

ULTRAVIOLET SPECULAR REFLECTANCE, ELECTRONIC
ABSORPTION AND THE EXCITATION OF FLUORESCENCE
IN SINGLE CRYSTALS OF ANTHRACENE

A Thesis Submitted for the
Degree of Doctor of Philosophy
of Rhodes University

by

W. H. WRIGHT

July 1965

Except where it is clear from the text
that I am describing the work of others
or surveying existing knowledge, the work
described in this Thesis is my own.

WHS/4.

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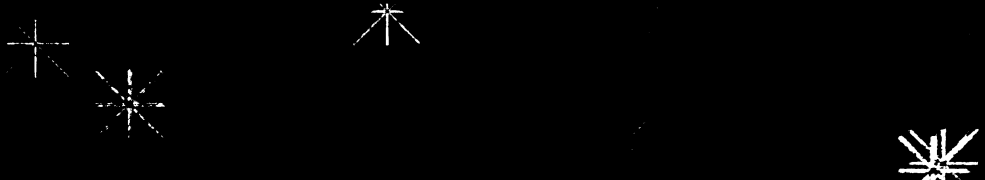
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INTRODUCTION

The Fluorescence Excitation Spectrum of anthracene is known to vary considerably with the age and condition of the crystal. This Thesis represents an attempt to improve the understanding of these variations. To put the problem on a quantitative basis it was found necessary to know both the ultraviolet reflection and absorption spectra. Reports of the reflection spectrum appear to have been confined to the case of polarised incident light. In addition the reflectivity measurements are always reported for a freshly cleaved surface. For these reasons the reflectivity of anthracene for various conditions of the reflecting surface was measured with unpolarised light. These varying reflectivities were used to further knowledge of the chemical processes at the crystal surface, as well as being used directly in the calculation of fluorescence excitation spectra.

Reflection spectra with a- and b- crystallographic axis polarisations were also obtained. Since such spectra are reported in the literature it was possible, by comparison, to conclude that the experimental methods used in this Thesis yielded valid results. The polarised measurements were used to obtain optical constants for the crystal. In the interests of readability most of the complicated process of converting the reflectivities to optical constants is dealt with in three Appendices to the Thesis.

The methods used for the reflectivity measurements had the fortunate advantage that fluorescence excitation spectra could be obtained as a by-product. Therefore although our primary purpose was to explain certain aspects of previously reported excitation spectra, we nevertheless were able to obtain significant new experimental results in this area. These show, inter alia, that the "surface escape of fluorescence" mechanism which has been postulated, cannot be responsible for the observed variations in excitation efficiency.

Our interpretation of the fluorescence excitation spectrum of anthracene will be made in terms of the exciton. The concept of the exciton is therefore basic to this Thesis. Since the exciton has its origin in the absorption process in the crystal, Chapters Two and Three are devoted to the theory of optical absorption in anthracene. The first of these chapters describes absorption in the molecule. This chapter is included because the results are used in the next chapter and the author is sure that knowledge of this particular molecular absorption is not so widespread that he can assume it known to the reader. This description leads naturally to Chapter Three where the theory of absorption in the crystal is developed. Thus are we introduced to the exciton.

The author wishes to emphasise that the main purpose of Chapters Two and Three is to provide this introduction to the exciton. Since these chapters are not primarily intended to be a review of the theory of optical absorption in anthracene, the author feels no compunction in omitting not only details but also different approaches which can be found in the literature. To compensate for this, however, a comprehensive list of references is included, so that the interested reader can consult the important contributions in this field with the minimum of effort.

Many experiments have been performed to confirm the existence, and to determine certain properties, of excitons. After describing some of these to get a feeling for the behaviour of excitons in the anthracene crystal, the experimental results are interpreted. Some speculations which have been put forward to describe the photoconductivity excitation spectrum are discussed and used in this interpretation since this spectrum is closely related to the fluorescence excitation spectrum. In the final chapter our interpretation of the excitation spectrum in terms of excitons is combined with previously described reflection and absorption spectra to yield calculated fluorescence excitation spectra for various conditions of the crystal surface. These are compared with the corresponding measured spectra and found to be in good agreement.

CHAPTER ONE. GEOMETRY OF THE ANTHRACENE MOLECULE AND CRYSTAL

1.1 STRUCTURE

Anthracene is an aromatic organic compound, the molecule consisting of three benzene rings as shown in fig. 1. Each unit cell of the crystal contains two of these molecules. The form of the unit cell is shown in fig. 2. Both figs. 1 and 2 are taken from Bragg [1].

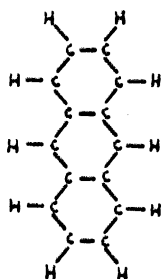


Fig. 1 ANTHRACENE MOLECULE

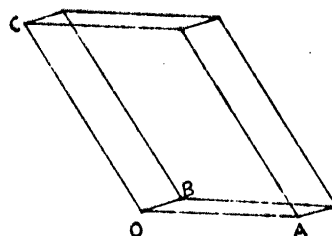
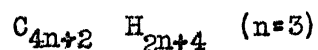


Fig. 2 ANTHRACENE UNIT CELL

$$OA = a, \quad OB = b, \quad OC = c, \quad \hat{AOC} = \beta$$

The arrangement of the molecules within the crystal has been extensively investigated by McL-Mathieson et al [2] and Sinclair et al [3] and unless otherwise indicated the information to be given in this Chapter is taken from these papers.

The anthracene crystal belongs to the monoclinic normal class i.e. it has one two-fold axis of symmetry and a centre of symmetry. We adopt the standard notation with regard to the crystallographic axes: the a- and b- axes are at right angles to each other and define the (001) plane. The c- axis lies in a plane at right angles to this (001) plane - the (010) plane. From fig. 3 we see, however, that oc makes an angle greater than 90° with oa. This angle is usually called β and was found to be $124^\circ 24'$ [2]. Unit lengths along the axes are unequal and reference [2] gives them as

$$a = 8.561 \text{ \AA}, \quad b = 6.036 \text{ \AA}, \quad c = 11.163 \text{ \AA}$$

each with uncertainty $\pm 0.010 \text{ \AA}$.

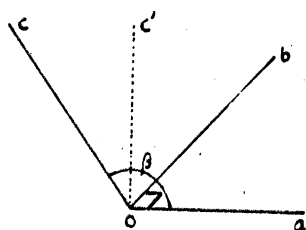


Fig. 3. THE CRYSTALLOGRAPHIC AXES FOR ANTHRACENE.

In Fig. 3 the b -axis, which is the crystallographic axis of symmetry, is shown in the horizontal plane (001), the c -axis in the vertical (010). An axis c' is chosen which also lies in the vertical plane but with the condition that $\hat{a} \hat{c}' = 90^\circ$. Therefore a, b, c' are a set of orthogonal axes. The plane defined by b and c' will be called the (1'00) plane. It is not a true crystallographic surface but will be found convenient to use since it is at right angles to (001) and (010).

Figs. 4 and 5 define the position of one of the two molecules within the unit cell. The edges d and e can be described mathematically in terms of a, b and c' [2,3]. They are the intersections of the molecular plane with (001) and (010) respectively. L and M , the long and short molecular axes are defined in fig. 4. Of the two molecules within the unit cell, one is centred about a corner, the other about the midpoint of the ab face of the unit cell. One can be transformed into the other by reflection in the ac plane, followed by translation along the a -axis by $|a|/2$.

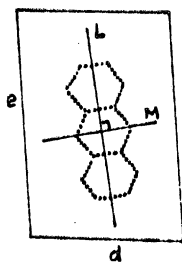


Fig 4. SECTION THROUGH THE
PLANE OF THE MOLECULE

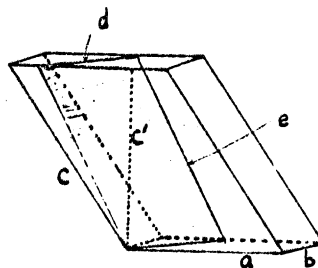


Fig 5. MOLECULAR PLANE IN THE
ANTHRACENE CRYSTAL

1.2 IDENTIFICATION OF PLANES AND AXES

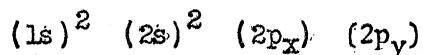
The major crystallographic planes and axes of a single crystal of anthracene can be identified quite easily. First the (001) face can be found because of its perfect cleavage, which reveals a smooth, shiny surface. For further identification the following method, which is taken from a paper by Nakada[4] can be used: The crystal is cut in the form of a plate with the (001) faces in the plane of the plate. This plate is placed on a sheet of paper with a thin, straight line drawn on it. In general double refraction causes two images of the line to be seen through the plate. As the plate is rotated about a normal axis, the double refraction disappears at two positions 180° apart, where the a- axis lies along the line. Therefore the b- axis, which lies in the plane of the plate, is at right angles to the line drawn on the paper. By using the information of the previous section, the remaining axes and major faces can be identified.

This method is not as accurate as more sophisticated methods which use a polarising microscope because of errors due to parallax and judgement, but it has the advantage of being very simple and quick. Initially the author used this method in addition to a polarising microscope, but finding satisfactory agreement between the two, later stopped using the microscope. Details of the latter method are not given here since they are described in appropriate text-books.

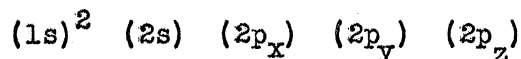
CHAPTER TWO. THEORY OF THE MOLECULAR ENERGY LEVELS

2.1 ATOMIC ORBITALS OF CARBON

If we were to describe the lowest state of the carbon atom by the well known atomic orbital method [5], it would read



This has two unpaired electrons with parallel spins giving the triplet 3P . This atom therefore is divalent. But a feature of carbon is its tetravalence, which means that we must have four unpaired electrons in the valence shell. To achieve this the carbon atom must be excited out of its ground state, so that one of the 2s electrons is elevated to an unfilled $2p_z$ orbital. This state is then



It is found that the increase in binding energy which this makes possible more than compensates for the energy required to produce the excited carbon atom. Thus the carbon atom will have available for bonding three p-type orbitals and one s-type. The hybridisation which takes place between the s- and p- states can be either tetrahedral, trigonal or digonal.

2.2 π - MOLECULAR ORBITALS IN BENZENE

Anthracene consists of three benzene rings. An obvious first step in our discussion then is to treat benzene. Trigonal hybridisation occurs in the carbon atoms of benzene i.e. a hybrid is formed between the (2s), (2p_x) and (2p_y) orbitals giving three new directed bonds in the xy plane which are mutually inclined at 120°. Thus the six carbon atoms in benzene lie in a plane, forming a regular hexagon; the six hydrogen atoms also lie in the same plane. Each of the six carbon atoms is joined by σ - orbitals to one hydrogen atom and to the adjacent two carbon atoms,

with the bonds at 120° (trigonal hybridisation). The six $2p_z$ electrons are distributed among a set of molecular orbitals formed by linear combination of these atomic $2p_z$ orbitals, resulting in π - bonds.

An important phenomenon found in benzene and indeed in all conjugated and aromatic molecules is that of delocalisation of the p_z orbitals: when we attempt to find one particularly favoured scheme for pairing the $2p_z$ orbitals which will result in a localised bond, we are unsuccessful. There is no single pairing scheme which is more favoured than any of the alternatives. This is because each of the wave functions describing these six orbitals ψ_n $n=1, 2, \dots, 6$ overlaps both of its neighbours equally. We are forced to take as our molecular orbitals

$$\Psi = c_1 \psi_1 + c_2 \psi_2 + \dots + c_6 \psi_6 \quad \dots \quad 1$$

with the constants c_1, c_2, \dots, c_6 determined by the fact that they should lead to stationary states. From the above equation we see that each one of our six ($2p_z$) electrons has to occupy an orbital which spreads over all six carbon atoms, so that the molecular orbitals are now completely delocalised. The appearance of these orbitals is shown in fig. 6

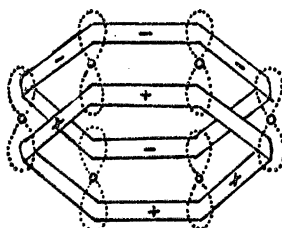


FIG 6. π -MOLECULAR ORBITALS IN BENZENE

This delocalisation is equivalent to allowing free migration of π -electrons round the benzene ring. Of course when an electron moves from an atom 1 of the ring to an adjacent atom 2, a second electron must move from 2 to 1, so that there is no net flow of charge.

2.3 GENERAL DESCRIPTION OF $N \rightarrow V$ TRANSITIONS

Equation (1) defines the π -type molecular orbitals for benzene. There are six independent combinations of this equation, yielding six π -molecular orbitals. Each of these molecular orbitals has a definite energy. The six π -electrons will be distributed among these orbitals, yielding for each distribution a π -electron configuration. The configuration for the ground state will obviously have two electrons in each of the three lowest orbitals. The other configurations provide a wide variety of excited states. The transitions between such configurations are associated with the emission or absorption of light.

These electronic transitions among the π -electrons are called $N \rightarrow V$ transitions. The characteristic spectral properties of benzene are almost entirely due to these $N \rightarrow V$ transitions. Therefore, to investigate the absorption spectrum of the molecule, we can, to a good approximation, ignore all except the π -electrons. This is true for most, perhaps all, aromatic molecules. There are several theoretical discussions of energy levels of such molecules [6,7,8,9,10,11]. We shall give a simplified account of the work of Coulson [6,7] who uses the LCAO model.

2.4 ENERGY LEVELS FOR $2n$ MOLECULAR ORBITALS

Before we attempt to describe the theoretical energy levels of the anthracene molecule it would be instructive to consider briefly a general molecule with $2n$ molecular orbitals. Fig. 7 shows the positions of these orbitals on an energy scale, the n bonding orbitals being below the long horizontal line, and the n anti-bonding orbitals above. It can be shown that to a good approximation the energies of the orbitals are symmetrical about this line.

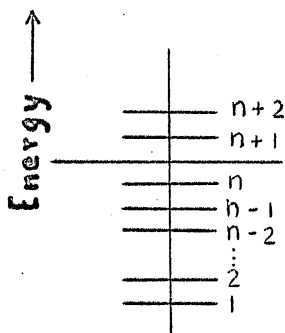
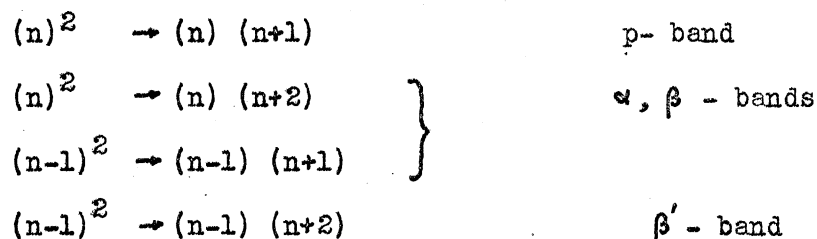


Fig. 7. ENERGIES OF $2n$ MOLECULAR ORBITALS

In the ground state all the levels up to n are each doubly occupied. The lowest excitation energy would be expected to correspond to a transition $n \rightarrow n+1$. The transitions $n \rightarrow n+2$ and $n-1 \rightarrow n+1$ are next in order of energy, leading to degenerate states. The result of the degeneracy is that the allowed upper states are not described by the individual wave functions corresponding to excited states two and three respectively, but by linear combinations of these. Thus the degeneracy is split, one of the energies being raised, the other lowered. The fourth transition is $n-1 \rightarrow n+2$. It is found that transitions to molecular orbitals of higher energies than these usually lead to the breaking up of the molecule.

The four transitions we have described are found to be characteristic of nearly all π - electron hydrocarbon molecules, and because of this have been given the following names:



The p- and β' - bands are due essentially to the excitation of a single electron from one molecular orbital to another. The excited states of the α - and β - bands cannot be represented in terms of a single electron jump because of the so-called configuration interaction discussed above. There was a great deal of difficulty and confusion in interpreting the spectra of π - electron hydrocarbon molecules before this interaction was taken into account.

2.5 ENERGY LEVELS FOR ANTHRACENE

We are now in a position to discuss the energy levels of the anthracene molecule. We begin by considering the symmetry of this molecule, which is shown in fig. 8

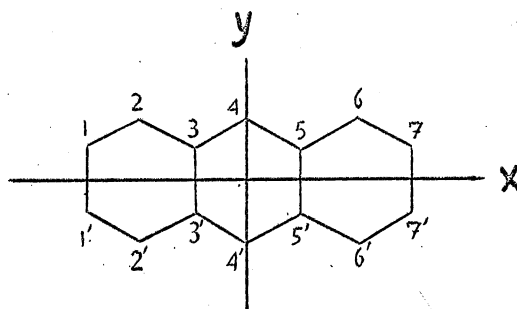


FIG 8. THE ANTHRACENE MOLECULE

The molecule has three two-fold rotation axes of symmetry--the x, y and z axes, as well as a plane of symmetry xy so that the full symmetry is $V_h (= D_{2h})$. This notation is described fully in [12].

One way of characterising the symmetry properties of the allowed molecular orbitals is to label them in terms of what happens on reflection in the three fundamental planes. Each orbital must be either symmetrical (S) or antisymmetrical (A). Since we are dealing with π - orbitals, each of these molecular orbitals will be antisymmetric in the plane $z = 0$ (plane of the molecule) so that we assign the label A_z . Because this label is common to all our orbitals we can leave it out, remembering that if we have an even number of orbitals with A_z symmetry their combination gives total symmetry S_z . Our remaining labels are S_x or A_x , S_y or A_y .

The LCAO molecular orbitals of anthracene are given by

$$\bar{\Psi} = \sum_{1}^{7+7'} c_r \psi_r \quad \text{--- 2}$$

The symmetry properties discussed above must be reflected in the values of the expansion coefficients C_r of (2). Following Coulson we can, for convenience, indicate symmetry $S_x S_y$ by P, $A_x S_y$ by Q, $S_x A_y$ by R and $A_x A_y$ by S.

The results of group theory [12] show that for the V_h symmetry there are only eight distinct types of molecular orbital, viz. A_{1g} , A_{1u} , B_{1g} , B_{1u} , B_{2g} , B_{2u} , B_{3g} , B_{3u} . But we have obtained only four distinct types P, Q, R, S each with the additional symmetry A_z which we did not include explicitly. The other four must be similar except for having the common symmetry S_z instead of A_z . These are the σ -

orbitals in which we have no interest.

Elementary arguments can be used to show that P, Q, R and S correspond to the group theory symbols B_{1u} , B_{2g} , B_{3g} and A_{1u} respectively. There are, however, several advantages in using the P, Q, R, S notation. These are discussed by Coulson [6,7].

A detailed examination of equation (2) would show that there are four molecular orbitals of each of the types P and R, and three each of Q and S. The relative energies of these fourteen molecular orbitals have been calculated by Coulson. For the ground state we have

$$P_1^2, Q_1^2, R_1^2, P_2^2, Q_2^2, S_1^2, R_2^2$$

where the suffixes have been assigned so that P_1 is lower than P_2 etc. Examination of the Character Table for V_h shows that two electrons sharing any one molecular orbital have combined symmetry A_{1g} . This therefore is the symmetry of the ground state. Table 1 shows the symmetry representation corresponding to any two electrons in any pair of orbitals of the types P, Q, R, S.

TABLE 1. SYMMETRY CLASS OF PRODUCT OF TWO ELECTRONS

	P	Q	R	S
P	A_{1g}	B_{3u}	B_{2u}	B_{1g}
Q	B_{3u}	A_{1g}	B_{1g}	B_{2u}
R	B_{2u}	B_{1g}	A_{1g}	B_{3u}
S	B_{1g}	B_{2u}	B_{3u}	A_{1g}

Each of our types of level could be either singlet or triplet. We are concerned only with the singlet, since the ground state (all orbitals doubly occupied) is always the singlet $^1A_{1g}$ and singlet-triplet transitions are not allowed. A further selection rule to be followed in view of our particular ground state is that transitions must satisfy the condition $g \rightarrow u$. Thus we see from Table 1 that the only allowed transitions are to B_{2u} and B_{3u} configurations. Therefore the only allowed excited configurations are PQ, PR, QS and RS, those not allowed being P^2 , Q^2 , R^2 , S^2 , PS and QR.

The five transitions of lowest energy obtained from Coulson's calculation of the relative energies of the fourteen molecular orbitals are shown in Table 2. The polarisation direction is obtained from the V_h character table.

TABLE 2. N → V TRANSITIONS IN ANTHRACENE

Transition	Description	Excited Configuration	Polarisation
$N \rightarrow V_1$	$R_2^2 \rightarrow R_2P_3$	B_{2u}	y
$N \rightarrow V_2$	$Q_2^2 \rightarrow Q_2P_3$	B_{3u}	x
$N \rightarrow V_3$	$S_1^2 \rightarrow S_1P_3$	B_{1g}	(z) forbidden
$N \rightarrow V_4$	$R_1^2 \rightarrow R_1P_3$	B_{2u}	y
$N \rightarrow V_5$	$P_2^2 \rightarrow P_2P_3$	A_{1g}	(-) forbidden

From the theory reviewed in this Chapter the following important facts emerge:

- (i) the first absorption band in anthracene has an upper state B_{2u} and is polarised along the y- axis of the molecule i.e. the short in-plane molecular axis.
- (ii) the second transition is to an upper state B_{3u} and is polarised along the x- or long in-plane molecular axis.
- (iii) the third band has a B_{2u} excited configuration so that the electric vector lies along the y- axis i.e. it is similar to the first transition.

A more detailed energy level determination which includes triplets is described by McClure [13]. Longuet-Higgins [14] discusses the valence-bond approach, while Platt [9] use what he calls the free electron "perimeter" model.

CHAPTER THREE. THEORY OF THE CRYSTAL ENERGY LEVELS3.1 INTRODUCTION

The most satisfactory description of the crystalline energy states of aromatic substances thus far produced is that based upon the "exciton" or non-conducting excited states first discussed by Frenkel [15,16] and Peierls [17]. This concept enabled Davydov [18] to determine theoretically the energy levels of anthracene-like molecular crystals using what might be called a weak-coupling model in which the interaction energy between molecules is assumed to be small compared with the intramolecular energy. This work has been reviewed and extended by Craig and Hobbins [19,21] and Craig [20], the material presented in this Chapter being based largely on the publications of the latter authors.

The unperturbed state in the exciton migration model can be represented by a collection of molecules which are not interacting with each other. If we use the Schrodinger equation to describe the energy levels of the k-th molecule, then the ground state of the crystal is written, following the assumption of weak coupling, as a simple product of molecular wave functions of the collection of N unexcited molecules. A set of excited states is obtained by assuming that if the collection of molecules were separated from each other by an infinite distance, N-1 of the molecules would be in the ground state, the other (the p-th say) would contain the energy of excitation.

The molecules in our crystal do interact with each other slightly, and to represent this interaction a small term, the interaction potential V, must be included in the unperturbed Schrodinger equation. This potential operator has the full symmetry of the crystal lattice so that the wave functions must also have this symmetry. Since the interaction is in this instance a purely crystalline phenomenon, we have here the first effect of the crystalline field on the molecular states.

3.2 FIRST ORDER THEORY

The energy levels E and wave functions Φ of the crystal are defined by the equation

$$\sum_{k=1}^N (H_k + \sum_{l>k} V_{kl}) \Phi = E \Phi$$

According to first-order perturbation theory the energy of the ground state is

$$E_G = \sum_{k=1}^N \omega_k + \sum \sum \int \psi_l \psi_k V_{lk} \psi_l \psi_k d\tau \quad \text{--- 3}$$

where ω_k is the isolated energy of the k-th molecule in the ground state described by the anti-symmetric wave functions ψ_k . Primed quantities would indicate an excited molecule.

It follows from what has been said in 3.1 that the crystal wave function is

$$\Phi_r = \sum_{l=1}^N a_{rl} \phi_l \quad \text{where} \quad \sum_{l=1}^N a_{rl}^* a_{rl} = 1$$

Φ_r is one of N crystal excited states all belonging in the weak coupling model to the excitation of one molecule to an excited state. The quantity $a_{rp}^* a_{rp}$ is the probability that the p-th molecule is the excitation "site". When N is large (as it will be for our crystal) the coefficients a_{rl} differ from one another only in their phase factors, and may be obtained from the usual secular equation:

$$\det | (\sum H_k + \sum \sum V_{kl})_{pq} - \delta_{pq} E | = 0$$

The diagonal elements can be written

$$\int \phi_p^* (\sum H_k + \sum \sum V_{kl}) \phi_p d\tau - E \quad \text{--- 4}$$

Since ϕ_p is the wave function of the zero-th approximation to the crystal excited state for which the excitation is located at the p-th molecule, we see that for the diagonal elements the excitation is localised at this p-th molecule. Remembering this when we use (3) in (4) we get for the diagonal elements

$$\sum_k \omega_k + \omega'_p + \sum_k \sum_{l>k} \psi_k \psi_l |V_{kl}| \psi_k \psi_l + \sum_l \psi'_p \psi_l |V_{pl}| \psi'_p \psi_l - E \quad \text{--- 5}$$

where the primed sum indicates that the excited (p-th) molecule has been omitted.

The non-diagonal elements are of the form

$$\int \phi_p^* (\sum \sum V_{kl}) \phi_q d\tau$$

Since for these elements $p \neq q$ the excitation is not localised on a particular molecule, and the expression similar to (5) for non-diagonal elements is

$$I_{pq} = \psi'_p \psi_q |V_{pq}| \psi_p \psi'_q \quad \text{--- 6}$$

The excitation can be said to have transferred from molecule p to q under the influence of the interaction potential. This is the exciton. The non-diagonal



elements (6) are the exciton "exchange" integrals for an exciton jumping from the p-th to the q-th molecule.

To get the magnitude of this energy which is transferred, we subtract the ground state energy (3) from the diagonal elements of the energy matrix. This gives a secular equation whose roots are the crystal excitation (exciton) energies. If in particular we consider only the p-th diagonal element we get by subtracting the p-th element of (3) from (5)

$$\Delta\omega_p + D - \Delta E \quad \text{--- 7}$$

where $\Delta\omega_p = \omega'_p - \omega_p$

$$\text{and } D = \sum_l \left\{ (\psi'_p \psi'_l | V_{pl} | \psi'_p \psi'_l) - (\psi_p \psi_l | V_{pl} | \psi_p \psi_l) \right\}$$

3.3 INCLUSION OF SYMMETRY

We have seen that the symmetry of the anthracene molecule is D_{2h} . The symmetry of the unit cell, which is now of great interest to us, is C_{2h} . We must combine the molecular wave functions in such a way that these combinations transform like representations of the unit cell group. The relations between representations of the molecular group D_{2h} and the unit cell group C_{2h} are included in Table 3.

TABLE 3. REPRESENTATIONS OF THE UNIT CELL GROUP C_{2h}

	E	C_{2h}	i	σ_b	Associated D_{2h} Representation
A_g	1	1	1	1	A_{1g}, B_{1g}
$A_u (\vec{r}_b)$	1	1	-1	-1	B_{2u}, B_{3u}
B_g	1	-1	1	-1	A_{1g}, B_{1g}
$B_u (\vec{r}_a)$	1	-1	-1	1	B_{2u}, B_{3u}

Unit cell wave functions γ are now defined, corresponding to the excitation of the two molecules (identified by subscripts 1 and 2) in the unit cell individually.

$$\gamma^{\alpha, \beta} = \frac{1}{\sqrt{2}} (\phi_1 \pm \phi_2)$$



The α - and β - unit cell functions formed by combining the g- type molecular wave functions transform like the A_g and B_g crystal species respectively; those from B_{2u} and B_{3u} molecular functions like B_u and A_u . Combining the γ 's into a form which must transform like a representation of the space group, we get

$$\Phi^{\alpha,\beta}(\vec{k}) = \frac{1}{\sqrt{N/2}} \sum_f^M (\exp i \vec{k} \cdot \vec{r}_f) \cdot \gamma^{\alpha,\beta}(\vec{r}_f) \quad \text{--- 8}$$

where \vec{r} is a lattice translation with components a, b and c and

$$k_a = \frac{2\pi\sigma}{M_a} \cdot a \quad \text{for } \sigma = 0, \pm 1, \pm 2, \dots, \pm M_a/2$$

σ numbers the M_a cells along the a- axis. k_a is a wave vector of the reciprocal lattice. Similar results obtain for the b- and c- directions.

3.4 APPLICATION OF THE SELECTION RULES

The selection rule for the wave vectors may be deduced from the transition dipole moment integral for the transition from the ground state Φ_g to the excited states $\Phi^{\alpha,\beta}$. It can be shown that this transition moment vanishes unless $\vec{k} = 0$. This selection rule applies to the rigid lattice. The band width may become finite on account of the excitation of lattice vibrations. However, even when lattice vibrations are permitted, the transitions for which $\vec{k} = 0$ are still the most intense.

This transition rule means that of the manifold of levels (8) only two are effectively excited. Thus from starting with a single molecular electronic level, we now have two levels for the crystal, corresponding to

$$\Phi_g \rightarrow \Phi^{\alpha,\beta}(0)$$

These two allowed transitions have different polarisations.

A further selection rule is obtained from the fact that, since the unit cell has a centre of symmetry, only g \rightarrow u transitions are allowed from the ground state, as is the case with a single molecule. It follows that only those transitions are allowed which correlate with allowed molecular transitions, and their polarisation may be read from Table 3. Thus crystal transitions related either to molecular transitions $A_{1g} \rightarrow B_{2u}$ (short axis polarised) or $A_{1g} \rightarrow B_{3u}$ (long axis polarised) have their α - components polarised in the ac crystal plane, and their β - components along the b- crystal axis.

3.5 DAVIDOV SPLITTING

It is found that the α - and β - states corresponding to a given molecular state not only are polarised in different directions, but have different energies. The difference in energy is called the Davydov Splitting and is caused by the exchange interaction of molecules which are not translationally equivalent i.e. of the different molecules of a unit cell. The exchange interaction of molecules which are translationally equivalent simply displaces the spectrum of the crystal relative to that of the free molecule.

If I_1 is the exchange interaction term for translationally equivalent molecules, and I_2 the exchange interaction term for molecules not translationally equivalent, then

$$I_1 = \sum_p I_{lp} \quad \dots \dots 9$$

$$I_2 = \sum_m I_{lm}$$

where p runs over molecules translationally equivalent to the l -th molecule and m runs over the others. The exciton Coulomb term D of (7) also contributes to the displacement of the lines or bands of the molecule in the crystal relative to those of the free molecule. Thus the energy of the transition from ground to crystal excited state may be written

$$\Delta E^{\alpha, \beta} = \Delta \omega + D + I_1 \pm I_2$$

The upper sign refers to the α wave functions, the lower to the β . We see that the Davydov splitting is equal to $2I_2$. The Davydov splitting differs from the usual splitting of levels in crystals in that Davydov splitting occurs even for molecular states which are not degenerate. It arises from the wandering of the excitation energy in the crystal and hence is restricted to the excited states.

3.6 SECOND ORDER EFFECTS

Craig [20] has shown that the effect of second order perturbations on weak transitions is not negligible. The effect is particularly noticeable when a strong molecular transition is found near the weak one. Then intermolecular forces bring



about interaction between the strong upper state of one molecule and the weaker upper state of a neighbouring molecule, leading to intensity stealing. Under these conditions the second order effects become comparable with those of the first order.

Quantitatively, Craig shows that the intensity transfer should be most noticeable when the weak system is 0.1-0.2 times as strong as the intense one, and greatest in the crystal direction in which the strong transition has its major component.

3.7 VIBRONIC LEVELS

Vibronic wave functions $\psi^r \cdot \sigma^{r(n)}$ can be written for the r-th excited electronic state, where $\sigma^{r(n)}$ is the vibrational function corresponding to the n-th quantum state of the vibration. In general the vibration differs from one electronic state r to another. For the less complex aromatic compounds, however, there is a simplification of both the second order perturbation and the vibrational energy problems in that there is usually only one very intense transition within easy reach of the weaker transition. Furthermore the intense system generally shows no well-developed progression of vibrational sub-levels. Therefore we can regard our energy-level system as being a weakly excited first upper state ψ^1 with accompanying vibrational sub-levels, and an intensely excited second upper state ψ^2 without vibrational structure, plus further upper states ψ^r .

In anthracene vapour spectra ψ^1 is found to have up to five members of the vibrational progression with a mean spacing of 1400 cm^{-1} between successive sub-levels. The spacings are very nearly equal for both vapour and liquid spectra, but in the crystal the intervals are distorted and differ along the a- and b- directions. The Davydov splittings are also found to differ from sub-level to sub-level. However, since the Davydov splitting is small for this the first band, the differences in splitting are neither very noticeable nor very certain, different crystal specimens of anthracene giving different results.

CHAPTER FOUR EXCITONS4.1 INTRODUCTION

Since the exciton will be used as the basis for explaining the anthracene fluorescence excitation spectrum, we devote the present Chapter to a discussion of certain relevant properties of the exciton. The previous chapter showed that excitons correspond to the "hopping" of the crystal energy of excitation from one molecule to another since the localisation of the excitation state in a particular molecule does not correspond to a stationary state of the crystal as a whole. The stationary state is obtained by allowing the excitation state to be delocalised over all molecules of the same kind in the form of an excitation wave. This type of exciton is called a Frenkel or Molecular exciton. We begin this chapter by showing that other models of the exciton have been successfully used, and then briefly describe other variations in the characteristics of excitons.

The decay of the exciton is obviously of great importance to an investigation of the fluorescence of crystalline anthracene. In addition the factors which affect the motion of the exciton will play a major role in our interpretation of the fluorescence excitation spectrum. Therefore sections dealing with the decay, trapping, scattering and diffusion of the exciton are included in this chapter.

4.2 VARIATIONS IN EXCITON CHARACTERISTICS

The model of the exciton which is of greatest interest to us, and to which we have already been introduced, is the Frenkel exciton. However Wannier [22] and Mott [23] who were concerned with the optical properties of semiconductors, view the exciton as a conduction-band electron and a valence-band hole which are bound together and travelling through the crystal, although they may be separated by an appreciable distance. This type of exciton is usually called the Wannier-Mott exciton. Knox [24] has pointed out that the two views (Frenkel and Wannier-Mott) are not as unrelated as they may seem. Since an excited atom can be described essentially as an electron bound closely to an ion by the Coulomb interaction, the two excitons

differ physically merely in their "radii" i.e. in the degree of separation of the electron and hole. Frenkel's case corresponds to a tight-binding, Wannier-Mott's to a weak-binding approximation. The absorption spectra of ionic crystals, and particularly the alkali halides, are interpreted in terms of an exciton which has binding intermediate between the Frenkel and Mott. Knox [24] summarises the experimental evidence which provides a striking verification of the validity of the three approximations.

If an exciton is produced by the absorption of an incident photon, the initial wave vector of the exciton will be the same as that of the photon since momentum must be conserved. In this case, since the electric vector of the photon is perpendicular to the direction of propagation, the dipole moment of the exciton will be perpendicular to the wave vector \vec{k} , so that all excitons formed in this way are transverse. Interaction of the exciton with lattice vibrations or imperfections can cause it to be scattered, and such a scattering process can change a transverse to a longitudinal exciton and vice versa. Marcus and Heller [25] have shown that the transverse exciton energy increases with \vec{k} so that the effective mass for this exciton is a positive quantity. The reverse is true for longitudinal excitons. The importance for us in this variation of the exciton characteristic lies in the fact that the exciton with negative effective mass has a smaller chance of decaying radiatively. This point is discussed more fully by Davydov [26].

In his discussion of molecular excitons [26], Davydov distinguishes between two limiting cases of this type of excitation wave. These are

(i) free excitons: the transfer of the exciton from one molecule to another is much more rapid than the intramolecular vibration frequencies, so that the change in the forces of interaction between neighbouring molecules when one molecule in the crystal is excited cannot displace the molecules to a new equilibrium position before the exciton has transferred.

(ii) "localised" excitons: the excitation propagates much more slowly than the intramolecular vibration frequency so that the molecules do have time to occupy

new equilibrium positions before the exciton can move. The progress of the exciton is impaired since a local deformation, which travels through the crystal together with the excitation, arises in the crystal. The "localised" excitons are not localised in the usual sense of the word but their velocities are much slower than those of the free exciton.

It can be shown that the "localised" excitons do not correspond to stationary crystal states and that spontaneous emissions take place into states in which all the excitation is distributed over the latter vibrations. Thus there is little likelihood of radiative emission from a "localised" exciton. This is important for us since an exciton originally free may, during its diffusion through the crystal, become "localised" through interactions with phonons, defects, impurities, surface molecules etc. If this happens then there is a reduced probability for fluorescent emission and the efficiency of excitation drops.

4.3 DECAY

There are basically two ways in which the energy of excitation of the crystal can be transformed (assuming no photochemical reaction to take place) after a photon has been absorbed. It can either be degraded to heat or re-radiated as electromagnetic waves. Since the two processes are not mutually exclusive the luminescence is usually of a lower energy than the incident radiation.

Transformation of excitation energy to heat may be by direct conversion into lattice vibrational energy or the excitation energy may suffer intramolecular conversion to vibrational energy of the atoms which make up the molecule. The latter process has been called intramolecular deactivation.

Most organic crystals have luminescence spectra which are independent of the energy of excitation, the fluorescence being observed to originate from the lowest excited singlet state of the molecule. It is obvious then that the non-radiative transformation of the excitation from higher to this lowest excited state must take place much more rapidly than the natural decay of the higher excited states (which have natural half-lives 10^{-10} - 10^{-11} sec.) Hochstrasser [27] argues that



since the quantum yield of fluorescence from these higher states is negligible, the non-radiative decay of excitation energy must have a half-life of the order 10^{-12} - 10^{-13} sec. Similar values have been estimated experimentally by other means. This process of non-radiative decay to the lowest excited state is called internal conversion.

If we denote the probability that a given exciton luminesces by P_L , that it transforms to a "localised" exciton or vice versa by P_t , that it decays to lattice vibration by P_p and that it suffers intramolecular deactivation by P_d , then the ratio η of the number of excitons emitting their energy as radiation to the total number formed is

$$\eta = \frac{P_L}{P_L + P_p + P_t + P_d}$$

For free excitons P_p is negligible so the probability of luminescence being observed from such states is governed by P_t and P_d . If the excitation energy of free excitons is less than that of the "localised" exciton then the probability P_t of conversion to "localised" states is small and luminescence with a large quantum yield can be observed from those states for which internal conversion is not rapid. We note that for anthracene internal conversion is very efficient for all excited states higher than the first since luminescence characteristic of the lowest excited state only is observed.

The luminescence will decrease as the temperature rises since the number of free excitons will drop as the result of enhanced thermal transfer to "localised" states and to lattice vibrations. The same effect should be obtainable by artificially introducing either impurities or defects at parts of the crystal accessible to the diffusing free exciton. This process will be studied in more detail in later chapters.

4.4 TRAPPING

Self-trapping of the exciton can result from large exciton-phonon coupling and makes itself apparent in the localisation of the excitation at some definite site in the lattice, followed usually by non-radiative decay. The experimental evidence



for this phenomenon is reviewed by Knox [24].

Trapping can also take place at a crystal defect which has an appropriately large capture cross-section. This may happen without strong phonon coupling.

Sidman [28] believes that his interpretation of the gap between the anthracene absorption and fluorescence origins in terms of trapped excitons constitutes evidence for the trapping of excitons. In addition Sidman shows semi-quantitatively that it is possible for trapped excitons to exist in anthracene: There is a shift of -2140 cm^{-1} of the 0-0 band of the ${}^1A_g \rightarrow {}^1B_{2u}$ transition in the crystal relative to the vapour. The Coulomb exciton term D and exciton exchange energy I are responsible for the shift. Now it can be shown that a necessary condition for the trapping of the exciton is

$$|D| \gg |I| \quad (I = I_1 + I_2 \text{ see equation 9})$$

From first-order theory [20] we have for the ${}^1A_g \rightarrow {}^1B_{2u}$ transition that $I_1 = -450 \text{ cm}^{-1}$, I_2 is negligible so that $I = -450 \text{ cm}^{-1}$ and $D = 1690 \text{ cm}^{-1}$. Second-order theory puts I at -650 cm^{-1} giving $D = -1490 \text{ cm}^{-1}$. In either case $|D|$ exceeds $|I|$ by an appreciable amount so that it is theoretically possible for an exciton to be trapped in anthracene.

4.5 SCATTERING

Excitons can be scattered by phonons, point defects, dislocations and surfaces. The mean free path of excitons as defined by scattering with acoustic phonons has been investigated theoretically and Knox [24] gives an expression for this path. Agranovich and Konobeev [29] estimate such a path to be 20μ for an exciton in a simplified model of anthracene. They find the exciton diffusion coefficient D to be $1 \text{ cm}^2 \text{ sec}^{-1}$ which exceeds measured values by more than an order of magnitude. They ascribe the discrepancy to the role played by "localised" excitons, the presence of lattice defects and the approximate nature of the calculation. Knox [24] discusses qualitatively, giving references to further work, the scattering by dislocations and surfaces.

4.6 DIFFUSION

The classical demonstration of the diffusion of excitation energy within a crystal is the experiment in which a trace of impurity is introduced into a host crystal and the fluorescence of the mixed crystal observed. A particularly thoroughly investigated instance is that of a naphthacene impurity in anthracene. In their review [30], Ganguly and Chaudhury point out that in the pure crystalline state naphthacene hardly fluoresces, whereas dissolved in solid anthracene it fluoresces brilliantly with its characteristic yellow-green colour, the host crystal fluorescence being quenched.

Since the proportion of naphthacene molecules in the mixture is negligible, it is obvious that the initial absorption of light must be by the host crystal. The excitation is then transferred to the impurity (the actual mechanism of transfer being a subject of controversy), where the excitation decays, giving the fluorescence characteristic of the impurity. In view of the small number of impurity molecules present it is clear that a simple process of reabsorption and re-emission cannot account for the effects. Although this experiment does not prove that excitons are responsible for the energy transfer, the mechanism can explain the results. There is a host of other experiments which give more direct evidence for the existence of excitons and their motion in the crystal. We shall not go through these here, but based on these experiments we make the following assumption which will be used in the latter part of the Thesis:

"Energy transport in organic molecular crystals is due to excitons. Certain impurities and possibly defects have a high trapping cross-section for these excitons. Once trapped by the impurity the exciton may decay either radiatively or non-radiatively, depending largely on the nature of the impurity. If trapped by a defect the probability of non-radiative decay is very high."

Simpson [31] has made what is probably the most notable direct measurement of the diffusion of excitons. The basis of his experiment is the fact that a phosphor containing luminescence centres can be used as a detector of excitons.

This makes it possible to detect the diffusion of excitons from an activator-free crystal into a contiguous crystal containing centres capable of trapping the exciton. Simpson uses anthracene as the substance in which the diffusion length is to be measured and naphthacene-doped anthracene as the detector.

One surface of a thin anthracene specimen was covered with the detector and the opposite surface illuminated in the fundamental absorption band. The luminescence emitted by the detector is due partly to excitation by those incident photons which are not absorbed in the specimen and partly due to excitons which are formed in the specimen and diffuse to the detector where they are trapped and fluoresce. A measurement of the transmission of the specimen alone, separates the two contributions so that the flux of excitons into the detector can be determined.

Simpson assumes that the motion of the excitons can be described by the ordinary diffusion equation including terms for the creation and decay of excitons. He solves this equation using boundary conditions which fit the assumptions that (1) there can be no transport of excitons across the front surface which is free and (2) the detector in contact with the back surface is a perfect absorber of excitons.

The agreement between theory and experiment is good. He finds that when a diffusion length $L = 460 \text{ \AA}$ is used in the solution of the diffusion equation, the theoretical exciton flux compares well with the measured transmission associated with the excitons. Where the mean free path of the exciton is comparable with the intermolecular distance it is appropriate to regard the motion of the exciton as a jump from molecule to molecule and treat the problem as a random walk. Doing this Simpson's experimental diffusion length can be used to obtain the displacement R in the random walk:

$$\overline{R^2} = 6D\tau = 6L^2 \quad \text{--- -- 10}$$

giving a root mean square displacement between the points of origin and decay of the exciton of 1120 \AA . The mean number of steps in the absence of impurities will be 10^5 and the mean free path of the exciton 0.2μ .

CHAPTER FIVE EXPERIMENTAL REFLECTION SPECTRA5.1 APPARATUS FOR UNPOLARISED MEASUREMENTS

One of the difficulties encountered in interpreting fluorescence excitation spectra has been a lack of knowledge of the ultraviolet reflectivity of anthracene for unpolarised light (excitation spectra almost always have been obtained with unpolarised light). In particular the variations of the reflectivity with aging of and damage to the surface were unknown. It was decided therefore to carry out such an investigation. This chapter represents the results of the investigation.

A Beckman Model DU Spectrophotometer was used to provide monochromatic near ultraviolet light. A reflectometer, based on a design by Smith [32] was attached to the monochromator. The reflectometer is illustrated in fig. 9. It consists

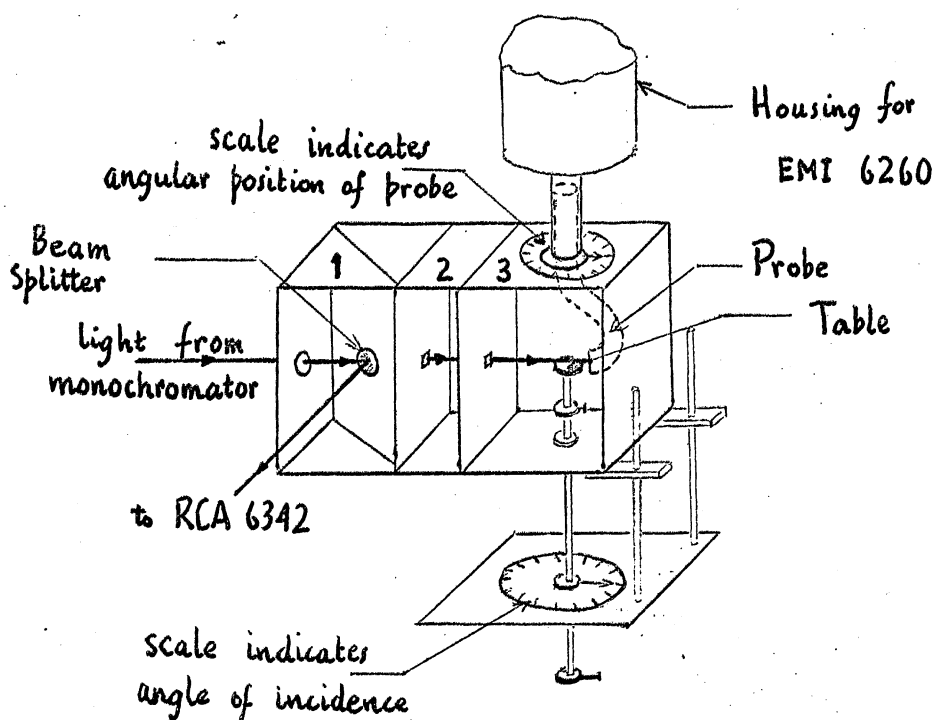


Fig. 9 THE REFLECTOMETER

basically of a rectangular metal box painted with non-reflecting black paint both inside and outside, and divided into three compartments. In the first a quartz disc is mounted at an angle of 45° to the direction of the incident beam of light

from the monochromator. This disc acts as a beam-splitter. The intensity of the light it reflects is measured by a RCA 6342 Photomultiplier tube, the window of which is covered with a fine layer of sodium salicylate deposited from an alcohol solution which was allowed to evaporate on the window. The phosphor converts the ultraviolet into visible light to improve the response of the photomultiplier and also reduces the dark current. The output from the photomultiplier is measured by a Cambridge Spot Galvanometer via a potential divider. The purpose of this first compartment is to check that the intensity of the incident light remains constant at any wavelength during an experiment. It is possible to allow for intensity changes but fortunately it was never necessary to do so.

The second compartment shown in fig. 9 is intended to house a polariser. Initially unpolarised light was used, so this compartment is shown vacant.

A small table, on which the crystal is mounted, stands at the centre of the third compartment. The height of this table is variable so that any part of the crystal can be illuminated (using visible light as a guide) and also so that the crystal can be lowered out of the path of the incident light. The table can be rotated by turning the handle attached to the bottom of the shaft supporting it. A pointer is attached to this shaft which protrudes beneath the rectangular box, so that the angle at which light is incident upon the crystal is indicated directly on a scale, this scale having been calibrated to give the true angle of incidence.

Light reflected from the crystal is picked up by the probe shown in position in fig. 9. The probe, shown isolated in fig. 10, is constructed from a $1/2$ " diameter perspex rod. The rod was bent to the desired shape after gentle heating and

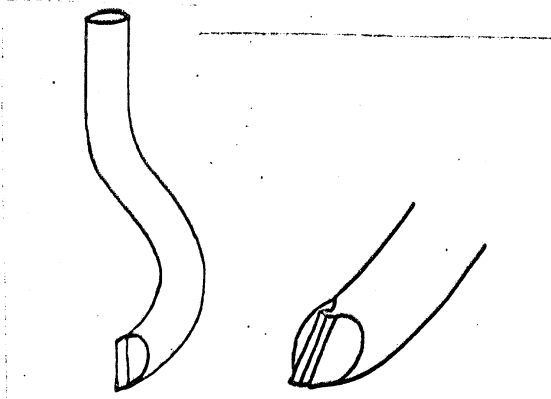


FIG. 10 THE PROBE

then cut to the right length. The upper (horizontal) face of the probe was sand-papered and polished until it was smooth and shiny. The lower face, which receives light reflected from the crystal, was filed down as shown in fig. 10 so that instead of being $\frac{1}{2}$ " wide it forms a nearly rectangular light accepting face about 3mm wide. The shoulders thus formed on the probe were filed down until they sloped gently, so that light missing the accepting face is not reflected back to the crystal or conducted up the probe, but is scattered into the compartment. The accepting face projects about 4mm from the shoulders. The purpose of narrowing the vertical face is to limit the angle over which light is accepted and conducted up the probe. The accepting face was sand-papered and polished until it too, like the horizontal face, was smooth and shiny, to enhance the transmission of light. All surfaces other than these two were then silvered, and a layer of sodium salicylate deposited on the vertical face by the method mentioned before.

A tight-fitting brass sleeve covers the upper portion of the probe. This sleeve (which is not shown in fig. 9) in turn fits tightly into the pipe from the top of the third compartment to the housing of an EMI 6260 photomultiplier. This tube was checked for linearity of response and found to be satisfactory for the range of intensities encountered in these experiments. The output of the 6260 is measured via a potential divider by a high sensitivity Rubicon galvanometer. The photomultiplier housing, sleeve and probe form a unit which can rotate about a vertical axis passing down the centre of the vertical section of the probe and through the centre of the table on which the crystal is mounted. Thus when the unit is rotated the vertical (accepting) face of the probe moves around the circumference of a circle with centre the midpoint of the table, so that this face in fact describes a circle around the crystal. This is shown in plan in fig. 11. The angular

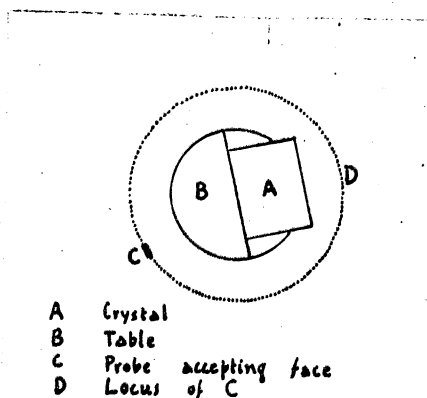


FIG 11. ROTATION OF PROBE ABOUT CRYSTAL

position of the probe is given by the reading of a pointer, attached to the photomultiplier housing, on a scale situated on top of the third compartment, as shown in fig. 9. The centre of this scale coincides with the vertical axis mentioned above.

The light from the monochromator, in travelling down the reflectometer, passes through two slits in the compartment dividing walls. These slits were made from brass strip 1" wide and $\frac{1}{8}$ " thick. A rectangular hole was filed in the strip and partially covered by razor blades held in place by clamping screws. The cutting edges of the blades form the slit. The brass strip, with blades mounted, can slide between two metal flanges attached to the compartment dividing walls, until the slit coincides with a hole drilled in the wall. This hole is of course somewhat larger than the slit, but smaller than the brass strip. The slit dimensions which were used were about 4mm high by 2mm wide.

5.2 METHOD OF MEASUREMENT

The faces and axes of the crystal are identified as described in Chapter 1.2, and the crystal is mounted with an edge of the chosen reflecting face lying along the centre-line of the table. The height of the table is adjusted so that light from the monochromator falls on a part of the reflecting surface. Visible light is

used for this adjustment. The surface is of course larger than the cross-section of the beam of light defined by the slits. The elevation of the table above the reflectometer floor is now fixed by clamping the shaft of the table (although it can still rotate). The position of the table is easily relocated because a small metal collar is attached to the table shaft so that the collar comes up against the underneath surface of the compartment when the table is in position. The desired angle of incidence is chosen by rotating the table to the appropriate position. With the crystal in place the front walls of the reflectometer (which are detachable) are screwed on. The monochromator exit slit is adjusted to a convenient value. Usually this was 1.0 or 2.0 mm.

With a given wavelength of light falling on the crystal, the probe is rotated about the crystal. The intensity of the reflected light received by the probe at a number of its angular positions during rotation is measured in terms of the Rubicon galvanometer deflection produced by the output of the EMI 6260 photomultiplier. The angular positions of the probe, and the galvanometer deflection at each of these positions are noted. The wavelength and incident control intensity (RCA 6342 photomultiplier tube) of the light are also noted. If the Rubicon galvanometer deflection is plotted against the angular position of the probe, a curve like that of fig. 12 is obtained.

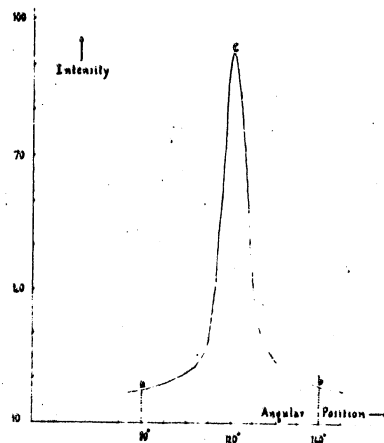


FIG 12. REFLECTED INTENSITY vs ANGULAR POSITION OF PROBE

This particular curve is for wavelength $240 \text{ m}\mu$. A curve of similar shape is obtained for other wavelengths. The large peak corresponds to specular reflection from the surface of the crystal. At angular positions far removed from that where the specularly reflected light falls on the probe, the intensity recorded is far from negligible. This is because anthracene fluoresces strongly. It is possible to find the intensity of the reflected light by subtraction of $1/2(a+b)$ from the intensity reading c (see fig. 12) This subtracts the fluorescence and stray light intensities from the total maximum intensity. The points a and b are chosen at 40° on either side of c . The curve in the regions of a and b is not perfectly flat so that their choice is to some extent arbitrary. Therefore no accuracy is sacrificed if measurement of intensities is restricted to the values at the points a , b and c only. This is in fact what was normally done.

For smaller values of the angle of incidence ($< 30^\circ$) the complete curve shown in fig. 12 is not obtained, since when the probe is in the region of the angular position at a , it moves into the incident beam of light, which is then prevented from reaching the crystal. In such cases readings b and c only were taken.

After these measurements have been completed for the chosen values of the wavelength, the table on which the crystal is mounted is lowered so that the crystal is removed from the incident beam of light. The probe is rotated until it accepts the incident beam, and values of the incident intensity are obtained, at the appropriate wavelengths, in terms of the Rubicon galvanometer deflection. The incident control intensities are checked with those obtained before to see whether or not the intensity has changed.

The light source of the monochromator is then switched off so that dark current and stray light intensities can be measured. This is subtracted from each of the incident intensity readings, to give $d(\lambda)$, say. The coefficient of reflection of the crystal $R(\lambda)$ is then obtained from either

$$R(\lambda) = \left[c(\lambda) - \frac{a(\lambda) + b(\lambda)}{2} \right] \cdot \frac{1}{d(\lambda)} \quad \text{or} \quad R(\lambda) = \frac{c(\lambda) - b(\lambda)}{d(\lambda)}$$

5.3 RESULTS OF UNPOLARISED MEASUREMENTS.

After many reflection spectra had been obtained both to test the apparatus and to acquaint the experimenter with it, an investigation into reflectivities for different surface conditions was begun. In fig. 13 we have three reflection spectra for the (001) crystal face measured at an angle of incidence 30° .

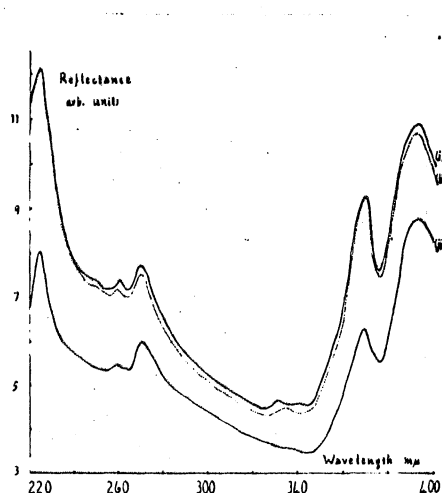


FIG 13. REFLECTION SPECTRA: (001)

For curve (i) the crystal face was freshly cleaved in feeble light immediately before measurement. Care was taken that the cleaved face was as smooth and shiny as possible, although it was not possible to obtain a surface entirely free from tiny cracks and lines associated with the perfect cleavage of the face. The spectrum reported here is extremely reliable—it was obtained on numerous occasions with remarkable reproducibility.

Curve (ii) was obtained the day after curve (i). Nothing was altered on the apparatus. This curve represents an attempt to see how the irradiation by ultraviolet light which the crystal underwent during the measurement of the previous day would alter the reflectance. It is known that photo-oxidation occurs in anthracene, the photochemical products being the polymer dianthracene, and anthraquinone [Ellis and Wells 33]. We see that the reflectivity has decreased slightly

from the unirradiated case. The effect, although small, was found by repetition of the experiment to be real and not instrumental.

Immediately after curve (ii) had been obtained the (001) face was polished gently with soft tissue paper. This resulted in the bright, shiny surface becoming cloudy, the reflecting power of the surface being perceptibly lower, even to the naked eye. Curve (iii) shows the reflectivity of this polished surface. We observe a marked decrease in the reflectivity although the wavelength dependence is unaltered. It is thought [Lipsett et al 34] that the friction engendered by polishing the crystal enhances its chemical activity so that an appreciable layer of probably anthracene peroxide or anthraquinone is formed during the polishing. This layer of impurities could tend to scatter the incident radiation and thereby reduce the specular reflectivity. Equally the roughening of the surface produced by the friction could lessen the density of the polished surface relative to the cleaved. This would provide a better refractive index match between the bulk crystal and the incident medium thus reducing the reflectivity. Probably both mechanisms are active, although the small photochemical change does suggest that the second is more effective in reducing the reflectivity.

Reflection measurements were also made on crystals which had a very thick layer of oxidation products. This thick layer is produced by allowing the crystals to "age" in the presence of air and light for a period of several months. The reflection spectra of aged (001), (010) and (1'00) surfaces are shown in fig. 14, 15 and 16 respectively.

Each of these figures shows two spectra. For the curves marked (i) the face was polished to a silky appearance as normally supplied by the manufacturer, and had been exposed to the chemical action of light and the atmosphere for an extended period. Before measurement the face was rubbed very gently with soft tissue paper to remove any grease marks which may have been present as a result of handling the crystal. For the curves marked (ii) the face was polished with soft tissue paper

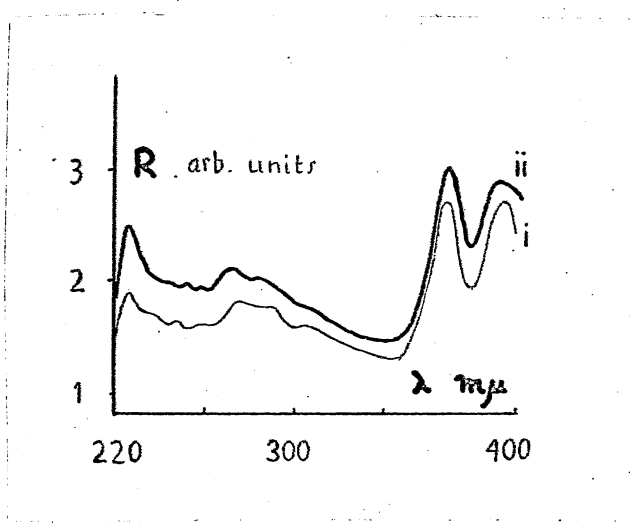
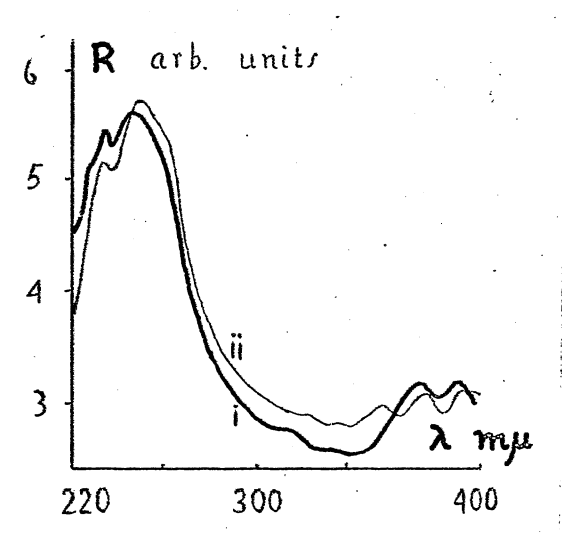


FIG 14
AGED (001)



REFLECTION SPECTRA

FIG 15
AGED (010)

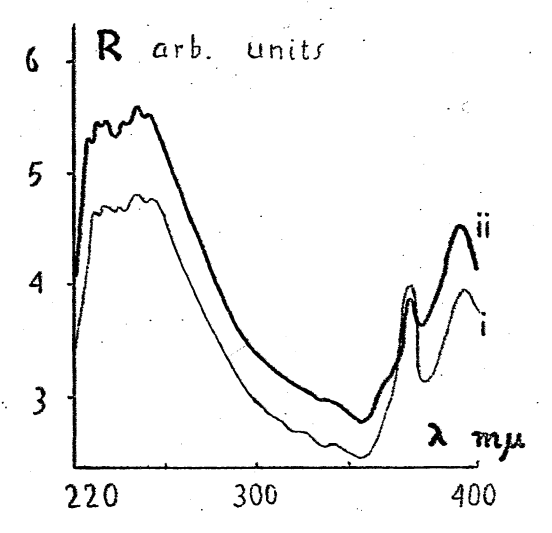


FIG 16
AGED (1'00)

so that it became smoother and had a shinier appearance. It can be seen that polishing the aged crystal generally increases the reflectance. Presumably this is because polishing removes some of the oxidation products.

It is noticeable that the aged (010) and the (1'00) spectra have a different appearance from the spectra in fig. 13, but the aged (001) spectrum remains like that of the cleaved spectrum except for being much less intense. On the aged crystal the (001) face certainly had a far less cloudy appearance than the others, and it is possible that the oxidation products do not form on this surface as easily as they do on the others. This may be due to the crystalline structure of the oxidation products showing a preferred orientation for growth relative to the bulk material. The reflection spectra of the (010) and (1'00) faces were remeasured after the aged surfaces had been scraped with a clean razor blade to remove (as far as possible) the layer of oxidation products. The results are shown in fig. 17.

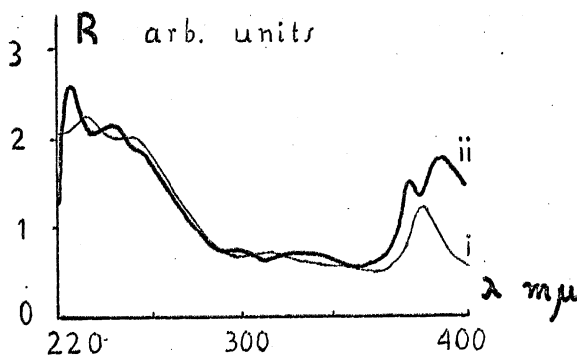


FIG 17. REFLECTION SPECTRA (i):(010);(ii):(1'00)

Unfortunately scraping the surface roughens it to such an extent that the reflectance is rather more diffuse than before. This makes measurement of the specular reflectivity difficult. There is no doubt, however, that the reflectivity of the scraped surface (which should be characteristic of the bulk material anthracene) is different from that of the aged surface (which appears to be characteristic of the oxidation products).

Both figs. 15 and 16 show a prominent peak in the region of 250 μ . Now anthraquinone has an intense absorption band at roughly this wavelength [35,36].

Furthermore anthraquinone is very nearly transparent to the longer wavelengths used in our measurements (340-400 μ) so that if anthraquinone were the oxidation product the longer wavelength reflectivity of the aged surfaces should be characteristic of the bulk material. Inspection of figs. 15 and 16 show that the long wavelength peaks lie at the same position as those of the first anthracene absorption band. Further, in the crystal this band has its major component along the b- axis so that the faces containing the b- axis - (001) and (1'00) - should have these peaks more intensely developed than the (010) which does not contain the b- axis. That this is in fact found can be seen from figs. 14, 15 and 16.

The above paragraph indicates that the long wavelength reflectivity of the aged crystal surfaces is characteristic of the oxidation product and that this appears to be anthraquinone.

5.4 POLARISED MEASUREMENTS

In order to carry out reflection measurements using polarised light, certain improvements were made to the reflectometer. These included the fitting of a polariser, a filter, a new probe and a new photomultiplier (Philips 50 AVP) in place of the EMI 6260.

The polariser, which was obtained from Polacoat Inc., consists of a thin film of dichroic material on a quartz disc. It is effective down to wavelengths of about 230 μ . The polariser was placed in a housing which in turn was installed in the centre compartment of the reflectometer. Details of the housing are shown in fig 18. The polariser can be set to any one of three easily located positions by rotating the centre portion of the housing until a spring-loaded ball-bearing clicks into one of three holes. The holes are spaced so that the plane of polarisation is either horizontal, vertical or at 45° to the horizontal.

A Chance OX 7 glass absorption filter was used in some of the measurements to absorb the anthracene fluorescence, so that specularly reflected light only was measured. It was found, however, that with both polariser and filter installed, the intensity of light conducted up the probe was very low. The best polarised spectra were obtained without the filter.

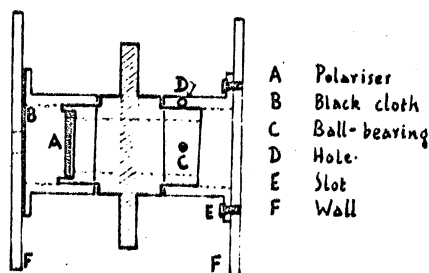


FIG 18. THE POLARISER HOUSING

The generally lower intensities for the polarised measurements meant that the spectra obtained were not as consistently good as those obtained with unpolarised light. Therefore large numbers of polarised spectra were measured in the hope of eliminating instrumental variations by taking the average. To facilitate the measurement of this large number of spectra the method of measurement was changed. The output of the Philips 50 AVP photomultiplier was recorded on a Photovolt Varicord 42-A recorder. The photomultiplier output was amplified by a stabilised D. C. amplifier based on a design by Marcley [37]. Minor modifications only were made to Marcley's instrument. In order to make the recordings automatic, the wavelength dial of the monochromator was motor-driven at constant speed.

As an example of the type of polarised spectrum obtained, we show in fig. 19 reflection spectra R_a and R_b (electric vector parallel to a- and b- crystallographic axes respectively) measured on the (001) face at an angle of incidence 20° . Correspondence with similar spectra reported in the literature [Bree and Lyons 38] is very good at short and intermediate wavelengths, fair at the longer wavelengths. This can be seen from fig. 20 where an average spectrum obtained from the spectra measured by the author in combination with all other reported spectra is displayed. This average spectrum is virtually identical with that of Bree and Lyons. In the averaging procedure allowance was made for the fortunately small differences in angles of incidence at which the spectra of the author and those of others workers were made.

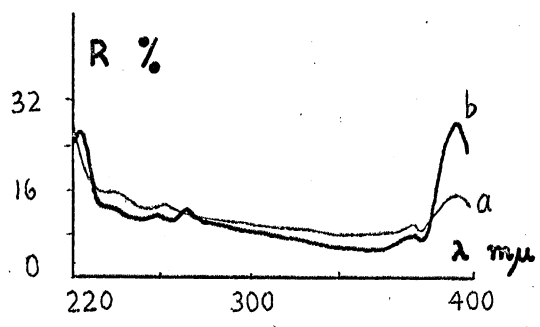


FIG 19
EXAMPLE OF AUTHOR'S SPECTRUM

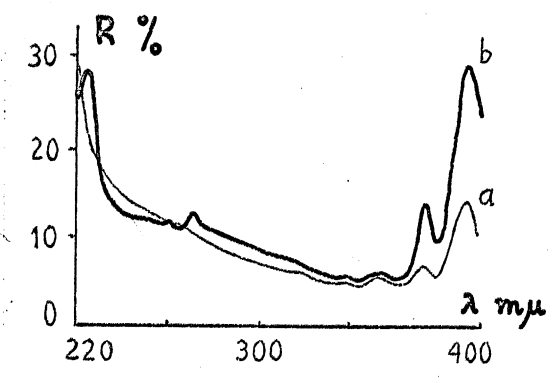


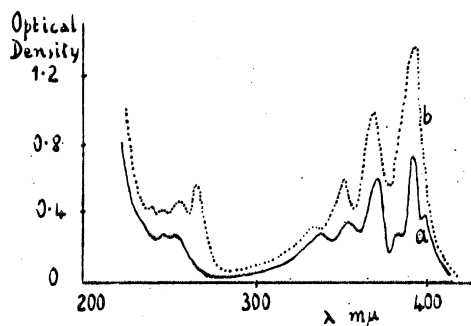
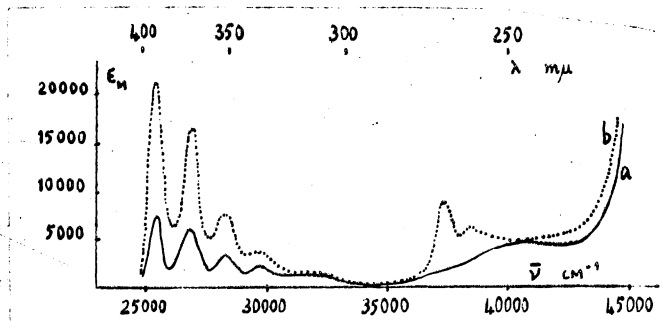
FIG 20
OVERALL AVERAGE SPECTRUM

The spectra in fig. 20 will be used in the next chapter to compute optical constants for the anthracene crystal.

CHAPTER SIX EXPERIMENTAL ABSORPTION SPECTRA6.1 CONVENTIONAL ANTHRACENE ABSORPTION SPECTRA

There are many experimental anthracene absorption spectra reported in the literature. We shall select a few of the more recent of these and discuss first the spectrum transition by transition and then compare the energy levels of the free molecule (solution) with those of the crystal.

Transition I The excited state in the molecule theoretically is B_{2u} so that in the crystal we expect two components with a small Davydov splitting. The intensity along the b- axis should be somewhat greater than along the a- axis. That this is found experimentally can be seen from the following two absorption spectra which are typical of many others in the literature. They are taken from Bree and Lyons [38] and Tanaka [39].



ABSORPTION SPECTRA

FIG 21. BREE AND LYONS

FIG 22. TANAKA

Craig and Hobbins [21] find that where Davydov splitting occurs for this transition it involves a b- component displaced to lower frequencies and an a- component to higher. They report that at -150°C the splitting is in the range 10 to 50 cm^{-1} . These small splittings are compatible with a B_{2u} upper state but not with a B_{3u} .

Oscillator strengths have been measured for this transition by a number of

workers. The formula usually used is that for the Reduced Oscillator Strength

$$f_{a,b,c'} = 1.44 \times 10^{-9} \int \epsilon_{a,b,c'} d\bar{\nu} \quad - - - - 11$$

where $\bar{\nu}$ is in wave numbers and ϵ is the molar extinction coefficient. Using this formula $f_a + f_b + f_{c'}$ should be approximately equal to f for the solution. Lyons and Morris [40] quote six values of the oscillator strengths of the first transition. The means of these are

$$f_a = 0.03 \pm 0.01 \quad f_b = 0.06 \pm 0.01$$

Therefore the solution value, which has been determined by several workers to be 0.10, shows that the component perpendicular to the ab plane is weak. Theoretical calculations [38] show that a B_{3u} upper state would have $f_{c'} > f_a, f_b$ but a B_{2u} upper state would have $f_c \approx 0.01$.

The theoretical predictions for the first excited state are seen to be borne out by experiment, the evidence being overwhelmingly in favour of an $A_{1g} \rightarrow B_{2u}$ molecular transition being responsible for the crystal states.

Transition II occurs in solution at about $250 \text{ m}\mu$ and does not have the well-defined vibrational progression of transition I. A typical solution (solvent ethanol) spectrum, after Jones [41] is shown in fig 23. Since the oscillator strength is $f = 2.3$ [21] and the theoretically predicted upper state is B_{3u} , the Davydov splitting is expected to be very large. Using $f = 2.3$ Craig and Hobbins [19] calculate the splitting to be $16,000 \text{ cm}^{-1}$ and $1,000 \text{ cm}^{-1}$ for B_{3u} and B_{2u} upper states respectively.

The crystal absorption spectrum shows a

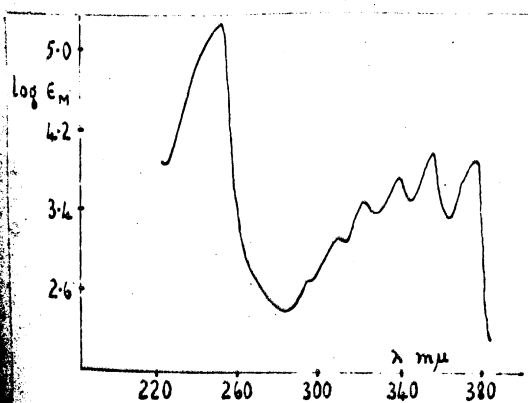


FIG 23. SOLUTION (JONES)

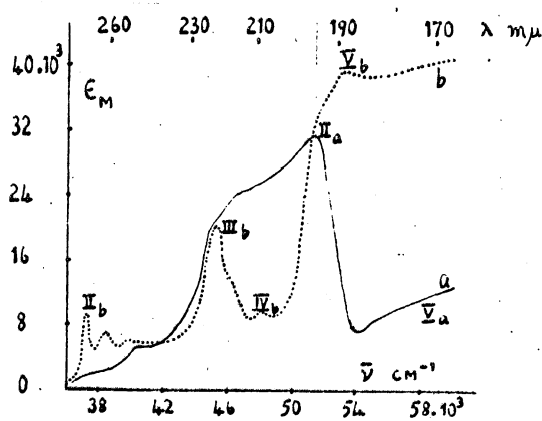


FIG 24. CRYSTAL (LYONS AND MORRIS)

ABSORPTION SPECTRA.

peak at $268\text{m}\mu$ in b- polarisation, so assuming a B_{3u} upper state the a- maximum should be near $190\text{m}\mu$. A crystal absorption spectrum covering these shorter wavelengths is shown in fig 24. It is taken from Lyons and Morris [40]. From it we can see that a peak in a- polarisation occurs at $195\text{m}\mu$, supporting the theoretical predictions that this is a B_{3u} state.

Transition III. The b- component of transition III is clearly seen in fig. 24 at $221\text{m}\mu$. The experimental oscillator strength is $f_p=0.16$ [42] while theoretically values of 0.005 and 0.2 are obtained for B_{3u} and B_{2u} states respectively [40]. Since the upper state is probably B_{2u} , the splitting should be small and the a- component found near the b. This a- component is probably hidden under and enhanced by the strong a- component of transition II. This would account for the unusual shape of the a- component in the region $220 - 190\text{m}\mu$.

Transition IV. The small peak in b- polarisation at $207\text{m}\mu$ is taken by Lyons and Morris to be the b- component of the long-axis polarised transition IV. They consider that the a- component is buried under the nearby strong a- absorption. Examination of solution spectra in the literature shows no clear-cut indication of an electronic transition in this region.

Transition V is intense in solution ($f=0.4$) and from the crystal spectrum (fig. 24) appears to have its major component along the b- axis. Certainly f_p is comparable with f_{soln} . This would indicate a short-axis polarised transition to an upper state B_{2u} .

Bree and Lyons [38] have summarised the change in the experimental energy levels from free molecule (solution in this case) to crystal in the diagram which is reproduced as fig. 25. Cross-hatching indicates a region of experimental uncertainty. Dotted lines show the correlation between solution and crystal.

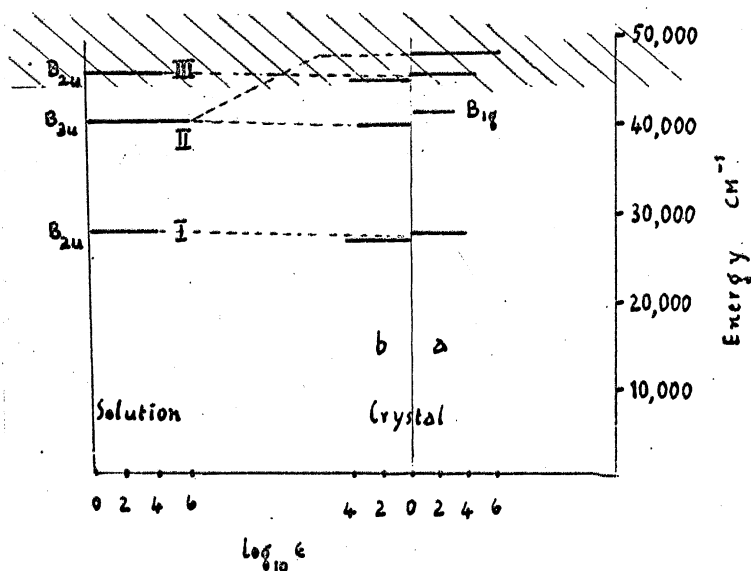


FIG 25. ANTHRACENE ENERGY LEVELS: SOLUTION AND CRYSTAL

6.2 THE PRICE-ROBINSON METHOD

In view of its high absorbing power in the near ultraviolet it would be very difficult to measure the optical constants of anthracene in this region by conventional transmission methods. In addition the complexity of the optics of anthracene has made it impossible to obtain meaningful optical constants by conventional reflection methods. Thus, as far as the author is aware, there are no reports in the literature which present these constants as a function of wavelength throughout the near ultraviolet.

Recently, however, a new technique has come to the fore. We shall use it in this section to obtain the optical constants. Since the technique, which has become known as the Price-Robinson method [43,44] is well described in the literature, we shall not describe it in any detail here. Additional papers which can be consulted are for example those of Jahoda [45] and Kato [46].

Briefly the method consists of measuring the reflection spectrum and hence expressing the real part of the amplitude of the reflected radiation as a function of frequency. The Kramers-Kronig dispersion relation is then used to obtain the

imaginary part of the amplitude as a function of frequency. Thus we know both the magnitude and phase of the reflected amplitude. Knowledge of these quantities allows effective optical parameters to be evaluated.

The method we have used to solve the Kramers-Kronig relation to yield the phase is that of Bode [47]. A general description of the dispersion relation and a discussion of its validity when applied to anthracene is given in Appendix A. The form in which we use the relation is shown in equation (12). A description of Bode's method of solving (12) appears in Appendix B.

$$\theta(\bar{\nu}_e) = \frac{1}{\pi} \int_0^{\infty} \frac{d \log |r(\bar{\nu})|}{d\bar{\nu}} \cdot \log \left| \frac{\bar{\nu} + \bar{\nu}_e}{\bar{\nu} - \bar{\nu}_e} \right| d\bar{\nu} \quad - - - - 12$$

where $\theta(\bar{\nu}_e)$ is the phase in radians at the particular wave number $\bar{\nu}_e$. $|r(\bar{\nu})|$ is the magnitude of the reflected amplitude expressed as a function of wave number $\bar{\nu}$.

6.3 CALCULATION OF THE PHASE CHARACTERISTIC

$\theta_a(\bar{\nu})$ and $\theta_b(\bar{\nu})$ corresponding to reflection spectra R_a and R_b were determined from (12) using Bode's method. It was necessary for the purposes of the calculation to extend the wavelength range of the reflection spectra. The extension to longer wavelengths was effected by calculating the reflectivity from the refractive indices obtained between 400 and 700 μ by Eitchiss [48]. The refractive indices are given for light polarised parallel to the a- and b- axes. Since anthracene is transparent in this region a straightforward application of Fresnel's equations was sufficient for the reflectivity calculation.

Since there is apparently no report of anthracene reflectivities below 220 μ it was necessary to guess the low wavelength reflectivity. Three guesses were made of the high frequency R_a spectrum. These were based on the approximate correspondence between reflection and absorption spectra in regions of high absorption. The absorption data of the previous section was used in making the guesses. The first guess of the R_a spectrum was purposely made rather high, the third rather low. An intermediate second spectrum was also drawn. The high frequency guess of R_b followed closely that of the intermediate R_a . The complete reflectivity spectrum of

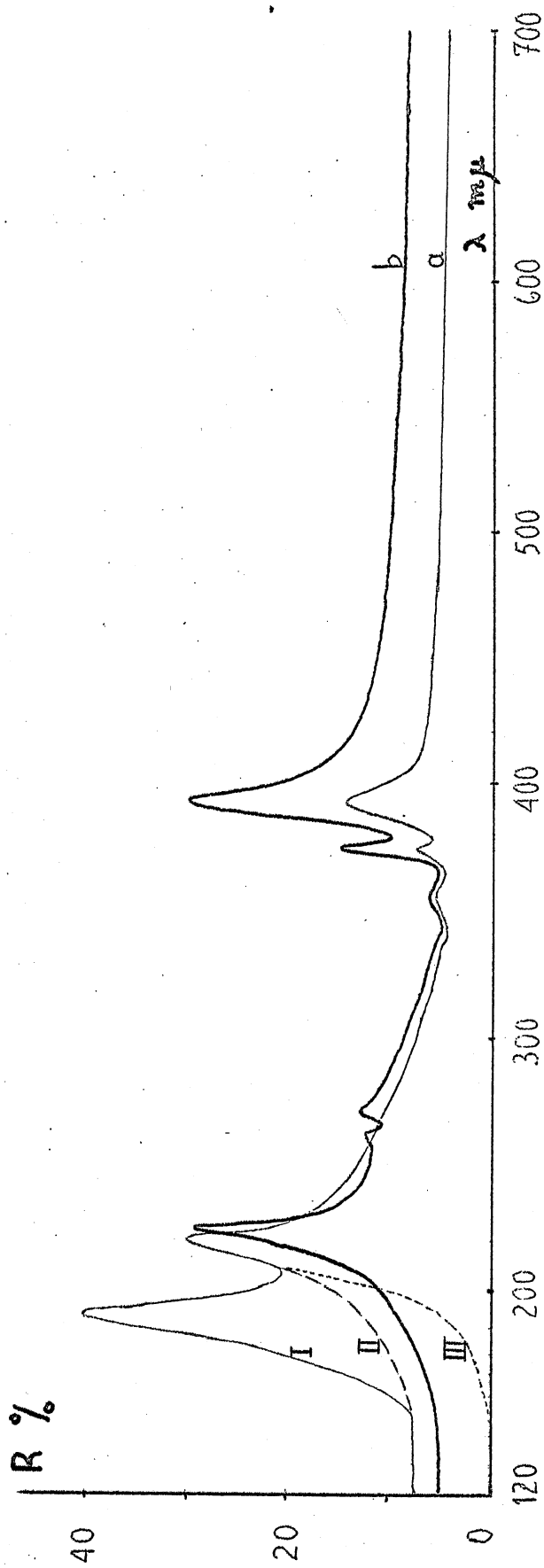


FIG 26. THE REFLECTION SPECTRUM OF ANTHRACENE



anthracene from 150 to 700 μ is shown in fig 26. The three guesses for the high frequency R_a and the single guess for R_b are shown.

Now it is found that the contribution to the phase at a wave number $\bar{\nu}_c$ from wavelengths remote from $\bar{\nu}_c$ is approximately linear in the region of $\bar{\nu}_c$. Therefore the contributions of the high frequency guesses to the phase in the wavelength region of interest (220 - 400 μ) will be linear. It follows that if these guesses are wrong then the errors will also be approximately linear functions of $\bar{\nu}$ in the near ultraviolet. Furthermore if we choose points in the near ultraviolet where the absorption is known to be low e.g. 283 and 400 μ , then we know that the phase must be very small negative quantities at these points. Values of $-0^\circ 30'$ and $-3^\circ 0'$ respectively were arbitrarily assigned. Thus we know the value the phase should take at two points; therefore it is possible to apply a linear correction throughout our region 220-400 μ .

The correction to the b- polarised phase was very small ($-0^\circ 54'$ and $4^\circ 47'$ at 25,000 and 32,500 cm^{-1} respectively). The correction to the a- polarised phase corresponding the second (intermediate) guess for R_a was reasonable, the correction for the first (high) guess was slightly larger and more negative while the third (low) guess required a very large positive correction. This justifies the method of correction. The reason for this statement is the following:

The calculation of the phase involves taking the logarithm of the magnitude of the reflected light amplitude. Since our third (low) guess let the reflectivity tend to zero, the logarithm of the magnitude becomes a very large negative number. Thus the phase obtained is very large negative, and to correct it requires a large positive subtraction (correction). The intermediate guesses required reasonably small corrections while the high guess required a correction only slightly more negative than the intermediate since the logarithm of the magnitude (and therefore the phase) increased much more slowly than the magnitude itself.

The phases corresponding to R_a I, II, and III were found to be virtually

identical after correction. θ_a was taken to be the mean of these three. It must be noted that the wavelength dependence of the phases was virtually unchanged by the corrections. Peaks occurred at the same frequencies in both corrected and uncorrected phases. The effect of the correction was to apply a linear shift to the phase spectrum as a whole.

We conclude that despite not knowing the short wavelength reflectivity of anthracene accurately, we have obtained very good phase characteristics in the near ultraviolet. This is the result of applying a technique in which errors of large magnitude but opposite sign are deliberately generated. The correction of the widely varying guesses to yield virtually identical characteristics indicates that the characteristic obtained is accurate.

6.4 CALCULATION OF EFFECTIVE OPTICAL PARAMETERS

We assume that the amplitude corresponding to the reflected light intensities we measure can be described by formulae similar to the Fresnel equations. Thus at normal incidence

$$r_h = \frac{n_h + ik_h - 1}{n_h + ik_h + 1} A_h \quad - - - - 13$$

where h is either the a- or b- crystallographic axis. By making certain assumptions (whose validity cannot be easily checked) it is possible to show that in fact, formulae like (13) hold for the normal incidence reflectivity from the (001) face of anthracene [see Appendix C.] But the quantities appearing in these formulae are not easily interpreted in terms of the more standard optical constants. The quantities n_h and k_h appearing in (13), however, are easily interpreted in terms of our assumption. They are merely real numbers which when substituted into (13) yield the complex amplitude of the reflected wave. We make no attempt to find a correlation theoretically between these numbers and the constants of optical transmission.

The point of view we have adopted is reinforced by the work of Hopfield and Thomas [49]. These authors have examined very closely a problem similar to ours, and state: "-----this complication of the reflectivity spectrum does not reduce the utility of ellipsometric and Kramers-Kronig determinations of optical parameters-----since such measurements are related to effective optical parameters only, and have only an indirect theoretical connection to the parameters related to optical transmission." Although the complication they discuss is that of spatial dispersion, the point they make is relevant. We shall be determining effective optical parameters. By indirect means, however, we shall be able to infer that our parameters bear a close analogy to the standard optical constants.

Having assumed (13) and knowing that

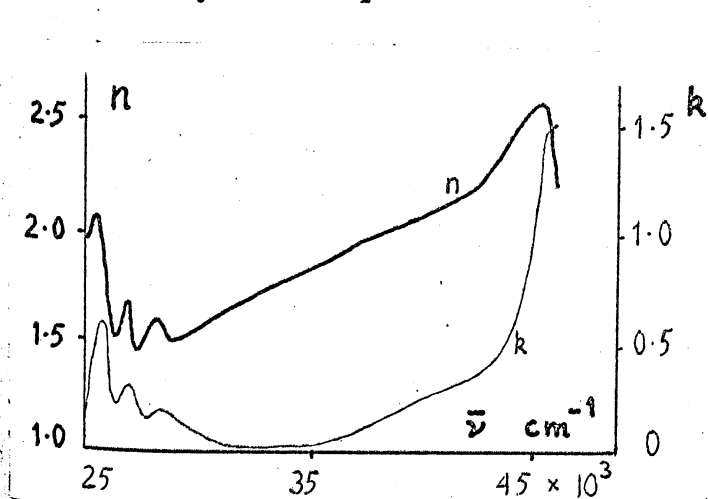
$$r_h = |r_h| e^{i\theta_h}$$

it follows that

$$n_h = \frac{1 - |r_h|^2}{1 + |r_h|^2 - 2|r_h| \cos \theta_h} \quad \dots \dots \dots 14$$

$$k_h = \frac{2|r_h| \sin \theta_h}{1 + |r_h|^2 - 2|r_h| \cos \theta_h} \quad \dots \dots \dots 15$$

Since we know all the quantities on the right hand sides of (14) and (15) as functions of $\bar{\nu}$, the calculation of effective optical parameters n_h and k_h follows immediately. These parameters are shown in figs 27 and 28.



EFFECTIVE OPTICAL PARAMETERS

FIG 27. a- POLARISATION

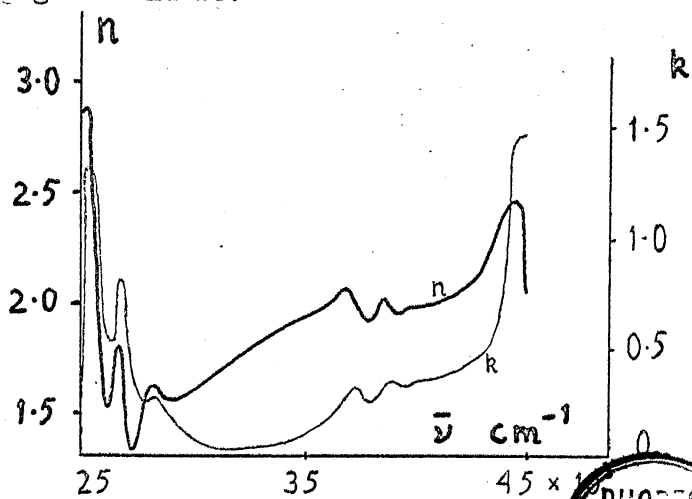


FIG 28. b- POLARISATION



6.5 INTERPRETATION OF THE EFFECTIVE OPTICAL PARAMETERS

Section 1 of this chapter contains a detailed description of the absorption spectrum of anthracene. This serves a two-fold purpose. It provides the spectrum required for the calculation of the fluorescence excitation spectrum which is to come later, and it also provides a yardstick against which we compare our optical parameter k_h . Obviously we want to show that this parameter is equivalent to the a- and b- components of the imaginary part of the complex refractive index of anthracene. The imaginary part is of course the absorption index. Comparison of our k_h (figs. 27 and 28) with absorption spectra in 6.1 shows that they have exactly the same wavelength dependence. This is very encouraging.

However for identification of k_h as the optical constant we need more than wavelength correspondence between the two. We must show that our k_h has the same magnitude as the optical constant. Since this constant is not reported in the literature we use an indirect magnitude comparison. Equation (11) shows how oscillator strengths are calculated for anthracene. We convert our effective optical parameters to effective absorption coefficients α by

$$\alpha_h = \frac{4\pi}{\lambda} \cdot k_h$$

We can use Beer's Law and the data given in Chapter 1 to show that the molar extinction coefficient of anthracene is related to the absorption coefficient by

$$\epsilon(\bar{\nu}) = 0.062 \alpha(\bar{\nu})$$

Therefore we can convert our parameter k_h to effective molar extinction coefficients and use equation (11) to calculate oscillator strengths. In this way we obtain for the first absorption band:

$$f_a = 0.04, \quad f_b = 0.07$$

The excellent agreement between these values and the mean reported oscillator strengths given in 6.1 shows that our k_h parameter, in addition to having the same wavelength dependence, also has the same magnitude (within the limits of experimental error) as the corresponding anthracene absorption data. This being so it would seem reasonable to conclude that our parameters n_h bear a similar correspondence to



the real part of the refractive index. Therefore we have obtained the optical constants of anthracene along the a- and b- crystallographic axes throughout the entire near ultraviolet spectral region.

6.6 THE ANTHRAQUINONE ABSORPTION SPECTRUM.

One of the conclusions we reached in the previous chapter was that a surface layer of probably anthraquinone forms on an anthracene crystal which is exposed to the action of light and air. In our investigation of the excitation spectrum we shall have to take into account this layer. For this reason the absorption spectrum of anthraquinone, as reported in the literature, is reproduced in this chapter dealing with experimental absorption spectra.

The spectrum has been measured by Sidman [35] who gives details of the structure of the first electronic transition. Since this is a very weak transition, however, we shall ignore the structure. Also in [35] is an energy level diagram for the electronic transitions in anthraquinone from which we observe that the upper states are at 38 k cm^{-1} ($\log \epsilon = 4.6$), 30 k cm^{-1} ($\log \epsilon = 4.0$) and 23 k cm^{-1} ($\log \epsilon = 2.0$).

Morton and Earlam [50] have measured the solution (alcohol) absorption spectrum of anthraquinone. Their result is shown in fig. 29. Also in this diagram are the three points corresponding to the Sidman energy levels. A smooth curve, following approximately the solution spectrum but ignoring finer details, has been drawn through these three points. We shall consider this smooth curve to be the solid state absorption spectrum of anthraquinone. It will be used in certain of the calculations of the anthracene fluorescence excitation spectrum.



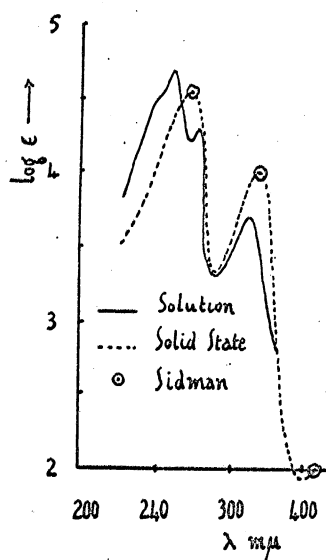


FIG 29 ANTHRAQUINONE ABSORPTION SPECTRUM

CHAPTER SEVEN. THE PHOTOCONDUCTIVITY EXCITATION SPECTRUM OF ANTHRACENE7.1 INTRODUCTION

The photoconductivity and fluorescence excitation spectra of several substances are known to be related. We shall see that this is true also of anthracene. Therefore, since the photoconductivity of anthracene has been widely investigated, while the fluorescence excitation has received much less attention, we summarise certain results and theories obtaining to the photoconductivity. This will assist in our interpretation of the fluorescence excitation spectrum.

7.2 EXPERIMENTAL METHODS

The method most often used for measuring the photoconductivity of anthracene has been the direct method in which two electrodes are attached to the illuminated crystal and the conductivity measured in the normal way. There are two variations of this method: the photoconductivity can be measured with either a sandwich or a surface cell. In the former the electrodes are on opposite sides of a crystal usually about $1/10$ inch thick. The current must flow through the bulk of the crystal. In the surface-type cell the two electrodes are on the same crystal surface and are separated by a gap of one or two millimetres.

These two different cells have on many occasions been observed to give different results. One of the reasons for this is the fact that the surface has been shown to play a leading role in the formation of charge carriers in anthracene. Therefore it is important to know which type of cell has been used when evaluating an experiment. Another reason for the difference in results, not only between the two methods but between different experimenters using the same method is that anthracene is a very good insulator. Thus the direct measurement approach is found to be marred by electrode and space charge effects.

Pulsed photoconductivity techniques [51] have eliminated both problems since electrical contact with the crystal is not required and the quantity of charge involved in the experiment is so low that a significant space charge cannot be set up. The anthracene photoconductivity as measured directly is found to be of the order

10^{-14} ohm $^{-1}$ cm $^{-1}$ but less than 10^{-17} ohm $^{-1}$ cm $^{-1}$, by pulsed methods.

The pulsed method consists simply of transmitting a pulse of light usually about 1 μ sec long through semitransparent electrodes. These electrodes are generally not in electrical contact with the crystal. They provide a field of the order 1KV.cm $^{-1}$ which causes the charge carriers produced in the crystal by the light pulse to drift. This drift results in a redistribution of charge in the external circuit which can be observed on an oscilloscope. The experiment provides an accurate determination of the number and drift mobility of the carriers.

7.3 THE EXCITATION SPECTRUM

Despite earlier variations (introduced mainly by electrode and space charge effects) most workers now agree that the relative quantum efficiency for the production of carriers as a function of the exciting light follows closely the absorption spectrum of the crystal. This spectral dependence has been accounted for by Lyons [52] by assuming that photoconduction is a surface phenomenon: Initially light is absorbed in the crystal and an exciton formed. This exciton diffuses throughout the crystal, and if it reaches the surface will produce a charge carrier there. The average distance of the point of origin of the exciton from the surface is determined by the wavelength of the exciting light. Thus for a wavelength which is strongly absorbed excitons are formed near the surface, have a high probability of reaching the surface and we observe a high photocurrent. Thus the similarity between the excitation and the absorption spectrum.

Steketee and de Jonge [53] adopt the hypothesis that excitons diffuse to the crystal surface where charge separation takes place. They then solve the same diffusion equation as Simpson (Chapter 4.6) but with the boundary conditions determined by the assumption that all excitons reaching the surface decay there. The photocurrent is assumed to be directly proportional to the exciton flux through the interface between the positive (illuminated) electrode and the crystal. The theory then shows that the photocurrent should be proportional to the absorption coefficient. This is observed experimentally. From their experiments with a

sandwich cell, and the above solution of the diffusion equation they estimate values of the mean free diffusion path $(D\tau)^{1/2}$ of an exciton ranging from 700 to 2000 Å for different crystal specimens of anthracene. Since the length of the diffusion path will depend critically on the amount of impurities in the crystal, the variation from crystal to crystal is not unexpected.

7.4 EXCITON-EXCITON INTERACTIONS

The above explanation of photoconduction in anthracene assumes that charge carriers are formed by the interaction of excitons with the crystal surface. There is, however, a body of experimental evidence which suggests that the photoconductivity is not entirely a surface phenomenon. In particular several experimenters have measured a small bulk photocurrent. A possible explanation for this is found in the suggestion of Northrop and Simpson [54] that exciton-exciton interactions can lead to carrier formation.

Experiments performed by Silver et al [55] have been interpreted by them in terms of the suggestion of Northrop and Simpson. These experiments show that if exciting light is used which is weakly absorbed then the photocurrent is proportional to the square of the intensity of the light (as it would be for the bimolecular exciton-exciton process) and that the rate of carrier generation is in agreement with that calculated by Choi and Rice [56, 57] for this process. For strongly absorbed exciting light a unimolecular process must occur since the photocurrent is now found to be linearly related to the light intensity. This has been widely observed.

For our purposes we shall assume that strongly absorbed light produces excitons very close to the surface so that an exciton-surface interaction is dominantly responsible for the photocurrent. Weakly absorbed light produces excitons throughout the crystal nearly uniformly and few are able to reach the surface. The smaller photocurrent observed will be primarily the result of exciton-exciton interaction. Normally the two processes will be mixed. The reabsorption of fluorescence will tend to enhance this mixing.

7.5 THE EFFECTS OF IMPURITIES, DEFECTS AND GASES

Northrop and Simpson [58] find that impurities which quench the fluorescence of anthracene greatly reduce the photocurrent, but that an impurity which leaves the fluorescence unchanged has no influence on the photoconduction. Alpha-particle bombardment [59], neutron bombardment [60] and abrasion [34] reduce both the photoconductivity and fluorescence efficiencies.

From experiments like these in which like effects are noted on the photoconduction and fluorescence excitation, Compton et al [60] conclude that these two phenomena are competing processes in the disappearance of the exciton. They suggest that the exciton disappears at a molecule located at a dislocation and that both the incorporation of impurities and extensive radiation localise the exciton and produce internal quenching of both the anthracene fluorescence and photoconductivity.

It has been demonstrated that the photoconductivity increases in the presence of gases which are electron acceptors (e.g O_2), decreases when the ambient gases are electron donors [61]. The behaviour in the presence of oxygen has been widely observed. It is found that if, after the increase is observed in the presence of oxygen the crystal is placed under hard vacuum, the photocurrent returns to its original value. This indicates that the increase is due to an interaction with adsorbed oxygen molecules. It also indicates (and this has been deduced from other experiments as well) that the majority carriers in anthracene are holes.

CHAPTER EIGHT EXPERIMENTAL FLUORESCENCE EXCITATION SPECTRA8.1 DEFINITION OF THE EXCITATION SPECTRUM

The relation

$$F(\lambda) = k q(\lambda) I(\lambda) A(\lambda) \quad \dots - 16$$

has been used by Weber and Teale [62] to describe the intensity of fluorescence reaching their detector in an experiment in which a fluorescent solution is illuminated with light of wavelength λ and intensity (after allowing for reflection loss) $I(\lambda)$. $A(\lambda)$ is the fraction of light absorbed by the solution, $q(\lambda)$ is the quantum yield for the same wavelength and k is a constant determined by the detector and experimental conditions. If instead of a solution we use a large ($\approx 1 \text{ cm}^3$) crystal of anthracene as the fluorescent substance, then for exciting wavelengths between 220 and 400 $m\mu$ all the light entering the crystal is absorbed there, so that $A(\lambda)=1$ for all wavelengths considered. Therefore if $F(\lambda)$ and $I(\lambda)$ are measured, the ratio: $F(\lambda)/I(\lambda) = k q(\lambda)$ which we shall call the relative quantum efficiency, can be found as a function of wavelength.

The relative quantum efficiency is closely related to the fluorescence excitation spectrum which we shall define as

$$F_e(\lambda) = F(\lambda)/I'(\lambda) \quad \dots - 17$$

where $I'(\lambda) = I(\lambda) + r(\lambda)$ and $r(\lambda)$ is the intensity of the light reflected from the crystal surface. We define the excitation spectrum in this way because all the experimental determinations of the spectrum have ignored reflection at the crystal surface.

8.2 EARLIER SPECTRA

The fluorescence excitation spectrum of anthracene for exciting wavelengths between 220 and 400 $m\mu$ is reported by G. T. Wright [63,64] and for vacuum ultraviolet excitation by Driver [65]. Fig. 30, taken from [63] shows three excitation spectra. All three curves are for excitation of the (001)



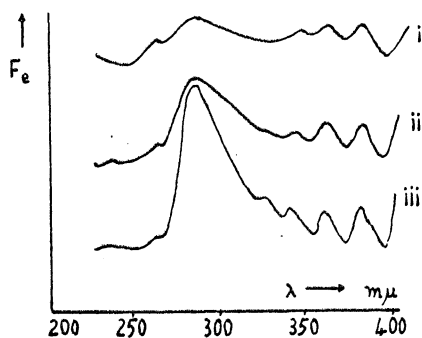


FIG 30 VARIOUS SURFACE CONDITIONS

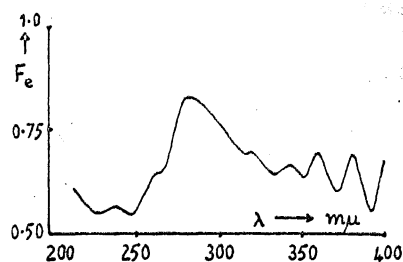


FIG 31 SCRAPED SURFACE

crystal face: (i) freshly cleaved glass smooth surface; (ii) freshly cleaved irregular surface; (iii) polished surface aged for several months—the ordinate scale for this curve has been increased threefold.

Fig. 31 is taken from [64] and is the fluorescence excitation spectrum of a freshly cleaved anthracene crystal which has had the illuminated surface scraped with a clean razor blade to produce a translucent appearance.

The excitation spectra of figs. 30 and 31 have all been measured in transmission i.e. the detector is situated so that it measures the fluorescent light flux which is transmitted through the crystal surface opposite to that illuminated. Comparison with the crystal absorption spectrum shows that maxima of excitation occur at very nearly the same wavelengths as minima of absorption. The excitation spectrum is therefore the inverse of the absorption spectrum. We also observe that both aging and damage (the cleaved irregular surface of case (ii) of fig. 30) cause the fluorescence intensity to drop markedly while at the same time the structure in the spectrum becomes more pronounced. These effects have been explained by G. T. Wright [63] in terms of self absorption of fluorescence, surface escape of fluorescence and spectral variations in the absorption coefficient of the crystal.

In this way G. T. Wright argues that the fluorescence transmitted through the

crystal should be higher for the lower absorption coefficients, giving the inverse relation to the absorption spectrum. The decrease in fluorescence intensity for the damaged or irregular surface is ascribed to the enhancement of surface escape of fluorescence for such a crystal. The very low efficiency of the fluorescence of an aged crystal is thought by G. T. Wright to be caused by chemical deterioration (probably oxidation resulting in the formation of the photo-oxide and anthraquinone) producing in the surface molecular layers impurity molecules capable of quenching the anthracene fluorescence.

8.3 MEASUREMENT IN TRANSMISSION AND REFLECTION

The instrument used for making the reflectivity measurements was found to be capable of yielding fluorescence excitation spectra in both reflection and transmission. It was possible to perform experiments with this apparatus which have been extremely useful in analysing both the excitation spectrum and its variations.

Radiation incident at an angle of 25° was allowed to fall on the (001) face of the crystal. The relative positions of the probe for the reflection and transmission measurements were normal to the (001) surface but on opposite sides of the crystal.

To start with both front and back (001) surfaces were freshly cleaved. The results of measurement of $F(\lambda)$ are designated CCR (cleaved, cleaved; in reflection) and CCT for the reflected and transmitted intensities respectively. Incident intensities $I'(\lambda)$ were found by lowering the crystal and taking readings as described in Chapter Five.

Next the rear surface of the crystal was polished gently with soft tissue paper, so that the glass smooth cleaved surface became cloudy. Results obtained are labelled CPR (cleaved, polished; in reflection) and CPT. $I'(\lambda)$ was remeasured and found to be virtually unchanged from the previous measurement.

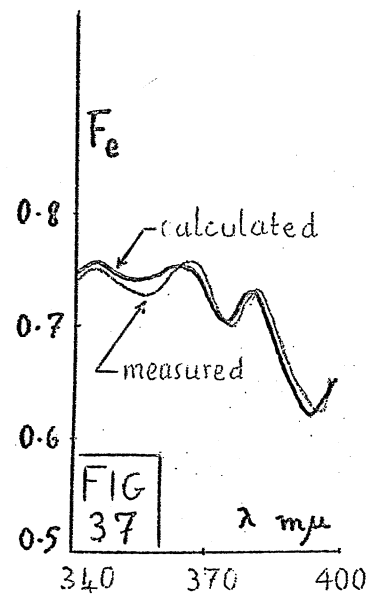
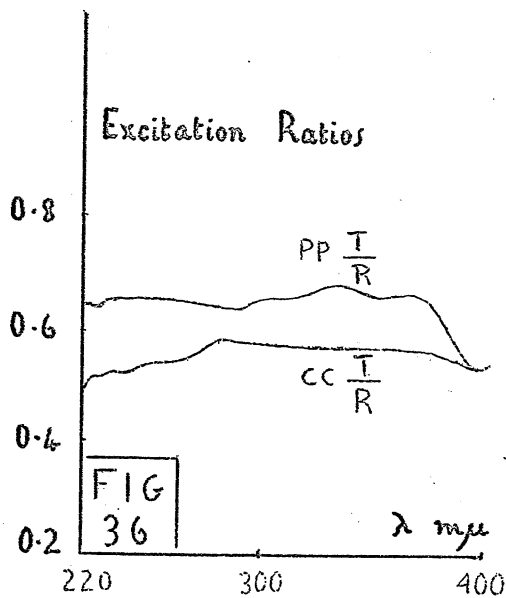
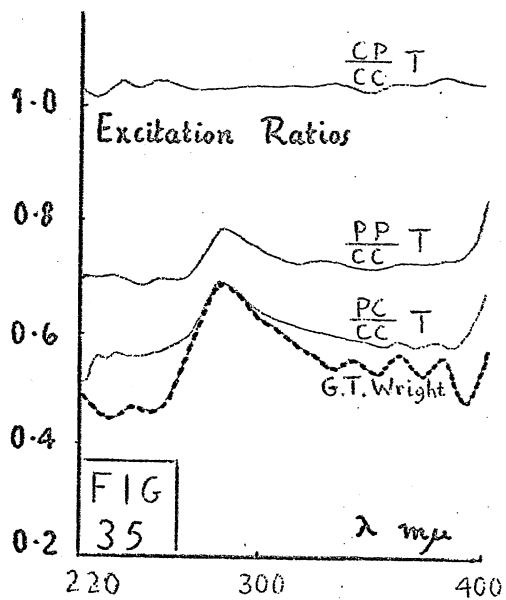
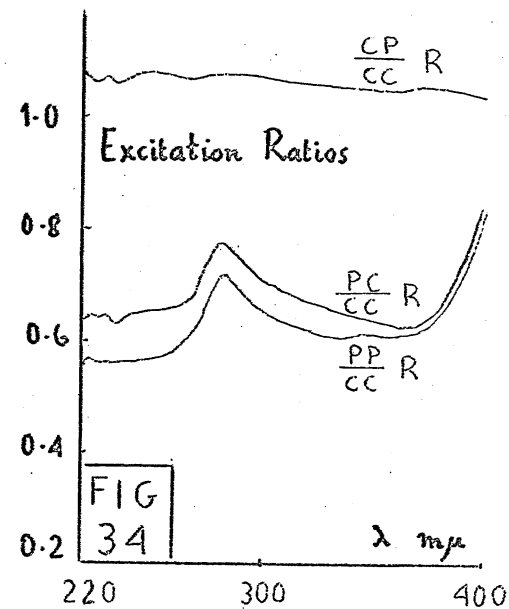
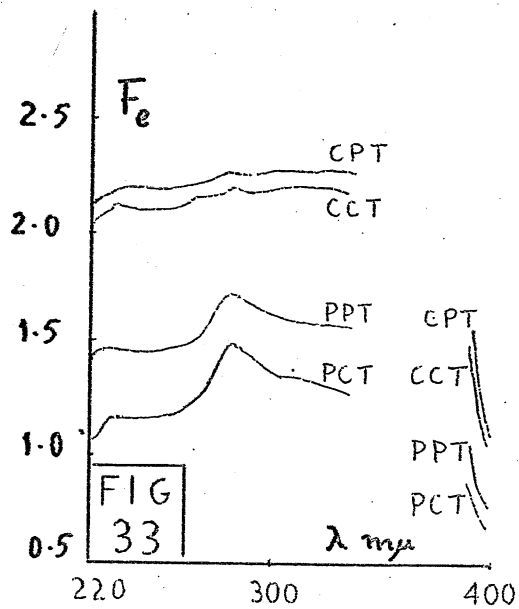
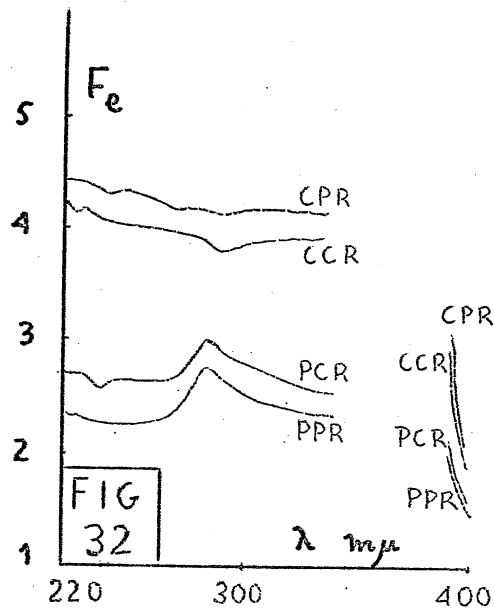
The front surface of the crystal was then polished with tissue paper, so that the resulting spectra were PPR and PPT.

Finally the rear face of the crystal was cleaved, giving spectra PCR and PCT.

$F(\lambda)/I'(\lambda)$ was plotted against λ for values of the wavelength ranging from 220 to 340 $m\mu$, and 390 to 400 $m\mu$. The results are shown in fig. 32 for reflection and fig. 33 for transmission. The wavelengths 340 to 390 $m\mu$ span the region where the sensitivity of the apparatus varies rapidly and in this region the values obtained for $I'(\lambda)$ are not a true indication of the incident light intensity relative to the fluorescent intensity. To overcome this difficulty ratios of $F(\lambda)$ were plotted against λ . Each of the ratios had as denominator the CC values of fluorescence intensity so that the variation in this intensity for the polished crystal relative to the cleaved crystal could be observed. In fig. 34 we have ratios of reflected fluorescence intensities $\frac{CP}{CC} R$, $\frac{PC}{CC} R$, $\frac{PP}{CC} R$ and in fig. 35 ratios of transmitted fluorescence intensities $\frac{CP}{CC} T$, $\frac{PP}{CC} T$, $\frac{PC}{CC} T$. The dotted curve in fig. 35 is the fluorescence excitation spectrum of G. T. Wright which has already been reproduced in fig. 31. It is included here for purposes of comparison.

8.4 INTERPRETATION

(a) Reabsorption. It can be seen from figs. 32 and 33 that when the face on which the incident light falls is freshly cleaved, the excitation of fluorescence is roughly constant between 220 and 340 $m\mu$ (spectra CC and CP). In the case of reflection there is a slight decrease from 220 to about 295 $m\mu$ after which the excitation is very nearly constant. For transmission the excitation increases very gradually at first, and is then approximately constant. Therefore where the excitation increases in transmission it decreases in reflection. This is possibly a reabsorption effect. Where the absorption coefficient of the crystal is high the molecules close to the illuminated surface are excited. Therefore the fluorescence observed in reflection is less likely, on the average, to have been reabsorbed than that in transmission. Since reabsorption tends to decrease the level of the output fluorescent intensity, it follows that for the high absorption coefficient the



transmitted intensity is likely to be relatively lower than the reflected intensity. As the absorption coefficient decreases this trend will tend to reverse itself. Therefore we should observe, when reabsorption is the dominating process, that the reflected excitation curve resembles the absorption spectrum, the transmitted the inverse absorption spectrum. This is clearly, however, a small effect. We see from figs. 32 and 33 that the reflected excitation has a minimum at $285 \text{ m}\mu$ and the transmitted excitation a maximum at $283 \text{ m}\mu$. Anthracene absorption has a very marked minimum at $283 \text{ m}\mu$. This supports the view that the slight structure in the excitation spectrum of a freshly cleaved crystal between wavelengths 220 and $340 \text{ m}\mu$ is due partly to the reabsorption of fluorescence. We note that this cannot be influenced by reflection losses since the reflectivity minimum corresponding to the absorption minimum at $283 \text{ m}\mu$ occurs at $340 \text{ m}\mu$.

(b) Reflection. The long wavelength end of the excitation spectra of G. T. Wright all show a structure which is the inverse of the absorption spectrum. As the surface of the crystal ages or is scratched or polished this structure becomes more noticeable. This we interpret as an increased likelihood of trapping of the exciton at the surface with consequent non-radiative decay and decreased excitation efficiency. However no matter how freshly or cleanly the surface is cleaved this inverse relation to the absorption spectrum is always observed.

We remember that reflection losses have not been taken into account when measuring these spectra and that reflection follows almost exactly the wavelength dependence of absorption when the latter is strong. In the next Chapter, one of the first calculations we perform is that of a long wavelength excitation spectrum allowing for reflection losses. Essentially all we do is subtract the reflectivity from a constant quantum efficiency of fluorescence excitation. The result is shown in fig. 37. Also plotted there is the corresponding measured excitation spectrum of G. T. Wright for a freshly cleaved crystal. The excellent agreement shows that our interpretation of the freshly cleaved long wavelength structure as a reflection-

loss effect is correct. It shows also that earlier workers were wrong in assuming that the reflectivity would affect the excitation spectrum but little.

There will always be, of course, some defects and impurities at the surface, with the associated exciton trapping. At shorter wavelengths where there are very large changes in the absorption coefficient, this effect together with reabsorption seems to dominate the reflection-loss mechanism even for freshly cleaved crystals. In this region then, the simple reflection loss theory alone cannot account for the spectral variation of the excitation efficiency.

(c) Equivalence of Reflection and Transmission Spectra. The PP and PC spectra of figs. 32 to 35 show that when the front surface of the crystal is polished, the excitation spectra have the same appearance whether measured in reflection or transmission. This new result was quite unexpected in view of G. T. Wright's statements that polishing enhances the escape of fluorescence through the surface, producing the observed drop in (transmitted) intensity associated with polishing. This escape mechanism would yield reflection and transmission excitation spectra which are the inverse of each other. Our experiment was repeated many times to verify the unexpected result. On each occasion exactly the result reported above was obtained.

Probably the most characteristic feature of these spectra is the very pronounced peak which appears at 283 m μ . This is the absorption minimum of anthracene in the near ultraviolet. At this wavelength excitons are formed well within the crystal and have little chance of diffusing to the surface. Thus few are trapped and a high efficiency of excitation is observed. In fig. 36 the similarity between the PC/CC^T ratio and G. T. Wright's excitation spectrum shows further that polishing the front surface of the crystal is largely responsible for the inverse absorption relationship.

(d) Decrease in Intensity. It is also very noticeable from figs. 32 and 33 that polishing the front surface reduces the fluorescent intensity markedly from the cleaved values. We have seen that surface abrasion enhances the formation of



probably anthraquinone. It also produces defects and it is possible that it enhances the adsorption of oxygen molecules. The latter are known to increase the photoconductivity and therefore presumably decrease the fluorescent intensity. The enhanced interaction of the exciton at the surface could be due to the increased quantities of oxide, oxygen molecules or defects. Although we cannot say how effective each of these agents is, it is nevertheless possible to explain the decrease in intensity by the increase in exciton trapping cross-section which the presence of these agents brings about.

(e) The Quantum Efficiency. That the above drop in fluorescent intensity is due to true quenching and not to absorption of incident radiation by a non-fluorescent layer of anthraquinone or other oxide is shown by a study of decay times. The quantum efficiency is proportional to the decay time of fluorescence, and measurements which we shall discuss in the next Chapter show that there is a definite decrease in the fluorescence decay time associated with this drop in intensity. Therefore the quantum efficiency has dropped and we have true quenching.

We denote the molecular quantum efficiency by q . This quantity is found to be a constant independent of wavelength and has a value 0.94 [66]. It is not possible to measure the quantum efficiency of an isolated molecule so that the quantity q refers to an extremely thin flake of the material. By extremely thin is meant that reabsorption effects are negligible. The effect of reabsorption of fluorescence is to decrease the quantum efficiency to a value 0.80 for a thick (1cm) crystal. This value we call the crystal quantum efficiency Q . We have seen, however, that the efficiency is highly dependent on the condition of the crystal surface. When we allow for exciton trapping the quantities q and Q will be designated by q' and Q' respectively. Both q' and Q' will be functions of the exciting wavelength. Since exciton trapping is a crystal property $q'(\lambda)$ is not strictly a molecular quantum efficiency, but for consistency of terminology we shall refer to it as the "molecular" quantum efficiency. This quantity is introduced only because it

is a concept which will be useful in the theory developed in the next Chapter.

(f) Depth of Exciton Penetration. Figs. 32 and 33 show that when the front face of the crystal is cleaved and the rear face polished, the fluorescent intensity, far from being reduced from its CC value, is in fact enhanced both in reflection and transmission. This can also be seen from figs. 34 and 35 where the ratios CP/CC R and T are slightly greater than unity for all wavelengths. If the quenching of the fluorescence when the front surface is polished is due to the diffusion to and trapping at the surface of excitons, then the lack of an intensity drop for CP fluorescence indicates that the exciton is unable to traverse the thick crystal, even by the process of reabsorption and re-emission of fluorescence. The actual enhancement of CP fluorescence is difficult to understand, but since it is small, may be an experimental error.

Fig. 36 demonstrates an effect the depth of exciton formation has on the fluorescence. For low values of the absorption coefficient the exciton is formed well within the crystal. But we have just seen that the exciton has a limited range. Therefore the situation arises that these excitons have a small probability of reaching the surface. Under these conditions the fluorescence characteristics of the polished crystal should approach those of the cleaved crystal; among other properties the ratios of transmitted to reflected fluorescent intensities should approach. In fig. 36 we have plotted PP T/R. These curves come together just before 400 mμ and also approach at 283 mμ — both regions of low absorption.



CHAPTER NINE. THEORETICAL FLUORESCENCE EXCITATION SPECTRA9.1 REABSORPTION AND REFLECTION

We shall use equation (16) as the starting point of this theoretical investigation into the fluorescence excitation spectrum of anthracene. Since we have decided that q shall be the molecular quantum efficiency in the absence of quenching, this equation is an expression for the molecular fluorescence intensity of the pure substance reaching the detector i.e. no allowance is made in this equation for either quenching or reabsorption of fluorescence. To emphasise the latter aspect we shall re-write the equation using not $F(\lambda)$ but $F_0(\lambda)$ to show that the fluorescence output under consideration is that associated with the light initially absorbed in the crystal. In addition we assume a perfect detector and total absorption of all light initially absorbed in the crystal, so that (16) becomes

$$F_0(\lambda) = q I(\lambda) \quad \text{--- 18}$$

Of the fluorescent output $F_0(\lambda)$ an amount $p F_0(\lambda)$ is reabsorbed, which results in the further fluorescent output $q \cdot p F_0(\lambda)$. The process continues so that of the new fluorescence $q \cdot p F_0(\lambda)$ we have $p \cdot q \cdot p F_0(\lambda)$ reabsorbed, and so on. This treatment assumes both p and q to be independent of the number of times reabsorption and re-emission occurs.

The fluorescence flux $F(\lambda)$ which escapes the crystal to be observed is the sum of all the fluorescence emitted minus the sum of all the flux which is reabsorbed:

$$F(\lambda) = F_0(\lambda) + \sum_{n=1}^{\infty} p^n q^n F_0(\lambda) - \sum_{n=1}^{\infty} p^n q^{n-1} F_0(\lambda) = \frac{1-p}{1-pq} F_0(\lambda) \quad \text{--- 19}$$

p and q have been determined experimentally by Wright [66] and Birks and Wright [67] to be 0.76 and 0.94 respectively. Combining (18) and (19) we get

$$F(\lambda) = 0.79 I(\lambda) \quad \text{--- 20}$$

which is the semi-infinite crystal equivalent of the form (18) so that the pure crystal quantum efficiency Q is 0.79. If we use (20) in (17) we obtain

$$F_e(\lambda) = 0.79 [1 - R(\lambda)] \quad \text{--- 21}$$

where $F_e(\lambda)$ is the fluorescence excitation spectrum and $R(\lambda)$ is the reflectivity. According to this theory the structure in the excitation spectrum of a pure substance in which all the light entering the crystal is initially absorbed, is due to the variation of the reflecting power of the crystal with wavelength. In order to calculate $F_e(\lambda)$ we need know only $R(\lambda)$ which we obtain from Chapter Five. $F_e(\lambda)$ calculated in this way is shown in fig. 37 for wavelengths 340 to 400 $m\mu$. Also shown is the experimental result of G. T. Wright for a freshly cleaved crystal. The agreement between the two curves is good enough to show that the theory developed thus far is essentially correct. At lower wavelengths the agreement is not nearly as good. We shall therefore include exciton surface-trapping to account for the appearance of the complete spectrum.

9.2 EXCITON TRAPPING

For the purposes of the calculation we no longer think in terms of the flux of the fluorescent light but in terms of the number of excitons which decay radiatively. The proportion of the fluorescent flux reabsorbed now becomes the proportion of photons reabsorbed to form new excitons, and so on. Thus we have zero order, first order, second order, ----- excitons, and we require to know the proportion of excitons belonging to each order which will be trapped at the surface.

Let us assume that the fraction of excitons from any one order which is trapped in this way is w . Obviously the proportion trapped will depend on the distribution of excitons within the crystal and this in turn on the wavelength of the light producing the excitons. We shall assume that the distribution in depth of excitons is the same for all orders of exciton caused initially by a given wavelength of the incident radiation. Since the number of excitons in an order drops off rapidly as the order increases and since we have already commented upon the inability of the exciton to traverse the thick crystal, the crude approximation of assuming the same distribution for all orders seems justified. Certainly the theory would become very difficult if we were to attempt to find the exact distribution of excitons

for each order.

The trapping of a fraction $w(\lambda)$ of our excitons will lead to a decrease in the quantum efficiency of fluorescence, and clearly the new "molecular" quantum efficiency q' will be

$$q'(\lambda) = q [1 - w(\lambda)] \quad - - - - 22$$

By running through the same argument as before we can arrive at an equation analogous to (19):

$$F'(\lambda) = q'(\lambda) \bar{I}(\lambda) \frac{1-p}{1-pq'(\lambda)} = Q'(\lambda) \bar{I}(\lambda) \quad - - - - 23$$

In order to be able to calculate the fluorescence excitation spectrum from (23) we need to know $\bar{I}(\lambda)$ as well as $q'(\lambda)$ or $w(\lambda)$. Since exciton trapping is taking place it is possible that the reflectivity can vary as the degree of trapping changes.

We use the results of Chapter Five to correct $\bar{I}(\lambda)$ for the various reflectivities

$R(\lambda)$. In addition we shall allow for absorption of part of the incident radiation in a surface layer of anthraquinone. $q'(\lambda)$ will be obtained from a calculation of the probability $w(\lambda)$ that an exciton diffuses to the surface of the crystal and is trapped there.

9.3 PROBABILITY OF EXCITON DIFFUSION TO THE SURFACE

We know that molecular excitons move from molecule to molecule within the crystal. In addition they may be scattered by phonons, point defects, dislocations and impurities. Their motion is therefore diffusive. We have also seen that in anthracene a typical exciton averages 10^5 "jumps" from molecule to molecule. The diffusion process can therefore be treated as a random walk. Furthermore we are interested in the front surface only, as a region of exciton absorption. We resolve each step of the walk into three components, one perpendicular to the plane of the front surface (x-direction) and two others in the plane parallel to the surface, the three components being mutually perpendicular. Therefore the excitons can reach the front surface via the x-component only. The components parallel to the front surface cannot bring about absorption by this surface. The other crystal surfaces

are not considered because the exciton cannot traverse a thick crystal, so we regard the crystal as being semi-infinite. Thus we reduce our random walk to the one-dimensional case.

Following Feller [68] we consider the motion of a variable point or "particle" on the x-axis. At time 0 this particle is at its initial position z , and at times 1, 2, 3, ----- it moves a unit step in the positive or negative directions. We assign equal probabilities to these two directions. The motion terminates when the particle for the first time reaches $z = 0$, so that our particle performs a random walk on a semi-infinite straight line with an absorbing barrier at the origin. Feller gives the probability $w(z, n)$ that the particle, initially at $z > 0$, will be absorbed at exactly the n -th step as

$$w(z, n) = \frac{z}{n} \binom{n}{\frac{1}{2}(n-z)} \cdot \frac{1}{2^n} \quad \text{--- 24}$$

Chandrasekhar [69] shows that for n large and $z \ll n$, (24) can be written

$$w(z, n) = \frac{z}{n} \left(\frac{2}{n\pi} \right)^{1/2} \cdot \exp\left(-\frac{z^2}{2n}\right) \quad \text{--- 25}$$

If instead of z we introduce the net displacement x as a variable:

$$x = z\ell \quad \text{and} \quad n = T/t$$

where ℓ is the length of a step and T is the time taken for n steps so that t is the mean time per step, then from (25) the probability per unit time of excitons being absorbed at 0 from the point x at the time T is

$$a(x, T) = \frac{x}{T} \frac{1}{2(\pi DT)^{1/2}} \exp\left(-\frac{x^2}{4DT}\right) \quad \text{--- 26}$$

where $D = \frac{1}{2t} \ell^2$ --- 27

The number of excitons formed at any point x will depend on the intensity of the incident radiation at that point. Since this intensity varies as $\exp(-\alpha x)$, a fraction $\propto e^{-\alpha x} \delta x$ of all the excitons is formed between x and $x + \delta x$. Therefore the time rate at the time T at which excitons are absorbed at the surface from the region x to $x + \delta x$ is

$$a(x, T) \propto \exp(-\alpha x) \delta x$$

Since the excitons have a finite average life-time τ before they decay radiatively,

the fraction (probability) of the excitons formed within the crystal which eventually reaches the surface is

$$w(\alpha) = \int_0^{\tau} \int_0^{\infty} a(x, T) \alpha \exp(-\alpha x) dx dT \quad \text{--- 28}$$

Putting (26) into (28) and integrating

$$w(\alpha) = 1 - \exp(-\alpha^2 D \tau) \operatorname{erfc}(\alpha \sqrt{D \tau}) \quad \text{--- 29}$$

In order to calculate $w(\alpha)$ from (29) we need to know $\alpha(\lambda)$, D and τ . We can find α from the absorption spectra of Tanaka or Bree and Lyons which are redrawn in Chapter Six. The quantity $(D\tau)^{1/2}$ which appears in (29) is the diffusion length L which in Chapters Four and Seven we found to range between 400 and 2,000 Å. We assume a convenient value of 1,000 Å for our calculation of $w(\alpha)$.

9.4 EXTENT OF EXCITON TRAPPING

Before we proceed with the calculation of $w(\alpha)$ we remember that we have assumed exciton propagation in the crystal to be isotropic, but Simpson [31] has shown that this is not true. Our particular direction (perpendicular to the (001) plane) is known to be a direction which is not favoured. In addition our choice of L is to some extent arbitrary. To allow for both of these factors we shall use the known decay times to estimate the magnitude of the effect of exciton capture and then adjust our calculated values of $w(\alpha)$ accordingly. The adjusted values we shall call $w_a(\alpha)$.

However we cannot yet identify $w_a(\alpha)$ with $w(\lambda)$ of equation (22) since (29) was derived assuming that every exciton reaching the front surface is absorbed, but (22) includes the case where the concentration of trapping centres is so low that it is possible for an exciton to travel to the surface and not be trapped there. For a perfectly trapping surface $w(\lambda)$ would equal $w_a(\alpha)$ but under any other circumstance $w(\lambda)$ is smaller than $w_a(\alpha)$. Therefore we write

$$w(\lambda) = k w_a(\alpha) \quad \text{--- 30}$$

where the proportionality constant k runs from 0 to 1 and is a measure of the trapping cross-section for excitons at the surface.

We now attempt to estimate the magnitude of $w_a(\alpha)$ from decay times. In the measurement of the decay time of the fluorescence of anthracene crystals it is

unavoidable that part of the fluorescence be reabsorbed. The effect of this reabsorption is to increase the decay time. Thus when no reabsorption of fluorescence and no exciton-surface-trapping takes place the molecular decay time τ_m is obtained. This becomes τ'_m when trapping occurs. For a thick crystal reabsorption takes place and the decay times increase to τ_c and τ'_c corresponding to the cases of no trapping and trapping respectively. Birks [70] has derived the following relation between τ_m and τ_c :

$$\tau_c = \frac{\tau_m}{1-pq}$$

Taking exciton trapping into consideration we have derived

$$\tau'_c = \frac{\tau'_m}{1-pq}$$

In addition we know that the molecular quantum efficiencies will be proportional to the life-times of the excited state:

$$\tau'_m / \tau_m = \eta' / \eta$$

Combining the above three equations with (22) we get

$$w(\lambda) = 1 - \frac{\tau'_c}{\tau_c - pq(\tau_c - \tau'_c)} \quad \dots \dots \dots 31$$

$w(\lambda)$ depends on both the wavelength of the exciting light and on the relative trapping cross-section k . When $k=0$ we have no trapping at the surface and $w(\lambda)=0$ as can be seen from both (30) and (31) since $k=0$ implies $\tau_c = \tau'_c$. When $k=1$ we have perfect trapping and $w(\lambda)$ is identically $w_a(\alpha)$. We assume that an aged anthracene crystal i.e. one which has been exposed to light and the atmosphere for several months, gives perfect trapping. For the aged crystal then, $k=1$ and $\tau'_c = \tau'_{aged}$ with $w(\lambda) = w_a(\alpha)$ so that (31) becomes

$$w_a(\alpha) = 1 - \frac{\tau'_{aged}}{\tau_c - pq(\tau_c - \tau'_{aged})} \quad \dots \dots \dots 32$$

In order to calculate $w_a(\alpha)$ from (32) we look for values of τ'_{aged} and τ_c in the literature. Several values of these decay times are reported but none is for monochromatic light. Since τ'_{aged} is wavelength dependent we cannot use (32) to find a particular value of $w(\lambda)$. We can, however, obtain a general value of w_a from (32) by using representative values of the reported decay times: $\tau_c = 24$ n sec,

$\tau'_{aged} = 13 \text{ n sec.}$ This gives $w_a = 0.20$.

$w(\alpha)$ was calculated from (29) using the value $L = 1000 \text{ \AA}$. It was found that by adjusting the value of L to lower values, better agreement could be obtained with the general value $w_a = 0.20$. The value of L which gave the best agreement was $L = 300 \text{ \AA}$. The values of $w(\alpha)$ calculated from (29) using $L = 300 \text{ \AA}$ are therefore called $w_a(\alpha)$.

9.5 CALCULATION OF THE SPECTRA

The total intensity of the light falling on our crystal is $I'(\lambda)$. At the surface this intensity is divided as follows: an amount $r(\lambda)$ is reflected, $s(\lambda)$ is absorbed in a layer of anthraquinone which is present at the surface and the remainder $I(\lambda)$ enters the bulk material of the anthracene crystal where it is absorbed.

Putting this information into (23) and dividing through by $I'(\lambda)$ we get

$$\frac{F'(\lambda)}{I'(\lambda)} = F'_e(\lambda) = Q'(\lambda) [1 - S(\lambda) - R(\lambda)] \quad \dots \quad 33$$

$Q'(\lambda)$. If we put (30) into (22) and use the result with (23) it can be seen that an expression is obtained for $Q'(\lambda)$ in which the only unknown is the relative trapping cross-section k . We want to calculate spectra for which different degrees of exciton trapping occur. We can obtain three such spectra by choosing $k = 0.1, 0.5$ and 1.0 . These values correspond to (i) a small degree of trapping such as might be found for a freshly cleaved crystal which has a small concentration of impurities and defects at the surface, (ii) intermediate trapping and (iii) perfect trapping - the aged crystal. We anticipate that these values correspond to the three excitation spectra measured by G. T. Wright which are shown in fig. 30. Thus we are able to calculate Q'_1, Q'_5 and Q'_{10} corresponding to $k = 0.1, 0.5$ and 1.0 respectively.

$R(\lambda)$. The results of Chapter Five were used to make the reflection-loss corrections appropriate to the three cases $k = 0.1, 0.5$ and 1.0 .

$S(\lambda)$. The absorption spectrum of anthraquinone is shown in fig. 29. The thickness of the layer of anthraquinone is not known so that it is necessary to

make an estimate. We note that at $\lambda = 265 \text{ m}\mu$, anthraquinone is highly absorbing ($\log \epsilon = 4.6$) and since the impurity layer on an aged crystal is thought to be considerable, we assume that for such a crystal nearly all light of this wavelength which enters the crystal is absorbed by the anthraquinone. At $265 \text{ m}\mu$ $R = 0.10$ approximately, so that we write $S(265 \text{ m}\mu) = 0.85$. Putting this into Beer's Law together with $\log \epsilon = 4.6$ we get that the product C of the concentration c and thickness x of the impurity layer is $C_{10} = 2.0696 \times 10^{-5}$ moles. cm. litre $^{-1}$. C is the equivalent surface density of the impurity. We have called the above value C_{10} because it corresponds to the aged crystal for which $k = 1.0$. For $k = 0.1$ and 0.5 the equivalent surface densities are $C_1 = 0.1C_{10}$ and $C_5 = 0.5C_{10}$ respectively. Knowing these densities as well as the absorption spectrum (fig. 29) of the impurity, we are able to calculate the fractions S_1 , S_5 and S_{10} of the incident light which are absorbed in the surface layers of the three cases.

We now have all the information that is required to calculate excitation spectra from (33). We obtain three spectra F'_{e1} , F'_{e5} and F'_{e10} . These are shown in fig. 38.

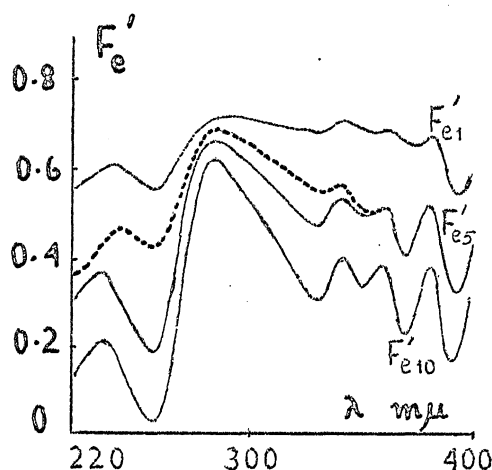


FIG 38. THEORETICAL FLUORESCENCE EXCITATION SPECTRA

These spectra agree quite well with their experimental counterparts shown in fig. 30, except at very low wavelengths. This might be due to (i) the experimental difficulties experienced in obtaining reliable results in this spectral region (ii) our assumption that the relative trapping cross-section depends on the concentration

of anthraquinone. We have seen that the trapping could be due to adsorbed oxygen or surface defects (iii) an overestimation of the degree to which the surface layer absorbs the incident light.

Therefore an additional excitation spectrum was calculated from (33) using C_1 and $k = 0.5$ i.e. fairly high trapping with low anthraquinone concentration. $R(\lambda)$ in this case was taken to be the reflectivity of the freshly cleaved crystal. The resulting excitation spectrum is the dotted curve in fig. 38. This spectrum is identical to $F_{e5}'(\lambda)$ at the longer wavelengths since anthraquinone is transparent there and has no effect on the incident radiation. At shorter wavelengths there is some difference though, the dotted curve resembling fairly closely, considering the likely errors in the anthraquinone absorption spectrum we have estimated, the experimental excitation spectrum shown in fig. 31. However this is not conclusive evidence that anthraquinone is not responsible for the trapping of excitons but rather that we may have over-estimated the extent to which the surface layer absorbs incident radiation.

CONCLUSIONS

It is shown that both ultraviolet irradiation and abrasion of the anthracene crystal surface reduce the reflectivity, the latter process being far more effective in this reduction. The reflectivity of a crystal surface which has a very thick layer of oxides is shown to be different from the true anthracene reflectivity. Analysis of the difference indicates that the oxide is probably anthraquinone.

Effective optical parameters for a- and b- crystallographic axis polarisations of the incident light are obtained from the reflectivity measurements. In the Thesis arguments are presented from which it can be inferred that the parameters are equivalent to the real and imaginary parts of the refractive index i.e. the optical constants. To the best of the author's knowledge this is the first report of the optical constants of anthracene throughout the near ultraviolet.

Experiments performed by the author and described in this Thesis indicate that the fluorescence excitation spectrum of anthracene has its structure determined principally by the trapping of excitons at the crystal surface. The trapping, which is generally followed by non-radiative decay (quenching) is apparently enhanced by the presence of impurities and defects. It might be that not both of these are active in trapping. From the evidence it would appear more probable that the trapping is due to impurities, and that the most likely of the impurities is anthraquinone.

By taking into account the absorption of part of the incident light in the surface layer of anthraquinone, specular reflectance at the surface and the known absorption characteristics of the crystal (including reabsorption of the fluorescence) the author is able to calculate Fluorescence Excitation Spectra. These agree well with the experimental spectra. This appears to be the first quantitative evaluation of the fluorescence excitation spectrum of the anthracene crystal. It represents a signal advance over previous qualitative explanations which used such concepts as surface escape of fluorescence. The experimental results in this Thesis show that it is very unlikely that such processes have any significant influence on the excitation spectrum.

APPENDIX A THE KRAMERS-KRONIG DISPERSION RELATION

The calculation of optical constants by the Price-Robinson method involves the Kramers-Kronig dispersion relation. Such a relation allows the real part of a complex function to be evaluated if the imaginary part is known as a function of frequency, or vice versa. The only condition imposed upon the complex function is that it be analytic in the upper half of the complex frequency plane. This is equivalent to assuming strict causality to hold.

Toll [71] defines a dispersion relation to be a simple integral formula relating a dispersive process to an absorption process. These are usually called Kramers-Kronig relations from the work of Kramers [72] who used the idea of a complex refractive index defined under certain conditions of analyticity in the complex frequency plane to show that a signal cannot travel faster than c in any medium in which the dispersion relation is obeyed; and Kronig [73] who obtained dispersion relations for the dielectric constant and index of refraction. Kronig [74] was also first to show that the dispersion relation is the necessary and sufficient condition for strict causality to be satisfied.

Strict causality is defined by Toll generally as the condition that "no output can occur before the input", or for particular physical systems--a scattering system-- as "no scattered wave can appear until the primary wave has reached some part of the scatterer", --a homogeneous refractive medium-- as "no signal can be transmitted faster than c ." Toll then proves rigorously the logical equivalence of strict causality and the validity of the dispersion relations for the general scattering system where the "output" function is a linear functional of the "input" function and the connection between the output and the freely variable input is time-independent.

The Kramers-Kronig relations are seen to be very general and powerful tools. However experimental investigations have revealed the possibility that the Kramers-Kronig relations are not generally valid for the dispersion process in anthracene

and related substances. The school of Brodin [75, 76, 77] measure dispersion curves $n(\bar{\nu})$ by an interference method using a Jamin interferometer and absorption curves $k(\bar{\nu})$ using photographic and photo-electric photometry. They then apply the dispersion relation in the form which links n with k to obtain theoretical values of n from the experimental k . Comparison between the theoretical and experimental values of n reveals a disparity at low temperatures in regions of absorption intimately connected with the exciton.

By taking into account spatial dispersion (the classical theory of dispersion is based upon local dielectric behaviour which assumes implicitly that energy is transported solely by means of electromagnetic waves. When there is an alternative means by which energy can be transported, such as excitons, we have spatial dispersion) Brodin and his co-workers develop a theory which gives the equations determining the absorption coefficient and refractive index of an electromagnetic wave in a crystal in the region of exciton absorption. These equations go over to the corresponding formulae of classical crystal optics as the temperature is increased or as we move to frequencies other than those of the exciton absorption region.

Hopfield and Thomas [49] develop the theory of spatial dispersion in the region of an exciton band for an exciton of non-infinite effective mass to obtain an expression for the reflectivity in this region. They find a radical departure from the shape of reflectivity peaks expected from the classical theory, the most striking aspect of the new peaks being very sharp subsidiary spikes. These spikes are observed experimentally when the temperature is below 20° K. Above this temperature the reflectivity is that which is expected classically.

It is the above work which led to the observation by Hopfield and Thomas on the utility of Kramers-Kronig relations near sharp exciton dispersion peaks which we have quoted in Chapter 6.4. In addition to the fact that we are satisfied with obtaining effective optical parameters, we emphasise that spatial dispersion introduces complications only at very low temperatures (we work at room temperature) and

over a very restricted frequency region (our measurements cover a frequency range much wider than the narrow long wavelength exciton band). Therefore we are satisfied that the Kramers-Kronig relation can be meaningfully applied in our case.

APPENDIX B ON THE SOLUTION OF EQUATION (12)

The solution of equation (12) to yield the phase $\theta(\bar{\nu})$ is a long and tedious numerical exercise. The method of solution we have chosen is that of Bode [47]. It is clear that the reader should be familiar with Bode's method in order that such things as the correction to the phase which is made in Chapter 6.3 might be more readily understood. Rather than give a detailed description of our particular solution, however, we consider it sufficient to discuss the application of Bode's method to equation (12) in general terms.

1. The reflectivity $R (= |r|^2)$ is converted to $|r(\bar{\nu})|$ and a curve of $-\log_e |r|$ vs $\log_{10} \bar{\nu}$ plotted. The negative sign is used for convenience in plotting. Such a curve is of course drawn for each of the spectra R_a and R_b . In what follows we shall not refer to these a- and b- spectra individually, but obviously (12) is solved once for a- and then again for b- polarisation yielding $\theta_a(\bar{\nu})$ and $\theta_b(\bar{\nu})$ respectively. We call the log-log plot the real characteristic, the phase θ the imaginary characteristic.

2. In theory it is necessary to know $|r(\bar{\nu})|$ over all wave numbers from 0 to ∞ . In practice $|r(\bar{\nu})|$ need be known only over a range somewhat greater than that of interest. The extension of the reflectivity R to wavelengths beyond the near ultraviolet (our range of interest) is described in 6.3. The error introduced by not knowing $|r(\bar{\nu})|$ at extreme wave numbers is negligible.

3. The log-log plot is now approximated by straight lines. According to Bode it is usually sufficient, in choosing the set of straight lines, to represent only the major trends in the real characteristic. This is the result of the relation (12) between real and imaginary components involving a smoothing out or averaging out of the real characteristic. If the major trends are correctly represented, therefore, the imaginary characteristics corresponding to the true real characteristic and to the straightline approximation to it should be much more nearly equal than are the

true and approximate real characteristics themselves.

4. We denote the separation of the ordinates of the m-th straight line segment in the above approximation by h_m nepers i.e. if the endpoints of the m-th line are characterised by ordinates $-\log_e |r_1|$ and $-\log_e |r_2|$ then

$$-h_m = \log_e |r_2| - \log_e |r_1| = \log_e \left| \frac{r_2}{r_1} \right| \text{ nepers}$$

h for each of the straight line segments is obtained from the real characteristic.

5. The abscissae of the endpoints of the m-th segment are $\log_{10} \bar{\nu}_1$ and $\log_{10} \bar{\nu}_2$. From these we obtain $\bar{\nu}_1$ and $\bar{\nu}_2$ and hence the geometric frequency centre $\bar{\nu}_{m0}$ of this segment. Parameter a_m is calculated from either $a_m = \bar{\nu}_{m0} / \bar{\nu}_1$ or $a_m = \bar{\nu}_2 / \bar{\nu}_{m0}$. A parameter a is calculated for each of the straight lines.

6. We have now characterised each straight line segment by three numbers: h , $\bar{\nu}_0$ and a .

7. Bode solves (12) for a linear real characteristic (i.e. a straight line segment) which has $h = 1$ neper. The solution is obtained for a large number of closely spaced values of the parameter a . His results are presented graphically in a series of curves; each curve corresponds to a particular value of parameter a . Since he has chosen $h = 1$ throughout, the ordinate scale of his curves has units radians.neper⁻¹. This quantity is plotted against $\bar{\nu} / \bar{\nu}_0$.

8. Consider the m-th segment. We have already determined the parameter a_m for this segment. Therefore we can immediately choose that curve from Bode's family of curves which is appropriate to the m-th segment.

9. This curve is the imaginary characteristic in radians.neper⁻¹ given as a function of $\bar{\nu} / \bar{\nu}_0$. We know $\bar{\nu}_0$ for our segment. Hence we can obtain the imaginary characteristic in radians.neper⁻¹ as a function of $\bar{\nu}$ for the m-th segment.

10. Our particular segment has an ordinate separation h_m nepers. Therefore we convert the imaginary characteristic from radians.neper⁻¹ to radians by a simple

multiplication by h_m .

11. The previous step has yielded the phase $\theta_m(\bar{\nu})$ which corresponds to the m -th segment of the real characteristic. The contribution to the phase from each of the segments is obtained in like manner. These contributions are summed to yield the imaginary characteristic $\theta(\bar{\nu})$. We have solved the dispersion relation for θ .

APPENDIX C ON THE DERIVATION OF EQUATION (13)

The derivation of the Fresnel equations of reflectivity for an isotropic medium is straightforward and can be found in many text-books. We wish to apply this theory to anthracene. Anthracene is, however, electrically anisotropic. Therefore the relations between the electric, displacement and current vectors which appear in Maxwell's equations become complicated. In particular the dielectric constant and conductivity become symmetric second-order tensors. In general these tensors have different principal axes. We let x, y, z refer to the principal dielectric axes, x', y', z' to the principal conductivity axes. It is possible to express one set of axes in terms of the other by using the following direction cosine scheme

	x	y	z
x'	l_1	m_1	n_1
y'	l_2	m_2	n_2
z'	l_3	m_3	n_3

Now the b - crystallographic axis of anthracene is an axis of symmetry. Therefore both the dielectric and conductivity tensors must have a principal axis which coincides with this symmetry axis for all frequencies in order that the tensors remain unchanged by the symmetry operation. If we choose y and y' to be the common axis coinciding with the symmetry axis b , then the direction cosine scheme becomes

	x	y	z
x'	l	0	$-p$
y'	0	1	0
z'	p	0	l

Where l = cosine of the angle between x and x' or between z and z'
and $p^2 = 1 - l^2$

With this scheme it is possible to express the components of current density along the principal dielectric axes in terms of the principal conductivity values:

$$j_x = \sigma_{x'} E_{x'} l + \sigma_{z'} E_{z'} p$$

$$j_y = \sigma_{y'} E_{y'}$$

--- C 1

$$j_z = -\sigma_x E_x \rho + \sigma_z E_z \ell$$

The theory of propagation of electromagnetic waves in an absorbing medium gives

$$\vec{s} \cdot \vec{D} = \frac{1}{i\omega} (\vec{s} \cdot \vec{j}) \quad \text{--- C2}$$

where the symbols have their usual significance. We want to know under what conditions we can consider the displacement \vec{D} to be perpendicular to the wave-normal \vec{s} . Putting (C1) into (C2):

$$\vec{s} \cdot \vec{D} = \frac{1}{i\omega} \left\{ \sigma_x (s_x E_x \ell - s_z E_x \rho) + \sigma_y (s_y E_y) + \sigma_z (s_x E_z \rho + s_z E_z \ell) \right\} \quad \text{--- C3}$$

This is not generally equal to zero. However if the conductivity is small enough to make the right hand side negligible then we can regard the displacement as being perpendicular to the wave normal. We do not know the conductivity of anthracene at the frequencies of interest, but when the photoconductivity is measured using these wavelengths for excitation, a value typically less than 10^{-17} ohm⁻¹ cm⁻¹ is obtained [51]. In the theory that follows it is tacitly assumed that

$$\vec{s} \cdot \vec{D} \doteq 0$$

If light is reflected from the (001) crystallographic face of the anthracene crystal with the (010) face in the plane of incidence, then two of the principal dielectric axes (x,z) are contained in this plane. The optic axes of the (biaxial) crystal are also contained in this plane.

Now the two directions of \vec{D} in the biaxial crystal corresponding to the wave-normal \vec{s} are the internal and external bisectors of the angle between two planes, each of which contains the wave-normal and one of the optic axes. Applying this to our particular situation (described in the previous paragraph) we find that one displacement vector lies in the plane of incidence, the other perpendicular to it.

If we use these results in the usual method for deriving Fresnel's equations of reflectivity we get, for normal incidence, equation (13) of this Thesis. Since the dielectric constant and conductivity are complex tensors, the quantities appearing in this equation are not easily interpreted. However it is sufficient for our

purposes to show that an equation which is of the same form as the Fresnel formulae does apply to anthracene under the assumptions and orientation of the crystal we have specified.

SUMMARY

ONE A brief description of the geometry of the anthracene molecule and crystal is presented. This is included to make later Chapters more meaningful. In addition a method of locating crystallographic axes and faces is described.

TWO In this chapter the energy levels of the anthracene molecule, as calculated by Coulson using the LCAO molecular orbital method, are presented. The ground state is found to be A_g and the first three excited states B_{2u} , B_{3u} and B_{2u} in increasing order of energy respectively.

THREE The extension of the theory of the energy states to the crystal, as performed by Davydov, Craig, Hobbins and others is reviewed. It is shown that each molecular transition becomes two in the crystal. These two components have different energies and polarisations. The theory shows that a localised excited state in anthracene is not a stationary state so that the energy of excitation moves from molecule to molecule. Thus we are introduced to the exciton, a concept which is of great importance to this Thesis.

FOUR Because of the importance of the exciton this Chapter is devoted to a discussion of its characteristics. First the various forms which the exciton can take and then the decay, trapping, scattering and diffusion of molecular excitons are reviewed. In this way we are made familiar with the behaviour of excitons in anthracene.

FIVE A detailed description of the apparatus and method of measurement used to find the ultraviolet reflectivity spectrum of anthracene is given. The results of an investigation into the effects of varying the condition of the reflecting surface is presented. These results are used in a later chapter to calculate fluorescence excitation spectra.

SIX The ultraviolet absorption spectrum of anthracene measured by conventional techniques is discussed. The Price-Robinson method is then applied to the reflectivity data to yield effective optical parameters. By comparison with the conventional absorption spectra we are able to infer that these parameters are equivalent to

the optical constants. Since the absorption spectrum of anthraquinone is needed in later calculations it is presented in this chapter on absorption spectra.

SEVEN Because it is not unrelated to the fluorescence excitation, and has received much attention from researchers, the photoconductivity excitation spectrum of anthracene is discussed. Emphasis is placed on the interpretation of the photoconductivity in terms of excitons. This aids our interpretation of the fluorescence excitation spectrum.

EIGHT After defining the fluorescence excitation spectrum to be calculated, the experimental results of G. T. Wright are given. The author's measurements of the excitation spectrum are then presented. A detailed interpretation of these excitation spectra taking into account reabsorption of fluorescence, reflection-losses and the quenching of fluorescence due to exciton trapping at the surface is presented.

NINE The ideas of the previous chapter are incorporated into a quantitative examination of the excitation spectrum from which an expression for the spectrum emerges. The calculation of the excitation spectra is preceded by a determination of the fraction of excitons trapped at the surface. This determination combines the random walk of the exciton with known decay times to yield the fraction trapped. This new knowledge together with the reflection and absorption spectra of previous chapters is put into the expression for the fluorescence excitation spectrum. The resulting spectra agree well with their experimental counterparts.

A A general definition of Kramers-Kronig relations and the requirements on a complex function for the relations to be applicable are presented. Experimental evidence on the validity of the application of the Kramers-Kronig relations to the dispersion process in anthracene is analysed. It is concluded that the relation can be used in our particular case.

B The application of Bode's method of solving the Kramers-Kronig relation to equation (12) is discussed. A step-by-step description of the solution in a general case, rather than our particular case, is presented.

C A summary of the important mathematical manipulations and assumptions used in deriving Fresnel reflection formulae for anthracene is presented. The particular case of reflection from the (001) face, with the (010) in the plane of incidence, is treated.

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The following tables show values of the reflection coefficients R_p and R_s as functions of the angle of incidence θ , the (real) refractive index n and the absorption index k . They have been obtained from

$$R_s = \frac{v_2 + x^2 - x \cdot 2a_2}{v_2 + x^2 + x \cdot 2a_2}$$

$$R_p = \frac{v_1 + l_1^2 x^2 - x(v_1 + y^2) [2(u_1 + v_1)]^{\frac{1}{2}}}{v_1 + l_1^2 x^2 + x(v_1 + y^2) [2(u_1 + v_1)]^{\frac{1}{2}}}$$

where $n_{\text{complex}} = n + ik$

and

$$\begin{aligned} n^2 + k^2 &= l & , & & n^2 - k^2 &= m \\ m - y^2 &= u & , & & v^2 &= u^2 + 4n^2 k^2 & , & & v^2 &= l^2 - 2my^2 + y^4 \\ l^2 &= m^2 + v^2 - u^2 & , & & v &= a^2 + b^2 & , & & u &= a^2 - b^2 & , & & ab &= nk = w \\ v + u &= 2a^2 & , & & 2a &= [2(u+v)]^{\frac{1}{2}} & , & & v - u &= 2b^2 \\ v + y^2 &= p & , & & v + x^2 &= q & , & & \cos \theta &= x & , & & \sin \theta &= y \end{aligned}$$

the subscripts (1 for R_p , 2 for R_s) having been omitted for brevity.

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=1.00

PAGE 1

THETA K	0	10	20	30	40	45	50	50	60	70	80	85
0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.05	0.0006	0.0007	0.0008	0.0011	0.0018	0.0023	0.0036	0.0095	0.0372	0.2013	0.4586	0.4586
0.10	0.0025	0.0026	0.0032	0.0044	0.0071	0.0095	0.0138	0.0339	0.1032	0.3337	0.5824	0.5824
0.15	0.0056	0.0059	0.0071	0.0088	0.0155	0.0208	0.0292	0.0654	0.1649	0.4159	0.6477	0.6477
0.20	0.0099	0.0105	0.0126	0.0171	0.0266	0.0352	0.0481	0.0991	0.2180	0.4743	0.6905	0.6905
0.25	0.0154	0.0163	0.0194	0.0261	0.0399	0.0518	0.0692	0.1324	0.2638	0.5192	0.7218	0.7218
0.30	0.0220	0.0233	0.0276	0.0367	0.0549	0.0700	0.0915	0.1645	0.3038	0.5554	0.7461	0.7461
0.35	0.0297	0.0314	0.0370	0.0486	0.0712	0.0893	0.1143	0.1950	0.3332	0.5856	0.7659	0.7659
0.40	0.0385	0.0405	0.0475	0.0617	0.0884	0.1092	0.1372	0.2239	0.3711	0.6116	0.7825	0.7825
0.45	0.0482	0.0507	0.0590	0.0737	0.1062	0.1295	0.1600	0.2514	0.4000	0.6343	0.7968	0.7968
0.50	0.0588	0.0618	0.0714	0.0895	0.1246	0.1499	0.1826	0.2774	0.4265	0.6544	0.8092	0.8092
0.55	0.0703	0.0737	0.0846	0.1060	0.1433	0.1703	0.2047	0.3022	0.4509	0.6724	0.8202	0.8202
0.60	0.0826	0.0863	0.0986	0.1221	0.1621	0.1907	0.2265	0.3258	0.4736	0.6888	0.8301	0.8301
0.65	0.0955	0.0997	0.1131	0.1385	0.1810	0.2108	0.2478	0.3483	0.4948	0.7038	0.8390	0.8390
0.70	0.1091	0.1137	0.1282	0.1554	0.2000	0.2308	0.2686	0.3699	0.5147	0.7176	0.8472	0.8472
0.75	0.1233	0.1282	0.1437	0.1724	0.2188	0.2505	0.2890	0.3906	0.5334	0.7303	0.8546	0.8546
0.80	0.1379	0.1431	0.1595	0.1896	0.2376	0.2699	0.3089	0.4105	0.5511	0.7422	0.8615	0.8615
0.85	0.1530	0.1585	0.1757	0.2070	0.2562	0.2890	0.3283	0.4296	0.5678	0.7533	0.8679	0.8679
0.90	0.1684	0.1741	0.1921	0.2244	0.2746	0.3078	0.3472	0.4480	0.5837	0.7636	0.8738	0.8738
0.95	0.1841	0.1900	0.2086	0.2418	0.2927	0.3262	0.3657	0.4657	0.5989	0.7733	0.8793	0.8793
1.00	0.2000	0.2061	0.2252	0.2591	0.3107	0.3442	0.3837	0.4827	0.6132	0.7825	0.8845	0.8845
1.05	0.2161	0.2224	0.2419	0.2763	0.3283	0.3619	0.4012	0.4991	0.6270	0.7912	0.8894	0.8894
1.10	0.2322	0.2387	0.2586	0.2934	0.3457	0.3792	0.4183	0.5149	0.6401	0.7993	0.8940	0.8940
1.15	0.2485	0.2550	0.2752	0.3104	0.3627	0.3961	0.4349	0.5302	0.6526	0.8071	0.8983	0.8983
1.20	0.2647	0.2714	0.2917	0.3271	0.3794	0.4128	0.4510	0.5449	0.6645	0.8144	0.9023	0.9023
1.25	0.2809	0.2876	0.3081	0.3436	0.3958	0.4287	0.4667	0.5591	0.6760	0.8214	0.9062	0.9062
1.30	0.2970	0.3038	0.3244	0.3599	0.4118	0.4445	0.4820	0.5728	0.6870	0.8280	0.9098	0.9098
1.35	0.3130	0.3198	0.3405	0.3759	0.4274	0.4598	0.4968	0.5850	0.6975	0.8343	0.9133	0.9133
1.40	0.3289	0.3357	0.3563	0.3916	0.4427	0.4747	0.5112	0.5987	0.7075	0.8402	0.9165	0.9165
1.45	0.3445	0.3513	0.3719	0.4070	0.4577	0.4892	0.5251	0.6110	0.7172	0.8460	0.9196	0.9196
1.50	0.3600	0.3668	0.3873	0.4221	0.4722	0.5033	0.5387	0.6229	0.7264	0.8514	0.9226	0.9226
1.55	0.3752	0.3820	0.4024	0.4369	0.4864	0.5170	0.5518	0.6343	0.7353	0.8566	0.9254	0.9254

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.00

PAGE 2

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3902	0.3969	0.4172	0.4514	0.5002	0.5304	0.5645	0.6453	0.7438	0.8615	0.9281
1.65	0.4050	0.4116	0.4317	0.4655	0.5137	0.5433	0.5763	0.6550	0.7520	0.8665	0.9306
1.70	0.4194	0.4260	0.4459	0.4793	0.5267	0.5559	0.5888	0.6652	0.7599	0.8708	0.9330
1.75	0.4336	0.4401	0.4598	0.4927	0.5395	0.5681	0.6004	0.6751	0.7674	0.8751	0.9353
1.80	0.4475	0.4540	0.4733	0.5059	0.5518	0.5800	0.6116	0.6857	0.7747	0.8792	0.9375
1.85	0.4611	0.4675	0.4856	0.5186	0.5638	0.5914	0.6225	0.6949	0.7816	0.8832	0.9397
1.90	0.4744	0.4806	0.4995	0.5311	0.5755	0.6026	0.6330	0.7038	0.7883	0.8870	0.9417
1.95	0.4873	0.4935	0.5121	0.5432	0.5868	0.6133	0.6431	0.7124	0.7948	0.8906	0.9436
2.00	0.5000	0.5061	0.5244	0.5549	0.5977	0.6238	0.6530	0.7206	0.8009	0.8940	0.9454
2.05	0.5123	0.5183	0.5363	0.5654	0.6084	0.6339	0.6625	0.7286	0.8059	0.8974	0.9472
2.10	0.5244	0.5303	0.5480	0.5775	0.6187	0.6437	0.6717	0.7353	0.8126	0.9006	0.9489
2.15	0.5361	0.5419	0.5593	0.5883	0.6287	0.6532	0.6806	0.7437	0.8181	0.9036	0.9505
2.20	0.5475	0.5532	0.5703	0.5988	0.6384	0.6624	0.6892	0.7509	0.8234	0.9065	0.9520
2.25	0.5586	0.5642	0.5810	0.6089	0.6478	0.6713	0.6975	0.7578	0.8285	0.9094	0.9535
2.30	0.5694	0.5749	0.5914	0.6188	0.6569	0.6799	0.7055	0.7644	0.8334	0.9121	0.9549
2.35	0.5799	0.5854	0.6016	0.6284	0.6658	0.6883	0.7133	0.7709	0.8381	0.9146	0.9563
2.40	0.5902	0.5955	0.6114	0.6377	0.6743	0.6964	0.7209	0.7771	0.8426	0.9171	0.9576
2.45	0.6001	0.6053	0.6209	0.6467	0.6826	0.7042	0.7281	0.7831	0.8470	0.9195	0.9588
2.50	0.6098	0.6149	0.6302	0.6555	0.6906	0.7117	0.7352	0.7889	0.8512	0.9218	0.9600
2.55	0.6191	0.6242	0.6392	0.6640	0.6984	0.7191	0.7420	0.7944	0.8553	0.9240	0.9612
2.60	0.6283	0.6332	0.6479	0.6722	0.7059	0.7261	0.7485	0.7998	0.8592	0.9262	0.9623
2.65	0.6371	0.6419	0.6554	0.6802	0.7132	0.7330	0.7550	0.8050	0.8630	0.9282	0.9633
2.70	0.6457	0.6504	0.6646	0.6880	0.7203	0.7397	0.7611	0.8101	0.8665	0.9302	0.9644
2.75	0.6541	0.6587	0.6726	0.6955	0.7271	0.7461	0.7671	0.8149	0.8701	0.9321	0.9653
2.80	0.6622	0.6667	0.6803	0.7028	0.7338	0.7523	0.7729	0.8196	0.8735	0.9339	0.9663
2.85	0.6700	0.6745	0.6878	0.7098	0.7402	0.7583	0.7785	0.8242	0.8768	0.9357	0.9672
2.90	0.6777	0.6821	0.6951	0.7167	0.7464	0.7642	0.7839	0.8286	0.8799	0.9374	0.9681
2.95	0.6851	0.6894	0.7022	0.7233	0.7524	0.7698	0.7891	0.8328	0.8830	0.9390	0.9689
3.00	0.6923	0.6965	0.7091	0.7298	0.7583	0.7753	0.7942	0.8359	0.8859	0.9406	0.9697

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=1-05

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0006	0.0006	0.0008	0.0010	0.0016	0.0022	0.0031	0.0073	0.0243	0.1255	0.3410
0.05	0.0012	0.0013	0.0015	0.0020	0.0032	0.0043	0.0061	0.0143	0.0448	0.1916	0.4323
0.10	0.0030	0.0031	0.0037	0.0051	0.0079	0.0106	0.0147	0.0331	0.0917	0.2958	0.5433
0.15	0.0059	0.0053	0.0075	0.0100	0.0155	0.0204	0.0280	0.0594	0.1451	0.3796	0.6165
0.20	0.0100	0.0106	0.0126	0.0168	0.0256	0.0333	0.0448	0.0894	0.1958	0.4432	0.6663
0.25	0.0152	0.0161	0.0190	0.0253	0.0378	0.0485	0.0641	0.1205	0.2417	0.4928	0.7025
0.30	0.0215	0.0227	0.0267	0.0352	0.0518	0.0654	0.0848	0.1513	0.2826	0.5329	0.7304
0.35	0.0289	0.0305	0.0356	0.0454	0.0670	0.0835	0.1065	0.1812	0.3193	0.5661	0.7527
0.40	0.0372	0.0392	0.0456	0.0588	0.0834	0.1025	0.1285	0.2039	0.3524	0.5944	0.7712
0.45	0.0465	0.0489	0.0566	0.0721	0.1004	0.1220	0.1506	0.2373	0.3825	0.6190	0.7870
0.50	0.0567	0.0595	0.0685	0.0863	0.1181	0.1418	0.1726	0.2635	0.4100	0.6407	0.8005
0.55	0.0677	0.0709	0.0811	0.1011	0.1361	0.1617	0.1944	0.2894	0.4354	0.6600	0.8125
0.60	0.0795	0.0830	0.0945	0.1156	0.1544	0.1815	0.2159	0.3123	0.4589	0.6774	0.8231
0.65	0.0919	0.0958	0.1084	0.1325	0.1728	0.2013	0.2369	0.3351	0.4809	0.6933	0.8327
0.70	0.1050	0.1092	0.1229	0.1487	0.1913	0.2210	0.2576	0.3539	0.5014	0.7078	0.8413
0.75	0.1186	0.1232	0.1379	0.1653	0.2098	0.2404	0.2778	0.3779	0.5207	0.7212	0.8492
0.80	0.1327	0.1376	0.1532	0.1820	0.2282	0.2596	0.2976	0.3980	0.5389	0.7336	0.8565
0.85	0.1472	0.1524	0.1689	0.1989	0.2465	0.2785	0.3170	0.4173	0.5562	0.7452	0.8632
0.90	0.1621	0.1676	0.1848	0.2159	0.2646	0.2970	0.3358	0.4358	0.5725	0.7559	0.8694
0.95	0.1773	0.1830	0.2008	0.2329	0.2825	0.3153	0.3542	0.4537	0.5879	0.7660	0.8751
1.00	0.1927	0.1986	0.2170	0.2499	0.3002	0.3332	0.3722	0.4709	0.6027	0.7755	0.8805
1.05	0.2083	0.2144	0.2333	0.2668	0.3177	0.3508	0.3897	0.4875	0.6167	0.7845	0.8856
1.10	0.2240	0.2303	0.2496	0.2836	0.3348	0.3680	0.4068	0.5035	0.6301	0.7929	0.8903
1.15	0.2398	0.2462	0.2658	0.3002	0.3517	0.3848	0.4234	0.5189	0.6429	0.8009	0.8948
1.20	0.2556	0.2621	0.2820	0.3167	0.3683	0.4013	0.4395	0.5338	0.6551	0.8084	0.8990
1.25	0.2715	0.2780	0.2981	0.3330	0.3845	0.4173	0.4553	0.5481	0.6668	0.8156	0.9030
1.30	0.2872	0.2938	0.3141	0.3490	0.4004	0.4330	0.4705	0.5620	0.6780	0.8224	0.9067
1.35	0.3029	0.3096	0.3299	0.3648	0.4160	0.4483	0.4854	0.5753	0.6887	0.8289	0.9103
1.40	0.3185	0.3251	0.3455	0.3804	0.4313	0.4632	0.4998	0.5882	0.6989	0.8350	0.9137
1.45	0.3339	0.3405	0.3609	0.3957	0.4451	0.4777	0.5138	0.6006	0.7088	0.8409	0.9169
1.50	0.3491	0.3558	0.3761	0.4107	0.4607	0.4919	0.5276	0.6126	0.7182	0.8465	0.9199
1.55	0.3641	0.3708	0.3910	0.4254	0.4749	0.5055	0.5407	0.6242	0.7273	0.8518	0.9228

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.05

PAGE 4

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3789	0.3856	0.4057	0.4398	0.4887	0.5190	0.5535	0.6354	0.7359	0.8569	0.9255
1.65	0.3935	0.4001	0.4200	0.4538	0.5021	0.5320	0.5659	0.6462	0.7443	0.8617	0.9282
1.70	0.4078	0.4144	0.4342	0.4676	0.5152	0.5446	0.5779	0.6566	0.7523	0.8663	0.9306
1.75	0.4219	0.4284	0.4480	0.4810	0.5280	0.5569	0.5896	0.6666	0.7600	0.8708	0.9330
1.80	0.4357	0.4421	0.4615	0.4941	0.5404	0.5688	0.6009	0.6763	0.7674	0.8750	0.9353
1.85	0.4492	0.4555	0.4747	0.5069	0.5525	0.5804	0.6113	0.6857	0.7745	0.8791	0.9375
1.90	0.4624	0.4687	0.4876	0.5193	0.5642	0.5916	0.6225	0.6947	0.7813	0.8830	0.9395
1.95	0.4753	0.4815	0.5002	0.5316	0.5756	0.6025	0.6328	0.7034	0.7879	0.8867	0.9415
2.00	0.4880	0.4941	0.5125	0.5433	0.5866	0.6130	0.6427	0.7118	0.7942	0.8902	0.9434
2.05	0.5003	0.5063	0.5245	0.5548	0.5973	0.6233	0.6523	0.7199	0.8003	0.8936	0.9452
2.10	0.5123	0.5183	0.5361	0.5659	0.6078	0.6332	0.6617	0.7278	0.8061	0.8969	0.9469
2.15	0.5241	0.5300	0.5475	0.5768	0.6179	0.6428	0.6707	0.7353	0.8118	0.9001	0.9486
2.20	0.5355	0.5413	0.5586	0.5874	0.6277	0.6521	0.6794	0.7426	0.8172	0.9031	0.9502
2.25	0.5467	0.5524	0.5694	0.5977	0.6372	0.6611	0.6879	0.7497	0.8224	0.9060	0.9517
2.30	0.5575	0.5631	0.5798	0.6076	0.6464	0.6699	0.6961	0.7555	0.8274	0.9087	0.9532
2.35	0.5681	0.5736	0.5900	0.6173	0.6554	0.6784	0.7040	0.7630	0.8323	0.9114	0.9546
2.40	0.5784	0.5838	0.5999	0.6267	0.6640	0.6866	0.7117	0.7694	0.8369	0.9140	0.9559
2.45	0.5884	0.5937	0.6096	0.6359	0.6724	0.6945	0.7191	0.7755	0.8414	0.9164	0.9572
2.50	0.5982	0.6034	0.6189	0.6447	0.6806	0.7022	0.7262	0.7814	0.8457	0.9188	0.9584
2.55	0.6077	0.6128	0.6280	0.6534	0.6885	0.7097	0.7332	0.7871	0.8499	0.9211	0.9596
2.60	0.6169	0.6219	0.6369	0.6617	0.6962	0.7169	0.7393	0.7926	0.8539	0.9233	0.9608
2.65	0.6258	0.6308	0.6455	0.6698	0.7036	0.7233	0.7454	0.7980	0.8578	0.9264	0.9619
2.70	0.6345	0.6394	0.6538	0.6777	0.7108	0.7307	0.7527	0.8031	0.8615	0.9274	0.9629
2.75	0.6430	0.6478	0.6619	0.6853	0.7178	0.7372	0.7588	0.8081	0.8652	0.9294	0.9639
2.80	0.6512	0.6559	0.6698	0.6928	0.7245	0.7435	0.7647	0.8129	0.8686	0.9313	0.9649
2.85	0.6592	0.6638	0.6774	0.7000	0.7311	0.7498	0.7704	0.8176	0.8720	0.9331	0.9659
2.90	0.6670	0.6715	0.6849	0.7069	0.7374	0.7557	0.7760	0.8221	0.8752	0.9348	0.9668
2.95	0.6745	0.6789	0.6921	0.7137	0.7436	0.7615	0.7813	0.8264	0.8784	0.9365	0.9676
3.00	0.6819	0.6862	0.6991	0.7203	0.7496	0.7671	0.7865	0.8307	0.8814	0.9381	0.9685

TABLES OF CALCULATIONS FOR W.H. WRIGHT E50.

VALUES OF R_S WHERE $N=1-10$

PAGE 5

THETA K	0	10	20	30	40	45	50	50	70	80	85
0.00	0.0023	0.0024	0.0028	0.0038	0.0058	0.0076	0.0105	0.0229	0.0632	0.2273	0.4694
0.05	0.0028	0.0030	0.0035	0.0047	0.0073	0.0095	0.0130	0.0281	0.0755	0.2544	0.4989
0.10	0.0045	0.0048	0.0057	0.0075	0.0115	0.0150	0.0203	0.0426	0.1071	0.3142	0.5578
0.15	0.0073	0.0077	0.0091	0.0121	0.0183	0.0237	0.0318	0.0640	0.1482	0.3775	0.6132
0.20	0.0112	0.0119	0.0140	0.0184	0.0275	0.0352	0.0465	0.0897	0.1914	0.4333	0.6577
0.25	0.0162	0.0171	0.0200	0.0263	0.0386	0.0490	0.0639	0.1174	0.2330	0.4804	0.6929
0.30	0.0222	0.0234	0.0273	0.0356	0.0515	0.0645	0.0829	0.1457	0.2718	0.5199	0.7209
0.35	0.0292	0.0307	0.0358	0.0461	0.0658	0.0814	0.1030	0.1739	0.3074	0.5535	0.7439
0.40	0.0372	0.0389	0.0452	0.0578	0.0811	0.0993	0.1238	0.2014	0.3401	0.5825	0.7632
0.45	0.0461	0.0483	0.0557	0.0704	0.0973	0.1177	0.1449	0.2281	0.3702	0.6078	0.7796
0.50	0.0558	0.0584	0.0670	0.0839	0.1141	0.1365	0.1661	0.2537	0.3979	0.6302	0.7938
0.55	0.0663	0.0693	0.0791	0.0981	0.1314	0.1558	0.1872	0.2783	0.4235	0.6502	0.8063
0.60	0.0775	0.0809	0.0919	0.1129	0.1490	0.1750	0.2081	0.3020	0.4474	0.6682	0.8174
0.65	0.0895	0.0932	0.1053	0.1282	0.1668	0.1943	0.2287	0.3247	0.4696	0.6846	0.8273
0.70	0.1020	0.1061	0.1192	0.1439	0.1848	0.2134	0.2490	0.3454	0.4905	0.6996	0.8363
0.75	0.1151	0.1196	0.1336	0.1599	0.2028	0.2324	0.2689	0.3674	0.5101	0.7134	0.8445
0.80	0.1287	0.1334	0.1484	0.1761	0.2207	0.2512	0.2884	0.3875	0.5286	0.7262	0.8521
0.85	0.1427	0.1477	0.1635	0.1925	0.2386	0.2698	0.3075	0.4058	0.5461	0.7381	0.8590
0.90	0.1571	0.1624	0.1789	0.2090	0.2564	0.2881	0.3262	0.4254	0.5626	0.7491	0.8654
0.95	0.1718	0.1773	0.1945	0.2256	0.2739	0.3061	0.3445	0.4434	0.5784	0.7595	0.8714
1.00	0.1867	0.1924	0.2102	0.2421	0.2913	0.3238	0.3623	0.4606	0.5933	0.7693	0.8769
1.05	0.2018	0.2077	0.2260	0.2586	0.3085	0.3412	0.3797	0.4773	0.6076	0.7784	0.8822
1.10	0.2171	0.2231	0.2419	0.2751	0.3255	0.3582	0.3967	0.4934	0.6211	0.7871	0.8870
1.15	0.2324	0.2386	0.2578	0.2914	0.3421	0.3749	0.4132	0.5089	0.6341	0.7952	0.8916
1.20	0.2479	0.2542	0.2736	0.3076	0.3585	0.3912	0.4293	0.5238	0.6465	0.8030	0.8959
1.25	0.2633	0.2697	0.2894	0.3236	0.3746	0.4072	0.4450	0.5382	0.6584	0.8103	0.9000
1.30	0.2787	0.2852	0.3050	0.3394	0.3904	0.4228	0.4603	0.5522	0.6697	0.8173	0.9039
1.35	0.2940	0.3006	0.3205	0.3550	0.4058	0.4380	0.4751	0.5656	0.6806	0.8239	0.9075
1.40	0.3093	0.3158	0.3359	0.3704	0.4210	0.4528	0.4895	0.5786	0.6910	0.8302	0.9110
1.45	0.3244	0.3310	0.3510	0.3855	0.4357	0.4673	0.5036	0.5911	0.7010	0.8361	0.9143
1.50	0.3395	0.3459	0.3660	0.4005	0.4502	0.4814	0.5172	0.6032	0.7106	0.8418	0.9174
1.55	0.3541	0.3607	0.3807	0.4149	0.4643	0.4952	0.5304	0.6149	0.7197	0.8473	0.9203

TABLES OF CALCULATIONS FOR W.H-WRIGHT EQ.

VALUES OF RS WHERE N=1-10

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3687	0.3753	0.3952	0.4292	0.4781	0.5086	0.5433	0.6262	0.7286	0.8525	0.9232
1.65	0.3831	0.3897	0.4095	0.4432	0.4915	0.5216	0.5557	0.6371	0.7371	0.8574	0.9258
1.70	0.3973	0.4038	0.4235	0.4568	0.5046	0.5342	0.5678	0.6476	0.7452	0.8622	0.9284
1.75	0.4112	0.4176	0.4372	0.4702	0.5174	0.5465	0.5796	0.6577	0.7530	0.8667	0.9308
1.80	0.4248	0.4312	0.4506	0.4833	0.5298	0.5585	0.5910	0.6675	0.7605	0.8710	0.9332
1.85	0.4382	0.4446	0.4637	0.4960	0.5419	0.5701	0.6020	0.6770	0.7678	0.8752	0.9354
1.90	0.4514	0.4577	0.4766	0.5088	0.5537	0.5814	0.6127	0.6861	0.7747	0.8791	0.9375
1.95	0.4642	0.4704	0.4892	0.5206	0.5651	0.5924	0.6230	0.6950	0.7814	0.8830	0.9395
2.00	0.4768	0.4830	0.5014	0.5324	0.5762	0.6030	0.6331	0.7035	0.7879	0.8866	0.9415
2.05	0.4891	0.4952	0.5134	0.5439	0.5870	0.6133	0.6428	0.7117	0.7940	0.8901	0.9433
2.10	0.5011	0.5071	0.5251	0.5552	0.5975	0.6233	0.6522	0.7197	0.8000	0.8934	0.9451
2.15	0.5129	0.5188	0.5365	0.5661	0.6077	0.6330	0.6614	0.7274	0.8058	0.8967	0.9468
2.20	0.5243	0.5301	0.5476	0.5767	0.6176	0.6424	0.6702	0.7348	0.8113	0.8998	0.9484
2.25	0.5355	0.5412	0.5584	0.5870	0.6272	0.6515	0.6783	0.7419	0.8166	0.9027	0.9500
2.30	0.5454	0.5520	0.5689	0.5971	0.6365	0.6604	0.6871	0.7488	0.8217	0.9056	0.9515
2.35	0.5570	0.5626	0.5792	0.6068	0.6455	0.6689	0.6951	0.7555	0.8267	0.9083	0.9529
2.40	0.5674	0.5728	0.5892	0.6163	0.6543	0.6773	0.7029	0.7620	0.8314	0.9109	0.9543
2.45	0.5774	0.5828	0.5989	0.6256	0.6628	0.6853	0.7104	0.7682	0.8360	0.9135	0.9556
2.50	0.5872	0.5925	0.6083	0.6349	0.6711	0.6931	0.7177	0.7743	0.8405	0.9159	0.9569
2.55	0.5968	0.6020	0.6175	0.6432	0.6791	0.7007	0.7243	0.7801	0.8447	0.9182	0.9581
2.60	0.6061	0.6112	0.6264	0.6517	0.6868	0.7080	0.7316	0.7857	0.8488	0.9205	0.9593
2.65	0.6151	0.6201	0.6351	0.6599	0.6944	0.7152	0.7382	0.7912	0.8528	0.9226	0.9604
2.70	0.6239	0.6288	0.6435	0.6679	0.7017	0.7221	0.7447	0.7954	0.8566	0.9247	0.9615
2.75	0.6325	0.6373	0.6518	0.6757	0.7088	0.7287	0.7509	0.8015	0.8603	0.9267	0.9626
2.80	0.6408	0.6456	0.6597	0.6832	0.7157	0.7352	0.7569	0.8065	0.8639	0.9287	0.9636
2.85	0.6489	0.6536	0.6675	0.6906	0.7224	0.7415	0.7627	0.8112	0.8674	0.9306	0.9646
2.90	0.6568	0.6614	0.6750	0.6976	0.7288	0.7475	0.7684	0.8158	0.8707	0.9324	0.9655
2.95	0.6644	0.6689	0.6823	0.7045	0.7351	0.7535	0.7739	0.8203	0.8739	0.9341	0.9664
3.00	0.6719	0.6763	0.6894	0.7112	0.7412	0.7592	0.7792	0.8246	0.8770	0.9358	0.9673

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RS WHERE N=1-15

PAGE 7

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0049	0.0051	0.0060	0.0080	0.0119	0.0153	0.0205	0.0417	0.1020	0.2997	0.5425
0.05	0.0054	0.0057	0.0067	0.0088	0.0132	0.0170	0.0227	0.0457	0.1101	0.3139	0.5560
0.10	0.0070	0.0074	0.0087	0.0114	0.0170	0.0217	0.0289	0.0572	0.1322	0.3496	0.5882
0.15	0.0097	0.0102	0.0120	0.0157	0.0231	0.0295	0.0388	0.0746	0.1632	0.3940	0.6258
0.20	0.0134	0.0141	0.0165	0.0215	0.0314	0.0397	0.0518	0.0953	0.1984	0.4384	0.6610
0.25	0.0181	0.0191	0.0222	0.0288	0.0417	0.0522	0.0673	0.1205	0.2343	0.4792	0.6915
0.30	0.0239	0.0251	0.0291	0.0375	0.0535	0.0664	0.0845	0.1460	0.2653	0.5155	0.7175
0.35	0.0306	0.0321	0.0371	0.0474	0.0667	0.0820	0.1030	0.1719	0.3025	0.5474	0.7395
0.40	0.0382	0.0400	0.0461	0.0584	0.0811	0.0987	0.1224	0.1977	0.3337	0.5755	0.7584
0.45	0.0466	0.0488	0.0560	0.0704	0.0963	0.1161	0.1423	0.2230	0.3627	0.6005	0.7747
0.50	0.0559	0.0585	0.0668	0.0832	0.1123	0.1340	0.1625	0.2477	0.3898	0.6228	0.7890
0.55	0.0660	0.0689	0.0783	0.0967	0.1288	0.1523	0.1827	0.2716	0.4151	0.6429	0.8016
0.60	0.0768	0.0800	0.0906	0.1108	0.1456	0.1708	0.2029	0.2947	0.4388	0.6611	0.8129
0.65	0.0882	0.0918	0.1034	0.1255	0.1628	0.1894	0.2223	0.3169	0.4610	0.6777	0.8230
0.70	0.1002	0.1042	0.1168	0.1406	0.1801	0.2079	0.2425	0.3384	0.4818	0.6929	0.8322
0.75	0.1128	0.1171	0.1306	0.1560	0.1975	0.2264	0.2621	0.3591	0.5015	0.7069	0.8406
0.80	0.1259	0.1304	0.1449	0.1717	0.2150	0.2447	0.2812	0.3790	0.5200	0.7199	0.8483
0.85	0.1394	0.1442	0.1595	0.1875	0.2324	0.2629	0.3000	0.3982	0.5376	0.7320	0.8554
0.90	0.1532	0.1583	0.1744	0.2035	0.2497	0.2808	0.3184	0.4157	0.5543	0.7433	0.8620
0.95	0.1674	0.1728	0.1894	0.2195	0.2669	0.2985	0.3364	0.4346	0.5701	0.7538	0.8681
1.00	0.1819	0.1874	0.2047	0.2358	0.2840	0.3159	0.3540	0.4518	0.5852	0.7637	0.8738
1.05	0.1966	0.2022	0.2201	0.2519	0.3008	0.3330	0.3712	0.4684	0.5995	0.7731	0.8791
1.10	0.2113	0.2172	0.2355	0.2679	0.3175	0.3498	0.3880	0.4845	0.6132	0.7818	0.8841
1.15	0.2262	0.2323	0.2510	0.2839	0.3339	0.3663	0.4044	0.5000	0.6263	0.7902	0.8887
1.20	0.2412	0.2474	0.2664	0.2998	0.3500	0.3824	0.4204	0.5149	0.6388	0.7980	0.8932
1.25	0.2563	0.2625	0.2818	0.3155	0.3559	0.3882	0.4359	0.5294	0.6507	0.8055	0.8973
1.30	0.2713	0.2776	0.2971	0.3310	0.3815	0.4137	0.4511	0.5433	0.6622	0.8125	0.9012
1.35	0.2863	0.2927	0.3123	0.3464	0.3967	0.4288	0.4659	0.5568	0.6732	0.8193	0.9050
1.40	0.3012	0.3076	0.3274	0.3615	0.4117	0.4435	0.4803	0.5698	0.6837	0.8257	0.9085
1.45	0.3160	0.3225	0.3423	0.3764	0.4264	0.4579	0.4943	0.5824	0.6938	0.8317	0.9118
1.50	0.3307	0.3372	0.3570	0.3911	0.4408	0.4720	0.5079	0.5946	0.7035	0.8375	0.9150
1.55	0.3452	0.3517	0.3715	0.4055	0.4548	0.4857	0.5211	0.6063	0.7128	0.8431	0.9180

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.15

PAGE 8

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3596	0.3661	0.3858	0.4196	0.4685	0.4990	0.5339	0.6177	0.7217	0.8484	0.9209
1.65	0.3737	0.3802	0.3999	0.4336	0.4819	0.5120	0.5464	0.6286	0.7303	0.8534	0.9237
1.70	0.3877	0.3942	0.4137	0.4470	0.4949	0.5247	0.5586	0.6392	0.7386	0.8582	0.9263
1.75	0.4014	0.4079	0.4273	0.4603	0.5076	0.5370	0.5703	0.6495	0.7465	0.8629	0.9288
1.80	0.4149	0.4213	0.4406	0.4733	0.5200	0.5490	0.5817	0.6593	0.7541	0.8673	0.9311
1.85	0.4282	0.4346	0.4537	0.4860	0.5321	0.5606	0.5928	0.6689	0.7614	0.8716	0.9334
1.90	0.4412	0.4475	0.4665	0.4984	0.5439	0.5719	0.6039	0.6791	0.7685	0.8755	0.9356
1.95	0.4540	0.4602	0.4790	0.5109	0.5553	0.5829	0.6140	0.6870	0.7753	0.8794	0.9376
2.00	0.4666	0.4727	0.4912	0.5223	0.5665	0.5936	0.6241	0.6957	0.7818	0.8831	0.9396
2.05	0.4788	0.4848	0.5031	0.5339	0.5773	0.6039	0.6339	0.7040	0.7881	0.8867	0.9415
2.10	0.4907	0.4967	0.5148	0.5451	0.5878	0.6140	0.6434	0.7120	0.7942	0.8901	0.9433
2.15	0.5024	0.5084	0.5262	0.5560	0.5981	0.6238	0.6526	0.7198	0.8000	0.8934	0.9451
2.20	0.5139	0.5197	0.5373	0.5667	0.6080	0.6332	0.6616	0.7273	0.8056	0.8966	0.9467
2.25	0.5250	0.5308	0.5481	0.5770	0.6177	0.6424	0.6702	0.7346	0.8111	0.8996	0.9483
2.30	0.5359	0.5416	0.5587	0.5871	0.6271	0.6514	0.6786	0.7416	0.8163	0.9025	0.9499
2.35	0.5466	0.5522	0.5690	0.5970	0.6352	0.6590	0.6867	0.7484	0.8213	0.9053	0.9514
2.40	0.5569	0.5625	0.5790	0.6065	0.6451	0.6684	0.6946	0.7550	0.8262	0.9080	0.9528
2.45	0.5671	0.5725	0.5887	0.6158	0.6537	0.6766	0.7022	0.7613	0.8309	0.9106	0.9541
2.50	0.5769	0.5823	0.5982	0.6249	0.6620	0.6845	0.7096	0.7674	0.8354	0.9131	0.9554
2.55	0.5865	0.5918	0.6075	0.6336	0.6701	0.6922	0.7167	0.7734	0.8397	0.9155	0.9567
2.60	0.5959	0.6010	0.6165	0.6422	0.6780	0.6996	0.7237	0.7791	0.8439	0.9178	0.9579
2.65	0.6050	0.6101	0.6253	0.6509	0.6856	0.7068	0.7304	0.7847	0.8480	0.9200	0.9591
2.70	0.6139	0.6188	0.6338	0.6586	0.6930	0.7138	0.7369	0.7900	0.8519	0.9221	0.9602
2.75	0.6225	0.6274	0.6421	0.6664	0.7002	0.7206	0.7433	0.7952	0.8557	0.9242	0.9613
2.80	0.6309	0.6357	0.6501	0.6740	0.7072	0.7272	0.7494	0.8002	0.8594	0.9262	0.9623
2.85	0.6391	0.6438	0.6580	0.6814	0.7140	0.7335	0.7553	0.8051	0.8629	0.9281	0.9633
2.90	0.6470	0.6517	0.6656	0.6886	0.7206	0.7398	0.7611	0.8098	0.8663	0.9300	0.9642
2.95	0.6548	0.6594	0.6730	0.6956	0.7270	0.7458	0.7667	0.8144	0.8696	0.9318	0.9652
3.00	0.6623	0.6668	0.6802	0.7024	0.7332	0.7516	0.7721	0.8188	0.8728	0.9335	0.9661

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-20

PAGE 9

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0083	0.0087	0.0101	0.0132	0.0193	0.0245	0.0322	0.0617	0.1380	0.3550	0.5921
0.05	0.0088	0.0092	0.0108	0.0140	0.0205	0.0259	0.0340	0.0649	0.1437	0.3636	0.5995
0.10	0.0103	0.0108	0.0126	0.0164	0.0239	0.0302	0.0394	0.0742	0.1598	0.3865	0.6189
0.15	0.0129	0.0135	0.0157	0.0203	0.0294	0.0370	0.0480	0.0885	0.1836	0.4178	0.6443
0.20	0.0164	0.0172	0.0200	0.0258	0.0370	0.0462	0.0595	0.1058	0.2119	0.4521	0.6709
0.25	0.0208	0.0220	0.0254	0.0326	0.0464	0.0575	0.0732	0.1278	0.2423	0.4859	0.6960
0.30	0.0264	0.0277	0.0320	0.0407	0.0573	0.0705	0.0888	0.1505	0.2731	0.5176	0.7187
0.35	0.0327	0.0343	0.0395	0.0500	0.0695	0.0849	0.1058	0.1740	0.3032	0.5467	0.7388
0.40	0.0400	0.0419	0.0480	0.0604	0.0829	0.1003	0.1237	0.1978	0.3320	0.5730	0.7565
0.45	0.0481	0.0503	0.0575	0.0717	0.0972	0.1166	0.1424	0.2215	0.3595	0.5969	0.7722
0.50	0.0570	0.0595	0.0677	0.0838	0.1123	0.1335	0.1614	0.2449	0.3854	0.6185	0.7861
0.55	0.0666	0.0695	0.0787	0.0967	0.1279	0.1509	0.1805	0.2678	0.4099	0.6381	0.7985
0.60	0.0769	0.0801	0.0904	0.1101	0.1440	0.1686	0.1999	0.2900	0.4330	0.6561	0.8097
0.65	0.0879	0.0914	0.1027	0.1242	0.1605	0.1864	0.2191	0.3116	0.4548	0.6726	0.8199
0.70	0.0994	0.1033	0.1155	0.1386	0.1771	0.2043	0.2382	0.3326	0.4753	0.6877	0.8291
0.75	0.1115	0.1157	0.1288	0.1534	0.1939	0.2221	0.2571	0.3528	0.4948	0.7018	0.8375
0.80	0.1241	0.1285	0.1425	0.1686	0.2108	0.2399	0.2757	0.3724	0.5132	0.7148	0.8453
0.85	0.1371	0.1418	0.1566	0.1839	0.2277	0.2575	0.2940	0.3913	0.5307	0.7270	0.8524
0.90	0.1504	0.1554	0.1710	0.1994	0.2445	0.2751	0.3121	0.4096	0.5473	0.7383	0.8590
0.95	0.1641	0.1693	0.1856	0.2150	0.2613	0.2927	0.3297	0.4273	0.5631	0.7489	0.8652
1.00	0.1781	0.1835	0.2003	0.2307	0.2779	0.3094	0.3470	0.4444	0.5782	0.7589	0.8710
1.05	0.1923	0.1978	0.2152	0.2463	0.2944	0.3262	0.3640	0.4609	0.5925	0.7683	0.8764
1.10	0.2066	0.2124	0.2302	0.2620	0.3107	0.3427	0.3805	0.4758	0.6063	0.7772	0.8814
1.15	0.2211	0.2270	0.2453	0.2776	0.3268	0.3589	0.3967	0.4922	0.6194	0.7856	0.8862
1.20	0.2357	0.2417	0.2603	0.2931	0.3427	0.3748	0.4125	0.5071	0.6319	0.7936	0.8906
1.25	0.2503	0.2564	0.2753	0.3085	0.3583	0.3904	0.4280	0.5215	0.6439	0.8011	0.8949
1.30	0.2649	0.2712	0.2903	0.3237	0.3737	0.4057	0.4430	0.5355	0.6555	0.8083	0.8989
1.35	0.2795	0.2859	0.3052	0.3388	0.3887	0.4205	0.4577	0.5489	0.6665	0.8151	0.9026
1.40	0.2941	0.3005	0.3199	0.3537	0.4035	0.4353	0.4720	0.5619	0.6771	0.8215	0.9062
1.45	0.3086	0.3150	0.3346	0.3684	0.4180	0.4495	0.4859	0.5745	0.6872	0.8277	0.9096
1.50	0.3230	0.3294	0.3490	0.3818	0.4323	0.4635	0.4994	0.5867	0.6970	0.8336	0.9128
1.55	0.3372	0.3437	0.3633	0.3970	0.4462	0.4771	0.5126	0.5985	0.7064	0.8392	0.9159

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-20

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3514	0.3578	0.3774	0.4110	0.4598	0.4904	0.5254	0.6099	0.7194	0.8446	0.9188
1.65	0.3653	0.3717	0.3913	0.4247	0.4731	0.5033	0.5379	0.6209	0.7240	0.8497	0.9216
1.70	0.3790	0.3855	0.4049	0.4381	0.4860	0.5159	0.5500	0.6315	0.7324	0.8546	0.9243
1.75	0.3926	0.3990	0.4184	0.4513	0.4987	0.5282	0.5617	0.6418	0.7404	0.8593	0.9268
1.80	0.4059	0.4123	0.4315	0.4642	0.5111	0.5401	0.5732	0.6517	0.7481	0.8637	0.9292
1.85	0.4191	0.4254	0.4445	0.4768	0.5231	0.5518	0.5843	0.6613	0.7555	0.8680	0.9315
1.90	0.4320	0.4382	0.4572	0.4892	0.5349	0.5631	0.5950	0.6706	0.7626	0.8721	0.9337
1.95	0.4446	0.4508	0.4696	0.5012	0.5463	0.5741	0.6055	0.6796	0.7695	0.8761	0.9358
2.00	0.4570	0.4632	0.4817	0.5130	0.5574	0.5848	0.6156	0.6883	0.7761	0.8799	0.9379
2.05	0.4692	0.4753	0.4936	0.5245	0.5683	0.5952	0.6255	0.6967	0.7825	0.8835	0.9398
2.10	0.4811	0.4871	0.5052	0.5357	0.5788	0.6053	0.6350	0.7048	0.7887	0.8870	0.9417
2.15	0.4927	0.4987	0.5166	0.5466	0.5891	0.6151	0.6443	0.7127	0.7946	0.8903	0.9434
2.20	0.5041	0.5100	0.5277	0.5573	0.5991	0.6246	0.6533	0.7203	0.8003	0.8935	0.9451
2.25	0.5153	0.5211	0.5385	0.5677	0.6088	0.6352	0.6620	0.7276	0.8058	0.8966	0.9468
2.30	0.5262	0.5319	0.5491	0.5778	0.6182	0.6429	0.6705	0.7347	0.8111	0.8996	0.9483
2.35	0.5368	0.5424	0.5594	0.5877	0.6274	0.6515	0.6787	0.7416	0.8152	0.9024	0.9498
2.40	0.5472	0.5527	0.5694	0.5973	0.6353	0.6587	0.6856	0.7483	0.8212	0.9052	0.9513
2.45	0.5573	0.5628	0.5792	0.6066	0.6450	0.6682	0.6944	0.7547	0.8259	0.9078	0.9527
2.50	0.5672	0.5726	0.5887	0.6157	0.6534	0.6763	0.7018	0.7609	0.8305	0.9104	0.9540
2.55	0.5768	0.5821	0.5980	0.6245	0.6616	0.6840	0.7091	0.7669	0.8350	0.9128	0.9553
2.60	0.5862	0.5914	0.6071	0.6332	0.6695	0.6916	0.7161	0.7728	0.8392	0.9152	0.9565
2.65	0.5954	0.6005	0.6159	0.6415	0.6772	0.6989	0.7229	0.7784	0.8434	0.9175	0.9577
2.70	0.6043	0.6093	0.6245	0.6497	0.6847	0.7059	0.7296	0.7839	0.8474	0.9196	0.9589
2.75	0.6130	0.6180	0.6329	0.6576	0.6920	0.7128	0.7360	0.7892	0.8512	0.9218	0.9600
2.80	0.6215	0.6263	0.6410	0.6653	0.6991	0.7195	0.7422	0.7943	0.8550	0.9238	0.9610
2.85	0.6297	0.6345	0.6489	0.6728	0.7060	0.7260	0.7482	0.7992	0.8586	0.9258	0.9621
2.90	0.6377	0.6425	0.6566	0.6801	0.7126	0.7323	0.7541	0.8040	0.8621	0.9277	0.9630
2.95	0.6456	0.6502	0.6641	0.6872	0.7191	0.7384	0.7597	0.8087	0.8654	0.9295	0.9640
3.00	0.6532	0.6577	0.6714	0.6940	0.7254	0.7443	0.7653	0.8132	0.8687	0.9312	0.9649

TABLES OF CALCULATIONS FOR W. H. WRIGHT EQ.

VALUES OF RS WHERE N=1-25

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0123	0.0130	0.0150	0.0193	0.0277	0.0347	0.0448	0.0820	0.1710	0.3993	0.6289
0.05	0.0128	0.0135	0.0156	0.0201	0.0288	0.0360	0.0464	0.0846	0.1753	0.4049	0.6335
0.10	0.0143	0.0150	0.0174	0.0223	0.0318	0.0397	0.0510	0.0922	0.1875	0.4206	0.6461
0.15	0.0157	0.0175	0.0203	0.0260	0.0369	0.0459	0.0586	0.1042	0.2060	0.4433	0.6638
0.20	0.0201	0.0211	0.0243	0.0310	0.0438	0.0541	0.0687	0.1197	0.2290	0.4697	0.6838
0.25	0.0244	0.0256	0.0294	0.0374	0.0524	0.0643	0.0810	0.1379	0.2545	0.4973	0.7039
0.30	0.0296	0.0310	0.0356	0.0450	0.0624	0.0762	0.0951	0.1579	0.2811	0.5243	0.7231
0.35	0.0357	0.0373	0.0428	0.0537	0.0738	0.0894	0.1106	0.1791	0.3079	0.5501	0.7409
0.40	0.0426	0.0445	0.0509	0.0634	0.0863	0.1037	0.1272	0.2009	0.3343	0.5741	0.7570
0.45	0.0503	0.0526	0.0598	0.0741	0.0997	0.1190	0.1445	0.2229	0.3597	0.5963	0.7717
0.50	0.0588	0.0613	0.0696	0.0856	0.1138	0.1349	0.1623	0.2449	0.3842	0.6168	0.7849
0.55	0.0680	0.0709	0.0800	0.0978	0.1287	0.1513	0.1805	0.2665	0.4075	0.6356	0.7969
0.60	0.0779	0.0811	0.0912	0.1107	0.1440	0.1681	0.1989	0.2878	0.4297	0.6530	0.8078
0.65	0.0884	0.0919	0.1030	0.1240	0.1596	0.1857	0.2173	0.3085	0.4508	0.6691	0.8177
0.70	0.0995	0.1033	0.1153	0.1379	0.1756	0.2022	0.2356	0.3288	0.4708	0.6841	0.8268
0.75	0.1111	0.1152	0.1280	0.1521	0.1917	0.2194	0.2538	0.3484	0.4899	0.6979	0.8351
0.80	0.1232	0.1275	0.1412	0.1665	0.2080	0.2366	0.2719	0.3675	0.5080	0.7108	0.8429
0.85	0.1357	0.1403	0.1548	0.1814	0.2243	0.2537	0.2897	0.3861	0.5292	0.7229	0.8500
0.90	0.1486	0.1534	0.1686	0.1964	0.2407	0.2707	0.3072	0.4040	0.5417	0.7342	0.8566
0.95	0.1618	0.1668	0.1827	0.2115	0.2570	0.2875	0.3245	0.4214	0.5573	0.7449	0.8628
1.00	0.1753	0.1805	0.1970	0.2267	0.2732	0.3042	0.3414	0.4382	0.5723	0.7549	0.8686
1.05	0.1890	0.1944	0.2114	0.2419	0.2892	0.3206	0.3580	0.4545	0.5866	0.7643	0.8740
1.10	0.2029	0.2085	0.2260	0.2572	0.3052	0.3368	0.3743	0.4703	0.6003	0.7732	0.8791
1.15	0.2169	0.2227	0.2406	0.2724	0.3209	0.3527	0.3902	0.4856	0.6134	0.7816	0.8839
1.20	0.2311	0.2370	0.2552	0.2875	0.3365	0.3683	0.4058	0.5003	0.6259	0.7896	0.8884
1.25	0.2453	0.2513	0.2699	0.3025	0.3518	0.3837	0.4211	0.5147	0.6379	0.7972	0.8927
1.30	0.2595	0.2657	0.2845	0.3175	0.3669	0.3987	0.4359	0.5285	0.6494	0.8044	0.8967
1.35	0.2738	0.2800	0.2990	0.3322	0.3817	0.4135	0.4504	0.5419	0.6605	0.8113	0.9005
1.40	0.2880	0.2943	0.3135	0.3468	0.3963	0.4279	0.4646	0.5549	0.6711	0.8178	0.9041
1.45	0.3022	0.3085	0.3278	0.3612	0.4106	0.4420	0.4784	0.5674	0.6813	0.8240	0.9076
1.50	0.3162	0.3226	0.3420	0.3755	0.4247	0.4558	0.4918	0.5796	0.6911	0.8299	0.9108
1.55	0.3302	0.3366	0.3560	0.3895	0.4384	0.4693	0.5049	0.5913	0.7005	0.8356	0.9139

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.25

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0.3440	0.3504	0.3599	0.4032	0.4519	0.4825	0.5177	0.6027	0.7086	0.8410	0.9169
1-65	0.3577	0.3641	0.3835	0.4158	0.4651	0.4954	0.5301	0.6137	0.7183	0.8462	0.9197
1-70	0.3713	0.3776	0.3970	0.4301	0.4779	0.5079	0.5421	0.6244	0.7266	0.8511	0.9224
1-75	0.3846	0.3910	0.4102	0.4431	0.4905	0.5201	0.5539	0.6347	0.7347	0.8559	0.9250
1-80	0.3978	0.4041	0.4233	0.4569	0.5028	0.5320	0.5653	0.6446	0.7425	0.8604	0.9274
1-85	0.4107	0.4170	0.4361	0.4684	0.5148	0.5436	0.5764	0.6543	0.7500	0.8648	0.9298
1-90	0.4235	0.4297	0.4486	0.4806	0.5265	0.5549	0.5871	0.6636	0.7572	0.8689	0.9320
1-95	0.4360	0.4422	0.4609	0.4926	0.5379	0.5659	0.5976	0.6727	0.7641	0.8729	0.9342
2-00	0.4483	0.4544	0.4730	0.5043	0.5490	0.5766	0.6078	0.6814	0.7708	0.8768	0.9362
2-05	0.4603	0.4664	0.4848	0.5158	0.5599	0.5870	0.6177	0.6889	0.7772	0.8805	0.9382
2-10	0.4722	0.4782	0.4964	0.5270	0.5704	0.5971	0.6272	0.6980	0.7834	0.8840	0.9401
2-15	0.4837	0.4897	0.5077	0.5379	0.5807	0.6070	0.6366	0.7060	0.7894	0.8874	0.9419
2-20	0.4951	0.5010	0.5187	0.5485	0.5907	0.6166	0.6456	0.7136	0.7952	0.8907	0.9436
2-25	0.5062	0.5120	0.5295	0.5589	0.6004	0.6258	0.6544	0.7210	0.8008	0.8938	0.9453
2-30	0.5170	0.5228	0.5401	0.5690	0.6099	0.6349	0.6629	0.7282	0.8062	0.8968	0.9469
2-35	0.5276	0.5333	0.5504	0.5789	0.6191	0.6436	0.6711	0.7352	0.8114	0.8997	0.9484
2-40	0.5380	0.5436	0.5604	0.5885	0.6281	0.6522	0.6792	0.7419	0.8164	0.9025	0.9499
2-45	0.5481	0.5536	0.5702	0.5979	0.6368	0.6604	0.6869	0.7484	0.8212	0.9052	0.9513
2-50	0.5580	0.5635	0.5798	0.6070	0.6453	0.6685	0.6945	0.7547	0.8259	0.9078	0.9527
2-55	0.5677	0.5730	0.5891	0.6159	0.6535	0.6763	0.7018	0.7608	0.8304	0.9103	0.9540
2-60	0.5771	0.5824	0.5982	0.6246	0.6615	0.6839	0.7089	0.7667	0.8347	0.9127	0.9552
2-65	0.5863	0.5915	0.6071	0.6330	0.6693	0.6913	0.7158	0.7724	0.8389	0.9150	0.9564
2-70	0.5952	0.6003	0.6157	0.6412	0.6769	0.6984	0.7225	0.7780	0.8430	0.9172	0.9576
2-75	0.6040	0.6090	0.6241	0.6492	0.6842	0.7054	0.7290	0.7833	0.8469	0.9194	0.9587
2-80	0.6125	0.6174	0.6323	0.6570	0.6914	0.7121	0.7353	0.7885	0.8507	0.9215	0.9598
2-85	0.6208	0.6257	0.6403	0.6645	0.6983	0.7187	0.7414	0.7936	0.8544	0.9235	0.9609
2-90	0.6289	0.6337	0.6480	0.6719	0.7051	0.7251	0.7473	0.7984	0.8580	0.9254	0.9619
2-95	0.6368	0.6415	0.6556	0.6790	0.7116	0.7313	0.7531	0.8032	0.8614	0.9273	0.9628
3-00	0.6444	0.6491	0.6630	0.6860	0.7180	0.7373	0.7587	0.8077	0.8647	0.9291	0.9638

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-30

THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-0170	0-0178	0-0206	0-0231	0-0368	0-0455	0-0579	0-1021	0-2012	0-4360	0-6578
0-05	0-0175	0-0183	0-0211	0-0238	0-0378	0-0467	0-0593	0-1042	0-2045	0-4399	0-6608
0-10	0-0180	0-0188	0-0228	0-0259	0-0406	0-0501	0-0634	0-1106	0-2140	0-4512	0-6695
0-15	0-0212	0-0222	0-0255	0-0323	0-0452	0-0556	0-0701	0-1207	0-2288	0-4682	0-6823
0-20	0-0244	0-0255	0-0293	0-0370	0-0515	0-0630	0-0791	0-1340	0-2475	0-4887	0-6975
0-25	0-0285	0-0298	0-0342	0-0430	0-0594	0-0723	0-0902	0-1498	0-2690	0-5111	0-7136
0-30	0-0335	0-0350	0-0400	0-0501	0-0686	0-0831	0-1029	0-1675	0-2920	0-5340	0-7296
0-35	0-0393	0-0410	0-0468	0-0582	0-0792	0-0953	0-1170	0-1855	0-3157	0-5554	0-7450
0-40	0-0459	0-0479	0-0544	0-0674	0-0908	0-1085	0-1322	0-2053	0-3394	0-5779	0-7594
0-45	0-0533	0-0556	0-0629	0-0775	0-1033	0-1227	0-1483	0-2266	0-3628	0-5982	0-7728
0-50	0-0614	0-0639	0-0722	0-0884	0-1167	0-1376	0-1650	0-2470	0-3855	0-6173	0-7851
0-55	0-0702	0-0730	0-0822	0-1000	0-1307	0-1531	0-1821	0-2674	0-4075	0-6351	0-7965
0-60	0-0796	0-0828	0-0929	0-1122	0-1452	0-1690	0-1995	0-2875	0-4286	0-6518	0-8069
0-65	0-0897	0-0931	0-1041	0-1250	0-1601	0-1852	0-2170	0-3074	0-4488	0-6673	0-8165
0-70	0-1003	0-1041	0-1159	0-1382	0-1753	0-2016	0-2345	0-3258	0-4682	0-6817	0-8253
0-75	0-1115	0-1155	0-1281	0-1518	0-1908	0-2181	0-2521	0-3458	0-4866	0-6953	0-8335
0-80	0-1231	0-1273	0-1408	0-1658	0-2065	0-2347	0-2694	0-3643	0-5043	0-7080	0-8411
0-85	0-1351	0-1396	0-1538	0-1800	0-2222	0-2512	0-2867	0-3823	0-5212	0-7199	0-8482
0-90	0-1475	0-1523	0-1672	0-1945	0-2380	0-2676	0-3037	0-3998	0-5373	0-7310	0-8547
0-95	0-1603	0-1652	0-1808	0-2091	0-2538	0-2840	0-3205	0-4158	0-5528	0-7416	0-8609
1-00	0-1733	0-1784	0-1946	0-2238	0-2695	0-3002	0-3370	0-4333	0-5675	0-7515	0-8666
1-05	0-1865	0-1919	0-2086	0-2385	0-2852	0-3162	0-3533	0-4493	0-5817	0-7609	0-8721
1-10	0-2000	0-2055	0-2227	0-2533	0-3007	0-3320	0-3692	0-4649	0-5952	0-7698	0-8771
1-15	0-2136	0-2193	0-2369	0-2681	0-3161	0-3475	0-3848	0-4799	0-6082	0-7782	0-8819
1-20	0-2273	0-2331	0-2511	0-2829	0-3313	0-3629	0-4001	0-4945	0-6207	0-7862	0-8864
1-25	0-2412	0-2471	0-2653	0-2975	0-3463	0-3772	0-4151	0-5087	0-6326	0-7938	0-8907
1-30	0-2550	0-2610	0-2796	0-3121	0-3611	0-3927	0-4298	0-5224	0-6441	0-8010	0-8948
1-35	0-2689	0-2750	0-2938	0-3266	0-3757	0-4072	0-4441	0-5357	0-6552	0-8079	0-8986
1-40	0-2828	0-2889	0-3079	0-3409	0-3900	0-4215	0-4581	0-5486	0-6657	0-8144	0-9022
1-45	0-2966	0-3028	0-3219	0-3550	0-4041	0-4354	0-4717	0-5611	0-6759	0-8207	0-9057
1-50	0-3103	0-3166	0-3358	0-3690	0-4179	0-4491	0-4850	0-5732	0-6857	0-8266	0-9090
1-55	0-3240	0-3303	0-3496	0-3828	0-4315	0-4624	0-4980	0-5849	0-6952	0-8323	0-9121

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=1.30

PAGE 14

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3376	0.3439	0.3632	0.3963	0.4448	0.4754	0.5107	0.5962	0.7042	0.8378	0.9151
1.65	0.3510	0.3573	0.3766	0.4097	0.4579	0.4882	0.5230	0.6072	0.7130	0.8430	0.9180
1.70	0.3643	0.3706	0.3899	0.4228	0.4706	0.5008	0.5350	0.6178	0.7214	0.8480	0.9207
1.75	0.3774	0.3837	0.4029	0.4357	0.4831	0.5128	0.5467	0.6281	0.7295	0.8528	0.9233
1.80	0.3904	0.3967	0.4158	0.4483	0.4953	0.5246	0.5580	0.6381	0.7373	0.8573	0.9258
1.85	0.4032	0.4094	0.4284	0.4607	0.5072	0.5361	0.5691	0.6478	0.7448	0.8617	0.9281
1.90	0.4157	0.4220	0.4408	0.4728	0.5188	0.5474	0.5799	0.6571	0.7520	0.8659	0.9304
1.95	0.4281	0.4343	0.4530	0.4847	0.5302	0.5584	0.5903	0.6662	0.7590	0.8700	0.9326
2.00	0.4403	0.4464	0.4650	0.4964	0.5413	0.5690	0.6005	0.6750	0.7658	0.8739	0.9346
2.05	0.4522	0.4583	0.4767	0.5078	0.5521	0.5794	0.6104	0.6835	0.7723	0.8776	0.9366
2.10	0.4639	0.4700	0.4882	0.5189	0.5626	0.5895	0.6200	0.6917	0.7785	0.8812	0.9385
2.15	0.4754	0.4814	0.4994	0.5297	0.5729	0.5994	0.6293	0.6997	0.7846	0.8846	0.9404
2.20	0.4867	0.4926	0.5104	0.5404	0.5829	0.6089	0.6384	0.7074	0.7904	0.8879	0.9421
2.25	0.4977	0.5035	0.5212	0.5507	0.5926	0.6183	0.6472	0.7148	0.7960	0.8911	0.9438
2.30	0.5085	0.5143	0.5317	0.5608	0.6021	0.6273	0.6557	0.7221	0.8015	0.8942	0.9455
2.35	0.5191	0.5248	0.5419	0.5707	0.6113	0.6361	0.6640	0.7291	0.8067	0.8971	0.9470
2.40	0.5294	0.5350	0.5520	0.5803	0.6203	0.6447	0.6721	0.7358	0.8118	0.8999	0.9485
2.45	0.5395	0.5451	0.5618	0.5897	0.6290	0.6530	0.6799	0.7424	0.8167	0.9027	0.9500
2.50	0.5494	0.5549	0.5713	0.5989	0.6376	0.6611	0.6875	0.7488	0.8214	0.9053	0.9513
2.55	0.5590	0.5644	0.5807	0.6078	0.6458	0.6690	0.6949	0.7549	0.8260	0.9078	0.9527
2.60	0.5685	0.5738	0.5898	0.6165	0.6539	0.6766	0.7020	0.7609	0.8304	0.9103	0.9540
2.65	0.5777	0.5829	0.5987	0.6249	0.6617	0.6841	0.7090	0.7667	0.8347	0.9126	0.9552
2.70	0.5866	0.5918	0.6073	0.6332	0.6694	0.6913	0.7158	0.7723	0.8388	0.9149	0.9564
2.75	0.5954	0.6005	0.6158	0.6412	0.6768	0.6983	0.7223	0.7777	0.8428	0.9171	0.9575
2.80	0.6040	0.6090	0.6240	0.6490	0.6840	0.7051	0.7287	0.7830	0.8467	0.9192	0.9586
2.85	0.6123	0.6172	0.6320	0.6567	0.6910	0.7117	0.7349	0.7881	0.8504	0.9213	0.9597
2.90	0.6204	0.6253	0.6399	0.6641	0.6978	0.7182	0.7409	0.7931	0.8540	0.9233	0.9607
2.95	0.6284	0.6332	0.6475	0.6713	0.7044	0.7244	0.7467	0.7979	0.8575	0.9252	0.9617
3.00	0.6361	0.6408	0.6549	0.6783	0.7109	0.7305	0.7524	0.8025	0.8609	0.9270	0.9627

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-0222	0-0232	0-0266	0-0335	0-0465	0-0569	0-0714	0-1217	0-2298	0-4671	0-6813
0-05	0-0226	0-0237	0-0271	0-0341	0-0473	0-0579	0-0725	0-1235	0-2314	0-4700	0-6835
0-10	0-0239	0-0251	0-0287	0-0357	0-0499	0-0609	0-0763	0-1289	0-2391	0-4785	0-6897
0-15	0-0261	0-0273	0-0313	0-0382	0-0541	0-0659	0-0822	0-1375	0-2511	0-4915	0-6993
0-20	0-0292	0-0305	0-0349	0-0436	0-0599	0-0727	0-0903	0-1489	0-2656	0-5077	0-7110
0-25	0-0331	0-0346	0-0395	0-0492	0-0671	0-0811	0-1002	0-1628	0-2847	0-5250	0-7239
0-30	0-0379	0-0395	0-0450	0-0559	0-0757	0-0910	0-1117	0-1784	0-3046	0-6452	0-7373
0-35	0-0434	0-0453	0-0514	0-0636	0-0855	0-1022	0-1246	0-1955	0-3295	0-6647	0-7505
0-40	0-0497	0-0518	0-0587	0-0722	0-0963	0-1145	0-1386	0-2135	0-3467	0-6837	0-7632
0-45	0-0568	0-0591	0-0668	0-0817	0-1080	0-1277	0-1535	0-2320	0-3680	0-6021	0-7752
0-50	0-0645	0-0671	0-0756	0-0920	0-1205	0-1415	0-1690	0-2510	0-3890	0-6196	0-7866
0-55	0-0730	0-0758	0-0851	0-1030	0-1337	0-1562	0-1851	0-2700	0-4095	0-6363	0-7971
0-60	0-0820	0-0852	0-0953	0-1146	0-1475	0-1712	0-2015	0-2890	0-4294	0-6520	0-8070
0-65	0-0917	0-0951	0-1060	0-1268	0-1617	0-1865	0-2181	0-3078	0-4485	0-6668	0-8161
0-70	0-1019	0-1056	0-1173	0-1394	0-1762	0-2022	0-2349	0-3264	0-4671	0-6807	0-8246
0-75	0-1126	0-1165	0-1290	0-1525	0-1910	0-2180	0-2515	0-3445	0-4849	0-6938	0-8325
0-80	0-1237	0-1279	0-1412	0-1659	0-2060	0-2339	0-2683	0-3624	0-5020	0-7061	0-8399
0-85	0-1353	0-1397	0-1537	0-1795	0-2212	0-2498	0-2849	0-3798	0-5184	0-7177	0-8468
0-90	0-1473	0-1519	0-1666	0-1935	0-2354	0-2657	0-3014	0-3968	0-5342	0-7287	0-8533
0-95	0-1595	0-1644	0-1797	0-2075	0-2517	0-2815	0-3177	0-4134	0-5493	0-7390	0-8594
1-00	0-1721	0-1772	0-1930	0-2218	0-2669	0-2972	0-3338	0-4295	0-5638	0-7488	0-8651
1-05	0-1849	0-1902	0-2066	0-2361	0-2821	0-3128	0-3496	0-4452	0-5777	0-7581	0-8704
1-10	0-1979	0-2033	0-2202	0-2504	0-2972	0-3282	0-3651	0-4605	0-5911	0-7669	0-8755
1-15	0-2111	0-2167	0-2340	0-2648	0-3122	0-3434	0-3804	0-4753	0-6039	0-7753	0-8803
1-20	0-2244	0-2301	0-2478	0-2791	0-3270	0-3584	0-3954	0-4897	0-6163	0-7832	0-8848
1-25	0-2378	0-2436	0-2617	0-2934	0-3417	0-3731	0-4101	0-5036	0-6281	0-7908	0-8890
1-30	0-2513	0-2572	0-2755	0-3077	0-3562	0-3875	0-4245	0-5172	0-6395	0-7980	0-8931
1-35	0-2648	0-2708	0-2893	0-3215	0-3705	0-4019	0-4386	0-5303	0-6505	0-8049	0-8969
1-40	0-2783	0-2844	0-3031	0-3358	0-3846	0-4159	0-4524	0-5431	0-6610	0-8114	0-9006
1-45	0-2918	0-2980	0-3168	0-3496	0-3984	0-4296	0-4659	0-5554	0-6712	0-8177	0-9040
1-50	0-3052	0-3114	0-3304	0-3633	0-4120	0-4431	0-4790	0-5674	0-6809	0-8236	0-9073
1-55	0-3186	0-3248	0-3439	0-3769	0-4254	0-4562	0-4919	0-5791	0-6903	0-8293	0-9105

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=1-35

PAGE 16

THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0-3319	0-3381	0-3573	0-3902	0-4385	0-4691	0-5044	0-5904	0-6994	0-8348	0-9135
1-65	0-3451	0-3513	0-3704	0-4033	0-4514	0-4817	0-5166	0-6013	0-7081	0-8400	0-9163
1-70	0-3581	0-3644	0-3835	0-4162	0-4640	0-4940	0-5285	0-6119	0-7165	0-8451	0-9191
1-75	0-3710	0-3773	0-3963	0-4290	0-4764	0-5061	0-5401	0-6222	0-7246	0-8499	0-9217
1-80	0-3837	0-3900	0-4090	0-4414	0-4884	0-5178	0-5514	0-6321	0-7325	0-8545	0-9242
1-85	0-3963	0-4025	0-4215	0-4537	0-5002	0-5293	0-5624	0-6418	0-7400	0-8589	0-9266
1-90	0-4087	0-4149	0-4337	0-4657	0-5118	0-5405	0-5731	0-6511	0-7473	0-8631	0-9289
1-95	0-4209	0-4271	0-4458	0-4775	0-5231	0-5514	0-5836	0-6602	0-7543	0-8672	0-9311
2-00	0-4329	0-4391	0-4576	0-4890	0-5341	0-5620	0-5937	0-6690	0-7611	0-8711	0-9332
2-05	0-4447	0-4508	0-4692	0-5003	0-5448	0-5724	0-6036	0-6775	0-7676	0-8749	0-9352
2-10	0-4563	0-4624	0-4806	0-5114	0-5553	0-5825	0-6132	0-6857	0-7739	0-8785	0-9371
2-15	0-4677	0-4737	0-4917	0-5222	0-5656	0-5923	0-6225	0-6937	0-7800	0-8820	0-9390
2-20	0-4789	0-4848	0-5027	0-5328	0-5755	0-6019	0-6316	0-7015	0-7859	0-8853	0-9408
2-25	0-4898	0-4957	0-5134	0-5431	0-5853	0-6112	0-6404	0-7090	0-7916	0-8885	0-9425
2-30	0-5006	0-5064	0-5238	0-5532	0-5948	0-6202	0-6490	0-7163	0-7970	0-8916	0-9441
2-35	0-5111	0-5168	0-5341	0-5630	0-6040	0-6291	0-6573	0-7233	0-8023	0-8946	0-9457
2-40	0-5214	0-5270	0-5441	0-5726	0-6130	0-6377	0-6654	0-7301	0-8075	0-8975	0-9472
2-45	0-5315	0-5370	0-5539	0-5820	0-6217	0-6460	0-6733	0-7367	0-8124	0-9003	0-9487
2-50	0-5413	0-5468	0-5634	0-5912	0-6303	0-6541	0-6809	0-7432	0-8172	0-9029	0-9501
2-55	0-5509	0-5564	0-5727	0-6001	0-6386	0-6620	0-6883	0-7494	0-8218	0-9055	0-9514
2-60	0-5604	0-5657	0-5819	0-6088	0-6467	0-6697	0-6955	0-7554	0-8263	0-9080	0-9528
2-65	0-5695	0-5748	0-5908	0-6173	0-6546	0-6772	0-7025	0-7613	0-8306	0-9104	0-9540
2-70	0-5785	0-5838	0-5994	0-6256	0-6622	0-6845	0-7093	0-7669	0-8348	0-9127	0-9552
2-75	0-5873	0-5925	0-6079	0-6336	0-6697	0-6915	0-7160	0-7724	0-8388	0-9149	0-9564
2-80	0-5959	0-6010	0-6162	0-6419	0-6769	0-6984	0-7224	0-7777	0-8428	0-9171	0-9575
2-85	0-6043	0-6092	0-6242	0-6492	0-6840	0-7051	0-7286	0-7829	0-8466	0-9192	0-9586
2-90	0-6124	0-6173	0-6321	0-6566	0-6909	0-7115	0-7347	0-7879	0-8502	0-9212	0-9597
2-95	0-6204	0-6252	0-6398	0-6639	0-6976	0-7179	0-7406	0-7928	0-8538	0-9231	0-9607
3-00	0-6282	0-6329	0-6472	0-6710	0-7041	0-7241	0-7463	0-7975	0-8572	0-9250	0-9616

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF R_6 WHERE $N=1-40$

PAGE 17

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0278	0.0290	0.0331	0.0413	0.0565	0.0686	0.0850	0.1406	0.2543	0.4940	0.7009
0.05	0.0282	0.0295	0.0336	0.0419	0.0573	0.0694	0.0861	0.1422	0.2564	0.4962	0.7026
0.10	0.0295	0.0308	0.0351	0.0437	0.0596	0.0721	0.0893	0.1468	0.2626	0.5028	0.7073
0.15	0.0316	0.0329	0.0375	0.0467	0.0635	0.0765	0.0946	0.1542	0.2725	0.5130	0.7146
0.20	0.0345	0.0360	0.0409	0.0509	0.0688	0.0828	0.1019	0.1642	0.2856	0.5261	0.7238
0.25	0.0382	0.0399	0.0453	0.0560	0.0755	0.0905	0.1108	0.1754	0.3010	0.5411	0.7343
0.30	0.0427	0.0446	0.0505	0.0622	0.0834	0.0995	0.1213	0.1903	0.3182	0.5574	0.7454
0.35	0.0480	0.0500	0.0566	0.0695	0.0925	0.1093	0.1331	0.2055	0.3366	0.5741	0.7567
0.40	0.0541	0.0563	0.0635	0.0776	0.1025	0.1213	0.1460	0.2219	0.3556	0.5909	0.7678
0.45	0.0608	0.0632	0.0712	0.0866	0.1135	0.1335	0.1597	0.2389	0.3748	0.6074	0.7786
0.50	0.0682	0.0709	0.0796	0.0963	0.1253	0.1466	0.1742	0.2554	0.3941	0.6234	0.7889
0.55	0.0763	0.0792	0.0886	0.1067	0.1377	0.1603	0.1893	0.2741	0.4131	0.6388	0.7986
0.60	0.0850	0.0881	0.0983	0.1178	0.1507	0.1745	0.2047	0.2919	0.4317	0.6535	0.8078
0.65	0.0942	0.0976	0.1086	0.1294	0.1642	0.1890	0.2204	0.3097	0.4499	0.6674	0.8165
0.70	0.1040	0.1077	0.1194	0.1414	0.1780	0.2039	0.2363	0.3273	0.4675	0.6807	0.8246
0.75	0.1143	0.1182	0.1307	0.1539	0.1922	0.2190	0.2523	0.3447	0.4845	0.6932	0.8322
0.80	0.1250	0.1292	0.1423	0.1668	0.2066	0.2342	0.2683	0.3618	0.5010	0.7051	0.8393
0.85	0.1361	0.1405	0.1544	0.1799	0.2211	0.2495	0.2843	0.3786	0.5159	0.7164	0.8460
0.90	0.1476	0.1522	0.1667	0.1933	0.2358	0.2648	0.3002	0.3951	0.5321	0.7271	0.8523
0.95	0.1595	0.1643	0.1794	0.2069	0.2505	0.2801	0.3159	0.4111	0.5469	0.7372	0.8583
1.00	0.1716	0.1766	0.1923	0.2206	0.2652	0.2953	0.3315	0.4268	0.5610	0.7468	0.8639
1.05	0.1840	0.1891	0.2053	0.2344	0.2800	0.3104	0.3469	0.4421	0.5747	0.7559	0.8692
1.10	0.1966	0.2019	0.2185	0.2484	0.2946	0.3253	0.3620	0.4570	0.5878	0.7646	0.8741
1.15	0.2093	0.2148	0.2319	0.2623	0.3092	0.3401	0.3770	0.4715	0.6004	0.7729	0.8789
1.20	0.2222	0.2278	0.2453	0.2762	0.3236	0.3548	0.3916	0.4855	0.6126	0.7808	0.8833
1.25	0.2352	0.2410	0.2587	0.2902	0.3380	0.3692	0.4060	0.4994	0.6243	0.7883	0.8876
1.30	0.2483	0.2542	0.2722	0.3040	0.3521	0.3834	0.4201	0.5127	0.6355	0.7954	0.8916
1.35	0.2615	0.2674	0.2857	0.3178	0.3661	0.3974	0.4340	0.5257	0.6464	0.8022	0.8954
1.40	0.2748	0.2806	0.2991	0.3315	0.3799	0.4111	0.4475	0.5383	0.6568	0.8088	0.8991
1.45	0.2878	0.2938	0.3125	0.3450	0.3935	0.4246	0.4608	0.5505	0.6669	0.8150	0.9025
1.50	0.3009	0.3070	0.3258	0.3584	0.4069	0.4378	0.4738	0.5624	0.6766	0.8209	0.9058
1.55	0.3139	0.3201	0.3390	0.3717	0.4200	0.4508	0.4864	0.5739	0.6860	0.8257	0.9090

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-40

PAGE 18

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3269	0.3331	0.3521	0.3848	0.4330	0.4635	0.4988	0.5851	0.6950	0.8321	0.9120
1.65	0.3398	0.3460	0.3650	0.3977	0.4456	0.4760	0.5109	0.5960	0.7037	0.8374	0.9149
1.70	0.3526	0.3588	0.3778	0.4104	0.4581	0.4881	0.5227	0.6065	0.7121	0.8424	0.9176
1.75	0.3653	0.3715	0.3904	0.4229	0.4703	0.5000	0.5342	0.6167	0.7202	0.8472	0.9202
1.80	0.3778	0.3840	0.4029	0.4353	0.4822	0.5117	0.5454	0.6266	0.7281	0.8518	0.9228
1.85	0.3901	0.3963	0.4152	0.4474	0.4939	0.5230	0.5563	0.6353	0.7356	0.8563	0.9252
1.90	0.4023	0.4085	0.4273	0.4592	0.5054	0.5341	0.5670	0.6456	0.7429	0.8605	0.9275
1.95	0.4144	0.4205	0.4392	0.4709	0.5166	0.5450	0.5774	0.6546	0.7499	0.8646	0.9297
2.00	0.4262	0.4323	0.4509	0.4823	0.5275	0.5556	0.5875	0.6634	0.7567	0.8686	0.9318
2.05	0.4379	0.4440	0.4623	0.4935	0.5382	0.5659	0.5973	0.6719	0.7633	0.8723	0.9338
2.10	0.4494	0.4554	0.4736	0.5045	0.5486	0.5759	0.6069	0.6802	0.7696	0.8760	0.9358
2.15	0.4608	0.4666	0.4847	0.5152	0.5588	0.5857	0.6162	0.6882	0.7757	0.8795	0.9376
2.20	0.4717	0.4776	0.4955	0.5257	0.5687	0.5953	0.6252	0.6960	0.7816	0.8829	0.9395
2.25	0.4826	0.4884	0.5061	0.5360	0.5784	0.6046	0.6341	0.7035	0.7873	0.8861	0.9412
2.30	0.4932	0.4990	0.5165	0.5460	0.5879	0.6136	0.6426	0.7108	0.7929	0.8892	0.9428
2.35	0.5037	0.5094	0.5267	0.5559	0.5971	0.6224	0.6510	0.7179	0.7982	0.8923	0.9444
2.40	0.5139	0.5196	0.5367	0.5654	0.6061	0.6310	0.6591	0.7247	0.8034	0.8952	0.9460
2.45	0.5239	0.5295	0.5464	0.5748	0.6149	0.6394	0.6670	0.7314	0.8083	0.8980	0.9475
2.50	0.5337	0.5393	0.5560	0.5839	0.6234	0.6476	0.6746	0.7378	0.8132	0.9007	0.9489
2.55	0.5433	0.5488	0.5653	0.5929	0.6317	0.6555	0.6821	0.7441	0.8178	0.9033	0.9503
2.60	0.5527	0.5581	0.5744	0.6016	0.6399	0.6632	0.6893	0.7502	0.8224	0.9058	0.9516
2.65	0.5619	0.5672	0.5833	0.6101	0.6478	0.6707	0.6954	0.7551	0.8267	0.9082	0.9529
2.70	0.5709	0.5761	0.5920	0.6184	0.6554	0.6780	0.7032	0.7618	0.8310	0.9105	0.9541
2.75	0.5797	0.5849	0.6004	0.6265	0.6629	0.6851	0.7099	0.7673	0.8351	0.9128	0.9553
2.80	0.5882	0.5934	0.6087	0.6343	0.6702	0.6920	0.7164	0.7727	0.8390	0.9150	0.9564
2.85	0.5966	0.6017	0.6168	0.6420	0.6773	0.6988	0.7227	0.7779	0.8429	0.9171	0.9575
2.90	0.6048	0.6098	0.6247	0.6495	0.6843	0.7053	0.7288	0.7830	0.8466	0.9192	0.9586
2.95	0.6129	0.6177	0.6324	0.6568	0.6910	0.7117	0.7347	0.7879	0.8502	0.9211	0.9596
3.00	0.6206	0.6254	0.6399	0.6640	0.6976	0.7179	0.7405	0.7927	0.8537	0.9230	0.9606

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-45

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0337	0.0352	0.0399	0.0494	0.0667	0.0802	0.0986	0.1589	0.2778	0.5176	0.7177
0.05	0.0341	0.0356	0.0404	0.0500	0.0675	0.0810	0.0996	0.1603	0.2795	0.5194	0.7190
0.10	0.0353	0.0369	0.0418	0.0517	0.0696	0.0835	0.1025	0.1643	0.2847	0.5246	0.7227
0.15	0.0373	0.0389	0.0441	0.0544	0.0732	0.0875	0.1072	0.1708	0.2930	0.5328	0.7284
0.20	0.0401	0.0418	0.0474	0.0583	0.0781	0.0933	0.1137	0.1795	0.3041	0.5435	0.7358
0.25	0.0437	0.0455	0.0515	0.0632	0.0842	0.1003	0.1219	0.1902	0.3173	0.5560	0.7444
0.30	0.0480	0.0500	0.0564	0.0690	0.0916	0.1087	0.1314	0.2026	0.3323	0.5697	0.7537
0.35	0.0531	0.0552	0.0622	0.0758	0.1000	0.1182	0.1422	0.2164	0.3485	0.5842	0.7633
0.40	0.0588	0.0612	0.0688	0.0835	0.1094	0.1287	0.1540	0.2312	0.3654	0.5990	0.7730
0.45	0.0653	0.0678	0.0761	0.0920	0.1197	0.1402	0.1668	0.2457	0.3829	0.6137	0.7826
0.50	0.0724	0.0751	0.0841	0.1012	0.1308	0.1524	0.1803	0.2629	0.4005	0.6282	0.7919
0.55	0.0801	0.0831	0.0927	0.1111	0.1425	0.1652	0.1944	0.2794	0.4180	0.6424	0.8008
0.60	0.0884	0.0916	0.1020	0.1216	0.1548	0.1786	0.2089	0.2950	0.4354	0.6560	0.8093
0.65	0.0973	0.1007	0.1118	0.1326	0.1675	0.1924	0.2237	0.3128	0.4524	0.6691	0.8174
0.70	0.1067	0.1104	0.1221	0.1442	0.1807	0.2065	0.2388	0.3295	0.4691	0.6816	0.8251
0.75	0.1165	0.1204	0.1329	0.1561	0.1942	0.2209	0.2541	0.3460	0.4853	0.6936	0.8324
0.80	0.1268	0.1310	0.1441	0.1684	0.2080	0.2354	0.2694	0.3624	0.5011	0.7050	0.8392
0.85	0.1375	0.1419	0.1557	0.1810	0.2219	0.2501	0.2847	0.3785	0.5163	0.7158	0.8457
0.90	0.1486	0.1532	0.1676	0.1939	0.2360	0.2648	0.3000	0.3943	0.5311	0.7262	0.8518
0.95	0.1600	0.1648	0.1797	0.2070	0.2502	0.2795	0.3151	0.4099	0.5454	0.7360	0.8576
1.00	0.1717	0.1767	0.1922	0.2202	0.2644	0.2942	0.3302	0.4251	0.5591	0.7454	0.8630
1.05	0.1837	0.1888	0.2048	0.2335	0.2787	0.3088	0.3451	0.4399	0.5724	0.7543	0.8682
1.10	0.1958	0.2011	0.2176	0.2470	0.2929	0.3233	0.3598	0.4545	0.5853	0.7628	0.8731
1.15	0.2082	0.2136	0.2305	0.2606	0.3070	0.3377	0.3744	0.4686	0.5976	0.7710	0.8778
1.20	0.2207	0.2262	0.2435	0.2741	0.3211	0.3520	0.3887	0.4824	0.6095	0.7787	0.8822
1.25	0.2333	0.2390	0.2565	0.2876	0.3350	0.3660	0.4027	0.4959	0.6211	0.7861	0.8864
1.30	0.2460	0.2518	0.2696	0.3011	0.3488	0.3799	0.4165	0.5090	0.6322	0.7932	0.8904
1.35	0.2588	0.2647	0.2827	0.3145	0.3625	0.3935	0.4301	0.5218	0.6429	0.8000	0.8942
1.40	0.2716	0.2775	0.2958	0.3279	0.3760	0.4071	0.4434	0.5342	0.6533	0.8064	0.8978
1.45	0.2844	0.2904	0.3089	0.3411	0.3893	0.4203	0.4564	0.5452	0.6632	0.8126	0.9012
1.50	0.2972	0.3032	0.3219	0.3543	0.4024	0.4333	0.4692	0.5580	0.6729	0.8186	0.9045
1.55	0.3099	0.3160	0.3348	0.3672	0.4154	0.4461	0.4817	0.5694	0.6822	0.8243	0.9077

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3226	0.3288	0.3476	0.3801	0.4281	0.4586	0.4939	0.5804	0.6911	0.8297	0.9107
1.65	0.3352	0.3414	0.3602	0.3928	0.4405	0.4708	0.5058	0.5912	0.6998	0.8349	0.9135
1.70	0.3478	0.3539	0.3728	0.4053	0.4528	0.4829	0.5175	0.6016	0.7081	0.8400	0.9163
1.75	0.3602	0.3664	0.3852	0.4176	0.4648	0.4946	0.5288	0.6118	0.7162	0.8448	0.9189
1.80	0.3725	0.3786	0.3975	0.4297	0.4766	0.5061	0.5400	0.6217	0.7240	0.8494	0.9214
1.85	0.3846	0.3908	0.4095	0.4416	0.4882	0.5174	0.5508	0.6312	0.7315	0.8538	0.9238
1.90	0.3966	0.4028	0.4215	0.4534	0.4995	0.5284	0.5614	0.6405	0.7388	0.8581	0.9262
1.95	0.4085	0.4146	0.4332	0.4649	0.5106	0.5391	0.5717	0.6495	0.7459	0.8622	0.9284
2.00	0.4201	0.4262	0.4447	0.4762	0.5214	0.5496	0.5817	0.6583	0.7526	0.8662	0.9305
2.05	0.4317	0.4377	0.4561	0.4873	0.5320	0.5599	0.5915	0.6668	0.7592	0.8700	0.9326
2.10	0.4430	0.4490	0.4672	0.4981	0.5424	0.5699	0.6010	0.6750	0.7656	0.8736	0.9345
2.15	0.4541	0.4601	0.4782	0.5088	0.5525	0.5796	0.6103	0.6830	0.7717	0.8772	0.9364
2.20	0.4651	0.4710	0.4889	0.5192	0.5624	0.5891	0.6193	0.6908	0.7776	0.8806	0.9382
2.25	0.4758	0.4817	0.4994	0.5294	0.5721	0.5984	0.6281	0.6983	0.7834	0.8838	0.9400
2.30	0.4864	0.4922	0.5098	0.5394	0.5815	0.6074	0.6367	0.7056	0.7889	0.8870	0.9416
2.35	0.4967	0.5025	0.5199	0.5492	0.5907	0.6162	0.6451	0.7127	0.7943	0.8900	0.9433
2.40	0.5069	0.5126	0.5298	0.5587	0.5997	0.6248	0.6532	0.7196	0.7995	0.8930	0.9448
2.45	0.5169	0.5225	0.5395	0.5680	0.6084	0.6332	0.6611	0.7253	0.8045	0.8958	0.9463
2.50	0.5266	0.5322	0.5490	0.5772	0.6170	0.6413	0.6687	0.7328	0.8094	0.8985	0.9478
2.55	0.5362	0.5417	0.5583	0.5861	0.6253	0.6493	0.6762	0.7391	0.8141	0.9011	0.9491
2.60	0.5455	0.5510	0.5674	0.5948	0.6334	0.6570	0.6835	0.7452	0.8186	0.9037	0.9505
2.65	0.5547	0.5601	0.5762	0.6033	0.6413	0.6645	0.6906	0.7511	0.8230	0.9061	0.9518
2.70	0.5637	0.5690	0.5849	0.6116	0.6490	0.6719	0.6974	0.7569	0.8273	0.9085	0.9530
2.75	0.5724	0.5777	0.5934	0.6197	0.6565	0.6790	0.7041	0.7625	0.8314	0.9108	0.9542
2.80	0.5810	0.5862	0.6017	0.6276	0.6639	0.6860	0.7107	0.7679	0.8354	0.9130	0.9554
2.85	0.5894	0.5945	0.6098	0.6353	0.6710	0.6927	0.7170	0.7731	0.8393	0.9152	0.9565
2.90	0.5976	0.6026	0.6177	0.6428	0.6780	0.6993	0.7231	0.7783	0.8431	0.9172	0.9576
2.95	0.6056	0.6105	0.6254	0.6501	0.6847	0.7057	0.7291	0.7832	0.8467	0.9192	0.9586
3.00	0.6134	0.6183	0.6329	0.6573	0.6913	0.7120	0.7350	0.7880	0.8502	0.9212	0.9596

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-50

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0400	0.0417	0.0471	0.0578	0.0772	0.0920	0.1121	0.1766	0.2996	0.5386	0.7323
0.05	0.0404	0.0421	0.0475	0.0583	0.0778	0.0928	0.1129	0.1778	0.3011	0.5400	0.7333
0.10	0.0415	0.0432	0.0488	0.0599	0.0798	0.0951	0.1156	0.1812	0.3055	0.5442	0.7362
0.15	0.0434	0.0452	0.0510	0.0626	0.0831	0.0988	0.1199	0.1869	0.3126	0.5509	0.7409
0.20	0.0461	0.0480	0.0541	0.0661	0.0876	0.1040	0.1258	0.1947	0.3220	0.5598	0.7469
0.25	0.0495	0.0515	0.0580	0.0707	0.0933	0.1104	0.1331	0.2042	0.3354	0.5703	0.7540
0.30	0.0536	0.0558	0.0627	0.0762	0.1002	0.1181	0.1419	0.2153	0.3465	0.5820	0.7618
0.35	0.0585	0.0607	0.0682	0.0826	0.1080	0.1269	0.1518	0.2277	0.3608	0.5946	0.7701
0.40	0.0640	0.0664	0.0744	0.0899	0.1168	0.1367	0.1627	0.2411	0.3760	0.6076	0.7786
0.45	0.0701	0.0728	0.0814	0.0979	0.1264	0.1474	0.1745	0.2554	0.3917	0.6207	0.7870
0.50	0.0769	0.0798	0.0890	0.1066	0.1368	0.1588	0.1871	0.2702	0.4078	0.6358	0.7954
0.55	0.0843	0.0874	0.0972	0.1160	0.1479	0.1708	0.2002	0.2855	0.4239	0.6468	0.8035
0.60	0.0923	0.0956	0.1061	0.1260	0.1595	0.1834	0.2139	0.3011	0.4401	0.6594	0.8114
0.65	0.1008	0.1043	0.1155	0.1365	0.1716	0.1965	0.2279	0.3168	0.4560	0.6716	0.8189
0.70	0.1098	0.1135	0.1253	0.1475	0.1841	0.2099	0.2422	0.3326	0.4717	0.6833	0.8261
0.75	0.1193	0.1232	0.1357	0.1589	0.1970	0.2238	0.2566	0.3483	0.4871	0.6947	0.8330
0.80	0.1292	0.1333	0.1464	0.1707	0.2101	0.2374	0.2713	0.3639	0.5021	0.7055	0.8395
0.85	0.1395	0.1438	0.1575	0.1828	0.2235	0.2515	0.2859	0.3793	0.5167	0.7159	0.8457
0.90	0.1501	0.1547	0.1690	0.1951	0.2370	0.2656	0.3006	0.3945	0.5309	0.7259	0.8516
0.95	0.1611	0.1659	0.1807	0.2077	0.2507	0.2798	0.3152	0.4095	0.5447	0.7354	0.8572
1.00	0.1724	0.1773	0.1927	0.2205	0.2644	0.2939	0.3297	0.4242	0.5581	0.7445	0.8625
1.05	0.1840	0.1890	0.2049	0.2334	0.2781	0.3081	0.3442	0.4386	0.5710	0.7532	0.8676
1.10	0.1957	0.2009	0.2172	0.2484	0.2919	0.3221	0.3584	0.4527	0.5835	0.7616	0.8723
1.15	0.2077	0.2130	0.2297	0.2636	0.3056	0.3361	0.3725	0.4665	0.5956	0.7695	0.8769
1.20	0.2198	0.2253	0.2423	0.2786	0.3192	0.3499	0.3864	0.4800	0.6072	0.7771	0.8812
1.25	0.2320	0.2376	0.2550	0.2858	0.3328	0.3636	0.4002	0.4932	0.6185	0.7844	0.8854
1.30	0.2443	0.2500	0.2677	0.2989	0.3463	0.3772	0.4137	0.5060	0.6295	0.7914	0.8893
1.35	0.2567	0.2625	0.2804	0.3120	0.3596	0.3905	0.4269	0.5185	0.6400	0.7981	0.8931
1.40	0.2692	0.2751	0.2932	0.3250	0.3728	0.4037	0.4399	0.5307	0.6502	0.8045	0.8967
1.45	0.2817	0.2876	0.3059	0.3379	0.3858	0.4167	0.4527	0.5426	0.6601	0.8106	0.9001
1.50	0.2941	0.3001	0.3186	0.3507	0.3987	0.4294	0.4653	0.5541	0.6696	0.8165	0.9034
1.55	0.3066	0.3126	0.3312	0.3634	0.4113	0.4420	0.4775	0.5654	0.6788	0.8221	0.9065

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3190	0.3250	0.3437	0.3750	0.4238	0.4543	0.4896	0.5763	0.6977	0.8276	0.9095
1.65	0.3313	0.3374	0.3561	0.3884	0.4361	0.4663	0.5013	0.5870	0.6962	0.8328	0.9123
1.70	0.3435	0.3497	0.3684	0.4007	0.4481	0.4782	0.5128	0.5973	0.7046	0.8378	0.9151
1.75	0.3557	0.3618	0.3806	0.4128	0.4600	0.4898	0.5241	0.6074	0.7126	0.8426	0.9177
1.80	0.3678	0.3739	0.3926	0.4247	0.4716	0.5011	0.5350	0.6171	0.7203	0.8472	0.9202
1.85	0.3797	0.3858	0.4045	0.4365	0.4830	0.5123	0.5458	0.6266	0.7278	0.8516	0.9226
1.90	0.3915	0.3976	0.4162	0.4481	0.4942	0.5231	0.5562	0.6359	0.7351	0.8559	0.9249
1.95	0.4031	0.4092	0.4278	0.4594	0.5052	0.5338	0.5665	0.6448	0.7421	0.8600	0.9272
2.00	0.4146	0.4207	0.4392	0.4706	0.5159	0.5442	0.5764	0.6536	0.7489	0.8640	0.9293
2.05	0.4260	0.4320	0.4504	0.4815	0.5264	0.5543	0.5861	0.6620	0.7555	0.8678	0.9314
2.10	0.4371	0.4432	0.4614	0.4923	0.5367	0.5643	0.5956	0.6702	0.7618	0.8715	0.9333
2.15	0.4481	0.4541	0.4722	0.5028	0.5457	0.5740	0.6043	0.6782	0.7679	0.8750	0.9352
2.20	0.4590	0.4649	0.4828	0.5132	0.5566	0.5834	0.6139	0.6860	0.7739	0.8784	0.9371
2.25	0.4696	0.4755	0.4933	0.5233	0.5662	0.5927	0.6226	0.6935	0.7796	0.8817	0.9388
2.30	0.4801	0.4859	0.5035	0.5332	0.5756	0.6017	0.6312	0.7008	0.7852	0.8849	0.9405
2.35	0.4903	0.4961	0.5135	0.5429	0.5847	0.6104	0.6395	0.7079	0.7906	0.8879	0.9421
2.40	0.5004	0.5061	0.5234	0.5524	0.5937	0.6190	0.6476	0.7148	0.7958	0.8909	0.9437
2.45	0.5103	0.5160	0.5330	0.5617	0.6024	0.6274	0.6555	0.7215	0.8008	0.8937	0.9452
2.50	0.5200	0.5256	0.5425	0.5708	0.6109	0.6355	0.6632	0.7280	0.8057	0.8965	0.9467
2.55	0.5295	0.5350	0.5517	0.5797	0.6192	0.6434	0.6707	0.7343	0.8105	0.8991	0.9481
2.60	0.5388	0.5443	0.5607	0.5884	0.6273	0.6512	0.6780	0.7405	0.8151	0.9017	0.9494
2.65	0.5479	0.5533	0.5696	0.5968	0.6352	0.6587	0.6851	0.7464	0.8195	0.9042	0.9507
2.70	0.5569	0.5622	0.5783	0.6051	0.6430	0.6661	0.6920	0.7522	0.8238	0.9066	0.9520
2.75	0.5656	0.5709	0.5867	0.6132	0.6505	0.6732	0.6987	0.7578	0.8280	0.9089	0.9532
2.80	0.5742	0.5794	0.5950	0.6211	0.6578	0.6802	0.7052	0.7633	0.8320	0.9111	0.9544
2.85	0.5825	0.5877	0.6031	0.6288	0.6650	0.6870	0.7116	0.7686	0.8359	0.9133	0.9555
2.90	0.5907	0.5958	0.6110	0.6364	0.6720	0.6935	0.7178	0.7737	0.8397	0.9154	0.9566
2.95	0.5987	0.6037	0.6187	0.6437	0.6788	0.7000	0.7238	0.7797	0.8434	0.9174	0.9577
3.00	0.6066	0.6115	0.6263	0.6509	0.6854	0.7063	0.7297	0.7836	0.8470	0.9193	0.9587

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF R_S WHERE $N=1-55$

THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-0465	0-0484	0-0545	0-0664	0-0877	0-1038	0-1254	0-1935	0-3199	0-5574	0-7452
0-05	0-0459	0-0488	0-0549	0-0669	0-0883	0-1045	0-1262	0-1946	0-3212	0-5586	0-7460
0-10	0-0480	0-0499	0-0561	0-0684	0-0901	0-1066	0-1285	0-1977	0-3249	0-5621	0-7483
0-15	0-0498	0-0518	0-0582	0-0708	0-0932	0-1100	0-1325	0-2027	0-3310	0-5676	0-7521
0-20	0-0524	0-0544	0-0611	0-0742	0-0974	0-1148	0-1378	0-2096	0-3391	0-5750	0-7571
0-25	0-0556	0-0578	0-0648	0-0789	0-1027	0-1207	0-1445	0-2181	0-3491	0-5840	0-7630
0-30	0-0595	0-0618	0-0693	0-0837	0-1090	0-1278	0-1525	0-2260	0-3506	0-5940	0-7697
0-35	0-0642	0-0666	0-0745	0-0898	0-1163	0-1360	0-1616	0-2392	0-3733	0-6049	0-7768
0-40	0-0694	0-0720	0-0804	0-0966	0-1245	0-1451	0-1717	0-2515	0-3869	0-6164	0-7842
0-45	0-0753	0-0781	0-0870	0-1042	0-1336	0-1550	0-1827	0-2645	0-4011	0-6281	0-7917
0-50	0-0818	0-0848	0-0943	0-1124	0-1433	0-1657	0-1944	0-2782	0-4158	0-6400	0-7992
0-55	0-0889	0-0921	0-1022	0-1213	0-1537	0-1770	0-2067	0-2924	0-4306	0-6518	0-8066
0-60	0-0965	0-0999	0-1106	0-1308	0-1647	0-1889	0-2195	0-3069	0-4456	0-6634	0-8138
0-65	0-1047	0-1082	0-1196	0-1408	0-1762	0-2012	0-2327	0-3217	0-4605	0-6747	0-8208
0-70	0-1133	0-1171	0-1290	0-1513	0-1881	0-2139	0-2462	0-3355	0-4752	0-6857	0-8275
0-75	0-1224	0-1264	0-1389	0-1622	0-2003	0-2269	0-2600	0-3514	0-4898	0-6964	0-8340
0-80	0-1320	0-1361	0-1492	0-1735	0-2129	0-2402	0-2739	0-3662	0-5040	0-7067	0-8402
0-85	0-1419	0-1462	0-1599	0-1851	0-2257	0-2536	0-2879	0-3810	0-5180	0-7167	0-8461
0-90	0-1521	0-1567	0-1709	0-1970	0-2387	0-2671	0-3020	0-3956	0-5316	0-7262	0-8518
0-95	0-1627	0-1674	0-1822	0-2091	0-2518	0-2808	0-3160	0-4100	0-5448	0-7354	0-8571
1-00	0-1736	0-1785	0-1937	0-2214	0-2550	0-2944	0-3300	0-4241	0-5577	0-7442	0-8623
1-05	0-1847	0-1898	0-2055	0-2338	0-2783	0-3081	0-3439	0-4381	0-5702	0-7526	0-8672
1-10	0-1961	0-2013	0-2174	0-2464	0-2916	0-3215	0-3578	0-4517	0-5824	0-7607	0-8718
1-15	0-2077	0-2130	0-2295	0-2591	0-3048	0-3352	0-3714	0-4651	0-5941	0-7685	0-8763
1-20	0-2194	0-2248	0-2417	0-2718	0-3181	0-3486	0-3850	0-4783	0-6055	0-7759	0-8806
1-25	0-2312	0-2368	0-2540	0-2845	0-3313	0-3619	0-3983	0-4911	0-6166	0-7831	0-8846
1-30	0-2432	0-2489	0-2664	0-2973	0-3444	0-3751	0-4115	0-5036	0-6273	0-7899	0-8885
1-35	0-2553	0-2610	0-2787	0-3100	0-3573	0-3881	0-4244	0-5159	0-6376	0-7965	0-8922
1-40	0-2674	0-2732	0-2911	0-3227	0-3702	0-4010	0-4371	0-5278	0-6477	0-8028	0-8957
1-45	0-2795	0-2854	0-3035	0-3353	0-3829	0-4137	0-4497	0-5395	0-6574	0-8089	0-8991
1-50	0-2915	0-2976	0-3159	0-3478	0-3955	0-4262	0-4619	0-5509	0-6667	0-8147	0-9023
1-55	0-3038	0-3098	0-3282	0-3602	0-4079	0-4385	0-4740	0-5619	0-6758	0-8203	0-9054

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3159	0.3219	0.3404	0.3725	0.4201	0.4505	0.4858	0.5727	0.6846	0.8257	0.9084
1.65	0.3279	0.3340	0.3526	0.3847	0.4322	0.4624	0.4974	0.5832	0.6931	0.8308	0.9113
1.70	0.3339	0.3400	0.3586	0.3908	0.4383	0.4685	0.5035	0.5893	0.7014	0.8358	0.9140
1.75	0.3512	0.3579	0.3765	0.4086	0.4557	0.4858	0.5198	0.6034	0.7093	0.8406	0.9166
1.80	0.3636	0.3697	0.3883	0.4204	0.4672	0.4967	0.5307	0.6131	0.7170	0.8452	0.9191
1.85	0.3753	0.3814	0.4000	0.4319	0.4784	0.5077	0.5413	0.6225	0.7245	0.8496	0.9215
1.90	0.3869	0.3930	0.4115	0.4433	0.4895	0.5184	0.5516	0.6317	0.7317	0.8539	0.9238
1.95	0.3984	0.4044	0.4229	0.4545	0.5003	0.5289	0.5617	0.6406	0.7387	0.8580	0.9261
2.00	0.4097	0.4157	0.4341	0.4655	0.5109	0.5392	0.5716	0.6492	0.7454	0.8619	0.9282
2.05	0.4208	0.4269	0.4452	0.4763	0.5213	0.5493	0.5813	0.6576	0.7520	0.8657	0.9303
2.10	0.4318	0.4378	0.4560	0.4870	0.5315	0.5591	0.5907	0.6658	0.7583	0.8694	0.9322
2.15	0.4427	0.4487	0.4667	0.4974	0.5414	0.5688	0.5998	0.6738	0.7645	0.8730	0.9341
2.20	0.4534	0.4593	0.4772	0.5076	0.5512	0.5782	0.6088	0.6815	0.7704	0.8764	0.9360
2.25	0.4639	0.4698	0.4876	0.5177	0.5607	0.5873	0.6175	0.6890	0.7762	0.8797	0.9377
2.30	0.4742	0.4801	0.4977	0.5275	0.5700	0.5963	0.6260	0.6963	0.7817	0.8829	0.9394
2.35	0.4844	0.4902	0.5077	0.5371	0.5791	0.6050	0.6343	0.7034	0.7871	0.8859	0.9411
2.40	0.4944	0.5001	0.5174	0.5466	0.5880	0.6136	0.6424	0.7103	0.7923	0.8889	0.9426
2.45	0.5042	0.5099	0.5270	0.5558	0.5967	0.6219	0.6503	0.7170	0.7974	0.8918	0.9442
2.50	0.5138	0.5194	0.5364	0.5648	0.6052	0.6300	0.6580	0.7235	0.8023	0.8945	0.9456
2.55	0.5233	0.5288	0.5456	0.5737	0.6135	0.6380	0.6655	0.7299	0.8071	0.8972	0.9471
2.60	0.5325	0.5380	0.5546	0.5823	0.6216	0.6457	0.6727	0.7360	0.8117	0.8998	0.9484
2.65	0.5416	0.5470	0.5634	0.5908	0.6295	0.6532	0.6798	0.7420	0.8161	0.9023	0.9497
2.70	0.5505	0.5558	0.5720	0.5991	0.6372	0.6605	0.6867	0.7478	0.8205	0.9047	0.9510
2.75	0.5592	0.5645	0.5804	0.6071	0.6448	0.6677	0.6935	0.7534	0.8247	0.9070	0.9522
2.80	0.5677	0.5730	0.5887	0.6150	0.6521	0.6747	0.7000	0.7589	0.8287	0.9093	0.9534
2.85	0.5761	0.5812	0.5968	0.6228	0.6593	0.6815	0.7064	0.7642	0.8327	0.9115	0.9546
2.90	0.5842	0.5893	0.6047	0.6303	0.6663	0.6881	0.7126	0.7694	0.8365	0.9136	0.9557
2.95	0.5922	0.5973	0.6124	0.6377	0.6731	0.6946	0.7187	0.7745	0.8402	0.9156	0.9568
3.00	0.6001	0.6050	0.6200	0.6448	0.6797	0.7009	0.7246	0.7793	0.8438	0.9176	0.9578

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=1.60

PAGE 25

THETA K	0	10	20	30	40	45	50	50	70	80	85
0.00	0.0533	0.0553	0.0620	0.0731	0.0982	0.1155	0.1385	0.2099	0.3389	0.5744	0.7566
0.05	0.0536	0.0557	0.0624	0.0736	0.0988	0.1162	0.1392	0.2108	0.3400	0.5754	0.7573
0.10	0.0547	0.0568	0.0636	0.0747	0.1005	0.1181	0.1414	0.2135	0.3432	0.5783	0.7592
0.15	0.0564	0.0586	0.0656	0.0763	0.1033	0.1212	0.1449	0.2180	0.3485	0.5830	0.7623
0.20	0.0588	0.0611	0.0683	0.0826	0.1072	0.1256	0.1498	0.2242	0.3556	0.5893	0.7665
0.25	0.0619	0.0643	0.0719	0.0865	0.1121	0.1311	0.1560	0.2318	0.3643	0.5969	0.7715
0.30	0.0657	0.0682	0.0761	0.0914	0.1180	0.1377	0.1633	0.2408	0.3745	0.6056	0.7772
0.35	0.0701	0.0727	0.0811	0.0971	0.1249	0.1453	0.1717	0.2509	0.3858	0.6152	0.7834
0.40	0.0751	0.0779	0.0867	0.1036	0.1326	0.1537	0.1811	0.2621	0.3980	0.6253	0.7899
0.45	0.0808	0.0837	0.0930	0.1108	0.1410	0.1630	0.1912	0.2741	0.4109	0.6358	0.7965
0.50	0.0870	0.0901	0.0999	0.1186	0.1502	0.1730	0.2021	0.2867	0.4242	0.6465	0.8033
0.55	0.0938	0.0971	0.1074	0.1271	0.1600	0.1836	0.2136	0.2998	0.4379	0.6572	0.8100
0.60	0.1011	0.1046	0.1155	0.1361	0.1704	0.1948	0.2257	0.3134	0.4517	0.6679	0.8166
0.65	0.1089	0.1126	0.1241	0.1456	0.1813	0.2065	0.2381	0.3272	0.4656	0.6784	0.8230
0.70	0.1172	0.1210	0.1331	0.1556	0.1926	0.2185	0.2509	0.3412	0.4794	0.6887	0.8293
0.75	0.1260	0.1300	0.1426	0.1660	0.2043	0.2309	0.2640	0.3552	0.4931	0.6987	0.8354
0.80	0.1351	0.1393	0.1525	0.1768	0.2163	0.2435	0.2772	0.3693	0.5066	0.7084	0.8412
0.85	0.1447	0.1490	0.1627	0.1879	0.2285	0.2563	0.2905	0.3834	0.5199	0.7179	0.8468
0.90	0.1546	0.1591	0.1733	0.1993	0.2409	0.2693	0.3040	0.3973	0.5329	0.7270	0.8522
0.95	0.1648	0.1695	0.1842	0.2110	0.2535	0.2824	0.3175	0.4111	0.5456	0.7358	0.8574
1.00	0.1753	0.1801	0.1953	0.2228	0.2662	0.2955	0.3310	0.4248	0.5580	0.7443	0.8623
1.05	0.1860	0.1910	0.2066	0.2348	0.2790	0.3087	0.3444	0.4382	0.5701	0.7524	0.8671
1.10	0.1970	0.2021	0.2182	0.2470	0.2919	0.3218	0.3577	0.4514	0.5819	0.7603	0.8716
1.15	0.2082	0.2134	0.2299	0.2592	0.3047	0.3349	0.3710	0.4644	0.5933	0.7678	0.8759
1.20	0.2195	0.2249	0.2417	0.2719	0.3175	0.3479	0.3841	0.4772	0.6044	0.7751	0.8801
1.25	0.2310	0.2365	0.2536	0.2849	0.3303	0.3609	0.3971	0.4897	0.6152	0.7821	0.8840
1.30	0.2426	0.2482	0.2656	0.2963	0.3431	0.3737	0.4098	0.5019	0.6256	0.7888	0.8878
1.35	0.2543	0.2600	0.2776	0.3086	0.3557	0.3864	0.4225	0.5139	0.6358	0.7952	0.8915
1.40	0.2661	0.2718	0.2897	0.3210	0.3682	0.3989	0.4349	0.5256	0.6456	0.8014	0.8950
1.45	0.2779	0.2837	0.3017	0.3333	0.3807	0.4113	0.4472	0.5370	0.6551	0.8074	0.8983
1.50	0.2897	0.2956	0.3137	0.3455	0.3929	0.4235	0.4592	0.5481	0.6644	0.8132	0.9015
1.55	0.3015	0.3075	0.3257	0.3576	0.4051	0.4355	0.4710	0.5590	0.6733	0.8187	0.9046

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=1-60

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3133	0.3193	0.3377	0.3696	0.4171	0.4474	0.4826	0.5696	0.6820	0.8240	0.9075
1.55	0.3251	0.3311	0.3496	0.3815	0.4289	0.4590	0.4940	0.5800	0.6904	0.8291	0.9103
1.70	0.3368	0.3428	0.3613	0.3933	0.4405	0.4703	0.5051	0.5901	0.6985	0.8340	0.9130
1.75	0.3484	0.3545	0.3730	0.4050	0.4520	0.4817	0.5161	0.5999	0.7064	0.8388	0.9156
1.80	0.3600	0.3661	0.3846	0.4166	0.4632	0.4927	0.5268	0.6095	0.7140	0.8434	0.9181
1.85	0.3715	0.3776	0.3961	0.4279	0.4743	0.5036	0.5372	0.6188	0.7214	0.8478	0.9205
1.90	0.3828	0.3889	0.4074	0.4391	0.4852	0.5142	0.5474	0.6278	0.7286	0.8520	0.9228
1.95	0.3941	0.4001	0.4186	0.4501	0.4959	0.5248	0.5575	0.6367	0.7356	0.8561	0.9251
2.00	0.4052	0.4112	0.4296	0.4609	0.5063	0.5347	0.5672	0.6453	0.7423	0.8601	0.9272
2.05	0.4152	0.4222	0.4405	0.4716	0.5166	0.5447	0.5768	0.6536	0.7488	0.8639	0.9292
2.10	0.4270	0.4330	0.4512	0.4821	0.5267	0.5543	0.5861	0.6618	0.7551	0.8675	0.9312
2.15	0.4377	0.4437	0.4617	0.4924	0.5365	0.5640	0.5952	0.6697	0.7612	0.8711	0.9331
2.20	0.4483	0.4542	0.4721	0.5025	0.5462	0.5733	0.6041	0.6774	0.7672	0.8745	0.9350
2.25	0.4587	0.4645	0.4823	0.5125	0.5557	0.5824	0.6128	0.6849	0.7729	0.8778	0.9367
2.30	0.4689	0.4747	0.4924	0.5222	0.5649	0.5913	0.6213	0.6921	0.7785	0.8810	0.9384
2.35	0.4789	0.4847	0.5022	0.5318	0.5740	0.6000	0.6295	0.6992	0.7839	0.8841	0.9401
2.40	0.4888	0.4946	0.5119	0.5411	0.5828	0.6085	0.6376	0.7061	0.7891	0.8870	0.9417
2.45	0.4985	0.5042	0.5214	0.5503	0.5915	0.6168	0.6454	0.7128	0.7942	0.8899	0.9432
2.50	0.5081	0.5137	0.5307	0.5593	0.5999	0.6249	0.6531	0.7193	0.7991	0.8927	0.9447
2.55	0.5174	0.5230	0.5398	0.5681	0.6082	0.6328	0.6605	0.7256	0.8039	0.8954	0.9461
2.60	0.5266	0.5321	0.5488	0.5767	0.6162	0.6405	0.6678	0.7318	0.8085	0.8980	0.9475
2.65	0.5356	0.5411	0.5575	0.5851	0.6241	0.6480	0.6749	0.7378	0.8130	0.9005	0.9488
2.70	0.5445	0.5499	0.5661	0.5934	0.6318	0.6554	0.6818	0.7436	0.8173	0.9029	0.9501
2.75	0.5532	0.5585	0.5745	0.6014	0.6393	0.6625	0.6886	0.7493	0.8215	0.9053	0.9513
2.80	0.5616	0.5669	0.5828	0.6093	0.6467	0.6695	0.6951	0.7548	0.8256	0.9075	0.9525
2.85	0.5700	0.5752	0.5908	0.6170	0.6539	0.6763	0.7015	0.7601	0.8296	0.9097	0.9537
2.90	0.5781	0.5833	0.5987	0.6245	0.6608	0.6830	0.7078	0.7653	0.8334	0.9119	0.9548
2.95	0.5861	0.5912	0.6064	0.6319	0.6677	0.6895	0.7138	0.7704	0.8372	0.9139	0.9559
3.00	0.5939	0.5989	0.6140	0.6391	0.6743	0.6958	0.7197	0.7753	0.8408	0.9159	0.9569

TABLES OF CALCULATIONS FOR H-H WRIGHT EQ.

VALUES OF RS WHERE N=1-65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0602	0.0624	0.0697	0.0839	0.1087	0.1271	0.1514	0.2255	0.3567	0.5900	0.7669
0.05	0.0605	0.0628	0.0701	0.0844	0.1092	0.1277	0.1520	0.2264	0.3576	0.5908	0.7674
0.10	0.0615	0.0638	0.0713	0.0857	0.1108	0.1295	0.1540	0.2288	0.3604	0.5932	0.7690
0.15	0.0632	0.0655	0.0731	0.0878	0.1134	0.1324	0.1573	0.2328	0.3650	0.5972	0.7717
0.20	0.0655	0.0679	0.0757	0.0909	0.1171	0.1365	0.1618	0.2384	0.3713	0.6026	0.7752
0.25	0.0685	0.0710	0.0791	0.0947	0.1217	0.1416	0.1674	0.2453	0.3790	0.6092	0.7795
0.30	0.0721	0.0747	0.0831	0.0993	0.1272	0.1477	0.1742	0.2534	0.3880	0.6168	0.7844
0.35	0.0763	0.0790	0.0878	0.1047	0.1336	0.1547	0.1819	0.2626	0.3981	0.6252	0.7897
0.40	0.0811	0.0840	0.0932	0.1108	0.1408	0.1626	0.1906	0.2728	0.4091	0.6341	0.7955
0.45	0.0865	0.0895	0.0992	0.1176	0.1488	0.1713	0.2000	0.2838	0.4208	0.6435	0.8014
0.50	0.0925	0.0956	0.1058	0.1250	0.1574	0.1806	0.2102	0.2955	0.4330	0.6532	0.8074
0.55	0.0990	0.1023	0.1130	0.1351	0.1667	0.1906	0.2210	0.3077	0.4456	0.6629	0.8135
0.60	0.1060	0.1095	0.1207	0.1416	0.1765	0.2012	0.2323	0.3203	0.4584	0.6727	0.8195
0.65	0.1135	0.1172	0.1289	0.1507	0.1868	0.2122	0.2440	0.3332	0.4713	0.6824	0.8255
0.70	0.1215	0.1253	0.1375	0.1603	0.1975	0.2235	0.2551	0.3464	0.4842	0.6920	0.8313
0.75	0.1299	0.1339	0.1466	0.1702	0.2087	0.2354	0.2685	0.3597	0.4971	0.7014	0.8370
0.80	0.1387	0.1429	0.1561	0.1806	0.2201	0.2474	0.2811	0.3730	0.5099	0.7106	0.8425
0.85	0.1478	0.1522	0.1660	0.1912	0.2318	0.2596	0.2938	0.3864	0.5225	0.7196	0.8478
0.90	0.1574	0.1619	0.1761	0.2022	0.2437	0.2720	0.3067	0.3997	0.5349	0.7282	0.8529
0.95	0.1672	0.1719	0.1866	0.2133	0.2558	0.2846	0.3196	0.4129	0.5470	0.7366	0.8579
1.00	0.1773	0.1822	0.1973	0.2248	0.2680	0.2972	0.3325	0.4260	0.5589	0.7448	0.8626
1.05	0.1877	0.1927	0.2082	0.2363	0.2803	0.3099	0.3455	0.4390	0.5706	0.7526	0.8672
1.10	0.1983	0.2034	0.2194	0.2481	0.2927	0.3225	0.3583	0.4517	0.5819	0.7602	0.8715
1.15	0.2091	0.2144	0.2307	0.2599	0.3051	0.3352	0.3711	0.4643	0.5930	0.7676	0.8757
1.20	0.2201	0.2255	0.2421	0.2718	0.3176	0.3478	0.3838	0.4767	0.6038	0.7746	0.8798
1.25	0.2312	0.2367	0.2536	0.2838	0.3300	0.3603	0.3964	0.4888	0.6143	0.7814	0.8837
1.30	0.2425	0.2490	0.2653	0.2958	0.3423	0.3728	0.4089	0.5007	0.6244	0.7880	0.8874
1.35	0.2538	0.2595	0.2769	0.3078	0.3546	0.3851	0.4212	0.5124	0.6344	0.7943	0.8909
1.40	0.2652	0.2710	0.2887	0.3198	0.3668	0.3974	0.4333	0.5238	0.6440	0.8004	0.8943
1.45	0.2767	0.2825	0.3004	0.3317	0.3789	0.4094	0.4452	0.5350	0.6533	0.8062	0.8976
1.50	0.2882	0.2941	0.3121	0.3436	0.3909	0.4214	0.4570	0.5459	0.6624	0.8119	0.9008
1.55	0.2997	0.3056	0.3238	0.3555	0.4028	0.4331	0.4686	0.5556	0.6712	0.8173	0.9038

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=1.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3112	0.3172	0.3355	0.3672	0.4145	0.4447	0.4799	0.5670	0.6797	0.8226	0.9067
1.65	0.3227	0.3287	0.3471	0.3789	0.4261	0.4562	0.4911	0.5772	0.6880	0.8276	0.9095
1.70	0.3342	0.3402	0.3586	0.3904	0.4375	0.4674	0.5021	0.5871	0.6961	0.8325	0.9122
1.75	0.3456	0.3516	0.3700	0.4019	0.4487	0.4784	0.5128	0.5958	0.7038	0.8372	0.9148
1.80	0.3569	0.3629	0.3814	0.4131	0.4598	0.4893	0.5233	0.6052	0.7114	0.8417	0.9172
1.85	0.3681	0.3742	0.3926	0.4243	0.4707	0.4999	0.5336	0.6155	0.7187	0.8461	0.9196
1.90	0.3793	0.3853	0.4037	0.4353	0.4814	0.5104	0.5437	0.6244	0.7258	0.8503	0.9219
1.95	0.3903	0.3963	0.4147	0.4461	0.4919	0.5205	0.5536	0.6332	0.7327	0.8544	0.9241
2.00	0.4012	0.4072	0.4255	0.4568	0.5022	0.5307	0.5633	0.6417	0.7394	0.8583	0.9263
2.05	0.4120	0.4180	0.4362	0.4674	0.5124	0.5405	0.5727	0.6500	0.7459	0.8621	0.9283
2.10	0.4227	0.4287	0.4468	0.4777	0.5223	0.5502	0.5820	0.6580	0.7522	0.8658	0.9303
2.15	0.4332	0.4392	0.4572	0.4879	0.5321	0.5595	0.5910	0.6659	0.7583	0.8693	0.9322
2.20	0.4436	0.4495	0.4674	0.4979	0.5416	0.5689	0.5998	0.6736	0.7642	0.8727	0.9340
2.25	0.4539	0.4597	0.4775	0.5077	0.5510	0.5779	0.6084	0.6810	0.7699	0.8760	0.9358
2.30	0.4640	0.4698	0.4874	0.5173	0.5602	0.5867	0.6168	0.6883	0.7755	0.8792	0.9375
2.35	0.4739	0.4797	0.4972	0.5265	0.5692	0.5954	0.6250	0.6953	0.7808	0.8823	0.9391
2.40	0.4837	0.4894	0.5068	0.5351	0.5779	0.6038	0.6331	0.7022	0.7861	0.8853	0.9407
2.45	0.4933	0.4990	0.5162	0.5432	0.5865	0.6120	0.6409	0.7089	0.7911	0.8882	0.9423
2.50	0.5027	0.5084	0.5254	0.5521	0.5949	0.6201	0.6485	0.7154	0.7961	0.8910	0.9437
2.55	0.5120	0.5176	0.5345	0.5628	0.6032	0.6280	0.6559	0.7217	0.8008	0.8937	0.9452
2.60	0.5211	0.5267	0.5433	0.5714	0.6112	0.6357	0.6632	0.7278	0.8055	0.8963	0.9466
2.65	0.5301	0.5356	0.5521	0.5798	0.6191	0.6432	0.6703	0.7338	0.8100	0.8988	0.9479
2.70	0.5389	0.5443	0.5606	0.5880	0.6267	0.6505	0.6772	0.7396	0.8143	0.9012	0.9492
2.75	0.5475	0.5528	0.5690	0.5960	0.6342	0.6576	0.6839	0.7453	0.8185	0.9036	0.9504
2.80	0.5559	0.5612	0.5772	0.6039	0.6416	0.6646	0.6905	0.7508	0.8227	0.9059	0.9516
2.85	0.5642	0.5694	0.5852	0.6116	0.6487	0.6714	0.6969	0.7552	0.8266	0.9081	0.9528
2.90	0.5723	0.5775	0.5931	0.6191	0.6557	0.6781	0.7031	0.7614	0.8305	0.9102	0.9539
2.95	0.5803	0.5854	0.6007	0.6264	0.6625	0.6846	0.7092	0.7655	0.8343	0.9123	0.9550
3.00	0.5881	0.5931	0.6083	0.6336	0.6692	0.6909	0.7151	0.7714	0.8379	0.9143	0.9561

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1.70

THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-0672	0-0697	0-0776	0-0928	0-1192	0-1386	0-1640	0-2406	0-3734	0-6042	0-7761
0-05	0-0675	0-0700	0-0779	0-0932	0-1197	0-1392	0-1646	0-2414	0-3742	0-6049	0-7766
0-10	0-0685	0-0710	0-0790	0-0944	0-1211	0-1408	0-1664	0-2436	0-3767	0-6070	0-7780
0-15	0-0701	0-0726	0-0808	0-0965	0-1236	0-1435	0-1694	0-2472	0-3807	0-6104	0-7802
0-20	0-0723	0-0749	0-0833	0-0993	0-1270	0-1472	0-1735	0-2522	0-3863	0-6151	0-7832
0-25	0-0751	0-0778	0-0865	0-1030	0-1313	0-1520	0-1788	0-2584	0-3931	0-6208	0-7869
0-30	0-0786	0-0814	0-0903	0-1073	0-1365	0-1577	0-1850	0-2658	0-4012	0-6274	0-7912
0-35	0-0826	0-0855	0-0948	0-1124	0-1425	0-1642	0-1922	0-2743	0-4102	0-6348	0-7959
0-40	0-0872	0-0903	0-0999	0-1182	0-1492	0-1716	0-2002	0-2836	0-4202	0-6428	0-8009
0-45	0-0924	0-0956	0-1056	0-1247	0-1567	0-1797	0-2090	0-2937	0-4308	0-6512	0-8062
0-50	0-0981	0-1014	0-1119	0-1317	0-1649	0-1885	0-2185	0-3045	0-4419	0-6599	0-8116
0-55	0-1044	0-1078	0-1188	0-1393	0-1736	0-1979	0-2286	0-3158	0-4535	0-6688	0-8171
0-60	0-1111	0-1147	0-1261	0-1475	0-1829	0-2078	0-2392	0-3276	0-4653	0-6778	0-8226
0-65	0-1183	0-1221	0-1340	0-1562	0-1927	0-2183	0-2503	0-3397	0-4773	0-6868	0-8281
0-70	0-1260	0-1299	0-1423	0-1653	0-2029	0-2291	0-2617	0-3521	0-4894	0-6957	0-8335
0-75	0-1340	0-1381	0-1510	0-1748	0-2134	0-2402	0-2734	0-3646	0-5015	0-7045	0-8388
0-80	0-1425	0-1467	0-1601	0-1847	0-2243	0-2517	0-2854	0-3772	0-5136	0-7131	0-8440
0-85	0-1513	0-1557	0-1695	0-1949	0-2355	0-2634	0-2975	0-3899	0-5255	0-7216	0-8490
0-90	0-1605	0-1650	0-1793	0-2054	0-2469	0-2752	0-3098	0-4026	0-5373	0-7298	0-8538
0-95	0-1700	0-1747	0-1894	0-2161	0-2585	0-2873	0-3222	0-4153	0-5489	0-7379	0-8586
1-00	0-1797	0-1846	0-1997	0-2271	0-2703	0-2994	0-3346	0-4278	0-5604	0-7457	0-8631
1-05	0-1898	0-1947	0-2103	0-2383	0-2821	0-3116	0-3471	0-4403	0-5715	0-7532	0-8675
1-10	0-2000	0-2051	0-2210	0-2496	0-2941	0-3238	0-3595	0-4526	0-5825	0-7605	0-8717
1-15	0-2104	0-2157	0-2319	0-2610	0-3061	0-3360	0-3718	0-4647	0-5932	0-7676	0-8758
1-20	0-2211	0-2264	0-2430	0-2725	0-3181	0-3482	0-3841	0-4767	0-6036	0-7744	0-8797
1-25	0-2319	0-2373	0-2542	0-2841	0-3301	0-3604	0-3963	0-4885	0-6138	0-7811	0-8834
1-30	0-2428	0-2483	0-2654	0-2958	0-3421	0-3724	0-4084	0-5000	0-6237	0-7874	0-8871
1-35	0-2538	0-2594	0-2768	0-3074	0-3540	0-3844	0-4204	0-5114	0-6334	0-7936	0-8905
1-40	0-2649	0-2706	0-2881	0-3191	0-3659	0-3963	0-4322	0-5225	0-6428	0-7996	0-8939
1-45	0-2760	0-2818	0-2995	0-3307	0-3777	0-4081	0-4438	0-5335	0-6519	0-8053	0-8971
1-50	0-2872	0-2930	0-3110	0-3423	0-3894	0-4197	0-4553	0-5441	0-6608	0-8109	0-9002
1-55	0-2984	0-3043	0-3224	0-3539	0-4010	0-4312	0-4666	0-5546	0-6695	0-8162	0-9032

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-70

THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0.3096	0.3156	0.3337	0.3653	0.4124	0.4426	0.4777	0.5648	0.6779	0.8214	0.9060
1-65	0.3208	0.3268	0.3450	0.3767	0.4237	0.4538	0.4887	0.5748	0.6860	0.8264	0.9088
1-70	0.3320	0.3380	0.3563	0.3880	0.4349	0.4648	0.4994	0.5846	0.6939	0.8312	0.9114
1-75	0.3432	0.3492	0.3675	0.3992	0.4459	0.4756	0.5100	0.5941	0.7016	0.8358	0.9140
1-80	0.3542	0.3602	0.3786	0.4103	0.4568	0.4863	0.5203	0.6034	0.7091	0.8403	0.9165
1-85	0.3652	0.3712	0.3896	0.4212	0.4675	0.4968	0.5305	0.6125	0.7163	0.8446	0.9188
1-90	0.3761	0.3822	0.4005	0.4320	0.4780	0.5071	0.5404	0.6214	0.7233	0.8488	0.9211
1-95	0.3870	0.3930	0.4113	0.4427	0.4884	0.5172	0.5502	0.6300	0.7302	0.8529	0.9233
2-00	0.3977	0.4037	0.4219	0.4532	0.4986	0.5271	0.5597	0.6384	0.7368	0.8568	0.9254
2-05	0.4083	0.4143	0.4325	0.4635	0.5086	0.5368	0.5691	0.6467	0.7432	0.8606	0.9275
2-10	0.4188	0.4248	0.4429	0.4737	0.5184	0.5463	0.5782	0.6547	0.7495	0.8642	0.9294
2-15	0.4292	0.4351	0.4531	0.4838	0.5280	0.5556	0.5871	0.6625	0.7555	0.8677	0.9313
2-20	0.4394	0.4453	0.4632	0.4936	0.5375	0.5648	0.5959	0.6700	0.7614	0.8711	0.9331
2-25	0.4495	0.4554	0.4732	0.5033	0.5467	0.5737	0.6044	0.6774	0.7671	0.8744	0.9349
2-30	0.4595	0.4653	0.4829	0.5129	0.5558	0.5825	0.6127	0.6847	0.7726	0.8775	0.9366
2-35	0.4693	0.4751	0.4926	0.5222	0.5647	0.5910	0.6209	0.6917	0.7780	0.8807	0.9383
2-40	0.4789	0.4847	0.5020	0.5314	0.5734	0.5994	0.6289	0.6985	0.7832	0.8837	0.9399
2-45	0.4884	0.4941	0.5114	0.5404	0.5820	0.6076	0.6366	0.7052	0.7883	0.8865	0.9414
2-50	0.4978	0.5034	0.5205	0.5493	0.5903	0.6156	0.6442	0.7116	0.7932	0.8893	0.9429
2-55	0.5070	0.5126	0.5295	0.5580	0.5985	0.6235	0.6516	0.7180	0.7980	0.8920	0.9443
2-60	0.5160	0.5216	0.5383	0.5665	0.6065	0.6311	0.6589	0.7241	0.8026	0.8947	0.9457
2-65	0.5249	0.5304	0.5469	0.5748	0.6143	0.6385	0.6659	0.7301	0.8071	0.8972	0.9470
2-70	0.5336	0.5390	0.5554	0.5830	0.6220	0.6459	0.6728	0.7359	0.8115	0.8996	0.9483
2-75	0.5422	0.5475	0.5637	0.5909	0.6294	0.6530	0.6795	0.7416	0.8157	0.9020	0.9496
2-80	0.5506	0.5559	0.5719	0.5988	0.6367	0.6600	0.6861	0.7471	0.8198	0.9043	0.9508
2-85	0.5588	0.5641	0.5799	0.6064	0.6439	0.6668	0.6925	0.7524	0.8238	0.9065	0.9520
2-90	0.5669	0.5721	0.5877	0.6139	0.6509	0.6734	0.6987	0.7577	0.8277	0.9087	0.9531
2-95	0.5748	0.5799	0.5954	0.6213	0.6577	0.6799	0.7048	0.7628	0.8315	0.9108	0.9542
3-00	0.5826	0.5876	0.6029	0.6284	0.6643	0.6862	0.7108	0.7677	0.8352	0.9128	0.9553

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF NS WHERE N=1.75

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0744	0.0770	0.0855	0.1017	0.1296	0.1499	0.1763	0.2551	0.3891	0.6172	0.7846
0.05	0.0747	0.0773	0.0858	0.1021	0.1300	0.1505	0.1769	0.2558	0.3899	0.6179	0.7850
0.10	0.0756	0.0783	0.0869	0.1033	0.1314	0.1520	0.1785	0.2578	0.3921	0.6197	0.7862
0.15	0.0771	0.0798	0.0886	0.1052	0.1337	0.1543	0.1813	0.2611	0.3957	0.6227	0.7881
0.20	0.0793	0.0820	0.0909	0.1079	0.1369	0.1580	0.1851	0.2656	0.4006	0.6267	0.7907
0.25	0.0820	0.0848	0.0939	0.1113	0.1409	0.1624	0.1900	0.2713	0.4067	0.6317	0.7939
0.30	0.0853	0.0882	0.0976	0.1154	0.1457	0.1675	0.1957	0.2780	0.4139	0.6376	0.7975
0.35	0.0891	0.0922	0.1019	0.1203	0.1514	0.1738	0.2024	0.2857	0.4221	0.6441	0.8017
0.40	0.0936	0.0967	0.1068	0.1258	0.1577	0.1807	0.2099	0.2943	0.4311	0.6513	0.8062
0.45	0.0985	0.1018	0.1122	0.1319	0.1648	0.1883	0.2181	0.3037	0.4407	0.6588	0.8109
0.50	0.1040	0.1074	0.1182	0.1386	0.1725	0.1963	0.2269	0.3136	0.4509	0.6667	0.8158
0.55	0.1100	0.1135	0.1248	0.1458	0.1807	0.2054	0.2364	0.3242	0.4616	0.6748	0.8208
0.60	0.1154	0.1201	0.1318	0.1536	0.1895	0.2148	0.2464	0.3351	0.4725	0.6831	0.8258
0.65	0.1234	0.1272	0.1393	0.1619	0.1988	0.2246	0.2568	0.3465	0.4837	0.6914	0.8309
0.70	0.1307	0.1347	0.1473	0.1705	0.2085	0.2342	0.2676	0.3581	0.4950	0.6996	0.8359
0.75	0.1385	0.1426	0.1556	0.1786	0.2186	0.2455	0.2787	0.3699	0.5064	0.7079	0.8408
0.80	0.1466	0.1509	0.1644	0.1891	0.2290	0.2564	0.2901	0.3819	0.5177	0.7160	0.8456
0.85	0.1551	0.1595	0.1734	0.1989	0.2396	0.2675	0.3017	0.3939	0.5290	0.7239	0.8504
0.90	0.1639	0.1685	0.1828	0.2090	0.2506	0.2782	0.3134	0.4060	0.5402	0.7318	0.8550
0.95	0.1731	0.1778	0.1925	0.2193	0.2617	0.2904	0.3253	0.4181	0.5513	0.7394	0.8594
1.00	0.1825	0.1873	0.2025	0.2299	0.2730	0.3020	0.3372	0.4301	0.5622	0.7468	0.8638
1.05	0.1922	0.1971	0.2126	0.2406	0.2844	0.3137	0.3491	0.4421	0.5730	0.7541	0.8680
1.10	0.2021	0.2071	0.2230	0.2515	0.2959	0.3255	0.3611	0.4539	0.5835	0.7611	0.8720
1.15	0.2122	0.2174	0.2336	0.2625	0.3075	0.3373	0.3730	0.4656	0.5938	0.7680	0.8760
1.20	0.2224	0.2278	0.2443	0.2737	0.3191	0.3491	0.3849	0.4772	0.6039	0.7746	0.8797
1.25	0.2329	0.2383	0.2551	0.2849	0.3307	0.3609	0.3967	0.4886	0.6138	0.7810	0.8834
1.30	0.2434	0.2490	0.2660	0.2962	0.3423	0.3726	0.4084	0.4999	0.6234	0.7872	0.8869
1.35	0.2541	0.2597	0.2770	0.3075	0.3539	0.3842	0.4200	0.5109	0.6328	0.7932	0.8903
1.40	0.2649	0.2706	0.2880	0.3188	0.3654	0.3958	0.4315	0.5217	0.6420	0.7990	0.8936
1.45	0.2757	0.2815	0.2991	0.3301	0.3769	0.4072	0.4429	0.5324	0.6509	0.8046	0.8967
1.50	0.2865	0.2924	0.3102	0.3414	0.3883	0.4185	0.4541	0.5428	0.6596	0.8101	0.8997
1.55	0.2975	0.3034	0.3213	0.3527	0.3996	0.4298	0.4651	0.5531	0.6681	0.8153	0.9027

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-75

PAGE 32

THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0.3085	0.3144	0.3324	0.3639	0.4108	0.4409	0.4760	0.5631	0.6763	0.8204	0.9055
1-65	0.3194	0.3253	0.3435	0.3750	0.4219	0.4518	0.4867	0.5729	0.6843	0.8253	0.9082
1-70	0.3303	0.3363	0.3545	0.3860	0.4328	0.4626	0.4972	0.5825	0.6921	0.8300	0.9108
1-75	0.3412	0.3471	0.3654	0.3970	0.4436	0.4733	0.5076	0.5918	0.6997	0.8346	0.9133
1-80	0.3520	0.3580	0.3763	0.4078	0.4543	0.4837	0.5178	0.6010	0.7070	0.8391	0.9158
1-85	0.3628	0.3688	0.3870	0.4185	0.4648	0.4940	0.5277	0.6099	0.7142	0.8433	0.9181
1-90	0.3735	0.3795	0.3977	0.4291	0.4751	0.5041	0.5375	0.6187	0.7211	0.8475	0.9204
1-95	0.3841	0.3901	0.4083	0.4396	0.4853	0.5141	0.5471	0.6272	0.7279	0.8515	0.9225
2-00	0.3946	0.4006	0.4188	0.4499	0.4953	0.5238	0.5565	0.6355	0.7345	0.8554	0.9246
2-05	0.4050	0.4110	0.4291	0.4601	0.5052	0.5334	0.5658	0.6437	0.7408	0.8591	0.9267
2-10	0.4153	0.4213	0.4393	0.4702	0.5149	0.5428	0.5748	0.6516	0.7470	0.8627	0.9286
2-15	0.4255	0.4314	0.4494	0.4801	0.5244	0.5520	0.5836	0.6593	0.7530	0.8662	0.9305
2-20	0.4356	0.4415	0.4594	0.4898	0.5337	0.5611	0.5923	0.6658	0.7589	0.8696	0.9323
2-25	0.4455	0.4514	0.4692	0.4994	0.5429	0.5699	0.6007	0.6742	0.7665	0.8729	0.9341
2-30	0.4554	0.4612	0.4788	0.5088	0.5518	0.5785	0.6090	0.6813	0.7700	0.8761	0.9358
2-35	0.4650	0.4708	0.4883	0.5181	0.5607	0.5871	0.6171	0.6883	0.7754	0.8792	0.9375
2-40	0.4746	0.4803	0.4977	0.5271	0.5693	0.5954	0.6250	0.6951	0.7806	0.8821	0.9390
2-45	0.4840	0.4897	0.5069	0.5361	0.5777	0.6035	0.6327	0.7017	0.7856	0.8850	0.9406
2-50	0.4932	0.4989	0.5160	0.5448	0.5860	0.6115	0.6402	0.7082	0.7905	0.8878	0.9421
2-55	0.5023	0.5079	0.5249	0.5534	0.5941	0.6192	0.6476	0.7145	0.7953	0.8905	0.9435
2-60	0.5113	0.5168	0.5336	0.5619	0.6021	0.6269	0.6548	0.7206	0.7999	0.8931	0.9449
2-65	0.5201	0.5256	0.5422	0.5701	0.6099	0.6343	0.6618	0.7266	0.8044	0.8957	0.9462
2-70	0.5287	0.5342	0.5506	0.5782	0.6175	0.6416	0.6687	0.7324	0.8088	0.8981	0.9475
2-75	0.5372	0.5426	0.5588	0.5862	0.6249	0.6487	0.6754	0.7380	0.8130	0.9005	0.9488
2-80	0.5455	0.5509	0.5670	0.5940	0.6322	0.6555	0.6820	0.7435	0.8172	0.9028	0.9500
2-85	0.5537	0.5590	0.5749	0.6016	0.6393	0.6624	0.6883	0.7489	0.8212	0.9050	0.9512
2-90	0.5617	0.5670	0.5827	0.6091	0.6463	0.6690	0.6946	0.7541	0.8251	0.9072	0.9523
2-95	0.5696	0.5748	0.5903	0.6164	0.6531	0.6755	0.7007	0.7592	0.8289	0.9093	0.9534
3-00	0.5774	0.5825	0.5978	0.6235	0.6597	0.6818	0.7066	0.7642	0.8325	0.9114	0.9545

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF R_S WHERE N=1-80

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0816	0.0844	0.0935	0.1106	0.1399	0.1611	0.1884	0.2691	0.4040	0.6294	0.7923
0.05	0.0819	0.0847	0.0938	0.1110	0.1403	0.1616	0.1889	0.2697	0.4047	0.6299	0.7927
0.10	0.0828	0.0856	0.0948	0.1121	0.1416	0.1630	0.1905	0.2715	0.4066	0.6315	0.7937
0.15	0.0843	0.0871	0.0964	0.1139	0.1437	0.1653	0.1930	0.2745	0.4098	0.6341	0.7953
0.20	0.0863	0.0892	0.0986	0.1165	0.1467	0.1686	0.1966	0.2786	0.4142	0.6377	0.7976
0.25	0.0889	0.0919	0.1015	0.1197	0.1505	0.1727	0.2010	0.2838	0.4197	0.6421	0.8004
0.30	0.0921	0.0951	0.1050	0.1236	0.1550	0.1776	0.2064	0.2900	0.4262	0.6473	0.8036
0.35	0.0958	0.0989	0.1091	0.1282	0.1603	0.1833	0.2126	0.2971	0.4336	0.6531	0.8073
0.40	0.1000	0.1033	0.1137	0.1334	0.1663	0.1898	0.2195	0.3050	0.4418	0.6595	0.8113
0.45	0.1048	0.1081	0.1189	0.1392	0.1729	0.1969	0.2272	0.3136	0.4506	0.6663	0.8155
0.50	0.1100	0.1135	0.1247	0.1456	0.1802	0.2047	0.2355	0.3228	0.4600	0.6735	0.8199
0.55	0.1158	0.1194	0.1309	0.1525	0.1880	0.2130	0.2444	0.3326	0.4698	0.6809	0.8244
0.60	0.1220	0.1257	0.1377	0.1599	0.1963	0.2219	0.2538	0.3429	0.4799	0.6884	0.8291
0.65	0.1286	0.1325	0.1449	0.1678	0.2051	0.2312	0.2636	0.3535	0.4903	0.6961	0.8337
0.70	0.1357	0.1397	0.1525	0.1761	0.2144	0.2409	0.2738	0.3644	0.5009	0.7038	0.8383
0.75	0.1431	0.1473	0.1605	0.1847	0.2239	0.2510	0.2844	0.3756	0.5115	0.7114	0.8429
0.80	0.1509	0.1553	0.1689	0.1938	0.2339	0.2614	0.2952	0.3869	0.5222	0.7190	0.8474
0.85	0.1591	0.1636	0.1776	0.2032	0.2441	0.2720	0.3062	0.3983	0.5329	0.7266	0.8519
0.90	0.1676	0.1722	0.1866	0.2129	0.2545	0.2829	0.3174	0.4098	0.5435	0.7340	0.8562
0.95	0.1764	0.1812	0.1960	0.2228	0.2652	0.2939	0.3287	0.4214	0.5541	0.7412	0.8605
1.00	0.1855	0.1904	0.2055	0.2329	0.2760	0.3060	0.3401	0.4329	0.5645	0.7483	0.8646
1.05	0.1949	0.1998	0.2153	0.2433	0.2870	0.3163	0.3515	0.4443	0.5748	0.7552	0.8686
1.10	0.2044	0.2095	0.2254	0.2538	0.2981	0.3276	0.3631	0.4557	0.5849	0.7620	0.8725
1.15	0.2142	0.2194	0.2355	0.2645	0.3093	0.3390	0.3746	0.4670	0.5949	0.7686	0.8763
1.20	0.2241	0.2294	0.2459	0.2752	0.3205	0.3504	0.3861	0.4782	0.6046	0.7750	0.8799
1.25	0.2342	0.2396	0.2564	0.2861	0.3317	0.3618	0.3975	0.4892	0.6142	0.7812	0.8835
1.30	0.2445	0.2500	0.2669	0.2970	0.3430	0.3731	0.4089	0.5001	0.6235	0.7872	0.8869
1.35	0.2549	0.2604	0.2776	0.3080	0.3542	0.3844	0.4201	0.5108	0.6326	0.7930	0.8902
1.40	0.2653	0.2709	0.2883	0.3190	0.3654	0.3957	0.4313	0.5214	0.6416	0.7987	0.8934
1.45	0.2758	0.2815	0.2991	0.3300	0.3766	0.4068	0.4423	0.5317	0.6503	0.8042	0.8964
1.50	0.2864	0.2922	0.3099	0.3410	0.3877	0.4179	0.4533	0.5419	0.6588	0.8095	0.8994
1.55	0.2970	0.3029	0.3207	0.3519	0.3987	0.4288	0.4640	0.5519	0.6670	0.8146	0.9023

TABLES OF CALCULATIONS FOR W.B. WRIGHT ESQ.

VALUES OF RS WHERE N=1.80

PAGE 34

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3077	0.3135	0.3315	0.3628	0.4096	0.4396	0.4747	0.5617	0.6751	0.8196	0.9050
1.65	0.3183	0.3242	0.3423	0.3737	0.4204	0.4503	0.4851	0.5713	0.6830	0.8244	0.9077
1.70	0.3290	0.3349	0.3530	0.3844	0.4311	0.4609	0.4956	0.5807	0.6906	0.8291	0.9103
1.75	0.3396	0.3455	0.3637	0.3952	0.4417	0.4713	0.5056	0.5899	0.6981	0.8336	0.9128
1.80	0.3502	0.3561	0.3743	0.4058	0.4521	0.4815	0.5156	0.5989	0.7053	0.8380	0.9152
1.85	0.3607	0.3667	0.3849	0.4163	0.4624	0.4915	0.5254	0.6077	0.7123	0.8422	0.9175
1.90	0.3712	0.3771	0.3953	0.4267	0.4726	0.5015	0.5350	0.6163	0.7192	0.8463	0.9197
1.95	0.3816	0.3875	0.4057	0.4370	0.4826	0.5114	0.5445	0.6247	0.7259	0.8503	0.9219
2.00	0.3919	0.3979	0.4160	0.4471	0.4924	0.5210	0.5537	0.6330	0.7324	0.8541	0.9240
2.05	0.4021	0.4081	0.4262	0.4571	0.5021	0.5304	0.5628	0.6410	0.7387	0.8578	0.9260
2.10	0.4122	0.4182	0.4362	0.4670	0.5117	0.5397	0.5717	0.6488	0.7448	0.8614	0.9279
2.15	0.4223	0.4282	0.4461	0.4767	0.5211	0.5488	0.5804	0.6564	0.7508	0.8649	0.9298
2.20	0.4322	0.4381	0.4559	0.4863	0.5303	0.5577	0.5890	0.6639	0.7565	0.8683	0.9316
2.25	0.4420	0.4478	0.4656	0.4958	0.5393	0.5664	0.5974	0.6712	0.7622	0.8715	0.9334
2.30	0.4516	0.4575	0.4751	0.5051	0.5482	0.5750	0.6055	0.6783	0.7677	0.8747	0.9351
2.35	0.4612	0.4670	0.4845	0.5142	0.5569	0.5834	0.6135	0.6852	0.7730	0.8778	0.9367
2.40	0.4706	0.4763	0.4937	0.5232	0.5655	0.5917	0.6214	0.6920	0.7781	0.8807	0.9383
2.45	0.4799	0.4856	0.5028	0.5320	0.5738	0.5997	0.6291	0.6985	0.7832	0.8836	0.9398
2.50	0.4890	0.4947	0.5118	0.5407	0.5821	0.6076	0.6365	0.7050	0.7881	0.8864	0.9413
2.55	0.4980	0.5036	0.5206	0.5492	0.5901	0.6153	0.6439	0.7112	0.7928	0.8891	0.9427
2.60	0.5068	0.5124	0.5292	0.5576	0.5980	0.6229	0.6510	0.7173	0.7974	0.8917	0.9441
2.65	0.5156	0.5211	0.5377	0.5658	0.6057	0.6303	0.6580	0.7233	0.8019	0.8942	0.9455
2.70	0.5241	0.5296	0.5461	0.5738	0.6133	0.6375	0.6649	0.7291	0.8063	0.8967	0.9468
2.75	0.5325	0.5380	0.5543	0.5817	0.6207	0.6446	0.6715	0.7347	0.8105	0.8991	0.9480
2.80	0.5408	0.5462	0.5623	0.5895	0.6279	0.6515	0.6781	0.7402	0.8147	0.9014	0.9493
2.85	0.5489	0.5542	0.5702	0.5971	0.6350	0.6583	0.6844	0.7456	0.8187	0.9036	0.9504
2.90	0.5569	0.5622	0.5780	0.6045	0.6419	0.6649	0.6905	0.7508	0.8226	0.9058	0.9516
2.95	0.5648	0.5699	0.5856	0.6118	0.6487	0.6713	0.6967	0.7559	0.8264	0.9079	0.9527
3.00	0.5724	0.5776	0.5930	0.6189	0.6554	0.6777	0.7027	0.7609	0.8300	0.9100	0.9538

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=1-85

PAGE 35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0890	0.0919	0.1015	0.1195	0.1500	0.1721	0.2002	0.2826	0.4181	0.6406	0.7994
0.05	0.0892	0.0922	0.1018	0.1199	0.1505	0.1725	0.2007	0.2831	0.4187	0.6411	0.7997
0.10	0.0901	0.0931	0.1027	0.1209	0.1517	0.1738	0.2021	0.2848	0.4204	0.6425	0.8006
0.15	0.0919	0.0945	0.1042	0.1226	0.1537	0.1760	0.2045	0.2875	0.4233	0.6448	0.8021
0.20	0.0934	0.0965	0.1064	0.1250	0.1565	0.1790	0.2078	0.2913	0.4273	0.6479	0.8040
0.25	0.0959	0.0981	0.1091	0.1281	0.1600	0.1829	0.2119	0.2960	0.4322	0.6518	0.8065
0.30	0.0989	0.1022	0.1124	0.1318	0.1643	0.1875	0.2169	0.3017	0.4381	0.6565	0.8094
0.35	0.1025	0.1058	0.1163	0.1362	0.1693	0.1928	0.2227	0.3082	0.4448	0.6617	0.8126
0.40	0.1065	0.1100	0.1208	0.1411	0.1749	0.1989	0.2292	0.3155	0.4522	0.6674	0.8162
0.45	0.1111	0.1146	0.1258	0.1466	0.1812	0.2056	0.2363	0.3234	0.4603	0.6736	0.8200
0.50	0.1162	0.1198	0.1313	0.1527	0.1880	0.2129	0.2441	0.3320	0.4689	0.6801	0.8240
0.55	0.1217	0.1254	0.1372	0.1593	0.1954	0.2208	0.2525	0.3412	0.4780	0.6869	0.8281
0.60	0.1276	0.1315	0.1437	0.1653	0.2033	0.2291	0.2613	0.3507	0.4874	0.6938	0.8323
0.65	0.1340	0.1380	0.1506	0.1738	0.2117	0.2380	0.2706	0.3607	0.4970	0.7009	0.8366
0.70	0.1408	0.1449	0.1579	0.1818	0.2204	0.2472	0.2803	0.3710	0.5069	0.7080	0.8409
0.75	0.1480	0.1522	0.1655	0.1901	0.2296	0.2568	0.2902	0.3815	0.5169	0.7152	0.8451
0.80	0.1559	0.1599	0.1736	0.1987	0.2390	0.2666	0.3005	0.3922	0.5270	0.7223	0.8494
0.85	0.1634	0.1679	0.1820	0.2077	0.2488	0.2768	0.3110	0.4030	0.5371	0.7294	0.8535
0.90	0.1716	0.1762	0.1907	0.2170	0.2588	0.2872	0.3217	0.4140	0.5472	0.7364	0.8576
0.95	0.1801	0.1848	0.1996	0.2266	0.2690	0.2977	0.3325	0.4250	0.5572	0.7433	0.8617
1.00	0.1888	0.1937	0.2089	0.2363	0.2794	0.3084	0.3435	0.4360	0.5672	0.7500	0.8656
1.05	0.1978	0.2028	0.2183	0.2463	0.2900	0.3192	0.3545	0.4470	0.5770	0.7566	0.8694
1.10	0.2071	0.2122	0.2280	0.2564	0.3007	0.3301	0.3655	0.4579	0.5867	0.7631	0.8732
1.15	0.2165	0.2217	0.2379	0.2667	0.3114	0.3411	0.3766	0.4688	0.5963	0.7694	0.8768
1.20	0.2261	0.2314	0.2479	0.2771	0.3223	0.3521	0.3877	0.4795	0.6057	0.7756	0.8803
1.25	0.2359	0.2413	0.2580	0.2876	0.3331	0.3631	0.3987	0.4902	0.6149	0.7816	0.8837
1.30	0.2459	0.2513	0.2682	0.2982	0.3440	0.3741	0.4097	0.5007	0.6239	0.7874	0.8870
1.35	0.2559	0.2614	0.2786	0.3089	0.3549	0.3850	0.4207	0.5111	0.6328	0.7931	0.8902
1.40	0.2661	0.2717	0.2890	0.3195	0.3658	0.3959	0.4315	0.5214	0.6415	0.7986	0.8933
1.45	0.2763	0.2820	0.2995	0.3302	0.3766	0.4068	0.4422	0.5315	0.6499	0.8039	0.8963
1.50	0.2866	0.2923	0.3100	0.3409	0.3874	0.4175	0.4529	0.5414	0.6582	0.8091	0.8992
1.55	0.2969	0.3027	0.3205	0.3516	0.3982	0.4282	0.4634	0.5512	0.6663	0.8141	0.9020

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF R_S WHERE $N=1-85$

PAGE 36

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3073	0.3131	0.3310	0.3522	0.4088	0.4388	0.4737	0.5607	0.6742	0.8190	0.9047
1.65	0.3177	0.3245	0.3415	0.3728	0.4193	0.4492	0.4840	0.5701	0.6819	0.8237	0.9073
1.70	0.3280	0.3349	0.3520	0.3835	0.4298	0.4593	0.4941	0.5793	0.6894	0.8283	0.9099
1.75	0.3384	0.3443	0.3624	0.3938	0.4401	0.4697	0.5040	0.5883	0.6967	0.8328	0.9123
1.80	0.3487	0.3547	0.3728	0.4041	0.4504	0.4798	0.5138	0.5972	0.7038	0.8371	0.9147
1.85	0.3590	0.3650	0.3831	0.4144	0.4605	0.4897	0.5234	0.6058	0.7108	0.8412	0.9169
1.90	0.3693	0.3752	0.3934	0.4246	0.4704	0.4994	0.5329	0.6143	0.7175	0.8453	0.9192
1.95	0.3795	0.3854	0.4035	0.4347	0.4803	0.5090	0.5421	0.6226	0.7241	0.8492	0.9213
2.00	0.3896	0.3955	0.4136	0.4446	0.4899	0.5185	0.5513	0.6307	0.7305	0.8530	0.9233
2.05	0.3996	0.4055	0.4236	0.4545	0.4995	0.5278	0.5602	0.6386	0.7367	0.8567	0.9253
2.10	0.4095	0.4154	0.4334	0.4642	0.5089	0.5369	0.5690	0.6463	0.7428	0.8602	0.9273
2.15	0.4194	0.4253	0.4432	0.4738	0.5181	0.5459	0.5775	0.6539	0.7487	0.8637	0.9291
2.20	0.4291	0.4350	0.4528	0.4832	0.5272	0.5547	0.5850	0.6613	0.7544	0.8670	0.9309
2.25	0.4388	0.4446	0.4623	0.4925	0.5361	0.5633	0.5943	0.6685	0.7600	0.8703	0.9327
2.30	0.4483	0.4541	0.4717	0.5017	0.5449	0.5718	0.6024	0.6755	0.7655	0.8734	0.9344
2.35	0.4577	0.4635	0.4810	0.5107	0.5535	0.5801	0.6103	0.6824	0.7707	0.8765	0.9360
2.40	0.4670	0.4727	0.4901	0.5196	0.5620	0.5882	0.6181	0.6891	0.7759	0.8794	0.9376
2.45	0.4761	0.4818	0.4991	0.5283	0.5702	0.5962	0.6257	0.6956	0.7809	0.8823	0.9391
2.50	0.4851	0.4908	0.5079	0.5359	0.5784	0.6040	0.6331	0.7020	0.7857	0.8851	0.9406
2.55	0.4940	0.4996	0.5166	0.5453	0.5864	0.6117	0.6404	0.7082	0.7905	0.8877	0.9420
2.60	0.5028	0.5083	0.5252	0.5536	0.5942	0.6192	0.6475	0.7143	0.7951	0.8904	0.9434
2.65	0.5114	0.5169	0.5336	0.5618	0.6018	0.6265	0.6545	0.7202	0.7996	0.8929	0.9448
2.70	0.5199	0.5253	0.5419	0.5697	0.6094	0.6337	0.6612	0.7259	0.8039	0.8953	0.9461
2.75	0.5282	0.5336	0.5500	0.5776	0.6167	0.6408	0.6679	0.7316	0.8082	0.8977	0.9473
2.80	0.5364	0.5418	0.5580	0.5853	0.6239	0.6476	0.6744	0.7371	0.8123	0.9000	0.9485
2.85	0.5445	0.5498	0.5658	0.5928	0.6310	0.6544	0.6807	0.7424	0.8163	0.9023	0.9497
2.90	0.5524	0.5577	0.5735	0.6002	0.6379	0.6610	0.6869	0.7476	0.8202	0.9045	0.9509
2.95	0.5602	0.5654	0.5811	0.6074	0.6446	0.6674	0.6930	0.7527	0.8240	0.9066	0.9520
3.00	0.5678	0.5730	0.5885	0.6145	0.6512	0.6737	0.6989	0.7577	0.8277	0.9086	0.9531

TABLES OF CALCULATIONS FOR W-H WRIGHT EQN.

VALUES OF RS WHERE N=1-90

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0963	0.0995	0.1095	0.1284	0.1601	0.1828	0.2118	0.2955	0.4314	0.6511	0.8060
0.05	0.0966	0.0997	0.1098	0.1287	0.1605	0.1832	0.2122	0.2960	0.4320	0.6515	0.8062
0.10	0.0974	0.1006	0.1106	0.1297	0.1616	0.1845	0.2135	0.2975	0.4335	0.6527	0.8070
0.15	0.0987	0.1019	0.1121	0.1313	0.1635	0.1865	0.2157	0.3000	0.4361	0.6548	0.8083
0.20	0.1006	0.1038	0.1142	0.1336	0.1661	0.1893	0.2188	0.3035	0.4397	0.6576	0.8100
0.25	0.1030	0.1063	0.1168	0.1365	0.1695	0.1929	0.2226	0.3078	0.4442	0.6611	0.8122
0.30	0.1059	0.1092	0.1200	0.1400	0.1735	0.1975	0.2273	0.3131	0.4495	0.6652	0.8148
0.35	0.1093	0.1127	0.1237	0.1442	0.1782	0.2023	0.2327	0.3191	0.4557	0.6699	0.8177
0.40	0.1132	0.1167	0.1279	0.1489	0.1835	0.2080	0.2387	0.3258	0.4625	0.6751	0.8209
0.45	0.1176	0.1212	0.1327	0.1541	0.1894	0.2143	0.2455	0.3332	0.4699	0.6807	0.8243
0.50	0.1224	0.1261	0.1379	0.1599	0.1959	0.2212	0.2528	0.3412	0.4778	0.6866	0.8279
0.55	0.1277	0.1315	0.1436	0.1661	0.2029	0.2286	0.2606	0.3497	0.4861	0.6928	0.8317
0.60	0.1334	0.1374	0.1498	0.1729	0.2104	0.2365	0.2689	0.3587	0.4949	0.6992	0.8355
0.65	0.1395	0.1436	0.1564	0.1800	0.2183	0.2449	0.2777	0.3680	0.5039	0.7057	0.8395
0.70	0.1461	0.1502	0.1634	0.1876	0.2267	0.2535	0.2858	0.3777	0.5131	0.7124	0.8434
0.75	0.1530	0.1573	0.1708	0.1956	0.2354	0.2627	0.2963	0.3876	0.5225	0.7190	0.8474
0.80	0.1602	0.1646	0.1785	0.2039	0.2444	0.2721	0.3061	0.3977	0.5320	0.7257	0.8514
0.85	0.1678	0.1723	0.1866	0.2125	0.2537	0.2818	0.3161	0.4080	0.5415	0.7324	0.8553
0.90	0.1757	0.1804	0.1949	0.2214	0.2633	0.2917	0.3263	0.4184	0.5511	0.7390	0.8591
0.95	0.1839	0.1887	0.2036	0.2306	0.2731	0.3018	0.3366	0.4289	0.5606	0.7455	0.8630
1.00	0.1923	0.1972	0.2125	0.2400	0.2831	0.3121	0.3471	0.4394	0.5701	0.7519	0.8667
1.05	0.2011	0.2060	0.2216	0.2486	0.2933	0.3225	0.3577	0.4499	0.5795	0.7582	0.8703
1.10	0.2100	0.2151	0.2309	0.2583	0.3035	0.3330	0.3683	0.4604	0.5888	0.7644	0.8739
1.15	0.2191	0.2243	0.2404	0.2693	0.3139	0.3435	0.3790	0.4709	0.5980	0.7705	0.8774
1.20	0.2284	0.2337	0.2501	0.2793	0.3244	0.3541	0.3897	0.4813	0.6070	0.7764	0.8808
1.25	0.2379	0.2433	0.2599	0.2895	0.3349	0.3648	0.4003	0.4916	0.6159	0.7822	0.8841
1.30	0.2475	0.2530	0.2698	0.2997	0.3454	0.3754	0.4110	0.5017	0.6247	0.7878	0.8872
1.35	0.2573	0.2628	0.2799	0.3100	0.3560	0.3860	0.4215	0.5118	0.6333	0.7933	0.8903
1.40	0.2671	0.2727	0.2900	0.3204	0.3665	0.3965	0.4320	0.5218	0.6417	0.7987	0.8934
1.45	0.2771	0.2827	0.3001	0.3308	0.3771	0.4071	0.4425	0.5316	0.6499	0.8039	0.8963
1.50	0.2871	0.2928	0.3103	0.3412	0.3876	0.4176	0.4528	0.5412	0.6580	0.8099	0.8991
1.55	0.2971	0.3029	0.3206	0.3515	0.3980	0.4280	0.4630	0.5507	0.6659	0.8138	0.9018

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQU.

VALUES OF RS WHERE N=1-90

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3072	0.3130	0.3308	0.3619	0.4084	0.4383	0.4732	0.5601	0.6736	0.8186	0.9045
1.65	0.3173	0.3231	0.3410	0.3722	0.4187	0.4484	0.4832	0.5693	0.6811	0.8232	0.9070
1.70	0.3274	0.3333	0.3513	0.3825	0.4289	0.4585	0.4930	0.5783	0.6884	0.8277	0.9095
1.75	0.3375	0.3434	0.3615	0.3927	0.4390	0.4685	0.5027	0.5871	0.6956	0.8321	0.9119
1.80	0.3476	0.3535	0.3716	0.4028	0.4490	0.4785	0.5123	0.5958	0.7026	0.8363	0.9142
1.85	0.3577	0.3636	0.3817	0.4129	0.4589	0.4880	0.5218	0.6043	0.7094	0.8404	0.9165
1.90	0.3677	0.3736	0.3917	0.4229	0.4686	0.4976	0.5310	0.6126	0.7161	0.8444	0.9187
1.95	0.3777	0.3836	0.4017	0.4328	0.4783	0.5070	0.5402	0.6207	0.7226	0.8483	0.9208
2.00	0.3878	0.3935	0.4115	0.4425	0.4878	0.5163	0.5491	0.6287	0.7289	0.8520	0.9228
2.05	0.3974	0.4033	0.4213	0.4522	0.4972	0.5254	0.5579	0.6355	0.7350	0.8556	0.9248
2.10	0.4072	0.4131	0.4310	0.4617	0.5064	0.5344	0.5665	0.6441	0.7410	0.8592	0.9267
2.15	0.4168	0.4227	0.4406	0.4712	0.5155	0.5433	0.5751	0.6516	0.7469	0.8626	0.9285
2.20	0.4264	0.4323	0.4501	0.4805	0.5244	0.5519	0.5834	0.6589	0.7525	0.8659	0.9303
2.25	0.4359	0.4417	0.4594	0.4896	0.5332	0.5605	0.5915	0.6660	0.7581	0.8691	0.9321
2.30	0.4453	0.4511	0.4687	0.4987	0.5419	0.5688	0.5995	0.6729	0.7635	0.8722	0.9337
2.35	0.4545	0.4603	0.4778	0.5075	0.5504	0.5771	0.6074	0.6797	0.7687	0.8753	0.9354
2.40	0.4637	0.4694	0.4868	0.5163	0.5587	0.5851	0.6151	0.6864	0.7738	0.8782	0.9369
2.45	0.4727	0.4784	0.4957	0.5249	0.5670	0.5930	0.6226	0.6929	0.7788	0.8811	0.9385
2.50	0.4816	0.4872	0.5044	0.5334	0.5750	0.6008	0.6300	0.6992	0.7836	0.8838	0.9399
2.55	0.4904	0.4960	0.5130	0.5418	0.5829	0.6083	0.6372	0.7054	0.7883	0.8865	0.9414
2.60	0.4990	0.5046	0.5215	0.5500	0.5907	0.6158	0.6442	0.7114	0.7929	0.8891	0.9427
2.65	0.5075	0.5131	0.5298	0.5580	0.5982	0.6231	0.6511	0.7173	0.7974	0.8916	0.9441
2.70	0.5159	0.5214	0.5380	0.5669	0.6057	0.6302	0.6579	0.7230	0.8017	0.8941	0.9454
2.75	0.5242	0.5296	0.5460	0.5737	0.6130	0.6372	0.6645	0.7286	0.8059	0.8965	0.9467
2.80	0.5323	0.5377	0.5539	0.5813	0.6202	0.6440	0.6709	0.7341	0.8100	0.8988	0.9479
2.85	0.5403	0.5456	0.5617	0.5888	0.6272	0.6507	0.6773	0.7395	0.8140	0.9010	0.9491
2.90	0.5482	0.5534	0.5694	0.5961	0.6340	0.6573	0.6834	0.7447	0.8179	0.9032	0.9502
2.95	0.5559	0.5611	0.5769	0.6033	0.6408	0.6637	0.6895	0.7497	0.8217	0.9053	0.9513
3.00	0.5635	0.5686	0.5842	0.6104	0.6474	0.6700	0.6954	0.7547	0.8254	0.9074	0.9524

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RS WHERE N=1.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1037	0.1070	0.1175	0.1372	0.1700	0.1934	0.2230	0.3080	0.4441	0.6609	0.8121
0.05	0.1040	0.1073	0.1178	0.1375	0.1704	0.1938	0.2234	0.3085	0.4446	0.6613	0.8123
0.10	0.1047	0.1080	0.1186	0.1384	0.1714	0.1949	0.2247	0.3099	0.4460	0.6624	0.8130
0.15	0.1060	0.1094	0.1200	0.1400	0.1732	0.1968	0.2267	0.3122	0.4484	0.6642	0.8141
0.20	0.1078	0.1112	0.1220	0.1421	0.1757	0.1995	0.2295	0.3153	0.4516	0.6667	0.8157
0.25	0.1101	0.1135	0.1245	0.1449	0.1788	0.2029	0.2332	0.3194	0.4557	0.6698	0.8176
0.30	0.1129	0.1164	0.1275	0.1485	0.1826	0.2069	0.2375	0.3242	0.4606	0.6735	0.8199
0.35	0.1161	0.1197	0.1310	0.1522	0.1871	0.2115	0.2425	0.3297	0.4662	0.6778	0.8225
0.40	0.1199	0.1235	0.1351	0.1566	0.1921	0.2170	0.2482	0.3360	0.4724	0.6825	0.8254
0.45	0.1241	0.1278	0.1396	0.1616	0.1977	0.2230	0.2545	0.3429	0.4792	0.6875	0.8285
0.50	0.1287	0.1326	0.1447	0.1671	0.2038	0.2295	0.2614	0.3503	0.4865	0.6930	0.8318
0.55	0.1338	0.1377	0.1501	0.1731	0.2105	0.2365	0.2688	0.3582	0.4943	0.6986	0.8352
0.60	0.1393	0.1433	0.1561	0.1785	0.2176	0.2440	0.2766	0.3666	0.5023	0.7045	0.8387
0.65	0.1452	0.1493	0.1624	0.1864	0.2251	0.2519	0.2849	0.3754	0.5107	0.7106	0.8424
0.70	0.1515	0.1557	0.1691	0.1936	0.2331	0.2602	0.2935	0.3845	0.5194	0.7167	0.8460
0.75	0.1581	0.1625	0.1762	0.2012	0.2414	0.2688	0.3025	0.3938	0.5282	0.7230	0.8497
0.80	0.1651	0.1696	0.1836	0.2092	0.2500	0.2778	0.3118	0.4034	0.5371	0.7292	0.8534
0.85	0.1724	0.1770	0.1913	0.2174	0.2589	0.2870	0.3213	0.4132	0.5461	0.7355	0.8571
0.90	0.1800	0.1847	0.1994	0.2260	0.2681	0.2965	0.3311	0.4231	0.5552	0.7417	0.8607
0.95	0.1879	0.1927	0.2077	0.2348	0.2775	0.3062	0.3410	0.4331	0.5642	0.7479	0.8643
1.00	0.1961	0.2010	0.2163	0.2439	0.2870	0.3160	0.3510	0.4431	0.5733	0.7540	0.8679
1.05	0.2045	0.2095	0.2251	0.2531	0.2968	0.3260	0.3612	0.4532	0.5822	0.7600	0.8714
1.10	0.2131	0.2182	0.2341	0.2625	0.3067	0.3361	0.3714	0.4633	0.5911	0.7659	0.8748
1.15	0.2219	0.2271	0.2433	0.2721	0.3167	0.3463	0.3816	0.4733	0.6000	0.7717	0.8781
1.20	0.2310	0.2362	0.2526	0.2818	0.3268	0.3565	0.3919	0.4833	0.6087	0.7774	0.8813
1.25	0.2401	0.2455	0.2621	0.2916	0.3369	0.3668	0.4022	0.4932	0.6172	0.7830	0.8845
1.30	0.2495	0.2549	0.2717	0.3015	0.3471	0.3770	0.4125	0.5031	0.6257	0.7884	0.8876
1.35	0.2589	0.2644	0.2815	0.3116	0.3574	0.3873	0.4228	0.5128	0.6340	0.7938	0.8906
1.40	0.2685	0.2740	0.2913	0.3216	0.3676	0.3976	0.4329	0.5225	0.6422	0.7989	0.8935
1.45	0.2781	0.2837	0.3011	0.3317	0.3778	0.4078	0.4431	0.5320	0.6502	0.8040	0.8963
1.50	0.2878	0.2935	0.3110	0.3418	0.3880	0.4180	0.4531	0.5414	0.6580	0.8089	0.8991
1.55	0.2976	0.3033	0.3210	0.3519	0.3982	0.4281	0.4631	0.5506	0.6657	0.8137	0.9017

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESO.

VALUES OF RS WHERE N=1.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3074	0.3132	0.3310	0.3619	0.4083	0.4381	0.4729	0.5597	0.6732	0.8183	0.9043
1.65	0.3173	0.3231	0.3409	0.3720	0.4183	0.4480	0.4827	0.5697	0.6806	0.8229	0.9068
1.70	0.3272	0.3330	0.3509	0.3820	0.4283	0.4579	0.4923	0.5775	0.6878	0.8273	0.9093
1.75	0.3370	0.3429	0.3608	0.3920	0.4381	0.4676	0.5018	0.5862	0.6948	0.8315	0.9116
1.80	0.3469	0.3528	0.3707	0.4019	0.4479	0.4772	0.5112	0.5946	0.7016	0.8357	0.9139
1.85	0.3567	0.3626	0.3806	0.4117	0.4576	0.4867	0.5204	0.6030	0.7083	0.8397	0.9161
1.90	0.3665	0.3724	0.3904	0.4215	0.4672	0.4961	0.5295	0.6111	0.7149	0.8437	0.9183
1.95	0.3762	0.3822	0.4002	0.4312	0.4766	0.5054	0.5385	0.6191	0.7213	0.8475	0.9203
2.00	0.3859	0.3918	0.4098	0.4407	0.4859	0.5145	0.5473	0.6270	0.7275	0.8512	0.9223
2.05	0.3956	0.4015	0.4194	0.4502	0.4952	0.5235	0.5560	0.6347	0.7335	0.8547	0.9243
2.10	0.4051	0.4110	0.4289	0.4596	0.5042	0.5323	0.5645	0.6422	0.7394	0.8582	0.9262
2.15	0.4146	0.4205	0.4383	0.4689	0.5132	0.5410	0.5728	0.6495	0.7452	0.8616	0.9280
2.20	0.4240	0.4299	0.4477	0.4780	0.5220	0.5495	0.5810	0.6557	0.7508	0.8649	0.9298
2.25	0.4333	0.4392	0.4569	0.4870	0.5307	0.5579	0.5891	0.6638	0.7563	0.8681	0.9315
2.30	0.4426	0.4484	0.4660	0.4959	0.5392	0.5662	0.5970	0.6706	0.7616	0.8712	0.9332
2.35	0.4517	0.4574	0.4749	0.5047	0.5476	0.5743	0.6047	0.6774	0.7668	0.8742	0.9348
2.40	0.4607	0.4664	0.4838	0.5133	0.5558	0.5823	0.6123	0.6839	0.7719	0.8771	0.9363
2.45	0.4696	0.4753	0.4925	0.5219	0.5639	0.5901	0.6198	0.6904	0.7768	0.8799	0.9378
2.50	0.4783	0.4840	0.5012	0.5302	0.5719	0.5977	0.6271	0.6956	0.7816	0.8827	0.9393
2.55	0.4870	0.4926	0.5097	0.5385	0.5797	0.6052	0.6342	0.7028	0.7853	0.8853	0.9407
2.60	0.4956	0.5011	0.5180	0.5466	0.5874	0.6126	0.6412	0.7088	0.7909	0.8879	0.9421
2.65	0.5040	0.5095	0.5263	0.5545	0.5949	0.6198	0.6480	0.7146	0.7953	0.8905	0.9435
2.70	0.5123	0.5178	0.5344	0.5624	0.6023	0.6269	0.6547	0.7203	0.7996	0.8929	0.9448
2.75	0.5204	0.5259	0.5423	0.5701	0.6095	0.6339	0.6613	0.7259	0.8038	0.8953	0.9460
2.80	0.5285	0.5339	0.5502	0.5776	0.6167	0.6407	0.6677	0.7314	0.8079	0.8976	0.9472
2.85	0.5364	0.5418	0.5579	0.5851	0.6236	0.6473	0.6740	0.7367	0.8119	0.8998	0.9484
2.90	0.5442	0.5495	0.5655	0.5923	0.6304	0.6538	0.6802	0.7419	0.8158	0.9020	0.9496
2.95	0.5519	0.5571	0.5729	0.5995	0.6371	0.6602	0.6862	0.7459	0.8196	0.9041	0.9507
3.00	0.5594	0.5646	0.5802	0.6065	0.6437	0.6664	0.6921	0.7519	0.8233	0.9062	0.9518

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=2.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1111	0.1145	0.1255	0.1459	0.1798	0.2038	0.2340	0.3201	0.4552	0.6701	0.8178
0.05	0.1114	0.1148	0.1257	0.1462	0.1801	0.2041	0.2344	0.3205	0.4566	0.6704	0.8180
0.10	0.1121	0.1156	0.1265	0.1471	0.1811	0.2052	0.2355	0.3218	0.4579	0.6714	0.8186
0.15	0.1133	0.1168	0.1279	0.1486	0.1828	0.2070	0.2375	0.3239	0.4601	0.6730	0.8196
0.20	0.1150	0.1186	0.1297	0.1506	0.1851	0.2095	0.2401	0.3268	0.4630	0.6753	0.8210
0.25	0.1172	0.1208	0.1321	0.1535	0.1881	0.2127	0.2435	0.3305	0.4667	0.6781	0.8227
0.30	0.1199	0.1235	0.1350	0.1564	0.1917	0.2165	0.2476	0.3350	0.4712	0.6815	0.8247
0.35	0.1230	0.1267	0.1384	0.1602	0.1959	0.2209	0.2523	0.3401	0.4763	0.6853	0.8271
0.40	0.1266	0.1304	0.1423	0.1644	0.2006	0.2260	0.2576	0.3459	0.4820	0.6896	0.8297
0.45	0.1307	0.1345	0.1467	0.1692	0.2059	0.2316	0.2635	0.3523	0.4883	0.6942	0.8325
0.50	0.1351	0.1391	0.1515	0.1744	0.2117	0.2377	0.2700	0.3593	0.4951	0.6992	0.8355
0.55	0.1400	0.1440	0.1567	0.1801	0.2180	0.2443	0.2769	0.3667	0.5023	0.7044	0.8386
0.60	0.1453	0.1494	0.1624	0.1882	0.2248	0.2514	0.2843	0.3746	0.5098	0.7098	0.8419
0.65	0.1510	0.1552	0.1684	0.1928	0.2320	0.2583	0.2922	0.3828	0.5176	0.7154	0.8452
0.70	0.1570	0.1613	0.1749	0.1997	0.2395	0.2668	0.3004	0.3914	0.5257	0.7211	0.8486
0.75	0.1634	0.1678	0.1817	0.2070	0.2474	0.2751	0.3089	0.4002	0.5340	0.7270	0.8521
0.80	0.1701	0.1746	0.1888	0.2146	0.2557	0.2835	0.3177	0.4093	0.5424	0.7328	0.8555
0.85	0.1772	0.1818	0.1963	0.2226	0.2642	0.2924	0.3268	0.4185	0.5509	0.7387	0.8590
0.90	0.1845	0.1892	0.2040	0.2308	0.2730	0.3015	0.3361	0.4279	0.5594	0.7446	0.8624
0.95	0.1921	0.1969	0.2120	0.2392	0.2820	0.3107	0.3455	0.4375	0.5680	0.7504	0.8658
1.00	0.2000	0.2049	0.2203	0.2479	0.2912	0.3202	0.3551	0.4470	0.5766	0.7562	0.8692
1.05	0.2081	0.2131	0.2288	0.2568	0.3006	0.3298	0.3643	0.4567	0.5852	0.7619	0.8725
1.10	0.2165	0.2216	0.2375	0.2659	0.3101	0.3395	0.3747	0.4663	0.5937	0.7676	0.8757
1.15	0.2250	0.2302	0.2463	0.2752	0.3197	0.3493	0.3846	0.4760	0.6022	0.7732	0.8789
1.20	0.2337	0.2390	0.2554	0.2846	0.3295	0.3591	0.3946	0.4856	0.6106	0.7786	0.8820
1.25	0.2426	0.2480	0.2646	0.2941	0.3393	0.3690	0.4044	0.4952	0.6188	0.7840	0.8850
1.30	0.2516	0.2571	0.2739	0.3037	0.3491	0.3790	0.4144	0.5047	0.6270	0.7892	0.8880
1.35	0.2608	0.2663	0.2833	0.3133	0.3590	0.3889	0.4243	0.5141	0.6350	0.7944	0.8909
1.40	0.2701	0.2756	0.2928	0.3231	0.3690	0.3989	0.4341	0.5235	0.6429	0.7994	0.8937
1.45	0.2794	0.2851	0.3024	0.3328	0.3789	0.4088	0.4440	0.5327	0.6507	0.8043	0.8965
1.50	0.2889	0.2946	0.3120	0.3427	0.3888	0.4187	0.4537	0.5418	0.6583	0.8091	0.8992
1.55	0.2984	0.3041	0.3217	0.3525	0.3987	0.4285	0.4634	0.5508	0.6658	0.8137	0.9017

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3080	0.3137	0.3314	0.3623	0.4085	0.4382	0.4730	0.5597	0.6731	0.8182	0.9043
1.65	0.3176	0.3233	0.3411	0.3721	0.4183	0.4479	0.4825	0.5684	0.6803	0.8227	0.9067
1.70	0.3272	0.3330	0.3508	0.3818	0.4280	0.4575	0.4919	0.5770	0.6873	0.8270	0.9091
1.75	0.3368	0.3426	0.3605	0.3915	0.4376	0.4670	0.5012	0.5855	0.6942	0.8312	0.9114
1.80	0.3464	0.3523	0.3702	0.4013	0.4472	0.4764	0.5104	0.5938	0.7009	0.8352	0.9136
1.85	0.3560	0.3619	0.3798	0.4109	0.4566	0.4857	0.5194	0.6020	0.7075	0.8392	0.9158
1.90	0.3656	0.3715	0.3894	0.4204	0.4660	0.4949	0.5283	0.6100	0.7139	0.8430	0.9179
1.95	0.3751	0.3810	0.3990	0.4299	0.4753	0.5040	0.5371	0.6178	0.7202	0.8468	0.9200
2.00	0.3846	0.3905	0.4084	0.4393	0.4844	0.5129	0.5458	0.6255	0.7263	0.8504	0.9219
2.05	0.3941	0.3999	0.4178	0.4486	0.4935	0.5218	0.5543	0.6331	0.7322	0.8540	0.9239
2.10	0.4034	0.4093	0.4272	0.4578	0.5024	0.5304	0.5626	0.6405	0.7381	0.8574	0.9257
2.15	0.4127	0.4186	0.4364	0.4669	0.5112	0.5390	0.5709	0.6477	0.7438	0.8607	0.9275
2.20	0.4220	0.4278	0.4455	0.4759	0.5198	0.5474	0.5789	0.6548	0.7493	0.8640	0.9293
2.25	0.4311	0.4369	0.4546	0.4847	0.5284	0.5557	0.5869	0.6618	0.7547	0.8671	0.9310
2.30	0.4402	0.4460	0.4635	0.4935	0.5368	0.5638	0.5947	0.6686	0.7600	0.8702	0.9326
2.35	0.4491	0.4549	0.4724	0.5021	0.5451	0.5718	0.6023	0.6752	0.7651	0.8732	0.9342
2.40	0.4580	0.4637	0.4811	0.5107	0.5532	0.5797	0.6098	0.6817	0.7701	0.8761	0.9358
2.45	0.4668	0.4725	0.4897	0.5190	0.5612	0.5874	0.6172	0.6881	0.7750	0.8789	0.9373
2.50	0.4754	0.4811	0.4982	0.5273	0.5691	0.5950	0.6244	0.6943	0.7798	0.8816	0.9388
2.55	0.4840	0.4896	0.5066	0.5355	0.5768	0.6024	0.6315	0.7004	0.7844	0.8843	0.9402
2.60	0.4924	0.4980	0.5149	0.5445	0.5844	0.6097	0.6384	0.7063	0.7890	0.8869	0.9415
2.65	0.5007	0.5062	0.5230	0.5514	0.5918	0.6169	0.6452	0.7121	0.7934	0.8894	0.9429
2.70	0.5089	0.5144	0.5310	0.5591	0.5992	0.6239	0.6518	0.7178	0.7977	0.8918	0.9442
2.75	0.5170	0.5224	0.5389	0.5667	0.6063	0.6308	0.6583	0.7233	0.8019	0.8942	0.9454
2.80	0.5249	0.5304	0.5467	0.5742	0.6134	0.6375	0.6647	0.7288	0.8050	0.8965	0.9466
2.85	0.5328	0.5381	0.5543	0.5816	0.6203	0.6441	0.6710	0.7341	0.8099	0.8987	0.9478
2.90	0.5405	0.5458	0.5618	0.5888	0.6271	0.6506	0.6771	0.7392	0.8138	0.9009	0.9490
2.95	0.5481	0.5534	0.5692	0.5959	0.6337	0.6569	0.6831	0.7443	0.8176	0.9030	0.9501
3.00	0.5556	0.5608	0.5765	0.6029	0.6402	0.6631	0.6889	0.7492	0.8213	0.9050	0.9512

TABLES OF CALCULATIONS FOR H-H-WRIGHT ESQ.

VALUES OF RS WHERE N=2.05

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1185	0.1221	0.1334	0.1546	0.1894	0.2139	0.2448	0.3317	0.4677	0.6787	0.8231
0.05	0.1188	0.1223	0.1337	0.1548	0.1897	0.2143	0.2451	0.3321	0.4681	0.6790	0.8232
0.10	0.1193	0.1231	0.1345	0.1557	0.1907	0.2153	0.2462	0.3333	0.4693	0.6799	0.8238
0.15	0.1206	0.1243	0.1357	0.1571	0.1923	0.2170	0.2480	0.3352	0.4712	0.6814	0.8247
0.20	0.1223	0.1259	0.1375	0.1590	0.1945	0.2193	0.2504	0.3379	0.4739	0.6834	0.8259
0.25	0.1244	0.1281	0.1398	0.1616	0.1973	0.2223	0.2536	0.3414	0.4774	0.6860	0.8275
0.30	0.1270	0.1307	0.1426	0.1646	0.2006	0.2259	0.2574	0.3455	0.4814	0.6890	0.8293
0.35	0.1300	0.1338	0.1458	0.1681	0.2046	0.2301	0.2618	0.3503	0.4861	0.6925	0.8314
0.40	0.1334	0.1373	0.1495	0.1722	0.2091	0.2348	0.2668	0.3557	0.4914	0.6964	0.8338
0.45	0.1373	0.1412	0.1537	0.1767	0.2141	0.2401	0.2724	0.3617	0.4972	0.7006	0.8364
0.50	0.1416	0.1456	0.1583	0.1817	0.2197	0.2459	0.2785	0.3682	0.5035	0.7052	0.8391
0.55	0.1463	0.1504	0.1633	0.1872	0.2256	0.2522	0.2851	0.3751	0.5101	0.7100	0.8420
0.60	0.1514	0.1556	0.1688	0.1930	0.2321	0.2589	0.2921	0.3825	0.5171	0.7150	0.8450
0.65	0.1568	0.1611	0.1746	0.1993	0.2389	0.2661	0.2995	0.3902	0.5245	0.7202	0.8481
0.70	0.1626	0.1670	0.1808	0.2059	0.2461	0.2736	0.3073	0.3983	0.5320	0.7255	0.8512
0.75	0.1688	0.1733	0.1873	0.2129	0.2536	0.2814	0.3154	0.4057	0.5398	0.7310	0.8544
0.80	0.1753	0.1798	0.1942	0.2202	0.2615	0.2896	0.3237	0.4152	0.5477	0.7365	0.8576
0.85	0.1820	0.1867	0.2013	0.2278	0.2697	0.2980	0.3324	0.4240	0.5557	0.7420	0.8609
0.90	0.1891	0.1939	0.2088	0.2357	0.2781	0.3066	0.3412	0.4330	0.5639	0.7475	0.8641
0.95	0.1965	0.2013	0.2165	0.2438	0.2867	0.3155	0.3503	0.4420	0.5720	0.7531	0.8673
1.00	0.2041	0.2090	0.2245	0.2522	0.2955	0.3245	0.3595	0.4512	0.5802	0.7585	0.8705
1.05	0.2119	0.2170	0.2326	0.2608	0.3045	0.3337	0.3688	0.4604	0.5884	0.7640	0.8736
1.10	0.2200	0.2251	0.2410	0.2695	0.3137	0.3431	0.3782	0.4697	0.5965	0.7694	0.8767
1.15	0.2282	0.2334	0.2496	0.2785	0.3230	0.3525	0.3877	0.4789	0.6046	0.7747	0.8798
1.20	0.2367	0.2420	0.2584	0.2875	0.3324	0.3620	0.3973	0.4882	0.6127	0.7800	0.8828
1.25	0.2453	0.2506	0.2672	0.2967	0.3419	0.3716	0.4069	0.4974	0.6206	0.7851	0.8857
1.30	0.2540	0.2595	0.2763	0.3060	0.3514	0.3812	0.4165	0.5066	0.6285	0.7902	0.8885
1.35	0.2629	0.2684	0.2854	0.3154	0.3610	0.3908	0.4261	0.5157	0.6363	0.7951	0.8913
1.40	0.2719	0.2775	0.2946	0.3248	0.3706	0.4004	0.4356	0.5247	0.6439	0.8000	0.8941
1.45	0.2810	0.2866	0.3039	0.3343	0.3802	0.4100	0.4452	0.5337	0.6514	0.8047	0.8967
1.50	0.2902	0.2959	0.3133	0.3438	0.3898	0.4196	0.4646	0.5426	0.6588	0.8093	0.8993
1.55	0.2994	0.3051	0.3227	0.3534	0.3994	0.4292	0.4641	0.5513	0.6661	0.8139	0.9018

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=2.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3087	0.3145	0.3321	0.3629	0.4090	0.4387	0.4734	0.5599	0.6732	0.8183	0.9043
1.65	0.3181	0.3239	0.3416	0.3724	0.4185	0.4481	0.4826	0.5685	0.6802	0.8226	0.9067
1.70	0.3275	0.3333	0.3510	0.3820	0.4280	0.4575	0.4918	0.5768	0.6871	0.8268	0.9090
1.75	0.3368	0.3427	0.3605	0.3915	0.4374	0.4668	0.5009	0.5851	0.6938	0.8309	0.9113
1.80	0.3462	0.3521	0.3699	0.4009	0.4467	0.4759	0.5098	0.5932	0.7004	0.8349	0.9134
1.85	0.3556	0.3615	0.3793	0.4103	0.4560	0.4850	0.5187	0.6012	0.7068	0.8388	0.9156
1.90	0.3650	0.3708	0.3887	0.4196	0.4652	0.4940	0.5274	0.6091	0.7131	0.8426	0.9176
1.95	0.3743	0.3801	0.3981	0.4289	0.4742	0.5029	0.5360	0.6168	0.7193	0.8462	0.9197
2.00	0.3836	0.3894	0.4073	0.4381	0.4832	0.5117	0.5446	0.6243	0.7253	0.8498	0.9216
2.05	0.3928	0.3987	0.4165	0.4472	0.4921	0.5203	0.5529	0.6318	0.7312	0.8533	0.9235
2.10	0.4020	0.4079	0.4257	0.4562	0.5008	0.5289	0.5611	0.6390	0.7369	0.8567	0.9253
2.15	0.4111	0.4170	0.4347	0.4652	0.5095	0.5373	0.5692	0.6462	0.7425	0.8600	0.9271
2.20	0.4202	0.4260	0.4437	0.4740	0.5180	0.5455	0.5771	0.6532	0.7480	0.8632	0.9289
2.25	0.4292	0.4350	0.4526	0.4827	0.5264	0.5537	0.5849	0.6600	0.7533	0.8663	0.9305
2.30	0.4381	0.4438	0.4614	0.4913	0.5347	0.5617	0.5926	0.6667	0.7585	0.8693	0.9322
2.35	0.4469	0.4526	0.4701	0.4998	0.5428	0.5696	0.6002	0.6733	0.7636	0.8723	0.9338
2.40	0.4556	0.4613	0.4787	0.5082	0.5508	0.5774	0.6076	0.6797	0.7686	0.8752	0.9353
2.45	0.4642	0.4699	0.4872	0.5165	0.5587	0.5850	0.6148	0.6860	0.7734	0.8779	0.9368
2.50	0.4728	0.4784	0.4956	0.5247	0.5665	0.5925	0.6220	0.6922	0.7781	0.8806	0.9382
2.55	0.4812	0.4868	0.5038	0.5327	0.5741	0.5998	0.6290	0.6982	0.7827	0.8833	0.9396
2.60	0.4895	0.4951	0.5120	0.5406	0.5816	0.6070	0.6358	0.7041	0.7872	0.8858	0.9410
2.65	0.4977	0.5033	0.5200	0.5484	0.5890	0.6141	0.6426	0.7098	0.7916	0.8883	0.9423
2.70	0.5058	0.5113	0.5280	0.5561	0.5962	0.6211	0.6491	0.7155	0.7959	0.8908	0.9436
2.75	0.5138	0.5192	0.5358	0.5635	0.6034	0.6279	0.6555	0.7210	0.8000	0.8931	0.9449
2.80	0.5217	0.5271	0.5434	0.5710	0.6103	0.6346	0.6619	0.7263	0.8041	0.8954	0.9461
2.85	0.5294	0.5348	0.5510	0.5783	0.6172	0.6411	0.6681	0.7316	0.8081	0.8976	0.9473
2.90	0.5371	0.5424	0.5584	0.5855	0.6239	0.6475	0.6742	0.7367	0.8119	0.8998	0.9484
2.95	0.5446	0.5498	0.5658	0.5926	0.6305	0.6539	0.6801	0.7418	0.8157	0.9019	0.9495
3.00	0.5520	0.5572	0.5730	0.5995	0.6370	0.6600	0.6860	0.7467	0.8194	0.9040	0.9506

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.10

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1259	0.1296	0.1413	0.1631	0.1989	0.2239	0.2552	0.3429	0.4787	0.6869	0.8280
0.05	0.1261	0.1298	0.1416	0.1634	0.1992	0.2242	0.2556	0.3433	0.4791	0.6872	0.8282
0.10	0.1268	0.1305	0.1423	0.1642	0.2001	0.2252	0.2566	0.3444	0.4801	0.6880	0.8287
0.15	0.1280	0.1317	0.1436	0.1655	0.2016	0.2268	0.2582	0.3452	0.4819	0.6893	0.8295
0.20	0.1295	0.1333	0.1453	0.1674	0.2036	0.2290	0.2606	0.3487	0.4844	0.6911	0.8306
0.25	0.1316	0.1354	0.1474	0.1698	0.2063	0.2318	0.2635	0.3519	0.4875	0.6934	0.8320
0.30	0.1340	0.1379	0.1501	0.1727	0.2095	0.2352	0.2671	0.3558	0.4913	0.6962	0.8337
0.35	0.1369	0.1408	0.1532	0.1761	0.2133	0.2391	0.2712	0.3602	0.4956	0.6994	0.8356
0.40	0.1402	0.1442	0.1568	0.1799	0.2175	0.2435	0.2760	0.3653	0.5005	0.7029	0.8377
0.45	0.1439	0.1480	0.1608	0.1842	0.2223	0.2486	0.2812	0.3708	0.5059	0.7068	0.8401
0.50	0.1481	0.1522	0.1652	0.1890	0.2275	0.2541	0.2869	0.3769	0.5117	0.7110	0.8426
0.55	0.1526	0.1568	0.1700	0.1942	0.2332	0.2601	0.2931	0.3834	0.5179	0.7154	0.8452
0.60	0.1575	0.1617	0.1752	0.1998	0.2393	0.2664	0.2998	0.3903	0.5244	0.7201	0.8480
0.65	0.1627	0.1671	0.1808	0.2058	0.2458	0.2732	0.3068	0.3976	0.5313	0.7249	0.8508
0.70	0.1683	0.1728	0.1867	0.2122	0.2527	0.2803	0.3142	0.4053	0.5383	0.7299	0.8538
0.75	0.1742	0.1788	0.1930	0.2188	0.2599	0.2878	0.3219	0.4131	0.5456	0.7350	0.8568
0.80	0.1805	0.1851	0.1996	0.2259	0.2674	0.2956	0.3298	0.4213	0.5531	0.7401	0.8598
0.85	0.1870	0.1917	0.2065	0.2332	0.2752	0.3036	0.3381	0.4296	0.5607	0.7453	0.8628
0.90	0.1939	0.1987	0.2137	0.2407	0.2833	0.3119	0.3465	0.4381	0.5684	0.7506	0.8658
0.95	0.2010	0.2058	0.2211	0.2486	0.2915	0.3204	0.3552	0.4468	0.5761	0.7558	0.8689
1.00	0.2083	0.2133	0.2288	0.2566	0.3000	0.3291	0.3640	0.4555	0.5839	0.7610	0.8719
1.05	0.2159	0.2209	0.2367	0.2649	0.3087	0.3379	0.3729	0.4643	0.5917	0.7662	0.8749
1.10	0.2237	0.2288	0.2448	0.2733	0.3175	0.3469	0.3820	0.4732	0.5995	0.7713	0.8778
1.15	0.2316	0.2369	0.2531	0.2819	0.3265	0.3559	0.3911	0.4821	0.6073	0.7764	0.8807
1.20	0.2398	0.2451	0.2615	0.2907	0.3355	0.3651	0.4003	0.4910	0.6150	0.7814	0.8836
1.25	0.2482	0.2535	0.2701	0.2996	0.3447	0.3743	0.4096	0.4998	0.6226	0.7864	0.8864
1.30	0.2566	0.2621	0.2788	0.3086	0.3539	0.3836	0.4188	0.5087	0.6302	0.7912	0.8891
1.35	0.2653	0.2707	0.2877	0.3176	0.3632	0.3929	0.4281	0.5175	0.6377	0.7960	0.8918
1.40	0.2740	0.2795	0.2966	0.3268	0.3725	0.4022	0.4374	0.5263	0.6451	0.8007	0.8945
1.45	0.2828	0.2884	0.3057	0.3360	0.3818	0.4116	0.4466	0.5349	0.6524	0.8053	0.8970
1.50	0.2917	0.2974	0.3148	0.3452	0.3911	0.4209	0.4558	0.5435	0.6596	0.8098	0.8995
1.55	0.3007	0.3064	0.3239	0.3545	0.4005	0.4302	0.4649	0.5520	0.6666	0.8142	0.9020

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF R5 WHERE N=2.10

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3098	0.3155	0.3331	0.3638	0.4098	0.4394	0.4740	0.5604	0.6736	0.8185	0.9044
1.65	0.3183	0.3246	0.3423	0.3731	0.4190	0.4486	0.4830	0.5687	0.6804	0.8227	0.9067
1.70	0.3260	0.3338	0.3515	0.3824	0.4283	0.4577	0.4920	0.5769	0.6871	0.8268	0.9090
1.75	0.3371	0.3450	0.3607	0.3916	0.4374	0.4668	0.5008	0.5850	0.6936	0.8308	0.9112
1.80	0.3453	0.3521	0.3699	0.4008	0.4466	0.4757	0.5096	0.5929	0.7001	0.8347	0.9133
1.85	0.3555	0.3613	0.3791	0.4100	0.4556	0.4846	0.5182	0.6007	0.7064	0.8385	0.9154
1.90	0.3646	0.3704	0.3883	0.4191	0.4646	0.4934	0.5268	0.6084	0.7125	0.8422	0.9174
1.95	0.3737	0.3796	0.3974	0.4282	0.4734	0.5021	0.5352	0.6160	0.7186	0.8458	0.9194
2.00	0.3828	0.3887	0.4065	0.4372	0.4822	0.5107	0.5435	0.6234	0.7245	0.8493	0.9213
2.05	0.3919	0.3977	0.4155	0.4461	0.4909	0.5192	0.5517	0.6307	0.7302	0.8527	0.9232
2.10	0.4009	0.4067	0.4245	0.4550	0.4995	0.5276	0.5598	0.6378	0.7359	0.8561	0.9250
2.15	0.4098	0.4156	0.4334	0.4637	0.5080	0.5358	0.5677	0.6448	0.7414	0.8593	0.9268
2.20	0.4187	0.4245	0.4422	0.4724	0.5164	0.5439	0.5756	0.6517	0.7468	0.8625	0.9285
2.25	0.4275	0.4333	0.4509	0.4810	0.5246	0.5520	0.5832	0.6585	0.7521	0.8656	0.9301
2.30	0.4362	0.4420	0.4595	0.4895	0.5328	0.5599	0.5908	0.6651	0.7572	0.8686	0.9318
2.35	0.4449	0.4507	0.4681	0.4978	0.5408	0.5676	0.5982	0.6716	0.7622	0.8715	0.9333
2.40	0.4535	0.4592	0.4766	0.5061	0.5487	0.5753	0.6056	0.6779	0.7671	0.8743	0.9348
2.45	0.4620	0.4677	0.4849	0.5142	0.5565	0.5828	0.6127	0.6841	0.7719	0.8771	0.9363
2.50	0.4704	0.4760	0.4932	0.5223	0.5642	0.5902	0.6198	0.6902	0.7766	0.8798	0.9378
2.55	0.4787	0.4843	0.5013	0.5302	0.5717	0.5974	0.6267	0.6962	0.7812	0.8824	0.9392
2.60	0.4869	0.4925	0.5094	0.5380	0.5791	0.6046	0.6335	0.7020	0.7856	0.8849	0.9405
2.65	0.4950	0.5005	0.5173	0.5467	0.5864	0.6116	0.6401	0.7077	0.7900	0.8874	0.9418
2.70	0.5030	0.5085	0.5251	0.5533	0.5936	0.6185	0.6467	0.7133	0.7942	0.8898	0.9431
2.75	0.5108	0.5163	0.5328	0.5608	0.6006	0.6252	0.6531	0.7188	0.7983	0.8922	0.9444
2.80	0.5186	0.5241	0.5404	0.5681	0.6075	0.6318	0.6593	0.7241	0.8024	0.8944	0.9456
2.85	0.5263	0.5317	0.5479	0.5753	0.6143	0.6383	0.6655	0.7293	0.8063	0.8967	0.9467
2.90	0.5339	0.5392	0.5553	0.5824	0.6210	0.6447	0.6715	0.7344	0.8102	0.8988	0.9479
2.95	0.5413	0.5466	0.5625	0.5894	0.6275	0.6510	0.6774	0.7394	0.8139	0.9009	0.9490
3.00	0.5486	0.5539	0.5697	0.5963	0.6340	0.6571	0.6832	0.7443	0.8176	0.9030	0.9501

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.15

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
0.00	0.1333	0.1371	0.1492	0.1716	0.2082	0.2337	0.2654	0.3538	0.4892	0.6946	0.8327	
0.05	0.1338	0.1373	0.1495	0.1719	0.2085	0.2340	0.2657	0.3541	0.4895	0.6948	0.8328	
0.10	0.1342	0.1380	0.1502	0.1726	0.2093	0.2349	0.2667	0.3551	0.4905	0.6956	0.8333	
0.15	0.1352	0.1391	0.1513	0.1739	0.2107	0.2364	0.2683	0.3568	0.4922	0.6968	0.8340	
0.20	0.1368	0.1407	0.1530	0.1757	0.2127	0.2384	0.2704	0.3592	0.4944	0.6984	0.8350	
0.25	0.1387	0.1426	0.1550	0.1780	0.2152	0.2411	0.2732	0.3621	0.4973	0.7006	0.8363	
0.30	0.1411	0.1450	0.1576	0.1807	0.2182	0.2443	0.2766	0.3657	0.5008	0.7031	0.8378	
0.35	0.1439	0.1479	0.1606	0.1839	0.2218	0.2480	0.2805	0.3699	0.5048	0.7060	0.8395	
0.40	0.1470	0.1511	0.1640	0.1876	0.2259	0.2523	0.2849	0.3746	0.5093	0.7092	0.8415	
0.45	0.1506	0.1548	0.1678	0.1918	0.2304	0.2570	0.2899	0.3798	0.5143	0.7128	0.8436	
0.50	0.1546	0.1588	0.1720	0.1963	0.2354	0.2622	0.2953	0.3855	0.5197	0.7167	0.8459	
0.55	0.1589	0.1632	0.1767	0.2013	0.2408	0.2679	0.3012	0.3916	0.5255	0.7208	0.8484	
0.60	0.1636	0.1680	0.1817	0.2066	0.2466	0.2739	0.3074	0.3981	0.5316	0.7251	0.8509	
0.65	0.1687	0.1731	0.1870	0.2124	0.2528	0.2803	0.3141	0.4050	0.5380	0.7296	0.8536	
0.70	0.1741	0.1786	0.1927	0.2185	0.2593	0.2871	0.3211	0.4122	0.5446	0.7342	0.8563	
0.75	0.1798	0.1844	0.1988	0.2249	0.2662	0.2943	0.3284	0.4196	0.5515	0.7389	0.8591	
0.80	0.1858	0.1905	0.2051	0.2316	0.2734	0.3017	0.3360	0.4274	0.5585	0.7438	0.8619	
0.85	0.1921	0.1969	0.2117	0.2386	0.2809	0.3093	0.3439	0.4353	0.5657	0.7487	0.8647	
0.90	0.1987	0.2035	0.2186	0.2459	0.2886	0.3173	0.3519	0.4434	0.5730	0.7536	0.8676	
0.95	0.2055	0.2105	0.2258	0.2534	0.2965	0.3254	0.3602	0.4516	0.5803	0.7585	0.8705	
1.00	0.2126	0.2176	0.2332	0.2612	0.3047	0.3337	0.3686	0.4599	0.5878	0.7635	0.8733	
1.05	0.2200	0.2250	0.2408	0.2691	0.3130	0.3422	0.3772	0.4684	0.5952	0.7684	0.8762	
1.10	0.2275	0.2326	0.2487	0.2773	0.3215	0.3508	0.3859	0.4769	0.6026	0.7733	0.8790	
1.15	0.2352	0.2404	0.2567	0.2856	0.3301	0.3595	0.3947	0.4854	0.6101	0.7782	0.8817	
1.20	0.2431	0.2484	0.2648	0.2940	0.3388	0.3684	0.4035	0.4939	0.6175	0.7830	0.8845	
1.25	0.2512	0.2566	0.2732	0.3026	0.3477	0.3773	0.4125	0.5025	0.6248	0.7877	0.8872	
1.30	0.2594	0.2648	0.2816	0.3113	0.3566	0.3863	0.4214	0.5110	0.6321	0.7924	0.8898	
1.35	0.2678	0.2733	0.2902	0.3201	0.3656	0.3952	0.4304	0.5195	0.6393	0.7970	0.8924	
1.40	0.2762	0.2818	0.2989	0.3290	0.3746	0.4043	0.4393	0.5280	0.6465	0.8015	0.8949	
1.45	0.2848	0.2904	0.3076	0.3379	0.3836	0.4133	0.4483	0.5354	0.6535	0.8060	0.8974	
1.50	0.2935	0.2991	0.3165	0.3469	0.3927	0.4224	0.4572	0.5447	0.6605	0.8103	0.8999	
1.55	0.3022	0.3079	0.3254	0.3559	0.4017	0.4314	0.4661	0.5530	0.6673	0.8146	0.9022	

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF R_s WHERE $N=2.15$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3110	0.3167	0.3343	0.3649	0.4108	0.4403	0.4749	0.5611	0.6741	0.8188	0.9045
1.65	0.3199	0.3256	0.3432	0.3740	0.4198	0.4493	0.4837	0.5692	0.6807	0.8229	0.9068
1.70	0.3288	0.3345	0.3522	0.3830	0.4288	0.4582	0.4924	0.5772	0.6872	0.8269	0.9090
1.75	0.3377	0.3435	0.3612	0.3920	0.4378	0.4670	0.5010	0.5851	0.6936	0.8308	0.9112
1.80	0.3466	0.3524	0.3702	0.4010	0.4466	0.4758	0.5096	0.5928	0.6999	0.8346	0.9133
1.85	0.3556	0.3614	0.3792	0.4100	0.4555	0.4844	0.5180	0.6004	0.7061	0.8383	0.9153
1.90	0.3645	0.3703	0.3881	0.4189	0.4642	0.4930	0.5264	0.6080	0.7121	0.8419	0.9173
1.95	0.3734	0.3792	0.3970	0.4278	0.4729	0.5016	0.5346	0.6154	0.7180	0.8455	0.9192
2.00	0.3823	0.3881	0.4059	0.4366	0.4815	0.5100	0.5428	0.6226	0.7238	0.8489	0.9211
2.05	0.3912	0.3970	0.4148	0.4453	0.4900	0.5183	0.5508	0.6298	0.7295	0.8523	0.9229
2.10	0.4000	0.4058	0.4235	0.4540	0.4985	0.5265	0.5587	0.6368	0.7351	0.8556	0.9247
2.15	0.4087	0.4145	0.4322	0.4626	0.5068	0.5346	0.5665	0.6437	0.7405	0.8588	0.9265
2.20	0.4174	0.4232	0.4409	0.4711	0.5150	0.5426	0.5742	0.6505	0.7458	0.8619	0.9281
2.25	0.4261	0.4319	0.4495	0.4795	0.5231	0.5505	0.5818	0.6571	0.7510	0.8649	0.9298
2.30	0.4347	0.4404	0.4579	0.4878	0.5311	0.5582	0.5892	0.6637	0.7551	0.8679	0.9314
2.35	0.4432	0.4489	0.4663	0.4961	0.5390	0.5652	0.5966	0.6700	0.7590	0.8708	0.9329
2.40	0.4516	0.4573	0.4747	0.5042	0.5468	0.5734	0.6038	0.6763	0.7659	0.8736	0.9344
2.45	0.4600	0.4657	0.4829	0.5122	0.5545	0.5808	0.6108	0.6824	0.7706	0.8763	0.9359
2.50	0.4682	0.4739	0.4910	0.5202	0.5621	0.5881	0.6178	0.6885	0.7752	0.8790	0.9373
2.55	0.4764	0.4820	0.4991	0.5280	0.5695	0.5953	0.6245	0.6944	0.7797	0.8816	0.9387
2.60	0.4845	0.4901	0.5070	0.5357	0.5768	0.6023	0.6313	0.7001	0.7842	0.8841	0.9401
2.65	0.4925	0.4980	0.5148	0.5433	0.5840	0.6093	0.6379	0.7058	0.7885	0.8869	0.9414
2.70	0.5004	0.5059	0.5225	0.5508	0.5911	0.6161	0.6444	0.7113	0.7927	0.8889	0.9426
2.75	0.5081	0.5136	0.5302	0.5581	0.5981	0.6228	0.6507	0.7167	0.7968	0.8913	0.9439
2.80	0.5158	0.5213	0.5377	0.5654	0.6049	0.6293	0.6569	0.7220	0.8008	0.8935	0.9451
2.85	0.5234	0.5288	0.5451	0.5725	0.6117	0.6358	0.6630	0.7272	0.8047	0.8957	0.9463
2.90	0.5309	0.5362	0.5524	0.5796	0.6183	0.6421	0.6690	0.7323	0.8085	0.8979	0.9474
2.95	0.5383	0.5436	0.5595	0.5865	0.6248	0.6483	0.6749	0.7372	0.8123	0.9000	0.9485
3.00	0.5455	0.5508	0.5666	0.5933	0.6311	0.6544	0.6806	0.7421	0.8159	0.9020	0.9496

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.20

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1406	0.1446	0.1570	0.1800	0.2173	0.2432	0.2754	0.3643	0.4992	0.7019	0.8371
0.05	0.1408	0.1448	0.1573	0.1803	0.2176	0.2435	0.2757	0.3646	0.4996	0.7021	0.8372
0.10	0.1415	0.1454	0.1579	0.1810	0.2184	0.2444	0.2768	0.3655	0.5005	0.7028	0.8376
0.15	0.1425	0.1465	0.1590	0.1822	0.2197	0.2458	0.2780	0.3671	0.5020	0.7039	0.8383
0.20	0.1440	0.1480	0.1606	0.1839	0.2216	0.2477	0.2801	0.3693	0.5041	0.7054	0.8392
0.25	0.1458	0.1499	0.1626	0.1861	0.2240	0.2502	0.2827	0.3721	0.5068	0.7073	0.8403
0.30	0.1481	0.1522	0.1650	0.1887	0.2269	0.2533	0.2859	0.3754	0.5100	0.7096	0.8417
0.35	0.1508	0.1549	0.1679	0.1918	0.2302	0.2568	0.2896	0.3793	0.5137	0.7123	0.8433
0.40	0.1538	0.1580	0.1712	0.1953	0.2341	0.2608	0.2937	0.3837	0.5179	0.7153	0.8451
0.45	0.1573	0.1615	0.1748	0.1992	0.2384	0.2653	0.2984	0.3886	0.5225	0.7186	0.8471
0.50	0.1611	0.1654	0.1789	0.2036	0.2431	0.2702	0.3035	0.3939	0.5275	0.7222	0.8492
0.55	0.1653	0.1696	0.1833	0.2083	0.2483	0.2756	0.3091	0.3997	0.5329	0.7259	0.8514
0.60	0.1698	0.1742	0.1881	0.2135	0.2538	0.2814	0.3150	0.4058	0.5386	0.7299	0.8538
0.65	0.1747	0.1792	0.1933	0.2189	0.2597	0.2875	0.3213	0.4123	0.5446	0.7341	0.8562
0.70	0.1799	0.1844	0.1988	0.2248	0.2660	0.2939	0.3280	0.4191	0.5508	0.7384	0.8588
0.75	0.1854	0.1900	0.2046	0.2309	0.2726	0.3007	0.3350	0.4262	0.5573	0.7429	0.8614
0.80	0.1912	0.1959	0.2107	0.2374	0.2794	0.3078	0.3422	0.4335	0.5639	0.7474	0.8640
0.85	0.1973	0.2021	0.2171	0.2441	0.2866	0.3151	0.3497	0.4410	0.5707	0.7520	0.8667
0.90	0.2036	0.2085	0.2237	0.2511	0.2940	0.3227	0.3574	0.4487	0.5776	0.7567	0.8694
0.95	0.2102	0.2152	0.2306	0.2584	0.3016	0.3305	0.3653	0.4565	0.5846	0.7614	0.8721
1.00	0.2171	0.2221	0.2378	0.2658	0.3094	0.3385	0.3734	0.4645	0.5917	0.7660	0.8748
1.05	0.2242	0.2293	0.2451	0.2735	0.3174	0.3466	0.3816	0.4725	0.5988	0.7707	0.8775
1.10	0.2314	0.2366	0.2527	0.2813	0.3256	0.3549	0.3900	0.4807	0.6059	0.7754	0.8801
1.15	0.2389	0.2442	0.2604	0.2894	0.3339	0.3633	0.3984	0.4889	0.6130	0.7800	0.8828
1.20	0.2466	0.2519	0.2683	0.2975	0.3423	0.3718	0.4069	0.4971	0.6201	0.7846	0.8854
1.25	0.2544	0.2598	0.2764	0.3058	0.3509	0.3804	0.4155	0.5053	0.6272	0.7892	0.8880
1.30	0.2624	0.2678	0.2846	0.3142	0.3595	0.3891	0.4242	0.5135	0.6342	0.7937	0.8905
1.35	0.2705	0.2759	0.2929	0.3228	0.3682	0.3978	0.4328	0.5218	0.6411	0.7981	0.8930
1.40	0.2787	0.2842	0.3013	0.3314	0.3769	0.4065	0.4415	0.5299	0.6480	0.8025	0.8955
1.45	0.2870	0.2926	0.3098	0.3400	0.3857	0.4153	0.4502	0.5381	0.6549	0.8068	0.8979
1.50	0.2954	0.3011	0.3184	0.3487	0.3944	0.4241	0.4588	0.5461	0.6616	0.8110	0.9002
1.55	0.3039	0.3096	0.3270	0.3575	0.4032	0.4328	0.4674	0.5541	0.6683	0.8151	0.9025

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.20

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3125	0.3182	0.3357	0.3663	0.4120	0.4415	0.4760	0.5621	0.6748	0.8192	0.9048
1.65	0.3211	0.3268	0.3444	0.3751	0.4208	0.4502	0.4846	0.5699	0.6813	0.8232	0.9070
1.70	0.3298	0.3355	0.3532	0.3839	0.4296	0.4589	0.4930	0.5777	0.6876	0.8270	0.9091
1.75	0.3385	0.3442	0.3619	0.3927	0.4383	0.4675	0.5014	0.5854	0.6938	0.8309	0.9112
1.80	0.3472	0.3530	0.3707	0.4014	0.4470	0.4760	0.5098	0.5929	0.7000	0.8346	0.9133
1.85	0.3559	0.3617	0.3795	0.4102	0.4556	0.4845	0.5180	0.6004	0.7060	0.8382	0.9153
1.90	0.3646	0.3704	0.3882	0.4189	0.4641	0.4929	0.5262	0.6077	0.7119	0.8418	0.9172
1.95	0.3733	0.3791	0.3969	0.4276	0.4726	0.5012	0.5343	0.6150	0.7177	0.8452	0.9191
2.00	0.3820	0.3878	0.4056	0.4362	0.4811	0.5095	0.5422	0.6221	0.7234	0.8486	0.9210
2.05	0.3907	0.3965	0.4142	0.4447	0.4894	0.5176	0.5501	0.6291	0.7289	0.8519	0.9228
2.10	0.3993	0.4051	0.4228	0.4532	0.4977	0.5257	0.5579	0.6360	0.7344	0.8552	0.9245
2.15	0.4079	0.4137	0.4314	0.4617	0.5058	0.5336	0.5655	0.6428	0.7397	0.8583	0.9262
2.20	0.4164	0.4222	0.4398	0.4700	0.5139	0.5415	0.5731	0.6495	0.7449	0.8614	0.9279
2.25	0.4249	0.4307	0.4482	0.4783	0.5219	0.5492	0.5805	0.6560	0.7501	0.8644	0.9295
2.30	0.4334	0.4391	0.4566	0.4864	0.5297	0.5569	0.5879	0.6624	0.7551	0.8673	0.9311
2.35	0.4417	0.4474	0.4648	0.4945	0.5375	0.5644	0.5951	0.6687	0.7600	0.8701	0.9326
2.40	0.4500	0.4557	0.4730	0.5026	0.5452	0.5718	0.6022	0.6749	0.7647	0.8729	0.9341
2.45	0.4582	0.4639	0.4811	0.5104	0.5527	0.5791	0.6092	0.6809	0.7694	0.8756	0.9355
2.50	0.4663	0.4720	0.4891	0.5182	0.5602	0.5863	0.6160	0.6869	0.7740	0.8782	0.9369
2.55	0.4744	0.4800	0.4970	0.5260	0.5675	0.5934	0.6228	0.6927	0.7785	0.8808	0.9383
2.60	0.4824	0.4879	0.5049	0.5336	0.5748	0.6003	0.6294	0.6984	0.7828	0.8833	0.9396
2.65	0.4902	0.4958	0.5126	0.5411	0.5819	0.6072	0.6359	0.7040	0.7871	0.8857	0.9409
2.70	0.4980	0.5035	0.5202	0.5494	0.5889	0.6139	0.6423	0.7095	0.7913	0.8881	0.9422
2.75	0.5057	0.5112	0.5277	0.5587	0.5958	0.6205	0.6485	0.7148	0.7953	0.8904	0.9434
2.80	0.5133	0.5187	0.5351	0.5629	0.6025	0.6270	0.6547	0.7201	0.7993	0.8927	0.9446
2.85	0.5208	0.5262	0.5424	0.5700	0.6092	0.6334	0.6607	0.7252	0.8032	0.8949	0.9458
2.90	0.5282	0.5335	0.5497	0.5765	0.6157	0.6396	0.6667	0.7303	0.8070	0.8970	0.9469
2.95	0.5354	0.5407	0.5568	0.5838	0.6222	0.6458	0.6725	0.7352	0.8107	0.8991	0.9480
3.00	0.5426	0.5479	0.5638	0.5905	0.6285	0.6518	0.6782	0.7400	0.8143	0.9011	0.9491

TABLES OF CALCULATIONS FOR H·H·WRIGHT ESQ.

VALUES OF RS WHERE $N=2.25$

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1479	0.1520	0.1648	0.1883	0.2263	0.2526	0.2851	0.3744	0.5089	0.7088	0.8412
0.05	0.1481	0.1522	0.1650	0.1885	0.2266	0.2529	0.2854	0.3747	0.5092	0.7090	0.8413
0.10	0.1487	0.1528	0.1656	0.1892	0.2273	0.2537	0.2862	0.3756	0.5100	0.7096	0.8417
0.15	0.1497	0.1538	0.1667	0.1904	0.2286	0.2550	0.2876	0.3771	0.5114	0.7106	0.8423
0.20	0.1511	0.1553	0.1682	0.1920	0.2304	0.2568	0.2895	0.3791	0.5134	0.7120	0.8431
0.25	0.1529	0.1571	0.1701	0.1941	0.2326	0.2592	0.2920	0.3817	0.5158	0.7138	0.8442
0.30	0.1551	0.1593	0.1725	0.1966	0.2354	0.2621	0.2950	0.3848	0.5188	0.7159	0.8455
0.35	0.1577	0.1619	0.1752	0.1995	0.2386	0.2654	0.2985	0.3885	0.5222	0.7184	0.8469
0.40	0.1606	0.1649	0.1783	0.2029	0.2422	0.2692	0.3024	0.3926	0.5261	0.7211	0.8486
0.45	0.1640	0.1683	0.1819	0.2066	0.2463	0.2739	0.3068	0.3972	0.5304	0.7242	0.8504
0.50	0.1676	0.1720	0.1857	0.2108	0.2508	0.2782	0.3117	0.4022	0.5351	0.7275	0.8523
0.55	0.1717	0.1761	0.1900	0.2154	0.2557	0.2833	0.3169	0.4076	0.5402	0.7310	0.8544
0.60	0.1760	0.1805	0.1946	0.2203	0.2610	0.2887	0.3226	0.4134	0.5455	0.7347	0.8566
0.65	0.1807	0.1853	0.1996	0.2255	0.2667	0.2946	0.3286	0.4195	0.5511	0.7386	0.8589
0.70	0.1857	0.1903	0.2048	0.2311	0.2726	0.3007	0.3349	0.4259	0.5570	0.7426	0.8612
0.75	0.1910	0.1957	0.2104	0.2370	0.2789	0.3072	0.3415	0.4326	0.5631	0.7468	0.8636
0.80	0.1966	0.2014	0.2163	0.2432	0.2855	0.3140	0.3484	0.4396	0.5694	0.7510	0.8661
0.85	0.2025	0.2073	0.2225	0.2497	0.2923	0.3210	0.3556	0.4467	0.5758	0.7554	0.8686
0.90	0.2086	0.2135	0.2289	0.2564	0.2994	0.3282	0.3629	0.4540	0.5823	0.7598	0.8712
0.95	0.2150	0.2200	0.2355	0.2634	0.3068	0.3357	0.3705	0.4615	0.5890	0.7642	0.8737
1.00	0.2216	0.2267	0.2424	0.2705	0.3143	0.3434	0.3782	0.4691	0.5957	0.7686	0.8763
1.05	0.2285	0.2336	0.2495	0.2780	0.3220	0.3512	0.3861	0.4768	0.6024	0.7731	0.8788
1.10	0.2355	0.2407	0.2568	0.2855	0.3298	0.3591	0.3942	0.4846	0.6092	0.7776	0.8814
1.15	0.2427	0.2480	0.2643	0.2933	0.3378	0.3672	0.4023	0.4925	0.6160	0.7820	0.8839
1.20	0.2502	0.2555	0.2719	0.3012	0.3460	0.3754	0.4105	0.5004	0.6228	0.7864	0.8864
1.25	0.2577	0.2631	0.2797	0.3092	0.3542	0.3837	0.4188	0.5083	0.6296	0.7907	0.8889
1.30	0.2655	0.2709	0.2877	0.3173	0.3625	0.3921	0.4271	0.5162	0.6364	0.7951	0.8913
1.35	0.2735	0.2788	0.2957	0.3256	0.3709	0.4005	0.4355	0.5241	0.6431	0.7993	0.8937
1.40	0.2813	0.2868	0.3039	0.3339	0.3794	0.4090	0.4439	0.5320	0.6498	0.8035	0.8960
1.45	0.2894	0.2950	0.3121	0.3423	0.3879	0.4175	0.4523	0.5399	0.6563	0.8077	0.8984
1.50	0.2976	0.3032	0.3205	0.3508	0.3964	0.4260	0.4606	0.5477	0.6629	0.8118	0.9005
1.55	0.3058	0.3115	0.3289	0.3593	0.4049	0.4344	0.4690	0.5555	0.6693	0.8158	0.9029



TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2-25

THETA K	0	10	20	30	40	45	50	50	70	80	85
1.60	0.3142	0.3198	0.3373	0.3678	0.4135	0.4429	0.4773	0.5632	0.6757	0.8197	0.9051
1.65	0.3225	0.3283	0.3458	0.3764	0.4220	0.4514	0.4856	0.5708	0.6819	0.8236	0.9072
1.70	0.3310	0.3367	0.3543	0.3849	0.4306	0.4598	0.4939	0.5784	0.6881	0.8273	0.9093
1.75	0.3394	0.3452	0.3629	0.3935	0.4391	0.4682	0.5021	0.5859	0.6942	0.8311	0.9113
1.80	0.3479	0.3537	0.3714	0.4021	0.4475	0.4765	0.5102	0.5932	0.7002	0.8347	0.9133
1.85	0.3565	0.3622	0.3799	0.4106	0.4559	0.4848	0.5183	0.6005	0.7061	0.8382	0.9153
1.90	0.3650	0.3708	0.3885	0.4191	0.4643	0.4930	0.5262	0.6077	0.7118	0.8417	0.9172
1.95	0.3735	0.3793	0.3970	0.4276	0.4726	0.5011	0.5341	0.6148	0.7175	0.8451	0.9190
2.00	0.3820	0.3878	0.4055	0.4360	0.4808	0.5092	0.5419	0.6218	0.7231	0.8484	0.9208
2.05	0.3905	0.3963	0.4139	0.4444	0.4890	0.5172	0.5497	0.6287	0.7285	0.8517	0.9226
2.10	0.3989	0.4047	0.4224	0.4527	0.4971	0.5251	0.5573	0.6354	0.7339	0.8548	0.9243
2.15	0.4073	0.4131	0.4307	0.4610	0.5051	0.5329	0.5648	0.6421	0.7391	0.8579	0.9260
2.20	0.4157	0.4215	0.4390	0.4691	0.5130	0.5406	0.5722	0.6486	0.7442	0.8609	0.9276
2.25	0.4240	0.4298	0.4473	0.4773	0.5208	0.5482	0.5795	0.6550	0.7493	0.8639	0.9292
2.30	0.4323	0.4380	0.4555	0.4853	0.5286	0.5557	0.5867	0.6614	0.7542	0.8668	0.9308
2.35	0.4405	0.4462	0.4636	0.4932	0.5362	0.5631	0.5938	0.6676	0.7590	0.8696	0.9323
2.40	0.4486	0.4543	0.4716	0.5011	0.5438	0.5704	0.6008	0.6736	0.7637	0.8723	0.9338
2.45	0.4567	0.4624	0.4796	0.5089	0.5512	0.5776	0.6077	0.6796	0.7684	0.8750	0.9352
2.50	0.4647	0.4703	0.4874	0.5166	0.5585	0.5847	0.6144	0.6855	0.7729	0.8776	0.9366
2.55	0.4726	0.4782	0.4952	0.5242	0.5658	0.5916	0.6211	0.6912	0.7773	0.8801	0.9379
2.60	0.4804	0.4860	0.5029	0.5317	0.5729	0.5985	0.6276	0.6969	0.7816	0.8826	0.9393
2.65	0.4882	0.4938	0.5106	0.5390	0.5799	0.6053	0.6340	0.7024	0.7858	0.8850	0.9406
2.70	0.4959	0.5014	0.5181	0.5463	0.5868	0.6119	0.6404	0.7078	0.7900	0.8874	0.9418
2.75	0.5034	0.5089	0.5255	0.5535	0.5936	0.6184	0.6466	0.7131	0.7940	0.8897	0.9430
2.80	0.5109	0.5164	0.5328	0.5606	0.6003	0.6249	0.6527	0.7183	0.7979	0.8919	0.9442
2.85	0.5183	0.5237	0.5400	0.5676	0.6069	0.6312	0.6586	0.7234	0.8018	0.8941	0.9454
2.90	0.5256	0.5310	0.5472	0.5745	0.6134	0.6374	0.6645	0.7284	0.8056	0.8962	0.9465
2.95	0.5328	0.5381	0.5542	0.5812	0.6198	0.6435	0.6703	0.7333	0.8092	0.8983	0.9476
3.00	0.5399	0.5452	0.5611	0.5879	0.6260	0.6495	0.6759	0.7381	0.8128	0.9003	0.9487

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2-30

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1552	0.1593	0.1725	0.1965	0.2351	0.2618	0.2946	0.3842	0.5181	0.7154	0.8451
0.05	0.1554	0.1595	0.1727	0.1967	0.2354	0.2620	0.2948	0.3845	0.5184	0.7156	0.8452
0.10	0.1560	0.1601	0.1733	0.1974	0.2361	0.2628	0.2956	0.3854	0.5192	0.7161	0.8456
0.15	0.1569	0.1611	0.1743	0.1985	0.2373	0.2640	0.2969	0.3867	0.5205	0.7170	0.8461
0.20	0.1583	0.1625	0.1757	0.2000	0.2390	0.2658	0.2988	0.3886	0.5223	0.7183	0.8469
0.25	0.1600	0.1642	0.1776	0.2020	0.2411	0.2680	0.3011	0.3911	0.5246	0.7199	0.8479
0.30	0.1621	0.1664	0.1798	0.2044	0.2437	0.2707	0.3033	0.3940	0.5273	0.7219	0.8490
0.35	0.1646	0.1689	0.1824	0.2072	0.2468	0.2739	0.3072	0.3974	0.5305	0.7242	0.8504
0.40	0.1674	0.1718	0.1855	0.2104	0.2503	0.2775	0.3109	0.4013	0.5341	0.7267	0.8519
0.45	0.1706	0.1750	0.1888	0.2140	0.2542	0.2815	0.3151	0.4056	0.5382	0.7295	0.8535
0.50	0.1741	0.1786	0.1926	0.2180	0.2585	0.2860	0.3197	0.4103	0.5425	0.7326	0.8553
0.55	0.1780	0.1825	0.1967	0.2224	0.2631	0.2909	0.3247	0.4154	0.5473	0.7359	0.8572
0.60	0.1822	0.1868	0.2011	0.2271	0.2682	0.2961	0.3300	0.4209	0.5523	0.7393	0.8593
0.65	0.1867	0.1914	0.2059	0.2321	0.2736	0.3016	0.3357	0.4267	0.5576	0.7430	0.8614
0.70	0.1916	0.1963	0.2109	0.2375	0.2793	0.3075	0.3418	0.4327	0.5631	0.7467	0.8636
0.75	0.1967	0.2014	0.2163	0.2431	0.2853	0.3137	0.3481	0.4391	0.5688	0.7506	0.8659
0.80	0.2021	0.2069	0.2220	0.2491	0.2916	0.3201	0.3546	0.4457	0.5747	0.7546	0.8682
0.85	0.2078	0.2126	0.2279	0.2553	0.2982	0.3269	0.3615	0.4524	0.5808	0.7587	0.8706
0.90	0.2137	0.2186	0.2341	0.2618	0.3050	0.3338	0.3685	0.4594	0.5870	0.7629	0.8729
0.95	0.2198	0.2249	0.2405	0.2685	0.3120	0.3410	0.3758	0.4666	0.5933	0.7671	0.8754
1.00	0.2262	0.2313	0.2471	0.2754	0.3192	0.3483	0.3832	0.4738	0.5997	0.7713	0.8778
1.05	0.2329	0.2380	0.2540	0.2825	0.3266	0.3558	0.3907	0.4812	0.6062	0.7755	0.8802
1.10	0.2397	0.2449	0.2611	0.2898	0.3342	0.3635	0.3984	0.4887	0.6127	0.7798	0.8826
1.15	0.2467	0.2519	0.2683	0.2973	0.3419	0.3713	0.4063	0.4962	0.6192	0.7840	0.8850
1.20	0.2539	0.2592	0.2757	0.3049	0.3497	0.3792	0.4142	0.5038	0.6257	0.7882	0.8874
1.25	0.2612	0.2666	0.2832	0.3127	0.3577	0.3872	0.4221	0.5114	0.6322	0.7924	0.8898
1.30	0.2687	0.2741	0.2909	0.3206	0.3657	0.3953	0.4302	0.5191	0.6387	0.7965	0.8921
1.35	0.2763	0.2818	0.2987	0.3286	0.3739	0.4034	0.4383	0.5267	0.6452	0.8006	0.8944
1.40	0.2840	0.2896	0.3066	0.3366	0.3820	0.4116	0.4464	0.5343	0.6516	0.8047	0.8967
1.45	0.2919	0.2975	0.3146	0.3448	0.3903	0.4198	0.4545	0.5419	0.6580	0.8087	0.8989
1.50	0.2998	0.3055	0.3227	0.3530	0.3985	0.4280	0.4626	0.5495	0.6643	0.8126	0.9011
1.55	0.3079	0.3135	0.3309	0.3613	0.4068	0.4363	0.4708	0.5570	0.6705	0.8165	0.9033

TABLES OF CALCULATIONS FOR H-H-WRIGHT EQ.

VALUES OF RS WHERE N=2.30

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3160	0.3217	0.3391	0.3686	0.4151	0.4445	0.4789	0.5645	0.6767	0.8203	0.9054
1.65	0.3242	0.3299	0.3474	0.3779	0.4234	0.4527	0.4869	0.5719	0.6828	0.8241	0.9075
1.70	0.3324	0.3381	0.3557	0.3862	0.4317	0.4609	0.4949	0.5793	0.6888	0.8277	0.9095
1.75	0.3406	0.3464	0.3640	0.3946	0.4400	0.4691	0.5029	0.5866	0.6947	0.8313	0.9115
1.80	0.3488	0.3547	0.3723	0.4029	0.4483	0.4772	0.5108	0.5938	0.7005	0.8349	0.9134
1.85	0.3572	0.3630	0.3806	0.4112	0.4565	0.4853	0.5187	0.6009	0.7063	0.8383	0.9153
1.90	0.3655	0.3713	0.3890	0.4195	0.4646	0.4933	0.5265	0.6079	0.7119	0.8417	0.9172
1.95	0.3738	0.3796	0.3973	0.4278	0.4727	0.5013	0.5342	0.6148	0.7175	0.8451	0.9190
2.00	0.3821	0.3879	0.4056	0.4361	0.4808	0.5091	0.5418	0.6216	0.7229	0.8483	0.9208
2.05	0.3904	0.3962	0.4139	0.4443	0.4888	0.5169	0.5494	0.6284	0.7282	0.8515	0.9225
2.10	0.3987	0.4045	0.4221	0.4524	0.4967	0.5247	0.5569	0.6350	0.7335	0.8546	0.9242
2.15	0.4069	0.4127	0.4303	0.4605	0.5046	0.5323	0.5642	0.6415	0.7386	0.8576	0.9258
2.20	0.4151	0.4209	0.4384	0.4685	0.5123	0.5399	0.5715	0.6479	0.7437	0.8606	0.9275
2.25	0.4233	0.4290	0.4465	0.4765	0.5200	0.5473	0.5787	0.6543	0.7486	0.8635	0.9290
2.30	0.4314	0.4371	0.4546	0.4844	0.5276	0.5547	0.5858	0.6605	0.7535	0.8663	0.9305
2.35	0.4395	0.4452	0.4625	0.4922	0.5351	0.5620	0.5927	0.6666	0.7582	0.8691	0.9320
2.40	0.4474	0.4531	0.4704	0.4999	0.5425	0.5692	0.5996	0.6726	0.7629	0.8718	0.9335
2.45	0.4554	0.4610	0.4782	0.5075	0.5499	0.5763	0.6064	0.6784	0.7674	0.8744	0.9349
2.50	0.4632	0.4689	0.4860	0.5151	0.5571	0.5832	0.6130	0.6842	0.7719	0.8770	0.9363
2.55	0.4710	0.4766	0.4937	0.5226	0.5642	0.5901	0.6196	0.6899	0.7752	0.8795	0.9376
2.60	0.4788	0.4843	0.5012	0.5300	0.5712	0.5969	0.6260	0.6955	0.7805	0.8820	0.9389
2.65	0.4864	0.4919	0.5087	0.5372	0.5782	0.6035	0.6324	0.7009	0.7847	0.8844	0.9402
2.70	0.4939	0.4995	0.5162	0.5444	0.5850	0.6101	0.6386	0.7063	0.7888	0.8867	0.9414
2.75	0.5014	0.5069	0.5235	0.5515	0.5917	0.6166	0.6448	0.7115	0.7928	0.8890	0.9427
2.80	0.5088	0.5143	0.5307	0.5585	0.5983	0.6229	0.6508	0.7167	0.7967	0.8912	0.9438
2.85	0.5161	0.5215	0.5378	0.5654	0.6048	0.6292	0.6567	0.7217	0.8005	0.8933	0.9450
2.90	0.5233	0.5287	0.5449	0.5722	0.6112	0.6353	0.6625	0.7267	0.8042	0.8955	0.9461
2.95	0.5304	0.5358	0.5518	0.5789	0.6175	0.6413	0.6682	0.7315	0.8079	0.8975	0.9472
3.00	0.5375	0.5427	0.5587	0.5855	0.6237	0.6473	0.6738	0.7363	0.8115	0.8995	0.9483

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1624	0.1667	0.1801	0.2045	0.2438	0.2707	0.3038	0.3938	0.5270	0.7216	0.8488
0.05	0.1626	0.1668	0.1803	0.2048	0.2440	0.2710	0.3041	0.3940	0.5272	0.7218	0.8489
0.10	0.1631	0.1674	0.1808	0.2054	0.2447	0.2717	0.3048	0.3948	0.5280	0.7223	0.8492
0.15	0.1641	0.1684	0.1818	0.2065	0.2459	0.2729	0.3060	0.3961	0.5292	0.7232	0.8498
0.20	0.1654	0.1697	0.1832	0.2079	0.2475	0.2745	0.3078	0.3979	0.5308	0.7243	0.8505
0.25	0.1670	0.1714	0.1850	0.2098	0.2495	0.2767	0.3100	0.4001	0.5330	0.7258	0.8513
0.30	0.1691	0.1734	0.1871	0.2121	0.2520	0.2792	0.3126	0.4029	0.5355	0.7276	0.8524
0.35	0.1714	0.1758	0.1896	0.2148	0.2549	0.2823	0.3157	0.4061	0.5385	0.7297	0.8536
0.40	0.1742	0.1786	0.1925	0.2179	0.2582	0.2857	0.3193	0.4098	0.5419	0.7321	0.8550
0.45	0.1772	0.1817	0.1958	0.2213	0.2619	0.2895	0.3232	0.4138	0.5457	0.7347	0.8566
0.50	0.1806	0.1852	0.1994	0.2251	0.2660	0.2938	0.3276	0.4183	0.5498	0.7375	0.8582
0.55	0.1844	0.1890	0.2033	0.2293	0.2705	0.2984	0.3323	0.4231	0.5542	0.7406	0.8600
0.60	0.1884	0.1931	0.2076	0.2338	0.2753	0.3033	0.3374	0.4282	0.5589	0.7438	0.8619
0.65	0.1928	0.1975	0.2121	0.2387	0.2804	0.3086	0.3428	0.4337	0.5639	0.7472	0.8639
0.70	0.1974	0.2022	0.2170	0.2438	0.2859	0.3142	0.3486	0.4395	0.5691	0.7508	0.8659
0.75	0.2024	0.2072	0.2222	0.2493	0.2917	0.3201	0.3546	0.4455	0.5745	0.7544	0.8681
0.80	0.2076	0.2125	0.2276	0.2550	0.2977	0.3263	0.3609	0.4517	0.5801	0.7582	0.8702
0.85	0.2131	0.2180	0.2334	0.2610	0.3040	0.3327	0.3674	0.4582	0.5858	0.7620	0.8725
0.90	0.2188	0.2238	0.2393	0.2672	0.3105	0.3394	0.3741	0.4648	0.5917	0.7660	0.8747
0.95	0.2247	0.2298	0.2455	0.2736	0.3172	0.3463	0.3810	0.4716	0.5977	0.7699	0.8770
1.00	0.2309	0.2360	0.2519	0.2803	0.3242	0.3533	0.3882	0.4786	0.6038	0.7739	0.8793
1.05	0.2373	0.2425	0.2586	0.2872	0.3313	0.3605	0.3954	0.4856	0.6100	0.7780	0.8816
1.10	0.2439	0.2491	0.2654	0.2942	0.3386	0.3679	0.4028	0.4928	0.6162	0.7820	0.8839
1.15	0.2507	0.2560	0.2724	0.3014	0.3460	0.3754	0.4103	0.5000	0.6224	0.7860	0.8862
1.20	0.2577	0.2630	0.2795	0.3088	0.3536	0.3830	0.4179	0.5073	0.6286	0.7901	0.8885
1.25	0.2649	0.2702	0.2868	0.3163	0.3613	0.3907	0.4256	0.5146	0.6349	0.7941	0.8907
1.30	0.2720	0.2775	0.2943	0.3239	0.3691	0.3985	0.4334	0.5220	0.6412	0.7980	0.8930
1.35	0.2794	0.2849	0.3018	0.3317	0.3769	0.4064	0.4412	0.5294	0.6474	0.8020	0.8952
1.40	0.2869	0.2925	0.3095	0.3395	0.3848	0.4143	0.4491	0.5367	0.6536	0.8059	0.8974
1.45	0.2946	0.3001	0.3173	0.3474	0.3928	0.4223	0.4569	0.5441	0.6597	0.8097	0.8995
1.50	0.3023	0.3079	0.3251	0.3554	0.4008	0.4303	0.4648	0.5514	0.6658	0.8135	0.9016
1.55	0.3101	0.3157	0.3331	0.3634	0.4089	0.4383	0.4727	0.5587	0.6719	0.8173	0.9037

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.35

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3180	0.3236	0.3411	0.3715	0.4170	0.4463	0.4805	0.5660	0.6779	0.8210	0.9058
1.65	0.3259	0.3316	0.3491	0.3796	0.4250	0.4543	0.4884	0.5732	0.6838	0.8246	0.9078
1.70	0.3339	0.3396	0.3572	0.3877	0.4331	0.4623	0.4962	0.5803	0.6896	0.8282	0.9098
1.75	0.3420	0.3477	0.3653	0.3958	0.4412	0.4702	0.5039	0.5874	0.6954	0.8317	0.9117
1.80	0.3500	0.3558	0.3734	0.4039	0.4492	0.4781	0.5117	0.5944	0.7010	0.8352	0.9136
1.85	0.3581	0.3639	0.3815	0.4121	0.4572	0.4860	0.5193	0.6014	0.7066	0.8385	0.9154
1.90	0.3663	0.3720	0.3897	0.4202	0.4652	0.4938	0.5269	0.6082	0.7121	0.8419	0.9173
1.95	0.3744	0.3802	0.3978	0.4283	0.4731	0.5016	0.5345	0.6150	0.7176	0.8451	0.9190
2.00	0.3825	0.3883	0.4059	0.4363	0.4810	0.5093	0.5419	0.6217	0.7229	0.8483	0.9208
2.05	0.3906	0.3964	0.4140	0.4443	0.4888	0.5169	0.5493	0.6282	0.7281	0.8514	0.9225
2.10	0.3987	0.4045	0.4220	0.4523	0.4965	0.5245	0.5566	0.6347	0.7333	0.8545	0.9241
2.15	0.4068	0.4126	0.4301	0.4582	0.5042	0.5320	0.5639	0.6411	0.7383	0.8574	0.9257
2.20	0.4148	0.4206	0.4380	0.4681	0.5118	0.5394	0.5710	0.6474	0.7433	0.8603	0.9273
2.25	0.4228	0.4286	0.4460	0.4759	0.5194	0.5467	0.5780	0.6536	0.7481	0.8632	0.9288
2.30	0.4307	0.4365	0.4539	0.4836	0.5268	0.5539	0.5850	0.6597	0.7529	0.8660	0.9304
2.35	0.4386	0.4443	0.4617	0.4913	0.5342	0.5611	0.5918	0.6657	0.7576	0.8687	0.9318
2.40	0.4465	0.4522	0.4694	0.4988	0.5415	0.5682	0.5986	0.6716	0.7621	0.8714	0.9332
2.45	0.4543	0.4599	0.4771	0.5064	0.5487	0.5751	0.6053	0.6774	0.7656	0.8740	0.9346
2.50	0.4620	0.4676	0.4847	0.5138	0.5558	0.5820	0.6118	0.6831	0.7710	0.8765	0.9360
2.55	0.4697	0.4753	0.4923	0.5212	0.5628	0.5886	0.6183	0.6887	0.7753	0.8790	0.9373
2.60	0.4773	0.4828	0.4997	0.5285	0.5698	0.5954	0.6247	0.6942	0.7795	0.8814	0.9386
2.65	0.4848	0.4903	0.5071	0.5356	0.5766	0.6020	0.6309	0.6996	0.7837	0.8838	0.9399
2.70	0.4922	0.4977	0.5144	0.5427	0.5833	0.6085	0.6371	0.7049	0.7877	0.8861	0.9411
2.75	0.4995	0.5051	0.5217	0.5497	0.5900	0.6149	0.6431	0.7101	0.7917	0.8883	0.9423
2.80	0.5069	0.5123	0.5288	0.5566	0.5965	0.6211	0.6491	0.7152	0.7955	0.8905	0.9435
2.85	0.5141	0.5195	0.5358	0.5645	0.6029	0.6273	0.6549	0.7202	0.7993	0.8927	0.9446
2.90	0.5212	0.5266	0.5428	0.5702	0.6093	0.6334	0.6607	0.7251	0.8030	0.8948	0.9457
2.95	0.5282	0.5336	0.5496	0.5768	0.6155	0.6394	0.6663	0.7299	0.8057	0.8968	0.9468
3.00	0.5352	0.5405	0.5564	0.5833	0.6216	0.6452	0.6719	0.7346	0.8102	0.8988	0.9479

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.40

PAGE 57

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1696	0.1739	0.1876	0.2125	0.2523	0.2795	0.3128	0.4030	0.5355	0.7276	0.8524
0.05	0.1697	0.1741	0.1878	0.2127	0.2525	0.2797	0.3131	0.4032	0.5357	0.7277	0.8525
0.10	0.1703	0.1746	0.1883	0.2133	0.2532	0.2804	0.3138	0.4040	0.5364	0.7282	0.8527
0.15	0.1712	0.1755	0.1893	0.2143	0.2543	0.2816	0.3150	0.4052	0.5375	0.7290	0.8532
0.20	0.1724	0.1768	0.1906	0.2157	0.2558	0.2831	0.3166	0.4068	0.5391	0.7301	0.8538
0.25	0.1740	0.1784	0.1923	0.2176	0.2577	0.2851	0.3187	0.4090	0.5411	0.7316	0.8547
0.30	0.1760	0.1804	0.1944	0.2197	0.2601	0.2876	0.3212	0.4116	0.5435	0.7331	0.8556
0.35	0.1783	0.1827	0.1968	0.2223	0.2629	0.2905	0.3241	0.4146	0.5463	0.7351	0.8568
0.40	0.1809	0.1854	0.1996	0.2253	0.2660	0.2937	0.3275	0.4180	0.5494	0.7373	0.8581
0.45	0.1838	0.1884	0.2027	0.2286	0.2696	0.2974	0.3312	0.4218	0.5530	0.7397	0.8595
0.50	0.1871	0.1917	0.2061	0.2322	0.2735	0.3014	0.3354	0.4260	0.5568	0.7423	0.8610
0.55	0.1907	0.1954	0.2099	0.2362	0.2777	0.3058	0.3399	0.4306	0.5609	0.7452	0.8627
0.60	0.1946	0.1993	0.2140	0.2406	0.2823	0.3105	0.3447	0.4355	0.5654	0.7482	0.8644
0.65	0.1988	0.2036	0.2184	0.2452	0.2873	0.3156	0.3499	0.4406	0.5700	0.7514	0.8663
0.70	0.2033	0.2081	0.2231	0.2501	0.2926	0.3209	0.3553	0.4461	0.5750	0.7547	0.8682
0.75	0.2081	0.2129	0.2281	0.2554	0.2980	0.3266	0.3611	0.4518	0.5801	0.7581	0.8702
0.80	0.2131	0.2180	0.2334	0.2609	0.3038	0.3325	0.3671	0.4578	0.5854	0.7617	0.8723
0.85	0.2184	0.2234	0.2389	0.2666	0.3098	0.3386	0.3733	0.4639	0.5908	0.7653	0.8743
0.90	0.2239	0.2290	0.2446	0.2726	0.3161	0.3450	0.3797	0.4702	0.5964	0.7690	0.8765
0.95	0.2297	0.2348	0.2506	0.2788	0.3226	0.3516	0.3864	0.4767	0.6021	0.7728	0.8786
1.00	0.2357	0.2408	0.2568	0.2853	0.3292	0.3584	0.3932	0.4834	0.6079	0.7766	0.8808
1.05	0.2419	0.2471	0.2632	0.2919	0.3361	0.3653	0.4002	0.4901	0.6138	0.7804	0.8830
1.10	0.2482	0.2535	0.2698	0.2987	0.3431	0.3724	0.4073	0.4970	0.6197	0.7843	0.8852
1.15	0.2548	0.2601	0.2765	0.3057	0.3503	0.3796	0.4145	0.5039	0.6257	0.7881	0.8873
1.20	0.2615	0.2669	0.2835	0.3128	0.3576	0.3870	0.4218	0.5109	0.6317	0.7920	0.8895
1.25	0.2684	0.2738	0.2905	0.3200	0.3650	0.3944	0.4292	0.5180	0.6377	0.7958	0.8917
1.30	0.2755	0.2809	0.2977	0.3274	0.3725	0.4019	0.4367	0.5251	0.6437	0.7996	0.8938
1.35	0.2826	0.2881	0.3051	0.3349	0.3801	0.4095	0.4443	0.5322	0.6497	0.8034	0.8960
1.40	0.2899	0.2955	0.3125	0.3425	0.3878	0.4172	0.4519	0.5393	0.6556	0.8072	0.8981
1.45	0.2973	0.3029	0.3201	0.3502	0.3955	0.4249	0.4595	0.5464	0.6616	0.8109	0.9001
1.50	0.3049	0.3105	0.3277	0.3579	0.4033	0.4327	0.4671	0.5535	0.6675	0.8146	0.9022
1.55	0.3124	0.3181	0.3354	0.3657	0.4111	0.4404	0.4747	0.5606	0.6733	0.8182	0.9042

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.40

PAGE 58

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3201	0.3298	0.3432	0.3735	0.4189	0.4482	0.4824	0.5676	0.6791	0.8218	0.9062
1.65	0.3278	0.3365	0.3510	0.3814	0.4268	0.4559	0.4900	0.5746	0.6849	0.8253	0.9081
1.70	0.3356	0.3443	0.3588	0.3893	0.4346	0.4637	0.4976	0.5815	0.6905	0.8288	0.9101
1.75	0.3435	0.3522	0.3667	0.3972	0.4425	0.4714	0.5051	0.5884	0.6961	0.8322	0.9119
1.80	0.3514	0.3601	0.3747	0.4051	0.4503	0.4792	0.5127	0.5953	0.7017	0.8355	0.9138
1.85	0.3593	0.3680	0.3826	0.4131	0.4581	0.4868	0.5201	0.6020	0.7071	0.8388	0.9156
1.90	0.3672	0.3759	0.3905	0.4210	0.4659	0.4945	0.5276	0.6087	0.7125	0.8421	0.9174
1.95	0.3751	0.3838	0.3985	0.4289	0.4736	0.5021	0.5349	0.6153	0.7178	0.8452	0.9191
2.00	0.3830	0.3917	0.4064	0.4367	0.4813	0.5096	0.5422	0.6218	0.7230	0.8483	0.9208
2.05	0.3910	0.3997	0.4143	0.4446	0.4890	0.5171	0.5494	0.6283	0.7281	0.8514	0.9224
2.10	0.3989	0.4076	0.4222	0.4524	0.4966	0.5245	0.5566	0.6347	0.7332	0.8544	0.9241
2.15	0.4068	0.4155	0.4300	0.4601	0.5041	0.5318	0.5637	0.6409	0.7381	0.8573	0.9257
2.20	0.4146	0.4233	0.4379	0.4678	0.5116	0.5391	0.5707	0.6471	0.7430	0.8602	0.9272
2.25	0.4225	0.4312	0.4456	0.4755	0.5189	0.5463	0.5776	0.6532	0.7477	0.8630	0.9287
2.30	0.4303	0.4390	0.4534	0.4831	0.5263	0.5534	0.5844	0.6592	0.7524	0.8657	0.9302
2.35	0.4382	0.4469	0.4610	0.4906	0.5335	0.5604	0.5911	0.6651	0.7570	0.8684	0.9316
2.40	0.4457	0.4544	0.4686	0.4981	0.5407	0.5673	0.5978	0.6709	0.7615	0.8710	0.9330
2.45	0.4534	0.4621	0.4762	0.5055	0.5478	0.5742	0.6043	0.6766	0.7659	0.8736	0.9344
2.50	0.4610	0.4697	0.4837	0.5128	0.5547	0.5809	0.6108	0.6822	0.7703	0.8761	0.9358
2.55	0.4685	0.4772	0.4911	0.5200	0.5617	0.5876	0.6172	0.6877	0.7745	0.8785	0.9371
2.60	0.4760	0.4847	0.4984	0.5272	0.5685	0.5942	0.6234	0.6931	0.7787	0.8809	0.9384
2.65	0.4834	0.4921	0.5057	0.5342	0.5752	0.6007	0.6296	0.6984	0.7828	0.8832	0.9396
2.70	0.4907	0.4994	0.5129	0.5412	0.5818	0.6070	0.6357	0.7037	0.7867	0.8855	0.9408
2.75	0.4980	0.5067	0.5200	0.5481	0.5884	0.6133	0.6417	0.7088	0.7907	0.8877	0.9420
2.80	0.5052	0.5139	0.5271	0.5549	0.5948	0.6195	0.6475	0.7138	0.7945	0.8899	0.9432
2.85	0.5123	0.5210	0.5340	0.5617	0.6012	0.6255	0.6533	0.7188	0.7982	0.8920	0.9443
2.90	0.5193	0.5280	0.5409	0.5683	0.6075	0.6315	0.6590	0.7236	0.8019	0.8941	0.9454
2.95	0.5262	0.5349	0.5476	0.5748	0.6136	0.6375	0.6646	0.7284	0.8055	0.8962	0.9465
3.00	0.5331	0.5418	0.5543	0.5813	0.6197	0.6434	0.6701	0.7331	0.8090	0.8981	0.9475

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.45

PAGE 59

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1766	0.1811	0.1950	0.2204	0.2607	0.2881	0.3217	0.4119	0.5437	0.7333	0.8557
0.05	0.1768	0.1813	0.1952	0.2205	0.2609	0.2883	0.3219	0.4122	0.5439	0.7334	0.8558
0.10	0.1773	0.1818	0.1957	0.2211	0.2615	0.2890	0.3225	0.4128	0.5446	0.7339	0.8560
0.15	0.1782	0.1827	0.1967	0.2221	0.2625	0.2900	0.3235	0.4140	0.5456	0.7346	0.8565
0.20	0.1794	0.1839	0.1979	0.2235	0.2640	0.2915	0.3252	0.4155	0.5471	0.7356	0.8571
0.25	0.1809	0.1854	0.1996	0.2252	0.2658	0.2935	0.3272	0.4176	0.5489	0.7369	0.8578
0.30	0.1828	0.1874	0.2015	0.2273	0.2681	0.2958	0.3295	0.4200	0.5512	0.7384	0.8587
0.35	0.1850	0.1896	0.2039	0.2297	0.2707	0.2985	0.3323	0.4228	0.5538	0.7402	0.8598
0.40	0.1876	0.1922	0.2065	0.2325	0.2737	0.3016	0.3355	0.4261	0.5567	0.7423	0.8610
0.45	0.1904	0.1950	0.2095	0.2357	0.2771	0.3051	0.3391	0.4297	0.5600	0.7445	0.8623
0.50	0.1936	0.1983	0.2129	0.2393	0.2809	0.3089	0.3430	0.4337	0.5636	0.7470	0.8637
0.55	0.1971	0.2018	0.2165	0.2431	0.2849	0.3131	0.3473	0.4380	0.5675	0.7496	0.8653
0.60	0.2008	0.2056	0.2204	0.2472	0.2893	0.3175	0.3519	0.4426	0.5717	0.7525	0.8669
0.65	0.2049	0.2097	0.2247	0.2517	0.2940	0.3223	0.3568	0.4475	0.5761	0.7554	0.8686
0.70	0.2092	0.2141	0.2292	0.2564	0.2990	0.3275	0.3620	0.4527	0.5807	0.7586	0.8704
0.75	0.2138	0.2187	0.2340	0.2615	0.3043	0.3330	0.3675	0.4581	0.5856	0.7618	0.8723
0.80	0.2187	0.2236	0.2391	0.2668	0.3099	0.3386	0.3732	0.4637	0.5906	0.7651	0.8742
0.85	0.2238	0.2288	0.2444	0.2723	0.3156	0.3443	0.3792	0.4696	0.5958	0.7686	0.8762
0.90	0.2291	0.2342	0.2499	0.2781	0.3217	0.3506	0.3853	0.4756	0.6011	0.7721	0.8782
0.95	0.2347	0.2398	0.2557	0.2841	0.3279	0.3569	0.3917	0.4818	0.6065	0.7756	0.8802
1.00	0.2405	0.2456	0.2617	0.2903	0.3343	0.3634	0.3982	0.4882	0.6120	0.7792	0.8823
1.05	0.2464	0.2517	0.2679	0.2965	0.3409	0.3701	0.4043	0.4946	0.6176	0.7829	0.8844
1.10	0.2526	0.2579	0.2742	0.3032	0.3477	0.3769	0.4118	0.5012	0.6233	0.7865	0.8865
1.15	0.2590	0.2643	0.2808	0.3099	0.3546	0.3839	0.4187	0.5079	0.6290	0.7902	0.8885
1.20	0.2655	0.2709	0.2875	0.3168	0.3616	0.3910	0.4258	0.5146	0.6347	0.7939	0.8906
1.25	0.2722	0.2776	0.2943	0.3239	0.3688	0.3982	0.4329	0.5214	0.6405	0.7976	0.8927
1.30	0.2790	0.2845	0.3013	0.3310	0.3760	0.4054	0.4402	0.5282	0.6463	0.8012	0.8947
1.35	0.2860	0.2915	0.3084	0.3382	0.3834	0.4128	0.4474	0.5351	0.6521	0.8049	0.8968
1.40	0.2931	0.2986	0.3156	0.3456	0.3908	0.4202	0.4548	0.5419	0.6578	0.8085	0.8988
1.45	0.3002	0.3058	0.3230	0.3530	0.3983	0.4277	0.4621	0.5488	0.6635	0.8121	0.9008
1.50	0.3075	0.3131	0.3304	0.3605	0.4059	0.4352	0.4695	0.5557	0.6692	0.8156	0.9028
1.55	0.3149	0.3206	0.3379	0.3681	0.4134	0.4427	0.4769	0.5625	0.6749	0.8191	0.9047

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=2.45

PAGE 60

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3224	0.3280	0.3454	0.3767	0.4211	0.4502	0.4843	0.5694	0.6805	0.8226	0.9067
1.65	0.3299	0.3356	0.3530	0.3834	0.4287	0.4578	0.4917	0.5761	0.6861	0.8260	0.9085
1.70	0.3375	0.3432	0.3607	0.3911	0.4363	0.4654	0.4991	0.5829	0.6916	0.8294	0.9104
1.75	0.3451	0.3509	0.3684	0.3988	0.4440	0.4729	0.5065	0.5896	0.6970	0.8327	0.9122
1.80	0.3528	0.3585	0.3761	0.4065	0.4516	0.4804	0.5138	0.5962	0.7024	0.8360	0.9140
1.85	0.3605	0.3663	0.3838	0.4142	0.4592	0.4879	0.5211	0.6028	0.7077	0.8392	0.9158
1.90	0.3683	0.3740	0.3916	0.4219	0.4668	0.4953	0.5283	0.6094	0.7130	0.8423	0.9175
1.95	0.3760	0.3817	0.3993	0.4297	0.4743	0.5027	0.5355	0.6158	0.7181	0.8454	0.9192
2.00	0.3837	0.3895	0.4071	0.4373	0.4819	0.5101	0.5426	0.6222	0.7232	0.8485	0.9209
2.05	0.3915	0.3972	0.4148	0.4450	0.4893	0.5174	0.5497	0.6285	0.7282	0.8515	0.9225
2.10	0.3992	0.4050	0.4225	0.4526	0.4968	0.5246	0.5567	0.6347	0.7332	0.8544	0.9241
2.15	0.4070	0.4127	0.4302	0.4602	0.5041	0.5318	0.5636	0.6409	0.7380	0.8572	0.9256
2.20	0.4147	0.4204	0.4378	0.4678	0.5114	0.5389	0.5705	0.6469	0.7428	0.8600	0.9271
2.25	0.4223	0.4281	0.4455	0.4755	0.5187	0.5460	0.5773	0.6529	0.7475	0.8628	0.9286
2.30	0.4300	0.4357	0.4530	0.4827	0.5259	0.5529	0.5840	0.6588	0.7521	0.8655	0.9301
2.35	0.4376	0.4433	0.4606	0.4901	0.5330	0.5598	0.5906	0.6646	0.7566	0.8681	0.9315
2.40	0.4452	0.4508	0.4680	0.4974	0.5400	0.5667	0.5971	0.6703	0.7610	0.8707	0.9329
2.45	0.4527	0.4583	0.4755	0.5047	0.5470	0.5734	0.6036	0.6759	0.7654	0.8732	0.9342
2.50	0.4601	0.4658	0.4828	0.5119	0.5538	0.5800	0.6099	0.6814	0.7696	0.8757	0.9356
2.55	0.4675	0.4731	0.4901	0.5190	0.5606	0.5866	0.6162	0.6868	0.7738	0.8781	0.9369
2.60	0.4749	0.4805	0.4973	0.5260	0.5674	0.5931	0.6224	0.6922	0.7779	0.8805	0.9381
2.65	0.4822	0.4877	0.5045	0.5330	0.5740	0.5995	0.6284	0.6974	0.7819	0.8828	0.9394
2.70	0.4894	0.4949	0.5116	0.5399	0.5805	0.6058	0.6344	0.7026	0.7859	0.8850	0.9406
2.75	0.4965	0.5020	0.5186	0.5467	0.5870	0.6120	0.6403	0.7076	0.7898	0.8872	0.9417
2.80	0.5036	0.5091	0.5255	0.5534	0.5934	0.6181	0.6461	0.7126	0.7935	0.8894	0.9429
2.85	0.5106	0.5160	0.5324	0.5600	0.5996	0.6241	0.6519	0.7175	0.7973	0.8915	0.9440
2.90	0.5175	0.5229	0.5391	0.5666	0.6058	0.6300	0.6575	0.7223	0.8009	0.8935	0.9451
2.95	0.5244	0.5297	0.5458	0.5731	0.6119	0.6359	0.6630	0.7270	0.8044	0.8955	0.9462
3.00	0.5312	0.5365	0.5524	0.5794	0.6179	0.6416	0.6684	0.7316	0.8079	0.8975	0.9472

TABLES OF CALCULATIONS FOR H-H-WRIGHT ESQ.

VALUES OF RS WHERE N=2.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1837	0.1882	0.2024	0.2281	0.2689	0.2965	0.3302	0.4206	0.5516	0.7387	0.8589
0.05	0.1838	0.1884	0.2025	0.2283	0.2691	0.2967	0.3305	0.4208	0.5518	0.7388	0.8590
0.10	0.1843	0.1889	0.2031	0.2285	0.2697	0.2973	0.3311	0.4215	0.5524	0.7392	0.8592
0.15	0.1852	0.1897	0.2039	0.2298	0.2706	0.2984	0.3321	0.4225	0.5534	0.7399	0.8596
0.20	0.1863	0.1909	0.2052	0.2311	0.2720	0.2998	0.3336	0.4240	0.5548	0.7409	0.8602
0.25	0.1878	0.1924	0.2067	0.2327	0.2738	0.3016	0.3355	0.4259	0.5565	0.7421	0.8609
0.30	0.1896	0.1942	0.2086	0.2347	0.2759	0.3038	0.3377	0.4282	0.5586	0.7435	0.8617
0.35	0.1918	0.1964	0.2109	0.2371	0.2785	0.3064	0.3404	0.4309	0.5610	0.7452	0.8627
0.40	0.1942	0.1989	0.2134	0.2398	0.2813	0.3094	0.3434	0.4339	0.5638	0.7471	0.8638
0.45	0.1969	0.2016	0.2163	0.2428	0.2846	0.3127	0.3468	0.4374	0.5669	0.7492	0.8650
0.50	0.2000	0.2047	0.2195	0.2462	0.2881	0.3164	0.3505	0.4411	0.5703	0.7515	0.8663
0.55	0.2033	0.2081	0.2230	0.2499	0.2920	0.3204	0.3546	0.4452	0.5740	0.7540	0.8678
0.60	0.2070	0.2118	0.2268	0.2539	0.2962	0.3247	0.3590	0.4495	0.5779	0.7566	0.8693
0.65	0.2109	0.2158	0.2309	0.2582	0.3007	0.3293	0.3637	0.4542	0.5820	0.7594	0.8709
0.70	0.2151	0.2200	0.2353	0.2627	0.3055	0.3342	0.3686	0.4591	0.5864	0.7623	0.8726
0.75	0.2195	0.2245	0.2399	0.2676	0.3106	0.3393	0.3739	0.4643	0.5910	0.7654	0.8744
0.80	0.2242	0.2292	0.2448	0.2726	0.3159	0.3447	0.3793	0.4697	0.5958	0.7685	0.8762
0.85	0.2291	0.2342	0.2499	0.2780	0.3215	0.3504	0.3850	0.4752	0.6007	0.7718	0.8780
0.90	0.2343	0.2394	0.2552	0.2838	0.3272	0.3562	0.3910	0.4810	0.6057	0.7751	0.8799
0.95	0.2397	0.2448	0.2608	0.2893	0.3332	0.3623	0.3971	0.4869	0.6109	0.7785	0.8819
1.00	0.2453	0.2505	0.2666	0.2953	0.3394	0.3686	0.4033	0.4930	0.6161	0.7819	0.8838
1.05	0.2511	0.2563	0.2726	0.3014	0.3458	0.3750	0.4098	0.4992	0.6215	0.7853	0.8858
1.10	0.2571	0.2623	0.2787	0.3078	0.3523	0.3818	0.4163	0.5055	0.6269	0.7888	0.8878
1.15	0.2632	0.2686	0.2851	0.3143	0.3589	0.3882	0.4230	0.5119	0.6324	0.7924	0.8897
1.20	0.2695	0.2749	0.2916	0.3209	0.3657	0.3951	0.4298	0.5183	0.6379	0.7959	0.8917
1.25	0.2760	0.2814	0.2982	0.3277	0.3727	0.4020	0.4367	0.5249	0.6434	0.7994	0.8937
1.30	0.2826	0.2881	0.3050	0.3347	0.3797	0.4090	0.4437	0.5314	0.6490	0.8029	0.8957
1.35	0.2894	0.2949	0.3118	0.3417	0.3868	0.4161	0.4507	0.5381	0.6545	0.8064	0.8976
1.40	0.2963	0.3018	0.3189	0.3488	0.3940	0.4233	0.4578	0.5447	0.6601	0.8099	0.8996
1.45	0.3033	0.3088	0.3260	0.3560	0.4012	0.4305	0.4649	0.5513	0.6656	0.8133	0.9015
1.50	0.3103	0.3159	0.3332	0.3633	0.4086	0.4378	0.4721	0.5580	0.6711	0.8168	0.9034
1.55	0.3175	0.3231	0.3404	0.3706	0.4159	0.4451	0.4793	0.5646	0.6766	0.8202	0.9053

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3248	0.3304	0.3478	0.3780	0.4233	0.4524	0.4865	0.5712	0.6820	0.8235	0.9072
1.65	0.3321	0.3378	0.3552	0.3855	0.4307	0.4598	0.4936	0.5778	0.6874	0.8268	0.9090
1.70	0.3395	0.3452	0.3626	0.3930	0.4381	0.4671	0.5008	0.5844	0.6928	0.8301	0.9108
1.75	0.3469	0.3526	0.3701	0.4005	0.4456	0.4744	0.5080	0.5909	0.6981	0.8333	0.9126
1.80	0.3544	0.3601	0.3776	0.4080	0.4530	0.4817	0.5151	0.5974	0.7033	0.8365	0.9143
1.85	0.3619	0.3677	0.3852	0.4155	0.4604	0.4890	0.5222	0.6038	0.7085	0.8396	0.9160
1.90	0.3695	0.3752	0.3928	0.4231	0.4678	0.4963	0.5293	0.6101	0.7136	0.8427	0.9177
1.95	0.3770	0.3828	0.4003	0.4306	0.4752	0.5035	0.5363	0.6154	0.7186	0.8457	0.9193
2.00	0.3846	0.3904	0.4079	0.4381	0.4825	0.5107	0.5432	0.6227	0.7236	0.8487	0.9210
2.05	0.3922	0.3979	0.4154	0.4456	0.4899	0.5179	0.5501	0.6288	0.7285	0.8516	0.9225
2.10	0.3998	0.4055	0.4230	0.4531	0.4971	0.5249	0.5570	0.6349	0.7333	0.8544	0.9241
2.15	0.4073	0.4130	0.4305	0.4605	0.5043	0.5320	0.5638	0.6409	0.7380	0.8572	0.9256
2.20	0.4149	0.4206	0.4380	0.4679	0.5115	0.5389	0.5705	0.6469	0.7427	0.8600	0.9271
2.25	0.4224	0.4281	0.4455	0.4752	0.5186	0.5459	0.5771	0.6527	0.7473	0.8627	0.9286
2.30	0.4299	0.4356	0.4529	0.4825	0.5256	0.5527	0.5837	0.6585	0.7518	0.8653	0.9300
2.35	0.4373	0.4430	0.4603	0.4898	0.5326	0.5595	0.5902	0.6642	0.7563	0.8679	0.9314
2.40	0.4448	0.4504	0.4676	0.4970	0.5395	0.5662	0.5966	0.6698	0.7606	0.8705	0.9328
2.45	0.4521	0.4578	0.4749	0.5041	0.5464	0.5728	0.6029	0.6753	0.7649	0.8729	0.9341
2.50	0.4595	0.4651	0.4821	0.5112	0.5531	0.5793	0.6092	0.6807	0.7691	0.8754	0.9354
2.55	0.4667	0.4723	0.4893	0.5182	0.5598	0.5858	0.6154	0.6861	0.7732	0.8777	0.9367
2.60	0.4740	0.4795	0.4964	0.5251	0.5664	0.5921	0.6214	0.6913	0.7773	0.8801	0.9379
2.65	0.4811	0.4867	0.5034	0.5319	0.5729	0.5984	0.6274	0.6965	0.7812	0.8823	0.9391
2.70	0.4882	0.4937	0.5104	0.5387	0.5794	0.6048	0.6333	0.7016	0.7851	0.8846	0.9403
2.75	0.4953	0.5007	0.5173	0.5454	0.5857	0.6108	0.6392	0.7066	0.7889	0.8868	0.9415
2.80	0.5022	0.5077	0.5241	0.5520	0.5920	0.6168	0.6449	0.7115	0.7927	0.8889	0.9426
2.85	0.5091	0.5145	0.5309	0.5586	0.5982	0.6227	0.6505	0.7164	0.7954	0.8910	0.9437
2.90	0.5160	0.5213	0.5376	0.5651	0.6043	0.6285	0.6561	0.7211	0.8000	0.8930	0.9448
2.95	0.5227	0.5281	0.5442	0.5714	0.6103	0.6344	0.6616	0.7258	0.8035	0.8950	0.9459
3.00	0.5294	0.5347	0.5507	0.5777	0.6163	0.6401	0.6669	0.7303	0.8069	0.8969	0.9469

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=2.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1906	0.1952	0.2096	0.2357	0.2769	0.3048	0.3386	0.4290	0.5592	0.7439	0.8619
0.05	0.1908	0.1954	0.2098	0.2359	0.2771	0.3050	0.3388	0.4292	0.5594	0.7440	0.8620
0.10	0.1913	0.1959	0.2103	0.2364	0.2777	0.3055	0.3394	0.4298	0.5600	0.7444	0.8622
0.15	0.1921	0.1967	0.2112	0.2373	0.2786	0.3065	0.3404	0.4308	0.5609	0.7450	0.8626
0.20	0.1932	0.1978	0.2123	0.2386	0.2799	0.3079	0.3418	0.4322	0.5622	0.7459	0.8631
0.25	0.1946	0.1993	0.2138	0.2401	0.2816	0.3096	0.3436	0.4340	0.5638	0.7470	0.8637
0.30	0.1964	0.2011	0.2157	0.2421	0.2837	0.3117	0.3458	0.4362	0.5658	0.7484	0.8645
0.35	0.1984	0.2031	0.2178	0.2443	0.2861	0.3142	0.3483	0.4387	0.5681	0.7499	0.8654
0.40	0.2008	0.2055	0.2203	0.2469	0.2888	0.3170	0.3512	0.4416	0.5707	0.7517	0.8665
0.45	0.2034	0.2082	0.2231	0.2499	0.2919	0.3202	0.3544	0.4448	0.5736	0.7537	0.8676
0.50	0.2064	0.2112	0.2261	0.2531	0.2953	0.3237	0.3579	0.4484	0.5768	0.7558	0.8689
0.55	0.2096	0.2144	0.2295	0.2566	0.2990	0.3275	0.3618	0.4522	0.5802	0.7581	0.8702
0.60	0.2131	0.2180	0.2332	0.2605	0.3031	0.3316	0.3660	0.4564	0.5839	0.7606	0.8716
0.65	0.2169	0.2218	0.2371	0.2646	0.3074	0.3360	0.3705	0.4608	0.5879	0.7633	0.8731
0.70	0.2209	0.2259	0.2413	0.2690	0.3120	0.3407	0.3752	0.4655	0.5920	0.7660	0.8747
0.75	0.2252	0.2302	0.2458	0.2736	0.3168	0.3456	0.3802	0.4704	0.5963	0.7689	0.8764
0.80	0.2298	0.2348	0.2505	0.2785	0.3219	0.3508	0.3854	0.4755	0.6008	0.7719	0.8781
0.85	0.2346	0.2396	0.2554	0.2836	0.3273	0.3562	0.3909	0.4808	0.6055	0.7749	0.8798
0.90	0.2395	0.2446	0.2606	0.2890	0.3328	0.3619	0.3965	0.4863	0.6103	0.7781	0.8816
0.95	0.2447	0.2499	0.2660	0.2946	0.3386	0.3677	0.4024	0.4920	0.6152	0.7813	0.8834
1.00	0.2501	0.2554	0.2716	0.3003	0.3445	0.3737	0.4084	0.4978	0.6202	0.7845	0.8853
1.05	0.2557	0.2610	0.2773	0.3063	0.3506	0.3793	0.4146	0.5037	0.6253	0.7878	0.8872
1.10	0.2615	0.2668	0.2833	0.3124	0.3569	0.3862	0.4209	0.5098	0.6305	0.7911	0.8891
1.15	0.2675	0.2729	0.2894	0.3187	0.3634	0.3926	0.4273	0.5159	0.6357	0.7945	0.8909
1.20	0.2736	0.2790	0.2957	0.3251	0.3699	0.3992	0.4339	0.5221	0.6410	0.7979	0.8928
1.25	0.2799	0.2853	0.3021	0.3317	0.3766	0.4059	0.4405	0.5284	0.6463	0.8012	0.8947
1.30	0.2863	0.2918	0.3087	0.3384	0.3834	0.4127	0.4473	0.5348	0.6517	0.8046	0.8966
1.35	0.2929	0.2984	0.3154	0.3452	0.3903	0.4196	0.4541	0.5411	0.6570	0.8080	0.8985
1.40	0.2996	0.3051	0.3222	0.3521	0.3972	0.4265	0.4609	0.5475	0.6624	0.8113	0.9004
1.45	0.3064	0.3119	0.3291	0.3591	0.4043	0.4335	0.4678	0.5539	0.6677	0.8146	0.9022
1.50	0.3132	0.3188	0.3361	0.3662	0.4114	0.4403	0.4748	0.5604	0.6730	0.8179	0.9041
1.55	0.3202	0.3258	0.3431	0.3733	0.4185	0.4476	0.4817	0.5668	0.6783	0.8212	0.9059

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.55

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3273	0.3329	0.3503	0.3805	0.4257	0.4547	0.4887	0.5732	0.6836	0.8245	0.9077
1.65	0.3344	0.3401	0.3575	0.3877	0.4329	0.4619	0.4957	0.5796	0.6888	0.8277	0.9094
1.70	0.3416	0.3473	0.3647	0.3950	0.4401	0.4690	0.5026	0.5860	0.6940	0.8308	0.9112
1.75	0.3489	0.3546	0.3720	0.4023	0.4473	0.4761	0.5096	0.5923	0.6992	0.8340	0.9129
1.80	0.3562	0.3619	0.3794	0.4097	0.4546	0.4832	0.5165	0.5986	0.7043	0.8371	0.9146
1.85	0.3635	0.3692	0.3867	0.4170	0.4618	0.4904	0.5235	0.6049	0.7093	0.8401	0.9163
1.90	0.3709	0.3766	0.3941	0.4244	0.4690	0.4974	0.5303	0.6111	0.7143	0.8431	0.9179
1.95	0.3782	0.3840	0.4015	0.4317	0.4762	0.5045	0.5372	0.6172	0.7192	0.8460	0.9195
2.00	0.3856	0.3914	0.4089	0.4390	0.4834	0.5115	0.5440	0.6233	0.7240	0.8489	0.9211
2.05	0.3930	0.3988	0.4162	0.4464	0.4905	0.5185	0.5507	0.6293	0.7288	0.8518	0.9227
2.10	0.4004	0.4062	0.4236	0.4537	0.4976	0.5254	0.5574	0.6353	0.7335	0.8546	0.9242
2.15	0.4078	0.4136	0.4310	0.4609	0.5047	0.5323	0.5641	0.6411	0.7382	0.8573	0.9257
2.20	0.4152	0.4209	0.4383	0.4682	0.5117	0.5391	0.5706	0.6459	0.7428	0.8600	0.9271
2.25	0.4226	0.4283	0.4456	0.4754	0.5187	0.5459	0.5771	0.6527	0.7473	0.8626	0.9285
2.30	0.4299	0.4356	0.4529	0.4825	0.5256	0.5526	0.5836	0.6583	0.7517	0.8652	0.9299
2.35	0.4372	0.4429	0.4601	0.4896	0.5324	0.5592	0.5900	0.6639	0.7550	0.8678	0.9313
2.40	0.4445	0.4502	0.4673	0.4967	0.5392	0.5658	0.5963	0.6694	0.7603	0.8703	0.9327
2.45	0.4518	0.4574	0.4745	0.5037	0.5459	0.5723	0.6025	0.6749	0.7645	0.8727	0.9340
2.50	0.4590	0.4646	0.4816	0.5105	0.5525	0.5787	0.6085	0.6802	0.7687	0.8751	0.9353
2.55	0.4661	0.4717	0.4886	0.5175	0.5591	0.5851	0.6147	0.6855	0.7727	0.8775	0.9365
2.60	0.4732	0.4788	0.4956	0.5243	0.5656	0.5914	0.6207	0.6907	0.7767	0.8797	0.9377
2.65	0.4803	0.4858	0.5025	0.5310	0.5720	0.5976	0.6266	0.6958	0.7806	0.8820	0.9389
2.70	0.4872	0.4927	0.5094	0.5377	0.5784	0.6037	0.6324	0.7008	0.7845	0.8842	0.9401
2.75	0.4942	0.4996	0.5162	0.5443	0.5847	0.6097	0.6381	0.7057	0.7882	0.8863	0.9413
2.80	0.5010	0.5065	0.5229	0.5508	0.5909	0.6157	0.6438	0.7105	0.7919	0.8884	0.9424
2.85	0.5078	0.5132	0.5296	0.5573	0.5970	0.6213	0.6494	0.7153	0.7956	0.8905	0.9435
2.90	0.5146	0.5199	0.5362	0.5637	0.6030	0.6273	0.6548	0.7200	0.7991	0.8925	0.9445
2.95	0.5212	0.5266	0.5427	0.5700	0.6089	0.6330	0.6602	0.7246	0.8026	0.8945	0.9456
3.00	0.5278	0.5331	0.5491	0.5762	0.6148	0.6386	0.6656	0.7291	0.8060	0.8964	0.9466

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.60

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1975	0.2022	0.2168	0.2432	0.2848	0.3128	0.3468	0.4372	0.5666	0.7489	0.8648
0.05	0.1977	0.2024	0.2170	0.2434	0.2850	0.3130	0.3470	0.4374	0.5668	0.7490	0.8649
0.10	0.1981	0.2028	0.2175	0.2439	0.2855	0.3135	0.3476	0.4379	0.5673	0.7494	0.8651
0.15	0.1989	0.2036	0.2183	0.2448	0.2864	0.3145	0.3485	0.4389	0.5681	0.7499	0.8654
0.20	0.2000	0.2047	0.2194	0.2460	0.2877	0.3158	0.3499	0.4402	0.5693	0.7508	0.8659
0.25	0.2014	0.2061	0.2209	0.2475	0.2893	0.3174	0.3516	0.4419	0.5709	0.7518	0.8665
0.30	0.2031	0.2078	0.2226	0.2493	0.2912	0.3193	0.3536	0.4440	0.5727	0.7530	0.8672
0.35	0.2050	0.2098	0.2247	0.2515	0.2935	0.3218	0.3560	0.4464	0.5749	0.7545	0.8681
0.40	0.2073	0.2121	0.2271	0.2540	0.2962	0.3245	0.3587	0.4491	0.5773	0.7562	0.8690
0.45	0.2099	0.2147	0.2297	0.2568	0.2991	0.3275	0.3618	0.4521	0.5801	0.7580	0.8701
0.50	0.2127	0.2176	0.2327	0.2599	0.3024	0.3309	0.3652	0.4555	0.5831	0.7600	0.8713
0.55	0.2158	0.2207	0.2360	0.2633	0.3060	0.3345	0.3689	0.4592	0.5863	0.7622	0.8725
0.60	0.2192	0.2241	0.2395	0.2670	0.3098	0.3384	0.3729	0.4631	0.5898	0.7645	0.8739
0.65	0.2229	0.2278	0.2433	0.2709	0.3140	0.3427	0.3771	0.4673	0.5935	0.7670	0.8753
0.70	0.2268	0.2318	0.2473	0.2752	0.3184	0.3471	0.3817	0.4718	0.5975	0.7696	0.8768
0.75	0.2309	0.2360	0.2516	0.2796	0.3230	0.3519	0.3865	0.4764	0.6016	0.7723	0.8783
0.80	0.2353	0.2404	0.2562	0.2843	0.3279	0.3568	0.3915	0.4813	0.6058	0.7751	0.8799
0.85	0.2399	0.2450	0.2609	0.2893	0.3331	0.3620	0.3967	0.4864	0.6103	0.7780	0.8816
0.90	0.2447	0.2499	0.2659	0.2945	0.3384	0.3674	0.4021	0.4916	0.6148	0.7810	0.8833
0.95	0.2498	0.2550	0.2711	0.2998	0.3439	0.3730	0.4077	0.4971	0.6195	0.7840	0.8850
1.00	0.2550	0.2603	0.2765	0.3054	0.3497	0.3788	0.4135	0.5026	0.6243	0.7871	0.8868
1.05	0.2604	0.2657	0.2821	0.3111	0.3556	0.3847	0.4194	0.5083	0.6292	0.7903	0.8886
1.10	0.2661	0.2714	0.2879	0.3171	0.3616	0.3908	0.4255	0.5141	0.6341	0.7934	0.8903
1.15	0.2718	0.2772	0.2938	0.3231	0.3678	0.3971	0.4317	0.5200	0.6392	0.7966	0.8922
1.20	0.2778	0.2832	0.2999	0.3294	0.3741	0.4034	0.4380	0.5260	0.6442	0.7999	0.8940
1.25	0.2839	0.2893	0.3061	0.3357	0.3806	0.4099	0.4444	0.5320	0.6493	0.8031	0.8958
1.30	0.2901	0.2956	0.3125	0.3422	0.3872	0.4164	0.4509	0.5381	0.6545	0.8063	0.8976
1.35	0.2965	0.3020	0.3190	0.3488	0.3938	0.4231	0.4575	0.5443	0.6596	0.8096	0.8994
1.40	0.3029	0.3085	0.3255	0.3556	0.4006	0.4298	0.4641	0.5504	0.6648	0.8128	0.9012
1.45	0.3095	0.3151	0.3322	0.3623	0.4074	0.4366	0.4708	0.5566	0.6699	0.8160	0.9030
1.50	0.3162	0.3218	0.3390	0.3691	0.4143	0.4434	0.4775	0.5629	0.6750	0.8192	0.9047
1.55	0.3230	0.3286	0.3459	0.3761	0.4212	0.4503	0.4843	0.5691	0.6802	0.8223	0.9065

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RS WHERE N=2.60

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3299	0.3355	0.3529	0.3830	0.4281	0.4572	0.4910	0.5753	0.6853	0.8255	0.9082
1.65	0.3368	0.3425	0.3599	0.3901	0.4352	0.4643	0.4978	0.5815	0.6903	0.8286	0.9099
1.70	0.3438	0.3495	0.3669	0.3972	0.4422	0.4710	0.5046	0.5877	0.6954	0.8316	0.9116
1.75	0.3509	0.3566	0.3740	0.4043	0.4492	0.4779	0.5113	0.5938	0.7004	0.8347	0.9133
1.80	0.3580	0.3637	0.3812	0.4114	0.4563	0.4849	0.5181	0.6000	0.7053	0.8377	0.9150
1.85	0.3652	0.3709	0.3884	0.4185	0.4633	0.4918	0.5248	0.6060	0.7102	0.8406	0.9166
1.90	0.3724	0.3781	0.3955	0.4258	0.4703	0.4987	0.5315	0.6121	0.7151	0.8435	0.9182
1.95	0.3796	0.3853	0.4028	0.4329	0.4774	0.5056	0.5382	0.6181	0.7199	0.8464	0.9197
2.00	0.3868	0.3925	0.4100	0.4401	0.4844	0.5124	0.5449	0.6240	0.7246	0.8492	0.9213
2.05	0.3940	0.3997	0.4172	0.4472	0.4913	0.5193	0.5514	0.6299	0.7293	0.8520	0.9228
2.10	0.4013	0.4070	0.4244	0.4544	0.4983	0.5260	0.5580	0.6357	0.7339	0.8548	0.9243
2.15	0.4085	0.4142	0.4316	0.4615	0.5052	0.5328	0.5645	0.6415	0.7384	0.8574	0.9257
2.20	0.4157	0.4214	0.4388	0.4686	0.5121	0.5394	0.5709	0.6472	0.7429	0.8601	0.9272
2.25	0.4229	0.4286	0.4459	0.4756	0.5189	0.5461	0.5773	0.6528	0.7473	0.8627	0.9286
2.30	0.4301	0.4358	0.4531	0.4826	0.5256	0.5527	0.5836	0.6583	0.7517	0.8652	0.9299
2.35	0.4373	0.4430	0.4602	0.4896	0.5324	0.5592	0.5899	0.6638	0.7559	0.8677	0.9313
2.40	0.4444	0.4501	0.4672	0.4965	0.5390	0.5656	0.5960	0.6692	0.7601	0.8702	0.9326
2.45	0.4515	0.4572	0.4742	0.5034	0.5456	0.5720	0.6022	0.6745	0.7643	0.8726	0.9339
2.50	0.4585	0.4642	0.4812	0.5102	0.5521	0.5783	0.6082	0.6798	0.7683	0.8749	0.9351
2.55	0.4656	0.4712	0.4881	0.5170	0.5586	0.5846	0.6142	0.6850	0.7723	0.8772	0.9364
2.60	0.4726	0.4782	0.4950	0.5237	0.5650	0.5907	0.6201	0.6901	0.7763	0.8795	0.9376
2.65	0.4795	0.4851	0.5018	0.5303	0.5713	0.5968	0.6259	0.6951	0.7801	0.8817	0.9388
2.70	0.4864	0.4919	0.5086	0.5389	0.5776	0.6028	0.6315	0.7000	0.7839	0.8839	0.9399
2.75	0.4932	0.4987	0.5153	0.5464	0.5837	0.6088	0.6372	0.7049	0.7876	0.8850	0.9411
2.80	0.5000	0.5054	0.5219	0.5498	0.5898	0.6146	0.6428	0.7097	0.7913	0.8881	0.9422
2.85	0.5067	0.5121	0.5285	0.5562	0.5959	0.6204	0.6483	0.7144	0.7948	0.8901	0.9433
2.90	0.5133	0.5187	0.5350	0.5625	0.6018	0.6261	0.6537	0.7190	0.7984	0.8921	0.9443
2.95	0.5199	0.5252	0.5414	0.5687	0.6077	0.6318	0.6591	0.7236	0.8018	0.8940	0.9454
3.00	0.5264	0.5317	0.5477	0.5748	0.6135	0.6373	0.6643	0.7280	0.8052	0.8959	0.9464

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RS WHERE N=2.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2044	0.2091	0.2239	0.2506	0.2925	0.3207	0.3548	0.4451	0.5737	0.7537	0.8676
0.05	0.2046	0.2092	0.2241	0.2508	0.2927	0.3209	0.3550	0.4453	0.5738	0.7538	0.8677
0.10	0.2050	0.2097	0.2245	0.2513	0.2932	0.3214	0.3556	0.4458	0.5743	0.7541	0.8679
0.15	0.2057	0.2105	0.2253	0.2521	0.2941	0.3223	0.3565	0.4467	0.5751	0.7547	0.8682
0.20	0.2067	0.2115	0.2264	0.2532	0.2953	0.3236	0.3577	0.4480	0.5763	0.7554	0.8686
0.25	0.2081	0.2129	0.2278	0.2547	0.2968	0.3251	0.3593	0.4496	0.5777	0.7564	0.8692
0.30	0.2097	0.2145	0.2295	0.2565	0.2987	0.3270	0.3613	0.4515	0.5794	0.7576	0.8698
0.35	0.2116	0.2164	0.2315	0.2586	0.3009	0.3293	0.3636	0.4538	0.5815	0.7589	0.8706
0.40	0.2138	0.2186	0.2338	0.2610	0.3034	0.3319	0.3662	0.4564	0.5838	0.7606	0.8715
0.45	0.2163	0.2211	0.2363	0.2637	0.3063	0.3348	0.3691	0.4593	0.5864	0.7622	0.8725
0.50	0.2190	0.2239	0.2392	0.2666	0.3094	0.3379	0.3723	0.4625	0.5892	0.7641	0.8736
0.55	0.2220	0.2270	0.2423	0.2699	0.3128	0.3414	0.3759	0.4660	0.5923	0.7661	0.8748
0.60	0.2253	0.2303	0.2457	0.2734	0.3165	0.3452	0.3797	0.4697	0.5956	0.7683	0.8761
0.65	0.2288	0.2338	0.2494	0.2773	0.3205	0.3492	0.3837	0.4737	0.5991	0.7707	0.8774
0.70	0.2326	0.2376	0.2533	0.2813	0.3247	0.3535	0.3881	0.4779	0.6028	0.7731	0.8788
0.75	0.2366	0.2417	0.2574	0.2856	0.3292	0.3581	0.3926	0.4824	0.6067	0.7757	0.8803
0.80	0.2408	0.2459	0.2618	0.2902	0.3339	0.3628	0.3974	0.4870	0.6108	0.7783	0.8818
0.85	0.2453	0.2504	0.2664	0.2949	0.3388	0.3678	0.4024	0.4919	0.6150	0.7811	0.8833
0.90	0.2500	0.2552	0.2713	0.2998	0.3439	0.3730	0.4076	0.4969	0.6193	0.7839	0.8849
0.95	0.2548	0.2601	0.2763	0.3051	0.3493	0.3784	0.4130	0.5021	0.6238	0.7868	0.8866
1.00	0.2599	0.2652	0.2815	0.3106	0.3548	0.3839	0.4186	0.5074	0.6284	0.7897	0.8882
1.05	0.2652	0.2705	0.2869	0.3160	0.3605	0.3895	0.4243	0.5128	0.6330	0.7927	0.8899
1.10	0.2705	0.2759	0.2925	0.3217	0.3663	0.3955	0.4301	0.5184	0.6378	0.7957	0.8916
1.15	0.2762	0.2816	0.2982	0.3276	0.3723	0.4015	0.4361	0.5241	0.6426	0.7988	0.8934
1.20	0.2820	0.2874	0.3041	0.3336	0.3784	0.4076	0.4422	0.5298	0.6474	0.8019	0.8951
1.25	0.2879	0.2933	0.3101	0.3398	0.3846	0.4139	0.4484	0.5356	0.6523	0.8050	0.8968
1.30	0.2939	0.2994	0.3163	0.3460	0.3910	0.4202	0.4546	0.5415	0.6573	0.8081	0.8986
1.35	0.3001	0.3056	0.3226	0.3524	0.3974	0.4266	0.4610	0.5474	0.6622	0.8112	0.9003
1.40	0.3064	0.3119	0.3290	0.3589	0.4040	0.4331	0.4674	0.5534	0.6672	0.8143	0.9020
1.45	0.3128	0.3184	0.3355	0.3655	0.4106	0.4397	0.4738	0.5594	0.6722	0.8174	0.9037
1.50	0.3193	0.3249	0.3421	0.3722	0.4172	0.4463	0.4803	0.5654	0.6771	0.8204	0.9054
1.55	0.3259	0.3315	0.3488	0.3789	0.4240	0.4530	0.4869	0.5714	0.6821	0.8235	0.9071

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=2.65

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3326	0.3382	0.3555	0.3857	0.4307	0.4597	0.4934	0.5775	0.6870	0.8265	0.9088
1.65	0.3394	0.3450	0.3624	0.3925	0.4375	0.4664	0.5000	0.5835	0.6919	0.8295	0.9105
1.70	0.3462	0.3519	0.3692	0.3994	0.4444	0.4731	0.5066	0.5895	0.6968	0.8325	0.9121
1.75	0.3531	0.3587	0.3762	0.4064	0.4512	0.4799	0.5132	0.5955	0.7017	0.8354	0.9137
1.80	0.3600	0.3657	0.3831	0.4133	0.4581	0.4866	0.5198	0.6014	0.7065	0.8384	0.9153
1.85	0.3670	0.3727	0.3901	0.4203	0.4649	0.4934	0.5263	0.6073	0.7112	0.8412	0.9169
1.90	0.3740	0.3797	0.3971	0.4273	0.4718	0.5001	0.5329	0.6132	0.7150	0.8441	0.9184
1.95	0.3810	0.3867	0.4042	0.4343	0.4786	0.5068	0.5394	0.6191	0.7206	0.8469	0.9200
2.00	0.3881	0.3938	0.4112	0.4413	0.4855	0.5135	0.5463	0.6249	0.7252	0.8496	0.9215
2.05	0.3951	0.4009	0.4183	0.4483	0.4923	0.5202	0.5523	0.6306	0.7298	0.8523	0.9230
2.10	0.4022	0.4079	0.4253	0.4553	0.4991	0.5268	0.5587	0.6363	0.7343	0.8550	0.9244
2.15	0.4093	0.4150	0.4324	0.4622	0.5058	0.5334	0.5650	0.6419	0.7387	0.8576	0.9258
2.20	0.4164	0.4221	0.4394	0.4691	0.5126	0.5399	0.5713	0.6475	0.7431	0.8602	0.9272
2.25	0.4234	0.4291	0.4464	0.4760	0.5192	0.5464	0.5776	0.6530	0.7475	0.8627	0.9286
2.30	0.4305	0.4362	0.4534	0.4829	0.5259	0.5528	0.5838	0.6584	0.7517	0.8652	0.9299
2.35	0.4375	0.4432	0.4603	0.4897	0.5324	0.5592	0.5899	0.6638	0.7559	0.8677	0.9313
2.40	0.4445	0.4502	0.4673	0.4966	0.5390	0.5656	0.5950	0.6691	0.7600	0.8701	0.9326
2.45	0.4515	0.4571	0.4742	0.5033	0.5454	0.5718	0.6020	0.6744	0.7641	0.8724	0.9338
2.50	0.4584	0.4640	0.4810	0.5100	0.5518	0.5780	0.6079	0.6795	0.7681	0.8748	0.9351
2.55	0.4653	0.4709	0.4878	0.5166	0.5582	0.5842	0.6138	0.6846	0.7720	0.8770	0.9363
2.60	0.4722	0.4777	0.4945	0.5232	0.5645	0.5902	0.6196	0.6896	0.7759	0.8793	0.9375
2.65	0.4790	0.4845	0.5012	0.5297	0.5707	0.5962	0.6253	0.6946	0.7797	0.8814	0.9386
2.70	0.4857	0.4912	0.5079	0.5362	0.5769	0.6021	0.6309	0.6994	0.7834	0.8836	0.9398
2.75	0.4925	0.4979	0.5145	0.5426	0.5829	0.6080	0.6365	0.7042	0.7871	0.8857	0.9409
2.80	0.4991	0.5045	0.5210	0.5489	0.5889	0.6138	0.6420	0.7089	0.7907	0.8877	0.9420
2.85	0.5057	0.5111	0.5275	0.5552	0.5949	0.6195	0.6474	0.7136	0.7942	0.8897	0.9431
2.90	0.5123	0.5176	0.5339	0.5614	0.6007	0.6251	0.6527	0.7182	0.7977	0.8917	0.9441
2.95	0.5187	0.5241	0.5402	0.5675	0.6065	0.6307	0.6580	0.7227	0.8011	0.8936	0.9451
3.00	0.5251	0.5304	0.5465	0.5736	0.6122	0.6361	0.6632	0.7271	0.8044	0.8955	0.9461

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=2.70

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2111	0.2159	0.2309	0.2579	0.3001	0.3285	0.3627	0.4528	0.5805	0.7583	0.8702
0.05	0.2112	0.2161	0.2311	0.2581	0.3003	0.3286	0.3628	0.4530	0.5807	0.7584	0.8703
0.10	0.2117	0.2165	0.2315	0.2585	0.3008	0.3291	0.3634	0.4535	0.5811	0.7587	0.8705
0.15	0.2124	0.2172	0.2323	0.2593	0.3016	0.3300	0.3642	0.4544	0.5819	0.7592	0.8708
0.20	0.2134	0.2182	0.2333	0.2604	0.3028	0.3312	0.3654	0.4555	0.5830	0.7599	0.8712
0.25	0.2147	0.2195	0.2347	0.2618	0.3042	0.3327	0.3669	0.4571	0.5843	0.7608	0.8717
0.30	0.2163	0.2211	0.2363	0.2635	0.3060	0.3345	0.3688	0.4589	0.5860	0.7619	0.8723
0.35	0.2181	0.2230	0.2382	0.2655	0.3081	0.3365	0.3710	0.4610	0.5879	0.7632	0.8731
0.40	0.2202	0.2251	0.2404	0.2678	0.3106	0.3391	0.3735	0.4635	0.5900	0.7646	0.8739
0.45	0.2226	0.2275	0.2429	0.2704	0.3133	0.3419	0.3762	0.4663	0.5925	0.7662	0.8749
0.50	0.2253	0.2302	0.2456	0.2733	0.3163	0.3449	0.3793	0.4693	0.5952	0.7680	0.8759
0.55	0.2282	0.2331	0.2487	0.2764	0.3195	0.3482	0.3827	0.4726	0.5981	0.7700	0.8770
0.60	0.2313	0.2363	0.2519	0.2798	0.3231	0.3518	0.3863	0.4762	0.6012	0.7720	0.8782
0.65	0.2347	0.2398	0.2555	0.2835	0.3269	0.3557	0.3902	0.4800	0.6045	0.7742	0.8794
0.70	0.2384	0.2434	0.2592	0.2874	0.3310	0.3598	0.3944	0.4840	0.6081	0.7765	0.8807
0.75	0.2422	0.2474	0.2632	0.2916	0.3352	0.3642	0.3987	0.4882	0.6118	0.7789	0.8821
0.80	0.2463	0.2515	0.2675	0.2959	0.3398	0.3688	0.4033	0.4927	0.6156	0.7815	0.8835
0.85	0.2507	0.2558	0.2719	0.3005	0.3445	0.3735	0.4081	0.4973	0.6196	0.7841	0.8850
0.90	0.2552	0.2604	0.2766	0.3053	0.3495	0.3785	0.4131	0.5021	0.6238	0.7867	0.8865
0.95	0.2599	0.2652	0.2814	0.3103	0.3546	0.3837	0.4183	0.5071	0.6280	0.7895	0.8881
1.00	0.2648	0.2701	0.2865	0.3155	0.3599	0.3890	0.4236	0.5122	0.6324	0.7923	0.8897
1.05	0.2699	0.2752	0.2917	0.3209	0.3654	0.3945	0.4291	0.5174	0.6368	0.7951	0.8913
1.10	0.2752	0.2805	0.2971	0.3264	0.3710	0.4009	0.4347	0.5227	0.6414	0.7980	0.8929
1.15	0.2806	0.2860	0.3027	0.3321	0.3768	0.4060	0.4405	0.5282	0.6460	0.8009	0.8946
1.20	0.2862	0.2916	0.3084	0.3379	0.3827	0.4119	0.4464	0.5337	0.6506	0.8039	0.8962
1.25	0.2919	0.2974	0.3142	0.3439	0.3887	0.4179	0.4523	0.5393	0.6554	0.8069	0.8979
1.30	0.2978	0.3033	0.3202	0.3499	0.3949	0.4240	0.4584	0.5450	0.6601	0.8098	0.8995
1.35	0.3038	0.3093	0.3263	0.3561	0.4011	0.4302	0.4645	0.5507	0.6649	0.8128	0.9012
1.40	0.3099	0.3155	0.3325	0.3624	0.4074	0.4365	0.4707	0.5564	0.6697	0.8158	0.9029
1.45	0.3161	0.3217	0.3388	0.3688	0.4138	0.4429	0.4770	0.5622	0.6744	0.8188	0.9045
1.50	0.3225	0.3281	0.3452	0.3753	0.4203	0.4493	0.4833	0.5680	0.6792	0.8217	0.9062
1.55	0.3289	0.3345	0.3517	0.3818	0.4268	0.4558	0.4896	0.5739	0.6840	0.8247	0.9078

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.70

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3354	0.3410	0.3583	0.3884	0.4334	0.4623	0.4960	0.5797	0.6888	0.8276	0.9094
1.65	0.3420	0.3476	0.3649	0.3951	0.4400	0.4688	0.5023	0.5855	0.6936	0.8305	0.9110
1.70	0.3486	0.3543	0.3716	0.4018	0.4466	0.4753	0.5087	0.5914	0.6983	0.8334	0.9126
1.75	0.3553	0.3610	0.3784	0.4085	0.4533	0.4819	0.5151	0.5972	0.7030	0.8363	0.9142
1.80	0.3621	0.3678	0.3852	0.4153	0.4600	0.4885	0.5215	0.6030	0.7077	0.8391	0.9157
1.85	0.3689	0.3746	0.3920	0.4221	0.4667	0.4950	0.5279	0.6087	0.7123	0.8419	0.9172
1.90	0.3757	0.3814	0.3988	0.4289	0.4734	0.5016	0.5343	0.6145	0.7169	0.8446	0.9188
1.95	0.3826	0.3883	0.4057	0.4358	0.4800	0.5082	0.5406	0.6202	0.7215	0.8474	0.9202
2.00	0.3895	0.3952	0.4126	0.4426	0.4867	0.5147	0.5470	0.6258	0.7260	0.8500	0.9217
2.05	0.3964	0.4021	0.4195	0.4494	0.4934	0.5212	0.5533	0.6314	0.7304	0.8527	0.9231
2.10	0.4033	0.4090	0.4264	0.4562	0.5000	0.5277	0.5595	0.6370	0.7348	0.8553	0.9246
2.15	0.4102	0.4159	0.4333	0.4630	0.5066	0.5341	0.5657	0.6425	0.7392	0.8579	0.9260
2.20	0.4172	0.4228	0.4401	0.4698	0.5132	0.5405	0.5719	0.6479	0.7435	0.8604	0.9273
2.25	0.4241	0.4297	0.4470	0.4766	0.5197	0.5469	0.5780	0.6533	0.7477	0.8629	0.9287
2.30	0.4310	0.4366	0.4538	0.4833	0.5262	0.5532	0.5841	0.6587	0.7519	0.8653	0.9300
2.35	0.4379	0.4435	0.4607	0.4900	0.5327	0.5594	0.5901	0.6639	0.7560	0.8677	0.9313
2.40	0.4447	0.4504	0.4674	0.4967	0.5391	0.5656	0.5960	0.6691	0.7600	0.8701	0.9325
2.45	0.4516	0.4572	0.4742	0.5033	0.5454	0.5718	0.6019	0.6743	0.7640	0.8724	0.9338
2.50	0.4584	0.4640	0.4809	0.5099	0.5517	0.5779	0.6077	0.6793	0.7679	0.8747	0.9350
2.55	0.4651	0.4707	0.4876	0.5164	0.5579	0.5839	0.6135	0.6843	0.7718	0.8769	0.9362
2.60	0.4719	0.4774	0.4942	0.5228	0.5641	0.5899	0.6192	0.6893	0.7756	0.8791	0.9374
2.65	0.4786	0.4841	0.5008	0.5283	0.5702	0.5958	0.6248	0.6941	0.7793	0.8812	0.9385
2.70	0.4852	0.4907	0.5073	0.5336	0.5763	0.6015	0.6304	0.6989	0.7830	0.8833	0.9397
2.75	0.4918	0.4973	0.5138	0.5419	0.5823	0.6073	0.6359	0.7037	0.7866	0.8854	0.9408
2.80	0.4984	0.5038	0.5202	0.5481	0.5882	0.6130	0.6413	0.7083	0.7902	0.8874	0.9418
2.85	0.5049	0.5103	0.5266	0.5543	0.5940	0.6187	0.6466	0.7129	0.7937	0.8894	0.9429
2.90	0.5113	0.5167	0.5329	0.5604	0.5998	0.6242	0.6519	0.7174	0.7971	0.8914	0.9439
2.95	0.5177	0.5230	0.5392	0.5665	0.6055	0.6297	0.6571	0.7218	0.8005	0.8933	0.9449
3.00	0.5240	0.5293	0.5453	0.5725	0.6112	0.6351	0.6622	0.7262	0.8038	0.8951	0.9459

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.75

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2178	0.2226	0.2378	0.2651	0.3076	0.3360	0.3703	0.4603	0.5872	0.7627	0.8728
0.05	0.2179	0.2228	0.2380	0.2652	0.3077	0.3362	0.3705	0.4605	0.5873	0.7628	0.8728
0.10	0.2183	0.2232	0.2384	0.2657	0.3082	0.3367	0.3710	0.4610	0.5877	0.7631	0.8730
0.15	0.2190	0.2239	0.2391	0.2664	0.3090	0.3375	0.3718	0.4618	0.5884	0.7635	0.8733
0.20	0.2200	0.2249	0.2401	0.2675	0.3101	0.3385	0.3729	0.4629	0.5894	0.7642	0.8737
0.25	0.2212	0.2261	0.2414	0.2688	0.3115	0.3400	0.3744	0.4643	0.5907	0.7650	0.8742
0.30	0.2228	0.2277	0.2430	0.2705	0.3132	0.3418	0.3761	0.4661	0.5923	0.7661	0.8747
0.35	0.2245	0.2295	0.2449	0.2724	0.3153	0.3439	0.3782	0.4681	0.5941	0.7673	0.8754
0.40	0.2265	0.2315	0.2470	0.2746	0.3176	0.3462	0.3806	0.4705	0.5961	0.7686	0.8762
0.45	0.2289	0.2339	0.2494	0.2771	0.3202	0.3488	0.3833	0.4731	0.5984	0.7702	0.8771
0.50	0.2314	0.2364	0.2520	0.2799	0.3230	0.3518	0.3862	0.4760	0.6010	0.7718	0.8781
0.55	0.2342	0.2393	0.2549	0.2829	0.3262	0.3550	0.3894	0.4791	0.6037	0.7737	0.8791
0.60	0.2373	0.2424	0.2581	0.2862	0.3296	0.3584	0.3929	0.4825	0.6067	0.7756	0.8802
0.65	0.2406	0.2457	0.2615	0.2897	0.3332	0.3621	0.3965	0.4861	0.6099	0.7777	0.8814
0.70	0.2441	0.2492	0.2651	0.2929	0.3371	0.3661	0.4005	0.4900	0.6132	0.7799	0.8826
0.75	0.2479	0.2530	0.2690	0.2975	0.3413	0.3702	0.4048	0.4940	0.6167	0.7821	0.8839
0.80	0.2518	0.2570	0.2731	0.3017	0.3456	0.3746	0.4092	0.4982	0.6204	0.7845	0.8853
0.85	0.2560	0.2612	0.2774	0.3061	0.3502	0.3792	0.4138	0.5027	0.6242	0.7870	0.8867
0.90	0.2604	0.2656	0.2819	0.3107	0.3549	0.3840	0.4186	0.5073	0.6281	0.7895	0.8881
0.95	0.2650	0.2702	0.2866	0.3156	0.3599	0.3890	0.4235	0.5120	0.6322	0.7921	0.8896
1.00	0.2697	0.2750	0.2915	0.3206	0.3650	0.3941	0.4287	0.5169	0.6364	0.7948	0.8911
1.05	0.2746	0.2800	0.2965	0.3258	0.3703	0.3994	0.4339	0.5219	0.6406	0.7975	0.8926
1.10	0.2798	0.2851	0.3018	0.3311	0.3757	0.4049	0.4394	0.5270	0.6450	0.8003	0.8942
1.15	0.2850	0.2904	0.3071	0.3366	0.3813	0.4105	0.4449	0.5323	0.6494	0.8031	0.8958
1.20	0.2904	0.2959	0.3127	0.3422	0.3870	0.4162	0.4506	0.5376	0.6539	0.8059	0.8973
1.25	0.2960	0.3015	0.3183	0.3480	0.3928	0.4220	0.4563	0.5430	0.6584	0.8087	0.8989
1.30	0.3017	0.3072	0.3241	0.3539	0.3988	0.4279	0.4622	0.5484	0.6630	0.8116	0.9005
1.35	0.3075	0.3130	0.3301	0.3599	0.4048	0.4339	0.4681	0.5539	0.6675	0.8145	0.9021
1.40	0.3135	0.3190	0.3361	0.3660	0.4109	0.4400	0.4741	0.5595	0.6722	0.8173	0.9037
1.45	0.3195	0.3251	0.3422	0.3722	0.4171	0.4461	0.4801	0.5651	0.6768	0.8202	0.9053
1.50	0.3257	0.3313	0.3485	0.3785	0.4234	0.4521	0.4862	0.5707	0.6814	0.8231	0.9069
1.55	0.3319	0.3375	0.3548	0.3848	0.4297	0.4585	0.4924	0.5754	0.6860	0.8259	0.9085

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.75

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3382	0.3439	0.3612	0.3912	0.4361	0.4649	0.4985	0.5820	0.6907	0.8287	0.9100
1.65	0.3447	0.3503	0.3676	0.3977	0.4425	0.4713	0.5047	0.5877	0.6953	0.8315	0.9116
1.70	0.3511	0.3568	0.3741	0.4043	0.4490	0.4776	0.5110	0.5933	0.6999	0.8343	0.9131
1.75	0.3577	0.3633	0.3807	0.4108	0.4555	0.4840	0.5172	0.5990	0.7044	0.8371	0.9146
1.80	0.3643	0.3699	0.3873	0.4174	0.4620	0.4904	0.5234	0.6046	0.7090	0.8399	0.9161
1.85	0.3709	0.3766	0.3940	0.4241	0.4685	0.4968	0.5296	0.6102	0.7135	0.8426	0.9176
1.90	0.3775	0.3833	0.4006	0.4307	0.4750	0.5032	0.5358	0.6158	0.7180	0.8452	0.9191
1.95	0.3843	0.3900	0.4073	0.4374	0.4816	0.5095	0.5420	0.6214	0.7224	0.8479	0.9205
2.00	0.3910	0.3967	0.4141	0.4440	0.4881	0.5160	0.5482	0.6269	0.7268	0.8505	0.9220
2.05	0.3978	0.4034	0.4208	0.4507	0.4946	0.5223	0.5543	0.6323	0.7311	0.8531	0.9234
2.10	0.4045	0.4102	0.4275	0.4574	0.5010	0.5285	0.5604	0.6378	0.7354	0.8556	0.9247
2.15	0.4113	0.4170	0.4343	0.4640	0.5075	0.5349	0.5665	0.6431	0.7397	0.8581	0.9261
2.20	0.4181	0.4237	0.4410	0.4706	0.5139	0.5412	0.5725	0.6485	0.7439	0.8606	0.9274
2.25	0.4248	0.4305	0.4477	0.4773	0.5203	0.5474	0.5785	0.6538	0.7480	0.8630	0.9288
2.30	0.4316	0.4372	0.4544	0.4839	0.5267	0.5536	0.5845	0.6590	0.7521	0.8654	0.9300
2.35	0.4383	0.4440	0.4611	0.4904	0.5330	0.5597	0.5904	0.6641	0.7561	0.8678	0.9313
2.40	0.4451	0.4507	0.4678	0.4969	0.5393	0.5658	0.5962	0.6692	0.7601	0.8701	0.9326
2.45	0.4518	0.4574	0.4744	0.5034	0.5455	0.5718	0.6020	0.6743	0.7640	0.8724	0.9338
2.50	0.4585	0.4640	0.4810	0.5099	0.5517	0.5778	0.6077	0.6793	0.7679	0.8746	0.9350
2.55	0.4651	0.4707	0.4875	0.5163	0.5578	0.5837	0.6133	0.6842	0.7717	0.8768	0.9362
2.60	0.4717	0.4773	0.4940	0.5226	0.5639	0.5896	0.6189	0.6890	0.7754	0.8790	0.9373
2.65	0.4783	0.4838	0.5005	0.5289	0.5699	0.5954	0.6245	0.6938	0.7791	0.8811	0.9384
2.70	0.4848	0.4903	0.5069	0.5352	0.5759	0.6011	0.6299	0.6985	0.7827	0.8831	0.9396
2.75	0.4913	0.4968	0.5133	0.5414	0.5817	0.6068	0.6353	0.7032	0.7862	0.8852	0.9406
2.80	0.4978	0.5032	0.5196	0.5475	0.5876	0.6124	0.6407	0.7078	0.7897	0.8872	0.9417
2.85	0.5042	0.5096	0.5259	0.5536	0.5933	0.6180	0.6459	0.7123	0.7932	0.8891	0.9427
2.90	0.5105	0.5159	0.5321	0.5596	0.5990	0.6234	0.6511	0.7167	0.7966	0.8911	0.9438
2.95	0.5168	0.5221	0.5383	0.5656	0.6047	0.6288	0.6563	0.7211	0.7999	0.8929	0.9448
3.00	0.5230	0.5283	0.5444	0.5715	0.6102	0.6342	0.6613	0.7254	0.8032	0.8948	0.9457

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2-80

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2244	0.2293	0.2446	0.2721	0.3149	0.3434	0.3778	0.4676	0.5936	0.7669	0.8752
0.05	0.2245	0.2294	0.2448	0.2723	0.3151	0.3436	0.3779	0.4678	0.5937	0.7670	0.8753
0.10	0.2247	0.2298	0.2452	0.2727	0.3155	0.3441	0.3784	0.4682	0.5941	0.7673	0.8754
0.15	0.2256	0.2305	0.2459	0.2734	0.3163	0.3448	0.3792	0.4690	0.5948	0.7677	0.8757
0.20	0.2265	0.2315	0.2469	0.2745	0.3173	0.3459	0.3803	0.4701	0.5957	0.7683	0.8760
0.25	0.2277	0.2327	0.2481	0.2758	0.3187	0.3473	0.3817	0.4714	0.5969	0.7691	0.8765
0.30	0.2292	0.2342	0.2496	0.2773	0.3203	0.3490	0.3833	0.4731	0.5984	0.7701	0.8771
0.35	0.2309	0.2359	0.2514	0.2792	0.3223	0.3509	0.3853	0.4750	0.6001	0.7712	0.8777
0.40	0.2329	0.2379	0.2535	0.2813	0.3245	0.3532	0.3876	0.4772	0.6020	0.7725	0.8784
0.45	0.2351	0.2401	0.2558	0.2837	0.3270	0.3557	0.3901	0.4797	0.6042	0.7740	0.8793
0.50	0.2376	0.2426	0.2583	0.2864	0.3297	0.3585	0.3930	0.4825	0.6066	0.7755	0.8802
0.55	0.2403	0.2454	0.2611	0.2893	0.3327	0.3615	0.3960	0.4855	0.6092	0.7772	0.8811
0.60	0.2432	0.2483	0.2642	0.2924	0.3360	0.3649	0.3994	0.4887	0.6120	0.7791	0.8822
0.65	0.2464	0.2516	0.2675	0.2958	0.3395	0.3684	0.4029	0.4921	0.6151	0.7810	0.8833
0.70	0.2498	0.2550	0.2710	0.2995	0.3433	0.3722	0.4067	0.4958	0.6182	0.7831	0.8845
0.75	0.2535	0.2586	0.2747	0.3033	0.3472	0.3762	0.4107	0.4997	0.6216	0.7853	0.8857
0.80	0.2573	0.2625	0.2787	0.3074	0.3514	0.3804	0.4150	0.5037	0.6251	0.7875	0.8870
0.85	0.2613	0.2666	0.2828	0.3117	0.3558	0.3848	0.4194	0.5080	0.6287	0.7899	0.8883
0.90	0.2656	0.2709	0.2872	0.3161	0.3604	0.3895	0.4240	0.5124	0.6325	0.7923	0.8897
0.95	0.2700	0.2753	0.2917	0.3208	0.3652	0.3942	0.4287	0.5169	0.6363	0.7948	0.8911
1.00	0.2746	0.2800	0.2965	0.3256	0.3701	0.3992	0.4337	0.5216	0.6403	0.7973	0.8925
1.05	0.2794	0.2848	0.3014	0.3306	0.3752	0.4043	0.4388	0.5264	0.6444	0.7999	0.8940
1.10	0.2843	0.2897	0.3064	0.3358	0.3804	0.4096	0.4440	0.5313	0.6486	0.8025	0.8955
1.15	0.2895	0.2949	0.3116	0.3411	0.3858	0.4149	0.4493	0.5363	0.6528	0.8052	0.8970
1.20	0.2947	0.3002	0.3170	0.3466	0.3913	0.4204	0.4548	0.5415	0.6571	0.8079	0.8985
1.25	0.3001	0.3056	0.3225	0.3522	0.3970	0.4261	0.4603	0.5467	0.6614	0.8106	0.9000
1.30	0.3056	0.3111	0.3281	0.3579	0.4027	0.4318	0.4660	0.5519	0.6658	0.8134	0.9015
1.35	0.3113	0.3168	0.3339	0.3637	0.4086	0.4376	0.4717	0.5572	0.6702	0.8161	0.9030
1.40	0.3171	0.3226	0.3397	0.3696	0.4145	0.4435	0.4775	0.5626	0.6747	0.8189	0.9046
1.45	0.3230	0.3285	0.3457	0.3756	0.4205	0.4493	0.4833	0.5680	0.6792	0.8216	0.9061
1.50	0.3289	0.3345	0.3517	0.3817	0.4266	0.4553	0.4893	0.5735	0.6836	0.8244	0.9076
1.55	0.3350	0.3406	0.3579	0.3879	0.4327	0.4615	0.4952	0.5789	0.6881	0.8271	0.9092

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF R_S WHERE N=2.80

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3412	0.3468	0.3641	0.3941	0.4389	0.4677	0.5012	0.5844	0.6926	0.8299	0.9107
1.65	0.3474	0.3531	0.3704	0.4004	0.4452	0.4738	0.5072	0.5899	0.6970	0.8326	0.9122
1.70	0.3537	0.3594	0.3767	0.4068	0.4515	0.4800	0.5133	0.5954	0.7015	0.8353	0.9136
1.75	0.3601	0.3658	0.3831	0.4132	0.4578	0.4862	0.5193	0.6009	0.7059	0.8380	0.9151
1.80	0.3665	0.3722	0.3895	0.4196	0.4641	0.4925	0.5254	0.6063	0.7103	0.8407	0.9166
1.85	0.3730	0.3787	0.3960	0.4261	0.4704	0.4987	0.5314	0.6118	0.7147	0.8433	0.9180
1.90	0.3795	0.3852	0.4025	0.4326	0.4768	0.5049	0.5375	0.6172	0.7191	0.8459	0.9194
1.95	0.3860	0.3917	0.4091	0.4391	0.4832	0.5111	0.5435	0.6226	0.7234	0.8485	0.9209
2.00	0.3926	0.3983	0.4157	0.4456	0.4895	0.5174	0.5495	0.6280	0.7277	0.8510	0.9222
2.05	0.3992	0.4049	0.4222	0.4521	0.4959	0.5235	0.5555	0.6333	0.7319	0.8535	0.9236
2.10	0.4058	0.4115	0.4288	0.4586	0.5022	0.5297	0.5615	0.6386	0.7361	0.8560	0.9250
2.15	0.4125	0.4181	0.4354	0.4651	0.5085	0.5359	0.5674	0.6439	0.7402	0.8585	0.9263
2.20	0.4191	0.4247	0.4420	0.4716	0.5148	0.5420	0.5733	0.6491	0.7443	0.8609	0.9276
2.25	0.4257	0.4314	0.4486	0.4781	0.5211	0.5481	0.5792	0.6543	0.7484	0.8633	0.9289
2.30	0.4323	0.4380	0.4551	0.4845	0.5273	0.5542	0.5850	0.6594	0.7524	0.8656	0.9301
2.35	0.4389	0.4446	0.4617	0.4909	0.5335	0.5602	0.5907	0.6645	0.7555	0.8679	0.9314
2.40	0.4455	0.4512	0.4682	0.4973	0.5396	0.5661	0.5965	0.6695	0.7602	0.8702	0.9326
2.45	0.4521	0.4577	0.4747	0.5037	0.5457	0.5720	0.6021	0.6744	0.7641	0.8724	0.9338
2.50	0.4587	0.4642	0.4812	0.5100	0.5518	0.5779	0.6077	0.6793	0.7679	0.8746	0.9350
2.55	0.4652	0.4708	0.4876	0.5153	0.5578	0.5837	0.6133	0.6841	0.7716	0.8768	0.9361
2.60	0.4717	0.4772	0.4940	0.5225	0.5638	0.5895	0.6188	0.6889	0.7753	0.8789	0.9373
2.65	0.4782	0.4837	0.5004	0.5287	0.5697	0.5952	0.6242	0.6936	0.7789	0.8810	0.9384
2.70	0.4848	0.4901	0.5067	0.5349	0.5755	0.6008	0.6295	0.6982	0.7824	0.8830	0.9395
2.75	0.4910	0.4964	0.5129	0.5410	0.5813	0.6064	0.6349	0.7028	0.7859	0.8850	0.9405
2.80	0.4973	0.5027	0.5192	0.5470	0.5871	0.6119	0.6402	0.7073	0.7894	0.8870	0.9416
2.85	0.5036	0.5090	0.5253	0.5530	0.5928	0.6174	0.6454	0.7118	0.7928	0.8889	0.9426
2.90	0.5098	0.5152	0.5314	0.5589	0.5984	0.6228	0.6505	0.7162	0.7951	0.8908	0.9436
2.95	0.5160	0.5214	0.5375	0.5648	0.6039	0.6281	0.6555	0.7205	0.7994	0.8927	0.9446
3.00	0.5222	0.5275	0.5435	0.5706	0.6094	0.6334	0.6605	0.7247	0.8026	0.8945	0.9456

TABLES OF CALCULATIONS FOR N.H. WRIGHT EQ.

VALUES OF RS WHERE N=2.85

PAGE 75

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2309	0.2359	0.2514	0.2791	0.3221	0.3507	0.3851	0.4747	0.5998	0.7710	0.8776
0.05	0.2310	0.2360	0.2515	0.2792	0.3222	0.3509	0.3852	0.4748	0.5999	0.7711	0.8776
0.10	0.2314	0.2364	0.2519	0.2796	0.3227	0.3513	0.3857	0.4753	0.6003	0.7713	0.8778
0.15	0.2321	0.2371	0.2526	0.2803	0.3234	0.3520	0.3864	0.4760	0.6009	0.7718	0.8780
0.20	0.2330	0.2380	0.2535	0.2813	0.3244	0.3531	0.3875	0.4770	0.6018	0.7723	0.8783
0.25	0.2341	0.2391	0.2547	0.2826	0.3257	0.3544	0.3888	0.4783	0.6029	0.7731	0.8788
0.30	0.2355	0.2406	0.2562	0.2841	0.3273	0.3560	0.3904	0.4799	0.6043	0.7740	0.8793
0.35	0.2372	0.2422	0.2579	0.2859	0.3291	0.3579	0.3923	0.4817	0.6059	0.7751	0.8799
0.40	0.2391	0.2442	0.2599	0.2879	0.3313	0.3600	0.3945	0.4839	0.6078	0.7763	0.8806
0.45	0.2413	0.2463	0.2621	0.2902	0.3336	0.3624	0.3969	0.4862	0.6098	0.7776	0.8814
0.50	0.2437	0.2488	0.2646	0.2928	0.3363	0.3651	0.3995	0.4888	0.6121	0.7791	0.8822
0.55	0.2463	0.2514	0.2673	0.2956	0.3392	0.3681	0.4025	0.4917	0.6146	0.7807	0.8831
0.60	0.2491	0.2543	0.2702	0.2986	0.3423	0.3712	0.4057	0.4948	0.6173	0.7825	0.8841
0.65	0.2522	0.2574	0.2734	0.3019	0.3457	0.3746	0.4091	0.4981	0.6201	0.7843	0.8852
0.70	0.2555	0.2607	0.2768	0.3054	0.3493	0.3783	0.4128	0.5016	0.6231	0.7863	0.8863
0.75	0.2590	0.2642	0.2804	0.3091	0.3531	0.3821	0.4166	0.5053	0.6253	0.7883	0.8874
0.80	0.2627	0.2680	0.2842	0.3130	0.3572	0.3862	0.4207	0.5091	0.6297	0.7905	0.8887
0.85	0.2666	0.2719	0.2882	0.3172	0.3614	0.3904	0.4249	0.5132	0.6331	0.7927	0.8899
0.90	0.2708	0.2761	0.2925	0.3215	0.3658	0.3949	0.4293	0.5174	0.6367	0.7950	0.8912
0.95	0.2750	0.2804	0.2969	0.3260	0.3704	0.3995	0.4339	0.5218	0.6404	0.7974	0.8925
1.00	0.2795	0.2849	0.3014	0.3307	0.3751	0.4042	0.4387	0.5262	0.6442	0.7998	0.8939
1.05	0.2841	0.2895	0.3062	0.3355	0.3801	0.4092	0.4435	0.5309	0.6481	0.8023	0.8953
1.10	0.2889	0.2944	0.3111	0.3405	0.3851	0.4142	0.4486	0.5356	0.6521	0.8048	0.8967
1.15	0.2939	0.2993	0.3161	0.3456	0.3903	0.4194	0.4537	0.5404	0.6562	0.8073	0.8981
1.20	0.2990	0.3045	0.3213	0.3509	0.3957	0.4247	0.4590	0.5453	0.6603	0.8099	0.8996
1.25	0.3042	0.3097	0.3266	0.3563	0.4011	0.4302	0.4643	0.5503	0.6645	0.8125	0.9010
1.30	0.3096	0.3151	0.3321	0.3619	0.4067	0.4357	0.4698	0.5554	0.6687	0.8152	0.9025
1.35	0.3151	0.3206	0.3377	0.3675	0.4123	0.4413	0.4753	0.5606	0.6730	0.8178	0.9040
1.40	0.3207	0.3263	0.3434	0.3733	0.4181	0.4470	0.4809	0.5657	0.6772	0.8205	0.9054
1.45	0.3264	0.3320	0.3492	0.3791	0.4239	0.4528	0.4866	0.5710	0.6815	0.8231	0.9069
1.50	0.3323	0.3379	0.3550	0.3850	0.4298	0.4586	0.4923	0.5762	0.6859	0.8258	0.9084
1.55	0.3382	0.3438	0.3610	0.3910	0.4358	0.4645	0.4981	0.5815	0.6902	0.8284	0.9099

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RS WHERE N=2.85

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3442	0.3498	0.3670	0.3971	0.4418	0.4703	0.5039	0.5868	0.6945	0.8311	0.9113
1.55	0.3502	0.3559	0.3732	0.4032	0.4479	0.4763	0.5098	0.5922	0.6989	0.8337	0.9128
1.70	0.3554	0.3620	0.3793	0.4094	0.4540	0.4825	0.5156	0.5975	0.7032	0.8363	0.9142
1.75	0.3626	0.3683	0.3856	0.4156	0.4601	0.4885	0.5215	0.6028	0.7075	0.8389	0.9156
1.80	0.3689	0.3745	0.3919	0.4219	0.4663	0.4946	0.5274	0.6081	0.7118	0.8415	0.9170
1.85	0.3752	0.3808	0.3982	0.4282	0.4725	0.5008	0.5333	0.6134	0.7160	0.8441	0.9184
1.90	0.3815	0.3872	0.4045	0.4345	0.4787	0.5067	0.5392	0.6187	0.7202	0.8466	0.9198
1.95	0.3879	0.3936	0.4109	0.4408	0.4849	0.5128	0.5451	0.6240	0.7244	0.8491	0.9212
2.00	0.3943	0.4000	0.4173	0.4472	0.4911	0.5189	0.5509	0.6292	0.7286	0.8516	0.9225
2.05	0.4008	0.4065	0.4238	0.4536	0.4973	0.5249	0.5568	0.6344	0.7327	0.8540	0.9239
2.10	0.4073	0.4129	0.4302	0.4599	0.5034	0.5309	0.5626	0.6396	0.7368	0.8565	0.9252
2.15	0.4137	0.4194	0.4366	0.4663	0.5096	0.5370	0.5684	0.6448	0.7409	0.8588	0.9265
2.20	0.4202	0.4259	0.4431	0.4726	0.5158	0.5429	0.5742	0.6498	0.7449	0.8612	0.9278
2.25	0.4267	0.4323	0.4495	0.4790	0.5219	0.5489	0.5799	0.6549	0.7489	0.8635	0.9290
2.30	0.4332	0.4388	0.4559	0.4853	0.5280	0.5548	0.5856	0.6599	0.7528	0.8658	0.9303
2.35	0.4397	0.4453	0.4624	0.4916	0.5341	0.5607	0.5912	0.6649	0.7566	0.8681	0.9315
2.40	0.4461	0.4517	0.4687	0.4978	0.5401	0.5666	0.5969	0.6698	0.7605	0.8703	0.9327
2.45	0.4526	0.4582	0.4751	0.5041	0.5461	0.5724	0.6024	0.6746	0.7642	0.8725	0.9338
2.50	0.4590	0.4646	0.4815	0.5103	0.5520	0.5781	0.6079	0.6794	0.7679	0.8746	0.9350
2.55	0.4654	0.4710	0.4878	0.5165	0.5579	0.5838	0.6134	0.6842	0.7716	0.8768	0.9361
2.60	0.4718	0.4773	0.4941	0.5226	0.5638	0.5895	0.6188	0.6888	0.7752	0.8788	0.9372
2.65	0.4781	0.4836	0.5003	0.5287	0.5696	0.5951	0.6241	0.6935	0.7788	0.8809	0.9383
2.70	0.4845	0.4899	0.5065	0.5347	0.5753	0.6005	0.6294	0.6980	0.7823	0.8829	0.9394
2.75	0.4907	0.4962	0.5127	0.5407	0.5810	0.6061	0.6346	0.7025	0.7857	0.8849	0.9405
2.80	0.4970	0.5024	0.5188	0.5467	0.5867	0.6116	0.6398	0.7070	0.7891	0.8868	0.9415
2.85	0.5032	0.5086	0.5249	0.5526	0.5923	0.6163	0.6449	0.7114	0.7925	0.8887	0.9425
2.90	0.5093	0.5147	0.5309	0.5584	0.5978	0.6222	0.6500	0.7157	0.7957	0.8906	0.9435
2.95	0.5154	0.5207	0.5369	0.5642	0.6033	0.6275	0.6549	0.7199	0.7990	0.8924	0.9445
3.00	0.5215	0.5268	0.5428	0.5699	0.6087	0.6327	0.6599	0.7241	0.8022	0.8942	0.9454

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.90

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2373	0.2424	0.2580	0.2859	0.3291	0.3878	0.3922	0.4816	0.6058	0.7749	0.8798
0.05	0.2375	0.2425	0.2581	0.2861	0.3293	0.3880	0.3924	0.4817	0.6059	0.7750	0.8799
0.10	0.2378	0.2429	0.2585	0.2865	0.3297	0.3884	0.3928	0.4822	0.6063	0.7752	0.8800
0.15	0.2385	0.2435	0.2592	0.2871	0.3304	0.3891	0.3935	0.4828	0.6069	0.7756	0.8802
0.20	0.2393	0.2444	0.2601	0.2881	0.3314	0.3601	0.3945	0.4838	0.6077	0.7762	0.8805
0.25	0.2405	0.2455	0.2612	0.2893	0.3326	0.3613	0.3957	0.4850	0.6088	0.7769	0.8809
0.30	0.2418	0.2469	0.2626	0.2907	0.3341	0.3629	0.3973	0.4865	0.6101	0.7778	0.8814
0.35	0.2434	0.2485	0.2643	0.2925	0.3359	0.3647	0.3991	0.4883	0.6116	0.7788	0.8820
0.40	0.2453	0.2504	0.2662	0.2944	0.3379	0.3667	0.4012	0.4903	0.6134	0.7799	0.8826
0.45	0.2474	0.2525	0.2684	0.2966	0.3402	0.3691	0.4035	0.4926	0.6153	0.7812	0.8834
0.50	0.2497	0.2548	0.2707	0.2991	0.3428	0.3716	0.4061	0.4951	0.6175	0.7826	0.8842
0.55	0.2522	0.2574	0.2734	0.3018	0.3456	0.3744	0.4088	0.4978	0.6198	0.7841	0.8850
0.60	0.2550	0.2602	0.2762	0.3047	0.3486	0.3775	0.4120	0.5007	0.6224	0.7858	0.8860
0.65	0.2580	0.2632	0.2793	0.3079	0.3518	0.3808	0.4152	0.5039	0.6251	0.7875	0.8870
0.70	0.2611	0.2664	0.2826	0.3113	0.3553	0.3843	0.4187	0.5072	0.6280	0.7894	0.8880
0.75	0.2645	0.2698	0.2860	0.3149	0.3590	0.3880	0.4224	0.5107	0.6310	0.7913	0.8891
0.80	0.2681	0.2734	0.2897	0.3187	0.3628	0.3919	0.4263	0.5145	0.6342	0.7933	0.8903
0.85	0.2719	0.2772	0.2936	0.3226	0.3669	0.3959	0.4304	0.5183	0.6375	0.7955	0.8915
0.90	0.2759	0.2812	0.2977	0.3268	0.3712	0.4002	0.4346	0.5224	0.6409	0.7976	0.8927
0.95	0.2801	0.2854	0.3020	0.3312	0.3756	0.4045	0.4390	0.5265	0.6444	0.7999	0.8940
1.00	0.2844	0.2898	0.3064	0.3357	0.3802	0.4092	0.4436	0.5309	0.6481	0.8022	0.8953
1.05	0.2889	0.2943	0.3110	0.3404	0.3849	0.4140	0.4483	0.5353	0.6518	0.8046	0.8966
1.10	0.2935	0.2990	0.3157	0.3452	0.3898	0.4189	0.4531	0.5398	0.6556	0.8070	0.8979
1.15	0.2984	0.3038	0.3206	0.3502	0.3949	0.4239	0.4581	0.5445	0.6595	0.8094	0.8993
1.20	0.3033	0.3088	0.3257	0.3553	0.4000	0.4290	0.4632	0.5492	0.6635	0.8119	0.9007
1.25	0.3084	0.3139	0.3308	0.3605	0.4053	0.4343	0.4684	0.5540	0.6675	0.8144	0.9021
1.30	0.3136	0.3191	0.3361	0.3659	0.4107	0.4395	0.4735	0.5589	0.6716	0.8169	0.9035
1.35	0.3189	0.3245	0.3415	0.3714	0.4161	0.4451	0.4790	0.5639	0.6757	0.8195	0.9049
1.40	0.3244	0.3300	0.3471	0.3769	0.4217	0.4506	0.4844	0.5689	0.6798	0.8220	0.9063
1.45	0.3300	0.3355	0.3527	0.3826	0.4274	0.4562	0.4899	0.5740	0.6840	0.8246	0.9077
1.50	0.3356	0.3412	0.3584	0.3884	0.4331	0.4619	0.4954	0.5791	0.6881	0.8271	0.9091
1.55	0.3414	0.3470	0.3642	0.3942	0.4389	0.4676	0.5010	0.5842	0.6923	0.8297	0.9106

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.90

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3472	0.3528	0.3701	0.4001	0.4447	0.4733	0.5067	0.5893	0.6965	0.8323	0.9120
1.65	0.3531	0.3588	0.3760	0.4060	0.4506	0.4792	0.5124	0.5945	0.7007	0.8348	0.9134
1.70	0.3591	0.3648	0.3820	0.4121	0.4566	0.4850	0.5181	0.5997	0.7049	0.8373	0.9148
1.75	0.3652	0.3708	0.3881	0.4181	0.4625	0.4909	0.5238	0.6048	0.7091	0.8399	0.9161
1.80	0.3713	0.3769	0.3942	0.4242	0.4685	0.4968	0.5295	0.6100	0.7132	0.8424	0.9175
1.85	0.3774	0.3831	0.4004	0.4304	0.4746	0.5027	0.5352	0.6152	0.7174	0.8449	0.9189
1.90	0.3836	0.3893	0.4066	0.4365	0.4806	0.5088	0.5410	0.6203	0.7215	0.8473	0.9202
1.95	0.3899	0.3955	0.4128	0.4427	0.4866	0.5145	0.5467	0.6254	0.7256	0.8498	0.9215
2.00	0.3961	0.4018	0.4191	0.4489	0.4927	0.5204	0.5524	0.6305	0.7296	0.8522	0.9229
2.05	0.4024	0.4081	0.4254	0.4551	0.4987	0.5263	0.5581	0.6356	0.7337	0.8546	0.9242
2.10	0.4088	0.4144	0.4317	0.4613	0.5048	0.5322	0.5638	0.6407	0.7376	0.8569	0.9254
2.15	0.4151	0.4208	0.4380	0.4676	0.5108	0.5381	0.5695	0.6457	0.7416	0.8593	0.9267
2.20	0.4214	0.4271	0.4443	0.4738	0.5168	0.5440	0.5751	0.6507	0.7455	0.8616	0.9280
2.25	0.4278	0.4334	0.4506	0.4800	0.5228	0.5498	0.5807	0.6556	0.7494	0.8638	0.9292
2.30	0.4341	0.4398	0.4569	0.4862	0.5288	0.5556	0.5863	0.6605	0.7532	0.8661	0.9304
2.35	0.4405	0.4461	0.4631	0.4923	0.5347	0.5613	0.5918	0.6654	0.7570	0.8683	0.9316
2.40	0.4468	0.4524	0.4694	0.4985	0.5406	0.5671	0.5973	0.6702	0.7607	0.8705	0.9328
2.45	0.4532	0.4587	0.4757	0.5046	0.5465	0.5728	0.6028	0.6749	0.7644	0.8726	0.9339
2.50	0.4595	0.4650	0.4819	0.5107	0.5524	0.5784	0.6082	0.6796	0.7681	0.8747	0.9350
2.55	0.4657	0.4713	0.4881	0.5167	0.5581	0.5840	0.6135	0.6843	0.7717	0.8768	0.9362
2.60	0.4720	0.4775	0.4942	0.5227	0.5639	0.5896	0.6189	0.6889	0.7752	0.8788	0.9372
2.65	0.4782	0.4837	0.5004	0.5287	0.5696	0.5951	0.6241	0.6934	0.7787	0.8809	0.9383
2.70	0.4844	0.4899	0.5065	0.5347	0.5753	0.6003	0.6293	0.6979	0.7822	0.8828	0.9394
2.75	0.4906	0.4961	0.5125	0.5406	0.5809	0.6059	0.6344	0.7023	0.7856	0.8848	0.9404
2.80	0.4967	0.5022	0.5186	0.5464	0.5864	0.6113	0.6395	0.7067	0.7889	0.8867	0.9414
2.85	0.5028	0.5082	0.5245	0.5522	0.5919	0.6166	0.6446	0.7110	0.7922	0.8886	0.9424
2.90	0.5089	0.5142	0.5305	0.5580	0.5974	0.6218	0.6495	0.7153	0.7954	0.8904	0.9434
2.95	0.5149	0.5202	0.5363	0.5636	0.6028	0.6270	0.6544	0.7195	0.7986	0.8922	0.9444
3.00	0.5209	0.5262	0.5422	0.5693	0.6081	0.6321	0.6593	0.7236	0.8018	0.8940	0.9453

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=2.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2437	0.2488	0.2646	0.2927	0.3360	0.3648	0.3992	0.4883	0.6116	0.7787	0.8820
0.05	0.2438	0.2489	0.2647	0.2928	0.3362	0.3649	0.3993	0.4884	0.6117	0.7788	0.8820
0.10	0.2442	0.2493	0.2651	0.2932	0.3366	0.3653	0.3997	0.4888	0.6120	0.7790	0.8821
0.15	0.2448	0.2499	0.2657	0.2938	0.3372	0.3660	0.4004	0.4895	0.6126	0.7794	0.8824
0.20	0.2456	0.2507	0.2665	0.2947	0.3382	0.3670	0.4014	0.4904	0.6134	0.7799	0.8827
0.25	0.2467	0.2518	0.2677	0.2959	0.3394	0.3682	0.4026	0.4916	0.6144	0.7806	0.8830
0.30	0.2480	0.2532	0.2690	0.2973	0.3408	0.3696	0.4040	0.4930	0.6157	0.7814	0.8835
0.35	0.2496	0.2547	0.2706	0.2989	0.3425	0.3714	0.4058	0.4947	0.6171	0.7823	0.8840
0.40	0.2514	0.2565	0.2725	0.3008	0.3445	0.3733	0.4078	0.4966	0.6188	0.7834	0.8846
0.45	0.2534	0.2586	0.2745	0.3030	0.3467	0.3755	0.4100	0.4988	0.6206	0.7846	0.8853
0.50	0.2556	0.2608	0.2769	0.3054	0.3491	0.3780	0.4126	0.5011	0.6227	0.7859	0.8861
0.55	0.2581	0.2633	0.2794	0.3080	0.3518	0.3807	0.4152	0.5037	0.6249	0.7874	0.8869
0.60	0.2608	0.2660	0.2821	0.3108	0.3547	0.3837	0.4181	0.5065	0.6274	0.7889	0.8878
0.65	0.2637	0.2689	0.2851	0.3138	0.3579	0.3868	0.4212	0.5096	0.6299	0.7906	0.8887
0.70	0.2667	0.2720	0.2883	0.3171	0.3612	0.3902	0.4246	0.5128	0.6327	0.7924	0.8897
0.75	0.2700	0.2753	0.2916	0.3206	0.3647	0.3937	0.4281	0.5161	0.6356	0.7942	0.8908
0.80	0.2735	0.2788	0.2952	0.3242	0.3685	0.3975	0.4319	0.5197	0.6386	0.7962	0.8919
0.85	0.2772	0.2825	0.2990	0.3281	0.3724	0.4014	0.4358	0.5234	0.6417	0.7982	0.8930
0.90	0.2810	0.2864	0.3029	0.3321	0.3765	0.4055	0.4399	0.5273	0.6450	0.8002	0.8942
0.95	0.2851	0.2904	0.3070	0.3363	0.3808	0.4098	0.4441	0.5313	0.6484	0.8024	0.8954
1.00	0.2893	0.2947	0.3113	0.3407	0.3852	0.4142	0.4485	0.5354	0.6519	0.8046	0.8966
1.05	0.2936	0.2990	0.3158	0.3452	0.3898	0.4188	0.4530	0.5397	0.6555	0.8069	0.8979
1.10	0.2981	0.3036	0.3204	0.3499	0.3945	0.4235	0.4577	0.5440	0.6591	0.8092	0.8992
1.15	0.3028	0.3083	0.3251	0.3547	0.3994	0.4284	0.4626	0.5485	0.6629	0.8115	0.9005
1.20	0.3076	0.3131	0.3300	0.3597	0.4043	0.4333	0.4674	0.5531	0.6667	0.8139	0.9018
1.25	0.3126	0.3181	0.3350	0.3647	0.4094	0.4384	0.4724	0.5577	0.6705	0.8163	0.9031
1.30	0.3176	0.3232	0.3402	0.3699	0.4147	0.4435	0.4775	0.5625	0.6745	0.8187	0.9045
1.35	0.3228	0.3284	0.3454	0.3752	0.4200	0.4488	0.4827	0.5672	0.6784	0.8211	0.9058
1.40	0.3281	0.3337	0.3508	0.3806	0.4254	0.4542	0.4879	0.5721	0.6824	0.8236	0.9072
1.45	0.3335	0.3391	0.3562	0.3861	0.4308	0.4595	0.4932	0.5770	0.6864	0.8261	0.9085
1.50	0.3390	0.3446	0.3618	0.3917	0.4364	0.4651	0.4986	0.5819	0.6904	0.8285	0.9099
1.55	0.3446	0.3502	0.3674	0.3974	0.4420	0.4705	0.5040	0.5869	0.6945	0.8310	0.9113

TABLES OF CALCULATIONS FOR W.H. WRIGHT E60.

VALUES OF RS WHERE N=2.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3503	0.3559	0.3732	0.4031	0.4477	0.4762	0.5095	0.5918	0.6985	0.8335	0.9126
1.65	0.3561	0.3617	0.3790	0.4089	0.4534	0.4819	0.5150	0.5968	0.7026	0.8359	0.9140
1.70	0.3619	0.3675	0.3848	0.4148	0.4592	0.4876	0.5205	0.6019	0.7066	0.8384	0.9153
1.75	0.3678	0.3734	0.3907	0.4207	0.4650	0.4933	0.5261	0.6069	0.7107	0.8408	0.9167
1.80	0.3738	0.3794	0.3967	0.4266	0.4709	0.4990	0.5317	0.6119	0.7147	0.8433	0.9180
1.85	0.3798	0.3854	0.4027	0.4326	0.4767	0.5048	0.5373	0.6169	0.7188	0.8457	0.9193
1.90	0.3858	0.3915	0.4088	0.4386	0.4826	0.5105	0.5428	0.6219	0.7228	0.8481	0.9206
1.95	0.3919	0.3976	0.4148	0.4447	0.4885	0.5163	0.5484	0.6269	0.7267	0.8505	0.9219
2.00	0.3980	0.4037	0.4210	0.4507	0.4944	0.5221	0.5540	0.6319	0.7307	0.8528	0.9232
2.05	0.4042	0.4098	0.4271	0.4568	0.5003	0.5278	0.5595	0.6369	0.7346	0.8551	0.9245
2.10	0.4104	0.4160	0.4332	0.4629	0.5062	0.5336	0.5651	0.6418	0.7385	0.8574	0.9257
2.15	0.4166	0.4222	0.4394	0.4689	0.5121	0.5393	0.5707	0.6467	0.7424	0.8597	0.9269
2.20	0.4228	0.4284	0.4456	0.4750	0.5180	0.5451	0.5762	0.6516	0.7462	0.8620	0.9282
2.25	0.4290	0.4346	0.4517	0.4811	0.5239	0.5508	0.5817	0.6564	0.7500	0.8642	0.9294
2.30	0.4352	0.4408	0.4579	0.4871	0.5297	0.5564	0.5871	0.6612	0.7537	0.8664	0.9305
2.35	0.4414	0.4470	0.4640	0.4932	0.5355	0.5621	0.5925	0.6659	0.7574	0.8685	0.9317
2.40	0.4476	0.4532	0.4702	0.4992	0.5413	0.5677	0.5979	0.6706	0.7611	0.8707	0.9329
2.45	0.4538	0.4594	0.4763	0.5052	0.5471	0.5733	0.6033	0.6753	0.7647	0.8728	0.9340
2.50	0.4600	0.4656	0.4824	0.5112	0.5528	0.5788	0.6086	0.6799	0.7683	0.8748	0.9351
2.55	0.4662	0.4717	0.4885	0.5171	0.5585	0.5843	0.6138	0.6845	0.7718	0.8769	0.9362
2.60	0.4723	0.4778	0.4945	0.5230	0.5641	0.5898	0.6190	0.6890	0.7753	0.8789	0.9373
2.65	0.4785	0.4839	0.5006	0.5289	0.5697	0.5952	0.6242	0.6935	0.7787	0.8809	0.9383
2.70	0.4845	0.4900	0.5066	0.5347	0.5753	0.6005	0.6293	0.6979	0.7821	0.8828	0.9394
2.75	0.4906	0.4960	0.5125	0.5405	0.5808	0.6058	0.6343	0.7022	0.7855	0.8847	0.9404
2.80	0.4966	0.5020	0.5184	0.5463	0.5863	0.6111	0.6394	0.7065	0.7888	0.8866	0.9414
2.85	0.5026	0.5080	0.5243	0.5520	0.5917	0.6163	0.6443	0.7108	0.7920	0.8884	0.9424
2.90	0.5086	0.5139	0.5301	0.5576	0.5970	0.6215	0.6492	0.7150	0.7952	0.8903	0.9433
2.95	0.5145	0.5198	0.5359	0.5632	0.6023	0.6265	0.6540	0.7191	0.7983	0.8920	0.9443
3.00	0.5204	0.5257	0.5417	0.5688	0.6076	0.6315	0.6588	0.7232	0.8014	0.8938	0.9452

TABLES OF CALCULATIONS FOR M.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2500	0.2551	0.2710	0.2993	0.3428	0.3718	0.4060	0.4949	0.6172	0.7824	0.8841
0.05	0.2501	0.2552	0.2711	0.2994	0.3430	0.3718	0.4061	0.4950	0.6173	0.7824	0.8841
0.10	0.2505	0.2556	0.2715	0.2998	0.3433	0.3721	0.4065	0.4954	0.6177	0.7827	0.8842
0.15	0.2511	0.2562	0.2721	0.3004	0.3440	0.3728	0.4072	0.4960	0.6182	0.7830	0.8844
0.20	0.2519	0.2570	0.2729	0.3013	0.3449	0.3737	0.4081	0.4969	0.6190	0.7835	0.8847
0.25	0.2529	0.2581	0.2740	0.3024	0.3460	0.3749	0.4092	0.4980	0.6199	0.7841	0.8851
0.30	0.2542	0.2593	0.2753	0.3037	0.3474	0.3763	0.4107	0.4994	0.6211	0.7849	0.8855
0.35	0.2557	0.2609	0.2769	0.3053	0.3491	0.3779	0.4123	0.5009	0.6225	0.7858	0.8860
0.40	0.2574	0.2626	0.2787	0.3072	0.3510	0.3798	0.4142	0.5028	0.6241	0.7868	0.8866
0.45	0.2594	0.2646	0.2807	0.3092	0.3531	0.3820	0.4164	0.5048	0.6258	0.7879	0.8872
0.50	0.2615	0.2667	0.2829	0.3115	0.3554	0.3843	0.4187	0.5071	0.6278	0.7892	0.8879
0.55	0.2639	0.2691	0.2853	0.3140	0.3580	0.3869	0.4213	0.5096	0.6299	0.7906	0.8887
0.60	0.2665	0.2717	0.2880	0.3168	0.3608	0.3897	0.4241	0.5123	0.6322	0.7921	0.8895
0.65	0.2693	0.2746	0.2909	0.3197	0.3638	0.3928	0.4271	0.5151	0.6347	0.7936	0.8904
0.70	0.2723	0.2776	0.2939	0.3228	0.3670	0.3960	0.4303	0.5182	0.6373	0.7953	0.8914
0.75	0.2755	0.2808	0.2972	0.3262	0.3704	0.3994	0.4338	0.5214	0.6400	0.7971	0.8924
0.80	0.2788	0.2842	0.3006	0.3297	0.3740	0.4030	0.4373	0.5248	0.6429	0.7989	0.8934
0.85	0.2824	0.2878	0.3043	0.3334	0.3778	0.4068	0.4411	0.5284	0.6459	0.8008	0.8945
0.90	0.2861	0.2915	0.3081	0.3373	0.3818	0.4108	0.4450	0.5321	0.6491	0.8028	0.8956
0.95	0.2900	0.2954	0.3121	0.3414	0.3859	0.4149	0.4491	0.5360	0.6523	0.8048	0.8967
1.00	0.2941	0.2995	0.3162	0.3456	0.3902	0.4192	0.4534	0.5399	0.6557	0.8070	0.8979
1.05	0.2983	0.3038	0.3205	0.3500	0.3946	0.4236	0.4577	0.5440	0.6591	0.8091	0.8991
1.10	0.3027	0.3082	0.3250	0.3545	0.3991	0.4281	0.4622	0.5482	0.6626	0.8113	0.9004
1.15	0.3073	0.3127	0.3296	0.3592	0.4038	0.4328	0.4668	0.5525	0.6662	0.8136	0.9016
1.20	0.3119	0.3174	0.3343	0.3640	0.4087	0.4376	0.4716	0.5569	0.6699	0.8158	0.9029
1.25	0.3167	0.3222	0.3392	0.3689	0.4136	0.4425	0.4764	0.5614	0.6736	0.8181	0.9042
1.30	0.3217	0.3272	0.3442	0.3740	0.4187	0.4475	0.4813	0.5660	0.6773	0.8205	0.9054
1.35	0.3267	0.3322	0.3493	0.3791	0.4238	0.4526	0.4863	0.5706	0.6811	0.8228	0.9067
1.40	0.3318	0.3374	0.3545	0.3844	0.4290	0.4578	0.4914	0.5753	0.6850	0.8252	0.9081
1.45	0.3371	0.3427	0.3598	0.3897	0.4343	0.4630	0.4966	0.5800	0.6888	0.8276	0.9094
1.50	0.3425	0.3481	0.3652	0.3951	0.4397	0.4684	0.5018	0.5848	0.6927	0.8299	0.9107
1.55	0.3479	0.3535	0.3707	0.4006	0.4452	0.4738	0.5070	0.5896	0.6967	0.8323	0.9120

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=3.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3534	0.3591	0.3763	0.4062	0.4507	0.4792	0.5124	0.5944	0.7006	0.8347	0.9133
1.65	0.3591	0.3647	0.3819	0.4119	0.4563	0.4847	0.5177	0.5992	0.7045	0.8371	0.9146
1.70	0.3647	0.3704	0.3876	0.4176	0.4619	0.4902	0.5231	0.6041	0.7084	0.8395	0.9159
1.75	0.3705	0.3761	0.3934	0.4233	0.4675	0.4958	0.5285	0.6090	0.7124	0.8418	0.9172
1.80	0.3763	0.3819	0.3992	0.4291	0.4732	0.5013	0.5339	0.6139	0.7163	0.8442	0.9185
1.85	0.3822	0.3878	0.4051	0.4349	0.4790	0.5069	0.5393	0.6188	0.7202	0.8465	0.9198
1.90	0.3881	0.3937	0.4110	0.4408	0.4847	0.5126	0.5448	0.6236	0.7241	0.8489	0.9211
1.95	0.3940	0.3997	0.4169	0.4467	0.4904	0.5182	0.5502	0.6295	0.7280	0.8512	0.9223
2.00	0.4000	0.4056	0.4229	0.4525	0.4962	0.5238	0.5557	0.6334	0.7318	0.8535	0.9236
2.05	0.4060	0.4117	0.4289	0.4585	0.5020	0.5294	0.5611	0.6382	0.7356	0.8557	0.9248
2.10	0.4121	0.4177	0.4349	0.4644	0.5077	0.5351	0.5665	0.6430	0.7394	0.8580	0.9260
2.15	0.4181	0.4237	0.4409	0.4704	0.5135	0.5407	0.5719	0.6478	0.7432	0.8602	0.9272
2.20	0.4242	0.4298	0.4469	0.4763	0.5192	0.5463	0.5773	0.6525	0.7469	0.8624	0.9284
2.25	0.4303	0.4359	0.4530	0.4823	0.5250	0.5518	0.5827	0.6573	0.7506	0.8646	0.9296
2.30	0.4364	0.4420	0.4590	0.4882	0.5307	0.5574	0.5880	0.6619	0.7543	0.8667	0.9307
2.35	0.4424	0.4480	0.4650	0.4941	0.5364	0.5629	0.5933	0.6666	0.7579	0.8688	0.9319
2.40	0.4485	0.4541	0.4710	0.5000	0.5421	0.5684	0.5986	0.6712	0.7615	0.8709	0.9330
2.45	0.4545	0.4602	0.4770	0.5069	0.5477	0.5739	0.6038	0.6758	0.7651	0.8730	0.9341
2.50	0.4607	0.4662	0.4830	0.5117	0.5533	0.5793	0.6090	0.6803	0.7686	0.8750	0.9352
2.55	0.4667	0.4722	0.4890	0.5176	0.5589	0.5847	0.6142	0.6848	0.7720	0.8770	0.9363
2.60	0.4728	0.4783	0.4949	0.5234	0.5644	0.5901	0.6193	0.6892	0.7755	0.8790	0.9373
2.65	0.4788	0.4842	0.5009	0.5291	0.5699	0.5954	0.6244	0.6936	0.7788	0.8809	0.9383
2.70	0.4848	0.4902	0.5067	0.5349	0.5754	0.6005	0.6294	0.6979	0.7822	0.8828	0.9394
2.75	0.4907	0.4961	0.5126	0.5406	0.5808	0.6059	0.6343	0.7022	0.7854	0.8847	0.9404
2.80	0.4966	0.5020	0.5184	0.5462	0.5862	0.6110	0.6393	0.7065	0.7887	0.8865	0.9414
2.85	0.5025	0.5079	0.5242	0.5518	0.5915	0.6162	0.6441	0.7106	0.7919	0.8884	0.9423
2.90	0.5084	0.5137	0.5299	0.5574	0.5968	0.6212	0.6490	0.7148	0.7950	0.8901	0.9433
2.95	0.5142	0.5195	0.5356	0.5629	0.6020	0.6262	0.6537	0.7188	0.7981	0.8919	0.9442
3.00	0.5200	0.5253	0.5413	0.5684	0.6072	0.6312	0.6584	0.7229	0.8012	0.8936	0.9451

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RS WHERE N=3.05

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2562	0.2614	0.2774	0.3058	0.3495	0.3783	0.4127	0.5012	0.6227	0.7859	0.8861
0.05	0.2563	0.2615	0.2775	0.3059	0.3496	0.3784	0.4128	0.5014	0.6228	0.7860	0.8861
0.10	0.2567	0.2618	0.2778	0.3063	0.3500	0.3788	0.4132	0.5017	0.6231	0.7862	0.8862
0.15	0.2572	0.2624	0.2784	0.3069	0.3506	0.3794	0.4138	0.5023	0.6236	0.7865	0.8864
0.20	0.2580	0.2632	0.2792	0.3077	0.3515	0.3803	0.4147	0.5032	0.6244	0.7870	0.8867
0.25	0.2590	0.2642	0.2803	0.3088	0.3526	0.3814	0.4158	0.5042	0.6253	0.7876	0.8870
0.30	0.2603	0.2655	0.2815	0.3101	0.3539	0.3828	0.4171	0.5055	0.6264	0.7883	0.8874
0.35	0.2617	0.2669	0.2830	0.3116	0.3555	0.3844	0.4187	0.5070	0.6277	0.7891	0.8879
0.40	0.2634	0.2686	0.2848	0.3134	0.3573	0.3862	0.4205	0.5088	0.6292	0.7901	0.8884
0.45	0.2653	0.2705	0.2867	0.3154	0.3593	0.3882	0.4226	0.5108	0.6309	0.7912	0.8890
0.50	0.2674	0.2726	0.2888	0.3176	0.3616	0.3905	0.4249	0.5129	0.6327	0.7924	0.8897
0.55	0.2697	0.2749	0.2912	0.3200	0.3641	0.3930	0.4274	0.5153	0.6348	0.7937	0.8905
0.60	0.2722	0.2775	0.2938	0.3227	0.3668	0.3957	0.4300	0.5179	0.6370	0.7951	0.8912
0.65	0.2748	0.2802	0.2965	0.3255	0.3697	0.3986	0.4329	0.5206	0.6393	0.7966	0.8921
0.70	0.2778	0.2831	0.2995	0.3285	0.3728	0.4017	0.4360	0.5235	0.6418	0.7982	0.8930
0.75	0.2809	0.2862	0.3027	0.3318	0.3760	0.4050	0.4393	0.5266	0.6444	0.7998	0.8939
0.80	0.2841	0.2895	0.3060	0.3352	0.3795	0.4085	0.4428	0.5299	0.6472	0.8016	0.8949
0.85	0.2876	0.2930	0.3095	0.3388	0.3832	0.4121	0.4464	0.5333	0.6501	0.8034	0.8959
0.90	0.2912	0.2966	0.3132	0.3425	0.3870	0.4159	0.4502	0.5369	0.6531	0.8053	0.8970
0.95	0.2950	0.3004	0.3171	0.3465	0.3910	0.4199	0.4541	0.5406	0.6562	0.8073	0.8981
1.00	0.2990	0.3044	0.3211	0.3506	0.3951	0.4240	0.4582	0.5444	0.6594	0.8093	0.8992
1.05	0.3031	0.3085	0.3253	0.3548	0.3994	0.4283	0.4624	0.5483	0.6627	0.8113	0.9004
1.10	0.3073	0.3128	0.3296	0.3592	0.4038	0.4327	0.4667	0.5524	0.6660	0.8134	0.9015
1.15	0.3117	0.3172	0.3341	0.3637	0.4083	0.4372	0.4712	0.5565	0.6695	0.8156	0.9027
1.20	0.3162	0.3217	0.3387	0.3684	0.4130	0.4419	0.4757	0.5608	0.6730	0.8178	0.9039
1.25	0.3209	0.3264	0.3434	0.3731	0.4178	0.4465	0.4804	0.5651	0.6766	0.8200	0.9052
1.30	0.3257	0.3312	0.3483	0.3780	0.4227	0.4514	0.4852	0.5695	0.6802	0.8222	0.9064
1.35	0.3306	0.3361	0.3532	0.3830	0.4276	0.4564	0.4900	0.5739	0.6839	0.8245	0.9077
1.40	0.3356	0.3412	0.3583	0.3881	0.4327	0.4614	0.4949	0.5785	0.6876	0.8268	0.9089
1.45	0.3407	0.3463	0.3634	0.3933	0.4379	0.4665	0.4999	0.5830	0.6913	0.8291	0.9102
1.50	0.3459	0.3515	0.3687	0.3986	0.4431	0.4717	0.5050	0.5876	0.6951	0.8313	0.9115
1.55	0.3512	0.3568	0.3740	0.4039	0.4484	0.4769	0.5101	0.5923	0.6988	0.8337	0.9127

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3566	0.3622	0.3795	0.4093	0.4538	0.4822	0.5152	0.5970	0.7026	0.8360	0.9140
1.65	0.3621	0.3677	0.3849	0.4148	0.4592	0.4875	0.5204	0.6017	0.7065	0.8383	0.9153
1.70	0.3676	0.3733	0.3905	0.4204	0.4646	0.4929	0.5257	0.6054	0.7103	0.8406	0.9165
1.75	0.3732	0.3789	0.3961	0.4260	0.4701	0.4983	0.5309	0.6111	0.7141	0.8429	0.9178
1.80	0.3788	0.3845	0.4018	0.4316	0.4757	0.5037	0.5362	0.6159	0.7179	0.8451	0.9190
1.85	0.3846	0.3903	0.4075	0.4373	0.4812	0.5092	0.5415	0.6206	0.7217	0.8474	0.9203
1.90	0.3904	0.3960	0.4133	0.4430	0.4868	0.5146	0.5468	0.6254	0.7255	0.8497	0.9215
1.95	0.3962	0.4018	0.4191	0.4488	0.4924	0.5201	0.5521	0.6301	0.7292	0.8519	0.9227
2.00	0.4020	0.4077	0.4249	0.4545	0.4981	0.5258	0.5574	0.6348	0.7330	0.8541	0.9239
2.05	0.4079	0.4135	0.4307	0.4603	0.5037	0.5311	0.5627	0.6396	0.7367	0.8564	0.9251
2.10	0.4138	0.4194	0.4366	0.4661	0.5093	0.5366	0.5680	0.6443	0.7404	0.8585	0.9263
2.15	0.4197	0.4254	0.4425	0.4719	0.5149	0.5421	0.5733	0.6489	0.7441	0.8607	0.9275
2.20	0.4257	0.4313	0.4484	0.4777	0.5206	0.5475	0.5785	0.6536	0.7477	0.8628	0.9286
2.25	0.4316	0.4372	0.4543	0.4835	0.5262	0.5530	0.5838	0.6582	0.7514	0.8650	0.9298
2.30	0.4376	0.4432	0.4602	0.4893	0.5318	0.5584	0.5890	0.6628	0.7549	0.8671	0.9309
2.35	0.4436	0.4491	0.4661	0.4951	0.5373	0.5638	0.5942	0.6673	0.7585	0.8691	0.9320
2.40	0.4495	0.4551	0.4720	0.5009	0.5429	0.5692	0.5993	0.6718	0.7620	0.8712	0.9331
2.45	0.4555	0.4610	0.4779	0.5067	0.5484	0.5746	0.6045	0.6753	0.7655	0.8732	0.9342
2.50	0.4614	0.4670	0.4838	0.5124	0.5539	0.5799	0.6095	0.6807	0.7689	0.8752	0.9353
2.55	0.4674	0.4729	0.4896	0.5181	0.5594	0.5852	0.6146	0.6851	0.7723	0.8771	0.9363
2.60	0.4733	0.4788	0.4954	0.5238	0.5649	0.5904	0.6196	0.6895	0.7757	0.8791	0.9374
2.65	0.4792	0.4847	0.5012	0.5295	0.5703	0.5957	0.6246	0.6938	0.7790	0.8810	0.9384
2.70	0.4851	0.4905	0.5070	0.5351	0.5756	0.6008	0.6295	0.6981	0.7822	0.8829	0.9394
2.75	0.4909	0.4963	0.5128	0.5407	0.5809	0.6060	0.6344	0.7023	0.7855	0.8847	0.9404
2.80	0.4968	0.5021	0.5185	0.5463	0.5862	0.6110	0.6393	0.7064	0.7887	0.8865	0.9413
2.85	0.5026	0.5079	0.5242	0.5518	0.5915	0.6161	0.6441	0.7106	0.7918	0.8883	0.9423
2.90	0.5085	0.5137	0.5298	0.5573	0.5967	0.6211	0.6488	0.7146	0.7949	0.8901	0.9432
2.95	0.5140	0.5194	0.5354	0.5627	0.6018	0.6260	0.6535	0.7186	0.7979	0.8918	0.9442
3.00	0.5197	0.5250	0.5410	0.5681	0.6069	0.6309	0.6581	0.7226	0.8009	0.8935	0.9451

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3-10

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2623	0.2675	0.2836	0.3122	0.3560	0.3849	0.4192	0.5075	0.6280	0.7893	0.8880
0.05	0.2625	0.2677	0.2838	0.3123	0.3561	0.3850	0.4193	0.5076	0.6281	0.7894	0.8880
0.10	0.2628	0.2680	0.2841	0.3127	0.3565	0.3854	0.4197	0.5079	0.6284	0.7896	0.8881
0.15	0.2633	0.2685	0.2847	0.3133	0.3571	0.3860	0.4203	0.5085	0.6289	0.7899	0.8883
0.20	0.2641	0.2693	0.2854	0.3141	0.3579	0.3868	0.4211	0.5093	0.6296	0.7903	0.8886
0.25	0.2651	0.2703	0.2864	0.3151	0.3590	0.3879	0.4222	0.5103	0.6305	0.7909	0.8889
0.30	0.2663	0.2715	0.2877	0.3164	0.3603	0.3892	0.4235	0.5115	0.6315	0.7916	0.8893
0.35	0.2677	0.2729	0.2891	0.3178	0.3618	0.3907	0.4250	0.5130	0.6328	0.7924	0.8897
0.40	0.2693	0.2745	0.2908	0.3195	0.3635	0.3924	0.4268	0.5147	0.6342	0.7933	0.8902
0.45	0.2711	0.2764	0.2927	0.3215	0.3655	0.3944	0.4287	0.5165	0.6358	0.7943	0.8908
0.50	0.2732	0.2784	0.2947	0.3236	0.3677	0.3966	0.4309	0.5186	0.6376	0.7955	0.8915
0.55	0.2754	0.2807	0.2970	0.3259	0.3701	0.3990	0.4333	0.5209	0.6395	0.7967	0.8921
0.60	0.2778	0.2831	0.2995	0.3285	0.3727	0.4016	0.4359	0.5233	0.6416	0.7980	0.8929
0.65	0.2804	0.2857	0.3022	0.3312	0.3754	0.4044	0.4387	0.5260	0.6438	0.7994	0.8937
0.70	0.2832	0.2886	0.3051	0.3342	0.3784	0.4074	0.4416	0.5288	0.6462	0.8009	0.8945
0.75	0.2862	0.2916	0.3081	0.3373	0.3816	0.4105	0.4448	0.5318	0.6487	0.8025	0.8954
0.80	0.2894	0.2948	0.3114	0.3406	0.3849	0.4139	0.4481	0.5349	0.6513	0.8042	0.8964
0.85	0.2927	0.2981	0.3148	0.3441	0.3885	0.4174	0.4516	0.5382	0.6541	0.8059	0.8974
0.90	0.2963	0.3017	0.3183	0.3477	0.3921	0.4211	0.4552	0.5416	0.6570	0.8078	0.8984
0.95	0.2999	0.3054	0.3221	0.3515	0.3960	0.4249	0.4590	0.5451	0.6600	0.8096	0.8994
1.00	0.3038	0.3092	0.3260	0.3555	0.4000	0.4289	0.4629	0.5488	0.6630	0.8115	0.9005
1.05	0.3077	0.3132	0.3300	0.3595	0.4041	0.4330	0.4670	0.5526	0.6662	0.8135	0.9016
1.10	0.3119	0.3174	0.3342	0.3638	0.4084	0.4373	0.4712	0.5565	0.6694	0.8155	0.9027
1.15	0.3161	0.3216	0.3386	0.3682	0.4128	0.4416	0.4755	0.5605	0.6727	0.8176	0.9038
1.20	0.3205	0.3261	0.3430	0.3727	0.4173	0.4461	0.4799	0.5646	0.6761	0.8197	0.9050
1.25	0.3251	0.3306	0.3476	0.3773	0.4219	0.4507	0.4844	0.5687	0.6795	0.8218	0.9062
1.30	0.3297	0.3353	0.3523	0.3821	0.4267	0.4554	0.4890	0.5730	0.6830	0.8240	0.9074
1.35	0.3345	0.3401	0.3571	0.3869	0.4315	0.4602	0.4937	0.5773	0.6866	0.8261	0.9086
1.40	0.3394	0.3449	0.3620	0.3919	0.4364	0.4650	0.4985	0.5816	0.6902	0.8283	0.9098
1.45	0.3443	0.3499	0.3671	0.3969	0.4414	0.4700	0.5033	0.5861	0.6938	0.8305	0.9110
1.50	0.3494	0.3550	0.3722	0.4020	0.4465	0.4750	0.5082	0.5905	0.6974	0.8328	0.9122
1.55	0.3546	0.3602	0.3774	0.4072	0.4516	0.4801	0.5131	0.5950	0.7011	0.8350	0.9135

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.10

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3598	0.3654	0.3826	0.4125	0.4568	0.4852	0.5181	0.5996	0.7047	0.8372	0.9147
1.65	0.3652	0.3708	0.3880	0.4178	0.4621	0.4904	0.5232	0.6041	0.7084	0.8394	0.9159
1.70	0.3706	0.3762	0.3934	0.4232	0.4674	0.4956	0.5283	0.6087	0.7121	0.8417	0.9171
1.75	0.3760	0.3817	0.3989	0.4287	0.4728	0.5008	0.5334	0.6133	0.7158	0.8439	0.9183
1.80	0.3815	0.3872	0.4044	0.4342	0.4782	0.5061	0.5385	0.6179	0.7195	0.8461	0.9195
1.85	0.3871	0.3928	0.4100	0.4397	0.4836	0.5114	0.5437	0.6226	0.7232	0.8483	0.9208
1.90	0.3928	0.3984	0.4156	0.4453	0.4890	0.5168	0.5488	0.6272	0.7269	0.8505	0.9219
1.95	0.3984	0.4041	0.4213	0.4509	0.4945	0.5221	0.5540	0.6318	0.7305	0.8527	0.9231
2.00	0.4041	0.4098	0.4270	0.4566	0.5000	0.5275	0.5592	0.6364	0.7342	0.8549	0.9243
2.05	0.4099	0.4155	0.4327	0.4622	0.5055	0.5328	0.5643	0.6410	0.7378	0.8570	0.9255
2.10	0.4156	0.4213	0.4384	0.4679	0.5110	0.5382	0.5695	0.6456	0.7414	0.8591	0.9266
2.15	0.4214	0.4271	0.4442	0.4735	0.5165	0.5435	0.5747	0.6501	0.7450	0.8612	0.9278
2.20	0.4273	0.4329	0.4499	0.4792	0.5220	0.5489	0.5798	0.6547	0.7486	0.8633	0.9289
2.25	0.4331	0.4387	0.4557	0.4849	0.5275	0.5542	0.5849	0.6592	0.7521	0.8654	0.9300
2.30	0.4389	0.4445	0.4615	0.4906	0.5329	0.5595	0.5900	0.6637	0.7556	0.8675	0.9311
2.35	0.4448	0.4503	0.4673	0.4963	0.5384	0.5648	0.5951	0.6681	0.7591	0.8695	0.9322
2.40	0.4506	0.4562	0.4730	0.5019	0.5438	0.5701	0.6002	0.6725	0.7625	0.8715	0.9333
2.45	0.4564	0.4620	0.4788	0.5076	0.5493	0.5754	0.6052	0.6769	0.7659	0.8734	0.9344
2.50	0.4623	0.4678	0.4846	0.5132	0.5546	0.5805	0.6102	0.6813	0.7693	0.8754	0.9354
2.55	0.4681	0.4736	0.4903	0.5188	0.5600	0.5858	0.6152	0.6856	0.7726	0.8773	0.9364
2.60	0.4739	0.4794	0.4960	0.5244	0.5654	0.5909	0.6201	0.6898	0.7759	0.8792	0.9374
2.65	0.4797	0.4852	0.5017	0.5299	0.5707	0.5960	0.6250	0.6941	0.7792	0.8811	0.9384
2.70	0.4855	0.4909	0.5074	0.5355	0.5759	0.6011	0.6298	0.6983	0.7824	0.8829	0.9394
2.75	0.4912	0.4966	0.5131	0.5410	0.5812	0.6062	0.6346	0.7024	0.7856	0.8847	0.9404
2.80	0.4970	0.5023	0.5187	0.5464	0.5864	0.6112	0.6394	0.7065	0.7887	0.8865	0.9414
2.85	0.5027	0.5080	0.5243	0.5519	0.5915	0.6161	0.6441	0.7105	0.7918	0.8883	0.9423
2.90	0.5083	0.5137	0.5298	0.5573	0.5966	0.6210	0.6487	0.7145	0.7948	0.8900	0.9432
2.95	0.5140	0.5193	0.5354	0.5626	0.6017	0.6259	0.6534	0.7185	0.7978	0.8917	0.9441
3.00	0.5196	0.5249	0.5408	0.5679	0.6067	0.6307	0.6579	0.7224	0.8008	0.8934	0.9450

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.15

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2684	0.2736	0.2898	0.3185	0.3624	0.3913	0.4256	0.5135	0.6332	0.7926	0.8899
0.05	0.2685	0.2737	0.2899	0.3186	0.3626	0.3914	0.4257	0.5136	0.6333	0.7927	0.8899
0.10	0.2688	0.2741	0.2903	0.3190	0.3629	0.3918	0.4261	0.5140	0.6335	0.7929	0.8900
0.15	0.2694	0.2746	0.2908	0.3195	0.3635	0.3923	0.4266	0.5145	0.6340	0.7932	0.8902
0.20	0.2701	0.2753	0.2916	0.3203	0.3643	0.3931	0.4274	0.5153	0.6347	0.7936	0.8904
0.25	0.2710	0.2763	0.2925	0.3213	0.3653	0.3942	0.4285	0.5162	0.6355	0.7941	0.8907
0.30	0.2722	0.2775	0.2937	0.3225	0.3665	0.3954	0.4297	0.5174	0.6355	0.7948	0.8911
0.35	0.2736	0.2788	0.2951	0.3240	0.3680	0.3969	0.4312	0.5188	0.6377	0.7955	0.8915
0.40	0.2751	0.2804	0.2967	0.3256	0.3697	0.3986	0.4328	0.5204	0.6391	0.7964	0.8920
0.45	0.2769	0.2822	0.2985	0.3275	0.3716	0.4003	0.4347	0.5222	0.6406	0.7974	0.8925
0.50	0.2789	0.2842	0.3006	0.3295	0.3737	0.4026	0.4365	0.5242	0.6423	0.7984	0.8931
0.55	0.2810	0.2853	0.3028	0.3318	0.3760	0.4049	0.4391	0.5264	0.6441	0.7996	0.8938
0.60	0.2834	0.2887	0.3052	0.3342	0.3785	0.4074	0.4415	0.5287	0.6461	0.8009	0.8945
0.65	0.2859	0.2913	0.3078	0.3369	0.3811	0.4101	0.4443	0.5312	0.6482	0.8022	0.8953
0.70	0.2886	0.2940	0.3105	0.3397	0.3840	0.4129	0.4471	0.5339	0.6505	0.8037	0.8961
0.75	0.2915	0.2969	0.3135	0.3427	0.3871	0.4160	0.4502	0.5368	0.6529	0.8052	0.8969
0.80	0.2946	0.3000	0.3166	0.3459	0.3903	0.4192	0.4533	0.5398	0.6554	0.8068	0.8978
0.85	0.2979	0.3033	0.3199	0.3493	0.3937	0.4226	0.4567	0.5429	0.6581	0.8084	0.8987
0.90	0.3013	0.3067	0.3234	0.3528	0.3973	0.4262	0.4602	0.5462	0.6608	0.8102	0.8997
0.95	0.3048	0.3103	0.3270	0.3565	0.4010	0.4299	0.4639	0.5496	0.6637	0.8119	0.9007
1.00	0.3085	0.3140	0.3308	0.3603	0.4048	0.4337	0.4677	0.5532	0.6666	0.8138	0.9017
1.05	0.3124	0.3179	0.3347	0.3643	0.4088	0.4377	0.4715	0.5568	0.6697	0.8157	0.9028
1.10	0.3164	0.3219	0.3388	0.3684	0.4129	0.4418	0.4756	0.5606	0.6728	0.8176	0.9039
1.15	0.3206	0.3261	0.3430	0.3727	0.4172	0.4460	0.4798	0.5644	0.6759	0.8196	0.9049
1.20	0.3248	0.3304	0.3473	0.3770	0.4216	0.4503	0.4840	0.5683	0.6792	0.8216	0.9061
1.25	0.3293	0.3348	0.3518	0.3815	0.4261	0.4548	0.4884	0.5724	0.6825	0.8236	0.9072
1.30	0.3338	0.3393	0.3564	0.3861	0.4306	0.4593	0.4928	0.5765	0.6859	0.8257	0.9083
1.35	0.3384	0.3440	0.3610	0.3908	0.4353	0.4639	0.4974	0.5806	0.6893	0.8278	0.9095
1.40	0.3432	0.3487	0.3658	0.3956	0.4401	0.4687	0.5020	0.5848	0.6927	0.8299	0.9107
1.45	0.3480	0.3536	0.3707	0.4005	0.4450	0.4735	0.5067	0.5891	0.6962	0.8320	0.9118
1.50	0.3529	0.3585	0.3757	0.4055	0.4499	0.4783	0.5114	0.5934	0.6997	0.8342	0.9130
1.55	0.3580	0.3636	0.3807	0.4106	0.4549	0.4832	0.5162	0.5978	0.7033	0.8363	0.9142

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-15

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3631	0.3687	0.3859	0.4197	0.4599	0.4882	0.5211	0.6022	0.7058	0.8385	0.9154
1.65	0.3683	0.3739	0.3911	0.4209	0.4651	0.4933	0.5250	0.6066	0.7104	0.8406	0.9166
1.70	0.3735	0.3791	0.3964	0.4262	0.4702	0.4983	0.5309	0.6111	0.7140	0.8428	0.9177
1.75	0.3788	0.3845	0.4017	0.4315	0.4754	0.5034	0.5359	0.6156	0.7176	0.8449	0.9189
1.80	0.3842	0.3899	0.4071	0.4368	0.4807	0.5086	0.5409	0.6200	0.7212	0.8471	0.9201
1.85	0.3897	0.3953	0.4125	0.4422	0.4860	0.5138	0.5459	0.6245	0.7247	0.8492	0.9213
1.90	0.3952	0.4008	0.4180	0.4477	0.4913	0.5190	0.5509	0.6290	0.7283	0.8514	0.9224
1.95	0.4007	0.4063	0.4235	0.4531	0.4966	0.5242	0.5560	0.6335	0.7319	0.8535	0.9236
2.00	0.4063	0.4119	0.4291	0.4586	0.5020	0.5294	0.5610	0.6380	0.7354	0.8556	0.9247
2.05	0.4119	0.4175	0.4347	0.4641	0.5073	0.5346	0.5660	0.6425	0.7390	0.8577	0.9258
2.10	0.4175	0.4232	0.4403	0.4697	0.5127	0.5398	0.5711	0.6469	0.7425	0.8598	0.9270
2.15	0.4232	0.4288	0.4459	0.4752	0.5181	0.5451	0.5761	0.6514	0.7460	0.8618	0.9281
2.20	0.4289	0.4345	0.4515	0.4808	0.5234	0.5503	0.5812	0.6558	0.7495	0.8639	0.9292
2.25	0.4346	0.4402	0.4572	0.4863	0.5288	0.5555	0.5862	0.6602	0.7529	0.8659	0.9303
2.30	0.4403	0.4459	0.4628	0.4919	0.5342	0.5607	0.5912	0.6646	0.7563	0.8679	0.9314
2.35	0.4460	0.4516	0.4685	0.4974	0.5395	0.5659	0.5961	0.6690	0.7597	0.8699	0.9324
2.40	0.4518	0.4573	0.4742	0.5030	0.5448	0.5711	0.6011	0.6733	0.7631	0.8718	0.9335
2.45	0.4575	0.4630	0.4798	0.5085	0.5501	0.5762	0.6060	0.6776	0.7664	0.8737	0.9345
2.50	0.4632	0.4687	0.4855	0.5140	0.5554	0.5813	0.6109	0.6819	0.7697	0.8756	0.9355
2.55	0.4689	0.4744	0.4911	0.5195	0.5607	0.5864	0.6158	0.6861	0.7730	0.8775	0.9365
2.60	0.4746	0.4801	0.4967	0.5250	0.5659	0.5915	0.6206	0.6903	0.7762	0.8794	0.9375
2.65	0.4803	0.4858	0.5023	0.5305	0.5711	0.5965	0.6254	0.6944	0.7794	0.8812	0.9385
2.70	0.4860	0.4914	0.5079	0.5359	0.5763	0.6015	0.6301	0.6985	0.7826	0.8830	0.9395
2.75	0.4916	0.4970	0.5134	0.5413	0.5815	0.6064	0.6349	0.7026	0.7857	0.8848	0.9404
2.80	0.4973	0.5026	0.5190	0.5467	0.5866	0.6113	0.6395	0.7066	0.7888	0.8866	0.9414
2.85	0.5029	0.5082	0.5245	0.5520	0.5916	0.6162	0.6442	0.7106	0.7918	0.8883	0.9423
2.90	0.5084	0.5138	0.5299	0.5573	0.5967	0.6211	0.6488	0.7145	0.7948	0.8900	0.9432
2.95	0.5140	0.5193	0.5354	0.5626	0.6016	0.6258	0.6533	0.7184	0.7978	0.8917	0.9441
3.00	0.5195	0.5248	0.5408	0.5678	0.6066	0.6306	0.6578	0.7223	0.8007	0.8934	0.9450

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=3-20

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2744	0.2796	0.2959	0.3247	0.3687	0.3976	0.4319	0.5194	0.6382	0.7958	0.8917
0.05	0.2745	0.2797	0.2960	0.3248	0.3688	0.3977	0.4320	0.5195	0.6383	0.7959	0.8917
0.10	0.2748	0.2801	0.2963	0.3252	0.3692	0.3980	0.4323	0.5198	0.6385	0.7960	0.8918
0.15	0.2753	0.2806	0.2969	0.3257	0.3697	0.3986	0.4328	0.5204	0.6390	0.7963	0.8919
0.20	0.2760	0.2813	0.2976	0.3265	0.3705	0.3994	0.4336	0.5211	0.6396	0.7967	0.8922
0.25	0.2769	0.2822	0.2985	0.3274	0.3715	0.4004	0.4346	0.5220	0.6404	0.7972	0.8925
0.30	0.2781	0.2833	0.2997	0.3286	0.3727	0.4016	0.4358	0.5232	0.6414	0.7978	0.8928
0.35	0.2794	0.2847	0.3010	0.3300	0.3741	0.4030	0.4372	0.5245	0.6425	0.7986	0.8932
0.40	0.2809	0.2862	0.3026	0.3316	0.3757	0.4046	0.4388	0.5260	0.6438	0.7994	0.8937
0.45	0.2826	0.2879	0.3044	0.3334	0.3775	0.4064	0.4406	0.5277	0.6452	0.8003	0.8942
0.50	0.2845	0.2898	0.3063	0.3354	0.3795	0.4084	0.4426	0.5296	0.6469	0.8013	0.8948
0.55	0.2866	0.2919	0.3084	0.3375	0.3818	0.4107	0.4448	0.5317	0.6486	0.8025	0.8954
0.60	0.2889	0.2942	0.3108	0.3399	0.3842	0.4131	0.4472	0.5340	0.6505	0.8037	0.8961
0.65	0.2913	0.2967	0.3133	0.3425	0.3868	0.4157	0.4498	0.5364	0.6526	0.8049	0.8968
0.70	0.2940	0.2994	0.3160	0.3452	0.3895	0.4184	0.4525	0.5390	0.6547	0.8063	0.8976
0.75	0.2968	0.3022	0.3188	0.3481	0.3925	0.4214	0.4554	0.5417	0.6570	0.8078	0.8984
0.80	0.2998	0.3052	0.3219	0.3512	0.3956	0.4245	0.4585	0.5446	0.6594	0.8093	0.8992
0.85	0.3029	0.3084	0.3251	0.3545	0.3989	0.4278	0.4618	0.5476	0.6620	0.8109	0.9001
0.90	0.3062	0.3117	0.3284	0.3579	0.4023	0.4312	0.4651	0.5508	0.6646	0.8125	0.9010
0.95	0.3097	0.3151	0.3320	0.3614	0.4059	0.4347	0.4687	0.5541	0.6673	0.8142	0.9020
1.00	0.3133	0.3188	0.3356	0.3651	0.4096	0.4385	0.4723	0.5575	0.6702	0.8160	0.9029
1.05	0.3171	0.3225	0.3394	0.3690	0.4135	0.4423	0.4761	0.5610	0.6731	0.8178	0.9040
1.10	0.3210	0.3265	0.3434	0.3730	0.4175	0.4463	0.4800	0.5646	0.6761	0.8195	0.9050
1.15	0.3250	0.3305	0.3475	0.3771	0.4216	0.4503	0.4840	0.5683	0.6791	0.8215	0.9060
1.20	0.3291	0.3347	0.3517	0.3813	0.4258	0.4545	0.4881	0.5721	0.6823	0.8235	0.9071
1.25	0.3334	0.3390	0.3560	0.3857	0.4302	0.4588	0.4924	0.5760	0.6854	0.8254	0.9082
1.30	0.3378	0.3434	0.3604	0.3902	0.4346	0.4632	0.4967	0.5799	0.6887	0.8274	0.9093
1.35	0.3423	0.3479	0.3650	0.3947	0.4392	0.4677	0.5011	0.5839	0.6920	0.8294	0.9104
1.40	0.3469	0.3525	0.3696	0.3994	0.4438	0.4723	0.5055	0.5880	0.6953	0.8315	0.9115
1.45	0.3517	0.3572	0.3744	0.4042	0.4485	0.4769	0.5101	0.5922	0.6987	0.8335	0.9126
1.50	0.3566	0.3621	0.3792	0.4090	0.4533	0.4817	0.5147	0.5954	0.7021	0.8356	0.9138
1.55	0.3614	0.3670	0.3841	0.4139	0.4582	0.4864	0.5193	0.6006	0.7055	0.8377	0.9149

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-20

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3663	0.3719	0.3891	0.4189	0.4631	0.4913	0.5240	0.6048	0.7089	0.8397	0.9161
1.65	0.3714	0.3770	0.3942	0.4240	0.4680	0.4962	0.5288	0.6091	0.7124	0.8418	0.9172
1.70	0.3759	0.3821	0.3993	0.4291	0.4731	0.5011	0.5336	0.6135	0.7159	0.8439	0.9183
1.75	0.3817	0.3873	0.4045	0.4343	0.4781	0.5061	0.5384	0.6178	0.7193	0.8460	0.9195
1.80	0.3870	0.3926	0.4098	0.4395	0.4833	0.5111	0.5433	0.6222	0.7228	0.8481	0.9206
1.85	0.3923	0.3979	0.4151	0.4447	0.4884	0.5161	0.5482	0.6265	0.7263	0.8502	0.9218
1.90	0.3976	0.4033	0.4204	0.4500	0.4936	0.5212	0.5531	0.6309	0.7298	0.8522	0.9229
1.95	0.4031	0.4087	0.4258	0.4554	0.4988	0.5263	0.5580	0.6353	0.7333	0.8543	0.9240
2.00	0.4085	0.4141	0.4313	0.4607	0.5040	0.5314	0.5629	0.6396	0.7367	0.8563	0.9251
2.05	0.4140	0.4196	0.4367	0.4661	0.5092	0.5365	0.5678	0.6440	0.7402	0.8584	0.9262
2.10	0.4195	0.4251	0.4422	0.4715	0.5145	0.5416	0.5727	0.6484	0.7436	0.8604	0.9273
2.15	0.4250	0.4306	0.4477	0.4770	0.5197	0.5467	0.5776	0.6527	0.7470	0.8624	0.9284
2.20	0.4305	0.4362	0.4532	0.4824	0.5250	0.5518	0.5826	0.6570	0.7504	0.8644	0.9295
2.25	0.4362	0.4418	0.4587	0.4878	0.5302	0.5569	0.5875	0.6613	0.7538	0.8664	0.9305
2.30	0.4418	0.4473	0.4643	0.4933	0.5355	0.5620	0.5923	0.6656	0.7571	0.8683	0.9316
2.35	0.4474	0.4529	0.4698	0.4987	0.5407	0.5670	0.5972	0.6699	0.7604	0.8703	0.9326
2.40	0.4530	0.4585	0.4754	0.5041	0.5459	0.5721	0.6021	0.6741	0.7637	0.8722	0.9337
2.45	0.4586	0.4641	0.4809	0.5096	0.5511	0.5771	0.6069	0.6783	0.7670	0.8741	0.9347
2.50	0.4642	0.4697	0.4864	0.5150	0.5563	0.5821	0.6117	0.6825	0.7702	0.8759	0.9357
2.55	0.4698	0.4753	0.4920	0.5204	0.5615	0.5871	0.6164	0.6867	0.7734	0.8778	0.9367
2.60	0.4754	0.4809	0.4975	0.5257	0.5666	0.5921	0.6212	0.6908	0.7766	0.8796	0.9376
2.65	0.4810	0.4864	0.5030	0.5311	0.5717	0.5970	0.6259	0.6948	0.7797	0.8814	0.9386
2.70	0.4866	0.4920	0.5084	0.5364	0.5768	0.6019	0.6306	0.6989	0.7828	0.8832	0.9396
2.75	0.4921	0.4975	0.5139	0.5417	0.5818	0.6068	0.6352	0.7029	0.7859	0.8849	0.9405
2.80	0.4976	0.5030	0.5193	0.5470	0.5869	0.6116	0.6398	0.7058	0.7889	0.8867	0.9414
2.85	0.5032	0.5085	0.5247	0.5523	0.5918	0.6164	0.6443	0.7107	0.7919	0.8884	0.9423
2.90	0.5086	0.5140	0.5301	0.5575	0.5968	0.6212	0.6489	0.7146	0.7948	0.8900	0.9432
2.95	0.5141	0.5194	0.5354	0.5627	0.6017	0.6259	0.6533	0.7184	0.7978	0.8917	0.9441
3.00	0.5195	0.5248	0.5408	0.5678	0.6065	0.6305	0.6578	0.7222	0.8006	0.8933	0.9450

TABLES OF CALCULATIONS FOR W H WRIGHT E92.

VALUES OF RS WHERE N=3-25

PAGE 91

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2803	0.2856	0.3019	0.3309	0.3749	0.4038	0.4380	0.5252	0.6431	0.7989	0.8934
0.05	0.2804	0.2857	0.3020	0.3310	0.3750	0.4039	0.4381	0.5253	0.6431	0.7990	0.8934
0.10	0.2807	0.2860	0.3023	0.3313	0.3753	0.4042	0.4384	0.5255	0.6434	0.7991	0.8935
0.15	0.2812	0.2865	0.3029	0.3318	0.3759	0.4047	0.4389	0.5261	0.6438	0.7994	0.8937
0.20	0.2819	0.2872	0.3036	0.3325	0.3766	0.4055	0.4397	0.5268	0.6444	0.7998	0.8939
0.25	0.2828	0.2881	0.3045	0.3334	0.3776	0.4064	0.4406	0.5277	0.6452	0.8005	0.8942
0.30	0.2838	0.2892	0.3056	0.3346	0.3787	0.4076	0.4418	0.5288	0.6461	0.8008	0.8945
0.35	0.2851	0.2904	0.3069	0.3359	0.3801	0.4089	0.4431	0.5301	0.6472	0.8015	0.8949
0.40	0.2866	0.2919	0.3084	0.3375	0.3816	0.4105	0.4447	0.5315	0.6484	0.8025	0.8953
0.45	0.2883	0.2936	0.3101	0.3392	0.3834	0.4123	0.4464	0.5332	0.6498	0.8032	0.8958
0.50	0.2901	0.2955	0.3120	0.3411	0.3853	0.4142	0.4483	0.5350	0.6513	0.8042	0.8963
0.55	0.2921	0.2975	0.3140	0.3432	0.3875	0.4163	0.4504	0.5370	0.6530	0.8052	0.8969
0.60	0.2943	0.2997	0.3163	0.3455	0.3898	0.4187	0.4527	0.5391	0.6548	0.8064	0.8976
0.65	0.2967	0.3021	0.3187	0.3480	0.3923	0.4212	0.4552	0.5415	0.6568	0.8076	0.8983
0.70	0.2993	0.3047	0.3213	0.3506	0.3950	0.4238	0.4579	0.5439	0.6589	0.8089	0.8990
0.75	0.3020	0.3074	0.3241	0.3535	0.3978	0.4267	0.4607	0.5466	0.6611	0.8103	0.8998
0.80	0.3049	0.3103	0.3271	0.3564	0.4008	0.4297	0.4636	0.5493	0.6634	0.8117	0.9006
0.85	0.3080	0.3134	0.3302	0.3596	0.4040	0.4328	0.4667	0.5522	0.6658	0.8132	0.9014
0.90	0.3112	0.3166	0.3334	0.3629	0.4073	0.4361	0.4700	0.5553	0.6683	0.8148	0.9023
0.95	0.3145	0.3200	0.3368	0.3663	0.4108	0.4396	0.4734	0.5584	0.6709	0.8165	0.9032
1.00	0.3180	0.3235	0.3404	0.3699	0.4144	0.4432	0.4769	0.5617	0.6737	0.8181	0.9041
1.05	0.3217	0.3272	0.3441	0.3737	0.4181	0.4469	0.4806	0.5651	0.6765	0.8199	0.9051
1.10	0.3255	0.3310	0.3479	0.3775	0.4220	0.4507	0.4844	0.5686	0.6793	0.8216	0.9061
1.15	0.3294	0.3349	0.3519	0.3815	0.4260	0.4547	0.4882	0.5721	0.6823	0.8235	0.9071
1.20	0.3334	0.3390	0.3560	0.3856	0.4301	0.4587	0.4922	0.5758	0.6853	0.8253	0.9081
1.25	0.3376	0.3431	0.3602	0.3899	0.4343	0.4629	0.4963	0.5795	0.6884	0.8272	0.9092
1.30	0.3419	0.3474	0.3645	0.3942	0.4386	0.4671	0.5005	0.5834	0.6915	0.8291	0.9102
1.35	0.3462	0.3518	0.3689	0.3986	0.4430	0.4715	0.5047	0.5873	0.6947	0.8311	0.9113
1.40	0.3507	0.3563	0.3734	0.4032	0.4475	0.4759	0.5090	0.5912	0.6979	0.8330	0.9124
1.45	0.3553	0.3609	0.3780	0.4078	0.4521	0.4804	0.5134	0.5952	0.7011	0.8350	0.9135
1.50	0.3600	0.3656	0.3827	0.4125	0.4567	0.4850	0.5179	0.5993	0.7044	0.8370	0.9146
1.55	0.3648	0.3704	0.3875	0.4173	0.4614	0.4896	0.5224	0.6034	0.7077	0.8390	0.9157

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=5.25

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3696	0.3752	0.3924	0.4221	0.4662	0.4943	0.5270	0.6075	0.7111	0.8410	0.9168
1.65	0.3745	0.3802	0.3973	0.4271	0.4711	0.4991	0.5316	0.6117	0.7144	0.8430	0.9179
1.70	0.3795	0.3852	0.4023	0.4320	0.4759	0.5039	0.5363	0.6159	0.7178	0.8450	0.9190
1.75	0.3846	0.3902	0.4074	0.4371	0.4809	0.5087	0.5410	0.6201	0.7211	0.8471	0.9201
1.80	0.3897	0.3954	0.4125	0.4422	0.4859	0.5136	0.5457	0.6243	0.7245	0.8491	0.9212
1.85	0.3949	0.4005	0.4177	0.4473	0.4909	0.5185	0.5505	0.6286	0.7279	0.8511	0.9223
1.90	0.4002	0.4058	0.4229	0.4525	0.4959	0.5234	0.5552	0.6328	0.7313	0.8531	0.9234
1.95	0.4054	0.4111	0.4282	0.4577	0.5010	0.5284	0.5600	0.6371	0.7347	0.8551	0.9245
2.00	0.4108	0.4164	0.4335	0.4629	0.5061	0.5334	0.5648	0.6413	0.7380	0.8571	0.9255
2.05	0.4161	0.4217	0.4388	0.4682	0.5112	0.5383	0.5696	0.6456	0.7414	0.8591	0.9266
2.10	0.4215	0.4271	0.4442	0.4735	0.5163	0.5433	0.5744	0.6498	0.7447	0.8611	0.9277
2.15	0.4269	0.4325	0.4495	0.4788	0.5214	0.5483	0.5792	0.6541	0.7481	0.8630	0.9287
2.20	0.4324	0.4380	0.4549	0.4841	0.5266	0.5533	0.5840	0.6583	0.7514	0.8650	0.9298
2.25	0.4378	0.4434	0.4604	0.4894	0.5317	0.5583	0.5888	0.6625	0.7547	0.8669	0.9308
2.30	0.4433	0.4489	0.4658	0.4947	0.5368	0.5633	0.5935	0.6667	0.7579	0.8688	0.9318
2.35	0.4488	0.4543	0.4712	0.5000	0.5419	0.5682	0.5983	0.6709	0.7612	0.8707	0.9329
2.40	0.4543	0.4598	0.4766	0.5054	0.5471	0.5732	0.6031	0.6750	0.7644	0.8725	0.9339
2.45	0.4598	0.4653	0.4821	0.5107	0.5522	0.5781	0.6078	0.6791	0.7676	0.8744	0.9349
2.50	0.4653	0.4708	0.4875	0.5160	0.5572	0.5830	0.6125	0.6832	0.7708	0.8762	0.9358
2.55	0.4708	0.4763	0.4929	0.5213	0.5623	0.5879	0.6172	0.6873	0.7739	0.8780	0.9368
2.60	0.4763	0.4817	0.4983	0.5265	0.5673	0.5928	0.6218	0.6913	0.7770	0.8798	0.9378
2.65	0.4818	0.4872	0.5037	0.5318	0.5724	0.5975	0.6264	0.6953	0.7801	0.8816	0.9387
2.70	0.4872	0.4926	0.5091	0.5370	0.5773	0.6024	0.6310	0.6993	0.7831	0.8833	0.9396
2.75	0.4927	0.4981	0.5144	0.5423	0.5823	0.6072	0.6356	0.7032	0.7861	0.8851	0.9406
2.80	0.4981	0.5035	0.5198	0.5474	0.5872	0.6120	0.6401	0.7071	0.7891	0.8868	0.9415
2.85	0.5035	0.5089	0.5251	0.5526	0.5921	0.6167	0.6445	0.7109	0.7920	0.8884	0.9424
2.90	0.5089	0.5142	0.5304	0.5577	0.5970	0.6213	0.6490	0.7147	0.7949	0.8901	0.9432
2.95	0.5143	0.5196	0.5356	0.5628	0.6018	0.6260	0.6534	0.7185	0.7978	0.8917	0.9441
3.00	0.5196	0.5249	0.5409	0.5679	0.6066	0.6306	0.6578	0.7222	0.8006	0.8933	0.9450

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.30

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2861	0.2914	0.3079	0.3369	0.3810	0.4098	0.4440	0.5308	0.6478	0.8019	0.8951
0.05	0.2862	0.2915	0.3080	0.3370	0.3811	0.4099	0.4441	0.5309	0.6479	0.8020	0.8951
0.10	0.2865	0.2918	0.3083	0.3373	0.3814	0.4103	0.4444	0.5312	0.6481	0.8021	0.8952
0.15	0.2870	0.2923	0.3087	0.3378	0.3819	0.4108	0.4449	0.5317	0.6485	0.8024	0.8953
0.20	0.2876	0.2930	0.3094	0.3385	0.3826	0.4115	0.4456	0.5324	0.6491	0.8027	0.8955
0.25	0.2885	0.2938	0.3103	0.3394	0.3835	0.4124	0.4465	0.5332	0.6498	0.8032	0.8958
0.30	0.2896	0.2949	0.3114	0.3405	0.3847	0.4135	0.4476	0.5343	0.6507	0.8037	0.8961
0.35	0.2908	0.2961	0.3127	0.3418	0.3860	0.4148	0.4489	0.5355	0.6517	0.8044	0.8965
0.40	0.2922	0.2976	0.3141	0.3432	0.3875	0.4163	0.4504	0.5369	0.6529	0.8051	0.8969
0.45	0.2938	0.2992	0.3158	0.3449	0.3892	0.4180	0.4521	0.5385	0.6542	0.8060	0.8974
0.50	0.2956	0.3010	0.3176	0.3468	0.3910	0.4198	0.4539	0.5402	0.6557	0.8069	0.8979
0.55	0.2976	0.3030	0.3196	0.3488	0.3931	0.4219	0.4560	0.5421	0.6573	0.8079	0.8984
0.60	0.2997	0.3051	0.3218	0.3510	0.3953	0.4242	0.4582	0.5442	0.6590	0.8090	0.8991
0.65	0.3020	0.3075	0.3241	0.3534	0.3977	0.4265	0.4606	0.5464	0.6609	0.8102	0.8997
0.70	0.3045	0.3099	0.3266	0.3560	0.4003	0.4292	0.4631	0.5488	0.6629	0.8114	0.9004
0.75	0.3072	0.3126	0.3293	0.3587	0.4031	0.4319	0.4658	0.5513	0.6650	0.8127	0.9011
0.80	0.3100	0.3154	0.3322	0.3615	0.4060	0.4348	0.4687	0.5540	0.6672	0.8141	0.9019
0.85	0.3129	0.3184	0.3352	0.3647	0.4091	0.4378	0.4717	0.5568	0.6695	0.8156	0.9027
0.90	0.3161	0.3215	0.3384	0.3679	0.4123	0.4410	0.4748	0.5597	0.6720	0.8171	0.9036
0.95	0.3193	0.3248	0.3417	0.3712	0.4156	0.4444	0.4781	0.5627	0.6745	0.8186	0.9044
1.00	0.3227	0.3282	0.3451	0.3747	0.4191	0.4478	0.4815	0.5659	0.6771	0.8203	0.9053
1.05	0.3263	0.3318	0.3487	0.3783	0.4227	0.4514	0.4850	0.5691	0.6798	0.8219	0.9062
1.10	0.3299	0.3355	0.3524	0.3821	0.4265	0.4551	0.4887	0.5725	0.6825	0.8236	0.9072
1.15	0.3338	0.3393	0.3563	0.3859	0.4303	0.4589	0.4924	0.5759	0.6854	0.8254	0.9082
1.20	0.3377	0.3432	0.3602	0.3899	0.4343	0.4629	0.4963	0.5795	0.6883	0.8272	0.9091
1.25	0.3417	0.3473	0.3643	0.3940	0.4384	0.4669	0.5002	0.5831	0.6912	0.8290	0.9101
1.30	0.3459	0.3514	0.3685	0.3982	0.4426	0.4710	0.5042	0.5868	0.6943	0.8308	0.9112
1.35	0.3502	0.3557	0.3728	0.4025	0.4468	0.4752	0.5084	0.5906	0.6973	0.8327	0.9122
1.40	0.3545	0.3601	0.3772	0.4069	0.4512	0.4795	0.5125	0.5944	0.7004	0.8346	0.9132
1.45	0.3590	0.3646	0.3817	0.4114	0.4556	0.4839	0.5168	0.5983	0.7036	0.8365	0.9143
1.50	0.3635	0.3691	0.3863	0.4160	0.4601	0.4884	0.5212	0.6022	0.7067	0.8384	0.9153
1.55	0.3682	0.3738	0.3909	0.4207	0.4647	0.4929	0.5255	0.6061	0.7099	0.8403	0.9164

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-30

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3729	0.3795	0.3957	0.4254	0.4694	0.4974	0.5300	0.6102	0.7132	0.8423	0.9175
1.65	0.3777	0.3833	0.4005	0.4302	0.4741	0.5020	0.5345	0.6142	0.7164	0.8442	0.9185
1.70	0.3826	0.3882	0.4054	0.4350	0.4788	0.5067	0.5390	0.6183	0.7197	0.8462	0.9196
1.75	0.3875	0.3932	0.4103	0.4399	0.4836	0.5114	0.5436	0.6224	0.7230	0.8481	0.9207
1.80	0.3925	0.3982	0.4153	0.4449	0.4885	0.5162	0.5482	0.6265	0.7262	0.8501	0.9217
1.85	0.3976	0.4032	0.4203	0.4499	0.4934	0.5209	0.5528	0.6306	0.7295	0.8521	0.9228
1.90	0.4027	0.4083	0.4254	0.4550	0.4983	0.5258	0.5574	0.6348	0.7328	0.8540	0.9239
1.95	0.4079	0.4135	0.4306	0.4600	0.5032	0.5306	0.5621	0.6389	0.7361	0.8560	0.9249
2.00	0.4131	0.4187	0.4358	0.4651	0.5082	0.5354	0.5668	0.6431	0.7394	0.8579	0.9260
2.05	0.4183	0.4239	0.4410	0.4703	0.5132	0.5403	0.5715	0.6472	0.7427	0.8598	0.9270
2.10	0.4236	0.4292	0.4462	0.4754	0.5182	0.5451	0.5762	0.6513	0.7459	0.8617	0.9280
2.15	0.4289	0.4345	0.4515	0.4806	0.5232	0.5500	0.5808	0.6555	0.7492	0.8636	0.9291
2.20	0.4342	0.4398	0.4567	0.4858	0.5282	0.5549	0.5855	0.6596	0.7524	0.8655	0.9301
2.25	0.4395	0.4451	0.4620	0.4910	0.5332	0.5598	0.5902	0.6637	0.7556	0.8674	0.9311
2.30	0.4448	0.4505	0.4673	0.4962	0.5383	0.5646	0.5949	0.6678	0.7588	0.8693	0.9321
2.35	0.4503	0.4558	0.4727	0.5014	0.5433	0.5695	0.5995	0.6719	0.7620	0.8711	0.9331
2.40	0.4557	0.4612	0.4780	0.5067	0.5483	0.5743	0.6042	0.6759	0.7651	0.8730	0.9341
2.45	0.4611	0.4665	0.4833	0.5119	0.5533	0.5792	0.6088	0.6800	0.7682	0.8748	0.9351
2.50	0.4665	0.4719	0.4886	0.5171	0.5582	0.5840	0.6134	0.6840	0.7713	0.8766	0.9360
2.55	0.4718	0.4773	0.4939	0.5222	0.5632	0.5888	0.6180	0.6880	0.7744	0.8783	0.9370
2.60	0.4772	0.4827	0.4992	0.5274	0.5681	0.5936	0.6226	0.6919	0.7775	0.8801	0.9379
2.65	0.4826	0.4880	0.5045	0.5326	0.5731	0.5983	0.6271	0.6958	0.7805	0.8818	0.9388
2.70	0.4880	0.4934	0.5098	0.5377	0.5780	0.6030	0.6316	0.6997	0.7835	0.8835	0.9397
2.75	0.4933	0.4987	0.5151	0.5428	0.5828	0.6077	0.6361	0.7036	0.7864	0.8852	0.9406
2.80	0.4987	0.5040	0.5203	0.5479	0.5877	0.6124	0.6405	0.7074	0.7893	0.8869	0.9415
2.85	0.5040	0.5093	0.5255	0.5530	0.5925	0.6170	0.6449	0.7112	0.7922	0.8885	0.9424
2.90	0.5093	0.5146	0.5307	0.5580	0.5973	0.6216	0.6493	0.7149	0.7951	0.8902	0.9433
2.95	0.5146	0.5199	0.5359	0.5630	0.6020	0.6262	0.6536	0.7186	0.7979	0.8918	0.9441
3.00	0.5198	0.5251	0.5410	0.5680	0.6067	0.6307	0.6579	0.7223	0.8007	0.8933	0.9450

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2918	0.2972	0.3137	0.3428	0.3870	0.4158	0.4498	0.5363	0.6524	0.8048	0.8967
0.05	0.2919	0.2973	0.3138	0.3429	0.3871	0.4159	0.4499	0.5364	0.6525	0.8049	0.8967
0.10	0.2922	0.2976	0.3141	0.3432	0.3874	0.4162	0.4502	0.5367	0.6527	0.8050	0.8968
0.15	0.2927	0.2980	0.3146	0.3437	0.3878	0.4167	0.4507	0.5372	0.6531	0.8053	0.8970
0.20	0.2933	0.2987	0.3152	0.3443	0.3885	0.4174	0.4514	0.5378	0.6536	0.8056	0.8971
0.25	0.2942	0.2995	0.3161	0.3452	0.3894	0.4182	0.4523	0.5386	0.6543	0.8060	0.8974
0.30	0.2952	0.3006	0.3171	0.3463	0.3905	0.4193	0.4533	0.5396	0.6552	0.8066	0.8977
0.35	0.2964	0.3018	0.3183	0.3475	0.3917	0.4206	0.4546	0.5408	0.6562	0.8072	0.8980
0.40	0.2978	0.3032	0.3198	0.3490	0.3932	0.4220	0.4560	0.5421	0.6573	0.8079	0.8984
0.45	0.2993	0.3047	0.3213	0.3506	0.3948	0.4235	0.4576	0.5436	0.6586	0.8087	0.8989
0.50	0.3011	0.3065	0.3231	0.3524	0.3966	0.4255	0.4594	0.5453	0.6600	0.8096	0.8994
0.55	0.3030	0.3084	0.3251	0.3543	0.3986	0.4274	0.4614	0.5471	0.6615	0.8105	0.8999
0.60	0.3051	0.3105	0.3272	0.3565	0.4008	0.4298	0.4635	0.5491	0.6632	0.8116	0.9005
0.65	0.3073	0.3127	0.3294	0.3588	0.4031	0.4319	0.4658	0.5513	0.6649	0.8127	0.9011
0.70	0.3097	0.3152	0.3319	0.3613	0.4056	0.4344	0.4683	0.5536	0.6668	0.8139	0.9018
0.75	0.3123	0.3177	0.3345	0.3639	0.4083	0.4370	0.4709	0.5560	0.6689	0.8151	0.9025
0.80	0.3150	0.3205	0.3373	0.3667	0.4111	0.4398	0.4736	0.5585	0.6710	0.8165	0.9032
0.85	0.3179	0.3234	0.3402	0.3697	0.4140	0.4428	0.4766	0.5612	0.6732	0.8178	0.9040
0.90	0.3209	0.3264	0.3433	0.3728	0.4171	0.4462	0.4795	0.5640	0.6756	0.8193	0.9048
0.95	0.3241	0.3296	0.3465	0.3760	0.4204	0.4491	0.4827	0.5670	0.6780	0.8208	0.9056
1.00	0.3274	0.3329	0.3498	0.3794	0.4238	0.4524	0.4860	0.5700	0.6805	0.8223	0.9065
1.05	0.3308	0.3363	0.3533	0.3829	0.4273	0.4559	0.4894	0.5731	0.6831	0.8239	0.9074
1.10	0.3344	0.3399	0.3569	0.3865	0.4309	0.4595	0.4929	0.5764	0.6857	0.8256	0.9083
1.15	0.3381	0.3436	0.3606	0.3903	0.4346	0.4632	0.4966	0.5797	0.6885	0.8272	0.9092
1.20	0.3419	0.3475	0.3645	0.3942	0.4385	0.4670	0.5003	0.5831	0.6912	0.8290	0.9101
1.25	0.3459	0.3514	0.3685	0.3981	0.4424	0.4709	0.5041	0.5866	0.6941	0.8307	0.9111
1.30	0.3499	0.3555	0.3725	0.4022	0.4465	0.4749	0.5080	0.5902	0.6970	0.8325	0.9121
1.35	0.3541	0.3596	0.3767	0.4064	0.4506	0.4790	0.5120	0.5938	0.7000	0.8343	0.9131
1.40	0.3583	0.3639	0.3810	0.4107	0.4549	0.4831	0.5161	0.5975	0.7030	0.8361	0.9141
1.45	0.3627	0.3682	0.3854	0.4151	0.4592	0.4874	0.5202	0.6013	0.7060	0.8379	0.9151
1.50	0.3671	0.3727	0.3898	0.4195	0.4636	0.4917	0.5244	0.6051	0.7091	0.8398	0.9161
1.55	0.3716	0.3772	0.3944	0.4240	0.4680	0.4961	0.5287	0.6089	0.7122	0.8417	0.9171

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE $N=3-35$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3762	0.3818	0.3990	0.4286	0.4725	0.5005	0.5330	0.6128	0.7153	0.8435	0.9181
1.65	0.3809	0.3865	0.4037	0.4333	0.4771	0.5050	0.5373	0.6167	0.7184	0.8454	0.9192
1.70	0.3857	0.3913	0.4084	0.4380	0.4817	0.5096	0.5417	0.6207	0.7216	0.8473	0.9202
1.75	0.3905	0.3961	0.4132	0.4428	0.4864	0.5141	0.5462	0.6247	0.7248	0.8492	0.9212
1.80	0.3954	0.4010	0.4181	0.4477	0.4911	0.5188	0.5507	0.6287	0.7280	0.8511	0.9223
1.85	0.4003	0.4059	0.4230	0.4525	0.4959	0.5234	0.5552	0.6327	0.7312	0.8530	0.9233
1.90	0.4053	0.4109	0.4280	0.4575	0.5007	0.5281	0.5597	0.6367	0.7344	0.8549	0.9243
1.95	0.4103	0.4159	0.4330	0.4624	0.5055	0.5328	0.5642	0.6408	0.7376	0.8568	0.9254
2.00	0.4154	0.4210	0.4381	0.4674	0.5104	0.5375	0.5688	0.6448	0.7407	0.8587	0.9264
2.05	0.4205	0.4261	0.4432	0.4724	0.5152	0.5423	0.5734	0.6489	0.7439	0.8606	0.9274
2.10	0.4257	0.4313	0.4483	0.4775	0.5201	0.5470	0.5779	0.6529	0.7471	0.8624	0.9284
2.15	0.4309	0.4364	0.4534	0.4825	0.5250	0.5518	0.5825	0.6569	0.7503	0.8643	0.9294
2.20	0.4361	0.4416	0.4586	0.4876	0.5299	0.5565	0.5871	0.6610	0.7534	0.8661	0.9304
2.25	0.4413	0.4469	0.4638	0.4927	0.5348	0.5613	0.5917	0.6650	0.7566	0.8680	0.9314
2.30	0.4466	0.4521	0.4690	0.4978	0.5397	0.5661	0.5962	0.6690	0.7597	0.8698	0.9324
2.35	0.4518	0.4574	0.4742	0.5029	0.5446	0.5709	0.6008	0.6730	0.7628	0.8716	0.9334
2.40	0.4571	0.4626	0.4794	0.5080	0.5495	0.5756	0.6053	0.6769	0.7659	0.8734	0.9343
2.45	0.4624	0.4679	0.4846	0.5131	0.5544	0.5803	0.6099	0.6809	0.7689	0.8752	0.9353
2.50	0.4677	0.4732	0.4898	0.5182	0.5593	0.5850	0.6144	0.6848	0.7720	0.8769	0.9362
2.55	0.4730	0.4784	0.4950	0.5233	0.5642	0.5897	0.6189	0.6887	0.7750	0.8786	0.9371
2.60	0.4782	0.4837	0.5002	0.5284	0.5690	0.5944	0.6233	0.6926	0.7780	0.8804	0.9381
2.65	0.4835	0.4889	0.5054	0.5334	0.5738	0.5991	0.6278	0.6964	0.7809	0.8821	0.9390
2.70	0.4888	0.4942	0.5106	0.5385	0.5787	0.6037	0.6322	0.7002	0.7838	0.8837	0.9399
2.75	0.4941	0.4994	0.5157	0.5435	0.5834	0.6083	0.6366	0.7040	0.7867	0.8854	0.9407
2.80	0.4993	0.5047	0.5209	0.5485	0.5882	0.6129	0.6409	0.7078	0.7896	0.8870	0.9416
2.85	0.5045	0.5099	0.5260	0.5535	0.5929	0.6174	0.6453	0.7115	0.7924	0.8887	0.9425
2.90	0.5097	0.5151	0.5311	0.5584	0.5976	0.6219	0.6496	0.7152	0.7952	0.8902	0.9433
2.95	0.5149	0.5202	0.5362	0.5634	0.6023	0.6264	0.6538	0.7188	0.7980	0.8918	0.9442
3.00	0.5201	0.5254	0.5413	0.5683	0.6069	0.6309	0.6580	0.7224	0.8007	0.8934	0.9450

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-40

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2975	0.3029	0.3195	0.3486	0.3928	0.4216	0.4556	0.5417	0.6569	0.8076	0.8983
0.05	0.2976	0.3030	0.3195	0.3487	0.3929	0.4217	0.4557	0.5418	0.6570	0.8077	0.8983
0.10	0.2979	0.3033	0.3198	0.3490	0.3932	0.4220	0.4560	0.5420	0.6572	0.8078	0.8984
0.15	0.2983	0.3037	0.3203	0.3495	0.3937	0.4225	0.4564	0.5425	0.6576	0.8081	0.8985
0.20	0.2990	0.3043	0.3209	0.3501	0.3943	0.4231	0.4571	0.5431	0.6581	0.8084	0.8987
0.25	0.2998	0.3052	0.3218	0.3510	0.3952	0.4240	0.4579	0.5439	0.6587	0.8088	0.8989
0.30	0.3008	0.3062	0.3228	0.3520	0.3962	0.4250	0.4590	0.5448	0.6595	0.8093	0.8992
0.35	0.3019	0.3073	0.3240	0.3532	0.3974	0.4262	0.4602	0.5460	0.6605	0.8099	0.8995
0.40	0.3033	0.3087	0.3253	0.3545	0.3988	0.4276	0.4615	0.5473	0.6616	0.8106	0.8999
0.45	0.3048	0.3102	0.3269	0.3561	0.4004	0.4292	0.4631	0.5487	0.6628	0.8113	0.9003
0.50	0.3065	0.3119	0.3286	0.3579	0.4022	0.4309	0.4648	0.5503	0.6641	0.8122	0.9008
0.55	0.3083	0.3137	0.3305	0.3598	0.4041	0.4328	0.4667	0.5521	0.6656	0.8131	0.9013
0.60	0.3103	0.3158	0.3325	0.3619	0.4062	0.4349	0.4688	0.5540	0.6672	0.8141	0.9019
0.65	0.3125	0.3190	0.3347	0.3641	0.4084	0.4372	0.4710	0.5560	0.6689	0.8151	0.9025
0.70	0.3149	0.3203	0.3371	0.3665	0.4108	0.4396	0.4733	0.5582	0.6707	0.8163	0.9031
0.75	0.3174	0.3228	0.3396	0.3691	0.4134	0.4421	0.4758	0.5606	0.6727	0.8175	0.9038
0.80	0.3200	0.3255	0.3423	0.3718	0.4161	0.4448	0.4785	0.5630	0.6747	0.8188	0.9045
0.85	0.3228	0.3283	0.3451	0.3745	0.4190	0.4477	0.4813	0.5656	0.6768	0.8201	0.9052
0.90	0.3257	0.3312	0.3481	0.3776	0.4220	0.4506	0.4842	0.5683	0.6791	0.8215	0.9060
0.95	0.3288	0.3343	0.3512	0.3806	0.4251	0.4537	0.4873	0.5712	0.6814	0.8229	0.9068
1.00	0.3320	0.3375	0.3545	0.3841	0.4284	0.4570	0.4904	0.5741	0.6838	0.8244	0.9076
1.05	0.3354	0.3409	0.3578	0.3875	0.4318	0.4603	0.4937	0.5771	0.6863	0.8259	0.9084
1.10	0.3388	0.3444	0.3614	0.3910	0.4353	0.4638	0.4971	0.5802	0.6888	0.8275	0.9093
1.15	0.3424	0.3490	0.3650	0.3946	0.4389	0.4674	0.5007	0.5834	0.6915	0.8291	0.9102
1.20	0.3462	0.3517	0.3687	0.3984	0.4426	0.4711	0.5043	0.5867	0.6942	0.8307	0.9111
1.25	0.3500	0.3555	0.3726	0.4023	0.4465	0.4749	0.5080	0.5901	0.6969	0.8324	0.9120
1.30	0.3539	0.3595	0.3765	0.4062	0.4504	0.4787	0.5117	0.5936	0.6997	0.8341	0.9130
1.35	0.3580	0.3635	0.3806	0.4103	0.4544	0.4827	0.5156	0.5971	0.7026	0.8359	0.9139
1.40	0.3621	0.3677	0.3848	0.4145	0.4585	0.4867	0.5196	0.6007	0.7055	0.8376	0.9149
1.45	0.3663	0.3719	0.3890	0.4187	0.4627	0.4909	0.5236	0.6043	0.7084	0.8394	0.9159
1.50	0.3707	0.3762	0.3934	0.4230	0.4670	0.4951	0.5276	0.6080	0.7114	0.8412	0.9169
1.55	0.3751	0.3807	0.3978	0.4274	0.4713	0.4993	0.5318	0.6117	0.7144	0.8430	0.9178

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF NS WHERE N=3.40

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3796	0.3852	0.4023	0.4319	0.4757	0.5036	0.5360	0.6155	0.7174	0.8448	0.9188
1.65	0.3841	0.3897	0.4068	0.4365	0.4802	0.5080	0.5402	0.6193	0.7205	0.8466	0.9198
1.70	0.3888	0.3944	0.4115	0.4411	0.4847	0.5124	0.5445	0.6231	0.7235	0.8485	0.9208
1.75	0.3935	0.3991	0.4162	0.4457	0.4892	0.5169	0.5488	0.6270	0.7266	0.8503	0.9218
1.80	0.3982	0.4038	0.4209	0.4504	0.4938	0.5214	0.5532	0.6309	0.7297	0.8522	0.9228
1.85	0.4031	0.4086	0.4257	0.4552	0.4985	0.5259	0.5575	0.6348	0.7328	0.8540	0.9238
1.90	0.4079	0.4135	0.4306	0.4600	0.5031	0.5305	0.5620	0.6397	0.7359	0.8558	0.9248
1.95	0.4128	0.4184	0.4355	0.4648	0.5078	0.5350	0.5664	0.6427	0.7390	0.8577	0.9258
2.00	0.4178	0.4234	0.4404	0.4697	0.5126	0.5397	0.5708	0.6456	0.7421	0.8595	0.9268
2.05	0.4228	0.4284	0.4454	0.4746	0.5173	0.5443	0.5753	0.6505	0.7452	0.8613	0.9278
2.10	0.4279	0.4334	0.4504	0.4795	0.5221	0.5489	0.5798	0.6545	0.7483	0.8632	0.9288
2.15	0.4329	0.4385	0.4554	0.4845	0.5269	0.5536	0.5842	0.6584	0.7514	0.8650	0.9298
2.20	0.4380	0.4435	0.4605	0.4894	0.5317	0.5582	0.5887	0.6623	0.7545	0.8668	0.9308
2.25	0.4431	0.4487	0.4655	0.4944	0.5365	0.5629	0.5932	0.6663	0.7576	0.8686	0.9317
2.30	0.4483	0.4538	0.4706	0.4994	0.5413	0.5675	0.5975	0.6702	0.7606	0.8703	0.9327
2.35	0.4534	0.4589	0.4757	0.5044	0.5461	0.5722	0.6021	0.6741	0.7636	0.8721	0.9336
2.40	0.4586	0.4641	0.4808	0.5094	0.5509	0.5768	0.6065	0.6780	0.7667	0.8738	0.9346
2.45	0.4638	0.4693	0.4859	0.5144	0.5557	0.5815	0.6110	0.6818	0.7696	0.8756	0.9355
2.50	0.4690	0.4744	0.4910	0.5194	0.5604	0.5861	0.6154	0.6857	0.7726	0.8773	0.9364
2.55	0.4741	0.4796	0.4962	0.5244	0.5652	0.5907	0.6198	0.6895	0.7756	0.8790	0.9373
2.60	0.4793	0.4848	0.5013	0.5294	0.5700	0.5953	0.6242	0.6933	0.7785	0.8807	0.9382
2.65	0.4845	0.4899	0.5064	0.5343	0.5747	0.5999	0.6285	0.6971	0.7814	0.8823	0.9391
2.70	0.4897	0.4951	0.5114	0.5393	0.5794	0.6044	0.6329	0.7008	0.7843	0.8840	0.9400
2.75	0.4948	0.5002	0.5165	0.5442	0.5841	0.6089	0.6372	0.7045	0.7871	0.8856	0.9409
2.80	0.5000	0.5054	0.5216	0.5491	0.5888	0.6134	0.6415	0.7082	0.7899	0.8872	0.9417
2.85	0.5051	0.5105	0.5266	0.5540	0.5934	0.6179	0.6457	0.7118	0.7927	0.8888	0.9426
2.90	0.5103	0.5156	0.5316	0.5589	0.5980	0.6223	0.6499	0.7155	0.7955	0.8904	0.9434
2.95	0.5154	0.5206	0.5366	0.5637	0.6026	0.6267	0.6541	0.7190	0.7982	0.8919	0.9442
3.00	0.5205	0.5257	0.5416	0.5685	0.6072	0.6311	0.6583	0.7226	0.8009	0.8934	0.9450

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3031	0.3085	0.3251	0.3544	0.3986	0.4273	0.4612	0.5469	0.6613	0.8104	0.8998
0.05	0.3032	0.3086	0.3252	0.3544	0.3987	0.4274	0.4613	0.5470	0.6613	0.8104	0.8998
0.10	0.3035	0.3089	0.3255	0.3547	0.3989	0.4277	0.4615	0.5473	0.6616	0.8105	0.8999
0.15	0.3039	0.3093	0.3259	0.3552	0.3994	0.4282	0.4620	0.5477	0.6619	0.8108	0.9000
0.20	0.3045	0.3099	0.3266	0.3558	0.4000	0.4288	0.4627	0.5483	0.6624	0.8111	0.9002
0.25	0.3053	0.3107	0.3274	0.3566	0.4009	0.4295	0.4635	0.5490	0.6630	0.8115	0.9004
0.30	0.3063	0.3117	0.3283	0.3575	0.4018	0.4306	0.4645	0.5500	0.6638	0.8120	0.9007
0.35	0.3074	0.3128	0.3295	0.3588	0.4030	0.4318	0.4656	0.5510	0.6647	0.8125	0.9010
0.40	0.3087	0.3141	0.3308	0.3601	0.4044	0.4331	0.4669	0.5523	0.6657	0.8132	0.9014
0.45	0.3102	0.3156	0.3323	0.3615	0.4059	0.4345	0.4684	0.5537	0.6669	0.8139	0.9018
0.50	0.3118	0.3172	0.3340	0.3633	0.4076	0.4363	0.4701	0.5552	0.6682	0.8147	0.9022
0.55	0.3136	0.3190	0.3358	0.3652	0.4094	0.4382	0.4719	0.5569	0.6696	0.8156	0.9027
0.60	0.3156	0.3210	0.3378	0.3672	0.4115	0.4402	0.4739	0.5587	0.6711	0.8165	0.9032
0.65	0.3177	0.3231	0.3399	0.3693	0.4136	0.4423	0.4760	0.5607	0.6728	0.8175	0.9038
0.70	0.3199	0.3254	0.3422	0.3717	0.4160	0.4446	0.4783	0.5628	0.6745	0.8185	0.9044
0.75	0.3224	0.3278	0.3447	0.3741	0.4185	0.4471	0.4807	0.5651	0.6764	0.8198	0.9050
0.80	0.3249	0.3304	0.3473	0.3768	0.4211	0.4497	0.4833	0.5675	0.6783	0.8210	0.9057
0.85	0.3275	0.3331	0.3500	0.3799	0.4238	0.4525	0.4860	0.5699	0.6804	0.8223	0.9064
0.90	0.3305	0.3360	0.3529	0.3829	0.4268	0.4553	0.4888	0.5725	0.6825	0.8236	0.9072
0.95	0.3335	0.3390	0.3559	0.3855	0.4298	0.4583	0.4918	0.5753	0.6848	0.8250	0.9079
1.00	0.3366	0.3421	0.3591	0.3887	0.4330	0.4615	0.4948	0.5781	0.6871	0.8264	0.9087
1.05	0.3399	0.3454	0.3624	0.3920	0.4362	0.4647	0.4980	0.5810	0.6895	0.8279	0.9095
1.10	0.3432	0.3488	0.3658	0.3954	0.4396	0.4681	0.5013	0.5840	0.6919	0.8294	0.9104
1.15	0.3467	0.3523	0.3693	0.3989	0.4432	0.4716	0.5047	0.5871	0.6945	0.8309	0.9112
1.20	0.3504	0.3559	0.3729	0.4026	0.4468	0.4751	0.5082	0.5903	0.6971	0.8325	0.9121
1.25	0.3541	0.3596	0.3767	0.4063	0.4505	0.4788	0.5118	0.5936	0.6997	0.8341	0.9130
1.30	0.3579	0.3635	0.3805	0.4102	0.4543	0.4826	0.5155	0.5969	0.7024	0.8358	0.9139
1.35	0.3618	0.3674	0.3845	0.4142	0.4582	0.4864	0.5192	0.6003	0.7052	0.8374	0.9148
1.40	0.3659	0.3715	0.3885	0.4182	0.4622	0.4903	0.5230	0.6038	0.7080	0.8391	0.9157
1.45	0.3700	0.3756	0.3927	0.4223	0.4663	0.4943	0.5269	0.6073	0.7108	0.8408	0.9167
1.50	0.3742	0.3798	0.3969	0.4265	0.4704	0.4984	0.5309	0.6109	0.7137	0.8426	0.9176
1.55	0.3785	0.3841	0.4012	0.4308	0.4746	0.5025	0.5349	0.6145	0.7166	0.8443	0.9185

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.45

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3829	0.3885	0.4056	0.4352	0.4789	0.5067	0.5390	0.6182	0.7195	0.8481	0.9195
1.65	0.3873	0.3929	0.4100	0.4396	0.4832	0.5110	0.5431	0.6219	0.7225	0.8478	0.9205
1.70	0.3919	0.3975	0.4146	0.4441	0.4876	0.5153	0.5472	0.6256	0.7255	0.8496	0.9215
1.75	0.3965	0.4021	0.4191	0.4486	0.4920	0.5196	0.5514	0.6293	0.7285	0.8514	0.9224
1.80	0.4011	0.4067	0.4238	0.4532	0.4965	0.5240	0.5557	0.6331	0.7315	0.8532	0.9234
1.85	0.4058	0.4114	0.4285	0.4579	0.5011	0.5284	0.5600	0.6369	0.7345	0.8550	0.9244
1.90	0.4106	0.4162	0.4332	0.4626	0.5056	0.5328	0.5642	0.6407	0.7375	0.8568	0.9253
1.95	0.4154	0.4210	0.4380	0.4673	0.5102	0.5373	0.5686	0.6446	0.7405	0.8586	0.9263
2.00	0.4202	0.4258	0.4428	0.4720	0.5148	0.5418	0.5729	0.6484	0.7436	0.8603	0.9273
2.05	0.4251	0.4307	0.4477	0.4768	0.5194	0.5463	0.5772	0.6522	0.7466	0.8621	0.9282
2.10	0.4300	0.4356	0.4526	0.4816	0.5241	0.5509	0.5816	0.6561	0.7496	0.8639	0.9292
2.15	0.4350	0.4406	0.4575	0.4865	0.5288	0.5554	0.5860	0.6599	0.7526	0.8657	0.9302
2.20	0.4400	0.4455	0.4624	0.4913	0.5335	0.5599	0.5903	0.6638	0.7556	0.8674	0.9311
2.25	0.4450	0.4505	0.4674	0.4962	0.5382	0.5645	0.5947	0.6676	0.7586	0.8692	0.9320
2.30	0.4500	0.4556	0.4723	0.5011	0.5428	0.5691	0.5991	0.6714	0.7616	0.8709	0.9330
2.35	0.4551	0.4606	0.4773	0.5060	0.5475	0.5735	0.6034	0.6752	0.7645	0.8726	0.9339
2.40	0.4601	0.4656	0.4823	0.5109	0.5522	0.5782	0.6078	0.6790	0.7675	0.8743	0.9348
2.45	0.4652	0.4707	0.4873	0.5158	0.5569	0.5827	0.6121	0.6828	0.7704	0.8760	0.9357
2.50	0.4703	0.4758	0.4924	0.5207	0.5616	0.5872	0.6165	0.6866	0.7733	0.8777	0.9366
2.55	0.4754	0.4808	0.4974	0.5255	0.5663	0.5917	0.6208	0.6903	0.7762	0.8793	0.9375
2.60	0.4805	0.4859	0.5024	0.5304	0.5709	0.5962	0.6251	0.6940	0.7791	0.8810	0.9384
2.65	0.4856	0.4910	0.5074	0.5353	0.5756	0.6007	0.6293	0.6977	0.7819	0.8826	0.9393
2.70	0.4906	0.4960	0.5124	0.5402	0.5802	0.6052	0.6335	0.7014	0.7847	0.8842	0.9401
2.75	0.4957	0.5011	0.5173	0.5450	0.5848	0.6096	0.6378	0.7050	0.7875	0.8858	0.9410
2.80	0.5008	0.5061	0.5223	0.5498	0.5894	0.6140	0.6420	0.7087	0.7903	0.8874	0.9418
2.85	0.5058	0.5111	0.5273	0.5546	0.5940	0.6184	0.6462	0.7123	0.7930	0.8890	0.9426
2.90	0.5109	0.5162	0.5322	0.5594	0.5985	0.6228	0.6503	0.7158	0.7957	0.8905	0.9435
2.95	0.5159	0.5211	0.5371	0.5642	0.6030	0.6271	0.6545	0.7193	0.7984	0.8920	0.9443
3.00	0.5209	0.5261	0.5420	0.5689	0.6075	0.6314	0.6585	0.7228	0.8010	0.8935	0.9451

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RS WHERE N=3-50

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3086	0.3141	0.3307	0.3600	0.4042	0.4329	0.4668	0.5521	0.6655	0.8130	0.9013
0.05	0.3087	0.3141	0.3308	0.3601	0.4043	0.4330	0.4668	0.5521	0.6656	0.8131	0.9013
0.10	0.3090	0.3144	0.3311	0.3604	0.4046	0.4333	0.4671	0.5524	0.6658	0.8132	0.9014
0.15	0.3094	0.3148	0.3315	0.3608	0.4050	0.4337	0.4675	0.5528	0.6661	0.8134	0.9015
0.20	0.3100	0.3154	0.3321	0.3614	0.4056	0.4343	0.4681	0.5534	0.6666	0.8137	0.9017
0.25	0.3108	0.3162	0.3329	0.3622	0.4064	0.4351	0.4689	0.5541	0.6672	0.8141	0.9019
0.30	0.3117	0.3171	0.3338	0.3631	0.4074	0.4361	0.4699	0.5550	0.6679	0.8145	0.9021
0.35	0.3128	0.3182	0.3349	0.3643	0.4085	0.4372	0.4710	0.5560	0.6688	0.8151	0.9024
0.40	0.3141	0.3195	0.3362	0.3656	0.4098	0.4385	0.4723	0.5572	0.6698	0.8157	0.9028
0.45	0.3155	0.3209	0.3377	0.3670	0.4113	0.4400	0.4737	0.5585	0.6709	0.8164	0.9032
0.50	0.3171	0.3225	0.3393	0.3687	0.4129	0.4415	0.4753	0.5600	0.6721	0.8171	0.9036
0.55	0.3188	0.3243	0.3410	0.3705	0.4147	0.4436	0.4771	0.5616	0.6735	0.8180	0.9041
0.60	0.3207	0.3262	0.3430	0.3724	0.4167	0.4453	0.4790	0.5634	0.6750	0.8189	0.9046
0.65	0.3228	0.3282	0.3451	0.3745	0.4188	0.4474	0.4810	0.5653	0.6765	0.8199	0.9051
0.70	0.3250	0.3304	0.3473	0.3768	0.4210	0.4497	0.4832	0.5673	0.6782	0.8209	0.9057
0.75	0.3273	0.3328	0.3497	0.3792	0.4234	0.4520	0.4856	0.5695	0.6800	0.8220	0.9063
0.80	0.3298	0.3353	0.3522	0.3817	0.4260	0.4546	0.4880	0.5718	0.6819	0.8232	0.9069
0.85	0.3325	0.3380	0.3549	0.3844	0.4287	0.4572	0.4906	0.5742	0.6838	0.8244	0.9076
0.90	0.3352	0.3407	0.3577	0.3872	0.4315	0.4600	0.4934	0.5767	0.6859	0.8257	0.9083
0.95	0.3381	0.3437	0.3606	0.3902	0.4344	0.4629	0.4962	0.5793	0.6881	0.8270	0.9090
1.00	0.3412	0.3467	0.3637	0.3932	0.4375	0.4659	0.4992	0.5820	0.6903	0.8283	0.9098
1.05	0.3443	0.3499	0.3668	0.3964	0.4407	0.4691	0.5023	0.5849	0.6926	0.8298	0.9106
1.10	0.3476	0.3532	0.3702	0.3998	0.4439	0.4723	0.5055	0.5878	0.6950	0.8312	0.9114
1.15	0.3510	0.3566	0.3736	0.4032	0.4474	0.4757	0.5087	0.5908	0.6974	0.8327	0.9122
1.20	0.3545	0.3601	0.3771	0.4068	0.4509	0.4792	0.5121	0.5939	0.6999	0.8342	0.9130
1.25	0.3582	0.3637	0.3808	0.4104	0.4545	0.4827	0.5156	0.5970	0.7025	0.8358	0.9139
1.30	0.3619	0.3675	0.3845	0.4141	0.4582	0.4864	0.5191	0.6002	0.7051	0.8374	0.9148
1.35	0.3657	0.3713	0.3884	0.4180	0.4620	0.4901	0.5228	0.6035	0.7078	0.8390	0.9156
1.40	0.3697	0.3752	0.3923	0.4219	0.4658	0.4939	0.5265	0.6069	0.7105	0.8406	0.9165
1.45	0.3737	0.3793	0.3963	0.4259	0.4698	0.4978	0.5303	0.6103	0.7132	0.8423	0.9174
1.50	0.3778	0.3834	0.4004	0.4300	0.4738	0.5017	0.5341	0.6138	0.7160	0.8439	0.9184
1.55	0.3820	0.3876	0.4046	0.4342	0.4779	0.5057	0.5380	0.6173	0.7188	0.8456	0.9193

TABLES OF CALCULATIONS FOR H-H WRIGHT ESR

VALUES OF N_S WHERE $N=3-50$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3862	0.3918	0.4089	0.4385	0.4821	0.5098	0.5420	0.6208	0.7217	0.8473	0.9202
1.65	0.3906	0.3962	0.4132	0.4428	0.4863	0.5139	0.5460	0.6244	0.7245	0.8490	0.9211
1.70	0.3950	0.4006	0.4177	0.4471	0.4906	0.5181	0.5500	0.6280	0.7274	0.8508	0.9221
1.75	0.3995	0.4051	0.4221	0.4516	0.4949	0.5224	0.5541	0.6317	0.7303	0.8525	0.9230
1.80	0.4040	0.4096	0.4266	0.4560	0.4992	0.5266	0.5582	0.6354	0.7332	0.8542	0.9240
1.85	0.4086	0.4142	0.4312	0.4606	0.5037	0.5309	0.5624	0.6391	0.7362	0.8560	0.9249
1.90	0.4132	0.4188	0.4358	0.4651	0.5081	0.5353	0.5666	0.6428	0.7391	0.8577	0.9259
1.95	0.4179	0.4235	0.4405	0.4698	0.5126	0.5396	0.5708	0.6465	0.7420	0.8594	0.9268
2.00	0.4227	0.4282	0.4452	0.4744	0.5171	0.5440	0.5750	0.6502	0.7450	0.8612	0.9277
2.05	0.4275	0.4330	0.4500	0.4791	0.5216	0.5484	0.5792	0.6540	0.7479	0.8629	0.9287
2.10	0.4323	0.4378	0.4547	0.4838	0.5261	0.5528	0.5835	0.6577	0.7509	0.8646	0.9296
2.15	0.4371	0.4427	0.4596	0.4885	0.5307	0.5573	0.5878	0.6615	0.7538	0.8663	0.9305
2.20	0.4420	0.4475	0.4644	0.4933	0.5353	0.5617	0.5920	0.6652	0.7567	0.8681	0.9314
2.25	0.4469	0.4524	0.4692	0.4980	0.5399	0.5662	0.5963	0.6690	0.7596	0.8698	0.9324
2.30	0.4518	0.4574	0.4741	0.5028	0.5445	0.5705	0.6006	0.6727	0.7626	0.8715	0.9333
2.35	0.4568	0.4623	0.4790	0.5076	0.5491	0.5751	0.6048	0.6764	0.7654	0.8731	0.9342
2.40	0.4617	0.4672	0.4839	0.5124	0.5537	0.5795	0.6091	0.6801	0.7683	0.8748	0.9351
2.45	0.4667	0.4722	0.4888	0.5172	0.5583	0.5840	0.6133	0.6838	0.7712	0.8765	0.9360
2.50	0.4717	0.4772	0.4937	0.5220	0.5628	0.5884	0.6176	0.6875	0.7740	0.8781	0.9368
2.55	0.4767	0.4821	0.4986	0.5268	0.5674	0.5928	0.6218	0.6912	0.7769	0.8797	0.9377
2.60	0.4817	0.4871	0.5035	0.5315	0.5720	0.5972	0.6260	0.6948	0.7797	0.8813	0.9386
2.65	0.4867	0.4921	0.5084	0.5363	0.5766	0.6016	0.6302	0.6985	0.7824	0.8829	0.9394
2.70	0.4916	0.4970	0.5133	0.5411	0.5811	0.6060	0.6344	0.7021	0.7852	0.8845	0.9403
2.75	0.4966	0.5020	0.5182	0.5459	0.5856	0.6104	0.6385	0.7056	0.7879	0.8861	0.9411
2.80	0.5016	0.5069	0.5231	0.5506	0.5901	0.6147	0.6427	0.7092	0.7907	0.8876	0.9419
2.85	0.5066	0.5119	0.5280	0.5553	0.5946	0.6190	0.6468	0.7127	0.7933	0.8892	0.9427
2.90	0.5116	0.5168	0.5328	0.5600	0.5991	0.6233	0.6508	0.7162	0.7960	0.8907	0.9436
2.95	0.5164	0.5217	0.5377	0.5647	0.6035	0.6276	0.6549	0.7197	0.7986	0.8922	0.9443
3.00	0.5214	0.5266	0.5425	0.5694	0.6079	0.6318	0.6589	0.7231	0.8012	0.8936	0.9451

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3141	0.3195	0.3362	0.3656	0.4098	0.4384	0.4722	0.5571	0.6697	0.8156	0.9027
0.05	0.3142	0.3196	0.3363	0.3656	0.4099	0.4385	0.4723	0.5571	0.6697	0.8156	0.9027
0.10	0.3144	0.3199	0.3366	0.3659	0.4101	0.4388	0.4725	0.5574	0.6699	0.8158	0.9028
0.15	0.3148	0.3203	0.3370	0.3663	0.4105	0.4392	0.4729	0.5578	0.6703	0.8160	0.9029
0.20	0.3154	0.3208	0.3376	0.3669	0.4111	0.4398	0.4735	0.5583	0.6707	0.8162	0.9031
0.25	0.3162	0.3216	0.3383	0.3677	0.4119	0.4406	0.4743	0.5590	0.6713	0.8166	0.9033
0.30	0.3171	0.3225	0.3392	0.3686	0.4128	0.4415	0.4752	0.5599	0.6720	0.8170	0.9035
0.35	0.3181	0.3236	0.3403	0.3697	0.4139	0.4426	0.4762	0.5608	0.6728	0.8176	0.9038
0.40	0.3194	0.3248	0.3416	0.3710	0.4152	0.4438	0.4775	0.5620	0.6738	0.8181	0.9041
0.45	0.3207	0.3262	0.3430	0.3724	0.4166	0.4452	0.4789	0.5633	0.6748	0.8188	0.9045
0.50	0.3223	0.3277	0.3445	0.3739	0.4182	0.4468	0.4804	0.5647	0.6760	0.8195	0.9049
0.55	0.3240	0.3294	0.3462	0.3757	0.4199	0.4485	0.4821	0.5663	0.6773	0.8203	0.9054
0.60	0.3258	0.3313	0.3481	0.3776	0.4218	0.4504	0.4839	0.5680	0.6787	0.8212	0.9058
0.65	0.3278	0.3333	0.3501	0.3796	0.4238	0.4524	0.4859	0.5698	0.6802	0.8221	0.9064
0.70	0.3300	0.3354	0.3523	0.3818	0.4260	0.4546	0.4880	0.5718	0.6818	0.8231	0.9069
0.75	0.3322	0.3377	0.3546	0.3841	0.4283	0.4569	0.4903	0.5738	0.6835	0.8242	0.9075
0.80	0.3347	0.3402	0.3571	0.3866	0.4308	0.4593	0.4927	0.5760	0.6854	0.8253	0.9081
0.85	0.3372	0.3427	0.3596	0.3892	0.4334	0.4619	0.4952	0.5784	0.6873	0.8265	0.9088
0.90	0.3399	0.3454	0.3624	0.3919	0.4361	0.4646	0.4978	0.5808	0.6892	0.8277	0.9094
0.95	0.3427	0.3483	0.3652	0.3948	0.4390	0.4674	0.5006	0.5833	0.6913	0.8290	0.9101
1.00	0.3457	0.3512	0.3682	0.3978	0.4419	0.4703	0.5035	0.5859	0.6935	0.8303	0.9109
1.05	0.3488	0.3543	0.3713	0.4009	0.4450	0.4734	0.5065	0.5887	0.6957	0.8316	0.9116
1.10	0.3520	0.3575	0.3746	0.4041	0.4482	0.4765	0.5095	0.5915	0.6980	0.8330	0.9124
1.15	0.3553	0.3608	0.3778	0.4074	0.4515	0.4798	0.5127	0.5944	0.7003	0.8345	0.9132
1.20	0.3587	0.3643	0.3813	0.4109	0.4549	0.4831	0.5160	0.5973	0.7027	0.8359	0.9140
1.25	0.3622	0.3678	0.3848	0.4144	0.4584	0.4866	0.5194	0.6004	0.7052	0.8374	0.9148
1.30	0.3659	0.3714	0.3885	0.4181	0.4620	0.4901	0.5228	0.6035	0.7077	0.8390	0.9156
1.35	0.3696	0.3752	0.3922	0.4218	0.4657	0.4937	0.5263	0.6067	0.7103	0.8405	0.9165
1.40	0.3734	0.3790	0.3961	0.4256	0.4695	0.4974	0.5299	0.6100	0.7129	0.8421	0.9173
1.45	0.3773	0.3829	0.4000	0.4295	0.4733	0.5012	0.5336	0.6133	0.7156	0.8437	0.9182
1.50	0.3813	0.3869	0.4040	0.4335	0.4772	0.5050	0.5373	0.6166	0.7183	0.8453	0.9191
1.55	0.3854	0.3910	0.4081	0.4376	0.4812	0.5090	0.5411	0.6200	0.7210	0.8469	0.9200

TABLES OF CALCULATIONS FOR N-H WRIGHT EQ.

VALUES OF RS WHERE N=3.55

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THETA K	0	10	20	30	40	45	50	50	70	80	85
1.60	0.3896	0.3952	0.4122	0.4417	0.4852	0.5129	0.5449	0.6235	0.7238	0.8486	0.9209
1.65	0.3938	0.3994	0.4165	0.4459	0.4893	0.5169	0.5488	0.6270	0.7265	0.8502	0.9218
1.70	0.3981	0.4037	0.4208	0.4502	0.4935	0.5210	0.5528	0.6305	0.7293	0.8519	0.9227
1.75	0.4025	0.4081	0.4251	0.4545	0.4977	0.5251	0.5568	0.6340	0.7322	0.8536	0.9236
1.80	0.4069	0.4125	0.4295	0.4589	0.5020	0.5293	0.5608	0.6376	0.7350	0.8553	0.9245
1.85	0.4114	0.4170	0.4340	0.4635	0.5063	0.5335	0.5648	0.6412	0.7378	0.8570	0.9254
1.90	0.4159	0.4215	0.4385	0.4677	0.5106	0.5377	0.5689	0.6448	0.7407	0.8586	0.9264
1.95	0.4205	0.4261	0.4431	0.4722	0.5150	0.5419	0.5730	0.6484	0.7436	0.8603	0.9273
2.00	0.4252	0.4307	0.4477	0.4768	0.5194	0.5462	0.5771	0.6521	0.7464	0.8620	0.9282
2.05	0.4298	0.4354	0.4523	0.4814	0.5238	0.5505	0.5813	0.6557	0.7493	0.8637	0.9291
2.10	0.4345	0.4401	0.4570	0.4859	0.5282	0.5548	0.5854	0.6594	0.7522	0.8654	0.9300
2.15	0.4393	0.4448	0.4617	0.4906	0.5327	0.5592	0.5896	0.6631	0.7550	0.8671	0.9309
2.20	0.4441	0.4496	0.4664	0.4952	0.5372	0.5638	0.5937	0.6667	0.7579	0.8687	0.9318
2.25	0.4489	0.4544	0.4712	0.4999	0.5416	0.5679	0.5979	0.6704	0.7607	0.8704	0.9327
2.30	0.4537	0.4592	0.4759	0.5045	0.5461	0.5722	0.6021	0.6740	0.7636	0.8720	0.9336
2.35	0.4585	0.4640	0.4807	0.5092	0.5506	0.5766	0.6063	0.6777	0.7664	0.8737	0.9345
2.40	0.4634	0.4689	0.4855	0.5139	0.5551	0.5809	0.6104	0.6813	0.7692	0.8753	0.9353
2.45	0.4683	0.4737	0.4903	0.5186	0.5596	0.5853	0.6146	0.6849	0.7720	0.8769	0.9362
2.50	0.4731	0.4786	0.4951	0.5233	0.5641	0.5896	0.6187	0.6885	0.7748	0.8785	0.9371
2.55	0.4780	0.4835	0.4999	0.5280	0.5686	0.5940	0.6229	0.6921	0.7776	0.8801	0.9379
2.60	0.4829	0.4883	0.5048	0.5327	0.5731	0.5983	0.6270	0.6957	0.7803	0.8817	0.9388
2.65	0.4878	0.4932	0.5096	0.5374	0.5776	0.6026	0.6311	0.6992	0.7830	0.8833	0.9396
2.70	0.4927	0.4981	0.5144	0.5421	0.5820	0.6069	0.6352	0.7028	0.7857	0.8848	0.9404
2.75	0.4976	0.5030	0.5192	0.5468	0.5865	0.6112	0.6393	0.7053	0.7884	0.8854	0.9413
2.80	0.5025	0.5078	0.5240	0.5514	0.5909	0.6154	0.6433	0.7098	0.7911	0.8879	0.9421
2.85	0.5074	0.5127	0.5288	0.5561	0.5953	0.6197	0.6474	0.7132	0.7937	0.8894	0.9429
2.90	0.5122	0.5175	0.5335	0.5607	0.5997	0.6239	0.6514	0.7167	0.7963	0.8909	0.9437
2.95	0.5171	0.5224	0.5383	0.5653	0.6040	0.6281	0.6553	0.7201	0.7989	0.8923	0.9444
3.00	0.5219	0.5272	0.5430	0.5699	0.6084	0.6322	0.6593	0.7234	0.8015	0.8938	0.9452

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RS WHERE N=3.60

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3195	0.3249	0.3417	0.3710	0.4152	0.4439	0.4775	0.5620	0.6737	0.8181	0.9041
0.05	0.3196	0.3250	0.3417	0.3711	0.4153	0.4439	0.4776	0.5620	0.6738	0.8181	0.9041
0.10	0.3198	0.3252	0.3420	0.3714	0.4156	0.4442	0.4778	0.5623	0.6740	0.8183	0.9042
0.15	0.3202	0.3256	0.3424	0.3718	0.4160	0.4446	0.4782	0.5626	0.6743	0.8185	0.9043
0.20	0.3208	0.3262	0.3430	0.3723	0.4165	0.4452	0.4788	0.5632	0.6747	0.8187	0.9045
0.25	0.3215	0.3269	0.3437	0.3731	0.4173	0.4459	0.4795	0.5638	0.6753	0.8191	0.9046
0.30	0.3224	0.3278	0.3446	0.3740	0.4182	0.4468	0.4804	0.5646	0.6759	0.8195	0.9049
0.35	0.3234	0.3288	0.3456	0.3750	0.4192	0.4478	0.4814	0.5656	0.6767	0.8200	0.9052
0.40	0.3246	0.3300	0.3468	0.3763	0.4205	0.4490	0.4826	0.5667	0.6776	0.8205	0.9055
0.45	0.3259	0.3314	0.3482	0.3776	0.4218	0.4504	0.4839	0.5679	0.6787	0.8212	0.9058
0.50	0.3274	0.3329	0.3497	0.3792	0.4234	0.4519	0.4854	0.5693	0.6798	0.8219	0.9062
0.55	0.3291	0.3345	0.3514	0.3808	0.4250	0.4536	0.4870	0.5708	0.6810	0.8226	0.9066
0.60	0.3309	0.3363	0.3532	0.3827	0.4269	0.4554	0.4888	0.5725	0.6824	0.8235	0.9071
0.65	0.3328	0.3383	0.3551	0.3846	0.4288	0.4573	0.4907	0.5742	0.6838	0.8244	0.9076
0.70	0.3349	0.3404	0.3573	0.3867	0.4309	0.4594	0.4928	0.5761	0.6854	0.8253	0.9081
0.75	0.3371	0.3426	0.3595	0.3890	0.4332	0.4617	0.4950	0.5781	0.6870	0.8263	0.9087
0.80	0.3394	0.3450	0.3619	0.3914	0.4356	0.4640	0.4973	0.5802	0.6888	0.8274	0.9093
0.85	0.3419	0.3475	0.3644	0.3939	0.4381	0.4665	0.4997	0.5825	0.6906	0.8285	0.9099
0.90	0.3446	0.3501	0.3670	0.3966	0.4407	0.4691	0.5023	0.5848	0.6925	0.8297	0.9105
0.95	0.3473	0.3528	0.3698	0.3994	0.4435	0.4718	0.5049	0.5872	0.6945	0.8309	0.9112
1.00	0.3502	0.3557	0.3727	0.4023	0.4464	0.4747	0.5077	0.5898	0.6966	0.8322	0.9119
1.05	0.3532	0.3587	0.3757	0.4053	0.4493	0.4776	0.5106	0.5924	0.6987	0.8335	0.9126
1.10	0.3563	0.3618	0.3788	0.4084	0.4524	0.4807	0.5136	0.5951	0.7009	0.8348	0.9134
1.15	0.3595	0.3651	0.3821	0.4117	0.4556	0.4838	0.5167	0.5979	0.7032	0.8362	0.9141
1.20	0.3628	0.3684	0.3854	0.4150	0.4590	0.4871	0.5198	0.6008	0.7055	0.8376	0.9149
1.25	0.3663	0.3718	0.3889	0.4184	0.4624	0.4904	0.5231	0.6038	0.7079	0.8391	0.9157
1.30	0.3698	0.3754	0.3924	0.4220	0.4658	0.4939	0.5264	0.6068	0.7103	0.8405	0.9165
1.35	0.3734	0.3790	0.3961	0.4256	0.4694	0.4974	0.5298	0.6099	0.7128	0.8420	0.9173
1.40	0.3772	0.3827	0.3998	0.4293	0.4731	0.5010	0.5333	0.6130	0.7154	0.8435	0.9181
1.45	0.3810	0.3866	0.4036	0.4331	0.4768	0.5046	0.5369	0.6162	0.7179	0.8451	0.9190
1.50	0.3849	0.3905	0.4075	0.4370	0.4806	0.5084	0.5405	0.6195	0.7205	0.8467	0.9198
1.55	0.3889	0.3944	0.4115	0.4410	0.4845	0.5122	0.5442	0.6228	0.7232	0.8482	0.9207

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.60

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3929	0.3985	0.4155	0.4450	0.4884	0.5180	0.5479	0.6261	0.7259	0.8498	0.9216
1.65	0.3970	0.4026	0.4197	0.4491	0.4924	0.5199	0.5517	0.6295	0.7286	0.8514	0.9224
1.70	0.4012	0.4068	0.4239	0.4532	0.4965	0.5239	0.5555	0.6329	0.7313	0.8531	0.9233
1.75	0.4055	0.4111	0.4281	0.4574	0.5006	0.5279	0.5594	0.6364	0.7340	0.8547	0.9242
1.80	0.4098	0.4154	0.4324	0.4617	0.5047	0.5319	0.5633	0.6398	0.7368	0.8563	0.9251
1.85	0.4142	0.4198	0.4368	0.4660	0.5089	0.5360	0.5673	0.6433	0.7399	0.8579	0.9260
1.90	0.4187	0.4242	0.4412	0.4704	0.5131	0.5401	0.5712	0.6469	0.7423	0.8596	0.9269
1.95	0.4231	0.4287	0.4456	0.4748	0.5174	0.5443	0.5752	0.6504	0.7451	0.8612	0.9278
2.00	0.4277	0.4332	0.4501	0.4792	0.5217	0.5485	0.5793	0.6540	0.7479	0.8629	0.9286
2.05	0.4322	0.4378	0.4547	0.4837	0.5260	0.5526	0.5833	0.6575	0.7507	0.8645	0.9295
2.10	0.4368	0.4424	0.4592	0.4882	0.5303	0.5569	0.5873	0.6611	0.7535	0.8661	0.9304
2.15	0.4415	0.4470	0.4638	0.4927	0.5347	0.5611	0.5914	0.6647	0.7563	0.8678	0.9313
2.20	0.4462	0.4517	0.4685	0.4972	0.5391	0.5653	0.5955	0.6682	0.7590	0.8694	0.9322
2.25	0.4509	0.4564	0.4731	0.5018	0.5434	0.5696	0.5996	0.6718	0.7618	0.8710	0.9330
2.30	0.4556	0.4611	0.4778	0.5063	0.5478	0.5739	0.6035	0.6754	0.7646	0.8726	0.9339
2.35	0.4603	0.4658	0.4825	0.5109	0.5522	0.5781	0.6077	0.6789	0.7674	0.8742	0.9348
2.40	0.4651	0.4705	0.4872	0.5155	0.5566	0.5824	0.6118	0.6825	0.7701	0.8758	0.9356
2.45	0.4699	0.4753	0.4919	0.5201	0.5611	0.5866	0.6159	0.6860	0.7728	0.8774	0.9365
2.50	0.4746	0.4801	0.4966	0.5247	0.5655	0.5909	0.6199	0.6896	0.7756	0.8790	0.9373
2.55	0.4794	0.4849	0.5013	0.5293	0.5699	0.5951	0.6240	0.6931	0.7783	0.8805	0.9381
2.60	0.4842	0.4896	0.5060	0.5339	0.5742	0.5994	0.6280	0.6966	0.7810	0.8821	0.9390
2.65	0.4890	0.4944	0.5108	0.5385	0.5786	0.6036	0.6321	0.7000	0.7836	0.8836	0.9398
2.70	0.4938	0.4992	0.5155	0.5431	0.5830	0.6078	0.6361	0.7035	0.7863	0.8851	0.9406
2.75	0.4987	0.5040	0.5202	0.5477	0.5874	0.6120	0.6401	0.7070	0.7889	0.8866	0.9414
2.80	0.5034	0.5088	0.5249	0.5523	0.5917	0.6162	0.6441	0.7104	0.7915	0.8881	0.9422
2.85	0.5082	0.5135	0.5296	0.5569	0.5960	0.6204	0.6480	0.7138	0.7941	0.8896	0.9430
2.90	0.5130	0.5183	0.5343	0.5614	0.6003	0.6245	0.6520	0.7171	0.7967	0.8911	0.9438
2.95	0.5178	0.5230	0.5390	0.5659	0.6046	0.6286	0.6559	0.7205	0.7992	0.8925	0.9445
3.00	0.5225	0.5278	0.5436	0.5704	0.6089	0.6327	0.6597	0.7238	0.8018	0.8939	0.9453

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESO.

VALUES OF RS WHERE N=3.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3248	0.3302	0.3470	0.3764	0.4206	0.4492	0.4827	0.5668	0.6777	0.8205	0.9055
0.05	0.3249	0.3303	0.3471	0.3765	0.4207	0.4492	0.4828	0.5668	0.6777	0.8206	0.9055
0.10	0.3251	0.3305	0.3473	0.3767	0.4209	0.4495	0.4830	0.5670	0.6779	0.8207	0.9056
0.15	0.3255	0.3309	0.3477	0.3771	0.4213	0.4499	0.4834	0.5674	0.6782	0.8209	0.9057
0.20	0.3260	0.3315	0.3483	0.3777	0.4219	0.4504	0.4839	0.5679	0.6786	0.8211	0.9058
0.25	0.3267	0.3322	0.3490	0.3784	0.4226	0.4511	0.4846	0.5685	0.6791	0.8215	0.9060
0.30	0.3276	0.3330	0.3499	0.3793	0.4234	0.4520	0.4855	0.5693	0.6798	0.8219	0.9062
0.35	0.3286	0.3340	0.3509	0.3803	0.4245	0.4530	0.4865	0.5702	0.6805	0.8223	0.9065
0.40	0.3297	0.3352	0.3520	0.3815	0.4256	0.4542	0.4876	0.5713	0.6814	0.8229	0.9068
0.45	0.3310	0.3365	0.3534	0.3828	0.4270	0.4555	0.4889	0.5725	0.6824	0.8235	0.9071
0.50	0.3325	0.3380	0.3548	0.3843	0.4284	0.4570	0.4903	0.5738	0.6835	0.8241	0.9075
0.55	0.3341	0.3396	0.3564	0.3859	0.4301	0.4586	0.4919	0.5753	0.6847	0.8249	0.9079
0.60	0.3358	0.3413	0.3582	0.3877	0.4318	0.4603	0.4936	0.5769	0.6860	0.8257	0.9083
0.65	0.3377	0.3432	0.3601	0.3896	0.4337	0.4622	0.4955	0.5786	0.6874	0.8265	0.9088
0.70	0.3397	0.3452	0.3621	0.3916	0.4358	0.4642	0.4975	0.5804	0.6889	0.8274	0.9093
0.75	0.3419	0.3474	0.3643	0.3938	0.4380	0.4664	0.4996	0.5823	0.6904	0.8284	0.9098
0.80	0.3442	0.3497	0.3666	0.3962	0.4403	0.4686	0.5018	0.5843	0.6921	0.8294	0.9104
0.85	0.3466	0.3521	0.3691	0.3986	0.4427	0.4711	0.5042	0.5865	0.6939	0.8305	0.9110
0.90	0.3492	0.3547	0.3716	0.4012	0.4453	0.4735	0.5065	0.5888	0.6957	0.8316	0.9116
0.95	0.3518	0.3574	0.3743	0.4039	0.4479	0.4762	0.5092	0.5911	0.6976	0.8328	0.9123
1.00	0.3546	0.3602	0.3771	0.4067	0.4507	0.4790	0.5119	0.5936	0.6996	0.8340	0.9129
1.05	0.3575	0.3631	0.3801	0.4095	0.4536	0.4818	0.5147	0.5961	0.7017	0.8353	0.9136
1.10	0.3606	0.3661	0.3831	0.4127	0.4566	0.4848	0.5176	0.5987	0.7038	0.8366	0.9143
1.15	0.3637	0.3692	0.3863	0.4158	0.4597	0.4878	0.5206	0.6014	0.7060	0.8379	0.9150
1.20	0.3669	0.3725	0.3895	0.4191	0.4629	0.4910	0.5236	0.6042	0.7083	0.8393	0.9158
1.25	0.3703	0.3758	0.3929	0.4224	0.4662	0.4942	0.5268	0.6071	0.7106	0.8407	0.9165
1.30	0.3737	0.3793	0.3963	0.4259	0.4696	0.4976	0.5300	0.6100	0.7129	0.8421	0.9173
1.35	0.3773	0.3828	0.3999	0.4294	0.4731	0.5010	0.5333	0.6130	0.7153	0.8435	0.9181
1.40	0.3809	0.3865	0.4035	0.4330	0.4767	0.5045	0.5367	0.6160	0.7178	0.8450	0.9189
1.45	0.3846	0.3902	0.4072	0.4367	0.4803	0.5080	0.5402	0.6192	0.7203	0.8465	0.9197
1.50	0.3884	0.3940	0.4110	0.4405	0.4840	0.5117	0.5437	0.6223	0.7228	0.8480	0.9206
1.55	0.3923	0.3979	0.4149	0.4445	0.4878	0.5153	0.5473	0.6255	0.7254	0.8495	0.9214

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.65

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THEYA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3963	0.4018	0.4189	0.4483	0.4916	0.5191	0.5509	0.6288	0.7279	0.8511	0.9222
1.65	0.4003	0.4059	0.4229	0.4523	0.4955	0.5229	0.5546	0.6320	0.7306	0.8526	0.9231
1.70	0.4044	0.4100	0.4270	0.4563	0.4994	0.5267	0.5583	0.6354	0.7332	0.8542	0.9239
1.75	0.4085	0.4141	0.4311	0.4604	0.5034	0.5306	0.5621	0.6387	0.7359	0.8558	0.9248
1.80	0.4128	0.4183	0.4353	0.4646	0.5075	0.5346	0.5659	0.6421	0.7385	0.8574	0.9257
1.85	0.4170	0.4226	0.4396	0.4688	0.5115	0.5386	0.5697	0.6455	0.7412	0.8589	0.9265
1.90	0.4214	0.4269	0.4439	0.4730	0.5157	0.5426	0.5736	0.6489	0.7439	0.8605	0.9274
1.95	0.4258	0.4313	0.4482	0.4773	0.5198	0.5465	0.5775	0.6524	0.7466	0.8621	0.9282
2.00	0.4302	0.4357	0.4526	0.4816	0.5240	0.5507	0.5814	0.6558	0.7493	0.8637	0.9291
2.05	0.4347	0.4402	0.4571	0.4860	0.5282	0.5548	0.5854	0.6593	0.7521	0.8653	0.9300
2.10	0.4392	0.4447	0.4615	0.4904	0.5324	0.5589	0.5893	0.6628	0.7548	0.8669	0.9308
2.15	0.4437	0.4492	0.4660	0.4948	0.5367	0.5631	0.5933	0.6663	0.7575	0.8685	0.9317
2.20	0.4483	0.4538	0.4705	0.4992	0.5410	0.5672	0.5973	0.6698	0.7602	0.8701	0.9325
2.25	0.4529	0.4584	0.4751	0.5037	0.5453	0.5714	0.6012	0.6732	0.7629	0.8717	0.9334
2.30	0.4575	0.4630	0.4797	0.5082	0.5496	0.5755	0.6052	0.6767	0.7657	0.8732	0.9342
2.35	0.4621	0.4676	0.4842	0.5127	0.5539	0.5797	0.6092	0.6802	0.7684	0.8748	0.9351
2.40	0.4668	0.4723	0.4888	0.5172	0.5582	0.5839	0.6132	0.6837	0.7710	0.8764	0.9359
2.45	0.4715	0.4769	0.4935	0.5217	0.5625	0.5880	0.6172	0.6872	0.7737	0.8779	0.9367
2.50	0.4762	0.4816	0.4981	0.5262	0.5668	0.5922	0.6212	0.6906	0.7764	0.8794	0.9376
2.55	0.4809	0.4863	0.5027	0.5307	0.5711	0.5964	0.6252	0.6941	0.7790	0.8810	0.9384
2.60	0.4856	0.4910	0.5074	0.5352	0.5754	0.6005	0.6291	0.6975	0.7817	0.8825	0.9392
2.65	0.4903	0.4957	0.5120	0.5397	0.5797	0.6047	0.6331	0.7009	0.7843	0.8840	0.9400
2.70	0.4950	0.5004	0.5166	0.5442	0.5840	0.6088	0.6370	0.7043	0.7869	0.8855	0.9408
2.75	0.4997	0.5051	0.5212	0.5487	0.5883	0.6129	0.6409	0.7077	0.7895	0.8869	0.9416
2.80	0.5045	0.5098	0.5259	0.5532	0.5926	0.6170	0.6448	0.7110	0.7920	0.8884	0.9423
2.85	0.5092	0.5145	0.5305	0.5577	0.5968	0.6211	0.6487	0.7144	0.7946	0.8899	0.9431
2.90	0.5139	0.5191	0.5351	0.5622	0.6011	0.6252	0.6526	0.7177	0.7971	0.8913	0.9439
2.95	0.5185	0.5238	0.5397	0.5666	0.6053	0.6292	0.6564	0.7210	0.7996	0.8927	0.9446
3.00	0.5232	0.5285	0.5443	0.5711	0.6095	0.6333	0.6602	0.7242	0.8021	0.8941	0.9454

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3-70

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3300	0.3355	0.3523	0.3817	0.4258	0.4544	0.4878	0.5714	0.6815	0.8229	0.9068
0.05	0.3301	0.3356	0.3524	0.3818	0.4259	0.4544	0.4879	0.5715	0.6816	0.8229	0.9068
0.10	0.3303	0.3358	0.3526	0.3820	0.4262	0.4547	0.4881	0.5717	0.6817	0.8231	0.9069
0.15	0.3307	0.3362	0.3530	0.3824	0.4265	0.4550	0.4885	0.5721	0.6820	0.8232	0.9070
0.20	0.3312	0.3367	0.3535	0.3829	0.4271	0.4555	0.4890	0.5725	0.6824	0.8235	0.9071
0.25	0.3319	0.3374	0.3542	0.3836	0.4278	0.4563	0.4896	0.5732	0.6829	0.8238	0.9073
0.30	0.3327	0.3382	0.3550	0.3845	0.4286	0.4571	0.4905	0.5739	0.6835	0.8242	0.9075
0.35	0.3337	0.3392	0.3560	0.3856	0.4296	0.4581	0.4914	0.5748	0.6843	0.8246	0.9077
0.40	0.3348	0.3403	0.3572	0.3866	0.4307	0.4592	0.4925	0.5758	0.6851	0.8251	0.9080
0.45	0.3361	0.3416	0.3584	0.3879	0.4320	0.4605	0.4938	0.5770	0.6861	0.8257	0.9083
0.50	0.3375	0.3430	0.3599	0.3893	0.4335	0.4619	0.4952	0.5782	0.6871	0.8264	0.9087
0.55	0.3391	0.3446	0.3614	0.3909	0.4350	0.4635	0.4967	0.5796	0.6882	0.8271	0.9091
0.60	0.3408	0.3463	0.3632	0.3926	0.4367	0.4651	0.4984	0.5812	0.6895	0.8278	0.9095
0.65	0.3426	0.3481	0.3650	0.3945	0.4386	0.4670	0.5001	0.5828	0.6908	0.8287	0.9100
0.70	0.3446	0.3501	0.3670	0.3965	0.4406	0.4689	0.5021	0.5846	0.6923	0.8295	0.9104
0.75	0.3467	0.3522	0.3691	0.3986	0.4427	0.4710	0.5041	0.5864	0.6938	0.8305	0.9110
0.80	0.3489	0.3544	0.3713	0.4009	0.4449	0.4732	0.5062	0.5884	0.6954	0.8314	0.9115
0.85	0.3512	0.3568	0.3737	0.4032	0.4473	0.4755	0.5085	0.5905	0.6971	0.8325	0.9121
0.90	0.3537	0.3592	0.3762	0.4057	0.4497	0.4780	0.5109	0.5926	0.6989	0.8336	0.9127
0.95	0.3563	0.3618	0.3788	0.4084	0.4523	0.4805	0.5134	0.5949	0.7007	0.8347	0.9133
1.00	0.3590	0.3646	0.3816	0.4111	0.4550	0.4832	0.5160	0.5973	0.7026	0.8358	0.9139
1.05	0.3619	0.3674	0.3844	0.4139	0.4578	0.4860	0.5187	0.5997	0.7046	0.8371	0.9146
1.10	0.3648	0.3704	0.3874	0.4169	0.4608	0.4888	0.5215	0.6023	0.7067	0.8383	0.9153
1.15	0.3679	0.3734	0.3904	0.4200	0.4638	0.4918	0.5244	0.6049	0.7088	0.8396	0.9160
1.20	0.3710	0.3766	0.3936	0.4231	0.4669	0.4949	0.5274	0.6076	0.7110	0.8409	0.9167
1.25	0.3743	0.3798	0.3969	0.4264	0.4701	0.4980	0.5304	0.6104	0.7132	0.8422	0.9174
1.30	0.3776	0.3832	0.4002	0.4297	0.4734	0.5013	0.5336	0.6132	0.7155	0.8436	0.9182
1.35	0.3811	0.3866	0.4037	0.4332	0.4768	0.5046	0.5368	0.6161	0.7178	0.8450	0.9189
1.40	0.3846	0.3902	0.4072	0.4367	0.4802	0.5080	0.5401	0.6190	0.7202	0.8464	0.9197
1.45	0.3882	0.3938	0.4108	0.4403	0.4838	0.5114	0.5434	0.6221	0.7226	0.8479	0.9205
1.50	0.3919	0.3975	0.4145	0.4440	0.4874	0.5149	0.5469	0.6251	0.7250	0.8493	0.9213
1.55	0.3957	0.4013	0.4183	0.4477	0.4910	0.5185	0.5503	0.6282	0.7275	0.8508	0.9221

TABLES OF CALCULATIONS FOR M.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-70

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3996	0.4052	0.4222	0.4515	0.4947	0.5222	0.5533	0.6314	0.7300	0.8523	0.9229
1.65	0.4035	0.4091	0.4261	0.4554	0.4985	0.5259	0.5574	0.6346	0.7326	0.8538	0.9237
1.70	0.4075	0.4131	0.4301	0.4594	0.5024	0.5298	0.5611	0.6378	0.7351	0.8553	0.9246
1.75	0.4116	0.4172	0.4341	0.4634	0.5063	0.5334	0.5647	0.6411	0.7377	0.8569	0.9254
1.80	0.4157	0.4213	0.4382	0.4674	0.5102	0.5373	0.5684	0.6444	0.7403	0.8584	0.9262
1.85	0.4198	0.4254	0.4424	0.4715	0.5142	0.5411	0.5722	0.6477	0.7429	0.8599	0.9271
1.90	0.4241	0.4297	0.4466	0.4757	0.5182	0.5451	0.5760	0.6510	0.7455	0.8615	0.9279
1.95	0.4284	0.4339	0.4508	0.4799	0.5223	0.5490	0.5798	0.6544	0.7482	0.8630	0.9287
2.00	0.4327	0.4383	0.4551	0.4841	0.5263	0.5530	0.5836	0.6577	0.7508	0.8646	0.9296
2.05	0.4371	0.4426	0.4595	0.4883	0.5305	0.5570	0.5874	0.6611	0.7535	0.8661	0.9304
2.10	0.4415	0.4470	0.4638	0.4926	0.5346	0.5610	0.5913	0.6645	0.7561	0.8677	0.9312
2.15	0.4460	0.4515	0.4682	0.4969	0.5388	0.5650	0.5952	0.6679	0.7588	0.8692	0.9321
2.20	0.4504	0.4559	0.4727	0.5013	0.5429	0.5691	0.5991	0.6713	0.7614	0.8708	0.9329
2.25	0.4549	0.4604	0.4771	0.5057	0.5471	0.5732	0.6030	0.6747	0.7641	0.8723	0.9337
2.30	0.4595	0.4649	0.4816	0.5100	0.5513	0.5772	0.6069	0.6781	0.7667	0.8739	0.9346
2.35	0.4640	0.4695	0.4861	0.5144	0.5556	0.5813	0.6108	0.6815	0.7694	0.8754	0.9354
2.40	0.4686	0.4740	0.4906	0.5188	0.5598	0.5854	0.6147	0.6849	0.7720	0.8769	0.9362
2.45	0.4732	0.4786	0.4951	0.5233	0.5640	0.5895	0.6186	0.6883	0.7746	0.8784	0.9370
2.50	0.4778	0.4832	0.4996	0.5277	0.5682	0.5936	0.6225	0.6917	0.7772	0.8799	0.9378
2.55	0.4824	0.4878	0.5042	0.5321	0.5725	0.5978	0.6264	0.6951	0.7798	0.8814	0.9386
2.60	0.4870	0.4924	0.5087	0.5365	0.5767	0.6017	0.6302	0.6984	0.7824	0.8829	0.9394
2.65	0.4916	0.4970	0.5133	0.5410	0.5809	0.6058	0.6341	0.7018	0.7850	0.8844	0.9402
2.70	0.4963	0.5016	0.5178	0.5454	0.5851	0.6098	0.6380	0.7051	0.7875	0.8858	0.9410
2.75	0.5009	0.5062	0.5224	0.5498	0.5893	0.6139	0.6418	0.7084	0.7900	0.8873	0.9417
2.80	0.5055	0.5108	0.5269	0.5542	0.5935	0.6179	0.6457	0.7117	0.7926	0.8887	0.9425
2.85	0.5101	0.5154	0.5314	0.5586	0.5977	0.6219	0.6495	0.7150	0.7951	0.8901	0.9433
2.90	0.5148	0.5200	0.5360	0.5630	0.6018	0.6259	0.6533	0.7182	0.7975	0.8915	0.9440
2.95	0.5194	0.5246	0.5405	0.5674	0.6060	0.6299	0.6570	0.7215	0.8000	0.8929	0.9447
3.00	0.5240	0.5292	0.5450	0.5717	0.6101	0.6338	0.6608	0.7247	0.8024	0.8943	0.9455

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.75

PAGE 111

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3352	0.3407	0.3575	0.3869	0.4310	0.4596	0.4928	0.5760	0.6853	0.8252	0.9081
0.05	0.3353	0.3407	0.3576	0.3870	0.4311	0.4596	0.4929	0.5761	0.6853	0.8252	0.9081
0.10	0.3355	0.3410	0.3578	0.3872	0.4313	0.4598	0.4931	0.5763	0.6855	0.8254	0.9081
0.15	0.3358	0.3413	0.3582	0.3875	0.4317	0.4601	0.4934	0.5766	0.6857	0.8255	0.9082
0.20	0.3364	0.3418	0.3587	0.3881	0.4322	0.4607	0.4939	0.5771	0.6861	0.8258	0.9084
0.25	0.3370	0.3425	0.3594	0.3888	0.4329	0.4613	0.4946	0.5777	0.6866	0.8261	0.9085
0.30	0.3378	0.3433	0.3602	0.3896	0.4337	0.4621	0.4954	0.5784	0.6872	0.8264	0.9087
0.35	0.3388	0.3443	0.3611	0.3906	0.4347	0.4631	0.4963	0.5793	0.6879	0.8269	0.9090
0.40	0.3399	0.3454	0.3622	0.3917	0.4358	0.4642	0.4974	0.5802	0.6887	0.8273	0.9092
0.45	0.3411	0.3466	0.3635	0.3929	0.4370	0.4654	0.4986	0.5813	0.6896	0.8279	0.9095
0.50	0.3425	0.3480	0.3649	0.3943	0.4384	0.4668	0.4999	0.5826	0.6906	0.8285	0.9099
0.55	0.3440	0.3495	0.3664	0.3959	0.4399	0.4683	0.5014	0.5839	0.6917	0.8292	0.9103
0.60	0.3456	0.3511	0.3680	0.3976	0.4416	0.4699	0.5030	0.5854	0.6929	0.8299	0.9107
0.65	0.3474	0.3529	0.3698	0.3993	0.4434	0.4717	0.5047	0.5870	0.6942	0.8307	0.9111
0.70	0.3493	0.3548	0.3718	0.4013	0.4453	0.4735	0.5066	0.5887	0.6956	0.8316	0.9116
0.75	0.3514	0.3569	0.3738	0.4033	0.4473	0.4756	0.5085	0.5905	0.6971	0.8325	0.9121
0.80	0.3535	0.3590	0.3760	0.4055	0.4495	0.4777	0.5106	0.5924	0.6986	0.8334	0.9126
0.85	0.3558	0.3613	0.3783	0.4078	0.4518	0.4800	0.5128	0.5944	0.7003	0.8344	0.9131
0.90	0.3582	0.3638	0.3807	0.4102	0.4542	0.4823	0.5151	0.5965	0.7020	0.8354	0.9137
0.95	0.3608	0.3663	0.3833	0.4128	0.4567	0.4846	0.5176	0.5987	0.7037	0.8365	0.9143
1.00	0.3634	0.3689	0.3859	0.4154	0.4593	0.4874	0.5201	0.6010	0.7056	0.8376	0.9149
1.05	0.3662	0.3717	0.3887	0.4182	0.4620	0.4901	0.5227	0.6033	0.7075	0.8388	0.9155
1.10	0.3690	0.3746	0.3916	0.4211	0.4649	0.4929	0.5254	0.6058	0.7095	0.8400	0.9162
1.15	0.3720	0.3775	0.3945	0.4240	0.4678	0.4957	0.5282	0.6083	0.7115	0.8412	0.9169
1.20	0.3751	0.3806	0.3976	0.4271	0.4708	0.4987	0.5311	0.6109	0.7136	0.8425	0.9176
1.25	0.3782	0.3838	0.4008	0.4303	0.4739	0.5018	0.5341	0.6136	0.7158	0.8438	0.9183
1.30	0.3815	0.3871	0.4041	0.4335	0.4771	0.5049	0.5371	0.6164	0.7180	0.8451	0.9190
1.35	0.3849	0.3904	0.4074	0.4369	0.4804	0.5081	0.5402	0.6192	0.7202	0.8465	0.9197
1.40	0.3883	0.3939	0.4109	0.4403	0.4838	0.5114	0.5434	0.6220	0.7225	0.8478	0.9205
1.45	0.3918	0.3974	0.4144	0.4438	0.4872	0.5148	0.5467	0.6249	0.7249	0.8492	0.9212
1.50	0.3955	0.4010	0.4180	0.4474	0.4907	0.5182	0.5500	0.6279	0.7272	0.8506	0.9220
1.55	0.3992	0.4047	0.4217	0.4511	0.4943	0.5217	0.5534	0.6309	0.7297	0.8521	0.9228

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3-75

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4029	0.4085	0.4255	0.4548	0.4979	0.5252	0.5568	0.6340	0.7321	0.8535	0.9236
1.65	0.4058	0.4123	0.4293	0.4586	0.5016	0.5288	0.5603	0.6371	0.7345	0.8550	0.9244
1.70	0.4107	0.4182	0.4332	0.4624	0.5053	0.5325	0.5638	0.6402	0.7370	0.8565	0.9252
1.75	0.4146	0.4202	0.4371	0.4663	0.5091	0.5362	0.5674	0.6434	0.7395	0.8579	0.9260
1.80	0.4187	0.4242	0.4411	0.4703	0.5130	0.5399	0.5710	0.6466	0.7421	0.8594	0.9268
1.85	0.4227	0.4283	0.4452	0.4743	0.5168	0.5437	0.5747	0.6498	0.7446	0.8609	0.9276
1.90	0.4259	0.4324	0.4493	0.4783	0.5208	0.5475	0.5783	0.6531	0.7472	0.8624	0.9284
1.95	0.4311	0.4366	0.4535	0.4824	0.5247	0.5514	0.5820	0.6564	0.7497	0.8639	0.9292
2.00	0.4353	0.4408	0.4577	0.4865	0.5287	0.5553	0.5858	0.6596	0.7523	0.8654	0.9300
2.05	0.4396	0.4451	0.4619	0.4907	0.5327	0.5592	0.5895	0.6629	0.7549	0.8670	0.9309
2.10	0.4439	0.4494	0.4662	0.4949	0.5368	0.5631	0.5933	0.6663	0.7575	0.8685	0.9317
2.15	0.4482	0.4537	0.4705	0.4991	0.5408	0.5670	0.5971	0.6696	0.7601	0.8700	0.9325
2.20	0.4526	0.4581	0.4748	0.5034	0.5449	0.5710	0.6009	0.6729	0.7626	0.8715	0.9333
2.25	0.4570	0.4625	0.4791	0.5076	0.5490	0.5750	0.6047	0.6762	0.7652	0.8730	0.9341
2.30	0.4614	0.4669	0.4835	0.5119	0.5531	0.5790	0.6085	0.6796	0.7678	0.8745	0.9349
2.35	0.4659	0.4714	0.4879	0.5162	0.5573	0.5829	0.6123	0.6829	0.7704	0.8760	0.9357
2.40	0.4704	0.4758	0.4923	0.5205	0.5614	0.5869	0.6161	0.6862	0.7730	0.8775	0.9365
2.45	0.4749	0.4803	0.4968	0.5249	0.5655	0.5909	0.6200	0.6895	0.7755	0.8789	0.9373
2.50	0.4794	0.4848	0.5012	0.5292	0.5697	0.5949	0.6238	0.6928	0.7781	0.8804	0.9381
2.55	0.4839	0.4893	0.5057	0.5335	0.5738	0.5989	0.6276	0.6961	0.7806	0.8819	0.9389
2.60	0.4884	0.4938	0.5101	0.5379	0.5780	0.6029	0.6314	0.6994	0.7831	0.8833	0.9396
2.65	0.4930	0.4983	0.5146	0.5422	0.5821	0.6069	0.6352	0.7027	0.7857	0.8848	0.9404
2.70	0.4975	0.5029	0.5190	0.5465	0.5862	0.6109	0.6390	0.7060	0.7882	0.8862	0.9412
2.75	0.5021	0.5074	0.5235	0.5509	0.5903	0.6149	0.6428	0.7092	0.7906	0.8876	0.9419
2.80	0.5066	0.5119	0.5280	0.5552	0.5944	0.6188	0.6465	0.7124	0.7931	0.8890	0.9427
2.85	0.5112	0.5164	0.5324	0.5596	0.5985	0.6228	0.6503	0.7157	0.7955	0.8904	0.9434
2.90	0.5157	0.5210	0.5369	0.5639	0.6026	0.6267	0.6540	0.7189	0.7980	0.8918	0.9441
2.95	0.5202	0.5255	0.5413	0.5682	0.6067	0.6305	0.6577	0.7220	0.8004	0.8932	0.9449
3.00	0.5248	0.5300	0.5457	0.5725	0.6107	0.6345	0.6614	0.7252	0.8028	0.8945	0.9456

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.80

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3403	0.3458	0.3626	0.3921	0.4361	0.4645	0.4977	0.5805	0.6889	0.8275	0.9093
0.05	0.3403	0.3458	0.3627	0.3921	0.4362	0.4646	0.4978	0.5806	0.6890	0.8275	0.9093
0.10	0.3405	0.3461	0.3629	0.3924	0.4364	0.4648	0.4980	0.5808	0.6891	0.8276	0.9094
0.15	0.3409	0.3464	0.3633	0.3927	0.4368	0.4651	0.4983	0.5811	0.6894	0.8278	0.9095
0.20	0.3414	0.3469	0.3638	0.3932	0.4373	0.4656	0.4988	0.5815	0.6898	0.8280	0.9096
0.25	0.3421	0.3476	0.3644	0.3939	0.4379	0.4663	0.4994	0.5821	0.6902	0.8283	0.9097
0.30	0.3429	0.3483	0.3652	0.3947	0.4387	0.4671	0.5002	0.5828	0.6908	0.8286	0.9099
0.35	0.3438	0.3493	0.3661	0.3956	0.4396	0.4680	0.5011	0.5836	0.6915	0.8290	0.9102
0.40	0.3448	0.3503	0.3672	0.3967	0.4407	0.4690	0.5021	0.5846	0.6922	0.8295	0.9104
0.45	0.3460	0.3515	0.3684	0.3979	0.4419	0.4702	0.5033	0.5856	0.6931	0.8300	0.9107
0.50	0.3474	0.3529	0.3698	0.3992	0.4432	0.4715	0.5046	0.5868	0.6941	0.8306	0.9110
0.55	0.3488	0.3543	0.3712	0.4007	0.4447	0.4730	0.5060	0.5881	0.6951	0.8313	0.9114
0.60	0.3504	0.3559	0.3729	0.4023	0.4463	0.4746	0.5076	0.5895	0.6963	0.8320	0.9118
0.65	0.3522	0.3577	0.3746	0.4041	0.4480	0.4763	0.5092	0.5911	0.6975	0.8327	0.9122
0.70	0.3540	0.3595	0.3765	0.4060	0.4499	0.4781	0.5110	0.5927	0.6989	0.8335	0.9127
0.75	0.3560	0.3615	0.3785	0.4080	0.4519	0.4801	0.5129	0.5944	0.7003	0.8344	0.9131
0.80	0.3581	0.3636	0.3806	0.4101	0.4540	0.4821	0.5149	0.5963	0.7018	0.8353	0.9136
0.85	0.3603	0.3659	0.3828	0.4123	0.4562	0.4843	0.5171	0.5982	0.7033	0.8363	0.9141
0.90	0.3627	0.3682	0.3852	0.4147	0.4585	0.4866	0.5193	0.6002	0.7050	0.8373	0.9147
0.95	0.3651	0.3707	0.3877	0.4172	0.4610	0.4890	0.5217	0.6024	0.7067	0.8383	0.9153
1.00	0.3677	0.3733	0.3902	0.4197	0.4635	0.4915	0.5241	0.6046	0.7085	0.8394	0.9159
1.05	0.3704	0.3760	0.3929	0.4224	0.4662	0.4941	0.5266	0.6069	0.7104	0.8405	0.9165
1.10	0.3732	0.3787	0.3957	0.4252	0.4689	0.4968	0.5293	0.6092	0.7123	0.8417	0.9171
1.15	0.3761	0.3816	0.3986	0.4281	0.4718	0.4996	0.5320	0.6117	0.7142	0.8429	0.9178
1.20	0.3791	0.3846	0.4016	0.4311	0.4747	0.5025	0.5348	0.6142	0.7163	0.8441	0.9184
1.25	0.3822	0.3877	0.4047	0.4342	0.4777	0.5055	0.5377	0.6168	0.7184	0.8453	0.9191
1.30	0.3854	0.3909	0.4079	0.4373	0.4808	0.5083	0.5406	0.6195	0.7205	0.8466	0.9198
1.35	0.3886	0.3942	0.4112	0.4406	0.4840	0.5116	0.5436	0.6222	0.7227	0.8479	0.9205
1.40	0.3920	0.3976	0.4146	0.4439	0.4873	0.5148	0.5467	0.6250	0.7249	0.8492	0.9212
1.45	0.3954	0.4010	0.4180	0.4474	0.4906	0.5181	0.5499	0.6278	0.7271	0.8506	0.9220
1.50	0.3990	0.4045	0.4215	0.4508	0.4940	0.5214	0.5531	0.6307	0.7294	0.8519	0.9227
1.55	0.4026	0.4081	0.4251	0.4544	0.4975	0.5248	0.5564	0.6336	0.7318	0.8533	0.9235

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESO.

VALUES OF RS WHERE N=3-80

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4063	0.4118	0.4288	0.4580	0.5010	0.5283	0.5598	0.6366	0.7341	0.8547	0.9242
1.65	0.4100	0.4155	0.4325	0.4617	0.5046	0.5318	0.5632	0.6396	0.7365	0.8562	0.9250
1.70	0.4138	0.4194	0.4363	0.4655	0.5083	0.5354	0.5665	0.6427	0.7389	0.8576	0.9258
1.75	0.4177	0.4232	0.4402	0.4693	0.5120	0.5390	0.5701	0.6458	0.7414	0.8590	0.9266
1.80	0.4216	0.4272	0.4441	0.4731	0.5157	0.5426	0.5735	0.6489	0.7438	0.8605	0.9273
1.85	0.4256	0.4311	0.4480	0.4770	0.5195	0.5463	0.5771	0.6520	0.7463	0.8619	0.9281
1.90	0.4296	0.4352	0.4520	0.4810	0.5233	0.5500	0.5807	0.6552	0.7488	0.8634	0.9289
1.95	0.4337	0.4393	0.4561	0.4850	0.5272	0.5538	0.5843	0.6584	0.7513	0.8648	0.9297
2.00	0.4379	0.4434	0.4602	0.4890	0.5311	0.5576	0.5880	0.6616	0.7538	0.8663	0.9305
2.05	0.4420	0.4476	0.4643	0.4931	0.5350	0.5614	0.5916	0.6648	0.7563	0.8678	0.9313
2.10	0.4463	0.4518	0.4685	0.4972	0.5390	0.5652	0.5953	0.6680	0.7588	0.8693	0.9321
2.15	0.4505	0.4560	0.4727	0.5013	0.5429	0.5691	0.5990	0.6712	0.7614	0.8707	0.9329
2.20	0.4548	0.4603	0.4770	0.5055	0.5469	0.5729	0.6027	0.6745	0.7639	0.8722	0.9337
2.25	0.4591	0.4646	0.4812	0.5096	0.5509	0.5768	0.6064	0.6777	0.7664	0.8737	0.9345
2.30	0.4635	0.4689	0.4855	0.5138	0.5550	0.5807	0.6102	0.6810	0.7689	0.8751	0.9352
2.35	0.4678	0.4733	0.4898	0.5181	0.5590	0.5846	0.6139	0.6842	0.7714	0.8766	0.9360
2.40	0.4722	0.4777	0.4941	0.5223	0.5630	0.5885	0.6176	0.6875	0.7739	0.8780	0.9368
2.45	0.4766	0.4820	0.4985	0.5265	0.5671	0.5924	0.6214	0.6907	0.7765	0.8795	0.9376
2.50	0.4811	0.4865	0.5028	0.5308	0.5712	0.5964	0.6251	0.6940	0.7789	0.8809	0.9383
2.55	0.4855	0.4909	0.5072	0.5350	0.5752	0.6003	0.6289	0.6972	0.7814	0.8823	0.9391
2.60	0.4899	0.4953	0.5116	0.5393	0.5793	0.6042	0.6326	0.7004	0.7839	0.8838	0.9399
2.65	0.4944	0.4997	0.5160	0.5435	0.5833	0.6081	0.6363	0.7037	0.7864	0.8852	0.9406
2.70	0.4988	0.5042	0.5203	0.5478	0.5874	0.6120	0.6400	0.7069	0.7888	0.8866	0.9414
2.75	0.5033	0.5086	0.5247	0.5521	0.5914	0.6159	0.6437	0.7100	0.7913	0.8880	0.9421
2.80	0.5078	0.5131	0.5291	0.5563	0.5955	0.6198	0.6474	0.7132	0.7937	0.8893	0.9428
2.85	0.5122	0.5175	0.5335	0.5606	0.5995	0.6236	0.6511	0.7164	0.7961	0.8907	0.9436
2.90	0.5167	0.5219	0.5378	0.5648	0.6035	0.6275	0.6548	0.7195	0.7985	0.8921	0.9443
2.95	0.5211	0.5264	0.5422	0.5690	0.6075	0.6313	0.6584	0.7226	0.8008	0.8934	0.9450
3.00	0.5256	0.5308	0.5465	0.5732	0.6115	0.6352	0.6620	0.7257	0.8032	0.8947	0.9457

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.85

PAGE 115

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3453	0.3508	0.3677	0.3971	0.4411	0.4694	0.5025	0.5849	0.6925	0.8296	0.9105
0.05	0.3454	0.3509	0.3678	0.3972	0.4412	0.4695	0.5026	0.5849	0.6925	0.8297	0.9105
0.10	0.3456	0.3511	0.3680	0.3974	0.4414	0.4697	0.5028	0.5851	0.6927	0.8298	0.9106
0.15	0.3459	0.3514	0.3683	0.3978	0.4417	0.4700	0.5031	0.5854	0.6929	0.8299	0.9107
0.20	0.3464	0.3519	0.3688	0.3982	0.4422	0.4705	0.5036	0.5859	0.6933	0.8301	0.9108
0.25	0.3470	0.3525	0.3694	0.3989	0.4429	0.4711	0.5042	0.5864	0.6938	0.8304	0.9109
0.30	0.3478	0.3533	0.3702	0.3996	0.4436	0.4719	0.5049	0.5871	0.6943	0.8308	0.9111
0.35	0.3487	0.3542	0.3711	0.4006	0.4445	0.4728	0.5058	0.5879	0.6950	0.8311	0.9113
0.40	0.3497	0.3552	0.3721	0.4016	0.4456	0.4738	0.5068	0.5888	0.6957	0.8316	0.9116
0.45	0.3509	0.3564	0.3733	0.4028	0.4467	0.4750	0.5079	0.5898	0.6965	0.8321	0.9119
0.50	0.3522	0.3577	0.3746	0.4041	0.4480	0.4762	0.5092	0.5910	0.6975	0.8327	0.9122
0.55	0.3536	0.3591	0.3761	0.4056	0.4494	0.4776	0.5105	0.5922	0.6985	0.8333	0.9125
0.60	0.3552	0.3607	0.3776	0.4071	0.4510	0.4792	0.5120	0.5936	0.6996	0.8340	0.9129
0.65	0.3569	0.3624	0.3793	0.4088	0.4527	0.4808	0.5137	0.5951	0.7008	0.8347	0.9133
0.70	0.3587	0.3642	0.3811	0.4106	0.4545	0.4826	0.5154	0.5967	0.7021	0.8355	0.9137
0.75	0.3606	0.3661	0.3831	0.4125	0.4564	0.4845	0.5172	0.5983	0.7034	0.8363	0.9142
0.80	0.3626	0.3682	0.3851	0.4146	0.4584	0.4865	0.5192	0.6001	0.7049	0.8372	0.9147
0.85	0.3648	0.3704	0.3873	0.4168	0.4606	0.4886	0.5213	0.6020	0.7064	0.8381	0.9152
0.90	0.3671	0.3726	0.3896	0.4191	0.4628	0.4908	0.5234	0.6039	0.7080	0.8391	0.9157
0.95	0.3695	0.3750	0.3920	0.4215	0.4652	0.4932	0.5257	0.6060	0.7096	0.8401	0.9162
1.00	0.3720	0.3775	0.3945	0.4240	0.4677	0.4956	0.5281	0.6081	0.7114	0.8411	0.9168
1.05	0.3746	0.3802	0.3971	0.4266	0.4703	0.4981	0.5305	0.6104	0.7131	0.8422	0.9174
1.10	0.3773	0.3829	0.3999	0.4293	0.4729	0.5007	0.5331	0.6127	0.7150	0.8433	0.9180
1.15	0.3802	0.3857	0.4027	0.4321	0.4757	0.5035	0.5357	0.6150	0.7169	0.8444	0.9186
1.20	0.3831	0.3886	0.4056	0.4350	0.4785	0.5063	0.5384	0.6175	0.7189	0.8456	0.9193
1.25	0.3861	0.3916	0.4086	0.4380	0.4815	0.5091	0.5412	0.6200	0.7209	0.8468	0.9199
1.30	0.3892	0.3947	0.4117	0.4411	0.4845	0.5121	0.5441	0.6226	0.7229	0.8481	0.9206
1.35	0.3924	0.3979	0.4149	0.4443	0.4876	0.5151	0.5470	0.6252	0.7251	0.8493	0.9213
1.40	0.3957	0.4012	0.4182	0.4475	0.4908	0.5182	0.5500	0.6279	0.7272	0.8506	0.9220
1.45	0.3990	0.4046	0.4216	0.4509	0.4940	0.5214	0.5531	0.6307	0.7294	0.8519	0.9227
1.50	0.4025	0.4080	0.4250	0.4543	0.4973	0.5247	0.5562	0.6335	0.7316	0.8532	0.9234
1.55	0.4060	0.4115	0.4285	0.4577	0.5007	0.5280	0.5594	0.6363	0.7339	0.8546	0.9242

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.85

PAGE 116

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4096	0.4151	0.4321	0.4613	0.5042	0.5313	0.5627	0.6392	0.7362	0.8559	0.9249
1.65	0.4132	0.4198	0.4357	0.4649	0.5077	0.5347	0.5660	0.6421	0.7385	0.8573	0.9256
1.70	0.4169	0.4225	0.4394	0.4685	0.5112	0.5382	0.5693	0.6451	0.7408	0.8587	0.9264
1.75	0.4207	0.4263	0.4432	0.4722	0.5148	0.5417	0.5727	0.6481	0.7432	0.8601	0.9271
1.80	0.4245	0.4301	0.4470	0.4760	0.5185	0.5453	0.5761	0.6511	0.7456	0.8615	0.9279
1.85	0.4283	0.4340	0.4508	0.4798	0.5222	0.5489	0.5795	0.6542	0.7480	0.8629	0.9287
1.90	0.4324	0.4379	0.4548	0.4837	0.5259	0.5525	0.5831	0.6573	0.7504	0.8643	0.9294
1.95	0.4364	0.4419	0.4587	0.4876	0.5297	0.5562	0.5866	0.6604	0.7528	0.8658	0.9302
2.00	0.4405	0.4460	0.4627	0.4915	0.5335	0.5599	0.5902	0.6635	0.7553	0.8672	0.9310
2.05	0.4445	0.4500	0.4668	0.4955	0.5373	0.5635	0.5937	0.6666	0.7577	0.8686	0.9317
2.10	0.4487	0.4542	0.4709	0.4995	0.5412	0.5673	0.5973	0.6698	0.7602	0.8700	0.9325
2.15	0.4528	0.4583	0.4750	0.5035	0.5450	0.5711	0.6010	0.6729	0.7627	0.8715	0.9333
2.20	0.4570	0.4625	0.4791	0.5076	0.5489	0.5749	0.6046	0.6761	0.7651	0.8729	0.9341
2.25	0.4613	0.4667	0.4833	0.5117	0.5529	0.5787	0.6082	0.6793	0.7676	0.8743	0.9348
2.30	0.4655	0.4710	0.4875	0.5158	0.5568	0.5825	0.6119	0.6824	0.7700	0.8758	0.9356
2.35	0.4698	0.4752	0.4917	0.5199	0.5608	0.5863	0.6155	0.6856	0.7725	0.8772	0.9363
2.40	0.4741	0.4795	0.4960	0.5241	0.5647	0.5901	0.6192	0.6888	0.7750	0.8786	0.9371
2.45	0.4784	0.4838	0.5002	0.5282	0.5687	0.5940	0.6228	0.6920	0.7774	0.8800	0.9379
2.50	0.4827	0.4881	0.5045	0.5324	0.5727	0.5978	0.6265	0.6952	0.7798	0.8814	0.9386
2.55	0.4871	0.4925	0.5088	0.5365	0.5766	0.6016	0.6302	0.6983	0.7823	0.8828	0.9394
2.60	0.4915	0.4968	0.5131	0.5407	0.5806	0.6055	0.6338	0.7015	0.7847	0.8842	0.9401
2.65	0.4958	0.5012	0.5174	0.5449	0.5846	0.6093	0.6375	0.7045	0.7871	0.8856	0.9408
2.70	0.5002	0.5055	0.5216	0.5491	0.5886	0.6131	0.6411	0.7078	0.7895	0.8870	0.9416
2.75	0.5046	0.5099	0.5259	0.5532	0.5925	0.6170	0.6447	0.7109	0.7919	0.8883	0.9423
2.80	0.5090	0.5142	0.5302	0.5574	0.5965	0.6208	0.6484	0.7140	0.7943	0.8897	0.9430
2.85	0.5134	0.5186	0.5345	0.5616	0.6004	0.6245	0.6520	0.7171	0.7966	0.8910	0.9437
2.90	0.5177	0.5230	0.5388	0.5658	0.6044	0.6284	0.6556	0.7202	0.7990	0.8923	0.9444
2.95	0.5221	0.5273	0.5431	0.5699	0.6083	0.6321	0.6591	0.7232	0.8013	0.8937	0.9451
3.00	0.5265	0.5317	0.5474	0.5740	0.6122	0.6359	0.6627	0.7263	0.8036	0.8950	0.9458

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RS WHERE N=3.90

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3503	0.3558	0.3727	0.4021	0.4460	0.4743	0.5072	0.5892	0.6960	0.8318	0.9117
0.05	0.3503	0.3558	0.3727	0.4022	0.4461	0.4743	0.5073	0.5892	0.6960	0.8318	0.9117
0.10	0.3506	0.3560	0.3729	0.4024	0.4463	0.4745	0.5075	0.5894	0.6962	0.8319	0.9117
0.15	0.3509	0.3564	0.3733	0.4027	0.4466	0.4749	0.5078	0.5897	0.6964	0.8320	0.9118
0.20	0.3514	0.3569	0.3738	0.4032	0.4471	0.4753	0.5083	0.5901	0.6968	0.8322	0.9119
0.25	0.3520	0.3575	0.3744	0.4038	0.4477	0.4759	0.5089	0.5907	0.6972	0.8325	0.9121
0.30	0.3527	0.3582	0.3751	0.4045	0.4485	0.4767	0.5096	0.5913	0.6977	0.8328	0.9123
0.35	0.3536	0.3591	0.3760	0.4054	0.4493	0.4775	0.5104	0.5921	0.6984	0.8332	0.9125
0.40	0.3546	0.3601	0.3770	0.4064	0.4503	0.4785	0.5114	0.5930	0.6991	0.8337	0.9127
0.45	0.3557	0.3612	0.3781	0.4076	0.4515	0.4796	0.5125	0.5940	0.6999	0.8341	0.9130
0.50	0.3570	0.3625	0.3794	0.4089	0.4527	0.4809	0.5137	0.5951	0.7008	0.8347	0.9133
0.55	0.3584	0.3639	0.3808	0.4103	0.4541	0.4822	0.5150	0.5963	0.7018	0.8353	0.9136
0.60	0.3599	0.3654	0.3823	0.4118	0.4556	0.4837	0.5165	0.5976	0.7028	0.8359	0.9140
0.65	0.3615	0.3670	0.3840	0.4134	0.4572	0.4853	0.5180	0.5990	0.7040	0.8366	0.9143
0.70	0.3633	0.3688	0.3857	0.4152	0.4590	0.4870	0.5197	0.6005	0.7052	0.8374	0.9148
0.75	0.3651	0.3707	0.3876	0.4171	0.4608	0.4889	0.5215	0.6022	0.7065	0.8382	0.9152
0.80	0.3671	0.3727	0.3896	0.4191	0.4628	0.4908	0.5234	0.6039	0.7079	0.8390	0.9157
0.85	0.3693	0.3748	0.3917	0.4212	0.4649	0.4929	0.5254	0.6057	0.7094	0.8399	0.9161
0.90	0.3716	0.3770	0.3940	0.4234	0.4671	0.4950	0.5275	0.6076	0.7109	0.8408	0.9166
0.95	0.3738	0.3793	0.3963	0.4258	0.4694	0.4973	0.5297	0.6096	0.7125	0.8418	0.9172
1.00	0.3762	0.3818	0.3988	0.4282	0.4718	0.4996	0.5320	0.6116	0.7142	0.8428	0.9177
1.05	0.3788	0.3843	0.4013	0.4307	0.4743	0.5021	0.5343	0.6138	0.7159	0.8438	0.9183
1.10	0.3814	0.3870	0.4040	0.4334	0.4769	0.5046	0.5368	0.6160	0.7177	0.8449	0.9189
1.15	0.3842	0.3897	0.4067	0.4361	0.4796	0.5073	0.5394	0.6183	0.7195	0.8460	0.9195
1.20	0.3870	0.3926	0.4096	0.4389	0.4823	0.5100	0.5420	0.6207	0.7214	0.8472	0.9201
1.25	0.3900	0.3955	0.4125	0.4419	0.4852	0.5128	0.5447	0.6231	0.7234	0.8483	0.9207
1.30	0.3930	0.3985	0.4155	0.4449	0.4881	0.5157	0.5475	0.6256	0.7254	0.8495	0.9214
1.35	0.3961	0.4017	0.4186	0.4479	0.4911	0.5186	0.5504	0.6282	0.7274	0.8507	0.9221
1.40	0.3993	0.4049	0.4218	0.4511	0.4942	0.5216	0.5533	0.6308	0.7295	0.8520	0.9227
1.45	0.4026	0.4081	0.4251	0.4543	0.4974	0.5247	0.5563	0.6335	0.7316	0.8532	0.9234
1.50	0.4059	0.4115	0.4284	0.4577	0.5006	0.5279	0.5593	0.6362	0.7338	0.8545	0.9241
1.55	0.4094	0.4149	0.4318	0.4610	0.5039	0.5311	0.5624	0.6389	0.7360	0.8558	0.9248

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RS WHERE N=3.90

PAGE 118

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4123	0.4184	0.4353	0.4645	0.5073	0.5344	0.5655	0.6418	0.7382	0.8571	0.9255
1.65	0.4164	0.4220	0.4389	0.4680	0.5107	0.5377	0.5688	0.6446	0.7404	0.8585	0.9263
1.70	0.4201	0.4256	0.4425	0.4716	0.5141	0.5411	0.5721	0.6475	0.7427	0.8598	0.9270
1.75	0.4238	0.4293	0.4462	0.4752	0.5177	0.5445	0.5754	0.6504	0.7450	0.8612	0.9277
1.80	0.4275	0.4331	0.4499	0.4789	0.5212	0.5479	0.5787	0.6534	0.7473	0.8625	0.9285
1.85	0.4313	0.4369	0.4537	0.4826	0.5248	0.5514	0.5821	0.6563	0.7497	0.8639	0.9292
1.90	0.4352	0.4407	0.4575	0.4863	0.5285	0.5550	0.5855	0.6593	0.7520	0.8653	0.9299
1.95	0.4391	0.4446	0.4614	0.4902	0.5321	0.5585	0.5889	0.6624	0.7544	0.8667	0.9307
2.00	0.4431	0.4486	0.4653	0.4940	0.5359	0.5622	0.5924	0.6654	0.7568	0.8681	0.9314
2.05	0.4471	0.4525	0.4693	0.4979	0.5396	0.5658	0.5959	0.6685	0.7592	0.8694	0.9322
2.10	0.4511	0.4566	0.4733	0.5018	0.5434	0.5695	0.5994	0.6715	0.7616	0.8708	0.9329
2.15	0.4552	0.4606	0.4773	0.5058	0.5472	0.5731	0.6029	0.6746	0.7640	0.8722	0.9337
2.20	0.4593	0.4647	0.4813	0.5097	0.5510	0.5768	0.6064	0.6777	0.7664	0.8736	0.9344
2.25	0.4634	0.4689	0.4854	0.5137	0.5548	0.5806	0.6100	0.6808	0.7688	0.8750	0.9352
2.30	0.4676	0.4730	0.4895	0.5178	0.5587	0.5843	0.6136	0.6839	0.7712	0.8764	0.9359
2.35	0.4718	0.4772	0.4937	0.5218	0.5625	0.5880	0.6171	0.6870	0.7736	0.8778	0.9367
2.40	0.4760	0.4814	0.4978	0.5258	0.5664	0.5918	0.6207	0.6901	0.7760	0.8792	0.9374
2.45	0.4802	0.4856	0.5020	0.5299	0.5703	0.5955	0.6243	0.6933	0.7784	0.8806	0.9382
2.50	0.4845	0.4898	0.5062	0.5340	0.5742	0.5993	0.6279	0.6954	0.7808	0.8819	0.9389
2.55	0.4887	0.4941	0.5104	0.5381	0.5781	0.6030	0.6315	0.6995	0.7831	0.8833	0.9396
2.60	0.4930	0.4984	0.5146	0.5422	0.5820	0.6068	0.6351	0.7025	0.7855	0.8847	0.9403
2.65	0.4973	0.5026	0.5188	0.5463	0.5859	0.6106	0.6386	0.7056	0.7879	0.8860	0.9411
2.70	0.5016	0.5069	0.5230	0.5504	0.5898	0.6143	0.6422	0.7087	0.7902	0.8874	0.9418
2.75	0.5059	0.5112	0.5272	0.5545	0.5937	0.6181	0.6458	0.7118	0.7926	0.8887	0.9425
2.80	0.5102	0.5155	0.5314	0.5586	0.5976	0.6218	0.6493	0.7148	0.7949	0.8900	0.9432
2.85	0.5145	0.5198	0.5357	0.5627	0.6015	0.6253	0.6529	0.7179	0.7972	0.8913	0.9439
2.90	0.5188	0.5240	0.5399	0.5668	0.6053	0.6292	0.6564	0.7209	0.7995	0.8926	0.9446
2.95	0.5231	0.5283	0.5441	0.5708	0.6092	0.6329	0.6599	0.7239	0.8018	0.8939	0.9453
3.00	0.5274	0.5326	0.5483	0.5749	0.6130	0.6366	0.6634	0.7269	0.8041	0.8952	0.9460

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RS WHERE N=3-95

PAGE 119

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3552	0.3607	0.3776	0.4070	0.4509	0.4790	0.5119	0.5934	0.6994	0.8338	0.9128
0.05	0.3552	0.3607	0.3776	0.4071	0.4509	0.4791	0.5119	0.5935	0.6994	0.8339	0.9128
0.10	0.3554	0.3609	0.3778	0.4073	0.4511	0.4793	0.5121	0.5936	0.6996	0.8340	0.9129
0.15	0.3558	0.3613	0.3782	0.4076	0.4515	0.4796	0.5124	0.5939	0.6998	0.8341	0.9130
0.20	0.3562	0.3617	0.3786	0.4081	0.4519	0.4801	0.5129	0.5943	0.7001	0.8343	0.9131
0.25	0.3558	0.3623	0.3792	0.4087	0.4525	0.4806	0.5134	0.5948	0.7006	0.8346	0.9132
0.30	0.3575	0.3630	0.3800	0.4094	0.4532	0.4813	0.5141	0.5955	0.7011	0.8349	0.9134
0.35	0.3584	0.3639	0.3808	0.4102	0.4541	0.4822	0.5149	0.5962	0.7017	0.8352	0.9136
0.40	0.3594	0.3649	0.3818	0.4112	0.4550	0.4831	0.5159	0.5970	0.7024	0.8357	0.9138
0.45	0.3605	0.3660	0.3829	0.4123	0.4561	0.4842	0.5169	0.5980	0.7031	0.8361	0.9141
0.50	0.3617	0.3672	0.3841	0.4136	0.4573	0.4854	0.5181	0.5991	0.7040	0.8366	0.9144
0.55	0.3630	0.3686	0.3855	0.4149	0.4587	0.4867	0.5194	0.6002	0.7050	0.8372	0.9147
0.60	0.3645	0.3700	0.3870	0.4164	0.4602	0.4882	0.5208	0.6015	0.7060	0.8378	0.9150
0.65	0.3661	0.3716	0.3886	0.4180	0.4617	0.4897	0.5223	0.6029	0.7071	0.8385	0.9154
0.70	0.3678	0.3733	0.3903	0.4197	0.4634	0.4914	0.5239	0.6044	0.7083	0.8392	0.9158
0.75	0.3696	0.3752	0.3921	0.4215	0.4652	0.4932	0.5257	0.6059	0.7096	0.8400	0.9162
0.80	0.3716	0.3771	0.3941	0.4235	0.4671	0.4950	0.5275	0.6076	0.7109	0.8408	0.9166
0.85	0.3736	0.3792	0.3961	0.4255	0.4692	0.4970	0.5294	0.6093	0.7123	0.8417	0.9171
0.90	0.3758	0.3813	0.3983	0.4277	0.4713	0.4991	0.5315	0.6112	0.7138	0.8426	0.9176
0.95	0.3781	0.3836	0.4006	0.4300	0.4735	0.5013	0.5335	0.6131	0.7153	0.8435	0.9181
1.00	0.3805	0.3860	0.4030	0.4324	0.4759	0.5036	0.5358	0.6151	0.7169	0.8445	0.9186
1.05	0.3829	0.3885	0.4054	0.4348	0.4783	0.5060	0.5381	0.6172	0.7186	0.8455	0.9192
1.10	0.3855	0.3911	0.4080	0.4374	0.4808	0.5085	0.5405	0.6193	0.7203	0.8465	0.9197
1.15	0.3882	0.3937	0.4107	0.4401	0.4834	0.5110	0.5430	0.6216	0.7221	0.8476	0.9203
1.20	0.3910	0.3965	0.4135	0.4428	0.4861	0.5137	0.5456	0.6239	0.7240	0.8487	0.9209
1.25	0.3938	0.3994	0.4163	0.4456	0.4889	0.5164	0.5482	0.6262	0.7258	0.8498	0.9215
1.30	0.3968	0.4023	0.4193	0.4486	0.4917	0.5192	0.5509	0.6286	0.7278	0.8509	0.9222
1.35	0.3998	0.4054	0.4223	0.4516	0.4947	0.5220	0.5537	0.6311	0.7297	0.8521	0.9228
1.40	0.4029	0.4085	0.4254	0.4547	0.4977	0.5250	0.5565	0.6337	0.7318	0.8533	0.9235
1.45	0.4061	0.4117	0.4286	0.4578	0.5008	0.5280	0.5594	0.6363	0.7338	0.8545	0.9241
1.50	0.4094	0.4149	0.4319	0.4610	0.5039	0.5311	0.5624	0.6389	0.7359	0.8558	0.9248
1.55	0.4127	0.4183	0.4352	0.4643	0.5071	0.5342	0.5654	0.6416	0.7380	0.8570	0.9255

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RS WHERE N=3.95

PAGE 120

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4162	0.4217	0.4386	0.4677	0.5104	0.5374	0.5685	0.6443	0.7402	0.8583	0.9262
1.65	0.4197	0.4252	0.4421	0.4711	0.5137	0.5406	0.5716	0.6471	0.7424	0.8596	0.9269
1.70	0.4232	0.4287	0.4456	0.4746	0.5171	0.5439	0.5748	0.6499	0.7446	0.8609	0.9276
1.75	0.4268	0.4323	0.4492	0.4781	0.5205	0.5472	0.5780	0.6527	0.7468	0.8622	0.9283
1.80	0.4305	0.4360	0.4528	0.4817	0.5240	0.5506	0.5813	0.6556	0.7491	0.8635	0.9290
1.85	0.4342	0.4397	0.4565	0.4853	0.5275	0.5540	0.5845	0.6585	0.7514	0.8649	0.9297
1.90	0.4380	0.4435	0.4603	0.4890	0.5310	0.5575	0.5879	0.6614	0.7537	0.8662	0.9305
1.95	0.4418	0.4473	0.4640	0.4928	0.5346	0.5610	0.5912	0.6644	0.7560	0.8676	0.9312
2.00	0.4457	0.4512	0.4679	0.4965	0.5382	0.5645	0.5946	0.6673	0.7583	0.8689	0.9319
2.05	0.4495	0.4551	0.4717	0.5003	0.5419	0.5680	0.5980	0.6703	0.7606	0.8703	0.9326
2.10	0.4533	0.4590	0.4756	0.5041	0.5456	0.5716	0.6014	0.6733	0.7629	0.8716	0.9334
2.15	0.4571	0.4630	0.4796	0.5080	0.5493	0.5752	0.6049	0.6763	0.7653	0.8730	0.9341
2.20	0.4610	0.4670	0.4836	0.5119	0.5530	0.5788	0.6083	0.6793	0.7676	0.8744	0.9348
2.25	0.4656	0.4710	0.4876	0.5158	0.5568	0.5825	0.6118	0.6824	0.7700	0.8757	0.9356
2.30	0.4697	0.4751	0.4916	0.5197	0.5606	0.5861	0.6153	0.6854	0.7723	0.8771	0.9363
2.35	0.4738	0.4792	0.4956	0.5237	0.5643	0.5898	0.6188	0.6885	0.7747	0.8784	0.9370
2.40	0.4779	0.4833	0.4997	0.5277	0.5681	0.5934	0.6223	0.6915	0.7770	0.8798	0.9377
2.45	0.4821	0.4874	0.5038	0.5317	0.5719	0.5971	0.6258	0.6945	0.7794	0.8811	0.9385
2.50	0.4862	0.4916	0.5079	0.5357	0.5758	0.6008	0.6293	0.6976	0.7817	0.8825	0.9392
2.55	0.4904	0.4958	0.5120	0.5397	0.5796	0.6045	0.6328	0.7006	0.7840	0.8838	0.9399
2.60	0.4946	0.4999	0.5161	0.5437	0.5834	0.6082	0.6363	0.7036	0.7863	0.8851	0.9406
2.65	0.4988	0.5041	0.5203	0.5477	0.5872	0.6118	0.6399	0.7067	0.7887	0.8865	0.9413
2.70	0.5030	0.5083	0.5244	0.5517	0.5910	0.6155	0.6434	0.7097	0.7910	0.8878	0.9420
2.75	0.5073	0.5125	0.5285	0.5557	0.5949	0.6192	0.6469	0.7127	0.7933	0.8891	0.9427
2.80	0.5115	0.5167	0.5327	0.5598	0.5987	0.6229	0.6503	0.7157	0.7955	0.8904	0.9434
2.85	0.5157	0.5210	0.5368	0.5638	0.6025	0.6265	0.6538	0.7187	0.7978	0.8917	0.9441
2.90	0.5199	0.5252	0.5410	0.5678	0.6063	0.6302	0.6573	0.7216	0.8001	0.8930	0.9448
2.95	0.5242	0.5294	0.5451	0.5718	0.6101	0.6338	0.6607	0.7246	0.8023	0.8942	0.9454
3.00	0.5284	0.5336	0.5492	0.5758	0.6139	0.6374	0.6642	0.7275	0.8045	0.8955	0.9461

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQU.

VALUES OF RS WHERE N=4.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3600	0.3655	0.3824	0.4118	0.4556	0.4837	0.5154	0.5975	0.7027	0.8359	0.9139
0.05	0.3601	0.3656	0.3825	0.4119	0.4557	0.4838	0.5165	0.5976	0.7028	0.8359	0.9139
0.10	0.3603	0.3658	0.3827	0.4121	0.4559	0.4839	0.5167	0.5977	0.7029	0.8360	0.9140
0.15	0.3606	0.3661	0.3830	0.4124	0.4562	0.4843	0.5170	0.5980	0.7031	0.8361	0.9141
0.20	0.3610	0.3665	0.3834	0.4129	0.4566	0.4847	0.5174	0.5984	0.7035	0.8363	0.9142
0.25	0.3616	0.3671	0.3840	0.4134	0.4572	0.4853	0.5179	0.5989	0.7039	0.8366	0.9143
0.30	0.3623	0.3678	0.3847	0.4141	0.4579	0.4859	0.5185	0.5995	0.7043	0.8369	0.9145
0.35	0.3631	0.3686	0.3856	0.4150	0.4587	0.4867	0.5194	0.6002	0.7049	0.8372	0.9147
0.40	0.3641	0.3696	0.3865	0.4159	0.4597	0.4877	0.5203	0.6010	0.7056	0.8376	0.9149
0.45	0.3651	0.3707	0.3876	0.4170	0.4607	0.4887	0.5213	0.6020	0.7063	0.8381	0.9151
0.50	0.3653	0.3719	0.3888	0.4182	0.4619	0.4899	0.5224	0.6030	0.7072	0.8386	0.9154
0.55	0.3677	0.3732	0.3901	0.4195	0.4632	0.4912	0.5237	0.6041	0.7081	0.8391	0.9157
0.60	0.3691	0.3746	0.3915	0.4210	0.4646	0.4926	0.5251	0.6054	0.7091	0.8397	0.9160
0.65	0.3706	0.3762	0.3931	0.4225	0.4662	0.4941	0.5265	0.6067	0.7102	0.8404	0.9164
0.70	0.3723	0.3778	0.3948	0.4242	0.4678	0.4957	0.5281	0.6081	0.7113	0.8411	0.9168
0.75	0.3741	0.3786	0.3966	0.4260	0.4695	0.4974	0.5298	0.6096	0.7125	0.8418	0.9172
0.80	0.3760	0.3815	0.3985	0.4278	0.4714	0.4992	0.5315	0.6112	0.7138	0.8426	0.9176
0.85	0.3780	0.3835	0.4005	0.4298	0.4734	0.5012	0.5334	0.6129	0.7152	0.8434	0.9180
0.90	0.3801	0.3856	0.4026	0.4319	0.4754	0.5032	0.5354	0.6147	0.7166	0.8442	0.9185
0.95	0.3823	0.3878	0.4048	0.4342	0.4776	0.5053	0.5375	0.6166	0.7181	0.8451	0.9190
1.00	0.3846	0.3902	0.4071	0.4365	0.4799	0.5075	0.5396	0.6185	0.7196	0.8461	0.9195
1.05	0.3870	0.3926	0.4095	0.4389	0.4822	0.5098	0.5419	0.6205	0.7213	0.8470	0.9200
1.10	0.3895	0.3951	0.4120	0.4414	0.4847	0.5122	0.5442	0.6226	0.7229	0.8480	0.9206
1.15	0.3922	0.3977	0.4146	0.4440	0.4872	0.5147	0.5466	0.6248	0.7247	0.8491	0.9212
1.20	0.3949	0.4004	0.4173	0.4466	0.4898	0.5173	0.5491	0.6270	0.7264	0.8501	0.9217
1.25	0.3976	0.4032	0.4201	0.4494	0.4925	0.5199	0.5516	0.6293	0.7283	0.8512	0.9223
1.30	0.4005	0.4061	0.4230	0.4522	0.4953	0.5226	0.5543	0.6316	0.7301	0.8523	0.9229
1.35	0.4035	0.4090	0.4260	0.4552	0.4982	0.5254	0.5570	0.6340	0.7320	0.8535	0.9236
1.40	0.4065	0.4121	0.4290	0.4582	0.5011	0.5283	0.5597	0.6365	0.7340	0.8546	0.9242
1.45	0.4096	0.4152	0.4321	0.4612	0.5041	0.5312	0.5625	0.6390	0.7360	0.8558	0.9248
1.50	0.4128	0.4184	0.4353	0.4644	0.5071	0.5342	0.5654	0.6416	0.7380	0.8570	0.9255
1.55	0.4161	0.4216	0.4385	0.4676	0.5103	0.5373	0.5684	0.6442	0.7401	0.8582	0.9261

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESO.

VALUES OF RS WHERE N=4.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.4194	0.4250	0.4418	0.4709	0.5134	0.5404	0.5714	0.6468	0.7422	0.8595	0.9268
1.65	0.4228	0.4284	0.4452	0.4742	0.5167	0.5435	0.5744	0.6495	0.7443	0.8607	0.9275
1.70	0.4253	0.4318	0.4487	0.4776	0.5200	0.5467	0.5775	0.6523	0.7465	0.8620	0.9282
1.75	0.4298	0.4354	0.4522	0.4811	0.5233	0.5500	0.5806	0.6550	0.7486	0.8633	0.9289
1.80	0.4334	0.4389	0.4557	0.4846	0.5267	0.5533	0.5838	0.6578	0.7508	0.8646	0.9296
1.85	0.4371	0.4426	0.4593	0.4881	0.5301	0.5566	0.5870	0.6606	0.7530	0.8659	0.9303
1.90	0.4408	0.4463	0.4630	0.4917	0.5336	0.5600	0.5902	0.6635	0.7553	0.8672	0.9310
1.95	0.4445	0.4500	0.4667	0.4953	0.5371	0.5634	0.5935	0.6664	0.7575	0.8685	0.9317
2.00	0.4483	0.4538	0.4704	0.4990	0.5406	0.5668	0.5968	0.6693	0.7598	0.8698	0.9324
2.05	0.4521	0.4576	0.4742	0.5027	0.5442	0.5703	0.6001	0.6722	0.7620	0.8711	0.9331
2.10	0.4559	0.4614	0.4780	0.5065	0.5478	0.5738	0.6035	0.6751	0.7643	0.8724	0.9338
2.15	0.4599	0.4653	0.4819	0.5103	0.5514	0.5773	0.6069	0.6780	0.7666	0.8738	0.9345
2.20	0.4638	0.4692	0.4858	0.5141	0.5551	0.5808	0.6102	0.6810	0.7689	0.8751	0.9352
2.25	0.4678	0.4732	0.4897	0.5179	0.5588	0.5844	0.6136	0.6840	0.7712	0.8764	0.9359
2.30	0.4718	0.4772	0.4936	0.5217	0.5625	0.5879	0.6170	0.6869	0.7735	0.8777	0.9366
2.35	0.4758	0.4812	0.4976	0.5256	0.5662	0.5913	0.6205	0.6899	0.7758	0.8791	0.9374
2.40	0.4798	0.4852	0.5016	0.5295	0.5699	0.5951	0.6239	0.6929	0.7781	0.8804	0.9381
2.45	0.4839	0.4893	0.5056	0.5334	0.5736	0.5987	0.6273	0.6958	0.7803	0.8817	0.9388
2.50	0.4880	0.4934	0.5096	0.5373	0.5773	0.6023	0.6308	0.6988	0.7826	0.8830	0.9395
2.55	0.4921	0.4974	0.5137	0.5413	0.5811	0.6059	0.6342	0.7018	0.7849	0.8843	0.9402
2.60	0.4962	0.5015	0.5177	0.5452	0.5848	0.6095	0.6377	0.7048	0.7872	0.8856	0.9409
2.65	0.5004	0.5057	0.5218	0.5491	0.5886	0.6131	0.6411	0.7077	0.7895	0.8869	0.9415
2.70	0.5045	0.5098	0.5258	0.5531	0.5923	0.6167	0.6445	0.7107	0.7917	0.8882	0.9422
2.75	0.5086	0.5139	0.5299	0.5570	0.5961	0.6204	0.6480	0.7136	0.7940	0.8895	0.9429
2.80	0.5128	0.5180	0.5340	0.5610	0.5998	0.6240	0.6514	0.7166	0.7962	0.8908	0.9436
2.85	0.5169	0.5222	0.5380	0.5649	0.6036	0.6275	0.6548	0.7195	0.7984	0.8920	0.9443
2.90	0.5211	0.5263	0.5421	0.5689	0.6073	0.6311	0.6582	0.7224	0.8006	0.8933	0.9449
2.95	0.5253	0.5305	0.5462	0.5728	0.6110	0.6347	0.6616	0.7253	0.8028	0.8945	0.9456
3.00	0.5294	0.5346	0.5502	0.5768	0.6147	0.6383	0.6650	0.7282	0.8050	0.8958	0.9463

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.05	0.0006	0.0006	0.0005	0.0003	0.0001	0.0000	0.0001	0.0024	0.0211	0.1676	0.4231
0.10	0.0025	0.0023	0.0019	0.0011	0.0003	0.0001	0.0005	0.0081	0.0549	0.2651	0.5215
0.15	0.0056	0.0053	0.0043	0.0026	0.0008	0.0004	0.0013	0.0150	0.0822	0.3143	0.5672
0.20	0.0099	0.0093	0.0076	0.0049	0.0018	0.0012	0.0026	0.0218	0.1028	0.3462	0.5939
0.25	0.0154	0.0146	0.0119	0.0077	0.0035	0.0027	0.0046	0.0284	0.1184	0.3678	0.6114
0.30	0.0220	0.0208	0.0171	0.0115	0.0059	0.0049	0.0072	0.0345	0.1308	0.3835	0.6236
0.35	0.0297	0.0281	0.0234	0.0162	0.0092	0.0080	0.0106	0.0405	0.1409	0.3954	0.6327
0.40	0.0389	0.0365	0.0306	0.0218	0.0135	0.0119	0.0147	0.0464	0.1495	0.4047	0.6397
0.45	0.0482	0.0458	0.0387	0.0284	0.0186	0.0168	0.0195	0.0523	0.1569	0.4122	0.6452
0.50	0.0588	0.0560	0.0478	0.0359	0.0248	0.0225	0.0251	0.0583	0.1637	0.4185	0.6498
0.55	0.0703	0.0671	0.0577	0.0443	0.0318	0.0290	0.0314	0.0645	0.1700	0.4239	0.6535
0.60	0.0826	0.0789	0.0685	0.0536	0.0396	0.0364	0.0383	0.0709	0.1759	0.4286	0.6567
0.65	0.0955	0.0915	0.0800	0.0637	0.0483	0.0445	0.0459	0.0776	0.1816	0.4328	0.6595
0.70	0.1091	0.1047	0.0923	0.0745	0.0578	0.0533	0.0541	0.0846	0.1871	0.4366	0.6620
0.75	0.1233	0.1185	0.1052	0.0861	0.0680	0.0628	0.0629	0.0918	0.1927	0.4401	0.6642
0.80	0.1379	0.1329	0.1186	0.0984	0.0789	0.0729	0.0722	0.0994	0.1981	0.4434	0.6662
0.85	0.1530	0.1477	0.1326	0.1112	0.0903	0.0835	0.0820	0.1072	0.2037	0.4465	0.6680
0.90	0.1684	0.1628	0.1471	0.1246	0.1023	0.0947	0.0923	0.1153	0.2092	0.4495	0.6697
0.95	0.1841	0.1783	0.1619	0.1384	0.1148	0.1064	0.1030	0.1237	0.2149	0.4523	0.6713
1.00	0.2000	0.1940	0.1770	0.1527	0.1277	0.1185	0.1141	0.1324	0.2206	0.4551	0.6728
1.05	0.2161	0.2099	0.1925	0.1672	0.1410	0.1310	0.1256	0.1414	0.2264	0.4578	0.6742
1.10	0.2322	0.2259	0.2081	0.1821	0.1547	0.1438	0.1374	0.1506	0.2323	0.4604	0.6755
1.15	0.2485	0.2420	0.2238	0.1971	0.1686	0.1569	0.1495	0.1600	0.2383	0.4631	0.6768
1.20	0.2647	0.2582	0.2396	0.2124	0.1828	0.1703	0.1619	0.1697	0.2445	0.4656	0.6781
1.25	0.2809	0.2743	0.2555	0.2277	0.1971	0.1838	0.1744	0.1795	0.2507	0.4682	0.6792
1.30	0.2970	0.2904	0.2714	0.2431	0.2115	0.1975	0.1872	0.1895	0.2570	0.4708	0.6804
1.35	0.3130	0.3063	0.2872	0.2586	0.2261	0.2114	0.2001	0.1997	0.2634	0.4733	0.6815
1.40	0.3289	0.3222	0.3029	0.2740	0.2407	0.2253	0.2131	0.2100	0.2699	0.4758	0.6826
1.45	0.3445	0.3378	0.3186	0.2893	0.2554	0.2393	0.2262	0.2204	0.2765	0.4784	0.6837
1.50	0.3600	0.3533	0.3340	0.3046	0.2700	0.2533	0.2394	0.2309	0.2832	0.4809	0.6847
1.55	0.3752	0.3686	0.3493	0.3198	0.2846	0.2673	0.2526	0.2416	0.2899	0.4834	0.6857

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.00

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
1.60	0.3902	0.3836	0.3644	0.3348	0.2990	0.2813	0.2657	0.2522	0.2357	0.4859	0.6867	
1.65	0.4050	0.3984	0.3793	0.3496	0.3134	0.2952	0.2789	0.2630	0.2436	0.4885	0.6877	
1.70	0.4194	0.4129	0.3939	0.3642	0.3277	0.3090	0.2920	0.2737	0.2506	0.4910	0.6887	
1.75	0.4336	0.4272	0.4083	0.3787	0.3418	0.3228	0.3051	0.2845	0.2576	0.4936	0.6896	
1.80	0.4475	0.4411	0.4224	0.3929	0.3558	0.3363	0.3181	0.2953	0.2646	0.4961	0.6905	
1.85	0.4611	0.4548	0.4362	0.4068	0.3696	0.3498	0.3310	0.3061	0.2717	0.4987	0.6914	
1.90	0.4744	0.4681	0.4498	0.4205	0.3831	0.3631	0.3437	0.3169	0.2788	0.5012	0.6923	
1.95	0.4873	0.4812	0.4630	0.4340	0.3965	0.3762	0.3564	0.3276	0.2860	0.5038	0.6932	
2.00	0.5000	0.4939	0.4760	0.4471	0.4097	0.3891	0.3689	0.3382	0.2932	0.5064	0.6941	
2.05	0.5123	0.5064	0.4886	0.4600	0.4226	0.4019	0.3812	0.3489	0.3004	0.5090	0.6950	
2.10	0.5244	0.5185	0.5010	0.4727	0.4353	0.4144	0.3934	0.3594	0.3076	0.5116	0.6958	
2.15	0.5361	0.5303	0.5131	0.4850	0.4477	0.4267	0.4054	0.3698	0.3148	0.5142	0.6967	
2.20	0.5475	0.5418	0.5248	0.4971	0.4599	0.4388	0.4172	0.3802	0.3220	0.5168	0.6975	
2.25	0.5586	0.5530	0.5363	0.5088	0.4718	0.4507	0.4288	0.3905	0.3322	0.5195	0.6983	
2.30	0.5694	0.5639	0.5474	0.5203	0.4835	0.4623	0.4402	0.4007	0.3363	0.5221	0.6991	
2.35	0.5799	0.5745	0.5583	0.5315	0.4949	0.4737	0.4515	0.4107	0.3435	0.5247	0.6999	
2.40	0.5902	0.5848	0.5689	0.5424	0.5061	0.4849	0.4625	0.4207	0.3506	0.5274	0.7008	
2.45	0.6001	0.5949	0.5792	0.5531	0.5170	0.4959	0.4733	0.4305	0.3578	0.5300	0.7016	
2.50	0.6098	0.6046	0.5892	0.5635	0.5277	0.5066	0.4840	0.4402	0.3649	0.5327	0.7023	
2.55	0.6191	0.6141	0.5989	0.5736	0.5381	0.5170	0.4944	0.4497	0.3719	0.5354	0.7031	
2.60	0.6283	0.6233	0.6084	0.5834	0.5483	0.5273	0.5046	0.4592	0.3789	0.5380	0.7039	
2.65	0.6371	0.6323	0.6176	0.5930	0.5582	0.5373	0.5146	0.4685	0.3859	0.5407	0.7047	
2.70	0.6457	0.6409	0.6266	0.6023	0.5679	0.5471	0.5243	0.4776	0.3928	0.5434	0.7055	
2.75	0.6541	0.6494	0.6353	0.6113	0.5773	0.5567	0.5339	0.4866	0.3997	0.5461	0.7063	
2.80	0.6622	0.6576	0.6437	0.6202	0.5865	0.5660	0.5433	0.4955	0.4066	0.5488	0.7070	
2.85	0.6700	0.6655	0.6519	0.6287	0.5955	0.5751	0.5525	0.5042	0.4133	0.5515	0.7078	
2.90	0.6777	0.6733	0.6599	0.6371	0.6042	0.5840	0.5614	0.5128	0.4201	0.5542	0.7086	
2.95	0.6851	0.6808	0.6677	0.6452	0.6128	0.5927	0.5702	0.5212	0.4268	0.5569	0.7093	
3.00	0.6923	0.6881	0.6752	0.6531	0.6211	0.6011	0.5788	0.5295	0.4334	0.5596	0.7101	

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF R^2 WHERE $N=1.05$

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
0.00	0.0006	0.0006	0.0005	0.0003	0.0001	0.0000	0.0000	0.0014	0.0117	0.0967	0.3035	
0.05	0.0012	0.0011	0.0009	0.0006	0.0002	0.0000	0.0001	0.0027	0.0212	0.1453	0.3811	
0.10	0.0030	0.0028	0.0023	0.0014	0.0004	0.0001	0.0003	0.0061	0.0419	0.2178	0.4707	
0.15	0.0059	0.0056	0.0046	0.0029	0.0010	0.0004	0.0008	0.0107	0.0535	0.2710	0.5254	
0.20	0.0100	0.0095	0.0078	0.0051	0.0020	0.0011	0.0017	0.0158	0.0822	0.3076	0.5594	
0.25	0.0152	0.0144	0.0119	0.0079	0.0036	0.0024	0.0032	0.0211	0.0975	0.3335	0.5820	
0.30	0.0219	0.0204	0.0170	0.0116	0.0059	0.0043	0.0053	0.0264	0.1101	0.3525	0.5980	
0.35	0.0289	0.0274	0.0230	0.0161	0.0089	0.0070	0.0081	0.0317	0.1207	0.3669	0.6097	
0.40	0.0372	0.0354	0.0299	0.0215	0.0128	0.0105	0.0117	0.0370	0.1297	0.3782	0.6186	
0.45	0.0465	0.0443	0.0377	0.0277	0.0176	0.0149	0.0160	0.0425	0.1377	0.3873	0.6257	
0.50	0.0567	0.0540	0.0463	0.0348	0.0233	0.0201	0.0211	0.0482	0.1449	0.3949	0.6314	
0.55	0.0677	0.0646	0.0558	0.0428	0.0298	0.0261	0.0268	0.0541	0.1514	0.4013	0.6361	
0.60	0.0795	0.0760	0.0661	0.0516	0.0372	0.0335	0.0333	0.0603	0.1577	0.4068	0.6401	
0.65	0.0919	0.0881	0.0772	0.0612	0.0454	0.0405	0.0404	0.0667	0.1636	0.4117	0.6435	
0.70	0.1050	0.1008	0.0889	0.0715	0.0543	0.0488	0.0481	0.0734	0.1694	0.4161	0.6464	
0.75	0.1186	0.1141	0.1013	0.0827	0.0640	0.0578	0.0564	0.0805	0.1750	0.4200	0.6491	
0.80	0.1327	0.1279	0.1142	0.0944	0.0743	0.0674	0.0652	0.0878	0.1807	0.4237	0.6514	
0.85	0.1472	0.1421	0.1276	0.1056	0.0852	0.0775	0.0748	0.0954	0.1863	0.4272	0.6535	
0.90	0.1621	0.1567	0.1415	0.1185	0.0967	0.0882	0.0845	0.1033	0.1919	0.4304	0.6555	
0.95	0.1773	0.1717	0.1558	0.1327	0.1086	0.0994	0.0948	0.1115	0.1976	0.4335	0.6573	
1.00	0.1927	0.1869	0.1705	0.1464	0.1210	0.1110	0.1055	0.1200	0.2034	0.4365	0.6589	
1.05	0.2083	0.2023	0.1854	0.1605	0.1338	0.1230	0.1166	0.1288	0.2092	0.4394	0.6605	
1.10	0.2240	0.2179	0.2005	0.1748	0.1470	0.1354	0.1280	0.1377	0.2152	0.4422	0.6620	
1.15	0.2398	0.2336	0.2157	0.1894	0.1604	0.1481	0.1397	0.1470	0.2212	0.4449	0.6634	
1.20	0.2556	0.2493	0.2311	0.2041	0.1741	0.1610	0.1517	0.1564	0.2273	0.4477	0.6647	
1.25	0.2715	0.2650	0.2466	0.2190	0.1880	0.1742	0.1639	0.1661	0.2335	0.4503	0.6660	
1.30	0.2872	0.2807	0.2620	0.2340	0.2020	0.1875	0.1763	0.1759	0.2398	0.4530	0.6673	
1.35	0.3029	0.2963	0.2775	0.2490	0.2162	0.2010	0.1889	0.1859	0.2462	0.4556	0.6685	
1.40	0.3185	0.3119	0.2929	0.2640	0.2305	0.2146	0.2016	0.1960	0.2527	0.4582	0.6696	
1.45	0.3339	0.3273	0.3082	0.2791	0.2447	0.2282	0.2144	0.2063	0.2593	0.4608	0.6708	
1.50	0.3491	0.3425	0.3234	0.2940	0.2590	0.2419	0.2273	0.2167	0.2660	0.4634	0.6718	
1.55	0.3641	0.3575	0.3384	0.3089	0.2733	0.2557	0.2402	0.2271	0.2727	0.4660	0.6729	

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.05

PAGE 126

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3789	0.3724	0.3533	0.3236	0.2875	0.2694	0.2532	0.2377	0.2296	0.4686	0.6739
1.65	0.3935	0.3870	0.3679	0.3382	0.3017	0.2830	0.2661	0.2483	0.2364	0.4712	0.6750
1.70	0.4078	0.4013	0.3824	0.3526	0.3157	0.2965	0.2791	0.2590	0.2434	0.4738	0.6760
1.75	0.4219	0.4154	0.3966	0.3669	0.3296	0.3102	0.2920	0.2696	0.3004	0.4764	0.6769
1.80	0.4357	0.4293	0.4106	0.3809	0.3434	0.3236	0.3048	0.2803	0.3074	0.4790	0.6779
1.85	0.4492	0.4429	0.4243	0.3947	0.3570	0.3369	0.3175	0.2910	0.3145	0.4816	0.6788
1.90	0.4624	0.4561	0.4377	0.4083	0.3705	0.3500	0.3302	0.3017	0.3217	0.4842	0.6798
1.95	0.4753	0.4692	0.4509	0.4216	0.3837	0.3630	0.3427	0.3124	0.3288	0.4868	0.6807
2.00	0.4880	0.4819	0.4638	0.4347	0.3967	0.3758	0.3551	0.3230	0.3360	0.4895	0.6816
2.05	0.5003	0.4943	0.4764	0.4476	0.4096	0.3885	0.3673	0.3335	0.3432	0.4921	0.6825
2.10	0.5123	0.5064	0.4888	0.4601	0.4222	0.4002	0.3794	0.3440	0.3504	0.4947	0.6834
2.15	0.5241	0.5182	0.5008	0.4725	0.4346	0.4132	0.3914	0.3545	0.3577	0.4974	0.6842
2.20	0.5355	0.5298	0.5126	0.4845	0.4468	0.4253	0.4032	0.3648	0.3649	0.5001	0.6851
2.25	0.5467	0.5410	0.5241	0.4963	0.4587	0.4371	0.4148	0.3751	0.3721	0.5027	0.6859
2.30	0.5575	0.5520	0.5353	0.5078	0.4704	0.4488	0.4262	0.3853	0.3753	0.5054	0.6868
2.35	0.5681	0.5626	0.5462	0.5190	0.4818	0.4602	0.4374	0.3953	0.3865	0.5081	0.6876
2.40	0.5784	0.5730	0.5568	0.5300	0.4930	0.4714	0.4485	0.4053	0.3937	0.5108	0.6884
2.45	0.5884	0.5831	0.5672	0.5407	0.5040	0.4823	0.4593	0.4151	0.4009	0.5135	0.6893
2.50	0.5982	0.5930	0.5773	0.5511	0.5147	0.4931	0.4700	0.4249	0.4080	0.5162	0.6901
2.55	0.6077	0.6025	0.5871	0.5613	0.5252	0.5035	0.4804	0.4345	0.4151	0.5189	0.6909
2.60	0.6169	0.6118	0.5967	0.5712	0.5354	0.5139	0.4907	0.4440	0.4222	0.5217	0.6917
2.65	0.6258	0.6209	0.6060	0.5809	0.5454	0.5240	0.5007	0.4533	0.4293	0.5244	0.6925
2.70	0.6345	0.6297	0.6150	0.5905	0.5551	0.5337	0.5105	0.4625	0.4363	0.5271	0.6933
2.75	0.6430	0.6383	0.6238	0.5994	0.5647	0.5435	0.5202	0.4716	0.4432	0.5299	0.6941
2.80	0.6512	0.6466	0.6324	0.6083	0.5740	0.5529	0.5297	0.4806	0.4501	0.5326	0.6949
2.85	0.6592	0.6546	0.6407	0.6170	0.5830	0.5621	0.5389	0.4894	0.4570	0.5354	0.6957
2.90	0.6670	0.6625	0.6488	0.6255	0.5919	0.5711	0.5480	0.4980	0.4638	0.5382	0.6965
2.95	0.6745	0.6701	0.6567	0.6337	0.6005	0.5797	0.5569	0.5065	0.4706	0.5409	0.6973
3.00	0.6819	0.6775	0.6644	0.6417	0.6089	0.5885	0.5655	0.5149	0.4773	0.5437	0.6981

TABLES OF CALCULATIONS FOR W.H. WRIGHT EAR

VALUES OF RP WHERE N=1-10

THETA	0	10	20	30	40	45	50	60	70	80	85
K											
0-00	0-0023	0-0021	0-0018	0-0011	0-0004	0-0001	0-0001	0-0033	0-0257	0-1599	0-3984
0-05	0-0028	0-0027	0-0022	0-0014	0-0005	0-0001	0-0001	0-0040	0-0304	0-1777	0-4218
0-10	0-0045	0-0043	0-0035	0-0023	0-0008	0-0002	0-0002	0-0060	0-0423	0-2158	0-4671
0-15	0-0073	0-0069	0-0057	0-0038	0-0014	0-0006	0-0006	0-0090	0-0569	0-2539	0-5076
0-20	0-0112	0-0106	0-0088	0-0059	0-0025	0-0012	0-0013	0-0127	0-0712	0-2852	0-5382
0-25	0-0162	0-0154	0-0128	0-0087	0-0040	0-0024	0-0025	0-0167	0-0842	0-3096	0-5607
0-30	0-0222	0-0211	0-0177	0-0123	0-0062	0-0042	0-0043	0-0209	0-0955	0-3287	0-5775
0-35	0-0292	0-0278	0-0234	0-0166	0-0091	0-0066	0-0067	0-0254	0-1054	0-3437	0-5902
0-40	0-0372	0-0354	0-0300	0-0218	0-0128	0-0099	0-0098	0-0301	0-1141	0-3557	0-6002
0-45	0-0461	0-0439	0-0375	0-0278	0-0173	0-0139	0-0137	0-0351	0-1218	0-3656	0-6081
0-50	0-0558	0-0532	0-0458	0-0346	0-0226	0-0187	0-0183	0-0403	0-1289	0-3738	0-6145
0-55	0-0663	0-0634	0-0549	0-0422	0-0288	0-0243	0-0236	0-0458	0-1355	0-3808	0-6199
0-60	0-0776	0-0743	0-0648	0-0506	0-0357	0-0306	0-0296	0-0516	0-1418	0-3868	0-6244
0-65	0-0895	0-0859	0-0754	0-0598	0-0434	0-0377	0-0362	0-0577	0-1477	0-3921	0-6282
0-70	0-1020	0-0981	0-0866	0-0696	0-0519	0-0455	0-0434	0-0641	0-1535	0-3969	0-6316
0-75	0-1151	0-1108	0-0985	0-0802	0-0610	0-0540	0-0512	0-0708	0-1592	0-4012	0-6345
0-80	0-1287	0-1241	0-1109	0-0914	0-0708	0-0631	0-0596	0-0779	0-1649	0-4052	0-6372
0-85	0-1427	0-1378	0-1238	0-1032	0-0812	0-0728	0-0686	0-0852	0-1705	0-4089	0-6395
0-90	0-1571	0-1519	0-1372	0-1154	0-0922	0-0830	0-0780	0-0929	0-1762	0-4123	0-6417
0-95	0-1718	0-1664	0-1510	0-1282	0-1036	0-0937	0-0879	0-1008	0-1819	0-4156	0-6437
1-00	0-1867	0-1811	0-1651	0-1414	0-1155	0-1048	0-0982	0-1091	0-1876	0-4188	0-6455
1-05	0-2018	0-1960	0-1795	0-1549	0-1278	0-1164	0-1088	0-1176	0-1934	0-4218	0-6472
1-10	0-2171	0-2111	0-1941	0-1687	0-1405	0-1283	0-1199	0-1263	0-1994	0-4247	0-6488
1-15	0-2324	0-2264	0-2089	0-1828	0-1535	0-1405	0-1312	0-1353	0-2054	0-4276	0-6503
1-20	0-2479	0-2417	0-2238	0-1971	0-1667	0-1530	0-1428	0-1446	0-2114	0-4304	0-6518
1-25	0-2633	0-2570	0-2389	0-2119	0-1802	0-1658	0-1547	0-1540	0-2176	0-4332	0-6531
1-30	0-2787	0-2723	0-2539	0-2261	0-1938	0-1787	0-1667	0-1636	0-2239	0-4359	0-6544
1-35	0-2940	0-2876	0-2690	0-2407	0-2076	0-1918	0-1790	0-1734	0-2303	0-4386	0-6557
1-40	0-3093	0-3028	0-2840	0-2553	0-2214	0-2051	0-1914	0-1834	0-2368	0-4413	0-6569
1-45	0-3244	0-3179	0-2990	0-2700	0-2354	0-2184	0-2039	0-1935	0-2433	0-4439	0-6581
1-50	0-3393	0-3328	0-3139	0-2846	0-2493	0-2318	0-2165	0-2037	0-2499	0-4466	0-6592
1-55	0-3541	0-3476	0-3286	0-2992	0-2633	0-2452	0-2291	0-2140	0-2567	0-4492	0-6603

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=1.10

PAGE 128

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3687	0.3622	0.3432	0.3136	0.2772	0.2586	0.2419	0.2244	0.2635	0.4519	0.6614
1.65	0.3831	0.3766	0.3577	0.3279	0.2911	0.2721	0.2546	0.2348	0.2703	0.4545	0.6625
1.70	0.3973	0.3908	0.3719	0.3421	0.3049	0.2854	0.2673	0.2454	0.2772	0.4571	0.6635
1.75	0.4112	0.4048	0.3859	0.3561	0.3186	0.2987	0.2800	0.2559	0.2842	0.4598	0.6645
1.80	0.4248	0.4185	0.3997	0.3700	0.3321	0.3119	0.2926	0.2665	0.2913	0.4624	0.6655
1.85	0.4382	0.4319	0.4133	0.3836	0.3456	0.3250	0.3052	0.2771	0.2983	0.4651	0.6665
1.90	0.4514	0.4451	0.4267	0.3971	0.3588	0.3380	0.3177	0.2877	0.3055	0.4677	0.6674
1.95	0.4642	0.4580	0.4398	0.4103	0.3719	0.3509	0.3301	0.2982	0.3126	0.4704	0.6684
2.00	0.4758	0.4707	0.4526	0.4233	0.3849	0.3636	0.3423	0.3088	0.3198	0.4731	0.6693
2.05	0.4891	0.4831	0.4651	0.4360	0.3976	0.3761	0.3545	0.3193	0.3270	0.4757	0.6702
2.10	0.5011	0.4952	0.4774	0.4485	0.4101	0.3889	0.3665	0.3297	0.3342	0.4784	0.6711
2.15	0.5129	0.5070	0.4895	0.4608	0.4224	0.4007	0.3784	0.3401	0.3415	0.4811	0.6720
2.20	0.5243	0.5185	0.5012	0.4728	0.4345	0.4127	0.3901	0.3504	0.3487	0.4838	0.6729
2.25	0.5355	0.5298	0.5127	0.4846	0.4464	0.4243	0.4017	0.3607	0.3560	0.4866	0.6738
2.30	0.5464	0.5408	0.5239	0.4961	0.4581	0.4361	0.4130	0.3708	0.3632	0.4893	0.6746
2.35	0.5570	0.5515	0.5348	0.5073	0.4695	0.4475	0.4243	0.3809	0.3704	0.4920	0.6755
2.40	0.5674	0.5619	0.5455	0.5183	0.4807	0.4587	0.4353	0.3908	0.3777	0.4948	0.6764
2.45	0.5774	0.5721	0.5559	0.5290	0.4917	0.4697	0.4461	0.4007	0.3849	0.4975	0.6772
2.50	0.5872	0.5820	0.5661	0.5395	0.5024	0.4804	0.4568	0.4104	0.3920	0.5003	0.6780
2.55	0.5968	0.5916	0.5759	0.5497	0.5129	0.4910	0.4673	0.4201	0.3992	0.5030	0.6789
2.60	0.6061	0.6010	0.5856	0.5597	0.5232	0.5013	0.4776	0.4296	0.4063	0.5058	0.6797
2.65	0.6151	0.6101	0.5950	0.5694	0.5333	0.5115	0.4877	0.4390	0.4134	0.5086	0.6805
2.70	0.6239	0.6190	0.6041	0.5789	0.5431	0.5214	0.4976	0.4482	0.4205	0.5114	0.6814
2.75	0.6325	0.6276	0.6130	0.5881	0.5527	0.5311	0.5073	0.4574	0.4275	0.5142	0.6822
2.80	0.6408	0.6361	0.6216	0.5971	0.5620	0.5405	0.5168	0.4664	0.4344	0.5170	0.6830
2.85	0.6489	0.6442	0.6301	0.6059	0.5712	0.5498	0.5261	0.4752	0.4414	0.5198	0.6838
2.90	0.6568	0.6522	0.6382	0.6144	0.5801	0.5589	0.5352	0.4840	0.4482	0.5226	0.6846
2.95	0.6644	0.6599	0.6462	0.6228	0.5888	0.5678	0.5442	0.4925	0.4551	0.5254	0.6854
3.00	0.6719	0.6675	0.6540	0.6309	0.5973	0.5764	0.5529	0.5010	0.4618	0.5282	0.6862

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1-15

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0043	0.0046	0.0038	0.0025	0.0009	0.0002	0.0000	0.0045	0.0357	0.1956	0.4433
0.05	0.0054	0.0051	0.0043	0.0028	0.0010	0.0003	0.0001	0.0050	0.0383	0.2040	0.4533
0.10	0.0070	0.0066	0.0055	0.0037	0.0014	0.0005	0.0002	0.0062	0.0454	0.2248	0.4768
0.15	0.0097	0.0092	0.0077	0.0052	0.0021	0.0009	0.0005	0.0082	0.0550	0.2497	0.5032
0.20	0.0134	0.0127	0.0106	0.0073	0.0032	0.0016	0.0011	0.0108	0.0654	0.2734	0.5268
0.25	0.0181	0.0172	0.0145	0.0100	0.0048	0.0027	0.0022	0.0138	0.0756	0.2939	0.5462
0.30	0.0239	0.0227	0.0192	0.0135	0.0070	0.0044	0.0037	0.0172	0.0850	0.3110	0.5618
0.35	0.0306	0.0291	0.0247	0.0177	0.0098	0.0067	0.0059	0.0209	0.0937	0.3251	0.5742
0.40	0.0382	0.0364	0.0310	0.0227	0.0133	0.0097	0.0087	0.0249	0.1016	0.3369	0.5843
0.45	0.0466	0.0445	0.0382	0.0285	0.0176	0.0135	0.0122	0.0293	0.1088	0.3467	0.5925
0.50	0.0559	0.0534	0.0462	0.0350	0.0226	0.0180	0.0164	0.0340	0.1156	0.3551	0.5992
0.55	0.0660	0.0632	0.0549	0.0423	0.0284	0.0232	0.0213	0.0391	0.1219	0.3623	0.6049
0.60	0.0768	0.0736	0.0644	0.0503	0.0350	0.0292	0.0268	0.0444	0.1279	0.3686	0.6097
0.65	0.0882	0.0847	0.0745	0.0591	0.0423	0.0353	0.0330	0.0502	0.1338	0.3741	0.6139
0.70	0.1002	0.0964	0.0853	0.0685	0.0503	0.0432	0.0398	0.0562	0.1395	0.3791	0.6175
0.75	0.1128	0.1087	0.0967	0.0787	0.0590	0.0513	0.0472	0.0626	0.1451	0.3836	0.6207
0.80	0.1259	0.1214	0.1086	0.0894	0.0683	0.0599	0.0552	0.0694	0.1506	0.3878	0.6235
0.85	0.1394	0.1347	0.1210	0.1006	0.0783	0.0691	0.0637	0.0764	0.1562	0.3916	0.6261
0.90	0.1532	0.1483	0.1339	0.1124	0.0887	0.0789	0.0727	0.0838	0.1618	0.3952	0.6284
0.95	0.1674	0.1622	0.1472	0.1247	0.0997	0.0891	0.0822	0.0915	0.1674	0.3986	0.6305
1.00	0.1819	0.1764	0.1608	0.1373	0.1111	0.0998	0.0921	0.0995	0.1731	0.4019	0.6325
1.05	0.1966	0.1909	0.1747	0.1504	0.1230	0.1109	0.1023	0.1077	0.1789	0.4050	0.6343
1.10	0.2113	0.2055	0.1889	0.1637	0.1351	0.1224	0.1129	0.1162	0.1848	0.4081	0.6360
1.15	0.2262	0.2203	0.2032	0.1773	0.1477	0.1342	0.1239	0.1250	0.1907	0.4110	0.6376
1.20	0.2412	0.2352	0.2177	0.1911	0.1604	0.1462	0.1351	0.1340	0.1968	0.4139	0.6391
1.25	0.2563	0.2501	0.2323	0.2051	0.1735	0.1585	0.1466	0.1432	0.2029	0.4167	0.6405
1.30	0.2713	0.2650	0.2469	0.2193	0.1867	0.1711	0.1583	0.1526	0.2091	0.4195	0.6419
1.35	0.2853	0.2789	0.2616	0.2336	0.2000	0.1839	0.1702	0.1622	0.2155	0.4223	0.6432
1.40	0.3012	0.2948	0.2763	0.2477	0.2135	0.1967	0.1823	0.1719	0.2219	0.4250	0.6445
1.45	0.3160	0.3096	0.2909	0.2620	0.2271	0.2097	0.1945	0.1818	0.2284	0.4277	0.6457
1.50	0.3307	0.3242	0.3055	0.2763	0.2407	0.2228	0.2068	0.1918	0.2350	0.4304	0.6469
1.55	0.3452	0.3387	0.3199	0.2909	0.2543	0.2359	0.2192	0.2020	0.2416	0.4331	0.6481

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.15

PAGE 130

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3596	0.3531	0.3343	0.3047	0.2680	0.2490	0.2317	0.2122	0.2484	0.4358	0.6492
1.65	0.3737	0.3673	0.3484	0.3187	0.2816	0.2622	0.2441	0.2225	0.2552	0.4384	0.6503
1.70	0.3877	0.3813	0.3624	0.3327	0.2951	0.2753	0.2566	0.2329	0.2621	0.4411	0.6513
1.75	0.4014	0.3950	0.3763	0.3465	0.3085	0.2883	0.2691	0.2433	0.2690	0.4458	0.6524
1.80	0.4149	0.4086	0.3899	0.3601	0.3219	0.3013	0.2815	0.2537	0.2760	0.4465	0.6534
1.85	0.4282	0.4219	0.4033	0.3735	0.3351	0.3143	0.2939	0.2642	0.2831	0.4491	0.6544
1.90	0.4412	0.4350	0.4165	0.3868	0.3482	0.3271	0.3062	0.2747	0.2902	0.4518	0.6554
1.95	0.4540	0.4478	0.4295	0.3999	0.3612	0.3398	0.3184	0.2851	0.2973	0.4545	0.6563
2.00	0.4665	0.4604	0.4422	0.4128	0.3739	0.3523	0.3306	0.2956	0.3045	0.4572	0.6573
2.05	0.4788	0.4727	0.4547	0.4254	0.3865	0.3647	0.3426	0.3060	0.3117	0.4600	0.6582
2.10	0.4907	0.4847	0.4669	0.4378	0.3990	0.3770	0.3545	0.3164	0.3189	0.4627	0.6591
2.15	0.5024	0.4965	0.4789	0.4500	0.4112	0.3891	0.3663	0.3267	0.3262	0.4654	0.6601
2.20	0.5139	0.5080	0.4906	0.4619	0.4232	0.4010	0.3779	0.3370	0.3334	0.4682	0.6610
2.25	0.5250	0.5193	0.5021	0.4737	0.4350	0.4127	0.3894	0.3472	0.3407	0.4709	0.6619
2.30	0.5359	0.5303	0.5133	0.4851	0.4466	0.4243	0.4008	0.3573	0.3479	0.4737	0.6627
2.35	0.5466	0.5410	0.5242	0.4963	0.4580	0.4355	0.4119	0.3673	0.3552	0.4764	0.6636
2.40	0.5569	0.5514	0.5349	0.5073	0.4692	0.4468	0.4229	0.3772	0.3624	0.4792	0.6645
2.45	0.5671	0.5616	0.5453	0.5180	0.4802	0.4578	0.4338	0.3871	0.3696	0.4820	0.6654
2.50	0.5769	0.5716	0.5555	0.5285	0.4909	0.4683	0.4444	0.3968	0.3768	0.4848	0.6662
2.55	0.5865	0.5813	0.5654	0.5388	0.5014	0.4791	0.4549	0.4065	0.3840	0.4876	0.6671
2.60	0.5959	0.5907	0.5751	0.5488	0.5117	0.4894	0.4652	0.4160	0.3912	0.4904	0.6679
2.65	0.6050	0.5999	0.5845	0.5589	0.5218	0.4996	0.4753	0.4254	0.3983	0.4932	0.6688
2.70	0.6139	0.6088	0.5937	0.5681	0.5316	0.5095	0.4852	0.4347	0.4054	0.4961	0.6696
2.75	0.6225	0.6176	0.6027	0.5774	0.5413	0.5193	0.4950	0.4438	0.4124	0.4989	0.6704
2.80	0.6309	0.6261	0.6114	0.5864	0.5507	0.5288	0.5045	0.4529	0.4194	0.5018	0.6713
2.85	0.6391	0.6343	0.6199	0.5953	0.5599	0.5381	0.5139	0.4618	0.4264	0.5046	0.6721
2.90	0.6470	0.6424	0.6282	0.6039	0.5689	0.5473	0.5231	0.4706	0.4333	0.5075	0.6729
2.95	0.6548	0.6502	0.6362	0.6123	0.5777	0.5562	0.5321	0.4792	0.4402	0.5103	0.6738
3.00	0.6623	0.6578	0.6441	0.6205	0.5863	0.5649	0.5409	0.4877	0.4470	0.5132	0.6746

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1-20

PAGE 131

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0083	0.0078	0.0066	0.0045	0.0018	0.0005	0.0000	0.0051	0.0420	0.2167	0.4680
0.05	0.0088	0.0083	0.0070	0.0048	0.0019	0.0007	0.0000	0.0054	0.0436	0.2214	0.4731
0.10	0.0103	0.0098	0.0082	0.0056	0.0024	0.0009	0.0002	0.0062	0.0480	0.2336	0.4865
0.15	0.0129	0.0122	0.0103	0.0071	0.0031	0.0014	0.0005	0.0076	0.0545	0.2499	0.5036
0.20	0.0164	0.0156	0.0131	0.0092	0.0043	0.0021	0.0011	0.0094	0.0619	0.2671	0.5209
0.25	0.0209	0.0199	0.0168	0.0119	0.0059	0.0033	0.0021	0.0117	0.0697	0.2853	0.5365
0.30	0.0264	0.0251	0.0213	0.0153	0.0080	0.0050	0.0035	0.0144	0.0773	0.2977	0.5499
0.35	0.0327	0.0312	0.0267	0.0194	0.0108	0.0072	0.0055	0.0175	0.0846	0.3103	0.5612
0.40	0.0400	0.0382	0.0328	0.0242	0.0142	0.0101	0.0081	0.0210	0.0915	0.3211	0.5707
0.45	0.0481	0.0460	0.0397	0.0298	0.0183	0.0135	0.0113	0.0248	0.0980	0.3305	0.5787
0.50	0.0570	0.0545	0.0473	0.0360	0.0231	0.0178	0.0152	0.0290	0.1042	0.3385	0.5854
0.55	0.0668	0.0638	0.0557	0.0430	0.0287	0.0228	0.0198	0.0336	0.1102	0.3457	0.5912
0.60	0.0769	0.0738	0.0647	0.0507	0.0349	0.0284	0.0249	0.0386	0.1159	0.3519	0.5961
0.65	0.0879	0.0845	0.0745	0.0591	0.0419	0.0347	0.0308	0.0439	0.1215	0.3575	0.6004
0.70	0.0994	0.0957	0.0848	0.0682	0.0495	0.0417	0.0372	0.0497	0.1270	0.3626	0.6042
0.75	0.1115	0.1075	0.0958	0.0779	0.0578	0.0493	0.0442	0.0557	0.1324	0.3672	0.6075
0.80	0.1241	0.1198	0.1072	0.0882	0.0667	0.0575	0.0518	0.0621	0.1378	0.3714	0.6105
0.85	0.1371	0.1325	0.1192	0.0990	0.0762	0.0663	0.0599	0.0689	0.1433	0.3753	0.6131
0.90	0.1504	0.1456	0.1316	0.1103	0.0862	0.0757	0.0685	0.0750	0.1488	0.3790	0.6156
0.95	0.1641	0.1590	0.1444	0.1221	0.0967	0.0855	0.0775	0.0834	0.1543	0.3825	0.6178
1.00	0.1781	0.1728	0.1575	0.1343	0.1077	0.0957	0.0870	0.0911	0.1599	0.3858	0.6198
1.05	0.1923	0.1868	0.1709	0.1458	0.1190	0.1064	0.0969	0.0991	0.1656	0.3890	0.6217
1.10	0.2066	0.2010	0.1846	0.1597	0.1308	0.1174	0.1071	0.1073	0.1714	0.3921	0.6235
1.15	0.2211	0.2153	0.1985	0.1728	0.1428	0.1288	0.1177	0.1158	0.1772	0.3951	0.6252
1.20	0.2357	0.2297	0.2125	0.1862	0.1552	0.1406	0.1285	0.1246	0.1832	0.3981	0.6268
1.25	0.2503	0.2442	0.2267	0.1998	0.1678	0.1524	0.1397	0.1335	0.1892	0.4009	0.6283
1.30	0.2649	0.2588	0.2410	0.2136	0.1806	0.1648	0.1510	0.1427	0.1954	0.4038	0.6297
1.35	0.2795	0.2733	0.2552	0.2273	0.1936	0.1769	0.1626	0.1521	0.2017	0.4066	0.6310
1.40	0.2941	0.2878	0.2695	0.2411	0.2067	0.1894	0.1743	0.1616	0.2080	0.4093	0.6324
1.45	0.3086	0.3023	0.2838	0.2551	0.2199	0.2021	0.1852	0.1713	0.2144	0.4121	0.6336
1.50	0.3230	0.3166	0.2981	0.2690	0.2331	0.2148	0.1982	0.1811	0.2210	0.4148	0.6348
1.55	0.3372	0.3309	0.3122	0.2829	0.2464	0.2276	0.2103	0.1910	0.2276	0.4175	0.6360

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=1-20

PAGE 132

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3514	0.3450	0.3262	0.2967	0.2597	0.2405	0.2225	0.2011	0.2343	0.4202	0.6372
1.65	0.3653	0.3589	0.3402	0.3105	0.2730	0.2533	0.2347	0.2112	0.2411	0.4229	0.6383
1.70	0.3790	0.3727	0.3539	0.3242	0.2863	0.2662	0.2469	0.2214	0.2479	0.4256	0.6394
1.75	0.3926	0.3862	0.3675	0.3377	0.2995	0.2790	0.2592	0.2317	0.2548	0.4283	0.6404
1.80	0.4059	0.3996	0.3810	0.3511	0.3126	0.2917	0.2714	0.2420	0.2618	0.4311	0.6415
1.85	0.4191	0.4128	0.3942	0.3644	0.3256	0.3044	0.2835	0.2523	0.2688	0.4338	0.6425
1.90	0.4320	0.4257	0.4073	0.3775	0.3385	0.3171	0.2957	0.2626	0.2758	0.4365	0.6435
1.95	0.4446	0.4384	0.4201	0.3904	0.3513	0.3295	0.3078	0.2730	0.2829	0.4392	0.6445
2.00	0.4570	0.4509	0.4327	0.4031	0.3639	0.3420	0.3198	0.2833	0.2901	0.4419	0.6455
2.05	0.4692	0.4631	0.4451	0.4156	0.3764	0.3542	0.3317	0.2937	0.2973	0.4447	0.6464
2.10	0.4811	0.4751	0.4572	0.4279	0.3887	0.3664	0.3435	0.3039	0.3045	0.4474	0.6474
2.15	0.4927	0.4868	0.4691	0.4400	0.4008	0.3783	0.3551	0.3142	0.3117	0.4502	0.6483
2.20	0.5041	0.4983	0.4807	0.4519	0.4127	0.3901	0.3667	0.3244	0.3189	0.4530	0.6492
2.25	0.5153	0.5095	0.4921	0.4639	0.4244	0.4018	0.3781	0.3345	0.3262	0.4558	0.6501
2.30	0.5262	0.5204	0.5033	0.4749	0.4360	0.4133	0.3893	0.3446	0.3334	0.4586	0.6511
2.35	0.5368	0.5312	0.5142	0.4861	0.4473	0.4246	0.4004	0.3546	0.3406	0.4614	0.6520
2.40	0.5472	0.5416	0.5249	0.4970	0.4585	0.4357	0.4114	0.3645	0.3479	0.4642	0.6528
2.45	0.5573	0.5518	0.5353	0.5078	0.4694	0.4465	0.4222	0.3743	0.3551	0.4670	0.6537
2.50	0.5672	0.5618	0.5455	0.5182	0.4801	0.4574	0.4323	0.3840	0.3623	0.4698	0.6546
2.55	0.5768	0.5715	0.5555	0.5285	0.4906	0.4679	0.4433	0.3936	0.3695	0.4727	0.6555
2.60	0.5862	0.5810	0.5652	0.5385	0.5009	0.4783	0.4535	0.4031	0.3767	0.4755	0.6563
2.65	0.5954	0.5902	0.5746	0.5483	0.5110	0.4884	0.4637	0.4125	0.3839	0.4784	0.6572
2.70	0.6043	0.5992	0.5839	0.5578	0.5209	0.4984	0.4735	0.4218	0.3910	0.4813	0.6581
2.75	0.6130	0.6080	0.5929	0.5672	0.5305	0.5081	0.4834	0.4310	0.3981	0.4841	0.6589
2.80	0.6215	0.6165	0.6016	0.5763	0.5400	0.5177	0.4929	0.4401	0.4051	0.4870	0.6598
2.85	0.6297	0.6249	0.6102	0.5852	0.5492	0.5270	0.5024	0.4490	0.4121	0.4899	0.6606
2.90	0.6377	0.6330	0.6185	0.5939	0.5583	0.5362	0.5116	0.4578	0.4191	0.4928	0.6615
2.95	0.6455	0.6409	0.6267	0.6023	0.5671	0.5452	0.5206	0.4655	0.4250	0.4957	0.6623
3.00	0.6532	0.6486	0.6346	0.6106	0.5757	0.5540	0.5295	0.4751	0.4329	0.4986	0.6632

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=1-25

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0123	0.0117	0.0099	0.0069	0.0030	0.0012	0.0001	0.0051	0.0495	0.2293	0.4822
0.05	0.0128	0.0122	0.0103	0.0072	0.0032	0.0013	0.0001	0.0053	0.0466	0.2321	0.4852
0.10	0.0143	0.0136	0.0115	0.0080	0.0036	0.0016	0.0003	0.0059	0.0495	0.2398	0.4935
0.15	0.0157	0.0159	0.0135	0.0096	0.0044	0.0021	0.0007	0.0069	0.0540	0.2508	0.5049
0.20	0.0201	0.0191	0.0163	0.0115	0.0056	0.0029	0.0013	0.0083	0.0594	0.2632	0.5173
0.25	0.0244	0.0232	0.0198	0.0142	0.0073	0.0041	0.0023	0.0101	0.0653	0.2757	0.5295
0.30	0.0296	0.0282	0.0242	0.0176	0.0094	0.0058	0.0036	0.0123	0.0713	0.2875	0.5406
0.35	0.0357	0.0341	0.0293	0.0215	0.0122	0.0080	0.0055	0.0148	0.0773	0.2982	0.5505
0.40	0.0426	0.0407	0.0351	0.0262	0.0155	0.0108	0.0080	0.0178	0.0833	0.3079	0.5591
0.45	0.0503	0.0482	0.0417	0.0316	0.0195	0.0142	0.0110	0.0212	0.0890	0.3164	0.5665
0.50	0.0588	0.0564	0.0491	0.0376	0.0241	0.0182	0.0146	0.0250	0.0946	0.3240	0.5730
0.55	0.0680	0.0653	0.0571	0.0444	0.0294	0.0229	0.0189	0.0292	0.1000	0.3308	0.5786
0.60	0.0779	0.0748	0.0658	0.0518	0.0354	0.0282	0.0237	0.0338	0.1054	0.3368	0.5835
0.65	0.0884	0.0850	0.0752	0.0598	0.0420	0.0343	0.0292	0.0388	0.1106	0.3423	0.5877
0.70	0.0995	0.0958	0.0851	0.0685	0.0493	0.0409	0.0353	0.0441	0.1158	0.3473	0.5915
0.75	0.1111	0.1072	0.0956	0.0778	0.0572	0.0481	0.0420	0.0499	0.1211	0.3518	0.5949
0.80	0.1232	0.1190	0.1066	0.0877	0.0658	0.0560	0.0492	0.0560	0.1263	0.3560	0.5980
0.85	0.1357	0.1312	0.1181	0.0981	0.0748	0.0644	0.0569	0.0624	0.1316	0.3600	0.6007
0.90	0.1486	0.1438	0.1301	0.1090	0.0844	0.0733	0.0651	0.0692	0.1369	0.3637	0.6032
0.95	0.1618	0.1568	0.1424	0.1203	0.0945	0.0827	0.0738	0.0763	0.1423	0.3672	0.6055
1.00	0.1753	0.1701	0.1551	0.1320	0.1050	0.0925	0.0829	0.0837	0.1478	0.3706	0.6076
1.05	0.1890	0.1836	0.1680	0.1441	0.1160	0.1028	0.0924	0.0914	0.1534	0.3738	0.6096
1.10	0.2029	0.1973	0.1813	0.1565	0.1273	0.1134	0.1022	0.0994	0.1590	0.3769	0.6114
1.15	0.2169	0.2112	0.1947	0.1692	0.1389	0.1244	0.1124	0.1077	0.1648	0.3800	0.6131
1.20	0.2311	0.2252	0.2083	0.1822	0.1509	0.1357	0.1229	0.1162	0.1706	0.3829	0.6147
1.25	0.2453	0.2393	0.2221	0.1953	0.1630	0.1472	0.1337	0.1249	0.1766	0.3858	0.6163
1.30	0.2595	0.2535	0.2359	0.2086	0.1754	0.1590	0.1447	0.1338	0.1827	0.3887	0.6177
1.35	0.2738	0.2677	0.2498	0.2220	0.1880	0.1710	0.1559	0.1430	0.1888	0.3915	0.6191
1.40	0.2880	0.2818	0.2637	0.2355	0.2007	0.1831	0.1673	0.1523	0.1951	0.3943	0.6205
1.45	0.3022	0.2959	0.2777	0.2490	0.2136	0.1954	0.1789	0.1617	0.2015	0.3971	0.6218
1.50	0.3162	0.3100	0.2916	0.2626	0.2265	0.2078	0.1906	0.1714	0.2079	0.3998	0.6230
1.55	0.3302	0.3239	0.3054	0.2761	0.2395	0.2203	0.2024	0.1811	0.2145	0.4026	0.6242

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.25

PAGE 134

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3440	0.3377	0.3191	0.2897	0.2525	0.2328	0.2143	0.1909	0.2211	0.4053	0.6254
1.65	0.3577	0.3514	0.3328	0.3032	0.2655	0.2454	0.2262	0.2009	0.2278	0.4080	0.6266
1.70	0.3713	0.3649	0.3463	0.3165	0.2784	0.2580	0.2382	0.2109	0.2346	0.4107	0.6277
1.75	0.3848	0.3783	0.3597	0.3298	0.2914	0.2705	0.2502	0.2210	0.2414	0.4135	0.6288
1.80	0.3978	0.3915	0.3729	0.3430	0.3042	0.2831	0.2622	0.2312	0.2483	0.4162	0.6298
1.85	0.4107	0.4045	0.3859	0.3561	0.3170	0.2953	0.2742	0.2413	0.2553	0.4189	0.6309
1.90	0.4235	0.4172	0.3988	0.3690	0.3297	0.3079	0.2861	0.2515	0.2623	0.4217	0.6319
1.95	0.4360	0.4298	0.4115	0.3817	0.3423	0.3203	0.2980	0.2618	0.2694	0.4244	0.6329
2.00	0.4483	0.4422	0.4239	0.3942	0.3547	0.3325	0.3099	0.2720	0.2765	0.4272	0.6339
2.05	0.4603	0.4543	0.4362	0.4066	0.3670	0.3445	0.3216	0.2822	0.2836	0.4299	0.6349
2.10	0.4722	0.4661	0.4482	0.4188	0.3792	0.3565	0.3332	0.2924	0.2908	0.4327	0.6358
2.15	0.4837	0.4778	0.4600	0.4307	0.3912	0.3684	0.3448	0.3025	0.2980	0.4355	0.6368
2.20	0.4951	0.4892	0.4716	0.4425	0.4030	0.3801	0.3562	0.3126	0.3052	0.4383	0.6377
2.25	0.5062	0.5004	0.4829	0.4541	0.4146	0.3917	0.3675	0.3227	0.3124	0.4411	0.6387
2.30	0.5170	0.5113	0.4940	0.4654	0.4261	0.4030	0.3787	0.3327	0.3197	0.4439	0.6396
2.35	0.5276	0.5220	0.5049	0.4765	0.4373	0.4143	0.3897	0.3426	0.3269	0.4468	0.6405
2.40	0.5380	0.5324	0.5156	0.4874	0.4484	0.4253	0.4005	0.3526	0.3341	0.4496	0.6414
2.45	0.5481	0.5426	0.5260	0.4981	0.4593	0.4362	0.4113	0.3622	0.3414	0.4525	0.6423
2.50	0.5580	0.5526	0.5361	0.5086	0.4700	0.4469	0.4219	0.3719	0.3486	0.4553	0.6432
2.55	0.5677	0.5623	0.5461	0.5188	0.4804	0.4574	0.4323	0.3815	0.3558	0.4582	0.6441
2.60	0.5771	0.5718	0.5558	0.5288	0.4907	0.4677	0.4426	0.3910	0.3630	0.4611	0.6450
2.65	0.5863	0.5811	0.5653	0.5386	0.5008	0.4773	0.4527	0.4004	0.3701	0.4640	0.6459
2.70	0.5952	0.5901	0.5745	0.5482	0.5107	0.4878	0.4626	0.4097	0.3773	0.4669	0.6467
2.75	0.6040	0.5989	0.5836	0.5576	0.5203	0.4975	0.4724	0.4189	0.3844	0.4698	0.6476
2.80	0.6125	0.6075	0.5924	0.5667	0.5298	0.5071	0.4820	0.4279	0.3914	0.4727	0.6485
2.85	0.6208	0.6159	0.6010	0.5756	0.5391	0.5165	0.4914	0.4369	0.3985	0.4756	0.6493
2.90	0.6289	0.6241	0.6094	0.5844	0.5481	0.5257	0.5006	0.4457	0.4055	0.4786	0.6502
2.95	0.6368	0.6320	0.6176	0.5929	0.5570	0.5347	0.5097	0.4544	0.4124	0.4815	0.6511
3.00	0.6444	0.6398	0.6256	0.6012	0.5657	0.5436	0.5186	0.4630	0.4193	0.4845	0.6519

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=1.30

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0170	0.0162	0.0138	0.0098	0.0046	0.0021	0.0003	0.0047	0.0471	0.2383	0.4902
0.05	0.0175	0.0167	0.0142	0.0101	0.0048	0.0022	0.0004	0.0049	0.0478	0.2381	0.4922
0.10	0.0189	0.0180	0.0153	0.0109	0.0053	0.0025	0.0006	0.0053	0.0498	0.2433	0.4976
0.15	0.0212	0.0202	0.0172	0.0124	0.0061	0.0031	0.0010	0.0061	0.0530	0.2509	0.5054
0.20	0.0244	0.0233	0.0199	0.0144	0.0073	0.0040	0.0016	0.0072	0.0570	0.2600	0.5146
0.25	0.0289	0.0272	0.0233	0.0170	0.0090	0.0052	0.0026	0.0087	0.0615	0.2696	0.5240
0.30	0.0339	0.0320	0.0275	0.0203	0.0112	0.0069	0.0040	0.0105	0.0663	0.2791	0.5330
0.35	0.0393	0.0375	0.0324	0.0241	0.0139	0.0091	0.0058	0.0127	0.0713	0.2881	0.5414
0.40	0.0459	0.0439	0.0381	0.0287	0.0171	0.0118	0.0081	0.0153	0.0763	0.2964	0.5490
0.45	0.0533	0.0510	0.0444	0.0339	0.0210	0.0151	0.0110	0.0183	0.0813	0.3040	0.5557
0.50	0.0614	0.0589	0.0515	0.0397	0.0255	0.0189	0.0145	0.0218	0.0862	0.3110	0.5617
0.55	0.0702	0.0674	0.0592	0.0462	0.0306	0.0234	0.0185	0.0256	0.0912	0.3173	0.5670
0.60	0.0796	0.0766	0.0675	0.0533	0.0363	0.0286	0.0231	0.0299	0.0961	0.3230	0.5717
0.65	0.0897	0.0864	0.0765	0.0611	0.0427	0.0343	0.0283	0.0345	0.1010	0.3282	0.5759
0.70	0.1003	0.0967	0.0861	0.0694	0.0497	0.0406	0.0341	0.0395	0.1059	0.3330	0.5796
0.75	0.1119	0.1076	0.0962	0.0784	0.0573	0.0476	0.0404	0.0450	0.1109	0.3375	0.5830
0.80	0.1231	0.1189	0.1068	0.0878	0.0654	0.0551	0.0473	0.0507	0.1159	0.3417	0.5860
0.85	0.1351	0.1307	0.1178	0.0978	0.0741	0.0631	0.0546	0.0569	0.1210	0.3456	0.5888
0.90	0.1479	0.1429	0.1293	0.1083	0.0833	0.0716	0.0625	0.0634	0.1261	0.3492	0.5913
0.95	0.1603	0.1554	0.1412	0.1192	0.0930	0.0806	0.0708	0.0702	0.1314	0.3527	0.5936
1.00	0.1733	0.1682	0.1534	0.1309	0.1032	0.0901	0.0795	0.0773	0.1367	0.3561	0.5958
1.05	0.1865	0.1813	0.1660	0.1422	0.1137	0.1000	0.0887	0.0848	0.1421	0.3593	0.5978
1.10	0.2000	0.1946	0.1787	0.1541	0.1246	0.1102	0.0982	0.0925	0.1477	0.3624	0.5996
1.15	0.2136	0.2080	0.1917	0.1664	0.1358	0.1208	0.1080	0.1005	0.1533	0.3655	0.6014
1.20	0.2273	0.2216	0.2049	0.1789	0.1473	0.1317	0.1181	0.1087	0.1591	0.3685	0.6030
1.25	0.2412	0.2353	0.2183	0.1916	0.1591	0.1428	0.1286	0.1172	0.1649	0.3714	0.6046
1.30	0.2550	0.2491	0.2317	0.2045	0.1711	0.1542	0.1392	0.1259	0.1709	0.3742	0.6061
1.35	0.2689	0.2629	0.2452	0.2175	0.1833	0.1658	0.1501	0.1348	0.1769	0.3771	0.6075
1.40	0.2828	0.2767	0.2588	0.2306	0.1956	0.1776	0.1612	0.1439	0.1831	0.3799	0.6089
1.45	0.2966	0.2904	0.2723	0.2438	0.2081	0.1896	0.1725	0.1531	0.1894	0.3826	0.6102
1.50	0.3103	0.3041	0.2859	0.2570	0.2207	0.2017	0.1839	0.1625	0.1958	0.3854	0.6115
1.55	0.3240	0.3178	0.2994	0.2703	0.2333	0.2138	0.1954	0.1721	0.2022	0.3882	0.6127

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=1.30

PAGE 136

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3376	0.3313	0.3129	0.2835	0.2460	0.2260	0.2070	0.1817	0.2088	0.3909	0.6139
1.65	0.3510	0.3447	0.3262	0.2967	0.2587	0.2383	0.2187	0.1915	0.2154	0.3936	0.6151
1.70	0.3643	0.3580	0.3395	0.3098	0.2714	0.2505	0.2304	0.2013	0.2221	0.3964	0.6162
1.75	0.3774	0.3712	0.3526	0.3228	0.2841	0.2629	0.2421	0.2112	0.2289	0.3991	0.6173
1.80	0.3904	0.3841	0.3656	0.3357	0.2967	0.2752	0.2539	0.2212	0.2357	0.4019	0.6184
1.85	0.4032	0.3969	0.3785	0.3485	0.3092	0.2874	0.2657	0.2312	0.2426	0.4046	0.6195
1.90	0.4157	0.4095	0.3911	0.3612	0.3217	0.2995	0.2774	0.2413	0.2496	0.4074	0.6205
1.95	0.4281	0.4219	0.4036	0.3738	0.3341	0.3118	0.2891	0.2514	0.2566	0.4101	0.6215
2.00	0.4403	0.4341	0.4159	0.3861	0.3463	0.3238	0.3007	0.2614	0.2637	0.4129	0.6225
2.05	0.4522	0.4461	0.4280	0.3983	0.3585	0.3357	0.3123	0.2715	0.2708	0.4157	0.6235
2.10	0.4639	0.4579	0.4399	0.4104	0.3704	0.3475	0.3238	0.2816	0.2779	0.4185	0.6245
2.15	0.4754	0.4694	0.4516	0.4222	0.3823	0.3592	0.3352	0.2916	0.2850	0.4213	0.6255
2.20	0.4867	0.4808	0.4631	0.4339	0.3940	0.3708	0.3465	0.3017	0.2922	0.4241	0.6264
2.25	0.4977	0.4919	0.4744	0.4453	0.4055	0.3822	0.3577	0.3116	0.2994	0.4269	0.6274
2.30	0.5085	0.5027	0.4854	0.4566	0.4169	0.3935	0.3688	0.3215	0.3066	0.4298	0.6283
2.35	0.5191	0.5134	0.4962	0.4676	0.4280	0.4047	0.3797	0.3314	0.3138	0.4326	0.6292
2.40	0.5294	0.5238	0.5068	0.4785	0.4390	0.4156	0.3905	0.3412	0.3211	0.4355	0.6302
2.45	0.5395	0.5340	0.5172	0.4891	0.4498	0.4264	0.4012	0.3509	0.3283	0.4384	0.6311
2.50	0.5494	0.5439	0.5273	0.4999	0.4605	0.4371	0.4117	0.3605	0.3355	0.4413	0.6320
2.55	0.5590	0.5536	0.5373	0.5097	0.4709	0.4475	0.4221	0.3701	0.3427	0.4442	0.6329
2.60	0.5685	0.5631	0.5470	0.5197	0.4812	0.4578	0.4323	0.3796	0.3499	0.4471	0.6338
2.65	0.5777	0.5724	0.5565	0.5295	0.4912	0.4679	0.4424	0.3889	0.3570	0.4500	0.6347
2.70	0.5866	0.5815	0.5657	0.5391	0.5011	0.4779	0.4523	0.3982	0.3642	0.4529	0.6356
2.75	0.5954	0.5903	0.5748	0.5484	0.5107	0.4876	0.4620	0.4074	0.3713	0.4559	0.6365
2.80	0.6040	0.5989	0.5836	0.5576	0.5202	0.4972	0.4716	0.4164	0.3784	0.4588	0.6374
2.85	0.6123	0.6073	0.5923	0.5666	0.5295	0.5063	0.4810	0.4254	0.3854	0.4618	0.6383
2.90	0.6204	0.6156	0.6007	0.5753	0.5386	0.5158	0.4903	0.4342	0.3924	0.4648	0.6391
2.95	0.6284	0.6236	0.6089	0.5839	0.5475	0.5248	0.4994	0.4429	0.3994	0.4677	0.6400
3.00	0.6361	0.6314	0.6170	0.5922	0.5562	0.5337	0.5083	0.4516	0.4064	0.4707	0.6409

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RP WHERE N=1-35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0222	0.0212	0.0181	0.0131	0.0065	0.0032	0.0007	0.0041	0.0472	0.2396	0.4943
0.05	0.0226	0.0216	0.0185	0.0134	0.0067	0.0034	0.0008	0.0042	0.0477	0.2409	0.4956
0.10	0.0239	0.0229	0.0196	0.0142	0.0072	0.0037	0.0010	0.0046	0.0492	0.2446	0.4994
0.15	0.0261	0.0250	0.0215	0.0156	0.0081	0.0043	0.0015	0.0052	0.0515	0.2500	0.5050
0.20	0.0292	0.0279	0.0240	0.0176	0.0094	0.0053	0.0022	0.0061	0.0545	0.2567	0.5117
0.25	0.0331	0.0317	0.0273	0.0202	0.0111	0.0065	0.0032	0.0074	0.0580	0.2641	0.5190
0.30	0.0379	0.0362	0.0313	0.0234	0.0132	0.0083	0.0046	0.0090	0.0618	0.2717	0.5263
0.35	0.0434	0.0416	0.0361	0.0271	0.0159	0.0104	0.0064	0.0109	0.0659	0.2792	0.5334
0.40	0.0497	0.0477	0.0415	0.0315	0.0191	0.0131	0.0086	0.0133	0.0702	0.2863	0.5399
0.45	0.0568	0.0545	0.0476	0.0366	0.0229	0.0163	0.0114	0.0160	0.0745	0.2930	0.5459
0.50	0.0645	0.0620	0.0544	0.0422	0.0272	0.0201	0.0147	0.0191	0.0789	0.2992	0.5513
0.55	0.0730	0.0701	0.0618	0.0485	0.0322	0.0244	0.0185	0.0227	0.0834	0.3050	0.5563
0.60	0.0820	0.0789	0.0698	0.0554	0.0377	0.0293	0.0229	0.0266	0.0879	0.3103	0.5607
0.65	0.0917	0.0883	0.0785	0.0628	0.0438	0.0348	0.0279	0.0309	0.0924	0.3152	0.5647
0.70	0.1019	0.0983	0.0876	0.0709	0.0506	0.0409	0.0334	0.0357	0.0970	0.3198	0.5683
0.75	0.1126	0.1087	0.0973	0.0795	0.0578	0.0475	0.0394	0.0408	0.1017	0.3241	0.5716
0.80	0.1237	0.1196	0.1075	0.0886	0.0657	0.0547	0.0460	0.0463	0.1065	0.3281	0.5746
0.85	0.1353	0.1310	0.1182	0.0982	0.0740	0.0624	0.0530	0.0522	0.1114	0.3319	0.5773
0.90	0.1473	0.1427	0.1293	0.1083	0.0829	0.0706	0.0606	0.0584	0.1163	0.3355	0.5798
0.95	0.1595	0.1547	0.1407	0.1188	0.0922	0.0792	0.0685	0.0649	0.1214	0.3390	0.5821
1.00	0.1721	0.1671	0.1525	0.1297	0.1019	0.0883	0.0769	0.0718	0.1265	0.3423	0.5843
1.05	0.1849	0.1797	0.1646	0.1409	0.1121	0.0978	0.0857	0.0790	0.1318	0.3459	0.5863
1.10	0.1979	0.1926	0.1770	0.1525	0.1226	0.1077	0.0949	0.0864	0.1372	0.3486	0.5882
1.15	0.2111	0.2056	0.1895	0.1643	0.1334	0.1179	0.1044	0.0942	0.1427	0.3516	0.5900
1.20	0.2244	0.2188	0.2023	0.1764	0.1445	0.1284	0.1142	0.1022	0.1483	0.3546	0.5916
1.25	0.2378	0.2321	0.2152	0.1887	0.1559	0.1392	0.1242	0.1104	0.1541	0.3575	0.5932
1.30	0.2513	0.2454	0.2283	0.2012	0.1675	0.1504	0.1346	0.1188	0.1599	0.3604	0.5947
1.35	0.2648	0.2589	0.2414	0.2138	0.1794	0.1615	0.1451	0.1275	0.1659	0.3632	0.5962
1.40	0.2783	0.2723	0.2546	0.2266	0.1913	0.1730	0.1559	0.1363	0.1720	0.3660	0.5976
1.45	0.2918	0.2857	0.2678	0.2394	0.2035	0.1845	0.1669	0.1454	0.1781	0.3688	0.5989
1.50	0.3052	0.2991	0.2810	0.2523	0.2157	0.1963	0.1779	0.1545	0.1844	0.3719	0.6002
1.55	0.3186	0.3124	0.2942	0.2652	0.2280	0.2082	0.1892	0.1639	0.1908	0.3743	0.6015

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RP WHERE N=1-35

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3319	0.3257	0.3074	0.2781	0.2404	0.2201	0.2005	0.1733	0.1972	0.3770	0.6027
1.65	0.3451	0.3388	0.3204	0.2909	0.2528	0.2321	0.2119	0.1829	0.2038	0.3798	0.6038
1.70	0.3581	0.3519	0.3334	0.3038	0.2652	0.2441	0.2234	0.1925	0.2104	0.3825	0.6050
1.75	0.3710	0.3648	0.3463	0.3165	0.2776	0.2561	0.2349	0.2023	0.2171	0.3853	0.6061
1.80	0.3837	0.3775	0.3591	0.3292	0.2899	0.2681	0.2464	0.2121	0.2239	0.3880	0.6072
1.85	0.3963	0.3901	0.3717	0.3418	0.3022	0.2802	0.2579	0.2219	0.2307	0.3908	0.6083
1.90	0.4087	0.4025	0.3842	0.3542	0.3145	0.2921	0.2695	0.2318	0.2376	0.3936	0.6093
1.95	0.4209	0.4148	0.3965	0.3666	0.3266	0.3040	0.2810	0.2418	0.2446	0.3963	0.6104
2.00	0.4329	0.4268	0.4086	0.3788	0.3387	0.3159	0.2924	0.2517	0.2516	0.3991	0.6114
2.05	0.4447	0.4387	0.4206	0.3908	0.3506	0.3276	0.3038	0.2617	0.2586	0.4019	0.6124
2.10	0.4563	0.4503	0.4323	0.4027	0.3624	0.3393	0.3151	0.2716	0.2657	0.4047	0.6134
2.15	0.4677	0.4618	0.4439	0.4144	0.3741	0.3508	0.3264	0.2815	0.2728	0.4076	0.6144
2.20	0.4789	0.4730	0.4553	0.4259	0.3857	0.3622	0.3375	0.2914	0.2800	0.4104	0.6154
2.25	0.4898	0.4840	0.4664	0.4372	0.3971	0.3735	0.3486	0.3013	0.2871	0.4132	0.6163
2.30	0.5006	0.4948	0.4774	0.4484	0.4083	0.3847	0.3596	0.3111	0.2943	0.4161	0.6173
2.35	0.5111	0.5054	0.4881	0.4594	0.4194	0.3957	0.3704	0.3209	0.3015	0.4190	0.6182
2.40	0.5214	0.5157	0.4987	0.4701	0.4303	0.4066	0.3811	0.3306	0.3087	0.4219	0.6191
2.45	0.5315	0.5259	0.5090	0.4807	0.4410	0.4173	0.3917	0.3403	0.3159	0.4248	0.6201
2.50	0.5413	0.5358	0.5191	0.4911	0.4516	0.4279	0.4021	0.3499	0.3231	0.4277	0.6210
2.55	0.5509	0.5455	0.5290	0.5012	0.4620	0.4383	0.4125	0.3594	0.3302	0.4306	0.6219
2.60	0.5604	0.5550	0.5387	0.5112	0.4722	0.4485	0.4226	0.3688	0.3374	0.4335	0.6228
2.65	0.5695	0.5642	0.5482	0.5209	0.4822	0.4586	0.4326	0.3781	0.3446	0.4365	0.6238
2.70	0.5785	0.5733	0.5574	0.5305	0.4920	0.4685	0.4425	0.3873	0.3517	0.4394	0.6247
2.75	0.5873	0.5822	0.5665	0.5398	0.5017	0.4782	0.4522	0.3965	0.3588	0.4424	0.6256
2.80	0.5959	0.5908	0.5753	0.5490	0.5111	0.4878	0.4618	0.4055	0.3659	0.4454	0.6265
2.85	0.6043	0.5992	0.5840	0.5580	0.5204	0.4972	0.4712	0.4145	0.3730	0.4484	0.6274
2.90	0.6124	0.6075	0.5924	0.5667	0.5295	0.5064	0.4804	0.4233	0.3800	0.4514	0.6283
2.95	0.6204	0.6155	0.6007	0.5753	0.5384	0.5154	0.4895	0.4320	0.3870	0.4544	0.6292
3.00	0.6282	0.6234	0.6088	0.5837	0.5471	0.5243	0.4985	0.4406	0.3939	0.4574	0.6301

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=1-40

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0278	0.0266	0.0229	0.0188	0.0088	0.0047	0.0013	0.0033	0.0463	0.2404	0.4957
0.05	0.0282	0.0270	0.0233	0.0171	0.0090	0.0048	0.0014	0.0034	0.0466	0.2413	0.4966
0.10	0.0296	0.0282	0.0243	0.0179	0.0095	0.0052	0.0017	0.0038	0.0477	0.2439	0.4993
0.15	0.0316	0.0302	0.0261	0.0193	0.0104	0.0059	0.0022	0.0043	0.0495	0.2479	0.5035
0.20	0.0345	0.0330	0.0286	0.0212	0.0117	0.0069	0.0029	0.0051	0.0518	0.2531	0.5086
0.25	0.0382	0.0366	0.0317	0.0238	0.0134	0.0082	0.0040	0.0062	0.0546	0.2588	0.5143
0.30	0.0427	0.0410	0.0356	0.0269	0.0156	0.0093	0.0054	0.0077	0.0577	0.2649	0.5202
0.35	0.0480	0.0461	0.0402	0.0305	0.0182	0.0121	0.0071	0.0094	0.0611	0.2711	0.5260
0.40	0.0541	0.0519	0.0454	0.0348	0.0214	0.0147	0.0094	0.0115	0.0647	0.2771	0.5316
0.45	0.0608	0.0584	0.0513	0.0397	0.0251	0.0178	0.0121	0.0140	0.0685	0.2829	0.5369
0.50	0.0682	0.0656	0.0578	0.0451	0.0293	0.0213	0.0152	0.0169	0.0724	0.2884	0.5418
0.55	0.0763	0.0734	0.0649	0.0512	0.0341	0.0257	0.0189	0.0202	0.0764	0.2936	0.5462
0.60	0.0850	0.0819	0.0726	0.0578	0.0395	0.0304	0.0232	0.0239	0.0805	0.2989	0.5504
0.65	0.0942	0.0909	0.0809	0.0650	0.0454	0.0357	0.0279	0.0280	0.0847	0.3031	0.5541
0.70	0.1040	0.1004	0.0897	0.0728	0.0518	0.0416	0.0332	0.0325	0.0890	0.3075	0.5576
0.75	0.1143	0.1104	0.0991	0.0810	0.0589	0.0480	0.0390	0.0373	0.0934	0.3115	0.5607
0.80	0.1250	0.1209	0.1089	0.0898	0.0664	0.0548	0.0453	0.0426	0.0980	0.3154	0.5636
0.85	0.1361	0.1318	0.1191	0.0991	0.0744	0.0622	0.0520	0.0482	0.1026	0.3191	0.5663
0.90	0.1476	0.1431	0.1298	0.1088	0.0829	0.0701	0.0592	0.0541	0.1074	0.3226	0.5688
0.95	0.1595	0.1547	0.1408	0.1189	0.0919	0.0784	0.0669	0.0604	0.1122	0.3259	0.5711
1.00	0.1716	0.1667	0.1522	0.1294	0.1013	0.0872	0.0750	0.0670	0.1172	0.3292	0.5732
1.05	0.1840	0.1789	0.1639	0.1403	0.1110	0.0963	0.0834	0.0739	0.1224	0.3323	0.5752
1.10	0.1966	0.1913	0.1758	0.1514	0.1212	0.1058	0.0923	0.0811	0.1276	0.3354	0.5771
1.15	0.2093	0.2039	0.1880	0.1629	0.1316	0.1157	0.1014	0.0886	0.1330	0.3384	0.5789
1.20	0.2222	0.2167	0.2004	0.1746	0.1424	0.1258	0.1109	0.0964	0.1385	0.3413	0.5805
1.25	0.2352	0.2296	0.2129	0.1865	0.1534	0.1363	0.1206	0.1043	0.1441	0.3442	0.5821
1.30	0.2483	0.2425	0.2256	0.1986	0.1647	0.1470	0.1306	0.1126	0.1498	0.3471	0.5837
1.35	0.2615	0.2556	0.2383	0.2108	0.1761	0.1579	0.1409	0.1210	0.1556	0.3499	0.5851
1.40	0.2746	0.2687	0.2511	0.2232	0.1877	0.1690	0.1513	0.1296	0.1616	0.3527	0.5865
1.45	0.2878	0.2817	0.2640	0.2357	0.1995	0.1803	0.1620	0.1384	0.1677	0.3554	0.5879
1.50	0.3009	0.2948	0.2769	0.2482	0.2114	0.1917	0.1728	0.1474	0.1738	0.3582	0.5892
1.55	0.3139	0.3078	0.2897	0.2608	0.2234	0.2032	0.1837	0.1565	0.1801	0.3609	0.5904

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=1.40

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
1.60	0.3269	0.3208	0.3026	0.2755	0.2354	0.2148	0.1947	0.1657	0.1865	0.3637	0.5917	
1.65	0.3398	0.3336	0.3154	0.2889	0.2475	0.2265	0.2059	0.1751	0.1929	0.3664	0.5928	
1.70	0.3526	0.3464	0.3281	0.2984	0.2597	0.2383	0.2171	0.1845	0.1995	0.3692	0.5940	
1.75	0.3653	0.3591	0.3407	0.3109	0.2718	0.2500	0.2283	0.1941	0.2061	0.3719	0.5951	
1.80	0.3778	0.3716	0.3532	0.3234	0.2839	0.2618	0.2396	0.2037	0.2128	0.3747	0.5962	
1.85	0.3901	0.3840	0.3656	0.3357	0.2959	0.2735	0.2509	0.2134	0.2195	0.3775	0.5973	
1.90	0.4023	0.3962	0.3779	0.3479	0.3079	0.2853	0.2622	0.2231	0.2254	0.3802	0.5984	
1.95	0.4144	0.4083	0.3900	0.3600	0.3199	0.2970	0.2735	0.2329	0.2333	0.3830	0.5994	
2.00	0.4262	0.4201	0.4019	0.3720	0.3317	0.3086	0.2848	0.2427	0.2402	0.3858	0.6005	
2.05	0.4379	0.4318	0.4137	0.3839	0.3435	0.3202	0.2960	0.2525	0.2472	0.3886	0.6015	
2.10	0.4494	0.4433	0.4253	0.3956	0.3551	0.3317	0.3072	0.2623	0.2542	0.3914	0.6025	
2.15	0.4606	0.4547	0.4368	0.4072	0.3666	0.3431	0.3183	0.2721	0.2513	0.3943	0.6035	
2.20	0.4717	0.4658	0.4480	0.4185	0.3780	0.3543	0.3293	0.2819	0.2584	0.3971	0.6045	
2.25	0.4825	0.4767	0.4591	0.4295	0.3893	0.3655	0.3402	0.2917	0.2755	0.4000	0.6055	
2.30	0.4932	0.4874	0.4699	0.4408	0.4004	0.3765	0.3510	0.3014	0.2826	0.4028	0.6064	
2.35	0.5037	0.4979	0.4806	0.4517	0.4114	0.3874	0.3617	0.3111	0.2897	0.4057	0.6074	
2.40	0.5139	0.5082	0.4911	0.4623	0.4222	0.3982	0.3723	0.3207	0.2969	0.4086	0.6083	
2.45	0.5239	0.5183	0.5013	0.4728	0.4328	0.4088	0.3828	0.3303	0.3041	0.4116	0.6093	
2.50	0.5337	0.5282	0.5114	0.4831	0.4433	0.4193	0.3932	0.3398	0.3112	0.4145	0.6102	
2.55	0.5433	0.5378	0.5212	0.4932	0.4536	0.4297	0.4034	0.3492	0.3184	0.4174	0.6111	
2.60	0.5527	0.5473	0.5309	0.5032	0.4637	0.4398	0.4135	0.3586	0.3256	0.4204	0.6121	
2.65	0.5619	0.5566	0.5403	0.5128	0.4737	0.4498	0.4235	0.3679	0.3327	0.4233	0.6130	
2.70	0.5709	0.5656	0.5496	0.5224	0.4835	0.4597	0.4333	0.3771	0.3398	0.4263	0.6139	
2.75	0.5797	0.5745	0.5586	0.5317	0.4931	0.4694	0.4430	0.3862	0.3469	0.4293	0.6148	
2.80	0.5882	0.5831	0.5675	0.5409	0.5025	0.4789	0.4525	0.3952	0.3540	0.4323	0.6157	
2.85	0.5966	0.5916	0.5762	0.5498	0.5118	0.4883	0.4619	0.4041	0.3611	0.4353	0.6167	
2.90	0.6048	0.5998	0.5846	0.5586	0.5209	0.4975	0.4711	0.4129	0.3681	0.4384	0.6176	
2.95	0.6128	0.6079	0.5929	0.5672	0.5298	0.5065	0.4802	0.4217	0.3751	0.4414	0.6185	
3.00	0.6206	0.6157	0.6010	0.5756	0.5385	0.5153	0.4891	0.4303	0.3821	0.4444	0.6194	

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0337	0.0323	0.0280	0.0209	0.0114	0.0064	0.0022	0.0025	0.0446	0.2393	0.4952
0.05	0.0341	0.0327	0.0284	0.0211	0.0116	0.0065	0.0023	0.0026	0.0449	0.2399	0.4959
0.10	0.0353	0.0339	0.0294	0.0220	0.0121	0.0070	0.0026	0.0029	0.0458	0.2419	0.4979
0.15	0.0373	0.0358	0.0311	0.0233	0.0130	0.0077	0.0031	0.0035	0.0471	0.2450	0.5010
0.20	0.0401	0.0385	0.0335	0.0252	0.0144	0.0087	0.0039	0.0042	0.0490	0.2489	0.5049
0.25	0.0437	0.0419	0.0365	0.0277	0.0161	0.0101	0.0050	0.0052	0.0512	0.2535	0.5094
0.30	0.0480	0.0461	0.0403	0.0307	0.0182	0.0118	0.0064	0.0065	0.0538	0.2584	0.5142
0.35	0.0531	0.0510	0.0446	0.0343	0.0208	0.0140	0.0082	0.0082	0.0567	0.2635	0.5191
0.40	0.0588	0.0565	0.0496	0.0384	0.0240	0.0166	0.0104	0.0101	0.0597	0.2686	0.5238
0.45	0.0653	0.0628	0.0553	0.0431	0.0276	0.0195	0.0130	0.0125	0.0630	0.2736	0.5284
0.50	0.0724	0.0697	0.0616	0.0484	0.0317	0.0232	0.0161	0.0152	0.0665	0.2785	0.5328
0.55	0.0801	0.0772	0.0684	0.0543	0.0363	0.0273	0.0197	0.0183	0.0701	0.2831	0.5368
0.60	0.0884	0.0852	0.0758	0.0607	0.0415	0.0319	0.0237	0.0217	0.0739	0.2876	0.5406
0.65	0.0973	0.0939	0.0838	0.0676	0.0473	0.0370	0.0283	0.0256	0.0778	0.2918	0.5441
0.70	0.1067	0.1030	0.0923	0.0751	0.0535	0.0425	0.0334	0.0298	0.0818	0.2959	0.5474
0.75	0.1165	0.1127	0.1013	0.0831	0.0603	0.0488	0.0389	0.0345	0.0859	0.2997	0.5504
0.80	0.1268	0.1228	0.1107	0.0915	0.0675	0.0554	0.0450	0.0394	0.0902	0.3034	0.5531
0.85	0.1375	0.1333	0.1206	0.1004	0.0753	0.0625	0.0515	0.0448	0.0946	0.3069	0.5557
0.90	0.1485	0.1441	0.1309	0.1098	0.0835	0.0701	0.0584	0.0505	0.0992	0.3103	0.5581
0.95	0.1600	0.1553	0.1415	0.1195	0.0921	0.0781	0.0658	0.0565	0.1039	0.3135	0.5604
1.00	0.1717	0.1669	0.1525	0.1297	0.1011	0.0866	0.0736	0.0629	0.1087	0.3167	0.5625
1.05	0.1837	0.1786	0.1638	0.1402	0.1106	0.0954	0.0817	0.0696	0.1137	0.3198	0.5645
1.10	0.1958	0.1906	0.1753	0.1509	0.1203	0.1045	0.0902	0.0765	0.1187	0.3228	0.5663
1.15	0.2082	0.2028	0.1871	0.1620	0.1305	0.1141	0.0991	0.0838	0.1240	0.3257	0.5681
1.20	0.2207	0.2152	0.1991	0.1733	0.1408	0.1239	0.1082	0.0913	0.1293	0.3286	0.5697
1.25	0.2333	0.2277	0.2112	0.1849	0.1515	0.1340	0.1177	0.0990	0.1348	0.3315	0.5713
1.30	0.2460	0.2403	0.2235	0.1966	0.1624	0.1443	0.1274	0.1070	0.1404	0.3343	0.5729
1.35	0.2588	0.2530	0.2359	0.2085	0.1735	0.1549	0.1373	0.1152	0.1461	0.3371	0.5743
1.40	0.2716	0.2657	0.2483	0.2205	0.1848	0.1657	0.1474	0.1236	0.1520	0.3399	0.5757
1.45	0.2844	0.2784	0.2608	0.2326	0.1962	0.1766	0.1578	0.1321	0.1579	0.3426	0.5771
1.50	0.2972	0.2912	0.2734	0.2448	0.2078	0.1877	0.1683	0.1409	0.1640	0.3454	0.5784
1.55	0.3099	0.3039	0.2859	0.2570	0.2194	0.1990	0.1789	0.1498	0.1701	0.3481	0.5796

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.45

THETA K	0	10	20	30	40	45	50	50	70	80	85
1.60	0.3225	0.3165	0.2985	0.2893	0.2312	0.2103	0.1897	0.1588	0.1764	0.3508	0.5809
1.65	0.3352	0.3291	0.3110	0.2816	0.2430	0.2217	0.2005	0.1680	0.1828	0.3536	0.5821
1.70	0.3478	0.3416	0.3234	0.2938	0.2548	0.2331	0.2115	0.1772	0.1892	0.3563	0.5832
1.75	0.3602	0.3540	0.3358	0.3060	0.2666	0.2446	0.2225	0.1866	0.1958	0.3591	0.5844
1.80	0.3725	0.3663	0.3480	0.3182	0.2785	0.2562	0.2335	0.1961	0.2024	0.3618	0.5855
1.85	0.3848	0.3785	0.3602	0.3303	0.2903	0.2677	0.2446	0.2056	0.2090	0.3646	0.5866
1.90	0.3966	0.3905	0.3722	0.3423	0.3021	0.2792	0.2557	0.2151	0.2158	0.3674	0.5877
1.95	0.4085	0.4024	0.3841	0.3542	0.3138	0.2907	0.2668	0.2247	0.2226	0.3701	0.5887
2.00	0.4201	0.4141	0.3959	0.3660	0.3254	0.3021	0.2778	0.2344	0.2295	0.3729	0.5898
2.05	0.4317	0.4256	0.4075	0.3776	0.3370	0.3134	0.2889	0.2441	0.2364	0.3758	0.5908
2.10	0.4430	0.4370	0.4190	0.3892	0.3484	0.3247	0.2998	0.2537	0.2434	0.3786	0.5918
2.15	0.4541	0.4482	0.4303	0.4006	0.3598	0.3359	0.3108	0.2634	0.2504	0.3814	0.5928
2.20	0.4651	0.4591	0.4414	0.4118	0.3710	0.3471	0.3216	0.2731	0.2574	0.3843	0.5938
2.25	0.4758	0.4700	0.4523	0.4229	0.3821	0.3581	0.3324	0.2827	0.2645	0.3871	0.5948
2.30	0.4864	0.4806	0.4631	0.4338	0.3931	0.3690	0.3431	0.2923	0.2715	0.3900	0.5958
2.35	0.4967	0.4910	0.4736	0.4445	0.4039	0.3798	0.3537	0.3019	0.2786	0.3929	0.5967
2.40	0.5069	0.5012	0.4840	0.4551	0.4146	0.3904	0.3642	0.3115	0.2858	0.3958	0.5977
2.45	0.5169	0.5112	0.4942	0.4655	0.4252	0.4005	0.3746	0.3209	0.2929	0.3988	0.5986
2.50	0.5268	0.5210	0.5042	0.4757	0.4356	0.4113	0.3849	0.3304	0.3000	0.4017	0.5996
2.55	0.5362	0.5307	0.5140	0.4858	0.4458	0.4216	0.3950	0.3397	0.3072	0.4047	0.6005
2.60	0.5455	0.5401	0.5236	0.4956	0.4559	0.4317	0.4050	0.3490	0.3143	0.4076	0.6015
2.65	0.5547	0.5493	0.5330	0.5053	0.4658	0.4416	0.4149	0.3583	0.3214	0.4106	0.6024
2.70	0.5637	0.5583	0.5422	0.5148	0.4755	0.4514	0.4247	0.3674	0.3285	0.4136	0.6034
2.75	0.5724	0.5672	0.5512	0.5241	0.4851	0.4610	0.4343	0.3765	0.3356	0.4166	0.6043
2.80	0.5810	0.5758	0.5601	0.5332	0.4945	0.4705	0.4438	0.3854	0.3427	0.4197	0.6052
2.85	0.5894	0.5843	0.5687	0.5421	0.5037	0.4799	0.4531	0.3943	0.3497	0.4227	0.6061
2.90	0.5976	0.5925	0.5772	0.5509	0.5127	0.4890	0.4623	0.4031	0.3567	0.4257	0.6071
2.95	0.6056	0.6006	0.5855	0.5595	0.5216	0.4980	0.4714	0.4118	0.3637	0.4288	0.6080
3.00	0.6134	0.6085	0.5936	0.5679	0.5304	0.5069	0.4803	0.4204	0.3707	0.4319	0.6089

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF R^2 WHERE $N=1-50$

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0400	0.0384	0.0335	0.0292	0.0143	0.0085	0.0033	0.0018	0.0425	0.2368	0.4933
0.05	0.0404	0.0387	0.0338	0.0295	0.0145	0.0086	0.0034	0.0019	0.0427	0.2373	0.4938
0.10	0.0415	0.0399	0.0348	0.0293	0.0150	0.0090	0.0037	0.0022	0.0434	0.2388	0.4953
0.15	0.0434	0.0417	0.0364	0.0276	0.0160	0.0098	0.0043	0.0027	0.0445	0.2412	0.4977
0.20	0.0461	0.0443	0.0387	0.0299	0.0173	0.0108	0.0051	0.0034	0.0460	0.2443	0.5008
0.25	0.0495	0.0475	0.0416	0.0319	0.0190	0.0122	0.0062	0.0043	0.0478	0.2479	0.5044
0.30	0.0536	0.0515	0.0452	0.0348	0.0211	0.0140	0.0075	0.0056	0.0500	0.2520	0.5083
0.35	0.0585	0.0562	0.0494	0.0383	0.0237	0.0161	0.0094	0.0071	0.0524	0.2562	0.5123
0.40	0.0640	0.0615	0.0543	0.0423	0.0268	0.0187	0.0116	0.0090	0.0551	0.2605	0.5164
0.45	0.0701	0.0675	0.0597	0.0439	0.0303	0.0217	0.0142	0.0112	0.0580	0.2649	0.5204
0.50	0.0769	0.0741	0.0657	0.0520	0.0344	0.0252	0.0172	0.0137	0.0611	0.2691	0.5242
0.55	0.0843	0.0813	0.0723	0.0577	0.0389	0.0292	0.0207	0.0166	0.0644	0.2733	0.5279
0.60	0.0923	0.0891	0.0794	0.0639	0.0439	0.0336	0.0246	0.0199	0.0678	0.2773	0.5313
0.65	0.1008	0.0973	0.0871	0.0706	0.0495	0.0386	0.0291	0.0236	0.0714	0.2812	0.5345
0.70	0.1098	0.1061	0.0953	0.0778	0.0555	0.0440	0.0340	0.0277	0.0752	0.2849	0.5376
0.75	0.1193	0.1154	0.1039	0.0855	0.0620	0.0500	0.0393	0.0321	0.0791	0.2885	0.5404
0.80	0.1292	0.1251	0.1130	0.0936	0.0690	0.0564	0.0451	0.0368	0.0832	0.2920	0.5431
0.85	0.1395	0.1352	0.1225	0.1022	0.0765	0.0632	0.0514	0.0420	0.0874	0.2954	0.5455
0.90	0.1501	0.1457	0.1324	0.1112	0.0844	0.0705	0.0581	0.0474	0.0917	0.2986	0.5478
0.95	0.1611	0.1565	0.1427	0.1207	0.0928	0.0783	0.0652	0.0532	0.0962	0.3018	0.5500
1.00	0.1724	0.1676	0.1533	0.1304	0.1015	0.0864	0.0727	0.0594	0.1009	0.3048	0.5521
1.05	0.1840	0.1790	0.1642	0.1406	0.1106	0.0949	0.0805	0.0658	0.1057	0.3078	0.5540
1.10	0.1957	0.1906	0.1753	0.1510	0.1200	0.1038	0.0887	0.0725	0.1106	0.3107	0.5558
1.15	0.2077	0.2024	0.1867	0.1617	0.1298	0.1130	0.0973	0.0795	0.1157	0.3136	0.5576
1.20	0.2198	0.2143	0.1983	0.1726	0.1398	0.1225	0.1061	0.0868	0.1209	0.3165	0.5592
1.25	0.2320	0.2265	0.2101	0.1838	0.1502	0.1322	0.1153	0.0943	0.1262	0.3193	0.5608
1.30	0.2443	0.2387	0.2220	0.1952	0.1607	0.1423	0.1247	0.1021	0.1317	0.3221	0.5623
1.35	0.2567	0.2510	0.2340	0.2067	0.1715	0.1525	0.1343	0.1100	0.1373	0.3248	0.5638
1.40	0.2692	0.2634	0.2461	0.2183	0.1824	0.1639	0.1442	0.1182	0.1430	0.3276	0.5652
1.45	0.2817	0.2758	0.2583	0.2301	0.1935	0.1735	0.1542	0.1266	0.1488	0.3303	0.5665
1.50	0.2941	0.2882	0.2705	0.2420	0.2048	0.1844	0.1644	0.1351	0.1548	0.3330	0.5678
1.55	0.3066	0.3006	0.2827	0.2539	0.2161	0.1953	0.1748	0.1438	0.1609	0.3357	0.5691

TABLES OF CALCULATIONS FOR W.H-WRIGHT EQ.

VALUES OF RP WHERE N=1.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0.3190	0.3129	0.2950	0.2658	0.2275	0.2083	0.1853	0.1526	0.1670	0.3385	0.5703
1-65	0.3313	0.3252	0.3072	0.2778	0.2390	0.2175	0.1959	0.1616	0.1733	0.3412	0.5715
1-70	0.3435	0.3374	0.3193	0.2898	0.2506	0.2286	0.2065	0.1706	0.1796	0.3439	0.5727
1-75	0.3557	0.3496	0.3314	0.3017	0.2621	0.2399	0.2173	0.1798	0.1861	0.3467	0.5738
1-80	0.3678	0.3616	0.3434	0.3136	0.2737	0.2511	0.2281	0.1891	0.1926	0.3494	0.5750
1-85	0.3797	0.3736	0.3553	0.3254	0.2853	0.2624	0.2389	0.1984	0.1992	0.3522	0.5761
1-90	0.3915	0.3854	0.3672	0.3372	0.2968	0.2737	0.2498	0.2078	0.2059	0.3549	0.5771
1-95	0.4031	0.3971	0.3789	0.3489	0.3083	0.2849	0.2607	0.2172	0.2126	0.3577	0.5782
2-00	0.4146	0.4086	0.3904	0.3605	0.3197	0.2961	0.2715	0.2267	0.2194	0.3605	0.5793
2-05	0.4260	0.4199	0.4019	0.3719	0.3311	0.3073	0.2824	0.2362	0.2262	0.3633	0.5803
2-10	0.4371	0.4311	0.4132	0.3833	0.3423	0.3184	0.2932	0.2458	0.2331	0.3662	0.5813
2-15	0.4481	0.4422	0.4243	0.3945	0.3535	0.3294	0.3039	0.2553	0.2401	0.3690	0.5823
2-20	0.4590	0.4531	0.4353	0.4056	0.3646	0.3404	0.3146	0.2648	0.2470	0.3719	0.5833
2-25	0.4696	0.4637	0.4461	0.4165	0.3755	0.3512	0.3252	0.2744	0.2540	0.3747	0.5843
2-30	0.4801	0.4742	0.4567	0.4273	0.3864	0.3620	0.3358	0.2839	0.2611	0.3776	0.5853
2-35	0.4903	0.4846	0.4672	0.4379	0.3971	0.3726	0.3462	0.2934	0.2681	0.3805	0.5863
2-40	0.5004	0.4947	0.4774	0.4484	0.4076	0.3832	0.3566	0.3028	0.2752	0.3835	0.5873
2-45	0.5103	0.5046	0.4875	0.4587	0.4181	0.3935	0.3669	0.3122	0.2823	0.3864	0.5882
2-50	0.5200	0.5144	0.4975	0.4688	0.4284	0.4039	0.3771	0.3215	0.2894	0.3893	0.5892
2-55	0.5295	0.5240	0.5072	0.4788	0.4385	0.4140	0.3871	0.3308	0.2965	0.3923	0.5901
2-60	0.5388	0.5333	0.5167	0.4886	0.4485	0.4240	0.3971	0.3400	0.3036	0.3953	0.5911
2-65	0.5479	0.5425	0.5261	0.4982	0.4583	0.4339	0.4069	0.3492	0.3107	0.3983	0.5920
2-70	0.5569	0.5515	0.5353	0.5076	0.4680	0.4435	0.4166	0.3583	0.3177	0.4013	0.5930
2-75	0.5656	0.5603	0.5443	0.5169	0.4775	0.4532	0.4261	0.3673	0.3248	0.4043	0.5939
2-80	0.5742	0.5689	0.5531	0.5260	0.4868	0.4626	0.4356	0.3762	0.3319	0.4074	0.5949
2-85	0.5826	0.5774	0.5617	0.5349	0.4960	0.4719	0.4449	0.3851	0.3389	0.4104	0.5958
2-90	0.5907	0.5856	0.5702	0.5436	0.5051	0.4811	0.4540	0.3938	0.3459	0.4135	0.5967
2-95	0.5987	0.5937	0.5784	0.5522	0.5139	0.4900	0.4630	0.4025	0.3529	0.4166	0.5977
3-00	0.6066	0.6016	0.5865	0.5606	0.5226	0.4989	0.4719	0.4110	0.3598	0.4196	0.5986

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1-55

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-0469	0-0447	0-0391	0-0299	0-0175	0-0108	0-0046	0-0011	0-0400	0-2334	0-4903
0-05	0-0469	0-0450	0-0395	0-0302	0-0177	0-0109	0-0047	0-0012	0-0402	0-2338	0-4907
0-10	0-0480	0-0461	0-0404	0-0309	0-0182	0-0114	0-0051	0-0015	0-0408	0-2349	0-4919
0-15	0-0498	0-0479	0-0420	0-0322	0-0192	0-0121	0-0057	0-0020	0-0417	0-2368	0-4938
0-20	0-0524	0-0503	0-0442	0-0340	0-0205	0-0132	0-0065	0-0027	0-0429	0-2393	0-4962
0-25	0-0556	0-0535	0-0470	0-0364	0-0222	0-0146	0-0077	0-0036	0-0445	0-2422	0-4991
0-30	0-0595	0-0573	0-0505	0-0392	0-0243	0-0163	0-0091	0-0048	0-0463	0-2455	0-5023
0-35	0-0642	0-0617	0-0545	0-0426	0-0269	0-0185	0-0109	0-0063	0-0485	0-2491	0-5057
0-40	0-0694	0-0669	0-0592	0-0465	0-0299	0-0210	0-0131	0-0081	0-0508	0-2528	0-5092
0-45	0-0753	0-0726	0-0644	0-0509	0-0333	0-0240	0-0156	0-0102	0-0534	0-2565	0-5126
0-50	0-0818	0-0789	0-0702	0-0559	0-0373	0-0275	0-0180	0-0126	0-0562	0-2603	0-5160
0-55	0-0889	0-0858	0-0765	0-0614	0-0417	0-0313	0-0220	0-0154	0-0591	0-2640	0-5193
0-60	0-0969	0-0932	0-0834	0-0674	0-0466	0-0357	0-0258	0-0185	0-0623	0-2676	0-5224
0-65	0-1047	0-1012	0-0908	0-0738	0-0520	0-0405	0-0301	0-0220	0-0657	0-2712	0-5254
0-70	0-1133	0-1096	0-0986	0-0809	0-0578	0-0458	0-0348	0-0259	0-0692	0-2746	0-5282
0-75	0-1224	0-1185	0-1070	0-0882	0-0641	0-0515	0-0400	0-0301	0-0728	0-2780	0-5308
0-80	0-1320	0-1279	0-1157	0-0961	0-0709	0-0577	0-0456	0-0347	0-0767	0-2812	0-5333
0-85	0-1419	0-1376	0-1249	0-1044	0-0781	0-0643	0-0517	0-0396	0-0807	0-2844	0-5357
0-90	0-1521	0-1477	0-1344	0-1131	0-0858	0-0714	0-0581	0-0449	0-0849	0-2875	0-5379
0-95	0-1627	0-1581	0-1443	0-1222	0-0938	0-0786	0-0650	0-0505	0-0892	0-2905	0-5400
1-00	0-1736	0-1688	0-1546	0-1316	0-1022	0-0867	0-0722	0-0564	0-0937	0-2935	0-5420
1-05	0-1847	0-1798	0-1651	0-1414	0-1110	0-0949	0-0798	0-0626	0-0983	0-2964	0-5439
1-10	0-1961	0-1910	0-1758	0-1515	0-1201	0-1035	0-0877	0-0691	0-1031	0-2992	0-5457
1-15	0-2077	0-2024	0-1869	0-1618	0-1296	0-1123	0-0960	0-0759	0-1080	0-3020	0-5474
1-20	0-2194	0-2140	0-1981	0-1724	0-1393	0-1215	0-1046	0-0829	0-1131	0-3048	0-5490
1-25	0-2312	0-2258	0-2095	0-1832	0-1493	0-1310	0-1134	0-0902	0-1183	0-3076	0-5506
1-30	0-2432	0-2376	0-2210	0-1942	0-1595	0-1407	0-1225	0-0977	0-1236	0-3103	0-5520
1-35	0-2555	0-2496	0-2327	0-2054	0-1700	0-1507	0-1319	0-1055	0-1291	0-3130	0-5535
1-40	0-2674	0-2616	0-2445	0-2167	0-1806	0-1608	0-1414	0-1134	0-1347	0-3157	0-5549
1-45	0-2795	0-2736	0-2563	0-2282	0-1914	0-1711	0-1512	0-1216	0-1404	0-3184	0-5562
1-50	0-2916	0-2857	0-2682	0-2397	0-2023	0-1815	0-1611	0-1299	0-1463	0-3211	0-5575
1-55	0-3038	0-2978	0-2801	0-2513	0-2133	0-1922	0-1712	0-1384	0-1522	0-3238	0-5588

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF R_P WHERE N=1.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3159	0.3089	0.2920	0.2629	0.2245	0.2030	0.1814	0.1470	0.1583	0.3265	0.5600
1.65	0.3279	0.3219	0.3039	0.2746	0.2357	0.2138	0.1918	0.1558	0.1644	0.3292	0.5612
1.70	0.3399	0.3338	0.3158	0.2853	0.2469	0.2247	0.2022	0.1646	0.1707	0.3320	0.5624
1.75	0.3518	0.3457	0.3276	0.2980	0.2582	0.2357	0.2127	0.1736	0.1770	0.3347	0.5635
1.80	0.3636	0.3575	0.3394	0.3096	0.2695	0.2467	0.2232	0.1827	0.1834	0.3374	0.5647
1.85	0.3753	0.3692	0.3511	0.3212	0.2808	0.2577	0.2339	0.1918	0.1899	0.3402	0.5658
1.90	0.3869	0.3808	0.3627	0.3327	0.2921	0.2688	0.2445	0.2011	0.1965	0.3429	0.5668
1.95	0.3984	0.3923	0.3741	0.3442	0.3034	0.2798	0.2551	0.2104	0.2032	0.3457	0.5679
2.00	0.4097	0.4036	0.3855	0.3555	0.3146	0.2908	0.2658	0.2197	0.2099	0.3485	0.5690
2.05	0.4208	0.4148	0.3968	0.3668	0.3257	0.3017	0.2764	0.2290	0.2167	0.3513	0.5700
2.10	0.4318	0.4259	0.4079	0.3780	0.3368	0.3126	0.2870	0.2384	0.2235	0.3541	0.5710
2.15	0.4427	0.4367	0.4188	0.3890	0.3478	0.3235	0.2976	0.2478	0.2303	0.3570	0.5720
2.20	0.4534	0.4475	0.4297	0.3999	0.3587	0.3343	0.3082	0.2572	0.2372	0.3599	0.5731
2.25	0.4639	0.4580	0.4403	0.4107	0.3695	0.3450	0.3186	0.2666	0.2442	0.3627	0.5741
2.30	0.4742	0.4684	0.4508	0.4214	0.3802	0.3556	0.3290	0.2760	0.2512	0.3656	0.5750
2.35	0.4844	0.4786	0.4612	0.4319	0.3907	0.3661	0.3394	0.2854	0.2582	0.3685	0.5760
2.40	0.4944	0.4887	0.4714	0.4422	0.4012	0.3765	0.3496	0.2947	0.2652	0.3715	0.5770
2.45	0.5042	0.4985	0.4814	0.4524	0.4115	0.3868	0.3597	0.3040	0.2722	0.3744	0.5780
2.50	0.5138	0.5082	0.4912	0.4624	0.4217	0.3969	0.3698	0.3132	0.2793	0.3774	0.5790
2.55	0.5233	0.5177	0.5009	0.4723	0.4317	0.4070	0.3798	0.3224	0.2863	0.3803	0.5799
2.60	0.5325	0.5270	0.5103	0.4820	0.4416	0.4169	0.3896	0.3316	0.2934	0.3833	0.5809
2.65	0.5416	0.5361	0.5196	0.4916	0.4513	0.4267	0.3993	0.3407	0.3004	0.3863	0.5818
2.70	0.5505	0.5451	0.5288	0.5009	0.4609	0.4363	0.4089	0.3497	0.3075	0.3894	0.5828
2.75	0.5592	0.5539	0.5377	0.5101	0.4704	0.4459	0.4184	0.3586	0.3145	0.3924	0.5837
2.80	0.5677	0.5625	0.5465	0.5192	0.4797	0.4552	0.4278	0.3675	0.3215	0.3955	0.5847
2.85	0.5761	0.5709	0.5551	0.5280	0.4888	0.4643	0.4370	0.3763	0.3286	0.3985	0.5856
2.90	0.5842	0.5791	0.5635	0.5367	0.4978	0.4733	0.4462	0.3850	0.3355	0.4016	0.5866
2.95	0.5922	0.5872	0.5718	0.5453	0.5066	0.4825	0.4551	0.3936	0.3425	0.4047	0.5875
3.00	0.6001	0.5951	0.5798	0.5536	0.5153	0.4913	0.4640	0.4021	0.3495	0.4078	0.5885

TABLES OF CALCULATIONS FOR W-H WRIGHT ESO.

VALUES OF RP WHERE N=1-60

PAGE 147

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0533	0.0512	0.0451	0.0348	0.0209	0.0133	0.0062	0.0006	0.0373	0.2292	0.4865
0.05	0.0536	0.0516	0.0454	0.0351	0.0211	0.0135	0.0064	0.0007	0.0375	0.2295	0.4868
0.10	0.0547	0.0526	0.0463	0.0358	0.0217	0.0139	0.0067	0.0010	0.0380	0.2304	0.4878
0.15	0.0564	0.0543	0.0478	0.0371	0.0226	0.0147	0.0073	0.0015	0.0387	0.2319	0.4893
0.20	0.0588	0.0566	0.0499	0.0388	0.0239	0.0158	0.0082	0.0021	0.0398	0.2339	0.4913
0.25	0.0619	0.0596	0.0527	0.0411	0.0256	0.0172	0.0093	0.0031	0.0412	0.2364	0.4937
0.30	0.0657	0.0633	0.0560	0.0439	0.0277	0.0190	0.0108	0.0042	0.0428	0.2391	0.4963
0.35	0.0701	0.0676	0.0599	0.0472	0.0303	0.0211	0.0126	0.0056	0.0446	0.2421	0.4992
0.40	0.0751	0.0724	0.0643	0.0510	0.0332	0.0236	0.0148	0.0074	0.0467	0.2453	0.5021
0.45	0.0808	0.0779	0.0694	0.0553	0.0366	0.0265	0.0173	0.0094	0.0490	0.2485	0.5051
0.50	0.0870	0.0840	0.0749	0.0601	0.0405	0.0299	0.0202	0.0117	0.0516	0.2518	0.5081
0.55	0.0938	0.0906	0.0810	0.0653	0.0448	0.0337	0.0235	0.0144	0.0543	0.2551	0.5110
0.60	0.1011	0.0977	0.0877	0.0711	0.0495	0.0380	0.0273	0.0174	0.0572	0.2584	0.5138
0.65	0.1089	0.1054	0.0948	0.0774	0.0547	0.0426	0.0314	0.0208	0.0604	0.2616	0.5165
0.70	0.1172	0.1135	0.1023	0.0841	0.0604	0.0478	0.0350	0.0245	0.0636	0.2648	0.5191
0.75	0.1260	0.1221	0.1103	0.0913	0.0665	0.0533	0.0410	0.0286	0.0671	0.2679	0.5216
0.80	0.1351	0.1310	0.1188	0.0989	0.0731	0.0593	0.0454	0.0330	0.0708	0.2710	0.5239
0.85	0.1447	0.1404	0.1276	0.1069	0.0800	0.0657	0.0523	0.0377	0.0746	0.2740	0.5261
0.90	0.1546	0.1501	0.1368	0.1153	0.0874	0.0725	0.0585	0.0428	0.0786	0.2769	0.5283
0.95	0.1648	0.1601	0.1464	0.1241	0.0952	0.0797	0.0651	0.0482	0.0827	0.2798	0.5303
1.00	0.1753	0.1705	0.1562	0.1332	0.1034	0.0873	0.0721	0.0539	0.0871	0.2826	0.5322
1.05	0.1860	0.1811	0.1664	0.1426	0.1118	0.0953	0.0795	0.0599	0.0915	0.2854	0.5340
1.10	0.1970	0.1919	0.1768	0.1524	0.1207	0.1036	0.0872	0.0662	0.0962	0.2882	0.5358
1.15	0.2082	0.2030	0.1875	0.1624	0.1298	0.1122	0.0952	0.0727	0.1009	0.2909	0.5374
1.20	0.2195	0.2142	0.1983	0.1727	0.1392	0.1210	0.1035	0.0796	0.1059	0.2936	0.5390
1.25	0.2310	0.2255	0.2094	0.1831	0.1489	0.1302	0.1120	0.0867	0.1109	0.2963	0.5405
1.30	0.2426	0.2371	0.2206	0.1938	0.1588	0.1396	0.1209	0.0940	0.1162	0.2990	0.5420
1.35	0.2543	0.2487	0.2319	0.2046	0.1689	0.1493	0.1299	0.1015	0.1215	0.3017	0.5434
1.40	0.2661	0.2603	0.2433	0.2156	0.1792	0.1591	0.1392	0.1092	0.1270	0.3044	0.5448
1.45	0.2779	0.2721	0.2548	0.2267	0.1897	0.1692	0.1487	0.1172	0.1326	0.3070	0.5461
1.50	0.2897	0.2838	0.2664	0.2379	0.2003	0.1794	0.1584	0.1253	0.1383	0.3097	0.5474
1.55	0.3015	0.2956	0.2780	0.2492	0.2111	0.1897	0.1682	0.1335	0.1441	0.3124	0.5487

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RP WHERE N=1.60

PAGE 148

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3133	0.3073	0.2896	0.2606	0.2219	0.2001	0.1781	0.1420	0.1501	0.3150	0.5499
1.65	0.3251	0.3191	0.3012	0.2719	0.2328	0.2107	0.1882	0.1505	0.1561	0.3177	0.5511
1.70	0.3368	0.3308	0.3128	0.2833	0.2438	0.2213	0.1984	0.1592	0.1623	0.3204	0.5523
1.75	0.3484	0.3424	0.3244	0.2947	0.2548	0.2320	0.2085	0.1680	0.1685	0.3231	0.5534
1.80	0.3600	0.3540	0.3359	0.3061	0.2659	0.2428	0.2190	0.1769	0.1749	0.3259	0.5545
1.85	0.3715	0.3654	0.3473	0.3174	0.2769	0.2536	0.2293	0.1859	0.1813	0.3286	0.5556
1.90	0.3828	0.3768	0.3587	0.3287	0.2880	0.2644	0.2397	0.1949	0.1878	0.3314	0.5567
1.95	0.3941	0.3880	0.3699	0.3400	0.2990	0.2752	0.2502	0.2040	0.1943	0.3341	0.5578
2.00	0.4052	0.3992	0.3811	0.3511	0.3100	0.2860	0.2606	0.2132	0.2010	0.3369	0.5589
2.05	0.4162	0.4102	0.3922	0.3622	0.3209	0.2967	0.2711	0.2224	0.2076	0.3397	0.5599
2.10	0.4270	0.4211	0.4031	0.3732	0.3318	0.3074	0.2815	0.2316	0.2144	0.3425	0.5609
2.15	0.4377	0.4318	0.4139	0.3840	0.3426	0.3181	0.2919	0.2409	0.2212	0.3454	0.5620
2.20	0.4483	0.4424	0.4246	0.3948	0.3533	0.3287	0.3022	0.2501	0.2280	0.3482	0.5630
2.25	0.4587	0.4528	0.4351	0.4054	0.3639	0.3392	0.3125	0.2594	0.2349	0.3511	0.5640
2.30	0.4689	0.4630	0.4455	0.4159	0.3745	0.3497	0.3228	0.2687	0.2418	0.3540	0.5650
2.35	0.4789	0.4731	0.4557	0.4263	0.3849	0.3600	0.3330	0.2779	0.2487	0.3569	0.5660
2.40	0.4888	0.4831	0.4657	0.4365	0.3952	0.3703	0.3431	0.2871	0.2557	0.3599	0.5670
2.45	0.4985	0.4928	0.4756	0.4466	0.4054	0.3804	0.3531	0.2963	0.2627	0.3628	0.5679
2.50	0.5081	0.5024	0.4854	0.4565	0.4154	0.3905	0.3631	0.3055	0.2697	0.3658	0.5689
2.55	0.5174	0.5119	0.4949	0.4663	0.4254	0.4004	0.3723	0.3146	0.2767	0.3688	0.5699
2.60	0.5266	0.5211	0.5044	0.4759	0.4352	0.4102	0.3826	0.3236	0.2837	0.3718	0.5708
2.65	0.5356	0.5302	0.5136	0.4854	0.4448	0.4199	0.3923	0.3326	0.2907	0.3748	0.5718
2.70	0.5445	0.5391	0.5227	0.4947	0.4543	0.4295	0.4018	0.3416	0.2977	0.3778	0.5728
2.75	0.5532	0.5478	0.5316	0.5038	0.4637	0.4389	0.4112	0.3504	0.3047	0.3808	0.5737
2.80	0.5618	0.5564	0.5403	0.5128	0.4730	0.4483	0.4206	0.3593	0.3117	0.3839	0.5747
2.85	0.5700	0.5647	0.5488	0.5216	0.4820	0.4574	0.4297	0.3680	0.3187	0.3870	0.5757
2.90	0.5781	0.5730	0.5572	0.5303	0.4910	0.4665	0.4388	0.3766	0.3257	0.3901	0.5766
2.95	0.5861	0.5810	0.5655	0.5388	0.4998	0.4753	0.4477	0.3852	0.3326	0.3932	0.5776
3.00	0.5939	0.5889	0.5735	0.5471	0.5084	0.4841	0.4565	0.3937	0.3395	0.3963	0.5785

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF NP WHERE N=1.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0602	0.0579	0.0512	0.0399	0.0246	0.0162	0.0081	0.0002	0.0345	0.2244	0.4821
0.05	0.0605	0.0583	0.0515	0.0402	0.0248	0.0163	0.0082	0.0003	0.0347	0.2247	0.4824
0.10	0.0615	0.0592	0.0524	0.0409	0.0254	0.0168	0.0086	0.0006	0.0351	0.2254	0.4831
0.15	0.0632	0.0608	0.0538	0.0421	0.0263	0.0175	0.0092	0.0011	0.0358	0.2267	0.4844
0.20	0.0655	0.0631	0.0559	0.0438	0.0276	0.0186	0.0101	0.0018	0.0367	0.2283	0.4860
0.25	0.0685	0.0660	0.0585	0.0461	0.0293	0.0200	0.0113	0.0027	0.0379	0.2303	0.4880
0.30	0.0721	0.0695	0.0617	0.0488	0.0314	0.0218	0.0127	0.0038	0.0393	0.2326	0.4902
0.35	0.0763	0.0736	0.0654	0.0519	0.0339	0.0239	0.0145	0.0052	0.0410	0.2352	0.4926
0.40	0.0811	0.0783	0.0697	0.0556	0.0368	0.0264	0.0167	0.0069	0.0429	0.2379	0.4952
0.45	0.0865	0.0835	0.0746	0.0598	0.0401	0.0293	0.0192	0.0088	0.0450	0.2407	0.4978
0.50	0.0925	0.0893	0.0799	0.0644	0.0438	0.0326	0.0220	0.0111	0.0473	0.2436	0.5004
0.55	0.0990	0.0957	0.0858	0.0696	0.0480	0.0365	0.0253	0.0137	0.0498	0.2466	0.5030
0.60	0.1060	0.1025	0.0922	0.0752	0.0527	0.0405	0.0289	0.0166	0.0525	0.2495	0.5055
0.65	0.1135	0.1099	0.0990	0.0812	0.0577	0.0450	0.0330	0.0199	0.0555	0.2525	0.5080
0.70	0.1215	0.1177	0.1063	0.0877	0.0632	0.0500	0.0374	0.0234	0.0586	0.2554	0.5103
0.75	0.1299	0.1259	0.1140	0.0946	0.0692	0.0554	0.0423	0.0274	0.0619	0.2583	0.5126
0.80	0.1387	0.1345	0.1222	0.1020	0.0755	0.0612	0.0476	0.0316	0.0653	0.2612	0.5148
0.85	0.1478	0.1435	0.1307	0.1097	0.0823	0.0674	0.0532	0.0362	0.0690	0.2640	0.5169
0.90	0.1574	0.1529	0.1396	0.1178	0.0894	0.0740	0.0593	0.0411	0.0728	0.2668	0.5189
0.95	0.1672	0.1626	0.1488	0.1263	0.0969	0.0810	0.0657	0.0463	0.0768	0.2695	0.5208
1.00	0.1773	0.1725	0.1583	0.1351	0.1048	0.0883	0.0724	0.0518	0.0810	0.2722	0.5227
1.05	0.1877	0.1828	0.1681	0.1443	0.1130	0.0960	0.0795	0.0576	0.0853	0.2749	0.5244
1.10	0.1983	0.1932	0.1782	0.1537	0.1216	0.1040	0.0870	0.0637	0.0898	0.2776	0.5261
1.15	0.2091	0.2039	0.1885	0.1634	0.1304	0.1124	0.0947	0.0701	0.0944	0.2803	0.5277
1.20	0.2201	0.2148	0.1990	0.1733	0.1395	0.1210	0.1028	0.0767	0.0992	0.2829	0.5293
1.25	0.2312	0.2258	0.2097	0.1834	0.1489	0.1298	0.1111	0.0836	0.1041	0.2856	0.5308
1.30	0.2425	0.2370	0.2205	0.1938	0.1585	0.1390	0.1196	0.0907	0.1092	0.2882	0.5322
1.35	0.2538	0.2482	0.2315	0.2043	0.1683	0.1483	0.1284	0.0980	0.1144	0.2908	0.5336
1.40	0.2652	0.2596	0.2426	0.2150	0.1783	0.1579	0.1375	0.1055	0.1198	0.2934	0.5350
1.45	0.2767	0.2710	0.2538	0.2258	0.1885	0.1675	0.1467	0.1133	0.1253	0.2961	0.5363
1.50	0.2882	0.2824	0.2650	0.2367	0.1988	0.1775	0.1561	0.1212	0.1309	0.2987	0.5376
1.55	0.2997	0.2939	0.2763	0.2475	0.2093	0.1875	0.1656	0.1292	0.1366	0.3013	0.5388

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3112	0.3053	0.2877	0.2587	0.2198	0.1978	0.1753	0.1375	0.1425	0.3040	0.5400
1.65	0.3227	0.3158	0.2990	0.2698	0.2304	0.2081	0.1851	0.1458	0.1484	0.3066	0.5412
1.70	0.3342	0.3262	0.3103	0.2809	0.2412	0.2185	0.1951	0.1543	0.1544	0.3093	0.5424
1.75	0.3456	0.3366	0.3216	0.2920	0.2519	0.2289	0.2051	0.1629	0.1606	0.3120	0.5435
1.80	0.3569	0.3469	0.3329	0.3031	0.2627	0.2394	0.2152	0.1716	0.1668	0.3147	0.5446
1.85	0.3681	0.3581	0.3441	0.3142	0.2735	0.2499	0.2253	0.1804	0.1731	0.3174	0.5457
1.90	0.3793	0.3732	0.3552	0.3253	0.2843	0.2608	0.2356	0.1893	0.1795	0.3202	0.5468
1.95	0.3903	0.3843	0.3662	0.3363	0.2951	0.2711	0.2457	0.1983	0.1860	0.3229	0.5479
2.00	0.4012	0.3952	0.3772	0.3472	0.3059	0.2816	0.2560	0.2072	0.1926	0.3257	0.5490
2.05	0.4120	0.4060	0.3880	0.3581	0.3166	0.2922	0.2662	0.2163	0.1992	0.3285	0.5500
2.10	0.4227	0.4167	0.3988	0.3688	0.3273	0.3027	0.2754	0.2254	0.2058	0.3313	0.5510
2.15	0.4332	0.4273	0.4094	0.3795	0.3379	0.3132	0.2857	0.2345	0.2125	0.3341	0.5521
2.20	0.4436	0.4377	0.4199	0.3901	0.3484	0.3236	0.2968	0.2436	0.2193	0.3370	0.5531
2.25	0.4539	0.4480	0.4303	0.4006	0.3589	0.3339	0.3070	0.2527	0.2261	0.3399	0.5541
2.30	0.4640	0.4581	0.4405	0.4109	0.3692	0.3442	0.3171	0.2619	0.2329	0.3428	0.5551
2.35	0.4739	0.4681	0.4506	0.4211	0.3795	0.3544	0.3271	0.2710	0.2398	0.3457	0.5561
2.40	0.4837	0.4779	0.4606	0.4312	0.3897	0.3646	0.3371	0.2801	0.2467	0.3486	0.5571
2.45	0.4933	0.4876	0.4703	0.4412	0.3997	0.3746	0.3470	0.2892	0.2536	0.3516	0.5581
2.50	0.5027	0.4971	0.4800	0.4510	0.4097	0.3845	0.3568	0.2982	0.2606	0.3545	0.5590
2.55	0.5120	0.5064	0.4895	0.4607	0.4195	0.3943	0.3665	0.3072	0.2675	0.3575	0.5600
2.60	0.5211	0.5156	0.4988	0.4702	0.4292	0.4041	0.3761	0.3162	0.2745	0.3605	0.5610
2.65	0.5301	0.5246	0.5079	0.4796	0.4388	0.4136	0.3857	0.3251	0.2815	0.3635	0.5620
2.70	0.5389	0.5334	0.5169	0.4888	0.4482	0.4231	0.3951	0.3339	0.2884	0.3666	0.5629
2.75	0.5475	0.5421	0.5258	0.4979	0.4575	0.4325	0.4044	0.3428	0.2954	0.3696	0.5639
2.80	0.5559	0.5506	0.5345	0.5068	0.4666	0.4417	0.4137	0.3515	0.3024	0.3727	0.5649
2.85	0.5642	0.5590	0.5430	0.5156	0.4757	0.4508	0.4228	0.3602	0.3093	0.3758	0.5659
2.90	0.5723	0.5671	0.5513	0.5242	0.4845	0.4598	0.4318	0.3688	0.3162	0.3789	0.5668
2.95	0.5803	0.5752	0.5595	0.5326	0.4933	0.4686	0.4406	0.3773	0.3232	0.3820	0.5678
3.00	0.5881	0.5830	0.5676	0.5409	0.5019	0.4773	0.4494	0.3857	0.3301	0.3851	0.5688

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF R^2 WHERE $N=1.70$

PAGE 151

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0672	0.0648	0.0575	0.0452	0.0286	0.0192	0.0101	0.0000	0.0317	0.2193	0.4773
0.05	0.0675	0.0651	0.0578	0.0455	0.0287	0.0194	0.0103	0.0001	0.0318	0.2195	0.4775
0.10	0.0685	0.0660	0.0586	0.0462	0.0293	0.0195	0.0105	0.0004	0.0322	0.2201	0.4781
0.15	0.0701	0.0676	0.0600	0.0474	0.0302	0.0206	0.0113	0.0009	0.0328	0.2211	0.4791
0.20	0.0723	0.0697	0.0620	0.0491	0.0315	0.0217	0.0122	0.0016	0.0336	0.2225	0.4805
0.25	0.0751	0.0725	0.0645	0.0512	0.0332	0.0231	0.0134	0.0025	0.0347	0.2242	0.4821
0.30	0.0785	0.0759	0.0676	0.0538	0.0352	0.0245	0.0149	0.0036	0.0360	0.2262	0.4840
0.35	0.0826	0.0798	0.0712	0.0569	0.0377	0.0270	0.0167	0.0050	0.0375	0.2283	0.4861
0.40	0.0872	0.0843	0.0753	0.0605	0.0405	0.0294	0.0188	0.0066	0.0392	0.2307	0.4882
0.45	0.0924	0.0893	0.0800	0.0645	0.0438	0.0323	0.0212	0.0085	0.0412	0.2332	0.4905
0.50	0.0981	0.0949	0.0852	0.0690	0.0474	0.0355	0.0241	0.0107	0.0433	0.2357	0.4928
0.55	0.1044	0.1010	0.0908	0.0740	0.0515	0.0392	0.0273	0.0132	0.0457	0.2384	0.4951
0.60	0.1111	0.1076	0.0969	0.0794	0.0560	0.0432	0.0308	0.0161	0.0482	0.2410	0.4974
0.65	0.1183	0.1146	0.1035	0.0852	0.0610	0.0476	0.0348	0.0192	0.0510	0.2437	0.4996
0.70	0.1260	0.1221	0.1105	0.0915	0.0663	0.0523	0.0391	0.0227	0.0539	0.2464	0.5018
0.75	0.1340	0.1300	0.1180	0.0982	0.0721	0.0577	0.0439	0.0265	0.0570	0.2491	0.5039
0.80	0.1425	0.1383	0.1258	0.1053	0.0782	0.0633	0.0490	0.0306	0.0603	0.2518	0.5060
0.85	0.1513	0.1470	0.1340	0.1128	0.0847	0.0694	0.0544	0.0350	0.0638	0.2544	0.5079
0.90	0.1605	0.1560	0.1426	0.1207	0.0917	0.0758	0.0603	0.0398	0.0675	0.2571	0.5098
0.95	0.1700	0.1653	0.1515	0.1288	0.0989	0.0825	0.0665	0.0448	0.0713	0.2597	0.5116
1.00	0.1797	0.1750	0.1607	0.1374	0.1066	0.0896	0.0731	0.0501	0.0754	0.2623	0.5134
1.05	0.1898	0.1848	0.1702	0.1462	0.1145	0.0971	0.0799	0.0558	0.0795	0.2649	0.5151
1.10	0.2000	0.1950	0.1799	0.1553	0.1228	0.1048	0.0871	0.0617	0.0839	0.2675	0.5167
1.15	0.2104	0.2053	0.1899	0.1647	0.1314	0.1129	0.0947	0.0679	0.0884	0.2701	0.5183
1.20	0.2211	0.2158	0.2000	0.1743	0.1402	0.1212	0.1024	0.0743	0.0930	0.2726	0.5198
1.25	0.2319	0.2265	0.2104	0.1841	0.1493	0.1299	0.1105	0.0810	0.0979	0.2752	0.5212
1.30	0.2428	0.2373	0.2209	0.1942	0.1586	0.1387	0.1188	0.0879	0.1028	0.2778	0.5227
1.35	0.2538	0.2482	0.2316	0.2044	0.1681	0.1478	0.1274	0.0950	0.1079	0.2803	0.5240
1.40	0.2648	0.2592	0.2423	0.2147	0.1778	0.1571	0.1361	0.1023	0.1132	0.2829	0.5254
1.45	0.2760	0.2703	0.2532	0.2252	0.1877	0.1665	0.1451	0.1098	0.1185	0.2855	0.5266
1.50	0.2872	0.2814	0.2642	0.2358	0.1977	0.1762	0.1542	0.1176	0.1240	0.2881	0.5279
1.55	0.2984	0.2926	0.2752	0.2465	0.2079	0.1860	0.1635	0.1254	0.1296	0.2907	0.5291

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF R^2 WHERE $N=1-70$

PAGE 152

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
1.60	0.3096	0.3038	0.2862	0.2572	0.2182	0.1959	0.1730	0.1335	0.1353	0.2933	0.5303	
1.65	0.3208	0.3149	0.2972	0.2680	0.2285	0.2059	0.1825	0.1416	0.1412	0.2959	0.5315	
1.70	0.3320	0.3261	0.3083	0.2789	0.2390	0.2160	0.1922	0.1499	0.1471	0.2986	0.5327	
1.75	0.3432	0.3372	0.3193	0.2897	0.2495	0.2262	0.2020	0.1584	0.1532	0.3013	0.5338	
1.80	0.3542	0.3482	0.3303	0.3006	0.2600	0.2365	0.2119	0.1669	0.1593	0.3039	0.5349	
1.85	0.3652	0.3592	0.3413	0.3114	0.2706	0.2468	0.2218	0.1755	0.1655	0.3066	0.5360	
1.90	0.3761	0.3702	0.3522	0.3222	0.2811	0.2571	0.2317	0.1842	0.1718	0.3094	0.5371	
1.95	0.3870	0.3810	0.3630	0.3330	0.2917	0.2674	0.2418	0.1930	0.1782	0.3121	0.5382	
2.00	0.3977	0.3917	0.3737	0.3437	0.3022	0.2778	0.2518	0.2018	0.1847	0.3149	0.5392	
2.05	0.4083	0.4023	0.3844	0.3544	0.3127	0.2881	0.2618	0.2107	0.1912	0.3177	0.5403	
2.10	0.4188	0.4129	0.3949	0.3650	0.3232	0.2984	0.2719	0.2196	0.1978	0.3205	0.5413	
2.15	0.4292	0.4232	0.4054	0.3754	0.3336	0.3087	0.2819	0.2286	0.2044	0.3233	0.5423	
2.20	0.4394	0.4335	0.4157	0.3858	0.3440	0.3190	0.2919	0.2376	0.2111	0.3261	0.5434	
2.25	0.4495	0.4436	0.4259	0.3961	0.3543	0.3292	0.3019	0.2465	0.2178	0.3290	0.5444	
2.30	0.4595	0.4536	0.4360	0.4063	0.3645	0.3393	0.3118	0.2555	0.2246	0.3319	0.5454	
2.35	0.4693	0.4635	0.4460	0.4164	0.3746	0.3493	0.3217	0.2645	0.2314	0.3348	0.5464	
2.40	0.4789	0.4732	0.4558	0.4264	0.3846	0.3593	0.3315	0.2735	0.2382	0.3377	0.5474	
2.45	0.4884	0.4827	0.4655	0.4362	0.3945	0.3692	0.3413	0.2825	0.2451	0.3407	0.5484	
2.50	0.4978	0.4921	0.4750	0.4459	0.4044	0.3799	0.3510	0.2914	0.2520	0.3436	0.5494	
2.55	0.5070	0.5014	0.4844	0.4554	0.4141	0.3887	0.3606	0.3003	0.2589	0.3466	0.5503	
2.60	0.5160	0.5105	0.4936	0.4649	0.4236	0.3983	0.3701	0.3092	0.2658	0.3496	0.5513	
2.65	0.5249	0.5194	0.5027	0.4742	0.4331	0.4078	0.3795	0.3180	0.2727	0.3527	0.5523	
2.70	0.5336	0.5282	0.5116	0.4833	0.4424	0.4172	0.3889	0.3268	0.2796	0.3557	0.5533	
2.75	0.5422	0.5368	0.5204	0.4923	0.4516	0.4264	0.3981	0.3355	0.2865	0.3588	0.5543	
2.80	0.5506	0.5452	0.5290	0.5011	0.4607	0.4356	0.4072	0.3442	0.2934	0.3618	0.5552	
2.85	0.5588	0.5535	0.5374	0.5098	0.4697	0.4448	0.4163	0.3528	0.3004	0.3649	0.5562	
2.90	0.5669	0.5617	0.5458	0.5184	0.4785	0.4535	0.4252	0.3613	0.3072	0.3680	0.5572	
2.95	0.5748	0.5696	0.5539	0.5268	0.4872	0.4623	0.4340	0.3698	0.3141	0.3712	0.5582	
3.00	0.5826	0.5775	0.5619	0.5351	0.4957	0.4709	0.4427	0.3781	0.3210	0.3743	0.5591	

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RP WHERE N=1.75

PAGE 153

THETA K	0	10	20	30	40	45	50	50	70	80	85
0.00	0.0744	0.0718	0.0639	0.0507	0.0327	0.0225	0.0124	0.0000	0.0289	0.2138	0.4720
0.05	0.0747	0.0721	0.0642	0.0510	0.0329	0.0226	0.0126	0.0001	0.0290	0.2140	0.4722
0.10	0.0755	0.0730	0.0650	0.0517	0.0334	0.0231	0.0130	0.0004	0.0293	0.2145	0.4727
0.15	0.0771	0.0745	0.0664	0.0528	0.0343	0.0239	0.0136	0.0009	0.0299	0.2154	0.4736
0.20	0.0793	0.0765	0.0683	0.0544	0.0356	0.0249	0.0145	0.0015	0.0306	0.2165	0.4747
0.25	0.0820	0.0792	0.0707	0.0565	0.0372	0.0264	0.0157	0.0024	0.0316	0.2180	0.4761
0.30	0.0853	0.0824	0.0737	0.0591	0.0392	0.0281	0.0172	0.0035	0.0328	0.2197	0.4777
0.35	0.0891	0.0861	0.0771	0.0621	0.0416	0.0302	0.0190	0.0049	0.0342	0.2215	0.4795
0.40	0.0936	0.0905	0.0811	0.0655	0.0444	0.0326	0.0211	0.0065	0.0358	0.2236	0.4814
0.45	0.0985	0.0953	0.0856	0.0694	0.0476	0.0354	0.0235	0.0084	0.0376	0.2258	0.4833
0.50	0.1040	0.1006	0.0906	0.0738	0.0512	0.0385	0.0263	0.0106	0.0396	0.2281	0.4854
0.55	0.1100	0.1065	0.0960	0.0786	0.0552	0.0422	0.0294	0.0130	0.0418	0.2304	0.4874
0.60	0.1164	0.1128	0.1019	0.0838	0.0596	0.0461	0.0329	0.0158	0.0442	0.2328	0.4895
0.65	0.1234	0.1196	0.1082	0.0895	0.0644	0.0504	0.0368	0.0188	0.0468	0.2353	0.4915
0.70	0.1307	0.1268	0.1150	0.0956	0.0696	0.0552	0.0410	0.0222	0.0496	0.2378	0.4935
0.75	0.1385	0.1344	0.1222	0.1020	0.0752	0.0603	0.0456	0.0259	0.0525	0.2403	0.4954
0.80	0.1466	0.1424	0.1297	0.1089	0.0811	0.0657	0.0506	0.0299	0.0557	0.2428	0.4973
0.85	0.1551	0.1507	0.1377	0.1161	0.0875	0.0716	0.0559	0.0342	0.0591	0.2453	0.4992
0.90	0.1639	0.1594	0.1459	0.1237	0.0942	0.0778	0.0616	0.0387	0.0626	0.2478	0.5010
0.95	0.1731	0.1684	0.1545	0.1316	0.1012	0.0843	0.0675	0.0436	0.0663	0.2503	0.5027
1.00	0.1825	0.1777	0.1634	0.1399	0.1086	0.0912	0.0740	0.0488	0.0702	0.2527	0.5044
1.05	0.1922	0.1872	0.1725	0.1484	0.1163	0.0984	0.0807	0.0543	0.0742	0.2552	0.5060
1.10	0.2021	0.1970	0.1820	0.1572	0.1243	0.1060	0.0876	0.0600	0.0784	0.2577	0.5075
1.15	0.2122	0.2070	0.1916	0.1663	0.1326	0.1138	0.0949	0.0660	0.0828	0.2602	0.5090
1.20	0.2224	0.2172	0.2014	0.1756	0.1412	0.1219	0.1026	0.0723	0.0874	0.2627	0.5105
1.25	0.2329	0.2275	0.2115	0.1852	0.1500	0.1302	0.1103	0.0787	0.0920	0.2652	0.5119
1.30	0.2434	0.2380	0.2217	0.1949	0.1590	0.1388	0.1184	0.0855	0.0969	0.2677	0.5133
1.35	0.2541	0.2486	0.2320	0.2048	0.1683	0.1475	0.1267	0.0924	0.1019	0.2702	0.5146
1.40	0.2649	0.2593	0.2425	0.2148	0.1777	0.1565	0.1352	0.0995	0.1070	0.2728	0.5159
1.45	0.2757	0.2700	0.2530	0.2250	0.1873	0.1658	0.1439	0.1069	0.1122	0.2753	0.5172
1.50	0.2865	0.2809	0.2637	0.2353	0.1970	0.1752	0.1528	0.1144	0.1176	0.2779	0.5185
1.55	0.2975	0.2917	0.2744	0.2457	0.2069	0.1847	0.1618	0.1221	0.1231	0.2804	0.5197

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RF WHERE N=1.75

PAGE 154

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3085	0.3026	0.2851	0.2562	0.2169	0.1844	0.1710	0.1299	0.1287	0.2830	0.5209
1.65	0.3194	0.3135	0.2959	0.2667	0.2270	0.2042	0.1804	0.1379	0.1345	0.2856	0.5220
1.70	0.3303	0.3244	0.3066	0.2773	0.2372	0.2140	0.1898	0.1460	0.1403	0.2882	0.5232
1.75	0.3412	0.3352	0.3174	0.2879	0.2474	0.2240	0.1994	0.1542	0.1462	0.2909	0.5243
1.80	0.3520	0.3460	0.3282	0.2985	0.2577	0.2340	0.2090	0.1626	0.1523	0.2935	0.5254
1.85	0.3628	0.3568	0.3389	0.3091	0.2680	0.2440	0.2187	0.1710	0.1584	0.2962	0.5265
1.90	0.3735	0.3675	0.3495	0.3196	0.2784	0.2541	0.2284	0.1796	0.1646	0.2989	0.5276
1.95	0.3841	0.3781	0.3601	0.3302	0.2887	0.2642	0.2382	0.1882	0.1709	0.3017	0.5286
2.00	0.3946	0.3886	0.3707	0.3407	0.2990	0.2744	0.2481	0.1958	0.1772	0.3044	0.5297
2.05	0.4050	0.3991	0.3811	0.3511	0.3093	0.2845	0.2579	0.2056	0.1837	0.3072	0.5307
2.10	0.4153	0.4094	0.3915	0.3615	0.3196	0.2945	0.2678	0.2143	0.1902	0.3100	0.5318
2.15	0.4255	0.4196	0.4018	0.3718	0.3298	0.3047	0.2775	0.2231	0.1967	0.3128	0.5328
2.20	0.4356	0.4297	0.4119	0.3820	0.3400	0.3148	0.2874	0.2320	0.2033	0.3156	0.5338
2.25	0.4455	0.4397	0.4220	0.3922	0.3501	0.3248	0.2972	0.2408	0.2100	0.3185	0.5348
2.30	0.4554	0.4495	0.4319	0.4022	0.3601	0.3348	0.3070	0.2497	0.2167	0.3214	0.5358
2.35	0.4650	0.4592	0.4417	0.4121	0.3701	0.3447	0.3167	0.2586	0.2234	0.3243	0.5368
2.40	0.4746	0.4688	0.4514	0.4219	0.3800	0.3545	0.3264	0.2674	0.2302	0.3272	0.5378
2.45	0.4840	0.4783	0.4610	0.4316	0.3898	0.3642	0.3360	0.2763	0.2370	0.3301	0.5388
2.50	0.4932	0.4876	0.4704	0.4412	0.3994	0.3739	0.3456	0.2851	0.2438	0.3331	0.5398
2.55	0.5023	0.4967	0.4797	0.4506	0.4090	0.3835	0.3551	0.2939	0.2506	0.3361	0.5408
2.60	0.5113	0.5057	0.4888	0.4600	0.4185	0.3929	0.3645	0.3026	0.2575	0.3391	0.5418
2.65	0.5201	0.5145	0.4978	0.4691	0.4278	0.4023	0.3738	0.3114	0.2643	0.3421	0.5428
2.70	0.5287	0.5232	0.5066	0.4782	0.4371	0.4116	0.3830	0.3201	0.2712	0.3452	0.5438
2.75	0.5372	0.5318	0.5153	0.4871	0.4462	0.4208	0.3922	0.3287	0.2781	0.3482	0.5448
2.80	0.5455	0.5402	0.5239	0.4959	0.4552	0.4298	0.4012	0.3373	0.2850	0.3513	0.5457
2.85	0.5537	0.5484	0.5323	0.5045	0.4641	0.4388	0.4102	0.3458	0.2918	0.3544	0.5467
2.90	0.5617	0.5565	0.5405	0.5130	0.4728	0.4476	0.4190	0.3543	0.2987	0.3575	0.5477
2.95	0.5696	0.5644	0.5486	0.5214	0.4814	0.4563	0.4278	0.3626	0.3055	0.3606	0.5487
3.00	0.5774	0.5722	0.5566	0.5296	0.4899	0.4649	0.4364	0.3710	0.3124	0.3638	0.5497

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=1.80

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0816	0.0789	0.0705	0.0564	0.0370	0.0260	0.0149	0.0002	0.0261	0.2081	0.4665
0.05	0.0819	0.0791	0.0707	0.0566	0.0372	0.0261	0.0151	0.0003	0.0262	0.2083	0.4666
0.10	0.0828	0.0800	0.0715	0.0573	0.0377	0.0266	0.0155	0.0005	0.0265	0.2087	0.4671
0.15	0.0843	0.0814	0.0728	0.0584	0.0386	0.0273	0.0161	0.0010	0.0270	0.2095	0.4678
0.20	0.0863	0.0834	0.0747	0.0600	0.0398	0.0284	0.0170	0.0017	0.0277	0.2105	0.4687
0.25	0.0889	0.0859	0.0770	0.0620	0.0415	0.0298	0.0182	0.0026	0.0286	0.2117	0.4699
0.30	0.0921	0.0890	0.0798	0.0645	0.0434	0.0315	0.0197	0.0037	0.0297	0.2132	0.4713
0.35	0.0958	0.0926	0.0832	0.0674	0.0458	0.0335	0.0215	0.0051	0.0310	0.2148	0.4728
0.40	0.1000	0.0968	0.0870	0.0707	0.0485	0.0360	0.0236	0.0067	0.0325	0.2166	0.4745
0.45	0.1048	0.1014	0.0913	0.0745	0.0517	0.0388	0.0260	0.0085	0.0342	0.2186	0.4762
0.50	0.1100	0.1066	0.0961	0.0787	0.0552	0.0419	0.0287	0.0106	0.0361	0.2206	0.4780
0.55	0.1158	0.1122	0.1014	0.0834	0.0591	0.0454	0.0318	0.0130	0.0382	0.2227	0.4799
0.60	0.1220	0.1182	0.1070	0.0885	0.0633	0.0492	0.0352	0.0157	0.0404	0.2249	0.4817
0.65	0.1286	0.1247	0.1132	0.0939	0.0680	0.0535	0.0390	0.0187	0.0429	0.2272	0.4835
0.70	0.1357	0.1317	0.1197	0.0998	0.0730	0.0580	0.0431	0.0220	0.0456	0.2295	0.4854
0.75	0.1431	0.1390	0.1266	0.1061	0.0785	0.0630	0.0476	0.0255	0.0484	0.2318	0.4872
0.80	0.1509	0.1467	0.1339	0.1127	0.0843	0.0683	0.0525	0.0294	0.0515	0.2341	0.4889
0.85	0.1591	0.1547	0.1415	0.1197	0.0904	0.0740	0.0576	0.0336	0.0547	0.2365	0.4907
0.90	0.1676	0.1631	0.1495	0.1270	0.0969	0.0800	0.0631	0.0380	0.0581	0.2388	0.4923
0.95	0.1764	0.1718	0.1578	0.1347	0.1037	0.0864	0.0690	0.0428	0.0617	0.2412	0.4940
1.00	0.1855	0.1807	0.1664	0.1427	0.1109	0.0931	0.0752	0.0478	0.0654	0.2436	0.4955
1.05	0.1949	0.1899	0.1752	0.1509	0.1184	0.1000	0.0816	0.0531	0.0693	0.2460	0.4971
1.10	0.2044	0.1994	0.1843	0.1595	0.1261	0.1073	0.0884	0.0587	0.0734	0.2484	0.4986
1.15	0.2142	0.2090	0.1936	0.1683	0.1342	0.1149	0.0955	0.0645	0.0777	0.2508	0.5000
1.20	0.2241	0.2189	0.2032	0.1773	0.1425	0.1228	0.1028	0.0706	0.0821	0.2532	0.5014
1.25	0.2342	0.2289	0.2129	0.1865	0.1510	0.1309	0.1104	0.0769	0.0867	0.2556	0.5028
1.30	0.2445	0.2391	0.2228	0.1959	0.1598	0.1392	0.1183	0.0834	0.0914	0.2581	0.5042
1.35	0.2549	0.2493	0.2328	0.2055	0.1687	0.1478	0.1263	0.0902	0.0952	0.2605	0.5055
1.40	0.2653	0.2597	0.2430	0.2153	0.1779	0.1565	0.1346	0.0972	0.1013	0.2630	0.5067
1.45	0.2758	0.2702	0.2532	0.2252	0.1872	0.1655	0.1431	0.1043	0.1064	0.2655	0.5080
1.50	0.2864	0.2807	0.2636	0.2352	0.1967	0.1745	0.1517	0.1116	0.1117	0.2680	0.5092
1.55	0.2970	0.2913	0.2740	0.2453	0.2063	0.1839	0.1605	0.1191	0.1170	0.2705	0.5104

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1-80

PAGE 156

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3077	0.3019	0.2844	0.2555	0.2161	0.1933	0.1695	0.1268	0.1226	0.2731	0.5116
1.65	0.3183	0.3125	0.2949	0.2658	0.2259	0.2028	0.1786	0.1346	0.1282	0.2757	0.5127
1.70	0.3290	0.3231	0.3054	0.2761	0.2358	0.2124	0.1878	0.1425	0.1359	0.2783	0.5139
1.75	0.3396	0.3337	0.3159	0.2864	0.2458	0.2221	0.1971	0.1506	0.1397	0.2809	0.5150
1.80	0.3502	0.3443	0.3264	0.2967	0.2558	0.2319	0.2065	0.1587	0.1457	0.2835	0.5161
1.85	0.3607	0.3548	0.3369	0.3071	0.2659	0.2417	0.2160	0.1670	0.1517	0.2862	0.5172
1.90	0.3712	0.3652	0.3473	0.3174	0.2760	0.2516	0.2256	0.1754	0.1578	0.2888	0.5182
1.95	0.3816	0.3756	0.3577	0.3278	0.2861	0.2615	0.2351	0.1838	0.1640	0.2916	0.5193
2.00	0.3919	0.3859	0.3680	0.3380	0.2962	0.2714	0.2448	0.1923	0.1703	0.2943	0.5203
2.05	0.4021	0.3962	0.3783	0.3483	0.3063	0.2813	0.2544	0.2009	0.1766	0.2970	0.5214
2.10	0.4122	0.4063	0.3885	0.3585	0.3164	0.2913	0.2641	0.2095	0.1830	0.2998	0.5224
2.15	0.4223	0.4164	0.3986	0.3686	0.3264	0.3012	0.2737	0.2182	0.1895	0.3026	0.5234
2.20	0.4322	0.4263	0.4085	0.3786	0.3364	0.3110	0.2834	0.2268	0.1960	0.3054	0.5245
2.25	0.4420	0.4361	0.4184	0.3886	0.3463	0.3209	0.2930	0.2356	0.2026	0.3083	0.5255
2.30	0.4516	0.4458	0.4282	0.3984	0.3562	0.3306	0.3026	0.2443	0.2092	0.3112	0.5265
2.35	0.4612	0.4554	0.4379	0.4082	0.3660	0.3404	0.3122	0.2530	0.2159	0.3141	0.5275
2.40	0.4706	0.4648	0.4474	0.4179	0.3757	0.3501	0.3217	0.2617	0.2226	0.3170	0.5285
2.45	0.4799	0.4742	0.4568	0.4274	0.3854	0.3597	0.3312	0.2705	0.2293	0.3199	0.5295
2.50	0.4890	0.4833	0.4661	0.4369	0.3949	0.3692	0.3406	0.2792	0.2360	0.3229	0.5305
2.55	0.4980	0.4924	0.4753	0.4462	0.4044	0.3786	0.3500	0.2879	0.2428	0.3259	0.5315
2.60	0.5068	0.5013	0.4843	0.4554	0.4137	0.3880	0.3593	0.2965	0.2496	0.3289	0.5325
2.65	0.5156	0.5100	0.4932	0.4645	0.4230	0.3973	0.3685	0.3051	0.2564	0.3319	0.5335
2.70	0.5241	0.5186	0.5020	0.4734	0.4321	0.4064	0.3776	0.3137	0.2632	0.3349	0.5344
2.75	0.5325	0.5271	0.5106	0.4823	0.4411	0.4155	0.3866	0.3223	0.2701	0.3380	0.5354
2.80	0.5408	0.5354	0.5191	0.4909	0.4500	0.4245	0.3956	0.3308	0.2769	0.3411	0.5364
2.85	0.5489	0.5436	0.5274	0.4995	0.4588	0.4333	0.4045	0.3392	0.2837	0.3442	0.5374
2.90	0.5569	0.5517	0.5356	0.5079	0.4675	0.4421	0.4132	0.3476	0.2905	0.3473	0.5384
2.95	0.5648	0.5595	0.5436	0.5162	0.4760	0.4507	0.4219	0.3559	0.2973	0.3504	0.5394
3.00	0.5724	0.5673	0.5516	0.5244	0.4844	0.4592	0.4304	0.3642	0.3041	0.3535	0.5404

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RP WHERE N=1-85

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0890	0.0860	0.0771	0.0621	0.0415	0.0296	0.0176	0.0005	0.0234	0.2023	0.4607
0.05	0.0892	0.0863	0.0774	0.0624	0.0416	0.0298	0.0178	0.0006	0.0235	0.2025	0.4609
0.10	0.0901	0.0871	0.0781	0.0630	0.0422	0.0302	0.0182	0.0009	0.0238	0.2028	0.4612
0.15	0.0915	0.0885	0.0794	0.0641	0.0430	0.0310	0.0188	0.0014	0.0243	0.2035	0.4618
0.20	0.0934	0.0904	0.0811	0.0656	0.0443	0.0320	0.0197	0.0021	0.0249	0.2043	0.4626
0.25	0.0959	0.0928	0.0834	0.0676	0.0459	0.0334	0.0209	0.0030	0.0258	0.2054	0.4637
0.30	0.0989	0.0958	0.0861	0.0700	0.0478	0.0351	0.0224	0.0041	0.0268	0.2067	0.4649
0.35	0.1025	0.0992	0.0894	0.0728	0.0501	0.0372	0.0242	0.0054	0.0280	0.2081	0.4662
0.40	0.1065	0.1032	0.0930	0.0761	0.0528	0.0396	0.0262	0.0070	0.0294	0.2097	0.4676
0.45	0.1111	0.1076	0.0972	0.0797	0.0559	0.0423	0.0286	0.0088	0.0310	0.2115	0.4692
0.50	0.1162	0.1126	0.1018	0.0838	0.0593	0.0453	0.0313	0.0109	0.0328	0.2133	0.4708
0.55	0.1217	0.1180	0.1069	0.0883	0.0631	0.0487	0.0344	0.0132	0.0348	0.2152	0.4724
0.60	0.1275	0.1238	0.1123	0.0932	0.0672	0.0525	0.0377	0.0159	0.0370	0.2172	0.4741
0.65	0.1340	0.1301	0.1182	0.0985	0.0718	0.0566	0.0414	0.0188	0.0393	0.2193	0.4757
0.70	0.1408	0.1367	0.1245	0.1042	0.0767	0.0611	0.0454	0.0220	0.0419	0.2214	0.4774
0.75	0.1480	0.1438	0.1312	0.1103	0.0819	0.0659	0.0498	0.0255	0.0446	0.2236	0.4791
0.80	0.1555	0.1512	0.1382	0.1167	0.0876	0.0711	0.0546	0.0292	0.0475	0.2258	0.4807
0.85	0.1634	0.1589	0.1456	0.1235	0.0935	0.0766	0.0596	0.0333	0.0506	0.2280	0.4823
0.90	0.1715	0.1670	0.1533	0.1305	0.0998	0.0825	0.0649	0.0376	0.0539	0.2302	0.4839
0.95	0.1801	0.1754	0.1613	0.1380	0.1065	0.0886	0.0706	0.0422	0.0574	0.2325	0.4854
1.00	0.1888	0.1840	0.1696	0.1457	0.1134	0.0951	0.0766	0.0471	0.0610	0.2348	0.4869
1.05	0.1978	0.1929	0.1781	0.1537	0.1206	0.1019	0.0829	0.0523	0.0648	0.2370	0.4884
1.10	0.2071	0.2020	0.1869	0.1619	0.1282	0.1090	0.0895	0.0577	0.0688	0.2394	0.4898
1.15	0.2165	0.2114	0.1960	0.1705	0.1360	0.1164	0.0963	0.0634	0.0730	0.2417	0.4912
1.20	0.2261	0.2209	0.2052	0.1782	0.1440	0.1240	0.1036	0.0693	0.0772	0.2440	0.4926
1.25	0.2359	0.2306	0.2146	0.1882	0.1523	0.1318	0.1108	0.0754	0.0817	0.2464	0.4939
1.30	0.2459	0.2404	0.2242	0.1973	0.1608	0.1399	0.1185	0.0818	0.0863	0.2488	0.4952
1.35	0.2559	0.2504	0.2339	0.2066	0.1695	0.1483	0.1263	0.0884	0.0911	0.2512	0.4965
1.40	0.2661	0.2605	0.2438	0.2161	0.1784	0.1568	0.1344	0.0951	0.0959	0.2536	0.4977
1.45	0.2763	0.2706	0.2537	0.2257	0.1875	0.1655	0.1426	0.1021	0.1010	0.2561	0.4990
1.50	0.2865	0.2809	0.2638	0.2354	0.1967	0.1743	0.1510	0.1093	0.1061	0.2585	0.5002
1.55	0.2969	0.2912	0.2739	0.2453	0.2061	0.1834	0.1596	0.1166	0.1114	0.2610	0.5013

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=1.85

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3073	0.3015	0.2841	0.2652	0.2156	0.1925	0.1683	0.1240	0.1168	0.2635	0.5025
1.65	0.3177	0.3118	0.2943	0.2652	0.2251	0.2016	0.1772	0.1317	0.1223	0.2661	0.5036
1.70	0.3280	0.3222	0.3046	0.2752	0.2348	0.2112	0.1862	0.1394	0.1280	0.2686	0.5047
1.75	0.3384	0.3325	0.3148	0.2853	0.2445	0.2206	0.1953	0.1473	0.1337	0.2712	0.5058
1.80	0.3487	0.3428	0.3251	0.2954	0.2543	0.2302	0.2049	0.1553	0.1395	0.2738	0.5069
1.85	0.3590	0.3531	0.3353	0.3055	0.2642	0.2398	0.2137	0.1634	0.1455	0.2765	0.5080
1.90	0.3693	0.3633	0.3455	0.3156	0.2740	0.2494	0.2231	0.1716	0.1515	0.2791	0.5091
1.95	0.3795	0.3735	0.3557	0.3257	0.2839	0.2591	0.2324	0.1799	0.1576	0.2818	0.5101
2.00	0.3896	0.3836	0.3658	0.3358	0.2938	0.2688	0.2419	0.1882	0.1638	0.2845	0.5112
2.05	0.3996	0.3937	0.3758	0.3458	0.3037	0.2785	0.2513	0.1966	0.1700	0.2872	0.5122
2.10	0.4095	0.4036	0.3858	0.3558	0.3136	0.2883	0.2608	0.2051	0.1763	0.2900	0.5132
2.15	0.4194	0.4135	0.3957	0.3657	0.3234	0.2980	0.2703	0.2136	0.1827	0.2928	0.5143
2.20	0.4291	0.4233	0.4055	0.3756	0.3332	0.3077	0.2797	0.2221	0.1892	0.2956	0.5153
2.25	0.4388	0.4329	0.4152	0.3853	0.3430	0.3173	0.2892	0.2307	0.1956	0.2984	0.5163
2.30	0.4483	0.4425	0.4249	0.3950	0.3527	0.3269	0.2986	0.2393	0.2022	0.3013	0.5173
2.35	0.4577	0.4519	0.4344	0.4047	0.3623	0.3365	0.3080	0.2479	0.2088	0.3042	0.5183
2.40	0.4670	0.4612	0.4438	0.4142	0.3719	0.3460	0.3174	0.2565	0.2154	0.3071	0.5193
2.45	0.4761	0.4704	0.4531	0.4236	0.3814	0.3555	0.3268	0.2651	0.2220	0.3100	0.5203
2.50	0.4851	0.4795	0.4622	0.4329	0.3908	0.3649	0.3360	0.2737	0.2287	0.3130	0.5213
2.55	0.4940	0.4884	0.4713	0.4421	0.4001	0.3742	0.3453	0.2822	0.2354	0.3160	0.5223
2.60	0.5028	0.4972	0.4802	0.4512	0.4093	0.3834	0.3544	0.2908	0.2422	0.3190	0.5233
2.65	0.5114	0.5059	0.4890	0.4602	0.4184	0.3926	0.3635	0.2993	0.2489	0.3220	0.5243
2.70	0.5199	0.5144	0.4977	0.4690	0.4275	0.4016	0.3725	0.3078	0.2557	0.3250	0.5253
2.75	0.5282	0.5228	0.5062	0.4777	0.4364	0.4106	0.3815	0.3163	0.2624	0.3281	0.5263
2.80	0.5364	0.5310	0.5146	0.4864	0.4452	0.4194	0.3903	0.3247	0.2692	0.3312	0.5273
2.85	0.5445	0.5391	0.5229	0.4948	0.4539	0.4282	0.3991	0.3330	0.2760	0.3342	0.5283
2.90	0.5524	0.5471	0.5310	0.5032	0.4625	0.4369	0.4078	0.3413	0.2827	0.3374	0.5293
2.95	0.5602	0.5549	0.5390	0.5114	0.4709	0.4454	0.4164	0.3496	0.2895	0.3405	0.5303
3.00	0.5678	0.5626	0.5468	0.5195	0.4793	0.4539	0.4248	0.3578	0.2962	0.3436	0.5313

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=1-90

PAGE 159

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.0963	0.0932	0.0838	0.0680	0.0461	0.0334	0.0205	0.0011	0.0208	0.1964	0.4548
0.05	0.0966	0.0935	0.0841	0.0682	0.0463	0.0335	0.0207	0.0012	0.0209	0.1965	0.4549
0.10	0.0974	0.0943	0.0848	0.0689	0.0468	0.0340	0.0211	0.0014	0.0212	0.1969	0.4552
0.15	0.0987	0.0956	0.0860	0.0699	0.0476	0.0348	0.0217	0.0019	0.0216	0.1974	0.4557
0.20	0.1006	0.0974	0.0877	0.0714	0.0488	0.0358	0.0226	0.0026	0.0223	0.1982	0.4564
0.25	0.1030	0.0997	0.0899	0.0733	0.0504	0.0372	0.0238	0.0035	0.0231	0.1991	0.4573
0.30	0.1059	0.1026	0.0925	0.0756	0.0523	0.0389	0.0253	0.0046	0.0240	0.2003	0.4584
0.35	0.1093	0.1059	0.0956	0.0784	0.0546	0.0409	0.0270	0.0059	0.0252	0.2015	0.4595
0.40	0.1132	0.1097	0.0992	0.0815	0.0572	0.0433	0.0291	0.0075	0.0265	0.2030	0.4608
0.45	0.1176	0.1140	0.1032	0.0851	0.0602	0.0459	0.0314	0.0093	0.0281	0.2045	0.4622
0.50	0.1224	0.1187	0.1076	0.0890	0.0635	0.0489	0.0341	0.0113	0.0298	0.2062	0.4636
0.55	0.1277	0.1239	0.1125	0.0934	0.0672	0.0523	0.0371	0.0137	0.0317	0.2079	0.4651
0.60	0.1334	0.1295	0.1178	0.0981	0.0713	0.0559	0.0404	0.0162	0.0337	0.2098	0.4666
0.65	0.1395	0.1355	0.1234	0.1033	0.0757	0.0600	0.0440	0.0191	0.0360	0.2117	0.4681
0.70	0.1461	0.1419	0.1295	0.1088	0.0805	0.0643	0.0479	0.0222	0.0385	0.2136	0.4696
0.75	0.1530	0.1487	0.1359	0.1146	0.0856	0.0690	0.0522	0.0256	0.0411	0.2157	0.4711
0.80	0.1602	0.1559	0.1427	0.1208	0.0910	0.0741	0.0568	0.0293	0.0439	0.2177	0.4727
0.85	0.1678	0.1633	0.1498	0.1274	0.0968	0.0794	0.0617	0.0332	0.0469	0.2198	0.4742
0.90	0.1757	0.1711	0.1573	0.1342	0.1030	0.0851	0.0669	0.0375	0.0501	0.2219	0.4756
0.95	0.1839	0.1792	0.1650	0.1414	0.1094	0.0911	0.0724	0.0420	0.0535	0.2241	0.4771
1.00	0.1923	0.1875	0.1730	0.1489	0.1161	0.0974	0.0782	0.0467	0.0570	0.2262	0.4785
1.05	0.2011	0.1961	0.1813	0.1566	0.1231	0.1040	0.0844	0.0517	0.0607	0.2285	0.4799
1.10	0.2100	0.2049	0.1898	0.1646	0.1305	0.1109	0.0908	0.0570	0.0646	0.2307	0.4813
1.15	0.2191	0.2140	0.1985	0.1729	0.1380	0.1180	0.0974	0.0625	0.0686	0.2329	0.4826
1.20	0.2284	0.2232	0.2075	0.1814	0.1458	0.1254	0.1044	0.0683	0.0728	0.2352	0.4839
1.25	0.2379	0.2326	0.2166	0.1900	0.1539	0.1331	0.1115	0.0742	0.0771	0.2375	0.4852
1.30	0.2475	0.2421	0.2259	0.1989	0.1621	0.1409	0.1189	0.0804	0.0816	0.2398	0.4865
1.35	0.2573	0.2518	0.2353	0.2080	0.1706	0.1490	0.1266	0.0869	0.0862	0.2422	0.4877
1.40	0.2671	0.2616	0.2449	0.2172	0.1792	0.1573	0.1344	0.0935	0.0910	0.2446	0.4889
1.45	0.2771	0.2714	0.2546	0.2266	0.1881	0.1657	0.1424	0.1003	0.0960	0.2470	0.4901
1.50	0.2871	0.2814	0.2643	0.2360	0.1970	0.1744	0.1506	0.1072	0.1010	0.2494	0.4913
1.55	0.2971	0.2914	0.2742	0.2455	0.2061	0.1832	0.1590	0.1144	0.1062	0.2518	0.4924

TABLES OF CALCULATIONS FOR W. H. WRIGHT ESR.

VALUES OF RP WHERE N=1-90

PAGE 160

THETA K	0	10	20	30	40	45	50	60	70	80	85
1-60	0.3072	0.3014	0.2841	0.2552	0.2154	0.1921	0.1675	0.1217	0.1115	0.2543	0.4936
1-65	0.3173	0.3115	0.2940	0.2649	0.2247	0.2011	0.1761	0.1291	0.1169	0.2568	0.4947
1-70	0.3274	0.3216	0.3040	0.2747	0.2341	0.2102	0.1849	0.1367	0.1224	0.2593	0.4958
1-75	0.3375	0.3317	0.3140	0.2845	0.2436	0.2195	0.1938	0.1444	0.1281	0.2619	0.4969
1-80	0.3476	0.3418	0.3240	0.2944	0.2532	0.2288	0.2027	0.1522	0.1338	0.2645	0.4980
1-85	0.3577	0.3518	0.3340	0.3043	0.2628	0.2382	0.2118	0.1602	0.1396	0.2671	0.4990
1-90	0.3677	0.3618	0.3440	0.3141	0.2724	0.2475	0.2209	0.1682	0.1455	0.2697	0.5001
1-95	0.3777	0.3718	0.3540	0.3240	0.2821	0.2571	0.2301	0.1763	0.1515	0.2724	0.5011
2-00	0.3876	0.3817	0.3639	0.3339	0.2918	0.2665	0.2393	0.1845	0.1576	0.2751	0.5022
2-05	0.3974	0.3915	0.3737	0.3437	0.3014	0.2761	0.2486	0.1927	0.1638	0.2778	0.5032
2-10	0.4072	0.4013	0.3835	0.3535	0.3111	0.2855	0.2579	0.2010	0.1700	0.2805	0.5042
2-15	0.4168	0.4110	0.3932	0.3632	0.3208	0.2951	0.2671	0.2094	0.1763	0.2833	0.5052
2-20	0.4264	0.4206	0.4028	0.3729	0.3304	0.3046	0.2764	0.2178	0.1827	0.2861	0.5063
2-25	0.4359	0.4301	0.4124	0.3825	0.3400	0.3141	0.2857	0.2262	0.1891	0.2889	0.5073
2-30	0.4453	0.4394	0.4219	0.3920	0.3495	0.3235	0.2950	0.2347	0.1955	0.2917	0.5083
2-35	0.4545	0.4487	0.4312	0.4015	0.3590	0.3330	0.3043	0.2431	0.2021	0.2946	0.5093
2-40	0.4637	0.4579	0.4405	0.4108	0.3684	0.3423	0.3135	0.2516	0.2086	0.2975	0.5103
2-45	0.4727	0.4670	0.4496	0.4201	0.3777	0.3517	0.3227	0.2601	0.2152	0.3004	0.5113
2-50	0.4816	0.4759	0.4587	0.4293	0.3870	0.3609	0.3318	0.2686	0.2218	0.3034	0.5123
2-55	0.4904	0.4847	0.4676	0.4384	0.3962	0.3701	0.3409	0.2770	0.2284	0.3064	0.5133
2-60	0.4990	0.4934	0.4764	0.4473	0.4053	0.3792	0.3500	0.2855	0.2351	0.3094	0.5143
2-65	0.5075	0.5020	0.4851	0.4562	0.4143	0.3882	0.3589	0.2939	0.2418	0.3124	0.5153
2-70	0.5159	0.5104	0.4937	0.4649	0.4232	0.3972	0.3678	0.3023	0.2485	0.3154	0.5163
2-75	0.5242	0.5187	0.5021	0.4736	0.4320	0.4060	0.3767	0.3106	0.2552	0.3185	0.5173
2-80	0.5323	0.5269	0.5104	0.4821	0.4407	0.4148	0.3854	0.3189	0.2619	0.3215	0.5183
2-85	0.5403	0.5349	0.5186	0.4905	0.4493	0.4234	0.3941	0.3272	0.2686	0.3246	0.5193
2-90	0.5482	0.5429	0.5267	0.4987	0.4578	0.4320	0.4027	0.3354	0.2753	0.3277	0.5203
2-95	0.5559	0.5506	0.5346	0.5069	0.4662	0.4405	0.4112	0.3436	0.2820	0.3309	0.5213
3-00	0.5635	0.5583	0.5424	0.5149	0.4744	0.4489	0.4196	0.3517	0.2887	0.3340	0.5223

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESO.

VALUES OF RP WHERE N=1-95

PAGE 161

THETA K	0	10	20	30	40	45	50	60	70	80	85
0-00	0-1037	0-1006	0-0906	0-0740	0-0508	0-0374	0-0236	0-0018	0-0184	0-1906	0-4487
0-05	0-1040	0-1007	0-0908	0-0742	0-0510	0-0376	0-0237	0-0019	0-0185	0-1906	0-4488
0-10	0-1047	0-1015	0-0915	0-0748	0-0515	0-0380	0-0241	0-0022	0-0187	0-1909	0-4491
0-15	0-1060	0-1027	0-0927	0-0758	0-0524	0-0387	0-0248	0-0027	0-0192	0-1914	0-4495
0-20	0-1078	0-1045	0-0943	0-0773	0-0535	0-0398	0-0257	0-0033	0-0197	0-1920	0-4502
0-25	0-1101	0-1067	0-0964	0-0791	0-0551	0-0412	0-0269	0-0042	0-0205	0-1929	0-4509
0-30	0-1129	0-1094	0-0990	0-0814	0-0569	0-0428	0-0283	0-0053	0-0214	0-1939	0-4518
0-35	0-1161	0-1126	0-1020	0-0840	0-0592	0-0448	0-0301	0-0066	0-0225	0-1950	0-4529
0-40	0-1199	0-1163	0-1054	0-0871	0-0617	0-0471	0-0321	0-0082	0-0238	0-1963	0-4540
0-45	0-1241	0-1204	0-1092	0-0905	0-0646	0-0497	0-0344	0-0100	0-0253	0-1977	0-4552
0-50	0-1287	0-1250	0-1135	0-0943	0-0679	0-0526	0-0370	0-0120	0-0269	0-1992	0-4565
0-55	0-1338	0-1299	0-1182	0-0986	0-0715	0-0559	0-0399	0-0143	0-0288	0-2008	0-4578
0-60	0-1393	0-1353	0-1233	0-1032	0-0755	0-0595	0-0432	0-0168	0-0308	0-2025	0-4592
0-65	0-1452	0-1411	0-1288	0-1081	0-0798	0-0634	0-0467	0-0196	0-0330	0-2043	0-4605
0-70	0-1515	0-1473	0-1346	0-1139	0-0844	0-0677	0-0506	0-0226	0-0353	0-2061	0-4620
0-75	0-1581	0-1538	0-1408	0-1191	0-0894	0-0723	0-0547	0-0260	0-0379	0-2080	0-4634
0-80	0-1651	0-1607	0-1474	0-1251	0-0947	0-0772	0-0592	0-0296	0-0406	0-2099	0-4648
0-85	0-1724	0-1679	0-1542	0-1315	0-1003	0-0824	0-0640	0-0334	0-0435	0-2119	0-4662
0-90	0-1800	0-1754	0-1614	0-1381	0-1062	0-0879	0-0691	0-0375	0-0466	0-2139	0-4675
0-95	0-1879	0-1832	0-1689	0-1451	0-1125	0-0937	0-0744	0-0419	0-0498	0-2160	0-4689
1-00	0-1961	0-1912	0-1766	0-1523	0-1190	0-0999	0-0801	0-0465	0-0533	0-2181	0-4703
1-05	0-2045	0-1995	0-1846	0-1598	0-1258	0-1063	0-0861	0-0514	0-0569	0-2202	0-4716
1-10	0-2131	0-2081	0-1929	0-1676	0-1329	0-1130	0-0923	0-0566	0-0606	0-2223	0-4729
1-15	0-2219	0-2168	0-2013	0-1755	0-1403	0-1199	0-0988	0-0619	0-0646	0-2245	0-4742
1-20	0-2310	0-2257	0-2100	0-1838	0-1479	0-1271	0-1055	0-0675	0-0686	0-2267	0-4754
1-25	0-2401	0-2348	0-2188	0-1922	0-1557	0-1345	0-1125	0-0734	0-0729	0-2289	0-4767
1-30	0-2495	0-2441	0-2278	0-2008	0-1637	0-1422	0-1197	0-0794	0-0773	0-2312	0-4779
1-35	0-2589	0-2534	0-2370	0-2096	0-1719	0-1500	0-1271	0-0857	0-0818	0-2335	0-4791
1-40	0-2685	0-2629	0-2463	0-2185	0-1803	0-1581	0-1347	0-0921	0-0865	0-2358	0-4803
1-45	0-2781	0-2725	0-2557	0-2276	0-1889	0-1663	0-1425	0-0987	0-0913	0-2382	0-4814
1-50	0-2878	0-2822	0-2652	0-2368	0-1976	0-1747	0-1505	0-1055	0-0962	0-2405	0-4826
1-55	0-2976	0-2919	0-2747	0-2461	0-2065	0-1832	0-1587	0-1125	0-1013	0-2429	0-4837

TABLES OF CALCULATIONS FOR W.H. WRIGHT E30.

VALUES OF RP WHERE $N=1.95$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3074	0.3017	0.2844	0.2596	0.2155	0.1919	0.1670	0.1197	0.1065	0.2454	0.4848
1.65	0.3173	0.3115	0.2941	0.2649	0.2245	0.2007	0.1754	0.1269	0.1118	0.2478	0.4859
1.70	0.3272	0.3213	0.3038	0.2745	0.2337	0.2096	0.1859	0.1343	0.1173	0.2503	0.4870
1.75	0.3370	0.3312	0.3136	0.2841	0.2430	0.2187	0.1926	0.1419	0.1228	0.2529	0.4881
1.80	0.3469	0.3410	0.3233	0.2937	0.2523	0.2277	0.2014	0.1495	0.1284	0.2554	0.4892
1.85	0.3567	0.3508	0.3331	0.3033	0.2617	0.2369	0.2102	0.1573	0.1342	0.2580	0.4902
1.90	0.3665	0.3606	0.3429	0.3130	0.2711	0.2461	0.2191	0.1652	0.1400	0.2606	0.4913
1.95	0.3762	0.3704	0.3526	0.3226	0.2806	0.2554	0.2281	0.1731	0.1459	0.2632	0.4923
2.00	0.3859	0.3801	0.3623	0.3323	0.2900	0.2647	0.2371	0.1811	0.1519	0.2659	0.4933
2.05	0.3956	0.3897	0.3719	0.3419	0.2995	0.2740	0.2462	0.1892	0.1580	0.2686	0.4944
2.10	0.4051	0.3993	0.3815	0.3515	0.3090	0.2833	0.2553	0.1974	0.1641	0.2713	0.4954
2.15	0.4146	0.4088	0.3910	0.3610	0.3184	0.2927	0.2644	0.2056	0.1703	0.2741	0.4964
2.20	0.4240	0.4182	0.4005	0.3705	0.3279	0.3020	0.2735	0.2138	0.1766	0.2769	0.4974
2.25	0.4333	0.4275	0.4099	0.3799	0.3373	0.3113	0.2826	0.2221	0.1829	0.2797	0.4984
2.30	0.4426	0.4368	0.4192	0.3893	0.3466	0.3206	0.2918	0.2304	0.1893	0.2825	0.4994
2.35	0.4517	0.4459	0.4284	0.3986	0.3559	0.3298	0.3009	0.2388	0.1957	0.2854	0.5004
2.40	0.4607	0.4549	0.4375	0.4078	0.3652	0.3390	0.3099	0.2471	0.2022	0.2883	0.5014
2.45	0.4696	0.4639	0.4465	0.4169	0.3744	0.3482	0.3190	0.2555	0.2087	0.2912	0.5024
2.50	0.4783	0.4727	0.4554	0.4260	0.3835	0.3573	0.3280	0.2638	0.2152	0.2941	0.5034
2.55	0.4870	0.4814	0.4642	0.4349	0.3926	0.3663	0.3369	0.2722	0.2218	0.2971	0.5044
2.60	0.4956	0.4900	0.4729	0.4438	0.4015	0.3753	0.3458	0.2805	0.2284	0.3000	0.5054
2.65	0.5040	0.4984	0.4815	0.4526	0.4104	0.3842	0.3547	0.2888	0.2350	0.3031	0.5064
2.70	0.5123	0.5068	0.4900	0.4612	0.4192	0.3930	0.3635	0.2971	0.2416	0.3061	0.5074
2.75	0.5204	0.5150	0.4983	0.4697	0.4279	0.4018	0.3722	0.3054	0.2483	0.3091	0.5084
2.80	0.5285	0.5231	0.5065	0.4781	0.4365	0.4104	0.3808	0.3136	0.2549	0.3122	0.5094
2.85	0.5364	0.5310	0.5147	0.4864	0.4450	0.4190	0.3894	0.3218	0.2616	0.3153	0.5104
2.90	0.5442	0.5389	0.5226	0.4946	0.4534	0.4275	0.3979	0.3299	0.2683	0.3184	0.5114
2.95	0.5519	0.5466	0.5305	0.5027	0.4617	0.4359	0.4063	0.3380	0.2749	0.3215	0.5124
3.00	0.5594	0.5542	0.5382	0.5106	0.4699	0.4442	0.4146	0.3460	0.2816	0.3247	0.5135

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.00

PAGE 163

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1111	0.1077	0.0974	0.0800	0.0557	0.0415	0.0258	0.0027	0.0161	0.1845	0.4426
0.05	0.1114	0.1080	0.0976	0.0802	0.0559	0.0417	0.0265	0.0028	0.0162	0.1846	0.4426
0.10	0.1121	0.1087	0.0983	0.0808	0.0564	0.0421	0.0273	0.0031	0.0164	0.1849	0.4429
0.15	0.1133	0.1099	0.0994	0.0818	0.0572	0.0429	0.0280	0.0036	0.0168	0.1853	0.4433
0.20	0.1150	0.1116	0.1010	0.0832	0.0584	0.0439	0.0289	0.0042	0.0174	0.1859	0.4438
0.25	0.1172	0.1137	0.1030	0.0850	0.0599	0.0452	0.0301	0.0051	0.0181	0.1867	0.4445
0.30	0.1193	0.1163	0.1055	0.0872	0.0617	0.0469	0.0315	0.0062	0.0190	0.1876	0.4453
0.35	0.1230	0.1194	0.1084	0.0897	0.0639	0.0488	0.0332	0.0075	0.0201	0.1886	0.4462
0.40	0.1266	0.1229	0.1117	0.0927	0.0664	0.0511	0.0352	0.0091	0.0213	0.1898	0.4472
0.45	0.1307	0.1269	0.1154	0.0960	0.0692	0.0536	0.0375	0.0108	0.0227	0.1910	0.4483
0.50	0.1351	0.1313	0.1195	0.0998	0.0724	0.0565	0.0401	0.0128	0.0243	0.1924	0.4494
0.55	0.1400	0.1360	0.1240	0.1038	0.0759	0.0597	0.0429	0.0151	0.0261	0.1939	0.4506
0.60	0.1453	0.1412	0.1289	0.1083	0.0798	0.0632	0.0461	0.0175	0.0280	0.1955	0.4519
0.65	0.1510	0.1468	0.1342	0.1131	0.0840	0.0671	0.0495	0.0203	0.0301	0.1971	0.4531
0.70	0.1570	0.1527	0.1399	0.1183	0.0885	0.0712	0.0534	0.0233	0.0324	0.1988	0.4544
0.75	0.1634	0.1590	0.1458	0.1237	0.0933	0.0757	0.0574	0.0265	0.0349	0.2006	0.4557
0.80	0.1701	0.1656	0.1522	0.1296	0.0985	0.0804	0.0618	0.0300	0.0375	0.2024	0.4570
0.85	0.1772	0.1726	0.1588	0.1357	0.1039	0.0855	0.0664	0.0338	0.0404	0.2043	0.4583
0.90	0.1845	0.1798	0.1657	0.1421	0.1097	0.0909	0.0714	0.0378	0.0433	0.2062	0.4596
0.95	0.1921	0.1873	0.1729	0.1489	0.1158	0.0966	0.0766	0.0421	0.0465	0.2081	0.4609
1.00	0.2000	0.1951	0.1804	0.1559	0.1221	0.1025	0.0822	0.0466	0.0498	0.2101	0.4622
1.05	0.2081	0.2031	0.1882	0.1631	0.1287	0.1087	0.0879	0.0514	0.0534	0.2122	0.4634
1.10	0.2165	0.2114	0.1961	0.1708	0.1356	0.1152	0.0940	0.0564	0.0570	0.2142	0.4647
1.15	0.2250	0.2198	0.2043	0.1784	0.1427	0.1220	0.1003	0.0616	0.0608	0.2164	0.4659
1.20	0.2337	0.2285	0.2127	0.1864	0.1501	0.1290	0.1069	0.0671	0.0648	0.2185	0.4671
1.25	0.2426	0.2373	0.2213	0.1945	0.1577	0.1362	0.1137	0.0728	0.0680	0.2207	0.4683
1.30	0.2516	0.2462	0.2300	0.2029	0.1655	0.1435	0.1207	0.0787	0.0733	0.2229	0.4695
1.35	0.2608	0.2553	0.2389	0.2114	0.1735	0.1513	0.1279	0.0848	0.0777	0.2251	0.4707
1.40	0.2701	0.2645	0.2479	0.2201	0.1816	0.1591	0.1353	0.0910	0.0823	0.2274	0.4718
1.45	0.2794	0.2739	0.2570	0.2289	0.1900	0.1671	0.1429	0.0975	0.0870	0.2297	0.4729
1.50	0.2889	0.2832	0.2663	0.2378	0.1984	0.1753	0.1507	0.1042	0.0918	0.2320	0.4741
1.55	0.2984	0.2927	0.2756	0.2469	0.2071	0.1836	0.1586	0.1110	0.0968	0.2344	0.4752

TABLES OF CALCULATIONS FOR M-H-WRIGHT ESQ.

VALUES OF RP WHERE N=2.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3080	0.3022	0.2850	0.2580	0.2158	0.1921	0.1667	0.1179	0.1019	0.2368	0.4763
1.65	0.3176	0.3118	0.2944	0.2653	0.2247	0.2006	0.1749	0.1251	0.1071	0.2392	0.4773
1.70	0.3272	0.3214	0.3039	0.2746	0.2336	0.2093	0.1833	0.1323	0.1125	0.2417	0.4784
1.75	0.3368	0.3310	0.3134	0.2839	0.2427	0.2181	0.1917	0.1397	0.1179	0.2442	0.4795
1.80	0.3464	0.3406	0.3229	0.2933	0.2518	0.2270	0.2003	0.1472	0.1234	0.2467	0.4805
1.85	0.3560	0.3502	0.3325	0.3027	0.2609	0.2359	0.2089	0.1548	0.1291	0.2492	0.4816
1.90	0.3656	0.3597	0.3420	0.3121	0.2701	0.2450	0.2176	0.1625	0.1348	0.2518	0.4826
1.95	0.3751	0.3693	0.3515	0.3216	0.2794	0.2540	0.2264	0.1703	0.1406	0.2544	0.4836
2.00	0.3846	0.3787	0.3610	0.3310	0.2886	0.2631	0.2353	0.1781	0.1465	0.2571	0.4847
2.05	0.3941	0.3882	0.3704	0.3404	0.2979	0.2722	0.2441	0.1861	0.1525	0.2597	0.4857
2.10	0.4034	0.3976	0.3798	0.3498	0.3072	0.2814	0.2530	0.1941	0.1586	0.2625	0.4867
2.15	0.4127	0.4069	0.3892	0.3592	0.3165	0.2905	0.2620	0.2021	0.1647	0.2652	0.4877
2.20	0.4220	0.4161	0.3985	0.3685	0.3257	0.2997	0.2709	0.2103	0.1709	0.2679	0.4887
2.25	0.4311	0.4253	0.4077	0.3777	0.3349	0.3088	0.2799	0.2184	0.1771	0.2707	0.4897
2.30	0.4402	0.4344	0.4168	0.3869	0.3441	0.3179	0.2888	0.2266	0.1834	0.2736	0.4907
2.35	0.4491	0.4434	0.4259	0.3960	0.3533	0.3270	0.2978	0.2348	0.1897	0.2764	0.4917
2.40	0.4580	0.4523	0.4348	0.4051	0.3623	0.3360	0.3067	0.2430	0.1961	0.2793	0.4927
2.45	0.4668	0.4611	0.4437	0.4141	0.3714	0.3450	0.3156	0.2512	0.2026	0.2822	0.4937
2.50	0.4754	0.4697	0.4525	0.4230	0.3804	0.3540	0.3244	0.2594	0.2090	0.2851	0.4947
2.55	0.4840	0.4783	0.4612	0.4318	0.3893	0.3629	0.3333	0.2677	0.2155	0.2881	0.4957
2.60	0.4924	0.4868	0.4697	0.4405	0.3981	0.3717	0.3420	0.2759	0.2221	0.2910	0.4967
2.65	0.5007	0.4951	0.4782	0.4492	0.4069	0.3805	0.3508	0.2841	0.2286	0.2940	0.4977
2.70	0.5089	0.5034	0.4866	0.4577	0.4156	0.3892	0.3594	0.2923	0.2352	0.2970	0.4987
2.75	0.5170	0.5115	0.4948	0.4661	0.4241	0.3979	0.3680	0.3004	0.2418	0.3001	0.4997
2.80	0.5249	0.5195	0.5030	0.4744	0.4326	0.4064	0.3766	0.3085	0.2484	0.3032	0.5007
2.85	0.5328	0.5274	0.5110	0.4826	0.4411	0.4149	0.3850	0.3166	0.2550	0.3062	0.5017
2.90	0.5405	0.5352	0.5189	0.4907	0.4494	0.4233	0.3934	0.3247	0.2616	0.3093	0.5027
2.95	0.5481	0.5428	0.5267	0.4987	0.4576	0.4315	0.4018	0.3327	0.2682	0.3125	0.5038
3.00	0.5556	0.5503	0.5343	0.5066	0.4657	0.4398	0.4100	0.3407	0.2748	0.3156	0.5048

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=2.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1185	0.1150	0.1043	0.0861	0.0607	0.0458	0.0302	0.0038	0.0139	0.1786	0.4363
0.05	0.1188	0.1152	0.1045	0.0863	0.0609	0.0459	0.0303	0.0039	0.0140	0.1787	0.4364
0.10	0.1195	0.1159	0.1051	0.0869	0.0613	0.0464	0.0307	0.0042	0.0142	0.1789	0.4366
0.15	0.1206	0.1171	0.1062	0.0879	0.0622	0.0471	0.0313	0.0046	0.0146	0.1793	0.4369
0.20	0.1223	0.1187	0.1077	0.0892	0.0633	0.0481	0.0322	0.0053	0.0152	0.1798	0.4374
0.25	0.1244	0.1207	0.1097	0.0909	0.0648	0.0494	0.0334	0.0062	0.0159	0.1805	0.4380
0.30	0.1270	0.1233	0.1120	0.0931	0.0665	0.0510	0.0348	0.0073	0.0168	0.1813	0.4387
0.35	0.1300	0.1262	0.1148	0.0955	0.0687	0.0529	0.0365	0.0086	0.0178	0.1823	0.4395
0.40	0.1334	0.1296	0.1180	0.0984	0.0711	0.0551	0.0385	0.0101	0.0190	0.1833	0.4404
0.45	0.1373	0.1334	0.1216	0.1016	0.0739	0.0577	0.0407	0.0118	0.0204	0.1845	0.4414
0.50	0.1416	0.1376	0.1256	0.1052	0.0770	0.0605	0.0433	0.0138	0.0219	0.1858	0.4424
0.55	0.1463	0.1422	0.1299	0.1092	0.0804	0.0636	0.0461	0.0160	0.0236	0.1871	0.4435
0.60	0.1514	0.1472	0.1346	0.1135	0.0842	0.0670	0.0492	0.0185	0.0255	0.1886	0.4446
0.65	0.1568	0.1526	0.1397	0.1182	0.0882	0.0708	0.0526	0.0212	0.0275	0.1901	0.4458
0.70	0.1626	0.1583	0.1452	0.1232	0.0926	0.0748	0.0563	0.0241	0.0298	0.1917	0.4470
0.75	0.1688	0.1643	0.1510	0.1285	0.0973	0.0792	0.0603	0.0273	0.0322	0.1934	0.4482
0.80	0.1753	0.1707	0.1571	0.1341	0.1024	0.0838	0.0645	0.0307	0.0347	0.1951	0.4494
0.85	0.1820	0.1774	0.1635	0.1401	0.1077	0.0888	0.0691	0.0344	0.0375	0.1969	0.4506
0.90	0.1891	0.1844	0.1702	0.1463	0.1133	0.0940	0.0739	0.0383	0.0404	0.1987	0.4518
0.95	0.1965	0.1917	0.1771	0.1528	0.1192	0.0995	0.0790	0.0425	0.0435	0.2006	0.4531
1.00	0.2041	0.1992	0.1844	0.1596	0.1253	0.1053	0.0844	0.0469	0.0467	0.2025	0.4543
1.05	0.2119	0.2069	0.1919	0.1665	0.1317	0.1114	0.0900	0.0516	0.0501	0.2045	0.4555
1.10	0.2200	0.2149	0.1996	0.1739	0.1384	0.1177	0.0959	0.0564	0.0537	0.2065	0.4566
1.15	0.2282	0.2231	0.2075	0.1814	0.1454	0.1243	0.1021	0.0615	0.0574	0.2085	0.4578
1.20	0.2367	0.2314	0.2156	0.1891	0.1525	0.1310	0.1084	0.0669	0.0613	0.2106	0.4590
1.25	0.2453	0.2400	0.2239	0.1971	0.1599	0.1381	0.1150	0.0724	0.0654	0.2127	0.4601
1.30	0.2540	0.2486	0.2324	0.2052	0.1674	0.1453	0.1219	0.0782	0.0695	0.2148	0.4613
1.35	0.2629	0.2575	0.2410	0.2134	0.1752	0.1527	0.1289	0.0841	0.0739	0.2170	0.4624
1.40	0.2719	0.2664	0.2498	0.2219	0.1832	0.1603	0.1361	0.0903	0.0784	0.2192	0.4635
1.45	0.2810	0.2754	0.2586	0.2305	0.1913	0.1681	0.1435	0.0966	0.0830	0.2215	0.4646
1.50	0.2902	0.2846	0.2676	0.2391	0.1995	0.1761	0.1511	0.1031	0.0878	0.2238	0.4657
1.55	0.2994	0.2938	0.2767	0.2480	0.2079	0.1842	0.1588	0.1097	0.0926	0.2261	0.4668

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3087	0.3030	0.2858	0.2569	0.2164	0.1824	0.1667	0.1165	0.0977	0.2285	0.4679
1.65	0.3181	0.3123	0.2950	0.2658	0.2251	0.2008	0.1747	0.1235	0.1028	0.2309	0.4689
1.70	0.3275	0.3217	0.3042	0.2749	0.2338	0.2093	0.1829	0.1306	0.1080	0.2333	0.4700
1.75	0.3368	0.3310	0.3135	0.2840	0.2426	0.2179	0.1911	0.1378	0.1133	0.2357	0.4710
1.80	0.3462	0.3404	0.3228	0.2932	0.2515	0.2265	0.1995	0.1451	0.1188	0.2382	0.4720
1.85	0.3556	0.3498	0.3321	0.3024	0.2604	0.2353	0.2079	0.1526	0.1243	0.2408	0.4731
1.90	0.3650	0.3591	0.3414	0.3116	0.2694	0.2441	0.2165	0.1601	0.1300	0.2433	0.4741
1.95	0.3743	0.3684	0.3507	0.3208	0.2785	0.2529	0.2250	0.1677	0.1357	0.2459	0.4751
2.00	0.3836	0.3777	0.3600	0.3300	0.2875	0.2618	0.2337	0.1755	0.1415	0.2485	0.4761
2.05	0.3928	0.3870	0.3692	0.3392	0.2966	0.2707	0.2424	0.1833	0.1474	0.2512	0.4771
2.10	0.4020	0.3962	0.3784	0.3484	0.3057	0.2797	0.2511	0.1911	0.1534	0.2539	0.4782
2.15	0.4111	0.4053	0.3876	0.3576	0.3148	0.2887	0.2599	0.1990	0.1594	0.2566	0.4792
2.20	0.4202	0.4144	0.3967	0.3667	0.3238	0.2976	0.2686	0.2070	0.1655	0.2593	0.4802
2.25	0.4292	0.4234	0.4058	0.3758	0.3329	0.3065	0.2774	0.2150	0.1716	0.2621	0.4812
2.30	0.4381	0.4323	0.4147	0.3848	0.3419	0.3155	0.2862	0.2230	0.1779	0.2649	0.4822
2.35	0.4469	0.4411	0.4236	0.3938	0.3509	0.3244	0.2950	0.2311	0.1841	0.2677	0.4832
2.40	0.4556	0.4499	0.4324	0.4027	0.3598	0.3333	0.3038	0.2392	0.1904	0.2706	0.4842
2.45	0.4642	0.4585	0.4412	0.4115	0.3687	0.3422	0.3125	0.2473	0.1968	0.2735	0.4852
2.50	0.4728	0.4671	0.4498	0.4203	0.3775	0.3510	0.3212	0.2554	0.2032	0.2764	0.4862
2.55	0.4812	0.4755	0.4584	0.4290	0.3863	0.3598	0.3299	0.2635	0.2096	0.2793	0.4872
2.60	0.4895	0.4839	0.4668	0.4376	0.3950	0.3685	0.3386	0.2716	0.2161	0.2823	0.4882
2.65	0.4977	0.4921	0.4752	0.4461	0.4036	0.3771	0.3472	0.2797	0.2225	0.2853	0.4892
2.70	0.5058	0.5003	0.4834	0.4545	0.4122	0.3857	0.3557	0.2878	0.2290	0.2883	0.4902
2.75	0.5138	0.5083	0.4916	0.4628	0.4207	0.3942	0.3642	0.2958	0.2356	0.2913	0.4912
2.80	0.5217	0.5162	0.4996	0.4710	0.4291	0.4027	0.3726	0.3038	0.2421	0.2944	0.4922
2.85	0.5294	0.5240	0.5076	0.4791	0.4374	0.4110	0.3810	0.3118	0.2486	0.2975	0.4932
2.90	0.5371	0.5317	0.5154	0.4871	0.4456	0.4193	0.3893	0.3198	0.2552	0.3006	0.4942
2.95	0.5446	0.5393	0.5231	0.4951	0.4537	0.4275	0.3975	0.3277	0.2617	0.3037	0.4952
3.00	0.5520	0.5467	0.5307	0.5029	0.4617	0.4356	0.4057	0.3356	0.2683	0.3068	0.4962

TABLES OF CALCULATIONS FOR N-H WRIGHT EQ.

VALUES OF RP WHERE N=2-10

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1259	0.1222	0.1111	0.0923	0.0658	0.0501	0.0337	0.0050	0.0119	0.1727	0.4300
0.05	0.1261	0.1225	0.1113	0.0924	0.0659	0.0503	0.0338	0.0051	0.0120	0.1728	0.4301
0.10	0.1268	0.1231	0.1120	0.0930	0.0664	0.0507	0.0342	0.0054	0.0122	0.1730	0.4303
0.15	0.1280	0.1242	0.1130	0.0939	0.0672	0.0514	0.0348	0.0059	0.0126	0.1733	0.4306
0.20	0.1295	0.1258	0.1145	0.0953	0.0683	0.0524	0.0357	0.0066	0.0131	0.1738	0.4310
0.25	0.1316	0.1278	0.1163	0.0969	0.0697	0.0537	0.0369	0.0074	0.0138	0.1744	0.4315
0.30	0.1340	0.1302	0.1186	0.0990	0.0715	0.0553	0.0383	0.0085	0.0147	0.1752	0.4321
0.35	0.1369	0.1330	0.1213	0.1014	0.0736	0.0572	0.0400	0.0098	0.0157	0.1760	0.4329
0.40	0.1402	0.1363	0.1244	0.1042	0.0760	0.0593	0.0419	0.0113	0.0168	0.1770	0.4337
0.45	0.1439	0.1399	0.1278	0.1073	0.0787	0.0618	0.0441	0.0130	0.0182	0.1781	0.4346
0.50	0.1481	0.1440	0.1316	0.1108	0.0817	0.0646	0.0466	0.0150	0.0197	0.1793	0.4355
0.55	0.1526	0.1484	0.1359	0.1146	0.0850	0.0676	0.0494	0.0172	0.0213	0.1805	0.4365
0.60	0.1575	0.1532	0.1404	0.1188	0.0887	0.0710	0.0524	0.0196	0.0232	0.1819	0.4375
0.65	0.1627	0.1584	0.1453	0.1233	0.0926	0.0743	0.0557	0.0222	0.0251	0.1833	0.4386
0.70	0.1683	0.1639	0.1506	0.1282	0.0969	0.0786	0.0593	0.0251	0.0273	0.1848	0.4397
0.75	0.1742	0.1698	0.1562	0.1333	0.1015	0.0828	0.0632	0.0282	0.0296	0.1864	0.4408
0.80	0.1805	0.1759	0.1621	0.1388	0.1064	0.0874	0.0674	0.0316	0.0322	0.1880	0.4419
0.85	0.1870	0.1824	0.1682	0.1445	0.1115	0.0922	0.0718	0.0352	0.0348	0.1897	0.4431
0.90	0.1939	0.1891	0.1747	0.1506	0.1170	0.0973	0.0765	0.0390	0.0377	0.1915	0.4442
0.95	0.2010	0.1961	0.1815	0.1569	0.1227	0.1026	0.0815	0.0431	0.0407	0.1933	0.4453
1.00	0.2083	0.2034	0.1885	0.1634	0.1287	0.1083	0.0868	0.0474	0.0438	0.1951	0.4465
1.05	0.2159	0.2108	0.1957	0.1703	0.1349	0.1142	0.0922	0.0519	0.0472	0.1970	0.4476
1.10	0.2237	0.2186	0.2032	0.1773	0.1414	0.1203	0.0980	0.0567	0.0507	0.1989	0.4488
1.15	0.2316	0.2265	0.2108	0.1845	0.1481	0.1267	0.1040	0.0617	0.0543	0.2009	0.4499
1.20	0.2398	0.2346	0.2187	0.1921	0.1551	0.1333	0.1102	0.0669	0.0581	0.2029	0.4510
1.25	0.2482	0.2428	0.2268	0.1998	0.1623	0.1401	0.1166	0.0723	0.0621	0.2050	0.4521
1.30	0.2566	0.2512	0.2350	0.2077	0.1696	0.1472	0.1233	0.0779	0.0662	0.2071	0.4532
1.35	0.2653	0.2598	0.2433	0.2157	0.1772	0.1544	0.1301	0.0837	0.0704	0.2092	0.4543
1.40	0.2740	0.2685	0.2518	0.2239	0.1849	0.1618	0.1371	0.0897	0.0748	0.2114	0.4554
1.45	0.2828	0.2773	0.2604	0.2322	0.1928	0.1694	0.1444	0.0959	0.0794	0.2136	0.4564
1.50	0.2917	0.2861	0.2692	0.2407	0.2008	0.1771	0.1517	0.1022	0.0840	0.2158	0.4575
1.55	0.3007	0.2951	0.2780	0.2492	0.2090	0.1850	0.1593	0.1087	0.0888	0.2181	0.4586

TABLES OF CALCULATIONS FOR M.H. WRIGHT ESO.

VALUES OF R^2 WHERE $N=2-10$

PAGE 168

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3098	0.3041	0.2869	0.2579	0.2173	0.1931	0.1670	0.1154	0.0937	0.2204	0.4596
1.65	0.3189	0.3131	0.2958	0.2667	0.2257	0.2012	0.1748	0.1222	0.0987	0.2228	0.4607
1.70	0.3280	0.3222	0.3048	0.2756	0.2342	0.2095	0.1827	0.1291	0.1039	0.2252	0.4617
1.75	0.3371	0.3314	0.3139	0.2844	0.2428	0.2179	0.1908	0.1362	0.1091	0.2276	0.4627
1.80	0.3463	0.3405	0.3229	0.2933	0.2515	0.2263	0.1990	0.1434	0.1145	0.2301	0.4637
1.85	0.3555	0.3496	0.3320	0.3023	0.2602	0.2349	0.2072	0.1506	0.1199	0.2326	0.4648
1.90	0.3646	0.3588	0.3411	0.3113	0.2690	0.2435	0.2155	0.1580	0.1255	0.2351	0.4658
1.95	0.3737	0.3679	0.3502	0.3203	0.2778	0.2521	0.2239	0.1655	0.1311	0.2377	0.4668
2.00	0.3828	0.3770	0.3593	0.3293	0.2867	0.2608	0.2324	0.1731	0.1368	0.2403	0.4678
2.05	0.3919	0.3860	0.3683	0.3383	0.2956	0.2695	0.2409	0.1807	0.1426	0.2429	0.4688
2.10	0.4009	0.3950	0.3773	0.3473	0.3044	0.2783	0.2495	0.1884	0.1485	0.2456	0.4698
2.15	0.4098	0.4040	0.3863	0.3563	0.3133	0.2871	0.2581	0.1962	0.1544	0.2482	0.4708
2.20	0.4187	0.4129	0.3952	0.3652	0.3222	0.2959	0.2667	0.2040	0.1604	0.2510	0.4718
2.25	0.4275	0.4217	0.4041	0.3741	0.3311	0.3047	0.2753	0.2119	0.1665	0.2537	0.4728
2.30	0.4362	0.4305	0.4129	0.3830	0.3399	0.3135	0.2839	0.2198	0.1726	0.2565	0.4738
2.35	0.4449	0.4392	0.4217	0.3918	0.3488	0.3222	0.2925	0.2277	0.1788	0.2593	0.4748
2.40	0.4535	0.4478	0.4303	0.4006	0.3575	0.3309	0.3011	0.2357	0.1851	0.2622	0.4758
2.45	0.4620	0.4563	0.4389	0.4095	0.3663	0.3396	0.3097	0.2437	0.1913	0.2650	0.4768
2.50	0.4704	0.4647	0.4474	0.4179	0.3750	0.3483	0.3183	0.2516	0.1977	0.2679	0.4778
2.55	0.4787	0.4730	0.4559	0.4264	0.3836	0.3569	0.3269	0.2596	0.2040	0.2709	0.4788
2.60	0.4869	0.4813	0.4642	0.4349	0.3922	0.3655	0.3354	0.2676	0.2104	0.2738	0.4798
2.65	0.4950	0.4894	0.4724	0.4433	0.4007	0.3740	0.3439	0.2756	0.2168	0.2768	0.4808
2.70	0.5030	0.4974	0.4806	0.4516	0.4091	0.3823	0.3523	0.2836	0.2232	0.2798	0.4818
2.75	0.5108	0.5054	0.4886	0.4598	0.4175	0.3909	0.3607	0.2915	0.2297	0.2828	0.4828
2.80	0.5186	0.5132	0.4966	0.4679	0.4258	0.3992	0.3690	0.2994	0.2362	0.2859	0.4838
2.85	0.5263	0.5209	0.5044	0.4759	0.4340	0.4075	0.3772	0.3073	0.2426	0.2889	0.4848
2.90	0.5339	0.5285	0.5121	0.4838	0.4421	0.4157	0.3854	0.3152	0.2491	0.2920	0.4858
2.95	0.5413	0.5360	0.5198	0.4916	0.4501	0.4238	0.3936	0.3230	0.2556	0.2951	0.4868
3.00	0.5486	0.5434	0.5273	0.4994	0.4580	0.4318	0.4016	0.3308	0.2621	0.2983	0.4878

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE $N=2.15$

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1333	0.1295	0.1180	0.0984	0.0709	0.0546	0.0373	0.0064	0.0101	0.1668	0.4237
0.05	0.1335	0.1297	0.1182	0.0985	0.0711	0.0547	0.0375	0.0065	0.0101	0.1669	0.4237
0.10	0.1342	0.1303	0.1188	0.0992	0.0715	0.0552	0.0378	0.0068	0.0104	0.1671	0.4239
0.15	0.1352	0.1314	0.1198	0.1001	0.0723	0.0559	0.0385	0.0073	0.0107	0.1674	0.4242
0.20	0.1368	0.1329	0.1212	0.1014	0.0734	0.0569	0.0393	0.0080	0.0113	0.1679	0.4246
0.25	0.1387	0.1348	0.1230	0.1030	0.0748	0.0581	0.0405	0.0088	0.0119	0.1684	0.4250
0.30	0.1411	0.1371	0.1252	0.1050	0.0765	0.0597	0.0419	0.0099	0.0128	0.1691	0.4256
0.35	0.1439	0.1399	0.1278	0.1073	0.0785	0.0615	0.0435	0.0112	0.0137	0.1698	0.4262
0.40	0.1470	0.1430	0.1307	0.1100	0.0809	0.0636	0.0454	0.0127	0.0149	0.1708	0.4270
0.45	0.1506	0.1465	0.1341	0.1130	0.0835	0.0661	0.0476	0.0144	0.0162	0.1718	0.4278
0.50	0.1546	0.1504	0.1378	0.1164	0.0865	0.0688	0.0501	0.0163	0.0176	0.1729	0.4286
0.55	0.1589	0.1547	0.1418	0.1201	0.0897	0.0717	0.0528	0.0185	0.0193	0.1741	0.4295
0.60	0.1636	0.1593	0.1462	0.1242	0.0933	0.0750	0.0557	0.0208	0.0210	0.1754	0.4305
0.65	0.1687	0.1643	0.1510	0.1286	0.0971	0.0786	0.0590	0.0234	0.0230	0.1767	0.4314
0.70	0.1741	0.1696	0.1561	0.1332	0.1013	0.0824	0.0625	0.0262	0.0251	0.1782	0.4325
0.75	0.1798	0.1752	0.1614	0.1382	0.1057	0.0866	0.0663	0.0293	0.0274	0.1796	0.4335
0.80	0.1858	0.1812	0.1671	0.1435	0.1105	0.0910	0.0704	0.0326	0.0298	0.1812	0.4345
0.85	0.1921	0.1874	0.1731	0.1491	0.1155	0.0957	0.0747	0.0361	0.0324	0.1828	0.4356
0.90	0.1987	0.1939	0.1794	0.1549	0.1208	0.1007	0.0793	0.0399	0.0352	0.1845	0.4367
0.95	0.2055	0.2007	0.1859	0.1610	0.1264	0.1059	0.0842	0.0439	0.0381	0.1862	0.4378
1.00	0.2126	0.2077	0.1927	0.1674	0.1322	0.1114	0.0893	0.0481	0.0412	0.1880	0.4388
1.05	0.2200	0.2149	0.1997	0.1740	0.1382	0.1171	0.0946	0.0525	0.0445	0.1898	0.4399
1.10	0.2275	0.2224	0.2069	0.1809	0.1445	0.1231	0.1002	0.0572	0.0479	0.1917	0.4410
1.15	0.2352	0.2300	0.2143	0.1879	0.1511	0.1293	0.1061	0.0620	0.0515	0.1936	0.4421
1.20	0.2431	0.2379	0.2220	0.1952	0.1578	0.1357	0.1121	0.0671	0.0552	0.1955	0.4432
1.25	0.2512	0.2459	0.2298	0.2027	0.1648	0.1423	0.1184	0.0724	0.0591	0.1975	0.4442
1.30	0.2594	0.2540	0.2377	0.2103	0.1720	0.1492	0.1248	0.0779	0.0631	0.1996	0.4453
1.35	0.2678	0.2623	0.2458	0.2181	0.1793	0.1562	0.1315	0.0836	0.0672	0.2017	0.4463
1.40	0.2762	0.2707	0.2541	0.2261	0.1868	0.1635	0.1384	0.0894	0.0715	0.2038	0.4474
1.45	0.2848	0.2793	0.2625	0.2342	0.1945	0.1708	0.1454	0.0954	0.0760	0.2060	0.4484
1.50	0.2935	0.2879	0.2709	0.2424	0.2023	0.1784	0.1526	0.1016	0.0805	0.2082	0.4495
1.55	0.3022	0.2966	0.2795	0.2507	0.2103	0.1861	0.1600	0.1080	0.0852	0.2104	0.4505

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE $N=2.15$

PAGE 170

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3110	0.3054	0.2882	0.2592	0.2184	0.1939	0.1679	0.1145	0.0900	0.2127	0.4515
1.65	0.3199	0.3142	0.2969	0.2677	0.2266	0.2019	0.1751	0.1211	0.0950	0.2150	0.4525
1.70	0.3288	0.3230	0.3057	0.2763	0.2348	0.2099	0.1828	0.1279	0.1000	0.2174	0.4536
1.75	0.3377	0.3319	0.3145	0.2850	0.2432	0.2181	0.1907	0.1348	0.1052	0.2198	0.4546
1.80	0.3466	0.3408	0.3233	0.2937	0.2517	0.2263	0.1987	0.1419	0.1104	0.2222	0.4556
1.85	0.3555	0.3498	0.3322	0.3024	0.2602	0.2347	0.2067	0.1490	0.1158	0.2247	0.4566
1.90	0.3644	0.3587	0.3411	0.3112	0.2688	0.2431	0.2149	0.1563	0.1213	0.2272	0.4576
1.95	0.3734	0.3676	0.3499	0.3200	0.2774	0.2515	0.2231	0.1636	0.1268	0.2297	0.4586
2.00	0.3823	0.3765	0.3588	0.3288	0.2861	0.2601	0.2314	0.1710	0.1324	0.2323	0.4596
2.05	0.3912	0.3853	0.3677	0.3376	0.2948	0.2686	0.2397	0.1785	0.1381	0.2349	0.4606
2.10	0.4000	0.3941	0.3765	0.3469	0.3035	0.2772	0.2481	0.1861	0.1439	0.2375	0.4616
2.15	0.4087	0.4029	0.3853	0.3553	0.3122	0.2858	0.2565	0.1937	0.1498	0.2402	0.4625
2.20	0.4174	0.4116	0.3940	0.3640	0.3209	0.2944	0.2650	0.2014	0.1557	0.2429	0.4635
2.25	0.4261	0.4203	0.4027	0.3728	0.3296	0.3030	0.2734	0.2091	0.1617	0.2456	0.4645
2.30	0.4347	0.4289	0.4114	0.3814	0.3383	0.3115	0.2819	0.2169	0.1677	0.2484	0.4655
2.35	0.4432	0.4374	0.4200	0.3901	0.3469	0.3202	0.2903	0.2247	0.1739	0.2512	0.4665
2.40	0.4516	0.4459	0.4285	0.3987	0.3556	0.3288	0.2988	0.2325	0.1800	0.2540	0.4675
2.45	0.4600	0.4543	0.4369	0.4072	0.3641	0.3374	0.3073	0.2403	0.1862	0.2569	0.4685
2.50	0.4682	0.4626	0.4453	0.4157	0.3727	0.3459	0.3157	0.2482	0.1924	0.2597	0.4695
2.55	0.4764	0.4708	0.4536	0.4241	0.3812	0.3544	0.3241	0.2561	0.1987	0.2627	0.4705
2.60	0.4845	0.4789	0.4618	0.4325	0.3896	0.3628	0.3325	0.2639	0.2050	0.2656	0.4715
2.65	0.4925	0.4869	0.4699	0.4407	0.3980	0.3712	0.3408	0.2718	0.2114	0.2686	0.4725
2.70	0.5004	0.4948	0.4780	0.4489	0.4063	0.3795	0.3491	0.2797	0.2177	0.2716	0.4735
2.75	0.5081	0.5027	0.4859	0.4570	0.4145	0.3878	0.3574	0.2875	0.2241	0.2746	0.4745
2.80	0.5158	0.5104	0.4937	0.4650	0.4227	0.3960	0.3656	0.2953	0.2305	0.2776	0.4755
2.85	0.5234	0.5180	0.5015	0.4729	0.4308	0.4042	0.3737	0.3031	0.2369	0.2807	0.4765
2.90	0.5309	0.5255	0.5091	0.4807	0.4388	0.4123	0.3818	0.3109	0.2434	0.2838	0.4776
2.95	0.5383	0.5329	0.5167	0.4885	0.4468	0.4203	0.3899	0.3187	0.2498	0.2869	0.4786
3.00	0.5455	0.5402	0.5241	0.4961	0.4546	0.4282	0.3978	0.3264	0.2562	0.2900	0.4796

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.20

PAGE 171

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1406	0.1387	0.1248	0.1047	0.0761	0.0592	0.0411	0.0080	0.0084	0.1611	0.4173
0.05	0.1408	0.1369	0.1250	0.1048	0.0763	0.0593	0.0412	0.0081	0.0085	0.1611	0.4174
0.10	0.1415	0.1375	0.1256	0.1054	0.0767	0.0597	0.0416	0.0084	0.0087	0.1613	0.4175
0.15	0.1425	0.1386	0.1266	0.1062	0.0775	0.0604	0.0422	0.0089	0.0090	0.1616	0.4178
0.20	0.1440	0.1400	0.1279	0.1075	0.0786	0.0614	0.0431	0.0095	0.0096	0.1620	0.4181
0.25	0.1458	0.1418	0.1297	0.1091	0.0799	0.0626	0.0442	0.0104	0.0102	0.1625	0.4185
0.30	0.1481	0.1441	0.1318	0.1110	0.0816	0.0641	0.0456	0.0115	0.0110	0.1632	0.4191
0.35	0.1508	0.1467	0.1343	0.1132	0.0836	0.0659	0.0472	0.0127	0.0120	0.1639	0.4196
0.40	0.1538	0.1497	0.1372	0.1159	0.0859	0.0680	0.0491	0.0142	0.0131	0.1648	0.4203
0.45	0.1573	0.1531	0.1404	0.1188	0.0884	0.0704	0.0512	0.0159	0.0144	0.1657	0.4210
0.50	0.1611	0.1569	0.1439	0.1221	0.0913	0.0730	0.0536	0.0178	0.0158	0.1667	0.4218
0.55	0.1653	0.1610	0.1479	0.1257	0.0945	0.0760	0.0563	0.0199	0.0174	0.1678	0.4226
0.60	0.1698	0.1654	0.1521	0.1296	0.0979	0.0792	0.0592	0.0222	0.0191	0.1690	0.4235
0.65	0.1747	0.1702	0.1567	0.1338	0.1017	0.0825	0.0624	0.0248	0.0210	0.1703	0.4244
0.70	0.1799	0.1753	0.1616	0.1384	0.1057	0.0864	0.0658	0.0276	0.0231	0.1717	0.4253
0.75	0.1854	0.1808	0.1668	0.1432	0.1101	0.0904	0.0695	0.0306	0.0253	0.1731	0.4263
0.80	0.1912	0.1865	0.1723	0.1483	0.1147	0.0947	0.0735	0.0338	0.0277	0.1745	0.4273
0.85	0.1973	0.1925	0.1781	0.1537	0.1196	0.0993	0.0777	0.0372	0.0302	0.1761	0.4283
0.90	0.2036	0.1988	0.1841	0.1594	0.1247	0.1041	0.0822	0.0409	0.0329	0.1777	0.4293
0.95	0.2102	0.2053	0.1904	0.1653	0.1301	0.1092	0.0870	0.0448	0.0358	0.1793	0.4303
1.00	0.2171	0.2121	0.1970	0.1715	0.1358	0.1145	0.0919	0.0489	0.0388	0.1810	0.4313
1.05	0.2242	0.2191	0.2038	0.1779	0.1417	0.1202	0.0972	0.0533	0.0420	0.1828	0.4324
1.10	0.2314	0.2263	0.2108	0.1845	0.1478	0.1260	0.1026	0.0578	0.0454	0.1846	0.4334
1.15	0.2389	0.2337	0.2180	0.1914	0.1542	0.1320	0.1083	0.0626	0.0489	0.1865	0.4344
1.20	0.2466	0.2413	0.2253	0.1985	0.1607	0.1383	0.1142	0.0676	0.0525	0.1884	0.4355
1.25	0.2544	0.2491	0.2329	0.2057	0.1675	0.1447	0.1203	0.0727	0.0563	0.1903	0.4365
1.30	0.2624	0.2570	0.2406	0.2131	0.1745	0.1514	0.1266	0.0781	0.0602	0.1923	0.4375
1.35	0.2705	0.2650	0.2485	0.2207	0.1816	0.1582	0.1331	0.0836	0.0643	0.1944	0.4385
1.40	0.2787	0.2732	0.2565	0.2284	0.1889	0.1653	0.1398	0.0893	0.0685	0.1965	0.4396
1.45	0.2870	0.2815	0.2647	0.2363	0.1964	0.1725	0.1466	0.0952	0.0729	0.1986	0.4406
1.50	0.2954	0.2898	0.2729	0.2443	0.2040	0.1798	0.1537	0.1013	0.0774	0.2007	0.4416
1.55	0.3039	0.2983	0.2812	0.2524	0.2117	0.1873	0.1608	0.1075	0.0820	0.2029	0.4426

TABLES OF CALCULATIONS FOR W.H. WRIGHT E60.

VALUES OF RP WHERE N=2.20

PAGE 172

THETA K	0	10	20	30	40	45	50	50	70	80	85
1.50	0.3125	0.3068	0.2897	0.2606	0.2196	0.1950	0.1681	0.1139	0.0867	0.2052	0.4436
1.65	0.3211	0.3154	0.2981	0.2689	0.2276	0.2027	0.1756	0.1204	0.0915	0.2075	0.4446
1.70	0.3258	0.3240	0.3067	0.2773	0.2357	0.2106	0.1832	0.1270	0.0965	0.2098	0.4456
1.75	0.3385	0.3327	0.3153	0.2858	0.2439	0.2185	0.1909	0.1338	0.1015	0.2122	0.4466
1.80	0.3472	0.3414	0.3239	0.2943	0.2521	0.2265	0.1986	0.1406	0.1067	0.2146	0.4476
1.85	0.3559	0.3501	0.3326	0.3028	0.2605	0.2347	0.2065	0.1476	0.1120	0.2170	0.4486
1.90	0.3646	0.3588	0.3412	0.3114	0.2688	0.2430	0.2145	0.1547	0.1173	0.2195	0.4495
1.95	0.3733	0.3675	0.3499	0.3200	0.2773	0.2512	0.2225	0.1619	0.1228	0.2220	0.4505
2.00	0.3820	0.3762	0.3586	0.3285	0.2857	0.2596	0.2306	0.1692	0.1283	0.2245	0.4515
2.05	0.3907	0.3849	0.3672	0.3372	0.2942	0.2679	0.2388	0.1755	0.1340	0.2271	0.4525
2.10	0.3993	0.3935	0.3759	0.3458	0.3028	0.2753	0.2470	0.1840	0.1397	0.2297	0.4535
2.15	0.4079	0.4021	0.3845	0.3545	0.3113	0.2848	0.2552	0.1914	0.1454	0.2324	0.4545
2.20	0.4164	0.4107	0.3931	0.3631	0.3198	0.2932	0.2635	0.1990	0.1513	0.2351	0.4554
2.25	0.4249	0.4192	0.4016	0.3716	0.3284	0.3015	0.2718	0.2066	0.1572	0.2378	0.4564
2.30	0.4334	0.4276	0.4101	0.3801	0.3369	0.3101	0.2801	0.2142	0.1632	0.2405	0.4574
2.35	0.4417	0.4360	0.4185	0.3886	0.3454	0.3185	0.2884	0.2219	0.1692	0.2433	0.4584
2.40	0.4500	0.4443	0.4269	0.3971	0.3538	0.3270	0.2967	0.2296	0.1752	0.2461	0.4594
2.45	0.4582	0.4525	0.4352	0.4056	0.3623	0.3354	0.3050	0.2373	0.1814	0.2489	0.4604
2.50	0.4663	0.4607	0.4434	0.4138	0.3707	0.3437	0.3133	0.2450	0.1875	0.2518	0.4614
2.55	0.4744	0.4688	0.4516	0.4221	0.3790	0.3521	0.3216	0.2528	0.1937	0.2547	0.4624
2.60	0.4824	0.4768	0.4597	0.4303	0.3873	0.3604	0.3299	0.2605	0.2000	0.2576	0.4634
2.65	0.4902	0.4847	0.4677	0.4384	0.3956	0.3687	0.3381	0.2683	0.2062	0.2606	0.4644
2.70	0.4980	0.4925	0.4756	0.4465	0.4038	0.3769	0.3463	0.2761	0.2125	0.2636	0.4654
2.75	0.5057	0.5002	0.4834	0.4546	0.4119	0.3850	0.3544	0.2838	0.2188	0.2666	0.4664
2.80	0.5133	0.5078	0.4912	0.4624	0.4199	0.3931	0.3625	0.2915	0.2252	0.2696	0.4674
2.85	0.5208	0.5154	0.4988	0.4702	0.4279	0.4012	0.3705	0.2992	0.2315	0.2727	0.4684
2.90	0.5282	0.5228	0.5064	0.4779	0.4358	0.4091	0.3785	0.3069	0.2379	0.2757	0.4694
2.95	0.5354	0.5301	0.5138	0.4855	0.4437	0.4171	0.3864	0.3146	0.2443	0.2788	0.4705
3.00	0.5426	0.5373	0.5212	0.4931	0.4514	0.4249	0.3943	0.3222	0.2507	0.2819	0.4715

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.25

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1479	0.1439	0.1317	0.1109	0.0814	0.0638	0.0450	0.0097	0.0069	0.1554	0.4110
0.05	0.1481	0.1441	0.1319	0.1111	0.0816	0.0639	0.0451	0.0098	0.0069	0.1554	0.4110
0.10	0.1487	0.1447	0.1324	0.1116	0.0820	0.0643	0.0454	0.0101	0.0072	0.1556	0.4112
0.15	0.1497	0.1457	0.1334	0.1124	0.0828	0.0650	0.0461	0.0106	0.0075	0.1559	0.4114
0.20	0.1511	0.1471	0.1347	0.1136	0.0838	0.0660	0.0469	0.0112	0.0080	0.1563	0.4117
0.25	0.1529	0.1488	0.1364	0.1152	0.0851	0.0672	0.0480	0.0121	0.0087	0.1567	0.4121
0.30	0.1551	0.1510	0.1384	0.1170	0.0868	0.0687	0.0494	0.0132	0.0094	0.1573	0.4125
0.35	0.1577	0.1535	0.1408	0.1192	0.0887	0.0704	0.0510	0.0144	0.0104	0.1580	0.4131
0.40	0.1606	0.1564	0.1436	0.1217	0.0909	0.0725	0.0528	0.0159	0.0115	0.1588	0.4137
0.45	0.1640	0.1597	0.1467	0.1246	0.0934	0.0748	0.0549	0.0175	0.0127	0.1597	0.4143
0.50	0.1676	0.1633	0.1501	0.1278	0.0962	0.0774	0.0573	0.0194	0.0141	0.1607	0.4150
0.55	0.1717	0.1673	0.1539	0.1313	0.0993	0.0802	0.0599	0.0215	0.0157	0.1617	0.4158
0.60	0.1760	0.1715	0.1580	0.1351	0.1027	0.0834	0.0627	0.0238	0.0174	0.1628	0.4166
0.65	0.1807	0.1762	0.1624	0.1392	0.1063	0.0868	0.0659	0.0263	0.0192	0.1641	0.4175
0.70	0.1857	0.1811	0.1672	0.1435	0.1103	0.0904	0.0692	0.0290	0.0212	0.1653	0.4183
0.75	0.1910	0.1863	0.1722	0.1482	0.1145	0.0944	0.0729	0.0320	0.0234	0.1667	0.4192
0.80	0.1966	0.1919	0.1775	0.1532	0.1190	0.0986	0.0767	0.0351	0.0258	0.1681	0.4201
0.85	0.2025	0.1977	0.1831	0.1584	0.1237	0.1030	0.0809	0.0385	0.0283	0.1696	0.4211
0.90	0.2086	0.2037	0.1889	0.1639	0.1287	0.1077	0.0853	0.0421	0.0309	0.1711	0.4220
0.95	0.2150	0.2100	0.1950	0.1697	0.1340	0.1127	0.0899	0.0459	0.0337	0.1727	0.4230
1.00	0.2216	0.2166	0.2014	0.1757	0.1395	0.1179	0.0947	0.0500	0.0367	0.1744	0.4240
1.05	0.2285	0.2234	0.2079	0.1819	0.1452	0.1233	0.0998	0.0542	0.0398	0.1761	0.4249
1.10	0.2355	0.2303	0.2147	0.1883	0.1512	0.1290	0.1051	0.0587	0.0431	0.1778	0.4259
1.15	0.2427	0.2375	0.2217	0.1950	0.1573	0.1349	0.1107	0.0633	0.0465	0.1796	0.4269
1.20	0.2502	0.2449	0.2289	0.2018	0.1637	0.1410	0.1164	0.0682	0.0501	0.1815	0.4279
1.25	0.2577	0.2524	0.2362	0.2089	0.1703	0.1473	0.1224	0.0732	0.0538	0.1834	0.4289
1.30	0.2655	0.2601	0.2437	0.2161	0.1771	0.1537	0.1285	0.0785	0.0576	0.1853	0.4299
1.35	0.2733	0.2679	0.2513	0.2234	0.1840	0.1604	0.1348	0.0839	0.0616	0.1873	0.4309
1.40	0.2813	0.2758	0.2591	0.2309	0.1912	0.1673	0.1414	0.0895	0.0658	0.1894	0.4319
1.45	0.2894	0.2838	0.2670	0.2386	0.1984	0.1743	0.1480	0.0952	0.0700	0.1914	0.4328
1.50	0.2976	0.2920	0.2750	0.2464	0.2058	0.1814	0.1549	0.1011	0.0744	0.1936	0.4338
1.55	0.3058	0.3002	0.2831	0.2543	0.2134	0.1887	0.1619	0.1072	0.0789	0.1957	0.4348

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.25

PAGE 174

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3142	0.3085	0.2913	0.2623	0.2211	0.1862	0.1690	0.1134	0.0836	0.1980	0.4358
1.65	0.3225	0.3168	0.2996	0.2703	0.2289	0.2037	0.1763	0.1198	0.0883	0.2002	0.4368
1.70	0.3310	0.3253	0.3079	0.2785	0.2367	0.2114	0.1837	0.1263	0.0932	0.2025	0.4377
1.75	0.3394	0.3337	0.3163	0.2868	0.2447	0.2192	0.1912	0.1329	0.0982	0.2048	0.4387
1.80	0.3479	0.3422	0.3247	0.2950	0.2528	0.2271	0.1988	0.1397	0.1033	0.2072	0.4397
1.85	0.3565	0.3507	0.3332	0.3034	0.2609	0.2350	0.2065	0.1465	0.1084	0.2096	0.4407
1.90	0.3650	0.3592	0.3416	0.3118	0.2691	0.2431	0.2143	0.1535	0.1137	0.2120	0.4416
1.95	0.3735	0.3677	0.3501	0.3202	0.2773	0.2511	0.2222	0.1605	0.1191	0.2145	0.4426
2.00	0.3820	0.3762	0.3586	0.3286	0.2856	0.2593	0.2301	0.1676	0.1245	0.2171	0.4436
2.05	0.3905	0.3847	0.3670	0.3370	0.2939	0.2675	0.2381	0.1748	0.1301	0.2196	0.4446
2.10	0.3989	0.3931	0.3755	0.3459	0.3023	0.2757	0.2461	0.1821	0.1357	0.2222	0.4455
2.15	0.4073	0.4015	0.3839	0.3539	0.3106	0.2839	0.2542	0.1895	0.1414	0.2248	0.4465
2.20	0.4157	0.4099	0.3923	0.3623	0.3190	0.2922	0.2623	0.1969	0.1471	0.2275	0.4475
2.25	0.4240	0.4182	0.4007	0.3707	0.3273	0.3005	0.2704	0.2043	0.1530	0.2302	0.4485
2.30	0.4323	0.4265	0.4090	0.3791	0.3357	0.3088	0.2786	0.2118	0.1588	0.2329	0.4495
2.35	0.4405	0.4347	0.4173	0.3874	0.3440	0.3171	0.2868	0.2194	0.1648	0.2357	0.4504
2.40	0.4486	0.4429	0.4255	0.3957	0.3523	0.3253	0.2949	0.2269	0.1708	0.2385	0.4514
2.45	0.4567	0.4510	0.4337	0.4039	0.3606	0.3336	0.3031	0.2345	0.1768	0.2413	0.4524
2.50	0.4647	0.4590	0.4418	0.4121	0.3689	0.3418	0.3112	0.2422	0.1829	0.2441	0.4534
2.55	0.4726	0.4670	0.4498	0.4203	0.3771	0.3500	0.3194	0.2498	0.1890	0.2470	0.4544
2.60	0.4804	0.4748	0.4578	0.4285	0.3853	0.3582	0.3275	0.2574	0.1952	0.2499	0.4554
2.65	0.4882	0.4826	0.4656	0.4363	0.3934	0.3663	0.3356	0.2651	0.2014	0.2529	0.4564
2.70	0.4959	0.4903	0.4735	0.4443	0.4014	0.3744	0.3436	0.2727	0.2076	0.2558	0.4574
2.75	0.5034	0.4980	0.4812	0.4522	0.4094	0.3825	0.3516	0.2803	0.2138	0.2588	0.4584
2.80	0.5109	0.5055	0.4888	0.4599	0.4174	0.3905	0.3596	0.2880	0.2201	0.2618	0.4594
2.85	0.5183	0.5129	0.4963	0.4676	0.4253	0.3984	0.3675	0.2956	0.2264	0.2649	0.4604
2.90	0.5256	0.5203	0.5038	0.4753	0.4331	0.4063	0.3754	0.3032	0.2327	0.2679	0.4615
2.95	0.5328	0.5275	0.5112	0.4828	0.4408	0.4141	0.3833	0.3107	0.2390	0.2710	0.4625
3.00	0.5399	0.5346	0.5184	0.4903	0.4485	0.4218	0.3910	0.3183	0.2454	0.2741	0.4635

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.30

PAGE 175

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1552	0.1511	0.1385	0.1171	0.0868	0.0685	0.0489	0.0116	0.0055	0.1498	0.4047
0.05	0.1554	0.1513	0.1387	0.1173	0.0869	0.0686	0.0490	0.0117	0.0056	0.1498	0.4047
0.10	0.1560	0.1518	0.1392	0.1178	0.0873	0.0690	0.0494	0.0120	0.0058	0.1500	0.4048
0.15	0.1569	0.1528	0.1401	0.1186	0.0881	0.0697	0.0500	0.0124	0.0061	0.1502	0.4050
0.20	0.1583	0.1541	0.1414	0.1198	0.0891	0.0706	0.0508	0.0131	0.0066	0.1506	0.4053
0.25	0.1600	0.1558	0.1430	0.1213	0.0904	0.0718	0.0519	0.0140	0.0073	0.1511	0.4056
0.30	0.1621	0.1579	0.1450	0.1231	0.0920	0.0733	0.0532	0.0150	0.0080	0.1516	0.4061
0.35	0.1646	0.1603	0.1473	0.1252	0.0938	0.0750	0.0548	0.0162	0.0090	0.1523	0.4065
0.40	0.1674	0.1631	0.1500	0.1277	0.0960	0.0770	0.0566	0.0177	0.0100	0.1530	0.4071
0.45	0.1706	0.1662	0.1530	0.1304	0.0984	0.0793	0.0587	0.0193	0.0113	0.1538	0.4077
0.50	0.1741	0.1697	0.1563	0.1335	0.1012	0.0818	0.0610	0.0212	0.0126	0.1547	0.4084
0.55	0.1780	0.1735	0.1600	0.1369	0.1042	0.0845	0.0635	0.0232	0.0141	0.1557	0.4091
0.60	0.1822	0.1777	0.1639	0.1405	0.1075	0.0877	0.0664	0.0255	0.0158	0.1568	0.4098
0.65	0.1867	0.1821	0.1682	0.1445	0.1110	0.0910	0.0694	0.0279	0.0176	0.1580	0.4106
0.70	0.1916	0.1869	0.1728	0.1488	0.1149	0.0946	0.0727	0.0306	0.0196	0.1592	0.4114
0.75	0.1967	0.1920	0.1776	0.1533	0.1190	0.0984	0.0763	0.0335	0.0218	0.1605	0.4122
0.80	0.2021	0.1973	0.1828	0.1581	0.1233	0.1025	0.0801	0.0366	0.0240	0.1618	0.4131
0.85	0.2078	0.2029	0.1882	0.1632	0.1279	0.1068	0.0841	0.0399	0.0265	0.1633	0.4140
0.90	0.2137	0.2088	0.1938	0.1685	0.1328	0.1114	0.0884	0.0435	0.0291	0.1647	0.4149
0.95	0.2198	0.2149	0.1997	0.1741	0.1379	0.1163	0.0929	0.0472	0.0318	0.1663	0.4158
1.00	0.2262	0.2212	0.2059	0.1799	0.1433	0.1213	0.0976	0.0512	0.0347	0.1679	0.4167
1.05	0.2329	0.2277	0.2122	0.1860	0.1488	0.1266	0.1026	0.0553	0.0378	0.1695	0.4176
1.10	0.2397	0.2345	0.2188	0.1922	0.1546	0.1321	0.1078	0.0597	0.0410	0.1712	0.4186
1.15	0.2467	0.2414	0.2255	0.1987	0.1607	0.1378	0.1132	0.0642	0.0444	0.1730	0.4195
1.20	0.2539	0.2486	0.2325	0.2053	0.1669	0.1438	0.1188	0.0690	0.0479	0.1748	0.4205
1.25	0.2612	0.2558	0.2396	0.2121	0.1733	0.1499	0.1246	0.0739	0.0515	0.1767	0.4214
1.30	0.2687	0.2633	0.2469	0.2191	0.1799	0.1562	0.1306	0.0790	0.0553	0.1786	0.4224
1.35	0.2763	0.2708	0.2543	0.2263	0.1866	0.1627	0.1368	0.0843	0.0592	0.1805	0.4233
1.40	0.2840	0.2785	0.2619	0.2336	0.1935	0.1694	0.1431	0.0898	0.0632	0.1825	0.4243
1.45	0.2919	0.2864	0.2695	0.2410	0.2006	0.1762	0.1496	0.0954	0.0674	0.1846	0.4253
1.50	0.2998	0.2943	0.2773	0.2486	0.2078	0.1832	0.1563	0.1012	0.0717	0.1866	0.4262
1.55	0.3079	0.3023	0.2852	0.2563	0.2152	0.1903	0.1631	0.1071	0.0762	0.1888	0.4272

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.30

PAGE 176

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3160	0.3103	0.2932	0.2641	0.2227	0.1976	0.1701	0.1132	0.0807	0.1909	0.4281
1.65	0.3242	0.3185	0.3012	0.2719	0.2303	0.2050	0.1772	0.1195	0.0854	0.1932	0.4291
1.70	0.3324	0.3267	0.3093	0.2799	0.2380	0.2125	0.1844	0.1258	0.0902	0.1954	0.4301
1.75	0.3406	0.3349	0.3175	0.2879	0.2457	0.2200	0.1918	0.1323	0.0951	0.1977	0.4310
1.80	0.3489	0.3432	0.3257	0.2960	0.2536	0.2277	0.1992	0.1389	0.1001	0.2001	0.4320
1.85	0.3572	0.3514	0.3339	0.3042	0.2615	0.2355	0.2067	0.1456	0.1052	0.2024	0.4329
1.90	0.3655	0.3597	0.3422	0.3123	0.2695	0.2433	0.2143	0.1524	0.1104	0.2049	0.4339
1.95	0.3738	0.3681	0.3505	0.3206	0.2776	0.2513	0.2220	0.1593	0.1156	0.2073	0.4349
2.00	0.3821	0.3764	0.3588	0.3288	0.2857	0.2592	0.2298	0.1663	0.1210	0.2098	0.4358
2.05	0.3904	0.3846	0.3671	0.3370	0.2938	0.2672	0.2376	0.1734	0.1265	0.2123	0.4368
2.10	0.3987	0.3929	0.3753	0.3453	0.3020	0.2753	0.2456	0.1805	0.1320	0.2149	0.4378
2.15	0.4069	0.4012	0.3836	0.3536	0.3102	0.2834	0.2534	0.1877	0.1376	0.2175	0.4387
2.20	0.4151	0.4094	0.3918	0.3618	0.3184	0.2915	0.2613	0.1950	0.1433	0.2202	0.4397
2.25	0.4233	0.4175	0.4000	0.3700	0.3266	0.2996	0.2693	0.2023	0.1490	0.2228	0.4407
2.30	0.4314	0.4257	0.4082	0.3782	0.3347	0.3077	0.2773	0.2097	0.1548	0.2255	0.4416
2.35	0.4396	0.4337	0.4163	0.3864	0.3429	0.3158	0.2853	0.2171	0.1607	0.2283	0.4426
2.40	0.4477	0.4418	0.4244	0.3945	0.3511	0.3240	0.2933	0.2246	0.1666	0.2310	0.4436
2.45	0.4558	0.4497	0.4324	0.4026	0.3592	0.3321	0.3014	0.2320	0.1725	0.2339	0.4446
2.50	0.4639	0.4576	0.4404	0.4107	0.3673	0.3402	0.3094	0.2395	0.1785	0.2367	0.4456
2.55	0.4719	0.4654	0.4483	0.4187	0.3754	0.3482	0.3174	0.2470	0.1846	0.2396	0.4466
2.60	0.4798	0.4732	0.4561	0.4266	0.3834	0.3563	0.3254	0.2546	0.1907	0.2424	0.4476
2.65	0.4878	0.4808	0.4638	0.4345	0.3914	0.3643	0.3333	0.2621	0.1968	0.2454	0.4486
2.70	0.4957	0.4884	0.4715	0.4423	0.3994	0.3722	0.3412	0.2696	0.2030	0.2483	0.4496
2.75	0.5036	0.4959	0.4791	0.4501	0.4072	0.3802	0.3491	0.2772	0.2091	0.2513	0.4506
2.80	0.5114	0.5034	0.4867	0.4578	0.4151	0.3880	0.3570	0.2847	0.2153	0.2543	0.4516
2.85	0.5192	0.5107	0.4941	0.4654	0.4228	0.3958	0.3648	0.2922	0.2216	0.2573	0.4526
2.90	0.5269	0.5179	0.5015	0.4729	0.4305	0.4036	0.3726	0.2997	0.2278	0.2604	0.4536
2.95	0.5346	0.5251	0.5087	0.4803	0.4382	0.4113	0.3803	0.3071	0.2340	0.2635	0.4546
3.00	0.5422	0.5322	0.5159	0.4877	0.4457	0.4190	0.3880	0.3146	0.2403	0.2666	0.4557

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2-35

PAGE 177

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1624	0.1582	0.1453	0.1234	0.0921	0.0733	0.0530	0.0136	0.0043	0.1443	0.3983
0.05	0.1626	0.1584	0.1455	0.1235	0.0923	0.0734	0.0531	0.0137	0.0044	0.1443	0.3984
0.10	0.1631	0.1589	0.1460	0.1240	0.0927	0.0738	0.0534	0.0140	0.0046	0.1445	0.3985
0.15	0.1641	0.1598	0.1469	0.1248	0.0934	0.0745	0.0540	0.0144	0.0049	0.1447	0.3987
0.20	0.1654	0.1611	0.1481	0.1259	0.0944	0.0754	0.0548	0.0151	0.0054	0.1451	0.3989
0.25	0.1670	0.1627	0.1497	0.1274	0.0957	0.0765	0.0559	0.0159	0.0060	0.1455	0.3992
0.30	0.1691	0.1647	0.1516	0.1291	0.0972	0.0780	0.0572	0.0170	0.0068	0.1460	0.3996
0.35	0.1714	0.1671	0.1538	0.1312	0.0990	0.0797	0.0588	0.0182	0.0077	0.1466	0.4001
0.40	0.1742	0.1698	0.1564	0.1336	0.1011	0.0816	0.0605	0.0196	0.0088	0.1473	0.4006
0.45	0.1772	0.1728	0.1593	0.1362	0.1035	0.0838	0.0626	0.0212	0.0100	0.1481	0.4011
0.50	0.1806	0.1762	0.1625	0.1392	0.1062	0.0863	0.0648	0.0230	0.0113	0.1490	0.4017
0.55	0.1844	0.1798	0.1660	0.1425	0.1091	0.0890	0.0673	0.0251	0.0128	0.1499	0.4024
0.60	0.1884	0.1838	0.1698	0.1461	0.1123	0.0920	0.0701	0.0273	0.0144	0.1510	0.4031
0.65	0.1928	0.1881	0.1740	0.1499	0.1158	0.0953	0.0731	0.0297	0.0162	0.1521	0.4038
0.70	0.1974	0.1927	0.1784	0.1541	0.1195	0.0987	0.0763	0.0324	0.0182	0.1532	0.4046
0.75	0.2024	0.1976	0.1831	0.1585	0.1235	0.1025	0.0798	0.0352	0.0203	0.1545	0.4053
0.80	0.2076	0.2027	0.1881	0.1631	0.1277	0.1065	0.0835	0.0382	0.0225	0.1558	0.4062
0.85	0.2131	0.2082	0.1933	0.1680	0.1322	0.1107	0.0874	0.0415	0.0249	0.1571	0.4070
0.90	0.2188	0.2138	0.1988	0.1732	0.1370	0.1152	0.0916	0.0450	0.0274	0.1586	0.4078
0.95	0.2247	0.2197	0.2045	0.1786	0.1419	0.1199	0.0960	0.0486	0.0301	0.1600	0.4087
1.00	0.2309	0.2258	0.2104	0.1842	0.1472	0.1248	0.1006	0.0525	0.0330	0.1616	0.4096
1.05	0.2373	0.2322	0.2166	0.1901	0.1526	0.1300	0.1055	0.0566	0.0360	0.1632	0.4105
1.10	0.2439	0.2387	0.2229	0.1962	0.1582	0.1354	0.1105	0.0608	0.0391	0.1649	0.4114
1.15	0.2507	0.2454	0.2295	0.2024	0.1641	0.1409	0.1158	0.0653	0.0424	0.1666	0.4123
1.20	0.2577	0.2523	0.2362	0.2089	0.1701	0.1467	0.1213	0.0699	0.0459	0.1683	0.4132
1.25	0.2648	0.2594	0.2431	0.2155	0.1763	0.1527	0.1269	0.0747	0.0494	0.1701	0.4141
1.30	0.2720	0.2666	0.2502	0.2223	0.1827	0.1588	0.1328	0.0797	0.0531	0.1720	0.4150
1.35	0.2794	0.2740	0.2574	0.2293	0.1893	0.1652	0.1388	0.0849	0.0570	0.1739	0.4160
1.40	0.2869	0.2814	0.2647	0.2364	0.1961	0.1717	0.1450	0.0903	0.0610	0.1759	0.4169
1.45	0.2946	0.2890	0.2722	0.2436	0.2030	0.1783	0.1514	0.0958	0.0651	0.1779	0.4178
1.50	0.3023	0.2967	0.2798	0.2510	0.2100	0.1851	0.1579	0.1014	0.0693	0.1799	0.4188
1.55	0.3101	0.3045	0.2874	0.2585	0.2172	0.1921	0.1645	0.1073	0.0736	0.1820	0.4197

TABLES OF CALCULATIONS FOR W.H. WRIGHT E60.

VALUES OF RP WHERE N=2.35

PAGE 178

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3180	0.3123	0.2952	0.2660	0.2245	0.1992	0.1713	0.1132	0.0781	0.1842	0.4206
1.65	0.3259	0.3202	0.3030	0.2737	0.2319	0.2063	0.1783	0.1193	0.0827	0.1864	0.4216
1.70	0.3339	0.3282	0.3109	0.2815	0.2394	0.2137	0.1853	0.1255	0.0874	0.1886	0.4225
1.75	0.3420	0.3362	0.3189	0.2893	0.2469	0.2211	0.1925	0.1319	0.0922	0.1909	0.4234
1.80	0.3500	0.3443	0.3269	0.2972	0.2546	0.2285	0.1997	0.1363	0.0971	0.1932	0.4244
1.85	0.3581	0.3524	0.3349	0.3051	0.2624	0.2362	0.2071	0.1449	0.1021	0.1955	0.4253
1.90	0.3663	0.3605	0.3430	0.3131	0.2702	0.2438	0.2146	0.1516	0.1072	0.1979	0.4263
1.95	0.3744	0.3686	0.3511	0.3211	0.2781	0.2515	0.2221	0.1584	0.1124	0.2003	0.4272
2.00	0.3825	0.3767	0.3592	0.3292	0.2860	0.2594	0.2297	0.1652	0.1177	0.2028	0.4282
2.05	0.3906	0.3848	0.3673	0.3373	0.2939	0.2672	0.2373	0.1721	0.1231	0.2053	0.4291
2.10	0.3987	0.3929	0.3754	0.3453	0.3019	0.2751	0.2450	0.1792	0.1285	0.2079	0.4301
2.15	0.4068	0.4010	0.3834	0.3534	0.3099	0.2830	0.2528	0.1862	0.1341	0.2104	0.4311
2.20	0.4148	0.4090	0.3915	0.3615	0.3179	0.2909	0.2606	0.1934	0.1395	0.2131	0.4320
2.25	0.4228	0.4170	0.3996	0.3695	0.3260	0.2989	0.2684	0.2006	0.1453	0.2157	0.4330
2.30	0.4307	0.4250	0.4076	0.3775	0.3340	0.3069	0.2763	0.2078	0.1510	0.2184	0.4340
2.35	0.4386	0.4329	0.4155	0.3856	0.3420	0.3148	0.2841	0.2151	0.1568	0.2211	0.4349
2.40	0.4465	0.4408	0.4234	0.3936	0.3500	0.3228	0.2920	0.2224	0.1626	0.2239	0.4359
2.45	0.4543	0.4486	0.4313	0.4015	0.3580	0.3308	0.2999	0.2298	0.1685	0.2267	0.4369
2.50	0.4620	0.4564	0.4391	0.4095	0.3660	0.3387	0.3077	0.2371	0.1745	0.2295	0.4379
2.55	0.4697	0.4641	0.4469	0.4173	0.3739	0.3466	0.3156	0.2445	0.1804	0.2323	0.4389
2.60	0.4773	0.4717	0.4546	0.4251	0.3818	0.3546	0.3235	0.2520	0.1864	0.2352	0.4398
2.65	0.4848	0.4792	0.4622	0.4329	0.3897	0.3624	0.3313	0.2594	0.1925	0.2381	0.4408
2.70	0.4922	0.4867	0.4698	0.4406	0.3975	0.3703	0.3391	0.2668	0.1986	0.2410	0.4418
2.75	0.4995	0.4941	0.4773	0.4482	0.4053	0.3781	0.3469	0.2742	0.2047	0.2440	0.4428
2.80	0.5069	0.5014	0.4847	0.4558	0.4130	0.3859	0.3546	0.2816	0.2108	0.2470	0.4439
2.85	0.5141	0.5087	0.4921	0.4633	0.4206	0.3933	0.3623	0.2890	0.2170	0.2500	0.4449
2.90	0.5212	0.5158	0.4993	0.4707	0.4282	0.4012	0.3700	0.2964	0.2231	0.2530	0.4459
2.95	0.5282	0.5229	0.5065	0.4780	0.4358	0.4088	0.3776	0.3038	0.2293	0.2561	0.4469
3.00	0.5352	0.5299	0.5136	0.4853	0.4432	0.4163	0.3852	0.3112	0.2355	0.2592	0.4479

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2-40

PAGE 179

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1696	0.1652	0.1521	0.1296	0.0975	0.0781	0.0571	0.0157	0.0033	0.1389	0.3920
0.05	0.1697	0.1654	0.1522	0.1298	0.0977	0.0783	0.0572	0.0158	0.0033	0.1389	0.3921
0.10	0.1703	0.1659	0.1528	0.1302	0.0981	0.0786	0.0575	0.0161	0.0035	0.1391	0.3922
0.15	0.1712	0.1668	0.1536	0.1310	0.0988	0.0793	0.0581	0.0165	0.0039	0.1393	0.3923
0.20	0.1724	0.1681	0.1548	0.1321	0.0997	0.0802	0.0589	0.0172	0.0043	0.1396	0.3926
0.25	0.1740	0.1696	0.1563	0.1335	0.1010	0.0813	0.0600	0.0180	0.0050	0.1400	0.3929
0.30	0.1750	0.1716	0.1581	0.1352	0.1025	0.0827	0.0613	0.0191	0.0057	0.1405	0.3932
0.35	0.1783	0.1738	0.1603	0.1372	0.1043	0.0844	0.0628	0.0203	0.0066	0.1411	0.3936
0.40	0.1809	0.1764	0.1628	0.1395	0.1063	0.0863	0.0645	0.0217	0.0076	0.1418	0.3941
0.45	0.1838	0.1793	0.1656	0.1421	0.1086	0.0884	0.0665	0.0233	0.0088	0.1425	0.3946
0.50	0.1871	0.1826	0.1687	0.1450	0.1112	0.0908	0.0687	0.0251	0.0101	0.1434	0.3952
0.55	0.1907	0.1861	0.1721	0.1482	0.1141	0.0935	0.0712	0.0270	0.0116	0.1443	0.3958
0.60	0.1946	0.1900	0.1758	0.1516	0.1172	0.0964	0.0739	0.0292	0.0132	0.1452	0.3964
0.65	0.1988	0.1941	0.1798	0.1553	0.1206	0.0996	0.0768	0.0316	0.0150	0.1463	0.3971
0.70	0.2033	0.1985	0.1840	0.1594	0.1242	0.1030	0.0800	0.0342	0.0169	0.1474	0.3978
0.75	0.2081	0.2033	0.1886	0.1635	0.1281	0.1067	0.0834	0.0370	0.0189	0.1486	0.3985
0.80	0.2131	0.2082	0.1934	0.1681	0.1322	0.1105	0.0870	0.0400	0.0211	0.1499	0.3993
0.85	0.2184	0.2135	0.1984	0.1729	0.1366	0.1147	0.0908	0.0432	0.0235	0.1512	0.4001
0.90	0.2239	0.2189	0.2037	0.1779	0.1412	0.1190	0.0949	0.0466	0.0260	0.1526	0.4009
0.95	0.2297	0.2246	0.2093	0.1832	0.1460	0.1236	0.0992	0.0502	0.0286	0.1540	0.4017
1.00	0.2357	0.2306	0.2150	0.1886	0.1511	0.1284	0.1037	0.0540	0.0314	0.1555	0.4026
1.05	0.2419	0.2367	0.2210	0.1943	0.1564	0.1334	0.1085	0.0579	0.0344	0.1571	0.4034
1.10	0.2482	0.2430	0.2272	0.2002	0.1619	0.1387	0.1134	0.0621	0.0375	0.1587	0.4043
1.15	0.2548	0.2495	0.2335	0.2063	0.1676	0.1441	0.1185	0.0665	0.0407	0.1604	0.4051
1.20	0.2615	0.2562	0.2400	0.2126	0.1734	0.1497	0.1239	0.0710	0.0441	0.1621	0.4060
1.25	0.2684	0.2631	0.2467	0.2190	0.1795	0.1556	0.1294	0.0757	0.0476	0.1638	0.4069
1.30	0.2755	0.2700	0.2536	0.2256	0.1857	0.1616	0.1351	0.0806	0.0512	0.1657	0.4078
1.35	0.2826	0.2772	0.2606	0.2324	0.1921	0.1677	0.1410	0.0857	0.0550	0.1675	0.4087
1.40	0.2899	0.2844	0.2677	0.2393	0.1987	0.1741	0.1470	0.0909	0.0589	0.1695	0.4096
1.45	0.2973	0.2918	0.2750	0.2463	0.2054	0.1806	0.1532	0.0963	0.0629	0.1714	0.4105
1.50	0.3049	0.2993	0.2823	0.2535	0.2123	0.1872	0.1596	0.1019	0.0671	0.1735	0.4114
1.55	0.3124	0.3068	0.2898	0.2608	0.2193	0.1940	0.1661	0.1076	0.0713	0.1755	0.4123

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.40

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3201	0.3145	0.2973	0.2681	0.2264	0.2009	0.1727	0.1134	0.0757	0.1776	0.4132
1.65	0.3278	0.3222	0.3050	0.2756	0.2336	0.2079	0.1795	0.1194	0.0803	0.1798	0.4142
1.70	0.3356	0.3299	0.3127	0.2832	0.2409	0.2150	0.1864	0.1254	0.0849	0.1820	0.4151
1.75	0.3435	0.3378	0.3204	0.2908	0.2483	0.2223	0.1934	0.1317	0.0896	0.1842	0.4160
1.80	0.3514	0.3456	0.3282	0.2985	0.2558	0.2296	0.2005	0.1380	0.0944	0.1865	0.4169
1.85	0.3593	0.3535	0.3361	0.3063	0.2634	0.2370	0.2077	0.1444	0.0994	0.1888	0.4179
1.90	0.3672	0.3614	0.3439	0.3141	0.2710	0.2445	0.2150	0.1510	0.1044	0.1912	0.4188
1.95	0.3751	0.3693	0.3518	0.3219	0.2787	0.2521	0.2223	0.1576	0.1095	0.1936	0.4197
2.00	0.3830	0.3773	0.3597	0.3298	0.2864	0.2597	0.2298	0.1643	0.1147	0.1960	0.4207
2.05	0.3910	0.3852	0.3677	0.3376	0.2942	0.2673	0.2373	0.1711	0.1200	0.1985	0.4216
2.10	0.3989	0.3931	0.3756	0.3455	0.3020	0.2751	0.2448	0.1780	0.1253	0.2010	0.4226
2.15	0.4068	0.4010	0.3835	0.3535	0.3099	0.2828	0.2524	0.1850	0.1308	0.2036	0.4235
2.20	0.4146	0.4089	0.3914	0.3614	0.3177	0.2906	0.2600	0.1920	0.1363	0.2062	0.4245
2.25	0.4225	0.4167	0.3993	0.3693	0.3256	0.2984	0.2677	0.1990	0.1419	0.2088	0.4254
2.30	0.4303	0.4245	0.4071	0.3771	0.3335	0.3062	0.2754	0.2062	0.1475	0.2115	0.4264
2.35	0.4380	0.4323	0.4149	0.3850	0.3413	0.3140	0.2831	0.2133	0.1532	0.2142	0.4274
2.40	0.4457	0.4400	0.4227	0.3928	0.3492	0.3219	0.2908	0.2205	0.1589	0.2169	0.4283
2.45	0.4534	0.4477	0.4304	0.4007	0.3570	0.3297	0.2986	0.2277	0.1648	0.2197	0.4293
2.50	0.4610	0.4553	0.4381	0.4084	0.3649	0.3375	0.3063	0.2350	0.1706	0.2225	0.4303
2.55	0.4685	0.4629	0.4458	0.4161	0.3727	0.3453	0.3141	0.2423	0.1765	0.2253	0.4313
2.60	0.4760	0.4704	0.4533	0.4238	0.3804	0.3530	0.3218	0.2496	0.1824	0.2282	0.4323
2.65	0.4834	0.4778	0.4608	0.4315	0.3882	0.3608	0.3295	0.2569	0.1884	0.2311	0.4333
2.70	0.4907	0.4852	0.4683	0.4390	0.3959	0.3685	0.3372	0.2642	0.1944	0.2340	0.4343
2.75	0.4980	0.4925	0.4757	0.4465	0.4035	0.3762	0.3448	0.2715	0.2005	0.2369	0.4353
2.80	0.5052	0.4997	0.4830	0.4540	0.4111	0.3838	0.3525	0.2788	0.2065	0.2399	0.4363
2.85	0.5123	0.5068	0.4902	0.4614	0.4186	0.3914	0.3601	0.2861	0.2126	0.2429	0.4373
2.90	0.5193	0.5139	0.4974	0.4687	0.4261	0.3990	0.3676	0.2934	0.2187	0.2459	0.4383
2.95	0.5262	0.5209	0.5045	0.4760	0.4336	0.4065	0.3751	0.3007	0.2248	0.2490	0.4393
3.00	0.5331	0.5278	0.5115	0.4831	0.4409	0.4139	0.3826	0.3080	0.2310	0.2521	0.4404

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=2.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1766	0.1722	0.1588	0.1358	0.1030	0.0830	0.0613	0.0180	0.0024	0.1336	0.3858
0.05	0.1768	0.1724	0.1590	0.1360	0.1031	0.0831	0.0614	0.0181	0.0024	0.1337	0.3858
0.10	0.1773	0.1729	0.1595	0.1364	0.1035	0.0835	0.0617	0.0183	0.0026	0.1338	0.3859
0.15	0.1782	0.1738	0.1603	0.1372	0.1042	0.0841	0.0623	0.0188	0.0030	0.1340	0.3861
0.20	0.1794	0.1750	0.1614	0.1382	0.1051	0.0850	0.0631	0.0194	0.0034	0.1343	0.3863
0.25	0.1809	0.1765	0.1629	0.1396	0.1063	0.0861	0.0641	0.0202	0.0040	0.1347	0.3865
0.30	0.1828	0.1783	0.1646	0.1412	0.1078	0.0875	0.0654	0.0213	0.0048	0.1352	0.3869
0.35	0.1850	0.1805	0.1667	0.1432	0.1095	0.0891	0.0669	0.0225	0.0057	0.1357	0.3872
0.40	0.1876	0.1830	0.1691	0.1454	0.1115	0.0910	0.0686	0.0238	0.0067	0.1364	0.3877
0.45	0.1904	0.1858	0.1718	0.1479	0.1138	0.0931	0.0705	0.0254	0.0078	0.1371	0.3881
0.50	0.1936	0.1889	0.1748	0.1507	0.1163	0.0954	0.0727	0.0272	0.0091	0.1379	0.3887
0.55	0.1971	0.1924	0.1781	0.1538	0.1191	0.0980	0.0751	0.0291	0.0106	0.1387	0.3892
0.60	0.2008	0.1961	0.1817	0.1572	0.1221	0.1009	0.0778	0.0313	0.0122	0.1397	0.3898
0.65	0.2049	0.2001	0.1856	0.1608	0.1254	0.1040	0.0806	0.0336	0.0139	0.1407	0.3905
0.70	0.2092	0.2044	0.1897	0.1647	0.1290	0.1073	0.0837	0.0362	0.0158	0.1418	0.3911
0.75	0.2138	0.2089	0.1941	0.1688	0.1327	0.1109	0.0870	0.0389	0.0178	0.1429	0.3918
0.80	0.2187	0.2137	0.1987	0.1732	0.1368	0.1147	0.0906	0.0419	0.0200	0.1441	0.3926
0.85	0.2238	0.2188	0.2036	0.1778	0.1410	0.1187	0.0943	0.0450	0.0223	0.1454	0.3933
0.90	0.2291	0.2241	0.2088	0.1827	0.1455	0.1229	0.0983	0.0483	0.0247	0.1468	0.3941
0.95	0.2347	0.2296	0.2141	0.1878	0.1502	0.1274	0.1025	0.0519	0.0273	0.1482	0.3948
1.00	0.2405	0.2353	0.2197	0.1931	0.1551	0.1321	0.1069	0.0556	0.0301	0.1496	0.3956
1.05	0.2464	0.2412	0.2255	0.1986	0.1603	0.1370	0.1115	0.0595	0.0330	0.1511	0.3965
1.10	0.2525	0.2474	0.2314	0.2043	0.1656	0.1421	0.1164	0.0635	0.0360	0.1527	0.3973
1.15	0.2590	0.2537	0.2376	0.2102	0.1711	0.1474	0.1214	0.0678	0.0392	0.1543	0.3981
1.20	0.2659	0.2602	0.2439	0.2163	0.1769	0.1529	0.1266	0.0723	0.0425	0.1560	0.3990
1.25	0.2722	0.2668	0.2504	0.2226	0.1828	0.1585	0.1320	0.0769	0.0459	0.1578	0.3998
1.30	0.2790	0.2736	0.2571	0.2290	0.1888	0.1644	0.1375	0.0817	0.0495	0.1595	0.4007
1.35	0.2860	0.2805	0.2639	0.2356	0.1951	0.1704	0.1433	0.0866	0.0532	0.1614	0.4016
1.40	0.2931	0.2875	0.2708	0.2423	0.2015	0.1765	0.1492	0.0918	0.0570	0.1633	0.4024
1.45	0.3002	0.2947	0.2778	0.2481	0.2080	0.1829	0.1552	0.0970	0.0610	0.1652	0.4033
1.50	0.3075	0.3020	0.2850	0.2551	0.2147	0.1894	0.1614	0.1025	0.0651	0.1672	0.4042
1.55	0.3149	0.3093	0.2923	0.2632	0.2215	0.1960	0.1678	0.1080	0.0693	0.1692	0.4051

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3224	0.3167	0.2996	0.2704	0.2284	0.2027	0.1743	0.1137	0.0736	0.1713	0.4060
1.65	0.3299	0.3243	0.3070	0.2777	0.2355	0.2096	0.1809	0.1196	0.0780	0.1734	0.4069
1.70	0.3375	0.3318	0.3145	0.2850	0.2426	0.2165	0.1876	0.1255	0.0825	0.1756	0.4078
1.75	0.3451	0.3394	0.3221	0.2925	0.2498	0.2236	0.1944	0.1316	0.0872	0.1778	0.4087
1.80	0.3528	0.3471	0.3297	0.3000	0.2571	0.2308	0.2014	0.1378	0.0919	0.1800	0.4096
1.85	0.3605	0.3548	0.3374	0.3075	0.2645	0.2380	0.2084	0.1441	0.0968	0.1823	0.4105
1.90	0.3683	0.3625	0.3450	0.3152	0.2720	0.2453	0.2155	0.1505	0.1017	0.1847	0.4115
1.95	0.3760	0.3702	0.3528	0.3228	0.2795	0.2527	0.2227	0.1571	0.1068	0.1871	0.4124
2.00	0.3837	0.3780	0.3605	0.3305	0.2871	0.2602	0.2300	0.1636	0.1119	0.1895	0.4133
2.05	0.3915	0.3857	0.3682	0.3382	0.2947	0.2677	0.2374	0.1703	0.1171	0.1919	0.4142
2.10	0.3992	0.3935	0.3760	0.3459	0.3023	0.2752	0.2448	0.1771	0.1224	0.1944	0.4152
2.15	0.4070	0.4012	0.3837	0.3537	0.3100	0.2828	0.2522	0.1839	0.1277	0.1970	0.4161
2.20	0.4147	0.4089	0.3915	0.3614	0.3177	0.2904	0.2597	0.1908	0.1332	0.1995	0.4171
2.25	0.4223	0.4166	0.3992	0.3692	0.3254	0.2981	0.2672	0.1977	0.1386	0.2021	0.4180
2.30	0.4300	0.4243	0.4069	0.3769	0.3331	0.3057	0.2748	0.2047	0.1442	0.2048	0.4190
2.35	0.4376	0.4319	0.4145	0.3846	0.3408	0.3134	0.2823	0.2117	0.1498	0.2075	0.4199
2.40	0.4452	0.4395	0.4222	0.3923	0.3486	0.3211	0.2899	0.2188	0.1555	0.2102	0.4209
2.45	0.4527	0.4470	0.4297	0.3999	0.3563	0.3288	0.2976	0.2259	0.1612	0.2129	0.4219
2.50	0.4601	0.4545	0.4373	0.4076	0.3639	0.3364	0.3051	0.2331	0.1670	0.2157	0.4228
2.55	0.4675	0.4619	0.4448	0.4152	0.3716	0.3441	0.3127	0.2402	0.1728	0.2185	0.4238
2.60	0.4749	0.4693	0.4522	0.4227	0.3792	0.3517	0.3203	0.2474	0.1787	0.2214	0.4248
2.65	0.4822	0.4766	0.4596	0.4302	0.3868	0.3594	0.3279	0.2546	0.1846	0.2242	0.4258
2.70	0.4894	0.4839	0.4670	0.4377	0.3944	0.3670	0.3354	0.2618	0.1905	0.2271	0.4268
2.75	0.4965	0.4910	0.4742	0.4451	0.4019	0.3745	0.3430	0.2690	0.1965	0.2301	0.4278
2.80	0.5036	0.4982	0.4814	0.4524	0.4094	0.3820	0.3505	0.2762	0.2025	0.2330	0.4288
2.85	0.5106	0.5052	0.4886	0.4597	0.4168	0.3895	0.3580	0.2834	0.2085	0.2360	0.4298
2.90	0.5175	0.5121	0.4956	0.4669	0.4242	0.3970	0.3655	0.2906	0.2145	0.2390	0.4308
2.95	0.5244	0.5190	0.5026	0.4741	0.4315	0.4045	0.3729	0.2978	0.2206	0.2421	0.4319
3.00	0.5312	0.5258	0.5095	0.4811	0.4388	0.4117	0.3802	0.3050	0.2267	0.2451	0.4329

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.50

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1837	0.1792	0.1655	0.1420	0.1084	0.0879	0.0655	0.0203	0.0016	0.1285	0.3796
0.05	0.1838	0.1793	0.1656	0.1422	0.1085	0.0880	0.0656	0.0204	0.0017	0.1286	0.3796
0.10	0.1843	0.1798	0.1661	0.1426	0.1089	0.0884	0.0660	0.0207	0.0019	0.1286	0.3797
0.15	0.1852	0.1807	0.1669	0.1434	0.1096	0.0890	0.0665	0.0211	0.0022	0.1288	0.3798
0.20	0.1863	0.1818	0.1680	0.1444	0.1105	0.0899	0.0673	0.0218	0.0027	0.1291	0.3800
0.25	0.1878	0.1833	0.1694	0.1457	0.1117	0.0910	0.0683	0.0226	0.0033	0.1295	0.3803
0.30	0.1896	0.1851	0.1711	0.1473	0.1131	0.0923	0.0696	0.0236	0.0040	0.1299	0.3806
0.35	0.1918	0.1872	0.1731	0.1492	0.1148	0.0939	0.0710	0.0248	0.0049	0.1305	0.3809
0.40	0.1942	0.1896	0.1755	0.1513	0.1168	0.0957	0.0727	0.0261	0.0059	0.1311	0.3813
0.45	0.1969	0.1923	0.1781	0.1538	0.1190	0.0978	0.0746	0.0277	0.0070	0.1318	0.3818
0.50	0.2000	0.1953	0.1810	0.1565	0.1214	0.1001	0.0768	0.0294	0.0083	0.1325	0.3822
0.55	0.2033	0.1986	0.1842	0.1595	0.1241	0.1026	0.0791	0.0314	0.0097	0.1334	0.3828
0.60	0.2070	0.2022	0.1876	0.1627	0.1271	0.1054	0.0817	0.0335	0.0113	0.1343	0.3833
0.65	0.2109	0.2061	0.1914	0.1662	0.1303	0.1084	0.0845	0.0358	0.0130	0.1353	0.3839
0.70	0.2151	0.2102	0.1953	0.1700	0.1337	0.1117	0.0875	0.0383	0.0148	0.1363	0.3846
0.75	0.2195	0.2146	0.1996	0.1740	0.1374	0.1151	0.0908	0.0410	0.0168	0.1374	0.3852
0.80	0.2242	0.2192	0.2041	0.1783	0.1413	0.1188	0.0942	0.0439	0.0190	0.1386	0.3859
0.85	0.2291	0.2241	0.2088	0.1828	0.1455	0.1228	0.0979	0.0469	0.0212	0.1398	0.3866
0.90	0.2343	0.2292	0.2138	0.1875	0.1498	0.1269	0.1018	0.0502	0.0236	0.1411	0.3873
0.95	0.2397	0.2346	0.2190	0.1924	0.1544	0.1313	0.1059	0.0536	0.0262	0.1425	0.3881
1.00	0.2453	0.2401	0.2244	0.1976	0.1592	0.1358	0.1102	0.0573	0.0289	0.1439	0.3888
1.05	0.2511	0.2459	0.2300	0.2029	0.1642	0.1406	0.1147	0.0611	0.0317	0.1454	0.3896
1.10	0.2571	0.2518	0.2358	0.2085	0.1694	0.1455	0.1194	0.0651	0.0347	0.1469	0.3904
1.15	0.2632	0.2579	0.2418	0.2142	0.1748	0.1507	0.1243	0.0693	0.0378	0.1485	0.3912
1.20	0.2695	0.2642	0.2479	0.2201	0.1803	0.1561	0.1294	0.0736	0.0410	0.1502	0.3920
1.25	0.2760	0.2706	0.2542	0.2262	0.1861	0.1615	0.1346	0.0782	0.0444	0.1519	0.3929
1.30	0.2826	0.2772	0.2607	0.2324	0.1920	0.1673	0.1401	0.0829	0.0479	0.1536	0.3937
1.35	0.2894	0.2839	0.2673	0.2388	0.1981	0.1732	0.1457	0.0877	0.0516	0.1554	0.3945
1.40	0.2963	0.2908	0.2740	0.2454	0.2043	0.1792	0.1514	0.0927	0.0553	0.1573	0.3954
1.45	0.3033	0.2977	0.2808	0.2520	0.2107	0.1854	0.1573	0.0979	0.0592	0.1592	0.3962
1.50	0.3103	0.3048	0.2878	0.2588	0.2172	0.1917	0.1634	0.1032	0.0632	0.1611	0.3971
1.55	0.3175	0.3119	0.2949	0.2657	0.2238	0.1981	0.1696	0.1087	0.0674	0.1631	0.3980

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=2.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3248	0.3191	0.3020	0.2727	0.2306	0.2047	0.1759	0.1142	0.0716	0.1652	0.3989
1.65	0.3321	0.3265	0.3092	0.2798	0.2374	0.2114	0.1824	0.1200	0.0760	0.1673	0.3997
1.70	0.3395	0.3338	0.3165	0.2870	0.2444	0.2182	0.1890	0.1258	0.0804	0.1694	0.4006
1.75	0.3469	0.3412	0.3239	0.2943	0.2515	0.2251	0.1957	0.1318	0.0850	0.1716	0.4015
1.80	0.3544	0.3487	0.3313	0.3016	0.2586	0.2321	0.2024	0.1378	0.0897	0.1738	0.4024
1.85	0.3619	0.3562	0.3388	0.3090	0.2658	0.2392	0.2093	0.1440	0.0944	0.1761	0.4033
1.90	0.3695	0.3638	0.3463	0.3164	0.2731	0.2463	0.2163	0.1503	0.0993	0.1784	0.4042
1.95	0.3770	0.3713	0.3538	0.3239	0.2805	0.2535	0.2233	0.1567	0.1043	0.1807	0.4051
2.00	0.3846	0.3789	0.3614	0.3314	0.2879	0.2608	0.2305	0.1632	0.1093	0.1831	0.4061
2.05	0.3922	0.3865	0.3690	0.3389	0.2953	0.2682	0.2375	0.1697	0.1144	0.1855	0.4070
2.10	0.3998	0.3940	0.3765	0.3465	0.3028	0.2756	0.2449	0.1763	0.1195	0.1880	0.4079
2.15	0.4073	0.4016	0.3841	0.3541	0.3103	0.2830	0.2522	0.1830	0.1249	0.1905	0.4088
2.20	0.4149	0.4091	0.3917	0.3617	0.3178	0.2905	0.2595	0.1898	0.1302	0.1931	0.4098
2.25	0.4224	0.4167	0.3992	0.3692	0.3254	0.2980	0.2669	0.1966	0.1357	0.1957	0.4107
2.30	0.4299	0.4242	0.4068	0.3768	0.3330	0.3055	0.2743	0.2035	0.1411	0.1983	0.4117
2.35	0.4373	0.4316	0.4143	0.3844	0.3405	0.3130	0.2817	0.2104	0.1467	0.2010	0.4126
2.40	0.4448	0.4391	0.4218	0.3919	0.3481	0.3205	0.2892	0.2173	0.1523	0.2037	0.4136
2.45	0.4521	0.4465	0.4292	0.3994	0.3556	0.3281	0.2966	0.2243	0.1579	0.2064	0.4146
2.50	0.4595	0.4538	0.4366	0.4069	0.3632	0.3355	0.3041	0.2313	0.1636	0.2091	0.4155
2.55	0.4667	0.4611	0.4440	0.4144	0.3707	0.3431	0.3116	0.2384	0.1694	0.2119	0.4165
2.60	0.4740	0.4684	0.4513	0.4218	0.3782	0.3506	0.3190	0.2455	0.1752	0.2148	0.4175
2.65	0.4811	0.4756	0.4586	0.4292	0.3857	0.3581	0.3265	0.2526	0.1810	0.2176	0.4185
2.70	0.4882	0.4827	0.4658	0.4365	0.3931	0.3656	0.3339	0.2597	0.1869	0.2205	0.4195
2.75	0.4953	0.4898	0.4730	0.4438	0.4005	0.3730	0.3414	0.2668	0.1928	0.2234	0.4205
2.80	0.5022	0.4968	0.4801	0.4510	0.4079	0.3804	0.3488	0.2739	0.1987	0.2264	0.4215
2.85	0.5091	0.5037	0.4871	0.4582	0.4152	0.3878	0.3561	0.2810	0.2046	0.2293	0.4225
2.90	0.5160	0.5106	0.4941	0.4653	0.4225	0.3951	0.3635	0.2881	0.2106	0.2323	0.4235
2.95	0.5227	0.5174	0.5010	0.4724	0.4297	0.4024	0.3708	0.2952	0.2166	0.2354	0.4245
3.00	0.5294	0.5241	0.5078	0.4793	0.4369	0.4097	0.3781	0.3022	0.2226	0.2384	0.4256

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=2.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1905	0.1861	0.1721	0.1482	0.1139	0.0929	0.0698	0.0228	0.0010	0.1234	0.3734
0.05	0.1908	0.1862	0.1723	0.1484	0.1140	0.0930	0.0700	0.0229	0.0011	0.1235	0.3734
0.10	0.1913	0.1867	0.1727	0.1488	0.1144	0.0934	0.0703	0.0231	0.0013	0.1236	0.3735
0.15	0.1921	0.1875	0.1735	0.1495	0.1150	0.0940	0.0708	0.0236	0.0016	0.1238	0.3736
0.20	0.1932	0.1886	0.1745	0.1505	0.1159	0.0948	0.0716	0.0242	0.0021	0.1241	0.3738
0.25	0.1946	0.1900	0.1759	0.1518	0.1171	0.0959	0.0726	0.0250	0.0027	0.1244	0.3740
0.30	0.1964	0.1917	0.1776	0.1533	0.1185	0.0972	0.0738	0.0260	0.0034	0.1248	0.3743
0.35	0.1984	0.1938	0.1795	0.1551	0.1201	0.0987	0.0752	0.0272	0.0042	0.1254	0.3746
0.40	0.2008	0.1961	0.1818	0.1572	0.1220	0.1005	0.0769	0.0285	0.0052	0.1259	0.3750
0.45	0.2034	0.1987	0.1843	0.1596	0.1242	0.1025	0.0788	0.0300	0.0064	0.1266	0.3754
0.50	0.2064	0.2016	0.1871	0.1622	0.1265	0.1048	0.0808	0.0318	0.0076	0.1273	0.3759
0.55	0.2096	0.2048	0.1902	0.1651	0.1292	0.1072	0.0832	0.0337	0.0090	0.1281	0.3764
0.60	0.2131	0.2083	0.1935	0.1683	0.1321	0.1100	0.0857	0.0357	0.0106	0.1290	0.3769
0.65	0.2169	0.2120	0.1971	0.1717	0.1352	0.1129	0.0884	0.0380	0.0122	0.1300	0.3775
0.70	0.2209	0.2160	0.2010	0.1753	0.1385	0.1161	0.0914	0.0405	0.0140	0.1310	0.3781
0.75	0.2252	0.2202	0.2051	0.1792	0.1421	0.1195	0.0946	0.0431	0.0160	0.1320	0.3787
0.80	0.2298	0.2247	0.2095	0.1834	0.1459	0.1231	0.0979	0.0460	0.0181	0.1332	0.3793
0.85	0.2345	0.2295	0.2141	0.1877	0.1500	0.1269	0.1015	0.0490	0.0203	0.1344	0.3800
0.90	0.2395	0.2344	0.2189	0.1923	0.1542	0.1309	0.1053	0.0522	0.0227	0.1357	0.3807
0.95	0.2447	0.2396	0.2239	0.1971	0.1587	0.1352	0.1093	0.0556	0.0252	0.1370	0.3814
1.00	0.2501	0.2449	0.2291	0.2021	0.1633	0.1396	0.1135	0.0591	0.0279	0.1384	0.3821
1.05	0.2557	0.2505	0.2345	0.2073	0.1682	0.1443	0.1179	0.0629	0.0306	0.1398	0.3829
1.10	0.2615	0.2563	0.2402	0.2127	0.1732	0.1491	0.1225	0.0668	0.0336	0.1413	0.3836
1.15	0.2675	0.2622	0.2460	0.2183	0.1785	0.1542	0.1273	0.0709	0.0366	0.1429	0.3844
1.20	0.2736	0.2683	0.2519	0.2240	0.1839	0.1594	0.1323	0.0751	0.0398	0.1445	0.3852
1.25	0.2799	0.2745	0.2580	0.2299	0.1895	0.1648	0.1374	0.0796	0.0431	0.1461	0.3860
1.30	0.2863	0.2809	0.2643	0.2360	0.1953	0.1703	0.1427	0.0842	0.0466	0.1479	0.3868
1.35	0.2929	0.2874	0.2707	0.2422	0.2012	0.1760	0.1482	0.0889	0.0502	0.1496	0.3876
1.40	0.2996	0.2941	0.2773	0.2486	0.2073	0.1819	0.1538	0.0938	0.0539	0.1515	0.3885
1.45	0.3064	0.3008	0.2839	0.2550	0.2135	0.1879	0.1596	0.0989	0.0577	0.1533	0.3893
1.50	0.3132	0.3077	0.2907	0.2616	0.2198	0.1941	0.1655	0.1041	0.0616	0.1552	0.3901
1.55	0.3202	0.3146	0.2976	0.2684	0.2263	0.2004	0.1715	0.1094	0.0657	0.1572	0.3910

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.55

PAGE 186

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3273	0.3217	0.3045	0.2752	0.2329	0.2068	0.1777	0.1149	0.0699	0.1592	0.3918
1.65	0.3344	0.3288	0.3116	0.2821	0.2396	0.2133	0.1840	0.1205	0.0741	0.1613	0.3927
1.70	0.3416	0.3359	0.3187	0.2891	0.2464	0.2200	0.1905	0.1262	0.0785	0.1634	0.3936
1.75	0.3489	0.3432	0.3259	0.2962	0.2532	0.2267	0.1970	0.1321	0.0830	0.1656	0.3945
1.80	0.3562	0.3505	0.3331	0.3033	0.2602	0.2335	0.2036	0.1380	0.0876	0.1678	0.3953
1.85	0.3635	0.3578	0.3404	0.3105	0.2673	0.2404	0.2104	0.1441	0.0923	0.1700	0.3962
1.90	0.3709	0.3651	0.3477	0.3178	0.2744	0.2474	0.2172	0.1502	0.0971	0.1723	0.3971
1.95	0.3782	0.3725	0.3551	0.3251	0.2816	0.2545	0.2241	0.1565	0.1020	0.1746	0.3980
2.00	0.3856	0.3799	0.3624	0.3324	0.2888	0.2616	0.2310	0.1628	0.1069	0.1770	0.3989
2.05	0.3930	0.3873	0.3698	0.3398	0.2961	0.2688	0.2381	0.1693	0.1120	0.1794	0.3999
2.10	0.4004	0.3947	0.3773	0.3472	0.3034	0.2761	0.2452	0.1758	0.1171	0.1818	0.4008
2.15	0.4078	0.4021	0.3847	0.3546	0.3108	0.2833	0.2523	0.1823	0.1223	0.1843	0.4017
2.20	0.4152	0.4095	0.3921	0.3620	0.3181	0.2907	0.2595	0.1890	0.1276	0.1869	0.4026
2.25	0.4226	0.4169	0.3995	0.3695	0.3255	0.2980	0.2667	0.1957	0.1329	0.1894	0.4036
2.30	0.4299	0.4242	0.4069	0.3769	0.3330	0.3054	0.2740	0.2024	0.1383	0.1920	0.4045
2.35	0.4372	0.4316	0.4142	0.3843	0.3404	0.3127	0.2813	0.2092	0.1438	0.1947	0.4055
2.40	0.4445	0.4389	0.4216	0.3917	0.3478	0.3201	0.2886	0.2160	0.1493	0.1973	0.4064
2.45	0.4518	0.4461	0.4289	0.3991	0.3552	0.3275	0.2959	0.2229	0.1549	0.2000	0.4074
2.50	0.4590	0.4533	0.4362	0.4064	0.3626	0.3349	0.3033	0.2298	0.1605	0.2028	0.4083
2.55	0.4661	0.4605	0.4434	0.4138	0.3700	0.3423	0.3106	0.2368	0.1661	0.2056	0.4093
2.60	0.4732	0.4676	0.4506	0.4210	0.3774	0.3497	0.3179	0.2437	0.1719	0.2084	0.4103
2.65	0.4803	0.4747	0.4577	0.4283	0.3847	0.3571	0.3253	0.2507	0.1776	0.2112	0.4113
2.70	0.4872	0.4817	0.4648	0.4355	0.3921	0.3644	0.3326	0.2577	0.1834	0.2141	0.4123
2.75	0.4942	0.4887	0.4719	0.4427	0.3993	0.3717	0.3399	0.2647	0.1892	0.2170	0.4133
2.80	0.5010	0.4956	0.4789	0.4498	0.4066	0.3790	0.3472	0.2717	0.1951	0.2199	0.4143
2.85	0.5078	0.5024	0.4858	0.4569	0.4138	0.3863	0.3545	0.2787	0.2010	0.2229	0.4153
2.90	0.5146	0.5092	0.4926	0.4639	0.4210	0.3935	0.3617	0.2857	0.2069	0.2258	0.4163
2.95	0.5212	0.5159	0.4994	0.4708	0.4281	0.4007	0.3689	0.2927	0.2128	0.2289	0.4173
3.00	0.5278	0.5225	0.5062	0.4777	0.4352	0.4078	0.3761	0.2997	0.2188	0.2319	0.4183

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESR.

VALUES OF RP WHERE N=2.60

PAGE 187

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.1975	0.1929	0.1787	0.1544	0.1193	0.0979	0.0742	0.0253	0.0006	0.1185	0.3672
0.05	0.1977	0.1930	0.1789	0.1545	0.1195	0.0980	0.0743	0.0254	0.0006	0.1185	0.3673
0.10	0.1981	0.1935	0.1793	0.1545	0.1198	0.0983	0.0745	0.0257	0.0008	0.1187	0.3673
0.15	0.1989	0.1943	0.1800	0.1556	0.1205	0.0989	0.0752	0.0261	0.0011	0.1188	0.3675
0.20	0.2000	0.1953	0.1811	0.1566	0.1213	0.0997	0.0759	0.0268	0.0016	0.1191	0.3676
0.25	0.2014	0.1967	0.1824	0.1578	0.1224	0.1008	0.0769	0.0275	0.0022	0.1195	0.3679
0.30	0.2031	0.1983	0.1840	0.1593	0.1238	0.1021	0.0781	0.0285	0.0029	0.1199	0.3681
0.35	0.2050	0.2003	0.1859	0.1611	0.1254	0.1036	0.0795	0.0297	0.0037	0.1204	0.3684
0.40	0.2073	0.2026	0.1880	0.1631	0.1273	0.1053	0.0811	0.0310	0.0047	0.1209	0.3688
0.45	0.2098	0.2051	0.1905	0.1654	0.1294	0.1073	0.0829	0.0325	0.0058	0.1216	0.3692
0.50	0.2127	0.2079	0.1932	0.1680	0.1317	0.1095	0.0850	0.0342	0.0071	0.1223	0.3696
0.55	0.2158	0.2110	0.1962	0.1708	0.1343	0.1119	0.0873	0.0361	0.0085	0.1231	0.3701
0.60	0.2192	0.2143	0.1994	0.1738	0.1371	0.1145	0.0897	0.0381	0.0100	0.1239	0.3706
0.65	0.2229	0.2179	0.2029	0.1772	0.1401	0.1174	0.0924	0.0404	0.0116	0.1248	0.3711
0.70	0.2268	0.2218	0.2066	0.1807	0.1434	0.1205	0.0953	0.0428	0.0134	0.1258	0.3716
0.75	0.2309	0.2259	0.2106	0.1845	0.1468	0.1238	0.0984	0.0454	0.0153	0.1268	0.3722
0.80	0.2353	0.2302	0.2148	0.1885	0.1506	0.1273	0.1017	0.0481	0.0174	0.1280	0.3729
0.85	0.2399	0.2348	0.2193	0.1927	0.1545	0.1311	0.1052	0.0511	0.0196	0.1291	0.3735
0.90	0.2447	0.2396	0.2239	0.1972	0.1586	0.1350	0.1089	0.0543	0.0219	0.1304	0.3742
0.95	0.2498	0.2446	0.2288	0.2018	0.1630	0.1392	0.1129	0.0576	0.0244	0.1317	0.3748
1.00	0.2550	0.2498	0.2339	0.2067	0.1675	0.1435	0.1170	0.0611	0.0270	0.1330	0.3755
1.05	0.2604	0.2552	0.2391	0.2117	0.1722	0.1480	0.1213	0.0647	0.0297	0.1344	0.3762
1.10	0.2661	0.2607	0.2446	0.2169	0.1772	0.1528	0.1257	0.0686	0.0326	0.1359	0.3770
1.15	0.2718	0.2665	0.2502	0.2224	0.1823	0.1577	0.1304	0.0726	0.0356	0.1374	0.3777
1.20	0.2778	0.2724	0.2560	0.2279	0.1875	0.1627	0.1352	0.0768	0.0387	0.1390	0.3785
1.25	0.2839	0.2784	0.2619	0.2337	0.1930	0.1680	0.1403	0.0811	0.0420	0.1406	0.3793
1.30	0.2901	0.2846	0.2680	0.2396	0.1986	0.1734	0.1454	0.0856	0.0454	0.1423	0.3800
1.35	0.2965	0.2910	0.2743	0.2456	0.2044	0.1790	0.1508	0.0903	0.0489	0.1440	0.3808
1.40	0.3029	0.2974	0.2806	0.2518	0.2103	0.1847	0.1563	0.0951	0.0525	0.1458	0.3816
1.45	0.3095	0.3040	0.2871	0.2581	0.2163	0.1906	0.1619	0.1000	0.0563	0.1477	0.3825
1.50	0.3162	0.3107	0.2937	0.2646	0.2225	0.1966	0.1677	0.1051	0.0602	0.1496	0.3833
1.55	0.3230	0.3174	0.3003	0.2711	0.2288	0.2027	0.1736	0.1103	0.0642	0.1515	0.3841

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=2.60

PAGE 188

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3299	0.3243	0.3071	0.2777	0.2353	0.2090	0.1796	0.1157	0.0683	0.1535	0.3850
1.65	0.3368	0.3312	0.3140	0.2845	0.2418	0.2154	0.1858	0.1212	0.0725	0.1555	0.3858
1.70	0.3438	0.3382	0.3209	0.2913	0.2484	0.2218	0.1921	0.1268	0.0768	0.1576	0.3867
1.75	0.3509	0.3452	0.3279	0.2982	0.2551	0.2284	0.1985	0.1325	0.0812	0.1597	0.3875
1.80	0.3580	0.3523	0.3350	0.3052	0.2619	0.2351	0.2050	0.1384	0.0857	0.1619	0.3884
1.85	0.3652	0.3595	0.3421	0.3122	0.2688	0.2419	0.2115	0.1443	0.0904	0.1641	0.3893
1.90	0.3724	0.3666	0.3492	0.3193	0.2758	0.2487	0.2182	0.1503	0.0951	0.1664	0.3902
1.95	0.3796	0.3739	0.3564	0.3264	0.2828	0.2556	0.2250	0.1565	0.0999	0.1687	0.3910
2.00	0.3868	0.3811	0.3636	0.3336	0.2899	0.2626	0.2318	0.1627	0.1047	0.1710	0.3919
2.05	0.3940	0.3883	0.3709	0.3408	0.2970	0.2696	0.2387	0.1690	0.1097	0.1734	0.3928
2.10	0.4013	0.3956	0.3781	0.3481	0.3042	0.2767	0.2456	0.1754	0.1148	0.1759	0.3937
2.15	0.4085	0.4028	0.3854	0.3553	0.3114	0.2838	0.2526	0.1818	0.1199	0.1783	0.3947
2.20	0.4157	0.4100	0.3926	0.3626	0.3186	0.2910	0.2597	0.1883	0.1251	0.1808	0.3956
2.25	0.4229	0.4173	0.3999	0.3699	0.3259	0.2982	0.2668	0.1949	0.1303	0.1834	0.3965
2.30	0.4301	0.4245	0.4071	0.3771	0.3331	0.3054	0.2739	0.2015	0.1357	0.1859	0.3975
2.35	0.4373	0.4316	0.4143	0.3844	0.3404	0.3127	0.2810	0.2082	0.1410	0.1886	0.3984
2.40	0.4444	0.4388	0.4215	0.3916	0.3477	0.3199	0.2882	0.2149	0.1465	0.1912	0.3993
2.45	0.4515	0.4459	0.4287	0.3989	0.3550	0.3272	0.2954	0.2217	0.1520	0.1939	0.4003
2.50	0.4586	0.4530	0.4358	0.4061	0.3622	0.3344	0.3026	0.2285	0.1575	0.1966	0.4013
2.55	0.4656	0.4600	0.4429	0.4133	0.3695	0.3417	0.3098	0.2353	0.1631	0.1994	0.4022
2.60	0.4726	0.4671	0.4500	0.4205	0.3767	0.3490	0.3170	0.2422	0.1688	0.2022	0.4032
2.65	0.4795	0.4740	0.4570	0.4276	0.3839	0.3562	0.3242	0.2490	0.1745	0.2050	0.4042
2.70	0.4864	0.4809	0.4640	0.4347	0.3911	0.3634	0.3314	0.2559	0.1802	0.2078	0.4052
2.75	0.4932	0.4878	0.4709	0.4417	0.3983	0.3706	0.3386	0.2628	0.1859	0.2107	0.4062
2.80	0.5000	0.4945	0.4778	0.4487	0.4055	0.3778	0.3458	0.2697	0.1917	0.2136	0.4072
2.85	0.5067	0.5013	0.4846	0.4557	0.4125	0.3849	0.3530	0.2766	0.1975	0.2166	0.4082
2.90	0.5133	0.5079	0.4914	0.4626	0.4196	0.3921	0.3601	0.2835	0.2034	0.2196	0.4092
2.95	0.5199	0.5146	0.4981	0.4694	0.4266	0.3991	0.3672	0.2904	0.2092	0.2225	0.4102
3.00	0.5264	0.5211	0.5048	0.4762	0.4336	0.4062	0.3743	0.2973	0.2151	0.2256	0.4112

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2044	0.1996	0.1852	0.1605	0.1248	0.1029	0.0786	0.0280	0.0002	0.1137	0.3612
0.05	0.2045	0.1998	0.1854	0.1607	0.1249	0.1030	0.0787	0.0281	0.0003	0.1137	0.3612
0.10	0.2050	0.2002	0.1858	0.1611	0.1253	0.1033	0.0790	0.0284	0.0005	0.1138	0.3613
0.15	0.2057	0.2010	0.1865	0.1617	0.1259	0.1039	0.0796	0.0288	0.0008	0.1140	0.3614
0.20	0.2067	0.2020	0.1875	0.1627	0.1267	0.1047	0.0803	0.0294	0.0013	0.1143	0.3615
0.25	0.2081	0.2033	0.1888	0.1638	0.1278	0.1057	0.0813	0.0302	0.0018	0.1146	0.3617
0.30	0.2097	0.2049	0.1903	0.1653	0.1292	0.1070	0.0824	0.0311	0.0025	0.1150	0.3620
0.35	0.2116	0.2068	0.1922	0.1670	0.1307	0.1084	0.0838	0.0323	0.0034	0.1155	0.3623
0.40	0.2138	0.2090	0.1942	0.1690	0.1325	0.1101	0.0854	0.0336	0.0043	0.1161	0.3626
0.45	0.2163	0.2114	0.1966	0.1712	0.1346	0.1121	0.0872	0.0351	0.0054	0.1167	0.3630
0.50	0.2190	0.2141	0.1992	0.1737	0.1368	0.1142	0.0892	0.0367	0.0067	0.1174	0.3634
0.55	0.2220	0.2171	0.2021	0.1764	0.1393	0.1166	0.0914	0.0386	0.0080	0.1181	0.3638
0.60	0.2253	0.2203	0.2053	0.1794	0.1421	0.1192	0.0938	0.0406	0.0095	0.1189	0.3643
0.65	0.2288	0.2238	0.2086	0.1826	0.1450	0.1220	0.0964	0.0428	0.0111	0.1198	0.3648
0.70	0.2326	0.2276	0.2123	0.1860	0.1482	0.1250	0.0993	0.0452	0.0129	0.1208	0.3653
0.75	0.2366	0.2315	0.2161	0.1897	0.1516	0.1282	0.1023	0.0477	0.0148	0.1218	0.3659
0.80	0.2408	0.2357	0.2202	0.1936	0.1552	0.1316	0.1055	0.0504	0.0168	0.1229	0.3665
0.85	0.2453	0.2401	0.2245	0.1977	0.1590	0.1353	0.1090	0.0533	0.0190	0.1240	0.3671
0.90	0.2500	0.2448	0.2290	0.2020	0.1631	0.1391	0.1126	0.0564	0.0213	0.1252	0.3677
0.95	0.2548	0.2496	0.2337	0.2065	0.1673	0.1432	0.1164	0.0597	0.0237	0.1265	0.3684
1.00	0.2599	0.2547	0.2387	0.2112	0.1717	0.1474	0.1204	0.0631	0.0263	0.1278	0.3690
1.05	0.2652	0.2599	0.2438	0.2162	0.1763	0.1518	0.1246	0.0667	0.0290	0.1292	0.3697
1.10	0.2706	0.2653	0.2490	0.2212	0.1811	0.1564	0.1290	0.0705	0.0318	0.1306	0.3704
1.15	0.2762	0.2708	0.2545	0.2265	0.1861	0.1612	0.1336	0.0744	0.0348	0.1321	0.3711
1.20	0.2820	0.2766	0.2601	0.2319	0.1912	0.1662	0.1383	0.0785	0.0378	0.1337	0.3719
1.25	0.2879	0.2824	0.2659	0.2375	0.1965	0.1713	0.1432	0.0828	0.0410	0.1353	0.3726
1.30	0.2939	0.2885	0.2718	0.2433	0.2020	0.1766	0.1482	0.0872	0.0444	0.1369	0.3734
1.35	0.3001	0.2946	0.2778	0.2491	0.2076	0.1820	0.1535	0.0917	0.0478	0.1386	0.3742
1.40	0.3064	0.3009	0.2840	0.2551	0.2134	0.1876	0.1588	0.0964	0.0514	0.1404	0.3749
1.45	0.3128	0.3072	0.2903	0.2613	0.2193	0.1933	0.1643	0.1013	0.0551	0.1422	0.3757
1.50	0.3193	0.3137	0.2967	0.2675	0.2253	0.1992	0.1700	0.1053	0.0589	0.1441	0.3765
1.55	0.3259	0.3203	0.3032	0.2739	0.2315	0.2052	0.1758	0.1114	0.0628	0.1460	0.3774

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.65

PAGE 190

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3326	0.3270	0.3098	0.2804	0.2377	0.2113	0.1817	0.1166	0.0669	0.1479	0.3782
1.65	0.3394	0.3337	0.3165	0.2870	0.2441	0.2175	0.1877	0.1220	0.0710	0.1500	0.3790
1.70	0.3462	0.3405	0.3233	0.2936	0.2506	0.2238	0.1938	0.1275	0.0753	0.1520	0.3799
1.75	0.3531	0.3474	0.3301	0.3004	0.2571	0.2303	0.2001	0.1331	0.0796	0.1541	0.3807
1.80	0.3600	0.3543	0.3370	0.3072	0.2638	0.2368	0.2064	0.1388	0.0841	0.1563	0.3816
1.85	0.3670	0.3613	0.3439	0.3140	0.2705	0.2434	0.2129	0.1447	0.0886	0.1585	0.3824
1.90	0.3740	0.3683	0.3509	0.3209	0.2773	0.2501	0.2194	0.1506	0.0932	0.1607	0.3833
1.95	0.3810	0.3753	0.3579	0.3279	0.2842	0.2569	0.2260	0.1566	0.0979	0.1630	0.3842
2.00	0.3881	0.3824	0.3649	0.3349	0.2911	0.2637	0.2327	0.1627	0.1028	0.1653	0.3851
2.05	0.3951	0.3894	0.3720	0.3420	0.2981	0.2706	0.2394	0.1689	0.1076	0.1676	0.3859
2.10	0.4022	0.3965	0.3791	0.3491	0.3051	0.2775	0.2462	0.1752	0.1126	0.1701	0.3868
2.15	0.4093	0.4036	0.3862	0.3562	0.3121	0.2845	0.2531	0.1815	0.1177	0.1725	0.3878
2.20	0.4164	0.4107	0.3933	0.3633	0.3192	0.2915	0.2600	0.1879	0.1228	0.1750	0.3887
2.25	0.4234	0.4178	0.4004	0.3704	0.3263	0.2986	0.2669	0.1943	0.1280	0.1775	0.3896
2.30	0.4305	0.4248	0.4075	0.3775	0.3334	0.3056	0.2739	0.2008	0.1332	0.1801	0.3905
2.35	0.4375	0.4319	0.4146	0.3846	0.3406	0.3127	0.2809	0.2074	0.1385	0.1827	0.3915
2.40	0.4445	0.4389	0.4216	0.3917	0.3477	0.3198	0.2880	0.2140	0.1439	0.1853	0.3924
2.45	0.4515	0.4459	0.4287	0.3988	0.3548	0.3270	0.2950	0.2207	0.1493	0.1880	0.3933
2.50	0.4584	0.4528	0.4357	0.4059	0.3620	0.3341	0.3021	0.2274	0.1548	0.1907	0.3943
2.55	0.4653	0.4597	0.4426	0.4130	0.3691	0.3412	0.3092	0.2341	0.1603	0.1934	0.3953
2.60	0.4722	0.4666	0.4496	0.4200	0.3762	0.3484	0.3163	0.2408	0.1659	0.1962	0.3962
2.65	0.4790	0.4735	0.4565	0.4270	0.3833	0.3555	0.3234	0.2476	0.1715	0.1990	0.3972
2.70	0.4857	0.4802	0.4634	0.4340	0.3904	0.3626	0.3305	0.2543	0.1771	0.2018	0.3982
2.75	0.4925	0.4870	0.4702	0.4409	0.3975	0.3697	0.3375	0.2611	0.1828	0.2047	0.3992
2.80	0.4991	0.4937	0.4769	0.4478	0.4045	0.3767	0.3446	0.2679	0.1885	0.2076	0.4002
2.85	0.5057	0.5003	0.4837	0.4547	0.4115	0.3838	0.3517	0.2748	0.1943	0.2105	0.4012
2.90	0.5123	0.5069	0.4903	0.4615	0.4184	0.3908	0.3587	0.2816	0.2001	0.2134	0.4022
2.95	0.5187	0.5134	0.4969	0.4682	0.4253	0.3977	0.3657	0.2884	0.2059	0.2164	0.4032
3.00	0.5251	0.5198	0.5035	0.4749	0.4322	0.4047	0.3727	0.2952	0.2117	0.2194	0.4043

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=2-70

PAGE 191

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2111	0.2063	0.1917	0.1666	0.1303	0.1079	0.0831	0.0308	0.0001	0.1090	0.3551
0.05	0.2112	0.2065	0.1919	0.1667	0.1304	0.1080	0.0832	0.0308	0.0001	0.1091	0.3552
0.10	0.2117	0.2069	0.1923	0.1671	0.1307	0.1083	0.0835	0.0311	0.0003	0.1092	0.3552
0.15	0.2124	0.2076	0.1929	0.1678	0.1313	0.1089	0.0840	0.0315	0.0006	0.1094	0.3553
0.20	0.2134	0.2086	0.1939	0.1687	0.1322	0.1097	0.0847	0.0321	0.0011	0.1096	0.3555
0.25	0.2147	0.2099	0.1951	0.1698	0.1332	0.1107	0.0857	0.0329	0.0016	0.1099	0.3557
0.30	0.2163	0.2114	0.1966	0.1713	0.1345	0.1119	0.0868	0.0338	0.0023	0.1103	0.3559
0.35	0.2181	0.2132	0.1984	0.1729	0.1360	0.1133	0.0881	0.0350	0.0032	0.1108	0.3562
0.40	0.2202	0.2153	0.2004	0.1748	0.1378	0.1150	0.0897	0.0362	0.0041	0.1113	0.3565
0.45	0.2226	0.2177	0.2027	0.1770	0.1398	0.1169	0.0915	0.0377	0.0052	0.1119	0.3568
0.50	0.2253	0.2203	0.2053	0.1784	0.1420	0.1190	0.0934	0.0393	0.0064	0.1126	0.3572
0.55	0.2282	0.2232	0.2080	0.1820	0.1444	0.1213	0.0956	0.0411	0.0077	0.1133	0.3576
0.60	0.2313	0.2263	0.2111	0.1849	0.1471	0.1238	0.0979	0.0431	0.0092	0.1141	0.3581
0.65	0.2347	0.2297	0.2144	0.1880	0.1500	0.1265	0.1005	0.0453	0.0108	0.1150	0.3586
0.70	0.2384	0.2333	0.2179	0.1914	0.1531	0.1295	0.1033	0.0476	0.0126	0.1159	0.3591
0.75	0.2422	0.2371	0.2216	0.1949	0.1564	0.1326	0.1063	0.0501	0.0144	0.1169	0.3596
0.80	0.2463	0.2412	0.2256	0.1987	0.1599	0.1360	0.1094	0.0528	0.0164	0.1179	0.3602
0.85	0.2507	0.2455	0.2297	0.2027	0.1636	0.1395	0.1128	0.0557	0.0185	0.1191	0.3607
0.90	0.2552	0.2500	0.2341	0.2069	0.1675	0.1433	0.1163	0.0587	0.0208	0.1202	0.3613
0.95	0.2599	0.2547	0.2387	0.2113	0.1716	0.1472	0.1201	0.0619	0.0232	0.1215	0.3620
1.00	0.2648	0.2595	0.2434	0.2159	0.1760	0.1513	0.1240	0.0652	0.0257	0.1228	0.3626
1.05	0.2699	0.2646	0.2484	0.2206	0.1804	0.1557	0.1281	0.0688	0.0284	0.1241	0.3633
1.10	0.2752	0.2698	0.2535	0.2256	0.1851	0.1602	0.1324	0.0725	0.0311	0.1255	0.3640
1.15	0.2806	0.2752	0.2588	0.2307	0.1900	0.1648	0.1368	0.0763	0.0340	0.1270	0.3647
1.20	0.2862	0.2808	0.2643	0.2360	0.1950	0.1697	0.1414	0.0803	0.0371	0.1285	0.3654
1.25	0.2919	0.2865	0.2699	0.2414	0.2001	0.1747	0.1462	0.0845	0.0402	0.1301	0.3661
1.30	0.2978	0.2923	0.2756	0.2470	0.2055	0.1798	0.1511	0.0888	0.0435	0.1317	0.3668
1.35	0.3038	0.2983	0.2815	0.2527	0.2109	0.1851	0.1562	0.0933	0.0469	0.1334	0.3676
1.40	0.3099	0.3044	0.2875	0.2585	0.2166	0.1906	0.1615	0.0979	0.0504	0.1351	0.3684
1.45	0.3161	0.3106	0.2936	0.2645	0.2223	0.1963	0.1669	0.1027	0.0541	0.1369	0.3691
1.50	0.3225	0.3169	0.2999	0.2706	0.2282	0.2019	0.1724	0.1075	0.0578	0.1388	0.3699
1.55	0.3289	0.3233	0.3062	0.2768	0.2342	0.2077	0.1780	0.1126	0.0617	0.1406	0.3707

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE $N=2.70$

PAGE 192

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3354	0.3298	0.3126	0.2831	0.2403	0.2137	0.1838	0.1177	0.0656	0.1426	0.3715
1.65	0.3420	0.3363	0.3191	0.2895	0.2465	0.2198	0.1897	0.1230	0.0697	0.1446	0.3723
1.70	0.3486	0.3430	0.3257	0.2950	0.2528	0.2259	0.1957	0.1284	0.0739	0.1466	0.3732
1.75	0.3553	0.3496	0.3323	0.3026	0.2592	0.2322	0.2018	0.1339	0.0782	0.1487	0.3740
1.80	0.3621	0.3564	0.3391	0.3092	0.2657	0.2386	0.2080	0.1385	0.0825	0.1508	0.3748
1.85	0.3689	0.3632	0.3458	0.3159	0.2723	0.2451	0.2143	0.1452	0.0870	0.1530	0.3757
1.90	0.3757	0.3700	0.3526	0.3227	0.2790	0.2516	0.2207	0.1510	0.0916	0.1552	0.3765
1.95	0.3826	0.3769	0.3595	0.3295	0.2857	0.2582	0.2271	0.1569	0.0962	0.1574	0.3774
2.00	0.3895	0.3838	0.3664	0.3364	0.2924	0.2649	0.2337	0.1629	0.1010	0.1597	0.3783
2.05	0.3964	0.3907	0.3733	0.3432	0.2993	0.2718	0.2403	0.1689	0.1058	0.1621	0.3792
2.10	0.4033	0.3976	0.3802	0.3502	0.3061	0.2784	0.2469	0.1751	0.1107	0.1644	0.3801
2.15	0.4102	0.4045	0.3872	0.3571	0.3130	0.2853	0.2537	0.1813	0.1156	0.1669	0.3810
2.20	0.4172	0.4115	0.3941	0.3641	0.3199	0.2921	0.2604	0.1876	0.1207	0.1693	0.3819
2.25	0.4241	0.4184	0.4010	0.3710	0.3269	0.2990	0.2673	0.1939	0.1258	0.1718	0.3828
2.30	0.4310	0.4253	0.4080	0.3780	0.3339	0.3060	0.2741	0.2003	0.1310	0.1744	0.3837
2.35	0.4379	0.4322	0.4149	0.3850	0.3409	0.3129	0.2810	0.2068	0.1352	0.1769	0.3846
2.40	0.4447	0.4391	0.4219	0.3920	0.3479	0.3199	0.2879	0.2133	0.1415	0.1795	0.3856
2.45	0.4516	0.4460	0.4288	0.3989	0.3549	0.3269	0.2948	0.2198	0.1468	0.1822	0.3865
2.50	0.4584	0.4528	0.4356	0.4059	0.3619	0.3339	0.3018	0.2264	0.1522	0.1849	0.3875
2.55	0.4651	0.4596	0.4425	0.4128	0.3689	0.3409	0.3087	0.2330	0.1577	0.1876	0.3884
2.60	0.4719	0.4663	0.4493	0.4197	0.3759	0.3479	0.3157	0.2396	0.1632	0.1903	0.3894
2.65	0.4786	0.4730	0.4561	0.4266	0.3829	0.3549	0.3227	0.2463	0.1687	0.1931	0.3904
2.70	0.4852	0.4797	0.4628	0.4335	0.3898	0.3619	0.3297	0.2529	0.1743	0.1959	0.3913
2.75	0.4918	0.4863	0.4695	0.4403	0.3967	0.3689	0.3366	0.2596	0.1799	0.1988	0.3923
2.80	0.4984	0.4929	0.4762	0.4471	0.4037	0.3758	0.3436	0.2663	0.1856	0.2017	0.3933
2.85	0.5049	0.4995	0.4828	0.4538	0.4105	0.3827	0.3505	0.2730	0.1912	0.2046	0.3943
2.90	0.5113	0.5059	0.4894	0.4605	0.4174	0.3896	0.3574	0.2798	0.1969	0.2075	0.3953
2.95	0.5177	0.5123	0.4959	0.4672	0.4242	0.3965	0.3643	0.2865	0.2027	0.2105	0.3964
3.00	0.5240	0.5187	0.5023	0.4738	0.4310	0.4034	0.3712	0.2932	0.2084	0.2135	0.3974

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.75

PAGE 193

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2178	0.2129	0.1981	0.1727	0.1357	0.1129	0.0876	0.0336	0.0000	0.1045	0.3492
0.05	0.2179	0.2131	0.1983	0.1728	0.1358	0.1130	0.0877	0.0337	0.0001	0.1045	0.3492
0.10	0.2183	0.2135	0.1987	0.1732	0.1362	0.1134	0.0880	0.0339	0.0002	0.1046	0.3493
0.15	0.2190	0.2142	0.1993	0.1738	0.1368	0.1139	0.0885	0.0343	0.0006	0.1048	0.3494
0.20	0.2200	0.2151	0.2003	0.1747	0.1376	0.1147	0.0892	0.0349	0.0010	0.1050	0.3495
0.25	0.2212	0.2164	0.2014	0.1758	0.1386	0.1155	0.0901	0.0357	0.0016	0.1053	0.3497
0.30	0.2228	0.2179	0.2029	0.1772	0.1399	0.1168	0.0912	0.0366	0.0022	0.1057	0.3499
0.35	0.2245	0.2196	0.2046	0.1788	0.1414	0.1182	0.0925	0.0377	0.0031	0.1062	0.3502
0.40	0.2266	0.2216	0.2066	0.1806	0.1431	0.1199	0.0940	0.0390	0.0040	0.1067	0.3504
0.45	0.2289	0.2239	0.2088	0.1827	0.1450	0.1217	0.0958	0.0404	0.0051	0.1073	0.3508
0.50	0.2314	0.2265	0.2112	0.1851	0.1472	0.1237	0.0977	0.0420	0.0063	0.1079	0.3511
0.55	0.2342	0.2292	0.2139	0.1876	0.1495	0.1260	0.0998	0.0438	0.0076	0.1086	0.3515
0.60	0.2373	0.2323	0.2169	0.1904	0.1521	0.1285	0.1021	0.0458	0.0090	0.1094	0.3520
0.65	0.2406	0.2355	0.2201	0.1935	0.1549	0.1311	0.1046	0.0479	0.0106	0.1103	0.3524
0.70	0.2441	0.2390	0.2234	0.1967	0.1579	0.1340	0.1073	0.0502	0.0123	0.1112	0.3529
0.75	0.2479	0.2427	0.2271	0.2002	0.1612	0.1371	0.1102	0.0526	0.0142	0.1121	0.3534
0.80	0.2518	0.2467	0.2309	0.2038	0.1646	0.1403	0.1133	0.0553	0.0161	0.1132	0.3539
0.85	0.2560	0.2508	0.2349	0.2077	0.1682	0.1438	0.1166	0.0581	0.0182	0.1143	0.3545
0.90	0.2604	0.2551	0.2392	0.2118	0.1720	0.1475	0.1201	0.0610	0.0205	0.1154	0.3551
0.95	0.2650	0.2597	0.2436	0.2160	0.1760	0.1513	0.1237	0.0642	0.0228	0.1166	0.3557
1.00	0.2697	0.2644	0.2482	0.2205	0.1802	0.1553	0.1276	0.0675	0.0253	0.1179	0.3563
1.05	0.2746	0.2693	0.2530	0.2251	0.1846	0.1595	0.1316	0.0709	0.0279	0.1192	0.3569
1.10	0.2798	0.2744	0.2580	0.2299	0.1892	0.1639	0.1357	0.0746	0.0306	0.1206	0.3576
1.15	0.2850	0.2796	0.2632	0.2349	0.1939	0.1685	0.1401	0.0783	0.0335	0.1220	0.3583
1.20	0.2904	0.2850	0.2685	0.2400	0.1988	0.1732	0.1446	0.0823	0.0365	0.1235	0.3590
1.25	0.2960	0.2905	0.2739	0.2453	0.2038	0.1781	0.1493	0.0864	0.0396	0.1251	0.3597
1.30	0.3017	0.2962	0.2795	0.2507	0.2090	0.1831	0.1541	0.0906	0.0428	0.1267	0.3604
1.35	0.3075	0.3020	0.2852	0.2563	0.2143	0.1883	0.1591	0.0950	0.0461	0.1283	0.3611
1.40	0.3135	0.3079	0.2910	0.2620	0.2198	0.1936	0.1642	0.0995	0.0496	0.1300	0.3619
1.45	0.3195	0.3140	0.2970	0.2678	0.2254	0.1990	0.1694	0.1041	0.0532	0.1318	0.3626
1.50	0.3257	0.3201	0.3030	0.2738	0.2311	0.2046	0.1748	0.1089	0.0569	0.1336	0.3634
1.55	0.3319	0.3263	0.3092	0.2798	0.2370	0.2103	0.1804	0.1138	0.0607	0.1355	0.3642

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=2.75

PAGE 194

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3382	0.3326	0.3155	0.2859	0.2430	0.2162	0.1860	0.1189	0.0846	0.1374	0.3650
1.65	0.3447	0.3390	0.3218	0.2922	0.2490	0.2221	0.1918	0.1241	0.0686	0.1393	0.3658
1.70	0.3511	0.3456	0.3282	0.2986	0.2552	0.2281	0.1976	0.1293	0.0727	0.1413	0.3666
1.75	0.3577	0.3520	0.3347	0.3049	0.2614	0.2343	0.2036	0.1347	0.0769	0.1434	0.3674
1.80	0.3643	0.3586	0.3413	0.3114	0.2678	0.2405	0.2097	0.1402	0.0812	0.1455	0.3682
1.85	0.3709	0.3652	0.3479	0.3179	0.2742	0.2468	0.2158	0.1458	0.0856	0.1476	0.3691
1.90	0.3776	0.3719	0.3545	0.3245	0.2807	0.2532	0.2221	0.1515	0.0901	0.1498	0.3699
1.95	0.3843	0.3786	0.3612	0.3312	0.2873	0.2597	0.2284	0.1573	0.0947	0.1521	0.3708
2.00	0.3910	0.3853	0.3679	0.3379	0.2939	0.2662	0.2348	0.1632	0.0993	0.1543	0.3716
2.05	0.3978	0.3921	0.3747	0.3446	0.3005	0.2728	0.2413	0.1691	0.1041	0.1566	0.3725
2.10	0.4045	0.3988	0.3814	0.3514	0.3073	0.2795	0.2478	0.1752	0.1089	0.1590	0.3734
2.15	0.4113	0.4056	0.3882	0.3582	0.3140	0.2862	0.2544	0.1813	0.1138	0.1614	0.3743
2.20	0.4181	0.4124	0.3950	0.3650	0.3208	0.2929	0.2610	0.1874	0.1187	0.1638	0.3752
2.25	0.4248	0.4192	0.4018	0.3718	0.3276	0.2997	0.2677	0.1937	0.1238	0.1663	0.3761
2.30	0.4316	0.4259	0.4086	0.3787	0.3345	0.3065	0.2744	0.1999	0.1289	0.1688	0.3770
2.35	0.4383	0.4327	0.4154	0.3856	0.3413	0.3133	0.2812	0.2063	0.1340	0.1714	0.3779
2.40	0.4451	0.4394	0.4222	0.3924	0.3482	0.3201	0.2880	0.2127	0.1393	0.1740	0.3788
2.45	0.4518	0.4462	0.4290	0.3992	0.3551	0.3270	0.2948	0.2191	0.1445	0.1766	0.3798
2.50	0.4585	0.4529	0.4357	0.4060	0.3619	0.3339	0.3016	0.2256	0.1499	0.1793	0.3807
2.55	0.4651	0.4595	0.4425	0.4128	0.3688	0.3408	0.3084	0.2321	0.1553	0.1820	0.3817
2.60	0.4717	0.4662	0.4492	0.4196	0.3757	0.3476	0.3153	0.2386	0.1607	0.1847	0.3827
2.65	0.4783	0.4728	0.4558	0.4264	0.3825	0.3545	0.3221	0.2451	0.1661	0.1875	0.3836
2.70	0.4848	0.4793	0.4625	0.4331	0.3894	0.3614	0.3290	0.2517	0.1716	0.1903	0.3846
2.75	0.4913	0.4859	0.4691	0.4398	0.3962	0.3682	0.3358	0.2583	0.1772	0.1931	0.3856
2.80	0.4978	0.4923	0.4756	0.4465	0.4030	0.3751	0.3427	0.2649	0.1828	0.1959	0.3866
2.85	0.5042	0.4988	0.4821	0.4531	0.4097	0.3819	0.3495	0.2715	0.1884	0.1989	0.3876
2.90	0.5109	0.5051	0.4886	0.4597	0.4165	0.3887	0.3563	0.2781	0.1940	0.2018	0.3886
2.95	0.5168	0.5114	0.4950	0.4663	0.4232	0.3954	0.3631	0.2848	0.1997	0.2047	0.3896
3.00	0.5230	0.5177	0.5014	0.4728	0.4299	0.4022	0.3699	0.2914	0.2054	0.2077	0.3906

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RP WHERE N=2.80

PAGE 195

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2244	0.2195	0.2045	0.1787	0.1412	0.1180	0.0921	0.0365	0.0001	0.1001	0.3433
0.05	0.2245	0.2196	0.2046	0.1788	0.1413	0.1181	0.0922	0.0366	0.0001	0.1001	0.3433
0.10	0.2249	0.2200	0.2050	0.1792	0.1416	0.1184	0.0925	0.0368	0.0003	0.1002	0.3433
0.15	0.2256	0.2207	0.2056	0.1798	0.1422	0.1189	0.0930	0.0372	0.0006	0.1004	0.3434
0.20	0.2265	0.2216	0.2065	0.1806	0.1430	0.1197	0.0937	0.0378	0.0011	0.1006	0.3436
0.25	0.2277	0.2228	0.2077	0.1817	0.1440	0.1206	0.0945	0.0386	0.0016	0.1009	0.3437
0.30	0.2292	0.2242	0.2091	0.1831	0.1452	0.1218	0.0956	0.0395	0.0023	0.1013	0.3440
0.35	0.2309	0.2259	0.2108	0.1846	0.1467	0.1231	0.0969	0.0406	0.0031	0.1017	0.3442
0.40	0.2329	0.2279	0.2127	0.1864	0.1483	0.1247	0.0984	0.0418	0.0040	0.1022	0.3445
0.45	0.2351	0.2301	0.2148	0.1885	0.1502	0.1265	0.1001	0.0432	0.0051	0.1028	0.3448
0.50	0.2376	0.2325	0.2172	0.1907	0.1523	0.1285	0.1020	0.0448	0.0063	0.1034	0.3451
0.55	0.2403	0.2352	0.2198	0.1932	0.1546	0.1307	0.1041	0.0466	0.0076	0.1041	0.3455
0.60	0.2432	0.2382	0.2226	0.1959	0.1571	0.1331	0.1063	0.0485	0.0090	0.1049	0.3459
0.65	0.2464	0.2413	0.2257	0.1989	0.1599	0.1357	0.1088	0.0506	0.0105	0.1057	0.3463
0.70	0.2498	0.2447	0.2290	0.2020	0.1628	0.1385	0.1114	0.0528	0.0122	0.1066	0.3468
0.75	0.2535	0.2483	0.2325	0.2054	0.1660	0.1415	0.1143	0.0552	0.0140	0.1075	0.3473
0.80	0.2573	0.2521	0.2362	0.2089	0.1693	0.1447	0.1173	0.0578	0.0160	0.1085	0.3478
0.85	0.2613	0.2561	0.2401	0.2127	0.1728	0.1481	0.1205	0.0606	0.0180	0.1096	0.3483
0.90	0.2656	0.2603	0.2443	0.2166	0.1765	0.1517	0.1239	0.0635	0.0202	0.1107	0.3489
0.95	0.2700	0.2647	0.2486	0.2208	0.1804	0.1554	0.1275	0.0666	0.0226	0.1119	0.3495
1.00	0.2746	0.2693	0.2530	0.2251	0.1845	0.1594	0.1312	0.0698	0.0250	0.1132	0.3501
1.05	0.2794	0.2740	0.2577	0.2295	0.1888	0.1635	0.1351	0.0732	0.0276	0.1145	0.3507
1.10	0.2843	0.2790	0.2625	0.2343	0.1932	0.1677	0.1392	0.0767	0.0303	0.1158	0.3513
1.15	0.2895	0.2840	0.2675	0.2391	0.1978	0.1722	0.1434	0.0804	0.0331	0.1172	0.3520
1.20	0.2947	0.2893	0.2727	0.2441	0.2026	0.1768	0.1478	0.0843	0.0360	0.1187	0.3527
1.25	0.3001	0.2946	0.2780	0.2492	0.2075	0.1815	0.1524	0.0883	0.0391	0.1202	0.3534
1.30	0.3056	0.3001	0.2834	0.2545	0.2125	0.1864	0.1571	0.0924	0.0422	0.1218	0.3541
1.35	0.3113	0.3058	0.2889	0.2599	0.2177	0.1915	0.1620	0.0967	0.0455	0.1234	0.3548
1.40	0.3171	0.3115	0.2946	0.2655	0.2231	0.1967	0.1670	0.1012	0.0489	0.1251	0.3555
1.45	0.3230	0.3174	0.3004	0.2712	0.2286	0.2020	0.1721	0.1057	0.0524	0.1269	0.3562
1.50	0.3289	0.3234	0.3063	0.2769	0.2341	0.2075	0.1774	0.1104	0.0561	0.1286	0.3570
1.55	0.3350	0.3294	0.3123	0.2828	0.2399	0.2130	0.1828	0.1152	0.0598	0.1305	0.3577

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF R^2 WHERE $N=2-80$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3412	0.3356	0.3184	0.2888	0.2457	0.2187	0.1883	0.1202	0.0636	0.1324	0.3585
1.65	0.3474	0.3418	0.3246	0.2949	0.2516	0.2245	0.1939	0.1253	0.0676	0.1343	0.3593
1.70	0.3537	0.3481	0.3308	0.3011	0.2576	0.2304	0.1997	0.1304	0.0716	0.1363	0.3601
1.75	0.3601	0.3544	0.3371	0.3073	0.2637	0.2364	0.2055	0.1357	0.0758	0.1383	0.3609
1.80	0.3665	0.3608	0.3435	0.3137	0.2699	0.2425	0.2114	0.1411	0.0800	0.1404	0.3617
1.85	0.3730	0.3673	0.3500	0.3200	0.2762	0.2487	0.2175	0.1466	0.0843	0.1425	0.3626
1.90	0.3795	0.3738	0.3565	0.3265	0.2825	0.2549	0.2236	0.1522	0.0888	0.1447	0.3634
1.95	0.3860	0.3804	0.3630	0.3330	0.2890	0.2613	0.2298	0.1579	0.0933	0.1469	0.3642
2.00	0.3926	0.3869	0.3696	0.3395	0.2954	0.2677	0.2361	0.1636	0.0979	0.1491	0.3651
2.05	0.3992	0.3935	0.3762	0.3461	0.3020	0.2741	0.2424	0.1695	0.1025	0.1514	0.3660
2.10	0.4058	0.4002	0.3828	0.3527	0.3085	0.2806	0.2488	0.1754	0.1073	0.1537	0.3668
2.15	0.4125	0.4068	0.3894	0.3594	0.3151	0.2872	0.2552	0.1814	0.1121	0.1561	0.3677
2.20	0.4191	0.4134	0.3961	0.3661	0.3218	0.2938	0.2617	0.1874	0.1170	0.1585	0.3686
2.25	0.4257	0.4201	0.4027	0.3727	0.3285	0.3004	0.2683	0.1935	0.1220	0.1610	0.3695
2.30	0.4323	0.4267	0.4094	0.3794	0.3352	0.3071	0.2749	0.1997	0.1270	0.1636	0.3704
2.35	0.4389	0.4333	0.4161	0.3861	0.3419	0.3138	0.2815	0.2059	0.1321	0.1660	0.3713
2.40	0.4455	0.4399	0.4227	0.3929	0.3486	0.3205	0.2882	0.2122	0.1372	0.1686	0.3722
2.45	0.4521	0.4465	0.4294	0.3996	0.3554	0.3272	0.2949	0.2185	0.1424	0.1712	0.3732
2.50	0.4587	0.4531	0.4360	0.4062	0.3621	0.3340	0.3016	0.2249	0.1477	0.1738	0.3741
2.55	0.4652	0.4596	0.4426	0.4129	0.3689	0.3407	0.3083	0.2313	0.1530	0.1765	0.3751
2.60	0.4717	0.4662	0.4492	0.4195	0.3756	0.3475	0.3150	0.2377	0.1583	0.1792	0.3760
2.65	0.4782	0.4726	0.4557	0.4262	0.3823	0.3542	0.3217	0.2442	0.1637	0.1820	0.3770
2.70	0.4846	0.4791	0.4622	0.4329	0.3891	0.3610	0.3285	0.2506	0.1692	0.1848	0.3780
2.75	0.4910	0.4855	0.4687	0.4395	0.3958	0.3677	0.3352	0.2571	0.1747	0.1876	0.3790
2.80	0.4973	0.4919	0.4752	0.4460	0.4024	0.3745	0.3419	0.2636	0.1802	0.1904	0.3799
2.85	0.5036	0.4982	0.4816	0.4525	0.4091	0.3812	0.3487	0.2701	0.1857	0.1933	0.3809
2.90	0.5098	0.5045	0.4879	0.4590	0.4157	0.3879	0.3554	0.2767	0.1913	0.1962	0.3820
2.95	0.5160	0.5107	0.4942	0.4655	0.4223	0.3945	0.3621	0.2832	0.1969	0.1991	0.3830
3.00	0.5222	0.5169	0.5005	0.4719	0.4289	0.4012	0.3688	0.2897	0.2025	0.2021	0.3840

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=2.85

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2309	0.2259	0.2108	0.1847	0.1466	0.1230	0.0966	0.0395	0.0003	0.0957	0.3374
0.05	0.2310	0.2261	0.2109	0.1848	0.1467	0.1231	0.0967	0.0395	0.0003	0.0958	0.3374
0.10	0.2314	0.2265	0.2113	0.1851	0.1470	0.1234	0.0970	0.0398	0.0005	0.0959	0.3375
0.15	0.2321	0.2271	0.2119	0.1857	0.1476	0.1239	0.0975	0.0402	0.0008	0.0960	0.3376
0.20	0.2330	0.2280	0.2128	0.1866	0.1484	0.1247	0.0982	0.0408	0.0012	0.0963	0.3377
0.25	0.2341	0.2291	0.2139	0.1876	0.1493	0.1256	0.0990	0.0415	0.0018	0.0966	0.3379
0.30	0.2355	0.2305	0.2152	0.1889	0.1505	0.1267	0.1001	0.0424	0.0024	0.0969	0.3381
0.35	0.2372	0.2322	0.2168	0.1904	0.1519	0.1281	0.1014	0.0435	0.0032	0.0974	0.3383
0.40	0.2391	0.2341	0.2187	0.1922	0.1536	0.1296	0.1028	0.0447	0.0042	0.0978	0.3386
0.45	0.2413	0.2362	0.2208	0.1942	0.1554	0.1314	0.1045	0.0461	0.0052	0.0984	0.3389
0.50	0.2437	0.2386	0.2231	0.1964	0.1575	0.1333	0.1063	0.0476	0.0064	0.0990	0.3392
0.55	0.2463	0.2412	0.2256	0.1988	0.1597	0.1355	0.1083	0.0494	0.0076	0.0997	0.3396
0.60	0.2491	0.2440	0.2284	0.2014	0.1622	0.1378	0.1105	0.0513	0.0091	0.1004	0.3399
0.65	0.2522	0.2471	0.2313	0.2043	0.1648	0.1404	0.1130	0.0533	0.0106	0.1013	0.3404
0.70	0.2555	0.2503	0.2345	0.2073	0.1677	0.1431	0.1155	0.0555	0.0123	0.1021	0.3408
0.75	0.2590	0.2538	0.2379	0.2106	0.1707	0.1460	0.1183	0.0579	0.0140	0.1030	0.3413
0.80	0.2627	0.2575	0.2415	0.2140	0.1740	0.1491	0.1213	0.0604	0.0160	0.1040	0.3418
0.85	0.2666	0.2614	0.2453	0.2177	0.1774	0.1524	0.1244	0.0631	0.0180	0.1051	0.3423
0.90	0.2708	0.2655	0.2493	0.2215	0.1811	0.1559	0.1277	0.0660	0.0201	0.1062	0.3428
0.95	0.2750	0.2697	0.2535	0.2255	0.1849	0.1596	0.1312	0.0690	0.0224	0.1074	0.3434
1.00	0.2795	0.2742	0.2578	0.2298	0.1888	0.1634	0.1349	0.0722	0.0248	0.1086	0.3440
1.05	0.2841	0.2788	0.2624	0.2341	0.1930	0.1674	0.1387	0.0755	0.0274	0.1099	0.3446
1.10	0.2889	0.2835	0.2671	0.2387	0.1973	0.1716	0.1427	0.0790	0.0300	0.1112	0.3452
1.15	0.2939	0.2885	0.2719	0.2434	0.2018	0.1759	0.1468	0.0826	0.0328	0.1126	0.3458
1.20	0.2990	0.2935	0.2769	0.2482	0.2064	0.1804	0.1511	0.0864	0.0357	0.1140	0.3465
1.25	0.3042	0.2988	0.2820	0.2532	0.2112	0.1850	0.1555	0.0903	0.0387	0.1155	0.3471
1.30	0.3096	0.3041	0.2873	0.2584	0.2161	0.1898	0.1602	0.0944	0.0418	0.1171	0.3478
1.35	0.3151	0.3096	0.2927	0.2636	0.2212	0.1948	0.1650	0.0986	0.0450	0.1187	0.3485
1.40	0.3207	0.3152	0.2982	0.2690	0.2264	0.1998	0.1698	0.1029	0.0484	0.1204	0.3492
1.45	0.3264	0.3209	0.3039	0.2745	0.2318	0.2050	0.1749	0.1074	0.0518	0.1221	0.3499
1.50	0.3323	0.3267	0.3096	0.2802	0.2372	0.2104	0.1800	0.1120	0.0554	0.1238	0.3507
1.55	0.3382	0.3326	0.3154	0.2859	0.2428	0.2158	0.1853	0.1167	0.0591	0.1256	0.3514

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=2.85

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3442	0.3385	0.3214	0.2918	0.2485	0.2214	0.1907	0.1216	0.0629	0.1275	0.3522
1.65	0.3502	0.3446	0.3274	0.2977	0.2542	0.2270	0.1962	0.1266	0.0667	0.1294	0.3530
1.70	0.3564	0.3507	0.3335	0.3037	0.2601	0.2328	0.2018	0.1316	0.0707	0.1314	0.3537
1.75	0.3626	0.3569	0.3397	0.3098	0.2661	0.2387	0.2075	0.1368	0.0748	0.1334	0.3545
1.80	0.3689	0.3632	0.3459	0.3160	0.2722	0.2446	0.2133	0.1421	0.0790	0.1354	0.3553
1.85	0.3752	0.3695	0.3522	0.3222	0.2783	0.2506	0.2192	0.1475	0.0832	0.1375	0.3562
1.90	0.3815	0.3759	0.3585	0.3285	0.2845	0.2568	0.2252	0.1530	0.0876	0.1397	0.3570
1.95	0.3879	0.3822	0.3649	0.3349	0.2908	0.2630	0.2313	0.1585	0.0920	0.1418	0.3578
2.00	0.3943	0.3887	0.3713	0.3413	0.2971	0.2692	0.2374	0.1642	0.0965	0.1441	0.3587
2.05	0.4008	0.3951	0.3778	0.3477	0.3035	0.2755	0.2436	0.1699	0.1011	0.1463	0.3595
2.10	0.4073	0.4016	0.3842	0.3542	0.3099	0.2819	0.2499	0.1757	0.1058	0.1487	0.3604
2.15	0.4137	0.4081	0.3907	0.3607	0.3164	0.2883	0.2562	0.1816	0.1106	0.1510	0.3612
2.20	0.4202	0.4146	0.3972	0.3672	0.3229	0.2948	0.2626	0.1876	0.1154	0.1534	0.3621
2.25	0.4267	0.4211	0.4038	0.3738	0.3294	0.3013	0.2690	0.1936	0.1203	0.1558	0.3630
2.30	0.4332	0.4276	0.4103	0.3803	0.3360	0.3078	0.2755	0.1996	0.1252	0.1583	0.3639
2.35	0.4397	0.4340	0.4168	0.3869	0.3426	0.3144	0.2820	0.2058	0.1303	0.1608	0.3648
2.40	0.4461	0.4405	0.4233	0.3935	0.3492	0.3210	0.2885	0.2119	0.1353	0.1634	0.3657
2.45	0.4526	0.4470	0.4298	0.4000	0.3558	0.3276	0.2951	0.2181	0.1405	0.1660	0.3667
2.50	0.4590	0.4534	0.4363	0.4066	0.3624	0.3342	0.3016	0.2244	0.1457	0.1686	0.3676
2.55	0.4654	0.4599	0.4428	0.4132	0.3690	0.3408	0.3082	0.2307	0.1509	0.1712	0.3686
2.60	0.4718	0.4663	0.4493	0.4197	0.3757	0.3475	0.3149	0.2370	0.1562	0.1739	0.3695
2.65	0.4781	0.4726	0.4557	0.4262	0.3823	0.3541	0.3215	0.2433	0.1615	0.1767	0.3705
2.70	0.4845	0.4790	0.4621	0.4327	0.3889	0.3608	0.3281	0.2497	0.1669	0.1794	0.3714
2.75	0.4907	0.4853	0.4685	0.4392	0.3955	0.3674	0.3347	0.2561	0.1723	0.1822	0.3724
2.80	0.4970	0.4916	0.4748	0.4457	0.4021	0.3740	0.3414	0.2625	0.1777	0.1850	0.3734
2.85	0.5032	0.4977	0.4811	0.4521	0.4086	0.3806	0.3480	0.2689	0.1832	0.1879	0.3744
2.90	0.5093	0.5039	0.4874	0.4586	0.4151	0.3872	0.3546	0.2754	0.1887	0.1908	0.3754
2.95	0.5154	0.5101	0.4936	0.4648	0.4216	0.3937	0.3612	0.2818	0.1942	0.1937	0.3764
3.00	0.5215	0.5161	0.4998	0.4712	0.4281	0.4003	0.3678	0.2882	0.1998	0.1966	0.3775

TABLES OF CALCULATIONS FOR H.H. WRIGHT ESR.

VALUES OF RP WHERE N=2.90

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2373	0.2323	0.2170	0.1968	0.1520	0.1280	0.1011	0.0425	0.0006	0.0916	0.3316
0.05	0.2375	0.2325	0.2171	0.1967	0.1521	0.1281	0.1012	0.0426	0.0006	0.0916	0.3317
0.10	0.2378	0.2328	0.2175	0.1970	0.1525	0.1284	0.1015	0.0428	0.0008	0.0917	0.3317
0.15	0.2385	0.2334	0.2181	0.1976	0.1530	0.1290	0.1020	0.0432	0.0011	0.0919	0.3318
0.20	0.2393	0.2343	0.2189	0.1984	0.1537	0.1297	0.1027	0.0438	0.0015	0.0921	0.3319
0.25	0.2405	0.2354	0.2200	0.1995	0.1547	0.1308	0.1035	0.0445	0.0021	0.0924	0.3321
0.30	0.2418	0.2368	0.2213	0.1997	0.1559	0.1317	0.1046	0.0454	0.0027	0.0927	0.3323
0.35	0.2434	0.2384	0.2229	0.1992	0.1572	0.1330	0.1058	0.0464	0.0035	0.0931	0.3325
0.40	0.2453	0.2402	0.2247	0.1979	0.1588	0.1345	0.1072	0.0476	0.0044	0.0936	0.3327
0.45	0.2474	0.2423	0.2267	0.1988	0.1606	0.1362	0.1088	0.0490	0.0054	0.0942	0.3330
0.50	0.2497	0.2446	0.2289	0.2019	0.1626	0.1381	0.1106	0.0506	0.0066	0.0948	0.3333
0.55	0.2522	0.2471	0.2314	0.2043	0.1648	0.1402	0.1126	0.0522	0.0079	0.0954	0.3337
0.60	0.2550	0.2498	0.2340	0.2068	0.1672	0.1425	0.1148	0.0541	0.0093	0.0962	0.3340
0.65	0.2580	0.2528	0.2369	0.2096	0.1698	0.1450	0.1172	0.0561	0.0108	0.0970	0.3344
0.70	0.2611	0.2559	0.2400	0.2126	0.1726	0.1477	0.1197	0.0583	0.0124	0.0978	0.3349
0.75	0.2645	0.2593	0.2433	0.2157	0.1755	0.1505	0.1224	0.0606	0.0142	0.0987	0.3353
0.80	0.2681	0.2629	0.2468	0.2191	0.1787	0.1536	0.1253	0.0631	0.0160	0.0997	0.3358
0.85	0.2719	0.2666	0.2505	0.2227	0.1821	0.1568	0.1284	0.0658	0.0181	0.1007	0.3363
0.90	0.2759	0.2706	0.2544	0.2264	0.1856	0.1602	0.1316	0.0686	0.0202	0.1018	0.3368
0.95	0.2801	0.2747	0.2584	0.2303	0.1893	0.1637	0.1350	0.0715	0.0224	0.1029	0.3374
1.00	0.2844	0.2790	0.2626	0.2344	0.1932	0.1675	0.1386	0.0746	0.0248	0.1041	0.3379
1.05	0.2889	0.2835	0.2670	0.2386	0.1972	0.1714	0.1423	0.0779	0.0273	0.1054	0.3385
1.10	0.2935	0.2881	0.2716	0.2431	0.2014	0.1755	0.1462	0.0813	0.0299	0.1067	0.3391
1.15	0.2984	0.2929	0.2763	0.2476	0.2058	0.1797	0.1503	0.0849	0.0326	0.1081	0.3397
1.20	0.3033	0.2978	0.2811	0.2524	0.2103	0.1841	0.1545	0.0886	0.0355	0.1095	0.3403
1.25	0.3084	0.3029	0.2861	0.2572	0.2150	0.1886	0.1588	0.0924	0.0384	0.1110	0.3410
1.30	0.3136	0.3081	0.2913	0.2622	0.2198	0.1933	0.1633	0.0964	0.0415	0.1125	0.3417
1.35	0.3189	0.3134	0.2965	0.2674	0.2247	0.1981	0.1680	0.1005	0.0447	0.1141	0.3423
1.40	0.3244	0.3189	0.3019	0.2726	0.2298	0.2030	0.1728	0.1048	0.0480	0.1157	0.3430
1.45	0.3300	0.3244	0.3074	0.2780	0.2350	0.2081	0.1777	0.1092	0.0514	0.1174	0.3437
1.50	0.3356	0.3300	0.3130	0.2835	0.2403	0.2133	0.1827	0.1137	0.0549	0.1192	0.3445
1.55	0.3414	0.3358	0.3186	0.2891	0.2458	0.2185	0.1879	0.1183	0.0585	0.1210	0.3452

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF R^2 WHERE $N=2-90$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3472	0.3416	0.3244	0.2948	0.2513	0.2241	0.1931	0.1231	0.0622	0.1228	0.3459
1.65	0.3531	0.3475	0.3303	0.3006	0.2570	0.2296	0.1985	0.1280	0.0660	0.1247	0.3467
1.70	0.3591	0.3535	0.3362	0.3064	0.2627	0.2352	0.2040	0.1329	0.0700	0.1265	0.3475
1.75	0.3652	0.3595	0.3422	0.3124	0.2685	0.2410	0.2096	0.1380	0.0740	0.1286	0.3483
1.80	0.3713	0.3656	0.3483	0.3184	0.2744	0.2468	0.2153	0.1432	0.0781	0.1306	0.3490
1.85	0.3774	0.3718	0.3544	0.3246	0.2804	0.2527	0.2211	0.1485	0.0823	0.1327	0.3499
1.90	0.3836	0.3780	0.3606	0.3306	0.2865	0.2587	0.2269	0.1539	0.0866	0.1348	0.3507
1.95	0.3899	0.3842	0.3669	0.3368	0.2926	0.2647	0.2328	0.1593	0.0909	0.1370	0.3515
2.00	0.3961	0.3905	0.3731	0.3431	0.2988	0.2708	0.2389	0.1649	0.0954	0.1392	0.3523
2.05	0.4024	0.3968	0.3794	0.3494	0.3051	0.2770	0.2449	0.1705	0.0999	0.1414	0.3532
2.10	0.4088	0.4031	0.3858	0.3557	0.3114	0.2833	0.2511	0.1762	0.1045	0.1437	0.3540
2.15	0.4151	0.4094	0.3921	0.3621	0.3177	0.2896	0.2573	0.1820	0.1092	0.1461	0.3549
2.20	0.4214	0.4158	0.3985	0.3685	0.3241	0.2959	0.2635	0.1878	0.1140	0.1484	0.3558
2.25	0.4278	0.4222	0.4049	0.3749	0.3305	0.3023	0.2698	0.1937	0.1188	0.1509	0.3567
2.30	0.4341	0.4285	0.4113	0.3813	0.3369	0.3087	0.2762	0.1997	0.1237	0.1533	0.3575
2.35	0.4405	0.4349	0.4177	0.3878	0.3434	0.3151	0.2825	0.2057	0.1286	0.1558	0.3584
2.40	0.4468	0.4412	0.4241	0.3942	0.3499	0.3216	0.2890	0.2118	0.1336	0.1583	0.3594
2.45	0.4532	0.4476	0.4304	0.4006	0.3563	0.3281	0.2954	0.2179	0.1387	0.1609	0.3603
2.50	0.4595	0.4539	0.4368	0.4071	0.3628	0.3345	0.3019	0.2240	0.1438	0.1635	0.3612
2.55	0.4657	0.4602	0.4432	0.4135	0.3693	0.3411	0.3083	0.2302	0.1490	0.1661	0.3622
2.60	0.4720	0.4665	0.4495	0.4200	0.3759	0.3476	0.3148	0.2364	0.1542	0.1688	0.3631
2.65	0.4782	0.4727	0.4558	0.4264	0.3824	0.3541	0.3214	0.2427	0.1594	0.1715	0.3641
2.70	0.4844	0.4790	0.4621	0.4328	0.3888	0.3606	0.3279	0.2489	0.1647	0.1743	0.3650
2.75	0.4906	0.4852	0.4684	0.4391	0.3953	0.3672	0.3344	0.2552	0.1701	0.1770	0.3660
2.80	0.4967	0.4913	0.4746	0.4455	0.4018	0.3737	0.3409	0.2615	0.1755	0.1798	0.3670
2.85	0.5028	0.4974	0.4808	0.4518	0.4082	0.3802	0.3474	0.2679	0.1809	0.1827	0.3680
2.90	0.5089	0.5035	0.4870	0.4581	0.4147	0.3866	0.3539	0.2742	0.1863	0.1855	0.3690
2.95	0.5149	0.5095	0.4931	0.4643	0.4211	0.3931	0.3604	0.2805	0.1918	0.1884	0.3700
3.00	0.5209	0.5155	0.4992	0.4705	0.4274	0.3995	0.3669	0.2869	0.1973	0.1913	0.3710

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=2.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2437	0.2387	0.2232	0.1965	0.1574	0.1331	0.1057	0.0456	0.0010	0.0875	0.3259
0.05	0.2438	0.2388	0.2233	0.1966	0.1575	0.1332	0.1058	0.0457	0.0010	0.0875	0.3259
0.10	0.2442	0.2391	0.2237	0.1969	0.1578	0.1335	0.1061	0.0459	0.0012	0.0876	0.3260
0.15	0.2448	0.2397	0.2242	0.1975	0.1584	0.1340	0.1066	0.0463	0.0015	0.0878	0.3261
0.20	0.2456	0.2406	0.2250	0.1983	0.1591	0.1347	0.1072	0.0469	0.0019	0.0880	0.3262
0.25	0.2467	0.2416	0.2261	0.1993	0.1600	0.1355	0.1080	0.0476	0.0025	0.0883	0.3263
0.30	0.2480	0.2430	0.2274	0.2005	0.1612	0.1366	0.1091	0.0484	0.0031	0.0886	0.3265
0.35	0.2496	0.2445	0.2289	0.2019	0.1625	0.1379	0.1103	0.0495	0.0039	0.0890	0.3267
0.40	0.2514	0.2463	0.2306	0.2036	0.1640	0.1394	0.1117	0.0507	0.0048	0.0895	0.3270
0.45	0.2534	0.2483	0.2325	0.2054	0.1658	0.1411	0.1133	0.0520	0.0058	0.0900	0.3272
0.50	0.2556	0.2505	0.2347	0.2075	0.1677	0.1429	0.1150	0.0535	0.0069	0.0906	0.3275
0.55	0.2581	0.2529	0.2371	0.2098	0.1699	0.1450	0.1170	0.0552	0.0082	0.0913	0.3279
0.60	0.2608	0.2556	0.2397	0.2123	0.1722	0.1472	0.1191	0.0570	0.0096	0.0920	0.3282
0.65	0.2637	0.2584	0.2425	0.2149	0.1747	0.1496	0.1214	0.0590	0.0110	0.0928	0.3286
0.70	0.2667	0.2615	0.2455	0.2178	0.1774	0.1522	0.1239	0.0611	0.0127	0.0936	0.3290
0.75	0.2700	0.2648	0.2487	0.2209	0.1803	0.1550	0.1265	0.0634	0.0144	0.0945	0.3295
0.80	0.2735	0.2682	0.2521	0.2242	0.1834	0.1580	0.1293	0.0659	0.0163	0.0955	0.3299
0.85	0.2772	0.2719	0.2556	0.2276	0.1867	0.1611	0.1323	0.0685	0.0182	0.0965	0.3304
0.90	0.2810	0.2757	0.2594	0.2313	0.1901	0.1644	0.1355	0.0712	0.0203	0.0975	0.3309
0.95	0.2851	0.2797	0.2633	0.2351	0.1937	0.1679	0.1388	0.0741	0.0225	0.0987	0.3314
1.00	0.2893	0.2839	0.2674	0.2390	0.1975	0.1716	0.1423	0.0772	0.0249	0.0999	0.3320
1.05	0.2936	0.2882	0.2717	0.2432	0.2015	0.1754	0.1460	0.0804	0.0273	0.1011	0.3325
1.10	0.2981	0.2927	0.2761	0.2476	0.2056	0.1794	0.1498	0.0837	0.0299	0.1024	0.3331
1.15	0.3028	0.2974	0.2807	0.2519	0.2098	0.1835	0.1538	0.0872	0.0326	0.1037	0.3337
1.20	0.3076	0.3021	0.2854	0.2565	0.2142	0.1878	0.1579	0.0909	0.0354	0.1051	0.3343
1.25	0.3126	0.3071	0.2902	0.2612	0.2188	0.1922	0.1621	0.0946	0.0383	0.1066	0.3350
1.30	0.3175	0.3121	0.2952	0.2661	0.2235	0.1968	0.1665	0.0985	0.0413	0.1081	0.3356
1.35	0.3228	0.3173	0.3003	0.2711	0.2283	0.2014	0.1711	0.1026	0.0445	0.1097	0.3363
1.40	0.3281	0.3226	0.3056	0.2762	0.2332	0.2063	0.1757	0.1068	0.0477	0.1113	0.3370
1.45	0.3335	0.3279	0.3109	0.2815	0.2383	0.2112	0.1805	0.1111	0.0510	0.1129	0.3376
1.50	0.3390	0.3334	0.3163	0.2868	0.2435	0.2163	0.1855	0.1155	0.0545	0.1147	0.3384
1.55	0.3446	0.3380	0.3219	0.2923	0.2488	0.2215	0.1905	0.1200	0.0581	0.1164	0.3391

TABLES OF CALCULATIONS FOR H·H·WRIGHT ESQ.

VALUES OF RP WHERE N=2.95

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3503	0.3447	0.3275	0.2978	0.2542	0.2268	0.1957	0.1247	0.0617	0.1182	0.3398
1.65	0.3561	0.3504	0.3332	0.3035	0.2597	0.2322	0.2009	0.1295	0.0655	0.1201	0.3406
1.70	0.3619	0.3563	0.3390	0.3092	0.2653	0.2377	0.2063	0.1343	0.0693	0.1220	0.3413
1.75	0.3678	0.3622	0.3449	0.3150	0.2710	0.2433	0.2118	0.1393	0.0733	0.1240	0.3421
1.80	0.3738	0.3681	0.3508	0.3209	0.2758	0.2490	0.2173	0.1444	0.0773	0.1260	0.3429
1.85	0.3798	0.3741	0.3568	0.3268	0.2827	0.2548	0.2230	0.1496	0.0815	0.1280	0.3437
1.90	0.3858	0.3802	0.3628	0.3328	0.2886	0.2607	0.2287	0.1549	0.0857	0.1301	0.3445
1.95	0.3919	0.3862	0.3689	0.3389	0.2946	0.2666	0.2345	0.1602	0.0900	0.1323	0.3453
2.00	0.3980	0.3924	0.3750	0.3450	0.3007	0.2726	0.2404	0.1657	0.0944	0.1345	0.3461
2.05	0.4042	0.3985	0.3812	0.3512	0.3068	0.2786	0.2464	0.1712	0.0988	0.1367	0.3469
2.10	0.4104	0.4047	0.3874	0.3574	0.3129	0.2847	0.2524	0.1768	0.1034	0.1390	0.3478
2.15	0.4166	0.4109	0.3936	0.3636	0.3191	0.2909	0.2585	0.1825	0.1080	0.1413	0.3486
2.20	0.4228	0.4171	0.3998	0.3698	0.3254	0.2971	0.2646	0.1882	0.1127	0.1436	0.3495
2.25	0.4290	0.4234	0.4061	0.3761	0.3317	0.3033	0.2708	0.1940	0.1174	0.1460	0.3504
2.30	0.4352	0.4296	0.4124	0.3824	0.3380	0.3096	0.2770	0.1999	0.1222	0.1485	0.3513
2.35	0.4414	0.4358	0.4186	0.3887	0.3443	0.3159	0.2832	0.2058	0.1271	0.1509	0.3522
2.40	0.4476	0.4420	0.4249	0.3950	0.3506	0.3223	0.2895	0.2117	0.1321	0.1534	0.3531
2.45	0.4538	0.4483	0.4311	0.4014	0.3570	0.3286	0.2959	0.2177	0.1371	0.1560	0.3540
2.50	0.4600	0.4545	0.4374	0.4077	0.3634	0.3350	0.3022	0.2238	0.1421	0.1586	0.3549
2.55	0.4662	0.4606	0.4436	0.4140	0.3698	0.3414	0.3086	0.2299	0.1472	0.1612	0.3559
2.60	0.4723	0.4668	0.4499	0.4203	0.3762	0.3478	0.3150	0.2360	0.1523	0.1638	0.3568
2.65	0.4785	0.4730	0.4561	0.4266	0.3825	0.3542	0.3214	0.2421	0.1575	0.1665	0.3578
2.70	0.4845	0.4791	0.4622	0.4329	0.3889	0.3606	0.3278	0.2483	0.1628	0.1692	0.3587
2.75	0.4906	0.4852	0.4684	0.4391	0.3953	0.3670	0.3342	0.2545	0.1680	0.1720	0.3597
2.80	0.4966	0.4912	0.4745	0.4454	0.4016	0.3734	0.3406	0.2607	0.1733	0.1748	0.3607
2.85	0.5026	0.4972	0.4806	0.4516	0.4080	0.3798	0.3470	0.2670	0.1787	0.1776	0.3617
2.90	0.5086	0.5032	0.4867	0.4578	0.4143	0.3862	0.3534	0.2732	0.1841	0.1804	0.3627
2.95	0.5145	0.5092	0.4927	0.4639	0.4206	0.3926	0.3598	0.2794	0.1895	0.1833	0.3637
3.00	0.5204	0.5151	0.4987	0.4700	0.4269	0.3989	0.3662	0.2857	0.1949	0.1862	0.3647

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=3.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2500	0.2449	0.2293	0.2023	0.1628	0.1381	0.1103	0.0487	0.0019	0.0836	0.3203
0.05	0.2501	0.2450	0.2294	0.2024	0.1629	0.1382	0.1104	0.0488	0.0016	0.0836	0.3203
0.10	0.2505	0.2454	0.2297	0.2027	0.1632	0.1385	0.1107	0.0491	0.0017	0.0837	0.3203
0.15	0.2511	0.2459	0.2303	0.2033	0.1637	0.1390	0.1111	0.0494	0.0020	0.0838	0.3204
0.20	0.2519	0.2468	0.2311	0.2040	0.1644	0.1397	0.1118	0.0500	0.0024	0.0841	0.3205
0.25	0.2529	0.2478	0.2321	0.2050	0.1653	0.1405	0.1126	0.0507	0.0030	0.0843	0.3207
0.30	0.2542	0.2491	0.2333	0.2062	0.1664	0.1416	0.1136	0.0516	0.0036	0.0847	0.3208
0.35	0.2557	0.2509	0.2348	0.2076	0.1677	0.1428	0.1148	0.0526	0.0044	0.0851	0.3210
0.40	0.2574	0.2523	0.2365	0.2092	0.1692	0.1443	0.1161	0.0537	0.0053	0.0855	0.3213
0.45	0.2594	0.2542	0.2384	0.2110	0.1709	0.1459	0.1177	0.0551	0.0063	0.0861	0.3215
0.50	0.2619	0.2563	0.2405	0.2130	0.1728	0.1477	0.1194	0.0565	0.0074	0.0866	0.3218
0.55	0.2639	0.2587	0.2428	0.2152	0.1749	0.1497	0.1213	0.0582	0.0086	0.0873	0.3221
0.60	0.2665	0.2613	0.2453	0.2176	0.1772	0.1519	0.1234	0.0600	0.0100	0.0880	0.3225
0.65	0.2693	0.2640	0.2480	0.2203	0.1796	0.1543	0.1255	0.0619	0.0114	0.0887	0.3229
0.70	0.2723	0.2670	0.2509	0.2231	0.1823	0.1568	0.1280	0.0640	0.0130	0.0896	0.3233
0.75	0.2755	0.2702	0.2540	0.2260	0.1851	0.1595	0.1306	0.0663	0.0147	0.0904	0.3237
0.80	0.2788	0.2735	0.2573	0.2292	0.1881	0.1624	0.1334	0.0687	0.0166	0.0914	0.3241
0.85	0.2824	0.2771	0.2608	0.2326	0.1913	0.1655	0.1363	0.0712	0.0185	0.0924	0.3246
0.90	0.2861	0.2808	0.2644	0.2361	0.1947	0.1687	0.1394	0.0739	0.0206	0.0934	0.3251
0.95	0.2900	0.2847	0.2682	0.2398	0.1982	0.1721	0.1427	0.0768	0.0228	0.0945	0.3256
1.00	0.2941	0.2887	0.2722	0.2437	0.2019	0.1757	0.1461	0.0798	0.0251	0.0957	0.3261
1.05	0.2983	0.2929	0.2763	0.2477	0.2057	0.1794	0.1497	0.0829	0.0275	0.0969	0.3266
1.10	0.3027	0.2973	0.2806	0.2519	0.2097	0.1833	0.1534	0.0862	0.0300	0.0982	0.3272
1.15	0.3073	0.3018	0.2851	0.2562	0.2139	0.1873	0.1573	0.0896	0.0327	0.0995	0.3278
1.20	0.3119	0.3064	0.2897	0.2607	0.2182	0.1915	0.1613	0.0932	0.0354	0.1009	0.3284
1.25	0.3167	0.3112	0.2944	0.2653	0.2226	0.1958	0.1655	0.0969	0.0383	0.1023	0.3290
1.30	0.3217	0.3161	0.2992	0.2700	0.2272	0.2003	0.1698	0.1007	0.0413	0.1038	0.3297
1.35	0.3267	0.3211	0.3042	0.2749	0.2319	0.2049	0.1742	0.1047	0.0443	0.1054	0.3303
1.40	0.3318	0.3263	0.3093	0.2799	0.2367	0.2096	0.1788	0.1088	0.0475	0.1070	0.3310
1.45	0.3371	0.3315	0.3145	0.2850	0.2417	0.2144	0.1835	0.1130	0.0508	0.1086	0.3316
1.50	0.3425	0.3369	0.3198	0.2902	0.2467	0.2194	0.1883	0.1173	0.0542	0.1103	0.3323
1.55	0.3479	0.3423	0.3252	0.2955	0.2519	0.2244	0.1932	0.1218	0.0577	0.1121	0.3330

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=3.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3534	0.3478	0.3306	0.3009	0.2572	0.2296	0.1982	0.1264	0.0614	0.1138	0.3338
1.65	0.3591	0.3534	0.3362	0.3064	0.2626	0.2349	0.2034	0.1310	0.0651	0.1157	0.3345
1.70	0.3647	0.3591	0.3419	0.3120	0.2680	0.2403	0.2086	0.1358	0.0689	0.1176	0.3352
1.75	0.3705	0.3648	0.3476	0.3177	0.2736	0.2458	0.2140	0.1407	0.0727	0.1195	0.3360
1.80	0.3763	0.3707	0.3534	0.3234	0.2793	0.2513	0.2194	0.1457	0.0767	0.1215	0.3368
1.85	0.3822	0.3765	0.3592	0.3292	0.2850	0.2570	0.2250	0.1508	0.0808	0.1235	0.3376
1.90	0.3881	0.3824	0.3651	0.3351	0.2908	0.2627	0.2306	0.1560	0.0849	0.1256	0.3384
1.95	0.3940	0.3884	0.3710	0.3410	0.2966	0.2685	0.2363	0.1612	0.0892	0.1277	0.3392
2.00	0.4000	0.3943	0.3770	0.3470	0.3026	0.2744	0.2420	0.1666	0.0935	0.1299	0.3400
2.05	0.4060	0.4004	0.3831	0.3530	0.3085	0.2803	0.2479	0.1720	0.0979	0.1321	0.3408
2.10	0.4121	0.4064	0.3891	0.3591	0.3146	0.2863	0.2538	0.1775	0.1024	0.1344	0.3416
2.15	0.4181	0.4125	0.3952	0.3652	0.3206	0.2923	0.2597	0.1831	0.1069	0.1366	0.3425
2.20	0.4242	0.4186	0.4013	0.3713	0.3268	0.2984	0.2657	0.1887	0.1115	0.1390	0.3434
2.25	0.4303	0.4246	0.4074	0.3774	0.3329	0.3045	0.2718	0.1944	0.1162	0.1413	0.3442
2.30	0.4364	0.4307	0.4135	0.3836	0.3391	0.3107	0.2779	0.2002	0.1210	0.1438	0.3451
2.35	0.4424	0.4368	0.4197	0.3898	0.3453	0.3169	0.2840	0.2060	0.1258	0.1462	0.3460
2.40	0.4485	0.4429	0.4258	0.3960	0.3515	0.3231	0.2902	0.2118	0.1306	0.1487	0.3469
2.45	0.4545	0.4490	0.4319	0.4022	0.3578	0.3293	0.2964	0.2177	0.1356	0.1512	0.3478
2.50	0.4607	0.4551	0.4381	0.4084	0.3640	0.3356	0.3027	0.2237	0.1405	0.1538	0.3487
2.55	0.4667	0.4612	0.4442	0.4146	0.3703	0.3419	0.3089	0.2297	0.1456	0.1564	0.3497
2.60	0.4728	0.4672	0.4503	0.4208	0.3766	0.3482	0.3152	0.2357	0.1507	0.1590	0.3506
2.65	0.4788	0.4733	0.4564	0.4269	0.3828	0.3545	0.3215	0.2417	0.1558	0.1617	0.3515
2.70	0.4848	0.4793	0.4625	0.4331	0.3891	0.3608	0.3278	0.2478	0.1609	0.1644	0.3525
2.75	0.4907	0.4853	0.4685	0.4393	0.3954	0.3671	0.3341	0.2539	0.1661	0.1671	0.3535
2.80	0.4966	0.4912	0.4746	0.4454	0.4016	0.3734	0.3404	0.2600	0.1714	0.1699	0.3545
2.85	0.5025	0.4971	0.4805	0.4515	0.4079	0.3796	0.3467	0.2662	0.1767	0.1727	0.3554
2.90	0.5084	0.5030	0.4865	0.4576	0.4141	0.3859	0.3530	0.2723	0.1820	0.1755	0.3564
2.95	0.5142	0.5089	0.4924	0.4636	0.4203	0.3922	0.3593	0.2785	0.1873	0.1784	0.3574
3.00	0.5200	0.5147	0.4983	0.4697	0.4264	0.3984	0.3656	0.2846	0.1927	0.1813	0.3585

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2562	0.2511	0.2353	0.2081	0.1681	0.1431	0.1149	0.0520	0.0021	0.0797	0.3147
0.05	0.2563	0.2512	0.2354	0.2082	0.1682	0.1432	0.1150	0.0520	0.0022	0.0798	0.3147
0.10	0.2567	0.2515	0.2358	0.2085	0.1685	0.1435	0.1152	0.0523	0.0024	0.0799	0.3148
0.15	0.2572	0.2521	0.2363	0.2090	0.1690	0.1440	0.1157	0.0526	0.0026	0.0800	0.3148
0.20	0.2580	0.2529	0.2371	0.2098	0.1697	0.1446	0.1163	0.0532	0.0030	0.0802	0.3149
0.25	0.2590	0.2539	0.2381	0.2107	0.1706	0.1455	0.1171	0.0539	0.0036	0.0805	0.3151
0.30	0.2603	0.2551	0.2393	0.2119	0.1717	0.1465	0.1181	0.0547	0.0042	0.0808	0.3152
0.35	0.2617	0.2565	0.2407	0.2132	0.1730	0.1477	0.1192	0.0557	0.0050	0.0812	0.3154
0.40	0.2634	0.2582	0.2423	0.2148	0.1744	0.1491	0.1206	0.0569	0.0058	0.0817	0.3157
0.45	0.2653	0.2601	0.2441	0.2165	0.1761	0.1507	0.1221	0.0582	0.0068	0.0822	0.3159
0.50	0.2674	0.2621	0.2462	0.2185	0.1779	0.1525	0.1238	0.0596	0.0079	0.0828	0.3162
0.55	0.2697	0.2644	0.2484	0.2206	0.1799	0.1545	0.1256	0.0612	0.0091	0.0834	0.3165
0.60	0.2722	0.2669	0.2508	0.2230	0.1822	0.1566	0.1277	0.0630	0.0105	0.0841	0.3168
0.65	0.2749	0.2696	0.2535	0.2255	0.1846	0.1589	0.1299	0.0649	0.0119	0.0848	0.3172
0.70	0.2778	0.2725	0.2563	0.2283	0.1871	0.1614	0.1322	0.0670	0.0135	0.0856	0.3176
0.75	0.2809	0.2756	0.2593	0.2312	0.1899	0.1640	0.1348	0.0692	0.0152	0.0865	0.3180
0.80	0.2841	0.2788	0.2625	0.2342	0.1928	0.1669	0.1375	0.0715	0.0170	0.0874	0.3184
0.85	0.2876	0.2822	0.2658	0.2375	0.1959	0.1699	0.1403	0.0740	0.0189	0.0884	0.3188
0.90	0.2912	0.2858	0.2694	0.2409	0.1992	0.1730	0.1434	0.0767	0.0210	0.0894	0.3193
0.95	0.2950	0.2896	0.2731	0.2445	0.2026	0.1763	0.1466	0.0795	0.0231	0.0905	0.3198
1.00	0.2990	0.2935	0.2770	0.2483	0.2062	0.1798	0.1499	0.0824	0.0254	0.0917	0.3203
1.05	0.3031	0.2976	0.2810	0.2522	0.2100	0.1834	0.1534	0.0855	0.0277	0.0929	0.3209
1.10	0.3073	0.3019	0.2851	0.2563	0.2139	0.1872	0.1570	0.0887	0.0302	0.0941	0.3214
1.15	0.3117	0.3062	0.2895	0.2605	0.2179	0.1912	0.1608	0.0921	0.0328	0.0954	0.3220
1.20	0.3162	0.3107	0.2939	0.2648	0.2221	0.1952	0.1647	0.0956	0.0356	0.0968	0.3226
1.25	0.3209	0.3154	0.2985	0.2693	0.2264	0.1995	0.1688	0.0992	0.0384	0.0982	0.3232
1.30	0.3257	0.3202	0.3032	0.2739	0.2309	0.2038	0.1730	0.1030	0.0413	0.0997	0.3238
1.35	0.3306	0.3250	0.3081	0.2787	0.2355	0.2083	0.1774	0.1069	0.0444	0.1012	0.3244
1.40	0.3356	0.3300	0.3130	0.2835	0.2402	0.2129	0.1818	0.1109	0.0475	0.1028	0.3251
1.45	0.3407	0.3351	0.3181	0.2885	0.2450	0.2176	0.1864	0.1150	0.0507	0.1044	0.3257
1.50	0.3459	0.3403	0.3232	0.2936	0.2500	0.2225	0.1911	0.1193	0.0541	0.1061	0.3264
1.55	0.3512	0.3456	0.3285	0.2988	0.2550	0.2274	0.1960	0.1236	0.0575	0.1078	0.3271

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.05

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3566	0.3510	0.3338	0.3041	0.2602	0.2325	0.2009	0.1281	0.0611	0.1096	0.3278
1.65	0.3621	0.3565	0.3393	0.3094	0.2654	0.2377	0.2059	0.1327	0.0647	0.1114	0.3285
1.70	0.3676	0.3620	0.3448	0.3149	0.2708	0.2429	0.2111	0.1374	0.0685	0.1133	0.3293
1.75	0.3732	0.3676	0.3503	0.3204	0.2762	0.2483	0.2163	0.1422	0.0723	0.1152	0.3300
1.80	0.3789	0.3733	0.3560	0.3260	0.2818	0.2537	0.2216	0.1471	0.0762	0.1172	0.3308
1.85	0.3846	0.3790	0.3617	0.3317	0.2873	0.2592	0.2270	0.1521	0.0802	0.1192	0.3316
1.90	0.3904	0.3847	0.3674	0.3374	0.2930	0.2648	0.2326	0.1572	0.0843	0.1212	0.3323
1.95	0.3962	0.3905	0.3732	0.3432	0.2987	0.2705	0.2381	0.1623	0.0885	0.1233	0.3331
2.00	0.4020	0.3964	0.3791	0.3490	0.3045	0.2763	0.2438	0.1676	0.0928	0.1255	0.3340
2.05	0.4079	0.4023	0.3850	0.3549	0.3104	0.2821	0.2495	0.1729	0.0971	0.1277	0.3348
2.10	0.4138	0.4082	0.3909	0.3609	0.3163	0.2879	0.2553	0.1783	0.1015	0.1299	0.3356
2.15	0.4197	0.4141	0.3968	0.3668	0.3222	0.2938	0.2611	0.1838	0.1060	0.1322	0.3364
2.20	0.4257	0.4201	0.4028	0.3728	0.3282	0.2998	0.2670	0.1893	0.1105	0.1345	0.3373
2.25	0.4316	0.4260	0.4088	0.3788	0.3343	0.3058	0.2729	0.1949	0.1152	0.1368	0.3382
2.30	0.4376	0.4320	0.4148	0.3849	0.3403	0.3118	0.2789	0.2006	0.1198	0.1392	0.3390
2.35	0.4436	0.4380	0.4208	0.3909	0.3464	0.3179	0.2849	0.2063	0.1246	0.1416	0.3399
2.40	0.4495	0.4439	0.4268	0.3970	0.3525	0.3240	0.2910	0.2120	0.1294	0.1441	0.3408
2.45	0.4555	0.4499	0.4328	0.4031	0.3586	0.3301	0.2971	0.2178	0.1342	0.1466	0.3417
2.50	0.4614	0.4559	0.4389	0.4092	0.3648	0.3363	0.3032	0.2237	0.1391	0.1492	0.3426
2.55	0.4674	0.4618	0.4449	0.4152	0.3709	0.3424	0.3094	0.2296	0.1441	0.1517	0.3436
2.60	0.4733	0.4678	0.4509	0.4213	0.3771	0.3486	0.3155	0.2355	0.1491	0.1544	0.3445
2.65	0.4792	0.4737	0.4568	0.4274	0.3832	0.3548	0.3217	0.2415	0.1542	0.1570	0.3454
2.70	0.4851	0.4796	0.4628	0.4334	0.3894	0.3610	0.3279	0.2474	0.1593	0.1597	0.3464
2.75	0.4909	0.4855	0.4688	0.4395	0.3956	0.3672	0.3341	0.2534	0.1644	0.1624	0.3474
2.80	0.4968	0.4913	0.4747	0.4456	0.4017	0.3734	0.3403	0.2595	0.1696	0.1651	0.3483
2.85	0.5025	0.4972	0.4806	0.4516	0.4078	0.3796	0.3465	0.2655	0.1748	0.1679	0.3493
2.90	0.5083	0.5029	0.4864	0.4576	0.4140	0.3857	0.3527	0.2716	0.1800	0.1707	0.3503
2.95	0.5140	0.5087	0.4923	0.4635	0.4201	0.3919	0.3589	0.2776	0.1853	0.1736	0.3513
3.00	0.5197	0.5144	0.4981	0.4694	0.4261	0.3980	0.3651	0.2837	0.1906	0.1764	0.3523

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=3.10

PAGE 207

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2623	0.2572	0.2413	0.2138	0.1735	0.1481	0.1195	0.0552	0.0028	0.0760	0.3092
0.05	0.2625	0.2573	0.2414	0.2139	0.1736	0.1482	0.1196	0.0553	0.0029	0.0761	0.3092
0.10	0.2628	0.2576	0.2417	0.2142	0.1738	0.1483	0.1198	0.0555	0.0031	0.0762	0.3092
0.15	0.2633	0.2581	0.2422	0.2147	0.1743	0.1489	0.1203	0.0559	0.0034	0.0763	0.3093
0.20	0.2641	0.2589	0.2430	0.2155	0.1750	0.1496	0.1209	0.0564	0.0038	0.0765	0.3094
0.25	0.2651	0.2599	0.2439	0.2164	0.1759	0.1504	0.1216	0.0571	0.0043	0.0768	0.3095
0.30	0.2663	0.2611	0.2451	0.2175	0.1769	0.1514	0.1226	0.0579	0.0049	0.0771	0.3097
0.35	0.2677	0.2625	0.2465	0.2188	0.1781	0.1526	0.1237	0.0589	0.0056	0.0775	0.3099
0.40	0.2693	0.2641	0.2480	0.2203	0.1796	0.1540	0.1250	0.0600	0.0065	0.0779	0.3101
0.45	0.2711	0.2659	0.2498	0.2220	0.1812	0.1558	0.1265	0.0613	0.0075	0.0784	0.3103
0.50	0.2732	0.2679	0.2518	0.2239	0.1830	0.1573	0.1282	0.0627	0.0086	0.0790	0.3106
0.55	0.2754	0.2701	0.2540	0.2260	0.1850	0.1592	0.1300	0.0643	0.0098	0.0796	0.3109
0.60	0.2778	0.2725	0.2563	0.2283	0.1871	0.1613	0.1320	0.0661	0.0111	0.0803	0.3112
0.65	0.2804	0.2751	0.2589	0.2308	0.1895	0.1635	0.1341	0.0679	0.0125	0.0810	0.3116
0.70	0.2832	0.2779	0.2616	0.2334	0.1920	0.1660	0.1364	0.0700	0.0141	0.0818	0.3119
0.75	0.2862	0.2809	0.2645	0.2362	0.1947	0.1685	0.1389	0.0721	0.0157	0.0827	0.3123
0.80	0.2894	0.2840	0.2676	0.2392	0.1975	0.1713	0.1416	0.0744	0.0175	0.0836	0.3128
0.85	0.2927	0.2874	0.2709	0.2424	0.2005	0.1742	0.1444	0.0769	0.0194	0.0846	0.3132
0.90	0.2963	0.2909	0.2743	0.2457	0.2037	0.1773	0.1473	0.0795	0.0214	0.0856	0.3136
0.95	0.2999	0.2945	0.2779	0.2492	0.2071	0.1806	0.1504	0.0823	0.0235	0.0867	0.3141
1.00	0.3038	0.2983	0.2817	0.2529	0.2106	0.1839	0.1537	0.0851	0.0258	0.0878	0.3146
1.05	0.3077	0.3023	0.2856	0.2567	0.2142	0.1875	0.1571	0.0882	0.0281	0.0890	0.3151
1.10	0.3119	0.3064	0.2897	0.2607	0.2180	0.1912	0.1607	0.0913	0.0306	0.0902	0.3157
1.15	0.3161	0.3107	0.2939	0.2648	0.2220	0.1950	0.1644	0.0946	0.0331	0.0915	0.3162
1.20	0.3205	0.3150	0.2982	0.2690	0.2261	0.1990	0.1682	0.0981	0.0358	0.0928	0.3168
1.25	0.3251	0.3196	0.3026	0.2734	0.2303	0.2031	0.1722	0.1016	0.0386	0.0942	0.3174
1.30	0.3297	0.3242	0.3072	0.2779	0.2346	0.2074	0.1763	0.1053	0.0415	0.0957	0.3180
1.35	0.3345	0.3289	0.3119	0.2825	0.2391	0.2118	0.1806	0.1091	0.0445	0.0972	0.3186
1.40	0.3394	0.3338	0.3168	0.2872	0.2437	0.2163	0.1849	0.1131	0.0476	0.0988	0.3193
1.45	0.3443	0.3388	0.3217	0.2921	0.2484	0.2209	0.1894	0.1171	0.0508	0.1004	0.3199
1.50	0.3494	0.3438	0.3267	0.2970	0.2533	0.2256	0.1940	0.1213	0.0541	0.1020	0.3206
1.55	0.3546	0.3490	0.3318	0.3021	0.2582	0.2305	0.1988	0.1256	0.0575	0.1037	0.3213

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3-10

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.3598	0.3542	0.3370	0.3072	0.2632	0.2354	0.2036	0.1300	0.0610	0.1055	0.3220
1.65	0.3652	0.3595	0.3423	0.3125	0.2684	0.2405	0.2085	0.1345	0.0646	0.1073	0.3227
1.70	0.3705	0.3648	0.3477	0.3178	0.2736	0.2456	0.2135	0.1391	0.0682	0.1091	0.3234
1.75	0.3760	0.3704	0.3531	0.3232	0.2789	0.2508	0.2187	0.1438	0.0720	0.1110	0.3242
1.80	0.3815	0.3759	0.3586	0.3287	0.2843	0.2562	0.2239	0.1486	0.0759	0.1130	0.3249
1.85	0.3871	0.3815	0.3642	0.3342	0.2898	0.2616	0.2292	0.1535	0.0798	0.1150	0.3257
1.90	0.3928	0.3871	0.3698	0.3398	0.2953	0.2670	0.2346	0.1585	0.0838	0.1170	0.3264
1.95	0.3984	0.3928	0.3755	0.3455	0.3009	0.2726	0.2400	0.1635	0.0880	0.1191	0.3272
2.00	0.4041	0.3985	0.3812	0.3512	0.3066	0.2782	0.2456	0.1687	0.0922	0.1212	0.3280
2.05	0.4099	0.4042	0.3870	0.3569	0.3123	0.2839	0.2512	0.1739	0.0964	0.1234	0.3288
2.10	0.4156	0.4100	0.3928	0.3627	0.3181	0.2896	0.2568	0.1792	0.1008	0.1256	0.3297
2.15	0.4214	0.4158	0.3986	0.3686	0.3239	0.2954	0.2625	0.1846	0.1052	0.1278	0.3305
2.20	0.4273	0.4216	0.4044	0.3744	0.3298	0.3013	0.2683	0.1900	0.1097	0.1301	0.3313
2.25	0.4331	0.4275	0.4103	0.3803	0.3357	0.3072	0.2741	0.1955	0.1142	0.1324	0.3322
2.30	0.4389	0.4333	0.4161	0.3862	0.3416	0.3131	0.2800	0.2011	0.1188	0.1348	0.3331
2.35	0.4448	0.4392	0.4220	0.3922	0.3476	0.3190	0.2859	0.2067	0.1235	0.1372	0.3339
2.40	0.4506	0.4450	0.4279	0.3981	0.3536	0.3250	0.2919	0.2124	0.1282	0.1397	0.3348
2.45	0.4564	0.4509	0.4338	0.4041	0.3596	0.3310	0.2979	0.2181	0.1330	0.1422	0.3357
2.50	0.4623	0.4567	0.4397	0.4100	0.3656	0.3371	0.3039	0.2238	0.1379	0.1447	0.3366
2.55	0.4681	0.4626	0.4456	0.4160	0.3717	0.3431	0.3099	0.2296	0.1428	0.1472	0.3376
2.60	0.4739	0.4684	0.4515	0.4220	0.3777	0.3492	0.3160	0.2354	0.1477	0.1498	0.3385
2.65	0.4797	0.4742	0.4574	0.4279	0.3837	0.3553	0.3220	0.2413	0.1527	0.1525	0.3394
2.70	0.4855	0.4800	0.4632	0.4339	0.3898	0.3613	0.3281	0.2472	0.1577	0.1551	0.3404
2.75	0.4912	0.4858	0.4691	0.4398	0.3958	0.3674	0.3342	0.2531	0.1628	0.1578	0.3413
2.80	0.4970	0.4915	0.4749	0.4457	0.4019	0.3735	0.3403	0.2590	0.1679	0.1606	0.3423
2.85	0.5027	0.4973	0.4807	0.4517	0.4079	0.3796	0.3464	0.2650	0.1730	0.1633	0.3433
2.90	0.5083	0.5030	0.4865	0.4579	0.4139	0.3857	0.3525	0.2710	0.1782	0.1661	0.3443
2.95	0.5140	0.5086	0.4922	0.4634	0.4199	0.3917	0.3586	0.2769	0.1834	0.1689	0.3453
3.00	0.5196	0.5143	0.4979	0.4692	0.4259	0.3978	0.3647	0.2829	0.1887	0.1718	0.3463

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RF WHERE N=3.15

PAGE 209

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2684	0.2632	0.2472	0.2195	0.1787	0.1531	0.1241	0.0585	0.0037	0.0724	0.3037
0.05	0.2685	0.2633	0.2473	0.2196	0.1788	0.1532	0.1241	0.0586	0.0037	0.0725	0.3037
0.10	0.2688	0.2636	0.2476	0.2199	0.1791	0.1535	0.1244	0.0588	0.0039	0.0726	0.3038
0.15	0.2694	0.2641	0.2481	0.2204	0.1796	0.1539	0.1248	0.0592	0.0042	0.0727	0.3039
0.20	0.2701	0.2649	0.2488	0.2211	0.1802	0.1546	0.1254	0.0597	0.0046	0.0729	0.3040
0.25	0.2710	0.2658	0.2498	0.2220	0.1811	0.1554	0.1262	0.0604	0.0051	0.0732	0.3041
0.30	0.2722	0.2670	0.2509	0.2231	0.1821	0.1564	0.1271	0.0612	0.0057	0.0735	0.3042
0.35	0.2736	0.2683	0.2522	0.2243	0.1833	0.1575	0.1282	0.0621	0.0064	0.0739	0.3044
0.40	0.2751	0.2699	0.2537	0.2258	0.1847	0.1589	0.1295	0.0633	0.0073	0.0743	0.3046
0.45	0.2769	0.2716	0.2555	0.2275	0.1863	0.1604	0.1310	0.0645	0.0082	0.0748	0.3049
0.50	0.2789	0.2736	0.2574	0.2293	0.1880	0.1621	0.1326	0.0659	0.0093	0.0754	0.3051
0.55	0.2810	0.2757	0.2595	0.2314	0.1900	0.1639	0.1344	0.0675	0.0105	0.0760	0.3054
0.60	0.2834	0.2781	0.2618	0.2336	0.1921	0.1660	0.1363	0.0692	0.0118	0.0766	0.3057
0.65	0.2859	0.2806	0.2643	0.2360	0.1943	0.1682	0.1384	0.0710	0.0132	0.0774	0.3060
0.70	0.2886	0.2833	0.2669	0.2385	0.1968	0.1705	0.1407	0.0730	0.0147	0.0782	0.3064
0.75	0.2915	0.2862	0.2697	0.2413	0.1994	0.1731	0.1431	0.0751	0.0164	0.0790	0.3068
0.80	0.2946	0.2892	0.2728	0.2442	0.2022	0.1757	0.1457	0.0774	0.0181	0.0799	0.3072
0.85	0.2979	0.2925	0.2759	0.2473	0.2051	0.1786	0.1484	0.0798	0.0200	0.0808	0.3076
0.90	0.3013	0.2958	0.2793	0.2505	0.2082	0.1816	0.1513	0.0824	0.0220	0.0818	0.3081
0.95	0.3048	0.2994	0.2828	0.2539	0.2115	0.1848	0.1544	0.0851	0.0241	0.0829	0.3085
1.00	0.3085	0.3031	0.2864	0.2575	0.2149	0.1881	0.1576	0.0879	0.0263	0.0840	0.3090
1.05	0.3124	0.3069	0.2902	0.2612	0.2185	0.1916	0.1609	0.0909	0.0286	0.0852	0.3095
1.10	0.3164	0.3109	0.2942	0.2651	0.2222	0.1952	0.1644	0.0940	0.0310	0.0864	0.3100
1.15	0.3206	0.3151	0.2982	0.2691	0.2260	0.1989	0.1680	0.0972	0.0335	0.0877	0.3106
1.20	0.3248	0.3193	0.3024	0.2732	0.2300	0.2028	0.1718	0.1006	0.0362	0.0890	0.3111
1.25	0.3293	0.3237	0.3068	0.2774	0.2342	0.2068	0.1757	0.1041	0.0389	0.0904	0.3117
1.30	0.3338	0.3282	0.3112	0.2818	0.2384	0.2110	0.1797	0.1077	0.0417	0.0918	0.3123
1.35	0.3384	0.3329	0.3158	0.2863	0.2428	0.2152	0.1838	0.1114	0.0447	0.0933	0.3129
1.40	0.3432	0.3376	0.3205	0.2909	0.2473	0.2196	0.1881	0.1153	0.0477	0.0949	0.3136
1.45	0.3480	0.3424	0.3253	0.2957	0.2519	0.2242	0.1925	0.1193	0.0509	0.0964	0.3142
1.50	0.3529	0.3473	0.3302	0.3005	0.2566	0.2288	0.1970	0.1234	0.0541	0.0981	0.3149
1.55	0.3580	0.3524	0.3352	0.3054	0.2614	0.2335	0.2016	0.1276	0.0575	0.0998	0.3155

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.15

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3631	0.3575	0.3403	0.3104	0.2663	0.2384	0.2063	0.1319	0.0609	0.1015	0.3162
1.65	0.3653	0.3526	0.3454	0.3155	0.2713	0.2433	0.2112	0.1363	0.0645	0.1033	0.3169
1.70	0.3735	0.3679	0.3507	0.3207	0.2764	0.2483	0.2161	0.1408	0.0681	0.1051	0.3176
1.75	0.3789	0.3732	0.3560	0.3260	0.2816	0.2535	0.2211	0.1454	0.0718	0.1070	0.3184
1.80	0.3842	0.3786	0.3613	0.3314	0.2869	0.2587	0.2262	0.1501	0.0756	0.1089	0.3191
1.85	0.3897	0.3840	0.3668	0.3368	0.2923	0.2639	0.2314	0.1550	0.0795	0.1109	0.3199
1.90	0.3952	0.3895	0.3723	0.3422	0.2977	0.2693	0.2367	0.1598	0.0835	0.1129	0.3206
1.95	0.4007	0.3951	0.3778	0.3478	0.3032	0.2747	0.2420	0.1648	0.0875	0.1150	0.3214
2.00	0.4063	0.4007	0.3834	0.3533	0.3087	0.2802	0.2474	0.1699	0.0917	0.1171	0.3222
2.05	0.4119	0.4063	0.3890	0.3590	0.3143	0.2858	0.2529	0.1750	0.0959	0.1192	0.3230
2.10	0.4175	0.4119	0.3947	0.3646	0.3200	0.2914	0.2585	0.1802	0.1001	0.1214	0.3238
2.15	0.4232	0.4176	0.4004	0.3704	0.3257	0.2971	0.2641	0.1855	0.1045	0.1236	0.3246
2.20	0.4289	0.4233	0.4061	0.3761	0.3314	0.3028	0.2697	0.1908	0.1089	0.1259	0.3255
2.25	0.4346	0.4290	0.4118	0.3819	0.3372	0.3085	0.2755	0.1962	0.1134	0.1282	0.3263
2.30	0.4403	0.4347	0.4176	0.3877	0.3430	0.3144	0.2812	0.2017	0.1179	0.1306	0.3272
2.35	0.4460	0.4405	0.4233	0.3935	0.3489	0.3202	0.2870	0.2072	0.1226	0.1330	0.3281
2.40	0.4518	0.4462	0.4291	0.3993	0.3547	0.3261	0.2929	0.2128	0.1272	0.1354	0.3289
2.45	0.4575	0.4519	0.4349	0.4052	0.3606	0.3320	0.2987	0.2184	0.1319	0.1378	0.3298
2.50	0.4632	0.4577	0.4407	0.4110	0.3665	0.3379	0.3046	0.2240	0.1367	0.1404	0.3307
2.55	0.4689	0.4634	0.4465	0.4169	0.3725	0.3439	0.3106	0.2297	0.1416	0.1429	0.3317
2.60	0.4746	0.4691	0.4522	0.4227	0.3784	0.3498	0.3165	0.2355	0.1464	0.1455	0.3326
2.65	0.4803	0.4748	0.4580	0.4286	0.3843	0.3558	0.3225	0.2412	0.1514	0.1481	0.3335
2.70	0.4860	0.4805	0.4638	0.4344	0.3903	0.3618	0.3285	0.2470	0.1563	0.1507	0.3345
2.75	0.4916	0.4862	0.4695	0.4402	0.3962	0.3678	0.3344	0.2529	0.1613	0.1534	0.3354
2.80	0.4973	0.4919	0.4752	0.4461	0.4022	0.3737	0.3405	0.2587	0.1664	0.1561	0.3364
2.85	0.5029	0.4975	0.4809	0.4519	0.4081	0.3797	0.3465	0.2646	0.1714	0.1588	0.3374
2.90	0.5084	0.5031	0.4866	0.4577	0.4140	0.3857	0.3525	0.2705	0.1766	0.1616	0.3384
2.95	0.5140	0.5087	0.4922	0.4634	0.4199	0.3917	0.3585	0.2764	0.1817	0.1644	0.3394
3.00	0.5195	0.5142	0.4979	0.4692	0.4258	0.3976	0.3645	0.2823	0.1869	0.1672	0.3404

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=3-20

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2744	0.2691	0.2530	0.2291	0.1840	0.1581	0.1286	0.0618	0.0046	0.0690	0.2983
0.05	0.2745	0.2692	0.2531	0.2292	0.1841	0.1582	0.1287	0.0619	0.0046	0.0690	0.2984
0.10	0.2748	0.2695	0.2534	0.2295	0.1844	0.1584	0.1290	0.0621	0.0048	0.0691	0.2984
0.15	0.2753	0.2700	0.2539	0.2260	0.1848	0.1589	0.1294	0.0625	0.0051	0.0692	0.2985
0.20	0.2760	0.2708	0.2546	0.2267	0.1855	0.1595	0.1300	0.0630	0.0055	0.0694	0.2986
0.25	0.2769	0.2717	0.2555	0.2275	0.1863	0.1603	0.1307	0.0637	0.0060	0.0697	0.2987
0.30	0.2781	0.2728	0.2566	0.2286	0.1873	0.1612	0.1317	0.0645	0.0066	0.0700	0.2988
0.35	0.2794	0.2741	0.2579	0.2298	0.1885	0.1624	0.1327	0.0654	0.0073	0.0704	0.2990
0.40	0.2809	0.2756	0.2594	0.2313	0.1898	0.1637	0.1340	0.0665	0.0081	0.0708	0.2992
0.45	0.2826	0.2773	0.2611	0.2329	0.1913	0.1652	0.1354	0.0677	0.0091	0.0713	0.2994
0.50	0.2845	0.2792	0.2629	0.2347	0.1931	0.1668	0.1370	0.0691	0.0101	0.0718	0.2997
0.55	0.2866	0.2813	0.2650	0.2367	0.1949	0.1686	0.1387	0.0707	0.0113	0.0724	0.3000
0.60	0.2889	0.2835	0.2672	0.2388	0.1970	0.1706	0.1406	0.0723	0.0126	0.0731	0.3003
0.65	0.2913	0.2860	0.2696	0.2411	0.1992	0.1728	0.1427	0.0741	0.0140	0.0738	0.3006
0.70	0.2940	0.2886	0.2722	0.2436	0.2016	0.1751	0.1449	0.0761	0.0155	0.0746	0.3009
0.75	0.2968	0.2914	0.2749	0.2463	0.2041	0.1776	0.1473	0.0782	0.0171	0.0754	0.3013
0.80	0.2998	0.2944	0.2778	0.2492	0.2069	0.1802	0.1498	0.0804	0.0189	0.0763	0.3017
0.85	0.3029	0.2975	0.2809	0.2522	0.2097	0.1830	0.1525	0.0828	0.0207	0.0772	0.3021
0.90	0.3062	0.3008	0.2842	0.2553	0.2128	0.1859	0.1553	0.0853	0.0226	0.0782	0.3026
0.95	0.3097	0.3042	0.2876	0.2586	0.2159	0.1890	0.1583	0.0879	0.0247	0.0793	0.3030
1.00	0.3133	0.3078	0.2911	0.2621	0.2193	0.1922	0.1614	0.0907	0.0269	0.0804	0.3035
1.05	0.3171	0.3116	0.2948	0.2657	0.2227	0.1956	0.1647	0.0936	0.0291	0.0815	0.3040
1.10	0.3210	0.3155	0.2986	0.2694	0.2264	0.1991	0.1681	0.0967	0.0315	0.0827	0.3045
1.15	0.3250	0.3195	0.3026	0.2733	0.2301	0.2028	0.1716	0.0998	0.0340	0.0840	0.3050
1.20	0.3291	0.3236	0.3067	0.2773	0.2340	0.2066	0.1753	0.1031	0.0366	0.0853	0.3056
1.25	0.3334	0.3279	0.3109	0.2815	0.2380	0.2105	0.1791	0.1066	0.0393	0.0867	0.3061
1.30	0.3378	0.3323	0.3153	0.2858	0.2422	0.2146	0.1830	0.1101	0.0421	0.0881	0.3067
1.35	0.3423	0.3368	0.3197	0.2901	0.2464	0.2188	0.1871	0.1138	0.0450	0.0896	0.3073
1.40	0.3469	0.3414	0.3243	0.2946	0.2508	0.2231	0.1913	0.1176	0.0480	0.0911	0.3079
1.45	0.3517	0.3461	0.3290	0.2993	0.2553	0.2275	0.1956	0.1215	0.0511	0.0927	0.3086
1.50	0.3565	0.3509	0.3337	0.3040	0.2599	0.2320	0.2000	0.1255	0.0543	0.0943	0.3092
1.55	0.3614	0.3558	0.3386	0.3088	0.2646	0.2366	0.2045	0.1296	0.0576	0.0959	0.3099

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=3.20

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3663	0.3607	0.3435	0.3137	0.2694	0.2414	0.2091	0.1339	0.0610	0.0977	0.3106
1.65	0.3714	0.3658	0.3486	0.3187	0.2743	0.2462	0.2138	0.1382	0.0645	0.0994	0.3112
1.70	0.3765	0.3709	0.3537	0.3237	0.2793	0.2511	0.2187	0.1426	0.0681	0.1012	0.3120
1.75	0.3817	0.3761	0.3588	0.3289	0.2844	0.2561	0.2236	0.1472	0.0717	0.1031	0.3127
1.80	0.3870	0.3813	0.3641	0.3341	0.2896	0.2612	0.2286	0.1518	0.0755	0.1050	0.3134
1.85	0.3923	0.3867	0.3694	0.3394	0.2948	0.2664	0.2337	0.1565	0.0793	0.1069	0.3141
1.90	0.3976	0.3920	0.3748	0.3447	0.3001	0.2716	0.2388	0.1613	0.0832	0.1089	0.3149
1.95	0.4031	0.3974	0.3802	0.3501	0.3055	0.2769	0.2441	0.1662	0.0872	0.1110	0.3157
2.00	0.4085	0.4029	0.3856	0.3556	0.3109	0.2823	0.2494	0.1712	0.0913	0.1131	0.3165
2.05	0.4140	0.4084	0.3911	0.3611	0.3164	0.2878	0.2547	0.1762	0.0954	0.1152	0.3173
2.10	0.4195	0.4139	0.3967	0.3666	0.3219	0.2933	0.2602	0.1813	0.0996	0.1174	0.3181
2.15	0.4250	0.4194	0.4022	0.3722	0.3275	0.2988	0.2657	0.1865	0.1039	0.1196	0.3189
2.20	0.4306	0.4250	0.4078	0.3778	0.3331	0.3045	0.2712	0.1917	0.1083	0.1218	0.3197
2.25	0.4362	0.4306	0.4134	0.3835	0.3388	0.3101	0.2768	0.1970	0.1127	0.1241	0.3206
2.30	0.4418	0.4362	0.4191	0.3892	0.3445	0.3158	0.2825	0.2024	0.1172	0.1264	0.3214
2.35	0.4474	0.4418	0.4247	0.3949	0.3502	0.3215	0.2882	0.2078	0.1217	0.1288	0.3223
2.40	0.4530	0.4474	0.4304	0.4006	0.3560	0.3273	0.2939	0.2133	0.1263	0.1312	0.3232
2.45	0.4586	0.4531	0.4360	0.4063	0.3618	0.3331	0.2997	0.2188	0.1310	0.1337	0.3240
2.50	0.4642	0.4587	0.4417	0.4121	0.3676	0.3389	0.3055	0.2244	0.1357	0.1362	0.3249
2.55	0.4698	0.4643	0.4474	0.4178	0.3734	0.3447	0.3113	0.2300	0.1405	0.1387	0.3259
2.60	0.4754	0.4699	0.4531	0.4235	0.3792	0.3506	0.3171	0.2356	0.1453	0.1412	0.3268
2.65	0.4810	0.4755	0.4587	0.4293	0.3850	0.3564	0.3230	0.2413	0.1501	0.1438	0.3277
2.70	0.4866	0.4811	0.4644	0.4350	0.3909	0.3623	0.3289	0.2470	0.1550	0.1464	0.3287
2.75	0.4921	0.4867	0.4700	0.4408	0.3967	0.3682	0.3348	0.2527	0.1600	0.1491	0.3296
2.80	0.4976	0.4922	0.4756	0.4465	0.4026	0.3741	0.3407	0.2585	0.1650	0.1518	0.3306
2.85	0.5032	0.4978	0.4812	0.4522	0.4084	0.3800	0.3466	0.2643	0.1700	0.1545	0.3315
2.90	0.5086	0.5033	0.4868	0.4579	0.4142	0.3858	0.3525	0.2701	0.1750	0.1573	0.3325
2.95	0.5141	0.5088	0.4924	0.4636	0.4200	0.3917	0.3584	0.2759	0.1801	0.1600	0.3335
3.00	0.5195	0.5142	0.4979	0.4692	0.4258	0.3976	0.3643	0.2817	0.1852	0.1629	0.3345

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.25

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2803	0.2750	0.2588	0.2307	0.1892	0.1630	0.1332	0.0652	0.0056	0.0656	0.2930
0.05	0.2804	0.2751	0.2589	0.2308	0.1893	0.1631	0.1333	0.0653	0.0056	0.0656	0.2931
0.10	0.2807	0.2754	0.2592	0.2311	0.1896	0.1634	0.1336	0.0655	0.0058	0.0657	0.2931
0.15	0.2812	0.2759	0.2597	0.2315	0.1900	0.1638	0.1340	0.0659	0.0061	0.0659	0.2932
0.20	0.2818	0.2766	0.2604	0.2322	0.1906	0.1644	0.1345	0.0664	0.0064	0.0661	0.2932
0.25	0.2828	0.2775	0.2612	0.2330	0.1914	0.1652	0.1353	0.0670	0.0069	0.0663	0.2934
0.30	0.2838	0.2785	0.2623	0.2341	0.1924	0.1661	0.1362	0.0678	0.0075	0.0666	0.2935
0.35	0.2851	0.2798	0.2635	0.2353	0.1936	0.1672	0.1372	0.0687	0.0083	0.0670	0.2937
0.40	0.2866	0.2813	0.2650	0.2367	0.1949	0.1685	0.1385	0.0698	0.0091	0.0674	0.2939
0.45	0.2883	0.2829	0.2666	0.2382	0.1964	0.1700	0.1398	0.0710	0.0100	0.0679	0.2941
0.50	0.2901	0.2848	0.2684	0.2400	0.1980	0.1716	0.1414	0.0724	0.0111	0.0684	0.2943
0.55	0.2921	0.2868	0.2704	0.2419	0.1999	0.1733	0.1431	0.0739	0.0122	0.0690	0.2946
0.60	0.2943	0.2890	0.2725	0.2440	0.2019	0.1753	0.1449	0.0755	0.0135	0.0697	0.2949
0.65	0.2967	0.2913	0.2749	0.2463	0.2040	0.1774	0.1470	0.0773	0.0149	0.0704	0.2952
0.70	0.2993	0.2939	0.2774	0.2487	0.2064	0.1796	0.1491	0.0792	0.0164	0.0711	0.2956
0.75	0.3020	0.2966	0.2800	0.2513	0.2089	0.1820	0.1515	0.0813	0.0180	0.0720	0.2959
0.80	0.3049	0.2995	0.2829	0.2541	0.2115	0.1846	0.1539	0.0835	0.0197	0.0728	0.2963
0.85	0.3080	0.3025	0.2859	0.2570	0.2143	0.1873	0.1566	0.0858	0.0215	0.0738	0.2967
0.90	0.3112	0.3057	0.2890	0.2601	0.2173	0.1902	0.1593	0.0882	0.0234	0.0747	0.2971
0.95	0.3145	0.3091	0.2923	0.2633	0.2204	0.1932	0.1622	0.0908	0.0254	0.0758	0.2976
1.00	0.3180	0.3126	0.2958	0.2667	0.2236	0.1964	0.1653	0.0936	0.0276	0.0769	0.2980
1.05	0.3217	0.3162	0.2994	0.2702	0.2270	0.1997	0.1685	0.0964	0.0298	0.0780	0.2985
1.10	0.3255	0.3200	0.3031	0.2738	0.2305	0.2031	0.1718	0.0994	0.0322	0.0792	0.2990
1.15	0.3294	0.3239	0.3070	0.2776	0.2342	0.2067	0.1753	0.1025	0.0346	0.0804	0.2995
1.20	0.3334	0.3279	0.3109	0.2815	0.2380	0.2104	0.1789	0.1058	0.0372	0.0817	0.3001
1.25	0.3376	0.3320	0.3150	0.2856	0.2419	0.2143	0.1826	0.1091	0.0398	0.0831	0.3006
1.30	0.3419	0.3363	0.3193	0.2897	0.2460	0.2182	0.1864	0.1126	0.0426	0.0845	0.3012
1.35	0.3462	0.3407	0.3236	0.2940	0.2501	0.2223	0.1904	0.1162	0.0454	0.0859	0.3018
1.40	0.3507	0.3452	0.3281	0.2984	0.2544	0.2265	0.1945	0.1199	0.0484	0.0874	0.3024
1.45	0.3553	0.3497	0.3326	0.3029	0.2588	0.2308	0.1987	0.1238	0.0515	0.0890	0.3030
1.50	0.3600	0.3544	0.3373	0.3075	0.2633	0.2352	0.2030	0.1277	0.0546	0.0906	0.3037
1.55	0.3648	0.3592	0.3420	0.3121	0.2679	0.2398	0.2074	0.1318	0.0579	0.0922	0.3043

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3-25

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3696	0.3640	0.3468	0.3169	0.2726	0.2444	0.2119	0.1359	0.0612	0.0939	0.3050
1.65	0.3745	0.3689	0.3517	0.3218	0.2774	0.2491	0.2166	0.1402	0.0646	0.0957	0.3057
1.70	0.3795	0.3739	0.3567	0.3267	0.2822	0.2539	0.2213	0.1445	0.0681	0.0975	0.3064
1.75	0.3846	0.3790	0.3618	0.3318	0.2872	0.2588	0.2261	0.1490	0.0718	0.0993	0.3071
1.80	0.3897	0.3841	0.3669	0.3369	0.2922	0.2638	0.2310	0.1535	0.0754	0.1012	0.3078
1.85	0.3949	0.3893	0.3721	0.3420	0.2974	0.2689	0.2360	0.1581	0.0792	0.1031	0.3085
1.90	0.4002	0.3945	0.3773	0.3473	0.3025	0.2740	0.2410	0.1628	0.0831	0.1051	0.3093
1.95	0.4054	0.3998	0.3826	0.3525	0.3078	0.2792	0.2462	0.1676	0.0870	0.1071	0.3100
2.00	0.4108	0.4051	0.3879	0.3579	0.3131	0.2845	0.2514	0.1725	0.0910	0.1092	0.3108
2.05	0.4161	0.4105	0.3933	0.3633	0.3185	0.2898	0.2566	0.1775	0.0951	0.1113	0.3116
2.10	0.4215	0.4159	0.3987	0.3687	0.3239	0.2952	0.2620	0.1825	0.0993	0.1135	0.3124
2.15	0.4269	0.4213	0.4041	0.3742	0.3294	0.3007	0.2674	0.1876	0.1035	0.1156	0.3132
2.20	0.4324	0.4268	0.4096	0.3797	0.3349	0.3062	0.2728	0.1927	0.1078	0.1179	0.3140
2.25	0.4378	0.4323	0.4151	0.3852	0.3404	0.3117	0.2783	0.1979	0.1121	0.1201	0.3149
2.30	0.4433	0.4377	0.4206	0.3907	0.3460	0.3173	0.2838	0.2032	0.1166	0.1225	0.3157
2.35	0.4488	0.4432	0.4262	0.3963	0.3516	0.3229	0.2894	0.2085	0.1210	0.1248	0.3166
2.40	0.4543	0.4488	0.4317	0.4019	0.3573	0.3285	0.2951	0.2139	0.1256	0.1272	0.3175
2.45	0.4598	0.4543	0.4373	0.4076	0.3630	0.3342	0.3007	0.2194	0.1302	0.1296	0.3183
2.50	0.4653	0.4598	0.4428	0.4132	0.3687	0.3399	0.3064	0.2248	0.1348	0.1321	0.3192
2.55	0.4708	0.4653	0.4484	0.4188	0.3744	0.3457	0.3121	0.2303	0.1395	0.1346	0.3201
2.60	0.4763	0.4708	0.4540	0.4245	0.3801	0.3514	0.3179	0.2359	0.1443	0.1371	0.3211
2.65	0.4818	0.4763	0.4595	0.4301	0.3858	0.3572	0.3236	0.2415	0.1491	0.1397	0.3220
2.70	0.4872	0.4818	0.4651	0.4357	0.3916	0.3629	0.3294	0.2471	0.1539	0.1423	0.3229
2.75	0.4927	0.4873	0.4706	0.4414	0.3973	0.3687	0.3352	0.2527	0.1588	0.1449	0.3239
2.80	0.4981	0.4927	0.4761	0.4470	0.4030	0.3745	0.3410	0.2584	0.1637	0.1476	0.3248
2.85	0.5035	0.4982	0.4816	0.4526	0.4088	0.3803	0.3468	0.2641	0.1686	0.1503	0.3258
2.90	0.5089	0.5036	0.4871	0.4582	0.4145	0.3861	0.3527	0.2698	0.1736	0.1530	0.3268
2.95	0.5143	0.5090	0.4926	0.4638	0.4202	0.3919	0.3585	0.2755	0.1787	0.1558	0.3278
3.00	0.5196	0.5143	0.4980	0.4693	0.4259	0.3976	0.3643	0.2813	0.1837	0.1586	0.3288

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.30

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2861	0.2808	0.2645	0.2382	0.1944	0.1680	0.1378	0.0686	0.0066	0.0623	0.2878
0.05	0.2862	0.2809	0.2646	0.2383	0.1945	0.1681	0.1379	0.0687	0.0067	0.0624	0.2878
0.10	0.2865	0.2812	0.2649	0.2386	0.1948	0.1683	0.1381	0.0689	0.0069	0.0625	0.2878
0.15	0.2870	0.2817	0.2654	0.2370	0.1952	0.1687	0.1385	0.0693	0.0071	0.0626	0.2879
0.20	0.2876	0.2823	0.2660	0.2377	0.1958	0.1693	0.1391	0.0698	0.0075	0.0628	0.2880
0.25	0.2885	0.2832	0.2669	0.2385	0.1966	0.1701	0.1398	0.0704	0.0080	0.0630	0.2881
0.30	0.2896	0.2842	0.2679	0.2395	0.1975	0.1710	0.1407	0.0712	0.0086	0.0634	0.2883
0.35	0.2908	0.2855	0.2691	0.2407	0.1986	0.1721	0.1417	0.0721	0.0093	0.0637	0.2884
0.40	0.2922	0.2869	0.2705	0.2420	0.1999	0.1733	0.1429	0.0731	0.0101	0.0641	0.2886
0.45	0.2938	0.2885	0.2721	0.2435	0.2014	0.1747	0.1443	0.0743	0.0110	0.0646	0.2888
0.50	0.2956	0.2903	0.2738	0.2452	0.2030	0.1763	0.1458	0.0757	0.0121	0.0651	0.2891
0.55	0.2976	0.2922	0.2757	0.2471	0.2048	0.1780	0.1474	0.0771	0.0132	0.0657	0.2893
0.60	0.2997	0.2943	0.2778	0.2492	0.2068	0.1799	0.1493	0.0787	0.0145	0.0664	0.2896
0.65	0.3020	0.2967	0.2801	0.2514	0.2089	0.1820	0.1512	0.0805	0.0158	0.0671	0.2899
0.70	0.3045	0.2991	0.2825	0.2537	0.2111	0.1842	0.1534	0.0824	0.0173	0.0678	0.2902
0.75	0.3072	0.3018	0.2851	0.2563	0.2136	0.1865	0.1556	0.0844	0.0189	0.0686	0.2906
0.80	0.3100	0.3045	0.2879	0.2590	0.2161	0.1890	0.1580	0.0865	0.0205	0.0695	0.2910
0.85	0.3129	0.3075	0.2908	0.2618	0.2189	0.1917	0.1606	0.0888	0.0223	0.0704	0.2914
0.90	0.3161	0.3106	0.2939	0.2648	0.2218	0.1945	0.1633	0.0912	0.0242	0.0714	0.2918
0.95	0.3193	0.3139	0.2971	0.2679	0.2248	0.1975	0.1662	0.0938	0.0262	0.0724	0.2922
1.00	0.3227	0.3172	0.3004	0.2712	0.2280	0.2005	0.1692	0.0965	0.0283	0.0735	0.2927
1.05	0.3263	0.3208	0.3039	0.2746	0.2313	0.2038	0.1723	0.0993	0.0305	0.0746	0.2931
1.10	0.3299	0.3244	0.3075	0.2782	0.2347	0.2071	0.1755	0.1022	0.0329	0.0758	0.2936
1.15	0.3338	0.3282	0.3113	0.2819	0.2383	0.2106	0.1789	0.1053	0.0353	0.0770	0.2941
1.20	0.3377	0.3321	0.3152	0.2857	0.2420	0.2142	0.1824	0.1084	0.0378	0.0783	0.2947
1.25	0.3417	0.3362	0.3192	0.2896	0.2458	0.2180	0.1861	0.1117	0.0404	0.0796	0.2952
1.30	0.3459	0.3403	0.3233	0.2937	0.2498	0.2219	0.1899	0.1152	0.0431	0.0810	0.2958
1.35	0.3502	0.3446	0.3275	0.2978	0.2538	0.2259	0.1937	0.1187	0.0460	0.0824	0.2964
1.40	0.3545	0.3489	0.3318	0.3021	0.2580	0.2300	0.1977	0.1223	0.0489	0.0839	0.2969
1.45	0.3590	0.3534	0.3363	0.3065	0.2623	0.2342	0.2018	0.1261	0.0519	0.0855	0.2976
1.50	0.3635	0.3580	0.3408	0.3110	0.2667	0.2385	0.2051	0.1300	0.0550	0.0870	0.2982
1.55	0.3682	0.3626	0.3454	0.3155	0.2712	0.2429	0.2104	0.1339	0.0582	0.0887	0.2988

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3-30

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3729	0.3673	0.3501	0.3202	0.2758	0.2474	0.2148	0.1380	0.0615	0.0903	0.2995
1.65	0.3777	0.3721	0.3549	0.3250	0.2804	0.2521	0.2193	0.1422	0.0649	0.0921	0.3002
1.70	0.3826	0.3770	0.3598	0.3298	0.2852	0.2568	0.2240	0.1465	0.0683	0.0939	0.3008
1.75	0.3875	0.3819	0.3647	0.3347	0.2901	0.2616	0.2287	0.1508	0.0719	0.0957	0.3015
1.80	0.3925	0.3869	0.3697	0.3397	0.2950	0.2664	0.2335	0.1553	0.0755	0.0975	0.3023
1.85	0.3976	0.3920	0.3747	0.3447	0.3000	0.2714	0.2383	0.1598	0.0792	0.0995	0.3030
1.90	0.4027	0.3971	0.3799	0.3498	0.3051	0.2764	0.2433	0.1644	0.0830	0.1014	0.3037
1.95	0.4079	0.4023	0.3850	0.3550	0.3102	0.2815	0.2483	0.1692	0.0869	0.1034	0.3045
2.00	0.4131	0.4075	0.3902	0.3602	0.3154	0.2867	0.2534	0.1739	0.0909	0.1055	0.3053
2.05	0.4183	0.4127	0.3955	0.3655	0.3206	0.2919	0.2586	0.1788	0.0949	0.1075	0.3060
2.10	0.4236	0.4180	0.4008	0.3708	0.3260	0.2972	0.2638	0.1837	0.0990	0.1097	0.3068
2.15	0.4289	0.4233	0.4061	0.3761	0.3313	0.3025	0.2691	0.1887	0.1031	0.1118	0.3076
2.20	0.4342	0.4286	0.4115	0.3815	0.3367	0.3079	0.2744	0.1938	0.1074	0.1141	0.3085
2.25	0.4395	0.4340	0.4169	0.3869	0.3422	0.3133	0.2798	0.1989	0.1117	0.1163	0.3093
2.30	0.4449	0.4393	0.4223	0.3924	0.3476	0.3188	0.2853	0.2041	0.1160	0.1186	0.3101
2.35	0.4503	0.4447	0.4277	0.3979	0.3531	0.3243	0.2908	0.2094	0.1204	0.1209	0.3110
2.40	0.4557	0.4501	0.4331	0.4034	0.3587	0.3299	0.2963	0.2146	0.1249	0.1233	0.3119
2.45	0.4611	0.4555	0.4386	0.4089	0.3642	0.3354	0.3018	0.2200	0.1295	0.1257	0.3127
2.50	0.4665	0.4609	0.4440	0.4144	0.3698	0.3410	0.3074	0.2254	0.1340	0.1282	0.3136
2.55	0.4718	0.4664	0.4495	0.4199	0.3754	0.3467	0.3130	0.2308	0.1387	0.1306	0.3145
2.60	0.4772	0.4718	0.4549	0.4254	0.3810	0.3523	0.3187	0.2362	0.1434	0.1332	0.3154
2.65	0.4826	0.4772	0.4604	0.4310	0.3867	0.3580	0.3244	0.2417	0.1481	0.1357	0.3164
2.70	0.4880	0.4825	0.4658	0.4365	0.3923	0.3636	0.3300	0.2473	0.1529	0.1383	0.3173
2.75	0.4933	0.4879	0.4713	0.4420	0.3979	0.3693	0.3357	0.2528	0.1577	0.1409	0.3182
2.80	0.4987	0.4933	0.4767	0.4476	0.4036	0.3750	0.3414	0.2584	0.1625	0.1436	0.3192
2.85	0.5040	0.4986	0.4821	0.4531	0.4092	0.3807	0.3472	0.2640	0.1674	0.1463	0.3202
2.90	0.5093	0.5040	0.4875	0.4586	0.4149	0.3864	0.3529	0.2696	0.1724	0.1490	0.3211
2.95	0.5146	0.5093	0.4929	0.4641	0.4205	0.3921	0.3586	0.2753	0.1773	0.1517	0.3221
3.00	0.5198	0.5145	0.4982	0.4696	0.4261	0.3978	0.3643	0.2809	0.1823	0.1545	0.3231

TABLES OF CALCULATIONS FOR H.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3-35

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2918	0.2865	0.2701	0.2417	0.1996	0.1729	0.1424	0.0721	0.0078	0.0592	0.2826
0.05	0.2919	0.2866	0.2702	0.2418	0.1996	0.1730	0.1424	0.0721	0.0078	0.0592	0.2826
0.10	0.2922	0.2869	0.2705	0.2420	0.1999	0.1732	0.1427	0.0723	0.0080	0.0593	0.2827
0.15	0.2927	0.2873	0.2710	0.2425	0.2003	0.1735	0.1431	0.0727	0.0083	0.0594	0.2827
0.20	0.2933	0.2880	0.2716	0.2431	0.2009	0.1742	0.1436	0.0732	0.0087	0.0596	0.2828
0.25	0.2942	0.2888	0.2724	0.2439	0.2017	0.1749	0.1443	0.0738	0.0091	0.0599	0.2829
0.30	0.2952	0.2898	0.2734	0.2449	0.2026	0.1758	0.1452	0.0746	0.0097	0.0602	0.2831
0.35	0.2964	0.2910	0.2746	0.2460	0.2037	0.1769	0.1462	0.0755	0.0104	0.0606	0.2832
0.40	0.2978	0.2924	0.2759	0.2473	0.2049	0.1781	0.1474	0.0765	0.0112	0.0610	0.2834
0.45	0.2993	0.2940	0.2775	0.2488	0.2064	0.1795	0.1487	0.0777	0.0121	0.0614	0.2835
0.50	0.3011	0.2957	0.2792	0.2505	0.2080	0.1810	0.1502	0.0790	0.0132	0.0620	0.2839
0.55	0.3030	0.2976	0.2810	0.2523	0.2097	0.1827	0.1518	0.0804	0.0143	0.0625	0.2841
0.60	0.3051	0.2997	0.2831	0.2543	0.2116	0.1845	0.1536	0.0820	0.0155	0.0632	0.2844
0.65	0.3073	0.3019	0.2853	0.2564	0.2137	0.1865	0.1553	0.0837	0.0169	0.0639	0.2847
0.70	0.3097	0.3043	0.2877	0.2587	0.2159	0.1887	0.1575	0.0856	0.0183	0.0646	0.2850
0.75	0.3123	0.3069	0.2902	0.2612	0.2182	0.1910	0.1598	0.0875	0.0199	0.0654	0.2853
0.80	0.3150	0.3096	0.2929	0.2638	0.2208	0.1935	0.1622	0.0897	0.0215	0.0662	0.2857
0.85	0.3179	0.3124	0.2957	0.2665	0.2234	0.1961	0.1647	0.0919	0.0233	0.0671	0.2861
0.90	0.3209	0.3154	0.2987	0.2695	0.2262	0.1988	0.1673	0.0943	0.0252	0.0681	0.2865
0.95	0.3241	0.3186	0.3018	0.2725	0.2292	0.2017	0.1701	0.0968	0.0271	0.0691	0.2869
1.00	0.3274	0.3219	0.3050	0.2757	0.2323	0.2047	0.1730	0.0994	0.0292	0.0702	0.2874
1.05	0.3308	0.3253	0.3084	0.2791	0.2355	0.2078	0.1761	0.1022	0.0314	0.0713	0.2878
1.10	0.3344	0.3289	0.3120	0.2825	0.2389	0.2111	0.1793	0.1050	0.0337	0.0725	0.2883
1.15	0.3381	0.3326	0.3156	0.2861	0.2423	0.2145	0.1826	0.1080	0.0360	0.0737	0.2888
1.20	0.3419	0.3364	0.3194	0.2898	0.2460	0.2181	0.1860	0.1112	0.0385	0.0749	0.2893
1.25	0.3459	0.3403	0.3233	0.2937	0.2497	0.2217	0.1896	0.1144	0.0411	0.0763	0.2899
1.30	0.3499	0.3443	0.3273	0.2976	0.2536	0.2255	0.1933	0.1177	0.0438	0.0776	0.2904
1.35	0.3541	0.3485	0.3314	0.3017	0.2575	0.2294	0.1971	0.1212	0.0466	0.0790	0.2910
1.40	0.3583	0.3527	0.3356	0.3058	0.2616	0.2334	0.2010	0.1248	0.0494	0.0805	0.2916
1.45	0.3627	0.3571	0.3399	0.3101	0.2658	0.2375	0.2050	0.1285	0.0524	0.0820	0.2922
1.50	0.3671	0.3615	0.3444	0.3145	0.2701	0.2418	0.2092	0.1323	0.0555	0.0836	0.2928
1.55	0.3716	0.3660	0.3489	0.3189	0.2745	0.2461	0.2134	0.1362	0.0586	0.0852	0.2934

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=3-35

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3762	0.3706	0.3534	0.3235	0.2790	0.2505	0.2177	0.1402	0.0618	0.0869	0.2941
1.65	0.3809	0.3753	0.3581	0.3281	0.2835	0.2550	0.2222	0.1443	0.0652	0.0886	0.2947
1.70	0.3857	0.3801	0.3628	0.3329	0.2882	0.2596	0.2267	0.1485	0.0686	0.0903	0.2954
1.75	0.3905	0.3849	0.3677	0.3376	0.2929	0.2643	0.2313	0.1527	0.0721	0.0922	0.2961
1.80	0.3954	0.3898	0.3725	0.3425	0.2977	0.2691	0.2360	0.1571	0.0757	0.0940	0.2968
1.85	0.4003	0.3947	0.3775	0.3474	0.3026	0.2740	0.2408	0.1616	0.0793	0.0959	0.2975
1.90	0.4053	0.3997	0.3825	0.3524	0.3076	0.2789	0.2456	0.1661	0.0831	0.0978	0.2983
1.95	0.4103	0.4047	0.3875	0.3575	0.3126	0.2839	0.2505	0.1707	0.0869	0.0998	0.2990
2.00	0.4154	0.4098	0.3926	0.3626	0.3177	0.2889	0.2555	0.1755	0.0908	0.1018	0.2998
2.05	0.4205	0.4149	0.3977	0.3677	0.3229	0.2940	0.2606	0.1802	0.0948	0.1039	0.3006
2.10	0.4257	0.4201	0.4029	0.3729	0.3281	0.2992	0.2657	0.1851	0.0988	0.1060	0.3014
2.15	0.4309	0.4253	0.4081	0.3782	0.3333	0.3045	0.2709	0.1900	0.1029	0.1082	0.3022
2.20	0.4361	0.4305	0.4134	0.3834	0.3386	0.3097	0.2761	0.1950	0.1071	0.1104	0.3030
2.25	0.4413	0.4358	0.4186	0.3888	0.3439	0.3151	0.2814	0.2000	0.1113	0.1126	0.3038
2.30	0.4466	0.4410	0.4239	0.3941	0.3493	0.3206	0.2868	0.2051	0.1156	0.1149	0.3046
2.35	0.4518	0.4463	0.4293	0.3994	0.3547	0.3258	0.2922	0.2102	0.1200	0.1172	0.3055
2.40	0.4571	0.4516	0.4346	0.4048	0.3601	0.3313	0.2976	0.2154	0.1244	0.1195	0.3063
2.45	0.4624	0.4569	0.4399	0.4102	0.3656	0.3367	0.3030	0.2207	0.1289	0.1219	0.3072
2.50	0.4677	0.4622	0.4453	0.4156	0.3711	0.3422	0.3085	0.2260	0.1334	0.1244	0.3081
2.55	0.4730	0.4675	0.4506	0.4211	0.3766	0.3478	0.3140	0.2313	0.1379	0.1268	0.3090
2.60	0.4782	0.4728	0.4560	0.4265	0.3821	0.3533	0.3196	0.2367	0.1426	0.1293	0.3099
2.65	0.4835	0.4781	0.4613	0.4319	0.3876	0.3589	0.3251	0.2421	0.1472	0.1319	0.3108
2.70	0.4888	0.4834	0.4667	0.4374	0.3931	0.3644	0.3307	0.2475	0.1520	0.1344	0.3118
2.75	0.4941	0.4887	0.4720	0.4428	0.3987	0.3700	0.3363	0.2530	0.1567	0.1370	0.3127
2.80	0.4993	0.4939	0.4773	0.4482	0.4042	0.3756	0.3420	0.2585	0.1615	0.1397	0.3137
2.85	0.5045	0.4992	0.4827	0.4537	0.4098	0.3812	0.3476	0.2640	0.1663	0.1423	0.3146
2.90	0.5097	0.5044	0.4880	0.4591	0.4153	0.3868	0.3532	0.2696	0.1712	0.1450	0.3156
2.95	0.5149	0.5096	0.4933	0.4645	0.4208	0.3924	0.3589	0.2751	0.1761	0.1477	0.3166
3.00	0.5201	0.5148	0.4985	0.4699	0.4264	0.3980	0.3645	0.2807	0.1810	0.1505	0.3176

TABLES OF CALCULATIONS FOR H.H-WRIGHT ESQ.

VALUES OF RP WHERE N=3-40

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.2976	0.2922	0.2757	0.2471	0.2047	0.1778	0.1469	0.0755	0.0090	0.0562	0.2775
0.05	0.2976	0.2922	0.2758	0.2472	0.2048	0.1778	0.1470	0.0756	0.0091	0.0562	0.2775
0.10	0.2979	0.2925	0.2761	0.2474	0.2050	0.1781	0.1472	0.0758	0.0092	0.0563	0.2776
0.15	0.2983	0.2930	0.2765	0.2479	0.2054	0.1785	0.1476	0.0761	0.0095	0.0564	0.2776
0.20	0.2990	0.2936	0.2771	0.2485	0.2060	0.1790	0.1482	0.0766	0.0099	0.0566	0.2777
0.25	0.2998	0.2944	0.2779	0.2492	0.2067	0.1798	0.1488	0.0772	0.0104	0.0568	0.2778
0.30	0.3008	0.2954	0.2789	0.2502	0.2076	0.1806	0.1497	0.0780	0.0109	0.0571	0.2780
0.35	0.3019	0.2966	0.2800	0.2513	0.2087	0.1817	0.1507	0.0789	0.0116	0.0575	0.2781
0.40	0.3033	0.2979	0.2814	0.2526	0.2099	0.1829	0.1518	0.0799	0.0124	0.0579	0.2783
0.45	0.3048	0.2994	0.2828	0.2540	0.2113	0.1842	0.1531	0.0810	0.0133	0.0584	0.2785
0.50	0.3065	0.3011	0.2845	0.2556	0.2129	0.1857	0.1546	0.0823	0.0143	0.0589	0.2787
0.55	0.3083	0.3029	0.2863	0.2574	0.2146	0.1874	0.1562	0.0837	0.0154	0.0595	0.2790
0.60	0.3103	0.3049	0.2883	0.2593	0.2164	0.1892	0.1579	0.0853	0.0167	0.0601	0.2792
0.65	0.3125	0.3071	0.2904	0.2614	0.2184	0.1911	0.1598	0.0870	0.0180	0.0608	0.2795
0.70	0.3149	0.3094	0.2927	0.2637	0.2206	0.1932	0.1618	0.0888	0.0194	0.0615	0.2798
0.75	0.3174	0.3119	0.2952	0.2661	0.2229	0.1955	0.1640	0.0907	0.0209	0.0623	0.2802
0.80	0.3200	0.3145	0.2978	0.2686	0.2253	0.1979	0.1663	0.0928	0.0226	0.0631	0.2805
0.85	0.3228	0.3173	0.3005	0.2713	0.2279	0.2004	0.1688	0.0950	0.0243	0.0640	0.2809
0.90	0.3257	0.3202	0.3034	0.2741	0.2307	0.2031	0.1714	0.0973	0.0261	0.0650	0.2813
0.95	0.3288	0.3233	0.3065	0.2771	0.2336	0.2059	0.1741	0.0998	0.0281	0.0660	0.2817
1.00	0.3320	0.3265	0.3096	0.2802	0.2366	0.2088	0.1769	0.1024	0.0301	0.0670	0.2822
1.05	0.3354	0.3299	0.3129	0.2835	0.2397	0.2119	0.1799	0.1051	0.0323	0.0681	0.2826
1.10	0.3388	0.3333	0.3164	0.2868	0.2430	0.2151	0.1830	0.1079	0.0345	0.0693	0.2831
1.15	0.3424	0.3369	0.3199	0.2903	0.2464	0.2185	0.1853	0.1108	0.0369	0.0705	0.2836
1.20	0.3462	0.3406	0.3236	0.2940	0.2499	0.2219	0.1897	0.1139	0.0393	0.0717	0.2841
1.25	0.3500	0.3444	0.3274	0.2977	0.2536	0.2255	0.1931	0.1171	0.0419	0.0730	0.2846
1.30	0.3539	0.3484	0.3313	0.3016	0.2574	0.2292	0.1967	0.1204	0.0445	0.0744	0.2852
1.35	0.3580	0.3524	0.3353	0.3055	0.2612	0.2330	0.2005	0.1238	0.0472	0.0758	0.2857
1.40	0.3621	0.3565	0.3394	0.3096	0.2652	0.2369	0.2043	0.1273	0.0501	0.0772	0.2863
1.45	0.3663	0.3608	0.3436	0.3137	0.2693	0.2409	0.2082	0.1309	0.0530	0.0787	0.2869
1.50	0.3707	0.3651	0.3479	0.3180	0.2735	0.2451	0.2123	0.1346	0.0560	0.0803	0.2875
1.55	0.3751	0.3695	0.3523	0.3224	0.2778	0.2493	0.2164	0.1385	0.0591	0.0819	0.2881

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=3.40

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3786	0.3740	0.3568	0.3268	0.2822	0.2536	0.2207	0.1424	0.0623	0.0835	0.2888
1.65	0.3841	0.3785	0.3613	0.3313	0.2866	0.2580	0.2250	0.1464	0.0656	0.0852	0.2894
1.70	0.3888	0.3832	0.3659	0.3359	0.2912	0.2626	0.2294	0.1505	0.0690	0.0870	0.2901
1.75	0.3935	0.3879	0.3706	0.3406	0.2958	0.2671	0.2339	0.1547	0.0724	0.0888	0.2908
1.80	0.3982	0.3926	0.3754	0.3454	0.3005	0.2718	0.2385	0.1590	0.0759	0.0906	0.2915
1.85	0.4031	0.3974	0.3802	0.3502	0.3053	0.2766	0.2432	0.1634	0.0795	0.0925	0.2922
1.90	0.4079	0.4023	0.3851	0.3551	0.3102	0.2814	0.2480	0.1679	0.0832	0.0944	0.2929
1.95	0.4128	0.4072	0.3900	0.3600	0.3151	0.2863	0.2528	0.1724	0.0870	0.0963	0.2937
2.00	0.4178	0.4122	0.3950	0.3650	0.3201	0.2912	0.2577	0.1770	0.0908	0.0984	0.2944
2.05	0.4228	0.4172	0.4000	0.3700	0.3251	0.2962	0.2627	0.1817	0.0947	0.1004	0.2952
2.10	0.4279	0.4223	0.4051	0.3751	0.3302	0.3013	0.2677	0.1865	0.0987	0.1025	0.2960
2.15	0.4329	0.4273	0.4102	0.3803	0.3353	0.3064	0.2728	0.1913	0.1028	0.1046	0.2968
2.20	0.4380	0.4325	0.4153	0.3854	0.3405	0.3116	0.2779	0.1962	0.1069	0.1068	0.2976
2.25	0.4431	0.4376	0.4205	0.3906	0.3458	0.3168	0.2831	0.2011	0.1111	0.1090	0.2984
2.30	0.4483	0.4427	0.4257	0.3958	0.3510	0.3221	0.2883	0.2062	0.1153	0.1113	0.2992
2.35	0.4534	0.4479	0.4309	0.4011	0.3563	0.3274	0.2936	0.2112	0.1196	0.1136	0.3001
2.40	0.4586	0.4531	0.4361	0.4064	0.3616	0.3327	0.2989	0.2163	0.1239	0.1159	0.3009
2.45	0.4638	0.4583	0.4413	0.4117	0.3670	0.3381	0.3043	0.2215	0.1284	0.1183	0.3018
2.50	0.4690	0.4635	0.4466	0.4170	0.3724	0.3435	0.3097	0.2267	0.1328	0.1207	0.3027
2.55	0.4741	0.4687	0.4518	0.4223	0.3778	0.3489	0.3151	0.2319	0.1373	0.1231	0.3036
2.60	0.4793	0.4739	0.4571	0.4276	0.3832	0.3544	0.3206	0.2372	0.1419	0.1256	0.3045
2.65	0.4845	0.4791	0.4623	0.4330	0.3886	0.3598	0.3260	0.2426	0.1465	0.1281	0.3054
2.70	0.4897	0.4843	0.4676	0.4383	0.3941	0.3653	0.3315	0.2479	0.1511	0.1307	0.3063
2.75	0.4948	0.4895	0.4728	0.4436	0.3995	0.3708	0.3370	0.2533	0.1558	0.1332	0.3072
2.80	0.5000	0.4946	0.4781	0.4490	0.4049	0.3763	0.3425	0.2587	0.1606	0.1359	0.3082
2.85	0.5051	0.4998	0.4833	0.4543	0.4104	0.3818	0.3481	0.2641	0.1653	0.1385	0.3092
2.90	0.5103	0.5049	0.4885	0.4596	0.4158	0.3873	0.3536	0.2696	0.1701	0.1412	0.3101
2.95	0.5154	0.5101	0.4937	0.4649	0.4213	0.3928	0.3592	0.2751	0.1750	0.1439	0.3111
3.00	0.5205	0.5152	0.4989	0.4702	0.4267	0.3983	0.3647	0.2806	0.1799	0.1466	0.3121

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=3.45

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3031	0.2977	0.2812	0.2525	0.2098	0.1826	0.1515	0.0790	0.0103	0.0532	0.2725
0.05	0.3032	0.2978	0.2813	0.2525	0.2098	0.1827	0.1515	0.0791	0.0104	0.0532	0.2725
0.10	0.3035	0.2981	0.2816	0.2528	0.2101	0.1829	0.1518	0.0793	0.0105	0.0533	0.2725
0.15	0.3039	0.2985	0.2820	0.2532	0.2105	0.1833	0.1521	0.0796	0.0108	0.0535	0.2726
0.20	0.3045	0.2991	0.2826	0.2538	0.2110	0.1839	0.1527	0.0801	0.0112	0.0537	0.2727
0.25	0.3053	0.2999	0.2834	0.2545	0.2118	0.1845	0.1534	0.0807	0.0116	0.0539	0.2728
0.30	0.3063	0.3009	0.2843	0.2555	0.2126	0.1854	0.1542	0.0814	0.0122	0.0542	0.2729
0.35	0.3074	0.3020	0.2854	0.2565	0.2137	0.1864	0.1551	0.0823	0.0129	0.0545	0.2731
0.40	0.3087	0.3033	0.2867	0.2578	0.2149	0.1876	0.1563	0.0833	0.0137	0.0549	0.2732
0.45	0.3102	0.3048	0.2881	0.2592	0.2162	0.1889	0.1575	0.0844	0.0146	0.0554	0.2734
0.50	0.3118	0.3064	0.2897	0.2608	0.2177	0.1904	0.1590	0.0857	0.0156	0.0559	0.2736
0.55	0.3136	0.3082	0.2915	0.2625	0.2194	0.1920	0.1605	0.0871	0.0167	0.0565	0.2739
0.60	0.3156	0.3101	0.2934	0.2644	0.2212	0.1937	0.1622	0.0886	0.0179	0.0571	0.2742
0.65	0.3177	0.3122	0.2955	0.2664	0.2232	0.1957	0.1641	0.0903	0.0192	0.0578	0.2744
0.70	0.3199	0.3145	0.2977	0.2686	0.2253	0.1977	0.1660	0.0920	0.0206	0.0585	0.2747
0.75	0.3224	0.3169	0.3001	0.2709	0.2275	0.1999	0.1682	0.0939	0.0221	0.0593	0.2751
0.80	0.3249	0.3195	0.3027	0.2734	0.2299	0.2022	0.1704	0.0960	0.0237	0.0601	0.2754
0.85	0.3276	0.3222	0.3053	0.2760	0.2325	0.2047	0.1728	0.0981	0.0254	0.0610	0.2758
0.90	0.3305	0.3250	0.3081	0.2788	0.2351	0.2073	0.1754	0.1004	0.0272	0.0619	0.2762
0.95	0.3335	0.3280	0.3111	0.2817	0.2379	0.2101	0.1780	0.1028	0.0291	0.0629	0.2766
1.00	0.3366	0.3311	0.3142	0.2847	0.2409	0.2130	0.1808	0.1054	0.0312	0.0639	0.2770
1.05	0.3399	0.3343	0.3174	0.2879	0.2440	0.2160	0.1838	0.1080	0.0333	0.0650	0.2775
1.10	0.3432	0.3377	0.3207	0.2912	0.2472	0.2191	0.1868	0.1108	0.0355	0.0662	0.2779
1.15	0.3467	0.3412	0.3242	0.2946	0.2505	0.2224	0.1900	0.1137	0.0378	0.0674	0.2784
1.20	0.3504	0.3448	0.3278	0.2981	0.2539	0.2258	0.1933	0.1167	0.0402	0.0686	0.2789
1.25	0.3541	0.3485	0.3315	0.3017	0.2575	0.2292	0.1967	0.1198	0.0427	0.0699	0.2794
1.30	0.3579	0.3523	0.3353	0.3055	0.2612	0.2329	0.2002	0.1230	0.0453	0.0712	0.2800
1.35	0.3618	0.3563	0.3392	0.3094	0.2649	0.2365	0.2039	0.1264	0.0480	0.0726	0.2805
1.40	0.3659	0.3603	0.3432	0.3133	0.2688	0.2404	0.2076	0.1298	0.0508	0.0741	0.2811
1.45	0.3700	0.3644	0.3473	0.3174	0.2728	0.2444	0.2115	0.1334	0.0537	0.0756	0.2817
1.50	0.3742	0.3686	0.3515	0.3215	0.2769	0.2484	0.2154	0.1370	0.0567	0.0771	0.2823
1.55	0.3785	0.3729	0.3557	0.3258	0.2811	0.2525	0.2195	0.1408	0.0597	0.0787	0.2829

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF R_p WHERE $N=3-45$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3829	0.3773	0.3601	0.3301	0.2854	0.2568	0.2236	0.1447	0.0629	0.0803	0.2835
1.65	0.3873	0.3817	0.3646	0.3346	0.2898	0.2611	0.2279	0.1486	0.0661	0.0820	0.2842
1.70	0.3919	0.3863	0.3691	0.3391	0.2942	0.2655	0.2322	0.1526	0.0694	0.0837	0.2848
1.75	0.3965	0.3909	0.3737	0.3436	0.2988	0.2700	0.2366	0.1568	0.0728	0.0855	0.2855
1.80	0.4011	0.3955	0.3783	0.3483	0.3034	0.2746	0.2411	0.1610	0.0763	0.0873	0.2862
1.85	0.4058	0.4002	0.3830	0.3530	0.3080	0.2792	0.2457	0.1653	0.0798	0.0891	0.2869
1.90	0.4105	0.4050	0.3878	0.3577	0.3128	0.2839	0.2504	0.1697	0.0835	0.0910	0.2876
1.95	0.4154	0.4098	0.3926	0.3626	0.3176	0.2887	0.2551	0.1741	0.0872	0.0930	0.2884
2.00	0.4202	0.4146	0.3975	0.3675	0.3225	0.2935	0.2599	0.1787	0.0910	0.0950	0.2891
2.05	0.4251	0.4195	0.4024	0.3724	0.3274	0.2985	0.2648	0.1833	0.0948	0.0970	0.2899
2.10	0.4300	0.4245	0.4073	0.3774	0.3324	0.3034	0.2697	0.1879	0.0987	0.0991	0.2907
2.15	0.4350	0.4294	0.4123	0.3824	0.3374	0.3085	0.2747	0.1927	0.1027	0.1012	0.2914
2.20	0.4400	0.4344	0.4173	0.3874	0.3425	0.3135	0.2797	0.1975	0.1068	0.1034	0.2922
2.25	0.4450	0.4395	0.4224	0.3925	0.3476	0.3187	0.2848	0.2024	0.1109	0.1056	0.2931
2.30	0.4500	0.4445	0.4275	0.3976	0.3528	0.3238	0.2900	0.2073	0.1151	0.1078	0.2939
2.35	0.4551	0.4496	0.4326	0.4028	0.3580	0.3290	0.2951	0.2123	0.1193	0.1101	0.2947
2.40	0.4601	0.4546	0.4377	0.4080	0.3632	0.3343	0.3004	0.2173	0.1236	0.1124	0.2956
2.45	0.4652	0.4597	0.4428	0.4132	0.3685	0.3395	0.3056	0.2224	0.1280	0.1147	0.2964
2.50	0.4703	0.4648	0.4479	0.4184	0.3737	0.3448	0.3109	0.2275	0.1324	0.1171	0.2973
2.55	0.4754	0.4699	0.4531	0.4236	0.3790	0.3501	0.3162	0.2326	0.1368	0.1196	0.2982
2.60	0.4805	0.4750	0.4583	0.4288	0.3844	0.3555	0.3216	0.2379	0.1413	0.1220	0.2991
2.65	0.4856	0.4801	0.4634	0.4341	0.3897	0.3609	0.3270	0.2431	0.1459	0.1245	0.3000
2.70	0.4906	0.4852	0.4686	0.4393	0.3950	0.3662	0.3324	0.2484	0.1505	0.1270	0.3009
2.75	0.4957	0.4903	0.4737	0.4445	0.4004	0.3716	0.3378	0.2537	0.1551	0.1296	0.3019
2.80	0.5008	0.4954	0.4789	0.4498	0.4057	0.3770	0.3432	0.2590	0.1598	0.1322	0.3028
2.85	0.5058	0.5005	0.4840	0.4550	0.4111	0.3824	0.3487	0.2644	0.1645	0.1348	0.3038
2.90	0.5109	0.5055	0.4891	0.4603	0.4165	0.3879	0.3541	0.2697	0.1692	0.1375	0.3047
2.95	0.5159	0.5106	0.4942	0.4655	0.4218	0.3933	0.3596	0.2751	0.1740	0.1402	0.3057
3.00	0.5209	0.5156	0.4993	0.4707	0.4272	0.3987	0.3650	0.2805	0.1788	0.1429	0.3067

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQN.

VALUES OF RP WHERE N=3-50

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3086	0.3032	0.2866	0.2578	0.2148	0.1874	0.1560	0.0825	0.0117	0.0504	0.2675
0.05	0.3087	0.3033	0.2867	0.2578	0.2149	0.1875	0.1561	0.0826	0.0118	0.0504	0.2675
0.10	0.3090	0.3036	0.2870	0.2581	0.2151	0.1877	0.1563	0.0828	0.0119	0.0505	0.2676
0.15	0.3094	0.3040	0.2874	0.2585	0.2155	0.1881	0.1567	0.0831	0.0122	0.0506	0.2676
0.20	0.3100	0.3046	0.2880	0.2591	0.2160	0.1887	0.1572	0.0836	0.0125	0.0508	0.2677
0.25	0.3108	0.3054	0.2887	0.2598	0.2167	0.1893	0.1578	0.0842	0.0130	0.0511	0.2678
0.30	0.3117	0.3063	0.2897	0.2607	0.2176	0.1902	0.1586	0.0849	0.0136	0.0513	0.2679
0.35	0.3128	0.3074	0.2907	0.2617	0.2186	0.1912	0.1596	0.0857	0.0142	0.0517	0.2681
0.40	0.3141	0.3086	0.2920	0.2629	0.2198	0.1923	0.1607	0.0867	0.0150	0.0521	0.2682
0.45	0.3155	0.3101	0.2934	0.2643	0.2211	0.1936	0.1619	0.0878	0.0159	0.0525	0.2684
0.50	0.3171	0.3116	0.2949	0.2658	0.2226	0.1950	0.1633	0.0891	0.0169	0.0531	0.2687
0.55	0.3188	0.3134	0.2966	0.2675	0.2242	0.1966	0.1648	0.0904	0.0180	0.0536	0.2689
0.60	0.3207	0.3153	0.2985	0.2693	0.2260	0.1983	0.1665	0.0919	0.0191	0.0542	0.2691
0.65	0.3228	0.3173	0.3005	0.2713	0.2279	0.2002	0.1683	0.0936	0.0204	0.0549	0.2694
0.70	0.3250	0.3195	0.3027	0.2735	0.2299	0.2022	0.1703	0.0953	0.0218	0.0556	0.2697
0.75	0.3273	0.3218	0.3050	0.2757	0.2321	0.2043	0.1723	0.0972	0.0233	0.0564	0.2701
0.80	0.3298	0.3243	0.3075	0.2781	0.2345	0.2066	0.1746	0.0992	0.0249	0.0572	0.2704
0.85	0.3325	0.3270	0.3101	0.2807	0.2369	0.2090	0.1769	0.1013	0.0266	0.0581	0.2708
0.90	0.3352	0.3297	0.3128	0.2834	0.2395	0.2116	0.1794	0.1036	0.0284	0.0590	0.2711
0.95	0.3381	0.3326	0.3157	0.2862	0.2423	0.2143	0.1820	0.1059	0.0303	0.0600	0.2715
1.00	0.3412	0.3357	0.3187	0.2892	0.2452	0.2171	0.1847	0.1084	0.0322	0.0610	0.2720
1.05	0.3443	0.3388	0.3218	0.2922	0.2482	0.2200	0.1876	0.1110	0.0343	0.0621	0.2724
1.10	0.3476	0.3421	0.3251	0.2954	0.2513	0.2231	0.1906	0.1137	0.0365	0.0632	0.2729
1.15	0.3510	0.3455	0.3284	0.2988	0.2545	0.2263	0.1937	0.1166	0.0388	0.0644	0.2733
1.20	0.3545	0.3490	0.3319	0.3022	0.2579	0.2296	0.1969	0.1195	0.0412	0.0656	0.2738
1.25	0.3582	0.3526	0.3355	0.3058	0.2614	0.2330	0.2002	0.1226	0.0436	0.0669	0.2743
1.30	0.3619	0.3563	0.3392	0.3094	0.2650	0.2365	0.2037	0.1258	0.0462	0.0682	0.2749
1.35	0.3657	0.3602	0.3430	0.3132	0.2687	0.2402	0.2073	0.1290	0.0489	0.0696	0.2754
1.40	0.3697	0.3641	0.3469	0.3171	0.2725	0.2439	0.2109	0.1324	0.0516	0.0710	0.2760
1.45	0.3737	0.3681	0.3509	0.3210	0.2764	0.2478	0.2147	0.1359	0.0544	0.0725	0.2765
1.50	0.3778	0.3722	0.3550	0.3251	0.2804	0.2517	0.2186	0.1395	0.0574	0.0740	0.2771
1.55	0.3820	0.3764	0.3592	0.3292	0.2845	0.2558	0.2225	0.1432	0.0604	0.0756	0.2777

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESR.

VALUES OF RP WHERE N=3.50

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3862	0.3806	0.3635	0.3335	0.2886	0.2599	0.2266	0.1470	0.0635	0.0772	0.2784
1.65	0.3906	0.3850	0.3678	0.3378	0.2929	0.2641	0.2308	0.1508	0.0667	0.0788	0.2790
1.70	0.3950	0.3894	0.3722	0.3422	0.2973	0.2685	0.2350	0.1548	0.0699	0.0806	0.2797
1.75	0.3995	0.3939	0.3767	0.3466	0.3017	0.2729	0.2394	0.1589	0.0733	0.0823	0.2803
1.80	0.4040	0.3984	0.3812	0.3512	0.3062	0.2773	0.2438	0.1630	0.0767	0.0841	0.2810
1.85	0.4086	0.4030	0.3858	0.3558	0.3108	0.2819	0.2483	0.1672	0.0802	0.0859	0.2817
1.90	0.4132	0.4077	0.3905	0.3604	0.3154	0.2865	0.2528	0.1715	0.0838	0.0878	0.2824
1.95	0.4179	0.4124	0.3952	0.3652	0.3202	0.2912	0.2575	0.1759	0.0875	0.0898	0.2832
2.00	0.4227	0.4171	0.3999	0.3699	0.3249	0.2959	0.2622	0.1804	0.0912	0.0917	0.2839
2.05	0.4275	0.4219	0.4047	0.3748	0.3298	0.3008	0.2669	0.1849	0.0950	0.0937	0.2847
2.10	0.4323	0.4267	0.4096	0.3796	0.3346	0.3056	0.2718	0.1895	0.0988	0.0958	0.2854
2.15	0.4371	0.4316	0.4145	0.3845	0.3396	0.3105	0.2767	0.1941	0.1028	0.0979	0.2862
2.20	0.4420	0.4365	0.4194	0.3895	0.3446	0.3155	0.2816	0.1989	0.1068	0.1000	0.2870
2.25	0.4469	0.4414	0.4243	0.3945	0.3496	0.3205	0.2866	0.2036	0.1108	0.1022	0.2878
2.30	0.4518	0.4463	0.4293	0.3995	0.3546	0.3255	0.2916	0.2085	0.1150	0.1044	0.2886
2.35	0.4568	0.4513	0.4343	0.4045	0.3597	0.3307	0.2967	0.2134	0.1191	0.1067	0.2895
2.40	0.4617	0.4562	0.4393	0.4096	0.3648	0.3358	0.3019	0.2183	0.1234	0.1090	0.2903
2.45	0.4667	0.4612	0.4443	0.4147	0.3700	0.3410	0.3070	0.2233	0.1277	0.1113	0.2912
2.50	0.4717	0.4662	0.4494	0.4198	0.3752	0.3462	0.3122	0.2284	0.1320	0.1137	0.2921
2.55	0.4767	0.4712	0.4544	0.4249	0.3804	0.3514	0.3175	0.2334	0.1364	0.1161	0.2929
2.60	0.4817	0.4762	0.4595	0.4301	0.3856	0.3567	0.3227	0.2386	0.1408	0.1185	0.2938
2.65	0.4867	0.4812	0.4645	0.4352	0.3908	0.3620	0.3280	0.2437	0.1453	0.1210	0.2947
2.70	0.4916	0.4862	0.4696	0.4404	0.3961	0.3672	0.3333	0.2489	0.1499	0.1235	0.2957
2.75	0.4966	0.4912	0.4747	0.4455	0.4013	0.3725	0.3385	0.2541	0.1544	0.1261	0.2966
2.80	0.5016	0.4962	0.4797	0.4507	0.4066	0.3779	0.3440	0.2594	0.1590	0.1286	0.2975
2.85	0.5066	0.5012	0.4848	0.4558	0.4119	0.3832	0.3493	0.2646	0.1637	0.1312	0.2985
2.90	0.5115	0.5062	0.4898	0.4610	0.4171	0.3885	0.3547	0.2699	0.1684	0.1339	0.2994
2.95	0.5164	0.5112	0.4948	0.4661	0.4224	0.3938	0.3601	0.2753	0.1731	0.1365	0.3004
3.00	0.5214	0.5161	0.4998	0.4712	0.4277	0.3992	0.3654	0.2806	0.1778	0.1392	0.3014

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=3.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3141	0.3087	0.2920	0.2630	0.2198	0.1922	0.1605	0.0861	0.0132	0.0477	0.2626
0.05	0.3142	0.3088	0.2921	0.2631	0.2199	0.1923	0.1606	0.0861	0.0132	0.0477	0.2626
0.10	0.3144	0.3090	0.2923	0.2633	0.2201	0.1925	0.1608	0.0863	0.0134	0.0478	0.2627
0.15	0.3148	0.3094	0.2928	0.2637	0.2205	0.1929	0.1612	0.0866	0.0136	0.0479	0.2627
0.20	0.3154	0.3100	0.2933	0.2643	0.2210	0.1934	0.1617	0.0871	0.0140	0.0481	0.2628
0.25	0.3162	0.3107	0.2940	0.2650	0.2217	0.1941	0.1623	0.0877	0.0144	0.0483	0.2629
0.30	0.3171	0.3116	0.2949	0.2658	0.2225	0.1949	0.1631	0.0884	0.0150	0.0486	0.2630
0.35	0.3181	0.3127	0.2960	0.2669	0.2235	0.1959	0.1640	0.0892	0.0156	0.0489	0.2632
0.40	0.3194	0.3139	0.2972	0.2681	0.2247	0.1970	0.1651	0.0902	0.0164	0.0493	0.2633
0.45	0.3207	0.3153	0.2986	0.2694	0.2259	0.1982	0.1663	0.0913	0.0173	0.0498	0.2635
0.50	0.3223	0.3168	0.3001	0.2709	0.2274	0.1996	0.1677	0.0925	0.0182	0.0503	0.2637
0.55	0.3240	0.3185	0.3017	0.2725	0.2290	0.2012	0.1692	0.0938	0.0193	0.0508	0.2640
0.60	0.3258	0.3203	0.3036	0.2743	0.2307	0.2029	0.1708	0.0953	0.0205	0.0514	0.2642
0.65	0.3278	0.3223	0.3055	0.2762	0.2325	0.2047	0.1726	0.0969	0.0217	0.0521	0.2645
0.70	0.3300	0.3245	0.3076	0.2783	0.2346	0.2066	0.1745	0.0986	0.0231	0.0528	0.2648
0.75	0.3322	0.3267	0.3099	0.2805	0.2367	0.2087	0.1765	0.1005	0.0246	0.0536	0.2651
0.80	0.3347	0.3292	0.3123	0.2828	0.2390	0.2110	0.1787	0.1024	0.0261	0.0544	0.2654
0.85	0.3372	0.3317	0.3148	0.2853	0.2414	0.2133	0.1810	0.1045	0.0278	0.0552	0.2658
0.90	0.3399	0.3344	0.3175	0.2879	0.2439	0.2158	0.1834	0.1067	0.0296	0.0562	0.2662
0.95	0.3427	0.3372	0.3203	0.2907	0.2466	0.2185	0.1859	0.1090	0.0314	0.0571	0.2666
1.00	0.3457	0.3402	0.3232	0.2936	0.2494	0.2212	0.1886	0.1115	0.0334	0.0581	0.2670
1.05	0.3488	0.3432	0.3262	0.2966	0.2524	0.2241	0.1914	0.1140	0.0355	0.0592	0.2674
1.10	0.3520	0.3464	0.3294	0.2997	0.2554	0.2271	0.1943	0.1167	0.0376	0.0603	0.2679
1.15	0.3553	0.3497	0.3327	0.3029	0.2586	0.2302	0.1974	0.1195	0.0399	0.0615	0.2683
1.20	0.3587	0.3531	0.3361	0.3063	0.2619	0.2334	0.2005	0.1224	0.0422	0.0627	0.2688
1.25	0.3622	0.3567	0.3396	0.3098	0.2653	0.2368	0.2038	0.1254	0.0446	0.0640	0.2693
1.30	0.3659	0.3603	0.3432	0.3133	0.2688	0.2402	0.2072	0.1285	0.0472	0.0653	0.2698
1.35	0.3696	0.3640	0.3469	0.3170	0.2724	0.2438	0.2107	0.1317	0.0498	0.0666	0.2704
1.40	0.3734	0.3678	0.3507	0.3208	0.2761	0.2474	0.2143	0.1350	0.0525	0.0681	0.2709
1.45	0.3773	0.3717	0.3546	0.3247	0.2799	0.2512	0.2180	0.1385	0.0553	0.0695	0.2715
1.50	0.3813	0.3757	0.3586	0.3286	0.2838	0.2551	0.2218	0.1420	0.0582	0.0710	0.2721
1.55	0.3854	0.3798	0.3627	0.3327	0.2878	0.2590	0.2256	0.1456	0.0611	0.0726	0.2727

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.55

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3896	0.3840	0.3668	0.3358	0.2919	0.2631	0.2295	0.1493	0.0642	0.0742	0.2733
1.65	0.3938	0.3882	0.3710	0.3410	0.2961	0.2672	0.2337	0.1531	0.0673	0.0758	0.2739
1.70	0.3981	0.3925	0.3753	0.3453	0.3003	0.2714	0.2379	0.1570	0.0705	0.0775	0.2746
1.75	0.4025	0.3969	0.3797	0.3497	0.3047	0.2757	0.2421	0.1610	0.0738	0.0792	0.2752
1.80	0.4069	0.4013	0.3841	0.3541	0.3091	0.2801	0.2464	0.1651	0.0772	0.0810	0.2759
1.85	0.4114	0.4058	0.3886	0.3586	0.3136	0.2846	0.2508	0.1692	0.0807	0.0829	0.2766
1.90	0.4159	0.4104	0.3932	0.3632	0.3181	0.2891	0.2553	0.1734	0.0842	0.0847	0.2773
1.95	0.4205	0.4149	0.3978	0.3678	0.3227	0.2937	0.2599	0.1777	0.0878	0.0866	0.2780
2.00	0.4252	0.4196	0.4024	0.3725	0.3274	0.2984	0.2646	0.1821	0.0915	0.0886	0.2788
2.05	0.4298	0.4243	0.4071	0.3772	0.3321	0.3031	0.2691	0.1866	0.0952	0.0906	0.2795
2.10	0.4345	0.4290	0.4119	0.3819	0.3369	0.3078	0.2739	0.1911	0.0990	0.0926	0.2803
2.15	0.4393	0.4337	0.4167	0.3867	0.3418	0.3127	0.2787	0.1957	0.1029	0.0947	0.2811
2.20	0.4441	0.4385	0.4215	0.3916	0.3466	0.3175	0.2835	0.2003	0.1069	0.0968	0.2819
2.25	0.4489	0.4433	0.4263	0.3965	0.3516	0.3225	0.2884	0.2050	0.1109	0.0990	0.2827
2.30	0.4537	0.4482	0.4312	0.4014	0.3565	0.3274	0.2934	0.2098	0.1149	0.1012	0.2835
2.35	0.4585	0.4530	0.4361	0.4063	0.3615	0.3324	0.2984	0.2146	0.1191	0.1034	0.2843
2.40	0.4634	0.4579	0.4410	0.4113	0.3665	0.3375	0.3034	0.2194	0.1232	0.1057	0.2851
2.45	0.4683	0.4628	0.4459	0.4163	0.3716	0.3426	0.3085	0.2243	0.1275	0.1080	0.2860
2.50	0.4731	0.4677	0.4509	0.4213	0.3767	0.3477	0.3136	0.2293	0.1317	0.1104	0.2869
2.55	0.4780	0.4726	0.4558	0.4263	0.3818	0.3528	0.3187	0.2343	0.1361	0.1127	0.2877
2.60	0.4829	0.4775	0.4608	0.4314	0.3869	0.3579	0.3239	0.2393	0.1405	0.1152	0.2886
2.65	0.4878	0.4824	0.4657	0.4364	0.3920	0.3631	0.3291	0.2444	0.1449	0.1176	0.2895
2.70	0.4927	0.4873	0.4707	0.4415	0.3972	0.3683	0.3343	0.2495	0.1494	0.1201	0.2905
2.75	0.4976	0.4922	0.4757	0.4465	0.4024	0.3735	0.3395	0.2547	0.1539	0.1226	0.2914
2.80	0.5025	0.4971	0.4806	0.4516	0.4075	0.3788	0.3448	0.2598	0.1584	0.1252	0.2923
2.85	0.5074	0.5020	0.4856	0.4567	0.4127	0.3840	0.3501	0.2650	0.1630	0.1278	0.2933
2.90	0.5122	0.5069	0.4906	0.4617	0.4179	0.3892	0.3553	0.2702	0.1676	0.1304	0.2942
2.95	0.5171	0.5118	0.4955	0.4668	0.4231	0.3945	0.3606	0.2755	0.1723	0.1331	0.2952
3.00	0.5219	0.5167	0.5004	0.4718	0.4282	0.3997	0.3659	0.2807	0.1770	0.1357	0.2962

TABLES OF CALCULATIONS FOR W-H-WRIGHT EQ.

VALUES OF RP WHERE N=3.60

THETA K	0	10	20	30	40	45	50	60	70	80	95
0.00	0.3199	0.3140	0.2973	0.2682	0.2247	0.1970	0.1650	0.0896	0.0147	0.0450	0.2578
0.05	0.3196	0.3141	0.2974	0.2683	0.2248	0.1971	0.1651	0.0897	0.0147	0.0450	0.2578
0.10	0.3198	0.3144	0.2976	0.2685	0.2250	0.1973	0.1653	0.0899	0.0149	0.0451	0.2578
0.15	0.3202	0.3148	0.2980	0.2689	0.2254	0.1977	0.1656	0.0902	0.0151	0.0453	0.2579
0.20	0.3208	0.3153	0.2986	0.2694	0.2259	0.1982	0.1661	0.0906	0.0155	0.0454	0.2580
0.25	0.3215	0.3160	0.2993	0.2701	0.2266	0.1988	0.1668	0.0912	0.0159	0.0457	0.2581
0.30	0.3224	0.3169	0.3002	0.2710	0.2274	0.1996	0.1675	0.0919	0.0165	0.0460	0.2582
0.35	0.3234	0.3179	0.3012	0.2720	0.2284	0.2006	0.1685	0.0927	0.0171	0.0463	0.2583
0.40	0.3246	0.3191	0.3024	0.2731	0.2295	0.2016	0.1695	0.0937	0.0179	0.0467	0.2585
0.45	0.3259	0.3205	0.3037	0.2744	0.2308	0.2029	0.1707	0.0947	0.0187	0.0471	0.2587
0.50	0.3274	0.3219	0.3052	0.2758	0.2322	0.2042	0.1720	0.0959	0.0197	0.0476	0.2589
0.55	0.3291	0.3236	0.3068	0.2774	0.2337	0.2057	0.1736	0.0972	0.0207	0.0482	0.2591
0.60	0.3309	0.3254	0.3085	0.2792	0.2354	0.2074	0.1751	0.0987	0.0219	0.0488	0.2593
0.65	0.3328	0.3273	0.3105	0.2810	0.2372	0.2092	0.1768	0.1002	0.0231	0.0494	0.2596
0.70	0.3349	0.3294	0.3125	0.2831	0.2392	0.2111	0.1787	0.1019	0.0245	0.0501	0.2599
0.75	0.3371	0.3316	0.3147	0.2852	0.2412	0.2131	0.1807	0.1037	0.0259	0.0509	0.2602
0.80	0.3394	0.3339	0.3170	0.2875	0.2435	0.2153	0.1828	0.1057	0.0275	0.0517	0.2605
0.85	0.3419	0.3364	0.3195	0.2899	0.2458	0.2176	0.1850	0.1077	0.0291	0.0525	0.2609
0.90	0.3446	0.3390	0.3221	0.2925	0.2483	0.2201	0.1874	0.1099	0.0309	0.0534	0.2613
0.95	0.3473	0.3418	0.3248	0.2952	0.2509	0.2226	0.1899	0.1122	0.0327	0.0544	0.2617
1.00	0.3502	0.3446	0.3276	0.2980	0.2537	0.2253	0.1925	0.1146	0.0346	0.0554	0.2621
1.05	0.3532	0.3476	0.3306	0.3009	0.2565	0.2281	0.1953	0.1171	0.0367	0.0564	0.2625
1.10	0.3563	0.3507	0.3337	0.3039	0.2595	0.2317	0.1981	0.1197	0.0388	0.0576	0.2629
1.15	0.3595	0.3539	0.3369	0.3071	0.2626	0.2341	0.2011	0.1224	0.0410	0.0587	0.2634
1.20	0.3628	0.3573	0.3402	0.3104	0.2658	0.2373	0.2042	0.1253	0.0433	0.0599	0.2639
1.25	0.3663	0.3607	0.3436	0.3137	0.2691	0.2405	0.2074	0.1282	0.0457	0.0612	0.2644
1.30	0.3698	0.3642	0.3471	0.3172	0.2726	0.2439	0.2107	0.1313	0.0482	0.0625	0.2649
1.35	0.3734	0.3679	0.3507	0.3208	0.2761	0.2474	0.2141	0.1344	0.0508	0.0638	0.2654
1.40	0.3772	0.3716	0.3544	0.3245	0.2797	0.2510	0.2176	0.1377	0.0534	0.0652	0.2660
1.45	0.3810	0.3754	0.3582	0.3283	0.2834	0.2546	0.2212	0.1411	0.0562	0.0667	0.2665
1.50	0.3849	0.3793	0.3621	0.3321	0.2873	0.2584	0.2250	0.1445	0.0590	0.0681	0.2671
1.55	0.3889	0.3833	0.3661	0.3361	0.2912	0.2623	0.2288	0.1481	0.0620	0.0697	0.2677

TABLES OF CALCULATIONS FOR W-H WRIGHT EQ.

VALUES OF RP WHERE N=3.60

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3929	0.3873	0.3702	0.3401	0.2952	0.2663	0.2327	0.1917	0.0650	0.0713	0.2683
1.65	0.3970	0.3915	0.3743	0.3443	0.2993	0.2703	0.2366	0.1954	0.0681	0.0729	0.2689
1.70	0.4012	0.3957	0.3785	0.3485	0.3034	0.2744	0.2407	0.1993	0.0712	0.0746	0.2696
1.75	0.4055	0.3999	0.3828	0.3527	0.3077	0.2787	0.2449	0.1632	0.0745	0.0763	0.2702
1.80	0.4098	0.4043	0.3871	0.3571	0.3120	0.2829	0.2491	0.1672	0.0778	0.0781	0.2709
1.85	0.4142	0.4086	0.3915	0.3614	0.3164	0.2873	0.2534	0.1712	0.0812	0.0799	0.2716
1.90	0.4187	0.4131	0.3959	0.3659	0.3208	0.2917	0.2578	0.1754	0.0847	0.0817	0.2723
1.95	0.4231	0.4176	0.4004	0.3704	0.3253	0.2962	0.2623	0.1796	0.0883	0.0836	0.2730
2.00	0.4277	0.4221	0.4050	0.3750	0.3299	0.3008	0.2668	0.1839	0.0919	0.0856	0.2737
2.05	0.4322	0.4267	0.4096	0.3796	0.3345	0.3054	0.2714	0.1883	0.0956	0.0875	0.2745
2.10	0.4368	0.4313	0.4142	0.3843	0.3392	0.3101	0.2760	0.1927	0.0993	0.0886	0.2752
2.15	0.4415	0.4359	0.4189	0.3890	0.3440	0.3148	0.2807	0.1972	0.1032	0.0916	0.2760
2.20	0.4462	0.4406	0.4236	0.3937	0.3487	0.3196	0.2855	0.2018	0.1070	0.0937	0.2768
2.25	0.4509	0.4453	0.4283	0.3985	0.3536	0.3244	0.2903	0.2064	0.1110	0.0959	0.2776
2.30	0.4556	0.4501	0.4331	0.4033	0.3584	0.3293	0.2952	0.2111	0.1150	0.0980	0.2784
2.35	0.4603	0.4548	0.4379	0.4082	0.3633	0.3342	0.3001	0.2158	0.1191	0.1003	0.2792
2.40	0.4651	0.4596	0.4427	0.4131	0.3683	0.3392	0.3050	0.2206	0.1232	0.1025	0.2801
2.45	0.4699	0.4644	0.4475	0.4179	0.3732	0.3441	0.3100	0.2254	0.1274	0.1048	0.2809
2.50	0.4746	0.4692	0.4524	0.4229	0.3782	0.3492	0.3150	0.2303	0.1316	0.1072	0.2818
2.55	0.4794	0.4740	0.4572	0.4278	0.3832	0.3542	0.3201	0.2352	0.1359	0.1095	0.2826
2.60	0.4842	0.4788	0.4621	0.4327	0.3882	0.3593	0.3251	0.2402	0.1402	0.1119	0.2835
2.65	0.4890	0.4836	0.4670	0.4377	0.3933	0.3643	0.3302	0.2452	0.1445	0.1144	0.2844
2.70	0.4938	0.4885	0.4719	0.4427	0.3984	0.3695	0.3354	0.2502	0.1490	0.1168	0.2853
2.75	0.4987	0.4933	0.4767	0.4476	0.4034	0.3746	0.3405	0.2553	0.1534	0.1193	0.2863
2.80	0.5034	0.4981	0.4816	0.4526	0.4085	0.3797	0.3457	0.2604	0.1579	0.1219	0.2872
2.85	0.5082	0.5029	0.4865	0.4576	0.4136	0.3849	0.3509	0.2655	0.1624	0.1244	0.2882
2.90	0.5130	0.5077	0.4914	0.4625	0.4187	0.3900	0.3561	0.2706	0.1670	0.1270	0.2891
2.95	0.5178	0.5125	0.4962	0.4675	0.4238	0.3952	0.3613	0.2758	0.1716	0.1297	0.2901
3.00	0.5225	0.5173	0.5011	0.4725	0.4289	0.4003	0.3665	0.2810	0.1762	0.1323	0.2911

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF NP WHERE N=3.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3248	0.3193	0.3026	0.2733	0.2297	0.2017	0.1695	0.0932	0.0162	0.0425	0.2530
0.05	0.3249	0.3194	0.3026	0.2734	0.2297	0.2018	0.1695	0.0932	0.0163	0.0425	0.2530
0.10	0.3251	0.3196	0.3029	0.2735	0.2300	0.2020	0.1698	0.0934	0.0164	0.0426	0.2531
0.15	0.3255	0.3200	0.3033	0.2740	0.2303	0.2024	0.1701	0.0937	0.0167	0.0427	0.2531
0.20	0.3260	0.3206	0.3038	0.2745	0.2308	0.2029	0.1706	0.0942	0.0170	0.0429	0.2532
0.25	0.3267	0.3213	0.3045	0.2752	0.2315	0.2035	0.1712	0.0947	0.0175	0.0431	0.2533
0.30	0.3276	0.3221	0.3053	0.2760	0.2323	0.2043	0.1720	0.0954	0.0180	0.0434	0.2534
0.35	0.3286	0.3231	0.3063	0.2770	0.2332	0.2052	0.1729	0.0962	0.0187	0.0437	0.2535
0.40	0.3297	0.3243	0.3075	0.2781	0.2343	0.2063	0.1739	0.0971	0.0194	0.0441	0.2537
0.45	0.3310	0.3256	0.3087	0.2794	0.2355	0.2075	0.1751	0.0982	0.0202	0.0446	0.2539
0.50	0.3325	0.3270	0.3102	0.2808	0.2369	0.2088	0.1763	0.0994	0.0212	0.0451	0.2541
0.55	0.3341	0.3286	0.3118	0.2823	0.2384	0.2103	0.1778	0.1007	0.0222	0.0456	0.2543
0.60	0.3358	0.3303	0.3135	0.2840	0.2400	0.2119	0.1793	0.1021	0.0234	0.0462	0.2546
0.65	0.3377	0.3322	0.3153	0.2858	0.2418	0.2135	0.1810	0.1036	0.0246	0.0468	0.2548
0.70	0.3397	0.3342	0.3173	0.2878	0.2437	0.2155	0.1829	0.1053	0.0259	0.0475	0.2551
0.75	0.3419	0.3364	0.3195	0.2899	0.2458	0.2175	0.1848	0.1071	0.0273	0.0483	0.2554
0.80	0.3442	0.3387	0.3217	0.2921	0.2479	0.2196	0.1869	0.1089	0.0289	0.0491	0.2557
0.85	0.3466	0.3411	0.3241	0.2945	0.2502	0.2219	0.1891	0.1110	0.0305	0.0499	0.2561
0.90	0.3492	0.3436	0.3266	0.2970	0.2527	0.2243	0.1914	0.1131	0.0322	0.0508	0.2564
0.95	0.3518	0.3463	0.3293	0.2996	0.2552	0.2268	0.1938	0.1153	0.0340	0.0518	0.2568
1.00	0.3546	0.3491	0.3321	0.3023	0.2579	0.2294	0.1964	0.1177	0.0359	0.0527	0.2572
1.05	0.3575	0.3520	0.3349	0.3052	0.2607	0.2322	0.1991	0.1201	0.0379	0.0538	0.2576
1.10	0.3606	0.3550	0.3380	0.3082	0.2636	0.2350	0.2019	0.1227	0.0400	0.0549	0.2581
1.15	0.3637	0.3581	0.3411	0.3112	0.2666	0.2380	0.2048	0.1254	0.0422	0.0560	0.2585
1.20	0.3669	0.3614	0.3443	0.3144	0.2698	0.2411	0.2078	0.1282	0.0445	0.0572	0.2590
1.25	0.3703	0.3647	0.3476	0.3177	0.2730	0.2443	0.2110	0.1311	0.0468	0.0585	0.2595
1.30	0.3737	0.3682	0.3510	0.3211	0.2763	0.2476	0.2142	0.1341	0.0493	0.0598	0.2600
1.35	0.3773	0.3717	0.3546	0.3246	0.2798	0.2510	0.2175	0.1372	0.0518	0.0611	0.2605
1.40	0.3809	0.3753	0.3582	0.3282	0.2833	0.2545	0.2210	0.1404	0.0545	0.0625	0.2611
1.45	0.3846	0.3790	0.3619	0.3319	0.2870	0.2581	0.2245	0.1437	0.0572	0.0639	0.2616
1.50	0.3884	0.3828	0.3657	0.3357	0.2907	0.2618	0.2282	0.1471	0.0600	0.0654	0.2622
1.55	0.3923	0.3867	0.3696	0.3395	0.2945	0.2656	0.2319	0.1506	0.0629	0.0669	0.2628

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESQ.

VALUES OF RP WHERE N=3.65

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3953	0.3907	0.3735	0.3435	0.2985	0.2695	0.2357	0.1941	0.0658	0.0685	0.2634
1.65	0.4003	0.3947	0.3775	0.3475	0.3024	0.2734	0.2396	0.1978	0.0659	0.0701	0.2640
1.70	0.4044	0.3988	0.3816	0.3516	0.3065	0.2775	0.2436	0.1616	0.0720	0.0717	0.2646
1.75	0.4085	0.4030	0.3858	0.3558	0.3107	0.2815	0.2477	0.1654	0.0752	0.0735	0.2653
1.80	0.4128	0.4072	0.3900	0.3600	0.3149	0.2858	0.2518	0.1693	0.0785	0.0752	0.2660
1.85	0.4170	0.4115	0.3943	0.3643	0.3192	0.2901	0.2561	0.1733	0.0818	0.0770	0.2666
1.90	0.4214	0.4158	0.3987	0.3687	0.3235	0.2944	0.2604	0.1774	0.0853	0.0788	0.2673
1.95	0.4258	0.4202	0.4031	0.3731	0.3280	0.2988	0.2647	0.1816	0.0888	0.0807	0.2680
2.00	0.4302	0.4246	0.4075	0.3774	0.3325	0.3033	0.2692	0.1858	0.0923	0.0826	0.2688
2.05	0.4347	0.4291	0.4120	0.3821	0.3370	0.3078	0.2737	0.1901	0.0960	0.0846	0.2695
2.10	0.4392	0.4336	0.4166	0.3866	0.3416	0.3124	0.2782	0.1944	0.0997	0.0866	0.2703
2.15	0.4437	0.4382	0.4211	0.3913	0.3462	0.3170	0.2828	0.1989	0.1035	0.0886	0.2710
2.20	0.4483	0.4428	0.4257	0.3959	0.3509	0.3217	0.2875	0.2033	0.1073	0.0907	0.2718
2.25	0.4529	0.4474	0.4304	0.4006	0.3556	0.3265	0.2922	0.2079	0.1112	0.0929	0.2726
2.30	0.4575	0.4520	0.4351	0.4053	0.3604	0.3312	0.2970	0.2125	0.1151	0.0950	0.2734
2.35	0.4621	0.4567	0.4398	0.4101	0.3652	0.3360	0.3018	0.2171	0.1191	0.0972	0.2742
2.40	0.4668	0.4613	0.4445	0.4148	0.3700	0.3409	0.3067	0.2218	0.1232	0.0995	0.2751
2.45	0.4715	0.4660	0.4492	0.4195	0.3749	0.3458	0.3116	0.2266	0.1273	0.1017	0.2759
2.50	0.4762	0.4707	0.4540	0.4245	0.3798	0.3507	0.3165	0.2314	0.1315	0.1040	0.2768
2.55	0.4809	0.4755	0.4587	0.4293	0.3847	0.3557	0.3214	0.2362	0.1357	0.1064	0.2776
2.60	0.4856	0.4802	0.4635	0.4341	0.3896	0.3606	0.3264	0.2411	0.1400	0.1088	0.2785
2.65	0.4903	0.4849	0.4683	0.4389	0.3946	0.3656	0.3314	0.2460	0.1443	0.1112	0.2794
2.70	0.4950	0.4897	0.4731	0.4439	0.3996	0.3706	0.3365	0.2510	0.1486	0.1137	0.2803
2.75	0.4997	0.4944	0.4779	0.4488	0.4046	0.3757	0.3415	0.2559	0.1530	0.1161	0.2812
2.80	0.5045	0.4991	0.4827	0.4537	0.4096	0.3807	0.3466	0.2610	0.1575	0.1187	0.2822
2.85	0.5092	0.5038	0.4874	0.4585	0.4146	0.3858	0.3517	0.2660	0.1620	0.1212	0.2831
2.90	0.5139	0.5086	0.4922	0.4634	0.4196	0.3909	0.3568	0.2711	0.1665	0.1238	0.2841
2.95	0.5185	0.5133	0.4970	0.4683	0.4246	0.3959	0.3620	0.2761	0.1710	0.1264	0.2850
3.00	0.5232	0.5180	0.5018	0.4732	0.4296	0.4010	0.3671	0.2813	0.1756	0.1290	0.2860

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.70

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3300	0.3245	0.3077	0.2784	0.2345	0.2064	0.1739	0.0967	0.0178	0.0400	0.2483
0.05	0.3301	0.3246	0.3078	0.2785	0.2346	0.2065	0.1740	0.0968	0.0179	0.0401	0.2483
0.10	0.3303	0.3248	0.3080	0.2787	0.2348	0.2067	0.1742	0.0970	0.0180	0.0401	0.2484
0.15	0.3307	0.3252	0.3084	0.2791	0.2352	0.2071	0.1746	0.0973	0.0183	0.0403	0.2484
0.20	0.3312	0.3258	0.3089	0.2796	0.2357	0.2076	0.1750	0.0977	0.0186	0.0404	0.2485
0.25	0.3319	0.3264	0.3096	0.2802	0.2363	0.2082	0.1756	0.0983	0.0191	0.0407	0.2486
0.30	0.3327	0.3273	0.3104	0.2810	0.2371	0.2089	0.1764	0.0989	0.0196	0.0410	0.2487
0.35	0.3337	0.3282	0.3114	0.2820	0.2380	0.2098	0.1772	0.0997	0.0202	0.0413	0.2488
0.40	0.3348	0.3293	0.3125	0.2831	0.2391	0.2109	0.1783	0.1006	0.0210	0.0417	0.2490
0.45	0.3361	0.3306	0.3137	0.2843	0.2403	0.2120	0.1794	0.1017	0.0218	0.0421	0.2492
0.50	0.3375	0.3320	0.3151	0.2857	0.2416	0.2133	0.1807	0.1028	0.0227	0.0426	0.2494
0.55	0.3391	0.3336	0.3167	0.2872	0.2431	0.2148	0.1821	0.1041	0.0238	0.0431	0.2496
0.60	0.3408	0.3353	0.3183	0.2888	0.2447	0.2164	0.1836	0.1055	0.0249	0.0437	0.2498
0.65	0.3426	0.3371	0.3202	0.2906	0.2464	0.2181	0.1852	0.1070	0.0261	0.0443	0.2501
0.70	0.3446	0.3390	0.3221	0.2925	0.2483	0.2199	0.1870	0.1086	0.0274	0.0450	0.2504
0.75	0.3467	0.3411	0.3242	0.2946	0.2503	0.2218	0.1889	0.1104	0.0288	0.0458	0.2507
0.80	0.3489	0.3434	0.3264	0.2967	0.2524	0.2239	0.1910	0.1122	0.0303	0.0466	0.2510
0.85	0.3512	0.3457	0.3287	0.2990	0.2546	0.2261	0.1931	0.1142	0.0319	0.0474	0.2513
0.90	0.3537	0.3482	0.3312	0.3015	0.2570	0.2285	0.1954	0.1163	0.0336	0.0483	0.2517
0.95	0.3563	0.3508	0.3338	0.3040	0.2595	0.2309	0.1978	0.1185	0.0354	0.0492	0.2521
1.00	0.3590	0.3535	0.3364	0.3067	0.2621	0.2335	0.2003	0.1208	0.0373	0.0502	0.2524
1.05	0.3619	0.3563	0.3393	0.3094	0.2648	0.2362	0.2029	0.1232	0.0392	0.0512	0.2529
1.10	0.3648	0.3593	0.3422	0.3123	0.2677	0.2390	0.2057	0.1257	0.0413	0.0523	0.2533
1.15	0.3679	0.3623	0.3452	0.3153	0.2706	0.2419	0.2085	0.1284	0.0435	0.0535	0.2537
1.20	0.3710	0.3655	0.3484	0.3185	0.2737	0.2449	0.2115	0.1311	0.0457	0.0546	0.2542
1.25	0.3743	0.3687	0.3516	0.3217	0.2768	0.2480	0.2145	0.1340	0.0480	0.0559	0.2547
1.30	0.3776	0.3721	0.3549	0.3250	0.2801	0.2513	0.2177	0.1369	0.0504	0.0571	0.2552
1.35	0.3811	0.3755	0.3584	0.3284	0.2835	0.2546	0.2210	0.1400	0.0530	0.0585	0.2557
1.40	0.3846	0.3790	0.3619	0.3319	0.2870	0.2580	0.2243	0.1431	0.0555	0.0598	0.2562
1.45	0.3882	0.3827	0.3655	0.3355	0.2905	0.2613	0.2278	0.1463	0.0582	0.0612	0.2568
1.50	0.3919	0.3864	0.3692	0.3392	0.2942	0.2652	0.2314	0.1497	0.0610	0.0627	0.2574
1.55	0.3957	0.3902	0.3730	0.3430	0.2979	0.2689	0.2350	0.1531	0.0638	0.0642	0.2579

TABLES OF CALCULATIONS FOR W-H WRIGHT ESR.

VALUES OF R^2 WHERE $N=3-70$

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.3996	0.3940	0.3769	0.3468	0.3017	0.2727	0.2388	0.1566	0.0667	0.0658	0.2585
1.65	0.4039	0.3979	0.3808	0.3508	0.3056	0.2765	0.2426	0.1602	0.0698	0.0674	0.2592
1.70	0.4079	0.4020	0.3848	0.3548	0.3096	0.2805	0.2466	0.1639	0.0728	0.0690	0.2598
1.75	0.4116	0.4060	0.3889	0.3588	0.3137	0.2845	0.2505	0.1677	0.0760	0.0707	0.2604
1.80	0.4157	0.4101	0.3930	0.3630	0.3178	0.2885	0.2546	0.1715	0.0792	0.0724	0.2611
1.85	0.4199	0.4143	0.3972	0.3672	0.3220	0.2928	0.2587	0.1754	0.0825	0.0742	0.2618
1.90	0.4241	0.4186	0.4014	0.3714	0.3263	0.2971	0.2629	0.1795	0.0859	0.0760	0.2625
1.95	0.4284	0.4228	0.4057	0.3758	0.3306	0.3014	0.2672	0.1835	0.0894	0.0779	0.2632
2.00	0.4327	0.4272	0.4101	0.3801	0.3350	0.3058	0.2716	0.1877	0.0929	0.0798	0.2639
2.05	0.4371	0.4316	0.4145	0.3846	0.3395	0.3102	0.2760	0.1919	0.0965	0.0818	0.2646
2.10	0.4415	0.4360	0.4189	0.3890	0.3439	0.3147	0.2805	0.1962	0.1001	0.0837	0.2654
2.15	0.4460	0.4404	0.4234	0.3936	0.3485	0.3193	0.2850	0.2005	0.1038	0.0858	0.2661
2.20	0.4504	0.4449	0.4279	0.3981	0.3531	0.3239	0.2896	0.2049	0.1076	0.0878	0.2669
2.25	0.4549	0.4494	0.4325	0.4027	0.3577	0.3285	0.2942	0.2094	0.1115	0.0899	0.2677
2.30	0.4595	0.4540	0.4370	0.4073	0.3624	0.3332	0.2989	0.2139	0.1154	0.0921	0.2685
2.35	0.4640	0.4585	0.4416	0.4120	0.3671	0.3379	0.3036	0.2185	0.1193	0.0943	0.2693
2.40	0.4686	0.4631	0.4463	0.4167	0.3718	0.3427	0.3084	0.2231	0.1233	0.0965	0.2701
2.45	0.4732	0.4677	0.4509	0.4214	0.3766	0.3475	0.3132	0.2278	0.1274	0.0988	0.2710
2.50	0.4778	0.4723	0.4556	0.4261	0.3814	0.3523	0.3180	0.2325	0.1315	0.1010	0.2718
2.55	0.4824	0.4770	0.4602	0.4308	0.3863	0.3572	0.3229	0.2373	0.1357	0.1034	0.2727
2.60	0.4870	0.4816	0.4649	0.4356	0.3911	0.3621	0.3278	0.2421	0.1399	0.1057	0.2736
2.65	0.4916	0.4862	0.4696	0.4404	0.3960	0.3670	0.3327	0.2469	0.1441	0.1081	0.2745
2.70	0.4963	0.4909	0.4743	0.4452	0.4009	0.3719	0.3377	0.2518	0.1484	0.1106	0.2754
2.75	0.5009	0.4955	0.4790	0.4500	0.4058	0.3768	0.3426	0.2567	0.1528	0.1130	0.2763
2.80	0.5055	0.5002	0.4837	0.4548	0.4107	0.3818	0.3476	0.2616	0.1571	0.1155	0.2772
2.85	0.5101	0.5048	0.4884	0.4596	0.4156	0.3868	0.3527	0.2666	0.1616	0.1181	0.2781
2.90	0.5148	0.5095	0.4931	0.4644	0.4205	0.3918	0.3577	0.2716	0.1660	0.1206	0.2791
2.95	0.5194	0.5141	0.4978	0.4692	0.4254	0.3968	0.3627	0.2766	0.1705	0.1232	0.2801
3.00	0.5240	0.5187	0.5025	0.4740	0.4304	0.4018	0.3678	0.2816	0.1750	0.1259	0.2810

TABLES OF CALCULATIONS FOR W.H. WRIGHT EQ.

VALUES OF RP WHERE N=3.75

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3352	0.3297	0.3129	0.2834	0.2394	0.2111	0.1784	0.1003	0.0195	0.0377	0.2437
0.05	0.3353	0.3298	0.3129	0.2835	0.2394	0.2112	0.1785	0.1004	0.0196	0.0377	0.2437
0.10	0.3355	0.3300	0.3131	0.2837	0.2396	0.2114	0.1787	0.1006	0.0197	0.0378	0.2437
0.15	0.3358	0.3304	0.3135	0.2841	0.2400	0.2117	0.1790	0.1009	0.0200	0.0379	0.2438
0.20	0.3364	0.3309	0.3140	0.2846	0.2405	0.2122	0.1794	0.1013	0.0203	0.0381	0.2438
0.25	0.3370	0.3315	0.3147	0.2852	0.2411	0.2128	0.1800	0.1018	0.0207	0.0383	0.2439
0.30	0.3378	0.3323	0.3155	0.2860	0.2419	0.2135	0.1808	0.1025	0.0213	0.0385	0.2441
0.35	0.3388	0.3333	0.3164	0.2869	0.2428	0.2144	0.1816	0.1033	0.0219	0.0389	0.2442
0.40	0.3399	0.3344	0.3175	0.2880	0.2438	0.2154	0.1826	0.1042	0.0226	0.0393	0.2443
0.45	0.3411	0.3356	0.3187	0.2892	0.2450	0.2165	0.1837	0.1052	0.0234	0.0397	0.2445
0.50	0.3425	0.3370	0.3201	0.2905	0.2463	0.2178	0.1850	0.1063	0.0243	0.0402	0.2447
0.55	0.3440	0.3385	0.3215	0.2920	0.2477	0.2193	0.1863	0.1075	0.0254	0.0407	0.2449
0.60	0.3456	0.3401	0.3232	0.2935	0.2493	0.2208	0.1878	0.1089	0.0265	0.0413	0.2452
0.65	0.3474	0.3419	0.3249	0.2953	0.2509	0.2223	0.1894	0.1104	0.0277	0.0420	0.2454
0.70	0.3493	0.3438	0.3268	0.2972	0.2528	0.2243	0.1912	0.1120	0.0290	0.0426	0.2457
0.75	0.3514	0.3458	0.3288	0.2992	0.2547	0.2262	0.1930	0.1137	0.0303	0.0434	0.2460
0.80	0.3535	0.3480	0.3310	0.3013	0.2568	0.2282	0.1950	0.1155	0.0318	0.0441	0.2463
0.85	0.3558	0.3503	0.3333	0.3035	0.2590	0.2304	0.1971	0.1175	0.0334	0.0450	0.2466
0.90	0.3582	0.3527	0.3357	0.3059	0.2613	0.2326	0.1994	0.1195	0.0351	0.0458	0.2470
0.95	0.3608	0.3552	0.3382	0.3084	0.2637	0.2350	0.2017	0.1217	0.0368	0.0468	0.2474
1.00	0.3634	0.3578	0.3408	0.3110	0.2663	0.2375	0.2042	0.1239	0.0387	0.0478	0.2478
1.05	0.3662	0.3606	0.3435	0.3137	0.2689	0.2402	0.2067	0.1263	0.0406	0.0488	0.2482
1.10	0.3690	0.3635	0.3464	0.3165	0.2717	0.2429	0.2094	0.1288	0.0427	0.0498	0.2486
1.15	0.3720	0.3664	0.3493	0.3194	0.2746	0.2458	0.2122	0.1314	0.0448	0.0510	0.2490
1.20	0.3751	0.3695	0.3524	0.3225	0.2776	0.2487	0.2151	0.1341	0.0470	0.0521	0.2495
1.25	0.3782	0.3727	0.3556	0.3256	0.2807	0.2518	0.2181	0.1369	0.0493	0.0534	0.2500
1.30	0.3815	0.3759	0.3588	0.3288	0.2839	0.2549	0.2212	0.1398	0.0517	0.0546	0.2505
1.35	0.3849	0.3793	0.3622	0.3322	0.2872	0.2582	0.2244	0.1428	0.0541	0.0559	0.2510
1.40	0.3883	0.3827	0.3656	0.3356	0.2906	0.2615	0.2277	0.1458	0.0567	0.0573	0.2515
1.45	0.3919	0.3863	0.3691	0.3391	0.2941	0.2650	0.2311	0.1490	0.0593	0.0587	0.2520
1.50	0.3955	0.3899	0.3727	0.3427	0.2976	0.2685	0.2346	0.1523	0.0621	0.0601	0.2526
1.55	0.3992	0.3936	0.3764	0.3464	0.3013	0.2722	0.2382	0.1557	0.0649	0.0616	0.2532

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.75

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.50	0.4029	0.3974	0.3802	0.3592	0.3050	0.2759	0.2419	0.1591	0.0677	0.0632	0.2538
1.55	0.4068	0.4012	0.3840	0.3540	0.3088	0.2797	0.2456	0.1626	0.0707	0.0648	0.2544
1.70	0.4107	0.4051	0.3880	0.3579	0.3127	0.2835	0.2494	0.1663	0.0737	0.0664	0.2550
1.75	0.4146	0.4091	0.3919	0.3619	0.3167	0.2875	0.2534	0.1700	0.0768	0.0681	0.2556
1.80	0.4187	0.4131	0.3960	0.3660	0.3208	0.2915	0.2573	0.1738	0.0800	0.0698	0.2563
1.85	0.4227	0.4172	0.4001	0.3701	0.3249	0.2955	0.2614	0.1776	0.0833	0.0715	0.2570
1.90	0.4269	0.4213	0.4042	0.3742	0.3291	0.2998	0.2655	0.1815	0.0866	0.0734	0.2577
1.95	0.4311	0.4255	0.4084	0.3785	0.3333	0.3040	0.2697	0.1856	0.0900	0.0752	0.2584
2.00	0.4353	0.4298	0.4127	0.3828	0.3376	0.3083	0.2740	0.1896	0.0935	0.0771	0.2591
2.05	0.4396	0.4340	0.4170	0.3871	0.3419	0.3127	0.2783	0.1938	0.0970	0.0790	0.2598
2.10	0.4439	0.4384	0.4213	0.3915	0.3463	0.3171	0.2827	0.1980	0.1006	0.0810	0.2605
2.15	0.4482	0.4427	0.4257	0.3959	0.3508	0.3215	0.2872	0.2023	0.1043	0.0830	0.2613
2.20	0.4526	0.4471	0.4301	0.4003	0.3553	0.3260	0.2917	0.2066	0.1080	0.0850	0.2621
2.25	0.4570	0.4515	0.4346	0.4048	0.3598	0.3306	0.2962	0.2110	0.1118	0.0871	0.2628
2.30	0.4614	0.4560	0.4391	0.4094	0.3644	0.3352	0.3008	0.2154	0.1157	0.0893	0.2636
2.35	0.4659	0.4604	0.4436	0.4139	0.3690	0.3398	0.3054	0.2199	0.1196	0.0914	0.2644
2.40	0.4704	0.4649	0.4481	0.4185	0.3737	0.3445	0.3101	0.2245	0.1235	0.0936	0.2653
2.45	0.4749	0.4694	0.4527	0.4231	0.3784	0.3492	0.3148	0.2291	0.1275	0.0959	0.2661
2.50	0.4794	0.4740	0.4572	0.4278	0.3831	0.3540	0.3196	0.2337	0.1316	0.0982	0.2670
2.55	0.4839	0.4785	0.4618	0.4324	0.3878	0.3587	0.3244	0.2384	0.1357	0.1005	0.2678
2.60	0.4884	0.4831	0.4664	0.4371	0.3926	0.3635	0.3292	0.2431	0.1398	0.1028	0.2687
2.65	0.4930	0.4876	0.4710	0.4418	0.3974	0.3683	0.3340	0.2479	0.1440	0.1052	0.2696
2.70	0.4975	0.4922	0.4756	0.4465	0.4022	0.3732	0.3389	0.2527	0.1483	0.1076	0.2705
2.75	0.5021	0.4967	0.4803	0.4512	0.4070	0.3781	0.3438	0.2575	0.1526	0.1101	0.2714
2.80	0.5066	0.5013	0.4849	0.4559	0.4118	0.3829	0.3487	0.2624	0.1569	0.1125	0.2723
2.85	0.5112	0.5059	0.4895	0.4606	0.4167	0.3878	0.3536	0.2673	0.1613	0.1151	0.2733
2.90	0.5157	0.5104	0.4941	0.4654	0.4215	0.3927	0.3586	0.2722	0.1657	0.1176	0.2742
2.95	0.5202	0.5150	0.4987	0.4701	0.4264	0.3976	0.3636	0.2771	0.1701	0.1202	0.2752
3.00	0.5248	0.5195	0.5033	0.4748	0.4312	0.4025	0.3685	0.2821	0.1746	0.1228	0.2761

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.80

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THETA K	0	10	20	30	40	45	50	55	60	70	80	85
0.00	0.3403	0.3348	0.3179	0.2884	0.2442	0.2158	0.1828	0.1039	0.0213	0.0354	0.2391	
0.05	0.3403	0.3349	0.3180	0.2885	0.2442	0.2158	0.1829	0.1040	0.0213	0.0354	0.2391	
0.10	0.3406	0.3351	0.3182	0.2887	0.2444	0.2160	0.1831	0.1041	0.0214	0.0355	0.2391	
0.15	0.3409	0.3354	0.3185	0.2890	0.2448	0.2164	0.1834	0.1044	0.0217	0.0356	0.2392	
0.20	0.3414	0.3359	0.3190	0.2895	0.2452	0.2168	0.1838	0.1048	0.0220	0.0358	0.2393	
0.25	0.3421	0.3366	0.3197	0.2901	0.2458	0.2174	0.1844	0.1054	0.0224	0.0360	0.2394	
0.30	0.3428	0.3373	0.3204	0.2909	0.2466	0.2181	0.1851	0.1060	0.0230	0.0363	0.2395	
0.35	0.3438	0.3383	0.3214	0.2918	0.2475	0.2190	0.1860	0.1068	0.0236	0.0367	0.2396	
0.40	0.3448	0.3393	0.3224	0.2928	0.2485	0.2200	0.1869	0.1077	0.0243	0.0370	0.2398	
0.45	0.3460	0.3405	0.3236	0.2940	0.2496	0.2211	0.1880	0.1087	0.0251	0.0375	0.2399	
0.50	0.3474	0.3419	0.3249	0.2953	0.2509	0.2223	0.1892	0.1098	0.0260	0.0379	0.2401	
0.55	0.3488	0.3433	0.3264	0.2967	0.2523	0.2237	0.1906	0.1110	0.0270	0.0385	0.2403	
0.60	0.3504	0.3449	0.3279	0.2983	0.2538	0.2252	0.1920	0.1124	0.0281	0.0390	0.2406	
0.65	0.3522	0.3466	0.3297	0.3000	0.2555	0.2268	0.1936	0.1138	0.0293	0.0396	0.2408	
0.70	0.3540	0.3485	0.3315	0.3018	0.2572	0.2286	0.1953	0.1154	0.0306	0.0403	0.2411	
0.75	0.3560	0.3505	0.3335	0.3037	0.2591	0.2305	0.1972	0.1171	0.0319	0.0410	0.2414	
0.80	0.3581	0.3526	0.3356	0.3058	0.2612	0.2325	0.1991	0.1189	0.0334	0.0418	0.2417	
0.85	0.3603	0.3548	0.3378	0.3080	0.2633	0.2345	0.2012	0.1208	0.0349	0.0426	0.2420	
0.90	0.3627	0.3571	0.3401	0.3103	0.2656	0.2368	0.2033	0.1228	0.0356	0.0435	0.2424	
0.95	0.3651	0.3596	0.3425	0.3127	0.2679	0.2391	0.2056	0.1249	0.0383	0.0444	0.2427	
1.00	0.3677	0.3622	0.3451	0.3152	0.2704	0.2415	0.2080	0.1271	0.0401	0.0454	0.2431	
1.05	0.3704	0.3649	0.3478	0.3179	0.2730	0.2442	0.2106	0.1294	0.0421	0.0464	0.2435	
1.10	0.3732	0.3676	0.3506	0.3206	0.2758	0.2468	0.2132	0.1319	0.0441	0.0475	0.2439	
1.15	0.3761	0.3705	0.3534	0.3235	0.2786	0.2495	0.2159	0.1344	0.0462	0.0486	0.2444	
1.20	0.3791	0.3735	0.3564	0.3265	0.2815	0.2525	0.2188	0.1371	0.0483	0.0497	0.2448	
1.25	0.3822	0.3766	0.3595	0.3295	0.2845	0.2555	0.2217	0.1398	0.0506	0.0509	0.2453	
1.30	0.3854	0.3798	0.3627	0.3327	0.2876	0.2585	0.2247	0.1426	0.0529	0.0522	0.2458	
1.35	0.3886	0.3831	0.3659	0.3359	0.2909	0.2618	0.2279	0.1456	0.0554	0.0536	0.2463	
1.40	0.3920	0.3864	0.3693	0.3393	0.2942	0.2651	0.2311	0.1486	0.0579	0.0548	0.2468	
1.45	0.3954	0.3899	0.3727	0.3427	0.2976	0.2684	0.2344	0.1517	0.0605	0.0562	0.2474	
1.50	0.3990	0.3934	0.3763	0.3462	0.3011	0.2719	0.2379	0.1549	0.0632	0.0577	0.2479	
1.55	0.4026	0.3970	0.3799	0.3498	0.3047	0.2755	0.2414	0.1582	0.0659	0.0592	0.2485	

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3.80

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THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4063	0.4007	0.3835	0.3535	0.3083	0.2791	0.2449	0.1616	0.0688	0.0607	0.2491
1.65	0.4100	0.4044	0.3873	0.3573	0.3120	0.2828	0.2486	0.1651	0.0717	0.0622	0.2497
1.70	0.4138	0.4082	0.3911	0.3611	0.3159	0.2866	0.2524	0.1687	0.0747	0.0639	0.2503
1.75	0.4177	0.4121	0.3950	0.3650	0.3198	0.2905	0.2562	0.1723	0.0778	0.0655	0.2509
1.80	0.4216	0.4161	0.3989	0.3689	0.3237	0.2944	0.2601	0.1760	0.0809	0.0672	0.2516
1.85	0.4256	0.4201	0.4030	0.3730	0.3277	0.2984	0.2641	0.1798	0.0841	0.0690	0.2522
1.90	0.4296	0.4241	0.4070	0.3770	0.3318	0.3025	0.2682	0.1837	0.0874	0.0708	0.2529
1.95	0.4337	0.4282	0.4111	0.3812	0.3360	0.3067	0.2723	0.1876	0.0908	0.0726	0.2536
2.00	0.4378	0.4323	0.4153	0.3854	0.3402	0.3109	0.2765	0.1916	0.0942	0.0745	0.2543
2.05	0.4420	0.4365	0.4195	0.3896	0.3445	0.3151	0.2807	0.1957	0.0977	0.0764	0.2551
2.10	0.4463	0.4407	0.4238	0.3939	0.3488	0.3195	0.2850	0.1998	0.1012	0.0783	0.2558
2.15	0.4505	0.4450	0.4280	0.3982	0.3531	0.3238	0.2894	0.2040	0.1048	0.0803	0.2565
2.20	0.4548	0.4493	0.4324	0.4026	0.3575	0.3282	0.2938	0.2083	0.1085	0.0824	0.2573
2.25	0.4591	0.4536	0.4367	0.4070	0.3620	0.3327	0.2982	0.2126	0.1122	0.0844	0.2581
2.30	0.4635	0.4580	0.4411	0.4114	0.3665	0.3372	0.3027	0.2170	0.1160	0.0865	0.2589
2.35	0.4678	0.4624	0.4455	0.4159	0.3710	0.3418	0.3073	0.2214	0.1199	0.0887	0.2597
2.40	0.4722	0.4668	0.4500	0.4204	0.3756	0.3464	0.3119	0.2259	0.1238	0.0909	0.2605
2.45	0.4766	0.4712	0.4544	0.4249	0.3802	0.3510	0.3165	0.2304	0.1277	0.0931	0.2613
2.50	0.4811	0.4756	0.4589	0.4295	0.3848	0.3556	0.3212	0.2350	0.1317	0.0954	0.2622
2.55	0.4855	0.4801	0.4634	0.4341	0.3895	0.3603	0.3259	0.2396	0.1358	0.0977	0.2630
2.60	0.4899	0.4845	0.4679	0.4386	0.3941	0.3650	0.3306	0.2442	0.1399	0.1000	0.2639
2.65	0.4944	0.4890	0.4724	0.4433	0.3988	0.3698	0.3354	0.2489	0.1440	0.1023	0.2648
2.70	0.4988	0.4935	0.4770	0.4479	0.4036	0.3745	0.3402	0.2536	0.1482	0.1047	0.2657
2.75	0.5033	0.4980	0.4815	0.4525	0.4083	0.3793	0.3450	0.2584	0.1525	0.1072	0.2666
2.80	0.5078	0.5025	0.4861	0.4571	0.4130	0.3841	0.3498	0.2632	0.1567	0.1096	0.2675
2.85	0.5122	0.5069	0.4906	0.4618	0.4178	0.3889	0.3547	0.2680	0.1610	0.1121	0.2684
2.90	0.5167	0.5114	0.4951	0.4664	0.4225	0.3938	0.3596	0.2728	0.1654	0.1147	0.2694
2.95	0.5211	0.5159	0.4997	0.4710	0.4273	0.3986	0.3644	0.2777	0.1698	0.1172	0.2703
3.00	0.5256	0.5204	0.5042	0.4757	0.4321	0.4034	0.3693	0.2826	0.1742	0.1198	0.2713

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RF WHERE $N=3.85$

PAGE 237

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3453	0.3398	0.3229	0.2933	0.2489	0.2204	0.1872	0.1075	0.0230	0.0332	0.2346
0.05	0.3454	0.3399	0.3230	0.2934	0.2490	0.2204	0.1873	0.1076	0.0231	0.0333	0.2346
0.10	0.3456	0.3401	0.3232	0.2935	0.2492	0.2205	0.1874	0.1077	0.0232	0.0333	0.2346
0.15	0.3459	0.3404	0.3235	0.2939	0.2495	0.2209	0.1878	0.1080	0.0235	0.0335	0.2347
0.20	0.3464	0.3409	0.3240	0.2944	0.2500	0.2214	0.1882	0.1084	0.0238	0.0336	0.2348
0.25	0.3470	0.3415	0.3246	0.2950	0.2506	0.2220	0.1888	0.1089	0.0242	0.0339	0.2349
0.30	0.3478	0.3423	0.3254	0.2957	0.2513	0.2227	0.1895	0.1096	0.0247	0.0341	0.2350
0.35	0.3487	0.3432	0.3263	0.2965	0.2521	0.2235	0.1903	0.1103	0.0253	0.0345	0.2351
0.40	0.3497	0.3442	0.3273	0.2975	0.2531	0.2245	0.1912	0.1112	0.0260	0.0348	0.2353
0.45	0.3508	0.3454	0.3284	0.2987	0.2542	0.2256	0.1923	0.1122	0.0268	0.0353	0.2354
0.50	0.3522	0.3467	0.3297	0.3000	0.2555	0.2268	0.1935	0.1133	0.0277	0.0357	0.2356
0.55	0.3536	0.3481	0.3311	0.3014	0.2568	0.2281	0.1948	0.1145	0.0287	0.0362	0.2358
0.60	0.3552	0.3497	0.3327	0.3029	0.2583	0.2296	0.1962	0.1158	0.0298	0.0368	0.2361
0.65	0.3569	0.3513	0.3343	0.3045	0.2599	0.2312	0.1978	0.1172	0.0309	0.0374	0.2363
0.70	0.3587	0.3531	0.3361	0.3064	0.2617	0.2329	0.1995	0.1188	0.0322	0.0381	0.2366
0.75	0.3606	0.3551	0.3380	0.3083	0.2635	0.2347	0.2012	0.1204	0.0336	0.0388	0.2369
0.80	0.3626	0.3571	0.3401	0.3103	0.2655	0.2367	0.2031	0.1222	0.0350	0.0396	0.2372
0.85	0.3648	0.3593	0.3422	0.3124	0.2676	0.2387	0.2052	0.1240	0.0365	0.0404	0.2375
0.90	0.3671	0.3616	0.3445	0.3146	0.2698	0.2409	0.2073	0.1260	0.0382	0.0413	0.2378
0.95	0.3695	0.3640	0.3469	0.3170	0.2721	0.2432	0.2095	0.1281	0.0399	0.0422	0.2382
1.00	0.3720	0.3665	0.3494	0.3195	0.2746	0.2456	0.2119	0.1303	0.0417	0.0431	0.2386
1.05	0.3746	0.3691	0.3520	0.3221	0.2771	0.2481	0.2144	0.1326	0.0435	0.0441	0.2390
1.10	0.3773	0.3718	0.3547	0.3247	0.2798	0.2507	0.2169	0.1350	0.0455	0.0452	0.2394
1.15	0.3802	0.3746	0.3575	0.3275	0.2825	0.2535	0.2196	0.1375	0.0476	0.0463	0.2398
1.20	0.3831	0.3775	0.3604	0.3304	0.2854	0.2563	0.2224	0.1401	0.0497	0.0474	0.2403
1.25	0.3861	0.3805	0.3634	0.3334	0.2883	0.2592	0.2253	0.1428	0.0520	0.0486	0.2407
1.30	0.3892	0.3836	0.3665	0.3365	0.2914	0.2622	0.2282	0.1455	0.0543	0.0499	0.2412
1.35	0.3924	0.3868	0.3697	0.3397	0.2945	0.2654	0.2313	0.1484	0.0567	0.0512	0.2417
1.40	0.3957	0.3901	0.3730	0.3429	0.2978	0.2688	0.2345	0.1514	0.0592	0.0525	0.2422
1.45	0.3990	0.3935	0.3763	0.3463	0.3011	0.2719	0.2377	0.1545	0.0617	0.0539	0.2428
1.50	0.4025	0.3969	0.3798	0.3497	0.3045	0.2753	0.2411	0.1576	0.0644	0.0553	0.2433
1.55	0.4060	0.4004	0.3833	0.3533	0.3080	0.2788	0.2445	0.1609	0.0671	0.0568	0.2439

TABLES OF CALCULATIONS FOR W-H-WRIGHT ESR

VALUES OF RP WHERE N=3.85

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4036	0.4040	0.3869	0.3568	0.3116	0.2823	0.2481	0.1642	0.0899	0.0583	0.2445
1.65	0.4132	0.4077	0.3905	0.3605	0.3153	0.2860	0.2517	0.1676	0.0728	0.0598	0.2451
1.70	0.4169	0.4114	0.3943	0.3643	0.3190	0.2897	0.2553	0.1711	0.0757	0.0614	0.2457
1.75	0.4207	0.4152	0.3981	0.3681	0.3228	0.2935	0.2591	0.1747	0.0788	0.0631	0.2463
1.80	0.4246	0.4190	0.4019	0.3719	0.3267	0.2973	0.2629	0.1783	0.0818	0.0648	0.2469
1.85	0.4285	0.4229	0.4058	0.3759	0.3306	0.3013	0.2668	0.1821	0.0850	0.0665	0.2476
1.90	0.4324	0.4269	0.4098	0.3799	0.3346	0.3053	0.2708	0.1859	0.0883	0.0683	0.2483
1.95	0.4364	0.4309	0.4138	0.3839	0.3387	0.3093	0.2748	0.1897	0.0916	0.0701	0.2490
2.00	0.4405	0.4349	0.4179	0.3880	0.3428	0.3134	0.2789	0.1937	0.0949	0.0719	0.2497
2.05	0.4446	0.4390	0.4220	0.3922	0.3470	0.3176	0.2831	0.1977	0.0984	0.0738	0.2504
2.10	0.4487	0.4432	0.4262	0.3964	0.3512	0.3219	0.2873	0.2017	0.1019	0.0758	0.2511
2.15	0.4528	0.4473	0.4304	0.4006	0.3555	0.3261	0.2916	0.2059	0.1054	0.0778	0.2519
2.20	0.4570	0.4515	0.4346	0.4049	0.3598	0.3305	0.2959	0.2101	0.1091	0.0798	0.2526
2.25	0.4613	0.4558	0.4389	0.4092	0.3642	0.3349	0.3003	0.2143	0.1127	0.0818	0.2534
2.30	0.4655	0.4600	0.4432	0.4135	0.3686	0.3393	0.3047	0.2186	0.1165	0.0839	0.2542
2.35	0.4698	0.4643	0.4475	0.4179	0.3730	0.3438	0.3092	0.2229	0.1203	0.0860	0.2550
2.40	0.4741	0.4686	0.4519	0.4223	0.3775	0.3483	0.3137	0.2273	0.1241	0.0882	0.2558
2.45	0.4784	0.4730	0.4562	0.4268	0.3820	0.3528	0.3183	0.2318	0.1280	0.0904	0.2566
2.50	0.4827	0.4773	0.4606	0.4312	0.3866	0.3574	0.3229	0.2363	0.1320	0.0927	0.2575
2.55	0.4871	0.4817	0.4651	0.4357	0.3911	0.3620	0.3275	0.2408	0.1360	0.0949	0.2583
2.60	0.4915	0.4861	0.4695	0.4402	0.3957	0.3666	0.3321	0.2454	0.1400	0.0972	0.2592
2.65	0.4958	0.4905	0.4739	0.4447	0.4003	0.3713	0.3368	0.2500	0.1441	0.0996	0.2601
2.70	0.5002	0.4949	0.4784	0.4493	0.4050	0.3759	0.3415	0.2547	0.1483	0.1020	0.2610
2.75	0.5046	0.4993	0.4828	0.4538	0.4096	0.3806	0.3463	0.2593	0.1524	0.1044	0.2619
2.80	0.5090	0.5037	0.4873	0.4584	0.4143	0.3854	0.3510	0.2641	0.1566	0.1068	0.2628
2.85	0.5134	0.5081	0.4917	0.4629	0.4190	0.3901	0.3558	0.2688	0.1609	0.1093	0.2637
2.90	0.5177	0.5125	0.4962	0.4675	0.4236	0.3948	0.3606	0.2736	0.1652	0.1118	0.2647
2.95	0.5221	0.5169	0.5007	0.4721	0.4283	0.3996	0.3654	0.2784	0.1695	0.1143	0.2656
3.00	0.5265	0.5213	0.5051	0.4766	0.4330	0.4043	0.3702	0.2832	0.1739	0.1169	0.2666

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF R^2 WHERE $N=3-90$

PAGE 239

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3503	0.3448	0.3278	0.2982	0.2536	0.2249	0.1916	0.1111	0.0249	0.0312	0.2302
0.05	0.3503	0.3448	0.3279	0.2982	0.2537	0.2250	0.1916	0.1112	0.0249	0.0312	0.2302
0.10	0.3505	0.3450	0.3281	0.2984	0.2539	0.2252	0.1918	0.1113	0.0250	0.0313	0.2302
0.15	0.3509	0.3454	0.3284	0.2987	0.2542	0.2255	0.1921	0.1116	0.0253	0.0314	0.2303
0.20	0.3514	0.3458	0.3289	0.2992	0.2546	0.2259	0.1925	0.1120	0.0256	0.0316	0.2303
0.25	0.3520	0.3464	0.3295	0.2998	0.2552	0.2265	0.1931	0.1125	0.0260	0.0318	0.2304
0.30	0.3527	0.3472	0.3302	0.3005	0.2559	0.2272	0.1938	0.1131	0.0255	0.0320	0.2305
0.35	0.3536	0.3481	0.3311	0.3014	0.2568	0.2280	0.1946	0.1139	0.0271	0.0324	0.2307
0.40	0.3546	0.3491	0.3321	0.3024	0.2577	0.2290	0.1955	0.1147	0.0278	0.0327	0.2308
0.45	0.3557	0.3502	0.3332	0.3035	0.2588	0.2300	0.1966	0.1157	0.0286	0.0332	0.2310
0.50	0.3570	0.3514	0.3345	0.3047	0.2600	0.2312	0.1977	0.1158	0.0295	0.0336	0.2312
0.55	0.3584	0.3528	0.3358	0.3061	0.2614	0.2325	0.1990	0.1180	0.0305	0.0341	0.2314
0.60	0.3599	0.3543	0.3373	0.3076	0.2628	0.2340	0.2004	0.1192	0.0315	0.0347	0.2316
0.65	0.3615	0.3560	0.3390	0.3092	0.2644	0.2355	0.2019	0.1207	0.0327	0.0353	0.2318
0.70	0.3633	0.3577	0.3407	0.3109	0.2661	0.2372	0.2036	0.1222	0.0339	0.0360	0.2321
0.75	0.3651	0.3596	0.3426	0.3127	0.2679	0.2390	0.2053	0.1238	0.0352	0.0367	0.2324
0.80	0.3671	0.3616	0.3446	0.3147	0.2698	0.2409	0.2072	0.1255	0.0367	0.0374	0.2327
0.85	0.3693	0.3637	0.3467	0.3168	0.2719	0.2429	0.2092	0.1273	0.0382	0.0382	0.2330
0.90	0.3715	0.3659	0.3489	0.3190	0.2740	0.2450	0.2112	0.1293	0.0398	0.0391	0.2333
0.95	0.3738	0.3683	0.3512	0.3213	0.2763	0.2473	0.2134	0.1313	0.0415	0.0400	0.2337
1.00	0.3762	0.3707	0.3536	0.3237	0.2787	0.2496	0.2157	0.1335	0.0432	0.0409	0.2341
1.05	0.3788	0.3732	0.3562	0.3262	0.2812	0.2521	0.2182	0.1357	0.0451	0.0419	0.2345
1.10	0.3814	0.3759	0.3588	0.3288	0.2838	0.2546	0.2207	0.1381	0.0470	0.0430	0.2349
1.15	0.3842	0.3786	0.3615	0.3316	0.2864	0.2573	0.2233	0.1405	0.0491	0.0441	0.2353
1.20	0.3870	0.3815	0.3644	0.3344	0.2892	0.2601	0.2260	0.1431	0.0512	0.0452	0.2358
1.25	0.3900	0.3844	0.3673	0.3373	0.2921	0.2629	0.2288	0.1457	0.0534	0.0464	0.2362
1.30	0.3930	0.3874	0.3703	0.3403	0.2951	0.2659	0.2318	0.1485	0.0557	0.0476	0.2367
1.35	0.3961	0.3905	0.3734	0.3434	0.2982	0.2689	0.2348	0.1513	0.0580	0.0489	0.2372
1.40	0.3993	0.3937	0.3766	0.3466	0.3014	0.2721	0.2379	0.1542	0.0605	0.0502	0.2377
1.45	0.4026	0.3970	0.3799	0.3499	0.3046	0.2753	0.2411	0.1572	0.0630	0.0516	0.2382
1.50	0.4059	0.4004	0.3833	0.3532	0.3080	0.2786	0.2443	0.1603	0.0656	0.0530	0.2388
1.55	0.4094	0.4038	0.3867	0.3567	0.3114	0.2821	0.2477	0.1635	0.0683	0.0545	0.2393

TABLES OF CALCULATIONS FOR W-H WRIGHT ESQ.

VALUES OF RP WHERE N=3-90

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4129	0.4073	0.3902	0.3602	0.3149	0.2855	0.2512	0.1668	0.0711	0.0560	0.2399
1.65	0.4164	0.4109	0.3938	0.3638	0.3185	0.2891	0.2547	0.1701	0.0739	0.0575	0.2405
1.70	0.4201	0.4145	0.3974	0.3674	0.3221	0.2927	0.2583	0.1736	0.0768	0.0591	0.2411
1.75	0.4238	0.4182	0.4011	0.3711	0.3258	0.2965	0.2620	0.1771	0.0798	0.0607	0.2417
1.80	0.4275	0.4220	0.4049	0.3749	0.3296	0.3002	0.2657	0.1807	0.0828	0.0624	0.2424
1.85	0.4313	0.4258	0.4087	0.3788	0.3335	0.3041	0.2695	0.1843	0.0860	0.0641	0.2430
1.90	0.4352	0.4297	0.4126	0.3827	0.3374	0.3080	0.2735	0.1881	0.0892	0.0659	0.2437
1.95	0.4391	0.4336	0.4166	0.3866	0.3414	0.3120	0.2774	0.1919	0.0924	0.0677	0.2444
2.00	0.4431	0.4375	0.4205	0.3907	0.3454	0.3160	0.2815	0.1957	0.0958	0.0695	0.2451
2.05	0.4471	0.4415	0.4246	0.3947	0.3495	0.3201	0.2855	0.1997	0.0991	0.0714	0.2458
2.10	0.4511	0.4456	0.4286	0.3988	0.3537	0.3243	0.2897	0.2037	0.1026	0.0733	0.2465
2.15	0.4552	0.4497	0.4328	0.4030	0.3579	0.3285	0.2939	0.2077	0.1061	0.0753	0.2473
2.20	0.4593	0.4538	0.4369	0.4072	0.3621	0.3327	0.2981	0.2118	0.1097	0.0773	0.2480
2.25	0.4634	0.4579	0.4411	0.4114	0.3664	0.3370	0.3024	0.2150	0.1133	0.0793	0.2488
2.30	0.4676	0.4621	0.4453	0.4157	0.3707	0.3414	0.3068	0.2202	0.1170	0.0814	0.2496
2.35	0.4718	0.4663	0.4495	0.4200	0.3751	0.3458	0.3112	0.2245	0.1207	0.0835	0.2504
2.40	0.4760	0.4706	0.4538	0.4243	0.3795	0.3502	0.3156	0.2289	0.1245	0.0856	0.2512
2.45	0.4802	0.4748	0.4581	0.4287	0.3839	0.3546	0.3201	0.2332	0.1284	0.0878	0.2520
2.50	0.4845	0.4791	0.4624	0.4330	0.3884	0.3591	0.3246	0.2377	0.1323	0.0901	0.2528
2.55	0.4887	0.4833	0.4667	0.4374	0.3928	0.3637	0.3291	0.2421	0.1362	0.0923	0.2537
2.60	0.4930	0.4876	0.4711	0.4418	0.3974	0.3682	0.3337	0.2466	0.1402	0.0946	0.2545
2.65	0.4973	0.4919	0.4754	0.4463	0.4019	0.3728	0.3383	0.2512	0.1443	0.0969	0.2554
2.70	0.5016	0.4963	0.4798	0.4507	0.4064	0.3774	0.3429	0.2557	0.1483	0.0993	0.2563
2.75	0.5059	0.5006	0.4842	0.4552	0.4110	0.3820	0.3476	0.2603	0.1525	0.1017	0.2572
2.80	0.5102	0.5049	0.4886	0.4597	0.4156	0.3866	0.3522	0.2650	0.1566	0.1041	0.2581
2.85	0.5145	0.5092	0.4929	0.4641	0.4202	0.3913	0.3569	0.2697	0.1608	0.1066	0.2591
2.90	0.5188	0.5136	0.4973	0.4686	0.4248	0.3959	0.3617	0.2744	0.1651	0.1091	0.2600
2.95	0.5231	0.5179	0.5017	0.4731	0.4294	0.4006	0.3664	0.2791	0.1693	0.1116	0.2609
3.00	0.5274	0.5222	0.5061	0.4776	0.4340	0.4053	0.3711	0.2838	0.1736	0.1141	0.2619

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=3-95

THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3552	0.3497	0.3327	0.3030	0.2583	0.2295	0.1959	0.1147	0.0267	0.0292	0.2258
0.05	0.3552	0.3497	0.3328	0.3030	0.2583	0.2295	0.1960	0.1148	0.0268	0.0292	0.2258
0.10	0.3554	0.3499	0.3329	0.3032	0.2585	0.2297	0.1961	0.1149	0.0269	0.0293	0.2258
0.15	0.3558	0.3502	0.3333	0.3035	0.2588	0.2300	0.1964	0.1152	0.0271	0.0294	0.2259
0.20	0.3562	0.3507	0.3337	0.3040	0.2593	0.2305	0.1969	0.1156	0.0275	0.0296	0.2260
0.25	0.3568	0.3513	0.3343	0.3046	0.2598	0.2310	0.1974	0.1161	0.0279	0.0298	0.2260
0.30	0.3575	0.3520	0.3350	0.3053	0.2605	0.2317	0.1981	0.1167	0.0284	0.0300	0.2262
0.35	0.3584	0.3529	0.3359	0.3061	0.2614	0.2325	0.1989	0.1174	0.0290	0.0304	0.2263
0.40	0.3594	0.3538	0.3368	0.3071	0.2623	0.2334	0.1998	0.1183	0.0297	0.0307	0.2264
0.45	0.3605	0.3549	0.3379	0.3081	0.2634	0.2345	0.2008	0.1192	0.0304	0.0311	0.2266
0.50	0.3617	0.3562	0.3391	0.3093	0.2645	0.2356	0.2019	0.1203	0.0313	0.0316	0.2268
0.55	0.3630	0.3575	0.3405	0.3107	0.2658	0.2369	0.2032	0.1214	0.0323	0.0321	0.2270
0.60	0.3645	0.3590	0.3420	0.3121	0.2673	0.2383	0.2046	0.1227	0.0333	0.0327	0.2272
0.65	0.3661	0.3606	0.3435	0.3137	0.2688	0.2398	0.2060	0.1241	0.0344	0.0333	0.2274
0.70	0.3678	0.3623	0.3452	0.3154	0.2705	0.2415	0.2076	0.1256	0.0357	0.0339	0.2277
0.75	0.3696	0.3641	0.3471	0.3172	0.2722	0.2432	0.2094	0.1272	0.0370	0.0346	0.2280
0.80	0.3716	0.3660	0.3490	0.3191	0.2741	0.2451	0.2112	0.1289	0.0384	0.0354	0.2283
0.85	0.3736	0.3681	0.3510	0.3211	0.2761	0.2470	0.2131	0.1307	0.0399	0.0362	0.2286
0.90	0.3758	0.3703	0.3532	0.3233	0.2782	0.2491	0.2152	0.1326	0.0414	0.0370	0.2289
0.95	0.3781	0.3725	0.3554	0.3255	0.2804	0.2513	0.2173	0.1346	0.0431	0.0379	0.2293
1.00	0.3805	0.3749	0.3578	0.3279	0.2828	0.2536	0.2196	0.1367	0.0448	0.0389	0.2297
1.05	0.3829	0.3774	0.3603	0.3303	0.2852	0.2560	0.2219	0.1389	0.0467	0.0398	0.2300
1.10	0.3855	0.3800	0.3629	0.3329	0.2877	0.2585	0.2244	0.1412	0.0486	0.0409	0.2305
1.15	0.3882	0.3826	0.3655	0.3355	0.2904	0.2611	0.2270	0.1436	0.0506	0.0420	0.2309
1.20	0.3910	0.3854	0.3683	0.3383	0.2931	0.2638	0.2296	0.1461	0.0527	0.0431	0.2313
1.25	0.3938	0.3883	0.3712	0.3411	0.2959	0.2666	0.2324	0.1487	0.0549	0.0443	0.2318
1.30	0.3968	0.3912	0.3741	0.3441	0.2988	0.2695	0.2353	0.1514	0.0571	0.0455	0.2322
1.35	0.3998	0.3943	0.3771	0.3471	0.3018	0.2725	0.2382	0.1542	0.0594	0.0467	0.2327
1.40	0.4029	0.3974	0.3803	0.3502	0.3049	0.2755	0.2413	0.1570	0.0619	0.0480	0.2332
1.45	0.4061	0.4006	0.3835	0.3534	0.3081	0.2788	0.2444	0.1600	0.0644	0.0494	0.2338
1.50	0.4094	0.4038	0.3867	0.3567	0.3114	0.2820	0.2476	0.1630	0.0669	0.0508	0.2343
1.55	0.4127	0.4072	0.3901	0.3601	0.3147	0.2853	0.2509	0.1662	0.0695	0.0522	0.2349

TABLES OF CALCULATIONS FOR H·H WRIGHT ESQ.

VALUES OF RP WHERE N=3.95

THETA K	0	10	20	30	40	45	50	55	60	70	80	85
1.60	0.4162	0.4106	0.3935	0.3635	0.3182	0.2888	0.2543	0.1694	0.0723	0.0537	0.2354	
1.65	0.4197	0.4141	0.3970	0.3670	0.3217	0.2923	0.2577	0.1727	0.0751	0.0563	0.2360	
1.70	0.4232	0.4177	0.4006	0.3706	0.3253	0.2958	0.2613	0.1761	0.0780	0.0568	0.2366	
1.75	0.4268	0.4213	0.4042	0.3742	0.3289	0.2993	0.2649	0.1795	0.0809	0.0585	0.2372	
1.80	0.4303	0.4249	0.4079	0.3779	0.3326	0.3032	0.2686	0.1830	0.0839	0.0601	0.2379	
1.85	0.4342	0.4287	0.4116	0.3817	0.3364	0.3069	0.2723	0.1866	0.0870	0.0618	0.2385	
1.90	0.4380	0.4324	0.4154	0.3855	0.3402	0.3108	0.2761	0.1903	0.0901	0.0636	0.2392	
1.95	0.4418	0.4363	0.4193	0.3894	0.3441	0.3147	0.2800	0.1940	0.0933	0.0653	0.2399	
2.00	0.4457	0.4402	0.4232	0.3933	0.3481	0.3186	0.2840	0.1978	0.0966	0.0672	0.2406	
2.05	0.4496	0.4441	0.4271	0.3973	0.3521	0.3227	0.2880	0.2017	0.1000	0.0690	0.2413	
2.10	0.4535	0.4480	0.4311	0.4013	0.3562	0.3267	0.2921	0.2056	0.1034	0.0709	0.2420	
2.15	0.4575	0.4520	0.4351	0.4054	0.3603	0.3309	0.2962	0.2096	0.1058	0.0729	0.2427	
2.20	0.4615	0.4561	0.4392	0.4095	0.3644	0.3350	0.3003	0.2137	0.1104	0.0749	0.2435	
2.25	0.4656	0.4601	0.4433	0.4136	0.3686	0.3392	0.3046	0.2178	0.1139	0.0769	0.2442	
2.30	0.4697	0.4642	0.4474	0.4178	0.3729	0.3435	0.3088	0.2219	0.1176	0.0789	0.2450	
2.35	0.4738	0.4683	0.4516	0.4220	0.3772	0.3478	0.3131	0.2261	0.1213	0.0810	0.2458	
2.40	0.4779	0.4725	0.4558	0.4263	0.3815	0.3522	0.3175	0.2304	0.1250	0.0832	0.2466	
2.45	0.4821	0.4766	0.4600	0.4306	0.3858	0.3565	0.3219	0.2347	0.1288	0.0853	0.2474	
2.50	0.4862	0.4808	0.4642	0.4348	0.3902	0.3609	0.3263	0.2391	0.1327	0.0875	0.2483	
2.55	0.4904	0.4850	0.4684	0.4392	0.3946	0.3654	0.3308	0.2435	0.1366	0.0898	0.2491	
2.60	0.4946	0.4892	0.4727	0.4435	0.3990	0.3698	0.3353	0.2479	0.1405	0.0921	0.2500	
2.65	0.4988	0.4935	0.4770	0.4479	0.4035	0.3743	0.3398	0.2524	0.1445	0.0944	0.2509	
2.70	0.5030	0.4977	0.4813	0.4522	0.4079	0.3789	0.3443	0.2569	0.1485	0.0967	0.2517	
2.75	0.5073	0.5019	0.4856	0.4566	0.4124	0.3834	0.3489	0.2614	0.1526	0.0991	0.2526	
2.80	0.5115	0.5062	0.4899	0.4610	0.4169	0.3880	0.3535	0.2660	0.1567	0.1015	0.2535	
2.85	0.5157	0.5104	0.4942	0.4654	0.4214	0.3925	0.3581	0.2706	0.1608	0.1039	0.2545	
2.90	0.5199	0.5147	0.4985	0.4698	0.4260	0.3971	0.3628	0.2752	0.1650	0.1064	0.2554	
2.95	0.5242	0.5189	0.5028	0.4742	0.4305	0.4017	0.3674	0.2799	0.1692	0.1089	0.2564	
3.00	0.5284	0.5232	0.5071	0.4786	0.4351	0.4063	0.3721	0.2845	0.1735	0.1114	0.2573	

TABLES OF CALCULATIONS FOR W. H. WRIGHT EQ.

VALUES OF RP WHERE N=4.00

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THETA K	0	10	20	30	40	45	50	60	70	80	85
0.00	0.3600	0.3545	0.3375	0.3077	0.2629	0.2340	0.2002	0.1183	0.0286	0.0272	0.2215
0.05	0.3601	0.3545	0.3376	0.3078	0.2630	0.2340	0.2003	0.1184	0.0287	0.0273	0.2215
0.10	0.3603	0.3547	0.3377	0.3080	0.2631	0.2342	0.2005	0.1185	0.0288	0.0273	0.2215
0.15	0.3606	0.3551	0.3381	0.3083	0.2634	0.2345	0.2007	0.1188	0.0291	0.0275	0.2216
0.20	0.3610	0.3555	0.3385	0.3087	0.2639	0.2349	0.2012	0.1192	0.0294	0.0276	0.2216
0.25	0.3616	0.3561	0.3391	0.3093	0.2644	0.2355	0.2017	0.1197	0.0298	0.0278	0.2217
0.30	0.3623	0.3568	0.3398	0.3100	0.2651	0.2361	0.2023	0.1203	0.0303	0.0281	0.2218
0.35	0.3631	0.3576	0.3406	0.3108	0.2659	0.2369	0.2031	0.1210	0.0309	0.0284	0.2220
0.40	0.3641	0.3585	0.3415	0.3117	0.2668	0.2378	0.2040	0.1218	0.0315	0.0288	0.2221
0.45	0.3651	0.3596	0.3426	0.3128	0.2679	0.2388	0.2050	0.1227	0.0323	0.0292	0.2223
0.50	0.3663	0.3608	0.3438	0.3139	0.2690	0.2400	0.2061	0.1238	0.0331	0.0297	0.2225
0.55	0.3677	0.3621	0.3451	0.3152	0.2703	0.2412	0.2073	0.1249	0.0341	0.0302	0.2227
0.60	0.3691	0.3636	0.3465	0.3166	0.2717	0.2426	0.2087	0.1262	0.0351	0.0307	0.2229
0.65	0.3706	0.3651	0.3481	0.3182	0.2732	0.2441	0.2102	0.1275	0.0362	0.0313	0.2231
0.70	0.3723	0.3668	0.3497	0.3198	0.2748	0.2457	0.2117	0.1290	0.0374	0.0320	0.2234
0.75	0.3741	0.3685	0.3515	0.3216	0.2765	0.2474	0.2134	0.1305	0.0387	0.0327	0.2236
0.80	0.3760	0.3704	0.3534	0.3234	0.2784	0.2492	0.2152	0.1322	0.0401	0.0334	0.2239
0.85	0.3780	0.3724	0.3554	0.3254	0.2803	0.2512	0.2171	0.1340	0.0416	0.0342	0.2243
0.90	0.3801	0.3745	0.3575	0.3275	0.2824	0.2532	0.2191	0.1359	0.0431	0.0350	0.2246
0.95	0.3823	0.3768	0.3597	0.3297	0.2845	0.2553	0.2212	0.1378	0.0448	0.0359	0.2249
1.00	0.3846	0.3791	0.3620	0.3320	0.2868	0.2576	0.2234	0.1399	0.0465	0.0368	0.2253
1.05	0.3870	0.3815	0.3644	0.3344	0.2892	0.2599	0.2257	0.1421	0.0483	0.0378	0.2257
1.10	0.3895	0.3840	0.3669	0.3369	0.2917	0.2624	0.2281	0.1443	0.0502	0.0389	0.2261
1.15	0.3922	0.3866	0.3695	0.3395	0.2942	0.2649	0.2307	0.1467	0.0522	0.0399	0.2265
1.20	0.3949	0.3893	0.3722	0.3422	0.2969	0.2676	0.2333	0.1491	0.0542	0.0410	0.2269
1.25	0.3976	0.3921	0.3750	0.3450	0.2997	0.2703	0.2350	0.1517	0.0564	0.0422	0.2274
1.30	0.4005	0.3950	0.3779	0.3478	0.3025	0.2732	0.2388	0.1543	0.0586	0.0434	0.2279
1.35	0.4035	0.3979	0.3808	0.3508	0.3055	0.2761	0.2417	0.1571	0.0609	0.0447	0.2284
1.40	0.4065	0.4010	0.3839	0.3538	0.3085	0.2791	0.2446	0.1599	0.0633	0.0460	0.2289
1.45	0.4096	0.4041	0.3870	0.3570	0.3116	0.2822	0.2477	0.1628	0.0657	0.0473	0.2294
1.50	0.4128	0.4073	0.3902	0.3602	0.3148	0.2854	0.2509	0.1658	0.0683	0.0487	0.2299
1.55	0.4161	0.4106	0.3935	0.3635	0.3181	0.2886	0.2541	0.1689	0.0709	0.0501	0.2305

TABLES OF CALCULATIONS FOR W.H. WRIGHT ESQ.

VALUES OF RP WHERE N=4.00

THETA K	0	10	20	30	40	45	50	60	70	80	85
1.60	0.4194	0.4139	0.3968	0.3668	0.3215	0.2920	0.2574	0.1720	0.0736	0.0516	0.2310
1.65	0.4229	0.4173	0.4002	0.3702	0.3249	0.2954	0.2608	0.1752	0.0763	0.0531	0.2316
1.70	0.4263	0.4208	0.4037	0.3737	0.3284	0.2989	0.2643	0.1786	0.0791	0.0547	0.2322
1.75	0.4298	0.4243	0.4073	0.3773	0.3320	0.3025	0.2678	0.1820	0.0820	0.0563	0.2328
1.80	0.4334	0.4279	0.4109	0.3809	0.3356	0.3061	0.2714	0.1854	0.0850	0.0579	0.2335
1.85	0.4371	0.4315	0.4145	0.3846	0.3393	0.3098	0.2751	0.1890	0.0881	0.0596	0.2341
1.90	0.4408	0.4352	0.4182	0.3883	0.3431	0.3136	0.2788	0.1926	0.0912	0.0613	0.2348
1.95	0.4445	0.4390	0.4220	0.3921	0.3469	0.3174	0.2827	0.1962	0.0943	0.0631	0.2354
2.00	0.4483	0.4428	0.4258	0.3960	0.3508	0.3213	0.2865	0.2000	0.0976	0.0649	0.2361
2.05	0.4521	0.4466	0.4297	0.3999	0.3547	0.3252	0.2905	0.2038	0.1009	0.0668	0.2368
2.10	0.4560	0.4505	0.4336	0.4038	0.3587	0.3292	0.2944	0.2076	0.1042	0.0687	0.2375
2.15	0.4599	0.4544	0.4375	0.4078	0.3627	0.3332	0.2985	0.2116	0.1076	0.0706	0.2383
2.20	0.4638	0.4583	0.4415	0.4118	0.3668	0.3373	0.3026	0.2155	0.1111	0.0725	0.2390
2.25	0.4678	0.4623	0.4455	0.4159	0.3709	0.3415	0.3067	0.2196	0.1146	0.0746	0.2398
2.30	0.4718	0.4663	0.4496	0.4200	0.3751	0.3457	0.3109	0.2237	0.1182	0.0766	0.2406
2.35	0.4758	0.4704	0.4536	0.4241	0.3792	0.3499	0.3151	0.2278	0.1219	0.0787	0.2413
2.40	0.4798	0.4744	0.4577	0.4283	0.3835	0.3541	0.3194	0.2320	0.1256	0.0808	0.2421
2.45	0.4839	0.4785	0.4619	0.4325	0.3877	0.3584	0.3237	0.2362	0.1293	0.0829	0.2430
2.50	0.4880	0.4826	0.4660	0.4367	0.3920	0.3628	0.3281	0.2405	0.1331	0.0851	0.2438
2.55	0.4921	0.4867	0.4702	0.4409	0.3964	0.3671	0.3325	0.2448	0.1370	0.0874	0.2446
2.60	0.4962	0.4909	0.4743	0.4452	0.4007	0.3715	0.3369	0.2492	0.1408	0.0896	0.2455
2.65	0.5004	0.4950	0.4785	0.4495	0.4051	0.3759	0.3413	0.2536	0.1448	0.0919	0.2464
2.70	0.5045	0.4992	0.4828	0.4538	0.4095	0.3804	0.3458	0.2580	0.1488	0.0942	0.2472
2.75	0.5086	0.5033	0.4870	0.4581	0.4139	0.3848	0.3503	0.2625	0.1528	0.0966	0.2481
2.80	0.5128	0.5075	0.4912	0.4624	0.4183	0.3893	0.3548	0.2670	0.1568	0.0990	0.2490
2.85	0.5169	0.5117	0.4954	0.4667	0.4228	0.3938	0.3594	0.2715	0.1609	0.1014	0.2500
2.90	0.5211	0.5159	0.4997	0.4710	0.4272	0.3983	0.3640	0.2761	0.1650	0.1038	0.2509
2.95	0.5253	0.5200	0.5039	0.4754	0.4317	0.4029	0.3685	0.2807	0.1692	0.1063	0.2518
3.00	0.5294	0.5242	0.5081	0.4797	0.4361	0.4074	0.3731	0.2853	0.1734	0.1088	0.2528