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FREE VIBRATION OF TWO SPAN RECTANGULAR PLATES WITH  
NON CLASSICAL BOUNDARY CONDITIONS

by

BUDI SETIAWAN

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN  
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## ABSTRACT

Vibrations of continuous plates with elastic supports are being presented here. The two span plate is considered to be resting on elastic springs located along the external and intermediate supports. The other two opposite edges are taken to be simply supported. The theoretical formulation is general as the position of the intermediate support and the aspect ratio of the plate as well as the spring properties are left arbitrary. Several special cases with symmetric and non-symmetric conditions at the external edges of the plate have been studied. The variation of the eigenvalues of the fundamental mode have been obtained and are given at the end of the thesis.

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LIST OF SYMBOLS

$A_1, B_1, C_1, D_1, A_2, B_2, C_2, D_2$	constants in general solution of the differential equation
E	modulus elasticity
D	flexural rigidity
h	plate thickness
k	eigenvalue of the plate vibration
K	lateral spring constant
$K^*$	dimensionless lateral spring parameter
$K_m$	intermediate lateral spring constant
$K_m^*$	dimensionless parameter of intermediate spring
$K_T$	torsional spring constant
$K_T^*$	dimensionless torsional spring parameter
L	total length of the span
$R_1, R_2$	constants integration of time function
t	time
T(t)	function of time
$V_x$	total shear force at the edge of a plate in x-direction
$M_x$	bending moment in x-direction
x	abscissa Cartesian coordinate
y	ordinate of Cartesian coordinate

$w(x,y,t)$	deflection of plate as function of $x$ , $y$ and $t$
$W(x,y)$	deflection of plate as function of $x$ and $y$
$W^*$	non-dimensional parameter of deflection with respect to total length
$\nu$	Poisson's ratio
$\rho$	mass density per unit area
$\xi, \eta$	non-dimensional coordinates system
$\omega$	circular frequency of plate vibration
$\mu$	dimensionless length of the first span
$\gamma$	dimensionless length of the second span
$\psi$	aspect ratio
$\zeta$	transformation operator

## CHAPTER 1

### INTRODUCTION

The problem of vibration of rectangular plates has been of interest for long. Several papers have appeared in the literature on the topic of vibration of rectangular plates. Warburton [1] presented the collection of solutions for rectangular plates having classical supports in his analysis. He used Rayleigh method and utilized the product of the shape function of the beam as the shape function. Young [2] had analyzed similar problem using Ritz method. Nishimura [3] approximated the vibration of square plate using relatively coarse finite difference. Vet [4] had presented the exact solution of the vibration of rectangular plates having all sides simply supported. The frequency parameters are presented in graphical form as a function of the aspect ratio. Iguchi [5] had extended this work by solving the problems of square plate with simple-clamped-simple-simple supports and simple-clamped-simple-clamped supports. A good collection of single span plate problems and their solutions are available in [6] and [7]. However, very little work has been done on vibrations of continuous rectangular plates with

non-classical support conditions. These types of problems are of considerable interest to practising engineers who work in the area of the structural design. In fact, an engineer does not very often come across the classical clamped and simple conditions in real life problems.

This thesis deals with the vibration of two span plates. The treatment is restricted to thin plates and no attempt is made to include the rotary inertia and shear terms. The theoretical development in this paper is fairly general in the sense that the position of intermediate support is left arbitrary and the aspect ratio can be varied to include a broad spectrum of cases. Furthermore, in this thesis, the two span plate is considered to be resting on elastic springs located along the external and intermediate support. One of the advantages of this type of support is that almost all possible boundary conditions can be approached by varying the spring stiffnesses. The other two opposite edges are taken to be simply supported. The case when a rectangular plate is having zero deflection and rotational restraint on the edge has been presented in [8]. Carmichael [9] solved similar problems by using the Rayleigh and Ritz methods.

The solution used in this analysis is exact since it satisfies the governing differential equation as well as all the boundary conditions.

The discussions of the two equal span plates with the outside edges resting on springs having the same properties are presented in Chapter 4. The more general cases such as unequal span and various support conditions are discussed in Chapter 5.

This thesis also contains some special cases which have been generated by the proper limiting procedures. The results obtained in this study for these cases have been found in good agreement with those available.

## CHAPTER 2

### FUNDAMENTAL EQUATION OF PLATE THEORY

The governing differential equation in terms of lateral displacement  $W$  for free lateral vibration of a plate is given by:

$$D\nabla^4 W(x,y,t) + \frac{\rho \partial^2 W(x,y,t)}{\partial t^2} = 0 \quad (2.1)$$

where  $D$  is flexural rigidity and is defined as:

$$D = \frac{Eh^3}{12(1-\nu^2)} \quad \text{and} \quad \nabla^4 = \frac{\partial^4}{\partial x^4} + 2 \frac{\partial^4}{\partial x^2 \partial y^2} + \frac{\partial^4}{\partial y^4}$$

The complete derivation of the differential equation (2.1) can be found in [6, 10, 11, 12, 13, 14].

The assumptions made in deriving Eq. (2.1) are the following:

1. The material of the plate is elastic, homogeneous and isotropic.
2. The plate is initially flat.
3. The thickness of the plate is small compared to its other dimensions.
4. The deflections are small compared to the plate thickness.
5. The deformations are small such that straight lines initially normal to the middle surface remain straight lines and normal to the middle surface.

6. The stresses normal to the middle surface are of negligible order of magnitude.
7. The effects of inplane forces are neglected.
8. The effect of rotary inertia and shear deformation is negligible.

In the case where the effect of rotary inertia and shear deformation are taken into consideration, the equation is of sixth order and they involve three dependent variables such as the local rotations in the x-direction due to bending, the local rotation in the y-direction due to bending and the middle surface deflection due to bending as well as due to shear.

It is not the intention of the author in this study to discuss the effects of rotary inertia and shear deformation. However, more elaborate explanations of these terms as well as the derivation can be found elsewhere [10].

Assuming that Eq.(2.1) has a variable separable solution, dependent variable  $w(x,y,t)$  can be represented by the product of  $W(x,y)$  and  $T(t)$ , where  $W(x,y)$  is the shape function and depend upon  $x$  and  $y$  only and  $T(t)$  is a function of time. With this,  $w(x,y,t)$  can readily be written as:

$$w(x,y,t) = W(x,y).T(t) \quad (2.2)$$

Introducing non-dimensional parameters such as:

$$W^* = \frac{W}{L}, \quad \xi = \frac{x}{L} \quad \text{and} \quad \eta = \frac{y}{L}$$

then

$$\frac{\delta w}{\delta x} = \frac{L \delta w^*}{\delta \xi} \frac{d\xi}{dx} = \frac{\delta w^*}{\delta \xi}$$

Utilizing the chain rule of differentiation for the higher derivative and differentiation with respect to  $\eta$ , then the relation between the derivative of dimensional and non-dimensional parameters can be written as:

$$\nabla^4 (W(x,y)) = \frac{\nabla^4 W^*}{L^3} (\xi, \eta) \quad (2.3)$$

Substituting Eq. (2.2) into Eq. (2.1) and utilizing (Eq. 2.3) one gets:

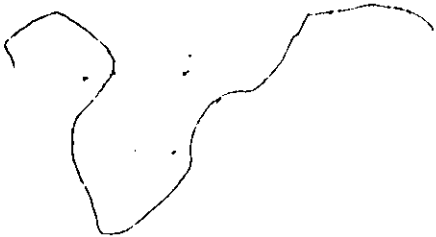
$$D \nabla^4 \left\{ \frac{W^*(\xi, \eta)}{L^3} \cdot T(t) \right\} + \rho L W^*(\xi, \eta) \frac{d^2 T(t)}{dt^2} = 0 \quad (2.4)$$

which can be simplified to the form:

$$\frac{\nabla^4 W^*(\xi, \eta)}{W^*(\xi, \eta)} = - \frac{\rho L^4}{D} \frac{\ddot{T}(t)}{T(t)} \quad (2.5)$$

Equation (2.5) can be achieved if and only if it is equal to a constant, namely  $k^4$ .

Now, the right-hand side of Eq. (2.5) can be written as:



$$\ddot{T}(t) = - \frac{k^4 D}{\rho L^4} T(t) \tag{2.6}$$

Introducing

$$\omega^2 = \frac{k^4 D}{\rho L^4}$$

the solution of Eq. (2.6) is known as:

$$T(t) = R_1 \sin \omega t + R_2 \cos \omega t \tag{2.7}$$

Provided the value of  $\omega^2$  is positive, which in turn means that the value of  $k^4$  must be positive,  $R_1$  and  $R_2$  in Eq. (2.7) are arbitrary constants.

In this equation,  $\omega$  is the circular frequency of plate vibration while  $k$  is its eigenvalue and must be a real positive constant.

Solving the left-hand side of Eq. (2.5), first it is necessary to rewrite it in this form:

$$(\nabla^4 - k^4)W^*(\xi, \eta) = 0 \tag{2.8}$$

which can be simplified to the form:

$$(\nabla^2 + k^2)(\nabla^2 - k^2)W^*(\xi, \eta) = 0 \tag{2.9}$$

The complete solution to Eq. (2.9) can be obtained by superimposing the solutions of the two equations:

$$\left. \begin{aligned} \nabla^2 W^*(\xi, \eta) + k^2 W^*(\xi, \eta) &= 0 \\ \nabla^2 W^*(\xi, \eta) - k^2 W^*(\xi, \eta) &= 0 \end{aligned} \right\} \quad (2.10)$$

By assuming Fourier series in one of the variables, the general solution can be expressed as:

$$W^*(\xi, \eta) = \sum_{m=1}^{\infty} X_m^1(\xi) \sin \alpha_n \eta + \sum_{m=1}^{\infty} X_m^2(\xi) \cos \alpha_n \eta \quad (2.11)$$

$X_m^1$  and  $X_m^2$  are, as yet, undetermined functions. The equation which governs the nature of these functions can be obtained by the substitution of Eq. (2.11) into Eq. (2.10). This substitution into the first equation of Eq. (2.10) yields:

$$\frac{\delta^2 X_m^i(\xi)}{\delta \xi^2} + (k^2 - \alpha_n^2) X_m^i(\xi) = 0 \quad (2.12)$$

$$i = 1, 2.$$

The solution of Eq. (2.12) is written as:

$$X_m^i(\xi) = A_m^i \sin \sqrt{k^2 - \alpha_n^2} \xi + B_m^i \cos \sqrt{k^2 - \alpha_n^2} \xi \quad (2.13)$$

where  $A_m^i$ ,  $B_m^i$  are unknown constants.

The substitution of Eq. (2.11) into the second of Eq. (2.10) yields:

$$\frac{\delta^2 X_m^i(\xi)}{\delta \xi^2} - (k^2 + \alpha_n^2) X_m^i(\xi) = 0 \quad (2.14)$$

The solution of this equation can be expressed as:

$$X_m^1(\xi) = C_m^1 \sinh \sqrt{k^2 - \alpha_n^2} \xi + D_m^1 \cosh \sqrt{k^2 + \alpha_n^2} \xi \quad (2.15)$$

$C_m^1$  and  $D_m^1$  are also arbitrary constants.

The general solution of plate deflection therefore is:

$$\begin{aligned} W^*(\xi, \eta) = & (A_m^1 \sin \sqrt{k^2 - \alpha_n^2} \xi + B_m^1 \cos \sqrt{k^2 - \alpha_n^2} \xi + C_m^1 \sinh \sqrt{k^2 + \alpha_n^2} \xi \\ & + D_m^1 \cosh \sqrt{k^2 + \alpha_n^2} \xi) \sin \alpha_n \eta \\ & + (A_m^2 \sin \sqrt{k^2 - \alpha_n^2} \xi + B_m^2 \cos \sqrt{k^2 - \alpha_n^2} \xi \\ & + C_m^2 \sinh \sqrt{k^2 + \alpha_n^2} \xi + D_m^2 \cosh \sqrt{k^2 + \alpha_n^2} \xi) \cos \alpha_n \eta \end{aligned} \quad (2.16)$$

This solution is only valid when  $k^2 - \alpha_n^2$  is positive. When  $k^2 - \alpha_n^2$  is equal to zero, it means that the plate becomes independent of  $\xi$ . Thus, it is necessary to modify the solution as that of the beam. In such case the plate is bound to deflect into the cylindrical surface.

The other case is when  $k^2 - \alpha_n^2$  is negative. The problem arises when taking the square root of negative values. Therefore, it is necessary to modify the solution of the first set of Eq. (2.10) by rewriting  $k^2 - \alpha_n^2$  as  $-(\alpha_n^2 - k^2)$ . Then, the first set of Eq. (2.10), after substitution of

Eq. (2.11) and making use of the above modification, reduces to:

$$\frac{\delta^2 X_m^i(\xi)}{\delta \xi^2} - (\alpha_n^2 - k^2) X_m^i(\xi) = 0 \quad (2.17)$$

and its solution can be written as:

$$X_m^i = A_m^i \sinh \sqrt{\alpha_n^2 - k^2} \xi + B_m^i \cosh \sqrt{\alpha_n^2 - k^2} \xi \quad (2.17a)$$

$$i = 1, 2$$

where  $A_m^i$  and  $B_m^i$  are constants of integration. The second set of Eq. (2.10) remains unchanged.

Now, the general shape function when  $k^2 - \alpha_n^2$  is negative can be expressed as:

$$\begin{aligned} W^*(\xi, \eta) = & \left\{ A_m^1 \sinh \sqrt{\alpha_n^2 - k^2} \xi + B_m^1 \cosh \sqrt{\alpha_n^2 - k^2} \xi \right. \\ & \left. + C_m^1 \sinh \sqrt{k^2 + \alpha_n^2} \xi + D_m^1 \cosh \sqrt{k^2 + \alpha_n^2} \xi \right\} \sin \alpha_n \eta \\ & \left\{ A_m^2 \sinh \sqrt{\alpha_n^2 - k^2} \xi + B_m^2 \cosh \sqrt{\alpha_n^2 - k^2} \xi \right. \\ & \left. + C_m^2 \sinh \sqrt{k^2 + \alpha_n^2} \xi + D_m^2 \cosh \sqrt{k^2 + \alpha_n^2} \xi \right\} \cos \alpha_n \eta \end{aligned} \quad (2.18)$$

For the case of two span plates, the governing equation for the deflection in each span is represented by either Eq. (2.16) or Eq. (2.18).

The selection of the particular equation depends upon the value of  $k$  and  $\alpha_n$ .

The decision of which equation is to be used will be left to the computer to decide while computing the eigenvalues, since both  $\alpha_n$  and  $k$  are dependent on the boundary conditions.

## CHAPTER 3

### BOUNDARY CONDITIONS

The solution of plate vibration problems as given by Eqs. (2.16) and (2.18) must satisfy the boundary conditions characterizing each problem and the governing equations of the plate. Consequently, the solution of the plate vibration problem is essentially a boundary value problem. In the case of plates, the fulfillment of the boundary conditions usually presents considerable mathematical difficulty.

Cases investigated in this thesis deal with simple support conditions along the running edges with variations of the support at the two external ends as well as the intermediate span.

The general boundary conditions used in this investigation will be discussed in this Chapter.

#### 3.1 Boundary Conditions at the Running Edges

It was stated earlier that cases investigated in this thesis deal with simple support conditions along the running edges. This requires that both the deflections and bending moments along these edges must be equal to zero. The zero deflection is due to the rigid support condition which does not permit any deflection along this edge. The zero bending

moment conditions arise due to the nature of simple support which allows free rotation of the edge with respect to the edge line. These conditions can be expressed analytically in the form:

$$W_i = M_{y_i} = 0 \quad (3.1)$$

$$i = 1, 2$$

where  $M_y$  is the bending moment in y-direction and is defined as [2,3,4,5]:

$$M_y = D \left( \frac{\delta^2 w}{\delta y^2} + \nu \frac{\delta^2 w}{\delta x^2} \right)$$

Subscripts 1 and 2 in Eq. (3.1) refer to left-hand and right-hand span respectively.

Substituting the non-dimensional parameters

$$W^* = \frac{W}{L}, \quad \eta = \frac{y}{L} \quad \text{and} \quad \xi = \frac{x}{L}$$

into Eq. (3.1) yields the following equation:

$$LW_i^* = \frac{D}{L} \left( \frac{\delta^2 W_i^*}{\delta \eta_i^2} + \nu \frac{\delta^2 W_i^*}{\delta \xi_i^2} \right) = 0 \quad (3.2)$$

$$i = 1, 2$$

which can be simplified as:

$$W_i^* = 0 \quad (3.3a)$$

and

$$\frac{\delta^2 W_i^*}{\delta \eta_i^2} + \nu \frac{\delta^2 W_i^*}{\delta \xi_i^2} = 0 \quad (3.3b)$$

The boundary conditions as well as the governing differential equation can be satisfied simultaneously by taking the solution of plate deflection as:

$$W_i^*(\xi_i, \eta) = \sum_{m=1}^{\infty} \left\{ A_i \sinh \sqrt{\alpha_n^2 - k^2} \xi_i + B_i \cosh \sqrt{\alpha_n^2 - k^2} \xi_i + C_i \sinh \sqrt{k^2 + \alpha_n^2} \xi_i + D_i \cosh \sqrt{k^2 + \alpha_n^2} \xi_i \right\} \sin \alpha_n \eta \quad (3.4)$$

$$i = 1, 2$$

for  $k < \alpha$  and

$$W_i^*(\xi_i, \eta) = \sum_{m=1}^{\infty} \left\{ A_i \sin \sqrt{k^2 - \alpha_n^2} \xi_i + B_i \cos \sqrt{k^2 - \alpha_n^2} \xi_i + C_i \sinh \sqrt{k^2 + \alpha_n^2} \xi_i + D_i \cosh \sqrt{k^2 + \alpha_n^2} \xi_i \right\} \sin \alpha_n \eta \quad (3.5)$$

$$i = 1, 2$$

for  $k > \alpha_n$

In the above equations,  $\alpha_n$  is defined as:

$$\alpha_n = n \pi \psi \quad (3.6)$$

where  $n$  = any positive integer

$\psi$  = the aspect ratio (length over the width).

It can be observed that this solution is only the first half portion of the Eq. (2.16).

All other pertinent solutions which arise due to the variation of parameters at the other supports in the two span plate vibrations are obtained by utilizing Eqs. (3.5) and (3.6) as the general basic equations.

There are still eight remaining unknown constants. Obviously, it means that eight more boundary conditions are required, four of which are acquired at the two external ends and the remaining four are obtained from the continuity conditions of deflection, slope, bending moment and shear forces at the intermediate support.

### 3.2 Boundary Conditions at the End of the Span

The classical boundary conditions (free, simple and clamped support) are hardly found in real problems of engineering designs. These kinds of boundary conditions are mostly used to satisfy the mathematical equations in order to estimate their effects. In this study, further approach is made which leads closer to the real life support conditions such as elastic supports with variable stiffnesses.

It is well known that almost all possible boundary conditions can be approached by boundary conditions as in elastic supports.

When an end of a plate is supported elastically, it means that the end of the plate may have lateral and/or torsional spring support. In order to accommodate a wide variation of support conditions, both lateral and torsional spring supports are considered in this thesis.

If the end of a span is supported elastically in the transverse direction, the deflection along this end is not zero since it is allowed to deflect in the lateral direction. This deflection of the plate is equal to the deflection of the spring support which transmits reaction force to the plate. If a torsional spring is attached along the external edge of a plate, this edge is restrained from free rotation since the torsional spring resists the motion. The angular rotation of this edge with respect to the edge line must be equal to the angular rotation of the support which transmits moment reaction to the plate.

To elaborate more clearly, an infinitesimal width is taken from one end of a span normal to the x-direction as shown in Fig. 3.1. The stiffnesses of the lateral and torsional springs attached to the end of the plates are  $K$  and  $K_T$  respectively.

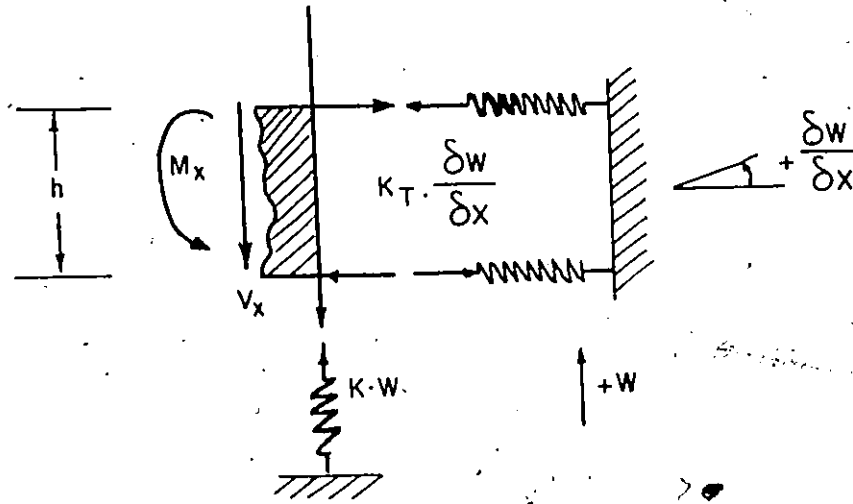


FIG. 3.1. Elastic edge constraints [1].

The force  $K \cdot W$  generated in the spring and also required to deflect the lateral spring support in the positive direction and the moment  $K_T \frac{\delta W}{\delta x}$  required to cause positive rotation are shown along with their reactions on the end of a plate.

The "Kirchoff" reaction [2,3,4]  $V_x$  and the bending moment  $M_x$  occur at an infinitesimal distance within the plate. By summing force and moments and neglecting higher order terms, the following equations are found to hold on the boundary:

$$V_x = -K W_i \tag{3.7}$$

$$M_x = K_T \frac{\delta W_i}{\delta x} \tag{3.8}$$

The shear forces  $V_x$  and the moment  $M_x$  are given by the following equations [3,4,5]:

$$V_x = D \frac{\delta}{\delta x} \left[ \frac{\delta^2 w}{\delta x^2} + (2-\nu) \frac{\delta^2 w}{\delta y^2} \right] \quad (3.9)$$

and

$$M_x = D \left[ \frac{\delta^2 w}{\delta x^2} + \nu \frac{\delta^2 w}{\delta y^2} \right]$$

Dimensionless stiffness parameter  $K^*$  and  $K_T^*$  are introduced for lateral and rotational springs, respectively. This non-dimensionalization is achieved by writing:

$$K^* = KL^3/D \text{ and } K_T^* = K_T L/D$$

where

$K$  = lateral spring constant taking the dimension of force/unit length<sup>2</sup>

$K_T$  = torsional spring constant taking the dimension of moment/unit length

$L$  = total length of the plates

$D$  = flexural rigidity of the plates.

Employing these new parameters, conditions (3.3) and (3.4) can be written in the following non-dimensional form:

$$\frac{\delta}{\delta \xi} \left[ \frac{\delta^2 w^*}{\delta \xi^2} + (2-\nu) \frac{\delta^2 w^*}{\delta n^2} \right] = - K^* w^* \quad (3.9a)$$

and

$$\frac{\delta^2 w^*}{\delta \xi^2} + \nu \frac{\delta^2 w^*}{\delta n^2} = K_T^* \frac{\delta w^*}{\delta \xi} \quad (3.10a)$$

In order to simplify the problem of enforcing these boundary conditions  $\xi_1$  and  $\xi_2$  are measured from the outer end of the span with the introduction of Eq. (3.1), Eq. (3.9a) and Eq. (3.10a) yield:

$$a_1 A_i + K^* B_i + a_3 C_i + K^* D_i = 0 \quad (3.11)$$

and

$$-\lambda_1 K_T^* A_i + a_2 B_i - \lambda_2 K_T^* C_i + a_4 D_i = 0 \quad (3.12)$$

where

$$\lambda_1 = \sqrt{k^2 - \alpha_n^2} \quad \lambda_2 = \sqrt{k^2 + \alpha_n^2}$$

$$a_1 = \lambda_1^3 - (2-\nu)\alpha_n^2 \lambda_1 \quad a_2 = \lambda_1^2 - \nu\alpha_n^2$$

$$a_3 = \lambda_2^3 - (2-\nu)\alpha_n^2 \lambda_2 \quad a_4 = \lambda_2^2 - \nu\alpha_n^2$$

It should be noted here that it is necessary to develop special cases when  $K^*$  and  $K_T^*$  approach the values of zero and infinity.

### 3.2.1 Clamped Support at an End of a Plate

A clamped edge condition occurs when both torsional and lateral spring stiffnesses approach infinite values; thus, the values of  $K^* = K_T^* \rightarrow \infty$ .

After dividing both Eqs. (3.11a) and (3.12a) with the appropriate constant, then these equations become:

$$B_1 + D_1 = 0 \tag{3.11a}$$

and

$$\lambda_1 A_1 + \lambda_2 C_1 = 0 \tag{3.12a}$$

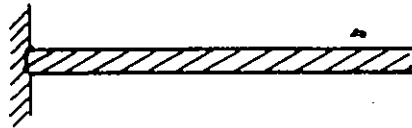


FIG. 3.2. Clamped support at the end of a plate.

3.2.2 Simple Support at an End of a Plate

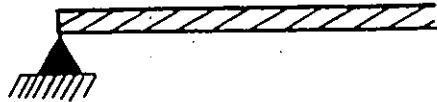


FIG. 3.3. Simple support at an end of a plate.

This condition is achieved when the torsional spring stiffness is approaching zero values but the lateral spring constant is approaching infinity.

After taking the proper limits, Eqs. (3.11) and (3.12) for this particular case can be written as:

$$B_1 + D_1 = 0 \quad (3.11b)$$

$$a_2 B_1 + a_4 D_1 = 0 \quad (3.12b)$$

Therefore, for this kind of support, the values of B and D must be equal to zero since  $a_2$  and  $a_4$  are not necessarily equal to zero.

### 3.2.3 Free Support at an End of a Plate



FIG. 3.4. Free support at an end of a plate.

When both torsional and lateral spring stiffnesses are approaching zero, then the end of the plate is said to be

free. Again, Eqs. (3.11) and (3.12) become:

$$a_2 B_1 + a_4 D_1 = 0 \quad (3.11c)$$

$$a_1 A_1 + a_3 C_1 = 0 \quad (3.12c)$$

### 3.3 Boundary Conditions at an Intermediate Support

The remaining boundary conditions in two span plate vibration can be developed from the continuity of deflection, slope, bending moment and shear force at the intermediate support.

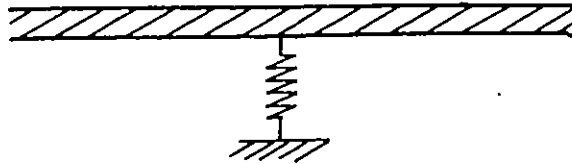


FIG. 3.5. Lateral spring intermediate support.

The continuity condition of the deflections require that the deflection of the left span is equal to the deflection of the right span on each side of the intermediate spring. Along this line, the slope is also to be continuous. Recalling the convention used in Section 3.1, that  $\xi$  is measured for each span from the outer end, it means that the

slope measured from the left-hand side of the intermediate support is equal to the slope obtained from the right-hand side of the support but with the opposite sign. The continuity of bending moment means that along the intermediate support its value obtained from the left span is equal to the value generated from the right span.

The last condition should be able to accommodate the spring support reaction due to the deflection of the plate which also causes the support to deflect. At this support, then, the total shear forces must be equal to the reaction of the spring.

For springs having stiffness constant  $K_m$ , this reaction force is equal to  $K_m W_1$  or  $K_m W_2$  since  $W_1 = W_2$  at this support. Again, introducing another non-dimensional intermediate spring stiffness parameter,  $K_m^* = K_m L^3 / D$  and working in non-dimensional variables, the analytical expressions for the above-mentioned boundary conditions at the intermediate support are:

$$W_1^* = W_2^* \tag{3.13}$$

$$\frac{\delta W_1^*}{\delta \xi_1} = - \frac{\delta W_2^*}{\delta \xi_2} \tag{3.14}$$

$$\left[ \frac{\delta^2 W_1^*}{\delta \xi^2} + \nu \frac{\delta^2 W_1^*}{\delta \eta^2} \right] = \left[ \frac{\delta^2 W_2^*}{\delta \xi^2} + \nu \frac{\delta^2 W_2^*}{\delta \eta^2} \right] \tag{3.15}$$

$$\left[ \frac{\delta^3 W_1^*}{\delta \xi_1^3} + (2-\nu) \frac{\delta^3 W_1^*}{\delta \xi_1 \delta \eta^2} \right] + \left[ \frac{\delta^3 W_2^*}{\delta \xi_2^3} + (2-\nu) \frac{\delta^3 W_2^*}{\delta \xi_2 \delta \eta^2} \right] = K_m^* W_1^* \quad (3.16)$$

Special cases are encountered when the value of  $K_m^*$  approach zero and infinity.

These conditions will be discussed in the next chapters.

## CHAPTER 4

### TWO EQUAL SPANS WITH SYMMETRICAL BOUNDARY CONDITIONS

The discussions in this Chapter deal with the case when the intermediate spring is symmetrically placed with respect to the outside edges of the plates. Further, the outside edges of the plate are resting on the springs having the same properties. Therefore, the relation of the spring stiffnesses are such that  $K_1^* = K_2^* = K^*$  and  $K_{T1}^* = K_{T2}^* = K_T^*$  (subscript 1 and 2 refer to left-hand and right-hand spans). Applying the boundary conditions at both ends, results in Eqs. (4.1) to (4.4) which are given below:

$$a_1 A_1 + K^* B_1 + a_3 C_1 + K^* D_1 = 0 \quad (4.1)$$

$$-K_T^* \lambda_1 A_1 + a_2 B_1 - K_T^* \lambda_2 C_1 + a_4 D_1 = 0 \quad (4.2)$$

$$a_1 A_2 + K^* B_2 + a_3 C_2 + K^* D_2 = 0 \quad (4.3)$$

$$-K_T^* \lambda_1 A_2 + a_2 B_2 - K_T^* \lambda_2 C_2 + a_4 D_2 = 0 \quad (4.4)$$

where

$$\lambda_1 = \sqrt{k^2 - \alpha_n^2}$$

$$\lambda_2 = \sqrt{k^2 + \alpha_n^2}$$

$$a_1 = \lambda_1^3 - (2-\nu)\alpha_n^2 \lambda_1$$

$$a_2 = \lambda_1^2 - \nu \alpha_n^2$$

$$a_3 = \lambda_2^3 - (2-\nu)\alpha_n^2 \lambda_2$$

$$a_4 = \lambda_2^2 - \nu \alpha_n^2$$

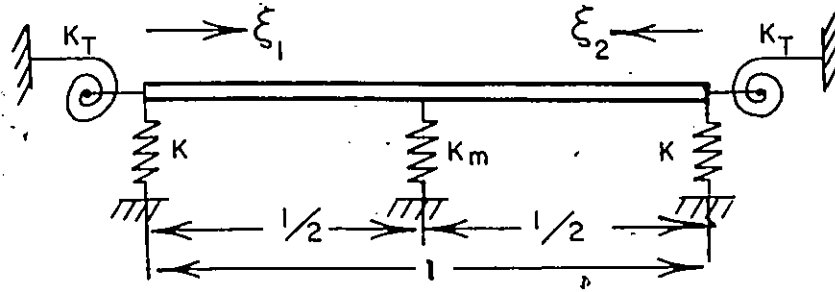


FIG. 4.1. Two equal span plates with symmetrical elastic supports.

The remaining four boundary conditions are obtained from the continuity conditions. In this case, the intermediate support is located at  $\xi_1 = \xi_2 = \frac{l}{2}$ .

Applying the continuity conditions which have been discussed in the previous chapter and utilizing Eq. (3.5) for two opposite side, simply supported plates, boundary conditions given by Eqs. (3.13), (3.14), (3.15) and (3.16), respectively yield:

$$\begin{aligned}
 & (\sin \frac{1}{2} \lambda_1) A_1 + (\cos \frac{1}{2} \lambda_1) B_1 + (\sinh \frac{1}{2} \lambda_2) C_1 + (\cosh \frac{1}{2} \lambda_2) D_1 \\
 & - (\sin \frac{1}{2} \lambda_1) A_2 - (\cos \frac{1}{2} \lambda_1) B_2 - (\sinh \frac{1}{2} \lambda_2) C_2 - (\cosh \frac{1}{2} \lambda_2) D_2 = 0
 \end{aligned}
 \tag{4.5}$$

$$\begin{aligned}
 & (\lambda_1 \cos \frac{1}{2} \lambda_1) A_1 - (\lambda_1 \sin \frac{1}{2} \lambda_1) B_1 + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1 \\
 & + (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_1 + (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2 - (\lambda_1 \sin \frac{1}{2} \lambda_1) B_2 \\
 & + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2 + (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_2 = 0
 \end{aligned}
 \tag{4.6}$$

$$\begin{aligned}
 & - (a_2 \sin \frac{1}{2} \lambda_1) A_1 + (a_2 \cos \frac{1}{2} \lambda_1) B_1 + (a_4 \sinh \frac{1}{2} \lambda_2) C_1 \\
 & + (a_4 \cosh \frac{1}{2} \lambda_2) D_1 + (a_2 \sin \frac{1}{2} \lambda_1) A_2 - (a_2 \cos \frac{1}{2} \lambda_1) B_2 \\
 & - (a_4 \sinh \frac{1}{2} \lambda_2) C_2 - (a_4 \cosh \frac{1}{2} \lambda_2) D_2 = 0
 \end{aligned} \tag{4.7}$$

$$\begin{aligned}
 & (a_1 \cos \frac{1}{2} \lambda_1 + K_m^* \sin \frac{1}{2} \lambda_1) A_1 + (-a_1 \sin \frac{1}{2} \lambda_1 + K_m^* \cos \frac{1}{2} \lambda_1) B_1 \\
 & + (a_3 \cosh \frac{1}{2} \lambda_2 + K_m^* \sinh \frac{1}{2} \lambda_2) C_1 + (a_3 \sinh \frac{1}{2} \lambda_2 + K_m^* \cosh \frac{1}{2} \lambda_2) D_1 \\
 & + (a_1 \cos \frac{1}{2} \lambda_1) A_2 - (a_1 \sin \frac{1}{2} \lambda_1) B_2 + (a_3 \cosh \frac{1}{2} \lambda_2) C_2 \\
 & + (a_3 \sinh \frac{1}{2} \lambda_2) D_2 = 0
 \end{aligned} \tag{4.8}$$

where  $\lambda_1$ ,  $\lambda_2$ ,  $a_1$ ,  $a_2$ ,  $a_3$  and  $a_4$  are the same as previously defined.

There are now eight simultaneous homogeneous equations involving eight unknown constants. Following established procedures, the values of  $k$  can be obtained by allowing the determinant of their coefficient matrix to vanish. The eigenvalues ( $k$ ) obtained from this analysis are calculated for different variations of spring stiffnesses and aspect ratios.

In determining expressions for modal shapes, one of the non-zero constants in general equation of the plate vibrations (Eq. (3.5)) is arbitrarily set equal to unity.

All remaining constants can easily be obtained by solving either of equations (4.1) to (4.8).

The normalized modal shapes, therefore, are given by:

$$W_1^* = \{(\sin \lambda_1 \xi_1) + (\cos \lambda_1 \xi_1) B_1^* + (\sinh \lambda_2 \xi_1) C_1^* + (\cosh \lambda_2 \xi_1) D_1^*\} \sin \alpha x$$

$$W_2^* = \{(\sin \lambda_1 \xi_2) A_2^* + (\cos \lambda_1 \xi_2) B_2^* + (\sinh \lambda_2 \xi_2) C_2^* + (\cosh \lambda_2 \xi_2) D_2^*\} \sin \alpha x$$

(4.9)

where the constants  $B_1^*$ ,  $C_1^*$ ,  $D_1^*$ ,  $A_2^*$ ,  $B_2^*$ ,  $C_2^*$  and  $D_2^*$  must satisfy the following equations:

$$K^* B_1^* + a_3 C_1^* + K^* D_1^* = -a_1$$

$$a_2 B_1^* - K_T^* \lambda_2 C_1^* + a_4 D_1^* = K_T^* \lambda_1$$

$$a_1 A_2^* + K^* B_2^* + a_3 C_2^* + K^* D_2^* = 0$$

$$-K_T^* \lambda_1 A_2^* + a_2 B_2^* - K_T^* \lambda_2 C_2^* + a_4 D_2^* = 0$$

$$(\cos \frac{1}{2} \lambda_1) B_1^* + (\sinh \frac{1}{2} \lambda_2) C_1^* + (\cosh \frac{1}{2} \lambda_2) D_1^* - (\sin \frac{1}{2} \lambda_1) A_2^*$$

$$- (\cos \frac{1}{2} \lambda_1) B_2^* - (\sinh \frac{1}{2} \lambda_2) C_2^* - (\cosh \frac{1}{2} \lambda_2) D_2^* = -\sin \frac{1}{2} \lambda_1$$

$$- (\lambda_1 \sin \frac{1}{2} \lambda_1) B_1^* + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1^* + (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_1^*$$

$$+ (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2^* - (\lambda_1 \sin \frac{1}{2} \lambda_1) B_2^* + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2^*$$

$$+ (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_2^* = -\lambda_1 \cos \frac{1}{2} \lambda_1$$

$$\begin{aligned}
 & (a_2 \cos \frac{1}{2} \lambda_1) B_1^* + (a_4 \sinh \frac{1}{2} \lambda_2) C_1^* + (a_4 \cosh \frac{1}{2} \lambda_2) D_1^* \\
 & + (a_2 \sin \frac{1}{2} \lambda_1) A_1^* - (a_2 \cos \frac{1}{2} \lambda_1) B_2^* - (a_4 \sinh \frac{1}{2} \lambda_2) C_2^* \\
 & (a_4 \cosh \frac{1}{2} \lambda_2) D_2^* = a_2 \sin \frac{1}{2} \lambda_1 \qquad (4.10)
 \end{aligned}$$

In the next few articles in this chapter, some special cases which arise as a consequence of limiting certain parameters will be discussed. It should be noted that in this chapter one can make use of symmetry and solves half of the total span only.

#### 4.1 Limiting Cases of the Spring Stiffness at Intermediate Support of Two Equal Span Plates with Symmetrical Boundary Conditions

The values of  $K_m^*$  vary from zero to infinity. When this value approaches zero, the plate is no longer a two span plate. This particular case will not be discussed further although it can be generated from this analysis.

The eigenvalues for square plate obtained by this method have been worked out up to fifth-fifth mode. The other limit is obtained when the stiffness value is close to infinity which will be discussed in Section 4.1.1.

##### 4.1.1 Two Equal Span Plates with Simple Intermediate Support and Symmetrical Springs at Both Ends

This case occurs when the value of the stiffness of the intermediate spring approaches infinity. Therefore, at intermediate support, the deflection is zero. This can be shown by Eq. (4.8).

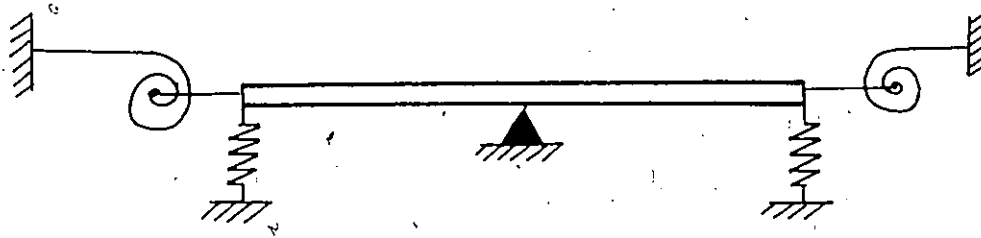


FIG. 4.2. Two equal span plates with simple intermediate support.

When  $K_m^* = \infty$  by dividing Eq. (4.8) by  $K_m^*$  and taking the limits by setting  $K_m^* \rightarrow \infty$  yields Eq. (4.11):

$$\sin \frac{1}{2} \lambda_1 A_1 + \cos \frac{1}{2} \lambda_1 B_1 + \sinh \frac{1}{2} \lambda_2 C_1 + \cosh \frac{1}{2} \lambda_2 D_1 = 0 \quad (4.11)$$

This is exactly the deflection of the plate at intermediate support. The substitution of Eq. (4.11) into Eq. (4.5) gives:

$$\sin \frac{1}{2} \lambda_1 A_2 + \cos \frac{1}{2} \lambda_1 B_2 + \sinh \frac{1}{2} \lambda_2 C_2 + \cosh \frac{1}{2} \lambda_2 D_2 = 0 \quad (4.12)$$

The frequency equation for this case is obtained by replacing Eqs. (4.8) and (4.5) of set of Eqs. (4.1) to (4.8) with Eqs. (4.11) and (4.12).

The modal shape expressions for this case are:

$$W_1^* = \{ \sin \lambda_1 \xi + (\cos \lambda_1 \xi) B_1^* + (\sinh \lambda_2 \xi) C_1^* + (\cosh \lambda_2 \xi) D_1^* \} \sin \alpha_n \eta$$

$$W_2^* = \{ (\sin \lambda_1 \xi_2) A_2^* + (\cos \lambda_1 \xi_2) B_2^* + (\sinh \lambda_2 \xi_2) C_2^* + (\cosh \lambda_2 \xi_2) D_2^* \} \sin \alpha \eta \quad (4.13)$$

where the values of  $B_1^*$ ,  $C_1^*$ ,  $D_1^*$ ,  $A_2^*$ ,  $B_2^*$ ,  $C_2^*$  and  $D_2^*$  are determined from the set of equations given below:

$$\begin{aligned} K^* B_1^* + a_3 C_1^* + K^* D_1^* &= -a_1 \\ a_2 B_1^* - K_T^* \lambda_2 C_1^* + a_4 D_1^* &= K_T^* \lambda_1 \\ a_1 A_2^* + K^* B_2^* + a_3 C_2^* + K^* D_2^* &= 0 \\ -K_T^* \lambda_1 A_2^* + a_2 B_2^* - K_T^* \lambda_2 C_2^* + a_4 D_2^* &= 0 \end{aligned} \quad (4.15)$$

$$\begin{aligned} (\cos \frac{1}{2} \lambda_1) B_1^* + (\sinh \frac{1}{2} \lambda_2) C_1^* + (\cosh \frac{1}{2} \lambda_2) D_1^* &= \sin \frac{1}{2} \lambda_1 \\ -(\sin \frac{1}{2} \lambda_1) A_2^* + (\cos \frac{1}{2} \lambda_1) B_2^* + (\sinh \frac{1}{2} \lambda_2) C_2^* + (\cosh \frac{1}{2} \lambda_2) D_2^* &= 0 \\ -(\lambda_1 \sin \frac{1}{2} \lambda_1) B_1^* + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1^* + (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_1^* \\ + (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2^* - (\lambda_1 \sin \frac{1}{2} \lambda_1) B_2^* + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2^* \\ + (\lambda_2 \sinh \frac{1}{2} \lambda_2) D_2^* &= -\lambda_1 \cos \frac{1}{2} \lambda_1 \end{aligned}$$

#### 4.2 Limiting Cases of Spring Stiffness at the End Supports of Two Equal Span Plates

At each end of a double span plate discussed earlier, two kinds of spring support exist: torsional and lateral spring support. Each spring stiffness can vary from zero to infinity. Obviously, there are four combinations of the

limiting values; hence there are four cases of support limit. They are classified as free, simple and clamped support at both ends. The fourth case is when the torsional spring stiffness approaches infinite value, yet lateral support stiffness approaches zero. This case is mathematically and physically possible, but receives virtually no treatment in the literature on plates.

4.2.1 Double Equal Span Plates Having Intermediate Spring Support and Clamped Support at Two External Ends

This case occurs when both torsional and lateral spring stiffness approach infinite values therefore  $K^* = K_T^* \rightarrow \infty$  utilizing Eqs. (3.9a) and (3.10a) and setting  $K^* = K_T^* = \infty$ , results in the four equations (4.16), (4.17), (4.18) and (4.19) as follows:

$$B_1 + D_1 = 0 \tag{4.16}$$

$$\lambda_1 A_1 + \lambda_2 C_1 = 0 \tag{4.17}$$

$$B_2 + D_2 = 0 \tag{4.18}$$

$$\lambda_1 A_2 + \lambda_2 C_2 = 0 \tag{4.19}$$

Combining these equations with the continuity conditions given by Eqs. (4.5) to (4.8), the eigenvalues can be extracted. The expressions for normalized modal shape can be easily established, after setting the coefficient  $A_1$  to unity.

The modal shape for this case can then be written as:

$$W_1^* = \{(\sin \lambda_1 \xi_1 - \lambda_1 / \lambda_2 \sinh \lambda_2 \xi_1) + B_1^*(\cos \lambda_1 \xi_1 - \cosh \lambda_2 \xi_1)\} \sin \alpha \eta$$

$$W_2^* = \{A_2^*(\sin \lambda_1 \xi_2 - \lambda_1 / \lambda_2 \sinh \lambda_2 \xi_2) + B_2^*(\cos \lambda_1 \xi_2 - \cosh \lambda_2 \xi_2)\} \sin \alpha \eta \quad (4.20)$$

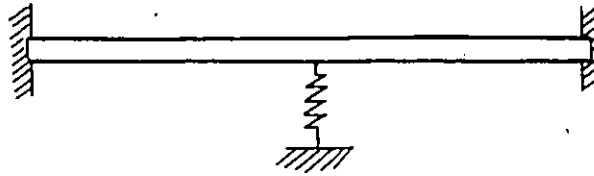


FIG. 4.3. Two equal span plates having intermediate lateral spring support and clamped at both ends.

where the values of  $B_1^*$ ,  $A_2^*$  and  $B_2^*$  are obtained from the equations below:

$$\begin{aligned} &(\cos \frac{1}{2} \lambda_1 - \cosh \frac{1}{2} \lambda_2) B_1^* - (\sin \frac{1}{2} \lambda_1 - \lambda_1 / \lambda_2 \sinh \frac{1}{2} \lambda_2) A_2^* \\ &- (\cos \frac{1}{2} \lambda_1 - \cosh \frac{1}{2} \lambda_2) B_2^* = - (\sin \frac{1}{2} \lambda_1 - \lambda_1 / \lambda_2 \sinh \frac{1}{2} \lambda_2) \\ &(-\lambda_1 \sin \frac{1}{2} \lambda_1 - \lambda_2 \sinh \frac{1}{2} \lambda_2) B_1^* + (\lambda_1 \cos \frac{1}{2} \lambda_1 - \lambda_1 \cosh \frac{1}{2} \lambda_2) A_2^* \quad (4.21) \\ &+ (-\lambda_1 \sin \frac{1}{2} \lambda_1 - \lambda_2 \sinh \frac{1}{2} \lambda_2) B_2^* = - (\lambda_1 \cos \frac{1}{2} \lambda_1 - \lambda_2 \cosh \frac{1}{2} \lambda_2) \\ &(a_2 \cos \frac{1}{2} \lambda_1 - a_4 \cosh \frac{1}{2} \lambda_2) B_1^* + (a_2 \sin \frac{1}{2} \lambda_1 + a_4 \lambda_1 / \lambda_2 \sinh \frac{1}{2} \lambda_2) A_2^* \\ &+ (-a_2 \cos \frac{1}{2} \lambda_1 + a_4 \cosh \frac{1}{2} \lambda_2) B_2^* = (a_2 \sin \frac{1}{2} \lambda_1 + a_4 \lambda_1 / \lambda_2 \sinh \frac{1}{2} \lambda_2) \end{aligned}$$

4.2.2 Two Equal Span Plates Having Intermediate Lateral Spring Support and Simple Support at the External Ends

This case is encountered when  $K_T^* = 0$  and  $K^* = \infty$ . Applying the boundary conditions for simple support case at both ends yields the relations:

$$B_1 = D_1 = 0 \quad \text{and} \quad B_2 = D_2 = 0.$$

Combining these relations with the continuity conditions given by Eqs. (4.5) to (4.8), the frequency equations are as follows:

$$(\sin \frac{1}{2} \lambda_1) A_1 + (\sinh \frac{1}{2} \lambda_2) C_1 - (\sin \frac{1}{2} \lambda_1) A_2 - (\sinh \frac{1}{2} \lambda_2) C_2 = 0 \quad (4.22)$$

$$\begin{aligned} & (\lambda_1 \cos \frac{1}{2} \lambda_1) A_1 + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1 + (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2 \\ & + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.23)$$

$$\begin{aligned} & - (a_2 \sin \frac{1}{2} \lambda_1) A_1 + (a_4 \sinh \frac{1}{2} \lambda_2) B_1 + (a_2 \sin \frac{1}{2} \lambda_1) A_2 \\ & - (a_4 \sinh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.24)$$

$$\begin{aligned} & + (a_1 \cos \frac{1}{2} \lambda_1 + K_m^* \sin \frac{1}{2} \lambda_1) A_1 + (a_3 \cosh \frac{1}{2} \lambda_2 + K_m^* \sinh \frac{1}{2} \lambda_2) C_1 \\ & + (a_1 \cos \frac{1}{2} \lambda_1) A_2 + (a_3 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.25)$$

The corresponding normalized modal shape expressions are:

$$W_1^* = \{ \sin \lambda_1 \xi_1 + C_1^* \sinh \lambda_2 \xi_1 \} \sin \alpha_n \eta$$

$$W_2^* = \{A_2^* \sin \lambda_1 \xi_2 + C_2^* \sinh \lambda_2 \xi_2\} \sin \alpha_n \eta \quad (4.26)$$

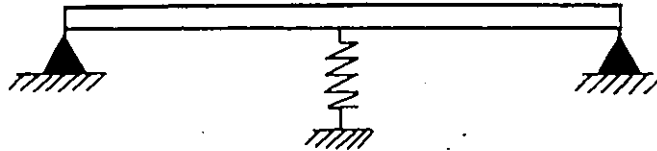


FIG. 4.4. Two equal span plates with lateral intermediate spring support and simple support at both ends.

where the values of  $C_1^*$ ,  $A_2^*$  and  $C_2^*$  are the roots of the following equations:

$$\begin{aligned} (\sin \frac{1}{2} \lambda_1) C_1^* - (\sin \frac{1}{2} \lambda_1) A_2^* - (\sinh \frac{1}{2} \lambda_2) C_2^* &= -\sin \frac{1}{2} \lambda_1 \\ (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1^* + (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2^* + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2^* &= -\lambda_1 \cos \frac{1}{2} \lambda_1 \\ (a_4 \sinh \frac{1}{2} \lambda_2) C_1^* + (a_2 \sin \frac{1}{2} \lambda_1) A_2^* - (a_4 \sinh \frac{1}{2} \lambda_2) C_2^* &= a_2 \sin \frac{1}{2} \lambda_1 \\ a_2 = \lambda_1^2 - \nu \alpha_n^2 \quad \text{and} \quad a_4 = \lambda_2^2 - \nu \alpha_n^2 & \quad (4.27) \end{aligned}$$

#### 4.2.3 Two Equal Span Plates with Lateral Intermediate Spring Support and Free Support at Both Ends

When both  $K_T^*$  and  $K^*$  approach zero, then the plate is free at both external ends. To establish the frequency equation and shape equations, one can enforce the boundary

conditions at both external ends by making use of Eqs. (3.11c) and (3.12c) and obtain relations such as:

$$D_1 = - a_2/a_4 B_1, C_1 = - a_1/a_3$$

$$D_2 = - a_2/a_4 B_2, C_2 = - a_1/a_3 A_2$$

Substituting these relations into Eqs. (4.5) to (4.8), one obtains the frequency equations of this case as the following:

$$\begin{aligned} & (\sin \frac{1}{2} \lambda_1 - a_1/a_3 \sinh \frac{1}{2} \lambda_2) A_1 + (\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) C_1 \\ & - (\sin \frac{1}{2} \lambda_1 - a_1/a_3 \sinh \frac{1}{2} \lambda_2) A_2 - (\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.28)$$

$$\begin{aligned} & (\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1/a_3 \lambda_2 \cosh \frac{1}{2} \lambda_2) A_1 - (\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) C_1 \\ & + (\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1/a_3 \lambda_2) A_2 - (\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.29)$$

$$\begin{aligned} & - (a_2 \sin \frac{1}{2} \lambda_1 - a_1 a_4/a_3 \sinh \frac{1}{2} \lambda_2) A_1 + (a_2 \cos \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2) C_1 \\ & + (a_2 \sin \frac{1}{2} \lambda_1 - a_1 a_4/a_3 \sinh \frac{1}{2} \lambda_2) A_2 - (a_2 \cos \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \end{aligned} \quad (4.30)$$

$$\begin{aligned} & (a_1 \cos \frac{1}{2} \lambda_1 + K_m^* \sin \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2 - a_1/a_3 K_m^* \sinh \frac{1}{2} \lambda_2) A_1 \\ & + (-a_1 \sin \frac{1}{2} \lambda_1 + K_m^* \cos \frac{1}{2} \lambda_1 - a_2 a_3/a_4 \sinh \frac{1}{2} \lambda_2 - a_2/a_4 K_m^* \cosh \frac{1}{2} \lambda_2) B_1 \\ & + (a_1 \cos \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2) A_2 - (a_1 \sin \frac{1}{2} \lambda_1 - a_2 a_3/a_4 \sinh \frac{1}{2} \lambda_2) B_2 = 0 \end{aligned} \quad (4.31)$$

The corresponding normalized modal shape expressions are:

$$\begin{aligned}
 W_1^* &= \{ (\sin \lambda_1 \xi_1 - a_1/a_3 \sinh \lambda_2 \xi_1) + B_1^* (\cos \lambda_1 \xi_1 - a_2/a_4 \cosh \lambda_2 \xi_1) \} \sin \alpha_n \eta \\
 W_2^* &= \{ A_2^* (\sin \lambda_1 \xi_2 - a_1/a_3 \sinh \lambda_2 \xi_2) + B_2^* (\cos \lambda_1 \xi_2 - a_2/a_4 \cosh \lambda_2 \xi_2) \} \\
 &\quad \sin \alpha_n \eta \qquad \qquad \qquad (4.32)
 \end{aligned}$$

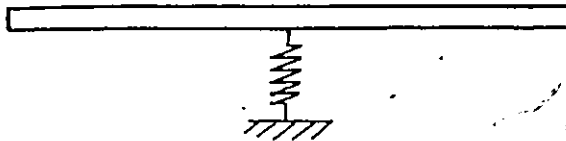


FIG. 4.5. Two equal span plates with lateral intermediate spring support and free support at both ends.

In this case, the values of the constants  $B_1^*$ ,  $A_2^*$  and  $B_2^*$  are governed by the equations as follows:

$$\begin{aligned}
 &(\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) B_1^* - (\sin \frac{1}{2} \lambda_1 - a_1/a_3 \sinh \frac{1}{2} \lambda_2) A_2^* \\
 &- (\cos \frac{1}{2} \lambda_1 - a_2/a_4 \cosh \frac{1}{2} \lambda_2) B_2^* = - (\sin \frac{1}{2} \lambda_1 - a_1/a_3 \sinh \frac{1}{2} \lambda_2) \\
 &- (\lambda_1 \sin \frac{1}{2} \lambda_1 - a_2/a_4 \lambda_2 \sinh \frac{1}{2} \lambda_2) B_1^* + (\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1/a_3 \lambda_2 \cosh \frac{1}{2} \lambda_2) A_2^* \\
 &- (\lambda_1 \sin \frac{1}{2} \lambda_1 - a_2/a_4 \lambda_2 \sinh \frac{1}{2} \lambda_2) B_2^* = - (\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1/a_3 \lambda_2 \cosh \frac{1}{2} \lambda_2)
 \end{aligned}$$

$$\begin{aligned}
 & (a_2 \cos \frac{1}{2} \lambda_1 - a_2 \cosh \frac{1}{2} \lambda_2) B_1^* + (a_2 \sin \frac{1}{2} \lambda_1 + a_4 / a_3 \sinh \frac{1}{2} \lambda_2) A_2^* \\
 & - (a_2 \cos \frac{1}{2} \lambda_1 - a_2 \cosh \frac{1}{2} \lambda_2) B_2^* = (a_2 \sin \frac{1}{2} \lambda_1 + a_4 / a_3 \sinh \frac{1}{2} \lambda_2)
 \end{aligned}
 \tag{4.33}$$

where

$$\begin{aligned}
 a_1 &= \lambda_1^3 - (2-\nu) \alpha_n^2 \lambda_1 \\
 a_2 &= \lambda_1^2 - \nu \alpha_n^2 \\
 a_3 &= \lambda_2^3 - (2-\nu) \alpha_n^2 \lambda_2 \\
 a_4 &= \lambda_2^2 - \nu \alpha_n^2
 \end{aligned}$$

#### 4.3 Limiting Cases of Spring Stiffness at Every Support and Intermediate Support of Double Equal Span Plates

In this section, the cases when end support as well as intermediate spring support stiffnesses are approaching the limit will be discussed.

There are six combinations of these kind of supports. Three of them having intermediate spring support stiffness which approach zero. These three cases will not be discussed in this thesis due to the reasons as mentioned in Section 4.2. The other three cases would be limiting cases of either cases discussed in previous sections.

4.3.1 Two Equal Span Plates with Simple Intermediate Support and Clamped Support at Both External Ends

The frequency equations of this case are the combination of Eqs. (4.16), (4.17), (4.18), (4.19), (4.11), (4.12), (4.6) and (4.7) and the modal shape expressions for this case are:

$$W_1^* = \{(\sin \lambda_1 \xi_1 - \lambda_1 / \lambda_2 \sinh \lambda_2 \xi_1) + g_1 (\cos \lambda_1 \xi_1 - \cosh \lambda_2 \xi_1)\} \sin \alpha_n \eta$$

$$W_2^* = \{(\sin \lambda_1 \xi_2 - \lambda_1 / \lambda_2 \sinh \lambda_2 \xi_2) + g_1 (\cos \lambda_1 \xi_2 - \cosh \lambda_2 \xi_2)\} \sin \alpha_n \eta$$

(4.34)

where

$$g_1 = - (\sin^{1/2} \lambda_1 - \lambda_1 / \lambda_2 \sinh^{1/2} \lambda_2) / (\cos^{1/2} \lambda_1 - \cosh^{1/2} \lambda_2)$$



FIG. 4.6. Two equal span plates with simple intermediate support and clamped support at both external ends.

4.3.2 Two Equal Span Plates with Simple Intermediate Support and Simple Support at Both External Ends

The frequency equations of this case can be established by setting  $K_m^* \rightarrow \infty$  of frequency equations in subsection 4.2.2.

The frequency equations are as follows:

$$\sin \frac{1}{2} \lambda_1 A_1 + \sinh \frac{1}{2} \lambda_2 C_1 = 0 \quad (4.35)$$

$$\sin \lambda_1 A_2 + \sinh \frac{1}{2} \lambda_2 C_2 = 0 \quad (4.36)$$

$$(\lambda_1 \cos \frac{1}{2} \lambda_1) A_1 + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_1 + (\lambda_1 \cos \frac{1}{2} \lambda_1) A_2 + (\lambda_2 \cosh \frac{1}{2} \lambda_2) C_2 = 0 \quad (4.37)$$

$$(-a_2 \sin \frac{1}{2} \lambda_1) A_1 + (a_4 \sin \frac{1}{2} \lambda_2) B_1 + (a_2 \sin \frac{1}{2} \lambda_1) A_2 - (a_4 \sinh \frac{1}{2} \lambda_2) C_2 = 0 \quad (4.38)$$

The normalized modal shape expressions are:

$$W_1^* = (\sin \lambda_1 \xi_1 + g_2 \sinh \lambda_2 \xi_1) \sin \alpha_n \eta \quad (4.39)$$

$$W_2^* = (\sin \lambda_1 \xi_2 + g_2 \sinh \lambda_2 \xi_2) \sin \alpha_n \eta$$

where

$$g_2 = - \sin \frac{1}{2} \lambda_1 / \sinh \frac{1}{2} \lambda_2$$



FIG. 4.7. Two equal span plates with simple intermediate support and simple support at both external ends.

4.3.3 Two Equal Span Plates with Simple Intermediate Support and Free Support at Both External Ends

Since this case is the special case at Subsection 4.2.3 the frequency equation is also obtained by setting  $K_m^* \rightarrow \infty$ . The frequency equations are:

$$(\sin \frac{1}{2} \lambda_1 - a_1 / a_3 \sinh \frac{1}{2} \lambda_2) A_1 + (\cos \frac{1}{2} \lambda_1 - a_2 / a_4 \cosh \frac{1}{2} \lambda_2) C_1 = 0$$

$$(\sin \frac{1}{2} \lambda_1 - a_1 / a_3 \sinh \frac{1}{2} \lambda_2) A_2 + (\cos \frac{1}{2} \lambda_1 - a_2 / a_4 \cosh \frac{1}{2} \lambda_2) C_2 = 0$$

$$(\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1 / a_3 \lambda_2 \cosh \frac{1}{2} \lambda_2) A_1 - (\cos \frac{1}{2} \lambda_1 - a_2 / a_4 \cosh \frac{1}{2} \lambda_2) C_1$$

$$+ (\lambda_1 \cos \frac{1}{2} \lambda_1 - a_1 / a_3 \lambda_2 \cosh \frac{1}{2} \lambda_2) A_2 - (\cos \frac{1}{2} \lambda_1 - a_2 / a_4 \cosh \frac{1}{2} \lambda_2) C_2 = 0$$

$$- (a_2 \sin \frac{1}{2} \lambda_1 + a_1 a_4 / a_3 \sinh \frac{1}{2} \lambda_2) A_1 + (a_2 \cos \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2) C_1$$

$$+ (a_2 \sin \frac{1}{2} \lambda_1 + a_1 a_4 / a_3 \sinh \frac{1}{2} \lambda_2) A_2 - (a_2 \cos \frac{1}{2} \lambda_1 - a_1 \cosh \frac{1}{2} \lambda_2) C_2 = 0$$

For this case, the expressions for normalized modal shapes are:

$$W_1^* = \{ (\sin \lambda_1 \xi_1 - a_1 / a_3 \sinh \lambda_2 \xi_1) + g_3 (\cos \lambda_1 \xi_1 - a_2 / a_4 \cosh \lambda_1 \xi_1) \}$$

$$\sin \alpha_n \eta$$

(4.40)

$$W_2^* = \{ (\sin \lambda_1 \xi_2 - a_1 / a_3 \sinh \lambda_2 \xi_2) + g_3 (\cos \lambda_1 \xi_2 - a_2 / a_4 \cosh \lambda_1 \xi_2) \}$$

$$\sin \alpha_n \eta$$

where

$$g_3 = - (\sin \frac{1}{2} \lambda_1 - a_1 / a_3 \sinh \frac{1}{2} \lambda_2) / (\cos \frac{1}{2} \lambda_1 - a_3 / a_4 \cosh \frac{1}{2} \lambda_2)$$

$$a_1 = \lambda_1^3 - (2-\nu) \alpha_n^2 \lambda_1$$

$$a_2 = \lambda_1^2 - \nu \alpha_n^2$$

$$a_3 = \lambda_2^3 - (2-\nu) \alpha_n^2 \lambda_2$$

$$a_4 = \lambda_2^2 - \nu \alpha_n^2$$



FIG. 4.8. Two equal span plates with simple intermediate support and free of support at both external ends.

## CHAPTER 5

### FREE VIBRATION OF TWO SPAN RECTANGULAR PLATES

This Chapter deals with the vibration of rectangular plates having two unequal spans. Furthermore, the independent variation of every elastic spring support stiffness for various aspect ratios are considered. This case is the general case of vibration of two span plates having simple support along two opposite sides.

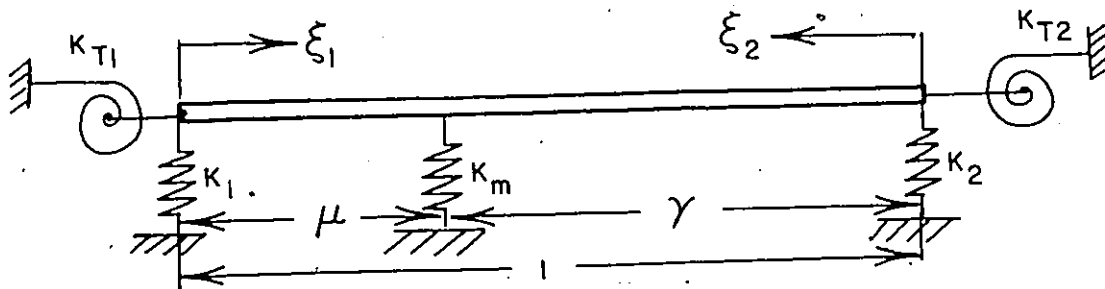


FIG. 5.1. Double span plate having different spring stiffnesses and variable intermediate support spacing.

The frequency equations for this general case are achieved by satisfying the boundary conditions at the external ends and continuity conditions at the intermediate support of the plate.

The enforcement of boundary conditions at the two external ends yield the following four homogeneous equations:

$$a_1 A_1 + K_1^* B_1 + a_3 C_1 + K_1^* D_1 = 0 \quad (5.1)$$

$$-K_{T_1}^* \lambda_1 A_1 + a_2 B_1 - K_{T_1}^* \lambda_2 C_1 + a_4 D_1 = 0 \quad (5.2)$$

$$a_1 A_2 + K_2^* B_2 + a_3 C_2 + K_2^* D_2 = 0 \quad (5.3)$$

$$-K_{T_2}^* \lambda_1 A_2 + a_2 B_2 - K_{T_2}^* \lambda_2 C_2 + a_4 D_2 = 0 \quad (5.4)$$

where again

$$\lambda_1 = k^2 - \alpha_n^2$$

$$\lambda_2 = k^2 + \alpha_n^2$$

$$a_1 = \lambda_1^3 - (2-\nu)\alpha_n^2 \lambda_1$$

$$a_2 = \lambda_1^2 - \nu \alpha_n^2$$

$$a_3 = \lambda_2^3 - (2-\nu)\alpha_n^2 \lambda_2$$

$$a_4 = \lambda_2^2 - \nu \alpha_n^2$$

To simplify the enforcement of the boundary conditions at the intermediate support the parameter  $\mu$  is introduced as the ratio of the first span length over the overall length of two span plates. In general, the value of  $\mu$  varies from zero to one.

The remaining span, therefore, has the ratio  $1-\mu$  and is designated as  $\gamma$ . Application of these conditions at  $\xi_1=\mu$  and  $\xi_2=\gamma$  yield the following equations:

$$\begin{aligned} & (\sin\mu\lambda_1)A_1 + (\cos\mu\lambda_1)B_1 + (\sinh\mu\lambda_2)C_1 + (\cosh\mu\lambda_2)D_1 \\ & - (\sin\gamma\lambda_1)A_2 - (\cos\gamma\lambda_1)B_2 - (\sinh\gamma\lambda_2)C_2 - (\cosh\gamma\lambda_2)D_2 = 0 \end{aligned} \quad (5.5)$$

$$\begin{aligned} & (\lambda_1 \cos\mu\lambda_1)A_1 - (\lambda_1 \sin\mu\lambda_1)B_1 + (\lambda_2 \cosh\mu\lambda_2)C_1 + (\lambda_2 \sinh\mu\lambda_2)D_1 \\ & + (\lambda_1 \cos\gamma\lambda_1)A_2 - (\lambda_1 \sin\gamma\lambda_1)B_2 + (\lambda_2 \cosh\gamma\lambda_2)C_2 \\ & + (\lambda_2 \sinh\gamma\lambda_2)D_2 = 0 \end{aligned} \quad (5.6)$$

$$\begin{aligned} & - (a_2 \sin\mu\lambda_1)A_1 + (a_2 \cos\mu\lambda_1)B_1 + (a_4 \sinh\mu\lambda_2)C_1 + (a_4 \cosh\mu\lambda_2)D_1 \\ & + (a_2 \sin\gamma\lambda_1)A_2 - (a_2 \cos\gamma\lambda_1)B_2 + (a_4 \sinh\gamma\lambda_2)C_2 \\ & - (a_4 \cosh\gamma\lambda_2)D_2 = 0 \end{aligned} \quad (5.7)$$

$$\begin{aligned} & (a_1 \cos\mu\lambda_1 + K_m^* \sin\mu\lambda_1)A_1 + (-a_1 \sin\mu\lambda_1 + K_m^* \cos\mu\lambda_1)B_1 \\ & + (a_3 \cosh\mu\lambda_2 + K_m^* \sinh\mu\lambda_2)C_1 + (a_3 \sinh\mu\lambda_2 + K_m^* \cosh\mu\lambda_2)D_1 \\ & + (a_1 \cos\gamma\lambda_1)A_2 - (a_1 \sin\gamma\lambda_1)B_2 + (a_2 \cosh\gamma\lambda_2)C_2 \\ & + (a_3 \sinh\gamma\lambda_2)D_2 = 0 \end{aligned} \quad (5.8)$$

There are again eight simultaneous homogeneous equations involving eight unknown constants.

The eigenvalues  $K$  are developed by setting the determinant of the coefficient matrix in the above equation to zero.

The general expressions of normalized shape for any double span plates having two opposite side simply supported are given by:

$$W_1^* = \{(\sin \lambda_1 \xi_1) + (\cos \lambda_1 \xi_1) B_1^* + (\sinh \lambda_2 \xi_1) C_1^* + (\cosh \lambda_2 \xi_1) D_1^*\} \sin \alpha_n \eta$$

$$W_2^* = \{(\sin \lambda_1 \xi_2) A_2^* + (\cos \lambda_1 \xi_2) B_2^* + (\sinh \lambda_2 \xi_2) C_2^* + (\cosh \lambda_2 \xi_2) D_2^*\} \sin \alpha_n \eta$$

(5.9)

where the constants  $B_1^*$ ,  $C_1^*$ ,  $D_1^*$ ,  $A_2^*$ ,  $B_2^*$ ,  $C_2^*$  and  $D_2^*$  are the roots of the following set of equations:

$$K_1^* B_1^* + a_3 C_1^* + K_1^* D_1^* = -a_1$$

$$a_2 B_1^* - K_{T1}^* \lambda_2 C_1^* + a_4 D_1^* = K_{T1}^* \lambda_1$$

$$a_1 A_2^* + K_2^* B_2^* + a_3 C_2^* + K_2^* D_2^* = 0$$

$$-K_{T2}^* \lambda_1 A_2^* + a_2 B_2^* - K_{T2}^* \lambda_2 C_2^* + a_4 D_2^* = 0$$

(5.10)

$$(\cos \mu \lambda_1) B_1^* + (\sinh \mu \lambda_2) C_1^* + (\cosh \mu \lambda_2) D_1^* - (\sin \gamma \lambda_1) A_2^*$$

$$- (\cos \gamma \lambda_1) B_2^* - (\sinh \gamma \lambda_2) C_2^* - (\cosh \gamma \lambda_2) D_2^* = -\sin \mu \lambda_1$$

$$(\lambda_1 \sin \mu \lambda_1) B_1^* + (\lambda_2 \cosh \mu \lambda_2) C_1^* + (\lambda_2 \sinh \mu \lambda_2) D_1^* + (\lambda_1 \cos \mu \lambda_1) A_2^*$$

$$- (\lambda_1 \sin \gamma \lambda_1) B_2^* + (\lambda_2 \cosh \gamma \lambda_2) C_2^* + (\lambda_2 \sinh \gamma \lambda_2) D_2^* = -\lambda_1 \cos \mu \lambda_1$$

$$(a_2 \cos \mu \lambda_1) B_1^* + (a_4 \sinh \mu \lambda_2) C_1^* + (a_4 \cosh \mu \lambda_2) D_1^* + (a_2 \sin \gamma \lambda_1) A_2^* \\ - (a_2 \cos \gamma \lambda_1) B_2^* - (a_4 \sinh \gamma \lambda_2) C_2^* - (a_4 \cosh \gamma \lambda_2) D_2^* = a_2 \sin \mu \lambda_1$$

### 5.1 The Cases When Linear Intermediate Spring Support Stiffness Approaches the Limit

This section is the general case of the case presented in Section 4.1.1. In Section 4.1.1, the plate considered has two equal spans. In this section, the discussion is extended further to two unequal spans.

The two limiting cases for the intermediate spring are obtained when its stiffness goes to zero and infinity. The plate system degenerates into a single span plate as this stiffness goes to zero. This case is not dealt with in detail in this work. The other case of a continuous plate on a non-yielding type support is generated as the stiffness goes to infinity.

The frequency equations for the case of two span plates having simple intermediate support can be generated from Eqs. (5.1) to (5.8) and setting the value of  $K_M^* = \infty$ .

The normalized modal shape of this case is also obtained from the general case by setting  $K_M^* = \infty$ .

After simplification, the normalized modal shape may be expressed as the following:

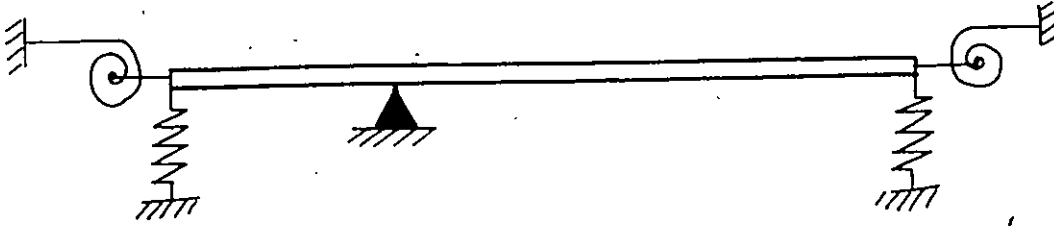


FIG. 5.2. Two span plates with simple intermediate support.

$$\begin{aligned}
 W_1^* &= \{(\sin \lambda_1 \xi_1 + (\cos \lambda_1 \xi_1) B_1^* + (\sinh \lambda_2 \xi_1) C_1^* + (\cosh \lambda_2 \xi_1) D_1^*) \sin \alpha_n \eta \\
 W_2^* &= \{(\sin \lambda_1 \xi_2) A_2^* + (\cos \lambda_1 \xi_2) B_2^* + (\sinh \lambda_2 \xi_2) C_2^* + (\cosh \lambda_2 \xi_2) D_2^*\} \sin \alpha_n \eta
 \end{aligned}
 \tag{5.11}$$

The values of  $B_1^*$ ,  $C_1^*$ ,  $D_1^*$ ,  $A_2^*$ ,  $B_2^*$ ,  $C_2^*$  and  $D_2^*$  are the roots of the following set of equations:

$$K_1^* B_1^* + a_3 C_1^* + K_1^* D_1^* = -a_1$$

$$a_2 B_1^* - K_{T_1}^* \lambda_2 C_1^* + a_4 D_1^* = K_{T_1}^* \lambda_1$$

$$a_1 A_2^* + K_2^* B_2^* + a_3 C_2^* + K_2^* D_2^* = 0$$

$$-K_{T_2}^* \lambda_1 A_2^* + a_2 B_2^* - K_{T_2}^* \lambda_2 C_2^* + a_4 D_2^* = 0$$

$$(\cos \mu \lambda_1) B_1^* + (\sinh \mu \lambda_2) C_1^* + (\cosh \mu \lambda_2) D_1^* = -\sin \mu \lambda_1$$

$$(\sin \gamma \lambda_1) A_2^* + (\cos \gamma \lambda_1) B_2^* + (\sinh \gamma \lambda_2) C_2^* + (\cosh \gamma \lambda_2) D_2^* = 0$$

$$\begin{aligned} & - (\lambda_1 \sin \mu \lambda_1) B_1^* + (\lambda_2 \cosh \mu \lambda_2) C_1^* + (\lambda_2 \sinh \mu \lambda_2) D_1^* + (\lambda_1 \cos \gamma \lambda_1) A_2^* \\ & - (\lambda_1 \sin \gamma \lambda_1) B_2^* + (\lambda_2 \cosh \gamma \lambda_2) C_2^* + (\lambda_2 \sinh \gamma \lambda_2) D_2^* = -(\lambda_1 \cos \mu \lambda_1) \end{aligned} \quad (5.12)$$

where

$$a_1 = \lambda_1^3 - (2-\nu) \alpha \frac{2}{n} \lambda_1$$

$$a_2 = \lambda_1^2 - \nu \alpha^2$$

$$a_3 = \lambda_2^3 - (2-\mu) \alpha \frac{2}{n} \lambda_2$$

$$a_4 = \lambda_2^2 - \nu \alpha^2$$

## 5.2 The Cases When the Spring Stiffnesses at the External End Support Approach the Limit

This family of cases consists of 10 situations of double span plates having conditions such that the spring support stiffnesses approach the limit either zero or infinity. The four situations which occur when the value of the torsional spring stiffness approaches infinity and the value of the linear spring approaches zero in one or both external end supports will not be discussed in this thesis although the computation has been included. The remaining six situations will be discussed in the following articles.

5.2.1 Two Span Plates with Lateral Intermediate Spring Support and Clamped Supports at External Ends

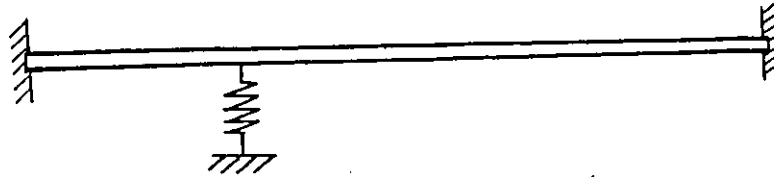


FIG. 5.3. Two span plates with lateral intermediate spring support and clamped supports at external ends.

This case occurs when both torsional and lateral spring stiffnesses approach infinite values for both end supports. Therefore, the values of  $K_{T_1}^*$ ,  $K_{T_2}^*$ ,  $K_1^*$  and  $K_2^*$  are approaching infinity. Utilizing Eqs. (3.9a) and (3.10a) and setting

$K_{T_1}^* = K_{T_2}^* = K_1^* = K_2^* = \infty$  result in the four following equations:

$$B_1 + D_1 = 0 \tag{5.13}$$

$$\lambda_1 A_1 + \lambda_2 C_1 = 0 \tag{5.14}$$

$$B_2 + D_2 = 0 \tag{5.15}$$

$$\lambda_1 A_2 + \lambda_2 C_2 = 0 \tag{5.16}$$

Combining these equations with the continuity conditions given by Eqs. (5.5), (5.6), (5.7) and (5.8), the eigenvalues can be extracted using the usual procedure.

The normalized modal shape expressions can be easily established after setting the coefficient  $A_1$  to unity.

The modal shapes for this case can then be expressed as:

$$W_1^* = \{(\sin\lambda_1\xi_1 - \lambda_1/\lambda_2 \sinh\lambda_2\xi_1) + B_1^*(\cos\lambda_1\xi_1 - \cosh\lambda_2\xi_1)\} \sin\alpha_n \eta$$

$$W_2^* = \{A_2^*(\sin\lambda_1\xi_2 - \lambda_1/\lambda_2 \sinh\lambda_2\xi_2) + B_2^*(\cos\lambda_1\xi_2 - \cosh\lambda_2\xi_2)\} \sin\alpha_n \eta$$

(5.17)

where the values of  $B_1^*$ ,  $A_2^*$  and  $B_2^*$  are the roots of the following set of Eqs. (5.18):

$$(\cos\mu\lambda_1 - \cosh\mu\lambda_2)B_1 - (\sin\gamma\lambda_1 - \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2$$

$$- (\cos\gamma\lambda_1 - \cosh\gamma\lambda_2)B_2 = - \sin\mu\lambda_1 - \lambda_1/\lambda_2 \sinh\mu\lambda_2$$

$$(-\lambda_1 \sin\mu\lambda_1 - \lambda_2 \sinh\mu\lambda_2)B_1 + (\lambda_1 \cos\gamma\lambda_1 - \lambda_1 \cosh\gamma\lambda_2)A_2$$

$$+ (-\lambda_1 \sin\gamma\lambda_1 - \lambda_2 \sinh\gamma\lambda_2)B_2 = - (\lambda_1 \cos\gamma\lambda_1 - \lambda_1 \cosh\gamma\lambda_2)$$

$$(a_2 \cos\mu\lambda_1 - a_4 \cosh\mu\lambda_2)B_1 + (a_2 \sin\gamma\lambda_1 + a_4 \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2$$

$$+ (-a_2 \cos\gamma\lambda_1 + a_4 \cosh\gamma\lambda_2)B_2 = (a_2 \sin\mu\lambda_1 + a_4 \lambda_1/\lambda_2 \sinh\mu\lambda_2)$$

where the following abbreviations have been used in the

above equations:

$$a_2 = \lambda_1 - v \alpha_n^2$$

and

$$a_4 = \lambda_2^2 - v \alpha_n^2$$

for this case.

When the linear spring stiffness at the intermediate support approaches infinity, the two span plates are said to have simple support at intermediate and clamped support at external ends. The eigenvalues of this case may be computed from the frequency equation discussed earlier by setting the value of intermediate lateral spring stiffness to infinity.

After being simplified, the above mentioned modal shapes for the case of two span plates having clamped support for two external ends becomes:

$$\begin{aligned} W_1^* &= \{ \sin \lambda_1 \xi_1 - g_1 \sinh \lambda_2 \xi_1 + h_1 (\cos \lambda_1 \xi_1 - \cosh \lambda_2 \xi_1) \} \sin \alpha_n \eta \\ W_2^* &= h_3 \{ \sin \lambda_1 \xi_2 - g_1 \sinh \lambda_2 \xi_2 + h_2 (\cos \lambda_1 \xi_2 - \cosh \lambda_2 \xi_2) \} \sin \alpha_n \eta \end{aligned} \quad (5.19)$$

where the following notations have been used in the above equations:

$$g_1 = \lambda_1 / \lambda_2$$

$$h_1 = - \frac{\sin \lambda_1 \mu - g_1 \sinh \lambda_2 \gamma}{\cos \lambda_1 \mu - \cosh \lambda_2 \mu}$$

$$h_2 = - \frac{\sin \lambda_1 \gamma - g_1 \sinh \lambda_2 \gamma}{\cos \lambda_1 \gamma - \cosh \lambda_2 \gamma}$$

$$h_3 = - \frac{\lambda_1 \cos \lambda_1 \mu - g_1 \lambda_2 \cosh \lambda_2 \mu - h_1 (\lambda_1 \sin \lambda_1 \mu + \lambda_2 \sinh \lambda_2 \mu)}{\lambda_1 \cos \lambda_1 \gamma - g_1 \lambda_2 \cosh \lambda_2 \gamma - h_2 (\lambda_1 \sin \lambda_1 \gamma + \lambda_2 \sinh \lambda_2 \gamma)}$$

5.2.2 Two Span Plates with Lateral Intermediate Spring Support and Simple Support at External Ends

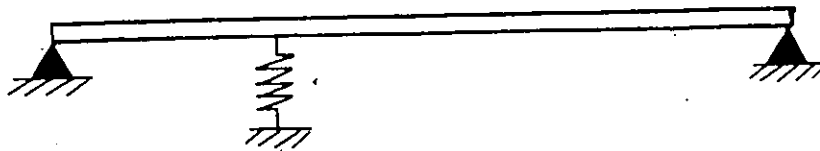


FIG. 5.4. Two span plates with lateral intermediate spring support and simple support at external ends.

When the torsional spring stiffness approaches zero and the linear spring stiffness approaches infinity for external end supports, the plate has simple support at the external ends.

Applying the boundary conditions for simple support case at both ends yields the relations of the constants as follows:

$$B_1 = D_1 = 0 \quad \text{and} \quad B_2 = D_2 = 0$$

Substituting the above equations into Eqs. (5.5), (5.6), (5.7) and (5.8) yields the frequency equations below:

$$(\sin\mu\lambda_1)A_1 + (\sinh\mu\lambda_2)C_1 - (\sin\gamma\lambda_1)A_2 - (\sinh\gamma\lambda_2)C_2 = 0$$

$$(\lambda_1 \cos\mu\lambda_1)A_1 + (\lambda_2 \cosh\mu\lambda_2)C_1 + (\lambda_1 \cos\gamma\lambda_1)A_2 + (\lambda_2 \cosh\gamma\lambda_2)C_2 = 0$$

$$- (a_2 \sin\mu\lambda_1)A_1 + (a_4 \sinh\mu\lambda_2)C_1 + (a_2 \sin\gamma\lambda_1)A_2$$

$$+ (a_4 \sinh\gamma\lambda_2)C_2 = 0$$

$$(a_1 \cos\mu\lambda_1 + K_m^* \sin\mu\lambda_1)A_1 + (a_3 \cosh\mu\lambda_2 + K_m^* \sinh\mu\lambda_2)C_1$$

$$+ (a_1 \cos\gamma\lambda_1)A_2 + (a_3 \cosh\gamma\lambda_2)C_2 = 0$$

where again

$$\lambda_1 = k^2 - \alpha_n^2$$

$$\lambda_2 = k^2 + \alpha_n^2$$

$$a_1 = \lambda_1^3 - (2-\nu)\alpha_n^2 \lambda_1$$

$$a_2 = \lambda_1^2 - \nu \alpha_n^2$$

$$a_3 = \lambda_2^3 - (2-\nu)\alpha_n^2 \lambda_2$$

$$a_4 = \lambda_2^2 - \nu \alpha_n^2$$

Simplifying the modal shape for the general case by setting  $K_1^* = K_2^* = \infty$  and  $K_{T_1}^* = K_{T_2}^* = 0$ , the normalized modal shape expression for this case can be written as:

$$W_1^* = \{\sin \lambda_1 \xi_1 + C_1^* (\sinh \lambda_2 \xi_1)\} \sin \alpha_n \eta \quad (5.20)$$

$$W_2^* = \{A_2^* (\sin \lambda_1 \xi_2) + C_2^* (\sinh \lambda_2 \xi_2)\} \sin \alpha_n \eta$$

The values of  $C_1^*$ ,  $A_2^*$  and  $C_2^*$  must satisfy the equations below:

$$\begin{aligned} (\sin \mu \lambda_1) C_1^* - (\sin \gamma \lambda_1) A_2^* - (\sin \gamma \lambda_2) C_2^* &= -\sin \mu \lambda_1 \\ (\lambda_2 \cosh \mu \lambda_1) C_1^* + (\lambda_1 \cos \gamma \lambda_1) A_2^* + (\lambda_2 \cosh \gamma \lambda_2) C_2^* &= -\lambda_1 \cos \mu \lambda_1 \\ (a_4 \sinh \mu \lambda_2) C_1^* + (a_2 \sin \gamma \lambda_1) A_2^* + (\lambda_2 \cosh \gamma \lambda_2) C_2^* &= -\lambda_1 \cos \mu \lambda_1 \\ (a_4 \sinh \mu \lambda_2) C_1^* + (a_2 \sin \gamma \lambda_1) A_2^* - (a_4 \sinh \gamma \lambda_2) C_2^* &= a_2 \sin \mu \lambda_1 \end{aligned} \quad (5.21)$$

$$a_2 = \lambda_1^2 - \nu \alpha_n^2 \quad \text{and} \quad a_4 = \lambda_2^2 - \nu \alpha_n^2$$

The special case of this case occurs when the lateral stiffness approaches infinity. The two span plates become simply supported at every edge as well as along the intermediate support.

The eigenvalues of this case are obtained by setting the value of  $K_m^* = \infty$  of the frequency equation for two span plates with lateral intermediate support and simple support at external ends. A similar procedure is taken for the modal shape expression; the normalized shape expressions for two span plates with all sides simply supported therefore are:

$$W_1^* = \{ \sin \lambda_1 \xi_1 + C_1^* (\sinh \lambda_2 \xi_1) \} \sin \alpha_n \quad (5.22)$$

$$W_2^* = \{ A_2^* (\sin \lambda_1 \xi_2 + C_2^* (\sinh \lambda_2 \xi_2)) \} \sin \alpha_n$$

The values of  $C_1^*$ ,  $A_2^*$  and  $C_2^*$  can be obtained from the following equations:

$$\sin \mu \lambda_1 + C_1^* (\sinh \mu \lambda_2) = 0$$

$$(\lambda_2 \cosh \mu \lambda_1) C_1^* + (\lambda_1 \cos \gamma_1 \lambda_1) A_2^* + (\lambda_2 \cosh \gamma \lambda_2) C_2^* = -\lambda_1 \cos \mu \lambda_1$$

$$(\sin \gamma \lambda_1) A_2^* + (\sinh \gamma \lambda_2) C_2^* = 0$$

(5.23)

5.2.3 Two Span Plates with Lateral Intermediate Spring Support and Free at the External Ends

Free support at the external end cases are encountered when both lateral and torsional spring approach at the external ends approach zero. Applying the boundary conditions for free support at both ends, one obtains relations of the constants as follows:

$$D_1 = - a_2/a_4 B_1$$

$$D_2 = - a_2/a_4 B_2$$

$$C_1 = - a_1/a_3 A_1$$

$$C_2 = - a_1/a_3 A_2$$

Satisfying the continuity conditions and eliminating some constants, the frequency equations can be written as below:

$$\begin{aligned} & (\sin\mu\lambda_1 - a_1/a_3 \sinh\mu\lambda_2)A_1 + (\cos\mu\lambda_1 - a_2/a_4 \cosh\mu\lambda_2)C_1 \\ & - (\sin\gamma\lambda_1 - a_1/a_3 \sinh\gamma\lambda_2)A_2 - (\cos\gamma\lambda_1 - a_2/a_4 \cosh\gamma\lambda_2)C_2 = 0 \\ & (\lambda_1 \cos\mu\lambda_1 - a_1/a_3 \lambda_2 \cosh\mu\lambda_2)A_1 - (\cos\mu\lambda_1 - a_2/a_4 \cosh\mu\lambda_2)C_1 \\ & + (\lambda_1 \cos\gamma\lambda_1 - a_1/a_3 \lambda_2 \cosh\gamma\lambda_2)A_2 - (\cos\gamma\lambda_1 - a_2/a_4 \cosh\gamma\lambda_2)C_2 = 0 \\ & - (a_2 \sin\mu\lambda_1 - a_1 a_4/a_3 \sinh\mu\lambda_2)A_1 + (a_2 \cos\mu\lambda_1 - a_1 \cosh\mu\lambda_2)C_1 \\ & + (a_2 \sin\gamma\lambda_1 - a_1 a_4/a_3 \sinh\gamma\lambda_2)A_2 - (a_2 \cos\gamma\lambda_1 - a_1 \cosh\gamma\lambda_2)C_2 = 0 \end{aligned}$$

$$\begin{aligned}
 & (a_1 \cos \mu \lambda_1 + K_m^* \sin \mu \lambda_1 - a_1 \cosh \mu \lambda_2 - a_1^3 / a_2 K_m^* \sinh \mu \lambda_2) A_1 \\
 & + (-a_1 \sin \mu \lambda_1 + K_m^* \cos \mu \lambda_1 - a_2 a_3 / a_4 \sinh \mu \lambda_2 - a_2 / a_4 K_m^* \cosh \mu \lambda_2) B_1 \\
 & + (a_1 \cos \gamma \lambda_1 - a_1 \cosh \gamma \lambda_2) A_2 - (a_1 \sin \gamma \lambda_1 - a_2 a_3 / a_4 \sinh \gamma \lambda_2) B_2 = 0
 \end{aligned}$$

The corresponding normalized modal shape expressions are:

$$\begin{aligned}
 W_1^* &= \{ (\sin \lambda_1 \xi_1 - a_1 / a_3 \sinh \lambda_2 \xi_1) + B_1^* (\cos \lambda_1 \xi_1 - a_2 / a_4 \cosh \lambda_2 \xi_1) \} \sin \alpha_n \\
 W_2^* &= \{ A_2^* (\sin \lambda_1 \xi_2 - a_1 / a_3 \sinh \lambda_2 \xi_2) + B_2^* (\cos \lambda_1 \xi_2 - a_2 / a_4 \cosh \lambda_2 \xi_2) \} \sin \alpha_n
 \end{aligned} \tag{5.24}$$

The constants  $A_2^*$ ,  $B_1^*$  and  $B_2^*$  are obtained from the following set of equations:

$$\begin{aligned}
 & (\cos \mu \lambda_1 - a_2 / a_4 \cosh \mu \lambda_2) B_1^* - (\sin \gamma \lambda_1 - a_1 / a_2 \sinh \gamma \lambda_2) A_2^* \\
 & - (\cos \gamma \lambda_1 - a_2 / a_4 \cosh \gamma \lambda_2) B_2^* = - (\sin \mu \lambda_1 - a_1 / a_3 \sinh \mu \lambda_2) \\
 & - (\lambda_1 \sin \mu \lambda_1 - a_2 / a_4 \lambda_2 \sinh \mu \lambda_2) B_1^* + (\lambda_1 \cos \gamma \lambda_1 - a_1 / a_3 \lambda_2 \cosh \gamma \lambda_2) A_2^* \\
 & - (\lambda_1 \sin \gamma \lambda_1 - a_2 / a_4 \lambda_2 \sinh \gamma \lambda_2) B_2^* = - (\lambda_1 \cos \mu \lambda_1 - a_1 / a_3 \lambda_2 \cosh \mu \lambda_2) \\
 & (a_2 \cos \mu \lambda_1 - a_2 \cosh \mu \lambda_2) B_1^* + (a_2 \sin \gamma \lambda_1 + (a_1 / a_3) a_4 \sinh \gamma \lambda_2) A_2^* \\
 & - (a_2 \cos \gamma \lambda_1 - a_2 \cosh \gamma \lambda_2) B_2^* = (a_2 \sin \mu \lambda_1 + a_1 a_3 / a_4 \sinh \mu \lambda_2)
 \end{aligned} \tag{5.25}$$

For the case of two span plates with simple intermediate support and free of support at the external ends, the fre-

quency equations as well as the modal shape expression can be achieved by setting  $K_m^*$  equal to infinity.

After simplification, the normalized modal shape for two span plates having simple intermediate support and free of support at the external ends can be expressed as:

$$W_1^* = \{ \sin \lambda_1 \xi_1 + (g_1/g_3) \sinh \lambda_2 \xi_1 + h_1 (\cos \lambda_1 \xi_1 + g_2 \cosh \lambda_2 \xi_1) \} \sin \alpha_n \eta$$

$$W_2^* = h_3 \{ \sin \lambda_1 \xi_2 + (g_1/g_3) \sinh \lambda_2 \xi_2 + h_2 (\cos \lambda_1 \xi_2 + g_2 \cosh \lambda_2 \xi_2) \} \sin \alpha_n \eta$$

(5.26)

where the following notations are used in the above equations:

$$h_1 = - \frac{(+\sin \lambda_1 \mu + g_1/g_3 \sinh \lambda_2 \mu)}{(\cos \lambda_1 \mu + g_2 \cosh \lambda_2 \mu)}$$

$$h_2 = - \frac{(+\sin \gamma \lambda_1 + g_1/g_3 \sinh \gamma \lambda_2)}{(\cos \gamma \lambda_1 + g_2 \cosh \lambda_2 \gamma)}$$

$$h_3 = - \frac{(\lambda_1 \cos \mu \lambda_1 + g_1/g_3 \lambda_2 \cos \mu \lambda_2) + h_1 \lambda_1 (-\sin \mu \lambda_1 + g_2 \lambda_2 \sinh \mu \lambda_2)}{(\lambda_1 \cos \gamma \lambda_1 + g_1/g_3 \lambda_2 \cosh \gamma \lambda_2) + h_2 \lambda_1 (-\sin \gamma \lambda_1 + g_2 \lambda_2 \sinh \gamma \lambda_2)}$$

$$g_1 = \lambda_1 / \lambda_2$$

$$g_2 = -(k^2 - (1+\nu)\alpha_n^2) / (k^2 + (1-\nu)\alpha_n^2)$$

$$g_3 = -(k^2 - (3-\nu)\alpha_n^2) / (k^2 - (1-\nu)\alpha_n^2)$$

5.2.4 Two Span Plates with Lateral Intermediate Spring Support, Simple Support at One End and Free of Support at the Other End

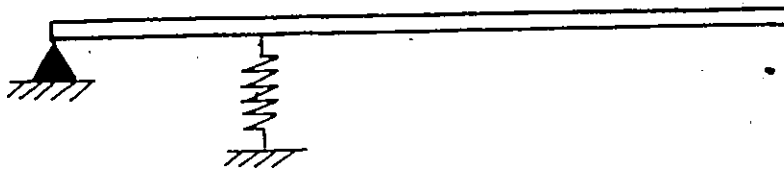


FIG. 5.5. Two span plates with lateral intermediate spring support, simple support at one end and free at the other.

This case occurs when on one end the torsional spring stiffness approaches zero and the linear spring approaches infinity. While at the other end, both of the spring stiffnesses approach zero. It has been discussed in Chapter 3 that Eqs. (3.11b) and (3.12b) are sets of equations which satisfy the simple support conditions at the end supports of a plate. Eqs. (3.11c) and (3.12c) also satisfy the boundary conditions for the free support at an end of plates.

Thus, the frequency equations for this case are established by combining these four equations (3.11b), (3.12b), (3.11c) and (3.12c) with the continuity conditions.

The continuity conditions are satisfied by Eqs. (5.5), (5.6), (5.7) and (5.8).

For the normalized modal shape expressions, following the usual procedure can be written as follows:

$$\begin{aligned}
 W_1^* &= \{\sin\lambda_1\xi_1 + C_1^* \sinh\lambda_2\xi_1\} \sin\alpha\eta \\
 W_2^* &= \{A_2^* (\sin\lambda_1\xi_2 - a_1/a_3 \sinh\lambda_2\xi_2) + B_2^* (\cos\lambda_1\xi_2 - a_2/a_4 \cosh\lambda_2\xi_2)\} \\
 &\quad \sin\alpha\eta \qquad \qquad \qquad (5.27)
 \end{aligned}$$

The values of  $C_1^*$ ,  $A_2^*$  and  $B_2^*$  are the roots of the equations below:

$$\begin{aligned}
 &(\sin\mu\lambda_1)C_1^* - (\sin\gamma\lambda_1 - a_1/a_3 \sin\gamma\lambda_2)A_2^* \\
 &- (\cos\gamma\lambda_1 - a_2/a_4 \cosh\gamma\lambda_2)B_2^* = -\sin\mu\lambda_1 \\
 &(\lambda_2 \cosh\mu\lambda_2)C_1^* + (\lambda_1 \cos\gamma\lambda_1 - a_1/a_3 \lambda_2 \cosh\gamma\lambda_2)A_2^* \\
 &- (\lambda_1 \sin\gamma\lambda_2 - a_2/a_4 \lambda_2 \sinh\gamma\lambda_2)B_2^* = -\lambda_1 \cos\mu\lambda_1 \\
 &(a_4 \sin\mu\lambda_2)C_1^* + (a_2 \sin\gamma\lambda_1 + a_1/a_3 \cdot a_4 \sinh\gamma\lambda_2)A_2^* \\
 &- (a_2 \cos\gamma\lambda_1 - a_2 \cosh\gamma\lambda_2)B_2^* = a_2 \sin\mu\lambda_1 \qquad \qquad \qquad (5.28)
 \end{aligned}$$

The case when the intermediate spring stiffness reaches infinity, this intermediate support becomes rigid support.

Utilizing the usual procedure by setting the value of  $K_m^* = \infty$ , the frequency equations as well as the modal shapes expressions can be derived.

The normalized modal shapes for the case of two span plates having simple and free support at the external ends and simple support at the intermediate are as follows:

$$W_1^* = (\sin \lambda_1 \xi_1 + h_1 \sinh \lambda_2 \xi_1) \sin \alpha_n \eta$$

$$W_2^* = h_3 \{ (\sin \lambda_1 \xi_2 + g_1/g_3 \sinh \lambda_2 \xi_2) + h_2 (\cos \lambda_1 \xi_2 + g_2 \cosh \lambda_1 \xi_2) \} \sin \alpha_n \eta \quad (5.29)$$

where

$$h_1 = - \frac{\sin \lambda_1 \mu}{\sinh \lambda_2 \mu}$$

$$h_2 = - \sin \lambda_1 \gamma + g_1/g_3 \sinh \lambda_2 \gamma$$

$$h_3 = - \frac{\lambda_1 \cos \lambda_1 \mu + h_1 \lambda_2 \cosh \lambda_2 \mu}{\lambda_1 \cos \lambda_1 \gamma + g_1/g_3 \lambda_2 \cosh \lambda_2 \gamma + h_2 (-\lambda_1 \sin \lambda_1 \gamma + g_2 \lambda_2 \sinh \lambda_2 \gamma)}$$

$$g_1 = \lambda_1 / \lambda_2$$

$$g_2 = -(k^2 - (1+\nu)\alpha_n^2) / (k^2 + (1-\nu)\alpha_n^2)$$

$$g_3 = -(k^2 - (3-\nu)\alpha_n^2) / (k^2 - (1-\nu)\alpha_n^2)$$

5.2.5 Two Span Plates with Lateral Intermediate Spring and Having Simple Support at One End and Clamped at the Other

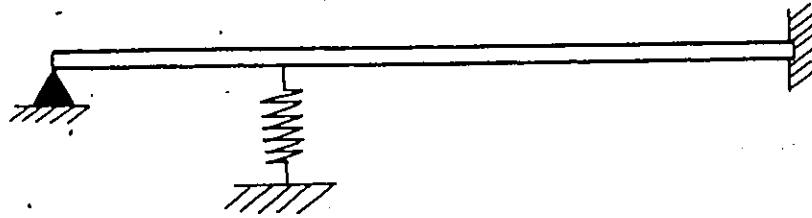


FIG. 5.6. Two span plates with lateral intermediate spring support and simple support at one end and clamped at the other.

Again utilizing relations of the unknown constants for simple and clamped conditions as established earlier in Eqs. (3.11b), (3.12b), (3.11a) and (3.12a), the frequency equations can be obtained by combining these four equations with the continuity conditions as established in Eqs. (5.5), (5.6), (5.7) and (5.8).

The normalized modal shape expressions can be established easily by eliminating some constants.

The resulting expressions are:

$$W_1^* = \{\sin \lambda_1 \xi_1 + C_1^* \sinh \lambda_2 \xi_1\} \sin \alpha_n \eta$$

$$W_2^* = \{A_2^* (\sin \lambda_1 \xi_2 - \lambda_1 / \lambda_2 \sinh \lambda_2 \xi_2) + B_2^* (\cos \lambda_1 \xi_2 - \cosh \lambda_2 \xi_2)\} \sin \alpha_n \eta$$

(5.30)

where  $C_1^*$ ,  $A_2^*$  and  $B_2^*$  are the roots of equations as follows:

$$\begin{aligned}
 & (\sinh\mu\lambda_2)C_1^* - (\sin\gamma\lambda_1 - \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2^* \\
 & - (\cos\gamma\lambda_1 - \cosh\gamma\lambda_2)B_2^* = -\sin\mu\lambda_1 \\
 & (\lambda_2 \cosh\mu\lambda_2)C_1^* + (\lambda_1 \cos\gamma\lambda_1 - \lambda_2 \cosh\gamma\lambda_2)A_2^* \\
 & + (-\lambda_1 \sin\gamma\lambda_1 - \lambda_2 \sinh\gamma\lambda_2)B_2^* = -\lambda_1 \cos\mu\lambda_1 \\
 & (a_4 \sinh\mu\lambda_2)C_1^* + (-a_1 \sin\gamma\lambda_1 + a_4 \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2^* \\
 & + (-a_2 \cosh\gamma\lambda_1 + a_4 \cosh\gamma\lambda_2)B_2^* = a_2 \sin\mu\lambda_1 \tag{5.31}
 \end{aligned}$$

The special case arises when  $K_m^*$  approaches infinity. After employing the same procedure as used earlier to express the modal shape equations, its normalized modal shapes for two span plates with simple intermediate support and having simple support at one end and clamped support at the other are as follows:

$$\begin{aligned}
 W_1^*(\xi_1, \eta) &= (\sin\lambda_1 \xi_1 + h_1 \sinh\lambda_2 \xi_1) \sin\alpha_n \eta \\
 W_2^*(\xi_2, \eta) &= h_3 \{ (\sin\lambda_1 \xi_2 - g_1 \sinh\lambda_2 \xi_2) + h_2 (\cos\lambda_1 \xi_2 - \cosh\lambda_2 \xi_2) \} \\
 & \quad \sin\alpha_n \eta \tag{5.32}
 \end{aligned}$$

where

$$g_1 = \lambda_1/\lambda_2$$

$$h_1 = - \frac{\sin \lambda_1 \mu}{\sinh \lambda_2 \mu}$$

$$h_2 = - \frac{(\sin \lambda_1 \gamma - g_1 \sinh \lambda_2 \lambda)}{(\cos \lambda_1 \gamma - \cosh \lambda_2 \gamma)}$$

$$h_3 = - \frac{(\lambda_1 \cos \lambda_1 \mu + h_1 \lambda_2 \cosh \lambda_2 \mu)}{(\lambda_1 \cos \lambda_1 \gamma - g_1 \lambda_2 \cosh \lambda_2 \gamma) - h_2 (\lambda_1 \sin \lambda_1 \gamma + \lambda_2 \cosh \lambda_2 \gamma)}$$

5.2.6 Two Span Plates with Lateral Intermediate Spring Supports and Free of Support at One End and Clamped at the Other

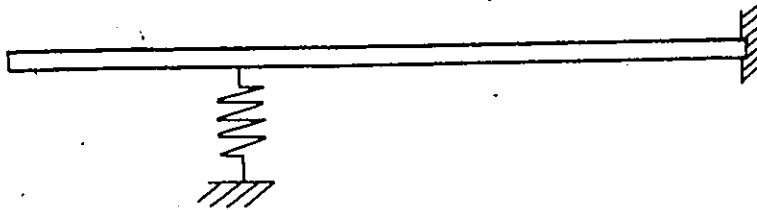


FIG. 5.7. Two span plates with lateral intermediate spring supports and having free support at one end and clamped at the other.

Similarly, for this case, use is made of Eqs. (3.11c), (3.12c), (3.11a) and (3.12a) for these conditions, and combining with Eqs. (5.5), (5.6), (5.7) and (5.8) for the continuity conditions, the frequency equations can be set up.

The modal shape expressions, after making certain simplifications, can be expressed as:

$$\begin{aligned}
 W_1^* &= \{(\sin\lambda_1\xi_1 - a_1/a_3 \sinh\lambda_2\xi_1) + B_1^*(\cos\lambda_1\xi_1 - a_2/a_4 \cosh\lambda_2\xi_1)\} \sin\alpha_n \eta \\
 W_2^* &= \{A_2^*(\sin\lambda_1\xi_2 - \lambda_1/\lambda_2 \sinh\lambda_2\xi_2) + B_2^*(\cos\lambda_1\xi_2 - \cosh\lambda_2\xi_2)\} \sin\alpha_n \eta
 \end{aligned}
 \tag{5.33}$$

where the values of  $B_1^*$ ,  $A_2^*$  and  $B_2^*$  are the roots of the equations below:

$$\begin{aligned}
 &(\cos\mu\lambda_1 - a_2/a_4 \cosh\mu\lambda_2)B_1^* - (\sin\gamma\lambda_1 - \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2^* \\
 &- (\cos\gamma\lambda_1 - \cosh\gamma\lambda_2)B_2^* = - (\sin\mu\lambda_1 - a_1/a_3 \sinh\mu\lambda_2) \\
 &- (\lambda_1 \sin\mu\lambda_1 - a_2/a_4 \lambda_2 \sinh\mu\lambda_2)B_1^* + (\lambda_1 \cos\gamma\lambda_1 - \lambda_2 \cosh\gamma\lambda_2)A_2^* \\
 &+ (-\lambda_1 \sin\gamma\lambda_1 - \lambda_2 \sinh\gamma\lambda_2)B_2^* = - (\lambda_1 \cos\mu\lambda_1 - a_1/a_3 \lambda_3 \cosh\mu\lambda_2) \\
 &(a_2 \cos\mu\lambda_1 - a_2 \cosh\mu\lambda_2)B_1^* + (a_2 \sin\gamma\lambda_1 + a_4 \lambda_1/\lambda_2 \sinh\gamma\lambda_2)A_2^* \\
 &+ (-a_2 \cos\gamma\lambda_1 - a_4 \cosh\gamma\lambda_2)B_2^* = (a_2 \sin\mu\lambda_1 + a_1 a_4/a_2 \sinh\mu\lambda_2)
 \end{aligned}
 \tag{5.34}$$

For the special case of this case when the intermediate spring is becoming rigid support, the frequency equations are obtained by setting  $K_m^* = \infty$ .

The modal shapes for this special case, after making some simplifications, can be written as:

$$W_1^*(\xi_1, \eta) = \frac{\{(\sin \lambda_1 \xi_1 + g_1/g_3 \sinh \lambda_2 \xi_2) + h_1(\cos \lambda_1 \xi_1 + g_2 \cos \lambda_2 \xi_1)\}}{\sin \alpha_n \eta}$$

$$W_2^*(\xi_2, \eta) = \frac{h_3(\sin \lambda_1 \xi_2 - g_1 \sinh \lambda_2 \xi_2) + h_2(\cos \lambda_1 \xi_2 - \cosh \lambda_2 \xi_2)}{\sin \alpha_n \eta} \quad (5.34)$$

where

$$g_1 = \lambda_1 / \lambda_2$$

$$g_2 = k^2 - (1-\nu)\alpha_n^2/k^2 + (1-\nu)\alpha_n^2 \quad g_3 = (k^2 - (3-\nu)\alpha_n^2)/(k - (1-\nu)\alpha_n^2)$$

$$h_1 = - \frac{\sin \lambda_1 \mu + g_1/g_3 \sinh \mu \lambda_2}{\cos \lambda_1 \mu + g_2 \cosh \lambda_2 \mu}$$

$$h_2 = - \frac{\sin \lambda_1 \gamma - g_1 \sinh \lambda_2 \gamma}{\cos \lambda_1 \gamma - \cosh \lambda_2 \gamma}$$

$$h_3 = - \frac{(\lambda_1 \cos \lambda_1 \mu + g_1/g_3 \lambda_2 \cosh \lambda_2 \mu) + h_1(-\lambda_1 \sin \lambda_1 \mu + g_2 \lambda_2 \sinh \lambda_2 \mu)}{\lambda_1 \cos \lambda_1 \gamma - g_1 \lambda_2 \cosh \lambda_2 \gamma - h_2(\lambda_1 \sin \lambda_1 \gamma + \lambda_2 \sinh \lambda_2 \gamma)}$$

## CHAPTER 6

### RESULTS AND DISCUSSION

The results are presented in the form of graphs. Fig. (A1) and Fig. (A2) show the variations of the eigenvalues of fundamental frequencies with respect to the variation of intermediate spring constants and different aspect ratios. Figs. (A3) and (A4) show the variation of the eigenvalues of fundamental frequency with respect to the spacing ratio and different aspect ratios for classical boundary conditions which are the special cases of this analysis. Figs. (A5) to (A10) show the independent variations of the spring parameters  $K_i^*$  and  $K_T^*$  and the aspect ratios.

When the intermediate support of the two span plate is placed close to the external edge support, the two span plate will degenerate into single span. It is also known that the eigenvalues of double span are always larger than those of single span plates. These reasons explain why there are various peaks in the eigenvalue curves shown in the Figs. (A3) to (A12).

Realizing that the variations of the aspect ratio and the spring parameters are ranging from zero to infinity, it is necessary to transform these variables. This is done with

a view to simplify the problem of presenting the results. A transformation parameter is introduced as:

$$\zeta_z = z/(1+z)$$

where  $z$  is the original value and  $\zeta_z$ , the transformed value. With this definition, the value of  $\zeta_z$  varies from 0 to 1 which corresponds to the original range of  $z$  from 0 to infinity.

In this thesis, the eigenvalues of the fundamental frequencies are calculated.

Although in some cases higher mode analysis is important, the designers and analysts are primarily concerned with the fundamental frequencies. Presenting the higher modes will require many more graphs or tables, since for plates the mode shapes are associated with the two rectangular directions.

Since the flexural rigidity contains  $\nu$ , the frequencies themselves depend upon the Poisson ratio. The effect of the Poisson's ratio will be more when one or more edges are free. For the calculations, the value of Poisson's ratio is taken as 0.3.

The higher modes, even though they are not presented here, can be generated easily from the same set of equations presented earlier in Chapters 4 and 5. The results of square plates with symmetrical boundary conditions, obtained from this analysis, are presented in the form of tables and may be found in Appendix B. This set of tables contains the eigenvalues of square plates with simple supports in two opposite sides up to fifth-fifth mode.

The expressions of normalized modal shapes have been established for the general solutions as well as for the simplified forms for the special cases in Chapters 4 and 5.

It is intended that these results will help designers and analysts to find the desired values of natural frequencies of double span plate vibration and their pertinent modal shape expressions.

Several values for the special cases  $\mu = 0$  or  $1$  which can be found in Figs. (A3) and (A4) are compared with those available in the literature.

The special cases  $\mu = 0$  and  $\zeta_{AR} = \frac{1}{2}$ , correspond to a single span square plate.

For  $\mu = 0$  and  $\zeta_{AR} = \frac{1}{2}$ , the eigenvalue  $k$  for the two span clamped plate shown in Fig. (A3) is 5.35. This value is in excellent agreement with the results for fundamental frequency available in [3,4] for a square clamped-simple-clamped-simple plate. The difference in the two values is less than .8%. Tracing the solid line for  $\zeta_{AR} = \frac{1}{2}$  in the above-mentioned figure yields the eigenvalue for the fundamental mode of a fixed-simple-simple-simple square plate. According to the calculations performed here, this value is 4.85 which is about 0.02% less than the results presented in [4]. Following the broken line in Fig. (A4) for  $\zeta_{AR} = \frac{1}{2}$ , the eigenvalue at  $\mu = 0$  is 5.0. This value is within 2% of the eigenvalue for the fundamental mode for square simple-simple-clamped-simple plates

given in a Hokkaido University report as quoted in [5]. The plate with simple free conditions at external edges as shown in Fig. (A4) reduces to a single span square plate with clamped-simple-free-simple conditions at  $\mu = 0$  and for

$\zeta_{AR} = \frac{1}{2}$ . The eigenvalue obtained by the author is 3.6 which is within 1.1% of the eigenvalue quoted in [4]. Two more values from Fig. (A4) at  $\mu = 1$  and  $\zeta_{AR} = \frac{1}{2}$  can be compared with those available in the literature. The solid line for the above noted parametric values gives an eigenvalue of 4.85 which is less than 0.1% off the value of the Hokkaido University Report referred to earlier in this section. Once again, the second case mentioned in the legend of Fig. (A4),  $\mu = 1$  and  $\zeta_{AR} = \frac{1}{2}$ , gives an eigenvalue of 4.45 which is extremely close to the value in [4].

Figs. (A11) and (A12) show the eigenvalues for two span beams with various end conditions. These results are obtained by making the plate solution given in Eq. (2.16) uni-directional terms of  $\xi$ . These results are exactly the same as given in [14].

## CHAPTER 7

### CONCLUSIONS

The treatment of the vibration of two span plates is not available in the literature. Only some special cases of this family can be found in the literature. The treatment is still quite inadequate.

Thus, the results of this analysis can be compared with the one available only in the area of its special cases. It is interesting to note the behaviour of classical supports when the intermediate support is placed very close to the external support, the two span plates degenerate into single span, and the external support behaviour changes depending on what the original support is. The two span plates originally having simple supports behave as a clamped support when approached closely by simple intermediate supports. When the edge is originally clamped, the combination of these supports and intermediate supports becomes a clamped support. When the hanging edge is approached by simple intermediate supports, it behaves as a simple support. Similar limiting analysis has been presented earlier [14].

It can be concluded also that all families of double span plate vibrations with two simple support edges as well

as the beam vibration with proper setup can be generated from the present analysis.

This analysis provides engineers and other persons working in the area of plate vibration with only one set of parent equations instead of a number of equations for different kinds of supports.

The simplified modal shape expressions are provided for every limiting case.

All possible cases in this family of two plates with two sides simply supported are analyzed thoroughly.

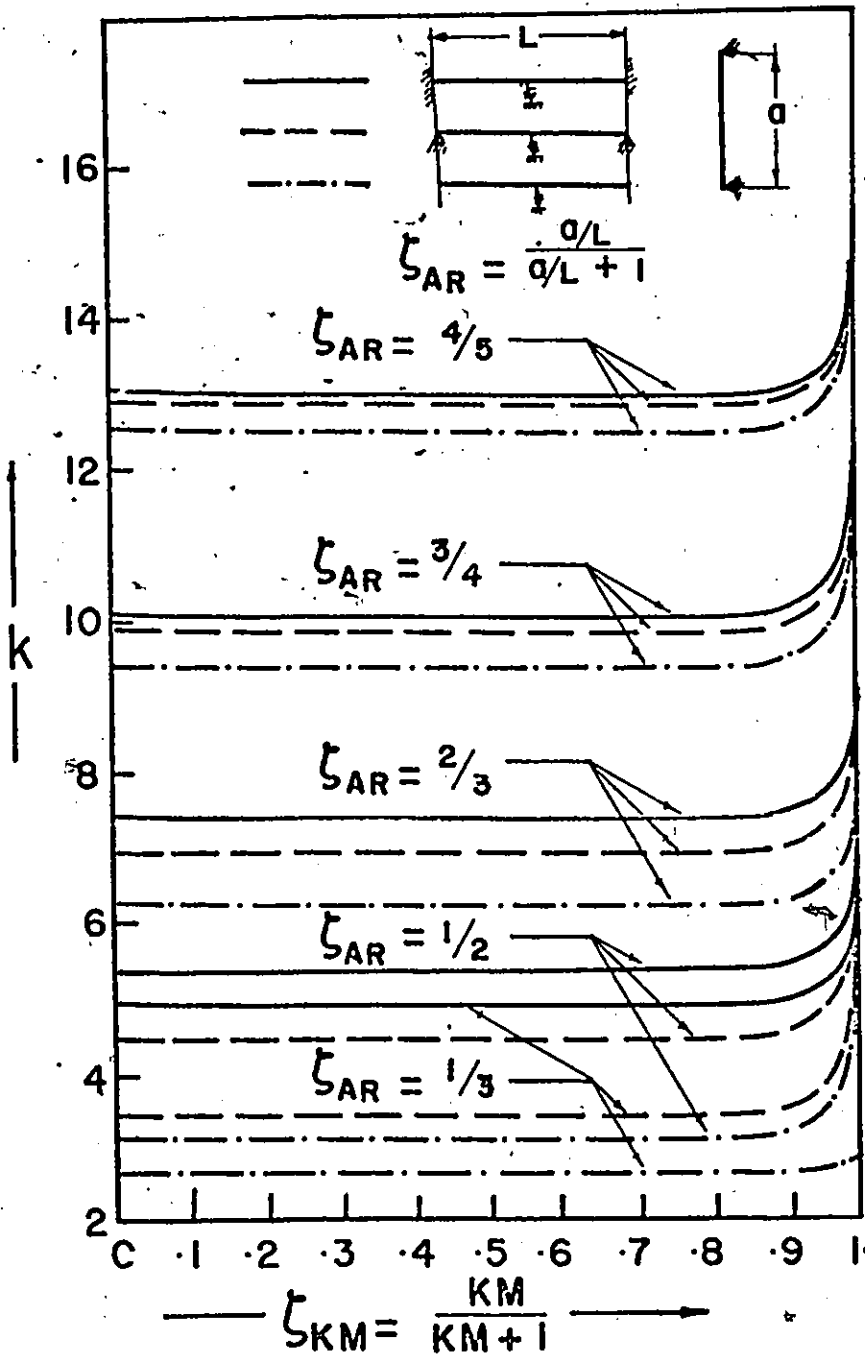


FIG. A1

VARIATION OF THE EIGENVALUE  $k$  WITH THE STIFFNESS OF INTERMEDIATE SPRING FOR VARIOUS END CONDITIONS AND ASPECT RATIOS

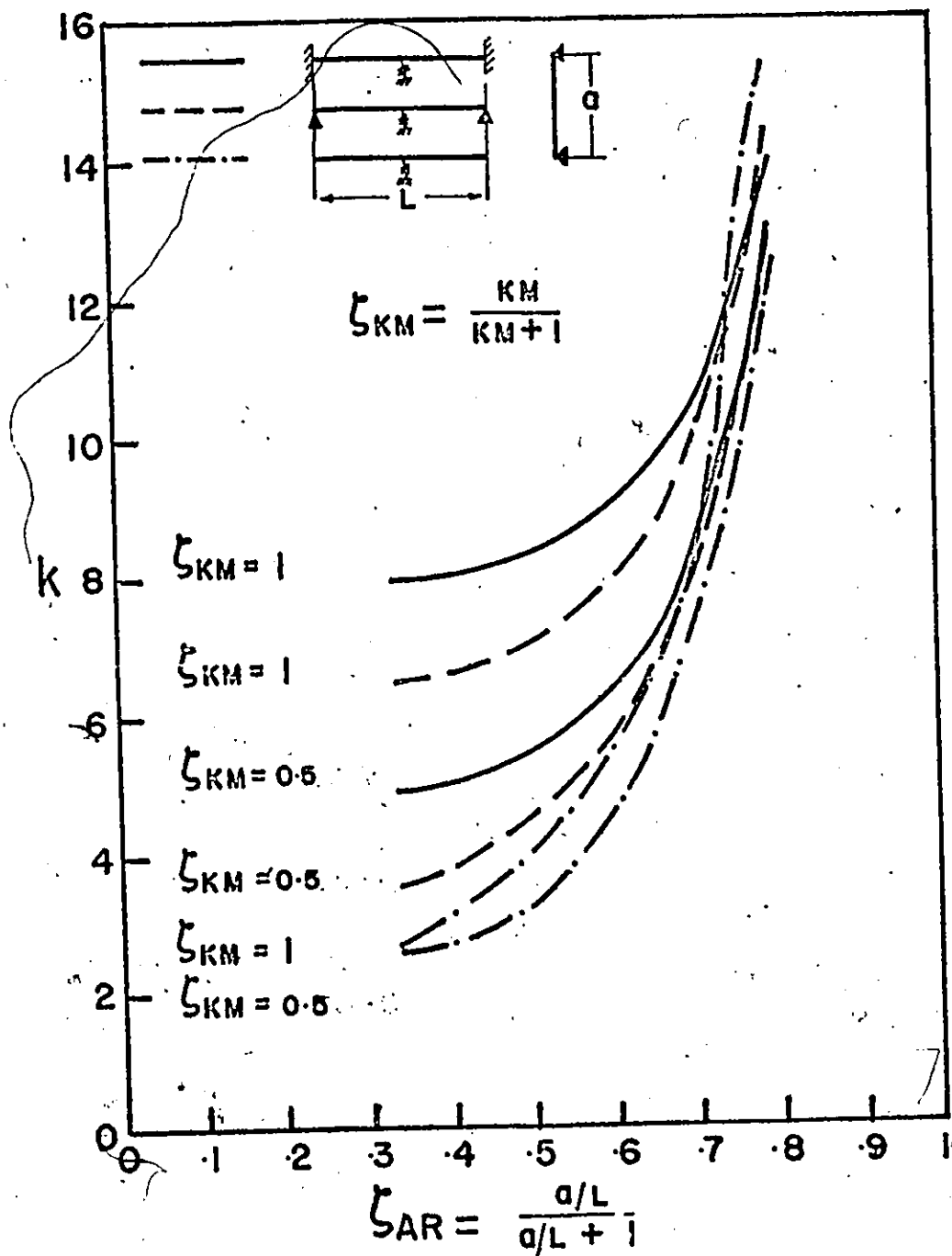


FIG. A2

VARIATION OF THE EIGENVALUE  $k$  WITH ASPECT RATIO FOR VARIOUS END CONDITIONS AND THE STIFFNESSES OF INTERMEDIATE SPRING.

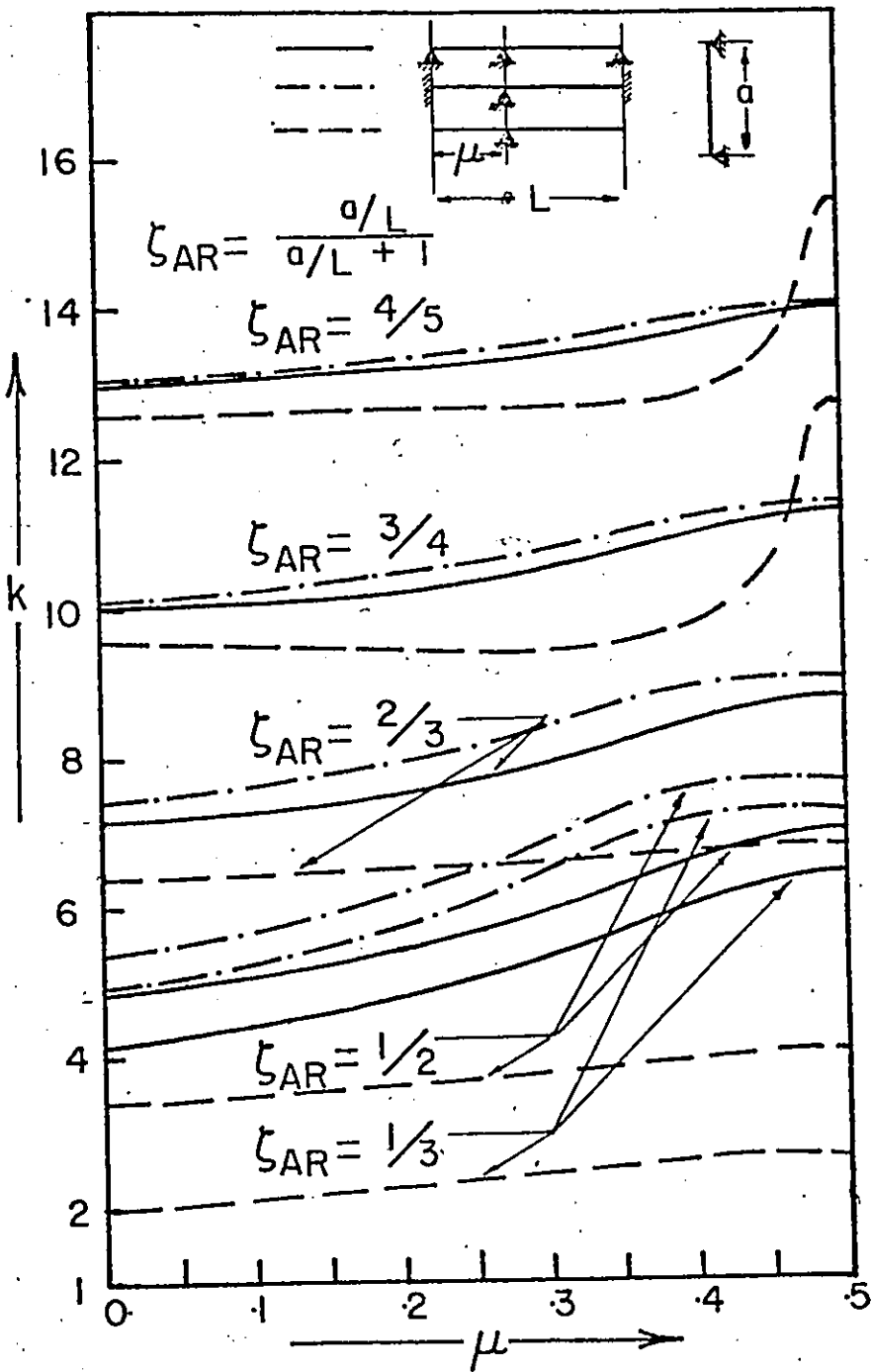


FIG. A3

VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING PARAMETER  $\mu$  FOR VARIOUS END CONDITIONS AND PLATE ASPECT RATIOS

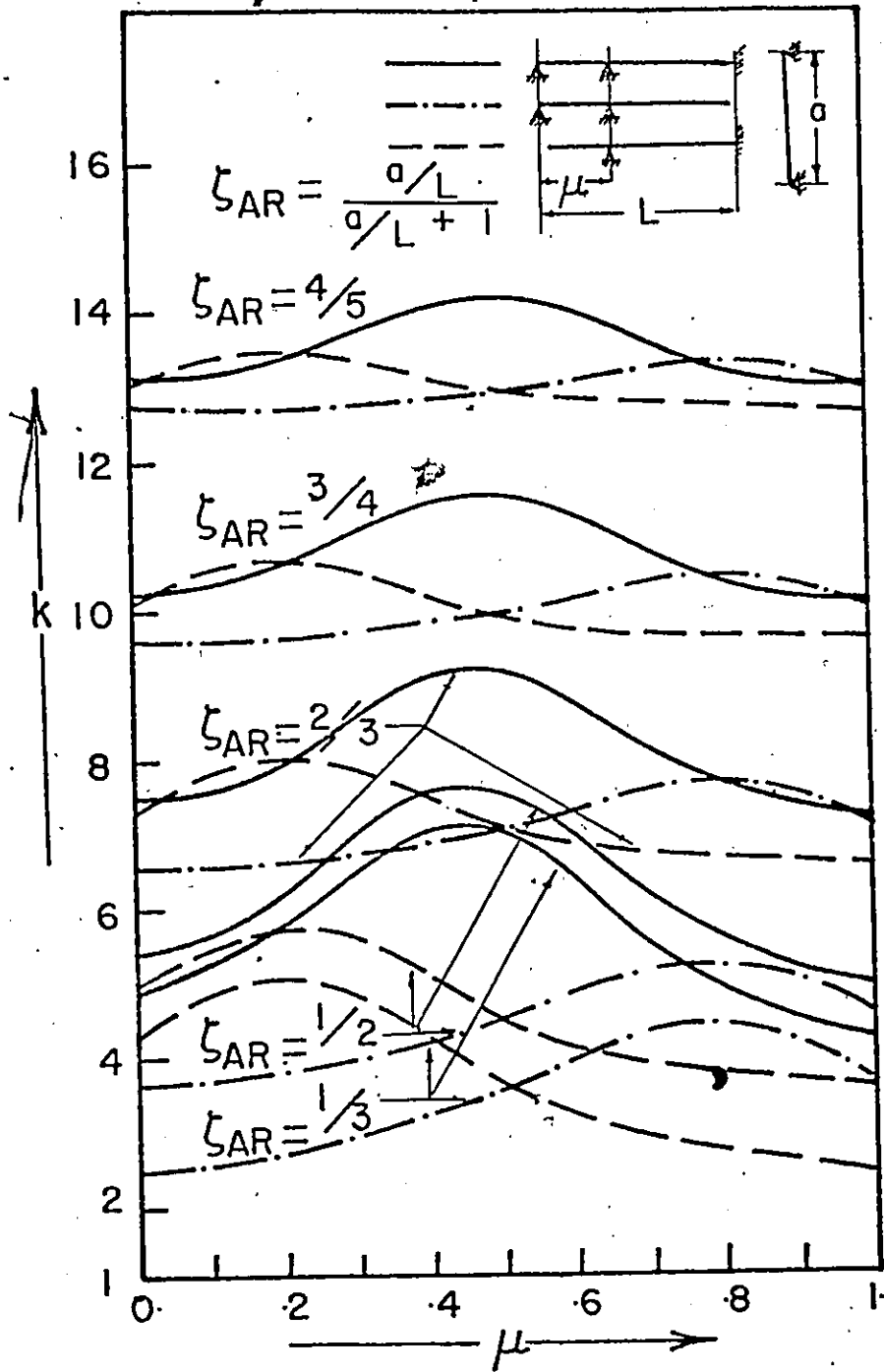


FIG. A4

VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING PARAMETER  $\mu$  FOR VARIOUS END CONDITIONS AND PLATE ASPECT RATIOS

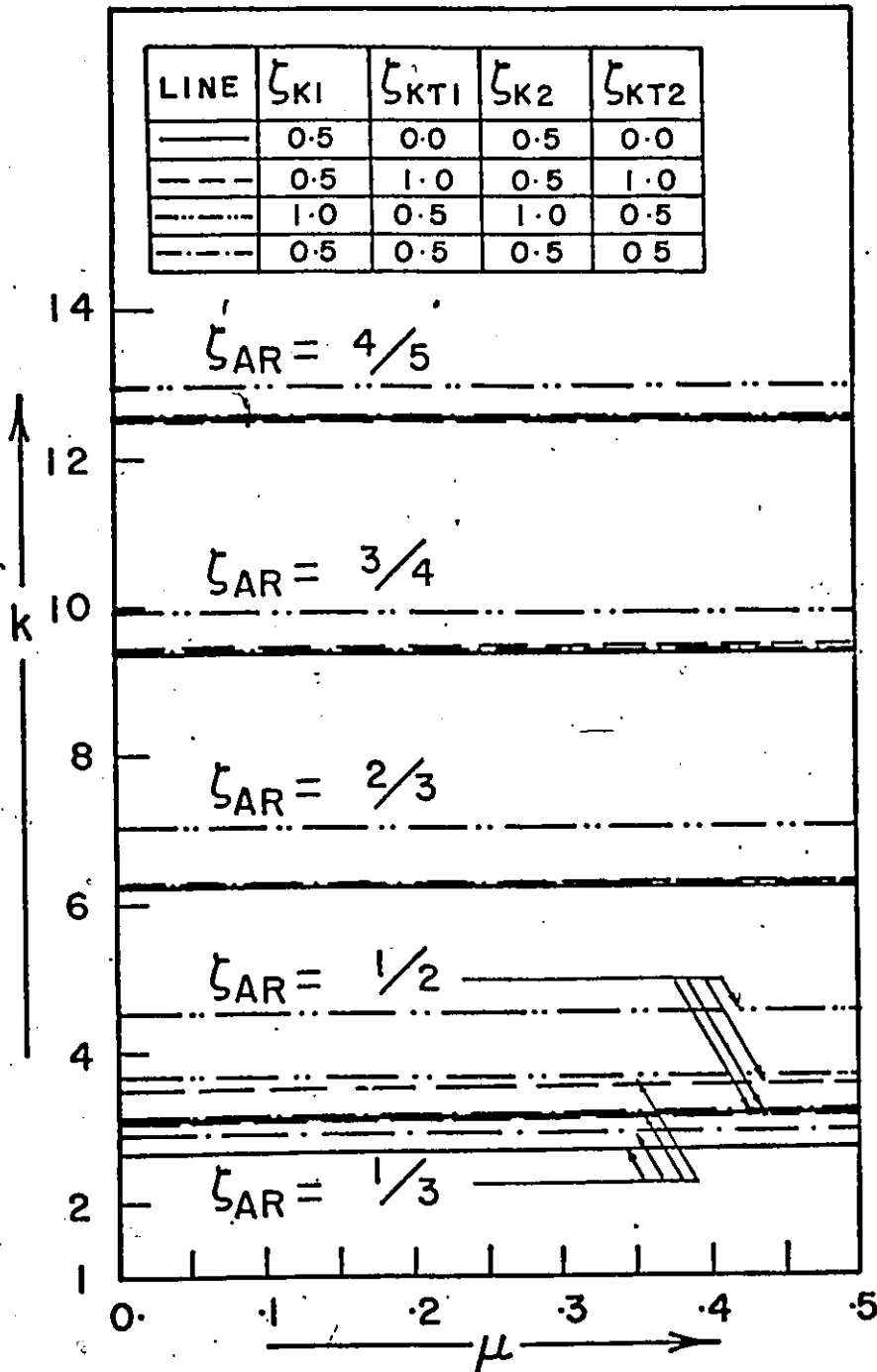


FIG: A5

VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND PLATE ASPECT RATIOS

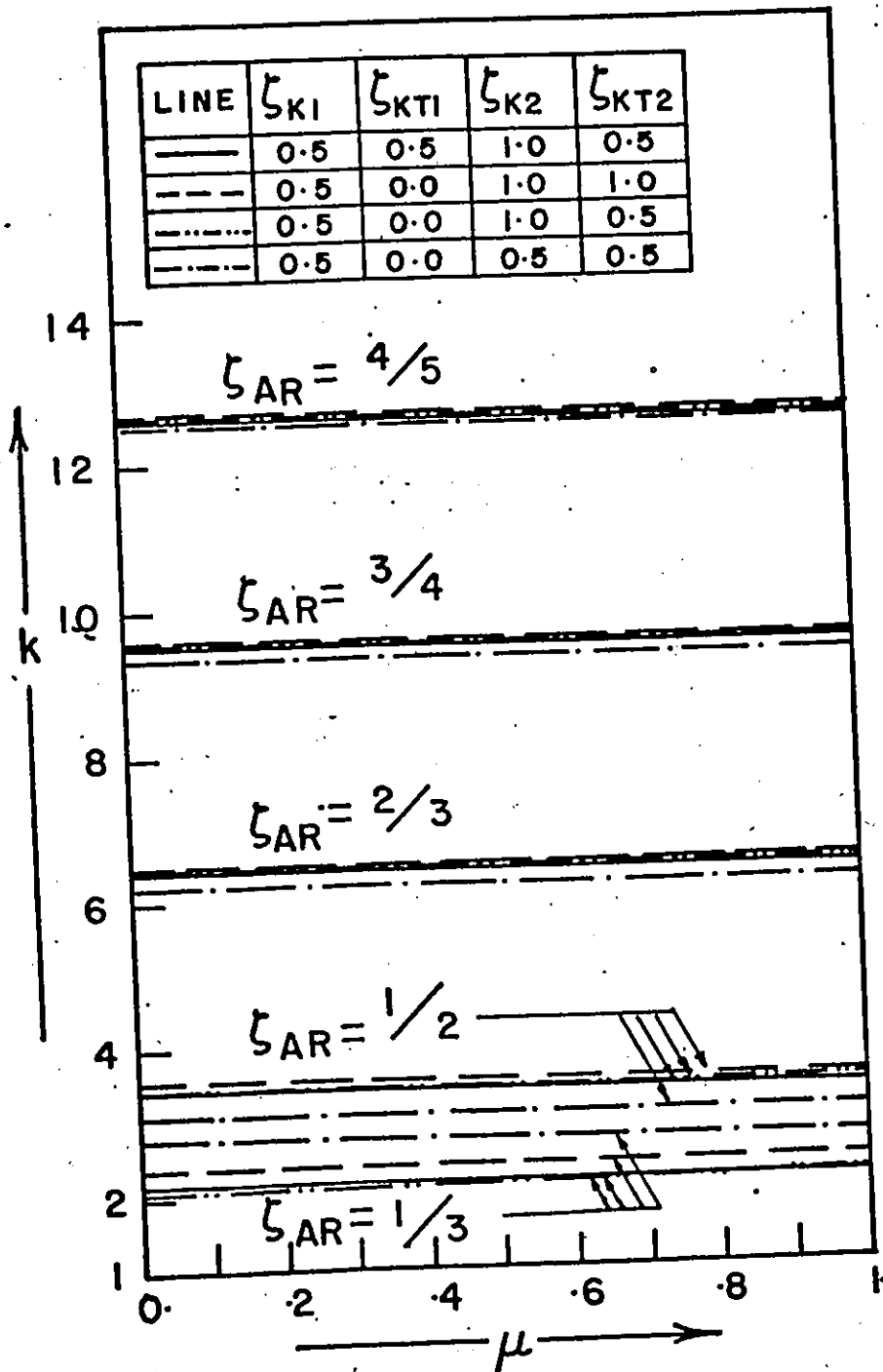


FIG. A6  
 VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
 PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND  
 PLATE ASPECT RATIOS

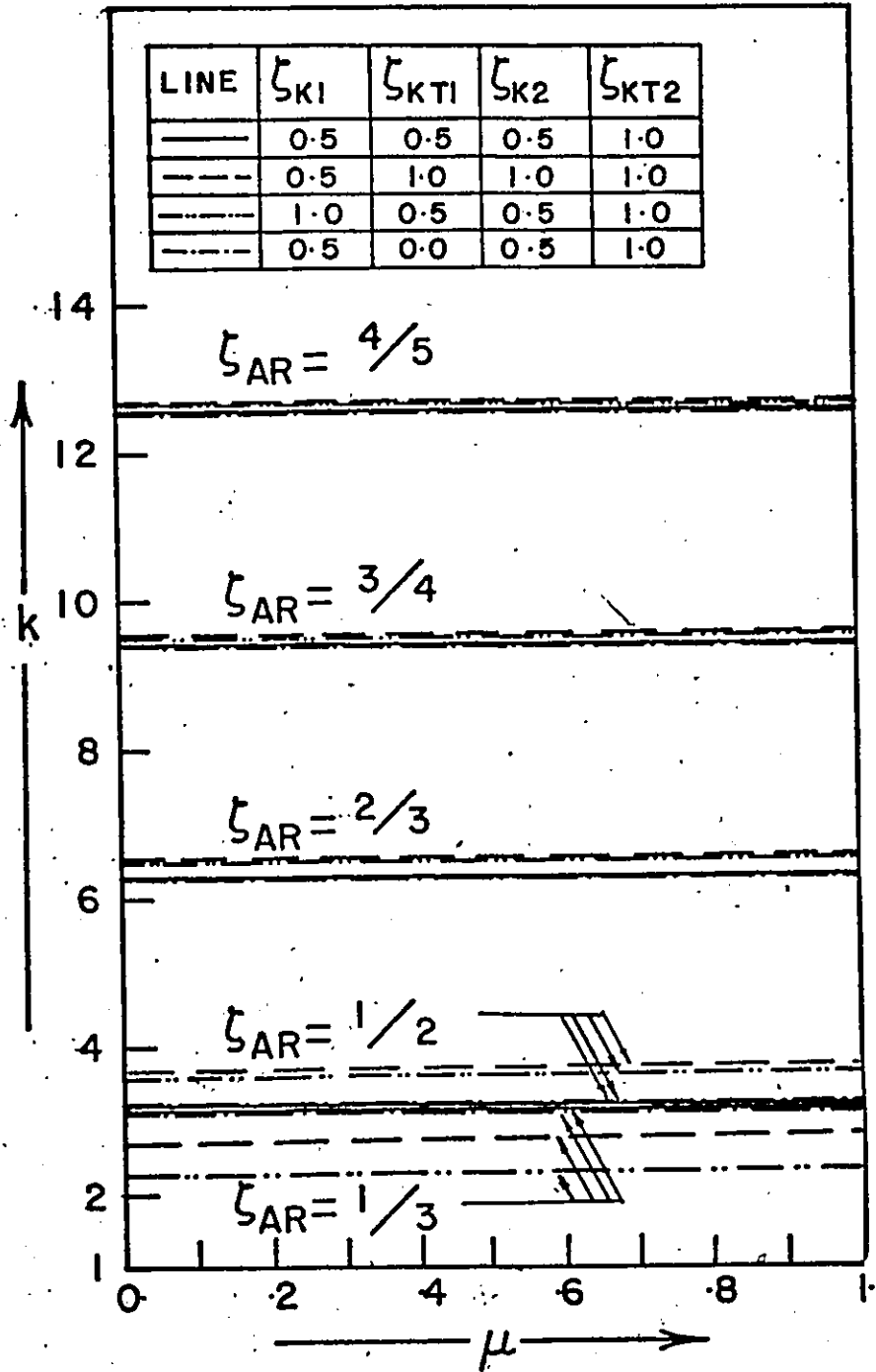


FIG. A7  
 VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
 PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND  
 PLATE ASPECT RATIOS

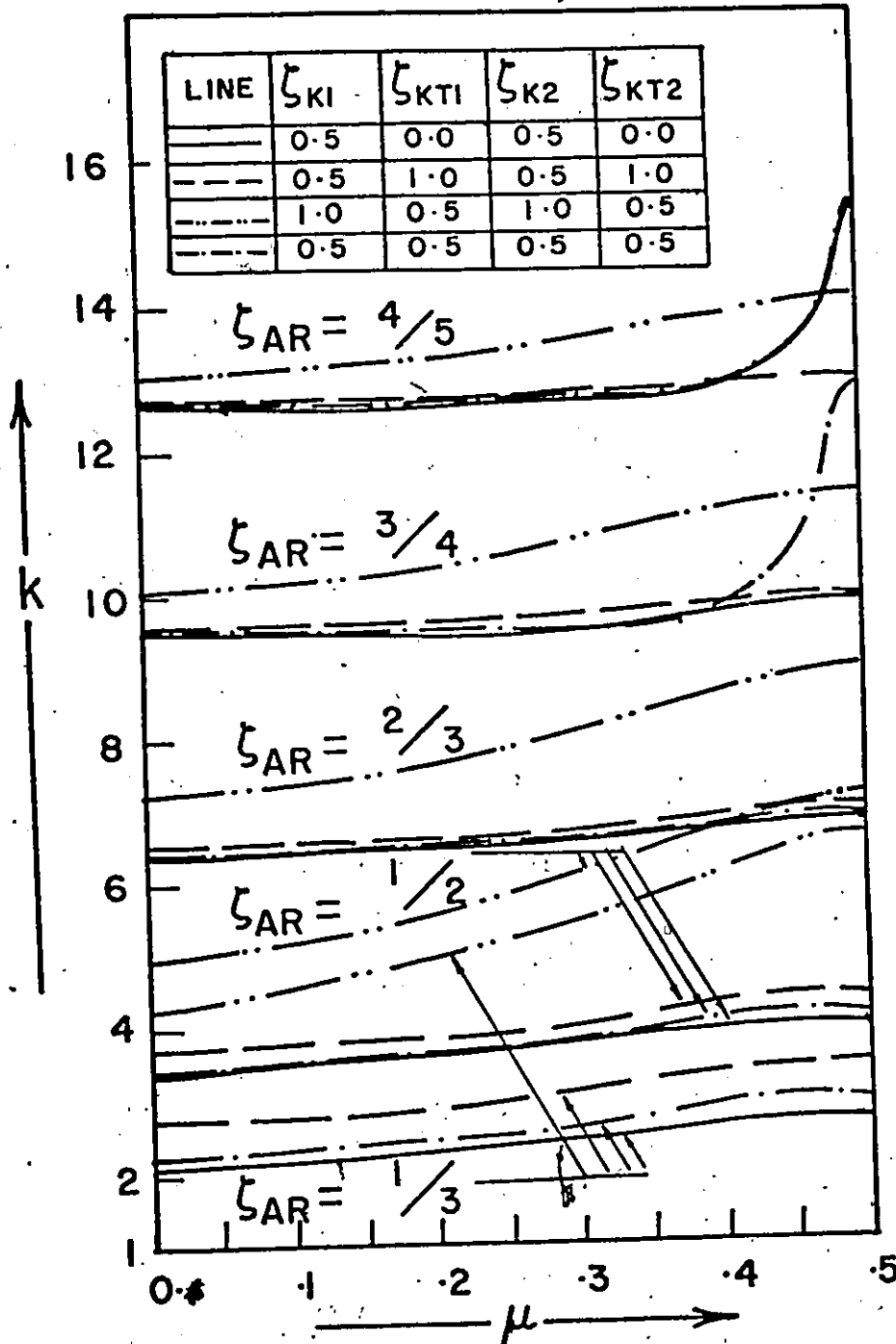


FIG. A8  
 VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
 PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND  
 PLATE ASPECT RATIOS

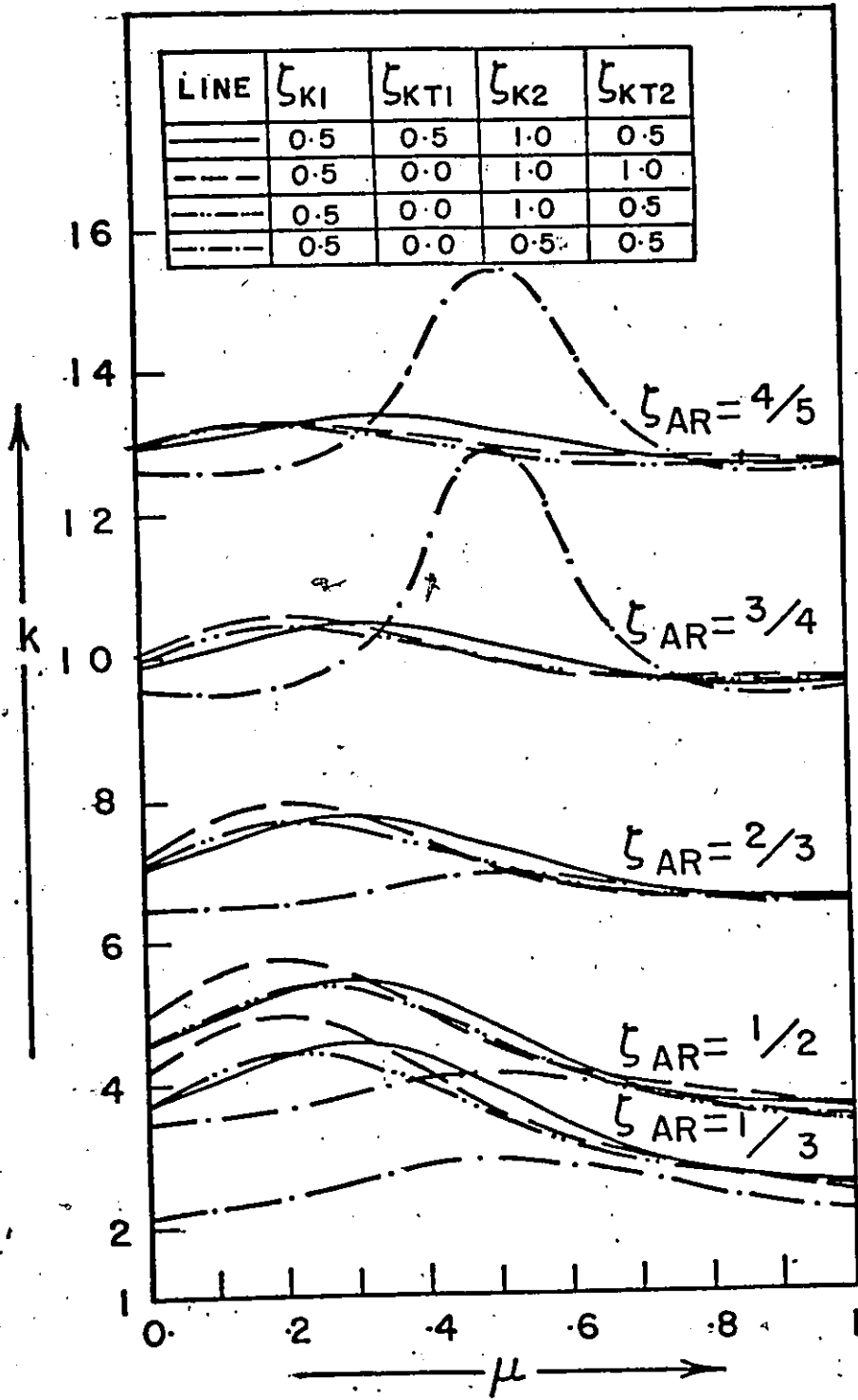


FIG. A9

VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND PLATE ASPECT RATIOS

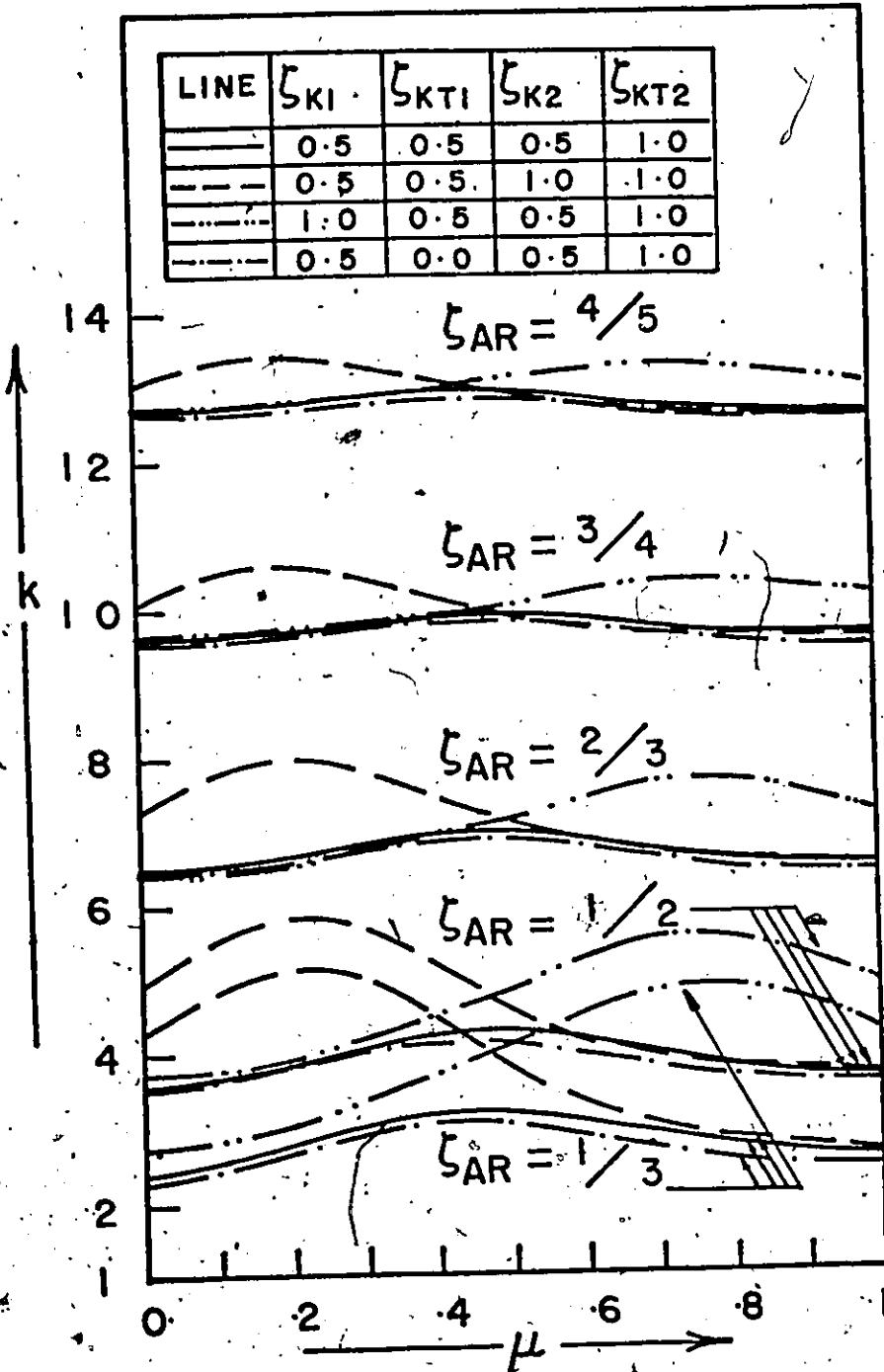


FIG. A10  
 VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
 PARAMETER  $\mu$  FOR VARIOUS SPRING SUPPORTS AND  
 PLATE ASPECT RATIOS

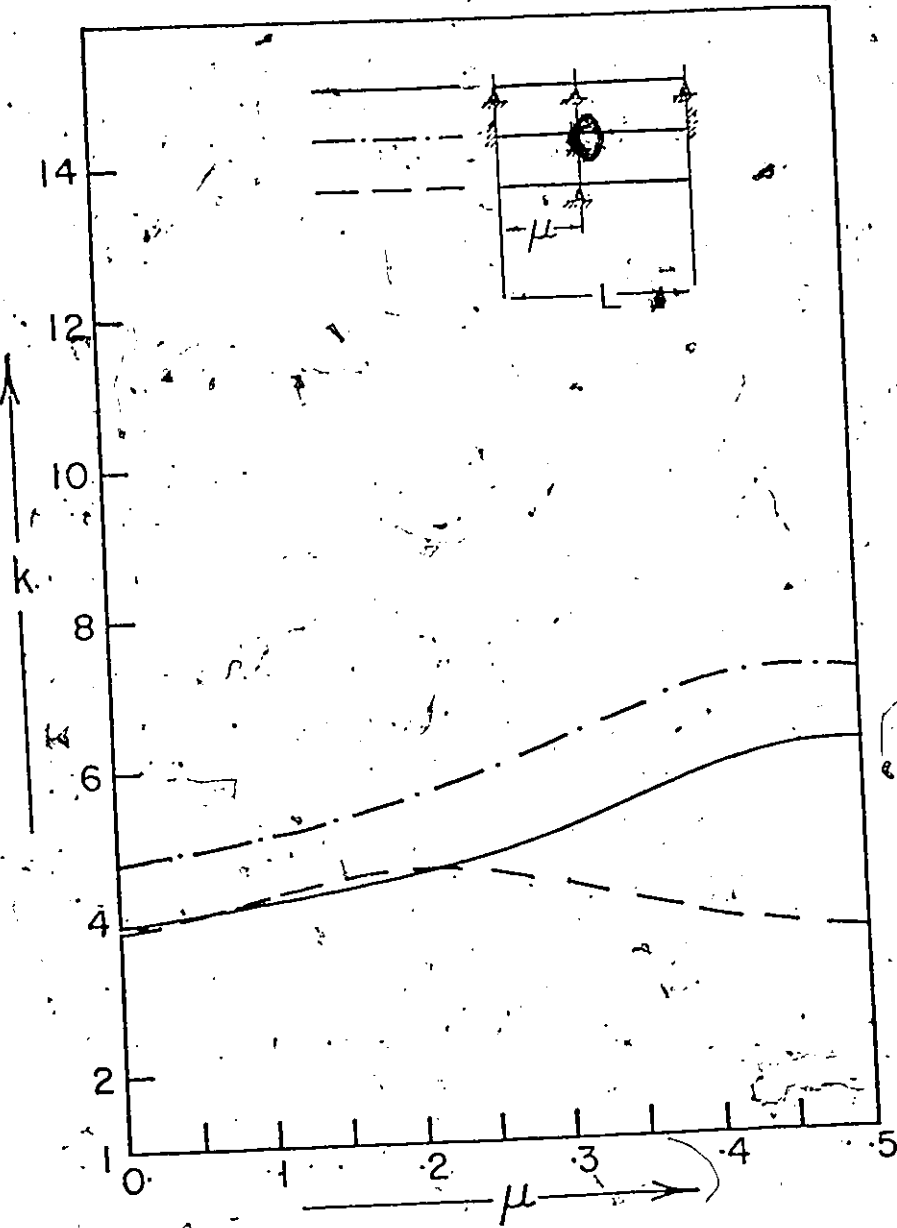


FIG. AII  
VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
PARAMETER  $\mu$  FOR VARIOUS END CONDITIONS

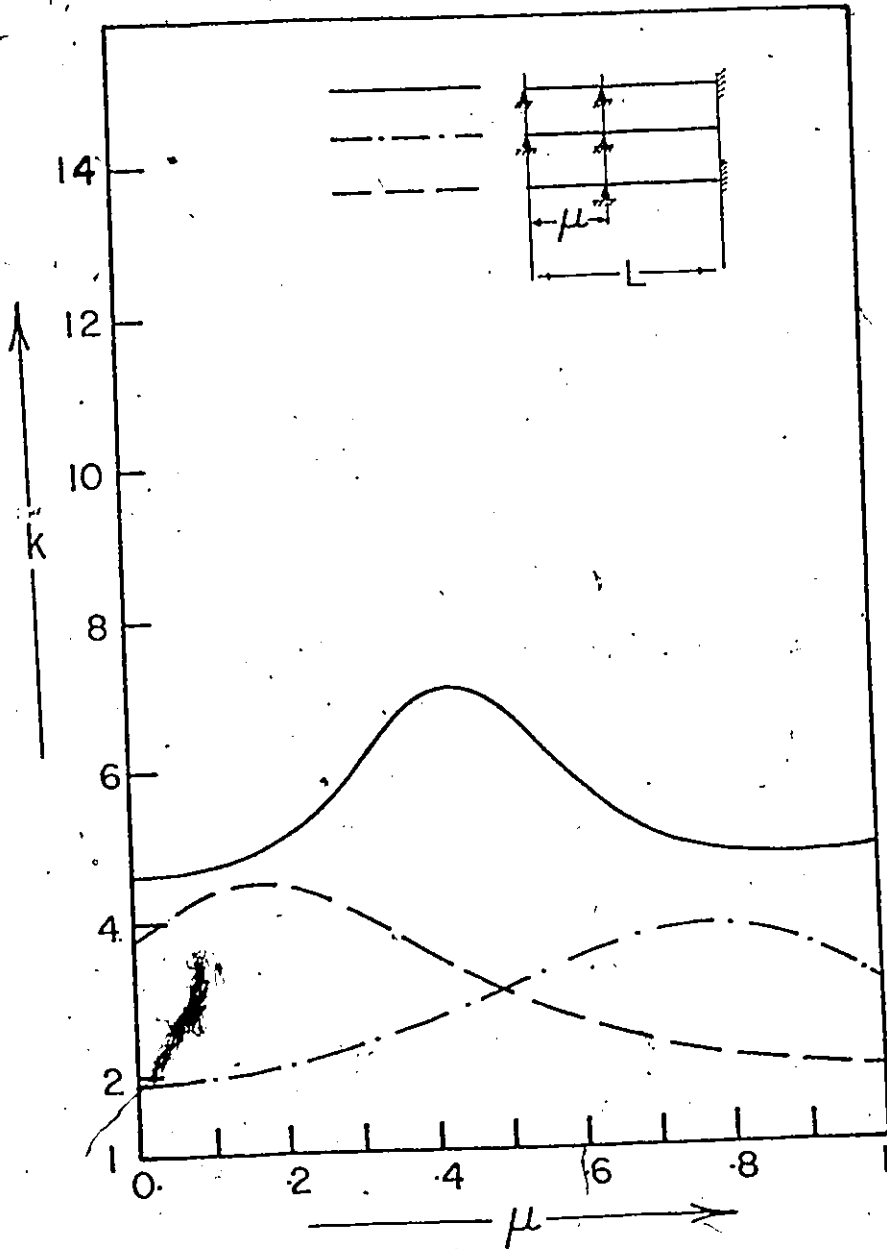


FIG. A12

VARIATION OF THE EIGENVALUE  $k$  WITH THE SPACING  
PARAMETER  $\mu$  FOR VARIOUS END CONDITIONS

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APPENDIX A

EIGENVALUE FOR TWO SPAN PLATES WITH VARIOUS SUPPORT CONDITIONS,  
ASPECT RATIOS AND SPACING PARAMETERS.

MNEMONIC VARIABLE

ORIGINAL VARIABLE

XMS

$\zeta_{Km}^*$

XAR

$\zeta_{AR}$

PHI

$\mu$

X $\Phi$ 1

$\zeta_{KT1}^*$

XT2

$\zeta_{KT2}^*$

XS1

$\zeta_{K1}^*$

XS2

$\zeta_{K2}^*$

XMS = 0.80000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.5020	2.5154	2.5198	2.5543	2.6953	4.3130
0.20000000	2.5116	2.5247	2.5290	2.5629	2.7019	4.3168
0.25000000	2.5148	2.5278	2.5321	2.5658	2.7049	4.3178
0.50000000	2.5408	2.5531	2.5572	2.5892	2.7222	4.3255
0.80000000	2.6610	2.6705	2.6737	2.6990	2.8088	2.0321
1.00000000	2.0301	2.0510	2.0578	2.1095	2.2965	3.5397

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.5142	2.5272	2.5315	2.5652	2.7030	4.3213
0.20000000	2.5237	2.5365	2.5407	2.5738	2.7097	4.3242
0.25000000	2.5269	2.5396	2.5438	2.5767	2.7119	4.3252
0.50000000	2.5528	2.5648	2.5687	2.6000	2.7300	4.3329
0.80000000	2.6721	2.6814	2.6845	2.7093	2.8165	2.0394
1.00000000	2.0364	2.0570	2.0636	2.1144	2.2990	3.5483

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.5900	2.6010	2.6046	2.6332	2.7524	4.3753
0.20000000	2.5992	2.6100	2.6135	2.6417	2.7592	4.3781
0.25000000	2.6023	2.6130	2.6165	2.6445	2.7614	4.3790
0.50000000	2.6272	2.6374	2.6408	2.6674	2.7798	4.3863
0.80000000	2.7414	2.7494	2.7521	2.7734	2.8665	2.0880
1.00000000	2.0749	2.0933	2.0993	2.1450	2.3150	3.6093

XMS = 0.80000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7345	2.7422	2.7447	2.7650	2.8523	4.5378
0.20000000	2.7432	2.7508	2.7533	2.7733	2.8593	4.5402
0.25000000	2.7461	2.7537	2.7562	2.7760	2.8616	4.5411
0.50000000	2.7956	2.7768	2.7792	2.7982	2.8805	4.5478
0.80000000	2.8759	2.8817	2.8837	2.8991	2.9677	2.2035
1.00000000	2.1458	2.1605	2.1653	2.2025	2.3463	3.7802

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8971	2.9019	2.9035	2.9164	2.9734	2.0270
0.20000000	2.9054	2.9101	2.9117	2.9244	2.9805	2.0566
0.25000000	2.9082	2.9129	2.9145	2.9270	2.9829	2.0662
0.50000000	2.9304	2.9349	2.9364	2.9485	3.0020	2.1379
0.80000000	3.0301	3.0338	3.0351	3.0449	3.0895	2.3884
1.00000000	2.2214	2.2327	2.2365	2.2655	2.3825	4.1631

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.5628	2.5751	2.5792	2.6112	2.7431	4.3648
0.20000000	2.5716	2.5839	2.5879	2.6193	2.7405	4.3676
0.25000000	2.5748	2.5868	2.5908	2.6220	2.7516	4.3695
0.50000000	2.5990	2.6104	2.6142	2.6440	2.7689	4.3758
0.80000000	2.7098	2.7189	2.7219	2.7460	2.8503	2.0613
1.00000000	2.0693	2.0804	2.0870	2.1368	2.3189	3.5753

XMS = 0.80000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8870	2.8937	2.8959	2.9135	2.9900	4.6794
0.20000000	2.8940	2.9006	2.9028	2.9201	2.9958	4.6815
0.25000000	2.8983	2.9029	2.9051	2.9223	2.9977	4.6822
0.50000000	2.9150	2.9213	2.9234	2.9401	3.0132	4.6851
0.80000000	2.9989	3.0043	3.0061	3.0204	3.0839	4.6879
1.00000000	2.2314	2.2451	2.2496	2.2843	2.4203	3.6739

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0547	3.0589	3.0603	3.0713	3.1206	2.2006
0.20000000	3.0613	3.0654	3.0668	3.0777	3.1265	2.2216
0.25000000	3.0635	3.0676	3.0690	3.0799	3.1284	2.2284
0.50000000	3.0812	3.0852	3.0865	3.0970	3.1440	2.2608
0.80000000	3.1602	3.1636	3.1647	3.1738	3.2146	2.4783
1.00000000	2.3118	2.3222	2.3256	2.3524	2.4616	4.2567

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.2418	3.2454	3.2466	3.2562	3.2990	2.3737
0.20000000	3.2466	3.2502	3.2514	3.2608	3.3033	2.3882
0.25000000	3.2482	3.2518	3.2529	3.2624	3.3047	2.3930
0.50000000	3.2609	3.2644	3.2655	3.2748	3.3162	2.4300
0.80000000	3.3178	3.3209	3.3220	3.3303	3.3576	2.5781
1.00000000	2.4495	2.4588	2.4619	2.4860	2.5853	4.4368

XMS = 0.80000000 KAR = 0.50000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0588	3.0611	3.0618	3.0677	3.0916	3.3461
0.20000000	3.0620	3.0642	3.0650	3.0709	3.0952	3.3512
0.25000000	3.0650	3.0653	3.0660	3.0720	3.0963	3.3529
0.50000000	3.0712	3.0735	3.0743	3.0803	3.1050	3.3664
0.80000000	3.1046	3.1071	3.1079	3.1144	3.1408	3.4237
1.00000000	3.4243	3.4267	3.4302	3.4418	3.4912	4.4565

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0591	3.0613	3.0621	3.0679	3.0919	3.3477
0.20000000	3.0622	3.0645	3.0652	3.0711	3.0953	3.3529
0.25000000	3.0633	3.0655	3.0663	3.0722	3.0964	3.3546
0.50000000	3.0715	3.0738	3.0746	3.0806	3.1051	3.3681
0.80000000	3.1050	3.1075	3.1083	3.1147	3.1410	3.4255
1.00000000	3.4262	3.4305	3.4320	3.4435	3.4925	4.4609

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0608	3.0630	3.0637	3.0693	3.0926	3.3598
0.20000000	3.0640	3.0662	3.0670	3.0726	3.0960	3.3650
0.25000000	3.0651	3.0673	3.0680	3.0737	3.0971	3.3667
0.50000000	3.0734	3.0756	3.0764	3.0821	3.1059	3.3803
0.80000000	3.1074	3.1097	3.1105	3.1167	3.1421	3.4379
1.00000000	3.4386	3.4427	3.4441	3.4550	3.5017	4.4926

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0648	3.0667	3.0674	3.0728	3.0942	3.3948
0.20000000	3.0681	3.0701	3.0707	3.0759	3.0976	3.4001
0.25000000	3.0692	3.0711	3.0718	3.0770	3.0988	3.4018
0.50000000	3.0777	3.0797	3.0804	3.0857	3.1077	3.4156
0.80000000	3.1127	3.1149	3.1156	3.1211	3.1445	3.4741
1.00000000	3.4676	3.4713	3.4725	3.4820	3.5233	4.5901

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0704	3.0721	3.0727	3.0772	3.0965	3.4800
0.20000000	3.0738	3.0755	3.0761	3.0806	3.1000	3.4854
0.25000000	3.0749	3.0767	3.0772	3.0818	3.1012	3.4872
0.50000000	3.0838	3.0855	3.0861	3.0907	3.1103	3.5014
0.80000000	3.1203	3.1221	3.1227	3.1275	3.1481	3.5620
1.00000000	3.5124	3.5153	3.5162	3.5239	3.5572	4.8827

XT1 = 0.20000000 XT2 = 0.75000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0614	3.0637	3.0645	3.0704	3.0947	3.3560
0.20000000	3.0645	3.0668	3.0676	3.0735	3.0980	3.3610
0.25000000	3.0655	3.0678	3.0686	3.0746	3.0990	3.3627
0.50000000	3.0735	3.0758	3.0766	3.0827	3.1076	3.3758
0.80000000	3.1082	3.1087	3.1095	3.1160	3.1425	3.4318
1.00000000	3.4317	3.4361	3.4376	3.4491	3.4983	4.4745

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0632	3.0654	3.0662	3.0719	3.0954	3.3683
0.20000000	3.0664	3.0688	3.0693	3.0750	3.0987	3.3733
0.25000000	3.0674	3.0696	3.0703	3.0761	3.0998	3.3750
0.50000000	3.0755	3.0777	3.0785	3.0843	3.1084	3.3882
0.80000000	3.1087	3.1110	3.1118	3.1180	3.1436	3.4443
1.00000000	3.4443	3.4485	3.4499	3.4608	3.5076	4.5064

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0673	3.0693	3.0700	3.0752	3.0971	3.4040
0.20000000	3.0705	3.0725	3.0732	3.0784	3.1004	3.4091
0.25000000	3.0716	3.0736	3.0742	3.0795	3.1015	3.4108
0.50000000	3.0799	3.0819	3.0826	3.0879	3.1102	3.4241
0.80000000	3.1141	3.1162	3.1169	3.1225	3.1461	3.4810
1.00000000	3.4738	3.4774	3.4787	3.4882	3.5295	4.6044

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0731	3.0748	3.0754	3.0800	3.0995	3.4909
0.20000000	3.0764	3.0782	3.0787	3.0833	3.1029	3.4961
0.25000000	3.0775	3.0793	3.0798	3.0844	3.1041	3.4979
0.50000000	3.0861	3.0884	3.0889	3.0931	3.1130	3.5116
0.80000000	3.1218	3.1236	3.1242	3.1291	3.1498	3.5705
1.00000000	3.5193	3.5.21	3.5231	3.5307	3.5641	4.8760

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0640	3.0662	3.0669	3.0726	3.0963	3.3700
0.20000000	3.0671	3.0693	3.0700	3.0758	3.0995	3.3759
0.25000000	3.0681	3.0703	3.0710	3.0768	3.1006	3.3775
0.50000000	3.0761	3.0784	3.0791	3.0849	3.1091	3.3906
0.80000000	3.1090	3.1114	3.1122	3.1184	3.1441	3.4462
1.00000000	3.4461	3.4503	3.4517	3.4626	3.5094	4.5108

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0681	3.0701	3.0707	3.0760	3.0979	3.4068
0.20000000	3.0712	3.0733	3.0739	3.0792	3.1013	3.4118
0.25000000	3.0723	3.0743	3.0750	3.0803	3.1024	3.4135
0.50000000	3.0805	3.0826	3.0833	3.0886	3.1110	3.4267
0.80000000	3.1145	3.1166	3.1173	3.1230	3.1466	3.4832
1.00000000	3.4758	3.4794	3.4806	3.4902	3.5315	4.6059

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0739	3.0757	3.0762	3.0808	3.1004	3.4942
0.20000000	3.0772	3.0790	3.0795	3.0841	3.1038	3.4994
0.25000000	3.0783	3.0800	3.0806	3.0852	3.1049	3.5011
0.50000000	3.0869	3.0886	3.0892	3.0939	3.1138	3.5148
0.80000000	3.1222	3.1241	3.1247	3.1295	3.1503	3.5731
1.00000000	3.5214	3.5243	3.5253	3.5329	3.5662	4.8836

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0731	3.0751	3.0758	3.0812	3.1037	3.4255
0.20000000	3.0761	3.0782	3.0788	3.0842	3.1068	3.4302
0.25000000	3.0771	3.0791	3.0798	3.0852	3.1078	3.4318
0.50000000	3.0849	3.0870	3.0877	3.0931	3.1160	3.4442
0.80000000	3.1172	3.1194	3.1201	3.1258	3.1498	3.4975
1.00000000	3.4899	3.4935	3.4947	3.5043	3.5459	4.6422

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0793	3.0811	3.0817	3.0863	3.1064	3.5166
0.20000000	3.0824	3.0842	3.0848	3.0895	3.1096	3.5215
0.25000000	3.0834	3.0852	3.0858	3.0905	3.1106	3.5231
0.50000000	3.0915	3.0933	3.0939	3.0987	3.1190	3.5359
0.80000000	3.1252	3.1271	3.1277	3.1326	3.1537	3.5908
1.00000000	3.5372	3.5400	3.5410	3.5486	3.5820	4.9208

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0912	3.0930	3.0937	3.0985	3.1195	3.5693
0.20000000	3.0939	3.0958	3.0964	3.1013	3.1223	3.5735
0.25000000	3.0948	3.0967	3.0973	3.1022	3.1233	3.5748
0.50000000	3.1019	3.1038	3.1044	3.1094	3.1306	3.5857
0.80000000	3.1319	3.1345	3.1345	3.1396	3.1613	3.6329
1.00000000	3.5834	3.5863	3.5873	3.5949	3.6285	5.0371

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2355	6.2359	6.2360	6.2369	6.2408	6.4078
0.20000000	6.2359	6.2362	6.2364	6.2373	6.2412	6.4088
0.25000000	6.2360	6.2364	6.2365	6.2374	6.2413	6.4107
0.50000000	6.2370	6.2374	6.2375	6.2384	6.2423	6.4194
0.80000000	6.2414	6.2417	6.2418	6.2427	6.2461	7.0253
1.00000000	6.4206	6.4213	6.4215	6.4234	6.4316	

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2350	6.2361	6.2362	6.2371	6.2410	6.4081
0.20000000	6.2361	6.2365	6.2366	6.2375	6.2414	6.4088
0.25000000	6.2363	6.2366	6.2367	6.2376	6.2415	6.4091
0.50000000	6.2373	6.2376	6.2377	6.2386	6.2425	6.4110
0.80000000	6.2416	6.2419	6.2421	6.2430	6.2470	6.4196
1.00000000	6.4213	6.4220	6.4222	6.4241	6.4323	7.0294

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2374	6.2378	6.2379	6.2387	6.2425	6.4102
0.20000000	6.2378	6.2381	6.2382	6.2391	6.2429	6.4109
0.25000000	6.2379	6.2383	6.2384	6.2392	6.2430	6.4112
0.50000000	6.2389	6.2393	6.2394	6.2402	6.2440	6.4131
0.80000000	6.2433	6.2437	6.2438	6.2447	6.2485	6.4218
1.00000000	6.4262	6.4269	6.4271	6.4289	6.4368	7.0379

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2422	6.2425	6.2426	6.2434	6.2468	6.4173
0.20000000	6.2426	6.2429	6.2430	6.2438	6.2472	6.4181
0.25000000	6.2427	6.2430	6.2431	6.2439	6.2473	6.4185
0.50000000	6.2438	6.2441	6.2442	6.2449	6.2483	6.4203
0.80000000	6.2483	6.2486	6.2487	6.2495	6.2530	6.4291
1.00000000	6.4406	6.4412	6.4414	6.4430	6.4502	7.0672

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2535	6.2537	6.2538	6.2543	6.2569	6.4452
0.20000000	6.2539	6.2541	6.2542	6.2548	6.2573	6.4460
0.25000000	6.2540	6.2543	6.2543	6.2549	6.2574	6.4463
0.50000000	6.2552	6.2554	6.2554	6.2560	6.2586	6.4484
0.80000000	6.2600	6.2603	6.2603	6.2609	6.2635	6.4577
1.00000000	6.4766	6.4770	6.4772	6.4784	6.4839	7.1885

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2366	6.2370	6.2371	6.2380	6.2419	6.4104
0.20000000	6.2370	6.2373	6.2375	6.2384	6.2423	6.4111
0.25000000	6.2371	6.2375	6.2376	6.2384	6.2424	6.4114
0.50000000	6.2381	6.2385	6.2386	6.2395	6.2434	6.4133
0.80000000	6.2424	6.2427	6.2428	6.2438	6.2478	6.4218
1.00000000	6.4222	6.4229	6.4231	6.4250	6.4332	7.0329

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.30000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2383	6.2386	6.2388	6.2396	6.2434	6.4125
0.20000000	6.2387	6.2390	6.2391	6.2400	6.2438	6.4133
0.25000000	6.2388	6.2391	6.2392	6.2401	6.2439	6.4135
0.30000000	6.2398	6.2401	6.2402	6.2411	6.2449	6.4138
0.50000000	6.2441	6.2445	6.2446	6.2455	6.2494	6.4240
0.80000000	6.4271	6.4278	6.4280	6.4298	6.4378	7.0413
1.00000000						

XT1 = 0.20000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2431	6.2434	6.2435	6.2443	6.2477	6.4197
0.20000000	6.2435	6.2438	6.2439	6.2447	6.2481	6.4205
0.25000000	6.2437	6.2439	6.2440	6.2448	6.2482	6.4207
0.50000000	6.2447	6.2450	6.2451	6.2458	6.2493	6.4227
0.80000000	6.2491	6.2494	6.2495	6.2503	6.2538	6.4313
1.00000000	6.4415	6.4421	6.4423	6.4440	6.4512	7.0709

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2545	6.2547	6.2548	6.2554	6.2579	6.4479
0.20000000	6.2549	6.2551	6.2552	6.2558	6.2583	6.4487
0.25000000	6.2550	6.2553	6.2553	6.2559	6.2585	6.4489
0.50000000	6.2561	6.2564	6.2564	6.2570	6.2596	6.4510
0.80000000	6.2609	6.2612	6.2612	6.2618	6.2644	6.4602
1.00000000	6.4777	6.4781	6.4783	6.4795	6.4850	7.1929

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2386	6.2389	6.2390	6.2399	6.2437	6.4133
0.20000000	6.2390	6.2393	6.2394	6.2403	6.2441	6.4140
0.25000000	6.2391	6.2394	6.2395	6.2404	6.2442	6.4142
0.50000000	6.2401	6.2404	6.2405	6.2414	6.2452	6.4162
0.80000000	6.2444	6.2447	6.2448	6.2457	6.2495	6.4247
1.00000000	6.4274	6.4281	6.4283	6.4301	6.4381	7.0426

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2434	6.2437	6.2438	6.2446	6.2480	6.4205
0.20000000	6.2438	6.2441	6.2442	6.2450	6.2484	6.4212
0.25000000	6.2439	6.2442	6.2443	6.2451	6.2485	6.4215
0.50000000	6.2450	6.2452	6.2453	6.2461	6.2496	6.4234
0.80000000	6.2494	6.2497	6.2498	6.2506	6.2541	6.4321
1.00000000	6.4418	6.4425	6.4427	6.4443	6.4515	7.0721

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2548	6.2550	6.2551	6.2557	6.2582	6.4487
0.20000000	6.2552	6.2554	6.2555	6.2561	6.2586	6.4495
0.25000000	6.2554	6.2556	6.2556	6.2562	6.2588	6.4498
0.50000000	6.2564	6.2567	6.2567	6.2573	6.2599	6.4518
0.80000000	6.2612	6.2615	6.2615	6.2621	6.2647	6.4610
1.00000000	6.4780	6.4785	6.4786	6.4799	6.4854	7.1943

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2455	6.2458	6.2459	6.2467	6.2501	6.4200
0.20000000	6.2459	6.2462	6.2463	6.2471	6.2505	6.4207
0.25000000	6.2460	6.2463	6.2464	6.2472	6.2506	6.4209
0.50000000	6.2470	6.2473	6.2474	6.2482	6.2516	6.4208
0.80000000	6.2513	6.2516	6.2517	6.2525	6.2560	6.4372
1.00000000	6.4442	6.4448	6.4450	6.4466	6.4539	7.0811

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2571	6.2573	6.2574	6.2580	6.2606	6.4548
0.20000000	6.2575	6.2577	6.2578	6.2584	6.2610	6.4555
0.25000000	6.2576	6.2578	6.2579	6.2585	6.2611	6.4558
0.50000000	6.2587	6.2589	6.2590	6.2596	6.2622	6.4578
0.80000000	6.2633	6.2635	6.2636	6.2642	6.2668	6.4667
1.00000000	6.4807	6.4812	6.4813	6.4826	6.4881	7.2050

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2637	6.2639	6.2640	6.2646	6.2673	6.4727
0.20000000	6.2640	6.2642	6.2643	6.2649	6.2676	6.4734
0.25000000	6.2641	6.2644	6.2644	6.2650	6.2677	6.4736
0.50000000	6.2651	6.2653	6.2654	6.2660	6.2687	6.4754
0.80000000	6.2692	6.2694	6.2695	6.2701	6.2729	6.4834
1.00000000	6.4899	6.4903	6.4905	6.4917	6.4973	7.2420

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3789	9.3790	9.3790	9.3793	9.3806	9.4959
0.20000000	9.3790	9.3791	9.3791	9.3794	9.3807	9.4991
0.25000000	9.3790	9.3791	9.3792	9.3795	9.3808	9.4992
0.50000000	9.3793	9.3793	9.3795	9.3798	9.3811	9.4998
0.80000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5026
1.00000000	9.5037	9.5039	9.5040	9.5048	9.5073	9.9358

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3791	9.3792	9.3792	9.3795	9.3805	9.4990
0.20000000	9.3792	9.3793	9.3793	9.3796	9.3809	9.4993
0.25000000	9.3792	9.3793	9.3793	9.3796	9.3809	9.4993
0.50000000	9.3795	9.3795	9.3797	9.3799	9.3812	9.4999
0.80000000	9.3809	9.3809	9.3810	9.3813	9.3826	9.5027
1.00000000	9.5041	9.5044	9.5044	9.5050	9.5077	9.9362

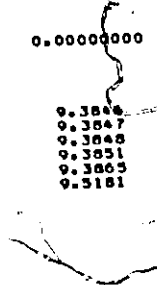
XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3804	9.3805	9.3805	9.3808	9.3820	9.4996
0.20000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.4999
0.25000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.4999
0.50000000	9.3808	9.3809	9.3810	9.3813	9.3825	9.5006
0.80000000	9.3822	9.3823	9.3824	9.3826	9.3839	9.5034
1.00000000	9.5074	9.5076	9.5077	9.5083	9.5109	9.9393

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3846	9.3847	9.3847	9.3850	9.3861	9.5021
0.20000000	9.3847	9.3848	9.3849	9.3851	9.3862	9.5023
0.25000000	9.3848	9.3849	9.3849	9.3851	9.3863	9.5024
0.50000000	9.3851	9.3852	9.3852	9.3853	9.3866	9.5030
0.80000000	9.3865	9.3866	9.3866	9.3869	9.3880	9.5058
1.00000000	9.5181	9.5183	9.5183	9.5189	9.5213	9.9507



XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3981	9.3981	9.3981	9.3983	9.3990	9.5151
0.20000000	9.3982	9.3982	9.3983	9.3984	9.3992	9.5153
0.25000000	9.3982	9.3983	9.3983	9.3985	9.3992	9.5154
0.50000000	9.3986	9.3986	9.3987	9.3988	9.3996	9.5161
0.80000000	9.4002	9.4002	9.4003	9.4004	9.4012	9.5190
1.00000000	9.5548	9.5549	9.5550	9.5554	9.5571	10.0135

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3796	9.3798	9.3798	9.3801	9.3814	9.5004
0.20000000	9.3798	9.3799	9.3799	9.3802	9.3815	9.5006
0.25000000	9.3798	9.3799	9.3799	9.3802	9.3815	9.5007
0.50000000	9.3801	9.3802	9.3802	9.3803	9.3816	9.5013
0.80000000	9.3814	9.3816	9.3816	9.3819	9.3832	9.5041
1.00000000	9.5044	9.5046	9.5047	9.5053	9.5080	9.9375

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3810	9.3811	9.3811	9.3814	9.3827	9.5010
0.20000000	9.3811	9.3812	9.3812	9.3815	9.3828	9.5013
0.25000000	9.3811	9.3812	9.3813	9.3815	9.3828	9.5014
0.50000000	9.3814	9.3815	9.3816	9.3819	9.3831	9.5020
0.80000000	9.3828	9.3829	9.3829	9.3832	9.3845	9.5047
1.00000000	9.5077	9.5079	9.5080	9.5086	9.5112	9.9406

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3852	9.3853	9.3854	9.3856	9.3867	9.5035
0.20000000	9.3854	9.3854	9.3855	9.3857	9.3868	9.5037
0.25000000	9.3854	9.3855	9.3855	9.3858	9.3869	9.5038
0.50000000	9.3857	9.3858	9.3858	9.3861	9.3872	9.5044
0.80000000	9.3871	9.3872	9.3872	9.3875	9.3886	9.5072
1.00000000	9.5184	9.5186	9.5186	9.5192	9.5216	9.9519

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3988	9.3988	9.3989	9.3990	9.3997	9.5166
0.20000000	9.3989	9.3990	9.3990	9.3991	9.3999	9.5168
0.25000000	9.3989	9.3990	9.3990	9.3992	9.3999	9.5169
0.50000000	9.3993	9.3994	9.3994	9.3995	9.4003	9.5176
0.80000000	9.4009	9.4009	9.4010	9.4011	9.4019	9.5205
1.00000000	9.5551	9.5553	9.5553	9.5557	9.5574	10.0150

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3812	9.3813	9.3813	9.3816	9.3828	9.3815
0.20000000	9.3813	9.3814	9.3814	9.3817	9.3830	9.3817
0.25000000	9.3813	9.3814	9.3815	9.3818	9.3830	9.3818
0.50000000	9.3816	9.3817	9.3818	9.3821	9.3833	9.3824
0.80000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.3852
1.00000000	9.5078	9.5080	9.5081	9.5087	9.5113	9.9410

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3854	9.3855	9.3856	9.3858	9.3869	9.3859
0.20000000	9.3854	9.3857	9.3857	9.3859	9.3871	9.3862
0.25000000	9.3856	9.3857	9.3857	9.3860	9.3874	9.3863
0.50000000	9.3859	9.3860	9.3860	9.3877	9.3888	9.3876
0.80000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.3876
1.00000000	9.5185	9.5187	9.5187	9.5193	9.5217	9.9524

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3990	9.3991	9.3991	9.3992	9.4000	9.3991
0.20000000	9.3991	9.3992	9.3992	9.3994	9.4001	9.3992
0.25000000	9.3992	9.3992	9.3993	9.3994	9.4002	9.3993
0.50000000	9.3995	9.3996	9.3996	9.3998	9.4005	9.3998
0.80000000	9.4011	9.4012	9.4012	9.4013	9.4021	9.4011
1.00000000	9.5352	9.5354	9.5354	9.5358	9.5375	10.0155

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3869	9.3870	9.3871	9.3873	9.3884	9.3874
0.20000000	9.3870	9.3871	9.3872	9.3874	9.3886	9.3876
0.25000000	9.3871	9.3872	9.3872	9.3875	9.3889	9.3877
0.50000000	9.3874	9.3875	9.3875	9.3878	9.3903	9.3883
0.80000000	9.3887	9.3888	9.3889	9.3891	9.3924	9.3893
1.00000000	9.5192	9.5194	9.5195	9.5200	9.5224	9.9556

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4007	9.4008	9.4008	9.4009	9.4017	9.4007
0.20000000	9.4008	9.4009	9.4009	9.4011	9.4018	9.4008
0.25000000	9.4009	9.4009	9.4009	9.4011	9.4019	9.4009
0.50000000	9.4012	9.4013	9.4013	9.4015	9.4022	9.4012
0.80000000	9.4027	9.4028	9.4028	9.4030	9.4037	9.4027
1.00000000	9.5361	9.5363	9.5363	9.5367	9.5384	10.0192

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4061	9.4062	9.4062	9.4064	9.4072	9.4061
0.20000000	9.4062	9.4063	9.4063	9.4065	9.4073	9.4062
0.25000000	9.4063	9.4063	9.4064	9.4065	9.4073	9.4063
0.50000000	9.4066	9.4066	9.4067	9.4068	9.4076	9.4066
0.80000000	9.4079	9.4080	9.4080	9.4082	9.4090	9.4079
1.00000000	9.5393	9.5394	9.5395	9.5398	9.5416	10.0330

XMS = 0.80000000 KAR = 0.80000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5197	12.5198	12.5198	12.5199	12.5205	12.6111
0.20000000	12.5198	12.5198	12.5198	12.5200	12.5206	12.6112
0.25000000	12.5198	12.5199	12.5199	12.5200	12.5206	12.6113
0.50000000	12.5199	12.5200	12.5200	12.5201	12.5207	12.6116
0.80000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6128
1.00000000	12.6138	12.6139	12.6139	12.6142	12.6154	12.9537

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5199	12.5199	12.5199	12.5201	12.5207	12.6112
0.20000000	12.5199	12.5200	12.5200	12.5201	12.5207	12.6113
0.25000000	12.5199	12.5200	12.5200	12.5201	12.5207	12.6113
0.50000000	12.5201	12.5201	12.5202	12.5203	12.5209	12.6129
0.80000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.9539
1.00000000	12.6141	12.6142	12.6142	12.6145	12.6157	12.9539

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5210	12.5210	12.5211	12.5212	12.5217	12.6115
0.20000000	12.5210	12.5211	12.5211	12.5212	12.5218	12.6116
0.25000000	12.5211	12.5211	12.5211	12.5212	12.5218	12.6116
0.50000000	12.5212	12.5212	12.5213	12.5214	12.5219	12.6119
0.80000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6131
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.9553

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5247	12.5248	12.5248	12.5249	12.5254	12.6125
0.20000000	12.5248	12.5248	12.5248	12.5250	12.5255	12.6126
0.25000000	12.5248	12.5248	12.5249	12.5250	12.5255	12.6127
0.50000000	12.5250	12.5250	12.5250	12.5251	12.5256	12.6129
0.80000000	12.5256	12.5256	12.5256	12.5258	12.5263	12.6142
1.00000000	12.6256	12.6257	12.6257	12.6260	12.6271	12.9607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5394	12.5394	12.5394	12.5395	12.5398	12.6198
0.20000000	12.5394	12.5395	12.5395	12.5395	12.5398	12.6199
0.25000000	12.5394	12.5395	12.5395	12.5395	12.5398	12.6199
0.50000000	12.5396	12.5396	12.5396	12.5397	12.5400	12.6202
0.80000000	12.5404	12.5404	12.5404	12.5405	12.5407	12.6215
1.00000000	12.6642	12.6642	12.6642	12.6644	12.6651	12.9984

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5204	12.5204	12.5204	12.5206	12.5211	12.6122
0.20000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6123
0.25000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6124
0.50000000	12.5206	12.5206	12.5206	12.5208	12.5213	12.6127
0.80000000	12.5212	12.5212	12.5212	12.5214	12.5219	12.6139
1.00000000	12.6142	12.6143	12.6143	12.6146	12.6159	12.9544

XMS = 0.00000000 KAR = 0.80000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5215	12.5215	12.5215	12.5217	12.5222	12.6125
0.20000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6126
0.25000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6127
0.50000000	12.5217	12.5217	12.5217	12.5219	12.5224	12.6129
0.80000000	12.5223	12.5223	12.5223	12.5225	12.5230	12.6142
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9558

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5252	12.5253	12.5253	12.5254	12.5259	12.6136
0.20000000	12.5253	12.5253	12.5253	12.5255	12.5260	12.6137
0.25000000	12.5253	12.5253	12.5253	12.5255	12.5261	12.6140
0.50000000	12.5254	12.5255	12.5255	12.5256	12.5268	12.6153
0.80000000	12.5261	12.5261	12.5261	12.5263	12.5272	12.9613
1.00000000	12.6257	12.6258	12.6258	12.6261	12.6272	12.9613

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5400	12.5400	12.5400	12.5401	12.5403	12.6209
0.20000000	12.5400	12.5400	12.5400	12.5401	12.5404	12.6210
0.25000000	12.5400	12.5401	12.5401	12.5401	12.5404	12.6210
0.50000000	12.5402	12.5402	12.5402	12.5403	12.5406	12.6213
0.80000000	12.5409	12.5410	12.5410	12.5410	12.5413	12.6225
1.00000000	12.6643	12.6644	12.6644	12.6646	12.6653	12.9991

XMS = 0.80000000 KAR = 0.80000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5216	12.5217	12.5217	12.5218	12.5224	12.6129
0.20000000	12.5217	12.5217	12.5217	12.5219	12.5224	12.6130
0.25000000	12.5217	12.5217	12.5218	12.5219	12.5224	12.6130
0.50000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6133
0.80000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6145
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9560

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5254	12.5254	12.5255	12.5256	12.5261	12.6139
0.20000000	12.5255	12.5255	12.5255	12.5256	12.5261	12.6140
0.25000000	12.5255	12.5255	12.5255	12.5256	12.5261	12.6141
0.50000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6144
0.80000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6156
1.00000000	12.6257	12.6258	12.6259	12.6261	12.6272	12.9615

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5401	12.5402	12.5402	12.5402	12.5405	12.6212
0.20000000	12.5402	12.5402	12.5402	12.5403	12.5406	12.6213
0.25000000	12.5402	12.5403	12.5403	12.5403	12.5406	12.6214
0.50000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6217
0.80000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
1.00000000	12.6644	12.6644	12.6644	12.6646	12.6653	12.9993

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5266	12.5267	12.5267	12.5268	12.5273	12.6166
0.20000000	12.5267	12.5267	12.5267	12.5268	12.5273	12.6167
0.25000000	12.5267	12.5267	12.5267	12.5269	12.5274	12.6167
0.50000000	12.5268	12.5269	12.5269	12.5270	12.5275	12.6170
0.80000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6182
1.00000000	12.6261	12.6261	12.6262	12.6264	12.6275	12.9629

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5416	12.5416	12.5416	12.5417	12.5420	12.6240
0.20000000	12.5416	12.5417	12.5417	12.5417	12.5420	12.6241
0.25000000	12.5417	12.5417	12.5417	12.5418	12.5421	12.6241
0.50000000	12.5418	12.5418	12.5418	12.5419	12.5422	12.6244
0.80000000	12.5425	12.5425	12.5426	12.5426	12.5429	12.6257
1.00000000	12.6647	12.6648	12.6648	12.6650	12.6657	13.0009

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5465	12.5465	12.5465	12.5466	12.5469	12.6335
0.20000000	12.5465	12.5465	12.5465	12.5466	12.5469	12.6336
0.25000000	12.5465	12.5466	12.5466	12.5466	12.5469	12.6336
0.50000000	12.5467	12.5467	12.5467	12.5468	12.5471	12.6339
0.80000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6351
1.00000000	12.6662	12.6662	12.6663	12.6664	12.6672	13.0073

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.40000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6475	2.6573	2.6606	2.6686	2.7986	2.0017
0.20000000	2.6576	2.6672	2.6704	2.6938	2.8061	2.0246
0.25000000	2.6609	2.6704	2.6736	2.6989	2.8085	2.0321
0.50000000	2.6875	2.6966	2.6996	2.7235	2.8284	2.0583
0.80000000	2.8031	2.8103	2.8127	2.8319	2.9185	2.2888
1.00000000	2.0301	2.0510	2.0578	2.1093	2.2965	3.5397

XT1 = 0.60000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6587	2.6683	2.6715	2.6969	2.8065	2.0091
0.20000000	2.6687	2.6781	2.6812	2.7061	2.8140	2.0319
0.25000000	2.6720	2.6813	2.6844	2.7091	2.8164	2.0393
0.50000000	2.6984	2.7072	2.7102	2.7336	2.8363	2.0952
0.80000000	2.8131	2.8202	2.8225	2.8414	2.9262	2.2949
1.00000000	2.0364	2.0570	2.0636	2.1144	2.2990	3.5483

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7287	2.7369	2.7397	2.7615	2.8567	2.0591
0.20000000	2.7382	2.7463	2.7490	2.7704	2.8641	2.0809
0.25000000	2.7413	2.7494	2.7521	2.7734	2.8660	2.0880
0.50000000	2.7666	2.7742	2.7767	2.7970	2.8804	2.1417
0.80000000	2.8763	2.8824	2.8845	2.9010	2.9754	2.3369
1.00000000	2.0749	2.0933	2.0993	2.1450	2.3150	3.6093

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.40000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8641	2.8701	2.8721	2.8879	2.9578	2.1770
0.20000000	2.8720	2.8768	2.8807	2.8963	2.9652	2.1969
0.25000000	2.8759	2.8817	2.8836	2.8991	2.9676	2.2034
0.50000000	2.8992	2.9048	2.9066	2.9214	2.9873	2.2530
0.80000000	3.0012	3.0058	3.0073	3.0195	3.0749	2.4365
1.00000000	2.1456	2.1605	2.1653	2.2025	2.3463	3.7602

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0191	3.0229	3.0241	3.0342	3.0797	2.3647
0.20000000	3.0273	3.0311	3.0323	3.0422	3.0870	2.3825
0.25000000	3.0301	3.0338	3.0350	3.0449	3.0894	2.3883
0.50000000	3.0519	3.0555	3.0566	3.0661	3.1089	2.4331
0.80000000	3.1474	3.1504	3.1514	3.1593	3.1953	2.6043
1.00000000	2.2214	2.2327	2.2365	2.2655	2.3825	4.1631

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6975	2.7068	2.7099	2.7345	2.8412	2.0330
0.20000000	2.7067	2.7156	2.7189	2.7431	2.8481	2.0543
0.25000000	2.7095	2.7189	2.7219	2.7459	2.8505	2.0613
0.50000000	2.7343	2.7429	2.7458	2.7687	2.8691	2.1140
0.80000000	2.8411	2.8481	2.8504	2.8692	2.9534	2.3046
1.00000000	2.0603	2.0804	2.0870	2.1364	2.3169	3.6753

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7675	2.7755	2.7782	2.7994	2.8921	2.0633
0.20000000	2.7764	2.7842	2.7869	2.8077	2.8990	2.1038
0.25000000	2.7743	2.7871	2.7897	2.8105	2.9014	2.1105
0.50000000	2.8027	2.8102	2.8127	2.8325	2.9199	2.1611
0.80000000	2.9049	2.9110	2.9131	2.9295	3.0033	2.3464
1.00000000	2.0993	2.1172	2.1231	2.1680	2.3355	3.6360

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9038	2.9096	2.9115	2.9269	2.9950	2.2028
0.20000000	2.9120	2.9177	2.9196	2.9347	3.0019	2.2214
0.25000000	2.9147	2.9204	2.9223	2.9373	3.0042	2.2275
0.50000000	2.9365	2.9419	2.9437	2.9582	3.0226	2.2742
0.80000000	3.0315	3.0361	3.0376	3.0498	3.1047	2.4469
1.00000000	2.1710	2.1854	2.1901	2.2266	2.3679	3.8065

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0606	3.0643	3.0655	3.0753	3.1194	2.3944
0.20000000	3.0683	3.0719	3.0731	3.0827	3.1262	2.4110
0.25000000	3.0708	3.0744	3.0756	3.0852	3.1285	2.4165
0.50000000	3.0912	3.0947	3.0958	3.1050	3.1467	2.4586
0.80000000	3.1804	3.1833	3.1843	3.1921	3.2277	2.6211
1.00000000	2.2479	2.2590	2.2626	2.2910	2.4055	4.1897

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7790	2.7869	2.7896	2.8106	2.9026	2.0904
0.20000000	2.7876	2.7954	2.7980	2.8187	2.9094	2.1104
0.25000000	2.7905	2.7982	2.8008	2.8214	2.9116	2.1170
0.50000000	2.8134	2.8208	2.8233	2.8430	2.9298	2.1668
0.80000000	2.9134	2.9195	2.9216	2.9380	3.0116	2.3495
1.00000000	2.1067	2.1246	2.1304	2.1750	2.3418	3.6444

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9155	2.9212	2.9232	2.9384	3.0060	2.2103
0.20000000	2.9235	2.9292	2.9311	2.9461	3.0127	2.2286
0.25000000	2.9262	2.9318	2.9337	2.9486	3.0150	2.2345
0.50000000	2.9475	2.9529	2.9547	2.9690	3.0330	2.2804
0.80000000	3.0406	3.0451	3.0466	3.0588	3.1135	2.4526
1.00000000	2.1788	2.1931	2.1978	2.2340	2.3746	3.8148

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0729	3.0766	3.0778	3.0875	3.1312	2.4031
0.20000000	3.0804	3.0841	3.0852	3.0948	3.1379	2.4194
0.25000000	3.0829	3.0865	3.0877	3.0972	3.1401	2.4247
0.50000000	3.1029	3.1063	3.1074	3.1166	3.1580	2.4661
0.80000000	3.1903	3.1932	3.1942	3.2019	3.2374	2.6260
1.00000000	2.2561	2.2670	2.2706	2.2988	2.4127	4.1981

XMS = 0.25000000 XAR = 0.33333333 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9886	2.9251	2.9969	3.0115	3.0760	2.2564
0.20000000	2.9963	3.0019	3.0037	3.0101	3.0819	2.2720
0.25000000	2.9949	3.0042	3.0060	3.0203	3.0839	2.2780
0.50000000	3.0173	3.0225	3.0242	3.0381	3.0997	2.3159
0.80000000	3.0983	3.1028	3.1043	3.1163	3.1703	2.4757
1.00000000	2.2314	2.2451	2.2496	2.2843	2.4203	3.0739

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1514	3.1549	3.1560	3.1652	3.2067	2.4572
0.20000000	3.1580	3.1614	3.1625	3.1716	3.2126	2.4716
0.25000000	3.1601	3.1635	3.1647	3.1737	3.2146	2.4763
0.50000000	3.1774	3.1807	3.1818	3.1906	3.2302	2.5131
0.80000000	3.2537	3.2565	3.2575	3.2651	3.2998	2.6577
1.00000000	2.3116	2.3222	2.3256	2.3526	2.4616	4.2587

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3115	3.3147	3.3157	3.3242	3.3621	2.5613
0.20000000	3.3162	3.3194	3.3204	3.3288	3.3664	2.5724
0.25000000	3.3178	3.3209	3.3220	3.3303	3.3678	2.5761
0.50000000	3.3304	3.3334	3.3344	3.3426	3.3793	2.6048
0.80000000	3.3861	3.3889	3.3898	3.3972	3.4305	2.7215
1.00000000	2.4495	2.4588	2.4619	2.4860	2.5853	4.4368

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1012	3.1036	3.1045	3.1109	3.1371	3.4176
0.20000000	3.1038	3.1063	3.1071	3.1135	3.1399	3.4227
0.25000000	3.1046	3.1071	3.1079	3.1144	3.1408	3.4258
0.50000000	3.1114	3.1139	3.1147	3.1212	3.1481	3.4670
0.80000000	3.1390	3.1416	3.1425	3.1494	3.1778	3.4870
1.00000000	3.4243	3.4287	3.4302	3.4418	3.4912	4.4565

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1015	3.1040	3.1048	3.1111	3.1373	3.4193
0.20000000	3.1041	3.1066	3.1074	3.1138	3.1401	3.4239
0.25000000	3.1050	3.1075	3.1083	3.1147	3.1410	3.4255
0.50000000	3.1118	3.1143	3.1151	3.1216	3.1482	3.4375
0.80000000	3.1394	3.1421	3.1429	3.1498	3.1780	3.4868
1.00000000	3.4262	3.4305	3.4320	3.4435	3.4925	4.4609

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1039	3.1062	3.1070	3.1131	3.1383	3.4318
0.20000000	3.1065	3.1089	3.1096	3.1158	3.1411	3.4364
0.25000000	3.1074	3.1097	3.1105	3.1167	3.1421	3.4379
0.50000000	3.1142	3.1166	3.1174	3.1236	3.1494	3.4500
0.80000000	3.1424	3.1449	3.1457	3.1523	3.1795	3.5016
1.00000000	3.4386	3.4427	3.4441	3.4550	3.5017	4.4926

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1091	J.1112	J.1119	J.1174	J.1407	J.4678
0.20000000	J.1118	J.1130	J.1148	J.1202	J.1435	J.4725
0.25000000	J.1127	J.1148	J.1156	J.1211	J.1445	J.4741
0.50000000	J.1198	J.1220	J.1227	J.1283	J.1519	J.4804
0.80000000	J.1490	J.1513	J.1520	J.1579	J.1827	J.5380
1.00000000	J.4676	J.4713	J.4725	J.4820	J.5233	4.5901

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1165	J.1183	J.1189	J.1237	J.1441	J.3555
0.20000000	J.1194	J.1212	J.1218	J.1266	J.1471	J.3603
0.25000000	J.1203	J.1221	J.1227	J.1275	J.1481	J.3619
0.50000000	J.1277	J.1296	J.1302	J.1350	J.1557	J.3747
0.80000000	J.1584	J.1603	J.1609	J.1660	J.1875	J.3828
1.00000000	J.35124	J.35153	J.35162	J.35239	J.35572	4.8627

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1028	J.1053	J.1061	J.1125	J.1389	J.4257
0.20000000	J.1054	J.1079	J.1087	J.1151	J.1416	J.4301
0.25000000	J.1062	J.1087	J.1095	J.1160	J.1425	J.4316
0.50000000	J.1128	J.1153	J.1162	J.1227	J.1496	J.4434
0.80000000	J.1400	J.1427	J.1435	J.1504	J.1788	J.4934
1.00000000	J.4317	J.4361	J.4376	J.4491	J.4983	4.4745

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1052	J.1076	J.1083	J.1145	J.1399	J.4383
0.20000000	J.1078	J.1102	J.1110	J.1171	J.1427	J.4428
0.25000000	J.1086	J.1110	J.1118	J.1180	J.1438	J.4443
0.50000000	J.1154	J.1178	J.1186	J.1248	J.1507	J.4561
0.80000000	J.1430	J.1455	J.1464	J.1529	J.1803	J.5064
1.00000000	J.4443	J.4485	J.4499	J.4608	J.5076	4.5084

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1105	J.1126	J.1134	J.1189	J.1423	J.4749
0.20000000	J.1132	J.1153	J.1160	J.1216	J.1452	J.4795
0.25000000	J.1141	J.1162	J.1169	J.1225	J.1481	J.4810
0.50000000	J.1210	J.1232	J.1239	J.1296	J.1534	J.4930
0.80000000	J.1497	J.1519	J.1527	J.1588	J.1836	J.5443
1.00000000	J.4738	J.4774	J.4787	J.4882	J.5295	4.6044

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1181	J.1199	J.1205	J.1253	J.1459	J.5642
0.20000000	J.1209	J.1227	J.1233	J.1281	J.1488	J.5689
0.25000000	J.1218	J.1236	J.1242	J.1291	J.1498	J.5705
0.50000000	J.1290	J.1309	J.1315	J.1364	J.1573	J.5829
0.80000000	J.1592	J.1611	J.1617	J.1668	J.1885	J.6364
1.00000000	J.5193	J.5221	J.5231	J.5307	J.5641	4.8786

XMS = 0.25000000 KAR = 0.50000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1404	3.4403
0.00000000	3.1056	3.1080	3.1086	3.1149	3.1432	3.4447
0.20000000	3.1002	3.1106	3.1113	3.1175	3.1441	3.4462
0.25000000	3.1090	3.1114	3.1122	3.1184	3.1512	3.4574
0.50000000	3.1157	3.1181	3.1189	3.1252	3.1805	3.5074
0.80000000	3.1432	3.1457	3.1466	3.1531	3.3094	4.5108
1.00000000	3.4461	3.4503	3.4517	3.4626		

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1429	3.4771
0.00000000	3.1109	3.1131	3.1136	3.1194	3.1456	3.4817
0.20000000	3.1136	3.1157	3.1165	3.1221	3.1466	3.4832
0.25000000	3.1145	3.1166	3.1173	3.1230	3.1538	3.4950
0.50000000	3.1214	3.1235	3.1243	3.1298	3.1638	3.5459
0.80000000	3.1499	3.1521	3.1529	3.1588	3.3315	4.8089
1.00000000	3.4758	3.4794	3.4806	3.4902		

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1465	3.5669
0.00000000	3.1185	3.1204	3.1210	3.1258	3.1493	3.5715
0.20000000	3.1213	3.1232	3.1238	3.1286	3.1503	3.5731
0.25000000	3.1222	3.1241	3.1247	3.1295	3.1577	3.5855
0.50000000	3.1295	3.1313	3.1319	3.1368	3.1887	3.6385
0.80000000	3.1594	3.1613	3.1620	3.1670	3.3662	4.8836
1.00000000	3.5214	3.5243	3.5253	3.5329		

XMS = 0.25000000 KAR = 0.50000000 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1462	3.4917
0.00000000	3.1138	3.1160	3.1167	3.1224	3.1489	3.4960
0.20000000	3.1163	3.1185	3.1192	3.1249	3.1498	3.4974
0.25000000	3.1172	3.1194	3.1201	3.1258	3.1507	3.5087
0.50000000	3.1238	3.1260	3.1267	3.1325	3.1856	3.5570
0.80000000	3.1512	3.1535	3.1543	3.1603	3.3459	4.6422
1.00000000	3.4899	3.4935	3.4947	3.5043		

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1500	3.5849
0.00000000	3.1217	3.1235	3.1242	3.1290	3.1528	3.5893
0.20000000	3.1243	3.1262	3.1268	3.1317	3.1537	3.5908
0.25000000	3.1252	3.1271	3.1277	3.1326	3.1808	3.6024
0.50000000	3.1321	3.1340	3.1346	3.1396	3.1906	3.6527
0.80000000	3.1610	3.1629	3.1636	3.1687	3.3820	4.9208
1.00000000	3.5372	3.5400	3.5410	3.5486		

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51					3.1581	3.6278
0.00000000	3.1287	3.1307	3.1313	3.1364	3.1605	3.6316
0.20000000	3.1311	3.1331	3.1337	3.1388	3.1613	3.6329
0.25000000	3.1319	3.1339	3.1345	3.1396	3.1677	3.6420
0.50000000	3.1382	3.1401	3.1408	3.1459	3.1949	3.6867
0.80000000	3.1646	3.1665	3.1672	3.1724	3.4285	5.0371
1.00000000	3.5834	3.5863	3.5873	3.5949		

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2409	6.2412	6.2413	6.2423	6.2463	6.4184
0.20000000	6.2412	6.2416	6.2417	6.2426	6.2467	6.4191
0.25000000	6.2414	6.2417	6.2418	6.2427	6.2468	6.4194
0.50000000	6.2423	6.2427	6.2428	6.2437	6.2478	6.4212
0.60000000	6.2464	6.2466	6.2469	6.2479	6.2520	6.4297
1.00000000	6.4206	6.4213	6.4215	6.4234	6.4316	7.0283

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2411	6.2415	6.2416	6.2425	6.2465	6.4187
0.20000000	6.2415	6.2418	6.2419	6.2429	6.2469	6.4194
0.25000000	6.2416	6.2419	6.2421	6.2430	6.2470	6.4196
0.50000000	6.2425	6.2429	6.2430	6.2439	6.2480	6.4215
0.60000000	6.2467	6.2471	6.2472	6.2481	6.2522	6.4299
1.00000000	6.4213	6.4220	6.4222	6.4241	6.4323	7.0294

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2429	6.2432	6.2433	6.2442	6.2481	6.4208
0.20000000	6.2432	6.2436	6.2437	6.2445	6.2484	6.4216
0.25000000	6.2433	6.2437	6.2438	6.2447	6.2485	6.4218
0.50000000	6.2443	6.2446	6.2447	6.2456	6.2495	6.4237
0.60000000	6.2485	6.2488	6.2490	6.2499	6.2538	6.4322
1.00000000	6.4262	6.4269	6.4271	6.4289	6.4368	7.0374

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2478	6.2481	6.2482	6.2490	6.2525	6.4261
0.20000000	6.2482	6.2485	6.2486	6.2494	6.2529	6.4269
0.25000000	6.2483	6.2486	6.2487	6.2495	6.2530	6.4291
0.50000000	6.2493	6.2496	6.2497	6.2505	6.2540	6.4310
0.60000000	6.2536	6.2540	6.2541	6.2549	6.2584	6.4396
1.00000000	6.4406	6.4412	6.4414	6.4430	6.4502	7.0672

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2595	6.2597	6.2598	6.2604	6.2630	6.4567
0.20000000	6.2599	6.2601	6.2602	6.2608	6.2634	6.4574
0.25000000	6.2600	6.2603	6.2603	6.2609	6.2635	6.4577
0.50000000	6.2611	6.2613	6.2614	6.2620	6.2646	6.4598
0.60000000	6.2658	6.2660	6.2661	6.2667	6.2694	6.4689
1.00000000	6.4766	6.4770	6.4772	6.4784	6.4839	7.1885

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2419	6.2423	6.2424	6.2433	6.2473	6.4209
0.20000000	6.2423	6.2426	6.2427	6.2436	6.2477	6.4216
0.25000000	6.2424	6.2427	6.2428	6.2436	6.2478	6.4218
0.50000000	6.2433	6.2437	6.2438	6.2447	6.2488	6.4237
0.60000000	6.2474	6.2478	6.2479	6.2488	6.2530	6.4320
1.00000000	6.4222	6.4229	6.4231	6.4250	6.4332	7.8329

XMS = 0.25000000 KAR = 0.66666667 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2437	6.2440	6.2441	6.2450	6.2460	6.4230
0.20000000	6.2440	6.2443	6.2445	6.2453	6.2492	6.4237
0.25000000	6.2441	6.2445	6.2446	6.2455	6.2494	6.4240
0.50000000	6.2451	6.2434	6.2455	6.2464	6.2503	6.4258
0.80000000	6.2492	6.2495	6.2497	6.2506	6.2546	6.4342
1.00000000	6.4271	6.4278	6.4280	6.4298	6.4378	7.0413

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2486	6.2489	6.2490	6.2498	6.2533	6.4304
0.20000000	6.2490	6.2493	6.2494	6.2502	6.2537	6.4311
0.25000000	6.2491	6.2494	6.2495	6.2503	6.2538	6.4313
0.50000000	6.2501	6.2504	6.2505	6.2513	6.2548	6.4332
0.80000000	6.2544	6.2547	6.2548	6.2556	6.2592	6.4417
1.00000000	6.4415	6.4421	6.4423	6.4440	6.4512	7.0709

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2604	6.2606	6.2607	6.2613	6.2639	6.4592
0.20000000	6.2608	6.2610	6.2611	6.2617	6.2643	6.4598
0.25000000	6.2609	6.2612	6.2612	6.2618	6.2644	6.4602
0.50000000	6.2620	6.2622	6.2623	6.2629	6.2655	6.4622
0.80000000	6.2668	6.2668	6.2669	6.2675	6.2702	6.4712
1.00000000	6.4777	6.4781	6.4783	6.4795	6.4850	7.1929

XMS = 0.25000000 KAR = 0.66666667 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2439	6.2442	6.2443	6.2452	6.2491	6.4237
0.20000000	6.2443	6.2446	6.2447	6.2456	6.2495	6.4244
0.25000000	6.2444	6.2447	6.2448	6.2457	6.2496	6.4247
0.50000000	6.2453	6.2456	6.2458	6.2466	6.2506	6.4265
0.80000000	6.2494	6.2498	6.2499	6.2508	6.2548	6.4368
1.00000000	6.4274	6.4281	6.4283	6.4301	6.4381	7.0426

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2489	6.2492	6.2493	6.2501	6.2536	6.4311
0.20000000	6.2493	6.2496	6.2497	6.2505	6.2540	6.4318
0.25000000	6.2494	6.2497	6.2498	6.2506	6.2541	6.4320
0.50000000	6.2504	6.2507	6.2508	6.2516	6.2551	6.4339
0.80000000	6.2546	6.2549	6.2550	6.2558	6.2594	6.4424
1.00000000	6.4418	6.4425	6.4427	6.4443	6.4515	7.0721

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2607	6.2609	6.2610	6.2616	6.2642	6.4600
0.20000000	6.2611	6.2613	6.2614	6.2620	6.2646	6.4607
0.25000000	6.2612	6.2615	6.2615	6.2621	6.2647	6.4610
0.50000000	6.2623	6.2625	6.2626	6.2632	6.2658	6.4630
0.80000000	6.2669	6.2671	6.2672	6.2678	6.2705	6.4719
1.00000000	6.4780	6.4785	6.4786	6.4799	6.4854	7.1943

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2508	6.2511	6.2512	6.2520	6.2535	6.4362
0.20000000	6.2511	6.2514	6.2515	6.2523	6.2539	6.4369
0.25000000	6.2513	6.2516	6.2517	6.2525	6.2560	6.4372
0.50000000	6.2522	6.2525	6.2526	6.2534	6.2570	6.4390
0.80000000	6.2563	6.2566	6.2567	6.2575	6.2612	6.4472
1.00000000	6.4442	6.4448	6.4450	6.4468	6.4539	7.0811

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2628	6.2630	6.2631	6.2637	6.2663	6.4657
0.20000000	6.2632	6.2634	6.2635	6.2641	6.2667	6.4664
0.25000000	6.2633	6.2635	6.2636	6.2642	6.2668	6.4667
0.50000000	6.2643	6.2645	6.2646	6.2652	6.2679	6.4686
0.80000000	6.2687	6.2690	6.2690	6.2696	6.2723	6.4773
1.00000000	6.4607	6.4612	6.4613	6.4626	6.4681	7.2050

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2687	6.2690	6.2690	6.2697	6.2724	6.4825
0.20000000	6.2692	6.2693	6.2694	6.2700	6.2727	6.4832
0.25000000	6.2701	6.2703	6.2704	6.2701	6.2729	6.4834
0.50000000	6.2741	6.2743	6.2744	6.2710	6.2738	6.4852
0.80000000	6.4699	6.4903	6.4905	6.4917	6.4973	6.4931
1.00000000						7.2420

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3805	9.3807	9.3807	9.3810	9.3823	9.5023
0.20000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5025
0.25000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5026
0.50000000	9.3810	9.3811	9.3811	9.3814	9.3827	9.5032
0.80000000	9.3823	9.3824	9.3825	9.3828	9.3841	9.5060
1.00000000	9.5037	9.5039	9.5040	9.5046	9.5073	9.9358

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3807	9.3808	9.3809	9.3812	9.3825	9.5024
0.20000000	9.3808	9.3809	9.3810	9.3813	9.3826	9.5026
0.25000000	9.3809	9.3810	9.3810	9.3813	9.3826	9.5027
0.50000000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5033
0.80000000	9.3825	9.3826	9.3827	9.3830	9.3843	9.5060
1.00000000	9.5041	9.5044	9.5044	9.5050	9.5077	9.9362

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3821	9.3822	9.3822	9.3825	9.3837	9.5030
0.20000000	9.3822	9.3823	9.3823	9.3826	9.3839	9.5033
0.25000000	9.3822	9.3823	9.3824	9.3826	9.3839	9.5034
0.50000000	9.3825	9.3827	9.3827	9.3829	9.3842	9.5040
0.80000000	9.3839	9.3840	9.3840	9.3843	9.3856	9.5067
1.00000000	9.5074	9.5076	9.5077	9.5083	9.5109	9.9393

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3864	9.3865	9.3865	9.3867	9.3879	9.5035
0.20000000	9.3863	9.3866	9.3866	9.3869	9.3880	9.5037
0.25000000	9.3863	9.3866	9.3866	9.3869	9.3880	9.5038
0.50000000	9.3866	9.3869	9.3870	9.3872	9.3883	9.5064
0.80000000	9.3882	9.3883	9.3884	9.3886	9.3898	9.5092
1.00000000	9.5181	9.5183	9.5183	9.5189	9.5213	9.5307

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4000	9.4001	9.4001	9.4003	9.4010	9.5187
0.20000000	9.4001	9.4002	9.4002	9.4004	9.4011	9.5189
0.25000000	9.4002	9.4003	9.4003	9.4004	9.4012	9.5190
0.50000000	9.4005	9.4006	9.4006	9.4008	9.4015	9.5197
0.80000000	9.4021	9.4022	9.4022	9.4023	9.4031	9.5226
1.00000000	9.5348	9.5349	9.5350	9.5354	9.5371	10.0133

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3813	9.3814	9.3814	9.3817	9.3830	9.5037
0.20000000	9.3814	9.3815	9.3815	9.3819	9.3832	9.5040
0.25000000	9.3814	9.3816	9.3816	9.3819	9.3832	9.5041
0.50000000	9.3817	9.3819	9.3819	9.3822	9.3835	9.5047
0.80000000	9.3831	9.3832	9.3832	9.3835	9.3848	9.5074
1.00000000	9.5044	9.5046	9.5047	9.5053	9.5080	9.5375

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3827	9.3828	9.3828	9.3831	9.3843	9.5044
0.20000000	9.3828	9.3829	9.3829	9.3832	9.3843	9.5047
0.25000000	9.3828	9.3829	9.3829	9.3832	9.3843	9.5047
0.50000000	9.3831	9.3832	9.3832	9.3835	9.3848	9.5053
0.80000000	9.3844	9.3845	9.3846	9.3849	9.3861	9.5081
1.00000000	9.5077	9.5079	9.5080	9.5086	9.5112	9.5406

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3870	9.3871	9.3871	9.3873	9.3885	9.5069
0.20000000	9.3871	9.3872	9.3872	9.3875	9.3886	9.5071
0.25000000	9.3871	9.3872	9.3872	9.3875	9.3886	9.5072
0.50000000	9.3874	9.3875	9.3876	9.3878	9.3889	9.5078
0.80000000	9.3888	9.3889	9.3889	9.3892	9.3903	9.5106
1.00000000	9.5184	9.5186	9.5186	9.5192	9.5216	9.5319

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4007	9.4008	9.4008	9.4009	9.4017	9.5202
0.20000000	9.4008	9.4009	9.4009	9.4010	9.4018	9.5204
0.25000000	9.4009	9.4009	9.4010	9.4011	9.4019	9.5205
0.50000000	9.4012	9.4013	9.4013	9.4015	9.4022	9.5211
0.80000000	9.4028	9.4028	9.4028	9.4030	9.4038	9.5240
1.00000000	9.5351	9.5353	9.5353	9.5357	9.5374	10.0150

XMS = 0.25000000 KAR = 0.75000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3828	9.3829	9.3830	9.3833	9.3845	9.5049
0.20000000	9.3829	9.3831	9.3831	9.3834	9.3846	9.5051
0.25000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.5052
0.50000000	9.3833	9.3834	9.3834	9.3837	9.3850	9.5058
0.80000000	9.3840	9.3847	9.3848	9.3850	9.3863	9.5065
1.00000000	9.5078	9.5080	9.5081	9.5087	9.5113	9.9410

XT1 = 0.25000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3872	9.3873	9.3873	9.3875	9.3887	9.5073
0.20000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.5076
0.25000000	9.3873	9.3874	9.3874	9.3877	9.3891	9.5083
0.50000000	9.3876	9.3877	9.3878	9.3880	9.3905	9.5110
0.80000000	9.3890	9.3891	9.3891	9.3894	9.3927	9.9524
1.00000000	9.5185	9.5187	9.5187	9.5193		

XT1 = 0.25000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4009	9.4010	9.4010	9.4012	9.4019	9.5206
0.20000000	9.4010	9.4011	9.4011	9.4013	9.4020	9.5209
0.25000000	9.4011	9.4012	9.4012	9.4013	9.4021	9.5210
0.50000000	9.4014	9.4015	9.4015	9.4017	9.4024	9.5216
0.80000000	9.4030	9.4031	9.4031	9.4032	9.4040	9.5245
1.00000000	9.5552	9.5554	9.5554	9.5558	9.5575	10.0155

XMS = 0.25000000 KAR = 0.75000000 PHI = 0.000

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3886	9.3887	9.3887	9.3890	9.3901	9.5107
0.20000000	9.3887	9.3888	9.3888	9.3891	9.3902	9.5109
0.25000000	9.3887	9.3888	9.3889	9.3891	9.3903	9.5110
0.50000000	9.3890	9.3891	9.3892	9.3894	9.3906	9.5116
0.80000000	9.3904	9.3905	9.3905	9.3908	9.3919	9.5142
1.00000000	9.5192	9.5194	9.5195	9.5200	9.5224	9.9556

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4026	9.4026	9.4026	9.4028	9.4036	9.5242
0.20000000	9.4027	9.4027	9.4028	9.4029	9.4037	9.5244
0.25000000	9.4027	9.4028	9.4028	9.4030	9.4037	9.5245
0.50000000	9.4031	9.4031	9.4031	9.4033	9.4041	9.5251
0.80000000	9.4045	9.4046	9.4046	9.4048	9.4056	9.5279
1.00000000	9.5561	9.5563	9.5563	9.5567	9.5584	10.0192

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4078	9.4079	9.4079	9.4081	9.4088	9.5358
0.20000000	9.4079	9.4080	9.4080	9.4082	9.4090	9.5360
0.25000000	9.4079	9.4080	9.4080	9.4082	9.4090	9.5361
0.50000000	9.4082	9.4083	9.4083	9.4085	9.4093	9.5367
0.80000000	9.4096	9.4096	9.4097	9.4098	9.4106	9.5392
1.00000000	9.5593	9.5594	9.5595	9.5598	9.5616	10.0330

XMS = 0.25000000 KAR = 0.80000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5205	12.5205	12.5205	12.5207	12.5213	12.6127
0.20000000	12.5205	12.5205	12.5206	12.5207	12.5213	12.6128
0.25000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6128
0.50000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6131
0.80000000	12.5213	12.5213	12.5213	12.5215	12.5221	12.6143
1.00000000	12.6138	12.6139	12.6139	12.6142	12.6154	12.9537

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5206	12.5207	12.5207	12.5208	12.5214	12.6127
0.20000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6128
0.25000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.6129
0.50000000	12.5208	12.5209	12.5209	12.5210	12.5216	12.6131
0.80000000	12.5214	12.5215	12.5215	12.5216	12.5222	12.6144
1.00000000	12.6141	12.6142	12.6142	12.6145	12.6157	12.9539

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5217	12.5218	12.5218	12.5219	12.5225	12.6130
0.20000000	12.5218	12.5218	12.5218	12.5220	12.5225	12.6131
0.25000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6131
0.50000000	12.5219	12.5220	12.5220	12.5221	12.5227	12.6134
0.80000000	12.5226	12.5226	12.5226	12.5227	12.5233	12.6147
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.9553

XMS = 0.25000000 KAR = 0.80000000 PHI = 0.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5255	12.5256	12.5256	12.5257	12.5262	12.6141
0.20000000	12.5256	12.5256	12.5256	12.5257	12.5262	12.6142
0.25000000	12.5256	12.5256	12.5256	12.5258	12.5263	12.6142
0.50000000	12.5257	12.5258	12.5258	12.5259	12.5264	12.6145
0.80000000	12.5264	12.5264	12.5264	12.5265	12.5270	12.6157
1.00000000	12.6256	12.6257	12.6257	12.6260	12.6271	12.9607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5403	12.5403	12.5403	12.5404	12.5407	12.6214
0.20000000	12.5403	12.5403	12.5404	12.5404	12.5407	12.6215
0.25000000	12.5404	12.5404	12.5404	12.5405	12.5407	12.6215
0.50000000	12.5405	12.5405	12.5406	12.5406	12.5409	12.6218
0.80000000	12.5413	12.5413	12.5413	12.5414	12.5416	12.6231
1.00000000	12.6642	12.6642	12.6642	12.6644	12.6651	12.9984

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5211	12.5211	12.5212	12.5213	12.5219	12.6136
0.20000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6139
0.25000000	12.5212	12.5212	12.5212	12.5214	12.5221	12.6142
0.50000000	12.5213	12.5213	12.5213	12.5215	12.5227	12.6154
0.80000000	12.5219	12.5219	12.5219	12.5221	12.5227	12.6154
1.00000000	12.6142	12.6143	12.6143	12.6146	12.6159	12.9544

XMS = 0.25000000 XAH = 0.80000000 PHI = 0.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5222	12.5223	12.5223	12.5224	12.5230	12.6140
0.20000000	12.5223	12.5223	12.5223	12.5225	12.5230	12.6142
0.25000000	12.5223	12.5223	12.5223	12.5225	12.5230	12.6142
0.50000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6145
0.80000000	12.5230	12.5231	12.5231	12.5232	12.5238	12.6157
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9558

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6151
0.20000000	12.5261	12.5261	12.5261	12.5262	12.5268	12.6152
0.25000000	12.5261	12.5261	12.5261	12.5262	12.5268	12.6153
0.50000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6155
0.80000000	12.5268	12.5269	12.5269	12.5270	12.5275	12.6168
1.00000000	12.6257	12.6258	12.6258	12.6261	12.6272	12.9613

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5409	12.5409	12.5409	12.5410	12.5412	12.6225
0.20000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6226
0.25000000	12.5409	12.5410	12.5410	12.5410	12.5413	12.6226
0.50000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6229
0.80000000	12.5418	12.5418	12.5419	12.5419	12.5422	12.6242
1.00000000	12.6643	12.6644	12.6644	12.6646	12.6653	12.9991

XMS = 0.25000000 XAH = 0.80000000 PHI = 0.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5224	12.5224	12.5224	12.5226	12.5231	12.6144
0.20000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6145
0.25000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6145
0.50000000	12.5226	12.5226	12.5226	12.5228	12.5233	12.6148
0.80000000	12.5232	12.5232	12.5232	12.5234	12.5239	12.6160
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9560

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5262	12.5262	12.5262	12.5263	12.5268	12.6153
0.20000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6156
0.25000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6156
0.50000000	12.5264	12.5264	12.5264	12.5265	12.5271	12.6159
0.80000000	12.5270	12.5270	12.5271	12.5272	12.5277	12.6171
1.00000000	12.6257	12.6258	12.6259	12.6261	12.6272	12.9615

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5410	12.5411	12.5411	12.5411	12.5414	12.6228
0.20000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6229
0.25000000	12.5411	12.5411	12.5412	12.5412	12.5415	12.6230
0.50000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.6232
0.80000000	12.5420	12.5420	12.5420	12.5421	12.5424	12.6245
1.00000000	12.6644	12.6644	12.6644	12.6646	12.6653	12.9993

XT1 = 0.50000000 XT2 = 0.60000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
XS1						
0.00000000	12.5274	12.5274	12.5274	12.5275	12.5280	12.6181
0.20000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6182
0.25000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6182
0.50000000	12.5276	12.5276	12.5276	12.5277	12.5283	12.6185
0.60000000	12.5282	12.5282	12.5282	12.5283	12.5289	12.6197
1.00000000	12.6261	12.6261	12.6262	12.6264	12.6275	12.6629

XT1 = 0.50000000 XT2 = 1.00000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
XS1						
0.00000000	12.5424	12.5425	12.5425	12.5425	12.5428	12.6255
0.20000000	12.5425	12.5425	12.5425	12.5426	12.5429	12.6256
0.25000000	12.5425	12.5425	12.5426	12.5426	12.5431	12.6257
0.50000000	12.5427	12.5427	12.5427	12.5428	12.5431	12.6259
0.60000000	12.5434	12.5434	12.5434	12.5435	12.5438	12.6272
1.00000000	12.6647	12.6648	12.6648	12.6650	12.6657	13.0009

XT1 = 0.60000000 XT2 = 1.00000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
XS1						
0.00000000	12.5472	12.5473	12.5473	12.5473	12.5477	12.6349
0.20000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6350
0.25000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6351
0.50000000	12.5474	12.5475	12.5475	12.5476	12.5479	12.6353
0.60000000	12.5481	12.5481	12.5481	12.5482	12.5485	12.6365
1.00000000	12.6662	12.6662	12.6663	12.6664	12.6672	13.0073

XMS = 0.0000000 XAR = 0.3333333 PHI = 0.250

XT1 = 0.0000000 XT2 = 0.2000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	2.6237	2.6346	2.6362	2.6665	2.7864	4.3605
0.2000000	2.6332	2.6438	2.6473	2.6752	2.7933	4.3035
0.2500000	2.6363	2.6408	2.6503	2.6781	2.7956	4.3645
0.5000000	2.6614	2.6714	2.6748	2.7012	2.8143	4.3723
0.8000000	2.7721	2.7802	2.7828	2.8094	2.8992	2.1555
1.0000000	2.0042	2.0256	2.0326	2.0834	2.2756	3.3165

XT1 = 0.0000000 XT2 = 0.2500000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	2.6354	2.6459	2.6494	2.6771	2.7944	4.3677
0.2000000	2.6447	2.6551	2.6585	2.6857	2.8013	4.3706
0.2500000	2.6479	2.6531	2.6616	2.6886	2.8036	4.3716
0.5000000	2.6728	2.6826	2.6858	2.7116	2.8222	4.3794
0.8000000	2.7827	2.7906	2.7932	2.8142	2.9072	2.1627
1.0000000	2.0104	2.0315	2.0383	2.0903	2.2761	3.5251

XT1 = 0.0000000 XT2 = 0.5000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	2.7679	2.7169	2.7199	2.7436	2.8451	4.4198
0.2000000	2.7169	2.7258	2.7287	2.7520	2.8520	4.4226
0.2500000	2.7199	2.7287	2.7316	2.7548	2.8544	4.4235
0.5000000	2.7438	2.7522	2.7550	2.7772	2.8730	4.4310
0.8000000	2.8492	2.8561	2.8583	2.8772	2.9576	2.2109
1.0000000	2.0487	2.0675	2.0737	2.1205	2.2936	3.5668

XMS = 0.8000000 XAR = 0.3333333 PHI = 0.250

XT1 = 0.0000000 XT2 = 0.8000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	2.8478	2.8542	2.8563	2.8732	2.9474	2.0212
0.2000000	2.8562	2.8625	2.8640	2.8813	2.9544	2.0456
0.2500000	2.8590	2.8653	2.8673	2.8839	2.9568	2.0536
0.5000000	2.8814	2.8874	2.8894	2.9053	2.9755	2.1135
0.8000000	2.9748	2.9848	2.9865	2.9998	3.0595	2.3269
1.0000000	2.1190	2.1341	2.1391	2.1772	2.3239	3.7586

XT1 = 0.0000000 XT2 = 1.0000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	3.2070	3.0110	3.0124	3.0231	3.0711	2.2482
0.2000000	3.0149	3.0189	3.0202	3.0308	3.0781	2.2685
0.2500000	3.0176	3.0215	3.0228	3.0333	3.0804	2.2752
0.5000000	3.0347	3.0425	3.0437	3.0538	3.0992	2.3260
0.8000000	3.1314	3.1346	3.1357	3.1442	3.1827	2.5162
1.0000000	2.1938	2.2055	2.2093	2.2392	2.3589	4.1426

XT1 = 0.2000000 XT2 = 0.2500000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	2.6735	2.6837	2.6871	2.7139	2.8279	4.4089
0.2000000	2.6822	2.6922	2.6955	2.7220	2.8345	4.4117
0.2500000	2.6851	2.6951	2.6984	2.7246	2.8366	4.4127
0.5000000	2.7092	2.7178	2.7210	2.7461	2.8542	4.4201
0.8000000	2.8107	2.8185	2.8211	2.8420	2.9330	2.1735
1.0000000	2.0364	2.0570	2.0637	2.1145	2.2994	3.5531

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7461	2.7548	2.7577	2.7807	2.8795	4.4607
0.20000000	2.7545	2.7630	2.7659	2.7885	2.8860	4.4634
0.25000000	2.7572	2.7658	2.7686	2.7911	2.8882	4.4643
0.50000000	2.7795	2.7877	2.7904	2.8120	2.9057	4.4714
0.80000000	2.8778	2.8846	2.8869	2.9050	2.9851	4.2224
1.00000000	2.0751	2.0935	2.0995	2.1453	2.3153	3.8142

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8667	2.8929	2.8950	2.9115	2.9836	2.0513
0.20000000	2.8646	2.9007	2.9027	2.9189	2.9902	2.0740
0.25000000	2.8972	2.9033	2.9053	2.9214	2.9924	2.0814
0.50000000	2.9180	2.9239	2.9258	2.9414	3.0100	2.1375
0.80000000	3.0100	3.0149	3.0166	3.0298	3.0888	2.2224
1.00000000	2.1463	2.1610	2.1658	2.2031	2.3470	3.7856

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0476	3.0517	3.0530	3.0633	3.1099	2.2806
0.20000000	3.0552	3.0590	3.0603	3.0705	3.1165	2.2996
0.25000000	3.0576	3.0615	3.0627	3.0729	3.1187	2.3058
0.50000000	3.0773	3.0810	3.0823	3.0921	3.1363	2.3534
0.80000000	3.1641	3.1672	3.1683	3.1767	3.2146	2.5336
1.00000000	2.2223	2.2336	2.2373	2.2664	2.3833	4.1698

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XMS = 0.80000000 XAR = 0.33333333 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7573	2.7660	2.7688	2.7916	2.8896	4.4732
0.20000000	2.7655	2.7740	2.7769	2.7993	2.8960	4.4758
0.25000000	2.7682	2.7767	2.7795	2.8019	2.8982	4.4767
0.50000000	2.7900	2.7982	2.8009	2.8223	2.9154	2.0058
0.80000000	2.8863	2.8931	2.8953	2.9134	2.9933	2.2258
1.00000000	2.0831	2.1014	2.1073	2.1529	2.3223	3.8230

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8982	2.9044	2.9064	2.9228	2.9944	2.0800
0.20000000	2.9059	2.9120	2.9140	2.9301	3.0006	2.0822
0.25000000	2.9084	2.9145	2.9165	2.9325	3.0030	2.0895
0.50000000	2.9289	2.9347	2.9366	2.9521	3.0202	2.1445
0.80000000	3.0189	3.0239	3.0255	3.0387	3.0975	2.3441
1.00000000	2.1546	2.1692	2.1740	2.2110	2.3541	3.7942

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0599	3.0637	3.0650	3.0753	3.1214	2.2901
0.20000000	3.0671	3.0709	3.0722	3.0824	3.1279	2.3097
0.25000000	3.0695	3.0733	3.0746	3.0847	3.1301	2.3147
0.50000000	3.0898	3.0925	3.0937	3.1035	3.1473	2.3615
0.80000000	3.1738	3.1770	3.1780	3.1864	3.2242	2.5388
1.00000000	2.2310	2.2423	2.2460	2.2744	2.3910	4.1764

XMS = C.H000000 XAH = 0.3333333 PHI = 0.250

XT1 = 0.5000000 XT2 = 0.8000000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	2.9711	2.9769	2.9789	2.9789	2.9945	3.0628	2.1132
0.2000000	2.9777	2.9835	2.9855	2.9877	3.0009	3.0685	2.1327
0.2500000	2.9800	2.9857	2.9877	2.9877	3.0030	3.0704	2.1391
0.5000000	2.9977	3.0033	3.0052	3.0052	3.0200	3.0855	2.1876
0.8000000	3.0763	3.0812	3.0828	3.0828	3.0957	3.1535	2.3688
1.0000000	2.2110	2.2299	2.2295	2.2649	2.2649	2.4027	3.8551

XT1 = 0.5000000 XT2 = 1.0000000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	3.1371	3.1407	3.1420	3.1420	3.1517	3.1955	2.3488
0.2000000	3.1434	3.1470	3.1482	3.1482	3.1570	3.2012	2.3651
0.2500000	3.1455	3.1491	3.1503	3.1503	3.1599	3.2030	2.3704
0.5000000	3.1623	3.1658	3.1670	3.1670	3.1763	3.2182	2.4117
0.8000000	3.2366	3.2397	3.2407	3.2407	3.2488	3.2857	2.5716
1.0000000	2.2905	2.3011	2.3046	2.3046	2.3319	2.4430	4.2405

XT1 = 0.8000000 XT2 = 1.0000000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	3.2949	3.2982	3.2993	3.2993	3.3082	3.3481	2.4606
0.2000000	3.2995	3.3028	3.3039	3.3039	3.3127	3.3523	2.4731
0.2500000	3.3010	3.3043	3.3054	3.3054	3.3142	3.3537	2.4772
0.5000000	3.3133	3.3165	3.3176	3.3176	3.3262	3.3648	2.5092
0.8000000	3.3678	3.3707	3.3717	3.3717	3.3795	3.4148	2.6377
1.0000000	2.4359	2.4453	2.4484	2.4484	2.4728	2.5731	4.4225

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XMS = 0.8000000 XAR = 0.5000000 PHI = 0.250

XT1 = 0.0000000 XT2 = 0.2000000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	3.0708	3.0732	3.0740	3.0740	3.0803	3.1059	3.3815
0.2000000	3.0736	3.0760	3.0768	3.0768	3.0831	3.1088	3.3862
0.2500000	3.0746	3.0770	3.0778	3.0778	3.0840	3.1098	3.3878
0.5000000	3.0818	3.0842	3.0850	3.0850	3.0914	3.1175	3.4001
0.8000000	3.1114	3.1140	3.1149	3.1149	3.1216	3.1493	3.4526
1.0000000	3.4187	3.4231	3.4245	3.4245	3.4361	3.4854	4.4450

XT1 = 0.0000000 XT2 = 0.2500000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	3.0712	3.0735	3.0743	3.0743	3.0804	3.1060	3.3833
0.2000000	3.0739	3.0763	3.0771	3.0771	3.0834	3.1090	3.3880
0.2500000	3.0747	3.0773	3.0781	3.0781	3.0843	3.1100	3.3895
0.5000000	3.0821	3.0846	3.0854	3.0854	3.0917	3.1177	3.4019
0.8000000	3.1118	3.1144	3.1153	3.1153	3.1219	3.1495	3.4545
1.0000000	3.4205	3.4249	3.4263	3.4263	3.4378	3.4867	4.4493

XT1 = 0.0000000 XT2 = 0.5000000

	X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51							
0.0000000	3.0732	3.0755	3.0762	3.0762	3.0822	3.1068	3.3960
0.2000000	3.0760	3.0783	3.0791	3.0791	3.0851	3.1098	3.4007
0.2500000	3.0770	3.0793	3.0800	3.0800	3.0860	3.1108	3.4023
0.5000000	3.0843	3.0866	3.0874	3.0874	3.0935	3.1166	3.4147
0.8000000	3.1145	3.1169	3.1177	3.1177	3.1241	3.1507	3.4675
1.0000000	3.4327	3.4369	3.4383	3.4383	3.4491	3.4957	4.4810

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0777	3.0738	3.0805	3.0880	3.1088	3.4329
0.20000000	3.0967	3.0827	3.0834	3.0889	3.1118	3.4377
0.25000000	3.0818	3.0837	3.0844	3.0899	3.1129	3.4393
0.50000000	3.0852	3.0913	3.0920	3.0975	3.1208	3.4519
0.80000000	3.1203	3.1225	3.1233	3.1291	3.1535	3.5056
1.00000000	3.4614	3.4650	3.4662	3.4758	3.5170	4.5784

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0842	3.0860	3.0866	3.0914	3.1117	3.5227
0.20000000	3.0873	3.0891	3.0897	3.0944	3.1145	3.5270
0.25000000	3.0883	3.0901	3.0907	3.0954	3.1158	3.5293
0.50000000	3.0961	3.0980	3.0986	3.1034	3.1240	3.5423
0.80000000	3.1287	3.1306	3.1312	3.1362	3.1576	3.5982
1.00000000	3.5056	3.5084	3.5094	3.5170	3.5503	4.8505

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0726	3.0750	3.0758	3.0820	3.1077	3.3896
0.20000000	3.0753	3.0777	3.0785	3.0848	3.1106	3.3942
0.25000000	3.0762	3.0786	3.0794	3.0857	3.1118	3.3957
0.50000000	3.0833	3.0858	3.0866	3.0929	3.1192	3.4077
0.80000000	3.1125	3.1151	3.1159	3.1227	3.1504	3.4591
1.00000000	3.4262	3.4306	3.4321	3.4436	3.4927	4.4633

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XMS = 0.80000000 XAR = 0.50000000 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0746	3.0770	3.0777	3.0837	3.1086	3.4024
0.20000000	3.0774	3.0797	3.0805	3.0865	3.1115	3.4071
0.25000000	3.0783	3.0807	3.0814	3.0875	3.1125	3.4086
0.50000000	3.0855	3.0879	3.0887	3.0948	3.1201	3.4207
0.80000000	3.1151	3.1174	3.1184	3.1249	3.1518	3.4723
1.00000000	3.4387	3.4428	3.4442	3.4551	3.5018	4.4951

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0793	3.0814	3.0821	3.0876	3.1106	3.4399
0.20000000	3.0821	3.0842	3.0849	3.0905	3.1136	3.4446
0.25000000	3.0831	3.0852	3.0859	3.0914	3.1146	3.4462
0.50000000	3.0905	3.0926	3.0933	3.0989	3.1223	3.4584
0.80000000	3.1211	3.1233	3.1240	3.1299	3.1544	3.5109
1.00000000	3.4678	3.4714	3.4726	3.4822	3.5235	4.5929

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0859	3.0877	3.0884	3.0931	3.1136	3.5313
0.20000000	3.0889	3.0907	3.0913	3.0961	3.1166	3.5361
0.25000000	3.0899	3.0917	3.0923	3.0971	3.1176	3.5377
0.50000000	3.0976	3.0994	3.1000	3.1048	3.1256	3.5504
0.80000000	3.1296	3.1315	3.1321	3.1371	3.1586	3.6049
1.00000000	3.5126	3.5155	3.5165	3.5241	3.5574	4.8665

XMS = 0.00000000 XAM = 0.50000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0751	3.0774	3.0782	3.0842	3.1091	3.4044
0.20000000	3.0774	3.0802	3.0809	3.0870	3.1120	3.4090
0.25000000	3.0737	3.0811	3.0818	3.0879	3.1130	3.4105
0.50000000	3.0854	3.0863	3.0890	3.0952	3.1206	3.4225
0.80000000	3.1154	3.1170	3.1187	3.1251	3.1519	3.4738
1.00000000	3.4406	3.4447	3.4461	3.4570	3.5037	4.4996

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0798	3.0819	3.0826	3.0881	3.1111	3.4421
0.20000000	3.0826	3.0847	3.0854	3.0909	3.1141	3.4467
0.25000000	3.0835	3.0856	3.0863	3.0919	3.1151	3.4483
0.50000000	3.0909	3.0930	3.0937	3.0993	3.1228	3.4604
0.80000000	3.1213	3.1235	3.1243	3.1301	3.1547	3.5125
1.00000000	3.4698	3.4734	3.4746	3.4842	3.5255	4.5976

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0864	3.0882	3.0888	3.0936	3.1141	3.5339
0.20000000	3.0894	3.0912	3.0918	3.0976	3.1172	3.5387
0.25000000	3.0903	3.0922	3.0928	3.0976	3.1182	3.5403
0.50000000	3.0980	3.0998	3.1005	3.1053	3.1281	3.5529
0.80000000	3.1298	3.1317	3.1323	3.1374	3.1589	3.6070
1.00000000	3.5149	3.5178	3.5187	3.5263	3.5597	4.8717

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XMS = 0.80000000 XAM = 0.50000000 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0829	3.0850	3.0857	3.0913	3.1148	3.4566
0.20000000	3.0856	3.0877	3.0884	3.0940	3.1176	3.4610
0.25000000	3.0865	3.0886	3.0893	3.0949	3.1185	3.4625
0.50000000	3.0935	3.0957	3.0964	3.1021	3.1259	3.4740
0.80000000	3.1228	3.1251	3.1258	3.1317	3.1566	3.5235
1.00000000	3.4843	3.4880	3.4892	3.4988	3.5403	4.6315

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0898	3.0916	3.0922	3.0971	3.1179	3.5518
0.20000000	3.0926	3.0944	3.0951	3.0999	3.1208	3.5563
0.25000000	3.0935	3.0954	3.0960	3.1009	3.1218	3.5578
0.50000000	3.1007	3.1027	3.1034	3.1083	3.1293	3.5698
0.80000000	3.1315	3.1334	3.1341	3.1391	3.1609	3.6210
1.00000000	3.5311	3.5339	3.5349	3.5425	3.5759	4.9095

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0974	3.0993	3.0997	3.1049	3.1265	3.5944
0.20000000	3.0999	3.1018	3.1025	3.1075	3.1291	3.5983
0.25000000	3.1008	3.1027	3.1033	3.1083	3.1300	3.5998
0.50000000	3.1074	3.1093	3.1100	3.1150	3.1368	3.6099
0.80000000	3.1354	3.1374	3.1381	3.1432	3.1655	3.6546
1.00000000	3.5786	3.5813	3.5825	3.5901	3.6237	5.0276

XMS = 0.80000000 XAH = 0.66666667 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2374	6.2378	6.2379	6.2385	6.2428	6.4132
0.20000000	6.2378	6.2381	6.2382	6.2391	6.2431	6.4139
0.25000000	6.2379	6.2382	6.2384	6.2393	6.2433	6.4141
0.50000000	6.2389	6.2392	6.2393	6.2402	6.2442	6.4160
0.80000000	6.2430	6.2434	6.2435	6.2444	6.2485	6.4244
1.00000000	6.4197	6.4204	6.4206	6.4225	6.4307	7.0254

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2377	6.2380	6.2381	6.2390	6.2430	6.4135
0.20000000	6.2380	6.2384	6.2385	6.2394	6.2434	6.4142
0.25000000	6.2381	6.2385	6.2386	6.2395	6.2435	6.4144
0.50000000	6.2391	6.2394	6.2395	6.2405	6.2445	6.4163
0.80000000	6.2433	6.2436	6.2438	6.2447	6.2488	6.4247
1.00000000	6.4204	6.4211	6.4213	6.4232	6.4314	7.0265

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2394	6.2397	6.2398	6.2407	6.2445	6.4156
0.20000000	6.2397	6.2401	6.2402	6.2410	6.2449	6.4163
0.25000000	6.2398	6.2402	6.2403	6.2412	6.2450	6.4166
0.50000000	6.2408	6.2411	6.2412	6.2421	6.2460	6.4185
0.80000000	6.2451	6.2454	6.2455	6.2464	6.2503	6.4269
1.00000000	6.4253	6.4259	6.4262	6.4280	6.4359	7.0350

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XMS = 0.80000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2442	6.2445	6.2446	6.2454	6.2488	6.4229
0.20000000	6.2446	6.2449	6.2450	6.2458	6.2492	6.4236
0.25000000	6.2447	6.2450	6.2451	6.2459	6.2493	6.4238
0.50000000	6.2457	6.2460	6.2461	6.2469	6.2504	6.4258
0.80000000	6.2501	6.2504	6.2505	6.2513	6.2548	6.4344
1.00000000	6.4396	6.4402	6.4404	6.4420	6.4492	7.0642

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2557	6.2559	6.2560	6.2566	6.2592	6.4314
0.20000000	6.2561	6.2563	6.2564	6.2570	6.2596	6.4321
0.25000000	6.2563	6.2565	6.2565	6.2571	6.2597	6.4324
0.50000000	6.2573	6.2575	6.2576	6.2582	6.2608	6.4344
0.80000000	6.2621	6.2623	6.2623	6.2629	6.2656	6.4365
1.00000000	6.4755	6.4759	6.4761	6.4773	6.4828	7.1850

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2384	6.2388	6.2389	6.2398	6.2438	6.4156
0.20000000	6.2388	6.2391	6.2393	6.2402	6.2442	6.4163
0.25000000	6.2389	6.2393	6.2394	6.2403	6.2443	6.4165
0.50000000	6.2397	6.2399	6.2403	6.2412	6.2452	6.4184
0.80000000	6.2440	6.2443	6.2445	6.2454	6.2495	6.4267
1.00000000	6.4213	6.4220	6.4222	6.4241	6.4323	7.0301

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2402	6.2405	6.2406	6.2415	6.2453	6.4178
0.20000000	6.2403	6.2408	6.2408	6.2418	6.2457	6.4183
0.40000000	6.2406	6.2410	6.2411	6.2419	6.2458	6.4187
0.60000000	6.2416	6.2419	6.2420	6.2429	6.2460	6.4206
0.80000000	6.2458	6.2461	6.2462	6.2471	6.2511	6.4269
1.00000000	6.4262	6.4269	6.4271	6.4289	6.4369	7.0386

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2451	6.2454	6.2455	6.2462	6.2497	6.4251
0.20000000	6.2454	6.2457	6.2458	6.2466	6.2501	6.4258
0.40000000	6.2456	6.2459	6.2459	6.2467	6.2502	6.4261
0.60000000	6.2465	6.2468	6.2469	6.2477	6.2512	6.4280
0.80000000	6.2509	6.2512	6.2513	6.2521	6.2550	6.4364
1.00000000	6.4406	6.4412	6.4414	6.4430	6.4502	7.0679

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2566	6.2568	6.2569	6.2575	6.2601	6.4538
0.20000000	6.2570	6.2572	6.2573	6.2579	6.2605	6.4546
0.40000000	6.2572	6.2574	6.2575	6.2580	6.2606	6.4548
0.60000000	6.2582	6.2584	6.2585	6.2591	6.2617	6.4569
0.80000000	6.2629	6.2631	6.2632	6.2638	6.2664	6.4659
1.00000000	6.4766	6.4771	6.4772	6.4784	6.4839	7.1894

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XMS = 0.80000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2404	6.2407	6.2408	6.2417	6.2456	6.4185
0.20000000	6.2408	6.2411	6.2412	6.2421	6.2459	6.4192
0.40000000	6.2409	6.2412	6.2413	6.2422	6.2461	6.4194
0.60000000	6.2418	6.2422	6.2423	6.2432	6.2470	6.4213
0.80000000	6.2460	6.2463	6.2464	6.2473	6.2513	6.4296
1.00000000	6.4265	6.4272	6.4274	6.4292	6.4372	7.0397

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2453	6.2456	6.2457	6.2465	6.2500	6.4258
0.20000000	6.2457	6.2460	6.2461	6.2469	6.2503	6.4265
0.40000000	6.2458	6.2461	6.2462	6.2470	6.2505	6.4268
0.60000000	6.2468	6.2471	6.2472	6.2480	6.2515	6.4287
0.80000000	6.2511	6.2514	6.2515	6.2523	6.2558	6.4371
1.00000000	6.4409	6.4415	6.4417	6.4433	6.4506	7.0691

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2569	6.2571	6.2572	6.2578	6.2604	6.4546
0.20000000	6.2573	6.2575	6.2576	6.2582	6.2608	6.4554
0.40000000	6.2574	6.2577	6.2577	6.2583	6.2609	6.4556
0.60000000	6.2585	6.2587	6.2588	6.2594	6.2620	6.4576
0.80000000	6.2631	6.2634	6.2634	6.2640	6.2667	6.4666
1.00000000	6.4770	6.4774	6.4776	6.4788	6.4843	7.1909

XMS = 0.0000000 XAR = 0.0000000 PHI = 0.250

XT1 = 0.5000000 XT2 = 0.8000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	0.2472	0.2475	0.2476	0.2484	0.2510	0.4309
0.2000000	0.2476	0.2479	0.2480	0.2488	0.2523	0.4316
0.2500000	0.2477	0.2480	0.2481	0.2483	0.2524	0.4318
0.5000000	0.2486	0.2489	0.2490	0.2498	0.2533	0.4337
0.8000000	0.2538	0.2531	0.2532	0.2540	0.2576	0.4418
1.0000000	0.4433	0.4439	0.4441	0.4457	0.4530	7.0782

XT1 = 0.5000000 XT2 = 1.0000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	0.2590	0.2592	0.2593	0.2599	0.2625	0.4603
0.2000000	0.2594	0.2596	0.2597	0.2603	0.2629	0.4610
0.2500000	0.2595	0.2597	0.2598	0.2604	0.2630	0.4612
0.5000000	0.2605	0.2607	0.2608	0.2614	0.2640	0.4632
0.8000000	0.2650	0.2652	0.2653	0.2659	0.2686	0.4719
1.0000000	0.4757	0.4801	0.4803	0.4815	0.4870	7.2016

XT1 = 0.8000000 XT2 = 1.0000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	0.2650	0.2652	0.2653	0.2659	0.2686	0.4770
0.2000000	0.2653	0.2655	0.2656	0.2662	0.2689	0.4776
0.2500000	0.2654	0.2656	0.2657	0.2663	0.2690	0.4778
0.5000000	0.2663	0.2665	0.2666	0.2672	0.2700	0.4796
0.8000000	0.2703	0.2706	0.2706	0.2713	0.2740	0.4873
1.0000000	0.4809	0.4894	0.4895	0.4908	0.4964	7.2389

UNIVERSITY OF CALIFORNIA

XMS = 0.8000000 XAR = 0.7500000 PHI = 0.250

XT1 = 0.0000000 XT2 = 0.2000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	9.3795	9.3797	9.3797	9.3800	9.3813	9.5007
0.2000000	9.3797	9.3798	9.3798	9.3801	9.3814	9.5009
0.2500000	9.3797	9.3798	9.3798	9.3801	9.3814	9.5010
0.5000000	9.3800	9.3801	9.3801	9.3804	9.3817	9.5016
0.8000000	9.3813	9.3814	9.3815	9.3818	9.3831	9.5048
1.0000000	9.5034	9.5036	9.5037	9.5043	9.5070	9.9348

XT1 = 0.0000000 XT2 = 0.2500000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	9.3797	9.3798	9.3799	9.3802	9.3815	9.5008
0.2000000	9.3798	9.3799	9.3800	9.3803	9.3816	9.5010
0.2500000	9.3799	9.3800	9.3800	9.3803	9.3816	9.5011
0.5000000	9.3802	9.3803	9.3803	9.3806	9.3819	9.5017
0.8000000	9.3815	9.3816	9.3817	9.3820	9.3833	9.5045
1.0000000	9.5039	9.5041	9.5042	9.5048	9.5075	9.9352

XT1 = 0.0000000 XT2 = 0.5000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	9.3811	9.3812	9.3812	9.3815	9.3827	9.5015
0.2000000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5017
0.2500000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5018
0.5000000	9.3815	9.3816	9.3817	9.3819	9.3832	9.5024
0.8000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5051
1.0000000	9.5071	9.5073	9.5074	9.5080	9.5106	9.9363

AMS = 0.80000000 KAH = 0.75000000 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3853	9.3854	9.3855	9.3857	9.3868	9.5039
0.20000000	9.3854	9.3855	9.3856	9.3858	9.3869	9.5041
0.25000000	9.3855	9.3856	9.3857	9.3859	9.3870	9.5042
0.50000000	9.3858	9.3859	9.3860	9.3862	9.3873	9.5048
0.80000000	9.3872	9.3873	9.3874	9.3876	9.3887	9.5076
1.00000000	9.5178	9.5180	9.5181	9.5186	9.5210	9.9996

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3989	9.3989	9.3990	9.3991	9.3999	9.5170
0.20000000	9.3990	9.3991	9.3991	9.3993	9.4000	9.5173
0.25000000	9.3991	9.3991	9.3991	9.3993	9.4000	9.5174
0.50000000	9.3994	9.3995	9.3995	9.3997	9.4004	9.5180
0.80000000	9.4010	9.4010	9.4011	9.4012	9.4020	9.5209
1.00000000	9.5544	9.5546	9.5546	9.5550	9.5567	10.0123

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3803	9.3804	9.3804	9.3807	9.3820	9.5021
0.20000000	9.3804	9.3805	9.3806	9.3809	9.3822	9.5024
0.25000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.5025
0.50000000	9.3807	9.3809	9.3809	9.3812	9.3825	9.5031
0.80000000	9.3821	9.3822	9.3822	9.3825	9.3838	9.5058
1.00000000	9.5041	9.5044	9.5044	9.5050	9.5078	9.9365

AMS = 0.80000000 KAH = 0.75000000 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3816	9.3816	9.3818	9.3821	9.3833	9.5028
0.20000000	9.3818	9.3819	9.3819	9.3822	9.3834	9.5031
0.25000000	9.3818	9.3819	9.3819	9.3822	9.3835	9.5031
0.50000000	9.3821	9.3822	9.3822	9.3825	9.3838	9.5037
0.80000000	9.3834	9.3835	9.3836	9.3839	9.3851	9.5065
1.00000000	9.5074	9.5076	9.5077	9.5083	9.5109	9.9395

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3859	9.3860	9.3861	9.3863	9.3874	9.5053
0.20000000	9.3861	9.3861	9.3862	9.3864	9.3876	9.5055
0.25000000	9.3861	9.3862	9.3862	9.3865	9.3877	9.5062
0.50000000	9.3864	9.3865	9.3865	9.3868	9.3879	9.5069
0.80000000	9.3878	9.3879	9.3882	9.3892	9.3893	9.9509
1.00000000	9.5181	9.5183	9.5184	9.5189	9.5213	9.9509

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3996	9.3996	9.3997	9.3998	9.4006	9.5183
0.20000000	9.3997	9.3998	9.3998	9.4000	9.4007	9.5188
0.25000000	9.3997	9.3998	9.3998	9.4000	9.4007	9.5188
0.50000000	9.4001	9.4002	9.4002	9.4003	9.4011	9.5193
0.80000000	9.4016	9.4017	9.4017	9.4019	9.4026	9.5224
1.00000000	9.5548	9.5549	9.5550	9.5554	9.5571	10.0138

XMS = 0.40000000 XAM = 0.75000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3818	9.3819	9.3820	9.3823	9.3835	9.5033
0.20000000	9.3819	9.3821	9.3821	9.3824	9.3836	9.5035
0.25000000	9.3820	9.3821	9.3821	9.3824	9.3837	9.5036
0.50000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5042
0.80000000	9.3836	9.3837	9.3838	9.3840	9.3853	9.5059
1.00000000	9.5075	9.5077	9.5078	9.5084	9.5110	9.9400

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3861	9.3862	9.3863	9.3865	9.3876	9.5057
0.20000000	9.3862	9.3863	9.3864	9.3866	9.3877	9.5060
0.25000000	9.3863	9.3864	9.3864	9.3867	9.3878	9.5060
0.50000000	9.3866	9.3867	9.3867	9.3870	9.3881	9.5067
0.80000000	9.3880	9.3881	9.3881	9.3884	9.3895	9.5094
1.00000000	9.5182	9.5184	9.5185	9.5190	9.5214	9.9513

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4000	9.4000	9.4000	9.4000	9.4008	9.5190
0.20000000	9.4000	9.4000	9.4000	9.4002	9.4009	9.5192
0.25000000	9.4000	9.4000	9.4001	9.4002	9.4010	9.5193
0.50000000	9.4004	9.4004	9.4004	9.4006	9.4013	9.5200
0.80000000	9.4019	9.4019	9.4019	9.4021	9.4029	9.5228
1.00000000	9.5549	9.5551	9.5551	9.5555	9.5572	10.0143

UNIVERSITY OF  
COMPLINT

XMS = 0.60000000 XAR = 0.75000000 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3876	9.3877	9.3877	9.3880	9.3891	9.5091
0.20000000	9.3877	9.3878	9.3878	9.3881	9.3892	9.5093
0.25000000	9.3877	9.3878	9.3878	9.3881	9.3892	9.5094
0.50000000	9.3880	9.3881	9.3881	9.3884	9.3895	9.5100
0.80000000	9.3894	9.3895	9.3895	9.3897	9.3909	9.5126
1.00000000	9.5189	9.5191	9.5192	9.5197	9.5222	9.9548

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4014	9.4015	9.4015	9.4017	9.4024	9.5225
0.20000000	9.4016	9.4016	9.4016	9.4018	9.4026	9.5228
0.25000000	9.4016	9.4017	9.4017	9.4018	9.4026	9.5228
0.50000000	9.4019	9.4020	9.4020	9.4022	9.4029	9.5235
0.80000000	9.4034	9.4035	9.4035	9.4037	9.4044	9.5263
1.00000000	9.5558	9.5559	9.5560	9.5564	9.5581	10.0180

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4067	9.4067	9.4068	9.4069	9.4077	9.5341
0.20000000	9.4068	9.4069	9.4069	9.4070	9.4078	9.5343
0.25000000	9.4068	9.4069	9.4069	9.4071	9.4079	9.5344
0.50000000	9.4071	9.4072	9.4072	9.4074	9.4082	9.5350
0.80000000	9.4085	9.4085	9.4085	9.4087	9.4095	9.5375
1.00000000	9.5590	9.5591	9.5591	9.5595	9.5613	10.0319

KMS = 0.00000000 XAH = 0.00000000 PHI = 0.250

XT1 = 0.00000000

XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5201	12.5201	12.5201	12.5203	12.5208	12.6120
0.20000000	12.5201	12.5202	12.5202	12.5203	12.5209	12.6121
0.25000000	12.5201	12.5202	12.5202	12.5203	12.5209	12.6121
0.50000000	12.5203	12.5203	12.5203	12.5205	12.5211	12.6124
0.80000000	12.5209	12.5209	12.5209	12.5211	12.5217	12.6137
1.00000000	12.6136	12.6137	12.6136	12.6141	12.6153	12.9532

XT1 = 0.00000000

XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5202	12.5203	12.5203	12.5204	12.5210	12.6120
0.20000000	12.5203	12.5203	12.5203	12.5205	12.5210	12.6121
0.25000000	12.5203	12.5203	12.5203	12.5205	12.5211	12.6122
0.50000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6125
0.80000000	12.5210	12.5211	12.5211	12.5212	12.5216	12.6137
1.00000000	12.6140	12.6141	12.6141	12.6144	12.6156	12.9534

XT1 = 0.00000000

XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5213	12.5214	12.5214	12.5215	12.5221	12.6123
0.20000000	12.5214	12.5214	12.5214	12.5216	12.5221	12.6124
0.25000000	12.5214	12.5214	12.5215	12.5216	12.5221	12.6125
0.50000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6127
0.80000000	12.5221	12.5222	12.5222	12.5223	12.5229	12.6140
1.00000000	12.6166	12.6167	12.6167	12.6170	12.6182	12.9548

UNIVERSITY OF  
CORVALLIS

KMS = 0.80000000 XAR = 0.80000000 PHI = 0.250

XT1 = 0.00000000

XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5251	12.5251	12.5251	12.5253	12.5258	12.6134
0.20000000	12.5251	12.5252	12.5252	12.5253	12.5258	12.6135
0.25000000	12.5252	12.5252	12.5252	12.5253	12.5258	12.6135
0.50000000	12.5253	12.5253	12.5254	12.5255	12.5260	12.6138
0.80000000	12.5259	12.5260	12.5260	12.5261	12.5266	12.6151
1.00000000	12.6255	12.6256	12.6256	12.6258	12.6270	12.9602

XT1 = 0.00000000

XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5398	12.5398	12.5398	12.5399	12.5402	12.6207
0.20000000	12.5399	12.5399	12.5399	12.5400	12.5402	12.6208
0.25000000	12.5399	12.5399	12.5399	12.5400	12.5403	12.6208
0.50000000	12.5400	12.5401	12.5401	12.5401	12.5404	12.6211
0.80000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6224
1.00000000	12.6640	12.6641	12.6641	12.6643	12.6650	12.9979

XT1 = 0.20000000

XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6131
0.20000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.6132
0.25000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6132
0.50000000	12.5209	12.5209	12.5209	12.5211	12.5217	12.6135
0.80000000	12.5215	12.5215	12.5215	12.5217	12.5223	12.6147
1.00000000	12.6141	12.6142	12.6142	12.6145	12.6157	12.9540

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5218	12.5218	12.5219	12.5220	12.5226	12.6134
0.20000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6135
0.25000000	12.5219	12.5219	12.5219	12.5221	12.5226	12.6135
0.50000000	12.5220	12.5220	12.5221	12.5222	12.5228	12.6135
0.80000000	12.5226	12.5226	12.5227	12.5228	12.5234	12.6150
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.9554

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5256	12.5256	12.5256	12.5258	12.5263	12.6144
0.20000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6145
0.25000000	12.5257	12.5257	12.5257	12.5258	12.5263	12.6146
0.50000000	12.5258	12.5258	12.5258	12.5260	12.5265	12.6149
0.80000000	12.5264	12.5265	12.5265	12.5266	12.5271	12.6161
1.00000000	12.6256	12.6257	12.6257	12.6260	12.6271	12.9608

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6218
0.20000000	12.5404	12.5405	12.5405	12.5405	12.5408	12.6219
0.25000000	12.5405	12.5405	12.5405	12.5406	12.5410	12.6222
0.50000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6235
0.80000000	12.5413	12.5414	12.5414	12.5414	12.5417	12.6255
1.00000000	12.6642	12.6642	12.6643	12.6644	12.6652	12.9955

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5220	12.5220	12.5220	12.5221	12.5227	12.6137
0.20000000	12.5220	12.5220	12.5221	12.5222	12.5228	12.6138
0.25000000	12.5221	12.5221	12.5222	12.5223	12.5229	12.6141
0.50000000	12.5221	12.5222	12.5222	12.5223	12.5235	12.6154
0.80000000	12.5227	12.5228	12.5228	12.5229	12.5235	12.9556
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5257	12.5258	12.5258	12.5259	12.5264	12.6148
0.20000000	12.5258	12.5258	12.5259	12.5260	12.5265	12.6149
0.25000000	12.5259	12.5259	12.5260	12.5261	12.5266	12.6152
0.50000000	12.5266	12.5266	12.5266	12.5267	12.5273	12.6164
0.80000000	12.6256	12.6257	12.6258	12.6260	12.6271	12.9610
1.00000000						

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6221
0.20000000	12.5406	12.5406	12.5407	12.5407	12.5410	12.6222
0.25000000	12.5406	12.5407	12.5407	12.5407	12.5410	12.6223
0.50000000	12.5408	12.5409	12.5409	12.5409	12.5412	12.6226
0.80000000	12.5415	12.5415	12.5416	12.5416	12.5419	12.6238
1.00000000	12.6642	12.6643	12.6643	12.6645	12.6652	12.9968

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5269	12.5270	12.5270	12.5271	12.5276	12.6174
0.20000000	12.5270	12.5270	12.5270	12.5271	12.5277	12.6175
0.25000000	12.5270	12.5270	12.5271	12.5272	12.5277	12.6175
0.50000000	12.5271	12.5272	12.5272	12.5273	12.5278	12.6178
0.80000000	12.5277	12.5278	12.5278	12.5279	12.5284	12.6190
1.00000000	12.6259	12.6260	12.6261	12.6263	12.6274	12.9624

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5420	12.5420	12.5420	12.5421	12.5424	12.6248
0.20000000	12.5420	12.5420	12.5421	12.5421	12.5424	12.6249
0.25000000	12.5420	12.5421	12.5421	12.5421	12.5424	12.6250
0.50000000	12.5422	12.5422	12.5422	12.5423	12.5426	12.6253
0.80000000	12.5429	12.5429	12.5429	12.5430	12.5433	12.6265
1.00000000	12.6646	12.6647	12.6647	12.6648	12.6656	13.0004

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5468	12.5468	12.5468	12.5469	12.5472	12.6342
0.20000000	12.5468	12.5468	12.5468	12.5469	12.5472	12.6343
0.25000000	12.5468	12.5469	12.5469	12.5469	12.5472	12.6343
0.50000000	12.5470	12.5470	12.5470	12.5471	12.5474	12.6344
0.80000000	12.5476	12.5476	12.5476	12.5477	12.5480	12.6358
1.00000000	12.6660	12.6661	12.6661	12.6663	12.6670	13.0068

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XMS = 0.25000000 XAH = 0.33333333 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6576	2.6673	2.6705	2.6960	2.8086	2.0152
0.20000000	2.6676	2.6770	2.6802	2.7052	2.8140	2.0374
0.25000000	2.6709	2.6803	2.6834	2.7083	2.8164	2.0447
0.50000000	2.6973	2.7062	2.7091	2.7328	2.8363	2.0995
0.80000000	2.8117	2.8188	2.8212	2.8402	2.9259	2.2957
1.00000000	2.0280	2.0490	2.0558	2.1075	2.2948	3.5378

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6687	2.6782	2.6813	2.7063	2.8145	2.0226
0.20000000	2.6786	2.6879	2.6909	2.7154	2.8219	2.0447
0.25000000	2.6819	2.6911	2.6942	2.7185	2.8243	2.0519
0.50000000	2.7081	2.7168	2.7197	2.7428	2.8442	2.1063
0.80000000	2.8217	2.8286	2.8310	2.8496	2.9336	2.3018
1.00000000	2.0343	2.0549	2.0616	2.1125	2.2973	3.5464

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7384	2.7465	2.7492	2.7707	2.8647	2.0723
0.20000000	2.7478	2.7558	2.7585	2.7796	2.8721	2.0935
0.25000000	2.7510	2.7589	2.7615	2.7825	2.8745	2.1004
0.50000000	2.7760	2.7835	2.7860	2.8060	2.8943	2.1528
0.80000000	2.8846	2.8907	2.8928	2.9091	2.9628	2.3431
1.00000000	2.0728	2.0912	2.0972	2.1431	2.3133	3.6074

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XMS = 0.25000000 XAR = 0.33333333 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8734	2.8793	2.8812	2.8968	2.9659	2.1899
0.20000000	2.8822	2.8879	2.8899	2.9052	2.9732	2.2093
0.25000000	2.8851	2.8908	2.8927	2.9080	2.9756	2.2156
0.50000000	2.9083	2.9138	2.9154	2.9302	2.9952	2.2641
0.80000000	3.0093	3.0139	3.0154	3.0275	3.0823	2.4440
1.00000000	2.1436	2.1583	2.1632	2.2005	2.3445	3.7785

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0281	3.0318	3.0331	3.0430	3.0878	2.3775
0.20000000	3.0363	3.0399	3.0412	3.0509	3.0951	2.3949
0.25000000	3.0390	3.0426	3.0439	3.0536	3.0975	2.4006
0.50000000	3.0607	3.0642	3.0653	3.0747	3.1189	2.4445
0.80000000	3.1555	3.1584	3.1594	3.1672	3.2028	2.6126
1.00000000	2.2192	2.2305	2.2343	2.2634	2.3806	4.1614

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7066	2.7158	2.7188	2.7431	2.8485	2.0450
0.20000000	2.7158	2.7244	2.7277	2.7516	2.8554	2.0658
0.25000000	2.7188	2.7277	2.7307	2.7544	2.8577	2.0726
0.50000000	2.7431	2.7516	2.7545	2.7771	2.8763	2.1241
0.80000000	2.8489	2.8558	2.8581	2.8767	2.9601	2.3110
1.00000000	2.0584	2.0785	2.0851	2.1356	2.3173	3.5735

KMS = 0.25000000 KAR = 0.33333333 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7764	2.7843	2.7869	2.8079	2.8094	2.0952
0.20000000	2.7351	2.7924	2.7955	2.8161	2.8063	2.1152
0.25000000	2.7801	2.7958	2.7984	2.8188	2.8086	2.1217
0.50000000	2.8113	2.8187	2.8211	2.8407	2.8271	2.1712
0.80000000	2.9126	2.9187	2.9207	2.9370	2.9101	2.3330
1.00000000	2.0973	2.1153	2.1212	2.1661	2.3339	3.6342

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9123	2.9180	2.9199	2.9351	3.0024	2.2144
0.20000000	2.9204	2.9260	2.9279	2.9420	3.0092	2.2328
0.25000000	2.9231	2.9287	2.9306	2.9455	3.0115	2.2386
0.50000000	2.9447	2.9501	2.9519	2.9662	3.0298	2.2843
0.80000000	3.0391	3.0436	3.0451	3.0571	3.1115	2.4558
1.00000000	2.1690	2.1834	2.1882	2.2247	2.3662	3.8048

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0688	3.0725	3.0737	3.0833	3.1269	2.4060
0.20000000	3.0765	3.0800	3.0812	3.0908	3.1337	2.4223
0.25000000	3.0790	3.0826	3.0838	3.0932	3.1360	2.4277
0.50000000	3.0993	3.1027	3.1038	3.1124	3.1541	2.4890
0.80000000	3.1878	3.1907	3.1917	3.1994	3.2347	2.6288
1.00000000	2.2459	2.2569	2.2605	2.2890	2.4037	4.1880

KMS = 0.25000000 KAR = 0.33333333 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7876	2.7954	2.7980	2.8188	2.8097	2.1019
0.20000000	2.7961	2.8038	2.8064	2.8269	2.8165	2.1214
0.25000000	2.7990	2.8067	2.8092	2.8295	2.8187	2.1278
0.50000000	2.8217	2.8290	2.8315	2.8510	2.8399	2.1765
0.80000000	2.9208	2.9269	2.9290	2.9482	3.0182	2.3558
1.00000000	2.1048	2.1227	2.1285	2.1732	2.3402	3.6427

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9238	2.9294	2.9313	2.9464	3.0132	2.2215
0.20000000	2.9317	2.9373	2.9392	2.9540	3.0199	2.2394
0.25000000	2.9344	2.9399	2.9418	2.9566	3.0222	2.2453
0.50000000	2.9555	2.9608	2.9626	2.9768	3.0401	2.2902
0.80000000	3.0479	3.0524	3.0539	3.0659	3.1202	2.4593
1.00000000	2.1768	2.1911	2.1958	2.2321	2.3729	3.8131

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0809	3.0845	3.0857	3.0953	3.1385	2.4143
0.20000000	3.0884	3.0920	3.0931	3.1026	3.1452	2.4303
0.25000000	3.0909	3.0944	3.0956	3.1050	3.1474	2.4356
0.50000000	3.1107	3.1144	3.1152	3.1243	3.1652	2.4762
0.80000000	3.1975	3.2004	3.2014	3.2091	3.2442	2.6336
1.00000000	2.2541	2.2640	2.2686	2.2969	2.4109	4.1965

XMS = 0.25000000 XAR = 0.33131111 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9964	3.0019	3.0037	3.0181	3.0821	2.2656
0.20000000	3.0034	3.0087	3.0105	3.0247	3.0885	2.2815
0.25000000	3.0057	3.0110	3.0128	3.0269	3.0909	2.2867
0.40000000	3.0240	3.0291	3.0308	3.0446	3.1057	2.3270
0.50000000	3.1043	3.1090	3.1104	3.1223	3.1759	2.4814
1.00000000	2.2298	2.2435	2.2480	2.2828	2.4189	3.8724

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1582	3.1616	3.1627	3.1718	3.2129	2.4664
0.20000000	3.1646	3.1680	3.1691	3.1782	3.2188	2.4806
0.25000000	3.1668	3.1702	3.1713	3.1803	3.2207	2.4853
0.50000000	3.1840	3.1873	3.1884	3.1971	3.2363	2.5214
0.80000000	3.2598	3.2626	3.2638	3.2712	3.3056	2.8641
1.00000000	2.3100	2.3204	2.3239	2.3508	2.4601	4.2572

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3159	3.3190	3.3200	3.3284	3.3661	2.5671
0.20000000	3.3206	3.3237	3.3247	3.3330	3.3704	2.5781
0.25000000	3.3221	3.3252	3.3263	3.3345	3.3719	2.5817
0.50000000	3.3346	3.3377	3.3387	3.3468	3.3833	2.6102
0.80000000	3.3901	3.3929	3.3938	3.4011	3.4344	2.7258
1.00000000	2.4464	2.4577	2.4608	2.4849	2.6843	4.4356

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1019	3.1044	3.1052	3.1116	3.1380	3.4203
0.20000000	3.1045	3.1070	3.1078	3.1142	3.1408	3.4246
0.25000000	3.1053	3.1078	3.1087	3.1151	3.1417	3.4263
0.50000000	3.1120	3.1145	3.1154	3.1219	3.1488	3.4383
0.80000000	3.1393	3.1420	3.1429	3.1498	3.1763	3.4891
1.00000000	3.4239	3.4263	3.4297	3.4413	3.4907	4.4556

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1023	3.1047	3.1055	3.1119	3.1382	3.4220
0.20000000	3.1049	3.1073	3.1081	3.1145	3.1409	3.4266
0.25000000	3.1057	3.1082	3.1090	3.1154	3.1418	3.4281
0.50000000	3.1124	3.1149	3.1157	3.1222	3.1490	3.4400
0.80000000	3.1348	3.1424	3.1433	3.1502	3.1785	3.4909
1.00000000	3.4257	3.4301	3.4315	3.4430	3.4921	4.4593

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1046	3.1070	3.1078	3.1139	3.1392	3.4345
0.20000000	3.1072	3.1096	3.1104	3.1165	3.1420	3.4391
0.25000000	3.1081	3.1105	3.1113	3.1174	3.1429	3.4406
0.50000000	3.1149	3.1173	3.1181	3.1243	3.1502	3.4526
0.80000000	3.1328	3.1424	3.1461	3.1527	3.1800	3.5036
1.00000000	3.4381	3.4422	3.4436	3.4545	3.5012	4.4916

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1099	J.1120	J.1127	J.1183	J.1416	J.4707
0.20000000	J.1126	J.1147	J.1154	J.1210	J.1444	J.4754
0.25000000	J.1135	J.1156	J.1163	J.1219	J.1454	J.4760
0.50000000	J.1203	J.1227	J.1234	J.1290	J.1528	J.4891
0.80000000	J.1494	J.1517	J.1524	J.1583	J.1833	J.5413
1.00000000	J.4671	J.4708	J.4720	J.4815	J.5227	4.5891

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1174	J.1192	J.1198	J.1246	J.1451	J.5587
0.20000000	J.1202	J.1220	J.1226	J.1274	J.1480	J.5635
0.25000000	J.1211	J.1230	J.1236	J.1284	J.1490	J.5652
0.50000000	J.1285	J.1303	J.1309	J.1358	J.1566	J.5779
0.80000000	J.1589	J.1608	J.1614	J.1665	J.1881	J.6323
1.00000000	J.5118	J.5147	J.5157	J.5233	J.5586	4.8617

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1035	J.1060	J.1068	J.1132	J.1397	J.4282
0.20000000	J.1060	J.1085	J.1093	J.1158	J.1424	J.4326
0.25000000	J.1099	J.1094	J.1102	J.1167	J.1433	J.4341
0.50000000	J.1134	J.1159	J.1168	J.1233	J.1503	J.4457
0.80000000	J.1403	J.1430	J.1439	J.1508	J.1793	J.4955
1.00000000	J.4313	J.4357	J.4371	J.4488	J.4978	4.4736

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XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1059	J.1083	J.1091	J.1152	J.1408	J.4408
0.20000000	J.1085	J.1108	J.1116	J.1178	J.1435	J.4453
0.25000000	J.1093	J.1117	J.1128	J.1187	J.1444	J.4468
0.50000000	J.1160	J.1184	J.1192	J.1255	J.1515	J.4589
0.80000000	J.1433	J.1459	J.1467	J.1533	J.1807	J.5085
1.00000000	J.4439	J.4480	J.4494	J.4603	J.5071	4.5055

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1113	J.1134	J.1141	J.1197	J.1432	J.4777
0.20000000	J.1139	J.1161	J.1168	J.1224	J.1460	J.4822
0.25000000	J.1148	J.1169	J.1176	J.1233	J.1469	J.4837
0.50000000	J.1217	J.1238	J.1245	J.1302	J.1541	J.4958
0.80000000	J.1500	J.1523	J.1531	J.1590	J.1841	J.5465
1.00000000	J.4733	J.4770	J.4782	J.4877	J.5290	4.8034

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1189	J.1207	J.1213	J.1261	J.1468	J.5073
0.20000000	J.1216	J.1235	J.1241	J.1289	J.1497	J.5120
0.25000000	J.1226	J.1244	J.1250	J.1299	J.1506	J.5135
0.50000000	J.1298	J.1316	J.1322	J.1371	J.1581	J.5859
0.80000000	J.1576	J.1615	J.1622	J.1672	J.1890	J.6390
1.00000000	J.5187	J.5216	J.5226	J.5302	J.5635	4.8776

XMS = 0.25000000 KAR = 0.50000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1263	3.1087	3.1095	3.1156	3.1412	3.4428
0.20000000	3.1084	3.1112	3.1120	3.1182	3.1439	3.4472
0.25000000	3.1037	3.1121	3.1129	3.1191	3.1448	3.4487
0.50000000	3.1163	3.1187	3.1195	3.1258	3.1519	3.4503
0.80000000	3.1435	3.1461	3.1469	3.1535	3.1810	3.5100
1.00000000	3.4457	3.4498	3.4512	3.4622	3.8090	4.8099

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1117	3.1138	3.1145	3.1201	3.1437	3.4798
0.20000000	3.1143	3.1165	3.1172	3.1238	3.1465	3.4843
0.25000000	3.1152	3.1173	3.1180	3.1247	3.1474	3.4858
0.50000000	3.1220	3.1242	3.1249	3.1306	3.1546	3.4976
0.80000000	3.1502	3.1525	3.1533	3.1592	3.1843	3.5481
1.00000000	3.4753	3.4785	3.4801	3.4897	3.5310	4.6080

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1193	3.1212	3.1218	3.1266	3.1473	3.5699
0.20000000	3.1221	3.1239	3.1245	3.1294	3.1502	3.5746
0.25000000	3.1230	3.1248	3.1255	3.1303	3.1511	3.5761
0.50000000	3.1301	3.1320	3.1326	3.1375	3.1585	3.5884
0.80000000	3.1598	3.1618	3.1624	3.1675	3.1893	3.6411
1.00000000	3.5209	3.5238	3.5247	3.5324	3.5857	4.8828

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XMS = 0.25000000 KAR = 0.50000000 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1144	3.1166	3.1173	3.1230	3.1470	3.4941
0.20000000	3.1169	3.1191	3.1198	3.1255	3.1498	3.4984
0.25000000	3.1178	3.1199	3.1207	3.1264	3.1508	3.4998
0.50000000	3.1243	3.1265	3.1272	3.1330	3.1573	3.5110
0.80000000	3.1515	3.1538	3.1546	3.1606	3.1860	3.5590
1.00000000	3.4894	3.4931	3.4943	3.5039	3.5454	4.8413

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1223	3.1242	3.1248	3.1297	3.1508	3.5876
0.20000000	3.1250	3.1268	3.1275	3.1324	3.1535	3.5920
0.25000000	3.1258	3.1277	3.1283	3.1333	3.1544	3.5935
0.50000000	3.1327	3.1346	3.1352	3.1402	3.1615	3.6051
0.80000000	3.1613	3.1633	3.1639	3.1690	3.1910	3.6550
1.00000000	3.5366	3.5395	3.5405	3.5481	3.5815	4.9199

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1291	3.1311	3.1317	3.1367	3.1585	3.6297
0.20000000	3.1315	3.1334	3.1341	3.1391	3.1609	3.6335
0.25000000	3.1323	3.1342	3.1349	3.1399	3.1618	3.6348
0.50000000	3.1385	3.1404	3.1411	3.1462	3.1681	3.6448
0.80000000	3.1648	3.1667	3.1674	3.1726	3.1951	3.6888
1.00000000	3.5830	3.5859	3.5869	3.5945	3.6281	5.0363

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2410	0.2414	0.2415	0.2424	0.2445	0.4108
0.20000000	0.2410	0.2417	0.2418	0.2420	0.2468	0.4105
0.25000000	0.2414	0.2419	0.2420	0.2429	0.2469	0.4108
0.50000000	0.2415	0.2428	0.2420	0.2438	0.2479	0.4217
0.80000000	0.2424	0.2428	0.2429	0.2480	0.2521	0.4301
1.00000000	0.2466	0.2469	0.2471	0.4233	0.4316	7.0281
	0.4205	0.4212	0.4215			

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2413	0.2416	0.2417	0.2426	0.2467	0.4191
0.20000000	0.2416	0.2420	0.2421	0.2430	0.2470	0.4198
0.25000000	0.2417	0.2421	0.2422	0.2431	0.2472	0.4201
0.50000000	0.2427	0.2430	0.2432	0.2441	0.2481	0.4220
0.80000000	0.2468	0.2472	0.2473	0.2482	0.2524	0.4304
1.00000000	0.4212	0.4219	0.4221	0.4240	0.4322	7.0292

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2430	0.2433	0.2435	0.2443	0.2482	0.4213
0.20000000	0.2434	0.2437	0.2438	0.2447	0.2486	0.4220
0.25000000	0.2435	0.2438	0.2439	0.2448	0.2487	0.4222
0.50000000	0.2444	0.2448	0.2449	0.2458	0.2497	0.4241
0.80000000	0.2486	0.2490	0.2491	0.2500	0.2540	0.4326
1.00000000	0.4261	0.4268	0.4270	0.4288	0.4368	7.0377

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XMS = 0.25000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2480	0.2483	0.2484	0.2492	0.2526	0.4286
0.20000000	0.2483	0.2486	0.2487	0.2495	0.2530	0.4293
0.25000000	0.2485	0.2488	0.2489	0.2497	0.2531	0.4296
0.50000000	0.2495	0.2498	0.2499	0.2506	0.2541	0.4315
0.80000000	0.2538	0.2541	0.2542	0.2550	0.2586	0.4401
1.00000000	0.4405	0.4411	0.4413	0.4429	0.4501	7.0670

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2597	0.2599	0.2600	0.2608	0.2632	0.4572
0.20000000	0.2601	0.2603	0.2604	0.2610	0.2636	0.4579
0.25000000	0.2602	0.2604	0.2605	0.2611	0.2637	0.4582
0.50000000	0.2613	0.2615	0.2616	0.2622	0.2648	0.4602
0.80000000	0.2660	0.2662	0.2663	0.2669	0.2695	0.4693
1.00000000	0.4765	0.4769	0.4771	0.4783	0.4838	7.1882

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
0.00000000	0.2420	0.2424	0.2425	0.2434	0.2475	0.4213
0.20000000	0.2424	0.2427	0.2429	0.2438	0.2478	0.4220
0.25000000	0.2425	0.2427	0.2429	0.2439	0.2480	0.4222
0.50000000	0.2434	0.2438	0.2439	0.2448	0.2489	0.4241
0.80000000	0.2475	0.2479	0.2480	0.2489	0.2531	0.4324
1.00000000	0.4221	0.4228	0.4230	0.4249	0.4331	7.0327

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2438	0.2441	0.2442	0.2451	0.2490	0.4235
0.20000000	0.2441	0.2445	0.2446	0.2453	0.2494	0.4242
0.25000000	0.2443	0.2446	0.2446	0.2456	0.2495	0.4244
0.50000000	0.2452	0.2455	0.2457	0.2463	0.2505	0.4263
0.80000000	0.2473	0.2497	0.2498	0.2507	0.2547	0.4346
1.00000000	0.4270	0.4277	0.4279	0.4297	0.4377	7.0412

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2485	0.2491	0.2492	0.2500	0.2535	0.4308
0.20000000	0.2492	0.2495	0.2496	0.2504	0.2539	0.4315
0.25000000	0.2493	0.2496	0.2496	0.2505	0.2540	0.4318
0.50000000	0.2503	0.2506	0.2507	0.2513	0.2550	0.4337
0.80000000	0.2545	0.2548	0.2549	0.2557	0.2593	0.4421
1.00000000	0.4414	0.4421	0.4423	0.4439	0.4511	7.0707

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2606	0.2608	0.2609	0.2615	0.2641	0.4597
0.20000000	0.2610	0.2612	0.2613	0.2619	0.2645	0.4604
0.25000000	0.2611	0.2613	0.2614	0.2620	0.2646	0.4607
0.50000000	0.2622	0.2624	0.2625	0.2630	0.2657	0.4627
0.80000000	0.2666	0.2670	0.2671	0.2677	0.2703	0.4717
1.00000000	0.4776	0.4780	0.4782	0.4794	0.4849	7.1926

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2440	0.2444	0.2445	0.2454	0.2493	0.4241
0.20000000	0.2444	0.2447	0.2448	0.2457	0.2496	0.4248
0.25000000	0.2445	0.2448	0.2450	0.2458	0.2498	0.4251
0.50000000	0.2454	0.2458	0.2459	0.2468	0.2507	0.4269
0.80000000	0.2496	0.2499	0.2500	0.2506	0.2549	0.4352
1.00000000	0.4273	0.4280	0.4282	0.4300	0.4380	7.0424

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2491	0.2494	0.2495	0.2502	0.2536	0.4315
0.20000000	0.2494	0.2497	0.2498	0.2506	0.2541	0.4322
0.25000000	0.2495	0.2498	0.2499	0.2507	0.2542	0.4325
0.50000000	0.2505	0.2508	0.2509	0.2517	0.2552	0.4344
0.80000000	0.2548	0.2551	0.2552	0.2560	0.2596	0.4428
1.00000000	0.4418	0.4424	0.4426	0.4442	0.4514	7.0719

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2609	0.2611	0.2612	0.2618	0.2644	0.4604
0.20000000	0.2613	0.2615	0.2616	0.2622	0.2648	0.4612
0.25000000	0.2614	0.2618	0.2617	0.2622	0.2649	0.4614
0.50000000	0.2627	0.2627	0.2627	0.2633	0.2660	0.4635
0.80000000	0.2670	0.2672	0.2673	0.2679	0.2706	0.4724
1.00000000	0.4777	0.4784	0.4786	0.4798	0.4853	7.1940

XT1 = 0.50000000 XT2 = 0.80000000

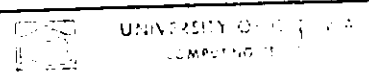
X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2509	6.2512	6.2513	6.2521	6.2537	6.4366
0.20000000	6.2513	6.2516	6.2517	6.2525	6.2560	6.4373
0.25000000	6.2514	6.2517	6.2518	6.2526	6.2561	6.4376
0.50000000	6.2523	6.2526	6.2527	6.2535	6.2571	6.4394
0.80000000	6.2564	6.2567	6.2568	6.2576	6.2613	6.4475
1.00000000	6.4441	6.4447	6.4449	6.4466	6.4538	7.0809

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2629	6.2632	6.2632	6.2638	6.2665	6.4661
0.20000000	6.2633	6.2635	6.2636	6.2642	6.2669	6.4669
0.25000000	6.2634	6.2637	6.2637	6.2643	6.2670	6.4671
0.50000000	6.2644	6.2647	6.2647	6.2653	6.2680	6.4690
0.80000000	6.2689	6.2691	6.2692	6.2698	6.2725	6.4777
1.00000000	6.4806	6.4811	6.4813	6.4825	6.4880	7.2047

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2688	6.2691	6.2691	6.2698	6.2725	6.4829
0.20000000	6.2692	6.2694	6.2695	6.2701	6.2728	6.4835
0.25000000	6.2693	6.2695	6.2696	6.2702	6.2730	6.4838
0.50000000	6.2702	6.2704	6.2705	6.2711	6.2739	6.4855
0.80000000	6.2742	6.2744	6.2745	6.2751	6.2779	6.4934
1.00000000	6.4898	6.4902	6.4904	6.4917	6.4973	7.2417



XT1 = 0.60000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3806	9.3807	9.3807	9.3810	9.3823	9.5024
0.20000000	9.3807	9.3808	9.3809	9.3811	9.3825	9.5027
0.25000000	9.3807	9.3809	9.3809	9.3812	9.3825	9.5027
0.50000000	9.3810	9.3812	9.3812	9.3815	9.3828	9.5034
0.80000000	9.3824	9.3825	9.3825	9.3828	9.3841	9.5041
1.00000000	9.5037	9.5039	9.5040	9.5046	9.5073	9.9357

XT1 = 0.60000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3808	9.3809	9.3809	9.3812	9.3825	9.5025
0.20000000	9.3807	9.3810	9.3810	9.3813	9.3826	9.5028
0.25000000	9.3809	9.3810	9.3811	9.3814	9.3827	9.5028
0.50000000	9.3812	9.3813	9.3814	9.3817	9.3830	9.5034
0.80000000	9.3826	9.3827	9.3827	9.3830	9.3843	9.5062
1.00000000	9.5041	9.5043	9.5044	9.5050	9.5077	9.9361

XT1 = 0.60000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3821	9.3822	9.3823	9.3825	9.3838	9.5032
0.20000000	9.3822	9.3823	9.3824	9.3827	9.3839	9.5034
0.25000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5035
0.50000000	9.3826	9.3827	9.3827	9.3830	9.3843	9.5041
0.80000000	9.3839	9.3840	9.3841	9.3844	9.3856	9.5069
1.00000000	9.5074	9.5076	9.5077	9.5083	9.5109	9.9392

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.250

XT1 = 0.00000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3864	9.3865	9.3865	9.3868	9.3879	9.5056
0.20000000	9.3865	9.3866	9.3867	9.3869	9.3880	9.5059
0.25000000	9.3866	9.3867	9.3867	9.3870	9.3881	9.5060
0.50000000	9.3869	9.3870	9.3870	9.3873	9.3884	9.5066
0.80000000	9.3833	9.3884	9.3884	9.3887	9.3898	9.5094
1.00000000	9.5181	9.5183	9.5183	9.5189	9.5213	9.5306

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4001	9.4001	9.4002	9.4003	9.4011	9.5188
0.20000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5191
0.25000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5192
0.50000000	9.4006	9.4007	9.4007	9.4008	9.4016	9.5198
0.80000000	9.4022	9.4022	9.4022	9.4024	9.4032	9.5227
1.00000000	9.5548	9.5549	9.5549	9.5553	9.5570	10.0134

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3814	9.3815	9.3815	9.3818	9.3831	9.5039
0.20000000	9.3815	9.3816	9.3816	9.3819	9.3832	9.5041
0.25000000	9.3815	9.3816	9.3816	9.3819	9.3832	9.5042
0.50000000	9.3818	9.3819	9.3819	9.3822	9.3835	9.5048
0.80000000	9.3831	9.3832	9.3833	9.3836	9.3849	9.5075
1.00000000	9.5044	9.5046	9.5047	9.5053	9.5080	9.5374

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XMS = 0.25000000 XAR = 0.75000000 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3827	9.3828	9.3828	9.3831	9.3844	9.5046
0.20000000	9.3828	9.3829	9.3830	9.3832	9.3845	9.5048
0.25000000	9.3829	9.3830	9.3830	9.3833	9.3845	9.5049
0.50000000	9.3832	9.3833	9.3833	9.3836	9.3848	9.5055
0.80000000	9.3845	9.3846	9.3846	9.3849	9.3862	9.5082
1.00000000	9.5077	9.5079	9.5079	9.5085	9.5112	9.5405

XT1 = 0.20000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3870	9.3871	9.3871	9.3874	9.3885	9.5070
0.20000000	9.3871	9.3872	9.3873	9.3875	9.3887	9.5073
0.25000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5073
0.50000000	9.3875	9.3876	9.3876	9.3879	9.3890	9.5080
0.80000000	9.3859	9.3890	9.3890	9.3893	9.3904	9.5107
1.00000000	9.5183	9.5185	9.5185	9.5182	9.5216	9.5519

XT1 = 0.20000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4008	9.4008	9.4008	9.4010	9.4016	9.5203
0.20000000	9.4009	9.4010	9.4010	9.4011	9.4019	9.5206
0.25000000	9.4009	9.4010	9.4010	9.4012	9.4019	9.5206
0.50000000	9.4013	9.4013	9.4014	9.4015	9.4023	9.5213
0.80000000	9.4025	9.4029	9.4029	9.4031	9.4038	9.5242
1.00000000	9.5551	9.5552	9.5553	9.5557	9.5574	10.0149

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5050
0.20000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.5052
0.25000000	9.3830	9.3831	9.3832	9.3835	9.3847	9.5053
0.50000000	9.3833	9.3834	9.3835	9.3838	9.3850	9.5059
0.80000000	9.3847	9.3848	9.3848	9.3848	9.3864	9.5066
1.00000000	9.5077	9.5080	9.5080	9.5086	9.5113	9.9409

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5075
0.20000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.5077
0.25000000	9.3874	9.3875	9.3875	9.3878	9.3889	9.5078
0.50000000	9.3877	9.3878	9.3878	9.3881	9.3892	9.5084
0.80000000	9.3891	9.3891	9.3892	9.3894	9.3906	9.5111
1.00000000	9.5184	9.5186	9.5187	9.5193	9.5217	9.9523

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4010	9.4010	9.4011	9.4012	9.4020	9.5208
0.20000000	9.4011	9.4012	9.4012	9.4014	9.4021	9.5210
0.25000000	9.4012	9.4012	9.4012	9.4014	9.4022	9.5211
0.50000000	9.4015	9.4016	9.4016	9.4017	9.4025	9.5218
0.80000000	9.4030	9.4031	9.4031	9.4033	9.4040	9.5246
1.00000000	9.5552	9.5554	9.5554	9.5558	9.5575	10.0154

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XMS = 0.25000000 XAR = 0.75000000 PHI = 0.250

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3886	9.3887	9.3888	9.3890	9.3902	9.5108
0.20000000	9.3886	9.3889	9.3889	9.3891	9.3903	9.5110
0.25000000	9.3886	9.3889	9.3889	9.3892	9.3903	9.5111
0.50000000	9.3891	9.3892	9.3892	9.3895	9.3906	9.5117
0.80000000	9.3904	9.3905	9.3906	9.3908	9.3920	9.5144
1.00000000	9.5192	9.5194	9.5194	9.5200	9.5224	9.9553

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4026	9.4027	9.4027	9.4029	9.4036	9.5243
0.20000000	9.4027	9.4028	9.4028	9.4030	9.4037	9.5246
0.25000000	9.4028	9.4028	9.4029	9.4030	9.4038	9.5246
0.50000000	9.4031	9.4032	9.4032	9.4034	9.4041	9.5253
0.80000000	9.4046	9.4047	9.4047	9.4049	9.4056	9.5281
1.00000000	9.5561	9.5562	9.5563	9.5567	9.5584	10.0191

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4075	9.4079	9.4079	9.4081	9.4089	9.5359
0.20000000	9.4080	9.4080	9.4080	9.4082	9.4090	9.5361
0.25000000	9.4080	9.4081	9.4081	9.4083	9.4090	9.5362
0.50000000	9.4083	9.4084	9.4084	9.4086	9.4093	9.5368
0.80000000	9.4096	9.4097	9.4097	9.4099	9.4107	9.5394
1.00000000	9.5592	9.5594	9.5594	9.5598	9.5616	10.0329

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6127
0.20000000	12.5206	12.5206	12.5206	12.5208	12.5213	12.6129
0.25000000	12.5206	12.5206	12.5206	12.5208	12.5214	12.6128
0.50000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6132
0.80000000	12.5213	12.5214	12.5214	12.5215	12.5221	12.6144
1.00000000	12.6137	12.6138	12.6139	12.6142	12.6154	12.6530

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5207	12.5207	12.5208	12.5214	12.6128
0.20000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6129
0.25000000	12.5207	12.5208	12.5208	12.5209	12.5216	12.6132
0.50000000	12.5209	12.5209	12.5209	12.5211	12.5222	12.6144
0.80000000	12.5215	12.5215	12.5215	12.5217	12.5222	12.6144
1.00000000	12.6141	12.6142	12.6142	12.6143	12.6157	12.6536

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5218	12.5218	12.5218	12.5220	12.5225	12.6131
0.20000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6132
0.25000000	12.5218	12.5219	12.5219	12.5220	12.5227	12.6132
0.50000000	12.5220	12.5220	12.5220	12.5222	12.5233	12.6135
0.80000000	12.5226	12.5226	12.5226	12.5228	12.5271	12.6147
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.6552

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XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5255	12.5256	12.5256	12.5257	12.5262	12.6141
0.20000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6142
0.25000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6143
0.50000000	12.5258	12.5258	12.5258	12.5259	12.5264	12.6145
0.80000000	12.5264	12.5264	12.5264	12.5266	12.5271	12.6158
1.00000000	12.6256	12.6257	12.6257	12.6260	12.6271	12.6607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5403	12.5403	12.5403	12.5404	12.5407	12.6214
0.20000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6215
0.25000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6216
0.50000000	12.5406	12.5406	12.5406	12.5407	12.5409	12.6219
0.80000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.6232
1.00000000	12.6642	12.6642	12.6642	12.6644	12.6651	12.6984

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6138
0.20000000	12.5212	12.5212	12.5212	12.5214	12.5220	12.6139
0.25000000	12.5212	12.5212	12.5212	12.5214	12.5220	12.6140
0.50000000	12.5213	12.5214	12.5214	12.5215	12.5221	12.6142
0.80000000	12.5219	12.5220	12.5220	12.5221	12.5227	12.6155
1.00000000	12.6142	12.6143	12.6143	12.6146	12.6158	12.6544

XMS = 0.25000000 XAM = 0.80000000 PHI = 0.250

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5222	12.5223	12.5223	12.5224	12.5230	12.6141
0.20000000	12.5223	12.5223	12.5224	12.5225	12.5230	12.6142
0.25000000	12.5223	12.5224	12.5224	12.5225	12.5231	12.6143
0.50000000	12.5224	12.5225	12.5225	12.5225	12.5232	12.6145
0.80000000	12.5230	12.5231	12.5231	12.5232	12.5238	12.6158
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9550

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6152
0.20000000	12.5261	12.5261	12.5261	12.5263	12.5268	12.6153
0.25000000	12.5261	12.5262	12.5262	12.5263	12.5268	12.6153
0.50000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6156
0.80000000	12.5269	12.5269	12.5269	12.5270	12.5276	12.6168
1.00000000	12.6257	12.6258	12.6258	12.6261	12.6272	12.9612

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6225
0.20000000	12.5409	12.5410	12.5410	12.5410	12.5413	12.6226
0.25000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6227
0.50000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
0.80000000	12.5419	12.5419	12.5419	12.5420	12.5423	12.6243
1.00000000	12.6643	12.6644	12.6644	12.6645	12.6653	12.9990

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XMS = 0.25000000 XAM = 0.80000000 PHI = 0.250

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5224	12.5224	12.5225	12.5226	12.5232	12.6145
0.20000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6146
0.25000000	12.5225	12.5225	12.5225	12.5226	12.5232	12.6146
0.50000000	12.5226	12.5226	12.5227	12.5228	12.5234	12.6149
0.80000000	12.5232	12.5232	12.5233	12.5234	12.5240	12.6161
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9560

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5262	12.5262	12.5263	12.5264	12.5269	12.6155
0.20000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6156
0.25000000	12.5263	12.5263	12.5263	12.5264	12.5271	12.6159
0.50000000	12.5264	12.5264	12.5265	12.5266	12.5271	12.6172
0.80000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6184
1.00000000	12.6257	12.6258	12.6259	12.6261	12.6272	12.9614

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6229
0.20000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
0.25000000	12.5412	12.5412	12.5412	12.5413	12.5415	12.6230
0.50000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.6233
0.80000000	12.5420	12.5421	12.5421	12.5421	12.5424	12.6246
1.00000000	12.6644	12.6644	12.6644	12.6646	12.6653	12.9992

XT1 = 0.50000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5274	12.5274	12.5274	12.5276	12.5281	12.6181
0.20000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6182
0.25000000	12.5275	12.5275	12.5275	12.5278	12.5281	12.6183
0.50000000	12.5276	12.5276	12.5276	12.5278	12.5283	12.6185
0.80000000	12.5282	12.5282	12.5282	12.5284	12.5289	12.6197
1.00000000	12.6260	12.6261	12.6262	12.6264	12.6275	12.9629

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5425	12.5425	12.5425	12.5426	12.5429	12.6256
0.20000000	12.5425	12.5426	12.5426	12.5426	12.5429	12.6257
0.25000000	12.5426	12.5426	12.5426	12.5427	12.5430	12.6257
0.50000000	12.5427	12.5427	12.5427	12.5428	12.5431	12.6260
0.80000000	12.5434	12.5434	12.5434	12.5435	12.5436	12.6273
1.00000000	12.6647	12.6648	12.6648	12.6650	12.6657	13.0009

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6350
0.20000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6351
0.25000000	12.5473	12.5474	12.5474	12.5474	12.5477	12.6351
0.50000000	12.5475	12.5475	12.5475	12.5476	12.5479	12.6354
0.80000000	12.5481	12.5481	12.5481	12.5482	12.5485	12.6366
1.00000000	12.6662	12.6662	12.6663	12.6664	12.6672	13.0072

XMS = 0.25000000 XAR = 0.33333333 PHI = 0.50380000

XT1 = 0.00000000 XT2 = 0.20800000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6609	2.6704	2.6734	2.6989	2.8054	2.0244
0.20000000	2.6709	2.6803	2.6834	2.7081	2.8159	2.0463
0.25000000	2.6742	2.6835	2.6866	2.7112	2.8184	2.0575
0.50000000	2.7007	2.7095	2.7125	2.7358	2.8334	2.1075
0.80000000	2.8154	2.8224	2.8247	2.8436	2.9284	2.1015
1.00000000	2.0221	2.0432	2.0501	2.1022	2.2904	3.5359

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6720	2.6813	2.6844	2.7091	2.8163	2.0318
0.20000000	2.6810	2.6911	2.6941	2.7183	2.8238	2.0536
0.25000000	2.6852	2.6943	2.6973	2.7214	2.8263	2.0606
0.50000000	2.7115	2.7201	2.7230	2.7458	2.8462	2.1143
0.80000000	2.8253	2.8322	2.8345	2.8529	2.9361	2.1075
1.00000000	2.0284	2.0492	2.0559	2.1071	2.2930	3.5445

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7413	2.7494	2.7520	2.7733	2.8645	2.0812
0.20000000	2.7508	2.7587	2.7613	2.7822	2.8739	2.1021
0.25000000	2.7540	2.7618	2.7644	2.7852	2.8764	2.1089
0.50000000	2.7791	2.7865	2.7890	2.8088	2.8962	2.1606
0.80000000	2.8879	2.8940	2.8960	2.9122	2.9852	2.1488
1.00000000	2.0671	2.0856	2.0916	2.1378	2.3089	3.6057

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XMS = 0.25000000 XAR = 0.33333333 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8758	2.8816	2.8836	2.8990	2.9675	2.1982
0.20000000	2.8846	2.8903	2.8922	2.9074	2.9749	2.2173
0.25000000	2.8875	2.8932	2.8951	2.9102	2.9773	2.2236
0.50000000	2.9108	2.9162	2.9180	2.9325	2.9970	2.2715
0.80000000	3.0121	3.0166	3.0181	3.0301	3.0845	2.4496
1.00000000	2.1380	2.1529	2.1577	2.1953	2.3401	3.7771

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0299	3.0336	3.0349	3.0447	3.0892	2.3851
0.20000000	3.0342	3.0418	3.0430	3.0527	3.0965	2.4023
0.25000000	3.0409	3.0445	3.0457	3.0554	3.0990	2.4079
0.50000000	3.0627	3.0661	3.0673	3.0765	3.1184	2.4514
0.80000000	3.1577	3.1606	3.1615	3.1693	3.2046	2.6182
1.00000000	2.2138	2.2252	2.2290	2.2583	2.3761	4.1607

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7048	2.7189	2.7219	2.7459	2.8504	2.0538
0.20000000	2.7120	2.7279	2.7309	2.7545	2.8574	2.0743
0.25000000	2.7221	2.7309	2.7339	2.7573	2.8597	2.0810
0.50000000	2.7465	2.7549	2.7577	2.7801	2.8784	2.1117
0.80000000	2.8424	2.8593	2.8616	2.8749	2.9526	2.1166
1.00000000	2.0527	2.0730	2.0796	2.1298	2.3131	3.5716

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7793	2.7871	2.7897	2.8105	2.9013	2.1037
0.20000000	2.7881	2.7958	2.7983	2.8187	2.9082	2.1234
0.25000000	2.7910	2.7987	2.8012	2.8215	2.9105	2.1238
0.50000000	2.8143	2.8216	2.8241	2.8435	2.9293	2.1787
0.80000000	2.9158	2.9218	2.9238	2.9400	3.0125	2.3585
1.00000000	2.9918	2.1099	2.1158	2.1610	2.3296	3.6325

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9147	2.9203	2.9222	2.9373	3.0040	2.2223
0.20000000	2.9229	2.9284	2.9303	2.9451	3.0109	2.2404
0.25000000	2.9256	2.9311	2.9330	2.9477	3.0132	2.2462
0.50000000	2.9472	2.9526	2.9543	2.9685	3.0317	2.2914
0.80000000	3.0418	3.0462	3.0477	3.0597	3.1136	2.4613
1.00000000	2.1638	2.1781	2.1829	2.2197	2.3619	3.8033

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0707	3.0743	3.0755	3.0851	3.1283	2.4133
0.20000000	3.0784	3.0819	3.0831	3.0925	3.1352	2.4294
0.25000000	3.0809	3.0845	3.0856	3.0950	3.1375	2.4347
0.50000000	3.1012	3.1046	3.1057	3.1148	3.1537	2.4756
0.80000000	3.1900	3.1929	3.1939	3.2015	3.2365	2.6342
1.00000000	2.2406	2.2517	2.2534	2.2840	2.3994	4.1873



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XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7905	2.7982	2.8008	2.8214	2.9115	2.1102
0.20000000	2.7991	2.8067	2.8092	2.8295	2.9184	2.1296
0.25000000	2.8019	2.8095	2.8120	2.8322	2.9207	2.1358
0.50000000	2.8247	2.8320	2.8344	2.8537	2.9389	2.1839
0.80000000	2.9241	2.9301	2.9321	2.9462	3.0206	2.3614
1.00000000	2.0993	2.1173	2.1232	2.1682	2.3360	3.6409

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9262	2.9318	2.9336	2.9486	3.0149	2.2294
0.20000000	2.9342	2.9397	2.9415	2.9562	3.0216	2.2471
0.25000000	2.9368	2.9423	2.9442	2.9588	3.0239	2.2528
0.50000000	2.9580	2.9633	2.9651	2.9791	3.0419	2.2973
0.80000000	3.0506	3.0551	3.0568	3.0685	3.1223	2.4648
1.00000000	2.1715	2.1859	2.1906	2.2271	2.3687	3.8116

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0828	3.0864	3.0876	3.0971	3.1399	2.4215
0.20000000	3.0973	3.0938	3.0950	3.1044	3.1467	2.4374
0.25000000	3.0928	3.0961	3.0975	3.1068	3.1489	2.4426
0.50000000	3.1127	3.1161	3.1172	3.1262	3.1658	2.4878
0.80000000	3.1957	3.2025	3.2015	3.2112	3.2460	2.6190
1.00000000	2.2489	2.2599	2.2636	2.2919	2.4088	4.1757

XT1 = 0.80000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9984	3.0042	3.0240	3.0203	3.0638	2.2728
0.20000000	3.0056	3.0111	3.0128	3.0270	3.0898	2.2886
0.25000000	3.0081	3.0134	3.0151	3.0292	3.0917	2.2937
0.50000000	3.0264	3.0316	3.0333	3.0469	3.1075	2.3136
0.80000000	3.1071	3.1115	3.1130	3.1248	3.1780	2.4066
1.00000000	2.2248	2.2368	2.2431	2.2781	2.4148	3.8709

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1601	3.1634	3.1646	3.1736	3.2144	2.4731
0.20000000	3.1686	3.1699	3.1710	3.1800	3.2203	2.4871
0.25000000	3.1887	3.1721	3.1732	3.1821	3.2223	2.4918
0.50000000	3.1865	3.1892	3.1903	3.1989	3.2379	2.5276
0.80000000	3.2613	3.2647	3.2657	3.2732	3.3074	2.6692
1.00000000	2.3032	2.3157	2.3191	2.3462	2.4560	4.2564

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3178	3.3209	3.3219	3.3303	3.3678	2.5728
0.20000000	3.3225	3.3256	3.3266	3.3349	3.3721	2.5830
0.25000000	3.3241	3.3272	3.3282	3.3364	3.3735	2.5874
0.50000000	3.3366	3.3396	3.3406	3.3487	3.3850	2.6157
0.80000000	3.3922	3.3949	3.3958	3.4031	3.4362	2.7305
1.00000000	2.4443	2.4537	2.4588	2.4810	2.5888	4.4346

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XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1021	3.1046	3.1054	3.1118	3.1383	3.4221
0.20000000	3.1046	3.1071	3.1080	3.1144	3.1411	3.4266
0.25000000	3.1055	3.1080	3.1088	3.1153	3.1420	3.4281
0.50000000	3.1121	3.1147	3.1155	3.1221	3.1491	3.4400
0.80000000	3.1393	3.1420	3.1429	3.1498	3.1784	3.4907
1.00000000	3.4226	3.4270	3.4285	3.4401	3.4895	4.4546

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1023	3.1049	3.1057	3.1121	3.1385	3.4238
0.20000000	3.1050	3.1075	3.1083	3.1148	3.1412	3.4283
0.25000000	3.1057	3.1083	3.1092	3.1156	3.1421	3.4298
0.50000000	3.1125	3.1150	3.1159	3.1224	3.1493	3.4418
0.80000000	3.1398	3.1424	3.1433	3.1502	3.1786	3.4925
1.00000000	3.4245	3.4288	3.4303	3.4418	3.4908	4.4590

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1048	3.1072	3.1080	3.1141	3.1396	3.4363
0.20000000	3.1074	3.1098	3.1106	3.1168	3.1421	3.4408
0.25000000	3.1083	3.1107	3.1115	3.1176	3.1432	3.4424
0.50000000	3.1150	3.1174	3.1182	3.1245	3.1504	3.4543
0.80000000	3.1427	3.1453	3.1461	3.1527	3.1801	3.5055
1.00000000	3.4368	3.4410	3.4424	3.4533	3.4999	4.4907

AMS = 0.25000000 XAH = 0.50000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1101	3.1123	3.1130	3.1160	3.1420	3.4726
0.20000000	3.1126	3.1150	3.1157	3.1213	3.1448	3.4772
0.25000000	3.1137	3.1159	3.1166	3.1222	3.1457	3.4796
0.50000000	3.1207	3.1220	3.1230	3.1293	3.1531	3.4910
0.80000000	3.1448	3.1517	3.1525	3.1584	3.1834	3.5430
1.00000000	3.4658	3.4695	3.4707	3.4802	3.5215	4.5853

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1177	3.1195	3.1201	3.1249	3.1455	3.5608
0.20000000	3.1205	3.1223	3.1229	3.1278	3.1484	3.5656
0.25000000	3.1214	3.1233	3.1239	3.1287	3.1494	3.5672
0.50000000	3.1267	3.1306	3.1312	3.1361	3.1570	3.5799
0.80000000	3.1590	3.1609	3.1615	3.1666	3.1883	3.6342
1.00000000	3.5105	3.5134	3.5143	3.5219	3.5553	4.8612

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1037	3.1062	3.1070	3.1134	3.1400	3.4299
0.20000000	3.1062	3.1087	3.1095	3.1160	3.1426	3.4344
0.25000000	3.1070	3.1095	3.1103	3.1168	3.1436	3.4358
0.50000000	3.1135	3.1160	3.1169	3.1235	3.1506	3.4475
0.80000000	3.1403	3.1430	3.1438	3.1508	3.1794	3.4970
1.00000000	3.4300	3.4344	3.4359	3.4474	3.4966	4.4727

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COMPTON

AMS = 0.25000000 XAR = 0.50000000 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1061	3.1085	3.1093	3.1154	3.1411	3.4426
0.20000000	3.1085	3.1110	3.1118	3.1180	3.1438	3.4471
0.25000000	3.1095	3.1119	3.1127	3.1189	3.1447	3.4486
0.50000000	3.1161	3.1185	3.1193	3.1256	3.1517	3.4602
0.80000000	3.1433	3.1459	3.1467	3.1533	3.1808	3.5101
1.00000000	3.4426	3.4468	3.4481	3.4591	3.5059	4.5946

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1115	3.1136	3.1143	3.1200	3.1436	3.4795
0.20000000	3.1141	3.1163	3.1170	3.1226	3.1463	3.4841
0.25000000	3.1150	3.1171	3.1179	3.1235	3.1472	3.4856
0.50000000	3.1218	3.1240	3.1247	3.1304	3.1544	3.4974
0.80000000	3.1501	3.1523	3.1531	3.1591	3.1842	3.5462
1.00000000	3.4720	3.4757	3.4769	3.4864	3.5278	4.6026

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1192	3.1210	3.1216	3.1265	3.1472	3.5693
0.20000000	3.1219	3.1236	3.1244	3.1292	3.1501	3.5740
0.25000000	3.1228	3.1247	3.1253	3.1302	3.1510	3.5756
0.50000000	3.1300	3.1319	3.1325	3.1374	3.1584	3.5879
0.80000000	3.1597	3.1616	3.1623	3.1674	3.1892	3.6409
1.00000000	3.5174	3.5202	3.5212	3.5288	3.5622	4.5770

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1065	3.1088	3.1096	3.1158	3.1416	3.4444
0.20000000	3.1070	3.1114	3.1122	3.1174	3.1442	3.4470
0.25000000	3.1048	3.1122	3.1130	3.1191	3.1451	3.4504
0.50000000	3.1164	3.1185	3.1196	3.1259	3.1521	3.4670
0.80000000	3.1435	3.1460	3.1469	3.1535	3.1811	3.5116
1.00000000	3.4444	3.4466	3.4500	3.4609	3.5077	4.5090

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1119	3.1140	3.1148	3.1204	3.1440	3.4817
0.20000000	3.1145	3.1167	3.1174	3.1230	3.1468	3.4861
0.25000000	3.1154	3.1175	3.1183	3.1239	3.1477	3.4876
0.50000000	3.1222	3.1244	3.1251	3.1308	3.1540	3.4994
0.80000000	3.1503	3.1525	3.1533	3.1593	3.1845	3.5498
1.00000000	3.4740	3.4776	3.4788	3.4884	3.5298	4.6072

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1196	3.1215	3.1221	3.1269	3.1477	3.5719
0.20000000	3.1224	3.1242	3.1248	3.1297	3.1506	3.5766
0.25000000	3.1233	3.1251	3.1257	3.1306	3.1515	3.5781
0.50000000	3.1304	3.1322	3.1329	3.1378	3.1580	3.5904
0.80000000	3.1599	3.1619	3.1625	3.1676	3.1894	3.6430
1.00000000	3.5195	3.5224	3.5234	3.5310	3.5644	4.8821

UNIVERSITY OF OTTAWA  
LEARNING CEN

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.50000000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1140	3.1168	3.1175	3.1232	3.1472	3.4959
0.20000000	3.1171	3.1193	3.1200	3.1257	3.1499	3.5002
0.25000000	3.1179	3.1201	3.1208	3.1266	3.1507	3.5016
0.50000000	3.1244	3.1266	3.1274	3.1332	3.1576	3.5127
0.80000000	3.1515	3.1538	3.1546	3.1606	3.1861	3.5606
1.00000000	3.4881	3.4918	3.4930	3.5026	3.5441	4.6405

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1226	3.1245	3.1251	3.1300	3.1511	3.5896
0.20000000	3.1252	3.1271	3.1277	3.1326	3.1538	3.5940
0.25000000	3.1261	3.1280	3.1286	3.1335	3.1547	3.5954
0.50000000	3.1329	3.1348	3.1354	3.1404	3.1616	3.6070
0.80000000	3.1614	3.1633	3.1640	3.1691	3.1912	3.6568
1.00000000	3.5353	3.5382	3.5392	3.5468	3.5802	4.9193

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1293	3.1312	3.1318	3.1369	3.1587	3.6316
0.20000000	3.1316	3.1336	3.1342	3.1393	3.1612	3.6354
0.25000000	3.1324	3.1344	3.1350	3.1401	3.1620	3.6367
0.50000000	3.1386	3.1405	3.1412	3.1463	3.1633	3.6467
0.80000000	3.1647	3.1667	3.1674	3.1726	3.1952	3.6901
1.00000000	3.5817	3.5846	3.5856	3.5922	3.6288	5.0357

XMS = 0.25000000 XAR = 0.00000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2411	0.2414	0.2415	0.2424	0.2465	0.4191
0.20000000	0.2414	0.2418	0.2419	0.2428	0.2468	0.4198
0.25000000	0.2415	0.2419	0.2420	0.2429	0.2470	0.4200
0.50000000	0.2425	0.2435	0.2439	0.2439	0.2479	0.4219
0.80000000	0.2466	0.2470	0.2471	0.2480	0.2522	0.4303
1.00000000	0.4203	0.4210	0.4213	0.4231	0.4314	7.0278

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2413	0.2416	0.2418	0.2427	0.2467	0.4194
0.20000000	0.2417	0.2420	0.2421	0.2430	0.2472	0.4201
0.25000000	0.2418	0.2421	0.2422	0.2431	0.2472	0.4203
0.50000000	0.2427	0.2431	0.2432	0.2441	0.2481	0.4222
0.80000000	0.2463	0.2472	0.2473	0.2483	0.2524	0.4306
1.00000000	0.4213	0.4217	0.4219	0.4238	0.4320	7.0289

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2430	0.2434	0.2435	0.2444	0.2482	0.4215
0.20000000	0.2434	0.2437	0.2438	0.2447	0.2485	0.4223
0.25000000	0.2435	0.2438	0.2438	0.2448	0.2487	0.4225
0.50000000	0.2445	0.2448	0.2449	0.2458	0.2497	0.4244
0.80000000	0.2486	0.2490	0.2491	0.2500	0.2540	0.4328
1.00000000	0.4259	0.4266	0.4268	0.4286	0.4366	7.0374

UNIVERSITY OF OTTAWA  
SMITHS CL

XMS = 0.25000000 XAR = 0.66660000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2480	0.2483	0.2484	0.2492	0.2527	0.4289
0.20000000	0.2484	0.2487	0.2488	0.2496	0.2530	0.4296
0.25000000	0.2485	0.2488	0.2489	0.2497	0.2532	0.4298
0.50000000	0.2495	0.2498	0.2499	0.2507	0.2542	0.4317
0.80000000	0.2538	0.2541	0.2542	0.2550	0.2585	0.4403
1.00000000	0.4403	0.4409	0.4411	0.4427	0.4499	7.0667

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2597	0.2599	0.2600	0.2606	0.2632	0.4575
0.20000000	0.2601	0.2603	0.2604	0.2610	0.2636	0.4582
0.25000000	0.2603	0.2605	0.2606	0.2611	0.2637	0.4585
0.50000000	0.2613	0.2615	0.2616	0.2622	0.2648	0.4605
0.80000000	0.2660	0.2662	0.2663	0.2669	0.2696	0.4696
1.00000000	0.4763	0.4767	0.4769	0.4781	0.4836	7.1880

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2421	0.2424	0.2425	0.2435	0.2475	0.4215
0.20000000	0.2424	0.2428	0.2429	0.2438	0.2479	0.4222
0.25000000	0.2425	0.2429	0.2430	0.2439	0.2480	0.4225
0.50000000	0.2435	0.2438	0.2439	0.2449	0.2489	0.4243
0.80000000	0.2475	0.2479	0.2480	0.2490	0.2531	0.4326
1.00000000	0.4219	0.4226	0.4228	0.4247	0.4329	7.0325

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2438	0.2442	0.2443	0.2451	0.2490	0.4237
0.20000000	0.2442	0.2445	0.2446	0.2455	0.2494	0.4244
0.25000000	0.2443	0.2446	0.2447	0.2456	0.2495	0.4251
0.50000000	0.2452	0.2456	0.2457	0.2466	0.2505	0.4305
0.80000000	0.2493	0.2497	0.2498	0.2507	0.2547	0.4348
1.00000000	0.4268	0.4275	0.4277	0.4295	0.4375	7.0410

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2489	0.2491	0.2492	0.2500	0.2535	0.4311
0.20000000	0.2492	0.2495	0.2496	0.2504	0.2537	0.4318
0.25000000	0.2493	0.2496	0.2497	0.2505	0.2540	0.4320
0.50000000	0.2503	0.2506	0.2507	0.2515	0.2550	0.4339
0.80000000	0.2548	0.2548	0.2549	0.2556	0.2593	0.4424
1.00000000	0.4412	0.4419	0.4421	0.4437	0.4509	7.0704

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2606	0.2609	0.2609	0.2615	0.2641	0.4600
0.20000000	0.2610	0.2612	0.2613	0.2619	0.2645	0.4607
0.25000000	0.2612	0.2614	0.2614	0.2620	0.2647	0.4610
0.50000000	0.2622	0.2624	0.2625	0.2631	0.2657	0.4630
0.80000000	0.2668	0.2670	0.2671	0.2677	0.2704	0.4720
1.00000000	0.4774	0.4778	0.4780	0.4792	0.4847	7.1924

UNIVERSITY OF DELAWARE  
COMPUTING CENTER

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2441	0.2444	0.2445	0.2454	0.2493	0.4244
0.20000000	0.2444	0.2448	0.2449	0.2458	0.2497	0.4251
0.25000000	0.2445	0.2449	0.2450	0.2459	0.2498	0.4253
0.50000000	0.2455	0.2458	0.2459	0.2468	0.2507	0.4272
0.80000000	0.2496	0.2499	0.2500	0.2509	0.2549	0.4355
1.00000000	0.4271	0.4278	0.4280	0.4298	0.4378	7.0421

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2491	0.2494	0.2495	0.2503	0.2538	0.4318
0.20000000	0.2494	0.2497	0.2498	0.2506	0.2542	0.4325
0.25000000	0.2496	0.2499	0.2500	0.2508	0.2543	0.4327
0.50000000	0.2505	0.2508	0.2509	0.2517	0.2553	0.4346
0.80000000	0.2548	0.2551	0.2552	0.2560	0.2596	0.4430
1.00000000	0.4416	0.4422	0.4424	0.4440	0.4512	7.0716

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2607	0.2611	0.2612	0.2618	0.2644	0.4607
0.20000000	0.2613	0.2615	0.2616	0.2622	0.2648	0.4615
0.25000000	0.2614	0.2617	0.2617	0.2623	0.2649	0.4617
0.50000000	0.2625	0.2627	0.2628	0.2634	0.2660	0.4636
0.80000000	0.2673	0.2673	0.2674	0.2680	0.2706	0.4727
1.00000000	0.4777	0.4782	0.4783	0.4796	0.4851	7.1938

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2509	0.2512	0.2513	0.2521	0.2557	0.4369
0.20000000	0.2513	0.2516	0.2517	0.2525	0.2561	0.4376
0.25000000	0.2514	0.2517	0.2518	0.2526	0.2562	0.4378
0.50000000	0.2513	0.2517	0.2518	0.2526	0.2571	0.4396
0.80000000	0.2564	0.2526	0.2527	0.2539	0.2613	0.4476
1.00000000	0.4439	0.2567	0.2568	0.4464	0.4536	7.0807

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2630	0.2632	0.2633	0.2639	0.2665	0.4664
0.20000000	0.2633	0.2636	0.2636	0.2642	0.2669	0.4671
0.25000000	0.2633	0.2637	0.2638	0.2644	0.2670	0.4674
0.50000000	0.2645	0.2647	0.2648	0.2654	0.2680	0.4693
0.80000000	0.2687	0.2691	0.2692	0.2698	0.2725	0.4780
1.00000000	0.4804	0.4809	0.4810	0.4823	0.4878	7.2045

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2689	0.2691	0.2692	0.2698	0.2725	0.4832
0.20000000	0.2692	0.2694	0.2695	0.2701	0.2729	0.4838
0.25000000	0.2693	0.2695	0.2696	0.2702	0.2730	0.4840
0.50000000	0.2702	0.2704	0.2705	0.2711	0.2739	0.4858
0.80000000	0.2742	0.2744	0.2745	0.2751	0.2779	0.4937
1.00000000	0.4896	0.4900	0.4902	0.4914	0.4970	7.2415

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XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3806	9.3807	9.3807	9.3810	9.3823	9.5025
0.20000000	9.3807	9.3808	9.3809	9.3812	9.3825	9.5027
0.25000000	9.3808	9.3809	9.3809	9.3812	9.3825	9.5028
0.50000000	9.3811	9.3812	9.3812	9.3815	9.3828	9.5034
0.80000000	9.3824	9.3825	9.3825	9.3828	9.3842	9.5062
1.00000000	9.5036	9.5038	9.5039	9.5045	9.5072	9.9357

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3808	9.3809	9.3809	9.3812	9.3825	9.5026
0.20000000	9.3809	9.3810	9.3810	9.3813	9.3827	9.5028
0.25000000	9.3809	9.3810	9.3811	9.3814	9.3830	9.5035
0.50000000	9.3812	9.3813	9.3814	9.3817	9.3843	9.5063
0.80000000	9.3826	9.3827	9.3827	9.3830	9.3844	9.5062
1.00000000	9.5040	9.5043	9.5043	9.5050	9.5077	9.9361

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3821	9.3822	9.3823	9.3826	9.3838	9.5033
0.20000000	9.3822	9.3824	9.3824	9.3827	9.3839	9.5035
0.25000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5036
0.50000000	9.3826	9.3827	9.3827	9.3830	9.3843	9.5042
0.80000000	9.3839	9.3840	9.3841	9.3844	9.3850	9.5070
1.00000000	9.5073	9.5075	9.5076	9.5082	9.5108	9.9392

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3864	9.3865	9.3866	9.3866	9.3873	9.5057
0.20000000	9.3865	9.3866	9.3867	9.3869	9.3880	9.5060
0.25000000	9.3866	9.3867	9.3867	9.3870	9.3881	9.5060
0.50000000	9.3869	9.3870	9.3870	9.3873	9.3884	9.5067
0.80000000	9.3883	9.3884	9.3884	9.3887	9.3895	9.5074
1.00000000	9.5180	9.5182	9.5183	9.5186	9.5212	9.9503

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4001	9.4002	9.4002	9.4003	9.4011	9.5189
0.20000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5192
0.25000000	9.4003	9.4003	9.4003	9.4009	9.4013	9.5193
0.50000000	9.4004	9.4007	9.4007	9.4024	9.4016	9.5199
0.80000000	9.4022	9.4022	9.4023	9.4024	9.4032	9.5228
1.00000000	9.5547	9.5548	9.5549	9.5553	9.5570	10.0133

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3814	9.3815	9.3815	9.3816	9.3831	9.5040
0.20000000	9.3815	9.3816	9.3816	9.3819	9.3832	9.5042
0.25000000	9.3815	9.3816	9.3817	9.3819	9.3833	9.5043
0.50000000	9.3816	9.3819	9.3819	9.3822	9.3836	9.5049
0.80000000	9.3831	9.3832	9.3833	9.3836	9.3849	9.5076
1.00000000	9.5043	9.5045	9.5046	9.5052	9.5079	9.9373

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XMS = 0.25000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3827	9.3828	9.3829	9.3831	9.3844	9.5046
0.20000000	9.3828	9.3829	9.3830	9.3832	9.3845	9.5049
0.25000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5050
0.50000000	9.3832	9.3833	9.3833	9.3836	9.3849	9.5056
0.80000000	9.3845	9.3846	9.3846	9.3849	9.3862	9.5063
1.00000000	9.5076	9.5078	9.5079	9.5085	9.5111	9.9404

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3870	9.3871	9.3872	9.3874	9.3885	9.5071
0.20000000	9.3871	9.3872	9.3873	9.3875	9.3887	9.5073
0.25000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5074
0.50000000	9.3875	9.3876	9.3876	9.3879	9.3890	9.5080
0.80000000	9.3887	9.3890	9.3890	9.3893	9.3904	9.5108
1.00000000	9.5183	9.5185	9.5186	9.5191	9.5215	9.9518

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4006	9.4008	9.4009	9.4010	9.4018	9.5204
0.20000000	9.4007	9.4010	9.4010	9.4012	9.4019	9.5206
0.25000000	9.4009	9.4010	9.4010	9.4012	9.4019	9.5207
0.50000000	9.4013	9.4014	9.4014	9.4015	9.4023	9.5214
0.80000000	9.4029	9.4029	9.4029	9.4031	9.4038	9.5243
1.00000000	9.5550	9.5552	9.5552	9.5556	9.5573	10.0148

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.3851
0.20000000	9.3830	9.3831	9.3832	9.3834	9.3847	9.3853
0.25000000	9.3830	9.3832	9.3832	9.3835	9.3847	9.3854
0.50000000	9.3833	9.3835	9.3835	9.3838	9.3850	9.3856
0.80000000	9.3847	9.3848	9.3848	9.3851	9.3864	9.3871
1.00000000	9.5077	9.5079	9.5080	9.5086	9.5112	9.5088

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3872	9.3873	9.3874	9.3876	9.3887	9.3876
0.20000000	9.3873	9.3874	9.3875	9.3877	9.3889	9.3878
0.25000000	9.3874	9.3875	9.3875	9.3878	9.3889	9.3879
0.50000000	9.3877	9.3878	9.3878	9.3881	9.3892	9.3885
0.80000000	9.3891	9.3892	9.3892	9.3894	9.3906	9.3892
1.00000000	9.5184	9.5186	9.5187	9.5192	9.5216	9.5222

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4010	9.4011	9.4011	9.4012	9.4020	9.5209
0.20000000	9.4011	9.4012	9.4012	9.4014	9.4021	9.5211
0.25000000	9.4012	9.4012	9.4013	9.4014	9.4022	9.5212
0.50000000	9.4015	9.4016	9.4016	9.4018	9.4025	9.5218
0.80000000	9.4030	9.4031	9.4031	9.4033	9.4041	9.5247
1.00000000	9.5551	9.5553	9.5553	9.5557	9.5574	10.0153

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XMS = 0.25000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3887	9.3888	9.3888	9.3890	9.3902	9.5109
0.20000000	9.3888	9.3889	9.3889	9.3892	9.3903	9.5111
0.25000000	9.3888	9.3889	9.3892	9.3892	9.3903	9.5112
0.50000000	9.3891	9.3892	9.3895	9.3906	9.3906	9.5118
0.80000000	9.3904	9.3905	9.3906	9.3908	9.3920	9.5145
1.00000000	9.5191	9.5193	9.5194	9.5199	9.5223	9.5554

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4026	9.4027	9.4027	9.4029	9.4036	9.5244
0.20000000	9.4028	9.4028	9.4028	9.4030	9.4038	9.5247
0.25000000	9.4029	9.4029	9.4029	9.4030	9.4038	9.5247
0.50000000	9.4031	9.4032	9.4032	9.4034	9.4040	9.5254
0.80000000	9.4046	9.4047	9.4047	9.4049	9.4056	9.5282
1.00000000	9.5560	9.5562	9.5562	9.5566	9.5583	10.0190

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4078	9.4079	9.4079	9.4081	9.4089	9.5340
0.20000000	9.4080	9.4080	9.4080	9.4082	9.4090	9.5342
0.25000000	9.4080	9.4081	9.4081	9.4083	9.4090	9.5343
0.50000000	9.4083	9.4084	9.4084	9.4086	9.4093	9.5349
0.80000000	9.4096	9.4097	9.4097	9.4097	9.4107	9.5394
1.00000000	9.5592	9.5593	9.5594	9.5597	9.5615	10.0328

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6128
0.20000000	12.5206	12.5206	12.5206	12.5208	12.5213	12.6129
0.25000000	12.5206	12.5206	12.5206	12.5209	12.5214	12.6129
0.50000000	12.5207	12.5209	12.5208	12.5209	12.5215	12.6132
0.80000000	12.5213	12.5214	12.5208	12.5213	12.5221	12.6144
1.00000000	12.6137	12.6138	12.5214	12.6141	12.6154	12.9536

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5207	12.5207	12.5209	12.5214	12.6128
0.20000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.6129
0.25000000	12.5207	12.5208	12.5208	12.5209	12.5216	12.6130
0.50000000	12.5209	12.5209	12.5209	12.5211	12.5222	12.6132
0.80000000	12.5215	12.5215	12.5215	12.5217	12.5227	12.6145
1.00000000	12.6141	12.6142	12.6142	12.6145	12.6157	12.9538

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5218	12.5218	12.5218	12.5220	12.5225	12.6131
0.20000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6132
0.25000000	12.5218	12.5219	12.5219	12.5220	12.5227	12.6132
0.50000000	12.5220	12.5220	12.5220	12.5222	12.5233	12.6135
0.80000000	12.5226	12.5226	12.5226	12.5228	12.5233	12.6148
1.00000000	12.6166	12.6167	12.6168	12.6170	12.6182	12.9552



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XMS = 0.25000000 XAR = 0.80000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5256	12.5256	12.5256	12.5257	12.5262	12.6142
0.20000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6143
0.25000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6143
0.50000000	12.5258	12.5258	12.5258	12.5259	12.5264	12.6146
0.80000000	12.5264	12.5264	12.5265	12.5266	12.5271	12.6158
1.00000000	12.6256	12.6256	12.6257	12.6259	12.6270	12.9606

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5403	12.5403	12.5403	12.5404	12.5407	12.6215
0.20000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6216
0.25000000	12.5404	12.5404	12.5404	12.5405	12.5410	12.6216
0.50000000	12.5406	12.5406	12.5406	12.5407	12.5417	12.6219
0.80000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.6232
1.00000000	12.6641	12.6642	12.6642	12.6644	12.6651	12.9983

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6139
0.20000000	12.5212	12.5212	12.5212	12.5214	12.5220	12.6140
0.25000000	12.5212	12.5212	12.5213	12.5214	12.5220	12.6140
0.50000000	12.5213	12.5214	12.5214	12.5215	12.5227	12.6143
0.80000000	12.5219	12.5220	12.5220	12.5221	12.5227	12.6155
1.00000000	12.6142	12.6143	12.6143	12.6146	12.6158	12.9543

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5222	12.5223	12.5223	12.5274	12.5230	12.6142
0.20000000	12.5223	12.5223	12.5224	12.5275	12.5231	12.6143
0.30000000	12.5223	12.5224	12.5224	12.5275	12.5231	12.6143
0.50000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6143
0.80000000	12.5270	12.5231	12.5231	12.5232	12.5235	12.6158
1.00000000	12.6167	12.6168	12.6169	12.6171	12.6184	12.9558

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6152
0.20000000	12.5261	12.5261	12.5262	12.5263	12.5268	12.6153
0.25000000	12.5261	12.5262	12.5262	12.5263	12.5268	12.6154
0.50000000	12.5263	12.5263	12.5263	12.5264	12.5269	12.6156
0.80000000	12.5269	12.5269	12.5270	12.5270	12.5276	12.6169
1.00000000	12.6257	12.6258	12.6258	12.6260	12.6272	12.9612

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6226
0.20000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6227
0.25000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6227
0.50000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
0.80000000	12.5419	12.5419	12.5419	12.5420	12.5423	12.6243
1.00000000	12.6643	12.6643	12.6644	12.6645	12.6653	12.9990

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XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5224	12.5224	12.5225	12.5226	12.5232	12.6145
0.20000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6146
0.25000000	12.5225	12.5225	12.5225	12.5227	12.5232	12.6146
0.50000000	12.5226	12.5226	12.5227	12.5228	12.5234	12.6149
0.80000000	12.5232	12.5232	12.5233	12.5234	12.5240	12.6161
1.00000000	12.6168	12.6169	12.6169	12.6172	12.6184	12.9580

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5262	12.5262	12.5263	12.5264	12.5269	12.6156
0.20000000	12.5263	12.5263	12.5263	12.5264	12.5270	12.6157
0.25000000	12.5263	12.5263	12.5263	12.5264	12.5271	12.6157
0.50000000	12.5264	12.5265	12.5265	12.5266	12.5271	12.6160
0.80000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6172
1.00000000	12.6257	12.6258	12.6258	12.6261	12.6272	12.9614

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6229
0.20000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
0.25000000	12.5412	12.5412	12.5412	12.5413	12.5416	12.6231
0.50000000	12.5413	12.5413	12.5414	12.5414	12.5417	12.6234
0.80000000	12.5420	12.5421	12.5421	12.5421	12.5424	12.6246
1.00000000	12.6643	12.6644	12.6644	12.6646	12.6653	12.9992

XT1 = 0.50000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5274	12.5274	12.5274	12.5276	12.5281	12.6182
0.20000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6183
0.25000000	12.5275	12.5275	12.5275	12.5276	12.5281	12.6183
0.50000000	12.5276	12.5276	12.5276	12.5278	12.5283	12.6186
0.60000000	12.5282	12.5282	12.5283	12.5284	12.5289	12.6198
1.00000000	12.6260	12.6261	12.6261	12.6264	12.6275	12.9628

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5425	12.5425	12.5425	12.5426	12.5429	12.6256
0.20000000	12.5425	12.5426	12.5426	12.5426	12.5429	12.6257
0.25000000	12.5426	12.5426	12.5426	12.5427	12.5430	12.6258
0.50000000	12.5427	12.5427	12.5428	12.5428	12.5431	12.6261
0.60000000	12.5434	12.5434	12.5435	12.5435	12.5438	12.6273
1.00000000	12.6647	12.6648	12.6648	12.6649	12.6657	13.0000

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6350
0.20000000	12.5473	12.5473	12.5474	12.5474	12.5477	12.6351
0.25000000	12.5473	12.5474	12.5474	12.5474	12.5478	12.6352
0.50000000	12.5475	12.5475	12.5475	12.5476	12.5479	12.6354
0.80000000	12.5481	12.5481	12.5481	12.5482	12.5485	12.6366
1.00000000	12.6661	12.6662	12.6662	12.6664	12.6671	13.0072

XMS = 0.80000000 KAR = 0.33333333 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6609	2.6704	2.6736	2.6987	2.8073	4.3444
0.20000000	2.6709	2.6802	2.6833	2.7040	2.8149	4.3474
0.25000000	2.6742	2.6833	2.6866	2.7111	2.8175	4.3485
0.50000000	2.7007	2.7093	2.7125	2.7358	2.8378	2.0242
0.80000000	2.8146	2.8214	2.8241	2.8432	2.9284	2.2337
1.00000000	4.3643	4.3673	4.3683	2.8149	2.2193	3.4935

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6720	2.6813	2.6844	2.7080	2.8152	4.3515
0.20000000	2.6819	2.6910	2.6941	2.7162	2.8228	4.3546
0.25000000	2.6852	2.6943	2.6973	2.7213	2.8253	4.3556
0.50000000	2.7115	2.7201	2.7230	2.7458	2.8456	2.0324
0.80000000	2.8246	2.8316	2.8339	2.8526	2.9361	2.2406
1.00000000	4.3772	4.3802	4.3811	2.8149	2.2216	3.5024

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7412	2.7492	2.7518	2.7730	2.8652	2.0004
0.20000000	2.7507	2.7586	2.7612	2.7820	2.8727	2.0233
0.25000000	2.7539	2.7617	2.7643	2.7849	2.8753	2.0308
0.50000000	2.7791	2.7865	2.7890	2.8087	2.8955	2.0870
0.80000000	2.8877	2.8938	2.8958	2.9121	2.9851	2.2878
1.00000000	4.4636	4.4662	4.4671	2.8149	2.2371	3.5654

XMS = 0.80000000 KAR = 0.33333333 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8752	2.8810	2.8829	2.8982	2.9656	2.1374
0.20000000	2.8841	2.8897	2.8916	2.9067	2.9733	2.1578
0.25000000	2.8870	2.8927	2.8945	2.9095	2.9750	2.1644
0.50000000	2.9105	2.9159	2.9177	2.9320	2.9958	2.2151
0.80000000	3.0121	3.0166	3.0181	3.0301	3.0842	2.4016
1.00000000	2.0456	2.0622	2.0676	2.1093	2.2671	3.7416

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0285	3.0321	3.0333	3.0430	3.0668	2.3483
0.20000000	3.0368	3.0404	3.0416	3.0511	3.0943	2.3661
0.25000000	3.0396	3.0431	3.0443	3.0538	3.0967	2.3719
0.50000000	3.0616	3.0650	3.0661	3.0753	3.1146	2.4188
0.80000000	3.1574	3.1602	3.1612	3.1689	3.2038	2.5878
1.00000000	2.1231	2.1359	2.1401	2.1726	2.3017	4.1338

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7098	2.7188	2.7219	2.7458	2.8495	4.3736
0.20000000	2.7190	2.7279	2.7309	2.7544	2.8567	4.3965
0.25000000	2.7221	2.7309	2.7339	2.7573	2.8590	4.3974
0.50000000	2.7464	2.7549	2.7577	2.7801	2.8780	2.0501
0.80000000	2.8517	2.8586	2.8610	2.8796	2.9626	2.7494
1.00000000	4.3994	4.4022	4.4032	2.8149	2.2448	3.5104

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7792	2.7870	2.7896	2.8103	2.9003	2.0236
0.20000000	2.7881	2.7947	2.7983	2.8186	2.9074	2.0451
0.25000000	2.7910	2.7986	2.8012	2.8214	2.9097	2.0571
0.50000000	2.8141	2.8216	2.8241	2.8438	2.9280	2.1053
0.80000000	2.9155	2.9216	2.9236	2.9398	3.0125	2.2972
1.00000000	2.0020	2.0221	2.0287	2.0766	2.2604	3.5930

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9143	2.9194	2.9217	2.9366	3.0027	2.1618
0.20000000	2.9225	2.9280	2.9299	2.9445	3.0097	2.1810
0.25000000	2.9252	2.9307	2.9326	2.9472	3.0120	2.1873
0.50000000	2.9470	2.9523	2.9541	2.9681	3.0307	2.2351
0.80000000	3.0416	3.0462	3.0477	3.0597	3.1134	2.4130
1.00000000	2.0759	2.0919	2.0972	2.1377	2.2919	3.7685

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0695	3.0730	3.0742	3.0837	3.1263	2.3766
0.20000000	3.0773	3.0807	3.0819	3.0912	3.1333	2.3933
0.25000000	3.0798	3.0833	3.0845	3.0937	3.1356	2.3988
0.50000000	3.1003	3.1037	3.1048	3.1137	3.1541	2.4410
0.80000000	3.1898	3.1926	3.1936	3.2012	3.2358	2.6036
1.00000000	2.1543	2.1666	2.1706	2.2022	2.3279	4.1607

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7904	2.7981	2.8007	2.8212	2.9107	2.0303
0.20000000	2.7990	2.8067	2.8092	2.8294	2.9176	2.0515
0.25000000	2.8019	2.8095	2.8120	2.8321	2.9199	2.0583
0.50000000	2.8247	2.8320	2.8344	2.8537	2.9384	2.1106
0.80000000	2.9237	2.9298	2.9318	2.9481	3.0206	2.3000
1.00000000	2.0110	2.0310	2.0375	2.0870	2.2680	3.6017

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9258	2.9313	2.9332	2.9480	3.0136	2.1689
0.20000000	2.9338	2.9393	2.9412	2.9557	3.0205	2.1878
0.25000000	2.9365	2.9420	2.9438	2.9583	3.0228	2.1930
0.50000000	2.9578	2.9631	2.9648	2.9785	3.0411	2.2409
0.80000000	3.0506	3.0551	3.0566	3.0645	3.1221	2.4164
1.00000000	2.0851	2.1010	2.1062	2.1464	2.2795	3.7769

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0817	3.0852	3.0864	3.0957	3.1380	2.3849
0.20000000	3.0893	3.0927	3.0939	3.1031	3.1449	2.4012
0.25000000	3.0914	3.0952	3.0964	3.1056	3.1471	2.4066
0.50000000	3.1119	3.1152	3.1163	3.1252	3.1653	2.4441
0.80000000	3.1994	3.2023	3.2032	3.2108	3.2454	2.6013
1.00000000	2.1638	2.1760	2.1800	2.2113	2.3160	4.1692

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9087	3.0040	3.4058	3.0200	3.0831	2.2128
0.20000000	3.0056	3.0109	3.0127	3.0267	3.0691	2.2445
0.25000000	3.0079	3.0132	3.0150	3.0290	3.0911	2.2350
0.30000000	3.0264	3.0315	3.0332	3.0467	3.1070	2.2772
0.40000000	3.1071	3.1115	3.1130	3.1248	3.1779	2.4376
1.00000000	2.1472	2.1622	2.1671	2.2051	2.3516	3.8375

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1593	3.1627	3.1630	3.1727	3.2131	2.4363
0.20000000	3.1653	3.1692	3.1703	3.1751	3.2191	2.4510
0.25000000	3.1681	3.1718	3.1725	3.1813	3.2210	2.4558
0.30000000	3.1855	3.1887	3.1897	3.1983	3.2369	2.4428
0.40000000	3.2618	3.2646	3.2655	3.2730	3.3069	2.5380
1.00000000	2.2283	2.2398	2.2435	2.2729	2.3912	4.2307

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3176	3.3207	3.3217	3.3300	3.3673	2.5360
0.20000000	3.3223	3.3254	3.3264	3.3346	3.3716	2.5473
0.25000000	3.3239	3.3269	3.3280	3.3362	3.3730	2.5310
0.30000000	3.3364	3.3394	3.3404	3.3485	3.3846	2.5802
0.40000000	3.3922	3.3949	3.3958	3.4031	3.4360	2.6982
1.00000000	2.3846	2.3943	2.3978	2.4235	2.5288	4.4108

XT1 = 0.60000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0734	3.0760	3.0768	3.0834	3.1103	3.4033
0.20000000	3.0760	3.0786	3.0794	3.0860	3.1131	3.4078
0.25000000	3.0769	3.0794	3.0803	3.0869	3.1140	3.4093
0.30000000	3.0836	3.0862	3.0871	3.0937	3.1213	3.4213
0.40000000	3.1113	3.1140	3.1149	3.1210	3.1509	3.4721
1.00000000	3.4034	3.4079	3.4093	3.4209	3.4705	4.4337

XT1 = 0.60000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0738	3.0763	3.0771	3.0837	3.1105	3.4051
0.20000000	3.0764	3.0789	3.0798	3.0863	3.1133	3.4096
0.25000000	3.0773	3.0798	3.0806	3.0872	3.1142	3.4112
0.30000000	3.0840	3.0866	3.0874	3.0941	3.1214	3.4231
0.40000000	3.1117	3.1144	3.1153	3.1223	3.1512	3.4740
1.00000000	3.4052	3.4096	3.4111	3.4226	3.4718	4.4380

XT1 = 0.60000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0761	3.0785	3.0793	3.0855	3.1115	3.4181
0.20000000	3.0787	3.0811	3.0819	3.0882	3.1143	3.4227
0.25000000	3.0796	3.0820	3.0828	3.0891	3.1152	3.4242
0.30000000	3.0864	3.0889	3.0897	3.0961	3.1225	3.4312
0.40000000	3.1146	3.1171	3.1180	3.1247	3.1525	3.4874
1.00000000	3.4173	3.4215	3.4228	3.4338	3.4866	4.4702

XMS = 0.60000000 KAR = 0.50000000 PHI = 0.30000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0812	3.0934	3.0841	3.0898	3.1138	3.4560
0.20000000	3.0839	3.0861	3.0868	3.0925	3.1160	3.4607
0.25000000	3.0848	3.0870	3.0877	3.0935	3.1176	3.4627
0.50000000	3.0919	3.0941	3.0948	3.1006	3.1250	3.4744
0.60000000	3.1210	3.1233	3.1241	3.1301	3.1557	3.5206
1.00000000	3.4455	3.4492	3.4504	3.4600	3.5014	4.5657

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0885	3.0904	3.0910	3.0959	3.1171	3.5479
0.20000000	3.0913	3.0932	3.0938	3.0988	3.1201	3.5527
0.25000000	3.0923	3.0941	3.0948	3.0997	3.1210	3.5543
0.50000000	3.0996	3.1015	3.1022	3.1072	3.1287	3.5670
0.60000000	3.1302	3.1322	3.1328	3.1380	3.1603	3.6214
1.00000000	3.4690	3.4919	3.4928	3.5005	3.5341	4.9443

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0750	3.0775	3.0783	3.0849	3.1119	3.4111
0.20000000	3.0775	3.0800	3.0809	3.0875	3.1147	3.4155
0.25000000	3.0783	3.0809	3.0817	3.0883	3.1156	3.4170
0.50000000	3.0850	3.0875	3.0884	3.0951	3.1226	3.4286
0.60000000	3.1122	3.1149	3.1158	3.1228	3.1518	3.4704
1.00000000	3.4111	3.4155	3.4169	3.4285	3.4778	4.4519

XMS = 0.80000000 KAR = 0.50000000 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0773	3.0797	3.0805	3.0868	3.1130	3.4243
0.20000000	3.0799	3.0823	3.0831	3.0894	3.1157	3.4288
0.25000000	3.0807	3.0831	3.0840	3.0903	3.1166	3.4303
0.50000000	3.0874	3.0899	3.0907	3.0971	3.1237	3.4420
0.60000000	3.1151	3.1177	3.1185	3.1253	3.1532	3.4920
1.00000000	3.4233	3.4275	3.4289	3.4398	3.4868	4.4841

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0825	3.0847	3.0854	3.0911	3.1153	3.4628
0.20000000	3.0851	3.0873	3.0881	3.0938	3.1181	3.4673
0.25000000	3.0860	3.0882	3.0890	3.0947	3.1190	3.4688
0.50000000	3.0929	3.0952	3.0959	3.1017	3.1263	3.4807
0.60000000	3.1216	3.1239	3.1247	3.1308	3.1564	3.5311
1.00000000	3.4519	3.4556	3.4568	3.4664	3.5080	4.5631

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0899	3.0918	3.0924	3.0974	3.1187	3.5561
0.20000000	3.0927	3.0946	3.0952	3.1002	3.1216	3.5610
0.25000000	3.0936	3.0955	3.0961	3.1011	3.1224	3.5625
0.50000000	3.1008	3.1027	3.1034	3.1084	3.1300	3.5749
0.60000000	3.1309	3.1329	3.1335	3.1387	3.1611	3.6240
1.00000000	3.4961	3.4990	3.5000	3.5077	3.5413	4.9602

XMS = 0.00000000 KAR = 0.50000000 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0776	3.0801	3.0809	3.0872	3.1136	3.4262
0.20000000	3.0802	3.0826	3.0835	3.0898	3.1161	3.4306
0.25000000	3.0811	3.0835	3.0843	3.0907	3.1170	3.4321
0.50000000	3.0877	3.0902	3.0910	3.0975	3.1241	3.4437
0.80000000	3.1151	3.1179	3.1187	3.1254	3.1535	3.4934
1.00000000	3.4252	3.4294	3.4308	3.4417	3.4887	4.4685

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0828	3.0850	3.0858	3.0915	3.1157	3.4049
0.20000000	3.0853	3.0877	3.0884	3.0942	3.1185	3.4094
0.25000000	3.0864	3.0886	3.0893	3.0951	3.1194	3.4709
0.50000000	3.0933	3.0955	3.0962	3.1021	3.1267	3.4827
0.80000000	3.1218	3.1241	3.1249	3.1310	3.1566	3.5332
1.00000000	3.4540	3.4576	3.4589	3.4685	3.5100	4.5877

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0903	3.0922	3.0928	3.0978	3.1192	3.5908
0.20000000	3.0931	3.0950	3.0956	3.1006	3.1221	3.5635
0.25000000	3.0940	3.0959	3.0965	3.1015	3.1230	3.5651
0.50000000	3.1012	3.1031	3.1037	3.1088	3.1305	3.5773
0.80000000	3.1311	3.1331	3.1337	3.1389	3.1614	3.6300
1.00000000	3.4983	3.5013	3.5022	3.5099	3.5436	4.6653

XMS = 0.80000000 KAR = 0.50000000 PHI = 0.50000000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0854	3.0876	3.0884	3.0942	3.1188	3.4788
0.20000000	3.0880	3.0902	3.0909	3.0968	3.1215	3.4831
0.25000000	3.0888	3.0910	3.0918	3.0977	3.1225	3.4845
0.50000000	3.0954	3.0977	3.0984	3.1044	3.1293	3.4957
0.80000000	3.1230	3.1253	3.1261	3.1322	3.1582	3.5437
1.00000000	3.4687	3.4723	3.4738	3.4832	3.5250	4.6213

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0931	3.0951	3.0957	3.1007	3.1225	3.5762
0.20000000	3.0958	3.0977	3.0984	3.1034	3.1252	3.5806
0.25000000	3.0967	3.0986	3.0992	3.1043	3.1261	3.5821
0.50000000	3.1036	3.1055	3.1062	3.1113	3.1332	3.5937
0.80000000	3.1325	3.1344	3.1351	3.1404	3.1630	3.6436
1.00000000	3.5147	3.5176	3.5185	3.5282	3.5599	4.7026

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0995	3.1015	3.1021	3.1071	3.1297	3.6175
0.20000000	3.1019	3.1039	3.1045	3.1096	3.1322	3.6214
0.25000000	3.1027	3.1047	3.1053	3.1106	3.1330	3.6226
0.50000000	3.1090	3.1110	3.1116	3.1169	3.1395	3.6327
0.80000000	3.1350	3.1376	3.1383	3.1437	3.1668	3.6763
1.00000000	3.5627	3.5656	3.5665	3.5743	3.6081	5.0196

XMS = 0.80000000 XAH = 0.66666667 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.30000000	0.60000000	1.00000000
X51						
0.00000000	6.2377	6.2380	6.2361	6.2391	6.2431	6.4162
0.20000000	6.2360	6.2384	6.2365	6.2394	6.2435	6.4169
0.25000000	6.2362	6.2385	6.2366	6.2395	6.2436	6.4171
0.50000000	6.2391	6.2394	6.2396	6.2405	6.2445	6.4190
0.80000000	6.2432	6.2436	6.2437	6.2448	6.2488	6.4274
1.00000000	6.4174	6.4181	6.4183	6.4202	6.4284	7.0225

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2379	6.2383	6.2384	6.2393	6.2433	6.4165
0.20000000	6.2363	6.2386	6.2367	6.2397	6.2437	6.4172
0.25000000	6.2384	6.2387	6.2389	6.2398	6.2438	6.4174
0.50000000	6.2393	6.2397	6.2398	6.2407	6.2448	6.4193
0.80000000	6.2435	6.2436	6.2439	6.2449	6.2490	6.4277
1.00000000	6.4181	6.4188	6.4190	6.4208	6.4290	7.0236

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2396	6.2400	6.2401	6.2410	6.2448	6.4186
0.20000000	6.2400	6.2403	6.2404	6.2413	6.2452	6.4194
0.25000000	6.2401	6.2405	6.2406	6.2414	6.2453	6.4196
0.50000000	6.2411	6.2414	6.2415	6.2424	6.2463	6.4215
0.80000000	6.2452	6.2456	6.2457	6.2466	6.2505	6.4292
1.00000000	6.4229	6.4236	6.4238	6.4256	6.4335	7.0321

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2446	6.2449	6.2450	6.2458	6.2492	6.4260
0.20000000	6.2450	6.2452	6.2453	6.2461	6.2496	6.4268
0.25000000	6.2451	6.2454	6.2455	6.2463	6.2497	6.4270
0.50000000	6.2461	6.2464	6.2465	6.2472	6.2507	6.4289
0.80000000	6.2504	6.2507	6.2508	6.2516	6.2552	6.4375
1.00000000	6.4372	6.4378	6.4380	6.4396	6.4468	7.0614

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2562	6.2564	6.2565	6.2571	6.2597	6.4549
0.20000000	6.2566	6.2568	6.2569	6.2575	6.2601	6.4557
0.25000000	6.2568	6.2570	6.2570	6.2576	6.2602	6.4559
0.50000000	6.2578	6.2580	6.2581	6.2587	6.2613	6.4580
0.80000000	6.2625	6.2627	6.2628	6.2634	6.2660	6.4671
1.00000000	6.4729	6.4733	6.4735	6.4747	6.4802	7.1828

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2387	6.2390	6.2392	6.2401	6.2441	6.4186
0.20000000	6.2390	6.2394	6.2395	6.2404	6.2445	6.4193
0.25000000	6.2392	6.2395	6.2396	6.2405	6.2446	6.4195
0.50000000	6.2401	6.2404	6.2405	6.2415	6.2455	6.4214
0.80000000	6.2441	6.2445	6.2446	6.2456	6.2497	6.4296
1.00000000	6.4190	6.4197	6.4199	6.4218	6.4300	7.0272

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2404	0.2408	0.2409	0.2418	0.2456	0.4208
0.20000000	0.2408	0.2411	0.2412	0.2421	0.2460	0.4215
0.25000000	0.2409	0.2412	0.2413	0.2422	0.2461	0.4217
0.30000000	0.2418	0.2422	0.2423	0.2432	0.2471	0.4236
0.40000000	0.2459	0.2463	0.2468	0.2473	0.2513	0.4319
0.60000000	0.4239	0.4245	0.4247	0.4265	0.4345	7.0357
1.00000000						

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2454	0.2457	0.2458	0.2466	0.2501	0.4262
0.20000000	0.2458	0.2461	0.2462	0.2470	0.2505	0.4290
0.25000000	0.2459	0.2462	0.2463	0.2471	0.2506	0.4292
0.30000000	0.2469	0.2471	0.2472	0.2480	0.2510	0.4311
0.40000000	0.2511	0.2514	0.2515	0.2523	0.2559	0.4395
0.60000000	0.4362	0.4388	0.4390	0.4406	0.4478	7.0651
1.00000000						

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2571	0.2573	0.2574	0.2580	0.2606	0.4374
0.20000000	0.2575	0.2577	0.2578	0.2584	0.2610	0.4381
0.25000000	0.2576	0.2579	0.2579	0.2585	0.2611	0.4384
0.30000000	0.2587	0.2589	0.2590	0.2596	0.2622	0.4404
0.40000000	0.2633	0.2635	0.2636	0.2642	0.2658	0.4494
0.60000000	0.4740	0.4744	0.4746	0.4758	0.4813	7.1871
1.00000000						

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2407	0.2410	0.2411	0.2420	0.2459	0.4215
0.20000000	0.2410	0.2414	0.2415	0.2424	0.2463	0.4222
0.25000000	0.2411	0.2415	0.2416	0.2425	0.2464	0.4224
0.30000000	0.2421	0.2424	0.2425	0.2434	0.2473	0.4243
0.40000000	0.2462	0.2465	0.2466	0.2475	0.2515	0.4325
0.60000000	0.4242	0.4248	0.4250	0.4268	0.4348	7.0368
1.00000000						

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2457	0.2460	0.2460	0.2468	0.2503	0.4269
0.20000000	0.2460	0.2463	0.2464	0.2472	0.2507	0.4297
0.25000000	0.2461	0.2464	0.2465	0.2473	0.2508	0.4299
0.30000000	0.2471	0.2474	0.2475	0.2483	0.2518	0.4318
0.40000000	0.2513	0.2516	0.2517	0.2525	0.2561	0.4402
0.60000000	0.4385	0.4391	0.4393	0.4409	0.4481	7.0663
1.00000000						

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2574	0.2576	0.2577	0.2583	0.2609	0.4542
0.20000000	0.2578	0.2580	0.2581	0.2587	0.2613	0.4549
0.25000000	0.2579	0.2581	0.2582	0.2588	0.2614	0.4552
0.30000000	0.2590	0.2592	0.2593	0.2598	0.2625	0.4612
0.40000000	0.2635	0.2637	0.2638	0.2644	0.2671	0.4701
0.60000000	0.4743	0.4748	0.4750	0.4762	0.4817	7.1885
1.00000000						

XMS = 0.80000000 XAH = 0.00000007 PHI = 0.50000000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2475	0.2470	0.2470	0.2487	0.2522	0.4340
0.20000000	0.2476	0.2481	0.2482	0.2440	0.2526	0.4347
0.25000000	0.2480	0.2483	0.2484	0.2492	0.2527	0.4349
0.50000000	0.2484	0.2492	0.2493	0.2501	0.2531	0.4367
0.80000000	0.2530	0.2533	0.2534	0.2542	0.2576	0.4449
1.00000000	0.4400	0.4415	0.4417	0.4433	0.4505	0.70754

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2594	0.2567	0.2597	0.2603	0.2630	0.4635
0.20000000	0.2598	0.2600	0.2601	0.2607	0.2634	0.4645
0.25000000	0.2599	0.2602	0.2602	0.2608	0.2635	0.4648
0.50000000	0.2609	0.2612	0.2612	0.2618	0.2645	0.4657
0.80000000	0.2653	0.2656	0.2656	0.2662	0.2690	0.4754
1.00000000	0.4771	0.4775	0.4777	0.4789	0.4844	0.71992

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	0.2653	0.2655	0.2656	0.2662	0.2689	0.4804
0.20000000	0.2656	0.2658	0.2659	0.2665	0.2693	0.4813
0.25000000	0.2657	0.2659	0.2660	0.2666	0.2694	0.4813
0.50000000	0.2666	0.2668	0.2669	0.2675	0.2703	0.4831
0.80000000	0.2706	0.2708	0.2709	0.2715	0.2743	0.4909
1.00000000	0.4863	0.4867	0.4869	0.4881	0.4937	0.72362

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3796	9.3797	9.3798	9.3801	9.3814	9.5016
0.20000000	9.3797	9.3798	9.3799	9.3802	9.3815	9.5018
0.25000000	9.3798	9.3799	9.3800	9.3803	9.3816	9.5019
0.50000000	9.3801	9.3802	9.3802	9.3807	9.3818	9.5025
0.80000000	9.3814	9.3815	9.3815	9.3820	9.3832	9.5053
1.00000000	9.5027	9.5029	9.5030	9.5036	9.5063	9.9338

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3796	9.3799	9.3799	9.3802	9.3815	9.5017
0.20000000	9.3799	9.3800	9.3801	9.3804	9.3817	9.5019
0.25000000	9.3800	9.3801	9.3801	9.3804	9.3817	9.5020
0.50000000	9.3803	9.3804	9.3804	9.3807	9.3820	9.5026
0.80000000	9.3816	9.3817	9.3817	9.3820	9.3833	9.5054
1.00000000	9.5031	9.5034	9.5035	9.5041	9.5068	9.9342

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3811	9.3813	9.3813	9.3816	9.3828	9.5024
0.20000000	9.3813	9.3814	9.3814	9.3817	9.3829	9.5026
0.25000000	9.3813	9.3814	9.3814	9.3817	9.3830	9.5027
0.50000000	9.3816	9.3817	9.3817	9.3820	9.3833	9.5031
0.80000000	9.3829	9.3831	9.3831	9.3834	9.3846	9.5061
1.00000000	9.5064	9.5066	9.5067	9.5073	9.5099	9.9373

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XMS = 0.00000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3854	9.3855	9.3856	9.3856	9.3859	9.5048
0.20000000	9.3855	9.3856	9.3857	9.3858	9.3871	9.5051
0.25000000	9.3856	9.3857	9.3857	9.3860	9.3871	9.5052
0.50000000	9.3859	9.3860	9.3860	9.3863	9.3874	9.5058
0.80000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.5086
1.00000000	9.5171	9.5173	9.5173	9.5174	9.5203	9.9456

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3991	9.3991	9.3991	9.3993	9.4001	9.5181
0.20000000	9.3992	9.3993	9.3993	9.3994	9.4003	9.5183
0.25000000	9.3992	9.3993	9.3993	9.3995	9.4002	9.5184
0.50000000	9.3996	9.3997	9.3997	9.3998	9.4006	9.5191
0.80000000	9.4011	9.4012	9.4012	9.4014	9.4021	9.5220
1.00000000	9.5536	9.5538	9.5538	9.5542	9.5559	10.0114

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3804	9.3805	9.3805	9.3808	9.3821	9.5031
0.20000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.5033
0.25000000	9.3805	9.3806	9.3807	9.3810	9.3823	9.5034
0.50000000	9.3808	9.3809	9.3810	9.3813	9.3826	9.5040
0.80000000	9.3821	9.3822	9.3823	9.3826	9.3839	9.5067
1.00000000	9.5034	9.5036	9.5037	9.5043	9.5070	9.9354

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.50000000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3817	9.3818	9.3819	9.3821	9.3834	9.5038
0.20000000	9.3818	9.3819	9.3820	9.3823	9.3835	9.5040
0.25000000	9.3819	9.3820	9.3820	9.3823	9.3836	9.5041
0.50000000	9.3822	9.3823	9.3823	9.3826	9.3839	9.5047
0.80000000	9.3835	9.3836	9.3836	9.3839	9.3852	9.5074
1.00000000	9.5067	9.5069	9.5070	9.5076	9.5102	9.9385

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3860	9.3861	9.3862	9.3864	9.3875	9.5062
0.20000000	9.3861	9.3862	9.3863	9.3865	9.3877	9.5065
0.25000000	9.3862	9.3863	9.3863	9.3866	9.3877	9.5065
0.50000000	9.3865	9.3866	9.3866	9.3869	9.3880	9.5072
0.80000000	9.3879	9.3880	9.3880	9.3883	9.3894	9.5099
1.00000000	9.5173	9.5175	9.5176	9.5182	9.5206	9.9499

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3997	9.3998	9.3998	9.4000	9.4007	9.5196
0.20000000	9.3999	9.3999	9.3999	9.4000	9.4009	9.5198
0.25000000	9.3999	9.4000	9.4000	9.4001	9.4009	9.5199
0.50000000	9.4003	9.4004	9.4004	9.4005	9.4013	9.5205
0.80000000	9.4019	9.4019	9.4019	9.4021	9.4028	9.5234
1.00000000	9.5540	9.5541	9.5542	9.5546	9.5563	10.0129

XMS = 0.80000000 KAR = 0.75000000 PHI = 0.50000000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3819	9.3820	9.3821	9.3823	9.3836	9.5042
0.20000000	9.3820	9.3821	9.3822	9.3824	9.3837	9.5044
0.25000000	9.3821	9.3822	9.3823	9.3825	9.3838	9.5045
0.50000000	9.3824	9.3825	9.3826	9.3828	9.3841	9.5051
0.80000000	9.3837	9.3838	9.3839	9.3841	9.3854	9.5078
1.00000000	9.5068	9.5070	9.5071	9.5077	9.5103	9.9389

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3862	9.3863	9.3864	9.3866	9.3877	9.5067
0.20000000	9.3863	9.3864	9.3865	9.3867	9.3879	9.5069
0.25000000	9.3864	9.3865	9.3866	9.3868	9.3882	9.5070
0.50000000	9.3867	9.3868	9.3869	9.3871	9.3886	9.5076
0.80000000	9.3881	9.3882	9.3883	9.3884	9.3896	9.5103
1.00000000	9.5174	9.5176	9.5177	9.5183	9.5207	9.9503

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4000	9.4000	9.4001	9.4002	9.4010	9.5200
0.20000000	9.4001	9.4002	9.4002	9.4003	9.4011	9.5203
0.25000000	9.4001	9.4002	9.4002	9.4004	9.4011	9.5204
0.50000000	9.4005	9.4005	9.4006	9.4007	9.4015	9.5210
0.80000000	9.4020	9.4021	9.4021	9.4023	9.4030	9.5239
1.00000000	9.5541	9.5542	9.5543	9.5547	9.5564	10.0134

XMS = 0.80000000 KAR = 0.75000000 PHI = 0.50000000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3877	9.3878	9.3878	9.3880	9.3892	9.5100
0.20000000	9.3878	9.3879	9.3879	9.3882	9.3893	9.5102
0.25000000	9.3878	9.3879	9.3879	9.3882	9.3893	9.5103
0.50000000	9.3881	9.3882	9.3882	9.3885	9.3896	9.5109
0.80000000	9.3894	9.3895	9.3896	9.3898	9.3910	9.5136
1.00000000	9.5182	9.5184	9.5184	9.5190	9.5214	9.9535

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4016	9.4017	9.4017	9.4018	9.4026	9.5236
0.20000000	9.4017	9.4018	9.4018	9.4020	9.4027	9.5238
0.25000000	9.4018	9.4018	9.4018	9.4020	9.4028	9.5239
0.50000000	9.4021	9.4022	9.4022	9.4023	9.4031	9.5245
0.80000000	9.4036	9.4036	9.4037	9.4038	9.4046	9.5273
1.00000000	9.5550	9.5551	9.5552	9.5555	9.5573	10.0171

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4068	9.4069	9.4069	9.4071	9.4078	9.5351
0.20000000	9.4069	9.4070	9.4070	9.4072	9.4080	9.5353
0.25000000	9.4069	9.4070	9.4070	9.4072	9.4080	9.5354
0.50000000	9.4072	9.4073	9.4073	9.4075	9.4083	9.5360
0.80000000	9.4086	9.4086	9.4087	9.4088	9.4096	9.5376
1.00000000	9.5581	9.5583	9.5583	9.5587	9.5604	10.0309

XMS = 0.80000000 KAR = 0.80000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5201	12.5202	12.5202	12.5202	12.5209	12.6124
0.20000000	12.5202	12.5202	12.5202	12.5203	12.5209	12.6125
0.25000000	12.5202	12.5202	12.5202	12.5204	12.5210	12.6125
0.50000000	12.5203	12.5204	12.5204	12.5205	12.5211	12.6128
0.80000000	12.5209	12.5210	12.5210	12.5211	12.5217	12.6141
1.00000000	12.6133	12.6134	12.6135	12.6136	12.6150	12.9528

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5203	12.5203	12.5203	12.5204	12.5210	12.6124
0.20000000	12.5203	12.5203	12.5203	12.5205	12.5211	12.6125
0.25000000	12.5203	12.5204	12.5204	12.5205	12.5212	12.6126
0.50000000	12.5205	12.5205	12.5205	12.5206	12.5218	12.6129
0.80000000	12.5211	12.5211	12.5211	12.5212	12.6153	12.6141
1.00000000	12.6137	12.6138	12.6138	12.6141	12.6153	12.9529

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5214	12.5214	12.5214	12.5216	12.5221	12.6127
0.20000000	12.5214	12.5215	12.5215	12.5216	12.5222	12.6128
0.25000000	12.5214	12.5215	12.5215	12.5216	12.5222	12.6129
0.50000000	12.5216	12.5216	12.5216	12.5218	12.5223	12.6131
0.80000000	12.5222	12.5222	12.5222	12.5224	12.5229	12.6144
1.00000000	12.6163	12.6164	12.6164	12.6167	12.6179	12.9544

XMS = 0.80000000 KAR = 0.80000000 PHI = 0.50000000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5251	12.5252	12.5252	12.5253	12.5258	12.6138
0.20000000	12.5252	12.5252	12.5253	12.5254	12.5259	12.6139
0.25000000	12.5252	12.5253	12.5253	12.5254	12.5260	12.6142
0.50000000	12.5254	12.5254	12.5255	12.5255	12.5267	12.6155
0.80000000	12.5260	12.5260	12.5260	12.5262	12.6266	12.9598
1.00000000	12.6252	12.6253	12.6253	12.6255		

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5399	12.5399	12.5399	12.5400	12.5403	12.6211
0.20000000	12.5400	12.5400	12.5400	12.5401	12.5403	12.6212
0.25000000	12.5400	12.5400	12.5400	12.5401	12.5404	12.6213
0.50000000	12.5401	12.5402	12.5402	12.5402	12.5405	12.6215
0.80000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6228
1.00000000	12.6637	12.6637	12.6638	12.6639	12.6647	12.9975

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6135
0.20000000	12.5208	12.5208	12.5208	12.5210	12.5215	12.6136
0.25000000	12.5208	12.5208	12.5208	12.5210	12.5216	12.6136
0.50000000	12.5209	12.5210	12.5210	12.5211	12.5217	12.6139
0.80000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6151
1.00000000	12.6136	12.6139	12.6139	12.6147	12.6154	12.9575

XMS = 0.60000000 XAR = 0.80000000 PHI = 0.50780000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6136
0.20000000	12.5219	12.5219	12.5219	12.5221	12.5227	12.6139
0.25000000	12.5219	12.5219	12.5220	12.5221	12.5228	12.6139
0.50000000	12.5220	12.5221	12.5221	12.5222	12.5228	12.6142
0.60000000	12.5226	12.5227	12.5227	12.5228	12.5234	12.6154
1.00000000	12.6164	12.6165	12.6165	12.6168	12.6180	12.6549

XT1 = 0.20000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6149
0.20000000	12.5257	12.5257	12.5257	12.5259	12.5264	12.6150
0.25000000	12.5257	12.5257	12.5258	12.5259	12.5264	12.6150
0.50000000	12.5258	12.5259	12.5259	12.5260	12.5265	12.6153
0.60000000	12.5265	12.5265	12.5265	12.5266	12.5271	12.6165
1.00000000	12.6253	12.6254	12.6254	12.6257	12.6268	12.6603

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5405	12.5405	12.5405	12.5406	12.5409	12.6222
0.20000000	12.5405	12.5406	12.5406	12.5406	12.5409	12.6223
0.25000000	12.5405	12.5406	12.5406	12.5408	12.5409	12.6224
0.50000000	12.5407	12.5407	12.5407	12.5415	12.5411	12.6226
0.60000000	12.5414	12.5415	12.5415	12.5415	12.5418	12.6239
1.00000000	12.6658	12.6659	12.6659	12.6641	12.6648	12.6981

XMS = 0.60000000 XAR = 0.60000000 PHI = 0.50080000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5220	12.5220	12.5220	12.5222	12.5227	12.6141
0.20000000	12.5220	12.5221	12.5221	12.5222	12.5228	12.6142
0.25000000	12.5221	12.5221	12.5221	12.5222	12.5228	12.6143
0.50000000	12.5222	12.5222	12.5222	12.5222	12.5229	12.6148
0.60000000	12.5226	12.5226	12.5226	12.5230	12.5235	12.6158
1.00000000	12.6164	12.6165	12.6165	12.6168	12.6180	12.6551

XT1 = 0.25000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5258	12.5258	12.5258	12.5260	12.5265	12.6152
0.20000000	12.5258	12.5259	12.5259	12.5260	12.5265	12.6153
0.25000000	12.5259	12.5259	12.5259	12.5260	12.5265	12.6153
0.50000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6156
0.60000000	12.5266	12.5267	12.5267	12.5268	12.5273	12.6168
1.00000000	12.6253	12.6254	12.6254	12.6257	12.6268	12.6605

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	12.5407	12.5407	12.5407	12.5408	12.5411	12.6226
0.20000000	12.5407	12.5407	12.5407	12.5408	12.5411	12.6227
0.25000000	12.5407	12.5408	12.5408	12.5408	12.5411	12.6227
0.50000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6230
0.60000000	12.5416	12.5416	12.5417	12.5417	12.5420	12.6243
1.00000000	12.6639	12.6639	12.6640	12.6641	12.6649	12.6983

XMS = 0.80000000 XAR = 0.80000000 PH1 = 0.90000000

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5270	12.5270	12.5270	12.5271	12.5277	12.6178
0.20000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6179
0.25000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6182
0.50000000	12.5272	12.5272	12.5272	12.5274	12.5279	12.6194
0.80000000	12.5278	12.5278	12.5278	12.5280	12.5285	12.6200
1.00000000	12.6258	12.6257	12.6257	12.6260	12.6271	

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5421	12.5421	12.5421	12.5422	12.5425	12.6253
0.20000000	12.5421	12.5421	12.5421	12.5422	12.5425	12.6254
0.25000000	12.5421	12.5422	12.5422	12.5422	12.5425	12.6254
0.50000000	12.5423	12.5423	12.5423	12.5424	12.5427	12.6257
0.80000000	12.5430	12.5430	12.5430	12.5431	12.5434	12.6269
1.00000000	12.6643	12.6643	12.6643	12.6645	12.6652	13.0000

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5468	12.5469	12.5469	12.5469	12.5472	12.6347
0.20000000	12.5469	12.5469	12.5469	12.5470	12.5473	12.6348
0.25000000	12.5469	12.5469	12.5469	12.5470	12.5473	12.6348
0.50000000	12.5470	12.5471	12.5471	12.5471	12.5475	12.6351
0.80000000	12.5477	12.5477	12.5477	12.5478	12.5481	12.6362
1.00000000	12.6657	12.6658	12.6658	12.6659	12.6667	13.0063

XMS = 0.25000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6575	2.6670	2.6701	2.6953	2.8047	2.8301
0.20000000	2.6670	2.6769	2.6800	2.7047	2.8122	2.8319
0.25000000	2.6710	2.6802	2.6833	2.7078	2.8147	2.8300
0.30000000	2.6750	2.6835	2.6865	2.7322	2.8350	2.8427
0.40000000	2.6790	2.6873	2.6904	2.7544	2.9258	2.9357
0.60000000	2.8134	2.8204	2.8227	2.8444	2.9248	3.0378
1.00000000	2.0132	2.0346	2.0416			

XT1 = 0.00000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6686	2.6779	2.6809	2.7056	2.8126	2.8374
0.20000000	2.6786	2.6877	2.6907	2.7149	2.8201	2.8391
0.25000000	2.6820	2.6910	2.6940	2.7180	2.8227	2.8361
0.30000000	2.6855	2.6941	2.6970	2.7217	2.8248	2.8359
0.40000000	2.6890	2.6973	2.7002	2.7262	2.8265	2.8357
0.60000000	2.8233	2.8301	2.8324	2.8507	2.9335	2.9317
1.00000000	2.0198	2.0406	2.0475	2.0994	2.2874	3.5464

XT1 = 0.00000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.7380	2.7460	2.7487	2.7699	2.8629	2.8864
0.20000000	2.7476	2.7554	2.7581	2.7789	2.8704	2.8972
0.25000000	2.7508	2.7586	2.7612	2.7819	2.8729	2.9027
0.30000000	2.7541	2.7618	2.7644	2.7850	2.8750	2.9057
0.40000000	2.7574	2.7650	2.7676	2.7881	2.8771	2.9077
0.60000000	2.8659	2.8733	2.8759	2.8963	2.9827	2.9827
1.00000000	2.0590	2.0778	2.0839	2.1306	2.3036	3.6076

XMS = 0.25000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.8727	2.8785	2.8804	2.8959	2.9643	2.9824
0.20000000	2.8816	2.8873	2.8892	2.9043	2.9717	2.9875
0.25000000	2.8845	2.8902	2.8921	2.9071	2.9742	2.9877
0.30000000	2.8874	2.8931	2.8950	2.9100	2.9769	2.9884
0.40000000	2.8903	2.8960	2.8979	2.9129	2.9798	2.9903
0.60000000	3.0100	3.0144	3.0159	3.0279	3.0821	3.0857
1.00000000	2.1313	2.1463	2.1512	2.1892	2.3353	3.7790

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	3.0271	3.0308	3.0321	3.0419	3.0863	2.3880
0.20000000	3.0354	3.0390	3.0402	3.0499	3.0937	2.4051
0.25000000	3.0382	3.0418	3.0430	3.0526	3.0962	2.4107
0.30000000	3.0401	3.0435	3.0447	3.0542	3.1157	2.4254
0.40000000	3.1556	3.1584	3.1594	3.1671	3.2024	2.6206
0.60000000	2.2083	2.2199	2.2236	2.2532	2.3720	4.1626

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.7065	2.7156	2.7186	2.7425	2.8465	2.8594
0.20000000	2.7159	2.7247	2.7277	2.7512	2.8539	2.8796
0.25000000	2.7189	2.7276	2.7307	2.7541	2.8563	2.8864
0.30000000	2.7216	2.7302	2.7332	2.7565	2.8582	2.8919
0.40000000	2.7243	2.7328	2.7358	2.7591	2.8601	2.8958
0.60000000	2.8504	2.8571	2.8595	2.8778	2.9601	2.9808
1.00000000	2.0441	2.0746	2.0713	2.1222	2.3075	3.5735

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7761	2.7839	2.7865	2.8072	2.8979	2.1089
0.20000000	2.7850	2.7927	2.7952	2.8156	2.9049	2.1264
0.25000000	2.7860	2.7956	2.7981	2.8184	2.9072	2.1348
0.50000000	2.8115	2.8180	2.8212	2.8403	2.9260	2.1834
0.80000000	2.9138	2.9198	2.9218	2.9378	3.0100	2.3674
1.00000000	2.0838	2.1022	2.1082	2.1540	2.3243	3.6344

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9117	2.9174	2.9192	2.9343	3.0009	2.2265
0.20000000	2.9200	2.9255	2.9274	2.9421	3.0079	2.2445
0.25000000	2.9227	2.9262	2.9301	2.9448	3.0102	2.2504
0.50000000	2.9445	2.9498	2.9516	2.9657	3.0288	2.2954
0.80000000	3.0397	3.0441	3.0456	3.0575	3.1113	2.4647
1.00000000	2.1570	2.1716	2.1765	2.2136	2.3572	3.8052

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0689	3.0716	3.0728	3.0824	3.1255	2.4161
0.20000000	3.0757	3.0793	3.0804	3.0899	3.1324	2.4323
0.25000000	3.0783	3.0816	3.0830	3.0923	3.1347	2.4373
0.50000000	3.0987	3.1021	3.1032	3.1122	3.1531	2.4784
0.80000000	3.1879	3.1908	3.1918	3.1994	3.2343	2.6367
1.00000000	2.2352	2.2465	2.2501	2.2790	2.3953	4.1892

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7873	2.7951	2.7977	2.8182	2.9082	2.1154
0.20000000	2.7960	2.8036	2.8062	2.8264	2.9131	2.1346
0.25000000	2.7969	2.8065	2.8090	2.8291	2.9174	2.1409
0.50000000	2.8219	2.8292	2.8316	2.8508	2.9358	2.1887
0.80000000	2.9220	2.9280	2.9300	2.9461	3.0182	2.3633
1.00000000	2.0914	2.1096	2.1156	2.1611	2.3307	3.6428

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9232	2.9288	2.9307	2.9456	3.0118	2.2336
0.20000000	2.9313	2.9368	2.9386	2.9533	3.0186	2.2512
0.25000000	2.9340	2.9375	2.9413	2.9559	3.0209	2.2569
0.50000000	2.9553	2.9606	2.9623	2.9764	3.0391	2.3012
0.80000000	3.0485	3.0529	3.0544	3.0643	3.1200	2.4682
1.00000000	2.1649	2.1794	2.1842	2.2211	2.3639	3.8133

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0801	3.0837	3.0849	3.0944	3.1372	2.4244
0.20000000	3.0877	3.0912	3.0924	3.1017	3.1440	2.4402
0.25000000	3.0902	3.0937	3.0948	3.1042	3.1462	2.4454
0.50000000	3.1102	3.1135	3.1146	3.1236	3.1642	2.4853
0.80000000	3.1976	3.2005	3.2014	3.2090	3.2436	2.6414
1.00000000	2.2433	2.2546	2.2583	2.2869	2.4025	4.1976

XMS = 0.25000000 KAR = 0.33333333 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9961	3.0015	3.0033	3.0176	3.0810	2.2770
0.20000000	3.0031	3.0084	3.0102	3.0243	3.0869	2.2927
0.25000000	3.0054	3.0107	3.0125	3.0265	3.0899	2.2970
0.50000000	3.0239	3.0290	3.0307	3.0443	3.1040	2.3375
0.80000000	3.1051	3.1095	3.1110	3.1227	3.1757	2.4900
1.00000000	2.2184	2.2323	2.2368	2.2722	2.4101	3.8727

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1575	3.1609	3.1621	3.1711	3.2119	2.4760
0.20000000	3.1641	3.1674	3.1685	3.1775	3.2178	2.4900
0.25000000	3.1663	3.1696	3.1707	3.1796	3.2197	2.4946
0.50000000	3.1836	3.1868	3.1879	3.1965	3.2385	2.5304
0.80000000	3.2599	3.2627	3.2637	3.2712	3.3053	2.6717
1.00000000	2.2999	2.3105	2.3140	2.3412	2.4519	4.2582

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3156	3.3157	3.3197	3.3260	3.3655	2.5757
0.20000000	3.3203	3.3234	3.3244	3.3327	3.3698	2.5867
0.25000000	3.3219	3.3249	3.3260	3.3342	3.3712	2.5903
0.50000000	3.3345	3.3375	3.3385	3.3465	3.3828	2.6184
0.80000000	3.3903	3.3930	3.3940	3.4012	3.4342	2.7331
1.00000000	2.4393	2.4487	2.4518	2.4762	2.5767	4.4362

XMS = 0.25000000 KAR = 0.50000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1019	3.1044	3.1053	3.1118	3.1384	3.4233
0.20000000	3.1045	3.1070	3.1078	3.1144	3.1411	3.4278
0.25000000	3.1053	3.1079	3.1087	3.1152	3.1420	3.4293
0.50000000	3.1119	3.1145	3.1153	3.1219	3.1491	3.4412
0.80000000	3.1390	3.1417	3.1426	3.1496	3.1783	3.4919
1.00000000	3.4209	3.4253	3.4268	3.4384	3.4879	4.4556

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1023	3.1048	3.1056	3.1121	3.1386	3.4250
0.20000000	3.1049	3.1074	3.1082	3.1147	3.1413	3.4296
0.25000000	3.1057	3.1082	3.1090	3.1155	3.1422	3.4311
0.50000000	3.1123	3.1149	3.1157	3.1223	3.1493	3.4430
0.80000000	3.1395	3.1421	3.1430	3.1499	3.1786	3.4937
1.00000000	3.4227	3.4271	3.4286	3.4401	3.4893	4.4599

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1047	3.1071	3.1079	3.1141	3.1396	3.4375
0.20000000	3.1073	3.1097	3.1105	3.1167	3.1424	3.4421
0.25000000	3.1082	3.1106	3.1114	3.1176	3.1433	3.4436
0.50000000	3.1149	3.1173	3.1181	3.1244	3.1505	3.4556
0.80000000	3.1425	3.1450	3.1459	3.1525	3.1800	3.5066
1.00000000	3.4352	3.4393	3.4407	3.4514	3.4984	4.4917

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.40000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1101	3.1123	3.1130	3.1166	3.1421	3.4736
0.20000000	3.1125	3.1150	3.1157	3.1213	3.1449	3.4784
0.25000000	3.1137	3.1159	3.1166	3.1222	3.1459	3.4799
0.50000000	3.1206	3.1228	3.1238	3.1293	3.1532	3.4921
0.80000000	3.1493	3.1516	3.1523	3.1583	3.1834	3.542
1.00000000	3.4643	3.4679	3.4691	3.4767	3.5201	4.5894

XT1 = 0.40000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1176	3.1196	3.1203	3.1231	3.1456	3.5616
0.20000000	3.1206	3.1225	3.1231	3.1279	3.1487	3.5666
0.25000000	3.1215	3.1234	3.1240	3.1288	3.1496	3.5685
0.50000000	3.1288	3.1307	3.1313	3.1362	3.1572	3.5805
0.80000000	3.1590	3.1609	3.1615	3.1666	3.1884	3.6352
1.00000000	3.5091	3.5120	3.5130	3.5206	3.5540	4.6624

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1035	3.1060	3.1065	3.1133	3.1401	3.4312
0.20000000	3.1060	3.1085	3.1094	3.1159	3.1427	3.4356
0.25000000	3.1088	3.1094	3.1102	3.1167	3.1436	3.4371
0.50000000	3.1133	3.1159	3.1167	3.1233	3.1506	3.4487
0.80000000	3.1400	3.1427	3.1436	3.1505	3.1793	3.4953
1.00000000	3.4283	3.4327	3.4342	3.4437	3.4950	4.4736

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1060	3.1084	3.1092	3.1154	3.1412	3.4436
0.20000000	3.1085	3.1109	3.1117	3.1180	3.1439	3.4483
0.25000000	3.1093	3.1118	3.1126	3.1188	3.1448	3.4496
0.50000000	3.1159	3.1184	3.1192	3.1255	3.1516	3.4615
0.80000000	3.1431	3.1456	3.1465	3.1533	3.1806	3.5113
1.00000000	3.4409	3.4451	3.4465	3.4574	3.5043	4.5055

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1115	3.1136	3.1143	3.1200	3.1437	3.4807
0.20000000	3.1141	3.1163	3.1170	3.1226	3.1465	3.4852
0.25000000	3.1150	3.1171	3.1178	3.1235	3.1474	3.4867
0.50000000	3.1218	3.1240	3.1247	3.1304	3.1545	3.4986
0.80000000	3.1499	3.1522	3.1530	3.1590	3.1842	3.5494
1.00000000	3.4704	3.4741	3.4753	3.4849	3.5263	4.6036

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1193	3.1211	3.1217	3.1266	3.1474	3.5703
0.20000000	3.1220	3.1239	3.1245	3.1294	3.1503	3.5750
0.25000000	3.1229	3.1248	3.1254	3.1303	3.1512	3.5766
0.50000000	3.1301	3.1320	3.1326	3.1375	3.1580	3.5880
0.80000000	3.1597	3.1616	3.1623	3.1674	3.1893	3.6410
1.00000000	3.5160	3.5189	3.5198	3.5275	3.5609	4.6782

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1063	J.1088	J.1095	J.1158	J.1416	J.4458
0.20000000	J.1089	J.1113	J.1121	J.1183	J.1443	J.4502
0.25000000	J.1097	J.1121	J.1129	J.1192	J.1452	J.4517
0.50000000	J.1162	J.1187	J.1195	J.1259	J.1522	J.4633
0.80000000	J.1432	J.1458	J.1466	J.1533	J.1810	J.5128
1.00000000	J.4427	J.4469	J.4483	J.4592	J.5062	4.5100

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1119	J.1140	J.1148	J.1204	J.1442	J.4828
0.20000000	J.1145	J.1166	J.1174	J.1231	J.1469	J.4873
0.25000000	J.1153	J.1175	J.1182	J.1239	J.1478	J.4888
0.50000000	J.1221	J.1243	J.1250	J.1308	J.1550	J.5006
0.80000000	J.1501	J.1524	J.1532	J.1592	J.1845	J.5510
1.00000000	J.4724	J.4761	J.4773	J.4869	J.5283	4.6082

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1197	J.1216	J.1222	J.1271	J.1480	J.5730
0.20000000	J.1225	J.1243	J.1249	J.1298	J.1508	J.5776
0.25000000	J.1234	J.1252	J.1258	J.1307	J.1517	J.5792
0.50000000	J.1305	J.1323	J.1330	J.1379	J.1590	J.5914
0.80000000	J.1599	J.1619	J.1625	J.1676	J.1895	J.6440
1.00000000	J.5162	J.5214	J.5220	J.5297	J.5631	6.8833

XMS = 0.25000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1145	J.1167	J.1175	J.1232	J.1474	J.4971
0.20000000	J.1170	J.1192	J.1200	J.1257	J.1500	J.5014
0.25000000	J.1179	J.1201	J.1208	J.1266	J.1509	J.5028
0.50000000	J.1244	J.1266	J.1273	J.1332	J.1577	J.5139
0.80000000	J.1514	J.1537	J.1544	J.1605	J.1861	J.5818
1.00000000	J.4865	J.4902	J.4914	J.5010	J.5427	4.6415

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1227	J.1246	J.1252	J.1301	J.1513	J.5906
0.20000000	J.1253	J.1272	J.1278	J.1328	J.1540	J.5950
0.25000000	J.1262	J.1280	J.1287	J.1336	J.1549	J.5965
0.50000000	J.1330	J.1349	J.1355	J.1405	J.1619	J.6081
0.80000000	J.1614	J.1633	J.1640	J.1691	J.1913	J.6579
1.00000000	J.5359	J.5368	J.5377	J.5454	J.5789	4.9204

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1293	J.1313	J.1319	J.1370	J.1589	J.6327
0.20000000	J.1317	J.1336	J.1343	J.1394	J.1613	J.6365
0.25000000	J.1325	J.1344	J.1351	J.1402	J.1621	J.6377
0.50000000	J.1386	J.1406	J.1412	J.1464	J.1665	J.6478
0.80000000	J.1647	J.1667	J.1674	J.1726	J.1953	J.6912
1.00000000	J.5802	J.5831	J.5841	J.5917	J.6224	5.0368

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2410	6.2414	6.2415	6.2424	6.2465	6.4193
0.20000000	6.2414	6.2417	6.2419	6.2428	6.2470	6.4200
0.25000000	6.2415	6.2419	6.2420	6.2429	6.2479	6.4202
0.50000000	6.2424	6.2428	6.2429	6.2438	6.2479	6.4221
0.80000000	6.2465	6.2469	6.2470	6.2480	6.2521	6.4305
1.00000000	6.4201	6.4208	6.4210	6.4229	6.4311	7.0281

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2413	6.2416	6.2417	6.2427	6.2467	6.4196
0.20000000	6.2416	6.2420	6.2421	6.2430	6.2472	6.4203
0.25000000	6.2417	6.2421	6.2422	6.2431	6.2481	6.4205
0.50000000	6.2427	6.2430	6.2432	6.2441	6.2481	6.4224
0.80000000	6.2468	6.2472	6.2473	6.2482	6.2524	6.4308
1.00000000	6.4208	6.4215	6.4217	6.4235	6.4318	7.0292

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2430	6.2433	6.2435	6.2443	6.2482	6.4217
0.20000000	6.2434	6.2437	6.2438	6.2447	6.2486	6.4224
0.25000000	6.2435	6.2438	6.2439	6.2448	6.2487	6.4227
0.50000000	6.2444	6.2448	6.2449	6.2458	6.2497	6.4246
0.80000000	6.2486	6.2490	6.2491	6.2500	6.2540	6.4330
1.00000000	6.4257	6.4263	6.4266	6.4284	6.4363	7.0377

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2480	6.2483	6.2484	6.2492	6.2527	6.4290
0.20000000	6.2484	6.2487	6.2488	6.2496	6.2530	6.4298
0.25000000	6.2485	6.2488	6.2489	6.2497	6.2532	6.4300
0.50000000	6.2495	6.2498	6.2499	6.2507	6.2542	6.4319
0.80000000	6.2538	6.2541	6.2542	6.2550	6.2585	6.4405
1.00000000	6.4400	6.4406	6.4409	6.4425	6.4497	7.0670

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2597	6.2600	6.2600	6.2606	6.2632	6.4577
0.20000000	6.2601	6.2604	6.2604	6.2610	6.2636	6.4584
0.25000000	6.2603	6.2605	6.2606	6.2612	6.2638	6.4587
0.50000000	6.2613	6.2616	6.2616	6.2622	6.2648	6.4607
0.80000000	6.2660	6.2662	6.2663	6.2669	6.2696	6.4698
1.00000000	6.4760	6.4765	6.4766	6.4779	6.4833	7.1683

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2421	6.2424	6.2425	6.2434	6.2475	6.4217
0.20000000	6.2424	6.2427	6.2427	6.2438	6.2478	6.4224
0.25000000	6.2425	6.2429	6.2430	6.2439	6.2480	6.4227
0.50000000	6.2434	6.2438	6.2439	6.2448	6.2489	6.4245
0.80000000	6.2475	6.2479	6.2480	6.2489	6.2531	6.4326
1.00000000	6.4217	6.4224	6.4226	6.4245	6.4327	7.0327

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2438	6.2441	6.2442	6.2431	6.2490	6.4239
0.20000000	6.2442	6.2445	6.2446	6.2455	6.2494	6.4246
0.25000000	6.2443	6.2446	6.2447	6.2456	6.2495	6.4248
0.50000000	6.2492	6.2495	6.2497	6.2505	6.2505	6.4267
0.80000000	6.2493	6.2497	6.2498	6.2507	6.2547	6.4350
1.00000000	6.4266	6.4273	6.4275	6.4293	6.4373	7.0412

XT1 = 0.20000000 XT2 = 0.60000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2488	6.2491	6.2492	6.2500	6.2535	6.4313
0.20000000	6.2492	6.2495	6.2496	6.2504	6.2539	6.4320
0.25000000	6.2493	6.2496	6.2497	6.2505	6.2540	6.4322
0.50000000	6.2503	6.2506	6.2507	6.2515	6.2550	6.4341
0.80000000	6.2545	6.2548	6.2549	6.2558	6.2593	6.4426
1.00000000	6.4410	6.4416	6.4418	6.4434	6.4507	7.0707

XT1 = 0.20000000 XT2 = 1.00000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2606	6.2609	6.2609	6.2615	6.2642	6.4601
0.20000000	6.2610	6.2613	6.2613	6.2619	6.2645	6.4609
0.25000000	6.2612	6.2614	6.2615	6.2621	6.2647	6.4612
0.50000000	6.2622	6.2624	6.2625	6.2631	6.2657	6.4632
0.80000000	6.2668	6.2670	6.2671	6.2677	6.2704	6.4722
1.00000000	6.4771	6.4776	6.4778	6.4790	6.4845	7.1927

XMS = 0.25000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2440	6.2444	6.2445	6.2454	6.2493	6.4246
0.20000000	6.2444	6.2447	6.2448	6.2457	6.2497	6.4253
0.25000000	6.2445	6.2449	6.2450	6.2459	6.2498	6.4255
0.50000000	6.2454	6.2458	6.2459	6.2468	6.2507	6.4274
0.80000000	6.2495	6.2499	6.2500	6.2509	6.2549	6.4357
1.00000000	6.4269	6.4276	6.4278	6.4296	6.4376	7.0424

XT1 = 0.25000000 XT2 = 0.80000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2491	6.2494	6.2495	6.2503	6.2538	6.4320
0.20000000	6.2494	6.2497	6.2498	6.2506	6.2542	6.4327
0.25000000	6.2496	6.2499	6.2500	6.2508	6.2543	6.4329
0.50000000	6.2505	6.2508	6.2509	6.2517	6.2553	6.4348
0.80000000	6.2548	6.2551	6.2552	6.2560	6.2596	6.4432
1.00000000	6.4413	6.4419	6.4421	6.4438	6.4510	7.0719

XT1 = 0.25000000 XT2 = 1.00000000

XS2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XS1						
0.00000000	6.2609	6.2612	6.2612	6.2618	6.2644	6.4609
0.20000000	6.2613	6.2615	6.2616	6.2622	6.2648	6.4617
0.25000000	6.2615	6.2617	6.2618	6.2623	6.2650	6.4619
0.50000000	6.2625	6.2627	6.2628	6.2634	6.2660	6.4639
0.80000000	6.2671	6.2673	6.2674	6.2680	6.2707	6.4720
1.00000000	6.4775	6.4780	6.4781	6.4793	6.4848	7.1941

XMS = 0.28000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	0.2509	0.2512	0.2513	0.2521	0.2557	0.4371
0.20000000	0.2513	0.2516	0.2517	0.2525	0.2561	0.4378
0.25000000	0.2514	0.2517	0.2518	0.2526	0.2562	0.4380
0.30000000	0.2523	0.2526	0.2527	0.2535	0.2571	0.4398
0.50000000	0.2564	0.2567	0.2568	0.2577	0.2613	0.4480
0.60000000	0.4437	0.4443	0.4445	0.4461	0.4534	7.0809
1.00000000						

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	0.2630	0.2632	0.2633	0.2639	0.2665	0.4666
0.20000000	0.2634	0.2636	0.2637	0.2643	0.2669	0.4673
0.25000000	0.2635	0.2637	0.2638	0.2644	0.2670	0.4676
0.50000000	0.2645	0.2647	0.2648	0.2654	0.2681	0.4665
0.60000000	0.2689	0.2691	0.2692	0.2698	0.2725	0.4782
1.00000000	0.4802	0.4807	0.4808	0.4820	0.4876	7.2048

XT1 = 0.60000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	0.2689	0.2691	0.2692	0.2698	0.2725	0.4834
0.20000000	0.2692	0.2694	0.2695	0.2701	0.2729	0.4840
0.25000000	0.2693	0.2696	0.2696	0.2702	0.2730	0.4842
0.50000000	0.2702	0.2704	0.2705	0.2711	0.2739	0.4860
0.60000000	0.2742	0.2744	0.2745	0.2751	0.2779	0.4939
1.00000000	0.4893	0.4898	0.4900	0.4912	0.4968	7.2419

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	9.3806	9.3807	9.3807	9.3810	9.3823	9.5026
0.20000000	9.3807	9.3807	9.3809	9.3812	9.3825	9.5028
0.25000000	9.3807	9.3808	9.3809	9.3812	9.3825	9.5035
0.50000000	9.3810	9.3810	9.3812	9.3815	9.3828	9.5042
0.60000000	9.3824	9.3825	9.3825	9.3828	9.3841	9.5062
1.00000000	9.5035	9.5038	9.5038	9.5044	9.5072	9.9357

XT1 = 0.60000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	9.3808	9.3809	9.3809	9.3812	9.3825	9.5027
0.20000000	9.3809	9.3810	9.3810	9.3813	9.3826	9.5029
0.25000000	9.3809	9.3810	9.3811	9.3814	9.3827	9.5030
0.50000000	9.3812	9.3812	9.3814	9.3817	9.3830	9.5036
0.60000000	9.3826	9.3827	9.3827	9.3830	9.3843	9.5063
1.00000000	9.5040	9.5042	9.5043	9.5049	9.5076	9.9361

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	9.3821	9.3822	9.3823	9.3826	9.3838	9.5033
0.20000000	9.3822	9.3823	9.3824	9.3827	9.3839	9.5036
0.25000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5043
0.50000000	9.3826	9.3827	9.3827	9.3830	9.3843	9.5070
0.60000000	9.3839	9.3840	9.3841	9.3844	9.3856	9.5070
1.00000000	9.5072	9.5073	9.5075	9.5081	9.5108	9.9392

XMS = 0.25000000 KAR = 0.75000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3864	9.3865	9.3865	9.3868	9.3879	9.5058
0.20000000	9.3865	9.3866	9.3867	9.3869	9.3880	9.5060
0.25000000	9.3866	9.3867	9.3867	9.3870	9.3881	9.5061
0.50000000	9.3869	9.3870	9.3870	9.3873	9.3884	9.5067
0.80000000	9.3883	9.3884	9.3884	9.3887	9.3898	9.5095
1.00000000	9.5179	9.5181	9.5182	9.5187	9.5211	9.9508

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4001	9.4002	9.4002	9.4003	9.4011	9.5190
0.20000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5192
0.25000000	9.4003	9.4003	9.4004	9.4005	9.4013	9.5193
0.50000000	9.4006	9.4007	9.4007	9.4009	9.4016	9.5200
0.80000000	9.4022	9.4023	9.4023	9.4024	9.4032	9.5229
1.00000000	9.5546	9.5548	9.5548	9.5552	9.5569	10.0134

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3814	9.3815	9.3815	9.3818	9.3831	9.5040
0.20000000	9.3815	9.3816	9.3816	9.3819	9.3832	9.5043
0.25000000	9.3815	9.3816	9.3816	9.3819	9.3833	9.5043
0.50000000	9.3818	9.3819	9.3819	9.3822	9.3835	9.5049
0.80000000	9.3831	9.3832	9.3833	9.3836	9.3849	9.5077
1.00000000	9.5042	9.5045	9.5045	9.5052	9.5079	9.9374

XMS = 0.25000000 KAR = 0.75000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3827	9.3828	9.3828	9.3831	9.3844	9.5047
0.20000000	9.3828	9.3829	9.3830	9.3832	9.3845	9.5049
0.25000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5050
0.50000000	9.3832	9.3833	9.3833	9.3836	9.3849	9.5056
0.80000000	9.3845	9.3846	9.3846	9.3849	9.3862	9.5063
1.00000000	9.5075	9.5077	9.5078	9.5084	9.5110	9.9405

XT1 = 0.20000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3870	9.3871	9.3872	9.3874	9.3885	9.5072
0.20000000	9.3871	9.3872	9.3873	9.3875	9.3887	9.5074
0.25000000	9.3872	9.3873	9.3873	9.3876	9.3889	9.5075
0.50000000	9.3875	9.3876	9.3876	9.3879	9.3890	9.5081
0.80000000	9.3889	9.3890	9.3890	9.3893	9.3904	9.5109
1.00000000	9.5182	9.5184	9.5185	9.5190	9.5214	9.9519

XT1 = 0.20000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4008	9.4008	9.4007	9.4010	9.4018	9.5205
0.20000000	9.4009	9.4010	9.4010	9.4012	9.4019	9.5207
0.25000000	9.4010	9.4010	9.4010	9.4012	9.4020	9.5208
0.50000000	9.4013	9.4014	9.4014	9.4016	9.4023	9.5214
0.80000000	9.4028	9.4029	9.4029	9.4031	9.4038	9.5243
1.00000000	9.5550	9.5551	9.5552	9.5555	9.5573	10.0149

XMS = 0.25000000 XAH = 0.75000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5051
0.20000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.5054
0.25000000	9.3830	9.3831	9.3831	9.3835	9.3847	9.5055
0.50000000	9.3833	9.3834	9.3834	9.3838	9.3850	9.5061
0.80000000	9.3847	9.3848	9.3848	9.3851	9.3854	9.5068
1.00000000	9.5076	9.5078	9.5079	9.5085	9.5111	9.9409

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5076
0.20000000	9.3873	9.3874	9.3874	9.3877	9.3889	9.5079
0.25000000	9.3874	9.3875	9.3875	9.3878	9.3889	9.5085
0.50000000	9.3877	9.3878	9.3878	9.3881	9.3892	9.5113
0.80000000	9.3891	9.3892	9.3892	9.3894	9.3906	9.9523
1.00000000	9.5183	9.5185	9.5186	9.5191	9.5215	

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4010	9.4011	9.4011	9.4013	9.4020	9.5209
0.20000000	9.4011	9.4012	9.4012	9.4014	9.4021	9.5215
0.25000000	9.4012	9.4012	9.4013	9.4014	9.4022	9.5219
0.50000000	9.4015	9.4016	9.4016	9.4018	9.4025	9.5248
0.80000000	9.4031	9.4031	9.4031	9.4033	9.4041	10.0154
1.00000000	9.5551	9.5552	9.5553	9.5557	9.5574	

XMS = 0.25000000 XAR = 0.75000000 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3887	9.3888	9.3888	9.3890	9.3902	9.5110
0.20000000	9.3888	9.3889	9.3889	9.3892	9.3903	9.5112
0.25000000	9.3888	9.3889	9.3889	9.3892	9.3906	9.5118
0.50000000	9.3891	9.3892	9.3892	9.3895	9.3920	9.5145
0.80000000	9.3904	9.3905	9.3906	9.3908	9.3923	9.9555
1.00000000	9.5190	9.5192	9.5193	9.5198		

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4026	9.4027	9.4027	9.4029	9.4036	9.5245
0.20000000	9.4028	9.4028	9.4028	9.4030	9.4038	9.5247
0.25000000	9.4028	9.4029	9.4029	9.4031	9.4038	9.5248
0.50000000	9.4031	9.4032	9.4032	9.4034	9.4041	9.5254
0.80000000	9.4046	9.4047	9.4047	9.4049	9.4056	9.5282
1.00000000	9.5559	9.5561	9.5561	9.5565	9.5582	10.0192

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4079	9.4079	9.4079	9.4081	9.4089	9.5361
0.20000000	9.4080	9.4080	9.4080	9.4081	9.4090	9.5363
0.25000000	9.4080	9.4081	9.4081	9.4083	9.4091	9.5364
0.50000000	9.4083	9.4084	9.4084	9.4085	9.4094	9.5369
0.80000000	9.4096	9.4097	9.4097	9.4099	9.4107	9.5395
1.00000000	9.5591	9.5592	9.5593	9.5597	9.5614	10.0329

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6128
0.20000000	12.5206	12.5206	12.5206	12.5208	12.5213	12.6129
0.25000000	12.5206	12.5206	12.5206	12.5208	12.5214	12.6130
0.50000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6132
0.80000000	12.5213	12.5214	12.5214	12.5215	12.5215	12.6145
1.00000000	12.6137	12.6138	12.6138	12.6141	12.6153	12.9536

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5207	12.5207	12.5209	12.5214	12.6128
0.20000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6129
0.25000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6130
0.50000000	12.5209	12.5209	12.5209	12.5211	12.5216	12.6133
0.80000000	12.5215	12.5215	12.5215	12.5217	12.5222	12.6145
1.00000000	12.6140	12.6141	12.6142	12.6144	12.6157	12.9538

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5218	12.5218	12.5218	12.5220	12.5225	12.6131
0.20000000	12.5218	12.5218	12.5219	12.5220	12.5226	12.6132
0.25000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6133
0.50000000	12.5220	12.5220	12.5220	12.5222	12.5227	12.6135
0.80000000	12.5226	12.5226	12.5226	12.5228	12.5233	12.6148
1.00000000	12.6166	12.6167	12.6167	12.6170	12.6182	12.9552

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.80000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5256	12.5256	12.5256	12.5257	12.5262	12.6142
0.20000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6143
0.25000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6143
0.50000000	12.5258	12.5258	12.5258	12.5259	12.5264	12.6146
0.80000000	12.5264	12.5264	12.5265	12.5266	12.5270	12.6159
1.00000000	12.6255	12.6256	12.6256	12.6259		12.9607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5403	12.5403	12.5404	12.5404	12.5407	12.6215
0.20000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6216
0.25000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6219
0.50000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6232
0.80000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.9984
1.00000000	12.6641	12.6642	12.6642	12.6643	12.6651	

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6139
0.20000000	12.5212	12.5212	12.5212	12.5214	12.5220	12.6140
0.25000000	12.5212	12.5212	12.5212	12.5214	12.5220	12.6140
0.50000000	12.5213	12.5214	12.5214	12.5215	12.5221	12.6143
0.80000000	12.5219	12.5220	12.5220	12.5221	12.5227	12.6155
1.00000000	12.6141	12.6142	12.6143	12.6146	12.6156	12.9544

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50800000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5222	12.5223	12.5223	12.5224	12.5230	12.6142
0.20000000	12.5223	12.5223	12.5224	12.5225	12.5231	12.6143
0.25000000	12.5223	12.5224	12.5224	12.5225	12.5231	12.6143
0.50000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6145
0.80000000	12.5230	12.5231	12.5231	12.5232	12.5238	12.6158
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.9558

XT1 = 0.20000000 XT2 = 0.80800000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6152
0.20000000	12.5261	12.5261	12.5261	12.5263	12.5268	12.6154
0.25000000	12.5261	12.5262	12.5262	12.5263	12.5268	12.6154
0.50000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6157
0.80000000	12.5269	12.5269	12.5269	12.5270	12.5276	12.6169
1.00000000	12.6256	12.6257	12.6258	12.6260	12.6271	12.9812

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6226
0.20000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6227
0.25000000	12.5410	12.5410	12.5411	12.5411	12.5414	12.6227
0.50000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6230
0.80000000	12.5419	12.5419	12.5419	12.5420	12.5423	12.6243
1.00000000	12.6642	12.6643	12.6643	12.6645	12.6652	12.9990

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5224	12.5224	12.5225	12.5226	12.5232	12.6145
0.20000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6146
0.25000000	12.5225	12.5225	12.5226	12.5226	12.5232	12.6147
0.50000000	12.5226	12.5226	12.5227	12.5228	12.5234	12.6149
0.80000000	12.5232	12.5232	12.5233	12.5234	12.5240	12.6162
1.00000000	12.6167	12.6168	12.6169	12.6172	12.6184	12.9560

XT1 = 0.25000000 XT2 = 0.80800000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5262	12.5262	12.5263	12.5264	12.5269	12.6156
0.20000000	12.5263	12.5263	12.5263	12.5264	12.5269	12.6157
0.25000000	12.5263	12.5263	12.5263	12.5264	12.5270	12.6157
0.50000000	12.5264	12.5265	12.5265	12.5266	12.5271	12.6160
0.80000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6172
1.00000000	12.6257	12.6258	12.6258	12.6261	12.6272	12.9814

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6230
0.20000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6231
0.25000000	12.5412	12.5412	12.5412	12.5413	12.5416	12.6231
0.50000000	12.5413	12.5414	12.5414	12.5415	12.5417	12.6234
0.80000000	12.5420	12.5421	12.5421	12.5421	12.5424	12.6247
1.00000000	12.6643	12.6644	12.6644	12.6645	12.6653	12.9992

XMS = 0.25000000 XAR = 0.80000000 PHI = 0.750

XI1 = 0.50000000 XI2 = 0.80000000

XI1	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI1	0.00000000	12.5274	12.5274	12.5274	12.5281	12.6182
0.20000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6183
0.25000000	12.5275	12.5275	12.5275	12.5276	12.5283	12.6183
0.50000000	12.5276	12.5276	12.5276	12.5278	12.5289	12.6186
0.80000000	12.5282	12.5282	12.5282	12.5284	12.5289	12.6198
1.00000000	12.6260	12.6261	12.6261	12.6264	12.6275	12.9629

XI1 = 0.50000000 XI2 = 1.00000000

XI1	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI1	0.00000000	12.5425	12.5425	12.5426	12.5429	12.6257
0.20000000	12.5425	12.5426	12.5426	12.5426	12.5429	12.6258
0.25000000	12.5426	12.5426	12.5426	12.5427	12.5430	12.6258
0.50000000	12.5427	12.5427	12.5428	12.5428	12.5431	12.6261
0.80000000	12.5434	12.5434	12.5435	12.5435	12.5438	12.6273
1.00000000	12.6647	12.6647	12.6648	12.6649	12.6657	13.0009

XI1 = 0.80000000 XI2 = 1.00000000

XI1	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI2	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
XI1	0.00000000	12.5473	12.5473	12.5473	12.5477	12.6351
0.20000000	12.5473	12.5473	12.5474	12.5474	12.5477	12.6352
0.25000000	12.5473	12.5474	12.5474	12.5474	12.5478	12.6352
0.50000000	12.5475	12.5475	12.5475	12.5476	12.5479	12.6355
0.80000000	12.5481	12.5481	12.5481	12.5482	12.5485	12.6366
1.00000000	12.6661	12.6662	12.6662	12.6664	12.6671	13.0072

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.00000000

XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6221	2.6311	2.6341	2.6580	2.7636	2.0083
0.20000000	2.6335	2.6423	2.6452	2.6696	2.7724	2.0305
0.25000000	2.6373	2.6460	2.6489	2.6721	2.7753	2.0377
0.50000000	2.6671	2.6753	2.6780	2.7000	2.7981	2.0524
0.80000000	2.7925	2.7991	2.8012	2.8187	2.8987	2.2861
1.00000000	4.3780	4.3824	4.3834	4.3910	2.1427	3.8172

XT1 = 0.00000000

XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6333	2.6421	2.6450	2.6685	2.7720	2.0161
0.20000000	2.6446	2.6532	2.6560	2.6790	2.7800	2.0382
0.25000000	2.6483	2.6569	2.6597	2.6824	2.7834	2.0454
0.50000000	2.6779	2.6859	2.6886	2.7101	2.8062	2.0997
0.80000000	2.8023	2.8087	2.8108	2.8280	2.9065	2.2945
1.00000000	4.3922	4.3951	4.3960	4.4035	2.1458	3.5261

XT1 = 0.00000000

XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.7034	2.7110	2.7136	2.7339	2.8239	2.0686
0.20000000	2.7141	2.7215	2.7240	2.7439	2.8324	2.0895
0.25000000	2.7176	2.7250	2.7275	2.7472	2.8352	2.0966
0.50000000	2.7456	2.7526	2.7549	2.7737	2.8576	2.1488
0.80000000	2.8642	2.8698	2.8717	2.8869	2.9560	2.3381
1.00000000	4.4770	4.4795	4.4804	4.4871	2.1650	3.5892

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.00000000

XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.8395	2.8451	2.8469	2.8617	2.9281	2.1916
0.20000000	2.8492	2.8547	2.8565	2.8711	2.9363	2.2109
0.25000000	2.8525	2.8579	2.8597	2.8741	2.9390	2.2171
0.50000000	2.8760	2.8832	2.8849	2.8987	2.9608	2.2652
0.80000000	2.9874	2.9917	2.9931	3.0044	3.0562	2.4437
1.00000000	4.6754	4.6753	4.6759	2.0223	2.2025	3.7654

XT1 = 0.00000000

XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.9957	2.9993	3.0005	3.0100	3.0530	2.3846
0.20000000	3.0047	3.0081	3.0093	3.0186	3.0610	2.4018
0.25000000	3.0076	3.0111	3.0122	3.0215	3.0637	2.4074
0.50000000	3.0312	3.0345	3.0356	3.0445	3.0849	2.4508
0.80000000	3.1327	3.1354	3.1363	3.1437	3.1775	2.6176
1.00000000	2.0454	2.0460	2.0467	2.1017	2.2450	4.1570

XT1 = 0.20000000

XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6730	2.6816	2.6844	2.7073	2.8083	2.0380
0.20000000	2.6834	2.6919	2.6946	2.7170	2.8163	2.0589
0.25000000	2.6868	2.6952	2.6980	2.7202	2.8189	2.0655
0.50000000	2.7141	2.7220	2.7246	2.7458	2.8402	2.1169
0.80000000	2.8297	2.8361	2.8383	2.8555	2.9337	2.3034
1.00000000	4.4145	4.4172	4.4181	4.4255	2.1694	3.5534

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7432	2.7506	2.7581	2.7729	2.8608	2.0910
0.20000000	2.7530	2.7603	2.7627	2.7822	2.8680	2.1109
0.25000000	2.7562	2.7635	2.7659	2.7852	2.8713	2.1173
0.50000000	2.7621	2.7690	2.7911	2.8097	2.8921	2.1667
0.80000000	2.6924	2.6981	2.9000	2.9151	2.9840	2.3477
1.00000000	4.4990	4.5014	4.5023	4.5089	2.1892	3.8161

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8800	2.8854	2.8872	2.9016	2.9664	2.2156
0.20000000	2.8889	2.8943	2.8961	2.9103	2.9740	2.2337
0.25000000	2.8919	2.8972	2.8990	2.9134	2.9766	2.2396
0.50000000	2.9156	2.9207	2.9224	2.9359	2.9969	2.2650
0.80000000	3.0175	3.0217	3.0231	3.0343	3.0860	2.4553
1.00000000	4.6951	4.6970	2.0050	2.0522	2.2277	3.7917

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0378	3.0413	3.0424	3.0517	3.0936	2.4127
0.20000000	3.0461	3.0495	3.0507	3.0598	3.1011	2.4288
0.25000000	3.0489	3.0523	3.0534	3.0624	3.1025	2.4341
0.50000000	3.0708	3.0740	3.0751	3.0838	3.1233	2.4751
0.80000000	3.1655	3.1682	3.1691	3.1764	3.2099	2.6336
1.00000000	2.0781	2.0921	2.0967	2.1324	2.2722	4.1835

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7548	2.7622	2.7647	2.7843	2.8716	2.0975
0.20000000	2.7644	2.7717	2.7741	2.7934	2.8793	2.1170
0.25000000	2.7676	2.7745	2.7772	2.7964	2.8819	2.1344
0.50000000	2.7929	2.7997	2.8020	2.8204	2.9023	2.1719
0.80000000	2.9008	2.9064	2.9083	2.9235	2.9923	2.3805
1.00000000	4.5060	4.5084	4.5093	4.5159	2.1966	3.6246

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8919	2.8973	2.8991	2.9134	2.9777	2.2226
0.20000000	2.9007	2.9060	2.9077	2.9219	2.9852	2.2404
0.25000000	2.9036	2.9088	2.9106	2.9247	2.9877	2.2482
0.50000000	2.9267	2.9318	2.9335	2.9469	3.0076	2.2908
0.80000000	3.0264	3.0307	3.0321	3.0434	3.0949	2.4587
1.00000000	4.7021	2.0085	2.0146	2.0614	2.2355	3.8000

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0503	3.0537	3.0549	3.0641	3.1057	2.4209
0.20000000	3.0584	3.0618	3.0629	3.0720	3.1129	2.4368
0.25000000	3.0611	3.0645	3.0656	3.0746	3.1154	2.4420
0.50000000	3.0825	3.0857	3.0868	3.0954	3.1347	2.4822
0.80000000	3.1752	3.1780	3.1789	3.1862	3.2196	2.6303
1.00000000	2.0881	2.1119	2.1065	2.1418	2.2803	4.1920

XMS = 0.80000000 XAR = 0.33333333 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9672	2.9723	2.9741	2.9879	3.0496	2.2658
0.20000000	2.9747	2.9798	2.9815	2.9951	3.0561	2.2816
0.25000000	2.9772	2.9823	2.9840	2.9976	3.0583	2.2868
0.50000000	2.9972	3.0021	3.0037	3.0168	3.0755	2.3208
0.80000000	3.0838	3.0880	3.0894	3.1007	3.1517	2.4803
1.00000000	2.0580	2.0734	2.0791	2.1229	2.2883	3.8593

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1298	3.1331	3.1341	3.1429	3.1826	2.4724
0.20000000	3.1368	3.1400	3.1411	3.1497	3.1886	2.4854
0.25000000	3.1391	3.1423	3.1434	3.1520	3.1910	2.4911
0.50000000	3.1576	3.1607	3.1617	3.1701	3.2079	2.5269
0.80000000	3.2383	3.2410	3.2419	3.2491	3.2820	2.6655
1.00000000	2.1554	2.1682	2.1725	2.2054	2.3382	4.2526

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.2913	3.2944	3.2954	3.3035	3.3401	2.5719
0.20000000	3.2963	3.2993	3.3003	3.3084	3.3447	2.5828
0.25000000	3.2980	3.3010	3.3020	3.3100	3.3462	2.5864
0.50000000	3.3113	3.3142	3.3152	3.3230	3.3584	2.6147
0.80000000	3.3701	3.3728	3.3736	3.3807	3.4127	2.7295
1.00000000	2.3166	2.3276	2.3313	2.3596	2.4748	4.4306

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0712	3.0739	3.0748	3.0819	3.1108	3.4183
0.20000000	3.0737	3.0764	3.0773	3.0844	3.1134	3.4229
0.25000000	3.0745	3.0772	3.0781	3.0852	3.1143	3.4244
0.50000000	3.0809	3.0837	3.0846	3.0917	3.1212	3.4362
0.80000000	3.1072	3.1101	3.1110	3.1185	3.1496	3.4869
1.00000000	3.3821	3.3867	3.3882	3.4002	3.4514	4.4453

XT1 = 0.00000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0716	3.0743	3.0752	3.0822	3.1110	3.4201
0.20000000	3.0741	3.0768	3.0777	3.0847	3.1136	3.4246
0.25000000	3.0749	3.0776	3.0785	3.0856	3.1145	3.4262
0.50000000	3.0814	3.0841	3.0850	3.0921	3.1214	3.4380
0.80000000	3.1077	3.1105	3.1115	3.1190	3.1498	3.4887
1.00000000	3.3840	3.3885	3.3901	3.4020	3.4528	4.4497

XT1 = 0.00000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0744	3.0770	3.0779	3.0845	3.1123	3.4330
0.20000000	3.0769	3.0795	3.0804	3.0871	3.1150	3.4375
0.25000000	3.0778	3.0804	3.0812	3.0880	3.1158	3.4390
0.50000000	3.0843	3.0869	3.0878	3.0946	3.1220	3.4510
0.80000000	3.1111	3.1138	3.1148	3.1219	3.1516	3.5020
1.00000000	3.3967	3.4010	3.4024	3.4137	3.4621	4.4821

XMS = 0.80000000 KAR = 0.50000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0807	3.0830	3.0838	3.0898	3.1152	3.4702
0.20000000	3.0833	3.0856	3.0864	3.0925	3.1180	3.4749
0.25000000	3.0841	3.0865	3.0872	3.0933	3.1189	3.4764
0.50000000	3.0909	3.0933	3.0940	3.1002	3.1260	3.4808
0.80000000	3.1188	3.1212	3.1221	3.1265	3.1555	3.5406
1.00000000	3.4264	3.4302	3.4314	3.4413	3.4841	4.5815

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0895	3.0915	3.0922	3.0974	3.1196	3.5602
0.20000000	3.0923	3.0943	3.0950	3.1002	3.1224	3.5651
0.25000000	3.0932	3.0952	3.0959	3.1011	3.1234	3.5667
0.50000000	3.1004	3.1023	3.1030	3.1083	3.1306	3.5793
0.80000000	3.1298	3.1319	3.1325	3.1380	3.1613	3.6337
1.00000000	3.4722	3.4752	3.4762	3.4841	3.5187	4.8585

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0727	3.0754	3.0763	3.0833	3.1123	3.4262
0.20000000	3.0751	3.0778	3.0787	3.0858	3.1149	3.4306
0.25000000	3.0759	3.0786	3.0795	3.0866	3.1158	3.4321
0.50000000	3.0822	3.0850	3.0859	3.0930	3.1225	3.4437
0.80000000	3.1081	3.1110	3.1120	3.1195	3.1505	3.4932
1.00000000	3.3897	3.3942	3.3957	3.4077	3.4586	4.4634

XMS = 0.80000000 KAR = 0.50000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0855	3.0781	3.0790	3.0857	3.1136	3.4393
0.20000000	3.0840	3.0800	3.0814	3.0862	3.1163	3.4437
0.25000000	3.0838	3.0814	3.0823	3.0890	3.1171	3.4452
0.50000000	3.0842	3.0876	3.0887	3.0956	3.1240	3.4568
0.80000000	3.1116	3.1143	3.1152	3.1224	3.1522	3.5066
1.00000000	3.4325	3.4068	3.4083	3.4196	3.4681	4.4959

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0818	3.0842	3.0849	3.0910	3.1166	3.4771
0.20000000	3.0844	3.0867	3.0875	3.0936	3.1193	3.4817
0.25000000	3.0852	3.0876	3.0884	3.0945	3.1202	3.4832
0.50000000	3.0919	3.0943	3.0950	3.1012	3.1272	3.4950
0.80000000	3.1193	3.1218	3.1226	3.1290	3.1562	3.5488
1.00000000	3.4327	3.4364	3.4377	3.4476	3.4904	4.8957

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0909	3.0929	3.0935	3.0987	3.1211	3.5688
0.20000000	3.0936	3.0956	3.0962	3.1015	3.1239	3.5735
0.25000000	3.0945	3.0965	3.0971	3.1024	3.1248	3.5750
0.50000000	3.1015	3.1035	3.1041	3.1094	3.1320	3.5874
0.80000000	3.1304	3.1325	3.1332	3.1386	3.1621	3.6403
1.00000000	3.4792	3.4822	3.4832	3.4911	3.5287	4.8743

XMS = 0.60000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0758	3.0784	3.0793	3.0860	3.1140	3.4412
0.20000000	3.0783	3.0809	3.0818	3.0885	3.1166	3.4456
0.25000000	3.0791	3.0817	3.0826	3.0894	3.1175	3.4470
0.50000000	3.0855	3.0881	3.0890	3.0958	3.1243	3.4586
0.60000000	3.1117	3.1145	3.1154	3.1222	3.1524	3.5081
1.00000000	3.4044	3.4087	3.4101	3.4215	3.4700	4.5003

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0822	3.0845	3.0853	3.0914	3.1171	3.4792
0.20000000	3.0847	3.0871	3.0879	3.0940	3.1197	3.4837
0.25000000	3.0856	3.0879	3.0887	3.0948	3.1206	3.4852
0.50000000	3.0922	3.0946	3.0953	3.1015	3.1274	3.4970
0.60000000	3.1195	3.1219	3.1228	3.1292	3.1564	3.5473
1.00000000	3.4346	3.4384	3.4397	3.4496	3.4925	4.6002

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0913	3.0933	3.0939	3.0992	3.1216	3.5714
0.20000000	3.0940	3.0959	3.0966	3.1018	3.1243	3.5760
0.25000000	3.0948	3.0968	3.0975	3.1027	3.1252	3.5776
0.50000000	3.1018	3.1038	3.1045	3.1098	3.1324	3.5898
0.60000000	3.1306	3.1327	3.1334	3.1388	3.1623	3.6424
1.00000000	3.4814	3.4844	3.4854	3.4933	3.5279	4.8793

XMS = 0.80000000 XAR = 0.50000000 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0845	3.0869	3.0877	3.0939	3.1199	3.4934
0.20000000	3.0870	3.0894	3.0901	3.0964	3.1225	3.4977
0.25000000	3.0878	3.0902	3.0910	3.0972	3.1233	3.4991
0.50000000	3.0941	3.0965	3.0973	3.1036	3.1300	3.5102
0.60000000	3.1205	3.1230	3.1238	3.1303	3.1578	3.5580
1.00000000	3.4490	3.4527	3.4540	3.4640	3.5070	4.6335

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0939	3.0959	3.0966	3.1019	3.1246	3.5890
0.20000000	3.0965	3.0985	3.0992	3.1045	3.1272	3.5934
0.25000000	3.0973	3.0993	3.1000	3.1053	3.1281	3.5949
0.50000000	3.1040	3.1060	3.1067	3.1121	3.1350	3.6064
0.60000000	3.1318	3.1339	3.1346	3.1401	3.1638	3.6562
1.00000000	3.4973	3.5003	3.5013	3.5092	3.5439	4.9165

XT1 = 0.60000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0998	3.1019	3.1026	3.1080	3.1314	3.6309
0.20000000	3.1021	3.1042	3.1049	3.1104	3.1338	3.6347
0.25000000	3.1029	3.1050	3.1057	3.1111	3.1346	3.6360
0.50000000	3.1090	3.1111	3.1118	3.1173	3.1409	3.6460
0.60000000	3.1347	3.1367	3.1375	3.1431	3.1673	3.6894
1.00000000	3.5442	3.5474	3.5482	3.5561	3.5909	5.0327

XMS = 0.60000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2374	6.2376	6.2379	6.2388	6.2430	6.4185
0.20000000	6.2376	6.2381	6.2383	6.2392	6.2433	6.4192
0.25000000	6.2379	6.2383	6.2384	6.2393	6.2434	6.4194
0.50000000	6.2388	6.2392	6.2393	6.2403	6.2444	6.4213
0.80000000	6.2429	6.2433	6.2434	6.2444	6.2486	6.4297
1.00000000	6.4144	6.4151	6.4154	6.4172	6.4255	7.0254

XT1 = 0.60000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2377	6.2380	6.2382	6.2391	6.2432	6.4188
0.20000000	6.2380	6.2384	6.2385	6.2394	6.2435	6.4195
0.25000000	6.2382	6.2385	6.2386	6.2396	6.2437	6.4197
0.50000000	6.2391	6.2394	6.2396	6.2405	6.2446	6.4216
0.80000000	6.2432	6.2435	6.2436	6.2446	6.2488	6.4300
1.00000000	6.4151	6.4158	6.4160	6.4179	6.4261	7.0266

XT1 = 0.60000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2395	6.2398	6.2399	6.2408	6.2447	6.4210
0.20000000	6.2398	6.2401	6.2403	6.2412	6.2451	6.4217
0.25000000	6.2399	6.2403	6.2404	6.2413	6.2452	6.4219
0.50000000	6.2409	6.2412	6.2413	6.2422	6.2462	6.4238
0.80000000	6.2450	6.2453	6.2455	6.2464	6.2504	6.4322
1.00000000	6.4200	6.4207	6.4209	6.4227	6.4307	7.0351

XMS = 0.80000000 XAR = 0.66666667 PHI = 0.750

XT1 = 0.60000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2445	6.2448	6.2449	6.2457	6.2492	6.4284
0.20000000	6.2449	6.2452	6.2453	6.2461	6.2496	6.4291
0.25000000	6.2450	6.2453	6.2454	6.2462	6.2497	6.4293
0.50000000	6.2460	6.2463	6.2464	6.2472	6.2507	6.4312
0.80000000	6.2502	6.2505	6.2507	6.2515	6.2551	6.4398
1.00000000	6.4343	6.4349	6.4351	6.4368	6.4440	7.0647

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2564	6.2566	6.2567	6.2573	6.2600	6.4572
0.20000000	6.2568	6.2570	6.2571	6.2577	6.2604	6.4580
0.25000000	6.2569	6.2572	6.2572	6.2578	6.2605	6.4583
0.50000000	6.2580	6.2582	6.2583	6.2589	6.2616	6.4603
0.80000000	6.2626	6.2628	6.2629	6.2635	6.2662	6.4694
1.00000000	6.4703	6.4707	6.4709	6.4721	6.4776	7.1868

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2385	6.2388	6.2389	6.2399	6.2440	6.4209
0.20000000	6.2388	6.2391	6.2393	6.2402	6.2443	6.4216
0.25000000	6.2389	6.2393	6.2394	6.2403	6.2444	6.4218
0.50000000	6.2398	6.2402	6.2403	6.2412	6.2454	6.4237
0.80000000	6.2438	6.2442	6.2443	6.2453	6.2495	6.4320
1.00000000	6.4160	6.4177	6.4189	6.4188	6.4270	7.0301

XMS = 0.80000000 KAR = 0.66666667 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2402	6.2406	6.2407	6.2416	6.2455	6.4231
0.20000000	6.2406	6.2409	6.2410	6.2419	6.2459	6.4238
0.25000000	6.2407	6.2410	6.2411	6.2420	6.2465	6.4241
0.50000000	6.2416	6.2420	6.2421	6.2430	6.2470	6.4259
0.80000000	6.2457	6.2460	6.2461	6.2471	6.2511	6.4342
1.00000000	6.4209	6.4216	6.4218	6.4236	6.4316	7.0387

XT1 = 0.20000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	6.2453	6.2456	6.2457	6.2465	6.2501	6.4306
0.20000000	6.2457	6.2460	6.2461	6.2469	6.2504	6.4313
0.25000000	6.2458	6.2461	6.2462	6.2470	6.2506	6.4315
0.50000000	6.2467	6.2471	6.2472	6.2480	6.2515	6.4334
0.80000000	6.2510	6.2513	6.2514	6.2522	6.2558	6.4419
1.00000000	6.4353	6.4359	6.4361	6.4377	6.4450	7.0663

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2573	6.2575	6.2576	6.2582	6.2609	6.4597
0.20000000	6.2577	6.2579	6.2580	6.2586	6.2613	6.4605
0.25000000	6.2578	6.2581	6.2581	6.2587	6.2614	6.4607
0.50000000	6.2589	6.2591	6.2592	6.2598	6.2624	6.4627
0.80000000	6.2634	6.2636	6.2637	6.2643	6.2670	6.4717
1.00000000	6.4714	6.4718	6.4720	6.4732	6.4787	7.1912

XMS = 0.80000000 KAR = 0.66666667 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2405	6.2408	6.2409	6.2418	6.2456	6.4238
0.20000000	6.2408	6.2412	6.2413	6.2422	6.2461	6.4245
0.25000000	6.2409	6.2413	6.2414	6.2423	6.2463	6.4247
0.50000000	6.2418	6.2422	6.2423	6.2432	6.2472	6.4266
0.80000000	6.2459	6.2462	6.2464	6.2473	6.2514	6.4349
1.00000000	6.4212	6.4219	6.4221	6.4239	6.4319	7.0398

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2456	6.2459	6.2460	6.2468	6.2503	6.4313
0.20000000	6.2459	6.2462	6.2463	6.2471	6.2507	6.4320
0.25000000	6.2460	6.2463	6.2464	6.2473	6.2508	6.4322
0.50000000	6.2470	6.2473	6.2474	6.2482	6.2518	6.4341
0.80000000	6.2512	6.2515	6.2516	6.2524	6.2561	6.4425
1.00000000	6.4356	6.4362	6.4364	6.4380	6.4453	7.0695

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2576	6.2578	6.2579	6.2585	6.2612	6.4605
0.20000000	6.2580	6.2582	6.2583	6.2589	6.2615	6.4613
0.25000000	6.2581	6.2585	6.2584	6.2590	6.2617	6.4615
0.50000000	6.2591	6.2594	6.2594	6.2600	6.2627	6.4635
0.80000000	6.2637	6.2637	6.2640	6.2646	6.2673	6.4725
1.00000000	6.4717	6.4722	6.4723	6.4736	6.4791	7.1926

XMS = 0.80000000 KAR<sub>1</sub> = 0.66666667 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2474	6.2477	6.2478	6.2486	6.2522	6.4364
0.20000000	6.2477	6.2480	6.2481	6.2490	6.2526	6.4371
0.25000000	6.2478	6.2482	6.2483	6.2491	6.2527	6.4373
0.50000000	6.2488	6.2491	6.2492	6.2500	6.2536	6.4391
0.80000000	6.2528	6.2531	6.2532	6.2541	6.2577	6.4473
1.00000000	6.4379	6.4385	6.4388	6.4404	6.4477	7.8785

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2596	6.2598	6.2599	6.2605	6.2632	6.4662
0.20000000	6.2600	6.2602	6.2603	6.2609	6.2636	6.4669
0.25000000	6.2601	6.2603	6.2604	6.2610	6.2637	6.4672
0.50000000	6.2611	6.2613	6.2614	6.2620	6.2647	6.4691
0.80000000	6.2655	6.2657	6.2658	6.2664	6.2691	6.4778
1.00000000	6.4744	6.4749	6.4750	6.4763	6.4818	7.2033

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2654	6.2656	6.2657	6.2663	6.2691	6.4829
0.20000000	6.2657	6.2660	6.2660	6.2667	6.2695	6.4836
0.25000000	6.2658	6.2661	6.2661	6.2668	6.2696	6.4838
0.50000000	6.2667	6.2670	6.2670	6.2677	6.2705	6.4856
0.80000000	6.2706	6.2709	6.2710	6.2716	6.2744	6.4934
1.00000000	6.4835	6.4839	6.4841	6.4854	6.4910	7.2403

XMS = 0.80000800 KAR = 0.75000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3796	9.3797	9.3797	9.3800	9.3813	9.5023
0.20000000	9.3797	9.3798	9.3798	9.3801	9.3814	9.5026
0.25000000	9.3797	9.3798	9.3798	9.3801	9.3815	9.5026
0.50000000	9.3800	9.3801	9.3801	9.3804	9.3818	9.5032
0.80000000	9.3813	9.3814	9.3815	9.3818	9.3831	9.5060
1.00000000	9.5018	9.5020	9.5021	9.5027	9.5054	9.9348

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3797	9.3798	9.3799	9.3802	9.3815	9.5024
0.20000000	9.3798	9.3800	9.3800	9.3803	9.3816	9.5026
0.25000000	9.3799	9.3800	9.3800	9.3803	9.3816	9.5027
0.50000000	9.3802	9.3803	9.3803	9.3806	9.3819	9.5033
0.80000000	9.3815	9.3816	9.3817	9.3820	9.3833	9.5061
1.00000000	9.5022	9.5025	9.5025	9.5031	9.5058	9.9352

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3811	9.3812	9.3812	9.3815	9.3828	9.5031
0.20000000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5033
0.25000000	9.3812	9.3813	9.3814	9.3817	9.3829	9.5034
0.50000000	9.3815	9.3816	9.3817	9.3820	9.3832	9.5040
0.80000000	9.3829	9.3830	9.3830	9.3833	9.3846	9.5068
1.00000000	9.5055	9.5057	9.5058	9.5064	9.5090	9.9383

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3854	9.3855	9.3855	9.3858	9.3869	9.5056
0.20000000	9.3855	9.3856	9.3857	9.3859	9.3870	9.5058
0.25000000	9.3856	9.3857	9.3857	9.3859	9.3871	9.5059
0.50000000	9.3859	9.3860	9.3860	9.3863	9.3874	9.5065
0.80000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.5093
1.00000000	9.5162	9.5164	9.5164	9.5170	9.5194	9.9497

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3992	9.3992	9.3992	9.3994	9.4001	9.5188
0.20000000	9.3993	9.3993	9.3994	9.3995	9.4003	9.5191
0.25000000	9.3993	9.3994	9.3994	9.3996	9.4007	9.5192
0.50000000	9.3997	9.3997	9.3998	9.3999	9.4007	9.5198
0.80000000	9.4012	9.4013	9.4013	9.4015	9.4022	9.5227
1.00000000	9.5528	9.5530	9.5530	9.5534	9.5551	10.0128

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3803	9.3804	9.3805	9.3807	9.3821	9.5038
0.20000000	9.3804	9.3805	9.3806	9.3809	9.3822	9.5040
0.25000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.5041
0.50000000	9.3807	9.3809	9.3809	9.3812	9.3825	9.5047
0.80000000	9.3821	9.3822	9.3822	9.3825	9.3838	9.5074
1.00000000	9.5025	9.5027	9.5028	9.5034	9.5061	9.9365

XMS = 0.80000000 XAR = 0.75000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3817	9.3818	9.3818	9.3821	9.3834	9.5045
0.20000000	9.3818	9.3819	9.3819	9.3822	9.3835	9.5047
0.25000000	9.3818	9.3819	9.3820	9.3822	9.3835	9.5048
0.50000000	9.3821	9.3822	9.3823	9.3825	9.3838	9.5054
0.80000000	9.3834	9.3835	9.3836	9.3839	9.3852	9.5081
1.00000000	9.5058	9.5060	9.5061	9.5067	9.5093	9.9396

XT1 = 0.20000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3860	9.3861	9.3861	9.3864	9.3875	9.5069
0.20000000	9.3861	9.3862	9.3863	9.3865	9.3877	9.5072
0.25000000	9.3862	9.3863	9.3863	9.3865	9.3877	9.5073
0.50000000	9.3865	9.3866	9.3866	9.3869	9.3880	9.5079
0.80000000	9.3878	9.3879	9.3880	9.3882	9.3894	9.5106
1.00000000	9.5164	9.5167	9.5167	9.5173	9.5197	9.9510

XT1 = 0.20000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3996	9.3999	9.3999	9.4001	9.4008	9.5203
0.20000000	9.4000	9.4000	9.4001	9.4002	9.4010	9.5205
0.25000000	9.4000	9.4001	9.4001	9.4003	9.4010	9.5206
0.50000000	9.4004	9.4004	9.4004	9.4006	9.4014	9.5213
0.80000000	9.4019	9.4019	9.4020	9.4021	9.4029	9.5242
1.00000000	9.5532	9.5533	9.5534	9.5537	9.5555	10.0143

XMS = 0.80000000 KAR = 0.75000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3819	9.3820	9.3820	9.3823	9.3836	9.5049
0.20000000	9.3820	9.3821	9.3821	9.3824	9.3837	9.5051
0.25000000	9.3820	9.3821	9.3821	9.3824	9.3837	9.5052
0.50000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5058
0.80000000	9.3836	9.3837	9.3838	9.3840	9.3853	9.5063
1.00000000	9.5059	9.5061	9.5062	9.5067	9.5094	9.9400

XT1 = 0.25000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3862	9.3863	9.3863	9.3866	9.3877	9.5074
0.20000000	9.3863	9.3864	9.3864	9.3867	9.3878	9.5076
0.25000000	9.3864	9.3865	9.3865	9.3868	9.3879	9.5077
0.50000000	9.3867	9.3868	9.3868	9.3870	9.3882	9.5083
0.80000000	9.3880	9.3881	9.3882	9.3884	9.3896	9.5111
1.00000000	9.5165	9.5167	9.5168	9.5174	9.5198	9.9514

XT1 = 0.25000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4001	9.4001	9.4001	9.4003	9.4011	9.5208
0.20000000	9.4002	9.4002	9.4002	9.4004	9.4012	9.5210
0.25000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5211
0.50000000	9.4005	9.4006	9.4007	9.4008	9.4016	9.5217
0.80000000	9.4021	9.4022	9.4022	9.4024	9.4031	9.5246
1.00000000	9.5533	9.5534	9.5535	9.5539	9.5556	10.0148

XMS = 0.80000000 KAR = 0.75000000 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3876	9.3877	9.3878	9.3880	9.3892	9.5107
0.20000000	9.3876	9.3878	9.3879	9.3881	9.3893	9.5109
0.25000000	9.3876	9.3879	9.3879	9.3882	9.3893	9.5110
0.50000000	9.3881	9.3882	9.3882	9.3885	9.3896	9.5116
0.80000000	9.3894	9.3895	9.3895	9.3898	9.3909	9.5143
1.00000000	9.5173	9.5175	9.5175	9.5181	9.5205	9.9546

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4017	9.4017	9.4018	9.4019	9.4027	9.5243
0.20000000	9.4018	9.4019	9.4019	9.4021	9.4028	9.5246
0.25000000	9.4018	9.4019	9.4019	9.4021	9.4029	9.5248
0.50000000	9.4022	9.4022	9.4023	9.4024	9.4032	9.5253
0.80000000	9.4037	9.4037	9.4037	9.4039	9.4047	9.5281
1.00000000	9.5541	9.5543	9.5543	9.5547	9.5564	10.0185

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.4069	9.4069	9.4070	9.4071	9.4079	9.5359
0.20000000	9.4070	9.4070	9.4071	9.4072	9.4080	9.5361
0.25000000	9.4070	9.4071	9.4071	9.4073	9.4081	9.5362
0.50000000	9.4073	9.4074	9.4074	9.4076	9.4084	9.5368
0.80000000	9.4086	9.4087	9.4087	9.4089	9.4097	9.5393
1.00000000	9.5573	9.5574	9.5575	9.5579	9.5596	10.0322

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5201	12.5201	12.5201	12.5203	12.5209	12.6127
0.20000000	12.5201	12.5202	12.5202	12.5203	12.5209	12.6128
0.25000000	12.5201	12.5202	12.5202	12.5203	12.5209	12.6128
0.50000000	12.5203	12.5203	12.5203	12.5205	12.5211	12.6131
0.80000000	12.5209	12.5209	12.5209	12.5211	12.5217	12.6144
1.00000000	12.6129	12.6130	12.6131	12.6134	12.6146	12.9532

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5202	12.5203	12.5203	12.5204	12.5210	12.6127
0.20000000	12.5203	12.5203	12.5203	12.5205	12.5211	12.6128
0.25000000	12.5203	12.5203	12.5204	12.5205	12.5211	12.6129
0.50000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6132
0.80000000	12.5210	12.5211	12.5211	12.5212	12.5218	12.6144
1.00000000	12.6133	12.6134	12.6134	12.6137	12.6149	12.9534

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5213	12.5214	12.5214	12.5215	12.5221	12.6130
0.20000000	12.5214	12.5214	12.5215	12.5216	12.5221	12.6131
0.25000000	12.5214	12.5215	12.5215	12.5216	12.5222	12.6132
0.50000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6134
0.80000000	12.5221	12.5222	12.5222	12.5223	12.5229	12.6147
1.00000000	12.6158	12.6159	12.6160	12.6163	12.6175	12.9548

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.00000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5251	12.5252	12.5252	12.5253	12.5258	12.6141
0.20000000	12.5252	12.5252	12.5252	12.5254	12.5259	12.6142
0.25000000	12.5252	12.5252	12.5253	12.5254	12.5259	12.6142
0.50000000	12.5253	12.5254	12.5254	12.5255	12.5260	12.6145
0.80000000	12.5260	12.5260	12.5260	12.5261	12.5267	12.6158
1.00000000	12.6248	12.6249	12.6249	12.6251	12.6263	12.9602

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5400	12.5400	12.5400	12.5400	12.5403	12.6214
0.20000000	12.5400	12.5400	12.5400	12.5401	12.5404	12.6215
0.25000000	12.5400	12.5401	12.5401	12.5401	12.5404	12.6216
0.50000000	12.5402	12.5402	12.5402	12.5403	12.5406	12.6219
0.80000000	12.5409	12.5409	12.5410	12.5410	12.5413	12.6232
1.00000000	12.6633	12.6634	12.6634	12.6636	12.6643	12.9981

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6138
0.20000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6139
0.25000000	12.5207	12.5208	12.5208	12.5209	12.5215	12.6139
0.50000000	12.5209	12.5209	12.5209	12.5211	12.5217	12.6142
0.80000000	12.5215	12.5215	12.5215	12.5217	12.5223	12.6154
1.00000000	12.6134	12.6135	12.6135	12.6138	12.6150	12.9540

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5218	12.6219	12.5219	12.5220	12.5226	12.6141
0.20000000	12.5219	12.5219	12.5219	12.5220	12.5226	12.6142
0.25000000	12.5219	12.5219	12.5219	12.5221	12.5226	12.6142
0.50000000	12.5220	12.5221	12.5221	12.5222	12.5228	12.6145
0.80000000	12.5226	12.5226	12.5227	12.5228	12.5234	12.6157
1.00000000	12.6160	12.6161	12.6161	12.6164	12.6176	12.9554

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6152
0.20000000	12.5257	12.5257	12.5257	12.5258	12.5264	12.6153
0.25000000	12.5257	12.5257	12.5257	12.5259	12.5264	12.6153
0.50000000	12.5258	12.5259	12.5259	12.5260	12.5265	12.6156
0.80000000	12.5264	12.5265	12.5265	12.5266	12.5271	12.6168
1.00000000	12.6249	12.6250	12.6250	12.6253	12.6264	12.9608

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5405	12.5405	12.5406	12.5406	12.5409	12.6225
0.20000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6226
0.25000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6227
0.50000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6230
0.80000000	12.5415	12.5415	12.5415	12.5416	12.5419	12.6242
1.00000000	12.6635	12.6635	12.6636	12.6637	12.6645	12.9987

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5220	12.5220	12.5220	12.5221	12.5227	12.6144
0.20000000	12.5220	12.5221	12.5221	12.5222	12.5228	12.6145
0.25000000	12.5220	12.5221	12.5221	12.5222	12.5228	12.6146
0.50000000	12.5222	12.5222	12.5222	12.5223	12.5229	12.6148
0.80000000	12.5227	12.5228	12.5228	12.5229	12.5235	12.6161
1.00000000	12.6160	12.6161	12.6161	12.6164	12.6176	12.9556

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5258	12.5258	12.5258	12.5259	12.5265	12.6155
0.20000000	12.5258	12.5259	12.5259	12.5260	12.5265	12.6156
0.25000000	12.5258	12.5259	12.5259	12.5260	12.5265	12.6156
0.50000000	12.5260	12.5260	12.5260	12.5262	12.5267	12.6159
0.80000000	12.5266	12.5266	12.5267	12.5268	12.5273	12.6172
1.00000000	12.6249	12.6250	12.6251	12.6253	12.6264	12.9610

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5407	12.5407	12.5407	12.5408	12.5411	12.6229
0.20000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6230
0.25000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6230
0.50000000	12.5409	12.5410	12.5410	12.5410	12.5413	12.6233
0.80000000	12.5417	12.5417	12.5417	12.5418	12.5421	12.6246
1.00000000	12.6635	12.6635	12.6636	12.6636	12.6645	12.9989

XMS = 0.80000000 XAR = 0.80000000 PHI = 0.750

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5270	12.5270	12.5270	12.5271	12.5277	12.6181
0.20000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6182
0.25000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6182
0.50000000	12.5272	12.5272	12.5272	12.5273	12.5279	12.6185
0.80000000	12.5278	12.5278	12.5278	12.5279	12.5285	12.6197
1.00000000	12.6252	12.6253	12.6254	12.6256	12.6267	12.9625

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5421	12.5421	12.5421	12.5422	12.5425	12.6256
0.20000000	12.5422	12.5422	12.5422	12.5423	12.5426	12.6257
0.25000000	12.5422	12.5422	12.5422	12.5423	12.5426	12.6257
0.50000000	12.5423	12.5424	12.5424	12.5424	12.5427	12.6260
0.80000000	12.5430	12.5431	12.5431	12.5431	12.5434	12.6273
1.00000000	12.6639	12.6640	12.6640	12.6641	12.6649	13.0006

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5469	12.5469	12.5469	12.5470	12.5473	12.6350
0.20000000	12.5469	12.5469	12.5470	12.5470	12.5473	12.6351
0.25000000	12.5469	12.5469	12.5470	12.5470	12.5474	12.6351
0.50000000	12.5471	12.5471	12.5471	12.5472	12.5475	12.6354
0.80000000	12.5477	12.5477	12.5477	12.5478	12.5481	12.6365
1.00000000	12.6653	12.6654	12.6654	12.6656	12.6663	13.0069

XMS = 0.80000000 KAR = 0.33333333 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.5092	2.5183	2.5214	2.5463	2.6610	2.0321
0.20000000	2.5230	2.5319	2.5349	2.5590	2.6710	2.0538
0.25000000	2.5275	2.5363	2.5393	2.5633	2.6743	2.0609
0.50000000	2.532	2.5414	2.5442	2.5685	2.7008	2.1145
0.80000000	2.7085	2.7148	2.7169	2.7340	2.8155	2.3072
1.00000000	4.3344	4.3372	4.3381	4.3457	2.0302	3.5397

XT1 = 0.00000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.5235	2.5325	2.5355	2.5599	2.6720	2.0393
0.20000000	2.5371	2.5458	2.5488	2.5725	2.6820	2.0609
0.25000000	2.5416	2.5502	2.5531	2.5766	2.6853	2.0679
0.50000000	2.5767	2.5848	2.5875	2.6094	2.7116	2.1212
0.80000000	2.7202	2.7264	2.7285	2.7454	2.8254	2.3132
1.00000000	4.3478	4.3505	4.3515	4.3589	2.0365	3.5463

XT1 = 0.00000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6128	2.6207	2.6234	2.6446	2.7414	2.0880
0.20000000	2.6252	2.6328	2.6354	2.6561	2.7509	2.1087
0.25000000	2.6292	2.6369	2.6394	2.6600	2.7540	2.1155
0.50000000	2.6613	2.6685	2.6709	2.6922	2.7791	2.1668
0.80000000	2.7944	2.8000	2.8019	2.8170	2.8880	2.3540
1.00000000	4.4373	4.4398	4.4406	4.4473	2.0750	3.6093

XMS = 0.80000000 KAR = 0.33333333 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.7830	2.7888	2.7907	2.8061	2.8759	2.2034
0.20000000	2.7936	2.7992	2.8011	2.8162	2.8847	2.2224
0.25000000	2.7971	2.8027	2.8045	2.8195	2.8876	2.2267
0.50000000	2.8247	2.8300	2.8318	2.8460	2.9109	2.2763
0.80000000	2.9418	2.9461	2.9475	2.9590	3.0121	2.4538
1.00000000	4.6447	4.6465	4.6472	4.6521	2.1858	3.7802

XT1 = 0.00000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.9716	2.9752	2.9764	2.9861	3.0301	2.3863
0.20000000	2.9808	2.9844	2.9856	2.9950	3.0383	2.4054
0.25000000	2.9839	2.9874	2.9886	2.9980	3.0410	2.4110
0.50000000	3.0082	3.0115	3.0126	3.0216	3.0628	2.4544
0.80000000	3.1125	3.1152	3.1161	3.1236	3.1577	2.6209
1.00000000	2.0068	2.0226	2.0278	2.0677	2.2214	4.1631

XT1 = 0.20000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.5650	2.5738	2.5767	2.6008	2.7098	2.0613
0.20000000	2.5774	2.5860	2.5885	2.6121	2.7190	2.0816
0.25000000	2.5815	2.5900	2.5929	2.6160	2.7221	2.0882
0.50000000	2.6138	2.6218	2.6245	2.6461	2.7465	2.1386
0.80000000	2.7471	2.7533	2.7554	2.7724	2.8525	2.3223
1.00000000	4.3708	4.3735	4.3744	4.3817	2.0804	3.5753

XMS = 0.80000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6539	2.6616	2.6642	2.6650	2.7793	2.1104
0.20000000	2.6652	2.6728	2.6753	2.6956	2.7881	2.1300
0.25000000	2.6690	2.6765	2.6790	2.6992	2.7911	2.1363
0.50000000	2.6986	2.7056	2.7080	2.7271	2.8144	2.1849
0.80000000	2.8222	2.8278	2.8297	2.8449	2.9159	2.3638
1.00000000	4.4599	4.4624	4.4632	4.4697	2.0993	3.6360

XT1 = 0.20000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.8241	2.8298	2.8316	2.8467	2.9147	2.2275
0.20000000	2.8339	2.8394	2.8412	2.8560	2.9229	2.2454
0.25000000	2.8371	2.8426	2.8444	2.8591	2.9256	2.2513
0.50000000	2.8627	2.8679	2.8697	2.8838	2.9473	2.2963
0.80000000	2.9718	2.9759	2.9773	2.9889	3.0418	2.4655
1.00000000	4.6668	4.6686	4.6692	4.6741	2.1711	3.8065

XT1 = 0.20000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	3.0140	3.0175	3.0187	3.0281	3.0708	2.4165
0.20000000	3.0225	3.0260	3.0271	3.0364	3.0785	2.4326
0.25000000	3.0258	3.0288	3.0299	3.0391	3.0810	2.4378
0.50000000	3.0479	3.0512	3.0523	3.0611	3.1013	2.4787
0.80000000	3.1451	3.1479	3.1488	3.1582	3.1901	2.6369
1.00000000	2.0401	2.0553	2.0603	2.0697	2.2479	4.1897

XMS = 0.80000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.6660	2.6736	2.6762	2.6968	2.7905	2.1170
0.20000000	2.6770	2.6845	2.6870	2.7072	2.7991	2.1361
0.25000000	2.6807	2.6881	2.6906	2.7107	2.8020	2.1424
0.50000000	2.7095	2.7166	2.7189	2.7379	2.8248	2.1902
0.80000000	2.8304	2.8361	2.8380	2.8532	2.9241	2.3667
1.00000000	4.4671	4.4696	4.4704	4.4769	2.1068	3.6444

XT1 = 0.25000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	2.8362	2.8418	2.8437	2.8586	2.9262	2.2345
0.20000000	2.8458	2.8512	2.8531	2.8677	2.9342	2.2521
0.25000000	2.8489	2.8544	2.8562	2.8708	2.9369	2.2579
0.50000000	2.8739	2.8791	2.8808	2.8948	2.9580	2.3021
0.80000000	2.9805	2.9848	2.9862	2.9977	3.0566	2.4690
1.00000000	4.6739	4.6757	4.6763	4.6812	2.1788	3.8148

XT1 = 0.25000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	3.0265	3.0300	3.0312	3.0405	3.0829	2.4247
0.20000000	3.0349	3.0383	3.0394	3.0486	3.0904	2.4405
0.25000000	3.0376	3.0410	3.0422	3.0513	3.0929	2.4457
0.50000000	3.0597	3.0629	3.0648	3.0728	3.1128	2.4858
0.80000000	3.1549	3.1576	3.1585	3.1659	3.1997	2.6417
1.00000000	2.0503	2.0653	2.0702	2.1082	2.2561	4.1981

XMS = 0.80000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5217	12.5217	12.5217	12.5219	12.5224	12.6145
0.20000000	12.5217	12.5218	12.5218	12.5219	12.5223	12.6146
0.25000000	12.5217	12.5218	12.5218	12.5219	12.5223	12.6147
0.50000000	12.5219	12.5219	12.5219	12.5221	12.5226	12.6149
0.80000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6162
1.00000000	12.6152	12.6153	12.6153	12.6156	12.6168	12.9560

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5255	12.5256	12.5256	12.5257	12.5262	12.6156
0.20000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6157
0.25000000	12.5256	12.5257	12.5257	12.5258	12.5263	12.6157
0.50000000	12.5258	12.5258	12.5258	12.5259	12.5264	12.6160
0.80000000	12.5264	12.5264	12.5264	12.5265	12.5271	12.6173
1.00000000	12.6243	12.6244	12.6244	12.6246	12.6257	12.9618

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5407	12.5407	12.5408	12.5408	12.5411	12.6230
0.20000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6231
0.25000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6231
0.50000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6234
0.80000000	12.5417	12.5417	12.5418	12.5418	12.5421	12.6247
1.00000000	12.6634	12.6634	12.6635	12.6636	12.6644	12.9993

XMS = 0.80000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5267	12.5268	12.5268	12.5269	12.5274	12.6182
0.20000000	12.5268	12.5268	12.5268	12.5270	12.5275	12.6183
0.25000000	12.5268	12.5268	12.5269	12.5270	12.5275	12.6183
0.50000000	12.5269	12.5270	12.5270	12.5271	12.5276	12.6186
0.80000000	12.5275	12.5276	12.5276	12.5277	12.5282	12.6198
1.00000000	12.6246	12.6247	12.6247	12.6249	12.6261	12.9629

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5421	12.5421	12.5422	12.5422	12.5425	12.6257
0.20000000	12.5422	12.5422	12.5422	12.5423	12.5426	12.6258
0.25000000	12.5422	12.5422	12.5422	12.5423	12.5426	12.6258
0.50000000	12.5424	12.5424	12.5424	12.5425	12.5428	12.6261
0.80000000	12.5431	12.5431	12.5431	12.5432	12.5435	12.6273
1.00000000	12.6638	12.6638	12.6638	12.6640	12.6647	13.0009

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5469	12.5469	12.5469	12.5470	12.5473	12.6351
0.20000000	12.5470	12.5470	12.5470	12.5470	12.5474	12.6352
0.25000000	12.5470	12.5470	12.5470	12.5471	12.5474	12.6352
0.50000000	12.5471	12.5471	12.5471	12.5472	12.5475	12.6355
0.80000000	12.5477	12.5477	12.5478	12.5478	12.5481	12.6368
1.00000000	12.6652	12.6652	12.6653	12.6654	12.6662	13.0093

XMS = 0.80000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9125	2.9179	2.9197	2.9341	2.9989	2.2760
0.20000000	2.9207	2.9260	2.9277	2.9419	3.0058	2.2936
0.25000000	2.9234	2.9286	2.9304	2.9445	3.0061	2.2986
0.50000000	2.9449	2.9499	2.9516	2.9651	3.0265	2.3364
0.80000000	3.0373	3.0416	3.0431	3.0546	3.1071	2.4009
1.00000000	4.7255	4.7273	4.7279	2.0381	2.2315	3.8739

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1063	3.1096	3.1107	3.1196	3.1801	2.4763
0.20000000	3.1135	3.1168	3.1179	3.1267	3.1888	2.4903
0.25000000	3.1150	3.1192	3.1202	3.1290	3.1861	2.4949
0.50000000	3.1349	3.1381	3.1391	3.1476	3.2620	2.5370
0.80000000	3.2177	3.2204	3.2213	3.2286	3.2620	2.6720
1.00000000	2.1186	2.1325	2.1371	2.1725	2.3118	4.2587

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.2681	3.2712	3.2722	3.2805	3.3178	2.5761
0.20000000	3.2733	3.2783	3.2774	3.2855	3.3225	2.5870
0.25000000	3.2750	3.2780	3.2781	3.2872	3.3241	2.5906
0.50000000	3.2887	3.2917	3.2926	3.3006	3.3366	2.6188
0.80000000	3.3490	3.3517	3.3526	3.3597	3.3922	2.7334
1.00000000	2.2814	2.2932	2.2970	2.3274	2.4495	4.4368

XMS = 0.80000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0602	3.0633	3.0643	3.0722	3.1046	3.4237
0.20000000	3.0626	3.0656	3.0657	3.0746	3.1072	3.4283
0.25000000	3.0633	3.0664	3.0674	3.0754	3.1080	3.4298
0.50000000	3.0694	3.0725	3.0736	3.0816	3.1147	3.4417
0.80000000	3.0942	3.0975	3.0986	3.1070	3.1418	3.4924
1.00000000	3.3489	3.3539	3.3556	3.3687	3.4243	4.4563

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0609	3.0640	3.0650	3.0728	3.1050	3.4255
0.20000000	3.0633	3.0663	3.0673	3.0752	3.1076	3.4300
0.25000000	3.0641	3.0671	3.0681	3.0760	3.1084	3.4315
0.50000000	3.0702	3.0732	3.0743	3.0823	3.1150	3.4434
0.80000000	3.0950	3.0983	3.0994	3.1078	3.1423	3.4942
1.00000000	3.3514	3.3564	3.3580	3.3710	3.4262	4.4609

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0655	3.0684	3.0693	3.0768	3.1074	3.4379
0.20000000	3.0679	3.0708	3.0718	3.0792	3.1100	3.4425
0.25000000	3.0687	3.0716	3.0726	3.0800	3.1106	3.4440
0.50000000	3.0750	3.0779	3.0788	3.0864	3.1176	3.4550
0.80000000	3.1005	3.1036	3.1046	3.1123	3.1453	3.5071
1.00000000	3.3681	3.3727	3.3743	3.3865	3.4386	4.4926

XMS = 0.80000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0756	3.0781	3.0789	3.0834	3.1127	3.4741
0.20000000	3.0781	3.0806	3.0815	3.0860	3.1154	3.4787
0.25000000	3.0790	3.0815	3.0823	3.0869	3.1183	3.4833
0.50000000	3.0855	3.0881	3.0889	3.0935	3.1233	3.4924
0.80000000	3.1125	3.1152	3.1161	3.1230	3.1530	3.5445
1.00000000	3.4068	3.4106	3.4119	3.4224	3.4677	4.5901

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0894	3.0914	3.0921	3.0974	3.1203	3.5619
0.20000000	3.0921	3.0942	3.0948	3.1002	3.1231	3.5666
0.25000000	3.0930	3.0951	3.0957	3.1011	3.1240	3.5684
0.50000000	3.1000	3.1021	3.1028	3.1082	3.1313	3.5810
0.80000000	3.1291	3.1312	3.1319	3.1375	3.1615	3.6354
1.00000000	3.4648	3.4678	3.4688	3.4770	3.5124	4.8627

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0619	3.0649	3.0659	3.0738	3.1062	3.4316
0.20000000	3.0642	3.0672	3.0682	3.0762	3.1087	3.4360
0.25000000	3.0649	3.0680	3.0690	3.0770	3.1096	3.4375
0.50000000	3.0709	3.0740	3.0750	3.0831	3.1161	3.4491
0.80000000	3.0954	3.0987	3.0997	3.1082	3.1428	3.4987
1.00000000	3.3568	3.3618	3.3634	3.3764	3.4318	4.4745

XMS = 0.80000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0665	3.0694	3.0703	3.0778	3.1087	3.4443
0.20000000	3.0689	3.0718	3.0727	3.0802	3.1112	3.4487
0.25000000	3.0696	3.0725	3.0735	3.0810	3.1120	3.4502
0.50000000	3.0758	3.0787	3.0797	3.0873	3.1186	3.4619
0.80000000	3.1009	3.1040	3.1050	3.1129	3.1458	3.5118
1.00000000	3.3737	3.3783	3.3799	3.3921	3.4443	4.5064

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0767	3.0792	3.0800	3.0866	3.1141	3.4810
0.20000000	3.0792	3.0817	3.0825	3.0891	3.1167	3.4855
0.25000000	3.0800	3.0825	3.0834	3.0900	3.1176	3.4871
0.50000000	3.0864	3.0890	3.0898	3.0965	3.1244	3.4989
0.80000000	3.1130	3.1157	3.1166	3.1235	3.1526	3.5497
1.00000000	3.4127	3.4167	3.4180	3.4285	3.4738	4.6044

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0907	3.0927	3.0934	3.0998	3.1218	3.5705
0.20000000	3.0933	3.0954	3.0961	3.1015	3.1245	3.5752
0.25000000	3.0942	3.0963	3.0970	3.1023	3.1254	3.5767
0.50000000	3.1011	3.1032	3.1039	3.1093	3.1326	3.5991
0.80000000	3.1297	3.1318	3.1325	3.1382	3.1623	3.6421
1.00000000	3.4716	3.4747	3.4757	3.4838	3.5193	4.8786

XMS = 0.60000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0668	3.0697	3.0706	3.0781	3.1090	3.4462
0.20000000	3.0691	3.0720	3.0730	3.0805	3.1116	3.4506
0.25000000	3.0699	3.0728	3.0738	3.0813	3.1124	3.4521
0.50000000	3.0760	3.0789	3.0799	3.0875	3.1190	3.4637
0.60000000	3.1010	3.1041	3.1051	3.1131	3.1460	3.5132
1.00000000	3.3755	3.3801	3.3817	3.3939	3.4462	4.5108

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0770	3.0795	3.0804	3.0870	3.1145	3.4832
0.20000000	3.0795	3.0820	3.0829	3.0895	3.1171	3.4876
0.25000000	3.0803	3.0828	3.0837	3.0903	3.1180	3.4891
0.50000000	3.0867	3.0893	3.0901	3.0968	3.1247	3.5009
0.60000000	3.1132	3.1158	3.1167	3.1236	3.1236	3.5513
1.00000000	3.4146	3.4186	3.4200	3.4305	3.4758	4.6089

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0911	3.0931	3.0936	3.0992	3.1222	3.5731
0.20000000	3.0937	3.0958	3.0964	3.1018	3.1250	3.5776
0.25000000	3.0946	3.0966	3.0973	3.1027	3.1259	3.5793
0.50000000	3.1014	3.1035	3.1042	3.1096	3.1330	3.5915
0.60000000	3.1299	3.1320	3.1327	3.1383	3.1625	3.6441
1.00000000	3.4736	3.4768	3.4779	3.4860	3.5214	4.8836

XMS = 0.60000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0792	3.0810	3.0826	3.0893	3.1172	3.4974
0.20000000	3.0816	3.0841	3.0850	3.0917	3.1197	3.5017
0.25000000	3.0824	3.0849	3.0858	3.0925	3.1205	3.5031
0.50000000	3.0885	3.0911	3.0920	3.0987	3.1270	3.5142
0.60000000	3.1141	3.1168	3.1177	3.1247	3.1541	3.5621
1.00000000	3.4285	3.4325	3.4339	3.4444	3.4899	4.6422

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0936	3.0957	3.0964	3.1019	3.1252	3.5908
0.20000000	3.0962	3.0983	3.0989	3.1044	3.1276	3.5952
0.25000000	3.0970	3.0991	3.0998	3.1052	3.1287	3.5966
0.50000000	3.1036	3.1057	3.1064	3.1119	3.1355	3.6082
0.60000000	3.1311	3.1332	3.1340	3.1396	3.1640	3.6580
1.00000000	3.4894	3.4925	3.4935	3.5016	3.5372	4.9208

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.60000000	1.00000000
X51						
0.00000000	3.0994	3.1016	3.1023	3.1079	3.1319	3.6329
0.20000000	3.1017	3.1038	3.1046	3.1102	3.1343	3.6366
0.25000000	3.1025	3.1046	3.1053	3.1109	3.1351	3.6379
0.50000000	3.1085	3.1106	3.1113	3.1170	3.1412	3.6479
0.60000000	3.1338	3.1359	3.1368	3.1425	3.1673	3.6914
1.00000000	3.5355	3.5396	3.5396	3.5476	3.5834	5.0371

XMS = 0.80000000 XAR = 0.86666667 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2357	6.2360	6.2361	6.2371	6.2414	6.4194
0.20000000	6.2360	6.2364	6.2365	6.2375	6.2417	6.4201
0.25000000	6.2361	6.2365	6.2366	6.2376	6.2418	6.4203
0.50000000	6.2370	6.2374	6.2375	6.2385	6.2428	6.4222
0.80000000	6.2411	6.2414	6.2416	6.2425	6.2469	6.4308
1.00000000	6.4093	6.4100	6.4102	6.4121	6.4206	7.0283

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2359	6.2363	6.2364	6.2374	6.2416	6.4196
0.20000000	6.2363	6.2366	6.2368	6.2377	6.2420	6.4204
0.25000000	6.2364	6.2368	6.2369	6.2378	6.2421	6.4206
0.50000000	6.2373	6.2377	6.2378	6.2388	6.2430	6.4225
0.80000000	6.2413	6.2417	6.2418	6.2428	6.2472	6.4309
1.00000000	6.4100	6.4107	6.4109	6.4128	6.4213	7.0294

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2379	6.2382	6.2383	6.2393	6.2433	6.4218
0.20000000	6.2382	6.2385	6.2387	6.2396	6.2437	6.4225
0.25000000	6.2383	6.2387	6.2388	6.2397	6.2438	6.4228
0.50000000	6.2393	6.2396	6.2397	6.2407	6.2448	6.4246
0.80000000	6.2434	6.2437	6.2438	6.2448	6.2490	6.4331
1.00000000	6.4153	6.4159	6.4162	6.4180	6.4262	7.0379

XMS = 0.80000000 XAR = 0.86666667 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2435	6.2438	6.2439	6.2447	6.2483	6.4291
0.20000000	6.2438	6.2441	6.2442	6.2451	6.2487	6.4298
0.25000000	6.2439	6.2442	6.2443	6.2452	6.2488	6.4301
0.50000000	6.2449	6.2452	6.2453	6.2461	6.2498	6.4320
0.80000000	6.2491	6.2495	6.2496	6.2504	6.2541	6.4406
1.00000000	6.4307	6.4313	6.4315	6.4332	6.4406	7.0672

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2565	6.2567	6.2568	6.2574	6.2600	6.4577
0.20000000	6.2569	6.2571	6.2572	6.2578	6.2604	6.4585
0.25000000	6.2570	6.2572	6.2573	6.2579	6.2606	6.4587
0.50000000	6.2580	6.2583	6.2583	6.2589	6.2616	6.4608
0.80000000	6.2626	6.2629	6.2629	6.2636	6.2663	6.4699
1.00000000	6.4691	6.4696	6.4698	6.4710	6.4766	7.1885

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2367	6.2370	6.2372	6.2381	6.2424	6.4216
0.20000000	6.2370	6.2374	6.2375	6.2385	6.2427	6.4225
0.25000000	6.2371	6.2374	6.2375	6.2385	6.2428	6.4227
0.50000000	6.2380	6.2384	6.2385	6.2395	6.2438	6.4246
0.80000000	6.2420	6.2421	6.2425	6.2435	6.2478	6.4329
1.00000000	6.4109	6.4116	6.4118	6.4137	6.4222	7.0329

XMS = 0.0000000 XAR = 0.6666667 PHI = 1.000

XT1 = 0.2000000 XT2 = 0.5000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2386	6.2390	6.2391	6.2400	6.2441	6.4240
0.2000000	6.2396	6.2393	6.2395	6.2404	6.2445	6.4247
0.2500000	6.2391	6.2394	6.2396	6.2403	6.2446	6.4249
0.5000000	6.2400	6.2404	6.2405	6.2414	6.2455	6.4258
0.8000000	6.2440	6.2444	6.2445	6.2453	6.2497	6.4351
1.0000000	6.4162	6.4168	6.4171	6.4189	6.4271	7.0415

XT1 = 0.2000000 XT2 = 0.8000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2442	6.2446	6.2447	6.2455	6.2491	6.4313
0.2000000	6.2446	6.2449	6.2450	6.2458	6.2495	6.4321
0.2500000	6.2447	6.2450	6.2451	6.2460	6.2496	6.4323
0.5000000	6.2457	6.2460	6.2461	6.2469	6.2506	6.4342
0.8000000	6.2498	6.2502	6.2503	6.2511	6.2549	6.4427
1.0000000	6.4316	6.4323	6.4325	6.4341	6.4415	7.0709

XT1 = 0.2000000 XT2 = 1.0000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2573	6.2576	6.2577	6.2583	6.2609	6.4602
0.2000000	6.2577	6.2580	6.2580	6.2586	6.2613	6.4609
0.2500000	6.2579	6.2581	6.2582	6.2588	6.2615	6.4612
0.5000000	6.2589	6.2591	6.2592	6.2598	6.2625	6.4632
0.8000000	6.2634	6.2637	6.2637	6.2644	6.2671	6.4722
1.0000000	6.4702	6.4707	6.4709	6.4721	6.4777	7.1929

XMS = 0.8000000 XAR = 0.6666667 PHI = 1.000

XT1 = 0.2500000 XT2 = 0.5000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2389	6.2392	6.2393	6.2403	6.2444	6.4247
0.2000000	6.2392	6.2396	6.2397	6.2406	6.2447	6.4254
0.2500000	6.2393	6.2397	6.2397	6.2407	6.2448	6.4256
0.5000000	6.2402	6.2406	6.2407	6.2417	6.2458	6.4275
0.8000000	6.2442	6.2446	6.2447	6.2457	6.2499	6.4337
1.0000000	6.4164	6.4171	6.4174	6.4192	6.4274	7.0426

XT1 = 0.2500000 XT2 = 0.8000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2445	6.2448	6.2449	6.2457	6.2494	6.4320
0.2000000	6.2449	6.2452	6.2453	6.2461	6.2498	6.4328
0.2500000	6.2450	6.2453	6.2454	6.2462	6.2499	6.4330
0.5000000	6.2459	6.2462	6.2463	6.2472	6.2508	6.4349
0.8000000	6.2501	6.2504	6.2505	6.2513	6.2551	6.4433
1.0000000	6.4319	6.4326	6.4328	6.4344	6.4418	7.0721

XT1 = 0.2500000 XT2 = 1.0000000

X52	0.0000000	0.2000000	0.2500000	0.5000000	0.8000000	1.0000000
X51						
0.0000000	6.2576	6.2579	6.2579	6.2585	6.2612	6.4610
0.2000000	6.2580	6.2582	6.2583	6.2589	6.2616	6.4617
0.2500000	6.2581	6.2584	6.2584	6.2591	6.2618	6.4620
0.5000000	6.2592	6.2594	6.2595	6.2601	6.2628	6.4640
0.8000000	6.2637	6.2639	6.2640	6.2646	6.2674	6.4729
1.0000000	6.4706	6.4711	6.4712	6.4725	6.4780	7.1943

XMS = 0.00000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.40000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2463	6.2466	6.2467	6.2476	6.2513	6.4372
0.20000000	6.2466	6.2470	6.2471	6.2479	6.2516	6.4376
0.25000000	6.2468	6.2471	6.2472	6.2480	6.2517	6.4381
0.50000000	6.2477	6.2480	6.2481	6.2489	6.2520	6.4399
0.80000000	6.2517	6.2520	6.2521	6.2530	6.2567	6.4481
1.00000000	6.4342	6.4349	6.4351	6.4368	6.4442	7.0811

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2596	6.2599	6.2599	6.2606	6.2633	6.4667
0.20000000	6.2600	6.2602	6.2603	6.2609	6.2637	6.4674
0.25000000	6.2601	6.2604	6.2604	6.2611	6.2638	6.4676
0.50000000	6.2611	6.2613	6.2614	6.2620	6.2648	6.4696
0.80000000	6.2655	6.2657	6.2658	6.2664	6.2692	6.4782
1.00000000	6.4732	6.4737	6.4739	6.4751	6.4807	7.2050

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2654	6.2656	6.2657	6.2664	6.2692	6.4834
0.20000000	6.2657	6.2660	6.2661	6.2667	6.2695	6.4841
0.25000000	6.2658	6.2660	6.2662	6.2668	6.2696	6.4843
0.50000000	6.2667	6.2670	6.2671	6.2677	6.2705	6.4861
0.80000000	6.2706	6.2709	6.2710	6.2716	6.2745	6.4939
1.00000000	6.4823	6.4827	6.4829	6.4842	6.4899	7.2420

XMS = 0.80000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3789	9.3790	9.3791	9.3794	9.3807	9.5026
0.20000000	9.3790	9.3791	9.3792	9.3795	9.3808	9.5028
0.25000000	9.3791	9.3792	9.3792	9.3795	9.3808	9.5029
0.50000000	9.3793	9.3795	9.3795	9.3798	9.3811	9.5035
0.80000000	9.3807	9.3808	9.3808	9.3811	9.3825	9.5063
1.00000000	9.5000	9.5002	9.5003	9.5009	9.5037	9.9358

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3791	9.3792	9.3792	9.3795	9.3809	9.5027
0.20000000	9.3792	9.3793	9.3794	9.3797	9.3810	9.5029
0.25000000	9.3792	9.3794	9.3794	9.3797	9.3810	9.5030
0.50000000	9.3795	9.3797	9.3797	9.3800	9.3813	9.5036
0.80000000	9.3809	9.3810	9.3810	9.3813	9.3827	9.5064
1.00000000	9.5003	9.5007	9.5008	9.5014	9.5041	9.9362

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3805	9.3806	9.3806	9.3809	9.3822	9.5034
0.20000000	9.3806	9.3807	9.3808	9.3810	9.3823	9.5036
0.25000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5037
0.50000000	9.3809	9.3811	9.3811	9.3814	9.3827	9.5043
0.80000000	9.3823	9.3824	9.3824	9.3827	9.3840	9.5070
1.00000000	9.5038	9.5041	9.5041	9.5047	9.5074	9.9393

Handwritten mark

XMS = 0.80000000 XAH = 0.75000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3850	9.3851	9.3851	9.3854	9.3865	9.5058
0.20000000	9.3851	9.3852	9.3852	9.3853	9.3866	9.5060
0.25000000	9.3851	9.3852	9.3853	9.3853	9.3867	9.5061
0.50000000	9.3854	9.3855	9.3856	9.3858	9.3870	9.5067
0.80000000	9.3868	9.3869	9.3870	9.3872	9.3884	9.5095
1.00000000	9.5148	9.5150	9.5151	9.5156	9.5181	9.9507

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3992	9.3992	9.3993	9.3994	9.4002	9.5190
0.20000000	9.3993	9.3994	9.3994	9.3996	9.4003	9.5192
0.25000000	9.3994	9.3994	9.3994	9.3996	9.4004	9.5193
0.50000000	9.3997	9.3998	9.3998	9.4000	9.4007	9.5200
0.80000000	9.4013	9.4013	9.4013	9.4015	9.4021	9.5229
1.00000000	9.5525	9.5526	9.5527	9.5531	9.5546	10.0135

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3797	9.3798	9.3798	9.3801	9.3814	9.5041
0.20000000	9.3798	9.3798	9.3799	9.3802	9.3816	9.5043
0.25000000	9.3798	9.3799	9.3800	9.3803	9.3816	9.5044
0.50000000	9.3801	9.3802	9.3802	9.3805	9.3819	9.5050
0.80000000	9.3814	9.3815	9.3815	9.3819	9.3832	9.5077
1.00000000	9.5007	9.5010	9.5010	9.5017	9.5044	9.9375

XMS = 0.80000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3811	9.3812	9.3812	9.3815	9.3828	9.5047
0.20000000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5050
0.25000000	9.3812	9.3813	9.3814	9.3817	9.3830	9.5050
0.50000000	9.3815	9.3816	9.3817	9.3820	9.3832	9.5056
0.80000000	9.3828	9.3829	9.3830	9.3833	9.3846	9.5084
1.00000000	9.5041	9.5043	9.5044	9.5050	9.5077	9.9406

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3856	9.3857	9.3857	9.3860	9.3871	9.5072
0.20000000	9.3857	9.3858	9.3858	9.3861	9.3872	9.5074
0.25000000	9.3857	9.3858	9.3859	9.3861	9.3873	9.5075
0.50000000	9.3860	9.3861	9.3862	9.3864	9.3876	9.5081
0.80000000	9.3874	9.3875	9.3875	9.3878	9.3890	9.5109
1.00000000	9.5151	9.5153	9.5154	9.5159	9.5184	9.9519

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3999	9.3999	9.3999	9.4001	9.4009	9.5205
0.20000000	9.4000	9.4001	9.4001	9.4002	9.4010	9.5207
0.25000000	9.4000	9.4001	9.4001	9.4003	9.4010	9.5208
0.50000000	9.4004	9.4004	9.4005	9.4006	9.4014	9.5214
0.80000000	9.4019	9.4020	9.4020	9.4022	9.4029	9.5243
1.00000000	9.5528	9.5530	9.5530	9.5534	9.5551	10.0150

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3813	9.3814	9.3814	9.3817	9.3830	9.5052
0.20000000	9.3814	9.3815	9.3815	9.3818	9.3831	9.5054
0.25000000	9.3814	9.3815	9.3815	9.3818	9.3831	9.5055
0.50000000	9.3817	9.3818	9.3818	9.3821	9.3834	9.5061
0.80000000	9.3830	9.3831	9.3831	9.3834	9.3848	9.5088
1.00000000	9.5042	9.5044	9.5045	9.5051	9.5078	9.9410

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3858	9.3859	9.3859	9.3862	9.3873	9.5076
0.20000000	9.3859	9.3860	9.3860	9.3863	9.3874	9.5079
0.25000000	9.3859	9.3860	9.3860	9.3863	9.3875	9.5080
0.50000000	9.3862	9.3863	9.3863	9.3866	9.3878	9.5086
0.80000000	9.3876	9.3877	9.3877	9.3880	9.3892	9.5113
1.00000000	9.5152	9.5154	9.5155	9.5160	9.5185	9.9524

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4001	9.4001	9.4002	9.4003	9.4011	9.5210
0.20000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5212
0.25000000	9.4003	9.4003	9.4003	9.4005	9.4013	9.5213
0.50000000	9.4006	9.4007	9.4007	9.4008	9.4016	9.5219
0.80000000	9.4021	9.4022	9.4022	9.4024	9.4031	9.5248
1.00000000	9.5529	9.5531	9.5531	9.5535	9.5552	10.0155

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5110
0.20000000	9.3873	9.3874	9.3874	9.3877	9.3889	9.5112
0.25000000	9.3873	9.3874	9.3875	9.3877	9.3889	9.5113
0.50000000	9.3876	9.3877	9.3878	9.3880	9.3892	9.5119
0.80000000	9.3889	9.3890	9.3891	9.3893	9.3905	9.5135
1.00000000	9.5159	9.5161	9.5162	9.5167	9.5192	9.9556

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4017	9.4018	9.4018	9.4020	9.4027	9.5245
0.20000000	9.4018	9.4019	9.4019	9.4021	9.4028	9.5247
0.25000000	9.4019	9.4019	9.4019	9.4021	9.4029	9.5248
0.50000000	9.4022	9.4023	9.4023	9.4025	9.4032	9.5254
0.80000000	9.4037	9.4037	9.4038	9.4039	9.4047	9.5282
1.00000000	9.5538	9.5539	9.5540	9.5544	9.5561	10.0192

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4069	9.4069	9.4070	9.4071	9.4079	9.5361
0.20000000	9.4070	9.4071	9.4071	9.4073	9.4081	9.5363
0.25000000	9.4070	9.4071	9.4071	9.4073	9.4081	9.5364
0.50000000	9.4073	9.4074	9.4074	9.4076	9.4084	9.5369
0.80000000	9.4087	9.4087	9.4087	9.4089	9.4097	9.5395
1.00000000	9.5569	9.5571	9.5571	9.5575	9.5593	10.0330

XMS = 0.80000000 HAR = 0.80000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.80000000	0.80000000	1.00000000
X51						
0.00000000	12.5197	12.5198	12.5198	12.5199	12.5205	12.6128
0.20000000	12.5198	12.5198	12.5199	12.5200	12.5206	12.6129
0.25000000	12.5198	12.5199	12.5199	12.5200	12.5206	12.6130
0.50000000	12.5199	12.5200	12.5200	12.5201	12.5207	12.6132
0.80000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6145
1.00000000	12.6121	12.6122	12.6122	12.6125	12.6138	12.9537

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5199	12.5200	12.5200	12.5201	12.5207	12.6129
0.20000000	12.5200	12.5200	12.5200	12.5202	12.5207	12.6130
0.25000000	12.5200	12.5200	12.5200	12.5202	12.5209	12.6130
0.50000000	12.5201	12.5202	12.5202	12.5203	12.5209	12.6133
0.80000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.6145
1.00000000	12.6124	12.6125	12.6126	12.6129	12.6141	12.9539

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5210	12.5211	12.5211	12.5212	12.5218	12.6131
0.20000000	12.5211	12.5211	12.5212	12.5213	12.5219	12.6132
0.25000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6133
0.50000000	12.5212	12.5213	12.5213	12.5214	12.5220	12.6135
0.80000000	12.5218	12.5219	12.5219	12.5220	12.5226	12.6148
1.00000000	12.6130	12.6131	12.6132	12.6135	12.6167	12.9533

XMS = 0.80000000 KAR = 0.80000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5249	12.5249	12.5250	12.5251	12.5256	12.6142
0.20000000	12.5250	12.5250	12.5250	12.5251	12.5257	12.6143
0.25000000	12.5250	12.5250	12.5250	12.5251	12.5258	12.6143
0.50000000	12.5251	12.5252	12.5252	12.5253	12.5258	12.6146
0.80000000	12.5257	12.5258	12.5258	12.5259	12.5264	12.6150
1.00000000	12.6241	12.6242	12.6242	12.6243	12.6256	12.9607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5400	12.5400	12.5400	12.5401	12.5404	12.6215
0.20000000	12.5400	12.5400	12.5401	12.5401	12.5404	12.6216
0.25000000	12.5400	12.5401	12.5401	12.5401	12.5404	12.6216
0.50000000	12.5402	12.5402	12.5402	12.5403	12.5406	12.6219
0.80000000	12.5409	12.5410	12.5410	12.5410	12.5413	12.6232
1.00000000	12.6632	12.6632	12.6633	12.6634	12.6642	12.9984

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5204	12.5204	12.5204	12.5206	12.5212	12.6139
0.20000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6140
0.25000000	12.5204	12.5205	12.5205	12.5206	12.5212	12.6140
0.50000000	12.5206	12.5206	12.5206	12.5206	12.5214	12.6143
0.80000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6156
1.00000000	12.6126	12.6127	12.6127	12.6130	12.6142	12.9344

XMS = 0.80000000 KAR = 0.80000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5215	12.5216	12.5216	12.5217	12.5223	12.6142
0.20000000	12.5216	12.5216	12.5216	12.5218	12.5223	12.6143
0.25000000	12.5216	12.5216	12.5218	12.5218	12.5225	12.6146
0.50000000	12.5217	12.5218	12.5218	12.5219	12.5231	12.6158
0.80000000	12.5223	12.5224	12.5224	12.5225	12.5231	12.9358
1.00000000	12.6152	12.6153	12.6153	12.6156	12.6168	12.9358

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5254	12.5254	12.5254	12.5256	12.5261	12.6153
0.20000000	12.5254	12.5255	12.5255	12.5256	12.5261	12.6154
0.25000000	12.5255	12.5255	12.5255	12.5256	12.5261	12.6154
0.50000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6157
0.80000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6169
1.00000000	12.6242	12.6243	12.6243	12.6246	12.6257	12.9613

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5405	12.5406	12.5406	12.5406	12.5409	12.6226
0.20000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6227
0.25000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6227
0.50000000	12.5408	12.5408	12.5408	12.5409	12.5412	12.6230
0.80000000	12.5415	12.5415	12.5415	12.5416	12.5419	12.6243
1.00000000	12.6633	12.6634	12.6634	12.6636	12.6643	12.9991

XMS = 0.25000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6481	2.6577	2.6609	2.6863	2.7968	2.0321
0.20000000	2.6584	2.6678	2.6709	2.6958	2.8044	2.0538
0.25000000	2.6618	2.6711	2.6742	2.6989	2.8069	2.0609
0.50000000	2.6890	2.6978	2.7007	2.7242	2.8273	2.1145
0.80000000	2.8061	2.8131	2.8154	2.8342	2.9190	2.3072
1.00000000	2.9010	2.9230	2.9301	2.9642	2.2785	3.5397

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6593	2.6689	2.6720	2.6968	2.8049	2.0393
0.20000000	2.6697	2.6789	2.6819	2.7062	2.8125	2.0609
0.25000000	2.6731	2.6822	2.6852	2.7094	2.8150	2.0679
0.50000000	2.7001	2.7087	2.7115	2.7344	2.8354	2.1212
0.80000000	2.8162	2.8231	2.8253	2.8437	2.9269	2.3132
1.00000000	2.9078	2.9294	2.9364	2.9898	2.2813	3.5483

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7306	2.7387	2.7413	2.7627	2.8565	2.0680
0.20000000	2.7403	2.7482	2.7508	2.7716	2.8641	2.1087
0.25000000	2.7435	2.7514	2.7540	2.7748	2.8666	2.1155
0.50000000	2.7691	2.7766	2.7791	2.7989	2.8668	2.1668
0.80000000	2.8799	2.8859	2.8880	2.9041	2.9771	2.3540
1.00000000	2.9495	2.9687	2.9749	2.1226	2.2985	3.6093

XMS = 0.25000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.8661	2.8739	2.8759	2.8914	2.9601	2.2034
0.20000000	2.8770	2.8828	2.8847	2.8999	2.9676	2.2224
0.25000000	2.8800	2.8857	2.8876	2.9027	2.9701	2.2287
0.50000000	2.9036	2.9090	2.9108	2.9253	2.9900	2.2763
0.80000000	3.0081	3.0106	3.0121	3.0241	3.0785	2.4538
1.00000000	2.1256	2.1408	2.1456	2.1842	2.3319	3.7802

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0252	3.0289	3.0301	3.0399	3.0845	2.3683
0.20000000	3.0335	3.0371	3.0383	3.0480	3.0919	2.4054
0.25000000	3.0362	3.0398	3.0410	3.0507	3.0943	2.4110
0.50000000	3.0582	3.0616	3.0628	3.0720	3.1139	2.4544
0.80000000	3.1539	3.1567	3.1577	3.1654	3.2007	2.6209
1.00000000	2.2061	2.2176	2.2214	2.2512	2.3705	4.1631

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.6977	2.7066	2.7098	2.7339	2.8392	2.0613
0.20000000	2.7071	2.7160	2.7190	2.7427	2.8463	2.0816
0.25000000	2.7102	2.7191	2.7221	2.7456	2.8487	2.0882
0.50000000	2.7352	2.7437	2.7465	2.7689	2.8678	2.1386
0.80000000	2.8434	2.8502	2.8525	2.8708	2.9535	2.3223
1.00000000	2.9324	2.9535	2.9603	2.1124	2.3013	3.5753

XMS = 0.25000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7688	2.7767	2.7793	2.8001	2.8915	2.1104
0.20000000	2.7778	2.7855	2.7881	2.8086	2.8986	2.1300
0.25000000	2.7808	2.7885	2.7910	2.8114	2.9010	2.1363
0.50000000	2.8046	2.8119	2.8143	2.8338	2.9199	2.1849
0.80000000	2.9078	2.9138	2.9188	2.9319	3.0045	2.3636
1.00000000	2.0744	2.0931	2.0993	2.1460	2.3191	3.6360

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9072	2.9128	2.9147	2.9298	2.9968	2.2275
0.20000000	2.9155	2.9210	2.9229	2.9377	3.0038	2.2454
0.25000000	2.9182	2.9238	2.9256	2.9404	3.0062	2.2513
0.50000000	2.9402	2.9455	2.9473	2.9614	3.0248	2.2963
0.80000000	3.0358	3.0403	3.0418	3.0537	3.1077	2.4655
1.00000000	2.1513	2.1662	2.1710	2.2086	2.3538	3.8065

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0661	3.0696	3.0708	3.0804	3.1237	2.4165
0.20000000	3.0738	3.0773	3.0785	3.0879	3.1308	2.4326
0.25000000	3.0763	3.0799	3.0810	3.0904	3.1329	2.4378
0.50000000	3.0968	3.1002	3.1013	3.1104	3.1513	2.4787
0.80000000	3.1862	3.1891	3.1901	3.1977	3.2326	2.6369
1.00000000	2.2330	2.2442	2.2479	2.2769	2.3937	4.1897

XMS = 0.25000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.7801	2.7879	2.7905	2.8111	2.9019	2.1170
0.20000000	2.7889	2.7965	2.7991	2.8194	2.9088	2.1361
0.25000000	2.7918	2.7994	2.8019	2.8221	2.9111	2.1424
0.50000000	2.8150	2.8223	2.8247	2.8441	2.9297	2.1902
0.80000000	2.9161	2.9221	2.9241	2.9402	3.0126	2.3667
1.00000000	2.0820	2.1006	2.1067	2.1531	2.3255	3.6444

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9187	2.9243	2.9262	2.9412	3.0077	2.2345
0.20000000	2.9208	2.9323	2.9342	2.9489	3.0146	2.2521
0.25000000	2.9295	2.9350	2.9368	2.9515	3.0188	2.2579
0.50000000	2.9310	2.9563	2.9580	2.9721	3.0351	2.3021
0.80000000	3.0447	3.0491	3.0506	3.0625	3.1164	2.4690
1.00000000	2.1592	2.1740	2.1788	2.2161	2.3603	3.8148

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.0782	3.0817	3.0829	3.0924	3.1354	2.4247
0.20000000	3.0857	3.0893	3.0904	3.0998	3.1421	2.4405
0.25000000	3.0883	3.0918	3.0929	3.1022	3.1444	2.4457
0.50000000	3.1083	3.1116	3.1128	3.1217	3.1624	2.4858
0.80000000	3.1959	3.1988	3.1997	3.2074	3.2422	2.6417
1.00000000	2.2412	2.2524	2.2561	2.2849	2.4009	4.1981

XMS = 0.25000000 XAR = 0.33333333 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	2.9917	2.9971	2.9988	3.0132	3.0769	2.2780
0.20000000	2.9987	3.0040	3.0058	3.0199	3.0829	2.2936
0.25000000	3.0010	3.0063	3.0081	3.0222	3.0849	2.2988
0.50000000	3.0196	3.0247	3.0264	3.0401	3.1009	2.3384
0.80000000	3.1012	3.1037	3.1071	3.1189	3.1721	2.4909
1.00000000	2.2127	2.2268	2.2314	2.2672	2.4068	3.8739

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1556	3.1590	3.1601	3.1692	3.2100	2.4763
0.20000000	3.1622	3.1655	3.1666	3.1756	3.2160	2.4903
0.25000000	3.1644	3.1677	3.1688	3.1777	3.2179	2.4949
0.50000000	3.1817	3.1850	3.1861	3.1947	3.2337	2.5307
0.80000000	3.2582	3.2614	3.2620	3.2695	3.3036	2.6720
1.00000000	2.2976	2.3083	2.3118	2.3391	2.4503	4.2587

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.3136	3.3168	3.3178	3.3261	3.3637	2.5761
0.20000000	3.3184	3.3215	3.3225	3.3308	3.3680	2.5870
0.25000000	3.3200	3.3231	3.3241	3.3323	3.3694	2.5906
0.50000000	3.3326	3.3356	3.3366	3.3447	3.3810	2.6188
0.80000000	3.3886	3.3913	3.3922	3.3995	3.4325	2.7334
1.00000000	2.4369	2.4464	2.4495	2.4740	2.5749	4.4368

XMS = 0.25000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1013	3.1038	3.1046	3.1112	3.1381	3.4237
0.20000000	3.1036	3.1064	3.1072	3.1138	3.1408	3.4263
0.25000000	3.1047	3.1072	3.1080	3.1146	3.1417	3.4298
0.50000000	3.1112	3.1138	3.1147	3.1213	3.1488	3.4417
0.80000000	3.1382	3.1409	3.1418	3.1488	3.1779	3.4924
1.00000000	3.4184	3.4228	3.4243	3.4360	3.4859	4.4563

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1017	3.1042	3.1050	3.1115	3.1382	3.4255
0.20000000	3.1042	3.1067	3.1076	3.1141	3.1410	3.4300
0.25000000	3.1051	3.1076	3.1084	3.1150	3.1419	3.4315
0.50000000	3.1116	3.1142	3.1150	3.1217	3.1490	3.4434
0.80000000	3.1387	3.1414	3.1423	3.1493	3.1781	3.4942
1.00000000	3.4203	3.4247	3.4262	3.4378	3.4873	4.4609

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1042	3.1066	3.1074	3.1136	3.1394	3.4379
0.20000000	3.1068	3.1092	3.1100	3.1162	3.1422	3.4425
0.25000000	3.1076	3.1100	3.1108	3.1171	3.1431	3.4440
0.50000000	3.1141	3.1166	3.1176	3.1239	3.1502	3.4550
0.80000000	3.1418	3.1444	3.1453	3.1519	3.1797	3.5071
1.00000000	3.4330	3.4372	3.4386	3.4494	3.4967	4.4926

XMS = 0.25000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1098	J.1120	J.1127	J.1184	J.1420	J.4741
0.20000000	J.1125	J.1147	J.1154	J.1211	J.1448	J.4787
0.25000000	J.1134	J.1156	J.1163	J.1220	J.1458	J.4803
0.50000000	J.1203	J.1225	J.1233	J.1290	J.1531	J.4924
0.80000000	J.1489	J.1512	J.1520	J.1580	J.1832	J.5443
1.00000000	J.4628	J.4664	J.4676	J.4773	J.5188	4.5001

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1178	J.1197	J.1203	J.1251	J.1459	J.5619
0.20000000	J.1206	J.1225	J.1231	J.1280	J.1488	J.5660
0.25000000	J.1216	J.1234	J.1240	J.1289	J.1497	J.5684
0.50000000	J.1289	J.1307	J.1313	J.1362	J.1573	J.5810
0.80000000	J.1590	J.1609	J.1615	J.1666	J.1885	J.6354
1.00000000	J.5086	J.5114	J.5124	J.5201	J.5535	4.6627

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1029	J.1054	J.1062	J.1128	J.1397	J.4316
0.20000000	J.1054	J.1079	J.1087	J.1153	J.1424	J.4360
0.25000000	J.1062	J.1087	J.1096	J.1162	J.1433	J.4375
0.50000000	J.1126	J.1152	J.1161	J.1227	J.1502	J.4491
0.80000000	J.1392	J.1419	J.1428	J.1496	J.1788	J.4987
1.00000000	J.4258	J.4303	J.4317	J.4434	J.4930	4.4745

XMS = 0.25000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1054	J.1078	J.1086	J.1149	J.1409	J.4443
0.20000000	J.1080	J.1104	J.1112	J.1175	J.1436	J.4487
0.25000000	J.1088	J.1112	J.1120	J.1183	J.1445	J.4502
0.50000000	J.1154	J.1178	J.1186	J.1250	J.1515	J.4619
0.80000000	J.1424	J.1450	J.1458	J.1525	J.1804	J.5118
1.00000000	J.4387	J.4429	J.4443	J.4553	J.5026	4.5084

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1112	J.1133	J.1141	J.1197	J.1436	J.4810
0.20000000	J.1138	J.1160	J.1167	J.1224	J.1463	J.4855
0.25000000	J.1147	J.1168	J.1176	J.1233	J.1473	J.4871
0.50000000	J.1215	J.1237	J.1244	J.1302	J.1544	J.4989
0.80000000	J.1495	J.1518	J.1526	J.1586	J.1840	J.5497
1.00000000	J.4689	J.4726	J.4738	J.4835	J.5251	4.6044

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	J.1193	J.1212	J.1218	J.1267	J.1475	J.5705
0.20000000	J.1221	J.1239	J.1245	J.1294	J.1504	J.5752
0.25000000	J.1230	J.1248	J.1254	J.1303	J.1513	J.5767
0.50000000	J.1301	J.1320	J.1326	J.1375	J.1567	J.5891
0.80000000	J.1597	J.1616	J.1623	J.1674	J.1893	J.6421
1.00000000	J.5154	J.5182	J.5193	J.5269	J.5604	4.8786

XMS = 0.25000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1058	3.1082	3.1090	3.1153	3.1414	3.4462
0.20000000	3.1083	3.1108	3.1116	3.1179	3.1441	3.4500
0.25000000	3.1091	3.1116	3.1124	3.1187	3.1449	3.4521
0.50000000	3.1157	3.1181	3.1190	3.1254	3.1519	3.4637
0.80000000	3.1426	3.1451	3.1460	3.1527	3.1807	3.5132
1.00000000	3.4406	3.4448	3.4461	3.4572	3.5044	4.5108

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1116	3.1136	3.1145	3.1202	3.1441	3.4832
0.20000000	3.1142	3.1164	3.1171	3.1228	3.1468	3.4870
0.25000000	3.1150	3.1172	3.1179	3.1237	3.1477	3.4891
0.50000000	3.1218	3.1240	3.1247	3.1305	3.1548	3.5009
0.80000000	3.1497	3.1520	3.1528	3.1586	3.1843	3.5513
1.00000000	3.4709	3.4746	3.4758	3.4854	3.5271	4.6089

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1198	3.1216	3.1222	3.1271	3.1480	3.5731
0.20000000	3.1225	3.1243	3.1250	3.1299	3.1509	3.5778
0.25000000	3.1234	3.1253	3.1259	3.1308	3.1518	3.5793
0.50000000	3.1305	3.1324	3.1330	3.1379	3.1591	3.5915
0.80000000	3.1599	3.1618	3.1625	3.1676	3.1896	3.6441
1.00000000	3.5176	3.5205	3.5214	3.5291	3.5626	4.8836

XMS = 0.25000000 XAR = 0.50000000 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1142	3.1164	3.1172	3.1230	3.1472	3.4974
0.20000000	3.1167	3.1189	3.1197	3.1255	3.1490	3.5017
0.25000000	3.1175	3.1198	3.1205	3.1263	3.1507	3.5031
0.50000000	3.1240	3.1263	3.1270	3.1329	3.1575	3.5142
0.80000000	3.1510	3.1533	3.1541	3.1602	3.1859	3.5621
1.00000000	3.4850	3.4886	3.4899	3.4995	3.5414	4.6422

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1227	3.1246	3.1252	3.1302	3.1514	3.5908
0.20000000	3.1253	3.1272	3.1278	3.1328	3.1541	3.5952
0.25000000	3.1262	3.1281	3.1287	3.1337	3.1558	3.5966
0.50000000	3.1330	3.1349	3.1355	3.1405	3.1620	3.6082
0.80000000	3.1614	3.1633	3.1640	3.1691	3.1913	3.6580
1.00000000	3.5333	3.5362	3.5372	3.5448	3.5784	4.9208

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	3.1293	3.1313	3.1319	3.1370	3.1590	3.6329
0.20000000	3.1317	3.1336	3.1343	3.1394	3.1614	3.6366
0.25000000	3.1325	3.1344	3.1351	3.1402	3.1622	3.6379
0.50000000	3.1386	3.1406	3.1412	3.1464	3.1685	3.6479
0.80000000	3.1647	3.1667	3.1673	3.1726	3.1953	3.6914
1.00000000	3.5795	3.5824	3.5834	3.5911	3.6248	5.0371

XMS = 0.25000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2409	6.2412	6.2414	6.2423	6.2463	6.4194
0.20000000	6.2412	6.2416	6.2417	6.2426	6.2467	6.4201
0.25000000	6.2414	6.2417	6.2418	6.2428	6.2468	6.4203
0.50000000	6.2423	6.2427	6.2428	6.2437	6.2478	6.4222
0.80000000	6.2464	6.2468	6.2469	6.2478	6.2520	6.4306
1.00000000	6.4197	6.4204	6.4206	6.4225	6.4307	7.0283

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2411	6.2415	6.2416	6.2425	6.2466	6.4196
0.20000000	6.2415	6.2418	6.2420	6.2429	6.2469	6.4204
0.25000000	6.2416	6.2420	6.2421	6.2430	6.2470	6.4206
0.50000000	6.2425	6.2429	6.2430	6.2439	6.2480	6.4325
0.80000000	6.2467	6.2470	6.2472	6.2481	6.2522	6.4309
1.00000000	6.4204	6.4211	6.4213	6.4231	6.4314	7.0294

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2429	6.2432	6.2433	6.2442	6.2481	6.4216
0.20000000	6.2433	6.2436	6.2437	6.2446	6.2485	6.4225
0.25000000	6.2434	6.2437	6.2438	6.2447	6.2486	6.4228
0.50000000	6.2443	6.2447	6.2448	6.2457	6.2496	6.4246
0.80000000	6.2485	6.2488	6.2490	6.2499	6.2539	6.4331
1.00000000	6.4253	6.4260	6.4262	6.4280	6.4360	7.0379

XMS = 0.25000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.60000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2479	6.2482	6.2483	6.2491	6.2526	6.4291
0.20000000	6.2483	6.2486	6.2487	6.2495	6.2530	6.4298
0.25000000	6.2484	6.2487	6.2488	6.2496	6.2531	6.4301
0.50000000	6.2494	6.2497	6.2498	6.2506	6.2541	6.4320
0.80000000	6.2537	6.2540	6.2541	6.2549	6.2585	6.4406
1.00000000	6.4397	6.4404	6.4406	6.4422	6.4494	7.0672

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2597	6.2600	6.2601	6.2606	6.2632	6.4577
0.20000000	6.2601	6.2604	6.2604	6.2610	6.2636	6.4585
0.25000000	6.2603	6.2605	6.2606	6.2612	6.2638	6.4587
0.50000000	6.2613	6.2616	6.2616	6.2622	6.2648	6.4608
0.80000000	6.2660	6.2662	6.2663	6.2669	6.2696	6.4699
1.00000000	6.4759	6.4764	6.4766	6.4778	6.4833	7.1885

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	6.2419	6.2423	6.2424	6.2433	6.2474	6.4218
0.20000000	6.2423	6.2426	6.2427	6.2436	6.2477	6.4225
0.25000000	6.2424	6.2427	6.2428	6.2438	6.2478	6.4227
0.50000000	6.2431	6.2437	6.2438	6.2447	6.2488	6.4246
0.80000000	6.2474	6.2477	6.2478	6.2488	6.2530	6.4329
1.00000000	6.4213	6.4220	6.4222	6.4240	6.4323	7.0329

XMS = 0.25000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2437	6.2440	6.2441	6.2450	6.2480	6.4240
0.20000000	6.2440	6.2444	6.2445	6.2454	6.2493	6.4247
0.25000000	6.2441	6.2445	6.2446	6.2455	6.2494	6.4249
0.50000000	6.2451	6.2454	6.2455	6.2464	6.2504	6.4258
0.80000000	6.2492	6.2495	6.2497	6.2506	6.2546	6.4351
1.00000000	6.4262	6.4269	6.4271	6.4289	6.4369	7.0415

XT1 = 0.20000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2487	6.2490	6.2491	6.2499	6.2534	6.4313
0.20000000	6.2491	6.2494	6.2495	6.2503	6.2538	6.4321
0.25000000	6.2492	6.2495	6.2496	6.2504	6.2539	6.4323
0.50000000	6.2502	6.2505	6.2506	6.2515	6.2549	6.4342
0.80000000	6.2544	6.2546	6.2549	6.2557	6.2593	6.4427
1.00000000	6.4407	6.4413	6.4415	6.4432	6.4504	7.0709

XT1 = 0.20000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2607	6.2609	6.2609	6.2615	6.2642	6.4602
0.20000000	6.2610	6.2613	6.2613	6.2619	6.2646	6.4609
0.25000000	6.2612	6.2614	6.2615	6.2621	6.2647	6.4612
0.50000000	6.2622	6.2624	6.2625	6.2631	6.2657	6.4632
0.80000000	6.2668	6.2670	6.2671	6.2677	6.2704	6.4722
1.00000000	6.4771	6.4775	6.4777	6.4789	6.4844	7.1929

XMS = 0.25000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2439	6.2443	6.2444	6.2453	6.2492	6.4247
0.20000000	6.2443	6.2446	6.2447	6.2456	6.2495	6.4254
0.25000000	6.2444	6.2447	6.2448	6.2457	6.2497	6.4256
0.50000000	6.2453	6.2457	6.2458	6.2467	6.2506	6.4275
0.80000000	6.2494	6.2498	6.2499	6.2508	6.2546	6.4357
1.00000000	6.4265	6.4272	6.4274	6.4292	6.4372	7.0426

XT1 = 0.25000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2490	6.2493	6.2494	6.2502	6.2537	6.4320
0.20000000	6.2494	6.2497	6.2498	6.2506	6.2541	6.4326
0.25000000	6.2495	6.2498	6.2499	6.2507	6.2542	6.4330
0.50000000	6.2504	6.2507	6.2508	6.2516	6.2552	6.4349
0.80000000	6.2547	6.2550	6.2551	6.2559	6.2595	6.4433
1.00000000	6.4410	6.4416	6.4418	6.4435	6.4507	7.0721

XT1 = 0.25000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	6.2609	6.2612	6.2612	6.2618	6.2645	6.4610
0.20000000	6.2613	6.2616	6.2616	6.2622	6.2648	6.4617
0.25000000	6.2615	6.2617	6.2618	6.2623	6.2650	6.4620
0.50000000	6.2625	6.2627	6.2628	6.2634	6.2660	6.4640
0.80000000	6.2671	6.2673	6.2674	6.2680	6.2707	6.4729
1.00000000	6.4774	6.4779	6.4780	6.4793	6.4848	7.1943

XMS = 0.25000000 XAR = 0.66666667 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	0.2508	0.2512	0.2513	0.2521	0.2556	0.4372
0.20000000	0.2512	0.2515	0.2516	0.2524	0.2560	0.4378
0.25000000	0.2513	0.2516	0.2517	0.2525	0.2561	0.4381
0.50000000	0.2522	0.2525	0.2526	0.2535	0.2570	0.4399
0.80000000	0.2503	0.2566	0.2567	0.2576	0.2612	0.4481
1.00000000	0.4434	0.4440	0.4442	0.4438	0.4331	7.0811

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	0.2630	0.2632	0.2633	0.2639	0.2665	0.4667
0.20000000	0.2634	0.2636	0.2637	0.2643	0.2669	0.4674
0.25000000	0.2635	0.2637	0.2638	0.2644	0.2671	0.4678
0.50000000	0.2645	0.2647	0.2648	0.2654	0.2681	0.4696
0.80000000	0.2669	0.2691	0.2692	0.2698	0.2725	0.4782
1.00000000	0.4801	0.4806	0.4807	0.4820	0.4875	7.2050

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	0.2689	0.2691	0.2692	0.2698	0.2726	0.4834
0.20000000	0.2692	0.2694	0.2695	0.2701	0.2729	0.4841
0.25000000	0.2693	0.2696	0.2696	0.2703	0.2730	0.4843
0.50000000	0.2702	0.2705	0.2705	0.2712	0.2739	0.4861
0.80000000	0.2742	0.2744	0.2745	0.2751	0.2779	0.4939
1.00000000	0.4892	0.4897	0.4899	0.4911	0.4967	7.2420

XMS = 0.25000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3805	9.3807	9.3807	9.3810	9.3823	9.5026
0.20000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5028
0.25000000	9.3807	9.3808	9.3808	9.3811	9.3824	9.5029
0.50000000	9.3810	9.3811	9.3811	9.3814	9.3827	9.5035
0.80000000	9.3823	9.3824	9.3825	9.3828	9.3841	9.5063
1.00000000	9.5034	9.5036	9.5037	9.5043	9.5070	9.9358

XT1 = 0.00000000 XT2 = 0.25000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3807	9.3808	9.3809	9.3812	9.3825	9.5027
0.20000000	9.3808	9.3809	9.3810	9.3813	9.3826	9.5029
0.25000000	9.3809	9.3810	9.3810	9.3813	9.3826	9.5030
0.50000000	9.3812	9.3813	9.3813	9.3816	9.3829	9.5036
0.80000000	9.3825	9.3826	9.3827	9.3830	9.3843	9.5064
1.00000000	9.5038	9.5041	9.5041	9.5047	9.5074	9.9362

XT1 = 0.00000000 XT2 = 0.50000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	9.3821	9.3822	9.3822	9.3825	9.3838	9.5034
0.20000000	9.3822	9.3823	9.3823	9.3826	9.3839	9.5036
0.25000000	9.3822	9.3823	9.3824	9.3827	9.3840	9.5043
0.50000000	9.3825	9.3826	9.3827	9.3830	9.3843	9.5070
0.80000000	9.3839	9.3840	9.3840	9.3843	9.3856	9.5070
1.00000000	9.5071	9.5073	9.5074	9.5080	9.5106	9.9393

XMS = 0.25000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3864	9.3865	9.3865	9.3868	9.3879	9.5058
0.20000000	9.3865	9.3866	9.3866	9.3869	9.3880	9.5060
0.25000000	9.3865	9.3866	9.3867	9.3869	9.3881	9.5061
0.50000000	9.3869	9.3870	9.3870	9.3872	9.3884	9.5067
0.80000000	9.3863	9.3884	9.3884	9.3886	9.3898	9.5095
1.00000000	9.5178	9.5180	9.5181	9.5186	9.5210	9.9507

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4001	9.4002	9.4002	9.4003	9.4011	9.5190
0.20000000	9.4002	9.4003	9.4003	9.4005	9.4012	9.5192
0.25000000	9.4003	9.4003	9.4004	9.4005	9.4013	9.5193
0.50000000	9.4006	9.4007	9.4007	9.4009	9.4016	9.5200
0.80000000	9.4022	9.4022	9.4023	9.4024	9.4032	9.5229
1.00000000	9.5546	9.5547	9.5548	9.5552	9.5569	10.0135

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3813	9.3814	9.3814	9.3817	9.3830	9.5041
0.20000000	9.3814	9.3815	9.3816	9.3819	9.3832	9.5043
0.25000000	9.3814	9.3816	9.3816	9.3819	9.3832	9.5044
0.50000000	9.3817	9.3819	9.3819	9.3822	9.3835	9.5050
0.80000000	9.3831	9.3832	9.3832	9.3835	9.3848	9.5077
1.00000000	9.5041	9.5043	9.5044	9.5050	9.5077	9.9375

XMS = 0.25000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3827	9.3828	9.3828	9.3831	9.3844	9.5047
0.20000000	9.3828	9.3829	9.3829	9.3832	9.3845	9.5050
0.25000000	9.3828	9.3829	9.3829	9.3832	9.3845	9.5050
0.50000000	9.3831	9.3832	9.3832	9.3835	9.3848	9.5056
0.80000000	9.3844	9.3845	9.3845	9.3849	9.3861	9.5084
1.00000000	9.5074	9.5076	9.5077	9.5083	9.5109	9.9406

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3870	9.3871	9.3871	9.3874	9.3885	9.5072
0.20000000	9.3871	9.3872	9.3872	9.3875	9.3886	9.5074
0.25000000	9.3871	9.3872	9.3873	9.3875	9.3887	9.5075
0.50000000	9.3875	9.3876	9.3876	9.3878	9.3890	9.5081
0.80000000	9.3888	9.3889	9.3890	9.3892	9.3904	9.5109
1.00000000	9.5181	9.5183	9.5184	9.5189	9.5213	9.9519

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4008	9.4008	9.4009	9.4010	9.4018	9.5205
0.20000000	9.4009	9.4010	9.4010	9.4012	9.4019	9.5207
0.25000000	9.4010	9.4010	9.4010	9.4012	9.4020	9.5208
0.50000000	9.4013	9.4014	9.4014	9.4016	9.4023	9.5214
0.80000000	9.4028	9.4029	9.4029	9.4031	9.4039	9.5243
1.00000000	9.5549	9.5551	9.5551	9.5555	9.5572	10.0150

XMS = 0.25000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3828	9.3830	9.3830	9.3833	9.3845	9.5052
0.20000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.5054
0.25000000	9.3830	9.3831	9.3831	9.3834	9.3847	9.5055
0.50000000	9.3833	9.3834	9.3834	9.3837	9.3850	9.5061
0.80000000	9.3846	9.3847	9.3848	9.3850	9.3863	9.5088
1.00000000	9.5075	9.5077	9.5078	9.5084	9.5110	9.9410

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3872	9.3873	9.3873	9.3876	9.3887	9.5076
0.20000000	9.3873	9.3874	9.3874	9.3877	9.3888	9.5079
0.25000000	9.3873	9.3874	9.3875	9.3877	9.3889	9.5080
0.50000000	9.3876	9.3877	9.3878	9.3880	9.3892	9.5086
0.80000000	9.3890	9.3891	9.3892	9.3894	9.3906	9.5113
1.00000000	9.5182	9.5184	9.5185	9.5190	9.5214	9.9524

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4010	9.4011	9.4011	9.4013	9.4020	9.5210
0.20000000	9.4011	9.4012	9.4012	9.4014	9.4021	9.5212
0.25000000	9.4012	9.4012	9.4013	9.4014	9.4022	9.5213
0.50000000	9.4015	9.4016	9.4016	9.4018	9.4025	9.5219
0.80000000	9.4031	9.4031	9.4031	9.4033	9.4041	9.5248
1.00000000	9.5551	9.5552	9.5552	9.5556	9.5573	10.0155

XMS = 0.25000000 XAR = 0.75000000 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.3886	9.3887	9.3887	9.3890	9.3902	9.5110
0.20000000	9.3887	9.3888	9.3889	9.3891	9.3903	9.5112
0.25000000	9.3888	9.3889	9.3889	9.3892	9.3903	9.5113
0.50000000	9.3891	9.3892	9.3892	9.3895	9.3906	9.5119
0.80000000	9.3904	9.3905	9.3905	9.3908	9.3919	9.5145
1.00000000	9.5189	9.5191	9.5192	9.5197	9.5222	9.9556

XT1 = 0.50000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4026	9.4027	9.4027	9.4029	9.4036	9.5245
0.20000000	9.4028	9.4028	9.4028	9.4030	9.4038	9.5247
0.25000000	9.4028	9.4029	9.4029	9.4031	9.4038	9.5248
0.50000000	9.4031	9.4032	9.4032	9.4034	9.4041	9.5254
0.80000000	9.4046	9.4047	9.4047	9.4049	9.4056	9.5282
1.00000000	9.5559	9.5561	9.5561	9.5565	9.5582	10.0192

XT1 = 0.80000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	9.4079	9.4079	9.4079	9.4081	9.4089	9.5361
0.20000000	9.4080	9.4080	9.4081	9.4082	9.4090	9.5363
0.25000000	9.4080	9.4081	9.4081	9.4083	9.4091	9.5364
0.50000000	9.4083	9.4084	9.4084	9.4086	9.4094	9.5369
0.80000000	9.4096	9.4097	9.4097	9.4099	9.4107	9.5395
1.00000000	9.5591	9.5592	9.5593	9.5596	9.5614	10.0330

XMS = 0.25000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.20000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5205	12.5205	12.5205	12.5207	12.5213	12.6128
0.20000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6129
0.25000000	12.5205	12.5206	12.5206	12.5207	12.5213	12.6130
0.50000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6132
0.80000000	12.5213	12.5213	12.5213	12.5215	12.5221	12.6145
1.00000000	12.6136	12.6137	12.6138	12.6140	12.6153	12.9537

XT1 = 0.00000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5206	12.5207	12.5207	12.5208	12.5214	12.6129
0.20000000	12.5207	12.5207	12.5207	12.5209	12.5215	12.6130
0.25000000	12.5207	12.5207	12.5208	12.5209	12.5215	12.6130
0.50000000	12.5208	12.5209	12.5209	12.5210	12.5216	12.6133
0.80000000	12.5214	12.5215	12.5215	12.5216	12.5222	12.6145
1.00000000	12.6140	12.6141	12.6141	12.6144	12.6156	12.9539

XT1 = 0.00000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5217	12.5218	12.5218	12.5219	12.5225	12.6131
0.20000000	12.5218	12.5218	12.5219	12.5220	12.5226	12.6132
0.25000000	12.5218	12.5219	12.5219	12.5220	12.5227	12.6133
0.50000000	12.5219	12.5220	12.5220	12.5221	12.5227	12.6135
0.80000000	12.5226	12.5226	12.5227	12.5227	12.5233	12.6146
1.00000000	12.6165	12.6166	12.6167	12.6169	12.6181	12.9553

XMS = 0.25000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.00000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5255	12.5256	12.5256	12.5257	12.5262	12.6142
0.20000000	12.5256	12.5256	12.5256	12.5258	12.5263	12.6143
0.25000000	12.5256	12.5256	12.5257	12.5258	12.5263	12.6143
0.50000000	12.5257	12.5258	12.5258	12.5259	12.5264	12.6146
0.80000000	12.5264	12.5264	12.5264	12.5265	12.5271	12.6159
1.00000000	12.6255	12.6256	12.6256	12.6258	12.6269	12.9607

XT1 = 0.00000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5403	12.5403	12.5404	12.5404	12.5407	12.6215
0.20000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6216
0.25000000	12.5404	12.5404	12.5404	12.5405	12.5408	12.6216
0.50000000	12.5406	12.5406	12.5406	12.5407	12.5410	12.6219
0.80000000	12.5413	12.5413	12.5413	12.5414	12.5417	12.6232
1.00000000	12.6641	12.6641	12.6642	12.6643	12.6651	12.9984

XT1 = 0.20000000 XT2 = 0.25000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5211	12.5211	12.5212	12.5213	12.5219	12.6139
0.20000000	12.5211	12.5212	12.5212	12.5213	12.5219	12.6140
0.25000000	12.5212	12.5212	12.5212	12.5214	12.5219	12.6140
0.50000000	12.5213	12.5213	12.5213	12.5215	12.5221	12.6143
0.80000000	12.5219	12.5219	12.5219	12.5221	12.5227	12.6156
1.00000000	12.6141	12.6142	12.6142	12.6145	12.6157	12.9544

XMS = 0.25000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.20000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5222	12.5223	12.5223	12.5224	12.5230	12.6142
0.20000000	12.5223	12.5223	12.5223	12.5225	12.5230	12.6143
0.25000000	12.5223	12.5223	12.5223	12.5225	12.5230	12.6143
0.50000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6146
0.80000000	12.5230	12.5231	12.5231	12.5232	12.5236	12.6158
1.00000000	12.6166	12.6167	12.6168	12.6170	12.6183	12.9558

XT1 = 0.20000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5260	12.5261	12.5261	12.5262	12.5267	12.6153
0.20000000	12.5261	12.5261	12.5261	12.5262	12.5268	12.6154
0.25000000	12.5261	12.5261	12.5261	12.5263	12.5269	12.6157
0.50000000	12.5262	12.5263	12.5263	12.5264	12.5275	12.6169
0.80000000	12.5269	12.5269	12.5269	12.5270	12.6271	12.9613
1.00000000	12.6256	12.6257	12.6257	12.6260		

XT1 = 0.20000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5409	12.5409	12.5409	12.5410	12.5413	12.6226
0.20000000	12.5410	12.5410	12.5410	12.5411	12.5414	12.6227
0.25000000	12.5410	12.5410	12.5410	12.5412	12.5415	12.6230
0.50000000	12.5411	12.5412	12.5412	12.5420	12.5423	12.6243
0.80000000	12.5419	12.5419	12.5419	12.6645	12.6652	12.9991
1.00000000	12.6642	12.6643	12.6643			

XMS = 0.25000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.25000000 XT2 = 0.50000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5224	12.5224	12.5224	12.5226	12.5231	12.6145
0.20000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6146
0.25000000	12.5224	12.5225	12.5225	12.5226	12.5232	12.6147
0.50000000	12.5226	12.5226	12.5226	12.5228	12.5233	12.6149
0.80000000	12.5232	12.5232	12.5232	12.5234	12.5239	12.6162
1.00000000	12.6167	12.6168	12.6168	12.6171	12.6183	12.9560

XT1 = 0.25000000 XT2 = 0.80000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5262	12.5262	12.5262	12.5264	12.5269	12.6156
0.20000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6157
0.25000000	12.5262	12.5263	12.5263	12.5264	12.5269	12.6157
0.50000000	12.5264	12.5264	12.5264	12.5266	12.5271	12.6160
0.80000000	12.5270	12.5271	12.5271	12.5272	12.5277	12.6173
1.00000000	12.6256	12.6257	12.6257	12.6260	12.6271	12.9615

XT1 = 0.25000000 XT2 = 1.00000000

X52	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X51						
0.00000000	12.5411	12.5411	12.5411	12.5412	12.5415	12.6230
0.20000000	12.5411	12.5412	12.5412	12.5412	12.5415	12.6231
0.25000000	12.5412	12.5412	12.5412	12.5413	12.5416	12.6231
0.50000000	12.5413	12.5414	12.5414	12.5414	12.5417	12.6234
0.80000000	12.5421	12.5421	12.5421	12.5422	12.5424	12.6247
1.00000000	12.6643	12.6643	12.6644	12.6645	12.6653	12.9993

AMS = 0.25000000 XAR = 0.80000000 PHI = 1.000

XT1 = 0.50000000 XT2 = 0.80000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5274	12.5274	12.5274	12.5273	12.5281	12.6182
0.20000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6183
0.25000000	12.5274	12.5275	12.5275	12.5276	12.5281	12.6183
0.50000000	12.5276	12.5276	12.5276	12.5277	12.5283	12.6186
0.80000000	12.5282	12.5282	12.5282	12.5283	12.5289	12.6198
1.00000000	12.6259	12.6260	12.6261	12.6263	12.6274	12.9629

XT1 = 0.50000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5425	12.5425	12.5425	12.5426	12.5429	12.6257
0.20000000	12.5425	12.5426	12.5426	12.5426	12.5429	12.6258
0.25000000	12.5426	12.5426	12.5426	12.5427	12.5430	12.6258
0.50000000	12.5427	12.5427	12.5428	12.5428	12.5431	12.6261
0.80000000	12.5434	12.5435	12.5435	12.5435	12.5438	12.6273
1.00000000	12.6647	12.6647	12.6647	12.6649	12.6656	13.0009

XT1 = 0.80000000 XT2 = 1.00000000

X32	0.00000000	0.20000000	0.25000000	0.50000000	0.80000000	1.00000000
X31						
0.00000000	12.5473	12.5473	12.5473	12.5474	12.5477	12.6351
0.20000000	12.5473	12.5473	12.5474	12.5474	12.5477	12.6352
0.25000000	12.5473	12.5474	12.5474	12.5474	12.5478	12.6352
0.50000000	12.5475	12.5475	12.5475	12.5476	12.5479	12.6355
0.80000000	12.5481	12.5481	12.5481	12.5482	12.5485	12.6366
1.00000000	12.6661	12.6662	12.6662	12.6663	12.6671	13.0073

APPENDIX B

THE EIGENVALUES  $k^2$  FOR SQUARE PLATE WITH TWO OPPOSITE SIDE SIMPLY  
SUPPORTED

MNEMONIC VARIABLE

ORIGINAL VARIABLE

PHI

$\Psi$

PSI

$\mu$

XS

$\zeta_K^*$

XT

$\zeta_{KT}^*$

XM

$\zeta_{Km}^*$

M

m

N

n

PHI = 1.00000000 PSI = 0.50000000

XS = 0.0 XI = 0.0 XM = 0.0

N	M	1	2	3	4	5
1		9.6314	16.1348	36.7257	75.2834	133.7046
2		38.9450	46.7382	70.7401	111.0254	169.5377
3		87.9867	96.0405	122.0400	164.6959	224.7585
4		156.7525	164.7866	191.8674	236.2621	298.1026
5		245.2417	253.1469	280.8849	326.4259	389.7274

PHI = 1.00000000      PSI = 0.50000000

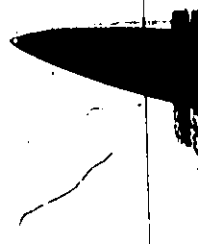
XS = 0.0      XT = 0.60000000      XM = 0.0

M      1      2      3      4      5

N	1	2	3	4	5
1	9.6997	17.0161	39.3045	79.1652	138.2900
2	39.0428	47.1795	72.0027	113.3953	172.8716
3	88.1006	96.3797	122.7892	166.1488	227.0235
4	156.8787	165.0940	192.4014	237.2361	299.6659
5	245.3786	253.4445	281.3150	327.1444	390.8620

C

>



PHI = 1.00000000

PHI = 0.50000000

XS = 0.0

XT = 0.900000000

XM = 0.0

5

4

3

2

1

M

N

1	9.7998	18.5144	44.3911	88.1002	150.3669
2	39.2513	48.1749	75.0393	119.5143	182.1817
3	88.3943	97.2841	124.8618	170.3096	233.7968
4	157.2436	166.0074	194.0331	240.2673	304.6487
5	245.8062	254.3975	282.7286	329.5303	394.6813

5

PHI = 1.00000000 PSI = 0.50000000

XS = 0.0 XT = 1.00000000 XM = 0.0

M 1 2 3 4 5

N	1	2	3	4	5
1	9.8696	19.7392	49.3480	98.6960	167.7833
2	39.4784	49.3480	78.9568	128.3049	197.3921
3	88.8264	98.6960	128.3049	177.6529	246.7401
4	157.9137	167.7833	197.3921	246.7401	315.8274
5	246.7401	256.6097	286.2185	335.5666	404.6538



12

8

PHI = 1.00000000

PSI = 0.50000000

XS = 0.60000000

XI = 0.0

XM = 0.0

M 1 2 3 4 5

N

1	9.8178	16.4049	36.8751	75.3619	133.7496
2	38.9977	46.8311	70.8104	111.0756	169.5725
3	88.0119	96.0863	122.0781	164.7274	224.7834
4	156.7675	164.8139	191.8908	236.2827	298.1204
5	245.2519	253.1651	280.9005	326.4402	389.7404

13

PHI = 1.00000000

PSI = 0.50000000

XS = 0.6000000000 XI = 0.6000000000 XM = 0.0

M 1 2 3 4 5

N

1	9.8754	17.2535	39.4329	79.2355	138.3318
2	39.0926	47.2666	72.0678	113.4419	172.9042
3	88.1246	96.4234	122.8256	166.1787	227.0472
4	156.8931	165.1203	192.4239	237.2560	299.6830
5	245.3884	253.4621	281.3301	327.1583	390.8745

9



PHI = 1.00000000 PSI = 0.50000000

XS = 0.6000000000 XI = 0.9000000000 XM = 0.0

5

4

3

2

1

M

N

1	9.9604	18.7018	44.4825	88.1515	150.3992
2	39.2953	48.2495	75.0921	119.5510	182.2078
3	88.4152	97.3225	124.8932	170.3347	233.8165
4	157.2561	166.0307	194.0532	240.2847	304.6634
5	245.8148	254.4133	282.7424	329.5428	394.6924

PHI = 1.00000000 PSI = 0.50000000

XS = 0.6000000000 XI = 1.0000000000 XM = 0.0

N	M	1	2	3	4	5
1		10.0200	19.8905	49.4088	98.7265	167.8012
2		39.5163	49.4087	78.9948	128.3283	197.4073
3		88.8433	98.7264	128.3283	177.6698	246.7523
4		157.9232	167.8012	197.4073	246.7523	315.8368
5		246.7462	256.6214	286.2290	335.5755	404.6612

PHI = 1.00000000

PHI = 0.50000000

XS = 0.900000000

XT = 0.0

XM = 0.0

1

2

3

4

5

N

1	10.6541	17.6749	37.6216	75.7562	133.9751
2	39.2548	47.2895	71.1619	111.3272	169.7465
3	88.1363	96.3141	122.2689	164.8851	224.9084
4	156.8422	164.9500	192.0074	236.3863	298.2095
5	245.3024	253.2561	280.9784	326.5119	389.8051

PHI = 1.00000000      PSI = 0.50000000

X5 = 0.9000000000    X1 = 0.6000000000    XM = 0.0

M            1            2            3            4            5

N

1	10.6749	18.3798	40.0745	79.5883	138.5414
2	39.3364	47.6969	72.3933	113.6747	173.0674
3	88.2432	96.6408	123.0073	166.3282	227.1659
4	156.9645	165.2512	192.5366	237.3556	299.7684
5	245.4370	253.5501	281.4060	327.2278	390.9371

PHI = 1.00000000      PSI = 0.50000000

XS = 0.90000000    XI = 0.90000000    XM = 0.0

M            1            2            3            4            5

N

1	10.7062	19.6038	44.9395	88.4082	150.5606
2	39.5114	48.6185	75.3563	119.7350	182.3382
3	88.5192	97.5131	125.0501	170.4602	233.9154
4	157.3186	166.1468	194.1538	240.3718	304.7372
5	245.8573	254.4919	282.8115	329.6053	394.7480

PHI = 1.00000000

PSI = 0.50000000

XS = 0.900000000 KI = 1.000000000 XM = 0.0

5

4

3

2

1

M

N

1	10.7287	20.6269	49.7135	98.8788	167.8907
2	39.7037	49.7103	79.1850	128.4453	197.4834
3	88.9272	98.8779	128.4452	177.7543	246.8131
4	157.9705	167.8904	197.4833	246.8131	315.8844
5	246.7765	256.6798	286.2814	335.6202	404.6983

PHI = 1.000000000 PSI = 0.500000000

XS = 1.000000000 XI = 0.0 XM = 0.0

N	M	1	2	3	4	5
1		19.7392	49.3480	98.6960	167.7833	256.6097
2		49.3480	78.9568	128.3049	197.3921	286.2185
3		98.6960	128.3049	177.6529	246.7401	335.5666
4		167.7833	197.3921	246.7401	315.8274	404.6538
5		256.6097	286.2185	335.5666	404.6538	493.4802

PHI = 1.00000000 PSI = 0.50000000

XS = 1.00000000 XI = 0.60000000 XM = 0.0

N	M	1	2	3	4	5
1		21.0255	51.4910	101.1865	170.4384	259.3555
2		49.8886	80.3279	130.2375	199.6572	288.6845
3		98.9727	129.1628	179.0615	248.5608	337.6752
4		167.9485	197.9564	247.7624	317.2567	406.4075
5		256.7189	286.6111	336.3231	405.7744	494.9226

PHI = 1.00000000

PSI = 0.50000000

XS = 1.0000000000 XT = 0.9000000000 XM = 0.0

3

5

4

3

2

1

N

1	24.2703	57.7297	109.4034	179.9706	269.8027
2	51.5142	84.6999	136.8762	207.9457	298.1595
3	99.8900	132.1038	184.1129	255.3869	345.8909
4	168.5338	199.9980	251.5702	322.7503	413.3497
5	257.1248	288.0914	339.2329	410.1822	500.7252



PHI = 1.000000000 PSI = 0.500000000

XS = 1.000000000 XI = 1.000000000 XM = 0.0

5

4

3

2

1

N

1	28.9509	69.3270	129.0956	208.3917	307.3162
2	54.7431	94.5853	154.7757	234.5855	333.9532
3	102.2162	140.2045	199.8106	279.6513	379.2685
4	170.3465	206.6971	265.1964	344.5379	444.0366
5	258.6136	293.7557	351.1137	429.6790	528.7539

APPENDIX C

COMPUTER PROGRAM LISTINGS FOR VIBRATION OF TWO SPAN PLATES

```
0001      IMPLICIT REAL*8(A-H,O-Z)
0002      DIMENSION A(8,8),EV(6,6,6),AXS(6),AR(6)
0003      COMMON XNU,AL1,AL2,BL,SK1,SK2,SK3,TSK1,TSK2,ALPH
0004      XNU=.3D0
0005      READ(5,999) (AXS(I),I=1,6)
0006      READ(5,999) (AR(J),J=1,6)
0007      999  FORMAT(6D10.9)
0008      ALT=1.0D0
0009      DO 1050 MU=1,6
0010      XVI=FLOAT(MU-1)*.1D0
0011      AL1=XVI*ALT
0012      AL2=(1.0D0-XVI)*ALT
0013      DO 1111 IXM=1,6
0014      SK2=AXS(IXM)/(1.0D0-AXS(IXM))
0015      DO 1100 LP=1,6
0016      PSI=AR(LP)/(1.0D0-AR(LP))
0017      BL=ALT/PSI
0018      IF(PSI.GT.50) GO TO 100
0019      ALPH=DARCOS(-1.0D0)/BL
0020      GO TO 106
0021      100  ALPH=0.0D0
0022      106  DO 111 K=1,6
0023      SK1=AXS(K)/(1.0D0-AXS(K))
0024      SK3=SK1
0025      DO 111 L=1,6
0026      TSK1=AXS(L)/(1.0D0-AXS(L))
0027      TSK2=TSK1
0028      X1=2.0D0
0029      DELX=.25
0030      CALL MATRIX(X1,A)
0031      FX1=DET(A)
0032      IF(DABS(FX1).LE.1.0D-10) GO TO 60
0033      4    X2=X1+DELX
0034      CALL MATRIX(X2,A)
0035      FX2=DET(A)
0036      IF(DABS(FX2).LE.1.0D-10) GO TO 11
0037      IF((DSIGN(1.0D0,FX1)*DSIGN(1.0D0,FX2)).LT.0.0D0) GO TO 7
0038      X1=X2
0039      FX1=FX2
0040      GO TO 4
0041      60  RT=X1
0042      GO TO 12
0043      7    DELX=DELX/2.
0044      X1=X2-DELX
0045      CALL MATRIX(X1,A)
0046      FX1=DET(A)
0047      IF(DABS(FX1).LE.1.0D-10) GO TO 60
0048      IF((DSIGN(1.0D0,FX1)*DSIGN(1.0D0,FX2)).LT.0.0D0) GO TO 9
0049      X2=X1
0050      FX2=FX1
0051      9    IF(DELX.GT.1.0D-6) GO TO 7
0052      11  RT=X2
0053      12  EV(LP,K,L)=RT
0054      111  CONTINUE
0055      1100 CONTINUE
0056      K1=1
0057      K2=3
0058      DO 4000 J=1,2
```

059 WRITE(6,2002)AXS(IXM),XVI  
060 DO 3000 M=K1,K2  
061 WRITE(6,2001)AR(M)  
062 WRITE(6,2000)(AXS(K),K=1,6),(AXS(K),(EV(M,K,\_),L=1,6),K=1,6)  
063 3000 CONTINUE  
064 K1=4  
065 K2=6  
066 4000 CONTINUE  
067 2000 FORMAT('-.',12X,'XT',10X,5(F10.8,8X)/'-.',10X,'XS'//6(' ',6X,F10.8,  
\*6X,6(F10.4,8X)/))  
068 2001 FORMAT('-.',50X,6HXAR = ,F10.8/)  
069 2002 FORMAT('1',42X,'XMS = ',F10.8,10X,'XVI = ',F10.8/)  
070 1111 CONTINUE  
071 1050 CONTINUE  
072 WRITE(3,1000)  
073 1000 FORMAT('1')  
074 STOP  
075 END

```
0001      SUBROUTINE MATRIX(X,A)
0002      IMPLICIT REAL*8(A-H,O-Z)
0003      DIMENSION A(8,8)
0004      COMMON XNU,AL1,AL2,BL,SK1,SK2,SK3,TSK1,TSK2,ALPH
0005      DJ 1 I=1,8
0006      DJ 1 J=1,8
0007      1 A(I,J)=0.000
0008      ALPH2=ALPH**2
0009      IF(X.GE.ALPH) GO TO 2
0010      XLM1=DSQRT(ALPH2-X**2)
0011      GO TO 3
0012      2 XLM1=DSQRT(X**2-ALPH2)
0013      3 XLM2=DSQRT(X**2+ALPH2)
0014      XLA11=XLM1*AL1
0015      XLA21=XLM2*AL1
0016      XLA12=XLM1*AL2
0017      XLA22=XLM2*AL2
0018      XLM12=XLM1**2
0019      XLM22=XLM2**2
0020      XLM13=XLM1**3
0021      XLM23=XLM2**3
0022      IF(X.GE.ALPH) GO TO 4
0023      SINH11=DSINH(XLA11)
0024      SINH12=DSINH(XLA12)
0025      COSH11=DCOSH(XLA11)
0026      COSH12=DCOSH(XLA12)
0027      GO TO 5
0028      4 SIN11=DSIN(XLA11)
0029      SIN12=DSIN(XLA12)
0030      COS11=DCOS(XLA11)
0031      COS12=DCOS(XLA12)
0032      5 SINH21=DSINH(XLA21)
0033      COSH21=DCOSH(XLA21)
0034      SINH22=DSINH(XLA22)
0035      COSH22=DCOSH(XLA22)
0036      XNUAL2=XNU*ALPH2
0037      X2NAL2=(2-XNU)*ALPH2*XLM2
0038      X2NAL1=(2-XNU)*ALPH2*XLM1
0039      IF(X.GE.ALPH) GO TO 6
0040      C      A11=XLM13-X2NAL1
0041      A22=XLM12-XNUAL2
0042      A(1,1)=A11
0043      A(2,2)=A22
0044      A(3,1)=A22*SINH11
0045      A(3,2)=A22*COSH11
0046      A(3,5)=-A22*SINH12
0047      A(3,6)=-A22*COSH12
0048      A(4,1)=XLM1*COSH11
0049      A(4,2)=XLM1*SINH11
0050      A(4,5)=XLM1*COSH12
0051      A(4,6)=XLM1*SINH12
0052      A(5,1)=SINH11
0053      A(5,2)=COSH11
0054      A(5,5)=-SINH12
0055      A(5,6)=-COSH12
0056      A(6,1)=A11*COSH11+SK2*SINH11
0057      A(6,2)=A11*SINH11+SK2*COSH11
```

```
0058      A(6,5)=A11*COSH12
0059      A(6,6)=A11*SINH12
0060      A(7,5)=A11
0061      A(8,6)=A22
0062      GO TO 7

C
0063      6 A11=- (XLM13+X2NAL1)
0064      A22=- (XLM12+XNUAL2)
0065      A(1,1)=A11
0066      A(2,2)=A22
0067      A(3,1)=A22*SIN11
0068      A(3,2)=A22*COS11
0069      A(3,5)=-A22*SIN12
0070      A(3,6)=-A22*COS12
0071      A(4,1)=XLM1*COS11
0072      A(4,2)=-XLM1*SIN11
0073      A(4,5)=XLM1*COS12
0074      A(4,6)=-XLM1*SIN12
0075      A(5,1)=SIN11
0076      A(5,2)=COS11
0077      A(5,5)=-SIN12
0078      A(5,6)=-COS12
0079      A(6,1)=A11*COS11+SK2*SIN11
0080      A(6,2)=-A11*SIN11+SK2*COS11
0081      A(6,5)=A11*COS12
0082      A(6,6)=-A11*SIN12
0083      A(7,5)=A11
0084      A(8,6)=A22

C
0085      7 A(1,2)=SK1
0086      A13=XLM23-X2NAL2
0087      A(1,3)=A13
0088      A(1,4)=SK1
0089      A(2,1)=- (TSK1*XLM1)
0090      A(2,3)=- (TSK1*XLM2)
0091      A24=XLM22-XNUAL2
0092      A(2,4)=A24
0093      A(3,3)=A24*SINH21
0094      A(3,4)=A24*COSH21
0095      A(3,7)=-A24*SINH22
0096      A(3,8)=-A24*COSH22
0097      A(4,3)=XLM2*COSH21
0098      A(4,4)=XLM2*SINH21
0099      A(4,7)=XLM2*COSH22
0100      A(4,8)=XLM2*SINH22
0101      A(5,3)=SINH21
0102      A(5,4)=COSH21
0103      A(5,7)=-SINH22
0104      A(5,8)=-COSH22
0105      A(6,3)=A13*COSH21+SK2*SINH21
0106      A(6,4)=A13*SINH21+SK2*COSH21
0107      A(6,7)=A13*COSH22
0108      A(6,8)=A13*SINH22
0109      A(7,6)=SK3
0110      A(7,7)=A13
0111      A(7,8)=SK3
0112      A(8,5)=- (TSK2*XLM1)
0113      A(8,7)=- (TSK2*XLM2)
```

FORTRAN IV G LEVEL 21

MATRIX

DATE = 74323

0114  
0115  
0116

A(8,8)=A24  
RETURN  
END

```

0001      DJUBLE PRECISION FUNCTION DET(A)
0002      IMPLICIT REAL*8(A-H,O-Z)
0003      DIMENSION A(8,8),IPVOT(8),PIVOT(8),INDEX(8,2)
0004      EQUIVALENCE (IROW, JROW), (ICOL, JCOL).

C
0005      N = 8
0006      DET = 1.0
0007      DO 1 J = 1, N
0008      IPVOT(J) = 0.0
0009      1 CONTINUE
0010      DO 9 I = 1, N
0011      T = 0.0
0012      DO 4 J = 1, N
0013      IF (IPVOT(J) .EQ. 1) GO TO 4
0014      DO 3 K = 1, N
0015      IF (IPVOT(K) - 1) 2, 3, 10
0016      2 IF (DABS(T) .GE. DABS(A(J, K))) GO TO 3
0017      IROW = J
0018      ICOL = K
0019      T = A(J, K)
0020      3 CONTINUE
0021      4 CONTINUE
0022      IPVOT(ICOL) = IPVOT(ICOL) + 1
0023      IF (IROW .EQ. ICOL) GO TO 6
0024      DET = -DET
0025      DO 5 L = 1, N
0026      T = A(IROW, L)
0027      A(IROW, L) = A(ICOL, L)
0028      A(ICOL, L) = T
0029      5 CONTINUE
0030      6 INDEX(I, 1) = IROW
0031      INDEX(I, 2) = ICOL
0032      PIVOT(I) = A(ICOL, ICOL)
0033      DET = DET * PIVOT(I)
0034      A(ICOL, ICOL) = 1.0
0035      DO 7 L = 1, N
0036      A(ICOL, L) = A(ICOL, L)/PIVOT(I)
0037      7 CONTINUE
0038      DO 9 LI = 1, N
0039      IF (LI .EQ. ICOL) GO TO 9
0040      T = A(LI, ICOL)
0041      A(LI, ICOL) = 0.0
0042      DO 8 L = 1, N
0043      A(LI, L) = A(LI, L) - A(ICOL, L) * T
0044      8 CONTINUE
0045      9 CONTINUE

C
0046      10 RETURN
0047      END

```