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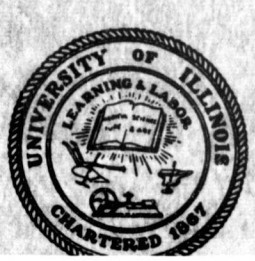

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SMALL DEFLECTION OF A CLASS OF CLAMPED THIN PLATES USING COLLOCATION

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Washington, D.C.

DEPARTMENT OF THEORETICAL AND APPLIED MECHANICS
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16. Abstract

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SUMMARY

The small deflection behavior is presented for clamped flat plates having a boundary defined by the equation $\left|\frac{x}{a}\right|^{\alpha} + \left|\frac{y}{b}\right|^{\beta} = 1$ where a, b, α and β as positive constants not necessarily integers, with $1 < \frac{b}{a} < 2$ and $1.6 < \alpha, \beta < 10$. The ratios of deflections to plate thickness are presented for uniform transverse loads as well as for uniform plus linearly varying transverse load. Deflections are presented at angular increments of 5 degrees and at radial increments of 0.1 of the radius.

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INTRODUCTION

1. Objective of General Project and the Relation of Current Report

The major objective of this project was the optimization of a class of two-dimensional and three-dimensional structures. The effort has been directed to the application of existing analytical techniques to the response of structural members having a range of shapes. The governing equations for these shapes were

$$\left|\frac{x}{a}\right|^{\alpha} + \left|\frac{y}{b}\right|^{\beta} = 1 \tag{1}$$

$$\left|\frac{x}{a}\right|^{\alpha} + \left|\frac{y}{b}\right|^{\beta} + \left|\frac{z}{c}\right|^{\gamma} = 1 \tag{2}$$

where a, b, c, α, β and γ are positive constants which need not be integers. Three-dimensional shapes result from revolving the line element defined by (1) about either the x-axis or the y-axis.

More general shapes result from the use of (2), while cross-sections of (2) are described by (1). Thus, plates defined by equations in the form of (1) may be used as bulk heads for structures defined by (2).

Because of the wide range of shapes which may be generated by (1) and by (2), the applications are not limited to the subjects of the current reports.

For example, the mapping reported in [6] along with an application similar to that reported in [7], could be used to determine the torsional behavior of cylindrical shafts having cross-sections defined by (1). Many other possibilities exist for structural optimization using these equations directly or as approximations to other shapes. In many cases a least square approximation may be used to achieve the parameters of (1) which best represent another function.

Earlier reports prepared under this grant [1,2,3,4,6,7]*, along with [5,8,9], treat various aspects of the application of (1) and (2) to structural members. A companion report [10], being prepared under this grant, determines the large deflection behavior for the clamped plate using the Rayleigh-Ritz method. The current report uses the collocation method, [11].

The author decided, at the inception of the project to calculate the small deflection behavior, for the clamped thin plates, by three distinct methods.

This decision was made to insure the accuracy of the results and to permit a comparison of the methods for the large range of shapes. In the process, minor errors in all three programs were detected which might have gone unnoticed had not the alternate solutions been available.

The three methods were particularly useful where deflections for limiting shapes, such as those near the diamond shape were involved.

When two different methods resulted in the same solution, the error was assumed to exist in the third method. Ultimately, all three methods achieved the same solution and thus were assumed to be correct.

The above procedure was necessary because of the large range of shapes for which comparison results did not exist in the literature. For the circle, the ellipse, the square, the rectangle and the diamond shape, adequate results existed in the literature. For the intermediate range of shapes, analytical and experimental results were not available.

2. Purpose of Report

This report is directed to the solution of the small deflection behavior

---

*Numbers in brackets refer to the references.

of thin flat plates clamped at the outer boundary and loaded with uniform transverse loads or with linearly varying transverse loads or a combination of uniform and linearly varying loads. Since small deflection theory was used, superposition was applicable and the combined load solution could be obtained by adding the uniform and the linear load solutions.

3. Acknowledgement

This project was sponsored by the National Aeronautics and Space Administration, Office of Advanced Research and Technology, Applied Mathematics Branch. At the time of its initiation, Dr. Raymond H. Wilson was chief.

More recently the project was sponsored by the contracts office of the George C. Marshall Space Flight Center, Alabama. The last funds were awarded in June, 1972. These funds were supplemented by grants of $300.00 October 1970 and $200.00 May 1971 from Chicago Bridge and Iron Company, Plainfield, Illinois, as well as $500.00 in September 1975 from Caterpillar Tractor Company, Peoria, Illinois.

The University of Illinois Research Board made a number of contributions of funds for digital computer use during the past four years. These funds made it possible to generate the final print out for this report as well as for the report for the large deflection solution which uses the Rayleigh-Ritz method.

This investigation was part of the research of the Engineering Experiment Station of which Ross J. Martin is director.

The author wishes to thank Dr. Benedict C. Sun, as well as Messrs. Gerald R. Boyer, Thomas J. Freund, and Walter E. Lohmann for assistance with various phases of this project.

THEORY

The transverse deflection, W, of thin camped plates Fig. 1 of constant flexural rigidity, D, subjected to transverse load intensity, q, is governed by the differential equation

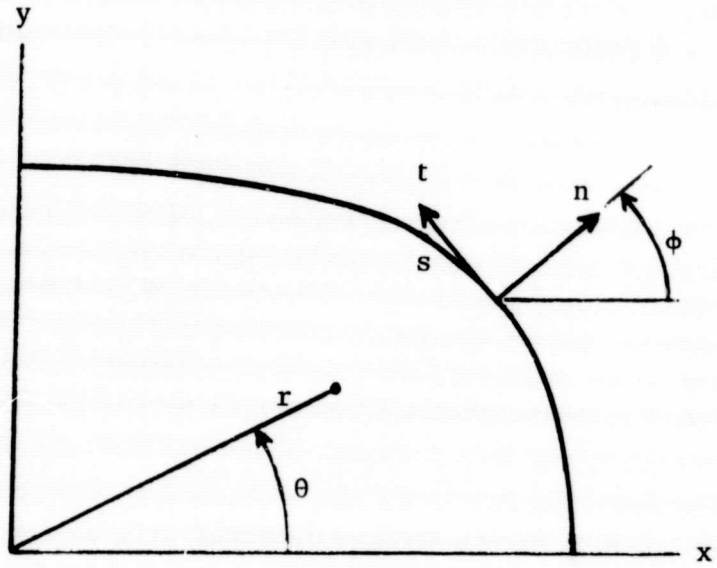

Fig. 1 Coordinate Geometry

$$\nabla^4 W(r,\theta) = q(r,\theta)/D \tag{3}$$

where polar coordinates, r and θ, are used to define the location of the deflection point as well as the load intensity.

The complementary solution to (3) is given by the trigonometric series, see Conway [11],

$$W_c = R_o + \sum_{m=1}^{\infty} R_m \cos m\theta + \sum_{m=1}^{\infty} R'_m \sin m\theta \tag{4}$$

where

$$\begin{aligned} m = 0,\ R_o &= A_o + B_o r^2 + C_o \log r + D_o r^2 \log r \\ m = 1,\ R_1 &= A_1 r + B_1 r^3 + C_1 r^{-1} + D_1 r \log r \\ m > 1,\ R_m &= A_m r^m + B_m r^{-m} + C_m r^{m+2} + D_m r^{-m+2} \end{aligned} \tag{5}$$

Equation (1) may be expressed in polar coordinates as

$$F_{\alpha\beta}(r,\theta) = \left|\frac{r\cos\theta}{a}\right|^{\alpha} + \left|\frac{r\sin\theta}{b}\right|^{\beta} - 1 = 0 \qquad (6)$$

Since $F_{\alpha\beta}$ is symmetrical with respect to the x and the y axes, the lines $\theta = 0°$ and $\theta = 90°$, only the first quadrant need be considered for the plate deflection analysis. Because superposition is valid for small deflections, it is possible to solve for the deflection due to linear load as well as for the uniform load in the first quadrant.

The loading $q(r,\theta)$ is assumed to be symmetric with respect to the y-axis and to have the form

$$q(y) = q_{\ell}\, y + q_u \qquad (7)$$

or in polar form

$$q(r,\theta) = q_{\ell}\, r \sin\theta + q_u \qquad (8)$$

where q_{ℓ} and q_u are constants which define the linear and the uniform components of the loading .

1. Uniformly Load Solution

In solving for the deflections, the loads (7) are treated separately. When the uniform component is considered, (4) will exhibit solutions with identical deflections at (r_1,θ_1) and $(r_1,-\theta_1)$ and since

$$\sin(-m\theta) = -\sin(m\theta)\ ,\ m = 1,2,\ldots \qquad (9)$$

these terms will cancel and the deflection will contain only a constant term and cosine terms. The deflections of points (r_1,θ_1) and $(r_1,\pi-\theta_1)$ will be

the same but $\cos[m(\pi-\theta_1)] = -\cos(m\theta_1)$, $m = 1,3,5,\ldots$. (10)

Hence terms containing $\cos(m\theta)$ where m is odd must be omitted. Thus (4) becomes

$$W_{uc}(r,\theta) = R_o + \sum_{m=1,3,} R_m \cos m\theta \tag{11}$$

Since there is a center deflection for uniform load, (5) reduces to

$$\begin{aligned} R_o &= A_o \\ R_m &= A_m r^m + B_m r^{m+2} \quad , m = 2,4,6,\ldots \end{aligned} \tag{12}$$

Now define the constant terms as AA_i and substitute (12) into (11) to obtain the complementary solution for (3) with uniform loading as

$$\begin{aligned} W_{uc}(r,\theta) = AA_1 + AA_2 r^2 + \sum_{i=2}^{\infty} [&AA_{2i-1} r^{2i-2} \cos(2i-2)\theta \\ &+ AA_{2i} r^{2i} \cos(2i-2)\theta] \end{aligned} \tag{13}$$

A particular solution of (1) is given by

$$W_{up}(r,\theta) = \frac{q_u b^4/D}{24(b/a)^4+16(b/a)^2+24} \left[1 - \frac{r^2}{a^2}\cos^2\theta - \frac{r^2}{b^2}\sin^2\theta\right]^2 \tag{14}$$

This is the solution for the clamped uniformly loaded elliptical plate.

Defining

$$CFE1 = \frac{q_u b^4/D}{24(b/a)^4+16(b/a)^2+24} \tag{15}$$

the deflection (14) becomes

$$W_{up}(r,\theta) = CFE1\ [1-r^2(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2})]^2 \tag{16}$$

The total solution of (3) then becomes

$$W_u(r,\theta) = W_{uc}(r,\theta) + W_{up}(r,\theta) \tag{17}$$

The complementary solution (13) will be truncated and solved for a finite number of coefficients AA_i.

For clamped thin plates, the following conditions must be satisfied at any point (r_B, θ_B) on the plate boundary:

$$W(r_B, \theta_B) = 0 \tag{18}$$

$$\left.\frac{\partial W}{\partial n}\right|_{r_B,\theta_B} = 0 \tag{19}$$

Consider N evenly spaced points along the first quadrant of the plate boundary. Application of (18) and (19) to (17) yields 2N linear homogeneous algebraic equations in 2N unknowns $AA_1, AA_2, \ldots, AA_{2N}$.

Condition (18) yields N equations of the form

$$W_{uc}(r_B, \theta_B) = - W_{up}(r_B, \theta_B) \tag{20}$$

Condition (19) may be evaluated from

$$\frac{\partial W_u(r,\theta)}{\partial n} = \left(\frac{\partial W_{uc}}{\partial r} + \frac{\partial W_{up}}{\partial r}\right)\frac{\partial r}{\partial n} + \left(\frac{\partial W_{uc}}{\partial \theta} + \frac{\partial W_{up}}{\partial \theta}\right)\frac{\partial \theta}{\partial n} \tag{21}$$

Since the r and θ may be expressed terms of x and y

$$\left.\begin{aligned}\frac{\partial r}{\partial n} &= \frac{\partial r}{\partial x}\frac{\partial x}{\partial n} + \frac{\partial r}{\partial y}\frac{\partial y}{\partial n}\\ \frac{\partial \theta}{\partial n} &= \frac{\partial \theta}{\partial x}\frac{\partial x}{\partial n} + \frac{\partial \theta}{\partial y}\frac{\partial y}{\partial n}\end{aligned}\right\} \tag{22}$$

From Fig. 1

$$\left.\begin{aligned} x &= n\cos\phi - t\sin\phi \\ y &= n\sin\phi + t\cos\phi \end{aligned}\right\} \qquad (23)$$

Solving for n and t

$$\left.\begin{aligned} n &= x\cos\phi + y\sin\phi \\ t &= -x\sin\phi + y\cos\phi \end{aligned}\right\} \qquad (24)$$

Partial derivatives of (23) yield

$$\left.\begin{aligned} \frac{\partial x}{\partial n} &= \cos\phi \ , \ \frac{\partial y}{\partial n} = -\sin\phi \\ \frac{\partial x}{\partial t} &= -\sin\phi \ , \ \frac{\partial y}{\partial t} = \cos\phi \end{aligned}\right\} \qquad (25)$$

Polar coordinates $r = (x^2 + y^2)^{\frac{1}{2}}$ and $\theta = \tan^{-1}(y/x)$ may be differentiated to obtain

$$\left.\begin{aligned} \frac{\partial r}{\partial x} &= \cos\theta \ , \ \frac{\partial r}{\partial y} = \sin\theta \\ \frac{\partial \theta}{\partial x} &= -\frac{1}{r}\sin\theta \ , \ \frac{\partial \theta}{\partial y} = \frac{1}{r}\cos\theta \end{aligned}\right\} \qquad (26)$$

The differential arc length, is related to x,y and ϕ as

$$(ds)^2 = (dx)^2 + (dy)^2 \text{ or } \left(\frac{dx}{ds}\right)^2 = \frac{1}{1+\left(\frac{dy}{dx}\right)^2}$$

and $\frac{dx}{ds} = -\sin\phi$

Thus

$$\sin\phi = [1 + (dy/dx)^2]^{-\frac{1}{2}} \qquad (27)$$

and from (6)

$$\frac{dy}{dx} = -\frac{b}{a}\,\frac{\alpha}{\beta}\left|\frac{r\cos\theta}{a}\right|^{\alpha-1} \Bigg/ \left|\frac{r\sin\theta}{b}\right|^{\beta-1} \qquad (28)$$

From (25) and (26), 22 may be expressed as

$$\left.\begin{aligned} \frac{\partial r}{\partial n} &= \cos\theta\,\cos\phi + \sin\theta\,\sin\phi \\ \frac{\partial \theta}{\partial n} &= -\frac{1}{r}\,(\sin\theta\,\cos\phi - \cos\theta\,\sin\phi) \end{aligned}\right\} \tag{29}$$

where $\sin\phi$ is defined by (27)

For the evaluation of (19), the following relations are evaluated using (16) and (13)

$$\frac{\partial W_{up}}{\partial \theta} = 4(CFE1)\,r^2(\sin\theta\,\cos\theta)\,\left(1-\frac{1}{b^2}\right)\left[1-r^2\left(\frac{\cos^2\theta}{a^2}+\frac{\sin^2\theta}{b^2}\right)\right] \tag{30}$$

$$\frac{\partial W_{up}}{\partial r} = -4(CFE1)\,r\left(\frac{\cos^2\theta}{a^2}+\frac{\sin^2\theta}{b^2}\right)\left[1-r^2\left(\frac{\cos^2\theta}{a^2}+\frac{\sin^2\theta}{b^2}\right)\right] \tag{31}$$

$$\frac{\partial W_{uc}}{\partial \theta} = -\sum_{i=2}^{N}\left\{AA_{2i-1}\,r^{2i-2}(2i-2)\sin(2i-2)\theta + AA_{2i}\,r^{2i}(2i-2)\sin(2i-2)\theta\right\} \tag{32}$$

$$\frac{\partial W_{uc}}{\partial r} = AA_2\,2r + \sum_{i=2}^{N}\left\{AA_{2i-1}\,(2i-2)r^{2i-3}\cos(2i-2)\theta + AA_{2i}\,(2i)r^{2i-1}\cos(2i-2)\theta\right\} \tag{33}$$

Equations (27) through (33) permit the evaluation of (21) and thus obtain N additional equations from (19) in terms of the series coefficients AA_i. These equations are of the form

$$\frac{\partial W_{uc}}{\partial r}\,\frac{\partial r}{\partial n} + \frac{\partial W_{uc}}{\partial \theta}\,\frac{\partial \theta}{\partial n} = -\left(\frac{\partial W_{up}}{\partial r}\,\frac{\partial r}{\partial n} + \frac{\partial W_{up}}{\partial \theta}\,\frac{\partial \theta}{\partial n}\right) \tag{34}$$

where the N district equations are obtained by evaluation at each one of the N boundary points (r_B,θ_B). Solving (20) and (34) simultaneously for the series coefficients AA_i, (17) may be evaluated and thus the

deflection at any point (r,θ) in the plate may be determined for the uniform component of the load.

2. Linear Load Solution

For the linearly varying load which is assumed downward for positive values of y and upward for negative values of y, the complementary solution of (3) yields first and fourth quadrant deflections of equal magnitude and of opposite sign. Because the load varies only in the y-direction, deflections in the second quadrant are identical with those in the first while those in the third and fourth quadrants are identical.

Since $\cos(m\theta_1) = \cos(-m\theta_1)$ all cosine terms are excluded. Also, $\sin(2\theta_1) = 2\sin\theta_1 \cos\theta_1 = -\sin[2(-\theta_1 + \pi)]$, thus $\sin(2\theta)$ must be excluded and all terms of the form $\sin(m\theta)$, $m = 2,4,6,\ldots$, must be excluded. The remaining coefficients are

$$R_m = A_m r^m + B_m r^{m+2}, \quad m = 1,3,5,\ldots$$

Note that $R_o = 0$ because the center deflection due to the linear load component is zero. Designating all coefficients AA_i, the complementary solution for linear loading becomes

$$W_{\ell c} = \sum_{i=1}^{\infty} \left\{ [AA_{2i-1} r^{2i-1} + AA_{2i} r^{2i+1}] \sin(2i-1)\theta \right\} \tag{35}$$

A particular solution to (3) is

$$W_{\ell p} = \frac{q_\ell b^4 r \sin\theta}{24D[(b/a)^4+2(b/a)^2+5]} \left[1 - r^2 \left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2} \right) \right]^2 \tag{36}$$

which is the exact solution for a clamped, linearly loaded elliptical plate, see page 312 of [12]. Defining

$$CFE2 = \frac{q_\ell \, b^4/D}{24(b/a)^4+48(b/a)^2+120} \tag{37}$$

(36) becomes

$$W_{\ell p}(r,\theta) = (CFE2)\, r \sin\theta \left[1-r^2\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]^2 \tag{38}$$

The complete solution is thus

$$W_\ell(r,\theta) = W_{\ell c}(r,\theta) + W_{\ell p}(r,\theta) \tag{39}$$

Equation (35) is now truncated to obtain the AA_i coefficients, as described for the uniform load. The boundary conditions (18) and (19) are the same as for the uniform load and (22) through (29) are valid. From (18), N equations of the form

$$W_{\ell c}(r_B,\theta_B) = - W_{\ell p}(r_B,\theta_B) \tag{40}$$

are obtained. Conditions (19) require the following derivatives

$$\frac{\partial W_{\ell p}}{\partial \theta} = (CEF2)\, r \left\{ \cos\theta \left[1-r^2\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]^2 + 2\sin\theta \left[1-r^2\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]\left[-r^2\left(-\frac{2\cos\theta\,\sin\theta}{a^2} + \frac{2\sin\theta\,\cos\theta}{b^2}\right)\right]\right\} \tag{41}$$

$$\frac{\partial W_{\ell p}}{\partial r} = (CEF2)\, \sin\theta \left\{ \left[1-r^2\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]^2 + 2r\left[1-r^2\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]\left[-2r\left(\frac{\cos^2\theta}{a^2} + \frac{\sin^2\theta}{b^2}\right)\right]\right\} \tag{42}$$

$$\frac{\partial W_{\ell c}}{\partial \theta} = \sum_{i=1}^{N} \left\{ \left[AA_{2i-1}\, r^{2i-1} + AA_{2i}\, r^{2i+1} \right] (2i-1) \cos(2i-1)\theta \right\} \tag{43}$$

$$\frac{\partial W_{\ell c}}{\partial r} = \sum_{i=1}^{N} \left\{ \left[(2i-1)\, AA_{2i-1}\, r^{2i-2} + (2i+1)\, AA_{2i}\, r^{2i} \right] \sin(2i-1)\theta \right\} \tag{44}$$

Thus N additional equations are obtained

$$\frac{\partial W_{\ell c}}{\partial r}\,\frac{\partial r}{\partial n} + \frac{\partial W_{\ell c}}{\partial \theta}\,\frac{\partial \theta}{\partial n} = -\left[\frac{\partial W_{\ell p}}{\partial r}\,\frac{\partial r}{\partial n} + \frac{\partial W_{\ell p}}{\partial \theta}\,\frac{\partial \theta}{\partial n} \right] \tag{45}$$

Solving (40) and (45) for the AA_i's, the deflection at any point due to a linearly varying load may be determined using (39).

Superposition of solutions gives the total deflection due to the loading described by (7), as

$$W(r,\theta) = W_{uc}(r,\theta) + W_{up}(r,\theta) + W_{\ell c}(r,\theta) + W_{\ell p}(r,\theta) \tag{46}$$

3. Selection of Collocation Points

Even distribution of the collocation points along the boundary, while desirable, requires the computation of arc length which increases computation time. The alternate approach, described below, is used for this reason.

First, locate the point on the plate boundary $f(r_B,\theta_B)$ for which the tangent is $(-b/a)$. Define a chord with end points $(b, \pi/2)$ and $f(r_B,\theta_B)$ and a chord with end points $f(r_B,\theta_B)$ and $(a,0)$. Divide each chord into $N/2$ evenly distributed points. Determine N angles θ_B, corresponding to the N points, and use a root finding routine to locate the value r_B which satisfies (6) at the specified angle. If N is odd, the point $f(r_B,\theta_B)$ becomes a collocation point.

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13. The Bending and Stretching of Plates, 1964, 148
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COMPUTER PROGRAM COMMENTS

The computer program listing, which follows, contains necessary definitions as comment cards. In addition to the main program there are seven subroutines. The program presents the output data for angles at 5 degree increments and at radii ranging from the center toward the edge of the plate in increments of radius ranging from one tenth to nine tenths.

The deflections, which are ratios of deflections to plate thickness, are obtained for uniform load as well as for uniform plus linear load. The uniform load component is 0.002 while the linear load component is 0.004. The value of Poisson's ratio is 0.3.

The program contains two options, one designated by RORN = 0.0, which determines the partial derivatives of the deflection function with respect to a normal vector at the boundary, and the other designated by RORN = 1.0 which determines the partial derivatives of the deflection function with respect to the radial vector from the plate center to a point on the boundary. This latter derivative, while requiring less computer time is also less accurate. All of the reported runs were generated using RORN = 0.0 to achieve higher accuracy.

COMPUTER PROGRAM LISTING

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C     INPUT DATA DEFINITIONS                                                    COLLC001
C        ALPHA AND BETA DETERMINE THE PLATE SHAPE ACCORDING TO                  COLLC002
C                  F(R,THETA) = (R*COS(THETA)/A)**ALPHA+                        COLLC003
C                               (R*SIN(THETA)/B)**B-1                           COLLC004
C           WHERE ALPHA,BETAIS GREATER THAN OR EQUAL TO ONE                     COLLC005
C                  NOTE IF:  ALPHA = BETA = 1  THE PLATE IS A RHOMBUS          COLLC006
C                            ALPHA = BETA = 2  THE PLATE IS AN ELLIPSE         COLLC007
C                            ALPHA = BETA = 10 APPROXIMATES A RECTANGLE        COLLC008
C           FORMULA FOR THE DEFLECTION FUNCTION:                                COLLC009
C        XU = X INTERCEPT OF THE PLATE BOUNDARY                                 COLLC010
C        XV = Y INTERCEPT OF THE PLATE BOUNDARY WHERE                           COLLC011
C           10**(-38) < B**2N < 10**(38)  IN THE DELECTION FUNCTION             COLLC012
C           FORMULA,  N IS THE NUMBER OF COLLOCATION POINTS                     COLLC013
C        QULOAD = MAGNITUDE OF THE UNIFORM COMPONENT OF THE LOAD                COLLC014
C        QLLOAD = SLOPE OF THE LINEARLY VARYING COMPONENT OF THE LOAD           COLLC015
C        RORN = INDEX CONTROLLING THE SOLUTION ACCORDING TO THE                 COLLC016
C             FOLLOWING BOUNDARY CONDITIONS:                                    COLLC017
C                RORN = 0.0    DENOTES USE OF THE PARTIAL OF W WITH            COLLC018
C                              RESPECT TO THE NORMAL VECTOR                    COLLC019
C                RORN = 1.0    DENOTES USE OF THE PARTIAL OF W WITH            COLLC020
C                              RESPECT TO THE RADIAL VECTOR                    COLLC021
C                                                                              COLLC022
C        N = NUMBER OF COLLOCATION POINTS,  WHERE N IS LESS THAN OR             COLLC023
C           EQUAL TO 19                                                        COLLC024
C        IWOT = INDEX CONTROLLING OUTPUT FORMAT                                COLLC025
C             TABULA                                                           COLLC026
C                                                                              COLLC027
C     OUTPUT|1|2|3|4| DEFLECTIONS (OUTPUT)  IWOT=1,2,3,4,                     COLLC028
C           |_____|   DEFLECTIONS (TABULA)  IWOT=  2,3,    6,7,               COLLC029
C           |5|6|7|8| SERIES COEF. (TABULA) IWOT=    3,4,    7,8             COLLC030
C           ---------                                                          COLLC031
C           -SERIES-                                                           COLLC032
C            COEF.                                                             COLLC033
C   OUTPUT PRINTS UNIFORM AND LINEAR CASES, TABULA PRINTS COMBINED CASE.       COLLC034
C        PR = POISSON'S RATIO                                                  COLLC035
C        E = MODULUS OF ELASTICITY                                             COLLC036
C        H = CONSTANT PLATE THICKNESS                                          COLLC037
C                                                                              COLLC038
C     SAMPLE DATA DECK FOR COLLOCATION PROGRAM                                 COLLC039
C-------------------------------------------------------------------------     COLLC040
C                  COLUMNS CONTAINING VARIABLE VALUE                           COLLC041
C  1-5  6-10 11-15 16-20 21-25 26-30 31-35 36-40 41-43 44-48  49  54  63       COLLC042
C                                                                -53 -62 -74   COLLC043
C                  VARIABLE NAME                                               COLLC044
C  ALPHA BETA XU    XV  QULOAD QLLOAD RORN   N    IWOT PUNCH  PR  E   H       COLLC045
C                  FORMAT OF VARIABLE                                          COLLC046
C  F5.2 F5.2  F5.2  F5.2  F5.3  F5.3  F5.2  I5    I3    F5.2 F5.2  E9.4      COLLC047
C                                                                              COLLC048
      IMPLICIT REAL*8 (A-H,O-Z)                                                COLLC049
      EXTERNAL FUNCR                                                           COLLC050
      DIMENSION X(11), S(2), SSIN(38), FCPOOO(38), SINT(19), COST(19),         COLLC051
     1          R(39), DADN(19), DRDN(19), RR(19), AA(76), RSTO(19),          COLLC052
     2          ASTO(19), ANG(19), THETA(19), Z(11,38), W(37,11),             COLLC053
     3          WC(37,11), D(38,39), A(37,34)                                 COLLC054
      COMMON ALPHA,BETA,P,SSI,CCC,QULOAD,QLLOAD,RR,W,PUNCH,AA,RSTO,            COLLC055
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWOT                                   COLLC056
C        DEFLECTION OF THE PLATE BY COLLOCATION METHOD                         COLLC057
C              FOR LINEAR LOADING                                              COLLC058
C              THE X(I) ARE DEFLECTION EVALUATION STATIONS ALONG               COLLC059
C              A GIVEN RADIUS RR(I)                                            COLLC060
C           XU STANDS FOR INTERCEPT OF X-AXIS BY PLATE BOUNDARY                COLLC061
C              XV STANDS FOR INTERCEPT OF Y-AXIS BY PLATE BOUNDARY             COLLC062
C              QU AND QL DETERMINE THE UNIFORM AND LINEAR LOADING              COLLC063
C              N IS THE NUMBER OF COLLOCATION POINTS                           COLLC064
      X(1)          = 0.0D0                                                    COLLC066
      DO 10     I = 2,10                                                       COLLC067
   10 X(I)          = X(I-1)+0.1D0                                             COLLC068
      X(11)         = 1.D0                                                     COLLC069
      ICT           = 0                                                        COLLC070
      CONV          = .17453292519943D-01                                      COLLC071
   15 READ(5,1000,END=345)ALPHA,BETA,XU,XV,QULOAD,QLLOAD,RORN,                COLLC072
     1                N,IWOT,PUNCH,PR,E,H                                     COLLC073
 1000 FORMAT(4F5.2,2F5.3,F5.2,I5,I3,2F5.2,E9.4,E12.5)                          COLLC074
      QU            = QULOAD*12.D0*(1.D0-PR**2)/(E*H**3)                       COLLC075
      QL            = QLLOAD*12.D0*(1.D0-PR**2)/(E*H**3)                       COLLC076
      LORU          = 2                                                        COLLC077
      IF (QU)25,20,25                                                          COLLC078
   20 LORU          = 4                                                        COLLC079
      GO TO 35                                                                 COLLC080
   25 IF (QL)35,30,35                                                          COLLC081
   30 LORU          = 1                                                        COLLC082
   35 XV2           = XV*XV                                                    COLLC083
      XV4           = XV2*XV2                                                  COLLC084
      XU2           = XU*XU                                                    COLLC085
      XU4           = XU2*XU2                                                  COLLC086
      P             = XV/XU                                                    COLLC087
      PPP           = -P**ALPHA/BETA                                           COLLC088
      AM1           = ALPHA-1.D0                                               COLLC089
      BM1           = BETA-1.D0                                                COLLC090
      CFE1          = QU*XV4/(24.D0*XV4/XU4+16.D0*XV2/XU2+24.D0)               COLLC091
      CFE2          = QL*XV4/(24.D0*XV4/XU4+48.D0*XV2/XU2+120.D0)              COLLC092
C        DETERMINE ANGLES OF COLLOCATION POINTS                                COLLC093
      CALL ANGLE(XU,XV)                                                        COLLC094
C        NOTE THAT XU EQUAL TO ZERO INDICATES TO MAIN - NO ROOT                COLLC095
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      IF (XU) 38,15,38                                                  COLL0096
   38 RR(N)       = XV                                                 COLL0097
      NM1         = N-1                                                COLL0098
      NN          = 2*N                                                COLL0099
      NNP1        = NN+1                                               COLL0100
      NNM1        = NN-1                                               COLL0101
      NNM2        = NN-2                                               COLL0102
      XEND        = DSQRT(XV*XV+XL*XL)                                 COLL0103
      XSTART      = XU*XV/XEND                                         COLL0104
C        COMPUTATION OF ELEMENTS FOR MATRIX EQUATION(S) OBTAINED      COLL0105
C        FROM BOUNDARY CONDITIONS                                     COLL0106
C              DETERMINATION OF RADII RR(I) OF COLLOCATION POINTS     COLL0107
C              AND PARTIAL DERIVATIVES                                COLL0108
      DO 80     I = 1,N                                              COLL0109
      T           = THETA(I)                                         COLL0110
      SINT(I)     = DSIN(T)                                          COLL0111
      COST(I)     = DCOS(T)                                          COLL0112
      SSI         = SINT(I)                                          COLL0113
      CCO         = COST(I)                                          COLL0114
   40 IF (I-N)45,60,60                                               COLL0115
   45 CONTINUE                                                       COLL0116
      CALL REGFA2(XSTART,XEND,.02D0,S,K,0.00000001D0,FUNCR)          COLL0117
      IF (K-1)50,55,50                                               COLL0118
   50 WRITE (6,1005)ALPHA,BETA,ANG(I)                                COLL0119
 1005 FORMAT ('0','NO ROOT FOR',2X,'ALPHA = ',F5.2,2X,'BETA = ',F5.2, COLL0120
     1   'AT ANGLE = ',D13.6,//)                                      COLL0121
      GO TO 15                                                       COLL0122
   55 RR(I)       = S(1)                                             COLL0123
C        COORDINATES OF COLLOCATION POINTS STORED                     COLL0124
   60 RSTO(I)     = RR(I)                                            COLL0125
      ASTO(I)     = ANG(I)                                           COLL0126
      XXX         = RR(I)*COST(I)/XU                                 COLL0127
      YYY         = RR(I)*SINT(I)/XV                                 COLL0128
      IF (I-1)65,70,65                                               COLL0129
   65 DERIV       = PPP*(DABS(XXX))**AM1/(DABS(YYY))**RM1            COLL0130
      IF (DERIV .LE. 1.0-30) DERIV=0.D0                              COLL0131
      SINPHI      = 1.D0/DSQRT(1.D0+DERIV**2)                        COLL0132
      GO TO 75                                                       COLL0133
   70 SINPHI      = 0.D0                                             COLL0134
   75 COSPHI      = DSQRT(1.D0-SINPHI**2)                            COLL0135
      DADN(I)     = (-SINT(I)*COSPHI+COST(I)*SINPHI)/RR(I)           COLL0136
   80 DRDN(I)     = COST(I)*COSPHI+SINT(I)*SINPHI                    COLL0137
   85 DO 165    I = 1,N                                             COLL0138
      T           = THETA(I)                                         COLL0139
      R(1)        = RR(I)                                            COLL0140
      DO 90     J = 2,NNP1                                           COLL0141
   90 R(J)        = R(J-1)*RR(I)                                     COLL0142
      RS2C2       = 1.D0-R(2)*(SINT(I)*SINT(I)/XV2+COST(I)*COST(I)/XU2) COLL0143
      GO TO (95,130,95,130),LORU                                     COLL0144
   95 DO 100    K = 2,NNM2,2                                        COLL0145
      AK          = K                                                COLL0146
      SSIN(K)     = DSIN(T*AK)                                       COLL0147
  100 FCPOOO(K)   = DCOS(T*AK)                                       COLL0148
C        COMPUTATION OF TERMS FOR HOMOGENEOUS SOLUTION TO UNIFORMLY  COLL0149
C              LOADED PLATE                                         COLL0150
      D(I,1)      = 1.D0                                             COLL0151
      D(I,2)      = R(2)                                             COLL0152
      DO 105    L = 2,N                                              COLL0153
      LL          = 2*L                                              COLL0154
      LLM1        = LL-1                                             COLL0155
      LLM2        = LL-2                                             COLL0156
      D(I,LLM1)   = R(LLM2)*FCPOOO(LLM2)                             COLL0157
  105 D(I,LL)     = R(LL)*FCPOOO(LLM2)                               COLL0158
C        PARTICULAR SOLUTION FOR A UNIFORMLY LOADED ELLIPTIC PLATE   COLL0159
      D(I,NNP1)   = -CFE1*RS2C2*RS2C2                                COLL0160
      IA          = I+N                                              COLL0161
C        COMPUTATION FOR DERIVATIVES OF UNIFORM LOAD                 COLL0162
C              HOMOGENEOUS SOLUTION                                 COLL0163
      IF (DRDN)110,110,120                                           COLL0164
  110 C(IA,1)     = 0.D0                                             COLL0165
      D(IA,2)     = R(1)*DRDN(I)*2.D0                                COLL0166
      DO 115    L = 2,N                                              COLL0167
      LL          = 2*L                                              COLL0168
      ALL         = LL                                               COLL0169
      LLM1        = LL-1                                             COLL0170
      LLM2        = LL-2                                             COLL0171
      LLM3        = LL-3                                             COLL0172
      ALLM2       = LLM2                                             COLL0173
      D(IA,LLM1)  = R(LLM3)*FCPOOO(LLM2)*ALLM2*DRDN(I)-ALLM2*R(LLM2)*COLL0174
     1              SSIN(LLM2)*DADN(I)                               COLL0175
  115 D(IA,LL)    = R(LLM1)*FCPOOO(LLM2)*ALL*DRDN(I)-ALLM2*R(LL)*    COLL0176
     1              SSIN(LLM2)*DADN(I)                               COLL0177
C        DERIVATIVE OF UNIFORM LOAD PARTICULAR SOLUTION              COLL0178
      D(IA,NNP1)  = 4.0*CFE1*R(1)*RS2C2*(((1.-RS2C2)/R(2))*DRDN(I)-  COLL0179
     1              R(1)*COST(I)*SINT(I)*(1.0D0/XU2-1.0D0/XV2)*DADN(I)) COLL0180
      GO TO 165                                                      COLL0181
  120 D(IA,1)     = 0.0D0                                            COLL0182
      D(IA,2)     = 2.D0*R(1)                                        COLL0183
      DO 125    L = 2,N                                              COLL0184
      LL          = 2*L                                              COLL0185
      ALL         = LL                                               COLL0186
      LLM1        = LL-1                                             COLL0187
      LLM2        = LL-2                                             COLL0188
      ALLM2       = LLM2                                             COLL0189
      LLM3        = LL-3                                             COLL0190
      D(IA,LLM1)  = ALLM2*R(LLM3)*FCPOOO(LLM2)                       COLL0191
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  125 D(IA,LL)    = ALL*R(LLM1)*FCP000(LLM2)                                    COLL0192
      D(IA,NNP1)  = 4.D0*CFE1*R(1)*((1.D0-RS2C2)/R(2))*RS2C2                    COLL0193
      GO TO 165                                                                 COLL0194
  130 DO 135    K = 1,NNM1,2                                                    COLL0195
      AK          = K                                                           COLL0196
      SSIN(K)     = DSIN(T*AK)                                                  COLL0197
  135 FCP000(K)   = DCOS(T*AK)                                                  COLL0198
C        COMPUTATION OF TERMS OF LINEAR LOAD HOMOGENEOUS SOLUTION               COLL0199
      DO 140    L = 1,N                                                         COLL0200
      LL          = L*2                                                         COLL0201
      LLM1        = LL-1                                                        COLL0202
      LLP1        = LL+1                                                        COLL0203
      D(I,LLM1)   = R(LLM1)*SSIN(LLM1)                                          COLL0204
  140 D(I,LL)     = R(LLP1)*SSIN(LLM1)                                          COLL0205
C        PARTICULAR SOLUTION FOR LINEARLY LOADED ELLIPTIC PLATE                 COLL0206
      D(I,NNP1)   = -CFE2*R(1)*SINT(I)*RS2C2*RS2C2                              COLL0207
      IA          = I+N                                                         COLL0208
C        CONTROL FOR SOLUTION USING THE PARTIAL OF W WITH RESPECT               COLL0209
C              TO THE NORMAL VECTOR FOR RORN = ZERO OR WITH RESPCT              COLL0210
C              TO THE RADIAL VECTOR FOR RORN = ONE                              COLL0211
      IF (RORN)145,145,155                                                      COLL0212
C        COMPUTATION OF DERIVATIVES - LINEAR LOAD HOMOGENEOUS SOLUTION          COLL0213
  145 D(IA,1)     = SINT(I)*DRDN(I)+R(1)*COST(I)*DADN(I)                        COLL0214
      D(IA,2)     = 3.D0*R(2)*SINT(I)*DRDN(I)+R(3)*COST(I)*DADN(I)              COLL0215
      DO 150    L = 2,N                                                         COLL0216
      LL          = L*2                                                         COLL0217
      LLM1        = LL-1                                                        COLL0218
      LLM2        =  LL-2                                                       COLL0219
      LLP1        = LL+1                                                        COLL0220
      ALLM1       = LLM1                                                        COLL0221
      ALLP1       = LLP1                                                        COLL0222
      D(IA,LLM1)  = ALLM1*(R(LLM2)*SSIN(LLM1)*DRDN(I)+R(LLM1)*                  COLL0223
     1              FCP000(LLM1)*DADN(I))                                      COLL0224
  150 D(IA,LL)    = ALLP1*R(LL)*SSIN(LLM1)*DRDN(I)+ALLM1*R(LLP1)*               COLL0225
     1              FCP000(LLM1)*DADN(I)                                       COLL0226
C        DERIVATIVE OF LINEAR LOAD PARTICULAR SOLUTION                          COLL0227
      D(IA,NNP1)  = -CFE2*RS2C2*(SINT(I)*(RS2C2+4.D0*(RS2C2-1.D0))*             COLL0228
     1              DRDN(I)+R(1)*COST(I)*(RS2C2+4.D0*R(2)*                     COLL0229
     2              SINT(I)*SINT(I)*(1.D0/XU2-1.D0/XV2))*DADN(I))              COLL0230
      GO TO 165                                                                 COLL0231
  155 D(IA,1)     = SINT(I)                                                     COLL0232
      D(IA,2)     = 3.D0*R(2)*SINT(I)                                           COLL0233
      DO 160    L = 2,N                                                         COLL0234
      LL          = 2*L                                                         COLL0235
      ALL         = LL                                                          COLL0236
      LLM1        = LL-1                                                        COLL0237
      ALLM1       = LLM1                                                        COLL0238
      LLM2        = LL-2                                                        COLL0239
      LLP1        = LL+1                                                        COLL0240
      ALLP1       = LLP1                                                        COLL0241
      D(IA,LLM1)  = ALLM1*R(LLM2)*SSIN(LLM1)                                    COLL0242
  160 D(IA,LL)    = ALLP1*R(LL)*SSIN(LLM1)                                      COLL0243
      D(IA,NNP1)  = -CFE2*SINT(I)*(RS2C2*RS2C2-4.D0*R(1)*RS2C2*R(1)*            COLL0244
     1              ((1.D0-RS2C2)/R(2)))                                       COLL0245
  165 CONTINUE                                                                  COLL0246
C        SOLUTION OF MATRIX EQUATION FOR SERIES COEFFICIENTS AA(I)              COLL0247
  170 CALL SIMEQ(MISCUE)                                                        COLL0248
      IF (MISCUE-1)180,180,175                                                  COLL0249
  175 WRITE (6,1010)                                                            COLL0250
 1010 FORMAT (//,5X,'THE SOLUTION IS SINGULAR ',//)                             COLL0251
      GO TO 15                                                                  COLL0252
  180 GO TO (200,185,200,185),LORU                                              COLL0253
  185 DO 190    I = 1,NN                                                        COLL0254
      J           = I+NN                                                        COLL0255
      AA(J)       = AA(I)                                                       COLL0256
  190 AA(I)       = 0.0D0                                                       COLL0257
      GO TO (200,195,200,200),LORU                                              COLL0258
  195 LORU        = 3                                                           COLL0259
      GO TO 85                                                                  COLL0260
C        DETERMINATION OF RADII RR(I) AND ANGLES THETA(I)                       COLL0261
C              FOR DEFLECTION EVALUATION                                        COLL0262
  200 RR(19)      = XV                                                          COLL0263
      RR(1)       = XU                                                          COLL0264
      ANG(1)      = 0.0D0                                                       COLL0265
      THETA(1)    = 0.0D0                                                       COLL0266
      DO 205    I = 1,18                                                        COLL0267
      J           = I+1                                                         COLL0268
      ANG(J)      = ANG(I)+5.0D0                                                COLL0269
  205 THETA(J)    = ANG(J)*CONV                                                 COLL0270
      THETA(19)   = 1.5707963267948967                                          COLL0271
C        NOTE THE NEW USE OF COST(I)                                            COLL0272
      SINT(1)     = 0.0D0                                                       COLL0273
      SINT(19)    = 1.0D0                                                       COLL0274
      COST(1)     = 1.0D0/XU2                                                   COLL0275
      COST(19)    = 1.0D0/XV2                                                   COLL0276
      DO 215    I = 2,18                                                        COLL0277
      SSI         = DSIN(THETA(I))                                              COLL0278
      CCO         = DCOS(THETA(I))                                              COLL0279
      SINT(I)     = SSI                                                         COLL0280
      COST(I)     = CCO*CCO/XU2+SSI*SSI/XV2                                     COLL0281
      CALL REGFA2(XSTART,XEND,.0200,S,K,0.000000100,FUNCR)                      COLL0282
      IF (K-1)210,215,210                                                       COLL0283
  210 WRITE (6,1015)ALPHA,BETA,ANG(I)                                           COLL0284
 1015 FORMAT ('0','NO ROOT FOR',2X,'ALPHA = ',F5.2,2X,'BETA =',F5.2,            COLL0285
     1        'AT ANGLE = ',D13.6,//)                                          COLL0286
  215 CONTINUE                                                                  COLL0287
      GO TO 15
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  215 RR(I)          = S(I)                                                  COLLO288
      DO 255   I = 1,19                                                      COLLO289
      T              = THETA(I)                                              COLLO290
      R(1)           = RR(I)                                                 COLLO291
      DO 220   J = 2,NNP1                                                    COLLO292
  220 R(J)           = R(J-1)*RR(I)                                          COLLO293
      GO TO (225,225,225,240),LORU                                           COLLO294
  225 DO 230   K = 2,NNM2,2                                                  COLLO295
      AK             = K                                                     COLLO296
  230 FCPOOO(K)      = DCOS(T*AK)                                            COLLO297
C         SERIES TERMS FOR UNIFORM LOAD DEFLECTION                           COLLO298
C              (EXCLUDING AA(I) AND Z(I,J))                                  COLLO299
      D(I,1)         = 1.DO                                                  COLLO300
      D(I,2)         = R(2)                                                  COLLO301
      DO 235   L = 2,N                                                       COLLO302
      LL             = L*2                                                   COLLO303
      LLM1           = LL-1                                                  COLLO304
      LLM2           = LL-2                                                  COLLO305
      D(I,LLM1)      = R(LLM2)*FCPOOO(LLM2)                                  COLLO306
  235 D(I,LL)        = R(LL)*FCPOOO(LLM2)                                    COLLO307
      GO TO (255,240,240,240),LORU                                           COLLO308
  240 IA             = I+19                                                  COLLO309
      DO 245   K = 1,NNM1,2                                                  COLLO310
      AK             = K                                                     COLLO311
  245 SSIN(K)        = DSIN(T*AK)                                            COLLO312
C         SERIES TERMS FOR LINEAR LOAD DEFLECTIONS                           COLLO313
C              (EXCLUDING AA(I) AND Z(I,J))                                  COLLO314
      DO 250   L = 1,N                                                       COLLO315
      LL             = L*2                                                   COLLO316
      LLM1           = LL-1                                                  COLLO317
      LLP1           = LL+1                                                  COLLO318
      D(IA,LLM1)     = R(LLM1)*SSIN(LLM1)                                    COLLO319
  250 D(IA,LL)       = R(LLP1)*SSIN(LLM1)                                    COLLO320
  255 CONTINUE                                                               COLLO321
      GO TO (260,260,260,280),LORU                                           COLLO322
  260 DO 265   J = 1,11                                                      COLLO323
      Z(J,1)         = 1.0                                                   COLLO324
      Z(J,2)         = X(J)*X(J)                                             COLLO325
      DO 265   K = 3,NNM1,2                                                  COLLO326
      Z(J,K)         = Z(J,K-1)                                              COLLO327
  265 Z(J,K+1)       = Z(J,K)*Z(J,2)                                         COLLO328
C         DEFLECTIONS DUE TO UNIFORM LOAD                                    COLLO329
      DO 275   I = 1,19                                                      COLLO330
      L              = 20-I                                                  COLLO331
      M              = 18+I                                                  COLLO332
      DO 275   J = 1,11                                                      COLLO333
C         UNIFORM LOAD PARTICULAR SOLUTION                                   COLLO334
      W(L,J)         = CFE1*(1.ODO-RR(I)*RR(I)*Z(J,2)*COST(I))**2            COLLO335
      DO 270   K = 1,NN                                                      COLLO336
C         UNIFORM LOAD HOMOGENEOUS SOLUTION                                  COLLO337
  270 W(L,J)         = W(L,J)+AA(K)*D(I,K)*Z(J,K)                            COLLO338
  275 W(M,J)         = W(L,J)                                                COLLO339
      GO TO (320,290,290,280),LORU                                           COLLO340
  280 DO 285   I = 1,37                                                      COLLO341
      DO 285   J = 1,11                                                      COLLO342
  285 W(I,J)         = 0.ODO                                                 COLLO343
  290 DO 295   J = 1,11                                                      COLLO344
      Z(J,1)         = X(J)                                                  COLLO345
      X2             = X(J)*X(J)                                             COLLO346
      Z(J,2)         = X(J)*X2                                               COLLO347
      DO 295   K = 3,NNM1,2                                                  COLLO348
      Z(J,K)         = Z(J,K-1)                                              COLLO349
  295 Z(J,K+1)       = Z(J,K)*X2                                             COLLO350
C         DEFLECTIONS DUE TO LINEAR LOAD                                     COLLO351
      DO 305 I=2,19                                                          COLLO352
      M=39-I                                                                 COLLO353
      IA=I+19                                                                COLLO354
      DO 305   J = 1,11                                                      COLLO355
C         LINEAR LOAD PARTICULAR SOLUTION                                    COLLO356
      SUM            = CFE2*RR(I)*X(J)*SINT(I)*(1.ODO-RR(I)*RR(I)*          COLLO357
     1                   X(J)*X(J)*COST(I))**2                               COLLO358
      DO 300   K = 1,NN                                                      COLLO359
      KN             = K+NN                                                  COLLO360
C         LINEAR LOAD HOMOGENEOUS SOLUTION                                   COLLO361
  300 SUM            = SUM+AA(KN)*D(IA,K)*Z(J,K)                             COLLO362
  305 W(M,J)=SUM                                                             COLLO363
      DO 310 I=1,37                                                          COLLO364
      DO 310 J=1,11                                                          COLLO365
  310 W(I,J)=W(I,J)/H                                                        COLLO366
      GO TO(315,315,315,315,320,320,320,320), IWCT                           COLLO367
  315 CALL OUTPUT                                                            COLLO368
      DO 325 I=1,18                                                          COLLO369
      II=I+19                                                                COLLO370
      MI=38-I                                                                COLLO371
      DO 325 J=1,11                                                          COLLO372
      WC(I,J)=W(I,J)+W(II,J)                                                 COLLO373
  325 WC(MI,J)=W(I,J)-W(II,J)                                                COLLO374
      DO 330 J=1,11                                                          COLLO375
  330 WC(19,J)=W(19,J)                                                       COLLO376
      GO TO 332                                                              COLLO377
  320 DO 331 I=1,37                                                          COLLO378
      DO 331 J=1,11                                                          COLLO379
  331 WC(I,J)=W(I,J)/H                                                       COLLO380
  332 GO TO(340,335,335,335,340,335,335,335), IWCT                           COLLO381
  335 CALL TABULA                                                            COLLO382
  340 GO TO 15                                                               COLLO383
  345 STOP                                                                   COLLO384
      END                                                                    COLLO385
```


REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

```
      SUBROUTINE REGFA2(A,B,M,R,N,ERROR,FUNCT)                          REGFA001
      IMPLICIT REAL*8 (A-H,O-Z)                                         REGFA002
      DIMENSION R(2)                                                    REGFA003
C        ROOTS OF A FUNCTION BY MODIFIED REGULA FALSI METHOD -          REGFA004
      AI            = A-M                                             REGFA005
      BI            = B+M                                             REGFA006
      YL            = FUNCT(AI)                                       REGFA007
      XL            = AI                                              REGFA008
      XR            = AI+M                                            REGFA009
      YR            = FUNCT(XR)                                       REGFA010
      N             = 1                                               REGFA011
   10 IF (YR)20,15,20                                                   REGFA012
   15 R(N)          = XR                                              REGFA013
      RETURN                                                            REGFA014
   20 IF (YR*YL)45,25,30                                                REGFA015
   25 R(N)          = XL                                              REGFA016
      RETURN                                                            REGFA017
   30 XL            = XR                                              REGFA018
      YL            = YR                                              REGFA019
      XR            = XR+M                                            REGFA020
      IF (XR-BI)40,40,35                                                REGFA021
   35 N             = N-1                                             REGFA022
      RETURN                                                            REGFA023
   40 YR            = FUNCT(XR)                                       REGFA024
      GO TO 10                                                          REGFA025
   45 DELTA         = (XR-XL)/2.D0                                    REGFA026
      XI            = XL+DELTA                                        REGFA027
      IF (XR-XI-ERROR)55,55,50                                          REGFA028
   50 IF (DELTA-ERROR)55,55,60                                          REGFA029
   55 R(N)          = XI                                              REGFA030
      RETURN                                                            REGFA031
   60 YI            = FUNCT(XI)                                       REGFA032
      IF (YI*YR)70,55,65                                                REGFA033
   65 XR            = XI                                              REGFA034
      YR            = YI                                              REGFA035
      GO TO 45                                                          REGFA036
   70 XL            = XI                                              REGFA037
      YL            = YI                                              REGFA038
      GO TO 45                                                          REGFA039
      END                                                               REGFA040
```

```
      SUBROUTINE ANGLE(U,V)                                             ANGLE001
      IMPLICIT REAL*8 (A-H,O-Z)                                         ANGLE002
      EXTERNAL FUNC2                                                    ANGLE003
      DIMENSION RR(19), A     ), RSTO(19), ASTO(19), ANG(19), THETA(19),ANGLE004
     1          S(2), W(3,   ), WC(37,11), D(38,39)                    ANGLE005
      COMMON ALPHA,BETA,P,SSI,CCC,CULCAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     ANGLE006
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWOT                            ANGLE007
C        U STANDS FOR INTERCEPT OF X-AXIS BY PLATE BOUNDARY             ANGLE008
C           V STANDS FOR INTERCEPT OF Y-AXIS BY PLATE BOUNDARY          ANGLE009
C           ANG STANDS FOR ANGLE IN DEGREES                             ANGLE010
C           THETA STANDS FOR ANGLE IN RADIANS                           ANGLE011
      THETA(N)      = 1.5707963267948966                                ANGLE012
      ANG(N)        = 90.D0                                             ANGLE013
      CCNV1         = 5.7295779513082320D+01                            ANGLE014
      IF (ALPHA+BETA-2.02)10,10,15                                      ANGLE015
   10 X             = U/2.                                            ANGLE016
      Y             = V/2.                                            ANGLE017
      GO TO 30                                                          ANGLE018
   15 CONTINUE                                                          ANGLE019
      CON1          = XU*.03D0                                        ANGLE020
      CON2          = XU*.01D0                                        ANGLE021
      CALL REGFA2(CON1,XU,CON2,S,K,0.001D0,FUNC2)                       ANGLE022
      IF (K-1)20,25,20                                                  ANGLE023
   20 WRITE (6,1000)ALPHA,BETA                                          ANGLE024
 1000 FORMAT ('0','NO ROOT FOR',2X,'ALPHA = ',F5.2,                     ANGLE025
     1       2X,'BETA = ',F5.2,///)                                     ANGLE026
C       NOTE THAT XU EQUAL TO ZERO INDICATES TO MAIN - NO ROOT          ANGLE027
      XU            = 0.D0                                            ANGLE028
      GO TO 55                                                          ANGLE029
   25 X             = S(1)*U                                          ANGLE030
      Y             = V*(DABS(1.D0-(DABS(S(1)))**ALPHA))**(1.D0/BETA) ANGLE031
   30 DD            = (DABS((U-X)*(U-X)+Y*Y))**0.5D0                  ANGLE032
      E             = (DABS(X*X+(V-Y)*(V-Y)))**0.5D0                  ANGLE033
      F             = N-1                                             ANGLE034
      G             = (DD*E)/F                                        ANGLE035
      IM            = DD/G+0.5D0                                      ANGLE036
      NSAVE         = N-IM-1                                          ANGLE037
   35 M             = IM                                              ANGLE038
      PP            = (U-X)/M                                         ANGLE039
      Q             = Y/M                                             ANGLE040
      HOR           = U                                               ANGLE041
      VER           = 0.D0                                            ANGLE042
      DO 40     I   = 2,IM                                            ANGLE043
      HOR           = HOR-PP                                          ANGLE044
      VER           = VER+Q                                           ANGLE045
   40 THETA(I)      = DATAN(VER/HOR)                                  ANGLE046
      M             = NSAVE                                           ANGLE047
      IMP1          = IM+1                                            ANGLE048
      THETA(IMP1)   = DATAN(Y/X)                                      ANGLE049
      IMP2          = IM+2                                            ANGLE050
      PP            = X/M                                             ANGLE051
      Q             = (V-Y)/M                                         ANGLE052
      HOR           = X                                               ANGLE053
      VER           = Y                                               ANGLE054
      NM1           = N-1                                             ANGLE055
      DO 45     I   = IMP2,NM1                                        ANGLE056
      HOR           = HOR-PP                                          ANGLE057
      VER           = VER+Q                                           ANGLE058
   45 THETA(I)      = DATAN(VER/HOR)                                  ANGLE059
      DO 50     I   = 2,NM1                                           ANGLE060
   50 ANG(I)        = THETA(I)*CCNV1                                  ANGLE061
      ANG(1)        = ANG(2)/2.0D0                                    ANGLE062
      THETA(1)      = THETA(2)/2.0D0                                  ANGLE063
   55 RETURN                                                          ANGLE064
      END                                                               ANGLE065
```

```
      DOUBLE PRECISION FUNCTION FUNCR(R)                                FUNCR001
      IMPLICIT REAL*8 (A-H,O-Z)                                         FUNCR002
      DIMENSION RR(19), AA(76), RSTO(19), ASTO(19), ANG(19), THETA(19), FUNCR003
     1          W(37,11), WC(37,11), D(38,39)                          FUNCR004
      COMMON ALPHA,BETA,P,SSI,CCC,CULCAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     FUNCR005
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWOT                           FUNCR006
      FUNCR          = (DABS(R*CCC/XU))**ALPHA+(DABS(R*SSI/XV))**BETA-1.DO FUNCR007
      RETURN                                                            FUNCR008
      END                                                               FUNCR009


      DOUBLE PRECISION FUNCTION FUNC2(X)                                FUNC2001
      IMPLICIT REAL*8 (A-H,O-Z)                                         FUNC2002
      DIMENSION RR(19), AA(76), RSTO(19), ASTO(19), ANG(19), THETA(19), FUNC2003
     1          W(37,11), WC(37,11), D(38,39)                          FUNC2004
      COMMON ALPHA,BETA,P,SSI,CCC,CULCAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     FUNC2005
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWOT                           FUNC2006
      XA             = (DABS(X/XU))**ALPHA                              FUNC20[illegible]
      IF (BETA - 1.DO)10,10,15                                          FUNC2008
   10 FUNC2          = ALPHA*XV*XA/X-1.ODO                              FUNC2009
      RETURN                                                            FUNC2010
   15 BB             = (1.ODO-BETA)/BETA                                FUNC2011
      FUNC2          = XV/BETA*(DABS(1.ODO-XA))**BB*ALPHA*XA/X-1.ODO    FUNC2012
      RETURN                                                            FUNC2013
      END                                                               FUNC2014


      SUBROUTINE SIMEQ(MISCUE)                                          SIMEQ001
      IMPLICIT REAL*8 (A-H,O-Z)                                         SIMEQ002
      DIMENSION RR(19), AA(76), RSTO(19), ASTO(19), ANG(19), THETA(19), SIMEQ003
     1          W(37,11), WC(37,11), D(38,39)                          SIMEQ004
      COMMON ALPHA,BETA,P,SSI,CCC,CULCAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     SIMEQ005
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWOT                           SIMEQ006
C       SIMULTANEOUS EQUATIONS SOLVER                                   SIMEQ007
      NN             = 2*N                                              SIMEQ008
      I              = NN                                               SIMEQ009
      J              = NN+1                                             SIMEQ010
      IA             = I-1                                              SIMEQ011
      DO 35    NM    = 1,IA                                             SIMEQ012
      DMAX           = 0.ODO                                            SIMEQ013
      DO 15    K     = NM,I                                             SIMEQ014
      IF (DABS(DMAX)-DABS(D(K,NM)))10,10,15                             SIMEQ015
   10 DMAX           = D(K,NM)                                          SIMEQ016
      M              = K                                                SIMEQ017
   15 CONTINUE                                                          SIMEQ018
      IF (DMAX)25,20,25                                                 SIMEQ019
   20 MISCUE         = 2                                                SIMEQ020
      RETURN                                                            SIMEQ021
   25 MISCUE         = 1                                                SIMEQ022
      DO 30    L     = NM,J                                             SIMEQ023
      DT             = D(M,L)                                           SIMEQ024
      D(M,L)         = D(NM,L)                                          SIMEQ025
   30 D(NM,L)        = DT                                               SIMEQ026
      IB             = NM+1                                             SIMEQ027
      DO 35    L     = IB,I                                             SIMEQ028
      CONST          = -D(L,NM)/D(NM,NM)                                SIMEQ029
      DO 35    K     = NM,J                                             SIMEQ030
   35 D(L,K)         = CONST*D(NM,K)+D(L,K)                             SIMEQ031
      AA(I)          = D(I,J)/D(I,I)                                    SIMEQ032
      IC             = I-1                                              SIMEQ033
      DO 45    NM    = 1,IC                                             SIMEQ034
      L              = I-NM                                             SIMEQ035
      SUM            = 0.ODO                                            SIMEQ036
      ID             = L+1                                              SIMEQ037
      DO 40    K     = ID,I                                             SIMEQ038
   40 SUM            = SUM+AA(K)*D(L,K)                                 SIMEQ039
   45 AA(L)          = (D(L,J)-SUM)/D(L,L)                              SIMEQ040
      RETURN                                                            SIMEQ041
      END                                                               SIMEQ042
```

```
      SUBROUTINE OUTPUT                                                 OUTPUT01
      IMPLICIT REAL*8 (A-H,O-Z)                                         OUTPUT02
      DIMENSION RR(19),ANG(19),W(37,11),WC(37,11),KANG(37),A(37,133),   OUTPUT03
     1  R(39),BUF(1110),AA(76),RSTO(19),ASTO(19),D(38,39),THETA(19)      OUTPUT04
      COMMON ALPHA,BETA,P,SSI,CCC,CULOAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     OUTPUT05
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWCT                            OUTPUT06
      CALL FIO99Z(8,BUF,30,1110)                                        OUTPUT07
      WRITE (6,1000)ALPHA,BETA,RR(1),RR(19),CULOAD,CLLOAD,W(19,1)       OUTPUT08
 1000 FORMAT ('1',3X,'ALPHA =',F5.2,2X,'BETA =',F5.2,2X,'A =',F5.2,2X,  OUTPUT09
     1       'B =',F5.2,2X,'CULOAD=',F5.3,2X,'CLLCAD=',F5.3,//3X,       OUTPUT10
     1       'CENTER DEFLECTION =',F10.8/)                              OUTPUT11
      WRITE (6,1005)                                                    OUTPUT12
 1005 FORMAT(13X,'RADIUS      0.1R        0.2R        0.3R        0.4R',  OUTPUT13
     1       '        0.5R        0.6R        0.7R        0.8R        0.9R')OUTPUT14
      DO 10    I = 1,19                                                 OUTPUT15
      L          = 20-I                                                 OUTPUT16
      KANG(I)    = ANG(L)+.1D0                                          OUTPUT17
      IF (I.EQ.19) GO TO 5                                              OUTPUT18
      KANG(I+19) = KANG(I)                                              OUTPUT19
    5 R(I)       = RR(L)                                                OUTPUT20
   10 R(I+19)    = R(I)                                                 OUTPUT21
      WRITE (8,1010) (KANG(I),R(I),(W(I,J),J=2,11),I=1,37)              OUTPUT22
 1010 FORMAT(37(I2,0PF7.4,1P10D11.4/))                                  OUTPUT23
      READ (8,1015) ((A(I,J),J=1,109),I=1,37)                           OUTPUT24
 1015 FORMAT (37(9A1,10(7A1,1X,3A1)/))                                  OUTPUT25
      WRITE (6,1020) ((A(I,J),J=1,99),I=1,19)                           OUTPUT26
 1020 FORMAT (37(10X,9A1,9(1X,10A1)/))                                  OUTPUT27
      WRITE (6,1020) ((A(I,J),J=1,99),I=20,37)                          OUTPUT28
      RETURN                                                            OUTPUT29
      END                                                               OUTPUT30
```

```
      SUBROUTINE TABULA                                                 TABULA01
      IMPLICIT REAL*8 (A-H,O-Z)                                         TABULA02
      DIMENSION RR(19), AA(76), RSTO(19), ASTO(19), ANG(19), THETA(19), TABULA03
     1          W(37,11),D(38,39),A(37,133),KANG(37),R(39),ACONV(78,10) TABULA04
      DIMENSION BUF2(1295),BUF3(864),WC(37,11)                          TABULA05
      COMMON ALPHA,BETA,P,SSI,CCC,CULOAD,CLLCAD,RR,W,PUNCH,AA,RSTO,     TABULA06
     1  ASTO,D,ANG,WC,THETA,XU,XV,ICT,N,IWCT                            TABULA07
      NN           = N+N                                                TABULA08
      NMAX         = NN+NN                                              TABULA09
      GO TO (5,5,5,25,5,5,5,25),IWCT                                    TABULA10
    5 WRITE (6,1000)ALPHA,BETA,RR(1),RR(19),CULOAD,CLLCAD,WC(19,1)      TABULA11
 1000 FORMAT ('1',3X,'ALPHA =',F5.2,2X,'BETA =',F5.2,2X,'A =',F5.2,2X,  TABULA12
     1       'B =',F5.2,2X,'CULOAD=',F5.3,2X,'CLLCAD=',F5.3,//3X,       TABULA13
     1       'CENTER DEFLECTION =',F10.8/)                              TABULA14
      WRITE (6,1005)                                                    TABULA15
 1005 FORMAT(13X,'RADIUS      0.1R        0.2R        0.3R        0.4R', TABULA16
     1       '        0.5R        0.6R        0.7R        0.8R        0.9R')TABULA17
      CALL FIO99Z(8,BUF2,35,1295)                                       TABULA18
      DO 20    I = 1,37                                                 TABULA19
      IF (I-19)10,10,15                                                 TABULA20
   10 L          = 20-I                                                 TABULA21
      KANG(I)    = ANG(L)+.1D0                                          TABULA22
      R(I)       = RR(L)                                                TABULA23
      GO TO 20                                                          TABULA24
   15 L          = I-18                                                 TABULA25
      KANG(I)    = -ANG(L)-.1D0                                         TABULA26
      R(I)       = RR(L)                                                TABULA27
   20 CONTINUE                                                          TABULA28
      WRITE (8,1010) (KANG(I), R(I),(WC(I,J), J=2,11) , I=1,37)         TABULA29
 1010 FORMAT(37(I3,0PF7.4,1P10D11.4/))                                  TABULA30
      READ (8,1015) ((A(I,J),J=1,110),I=1,37)                           TABULA31
 1015 FORMAT(37(10A1,10(7A1,1X,3A1)/))                                  TABULA32
      WRITE (6,1020)((A(I,J),J=1,100),I=1,37)                           TABULA33
 1020 FORMAT (37(9X,10A1,9(1X,10A1)/))                                  TABULA34
      GO TO (65,65,25,25,65,65,25,25),IWCT                              TABULA35
   25 WRITE (6,1025)                                                    TABULA36
 1025 FORMAT ('1',8X,'SERIES COEFFICIENTS AA',4X,'COLLOCATION POINTS',   TABULA37
     1       /10X,'UNIFORM       LINEAR',6X,'RADIUS     ANGLE')        TABULA38
      CALL FIO99X                                                       TABULA39
      CALL FIO99Z(8,BUF3,72,864)                                        TABULA40
      WRITE (8,1030) (AA(I),I=1,NMAX)                                   TABULA41
 1030 FORMAT(3(26(1PD11.4),/))                                          TABULA42
      READ (8,1035) ((ACONV(I,J),J=1,10),I=1,NMAX)                      TABULA43
 1035 FORMAT (3(26(7A1,1X,3A1)/))                                       TABULA44
      DO 40    I = 1,NN                                                 TABULA45
      J          = I+38                                                 TABULA46
      IF (I-N)30,30,35                                                  TABULA47
   30 WRITE (6,1040) I,(ACONV(I,K),K=1,10),(ACONV(J,K),K=1,10),RSTO(I),  TABULA48
     1                ASTO(I)                                          TABULA49
 1040 FORMAT (I3,2X,2(2X,10A1,1X),F10.4,3X,F5.2)                        TABULA50
      GO TO 40                                                          TABULA51
   35 WRITE (6,1045) I,(ACONV(I,K),K=1,10),(ACONV(J,K),K=1,10)          TABULA52
 1045 FORMAT (I3,2X,2(2X,10A1,1X))                                      TABULA53
   40 CONTINUE                                                          TABULA54
      IF (PUNCH)65,65,45                                                TABULA55
   45 WRITE (7,1050)ALPHA,BETA,RR(1),RR(19),W(1,1)                      TABULA56
 1050 FORMAT (4F10.2,D12.5)                                             TABULA57
      DO 60    I = 1,37                                                 TABULA58
      IF (I-19)50,50,55                                                 TABULA59
   50 L          = 20-I                                                 TABULA60
      GO TO 60                                                          TABULA61
   55 L          = I-18                                                 TABULA62
   60 WRITE (7,1055)THETA(L),RR(L),(W(I,J),J=2,11)                      TABULA63
 1055 FORMAT (2F10.5,5D12.5/5D12.5)                                     TABULA64
   65 RETURN                                                            TABULA65
      END                                                               TABULA66
```

TABULATED RESULTS

1. Plate Shapes

Twelve representative plate shapes were selected by assigning values 1.0 and 2.0 for the ratio of vertical to horizontal dimension, b/a, of the plate, and using the following combinations of α and β:

(1.6,1.6), (2.0,2.0), (3.0,3.0), (5.0,5.0), (10.0,10.0), (1.6,10.0)

2. Plate Loadings

Two loads were applied to each of the above plates, a uniform load as well as uniform plus linear load. In (7), $q = .004\ y + .002$ while the flexural rigidity, D, was assigned a value of unity by selecting $D = 1.0 = E\ h^3/12(1 - \nu^2)$. Since steel was assumed as the material with modulus of elasticity $E = 200$ GPa, and with Poisson's ratio assumed to be 0.3, h was selected as 0.379371 mm .

3. Floating Point Notation

The values which appear in the tables are in floating point notation as follows:

6.4252 01 = 64.252
6.4252-02 = 0.064252
-6.4252 00 = -6.4252

4. Tables

Deflections for uniform load are first presented. These are followed by uniform and linear components displayed separately. The total deflection due to the linear and uniform loads are then presented.

TABLES

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 1.00 CLLOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.06571199

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	6.4252-02	5.9985-02	5.3245-02	4.4571-02	3.4686-02	2.4464-02	1.4890-02	6.9973-03	1.7826-03
85	0.9913	6.4277-02	6.0081-02	5.3443-02	4.4882-02	3.5096-02	2.4930-02	1.5342-02	7.3487-03	1.9488-03
80	0.9778	6.4316-02	6.0226-02	5.3741-02	4.5345-02	3.5692-02	2.5586-02	1.5949-02	7.7822-03	2.1214-03
75	0.9636	6.4355-02	6.0376-02	5.4047-02	4.5813-02	3.6285-02	2.6223-02	1.6516-02	8.1637-03	2.2594-03
70	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6238-02	3.6816-02	2.6781-02	1.6999-02	8.4763-03	2.3676-03
65	0.9387	6.4423-02	6.0633-02	5.4565-02	4.6597-02	3.7259-02	2.7240-02	1.7388-02	8.7219-03	2.4500-03
60	0.9294	6.4449-02	6.0727-02	5.4754-02	4.6880-02	3.7606-02	2.7595-02	1.7684-02	8.9059-03	2.5109-03
55	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7847-02	1.7892-02	9.0335-03	2.5527-03
50	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1084-03	2.5770-03
45	0.9170	6.4481-02	6.0850-02	5.5000-02	4.7246-02	3.8052-02	2.8046-02	1.8056-02	9.1331-03	2.5851-03
40	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1083-03	2.5770-03
35	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7846-02	1.7892-02	9.0333-03	2.5526-03
30	0.9294	6.4449-02	6.0727-02	5.4753-02	4.6879-02	3.7606-02	2.7595-02	1.7684-02	8.9056-03	2.5107-03
25	0.9387	6.4423-02	6.0632-02	5.4564-02	4.6596-02	3.7258-02	2.7239-02	1.7387-02	8.7214-03	2.4500-03
20	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6237-02	3.6815-02	2.6779-02	1.6997-02	8.4755-03	2.3671-03
15	0.9636	6.4355-02	6.0376-02	5.4046-02	4.5812-02	3.6284-02	2.6221-02	1.6514-02	8.1624-03	2.2590-03
10	0.9778	6.4315-02	6.0226-02	5.3741-02	4.5344-02	3.5691-02	2.5584-02	1.5947-02	7.7802-03	2.1202-03
5	0.9913	6.4277-02	6.0081-02	5.3442-02	4.4881-02	3.5094-02	2.4928-02	1.5340-02	7.3457-03	1.9463-03
0	1.0000	6.4252-02	5.9985-02	5.3244-02	4.4570-02	3.4684-02	2.4462-02	1.4887-02	6.9937-03	1.7781-03
-5	0.9913	6.4277-02	6.0081-02	5.3442-02	4.4881-02	3.5094-02	2.4928-02	1.5340-02	7.3457-03	1.9463-03
-10	0.9778	6.4315-02	6.0226-02	5.3741-02	4.5344-02	3.5691-02	2.5584-02	1.5947-02	7.7802-03	2.1202-03
-15	0.9636	6.4355-02	6.0376-02	5.4046-02	4.5812-02	3.6284-02	2.6221-02	1.6514-02	8.1624-03	2.2590-03
-20	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6237-02	3.6815-02	2.6779-02	1.6997-02	8.4755-03	2.3671-03
-25	0.9387	6.4423-02	6.0632-02	5.4564-02	4.6596-02	3.7258-02	2.7239-02	1.7387-02	8.7214-03	2.4500-03
-30	0.9294	6.4449-02	6.0727-02	5.4753-02	4.6879-02	3.7606-02	2.7595-02	1.7684-02	8.9056-03	2.5107-03
-35	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7846-02	1.7892-02	9.0333-03	2.5526-03
-40	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1083-03	2.5770-03
-45	0.9170	6.4481-02	6.0850-02	5.5000-02	4.7246-02	3.8052-02	2.8046-02	1.8056-02	9.1331-03	2.5851-03
-50	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1084-03	2.5770-03
-55	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7847-02	1.7892-02	9.0335-03	2.5527-03
-60	0.9294	6.4449-02	6.0727-02	5.4754-02	4.6880-02	3.7606-02	2.7595-02	1.7684-02	8.9059-03	2.5109-03
-65	0.9387	6.4423-02	6.0633-02	5.4565-02	4.6597-02	3.7259-02	2.7240-02	1.7388-02	8.7219-03	2.4500-03
-70	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6238-02	3.6816-02	2.6781-02	1.6999-02	8.4763-03	2.3676-03
-75	0.9636	6.4355-02	6.0376-02	5.4047-02	4.5813-02	3.6285-02	2.6223-02	1.6516-02	8.1637-03	2.2594-03
-80	0.9778	6.4316-02	6.0226-02	5.3741-02	4.5345-02	3.5692-02	2.5586-02	1.5949-02	7.7822-03	2.1214-03
-85	0.9913	6.4277-02	6.0081-02	5.3443-02	4.4882-02	3.5096-02	2.4930-02	1.5342-02	7.3487-03	1.9488-03
-90	1.0000	6.4252-02	5.9985-02	5.3245-02	4.4571-02	3.4686-02	2.4464-02	1.4890-02	6.9973-03	1.7826-03

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 1.00 CLLOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.06571199

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	6.4252-02	5.9985-02	5.3245-02	4.4571-02	3.4686-02	2.4464-02	1.4890-02	6.9973-03	1.7826-03
85	0.9913	6.4277-02	6.0081-02	5.3443-02	4.4882-02	3.5096-02	2.4930-02	1.5342-02	7.3487-03	1.9488-03
80	0.9778	6.4316-02	6.0226-02	5.3741-02	4.5345-02	3.5692-02	2.5586-02	1.5949-02	7.7822-03	2.1214-03
75	0.9636	6.4355-02	6.0376-02	5.4047-02	4.5813-02	3.6285-02	2.6223-02	1.6516-02	8.1637-03	2.2594-03
70	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6238-02	3.6816-02	2.6781-02	1.6999-02	8.4763-03	2.3676-03
65	0.9387	6.4423-02	6.0633-02	5.4565-02	4.6597-02	3.7259-02	2.7240-02	1.7388-02	8.7219-03	2.4500-03
60	0.9294	6.4449-02	6.0727-02	5.4754-02	4.6880-02	3.7606-02	2.7595-02	1.7684-02	8.9059-03	2.5109-03
55	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7847-02	1.7892-02	9.0335-03	2.5527-03
50	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1084-03	2.5770-03
45	0.9170	6.4481-02	6.0850-02	5.5000-02	4.7246-02	3.8052-02	2.8046-02	1.8056-02	9.1331-03	2.5851-03
40	0.9184	6.4478-02	6.0836-02	5.4972-02	4.7206-02	3.8002-02	2.7996-02	1.8015-02	9.1083-03	2.5770-03
35	0.9226	6.4467-02	6.0795-02	5.4890-02	4.7083-02	3.7854-02	2.7846-02	1.7892-02	9.0333-03	2.5526-03
30	0.9294	6.4449-02	6.0727-02	5.4753-02	4.6879-02	3.7606-02	2.7595-02	1.7684-02	8.9056-03	2.5107-03
25	0.9387	6.4423-02	6.0632-02	5.4564-02	4.6596-02	3.7258-02	2.7239-02	1.7387-02	8.7214-03	2.4500-03
20	0.9503	6.4392-02	6.0514-02	5.4326-02	4.6237-02	3.6815-02	2.6779-02	1.6997-02	8.4755-03	2.3671-03
15	0.9636	6.4355-02	6.0376-02	5.4046-02	4.5812-02	3.6284-02	2.6221-02	1.6514-02	8.1624-03	2.2590-03
10	0.9778	6.4315-02	6.0226-02	5.3741-02	4.5344-02	3.5691-02	2.5584-02	1.5947-02	7.7802-03	2.1202-03
5	0.9913	6.4277-02	6.0081-02	5.3442-02	4.4881-02	3.5094-02	2.4928-02	1.5340-02	7.3457-03	1.9463-03
0	1.0000	6.4252-02	5.9985-02	5.3244-02	4.4570-02	3.4684-02	2.4462-02	1.4887-02	6.9937-03	1.7781-03
90	1.0000	4.3126-03	8.0745-03	1.0800-02	1.2133-02	1.1905-02	1.0186-02	7.3322-03	4.0068-03	1.1753-03
85	0.9913	4.2603-03	7.9852-03	1.0701-02	1.2058-02	1.1882-02	1.0234-02	7.4428-03	4.1403-03	1.2609-03
80	0.9778	4.1564-03	7.8024-03	1.0484-02	1.1860-02	1.1754-02	1.0203-02	7.5032-03	4.2408-03	1.3215-03
75	0.9636	4.0195-03	7.5564-03	1.0179-02	1.1557-02	1.1509-02	1.0055-02	7.4538-03	4.2544-03	1.3401-03
70	0.9503	3.8579-03	7.2613-03	9.8612-03	1.1160-02	1.1155-02	9.7895-03	7.2949-03	4.1868-03	1.3256-03
65	0.9387	3.6766-03	6.9261-03	9.3624-03	1.0681-02	1.0703-02	9.4191-03	7.0395-03	4.0512-03	1.2853-03
60	0.9294	3.4788-03	6.5569-03	8.8708-03	1.0131-02	1.0165-02	8.9575-03	6.7024-03	3.8603-03	1.2250-03
55	0.9226	3.2665-03	6.1577-03	8.3326-03	9.5191-03	9.5526-03	8.4179-03	6.2971-03	3.6246-03	1.1489-03
50	0.9184	3.0407-03	5.7310-03	7.7522-03	8.8510-03	8.8749-03	7.8120-03	5.8353-03	3.3526-03	1.0604-03
45	0.9170	2.8020-03	5.2780-03	7.1327-03	8.1326-03	8.1401-03	7.1495-03	5.3267-03	3.0515-03	9.6209-04
40	0.9184	2.5502-03	4.7993-03	6.4759-03	7.3681-03	7.3550-03	6.4340-03	4.7796-03	2.7269-03	8.5603-04
35	0.9226	2.2850-03	4.2948-03	5.7830-03	6.5608-03	6.5254-03	5.6881-03	4.2015-03	2.3842-03	7.4422-04
30	0.9294	2.0056-03	3.7636-03	5.0546-03	5.7136-03	5.6568-03	4.9040-03	3.5997-03	2.0286-03	6.2843-04
25	0.9387	1.7111-03	3.2051-03	4.2910-03	4.8294-03	4.7548-03	4.0945-03	2.9818-03	1.6653-03	5.1076-04
20	0.9503	1.4009-03	2.6183-03	3.4928-03	3.9113-03	3.8256-03	3.2678-03	2.3566-03	1.3008-03	3.9353-04
15	0.9636	1.0741-03	2.0028-03	2.6613-03	2.9634-03	2.8771-03	2.4340-03	1.7342-03	9.4268-04	2.7965-04
10	0.9778	7.3067-04	1.3592-03	1.7986-03	1.9968-03	1.9172-03	1.6044-03	1.1265-03	6.0020-04	1.7302-04
5	0.9913	3.7152-04	6.8954-04	9.0894-04	1.0004-03	9.5557-04	7.9067-04	5.4614-04	2.8371-04	7.8263-05

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 1.00 QULOAD=0.002 QLLOAD=0.004

CENTER DEFLECTION = 0.06571199

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	6.8565-02	6.8060-02	6.4045-02	5.6704-02	4.6590-02	3.4650-02	2.2222-02	1.1004-02	2.9579-03
85	0.9913	6.8538-02	6.8066-02	6.4144-02	5.6940-02	4.6978-02	3.5164-02	2.2785-02	1.1489-02	3.2097-03
80	0.9778	6.8472-02	6.8029-02	6.4226-02	5.7205-02	4.7446-02	3.5790-02	2.3452-02	1.2023-02	3.4429-03
75	0.9636	6.8375-02	6.7933-02	6.4226-02	5.7370-02	4.7794-02	3.6277-02	2.3969-02	1.2418-02	3.5944-03
70	0.9503	6.8250-02	6.7776-02	6.4128-02	5.7397-02	4.7971-02	3.6570-02	2.4293-02	1.2663-02	3.6932-03
65	0.9387	6.8100-02	6.7559-02	6.3927-02	5.7278-02	4.7962-02	3.6659-02	2.4427-02	1.2773-02	3.7353-03
60	0.9294	6.7927-02	6.7284-02	6.3624-02	5.7011-02	4.7771-02	3.6553-02	2.4387-02	1.2766-02	3.7358-03
55	0.9226	6.7733-02	6.6953-02	6.3223-02	5.6602-02	4.7407-02	3.6265-02	2.4189-02	1.2658-02	3.7016-03
50	0.9184	6.7518-02	6.6567-02	6.2725-02	5.6057-02	4.6877-02	3.5808-02	2.3851-02	1.2461-02	3.6374-03
45	0.9170	6.7283-02	6.6128-02	6.2132-02	5.5379-02	4.6192-02	3.5196-02	2.3383-02	1.2185-02	3.5471-03
40	0.9184	6.7028-02	6.5635-02	6.1448-02	5.4574-02	4.5357-02	3.4435-02	2.2795-02	1.1835-02	3.4330-03
35	0.9226	6.6752-02	6.5090-02	6.0673-02	5.3644-02	4.4379-02	3.3534-02	2.2094-02	1.1418-02	3.2968-03
30	0.9294	6.6454-02	6.4490-02	5.9808-02	5.2593-02	4.3262-02	3.2499-02	2.1284-02	1.0934-02	3.1391-03
25	0.9387	6.6135-02	6.3837-02	5.8855-02	5.1425-02	4.2013-02	3.1333-02	2.0369-02	1.0387-02	2.9607-03
20	0.9503	6.5793-02	6.3133-02	5.7819-02	5.0148-02	4.0640-02	3.0047-02	1.9354-02	9.7763-03	2.7606-03
15	0.9636	6.5429-02	6.2379-02	5.6708-02	4.8776-02	3.9161-02	2.8655-02	1.8248-02	9.1051-03	2.5386-03
10	0.9778	6.5046-02	6.1585-02	5.5539-02	4.7335-02	3.7608-02	2.7189-02	1.7073-02	8.3804-03	2.2932-03
5	0.9913	6.4649-02	6.0770-02	5.4351-02	4.5882-02	3.6050-02	2.5719-02	1.5886-02	7.6294-03	2.0245-03
0	1.0000	6.4252-02	5.9985-02	5.3244-02	4.4570-02	3.4684-02	2.4462-02	1.4887-02	6.9937-03	1.7781-03
-5	0.9913	6.3906-02	5.9391-02	5.2533-02	4.3881-02	3.4139-02	2.4137-02	1.4793-02	7.0620-03	1.8680-03
-10	0.9778	6.3585-02	5.8867-02	5.1942-02	4.3353-02	3.3773-02	2.3980-02	1.4820-02	7.1800-03	1.9471-03
-15	0.9636	6.3281-02	5.8373-02	5.1385-02	4.2849-02	3.3407-02	2.3787-02	1.4780-02	7.2197-03	1.9793-03
-20	0.9503	6.2991-02	5.7896-02	5.0833-02	4.2326-02	3.2989-02	2.3512-02	1.4641-02	7.1747-03	1.9736-03
-25	0.9387	6.2712-02	5.7427-02	5.0273-02	4.1767-02	3.2503-02	2.3145-02	1.4405-02	7.0561-03	1.9392-03
-30	0.9294	6.2443-02	5.6963-02	4.9699-02	4.1166-02	3.1949-02	2.2690-02	1.4084-02	6.8770-03	1.8823-03
-35	0.9226	6.2182-02	5.6500-02	4.9107-02	4.0522-02	3.1328-02	2.2158-02	1.3690-02	6.6490-03	1.8084-03
-40	0.9184	6.1928-02	5.6037-02	4.8496-02	3.9837-02	3.0647-02	2.1557-02	1.3236-02	6.3814-03	1.7209-03
-45	0.9170	6.1679-02	5.5572-02	4.7867-02	3.9114-02	2.9912-02	2.0897-02	1.2729-02	6.0817-03	1.6230-03
-50	0.9184	6.1437-02	5.5105-02	4.7220-02	3.8355-02	2.9127-02	2.0184-02	1.2180-02	5.7558-03	1.5166-03
-55	0.9226	6.1200-02	5.4637-02	4.6558-02	3.7564-02	2.8301-02	1.9429-02	1.1595-02	5.4089-03	1.4037-03
-60	0.9294	6.0970-02	5.4170-02	4.5883-02	3.6748-02	2.7441-02	1.8638-02	1.0982-02	5.0457-03	1.2859-03
-65	0.9387	6.0747-02	5.3706-02	4.5202-02	3.5915-02	2.6556-02	1.7821-02	1.0348-02	4.6707-03	1.1647-03
-70	0.9503	6.0534-02	5.3253-02	4.4525-02	3.5078-02	2.5660-02	1.6991-02	9.7036-03	4.2895-03	1.0419-03
-75	0.9636	6.0336-02	5.2820-02	4.3868-02	3.4256-02	2.4776-02	1.6168-02	9.0619-03	3.9093-03	9.1930-04
-80	0.9778	6.0159-02	5.2424-02	4.3257-02	3.3485-02	2.3938-02	1.5383-02	8.4458-03	3.5414-03	7.9982-04
-85	0.9913	6.0017-02	5.2096-02	4.2742-02	3.2825-02	2.3214-02	1.4696-02	7.8995-03	3.2085-03	6.8797-04
-90	1.0000	5.9940-02	5.1911-02	4.2445-02	3.2438-02	2.2781-02	1.4278-02	7.5277-03	2.9906-03	6.0731-04

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 2.00 QULOAD=0.002 QLLOAD=0.0

CENTER DEFLECTION = 0.15340862

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	1.4919-01	1.3706-01	1.1849-01	9.5647-02	7.1036-02	4.7246-02	2.6681-02	1.1325-02	2.5005-03
85	1.9341	1.4940-01	1.3784-01	1.2004-01	9.7942-02	7.3853-02	5.0196-02	2.9287-02	1.3130-02	3.1792-03
80	1.8229	1.4969-01	1.3890-01	1.2212-01	1.0098-01	7.7515-02	5.3928-02	3.2458-02	1.5195-02	3.9393-03
75	1.7018	1.4994-01	1.3983-01	1.2393-01	1.0363-01	8.0682-02	5.7117-02	3.5112-02	1.6871-02	4.5134-03
70	1.5856	1.5013-01	1.4054-01	1.2534-01	1.0568-01	8.3134-02	5.9577-02	3.7144-02	1.8135-02	4.9304-03
65	1.4803	1.5027-01	1.4105-01	1.2635-01	1.0717-01	8.4923-02	6.1377-02	3.8630-02	1.9057-02	5.2686-03
60	1.3878	1.5036-01	1.4139-01	1.2703-01	1.0819-01	8.6166-02	6.2640-02	3.9683-02	1.9706-02	5.4534-03
55	1.3082	1.5042-01	1.4161-01	1.2747-01	1.0885-01	8.6983-02	6.3484-02	4.0394-02	2.0168-02	5.6212-03
50	1.2404	1.5045-01	1.4173-01	1.2772-01	1.0924-01	8.7470-02	6.4001-02	4.0841-02	2.0447-02	5.7495-03
45	1.1834	1.5046-01	1.4177-01	1.2782-01	1.0941-01	8.7703-02	6.4265-02	4.1084-02	2.0606-02	5.7498-03
40	1.1360	1.5046-01	1.4177-01	1.2782-01	1.0942-01	8.7737-02	6.4327-02	4.1162-02	2.0681-02	5.8061-03
35	1.0970	1.5045-01	1.4172-01	1.2773-01	1.0930-01	8.7616-02	6.4226-02	4.1099-02	2.0658-02	5.8346-03
30	1.0657	1.5043-01	1.4165-01	1.2759-01	1.0909-01	8.7370-02	6.3991-02	4.0920-02	2.0551-02	5.7675-03
25	1.0412	1.5040-01	1.4155-01	1.2740-01	1.0881-01	8.7025-02	6.3645-02	4.0640-02	2.0387-02	5.7061-03
20	1.0228	1.5037-01	1.4145-01	1.2717-01	1.0847-01	8.6603-02	6.3206-02	4.0270-02	2.0164-02	5.6643-03
15	1.0101	1.5034-01	1.4133-01	1.2693-01	1.0810-01	8.6127-02	6.2694-02	3.9819-02	1.9870-02	5.5662-03
10	1.0026	1.5031-01	1.4121-01	1.2669-01	1.0771-01	8.5626-02	6.2140-02	3.9308-02	1.9509-02	5.4120-03
5	0.9996	1.5028-01	1.4110-01	1.2646-01	1.0735-01	8.5149-02	6.1596-02	3.8783-02	1.9114-02	5.2459-03
0	1.0000	1.5026-01	1.4103-01	1.2631-01	1.0712-01	8.4834-02	6.1226-02	3.8408-02	1.8807-02	5.0949-03
-5	0.9996	1.5028-01	1.4110-01	1.2646-01	1.0735-01	8.5149-02	6.1596-02	3.8783-02	1.9114-02	5.2459-03
-10	1.0026	1.5031-01	1.4121-01	1.2669-01	1.0771-01	8.5626-02	6.2140-02	3.9308-02	1.9509-02	5.4120-03
-15	1.0101	1.5034-01	1.4133-01	1.2693-01	1.0810-01	8.6127-02	6.2694-02	3.9819-02	1.9870-02	5.5662-03
-20	1.0228	1.5037-01	1.4145-01	1.2717-01	1.0847-01	8.6603-02	6.3206-02	4.0270-02	2.0164-02	5.6643-03
-25	1.0412	1.5040-01	1.4155-01	1.2740-01	1.0881-01	8.7025-02	6.3645-02	4.0640-02	2.0387-02	5.7061-03
-30	1.0657	1.5043-01	1.4165-01	1.2759-01	1.0909-01	8.7370-02	6.3991-02	4.0920-02	2.0551-02	5.7675-03
-35	1.0970	1.5045-01	1.4172-01	1.2773-01	1.0930-01	8.7616-02	6.4226-02	4.1099-02	2.0658-02	5.8346-03
-40	1.1360	1.5046-01	1.4177-01	1.2782-01	1.0942-01	8.7737-02	6.4327-02	4.1162-02	2.0681-02	5.8061-03
-45	1.1834	1.5046-01	1.4177-01	1.2782-01	1.0941-01	8.7703-02	6.4265-02	4.1084-02	2.0606-02	5.7498-03
-50	1.2404	1.5045-01	1.4173-01	1.2772-01	1.0924-01	8.7470-02	6.4001-02	4.0841-02	2.0447-02	5.7495-03
-55	1.3082	1.5042-01	1.4161-01	1.2747-01	1.0885-01	8.6983-02	6.3484-02	4.0394-02	2.0168-02	5.6212-03
-60	1.3878	1.5036-01	1.4139-01	1.2703-01	1.0819-01	8.6166-02	6.2640-02	3.9683-02	1.9706-02	5.4534-03
-65	1.4803	1.5027-01	1.4105-01	1.2635-01	1.0717-01	8.4923-02	6.1377-02	3.8630-02	1.9057-02	5.2686-03
-70	1.5856	1.5013-01	1.4054-01	1.2534-01	1.0568-01	8.3134-02	5.9577-02	3.7144-02	1.8135-02	4.9304-03
-75	1.7018	1.4994-01	1.3983-01	1.2393-01	1.0363-01	8.0682-02	5.7117-02	3.5112-02	1.6871-02	4.5134-03
-80	1.8229	1.4969-01	1.3890-01	1.2212-01	1.0098-01	7.7515-02	5.3928-02	3.2458-02	1.5195-02	3.9393-03
-85	1.9341	1.4940-01	1.3784-01	1.2004-01	9.7942-02	7.3853-02	5.0196-02	2.9287-02	1.3130-02	3.1792-03
-90	2.0000	1.4919-01	1.3706-01	1.1849-01	9.5647-02	7.1036-02	4.7246-02	2.6681-02	1.1325-02	2.5005-03

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 2.00 CULOAD=0.002 CLLCAD=0.004

CENTER DEFLECTION = 0.15340862

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	1.8566-01	2.0458-01	2.0714-01	1.9264-01	1.6294-01	1.2239-01	7.7641-02	3.6950-02	9.1412-03
85	1.9341	1.8457-01	2.0321-01	2.0641-01	1.9335-01	1.6550-01	1.2664-01	8.2710-02	4.1388-02	1.1213-02
80	1.8229	1.8251-01	2.0018-01	2.0372-01	1.9215-01	1.6643-01	1.2960-01	8.6797-02	4.5033-02	1.2911-02
75	1.7018	1.8003-01	1.9622-01	1.9950-01	1.8880-01	1.6468-01	1.2962-01	8.8068-02	4.6558-02	1.3660-02
70	1.5856	1.7743-01	1.9183-01	1.9437-01	1.8395-01	1.6090-01	1.2730-01	8.7130-02	4.6484-02	1.3769-02
65	1.4803	1.7486-01	1.8734-01	1.8881-01	1.7825-01	1.5588-01	1.2351-01	8.4767-02	4.5400-02	1.3564-02
60	1.3878	1.7240-01	1.8291-01	1.8314-01	1.7217-01	1.5020-01	1.1889-01	8.1591-02	4.3714-02	1.3016-02
55	1.3082	1.7007-01	1.7864-01	1.7755-01	1.6601-01	1.4425-01	1.1385-01	7.7983-02	4.1749-02	1.2436-02
50	1.2404	1.6788-01	1.7456-01	1.7212-01	1.5991-01	1.3825-01	1.0867-01	7.4182-02	3.9591-02	1.1823-02
45	1.1834	1.6584-01	1.7068-01	1.6689-01	1.5396-01	1.3232-01	1.0348-01	7.0334-02	3.7385-02	1.1034-02
40	1.1360	1.6385-01	1.6697-01	1.6185-01	1.4819-01	1.2651-01	9.8358-02	6.6506-02	3.5202-02	1.0384-02
35	1.0970	1.6198-01	1.6343-01	1.5701-01	1.4260-01	1.2086-01	9.3338-02	6.2729-02	3.3023-02	9.7395-03
30	1.0657	1.6019-01	1.6001-01	1.5232-01	1.3718-01	1.1535-01	8.8428-02	5.9021-02	3.0861-02	8.9989-03
25	1.0412	1.5846-01	1.5670-01	1.4777-01	1.3190-01	1.0997-01	8.3625-02	5.5386-02	2.8748-02	8.3086-03
20	1.0228	1.5678-01	1.5347-01	1.4334-01	1.2675-01	1.0471-01	7.8921-02	5.1817-02	2.6678-02	7.6866-03
15	1.0101	1.5513-01	1.5031-01	1.3898-01	1.2169-01	9.9562-02	7.4307-02	4.8309-02	2.4628-02	7.0329-03
10	1.0026	1.5350-01	1.4718-01	1.3469-01	1.1673-01	9.4507-02	6.9786-02	4.4866-02	2.2599-02	6.3504-03
5	0.9996	1.5188-01	1.4409-01	1.3046-01	1.1184-01	8.9564-02	6.5383-02	4.1520-02	2.0621-02	5.6952-03
0	1.0000	1.5026-01	1.4103-01	1.2631-01	1.0712-01	8.4834-02	6.1226-02	3.8408-02	1.8807-02	5.0949-03
-5	0.9996	1.4869-01	1.3811-01	1.2246-01	1.0286-01	8.0733-02	5.7809-02	3.6047-02	1.7607-02	4.7967-03
-10	1.0026	1.4712-01	1.3523-01	1.1868-01	9.8695-02	7.6744-02	5.4493-02	3.3750-02	1.6420-02	4.4737-03
-15	1.0101	1.4555-01	1.3235-01	1.1488-01	9.4498-02	7.2692-02	5.1081-02	3.1330-02	1.5111-02	4.0995-03
-20	1.0228	1.4396-01	1.2942-01	1.1101-01	9.0191-02	6.8492-02	4.7490-02	2.8723-02	1.3650-02	3.6420-03
-25	1.0412	1.4234-01	1.2641-01	1.0702-01	8.5713-02	6.4079-02	4.3664-02	2.5895-02	1.2026-02	3.1035-03
-30	1.0657	1.4066-01	1.2329-01	1.0285-01	8.1004-02	5.9393-02	3.9554-02	2.2819-02	1.0242-02	2.5361-03
-35	1.0970	1.3891-01	1.2002-01	9.8458-02	7.6003-02	5.4375-02	3.5114-02	1.9469-02	8.2938-03	1.9297-03
-40	1.1360	1.3707-01	1.1656-01	9.3779-02	7.0643-02	4.8962-02	3.0296-02	1.5817-02	6.1604-03	1.2286-03
-45	1.1834	1.3512-01	1.1287-01	8.8754-02	6.4855-02	4.3089-02	2.5051-02	1.1835-02	3.8274-03	4.6537-04
-50	1.2404	1.3302-01	1.0889-01	8.3313-02	5.8564-02	3.6691-02	1.9334-02	7.4995-03	1.3019-03	-3.2432-04
-55	1.3082	1.3076-01	1.0457-01	7.7389-02	5.1702-02	2.9714-02	1.3115-02	2.8052-03	-1.4133-03	-1.1939-03
-60	1.3878	1.2832-01	9.9873-02	7.0922-02	4.4214-02	2.2127-02	6.3945-03	-2.2257-03	-4.3025-03	-2.1092-03
-65	1.4803	1.2567-01	9.4759-02	6.3881-02	3.6092-02	1.3962-02	-7.5871-04	-7.5082-03	-7.2861-03	-3.0270-03
-70	1.5856	1.2283-01	8.9242-02	5.6302-02	2.7421-02	5.3638-03	-8.1519-03	-1.2842-02	-1.0215-02	-3.9077-03
-75	1.7018	1.1985-01	8.3430-02	4.8364-02	1.8469-02	-3.3149-03	-1.5382-02	-1.7844-02	-1.2817-02	-4.6334-03
-80	1.8229	1.1687-01	7.7619-02	4.0513-02	9.8159-03	-1.1398-02	-2.1747-02	-2.1881-02	-1.4642-02	-5.0323-03
-85	1.9341	1.1423-01	7.2474-02	3.3672-02	2.5343-03	-1.7790-02	-2.6244-02	-2.4137-02	-1.5129-02	-4.8544-03
-90	2.0000	1.1272-01	6.9538-02	2.9844-02	-1.3497-03	-2.0864-02	-2.7901-02	-2.4230-02	-1.4300-02	-4.1403-03

ALPHA = 1.60 BETA = 1.60 A = 1.00 B = 2.00 CULOAD=0.002 CLLCAD=0.004

CENTER DEFLECTION = 0.15340862

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	1.4919-01	1.3706-01	1.1849-01	9.5647-02	7.1036-02	4.7246-02	2.6681-02	1.1325-02	2.5005-03
85	1.9341	1.4940-01	1.3784-01	1.2004-01	9.7942-02	7.3853-02	5.0196-02	2.9287-02	1.3130-02	3.1792-03
80	1.8229	1.4969-01	1.3890-01	1.2212-01	1.0098-01	7.7515-02	5.3928-02	3.2458-02	1.5195-02	3.9393-03
75	1.7018	1.4994-01	1.3983-01	1.2393-01	1.0363-01	8.0682-02	5.7117-02	3.5112-02	1.6871-02	4.5134-03
70	1.5856	1.5013-01	1.4054-01	1.2534-01	1.0568-01	8.3134-02	5.9577-02	3.7144-02	1.8135-02	4.9304-03
65	1.4803	1.5027-01	1.4105-01	1.2635-01	1.0717-01	8.4923-02	6.1377-02	3.8630-02	1.9057-02	5.2686-03
60	1.3878	1.5036-01	1.4139-01	1.2703-01	1.0819-01	8.6166-02	6.2640-02	3.9683-02	1.9706-02	5.4534-03
55	1.3082	1.5042-01	1.4161-01	1.2747-01	1.0885-01	8.6983-02	6.3484-02	4.0394-02	2.0168-02	5.6212-03
50	1.2404	1.5045-01	1.4173-01	1.2772-01	1.0924-01	8.7470-02	6.4001-02	4.0841-02	2.0447-02	5.7495-03
45	1.1834	1.5046-01	1.4177-01	1.2782-01	1.0941-01	8.7703-02	6.4265-02	4.1084-02	2.0606-02	5.7498-03
40	1.1360	1.5046-01	1.4177-01	1.2782-01	1.0942-01	8.7737-02	6.4327-02	4.1162-02	2.0681-02	5.8061-03
35	1.0970	1.5045-01	1.4172-01	1.2773-01	1.0930-01	8.7616-02	6.4226-02	4.1099-02	2.0658-02	5.8346-03
30	1.0657	1.5043-01	1.4165-01	1.2759-01	1.0909-01	8.7370-02	6.3991-02	4.0920-02	2.0551-02	5.7675-03
25	1.0412	1.5040-01	1.4155-01	1.2740-01	1.0881-01	8.7025-02	6.3645-02	4.0640-02	2.0387-02	5.7061-03
20	1.0228	1.5037-01	1.4145-01	1.2717-01	1.0847-01	8.6603-02	6.3206-02	4.0270-02	2.0164-02	5.6643-03
15	1.0101	1.5034-01	1.4133-01	1.2693-01	1.0810-01	8.6127-02	6.2694-02	3.9819-02	1.9870-02	5.5662-03
10	1.0026	1.5031-01	1.4121-01	1.2669-01	1.0771-01	8.5626-02	6.2140-02	3.9308-02	1.9509-02	5.4120-03
5	0.9996	1.5028-01	1.4110-01	1.2646-01	1.0735-01	8.5149-02	6.1596-02	3.8783-02	1.9114-02	5.2459-03
0	1.0000	1.5026-01	1.4103-01	1.2631-01	1.0712-01	8.4834-02	6.1226-02	3.8408-02	1.8807-02	5.0949-03
90	2.0000	3.6467-02	6.7521-02	8.8649-02	9.6997-02	9.1900-02	7.5147-02	5.0960-02	2.5625-02	6.6407-03
85	1.9341	3.5174-02	6.5367-02	8.6369-02	9.5408-02	9.1643-02	7.6440-02	5.3424-02	2.8258-02	8.0337-03
80	1.8229	3.2822-02	6.1280-02	8.1605-02	9.1167-02	8.8912-02	7.5675-02	5.4339-02	2.9837-02	8.9715-03
75	1.7018	3.0093-02	5.6396-02	7.5570-02	8.5163-02	8.3997-02	7.2499-02	5.2956-02	2.9687-02	9.1469-03
70	1.5856	2.7300-02	5.1296-02	6.9034-02	7.8262-02	7.7771-02	6.7728-02	4.9986-02	2.8350-02	8.8381-03
65	1.4803	2.4595-02	4.6289-02	6.2465-02	7.1078-02	7.0960-02	6.2135-02	4.6138-02	2.6343-02	8.2956-03
60	1.3878	2.2040-02	4.1518-02	5.6111-02	6.3979-02	6.4039-02	5.6246-02	4.1909-02	2.4008-02	7.5627-03
55	1.3082	1.9653-02	3.7034-02	5.0080-02	5.7152-02	5.7269-02	5.0369-02	3.7589-02	2.1581-02	6.8152-03
50	1.2404	1.7427-02	3.2838-02	4.4403-02	5.0672-02	5.0779-02	4.4667-02	3.3341-02	1.9145-02	6.0738-03
45	1.1834	1.5345-02	2.8906-02	3.9066-02	4.4553-02	4.4614-02	3.9214-02	2.9250-02	1.6779-02	5.2844-03
40	1.1360	1.3388-02	2.5206-02	3.4037-02	3.8774-02	3.8775-02	3.4031-02	2.5344-02	1.4521-02	4.5774-03
35	1.0970	1.1534-02	2.1702-02	2.9275-02	3.3300-02	3.3240-02	2.9112-02	2.1630-02	1.2364-02	3.9049-03
30	1.0657	9.7649-03	1.8359-02	2.4735-02	2.8089-02	2.7977-02	2.4437-02	1.8101-02	1.0310-02	3.2314-03
25	1.0412	8.0616-03	1.5145-02	2.0377-02	2.3096-02	2.2946-02	1.9981-02	1.4745-02	8.3614-03	2.6025-03
20	1.0228	6.4076-03	1.2028-02	1.6161-02	1.8279-02	1.8111-02	1.5715-02	1.1547-02	6.5141-03	2.0223-03
15	1.0101	4.7874-03	8.9792-03	1.2048-02	1.3599-02	1.3435-02	1.1613-02	8.4894-03	4.7581-03	1.4667-03
10	1.0026	3.1672-03	5.9733-03	8.0036-03	9.0157-03	8.8816-03	7.6462-03	5.5380-03	3.0895-03	9.3834-04
5	0.9996	1.5946-03	2.9865-03	3.9969-03	4.4941-03	4.4155-03	3.7867-03	2.7365-03	1.5067-03	4.4925-04

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.10340885

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.0155-01	9.6051-02	8.7137-02	7.5222-02	6.0941-02	4.5212-02	2.9303-02	1.4913-02	4.2354-03
85	1.0018	1.0154-01	9.6029-02	8.7096-02	7.5166-02	6.0884-02	4.5170-02	2.9293-02	1.4934-02	4.2638-03
80	1.0090	1.0152-01	9.5936-02	8.6912-02	7.4897-02	6.0565-02	4.4861-02	2.9055-02	1.4806-02	4.2304-03
75	1.0222	1.0147-01	9.5762-02	8.6564-02	7.4380-02	5.9937-02	4.4223-02	2.8527-02	1.4478-02	4.1206-03
70	1.0418	1.0140-01	9.5499-02	8.6038-02	7.3591-02	5.8968-02	4.3225-02	2.7680-02	1.3936-02	3.9309-03
65	1.0677	1.0131-01	9.5141-02	8.5318-02	7.2509-02	5.7632-02	4.1837-02	2.6491-02	1.3168-02	3.6622-03
60	1.1000	1.0119-01	9.4683-02	8.4395-02	7.1118-02	5.5910-02	4.0041-02	2.4947-02	1.2168-02	3.3104-03
55	1.1378	1.0104-01	9.4130-02	8.3281-02	6.9435-02	5.3819-02	3.7857-02	2.3066-02	1.0951-02	2.8862-03
50	1.1783	1.0088-01	9.3520-02	8.2046-02	6.7565-02	5.1491-02	3.5418-02	2.0963-02	9.5885-03	2.4079-03
45	1.2138	1.0073-01	9.2970-02	8.0929-02	6.5861-02	4.9353-02	3.3157-02	1.8994-02	8.3023-03	1.9602-03
40	1.2276	1.0068-01	9.2764-02	8.0496-02	6.5173-02	4.8443-02	3.2136-02	1.8043-02	7.6304-03	1.7023-03
35	1.2022	1.0079-01	9.3200-02	8.1360-02	6.6440-02	4.9955-02	3.3631-02	1.9230-02	8.3128-03	1.8759-03
30	1.1518	1.0101-01	9.4019-02	8.3011-02	6.8933-02	5.3049-02	3.6862-02	2.2007-02	1.0093-02	2.5368-03
25	1.1030	1.0121-01	9.4779-02	8.4556-02	7.1292-02	5.6020-02	4.0028-02	2.4811-02	1.1983-02	3.1618-03
20	1.0642	1.0137-01	9.5362-02	8.5747-02	7.3122-02	5.8341-02	4.2519-02	2.7041-02	1.3536-02	3.8279-03
15	1.0353	1.0148-01	9.5783-02	8.6608-02	7.4448-02	6.0027-02	4.4334-02	2.8660-02	1.4648-02	4.3300-03
10	1.0154	1.0155-01	9.6066-02	8.7188-02	7.5342-02	6.1167-02	4.5560-02	2.9745-02	1.5357-02	4.5399-03
5	1.0038	1.0160-01	9.6229-02	8.7522-02	7.5859-02	6.1826-02	4.6268-02	3.0366-02	1.5744-02	4.6098-03
0	1.0000	1.0161-01	9.6282-02	8.7631-02	7.6028-02	6.2041-02	4.6499-02	3.0568-02	1.5867-02	4.6333-03
-5	1.0038	1.0160-01	9.6229-02	8.7522-02	7.5859-02	6.1826-02	4.6268-02	3.0366-02	1.5744-02	4.6098-03
-10	1.0154	1.0155-01	9.6066-02	8.7188-02	7.5342-02	6.1167-02	4.5560-02	2.9745-02	1.5357-02	4.5399-03
-15	1.0353	1.0148-01	9.5783-02	8.6608-02	7.4448-02	6.0027-02	4.4334-02	2.8660-02	1.4648-02	4.3300-03
-20	1.0642	1.0137-01	9.5362-02	8.5747-02	7.3122-02	5.8341-02	4.2519-02	2.7041-02	1.3536-02	3.8279-03
-25	1.1030	1.0121-01	9.4779-02	8.4556-02	7.1292-02	5.6020-02	4.0028-02	2.4811-02	1.1983-02	3.1618-03
-30	1.1518	1.0101-01	9.4019-02	8.3011-02	6.8933-02	5.3049-02	3.6862-02	2.2007-02	1.0093-02	2.5368-03
-35	1.2022	1.0079-01	9.3200-02	8.1360-02	6.6440-02	4.9955-02	3.3631-02	1.9230-02	8.3128-03	1.8759-03
-40	1.2276	1.0068-01	9.2764-02	8.0496-02	6.5173-02	4.8443-02	3.2136-02	1.8043-02	7.6304-03	1.7023-03
-45	1.2138	1.0073-01	9.2970-02	8.0929-02	6.5861-02	4.9353-02	3.3157-02	1.8994-02	8.3023-03	1.9602-03
-50	1.1783	1.0088-01	9.3520-02	8.2046-02	6.7565-02	5.1491-02	3.5418-02	2.0963-02	9.5885-03	2.4079-03
-55	1.1378	1.0104-01	9.4130-02	8.3281-02	6.9435-02	5.3819-02	3.7857-02	2.3066-02	1.0951-02	2.8862-03
-60	1.1000	1.0119-01	9.4683-02	8.4395-02	7.1118-02	5.5910-02	4.0041-02	2.4947-02	1.2168-02	3.3104-03
-65	1.0677	1.0131-01	9.5141-02	8.5318-02	7.2509-02	5.7632-02	4.1837-02	2.6491-02	1.3168-02	3.6622-03
-70	1.0418	1.0140-01	9.5499-02	8.6038-02	7.3591-02	5.8968-02	4.3225-02	2.7680-02	1.3936-02	3.9309-03
-75	1.0222	1.0147-01	9.5762-02	8.6564-02	7.4380-02	5.9937-02	4.4223-02	2.8527-02	1.4478-02	4.1206-03
-80	1.0090	1.0152-01	9.5936-02	8.6912-02	7.4897-02	6.0565-02	4.4861-02	2.9055-02	1.4806-02	4.2304-03
-85	1.0018	1.0154-01	9.6029-02	8.7096-02	7.5166-02	6.0884-02	4.5170-02	2.9293-02	1.4934-02	4.2638-03
-90	1.0000	1.0155-01	9.6051-02	8.7137-02	7.5222-02	6.0941-02	4.5212-02	2.9303-02	1.4913-02	4.2354-03

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.10340885

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.0155-01	9.6051-02	8.7137-02	7.5222-02	6.0941-02	4.5212-02	2.9303-02	1.4913-02	4.2354-03
85	1.0018	1.0154-01	9.6029-02	8.7096-02	7.5166-02	6.0884-02	4.5170-02	2.9293-02	1.4934-02	4.2638-03
80	1.0090	1.0152-01	9.5936-02	8.6912-02	7.4897-02	6.0565-02	4.4861-02	2.9055-02	1.4806-02	4.2304-03
75	1.0222	1.0147-01	9.5762-02	8.6564-02	7.4380-02	5.9937-02	4.4223-02	2.8527-02	1.4478-02	4.1206-03
70	1.0418	1.0140-01	9.5499-02	8.6038-02	7.3591-02	5.8968-02	4.3225-02	2.7680-02	1.3936-02	3.9309-03
65	1.0677	1.0131-01	9.5141-02	8.5318-02	7.2509-02	5.7632-02	4.1837-02	2.6491-02	1.3168-02	3.6622-03
60	1.1000	1.0119-01	9.4683-02	8.4395-02	7.1118-02	5.5910-02	4.0041-02	2.4947-02	1.2168-02	3.3104-03
55	1.1378	1.0104-01	9.4130-02	8.3281-02	6.9435-02	5.3819-02	3.7857-02	2.3066-02	1.0951-02	2.8862-03
50	1.1783	1.0088-01	9.3520-02	8.2046-02	6.7565-02	5.1491-02	3.5418-02	2.0963-02	9.5885-03	2.4079-03
45	1.2138	1.0073-01	9.2970-02	8.0929-02	6.5861-02	4.9353-02	3.3157-02	1.8994-02	8.3023-03	1.9602-03
40	1.2276	1.0068-01	9.2764-02	8.0496-02	6.5173-02	4.8443-02	3.2136-02	1.8043-02	7.6304-03	1.7023-03
35	1.2022	1.0079-01	9.3200-02	8.1360-02	6.6440-02	4.9955-02	3.3631-02	1.9230-02	8.3128-03	1.8759-03
30	1.1518	1.0101-01	9.4019-02	8.3011-02	6.8933-02	5.3049-02	3.6862-02	2.2007-02	1.0093-02	2.5368-03
25	1.1030	1.0121-01	9.4779-02	8.4556-02	7.1292-02	5.6020-02	4.0028-02	2.4811-02	1.1983-02	3.1618-03
20	1.0642	1.0137-01	9.5362-02	8.5747-02	7.3122-02	5.8341-02	4.2519-02	2.7041-02	1.3536-02	3.8279-03
15	1.0353	1.0148-01	9.5783-02	8.6608-02	7.4448-02	6.0027-02	4.4334-02	2.8660-02	1.4648-02	4.3300-03
10	1.0154	1.0155-01	9.6066-02	8.7188-02	7.5342-02	6.1167-02	4.5560-02	2.9745-02	1.5357-02	4.5399-03
5	1.0038	1.0160-01	9.6229-02	8.7522-02	7.5859-02	6.1826-02	4.6268-02	3.0366-02	1.5744-02	4.6098-03
0	1.0000	1.0161-01	9.6282-02	8.7631-02	7.6028-02	6.2041-02	4.6499-02	3.0568-02	1.5867-02	4.6333-03
90	1.0000	6.8259-03	1.2867-02	1.7406-02	1.9873-02	1.9920-02	1.7519-02	1.3062-02	7.4790-03	2.3499-03
85	1.0018	6.8118-03	1.2839-02	1.7369-02	1.9830-02	1.9880-02	1.7491-02	1.3035-02	7.4921-03	2.3671-03
80	1.0090	6.7816-03	1.2778-02	1.7275-02	1.9710-02	1.9748-02	1.7368-02	1.2964-02	7.4472-03	2.3579-03
75	1.0222	6.7370-03	1.2684-02	1.7127-02	1.9511-02	1.9513-02	1.7131-02	1.2767-02	7.3242-03	2.3163-03
70	1.0418	6.6765-03	1.2554-02	1.6920-02	1.9224-02	1.9167-02	1.6768-02	1.2451-02	7.1151-03	2.2407-03
65	1.0677	6.5961-03	1.2382-02	1.6641-02	1.8837-02	1.8692-02	1.6263-02	1.2001-02	6.8116-03	2.1301-03
60	1.1000	6.4890-03	1.2155-02	1.6276-02	1.8330-02	1.8071-02	1.5597-02	1.1401-02	6.4026-03	1.9783-03
55	1.1378	6.3432-03	1.1851-02	1.5800-02	1.7680-02	1.7282-02	1.4754-02	1.0640-02	5.8797-03	1.7842-03
50	1.1783	6.1374-03	1.1436-02	1.5174-02	1.6859-02	1.6312-02	1.3736-02	9.7282-03	5.2517-03	1.5465-03
45	1.2138	5.8324-03	1.0846-02	1.4339-02	1.5836-02	1.5183-02	1.2610-02	8.7511-03	4.5875-03	1.2976-03
40	1.2276	5.3638-03	9.9818-03	1.3208-02	1.4594-02	1.3979-02	1.1568-02	7.9568-03	4.0944-03	1.1173-03
35	1.2022	4.6950-03	8.7829-03	1.1724-02	1.3115-02	1.2768-02	1.0781-02	7.5973-03	4.0206-03	1.1219-03
30	1.1518	3.9309-03	7.4084-03	1.0016-02	1.1414-02	1.1398-02	9.9532-03	7.3309-03	4.1138-03	1.2590-03
25	1.1030	3.1888-03	6.0490-03	8.2693-03	9.5779-03	9.7758-03	8.7846-03	6.7146-03	3.9532-03	1.2761-03
20	1.0642	2.4937-03	4.7538-03	6.5532-03	7.6818-03	7.9664-03	7.3054-03	5.7274-03	3.4819-03	1.1768-03
15	1.0353	1.8380-03	3.5162-03	4.8760-03	5.7641-03	6.0439-03	5.6189-03	4.4786-03	2.7776-03	9.6919-04
10	1.0154	1.2105-03	2.3212-03	3.2315-03	3.8415-03	4.0570-03	3.8051-03	3.0642-03	1.9223-03	6.7726-04
5	1.0038	6.0087-04	1.1538-03	1.6099-03	1.9199-03	2.0359-03	1.9189-03	1.5540-03	9.8051-04	3.4558-04

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 1.00 GULOAD=0.002 GLLOAD=0.004

CENTER DEFLECTION = 0.10340885

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.0838-01	1.0892-01	1.0454-01	9.5095-02	8.0861-02	6.2730-02	4.2363-02	2.2342-02	6.5853-03
85	1.0018	1.0836-01	1.0887-01	1.0447-01	9.4997-02	8.0764-02	6.2662-02	4.2348-02	2.2426-02	6.6308-03
80	1.0090	1.0830-01	1.0871-01	1.0419-01	9.4608-02	8.0313-02	6.2228-02	4.2019-02	2.2253-02	6.5883-03
75	1.0222	1.0821-01	1.0845-01	1.0369-01	9.3891-02	7.9450-02	6.1355-02	4.1294-02	2.1802-02	6.4370-03
70	1.0418	1.0808-01	1.0805-01	1.0296-01	9.2815-02	7.8135-02	5.9994-02	4.0130-02	2.1051-02	6.1716-03
65	1.0677	1.0790-01	1.0752-01	1.0196-01	9.1345-02	7.6324-02	5.8101-02	3.8492-02	1.9980-02	5.7923-03
60	1.1000	1.0767-01	1.0684-01	1.0067-01	8.9448-02	7.3980-02	5.5639-02	3.6348-02	1.8571-02	5.2887-03
55	1.1378	1.0738-01	1.0598-01	9.9081-02	8.7115-02	7.1101-02	5.2611-02	3.3707-02	1.6831-02	4.6704-03
50	1.1783	1.0701-01	1.0496-01	9.7220-02	8.4424-02	6.7804-02	4.9154-02	3.0691-02	1.4840-02	3.9544-03
45	1.2138	1.0656-01	1.0382-01	9.5268-02	8.1697-02	6.4535-02	4.5767-02	2.7745-02	1.2890-02	3.2578-03
40	1.2276	1.0604-01	1.0275-01	9.3704-02	7.9766-02	6.2422-02	4.3704-02	2.5999-02	1.1725-02	2.8197-03
35	1.2022	1.0549-01	1.0198-01	9.3083-02	7.9555-02	6.2723-02	4.4412-02	2.6827-02	1.2333-02	2.9978-03
30	1.1518	1.0494-01	1.0143-01	9.3026-02	8.0348-02	6.4447-02	4.6816-02	2.9338-02	1.4207-02	3.7957-03
25	1.1030	1.0440-01	1.0083-01	9.2825-02	8.0870-02	6.5795-02	4.8812-02	3.1526-02	1.5936-02	4.4379-03
20	1.0642	1.0386-01	1.0012-01	9.2301-02	8.0804-02	6.6307-02	4.9825-02	3.2768-02	1.7018-02	5.0047-03
15	1.0353	1.0332-01	9.9299-02	9.1484-02	8.0212-02	6.6071-02	4.9953-02	3.3139-02	1.7426-02	5.2992-03
10	1.0154	1.0276-01	9.8387-02	9.0419-02	7.9184-02	6.5224-02	4.9365-02	3.2809-02	1.7279-02	5.2171-03
5	1.0038	1.0220-01	9.7383-02	8.9132-02	7.7779-02	6.3862-02	4.8187-02	3.1920-02	1.6724-02	4.9554-03
0	1.0000	1.0161-01	9.6282-02	8.7631-02	7.6028-02	6.2041-02	4.6499-02	3.0568-02	1.5867-02	4.6333-03
-5	1.0038	1.0100-01	9.5075-02	8.5912-02	7.3939-02	5.9790-02	4.4349-02	2.8812-02	1.4763-02	4.2642-03
-10	1.0154	1.0034-01	9.3745-02	8.3956-02	7.1501-02	5.7110-02	4.1755-02	2.6681-02	1.3434-02	3.8626-03
-15	1.0353	9.9641-02	9.2267-02	8.1732-02	6.8684-02	5.3984-02	3.8715-02	2.4181-02	1.1870-02	3.3608-03
-20	1.0642	9.8874-02	9.0609-02	7.9194-02	6.5440-02	5.0374-02	3.5214-02	2.1313-02	1.0054-02	2.6512-03
-25	1.1030	9.8025-02	8.8730-02	7.6286-02	6.1714-02	4.6244-02	3.1243-02	1.8097-02	8.0296-03	1.8857-03
-30	1.1518	9.7081-02	8.6610-02	7.2995-02	5.7519-02	4.1651-02	2.6909-02	1.4677-02	5.9795-03	1.2778-03
-35	1.2022	9.6099-02	8.4417-02	6.9636-02	5.3325-02	3.7187-02	2.2850-02	1.1633-02	4.2922-03	7.5400-04
-40	1.2276	9.5313-02	8.2782-02	6.7288-02	5.0579-02	3.4464-02	2.0568-02	1.0086-02	3.5360-03	5.8502-04
-45	1.2138	9.4898-02	8.2124-02	6.6590-02	5.0025-02	3.4170-02	2.0547-02	1.0243-02	3.7148-03	6.6262-04
-50	1.1783	9.4739-02	8.2084-02	6.6872-02	5.0707-02	3.5179-02	2.1682-02	1.1234-02	4.3369-03	8.6141-04
-55	1.1378	9.4695-02	8.2279-02	6.7481-02	5.1754-02	3.6537-02	2.3103-02	1.2426-02	5.0713-03	1.1020-03
-60	1.1000	9.4697-02	8.2528-02	6.8119-02	5.2788-02	3.7839-02	2.4444-02	1.3545-02	5.7657-03	1.3321-03
-65	1.0677	9.4711-02	8.2759-02	6.8677-02	5.3672-02	3.8940-02	2.5574-02	1.4490-02	6.3567-03	1.5322-03
-70	1.0418	9.4727-02	8.2945-02	6.9118-02	5.4367-02	3.9802-02	2.6457-02	1.5229-02	6.8212-03	1.6903-03
-75	1.0222	9.4736-02	8.3078-02	6.9437-02	5.4869-02	4.0423-02	2.7092-02	1.5760-02	7.1542-03	1.8043-03
-80	1.0090	9.4738-02	8.3158-02	6.9637-02	5.5187-02	4.0818-02	2.7493-02	1.6091-02	7.3583-03	1.8726-03
-85	1.0018	9.4733-02	8.3190-02	6.9727-02	5.5336-02	4.1003-02	2.7679-02	1.6238-02	7.4420-03	1.8967-03
-90	1.0000	9.4725-02	8.3184-02	6.9731-02	5.5349-02	4.1021-02	2.7693-02	1.6242-02	7.4335-03	1.8856-03

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 2.00 GULOAD=0.002 GLLOAD=0.0

CENTER DEFLECTION = 0.21224926

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.1043-01	2.0471-01	1.9436-01	1.7834-01	1.5554-01	1.2541-01	8.8832-02	4.9453-02	1.5278-02
85	1.9951	2.1032-01	2.0432-01	1.9357-01	1.7714-01	1.5408-01	1.2398-01	8.7785-02	4.9044-02	1.5361-02
80	1.9903	2.1000-01	2.0310-01	1.9105-01	1.7323-01	1.4911-01	1.1871-01	8.3274-02	4.6235-02	1.4461-02
75	1.9849	2.0948-01	2.0111-01	1.8694-01	1.6682-01	1.4089-01	1.0984-01	7.5438-02	4.1052-02	1.2607-02
70	1.9724	2.0880-01	1.9852-01	1.8160-01	1.5854-01	1.3028-01	9.8360-02	6.5221-02	3.4200-02	1.0119-02
65	1.9383	2.0807-01	1.9574-01	1.7592-01	1.4979-01	1.1914-01	8.6399-02	5.4565-02	2.7049-02	7.5203-03
60	1.8562	2.0751-01	1.9363-01	1.7165-01	1.4328-01	1.1096-01	7.7691-02	4.6866-02	2.1884-02	5.6343-03
55	1.7120	2.0736-01	1.9309-01	1.7058-01	1.4174-01	1.0912-01	7.5829-02	4.5267-02	2.0800-02	5.2107-03
50	1.5504	2.0749-01	1.9358-01	1.7163-01	1.4341-01	1.1134-01	7.8317-02	4.7560-02	2.2376-02	5.7871-03
45	1.4134	2.0765-01	1.9419-01	1.7288-01	1.4537-01	1.1388-01	8.1099-02	5.0091-02	2.4121-02	6.4416-03
40	1.3053	2.0778-01	1.9467-01	1.7386-01	1.4689-01	1.1581-01	8.3182-02	5.1958-02	2.5390-02	6.9133-03
35	1.2208	2.0787-01	1.9502-01	1.7458-01	1.4798-01	1.1719-01	8.4656-02	5.3257-02	2.6256-02	7.2279-03
30	1.1547	2.0794-01	1.9526-01	1.7511-01	1.4878-01	1.1819-01	8.5701-02	5.4164-02	2.6850-02	7.4386-03
25	1.1034	2.0799-01	1.9547-01	1.7549-01	1.4936-01	1.1891-01	8.6450-02	5.4806-02	2.7263-02	7.5824-03
20	1.0642	2.0803-01	1.9561-01	1.7578-01	1.4979-01	1.1943-01	8.6986-02	5.5260-02	2.7551-02	7.6814-03
15	1.0353	2.0805-01	1.9571-01	1.7598-01	1.5009-01	1.1979-01	8.7362-02	5.5576-02	2.7750-02	7.7487-03
10	1.0154	2.0807-01	1.9578-01	1.7611-01	1.5028-01	1.2004-01	8.7611-02	5.5784-02	2.7880-02	7.7923-03
5	1.0038	2.0808-01	1.9582-01	1.7619-01	1.5040-01	1.2018-01	8.7753-02	5.5902-02	2.7954-02	7.8167-03
0	1.0000	2.0808-01	1.9583-01	1.7621-01	1.5044-01	1.2022-01	8.7799-02	5.5940-02	2.7977-02	7.8246-03
-5	1.0038	2.0808-01	1.9582-01	1.7619-01	1.5040-01	1.2018-01	8.7753-02	5.5902-02	2.7954-02	7.8167-03
-10	1.0154	2.0807-01	1.9578-01	1.7611-01	1.5028-01	1.2004-01	8.7611-02	5.5784-02	2.7880-02	7.7923-03
-15	1.0353	2.0805-01	1.9571-01	1.7598-01	1.5009-01	1.1979-01	8.7362-02	5.5576-02	2.7750-02	7.7487-03
-20	1.0642	2.0803-01	1.9561-01	1.7578-01	1.4979-01	1.1943-01	8.6986-02	5.5260-02	2.7551-02	7.6814-03
-25	1.1034	2.0799-01	1.9547-01	1.7549-01	1.4936-01	1.1891-01	8.6450-02	5.4806-02	2.7263-02	7.5824-03
-30	1.1547	2.0794-01	1.9528-01	1.7511-01	1.4878-01	1.1819-01	8.5701-02	5.4164-02	2.6850-02	7.4386-03
-35	1.2208	2.0787-01	1.9502-01	1.7458-01	1.4798-01	1.1719-01	8.4656-02	5.3257-02	2.6256-02	7.2279-03
-40	1.3053	2.0778-01	1.9467-01	1.7386-01	1.4689-01	1.1581-01	8.3182-02	5.1958-02	2.5390-02	6.9133-03
-45	1.4134	2.0765-01	1.9419-01	1.7288-01	1.4537-01	1.1388-01	8.1099-02	5.0091-02	2.4121-02	6.4416-03
-50	1.5504	2.0749-01	1.9358-01	1.7163-01	1.4341-01	1.1134-01	7.8317-02	4.7560-02	2.2376-02	5.7871-03
-55	1.7120	2.0736-01	1.9309-01	1.7058-01	1.4174-01	1.0912-01	7.5829-02	4.5267-02	2.0800-02	5.2107-03
-60	1.8562	2.0751-01	1.9363-01	1.7165-01	1.4328-01	1.1096-01	7.7691-02	4.6866-02	2.1884-02	5.6343-03
-65	1.9383	2.0807-01	1.9574-01	1.7592-01	1.4979-01	1.1914-01	8.6399-02	5.4565-02	2.7049-02	7.5203-03
-70	1.9724	2.0880-01	1.9852-01	1.8160-01	1.5854-01	1.3028-01	9.8360-02	6.5221-02	3.4200-02	1.0119-02
-75	1.9849	2.0948-01	2.0111-01	1.8694-01	1.6682-01	1.4089-01	1.0984-01	7.5438-02	4.1052-02	1.2607-02
-80	1.9903	2.1000-01	2.0310-01	1.9105-01	1.7323-01	1.4911-01	1.1871-01	8.3274-02	4.6235-02	1.4461-02
-85	1.9951	2.1032-01	2.0432-01	1.9357-01	1.7714-01	1.5408-01	1.2398-01	8.7785-02	4.9044-02	1.5361-02
-90	2.0000	2.1043-01	2.0471-01	1.9436-01	1.7834-01	1.5554-01	1.2541-01	8.8832-02	4.9453-02	1.5278-02

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 2.00 CLLCAD=0.002 CLLCAD=0.004

CENTER DEFLECTION = 0.21224926

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.1043-01	2.0471-01	1.9436-01	1.7834-01	1.5554-01	1.2541-01	8.8832-02	4.9453-02	1.5278-02
85	1.9951	2.1032-01	2.0432-01	1.9357-01	1.7714-01	1.5408-01	1.2398-01	8.7785-02	4.9044-02	1.5361-02
80	1.9903	2.1000-01	2.0310-01	1.9105-01	1.7323-01	1.4911-01	1.1871-01	8.3274-02	4.6235-02	1.4461-02
75	1.9849	2.0948-01	2.0111-01	1.8694-01	1.6682-01	1.4089-01	1.0984-01	7.5438-02	4.1052-02	1.2607-02
70	1.9724	2.0880-01	1.9852-01	1.8160-01	1.5854-01	1.3028-01	9.8380-02	6.5221-02	3.4200-02	1.0119-02
65	1.9383	2.0807-01	1.9574-01	1.7592-01	1.4979-01	1.1914-01	8.6399-02	5.4565-02	2.7049-02	7.5203-03
60	1.8562	2.0751-01	1.9363-01	1.7165-01	1.4328-01	1.1096-01	7.7691-02	4.6866-02	2.1884-02	5.6343-03
55	1.7120	2.0736-01	1.9309-01	1.7058-01	1.4174-01	1.0912-01	7.5829-02	4.5267-02	2.0800-02	5.2107-03
50	1.5504	2.0749-01	1.9358-01	1.7163-01	1.4341-01	1.1134-01	7.8317-02	4.7500-02	2.2376-02	5.7871-03
45	1.4134	2.0765-01	1.9419-01	1.7288-01	1.4537-01	1.1388-01	8.1099-02	5.0091-02	2.4121-02	6.4416-03
40	1.3053	2.0778-01	1.9467-01	1.7386-01	1.4689-01	1.1581-01	8.3182-02	5.1958-02	2.5390-02	6.9133-03
35	1.2208	2.0787-01	1.9502-01	1.7458-01	1.4798-01	1.1719-01	8.4656-02	5.3257-02	2.6256-02	7.2279-03
30	1.1547	2.0794-01	1.9528-01	1.7511-01	1.4878-01	1.1819-01	8.5701-02	5.4164-02	2.6850-02	7.4386-03
25	1.1034	2.0799-01	1.9547-01	1.7549-01	1.4936-01	1.1891-01	8.6450-02	5.4806-02	2.7263-02	7.5824-03
20	1.0642	2.0803-01	1.9561-01	1.7578-01	1.4979-01	1.1943-01	8.6986-02	5.5260-02	2.7551-02	7.6814-03
15	1.0353	2.0805-01	1.9571-01	1.7598-01	1.5009-01	1.1979-01	8.7362-02	5.5576-02	2.7750-02	7.7487-03
10	1.0154	2.0807-01	1.9578-01	1.7611-01	1.5028-01	1.2004-01	8.7611-02	5.5784-02	2.7880-02	7.7923-03
5	1.0038	2.0808-01	1.9582-01	1.7619-01	1.5040-01	1.2018-01	8.7753-02	5.5902-02	2.7954-02	7.8167-03
0	1.0000	2.0808-01	1.9583-01	1.7621-01	1.5044-01	1.2022-01	8.7799-02	5.5940-02	2.7977-02	7.8246-03
90	2.0000	6.8937-02	1.3250-01	1.8501-01	2.2039-01	2.3257-01	2.1676-01	1.7192-01	1.0473-01	3.4813-02
85	1.9951	6.8477-02	1.3147-01	1.8324-01	2.1782-01	2.2939-01	2.1351-01	1.6943-01	1.0365-01	3.4948-02
80	1.9903	6.7443-02	1.2898-01	1.7868-01	2.1076-01	2.1999-01	2.0300-01	1.5993-01	9.7444-02	3.2867-02
75	1.9849	6.5829-02	1.2509-01	1.7150-01	1.9950-01	2.0489-01	1.8574-01	1.4376-01	8.6172-02	2.8647-02
70	1.9724	6.3459-02	1.1958-01	1.6169-01	1.8456-01	1.8511-01	1.6325-01	1.2258-01	7.1193-02	2.2942-02
65	1.9383	5.9968-02	1.1200-01	1.4921-01	1.6674-01	1.6265-01	1.3853-01	9.9739-02	5.5164-02	1.6843-02
60	1.8562	5.4767-02	1.0167-01	1.3405-01	1.4754-01	1.4092-01	1.1665-01	8.0821-02	4.2463-02	1.2120-02
55	1.7120	4.7779-02	8.8705-02	1.1697-01	1.2874-01	1.2295-01	1.0167-01	7.0212-02	3.6582-02	1.0245-02
50	1.5504	4.0514-02	7.5497-02	1.0019-01	1.1133-01	1.0771-01	9.0628-02	6.4029-02	3.4361-02	9.9927-03
45	1.4134	3.4132-02	6.3835-02	8.5243-02	9.5579-02	9.3618-02	8.0058-02	5.7765-02	3.1861-02	9.6066-03
40	1.3053	2.8681-02	5.3788-02	7.2162-02	8.1453-02	8.0493-02	6.9620-02	5.0954-02	2.8609-02	8.8208-03
35	1.2208	2.3951-02	4.5009-02	6.0589-02	6.8717-02	6.8330-02	5.9559-02	4.4001-02	2.4982-02	7.8049-03
30	1.1547	1.9759-02	3.7186-02	5.0181-02	5.7109-02	5.7038-02	4.9983-02	3.7159-02	2.1250-02	6.6931-03
25	1.1034	1.5965-02	3.0078-02	4.0662-02	4.6391-02	4.6480-02	4.0884-02	3.0527-02	1.7541-02	5.5538-03
20	1.0642	1.2464-02	2.3502-02	3.1814-02	3.6362-02	3.6514-02	3.2204-02	2.4118-02	1.3904-02	4.4173-03
15	1.0353	9.1777-03	1.7315-02	2.3461-02	2.6849-02	2.7004-02	2.3860-02	1.7906-02	1.0346-02	3.2943-03
10	1.0154	6.0403-03	1.1400-02	1.5456-02	1.7703-02	1.7824-02	1.5768-02	1.1850-02	6.8561-03	2.1862-03
5	1.0038	2.9972-03	5.6580-03	7.6738-03	8.7938-03	8.8592-03	7.8430-03	5.8982-03	3.4154-03	1.0900-03

ALPHA = 1.60 BETA =10.00 A = 1.00 B = 2.00 CLLCAD=0.002 CLLCAD=0.004

CENTER DEFLECTION = 0.21224926

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.7936-01	3.3721-01	3.7937-01	3.9873-01	3.8812-01	3.4217-01	2.6072-01	1.5418-01	5.0092-02
85	1.9951	2.7880-01	3.3578-01	3.7681-01	3.9496-01	3.8347-01	3.3749-01	2.5721-01	1.5270-01	5.0309-02
80	1.9903	2.7745-01	3.3208-01	3.6973-01	3.8397-01	3.6910-01	3.2171-01	2.4320-01	1.4368-01	4.7328-02
75	1.9849	2.7531-01	3.2619-01	3.5844-01	3.6633-01	3.4578-01	2.9559-01	2.1920-01	1.2722-01	4.1254-02
70	1.9724	2.7226-01	3.1809-01	3.4329-01	3.4310-01	3.1539-01	2.6163-01	1.8780-01	1.0539-01	3.3062-02
65	1.9383	2.6804-01	3.0774-01	3.2512-01	3.1652-01	2.8179-01	2.2493-01	1.5430-01	8.2213-02	2.4363-02
60	1.8562	2.6228-01	2.9530-01	3.0570-01	2.9082-01	2.5188-01	1.9434-01	1.2769-01	6.4347-02	1.7755-02
55	1.7120	2.5514-01	2.8179-01	2.8755-01	2.7048-01	2.3207-01	1.7750-01	1.1548-01	5.7382-02	1.5456-02
50	1.5504	2.4800-01	2.6908-01	2.7182-01	2.5474-01	2.1905-01	1.6894-01	1.1159-01	5.6737-02	1.5780-02
45	1.4134	2.4178-01	2.5802-01	2.5813-01	2.4095-01	2.0750-01	1.6116-01	1.0786-01	5.5982-02	1.6048-02
40	1.3053	2.3646-01	2.4846-01	2.4602-01	2.2834-01	1.9630-01	1.5280-01	1.0291-01	5.3999-02	1.5734-02
35	1.2208	2.3182-01	2.4003-01	2.3517-01	2.1670-01	1.8552-01	1.4421-01	9.7258-02	5.1238-02	1.5033-02
30	1.1547	2.2770-01	2.3247-01	2.2529-01	2.0589-01	1.7523-01	1.3568-01	9.1323-02	4.8100-02	1.4132-02
25	1.1034	2.2395-01	2.2555-01	2.1616-01	1.9575-01	1.6539-01	1.2733-01	8.5333-02	4.4804-02	1.3136-02
20	1.0642	2.2049-01	2.1912-01	2.0759-01	1.8615-01	1.5594-01	1.1919-01	7.9378-02	4.1455-02	1.2099-02
15	1.0353	2.1723-01	2.1303-01	1.9944-01	1.7693-01	1.4680-01	1.1122-01	7.3462-02	3.8096-02	1.1043-02
10	1.0154	2.1411-01	2.0718-01	1.9157-01	1.6799-01	1.3786-01	1.0338-01	6.7633-02	3.4736-02	9.9785-03
5	1.0038	2.1108-01	2.0148-01	1.8386-01	1.5919-01	1.2904-01	9.5596-02	6.1800-02	3.1369-02	8.9067-03
0	1.0000	2.0808-01	1.9583-01	1.7621-01	1.5044-01	1.2022-01	8.7799-02	5.5940-02	2.7977-02	7.8246-03
-5	1.0038	2.0508-01	1.9016-01	1.6851-01	1.4161-01	1.1132-01	7.9910-02	5.0004-02	2.4538-02	6.7267-03
-10	1.0154	2.0203-01	1.8438-01	1.6065-01	1.3258-01	1.0221-01	7.1842-02	4.3934-02	2.1024-02	5.6060-03
-15	1.0353	1.9888-01	1.7840-01	1.5251-01	1.2324-01	9.2789-02	6.3502-02	3.7670-02	1.7404-02	4.4544-03
-20	1.0642	1.9556-01	1.7211-01	1.4396-01	1.1342-01	8.2913-02	5.4783-02	3.1142-02	1.3647-02	3.2641-03
-25	1.1034	1.9202-01	1.6540-01	1.3483-01	1.0297-01	7.2427-02	4.5566-02	2.4279-02	9.7213-03	2.0286-03
-30	1.1547	1.8818-01	1.5810-01	1.2493-01	9.1672-02	6.1149-02	3.5719-02	1.7005-02	5.5999-03	7.4552-04
-35	1.2208	1.8392-01	1.5001-01	1.1399-01	7.9266-02	4.8862-02	2.5097-02	9.2565-03	1.2746-03	-5.7707-04
-40	1.3053	1.7909-01	1.4088-01	1.0170-01	6.5432-02	3.5315-02	1.3562-02	1.0040-03	-3.2183-03	-1.9075-03
-45	1.4134	1.7352-01	1.3035-01	8.7639-02	4.9795-02	2.0262-02	1.0406-03	-7.6741-03	-7.7402-03	-3.1650-03
-50	1.5504	1.6698-01	1.1808-01	7.1435-02	3.2086-02	3.6343-03	-1.2311-02	-1.6469-02	-1.1984-02	-4.2056-03
-55	1.7120	1.5958-01	1.0438-01	5.3615-02	1.2995-02	-1.3825-02	-2.5840-02	-2.4943-02	-1.5783-02	-5.0347-03
-60	1.8562	1.5274-01	9.1960-02	3.7595-02	-4.2527-03	-2.9957-02	-3.8958-02	-3.3955-02	-2.0579-02	-6.4859-03
-65	1.9383	1.4810-01	8.3739-02	2.6711-02	-1.6949-02	-4.3510-02	-5.2135-02	-4.5173-02	-2.8115-02	-9.3225-03
-70	1.9724	1.4534-01	7.8960-02	1.9910-02	-2.6013-02	-5.4830-02	-6.4872-02	-5.7361-02	-3.6994-02	-1.2823-02
-75	1.9849	1.4365-01	7.6019-02	1.5437-02	-3.2680-02	-6.4002-02	-7.5899-02	-6.8325-02	-4.5120-02	-1.6039-02
-80	1.9903	1.4256-01	7.4117-02	1.2371-02	-3.7507-02	-7.0883-02	-8.4294-02	-7.6655-02	-5.1209-02	-1.8406-02
-85	1.9951	1.4185-01	7.2852-02	1.0331-02	-4.0679-02	-7.5310-02	-8.9539-02	-8.1640-02	-5.4610-02	-1.9587-02
-90	2.0000	1.4149-01	7.2204-02	9.3477-03	-4.2056-02	-7.7032-02	-9.1351-02	-8.3090-02	-5.5275-02	-1.9535-02

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.08237322

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
85	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
80	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
75	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
70	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
65	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
60	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
55	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
50	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
45	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
40	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
35	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
30	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
25	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
20	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
15	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
10	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
5	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
0	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-5	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-10	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-15	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-20	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-25	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-30	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-35	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-40	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-45	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-50	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-55	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-60	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-65	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-70	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-75	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-80	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-85	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-90	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.08237322

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
85	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
80	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
75	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
70	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
65	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
60	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
55	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
50	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
45	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
40	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
35	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
30	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
25	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
20	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
15	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
10	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
5	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
0	1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
90	1.0000	5.3823-03	1.0122-02	1.3643-02	1.5499-02	1.5445-02	1.3496-02	9.9985-03	5.6936-03	1.7842-03
85	1.0000	5.3618-03	1.0084-02	1.3591-02	1.5440-02	1.5386-02	1.3445-02	9.9604-03	5.6720-03	1.7774-03
80	1.0000	5.3005-03	9.9682-03	1.3435-02	1.5264-02	1.5210-02	1.3291-02	9.8466-03	5.6071-03	1.7571-03
75	1.0000	5.1989-03	9.7771-03	1.3178-02	1.4971-02	1.4919-02	1.3036-02	9.6578-03	5.4996-03	1.7234-03
70	1.0000	5.0577-03	9.5116-03	1.2820-02	1.4565-02	1.4514-02	1.2682-02	9.3955-03	5.3503-03	1.6766-03
65	1.0000	4.8780-03	9.1737-03	1.2364-02	1.4047-02	1.3998-02	1.2232-02	9.0617-03	5.1602-03	1.6170-03
60	1.0000	4.6612-03	8.7659-03	1.1815-02	1.3423-02	1.3376-02	1.1688-02	8.6589-03	4.9308-03	1.5452-03
55	1.0000	4.4089-03	8.2915-03	1.1175-02	1.2696-02	1.2652-02	1.1055-02	8.1903-03	4.6640-03	1.4615-03
50	1.0000	4.1231-03	7.7539-03	1.0451-02	1.1873-02	1.1832-02	1.0339-02	7.6593-03	4.3616-03	1.3668-03
45	1.0000	3.8058-03	7.1573-03	9.6468-03	1.0960-02	1.0921-02	9.5431-03	7.0700-03	4.0260-03	1.2616-03
40	1.0000	3.4597-03	6.5063-03	8.7693-03	9.9628-03	9.9278-03	8.6751-03	6.4269-03	3.6598-03	1.1469-03
35	1.0000	3.0871-03	5.8058-03	7.8251-03	8.8901-03	8.8589-03	7.7410-03	5.7349-03	3.2657-03	1.0234-03
30	1.0000	2.6911-03	5.0610-03	6.8213-03	7.7497-03	7.7225-03	6.7480-03	4.9992-03	2.8468-03	8.9210-04
25	1.0000	2.2746-03	4.2778-03	5.7656-03	6.5503-03	6.5273-03	5.7037-03	4.2255-03	2.4062-03	7.5404-04
20	1.0000	1.8408-03	3.4619-03	4.6661-03	5.3011-03	5.2825-03	4.6159-03	3.4197-03	1.9473-03	6.1023-04
15	1.0000	1.3930-03	2.6198-03	3.5310-03	4.0115-03	3.9975-03	3.4930-03	2.5878-03	1.4736-03	4.6179-04
10	1.0000	9.3462-04	1.7577-03	2.3690-03	2.6914-03	2.6820-03	2.3436-03	1.7362-03	9.8864-04	3.0982-04
5	1.0000	4.6910-04	8.8219-04	1.1890-03	1.3509-03	1.3461-03	1.1763-03	8.7142-04	4.9623-04	1.5550-04

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.08237322

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 1.0000	8.6116-02	8.6037-02	8.1856-02	7.3622-02	6.1780-02	4.7236-02	3.1424-02	1.6369-02	4.7579-03
85 1.0000	8.6096-02	8.5999-02	8.1804-02	7.3563-02	6.1721-02	4.7185-02	3.1386-02	1.6348-02	4.7511-03
80 1.0000	8.6034-02	8.5883-02	8.1649-02	7.3386-02	6.1545-02	4.7031-02	3.1272-02	1.6283-02	4.7308-03
75 1.0000	8.5933-02	8.5692-02	8.1391-02	7.3094-02	6.1254-02	4.6776-02	3.1083-02	1.6175-02	4.6971-03
70 1.0000	8.5792-02	8.5427-02	8.1033-02	7.2687-02	6.0848-02	4.6422-02	3.0821-02	1.6026-02	4.6503-03
65 1.0000	8.5612-02	8.5089-02	8.0578-02	7.2170-02	6.0333-02	4.5972-02	3.0487-02	1.5836-02	4.5907-03
60 1.0000	8.5395-02	8.4681-02	8.0028-02	7.1545-02	5.9711-02	4.5428-02	3.0084-02	1.5606-02	4.5188-03
55 1.0000	8.5143-02	8.4207-02	7.9389-02	7.0819-02	5.8987-02	4.4795-02	2.9616-02	1.5340-02	4.4352-03
50 1.0000	8.4857-02	8.3669-02	7.8664-02	6.9996-02	5.8166-02	4.4079-02	2.9085-02	1.5037-02	4.3405-03
45 1.0000	8.4540-02	8.3073-02	7.7860-02	6.9082-02	5.7256-02	4.3283-02	2.8495-02	1.4702-02	4.2353-03
40 1.0000	8.4194-02	8.2421-02	7.6983-02	6.8085-02	5.6263-02	4.2415-02	2.7852-02	1.4335-02	4.1205-03
35 1.0000	8.3821-02	8.1721-02	7.6038-02	6.7013-02	5.5194-02	4.1481-02	2.7160-02	1.3941-02	3.9971-03
30 1.0000	8.3425-02	8.0976-02	7.5035-02	6.5872-02	5.4057-02	4.0488-02	2.6425-02	1.3522-02	3.8658-03
25 1.0000	8.3009-02	8.0193-02	7.3979-02	6.4673-02	5.2862-02	3.9444-02	2.5651-02	1.3082-02	3.7277-03
20 1.0000	8.2575-02	7.9377-02	7.2879-02	6.3424-02	5.1617-02	3.8356-02	2.4845-02	1.2623-02	3.5839-03
15 1.0000	8.2127-02	7.8535-02	7.1744-02	6.2134-02	5.0332-02	3.7233-02	2.4013-02	1.2149-02	3.4355-03
10 1.0000	8.1669-02	7.7673-02	7.0582-02	6.0814-02	4.9017-02	3.6084-02	2.3161-02	1.1664-02	3.2835-03
5 1.0000	8.1203-02	7.6797-02	6.9402-02	5.9473-02	4.7681-02	3.4916-02	2.2297-02	1.1172-02	3.1292-03
0 1.0000	8.0734-02	7.5915-02	6.8213-02	5.8123-02	4.6335-02	3.3740-02	2.1425-02	1.0676-02	2.9737-03
-5 1.0000	8.0265-02	7.5033-02	6.7024-02	5.6772-02	4.4989-02	3.2564-02	2.0554-02	1.0179-02	2.8182-03
-10 1.0000	7.9799-02	7.4157-02	6.5844-02	5.5431-02	4.3653-02	3.1397-02	1.9689-02	9.6869-03	2.6638-03
-15 1.0000	7.9341-02	7.3295-02	6.4682-02	5.4111-02	4.2337-02	3.0247-02	1.8837-02	9.2019-03	2.5119-03
-20 1.0000	7.8893-02	7.2453-02	6.3547-02	5.2821-02	4.1052-02	2.9124-02	1.8006-02	8.7282-03	2.3634-03
-25 1.0000	7.8459-02	7.1637-02	6.2448-02	5.1572-02	3.9808-02	2.8036-02	1.7200-02	8.2693-03	2.2196-03
-30 1.0000	7.8043-02	7.0854-02	6.1392-02	5.0373-02	3.8612-02	2.6992-02	1.6426-02	7.8288-03	2.0816-03
-35 1.0000	7.7647-02	7.0109-02	6.0388-02	4.9232-02	3.7476-02	2.5999-02	1.5690-02	7.4098-03	1.9503-03
-40 1.0000	7.7274-02	6.9409-02	5.9444-02	4.8160-02	3.6407-02	2.5065-02	1.4998-02	7.0158-03	1.8268-03
-45 1.0000	7.6928-02	6.8758-02	5.8566-02	4.7163-02	3.5414-02	2.4197-02	1.4355-02	6.6496-03	1.7121-03
-50 1.0000	7.6611-02	6.8161-02	5.7762-02	4.6249-02	3.4503-02	2.3402-02	1.3766-02	6.3140-03	1.6069-03
-55 1.0000	7.6325-02	6.7624-02	5.7038-02	4.5426-02	3.3683-02	2.2685-02	1.3235-02	6.0116-03	1.5121-03
-60 1.0000	7.6073-02	6.7149-02	5.6398-02	4.4700-02	3.2959-02	2.2052-02	1.2766-02	5.7447-03	1.4285-03
-65 1.0000	7.5856-02	6.6741-02	5.5849-02	4.4075-02	3.2337-02	2.1509-02	1.2364-02	5.5154-03	1.3566-03
-70 1.0000	7.5676-02	6.6404-02	5.5393-02	4.3558-02	3.1821-02	2.1058-02	1.2030-02	5.3253-03	1.2971-03
-75 1.0000	7.5535-02	6.6138-02	5.5035-02	4.3151-02	3.1416-02	2.0704-02	1.1768-02	5.1759-03	1.2503-03
-80 1.0000	7.5433-02	6.5947-02	5.4778-02	4.2859-02	3.1125-02	2.0449-02	1.1579-02	5.0684-03	1.2166-03
-85 1.0000	7.5372-02	6.5832-02	5.4623-02	4.2682-02	3.0949-02	2.0295-02	1.1465-02	5.0036-03	1.1963-03
-90 1.0000	7.5352-02	6.5793-02	5.4571-02	4.2623-02	3.0890-02	2.0244-02	1.1427-02	4.9819-03	1.1895-03

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.17870804

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
85 1.9776	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
80 1.9152	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
75 1.8250	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
70 1.7207	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
65 1.6138	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
60 1.5119	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
55 1.4188	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
50 1.3364	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
45 1.2649	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
40 1.2038	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
35 1.1522	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
30 1.1094	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
25 1.0746	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
20 1.0470	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
15 1.0261	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
10 1.0115	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
5 1.0029	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
0 1.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-5 1.0029	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-10 1.0115	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-15 1.0261	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-20 1.0470	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-25 1.0746	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-30 1.1094	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-35 1.1522	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-40 1.2038	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-45 1.2649	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-50 1.3364	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-55 1.4188	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-60 1.5119	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-65 1.6138	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-70 1.7207	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-75 1.8250	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-80 1.9152	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-85 1.9776	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-90 2.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 2.00 CULOAD=0.002 CELOAD=0.004

CENTER DEFLECTION = 0.17870804

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
85 1.9776	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
80 1.9152	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
75 1.8250	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
70 1.7207	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
65 1.6138	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
60 1.5119	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
55 1.4188	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
50 1.3364	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
45 1.2649	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
40 1.2038	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
35 1.1522	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
30 1.1094	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
25 1.0746	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
20 1.0470	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
15 1.0261	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
10 1.0115	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
5 1.0029	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
0 1.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
90 2.0000	4.7512-02	8.9353-02	1.2043-01	1.3682-01	1.3634-01	1.1914-01	8.8262-02	5.0261-02	1.5750-02
85 1.9776	4.6801-02	8.8016-02	1.1863-01	1.3477-01	1.3430-01	1.1735-01	8.6941-02	4.9509-02	1.5514-02
80 1.9152	4.4808-02	8.4267-02	1.1358-01	1.2903-01	1.2858-01	1.1236-01	8.3238-02	4.7400-02	1.4854-02
75 1.8250	4.1878-02	7.8757-02	1.0615-01	1.2060-01	1.2017-01	1.0501-01	7.7795-02	4.4301-02	1.3882-02
70 1.7207	3.8413-02	7.2240-02	9.7367-02	1.1062-01	1.1023-01	9.6320-02	7.1358-02	4.0635-02	1.2734-02
65 1.6138	3.4747-02	6.5345-02	8.8074-02	1.0006-01	9.9709-02	8.7127-02	6.4548-02	3.6757-02	1.1518-02
60 1.5119	3.1104-02	5.8495-02	7.8841-02	8.9571-02	8.9257-02	7.7994-02	5.7781-02	3.2904-02	1.0311-02
55 1.4188	2.7611-02	5.1925-02	6.9986-02	7.9510-02	7.9232-02	6.9234-02	5.1291-02	2.9208-02	9.1528-03
50 1.3364	2.4321-02	4.5739-02	6.1648-02	7.0038-02	6.9792-02	6.0985-02	4.5180-02	2.5728-02	8.0624-03
45 1.2649	2.1248-02	3.9960-02	5.3859-02	6.1189-02	6.0974-02	5.3280-02	3.9472-02	2.2477-02	7.0437-03
40 1.2038	1.8382-02	3.4569-02	4.6593-02	5.2934-02	5.2748-02	4.6092-02	3.4147-02	1.9445-02	6.0934-03
35 1.1522	1.5700-02	2.9526-02	3.9795-02	4.5211-02	4.5053-02	3.9367-02	2.9165-02	1.6608-02	5.2045-03
30 1.1094	1.3178-02	2.4782-02	3.3402-02	3.7948-02	3.7814-02	3.3043-02	2.4480-02	1.3940-02	4.3683-03
25 1.0746	1.0788-02	2.0289-02	2.7346-02	3.1067-02	3.0958-02	2.7052-02	2.0041-02	1.1412-02	3.5763-03
20 1.0470	8.5068-03	1.5998-02	2.1563-02	2.4497-02	2.4411-02	2.1331-02	1.5803-02	8.9990-03	2.8200-03
15 1.0261	6.3091-03	1.1865-02	1.5992-02	1.8168-02	1.8105-02	1.5820-02	1.1720-02	6.6741-03	2.0914-03
10 1.0115	4.1727-03	7.8472-03	1.0577-02	1.2016-02	1.1974-02	1.0463-02	7.7514-03	4.4141-03	1.3832-03
5 1.0029	2.0764-03	3.9050-03	5.2632-03	5.9795-03	5.9585-03	5.2066-03	3.8573-03	2.1965-03	6.8832-04

ALPHA = 2.00 BETA = 2.00 A = 1.00 B = 2.00 CULOAD=0.002 CELOAD=0.004

CENTER DEFLECTION = 0.17870804

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	2.2266-01	2.5405-01	2.6842-01	2.6292-01	2.3687-01	1.9234-01	1.3474-01	7.3422-02	2.2202-02
85 1.9776	2.2195-01	2.5271-01	2.6662-01	2.6087-01	2.3482-01	1.9055-01	1.3342-01	7.2669-02	2.1966-02
80 1.9152	2.1996-01	2.4896-01	2.6156-01	2.5513-01	2.2910-01	1.8555-01	1.2972-01	7.0561-02	2.1305-02
75 1.8250	2.1703-01	2.4345-01	2.5414-01	2.4669-01	2.2070-01	1.7821-01	1.2428-01	6.7461-02	2.0334-02
70 1.7207	2.1356-01	2.3694-01	2.4535-01	2.3671-01	2.1075-01	1.6952-01	1.1784-01	6.3796-02	1.9185-02
65 1.6138	2.0990-01	2.3004-01	2.3606-01	2.2616-01	2.0023-01	1.6033-01	1.1103-01	5.9917-02	1.7970-02
60 1.5119	2.0626-01	2.2319-01	2.2683-01	2.1567-01	1.8978-01	1.5119-01	1.0426-01	5.6064-02	1.6762-02
55 1.4188	2.0276-01	2.1662-01	2.1797-01	2.0561-01	1.7975-01	1.4243-01	9.7773-02	5.2369-02	1.5604-02
50 1.3364	1.9947-01	2.1044-01	2.0964-01	1.9613-01	1.7032-01	1.3418-01	9.1662-02	4.8889-02	1.4514-02
45 1.2649	1.9640-01	2.0466-01	2.0185-01	1.8728-01	1.6150-01	1.2648-01	8.5954-02	4.5638-02	1.3495-02
40 1.2038	1.9353-01	1.9927-01	1.9458-01	1.7903-01	1.5327-01	1.1929-01	8.0629-02	4.2606-02	1.2545-02
35 1.1522	1.9085-01	1.9422-01	1.8778-01	1.7131-01	1.4558-01	1.1257-01	7.5647-02	3.9769-02	1.1656-02
30 1.1094	1.8833-01	1.8948-01	1.8139-01	1.6404-01	1.3834-01	1.0624-01	7.0962-02	3.7100-02	1.0820-02
25 1.0746	1.8594-01	1.8499-01	1.7533-01	1.5716-01	1.3148-01	1.0025-01	6.6523-02	3.4573-02	1.0028-02
20 1.0470	1.8366-01	1.8070-01	1.6955-01	1.5059-01	1.2493-01	9.4530-02	6.2285-02	3.2160-02	9.2713-03
15 1.0261	1.8146-01	1.7656-01	1.6398-01	1.4426-01	1.1863-01	8.9019-02	5.8202-02	2.9835-02	8.5428-03
10 1.0115	1.7932-01	1.7254-01	1.5856-01	1.3811-01	1.1250-01	8.3662-02	5.4233-02	2.7575-02	7.8346-03
5 1.0029	1.7723-01	1.6860-01	1.5325-01	1.3208-01	1.0648-01	7.8405-02	5.0339-02	2.5357-02	7.1397-03
0 1.0000	1.7515-01	1.6470-01	1.4799-01	1.2610-01	1.0052-01	7.3199-02	4.6482-02	2.3161-02	6.4514-03
-5 1.0029	1.7308-01	1.6079-01	1.4272-01	1.2012-01	9.4565-02	6.7992-02	4.2625-02	2.0964-02	5.7630-03
-10 1.0115	1.7098-01	1.5685-01	1.3741-01	1.1408-01	8.8549-02	6.2736-02	3.8731-02	1.8746-02	5.0681-03
-15 1.0261	1.6884-01	1.5283-01	1.3200-01	1.0793-01	8.2419-02	5.7379-02	3.4762-02	1.6486-02	4.3599-03
-20 1.0470	1.6664-01	1.4870-01	1.2643-01	1.0160-01	7.6112-02	5.1868-02	3.0679-02	1.4162-02	3.6314-03
-25 1.0746	1.6436-01	1.4441-01	1.2064-01	9.5029-02	6.9565-02	4.6147-02	2.6441-02	1.1748-02	2.8751-03
-30 1.1094	1.6197-01	1.3992-01	1.1459-01	8.8149-02	6.2709-02	4.0156-02	2.2002-02	9.2206-03	2.0830-03
-35 1.1522	1.5945-01	1.3517-01	1.0819-01	8.0885-02	5.5471-02	3.3831-02	1.7317-02	6.5524-03	1.2469-03
-40 1.2038	1.5677-01	1.3013-01	1.0140-01	7.3163-02	4.7775-02	2.7107-02	1.2335-02	3.7156-03	3.5792-04
-45 1.2649	1.5390-01	1.2474-01	9.4129-02	6.4908-02	3.9549-02	1.9919-02	7.0099-03	6.8312-04	-5.9235-04
-50 1.3364	1.5083-01	1.1896-01	8.6340-02	5.6359-02	3.0731-02	1.2214-02	1.3015-03	-2.5675-03	-1.6110-03
-55 1.4188	1.4754-01	1.1277-01	7.8002-02	4.6586-02	2.1292-02	3.9652-03	-4.8094-03	-6.0474-03	-2.7015-03
-60 1.5119	1.4405-01	1.0620-01	6.9147-02	3.6525-02	1.1267-02	-4.7949-03	-1.1299-02	-9.7430-03	-3.8596-03
-65 1.6138	1.4041-01	9.9352-02	5.9914-02	2.6036-02	8.1409-04	-1.3928-02	-1.8066-02	-1.3596-02	-5.0670-03
-70 1.7207	1.3674-01	9.2457-02	5.0622-02	1.5479-02	-9.7063-03	-2.3121-02	-2.4876-02	-1.7474-02	-6.2824-03
-75 1.8250	1.3327-01	8.5940-02	4.1838-02	5.4999-03	-1.9650-02	-3.1810-02	-3.1314-02	-2.1140-02	-7.4311-03
-80 1.9152	1.3034-01	8.0431-02	3.4412-02	-2.9369-03	-2.8057-02	-3.9157-02	-3.6756-02	-2.4239-02	-8.4023-03
-85 1.9776	1.2835-01	7.6682-02	2.9359-02	-8.6778-03	-3.3778-02	-4.4156-02	-4.0459-02	-2.6348-02	-9.0631-03
-90 2.0000	1.2764-01	7.5344-02	2.7556-02	-1.0725-02	-3.5819-02	-4.5939-02	-4.1780-02	-2.7101-02	-9.2989-03

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.09960683

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	9.7807-02	9.2487-02	8.3884-02	7.2420-02	5.8722-02	4.3667-02	2.8441-02	1.4608-02	4.2206-03
85	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2262-02	5.8514-02	4.3434-02	2.8220-02	1.4443-02	4.1502-03
80	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7949-02	4.2809-02	2.7639-02	1.4027-02	3.9839-03
75	1.0287	9.7704-02	9.2094-02	8.3078-02	7.1168-02	5.7108-02	4.1895-02	2.6813-02	1.3459-02	3.7710-03
70	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0353-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5437-03
65	1.0684	9.7556-02	9.1539-02	8.1952-02	6.9458-02	5.4970-02	3.9644-02	2.4862-02	1.2191-02	3.3291-03
60	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1405-03
55	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7836-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9986-03
50	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9067-03
45	1.1225	9.7347-02	9.0759-02	8.0398-02	6.7153-02	5.2184-02	3.6841-02	2.2566-02	1.0796-02	2.8767-03
40	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9065-03
35	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7835-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9988-03
30	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1397-03
25	1.0684	9.7556-02	9.1538-02	8.1952-02	6.9458-02	5.4969-02	3.9644-02	2.4861-02	1.2191-02	3.3300-03
20	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0352-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5432-03
15	1.0287	9.7704-02	9.2094-02	8.3077-02	7.1168-02	5.7107-02	4.1895-02	2.6812-02	1.3459-02	3.7709-03
10	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7948-02	4.2808-02	2.7638-02	1.4027-02	3.9839-03
5	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2261-02	5.8514-02	4.3434-02	2.8219-02	1.4443-02	4.1492-03
0	1.0000	9.7807-02	9.2486-02	8.3884-02	7.2420-02	5.8721-02	4.3667-02	2.8440-02	1.4607-02	4.2203-03
-5	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2261-02	5.8514-02	4.3434-02	2.8219-02	1.4443-02	4.1492-03
-10	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7948-02	4.2808-02	2.7638-02	1.4027-02	3.9839-03
-15	1.0287	9.7704-02	9.2094-02	8.3077-02	7.1168-02	5.7107-02	4.1895-02	2.6812-02	1.3459-02	3.7709-03
-20	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0352-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5432-03
-25	1.0684	9.7556-02	9.1538-02	8.1952-02	6.9458-02	5.4969-02	3.9644-02	2.4861-02	1.2191-02	3.3300-03
-30	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1397-03
-35	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7835-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9988-03
-40	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9065-03
-45	1.1225	9.7347-02	9.0759-02	8.0398-02	6.7153-02	5.2184-02	3.6841-02	2.2566-02	1.0796-02	2.8767-03
-50	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9067-03
-55	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7836-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9986-03
-60	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1405-03
-65	1.0684	9.7556-02	9.1539-02	8.1952-02	6.9458-02	5.4970-02	3.9644-02	2.4862-02	1.2191-02	3.3291-03
-70	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0353-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5437-03
-75	1.0287	9.7704-02	9.2094-02	8.3078-02	7.1168-02	5.7108-02	4.1895-02	2.6813-02	1.3459-02	3.7710-03
-80	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7949-02	4.2809-02	2.7639-02	1.4027-02	3.9839-03
-85	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2262-02	5.8514-02	4.3434-02	2.8220-02	1.4443-02	4.1502-03
-90	1.0000	9.7807-02	9.2487-02	8.3884-02	7.2420-02	5.8722-02	4.3667-02	2.8441-02	1.4608-02	4.2206-03

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.09960683

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	9.7807-02	9.2487-02	8.3884-02	7.2420-02	5.8722-02	4.3667-02	2.8441-02	1.4608-02	4.2206-03
85	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2262-02	5.8514-02	4.3434-02	2.8220-02	1.4443-02	4.1502-03
80	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7949-02	4.2809-02	2.7639-02	1.4027-02	3.9839-03
75	1.0287	9.7704-02	9.2094-02	8.3078-02	7.1168-02	5.7108-02	4.1895-02	2.6813-02	1.3459-02	3.7710-03
70	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0353-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5437-03
65	1.0684	9.7556-02	9.1539-02	8.1952-02	6.9458-02	5.4970-02	3.9644-02	2.4862-02	1.2191-02	3.3291-03
60	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1405-03
55	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7836-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9986-03
50	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9067-03
45	1.1225	9.7347-02	9.0759-02	8.0398-02	6.7153-02	5.2184-02	3.6841-02	2.2566-02	1.0796-02	2.8767-03
40	1.1183	9.7364-02	9.0820-02	8.0520-02	6.7331-02	5.2396-02	3.7049-02	2.2732-02	1.0895-02	2.9065-03
35	1.1064	9.7410-02	9.0993-02	8.0863-02	6.7835-02	5.2998-02	3.7646-02	2.3212-02	1.1180-02	2.9988-03
30	1.0889	9.7478-02	9.1246-02	8.1366-02	6.8581-02	5.3898-02	3.8549-02	2.3949-02	1.1626-02	3.1397-03
25	1.0684	9.7556-02	9.1538-02	8.1952-02	6.9458-02	5.4969-02	3.9644-02	2.4861-02	1.2191-02	3.3300-03
20	1.0476	9.7634-02	9.1832-02	8.2544-02	7.0352-02	5.6080-02	4.0801-02	2.5851-02	1.2823-02	3.5432-03
15	1.0287	9.7704-02	9.2094-02	8.3077-02	7.1168-02	5.7107-02	4.1895-02	2.6812-02	1.3459-02	3.7709-03
10	1.0136	9.7759-02	9.2302-02	8.3503-02	7.1825-02	5.7948-02	4.2808-02	2.7638-02	1.4027-02	3.9839-03
5	1.0036	9.7794-02	9.2438-02	8.3783-02	7.2261-02	5.8514-02	4.3434-02	2.8219-02	1.4443-02	4.1492-03
0	1.0000	9.7807-02	9.2486-02	8.3884-02	7.2420-02	5.8721-02	4.3667-02	2.8440-02	1.4607-02	4.2203-03
90	1.0000	6.5963-03	1.2441-02	1.6850-02	1.9275-02	1.9380-02	1.7124-02	1.2860-02	7.4453-03	2.3814-03
85	1.0036	6.5941-03	1.2433-02	1.6830-02	1.9236-02	1.9320-02	1.7046-02	1.2776-02	7.3755-03	2.3484-03
80	1.0136	6.5817-03	1.2399-02	1.6759-02	1.9114-02	1.9142-02	1.6825-02	1.2549-02	7.1976-03	2.2716-03
75	1.0287	6.5492-03	1.2322-02	1.6618-02	1.8896-02	1.8846-02	1.6480-02	1.2212-02	6.9494-03	2.1727-03
70	1.0476	6.4849-03	1.2182-02	1.6388-02	1.8566-02	1.8430-02	1.6024-02	1.1793-02	6.6587-03	2.0640-03
65	1.0684	6.3754-03	1.1957-02	1.6043-02	1.8109-02	1.7893-02	1.5471-02	1.1315-02	6.3458-03	1.9542-03
60	1.0889	6.2060-03	1.1623-02	1.5560-02	1.7508-02	1.7233-02	1.4833-02	1.0796-02	6.0251-03	1.8461-03
55	1.1064	5.9626-03	1.1158-02	1.4915-02	1.6750-02	1.6448-02	1.4121-02	1.0250-02	5.7058-03	1.7450-03
50	1.1183	5.6336-03	1.0545-02	1.4093-02	1.5824-02	1.5536-02	1.3337-02	9.6813-03	5.3905-03	1.6488-03
45	1.1225	5.2230-03	9.7810-03	1.3090-02	1.4727-02	1.4493-02	1.2477-02	9.0852-03	5.0752-03	1.5578-03
40	1.1183	4.7330-03	8.8792-03	1.1919-02	1.3462-02	1.3315-02	1.1528-02	8.4465-03	4.7487-03	1.4664-03
35	1.1064	4.1822-03	7.8659-03	1.0603-02	1.2045-02	1.1998-02	1.0473-02	7.7427-03	4.3940-03	1.3702-03
30	1.0889	3.5917-03	6.7756-03	9.1782-03	1.0498-02	1.0545-02	9.2968-03	6.9502-03	3.9916-03	1.2594-03
25	1.0684	2.9818-03	5.6425-03	7.6826-03	8.8494-03	8.9697-03	7.9932-03	6.0502-03	3.5230-03	1.1288-03
20	1.0476	2.3684-03	4.4948-03	6.1494-03	7.1310-03	7.2905-03	6.5661-03	5.0333-03	2.9745-03	9.6887-04
15	1.0287	1.7614-03	3.3510-03	4.6035-03	5.3694-03	5.5314-03	5.0297-03	3.9015-03	2.3395-03	7.7582-04
10	1.0136	1.1651-03	2.2208-03	3.0605-03	3.5858-03	3.7162-03	3.4053-03	2.6683-03	1.6208-03	5.4693-04
5	1.0036	5.7924-04	1.1054-03	1.5265-03	1.7937-03	1.8663-03	1.7191-03	1.3502-03	8.3187-04	2.8472-04

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 1.00 CCLOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.09960883

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 1.0000	1.0440-01	1.0493-01	1.0073-01	9.1695-02	7.8101-02	6.0791-02	4.1301-02	2.2053-02	6.6020-03
85 1.0036	1.0439-01	1.0487-01	1.0061-01	9.1498-02	7.7834-02	6.0480-02	4.0996-02	2.1819-02	6.4986-03
80 1.0136	1.0434-01	1.0470-01	1.0026-01	9.0939-02	7.7090-02	5.9634-02	4.0187-02	2.1225-02	6.2555-03
75 1.0287	1.0425-01	1.0442-01	9.9696-02	9.0063-02	7.5953-02	5.8375-02	3.9025-02	2.0409-02	5.9437-03
70 1.0476	1.0412-01	1.0401-01	9.8932-02	8.8919-02	7.4510-02	5.6825-02	3.7644-02	1.9482-02	5.6077-03
65 1.0684	1.0393-01	1.0350-01	9.7995-02	8.7567-02	7.2863-02	5.5115-02	3.6176-02	1.8537-02	5.2833-03
60 1.0889	1.0368-01	1.0287-01	9.6926-02	8.6090-02	7.1131-02	5.3383-02	3.4745-02	1.7651-02	4.9866-03
55 1.1064	1.0337-01	1.0215-01	9.5777-02	8.4586-02	6.9446-02	5.1767-02	3.3462-02	1.6886-02	4.7436-03
50 1.1183	1.0300-01	1.0136-01	9.4612-02	8.3156-02	6.7932-02	5.0386-02	3.2414-02	1.6285-02	4.5555-03
45 1.1225	1.0257-01	1.0054-01	9.3488-02	8.1880-02	6.6677-02	4.9317-02	3.1651-02	1.5871-02	4.4345-03
40 1.1183	1.0210-01	9.9699-02	9.2438-02	8.0794-02	6.5711-02	4.8577-02	3.1179-02	1.5643-02	4.3729-03
35 1.1064	1.0159-01	9.8859-02	9.1465-02	7.9880-02	6.4996-02	4.8119-02	3.0955-02	1.5574-02	4.3691-03
30 1.0889	1.0107-01	9.8022-02	9.0544-02	7.9079-02	6.4443-02	4.7846-02	3.0899-02	1.5617-02	4.3990-03
25 1.0684	1.0054-01	9.7181-02	8.9635-02	7.8307-02	6.3939-02	4.7637-02	3.0912-02	1.5714-02	4.4588-03
20 1.0476	1.0000-01	9.6326-02	8.8693-02	7.7483-02	6.3370-02	4.7367-02	3.0884-02	1.5797-02	4.5120-03
15 1.0287	9.9465-02	9.5445-02	8.7681-02	7.6537-02	6.2639-02	4.6924-02	3.0714-02	1.5798-02	4.5667-03
10 1.0136	9.8924-02	9.4522-02	8.6564-02	7.5411-02	6.1664-02	4.6213-02	3.0306-02	1.5647-02	4.5308-03
5 1.0036	9.8374-02	9.3543-02	8.5310-02	7.4055-02	6.0380-02	4.5153-02	2.9575-02	1.5275-02	4.4339-03
0 1.0000	9.7807-02	9.2486-02	8.3884-02	7.2420-02	5.8721-02	4.3667-02	2.8440-02	1.4607-02	4.2203-03
-5 1.0036	9.7215-02	9.1332-02	8.2257-02	7.0468-02	5.6648-02	4.1715-02	2.6863-02	1.3611-02	3.8645-03
-10 1.0136	9.6594-02	9.0081-02	8.0443-02	6.8239-02	5.4232-02	3.9403-02	2.4970-02	1.2406-02	3.4369-03
-15 1.0287	9.5942-02	8.8743-02	7.8474-02	6.5798-02	5.1576-02	3.6865-02	2.2911-02	1.1119-02	2.9951-03
-20 1.0476	9.5266-02	8.7337-02	7.6395-02	6.3221-02	4.8789-02	3.4235-02	2.0817-02	9.8484-03	2.5743-03
-25 1.0684	9.4575-02	8.5896-02	7.4270-02	6.0608-02	4.6000-02	3.1651-02	1.8811-02	8.6683-03	2.2011-03
-30 1.0889	9.3887-02	8.4471-02	7.2188-02	5.8084-02	4.3352-02	2.9252-02	1.6999-02	7.6343-03	1.8803-03
-35 1.1064	9.3228-02	8.3127-02	7.0260-02	5.5790-02	4.1000-02	2.7173-02	1.5469-02	6.7859-03	1.6286-03
-40 1.1183	9.2631-02	8.1941-02	6.8601-02	5.3869-02	3.9081-02	2.5522-02	1.4286-02	6.1458-03	1.4401-03
-45 1.1225	9.2124-02	8.0978-02	6.7307-02	5.2426-02	3.7690-02	2.4364-02	1.3481-02	5.7211-03	1.3189-03
-50 1.1183	9.1728-02	8.0276-02	6.6427-02	5.1507-02	3.6860-02	2.3713-02	1.3051-02	5.5041-03	1.2579-03
-55 1.1064	9.1448-02	7.9836-02	6.5948-02	5.1085-02	3.6550-02	2.3526-02	1.2962-02	5.4742-03	1.2535-03
-60 1.0889	9.1272-02	7.9623-02	6.5807-02	5.1073-02	3.6665-02	2.3716-02	1.3153-02	5.6009-03	1.2944-03
-65 1.0684	9.1181-02	7.9581-02	6.5909-02	5.1349-02	3.7076-02	2.4173-02	1.3547-02	5.8456-03	1.3749-03
-70 1.0476	9.1149-02	7.9650-02	6.6156-02	5.1787-02	3.7650-02	2.4778-02	1.4058-02	6.1645-03	1.4798-03
-75 1.0287	9.1155-02	7.9772-02	6.6459-02	5.2272-02	3.8262-02	2.5415-02	1.4601-02	6.5098-03	1.5982-03
-80 1.0136	9.1177-02	7.9903-02	6.6745-02	5.2711-02	3.8807-02	2.5983-02	1.5090-02	6.8296-03	1.7123-03
-85 1.0036	9.1200-02	8.0005-02	6.6954-02	5.3025-02	3.9195-02	2.6389-02	1.5444-02	7.0679-03	1.8018-03
-90 1.0000	9.1211-02	8.0045-02	6.7034-02	5.3145-02	3.9342-02	2.6544-02	1.5581-02	7.1624-03	1.8333-03

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 2.00 CCLOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.20331793

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	2.0089-01	1.9350-01	1.8085-01	1.6260-01	1.3866-01	1.0946-01	7.6410-02	4.2541-02	1.3540-02
85 2.0041	2.0078-01	1.9307-01	1.7993-01	1.6111-01	1.3662-01	1.0703-01	7.3931-02	4.0511-02	1.2543-02
80 2.0020	2.0048-01	1.9193-01	1.7754-01	1.5732-01	1.3156-01	1.0123-01	6.8287-02	3.6235-02	1.0719-02
75 1.9741	2.0008-01	1.9040-01	1.7440-01	1.5244-01	1.2529-01	9.4349-02	6.2004-02	3.1884-02	9.0924-03
70 1.9091	1.9968-01	1.8888-01	1.7134-01	1.4782-01	1.1953-01	8.8316-02	5.6814-02	2.8557-02	7.9634-03
65 1.8104	1.9936-01	1.8771-01	1.6901-01	1.4436-01	1.1533-01	8.4074-02	5.3327-02	2.6442-02	7.2896-03
60 1.6927	1.9917-01	1.8700-01	1.6759-01	1.4227-01	1.1285-01	8.1622-02	5.1372-02	2.5299-02	6.9405-03
55 1.5720	1.9908-01	1.8666-01	1.6693-01	1.4131-01	1.1171-01	8.0510-02	5.0504-02	2.4806-02	6.7955-03
50 1.4593	1.9906-01	1.8658-01	1.6678-01	1.4107-01	1.1143-01	8.0250-02	5.0311-02	2.4708-02	6.7727-03
45 1.3598	1.9908-01	1.8665-01	1.6690-01	1.4125-01	1.1165-01	8.0471-02	5.0499-02	2.4831-02	6.8168-03
40 1.2748	1.9911-01	1.8678-01	1.6716-01	1.4164-01	1.1211-01	8.0937-02	5.0885-02	2.5071-02	6.8980-03
35 1.2038	1.9915-01	1.8693-01	1.6747-01	1.4210-01	1.1267-01	8.1503-02	5.1355-02	2.5364-02	6.9963-03
30 1.1456	1.9919-01	1.8709-01	1.6777-01	1.4256-01	1.1324-01	8.2086-02	5.1845-02	2.5671-02	7.0997-03
25 1.0988	1.9923-01	1.8723-01	1.6806-01	1.4299-01	1.1377-01	8.2637-02	5.2315-02	2.5970-02	7.2021-03
20 1.0620	1.9926-01	1.8735-01	1.6831-01	1.4336-01	1.1423-01	8.3128-02	5.2739-02	2.6245-02	7.2981-03
15 1.0344	1.9929-01	1.8745-01	1.6851-01	1.4367-01	1.1462-01	8.3540-02	5.3100-02	2.6483-02	7.3830-03
10 1.0152	1.9931-01	1.8752-01	1.6866-01	1.4390-01	1.1492-01	8.3856-02	5.3382-02	2.6674-02	7.4529-03
5 1.0038	1.9932-01	1.8757-01	1.6875-01	1.4405-01	1.1510-01	8.4061-02	5.3567-02	2.6802-02	7.5024-03
0 1.0000	1.9933-01	1.8758-01	1.6879-01	1.4410-01	1.1517-01	8.4134-02	5.3635-02	2.6851-02	7.5222-03
-5 1.0038	1.9932-01	1.8757-01	1.6875-01	1.4405-01	1.1510-01	8.4061-02	5.3567-02	2.6802-02	7.5024-03
-10 1.0152	1.9931-01	1.8752-01	1.6866-01	1.4390-01	1.1492-01	8.3856-02	5.3382-02	2.6674-02	7.4529-03
-15 1.0344	1.9929-01	1.8745-01	1.6851-01	1.4367-01	1.1462-01	8.3540-02	5.3100-02	2.6483-02	7.3830-03
-20 1.0620	1.9926-01	1.8735-01	1.6831-01	1.4336-01	1.1423-01	8.3128-02	5.2739-02	2.6245-02	7.2981-03
-25 1.0988	1.9923-01	1.8723-01	1.6806-01	1.4299-01	1.1377-01	8.2637-02	5.2315-02	2.5970-02	7.2021-03
-30 1.1456	1.9919-01	1.8709-01	1.6777-01	1.4256-01	1.1324-01	8.2086-02	5.1845-02	2.5671-02	7.0997-03
-35 1.2038	1.9915-01	1.8693-01	1.6747-01	1.4210-01	1.1267-01	8.1503-02	5.1355-02	2.5364-02	6.9963-03
-40 1.2748	1.9911-01	1.8678-01	1.6716-01	1.4164-01	1.1211-01	8.0937-02	5.0885-02	2.5071-02	6.8980-03
-45 1.3598	1.9908-01	1.8665-01	1.6690-01	1.4125-01	1.1165-01	8.0471-02	5.0499-02	2.4831-02	6.8168-03
-50 1.4593	1.9906-01	1.8658-01	1.6678-01	1.4107-01	1.1143-01	8.0250-02	5.0311-02	2.4708-02	6.7727-03
-55 1.5720	1.9908-01	1.8666-01	1.6693-01	1.4131-01	1.1171-01	8.0510-02	5.0504-02	2.4806-02	6.7955-03
-60 1.6927	1.9917-01	1.8700-01	1.6759-01	1.4227-01	1.1285-01	8.1622-02	5.1372-02	2.5299-02	6.9405-03
-65 1.8104	1.9936-01	1.8771-01	1.6901-01	1.4436-01	1.1533-01	8.4074-02	5.3327-02	2.6442-02	7.2896-03
-70 1.9091	1.9968-01	1.8888-01	1.7134-01	1.4782-01	1.1953-01	8.8316-02	5.6814-02	2.8557-02	7.9634-03
-75 1.9741	2.0008-01	1.9040-01	1.7440-01	1.5244-01	1.2529-01	9.4349-02	6.2004-02	3.1884-02	9.0924-03
-80 2.0020	2.0048-01	1.9193-01	1.7754-01	1.5732-01	1.3156-01	1.0123-01	6.8287-02	3.6235-02	1.0719-02
-85 2.0041	2.0078-01	1.9307-01	1.7993-01	1.6111-01	1.3662-01	1.0703-01	7.3931-02	4.0511-02	1.2543-02
-90 2.0000	2.0089-01	1.9350-01	1.8085-01	1.6260-01	1.3866-01	1.0946-01	7.6410-02	4.2541-02	1.3540-02

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.20331793

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	2.0089-01	1.9350-01	1.8085-01	1.6260-01	1.3866-01	1.0946-01	7.6410-02	4.2541-02	1.3540-02
85 2.0041	2.0078-01	1.9307-01	1.7994-01	1.6111-01	1.3662-01	1.0703-01	7.3931-02	4.0511-02	1.2543-02
80 2.0020	2.0048-01	1.9193-01	1.7754-01	1.5732-01	1.3156-01	1.0123-01	6.8287-02	3.6235-02	1.0719-02
75 1.9741	2.0008-01	1.9040-01	1.7440-01	1.5244-01	1.2529-01	9.4349-02	6.2004-02	3.1884-02	9.0924-03
70 1.9091	1.9968-01	1.8888-01	1.7134-01	1.4782-01	1.1953-01	8.8316-02	5.6814-02	2.8557-02	7.9634-03
65 1.8104	1.9936-01	1.8771-01	1.6901-01	1.4436-01	1.1533-01	8.4074-02	5.3327-02	2.6442-02	7.2896-03
60 1.6927	1.9917-01	1.8700-01	1.6759-01	1.4227-01	1.1285-01	8.1622-02	5.1372-02	2.5299-02	6.9405-03
55 1.5720	1.9908-01	1.8666-01	1.6693-01	1.4131-01	1.1171-01	8.0510-02	5.0504-02	2.4806-02	6.7955-03
50 1.4593	1.9906-01	1.8658-01	1.6678-01	1.4107-01	1.1143-01	8.0250-02	5.0311-02	2.4708-02	6.7727-03
45 1.3598	1.9908-01	1.8665-01	1.6690-01	1.4125-01	1.1165-01	8.0471-02	5.0499-02	2.4831-02	6.8168-03
40 1.2748	1.9911-01	1.8678-01	1.6716-01	1.4164-01	1.1211-01	8.0937-02	5.0885-02	2.5071-02	6.8980-03
35 1.2038	1.9915-01	1.8693-01	1.6747-01	1.4210-01	1.1267-01	8.1503-02	5.1355-02	2.5364-02	6.9963-03
30 1.1456	1.9919-01	1.8709-01	1.6777-01	1.4256-01	1.1324-01	8.2086-02	5.1845-02	2.5671-02	7.0997-03
25 1.0988	1.9923-01	1.8723-01	1.6806-01	1.4299-01	1.1377-01	8.2637-02	5.2315-02	2.5970-02	7.2021-03
20 1.0620	1.9926-01	1.8735-01	1.6831-01	1.4336-01	1.1423-01	8.3128-02	5.2739-02	2.6245-02	7.2981-03
15 1.0344	1.9929-01	1.8745-01	1.6851-01	1.4367-01	1.1462-01	8.3540-02	5.3100-02	2.6483-02	7.3830-03
10 1.0152	1.9931-01	1.8752-01	1.6866-01	1.4390-01	1.1492-01	8.3856-02	5.3382-02	2.6674-02	7.4529-03
5 1.0038	1.9932-01	1.8757-01	1.6875-01	1.4405-01	1.1510-01	8.4061-02	5.3567-02	2.6802-02	7.5024-03
0 1.0000	1.9933-01	1.8758-01	1.6879-01	1.4410-01	1.1517-01	8.4134-02	5.3635-02	2.6851-02	7.5222-03
90 2.0000	6.2109-02	1.1866-01	1.6415-01	1.9331-01	2.0164-01	1.8628-01	1.4750-01	9.0964-02	3.1453-02
85 2.0041	6.1966-02	1.1820-01	1.6307-01	1.9129-01	1.9847-01	1.8203-01	1.4268-01	8.6671-02	2.9201-02
80 2.0020	6.1111-02	1.1610-01	1.5908-01	1.8482-01	1.8930-01	1.7073-01	1.3092-01	7.7206-02	2.4956-02
75 1.9741	5.9001-02	1.1151-01	1.5149-01	1.7390-01	1.7539-01	1.5520-01	1.1628-01	6.6709-02	2.0892-02
70 1.9091	5.5419-02	1.0424-01	1.4051-01	1.5959-01	1.5884-01	1.3837-01	1.0188-01	5.7373-02	1.7654-02
65 1.8104	5.0633-02	9.4932-02	1.2730-01	1.4357-01	1.4167-01	1.2224-01	8.9118-02	4.9727-02	1.5190-02
60 1.6927	4.5215-02	8.4652-02	1.1325-01	1.2732-01	1.2519-01	1.0760-01	7.8165-02	4.3499-02	1.3275-02
55 1.5720	3.9718-02	7.4352-02	9.9453-02	1.1180-01	1.0991-01	9.4486-02	6.8677-02	3.8268-02	1.1705-02
50 1.4593	3.4488-02	6.4606-02	8.6515-02	9.7405-02	9.5952-02	8.2686-02	6.0274-02	3.3701-02	1.0351-02
45 1.3598	2.9673-02	5.5644-02	7.4642-02	8.4236-02	8.3225-02	7.1970-02	5.2673-02	2.9582-02	9.1288-03
40 1.2748	2.5297-02	4.7492-02	6.3825-02	7.2214-02	7.1579-02	6.2138-02	4.5677-02	2.5778-02	7.9963-03
35 1.2038	2.1324-02	4.0077-02	5.3955-02	6.1199-02	6.0853-02	5.3027-02	3.9150-02	2.2201-02	6.9231-03
30 1.1456	1.7696-02	3.3289-02	4.4889-02	5.1030-02	5.0888-02	4.4499-02	3.2989-02	1.8795-02	5.8905-03
25 1.0988	1.4350-02	2.7016-02	3.6481-02	4.1553-02	4.1541-02	3.6440-02	2.7115-02	1.5514-02	4.8861-03
20 1.0620	1.1227-02	2.1153-02	2.8596-02	3.2624-02	3.2684-02	2.8747-02	2.1460-02	1.2326-02	3.8999-03
15 1.0344	8.2769-03	1.5602-02	2.1111-02	2.4116-02	2.4202-02	2.1332-02	1.5968-02	9.2024-03	2.9234-03
10 1.0152	5.4505-03	1.0278-02	1.3917-02	1.5912-02	1.5989-02	1.4116-02	1.0588-02	6.1186-03	1.9504-03
5 1.0038	2.7051-03	5.1025-03	6.9114-03	7.9072-03	7.9516-03	7.0275-03	5.2785-03	3.0557-03	9.7659-04

ALPHA = 3.00 BETA = 3.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.20331793

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	2.6300-01	3.1216-01	3.4499-01	3.5591-01	3.4030-01	2.9574-01	2.2391-01	1.3350-01	4.4993-02
85 2.0041	2.6275-01	3.1127-01	3.4300-01	3.5240-01	3.3509-01	2.8906-01	2.1661-01	1.2718-01	4.1744-02
80 2.0020	2.6159-01	3.0802-01	3.3662-01	3.4213-01	3.2086-01	2.7196-01	1.9921-01	1.1344-01	3.5675-02
75 1.9741	2.5908-01	3.0190-01	3.2588-01	3.2634-01	3.0068-01	2.4955-01	1.7829-01	9.8593-02	2.9985-02
70 1.9091	2.5510-01	2.9312-01	3.1186-01	3.0741-01	2.7837-01	2.2669-01	1.5869-01	8.5920-02	2.5618-02
65 1.8104	2.5000-01	2.8265-01	2.9631-01	2.8792-01	2.5700-01	2.0632-01	1.4244-01	7.6169-02	2.2480-02
60 1.6927	2.4439-01	2.7165-01	2.8084-01	2.6960-01	2.3803-01	1.8922-01	1.2954-01	6.8798-02	2.0215-02
55 1.5720	2.3880-01	2.6102-01	2.6639-01	2.5310-01	2.2162-01	1.7500-01	1.1918-01	6.3075-02	1.8500-02
50 1.4593	2.3355-01	2.5119-01	2.5329-01	2.3848-01	2.0738-01	1.6294-01	1.1058-01	5.8409-02	1.7123-02
45 1.3598	2.2875-01	2.4229-01	2.4154-01	2.2549-01	1.9487-01	1.5244-01	1.0317-01	5.4414-02	1.5946-02
40 1.2748	2.2441-01	2.3427-01	2.3098-01	2.1385-01	1.8369-01	1.4307-01	9.6562-02	5.0849-02	1.4894-02
35 1.2038	2.2048-01	2.2701-01	2.2142-01	2.0329-01	1.7352-01	1.3453-01	9.0505-02	4.7565-02	1.3919-02
30 1.1456	2.1689-01	2.2037-01	2.1266-01	1.9359-01	1.6412-01	1.2659-01	8.4834-02	4.4466-02	1.2990-02
25 1.0988	2.1358-01	2.1424-01	2.0454-01	1.8434-01	1.5531-01	1.1908-01	7.9429-02	4.1485-02	1.2088-02
20 1.0620	2.1049-01	2.0850-01	1.9690-01	1.7599-01	1.4692-01	1.1187-01	7.4199-02	3.8571-02	1.1198-02
15 1.0344	2.0757-01	2.0305-01	1.8962-01	1.6779-01	1.3882-01	1.0487-01	6.9067-02	3.5686-02	1.0306-02
10 1.0152	2.0476-01	1.9780-01	1.8257-01	1.5981-01	1.3090-01	9.7972-02	6.3970-02	3.2792-02	9.4033-03
5 1.0038	2.0203-01	1.9267-01	1.7566-01	1.5196-01	1.2306-01	9.1088-02	5.8846-02	2.9858-02	8.4790-03
0 1.0000	1.9933-01	1.8758-01	1.6879-01	1.4410-01	1.1517-01	8.4134-02	5.3635-02	2.6851-02	7.5222-03
-5 1.0038	1.9662-01	1.8247-01	1.6184-01	1.3614-01	1.0715-01	7.7033-02	4.8289-02	2.3747-02	6.5258-03
-10 1.0152	1.9386-01	1.7724-01	1.5474-01	1.2799-01	9.8927-02	6.9740-02	4.2793-02	2.0555-02	5.5024-03
-15 1.0344	1.9101-01	1.7185-01	1.4740-01	1.1955-01	9.0420-02	6.2208-02	3.7132-02	1.7281-02	4.4597-03
-20 1.0620	1.8804-01	1.6620-01	1.3971-01	1.1074-01	8.1550-02	5.4382-02	3.1279-02	1.3919-02	3.3983-03
-25 1.0988	1.8488-01	1.6021-01	1.3158-01	1.0143-01	7.2225-02	4.6197-02	2.5200-02	1.0456-02	2.3160-03
-30 1.1456	1.8150-01	1.5380-01	1.2289-01	9.1528-02	6.2347-02	3.7586-02	1.8856-02	6.8767-03	1.2093-03
-35 1.2038	1.7783-01	1.4686-01	1.1351-01	8.0896-02	5.1815-02	2.8476-02	1.2206-02	3.1625-03	7.3119-05
-40 1.2748	1.7381-01	1.3929-01	1.0333-01	6.9623-02	4.0531-02	1.8799-02	5.2078-03	-7.0659-04	-1.0983-03
-45 1.3598	1.6940-01	1.3100-01	9.2257-02	5.7619-02	2.8425-02	8.5018-03	-2.1733-03	-4.7512-03	-2.3120-03
-50 1.4593	1.6457-01	1.2198-01	8.0260-02	4.3668-02	1.5479-02	-2.4361-03	-9.9634-03	-8.9937-03	-3.5779-03
-55 1.5720	1.5936-01	1.1231-01	6.7480-02	2.9508-02	1.7937-03	-1.3976-02	-1.8173-02	-1.3462-02	-4.9090-03
-60 1.6927	1.5396-01	1.0235-01	5.4346-02	1.4947-02	-1.2340-02	-2.5981-02	-2.6793-02	-1.8200-02	-6.3344-03
-65 1.8104	1.4873-01	9.2782-02	4.1714-02	7.8759-04	-2.6344-02	-3.8170-02	-3.5791-02	-2.3284-02	-7.9006-03
-70 1.9091	1.4426-01	8.4642-02	3.0830-02	-1.1776-02	-3.9310-02	-5.0053-02	-4.3063-02	-2.8817-02	-9.6909-03
-75 1.9741	1.4108-01	7.8888-02	2.2913-02	-2.1457-02	-5.0106-02	-6.0849-02	-5.4280-02	-3.4824-02	-1.1800-02
-80 2.0020	1.3937-01	7.5829-02	1.8460-02	-2.7499-02	-5.7734-02	-6.9501-02	-6.2633-02	-4.0971-02	-1.4237-02
-85 2.0041	1.3882-01	7.4671-02	1.6861-02	-3.0177-02	-6.1846-02	-7.4993-02	-6.8752-02	-4.6161-02	-1.6658-02
-90 2.0000	1.3879-01	7.4843-02	1.6700-02	-3.0710-02	-6.2983-02	-7.6827-02	-7.1092-02	-4.8423-02	-1.7913-02

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.10570850

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5964-02	4.6242-03
85 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0735-02	1.5827-02	4.5743-03
80 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6330-02	3.0120-02	1.5413-02	4.4223-03
75 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
70 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9682-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
65 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3704-03
60 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
55 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4664-03
50 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
45 1.2311	1.0293-01	9.4879-02	8.2431-02	6.6926-02	5.0040-02	3.3588-02	1.9284-02	8.5027-03	2.0461-03
40 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
35 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4663-03
30 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
25 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3703-03
20 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9681-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
15 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
10 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6329-02	3.0120-02	1.5413-02	4.4222-03
5 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0734-02	1.5827-02	4.5742-03
0 1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5963-02	4.6241-03
-5 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0734-02	1.5827-02	4.5742-03
-10 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6329-02	3.0120-02	1.5413-02	4.4222-03
-15 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
-20 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9681-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
-25 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3703-03
-30 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
-35 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4663-03
-40 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
-45 1.2311	1.0293-01	9.4879-02	8.2431-02	6.6926-02	5.0040-02	3.3588-02	1.9284-02	8.5027-03	2.0461-03
-50 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
-55 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4664-03
-60 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
-65 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3704-03
-70 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9682-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
-75 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
-80 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6330-02	3.0120-02	1.5413-02	4.4223-03
-85 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0735-02	1.5827-02	4.5743-03
-90 1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5964-02	4.6242-03

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.10570850

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5964-02	4.6242-03
85 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0735-02	1.5827-02	4.5743-03
80 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6330-02	3.0120-02	1.5413-02	4.4223-03
75 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
70 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9682-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
65 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3704-03
60 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
55 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4664-03
50 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
45 1.2311	1.0293-01	9.4879-02	8.2431-02	6.6926-02	5.0040-02	3.3588-02	1.9284-02	8.5027-03	2.0461-03
40 1.2177	1.0299-01	9.5100-02	8.2869-02	6.7571-02	5.0810-02	3.4350-02	1.9896-02	8.8634-03	2.1581-03
35 1.1834	1.0314-01	9.5656-02	8.3974-02	6.9204-02	5.2778-02	3.6323-02	2.1502-02	9.8308-03	2.4663-03
30 1.1404	1.0332-01	9.6332-02	8.5328-02	7.1226-02	5.5246-02	3.8842-02	2.3604-02	1.1136-02	2.8992-03
25 1.0986	1.0349-01	9.6970-02	8.6614-02	7.3165-02	5.7645-02	4.1336-02	2.5734-02	1.2501-02	3.3703-03
20 1.0628	1.0363-01	9.7499-02	8.7685-02	7.4792-02	5.9681-02	4.3483-02	2.7603-02	1.3728-02	3.8076-03
15 1.0350	1.0373-01	9.7899-02	8.8500-02	7.6038-02	6.1252-02	4.5156-02	2.9078-02	1.4712-02	4.1652-03
10 1.0154	1.0381-01	9.8176-02	8.9064-02	7.6902-02	6.2347-02	4.6329-02	3.0120-02	1.5413-02	4.4222-03
5 1.0038	1.0385-01	9.8336-02	8.9392-02	7.7407-02	6.2989-02	4.7019-02	3.0734-02	1.5827-02	4.5742-03
0 1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5963-02	4.6241-03
90 1.0000	7.1323-03	1.3462-02	1.8254-02	2.0911-02	2.1057-02	1.9632-02	1.4003-02	8.1035-03	2.5841-03
85 1.0038	7.1316-03	1.3457-02	1.8238-02	2.0880-02	2.1009-02	1.8572-02	1.3944-02	8.0601-03	2.5676-03
80 1.0154	7.1292-03	1.3441-02	1.8190-02	2.0784-02	2.0861-02	1.8387-02	1.3760-02	7.9259-03	2.5157-03
75 1.0350	7.1239-03	1.3411-02	1.8104-02	2.0615-02	2.0603-02	1.8067-02	1.3441-02	7.6918-03	2.4241-03
70 1.0628	7.1117-03	1.3359-02	1.7970-02	2.0360-02	2.0220-02	1.7596-02	1.2973-02	7.3492-03	2.2894-03
65 1.0986	7.0831-03	1.3268-02	1.7764-02	1.9996-02	1.9692-02	1.6961-02	1.2354-02	6.8984-03	2.1137-03
60 1.1404	7.0186-03	1.3104-02	1.7449-02	1.9490-02	1.9001-02	1.6164-02	1.1598-02	6.3619-03	1.9093-03
55 1.1834	6.8815-03	1.2808-02	1.6964-02	1.8805-02	1.8150-02	1.5245-02	1.0770-02	5.7999-03	1.7037-03
50 1.2177	6.6179-03	1.2294-02	1.6231-02	1.7907-02	1.7171-02	1.4300-02	9.9948-03	5.3121-03	1.5363-03
45 1.2311	6.1780-03	1.1486-02	1.5183-02	1.6775-02	1.6110-02	1.3434-02	9.3956-03	4.9929-03	1.4422-03
40 1.2177	5.5619-03	1.0381-02	1.3812-02	1.5397-02	1.4954-02	1.2638-02	8.9739-03	4.8478-03	1.4244-03
35 1.1834	4.8327-03	9.0737-03	1.2192-02	1.3781-02	1.3624-02	1.1764-02	8.5670-03	4.7622-03	1.4437-03
30 1.1404	4.0684-03	7.6869-03	1.0438-02	1.1972-02	1.2063-02	1.0662-02	7.9824-03	4.5821-03	1.4407-03
25 1.0986	3.3187-03	6.3055-03	8.6417-03	1.0042-02	1.0290-02	9.2846-03	7.1255-03	4.2109-03	1.3697-03
20 1.0628	2.6023-03	4.9663-03	6.8571-03	8.0517-03	8.3608-03	7.6690-03	6.0023-03	3.6304-03	1.2135-03
15 1.0350	1.9198-03	3.6760-03	5.1036-03	6.0388-03	6.3326-03	5.8789-03	4.6677-03	2.8711-03	9.7879-04
10 1.0154	1.2646-03	2.4270-03	3.3821-03	4.0227-03	4.2466-03	3.9743-03	3.1858-03	1.9814-03	6.8411-04
5 1.0038	6.2776-04	1.2063-03	1.6847-03	2.0099-03	2.1298-03	2.0025-03	1.6139-03	1.0100-03	3.5112-04

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 1.00 CLLOAD=0.002 CLLOAL=0.004

CENTER DEFLECTION = 0.10570850

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.1099-01	1.1185-01	1.0775-01	9.8484-02	8.4257-02	6.5878-02	4.4940-02	2.4067-02	7.2083-03
85	1.0038	1.1098-01	1.1179-01	1.0763-01	9.8287-02	8.3998-02	6.5591-02	4.4678-02	2.3887-02	7.1419-03
80	1.0154	1.1093-01	1.1162-01	1.0725-01	9.7686-02	8.3208-02	6.4717-02	4.3880-02	2.3339-02	6.9380-03
75	1.0350	1.1086-01	1.1131-01	1.0660-01	9.6653-02	8.1855-02	6.3223-02	4.2519-02	2.2404-02	6.5893-03
70	1.0628	1.1074-01	1.1086-01	1.0566-01	9.5152-02	7.9901-02	6.1079-02	4.0578-02	2.1077-02	6.0970-03
65	1.0986	1.1057-01	1.1024-01	1.0438-01	9.3161-02	7.7337-02	5.8297-02	3.8088-02	1.9400-02	5.4840-03
60	1.1404	1.1033-01	1.0944-01	1.0278-01	9.0716-02	7.4247-02	5.5005-02	3.5201-02	1.7498-02	4.8085-03
55	1.1834	1.1002-01	1.0846-01	1.0094-01	8.8009-02	7.0928-02	5.1568-02	3.2273-02	1.5631-02	4.1700-03
50	1.2177	1.0960-01	1.0739-01	9.9101-02	8.5478-02	6.7982-02	4.8651-02	2.9890-02	1.4175-02	3.6945-03
45	1.2311	1.0910-01	1.0636-01	9.7613-02	8.3701-02	6.5150-02	4.7021-02	2.8680-02	1.3496-02	3.4883-03
40	1.2177	1.0855-01	1.0548-01	9.6681-02	8.2968-02	6.5764-02	4.6988-02	2.8870-02	1.3711-02	3.5826-03
35	1.1834	1.0797-01	1.0473-01	9.6166-02	8.2985-02	6.6402-02	4.8087-02	3.0069-02	1.4593-02	3.9100-03
30	1.1404	1.0738-01	1.0402-01	9.5766-02	8.3198-02	6.7209-02	4.9504-02	3.1586-02	1.5718-02	4.3399-03
25	1.0986	1.0680-01	1.0328-01	9.5256-02	8.3207-02	6.7935-02	5.0620-02	3.2859-02	1.6712-02	4.7400-03
20	1.0628	1.0623-01	1.0247-01	9.4542-02	8.2844-02	6.8042-02	5.1152-02	3.3605-02	1.7359-02	5.0211-03
15	1.0350	1.0565-01	1.0158-01	9.3604-02	8.2077-02	6.7585-02	5.1035-02	3.3745-02	1.7583-02	5.1440-03
10	1.0154	1.0507-01	1.0060-01	9.2446-02	8.0925-02	6.6594-02	5.0304-02	3.3306-02	1.7394-02	5.1063-03
5	1.0038	1.0448-01	9.9543-02	9.1077-02	7.9417-02	6.5119-02	4.9022-02	3.2348-02	1.6837-02	4.9253-03
0	1.0000	1.0386-01	9.8389-02	8.9500-02	7.7573-02	6.3200-02	4.7246-02	3.0937-02	1.5963-02	4.6241-03
-5	1.0038	1.0322-01	9.7130-02	8.7708-02	7.5398-02	6.0859-02	4.5017-02	2.9121-02	1.4817-02	4.2231-03
-10	1.0154	1.0254-01	9.5749-02	8.5682-02	7.2880-02	5.8101-02	4.2355-02	2.6934-02	1.3432-02	3.7381-03
-15	1.0350	1.0181-01	9.4223-02	8.3397-02	6.9999-02	5.4919-02	3.9277-02	2.4410-02	1.1841-02	3.1864-03
-20	1.0628	1.0102-01	9.2532-02	8.0828-02	6.6740-02	5.1321-02	3.5814-02	2.1601-02	1.0098-02	2.5941-03
-25	1.0986	1.0017-01	9.0665-02	7.7973-02	6.3122-02	4.7356-02	3.2051-02	1.8609-02	8.2903-03	2.0007-03
-30	1.1404	9.9248-02	8.8645-02	7.4891-02	5.9253-02	4.3183-02	2.8180-02	1.5621-02	6.5541-03	1.4585-03
-35	1.1834	9.8302-02	8.6582-02	7.1782-02	5.5424-02	3.9155-02	2.4559-02	1.2935-02	5.0686-03	1.0227-03
-40	1.2177	9.7424-02	8.4719-02	6.9058-02	5.2174-02	3.5856-02	2.1713-02	1.0922-02	4.0155-03	7.3372-04
-45	1.2311	9.6748-02	8.3393-02	6.7248-02	5.0151-02	3.3930-02	2.0154-02	9.8886-03	3.5099-03	6.0389-04
-50	1.2177	9.6368-02	8.2806-02	6.6638-02	4.9663-02	3.3639-02	2.0050-02	9.9008-03	3.5513-03	6.2176-04
-55	1.1834	9.6254-02	8.2848-02	6.7010-02	5.0399-02	3.4028-02	2.1078-02	1.0732-02	4.0308-03	7.6271-04
-60	1.1404	9.6297-02	8.3228-02	6.7879-02	5.1735-02	3.6245-02	2.2678-02	1.2006-02	4.7744-03	9.8990-04
-65	1.0986	9.6403-02	8.3703-02	6.8850-02	5.3169-02	3.7954-02	2.4375-02	1.3380-02	5.6029-03	1.2567-03
-70	1.0628	9.6515-02	8.4140-02	6.9716-02	5.4432-02	3.9462-02	2.5887-02	1.4628-02	6.3790-03	1.5182-03
-75	1.0350	9.6608-02	8.4489-02	7.0396-02	5.5423-02	4.0649-02	2.7089-02	1.5636-02	7.0202-03	1.7412-03
-80	1.0154	9.6676-02	8.4735-02	7.0874-02	5.6119-02	4.1487-02	2.7942-02	1.6360-02	7.4872-03	1.9067-03
-85	1.0038	9.6716-02	8.4880-02	7.1154-02	5.6528-02	4.1980-02	2.8448-02	1.6791-02	7.7673-03	2.0068-03
-90	1.0000	9.6730-02	8.4927-02	7.1246-02	5.6662-02	4.2143-02	2.8614-02	1.6933-02	7.8602-03	2.0400-03

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 2.00 CLLOAD=0.002 CLLOAL=0.0

CENTER DEFLECTION = 0.21212069

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.1033-01	2.0473-01	1.9466-01	1.7914-01	1.5716-01	1.2809-01	9.2476-02	5.3166-02	1.7344-02
85	2.0076	2.1021-01	2.0424-01	1.9361-01	1.7743-01	1.5481-01	1.2533-01	8.9719-02	5.1037-02	1.6427-02
80	2.0286	2.0982-01	2.0276-01	1.9046-01	1.7232-01	1.4787-01	1.1722-01	8.1739-02	4.4969-02	1.3849-02
75	2.0527	2.0919-01	2.0034-01	1.8538-01	1.6421-01	1.3767-01	1.0494-01	7.0058-02	3.6476-02	1.0451-02
70	2.0506	2.0843-01	1.9741-01	1.7934-01	1.5480-01	1.2495-01	9.1746-02	5.8212-02	2.8501-02	7.5824-03
65	1.9833	2.0777-01	1.9495-01	1.7437-01	1.4732-01	1.1573-01	8.2281-02	5.0324-02	2.3682-02	6.0572-03
60	1.8474	2.0745-01	1.9375-01	1.7203-01	1.4394-01	1.1181-01	7.8560-02	4.7539-02	2.2216-02	5.6866-03
55	1.6851	2.0740-01	1.9359-01	1.7177-01	1.4368-01	1.1169-01	7.8689-02	4.7902-02	2.2632-02	5.9004-03
50	1.5333	2.0747-01	1.9389-01	1.7240-01	1.4470-01	1.1306-01	8.0247-02	4.9365-02	2.3662-02	6.2905-03
45	1.4055	2.0758-01	1.9428-01	1.7321-01	1.4595-01	1.1467-01	8.1992-02	5.0926-02	2.4714-02	6.6736-03
40	1.3020	2.0767-01	1.9464-01	1.7394-01	1.4708-01	1.1609-01	8.3511-02	5.2263-02	2.5601-02	6.9926-03
35	1.2195	2.0775-01	1.9494-01	1.7455-01	1.4800-01	1.1725-01	8.4727-02	5.3323-02	2.6298-02	7.2409-03
30	1.1542	2.0781-01	1.9517-01	1.7502-01	1.4872-01	1.1814-01	8.5665-02	5.4134-02	2.6827-02	7.4282-03
25	1.1032	2.0786-01	1.9535-01	1.7538-01	1.4926-01	1.1882-01	8.6373-02	5.4743-02	2.7221-02	7.5664-03
20	1.0641	2.0790-01	1.9549-01	1.7565-01	1.4967-01	1.1932-01	8.6897-02	5.5191-02	2.7508-02	7.6662-03
15	1.0353	2.0792-01	1.9559-01	1.7585-01	1.4997-01	1.1968-01	8.7271-02	5.5508-02	2.7711-02	7.7359-03
10	1.0154	2.0794-01	1.9565-01	1.7598-01	1.5016-01	1.1993-01	8.7521-02	5.5720-02	2.7845-02	7.7816-03
5	1.0038	2.0795-01	1.9569-01	1.7606-01	1.5028-01	1.2007-01	8.7665-02	5.5841-02	2.7921-02	7.8073-03
0	1.0000	2.0796-01	1.9570-01	1.7608-01	1.5031-01	1.2011-01	8.7711-02	5.5880-02	2.7946-02	7.8156-03
-5	1.0038	2.0795-01	1.9569-01	1.7606-01	1.5028-01	1.2007-01	8.7665-02	5.5841-02	2.7921-02	7.8073-03
-10	1.0154	2.0794-01	1.9565-01	1.7598-01	1.5016-01	1.1993-01	8.7521-02	5.5720-02	2.7845-02	7.7816-03
-15	1.0353	2.0792-01	1.9559-01	1.7585-01	1.4997-01	1.1968-01	8.7271-02	5.5508-02	2.7711-02	7.7359-03
-20	1.0641	2.0790-01	1.9549-01	1.7565-01	1.4967-01	1.1932-01	8.6897-02	5.5191-02	2.7508-02	7.6662-03
-25	1.1032	2.0786-01	1.9535-01	1.7538-01	1.4926-01	1.1882-01	8.6373-02	5.4743-02	2.7221-02	7.5664-03
-30	1.1542	2.0781-01	1.9517-01	1.7502-01	1.4872-01	1.1814-01	8.5665-02	5.4134-02	2.6827-02	7.4282-03
-35	1.2195	2.0775-01	1.9494-01	1.7455-01	1.4800-01	1.1725-01	8.4727-02	5.3323-02	2.6298-02	7.2409-03
-40	1.3020	2.0767-01	1.9464-01	1.7394-01	1.4708-01	1.1609-01	8.3511-02	5.2263-02	2.5601-02	6.9926-03
-45	1.4055	2.0758-01	1.9428-01	1.7321-01	1.4595-01	1.1467-01	8.1992-02	5.0926-02	2.4714-02	6.6736-03
-50	1.5333	2.0747-01	1.9389-01	1.7240-01	1.4470-01	1.1306-01	8.0247-02	4.9365-02	2.3662-02	6.2905-03
-55	1.6851	2.0740-01	1.9359-01	1.7177-01	1.4368-01	1.1169-01	7.8689-02	4.7902-02	2.2632-02	5.9004-03
-60	1.8474	2.0745-01	1.9375-01	1.7203-01	1.4394-01	1.1181-01	7.8560-02	4.7539-02	2.2216-02	5.6866-03
-65	1.9833	2.0777-01	1.9495-01	1.7437-01	1.4732-01	1.1573-01	8.2281-02	5.0324-02	2.3682-02	6.0572-03
-70	2.0506	2.0843-01	1.9741-01	1.7934-01	1.5480-01	1.2495-01	9.1746-02	5.8212-02	2.8501-02	7.5824-03
-75	2.0527	2.0919-01	2.0034-01	1.8538-01	1.6421-01	1.3767-01	1.0494-01	7.0058-02	3.6476-02	1.0451-02
-80	2.0286	2.0982-01	2.0276-01	1.9046-01	1.7232-01	1.4787-01	1.1722-01	8.1739-02	4.4969-02	1.3849-02
-85	2.0076	2.1021-01	2.0424-01	1.9361-01	1.7743-01	1.5481-01	1.2533-01	8.9719-02	5.1037-02	1.6427-02
-90	2.0000	2.1033-01	2.0473-01	1.9466-01	1.7914-01	1.5716-01	1.2809-01	9.2476-02	5.3166-02	1.7344-02

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.21212069

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.1033-01	2.0473-01	1.9466-01	1.7914-01	1.5716-01	1.2809-01	9.2476-02	5.3166-02	1.7344-02
85	2.0076	2.1021-01	2.0424-01	1.9361-01	1.7743-01	1.5481-01	1.2533-01	8.9719-02	5.1037-02	1.6627-02
80	2.0286	2.0982-01	2.0276-01	1.9046-01	1.7232-01	1.4787-01	1.1722-01	8.1739-02	4.4969-02	1.3849-02
75	2.0527	2.0919-01	2.0034-01	1.8738-01	1.6721-01	1.3707-01	1.0494-01	7.0058-02	3.6476-02	1.0451-02
70	2.0506	2.0843-01	1.9741-01	1.7934-01	1.5480-01	1.2495-01	9.1746-02	5.8212-02	2.8501-02	7.5824-03
65	1.9833	2.0777-01	1.9495-01	1.7437-01	1.4732-01	1.1573-01	8.2281-02	5.0324-02	2.3682-02	6.0572-03
60	1.8474	2.0745-01	1.9375-01	1.7203-01	1.4394-01	1.1181-01	7.8560-02	4.7539-02	2.2216-02	5.6866-03
55	1.6851	2.0740-01	1.9359-01	1.7177-01	1.4368-01	1.1169-01	7.8689-02	4.7902-02	2.2632-02	5.9004-03
50	1.5333	2.0747-01	1.9389-01	1.7240-01	1.4470-01	1.1306-01	8.0247-02	4.9365-02	2.3662-02	6.2905-03
45	1.4055	2.0758-01	1.9428-01	1.7321-01	1.4595-01	1.1467-01	8.1992-02	5.0926-02	2.4714-02	6.6736-03
40	1.3020	2.0767-01	1.9464-01	1.7394-01	1.4708-01	1.1609-01	8.3511-02	5.2263-02	2.5601-02	6.9926-03
35	1.2195	2.0775-01	1.9494-01	1.7455-01	1.4800-01	1.1725-01	8.4727-02	5.3323-02	2.6298-02	7.2409-03
30	1.1542	2.0781-01	1.9517-01	1.7502-01	1.4872-01	1.1814-01	8.5665-02	5.4134-02	2.6827-02	7.4282-03
25	1.1032	2.0786-01	1.9535-01	1.7538-01	1.4926-01	1.1882-01	8.6373-02	5.4743-02	2.7221-02	7.5664-03
20	1.0641	2.0790-01	1.9549-01	1.7565-01	1.4967-01	1.1932-01	8.6897-02	5.5191-02	2.7508-02	7.6662-03
15	1.0353	2.0792-01	1.9559-01	1.7585-01	1.4997-01	1.1968-01	8.7271-02	5.5508-02	2.7711-02	7.7359-03
10	1.0154	2.0794-01	1.9565-01	1.7598-01	1.5016-01	1.1993-01	8.7521-02	5.5720-02	2.7845-02	7.7816-03
5	1.0038	2.0795-01	1.9569-01	1.7606-01	1.5028-01	1.2007-01	8.7665-02	5.5841-02	2.7921-02	7.8073-03
0	1.0000	2.0796-01	1.9570-01	1.7608-01	1.5031-01	1.2011-01	8.7711-02	5.5880-02	2.7946-02	7.8156-03
90	2.0000	6.9336-02	1.3345-01	1.8683-01	2.2359-01	2.3780-01	2.2449-01	1.8174-01	1.1435-01	4.0034-02
85	2.0076	6.9294-02	1.3314-01	1.8586-01	2.2155-01	2.3443-01	2.1992-01	1.7667-01	1.1011-01	3.8113-02
80	2.0286	6.9101-02	1.3208-01	1.8280-01	2.1529-01	2.2427-01	2.0632-01	1.6180-01	9.7875-02	3.2608-02
75	2.0527	6.8389-02	1.2963-01	1.7692-01	2.0431-01	2.0745-01	1.8481-01	1.3930-01	8.0201-02	2.5088-02
70	2.0506	6.6247-02	1.2434-01	1.6694-01	1.8836-01	1.8560-01	1.5928-01	1.1474-01	6.2572-02	1.8351-02
65	1.9833	6.1641-02	1.1484-01	1.5228-01	1.6890-01	1.6281-01	1.3610-01	9.5126-02	5.0207-02	1.4250-02
60	1.8474	5.4823-02	1.0190-01	1.3464-01	1.4862-01	1.4250-01	1.1849-01	8.2484-02	4.3488-02	1.2401-02
55	1.6851	4.7322-02	8.8091-02	1.1670-01	1.2936-01	1.2478-01	1.0466-01	7.3723-02	3.9509-02	1.1519-02
50	1.5333	4.0306-02	7.5238-02	1.0015-01	1.1178-01	1.0883-01	9.2389-02	6.6092-02	3.6105-02	1.0777-02
45	1.4055	3.4134-02	6.3889-02	8.5428-02	9.5973-02	9.4256-02	8.0897-02	5.8657-02	3.2570-02	9.9126-03
40	1.3020	2.8766-02	5.3962-02	7.2427-02	8.1802-02	8.0901-02	7.0040-02	5.1322-02	2.8855-02	8.9111-03
35	1.2195	2.4055-02	4.5205-02	6.0853-02	6.9015-02	6.8621-02	5.9802-02	4.4167-02	2.5062-02	7.8222-03
30	1.1542	1.9857-02	3.7365-02	5.0413-02	5.7355-02	5.7259-02	5.0146-02	3.7251-02	2.1279-02	6.6924-03
25	1.1032	1.6047-02	3.0228-02	4.0853-02	4.6588-02	4.6651-02	4.1005-02	3.0590-02	1.7558-02	5.5519-03
20	1.0641	1.2530-02	2.3620-02	3.1963-02	3.6514-02	3.6644-02	3.2295-02	2.4165-02	1.3919-02	4.4175-03
15	1.0353	9.2263-03	1.7402-02	2.3570-02	2.6960-02	2.7098-02	2.3927-02	1.7942-02	1.0359-02	3.2960-03
10	1.0154	6.0723-03	1.1458-02	1.5528-02	1.7776-02	1.7886-02	1.5812-02	1.1874-02	6.8657-03	2.1881-03
5	1.0038	3.0131-03	5.6865-03	7.7093-03	8.8297-03	8.8897-03	7.8646-03	5.9105-03	3.4205-03	1.0911-03

ALPHA = 5.00 BETA = 5.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.21212069

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.7967-01	3.3818-01	3.8148-01	4.0272-01	3.9495-01	3.5258-01	2.7421-01	1.6751-01	5.7378-02
85	2.0076	2.7950-01	3.3738-01	3.7947-01	3.9898-01	3.8924-01	3.4524-01	2.6639-01	1.6115-01	5.4539-02
80	2.0286	2.7892-01	3.3484-01	3.7326-01	3.8761-01	3.7214-01	3.2354-01	2.4354-01	1.4284-01	4.6457-02
75	2.0527	2.7758-01	3.2997-01	3.6230-01	3.6852-01	3.4452-01	2.8976-01	2.0936-01	1.1668-01	3.5539-02
70	2.0506	2.7467-01	3.2175-01	3.4627-01	3.4316-01	3.1054-01	2.5103-01	1.7295-01	9.1073-02	2.5934-02
65	1.9833	2.6941-01	3.0979-01	3.2666-01	3.1622-01	2.7854-01	2.1838-01	1.4545-01	7.3889-02	2.0307-02
60	1.8474	2.6227-01	2.9565-01	3.0666-01	2.9256-01	2.5431-01	1.9705-01	1.3002-01	6.5704-02	1.8088-02
55	1.6851	2.5472-01	2.8168-01	2.8847-01	2.7304-01	2.3647-01	1.8334-01	1.2163-01	6.2141-02	1.7419-02
50	1.5333	2.4778-01	2.6915-01	2.7254-01	2.5647-01	2.2189-01	1.7264-01	1.1546-01	5.9767-02	1.7068-02
45	1.4055	2.4171-01	2.5817-01	2.5863-01	2.4192-01	2.0893-01	1.6289-01	1.0958-01	5.7284-02	1.6586-02
40	1.3020	2.3644-01	2.4860-01	2.4637-01	2.2888-01	1.9699-01	1.5355-01	1.0359-01	5.4456-02	1.5904-02
35	1.2195	2.3181-01	2.4014-01	2.3540-01	2.1701-01	1.8587-01	1.4453-01	9.7490-02	5.1359-02	1.5063-02
30	1.1542	2.2767-01	2.3254-01	2.2543-01	2.0607-01	1.7540-01	1.3581-01	9.1385-02	4.8106-02	1.4121-02
25	1.1032	2.2391-01	2.2558-01	2.1624-01	1.9585-01	1.6547-01	1.2738-01	8.5333-02	4.4780-02	1.3118-02
20	1.0641	2.2043-01	2.1911-01	2.0762-01	1.8619-01	1.5597-01	1.1919-01	7.9356-02	4.1427-02	1.2084-02
15	1.0353	2.1715-01	2.1299-01	1.9942-01	1.7693-01	1.4678-01	1.1120-01	7.3451-02	3.8070-02	1.1032-02
10	1.0154	2.1401-01	2.0711-01	1.9151-01	1.6794-01	1.3781-01	1.0333-01	6.7594-02	3.4711-02	9.9697-03
5	1.0038	2.1097-01	2.0138-01	1.8377-01	1.5911-01	1.2896-01	9.5529-02	6.1751-02	3.1342-02	8.8984-03
0	1.0000	2.0796-01	1.9570-01	1.7608-01	1.5031-01	1.2011-01	8.7711-02	5.5880-02	2.7946-02	7.8156-03
-5	1.0038	2.0494-01	1.9000-01	1.6835-01	1.4145-01	1.1118-01	7.9800-02	4.9930-02	2.4500-02	6.7162-03
-10	1.0154	2.0187-01	1.8419-01	1.6045-01	1.3239-01	1.0204-01	7.1709-02	4.3846-02	2.0979-02	5.5934-03
-15	1.0353	1.9870-01	1.7818-01	1.5228-01	1.2301-01	9.2587-02	6.3345-02	3.7566-02	1.7352-02	4.4399-03
-20	1.0641	1.9537-01	1.7187-01	1.4369-01	1.1316-01	8.2679-02	5.4602-02	3.1025-02	1.3590-02	3.2487-03
-25	1.1032	1.9182-01	1.6513-01	1.3453-01	1.0268-01	7.2168-02	4.5368-02	2.4154-02	9.6627-03	2.0144-03
-30	1.1542	1.8796-01	1.5781-01	1.2461-01	9.1361-02	6.0881-02	3.5518-02	1.6884-02	5.5478-03	7.3583-04
-35	1.2195	1.8370-01	1.4973-01	1.1369-01	7.8983-02	4.8624-02	2.4924-02	9.1503-03	1.2363-03	-5.8129-04
-40	1.3020	1.7891-01	1.4068-01	1.0152-01	6.5278-02	3.5193-02	1.3471-02	9.4142-04	-3.2535-03	-1.9185-03
-45	1.4055	1.7344-01	1.3039-01	8.7778-02	4.9978-02	2.0412-02	1.0951-03	-7.7307-03	-7.8555-03	-3.2390-03
-50	1.5333	1.6717-01	1.1865-01	7.2251-02	3.2920-02	4.2265-03	-1.2142-02	-1.6727-02	-1.2443-02	-4.4870-03
-55	1.6851	1.6008-01	1.0550-01	5.5068-02	1.4318-02	-1.3095-02	-2.5966-02	-2.5821-02	-1.6876-02	-5.6183-03
-60	1.8474	1.5262-01	9.1848-02	3.7389-02	-4.6847-03	-3.0690-02	-3.9932-02	-3.4944-02	-2.1272-02	-6.7144-03
-65	1.9833	1.4613-01	8.0112-02	2.2691-02	-2.1577-02	-4.7077-02	-5.3818-02	-4.4801-02	-2.6525-02	-8.1925-03
-70	2.0506	1.4218-01	7.3070-02	1.2400-02	-3.3565-02	-6.0650-02	-6.7539-02	-5.0526-02	-3.4071-02	-1.0769-02
-75	2.0527	1.4081-01	7.0709-02	8.4589-03	-4.0094-02	-7.0376-02	-7.9872-02	-6.9239-02	-4.3726-02	-1.4637-02
-80	2.0286	1.4072-01	7.0674-02	7.6514-03	-4.2976-02	-7.6408-02	-8.9102-02	-8.0065-02	-5.2906-02	-1.8759-02
-85	2.0076	1.4091-01	7.1103-02	7.7458-03	-4.4127-02	-7.9623-02	-9.4589-02	-8.6949-02	-5.9076-02	-2.1686-02
-90	2.0000	1.4100-01	7.1286-02	7.8318-03	-4.4450-02	-8.0642-02	-9.6395-02	-8.9262-02	-6.1180-02	-2.2640-02

ALPHA =10.00 BETA =10.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.10669158

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.0484-01	9.9347-02	9.0417-02	7.8419-02	6.3935-02	4.7829-02	3.1335-02	1.6172-02	4.6825-03
85	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3728-02	4.7608-02	3.1141-02	1.6044-02	4.6369-03
80	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4975-03
75	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9534-02	1.4982-02	4.2569-03
70	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9021-03
65	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
60	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
55	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
50	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
45	1.3195	1.0349-01	9.4290-02	8.0241-02	6.3107-02	4.5037-02	2.8251-02	1.4683-02	5.5662-03	1.0538-03
40	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
35	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
30	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
25	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
20	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9020-03
15	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9533-02	1.4982-02	4.2568-03
10	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4974-03
5	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3727-02	4.7608-02	3.1141-02	1.6044-02	4.6368-03
0	1.0000	1.0484-01	9.9347-02	9.0417-02	7.8418-02	6.3935-02	4.7828-02	3.1334-02	1.6172-02	4.6824-03
-5	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3727-02	4.7608-02	3.1141-02	1.6044-02	4.6368-03
-10	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4974-03
-15	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9533-02	1.4982-02	4.2568-03
-20	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9020-03
-25	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
-30	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
-35	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
-40	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
-45	1.3195	1.0349-01	9.4290-02	8.0241-02	6.3107-02	4.5037-02	2.8251-02	1.4683-02	5.5662-03	1.0538-03
-50	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
-55	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
-60	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
-65	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
-70	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9021-03
-75	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9534-02	1.4982-02	4.2569-03
-80	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4975-03
-85	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3728-02	4.7608-02	3.1141-02	1.6044-02	4.6369-03
-90	1.0000	1.0484-01	9.9347-02	9.0417-02	7.8419-02	6.3935-02	4.7829-02	3.1335-02	1.6172-02	4.6825-03

ALPHA =10.00 BETA =10.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.10669158

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	1.0000	1.0484-01	9.9347-02	9.0417-02	7.8419-02	6.3935-02	4.7829-02	3.1335-02	1.6172-02	4.6825-03
85	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3728-02	4.7608-02	3.1141-02	1.6044-02	4.6369-03
80	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4975-03
75	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9534-02	1.4982-02	4.2569-03
70	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9021-03
65	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
60	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
55	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
50	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
45	1.3195	1.0349-01	9.4290-02	8.0241-02	6.3107-02	4.5037-02	2.8251-02	1.4683-02	5.5662-03	1.0538-03
40	1.2847	1.0366-01	9.4901-02	8.1455-02	6.4898-02	4.7184-02	3.0388-02	1.6398-02	6.5675-03	1.3516-03
35	1.2174	1.0396-01	9.6045-02	8.3740-02	6.8301-02	5.1324-02	3.4594-02	1.9882-02	8.7038-03	2.0420-03
30	1.1542	1.0423-01	9.7067-02	8.5795-02	7.1390-02	5.5137-02	3.8545-02	2.3248-02	1.0857-02	2.7857-03
25	1.1033	1.0444-01	9.7853-02	8.7384-02	7.3797-02	5.8133-02	4.1687-02	2.5966-02	1.2632-02	3.4158-03
20	1.0642	1.0460-01	9.8435-02	8.8564-02	7.5591-02	6.0379-02	4.4057-02	2.8032-02	1.3991-02	3.9020-03
15	1.0353	1.0471-01	9.8852-02	8.9411-02	7.6882-02	6.2000-02	4.5774-02	2.9533-02	1.4982-02	4.2568-03
10	1.0154	1.0478-01	9.9132-02	8.9981-02	7.7752-02	6.3095-02	4.6936-02	3.0552-02	1.5654-02	4.4974-03
5	1.0038	1.0483-01	9.9294-02	9.0309-02	7.8254-02	6.3727-02	4.7608-02	3.1141-02	1.6044-02	4.6368-03
0	1.0000	1.0484-01	9.9347-02	9.0417-02	7.8418-02	6.3935-02	4.7828-02	3.1334-02	1.6172-02	4.6824-03
90	1.0000	7.2476-03	1.3681-02	1.8554-02	2.1257-02	2.1406-02	1.8938-02	1.4226-02	8.2243-03	2.6184-03
85	1.0038	7.2470-03	1.3676-02	1.8539-02	2.1228-02	2.1362-02	1.8884-02	1.4175-02	8.1882-03	2.6053-03
80	1.0154	7.2449-03	1.3661-02	1.8493-02	2.1138-02	2.1225-02	1.8718-02	1.4014-02	8.0759-03	2.5640-03
75	1.0353	7.2414-03	1.3635-02	1.8414-02	2.0981-02	2.0986-02	1.8425-02	1.3731-02	7.8749-03	2.4891-03
70	1.0642	7.2361-03	1.3595-02	1.8296-02	2.0745-02	2.0625-02	1.7981-02	1.3295-02	7.5619-03	2.3701-03
65	1.1033	7.2284-03	1.3540-02	1.8129-02	2.0411-02	2.0112-02	1.7344-02	1.2662-02	7.0986-03	2.1895-03
60	1.1542	7.2159-03	1.3460-02	1.7896-02	1.9949-02	1.9400-02	1.6453-02	1.1767-02	6.4319-03	1.9230-03
55	1.2174	7.1859-03	1.3332-02	1.7562-02	1.9312-02	1.8432-02	1.5248-02	1.0552-02	5.5221-03	1.5567-03
50	1.2847	7.0788-03	1.3058-02	1.7028-02	1.8437-02	1.7210-02	1.3798-02	9.1369-03	4.4915-03	1.1566-03
45	1.3195	6.7080-03	1.2356-02	1.6067-02	1.7309-02	1.6022-02	1.2672-02	8.2111-03	3.9002-03	9.5172-04
40	1.2847	5.9512-03	1.1041-02	1.4532-02	1.5933-02	1.5102-02	1.2324-02	8.3201-03	4.1735-03	1.0963-03
35	1.2174	5.0488-03	9.4620-03	1.2671-02	1.4248-02	1.3978-02	1.1938-02	8.5577-03	4.6498-03	1.3621-03
30	1.1542	4.1848-03	7.9103-03	1.0749-02	1.2341-02	1.2447-02	1.1017-02	8.2622-03	4.7538-03	1.4997-03
25	1.1033	3.3884-03	6.4468-03	8.8556-03	1.0324-02	1.0623-02	9.6379-03	7.4484-03	4.4423-03	1.4630-03
20	1.0642	2.6491-03	5.0842-03	7.0117-03	8.2649-03	8.6242-03	7.9578-03	6.2727-03	3.8261-03	1.2920-03
15	1.0353	1.9525-03	3.7451-03	5.2144-03	6.1938-03	6.5258-03	6.0908-03	4.8637-03	3.0091-03	1.0314-03
10	1.0154	1.2858-03	2.4720-03	3.4546-03	4.1244-03	4.3730-03	4.1118-03	3.3104-03	2.0661-03	7.1450-04
5	1.0038	6.3827-04	1.2287-03	1.7207-03	2.0603-03	2.1924-03	2.0699-03	1.6741-03	1.0498-03	3.6479-04

ALPHA =10.00 BETA =10.00 A = 1.00 B = 1.00 CULOAD=0.002 CLLOAD=0.004

CENTER DEFLECTION = 0.10669158

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 1.0000	1.1209-01	1.1303-01	1.0897-01	9.9676-02	8.5341-02	6.6766-02	4.5561-02	2.4396-02	7.3009-03
85 1.0038	1.1207-01	1.1297-01	1.0885-01	9.9482-02	8.5090-02	6.6492-02	4.5316-02	2.4232-02	7.2421-03
80 1.0154	1.1203-01	1.1279-01	1.0847-01	9.8890-02	8.4320-02	6.5654-02	4.4566-02	2.3730-02	7.0615-03
75 1.0353	1.1195-01	1.1249-01	1.0783-01	9.7863-02	8.2986-02	6.4199-02	4.3264-02	2.2857-02	6.7460-03
70 1.0642	1.1183-01	1.1203-01	1.0686-01	9.6336-02	8.1004-02	6.2038-02	4.1327-02	2.1553-02	6.2722-03
65 1.1033	1.1167-01	1.1139-01	1.0551-01	9.4208-02	7.8245-02	5.9031-02	3.8628-02	1.9730-02	5.6053-03
60 1.1542	1.1145-01	1.1053-01	1.0369-01	9.1340-02	7.4536-02	5.4998-02	3.5014-02	1.7289-02	4.7087-03
55 1.2174	1.1115-01	1.0938-01	1.0130-01	8.7613-02	6.9756-02	4.9842-02	3.0433-02	1.4226-02	3.5987-03
50 1.2847	1.1073-01	1.0796-01	9.8483-02	8.3335-02	6.4394-02	4.4186-02	2.5535-02	1.1059-02	2.5081-03
45 1.3195	1.1020-01	1.0665-01	9.6307-02	8.0416-02	6.1059-02	4.0923-02	2.2894-02	9.4664-03	2.0055-03
40 1.2847	1.0961-01	1.0594-01	9.5986-02	8.0830-02	6.2287-02	4.2712-02	2.4718-02	1.0741-02	2.4478-03
35 1.2174	1.0901-01	1.0551-01	9.6412-02	8.2549-02	6.5302-02	4.6532-02	2.8439-02	1.3354-02	3.4041-03
30 1.1542	1.0842-01	1.0498-01	9.6543-02	8.3731-02	6.7584-02	4.9561-02	3.1510-02	1.5611-02	4.2854-03
25 1.1033	1.0783-01	1.0430-01	9.6240-02	8.4121-02	6.8756-02	5.1325-02	3.3414-02	1.7074-02	4.8788-03
20 1.0642	1.0725-01	1.0350-01	9.5576-02	8.3856-02	6.9003-02	5.2015-02	3.4304-02	1.7817-02	5.1940-03
15 1.0353	1.0666-01	1.0260-01	9.4626-02	8.3076-02	6.8526-02	5.1865-02	3.4397-02	1.7991-02	5.2882-03
10 1.0154	1.0607-01	1.0160-01	9.3435-02	8.1876-02	6.7468-02	5.1048-02	3.3862-02	1.7720-02	5.2119-03
5 1.0038	1.0546-01	1.0052-01	9.2030-02	8.0315-02	6.5920-02	4.9678-02	3.2815-02	1.7094-02	5.0016-03
0 1.0000	1.0484-01	9.9347-02	9.0417-02	7.8418-02	6.3935-02	4.7828-02	3.1334-02	1.6172-02	4.6824-03
-5 1.0038	1.0419-01	9.8065-02	8.8589-02	7.6194-02	6.1535-02	4.5538-02	2.9467-02	1.4994-02	4.2720-03
-10 1.0154	1.0350-01	9.6660-02	8.6526-02	7.3628-02	5.8722-02	4.2824-02	2.7241-02	1.3588-02	3.7829-03
-15 1.0353	1.0276-01	9.5107-02	8.4197-02	7.0688-02	5.5474-02	3.9683-02	2.4670-02	1.1973-02	3.2254-03
-20 1.0642	1.0195-01	9.3371-02	8.1553-02	6.7326-02	5.1754-02	3.6099-02	2.1759-02	1.0165-02	2.6100-03
-25 1.1033	1.0105-01	9.1406-02	7.8528-02	6.3473-02	4.7509-02	3.2049-02	1.8518-02	8.1895-03	1.9528-03
-30 1.1542	1.0005-01	8.9156-02	7.5046-02	5.9050-02	4.2689-02	2.7528-02	1.4986-02	6.1034-03	1.2860-03
-35 1.2174	9.8913-02	8.6583-02	7.1069-02	5.4053-02	3.7346-02	2.2657-02	1.1324-02	4.0540-03	6.7982-04
-40 1.2847	9.7704-02	8.3861-02	6.6923-02	4.8965-02	3.2082-02	1.8064-02	8.0781-03	2.3940-03	2.5532-04
-45 1.3195	9.6783-02	8.1934-02	6.4174-02	4.5798-02	2.9014-02	1.5579-02	6.4717-03	1.6660-03	1.0208-04
-50 1.2847	9.6577-02	8.1844-02	6.4427-02	4.6461-02	2.9974-02	1.6590-02	7.2613-03	2.0760-03	1.9501-04
-55 1.2174	9.6776-02	8.2713-02	6.6178-02	4.8989-02	3.2893-02	1.9347-02	9.3297-03	3.1817-03	4.8526-04
-60 1.1542	9.7018-02	8.3607-02	6.7898-02	5.1441-02	3.5737-02	2.2092-02	1.1481-02	4.4254-03	8.6274-04
-65 1.1033	9.7215-02	8.4314-02	6.9255-02	5.3386-02	3.8021-02	2.4343-02	1.3304-02	5.5332-03	1.2264-03
-70 1.0642	9.7362-02	8.4840-02	7.0268-02	5.4847-02	3.9754-02	2.6075-02	1.4736-02	6.4290-03	1.5319-03
-75 1.0353	9.7467-02	8.5218-02	7.0997-02	5.5902-02	4.1014-02	2.7349-02	1.5803-02	7.1070-03	1.7678-03
-80 1.0154	9.7538-02	8.5471-02	7.1487-02	5.6614-02	4.1869-02	2.8218-02	1.6537-02	7.5785-03	1.9335-03
-85 1.0038	9.7578-02	8.5618-02	7.1770-02	5.7026-02	4.2366-02	2.8724-02	1.6967-02	7.8558-03	2.0316-03
-90 1.0000	9.7592-02	8.5665-02	7.1863-02	5.7161-02	4.2528-02	2.8891-02	1.7108-02	7.9473-03	2.0640-03

ALPHA =10.00 BETA =10.00 A = 1.00 B = 2.00 CULOAD=0.002 CLLOAD=0.0

CENTER DEFLECTION = 0.21359257

RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90 2.0000	2.1196-01	2.0681-01	1.9742-01	1.8271-01	1.6143-01	1.3264-01	9.6527-02	5.5849-02	1.8261-02
85 2.0076	2.1183-01	2.0631-01	1.9636-01	1.8098-01	1.5907-01	1.2989-01	9.3852-02	5.3867-02	1.7461-02
80 2.0308	2.1144-01	2.0479-01	1.9313-01	1.7573-01	1.5195-01	1.2164-01	8.5855-02	4.7965-02	1.5080-02
75 2.0701	2.1076-01	2.0217-01	1.8758-01	1.6681-01	1.3997-01	1.0790-01	7.2727-02	3.8393-02	1.1239-02
70 2.1197	2.0978-01	1.9840-01	1.7971-01	1.5433-01	1.2355-01	8.9564-02	5.5732-02	2.6464-02	6.6674-03
65 2.1194	2.0874-01	1.9447-01	1.7167-01	1.4199-01	1.0796-01	7.3058-02	4.1473-02	1.7382-02	3.6670-03
60 1.9579	2.0842-01	1.9332-01	1.6949-01	1.3901-01	1.0477-01	7.0395-02	3.9865-02	1.6861-02	3.6983-03
55 1.7375	2.0862-01	1.9410-01	1.7120-01	1.4189-01	1.0880-01	7.5136-02	4.4432-02	2.0120-02	4.9240-03
50 1.5548	2.0884-01	1.9494-01	1.7298-01	1.4472-01	1.1256-01	7.9357-02	4.8352-02	2.2860-02	5.9567-03
45 1.4141	2.0900-01	1.9556-01	1.7426-01	1.4674-01	1.1516-01	8.2222-02	5.0961-02	2.4657-02	6.6296-03
40 1.3054	2.0912-01	1.9600-01	1.7517-01	1.4813-01	1.1695-01	8.4144-02	5.2676-02	2.5816-02	7.0557-03
35 1.2208	2.0920-01	1.9632-01	1.7582-01	1.4912-01	1.1819-01	8.5465-02	5.3835-02	2.6583-02	7.3319-03
30 1.1547	2.0926-01	1.9655-01	1.7629-01	1.4984-01	1.1908-01	8.6396-02	5.4639-02	2.7106-02	7.5163-03
25 1.1034	2.0931-01	1.9673-01	1.7664-01	1.5036-01	1.1972-01	8.7061-02	5.5207-02	2.7470-02	7.6422-03
20 1.0642	2.0934-01	1.9685-01	1.7689-01	1.5073-01	1.2018-01	8.7536-02	5.5608-02	2.7724-02	7.7289-03
15 1.0353	2.0937-01	1.9694-01	1.7707-01	1.5100-01	1.2051-01	8.7869-02	5.5887-02	2.7899-02	7.7880-03
10 1.0154	2.0938-01	1.9700-01	1.7719-01	1.5118-01	1.2072-01	8.8090-02	5.6071-02	2.8014-02	7.8263-03
5 1.0038	2.0939-01	1.9704-01	1.7726-01	1.5128-01	1.2085-01	8.8216-02	5.6176-02	2.8079-02	7.8479-03
0 1.0000	2.0940-01	1.9705-01	1.7728-01	1.5131-01	1.2089-01	8.8257-02	5.6210-02	2.8100-02	7.8548-03
-5 1.0038	2.0939-01	1.9704-01	1.7726-01	1.5128-01	1.2085-01	8.8216-02	5.6176-02	2.8079-02	7.8479-03
-10 1.0154	2.0938-01	1.9700-01	1.7719-01	1.5118-01	1.2072-01	8.8090-02	5.6071-02	2.8014-02	7.8263-03
-15 1.0353	2.0937-01	1.9694-01	1.7707-01	1.5100-01	1.2051-01	8.7869-02	5.5887-02	2.7899-02	7.7880-03
-20 1.0642	2.0934-01	1.9685-01	1.7689-01	1.5073-01	1.2018-01	8.7536-02	5.5608-02	2.7724-02	7.7289-03
-25 1.1034	2.0931-01	1.9673-01	1.7664-01	1.5036-01	1.1972-01	8.7061-02	5.5207-02	2.7470-02	7.6422-03
-30 1.1547	2.0926-01	1.9655-01	1.7629-01	1.4984-01	1.1908-01	8.6396-02	5.4639-02	2.7106-02	7.5163-03
-35 1.2208	2.0920-01	1.9632-01	1.7582-01	1.4912-01	1.1819-01	8.5465-02	5.3835-02	2.6583-02	7.3319-03
-40 1.3054	2.0912-01	1.9600-01	1.7517-01	1.4813-01	1.1695-01	8.4144-02	5.2676-02	2.5816-02	7.0557-03
-45 1.4141	2.0900-01	1.9556-01	1.7426-01	1.4674-01	1.1516-01	8.2222-02	5.0961-02	2.4657-02	6.6296-03
-50 1.5548	2.0884-01	1.9494-01	1.7298-01	1.4472-01	1.1256-01	7.9357-02	4.8352-02	2.2860-02	5.9567-03
-55 1.7375	2.0862-01	1.9410-01	1.7120-01	1.4189-01	1.0880-01	7.5136-02	4.4432-02	2.0120-02	4.9240-03
-60 1.9579	2.0842-01	1.9332-01	1.6949-01	1.3901-01	1.0477-01	7.0395-02	3.9865-02	1.6861-02	3.6983-03
-65 2.1194	2.0874-01	1.9447-01	1.7167-01	1.4199-01	1.0796-01	7.3058-02	4.1473-02	1.7382-02	3.6670-03
-70 2.1197	2.0978-01	1.9840-01	1.7971-01	1.5433-01	1.2355-01	8.9564-02	5.5732-02	2.6464-02	6.6674-03
-75 2.0701	2.1076-01	2.0217-01	1.8758-01	1.6681-01	1.3997-01	1.0790-01	7.2727-02	3.8393-02	1.1239-02
-80 2.0308	2.1144-01	2.0479-01	1.9313-01	1.7573-01	1.5195-01	1.2164-01	8.5855-02	4.7965-02	1.5080-02
-85 2.0076	2.1183-01	2.0631-01	1.9636-01	1.8098-01	1.5907-01	1.2989-01	9.3852-02	5.3867-02	1.7461-02
-90 2.0000	2.1196-01	2.0681-01	1.9742-01	1.8271-01	1.6143-01	1.3264-01	9.6527-02	5.5849-02	1.8261-02

ALPHA =10.00 BETA =10.00 A = 1.00 B = 2.00 QULOAD=0.002 QLLOAD=0.004

CENTER DEFLECTION = 0.21359257

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.1196-01	2.0681-01	1.9742-01	1.8271-01	1.6143-01	1.3264-01	9.6527-02	5.5849-02	1.8261-02
85	2.0076	2.1183-01	2.0631-01	1.9636-01	1.8098-01	1.5907-01	1.2989-01	9.3852-02	5.3867-02	1.7461-02
80	2.0308	2.1144-01	2.0479-01	1.9313-01	1.7573-01	1.5195-01	1.2164-01	8.5855-02	4.7965-02	1.5080-02
75	2.0701	2.1076-01	2.0217-01	1.8758-01	1.6681-01	1.3997-01	1.0790-01	7.2727-02	3.8393-02	1.1239-02
70	2.1197	2.0978-01	1.9840-01	1.7971-01	1.5433-01	1.2355-01	8.9564-02	5.5732-02	2.6664-02	6.6674-03
65	2.1194	2.0874-01	1.9447-01	1.7167-01	1.4199-01	1.0796-01	7.3058-02	4.1473-02	1.7382-02	3.6670-03
60	1.9579	2.0842-01	1.9332-01	1.6949-01	1.3901-01	1.0477-01	7.0395-02	3.9865-02	1.6861-02	3.6983-03
55	1.7375	2.0862-01	1.9410-01	1.7120-01	1.4189-01	1.0880-01	7.5136-02	4.4432-02	2.0120-02	4.9240-03
50	1.5548	2.0884-01	1.9494-01	1.7298-01	1.4472-01	1.1256-01	7.9357-02	4.8352-02	2.2860-02	5.9567-03
45	1.4141	2.0900-01	1.9556-01	1.7426-01	1.4674-01	1.1516-01	8.2222-02	5.0961-02	2.4657-02	6.6296-03
40	1.3054	2.0912-01	1.9600-01	1.7517-01	1.4813-01	1.1695-01	8.4144-02	5.2676-02	2.5816-02	7.0557-03
35	1.2208	2.0920-01	1.9632-01	1.7582-01	1.4912-01	1.1819-01	8.5465-02	5.3835-02	2.6583-02	7.3319-03
30	1.1547	2.0926-01	1.9655-01	1.7629-01	1.4984-01	1.1908-01	8.6396-02	5.4639-02	2.7106-02	7.5163-03
25	1.1034	2.0931-01	1.9673-01	1.7664-01	1.5036-01	1.1972-01	8.7061-02	5.5207-02	2.7470-02	7.6422-03
20	1.0642	2.0934-01	1.9685-01	1.7689-01	1.5073-01	1.2018-01	8.7536-02	5.5608-02	2.7724-02	7.7289-03
15	1.0353	2.0937-01	1.9694-01	1.7707-01	1.5100-01	1.2051-01	8.7869-02	5.5887-02	2.7899-02	7.7880-03
10	1.0154	2.0938-01	1.9700-01	1.7719-01	1.5118-01	1.2072-01	8.8090-02	5.6071-02	2.8014-02	7.8263-03
5	1.0038	2.0939-01	1.9704-01	1.7726-01	1.5128-01	1.2085-01	8.8216-02	5.6176-02	2.8079-02	7.8479-03
0	1.0000	2.0940-01	1.9705-01	1.7728-01	1.5131-01	1.2089-01	8.8257-02	5.6210-02	2.8100-02	7.8548-03
90	2.0000	7.0971-02	1.3687-01	1.9226-01	2.3116-01	2.4722-01	2.3479-01	1.9112-01	1.2068-01	4.2223-02
85	2.0076	7.0931-02	1.3656-01	1.9129-01	2.2909-01	2.4383-01	2.3027-01	1.8627-01	1.1683-01	4.0611-02
80	2.0308	7.0806-02	1.3560-01	1.8830-01	2.2281-01	2.3357-01	2.1661-01	1.7163-01	1.0522-01	3.5715-02
75	2.0701	7.0576-02	1.3393-01	1.8313-01	2.1206-01	2.1615-01	1.9364-01	1.4718-01	8.5885-02	2.7481-02
70	2.1197	6.9992-02	1.3106-01	1.7519-01	1.9633-01	1.9151-01	1.6206-01	1.1448-01	6.0734-02	1.7048-02
65	2.1194	6.7199-02	1.2415-01	1.6217-01	1.7570-01	1.6360-01	1.3006-01	8.4517-02	4.0021-02	9.5705-03
60	1.9579	5.9284-02	1.0935-01	1.4251-01	1.5401-01	1.4315-01	1.1383-01	7.4301-02	3.5662-02	8.8341-03
55	1.7375	4.9856-02	9.2477-02	1.2174-01	1.3366-01	1.2717-01	1.0460-01	7.1688-02	3.6945-02	1.0177-02
50	1.5548	4.1790-02	7.7911-02	1.0348-01	1.1512-01	1.1158-01	9.4139-02	6.6775-02	3.6054-02	1.0586-02
45	1.4141	3.5124-02	6.5721-02	8.7832-02	9.8601-02	9.6747-02	8.2938-02	6.0051-02	3.3285-02	1.0107-02
40	1.3054	2.9500-02	5.5340-02	7.4279-02	8.3903-02	8.2998-02	7.1886-02	5.2712-02	2.9670-02	9.1785-03
35	1.2208	2.4633-02	4.6295-02	6.2330-02	7.0712-02	7.0341-02	6.1345-02	4.5353-02	2.5773-02	8.0608-03
30	1.1547	2.0320-02	3.8241-02	5.1602-02	5.8724-02	5.8647-02	5.1391-02	3.8204-02	2.1846-02	6.8799-03
25	1.1034	1.6417-02	3.0927-02	4.1802-02	4.7678-02	4.7751-02	4.1983-02	3.1330-02	1.7991-02	5.6914-03
20	1.0642	1.2817-02	2.4163-02	3.2698-02	3.7356-02	3.7489-02	3.3040-02	2.4721-02	1.4237-02	4.5174-03
15	1.0353	9.4376-03	1.7801-02	2.4109-02	2.7575-02	2.7713-02	2.4464-02	1.8339-02	1.0582-02	3.3644-03
10	1.0154	6.2113-03	1.1720-02	1.5882-02	1.8179-02	1.8287-02	1.6161-02	1.2129-02	7.0075-03	2.2308-03
5	1.0038	3.0821-03	5.8165-03	7.8848-03	9.0292-03	9.0879-03	8.0363-03	6.0355-03	3.4895-03	1.1116-03

ALPHA =10.00 BETA =10.00 A = 1.00 B = 2.00 QULOAD=0.002 QLLOAD=0.004

CENTER DEFLECTION = 0.21359257

	RADIUS	0.1R	0.2R	0.3R	0.4R	0.5R	0.6R	0.7R	0.8R	0.9R
90	2.0000	2.8293-01	3.4368-01	3.8968-01	4.1386-01	4.0865-01	3.6743-01	2.8765-01	1.7652-01	6.0484-02
85	2.0076	2.8276-01	3.4287-01	3.8764-01	4.1007-01	4.0290-01	3.6016-01	2.8012-01	1.7070-01	5.8073-02
80	2.0308	2.8224-01	3.4039-01	3.8142-01	3.9855-01	3.8552-01	3.3825-01	2.5749-01	1.5319-01	5.0794-02
75	2.0701	2.8134-01	3.3609-01	3.7072-01	3.7887-01	3.5612-01	3.0154-01	2.1991-01	1.2428-01	3.8720-02
70	2.1197	2.7977-01	3.2946-01	3.5490-01	3.5066-01	3.1506-01	2.5162-01	1.7021-01	8.7198-02	2.3715-02
65	2.1194	2.7594-01	3.1862-01	3.3385-01	3.1769-01	2.7155-01	2.0312-01	1.2599-01	5.7403-02	1.3237-02
60	1.9579	2.6771-01	3.0267-01	3.1200-01	2.9302-01	2.4792-01	1.8423-01	1.1417-01	5.2523-02	1.2532-02
55	1.7375	2.5847-01	2.8657-01	2.9295-01	2.7555-01	2.3597-01	1.7973-01	1.1612-01	5.7065-02	1.5101-02
50	1.5548	2.5063-01	2.7285-01	2.7646-01	2.5985-01	2.2414-01	1.7350-01	1.1513-01	5.8913-02	1.6543-02
45	1.4141	2.4412-01	2.6128-01	2.6210-01	2.4534-01	2.1191-01	1.6516-01	1.1101-01	5.7942-02	1.6737-02
40	1.3054	2.3862-01	2.5134-01	2.4945-01	2.3204-01	1.9994-01	1.5603-01	1.0539-01	5.5486-02	1.6234-02
35	1.2208	2.3383-01	2.4262-01	2.3815-01	2.1984-01	1.8853-01	1.4681-01	9.9188-02	5.2356-02	1.5393-02
30	1.1547	2.2958-01	2.3480-01	2.2789-01	2.0856-01	1.7773-01	1.3779-01	9.2843-02	4.8952-02	1.4396-02
25	1.1034	2.2573-01	2.2765-01	2.1844-01	1.9803-01	1.6747-01	1.2904-01	8.6536-02	4.5461-02	1.3334-02
20	1.0642	2.2216-01	2.2101-01	2.0959-01	1.8809-01	1.5767-01	1.2058-01	8.0330-02	4.1961-02	1.2246-02
15	1.0353	2.1880-01	2.1474-01	2.0118-01	1.7858-01	1.4822-01	1.1233-01	7.4226-02	3.8481-02	1.1152-02
10	1.0154	2.1559-01	2.0872-01	1.9307-01	1.6936-01	1.3901-01	1.0425-01	6.8200-02	3.5021-02	1.0057-02
5	1.0038	2.1247-01	2.0285-01	1.8514-01	1.6031-01	1.2994-01	9.6252-02	6.2211-02	3.1568-02	8.9595-03
0	1.0000	2.0940-01	1.9705-01	1.7728-01	1.5131-01	1.2089-01	8.8257-02	5.6210-02	2.8100-02	7.8548-03
-5	1.0038	2.0631-01	1.9122-01	1.6937-01	1.4225-01	1.1176-01	8.0180-02	5.0140-02	2.4589-02	6.7362-03
-10	1.0154	2.0317-01	1.8528-01	1.6130-01	1.3300-01	1.0244-01	7.1929-02	4.3942-02	2.1006-02	5.5955-03
-15	1.0353	1.9993-01	1.7914-01	1.5296-01	1.2343-01	9.2795-02	6.3405-02	3.7549-02	1.7317-02	4.4237-03
-20	1.0642	1.9653-01	1.7269-01	1.4419-01	1.1338-01	8.2693-02	5.4496-02	3.0887-02	1.3487-02	3.2115-03
-25	1.1034	1.9289-01	1.6580-01	1.3483-01	1.0268-01	7.1969-02	4.5077-02	2.3877-02	9.4792-03	1.9508-03
-30	1.1547	1.8894-01	1.5831-01	1.2469-01	9.1114-02	6.0431-02	3.5005-02	1.6436-02	5.2605-03	6.3636-04
-35	1.2208	1.8457-01	1.5003-01	1.1349-01	7.8412-02	4.7849-02	2.4120-02	8.4829-03	8.1082-04	-7.2893-04
-40	1.3054	1.7962-01	1.4066-01	1.0089-01	6.4231-02	3.3948-02	1.2257-02	-3.5764-05	-3.8541-03	-2.1227-03
-45	1.4141	1.7388-01	1.2984-01	8.6433-02	4.8135-02	1.8417-02	-7.1605-04	-9.0906-03	-8.6284-03	-3.4778-03
-50	1.5548	1.6705-01	1.1703-01	6.9501-02	2.9603-02	9.7222-04	-1.4782-02	-1.8423-02	-1.3194-02	-4.6297-03
-55	1.7375	1.5876-01	1.0162-01	4.9460-02	8.2270-03	-1.8371-02	-2.9462-02	-2.7256-02	-1.6825-02	-5.2532-03
-60	1.9579	1.4914-01	8.3970-02	2.6987-02	-1.4998-02	-3.8376-02	-4.3435-02	-3.4436-02	-1.8800-02	-5.1358-03
-65	2.1194	1.4154-01	7.0325-02	9.5014-03	-3.3711-02	-5.5644-02	-5.7005-02	-4.3044-02	-2.2640-02	-5.9035-03
-70	2.1197	1.3979-01	6.7344-02	4.5190-03	-4.1998-02	-6.7968-02	-7.2493-02	-5.8749-02	-3.4270-02	-1.0380-02
-75	2.0701	1.4018-01	6.8240-02	4.4496-03	-4.5252-02	-7.6188-02	-8.5736-02	-7.4452-02	-4.7492-02	-1.6242-02
-80	2.0308	1.4063-01	6.9186-02	4.8282-03	-4.7079-02	-8.1618-02	-9.4978-02	-8.5776-02	-5.7257-02	-2.0635-02
-85	2.0076	1.4090-01	6.9749-02	5.0734-03	-4.8110-02	-8.4758-02	-1.0037-01	-9.2417-02	-6.2962-02	-2.3150-02
-90	2.0000	1.4099-01	6.9933-02	5.1550-03	-4.8445-02	-8.5786-02	-1.0215-01	-9.4598-02	-6.4827-02	-2.3962-02