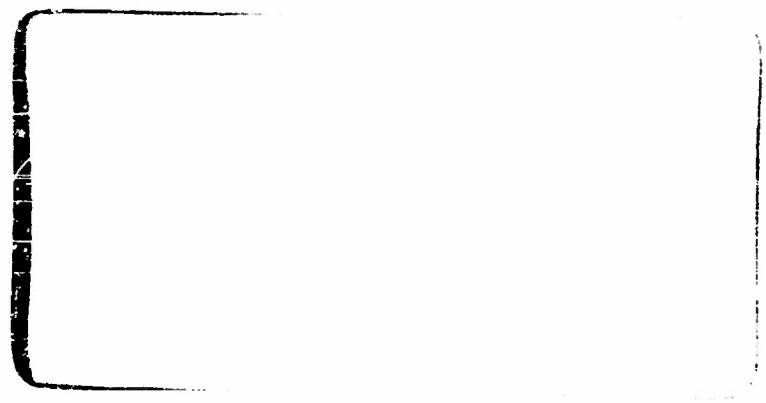


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TABLES RELATING TO RAYLEIGH SCATTERING
OF LIGHT IN THE ATMOSPHERE
(Numerical Solution of
Chandrasekhar's Equations)

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This report, published by the department named,
is the approved version of 5018/MS-26. It consists of
cover, 62 leaves, and abstract cards. From the original
printing of 100 copies this document is

Copy No. 76

China Lake, California

2 October 1953

U N C L A S S I F I E D

ACKNOWLEDGMENT

The authors wish to express their sincere thanks to Dr. Gertrude Blanch of the National Bureau of Standards, Institute of Numerical Analysis, Los Angeles, California, for writing the section on Numerical Analysis and for supervising the preparation of the tables given in this report. The computations were carried out on I.B.M. equipment by Helen Meek with guidance from Patricia Bremer. Lilian Forthal assisted with some computations performed on a desk calculator. K. L. Coulson of the University of California at Los Angeles assisted in spot checking the tabular values. Grateful acknowledgment is made to them for their cooperation.

FOREWORD

The tables given in this report were prepared by the National Bureau of Standards, Institute of Numerical Analysis, Los Angeles, California, as authorized under L.P. 701.

This report is an extension, on the infrared side, of the "Tables Relating to Rayleigh Scattering of Light in the Atmosphere," University of California at Los Angeles, Department of Meteorology, Scientific Report Number 3, Contract Number AF 19(122)-239. These tables present numerical solutions of the equations first derived by S. Chandrasekhar, Professor of Theoretical Astrophysics, University of Chicago, in his outstanding book "Radiative Transfer" Oxford at the Clarendon Press, 1950.

This report was reviewed for technical accuracy by Dr. F. E. Roach and Dr. Gertrude Blanch.

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ABSTRACT

The theory of molecular scattering of light in a plane-parallel atmosphere, presented in the simplest form by Lord Rayleigh, was recently extended in an ingenious way by Chandrasekhar to cover the process of multiple scattering and the effect of the reflection from the ground.

The computation of the intensity and polarization of the sky radiation by this theory requires the solution of four pairs of non-linear integral equations, obtained in the general case by successive iteration. For small values of the optical thickness τ ($\tau \leq 0.10$), the second approximation is an adequate approximation. The following tables present the result of computation based on the second approximation only. They contain the intensities in the direction perpendicular and parallel to the vertical plane through the zenith and the sun (sun's vertical) for different zenith distances along this plane and for different zenith distances of the sun.

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INTRODUCTION

All problems dealing with any type of radiation transfer through the atmosphere can be reduced to the problem of light scattering. During the interaction of the radiation with matter some part of the absorbed energy may reappear as radiation of the same wave length radiated from the matter in directions other than the incident radiation. This scattered radiation has different characteristics according to the physical properties of the matter. To evaluate quantitatively the character of the scattered radiation is, in general, a difficult task. In the special case when the scattering material is dielectrical, the dimensions of the scattering particles are small compared with the wave length of the radiation, and the radiation is not absorbed by the particles, the scattered radiation is described by a well-known law discovered by Lord Rayleigh. This type of scattering is usually named "Rayleigh" or "molecular" scattering. It is only for this case that an exact solution of the radiation transfer in a plane parallel atmosphere has been obtained.

In most problems the atmosphere can be considered to be plane-parallel illuminated by a parallel beam of unpolarized light, of the net flux (the rate of flow of radiant energy per unit frequency interval and per unit area normal to the incident direction) equal to πF_0 . The net flux of the sun radiation is reduced during its passage through the atmosphere. At a level z above the ground the reduced flux is given by the equation

$$(1) \quad \pi F = \pi F_0 \exp(-\tau/\mu_0)$$

where πF_0 represents the flux at the upper limit of the atmosphere (extraterrestrial value), $\mu_0 = \cos \theta_0$, θ_0 being the zenith distance of the sun. The parameter τ , called optical thickness, depends upon the number of scattering centers (molecules), and their refractive indices as discussed in detail elsewhere (Ref. 1). Since τ increases with the distance from the upper limit of the atmosphere, it can be used instead of the vertical coordinate z . Furthermore, it depends upon the inverse fourth power of the wave length and thus determines for each level of the atmosphere the wave length of the monochromatic light, for which the result is valid.

The scattered radiation has, however, a completely different character. It is not a parallel radiation, since each scattering center becomes a source of a spherical wave around the center. Each point within the atmosphere is illuminated by scattered radiation from all directions, and its illumination can be measured by the rate of flow of the radiant energy through a cone, with its apex at the point and with the axis in any particular direction. The rate of flow is then proportional to the solid angle which the cone intercepts. The proportionality factor in this relationship, called the specific intensity or simply the intensity, is the quantity which must be determined for the specific problems that arise. The scattered radiation is in general polarized, i.e., the intensity has different values, in different directions, in a plane normal to the direction of observation. For a complete quantitative description of the scattered radiation, it is thus necessary to introduce, besides the intensity I , other parameters, defining the state of polarization of the radiation. This can be done most conveniently by defining the state of polarization by a set of three additional Stokes parameters, Q , U , V , the meaning of which is discussed in detail by Chandrasekhar (Ref. 2).

Computation of the intensity and of the polarization of the sky radiation is not a simple problem. It was made first by Lord Rayleigh, under a simplifying assumption of primary scattering only, when the scattering process of the light already scattered was neglected. The extension of his theory for the more realistic case of multiple scattering, when no restriction is applied to the scattering of the light scattered once or several times before, is connected with difficulties, considered unsurmountable not a long time ago. In 1947 Chandrasekhar succeeded in reducing the exact solution of the problem to the solution of four pairs of non-linear integral equations, allowing a solution by iteration. The computation of the intensity and the polarization parameters according to the method described in detail by Chandrasekhar (Ref. 2) was performed for three values of the optical thickness ($\tau = 0.15, 0.25$ and 1.00). These results were published in Ref. 3. The following tables represent the continuation of the computation for smaller values of the optical thickness, corresponding to the red and infrared part of the spectrum for normal conditions at the sea level.

For small τ , as predicted by the theory, the computation can be simplified because of the fact that the effect of multiple scattering is decreasing and the second approximation, corresponding to the secondary scattering, is so close to the exact value, that further iteration is not necessary for all practical purposes. The first iteration of the above-mentioned integral equations leads to analytical expressions for the fundamental functions $X^{(1)}$ and $Y^{(1)}$ ($i = 1, 2, 3, 4$), given in Ref. 2 and discussed in the following

section. The values of these functions for $\nu = 0.10, 0.05, 0.02,$ and 0.01 are tabulated in Table 1 as functions of μ , corresponding to different zenith distances. In further computations their moments of two different kinds are needed; these are tabulated in Table 2.

The intensity and the polarization of the sky radiation is in general different in different directions, thus varying with the zenith distance and with the azimuth of the direction of observation. In the computation the terms dependent on the azimuth and the terms independent of the azimuth are separated. The terms dependent on the azimuth include the first two pairs of the X and Y functions, $(X^{(1)} \text{ and } Y^{(1)})$ for $i = 1, 2$. The azimuth-independent terms contain the remaining two pairs ($i = 3, 4$) of X and Y functions in a more complicated relationship, conveniently expressed in terms of eight functions: $\psi, \phi, \xi, \eta, \zeta, \delta, \chi, \sigma$. These functions are linear combinations of the $X^{(i)}$ and $Y^{(i)}$ ($i = 3, 4$). The constants in these combinations are functions of the moments tabulated in Table 2. The values of the eight functions mentioned above are given in Table 3, the constants used for their computation in Table 4.

The polarization of sky radiation is relatively simple in all directions along the sun vertical, the vertical plane through the zenith and toward the sun. The simplification is caused by the fact that along this plane $U = 0$, the plane of polarization is either parallel or perpendicular to the sun vertical. In such a case the state of polarization is completely defined by two intensities I_{\parallel} and I_{\perp} , in the direction parallel and perpendicular to the sun vertical. These intensities are related to the mentioned total intensity I and the parameter Q by the formulae

$$(2) \quad I = I_{\parallel} + I_{\perp}, \quad Q = I_{\parallel} - I_{\perp}.$$

From the general form of the expressions for I_{\parallel} and I_{\perp} (3, 4) it is evident that the intensity I_{\perp} has the same value on the solar side of the sun vertical, where $\phi = \phi_0$, and on the antisolar side, where $\phi = \phi_0 + \pi$, whereas the intensity I has different value on the solar and antisolar sides, denoted by I_{\parallel} and $I_{\parallel a}$ respectively. The values of the intensities $I_{\parallel}, I_{\parallel a}, I_{\perp}$ along the sun vertical for $F_0 = 1$ are tabulated in Table 5, for different sun elevation, and for several optical thicknesses.

Chandrasekhar extended Rayleigh's original theory also in another direction. The effect of the reflection from the ground

was incorporated for the case of the reflection according to the Lambert's law. It is assumed that the reflected radiation is independent of the direction, unpolarized, and the total flux upward is a fraction (albedo $\lambda < 1$) of the flux received from above. The effect of the ground reflection can be expressed by the corrections to the intensities I_ℓ and I_r , denoted accordingly by I_ℓ^* and I_r^* . These corrections can be computed by means of two functions γ_ℓ^* , γ_r^* tabulated in Table 3 and of a constant \bar{s} , given in Table 4. The correction for the intensity I_ℓ is the same on both sides of the sun vertical, thus the subscript a is omitted. The values of these corrections are incorporated in Table 5 for $\lambda = .25, .50, .80$.

As explained in the following section, for very small values of τ some of the terms become so small that the computational scheme, used for the moderate values of τ does not lead to a result with a satisfactory accuracy. In this case the effect of the secondary scattering is so small that the primary scattering is quite predominant. The computational scheme above can then be replaced by the formulae given below, easily derived from the equation of the radiative transfer (p. 44 in Ref. 2):

$$I_\ell(\mu, \varphi) = E(\tau, \mu, \mu_0) \left\{ 2(1-\mu^2)(1-\mu_0^2) + \mu^2(1+\mu_0^2) + 4\mu\mu_0(1-\tau^2)^{\frac{1}{2}}(1-\mu_0^2)^{\frac{1}{2}} \cos(\varphi_0 - \varphi) - \mu^2(1-\mu_0^2) \cos 2(\varphi_0 - \varphi) \right\},$$

(3)

$$I_r(\mu, \varphi) = E(\tau, \mu, \mu_0) \left\{ 1 + \mu_0^2 + (1-\mu_0^2) \cos 2(\varphi_0 - \varphi) \right\},$$

$$U(\mu, \varphi) = 2E(\tau, \mu, \mu_0) \left\{ 2\mu_0(1-\mu^2)^{\frac{1}{2}}(1-\mu_0^2)^{\frac{1}{2}} \sin(\varphi_0 - \varphi) - \mu(1-\mu_0^2) \sin 2(\varphi_0 - \varphi) \right\},$$

with

$$E(\tau, \mu, \mu_0) = \frac{3\mu_0 F_0}{32(\mu_0 - \mu)} \left[e^{-\tau/\mu_0} - e^{-\tau/\mu} \right].$$

($\varphi_0 - \varphi$ being the azimuth difference of the vertical planes from the sun's vertical.) For the sun's vertical these expressions reduce to the following:

$$(4) \quad \left. \begin{array}{l} I_{\ell} \\ I_{\ell a} \end{array} \right\} = 2E(\tau, \mu, \mu_0) \left[\mu - \mu_0 \pm (1-\mu^2)^{\frac{1}{2}}(1-\mu_0^2)^{\frac{1}{2}} \right]^2$$

$$I_r = 2E(\tau, \mu, \mu_0) .$$

With the values of I_{ℓ} , $I_{\ell a}$ and I_r in Table 5, the corresponding values for any other direction in a vertical plane of the azimuth φ can be readily computed, as proved elsewhere (Ref. 3):

$$(5) \quad \begin{aligned} I_{\ell}(\mu, \varphi) &= I_{\ell} \cos^2 \frac{1}{2}(\varphi_0 - \varphi) + I_{\ell a} \sin^2 \frac{1}{2}(\varphi_0 - \varphi) + \mu^2 Z \sin^2(\varphi_0 - \varphi) , \\ I_r(\mu, \varphi) &= I_r - Z \sin^2(\varphi_0 - \varphi) , \end{aligned}$$

$$U(\mu, \varphi) = \frac{1}{2} \mu^{-1} (I_{\ell} - I_{\ell a}) \sin(\varphi_0 - \varphi) - \mu Z \sin 2(\varphi_0 - \varphi) ,$$

with

$$Z = \frac{3\mu_0(1-\mu_0^2)}{16(\mu-\mu_0)} \left\{ X^{(2)}(\mu_0) Y^{(2)}(\mu) - Y^{(2)}(\mu_0) X^{(2)}(\mu) \right\}$$

and $X^{(2)}$ and $Y^{(2)}$ as given in Table 1.

NUMERICAL ANALYSIS

THE X AND Y FUNCTIONS

These functions are basic in what is to follow, and a full discussion of their properties is given by Chandrasekhar (Ref. 2). We shall state here without proof some of these properties, and reference will be made to equations of Chandrasekhar's text; thus RT(126), will imply equation (126) in Chandrasekhar's text. Unless otherwise specified, Chapter VIII will be implied. By definition

$$(6) \quad X^{(k)}(\mu, \tau) = 1 + \mu T_1(X^{(k)}, Y^{(k)})$$

$$(7) \quad Y^{(k)}(\mu, \tau) = e^{-\tau/\mu} + \mu T_2(X^{(k)}, Y^{(k)})$$

where

$$(8) \quad T_1(X^{(k)}, Y^{(k)}) = \int_0^1 \frac{\psi_k(t) [X^{(k)}(\mu, \tau) X^{(k)}(t, \tau) - Y^{(k)}(\mu, \tau) Y^{(k)}(t, \tau)] dt}{\mu + t};$$

$$(9) \quad T_2(X^{(k)}, Y^{(k)}) = \int_0^1 \frac{\psi_k(t) [Y^{(k)}(\mu, \tau) X^{(k)}(t, \tau) - X^{(k)}(\mu, \tau) Y^{(k)}(t, \tau)] dt}{\mu - t}.$$

In the above the characteristic function $\psi_k(t)$ is an even polynomial in t , satisfying

$$\int_0^1 \psi_k(t) dt \leq \frac{1}{2}.$$

The following four polynomials are considered in this discussion:

$$k = 1, \psi_k(t) = \frac{3}{8}(1+t^2-2t^4); \quad k = 2, \psi_k(t) = \frac{3}{16}(1+2t^2+t^4);$$

$$k = 3, \psi_k(t) = \frac{3}{4}(1-t^2) \text{ — the } \underline{\text{conservative}} \text{ case; } k=4, \psi_k(t) = \frac{3}{8}(1-t^2).$$

Whenever no ambiguity is likely to arise, the functions defined in (6) and (7) will be abbreviated by X and Y , respectively.

Let

$$\begin{aligned} x_n^{(k)}(\tau) &= \int_0^1 t^n \psi_k(t) X^{(k)}(t, \tau) dt; & y_n^{(k)}(\tau) &= \int_0^1 t^n \psi_k(t) Y^{(k)}(t, \tau) dt; \\ \alpha_n^{(k)}(\tau) &= \int_0^1 t^n X^{(k)}(t, \tau) dt; & \beta_n^{(k)}(\tau) &= \int_0^1 t^n Y^{(k)}(t, \tau) dt. \end{aligned}$$

For the sake of simplicity, the "moments" defined above will usually be indicated by $x_n, y_n, \alpha_n,$ and β_n ; the parameter τ will always be dropped and k will be indicated only when necessary. A property of fundamental importance is given in (29RT), namely

$$(10) \quad x_0 = \frac{1}{2}(x_0^2 - y_0^2) + \int_0^1 \psi_k(t) dt.$$

Chandrasekhar has shown that for $k = 3$ (the conservative case) the solutions of (6) and (7) are not unique; and that if X, Y form one set of solutions, then the set \bar{X}, \bar{Y} defined by

$$(11) \quad \bar{X} = X + \mu q(X+Y); \quad \bar{Y} = Y - \mu q(X+Y)$$

also satisfies (6) and (7) for an arbitrary q . The standard solutions $X^{(s)}$ and $Y^{(s)}$ are obtained from $X^{(3)}$ and $Y^{(3)}$ by setting

$$(12) \quad q = y_0^{(3)} / [x_1^{(3)} + y_1^{(3)}]$$

in (11). With this normalization

$$(13) \quad x_0^{(s)} = 1; \quad y_0^{(s)} = 0.$$

METHOD OF APPROXIMATING THE X AND Y FUNCTIONS

Dropping the parameters k and τ for brevity, let

$$(14) \quad X_0(\mu) = 1; \quad Y_0(\mu) = \exp(-\tau/\mu);$$

$$(15) \quad X_n(\mu) = 1 - \mu T_1 [X_{n-1}(\mu), Y_{n-1}(\mu)];$$

$$Y_n(\mu) = \exp(-\tau/\mu) + \mu T_2 [X_{n-1}(\mu), Y_{n-1}(\mu)],$$

with T_1 and T_2 defined in (8) and (9).

Starting with X_0 and Y_0 , we may compute in sequence $X_1, Y_1, X_2, Y_2, \dots, X_n, Y_n$. When two successive approximations agree to a sufficient accuracy, the solutions $X = X_n, Y = Y_n$ are considered satisfactory approximations to the solutions of (6) and (7).

In order to speed convergence, use can be made of (124RT) and (126KT). Thus if X_n, Y_n are available, an "improved" set is obtained by setting

$$(16) \quad X_{n+1} = X_n + \mu \Delta_n (1 - e^{-\tau/\mu}); \quad Y_{n+1} = Y_n + \mu \Delta_n (1 - e^{-\tau/\mu}),$$

where

$$(17) \quad \Delta_n = [1 - (x_{o,n} + y_{o,n}) - D_1] / D_2,$$

$$(18) \quad D_1 = [1 - 2 \int_0^1 \psi(t) dt] / [1 - x_{o,n} + y_{o,n}],$$

$$(19) \quad D_2 = 2 \int_0^1 t \psi(t) [1 - \exp(-\tau/t)] dt.$$

The symbols $x_{o,n}$ and $y_{o,n}$ imply the evaluation of these moments corresponding to X_n and Y_n . It can be readily verified that Δ_n vanishes if X_n, Y_n are identical with X, Y respectively. Moreover, the moment relation (10) is satisfied identically for the set X_{n+1}, Y_{n+1} .

In Ref. 3 values of the X and Y functions are given for $\tau = 0.15, 0.25, \text{ and } 1$. An examination of the results shows that for $\tau = 0.15, X_2$ and Y_2 agree with the more accurate values, based on several iterations, to within 0.001, for small values of μ , and often to four decimals for $\mu > 0.4$. It is expected that with decreasing τ, X_2 and Y_2 approximate X and Y , respectively, more and more closely. Consequently X_2 and Y_2 were taken as approximations to X and Y for the calculations given here.

It is possible to express X_1 and Y_1 in terms of the exponential integrals $E_n(x)$ and elementary functions. Thus let

$$(20) \quad E_n(x) = \int_1^\infty e^{-xt} dt / t^n = \int_0^1 e^{-x/t} t^{n-2} dt$$

$$(21) \quad F_n(\tau, \mu) = \int_0^\tau e^{t/\mu} E_n(t) dt$$

$$(22) \quad G_{n,m}(\tau) = \int_0^1 t^{m-2} F_n(\tau, -t) dt$$

$$(23) \quad G'_{n,m}(\tau) = \int_0^1 e^{-\tau/t} t^{m-2} F_n(\tau, t) dt$$

Further, let us now assign symbols to the coefficient of the polynomials $\psi_k(t)$ entering into (8) and (9) by writing

$$(24) \quad \psi_k(t) = \sum_{m=0}^4 b_{k,m} t^m = \sum_{m=0}^4 a_m t^m.$$

For brevity the dependence of the coefficient a_m on k is not indicated. With the above definitions it can be verified that

$$(25) \quad X_1^{(k)}(\tau, \mu) = 1 + \sum_{j=0}^4 a_j F_{j+1}(\tau, -\mu)$$

$$(26) \quad Y_1^{(k)}(\tau, \mu) = e^{-\tau/\mu} \left[1 + \sum_{j=0}^4 a_j F_{j+1}(\tau, \mu) \right],$$

$k = 1, 2, 3, 4.$

The following recurrence relations can be readily established:

$$(27) \quad E_{n+1}(x) = [e^{-x} - x E_n(x)]/n, \quad n \geq 1.$$

$$(28) \quad F_n(\tau, \mu) = \mu [F_{n-1}(\tau, \mu) + e^{\tau/\mu} E_n(\tau) - \frac{1}{n-1}], \quad n \geq 2.$$

$$(29) \quad F_1(\tau, -\mu) = \mu \left[\log\left(1 + \frac{1}{\mu}\right) - e^{-\tau/\mu} E_1(\tau) + E_1\left(\frac{\tau}{\mu} + \tau\right) \right], \quad \mu > 0.$$

$$(30) \quad F_1(\tau, \mu) = \mu \left[-\log\left(\frac{1}{\mu} - 1\right) + e^{\tau/\mu} E_1(\tau) + \text{Ei}\left(\frac{\tau}{\mu} - \tau\right) \right],$$

$$(31) \quad F_1(\tau, 1) = \gamma + \log \tau + e^{\tau} E_1(\tau),$$

where $\gamma = 0.5772156649$ (Euler's constant to ten decimals).

In (30)

$$(32) \quad \text{Ei}(x) = \int_{-\infty}^x (e^t/t) dt, \quad x = -\tau + \frac{\tau}{\mu},$$

is the well known exponential integral, and $E_1(x)$, defined in (30), is equal to $-\text{Ei}(-x)$. Both $\text{Ei}(x)$ and $E_1(x)$ have been extensively tabulated.

The moments $\alpha_{j,1}$, $\beta_{j,1}$ can be obtained by numerical integration, or else by the use of the functions $G_{n,m}(\tau)$ and $G'_{n,m}(\tau)$. From the definition of these functions and (25), (26) we have

$$(33) \quad \alpha_{n,1}^{(k)}(\tau) = \frac{1}{n+1} + \sum_{j=0}^4 a_j G_{n+2,j+1}(\tau).$$

$$(34) \quad \beta_{n,1}^{(k)}(\tau) = E_{n+2}(\tau) + \sum_{j=0}^4 a_j G_{n+2,j+1}(\tau).$$

It has been shown by Chandrasekhar (Ref. 2), Appendix I, that

$$(35) \quad G_{n,m}(\tau) = \int_0^\tau E_n(t)E_m(t)dt = G_{m,n}$$

$$(36) \quad G'_{n,m}(\tau) = \int_0^\tau E_n(t)E_m(\tau-t)dt = G'_{m,n}$$

$$(37) \quad G_{n,m}(\tau) = \frac{1}{(m+n-1)} [\tau E_n(\tau)E_m(\tau) + F_n(\tau,-1) + F_m(\tau,-1)]$$

$$(38) \quad G'_{n,m}(\tau) = G'_{n-1,m+1}(\tau) - \frac{1}{n-1} E_{m+1}(\tau) + \frac{1}{m} E_m(\tau) \quad n \geq 2$$

$$(39) \quad G'_{1,1}(\tau) = 2 [E_1(\tau) + (\gamma + \log \tau)E_2(\tau) - U(\tau)] ,$$

where

$$(40) \quad U(\tau) = \frac{1}{2}\tau(\gamma + \log \tau)^2 + \frac{\pi^2\tau}{12} + \sum_{m=1}^{\infty} \frac{\tau^{m+1}(-1)^m}{m^2 m!}$$

The moments of order zero and one were obtained from the above formulas, rather than from numerical integration, for all values of τ . For $\tau \geq 0.01$ higher order moments were obtained by numerical integration. All required moments for $\tau = 0.001$ and 0.003 listed in these tables were obtained from the above formulas. The computation of the function $G_{n,m}(\tau)$ from (37) is straightforward. The functions $G'_{n,m}(\tau)$ are somewhat harder to get. In practice $G'_{1,1}(\tau)$ was computed, and the additional functions specified below were derived. For convenience some abbreviations are also introduced, as explained.

Abbreviations

$$f_n = e^{-\tau} F_n(\tau, 1); \quad G'_{i,j} = G'_{i,j}(\tau); \quad E_n = E_n(\tau)$$

$$(41) \quad G'_{1,2} = \frac{1}{2} [-\tau G'_{1,1} + \tau E_1 + f_1 + f_2]$$

$$(42) \quad G'_{1,j} = \frac{1}{j} [-\tau G'_{1,j-1} + \frac{\tau}{j-1} E_1 + f_1 + f_j] \quad j \geq 2$$

$$(43) \quad G'_{3,2} = G'_{1,4} - E_4 + \frac{1}{3} E_2$$

$$(44) \quad G'_{5,2} + G'_{1,6} - E_6 + \frac{1}{5} E_2$$

Once $\alpha_{j,1}$ and $\beta_{j,1}$ are available, the moments $x_{n,1}$ and $y_{n,1}$, can be obtained from

$$(45) \quad x_{n,1} = \sum_{j=0}^4 a_j \alpha_{n+j,1}; \quad y_{n,1} = \sum_{j=0}^4 a_j \beta_{n+j,1}$$

When $X_1^{(k)}$, $Y_1^{(k)}$ and their moments are known, $X_2^{(k)}$ and $Y_2^{(k)}$ can be obtained from (16). It can be verified that

$$(46) \quad D_2 = a_0 + \frac{a_2}{2} + \frac{a_4}{3} - [2a_0 E_3 + 2a_2 E_5 + 2a_4 E_7].$$

The moments corresponding to the second approximation are obtained from

$$(47) \quad \alpha_{n,2} = \alpha_{n,1} + \Delta \left(\frac{1}{n+2} - E_{n+3} \right); \quad \beta_{n,2} = \beta_{n,1} + \Delta \left(\frac{1}{n+2} - E_{n+3} \right)$$

Values of $x_{n,2}$ and $y_{n,2}$ are then obtained by substituting (47) into (45).

To get the standard solution, (12) is used in conjunction with $X_2^{(3)}$, $Y_2^{(3)}$ and the corresponding moments $x_{1,2}$, $y_{1,2}$ and $y_{0,2}$.

SCATTERING AND INTENSITY FUNCTIONS

The scattering and "intensity" functions depend on the coefficients listed in Table 4; they are based implicitly on the X and Y functions and their moments. It turned out that for small values of τ , some of the coefficients are sensitive to a small change in the moments of Table 2. In view of the fact that the X and Y functions are approximated by X_2 and Y_2 , respectively, the approximations to X and Y are probably correct to no more than four decimal places. The functions have a logarithmic singularity in their derivatives at the origin of μ , and straightforward numerical integration for the moments of order two is good to only five decimal places. It was expected that this accuracy would be ample, in view of the fact that X_2 and Y_2 are themselves correct representations of X and Y to at most that accuracy. At the outset all moments of order higher than one were obtained by numerical integration, and it turned out that some of the coefficients in Table 4 became indeterminate for $\tau = 0.001$ and 0.003 . The required coefficients were then interpolated from a table of such coefficients. These interpolated coefficients were good to within ± 0.003 , and the scattering functions actually listed were based on them. It turned out that the "intensity" functions became meaningless when based on these scattering functions. The higher moments for $\tau = 0.001$ and 0.003 were then recomputed by the formulas (33) and (34) and the coefficients listed in Table 4 are based on these recomputed values. Although they are probably correct to only three decimals, compared with those based on exact values of X and Y, it was possible to derive them from computations of the moments which were consistent among themselves to seven decimal places. Computations of the "intensity functions" based on the "corrected" scattering functions were made for a few parameters, and the results were consistent. We give below some comparative values:

	(a) Coefficients on which scattering functions are based		(b) More consistent coefficients, given in Table 4	
	$\tau = .001$	$\tau = .003$	$\tau = .001$	$\tau = .003$
v_1	-0.18820	-0.18946	-0.18847	-0.18975
v_2	-0.18870	-0.19095	-0.18897	-0.19123
v_3	+1.13551	1.11659	1.13257	1.11348
v_4	-1.51307	-1.49888	-1.51083	-1.49651
s	-0.24957	-0.24873	-0.24936	-0.24837
t	-0.49981	-0.49943	-0.49981	-0.49944
u_3	-0.28202	-0.28343	-0.28229	-0.28371
u_4	-0.28252	-0.28492	-0.28279	-0.28520
u_5	0.00037	0.00113	0.00038	0.00113
a	0.49812	0.49452	0.49744	0.49354
b	0.49877	0.49646	0.49853	0.49621
c	-0.37540	-0.37779	-0.37559	-0.37632
g	1.32144	1.30424	1.32145	1.30425
\bar{u}	0.00062	0.00296	0.00100	0.00297

The following are the scattering functions based on coefficients of column (b), for $\tau = 0.001$ for three values of μ .

	$\tau = 0.001$	$\mu = 0.1$	$\mu = 0.6$	$\mu = 1$
ψ		0.01021	0.36115	1.00287
ξ		0.01011	0.36055	1.00186
φ		0.99490	0.64321	0.00010
η		0.98503	0.64212	0.00012
ζ		0.00009	0.00009	0.00010
θ		0.00009	0.00009	0.00009
χ		1.00284	1.00285	1.00285
σ		0.99289	1.00118	1.00185
γ_ℓ		0.99503	0.99918	0.99694
γ_r		0.99503	0.99917	0.99950

Compared with the values tabulated, η diverges by most, especially for $\mu = 1$.

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It was not deemed worth while to recompute the scattering and intensity functions for $\tau = 0.001$ and 0.003 , especially since the simple formula (4), given in the preceding Introduction, gives good results for small values of τ . In the following schedule some comparative results are given.

- A: Values computed from Chandrasekhar's formulas.
 B: Values computed from formula (4), Z. Sekera's Introduction.

τ	μ_0	μ	I_r	I_s	I_a		
0.001	0.1	0.6	0.00031	0.00023	0.00017	A	
			.00031	.00023	.00017	B	
	0.6	0.1	0.00187	0.00120	0.00118	A	
			.00186	.00137	.00101	B	
	0.6	1.0	0.00019	0.000071	0.000071	A	
			.000187	.000067	.000067	B	
	1.0	0.6	0.00031	0.00012	0.00012	A	
			.000278	.000111	.000111	B	
	0.01	0.02	0.10	0.01772	0.01786	0.01648	A
				.01398	.01389	.01378	B
		0.02	0.60	0.00307	0.00255	0.00139	A
				.00244	.00209	.00151	B
0.02		1.00	0.00185	0.00008	0.00008	A	
			.00147	.000006	.000006	B	
0.01	0.6	0.1	0.01804	0.01344	0.00999	A	
			.01777	.0130	.00958	B	
	0.6	0.8	0.00235	0.00218	0.00001	A	
			.00231	.00213	0	B	
	0.6	1.0	0.00188	0.00068	0.00068	A	
			.00185	.00067	.00067	B	

There is a considerable loss in significant figures, in computing I_r and I_a by method A, and wherever one significant figure only is given, that figure is not trustworthy, and the value given by method B may in fact be the better one. The above schedule seems to indicate that Sekera's formula is good, even when τ is as large as 0.01.

It should be emphasized that the entries given are all based implicitly on the second approximation to the X and Y functions, as stated previously, and it should not be inferred that the values are correct to all the decimal places given, compared with the true results based on exact values of X and Y. For $\tau \geq 0.01$ the scattering and intensity functions are probably correct to three decimal places. This conjecture is based on comparisons made in (2) for $\tau = 0.15$, with similar computations.

Table 1. X and Y Functions

Values of $X_n^{(k)}(\mu, \tau)$ and $Y_n^{(k)}(\mu, \tau)$

$k = 1, 2, 3, 4$

for $\tau = 0.001, 0.003, 0.01, 0.02, 0.05, \text{ and } 0.10$. $X_n^{(k)}(\mu, \tau)$ and $Y_n^{(k)}$ are defined in the section on Numerical Analysis.

TABLE 1 X and Y Functions
 $\tau = .001$

μ	$X_2^{(1)}$	$Y_2^{(1)}$	$X_2^{(2)}$	$Y_2^{(2)}$
000	100000	000000	100000	000000
001	100263	090745	100153	090636
002	100269	095391	100157	095279
003	100271	095992	100158	095880
004	100272	097803	100159	097690
005	100273	093293	100159	098179
006	100273	093620	100159	098506
007	100274	093855	100160	098741
008	100274	093032	100160	098917
009	100274	093169	100160	099055
010	100274	093279	100160	099165
011	100274	093369	100160	099255
012	100274	093444	100160	099330
014	100275	093563	100160	099448
016	100275	093652	100160	099537
018	100275	093721	100160	099606
020	100275	093776	100160	099662
022	100275	093821	100160	099707
024	100275	093859	100160	099745
026	100275	093891	100160	099777
028	100275	093919	100160	099804
030	100275	093942	100160	099828
032	100275	093963	100161	099848
034	100275	093981	100161	099867
036	100275	093998	100161	099883
040	100275	100026	100161	099911
044	100275	100048	100161	099934
048	100275	100067	100161	099952
052	100275	150083	100161	099968
056	100275	150097	100161	099982
060	100275	100109	100161	099994
064	100275	100119	100161	100004
068	100275	100126	100161	100014
072	100275	100137	100161	100022
076	100275	100144	100161	100029
080	100275	100150	100161	100036
084	100275	100156	100161	100042
085	100275	100159	100161	100044
088	100275	100162	100161	100047
090	100275	100164	100161	100050
092	100275	100167	100161	100052
094	100275	100169	100161	100054
096	100275	100171	100161	100057
098	100275	100173	100161	100059
100	100275	100175	100161	100061

TABLE 1 X and Y Functions (Continued)

$\tau = .001$

μ	$X_2^{(s)}$	$Y_2^{(s)}$	$X_2^{(4)}$	$Y_2^{(4)}$
0100	1000000	0000000	1000000	0000000
001	103022	088442	100245	090727
002	105587	090441	100251	095373
003	103346	089389	100253	096974
004	111004	087545	100254	097784
005	113662	085379	100255	098274
006	115319	083050	100255	098602
007	113976	080629	100255	098837
008	121633	078149	100255	099013
009	124289	075631	100256	099150
010	125946	073084	100256	099261
011	129603	070518	100256	099351
012	132259	067937	100256	099426
014	137573	062743	100256	099544
016	142886	057519	100256	099633
018	148199	052275	100256	099702
020	153512	047017	100256	099757
022	158825	041749	100256	099803
024	164139	036474	100256	099841
026	169452	031193	100256	099873
028	174765	025908	100256	099900
030	180078	020618	100257	099924
032	185391	015326	100257	099944
034	190704	010031	100257	099963
036	196017	004735	100257	099979
040	206643	-005863	100257	100007
044	217270	-016466	100257	100030
048	227896	-027073	100257	100049
052	238522	-037683	100257	100065
056	249148	-048296	100257	100078
060	259774	-058910	100257	100090
064	270400	-069525	100257	100101
068	281026	-080142	100257	100110
072	291653	-090760	100257	100118
076	302279	-101379	100257	100125
080	312905	-111999	100257	100132
084	323531	-122619	100257	100138
086	323844	-127929	100257	100141
088	334157	-133239	100257	100143
090	334470	-138550	100257	100146
092	344783	-143861	100257	100148
094	355096	-149171	100257	100150
096	355409	-154482	100257	100153
098	360722	-159793	100257	100155
100	365035	-165104	100257	100157

TABLE 1 X and Y Functions (Continued)

$\tau = .003$

μ	x_2^1	$y_2^{(1)}$	$x_2^{(2)}$	$y_2^{(2)}$
000	100000	000000	100000	000000
001	100618	074685	100368	074443
002	100660	086723	100394	086461
003	100675	091153	100403	090884
004	100683	093453	100408	093180
005	100687	094861	100411	094585
006	100690	095811	100413	095534
007	100693	096495	100414	096218
008	100694	097012	100415	096733
009	100696	097416	100416	097136
010	100697	097740	100416	097460
011	100698	098006	100417	097726
012	100693	098223	100417	097948
014	100700	098578	100418	098297
016	100700	098842	100419	098561
018	100701	099047	100419	098766
020	100702	099212	100419	098930
022	100702	099347	100420	099065
024	100702	099460	100420	099177
026	100703	099555	100420	099272
028	100703	099637	100420	099354
030	100703	099708	100420	099425
032	100703	099770	100420	099487
034	100704	099825	100421	099542
036	100704	099873	100421	099591
040	100704	099956	100421	099673
044	100704	100024	100421	099741
048	100704	100081	100421	099798
052	100705	100129	100421	099846
056	100705	100170	100421	099887
060	100705	100206	100421	099922
064	100705	100237	100421	099954
068	100705	100265	100421	099981
072	100705	100289	100421	100006
076	100705	100311	100421	100027
080	100705	100331	100422	100047
084	100705	100349	100422	100065
086	100705	100357	100422	100073
088	100705	100365	100422	100081
090	100705	100372	100422	100089
092	100705	100380	100422	100096
094	100705	100387	100422	100103
096	100705	100393	100422	100110
098	100706	100400	100422	100116
100	100706	100406	100422	100122

TABLE 1 X and Y Functions

$\tau = .003$

μ	$X_2^{(s)}$	$Y_2^{(s)}$	$X_2^{(L)}$	$Y_2^{(L)}$
000	1000000	0000000	1000000	0000000
001	1034446	0728998	1005669	0746336
002	1061441	0823662	1006007	0866670
003	1088002	0841774	1006221	0911000
004	1114554	0838443	1006228	0933998
005	1141002	0826115	1006332	0948006
006	1167449	0809228	1006335	0957555
007	1193994	0789773	1006337	0964440
008	1220339	0768550	1006339	0969556
009	1246883	0746113	1006440	0973660
010	1273227	0722297	1006441	0976884
011	1299771	0699221	1006442	0979550
012	1326115	0675502	1006443	0981772
014	1379001	0625669	1006444	0985222
016	1431888	0575449	1006444	0987886
018	1484774	0524770	1006445	0989991
020	1537660	0473550	1006445	0991556
022	1590446	0422000	1006446	0992991
024	1643331	0370228	1006446	0994003
026	1696117	0318339	1006446	0994999
028	1749003	0266336	1006447	0995880
030	1801888	0214222	1006447	0996551
032	1854774	0161999	1006447	0997113
034	1907559	0109669	1006447	0997668
036	1960445	0057333	1006447	0998117
040	2066116	-0047554	1006448	0999000
044	2171887	-0152556	1006448	0999668
048	2277558	-0257770	1006448	1000225
052	2383228	-0362992	1006448	1000773
056	2488999	-0468221	1006448	1001114
060	2594770	-0573556	1006448	1001449
064	2700441	-0678995	1006449	1001881
068	2806111	-0784338	1006449	1002208
072	2911882	-0889884	1006449	1002333
076	3017553	-0995333	1006449	1002555
080	3123223	-1100884	1006449	1002774
084	3228994	-1206336	1006449	1002992
086	3281779	-1259113	1006449	1003000
088	3334665	-1311990	1006449	1003008
090	3387550	-1364668	1006449	1003116
092	3440336	-1417446	1006449	1003223
094	3493221	-1470224	1006449	1003330
096	3546006	-1523003	1006449	1003337
098	3598892	-1575882	1006449	1003443
100	3651777	-1628661	1006449	1003449

TABLE 1 X and Y Functions (Continued)

$\tau = .010$

μ	$x_2^{(1)}$	$y_2^{(1)}$	$x_2^{(2)}$	$y_2^{(2)}$
000	1000000	0000000	1000000	0000000
001	101279	037950	100783	037513
002	101553	062133	100956	061572
003	101665	073265	101026	072652
004	101725	079564	101064	078923
005	101763	083602	101088	082944
006	101789	086408	101104	085738
007	101808	088470	101116	087791
008	101822	090049	101125	089363
009	101833	091297	101132	090606
010	101842	092308	101137	091612
011	101849	093143	101142	092444
012	101856	093845	101146	093143
014	101866	094959	101152	094252
016	101873	095803	101157	095093
018	101879	096465	101161	095751
020	101883	096997	101164	096282
022	101887	097435	101166	096718
024	101891	097802	101168	097083
026	101893	098113	101170	097393
028	101896	098381	101171	097659
030	101898	098613	101172	097891
032	101899	098817	101174	098094
034	101901	098997	101175	098273
036	101902	099158	101175	098433
040	101905	099431	101177	098706
044	101907	099655	101178	098929
048	101908	099843	101179	099115
052	101910	100001	101180	099274
056	101911	100138	101181	099409
060	101912	100256	101181	099527
064	101913	100359	101182	099630
068	101914	100451	101183	099721
072	101914	100532	101183	099802
076	101915	100605	101183	099875
080	101915	100671	101184	099940
084	101916	100730	101184	100000
086	101916	100758	101184	100027
088	101916	100784	101184	100053
090	101917	100810	101184	100078
092	101917	100834	101185	100103
094	101917	100857	101185	100126
096	101917	100879	101185	100148
098	101917	100900	101185	100169
100	101918	100921	101185	100189

TABLE 1 X and Y Functions (Continued)

$\tau = .010$

μ	x_2^S	y_2^S	x_2^4	y_2^4
000	1000000	0000000	1000000	0000000
001	104138	037133	101157	037829
002	107047	059176	101402	061982
003	109777	067893	101501	073102
004	112451	071688	101555	079394
005	115101	073183	101589	083428
006	117738	073425	101612	086231
007	120367	072912	101628	088291
008	122992	071907	101641	089869
009	125613	070565	101651	091115
010	128232	068983	101659	092125
011	130849	067222	101666	092960
012	133465	065326	101671	093661
014	138693	061239	101680	094773
016	143920	056878	101687	095617
018	149144	052332	101692	096278
020	154367	047655	101696	096810
022	159590	042881	101699	097247
024	164811	038035	101702	097614
026	170032	033133	101705	097925
028	175253	028187	101707	098192
030	180473	023204	101709	098424
032	185693	018193	101710	098628
034	190913	013158	101712	098808
036	196133	008103	101713	098968
040	206572	-002055	101715	099241
044	217010	-012263	101717	099465
048	227448	-022509	101718	099652
052	237886	-032785	101719	099811
056	248324	-043082	101720	099947
060	258761	-053399	101721	100065
064	269198	-063730	101722	100169
068	279635	-074073	101723	100260
072	290072	-084427	101723	100342
076	300509	-094789	101724	100414
080	310946	-105159	101724	100480
084	321383	-115535	101725	100539
086	326602	-120725	101725	100567
088	331820	-125916	101725	100593
090	337038	-131109	101726	100618
092	342257	-136303	101726	100643
094	347475	-141497	101726	100666
096	352694	-146693	101726	100688
098	357912	-151889	101726	100709
100	363130	-157087	101726	100729

TABLE 1 X and Y Functions (Continued)

$\tau = .02$

μ	$X_2^{(1)}$	$Y_2^{(1)}$	$X_2^{(2)}$	$Y_2^{(2)}$
000	100000	000000	100000	000000
001	101625	014852	101003	014382
002	102250	038806	101403	038074
003	102550	053713	101596	052847
004	102724	063232	101708	062288
005	102837	069748	101781	068752
006	102916	074466	101832	073433
007	102975	078033	101870	076972
008	103020	080821	101899	079739
009	103056	083059	101922	081960
010	103085	084895	101941	083782
011	103109	086427	101956	085302
012	103129	087725	101969	086591
014	103152	089806	101990	088656
016	103186	091399	102006	090237
018	103205	092658	102018	091486
020	103221	093678	102028	092499
022	103234	094521	102037	093335
024	103244	095229	102044	094038
026	103254	095833	102049	094637
028	103261	096354	102054	095154
030	103268	096808	102059	095605
032	103274	097207	102063	096000
034	103280	097560	102066	096351
036	103284	097876	102069	096664
040	103292	098415	102074	097199
044	103299	098858	102079	097639
048	103304	099229	102082	098008
052	103309	099545	102085	098321
056	103313	099816	102088	098592
060	103317	100052	102090	098827
064	103320	100258	102092	099034
068	103322	100441	102094	099218
072	103325	100602	102095	099383
076	103327	100747	102097	099531
080	103329	100876	102098	099666
084	103331	100992	102099	099789
086	103331	101046	102100	099847
088	103332	101096	102100	099903
090	103333	101144	102101	099956
092	103334	101190	102101	100007
094	103334	101233	102102	100057
096	103335	101274	102102	100105
098	103336	101312	102102	100151
100	103336	101349	102103	100196

TABLE 1 X and Y Functions (Continued)

$\tau = .020$

μ	$x_2^{(s)}$	$y_2^{(s)}$	x_2^4	y_2^4
000	100000	000000	100000	000000
001	104441	014483	101457	014687
002	107643	036956	102006	038564
003	110514	049832	102264	053433
004	113259	057096	102421	062930
005	115944	061247	102519	069432
006	118596	063537	102589	074140
007	121229	064639	102640	077699
008	123848	064937	102679	080481
009	126458	064667	102711	082714
010	129061	063982	102736	084546
011	131660	062985	102757	086075
012	134255	061747	102775	087371
014	139437	058738	102803	089447
016	144611	055227	102824	091037
018	149780	051373	102841	092293
020	154946	047272	102855	093311
022	160109	042989	102866	094152
024	165271	038567	102875	094859
026	170430	034037	102883	095462
028	175589	029422	102890	095981
030	180746	024738	102896	096434
032	185903	019998	102901	096832
034	191059	015210	102906	097184
036	196215	010384	102910	097498
040	206525	000536	102917	098035
044	216834	-009210	102923	098477
048	227141	-019131	102928	098846
052	237448	-029110	102932	099160
056	247753	-039134	102935	099429
060	258058	-049195	102938	099663
064	268362	-059285	102941	099868
068	278666	-069400	102943	100048
072	288968	-079535	102945	100209
076	299270	-089688	102947	100353
080	309571	-099855	102949	100482
084	319870	-110035	102950	100599
086	325020	-115128	102951	100653
088	330169	-120225	102952	100704
090	335318	-125323	102953	100753
092	340466	-130424	102953	100800
094	345614	-135526	102954	100845
096	350762	-140631	102954	100888
098	355910	-145737	102955	100929
100	361057	-150844	102955	100968

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TABLE 1 X and Y Functions (Continued)

$\tau = .05$

μ	$x_2^{(1)}$	$y_2^{(1)}$	$x_2^{(2)}$	$y_2^{(2)}$
000	100000	000000	100000	000000
001	101825	001782	101134	001439
002	102998	010421	101906	009709
003	103779	021942	102426	020941
004	104315	032318	102785	031102
005	104700	040910	103044	039535
006	104989	047930	103239	046431
007	105213	053698	103390	052102
008	105392	058490	103511	056816
009	105537	062520	103609	060782
010	105658	065948	103691	064157
011	105760	068897	103760	067060
012	105847	071457	103819	069581
014	105988	075678	103914	073739
016	106098	079011	103988	077022
018	106185	081707	104047	079678
020	106256	083931	104095	081870
022	106315	085797	104135	083709
024	106365	087384	104169	085273
026	106407	088751	104198	086620
028	106444	089939	104223	087791
030	106476	090982	104245	088820
032	106505	091905	104264	089730
034	106530	092728	104281	090540
036	106552	093465	104296	091267
040	106591	094732	104323	092516
044	106623	095781	104344	093551
048	106649	096665	104362	094422
052	106672	097419	104378	095166
056	106691	098071	104391	095808
060	106708	098639	104402	096369
064	106723	099139	104412	096861
068	106737	099582	104421	097298
072	106748	099977	104429	097688
076	106759	100333	104436	098039
080	106768	100654	104443	098355
084	106777	100945	104449	098643
086	106781	101081	104452	098776
088	106785	101210	104454	098904
090	106789	101334	104457	099027
092	106792	101453	104459	099144
094	106795	101567	104461	099256
096	106799	101677	104463	099364
098	105802	101782	104466	099468
100	106805	101883	104468	099567

TABLE 1 X and Y Functions (Continued)

$\tau = .050$

μ	X_2^S	Y_2^S	X_2^4	Y_2^4
000	1000000	0000000	1000000	0000000
001	104604	000530	101647	000669
002	108277	001797	102781	002089
003	111629	005174	103689	005763
004	114772	009968	104416	011128
005	117767	015068	105001	017088
006	120653	019854	105478	022987
007	123459	024076	105871	028532
008	126204	027671	106199	033619
009	128903	030658	106478	038234
010	131565	033089	106716	042405
011	134197	035023	106922	046170
012	136806	036522	107102	049575
014	141968	038419	107500	055461
016	147075	039138	107638	060350
018	152143	038947	107832	064459
020	157182	038042	107992	067954
022	162198	036570	108128	070960
024	167197	034542	108243	073568
026	172182	032341	108343	075853
028	177156	029732	108430	077869
030	182121	026867	108507	079661
032	187078	023786	108575	081264
034	192028	020521	108636	082706
036	196974	017099	108690	084010
040	206851	009865	108784	086275
044	216714	002216	108862	088174
048	226567	-005754	108928	089790
052	236411	-013979	108984	091181
056	246249	-022410	109033	092391
060	256081	-031009	109075	093453
064	265909	-039745	109113	094393
068	275733	-048598	109146	095230
072	285554	-057548	109176	095980
076	295373	-066582	109203	096655
080	305189	-075688	109227	097269
084	315003	-084855	109249	097827
086	319910	-089459	109259	098088
088	324816	-094076	109269	098338
090	329722	-098705	109278	098577
092	334627	-103345	109287	098806
094	339532	-107995	109296	099026
096	344437	-112655	109304	099237
098	349342	-117325	109312	099440
100	354246	-122003	109319	099635

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TABLE 1 X and Y Functions (Continued)

$\tau = .100$

μ	x_2^S	y_2^S	x_2^4	y_2^4
000	100000	000000	100000	000000
001	104591	001497	101618	001589
002	108186	009607	102620	010058
003	111380	020066	103281	021459
004	114349	028965	103733	031749
005	117186	035806	104057	040279
006	119940	040892	104300	047251
007	122638	044601	104488	052982
008	125298	047244	104638	057744
009	127929	049060	104760	061750
010	130541	050226	104861	065158
011	133136	050872	104947	068090
012	135719	051101	105020	070635
014	140858	050592	105138	074833
016	145970	049128	105230	078148
018	151064	046983	105302	080829
020	156145	044332	105362	083041
022	161216	041299	105411	084897
024	166279	037967	105453	086476
026	171337	034400	105488	087835
028	176389	030643	105519	089017
030	181438	026731	105546	090055
032	186484	022691	105570	090973
034	191527	018544	105591	091791
036	196568	014306	105610	092525
040	206645	005608	105642	093785
044	216716	-003319	105669	094829
048	226783	-012425	105691	095709
052	236846	-021668	105710	096459
056	246907	-031027	105726	097107
060	256966	-040462	105740	097672
064	267023	-049976	105753	098170
068	277079	-059550	105764	098610
072	287134	-069174	105774	099004
076	297188	-078842	105783	099358
080	307241	-088546	105791	099677
084	317293	-098282	105798	099967
086	322319	-103160	105801	100102
088	327344	-108045	105804	100231
090	332370	-112936	105807	100354
092	337395	-117832	105810	100473
094	342421	-122733	105813	100586
096	347446	-127640	105816	100695
098	352471	-132551	105818	100799
100	357496	-137466	105821	100900

TABLE 1 X and Y Functions

$\tau = .100$

μ	$x_2^{(1)}$	$y_2^{(1)}$	$x_2^{(2)}$	$y_2^{(2)}$
000	1000000	0000000	1000000	0000000
001	101872	000862	101161	000632
002	103220	002480	102052	001978
003	104319	006340	102796	005545
004	105209	011866	103406	010793
005	105929	017962	103904	016643
006	106517	023976	104313	022443
007	107004	029617	104651	027900
008	107411	034785	104936	032910
009	107757	039470	105177	037458
010	108053	043701	105385	041569
011	108309	047519	105564	045282
012	108533	050970	105722	048639
014	108905	056933	105983	054446
015	109202	061883	106191	059270
018	109444	066043	106361	063326
020	109644	069581	106503	066776
022	109813	072621	106622	069742
024	109958	075261	106723	072318
026	110083	077572	106811	074574
028	110191	079611	106888	076565
030	110287	081423	106956	078335
032	110372	083044	107016	079918
034	110448	084502	107069	081342
036	110517	085820	107118	082629
040	110634	088110	107200	084866
044	110732	090031	107269	086743
048	110814	091664	107328	088339
052	110885	093070	107377	089713
056	110946	094293	107420	090908
060	110999	095367	107458	091958
064	111046	096316	107491	092886
068	111087	097162	107521	093713
072	111125	097920	107547	094454
076	111158	098604	107571	095122
080	111188	099223	107592	095728
084	111216	099787	107611	096279
086	111229	100051	107620	096537
088	111241	100303	107629	096783
090	111253	100544	107637	097019
092	111264	100776	107645	097246
094	111275	100998	107653	097463
096	111285	101212	107660	097672
098	111295	101417	107667	097873
100	111304	101614	107674	098066

Table 2. Moments

$$\alpha_p^{(k)} = \int_0^1 x_2^{(k)}(t, \tau) t^p dt \quad ; \quad \beta_p^{(k)} = \int_0^1 y_2^{(k)}(t, \tau) t^p dt$$

$$x_p^{(k)} = \int_0^1 \psi_k(t) x_2^{(k)}(t, \tau) t^p dt \quad ; \quad y_p^{(k)} = \int_0^1 \psi_k(t) y_2^{(k)}(t, \tau) t^p dt$$

$$(k = 1, 2, 3, 4)$$

TABLE 2 Moments

k	τ	$\alpha_0^{(k)}$	$\alpha_1^{(k)}$	$\alpha_2^{(k)}$	$\alpha_3^{(k)}$
1	001	100274	050137	033425	025068
1	003	100699	050352	033568	025176
1	010	101877	050954	033971	025478
1	020	103219	051654	034440	025831
1	050	106348	053336	035578	026689
1	100	110120	055452	037027	027788
2	001	100160	050080	033387	025040
2	003	100418	050210	033473	025105
2	010	101160	050590	033727	025295
2	020	102027	051042	034031	025524
2	050	104160	052189	034806	026108
2	100	106843	053696	035839	026891
s	001	233207	138742	099874	078226
s	003	233036	138543	099703	078080
s	010	232633	138076	099299	077736
s	020	232252	137638	098919	077410
s	050	231552	136839	098218	076807
s	100	230957	136169	097623	076291
4	001	100256	050128	033419	025064
4	003	100643	050324	033549	025162
4	010	101691	050859	033907	025431
4	020	102853	051465	034314	025736
4	050	105438	052855	035254	026445
4	100	108368	054499	036380	027299

TABLE 2 Moments (Continued)

k	τ	α_4	α_5	α_6	α_7
1	001	020055	016712	014325	012534
1	003	020141	016784	014386	012588
1	010	020383	016986	014559	012739
1	020	020665	017221	014761	012916
1	050	021353	017796	015254	013348
1	100	022238	018535	015889	013904
2	001	020032	016693	014308	012520
2	003	020084	016737	014346	012552
2	010	020236	016864	014454	012648
2	020	020419	017016	014585	012762
2	050	020888	017408	014921	013056
2	100	021518	017934	015374	013453
s	001	064352	054680	047547	042064
s	003	064226	054570	047449	041976
s	010	063928	054309	047216	041767
s	020	063646	054060	046994	041567
s	050	063122	053599	046583	041197
s	100	062670	053199	046226	040873
4	001	020051	016709	014322	012532
4	003	020129	016774	014378	012581
4	010	020344	016954	014532	012715
4	020	020589	017158	014707	012869
4	050	021158	017632	015114	013225
4	100	021845	018207	015608	013658

TABLE 2 Moments (Continued)

k	τ	β_0	β_1	β_2	β_3
1	001	099541	050038	033375	025035
1	003	098829	050055	033418	025076
1	010	096836	049980	033475	025147
1	020	094530	049753	033462	025177
1	050	088979	048786	033172	025068
1	100	081894	046929	032384	024633
2	001	099427	049981	033337	025006
2	003	098548	049913	033324	025005
2	010	096122	049616	033232	024964
2	020	093367	049152	033062	024877
2	050	086865	047659	032411	024495
2	100	078843	045244	031235	023763
s	001	-032913	-038326	-032913	-028001
s	003	-032315	-037534	-032315	-027527
s	010	-030787	-035546	-030787	-026310
s	020	-029182	-033493	-029182	-025024
s	050	-025733	-029172	-025733	-022237
s	100	-021919	-024527	-021919	-019115
4	001	099523	050029	033369	025030
4	003	098773	050027	033400	025062
4	010	096649	049885	033411	025099
4	020	094152	049560	033333	025079
4	050	088072	048306	032848	024824
4	100	080159	045982	031740	024146

TABLE 2 Moments (Continued)

k	τ	β_4	β_5	β_6	β_7
1	001	020030	016692	014308	012520
1	003	020066	016724	014336	012545
1	010	020134	016786	014393	012597
1	020	020174	016828	014433	012634
1	050	020133	016817	014438	012647
1	100	019853	016620	014290	012531
2	001	020007	016673	014292	012505
2	003	020009	016677	014296	012509
2	010	019988	016665	014289	012505
2	020	019935	016629	014263	012486
2	050	019673	016434	014108	012359
2	100	019154	016036	013788	012091
s	001	-024170	-021195	-018844	-016950
s	003	-023778	-020861	-018554	-016692
s	010	-022771	-020002	-017806	-016030
s	020	-021703	-019091	-017012	-015326
s	050	-019380	-017104	-015277	-013788
s	100	-016760	-014854	-013307	-012038
4	001	020026	016689	014305	012517
4	003	020054	016714	014328	012538
4	010	020096	016755	014366	012573
4	020	020096	016763	014377	012586
4	050	019937	016654	014298	012525
4	100	019463	016294	014009	012286

TABLE 2 Moments (Continued)

k	τ	x_0	x_1	x_2	x_3
1	001	035096	015668	009311	006267
1	003	035244	015735	009351	006294
1	010	035656	015923	009463	006369
1	020	036123	016140	009593	006457
1	050	037207	016662	009908	006670
1	100	038502	017313	010307	006942
2	001	035056	021910	016455	013302
2	003	035147	021967	016497	013337
2	010	035409	022133	016623	013438
2	020	035720	022332	016773	013559
2	050	036499	022840	017157	013871
2	100	037507	023515	017672	014290
s	001	100000	045387	026641	017659
s	003	100000	045347	026607	017632
s	010	100000	045254	026528	017570
s	020	100000	045171	026454	017512
s	050	100000	045023	026322	017406
s	100	100000	044908	026214	017318
4	001	025063	009399	005012	003133
4	003	025160	009435	005032	003145
4	010	025418	009535	005086	003178
4	020	025702	009648	005146	003216
4	050	026319	009903	005285	003304
4	100	026995	010200	005450	003409

TABLE 2 Moments (Continued)

k	τ	y_0	y_1	y_2	y_3
1	001	034821	015633	009295	006257
1	003	034543	015631	009304	006266
1	010	033765	015582	009308	006277
1	020	032867	015477	009288	006275
1	050	030707	015082	009160	006221
1	100	027964	014370	008871	006071
2	001	034895	021875	016433	013286
2	003	034726	021862	016432	013288
2	010	034232	021789	016405	013275
2	020	033642	021663	016349	013241
2	050	032130	021203	016100	013073
2	100	030087	020401	015624	012736
3	001	000000	-007743	-006557	-005104
3	003	000000	-007505	-006402	-004999
3	010	000000	-006926	-006012	-004730
3	020	000000	-006351	-005609	-004449
3	050	000000	-005200	-004764	-003849
3	100	000000	-004059	-003869	-003195
4	001	024807	009374	005003	003128
4	003	024514	009361	005004	003130
4	010	023714	009294	004993	003129
4	020	022807	009180	004963	003118
4	050	020708	008805	004841	003063
4	100	018157	008188	004604	002944

Table 3. Scattering Functions

$$\psi(\mu, \tau) = \mu[v_1 Y^{(s)} - v_2 X^{(s)}], \quad \xi(\mu, \tau) = \mu[v_2 Y^{(s)} - v_1 X^{(s)}]$$

$$\varphi(\mu, \tau) = (1 + \mu v_4) X^{(s)} - \mu v_3 Y^{(s)}, \quad \eta(\mu, \tau) = (1 - \mu v_4) Y^{(s)} + \mu v_3 X^{(s)}$$

$$\xi(\mu, \tau) = \frac{1}{2} \mu [v_1 Y^{(4)} - v_2 X^{(4)}] + s_1^2 [X^{(4)} - Y^{(4)}]$$

$$\theta(\mu, \tau) = \frac{1}{2} \mu [v_2 Y^{(4)} - v_1 X^{(4)}] - s_1^2 [X^{(4)} - Y^{(4)}]$$

$$\chi(\mu, \tau) = (1 - \mu u_4) X^{(4)} + \mu u_3 Y^{(4)} + t_1^2 [X^{(4)} - Y^{(4)}]$$

$$\sigma(\mu, \tau) = (1 + \mu u_4) Y^{(4)} - \mu u_3 X^{(4)} - t_1^2 [X^{(4)} - Y^{(4)}]$$

$$\gamma_L(\mu, \tau) = a[X^{(s)} + Y^{(s)}], \quad \gamma_T(\mu, \tau) = b[X^{(4)} + Y^{(4)}] - \mu c[X^{(4)} - Y^{(4)}]$$

In the above $X^{(k)}$ and $Y^{(k)}$ are abbreviations for $X_2^{(k)}(\mu, \tau)$ and $Y_2^{(k)}(\mu, \tau)$. The coefficients of $X^{(k)}$ and $Y^{(k)}$ are defined and tabulated in Table 4.

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TABLE 3 Scattering Function.
 $\tau = .001$

μ	ψ	ϕ	ξ	η
000	000000	100000	000000	000000
002	000058	100435	000056	095578
004	000178	100310	000174	097885
006	000379	100101	000373	098515
008	000659	099810	000651	098658
010	001020	099439	001010	098558
012	001460	098988	001448	098294
014	001981	098456	001967	097904
016	002582	097844	002566	097403
018	003262	097152	003244	096803
020	004023	096379	004003	096108
024	005786	094593	005762	094451
028	007868	092486	007840	092449
032	010271	089058	010239	090112
036	012995	084730	012959	087443
040	016038	084840	015998	084447
044	019403	080849	019359	081124
048	023087	077137	023039	077477
052	027092	073104	027040	073506
056	031418	068780	031362	069211
060	036064	064075	036004	064894
064	041030	059080	040966	059655
068	046316	053763	046245	054393
072	051923	048125	051851	048809
076	057851	042167	057775	042904
080	064099	035887	064019	036676
084	070667	029287	070583	030128
088	077556	022365	077468	023237
090	081120	018754	081030	019702
092	084765	015123	084673	016066
094	088489	011381	088395	012349
096	092294	007559	092198	008552
098	096179	003657	096081	004675
100	100144	000010	100044	000718

TABLE 3 Scattering Functions (Continued)

 $\tau = .001$

μ	ζ	θ	x	σ
0.00	0.00000	0.00000	1.00000	0.00000
0.02	0.00009	0.00009	1.00279	0.95401
0.04	0.00009	0.00009	1.00282	0.97812
0.06	0.00009	0.00009	1.00283	0.98630
0.08	0.00009	0.00009	1.00283	0.99041
0.10	0.00009	0.00009	1.00284	0.99289
0.12	0.00009	0.00009	1.00284	0.99454
0.14	0.00009	0.00009	1.00284	0.99572
0.16	0.00009	0.00009	1.00284	0.99661
0.18	0.00009	0.00009	1.00284	0.99730
0.20	0.00009	0.00009	1.00284	0.99786
0.24	0.00009	0.00009	1.00285	0.99869
0.28	0.00009	0.00009	1.00285	0.99928
0.32	0.00009	0.00009	1.00285	0.99973
0.36	0.00009	0.00009	1.00285	1.00007
0.40	0.00009	0.00009	1.00285	1.00035
0.44	0.00009	0.00009	1.00285	1.00058
0.48	0.00009	0.00009	1.00285	1.00077
0.52	0.00009	0.00009	1.00285	1.00093
0.56	0.00009	0.00009	1.00285	1.00106
0.60	0.00009	0.00009	1.00285	1.00118
0.64	0.00009	0.00009	1.00285	1.00129
0.68	0.00009	0.00009	1.00285	1.00138
0.72	0.00009	0.00009	1.00285	1.00146
0.76	0.00009	0.00009	1.00285	1.00153
0.80	0.00009	0.00009	1.00285	1.00160
0.84	0.00009	0.00009	1.00285	1.00166
0.88	0.00009	0.00009	1.00285	1.00171
0.90	0.00009	0.00009	1.00285	1.00174
0.92	0.00009	0.00009	1.00285	1.00176
0.94	0.00009	0.00009	1.00285	1.00179
0.96	0.00009	0.00009	1.00285	1.00181
0.98	0.00009	0.00009	1.00285	1.00183
1.00	0.00009	0.00009	1.00285	1.00185

TABLE 3 Scattering Functions (Continued)

μ	$\tau = .001$		$\tau = .003$	
	Y_e	Y_r	Y_e	Y_r
000	049812	049877	049452	049646
002	097695	097609	093219	093082
004	098901	098813	096579	096436
006	099310	099222	097756	097611
008	099515	099427	098356	098210
010	099639	099551	098719	098573
012	099722	099633	098953	098816
014	099781	099692	099138	098991
016	099825	099737	099269	099122
018	099860	099771	099372	099225
020	099888	099799	099454	099307
024	099929	099840	099577	099430
028	099959	099870	099666	099518
032	099981	099892	099732	099585
036	099999	099910	099784	099636
040	100012	099924	099825	099678
044	100024	099935	099859	099711
048	100033	099944	099888	099740
052	100041	099952	099912	099764
056	100048	099959	099932	099784
060	100054	099965	099950	099802
064	100059	099970	099965	099817
068	100064	099975	099979	099831
072	100068	099979	099991	099843
076	100072	099983	100002	099854
080	100075	099986	100012	099864
084	100078	099989	100021	099873
088	100081	099992	100029	099881
090	100082	099993	100033	099885
092	100083	099994	100037	099889
094	100084	099995	100040	099892
096	100085	099996	100043	099895
098	100086	099997	100047	099899
100	100087	099998	100050	099902

TABLE 3 Scattering Functions (Continued)

$\tau = .003$

μ	ψ	ϕ	ξ	η
0.00	0.00000	1.00000	0.00000	0.00000
0.02	0.00093	1.01114	0.00087	0.87201
0.04	0.00215	1.01027	0.00204	0.93848
0.06	0.00417	1.00827	0.00400	0.96028
0.08	0.00699	1.00540	0.00675	0.96967
0.10	0.01061	1.00170	0.01031	0.97350
0.12	0.01504	0.99717	0.01468	0.97413
0.14	0.02026	0.99182	0.01985	0.97256
0.16	0.02630	0.98567	0.02582	0.96931
0.18	0.03313	0.97870	0.03260	0.96468
0.20	0.04077	0.97092	0.04018	0.95882
0.24	0.05847	0.95293	0.05775	0.94387
0.28	0.07938	0.93170	0.07854	0.92497
0.32	0.10351	0.90724	0.10255	0.90241
0.36	0.13085	0.87954	0.12977	0.87631
0.40	0.16141	0.84861	0.16021	0.84677
0.44	0.19519	0.81445	0.19387	0.81385
0.48	0.23219	0.77705	0.23075	0.77759
0.52	0.27240	0.73642	0.27084	0.73800
0.56	0.31583	0.69256	0.31415	0.69511
0.60	0.36247	0.64546	0.36067	0.64894
0.64	0.41234	0.59513	0.41042	0.59948
0.68	0.46542	0.54157	0.46338	0.54676
0.72	0.52171	0.48477	0.51955	0.49078
0.76	0.58123	0.42474	0.57895	0.43153
0.80	0.64396	0.36148	0.64156	0.36903
0.84	0.70991	0.29498	0.70739	0.30328
0.88	0.77907	0.22526	0.77643	0.23428
0.90	0.81486	0.18918	0.81316	0.19856
0.92	0.85145	0.15229	0.84869	0.16203
0.94	0.88885	0.11460	0.88603	0.12469
0.96	0.92705	0.07610	0.92417	0.08654
0.98	0.96606	0.03679	0.96312	0.04758
1.00	1.00587	0.00030	1.00287	0.00780

TABLE 3 Scattering Functions (Continued)

$\tau = .003$

μ	ζ	θ	χ	σ
000	000000	000000	100000	000000
002	000026	000026	100687	086750
004	000027	000027	100710	093481
006	000027	000027	100718	095839
008	000028	000028	100723	097040
010	000028	000028	100725	097768
012	000028	000028	100727	098256
014	000028	000028	100728	098607
016	000028	000028	100729	098870
018	000028	000028	100730	099076
020	000028	000028	100730	099241
024	000028	000028	100731	099488
028	000028	000028	100732	099665
032	000028	000028	100732	099798
036	000028	000028	100732	099902
040	000028	000028	100733	099985
044	000028	000028	100733	100053
048	000028	000028	100733	100110
052	000028	000028	100733	100158
056	000028	000028	100733	100199
060	000028	000028	100733	100235
064	000028	000028	100734	100266
068	000028	000028	100734	100293
072	000028	000028	100734	100318
076	000028	000028	100734	100340
080	000028	000028	100734	100360
084	000028	000028	100734	100377
088	000028	000028	100734	100394
090	000028	000028	100734	100401
092	000028	000028	100734	100408
094	000028	000028	100734	100415
096	000028	000028	100734	100422
098	000028	000028	100734	100428
100	000028	000028	100734	100435

TABLE 3 Scattering Functions (Continued)

μ	$\tau = .010$		$\tau = .020$	
	Y_{ℓ}	Y_r	Y_{ℓ}	Y_r
0.00	0.48292	0.48961	0.47088	0.48180
0.02	0.80273	0.80293	0.68089	0.68208
0.04	0.88925	0.88930	0.80217	0.80265
0.06	0.92317	0.92320	0.85764	0.85795
0.08	0.94121	0.94122	0.88895	0.88920
0.10	0.95239	0.95240	0.90901	0.90922
0.12	0.96000	0.96001	0.92294	0.92313
0.14	0.96552	0.96552	0.93317	0.93335
0.16	0.96969	0.96970	0.94101	0.94118
0.18	0.97297	0.97297	0.94720	0.94736
0.20	0.97561	0.97561	0.95221	0.95236
0.24	0.97959	0.97959	0.95984	0.95998
0.28	0.98245	0.98245	0.96537	0.96550
0.32	0.98461	0.98461	0.96956	0.96968
0.36	0.98630	0.98630	0.97284	0.97295
0.40	0.98765	0.98765	0.97549	0.97559
0.44	0.98876	0.98876	0.97766	0.97776
0.48	0.98969	0.98969	0.97948	0.97957
0.52	0.99047	0.99047	0.98102	0.98111
0.56	0.99115	0.99115	0.98235	0.98244
0.60	0.99173	0.99173	0.98350	0.98358
0.64	0.99225	0.99225	0.98451	0.98459
0.68	0.99270	0.99270	0.98539	0.98548
0.72	0.99310	0.99310	0.98618	0.98627
0.76	0.99346	0.99346	0.98688	0.98696
0.80	0.99379	0.99379	0.98751	0.98761
0.84	0.99408	0.99408	0.98808	0.98819
0.88	0.99435	0.99435	0.98859	0.98871
0.90	0.99447	0.99447	0.98883	0.98896
0.92	0.99459	0.99459	0.98905	0.98919
0.94	0.99471	0.99471	0.98927	0.98942
0.96	0.99482	0.99482	0.98947	0.98963
0.98	0.99492	0.99492	0.98966	0.98984
1.00	0.99502	0.99502	0.98985	0.99004

TABLE 3 Scattering Functions (Continued)

$\tau = .010$

μ	ψ	ϕ	ξ	η
000	000000	100000	000000	000000
002	000194	102660	000178	063183
004	000336	102830	000300	080664
006	000546	102732	000491	087379
008	000835	102500	000759	090781
010	001203	102163	001108	092707
012	001653	101732	001537	093823
014	002183	101213	002048	094429
016	002795	100606	002639	094681
018	003488	099914	003312	094666
020	004252	099138	004067	094439
024	006055	097334	005819	093473
028	008173	095195	007897	091950
032	010617	092725	010301	089953
036	013387	089922	013031	087529
040	016482	086788	016087	084706
044	019904	083323	019468	081504
048	023651	079527	023175	077935
052	027724	075401	027208	074006
056	032123	070943	031567	069724
060	036847	066155	036251	065093
064	041898	061037	041262	060118
068	047274	055587	046598	054799
072	052976	049808	052260	049141
076	059004	043698	058248	043143
080	065358	037257	064562	036808
084	072038	030486	071201	030136
088	079043	023384	078167	023128
090	082668	019710	081772	019498
092	086375	015952	085458	015785
094	090163	012112	089226	011988
096	094032	008190	093075	008108
098	097983	004185	097006	004144
100	102015	000097	101018	000097

TABLE 3 Scattering Functions (Continued)

$\tau = .010$

μ	ζ	θ	χ	σ
000	000000	000000	100000	000000
002	000077	000076	101631	062210
004	000086	000086	101812	079651
006	000090	000090	101879	086498
008	000091	000091	101914	090142
010	000093	000093	101935	092401
012	000093	000093	101950	093939
014	000094	000094	101960	095053
016	000094	000094	101968	095898
018	000095	000095	101974	096560
020	000095	000095	101979	097093
024	000095	000095	101986	097898
028	000096	000096	101992	098477
032	000096	000096	101996	098913
036	000096	000096	101999	099254
040	000096	000096	102001	099528
044	000096	000096	102003	099752
048	000096	000096	102005	099940
052	000096	000096	102007	100098
056	000096	000096	102008	100235
060	000096	000096	102009	100353
064	000097	000096	102010	100457
068	000097	000097	102011	100548
072	000097	000097	102011	100630
076	000097	000097	102012	100703
080	000097	000097	102013	100768
084	000097	000097	102013	100828
088	000097	000097	102014	100882
090	000097	000097	102014	100907
092	000097	000097	102014	100931
094	000097	000097	102014	100954
096	000097	000097	102015	100976
098	000097	000097	102015	100998
100	000097	000097	102015	101018

TABLE 3 Scattering Functions (Continued)

μ	$\tau = .050$		$\tau = .100$	
	Y_L	Y_T	Y_L	Y_T
0.00	0.44340	0.46291	0.41013	0.43832
0.02	0.52231	0.52863	0.45145	0.46725
0.04	0.63547	0.63808	0.51160	0.52051
0.06	0.71314	0.71453	0.57627	0.58173
0.08	0.76507	0.76592	0.63110	0.63472
0.10	0.80153	0.80210	0.67530	0.67785
0.12	0.82838	0.82878	0.71088	0.71275
0.14	0.84890	0.84920	0.73983	0.74125
0.16	0.86509	0.86531	0.76373	0.76483
0.18	0.87816	0.87834	0.78373	0.78459
0.20	0.88893	0.88908	0.80068	0.80137
0.24	0.90565	0.90574	0.82781	0.82826
0.28	0.91800	0.91806	0.84852	0.84882
0.32	0.92750	0.92754	0.86483	0.86502
0.36	0.93503	0.93506	0.87799	0.87811
0.40	0.94115	0.94117	0.88883	0.88890
0.44	0.94621	0.94622	0.89791	0.89794
0.48	0.95048	0.95048	0.90563	0.90562
0.52	0.95412	0.95411	0.91227	0.91224
0.56	0.95726	0.95725	0.91804	0.91799
0.60	0.96000	0.95999	0.92310	0.92303
0.64	0.96240	0.96239	0.92757	0.92749
0.68	0.96454	0.96453	0.93156	0.93147
0.72	0.96645	0.96643	0.93513	0.93503
0.76	0.96816	0.96814	0.93835	0.93824
0.80	0.96971	0.96969	0.94126	0.94115
0.84	0.97111	0.97109	0.94392	0.94379
0.88	0.97239	0.97237	0.94634	0.94621
0.90	0.97299	0.97297	0.94748	0.94735
0.92	0.97356	0.97354	0.94857	0.94843
0.94	0.97411	0.97409	0.94961	0.94948
0.96	0.97463	0.97461	0.95062	0.95048
0.98	0.97514	0.97512	0.95158	0.95144
1.00	0.97563	0.97560	0.95251	0.95237

TABLE 3 Scattering Functions (Continued)

$\tau = .070$

μ	ψ	ϕ	ξ	η
0.00	0.00000	1.00000	0.00000	0.00000
0.02	0.00296	1.03832	0.00269	0.40188
0.04	0.00482	1.04501	0.00417	0.64933
0.06	0.00713	1.04614	0.00610	0.76166
0.08	0.01015	1.04493	0.00872	0.82360
0.10	0.01394	1.04223	0.01212	0.86153
0.12	0.01853	1.03834	0.01631	0.88601
0.14	0.02393	1.03340	0.02131	0.90204
0.16	0.03015	1.02749	0.02713	0.91228
0.18	0.03718	1.02064	0.03376	0.91828
0.20	0.04504	1.01289	0.04122	0.92102
0.24	0.06321	0.99473	0.05859	0.91901
0.28	0.08468	0.97308	0.07925	0.90929
0.32	0.10944	0.94798	0.10322	0.89343
0.36	0.13750	0.91946	0.13047	0.87233
0.40	0.16886	0.88753	0.16103	0.84652
0.44	0.20352	0.85219	0.19489	0.81637
0.48	0.24148	0.81346	0.23204	0.78211
0.52	0.28274	0.77134	0.27250	0.74390
0.56	0.32730	0.72582	0.31626	0.70187
0.60	0.37516	0.67692	0.36332	0.65609
0.64	0.42632	0.62464	0.41367	0.60664
0.68	0.48078	0.56897	0.46733	0.55356
0.72	0.53854	0.50992	0.52429	0.49691
0.76	0.59960	0.44750	0.58455	0.43670
0.80	0.66396	0.38169	0.64811	0.37296
0.84	0.73162	0.31250	0.71496	0.30571
0.88	0.80258	0.23993	0.78512	0.23498
0.90	0.83929	0.20238	0.82143	0.19831
0.92	0.87683	0.16399	0.85857	0.16078
0.94	0.91519	0.12476	0.89653	0.12237
0.96	0.95438	0.08467	0.93532	0.08311
0.98	0.99439	0.04375	0.97493	0.04298
1.00	1.03523	0.00198	1.01536	0.00199

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TABLE 3 Scattering Functions (Continued)

$\tau = .020$

μ	ζ	θ	χ	σ
000	000000	000000	100000	000000
002	000127	000126	102382	038938
004	000158	000157	102888	063396
006	000171	000170	103093	074643
008	000178	000177	103204	081005
010	000182	000182	103273	085083
012	000185	000184	103321	087917
014	000187	000187	103355	089999
016	000189	000188	103382	091594
018	000190	000190	103402	092854
020	000191	000191	103419	093874
024	000192	000192	103444	095427
028	000193	000193	103462	096552
032	000194	000194	103476	097404
036	000195	000194	103486	098073
040	000196	000195	103495	098611
044	000196	000195	103502	099053
048	000197	000195	103508	099423
052	000197	000195	103513	099737
056	000197	000195	103517	100006
060	000198	000195	103521	100240
064	000198	000195	103525	100445
068	000198	000195	103528	100626
072	000198	000195	103531	100787
076	000199	000195	103533	100931
080	000199	000195	103535	101061
084	000199	000196	103537	101179
088	000199	000196	103539	101285
090	000199	000196	103540	101335
092	000199	000197	103540	101383
094	000199	000197	103541	101428
096	000199	000198	103541	101472
098	000199	000198	103542	101514
100	000198	000199	103542	101555

TABLE 3 Scattering Functions (Continued)

$\tau = .050$

μ	ψ	ϕ	ξ	η
000	000000	100000	000000	000000
002	000444	105101	000391	011821
004	000787	107146	000659	034657
006	001112	108037	000897	050697
008	001477	108391	001158	061389
010	001904	108432	001499	068781
012	002402	108258	001900	074070
014	002977	107916	002377	077943
016	003632	107432	002934	080811
018	004368	106824	003570	082934
020	005187	106100	004289	084483
024	007073	104332	005976	086290
028	009295	102161	007998	086817
032	011855	099602	010357	086383
036	014752	096668	013054	085176
040	017989	093362	016089	083313
044	021565	089690	019464	080870
048	025481	085655	023178	077902
052	029736	081257	027232	074445
056	034332	076498	031627	070527
060	039268	071380	036361	066168
064	044543	065903	041435	061383
068	050160	060067	046850	056184
072	056116	053874	052604	050581
076	062413	047323	058700	044581
080	069050	040415	065135	038190
084	076028	033150	071911	031414
088	083346	025528	079027	024255
090	087133	021583	082713	020533
092	091004	017549	086484	016717
094	094961	013426	090340	012808
096	099003	009214	094281	008804
098	103130	004913	098308	004707
100	107343	000523	102419	000517

TABLE 3 Scattering Functions (Continued)

$\tau = .050$

μ	ζ	θ	χ	σ
0.00	000000	000000	100000	000000
0.02	000200	000192	103199	010621
0.04	000308	000301	104627	032630
0.06	000365	000360	105360	048301
0.08	000399	000395	105799	058896
0.10	000422	000418	106089	066378
0.12	000438	000435	106295	071904
0.14	000450	000448	106449	076138
0.16	000460	000457	106568	079481
0.18	000467	000465	106663	082184
0.20	000474	000471	106740	084415
0.24	000483	000481	106859	087878
0.28	000490	000488	106945	090440
0.32	000495	000494	107011	092411
0.36	000499	000498	107063	093975
0.40	000503	000501	107105	095246
0.44	000505	000504	107140	096298
0.48	000508	000507	107169	097184
0.52	000510	000509	107194	097941
0.56	000511	000510	107215	098594
0.60	000513	000512	107234	099163
0.64	000514	000513	107250	099664
0.68	000515	000514	107264	100109
0.72	000516	000515	107277	100505
0.76	000517	000516	107289	100862
0.80	000518	000517	107299	101183
0.84	000519	000518	107309	101475
0.88	000520	000519	107317	101742
0.90	000520	000519	107321	101866
0.92	000520	000519	107325	101985
0.94	000521	000520	107329	102100
0.96	000521	000520	107332	102209
0.98	000521	000520	107336	102314
1.00	000521	000520	107339	102416

TABLE 3 Scattering Functions (Continued)

$\tau = .100$

μ	ψ	ϕ	ξ	η
000	000000	100000	000000	000000
002	000527	105505	000435	003540
004	001051	108644	000843	014071
006	001542	110549	001190	027037
008	002038	111679	001524	038388
010	002569	112305	001881	047591
012	003154	112574	002285	054940
014	003803	112574	002748	060810
016	004525	112357	003280	065514
018	005323	111957	003886	069290
020	006200	111396	004569	072317
024	008201	109848	006178	076622
028	010539	107794	008119	079154
032	013219	105276	010400	080345
036	016244	102320	013025	080471
040	019618	098943	015997	079709
044	023342	095155	019318	078182
048	027417	090965	022989	075977
052	031843	086376	027011	073155
056	036621	081394	031384	069764
060	041751	076021	036110	065837
064	047235	070259	041188	061403
068	053071	064110	046614	056482
072	059260	057575	052403	051091
076	065803	050656	058540	045244
080	072700	043353	065030	038951
084	079950	035667	071874	032222
088	087553	027599	079071	025063
090	091488	023422	087802	021325
092	095511	019149	086522	017482
094	099622	014781	090530	013534
096	103822	010317	094527	009483
098	108110	005758	098612	005328
100	112487	001104	102785	001071

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TABLE 3 Scattering Functions (Continued)

$\tau = .100$

μ	ζ	θ	χ	σ
000	000000	000000	100000	000000
002	000240	000214	103461	002714
004	000436	000406	105656	012306
006	000573	000545	107111	024562
008	000668	000643	108107	035473
010	000737	000715	108823	044465
012	000790	000770	109359	051790
014	000830	000812	109776	057798
016	000863	000846	110107	062783
018	000889	000874	110378	066972
020	000912	000897	110602	070533
024	000946	000934	110953	076251
028	000972	000961	111215	080629
032	000992	000982	111418	084084
036	001009	000999	111579	086877
040	001022	001012	111711	089182
044	001033	001024	111820	091114
048	001042	001033	111913	092757
052	001050	001041	111992	094172
056	001057	001049	112061	095402
060	001063	001055	112120	096481
064	001068	001060	112173	097436
068	001073	001065	112220	098287
072	001077	001069	112262	099050
076	001081	001073	112300	099737
080	001084	001077	112334	100360
084	001087	001080	112365	100927
088	001090	001083	112393	101446
090	001092	001084	112406	101689
092	001093	001085	112419	101922
094	001094	001087	112431	102145
096	001095	001088	112443	102360
098	001097	001089	112454	102566
100	001098	001090	112465	102764

Table 4. Coefficients

Coefficients relating to the computation of scattering functions

$$v_1, v_2, v_3, v_4, u_3, u_4, u_5, s, t, a, b, c, Q, q, \bar{s}$$

The coefficients are defined by the following relations:

$$q = y_0^{(3)} / (\bar{x}_1^{(3)} + y_1^{(3)}) , \quad v_2 + v_1 = \Delta_1(k_1\delta_1 - k_2\delta_2)$$

$$v_2 - v_1 = \Delta_2(k_1\delta_1 - k_2\delta_2) , \quad v_4 + v_3 = \Delta_1(d_1k_1 - d_0k_2)$$

$$v_4 - v_3 = \Delta_2[c_1\delta_1 - c_0\delta_2 - 2Q(d_0\delta_1 - d_1\delta_2)]$$

$$u_4 + u_3 = \Delta_1[c_1\delta_1 - c_0\delta_2] , \quad u_4 - u_3 = \Delta_2[d_1k_1 - d_0k_2]$$

$$u_5 = \Delta_2[c_0k_1 - c_1k_2] , \quad s = \frac{1}{2}Q(v_2 - v_1) , \quad t = Q(u_4 - u_3)$$

$$a = \frac{3}{8}Q(v_2 - v_1)(d_0 - d_2) , \quad b = \frac{3}{8}Q(u_4 - u_3)(d_0 - d_2)$$

$$c = \frac{3}{8}Q(d_0 - d_2)u_5 , \quad Q = \frac{c_0 - c_2}{(d_0 - d_2)\tau + 2(d_1 - d_3)}$$

$$\bar{s} = 1 - ak_1 - bc_1 + cd_2 ,$$

where

$$\frac{1}{\Delta_1} = d_0\delta_1 - d_1\delta_2 , \quad \frac{1}{\Delta_2} = c_0k_1 - c_1k_2 - 2Q(d_1k_1 - d_0k_2)$$

$$c_0 = \alpha_0^{(4)} + \beta_0^{(4)} - \frac{8}{3} , \quad d_0 = \alpha_0^{(4)} - \beta_0^{(4)} - \frac{8}{3} , \quad c_p = \alpha_p^{(4)} + \beta_p^{(4)}$$

$$d_p = \alpha_p^{(4)} - \beta_p^{(4)} , \quad k_p = \alpha_p^{(s)} + \beta_p^{(s)} , \quad \delta_p = \alpha_p^{(s)} - \beta_p^{(s)} ,$$

$p \geq 1$; $\alpha_p^{(k)}$, $\beta_p^{(k)}$, $x_p^{(k)}$, and $y_p^{(k)}$ are the moments defined and tabulated in Table 2.

TABLE 4 Coefficients

τ		v_1		v_2		v_3
000	-0	18750	-0	18750	1	14583
001	-0	18847	-0	18897	1	13257
003	-0	18975	-0	19123	1	11348
010	-0	19272	-0	19756	1	06454
020	-0	19556	-0	20501	1	01264
050	-0	20070	-0	22308	0	90353
100	-0	20512	-0	24689	0	78371
τ		v_4		s		t
000	-1	52083	-0	25000	-0	50000
001	-1	51083	-0	24936	-0	49981
003	-1	49651	-0	24837	-0	49944
010	-1	46024	-0	24564	-0	49810
020	-1	42252	-0	24247	-0	49619
050	-1	34596	-0	23488	-0	49042
100	-1	26679	-0	22495	-0	48081
τ		u_3		u_4		u_5
000	-0	28125	-0	28125	0	00000
001	-0	28229	-0	28279	0	00038
003	-0	28371	-0	28520	0	00113
010	-0	28711	-0	29202	0	00378
020	-0	29044	-0	30011	0	00760
050	-0	29656	-0	31992	0	01914
100	-0	30164	-0	34628	0	03836
τ		a		b		c
000	0	50000	0	50000	-0	37500
001	0	49744	0	49853	-0	37559
003	0	49354	0	49621	-0	37632
010	0	48292	0	48951	-0	37779
020	0	47088	0	48180	-0	37885
050	0	44340	0	46291	-0	37933
100	0	41013	0	43832	-0	37667
τ		q		q		s
000		∞	1	33333	0	00000
001	1002	39	1	32145	0	00100
003	335	31	1	30425	0	00279
010	101	54	1	25997	0	00972
020	51	30	1	21285	0	01904
050	20	99	1	11347	0	04518
100	10	76	1	00411	0	08420

Table 5. Intensities

Intensities in the direction normal (I_r) and parallel (I_ℓ) to the sun vertical and their correction for the ground reflection (I_r^* , I_ℓ^*) along the sun vertical for different sun elevations

$$I_r = \frac{3}{32} \frac{\mu_0}{\mu - \mu_0} \{ K\sigma(\mu) + L\theta(\mu) - M\chi(\mu) - N\zeta(\mu) + H \}$$

$$\left. \begin{array}{l} I_\ell \\ I_{\ell a} \end{array} \right\} = \frac{3}{32} \frac{\mu_0}{\mu - \mu_0} \{ K\xi(\mu) + L\eta(\mu) - M\psi(\mu) - N\phi(\mu) \pm \mu \sqrt{1-\mu^2} G - \mu^2 H \}$$

(The upper sign applied to I_ℓ ; the lower sign to $I_{\ell a}$.)

$$I_r^* = \frac{\lambda}{4(1-\lambda s)} \mu_0 [\gamma_\ell(\mu_0) + \gamma_r(\mu_0)] [1 - \gamma_r(\mu)]$$

$$I_\ell^* = \frac{\lambda}{4(1-\lambda s)} \mu_0 [\gamma_\ell(\mu_0) + \gamma_r(\mu_0)] [1 - \gamma_\ell(\mu)]$$

where

$$K = \psi(\mu_0) + \chi(\mu_0), \quad L = 2\phi(\mu_0) + 2\zeta(\mu_0),$$

$$M = \xi(\mu_0) + \sigma(\mu_0), \quad N = 2\phi(\mu_0) + 2\eta(\mu_0)$$

$$G = 4\mu_0 \sqrt{1-\mu_0^2} \{ X^{(1)}(\mu_0) Y^{(1)}(\mu) - Y^{(1)}(\mu_0) X^{(1)}(\mu) \}$$

$$H = (1 - \mu_0^2) \{ X^{(2)}(\mu_0) Y^{(2)}(\mu) - Y^{(2)}(\mu_0) X^{(2)}(\mu) \}$$

(λ - albedo of the ground, reflecting according to Lambert's law.)
For detailed discussion see the Introduction.

TABLE 5 Intensities

τ	μ_0	μ	I_ℓ	$I_{\ell a}$	I_r
010	002	000	11850	11860	11610
010	002	002	06000	06000	05900
010	002	004	03353	03342	03290
010	002	006	02332	02321	02291
010	002	008	01784	01773	01756
010	002	010	01442	01431	01424
010	002	012	01208	01197	01197
010	002	020	00721	00709	00731
010	002	040	00323	00312	00370
010	002	060	00167	00157	00248
010	002	080	00072	00065	00186
010	002	090	00035	00030	00165
010	002	094	00021	00017	00158
010	002	098	00008	00005	00152
010	002	100	00000	00000	00149

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_l	I_{l_a}	I_r
010	010	006	02835	02768	02786
010	010	008	02173	02105	02133
010	010	010	01761	01698	01735
010	010	012	01479	01410	01452
010	010	014	01273	01204	01252
010	010	016	01117	01047	01100
010	010	018	00993	00924	00981
010	010	020	00893	00824	00885
010	010	040	00414	00348	00448
010	010	060	00224	00165	00300
010	010	080	00105	00062	00225
010	010	090	00056	00025	00200
010	010	094	00037	00012	00192
010	010	098	00017	00002	00184
010	010	100	00002	00002	00180
010	020	006	02854	02719	02858
010	020	010	01786	01648	01772
010	020	014	01302	01162	01283
010	020	018	01024	00884	01006
010	020	020	00925	00784	00909
010	020	024	00772	00633	00760
010	020	028	00660	00522	00653
010	020	032	00574	00437	00573
010	020	040	00447	00315	00459
010	020	060	00255	00139	00307
010	020	080	00131	00044	00231
010	020	090	00077	00014	00205
010	020	094	00055	00005	00197
010	020	098	00030	00001	00189
010	020	100	00008	00008	00185
010	040	006	02599	02344	02896
010	040	010	01655	01393	01795
010	040	020	00894	00629	00920
010	040	028	00661	00400	00662
010	040	032	00585	00326	00580
010	040	036	00523	00268	00516
010	040	040	00476	00225	00470
010	040	044	00429	00183	00424
010	040	052	00357	00123	00359
010	040	060	00299	00079	00311
010	040	080	00179	00014	00234
010	040	090	00121	00001	00208
010	040	094	00096	00001	00199
010	040	098	00064	00009	00191
010	040	100	00030	00030	00187

TABLE 5 Intensities (continued)

τ	μ_0	μ	I_ℓ	$I_{\ell a}$	I_r
010	060	006	03062	01727	02910
010	050	010	01344	00999	01804
010	060	020	01766	00418	00924
010	060	040	01448	00118	00468
010	060	052	01361	00053	00361
010	060	056	01336	00038	00335
010	060	060	01317	00028	00314
010	060	064	01296	00018	00293
010	060	068	01276	00010	00276
010	060	072	01257	00005	00261
010	060	080	01218	00001	00235
010	060	090	01166	00008	00209
010	060	094	01141	00017	00200
010	060	098	01108	00036	00192
010	060	100	01068	00068	00188
010	080	006	01243	00907	02919
010	080	010	01842	00496	01809
010	080	020	01525	00176	00927
010	080	040	01358	00027	00469
010	080	060	01291	00001	00314
010	080	068	01270	00004	00277
010	080	072	01259	00007	00262
010	080	076	00248	00012	00248
010	080	080	00236	00020	00236
010	080	084	01224	00027	00225
010	080	088	01211	00038	00214
010	080	090	00203	00044	00210
010	080	094	00184	00060	00201
010	080	098	01158	00085	00193
010	080	100	00121	00121	00189
010	090	006	01712	00438	02923
010	090	010	01505	00222	01812
010	090	020	01346	00060	00928
010	090	040	01273	00002	00470
010	090	060	00249	00012	00314
010	090	080	01228	00050	00236
010	090	084	01222	00061	00225
010	090	088	00215	00073	00215
010	090	090	00210	00081	00210
010	090	092	00205	00089	00205
010	090	094	00199	00098	00201
010	090	096	00192	00108	00197
010	090	098	00181	00122	00193
010	090	100	00153	00153	00189

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I	I_{θ}	I_r
010	094	006	00471	00246	02925
010	094	010	00347	00115	01813
010	094	020	00256	00023	00929
010	094	040	00224	00003	00470
010	094	060	00221	00027	00314
010	094	080	00216	00071	00236
010	094	084	00214	00082	00225
010	094	088	00210	00095	00215
010	094	090	00208	00102	00210
010	094	092	00205	00110	00206
010	094	094	00200	00119	00202
010	094	096	00196	00128	00197
010	094	098	00189	00140	00193
010	094	100	00167	00167	00189
010	098	006	00201	00064	02926
010	098	010	00163	00022	01814
010	098	020	00144	00002	00929
010	098	040	00156	00021	00470
010	098	060	00176	00058	00315
010	098	080	00193	00104	00236
010	098	084	00195	00115	00225
010	098	088	00197	00127	00215
010	098	090	00197	00133	00210
010	098	092	00197	00139	00206
010	098	094	00197	00146	00201
010	098	096	00196	00154	00197
010	098	098	00189	00168	00193
010	098	100	00182	00182	00189
010	100	006	00015	00016	02927
010	100	010	00021	00021	01814
010	100	020	00038	00038	00930
010	100	040	00076	00076	00470
010	100	060	00113	00113	00315
010	100	080	00151	00151	00236
010	100	084	00159	00159	00225
010	100	088	00166	00166	00215
010	100	090	00170	00170	00210
010	100	092	00174	00174	00206
010	100	094	00178	00178	00201
010	100	096	00182	00182	00197
010	100	098	00185	00185	00193
010	100	100	00188	00188	00189

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_l	I_{2a}	I_r
020	002	000	07560	07560	07240
020	002	002	07700	07700	07400
020	002	004	04784	04769	04629
020	002	006	03487	03471	03380
020	002	008	02734	02717	02655
020	002	010	02243	02225	02185
020	002	012	01897	01880	01855
020	002	020	01155	01137	01156
020	002	040	00525	00508	00595
020	002	060	00273	00258	00400
020	002	080	00119	00108	00301
020	002	090	00059	00050	00268
020	002	094	00036	00029	00257
020	002	098	00014	00010	00247
020	002	100	00002	00002	00242
020	010	006	03106	04987	04952
020	010	008	03994	03871	03869
020	010	010	03280	03154	03172
020	010	012	02776	02648	02689
020	010	014	02405	02276	02333
020	010	016	02119	01989	02060
020	010	018	01891	01761	01844
020	010	020	01705	01575	01669
020	010	040	00801	00676	00856
020	010	060	00436	00326	00575
020	010	080	00206	00123	00433
020	010	090	00111	00050	00386
020	010	094	00073	00026	00370
020	010	098	00034	00006	00355
020	010	100	00006	00006	00348
020	020	006	05277	05031	05215
020	020	010	03411	03149	03338
020	020	014	02522	02255	02453
020	020	018	01999	01729	01938
020	020	020	01808	01537	01754
020	020	024	01518	01248	01474
020	020	028	01303	01034	01271
020	020	032	01135	00868	01117
020	020	040	00888	00628	00899
020	020	060	00510	00281	00605
020	020	080	00263	00090	00456
020	020	090	00154	00029	00406
020	020	094	00109	00011	00389
020	020	098	00059	00002	00373
020	020	100	00016	00016	00366

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_l	I_{l_a}	I_r
020	040	006	04872	04400	05357
020	040	010	03203	02701	03428
020	040	020	01774	01255	01801
020	040	028	01322	00805	01305
020	040	032	01172	00659	01147
020	040	036	01051	00544	01023
020	040	040	00948	00450	00923
020	040	044	00864	00373	00841
020	040	052	00721	00252	00714
020	040	060	00604	00164	00621
020	040	080	00361	00030	00468
020	040	090	00243	00003	00417
020	040	094	00190	00003	00400
020	040	098	00125	00016	00384
020	040	100	00059	00059	00377
020	060	006	03886	03262	05410
020	060	010	02613	01950	03461
020	060	020	01527	00841	01818
020	060	040	00905	00245	00932
020	060	052	00731	00112	00721
020	060	056	00684	00082	00670
020	060	060	00641	00060	00628
020	060	064	00598	00039	00587
020	060	068	00557	00024	00554
020	060	072	00518	00014	00523
020	060	080	00439	00004	00472
020	060	090	00331	00016	00421
020	060	094	00279	00034	00404
020	060	098	00211	00069	00389
020	060	100	00132	00132	00381
020	080	006	02351	01724	05442
020	080	010	01643	00977	03481
020	080	020	01049	00359	01828
020	080	040	00723	00061	00936
020	080	060	00587	00006	00628
020	080	068	00542	00011	00555
020	080	072	00520	00018	00525
020	080	076	00496	00028	00498
020	080	080	00471	00043	00475
020	080	084	00446	00058	00452
020	080	088	00417	00079	00432
020	080	090	00400	00092	00423
020	080	094	00362	00123	00406
020	080	098	00309	00170	00390
020	080	100	00236	00236	00383

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_e	I_a	I_r
020	090	006	01352	00840	05455
020	090	010	00988	00443	03489
020	090	020	00692	00128	01831
020	090	040	00549	00009	00937
020	090	060	00500	00029	00628
020	090	080	00453	00105	00473
020	090	084	00439	00128	00452
020	090	088	00423	00153	00432
020	090	090	00414	00168	00422
020	090	092	00405	00184	00413
020	090	094	00393	00201	00405
020	090	096	00378	00221	00397
020	090	098	00357	00247	00390
020	090	100	00305	00305	00383
020	094	006	00897	00478	05460
020	094	010	00680	00234	03492
020	094	020	00512	00052	01832
020	094	040	00451	00010	00937
020	094	060	00443	00059	00628
020	094	080	00430	00148	00473
020	094	084	00424	00171	00451
020	094	088	00416	00197	00432
020	094	090	00411	00211	00422
020	094	092	00404	00226	00414
020	094	094	00446	00244	00405
020	094	096	00389	00263	00397
020	094	098	00375	00286	00389
020	094	100	00335	00335	00382
020	098	006	00388	00133	05464
020	098	010	00323	00052	03494
020	098	020	00289	00009	01833
020	098	040	00313	00046	00937
020	098	060	00352	00120	00628
020	098	080	00384	00215	00473
020	098	084	00389	00237	00451
020	098	088	00391	00260	00431
020	098	090	00392	00272	00422
020	098	092	00392	00285	00413
020	098	094	00391	00299	00405
020	098	096	00389	00314	00397
020	098	098	00377	00341	00389
020	098	100	00366	00366	00381

TABLE 5 Intensities (Continued)

τ	μ_0	u	I_{ℓ}	I_{ρ_a}	I_I
020	100	006	00041	00041	05466
020	100	010	00048	00048	03495
020	100	020	00080	00080	01834
020	100	040	00153	00153	00937
020	100	060	00229	00229	00628
020	100	080	00305	00305	00472
020	100	084	00320	00320	00450
020	100	088	00336	00336	00430
020	100	090	00343	00343	00421
020	100	092	00351	00351	00413
020	100	094	00358	00358	00404
020	100	096	00366	00366	00397
020	100	098	00373	00373	00390
020	100	100	00379	00379	00381
050	002	000	02250	02250	01440
050	002	002	05500	05500	04900
050	002	004	04488	04475	04177
050	002	006	03828	03810	03581
050	002	008	03259	03239	03061
050	002	010	02813	02792	02652
050	002	012	02453	02441	02333
050	002	020	01609	01585	01561
050	002	040	00773	00748	00848
050	002	060	00411	00389	00581
050	002	080	00184	00156	00442
050	002	090	00092	00080	00395
050	002	094	00058	00049	00278
050	002	098	00025	00019	00364
050	002	100	00007	00007	00356
050	010	006	09214	09006	08668
050	010	008	07641	07411	07183
050	010	010	06502	06256	05114
050	010	012	05644	05391	05309
050	010	014	04979	04719	04690
050	010	016	04447	04182	04199
050	010	018	04012	03743	03799
050	010	020	03649	03377	03469
050	010	040	01783	01512	01852
050	010	060	00986	00743	01262
050	010	080	00473	00290	00957
050	010	090	00259	00125	00854
050	010	094	00175	00070	00818
050	010	098	00056	00025	00756
050	010	100	00023	00023	00770

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_p	I_{2a}	I_r
050	020	006	10327	09859	09909
050	020	010	07297	06753	06941
050	020	014	05617	05037	05312
050	020	018	04555	03956	04297
050	020	020	04157	03551	03921
050	020	024	03529	02917	03336
050	020	028	03054	02439	02903
050	020	032	02678	02064	02569
050	020	040	02113	01510	02088
050	020	060	01229	00691	01422
050	020	080	00641	00234	01077
050	020	090	00382	00085	00961
050	020	094	00275	00042	00921
050	020	098	00155	00019	00885
050	020	100	00052	00052	00867
050	040	006	09943	09005	10628
050	040	010	07123	06036	07420
050	040	020	04221	03014	04181
050	040	028	03203	01979	03093
050	040	032	02856	01635	02737
050	040	036	02572	01359	02454
050	040	040	02334	01132	02225
050	040	044	02127	00944	02033
050	040	052	01783	00648	01735
050	040	060	01498	00428	01513
050	040	080	00905	00094	01147
050	040	090	00617	00026	01023
050	040	094	00488	00025	00981
050	040	098	00330	00059	00942
050	040	100	00164	00164	00923
050	060	006	08050	06795	10900
050	060	010	05889	04434	07602
050	060	020	03673	02059	04280
050	060	040	02242	00637	02275
050	060	052	01822	00304	01775
050	060	056	01707	00230	01654
050	060	060	01601	00169	01548
050	060	064	01498	00121	01455
050	060	068	01400	00082	01373
050	060	072	01304	00054	01299
050	060	080	01111	00027	01173
050	060	090	00848	00058	01047
050	060	094	00721	00102	01003
050	060	098	00553	00192	00963
050	060	100	00354	00354	00944

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_l	I_a	I_r
050	080	006	04925	03655	11061
050	080	010	03738	02267	07710
050	080	020	02539	00908	04339
050	080	040	01799	00177	02306
050	080	060	01477	00032	01569
050	080	068	01372	00041	01391
050	080	072	01319	00057	01317
050	080	076	01254	00080	01250
050	080	080	01204	00116	01192
050	080	084	01144	00152	01134
050	080	088	01074	00204	01084
050	080	090	01034	00236	01061
050	080	094	00941	00315	01017
050	080	098	00806	00410	00976
050	080	100	00621	00621	00957
050	090	006	02866	01824	11125
050	090	010	02267	01060	07753
050	090	020	01664	00346	04363
050	090	040	01373	00042	02319
050	090	060	01265	00080	01578
050	090	080	01161	00263	01195
050	090	084	01131	00316	01140
050	090	088	01095	00382	01090
050	090	090	01071	00420	01067
050	090	092	01047	00458	01044
050	090	094	01016	00503	01022
050	090	096	00978	00557	01001
050	090	098	00925	00625	00981
050	090	100	00783	00783	00962
050	094	006	01924	01071	11148
050	094	010	01575	00537	07769
050	094	020	01254	00152	04372
050	094	040	01129	00041	02323
050	094	060	01121	00151	01581
050	094	080	01103	00326	01198
050	094	084	01091	00425	01148
050	094	088	01073	00489	01092
050	094	090	01061	00512	01068
050	094	092	01046	00564	01046
050	094	094	01023	00560	01024
050	094	096	01001	00631	01003
050	094	098	00964	00719	00983
050	094	100	00854	00854	00962

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_L	I_a	I_r
0 50	0 98	0 0 6	0 0 8 7 1	0 0 3 5 1	1 1 1 7 1
0 50	0 98	0 1 0	0 0 7 7 1	0 0 1 7 0	0 7 7 8 4
0 50	0 98	0 2 0	0 0 7 1 7	0 0 0 5 0	0 4 3 8 0
0 50	0 98	0 4 0	0 0 7 8 8	0 0 1 2 6	0 2 3 2 8
0 50	0 98	0 6 0	0 0 8 9 4	0 0 3 0 3	0 1 5 8 4
0 50	0 98	0 8 0	0 0 9 8 3	0 0 5 3 5	0 1 2 0 0
0 50	0 98	0 8 4	0 0 9 9 5	0 0 5 9 0	0 1 1 4 5
0 50	0 98	0 8 8	0 1 0 0 3	0 0 6 4 8	0 1 0 9 4
0 50	0 98	0 9 0	0 1 0 0 6	0 0 6 7 9	0 1 0 7 0
0 50	0 98	0 9 2	0 1 0 0 6	0 0 7 1 3	0 1 0 4 8
0 50	0 98	0 9 4	0 1 0 0 4	0 0 7 4 8	0 1 0 2 6
0 50	0 98	0 9 6	0 0 9 9 8	0 0 7 8 8	0 1 0 0 5
0 50	0 98	0 9 8	0 0 9 6 2	0 0 8 5 7	0 0 9 8 5
0 50	0 98	1 0 0	0 0 9 2 7	0 0 9 2 7	0 0 9 6 6
0 50	1 0 0	0 0 6	0 0 1 5 3	0 0 1 5 3	1 1 1 8 2
0 50	1 0 0	0 1 0	0 0 1 5 5	0 0 1 5 5	0 7 7 9 2
0 50	1 0 0	0 2 0	0 0 2 1 7	0 0 2 1 7	0 4 3 8 4
0 50	1 0 0	0 4 0	0 0 3 9 1	0 0 3 9 1	0 2 3 3 0
0 50	1 0 0	0 6 0	0 0 5 7 9	0 0 5 7 9	0 1 5 8 5
0 50	1 0 0	0 8 0	0 0 7 7 1	0 0 7 7 1	0 1 2 0 1
0 50	1 0 0	0 8 4	0 0 8 1 0	0 0 8 1 0	0 1 1 4 6
0 50	1 0 0	0 8 8	0 0 8 4 9	0 0 8 4 9	0 1 0 9 5
0 50	1 0 0	0 9 0	0 0 8 6 8	0 0 8 6 8	0 1 0 7 1
0 50	1 0 0	0 9 2	0 0 8 8 8	0 0 8 8 8	0 1 0 4 9
0 50	1 0 0	0 9 4	0 0 9 0 7	0 0 9 0 7	0 1 0 2 7
0 50	1 0 0	0 9 6	0 0 9 2 6	0 0 9 2 6	0 1 0 0 6
0 50	1 0 0	0 9 8	0 0 9 4 6	0 0 9 4 6	0 0 9 8 6
0 50	1 0 0	1 0 0	0 0 9 6 5	0 0 9 6 5	0 0 9 6 6
1 0 0	0 0 2	0 0 0	0 0 7 0 0	0 0 7 0 0	0 0 4 8 1
1 0 0	0 0 2	0 0 2	0 1 3 0 0	0 1 3 0 0	0 1 1 0 0
1 0 0	0 0 2	0 0 4	0 2 1 0 5	0 2 0 9 9	0 1 8 0 5
1 0 0	0 0 2	0 0 6	0 2 3 4 8	0 2 3 3 8	0 2 0 6 7
1 0 0	0 0 2	0 0 8	0 2 3 2 2	0 2 3 0 9	0 2 0 7 1
1 0 0	0 0 2	0 1 0	0 2 2 0 3	0 2 1 8 7	0 1 9 8 2
1 0 0	0 0 2	0 1 2	0 2 0 5 8	0 2 0 4 1	0 1 8 6 5
1 0 0	0 0 2	0 2 0	0 1 5 3 7	0 1 5 1 4	0 1 4 3 4
1 0 0	0 0 2	0 4 0	0 0 8 2 0	0 0 7 9 4	0 0 8 6 7
1 0 0	0 0 2	0 6 0	0 0 4 5 3	0 0 4 3 0	0 0 6 1 6
1 0 0	0 0 2	0 8 0	0 0 2 0 9	0 0 1 9 1	0 0 4 7 7
1 0 0	0 0 2	0 9 0	0 0 1 0 9	0 0 0 9 5	0 0 4 2 8
1 0 0	0 0 2	0 9 4	0 0 0 7 1	0 0 0 6 1	0 0 4 1 2
1 0 0	0 0 2	0 9 8	0 0 0 3 4	0 0 0 2 8	0 0 3 9 6
1 0 0	0 0 2	1 0 0	0 0 0 1 4	0 0 0 1 4	0 0 3 8 9

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_l	I_a	I_r
100	010	006	10661	10431	09636
100	010	008	09653	09375	08732
100	010	010	08699	08385	07874
100	010	012	07870	07530	07134
100	010	014	07155	06795	06498
100	010	016	06540	06164	05956
100	010	018	06010	05621	05491
100	010	020	05548	05149	05090
100	010	040	02908	02481	02915
100	010	060	01651	01260	02035
100	010	080	00810	00510	01563
100	010	090	00453	00233	01400
100	010	094	00312	00140	01344
100	010	098	00164	00063	01292
100	010	100	00059	00059	01268
100	020	006	13795	13193	12762
100	020	010	11092	10294	10185
100	020	014	09097	08190	08312
100	020	018	07657	06684	06982
100	020	020	07084	06088	06461
100	020	024	06136	05107	05611
100	020	028	05387	04339	04956
100	020	032	04777	03719	04436
100	020	040	03830	02773	03665
100	020	060	02279	01315	02551
100	020	080	01209	00470	01956
100	020	090	00729	00188	01751
100	020	094	00531	00107	01681
100	020	098	00309	00061	01616
100	020	100	00120	00120	01585
100	040	006	14359	13055	14822
100	040	010	11606	09897	11689
100	040	020	07647	05532	07344
100	040	028	05993	03773	05620
100	040	032	05398	03158	05027
100	040	036	04900	02656	04545
100	040	040	04474	02235	04147
100	040	044	04097	01882	03813
100	040	052	03461	01317	03284
100	040	060	02924	00890	02883
100	040	080	01786	00227	02208
100	040	090	01224	00084	01976
100	040	094	00972	00078	01897
100	040	098	00663	00141	01823
100	040	100	00342	00342	01789

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_0	I_a	I_r
100	0.60	0.06	11967	10171	15636
100	0.60	0.10	09840	07496	12283
100	0.60	0.20	06798	03906	07693
100	0.60	0.40	04373	01322	04338
100	0.60	0.52	03593	00667	03433
100	0.60	0.56	03376	00518	03210
100	0.60	0.60	03170	00395	03014
100	0.60	0.64	02974	00294	02840
100	0.60	0.68	02783	00215	02685
100	0.60	0.72	02596	00155	02546
100	0.60	0.80	02218	00093	02307
100	0.60	0.90	01698	00143	02065
100	0.60	0.94	01446	00226	01982
100	0.60	0.98	01113	00400	01905
100	0.60	1.00	00718	00718	01869
100	0.80	0.06	07480	05638	16108
100	0.80	0.10	06351	03961	12630
100	0.80	0.20	04762	01806	07898
100	0.80	0.40	03538	00422	04450
100	0.80	0.60	02944	00110	03090
100	0.80	0.68	02742	00119	02753
100	0.80	0.72	02639	00146	02610
100	0.80	0.76	02532	00189	02482
100	0.80	0.80	02418	00248	02366
100	0.80	0.84	02294	00326	02259
100	0.80	0.88	02154	00427	02162
100	0.80	0.90	02076	00488	02117
100	0.80	0.94	01890	00645	02032
100	0.80	0.98	01619	00891	01953
100	0.80	1.00	01250	01250	01916
100	0.90	0.06	04441	02922	16288
100	0.90	0.10	03920	01943	12763
100	0.90	0.20	03188	00754	07977
100	0.90	0.40	02709	00144	04493
100	0.90	0.60	02525	00193	03120
100	0.90	0.80	02329	00543	02388
100	0.90	0.84	02270	00650	02281
100	0.90	0.88	02197	00775	02183
100	0.90	0.90	02150	00851	02138
100	0.90	0.92	02103	00927	02093
100	0.90	0.94	02042	01017	2051
100	0.90	0.96	01965	01123	02010
100	0.90	0.98	01859	01260	01971
100	0.90	1.00	01575	01575	01934

TABLE 5 Intensities (Continued)

τ	μ_0	μ	I_ρ	I_{ρ_e}	I_r
100	0.94	0.6	0.2051	0.1143	1.2554
100	0.94	0.10	0.2754	0.1143	1.2811
100	0.94	0.20	0.2393	0.0398	0.8006
100	0.94	0.40	0.2235	0.0133	0.4509
100	0.94	0.60	0.2240	0.0329	0.3131
100	0.94	0.80	0.2212	0.0748	0.2396
100	0.94	0.84	0.2189	0.0861	0.2289
100	0.94	0.88	0.2154	0.0989	0.2191
100	0.94	0.90	0.2130	0.1059	0.2145
100	0.94	0.92	0.2100	0.1137	0.2101
100	0.94	0.94	0.2056	0.1229	0.2059
100	0.94	0.96	0.2012	0.1322	0.2017
100	0.94	0.98	0.1957	0.1446	0.1978
100	0.94	1.00	0.1716	0.1716	0.1941
100	0.98	0.06	0.1473	0.0713	1.6417
100	0.98	0.10	0.1421	0.0433	1.2858
100	0.98	0.20	0.1400	0.0134	0.8034
100	0.98	0.40	0.1570	0.0289	0.4524
100	0.98	0.60	0.1739	0.0624	0.3141
100	0.98	0.80	0.1972	0.1080	0.2404
100	0.98	0.84	0.1997	0.1188	0.2297
100	0.98	0.88	0.2014	0.1304	0.2198
100	0.98	0.90	0.2019	0.1367	0.2152
100	0.98	0.92	0.2021	0.1433	0.2108
100	0.98	0.94	0.2017	0.1505	0.2065
100	0.98	0.96	0.2005	0.1585	0.2024
100	0.98	0.98	0.1934	0.1724	0.1986
100	0.98	1.00	0.1864	0.1864	0.1947
100	1.00	0.06	0.0407	0.0407	1.6447
100	1.00	0.10	0.0396	0.0396	1.2881
100	1.00	0.20	0.0480	0.0480	0.8048
100	1.00	0.40	0.0797	0.0797	0.4532
100	1.00	0.60	0.1166	0.1166	0.3146
100	1.00	0.80	0.1549	0.1549	0.2408
100	1.00	0.84	0.1627	0.1627	0.2300
100	1.00	0.88	0.1705	0.1705	0.2202
100	1.00	0.90	0.1744	0.1744	0.2155
100	1.00	0.92	0.1783	0.1783	0.2111
100	1.00	0.94	0.1822	0.1822	0.2068
100	1.00	0.96	0.1861	0.1861	0.2028
100	1.00	0.98	0.1900	0.1900	0.1988
100	1.00	1.00	0.1939	0.1939	0.1948

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_s^*
0 1 0	0 2 5	0 0 2	0 0 2	0 0 0 3 9	0 0 0 3 9
0 1 0	0 2 5	0 0 2	0 0 4	0 0 0 2 2	0 0 0 2 2
0 1 0	0 2 5	0 0 2	0 0 6	0 0 0 1 5	0 0 0 1 5
0 1 0	0 2 5	0 0 2	0 0 8	0 0 0 1 1	0 0 0 1 1
0 1 0	0 2 5	0 0 2	0 1 0	0 0 0 0 9	0 0 0 0 9
0 1 0	0 2 5	0 0 2	0 1 2	0 0 0 0 8	0 0 0 0 8
0 1 0	0 2 5	0 0 2	0 2 0	0 0 0 0 4	0 0 0 0 4
0 1 0	0 2 5	0 0 2	0 4 0	0 0 0 0 2	0 0 0 0 2
0 1 0	0 2 5	0 0 2	0 6 0	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 0 2	0 8 0	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 0 2	0 9 0	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 0 2	0 9 4	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 0 2	0 9 8	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 0 2	1 0 0	0 0 0 0 1	0 0 0 0 1
0 1 0	0 2 5	0 1 0	0 0 6	0 0 0 9 1	0 0 0 9 1
0 1 0	0 2 5	0 1 0	0 0 8	0 0 0 7 0	0 0 0 7 0
0 1 0	0 2 5	0 1 0	0 1 0	0 0 0 5 6	0 0 0 5 6
0 1 0	0 2 5	0 1 0	0 1 2	0 0 0 4 7	0 0 0 4 7
0 1 0	0 2 5	0 1 0	0 1 4	0 0 0 4 1	0 0 0 4 1
0 1 0	0 2 5	0 1 0	0 1 6	0 0 0 3 6	0 0 0 3 6
0 1 0	0 2 5	0 1 0	0 1 8	0 0 0 3 2	0 0 0 3 2
0 1 0	0 2 5	0 1 0	0 2 0	0 0 0 2 9	0 0 0 2 9
0 1 0	0 2 5	0 1 0	0 4 0	0 0 0 1 4	0 0 0 1 4
0 1 0	0 2 5	0 1 0	0 6 0	0 0 0 0 9	0 0 0 0 9
0 1 0	0 2 5	0 1 0	0 8 0	0 0 0 0 7	0 0 0 0 7
0 1 0	0 2 5	0 1 0	0 9 0	0 0 0 0 6	0 0 0 0 6
0 1 0	0 2 5	0 1 0	0 9 4	0 0 0 0 6	0 0 0 0 6
0 1 0	0 2 5	0 1 0	0 9 8	0 0 0 0 6	0 0 0 0 6
0 1 0	0 2 5	0 1 0	1 0 0	0 0 0 0 5	0 0 0 0 5
0 1 0	0 2 5	0 2 0	0 0 6	0 0 1 8 7	0 0 1 8 7
0 1 0	0 2 5	0 2 0	0 1 0	0 0 1 1 6	0 0 1 1 6
0 1 0	0 2 5	0 2 0	0 1 4	0 0 0 8 4	0 0 0 8 4
0 1 0	0 2 5	0 2 0	0 1 8	0 0 0 6 6	0 0 0 6 6
0 1 0	0 2 5	0 2 0	0 2 0	0 0 0 5 9	0 0 0 5 9
0 1 0	0 2 5	0 2 0	0 2 4	0 0 0 4 9	0 0 0 4 9
0 1 0	0 2 5	0 2 0	0 2 8	0 0 0 4 2	0 0 0 4 2
0 1 0	0 2 5	0 2 0	0 3 2	0 0 0 3 7	0 0 0 3 7
0 1 0	0 2 5	0 2 0	0 4 0	0 0 0 3 0	0 0 0 3 0
0 1 0	0 2 5	0 2 0	0 6 0	0 0 0 2 0	0 0 0 2 0
0 1 0	0 2 5	0 2 0	0 8 0	0 0 0 1 5	0 0 0 1 5
0 1 0	0 2 5	0 2 0	0 9 0	0 0 0 1 3	0 0 0 1 3
0 1 0	0 2 5	0 2 0	0 9 4	0 0 0 1 2	0 0 0 1 2
0 1 0	0 2 5	0 2 0	0 9 8	0 0 0 1 2	0 0 0 1 2
0 1 0	0 2 5	0 2 0	1 0 0	0 0 0 1 2	0 0 0 1 2

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_e^*	I_r^*
0 1 0	0 2 5	0 4 0	0 0 6	0 0 3 8 0	0 0 3 8 0
0 1 0	0 2 5	0 4 0	0 1 0	0 0 2 3 5	0 0 2 3 5
0 1 0	0 2 5	0 4 0	0 2 0	0 0 1 2 0	0 0 1 2 0
0 1 0	0 2 5	0 4 0	0 2 8	0 0 0 8 6	0 0 0 8 6
0 1 0	0 2 5	0 4 0	0 3 2	0 0 0 7 6	0 0 0 7 6
0 1 0	0 2 5	0 4 0	0 3 6	0 0 0 6 7	0 0 0 6 7
0 1 0	0 2 5	0 4 0	0 4 0	0 0 0 6 1	0 0 0 6 1
0 1 0	0 2 5	0 4 0	0 4 4	0 0 0 5 5	0 0 0 5 5
0 1 0	0 2 5	0 4 0	0 5 2	0 0 0 4 7	0 0 0 4 7
0 1 0	0 2 5	0 4 0	0 5 0	0 0 0 4 0	0 0 0 4 0
0 1 0	0 2 5	0 4 0	0 8 0	0 0 0 3 0	0 0 0 3 0
0 1 0	0 2 5	0 4 0	0 9 0	0 0 0 2 7	0 0 0 2 7
0 1 0	0 2 5	0 4 0	0 9 4	0 0 0 2 6	0 0 0 2 6
0 1 0	0 2 5	0 4 0	0 9 8	0 0 0 2 5	0 0 0 2 5
0 1 0	0 2 5	0 4 0	1 0 0	0 0 0 2 4	0 0 0 2 4
0 1 0	0 2 5	0 6 0	0 0 6	0 0 5 7 2	0 0 5 7 2
0 1 0	0 2 5	0 6 0	0 1 0	0 0 3 5 4	0 0 3 5 4
0 1 0	0 2 5	0 6 0	0 2 0	0 0 1 8 1	0 0 1 8 1
0 1 0	0 2 5	0 6 0	0 4 0	0 0 0 9 2	0 0 0 9 2
0 1 0	0 2 5	0 6 0	0 5 2	0 0 0 7 0	0 0 0 7 0
0 1 0	0 2 5	0 6 0	0 5 6	0 0 0 6 5	0 0 0 6 5
0 1 0	0 2 5	0 6 0	0 6 0	0 0 0 6 1	0 0 0 6 1
0 1 0	0 2 5	0 6 0	0 6 4	0 0 0 5 7	0 0 0 5 7
0 1 0	0 2 5	0 6 0	0 6 8	0 0 0 5 4	0 0 0 5 4
0 1 0	0 2 5	0 6 0	0 7 2	0 0 0 5 1	0 0 0 5 1
0 1 0	0 2 5	0 6 0	0 8 0	0 0 0 4 6	0 0 0 4 6
0 1 0	0 2 5	0 6 0	0 9 0	0 0 0 4 1	0 0 0 4 1
0 1 0	0 2 5	0 6 0	0 9 4	0 0 0 3 9	0 0 0 3 9
0 1 0	0 2 5	0 6 0	0 9 8	0 0 0 3 7	0 0 0 3 7
0 1 0	0 2 5	0 6 0	1 0 0	0 0 0 3 7	0 0 0 3 7
0 1 0	0 2 5	0 8 0	0 0 6	0 0 7 6 5	0 0 7 6 5
0 1 0	0 2 5	0 8 0	0 1 0	0 0 4 7 4	0 0 4 7 4
0 1 0	0 2 5	0 8 0	0 2 0	0 0 2 4 2	0 0 2 4 2
0 1 0	0 2 5	0 8 0	0 4 0	0 0 1 2 2	0 0 1 2 2
0 1 0	0 2 5	0 8 0	0 6 0	0 0 0 8 2	0 0 0 8 2
0 1 0	0 2 5	0 8 0	0 6 8	0 0 0 7 2	0 0 0 7 2
0 1 0	0 2 5	0 8 0	0 7 2	0 0 0 6 8	0 0 0 6 8
0 1 0	0 2 5	0 8 0	0 7 6	0 0 0 6 5	0 0 0 6 5
0 1 0	0 2 5	0 8 0	0 8 0	0 0 0 6 1	0 0 0 6 1
0 1 0	0 2 5	0 8 0	0 8 4	0 0 0 5 8	0 0 0 5 8
0 1 0	0 2 5	0 8 0	0 8 8	0 0 0 5 6	0 0 0 5 6
0 1 0	0 2 5	0 8 0	0 9 0	0 0 0 5 5	0 0 0 5 5
0 1 0	0 2 5	0 8 0	0 9 4	0 0 0 5 2	0 0 0 5 2
0 1 0	0 2 5	0 8 0	0 9 8	0 0 0 5 0	0 0 0 5 0
0 1 0	0 2 5	0 8 0	1 0 0	0 0 0 4 9	0 0 0 4 9

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_s^*
010	025	090	006	00861	00861
010	025	090	010	00533	00533
010	025	090	020	00273	00273
010	025	090	040	00138	00138
010	025	090	060	00092	00092
010	025	090	080	00069	00069
010	025	090	084	00066	00066
010	025	090	088	00063	00063
010	025	090	090	00061	00061
010	025	090	092	00060	00060
010	025	090	094	00059	00059
010	025	090	096	00058	00058
010	025	090	098	00056	00056
010	025	090	100	00055	00055
010	025	094	006	00900	00899
010	025	094	010	00557	00557
010	025	094	020	00285	00285
010	025	094	040	00144	00144
010	025	094	060	00096	00096
010	025	094	080	00072	00072
010	025	094	084	00069	00069
010	025	094	088	00066	00066
010	025	094	090	00064	00064
010	025	094	092	00063	00063
010	025	094	094	00061	00061
010	025	094	096	00060	00060
010	025	094	098	00059	00059
010	025	094	100	00058	00058
010	025	098	006	00938	00938
010	025	098	010	00581	00581
010	025	098	020	00297	00297
010	025	098	040	00150	00150
010	025	098	060	00100	00100
010	025	098	080	00075	00075
010	025	098	084	00072	00072
010	025	098	088	00068	00068
010	025	098	090	00067	00067
010	025	098	092	00065	00066
010	025	098	094	00064	00064
010	025	098	096	00063	00063
010	025	098	098	00061	00061
010	025	098	100	00060	00060

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_1^*	I_2^*
0 1 0	0 2 5	1 0 0	0 0 6	0 0 9 5 7	0 0 9 5 7
0 1 0	0 2 5	1 0 0	0 1 0	0 0 5 9 3	0 0 5 9 3
0 1 0	0 2 5	1 0 0	0 2 0	0 0 3 0 4	0 0 3 0 4
0 1 0	0 2 5	1 0 0	0 4 0	0 0 1 5 3	0 0 1 5 3
0 1 0	0 2 5	1 0 0	0 6 0	0 0 1 0 3	0 0 1 0 3
0 1 0	0 2 5	1 0 0	0 8 0	0 0 0 7 7	0 0 0 7 7
0 1 0	0 2 5	1 0 0	0 8 4	0 0 0 7 3	0 0 0 7 3
0 1 0	0 2 5	1 0 0	0 8 8	0 0 0 7 0	0 0 0 7 0
0 1 0	0 2 5	1 0 0	0 9 0	0 0 0 6 8	0 0 0 6 8
0 1 0	0 2 5	1 0 0	0 9 2	0 0 0 6 7	0 0 0 6 7
0 1 0	0 2 5	1 0 0	0 9 4	0 0 0 6 5	0 0 0 6 5
0 1 0	0 2 5	1 0 0	0 9 6	0 0 0 6 4	0 0 0 6 4
0 1 0	0 2 5	1 0 0	0 9 8	0 0 0 6 3	0 0 0 6 3
0 1 0	0 2 5	1 0 0	1 0 0	0 0 0 6 1	0 0 0 6 2
0 1 0	0 5 0	0 0 2	0 0 2	0 0 0 7 9	0 0 0 7 9
0 1 0	0 5 0	0 0 2	0 0 4	0 0 0 4 4	0 0 0 4 4
0 1 0	0 5 0	0 0 2	0 0 6	0 0 0 3 0	0 0 0 3 0
0 1 0	0 5 0	0 0 2	0 0 8	0 0 0 2 3	0 0 0 2 3
0 1 0	0 5 0	0 0 2	0 1 0	0 0 0 1 9	0 0 0 1 9
0 1 0	0 5 0	0 0 2	0 1 2	0 0 0 1 6	0 0 0 1 6
0 1 0	0 5 0	0 0 2	0 2 0	0 0 0 0 9	0 0 0 0 9
0 1 0	0 5 0	0 0 2	0 4 0	0 0 0 0 4	0 0 0 0 4
0 1 0	0 5 0	0 0 2	0 6 0	0 0 0 0 3	0 0 0 0 3
0 1 0	0 5 0	0 0 2	0 8 0	0 0 0 0 2	0 0 0 0 2
0 1 0	0 5 0	0 0 2	0 9 0	0 0 0 0 2	0 0 0 0 2
0 1 0	0 5 0	0 0 2	0 9 4	0 0 0 0 2	0 0 0 0 2
0 1 0	0 5 0	0 0 2	0 9 8	0 0 0 0 2	0 0 0 0 2
0 1 0	0 5 0	0 0 2	1 0 0	0 0 0 0 2	0 0 0 0 2
0 1 0	0 5 0	0 1 0	0 0 6	0 0 1 8 3	0 0 1 8 3
0 1 0	0 5 0	0 1 0	0 0 8	0 0 1 4 0	0 0 1 4 0
0 1 0	0 5 0	0 1 0	0 1 0	0 0 1 1 3	0 0 1 1 3
0 1 0	0 5 0	0 1 0	0 1 2	0 0 0 9 5	0 0 0 9 5
0 1 0	0 5 0	0 1 0	0 1 4	0 0 0 8 2	0 0 0 8 2
0 1 0	0 5 0	0 1 0	0 1 6	0 0 0 7 2	0 0 0 7 2
0 1 0	0 5 0	0 1 0	0 1 8	0 0 0 6 4	0 0 0 6 4
0 1 0	0 5 0	0 1 0	0 2 0	0 0 0 5 8	0 0 0 5 8
0 1 0	0 5 0	0 1 0	0 4 0	0 0 0 2 9	0 0 0 2 9
0 1 0	0 5 0	0 1 0	0 6 0	0 0 0 1 9	0 0 0 1 9
0 1 0	0 5 0	0 1 0	0 8 0	0 0 0 1 4	0 0 0 1 4
0 1 0	0 5 0	0 1 0	0 9 0	0 0 0 1 3	0 0 0 1 3
0 1 0	0 5 0	0 1 0	0 9 4	0 0 0 1 2	0 0 0 1 2
0 1 0	0 5 0	0 1 0	0 9 8	0 0 0 1 2	0 0 0 1 2
0 1 0	0 5 0	0 1 0	1 0 0	0 0 0 1 1	0 0 0 1 1

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_r^*
0 1 0	0 5 0	0 2 0	0 0 6	0 0 3 7 6	0 0 3 7 6
0 1 0	0 5 0	0 2 0	0 1 0	0 0 2 3 3	0 0 2 3 3
0 1 0	0 5 0	0 2 0	0 1 4	0 0 1 6 9	0 0 1 6 8
0 1 0	0 5 0	0 2 0	0 1 8	0 0 1 3 2	0 0 1 3 2
0 1 0	0 5 0	0 2 0	0 2 0	0 0 1 1 9	0 0 1 1 9
0 1 0	0 5 0	0 2 0	0 2 4	0 0 1 0 0	0 0 1 0 0
0 1 0	0 5 0	0 2 0	0 2 8	0 0 0 8 5	0 0 0 8 5
0 1 0	0 5 0	0 2 0	0 3 2	0 0 0 7 5	0 0 0 7 5
0 1 0	0 5 0	0 2 0	0 4 0	0 0 0 6 0	0 0 0 6 0
0 1 0	0 5 0	0 2 0	0 6 0	0 0 0 4 0	0 0 0 4 0
0 1 0	0 5 0	0 2 0	0 8 0	0 0 0 3 0	0 0 0 3 0
0 1 0	0 5 0	0 2 0	0 9 0	0 0 0 2 7	0 0 0 2 7
0 1 0	0 5 0	0 2 0	0 9 4	0 0 0 2 5	0 0 0 2 5
0 1 0	0 5 0	0 2 0	0 9 8	0 0 0 2 4	0 0 0 2 4
0 1 0	0 5 0	0 2 0	1 0 0	0 0 0 2 4	0 0 0 2 4
0 1 0	0 5 0	0 4 0	0 0 6	0 0 7 6 2	0 0 7 6 2
0 1 0	0 5 0	0 4 0	0 1 0	0 0 4 7 2	0 0 4 7 2
0 1 0	0 5 0	0 4 0	0 2 0	0 0 2 4 2	0 0 2 4 2
0 1 0	0 5 0	0 4 0	0 2 8	0 0 1 7 4	0 0 1 7 4
0 1 0	0 5 0	0 4 0	0 3 2	0 0 1 5 2	0 0 1 5 2
0 1 0	0 5 0	0 4 0	0 3 6	0 0 1 3 5	0 0 1 3 5
0 1 0	0 5 0	0 4 0	0 4 0	0 0 1 2 2	0 0 1 2 2
0 1 0	0 5 0	0 4 0	0 4 4	0 0 1 1 1	0 0 1 1 1
0 1 0	0 5 0	0 4 0	0 5 2	0 0 0 9 4	0 0 0 9 4
0 1 0	0 5 0	0 4 0	0 6 0	0 0 0 8 1	0 0 0 8 2
0 1 0	0 5 0	0 4 0	0 8 0	0 0 0 6 1	0 0 0 6 1
0 1 0	0 5 0	0 4 0	0 9 0	0 0 0 5 4	0 0 0 5 4
0 1 0	0 5 0	0 4 0	0 9 4	0 0 0 5 2	0 0 0 5 2
0 1 0	0 5 0	0 4 0	0 9 8	0 0 0 5 0	0 0 0 5 0
0 1 0	0 5 0	0 4 0	1 0 0	0 0 0 4 9	0 0 0 4 9
0 1 0	0 5 0	0 6 0	0 0 6	0 1 1 4 8	0 1 1 4 8
0 1 0	0 5 0	0 6 0	0 1 0	0 0 7 1 1	0 0 7 1 1
0 1 0	0 5 0	0 6 0	0 2 0	0 0 3 6 4	0 0 3 6 4
0 1 0	0 5 0	0 6 0	0 4 0	0 0 1 8 4	0 0 1 8 4
0 1 0	0 5 0	0 6 0	0 5 2	0 0 1 4 2	0 0 1 4 2
0 1 0	0 5 0	0 6 0	0 5 6	0 0 1 3 2	0 0 1 3 2
0 1 0	0 5 0	0 6 0	0 6 0	0 0 1 2 3	0 0 1 2 3
0 1 0	0 5 0	0 6 0	0 6 4	0 0 1 1 5	0 0 1 1 5
0 1 0	0 5 0	0 6 0	0 6 8	0 0 1 0 9	0 0 1 0 9
0 1 0	0 5 0	0 6 0	0 7 2	0 0 1 0 3	0 0 1 0 3
0 1 0	0 5 0	0 6 0	0 8 0	0 0 0 9 2	0 0 0 9 2
0 1 0	0 5 0	0 6 0	0 9 0	0 0 0 8 2	0 0 0 8 2
0 1 0	0 5 0	0 6 0	0 9 4	0 0 0 7 9	0 0 0 7 9
0 1 0	0 5 0	0 6 0	0 9 8	0 0 0 7 5	0 0 0 7 5
0 1 0	0 5 0	0 6 0	1 0 0	0 0 0 7 4	0 0 0 7 4

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_θ^*	I_T^*
010	050	098	006	01881	01881
010	050	098	010	01166	01165
010	050	098	020	00597	00597
010	050	098	040	00302	00302
010	050	098	060	00202	00202
010	050	098	080	00152	00152
010	050	098	084	00144	00144
010	050	098	088	00138	00138
010	050	098	090	00135	00135
010	050	098	092	00132	00132
010	050	098	094	00129	00129
010	050	098	096	00126	00126
010	050	098	098	00124	00124
010	050	098	100	00121	00121
010	050	100	006	01920	01919
010	050	100	010	01189	01189
010	050	100	020	00609	00609
010	050	100	040	00308	00308
010	050	100	060	00206	00206
010	050	100	080	00155	00155
010	050	100	084	00147	00147
010	050	100	088	00141	00141
010	050	100	090	00138	00138
010	050	100	092	00135	00135
010	050	100	094	00132	00132
010	050	100	096	00129	00129
010	050	100	098	00126	00126
010	050	100	100	00124	00124
010	080	002	002	00127	00127
010	080	002	004	00071	00071
010	080	002	006	00049	00049
010	080	002	008	00038	00038
010	080	002	010	00030	00030
010	080	002	012	00025	00025
010	080	002	020	00015	00015
010	080	002	040	00007	00007
010	080	002	060	00005	00005
010	080	002	080	00004	00004
010	080	002	090	00003	00003
010	080	002	094	00003	00003
010	080	002	098	00003	00003
010	080	002	100	00003	00003

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_{θ}^*	I_{\perp}^*
0 1 0	0 8 0	0 1 0	0 0 6	0 0 2 9 4	0 0 2 9 4
0 1 0	0 8 0	0 1 0	0 0 8	0 0 2 2 5	0 0 2 2 5
0 1 0	0 8 0	0 1 0	0 1 0	0 0 1 8 2	0 0 1 8 2
0 1 0	0 8 0	0 1 0	0 1 2	0 0 1 5 3	0 0 1 5 3
0 1 0	0 8 0	0 1 0	0 1 4	0 0 1 3 2	0 0 1 3 2
0 1 0	0 8 0	0 1 0	0 1 5	0 0 1 1 6	0 0 1 1 6
0 1 0	0 8 0	0 1 0	0 1 8	0 0 1 0 3	0 0 1 0 3
0 1 0	0 8 0	0 1 0	0 2 0	0 0 0 9 3	0 0 0 9 3
0 1 0	0 8 0	0 1 0	0 4 0	0 0 0 4 7	0 0 0 4 7
0 1 0	0 8 0	0 1 0	0 6 0	0 0 0 3 1	0 0 0 3 1
0 1 0	0 8 0	0 1 0	0 8 0	0 0 0 2 3	0 0 0 2 3
0 1 0	0 8 0	0 1 0	0 9 0	0 0 0 2 1	0 0 0 2 1
0 1 0	0 8 0	0 1 0	0 9 4	0 0 0 2 0	0 0 0 2 0
0 1 0	0 8 0	0 1 0	0 9 8	0 0 0 1 9	0 0 0 1 9
0 1 0	0 8 0	0 1 0	1 0 0	0 0 0 1 9	0 0 0 1 9
0 1 0	0 8 0	0 2 0	0 0 6	0 0 6 0 4	0 0 6 0 4
0 1 0	0 8 0	0 2 0	0 1 0	0 0 3 7 4	0 0 3 7 4
0 1 0	0 8 0	0 2 0	0 1 4	0 0 2 7 1	0 0 2 7 1
0 1 0	0 8 0	0 2 0	0 1 8	0 0 2 1 2	0 0 2 1 2
0 1 0	0 8 0	0 2 0	0 2 0	0 0 1 9 1	0 0 1 9 1
0 1 0	0 8 0	0 2 0	0 2 4	0 0 1 6 0	0 0 1 6 0
0 1 0	0 8 0	0 2 0	0 2 8	0 0 1 3 7	0 0 1 3 7
0 1 0	0 8 0	0 2 0	0 3 2	0 0 1 2 0	0 0 1 2 1
0 1 0	0 8 0	0 2 0	0 4 0	0 0 0 9 7	0 0 0 9 7
0 1 0	0 8 0	0 2 0	0 5 0	0 0 0 6 4	0 0 0 6 4
0 1 0	0 8 0	0 2 0	0 8 0	0 0 0 4 8	0 0 0 4 8
0 1 0	0 8 0	0 2 0	0 9 0	0 0 0 4 3	0 0 0 4 3
0 1 0	0 8 0	0 2 0	0 9 4	0 0 0 4 1	0 0 0 4 1
0 1 0	0 8 0	0 2 0	0 9 8	0 0 0 3 9	0 0 0 3 9
0 1 0	0 8 0	0 2 0	1 0 0	0 0 0 3 9	0 0 0 3 9
0 1 0	0 8 0	0 4 0	0 0 6	0 1 2 2 3	0 1 2 2 3
0 1 0	0 8 0	0 4 0	0 1 0	0 0 7 5 8	0 0 7 5 8
0 1 0	0 8 0	0 4 0	0 2 0	0 0 3 8 8	0 0 3 8 8
0 1 0	0 8 0	0 4 0	0 2 8	0 0 2 7 9	0 0 2 7 9
0 1 0	0 8 0	0 4 0	0 3 2	0 0 2 4 4	0 0 2 4 4
0 1 0	0 8 0	0 4 0	0 3 6	0 0 2 1 8	0 0 2 1 8
0 1 0	0 8 0	0 4 0	0 4 0	0 0 1 9 6	0 0 1 9 6
0 1 0	0 8 0	0 4 0	0 4 4	0 0 1 7 8	0 0 1 7 8
0 1 0	0 8 0	0 4 0	0 5 2	0 0 1 5 1	0 0 1 5 1
0 1 0	0 8 0	0 4 0	0 6 0	0 0 1 3 1	0 0 1 3 1
0 1 0	0 8 0	0 4 0	0 8 0	0 0 0 9 8	0 0 0 9 8
0 1 0	0 8 0	0 4 0	0 9 0	0 0 0 8 7	0 0 0 8 7
0 1 0	0 8 0	0 4 0	0 9 4	0 0 0 8 4	0 0 0 8 4
0 1 0	0 8 0	0 4 0	0 9 8	0 0 0 8 0	0 0 0 8 0
0 1 0	0 8 0	0 4 0	1 0 0	0 0 0 7 9	0 0 0 7 9

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_2^*	I_r^*
010	080	060	006	01842	01842
010	080	060	010	01141	01141
010	080	060	020	00585	00585
010	080	060	040	00296	00296
010	080	060	052	00228	00228
010	080	060	056	00212	00212
010	080	060	060	00198	00198
010	080	060	064	00185	00185
010	080	060	068	00175	00175
010	080	060	072	00165	00165
010	080	060	080	00148	00148
010	080	060	090	00132	00132
010	080	060	094	00126	00126
010	080	060	098	00121	00121
010	080	060	100	00119	00119
010	080	080	006	02462	02461
010	080	080	010	01525	01525
010	080	080	020	00781	00781
010	080	080	040	00395	00395
010	080	080	060	00264	00264
010	080	080	068	00233	00233
010	080	080	072	00220	00220
010	080	080	076	00209	00209
010	080	080	080	00198	00199
010	080	080	084	00189	00189
010	080	080	088	00180	00181
010	080	080	090	00176	00177
010	080	080	094	00169	00169
010	080	080	098	00162	00162
010	080	080	100	00159	00159
010	080	090	006	02772	02771
010	080	090	010	01717	01717
010	080	090	020	00879	00879
010	080	090	040	00445	00445
010	080	090	060	00298	00298
010	080	090	080	00223	00224
010	080	090	084	00213	00213
010	080	090	088	00203	00203
010	080	090	090	00199	00199
010	080	090	092	00194	00194
010	080	090	094	00190	00190
010	080	090	096	00186	00186
010	080	090	098	00183	00183
010	080	090	100	00179	00179

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_{λ}^*	I_{τ}^*
0 1 0	0 8 0	0 9 4	0 0 5	0 2 8 9 5	0 2 8 9 4
0 1 0	0 8 0	0 9 4	0 1 0	0 1 7 9 4	0 1 7 9 4
0 1 0	0 8 0	0 9 4	0 2 0	0 0 9 1 9	0 0 9 1 9
0 1 0	0 8 0	0 9 4	0 4 0	0 0 4 6 5	0 0 4 6 5
0 1 0	0 8 0	0 9 4	0 6 0	0 0 3 1 1	0 0 3 1 1
0 1 0	0 8 0	0 9 4	0 8 0	0 0 2 3 3	0 0 2 3 4
0 1 0	0 8 0	0 9 4	0 8 4	0 0 2 2 2	0 0 2 2 2
0 1 0	0 8 0	0 9 4	0 8 8	0 0 2 1 2	0 0 2 1 2
0 1 0	0 8 0	0 9 4	0 9 0	0 0 2 0 8	0 0 2 0 8
0 1 0	0 8 0	0 9 4	0 9 2	0 0 2 0 3	0 0 2 0 3
0 1 0	0 8 0	0 9 4	0 9 4	0 0 1 9 9	0 0 1 9 9
0 1 0	0 8 0	0 9 4	0 9 5	0 0 1 9 5	0 0 1 9 5
0 1 0	0 8 0	0 9 4	0 9 8	0 0 1 9 1	0 0 1 9 1
0 1 0	0 8 0	0 9 4	1 0 0	0 0 1 8 7	0 0 1 8 7
0 1 0	0 8 0	0 9 8	0 0 6	0 3 0 1 9	0 3 0 1 8
0 1 0	0 8 0	0 9 8	0 1 0	0 1 8 7 1	0 1 8 7 0
0 1 0	0 8 0	0 9 8	0 2 0	0 0 9 5 8	0 0 9 5 8
0 1 0	0 8 0	0 9 8	0 4 0	0 0 4 8 5	0 0 4 8 5
0 1 0	0 8 0	0 9 8	0 6 0	0 0 3 2 4	0 0 3 2 4
0 1 0	0 8 0	0 9 8	0 8 0	0 0 2 4 4	0 0 2 4 4
0 1 0	0 8 0	0 9 8	0 8 4	0 0 2 3 2	0 0 2 3 2
0 1 0	0 8 0	0 9 8	0 8 8	0 0 2 2 1	0 0 2 2 1
0 1 0	0 8 0	0 9 8	0 9 0	0 0 2 1 7	0 0 2 1 7
0 1 0	0 8 0	0 9 8	0 9 2	0 0 2 1 2	0 0 2 1 2
0 1 0	0 8 0	0 9 8	0 9 4	0 0 2 0 7	0 0 2 0 7
0 1 0	0 8 0	0 9 8	0 9 6	0 0 2 0 3	0 0 2 0 3
0 1 0	0 8 0	0 9 8	0 9 8	0 0 1 9 9	0 0 1 9 9
0 1 0	0 8 0	0 9 8	1 0 0	0 0 1 9 5	0 0 1 9 5
0 1 0	0 8 0	1 0 0	0 0 6	0 3 0 8 1	0 3 0 8 0
0 1 0	0 8 0	1 0 0	0 1 0	0 1 9 0 9	0 1 9 0 9
0 1 0	0 8 0	1 0 0	0 2 0	0 0 9 7 8	0 0 9 7 8
0 1 0	0 8 0	1 0 0	0 4 0	0 0 4 9 5	0 0 4 9 5
0 1 0	0 8 0	1 0 0	0 6 0	0 0 3 3 1	0 0 3 3 1
0 1 0	0 8 0	1 0 0	0 8 0	0 0 2 4 9	0 0 2 4 9
0 1 0	0 8 0	1 0 0	0 8 4	0 0 2 3 7	0 0 2 3 7
0 1 0	0 8 0	1 0 0	0 8 8	0 0 2 2 6	0 0 2 2 6
0 1 0	0 8 0	1 0 0	0 9 0	0 0 2 2 1	0 0 2 2 1
0 1 0	0 8 0	1 0 0	0 9 2	0 0 2 1 6	0 0 2 1 6
0 1 0	0 8 0	1 0 0	0 9 4	0 0 2 1 2	0 0 2 1 2
0 1 0	0 8 0	1 0 0	0 9 6	0 0 2 0 7	0 0 2 0 7
0 1 0	0 8 0	1 0 0	0 9 8	0 0 2 0 3	0 0 2 0 3
0 1 0	0 8 0	1 0 0	1 0 0	0 0 1 9 9	0 0 1 9 9

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TABLE 5 Intensities (Continued)

τ	λ	F_0	μ	I_0^*	I_T^*
020	025	002	002	00054	00054
020	025	002	004	00033	00033
020	025	002	006	00024	00024
020	025	002	008	00019	00018
020	025	002	010	00015	00015
020	025	002	012	00013	00013
020	025	002	020	00008	00008
020	025	002	040	00004	00004
020	025	002	060	00002	00002
020	025	002	080	00002	00002
020	025	002	090	00001	00001
020	025	002	094	00001	00001
020	025	002	098	00001	00001
020	025	002	100	00001	00001
020	025	010	006	00162	00162
020	025	010	008	00126	00126
020	025	010	010	00103	00103
020	025	010	012	00087	00087
020	025	010	014	00076	00076
020	025	010	016	00067	00067
020	025	010	018	00060	00060
020	025	010	020	00054	00054
020	025	010	040	00027	00027
020	025	010	060	00018	00018
020	025	010	080	00014	00014
020	025	010	090	00012	00012
020	025	010	094	00012	00012
020	025	010	098	00011	00011
020	025	010	100	00011	00011
020	025	020	006	00340	00339
020	025	020	010	00217	00217
020	025	020	014	00159	00159
020	025	020	018	00126	00125
020	025	020	020	00114	00113
020	025	020	024	00096	00095
020	025	020	028	00082	00082
020	025	020	032	00072	00072
020	025	020	040	00058	00058
020	025	020	060	00039	00039
020	025	020	080	00029	00029
020	025	020	090	00026	00026
020	025	020	094	00025	00025
020	025	020	098	00024	00024
020	025	020	100	00024	00023

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_1^*
0 20	0 25	0 40	0 0 6	0 0 6 9 7	0 0 6 9 6
0 20	0 25	0 40	0 1 0	0 0 4 4 5	0 0 4 4 4
0 20	0 25	0 40	0 2 0	0 0 2 3 4	0 0 2 3 3
0 20	0 25	0 40	0 2 8	0 0 1 6 9	0 0 1 6 9
0 20	0 25	0 40	0 3 2	0 0 1 4 9	0 0 1 4 8
0 20	0 25	0 40	0 3 6	0 0 1 3 3	0 0 1 3 2
0 20	0 25	0 40	0 4 0	0 0 1 2 0	0 0 1 1 9
0 20	0 25	0 40	0 4 4	0 0 1 0 9	0 0 1 0 8
0 20	0 25	0 40	0 5 2	0 0 0 9 2	0 0 0 9 2
0 20	0 25	0 40	0 6 0	0 0 0 8 0	0 0 0 8 0
0 20	0 25	0 40	0 8 0	0 0 0 6 1	0 0 0 6 0
0 20	0 25	0 40	0 9 0	0 0 0 5 4	0 0 0 5 4
0 20	0 25	0 40	0 9 4	0 0 0 5 2	0 0 0 5 1
0 20	0 25	0 40	0 9 8	0 0 0 5 0	0 0 0 4 9
0 20	0 25	0 40	1 0 0	0 0 0 4 9	0 0 0 4 8
0 20	0 25	0 60	0 0 6	0 1 0 5 5	0 1 0 5 2
0 20	0 25	0 60	0 1 0	0 0 6 7 4	0 0 6 7 2
0 20	0 25	0 60	0 2 0	0 0 3 5 4	0 0 3 5 3
0 20	0 25	0 60	0 4 0	0 0 1 8 1	0 0 1 8 0
0 20	0 25	0 60	0 5 2	0 0 1 4 0	0 0 1 3 9
0 20	0 25	0 60	0 5 6	0 0 1 3 0	0 0 1 3 0
0 20	0 25	0 60	0 6 0	0 0 1 2 2	0 0 1 2 1
0 20	0 25	0 60	0 6 4	0 0 1 1 4	0 0 1 1 4
0 20	0 25	0 60	0 6 8	0 0 1 0 8	0 0 1 0 7
0 20	0 25	0 60	0 7 2	0 0 1 0 2	0 0 1 0 1
0 20	0 25	0 60	0 8 0	0 0 0 9 2	0 0 0 9 1
0 20	0 25	0 60	0 9 0	0 0 0 8 2	0 0 0 8 1
0 20	0 25	0 60	0 9 4	0 0 0 7 9	0 0 0 7 8
0 20	0 25	0 60	0 9 8	0 0 0 7 6	0 0 0 7 5
0 20	0 25	0 60	1 0 0	0 0 0 7 5	0 0 0 7 3
0 20	0 25	0 80	0 0 6	0 1 4 1 2	0 1 4 0 9
0 20	0 25	0 80	0 1 0	0 0 9 0 2	0 0 9 0 0
0 20	0 25	0 80	0 2 0	0 0 4 7 4	0 0 4 7 2
0 20	0 25	0 80	0 4 0	0 0 2 4 3	0 0 2 4 2
0 20	0 25	0 80	0 6 0	0 0 1 6 3	0 0 1 6 2
0 20	0 25	0 80	0 6 8	0 0 1 4 4	0 0 1 4 4
0 20	0 25	0 80	0 7 2	0 0 1 3 7	0 0 1 3 6
0 20	0 25	0 80	0 7 6	0 0 1 3 0	0 0 1 2 9
0 20	0 25	0 80	0 8 0	0 0 1 2 3	0 0 1 2 2
0 20	0 25	0 80	0 8 4	0 0 1 1 8	0 0 1 1 7
0 20	0 25	0 80	0 8 8	0 0 1 1 3	0 0 1 1 1
0 20	0 25	0 80	0 9 0	0 0 1 1 0	0 0 1 0 9
0 20	0 25	0 80	0 9 4	0 0 1 0 6	0 0 1 0 4
0 20	0 25	0 80	0 9 8	0 0 1 0 2	0 0 1 0 0
0 20	0 25	0 80	1 0 0	0 0 1 0 0	0 0 0 9 8

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_r^*	I_r^*
020	025	090	006	01591	01587
020	025	090	010	01017	01014
020	025	090	020	00534	00532
020	025	090	040	00273	00272
020	025	090	060	00184	00183
020	025	090	080	00139	00138
020	025	090	084	00133	00131
020	025	090	088	00127	00126
020	025	090	090	00124	00123
020	025	090	092	00122	00120
020	025	090	094	00119	00118
020	025	090	096	00117	00115
020	025	090	098	00115	00113
020	025	090	100	00113	00111
020	025	094	006	01662	01659
020	025	094	010	01062	01060
020	025	094	020	00558	00556
020	025	094	040	00286	00285
020	025	094	060	00192	00191
020	025	094	080	00145	00144
020	025	094	084	00139	00137
020	025	094	088	00133	00131
020	025	094	090	00130	00128
020	025	094	092	00127	00126
020	025	094	094	00125	00123
020	025	094	096	00122	00121
020	025	094	098	00120	00118
020	025	094	100	00118	00116
020	025	098	006	01734	01730
020	025	098	010	01108	01105
020	025	098	020	00582	00580
020	025	098	040	00298	00297
020	025	098	060	00200	00199
020	025	098	080	00152	00150
020	025	098	084	00145	00143
020	025	098	088	00138	00137
020	025	098	090	00136	00134
020	025	098	092	00133	00131
020	025	098	094	00130	00128
020	025	098	096	00128	00126
020	025	098	098	00125	00123
020	025	098	100	00123	00121

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_e^*	I_r^*
020	025	100	006	01769	01766
020	025	100	010	01131	01128
020	025	100	020	00594	00592
020	025	100	040	00304	00303
020	025	100	060	00205	00204
020	025	100	080	00155	00153
020	025	100	084	00148	00146
020	025	100	088	00141	00140
020	025	100	090	00138	00137
020	025	100	092	00136	00134
020	025	100	094	00133	00131
020	025	100	096	00130	00128
020	025	100	098	00128	00126
020	025	100	100	00126	00123
020	050	002	002	00109	00109
020	050	002	004	00068	00067
020	050	002	006	00048	00048
020	050	002	008	00038	00039
020	050	002	010	00031	00031
020	050	002	012	00026	00026
020	050	002	020	00016	00016
020	050	002	040	00008	00008
020	050	002	060	00005	00005
020	050	002	080	00004	00004
020	050	002	090	00003	00003
020	050	002	094	00003	00003
020	050	002	098	00003	00003
020	050	002	100	00003	00003
020	050	010	006	00326	00325
020	050	010	008	00254	00254
020	050	010	010	00208	00208
020	050	010	012	00176	00176
020	050	010	014	00153	00152
020	050	010	016	00135	00134
020	050	010	018	00121	00120
020	050	010	020	00109	00109
020	050	010	040	00056	00055
020	050	010	060	00037	00037
020	050	010	080	00028	00028
020	050	010	090	00025	00025
020	050	010	094	00024	00024
020	050	010	098	00023	00023
020	050	010	100	00023	00022

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_l^*	I_r^*
020	050	020	006	00684	00682
020	050	020	010	00437	00436
020	050	020	014	00321	00320
020	050	020	018	00253	00253
020	050	020	020	00229	00228
020	050	020	024	00193	00192
020	050	020	028	00166	00165
020	050	020	032	00146	00145
020	050	020	040	00117	00117
020	050	020	060	00079	00078
020	050	020	080	00060	00059
020	050	020	090	00053	00053
020	050	020	094	00051	00050
020	050	020	098	00049	00048
020	050	020	100	00048	00047
020	050	040	006	01402	01399
020	050	040	010	00896	00894
020	050	040	020	00470	00469
020	050	040	028	00341	00339
020	050	040	032	00299	00298
020	050	040	036	00267	00265
020	050	040	040	00241	00240
020	050	040	044	00219	00218
020	050	040	052	00186	00185
020	050	040	060	00162	00161
020	050	040	080	00122	00121
020	050	040	090	00110	00108
020	050	040	094	00105	00104
020	050	040	098	00101	00100
020	050	040	100	00099	00098
020	050	060	006	02120	02115
020	050	060	010	01355	01352
020	050	060	020	00711	00709
020	050	060	040	00365	00363
020	050	060	052	00282	00281
020	050	060	056	00262	00261
020	050	060	060	00245	00244
020	050	060	064	00230	00229
020	050	060	068	00217	00216
020	050	060	072	00205	00204
020	050	060	080	00185	00184
020	050	060	090	00166	00164
020	050	060	094	00159	00157
020	050	060	098	00153	00151
020	050	060	100	00151	00148

TABLE 5. Intensities (Continued)

τ	λ	μ_0	μ	I_2^*	I_1^*
020	050	080	006	02858	02832
020	050	080	010	01814	01810
020	050	080	020	00952	00949
020	050	080	040	00458	00486
020	050	080	050	00328	00327
020	050	080	058	00291	00289
020	050	080	072	00275	00273
020	050	080	076	00261	00259
020	050	080	080	00248	00246
020	050	080	084	00237	00235
020	050	080	088	00227	00224
020	050	080	090	00222	00220
020	050	080	094	00213	00210
020	050	080	098	00205	00202
020	050	080	100	00202	00198
020	050	090	006	03197	03190
020	050	090	010	02043	02039
020	050	090	020	01073	01069
020	050	090	040	00550	00548
020	050	090	060	00370	00368
020	050	090	080	00280	00278
020	050	090	084	00267	00265
020	050	090	088	00256	00253
020	050	090	090	00250	00247
020	050	090	092	00245	00242
020	050	090	094	00241	00237
020	050	090	096	00236	00232
020	050	090	098	00232	00228
020	050	090	100	00227	00223
020	050	094	006	03341	03334
020	050	094	010	02135	02130
020	050	094	020	01121	01118
020	050	094	040	00575	00572
020	050	094	060	00387	00385
020	050	094	080	00293	00290
020	050	094	084	00279	00277
020	050	094	088	00267	00264
020	050	094	090	00252	00250
020	050	094	092	00256	00253
020	050	094	094	00251	00248
020	050	094	096	00247	00243
020	050	094	098	00242	00238
020	050	094	100	00238	00233

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_1^*
0 20	0 50	0 98	0 06	0 3 485	0 3 477
0 20	0 50	0 98	0 10	0 2 227	0 2 222
0 20	0 50	0 98	0 20	0 1 169	0 1 166
0 20	0 50	0 98	0 40	0 0 600	0 0 597
0 20	0 50	0 98	0 60	0 0 403	0 0 401
0 20	0 50	0 98	0 80	0 0 305	0 0 303
0 20	0 50	0 98	0 8 4	0 0 291	0 0 289
0 20	0 50	0 98	0 8 8	0 0 279	0 0 276
0 20	0 50	0 98	0 9 0	0 0 273	0 0 270
0 20	0 50	0 98	0 9 2	0 0 267	0 0 264
0 20	0 50	0 98	0 9 4	0 0 262	0 0 258
0 20	0 50	0 98	0 9 6	0 0 257	0 0 253
0 20	0 50	0 98	0 9 8	0 0 252	0 0 248
0 20	0 50	0 98	1 0 0	0 0 248	0 0 243
0 20	0 50	1 00	0 0 6	0 3 556	0 3 549
0 20	0 50	1 00	0 1 0	0 2 273	0 2 268
0 20	0 50	1 00	0 2 0	0 1 193	0 1 190
0 20	0 50	1 00	0 4 0	0 0 612	0 0 609
0 20	0 50	1 00	0 6 0	0 0 412	0 0 410
0 20	0 50	1 00	0 8 0	0 0 311	0 0 309
0 20	0 50	1 00	0 8 4	0 0 297	0 0 294
0 20	0 50	1 00	0 8 8	0 0 285	0 0 281
0 20	0 50	1 00	0 9 0	0 0 279	0 0 275
0 20	0 50	1 00	0 9 2	0 0 273	0 0 269
0 20	0 50	1 00	0 9 4	0 0 268	0 0 264
0 20	0 50	1 00	0 9 6	0 0 262	0 0 258
0 20	0 50	1 00	0 9 8	0 0 256	0 0 253
0 20	0 50	1 00	1 0 0	0 0 253	0 0 248
0 20	0 80	0 0 2	0 0 2	0 0 176	0 0 176
0 20	0 80	0 0 2	0 0 4	0 0 109	0 0 109
0 20	0 80	0 0 2	0 0 6	0 0 078	0 0 078
0 20	0 80	0 0 2	0 0 8	0 0 061	0 0 061
0 20	0 80	0 0 2	0 1 0	0 0 050	0 0 050
0 20	0 80	0 0 2	0 1 2	0 0 042	0 0 042
0 20	0 80	0 0 2	0 2 0	0 0 026	0 0 026
0 20	0 80	0 0 2	0 4 0	0 0 013	0 0 013
0 20	0 80	0 0 2	0 5 0	0 0 009	0 0 009
0 20	0 80	0 0 2	0 8 0	0 0 006	0 0 006
0 20	0 80	0 0 2	0 9 0	0 0 006	0 0 006
0 20	0 80	0 0 2	0 9 4	0 0 005	0 0 005
0 20	0 80	0 0 2	0 9 8	0 0 005	0 0 005
0 20	0 80	0 0 2	1 0 0	0 0 005	0 0 005

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_ℓ^*	I_r^*
0 20	0 80	0 10	0 0 6	00 5 25	00 5 24
0 20	0 80	0 10	0 0 8	00 4 10	00 4 09
0 20	0 80	0 10	0 1 0	00 3 35	00 3 35
0 20	0 80	0 10	0 1 2	00 2 84	00 2 83
0 20	0 80	0 10	0 1 4	00 2 46	00 2 46
0 20	0 80	0 10	0 1 6	00 2 17	00 2 17
0 20	0 80	0 1 0	0 1 8	00 1 94	00 1 94
0 20	0 80	0 1 0	0 2 0	00 1 76	00 1 75
0 20	0 80	0 1 0	0 4 0	00 0 90	00 0 90
0 20	0 80	0 1 0	0 6 0	00 0 60	00 0 60
0 20	0 80	0 1 0	0 8 0	00 0 46	00 0 45
0 20	0 80	0 1 0	0 9 0	00 0 41	00 0 40
0 20	0 80	0 1 0	0 9 4	00 0 39	00 0 39
0 20	0 80	0 1 0	0 9 8	00 0 38	00 0 37
0 20	0 80	0 1 0	1 0 0	00 0 37	00 0 36
0 20	0 80	0 2 0	0 0 6	01 1 01	01 0 98
0 20	0 80	0 2 0	0 1 0	00 7 03	00 7 02
0 20	0 80	0 2 0	0 1 4	00 5 16	00 5 15
0 20	0 80	0 2 0	0 1 8	00 4 08	00 4 07
0 20	0 80	0 2 0	0 2 0	00 3 69	00 3 68
0 20	0 80	0 2 0	0 2 4	00 3 10	00 3 09
0 20	0 80	0 2 0	0 2 8	00 2 67	00 2 66
0 20	0 80	0 2 0	0 3 2	00 2 35	00 2 34
0 20	0 80	0 2 0	0 4 0	00 1 89	00 1 88
0 20	0 80	0 2 0	0 6 0	00 1 27	00 1 26
0 20	0 80	0 2 0	0 8 0	00 0 95	00 0 95
0 20	0 80	0 2 0	0 9 0	00 0 86	00 0 85
0 20	0 80	0 2 0	0 9 4	00 0 83	00 0 81
0 20	0 80	0 2 0	0 9 8	00 0 79	00 0 78
0 20	0 80	0 2 0	1 0 0	00 0 78	00 0 77
0 20	0 80	0 4 0	0 0 6	02 2 56	02 2 51
0 20	0 80	0 4 0	0 1 0	01 4 42	01 4 38
0 20	0 80	0 4 0	0 2 0	00 7 57	00 7 54
0 20	0 80	0 4 0	0 2 8	00 5 48	00 5 46
0 20	0 80	0 4 0	0 3 2	00 4 82	00 4 80
0 20	0 80	0 4 0	0 3 6	00 4 30	00 4 28
0 20	0 80	0 4 0	0 4 0	00 3 88	00 3 86
0 20	0 80	0 4 0	0 4 4	00 3 54	00 3 52
0 20	0 80	0 4 0	0 5 2	00 3 00	00 2 99
0 20	0 80	0 4 0	0 6 0	00 2 61	00 2 60
0 20	0 80	0 4 0	0 8 0	00 1 97	00 1 96
0 20	0 80	0 4 0	0 9 0	00 1 77	00 1 74
0 20	0 80	0 4 0	0 9 4	00 1 70	00 1 67
0 20	0 80	0 4 0	0 9 8	00 1 63	00 1 60
0 20	0 80	0 4 0	1 0 0	00 1 60	00 1 57

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_r^*
020	080	060	006	03412	03404
020	080	060	010	02180	02175
020	080	060	020	01145	01141
020	080	060	040	00587	00584
020	080	060	052	00454	00452
020	080	060	056	00422	00420
020	080	060	060	00395	00393
020	080	060	064	00371	00369
020	080	060	068	00350	00347
020	080	060	072	00331	00329
020	080	060	080	00299	00296
020	080	060	090	00267	00264
020	080	060	094	00257	00253
020	080	060	098	00247	00243
020	080	060	100	00243	00238
020	080	080	006	04568	04558
020	080	080	010	02919	02912
020	080	080	020	01533	01528
020	080	080	040	00786	00783
020	080	080	060	00529	00526
020	080	080	068	00468	00465
020	080	080	072	00443	00440
020	080	080	076	00420	00417
020	080	080	080	00400	00397
020	080	080	084	00382	00378
020	080	080	088	00366	00362
020	080	080	090	00358	00354
020	080	080	094	00344	00339
020	080	080	098	00331	00325
020	080	080	100	00325	00319
020	080	090	006	05146	05135
020	080	090	010	03289	03281
020	080	090	020	01727	01721
020	080	090	040	00886	00882
020	080	090	060	00596	00593
020	080	090	080	00451	00447
020	080	090	084	00430	00426
020	080	090	088	00412	00407
020	080	090	090	00403	00398
020	080	090	092	00395	00390
020	080	090	094	00387	00382
020	080	090	096	00380	00374
020	080	090	098	00373	00367
020	080	090	100	00366	00359

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_r^*
020	080	094	006	05377	05365
020	080	094	010	03436	03428
020	080	094	020	01805	01799
020	080	094	040	00925	00921
020	080	094	060	00623	00619
020	080	094	080	00471	00467
020	080	094	084	00450	00445
020	080	094	088	00430	00426
020	080	094	090	00421	00416
020	080	094	092	00413	00408
020	080	094	094	00405	00399
020	080	094	096	00397	00391
020	080	094	098	00390	00383
020	080	094	100	00383	00376
020	080	098	006	05608	05596
020	080	098	010	03584	03576
020	080	098	020	01882	01876
020	080	098	040	00965	00961
020	080	098	060	00649	00646
020	080	098	080	00491	00487
020	080	098	084	00469	00465
020	080	098	088	00449	00444
020	080	098	090	00440	00434
020	080	098	092	00431	00425
020	080	098	094	00422	00416
020	080	098	096	00414	00408
020	080	098	098	00406	00400
020	080	098	100	00399	00392
020	080	100	006	05724	05711
020	080	100	010	03658	03650
020	080	100	020	01921	01915
020	080	100	040	00985	00981
020	080	100	060	00653	00659
020	080	100	080	00501	00497
020	080	100	084	00479	00474
020	080	100	088	00458	00453
020	080	100	090	00449	00443
020	080	100	092	00440	00434
020	080	100	094	00431	00425
020	080	100	096	00423	00416
020	080	100	098	00415	00408
020	080	100	100	00407	00400

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_r^*
0 5 0	0 2 5	0 0 2	0 0 2	0 0 0 6 3	0 0 0 6 2
0 5 0	0 2 5	0 0 2	0 0 4	0 0 0 4 8	0 0 0 4 8
0 5 0	0 2 5	0 0 2	0 0 6	0 0 0 3 8	0 0 0 3 7
0 5 0	0 2 5	0 0 2	0 0 8	0 0 0 3 1	0 0 0 3 1
0 5 0	0 2 5	0 0 2	0 1 0	0 0 0 2 6	0 0 0 2 6
0 5 0	0 2 5	0 0 2	0 1 2	0 0 0 2 2	0 0 0 2 2
0 5 0	0 2 5	0 0 2	0 2 0	0 0 0 1 4	0 0 0 1 4
0 5 0	0 2 5	0 0 2	0 4 0	0 0 0 0 7	0 0 0 0 7
0 5 0	0 2 5	0 0 2	0 6 0	0 0 0 0 5	0 0 0 0 5
0 5 0	0 2 5	0 0 2	0 8 0	0 0 0 0 4	0 0 0 0 4
0 5 0	0 2 5	0 0 2	0 9 0	0 0 0 0 3	0 0 0 0 3
0 5 0	0 2 5	0 0 2	0 9 4	0 0 0 0 3	0 0 0 0 3
0 5 0	0 2 5	0 0 2	0 9 8	0 0 0 0 3	0 0 0 0 3
0 5 0	0 2 5	0 0 2	1 0 0	0 0 0 0 3	0 0 0 0 3
0 5 0	0 2 5	0 1 0	0 0 6	0 0 2 9 0	0 0 2 8 9
0 5 0	0 2 5	0 1 0	0 0 8	0 0 2 3 8	0 0 2 3 7
0 5 0	0 2 5	0 1 0	0 1 0	0 0 2 0 1	0 0 2 0 0
0 5 0	0 2 5	0 1 0	0 1 2	0 0 1 7 3	0 0 1 7 3
0 5 0	0 2 5	0 1 0	0 1 4	0 0 1 5 3	0 0 1 5 2
0 5 0	0 2 5	0 1 0	0 1 6	0 0 1 3 6	0 0 1 3 6
0 5 0	0 2 5	0 1 0	0 1 8	0 0 1 2 3	0 0 1 2 3
0 5 0	0 2 5	0 1 0	0 2 0	0 0 1 1 2	0 0 1 1 2
0 5 0	0 2 5	0 1 0	0 4 0	0 0 0 5 9	0 0 0 5 9
0 5 0	0 2 5	0 1 0	0 6 0	0 0 0 4 0	0 0 0 4 0
0 5 0	0 2 5	0 1 0	0 8 0	0 0 0 3 0	0 0 0 3 0
0 5 0	0 2 5	0 1 0	0 9 0	0 0 0 2 7	0 0 0 2 7
0 5 0	0 2 5	0 1 0	0 9 4	0 0 0 2 6	0 0 0 2 6
0 5 0	0 2 5	0 1 0	0 9 8	0 0 0 2 5	0 0 0 2 5
0 5 0	0 2 5	0 1 0	1 0 0	0 0 0 2 4	0 0 0 2 4
0 5 0	0 2 5	0 2 0	0 0 6	0 0 6 4 4	0 0 6 4 1
0 5 0	0 2 5	0 2 0	0 1 0	0 0 4 4 6	0 0 4 4 4
0 5 0	0 2 5	0 2 0	0 1 4	0 0 3 3 9	0 0 3 3 8
0 5 0	0 2 5	0 2 0	0 1 8	0 0 2 7 3	0 0 2 7 3
0 5 0	0 2 5	0 2 0	0 2 0	0 0 2 4 9	0 0 2 4 9
0 5 0	0 2 5	0 2 0	0 2 4	0 0 2 1 2	0 0 2 1 1
0 5 0	0 2 5	0 2 0	0 2 8	0 0 1 8 4	0 0 1 8 4
0 5 0	0 2 5	0 2 0	0 3 2	0 0 1 6 2	0 0 1 6 2
0 5 0	0 2 5	0 2 0	0 4 0	0 0 1 3 2	0 0 1 3 2
0 5 0	0 2 5	0 2 0	0 6 0	0 0 0 8 9	0 0 0 8 9
0 5 0	0 2 5	0 2 0	0 8 0	0 0 0 6 8	0 0 0 6 8
0 5 0	0 2 5	0 2 0	0 9 0	0 0 0 6 0	0 0 0 6 0
0 5 0	0 2 5	0 2 0	0 9 4	0 0 0 5 8	0 0 0 5 8
0 5 0	0 2 5	0 2 0	0 9 8	0 0 0 5 5	0 0 0 5 5
0 5 0	0 2 5	0 2 0	1 0 0	0 0 0 5 4	0 0 0 5 4

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_{ℓ}^*	I_{I}^*
0.50	0.25	0.40	0.06	01355	01358
0.50	0.25	0.40	0.10	00944	00941
0.50	0.25	0.40	0.20	00528	00527
0.50	0.25	0.40	0.28	00390	00389
0.50	0.25	0.40	0.32	00345	00344
0.50	0.25	0.40	0.36	00309	00309
0.50	0.25	0.40	0.40	00280	00280
0.50	0.25	0.40	0.44	00255	00255
0.50	0.25	0.40	0.52	00218	00218
0.50	0.25	0.40	0.60	00190	00190
0.50	0.25	0.40	0.80	00144	00144
0.50	0.25	0.40	0.90	00128	00128
0.50	0.25	0.40	0.94	00123	00123
0.50	0.25	0.40	0.98	00118	00118
0.50	0.25	0.40	1.00	00115	00116
0.50	0.25	0.50	0.06	02088	02078
0.50	0.25	0.50	0.10	01445	01441
0.50	0.25	0.60	0.20	00808	00807
0.50	0.25	0.60	0.40	00428	00428
0.50	0.25	0.60	0.52	00354	00354
0.50	0.25	0.60	0.56	00311	00311
0.50	0.25	0.60	0.60	00291	00291
0.50	0.25	0.60	0.64	00273	00273
0.50	0.25	0.60	0.68	00258	00258
0.50	0.25	0.60	0.72	00244	00244
0.50	0.25	0.60	0.80	00220	00220
0.50	0.25	0.60	0.90	00195	00196
0.50	0.25	0.60	0.94	00188	00198
0.50	0.25	0.60	0.98	00180	00181
0.50	0.25	0.60	1.00	00177	00177
0.50	0.25	0.80	0.06	02813	02799
0.50	0.25	0.80	0.10	01945	01940
0.50	0.25	0.80	0.20	01084	01087
0.50	0.25	0.80	0.40	00577	00576
0.50	0.25	0.80	0.50	00392	00392
0.50	0.25	0.80	0.58	00347	00347
0.50	0.25	0.80	0.72	00329	00329
0.50	0.25	0.80	0.76	00312	00312
0.50	0.25	0.80	0.80	00297	00297
0.50	0.25	0.80	0.84	00283	00283
0.50	0.25	0.80	0.88	00270	00270
0.50	0.25	0.80	0.90	00264	00265
0.50	0.25	0.80	0.94	00253	00254
0.50	0.25	0.80	0.98	00243	00243
0.50	0.25	0.80	1.00	00239	00239

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_T^*
050	025	090	006	03175	03160
050	025	090	010	02197	02190
050	025	090	020	01229	01228
050	025	090	040	00651	00651
050	025	090	060	00442	00442
050	025	090	080	00335	00335
050	025	090	084	00319	00320
050	025	090	088	00305	00305
050	025	090	090	00299	00299
050	025	090	092	00292	00292
050	025	090	094	00286	00286
050	025	090	096	00280	00281
050	025	090	098	00275	00275
050	025	090	100	00269	00270
050	025	094	006	03320	03304
050	025	094	010	02297	02290
050	025	094	020	01285	01284
050	025	094	040	00681	00681
050	025	094	060	00463	00463
050	025	094	080	00350	00350
050	025	094	084	00334	00334
050	025	094	088	00319	00319
050	025	094	090	00312	00312
050	025	094	092	00306	00306
050	025	094	094	00299	00299
050	025	094	096	00293	00293
050	025	094	098	00287	00287
050	025	094	100	00282	00282
050	025	098	006	03465	03448
050	025	098	010	02397	02390
050	025	098	020	01341	01340
050	025	098	040	00710	00710
050	025	098	060	00483	00483
050	025	098	080	00365	00366
050	025	098	084	00348	00349
050	025	098	088	00333	00333
050	025	098	090	00326	00326
050	025	098	092	00319	00319
050	025	098	094	00312	00313
050	025	098	096	00306	00306
050	025	098	098	00300	00300
050	025	098	100	00294	00294

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_r^*
0.50	0.25	1.00	0.06	0.3558	0.3521
0.50	0.25	1.00	0.10	0.2447	0.2440
0.50	0.25	1.00	0.20	0.1369	0.1368
0.50	0.25	1.00	0.40	0.0725	0.0725
0.50	0.25	1.00	0.60	0.0493	0.0493
0.50	0.25	1.00	0.80	0.0373	0.0373
0.50	0.25	1.00	0.84	0.0356	0.0356
0.50	0.25	1.00	0.88	0.0340	0.0340
0.50	0.25	1.00	0.90	0.0333	0.0333
0.50	0.25	1.00	0.92	0.0326	0.0326
0.50	0.25	1.00	0.94	0.0319	0.0319
0.50	0.25	1.00	0.96	0.0312	0.0313
0.50	0.25	1.00	0.98	0.0306	0.0306
0.50	0.25	1.00	1.00	0.0300	0.0300
0.50	0.50	0.02	0.02	0.0128	0.0126
0.50	0.50	0.02	0.04	0.0097	0.0097
0.50	0.50	0.02	0.06	0.0077	0.0076
0.50	0.50	0.02	0.08	0.0063	0.0062
0.50	0.50	0.02	0.10	0.0053	0.0053
0.50	0.50	0.02	0.12	0.0046	0.0046
0.50	0.50	0.02	0.20	0.0029	0.0029
0.50	0.50	0.02	0.40	0.0015	0.0015
0.50	0.50	0.02	0.60	0.0010	0.0010
0.50	0.50	0.02	0.80	0.0008	0.0008
0.50	0.50	0.02	0.90	0.0007	0.0007
0.50	0.50	0.02	0.94	0.0006	0.0006
0.50	0.50	0.02	0.98	0.0006	0.0006
0.50	0.50	0.02	1.00	0.0006	0.0006
0.50	0.50	0.10	0.06	0.0588	0.0585
0.50	0.50	0.10	0.08	0.0481	0.0480
0.50	0.50	0.10	0.10	0.0407	0.0405
0.50	0.50	0.10	0.12	0.0351	0.0351
0.50	0.50	0.10	0.14	0.0309	0.0309
0.50	0.50	0.10	0.16	0.0276	0.0276
0.50	0.50	0.10	0.18	0.0249	0.0249
0.50	0.50	0.10	0.20	0.0227	0.0227
0.50	0.50	0.10	0.40	0.0120	0.0120
0.50	0.50	0.10	0.60	0.0082	0.0082
0.50	0.50	0.10	0.80	0.0062	0.0062
0.50	0.50	0.10	0.90	0.0055	0.0055
0.50	0.50	0.10	0.94	0.0053	0.0053
0.50	0.50	0.10	0.98	0.0050	0.0051
0.50	0.50	0.10	1.00	0.0049	0.0050

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_r^*
0 5 0	0 5 0	0 2 0	0 0 6	0 1 3 0 4	0 1 2 9 8
0 5 0	0 5 0	0 2 0	0 1 0	0 0 9 0 2	0 0 8 9 9
0 5 0	0 5 0	0 2 0	0 1 4	0 0 6 8 7	0 0 6 8 5
0 5 0	0 5 0	0 2 0	0 1 8	0 0 5 5 4	0 0 5 5 3
0 5 0	0 5 0	0 2 0	0 2 0	0 0 5 0 5	0 0 5 0 4
0 5 0	0 5 0	0 2 0	0 2 4	0 0 4 2 9	0 0 4 2 8
0 5 0	0 5 0	0 2 0	0 2 8	0 0 3 7 2	0 0 3 7 2
0 5 0	0 5 0	0 2 0	0 3 2	0 0 3 2 9	0 0 3 2 9
0 5 0	0 5 0	0 2 0	0 4 0	0 0 2 6 7	0 0 2 6 7
0 5 0	0 5 0	0 2 0	0 6 0	0 0 1 8 1	0 0 1 8 1
0 5 0	0 5 0	0 2 0	0 8 0	0 0 1 3 7	0 0 1 3 7
0 5 0	0 5 0	0 2 0	0 9 0	0 0 1 2 2	0 0 1 2 2
0 5 0	0 5 0	0 2 0	0 9 4	0 0 1 1 7	0 0 1 1 7
0 5 0	0 5 0	0 2 0	0 9 8	0 0 1 1 3	0 0 1 1 3
0 5 0	0 5 0	0 2 0	1 0 0	0 0 1 1 0	0 0 1 1 0
0 5 0	0 5 0	0 4 0	0 0 6	0 2 7 6 2	0 2 7 4 8
0 5 0	0 5 0	0 4 0	0 1 0	0 1 9 1 1	0 1 9 0 5
0 5 0	0 5 0	0 4 0	0 2 0	0 1 0 6 9	0 1 0 6 8
0 5 0	0 5 0	0 4 0	0 2 8	0 0 7 8 9	0 0 7 8 8
0 5 0	0 5 0	0 4 0	0 3 2	0 0 6 9 8	0 0 6 9 7
0 5 0	0 5 0	0 4 0	0 3 6	0 0 6 2 5	0 0 6 2 5
0 5 0	0 5 0	0 4 0	0 4 0	0 0 5 6 6	0 0 5 6 6
0 5 0	0 5 0	0 4 0	0 4 4	0 0 5 1 7	0 0 5 1 7
0 5 0	0 5 0	0 4 0	0 5 2	0 0 4 4 1	0 0 4 4 1
0 5 0	0 5 0	0 4 0	0 6 0	0 0 3 8 5	0 0 3 8 5
0 5 0	0 5 0	0 4 0	0 8 0	0 0 2 9 1	0 0 2 9 1
0 5 0	0 5 0	0 4 0	0 9 0	0 0 2 6 0	0 0 2 6 0
0 5 0	0 5 0	0 4 0	0 9 4	0 0 2 4 9	0 0 2 4 9
0 5 0	0 5 0	0 4 0	0 9 8	0 0 2 3 9	0 0 2 3 9
0 5 0	0 5 0	0 4 0	1 0 0	0 0 2 3 4	0 0 2 3 4
0 5 0	0 5 0	0 6 0	0 0 6	0 4 2 2 6	0 4 2 0 5
0 5 0	0 5 0	0 6 0	0 1 0	0 2 9 2 3	0 2 9 1 5
0 5 0	0 5 0	0 6 0	0 2 0	0 1 6 3 6	0 1 6 3 4
0 5 0	0 5 0	0 6 0	0 4 0	0 0 8 6 6	0 0 8 5 6
0 5 0	0 5 0	0 6 0	0 5 2	0 0 6 7 5	0 0 6 7 5
0 5 0	0 5 0	0 6 0	0 5 6	0 0 6 2 9	0 0 6 2 9
0 5 0	0 5 0	0 6 0	0 6 0	0 0 5 8 9	0 0 5 8 9
0 5 0	0 5 0	0 6 0	0 6 4	0 0 5 5 3	0 0 5 5 3
0 5 0	0 5 0	0 6 0	0 6 8	0 0 5 2 2	0 0 5 2 2
0 5 0	0 5 0	0 6 0	0 7 2	0 0 4 9 4	0 0 4 9 4
0 5 0	0 5 0	0 6 0	0 8 0	0 0 4 4 6	0 0 4 4 6
0 5 0	0 5 0	0 6 0	0 9 0	0 0 3 9 7	0 0 3 9 8
0 5 0	0 5 0	0 6 0	0 9 4	0 0 3 8 1	0 0 3 8 1
0 5 0	0 5 0	0 6 0	0 9 8	0 0 3 6 6	0 0 3 6 6
0 5 0	0 5 0	0 6 0	1 0 0	0 0 3 5 9	0 0 3 5 9

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_r^*
0 5 0	0 5 0	0 8 0	0 0 6	0 5 6 9 1	0 5 6 6 4
0 5 0	0 5 0	0 8 0	0 1 0	0 3 9 3 7	0 3 9 2 6
0 5 0	0 5 0	0 8 0	0 2 0	0 2 2 0 3	0 2 2 0 0
0 5 0	0 5 0	0 8 0	0 4 0	0 1 1 6 7	0 1 1 6 7
0 5 0	0 5 0	0 8 0	0 6 0	0 0 7 9 3	0 0 7 9 3
0 5 0	0 5 0	0 8 0	0 6 8	0 0 7 0 3	0 0 7 0 3
0 5 0	0 5 0	0 8 0	0 7 2	0 0 6 6 5	0 0 6 6 5
0 5 0	0 5 0	0 8 0	0 7 6	0 0 6 3 1	0 0 6 3 2
0 5 0	0 5 0	0 8 0	0 8 0	0 0 6 0 1	0 0 6 0 1
0 5 0	0 5 0	0 8 0	0 8 4	0 0 5 7 3	0 0 5 7 3
0 5 0	0 5 0	0 8 0	0 8 8	0 0 5 4 7	0 0 5 4 8
0 5 0	0 5 0	0 8 0	0 9 0	0 0 5 3 5	0 0 5 3 6
0 5 0	0 5 0	0 8 0	0 9 4	0 0 5 1 3	0 0 5 1 4
0 5 0	0 5 0	0 8 0	0 9 8	0 0 4 9 3	0 0 4 9 3
0 5 0	0 5 0	0 8 0	1 0 0	0 0 4 8 3	0 0 4 8 3
0 5 0	0 5 0	0 9 0	0 0 6	0 6 4 2 4	0 6 3 9 3
0 5 0	0 5 0	0 9 0	0 1 0	0 4 4 4 5	0 4 4 3 2
0 5 0	0 5 0	0 9 0	0 2 0	0 2 4 8 7	0 2 4 8 4
0 5 0	0 5 0	0 9 0	0 4 0	0 1 3 1 8	0 1 3 1 7
0 5 0	0 5 0	0 9 0	0 6 0	0 0 8 9 5	0 0 8 9 6
0 5 0	0 5 0	0 9 0	0 8 0	0 0 6 7 8	0 0 6 7 8
0 5 0	0 5 0	0 9 0	0 8 4	0 0 6 4 6	0 0 6 4 7
0 5 0	0 5 0	0 9 0	0 8 8	0 0 6 1 8	0 0 6 1 8
0 5 0	0 5 0	0 9 0	0 9 0	0 0 6 0 4	0 0 6 0 5
0 5 0	0 5 0	0 9 0	0 9 2	0 0 5 9 2	0 0 5 9 2
0 5 0	0 5 0	0 9 0	0 9 4	0 0 5 7 9	0 0 5 8 0
0 5 0	0 5 0	0 9 0	0 9 6	0 0 5 6 8	0 0 5 6 8
0 5 0	0 5 0	0 9 0	0 9 8	0 0 5 5 6	0 0 5 5 7
0 5 0	0 5 0	0 9 0	1 0 0	0 0 5 4 5	0 0 5 4 6
0 5 0	0 5 0	0 9 4	0 0 6	0 6 7 1 8	0 6 6 8 5
0 5 0	0 5 0	0 9 4	0 1 0	0 4 6 4 8	0 4 6 3 4
0 5 0	0 5 0	0 9 4	0 2 0	0 2 6 0 1	0 2 5 9 7
0 5 0	0 5 0	0 9 4	0 4 0	0 1 3 7 8	0 1 3 7 7
0 5 0	0 5 0	0 9 4	0 6 0	0 0 9 3 6	0 0 9 3 7
0 5 0	0 5 0	0 9 4	0 8 0	0 0 7 0 9	0 0 7 0 9
0 5 0	0 5 0	0 9 4	0 8 4	0 0 6 7 6	0 0 6 7 6
0 5 0	0 5 0	0 9 4	0 8 8	0 0 6 4 6	0 0 6 4 7
0 5 0	0 5 0	0 9 4	0 9 0	0 0 6 3 2	0 0 6 3 3
0 5 0	0 5 0	0 9 4	0 9 2	0 0 6 1 9	0 0 6 1 9
0 5 0	0 5 0	0 9 4	0 9 4	0 0 6 0 6	0 0 6 0 6
0 5 0	0 5 0	0 9 4	0 9 6	0 0 5 9 3	0 0 5 9 4
0 5 0	0 5 0	0 9 4	0 9 8	0 0 5 8 2	0 0 5 8 2
0 5 0	0 5 0	0 9 4	1 0 0	0 0 5 7 0	0 0 5 7 1

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_T^*
0 50	0 50	0 9 8	0 0 6	0 7 0 1 1	0 6 9 7 7
0 50	0 50	0 9 8	0 1 0	0 4 8 5 0	0 4 8 3 7
0 50	0 50	0 9 8	0 2 0	0 2 7 1 4	0 2 7 1 1
0 50	0 50	0 9 8	0 4 0	0 1 4 3 8	0 1 4 3 7
0 50	0 50	0 9 8	0 6 0	0 0 9 7 7	0 0 9 7 7
0 50	0 50	0 9 8	0 8 0	0 0 7 4 0	0 0 7 4 0
0 50	0 50	0 9 8	0 8 4	0 0 7 0 6	0 0 7 0 6
0 50	0 50	0 9 8	0 8 8	0 0 6 7 4	0 0 6 7 5
0 50	0 50	0 9 8	0 9 0	0 0 6 6 0	0 0 6 6 0
0 50	0 50	0 9 8	0 9 2	0 0 6 4 6	0 0 6 4 6
0 50	0 50	0 9 8	0 9 4	0 0 6 3 2	0 0 6 3 3
0 50	0 50	0 9 8	0 9 6	0 0 6 1 9	0 0 6 2 0
0 50	0 50	0 9 8	0 9 8	0 0 6 0 7	0 0 6 0 8
0 50	0 50	0 9 8	1 0 0	0 0 5 9 5	0 0 5 9 6
0 50	0 50	1 0 0	0 0 6	0 7 1 5 8	0 7 1 2 3
0 50	0 50	1 0 0	0 1 0	0 4 9 5 2	0 4 9 3 8
0 50	0 50	1 0 0	0 2 0	0 2 7 7 1	0 2 7 6 7
0 50	0 50	1 0 0	0 4 0	0 1 4 6 8	0 1 4 6 8
0 50	0 50	1 0 0	0 6 0	0 0 9 9 8	0 0 9 9 8
0 50	0 50	1 0 0	0 8 0	0 0 7 5 5	0 0 7 5 6
0 50	0 50	1 0 0	0 8 4	0 0 7 2 0	0 0 7 2 1
0 50	0 50	1 0 0	0 8 8	0 0 6 8 8	0 0 6 8 9
0 50	0 50	1 0 0	0 9 0	0 0 6 7 3	0 0 6 7 4
0 50	0 50	1 0 0	0 9 2	0 0 6 5 9	0 0 6 6 0
0 50	0 50	1 0 0	0 9 4	0 0 6 4 5	0 0 6 4 6
0 50	0 50	1 0 0	0 9 6	0 0 6 3 2	0 0 6 3 3
0 50	0 50	1 0 0	0 9 8	0 0 6 2 0	0 0 6 2 0
0 50	0 50	1 0 0	1 0 0	0 0 6 0 8	0 0 6 0 8
0 50	0 8 0	0 0 2	0 0 2	0 0 2 0 8	0 0 2 0 5
0 50	0 8 0	0 0 2	0 0 4	0 0 1 5 8	0 0 1 5 7
0 50	0 8 0	0 0 2	0 0 6	0 0 1 2 5	0 0 1 2 4
0 50	0 8 0	0 0 2	0 0 8	0 0 1 0 2	0 0 1 0 2
0 50	0 8 0	0 0 2	0 1 0	0 0 0 8 6	0 0 0 8 6
0 50	0 8 0	0 0 2	0 1 2	0 0 0 7 4	0 0 0 7 4
0 50	0 8 0	0 0 2	0 2 0	0 0 0 4 8	0 0 0 4 8
0 50	0 8 0	0 0 2	0 4 0	0 0 0 2 5	0 0 0 2 5
0 50	0 8 0	0 0 2	0 6 0	0 0 0 1 7	0 0 0 1 7
0 50	0 8 0	0 0 2	0 8 0	0 0 0 1 3	0 0 0 1 3
0 50	0 8 0	0 0 2	0 9 0	0 0 0 1 1	0 0 0 1 1
0 50	0 8 0	0 0 2	0 9 4	0 0 0 1 1	0 0 0 1 1
0 50	0 8 0	0 0 2	0 9 8	0 0 0 1 0	0 0 0 1 0
0 50	0 8 0	0 0 2	1 0 0	0 0 0 1 0	0 0 0 1 0

TABLE 5 Intensities (Continued)

ν	λ	μ_0	μ	I_f^*	I_r^*
050	080	010	006	00954	00949
050	080	010	008	00781	00778
050	080	010	010	00660	00658
050	080	010	012	00571	00569
050	080	010	014	00502	00501
050	080	010	016	00448	00448
050	080	010	018	00405	00404
050	080	010	020	00369	00369
050	080	010	040	00195	00195
050	080	010	060	00133	00133
050	080	010	080	00100	00100
050	080	010	090	00089	00089
050	080	010	094	00086	00086
050	080	010	098	00082	00082
050	080	010	100	00081	00081
050	080	020	006	02116	02106
050	080	020	010	01464	01460
050	080	020	014	01114	01112
050	080	020	018	00899	00897
050	080	020	020	00819	00818
050	080	020	024	00696	00695
050	080	020	028	00605	00604
050	080	020	032	00534	00534
050	080	020	040	00434	00434
050	080	020	060	00295	00295
050	080	020	080	00223	00223
050	080	020	090	00199	00199
050	080	020	094	00191	00191
050	080	020	098	00183	00183
050	080	020	100	00179	00179
050	080	040	006	04481	04459
050	080	040	010	03106	03091
050	080	040	020	01735	01732
050	080	040	028	01281	01280
050	080	040	032	01132	01131
050	080	040	036	01014	01014
050	080	040	040	00919	00919
050	080	040	044	00840	00840
050	080	040	052	00716	00716
050	080	040	060	00624	00625
050	080	040	080	00473	00473
050	080	040	090	00421	00422
050	080	040	094	00404	00404
050	080	040	098	00388	00388
050	080	040	100	00380	00381

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_l^*	I_r^*
0 5 0	0 8 0	0 6 0	0 0 6	0 6 8 5 6	0 6 8 2 3
0 5 0	0 8 0	0 6 0	0 1 0	0 4 7 4 4	0 4 7 3 0
0 5 0	0 8 0	0 6 0	0 2 0	0 2 6 5 4	0 2 6 5 1
0 5 0	0 8 0	0 6 0	0 4 0	0 1 4 0 6	0 1 4 0 6
0 5 0	0 8 0	0 6 0	0 5 2	0 1 0 9 5	0 1 0 9 6
0 5 0	0 8 0	0 6 0	0 5 6	0 1 0 2 1	0 1 0 2 1
0 5 0	0 8 0	0 6 0	0 6 0	0 0 9 5 6	0 0 9 5 6
0 5 0	0 8 0	0 6 0	0 6 4	0 0 8 9 8	0 0 8 9 8
0 5 0	0 8 0	0 6 0	0 6 8	0 0 8 4 7	0 0 8 4 7
0 5 0	0 8 0	0 6 0	0 7 2	0 0 8 0 1	0 0 8 0 2
0 5 0	0 8 0	0 6 0	0 8 0	0 0 7 2 4	0 0 7 2 4
0 5 0	0 8 0	0 6 0	0 9 0	0 0 6 4 5	0 0 6 4 6
0 5 0	0 8 0	0 6 0	0 9 4	0 0 6 1 8	0 0 6 1 9
0 5 0	0 8 0	0 6 0	0 9 8	0 0 5 9 4	0 0 5 9 4
0 5 0	0 8 0	0 6 0	1 0 0	0 0 5 8 2	0 0 5 8 3
0 5 0	0 8 0	0 8 0	0 0 6	0 9 2 3 5	0 9 1 9 0
0 5 0	0 8 0	0 8 0	0 1 0	0 6 3 8 9	0 6 3 7 0
0 5 0	0 8 0	0 8 0	0 2 0	0 3 5 7 5	0 3 5 7 0
0 5 0	0 8 0	0 8 0	0 4 0	0 1 8 9 4	0 1 8 9 3
0 5 0	0 8 0	0 8 0	0 6 0	0 1 2 8 7	0 1 2 8 8
0 5 0	0 8 0	0 8 0	0 6 8	0 1 1 4 1	0 1 1 4 1
0 5 0	0 8 0	0 8 0	0 7 2	0 1 0 8 0	0 1 0 8 0
0 5 0	0 8 0	0 8 0	0 7 6	0 1 0 2 4	0 1 0 2 5
0 5 0	0 8 0	0 8 0	0 8 0	0 0 9 7 5	0 0 9 7 5
0 5 0	0 8 0	0 8 0	0 8 4	0 0 9 2 9	0 0 9 3 0
0 5 0	0 8 0	0 8 0	0 8 8	0 0 8 8 8	0 0 8 8 9
0 5 0	0 8 0	0 8 0	0 9 0	0 0 8 6 9	0 0 8 7 0
0 5 0	0 8 0	0 8 0	0 9 4	0 0 8 3 3	0 0 8 3 4
0 5 0	0 8 0	0 8 0	0 9 8	0 0 8 0 0	0 0 8 0 0
0 5 0	0 8 0	0 8 0	1 0 0	0 0 7 8 4	0 0 7 8 5
0 5 0	0 8 0	0 9 0	0 0 6	1 0 4 2 4	1 0 3 7 3
0 5 0	0 8 0	0 9 0	0 1 0	0 7 2 1 2	0 7 1 9 1
0 5 0	0 8 0	0 9 0	0 2 0	0 4 0 3 6	0 4 0 3 0
0 5 0	0 8 0	0 9 0	0 4 0	0 2 1 3 8	0 2 1 3 7
0 5 0	0 8 0	0 9 0	0 6 0	0 1 4 5 3	0 1 4 5 3
0 5 0	0 8 0	0 9 0	0 8 0	0 1 1 0 0	0 1 1 0 1
0 5 0	0 8 0	0 9 0	0 8 4	0 1 0 4 9	0 1 0 5 0
0 5 0	0 8 0	0 9 0	0 8 8	0 1 0 0 3	0 1 0 0 3
0 5 0	0 8 0	0 9 0	0 9 0	0 0 9 8 1	0 0 9 8 2
0 5 0	0 8 0	0 9 0	0 9 2	0 0 9 6 0	0 0 9 6 1
0 5 0	0 8 0	0 9 0	0 9 4	0 0 9 4 0	0 0 9 4 1
0 5 0	0 8 0	0 9 0	0 9 6	0 0 9 2 1	0 0 9 2 2
0 5 0	0 8 0	0 9 0	0 9 8	0 0 9 0 3	0 0 9 0 4
0 5 0	0 8 0	0 9 0	1 0 0	0 0 8 8 5	0 0 8 8 6

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_T^*
0 50	0 80	0 94	0 06	1 0900	1 0847
0 50	0 80	0 94	0 10	0 7541	0 7519
0 50	0 80	0 94	0 20	0 4220	0 4214
0 50	0 80	0 94	0 40	0 2236	0 2235
0 50	0 80	0 94	0 60	0 1519	0 1520
0 50	0 80	0 94	0 80	0 1150	0 1151
0 50	0 80	0 94	0 84	0 1097	0 1098
0 50	0 80	0 94	0 88	0 1049	0 1049
0 50	0 80	0 94	0 90	0 1026	0 1027
0 50	0 80	0 94	0 92	0 1004	0 1005
0 50	0 80	0 94	0 94	0 0983	0 0984
0 50	0 80	0 94	0 96	0 0963	0 0964
0 50	0 80	0 94	0 98	0 0944	0 0945
0 50	0 80	0 94	1 00	0 0926	0 0926
0 50	0 80	0 98	0 06	1 1376	1 1321
0 50	0 80	0 98	0 10	0 7870	0 7848
0 50	0 80	0 98	0 20	0 4404	0 4398
0 50	0 80	0 98	0 40	0 2333	0 2333
0 50	0 80	0 98	0 60	0 1586	0 1586
0 50	0 80	0 98	0 80	0 1201	0 1201
0 50	0 80	0 98	0 84	0 1145	0 1146
0 50	0 80	0 98	0 88	0 1094	0 1095
0 50	0 80	0 98	0 90	0 1071	0 1071
0 50	0 80	0 98	0 92	0 1048	0 1049
0 50	0 80	0 98	0 94	0 1026	0 1027
0 50	0 80	0 98	0 96	0 1005	0 1006
0 50	0 80	0 98	0 98	0 0985	0 0986
0 50	0 80	0 98	1 00	0 0966	0 0967
0 50	0 80	1 00	0 06	1 1614	1 1557
0 50	0 80	1 00	0 10	0 8035	0 8012
0 50	0 80	1 00	0 20	0 4496	0 4490
0 50	0 80	1 00	0 40	0 2382	0 2381
0 50	0 80	1 00	0 60	0 1619	0 1619
0 50	0 80	1 00	0 80	0 1226	0 1227
0 50	0 80	1 00	0 84	0 1169	0 1170
0 50	0 80	1 00	0 88	0 1117	0 1118
0 50	0 80	1 00	0 90	0 1093	0 1094
0 50	0 80	1 00	0 92	0 1070	0 1071
0 50	0 80	1 00	0 94	0 1048	0 1048
0 50	0 80	1 00	0 96	0 1026	0 1027
0 50	0 80	1 00	0 98	0 1006	0 1007
0 50	0 80	1 00	1 00	0 0986	0 0987

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_r^*
1 00	0 25	0 02	0 02	0 0064	0 0062
1 00	0 25	0 02	0 04	0 0057	0 0056
1 00	0 25	0 02	0 06	0 0049	0 0049
1 00	0 25	0 02	0 08	0 0043	0 0042
1 00	0 25	0 02	0 10	0 0038	0 0037
1 00	0 25	0 02	0 12	0 0033	0 0033
1 00	0 25	0 02	0 20	0 0023	0 0023
1 00	0 25	0 02	0 40	0 0013	0 0013
1 00	0 25	0 02	0 60	0 0009	0 0009
1 00	0 25	0 02	0 80	0 0006	0 0006
1 00	0 25	0 02	0 90	0 0006	0 0006
1 00	0 25	0 02	0 94	0 0005	0 0005
1 00	0 25	0 02	0 98	0 0005	0 0005
1 00	0 25	0 02	1 00	0 0005	0 0005
1 00	0 25	0 10	0 06	0 00366	0 00361
1 00	0 25	0 10	0 08	0 00318	0 00315
1 00	0 25	0 10	0 10	0 00280	0 00278
1 00	0 25	0 10	0 12	0 00249	0 00248
1 00	0 25	0 10	0 14	0 00224	0 00223
1 00	0 25	0 10	0 16	0 00204	0 00203
1 00	0 25	0 10	0 18	0 00186	0 00186
1 00	0 25	0 10	0 20	0 00172	0 00171
1 00	0 25	0 10	0 40	0 00096	0 00095
1 00	0 25	0 10	0 60	0 00066	0 00066
1 00	0 25	0 10	0 80	0 00050	0 00050
1 00	0 25	0 10	0 90	0 00045	0 00045
1 00	0 25	0 10	0 94	0 00043	0 00043
1 00	0 25	0 10	0 98	0 00041	0 00041
1 00	0 25	0 10	1 00	0 00041	0 00041
1 00	0 25	0 20	0 06	0 00866	0 00855
1 00	0 25	0 20	0 10	0 00664	0 00658
1 00	0 25	0 20	0 14	0 00532	0 00529
1 00	0 25	0 20	0 18	0 00442	0 00440
1 00	0 25	0 20	0 20	0 00407	0 00406
1 00	0 25	0 20	0 24	0 00352	0 00351
1 00	0 25	0 20	0 28	0 00309	0 00309
1 00	0 25	0 20	0 32	0 00276	0 00276
1 00	0 25	0 20	0 40	0 00227	0 00227
1 00	0 25	0 20	0 60	0 00157	0 00157
1 00	0 25	0 20	0 80	0 00120	0 00120
1 00	0 25	0 20	0 90	0 00107	0 00107
1 00	0 25	0 20	0 94	0 00103	0 00103
1 00	0 25	0 20	0 98	0 00099	0 00099
1 00	0 25	0 20	1 00	0 00097	0 00097

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0^*	I_r^*
1 00	0 25	0 40	0 06	0 1923	0 1898
1 00	0 25	0 40	0 10	0 1474	0 1462
1 00	0 25	0 40	0 20	0 0904	0 0901
1 00	0 25	0 40	0 28	0 0687	0 0686
1 00	0 25	0 40	0 32	0 0613	0 0612
1 00	0 25	0 40	0 36	0 0553	0 0553
1 00	0 25	0 40	0 40	0 0504	0 0504
1 00	0 25	0 40	0 44	0 0463	0 0463
1 00	0 25	0 40	0 52	0 0398	0 0398
1 00	0 25	0 40	0 60	0 0349	0 0349
1 00	0 25	0 40	0 80	0 0266	0 0267
1 00	0 25	0 40	0 90	0 0238	0 0239
1 00	0 25	0 40	0 94	0 0228	0 0229
1 00	0 25	0 40	0 98	0 0219	0 0220
1 00	0 25	0 40	1 00	0 0215	0 0216
1 00	0 25	0 60	0 06	0 2996	0 2957
1 00	0 25	0 60	0 10	0 2296	0 2278
1 00	0 25	0 60	0 20	0 1409	0 1404
1 00	0 25	0 60	0 40	0 0786	0 0785
1 00	0 25	0 60	0 52	0 0620	0 0620
1 00	0 25	0 60	0 56	0 0579	0 0579
1 00	0 25	0 60	0 60	0 0543	0 0544
1 00	0 25	0 60	0 64	0 0512	0 0512
1 00	0 25	0 60	0 68	0 0483	0 0484
1 00	0 25	0 60	0 72	0 0458	0 0459
1 00	0 25	0 60	0 80	0 0415	0 0416
1 00	0 25	0 60	0 90	0 0371	0 0372
1 00	0 25	0 60	0 94	0 0356	0 0357
1 00	0 25	0 60	0 98	0 0342	0 0343
1 00	0 25	0 60	1 00	0 0335	0 0336
1 00	0 25	0 80	0 06	0 4073	0 4021
1 00	0 25	0 80	0 10	0 3121	0 3097
1 00	0 25	0 80	0 20	0 1916	0 1909
1 00	0 25	0 80	0 40	0 1058	0 1062
1 00	0 25	0 80	0 60	0 0739	0 0739
1 00	0 25	0 80	0 68	0 0657	0 0658
1 00	0 25	0 80	0 72	0 0623	0 0624
1 00	0 25	0 80	0 76	0 0592	0 0593
1 00	0 25	0 80	0 80	0 0554	0 0565
1 00	0 25	0 80	0 84	0 0539	0 0540
1 00	0 25	0 80	0 88	0 0515	0 0517
1 00	0 25	0 80	0 90	0 0504	0 0506
1 00	0 25	0 80	0 94	0 0484	0 0485
1 00	0 25	0 80	0 98	0 0465	0 0466
1 00	0 25	0 80	1 00	0 0456	0 0457

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_r^*
100	025	090	006	04613	04553
100	025	090	010	03535	03507
100	025	090	020	02170	02162
100	025	090	040	01210	01209
100	025	090	060	00837	00837
100	025	090	080	00639	00640
100	025	090	084	00610	00611
100	025	090	088	00584	00585
100	025	090	090	00571	00573
100	025	090	092	00559	00561
100	025	090	094	00548	00550
100	025	090	096	00537	00539
100	025	090	098	00527	00528
100	025	090	100	00517	00518
100	025	094	006	04829	04766
100	025	094	010	03700	03671
100	025	094	020	02271	02263
100	025	094	040	01266	01266
100	025	094	060	00876	00877
100	025	094	080	00669	00670
100	025	094	084	00639	00640
100	025	094	088	00611	00612
100	025	094	090	00598	00600
100	025	094	092	00585	00587
100	025	094	094	00574	00575
100	025	094	096	00562	00564
100	025	094	098	00551	00553
100	025	094	100	00541	00542
100	025	098	006	05045	04980
100	025	098	010	03866	03835
100	025	098	020	02373	02364
100	025	098	040	01323	01322
100	025	098	060	00915	00916
100	025	098	080	00699	00700
100	025	098	084	00667	00669
100	025	098	088	00638	00640
100	025	098	090	00625	00626
100	025	098	092	00612	00613
100	025	098	094	00599	00601
100	025	098	096	00587	00589
100	025	098	098	00576	00578
100	025	098	100	00565	00567

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_c^*	I_r^*
1.00	0.25	1.00	0.06	0.5153	0.5086
1.00	0.25	1.00	0.10	0.3948	0.3917
1.00	0.25	1.00	0.20	0.2423	0.2415
1.00	0.25	1.00	0.40	0.1351	0.1351
1.00	0.25	1.00	0.60	0.0935	0.0936
1.00	0.25	1.00	0.80	0.0714	0.0715
1.00	0.25	1.00	0.84	0.0682	0.0683
1.00	0.25	1.00	0.88	0.0652	0.0654
1.00	0.25	1.00	0.90	0.0638	0.0640
1.00	0.25	1.00	0.92	0.0625	0.0627
1.00	0.25	1.00	0.94	0.0612	0.0614
1.00	0.25	1.00	0.96	0.0600	0.0602
1.00	0.25	1.00	0.98	0.0588	0.0590
1.00	0.25	1.00	1.00	0.0577	0.0579
1.00	0.50	0.02	0.02	0.0131	0.0127
1.00	0.50	0.02	0.04	0.0117	0.0114
1.00	0.50	0.02	0.06	0.0101	0.0100
1.00	0.50	0.02	0.08	0.0083	0.0087
1.00	0.50	0.02	0.10	0.0077	0.0077
1.00	0.50	0.02	0.12	0.0069	0.0068
1.00	0.50	0.02	0.20	0.0047	0.0047
1.00	0.50	0.02	0.40	0.0026	0.0026
1.00	0.50	0.02	0.50	0.0018	0.0018
1.00	0.50	0.02	0.80	0.0014	0.0014
1.00	0.50	0.02	0.90	0.0012	0.0012
1.00	0.50	0.02	0.94	0.0012	0.0012
1.00	0.50	0.02	0.98	0.0011	0.0011
1.00	0.50	0.02	1.00	0.0011	0.0011
1.00	0.50	0.10	0.06	0.0748	0.0738
1.00	0.50	0.10	0.08	0.0651	0.0644
1.00	0.50	0.10	0.10	0.0573	0.0568
1.00	0.50	0.10	0.12	0.0510	0.0507
1.00	0.50	0.10	0.14	0.0452	0.0456
1.00	0.50	0.10	0.15	0.0417	0.0415
1.00	0.50	0.10	0.18	0.0381	0.0380
1.00	0.50	0.10	0.20	0.0351	0.0350
1.00	0.50	0.10	0.40	0.0178	0.0176
1.00	0.50	0.10	0.50	0.0135	0.0135
1.00	0.50	0.10	0.80	0.0103	0.0103
1.00	0.50	0.10	0.90	0.0092	0.0092
1.00	0.50	0.10	0.94	0.0088	0.0088
1.00	0.50	0.10	0.98	0.0085	0.0085
1.00	0.50	0.10	1.00	0.0083	0.0084

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_p^*	I_s^*
1 00	0 50	0 20	0 06	0 1771	0 1748
1 00	0 50	0 20	0 10	0 1357	0 1346
1 00	0 50	0 20	0 14	0 1087	0 1081
1 00	0 50	0 20	0 18	0 0904	0 0900
1 00	0 50	0 20	0 20	0 0833	0 0830
1 00	0 50	0 20	0 24	0 0719	0 0718
1 00	0 50	0 20	0 28	0 0633	0 0632
1 00	0 50	0 20	0 32	0 0565	0 0564
1 00	0 50	0 20	0 40	0 0464	0 0464
1 00	0 50	0 20	0 60	0 0321	0 0321
1 00	0 50	0 20	0 80	0 0245	0 0246
1 00	0 50	0 20	0 90	0 0219	0 0220
1 00	0 50	0 20	0 94	0 0210	0 0211
1 00	0 50	0 20	0 98	0 0202	0 0203
1 00	0 50	0 20	1 00	0 0198	0 0199
1 00	0 50	0 40	0 06	0 3931	0 3881
1 00	0 50	0 40	0 10	0 3012	0 2989
1 00	0 50	0 40	0 20	0 1849	0 1843
1 00	0 50	0 40	0 28	0 1405	0 1402
1 00	0 50	0 40	0 32	0 1254	0 1252
1 00	0 50	0 40	0 36	0 1132	0 1131
1 00	0 50	0 40	0 40	0 1031	0 1030
1 00	0 50	0 40	0 44	0 0947	0 0947
1 00	0 50	0 40	0 52	0 0814	0 0814
1 00	0 50	0 40	0 60	0 0713	0 0714
1 00	0 50	0 40	0 80	0 0544	0 0546
1 00	0 50	0 40	0 90	0 0487	0 0488
1 00	0 50	0 40	0 94	0 0467	0 0468
1 00	0 50	0 40	0 98	0 0449	0 0450
1 00	0 50	0 40	1 00	0 0440	0 0441
1 00	0 50	0 60	0 06	0 6124	0 6045
1 00	0 50	0 60	0 10	0 4693	0 4656
1 00	0 50	0 60	0 20	0 2880	0 2870
1 00	0 50	0 60	0 40	0 1606	0 1605
1 00	0 50	0 60	0 52	0 1268	0 1268
1 00	0 50	0 60	0 56	0 1184	0 1185
1 00	0 50	0 60	0 60	0 1111	0 1112
1 00	0 50	0 60	0 64	0 1046	0 1047
1 00	0 50	0 60	0 68	0 0989	0 0990
1 00	0 50	0 60	0 72	0 0937	0 0939
1 00	0 50	0 60	0 80	0 0848	0 0850
1 00	0 50	0 60	0 90	0 0759	0 0760
1 00	0 50	0 60	0 94	0 0728	0 0730
1 00	0 50	0 60	0 98	0 0699	0 0701
1 00	0 50	0 60	1 00	0 0686	0 0688

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_j^*	I_r^*
100	050	080	006	08326	08219
100	050	080	010	06380	06330
100	050	080	020	03916	03903
100	050	080	040	02184	02183
100	050	080	060	01511	01512
100	050	080	068	01344	01346
100	050	080	072	01274	01276
100	050	080	076	01211	01213
100	050	080	080	01154	01156
100	050	080	084	01102	01104
100	050	080	088	01054	01056
100	050	080	090	01032	01034
100	050	080	094	00990	00992
100	050	080	098	00951	00954
100	050	080	100	00933	00935
100	050	090	006	09429	09307
100	050	090	010	07225	07168
100	050	090	020	04435	04420
100	050	090	040	02473	02472
100	050	090	060	01711	01712
100	050	090	080	01307	01309
100	050	090	084	01247	01250
100	050	090	088	01193	01196
100	050	090	090	01168	01171
100	050	090	092	01144	01147
100	050	090	094	01121	01124
100	050	090	096	01098	01101
100	050	090	098	01077	01080
100	050	090	100	01056	01059
100	050	094	006	09870	09743
100	050	094	010	07563	07504
100	050	094	020	04643	04626
100	050	094	040	02589	02588
100	050	094	060	01791	01792
100	050	094	080	01368	01370
100	050	094	084	01306	01309
100	050	094	088	01249	01252
100	050	094	090	01223	01226
100	050	094	092	01198	01201
100	050	094	094	01173	01176
100	050	094	096	01150	01153
100	050	094	098	01127	01131
100	050	094	100	01106	01109

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_z^*	I_r^*
100	050	098	006	10312	10179
100	050	098	010	07902	07839
100	050	098	020	04850	04833
100	050	098	040	02705	02703
100	050	098	060	01871	01873
100	050	098	080	01429	01432
100	050	098	084	01364	01367
100	050	098	088	01305	01308
100	050	098	090	01278	01281
100	050	098	092	01251	01254
100	050	098	094	01226	01229
100	050	098	096	01201	01205
100	050	098	098	01178	01181
100	050	098	100	01155	01159
100	050	100	006	10532	10397
100	050	100	010	08071	08007
100	050	100	020	04954	04937
100	050	100	040	02763	02761
100	050	100	060	01911	01913
100	050	100	080	01459	01462
100	050	100	084	01393	01397
100	050	100	088	01333	01336
100	050	100	090	01305	01308
100	050	100	092	01278	01281
100	050	100	094	01252	01255
100	050	100	096	01227	01230
100	050	100	098	01203	01206
100	050	100	100	01180	01183
100	080	002	002	00216	00209
100	080	002	004	00192	00188
100	080	002	006	00166	00164
100	080	002	008	00145	00143
100	080	002	010	00127	00126
100	080	002	012	00113	00113
100	080	002	020	00078	00078
100	080	002	040	00043	00043
100	080	002	060	00030	00030
100	080	002	080	00023	00023
100	080	002	090	00020	00020
100	080	002	094	00019	00019
100	080	002	098	00019	00019
100	080	002	100	00018	00018

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_T^*
100	080	010	006	01229	01213
100	080	010	008	01070	01059
100	080	010	010	00942	00934
100	080	010	012	00838	00833
100	080	010	014	00754	00750
100	080	010	016	00685	00682
100	080	010	018	00627	00625
100	080	010	020	00578	00576
100	080	010	040	00322	00322
100	080	010	060	00223	00223
100	080	010	080	00170	00170
100	080	010	090	00152	00152
100	080	010	094	00146	00146
100	080	010	098	00140	00140
100	080	010	100	00137	00138
100	080	020	006	02911	02873
100	080	020	010	02231	02213
100	080	020	014	01787	01777
100	080	020	018	01485	01480
100	080	020	020	01369	01364
100	080	020	024	01183	01179
100	080	020	028	01040	01038
100	080	020	032	00928	00927
100	080	020	040	00763	00763
100	080	020	060	00528	00528
100	080	020	080	00403	00404
100	080	020	090	00360	00361
100	080	020	094	00346	00347
100	080	020	098	00332	00333
100	080	020	100	00326	00327
100	080	040	006	06461	06378
100	080	040	010	04951	04912
100	080	040	020	03039	03028
100	080	040	028	02309	02305
100	080	040	032	02061	02058
100	080	040	036	01860	01858
100	080	040	040	01695	01694
100	080	040	044	01556	01556
100	080	040	052	01337	01338
100	080	040	060	01172	01173
100	080	040	080	00895	00897
100	080	040	090	00800	00802
100	080	040	094	00768	00770
100	080	040	098	00738	00740
100	080	040	100	00724	00726

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TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I^*	I_r^*
1 00	0 80	0 60	0 06	1 00655	0 99355
1 00	0 80	0 60	0 10	0 7712	0 7652
1 00	0 80	0 60	0 20	0 4734	0 4718
1 00	0 80	0 60	0 40	0 2640	0 2638
1 00	0 80	0 60	0 52	0 2083	0 2084
1 00	0 80	0 60	0 56	0 1946	0 1948
1 00	0 80	0 60	0 60	0 1826	0 1828
1 00	0 80	0 60	0 64	0 1720	0 1722
1 00	0 80	0 60	0 68	0 1625	0 1627
1 00	0 80	0 60	0 72	0 1540	0 1543
1 00	0 80	0 60	0 80	0 1395	0 1397
1 00	0 80	0 60	0 90	0 1247	0 1250
1 00	0 80	0 60	0 94	0 1196	0 1199
1 00	0 80	0 60	0 98	0 1150	0 1153
1 00	0 80	0 60	1 00	0 1127	0 1131
1 00	0 80	0 80	0 06	1 3683	1 3507
1 00	0 80	0 80	0 10	1 0485	1 0403
1 00	0 80	0 80	0 20	0 6436	0 6414
1 00	0 80	0 80	0 40	0 3590	0 3587
1 00	0 80	0 80	0 60	0 2483	0 2485
1 00	0 80	0 80	0 68	0 2210	0 2213
1 00	0 80	0 80	0 72	0 2094	0 2098
1 00	0 80	0 80	0 76	0 1990	0 1994
1 00	0 80	0 80	0 80	0 1896	0 1900
1 00	0 80	0 80	0 84	0 1811	0 1814
1 00	0 80	0 80	0 88	0 1732	0 1736
1 00	0 80	0 80	0 90	0 1695	0 1700
1 00	0 80	0 80	0 94	0 1627	0 1631
1 00	0 80	0 80	0 98	0 1565	0 1567
1 00	0 80	0 80	1 00	0 1533	0 1538
1 00	0 80	0 90	0 06	1 5495	1 5296
1 00	0 80	0 90	0 10	1 1374	1 1731
1 00	0 80	0 90	0 20	0 7288	0 7263
1 00	0 80	0 90	0 40	0 4065	0 4062
1 00	0 80	0 90	0 60	0 2812	0 2814
1 00	0 80	0 90	0 80	0 2147	0 2152
1 00	0 80	0 90	0 84	0 2050	0 2055
1 00	0 80	0 90	0 88	0 1962	0 1966
1 00	0 80	0 90	0 90	0 1920	0 1925
1 00	0 80	0 90	0 92	0 1880	0 1885
1 00	0 80	0 90	0 94	0 1842	0 1847
1 00	0 80	0 90	0 96	0 1805	0 1810
1 00	0 80	0 90	0 98	0 1770	0 1775
1 00	0 80	0 90	1 00	0 1736	0 1741

TABLE 5 Intensities (Continued)

τ	λ	μ_0	μ	I_0	I_r
1 00	0 80	0 94	0 0 6	1 6 2 2 1	1 5 0 1 1
1 00	0 80	0 94	0 1 0	1 2 4 2 9	1 2 3 3 2
1 00	0 80	0 94	0 2 0	0 7 6 3 0	0 7 6 0 3
1 00	0 80	0 94	0 4 0	0 4 2 5 5	0 4 2 5 3
1 00	0 80	0 94	0 6 0	0 2 9 4 3	0 2 9 4 6
1 00	0 80	0 94	0 8 0	0 2 2 4 8	0 2 2 5 2
1 00	0 80	0 94	0 8 4	0 2 1 4 6	0 2 1 5 1
1 00	0 80	0 94	0 8 8	0 2 0 5 3	0 2 0 5 8
1 00	0 80	0 94	0 9 0	0 2 0 1 0	0 2 0 1 5
1 00	0 80	0 94	0 9 2	0 1 9 5 8	0 1 9 7 3
1 00	0 80	0 94	0 9 4	0 1 9 2 8	0 1 9 3 3
1 00	0 80	0 94	0 9 6	0 1 8 9 0	0 1 8 9 5
1 00	0 80	0 94	0 9 8	0 1 8 5 3	0 1 8 5 8
1 00	0 80	0 94	1 0 0	0 1 8 1 7	0 1 8 2 3
1 00	0 80	0 98	0 0 6	1 6 9 4 6	1 6 7 2 7
1 00	0 80	0 98	0 1 0	1 2 9 8 5	1 2 8 8 3
1 00	0 80	0 98	0 2 0	0 7 9 7 1	0 7 9 4 3
1 00	0 80	0 98	0 4 0	0 4 4 4 5	0 4 4 4 3
1 00	0 80	0 98	0 6 0	0 3 0 7 5	0 3 0 7 8
1 00	0 80	0 98	0 8 0	0 2 3 4 8	0 2 3 5 3
1 00	0 80	0 98	0 8 4	0 2 2 4 2	0 2 2 4 7
1 00	0 80	0 98	0 8 8	0 2 1 4 5	0 2 1 5 0
1 00	0 80	0 98	0 9 0	0 2 1 0 0	0 2 1 0 5
1 00	0 80	0 98	0 9 2	0 2 0 5 6	0 2 0 6 2
1 00	0 80	0 98	0 9 4	0 2 0 1 4	0 2 0 2 0
1 00	0 80	0 98	0 9 6	0 1 9 7 4	0 1 9 8 0
1 00	0 80	0 98	0 9 8	0 1 9 3 6	0 1 9 4 1
1 00	0 80	0 98	1 0 0	0 1 8 9 9	0 1 9 0 4
1 00	0 80	1 00	0 0 6	1 7 3 0 8	1 7 0 8 5
1 00	0 80	1 00	0 1 0	1 3 2 6 3	1 3 1 5 9
1 00	0 80	1 00	0 2 0	0 8 1 4 1	0 8 1 1 3
1 00	0 80	1 00	0 4 0	0 4 5 4 1	0 4 5 3 8
1 00	0 80	1 00	0 6 0	0 3 1 4 1	0 3 1 4 3
1 00	0 80	1 00	0 8 0	0 2 3 9 9	0 2 4 0 3
1 00	0 80	1 00	0 8 4	0 2 2 9 0	0 2 2 9 5
1 00	0 80	1 00	0 8 8	0 2 1 9 1	0 2 1 9 6
1 00	0 80	1 00	0 9 0	0 2 1 4 5	0 2 1 5 0
1 00	0 80	1 00	0 9 2	0 2 1 0 0	0 2 1 0 6
1 00	0 80	1 00	0 9 4	0 2 0 5 8	0 2 0 6 3
1 00	0 80	1 00	0 9 6	0 2 0 1 7	0 2 0 2 2
1 00	0 80	1 00	0 9 8	0 1 9 7 7	0 1 9 8 3
1 00	0 80	1 00	1 0 0	0 1 9 3 9	0 1 9 4 5

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the second approximation is an adequate approximation. The following tables present the result of computation based on the second approximation only. They contain the intensities in the direction perpendicular and parallel to the vertical plane through the zenith and the sun (sun's vertical) for different zenith distances along this plane and for different zenith distances of the sun.

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(Over)

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ABSTRACT. The theory of molecular scattering of light in a plane-parallel atmosphere, presented in the simplest form by Lord Rayleigh, was recently extended in an ingenious way by Chandrasekhar to cover the process of multiple scattering and the effect of the reflection from the ground.

The computation of the intensity and polarization of the sky radiation by this theory requires the solution of four pairs of non-linear integral equations, obtained in the general case by successive iteration. For small values of the optical thickness τ ($\tau \leq 0.10$),

(Contd. of C.R.N. 2)