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Technical Note

1976-34

Circular Polarization Scattering Coefficients for the Bistatic Scattering of Electromagnetic Waves from Perfectly Conducting Spheres

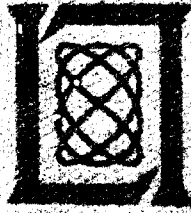
R. A. Ross  
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27 July 1976

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Lincoln Laboratory

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
LEXINGTON, MASSACHUSETTS



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FOR THE COMMANDER

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
LINCOLN LABORATORY

CIRCULAR POLARIZATION SCATTERING COEFFICIENTS  
FOR THE BISTATIC SCATTERING OF ELECTROMAGNETIC WAVES  
FROM PERFECTLY CONDUCTING SPHERES

R. A. ROSS  
G. N. COHEN  
Group 95

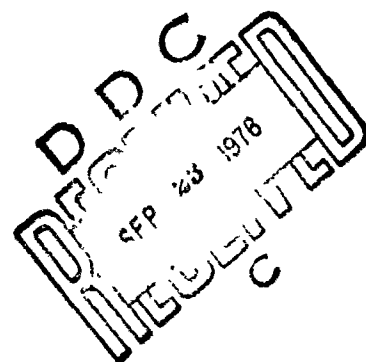
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ABSTRACT

The scattering by a number of perfectly conducting spheres has been calculated as a function of bistatic angle for both principal circular polarizations. Normalized radar cross section and scattering phase are tabulated for body circumference in wavelengths equal to 1.0(1.0)10.0, 15.0(5.0)50.0 with bistatic angles 0.0(1.0)180.0 degrees. Selected graphs precede the tables.

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## I. INTRODUCTION

The most important of the bodies for which exact solutions are possible is the sphere. Calculations via the exact solution for scattering by perfectly conducting spheres are of great importance, both as a means of calibrating cross-section ranges and as a means of checking approximate methods of computation.

In the monostatic case, the two most complete tables of scattering coefficients for perfectly conducting spheres are those of Bechtel<sup>1</sup>, whose tables cover the range  $ka=0.2(0.02)50^*$ , where  $ka$  is sphere circumference in wavelengths, and those of Rheinstejn<sup>2</sup>, whose tables cover the range  $a/\lambda = 0.01(.01)19.00$ , where  $a$  is the sphere radius and  $\lambda$  is the wavelength. Both these tables give the amplitude and phase of the scattered field as well as the radar cross-section; they differ in that Rheinstejn has referenced his phase value to the sphere's center, while Bechtel's results yield phase referenced to the specular point. Tables which are more limited than the two mentioned above have been published by Goodrich, et al.<sup>3</sup>, by Crispin and Siegel<sup>4</sup>, and by Alder and Johnson<sup>5</sup>, the latter tables giving monostatic cross-sections of a variety of dielectric spheres as well as of perfectly conducting ones.

In the bistatic case, tables of scattering coefficients giving the amplitude and phase of the electromagnetic wave scattered by a perfectly conducting sphere have been published for principal linear polarization combinations. Despite a very limited range of sphere sizes and bistatic angles, the early data of Proudman, Doodson, and Kennedy<sup>6</sup> are quite remarkable in view of the procedure for computation. In reference 7 tables are given of normalized echoing area and phase angle for sphere circumference  $ka = 0.25(0.25)16.00$  with bistatic angles  $= 0^\circ(30.0)180^\circ$ . Those tables were based upon computations made at the Cornell Aeronautical Laboratory. Attendant with scattering studies conducted at the University of Manitoba, tables<sup>8</sup> were compiled for a wide range of sphere sizes and bistatic angles. Normalized radar cross-section and scattering phase are presented for both principal linear polarizations for  $ka = 1.0(1.0)10.0, 15.0(5.0)50.0$  with bistatic angles  $= 0.0(1.0)180.0^\circ$ . Graphs showing the bistatic dependence of normalized radar cross-section and scattering phase for  $ka = 1.0(1.0)10.0$  precede the tables.

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\*The code to this convention is: initial value (increment) final value.

Interest has been generated in scattering behavior when antennas are circularly polarized. In the monostatic case of sphere scattering, the parallel circular polarization result is unchanged from the linear polarization result, and the opposite circular polarization return is identically zero [see Equations (1) and (2)]. The existing tables of reference 1 or 2 are appropriate for the non-trivial situation. In the bistatic case of sphere scattering, circular polarization data are completely defined by simple combinations of linear polarization data, and the calculations contained in reference 8 would apply. However, hand calculations combining phasors can be tedious, so the present table is offered.

Principal circular polarization data (normalized radar cross-section and scattering phase) were computed for  $ka = 1.0(1.0)10.0, 15.0(5.0)50.0$  with bistatic angles  $0.0(1.0)180.0^\circ$ . Graphs showing the bistatic dependence of parallel and opposite circular RCS and phase for  $ka = 1.0(1.0)10.0, 15.0,$  and  $20.0$  precede the tables.

This report is intended to serve as a companion report to references 1 and 8. For this reason, we limit further discussion to those topics necessary in the use of the data presented.

## II. NOTATION AND FORMULATION

Computations are based upon Stratton's<sup>9</sup> formulation (modified for  $e^{i\omega t}$  time dependence) with spherical Bessel functions expressed in finite-series representation. Reference 1 contains the details of the formulation for the interested reader.

An incident, monochromatic, plane wave having number  $k (= \frac{2\pi}{\lambda})$  where  $\lambda$  is the wavelength) has been assigned the common  $e^{i\omega t}$  time dependence. Real (REAL) and imaginary (IMAG) parts of the scattering coefficients were computed for E-plane and H-plane (principal linear polarization) configurations\* as a function of bistatic angle.

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\*Since this polarization convention is uniformly accepted, we do not elaborate further (e.g., see the Appendix of Reference 10).

We seek the related quantities for the two circular polarization combinations (PP and OP) originating in the sense of these EM waves. By convention, PP or principal circular polarization obtains when transmitting and receiving antennas are circularly polarized with differing sense of rotation; OP or opposite circular polarization corresponds with circular antennas having the same sense. The equations which join circular and linear polarization scattering coefficients can be shown to be

$$\text{REAL } \frac{\text{PP}}{\text{OP}} = \frac{\text{REAL (H)} + \text{REAL (E)}}{2} \quad (1)$$

$$\text{IMAG } \frac{\text{PP}}{\text{OP}} = \frac{\text{IMAG (H)} + \text{IMAG (E)}}{2} \quad (2)$$

For comparison purposes, note that the phase of the scattered field defined by equations (1) and (2) was referenced to the center of the perfectly conducting sphere.

### III. USE OF TABLES AND GRAPHS

The tables present bistatic scattering data according to polarization pairs (circular PP and circular OP, respectively) in increasing order of integral value of  $ka$ .

Beneath a major heading specifying polarization and  $ka$  lies a table consisting of five columns. The first column on the left contains the bistatic angle THETA in degrees: monostatic scattering or backscattering corresponds with THETA =  $0^\circ$ ; forward scattering corresponds with THETA =  $180^\circ$ . The fifth column lists radar cross-section ( $\sigma$ ) normalized to its geometric optics value; i

$$\text{NRCS} = \frac{\sigma}{\pi a^2} \quad (3)$$



The fourth column gives the phase (PHASE) of the scattered field in degrees, modulus  $360^\circ$  and lying in the interval  $-180^\circ$  to  $+180^\circ$ . Columns two and three present the real (REAL) and imaginary (IMAG) parts of the circular polarization scattering coefficients given by equations (1) and (2), where

$$\text{NRCS} = |\text{REAL} + i \text{IMAG}|^2 \quad (4)$$

$$\text{PHASE} = \tan^{-1} \left( \frac{\text{IMAG}}{\text{REAL}} \right) \quad (5)$$

and the sphere center is the phase reference.

The only errors incurred in evaluating the scattering coefficients result from roundoff and from truncation of the infinite series representation of spherical Bessel functions. An IBM 370/168 digital computer was programmed to generate scattering-coefficient data which are accurate to six significant figures.

Graphs preceding the tables permit a rapid assessment of the bistatic dependence of normalized radar cross-section and scattering phase over the range  $ka = 1.0(1.0)10.0, 15.0, \text{ and } 20.0$  (see Figs. 1 through 24).

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1. M. E. Bechtel, "Scattering Coefficients for the Backscattering of Electromagnetic Waves from Perfectly Conducting Spheres," Cornell Aeronautical Laboratory Report No. AP/RIS-1 (December 1962).
2. J. Rheinstein, "Tables of the Amplitude and Phase of the Backscatter from a Conducting Sphere," Group Report 22G-16, Lincoln Laboratory, M.I.T. (19 June 1963), DDC AD-409820.
3. R. F. Goodrich, B. A. Harrison, R. E. Kleiman and T. B. A. Senior, "Studies in Radar Cross Sections XLVII - Diffraction and Scattering by Regular Bodies-I: The Sphere," University of Michigan Report No. 3648-I-T on Contract No. AF 19(604)-6855 (December 1961).
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8. R. A. Ross and P. Bhartia, "Scattering Coefficients for the Bistatic Scattering of Electromagnetic Waves from Perfectly Conducting Spheres," Technical Report No. 69-TR-1, University of Manitoba (February 1969).
9. J. A. Stratton, Electromagnetic Theory (McGraw-Hill, New York, 1941).
10. R. W. P. King and T. T. Wu, The Scattering and Diffraction of Waves (Harvard University Press, Cambridge, Massachusetts, 1959).

IN-1976-34 (1)

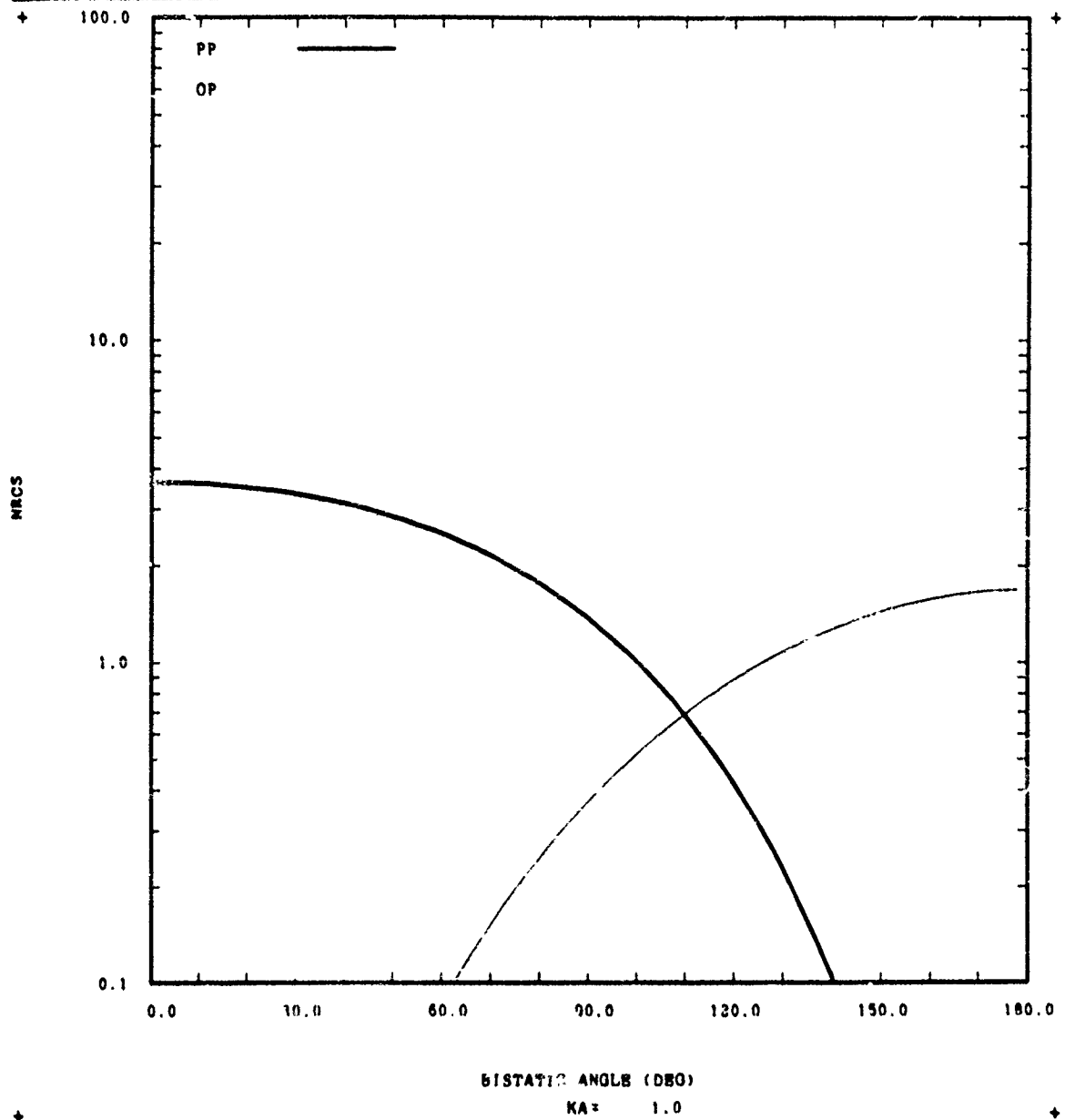


Fig. 1. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (2)

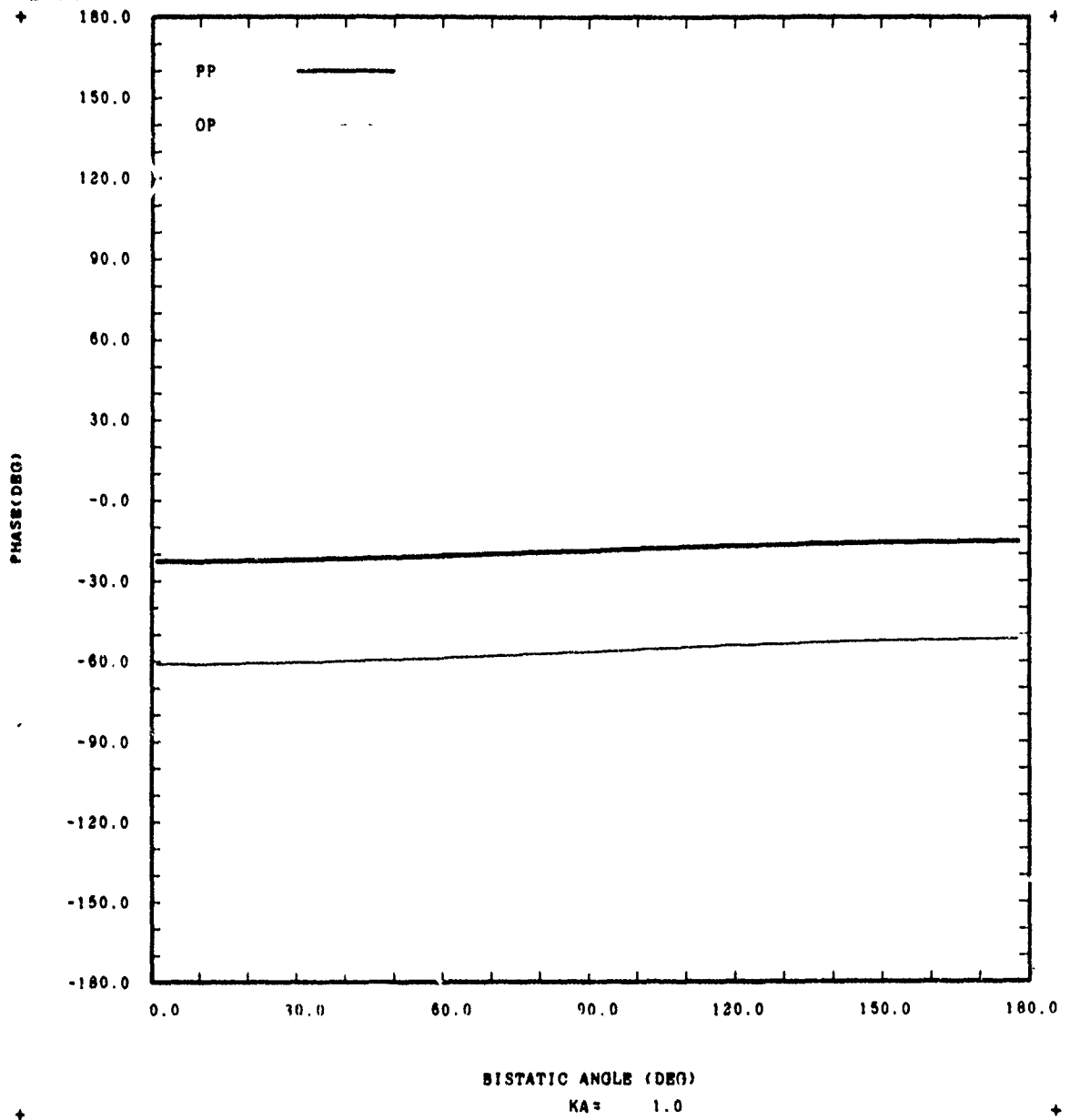


Fig. 2. Phase vs. bistatic angle.

TN-1976-34 (3)

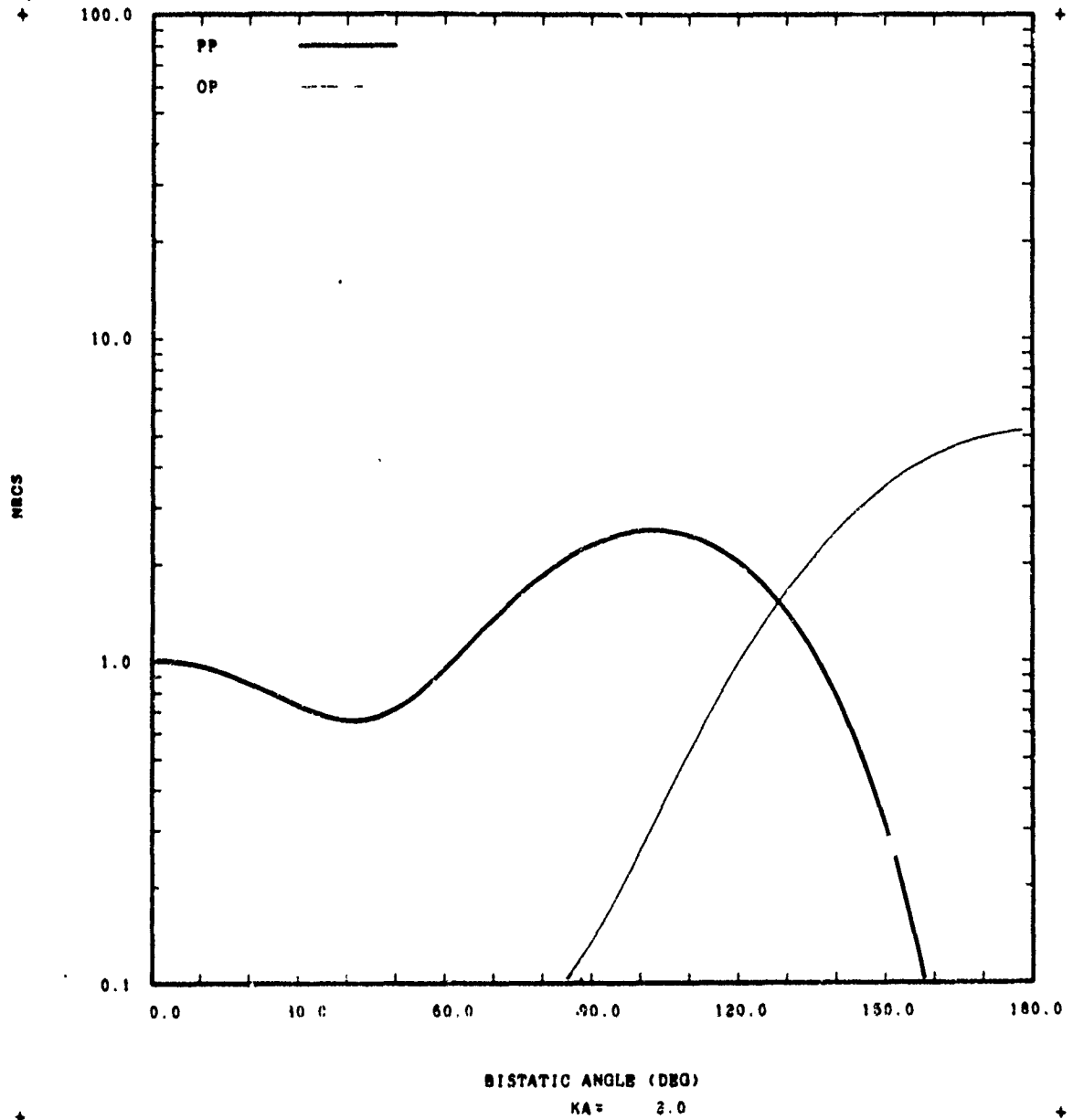


Fig. 3. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (4)

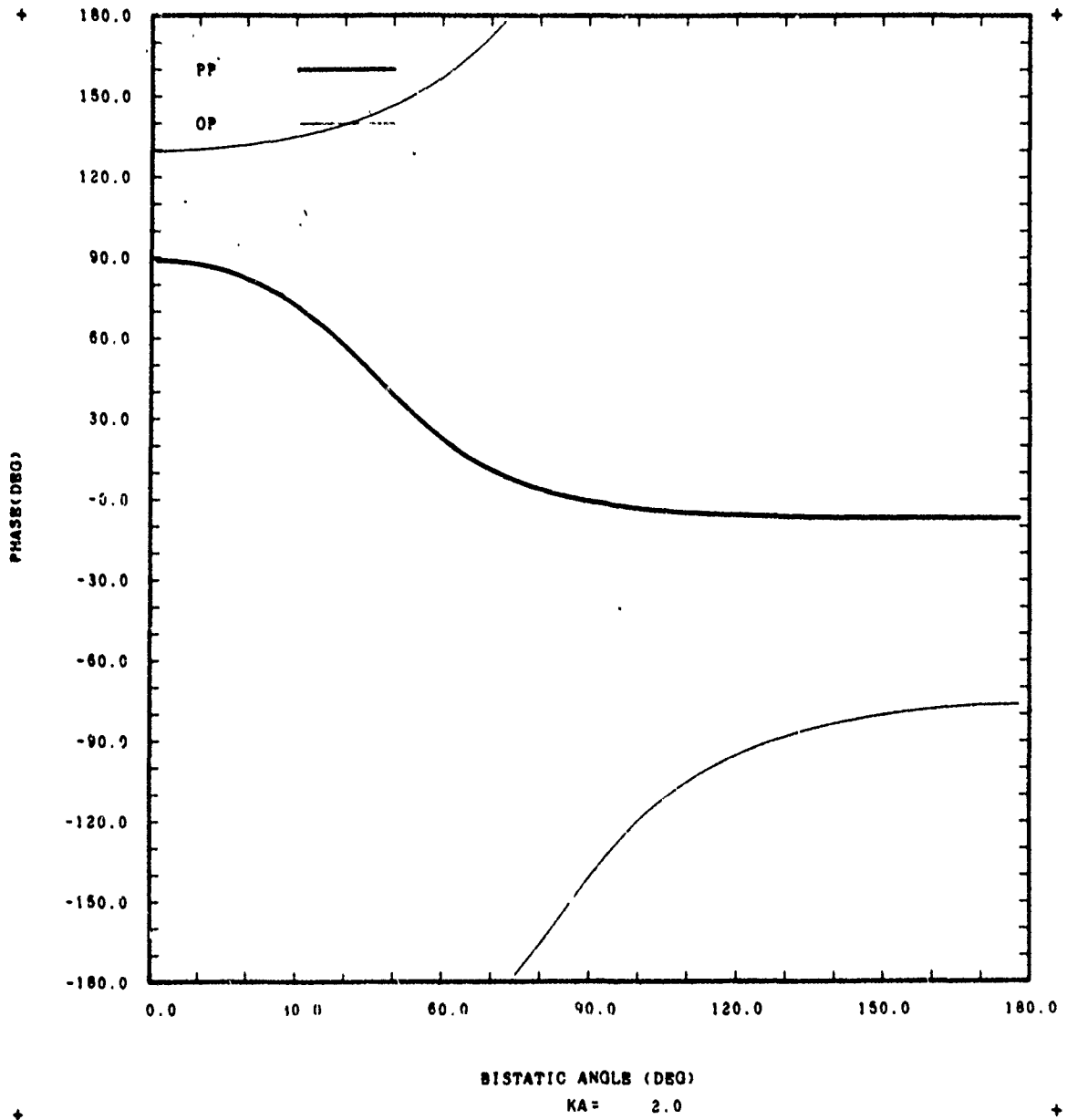


Fig. 4. Phase vs. bistatic angle.

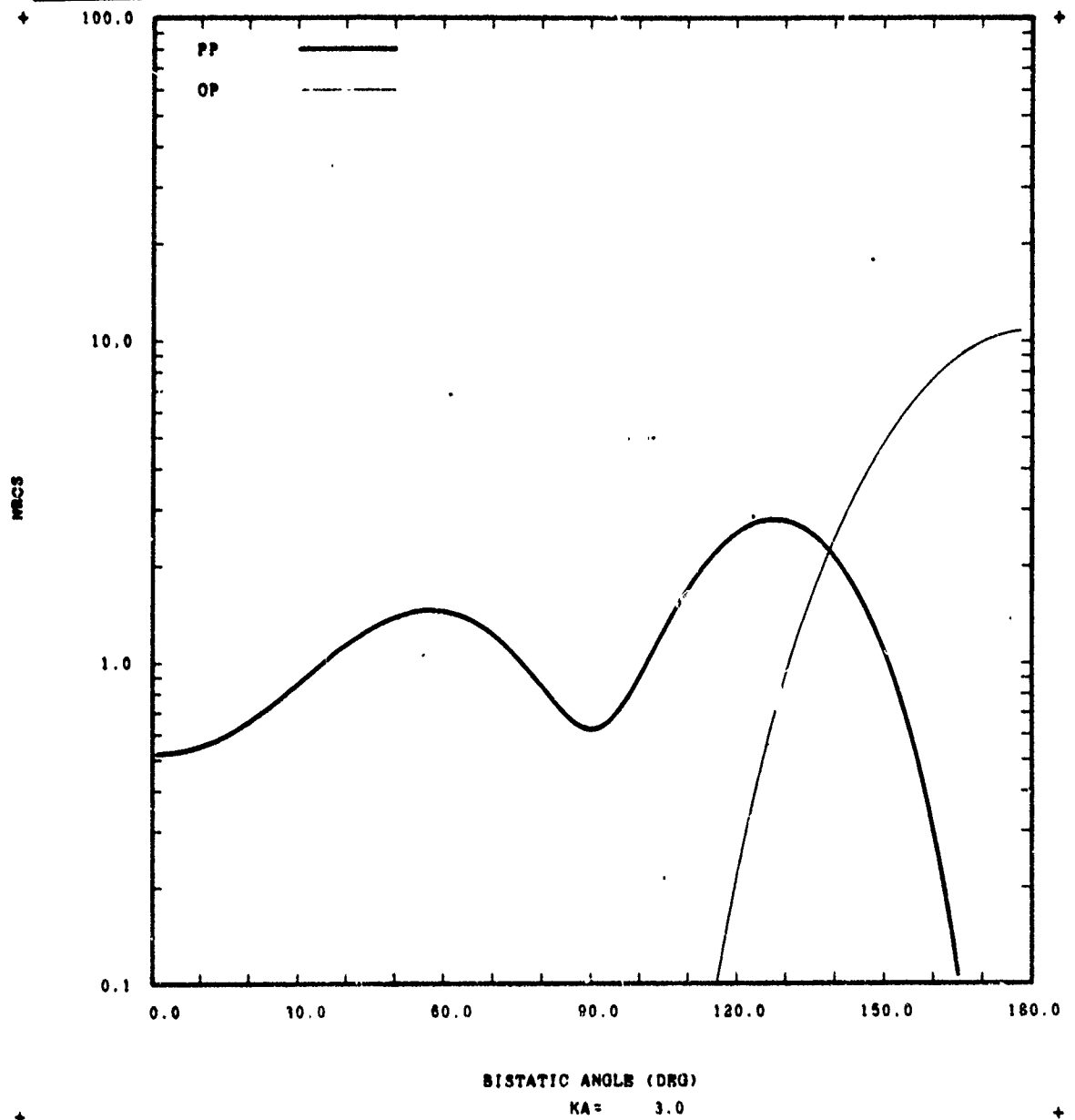


Fig. 5. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (6)

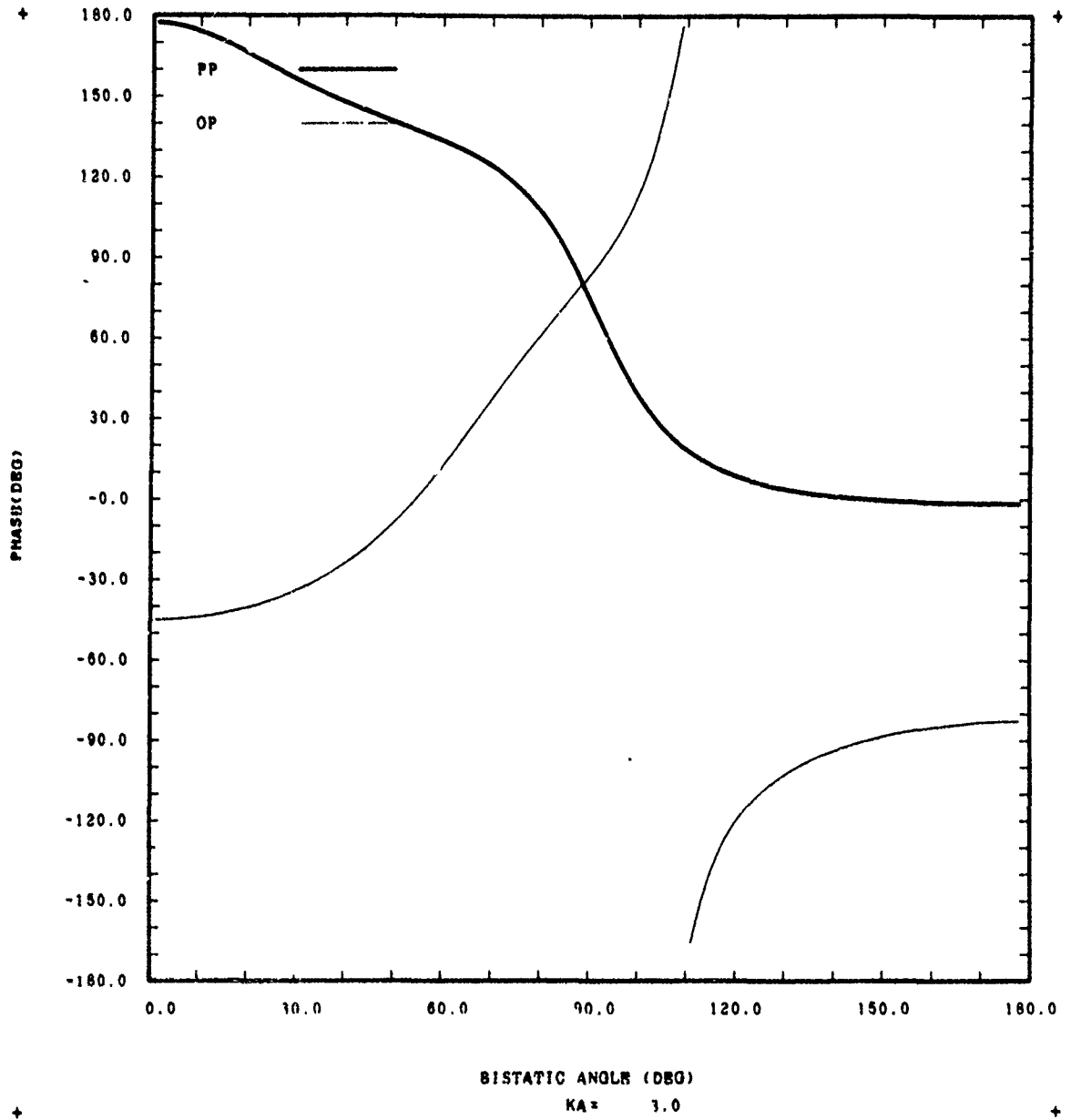


Fig. 6. Phase vs. bistatic angle.



TN-1976-34 (7)

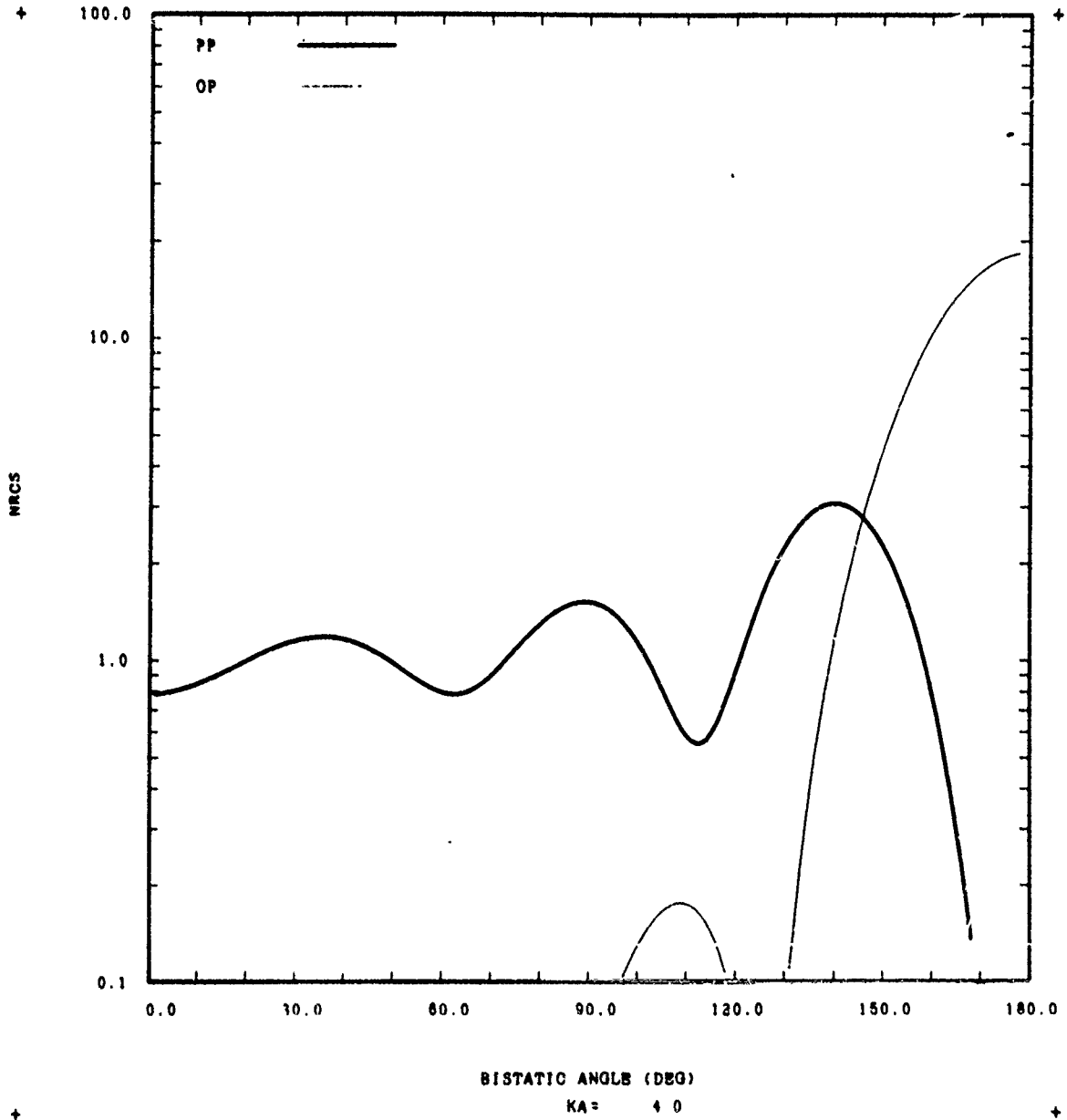


Fig. 7. Normalized radar cross-section vs. bistatic angle.

IN-1976-34 (7)

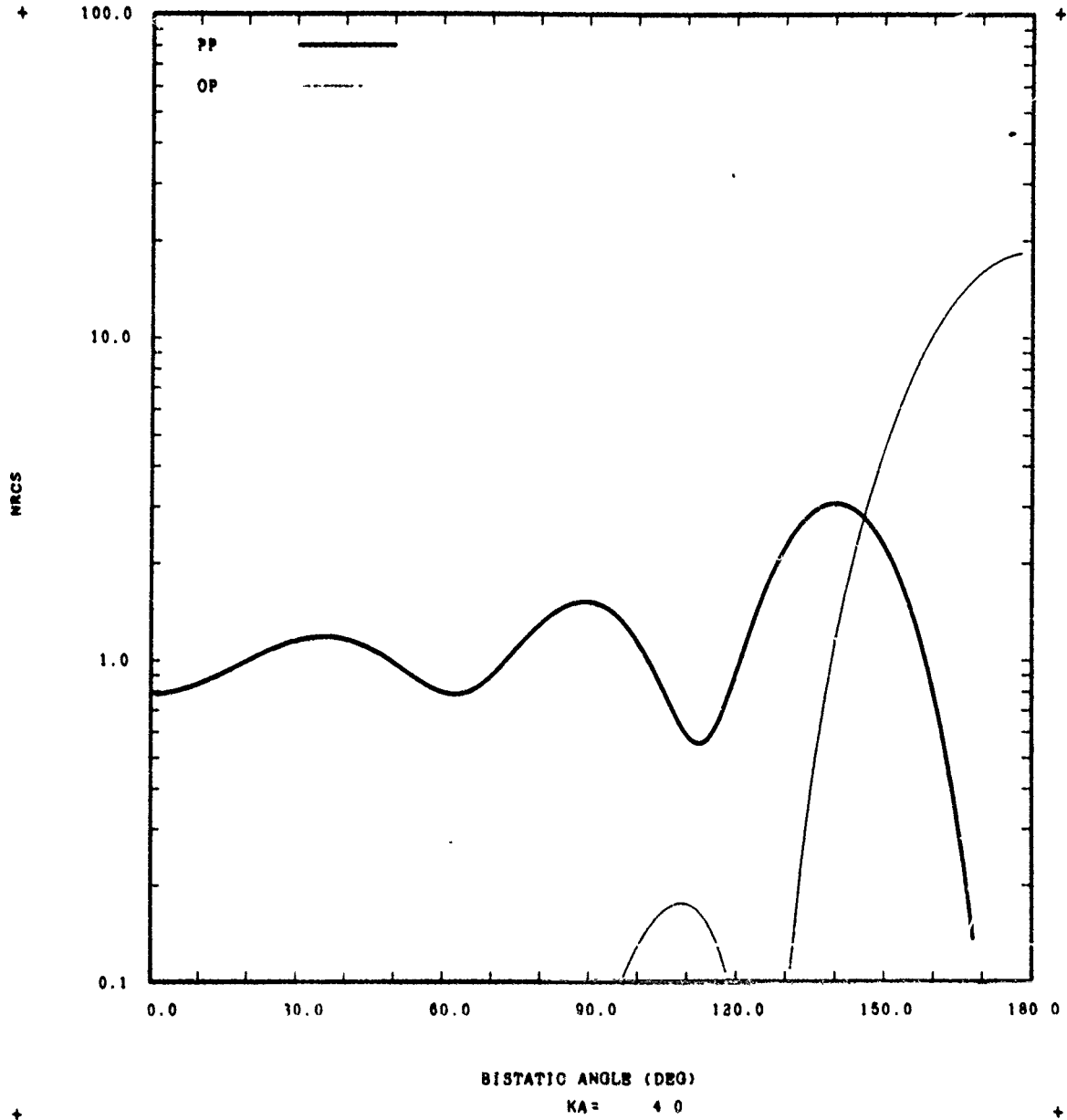


Fig. 7. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (8)

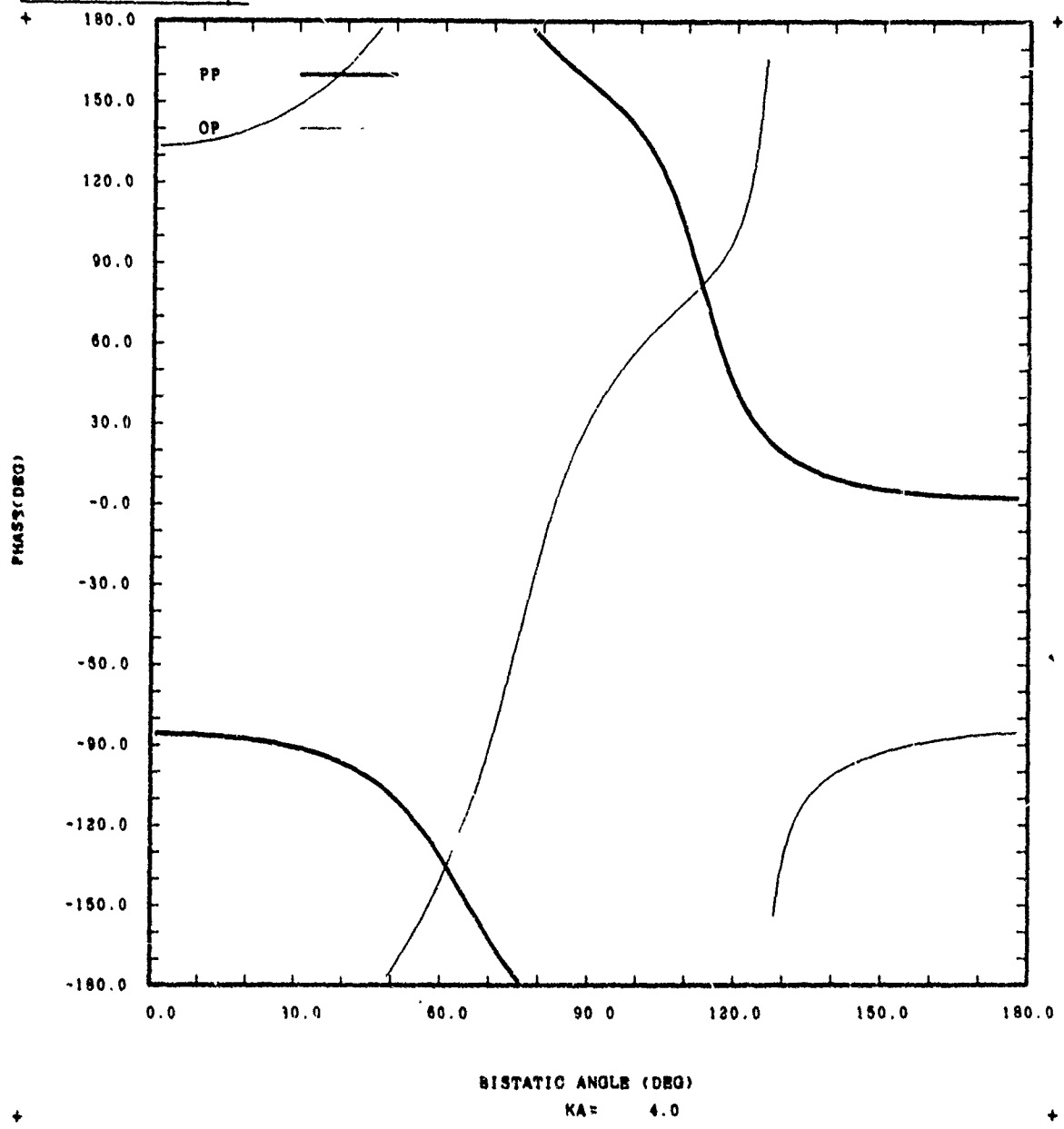


Fig. 8. Phase vs. bistatic angle.

TN-1976-34 (9)

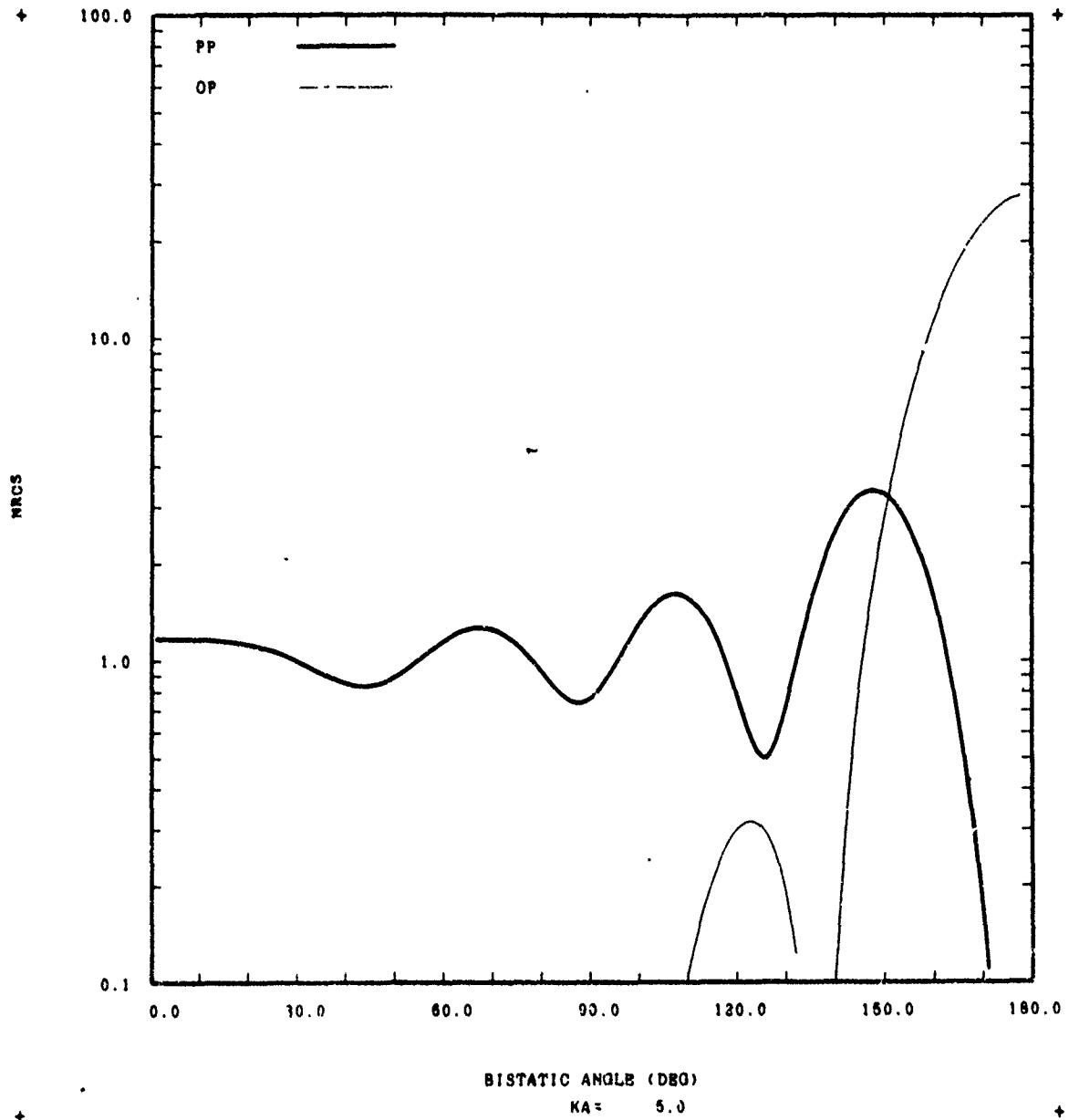


Fig. 9. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (10)

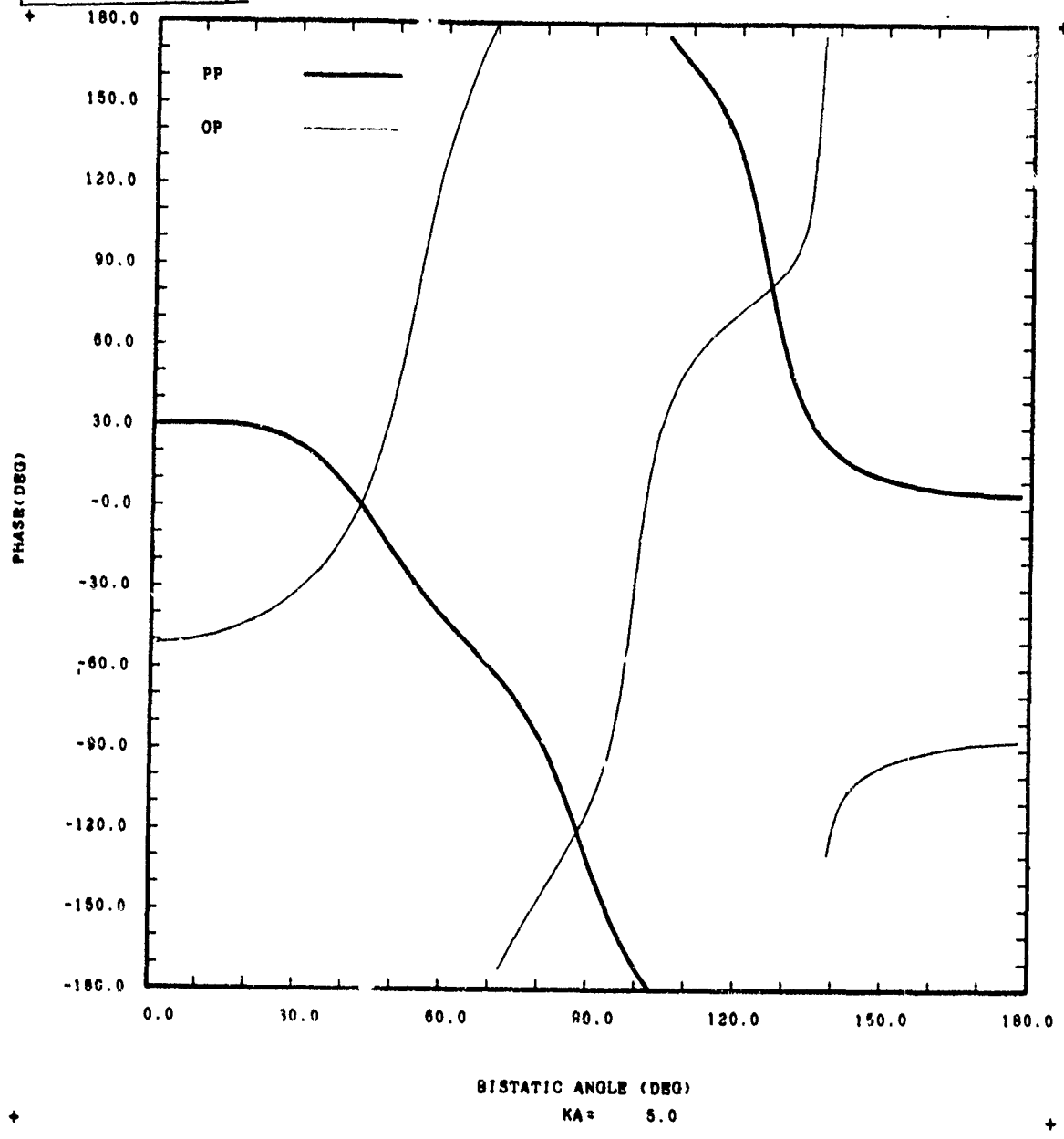


Fig. 10. Phase vs. bistatic angle.

TN-1976-34 (11)

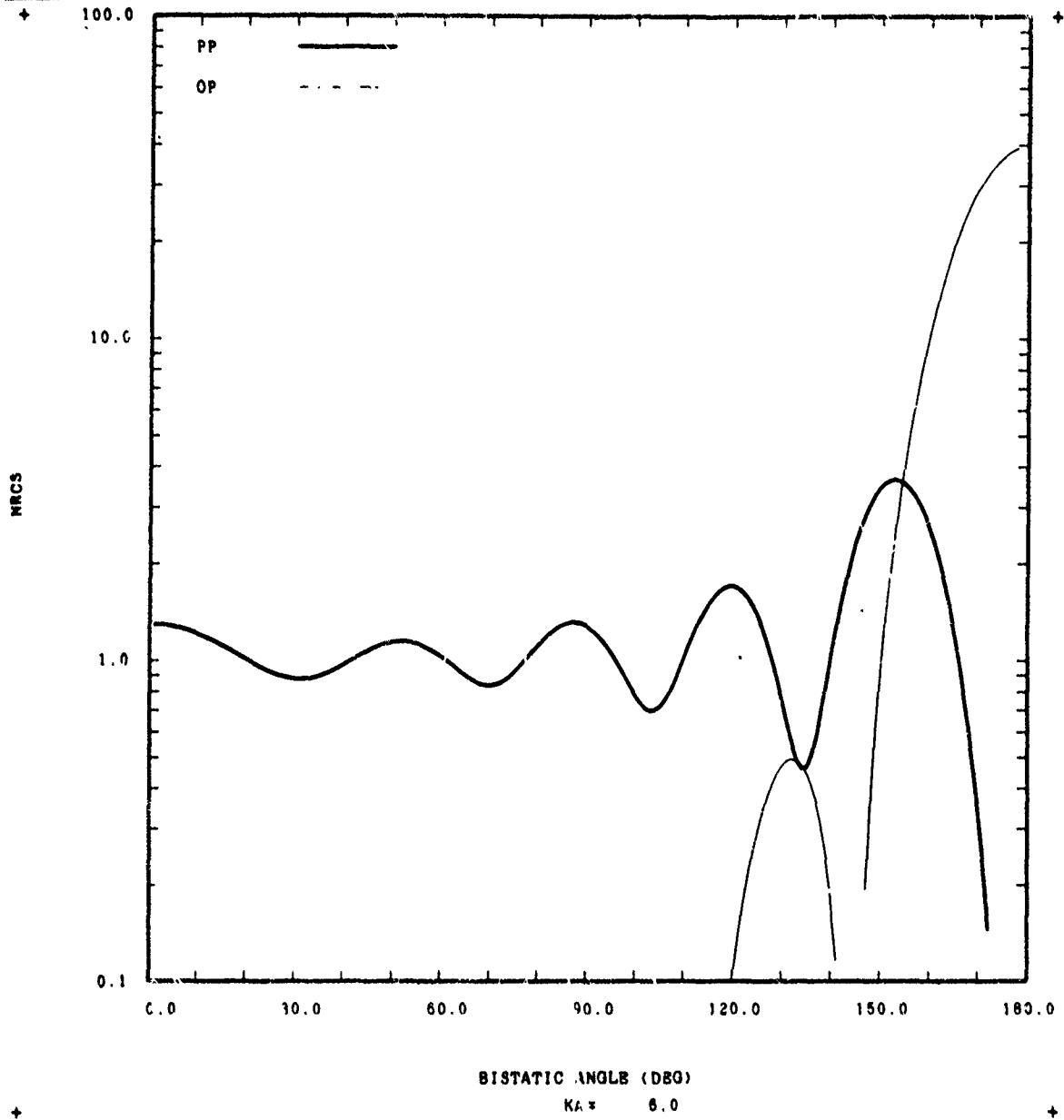


Fig. 11. Normalized radar cross-section vs. bistatic angle.

TN-1976-34 (12)

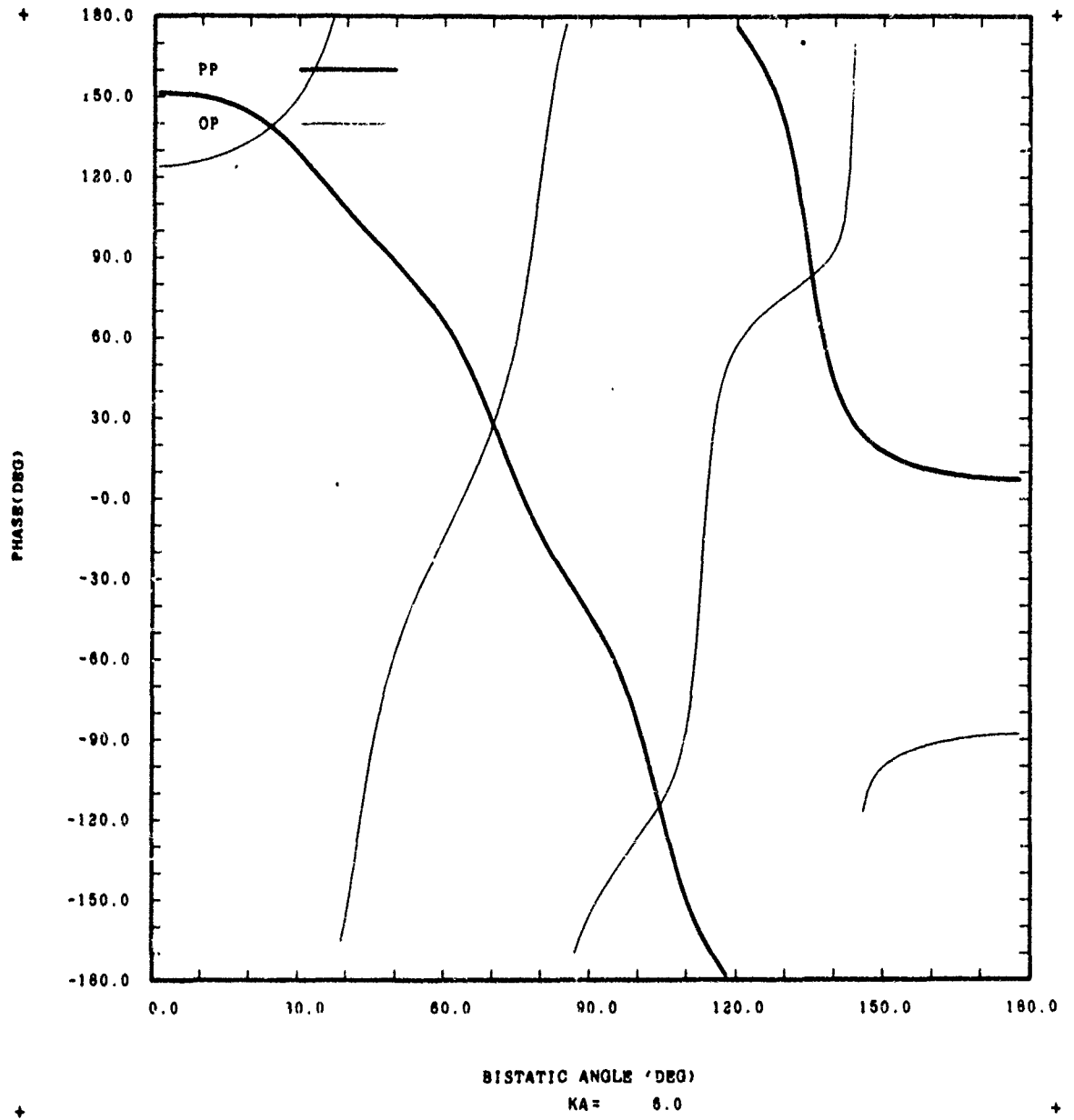


Fig. 12. Phase vs. bistatic angle.

TN-1976-34 (13)

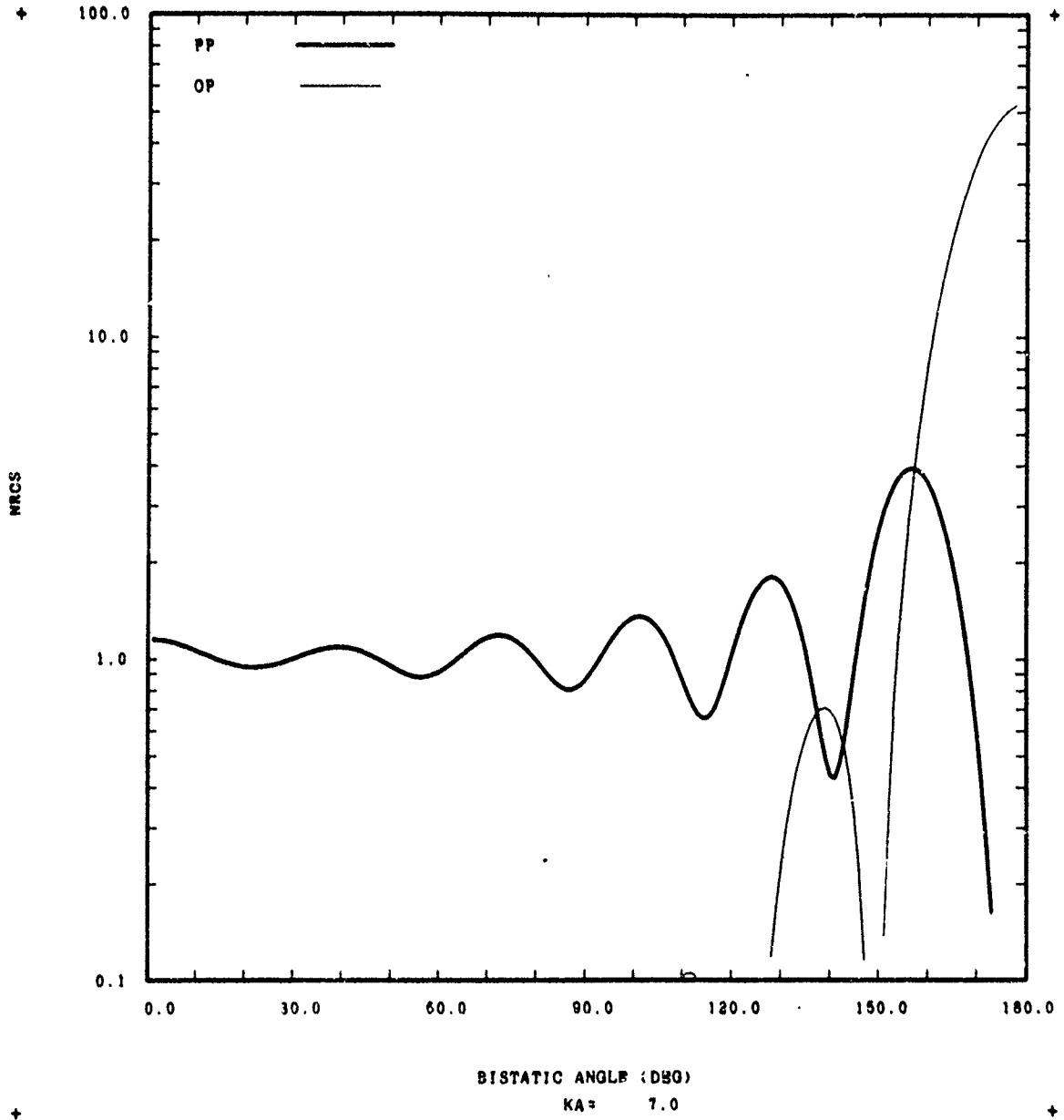


Fig. 13. Normalized radar cross-section vs. bistatic angle.



TN-1976-34 (14)

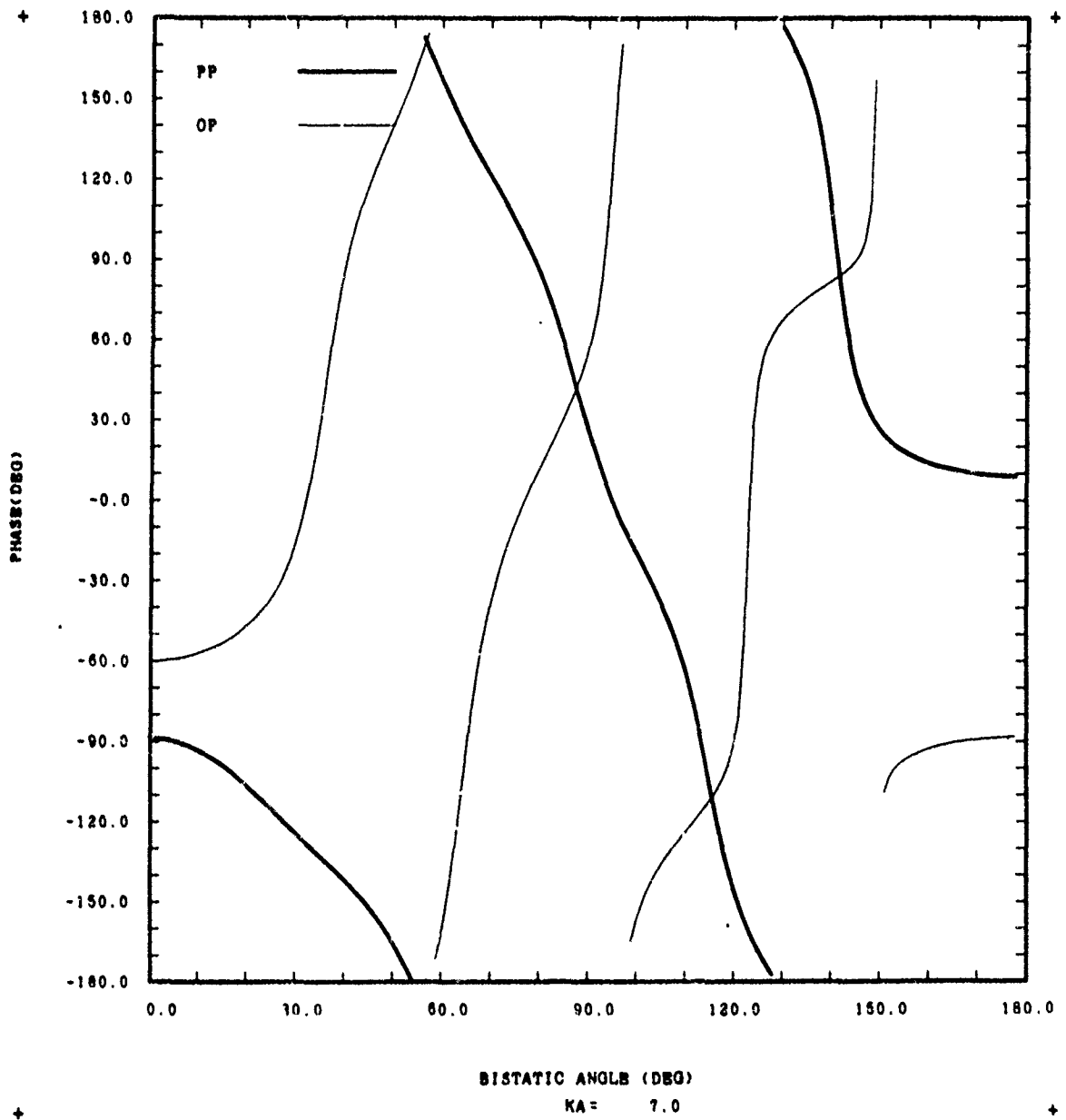


Fig. 14. Phase vs. bistatic angle.

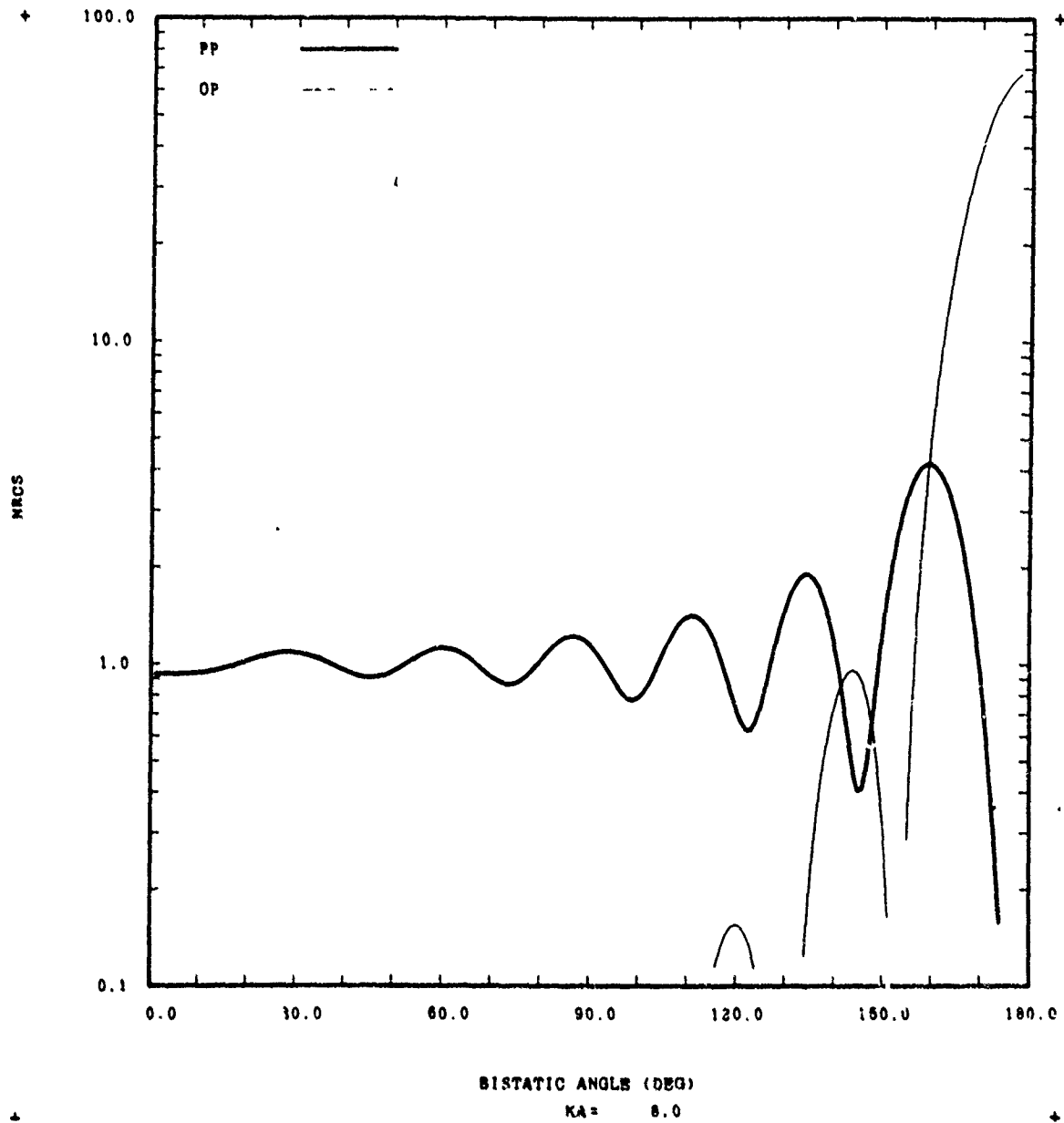


Fig. 15. Normalized radar cross-section vs. bistatic angle.

IN-1976-34 (16)

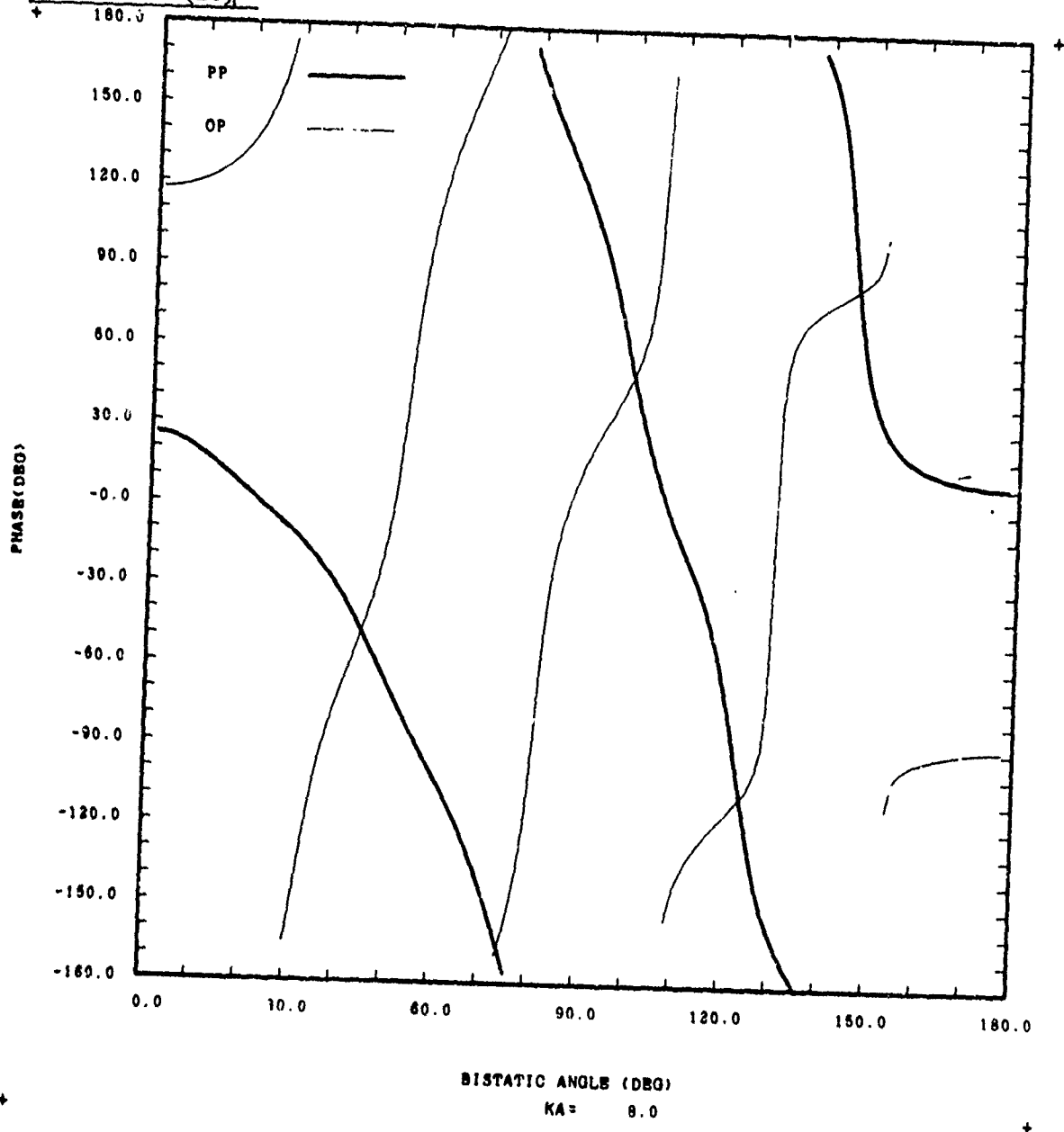


Fig. 16. Phase vs. bistatic angle.

TN-1976-34 (17)

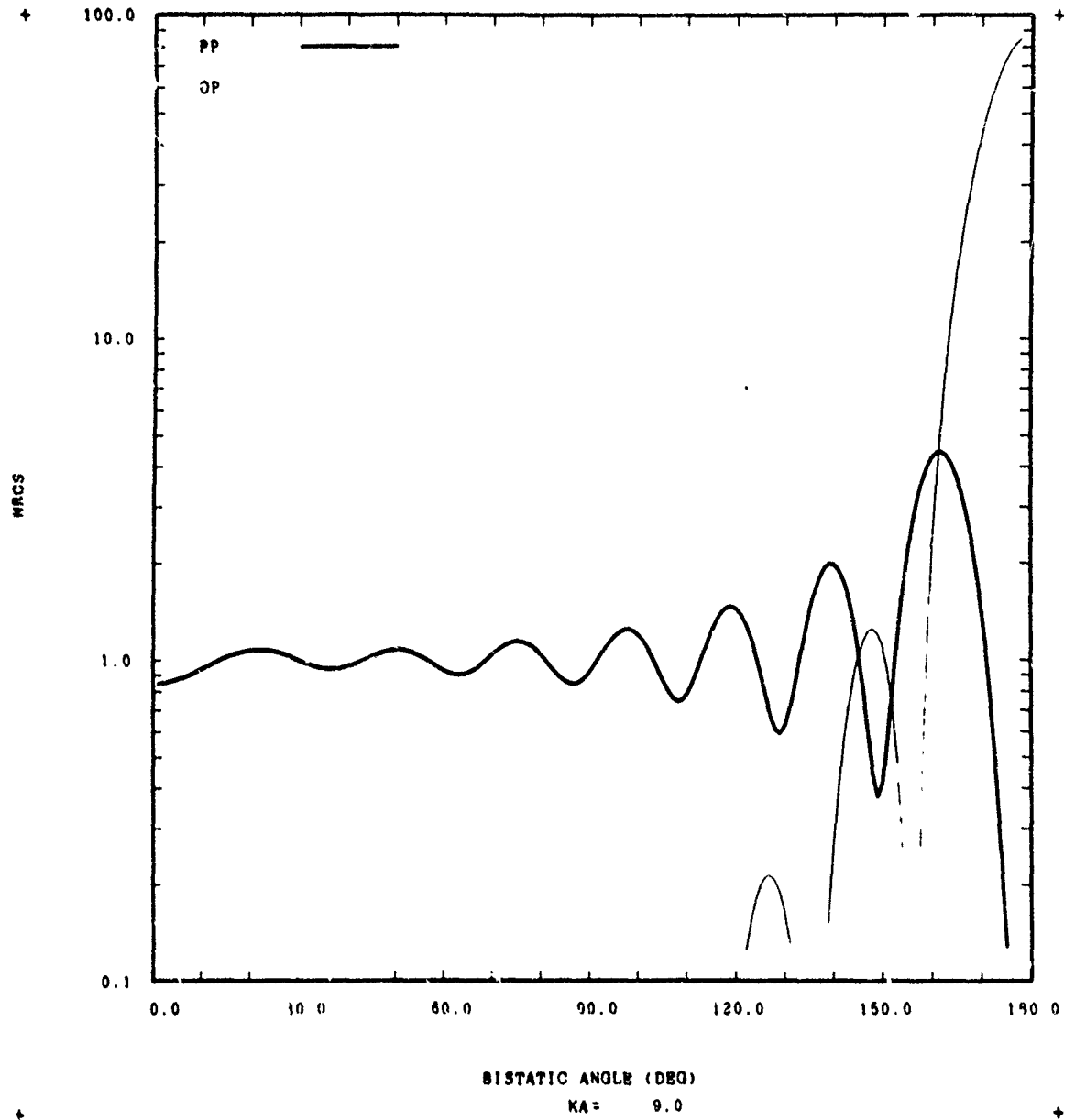


Fig. 17. Normalized radar cross-section vs. bistatic angle.

IN-1976-34 (18)

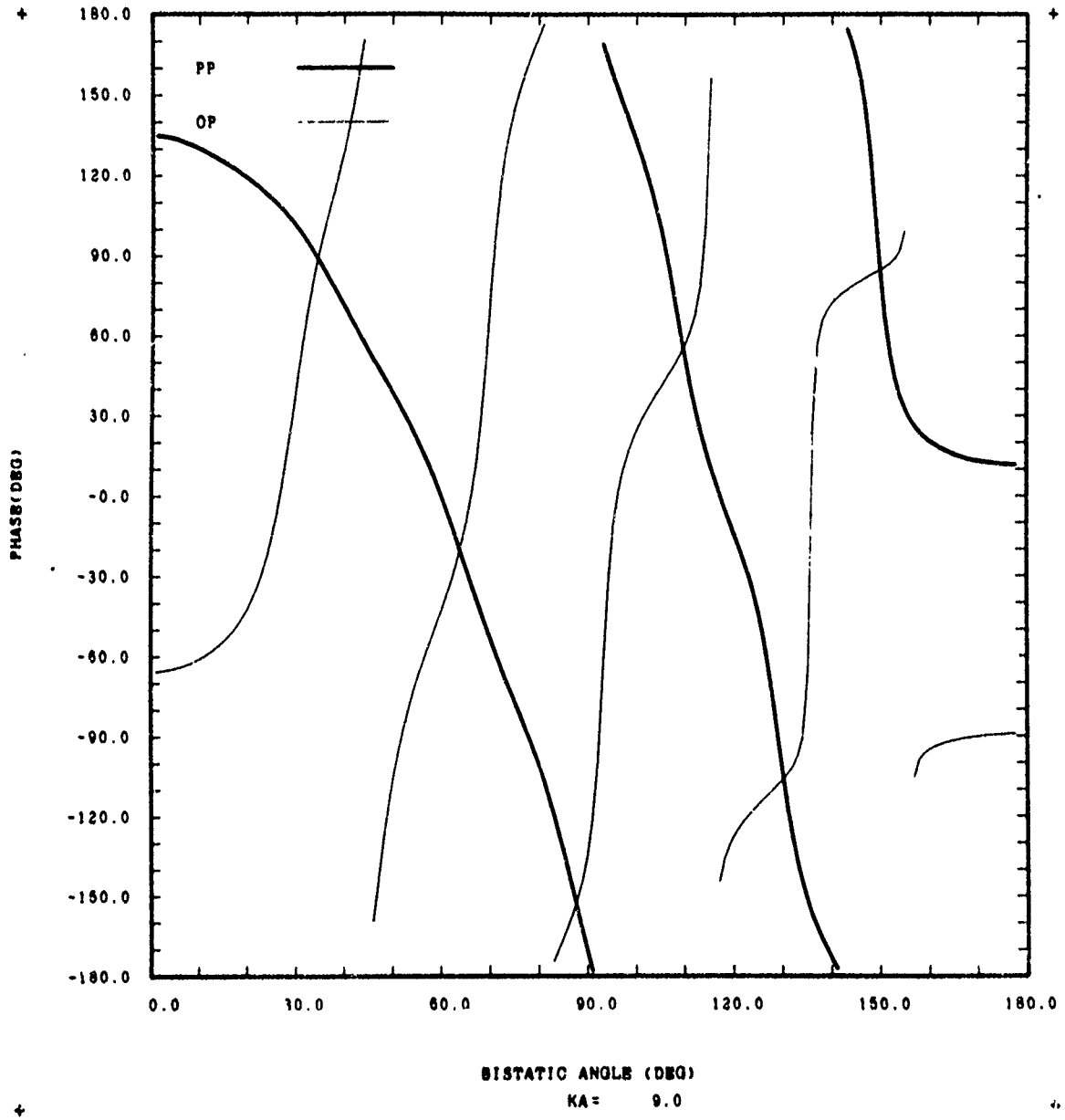


Fig. 18. Phase vs. bistatic angle.

TN-1976-34(19)

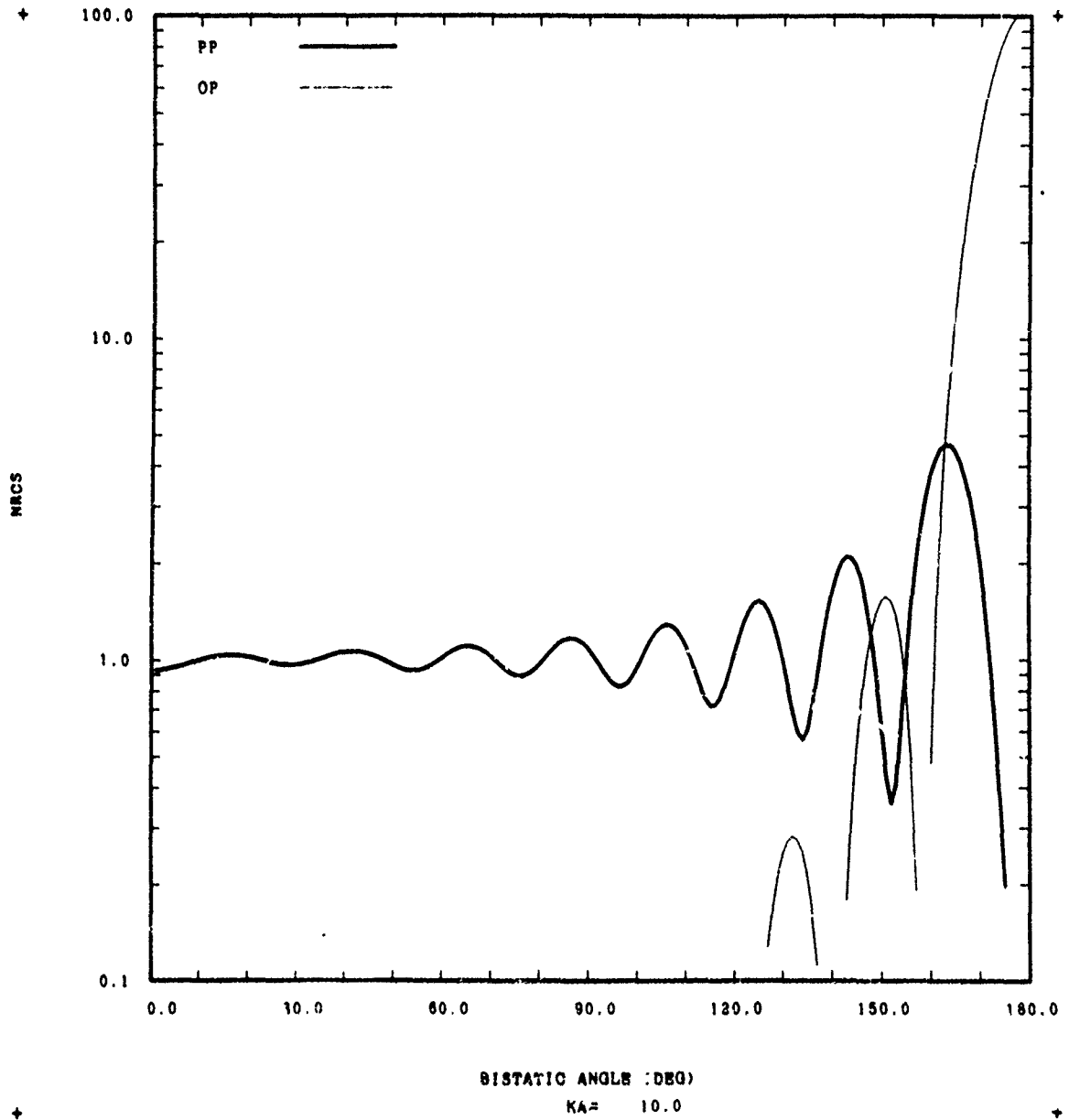


Fig. 19. Normalized radar cross-section vs. bistatic angle.

TN-1976-34(20)

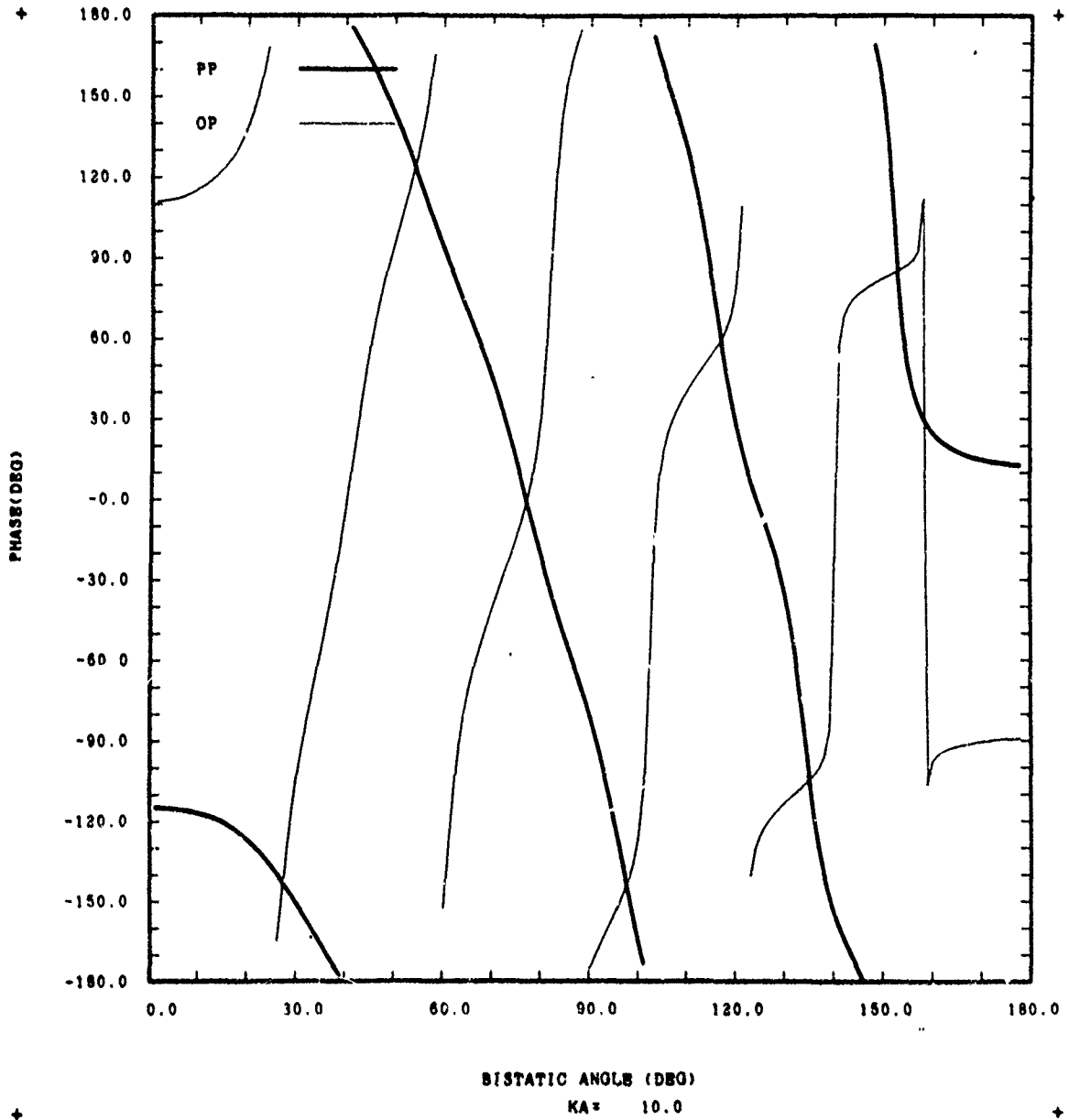


Fig. 20. Phase vs. bistatic angle.

TN-1976-54(21)

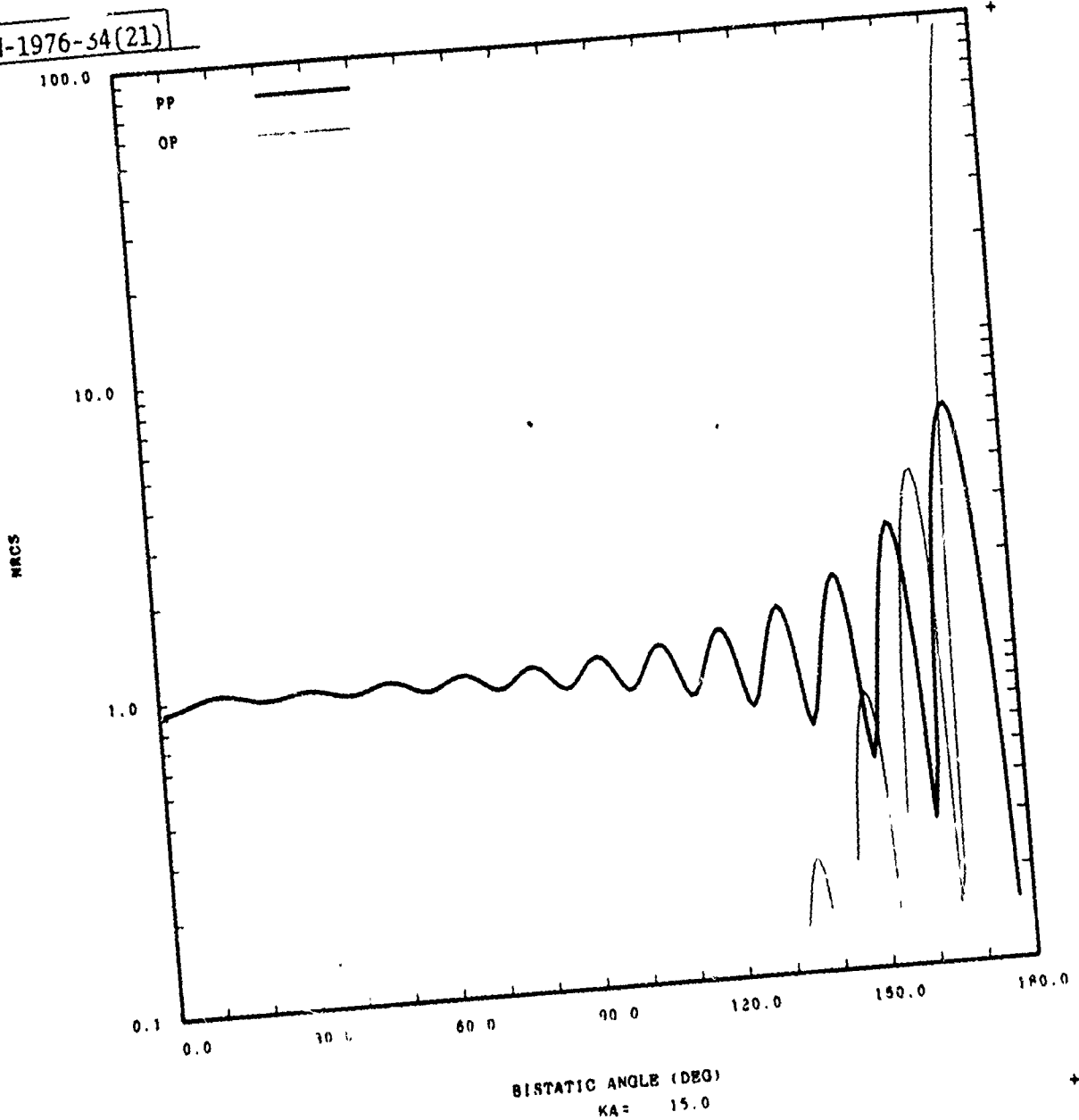


Fig. 21. Normalized radar cross-section vs. bistatic angle.



TN-1976-34(22)

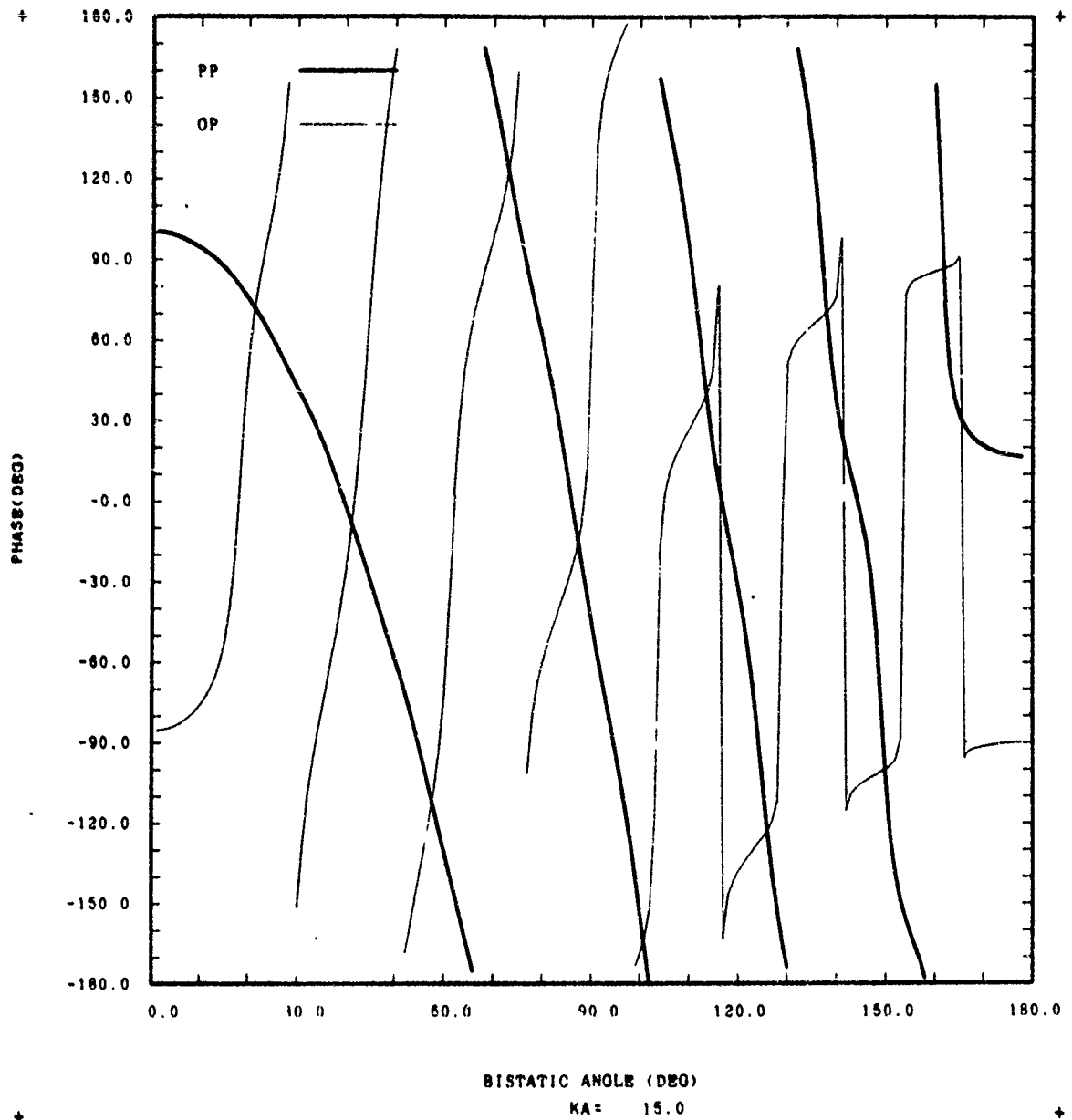


Fig. 22. Phase vs. bistatic angle.

TN-1976-34(23)

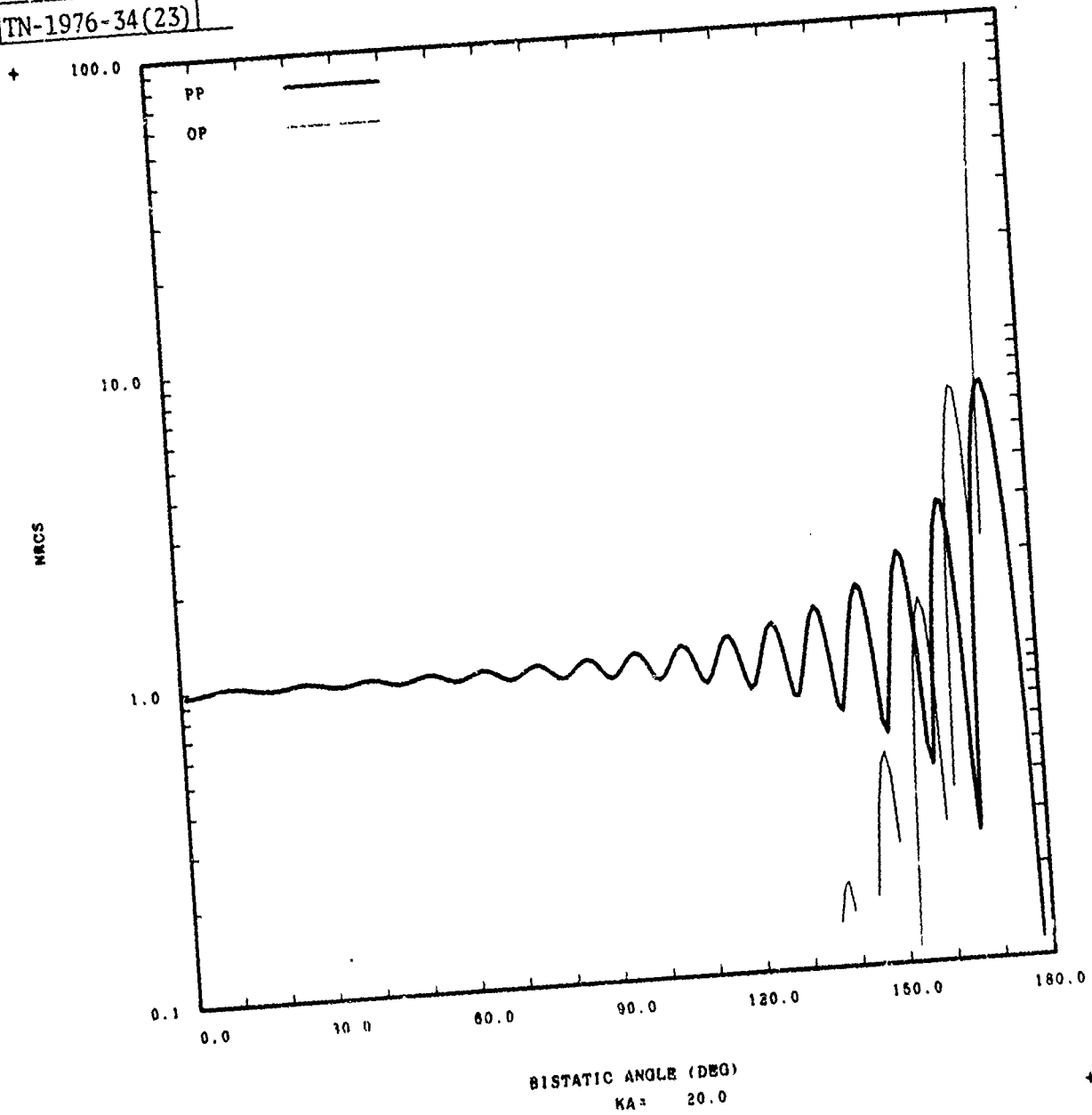


Fig. 23. Normalized radar cross-section vs. bistatic angle.

TN-1976-34(24)

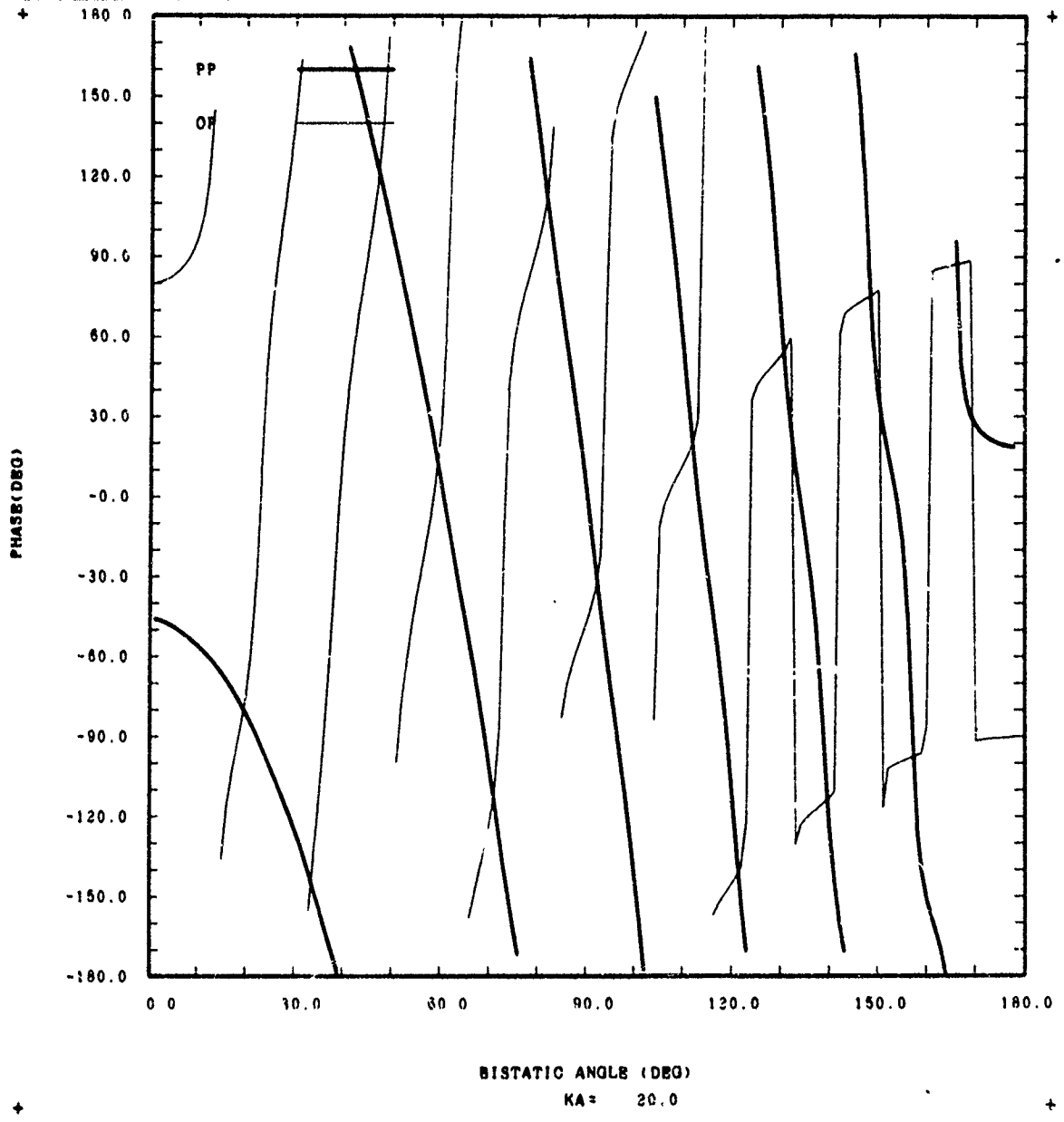


Fig. 24. Phase vs. bistatic angle.

CIRCULAR PP POLARIZATION KA= 1.000

CIRCULAR OP POLARIZATION KA= 1.000

THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
0.0	0.175926D+01	-0.736596D+00	-22.72	3.637567	0.0	-0.603801D-13	-0.698677D-13	-139.00	0.000000
1.0	0.175919D+01	-0.736540D+00	-22.72	3.637245	1.0	0.419748D-04	-0.756618D-04	-60.98	0.000000
2.0	0.175899D+01	-0.736375D+00	-22.72	3.636282	2.0	0.167906D-03	-0.302632D-03	-60.98	0.000000
3.0	0.175865D+01	-0.736099D+00	-22.71	3.634676	3.0	0.377804D-03	-0.680845D-03	-60.97	0.000001
4.0	0.175817D+01	-0.735714D+00	-22.71	3.632427	4.0	0.671686D-03	-0.121020D-02	-60.97	0.000002
5.0	0.175755D+01	-0.735218D+00	-22.70	3.629537	5.0	0.104958D-02	-0.195053D-02	-60.96	0.000005
6.0	0.175680D+01	-0.734612D+00	-22.69	3.626004	6.0	0.151151D-02	-0.272167D-02	-60.95	0.000010
7.0	0.175591D+01	-0.733897D+00	-22.68	3.621829	7.0	0.205752D-02	-0.370336D-02	-60.94	0.000018
8.0	0.175488D+01	-0.733072D+00	-22.67	3.617012	8.0	0.268765D-02	-0.483534D-02	-60.93	0.000031
9.0	0.175372D+01	-0.732138D+00	-22.66	3.611553	9.0	0.340195D-02	-0.611728D-02	-60.92	0.000049
10.0	0.175241D+01	-0.731095D+00	-22.65	3.604853	10.0	0.420048D-02	-0.754882D-02	-60.91	0.000075
11.0	0.175097D+01	-0.729843D+00	-22.63	3.598711	11.0	0.508330D-02	-0.912556D-02	-60.89	0.000109
12.0	0.174939D+01	-0.728683D+00	-22.61	3.593328	12.0	0.605487D-02	-0.108551D-01	-60.87	0.000155
13.0	0.174766D+01	-0.727314D+00	-22.60	3.588305	13.0	0.710208D-02	-0.127368D-01	-60.86	0.000213
14.0	0.174579D+01	-0.725839D+00	-22.58	3.584641	14.0	0.823819D-02	-0.147623D-01	-60.84	0.000286
15.0	0.174379D+01	-0.724256D+00	-22.55	3.582336	15.0	0.945889D-02	-0.169349D-01	-60.81	0.000376
16.0	0.174163D+01	-0.722566D+00	-22.53	3.58103	16.0	0.107643D-01	-0.192541D-01	-60.79	0.000487
17.0	0.173934D+01	-0.720770D+00	-22.51	3.548810	17.0	0.121544D-01	-0.217192D-01	-60.77	0.000619
18.0	0.173690D+01	-0.718869D+00	-22.48	3.53589	18.0	0.136294D-01	-0.243294D-01	-60.74	0.000778
19.0	0.173431D+01	-0.716862D+00	-22.46	3.521730	19.0	0.151893D-01	-0.270841D-01	-60.72	0.000964
20.0	0.173156D+01	-0.714750D+00	-22.43	3.509235	20.0	0.168342D-01	-0.299825D-01	-60.69	0.001182
21.0	0.172870D+01	-0.712535D+00	-22.40	3.496103	21.0	0.185843D-01	-0.330237D-01	-60.66	0.001435
22.0	0.172567D+01	-0.710217D+00	-22.37	3.482337	22.0	0.203796D-01	-0.362069D-01	-60.63	0.001726
23.0	0.172249D+01	-0.707795D+00	-22.34	3.467937	23.0	0.222802D-01	-0.395311D-01	-60.59	0.002059
24.0	0.171916D+01	-0.705272D+00	-22.31	3.452905	24.0	0.242662D-01	-0.429956D-01	-60.56	0.002437
25.0	0.171567D+01	-0.702648D+00	-22.27	3.437242	25.0	0.263378D-01	-0.465991D-01	-60.52	0.002865
26.0	0.171203D+01	-0.699923D+00	-22.24	3.420950	26.0	0.284989D-01	-0.503408D-01	-60.49	0.003346
27.0	0.170824D+01	-0.697098D+00	-22.20	3.405030	27.0	0.307377D-01	-0.542195D-01	-60.45	0.003885
28.0	0.170429D+01	-0.694175D+00	-22.16	3.388484	28.0	0.330662D-01	-0.582342D-01	-60.41	0.004485
29.0	0.170018D+01	-0.691154D+00	-22.12	3.369315	29.0	0.354806D-01	-0.623837D-01	-60.37	0.005151
30.0	0.169592D+01	-0.688035D+00	-22.08	3.349525	30.0	0.379809D-01	-0.666668D-01	-60.33	0.005887
31.0	0.169149D+01	-0.684820D+00	-22.04	3.330117	31.0	0.405671D-01	-0.710824D-01	-60.29	0.006698
32.0	0.168690D+01	-0.681510D+00	-22.00	3.310092	32.0	0.432393D-01	-0.756291D-01	-60.24	0.007589
33.0	0.168215D+01	-0.678106D+00	-21.96	3.289455	33.0	0.459776D-01	-0.803056D-01	-60.20	0.008565
34.0	0.167723D+01	-0.674609D+00	-21.91	3.268208	34.0	0.488420D-01	-0.851107D-01	-60.15	0.009629
35.0	0.167215D+01	-0.671019D+00	-21.87	3.246354	35.0	0.517726D-01	-0.903428D-01	-60.10	0.010788
36.0	0.166690D+01	-0.667338D+00	-21.82	3.223899	36.0	0.547892D-01	-0.951008D-01	-60.05	0.012046
37.0	0.166148D+01	-0.663567D+00	-21.77	3.200845	37.0	0.578921D-01	-0.100283D+00	-60.00	0.013408
38.0	0.165589D+01	-0.659706D+00	-21.72	3.177197	38.0	0.610810D-01	-0.105588D+00	-59.95	0.014880
39.0	0.165013D+01	-0.655758D+00	-21.67	3.152960	39.0	0.643561D-01	-0.110144D+00	-59.90	0.016466
40.0	0.164420D+01	-0.651723D+00	-21.62	3.128139	40.0	0.677172D-01	-0.115609D+00	-59.84	0.018172
41.0	0.163809D+01	-0.647602D+00	-21.57	3.102738	41.0	0.711443D-01	-0.122224D+00	-59.79	0.020003
42.0	0.163181D+01	-0.643397D+00	-21.52	3.076765	42.0	0.746973D-01	-0.129005D+00	-59.73	0.021965
43.0	0.162535D+01	-0.639109D+00	-21.47	3.050224	43.0	0.783162D-01	-0.135900D+00	-59.68	0.024063
44.0	0.161871D+01	-0.634739D+00	-21.41	3.023122	44.0	0.820208D-01	-0.139909D+00	-59.62	0.026302
45.0	0.161189D+01	-0.630288D+00	-21.36	2.995466	45.0	0.858110D-01	-0.146029D+00	-59.56	0.028688



CIRCULAR PF POLARIZATION KA= 1.000					CIRCULAR OP POLARIZATION KA= 1.000				
BETA	REAL	IMAG	PHASE	MCS	BETA	REAL	IMAG	PHASE	MCS
90.0	0.111178D+01	-0.371429D+00	-18.47	1.374020	90.0	0.336795D+00	-0.502870D+00	-56.19	0.366309
91.0	0.109665D+01	-0.365500D+00	-18.41	1.355876	91.0	0.343808D+00	-0.511754D+00	-56.11	0.380096
92.0	0.108139D+01	-0.358572D+00	-18.34	1.297977	92.0	0.350500D+00	-0.520639D+00	-56.02	0.394169
93.0	0.106599D+01	-0.352145D+00	-18.28	1.260345	93.0	0.357480D+00	-0.529523D+00	-55.94	0.408521
94.0	0.105047D+01	-0.345723D+00	-18.22	1.233004	94.0	0.365070D+00	-0.538402D+00	-55.86	0.423153
95.0	0.103482D+01	-0.339306D+00	-18.15	1.195975	95.0	0.372255D+00	-0.547274D+00	-55.78	0.438040
96.0	0.101905D+01	-0.332897D+00	-18.09	1.149283	96.0	0.379450D+00	-0.556137D+00	-55.70	0.453239
97.0	0.100317D+01	-0.326499D+00	-18.03	1.112948	97.0	0.386620D+00	-0.564986D+00	-55.62	0.468685
98.0	0.987178D+00	-0.320112D+00	-17.97	1.076992	98.0	0.393757D+00	-0.573821D+00	-55.54	0.484393
99.0	0.971085D+00	-0.313738D+00	-17.90	1.041438	99.0	0.401117D+00	-0.582637D+00	-55.45	0.500360
100.0	0.954984D+00	-0.307381D+00	-17.84	1.006306	100.0	0.408396D+00	-0.591433D+00	-55.37	0.516580
101.0	0.938611D+00	-0.301041D+00	-17.78	0.971671	101.0	0.415694D+00	-0.600205D+00	-55.29	0.533047
102.0	0.922242D+00	-0.294721D+00	-17.72	0.937391	102.0	0.423007D+00	-0.608951D+00	-55.21	0.549756
103.0	0.905793D+00	-0.288422D+00	-17.66	0.903688	103.0	0.430332D+00	-0.617668D+00	-55.13	0.566700
104.0	0.889269D+00	-0.282147D+00	-17.60	0.870467	104.0	0.437668D+00	-0.626354D+00	-55.06	0.583873
105.0	0.872678D+00	-0.275898D+00	-17.54	0.837686	105.0	0.445012D+00	-0.635005D+00	-54.98	0.601267
106.0	0.856025D+00	-0.269675D+00	-17.48	0.805503	106.0	0.452360D+00	-0.643620D+00	-54.90	0.618876
107.0	0.839317D+00	-0.263482D+00	-17.43	0.773876	107.0	0.459710D+00	-0.652195D+00	-54.82	0.636691
108.0	0.822561D+00	-0.257321D+00	-17.37	0.742821	108.0	0.467059D+00	-0.660728D+00	-54.74	0.654706
109.0	0.805764D+00	-0.251192D+00	-17.31	0.712354	109.0	0.474405D+00	-0.669216D+00	-54.67	0.672910
110.0	0.788933D+00	-0.245098D+00	-17.26	0.682489	110.0	0.481745D+00	-0.677656D+00	-54.59	0.691296
111.0	0.772075D+00	-0.239042D+00	-17.20	0.653280	111.0	0.489075D+00	-0.686046D+00	-54.52	0.709854
112.0	0.755197D+00	-0.233024D+00	-17.15	0.624622	112.0	0.496394D+00	-0.694384D+00	-54.44	0.728575
113.0	0.738306D+00	-0.227047D+00	-17.09	0.596646	113.0	0.503697D+00	-0.702666D+00	-54.37	0.747450
114.0	0.721411D+00	-0.221112D+00	-17.04	0.569324	114.0	0.510983D+00	-0.710890D+00	-54.29	0.766467
115.0	0.704518D+00	-0.215222D+00	-16.99	0.542666	115.0	0.518247D+00	-0.719053D+00	-54.22	0.785618
116.0	0.687636D+00	-0.209377D+00	-16.93	0.516683	116.0	0.525488D+00	-0.727153D+00	-54.14	0.804890
117.0	0.670733D+00	-0.203558D+00	-16.88	0.491381	117.0	0.532702D+00	-0.735180D+00	-54.06	0.824273
118.0	0.653836D+00	-0.197835D+00	-16.83	0.466770	118.0	0.539887D+00	-0.743154D+00	-54.00	0.843756
119.0	0.637133D+00	-0.192140D+00	-16.78	0.442856	119.0	0.547038D+00	-0.751050D+00	-53.93	0.863327
120.0	0.620373D+00	-0.186499D+00	-16.73	0.419644	120.0	0.554153D+00	-0.758873D+00	-53.86	0.882973
121.0	0.603664D+00	-0.180912D+00	-16.68	0.397139	121.0	0.561229D+00	-0.766619D+00	-53.79	0.902684
122.0	0.587014D+00	-0.175383D+00	-16.63	0.375445	122.0	0.568263D+00	-0.774280D+00	-53.72	0.922446
123.0	0.570432D+00	-0.169912D+00	-16.59	0.354262	123.0	0.575252D+00	-0.781877D+00	-53.66	0.942246
124.0	0.553925D+00	-0.164502D+00	-16.54	0.333894	124.0	0.582193D+00	-0.789382D+00	-53.59	0.962072
125.0	0.537503D+00	-0.159155D+00	-16.49	0.314240	125.0	0.589082D+00	-0.796602D+00	-53.52	0.981911
126.0	0.521175D+00	-0.153868D+00	-16.45	0.295299	126.0	0.595916D+00	-0.804134D+00	-53.46	1.001748
127.0	0.504948D+00	-0.148649D+00	-16.40	0.277069	127.0	0.602693D+00	-0.811377D+00	-53.39	1.021571
128.0	0.488810D+00	-0.143470D+00	-16.36	0.259547	128.0	0.609409D+00	-0.818527D+00	-53.33	1.041366
129.0	0.472834D+00	-0.138413D+00	-16.32	0.242730	129.0	0.616061D+00	-0.825585D+00	-53.27	1.061118
130.0	0.456954D+00	-0.133459D+00	-16.27	0.226612	130.0	0.622646D+00	-0.832541D+00	-53.21	1.080813
131.0	0.441231D+00	-0.128457D+00	-16.23	0.211184	131.0	0.629161D+00	-0.839403D+00	-53.15	1.100438
132.0	0.425643D+00	-0.123509D+00	-16.19	0.196446	132.0	0.635603D+00	-0.846160D+00	-53.09	1.119978
133.0	0.410209D+00	-0.118795D+00	-16.15	0.182384	133.0	0.641969D+00	-0.852815D+00	-53.03	1.139417
134.0	0.394937D+00	-0.114078D+00	-16.11	0.168989	134.0	0.648250D+00	-0.859365D+00	-52.97	1.158743
135.0	0.379837D+00	-0.109439D+00	-16.07	0.156253	135.0	0.654459D+00	-0.865807D+00	-52.91	1.177939

CIRCULAR PP POLARIZATION KA= 1.000

THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
135.0	0.79837D+00	-0.109439D+00	-16.07	0.156253	135.0	0.654459D+00	-0.865807D+00	-52.91	1.177939
136.0	0.36497D+00	-0.104879D+00	-16.03	0.144164	136.0	0.560578D+00	-0.872140D+00	-52.86	1.196991
137.0	0.350185D+00	-0.100399D+00	-16.00	0.132710	137.0	0.665608D+00	-0.878361D+00	-52.80	1.215884
138.0	0.335651D+00	-0.960023D-01	-15.96	0.121878	138.0	0.672547D+00	-0.884468D+00	-52.75	1.234604
139.0	0.321322D+00	-0.916888D-01	-15.93	0.111655	139.0	0.678392D+00	-0.890460D+00	-52.70	1.253135
140.0	0.307208D+00	-0.874670D-01	-15.89	0.102026	140.0	0.684140D+00	-0.896338D+00	-52.65	1.271462
141.0	0.293316D+00	-0.833178D-01	-15.86	0.092976	141.0	0.689787D+00	-0.902089D+00	-52.60	1.289571
142.0	0.279656D+00	-0.792631D-01	-15.82	0.084490	142.0	0.695332D+00	-0.907723D+00	-52.55	1.307447
143.0	0.266235D+00	-0.752972D-01	-15.79	0.076551	143.0	0.700771D+00	-0.913233D+00	-52.50	1.325075
144.0	0.253061D+00	-0.714218D-01	-15.76	0.069141	144.0	0.706102D+00	-0.918619D+00	-52.45	1.342440
145.0	0.240142D+00	-0.676370D-01	-15.73	0.062243	145.0	0.711321D+00	-0.923878D+00	-52.41	1.359528
146.0	0.227488D+00	-0.639451D-01	-15.70	0.055880	146.0	0.716427D+00	-0.929009D+00	-52.36	1.376325
147.0	0.215104D+00	-0.603465D-01	-15.67	0.049972	147.0	0.721416D+00	-0.934010D+00	-52.32	1.392815
148.0	0.203000D+00	-0.568437D-01	-15.64	0.044440	148.0	0.726286D+00	-0.938879D+00	-52.28	1.408985
149.0	0.191182D+00	-0.534364D-01	-15.62	0.039406	149.0	0.731034D+00	-0.943615D+00	-52.23	1.424821
150.0	0.179659D+00	-0.501261D-01	-15.59	0.034790	150.0	0.735658D+00	-0.948217D+00	-52.19	1.440309
151.0	0.168437D+00	-0.469140D-01	-15.56	0.030572	151.0	0.740156D+00	-0.952683D+00	-52.16	1.455435
152.0	0.157523D+00	-0.438009D-01	-15.54	0.026732	152.0	0.744525D+00	-0.957011D+00	-52.12	1.470186
153.0	0.146925D+00	-0.407881D-01	-15.52	0.023251	153.0	0.748762D+00	-0.961200D+00	-52.08	1.484549
154.0	0.136650D+00	-0.378763D-01	-15.49	0.020108	154.0	0.752866D+00	-0.965248D+00	-52.05	1.498511
155.0	0.126703D+00	-0.350664D-01	-15.47	0.017293	155.0	0.756834D+00	-0.969155D+00	-52.01	1.512060
156.0	0.117092D+00	-0.323596D-01	-15.45	0.014759	156.0	0.760665D+00	-0.972919D+00	-51.99	1.525183
157.0	0.107823D+00	-0.297564D-01	-15.43	0.012511	157.0	0.764355D+00	-0.976539D+00	-51.95	1.537868
158.0	0.989018D-01	-0.271579D-01	-15.41	0.010525	158.0	0.767904D+00	-0.980014D+00	-51.92	1.550184
159.0	0.903339D-01	-0.248647D-01	-15.39	0.008778	159.0	0.771309D+00	-0.983343D+00	-51.89	1.561880
160.0	0.822569D-01	-0.225770D-01	-15.37	0.007254	160.0	0.774568D+00	-0.986523D+00	-51.86	1.573184
161.0	0.742820D-01	-0.203976D-01	-15.35	0.005934	161.0	0.777680D+00	-0.989556D+00	-51.84	1.584006
162.0	0.668083D-01	-0.183251D-01	-15.34	0.004799	162.0	0.780643D+00	-0.992438D+00	-51.81	1.594337
163.0	0.597096D-01	-0.163608D-01	-15.32	0.003833	163.0	0.783455D+00	-0.995170D+00	-51.79	1.604166
164.0	0.529905D-01	-0.145054D-01	-15.31	0.003018	164.0	0.786114D+00	-0.997752D+00	-51.77	1.613484
165.0	0.466557D-01	-0.127594D-01	-15.30	0.002340	165.0	0.788620D+00	-0.100016D+01	-51.74	1.622283
166.0	0.407092D-01	-0.111235D-01	-15.28	0.001781	166.0	0.790971D+00	-0.100246D+01	-51.73	1.630554
167.0	0.351511D-01	-0.959807D-02	-15.27	0.001328	167.0	0.793166D+00	-0.100458D+01	-51.71	1.638289
168.0	0.299972D-01	-0.818369D-02	-15.26	0.000967	168.0	0.795202D+00	-0.100655D+01	-51.69	1.645482
169.0	0.252390D-01	-0.688079D-02	-15.25	0.000684	169.0	0.797081D+00	-0.100835D+01	-51.67	1.652124
170.0	0.208836D-01	-0.568779D-02	-15.24	0.000468	170.0	0.798799D+00	-0.101002D+01	-51.66	1.658211
171.0	0.169340D-01	-0.461107D-02	-15.23	0.000308	171.0	0.800356D+00	-0.101152D+01	-51.65	1.663736
172.0	0.133929D-01	-0.364496D-02	-15.22	0.000193	172.0	0.801752D+00	-0.101286D+01	-51.64	1.668693
173.0	0.102627D-01	-0.279179D-02	-15.22	0.000113	173.0	0.802986D+00	-0.101405D+01	-51.63	1.673079
174.0	0.754522D-02	-0.205182D-02	-15.21	0.000061	174.0	0.804056D+00	-0.101508D+01	-51.62	1.676848
175.0	0.524233D-02	-0.142530D-02	-15.21	0.000030	175.0	0.804963D+00	-0.101595D+01	-51.61	1.680118
176.0	0.335739D-02	-0.912408D-03	-15.20	0.000012	176.0	0.805769D+00	-0.101665D+01	-51.60	1.682765
177.0	0.188928D-02	-0.513325D-03	-15.20	0.000004	177.0	0.806284D+00	-0.101722D+01	-51.60	1.684826
178.0	0.839920D-03	-0.228175D-03	-15.20	0.000001	178.0	0.806697D+00	-0.101761D+01	-51.59	1.686299
179.0	0.210016D-03	-0.570483D-04	-15.20	0.000000	179.0	0.807045D+00	-0.101785D+01	-51.59	1.687184
180.0	0.946984D-12	0.435419D-12	24.59	0.000000	180.0	0.807027D+00	-0.101793D+01	-51.59	1.687479

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION			
KA= 2.000				KA= 2.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
0.0	0.168582D-01	0.100392D+01	69.04	0.0	-0.603870D-12	0.529909D-12	138.73
1.0	0.173320D-01	0.100370D+01	89.02	1.0	-0.710715D-08	0.850812D-04	129.87
2.0	0.179559D-01	0.100302D+01	86.97	2.0	-0.282262D-03	0.380096D-03	129.89
3.0	0.193280D-01	0.100189D+01	86.82	3.0	-0.639865D-03	0.784353D-03	129.92
4.0	0.212484D-01	0.100031D+01	88.78	4.0	-0.113659D-02	0.135668D-02	129.96
5.0	0.237169D-01	0.998265D+00	88.64	5.0	-0.177538D-02	0.211545D-02	130.00
6.0	0.267329D-01	0.995812D+00	88.46	6.0	-0.255559D-02	0.303859D-02	130.07
7.0	0.302958D-01	0.992893D+00	88.25	7.0	-0.347688D-02	0.412353D-02	130.14
8.0	0.346049D-01	0.989532D+00	88.01	8.0	-0.453887D-02	0.536728D-02	130.22
9.0	0.390593D-01	0.985732D+00	87.73	9.0	-0.578110D-02	0.676637D-02	130.31
10.0	0.442579D-01	0.981496D+00	87.42	10.0	-0.708304D-02	0.831697D-02	130.42
11.0	0.499994D-01	0.976827D+00	87.07	11.0	-0.856410D-02	0.100145D-01	130.54
12.0	0.562832D-01	0.971729D+00	86.69	12.0	-0.101836D-01	0.118545D-01	130.66
13.0	0.631070D-01	0.966208D+00	86.26	13.0	-0.119808D-01	0.128315D-01	130.80
14.0	0.704696D-01	0.960266D+00	85.80	14.0	-0.138349D-01	0.159399D-01	130.96
15.0	0.783690D-01	0.953911D+00	85.30	15.0	-0.158650D-01	0.181737D-01	131.12
16.0	0.868032D-01	0.947146D+00	84.76	16.0	-0.180300D-01	0.205264D-01	131.30
17.0	0.957700D-01	0.939978D+00	84.18	17.0	-0.203289D-01	0.229911D-01	131.48
18.0	0.105267D+00	0.932412D+00	83.56	18.0	-0.227605D-01	0.255608D-01	131.68
19.0	0.115292D+00	0.924456D+00	82.89	19.0	-0.253236D-01	0.282267D-01	131.90
20.0	0.125841D+00	0.916116D+00	82.18	20.0	-0.280166D-01	0.309820D-01	132.12
21.0	0.136911D+00	0.907399D+00	81.42	21.0	-0.308382D-01	0.338179D-01	132.36
22.0	0.148500D+00	0.898312D+00	80.61	22.0	-0.337867D-01	0.367254D-01	132.61
23.0	0.160603D+00	0.888863D+00	79.76	23.0	-0.368604D-01	0.395955D-01	132.88
24.0	0.173216D+00	0.879061D+00	78.85	24.0	-0.400575D-01	0.427188D-01	133.16
25.0	0.186355D+00	0.868913D+00	77.90	25.0	-0.433759D-01	0.457853D-01	133.45
26.0	0.199955D+00	0.858427D+00	76.89	26.0	-0.468135D-01	0.488850D-01	133.76
27.0	0.214071D+00	0.847614D+00	75.83	27.0	-0.503681D-01	0.520074D-01	134.08
28.0	0.228678D+00	0.836482D+00	74.71	28.0	-0.540373D-01	0.551418D-01	134.42
29.0	0.243770D+00	0.825040D+00	73.54	29.0	-0.578186D-01	0.582773D-01	134.77
30.0	0.259342D+00	0.813298D+00	72.31	30.0	-0.617091D-01	0.614025D-01	135.14
31.0	0.275385D+00	0.801266D+00	71.02	31.0	-0.657061D-01	0.645059D-01	135.53
32.0	0.291894D+00	0.788953D+00	69.70	32.0	-0.698066D-01	0.675758D-01	135.93
33.0	0.308860D+00	0.776371D+00	68.31	33.0	-0.740073D-01	0.706002D-01	136.35
34.0	0.326276D+00	0.763530D+00	66.86	34.0	-0.783048D-01	0.735669D-01	136.79
35.0	0.344134D+00	0.750440D+00	65.36	35.0	-0.826957D-01	0.764636D-01	137.24
36.0	0.362424D+00	0.737113D+00	63.82	36.0	-0.871762D-01	0.792777D-01	137.72
37.0	0.381137D+00	0.723559D+00	62.22	37.0	-0.917424D-01	0.819965D-01	138.21
38.0	0.400264D+00	0.709791D+00	60.58	38.0	-0.963902D-01	0.846071D-01	138.72
39.0	0.419792D+00	0.695816D+00	58.90	39.0	-0.101150D+00	0.870965D-01	139.26
40.0	0.439713D+00	0.681653D+00	57.18	40.0	-0.105913D+00	0.894519D-01	139.82
41.0	0.460013D+00	0.667308D+00	55.42	41.0	-0.110779D+00	0.916597D-01	140.40
42.0	0.480681D+00	0.652798D+00	53.63	42.0	-0.115708D+00	0.937069D-01	141.00
43.0	0.501704D+00	0.638123D+00	51.82	43.0	-0.120696D+00	0.955801D-01	141.62
44.0	0.523069D+00	0.623308D+00	50.00	44.0	-0.125735D+00	0.972659D-01	142.28
45.0	0.544761D+00	0.608361D+00	48.16	45.0	-0.130824D+00	0.987510D-01	142.95



CIRCULAR OP POLARIZATION KA= 2.000

CIRCULAR PP POLARIZATION KA= 2.000

THETA	REAL	IMAG	PHASE	MSCS	THETA	REAL	IMAG	PHASE	MSCS
45.0	0.544761D+00	0.608361D+00	48.16	0.666887	45.0	-0.130824D+00	0.987510D-01	142.95	0.026867
46.0	0.566765D+00	0.593293D+00	46.31	0.673219	46.0	-0.135953D+00	0.100222D+00	143.66	0.028488
47.0	0.589067D+00	0.578116D+00	44.46	0.681219	47.0	-0.143118D+00	0.101065D+00	144.39	0.030128
48.0	0.611651D+00	0.562885D+00	42.62	0.690911	48.0	-0.146313D+00	0.01868D+00	145.15	0.031784
49.0	0.634499D+00	0.547490D+00	40.79	0.702334	49.0	-0.151531D+00	0.107417D+00	145.95	0.033451
50.0	0.657595D+00	0.532064D+00	38.98	0.715524	50.0	-0.156765D+00	0.102498D+00	146.77	0.035122
51.0	0.680921D+00	0.516579D+00	37.19	0.730508	51.0	-0.162010D+00	0.102698D+00	147.63	0.036794
52.0	0.704458D+00	0.501048D+00	35.42	0.747311	52.0	-0.167258D+00	0.102805D+00	148.52	0.038462
53.0	0.728187D+00	0.485884D+00	33.69	0.765951	53.0	-0.172502D+00	0.101806D+00	149.45	0.040122
54.0	0.752088D+00	0.469893D+00	32.00	0.786441	54.0	-0.177750D+00	0.100888D+00	150.42	0.041768
55.0	0.776141D+00	0.453303D+00	30.34	0.808786	55.0	-0.182949D+00	0.996379D-01	151.43	0.043398
56.0	0.800324D+00	0.437110D+00	28.73	0.832985	56.0	-0.188137D+00	0.980435D-01	152.47	0.045000
57.0	0.824615D+00	0.421350D+00	27.16	0.859033	57.0	-0.193290D+00	0.965028D-01	153.57	0.046595
58.0	0.848992D+00	0.406056D+00	25.64	0.886974	58.0	-0.198401D+00	0.957737D-01	154.70	0.048167
59.0	0.873433D+00	0.391277D+00	24.17	0.916609	59.0	-0.203462D+00	0.910744D-01	155.89	0.049691
60.0	0.897932D+00	0.376619D+00	22.76	0.948088	60.0	-0.208464D+00	0.879835D-01	157.12	0.051198
61.0	0.922406D+00	0.361225D+00	21.39	0.981316	61.0	-0.213398D+00	0.844897D-01	158.40	0.052677
62.0	0.946890D+00	0.346906D+00	20.07	1.016252	62.0	-0.218256D+00	0.805821D-01	159.74	0.054129
63.0	0.971330D+00	0.332673D+00	18.80	1.052844	63.0	-0.223030D+00	0.762591D-01	161.13	0.05557
64.0	0.995726D+00	0.318559D+00	17.58	1.091035	64.0	-0.227710D+00	0.714834D-01	162.57	0.056962
65.0	0.102002D+01	0.300514D+00	16.42	1.130759	65.0	-0.232288D+00	0.662720D-01	164.08	0.058349
66.0	0.104421D+01	0.285610D+00	15.30	1.171943	66.0	-0.236753D+00	0.606063D-01	165.64	0.059725
67.0	0.106825D+01	0.270631D+00	14.23	1.214507	67.0	-0.241098D+00	0.544771D-01	167.27	0.061096
68.0	0.109212D+01	0.256206D+00	13.20	1.258364	68.0	-0.245313D+00	0.478757D-01	168.96	0.062470
69.0	0.111579D+01	0.241728D+00	12.22	1.303416	69.0	-0.249388D+00	0.407935D-01	170.71	0.063858
70.0	0.113922D+01	0.227443D+00	11.29	1.349563	70.0	-0.253314D+00	0.332227D-01	172.53	0.065272
71.0	0.116242D+01	0.213270D+00	10.40	1.396694	71.0	-0.257082D+00	0.251558D-01	174.41	0.066724
72.0	0.118531D+01	0.199311D+00	9.55	1.444693	72.0	-0.260683D+00	0.165855D-01	176.36	0.068230
73.0	0.120789D+01	0.185544D+00	8.73	1.493436	73.0	-0.264106D+00	0.750547D-02	178.37	0.069808
74.0	0.123013D+01	0.171979D+00	7.96	1.542795	74.0	-0.267343D+00	-0.209053D-02	179.55	0.071476
75.0	0.125199D+01	0.158625D+00	7.22	1.592623	75.0	-0.270384D+00	-0.122081D-01	177.41	0.073256
76.0	0.127344D+01	0.145490D+00	6.52	1.642809	76.0	-0.273219D+00	-0.228522D-01	175.22	0.075171
77.0	0.129445D+01	0.132563D+00	5.85	1.693177	77.0	-0.275841D+00	-0.340276D-01	172.97	0.077246
78.0	0.131499D+01	0.119913D+00	5.21	1.743585	78.0	-0.278238D+00	-0.457391D-01	170.66	0.079508
79.0	0.133504D+01	0.107487D+00	4.60	1.793878	79.0	-0.280403D+00	-0.579473D-01	168.32	0.081988
80.0	0.135455D+01	0.953123D-01	4.02	1.843896	80.0	-0.282326D+00	-0.707781D-01	165.93	0.084718
81.0	0.137351D+01	0.833969D-01	3.47	1.893477	81.0	-0.283999D+00	-0.841127D-01	163.50	0.087730
82.0	0.139187D+01	0.717470D-01	2.95	1.942444	82.0	-0.285422D+00	-0.979429D-01	161.05	0.091063
83.0	0.140962D+01	0.603704D-01	2.45	1.990661	83.0	-0.286556D+00	-0.112420D+00	158.58	0.094754
84.0	0.142671D+01	0.492672D-01	1.98	2.037927	84.0	-0.287427D+00	-0.127394D+00	156.10	0.098844
85.0	0.144312D+01	0.384586D-01	1.53	2.084084	85.0	-0.288013D+00	-0.142915D+00	153.61	0.103376
86.0	0.145883D+01	0.279353D-01	1.10	2.128960	86.0	-0.288307D+00	-0.158983D+00	151.13	0.108396
87.0	0.147380D+01	0.177074D-01	0.69	2.172387	87.0	-0.288301D+00	-0.175596D+00	148.66	0.113951
88.0	0.148800D+01	0.777960D-02	0.30	2.214155	88.0	-0.287988D+00	-0.192753D+00	146.21	0.120091
89.0	0.150141D+01	-0.144314D-02	-0.07	2.254221	89.0	-0.287361D+00	-0.210450D+00	143.78	0.126566
90.0	0.151399D+01	-0.111573D-01	-0.42	2.292360	90.0	-0.286444D+00	-0.228684D+00	141.39	0.133425



CIRCULAR PP POLARIZATION KA= 2.000

THETA	REAL	IMAG	PHASE	MBCS
135.0	0.103586D+01	-0.117629D+00	-6.48	1.086833
136.0	0.100498D+01	-0.114669D+00	-6.51	1.023052
137.0	0.973619D+00	-0.111599D+00	-6.54	0.960387
138.0	0.941948D+00	-0.108426D+00	-6.57	0.898014
139.0	0.909367D+00	-0.105163D+00	-6.59	0.836995
140.0	0.877741D+00	-0.101818D+00	-6.62	0.780797
141.0	0.845321D+00	-0.964003D-01	-6.64	0.724250
142.0	0.812760D+00	-0.929205D-01	-6.66	0.665899
143.0	0.780115D+00	-0.913881D-01	-6.68	0.616932
144.0	0.747424D+00	-0.876127D-01	-6.70	0.566381
145.0	0.714796D+00	-0.842039D-01	-6.72	0.518026
146.0	0.682239D+00	-0.805712D-01	-6.74	0.471942
147.0	0.649824D+00	-0.769241D-01	-6.75	0.428188
148.0	0.617609D+00	-0.732719D-01	-6.77	0.386810
149.0	0.585659D+00	-0.696240D-01	-6.78	0.347838
150.0	0.555018D+00	-0.659893D-01	-6.79	0.311286
151.0	0.522747D+00	-0.623770D-01	-6.80	0.277156
152.0	0.491912D+00	-0.587959D-01	-6.82	0.245434
153.0	0.461563D+00	-0.552546D-01	-6.83	0.216093
154.0	0.431757D+00	-0.517617D-01	-6.84	0.189093
155.0	0.402549D+00	-0.483254D-01	-6.85	0.164381
156.0	0.373995D+00	-0.449550D-01	-6.85	0.141893
157.0	0.346146D+00	-0.416552D-01	-6.86	0.121552
158.0	0.319056D+00	-0.384369D-01	-6.87	0.103274
159.0	0.292776D+00	-0.353063D-01	-6.88	0.086964
160.0	0.267356D+00	-0.322708D-01	-6.88	0.072520
161.0	0.242833D+00	-0.293373D-01	-6.89	0.059834
162.0	0.219266D+00	-0.265123D-01	-6.89	0.048789
163.0	0.196728D+00	-0.238024D-01	-6.90	0.039269
164.0	0.175274D+00	-0.212136D-01	-6.90	0.031150
165.0	0.154785D+00	-0.187517D-01	-6.91	0.024310
166.0	0.135481D+00	-0.164222D-01	-6.91	0.018625
167.0	0.117338D+00	-0.142304D-01	-6.91	0.013971
168.0	0.100393D+00	-0.121810D-01	-6.92	0.010227
169.0	0.846784D-01	-0.102785D-01	-6.92	0.007276
170.0	0.702247D-01	-0.852728D-02	-6.92	0.005004
171.0	0.570603D-01	-0.693106D-02	-6.93	0.003204
172.0	0.452111D-01	-0.549336D-02	-6.93	0.002074
173.0	0.347004D-01	-0.421733D-02	-6.93	0.001222
174.0	0.255489D-01	-0.310577D-02	-6.93	0.000662
175.0	0.177744D-01	-0.216109D-02	-6.93	0.000321
176.0	0.113925D-01	-0.138536D-02	-6.93	0.000132
177.0	0.641569D-02	-0.780251D-03	-6.93	0.000042
178.0	0.285377D-02	-0.347092D-03	-6.93	0.000008
179.0	0.713795D-03	-0.868202D-04	-6.93	0.000001
180.0	0.694930D-03	-0.600209D-04	-40.82	0.000000

CIRCULAR DP POLARIZATION KA= 2.000

THETA	REAL	IMAG	PHASE	MBCS
135.0	0.10401D+00	-0.143214D+01	-85.83	2.061919
136.0	0.118735D+00	-0.146123D+01	-85.35	2.149302
137.0	0.133115D+00	-0.149009D+01	-84.90	2.238095
138.0	0.147525D+00	-0.151869D+01	-84.45	2.328181
139.0	0.161946D+00	-0.154700D+01	-84.02	2.419440
140.0	0.176358D+00	-0.157500D+01	-83.61	2.511743
141.0	0.190744D+00	-0.160268D+01	-83.21	2.604954
142.0	0.205083D+00	-0.162999D+01	-82.83	2.699931
143.0	0.219356D+00	-0.165693D+01	-82.46	2.795377
144.0	0.233548D+00	-0.168346D+01	-82.10	2.888589
145.0	0.247628D+00	-0.170957D+01	-81.76	2.983957
146.0	0.261588D+00	-0.173523D+01	-81.43	3.079468
147.0	0.275405D+00	-0.176043D+01	-81.11	3.174954
148.0	0.289058D+00	-0.178513D+01	-80.80	3.270241
149.0	0.302530D+00	-0.180932D+01	-80.51	3.365154
150.0	0.315800D+00	-0.183297D+01	-80.22	3.459514
151.0	0.328850D+00	-0.185607D+01	-79.95	3.553338
152.0	0.341661D+00	-0.187859D+01	-79.69	3.645843
153.0	0.354218D+00	-0.190052D+01	-79.44	3.737443
154.0	0.366490D+00	-0.192183D+01	-79.20	3.827752
155.0	0.378472D+00	-0.194251D+01	-78.97	3.916583
156.0	0.390142D+00	-0.196253D+01	-78.76	4.003749
157.0	0.401482D+00	-0.198189D+01	-78.55	4.089064
158.0	0.412476D+00	-0.200055D+01	-78.35	4.172345
159.0	0.423107D+00	-0.201851D+01	-78.16	4.253408
160.0	0.433359D+00	-0.203575D+01	-77.98	4.332076
161.0	0.443216D+00	-0.205225D+01	-77.81	4.408170
162.0	0.452668D+00	-0.206800D+01	-77.65	4.481520
163.0	0.461687D+00	-0.208298D+01	-77.50	4.551957
164.0	0.470272D+00	-0.209718D+01	-77.36	4.619319
165.0	0.478407D+00	-0.211059D+01	-77.23	4.683449
166.0	0.486077D+00	-0.212319D+01	-77.11	4.744197
167.0	0.493272D+00	-0.213497D+01	-76.99	4.801420
168.0	0.499980D+00	-0.214593D+01	-76.88	4.854980
169.0	0.506191D+00	-0.215604D+01	-76.79	4.904750
170.0	0.511895D+00	-0.216531D+01	-76.70	4.950609
171.0	0.517083D+00	-0.217372D+01	-76.62	4.992448
172.0	0.521746D+00	-0.218127D+01	-76.55	5.030163
173.0	0.525881D+00	-0.218795D+01	-76.49	5.063663
174.0	0.529476D+00	-0.219375D+01	-76.43	5.092866
175.0	0.532527D+00	-0.219866D+01	-76.38	5.117699
176.0	0.535031D+00	-0.220269D+01	-76.35	5.138101
177.0	0.536982D+00	-0.220583D+01	-76.32	5.154023
178.0	0.538378D+00	-0.220807D+01	-76.30	5.165323
179.0	0.539216D+00	-0.220942D+01	-76.28	5.172752
180.0	0.539946D+00	-0.220987D+01	-76.28	5.174561

CIRCULAR PP POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	NRCS
0.0	-0.721040D+00	0.301678D-01	177.60	0.520765
1.0	-0.721188D+00	0.306128D-01	177.57	0.521049
2.0	-0.721271D+00	0.319487D-01	177.57	0.521901
3.0	-0.722607D+00	0.341671D-01	177.59	0.523329
4.0	-0.723885D+00	0.372693D-01	177.05	0.525331
5.0	-0.725432D+00	0.412470D-01	176.75	0.527953
6.0	-0.727363D+00	0.460922D-01	176.37	0.531181
7.0	-0.729633D+00	0.517951D-01	175.94	0.535047
8.0	-0.732237D+00	0.583440D-01	175.44	0.539575
9.0	-0.735167D+00	0.657259D-01	174.89	0.544791
10.0	-0.738417D+00	0.739255D-01	174.28	0.550725
11.0	-0.741977D+00	0.829265D-01	173.62	0.557406
12.0	-0.745837D+00	0.927165D-01	172.91	0.564868
13.0	-0.749987D+00	0.103258D+00	172.16	0.573143
14.0	-0.754416D+00	0.118587D+00	171.37	0.582264
15.0	-0.759110D+00	0.126554D+00	170.54	0.592263
16.0	-0.764055D+00	0.139257D+00	169.67	0.603173
17.0	-0.769238D+00	0.152628D+00	168.78	0.615022
18.0	-0.774642D+00	0.166641D+00	167.86	0.627839
19.0	-0.780250D+00	0.181268D+00	166.92	0.641648
20.0	-0.786040D+00	0.196478D+00	165.97	0.656469
21.0	-0.792005D+00	0.212241D+00	165.00	0.672318
22.0	-0.798133D+00	0.228525D+00	164.02	0.689208
23.0	-0.804346D+00	0.245277D+00	163.04	0.707143
24.0	-0.810681D+00	0.262524D+00	162.06	0.726123
25.0	-0.817096D+00	0.280169D+00	161.07	0.746140
26.0	-0.823564D+00	0.298198D+00	160.10	0.767180
27.0	-0.830061D+00	0.316574D+00	159.12	0.789220
28.0	-0.836558D+00	0.335259D+00	158.16	0.812228
29.0	-0.843027D+00	0.354217D+00	157.21	0.836165
30.0	-0.849539D+00	0.373408D+00	156.27	0.860981
31.0	-0.855764D+00	0.392795D+00	155.34	0.886619
32.0	-0.861968D+00	0.412337D+00	154.44	0.913010
33.0	-0.868099D+00	0.431995D+00	153.54	0.940077
34.0	-0.873888D+00	0.451730D+00	152.66	0.967732
35.0	-0.879526D+00	0.471502D+00	151.80	0.995980
36.0	-0.884910D+00	0.491271D+00	150.96	1.024813
37.0	-0.890995D+00	0.510996D+00	150.14	1.053216
38.0	-0.896755D+00	0.530680D+00	149.33	1.081216
39.0	-0.899139D+00	0.550161D+00	148.54	1.111228
40.0	-0.903110D+00	0.569522D+00	147.76	1.139963
41.0	-0.906625D+00	0.588682D+00	147.00	1.168523
42.0	-0.909654D+00	0.607608D+00	146.26	1.196424
43.0	-0.912184D+00	0.626289D+00	145.53	1.224194
44.0	-0.914055D+00	0.644581D+00	144.81	1.250981
45.0	-0.915345D+00	0.662563D+00	144.10	1.276846

CIRCULAR OP POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	NRCS
0.0	-0.401623D-13	-0.300245D-12	-97.62	0.000000
1.0	0.105120D-03	-0.104294D-03	-44.77	0.000000
2.0	0.420160D-03	-0.416575D-03	-44.74	0.000000
3.0	0.941340D-03	-0.935022D-03	-44.69	0.000002
4.0	0.161340D-02	-0.165666D-02	-44.61	0.000006
5.0	0.261340D-02	-0.257711D-02	-44.51	0.000014
6.0	0.371091D-02	-0.369112D-02	-44.39	0.000028
7.0	0.512575D-02	-0.499208D-02	-44.24	0.000051
8.0	0.668444D-02	-0.647227D-02	-44.08	0.000087
9.0	0.844980D-02	-0.812288D-02	-43.89	0.000137
10.0	0.104051D-01	-0.993401D-02	-43.67	0.000207
11.0	0.125621D-01	-0.118947D-01	-43.44	0.000299
12.0	0.149133D-01	-0.139920D-01	-43.18	0.000418
13.0	0.174552D-01	-0.162161D-01	-42.89	0.000568
14.0	0.201845D-01	-0.185499D-01	-42.58	0.000752
15.0	0.230971D-01	-0.209800D-01	-42.25	0.000974
16.0	0.261888D-01	-0.234907D-01	-41.89	0.001238
17.0	0.294551D-01	-0.260658D-01	-41.51	0.001547
18.0	0.328908D-01	-0.286883D-01	-41.10	0.001905
19.0	0.364907D-01	-0.313405D-01	-40.66	0.002314
20.0	0.402599D-01	-0.340044D-01	-40.19	0.002776
21.0	0.441593D-01	-0.366612D-01	-39.70	0.003294
22.0	0.482152D-01	-0.392919D-01	-39.18	0.003869
23.0	0.524096D-01	-0.418769D-01	-38.63	0.004500
24.0	0.567350D-01	-0.443966D-01	-38.04	0.005190
25.0	0.611834D-01	-0.468309D-01	-37.43	0.005937
26.0	0.657465D-01	-0.491598D-01	-36.79	0.006739
27.0	0.704154D-01	-0.513632D-01	-36.11	0.007597
28.0	0.751808D-01	-0.534210D-01	-35.40	0.008506
29.0	0.800328D-01	-0.553133D-01	-34.65	0.009465
30.0	0.849612D-01	-0.570203D-01	-33.87	0.010470
31.0	0.899553D-01	-0.585226D-01	-33.05	0.011517
32.0	0.950039D-01	-0.598010D-01	-32.19	0.012602
33.0	0.100095D+00	-0.608371D-01	-31.29	0.013720
34.0	0.105217D+00	-0.616126D-01	-30.35	0.014867
35.0	0.110352D+00	-0.621103D-01	-29.37	0.016036
36.0	0.115503D+00	-0.623133D-01	-28.35	0.017224
37.0	0.120640D+00	-0.622059D-01	-27.28	0.018424
38.0	0.125755D+00	-0.617729D-01	-26.16	0.019630
39.0	0.130833D+00	-0.610005D-01	-25.00	0.020838
40.0	0.135866D+00	-0.598754D-01	-23.78	0.022043
41.0	0.140823D+00	-0.583860D-01	-22.52	0.023240
42.0	0.145703D+00	-0.565216D-01	-21.20	0.024424
43.0	0.150488D+00	-0.542727D-01	-19.83	0.025592
44.0	0.155159D+00	-0.516314D-01	-18.41	0.026740
45.0	0.159703D+00	-0.485912D-01	-16.92	0.027866

CIRCULAR PP POLARIZATION RM= 3.000					CIRCULAR OP POLARIZATION RM= 3.000				
THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
45.0	-0.915345D+00	0.662553D+00	144.10	1.276846	45.0	0.159703D+00	-0.485912D-01	-16.92	0.07866
46.0	-0.915971D+00	0.680160D+00	143.40	1.301619	45.0	0.164102D+00	-0.451468D-01	-15.38	0.028068
47.0	-0.915889D+00	0.657335D+00	142.72	1.325128	47.0	0.168340D+00	-0.412948D-01	-13.78	0.030044
48.0	-0.915055D+00	0.714005D+00	142.03	1.347202	48.0	0.172401D+00	-0.376333D-01	-12.12	0.031094
49.0	-0.913427D+00	0.750286D+00	141.36	1.367670	49.0	0.176268D+00	-0.323618D-01	-10.40	0.032118
50.0	-0.910960D+00	0.748600D+00	140.69	1.386366	50.0	0.179926D+00	-0.272821D-01	-8.62	0.033118
51.0	-0.907611D+00	0.761163D+00	140.02	1.403137	51.0	0.183357D+00	-0.217971D-01	-6.78	0.034095
52.0	-0.903337D+00	0.775745D+00	139.35	1.417798	52.0	0.186546D+00	-0.159121D-01	-4.88	0.035053
53.0	-0.898095D+00	0.789713D+00	138.67	1.430230	53.0	0.189476D+00	-0.96378D-02	-2.91	0.035994
54.0	-0.891844D+00	0.803055D+00	138.00	1.440283	54.0	0.192138D+00	-0.293105D-02	-0.89	0.036923
55.0	-0.884542D+00	0.815731D+00	137.32	1.448781	55.0	0.194597D+00	-0.406544D-02	1.20	0.037845
56.0	-0.876150D+00	0.827720D+00	136.63	1.452759	56.0	0.196557D+00	0.114631D-01	3.34	0.038766
57.0	-0.866628D+00	0.839000D+00	135.93	1.454945	57.0	0.198296D+00	0.192073D-01	5.53	0.039690
58.0	-0.855938D+00	0.849510D+00	135.21	1.454366	58.0	0.199702D+00	0.272814D-01	7.78	0.040625
59.0	-0.844044D+00	0.859351D+00	134.49	1.450894	59.0	0.200759D+00	0.356671D-01	10.07	0.041576
60.0	-0.830971D+00	0.868583D+00	133.74	1.444503	60.0	0.201454D+00	0.443437D-01	12.41	0.042550
61.0	-0.816507D+00	0.876631D+00	132.97	1.435165	61.0	0.201775D+00	0.532888D-01	14.79	0.043553
62.0	-0.800800D+00	0.884078D+00	132.17	1.422875	62.0	0.201709D+00	0.624780D-01	17.21	0.044590
63.0	-0.783761D+00	0.890714D+00	131.35	1.407652	63.0	0.201247D+00	0.718848D-01	19.66	0.045668
64.0	-0.765360D+00	0.896525D+00	130.49	1.389538	64.0	0.200377D+00	0.814809D-01	22.13	0.046790
65.0	-0.745585D+00	0.901502D+00	129.59	1.368602	65.0	0.199090D+00	0.912361D-01	24.62	0.047961
66.0	-0.724402D+00	0.905637D+00	128.66	1.344936	66.0	0.197379D+00	0.101118D+00	27.13	0.049183
67.0	-0.701796D+00	0.908924D+00	127.67	1.318661	67.0	0.195234D+00	0.111094D+00	29.64	0.050458
68.0	-0.677753D+00	0.911359D+00	126.64	1.289924	68.0	0.192652D+00	0.121265D+00	32.16	0.051786
69.0	-0.652259D+00	0.912939D+00	125.54	1.258899	69.0	0.189625D+00	0.131179D+00	34.67	0.053166
70.0	-0.625306D+00	0.913663D+00	124.39	1.225788	70.0	0.186152D+00	0.141213D+00	37.18	0.054593
71.0	-0.596889D+00	0.913532D+00	123.16	1.190817	71.0	0.182228D+00	0.151187D+00	39.68	0.056064
72.0	-0.567004D+00	0.912549D+00	121.85	1.154240	72.0	0.177853D+00	0.161059D+00	42.16	0.057572
73.0	-0.535655D+00	0.910719D+00	120.46	1.116336	73.0	0.173027D+00	0.170786D+00	44.63	0.059106
74.0	-0.502848D+00	0.908047D+00	118.98	1.074406	74.0	0.167752D+00	0.180322D+00	47.07	0.060657
75.0	-0.468592D+00	0.904542D+00	117.39	1.037775	75.0	0.162030D+00	0.189621D+00	49.49	0.062210
76.0	-0.432902D+00	0.900213D+00	115.68	0.997788	76.0	0.155866D+00	0.198637D+00	51.88	0.063751
77.0	-0.395797D+00	0.895072D+00	113.85	0.957809	77.0	0.149266D+00	0.207319D+00	54.25	0.065262
78.0	-0.357299D+00	0.889132D+00	111.89	0.918218	78.0	0.142238D+00	0.215619D+00	56.59	0.066723
79.0	-0.317438D+00	0.882406D+00	109.79	0.879407	79.0	0.134790D+00	0.223487D+00	58.90	0.068115
80.0	-0.276244D+00	0.874912D+00	107.52	0.841781	80.0	0.126934D+00	0.230871D+00	61.20	0.069414
81.0	-0.233755D+00	0.866666D+00	105.09	0.805752	81.0	0.118682D+00	0.237720D+00	63.47	0.070596
82.0	-0.190014D+00	0.857689D+00	102.49	0.771736	82.0	0.110047D+00	0.243981D+00	65.72	0.071637
83.0	-0.145066D+00	0.848000D+00	99.71	0.740188	83.0	0.101454D+00	0.249601D+00	67.96	0.072511
84.0	-0.989630D-01	0.837621D+00	96.74	0.711403	84.0	0.916935D-01	0.254529D+00	70.19	0.073193
85.0	-0.517617D-01	0.826576D+00	93.58	0.685907	85.0	0.820106D-01	0.258711D+00	72.41	0.073657
86.0	-0.352302D-02	0.814888D+00	90.25	0.664055	86.0	0.720168D-01	0.262095D+00	74.64	0.073880
87.0	0.456872D-01	0.802584D+00	86.74	0.646228	87.0	0.617338D-01	0.264626D+00	76.87	0.073838
88.0	0.957982D-01	0.789689D+00	83.08	0.632786	88.0	0.511847D-01	0.266254D+00	79.12	0.073511
89.0	0.146735D+00	0.776232D+00	79.30	0.624067	89.0	0.403443D-01	0.265927D+00	81.39	0.072882
90.0	0.198417D+00	0.762240D+00	75.41	0.620380	90.0	0.293687D-01	0.266592D+00	83.71	0.071935

CIRCULAR OF POLARIZATION KA= 3.000

CIRCULAR PP POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
90.0	0.198417D+00	0.762240D+00	75.41	0.620380	90.0	0.293887D-01	0.266592D+00	83.71	0.071935
91.0	0.250761D+00	0.747745D+00	71.46	0.622003	91.0	0.181954D-01	0.265200D+00	86.08	0.070662
92.0	0.303677D+00	0.732778D+00	67.49	0.629178	92.0	0.684320D-02	0.262702D+00	88.51	0.069059
93.0	0.357073D+00	0.717161D+00	63.54	0.642108	93.0	-0.463799D-02	0.259048D+00	91.03	0.067127
94.0	0.408530D+00	0.701536D+00	59.64	0.660952	94.0	-0.162169D-01	0.254191D+00	93.65	0.064876
95.0	0.454915D+00	0.685331D+00	55.85	0.685824	95.0	-0.278614D-01	0.248086D+00	96.41	0.062323
96.0	0.519155D+00	0.668779D+00	52.18	0.716787	96.0	-0.395382D-01	0.240689D+00	99.33	0.059494
97.0	0.573466D+00	0.651913D+00	48.66	0.753854	97.0	-0.512130D-01	0.231956D+00	102.45	0.056426
98.0	0.627737D+00	0.634767D+00	45.32	0.796982	98.0	-0.628510D-01	0.221847D+00	105.82	0.053166
99.0	0.681855D+00	0.617373D+00	42.16	0.846075	99.0	-0.744165D-01	0.210324D+00	109.48	0.049774
100.0	0.735703D+00	0.599765D+00	39.19	0.900978	100.0	-0.858733D-01	0.197349D+00	113.52	0.046321
101.0	0.789165D+00	0.581978D+00	36.41	0.961479	101.0	-0.971845D-01	0.182889D+00	117.99	0.042893
102.0	0.842119D+00	0.564044D+00	33.61	1.027310	102.0	-0.108313D+00	0.166910D+00	122.58	0.039591
103.0	0.894444D+00	0.545998D+00	31.40	1.098143	103.0	-0.119222D+00	0.149385D+00	128.59	0.036530
104.0	0.945018D+00	0.527871D+00	29.16	1.173596	104.0	-0.129873D+00	0.130287D+00	134.91	0.033841
105.0	0.996717D+00	0.509699D+00	27.09	1.253239	105.0	-0.140229D+00	0.109590D+00	141.99	0.031674
106.0	0.104682D+01	0.491512D+00	25.16	1.336576	106.0	-0.150253D+00	0.872709D-01	149.35	0.030193
107.0	0.109500D+01	0.473432D+00	23.38	1.423075	107.0	-0.159908D+00	0.532333D-01	158.40	0.029580
108.0	0.114233D+01	0.455224D+00	21.77	1.512155	108.0	-0.169157D+00	0.377020D-01	167.43	0.030037
109.0	0.118630D+01	0.437186D+00	20.20	1.603193	109.0	-0.177964D+00	0.104543D-01	176.64	0.031781
110.0	0.123278D+01	0.419258D+00	18.75	1.695531	110.0	-0.186294D+00	-0.184828D-01	-174.33	0.035047
111.0	0.127566D+01	0.401471D+00	17.47	1.788483	111.0	-0.194113D+00	-0.490958D-01	-165.31	0.040090
112.0	0.131681D+01	0.383853D+00	16.25	1.881334	112.0	-0.201386D+00	-0.813860D-01	-157.19	0.047180
113.0	0.135613D+01	0.366431D+00	15.12	1.973355	113.0	-0.208082D+00	-0.113515D+00	-151.90	0.056604
114.0	0.139350D+01	0.349233D+00	14.07	2.063803	114.0	-0.214170D+00	-0.150895D+00	-144.12	0.068665
115.0	0.142882D+01	0.332284D+00	13.09	2.151932	115.0	-0.219619D+00	-0.186827D+00	-139.19	0.083681
116.0	0.146198D+01	0.315609D+00	12.18	2.236997	116.0	-0.224402D+00	-0.227217D+00	-134.64	0.101984
117.0	0.149289D+01	0.299231D+00	11.33	2.318266	117.0	-0.228493D+00	-0.267784D+00	-130.17	0.123917
118.0	0.152146D+01	0.283173D+00	10.54	2.395022	118.0	-0.231865D+00	-0.309950D+00	-126.10	0.149836
119.0	0.154799D+01	0.267475D+00	9.81	2.466575	119.0	-0.234498D+00	-0.353716D+00	-123.54	0.180104
120.0	0.157121D+01	0.252099D+00	9.12	2.532268	120.0	-0.236370D+00	-0.399026D+00	-120.64	0.215993
121.0	0.159225D+01	0.237121D+00	8.47	2.591484	121.0	-0.237463D+00	-0.445858D+00	-118.04	0.255178
122.0	0.161063D+01	0.222540D+00	7.87	2.643651	122.0	-0.237760D+00	-0.494175D+00	-115.69	0.300738
123.0	0.162623D+01	0.208369D+00	7.30	2.688253	123.0	-0.237247D+00	-0.543936D+00	-113.57	0.352152
124.0	0.163919D+01	0.194625D+00	6.77	2.724833	124.0	-0.235914D+00	-0.595097D+00	-111.62	0.403795
125.0	0.164928D+01	0.181320D+00	6.27	2.752998	125.0	-0.233750D+00	-0.647610D+00	-109.85	0.474038
126.0	0.165652D+01	0.168466D+00	5.81	2.772427	126.0	-0.230751D+00	-0.701424D+00	-108.11	0.545241
127.0	0.166088D+01	0.156671D+00	5.37	2.782872	127.0	-0.226911D+00	-0.756484D+00	-106.10	0.623756
128.0	0.166238D+01	0.144146D+00	4.96	2.784163	128.0	-0.222323D+00	-0.812730D+00	-105.29	0.709917
129.0	0.166090D+01	0.132686D+00	4.57	2.776210	129.0	-0.216713D+00	-0.870101D+00	-103.99	0.804040
130.0	0.165656D+01	0.121728D+00	4.20	2.759005	130.0	-0.210361D+00	-0.928530D+00	-102.77	0.906420
131.0	0.164932D+01	0.111245D+00	3.86	2.732622	131.0	-0.203182D+00	-0.987950D+00	-101.62	1.017328
132.0	0.163920D+01	0.101250D+00	3.53	2.697218	132.0	-0.195188D+00	-0.104829D+01	-100.55	1.137003
133.0	0.162623D+01	0.917444D-01	3.21	2.653030	133.0	-0.186391D+00	-0.110947D+01	-99.54	1.265656
134.0	0.161044D+01	0.827282D-01	2.94	2.603374	134.0	-0.176808D+00	-0.117414D+01	-98.58	1.403461
135.0	0.159190D+01	0.741995D-01	2.67	2.550542	135.0	-0.166445D+00	-0.123404D+01	-97.68	1.550552

CIRCULAR PP POLARIZATION KA= 3.000 CIRCULAR OP POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	MBCS	ZETA	REAL	IMAG	PHASE	MBCS
135.0	0.159190D+01	0.731995D-01	2.67	2.539682	135.0	-0.166459D+00	-0.123404D+01	-97.68	1.550552
136.0	0.157064D+01	0.661554D-01	2.41	2.471297	136.0	-0.155334D+00	-0.129726D+01	-96.83	1.707025
137.0	0.154675D+01	0.585918D-01	2.17	2.395867	137.0	-0.143549D+00	-0.136700D+01	-96.02	1.872928
138.0	0.152029D+01	0.515030D-01	1.94	2.313943	138.0	-0.131041D+00	-0.142516D+01	-95.25	2.048264
139.0	0.149136D+01	0.448822D-01	1.72	2.226167	139.0	-0.117871D+00	-0.148956D+01	-94.52	2.237985
140.0	0.146004D+01	0.387215D-01	1.52	2.133228	140.0	-0.104071D+00	-0.155440D+01	-93.83	2.426992
141.0	0.142645D+01	0.330118D-01	1.33	2.035856	141.0	-0.896763D-01	-0.161929D+01	-93.17	2.630130
142.0	0.139070D+01	0.277428D-01	1.14	1.934807	142.0	-0.747248D-01	-0.168422D+01	-92.54	2.842190
143.0	0.135290D+01	0.229032D-01	0.97	1.830861	143.0	-0.592565D-01	-0.174911D+01	-91.94	3.062905
144.0	0.131319D+01	0.184809D-01	0.81	1.724808	144.0	-0.433136D-01	-0.181386D+01	-91.37	3.291950
145.0	0.127170D+01	0.144626D-01	0.65	1.617442	145.0	-0.269403D-01	-0.187355D+01	-90.82	3.528943
146.0	0.122859D+01	0.108344D-01	0.51	1.509550	146.0	-0.101828D-01	-0.194251D+01	-90.30	3.773440
147.0	0.118400D+01	0.758140D-02	0.37	1.401204	147.0	-0.691062D-02	-0.200621D+01	-89.80	4.024941
148.0	0.113868D+01	0.468816D-02	0.24	1.295252	148.0	0.242311D-01	-0.206937D+01	-89.33	4.282887
149.0	0.109101D+01	0.213850D-02	0.11	1.190306	149.0	0.419069D-01	-0.213188D+01	-88.87	4.546663
150.0	0.104295D+01	-0.842936D-04	-0.00	1.087741	150.0	0.597059D-01	-0.219363D+01	-88.44	4.815599
151.0	0.994071D+00	-0.199744D-02	-0.12	0.988162	151.0	0.776347D-01	-0.225454D+01	-88.03	5.094772
152.0	0.985560D+00	-0.361859D-02	-0.22	0.892198	152.0	0.953389D-01	-0.231440D+01	-87.63	5.384006
153.0	0.984581D+00	-0.496570D-02	-0.32	0.800301	153.0	0.113663D+00	-0.237139D+01	-87.26	5.682883
154.0	0.984332D+00	-0.605703D-02	-0.41	0.712333	154.0	0.136533D+00	-0.243113D+01	-86.90	5.927736
155.0	0.979597D+00	-0.691452D-02	-0.50	0.630470	155.0	0.149551D+00	-0.248763D+01	-86.56	6.140661
156.0	0.743746D+00	-0.754614D-02	-0.58	0.553215	156.0	0.167302D+00	-0.254278D+01	-86.24	6.493717
157.0	0.693783D+00	-0.798103D-02	-0.66	0.481398	157.0	0.184849D+00	-0.259691D+01	-85.93	6.775931
158.0	0.644287D+00	-0.823418D-02	-0.73	0.415174	158.0	0.202138D+00	-0.264867D+01	-85.64	7.056306
159.0	0.595445D+00	-0.832398D-02	-0.80	0.354624	159.0	0.219112D+00	-0.269922D+01	-85.36	7.333823
160.0	0.547439D+00	-0.826862D-02	-0.87	0.299757	160.0	0.235718D+00	-0.274807D+01	-85.10	7.607448
161.0	0.500456D+00	-0.808602D-02	-0.93	0.250575	161.0	0.251902D+00	-0.279512D+01	-84.85	7.876138
162.0	0.454656D+00	-0.775373D-02	-0.98	0.206773	162.0	0.267610D+00	-0.284209D+01	-84.62	8.138846
163.0	0.410230D+00	-0.740489D-02	-1.03	0.168344	163.0	0.282793D+00	-0.288350D+01	-84.40	8.394530
164.0	0.367342D+00	-0.694816D-02	-1.08	0.134989	164.0	0.297399D+00	-0.292467D+01	-84.19	8.642155
165.0	0.326156D+00	-0.642762D-02	-1.13	0.106419	165.0	0.311383D+00	-0.296374D+01	-84.00	8.880704
166.0	0.286828D+00	-0.586273D-02	-1.17	0.082306	166.0	0.324696D+00	-0.300063D+01	-83.82	9.109180
167.0	0.249509D+00	-0.526829D-02	-1.21	0.062282	167.0	0.337295D+00	-0.303527D+01	-83.66	9.326617
168.0	0.214333D+00	-0.465832D-02	-1.25	0.045964	168.0	0.349139D+00	-0.306760D+01	-83.51	9.532083
169.0	0.181465D+00	-0.404608D-02	-1.28	0.032936	169.0	0.360187D+00	-0.309757D+01	-83.37	9.724686
170.0	0.151001D+00	-0.344385D-02	-1.31	0.022813	170.0	0.370403D+00	-0.312512D+01	-83.24	9.903581
171.0	0.123071D+00	-0.286230D-02	-1.33	0.015355	171.0	0.379753D+00	-0.315020D+01	-83.11	10.067977
172.0	0.977813D-01	-0.231462D-02	-1.36	0.009567	172.0	0.388206D+00	-0.317276D+01	-83.02	10.217141
173.0	0.752303D-01	-0.180764D-02	-1.38	0.005663	173.0	0.395732D+00	-0.319277D+01	-82.93	10.350400
174.0	0.555055D-01	-0.135076D-02	-1.39	0.003083	174.0	0.402307D+00	-0.321019D+01	-82.86	10.467153
175.0	0.386837D-01	-0.951404D-03	-1.41	0.001497	175.0	0.407908D+00	-0.322498D+01	-82.79	10.566866
176.0	0.248361D-01	-0.615922D-03	-1.42	0.000617	176.0	0.412518D+00	-0.323711D+01	-82.74	10.649083
177.0	0.139968D-01	-0.349535D-03	-1.43	0.000196	177.0	0.416119D+00	-0.324558D+01	-82.70	10.713427
178.0	0.623179D-02	-0.156328D-03	-1.44	0.000039	178.0	0.418700D+00	-0.325353D+01	-82.67	10.759600
179.0	0.594747D-02	-0.352290D-04	-1.44	0.000002	179.0	0.420252D+00	-0.325742D+01	-82.65	10.787390
180.0	0.107560D-11	0.369560D-11	73.77	0.000000	180.0	0.420770D+00	-0.325678D+01	-82.64	10.796668

CIRCULAR PP POLARIZATION KA= 3.000

CIRCULAR OF POLARIZATION KA= 3.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
135.0	0.159190D+01	0.719955D-01	2.67	2.538642	135.0	-0.166459D+00	-0.123404D+01	-97.68	1.550552
136.0	0.157064D+01	0.661554D-01	2.41	2.471297	136.0	-0.155364D+00	-0.129726D+01	-96.83	1.707025
137.0	0.154675D+01	0.585918D-01	2.17	2.395867	137.0	-0.143549D+00	-0.136100D+01	-96.02	1.872928
138.0	0.152029D+01	0.515030D-01	1.94	2.313943	138.0	-0.131041D+00	-0.142516D+01	-95.25	2.048264
139.0	0.149136D+01	0.448822D-01	1.72	2.22167	139.0	-0.117871D+00	-0.148956D+01	-94.52	2.232985
140.0	0.146004D+01	0.387215D-01	1.52	2.133228	140.0	-0.104071D+00	-0.155440D+01	-93.83	2.426992
141.0	0.142645D+01	0.330118D-01	1.33	2.025856	141.0	-0.896763D-01	-0.161929D+01	-93.17	2.630130
142.0	0.139070D+01	0.277428D-01	1.14	1.934807	142.0	-0.747248D-01	-0.168422D+01	-92.54	2.842190
143.0	0.135290D+01	0.229032D-01	0.97	1.830861	143.0	-0.592565D-01	-0.174911D+01	-91.94	3.062905
144.0	0.131319D+01	0.184609D-01	0.81	1.724808	144.0	-0.433136D-01	-0.181386D+01	-91.37	3.291950
145.0	0.127170D+01	0.144626D-01	0.65	1.617442	145.0	-0.269403D-01	-0.187835D+01	-90.82	3.528943
146.0	0.122859D+01	0.108344D-01	0.51	1.509550	146.0	-0.101828D-01	-0.194251D+01	-90.30	3.773440
147.0	0.118600D+01	0.758140D-02	0.37	1.401904	147.0	0.691082D-02	-0.200621D+01	-89.80	4.024941
148.0	0.113608D+01	0.468816D-02	0.24	1.292522	148.0	0.242911D-01	-0.206937D+01	-89.33	4.282887
149.0	0.109101D+01	0.213850D-02	0.11	1.190306	149.0	0.419069D-01	-0.213188D+01	-88.87	4.546663
150.0	0.104295D+01	-0.842936D-04	-0.00	1.087741	150.0	0.597059D-01	-0.219363D+01	-88.44	4.815559
151.0	0.994071D+00	-0.199744D-02	-0.12	0.988182	151.0	0.776387D-01	-0.225448D+01	-88.03	5.092772
152.0	0.945566D+00	-0.361859D-02	-0.22	0.892198	152.0	0.956389D-01	-0.231449D+01	-87.63	5.360000
153.0	0.894561D+00	-0.496570D-02	-0.32	0.803031	153.0	0.113663D+00	-0.237399D+01	-87.26	5.625883
154.0	0.844332D+00	-0.605703D-02	-0.41	0.712933	154.0	0.121663D+00	-0.243113D+01	-86.90	5.927736
155.0	0.793991D+00	-0.691402D-02	-0.50	0.630470	155.0	0.148955D+00	-0.248763D+01	-86.56	6.210661
156.0	0.743746D+00	-0.754614D-02	-0.58	0.553215	156.0	0.167302D+00	-0.254278D+01	-86.24	6.493717
157.0	0.693783D+00	-0.798103D-02	-0.66	0.481398	157.0	0.184849D+00	-0.259849D+01	-85.93	6.775931
158.0	0.644287D+00	-0.823418D-02	-0.73	0.415174	158.0	0.202138D+00	-0.264867D+01	-85.64	7.056306
159.0	0.595445D+00	-0.832398D-02	-0.80	0.354624	159.0	0.219112D+00	-0.269922D+01	-85.36	7.333823
160.0	0.547439D+00	-0.826662D-02	-0.87	0.299757	160.0	0.235718D+00	-0.274807D+01	-85.10	7.607448
161.0	0.500550D+00	-0.808602D-02	-0.93	0.250515	161.0	0.251902D+00	-0.279512D+01	-84.85	7.876138
162.0	0.454656D+00	-0.775373D-02	-0.98	0.205773	162.0	0.267610D+00	-0.284029D+01	-84.62	8.138846
163.0	0.410230D+00	-0.740889D-02	-1.03	0.165844	163.0	0.282793D+00	-0.288350D+01	-84.40	8.394530
164.0	0.367322D+00	-0.694816D-02	-1.08	0.134989	164.0	0.297399D+00	-0.292467D+01	-84.19	8.642155
165.0	0.326156D+00	-0.642762D-02	-1.13	0.106419	165.0	0.311383D+00	-0.296374D+01	-84.00	8.880704
166.0	0.286828D+00	-0.586273D-02	-1.17	0.082304	166.0	0.324696D+00	-0.300063D+01	-83.82	9.109180
167.0	0.249509D+00	-0.526829D-02	-1.21	0.062282	167.0	0.337295D+00	-0.303527D+01	-83.66	9.326617
168.0	0.214343D+00	-0.465832D-02	-1.25	0.045964	168.0	0.349139D+00	-0.306760D+01	-83.51	9.532083
169.0	0.181465D+00	-0.404608D-02	-1.28	0.032946	169.0	0.360187D+00	-0.309757D+01	-83.37	9.724886
170.0	0.151001D+00	-0.344385D-02	-1.31	0.022813	170.0	0.370403D+00	-0.312527D+01	-83.24	9.903581
171.0	0.123071D+00	-0.286320D-02	-1.33	0.015155	171.0	0.379753D+00	-0.315020D+01	-83.13	10.067977
172.0	0.977813D-01	-0.231462D-02	-1.36	0.009567	172.0	0.388206D+00	-0.317276D+01	-83.02	10.217141
173.0	0.752303D-01	-0.180764D-02	-1.38	0.005663	173.0	0.395732D+00	-0.319277D+01	-82.91	10.350400
174.0	0.555055D-01	-0.135076D-02	-1.39	0.003083	174.0	0.402307D+00	-0.321019D+01	-82.80	10.467153
175.0	0.386837D-01	-0.951404D-03	-1.41	0.001497	175.0	0.407908D+00	-0.322498D+01	-82.73	10.566866
176.0	0.248301D-01	-0.615222D-03	-1.42	0.000617	176.0	0.412518D+00	-0.323711D+01	-82.71	10.649083
177.0	0.139988D-01	-0.349535D-03	-1.43	0.000196	177.0	0.416119D+00	-0.324658D+01	-82.70	10.713627
178.0	0.623179D-02	-0.156328D-03	-1.44	0.000030	178.0	0.418700D+00	-0.325335D+01	-82.67	10.759600
179.0	0.155947D-02	-0.392290D-04	-1.44	0.000002	179.0	0.420252D+00	-0.325742D+01	-82.65	10.787390
180.0	0.107560D-11	0.369560D-11	73.77	0.000000	180.0	0.420770D+00	-0.325878D+01	-82.64	10.796668



CIRCULAR OP POLARIZATION KA= 4.000

THETA	REAL	IMAG	PHAS	WRCS	THETA	REAL	IMAG	PHAS	WRCS
0.0	0.672984D-01	-C.8836229D+00	-85.64	0.785329	0.0	0.223463D-10	0.334115D-11	8.50	0.000000
1.0	0.672490D-01	-0.883992D+00	-85.65	0.785965	1.0	-0.131531D-03	0.137652D-03	133.70	0.000000
2.0	0.671003D-01	-0.885061D+00	-85.66	0.787871	2.0	-0.525804D-03	0.543416D-03	133.74	0.000001
3.0	0.668506D-01	-0.886883D+00	-85.69	0.791038	3.0	-0.118183D-02	0.123169D-02	133.82	0.000003
4.0	0.664971D-01	-0.889401D+00	-85.72	0.795456	4.0	-0.209796D-02	0.217849D-02	133.92	0.000009
5.0	0.660359D-01	-0.892605D+00	-85.77	0.801104	5.0	-0.327186D-02	0.338150D-02	134.06	0.000022
6.0	0.654619D-01	-0.896479D+00	-85.84	0.807960	6.0	-0.470054D-02	0.483012D-02	134.22	0.000065
7.0	0.647689D-01	-0.900999D+00	-85.49	0.815993	7.0	-0.638030D-02	0.651158D-02	134.42	0.000083
8.0	0.639498D-01	-0.906135D+00	-85.96	0.825169	8.0	-0.830673D-02	0.841079D-02	134.64	0.000140
9.0	0.629959D-01	-0.911854D+00	-86.05	0.835446	9.0	-0.104747D-01	0.105109D-01	134.90	0.000220
10.0	0.618976D-01	-0.918119D+00	-86.14	0.846773	10.0	-0.128784D-01	0.127929D-01	135.19	0.000330
11.0	0.606443D-01	-0.924899D+00	-86.25	0.859097	11.0	-0.155111D-01	0.152361D-01	135.51	0.000473
12.0	0.592240D-01	-0.932112D+00	-86.36	0.872352	12.0	-0.183656D-01	0.178122D-01	135.87	0.000655
13.0	0.576236D-01	-0.939760D+00	-86.49	0.886469	13.0	-0.214335D-01	0.205152D-01	136.25	0.000880
14.0	0.558288D-01	-0.947761D+00	-86.63	0.901369	14.0	-0.247058D-01	0.233018D-01	136.68	0.001153
15.0	0.538243D-01	-0.956668D+00	-86.78	0.916963	15.0	-0.281728D-01	0.261516D-01	137.13	0.001478
16.0	0.515934D-01	-0.964622D+00	-86.94	0.933158	16.0	-0.318237D-01	0.290371D-01	137.62	0.001856
17.0	0.491185D-01	-0.973363D+00	-87.11	0.949849	17.0	-0.356470D-01	0.319300D-01	138.15	0.002290
18.0	0.463808D-01	-0.982229D+00	-87.30	0.966925	18.0	-0.396302D-01	0.348014D-01	138.71	0.002782
19.0	0.433604D-01	-0.991154D+00	-87.50	0.984267	19.0	-0.437599D-01	0.376219D-01	139.31	0.003330
20.0	0.400362D-01	-0.100007D+01	-87.71	1.001747	20.0	-0.480220D-01	0.403619D-01	139.95	0.003935
21.0	0.363862D-01	-0.100891D+01	-87.93	1.019231	21.0	-0.524012D-01	0.429918D-01	140.63	0.004594
22.0	0.323876D-01	-0.101761D+01	-88.18	1.036579	22.0	-0.568916D-01	0.458210D-01	141.35	0.005304
23.0	0.280163D-01	-0.102609D+01	-88.44	1.053464	23.0	-0.614461D-01	0.478040D-01	142.12	0.006061
24.0	0.232475D-01	-0.103428D+01	-88.71	1.070280	24.0	-0.660770D-01	0.499289D-01	142.92	0.006859
25.0	0.180557D-01	-0.104211D+01	-89.01	1.086328	25.0	-0.707555D-01	0.518294D-01	143.78	0.007693
26.0	0.124147D-01	-0.104951D+01	-89.32	1.101635	26.0	-0.754621D-01	0.534791D-01	144.68	0.008555
27.0	0.0629756D-02	-0.105641D+01	-89.66	1.116043	27.0	-0.801764D-01	0.548527D-01	145.62	0.009437
28.0	-0.323116D-02	-0.106273D+01	-90.02	1.129397	28.0	-0.848773D-01	0.559265D-01	146.62	0.010332
29.0	-0.747503D-02	-0.106841D+01	-90.40	1.141546	29.0	-0.895429D-01	0.566786D-01	147.67	0.011230
30.0	-0.151862D-01	-0.107336D+01	-90.81	1.152340	30.0	-0.941507D-01	0.570887D-01	148.77	0.012123
31.0	-0.234846D-01	-0.107754D+01	-91.25	1.161639	31.0	-0.986775D-01	0.571389D-01	149.93	0.013002
32.0	-0.323982D-01	-0.108086D+01	-91.72	1.169310	32.0	-0.103100D+00	0.568133D-01	151.14	0.013857
33.0	-0.419549D-01	-0.108327D+01	-92.22	1.175232	33.0	-0.107393D+00	0.560984D-01	152.42	0.014660
34.0	-0.521820D-01	-0.108470D+01	-92.75	1.179295	34.0	-0.111532D+00	0.549836D-01	153.76	0.015463
35.0	-0.631061D-01	-0.108509D+01	-93.33	1.181407	35.0	-0.115494D+00	0.534607D-01	155.15	0.016197
36.0	-0.747532D-01	-0.108439D+01	-93.93	1.181407	36.0	-0.119251D+00	0.512458D-01	156.63	0.016876
37.0	-0.871479D-01	-0.108254D+01	-94.50	1.179487	37.0	-0.122781D+00	0.491727D-01	158.17	0.017493
38.0	-0.100314D+00	-0.107949D+01	-95.31	1.175362	38.0	-0.126056D+00	0.464062D-01	159.79	0.018084
39.0	-0.114273D+00	-0.107520D+01	-96.07	1.169103	39.0	-0.129053D+00	0.432893D-01	161.48	0.018523
40.0	-0.129046D+00	-0.106961D+01	-96.88	1.160720	40.0	-0.131746D+00	0.396481D-01	163.25	0.018929
41.0	-0.144650D+00	-0.106270D+01	-97.75	1.150251	41.0	-0.134112D+00	0.355742D-01	165.10	0.019259
42.0	-0.161102D+00	-0.105442D+01	-98.69	1.137760	42.0	-0.136126D+00	0.312110D-01	167.04	0.019511
43.0	-0.178415D+00	-0.104475D+01	-99.69	1.123339	43.0	-0.137766D+00	0.266060D-01	169.07	0.019687
44.0	-0.196598D+00	-0.103366D+01	-100.77	1.107110	44.0	-0.139009D+00	0.215493D-01	171.19	0.019788
45.0	-0.215660D+00	-0.102113D+01	-101.93	1.089220	45.0	-0.139835D+00	0.161748D-01	173.40	0.019815

CIRCULAR PP POLARIZATION KA= 4.000				CIRCULAR OP POLARIZATION KA= 4.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
45.0	-0.215600D+00	-0.102113D+01	-101.93	45.0	-0.139835D+00	0.161748D-01	173.40
46.0	-0.235600D+00	-0.100714D+01	-103.17	46.0	-0.180222D+00	0.105095D-01	175.71
47.0	-0.256430D+00	-0.991687D+00	-104.50	47.0	-0.180153D+00	0.459356D-02	178.13
48.0	-0.278135D+00	-0.974755D+00	-105.93	48.0	-0.139610D+00	-0.156972D-02	-179.36
49.0	-0.300710D+00	-0.956346D+00	-107.46	49.0	-0.139577D+00	-0.791410D-02	-176.73
50.0	-0.324142D+00	-0.936464D+00	-109.09	50.0	-0.137041D+00	-0.144105D-01	-174.00
51.0	-0.348411D+00	-0.915120D+00	-110.84	51.0	-0.134989D+00	-0.210172D-01	-171.15
52.0	-0.373503D+00	-0.892326D+00	-112.71	52.0	-0.132412D+00	-0.276892D-01	-168.19
53.0	-0.399382D+00	-0.868103D+00	-114.71	53.0	-0.129302D+00	-0.343820D-01	-165.11
54.0	-0.426016D+00	-0.842476D+00	-116.82	54.0	-0.125654D+00	-0.410450D-01	-161.91
55.0	-0.453368D+00	-0.815475D+00	-119.07	55.0	-0.121468D+00	-0.476282D-01	-159.59
56.0	-0.481515D+00	-0.787134D+00	-121.45	56.0	-0.116732D+00	-0.540797D-01	-155.14
57.0	-0.510034D+00	-0.757498D+00	-123.95	57.0	-0.111650D+00	-0.603458D-01	-151.57
58.0	-0.539241D+00	-0.726601D+00	-126.58	58.0	-0.105654D+00	-0.663723D-01	-147.86
59.0	-0.568985D+00	-0.694504D+00	-129.32	59.0	-0.993217D-01	-0.721039D-01	-144.02
60.0	-0.599084D+00	-0.661257D+00	-132.16	60.0	-0.924732D-01	-0.774850D-01	-140.04
61.0	-0.629573D+00	-0.626919D+00	-135.12	61.0	-0.851225D-01	-0.824599D-01	-135.91
62.0	-0.660332D+00	-0.591553D+00	-138.14	62.0	-0.772868D-01	-0.869732D-01	-131.63
63.0	-0.691272D+00	-0.555228D+00	-141.23	63.0	-0.689854D-01	-0.909702D-01	-127.17
64.0	-0.722297D+00	-0.518012D+00	-144.35	64.0	-0.602413D-01	-0.943971D-01	-122.54
65.0	-0.753306D+00	-0.479982D+00	-147.50	65.0	-0.510893D-01	-0.972015D-01	-117.72
66.0	-0.784199D+00	-0.441216D+00	-150.64	66.0	-0.415312D-01	-0.993327D-01	-112.69
67.0	-0.814834D+00	-0.401793D+00	-153.75	67.0	-0.316257D-01	-0.100742D+00	-107.43
68.0	-0.845126D+00	-0.361798D+00	-156.82	68.0	-0.213983D-01	-0.101349D+00	-101.92
69.0	-0.874923D+00	-0.321317D+00	-159.83	69.0	-0.108868D-01	-0.101215D+00	-96.14
70.0	-0.904112D+00	-0.280439D+00	-162.77	70.0	-0.129932D-03	-0.100195D+00	-90.07
71.0	-0.932554D+00	-0.239253D+00	-165.61	71.0	-0.104207D-01	-0.982883D-01	-83.71
72.0	-0.960108D+00	-0.197852D+00	-168.36	72.0	0.219446D-01	-0.954624D-01	-77.05
73.0	-0.986632D+00	-0.156329D+00	-171.00	73.0	0.331707D-01	-0.916848D-01	-70.11
74.0	-0.101198D+01	-0.114776D+00	-173.53	74.0	0.444582D-01	-0.869468D-01	-62.92
75.0	-0.103601D+01	-0.732895D-01	-175.95	75.0	0.557563D-01	-0.812159D-01	-55.53
76.0	-0.105856D+01	-0.319626D-01	-178.27	76.0	0.670125D-01	-0.744843D-01	-49.02
77.0	-0.107948D+01	0.911003D-02	179.52	77.0	0.781733D-01	-0.657452D-01	-40.49
78.0	-0.109862D+01	0.498347D-01	177.40	78.0	0.891840D-01	-0.579974D-01	-33.04
79.0	-0.111594D+01	0.901185D-01	175.32	79.0	0.999892D-01	-0.482463D-01	-25.76
80.0	-0.113097D+01	0.129870D+00	173.45	80.0	0.119532D+00	-0.375036D-01	-18.74
81.0	-0.114386D+01	0.168999D+00	171.60	81.0	0.120759D+00	-0.257877D-01	-12.05
82.0	-0.115438D+01	0.207417D+00	169.81	82.0	0.130612D+00	-0.131240D-01	-5.74
83.0	-0.116236D+01	0.245039D+00	168.10	83.0	0.140036D+00	0.552523D-03	0.19
84.0	-0.116769D+01	0.281781D+00	166.43	84.0	0.148977D+00	0.149105D-01	5.72
85.0	-0.117021D+01	0.317563D+00	164.82	85.0	0.157380D+00	0.301950D-01	10.86
86.0	-0.116981D+01	0.352307D+00	163.24	86.0	0.165194D+00	0.462548D-01	15.64
87.0	-0.116636D+01	0.385500D+00	161.69	87.0	0.172369D+00	0.630283D-01	20.09
88.0	-0.115974D+01	0.418391D+00	160.16	88.0	0.178857D+00	0.804466D-01	24.22
89.0	-0.114986D+01	0.449594D+00	158.64	89.0	0.184612D+00	0.984344D-01	28.07
90.0	-0.113662D+01	0.479447D+00	157.13	90.0	0.189592D+00	0.116906D+00	0.049613

CIRCULAR PP POLARIZATION KA= 4.000

THETA	REAL	IMAG	PHASE	FNC	FNC	THETA	REAL	IMAG	PHASE	FNC	FNC
90.0	-0.113662D+01	0.479487D+00	157.13	1.52	03	90.0	0.189592D+00	0.116908D+00	31.66	0.049613	0.049613
91.0	-0.111953D+01	0.508012D+00	155.60	1.512313		91.0	0.193757D+00	0.153777D+00	35.02	0.055977	0.055977
92.0	-0.109972D+01	0.535116D+00	154.05	1.495736		92.0	0.197070D+00	0.154944D+00	38.18	0.062844	0.062844
93.0	-0.107594D+01	0.560752D+00	152.47	1.472087		93.0	0.199501D+00	0.174306D+00	41.18	0.070183	0.070183
94.0	-0.104853D+01	0.584875D+00	150.85	1.448503		94.0	0.201019D+00	0.193751D+00	43.95	0.077948	0.077948
95.0	-0.101788D+01	0.607447D+00	149.16	1.424249		95.0	0.201603D+00	0.213164D+00	46.50	0.086083	0.086083
96.0	-0.982747D+00	0.628435D+00	147.40	1.360721		96.0	0.201232D+00	0.232423D+00	49.11	0.094515	0.094515
97.0	-0.944365D+00	0.646781D+00	145.55	1.311447		97.0	0.199893D+00	0.251398D+00	51.51	0.103158	0.103158
98.0	-0.902285D+00	0.665554D+00	143.59	1.257082		98.0	0.197525D+00	0.269957D+00	53.80	0.111913	0.111913
99.0	-0.856603D+00	0.681846D+00	141.49	1.198406		99.0	0.194275D+00	0.287963D+00	55.99	0.120665	0.120665
100.0	-0.807359D+00	0.696075D+00	139.23	1.136316		100.0	0.189993D+00	0.305274D+00	58.10	0.129289	0.129289
101.0	-0.754567D+00	0.708834D+00	136.79	1.071817		101.0	0.184738D+00	0.321743D+00	60.14	0.137647	0.137647
102.0	-0.698369D+00	0.719924D+00	134.13	1.006009		102.0	0.178520D+00	0.337222D+00	62.10	0.145588	0.145588
103.0	-0.638874D+00	0.729346D+00	131.22	0.940074		103.0	0.171359D+00	0.351561D+00	64.01	0.152959	0.152959
104.0	-0.576123D+00	0.737116D+00	128.01	0.872258		104.0	0.163277D+00	0.364604D+00	65.88	0.159596	0.159596
105.0	-0.510335D+00	0.743244D+00	124.47	0.812853		105.0	0.154304D+00	0.376199D+00	67.70	0.165335	0.165335
106.0	-0.441640D+00	0.747751D+00	120.57	0.754176		106.0	0.144476D+00	0.386188D+00	69.49	0.170015	0.170015
107.0	-0.370212D+00	0.750661D+00	116.25	0.700550		107.0	0.133832D+00	0.394417D+00	71.26	0.173476	0.173476
108.0	-0.296245D+00	0.752006D+00	111.50	0.653275		108.0	0.122419D+00	0.400731D+00	73.01	0.175572	0.175572
109.0	-0.219947D+00	0.751819D+00	106.21	0.613609		109.0	0.110287D+00	0.404977D+00	74.77	0.176169	0.176169
110.0	-0.141545D+00	0.750139D+00	100.69	0.582744		110.0	0.974946D-01	0.407001D+00	76.53	0.175155	0.175155
111.0	-0.612789D-01	0.747009D+00	94.69	0.561777		111.0	0.841015D-01	0.406657D+00	78.32	0.172443	0.172443
112.0	-0.205934D-01	0.742475D+00	88.41	0.551693		112.0	0.701739D-01	0.403798D+00	80.14	0.167978	0.167978
113.0	-0.103802D+00	0.736589D+00	81.98	0.553338		113.0	0.558210D-01	0.398284D+00	82.03	0.161742	0.161742
114.0	0.188032D+00	0.729403D+00	75.54	0.567397		114.0	0.410030D-01	0.389979D+00	84.00	0.153765	0.153765
115.0	0.273080D+00	0.720976D+00	69.26	0.594380		115.0	0.259062D-01	0.378752D+00	86.09	0.144124	0.144124
116.0	0.358549D+00	0.711368D+00	63.25	0.634602		116.0	0.105809D-01	0.364480D+00	88.34	0.132958	0.132958
117.0	0.444154D+00	0.700441D+00	57.63	0.684171		117.0	-0.489165D-02	0.347045D+00	90.81	0.120464	0.120464
118.0	0.529573D+00	0.688860D+00	52.45	0.754976		118.0	-0.204254D-01	0.326340D+00	93.58	0.106915	0.106915
119.0	0.614476D+00	0.676922D+00	47.73	0.834682		119.0	-0.359321D-01	0.302263D+00	96.78	0.092654	0.092654
120.0	0.698531D+00	0.662407D+00	43.48	0.926728		120.0	-0.513225D-01	0.274725D+00	100.58	0.078108	0.078108
121.0	0.781401D+00	0.647873D+00	39.66	1.030327		121.0	-0.665061D-01	0.243642D+00	105.27	0.063785	0.063785
122.0	0.862750D+00	0.632563D+00	36.25	1.144473		122.0	-0.813923D-01	0.208946D+00	111.28	0.050283	0.050283
123.0	0.942281D+00	0.616547D+00	33.20	1.267949		123.0	-0.958907D-01	0.170576D+00	119.34	0.038291	0.038291
124.0	0.101954D+01	0.599899D+00	30.47	1.399346		124.0	-0.109911D+00	0.128484D+00	130.55	0.028589	0.028589
125.0	0.109433D+01	0.582690D+00	28.03	1.537075		125.0	-0.123366D+00	0.826634D-01	146.18	0.022048	0.022048
126.0	0.116627D+01	0.564993D+00	25.85	1.679398		126.0	-0.136169D+00	0.330032D-01	166.38	0.019631	0.019631
127.0	0.123506D+01	0.546880D+00	23.88	1.824445		127.0	-0.148235D+00	-0.204198D-01	-172.16	0.022391	0.022391
128.0	0.130039D+01	0.528420D+00	22.11	1.970249		128.0	-0.159483D+00	-0.176318D-01	-154.11	0.031462	0.031462
129.0	0.136198D+01	0.509684D+00	20.52	2.114779		129.0	-0.169837D+00	-0.138616D+00	-140.78	0.048059	0.048059
130.0	0.141956D+01	0.490740D+00	19.07	2.255967		130.0	-0.179222D+00	-0.203343D+00	-131.39	0.073469	0.073469
131.0	0.147285D+01	0.471655D+00	17.76	2.391753		131.0	-0.187569D+00	-0.271768D+00	-124.51	0.109040	0.109040
132.0	0.152163D+01	0.452494D+00	16.56	2.520113		132.0	-0.194816D+00	-0.34332E+00	-119.54	0.156174	0.156174
133.0	0.156567D+01	0.433318D+00	15.47	2.639099		133.0	-0.200904D+00	-0.419461E+00	-115.59	0.216310	0.216310
134.0	0.160478D+01	0.414189D+00	14.47	2.748675		134.0	-0.205780D+00	-0.499564D+00	-112.43	0.290917	0.290917
135.0	0.163878D+01	0.395164D+00	13.56	2.848751		135.0	-0.209399D+00	-0.571084D+00	-109.82	0.381471	0.381471

CIRCULAR PP POLARIZATION KA= 4.000

CIRCULAR OP POLARIZATION KA= 4.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MR'S
135.0	0.163878D+01	0.395164D+00	13.56	2.841751	135.0	-0.209399D+00	-0.581054D+00	-109.82	0.381871
136.0	0.166752D+01	0.376299D+00	12.72	2.922213	136.0	-0.211722D+00	-0.666799D+00	-107.62	0.489447
137.0	0.169087D+01	0.357644D+00	11.94	2.986952	137.0	-0.212717E+00	-0.755674D+00	-105.72	0.616291
138.0	0.170878D+01	0.339250D+00	11.23	3.038896	138.0	-0.212330D+00	-0.847535D+00	-104.07	0.763412
139.0	0.172107D+01	0.321162D+00	10.57	3.052218	139.0	-0.210633D+00	-0.942224D+00	-102.60	0.932152
140.0	0.172780D+01	0.303462D+00	9.96	3.077365	140.0	-0.207528D+00	-0.103957D+01	-101.29	1.123774
141.0	0.172894D+01	0.286507D+00	9.40	3.071062	141.0	-0.203045D+00	-0.113939D+01	-100.10	1.339435
142.0	0.172450D+01	0.269142D+00	8.87	3.063322	142.0	-0.197190D+00	-0.124148D+01	-99.03	1.580168
143.0	0.171453D+01	0.252669D+00	8.38	3.063442	143.0	-0.189980D+00	-0.134550D+01	-96.04	1.846862
144.0	0.169911D+01	0.236681D+00	7.93	2.983006	144.0	-0.181437D+00	-0.145165D+01	-97.12	2.180239
145.0	0.167837D+01	0.221203D+00	7.51	2.865862	145.0	-0.171594D+00	-0.155029D+01	-96.28	2.460835
146.0	0.165243D+01	0.206256D+00	7.11	2.773067	146.0	-0.160491D+00	-0.166830D+01	-95.49	2.808984
147.0	0.162148D+01	0.191859D+00	6.75	2.666004	147.0	-0.1480175D+00	-0.177844D+01	-94.76	3.184796
148.0	0.158571D+01	0.178027D+00	6.41	2.546184	148.0	-0.134704D+00	-0.188944D+01	-94.08	3.588146
149.0	0.154537D+01	0.164770D+00	6.09	2.415310	149.0	-0.120138D+00	-0.200106D+01	-93.44	4.018660
150.0	0.150070D+01	0.152098D+00	5.79	2.275224	150.0	-0.104550D+00	-0.211300D+01	-92.83	4.475702
151.0	0.145199D+01	0.140016D+00	5.51	2.127866	151.0	-0.0880152D-01	-0.222500D+01	-92.27	4.958365
152.0	0.139954D+01	0.128525D+00	5.25	1.975239	152.0	-0.0706177D-01	-0.233677D+01	-91.73	5.465470
153.0	0.134370D+01	0.117626D+00	5.00	1.819370	153.0	-0.0524465D-01	-0.244802D+01	-91.23	5.995555
154.0	0.128481D+01	0.107315D+00	4.77	1.662263	154.0	-0.0335964D-01	-0.255847D+01	-90.75	6.546886
155.0	0.122325D+01	0.975854D-01	4.56	1.505867	155.0	-0.0141668D-01	-0.266782D+01	-90.30	7.117451
156.0	0.115940D+01	0.884302D-01	4.36	1.352037	156.0	0.057384E-02	-0.277578D+01	-89.88	7.704373
157.0	0.109367D+01	0.798386D-01	4.18	1.202098	157.0	0.260118D-01	-0.288206D+01	-89.48	8.306919
158.0	0.102648D+01	0.717986D-01	4.00	1.056815	158.0	0.665428D-01	-0.298636D+01	-89.11	8.920516
159.0	0.952445D+00	0.642964D-01	3.84	0.922367	159.0	0.672187D-01	-0.308811D+01	-88.75	9.542765
160.0	0.889402D+00	0.573164D-01	3.69	0.794321	160.0	0.879248D-01	-0.318790D+01	-88.42	10.170463
161.0	0.823905D+00	0.508422D-01	3.55	0.675625	161.0	0.108546D+00	-0.328458D+01	-88.11	10.800231
162.0	0.751647D+00	0.448561D-01	3.42	0.566985	162.0	0.128965D+00	-0.337815D+01	-87.81	11.428535
163.0	0.683611D+00	0.392395D-01	3.29	0.468871	163.0	0.149065D+00	-0.346036D+01	-87.54	12.051720
164.0	0.616716D+00	0.342735D-01	3.18	0.381512	164.0	0.168742D+00	-0.355094D+01	-87.28	12.666038
165.0	0.551389D+00	0.296387D-01	3.08	0.304909	165.0	0.187072D+00	-0.363744D+01	-87.04	13.267687
166.0	0.485049D+00	0.254156D-01	2.98	0.238838	166.0	0.206350D+00	-0.371622D+01	-86.82	13.852841
167.0	0.421020D+00	0.215847D-01	2.89	0.182882	167.0	0.224089D+00	-0.379045D+01	-86.62	14.417690
168.0	0.368938D+00	0.181269D-01	2.81	0.136444	168.0	0.240927D+00	-0.386011D+01	-86.44	14.958478
169.0	0.319932D+00	0.150237D-01	2.74	0.098779	169.0	0.256826D+00	-0.392499D+01	-86.24	15.471536
170.0	0.262437D+00	0.122570D-01	2.67	0.069023	170.0	0.271674D+00	-0.398491D+01	-86.11	15.953325
171.0	0.214784D+00	0.980990D-02	2.62	0.046228	171.0	0.285384D+00	-0.403948D+01	-85.94	16.400471
172.0	0.171281D+00	0.766642D-02	2.56	0.029356	172.0	0.297877D+00	-0.408914D+01	-85.81	16.809296
173.0	0.132209D+00	0.581185D-02	2.52	0.017513	173.0	0.309079D+00	-0.413334D+01	-85.71	17.178359
174.0	0.978204D-01	0.423282D-02	2.44	0.009587	174.0	0.318924D+00	-0.417158D+01	-85.61	17.503483
175.0	0.683368D-01	0.291748D-02	2.44	0.004678	175.0	0.327355D+00	-0.420424D+01	-85.55	17.782784
176.0	0.439490D-01	0.185561D-02	2.42	0.001935	176.0	0.334323D+00	-0.423113D+01	-85.49	18.014201
177.0	0.248151D-01	0.103868D-02	2.40	0.000617	177.0	0.339370D+00	-0.425212D+01	-85.43	18.196612
178.0	0.110588D-01	0.460014D-03	2.38	0.000123	178.0	0.343707D+00	-0.426717D+01	-85.39	18.326561
179.0	0.276918D-02	0.114759D-03	2.37	0.000008	179.0	0.346071D+00	-0.427621D+01	-85.37	18.405765
180.0	0.291099D-09	0.428105D-10	8.37	0.000000	180.0	0.346861D+00	-0.427923D+01	-85.37	18.432133

CIRCULAR PP POLARIZATION RA= 5.000				CIRCULAR OP POLARIZATION RA= 5.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
0.0	0.934424D+00	0.543773D+00	30.20	0.0	0.185398D-11	-0.284418D-11	-55.90
1.0	0.934396D+00	0.543821D+00	30.20	1.0	0.142189D-03	-0.175871D-03	-51.04
2.0	0.934312D+00	0.543961D+00	30.21	2.0	0.568157D-02	-0.701391D-03	-50.99
3.0	0.934178D+00	0.544182D+00	30.22	3.0	0.127670D-02	-0.157026D-02	-50.90
4.0	0.933980D+00	0.544466D+00	30.24	4.0	0.226286D-02	-0.277204D-02	-50.77
5.0	0.933733D+00	0.544787D+00	30.26	5.0	0.352420D-02	-0.429236D-02	-50.61
6.0	0.933433D+00	0.545115D+00	30.28	6.0	0.505454D-02	-0.611256D-02	-50.41
7.0	0.933082D+00	0.545411D+00	30.31	7.0	0.684731D-02	-0.821086D-02	-50.18
8.0	0.932681D+00	0.545629D+00	30.33	8.0	0.889343D-02	-0.105616D-01	-49.90
9.0	0.932232D+00	0.545720D+00	30.34	9.0	0.111843D-01	-0.131359D-01	-49.59
10.0	0.931737D+00	0.545627D+00	30.35	10.0	0.137088D-01	-0.159021D-01	-49.24
11.0	0.931200D+00	0.545289D+00	30.35	11.0	0.164546D-01	-0.188256D-01	-48.84
12.0	0.930623D+00	0.544641D+00	30.34	12.0	0.194081D-01	-0.218637D-01	-48.41
13.0	0.930010D+00	0.543612D+00	30.31	13.0	0.225541D-01	-0.249937D-01	-47.94
14.0	0.929365D+00	0.542129D+00	30.26	14.0	0.258761D-01	-0.281634D-01	-47.42
15.0	0.928692D+00	0.540117D+00	30.18	15.0	0.293561D-01	-0.313313D-01	-46.85
16.0	0.927997D+00	0.537496D+00	30.08	16.0	0.329745D-01	-0.344572D-01	-46.26
17.0	0.927283D+00	0.534187D+00	29.95	17.0	0.367104D-01	-0.374988D-01	-45.61
18.0	0.926557D+00	0.530110D+00	29.78	18.0	0.405413D-01	-0.404138D-01	-44.91
19.0	0.925822D+00	0.525183D+00	29.56	19.0	0.444434D-01	-0.431604D-01	-44.16
20.0	0.925093D+00	0.519326D+00	29.31	20.0	0.483916D-01	-0.456982D-01	-43.36
21.0	0.924367D+00	0.512460D+00	29.00	21.0	0.523587D-01	-0.479879D-01	-42.51
22.0	0.923648D+00	0.504608D+00	28.64	22.0	0.563176D-01	-0.499923D-01	-41.59
23.0	0.922929D+00	0.495394D+00	28.22	23.0	0.602389D-01	-0.516767D-01	-40.63
24.0	0.922212D+00	0.485068D+00	27.74	24.0	0.640927D-01	-0.530089D-01	-39.59
25.0	0.921555D+00	0.473403D+00	27.19	25.0	0.678476D-01	-0.539600D-01	-38.50
26.0	0.921055D+00	0.460396D+00	26.56	26.0	0.714724D-01	-0.545087D-01	-37.33
27.0	0.920698D+00	0.445972D+00	25.85	27.0	0.749341D-01	-0.546216D-01	-36.09
28.0	0.919986D+00	0.430078D+00	25.06	28.0	0.781998D-01	-0.542932D-01	-34.77
29.0	0.919524D+00	0.412671D+00	24.17	29.0	0.812365D-01	-0.535067D-01	-33.37
30.0	0.919112D+00	0.393714D+00	23.19	30.0	0.840107D-01	-0.522539D-01	-31.88
31.0	0.918751D+00	0.373178D+00	22.11	31.0	0.864895D-01	-0.505317D-01	-30.30
32.0	0.918439D+00	0.351043D+00	20.92	32.0	0.886401D-01	-0.483418D-01	-28.61
33.0	0.918172D+00	0.327277D+00	19.52	33.0	0.904305D-01	-0.456912D-01	-26.81
34.0	0.917943D+00	0.301937D+00	18.21	34.0	0.918298D-01	-0.425922D-01	-24.88
35.0	0.917744D+00	0.274969D+00	16.68	35.0	0.928082D-01	-0.390621D-01	-22.62
36.0	0.917562D+00	0.246410D+00	15.03	36.0	0.933374D-01	-0.351237D-01	-20.62
37.0	0.917381D+00	0.216286D+00	13.27	37.0	0.933910D-01	-0.308048D-01	-18.26
38.0	0.917182D+00	0.184635D+00	11.38	38.0	0.929448D-01	-0.261367D-01	-15.71
39.0	0.916943D+00	0.151503D+00	9.34	39.0	0.919769D-01	-0.211617D-01	-12.96
40.0	0.916635D+00	0.116947D+00	7.27	40.0	0.904682D-01	-0.159173D-01	-9.96
41.0	0.916272D+00	0.810355D-01	5.05	41.0	0.884026D-01	-0.104516D-01	-6.74
42.0	0.915862D+00	0.438450D-01	2.74	42.0	0.857675D-01	-0.481504D-02	-3.21
43.0	0.914959D+00	0.546360D-02	0.34	43.0	0.825536D-01	0.938400D-03	0.65
44.0	0.914012D+00	-0.340114D-01	-2.13	44.0	0.787556D-01	0.675159D-02	4.90
45.0	0.912788D+00	-0.744730D-01	-4.66	45.0	0.743723D-01	0.125648D-01	9.59

CIRCULAR PP POLARIZATION KA= 5.000					CIRCULAR OP POLARIZATION KA= 5.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
45.0	0.912788D+00	-0.744730D-01	-4.86	0.838729	45.0	0.743723D-01	0.125648D-01	9.59	0.005689
46.0	0.911232D+00	-0.115805D+00	-7.24	0.843754	46.0	0.694067D-01	0.133360D-01	14.78	0.005153
47.0	0.909280D+00	-0.157884D+00	-9.85	0.851717	47.0	0.638664D-01	0.239473D-01	20.55	0.004652
48.0	0.906865D+00	-0.200576D+00	-12.47	0.862635	48.0	0.577634D-01	0.293778D-01	26.96	0.004200
49.0	0.903915D+00	-0.243741D+00	-15.09	0.876872	49.0	0.511148D-01	0.345590D-01	34.06	0.003807
50.0	0.900351D+00	-0.287232D+00	-17.69	0.893134	50.0	0.439422E-01	0.394209D-01	41.90	0.003485
51.0	0.896092D+00	-0.330895D+00	-20.27	0.912471	51.0	0.362723D-01	0.438998D-01	50.43	0.003243
52.0	0.891049D+00	-0.374571D+00	-22.80	0.934271	52.0	0.281368D-01	0.479336D-01	59.59	0.003089
53.0	0.885131D+00	-0.418096D+00	-25.28	0.958261	53.0	0.195720D-01	0.514626D-01	69.18	0.003031
54.0	0.878242D+00	-0.461303D+00	-27.71	0.984110	54.0	0.106193D-01	0.544298D-01	78.96	0.003075
55.0	0.870285D+00	-0.504019D+00	-30.08	1.011431	55.0	0.132450D-02	0.567820D-01	88.66	0.003226
56.0	0.861158D+00	-0.546073D+00	-32.38	1.039786	56.0	-0.626187D-02	0.584763D-01	98.04	0.003487
57.0	0.850753D+00	-0.587289D+00	-34.62	1.068690	57.0	-0.180851D-01	0.594510D-01	106.42	0.003861
58.0	0.839709D+00	-0.627493D+00	-36.79	1.097618	58.0	-0.280864D-01	0.596853E-01	115.20	0.004351
59.0	0.827871D+00	-0.666510D+00	-38.91	1.126019	59.0	-0.381228D-01	0.591416D-01	122.06	0.004957
60.0	0.815084D+00	-0.704168D+00	-40.97	1.153216	60.0	-0.482469D-01	0.57791D-01	129.93	0.005680
61.0	0.794284D+00	-0.740297D+00	-42.99	1.178927	61.0	-0.585173D-01	0.556247D-01	136.45	0.006518
62.0	0.775929D+00	-0.774730D+00	-44.96	1.202273	62.0	-0.685745D-01	0.526232D-01	142.50	0.007472
63.0	0.756760D+00	-0.807306D+00	-46.89	1.222900	63.0	-0.784679D-01	0.487875D-01	148.13	0.008537
64.0	0.733430D+00	-0.837868D+00	-48.80	1.239443	64.0	-0.881228D-01	0.441239D-01	153.40	0.009713
65.0	0.709102D+00	-0.866267D+00	-50.70	1.253243	65.0	-0.974634D-01	0.386476D-01	158.37	0.010993
66.0	0.682609D+00	-0.892359D+00	-52.59	1.262259	66.0	-0.106414D+00	0.323836D-01	163.07	0.012373
67.0	0.653876D+00	-0.916010D+00	-54.48	1.266629	67.0	-0.118989D+00	0.253648D-01	167.55	0.013845
68.0	0.622838D+00	-0.937096D+00	-56.39	1.266076	68.0	-0.122841D+00	0.176347D-01	171.83	0.015401
69.0	0.589838D+00	-0.955502E+00	-58.33	1.260421	69.0	-0.130169E+00	8.924523D-02	175.94	0.017030
70.0	0.553635D+00	-0.971122D+00	-60.31	1.249569	70.0	-0.136813D+00	0.258321D-03	179.89	0.018178
71.0	0.515397D+00	-0.983863D+00	-62.35	1.233621	71.0	-0.142702D+00	-0.925563D-02	-176.29	0.020450
72.0	0.474708D+00	-0.993645D+00	-64.46	1.212679	72.0	-0.147774D+00	-0.192171D-01	-172.59	0.022206
73.0	0.431567D+00	-0.100040D+01	-66.66	1.187049	73.0	-0.151967D+00	-0.295384D-01	-169.90	0.023967
74.0	0.385990D+00	-0.100407D+01	-68.97	1.157446	74.0	-0.155227D+00	-0.401234D-01	-165.51	0.025705
75.0	0.338009D+00	-0.100462D+01	-71.40	1.123505	75.0	-0.157504D+00	-0.508690D-01	-162.10	0.027395
76.0	0.287678D+00	-0.100204D+01	-73.98	1.086782	76.0	-0.158753D+00	-0.616650D-01	-158.77	0.029005
77.0	0.235066D+00	-0.996236D+00	-76.72	1.047743	77.0	-0.158939D+00	-0.723952D-01	-155.51	0.030503
78.0	0.180266D+00	-0.987297D+00	-79.65	1.007251	78.0	-0.158032D+00	-0.829380D-01	-152.31	0.031853
79.0	0.123390D+00	-0.975207D+00	-82.79	0.966254	79.0	-0.156099D+00	-0.931676D-01	-149.15	0.033019
80.0	0.645723D-01	-0.959997D+00	-86.15	0.925763	80.0	-0.152858D+00	-0.119555D+00	-146.04	0.033965
81.0	0.396903D-02	-0.941710D+00	-89.76	0.886633	81.0	-0.148372D+00	-0.112674D+00	-142.95	0.034656
82.0	-0.582419D-01	-0.920404D+00	-93.62	0.850536	82.0	-0.143157D+00	-0.120674D+00	-139.87	0.035056
83.0	-0.121860D+00	-0.896154D+00	-97.74	0.817942	83.0	-0.136628D+00	-0.128336E+00	-136.79	0.035137
84.0	-0.186664D+00	-0.869045D+00	-102.12	0.790082	84.0	-0.129002D+00	-0.135021E+00	-133.69	0.034874
85.0	-0.252409D+00	-0.839177D+00	-106.74	0.767928	85.0	-0.120314D+00	-0.140617E+00	-130.55	0.034248
86.0	-0.318831D+00	-0.806662D+00	-111.57	0.752357	86.0	-0.110604D+00	-0.144977D+00	-127.34	0.033251
87.0	-0.385644D+00	-0.771627D+00	-116.55	0.744429	87.0	-0.995232D-01	-0.147987D+00	-124.03	0.031885
88.0	-0.452543D+00	-0.734207D+00	-121.65	0.743856	88.0	-0.683309D-01	-0.149532D+00	-120.57	0.030162
89.0	-0.519207D+00	-0.694551D+00	-126.78	0.751977	89.0	-0.758949D-01	-0.149505D+00	-116.91	0.028112
90.0	-0.585295D+00	-0.652816D+00	-131.88	0.768740	90.0	-0.626949D-01	-0.147808D+00	-112.98	0.025778

CIRCULAR PP POLARIZATION KA= 5.000				CIRCULAR OP POLARIZATION KA= 5.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
90.0	-0.585295D+00	-0.652816D+00	-131.88	90.0	-0.626989D-01	-0.187808D+00	-112.98
91.0	-0.650453D+00	0.609171D+00	-136.58	91.0	-0.488136D-01	-0.144353D+00	-108.63
92.0	-0.714312D+00	-0.563791D+00	-141.72	92.0	-0.343447D-01	-0.139063D+00	-103.87
93.0	-0.776494D+00	-0.516859D+00	-146.35	93.0	-0.193883D-01	-0.131876D+00	-98.36
94.0	-0.836611D+00	-0.468565D+00	-150.75	94.0	-0.405075D-02	-0.122742D+00	-91.89
95.0	-0.894267D+00	-0.419106D+00	-154.89	95.0	0.115561D-01	-0.111627D+00	-84.09
96.0	-0.949065D+00	-0.368681D+00	-158.77	96.0	0.273755D-01	-0.985135D-01	-74.50
97.0	-0.100061D+01	-0.317498D+00	-162.40	97.0	0.431067D-01	-0.834019D-01	-62.67
98.0	-0.104849D+01	-0.265750D+00	-165.78	98.0	0.588063D-01	-0.663100D-01	-48.43
99.0	-0.109233D+01	-0.213655D+00	-168.93	99.0	0.742888D-01	-0.472749D-01	-32.47
100.0	-0.113174D+01	-0.161417D+00	-171.68	100.0	0.894278D-01	-0.263536D-01	-16.42
101.0	-0.116634D+01	-0.109242D+00	-174.65	101.0	0.104097D+00	-0.362333D-02	-1.99
102.0	-0.119578D+01	-0.573330D-01	-177.25	102.0	0.118172D+00	0.208119D-01	9.99
103.0	-0.121972D+01	-0.588984D-02	-179.72	103.0	0.131530D+00	0.468512D-01	19.61
104.0	-0.123784D+01	0.448913D-01	177.92	104.0	0.144053D+00	0.743362D-01	27.30
105.0	-0.124866D+01	0.948193D-01	175.66	105.0	0.155626D+00	0.103112D+00	33.53
106.0	-0.125550D+01	0.183712D+00	173.47	106.0	0.166142D+00	0.132996D+00	38.68
107.0	-0.125453D+01	0.151391D+00	171.33	107.0	0.175499D+00	0.163785D+00	43.02
108.0	-0.124676D+01	0.237688D+00	169.21	108.0	0.183608D+00	0.195257D+00	46.76
109.0	-0.123202D+01	0.282443D+00	167.00	109.0	0.190378D+00	0.227168D+00	50.04
110.0	-0.121020D+01	0.325507D+00	164.95	110.0	0.195733D+00	0.259259D+00	52.95
111.0	-0.118122D+01	0.366741D+00	162.75	111.0	0.199619D+00	0.291251D+00	55.57
112.0	-0.114504D+01	0.406017D+00	160.44	112.0	0.201981D+00	0.322884D+00	57.97
113.0	-0.110169D+01	0.442217D+00	158.08	113.0	0.202778D+00	0.353742D+00	60.18
114.0	-0.105122D+01	0.478238D+00	155.54	114.0	0.201988D+00	0.383608D+00	62.23
115.0	-0.993741D+00	0.510589D+00	152.79	115.0	0.199587D+00	0.412112D+00	64.16
116.0	-0.929426D+00	0.501389D+00	149.75	116.0	0.195588D+00	0.438909D+00	65.98
117.0	-0.858484D+00	0.569373D+00	146.45	117.0	0.190002D+00	0.463645D+00	67.72
118.0	-0.781181D+00	0.594869D+00	142.71	118.0	0.182858D+00	0.485961D+00	69.38
119.0	-0.697833D+00	0.617897D+00	138.48	119.0	0.174200D+00	0.505495D+00	70.99
120.0	-0.608680D+00	0.638371D+00	133.64	120.0	0.164085D+00	0.521882D+00	72.55
121.0	-0.514509D+00	0.656297D+00	128.09	121.0	0.152585D+00	0.534757D+00	74.07
122.0	-0.414008D+00	0.671675D+00	121.74	122.0	0.139786D+00	0.543761D+00	75.58
123.0	-0.312008D+00	0.684517D+00	114.50	123.0	0.125785D+00	0.548539D+00	77.08
124.0	-0.204843D+00	0.694848D+00	106.43	124.0	0.110693D+00	0.548745D+00	78.60
125.0	-0.945101D-01	0.702708D+00	97.66	125.0	0.946305D-01	0.544043D+00	80.13
126.0	0.183773D-01	0.708134D+00	68.51	126.0	0.777306D-01	0.534111D+00	81.72
127.0	0.133170D+00	0.711189D+00	75.39	127.0	0.601349D-01	0.518644D+00	83.39
128.0	0.249193D+00	0.711945D+00	70.71	128.0	0.419934D-01	0.497353D+00	85.17
129.0	0.365749D+00	0.710477D+00	62.76	129.0	0.234633D-01	0.469974D+00	87.14
130.0	0.482127D+00	0.706870D+00	55.70	130.0	0.070736D-02	0.456261D+00	89.38
131.0	0.597605D+00	0.701220D+00	49.56	131.0	-0.141071D-01	0.396000D+00	92.04
132.0	0.714451D+00	0.693627D+00	44.27	132.0	-0.328104D-01	0.349000D+00	95.37
133.0	0.822941D+00	0.684197D+00	37.78	133.0	-0.512302D-01	0.295107D+00	99.85
134.0	0.933540D+00	0.673046D+00	35.25	134.0	-0.691963D-01	0.234178D+00	106.46
135.0	0.103598D+01	0.660288D+00	32.51	135.0	-0.865393D-01	0.166137D+00	117.51

CIRCULAR CP POLARIZATION KA# 5.000

CIRCULAR PP POLARIZATION KA# 5.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
135.0	0.103598D+01	0.660288D+00	32.51	1.509243	135.0	-0.865393E-01	0.166137D+00	117.51	0.035091
136.0	0.113614D+01	0.646087D+00	29.52	1.706194	136.0	-0.103093D+00	0.909192D-01	138.59	0.018895
137.0	0.123117D+01	0.630445D+00	27.52	1.913229	137.0	-0.118698D+00	0.850419D-02	175.30	0.014816
138.0	0.132042D+01	0.613558D+00	24.52	2.120024	138.0	-0.133199D+00	-0.810912D-01	-148.57	0.024318
139.0	0.140332D+01	0.595649D+00	23.00	2.344131	139.0	-0.146450D+00	-0.777811D+00	-129.48	0.053064
140.0	0.147931D+01	0.576514D+00	21.30	2.570994	140.0	-0.158316D+00	-0.281559D+00	-119.35	0.104340
141.0	0.154789D+01	0.556961D+00	19.79	2.796169	141.0	-0.168671D+00	-0.392200D+00	-113.27	0.182271
142.0	0.160861D+01	0.536455D+00	18.28	3.026398	142.0	-0.177402D+00	-0.509556D+00	-109.20	0.291119
143.0	0.166107D+01	0.515385D+00	17.24	3.262677	143.0	-0.184411D+00	-0.633410D+00	-106.23	0.435216
144.0	0.170495D+01	0.493750D+00	16.15	3.506665	144.0	-0.189613D+00	-0.763504D+00	-103.95	0.618892
145.0	0.174000D+01	0.471710D+00	15.17	3.759184	145.0	-0.192939D+00	-0.899541D+00	-102.11	0.846339
146.0	0.176601D+01	0.449578D+00	14.28	4.020907	146.0	-0.194337D+00	-0.104118D+01	-100.57	1.121827
147.0	0.178266D+01	0.427223D+00	13.56	4.361126	147.0	-0.193772D+00	-0.118805D+01	-99.26	1.449018
148.0	0.179052D+01	0.404830D+00	12.74	4.769836	148.0	-0.191226D+00	-0.133974D+01	-99.12	1.831475
149.0	0.178900D+01	0.382498D+00	12.07	5.246817	149.0	-0.186701D+00	-0.149580D+01	-97.11	2.272275
150.0	0.177841D+01	0.360320D+00	11.45	5.792591	150.0	-0.180218D+00	-0.165575D+01	-96.21	2.773976
151.0	0.175894D+01	0.338385D+00	10.89	6.428377	151.0	-0.171803D+00	-0.181907D+01	-95.40	3.338535
152.0	0.173084D+01	0.316744D+00	10.37	7.164352	152.0	-0.161528D+00	-0.198523D+01	-94.65	3.967221
153.0	0.169448D+01	0.295562D+00	9.85	7.998482	153.0	-0.149249D+00	-0.215365D+01	-93.97	4.660507
154.0	0.165014D+01	0.274819D+00	9.46	8.938489	154.0	-0.135669D+00	-0.232375D+01	-93.34	5.418202
155.0	0.159841D+01	0.254607D+00	9.05	10.019751	155.0	-0.120290D+00	-0.249496D+01	-92.76	6.238995
156.0	0.153979D+01	0.234982D+00	8.68	11.282181	156.0	-0.103438D+00	-0.266648D+01	-92.22	7.120811
157.0	0.147486D+01	0.215995D+00	8.33	12.749121	157.0	-0.085386D-01	-0.283788D+01	-91.72	8.060589
158.0	0.140531D+01	0.197690D+00	8.01	14.411171	158.0	-0.068540D-01	-0.300832D+01	-91.25	9.054303
159.0	0.132880D+01	0.180105D+00	7.72	16.3798151	159.0	-0.048425D-01	-0.317725D+01	-90.82	10.086967
160.0	0.124909D+01	0.163272D+00	7.45	18.668888	160.0	-0.024177D-01	-0.334396D+01	-90.41	11.182655
161.0	0.116597D+01	0.147219D+00	7.20	21.381149	161.0	-0.224054D-02	-0.350778D+01	-90.04	12.304539
162.0	0.108024D+01	0.131966D+00	6.96	24.644325	162.0	0.201782D-01	-0.366804D+01	-89.68	13.454944
163.0	0.997740D+00	0.117533D+00	6.75	28.595346	163.0	0.428837D-01	-0.382408D+01	-89.36	14.625422
164.0	0.904323D+00	0.103932D+00	6.56	33.38812	164.0	0.656769D-01	-0.397524D+01	-89.05	15.806836
165.0	0.815863D+00	0.911718D-01	6.38	39.1673945	165.0	0.883566D-01	-0.412086D+01	-88.77	16.989471
166.0	0.728203D+00	0.792585D-01	6.21	46.17069	166.0	0.110722D+00	-0.426039D+01	-88.51	18.163146
167.0	0.642198D+00	0.681947D-01	6.06	54.417069	167.0	0.132574D+00	-0.439315D+01	-88.27	19.317351
168.0	0.558685D+00	0.579805D-01	5.92	64.17069	168.0	0.153716D+00	-0.451860D+01	-88.05	20.441360
169.0	0.478472D+00	0.486139D-01	5.80	75.417069	169.0	0.173960D+00	-0.463619D+01	-87.85	21.524886
170.0	0.402339D+00	0.400972D-01	5.69	88.167069	170.0	0.193122D+00	-0.474539D+01	-87.67	22.556031
171.0	0.331025D+00	0.324072D-01	5.58	102.417069	171.0	0.211029D+00	-0.484857D+01	-87.51	23.525640
172.0	0.265220D+00	0.255560D-01	5.50	118.167069	172.0	0.227520D+00	-0.493676D+01	-87.36	24.423361
173.0	0.205565D+00	0.195312D-01	5.43	135.417069	173.0	0.242444D+00	-0.501807D+01	-87.23	25.239811
174.0	0.152637D+00	0.143263D-01	5.36	154.167069	174.0	0.255666D+00	-0.508930D+01	-87.12	25.966325
175.0	0.106952D+00	0.993473D-02	5.31	174.417069	175.0	0.267065D+00	-0.515012D+01	-87.03	26.595090
176.0	0.689517D-01	0.635067D-02	5.26	206.004795	176.0	0.276537D+00	-0.520027D+01	-86.96	27.119270
177.0	0.390064D-01	0.356888D-02	5.23	249.001534	177.0	0.283995D+00	-0.523511D+01	-86.90	27.533114
178.0	0.174066D-01	0.158508D-02	5.20	304.00306	178.0	0.289372D+00	-0.526767D+01	-86.86	27.832049
179.0	0.43626D-02	0.396105D-03	5.19	372.000019	179.0	0.292618D+00	-0.529616D+01	-86.83	28.012751
180.0	0.270578D-03	-0.417318D-03	-57.04	454.000000	180.0	0.293703D+00	-0.529027D+01	-86.82	28.073213



CIRCULAR OF POLARIZATION KA= 6.000

THETA	REAL	IMAG	PHASE	BSCS	THETA	REAL	IMAG	PHASE	BSCS
0.0	-0.100228D+01	0.545957D+00	151.42	1.307637	0.0	-0.103306D-10	-0.160973D-10	-122.69	0.000000
1.0	-0.100179D+01	0.545957D+00	151.41	1.301661	1.0	-0.140667D-03	0.208412D-03	124.02	0.000000
2.0	-0.100033D+01	0.545957D+00	151.38	1.296741	2.0	-0.541743D-03	0.830292D-03	124.08	0.000001
3.0	-0.979905D+00	0.545957D+00	151.32	1.293900	3.0	-0.156050D-02	0.185558D-02	124.19	0.000005
4.0	-0.948993D+00	0.546081D+00	151.23	1.287177	4.0	-0.223277D-02	0.326765D-02	124.34	0.000016
5.0	-0.930148D+00	0.546169D+00	151.12	1.278626	5.0	-0.347178D-02	0.504353D-02	124.54	0.000037
6.0	-0.924765D+00	0.546402D+00	150.98	1.268316	6.0	-0.496948D-02	0.715424D-02	124.78	0.000076
7.0	-0.928466D+00	0.546784D+00	150.80	1.256330	7.0	-0.671516D-02	0.956513D-02	125.07	0.000137
8.0	-0.937161D+00	0.547368D+00	150.59	1.242765	8.0	-0.869857D-02	0.122364D-01	125.41	0.000225
9.0	-0.942912D+00	0.548209D+00	150.35	1.227732	9.0	-0.109033D-01	0.151236D-01	125.79	0.000348
10.0	-0.953703D+00	0.549369D+00	150.06	1.211355	10.0	-0.135356D-01	0.181782D-01	126.22	0.000508
11.0	-0.943539D+00	0.550914D+00	149.72	1.193771	11.0	-0.159156D-01	0.213484D-01	126.71	0.000709
12.0	-0.932425D+00	0.552913D+00	149.33	1.175128	12.0	-0.186838D-01	0.245795D-01	127.24	0.000953
13.0	-0.920368D+00	0.555433D+00	148.89	1.155586	13.0	-0.215979D-01	0.278153D-01	127.83	0.001240
14.0	-0.907377D+00	0.558553D+00	148.38	1.135315	14.0	-0.246335D-01	0.309940D-01	128.47	0.001568
15.0	-0.892461D+00	0.562337D+00	147.81	1.114896	15.0	-0.277642D-01	0.340699D-01	129.18	0.001932
16.0	-0.876322D+00	0.566856D+00	147.17	1.093320	16.0	-0.309616D-01	0.369734D-01	129.94	0.002326
17.0	-0.862902D+00	0.572176D+00	146.45	1.071994	17.0	-0.341953D-01	0.396527D-01	130.77	0.002742
18.0	-0.846284D+00	0.578359D+00	145.65	1.050597	18.0	-0.374332D-01	0.420537D-01	131.67	0.003170
19.0	-0.828796D+00	0.585463D+00	144.76	1.029670	19.0	-0.406414D-01	0.441255D-01	132.65	0.003599
20.0	-0.810454D+00	0.593536D+00	143.78	1.009122	20.0	-0.437844D-01	0.458204D-01	133.73	0.004017
21.0	-0.791274D+00	0.602623D+00	142.71	0.989275	21.0	-0.468256D-01	0.470970D-01	134.83	0.004411
22.0	-0.771289D+00	0.612755D+00	141.52	0.970254	22.0	-0.497270D-01	0.479164D-01	136.06	0.004769
23.0	-0.750505D+00	0.623958D+00	140.26	0.952581	23.0	-0.524510D-01	0.482472D-01	137.39	0.005079
24.0	-0.728952D+00	0.636244D+00	138.88	0.936178	24.0	-0.549557D-01	0.480639D-01	138.83	0.005330
25.0	-0.706654D+00	0.649613D+00	137.41	0.921358	25.0	-0.572047D-01	0.473479D-01	140.39	0.005554
26.0	-0.683635D+00	0.664056D+00	135.83	0.908327	26.0	-0.591579D-01	0.460877D-01	142.08	0.005624
27.0	-0.659921D+00	0.679546D+00	134.16	0.897276	27.0	-0.607770D-01	0.442796D-01	143.92	0.005655
28.0	-0.635535D+00	0.696050D+00	132.40	0.888344	28.0	-0.620247D-01	0.419274D-01	145.94	0.005605
29.0	-0.610505D+00	0.713501D+00	130.55	0.881801	29.0	-0.628654D-01	0.390432D-01	148.16	0.005476
30.0	-0.584855D+00	0.731847D+00	128.63	0.877656	30.0	-0.632655D-01	0.356467D-01	150.60	0.005273
31.0	-0.558610D+00	0.751000D+00	126.64	0.876046	31.0	-0.631938D-01	0.317655D-01	153.31	0.005002
32.0	-0.531792D+00	0.770846D+00	124.60	0.877034	32.0	-0.626227D-01	0.274351D-01	156.34	0.004674
33.0	-0.504255D+00	0.791328D+00	122.52	0.880644	33.0	-0.615266D-01	0.229810D-01	159.75	0.004301
34.0	-0.476280D+00	0.812671D+00	120.40	0.886855	34.0	-0.598863D-01	0.176420D-01	163.62	0.003896
35.0	-0.448119D+00	0.833541D+00	118.26	0.895501	35.0	-0.576857D-01	0.122095D-01	168.05	0.003477
36.0	-0.419217D+00	0.854999D+00	116.12	0.906766	36.0	-0.549138D-01	0.657590D-02	171.17	0.003059
37.0	-0.389833D+00	0.876476D+00	113.98	0.920181	37.0	-0.515653D-01	0.770523D-02	173.14	0.002660
38.0	-0.359945D+00	0.897797D+00	111.85	0.935626	38.0	-0.476408D-01	-0.513493D-02	-173.85	0.002296
39.0	-0.329667D+00	0.918776D+00	109.74	0.952831	39.0	-0.431470D-01	-0.110658D-01	-165.62	0.001984
40.0	-0.298900D+00	0.939218D+00	107.65	0.971472	40.0	-0.380970D-01	-0.169446D-01	-156.02	0.001739
41.0	-0.267681D+00	0.958921D+00	105.60	0.991182	41.0	-0.325109D-01	-0.226922D-01	-145.09	0.001572
42.0	-0.236011D+00	0.977675D+00	103.57	1.011549	42.0	-0.264140D-01	-0.282293D-01	-133.10	0.001495
43.0	-0.203888D+00	0.995267D+00	101.51	1.032127	43.0	-0.198443D-01	-0.334768D-01	-120.66	0.001514
44.0	-0.171309D+00	0.101148D+01	99.61	1.052442	44.0	-0.128369D-01	-0.363577D-01	-108.51	0.001636
45.0	-0.138267D+00	0.102610D+01	97.67	1.072001	45.0	-0.544588D-02	-0.427977D-01	-97.25	0.001861

CIRCULAR PP POLARIZATION KA= 6.000

CIRCULAR OP POLARIZATION KA= 6.000

THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
45.0	-0.138267D+00	0.102610D+01	97.67	1.072001	45.0	-0.584588D-02	-0.427977D-01	-97.25	0.001861
46.0	-0.194755D+00	0.103891D+01	95.76	1.090307	46.0	0.227936D-02	-0.467265D-01	-87.21	0.032189
47.0	-0.270687D-01	0.104969D+01	93.86	1.106865	47.0	0.102761D-01	-0.500790D-01	-78.40	0.002614
48.0	-0.362869D-01	0.105824D+01	91.96	1.121198	48.0	0.184774D-01	-0.537960D-01	-70.71	0.003129
49.0	-0.431404D-02	0.106436D+01	90.07	1.132863	49.0	0.268104D-01	-0.582288D-01	-63.94	0.003725
50.0	0.341607D-01	0.106785D+01	88.17	1.141461	50.0	0.351971D-01	-0.561248D-01	-57.91	0.004389
51.0	0.701417D-01	0.106852D+01	86.24	1.146655	51.0	0.435554D-01	-0.566584D-01	-52.45	0.005107
52.0	0.106630D+00	0.106621D+01	84.29	1.148161	52.0	0.517990D-01	-0.564018D-01	-47.44	0.005864
53.0	0.143623D+00	0.106077D+01	82.29	1.145859	53.0	0.598390D-01	-0.554100D-01	-42.76	0.006643
54.0	0.181112D+00	0.105205D+01	80.23	1.139609	54.0	0.675841D-01	-0.534728D-01	-38.35	0.007427
55.0	0.219082D+00	0.103993D+01	78.10	1.129455	55.0	0.749423D-01	-0.508059D-01	-34.13	0.008198
56.0	0.257509D+00	0.102432D+01	75.89	1.115536	56.0	0.818213D-01	-0.473608D-01	-30.06	0.008938
57.0	0.296363D+00	0.100512D+01	73.57	1.098103	57.0	0.881300D-01	-0.431699D-01	-26.10	0.009631
58.0	0.335600D+00	0.982294D+00	71.14	1.077528	58.0	0.937792D-01	-0.382799D-01	-22.20	0.010260
59.0	0.375167D+00	0.955795D+00	68.57	1.054295	59.0	0.986833D-01	-0.327412D-01	-18.35	0.010810
60.0	0.414998D+00	0.925619D+00	65.85	1.028935	60.0	0.102761D+00	-0.265279D-01	-14.53	0.011269
61.0	0.455014D+00	0.891782D+00	62.97	1.002313	61.0	0.105935D+00	-0.200171D-01	-10.70	0.011623
62.0	0.495120D+00	0.854328D+00	59.91	0.975019	62.0	0.108140D+00	-0.129983D-01	-6.85	0.011863
63.0	0.535206D+00	0.813325D+00	56.65	0.948794	63.0	0.109311D+00	-0.362708D-02	-2.97	0.011981
64.0	0.575147D+00	0.768872D+00	53.20	0.921959	64.0	0.109398D+00	0.185778D-02	0.57	0.011971
65.0	0.614800D+00	0.721093D+00	49.55	0.897954	65.0	0.108358D+00	0.947228D-02	5.00	0.011831
66.0	0.654005D+00	0.670138D+00	45.70	0.876808	66.0	0.105158D+00	0.170518D-01	9.13	0.011560
67.0	0.692586D+00	0.616183D+00	41.86	0.859357	67.0	0.102780D+00	0.248691D-01	13.33	0.011163
68.0	0.730348D+00	0.559432D+00	37.45	0.846372	68.0	0.982161D-01	0.315963D-01	17.83	0.010645
69.0	0.767060D+00	0.500111D+00	33.10	0.838522	69.0	0.924707D-01	0.343023D-01	22.50	0.010078
70.0	0.802554D+00	0.436871D+00	28.65	0.836350	70.0	0.855631D-01	0.444569D-01	27.46	0.009297
71.0	0.836529D+00	0.374784D+00	24.13	0.840241	71.0	0.775254D-01	0.499319D-01	32.78	0.008503
72.0	0.868746D+00	0.309343D+00	19.60	0.850413	72.0	0.684041D-01	0.546032D-01	38.60	0.007661
73.0	0.898936D+00	0.242459D+00	15.09	0.866872	73.0	0.582590D-01	0.583525D-01	45.05	0.006799
74.0	0.926817D+00	0.174460D+00	10.66	0.889425	74.0	0.471648D-01	0.610697D-01	52.32	0.005954
75.0	0.952098D+00	0.105690D+00	6.33	0.917660	75.0	0.352060D-01	0.626541D-01	60.67	0.005165
76.0	0.974482D+00	0.365013D-01	2.15	0.950948	76.0	0.224848D-01	0.630170D-01	70.36	0.004477
77.0	0.993668D+00	-0.377403D-01	-1.89	0.986449	77.0	0.911194D-02	0.620631D-01	81.65	0.003937
78.0	0.100935D+01	-0.101684D+00	-5.75	1.029130	78.0	-0.478953D-02	0.587922D-01	94.58	0.003598
79.0	0.102124D+01	-0.169894D+00	-9.45	1.071789	79.0	-0.190467D-01	0.561010D-01	104.79	0.003552
80.0	0.102902D+01	-0.237053D+00	-12.97	1.115082	80.0	-0.336379D-01	0.509645D-01	123.42	0.003731
81.0	0.103243D+01	-0.302764D+00	-16.34	1.157568	81.0	-0.482938D-01	0.444371D-01	137.38	0.004307
82.0	0.103117D+01	-0.366657D+00	-19.57	1.197749	82.0	-0.628930D-01	0.364839D-01	149.89	0.005287
83.0	0.102500D+01	-0.428335D+00	-22.68	1.234424	83.0	-0.772950D-01	0.271314D-01	160.66	0.006711
84.0	0.101368D+01	-0.487534D+00	-25.69	1.265441	84.0	-0.913188D-01	0.164663D-01	169.78	0.008610
85.0	0.997003D+00	-0.543820D+00	-28.61	1.289754	85.0	-0.104808D+00	0.436573D-02	177.51	0.011006
86.0	0.974781D+00	-0.596895D+00	-31.48	1.306482	86.0	-0.117602D+00	-0.847245D-02	-175.88	0.013902
87.0	0.946669D+00	-0.65451D+00	-34.32	1.314459	87.0	-0.129542D+00	-0.225201D-01	-170.14	0.017288
88.0	0.913156D+00	-0.692196D+00	-37.16	1.312989	88.0	-0.140474D+00	-0.374290D-01	-165.08	0.021134
89.0	0.873573D+00	-0.733864D+00	-40.03	1.301886	89.0	-0.150255D+00	-0.530299D-01	-160.56	0.025389
90.0	0.828095D+00	-0.771213D+00	-42.96	1.280511	90.0	-0.158746D+00	-0.691333D-01	-156.47	0.029980

CIRCULAR PP POLARIZATION KA= 6.000

THETA	REAL	IMAG	PHASE	WRCS	THETA	REAL	IMAG	PHASE	WRCS
90.0	0.828095D+00	-0.771213D+00	-82.96	1.280511	90.0	-0.158746D+00	-0.691333D-01	-156.87	0.029980
91.0	0.776746D+00	-0.808277D+00	-85.99	1.249795	91.0	-0.165822D+00	-0.855313D-01	-152.72	0.038813
92.0	0.719603D+00	-0.832119D+00	-89.15	1.210252	92.0	-0.171372D+00	-0.101999D+00	-149.24	0.039772
93.0	0.656793D+00	-0.853333D+00	-92.48	1.162878	93.0	-0.175296D+00	-0.118296D+00	-145.99	0.044722
94.0	0.588502D+00	-0.873582D+00	-95.03	1.109818	94.0	-0.177513D+00	-0.134170D+00	-142.92	0.049512
95.0	0.514968D+00	-0.896654D+00	-99.85	1.051368	95.0	-0.177960D+00	-0.149358D+00	-139.99	0.053977
96.0	0.436537D+00	-0.894608D+00	-63.99	0.990889	96.0	-0.176590D+00	-0.163590D+00	-137.19	0.057946
97.0	0.353520D+00	-0.897379D+00	-66.50	0.930266	97.0	-0.173380D+00	-0.176593D+00	-134.47	0.061246
98.0	0.263360D+00	-0.894875D+00	-73.83	0.871827	98.0	-0.168225D+00	-0.189091D+00	-131.83	0.063712
99.0	0.175581D+00	-0.887436D+00	-76.81	0.818257	99.0	-0.161442D+00	-0.197813D+00	-129.22	0.065194
100.0	0.816017D-01	-0.874858D+00	-84.67	0.772001	100.0	-0.152770D+00	-0.205491D+00	-126.63	0.065565
101.0	-0.148611D-01	-0.857290D+00	-90.99	0.735167	101.0	-0.142370D+00	-0.210877D+00	-124.03	0.068736
102.0	-0.113200D+00	-0.834932D+00	-97.72	0.709925	102.0	-0.130328D+00	-0.213710D+00	-121.38	0.062656
103.0	-0.212718D+00	-0.807938D+00	-104.75	0.698007	103.0	-0.116736D+00	-0.213783D+00	-118.64	0.059330
104.0	-0.312676D+00	-0.776499D+00	-111.93	0.700716	104.0	-0.101730D+00	-0.210687D+00	-115.75	0.054822
105.0	-0.412294D+00	-0.740858D+00	-119.10	0.718851	105.0	-0.854493D-01	-0.204844D+00	-112.64	0.049263
106.0	-0.510761D+00	-0.701255D+00	-132.70	0.752635	106.0	-0.680551D-01	-0.195506D+00	-109.19	0.042854
107.0	-0.607240D+00	-0.657980D+00	-156.89	0.801677	107.0	-0.497251D-01	-0.182757D+00	-105.22	0.035873
108.0	-0.700674D+00	-0.611302D+00	-138.90	0.864849	108.0	-0.306518D-01	-0.166515D+00	-100.43	0.028667
109.0	-0.790793D+00	-0.561625D+00	-144.62	0.940786	109.0	-0.110403D-01	-0.146739D+00	-94.31	0.021654
110.0	-0.876146D+00	-0.509201D+00	-149.84	1.026917	110.0	0.689422D-02	-0.123431D+00	-85.86	0.015314
111.0	-0.956053D+00	-0.454408D+00	-154.58	1.120524	111.0	0.269287D-01	-0.966752D-01	-73.33	0.010175
112.0	-0.102968D+01	-0.397609D+00	-162.81	1.218324	112.0	0.488350D-01	-0.664426D-01	-53.68	0.006799
113.0	-0.109619D+01	-0.339174D+00	-162.81	1.316279	113.0	0.68823D-01	-0.329935D-01	-25.76	0.005765
114.0	-0.115482D+01	-0.279478D+00	-166.40	1.411727	114.0	0.873403D-01	0.352265D-02	2.31	0.007641
115.0	-0.120483D+01	-0.218858D+00	-169.70	1.499526	115.0	0.105482D+00	0.428658D-01	22.12	0.012964
116.0	-0.124552D+01	-0.157848D+00	-172.78	1.576224	116.0	0.122587D+00	0.847450D-01	34.66	0.022209
117.0	-0.127628D+01	-0.965992D-01	-175.67	1.638820	117.0	0.138443D+00	0.128819D+00	42.94	0.035761
118.0	-0.129656D+01	-0.356220D-01	-178.43	1.682236	118.0	0.152851D+00	0.174695D+00	48.82	0.053882
119.0	-0.130589D+01	0.247577D-01	178.41	1.705973	119.0	0.165625D+00	0.221935D+00	53.27	0.074687
120.0	-0.130391D+01	0.841915D-01	176.21	1.707262	120.0	0.176559D+00	0.270050D+00	56.82	0.104114
121.0	-0.129032D+01	0.142348D+00	173.70	1.685181	121.0	0.185623D+00	0.318510D+00	59.77	0.135905
122.0	-0.126495D+01	0.198899D+00	171.06	1.539856	122.0	0.197743D+00	0.366741D+00	62.30	0.171584
123.0	-0.122773D+01	0.253558D+00	168.33	1.371615	123.0	0.19980D+00	0.414132D+00	64.52	0.210452
124.0	-0.117971D+01	0.306030D+00	165.45	1.448304	124.0	0.199871D+00	0.460400D+00	66.52	0.251585
125.0	-0.111805D+01	0.356067D+00	162.33	1.376812	125.0	0.200092D+00	0.503789D+00	68.38	0.293840
126.0	-0.104601D+01	0.403432D+00	158.91	1.256904	126.0	0.197992D+00	0.544681D+00	70.02	0.335878
127.0	-0.963012D+00	0.447913D+00	155.06	1.128017	127.0	0.193578D+00	0.582000D+00	71.60	0.376196
128.0	-0.869550D+00	0.489325D+00	150.63	0.995356	128.0	0.186889D+00	0.615015D+00	73.10	0.413171
129.0	-0.786257D+00	0.527510D+00	145.46	0.865417	129.0	0.177991D+00	0.642990D+00	74.53	0.445118
130.0	-0.653873D+00	0.562336D+00	139.30	0.743771	130.0	0.166980D+00	0.665189D+00	75.91	0.470359
131.0	-0.533242D+00	0.593698D+00	131.97	0.636826	131.0	0.153980D+00	0.680882D+00	77.26	0.487311
132.0	-0.405308D+00	0.621518D+00	123.11	0.550559	132.0	0.139141D+00	0.689354D+00	78.59	0.494569
133.0	-0.271107D+00	0.645747D+00	112.77	0.490888	133.0	0.122639D+00	0.689908D+00	79.92	0.491014
134.0	-0.131758D+00	0.666359D+00	101.48	0.461395	134.0	0.104673D+00	0.681880D+00	81.27	0.475917
135.0	0.115508D-01	0.683357D+00	89.03	0.446710	135.0	0.854542D-01	0.664638D+00	82.67	0.449048

CIRCULAR PP POLARIZATION Kλ= 6.000

THETA	REAL	IMAG	RECS	PHASE	REAL	IMAG	RECS	PHASE
135.0	0.115508D+01	0.683357D+00	0.467110	89.03	0.854642D+01	0.664638D+00	0.449048	82.67
136.0	0.157571D+00	0.696766D+00	0.510311	77.26	0.652504D+01	0.637593D+00	0.410782	84.16
137.0	0.305007D+00	0.706637D+00	0.592365	66.65	0.442861D+01	0.600206D+00	0.362209	85.78
138.0	0.452531D+00	0.713084D+00	0.713316	57.60	0.228800D+01	0.551598D+00	0.305219	87.63
139.0	0.598796D+00	0.716080D+00	0.871327	50.10	0.118186D+02	0.492538D+00	0.242595	89.86
140.0	0.742853D+00	0.715859D+00	1.063690	43.96	-0.204011D+01	0.421444D+00	0.178065	92.77
141.0	0.882163D+00	0.712513D+00	1.285687	38.93	-0.416276D+01	0.338556D+00	0.116353	97.01
142.0	0.101662D+01	0.706190D+00	1.532217	34.79	-0.622163D+01	0.243556D+00	0.063190	104.33
143.0	0.118455D+01	0.697053D+00	1.795981	31.34	-0.818913D+01	0.136369D+00	0.025303	120.99
144.0	0.126476D+01	0.685277D+00	2.069213	28.85	-0.100386D+00	0.169688D+01	0.010365	170.81
145.0	0.137610D+01	0.671048D+00	2.349397	26.00	-0.117447D+00	-0.114581D+00	-0.026923	-135.71
146.0	0.147754D+01	0.654559D+00	2.613573	23.89	-0.132837D+00	-0.258122D+00	-0.084273	-117.23
147.0	0.156813D+01	0.636012D+00	2.863559	22.08	-0.146339D+00	-0.413401D+00	-0.192315	-109.49
148.0	0.164706D+01	0.615613D+00	3.091780	20.49	-0.157758D+00	-0.580070D+00	-0.361368	-105.21
149.0	0.171361D+01	0.593572D+00	3.288787	19.11	-0.166925D+00	-0.757688D+00	-0.601948	-102.42
150.0	0.176723D+01	0.570098D+00	3.448107	17.88	-0.173700D+00	-0.945703D+00	-0.924526	-106.41
151.0	0.180749D+01	0.545401D+00	3.564895	16.79	-0.177972D+00	-0.114389D+01	-0.1339253	-98.85
152.0	0.183416D+01	0.519690D+00	3.634145	15.82	-0.179663D+00	-0.135033D+01	-0.1855677	-97.58
153.0	0.184706D+01	0.493169D+00	3.654331	14.95	-0.178728D+00	-0.156541D+01	-0.2482443	-96.51
154.0	0.184623D+01	0.466038D+00	3.625983	14.17	-0.175158D+00	-0.178782D+01	-0.3226987	-95.60
155.0	0.183206D+01	0.438491D+00	3.548700	13.46	-0.168976D+00	-0.201660D+01	-0.4095240	-94.79
156.0	0.180472D+01	0.410716D+00	3.425685	12.82	-0.160441D+00	-0.225070D+01	-0.5091350	-94.07
157.0	0.176480D+01	0.382890D+00	3.261110	12.24	-0.149048D+00	-0.248902D+01	-0.6217413	-93.43
158.0	0.171297D+01	0.355184D+00	3.060828	11.71	-0.135021D+00	-0.273036D+01	-0.7473255	-92.84
159.0	0.165006D+01	0.327760D+00	2.830126	11.23	-0.119819D+00	-0.297353D+01	-0.8856237	-92.31
160.0	0.157701D+01	0.300769D+00	2.577432	10.80	-0.102131D+00	-0.321725D+01	-1.0361122	-91.82
161.0	0.149490D+01	0.274352D+00	2.310007	10.40	-0.826716D+01	-0.346022D+01	-1.1979989	-91.37
162.0	0.140492D+01	0.248640D+00	2.035617	10.04	-0.616811D+01	-0.370114D+01	-1.3702215	-90.95
163.0	0.130833D+01	0.223758D+00	1.761804	9.70	-0.394215D+01	-0.393865D+01	-1.5514515	-90.57
164.0	0.120651D+01	0.199808D+00	1.495592	9.40	-0.161729D+01	-0.417143D+01	-1.7401053	-90.22
165.0	0.110087D+01	0.176890D+00	1.2443209	9.13	0.0776996D+02	-0.439813D+01	-1.9348625	-89.90
166.0	0.992881D+00	0.155104D+00	1.009870	8.88	0.321017D+01	-0.461745D+01	-2.1321897	-89.60
167.0	0.888031D+00	0.134527D+00	0.799608	8.65	0.565102D+01	-0.482810D+01	-2.3311318	-89.33
168.0	0.775820D+00	0.115231D+00	0.615175	8.45	0.806813D+01	-0.502881D+01	-2.5295484	-89.08
169.0	0.669734D+00	0.972797D+01	0.458007	8.26	0.104302D+00	-0.521800D+01	-2.7242550	-88.85
170.0	0.567226D+00	0.807291D+01	0.328262	8.10	0.127066D+00	-0.539570D+01	-2.8865	-88.65
171.0	0.469697D+00	0.656277D+01	0.224922	7.95	0.146678D+00	-0.555963D+01	-3.0931573	-88.47
172.0	0.378480D+00	0.520174D+01	0.145853	7.83	0.168858D+00	-0.570918D+01	-3.2623779	-88.31
173.0	0.294819D+00	0.399335D+01	0.088513	7.71	0.187332D+00	-0.584383D+01	-3.4180800	-88.16
174.0	0.219856D+00	0.294060D+01	0.049201	7.62	0.203869D+00	-0.596154D+01	-3.5481541	-88.04
175.0	0.154610D+00	0.204595D+01	0.024323	7.54	0.218248D+00	-0.606277D+01	-3.65804805	-87.94
176.0	0.999717D+01	0.131140D+01	0.010166	7.47	0.230280D+00	-0.614648D+01	-3.7483240	-87.85
177.0	0.566841D+01	0.738521D+02	0.003268	7.42	0.239806D+00	-0.612148D+01	-3.8264838	-87.79
178.0	0.253266D+01	0.328502D+02	0.000653	7.39	0.246702D+00	-0.615935D+01	-3.9240282	-87.74
179.0	0.635576D+02	0.821656D+03	0.000041	7.37	0.250877D+00	-0.628779D+01	-3.9599226	-87.72
180.0	0.185073D+09	0.291059D+09	0.000000	57.55	0.252274D+00	-0.629729D+01	-3.9719498	-87.71

CIRCULAR PP POLARIZATION				CIRCULAR OP POLARIZATION			
KA= 7.000				KA= 7.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
0.0	0.214491D-01	-0.107482D+01	-88.86	0.0	-0.684096D-11	0.869305D-12	172.76
1.0	0.206433D-01	-0.107432D+01	-88.90	1.0	0.135944D-03	-0.233220D-03	-59.76
2.0	0.152352D-01	-0.107264D+01	-89.03	2.0	0.52671D-03	-0.927917D-03	-59.68
3.0	0.142068D-01	-0.107039D+01	-89.24	3.0	0.121683D-02	-0.206923D-02	-59.54
4.0	0.85969D-02	-0.10669D+01	-89.54	4.0	0.215281D-02	-0.363270D-02	-59.35
5.0	0.138822D-02	-0.106269D+01	-89.93	5.0	0.334268D-02	-0.558465D-02	-59.10
6.0	-0.736179D-02	-0.105753D+01	-90.40	6.0	0.477614D-02	-0.788285D-02	-58.79
7.0	-0.177006D-01	-0.105188D+01	-90.96	7.0	0.644049D-02	-0.104772D-01	-58.42
8.0	-0.295444D-01	-0.104488D+01	-91.62	8.0	0.832089D-02	-0.13317D-01	-57.99
9.0	-0.42851D-01	-0.103751D+01	-92.37	9.0	0.103984D-01	-0.163203D-01	-57.50
10.0	-0.576397D-01	-0.102955D+01	-93.21	10.0	0.126537D-01	-0.194383D-01	-56.94
11.0	-0.739206D-01	-0.102107D+01	-94.14	11.0	0.150633D-01	-0.225938D-01	-56.31
12.0	-0.915352D-01	-0.101216D+01	-95.17	12.0	0.176016D-01	-0.257118D-01	-55.61
13.0	-0.110485D+00	-0.100288D+01	-96.29	13.0	0.202400D-01	-0.287189D-01	-54.83
14.0	-0.130717D+00	-0.993315D+00	-97.50	14.0	0.229476D-01	-0.315408D-01	-53.96
15.0	-0.152172D+00	-0.963538D+00	-98.80	15.0	0.256907D-01	-0.341050D-01	-53.01
16.0	-0.174785D+00	-0.973618D+00	-100.18	16.0	0.284334D-01	-0.363425D-01	-51.96
17.0	-0.198485D+00	-0.965601D+00	-101.64	17.0	0.311377D-01	-0.381888D-01	-50.81
18.0	-0.223195D+00	-0.95550D+00	-103.17	18.0	0.337636D-01	-0.395851D-01	-49.54
19.0	-0.248834D+00	-0.943499D+00	-104.77	19.0	0.362696D-01	-0.404799D-01	-48.14
20.0	-0.275315D+00	-0.933475D+00	-106.43	20.0	0.386137D-01	-0.408294D-01	-46.60
21.0	-0.302543D+00	-0.923492D+00	-108.14	21.0	0.407508D-01	-0.405994D-01	-44.89
22.0	-0.330422D+00	-0.913547D+00	-109.88	22.0	0.426393D-01	-0.397651D-01	-43.00
23.0	-0.35850D+00	-0.903625D+00	-111.66	23.0	0.442356D-01	-0.383126D-01	-40.90
24.0	-0.387721D+00	-0.893653D+00	-113.45	24.0	0.454979D-01	-0.362389D-01	-38.54
25.0	-0.416924D+00	-0.883702D+00	-115.26	25.0	0.463860D-01	-0.335525D-01	-35.88
26.0	-0.446348D+00	-0.873586D+00	-117.06	26.0	0.468624D-01	-0.302733D-01	-32.86
27.0	-0.47579D+00	-0.863263D+00	-118.87	27.0	0.468929D-01	-0.268326D-01	-29.41
28.0	-0.505400D+00	-0.852636D+00	-120.66	28.0	0.46471D-01	-0.220728D-01	-25.42
29.0	-0.534786D+00	-0.841592D+00	-122.43	29.0	0.454979D-01	-0.172470D-01	-20.76
30.0	-0.563951D+00	-0.830002D+00	-124.19	30.0	0.440309D-01	-0.120182D-01	-15.27
31.0	-0.592748D+00	-0.817777D+00	-125.94	31.0	0.420271D-01	-0.645843D-02	-8.74
32.0	-0.621074D+00	-0.804616D+00	-127.66	32.0	0.394817D-01	-0.647874D-03	-0.94
33.0	-0.648918D+00	-0.790506D+00	-129.38	33.0	0.363956D-01	-0.532664D-02	8.33
34.0	-0.675972D+00	-0.775230D+00	-131.08	34.0	0.32779D-01	0.113728D-01	19.14
35.0	-0.702131D+00	-0.758613D+00	-132.79	35.0	0.286462D-01	0.173944D-01	31.27
36.0	-0.727495D+00	-0.740481D+00	-134.49	36.0	0.240270D-01	0.232930D-01	44.11
37.0	-0.751867D+00	-0.720657D+00	-136.21	37.0	0.189566D-01	0.289694D-01	56.80
38.0	-0.775157D+00	-0.698967D+00	-137.96	38.0	0.134765D-01	0.343256D-01	68.56
39.0	-0.797280D+00	-0.675246D+00	-139.74	39.0	0.764319D-02	0.392667D-01	78.99
40.0	-0.818154D+00	-0.649336D+00	-141.56	40.0	0.151786D-02	0.437023D-01	88.01
41.0	-0.837704D+00	-0.621090D+00	-143.45	41.0	-0.482909D-02	0.475486D-01	95.80
42.0	-0.855861D+00	-0.590377D+00	-145.40	42.0	-0.113196D-01	0.507298D-01	102.58
43.0	-0.872558D+00	-0.557087D+00	-147.44	43.0	0.178660D-01	0.531799D-01	108.57
44.0	-0.887735D+00	-0.521127D+00	-149.59	44.0	-0.243822D-01	0.54843D-01	113.97
45.0	-0.901333D+00	-0.482430D+00	-151.84	45.0	-0.307736D-01	0.556806D-01	118.93

CIRCULAR PP POLARIZATION KA= 7.000					CIRCULAR OF POLARIZATION KA= 7.000				
THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
45.0	-0.901333D+00	-0.482230D+00	-151.84	1.045140	45.0	-0.307736D-01	0.556806D-01	118.93	0.004047
46.0	-0.913298D+00	-0.480956D+00	-154.23	1.028556	46.0	-0.369343D-01	0.556602D-01	123.57	0.004462
47.0	-0.923579D+00	-0.396691D+00	-156.76	1.010362	47.0	-0.427656D-01	0.547691D-01	127.98	0.004829
48.0	-0.932125D+00	-0.389856D+00	-159.44	0.991115	48.0	-0.481550D-01	0.530086D-01	132.26	0.005130
49.0	-0.938885D+00	-0.299901D+00	-162.29	0.971445	49.0	-0.503099D-01	0.503956D-01	136.46	0.005352
50.0	-0.943810D+00	-0.247513D+00	-165.31	0.952039	50.0	-0.572643D-01	0.469630D-01	140.64	0.005485
51.0	-0.946887D+00	-0.192613D+00	-168.50	0.933620	51.0	-0.607704D-01	0.427592D-01	144.87	0.005521
52.0	-0.947945D+00	-0.135359D+00	-171.87	0.916921	52.0	-0.634653D-01	0.378485D-01	149.19	0.005460
53.0	-0.947085D+00	-0.759441D-01	-175.42	0.902662	53.0	-0.652532D-01	0.323096D-01	153.66	0.005302
54.0	-0.944089D+00	-0.145976D-01	-179.11	0.891518	54.0	-0.660774D-01	0.262348D-01	158.35	0.005054
55.0	-0.939013D+00	0.484153D-01	-177.05	0.884089	55.0	-0.658728D-01	0.197293D-01	163.33	0.004728
56.0	-0.931747D+00	0.112795D+00	-173.10	0.880875	56.0	-0.645916D-01	0.129090D-01	168.70	0.004339
57.0	-0.922217D+00	0.178210D+00	-169.06	0.882244	57.0	-0.622005D-01	0.589915D-02	174.58	0.003904
58.0	-0.910347D+00	0.244297D+00	-164.98	0.888412	58.0	-0.586814D-01	-0.116800D-02	-178.86	0.003445
59.0	-0.896052D+00	0.310665D+00	-160.88	0.899422	59.0	-0.540328D-01	-0.815504D-02	-171.42	0.002986
60.0	-0.879245D+00	0.376900D+00	-156.80	0.915125	60.0	-0.482704D-01	-0.149220D-01	-162.82	0.002553
61.0	-0.859836D+00	0.442562D+00	-152.76	0.935178	61.0	-0.414280D-01	-0.213290D-01	-152.76	0.002171
62.0	-0.837731D+00	0.507197D+00	-148.61	0.955043	62.0	-0.335766D-01	-0.272386D-01	-140.93	0.001868
63.0	-0.812838D+00	0.570336D+00	-144.94	0.985990	63.0	-0.247296D-01	-0.325186D-01	-127.25	0.001669
64.0	-0.785065D+00	0.631501D+00	-141.19	1.045119	64.0	-0.150323D-01	-0.370449D-01	-112.09	0.001598
65.0	-0.754320D+00	0.690207D+00	-137.54	1.045385	65.0	-0.457161D-02	-0.407040D-01	-96.41	0.001678
66.0	-0.720522D+00	0.745974D+00	-134.01	1.075629	66.0	0.652984D-02	-0.433957D-01	-81.44	0.001926
67.0	-0.683530D+00	0.798324D+00	-130.57	1.104621	67.0	0.181341D-01	-0.450353D-01	-68.07	0.002357
68.0	-0.643470D+00	0.846791D+00	-127.23	1.131109	68.0	0.300893D-01	-0.455563D-01	-56.56	0.002981
69.0	-0.600103D+00	0.890925D+00	-123.96	1.153872	69.0	0.422314D-01	-0.449120D-01	-46.76	0.003801
70.0	-0.553456D+00	0.930300D+00	-120.75	1.171773	70.0	0.543864D-01	-0.430776D-01	-38.38	0.004814
71.0	-0.503525D+00	0.964511D+00	-117.57	1.183821	71.0	0.663726D-01	-0.400515D-01	-31.11	0.006009
72.0	-0.450320D+00	0.993192D+00	-114.39	1.192181	72.0	0.780032D-01	-0.358563D-01	-24.69	0.007370
73.0	-0.393883D+00	0.101601D+01	-111.19	1.187414	73.0	0.890890D-01	-0.305397D-01	-18.92	0.008870
74.0	-0.334289D+00	0.103262D+01	-107.94	1.178148	74.0	0.994416D-01	-0.241747D-01	-13.66	0.010473
75.0	-0.271649D+00	0.104292D+01	-104.60	1.161480	75.0	0.108876D+00	-0.168591D-01	-8.80	0.012138
76.0	-0.206113D+00	0.104658D+01	-101.14	1.137808	76.0	0.117218D+00	-0.871532D-02	-4.25	0.013815
77.0	-0.137872D+00	0.104349D+01	-97.53	1.107881	77.0	0.124287D+00	0.110966D-03	0.05	0.015447
78.0	-0.671610D-01	0.103357D+01	-93.72	1.072777	78.0	0.129440D+00	0.945252D-02	4.16	0.016974
79.0	0.573632D-02	0.101679D+01	-89.68	1.033886	79.0	0.134034D+00	0.191225D-01	8.12	0.018331
80.0	0.804895D-01	0.993168D+00	-85.37	0.992861	80.0	0.136447D+00	0.289171D-01	11.97	0.019454
81.0	0.156719D+00	0.962805D+00	-80.75	0.951555	81.0	0.137080D+00	0.346184D-01	15.73	0.020282
82.0	0.233995D+00	0.925850D+00	-75.62	0.911951	82.0	0.135858D+00	0.475984E-01	19.46	0.020761
83.0	0.311830D+00	0.882513D+00	-70.54	0.874073	83.0	0.132731D+00	0.568214D-01	23.18	0.020846
84.0	0.389726D+00	0.833068D+00	-64.93	0.838689	84.0	0.127676D+00	0.648497D-01	26.93	0.020507
85.0	0.467085D+00	0.777846D+00	-59.02	0.823213	85.0	0.120700D+00	0.718469D-01	30.76	0.019731
86.0	0.543303D+00	0.717234D+00	-52.86	0.809603	86.0	0.111841D+00	0.775829D-01	34.75	0.018527
87.0	0.617730D+00	0.651673D+00	-46.53	0.806268	87.0	0.101164D+00	0.818384D-01	38.97	0.016932
88.0	0.689681D+00	0.581654D+00	-40.14	0.813981	88.0	0.687674D-01	0.844098D-01	43.56	0.015005
89.0	0.758448D+00	0.507713D+00	-33.80	0.833016	89.0	0.747773D-01	0.851139D-01	48.70	0.012836
90.0	0.823301D+00	0.430429D+00	-27.60	0.863093	90.0	0.593493D-01	0.837925D-01	54.69	0.010544



CIRCULAR PP POLARIZATION KL= 7.000				CIRCULAR OF POLARIZATION KA= 7.000					
THETA	REAL	IMAG	PHASE	IBCS	IBCS	REAL	IMAG	PHASE	IBCS
90.0	0.823301D+00	0.430629D+00	27.60	0.863093	90.0	0.593493D-01	0.837925D-01	58.69	0.010544
91.0	0.883498D+00	0.350415D+00	21.63	0.903359	91.0	0.426658D-01	0.803166D-01	62.02	0.008271
92.0	0.938296D+00	0.268314D+00	15.96	0.952392	92.0	0.249345D-01	0.749512D-01	71.52	0.006186
93.0	0.986980D+00	0.184795D+00	10.61	1.008236	93.0	0.638533D-02	0.665582D-01	84.52	0.004471
94.0	0.102877D+01	0.100542D+00	5.58	1.068467	94.0	-0.127323D-01	0.562008D-01	102.76	0.003321
95.0	0.106302D+01	0.162551D-01	0.88	1.130285	95.0	-0.321526D-01	0.435452D-01	126.14	0.002930
96.0	0.108908D+01	-0.673744D-01	-3.54	1.190640	96.0	-0.515986D-01	0.286638D-01	150.95	0.003484
97.0	0.110634D+01	-0.149640D+00	-7.70	1.246374	97.0	-0.707836D-01	0.116762D-01	170.63	0.005147
98.0	0.111425D+01	-0.229857D+00	-11.66	1.294381	98.0	-0.894184D-01	-0.724974D-02	-175.36	0.006048
99.0	0.111235D+01	-0.307355D+00	-15.45	1.331778	99.0	-0.107214D+00	-0.278979D-01	-165.41	0.012273
100.0	0.110025D+01	-0.381486E+00	-19.12	1.356075	100.0	-0.123887D+00	-0.500089D-01	-158.02	0.017849
101.0	0.107767D+01	-0.451633D+00	-22.74	1.366336	101.0	-0.139165D+00	-0.732613D-01	-152.24	0.024734
102.0	0.104420D+01	-0.517215D+00	-26.35	1.358319	102.0	-0.152790D+00	-0.973167D-01	-147.51	0.032815
103.0	0.100043D+01	-0.577694D+00	-30.00	1.334594	103.0	-0.164522D+00	-0.121772D+00	-143.49	0.041896
104.0	0.945762D+00	-0.632579D+00	-33.78	1.294622	104.0	-0.174184D+00	-0.186206D+00	-139.98	0.051704
105.0	0.880589D+00	-0.681431D+00	-37.73	1.239786	105.0	-0.181480D+00	-0.170158D+00	-136.84	0.061689
106.0	0.805227D+00	-0.723869D+00	-41.95	1.172377	106.0	-0.186365D+00	-0.193145D+00	-133.98	0.072037
107.0	0.720127D+00	-0.759571D+00	-46.53	1.095532	107.0	-0.188682D+00	-0.214665D+00	-131.31	0.081682
108.0	0.625879D+00	-0.788281D+00	-51.55	1.013112	108.0	-0.188349D+00	-0.234208D+00	-128.81	0.090329
109.0	0.522117D+00	-0.809607D+00	-57.13	0.928537	109.0	-0.185325D+00	-0.251260D+00	-126.41	0.097477
110.0	0.412986D+00	-0.824025D+00	-63.38	0.849575	110.0	-0.179609D+00	-0.265513D+00	-124.10	0.102650
111.0	0.296199D+00	-0.830879D+00	-70.38	0.774094	111.0	-0.171244D+00	-0.275874D+00	-121.83	0.105431
112.0	0.173968D+00	-0.830303D+00	-78.17	0.719801	112.0	-0.160314D+00	-0.282475D+00	-119.58	0.105493
113.0	0.475289D-01	-0.822616D+00	-86.69	0.679956	113.0	-0.146949D+00	-0.284681D+00	-117.30	0.102637
114.0	-0.817821D-01	-0.807726D+00	-95.78	0.659110	114.0	-0.131315D+00	-0.282101D+00	-114.96	0.095825
115.0	-0.212536D+00	-0.785924D+00	-105.13	0.662848	115.0	-0.113622D+00	-0.274395D+00	-112.49	0.088203
116.0	-0.343230D+00	-0.757481D+00	-114.38	0.691585	116.0	-0.941182D-01	-0.261286D+00	-109.81	0.077128
117.0	-0.472302D+00	-0.722730D+00	-123.16	0.744408	117.0	-0.730685D-01	-0.242565D+00	-106.76	0.064177
118.0	-0.598153D+00	-0.682053D+00	-131.25	0.822983	118.0	-0.507920D-01	-0.218104D+00	-103.11	0.050149
119.0	-0.719164D+00	-0.635884D+00	-138.52	0.921545	119.0	-0.276161D-01	-0.187858D+00	-98.36	0.036053
120.0	-0.833721D+00	-0.584701D+00	-144.96	1.036965	120.0	-0.389159D-02	-0.151875D+00	-91.47	0.023081
121.0	-0.940235D+00	-0.529018D+00	-150.64	1.163902	121.0	0.200167D-01	-0.110301D+00	-79.71	0.012567
122.0	-0.103717D+01	-0.469386D+00	-155.65	1.296038	122.0	0.437360D-01	-0.633881D-01	-55.39	0.005930
123.0	-0.112305D+01	-0.406379D+00	-160.11	1.426384	123.0	0.668915D-01	-0.114775D-01	-9.74	0.004606
124.0	-0.119651D+01	-0.340593D+00	-164.11	1.547646	124.0	0.891129D-01	0.049591D-01	26.77	0.009962
125.0	-0.125631D+01	-0.272635D+00	-167.76	1.652633	125.0	0.110004D+00	0.049358D+00	43.75	0.023209
126.0	-0.130132D+01	-0.203123D+00	-171.13	1.734685	126.0	0.129332D+00	0.169086D+00	52.58	0.045303
127.0	-0.133060D+01	-0.132673D+00	-174.51	1.788093	127.0	0.146667D+00	0.235283D+00	58.06	0.076851
128.0	-0.133388D+01	-0.618971D-01	-177.36	1.808500	128.0	0.161757D+00	0.303074D+00	61.91	0.118019
129.0	-0.133909D+01	0.860395D-02	179.63	1.793232	129.0	0.174343D+00	0.371564D+00	64.86	0.168456
130.0	-0.131737D+01	0.742537D-01	176.60	1.741589	130.0	0.184210D+00	0.439658D+00	67.27	0.227233
131.0	-0.127808D+01	0.146487D+00	173.45	1.654953	131.0	0.191184D+00	0.506218D+00	69.31	0.292808
132.0	-0.122132D+01	0.212775D+00	170.12	1.536895	132.0	0.195158D+00	0.570041D+00	71.10	0.365025
133.0	-0.114747D+01	0.276619D+00	166.45	1.393078	133.0	0.195995D+00	0.625867D+00	72.72	0.435146
134.0	-0.105694D+01	0.337559D+00	162.29	1.231058	134.0	0.193737D+00	0.684394D+00	74.19	0.505927
135.0	-0.950687D+00	0.395173D+00	157.43	1.059968	135.0	0.188374D+00	0.732322D+00	75.57	0.571737



CIRCULAR PP POLARIZATION					CIRCULAR OP POLARIZATION				
KA= 7.000					KA= 7.000				
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
135.0	-0.950687D+00	0.395173D+00	157.43	1.059968	135.0	0.188374D+00	0.732292D+00	75.57	0.571737
136.0	-0.829795D+00	0.449085D+00	151.58	0.890088	136.0	0.180005D+00	0.772217D+00	76.88	0.628721
137.0	-0.695246D+00	0.498964D+00	144.33	0.732332	137.0	0.168757D+00	0.802826D+00	78.13	0.673008
138.0	-0.548771D+00	0.544528D+00	135.22	0.549660	138.0	0.154815D+00	0.822797D+00	75.34	0.700962
139.0	-0.391932D+00	0.585542D+00	123.80	0.496761	139.0	0.138410D+00	0.830843D+00	80.54	0.709458
140.0	-0.226552D+00	0.621825D+00	110.02	0.437992	140.0	0.119819D+00	0.825572D+00	81.74	0.696190
141.0	-0.545962D-01	0.653281D+00	94.78	0.429705	141.0	0.993581D-01	0.806302D+00	82.98	0.659995
142.0	0.121851D+00	0.679709D+00	79.84	0.476851	142.0	0.773788D-01	0.771478D+00	84.27	0.601166
143.0	0.300617D+00	0.701191D+00	66.79	0.582040	143.0	0.542614D-01	0.720291D+00	85.69	0.521744
144.0	0.479470D+00	0.717762D+00	56.25	0.744987	144.0	0.304089D-01	0.651894D+00	87.33	0.425893
145.0	0.656157D+00	0.729297D+00	48.02	0.962416	145.0	0.623985D-02	0.555572D+00	89.37	0.319910
146.0	0.828434D+00	0.736076D+00	41.62	1.228110	146.0	-0.178188D-01	0.460762D+00	92.21	0.212620
147.0	0.994102D+00	0.738179D+00	36.60	1.533147	147.0	-0.413392D-01	0.337066D+00	96.99	0.115322
148.0	0.115104D+01	0.735783D+00	32.59	1.866277	148.0	-0.639002D-01	0.194255D+00	108.21	0.041818
149.0	0.129743D+01	0.729097D+00	29.34	2.214448	149.0	-0.850951D-01	0.322857D-01	159.22	0.008284
150.0	0.143088D+01	0.718361D+00	26.66	2.563347	150.0	-0.104539D+00	-0.148696D+00	-125.11	0.033039
151.0	0.155023D+01	0.703842D+00	24.42	2.898611	151.0	-0.121875D+00	-0.348348D+00	-109.28	0.136200
152.0	0.165385D+01	0.685827D+00	22.52	3.205580	152.0	-0.136783D+00	-0.566129D+00	-103.58	0.339212
153.0	0.174049D+01	0.664623D+00	20.90	3.471943	153.0	-0.148983D+00	-0.801299D+00	-100.53	0.664275
154.0	0.180918D+01	0.640552D+00	19.50	3.683335	154.0	-0.158242D+00	-0.105292D+01	-98.55	1.133675
155.0	0.185919D+01	0.613948D+00	18.27	3.833338	155.0	-0.164379D+00	-0.131985D+01	-97.10	1.769026
156.0	0.189012D+01	0.585149D+00	17.20	3.914852	156.0	-0.167269D+00	-0.166078D+01	-95.97	2.590462
157.0	0.190183D+01	0.554500D+00	1.25	3.924816	157.0	-0.166840D+00	-0.189419D+01	-95.03	3.615791
158.0	0.189449D+01	0.522345D+00	15.41	3.861940	158.0	-0.163085D+00	-0.219842D+01	-94.74	4.859687
159.0	0.186359D+01	0.489026D+00	14.67	3.730762	159.0	-0.156052D+00	-0.251164D+01	-93.56	6.332674
160.0	0.182488D+01	0.454881D+00	14.00	3.537112	160.0	-0.145851D+00	-0.283187D+01	-92.95	8.040768
161.0	0.176443D+01	0.420238D+00	13.40	3.289815	161.0	-0.132649D+00	-0.315703D+01	-92.41	9.984417
162.0	0.168855D+01	0.385416D+00	12.86	2.999747	162.0	-0.116666D+00	-0.348449D+01	-91.92	12.158173
163.0	0.159881D+01	0.350723D+00	12.37	2.679192	163.0	-0.981755D-01	-0.381322D+01	-91.47	14.550272
164.0	0.149699D+01	0.316452D+00	11.94	2.341121	164.0	-0.774955D-01	-0.413962D+01	-91.07	17.142445
165.0	0.138508D+01	0.282681D+00	11.54	1.998461	165.0	-0.549857D-01	-0.446172D+01	-90.71	19.909926
166.0	0.126521D+01	0.250273D+00	11.19	1.663390	166.0	-0.310399D-01	-0.477710D+01	-90.37	22.821667
167.0	0.113985D+01	0.218874D+00	10.87	1.346702	167.0	-0.607897D-02	-0.508338D+01	-90.07	25.840775
168.0	0.101074D+01	0.183911D+00	10.59	1.057284	168.0	0.194561D-01	-0.537818D+01	-89.79	28.925164
169.0	0.80884D+00	0.160594D+00	10.33	0.801747	169.0	0.451126D-01	-0.565918D+01	-89.54	32.028398
170.0	0.752475D+00	0.134116D+00	10.11	0.584205	170.0	0.704346D-01	-0.592417D+01	-89.32	35.100726
171.0	0.627875D+00	0.109649D+00	9.91	0.406250	171.0	0.949705D-01	-0.617100D+01	-89.12	38.090257
172.0	0.509369D+00	0.873507D-01	9.73	0.267087	172.0	0.116282D+00	-0.538338D+01	-88.94	40.944263
173.0	0.399123D+00	0.673579D-01	9.56	0.163836	173.0	0.139952D+00	-0.660235D+01	-88.79	43.610546
174.0	0.299149D+00	0.497917D-01	9.45	0.091970	174.0	0.159592D+00	-0.678332D+01	-88.65	46.038846
175.0	0.211269D+00	0.347556D-01	9.34	0.045843	175.0	0.176648D+00	-0.693909D+01	-88.54	48.182225
176.0	0.137081D+00	0.223365D-01	9.25	0.019290	176.0	0.191412D+00	-0.706436D+01	-88.45	49.998395
177.0	0.779331D-01	0.126048D-01	9.19	0.006232	177.0	0.203021D+00	-0.717716D+01	-88.38	51.450926
178.0	0.349086D-01	0.561497D-02	9.14	0.001250	178.0	0.211465D+00	-0.724331D+01	-88.33	52.510307
179.0	0.676496D-02	0.140566D-02	9.11	0.000079	179.0	0.216594D+00	-0.728752D+01	-88.30	53.154910
180.0	0.137774D-09	-0.190161D-10	-7.66	0.000000	180.0	0.218314D+00	-0.730229D+01	-88.29	53.371138

CIRCULAR OP POLARIZATION KA= 8.000

THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
0.0	0.871865D+00	0.416577D+00	25.54	0.933684	0.0	0.260365D-11	-0.872592D-11	-73.39	0.000000
1.0	0.872341D+00	0.415491D+00	25.47	0.933612	1.0	-0.132648D-03	0.255631D-03	117.42	0.000000
2.0	0.873768D+00	0.412244D+00	25.26	0.933414	2.0	-0.529367D-02	0.101562D-02	117.53	0.000001
3.0	0.876132D+00	0.406662D+00	24.91	0.933142	3.0	-0.186444D-02	0.259380D-02	117.70	0.000007
4.0	0.879418D+00	0.399393D+00	24.43	0.932885	4.0	-0.209761D-02	0.359309D-02	117.95	0.000020
5.0	0.883583D+00	0.389901D+00	23.81	0.932751	5.0	-0.325399D-02	0.605045D-02	118.27	0.000047
6.0	0.888481D+00	0.378465D+00	23.07	0.932877	6.0	-0.464395D-02	0.849380D-02	118.67	0.000094
7.0	0.894460D+00	0.365179D+00	22.21	0.933414	7.0	-0.625298D-02	0.112153D-01	119.18	0.000165
8.0	0.901063D+00	0.350150D+00	21.24	0.934515	8.0	-0.806358D-02	0.141387D-01	119.70	0.000265
9.0	0.908359D+00	0.333496D+00	20.16	0.936336	9.0	-0.100551D-01	0.171808D-01	120.34	0.000396
10.0	0.916286D+00	0.315342D+00	18.99	0.939020	10.0	-0.122036D-01	0.202534D-01	121.07	0.000559
11.0	0.924759D+00	0.295818D+00	17.74	0.942688	11.0	-0.144820D-01	0.232657D-01	121.90	0.000751
12.0	0.933691D+00	0.275058D+00	16.41	0.947437	12.0	-0.168598D-01	0.251260D-01	122.84	0.000967
13.0	0.942830D+00	0.253198D+00	15.23	0.953325	13.0	-0.193031D-01	0.287441D-01	123.88	0.001199
14.0	0.952252D+00	0.230368D+00	14.0	0.960374	14.0	-0.217750D-01	0.310333D-01	125.06	0.001437
15.0	0.962201D+00	0.208697D+00	12.62	0.968555	15.0	-0.242358D-01	0.329128D-01	126.37	0.001671
16.0	0.971884D+00	0.182304D+00	10.62	0.977794	16.0	-0.266430D-01	0.343094D-01	127.83	0.001887
17.0	0.981400D+00	0.157299D+00	9.11	0.987967	17.0	-0.289521D-01	0.351595D-01	129.47	0.002074
18.0	0.990750D+00	0.131782D+00	7.58	0.998502	18.0	-0.311169D-01	0.354109D-01	131.31	0.002242
19.0	0.999589D+00	0.105839D+00	6.04	1.010380	19.0	-0.330904D-01	0.350241D-01	133.37	0.002322
20.0	0.100786D+01	0.795391D+01	4.51	1.022142	20.0	-0.348251D-01	0.339737D-01	135.71	0.002367
21.0	0.101433D+01	0.529385D+01	2.98	1.033896	21.0	-0.362745D-01	0.322491D-01	138.36	0.002356
22.0	0.102208D+01	0.260753D+01	1.46	1.045321	22.0	-0.373368D-01	0.298553D-01	141.40	0.002290
23.0	0.102766D+01	-0.102864D+02	-0.06	1.056081	23.0	-0.381399D-01	0.268126D-01	144.89	0.002174
24.0	0.103260D+01	-0.283683D-01	-1.57	1.065834	24.0	-0.384747D-01	0.231580D-01	148.96	0.002017
25.0	0.103495D+01	-0.559543D-01	-3.09	1.074244	25.0	-0.383641D-01	0.169431D-01	153.72	0.001831
26.0	0.103632D+01	-0.838123D-01	-4.62	1.080991	26.0	-0.377802D-01	0.142342D-01	159.36	0.001630
27.0	0.103588D+01	-0.111981D+00	-6.17	1.085787	27.0	-0.367017D-01	0.91102D-02	166.06	0.001430
28.0	0.103375D+01	-0.140511D+00	-7.74	1.088389	28.0	-0.351155D-01	0.366529D-02	174.04	0.001247
29.0	0.102951D+01	-0.169460D+00	-9.35	1.089604	29.0	-0.330174D-01	-0.200101D-02	-176.53	0.001094
30.0	0.102311D+01	-0.198894D+00	-11.00	1.086311	30.0	-0.304129D-01	-0.777764D-02	-165.65	0.000985
31.0	0.101443D+01	-0.228881D+00	-12.71	1.081458	31.0	-0.273176D-01	-0.135484D-01	-153.62	0.000930
32.0	0.100337D+01	-0.259489D+00	-14.50	1.074081	32.0	-0.237581D-01	-0.191934D-01	-141.07	0.000933
33.0	0.989822D+00	-0.290782D+00	-16.37	1.064302	33.0	-0.197220D-01	-0.245919D-01	-128.80	0.000996
34.0	0.973717D+00	-0.32216D+00	-18.34	1.052335	34.0	-0.154084D-01	-0.296247D-01	-117.48	0.001115
35.0	0.954990D+00	-0.355635D+00	-20.43	1.036483	35.0	-0.107265D-01	-0.341770D-01	-107.42	0.001283
36.0	0.933588D+00	-0.389270D+00	-22.63	1.023137	36.0	-0.579653D-02	-0.381411D-01	-98.64	0.001488
37.0	0.909515D+00	-0.42372D+00	-24.98	1.006767	37.0	-0.698221D-02	-0.414189D-01	-90.97	0.001716
38.0	0.882733D+00	-0.459010D+00	-27.47	0.98908	38.0	0.448002D-02	-0.439244D-01	-84.18	0.001949
39.0	0.853265D+00	-0.495065D+00	-30.12	0.973151	39.0	0.964240D-02	-0.455858D-01	-78.06	0.002171
40.0	0.821139D+00	-0.531834D+00	-32.93	0.957117	40.0	0.146873D-01	-0.463480D-01	-72.42	0.002364
41.0	0.786404D+00	-0.569218D+00	-35.90	0.942440	41.0	0.195091D-01	-0.461737D-01	-67.10	0.002513
42.0	0.749124D+00	-0.607088D+00	-39.02	0.929742	42.0	0.240000D-01	-0.450450D-01	-61.95	0.002605
43.0	0.709379D+00	-0.645280D+00	-42.29	0.919605	43.0	0.280524D-01	-0.429645D-01	-56.86	0.002633
44.0	0.667265D+00	-0.683593D+00	-45.69	0.912542	44.0	0.315612D-01	-0.399554D-01	-51.69	0.002593
45.0	0.622892D+00	-0.721791D+00	-49.21	0.908977	45.0	0.344260D-01	-0.360623D-01	-46.33	0.002486

CIRCULAR PP POLARIZATION KA= 8.000					CIRCULAR OP POLARIZATION KA= 8.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
45.0	0.622892D+01	-0.721791D+00	-89.21	0.908977	45.0	0.388260D-01	-0.360623D-01	-46.33	0.002486
46.0	0.576381D+00	-0.759603D+00	-52.81	0.909212	46.0	0.365538D-01	-0.313498D-01	-40.62	0.002319
47.0	0.527865D+00	-0.796722D+00	-56.47	0.913408	47.0	0.378615D-01	-0.259026D-01	-34.38	0.002104
48.0	0.477485D+00	-0.832815D+00	-60.17	0.921569	48.0	0.382779D-01	-0.193235D-01	-27.38	0.001858
49.0	0.425391D+00	-0.867507D+00	-63.88	0.933526	49.0	0.377464D-01	-0.132318D-01	-19.32	0.001600
50.0	0.371739D+00	-0.900811D+00	-67.57	0.948930	50.0	0.362270D-01	-0.626133D-02	-9.81	0.001352
51.0	0.316690D+00	-0.931112D+00	-71.22	0.967261	51.0	0.336979D-01	0.942691D-03	1.60	0.001136
52.0	0.260410D+00	-0.959176D+00	-74.81	0.987832	52.0	0.301574D-01	0.822626D-02	15.26	0.000977
53.0	0.203067D+00	-0.988163D+00	-78.34	1.009812	53.0	0.256249D-01	0.154300D-01	31.05	0.000895
54.0	0.144833D+00	-1.005629D+01	-81.80	1.032255	54.0	0.201417D-01	0.223927D-01	48.03	0.000907
55.0	0.088827D-01	-0.102311D+01	-85.20	1.058133	55.0	0.137714D-01	0.289550D-01	64.56	0.001028
56.0	0.263913D-01	-0.103619D+01	-88.54	1.074386	56.0	0.660009D-02	0.349629D-01	79.31	0.001266
57.0	-0.334617D-01	-0.104448D+01	-91.84	1.091970	57.0	-0.126472D-02	0.402721D-01	91.80	0.001623
58.0	-0.938938D-01	-0.107465D+01	-95.10	1.105905	58.0	-0.964865D-02	0.447511D-01	102.22	0.002097
59.0	-0.135518D+00	-0.104488D+01	-98.36	1.115338	59.0	-0.185432D-01	0.482849D-01	111.01	0.002675
60.0	-0.213343D+00	-0.103638D+01	-101.63	1.119591	60.0	-0.276458D-01	0.507785D-01	118.57	0.003343
61.0	-0.272770D+00	-0.102167D+01	-104.95	1.118209	61.0	-0.368244D-01	0.521595D-01	125.22	0.004077
62.0	-0.331589D+00	-0.100052D+01	-108.34	1.111002	62.0	-0.458894D-01	0.523810D-01	131.22	0.004850
63.0	-0.389585D+00	-0.972778D+00	-111.83	1.098073	63.0	-0.546436D-01	0.514227D-01	136.74	0.005630
64.0	-0.446528D+00	-0.938324D+00	-115.45	1.079836	64.0	-0.628855D-01	0.492935D-01	141.91	0.006384
65.0	-0.502168D+00	-0.897130D+00	-119.24	1.057015	65.0	-0.708139D-01	0.460315D-01	146.83	0.007077
66.0	-0.556251D+00	-0.849241D+00	-123.22	1.030626	66.0	-0.770315D-01	0.417045D-01	151.57	0.007673
67.0	-0.608498D+00	-0.798780D+00	-127.48	1.001945	67.0	-0.825501D-01	0.364091D-01	156.20	0.008140
68.0	-0.658614D+00	-0.739950D+00	-131.90	0.972455	68.0	-0.867943D-01	0.302699D-01	160.77	0.008450
69.0	-0.706284D+00	-0.667040D+00	-136.64	0.943779	69.0	-0.896061D-01	0.234372D-01	165.34	0.008579
70.0	-0.751172D+00	-0.594421D+00	-141.64	0.917595	70.0	-0.908493D-01	0.160844D-01	169.96	0.008512
71.0	-0.792927D+00	-0.516548D+00	-146.92	0.892551	71.0	-0.904131D-01	0.840443D-02	174.69	0.008245
72.0	-0.831175D+00	-0.433945D+00	-152.43	0.879160	72.0	-0.882157D-01	0.606149D-03	179.61	0.007782
73.0	-0.865529D+00	-0.347231D+00	-158.14	0.869711	73.0	-0.842076D-01	-0.703041D-02	-175.19	0.007141
74.0	-0.895587D+00	-0.257084D+00	-163.98	0.868169	74.0	-0.783737D-01	-0.144591D-01	-169.55	0.006352
75.0	-0.920937D+00	-0.164251D+00	-169.89	0.875193	75.0	-0.707359D-01	-0.212731D-01	-163.26	0.005456
76.0	-0.941160D+00	-0.695336D-01	-175.77	0.890617	76.0	-0.613535D-01	-0.273105D-01	-156.00	0.004510
77.0	-0.955838D+00	0.262127D-01	-178.43	0.914314	77.0	-0.503243D-01	-0.323599D-01	-147.26	0.003580
78.0	-0.964560D+00	0.122095D+00	-172.79	0.945282	78.0	-0.377840D-01	-0.362269D-01	-136.21	0.002713
79.0	-0.965925D+00	0.217188D+00	-167.34	0.982114	79.0	-0.239050D-01	-0.387394D-01	-121.68	0.002072
80.0	-0.962555D+00	0.310552D+00	-162.12	1.022956	80.0	-0.889427D-02	-0.397530D-01	-102.61	0.001659
81.0	-0.951104D+00	0.401236D+00	-157.13	1.065589	81.0	0.700901D-02	-0.391566D-01	-79.85	0.001582
82.0	-0.932261D+00	0.486297D+00	-152.36	1.107595	82.0	0.235376D-01	-0.368766D-01	-57.45	0.001914
83.0	-0.905768D+00	0.570609D+00	-147.78	1.146238	83.0	0.404003D-01	-0.328611D-01	-39.14	0.002713
84.0	-0.871424D+00	0.647875D+00	-143.37	1.179122	84.0	0.572872D-01	-0.271825D-01	-25.38	0.004021
85.0	-0.829098D+00	0.718643D+00	-139.08	1.203851	85.0	0.738751D-01	-0.198407D-01	-15.03	0.005851
86.0	-0.778738D+00	0.782315D+00	-134.87	1.216449	86.0	0.898340D-01	-0.109632D-01	-6.96	0.008190
87.0	-0.720381D+00	0.838160D+00	-129.68	1.221461	87.0	0.104833D+00	-0.706328D-03	-0.39	0.010991
88.0	-0.654163D+00	0.885524D+00	-126.45	1.212081	88.0	0.118549D+00	-0.107267D-01	5.17	0.014169
89.0	-0.580324D+00	0.923841D+00	-122.14	1.190258	89.0	0.130671D+00	0.226087D-01	10.02	0.017608
90.0	-0.499218D+00	0.952643D+00	-117.66	1.156787	90.0	0.140908D+00	0.360853D-01	14.36	0.021157

CIRCULAR PP POLARIZATION KA= 8.000				CIRCULAR OP POLARIZATION KA= 8.000					
THETA 90.C	REAL	IMAG	MBCS	PHASE 117.66	THETA 90.C	REAL	IMAG	MBCS	PHASE 14.36
91.0	-0.499218D+00	0.952683D+00	1.156747	117.66	91.0	0.140908D+00	0.360853D-01	0.021157	14.36
92.0	-0.411317D+00	0.971565D+00	1.113121	112.95	92.0	0.148998D+00	0.493933D-01	0.024000	18.34
93.0	-0.317216D+00	0.980357D+00	1.061724	107.93	93.0	0.154710D+00	0.626527D-01	0.027861	22.03
94.0	-0.217626D+00	0.978882D+00	1.005570	102.53	94.0	0.157855D+00	0.754799D-01	0.030615	25.56
95.0	-0.113392D+00	0.967125D+00	0.948168	96.69	95.0	0.158287D+00	0.874751D-01	0.032707	28.93
96.0	-0.547290D-02	0.945193D+00	0.893419	90.33	96.0	0.155908D+00	0.962300D-01	0.033957	32.21
97.0	0.105057D+00	0.913315D+00	0.845182	83.44	97.0	0.150677D+00	0.107338D+00	0.034225	35.46
98.0	0.217017D+00	0.871843D+00	0.807206	76.02	98.0	0.142605D+00	0.144030D+00	0.034824	38.74
99.0	0.329130D+00	0.821243D+00	0.782766	68.16	99.0	0.131761D+00	0.119051D+00	0.031534	42.10
100.0	0.440038D+00	0.762095D+00	0.774421	60.00	100.0	0.118271D+00	0.120941D+00	0.028615	45.64
101.0	0.552462D+00	0.695090D+00	0.783787	51.73	101.0	0.102319D+00	0.119773D+00	0.024815	49.49
102.0	0.652462D+00	0.621010D+00	0.811359	43.59	102.0	0.841413D-01	0.115300D+00	0.020374	53.88
103.0	0.751007D+00	0.540728D+00	0.856398	35.75	103.0	0.640276D-01	0.107337D+00	0.015621	59.18
104.0	0.842431D+00	0.455195D+00	0.916892	28.38	104.0	0.423129D-01	0.957696D-01	0.010962	66.16
105.0	0.925246D+00	0.365428D+00	0.989619	21.55	105.0	0.193733D-01	0.805619D-01	0.006866	76.48
106.0	0.998012D+00	0.272495D+00	1.070281	15.27	105.0	-0.436950D-02	0.617629D-01	0.003834	94.06
107.0	0.105936D+01	0.177508D+00	1.153750	9.51	106.0	-0.285115D-01	0.395110D-01	0.002374	125.81
108.0	0.110802D+01	0.815852D-01	1.234367	4.21	107.0	-0.525639D-01	0.140376D-01	0.002960	165.05
109.0	0.114285D+01	-0.141212D-01	1.306325	-0.71	108.0	-0.760730D-01	-0.143316D-01	0.005993	-169.33
110.0	0.116289D+01	-0.108481D+00	1.364077	-5.33	109.0	-0.985743D-01	-0.451773D-01	0.011758	-155.38
111.0	0.116731D+01	-0.200380D+00	1.402759	-9.74	110.0	-0.115613D+00	-0.779891D-01	0.020390	-146.90
112.0	0.115552D+01	-0.288741D+00	1.418957	-14.03	111.0	-0.138755D+00	-0.112171D+00	0.031835	-141.05
113.0	0.108209D+01	-0.450796D+00	1.409258	-18.29	112.0	-0.152593D+00	-0.147047D+00	0.045832	-136.62
114.0	0.102045D+01	-0.522634D+00	1.374728	-22.62	113.0	-0.169761D+00	-0.181872D+00	0.061896	-133.03
115.0	0.942662D+00	-0.587244D+00	1.314470	-27.12	114.0	-0.180939D+00	-0.215843D+00	0.079327	-129.97
116.0	0.849401D+00	-0.643920D+00	1.233467	-31.92	115.0	-0.188861D+00	-0.248111D+00	0.097228	-127.28
117.0	0.741637D+00	-0.682059D+00	1.136115	-37.17	116.0	-0.193324D+00	-0.277798D+00	0.114546	-124.83
118.0	0.620616D+00	-0.731170D+00	1.028971	-43.02	117.0	-0.194191D+00	-0.304011D+00	0.130132	-122.57
119.0	0.487850D+00	-0.760881D+00	0.919738	-49.68	118.0	-0.191396D+00	-0.325663D+00	0.142820	-120.43
120.0	0.345105D+00	-0.780941D+00	0.816934	-57.33	119.0	-0.184949D+00	-0.342898D+00	0.151509	-118.37
121.0	0.194383D+00	-0.791221D+00	0.728966	-66.16	120.0	-0.174935D+00	-0.353085D+00	0.155271	-116.36
122.0	0.378909D-01	-0.791715D+00	0.663015	-76.20	121.0	-0.161511D+00	-0.356840D+00	0.153452	-114.35
123.0	-0.121948D+00	-0.782559D+00	0.628248	-86.86	122.0	-0.144911D+00	-0.353223D+00	0.145765	-112.31
124.0	-0.262713D+00	-0.763927D+00	0.627271	-98.86	123.0	-0.125344D+00	-0.341542D+00	0.132385	-110.17
125.0	-0.441666D+00	-0.736226D+00	0.633511	-110.31	124.0	-0.103448D+00	-0.321405D+00	0.114003	-107.84
126.0	-0.596152D+00	-0.699891D+00	0.637098	-120.96	125.0	-0.793727D-01	-0.292520D+00	0.091868	-105.18
127.0	-0.743469D+00	-0.655472D+00	0.645244	-130.42	126.0	-0.536796D-01	-0.254757D+00	0.067782	-101.90
128.0	-0.880952D+00	-0.602611D+00	0.682390	-138.60	127.0	-0.268789D-01	-0.208157D+00	0.044052	-97.36
129.0	-0.100602D+01	-0.485030D+00	1.440423	-145.58	128.0	0.490579D-03	0.152952D+00	0.023395	-89.82
130.0	-0.111623D+01	-0.480517D+00	1.509134	-151.55	129.0	0.278723D-01	-0.895702D-01	0.008800	-72.71
131.0	-0.120933D+01	-0.410916D+00	1.876067	-156.71	130.0	0.547042D-01	-0.186246D-01	0.003340	-16.82
132.0	-0.128328D+01	-0.337116D+00	1.631322	-161.23	131.0	0.804305D-01	0.589929D-01	0.009949	36.26
133.0	-0.133636D+01	-0.260035D+00	1.760464	-165.28	132.0	0.104515D+00	0.142292D+00	0.031170	53.70
134.0	-0.136712D+01	-0.180641D+00	1.801649	-168.99	133.0	0.126450D+00	0.230008D+00	0.068893	61.20
135.0	-0.137451D+01	-0.997848D-01	1.901623	-172.47	134.0	0.145774D+00	0.320710D+00	0.124099	65.56
			1.899227	-175.85	135.0	0.162076D+00	0.412746D+00	0.196628	68.56

CIRCULAR PP POLARIZATION KA= 9.000

THETA	REAL	IMAG	PHASE	NPCS	THETA	REAL	IMAG	PHASE	NPCS
135.0	-0.137451D+01	-0.997848D-01	-175.85	1.899227	135.0	0.162076D+00	0.412744D+00	68.56	0.196628
136.0	-0.135783D+01	-0.188904D-01	-178.22	1.844040	136.0	0.175007D+00	0.503354D+00	70.86	0.285001
137.0	-0.131681D+01	0.623579D-01	-177.29	1.737895	137.0	0.184352D+00	0.593588D+00	77.75	0.386310
138.0	-0.125160D+01	0.141877D+00	-173.53	1.586626	138.0	0.189731D+00	0.678385D+00	74.37	0.496204
139.0	-0.116277D+01	0.219225D+00	-169.32	1.400105	139.0	0.191209D+00	0.756588D+00	75.82	0.608981
140.0	-0.105135D+01	0.293613D+00	-164.40	1.191552	140.0	0.188598D+00	0.823957D+00	77.13	0.717811
141.0	-0.918767D+00	0.364312D+00	-158.37	0.976856	141.0	0.182756D+00	0.884235D+00	78.35	0.815089
142.0	-0.766855D+00	0.430660D+00	-150.68	0.773535	142.0	0.172021D+00	0.923150D+00	79.51	0.892914
143.0	-0.597834D+00	0.492070D+00	-140.58	0.599557	143.0	0.156254D+00	0.958463D+00	80.62	0.943695
144.0	-0.414258D+00	0.548933D+00	-127.09	0.471951	144.0	0.141237D+00	0.970906D+00	81.72	0.960859
145.0	-0.218988D+00	0.598125D+00	-110.11	0.405770	145.0	0.121367D+00	0.961717D+00	82.81	0.939630
146.0	-0.151235D-01	0.642007D+00	-91.35	0.412401	146.0	0.990937D-01	0.931679D+00	83.93	0.877845
147.0	0.119867D+01	0.679424D+00	-74.06	0.499269	147.0	0.749262D-01	0.878154D+00	85.12	0.776749
148.0	0.405075D+00	0.710212D+00	-60.30	0.668486	148.0	0.494162D-01	0.799621D+00	86.46	0.641836
149.0	0.614895D+00	0.734297D+00	-50.08	0.916783	149.0	0.231483D-01	0.694907D+00	88.09	0.483292
150.0	0.818818D+00	0.751653D+00	-42.55	1.235445	150.0	-0.327401D-02	0.562718D+00	90.33	0.316663
151.0	0.101463D+01	0.762269D+00	-36.92	1.610716	151.0	-0.292418D-01	0.402669D+00	94.15	0.162998
152.0	0.119867D+01	0.766652D+00	-32.60	2.024574	152.0	-0.541549D-01	0.218304D+00	104.18	0.048859
153.0	0.136789D+01	0.764668D+00	-29.21	2.455834	153.0	-0.774357D-01	-0.236177D-02	-178.24	0.006002
154.0	0.151950D+01	0.756726D+00	-26.47	2.891502	154.0	-0.935430D-01	-0.247030D+00	-111.75	0.070734
155.0	0.165105D+01	0.743175D+00	-24.23	3.278289	155.0	0.116984D+00	-0.518905D+00	-102.70	0.282948
156.0	0.176051D+01	0.724413D+00	-22.37	3.624161	156.0	-0.132327D+00	-0.816896D+00	-99.20	0.684829
157.0	0.184623D+01	0.708883D+00	-20.79	3.899816	157.0	-0.144271D+00	-0.113951D+01	-97.21	1.319284
158.0	0.190708D+01	0.673065D+00	-19.44	4.089976	158.0	-0.152355D+00	-0.148489D+01	-95.86	2.228117
159.0	0.194240D+01	0.641468D+00	-18.28	4.184385	159.0	-0.156564D+00	-0.185082D+01	-94.84	3.450046
160.0	0.195240D+01	0.606623D+00	-17.26	4.178451	160.0	-0.156735D+00	-0.223474D+01	-94.01	5.018617
161.0	0.193639D+01	0.569070D+00	-16.38	4.073467	161.0	0.152859D+00	-0.263377D+01	-93.32	6.960129
162.0	0.189635D+01	0.529388D+00	-15.60	3.876402	162.0	-0.145023D+00	-0.304477D+01	-92.73	9.291660
163.0	0.183313D+01	0.488110D+00	-14.91	3.599284	163.0	-0.134050D+00	-0.346432D+01	-92.21	12.019312
164.0	0.174914D+01	0.445600D+00	-14.30	3.256222	164.0	-0.118274D+00	-0.388880D+01	-91.74	15.136761
165.0	0.164613D+01	0.403002D+00	-13.76	2.872152	165.0	-0.999912D-01	-0.431444D+01	-91.33	18.624222
166.0	0.152697D+01	0.360247D+00	-13.27	2.461407	166.0	-0.789539D-01	-0.473726D+01	-90.95	22.447906
167.0	0.139466D+01	0.318048D+00	-12.85	2.046238	167.0	-0.556838D-01	-0.515333D+01	-90.62	26.560017
168.0	0.125249D+01	0.276893D+00	-12.47	1.645396	168.0	-0.307166D-01	-0.555863D+01	-90.32	30.899343
169.0	0.110391D+01	0.237246D+00	-12.13	1.274901	169.0	-0.463399D-02	-0.594915D+01	-90.04	35.392444
170.0	0.952507D+00	0.199541D+00	-11.83	0.947087	170.0	0.219355D-01	-0.635209D+01	-89.80	39.955412
171.0	0.801903D+00	0.164181D+00	-11.57	0.670004	171.0	0.483805D-01	-0.667037D+01	-89.58	44.496166
172.0	0.655675D+00	0.131532D+00	-11.34	0.447270	172.0	0.740721D-01	-0.699369D+01	-89.39	48.917189
173.0	0.517281D+00	0.101930D+00	-11.15	0.277969	173.0	0.984035D-01	-0.728759D+01	-89.23	53.118630
174.0	0.389482D+00	0.756691D-01	-10.98	0.157812	174.0	0.120799D+00	-0.754897D+01	-89.08	57.001616
175.0	0.276768D+00	0.530080D-01	-10.84	0.079410	175.0	0.140730D+00	-0.777508D+01	-88.96	60.471664
176.0	0.180293D+00	0.341664D-01	-10.73	0.033673	176.0	0.157724D+00	-0.796349D+01	-88.87	63.442033
177.0	0.102815D+00	0.195242D-01	-10.64	0.010944	177.0	0.171378D+00	-0.811218D+01	-88.79	65.836866
178.0	0.461640D-01	0.862208D-02	-10.58	0.002204	178.0	0.181369D+00	-0.821956D+01	-88.74	67.593989
179.0	0.116037D-01	0.216056D-02	-10.55	0.000139	179.0	0.187460D+00	-0.828445D+01	-88.70	68.667234
180.0	0.503379D-10	-0.167493D-09	-73.27	0.000000	180.0	0.189506D+00	-0.830616D+01	-88.69	69.028181

CIRCULAR OP POLARIZATION KA= 9.000

THETA	REAL	IMAG	PHASE	NPCS	THETA	REAL	IMAG	PHASE	NPCS
135.0	0.162076D+00	0.412744D+00	68.56	0.196628	135.0	0.162076D+00	0.412744D+00	68.56	0.196628
136.0	0.175007D+00	0.503354D+00	70.86	0.285001	136.0	0.175007D+00	0.503354D+00	70.86	0.285001
137.0	0.184352D+00	0.593588D+00	77.75	0.386310	137.0	0.184352D+00	0.593588D+00	77.75	0.386310
138.0	0.189731D+00	0.678385D+00	74.37	0.496204	138.0	0.189731D+00	0.678385D+00	74.37	0.496204
139.0	0.191209D+00	0.756588D+00	75.82	0.608981	139.0	0.191209D+00	0.756588D+00	75.82	0.608981
140.0	0.188598D+00	0.823957D+00	77.13	0.717811	140.0	0.188598D+00	0.823957D+00	77.13	0.717811
141.0	0.182756D+00	0.884235D+00	78.35	0.815089	141.0	0.182756D+00	0.884235D+00	78.35	0.815089
142.0	0.172021D+00	0.923150D+00	79.51	0.892914	142.0	0.172021D+00	0.923150D+00	79.51	0.892914
143.0	0.156254D+00	0.958463D+00	80.62	0.943695	143.0	0.156254D+00	0.958463D+00	80.62	0.943695
144.0	0.141237D+00	0.970906D+00	81.72	0.960859	144.0	0.141237D+00	0.970906D+00	81.72	0.960859
145.0	0.121367D+00	0.961717D+00	82.81	0.939630	145.0	0.121367D+00	0.961717D+00	82.81	0.939630
146.0	0.990937D-01	0.931679D+00	83.93	0.877845	146.0	0.990937D-01	0.931679D+00	83.93	0.877845
147.0	0.749262D-01	0.878154D+00	85.12	0.776749	147.0	0.749262D-01	0.878154D+00	85.12	0.776749
148.0	0.494162D-01	0.799621D+00	86.46	0.641836	148.0	0.494162D-01	0.799621D+00	86.46	0.641836
149.0	0.231483D-01	0.694907D+00	88.09	0.483292	149.0	0.231483D-01	0.694907D+00	88.09	0.483292
150.0	-0.327401D-02	0.562718D+00	90.33	0.316663	150.0	-0.327401D-02	0.562718D+00	90.33	0.316663
151.0	-0.292418D-01	0.402669D+00	94.15	0.162998	151.0	-0.292418D-01	0.402669D+00	94.15	0.162998
152.0	-0.541549D-01	0.218304D+00	104.18	0.048859	152.0	-0.541549D-01	0.218304D+00	104.18	0.048859
153.0	-0.774357D-01	-0.236177D-02	-178.24	0.006002	153.0	-0.774357D-01	-0.236177D-02	-178.24	0.006002
154.0	-0.935430D-01	-0.247030D+00	-111.75	0.070734	154.0	-0.935430D-01	-0.247030D+00	-111.75	0.070734
155.0	0.116984D+00	-0.518905D+00	-102.70	0.282948	155.0	0.116984D+00	-0.518905D+00	-102.70	0.282948
156.0	-0.132327D+00	-0.816896D+00	-99.20	0.684829	156.0	-0.132327D+00	-0.816896D+00	-99.20	0.684829
157.0	-0.144271D+00	-0.113951D+01	-97.21	1.319284	157.0	-0.144271D+00	-0.113951D+01	-97.21	1.319284
158.0	-0.152355D+00	-0.148489D+01	-95.86	2.228117	158.0	-0.152355D+00	-0.148489D+01	-95.86	2.228117
159.0	-0.156564D+00	-0.185082D+01	-94.84	3.450046	159.0	-0.156564D+00	-0.185082D+01	-94.84	3.450046
160.0	-0.156735D+00	-0.223474D+01	-94.01	5.018617	160.0	-0.156735D+00	-0.223474D+01	-94.01	5.018617
161.0	0.152859D+00	-0.263377D+01	-93.32	6.960129	161.0	0.152859D+00	-0.263377D+01	-93.32	6.960129
162.0	-0.145023D+00	-0.304477D+01	-92.73	9.291660	162.0	-0.145023D+00	-0.304477D+01	-92.73	9.291660
163.0	-0.134050D+00	-0.346432D+01	-92.21	12.019312	163.0	-0.134050D+00	-0.346432D+01	-92.21	12.019312
164.0	-0.118274D+00	-0.388880D+01	-91.74	15.136761	164.0	-0.118274D+00	-0.388880D+01	-91.74	15.136761
165.0	-0.999912D-01	-0.431444D+01	-91.33	18.624222	165.0	-0.999912D-01	-0.431444D+01	-91.33	18.624222
166.0	-0.789539D-01	-0.473726D+01	-90.95	22.447906	166.0	-0.789539D-01	-0.473726D+01	-90.95	22.447906
167.0	-0.556838D-01	-0.515333D+01	-90.62	26.560017	167.0	-0.556838D-01	-0.515333D+01	-90.62	26.560017
168.0	-0.307166D-01	-0.555863D+01	-90.32	30.899343	168.0	-0.307166D-01	-0.555863D+01	-90.32	30.899343
169.0	-0.463399D-02	-0.594915D+01	-90.04	35.392444	169.0	-0.463399D-02	-0.594915D+01	-90.04	35.392444
170.0	0.219355D-01	-0.635209D+01	-89.80	39.955412	170.0	0.219355D-01	-0.635209D+01	-89.80	39.955412
171.0	0.483805D-01	-0.667037D+01	-89.58	44.496166	171.0	0.483805D-01	-0.667037D+01	-89.58	44.496166
172.0	0.740721D-01	-0.699369D+01	-89.39	48.917189	172.0	0.740721D-01	-0.699369D+01	-89.39	48.917189
173.0	0.984035D-01	-0.728759D+01	-89.23	53.118630	173.0	0.984035D-01	-0.728759D+01	-89.23	53.118630
174.0	0.120799D+00	-0.754897D+01	-89.08	57.001616	174.0	0.120799D+00	-0.754897D+01	-89.08	57.001

CIRCULAR PP POLARIZATION KA= 9.000

THETA	REAL	IRAG	PHASE	MCS	THETA	REAL	IRAG	PHASE	MCS
0.0	-0.649129D+00	0.651031D+00	134.92	0.845210	0.0	0.318154D-11	0.266032D-11	39.90	0.000000
1.0	-0.648890D+00	0.652076D+00	134.86	0.846261	1.0	0.129179D-03	-0.280403D-03	-65.43	0.000000
2.0	-0.648167D+00	0.655194D+00	134.69	0.849400	2.0	0.511460D-03	-0.111450D-02	-62.31	0.000001
3.0	-0.646950D+00	0.660340D+00	134.41	0.854593	3.0	0.114673D-02	-0.248820D-02	-65.10	0.000007
4.0	-0.645219D+00	0.667436D+00	134.03	0.861779	4.0	0.202573D-02	-0.430487D-02	-64.80	0.000023
5.0	-0.642950D+00	0.676378D+00	133.55	0.870671	5.0	0.374105D-02	-0.655981D-02	-64.41	0.000053
6.0	-0.640106D+00	0.687032D+00	132.97	0.881749	6.0	0.447984D-02	-0.915848D-02	-63.93	0.000104
7.0	-0.636646D+00	0.699245D+00	132.32	0.894262	7.0	0.502457D-02	-0.120134D-01	-63.36	0.000181
8.0	-0.632515D+00	0.712640D+00	131.58	0.908221	8.0	0.776215D-02	-0.150273D-01	-62.68	0.000286
9.0	-0.627665D+00	0.727623D+00	130.78	0.923399	9.0	0.966372D-02	-0.180959D-01	-61.90	0.000421
10.0	-0.622016D+00	0.743990D+00	129.92	0.939533	10.0	0.117044D-01	-0.211109D-01	-60.99	0.000583
11.0	-0.615494D+00	0.759924D+00	129.01	0.956318	11.0	0.138533D-01	-0.239628D-01	-59.97	0.000765
12.0	-0.608016D+00	0.777005D+00	128.04	0.974420	12.0	0.160753D-01	-0.265447D-01	-58.80	0.000963
13.0	-0.599486D+00	0.794411D+00	127.04	0.993472	13.0	0.183130D-01	-0.287552D-01	-57.48	0.001163
14.0	-0.589805D+00	0.811923D+00	126.00	1.007089	14.0	0.205785D-01	-0.305011D-01	-55.99	0.001354
15.0	-0.578866D+00	0.829331D+00	124.91	1.026273	15.0	0.227707D-01	-0.317009D-01	-54.31	0.001523
16.0	-0.566552D+00	0.846432D+00	123.60	1.037427	16.0	0.249590D-01	-0.322871D-01	-52.41	0.001660
17.0	-0.552749D+00	0.863039D+00	122.64	1.050368	17.0	0.267925D-01	-0.322083D-01	-50.24	0.001755
18.0	-0.537338D+00	0.878981D+00	121.44	1.064339	18.0	0.285193D-01	-0.314316D-01	-47.78	0.001801
19.0	-0.520197D+00	0.894105D+00	120.15	1.07944	19.0	0.299878D-01	-0.299434D-01	-44.96	0.001796
20.0	-0.501210D+00	0.908277D+00	118.89	1.076179	20.0	0.311474D-01	-0.277505D-01	-41.70	0.001740
21.0	-0.480261D+00	0.921386D+00	117.53	1.073604	21.0	0.319507D-01	-0.248808D-01	-37.91	0.001640
22.0	-0.457244D+00	0.933942D+00	116.10	1.080199	22.0	0.323543D-01	-0.213824D-01	-33.46	0.001504
23.0	-0.432061D+00	0.944073D+00	114.59	1.077951	23.0	0.323206D-01	-0.173233D-01	-26.19	0.001345
24.0	-0.404627D+00	0.953531D+00	112.99	1.072944	24.0	0.318192D-01	-0.127899D-01	-21.90	0.001176
25.0	-0.374873D+00	0.961681D+00	111.30	1.065361	25.0	0.308285D-01	-0.784970D-02	-14.35	0.001013
26.0	-0.342748D+00	0.966509D+00	109.49	1.055885	26.0	0.293370D-01	-0.272552D-02	-5.31	0.000668
27.0	-0.308220D+00	0.974089D+00	107.56	1.042693	27.0	0.273444D-01	0.256032D-02	5.35	0.000754
28.0	-0.271284D+00	0.978187D+00	105.50	1.030445	28.0	0.248627D-01	0.783643D-02	17.49	0.000640
29.0	-0.231916D+00	0.981055D+00	103.30	1.016274	29.0	0.219167D-01	0.129622D-01	30.60	0.000648
30.0	-0.190289D+00	0.982626D+00	100.96	1.001765	30.0	0.185446D-01	0.177963D-01	43.82	0.000661
31.0	-0.146354D+00	0.982911D+00	98.47	0.987534	31.0	0.147979D-01	0.222007D-01	56.31	0.000712
32.0	-0.100260D+00	0.981914D+00	95.83	0.974207	32.0	0.107413D-01	0.260444D-01	67.59	0.000794
33.0	-0.521839D+00	0.979629D+00	93.05	0.962391	33.0	0.585154D-02	0.292071D-01	77.54	0.000895
34.0	-0.217570D-02	0.976035D+00	90.13	0.952650	34.0	0.201645D-02	0.315834D-01	86.35	0.001002
35.0	0.494444D-01	0.971096D+00	87.03	0.945473	35.0	-0.246655D-02	0.330455D-01	94.26	0.001101
36.0	0.102487D+00	0.968752D+00	83.94	0.941251	36.0	-0.689255D-02	0.336465D-01	101.58	0.001180
37.0	0.156644D+00	0.956923D+00	80.70	0.940255	37.0	-0.111514D-01	0.332228D-01	108.55	0.001228
38.0	0.211780D+00	0.947502D+00	77.40	0.942612	38.0	-0.151307D-01	0.317959D-01	115.45	0.001240
39.0	0.267437D+00	0.936360D+00	74.06	0.948293	39.0	-0.187180D-01	0.293739D-01	122.51	0.001213
40.0	0.323338D+00	0.923340D+00	70.70	0.957104	40.0	-0.218047D-01	0.259917D-01	129.99	0.001151
41.0	0.379136D+00	0.908263D+00	67.34	0.968685	41.0	-0.242091D-01	0.217113D-01	138.21	0.001061
42.0	0.434472D+00	0.890928D+00	64.00	0.982518	42.0	-0.260793D-01	0.166205D-01	147.49	0.000956
43.0	0.488977D+00	0.871116D+00	60.69	0.997942	43.0	-0.270969D-01	0.108316D-01	158.21	0.000854
44.0	0.542278D+00	0.848594D+00	57.42	1.014178	44.0	-0.272795D-01	0.447886D-02	170.68	0.000764
45.0	0.594000D+00	0.823119D+00	54.18	1.030362	45.0	-0.265843D-01	-0.228459D-02	-175.09	0.000712

CIRCULAR OP POLARIZATION KA= 9.000

THETA	REAL	IRAG	PHASE	MCS	THETA	REAL	IRAG	PHASE	MCS
0.0	0.318154D-11	0.266032D-11	39.90	0.000000	0.0	0.318154D-11	0.266032D-11	39.90	0.000000
1.0	0.129179D-03	-0.280403D-03	-65.43	0.000000	1.0	0.129179D-03	-0.280403D-03	-65.43	0.000000
2.0	0.511460D-03	-0.111450D-02	-62.31	0.000001	2.0	0.511460D-03	-0.111450D-02	-62.31	0.000001
3.0	0.114673D-02	-0.248820D-02	-65.10	0.000007	3.0	0.114673D-02	-0.248820D-02	-65.10	0.000007
4.0	0.202573D-02	-0.430487D-02	-64.80	0.000023	4.0	0.202573D-02	-0.430487D-02	-64.80	0.000023
5.0	0.374105D-02	-0.655981D-02	-64.41	0.000053	5.0	0.374105D-02	-0.655981D-02	-64.41	0.000053
6.0	0.447984D-02	-0.915848D-02	-63.93	0.000104	6.0	0.447984D-02	-0.915848D-02	-63.93	0.000104
7.0	0.502457D-02	-0.120134D-01	-63.36	0.000181	7.0	0.502457D-02	-0.120134D-01	-63.36	0.000181
8.0	0.776215D-02	-0.150273D-01	-62.68	0.000286	8.0	0.776215D-02	-0.150273D-01	-62.68	0.000286
9.0	0.966372D-02	-0.180959D-01	-61.90	0.000421	9.0	0.966372D-02	-0.180959D-01	-61.90	0.000421
10.0	0.117044D-01	-0.211109D-01	-60.99	0.000583	10.0	0.117044D-01	-0.211109D-01	-60.99	0.000583
11.0	0.138533D-01	-0.239628D-01	-59.97	0.000765	11.0	0.138533D-01	-0.239628D-01	-59.97	0.000765
12.0	0.160753D-01	-0.265447D-01	-58.80	0.000963	12.0	0.160753D-01	-0.265447D-01	-58.80	0.000963
13.0	0.183130D-01	-0.287552D-01	-57.48	0.001163	13.0	0.183130D-01	-0.287552D-01	-57.48	0.001163
14.0	0.205785D-01	-0.305011D-01	-55.99	0.001354	14.0	0.205785D-01	-0.305011D-01	-55.99	0.001354
15.0	0.227707D-01	-0.317009D-01	-54.31	0.001523	15.0	0.227707D-01	-0.317009D-01	-54.31	0.001523
16.0	0.249590D-01	-0.322871D-01	-52.41	0.001660	16.0	0.249590D-01	-0.322871D-01	-52.41	0.001660
17.0	0.267925D-01	-0.322083D-01	-50.24	0.001755	17.0	0.267925D-01	-0.322083D-01	-50.24	0.001755
18.0	0.285193D-01	-0.314316D-01	-47.78	0.001801	18.0	0.285193D-01	-0.314316D-01	-47.78	0.001801
19.0	0.299878D-01	-0.299434D-01	-44.96	0.001796	19.0	0.299878D-01	-0.299434D-01	-44.96	0.001796
20.0	0.311474D-01	-0.277505D-01	-41.70	0.001740	20.0	0.311474D-01	-0.277505D-01	-41.70	0.001740
21.0	0.319507D-01	-0.248808D-01	-37.91	0.001640	21.0	0.319507D-01	-0.248808D-01	-37.91	0.001640
22.0	0.323543D-01	-0.213824D-01	-33.46	0.001504	22.0	0.323543D-01	-0.213824D-01	-33.46	0.001504
23.0	0.323206D-01	-0.173233D-01	-26.19	0.001345	23.0	0.323206D-01	-0.173233D-01	-26.19	0.001345
24.0	0.318192D-01	-0.127899D-01	-21.90	0.001176	24.0	0.318192D-01	-0.127899D-01	-21.90	0.001176
25.0	0.308285D-01	-0.784970D-02	-14.35	0.001013	25.0	0.308285D-01	-0.784970D-02	-14.35	0.001013
26.0	0.293370D-01	-0.272552D-02	-5.31	0.000668	26.0	0.293370D-01	-0.272552D-02	-5.31	0.000668
27.0	0.273444D-01	0.256032D-02	5.35	0.000754	27.0	0.273444D-01	0.256032D-02	5.35	0.000754
28.0	0.248627D-01	0.783643D-02	17.49	0.000640	28.0	0.248627D-01	0.783643D-02	17.49	0.000640
29.0	0.219167D-01	0.129622D-01	30.60	0.000648	29.0	0.219167D-01	0.129622D-01	30.60	0.000648
30.0	0.185446D-01	0.177963D-01	43.82	0.000661	30.0	0.185446D-01	0.177963D-01	43.82	0.000661
31.0	0.147979D-01	0.222007D-01	56.31	0.000712	31.0	0.147979D-01	0.222007D-01	56.31	0.000712
32.0	0.107413D-01	0.260444D-01	67.59	0.000794	32.0	0.107413D-01	0.260444D-01	67.59	0.000794
33.0	0.585154D-02	0.292071D-01	77.54	0.000895	33.0	0.585154D-02	0.292071D-01	77.54	0.000895
34.0	0.201645D-02	0.315834D-01	86.35	0.001002	34.0	0.201645D-02	0.315834D-01	86.35	0.001002
35.0	-0.246655D-02	0.330455D-01	94.26	0.001101	35.0	-0.246655D-02	0.330455D-01	94.26	0.001101
36.0	-0.689255D-02	0.336465D-01	101.58	0.001180	36.0	-0.689255D-02	0.336465D-01	101.58	0.001180
37.0	-0.111514D-01	0.332228D-01	108.55	0.001228	37.0	-0.111514D-01	0.332228D-01	108.55	0.001228
38.0	-0.151307D-01	0.317959D-01	115.45	0.001240	38.0	-0.151307D-01	0.317959D-01	115.45	0.001240
39.0	-0.187180D-01	0.293739D-01	122.51	0.001213	39.0	-0.187180D-01	0.293739D-01	122.51	0.001213
40.0	-0.218047D-01	0.259917D-01	129.99	0.001151	40.0	-0.218047D-01	0.259917D-01	129.99	0.001151
41.0	-0.242091D-01	0.217113D-01	138.21	0.001061	41.0	-0.24209			

CIRCULAR PP POLARIZATION KA= 9.000				CIRCULAR OP POLARIZATION KA= 9.000					
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
45.0	0.594000D+00	0.823119D+00	58.18	1.030362	45.0	-0.265843D-01	-0.228459D-02	-175.09	0.000712
46.0	0.643772D+00	0.794446D+00	50.98	1.045587	46.0	-0.249896D-01	-0.923022D-02	-159.61	0.000711
47.0	0.691227D+00	0.762333D+00	47.80	1.058986	47.0	-0.224975D-01	-0.163588D-01	-143.98	0.000774
48.0	0.736013D+00	0.726549D+00	44.63	1.069589	48.0	-0.191350D-01	-0.233032D-01	-123.39	0.000509
49.0	0.777899D+00	0.586885D+00	41.45	1.076785	49.0	-0.149546D-01	-0.299369D-01	-116.54	0.001120
50.0	0.816232D+00	0.643155D+00	38.24	1.079884	50.0	-0.100350D-01	-0.360758D-01	-105.54	0.001402
51.0	0.851042D+00	0.595215D+00	34.97	1.078553	51.0	-0.448005D-02	-0.415447D-01	-96.15	0.001746
52.0	0.881936D+00	0.542962D+00	31.62	1.072619	52.0	0.158259D-02	-0.461829D-01	-88.04	0.002135
53.0	0.908659D+00	0.486347D+00	28.16	1.062195	53.0	0.80327D-02	-0.498884D-01	-80.88	0.002549
54.0	0.930980D+00	0.425383D+00	24.56	1.047674	54.0	0.146134D-01	-0.524280D-01	-74.42	0.002962
55.0	0.948691D+00	0.360151D+00	20.79	1.029724	55.0	0.212291D-01	-0.538154D-01	-69.47	0.003347
56.0	0.961614D+00	0.290806D+00	16.83	1.009270	56.0	0.276550D-01	-0.539662D-01	-62.87	0.003677
57.0	0.969594D+00	0.217584D+00	12.65	0.987456	57.0	0.336895D-01	-0.528489D-01	-57.48	0.003928
58.0	0.972502D+00	0.140802D+00	8.24	0.965585	58.0	0.391297D-01	-0.504727D-01	-52.21	0.004079
59.0	0.970232D+00	0.608656D-01	3.59	0.945055	59.0	0.437768D-01	-0.468827D-01	-46.96	0.004114
60.0	0.962704D+00	-0.217352D-01	-1.29	0.927272	60.0	0.474423D-01	-0.412159D-01	-41.63	0.004028
61.0	0.949859D+00	-0.106424D+00	-6.39	0.913557	61.0	0.499534D-01	-0.364195D-01	-36.09	0.003822
62.0	0.931659D+00	-0.192542D+00	-11.68	0.905060	62.0	0.511588D-01	-0.298099D-01	-30.23	0.003506
63.0	0.908089D+00	-0.279353D+00	-17.10	0.902662	63.0	0.509344D-01	-0.225077D-01	-23.84	0.003101
64.0	0.879151D+00	-0.366051D+00	-22.61	0.906900	64.0	0.491875D-01	-0.147141D-01	-16.65	0.002636
65.0	0.844873D+00	-0.453766D+00	-28.13	0.917903	65.0	0.458620D-01	-0.664992D-02	-8.25	0.002188
66.0	0.805301D+00	-0.535578D+00	-33.63	0.935353	66.0	0.409414D-01	0.145080D-02	2.03	0.001678
67.0	0.760503D+00	-0.616528D+00	-39.03	0.958472	67.0	0.344517D-01	0.934721D-02	15.18	0.001274
68.0	0.710574D+00	-0.693531D+00	-44.31	0.986039	68.0	0.264631D-01	0.167988D-01	32.41	0.000982
69.0	0.655634D+00	-0.765897D+00	-49.44	1.016444	69.0	0.170901D-01	0.235725D-01	54.06	0.000848
70.0	0.595832D+00	-0.832320D+00	-54.40	1.047772	70.0	0.649341D-02	0.2349507D-01	77.57	0.000909
71.0	0.531354D+00	-0.891952D+00	-59.22	1.077915	71.0	-0.513230D-02	0.342379D-01	98.53	0.001199
72.0	0.462422D+00	-0.943862D+00	-63.90	1.104710	72.0	-0.175416D-01	0.377677D-01	114.91	0.001734
73.0	0.389300D+00	-0.987185D+00	-68.48	1.126089	73.0	-0.304625D-01	0.399096D-01	127.35	0.002521
74.0	0.312302D+00	-0.102113D+01	-72.99	1.140240	74.0	-0.435922D-01	0.405740D-01	137.05	0.003547
75.0	0.221193D+00	-0.104500D+01	-77.49	1.145759	75.0	-0.566056D-01	0.397168D-01	144.94	0.004782
76.0	0.148198D+00	-0.105822D+01	-82.0	1.141783	76.0	-0.691628D-01	0.373432D-01	151.63	0.006178
77.0	0.620011D-01	-0.106031D+01	-86.0	1.128096	77.0	-0.809175D-01	0.335091D-01	157.50	0.007670
78.0	-0.262420D-01	-0.105096D+01	-91.43	1.105197	78.0	-0.915259D-01	0.283217D-01	162.81	0.009179
79.0	-0.115918D+00	-0.102999D+01	-96.42	1.074310	79.0	-0.105656D+00	0.219391D-01	167.70	0.010613
80.0	-0.205318D+00	-0.997388D+00	-101.69	1.037349	80.0	-0.107996D+00	0.145669D-01	172.32	0.011875
81.0	-0.236689D+00	-0.953309D+00	-107.29	0.996822	81.0	-0.112626D+00	0.645427D-02	176.74	0.012871
82.0	-0.386192D+00	-0.898071D+00	-113.27	0.955672	82.0	-0.116224D+00	-0.211160D-02	-178.96	0.013572
83.0	-0.473924D+00	-0.832168D+00	-119.56	0.917107	83.0	-0.116675D+00	-0.108131D-01	-174.71	0.013730
84.0	-0.558922D+00	-0.756258D+00	-126.47	0.884320	84.0	-0.114480D+00	-0.193108D-01	-170.43	0.013479
85.0	-0.640168D+00	-0.671167D+00	-133.65	0.860280	85.0	-0.109559D+00	-0.272529D-01	-166.03	0.012746
86.0	-0.716600D+00	-0.57875D+00	-141.12	0.847455	86.0	-0.101900D+00	-0.342861D-01	-161.40	0.011559
87.0	-0.787128D+00	-0.477504D+00	-148.76	0.847581	87.0	-0.915579D-01	-0.400669D-01	-156.37	0.009988
88.0	-0.850646D+00	-0.371309D+00	-156.42	0.861469	88.0	-0.786575D-01	-0.442736D-01	-150.63	0.008147
89.0	-0.906050D+00	-0.260656D+00	-163.95	0.888869	89.0	-0.633947D-01	-0.466172D-01	-143.67	0.006192
90.0	-0.952261D+00	-0.147005D+00	-171.24	0.928412	90.0	-0.460332D-01	-0.468536D-01	-134.49	0.004314

CIRCULAR PP POLARIZATION KA= 9.000					CIRCULAR OP POLARIZATION KA= 3.000				
THETA	REAL	IMAG	PHASE	MNC	THETA	REAL	IMAG	PHASE	MNC
90.0	-0.952267D+00	-0.147005D+00	-171.22	0.928812	90.0	-0.460332D-01	-0.468536D-01	-134.49	0.004837
91.0	-0.988233D+00	-0.318899D-01	-178.15	0.977642	91.0	-0.269001D-01	-0.447941D-01	-120.99	0.002730
92.0	-0.101303D+01	0.831133D-01	175.31	1.033139	92.0	-0.438070D-02	-0.403146D-01	-99.99	0.001666
93.0	-0.102575D+01	0.196398D+00	169.16	1.090736	93.0	0.150897D-01	-0.333668D-01	-65.66	0.001341
94.0	-0.102565D+01	0.306363D+00	163.37	1.145818	94.0	0.370350D-01	-0.239740D-01	-32.92	0.001946
95.0	-0.101212D+01	0.411437D+00	157.88	1.193660	95.0	0.589487D-01	-0.122561D-01	-11.75	0.003625
96.0	-0.988712D+00	0.510103D+00	152.61	1.229963	96.0	0.803966D-01	0.158787D-02	1.13	0.006452
97.0	-0.543167D+00	0.600925D+00	147.50	1.250716	97.0	0.100579D+00	0.172704D-01	9.74	0.010414
98.0	-0.887518D+00	0.682574D+00	142.44	1.253583	98.0	0.119244D+00	0.344197D-01	16.10	0.015404
99.0	-0.817887D+00	0.753851D+00	137.33	1.237230	99.0	0.135804D+00	0.525853D-01	21.17	0.021208
100.0	-0.734757D+00	0.813707D+00	132.08	1.201986	100.0	0.119794D+00	0.712463D-01	25.44	0.027514
101.0	-0.638631D+00	0.861265D+00	126.57	1.149882	101.0	0.160800D+00	0.898219D-01	29.19	0.033925
102.0	-0.531084D+00	0.895834D+00	120.66	1.084568	102.0	0.168480D+00	0.107685D+00	32.57	0.039978
103.0	-0.412755D+00	0.916923D+00	114.23	1.011115	103.0	0.172519D+00	0.124177D+00	35.75	0.045183
104.0	-0.285346D+00	0.924253D+00	107.16	0.935666	104.0	0.172520D+00	0.138626D+00	38.75	0.050660
105.0	-0.150608D+00	0.917759D+00	99.32	0.864944	105.0	0.169058D+00	0.150367D+00	41.65	0.051191
106.0	-0.105233D-01	0.897595D+00	90.67	0.805787	106.0	0.161423D+00	0.158758D+00	44.52	0.051261
107.0	-0.132719D+00	0.864133D+00	81.27	0.763340	107.0	0.149930D+00	0.163208D+00	47.43	0.049116
108.0	-0.276755D+00	0.819757D+00	71.31	0.745647	108.0	0.134763D+00	0.163191D+00	50.45	0.044792
109.0	-0.419081D+00	0.759852D+00	61.12	0.753004	109.0	0.116200D+00	0.158270D+00	53.71	0.038552
110.0	-0.557100D+00	0.690795D+00	51.12	0.67559	110.0	0.046130D-01	0.148119D+00	57.43	0.030671
111.0	-0.688170D+00	0.611235D+00	41.64	0.648043	111.0	0.704591E-01	0.132530D+00	62.00	0.022530
112.0	-0.809655D+00	0.524976D+00	32.94	0.630727	112.0	0.442695D-01	0.111460D+00	66.34	0.014383
113.0	-0.918918D+00	0.430154D+00	25.08	1.029558	113.0	0.164803D-01	0.849877D-01	78.92	0.007500
114.0	-0.101370D+01	0.330213D+00	16.04	1.136620	114.0	-0.117851D-01	0.533839D-01	102.45	0.032989
115.0	-0.109153D+01	0.226376D+00	11.72	1.242683	115.0	-0.403286D-01	0.170734D-01	157.05	0.001918
116.0	-0.115045D+01	0.120323D+00	5.97	1.338012	116.0	-0.682955D-01	-0.233397D-01	-161.13	0.005209
117.0	-0.118872D+01	0.137564D-01	0.66	1.413245	117.0	-0.949925D-01	-0.670852D-01	-144.77	0.013524
118.0	-0.120493D+01	-0.916253D-01	-4.35	1.460310	118.0	-0.119746D+00	-0.113232D+00	-136.60	0.027161
119.0	-0.119816D+01	-0.194156D+00	-9.20	1.449127	119.0	-0.141919D+00	-0.160703D+00	-131.45	0.045966
120.0	-0.116779D+01	-0.292223D+00	-14.05	1.449127	120.0	-0.160931D+00	-0.208289D+00	-127.69	0.069283
121.0	-0.113750D+01	-0.384331D+00	-19.04	1.388158	121.0	-0.176272D+00	-0.254675D+00	-124.69	0.095931
122.0	-0.103647D+01	-0.469052D+00	-24.35	1.294286	122.0	-0.187518D+00	-0.298466D+00	-122.14	0.124245
123.0	-0.936868D+00	-0.545123D+00	-30.19	1.174881	123.0	-0.194345D+00	-0.338217D+00	-119.89	0.152161
124.0	-0.814282D+00	-0.611428D+00	-36.03	1.040308	124.0	-0.196537D+00	-0.372470D+00	-117.82	0.177361
125.0	-0.676919D+00	-0.667024D+00	-44.58	0.903141	125.0	-0.193960D+00	-0.399788D+00	-115.88	0.197465
126.0	-0.520922D+00	-0.711152D+00	-53.78	0.777097	126.0	-0.186745D+00	-0.419798D+00	-114.03	0.210266
127.0	-0.351235D+00	-0.743289D+00	-64.71	0.675709	127.0	-0.174930D+00	-0.428229D+00	-112.22	0.213981
128.0	-0.171113D+00	-0.762953D+00	-77.36	0.611377	128.0	-0.158817D+00	-0.426955D+00	-110.40	0.207514
129.0	-0.158537D-01	-0.770108D+00	-91.18	0.593317	129.0	-0.138786D+00	-0.414037D+00	-108.53	0.190689
130.0	-0.205806D+00	-0.764761D+00	-105.06	0.627215	130.0	-0.115324D+00	-0.388759D+00	-106.57	0.164434
131.0	-0.394695D+00	-0.747158D+00	-117.85	0.714029	131.0	-0.890162D-01	-0.350665D+00	-104.24	0.130491
132.0	-0.578365D+00	-0.717370D+00	-128.48	0.849653	132.0	-0.605246D-01	-0.299595D+00	-101.42	0.093420
133.0	-0.752653D+00	-0.677114D+00	-138.02	1.024971	133.0	-0.305701D-01	-0.215707D+00	-97.39	0.056492
134.0	-0.913447D+00	-0.626073D+00	-145.57	1.224609	134.0	0.763946D-04	-0.139505D+00	-89.97	0.025442
135.0	-0.105694D+01	-0.555450D+00	-151.85	1.446964	135.0	0.396223D-01	-0.718262D-01	-66.92	0.006101



CIRCULAR PP POLARIZATION KA= 9.000						CIRCULAR OP POLARIZATION KA= 9.000					
THETA	REAL	IMAG	PHASE	MCS	WCS	THETA	REAL	IMAG	PHASE	MCS	WCS
135.0	-0.105694D+01	-0.565545D+00	-151.85	1.83698	0.006101	135.0	0.306229D-01	-0.719526D-01	-66.92	0.006101	0.006101
136.0	-0.117982D+01	-0.496589D+00	-157.17	1.80915	0.004310	136.0	0.502752D-01	0.260187D-01	73.35	0.004310	0.004310
137.0	-0.127768D+01	-0.420375D+00	-161.79	1.76425	0.025348	137.0	0.682594D-01	0.132508D+00	56.33	0.025348	0.025348
138.0	-0.134892D+01	-0.338158D+00	-165.93	1.93377	0.073305	138.0	0.117882D+00	0.254651D+00	65.14	0.073305	0.073305
139.0	-0.139089D+01	-0.251257D+00	-169.76	1.997704	0.150463	139.0	0.136354D+00	0.363140D+00	69.42	0.150463	0.150463
140.0	-0.140195D+01	-0.161029D+00	-173.45	1.991398	0.256741	140.0	0.155203D+00	0.482341D+00	72.16	0.256741	0.256741
141.0	-0.138112D+01	-0.688457D-01	-177.15	1.912225	0.389265	141.0	0.169899D+00	0.603332D+00	74.20	0.389265	0.389265
142.0	-0.132810D+01	0.239263D-01	178.97	1.76425	0.582139	142.0	0.180063D+00	0.713944D+00	75.81	0.582139	0.582139
143.0	-0.124334D+01	0.115953D+00	174.67	1.559339	0.706470	143.0	0.185439D+00	0.819806D+00	77.25	0.706470	0.706470
144.0	-0.112800D+01	0.205949D+00	169.65	1.314798	0.870691	144.0	0.184402D+00	0.914402D+00	78.51	0.870691	0.870691
145.0	-0.983961D+00	0.292702D+00	163.43	1.053823	1.021232	145.0	0.181468D+00	0.994133D+00	79.66	1.021232	1.021232
146.0	-0.613789D+00	0.375087D+00	155.25	0.802944	1.143518	146.0	0.172363D+00	0.105438D+01	80.73	1.143518	1.143518
147.0	-0.620686D+00	0.452083D+00	143.93	0.589630	1.223298	147.0	0.158630D+00	0.107459D+01	81.75	1.223298	1.223298
148.0	-0.408420D+00	0.522784D+00	128.00	0.440110	1.248239	148.0	0.140316D+00	0.110813D+01	82.75	1.248239	1.248239
149.0	-0.181247D+00	0.586413D+00	107.18	0.376731	1.209715	149.0	0.119638D+00	0.109334D+01	83.75	1.209715	1.209715
150.0	0.561899D-01	0.642326D+00	85.00	0.415741	1.104666	150.0	0.954930D-01	0.104668D+01	84.79	1.104666	1.104666
151.0	0.298965D+00	0.690023D+00	66.57	0.565511	0.937428	151.0	0.691110D-01	0.965734D+00	85.91	0.937428	0.937428
152.0	0.549396D+00	0.723142D+00	53.36	0.825407	0.721295	152.0	0.412861D-01	0.842870D+00	87.21	0.721295	0.721295
153.0	0.780160D+00	0.759467D+00	44.23	1.185440	0.478788	153.0	0.128208D-01	0.695614D+00	84.94	0.478788	0.478788
154.0	0.100843D+01	0.780924D+00	37.75	1.626766	0.247761	154.0	-0.154524D-01	0.4957516D+00	91.78	0.247761	0.247761
155.0	0.122196D+01	0.793573D+00	33.00	2.123002	0.070665	155.0	-0.427193D-01	0.2E2374D+00	99.25	0.070665	0.070665
156.0	0.141636D+01	0.797605D+00	29.35	2.682240	0.004814	156.0	-0.318679D-01	-0.128176D-01	-169.76	0.004814	0.004814
157.0	0.158756D+01	0.793334D+00	26.55	3.189715	0.115496	157.0	-0.911204D-01	-0.327403D+00	-105.55	0.115496	0.115496
158.0	0.173212D+01	0.781885D+00	24.28	3.610484	0.474010	158.0	-0.110599D+00	-0.680088D+00	-99.26	0.474010	0.474010
159.0	0.184726D+01	0.761685D+00	22.41	3.922544	1.158620	159.0	-0.126836D+00	-0.106889D+01	-96.77	1.158620	1.158620
160.0	0.193094D+01	0.735449D+00	20.85	4.269411	2.242836	160.0	-0.138595D+00	-0.149118D+01	-95.31	2.242836	2.242836
161.0	0.198189D+01	0.703170D+00	19.53	4.822322	3.799157	161.0	-0.145406D+00	-0.194368D+01	-94.29	3.799157	3.799157
162.0	0.199671D+01	0.665601D+00	18.41	4.441723	5.890509	162.0	-0.148271D+00	-0.202250D+01	-93.50	5.890509	5.890509
163.0	0.198471D+01	0.623550D+00	17.44	4.379905	8.566404	163.0	-0.149370D+00	-0.292320D+01	-92.86	8.566404	8.566404
164.0	0.193825D+01	0.573855D+00	16.60	4.090744	11.858524	164.0	-0.138888D+00	-0.344082D+01	-91.31	11.858524	11.858524
165.0	0.186235D+01	0.529384D+00	15.87	3.748576	15.776798	165.0	-0.127353D+00	-0.394966D+01	-89.84	15.776798	15.776798
166.0	0.175979D+01	0.479009D+00	15.23	3.326325	20.306275	166.0	-0.111692D+00	-0.450466D+01	-91.42	20.306275	20.306275
167.0	0.163409D+01	0.427606D+00	14.66	2.853082	25.405036	167.0	-0.923872D-01	-0.503949D+01	-91.05	25.405036	25.405036
168.0	0.148929D+01	0.376035D+00	14.17	2.359386	31.003354	168.0	-0.700304D-01	-0.556763D+01	-90.72	31.003354	31.003354
169.0	0.132989D+01	0.325131D+00	13.74	1.874492	37.004258	169.0	-0.453040D-01	-0.608294D+01	-90.43	37.004258	37.004258
170.0	0.116099D+01	0.275699D+00	13.36	1.423902	43.285558	170.0	-0.139608D-01	-0.657915D+01	-90.17	43.285558	43.285558
171.0	0.987509D+00	0.224495D+00	13.03	1.027386	49.703309	171.0	0.819848D-02	-0.705009D+01	-89.93	49.703309	49.703309
172.0	0.814726D+00	0.184242D+00	12.74	0.697373	56.086622	172.0	0.353493D-01	-0.748968D+01	-89.73	56.086622	56.086622
173.0	0.647782D+00	0.143560D+00	12.50	0.400237	62.293609	173.0	0.616680D-01	-0.789233D+01	-89.55	62.293609	62.293609
174.0	0.491620D+00	0.103030D+00	12.29	0.253161	68.118193	174.0	0.863565D-01	-0.825292D+01	-89.40	68.118193	68.118193
175.0	0.350838D+00	0.733255D-01	12.12	0.128762	73.397454	175.0	0.106666D+00	-0.856654D+01	-89.27	73.397454	73.397454
176.0	0.229571D+00	0.467154D-01	11.98	0.055076	77.969116	176.0	0.127922D+00	-0.882909D+01	-89.17	77.969116	77.969116
177.0	0.131369D+00	0.276232D-01	11.87	0.048021	81.688779	177.0	0.143535D+00	-0.903704D+01	-89.09	81.688779	81.688779
178.0	0.591042D-01	0.123472D-01	11.80	0.003666	84.434499	178.0	0.155044D+00	-0.917630D+01	-89.03	84.434499	84.434499
179.0	0.148945D-01	0.309737D-02	11.76	0.000231	86.122335	179.0	0.162090D+00	-0.927980D+01	-89.00	86.122335	86.122335
180.0	0.658851D-10	0.579282D-10	11.32	0.000000	86.690571	180.0	0.164463D+00	-0.932093D+01	-88.99	86.690571	86.690571

CIRCULAR PP POLARIZATION KM= 10.000

CIRCULAR OF POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	MNCS	THETA	REAL	IMAG	PHASE	MNCS	THETA	REAL	IMAG	PHASE	MNCS
0.0	-0.40385D+00	-0.875298D+00	-118.77	0.929230	0.0	-0.134739D-10	0.611172D-11	155.60	0.000000					
1.0	-0.404339D+00	-0.875633D+00	-114.78	0.930207	1.0	-0.117848D-03	0.306441D-03	111.04	0.000000					
2.0	-0.405770D+00	-0.876615D+00	-114.84	0.933104	2.0	-0.470292D-03	0.127397D-02	111.18	0.000002					
3.0	-0.408191D+00	-0.878183D+00	-114.93	0.937826	3.0	-0.105393D-02	0.268751D-02	111.41	0.000008					
4.0	-0.411581D+00	-0.880236D+00	-115.06	0.944215	4.0	-0.186289D-02	0.466994D-02	111.75	0.000025					
5.0	-0.415943D+00	-0.882636D+00	-115.23	0.952054	5.0	-0.288875D-02	0.708400D-02	112.18	0.000059					
6.0	-0.421282D+00	-0.885209D+00	-115.45	0.961075	6.0	-0.411870D-02	0.983492D-02	112.72	0.000114					
7.0	-0.427604D+00	-0.887757D+00	-115.72	0.970958	7.0	-0.553804D-02	0.128136D-01	113.37	0.000195					
8.0	-0.434915D+00	-0.890054D+00	-116.04	0.981348	8.0	-0.712671D-02	0.159006D-01	114.14	0.000304					
9.0	-0.443228D+00	-0.891857D+00	-116.43	0.991861	9.0	-0.886036D-02	0.189697D-01	115.04	0.000438					
10.0	-0.452556D+00	-0.892912D+00	-116.88	1.002098	10.0	-0.107097D-01	0.218929D-01	116.07	0.000594					
11.0	-0.462915D+00	-0.892956D+00	-117.40	1.011660	11.0	-0.126404D-01	0.248485D-01	117.25	0.000762					
12.0	-0.474323D+00	-0.891729D+00	-118.01	1.020165	12.0	-0.146128D-01	0.268059D-01	118.60	0.000921					
13.0	-0.486806D+00	-0.888979D+00	-118.71	1.027263	13.0	-0.165825D-01	0.285695D-01	120.13	0.001091					
14.0	-0.500381D+00	-0.884463D+00	-119.50	1.032656	14.0	-0.185004D-01	0.297431D-01	121.88	0.001227					
15.0	-0.515073D+00	-0.877959D+00	-120.40	1.036112	15.0	-0.203440D-01	0.302531D-01	123.88	0.001328					
16.0	-0.530901D+00	-0.869268D+00	-121.41	1.037483	16.0	-0.219678D-01	0.300479D-01	126.17	0.001385					
17.0	-0.547823D+00	-0.858219D+00	-122.55	1.037115	17.0	-0.234649D-01	0.290997D-01	128.81	0.001395					
18.0	-0.566026D+00	-0.844671D+00	-123.83	1.033855	18.0	-0.245688D-01	0.2740664D-01	131.87	0.001355					
19.0	-0.585334D+00	-0.828517D+00	-125.24	1.029057	19.0	-0.258046D-01	0.2549921D-01	135.47	0.001270					
20.0	-0.605795D+00	-0.809685D+00	-126.80	1.022578	20.0	-0.258617D-01	0.219070D-01	139.73	0.001149					
21.0	-0.627382D+00	-0.786139D+00	-128.52	1.014771	21.0	-0.258949D-01	0.182266D-01	144.86	0.001003					
22.0	-0.650510D+00	-0.763876D+00	-130.40	1.006074	22.0	-0.25495D-01	0.140495D-01	151.12	0.000846					
23.0	-0.675735D+00	-0.736299D+00	-132.44	0.996983	23.0	-0.245240D-01	0.949470D-02	158.86	0.000693					
24.0	-0.698344D+00	-0.707359D+00	-134.63	0.986041	24.0	-0.23145D-01	0.469830D-02	166.52	0.000557					
25.0	-0.723759D+00	-0.675256D+00	-136.99	0.979797	25.0	-0.212122D-01	-0.190732D-03	-179.48	0.000450					
26.0	-0.749832D+00	-0.640733D+00	-139.49	0.972786	26.0	-0.187987D-01	-0.501525D-02	-165.06	0.000379					
27.0	-0.776383D+00	-0.603922D+00	-142.12	0.967493	27.0	-0.159227D-01	-0.961503D-02	-148.87	0.000346					
28.0	-0.803202D+00	-0.564969D+00	-144.88	0.964374	28.0	-0.126292D-01	-0.138320D-01	-132.40	0.000351					
29.0	-0.830043D+00	-0.524422D+00	-147.73	0.963578	29.0	-0.897897D-02	-0.175156D-01	-117.14	0.000387					
30.0	-0.856629D+00	-0.481260D+00	-150.67	0.965425	30.0	-0.504797D-02	-0.202835D-01	-103.82	0.000447					
31.0	-0.882652D+00	-0.436820D+00	-153.67	0.969895	31.0	-0.926060D-03	-0.227505D-01	-92.33	0.000518					
32.0	-0.907740D+00	-0.390860D+00	-156.70	0.976825	32.0	0.328497D-02	-0.240851D-01	-82.23	0.000591					
33.0	-0.931633D+00	-0.343522D+00	-159.76	0.985947	33.0	0.747395D-02	-0.244615D-01	-73.01	0.000654					
34.0	-0.952845D+00	-0.294936D+00	-162.82	0.996807	34.0	0.115238D-01	-0.233887D-01	-64.20	0.000701					
35.0	-0.974008D+00	-0.245217D+00	-165.87	1.008824	35.0	0.153128D-01	-0.222079D-01	-55.41	0.000728					
36.0	-0.991712D+00	-0.194464D+00	-168.91	1.021309	36.0	0.187230D-01	-0.195936D-01	-46.30	0.000734					
37.0	-0.100654D+00	-0.142759D+00	-171.93	1.033505	37.0	0.216399D-01	-0.160539D-01	-36.57	0.000726					
38.0	-0.101808D+00	-0.901725D-01	-174.94	1.044621	38.0	0.239586D-01	-0.116798D-01	-25.99	0.000710					
39.0	-0.102593D+00	-0.367599D-01	-177.95	1.053884	39.0	0.255982D-01	-0.659292D-02	-14.45	0.000698					
40.0	-0.102970D+00	0.174299D-01	179.03	1.060591	40.0	0.264552D-01	-0.942896D-03	-2.04	0.000701					
41.0	-0.102004D+00	0.723521D-01	175.98	1.064153	41.0	0.265074D-01	0.509711D-02	10.88	0.000729					
42.0	-0.102361D+00	0.127960D+00	172.87	1.064148	42.0	0.257172D-01	0.113352D-01	23.79	0.000790					
43.0	-0.101313D+00	0.184197D+00	169.70	1.060356	43.0	0.240839D-01	0.240839D-01	36.11	0.000889					
44.0	-0.997354D+00	0.240991D+00	166.42	1.052791	44.0	0.216355D-01	0.235303D-01	47.46	0.001024					
45.0	-0.976098D+00	0.2298247D+00	163.01	1.041718	45.0	0.184294D-01	0.2291652D-01	57.71	0.001190					

CIRCULAR CP POLARIZATION KA= 10.000

CIRCULAR PP POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
45.0	-0.976098D+00	0.298247D+00	163.01	1.041718	45.0	0.184294D+01	0.291652D-01	57.71	0.001190
46.0	-0.949228D+00	0.355833D+00	159.45	1.027655	46.0	0.145524D-01	0.341180D-01	66.90	0.001376
47.0	-0.916674D+00	0.413600D+00	155.72	1.011356	47.0	0.101194D-01	0.382499D-01	75.18	0.001565
48.0	-0.878429D+00	0.471319D+00	151.78	0.993779	48.0	0.527072D-02	0.413932D-01	82.74	0.001741
49.0	-0.834552D+00	0.528734D+00	147.64	0.976037	49.0	0.169447D-03	0.434079D-01	89.78	0.001884
50.0	-0.785169D+00	0.585524D+00	143.29	0.959330	50.0	-0.500354D-02	0.441871D-01	96.46	0.001978
51.0	-0.730472D+00	0.641131D+00	138.72	0.944868	51.0	-0.100546D-01	0.436617D-01	102.97	0.002007
52.0	-0.670716D+00	0.695649D+00	133.95	0.933787	52.0	-0.147834D-01	0.418039D-01	109.48	0.001966
53.0	-0.606218D+00	0.748036D+00	129.02	0.927058	53.0	-0.189897D-01	0.386295D-01	116.18	0.001853
54.0	-0.537351D+00	0.797908D+00	123.96	0.925404	54.0	-0.224402D-01	0.341946D-01	123.32	0.001675
55.0	-0.464544D+00	0.844464D+00	118.81	0.929228	55.0	-0.250760D-01	0.286148D-01	131.23	0.001448
56.0	-0.383270D+00	0.887582D+00	113.63	0.938556	56.0	-0.266196D-01	0.220233D-01	140.40	0.001194
57.0	-0.309045D+00	0.926011D+00	108.46	0.953004	57.0	-0.269820D-01	0.146071D-01	151.57	0.000941
58.0	-0.227424D+00	0.959198D+00	103.34	0.971781	58.0	-0.260688D-01	0.658165D-02	165.83	0.000723
59.0	-0.143987D+00	0.986397D+00	98.30	0.993711	59.0	-0.238256D-01	-0.18142D-02	-175.65	0.000571
60.0	-0.593440D-01	0.100666D+01	93.37	1.017295	60.0	-0.202426D-01	-0.103119D-01	-153.01	0.000516
61.0	0.258809D-01	0.101987D+01	88.55	1.040810	61.0	-0.153573D-01	-0.176494D-01	-129.47	0.000584
62.0	0.111048D+00	0.102474D+01	83.82	1.062423	62.0	-0.925662D-02	-0.265528D-01	-109.22	0.000791
63.0	0.195509D+00	0.102064D+01	79.16	1.080331	63.0	-0.207627D-02	-0.337594D-01	-93.52	0.001144
64.0	0.278611D+00	0.100761D+01	74.54	1.092911	64.0	0.600052D-02	-0.400247D-01	-81.47	0.001638
65.0	0.359701D+00	0.984622D+00	69.93	1.098866	65.0	0.147467D-01	-0.451314D-01	-71.91	0.002254
66.0	0.438126D+00	0.951529D+00	65.28	1.097362	66.0	0.238964D-01	-0.446983D-01	-63.96	0.002962
67.0	0.513236D+00	0.908138D+00	60.53	1.088126	67.0	0.331520D-01	-0.511875D-01	-57.07	0.003719
68.0	0.584390D+00	0.854406D+00	55.63	1.071521	68.0	0.421924D-01	-0.519144D-01	-50.90	0.004475
69.0	0.650953D+00	0.790455D+00	50.52	1.048559	69.0	0.506824D-01	-0.51076D-01	-45.20	0.005173
70.0	0.712297D+00	0.716588D+00	45.17	1.020866	70.0	0.582833D-01	-0.445875D-01	-39.82	0.005758
71.0	0.767809D+00	0.633290D+00	39.52	0.990587	71.0	0.646488D-01	-0.446473D-01	-34.62	0.006175
72.0	0.816844D+00	0.541238D+00	33.53	0.960238	72.0	0.695159D-01	-0.37354D-01	-29.52	0.006381
73.0	0.858938D+00	0.441297D+00	27.19	0.932517	73.0	0.725572D-01	-0.329095D-01	-24.40	0.006348
74.0	0.893402D+00	0.334519D+00	20.53	0.910065	74.0	0.735517D-01	-0.255500D-01	-19.16	0.006063
75.0	0.919734D+00	0.222129D+00	13.58	0.895251	75.0	0.723157D-01	-0.175626D-01	-13.65	0.005538
76.0	0.937421D+00	0.105517D+00	6.42	0.889892	76.0	0.687274D-01	-0.926415D-02	-7.68	0.004809
77.0	0.945902D+00	-0.13748D-01	-0.83	0.892087	77.0	0.627349D-01	-0.92216D-03	-0.91	0.003937
78.0	0.945014D+00	-0.134122D+00	-8.08	0.911040	78.0	0.543621D-01	0.690669D-02	7.24	0.003003
79.0	0.934124D+00	-0.253744D+00	-15.20	0.936974	79.0	0.437113D-01	0.140904D-01	17.87	0.002109
80.0	0.913022D+00	-0.370837D+00	-22.11	0.971130	80.0	0.309650D-01	0.202348D-01	33.16	0.001368
81.0	0.881494D+00	-0.483555D+00	-28.75	1.010658	81.0	0.163837D-01	0.250470D-01	56.81	0.000896
82.0	0.839426D+00	-0.590053D+00	-35.10	1.052798	82.0	0.301881D-03	0.228278D-01	89.39	0.000800
83.0	0.786815D+00	-0.688530D+00	-41.19	1.093151	83.0	-0.168791D-01	0.297389D-01	118.58	0.001169
84.0	0.723791D+00	-0.777260D+00	-47.04	1.128007	84.0	-0.347007D-01	0.293024D-01	139.82	0.002063
85.0	0.650628D+00	-0.858636D+00	-52.72	1.153719	85.0	-0.526589D-01	0.269203D-01	152.92	0.003498
86.0	0.567760D+00	-0.919200D+00	-58.30	1.167280	86.0	-0.702184D-01	0.226253D-01	162.14	0.005443
87.0	0.475794D+00	-0.969685D+00	-63.85	1.166669	87.0	-0.868285D-01	0.165347D-01	169.22	0.007813
88.0	0.375520D+00	-0.100505D+01	-69.51	1.151123	88.0	-0.101939D+00	0.685114D-02	175.04	0.010470
89.0	0.267918D+00	-0.102447D+01	-75.34	1.121315	89.0	-0.115021D+00	-0.140733D-03	-175.93	0.013230
90.0	0.154164D+00	-0.102744D+01	-81.47	1.079394	90.0	-0.125579D+00	-0.100606D-01	-175.41	0.015872

CIRCULAR PP POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	BSCS	THETA	REAL	IMAG	PHASE	BSCS
90.0	0.158168D+00	-0.102784D+01	-81.47	1.079394	90.0	-0.125579D+00	-0.100806D-01	-175.41	0.015872
91.0	0.356243D-01	-0.101371D+01	-87.99	1.028878	91.0	-0.133175D+00	-0.205420D-01	-171.23	0.018158
92.0	-0.821436D-01	-0.983354D+00	-95.01	0.974806	92.0	-0.137481D+00	-0.310453D-01	-167.27	0.019854
93.0	-0.209409D+00	-0.936784D+00	-102.60	0.921342	93.0	-0.138096D+00	-0.410731D-01	-163.44	0.020757
94.0	-0.322818D+00	-0.874569D+00	-110.80	0.875281	94.0	-0.134951D+00	-0.500894D-01	-159.64	0.020721
95.0	-0.452736D+00	-0.797820D+00	-119.57	0.841466	95.0	-0.127936D+00	-0.575547D-01	-155.78	0.019680
96.0	-0.568648D+00	-0.707779D+00	-128.78	0.824311	96.0	-0.117090D+00	-0.629574D-01	-151.73	0.017674
97.0	-0.678210D+00	-0.606200D+00	-138.20	0.816677	97.0	-0.102572D+00	-0.658248D-01	-147.31	0.014854
98.0	-0.778036D+00	-0.494279D+00	-147.57	0.814652	98.0	-0.846615D-01	-0.657533D-01	-142.16	0.011891
99.0	-0.867093D+00	-0.374627D+00	-156.63	0.821372	99.0	-0.637504D-01	-0.624223D-01	-135.60	0.007961
100.0	-0.942880D+00	-0.249223D+00	-165.19	0.931136	100.0	-0.403387D-01	-0.556193D-01	-125.95	0.004721
101.0	-0.100340D+01	-0.120384D+00	-173.16	1.021295	101.0	-0.150209D-01	-0.452532D-01	-108.36	0.002273
102.0	-0.104684D+01	0.949119D-02	179.48	1.095955	102.0	0.115269D-01	-0.313686D-01	-69.82	0.001117
103.0	-0.107164D+01	0.137965E+00	172.66	1.167445	103.0	0.138533D-01	-0.141548D-01	-20.15	0.001588
104.0	-0.107644D+01	0.262617D+00	166.29	1.227914	104.0	0.653442D-01	0.604965E-02	5.29	0.004306
105.0	-0.106064D+01	0.381084D+00	160.24	1.270183	105.0	0.910390D-01	0.287542D-01	17.53	0.009115
106.0	-0.102342D+01	0.491118D+00	154.36	1.288589	106.0	0.114879D+00	0.533390D-01	24.91	0.016042
107.0	-0.944621D+00	0.590634D+00	148.53	1.279729	107.0	0.136109D+00	0.790330D-01	30.14	0.024772
108.0	-0.885249D+00	0.677751D+00	142.30	1.243012	108.0	0.154034D+00	0.104965D+00	34.27	0.034744
109.0	-0.785611D+00	0.750833D+00	136.30	1.180935	109.0	0.168039D+00	0.130169D+00	37.76	0.045181
110.0	-0.667322D+00	0.808528D+00	129.53	1.099036	110.0	0.177613D+00	0.153615D+00	40.86	0.055144
111.0	-0.532030D+00	0.849792D+00	122.06	1.005494	111.0	0.182363D+00	0.174243D+00	43.70	0.063617
112.0	-0.382964D+00	0.873918D+00	113.66	0.910394	112.0	0.182039D+00	0.190995D+00	46.38	0.069617
113.0	-0.222171D+00	0.880545D+00	104.16	0.824720	113.0	0.176536D+00	0.202858D+00	48.97	0.072316
114.0	-0.532055D-01	0.869672D+00	93.50	0.759160	114.0	0.165907D+00	0.208899D+00	51.54	0.071164
115.0	-0.120302D+00	0.841652D+00	81.87	0.722850	115.0	0.150365D+00	0.203306D+00	54.18	0.066001
116.0	0.294462D+00	0.797189D+00	69.73	0.722206	116.0	0.130276D+00	0.200430D+00	56.98	0.057144
117.0	0.465153D+00	0.737139D+00	57.76	0.759972	117.0	0.106157D+00	0.184481D+00	60.13	0.045427
118.0	0.628127D+00	0.663391D+00	46.56	0.844630	118.0	0.786588D-01	0.161245D+00	64.00	0.032187
119.0	0.779296D+00	0.577030D+00	36.52	0.940266	119.0	0.485433D-01	0.129746D+00	69.48	0.019191
120.0	0.914567D+00	0.480109D+00	27.70	1.066936	120.0	0.166920D-01	0.905297D-01	79.56	0.008492
121.0	0.103012D+01	0.374702D+00	19.99	1.201550	121.0	-0.159800D-01	0.444982D-01	109.75	0.002235
122.0	0.112249D+01	0.263013D+00	13.19	1.329186	122.0	-0.148492D-01	-0.775324D-02	-170.92	0.002812
123.0	0.118869D+01	0.147474D+00	7.07	1.434732	123.0	-0.798613D-01	-0.649387D-01	-140.88	0.010595
124.0	0.122628D+01	0.303944D-01	1.42	1.504676	124.0	-0.109122D+00	-0.125598D+00	-130.98	0.027682
125.0	0.123348D+01	-0.857873D-01	-3.98	1.528838	125.0	-0.135363D+00	-0.188019D+00	-125.75	0.053674
126.0	0.120928D+01	-0.198708D+00	-9.33	1.501841	126.0	-0.157755D+00	-0.250276D+00	-122.22	0.087525
127.0	0.115344D+01	-0.306097D+00	-14.86	1.424109	127.0	-0.175580D+00	-0.310274D+00	-119.50	0.127098
128.0	0.106656D+01	-0.405827D+00	-20.83	1.302249	128.0	-0.193254D+00	-0.365800D+00	-117.23	0.169249
129.0	0.950125D+00	-0.495951D+00	-27.56	1.148706	129.0	-0.195352D+00	-0.414585D+00	-115.23	0.210043
130.0	0.806448D+00	-0.574747D+00	-35.48	0.980692	130.0	-0.196621D+00	-0.454374D+00	-113.40	0.245115
131.0	0.638671D+00	-0.640745D+00	-45.09	0.818455	131.0	-0.191988D+00	-0.482998D+00	-111.68	0.270147
132.0	0.450700D+00	-0.692761D+00	-56.95	0.683088	132.0	-0.181573D+00	-0.498452D+00	-110.02	0.281423
133.0	0.247123D+00	-0.729910D+00	-71.30	0.533838	133.0	-0.165677D+00	-0.494670D+00	-108.37	0.276417
134.0	0.331077D-01	-0.751622D+00	-87.48	0.566031	134.0	-0.144762D+00	-0.510920D+00	-106.68	0.254340
135.0	-0.185741D+00	-0.757650D+00	-103.77	0.608533	135.0	-0.119534D+00	-0.449976D+00	-104.88	0.216574

CIRCULAR OP POLARIZATION KA= 10.000

CIRCULAR PP POLARIZATION KA= 10.000

THETA	REAL	IMAG	PHASE	MCS	IBTA	REAL	IMAG	PHASE	MCS
135.0	-0.185741D+00	-0.757650D+00	-103.77	0.608533	135.0	-0.119534E+00	-0.449762D+00	-104.88	0.216574
136.0	-0.403496D+00	-0.748064D+00	-118.34	0.722409	136.0	-0.907211D-01	-0.359367D+00	-102.83	0.166926
137.0	-0.614093D+00	-0.723248D+00	-130.33	0.920198	137.0	-0.592529D-01	-0.328808D+00	-100.22	0.111626
138.0	-0.811449D+00	-0.683681D+00	-139.88	1.126213	138.0	-0.261278D-01	-0.241549D+00	-96.17	0.059028
139.0	-0.989854D+00	-0.630915D+00	-147.49	1.377864	139.0	-0.759793D-02	-0.137648D+00	-86.84	0.019005
140.0	-0.114371D+01	-0.565554D+00	-153.69	1.627920	140.0	0.408858D-01	-0.187804D-01	-24.69	0.002021
141.0	-0.126813D+01	-0.489218D+00	-158.90	1.847491	141.0	0.725511D-01	0.112753D+00	57.24	0.017977
142.0	-0.135890D+01	-0.403508D+00	-163.46	2.00428	142.0	0.101699D+00	0.254040D+00	68.18	0.074879
143.0	-0.141263D+01	-0.310173D+00	-167.62	2.091738	143.0	0.127358D+00	0.401584D+00	72.40	0.177490
144.0	-0.142691D+01	-0.211062D+00	-171.59	2.080624	144.0	0.148714D+00	0.551347D+00	74.90	0.326100
145.0	-0.140037D+01	-0.108089D+00	-175.59	1.972733	145.0	0.165097D+00	0.698816D+00	76.71	0.515601
146.0	-0.133278D+01	-0.318998D-02	-179.86	1.776315	146.0	0.176055D+00	0.839078D+00	78.15	0.735030
147.0	-0.122504D+01	0.101717D+00	-175.25	1.511069	147.0	0.181122D+00	0.966919D+00	79.39	0.967737
148.0	-0.107921D+01	0.204770D+00	-169.26	1.205624	148.0	0.180329D+00	0.107693D+01	80.49	1.192286
149.0	-0.898455D+00	0.304201D+00	-161.29	0.899760	149.0	0.173707D+00	0.116361D+01	81.51	1.384160
150.0	-0.686976D+00	0.398366D+00	-149.89	0.630631	150.0	0.161538D+00	0.122153D+01	82.47	1.518235
151.0	-0.449894D+00	0.485775D+00	-132.80	0.439382	151.0	0.144294D+00	0.124544D+01	83.39	1.571940
152.0	-0.193119D+00	0.565115D+00	-108.87	0.356650	152.0	0.127619D+00	0.123404D+01	84.31	1.528910
153.0	0.768274D-01	0.635274D+00	83.10	0.409476	153.0	0.973085D-01	0.117192D+01	85.25	1.382872
154.0	0.352933D+00	0.695350D+00	63.09	0.608115	154.0	0.692824D-01	0.106613D+01	86.28	1.141426
155.0	0.626207D+00	0.744665D+00	49.85	0.949170	155.0	0.395496D-01	0.909823D+00	87.51	0.829342
156.0	0.895296D+00	0.782769D+00	41.16	1.414283	156.0	0.917500D-02	0.700649D+00	89.25	0.490993
157.0	0.114731D+01	0.609441D+00	35.20	1.971505	157.0	-0.207598D-01	0.437162D+00	92.72	0.191542
158.0	0.137771D+01	0.824683D+00	30.90	2.578199	158.0	-0.491941D-01	0.116918D+00	112.47	0.016562
159.0	0.158064D+01	0.828712D+00	27.67	3.185202	159.0	-0.751268D-01	-0.253467D+00	-106.51	0.069890
160.0	0.175105D+01	0.821950D+00	25.15	3.744768	160.0	-0.976515D-01	-0.678281D+00	-98.19	0.449601
161.0	0.188487D+01	0.805004D+00	23.13	4.200749	161.0	-0.115270D+01	-0.115270D+01	-95.75	1.342168
162.0	0.197917D+01	0.778652D+00	21.48	4.523406	162.0	-0.129518D+00	-0.167279D+01	-94.43	2.815015
163.0	0.203225D+01	0.743821D+00	20.10	4.683306	163.0	-0.137490D+00	-0.233358D+01	-93.53	5.007852
164.0	0.204366D+01	0.701561D+00	18.95	4.668631	164.0	-0.140555D+00	-0.282205D+01	-92.84	8.023304
165.0	0.201443D+01	0.653027D+00	17.96	4.484039	165.0	-0.137764D+00	-0.345232D+01	-92.29	11.937465
166.0	0.194639D+01	0.599453D+00	17.12	4.147773	166.0	-0.129570D+00	-0.409565D+01	81	16.791100
167.0	0.184317D+01	0.542122D+00	16.39	3.691156	167.0	-0.116326D+00	-0.475065D+01	1.40	22.582191
168.0	0.170913D+01	0.482351D+00	15.76	3.153794	168.0	-0.985695D-01	-0.540840D+01	91.04	29.260537
169.0	0.154970D+01	0.421160D+00	15.21	2.579147	169.0	-0.770220D-01	-0.635962D+01	-90.73	36.724961
170.0	0.137104D+01	0.360752D+00	14.74	2.009901	170.0	-0.524644D-01	-0.669404D+01	-90.45	44.823575
171.0	0.117993D+01	0.301491D+00	14.33	1.483128	171.0	-0.259035D-01	-0.730456D+01	-90.20	53.357302
172.0	0.983454D+00	0.244864D+00	13.96	1.027150	172.0	0.1466121D-02	-0.787951D+01	-89.99	62.086666
173.0	0.788834D+00	0.192057D+00	13.68	0.659745	173.0	0.291761D-01	-0.841075D+01	-89.80	70.741585
174.0	0.603147D+00	0.144048D+00	13.43	0.384536	174.0	0.555928D-01	-0.888922D+01	-89.64	79.033688
175.0	0.433105D+00	0.101781D+00	13.22	0.197940	175.0	0.799071D-01	-0.930935D+01	-89.51	86.670443
176.0	0.284824D+00	0.660630D-01	13.06	0.085489	176.0	0.101196E+00	-0.966230D+01	-89.40	93.370240
177.0	0.163616D+00	0.375670D-01	12.93	0.028181	177.0	0.118653D+00	-0.994301D+01	-89.32	96.877467
178.0	0.738132D-01	0.168262D-01	12.84	0.005732	178.0	0.131617D+00	-0.101469D+02	-89.26	102.976566
179.0	0.186190D-01	0.422606D-02	12.74	0.000365	179.0	0.139596D+00	-0.102706D+02	-89.22	105.504129
180.0	0.322386D-09	-0.144101D-09	-24.08	0.000000	180.0	0.132290D+00	-0.103120D+02	-89.21	106.358200

CIRCULAR OP POLARIZATION KA= 15.000

CIRCULAR PP POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	RMCS	THETA	REAL	IMAG	PHASE	RMCS
0.0	-0.17680D+00	0.945586D+00	100.57	0.922564	0.0	0.673390D-11	0.916982D-12	7.75	0.000000
1.0	-0.175373D+00	0.946558D+00	100.50	0.926728	1.0	0.307956D-04	-0.379109D-03	-85.36	0.000000
2.0	-0.172179D+00	0.949422D+00	100.28	0.931047	2.0	0.127135D-03	-0.148690D-02	-85.11	0.000002
3.0	-0.166671D+00	0.954024D+00	99.92	0.938008	3.0	0.300139D-03	-0.323677D-02	-84.70	0.000011
4.0	-0.159466D+00	0.960120D+00	99.43	0.947260	4.0	0.565959D-03	-0.549109D-02	-84.11	0.000030
5.0	-0.149986D+00	0.967383D+00	98.81	0.958325	5.0	0.942717D-03	-0.807085D-02	-83.34	0.000066
6.0	-0.138449D+00	0.975422D+00	98.08	0.970617	6.0	0.144614D-02	-0.107683D-01	-82.35	0.000118
7.0	-0.124864D+00	0.983805D+00	97.23	0.983464	7.0	0.208565D-02	-0.133615D-01	-81.13	0.000183
8.0	-0.109229D+00	0.992707D+00	96.28	0.998145	8.0	0.286089D-02	-0.156304D-01	-79.63	0.000252
9.0	-0.915247D-01	0.999776D+00	95.23	1.007928	9.0	0.375455D-02	-0.173725D-01	-77.80	0.000316
10.0	-0.717122D-01	0.100647D+01	94.08	1.018124	10.0	0.473822D-02	-0.184179D-01	-75.57	0.000362
11.0	-0.497353D-01	0.101176D+01	92.81	1.026131	11.0	0.576404D-02	-0.186421D-01	-72.82	0.000381
12.0	-0.255216D-01	0.101530D+01	91.44	1.031490	12.0	0.676997D-02	-0.179760D-01	-69.36	0.000369
13.0	0.101207D-02	0.101682D+01	89.94	1.033924	13.0	0.768233D-02	-0.164118D-01	-64.92	0.000328
14.0	0.259522D-01	0.101611D+01	88.31	1.033369	14.0	0.842073D-02	-0.140057D-01	-58.98	0.000267
15.0	0.613787D-01	0.101303D+01	86.53	1.029989	15.0	0.890446D-02	-0.108748D-01	-50.69	0.000198
16.0	0.953548D-01	0.100751D+01	84.59	1.024174	16.0	0.905984D-02	-0.719121D-02	-38.44	0.000134
17.0	0.131908D+00	0.999556D+00	82.48	1.016512	17.0	0.882777D-02	-0.317097D-02	-19.76	0.000088
18.0	0.171033D+00	0.989193D+00	80.19	1.007750	18.0	0.817097D-02	0.939619D-03	6.56	0.000068
19.0	0.212663D+00	0.976476D+00	77.71	0.998731	19.0	0.703048D-02	0.488037D-02	34.58	0.000074
20.0	0.256673D+00	0.961479D+00	75.05	0.990323	20.0	0.557797D-02	0.839495D-02	56.40	0.000102
21.0	0.302867D+00	0.944253D+00	72.22	0.983342	21.0	0.372165D-02	0.112488D-01	71.69	0.000140
22.0	0.350975D+00	0.924820D+00	69.22	0.978475	22.0	0.160154D-02	0.132458D-01	83.11	0.000178
23.0	0.400656D+00	0.903150D+00	66.08	0.976206	23.0	-0.662309D-03	0.182432D-01	92.66	0.000203
24.0	0.451428D+00	0.879154D+00	62.82	0.976763	24.0	-0.292679D-02	0.141628D-01	101.68	0.000209
25.0	0.503028D+00	0.852671D+00	59.46	0.980084	25.0	-0.503490D-02	0.129979D-01	111.17	0.000194
26.0	0.554720D+00	0.823466D+00	56.03	0.985810	26.0	-0.682692D-02	0.108156D-01	122.26	0.000164
27.0	0.606011D+00	0.791237D+00	52.55	0.993305	27.0	-0.815277D-02	0.775423D-02	136.44	0.000127
28.0	0.656313D+00	0.755623D+00	49.02	1.001715	28.0	-0.888475D-02	0.401504D-02	155.68	0.000095
29.0	0.705033D+00	0.716225D+00	45.45	1.010048	29.0	-0.892947D-02	-0.150168D-03	-179.04	0.000080
30.0	0.751572D+00	0.672621D+00	41.83	1.017280	30.0	-0.823804D-02	-0.445529D-02	-151.59	0.000088
31.0	0.795358D+00	0.624403D+00	38.13	1.022474	31.0	-0.681358D-02	-0.860046D-02	-128.39	0.000120
32.0	0.835842D+00	0.571199D+00	34.35	1.024900	32.0	-0.471512D-02	-0.122918D-01	-110.99	0.000173
33.0	0.872508D+00	0.512707D+00	30.44	1.024138	33.0	-0.205728D-02	-0.152634D-01	-97.68	0.000237
34.0	0.904875D+00	0.448729D+00	26.38	1.020156	34.0	0.933766D-03	-0.172368D-01	-86.71	0.000300
35.0	0.932498D+00	0.379196D+00	22.13	1.013341	35.0	0.423027D-02	-0.182383D-01	-76.94	0.000351
36.0	0.954960D+00	0.304193D+00	17.67	1.004482	36.0	0.741475D-02	-0.180116D-01	-67.62	0.000379
37.0	0.971869D+00	0.223980D+00	12.96	0.994696	37.0	0.102965D-01	-0.166254D-01	-58.23	0.000382
38.0	0.982843D+00	0.139020D+00	8.05	0.985301	38.0	0.126298D-01	-0.141752D-01	-48.30	0.000360
39.0	0.987505D+00	0.498950D-01	2.89	0.977656	39.0	0.141927D-01	-0.108383D-01	-37.37	0.000319
40.0	0.985474D+00	-0.425223D-01	-2.47	0.972968	40.0	0.148054D-01	-0.686319D-02	-24.87	0.000266
41.0	0.976359D+00	-1.137257D+00	-8.00	0.972116	41.0	0.143469D-01	-0.255256D-02	-10.09	0.000212
42.0	0.959755D+00	-0.331644D+00	-13.65	0.959795	42.0	0.127672D-01	-0.175767D-02	7.84	0.000166
43.0	0.935252D+00	-0.328927D+00	-19.38	0.942919	43.0	0.100960D-01	0.572304D-02	29.55	0.000135
44.0	0.902442D+00	-0.423317D+00	-25.13	0.923613	44.0	0.644479D-02	0.901669D-02	54.44	0.000123
45.0	0.860937D+00	-0.547777D+00	-30.88	1.906208	45.0	0.208334D-02	0.113552D-01	79.99	0.000133

CIRCULAR P2 POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	MROS
45.0	0.860937D+00	-0.514777D+00	-30.88	1.006208
46.0	0.810394D+00	-0.601907D+00	-36.60	1.019031
47.0	0.750544D+00	-0.683281D+00	-42.31	1.030190
48.0	0.681232D+00	-0.757521D+00	-48.04	1.037915
49.0	0.602448D+00	-0.823332D+00	-53.81	1.040820
50.0	0.514376D+00	-0.879526D+00	-59.68	1.038150
51.0	0.417430D+00	-0.925044D+00	-65.71	1.029955
52.0	0.31281D+00	-0.958970D+00	-71.96	1.017433
53.0	0.199893D+00	-0.980581D+00	-78.48	1.001417
54.0	0.815350D-01	-0.989150D+00	-85.29	0.985066
55.0	-0.412114D-01	-0.984351D+00	-92.40	0.970645
56.0	-0.166484D+00	-0.965853D+00	-99.78	0.960583
57.0	-0.292066D+00	-0.933527D+00	-107.37	0.956775
58.0	-0.415621D+00	-0.887398D+00	-115.10	0.960216
59.0	-0.534554D+00	-0.827658D+00	-122.86	0.970765
60.0	-0.646178D+00	-0.754669D+00	-130.57	0.987071
61.0	-0.747775D+00	-0.668979D+00	-138.18	1.006699
62.0	-0.836683D+00	-0.571339D+00	-145.67	1.026467
63.0	-0.916393D+00	-0.462728D+00	-153.06	1.042933
64.0	-0.966638D+00	-0.344375D+00	-160.39	1.052984
65.0	-0.100349D+01	-0.217782D+00	-167.76	1.059417
66.0	-0.101943D+01	-0.847490D-01	-175.25	1.046417
67.0	-0.101344D+01	0.526135D-01	177.03	0.929820
68.0	-0.985030D+00	0.191882D+00	168.98	1.007103
69.0	-0.934318D+00	0.330328D+00	160.53	0.962066
70.0	-0.862007D+00	0.464949D+00	151.66	0.939234
71.0	-0.769413D+00	0.592513D+00	142.40	0.943067
72.0	-0.658430D+00	0.709631D+00	132.86	0.937106
73.0	-0.531499D+00	0.812848D+00	123.18	0.932113
74.0	-0.391548D+00	0.898753D+00	113.54	0.911067
75.0	-0.241918D+00	0.964114D+00	104.09	0.988039
76.0	-0.862816D-01	0.100601D+01	94.90	1.049511
77.0	0.714512D-01	0.10201D+01	86.00	1.049616
78.0	0.227234D+00	0.101028D+01	77.32	1.072309
79.0	0.376987D+00	0.969768D+00	68.76	1.082570
80.0	0.516700D+00	0.900293D+00	60.15	1.077507
81.0	0.642536D+00	0.802672D+00	51.32	1.057135
82.0	0.750930D+00	0.67877D+00	42.11	1.024622
83.0	0.838684D+00	0.531518D+00	32.36	0.985899
84.0	0.903057D+00	0.364890D+00	22.00	0.948658
85.0	0.944848D+00	0.183838D+00	11.04	0.920874
86.0	0.953470D+00	-0.586578D-02	-0.35	0.909139
87.0	0.937020D+00	-0.197792D+00	-11.92	0.917128
88.0	0.892338D+00	-0.385088D+00	-23.34	0.944560
89.0	0.820051D+00	-0.560744D+00	-34.36	0.966917
90.0	0.721609D+00	-0.717882D+00	-44.85	1.036074

CIRCULAR OF POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	MROS
45.0	0.200334D-02	0.113552D-01	79.99	0.000133
46.0	-0.297024D-02	0.125222D-01	103.34	0.000166
47.0	-0.616545D-02	0.123880D-01	123.39	0.000220
48.0	-0.132385D-01	0.139231D-01	140.47	0.000295
49.0	-0.178394D-01	0.820556D-02	155.30	0.000386
50.0	-0.216351D-01	0.441906D-02	168.46	0.000488
51.0	-0.243371D-01	-0.155704D-03	-179.63	0.000592
52.0	-0.257249D-02	-0.515839D-02	-168.66	0.000688
53.0	-0.256657D-01	-0.101730D-01	-158.38	0.000762
54.0	-0.241230D-01	-0.447572D-01	-148.55	0.000800
55.0	-0.211930D-01	-0.144756D-01	-138.92	0.000790
56.0	-0.170430D-01	-0.209334D-01	-129.15	0.000729
57.0	-0.119622D-01	-0.218049D-01	-118.74	0.000619
58.0	-0.631244D-02	-0.208851D-01	-106.82	0.000476
59.0	-0.510910D-03	-0.180666D-01	-91.62	0.000327
60.0	0.500341D-02	-0.133996D-01	-69.52	0.000205
61.0	0.380174D-02	-0.707377D-02	-35.82	0.000146
62.0	0.135017D-01	0.583726D-03	2.48	0.000183
63.0	0.30905D-01	0.912456D-02	30.01	0.000334
64.0	0.165033D-01	0.180063D-01	47.49	0.000597
65.0	0.155453D-01	0.266268D-01	59.72	0.000951
66.0	0.130030D-01	0.343668D-01	69.28	0.001350
67.0	0.909617D-02	0.406338D-01	77.38	0.001734
68.0	0.417691D-02	0.449066D-01	84.69	0.002034
69.0	0.329190D-02	0.467780D-01	91.58	0.002190
70.0	-0.676913D-02	0.459890D-01	98.37	0.002161
71.0	-0.116763D-01	0.424549D-01	105.38	0.001939
72.0	-0.154440D-01	0.362793D-01	113.06	0.001555
73.0	-0.175613D-01	0.277539D-01	122.32	0.001079
74.0	-0.176233D-01	0.173454D-01	135.46	0.000611
75.0	-0.153735D-01	0.566746D-02	159.76	0.000268
76.0	-0.107272D-01	-0.655830D-02	-148.58	0.000158
77.0	-0.384290D-02	-0.185519D-01	101.70	0.000359
78.0	0.497177D-02	-0.295307D-01	-80.44	0.000897
79.0	0.151697D-01	-0.387668D-01	-68.63	0.001733
80.0	0.260443D-01	-0.456437D-01	-60.29	0.002761
81.0	0.367468D-01	-0.497049D-01	-53.52	0.003821
82.0	0.463724D-01	-0.506930D-01	-47.55	0.004720
83.0	0.539961D-01	-0.485744D-01	-41.97	0.005275
84.0	0.587601D-01	-0.435467D-01	-36.54	0.005349
85.0	0.599431D-01	-0.360290D-01	-31.01	0.004891
86.0	0.570274D-01	-0.264338D-01	-25.03	0.003961
87.0	0.497563D-01	-0.161217D-01	-17.95	0.002736
88.0	0.381736D-01	-0.534366D-02	-7.97	0.001486
89.0	0.226550D-01	0.482735D-02	12.03	0.000537
90.0	0.388697D-02	0.135689D-01	74.01	0.000199

CIRCULAR PP POLARIZATION KA= 15.000

CIRCULAR OP POLARIZATION KA= 15.000

THETA	REAL	IMAG	PHASE	MCS	YETA	REAL	IMAG	PHASE	MCS
90.0	0.721609D+00	-0.717882D+00	-88.85	1.036078	50.0	0.388697D-02	0.135689D-01	74.01	0.000199
91.0	0.599299D+00	-0.850070D+00	-58.82	1.081778	91.0	-0.171382D-01	0.201801D-01	130.34	0.000701
92.0	0.456248D+00	-0.951622D+00	-39.39	1.133743	92.0	-0.391827D-01	0.281460D-01	188.36	0.002118
93.0	0.296373D+00	-0.101789D+01	-73.77	1.123981	93.0	-0.608280D-01	0.251888D-01	157.51	0.004335
94.0	0.128363D+00	-0.104553D+01	-83.22	1.108606	94.0	-0.805754D-01	0.232996D-01	163.87	0.007035
95.0	-0.588447D-01	-0.103270D+01	-93.02	1.069483	95.0	-0.969315D-01	0.187534D-01	169.05	0.009447
96.0	-0.234168D+00	-0.979223D+00	-103.45	1.03712	96.0	-0.108529D+00	0.120932D-01	173.68	0.01125
97.0	-0.408544D+00	-0.886639D+00	-114.74	0.953037	97.0	-0.118226D+00	0.409563D-02	177.95	0.013064
98.0	-0.571118D+00	-0.758238D+00	-126.99	0.901095	98.0	-0.113205D+00	-0.428933D-02	-177.83	0.012834
99.0	-0.715473D+00	-0.598938D+00	-148.07	0.870623	99.0	-0.105052D+00	-0.120163D-01	-173.47	0.011180
100.0	-0.835477D+00	-0.415135D+00	-153.58	0.870359	100.0	-0.898103D-01	-0.180371D-01	-168.64	0.008391
101.0	-0.925558D+00	-0.214458D+00	-166.95	0.902651	101.0	-0.680062D-01	-0.213993D-01	-162.53	0.005083
102.0	-0.980985D+00	-0.542705D-02	-179.68	0.962361	102.0	-0.406442D-01	-0.213445D-01	-152.29	0.002108
103.0	-0.998138D+00	0.202906D+00	168.51	1.037449	103.0	-0.916379D-02	-0.173968D-01	-117.78	0.000387
104.0	-0.974767D+00	0.401370D+00	157.62	1.111268	104.0	0.266343D-01	-0.943274D-02	-20.95	0.000196
105.0	-0.910210D+00	0.581128D+00	147.44	1.166173	105.0	0.586926D-01	0.227238D-02	2.22	0.003450
106.0	-0.805557D+00	0.748019D+00	137.66	1.187706	106.0	0.908242D-01	0.170337D-01	10.62	0.008539
107.0	-0.663747D+00	0.853125D+00	117.88	1.168382	107.0	0.113857D+00	0.337718D-01	15.86	0.015267
108.0	-0.489576D+00	0.932967D+00	117.69	1.110113	108.0	0.140787D+00	0.510754D-01	19.94	0.022428
109.0	-0.289621D+00	0.969871D+00	106.63	1.024531	109.0	0.154899D+00	0.672907D-01	23.48	0.028522
110.0	-0.720491D-01	0.962160D+00	94.28	0.930943	110.0	0.159953D+00	0.806427D-01	26.76	0.032088
111.0	0.153662D+00	0.910259D+00	80.42	0.852183	111.0	0.155230D+00	0.893796D-01	29.93	0.032085
112.0	0.371099D+00	0.816705D+00	65.22	0.809219	112.0	0.140640D+00	0.919294D-01	33.17	0.028231
113.0	0.587430D+00	0.686042D+00	49.43	0.85728	113.0	0.116741D+00	0.870569D-01	36.71	0.021207
114.0	0.773838D+00	0.524617D+00	34.14	0.874041	114.0	0.847366D-01	0.740089D-01	41.13	0.012658
115.0	0.926178D+00	0.340278D+00	20.17	0.973595	115.0	0.464111D-01	0.526345D-01	48.60	0.004924
116.0	0.105558D+01	0.141999D+00	7.81	1.022533	116.0	0.403534D-02	0.234682D-01	80.24	0.000567
117.0	0.109484D+01	-0.605632D-01	-3.17	1.202342	117.0	-0.397724D-01	-0.122347D-01	-162.50	0.001732
118.0	0.109922D+01	-0.257549D+00	-13.19	1.274615	118.0	-0.822121D-01	-0.525174D-01	-147.43	0.009517
119.0	0.104658D+01	-0.439391D+00	-22.77	1.288392	119.0	-0.120487D+00	-0.947996D-01	-141.80	0.023504
120.0	0.937793D+00	-0.597292D+00	-32.49	1.236214	120.0	-0.151996D+00	-0.136013D+00	-138.18	0.041602
121.0	0.776853D+00	-0.723676D+00	-42.97	1.127207	121.0	-0.174513D+00	-0.172701D+00	-135.28	0.050312
122.0	0.570817D+00	-0.812566D+00	-54.91	0.966095	122.0	-0.186355D+00	-0.201702D+00	-132.74	0.075412
123.0	0.329582D+00	-0.859890D+00	-69.03	0.848034	123.0	-0.186517D+00	-0.219506D+00	-130.35	0.082969
124.0	0.654564D-01	-0.863684D+00	-85.67	0.750235	124.0	-0.174727D+00	-0.223439D+00	-128.03	0.080455
125.0	-0.207421D+00	-0.824189D+00	-104.13	0.722311	125.0	-0.451545D+00	-0.211469D+00	-125.63	0.067685
126.0	-0.473828D+00	-0.743828D+00	-122.50	0.777789	126.0	-0.118285D+00	-0.182541D+00	-122.94	0.047313
127.0	-0.718289D+00	-0.627075D+00	-138.88	0.908137	127.0	-0.769630D-01	-0.136762D+00	-119.37	0.024628
128.0	-0.926027D+00	-0.480219D+00	-152.59	1.086137	128.0	-0.302027D-01	-0.755216D-01	-111.80	0.006616
129.0	-0.108385D+01	-0.311027D+00	-163.99	0.714464	129.0	0.189973D-01	-0.152832D-02	-4.60	0.000363
130.0	-0.118104D+01	-0.128338D+00	-173.80	1.411323	130.0	0.6744012D-01	0.812506D-01	50.32	0.011145
131.0	-0.121013D+01	0.583974D-01	177.24	1.467830	131.0	0.111786D+00	0.167747D+00	56.32	0.040635
132.0	-0.116751D+01	0.239610D+00	168.40	1.420503	132.0	0.149158D+00	0.252049D+00	59.38	0.085777
133.0	-0.105382D+01	0.406104D+00	158.93	1.275448	133.0	0.176963D+00	0.327747D+00	61.63	0.138734
134.0	-0.874058D+00	0.549524D+00	147.84	1.065954	134.0	0.193224D+00	0.388346D+00	63.54	0.188167
135.0	-0.637521D+00	0.662780D+00	133.89	0.845710	135.0	0.196927D+00	0.427735D+00	65.28	0.221737



CIRCULAR PP POLARIZATION KA= 15.000					CIRCULAR OF POLARIZATION KA= 15.000				
THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
135.0	-0.637521D+00	0.662780D+00	133.89	0.845710	135.0	0.196273D+00	0.427735D+00	65.28	0.221737
136.0	-0.557334D+00	0.740399D+00	115.76	0.675879	136.0	0.187615D+00	0.440669D+00	66.94	0.229389
137.0	-0.498023D+00	0.778787D+00	93.66	0.608989	137.0	0.165918D+00	0.423241D+00	68.59	0.206662
138.0	0.266514D+00	0.776391D+00	71.05	0.633610	138.0	0.133269D+00	0.373305D+00	70.35	0.157118
139.0	0.571894D+00	0.733760D+00	52.07	0.865467	139.0	0.918618D+00	0.290822D+00	72.47	0.093016
140.0	0.846686D+00	0.653486D+00	37.66	1.143921	140.0	0.445020D+00	0.178081D+00	75.97	0.033693
141.0	0.107268D+01	0.540046D+00	26.73	1.442070	141.0	-0.58748D-02	0.397932D-01	97.99	0.001615
142.0	0.123383D+01	0.399555D+00	17.94	1.681972	142.0	-0.549918D-01	-0.116980D+00	-115.18	0.016708
143.0	0.131839D+01	0.239424D+00	10.29	1.795479	143.0	-0.100345D+00	-0.283068D+00	-109.52	0.090197
144.0	0.131883D+01	0.679739D-01	2.95	1.743937	144.0	-0.138569D+00	-0.447604D+00	-107.20	0.219551
145.0	0.123296D+01	-0.105999D+00	-4.91	1.531426	145.0	-0.167093D+00	-0.598589D+00	-105.60	0.386228
146.0	0.106416D+01	-0.273675D+00	-14.42	1.207336	146.0	-0.184035D+00	-0.723591D+00	-104.27	0.557453
147.0	0.821346D+00	-0.426645D+00	-27.45	0.856636	147.0	-0.188337D+00	-0.810559D+00	-103.08	0.692477
148.0	0.518548D+00	-0.557330D+00	-47.06	0.579509	148.0	-0.179838D+00	-0.848672D+00	-101.96	0.752586
149.0	0.174147D+00	-0.659333D+00	-75.20	0.465047	149.0	-0.159282D+00	-0.829213D+00	-100.87	0.712965
150.0	-0.190212D+00	-0.727734D+00	-104.65	0.565777	150.0	-0.128260D+00	-0.746393D+00	-99.75	0.573553
151.0	-0.550950D+00	-0.759305D+00	-125.96	0.880090	151.0	-0.890890D-01	-0.595069D+00	-98.47	0.365623
152.0	-0.864068D+00	-0.752625D+00	-139.59	1.348022	152.0	-0.446404D-01	-0.386313D+00	-96.59	0.151231
153.0	-0.116672D+01	-0.708117D+00	-148.75	1.862656	153.0	0.187701D-02	-0.117749D+00	-89.09	0.013874
154.0	-0.137873D+01	-0.627878D+00	-155.51	2.295263	154.0	0.471533D-01	0.166198D+00	76.49	0.040717
155.0	-0.150405D+01	-0.516035D+00	-161.06	2.528445	155.0	0.880220D-01	0.539695D+00	80.74	0.299019
156.0	-0.153181D+01	-0.377520D+00	-166.16	2.488971	156.0	0.121692D+00	0.892674D+00	82.24	0.811676
157.0	-0.145725D+01	-0.218785D+00	-171.46	2.171446	157.0	0.145949D+00	0.123165D+01	83.24	1.538268
158.0	-0.128206D+01	-0.469656D-01	-177.90	1.645872	158.0	0.159313D+00	0.153066D+01	84.06	2.368289
159.0	-0.101439D+01	0.130372D+00	172.68	1.045989	159.0	0.161137D+00	0.176239D+01	84.78	3.131993
160.0	-0.668444D+00	0.305607D+00	155.43	0.540114	160.0	0.151643D+00	0.189958D+01	85.44	3.631385
161.0	-0.263536D+00	0.471422D+00	119.29	0.291690	161.0	0.131889D+00	0.191616D+01	86.06	3.589807
162.0	0.177106D+00	0.621399D+00	74.09	0.417180	162.0	0.103674D+00	0.178913D+01	86.68	3.214192
163.0	0.627877D+00	0.749016D+00	56.03	0.955254	163.0	0.693839D-01	0.150130D+01	87.35	2.258726
164.0	0.106251D+01	0.850486D+00	38.68	1.852250	164.0	0.317997D-01	0.103778D+01	88.24	1.078001
165.0	0.145564D+01	0.922338D+00	32.36	2.970173	165.0	-0.613022D-02	0.392862D+00	90.89	0.154378
166.0	0.178553D+01	0.962829D+00	28.34	4.115153	166.0	-0.415228D-01	-0.432396D+00	-95.49	0.188690
167.0	0.203360D+01	0.971720D+00	25.54	5.079750	167.0	-0.717669D-01	-0.142903D+01	-92.88	2.047267
168.0	0.218765D+01	0.950248D+00	23.48	5.688773	168.0	-0.948225D-01	-0.235606D+01	-92.10	6.665722
169.0	0.224174D+01	0.901026D+00	21.90	5.837242	169.0	-0.109179D+00	-0.346085D+01	-91.62	14.918120
170.0	0.219677D+01	0.827888D+00	20.65	5.511201	170.0	-0.114159D+00	-0.523397D+01	-91.25	27.467914
171.0	0.206041D+01	0.735678D+00	19.65	4.786516	171.0	-0.109858D+00	-0.667913D+01	-90.94	44.622835
172.0	0.184653D+01	0.630020D+00	18.84	3.806578	172.0	-0.971429D-01	-0.813699D+01	-90.68	66.218337
173.0	0.157420D+01	0.516951D+00	18.18	2.745343	173.0	-0.775623D-01	-0.956799D+01	-90.46	91.552452
174.0	0.126631D+01	0.402807D+00	17.65	1.765784	174.0	-0.532074D-01	-0.109264D+02	-90.28	119.388869
175.0	0.947898D+00	0.259374D+00	17.22	0.984798	175.0	-0.265255D-01	-0.121670D+02	-90.12	148.035501
176.0	0.644371D+00	0.195565D+00	16.88	0.453459	176.0	-0.107402D-03	-0.132474D+02	-90.00	175.494117
177.0	0.379626D+00	0.113396D+00	16.63	0.156975	177.0	-0.235360D-01	-0.141303D+02	-89.90	199.664831
178.0	0.174336D+00	0.514937D-01	16.46	0.033045	178.0	0.421883D-01	-0.147844D+02	-89.84	218.579438
179.0	0.444426D-01	0.130397D-01	16.35	0.002145	179.0	0.541166D-01	-0.151865D+02	-89.80	230.631571
180.0	0.195013D-09	0.304424D-10	9.47	0.000000	180.0	0.582188D-01	-0.153221D+02	-89.78	234.770776

CIRCULAR OP POLARIZATION KA= 20.000

CIRCULAR PP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
0.0	0.685583D+00	-0.704509D+00	-45.78	0.96637	0.0	0.85166CD-11	0.774147D-11	42.27	0.00000
1.0	0.684333D+00	-0.706350D+00	-45.91	0.967242	1.0	0.684944D-04	0.397567D-03	80.22	0.00000
2.0	0.680601D+00	-0.711786D+00	-46.28	0.969858	2.0	0.255362D-03	0.153875D-02	80.58	0.00002
3.0	0.674440D+00	-0.720562D+00	-46.89	0.974079	3.0	0.508188D-03	0.327495D-02	81.18	0.00011
4.0	0.665919D+00	-0.732280D+00	-47.72	0.979682	4.0	0.750538D-03	0.537788D-02	82.06	0.00029
5.0	0.655111D+00	-0.748643D+00	-48.73	0.986332	5.0	0.896489D-03	0.756646D-02	83.24	0.00058
6.0	0.642070D+00	-0.762446D+00	-49.50	0.993576	6.0	0.867507D-03	0.954003D-02	84.80	0.00092
7.0	0.626803D+00	-0.779730D+00	-51.21	1.000861	7.0	0.608887D-03	0.110143D-01	86.84	0.00122
8.0	0.609262D+00	-0.797726D+00	-52.63	1.007567	8.0	0.102922D-03	0.117559D-01	89.50	0.00138
9.0	0.589326D+00	-0.815944D+00	-54.16	1.013070	9.0	0.623561D-03	0.116115D-01	93.07	0.00135
10.0	0.566804D+00	-0.833996D+00	-55.80	1.016816	10.0	0.149886D-02	0.105280D-01	98.10	0.00113
11.0	0.541744D+00	-0.851610D+00	-57.55	1.018401	11.0	0.241370D-02	0.956145D-02	105.74	0.00079
12.0	0.512952D+00	-0.868632D+00	-59.44	1.017641	12.0	0.323544D-02	0.587359D-02	118.85	0.00045
13.0	0.481016D+00	-0.885011D+00	-61.48	1.014621	13.0	0.382786D-02	0.271560D-02	144.65	0.00022
14.0	0.445343D+00	-0.900767D+00	-63.69	1.009710	14.0	0.407191D-02	0.598766D-03	-171.63	0.00017
15.0	0.405685D+00	-0.915949D+00	-66.11	1.003544	15.0	0.388748D-02	0.372012D-02	-136.20	0.00029
16.0	0.361895D+00	-0.930590D+00	-68.75	0.996959	16.0	0.324949D-02	0.634250D-02	-117.13	0.00051
17.0	0.313867D+00	-0.944658D+00	-71.62	0.990891	17.0	0.219747D-02	0.816208D-02	-105.07	0.00071
18.0	0.261683D+00	-0.958005D+00	-74.72	0.986252	18.0	0.836101D-03	0.899106D-02	-95.31	0.00082
19.0	0.205498D+00	-0.970341D+00	-78.04	0.983790	19.0	0.674084D-03	0.874254D-02	-85.59	0.00077
20.0	0.145568D+00	-0.981204D+00	-81.56	0.983954	20.0	0.213504D-02	0.745118D-02	-74.01	0.00060
21.0	0.822610D-01	-0.989966D+00	-85.25	0.986799	21.0	0.333654D-02	0.527187D-02	-57.67	0.00039
22.0	0.159897D-01	-0.995833D+00	-89.08	0.991938	22.0	0.408536D-02	0.246139D-02	-31.10	0.00023
23.0	0.527918D-01	-0.997892D+00	-93.03	0.998575	23.0	0.423212D-02	0.637263D-03	8.56	0.00018
24.0	0.122617D+00	-0.997522D+00	-97.08	1.005608	24.0	0.370839D-02	0.365928D-02	44.63	0.00027
25.0	0.196023D+00	-0.986599D+00	-101.24	1.011802	25.0	0.251217D-02	0.623633D-02	68.06	0.00045
26.0	0.269555D+00	-0.971263D+00	-105.51	1.016012	26.0	0.754135D-03	0.805478D-02	84.65	0.00065
27.0	0.343762D+00	-0.948279D+00	-109.93	1.017406	27.0	0.138008D-02	0.888924D-02	88.82	0.00081
28.0	0.418175D+00	-0.916440D+00	-114.52	1.016649	28.0	0.363743D-02	0.863920D-02	112.83	0.00088
29.0	0.492277D+00	-0.876738D+00	-119.31	1.011007	29.0	0.572953D-02	0.733733D-02	127.98	0.00067
30.0	0.565463D+00	-0.827398D+00	-124.35	1.004336	30.0	0.736960D-02	0.515428D-02	145.03	0.00081
31.0	0.637007D+00	-0.766877D+00	-129.64	0.996950	31.0	0.831161D-02	0.237627D-02	164.04	0.00075
32.0	0.706018D+00	-0.701365D+00	-135.19	0.990575	32.0	0.838617D-02	0.623956D-03	-175.74	0.00071
33.0	0.771425D+00	-0.625257D+00	-140.97	0.986083	33.0	0.752819D-02	0.343402D-02	-155.48	0.00068
34.0	0.831961D+00	-0.541127+00	-146.96	0.984972	34.0	0.579185D-02	0.565314D-02	-135.69	0.00066
35.0	0.886181D+00	-0.449669D+00	-153.10	0.987519	35.0	0.334998D-02	0.694416D-02	-115.75	0.00059
36.0	0.932493D+00	-0.351710D+00	-159.33	0.993283	36.0	0.477201D-03	0.707950D-02	-93.86	0.00050
37.0	0.969218D+00	-0.248134D+00	-165.64	1.000954	37.0	0.248199D-02	0.597897D-02	-67.44	0.00042
38.0	0.994661D+00	-0.139898D+00	-171.99	1.008922	38.0	0.515657D-02	0.370647D-02	-35.71	0.00040
39.0	0.100720D+01	-0.280270D-01	-178.41	1.015243	39.0	0.719847D-02	0.506936D-03	-4.03	0.00052
40.0	0.100539D+01	0.863655D-01	175.09	1.018275	40.0	0.833179D-02	0.325709D-02	21.35	0.00080
41.0	0.988046D+00	0.202043D+00	168.44	1.017056	41.0	0.839479D-02	0.712711D-02	40.33	0.000121
42.0	0.954319D+00	0.317604D+00	161.54	1.017597	42.0	0.736863D-02	0.106079D-01	55.21	0.000204
43.0	0.903784D+00	0.431437D+00	154.48	1.002963	43.0	0.538791D-02	0.132300D-01	67.84	0.00020
44.0	0.836471D+00	0.541685D+00	147.07	0.993106	44.0	0.273060D-02	0.146111D-01	79.41	0.000221
45.0	0.752889D+00	0.646224D+00	139.36	0.984447	45.0	0.212562D-03	0.145094D-01	90.84	0.000211

CIRCULAR PP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	MACS
45.0	-1.752889D+00	0.646774D+00	139.36	0.984447
46.0	-0.658026D+00	0.742667D+00	131.37	0.979304
47.0	-0.541319D+00	0.828402D+00	123.16	0.979277
48.0	-0.416621D+00	0.906664D+00	114.82	0.984768
49.0	-0.282145D+00	0.956638D+00	106.43	0.994761
50.0	-0.140413D+00	0.993602D+00	98.04	1.006961
51.0	0.579253D-02	0.100909D+01	89.67	1.038292
52.0	0.153777D+00	0.100106D+01	81.28	1.025666
53.0	0.299465D+00	0.968064D+00	72.81	1.026827
54.0	0.440435D+00	0.909434D+00	64.16	1.021053
55.0	0.572940D+00	0.825372D+00	55.23	1.009499
56.0	0.693448D+00	0.717059D+00	45.96	0.995043
57.0	0.798383D+00	0.586683D+00	36.31	0.981612
58.0	0.882008D+00	0.437419D+00	26.32	0.973146
59.0	0.947483D+00	0.273354D+00	16.09	0.972446
60.0	0.985077D+00	0.993537D-01	5.76	0.980247
61.0	0.994260D+00	-0.791077D-01	-4.55	0.994811
62.0	0.972939D+00	-0.256155D+00	-14.75	1.012225
63.0	0.919860D+00	-0.252370D+00	-24.84	1.027355
64.0	0.834827D+00	-0.561861D+00	-3.88	1.035499
65.0	0.718893D+00	-0.719818D+00	-101.02	1.033507
66.0	0.574507D+00	-0.831404D+00	-55.36	1.021291
67.0	0.405670D+00	-0.915108D+00	-66.10	1.001931
68.0	0.217060D+00	-0.966273D+00	-77.3	0.981035
69.0	0.173009D-01	-0.982276D+00	-88.99	0.955164
70.0	-0.187351D+00	-0.961619D+00	-101.02	0.959811
71.0	-0.387548D+00	-0.904042D+00	-113.20	0.967485
72.0	-0.574058D+00	-0.810613D+00	-125.31	0.986636
73.0	-0.737715D+00	-0.683779D+00	-137.17	1.011770
74.0	-0.869953D+00	-0.527402D+00	-148.77	1.034971
75.0	-0.963349D+00	-0.346749D+00	-160.20	1.046275
76.0	-0.101214D+01	-0.148439D+00	-171.66	1.046456
77.0	-0.101265D+01	0.596781D-01	176.63	1.029030
78.0	-0.963670D+00	0.268724D+00	164.42	1.000872
79.0	-0.866585D+00	0.469077D+00	151.57	0.971008
80.0	-0.725483D+00	0.650764D+00	138.11	0.949820
81.0	-0.546978D+00	0.803932D+00	124.23	0.945432
82.0	-0.339949D+00	0.919411D+00	110.29	0.960881
83.0	-0.115087D+00	0.989316D+00	96.64	0.991995
84.0	0.115663D+00	0.100769D+01	83.45	1.028813
85.0	0.339759D+00	0.971056D+00	70.72	1.058395
86.0	0.544763D+00	0.878960D+00	58.21	1.069337
87.0	0.719058D+00	0.734292D+00	45.60	1.056229
88.0	0.852529D+00	0.543445D+00	32.52	1.022139
89.0	0.937174D+00	0.316220D+00	18.65	0.978289
90.0	0.967606D+00	0.654512D-01	3.87	0.940546

CIRCULAR OP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	MACS
45.0	-0.212562D-03	0.145094D-01	90.84	0.000211
46.0	-0.298619D-02	0.128604D-01	103.07	0.000174
47.0	-0.513034D-02	0.979226D-02	117.65	0.000122
48.0	-0.624505D-02	0.561657D-02	138.03	0.000071
49.0	-0.605073D-02	0.794760D-03	172.52	0.000037
50.0	-0.443587D-02	-0.411688D-02	-137.14	0.000037
51.0	-0.148470D-02	-0.853697D-02	-99.37	0.000075
52.0	0.252016D-02	-0.119351D-01	-78.08	0.000149
53.0	0.712200D-02	-0.139046D-01	-62.58	0.000244
54.0	0.117397D-01	-0.142213D-01	-50.46	0.000340
55.0	0.157372D-01	-0.128803D-01	-39.30	0.000414
56.0	0.185058D-01	-0.101072D-01	-28.64	0.000445
57.0	0.195466D-01	-0.633088D-02	-17.95	0.000422
58.0	0.185445D-01	-0.213717D-02	-6.57	0.000348
59.0	0.154219D-01	0.180959D-02	6.69	0.000241
60.0	0.103637D-01	0.485682D-02	25.11	0.000131
61.0	0.380873D-02	0.645802D-02	59.47	0.000056
62.0	-0.359252D-02	0.625800D-02	119.86	0.000052
63.0	-0.110510D-01	0.415656D-02	159.39	0.000139
64.0	-0.177340D-01	0.340709D-03	178.90	0.000315
65.0	-0.228711D-01	-0.472117D-02	-168.34	0.000545
66.0	-0.258564D-01	-0.103243D-01	-158.23	0.000775
67.0	-0.263337D-01	-0.156114D-01	-149.34	0.000937
68.0	-0.242518D-01	-0.196771D-01	-140.95	0.000975
69.0	-0.198813D-01	-0.216957D-01	-132.50	0.000866
70.0	-0.137881D-01	-0.210439D-01	-123.54	0.000633
71.0	-0.676554D-02	-0.173902D-01	-111.26	0.000348
72.0	0.268351D-03	0.107961D-01	-88.58	0.000117
73.0	0.639462D-02	-0.171119D-02	-14.98	0.000044
74.0	0.108234D-01	0.903729D-02	39.86	0.000199
75.0	0.130114D-01	0.203245D-01	57.37	0.000582
76.0	0.127495D-01	0.308507D-01	67.55	0.001114
77.0	0.102074D-01	0.392942D-01	75.44	0.001648
78.0	0.592396D-02	0.444788D-01	82.41	0.002013
79.0	0.744367D-03	0.455321D-01	89.06	0.002074
80.0	-0.429310D-02	0.120157D-01	95.83	0.001784
81.0	-0.810643D-02	0.340070D-01	103.41	0.001222
82.0	-0.973647D-02	0.221196D-01	113.76	0.000584
83.0	-0.950838D-02	0.745624D-02	138.77	0.000128
84.0	-0.416402D-02	-0.850246D-02	-116.09	0.000090
85.0	0.305616D-02	-0.240638D-01	-82.76	0.000588
86.0	0.123976D-01	-0.375228D-01	-71.72	0.001562
87.0	0.226501D-01	-0.473721D-01	-64.45	0.002757
88.0	0.371753D-01	-0.529519D-01	-58.41	0.003798
89.0	0.396172D-01	-0.523152D-01	-52.86	0.004306
90.0	0.430918D-01	-0.468807D-01	-47.41	0.004055

CIRCULAR PP POLARIZATION KA= 20.000

CIRCULAR P POLARIZATION KA= 20.000

CIRCULAR OP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
90.0	0.967606D+00	0.654512D-01	3.87	0.940566	90.0	0.430918D-01	-0.368807D-01	-47.41	0.004055	90.0	0.430918D-01	-0.368807D-01	-47.41	0.004055
91.0	0.941435D+00	-0.193635D+00	-11.62	0.923794	91.0	0.414668D-01	-0.368703D-01	-41.64	0.003079	91.0	0.414668D-01	-0.368703D-01	-41.64	0.003079
92.0	0.859478D+00	-0.444329D+00	-27.34	0.936131	92.0	0.340579D-01	-0.235168D-01	-34.62	0.001713	92.0	0.340579D-01	-0.235168D-01	-34.62	0.001713
93.0	0.725822D+00	-0.669547D+00	-42.69	0.975110	93.0	0.208950D-01	-0.845371D-02	-22.03	0.000508	93.0	0.208950D-01	-0.845371D-02	-22.03	0.000508
94.0	0.547690D+00	-0.853086D+00	-57.30	1.027720	94.0	0.280217D-02	0.649370D-02	65.66	0.000050	94.0	0.280217D-02	0.649370D-02	65.66	0.000050
95.0	0.335152D+00	-0.980910D+00	-71.14	1.074511	95.0	-0.186226D-01	0.195502D-01	133.61	0.000729	95.0	-0.186226D-01	0.195502D-01	133.61	0.000729
96.0	0.106520D+00	-0.104237D+01	-84.48	1.096676	96.0	-0.411347D-01	0.292299D-01	144.60	0.002546	96.0	-0.411347D-01	0.292299D-01	144.60	0.002546
97.0	-0.141617D+00	-0.103121D+01	-97.82	1.083573	97.0	-0.620692D-01	0.345418D-01	150.90	0.005346	97.0	-0.620692D-01	0.345418D-01	150.90	0.005346
98.0	-0.376479D+00	-0.946569D+00	-111.69	1.037759	98.0	-0.786451D-01	0.351295D-01	155.93	0.007419	98.0	-0.786451D-01	0.351295D-01	155.93	0.007419
99.0	-0.588453D+00	-0.792803D+00	-126.59	0.975040	99.0	-0.883141D-01	0.313243D-01	160.47	0.008781	99.0	-0.883141D-01	0.313243D-01	160.47	0.008781
100.0	-0.763636D+00	-0.579989D+00	-142.76	0.919568	100.0	-0.891117D-01	0.240984D-01	164.87	0.008522	100.0	-0.891117D-01	0.240984D-01	164.87	0.008522
101.0	-0.886888D+00	-0.323089D+00	-160.03	0.894507	101.0	-0.799648D-01	0.149233D-01	169.43	0.006617	101.0	-0.799648D-01	0.149233D-01	169.43	0.006617
102.0	-0.954423D+00	-0.410175D+01	-177.54	0.912606	102.0	-0.609118D-01	0.154695D-02	174.80	0.003741	102.0	-0.609118D-01	0.154695D-02	174.80	0.003741
103.0	-0.953970D+00	0.244744D+00	165.61	0.969959	103.0	-0.332011D-01	-0.227945D-02	-176.07	0.001108	103.0	-0.332011D-01	-0.227945D-02	-176.07	0.001108
104.0	-0.685510D+00	0.511823D+00	149.97	1.046098	104.0	0.756743D-03	-0.708722D-02	-83.91	0.000051	104.0	0.756743D-03	-0.708722D-02	-83.91	0.000051
105.0	-0.751750D+00	0.738824D+00	135.50	1.110989	105.0	0.375707D-01	-0.794639D-02	-111.94	0.001476	105.0	0.375707D-01	-0.794639D-02	-111.94	0.001476
106.0	-0.560275D+00	0.907105D+00	121.70	1.136747	106.0	0.732850D-01	-0.405111D-02	-3.63	0.005392	106.0	0.732850D-01	-0.405111D-02	-3.63	0.005392
107.0	-0.223500D+00	0.100251D+01	107.88	1.109572	107.0	0.103656D+00	0.219899D-02	1.22	0.010749	107.0	0.103656D+00	0.219899D-02	1.22	0.010749
108.0	-0.573364D-01	0.101667D+01	93.23	1.036897	108.0	0.124808D+00	0.112417D-01	5.15	0.15703	108.0	0.124808D+00	0.112417D-01	5.15	0.15703
109.0	0.218269D+00	0.947907D+00	77.03	0.946168	109.0	0.133652D+00	0.205227D-01	8.73	0.018284	109.0	0.133652D+00	0.205227D-01	8.73	0.018284
110.0	0.482146D+00	0.801542D+00	58.97	0.874934	110.0	0.128324D+00	0.277775D-01	12.21	0.017239	110.0	0.128324D+00	0.277775D-01	12.21	0.017239
111.0	0.712748D+00	0.589577D+00	39.60	0.855651	111.0	0.108500D+00	0.307924D-01	15.84	0.012720	111.0	0.108500D+00	0.307924D-01	15.84	0.012720
112.0	0.890760D+00	0.329760D+00	20.33	0.900991	112.0	0.755312D-01	0.277947D-01	20.20	0.006478	112.0	0.755312D-01	0.277947D-01	20.20	0.006478
113.0	0.997456D+00	0.442993D-01	2.54	0.996881	113.0	0.323895D-01	0.178154D-01	28.81	0.001366	113.0	0.323895D-01	0.178154D-01	28.81	0.001366
114.0	0.102327D+01	-0.242378D+00	-3.33	1.105833	114.0	-0.165890D-01	0.966651D-03	176.67	0.000276	114.0	-0.165890D-01	0.966651D-03	176.67	0.000276
115.0	0.962294D+00	-0.505422D+00	-27.71	1.181461	115.0	-0.661438D-01	-0.214191D-01	-162.06	0.004834	115.0	-0.661438D-01	-0.214191D-01	-162.06	0.004834
116.0	0.816624D+00	-0.721957D+00	-81.48	1.188097	116.0	-0.110665D+00	-0.468238D-01	-157.07	0.014439	116.0	-0.110665D+00	-0.468238D-01	-157.07	0.014439
117.0	0.590110D+00	-0.873131D+00	-55.68	1.117596	117.0	-0.144842D+00	-0.717672D-01	-153.64	0.026130	117.0	-0.144842D+00	-0.717672D-01	-153.64	0.026130
118.0	0.317474D+00	-0.945862D+00	-71.45	0.995444	118.0	-0.164311D+00	-0.922067D-01	-150.70	0.035500	118.0	-0.164311D+00	-0.922067D-01	-150.70	0.035500
119.0	0.420386D-02	-0.934080D+00	-89.74	0.872522	119.0	-0.166220D+00	-0.104076D+00	-147.95	0.038461	119.0	-0.166220D+00	-0.104076D+00	-147.95	0.038461
120.0	-0.316225D+00	-0.839333D+00	-110.64	0.804478	120.0	-0.149638D+00	-0.103900D+00	-145.23	0.033187	120.0	-0.149638D+00	-0.103900D+00	-145.23	0.033187
121.0	-0.614214D+00	-0.676691D+00	-132.48	0.827085	121.0	-0.115747D+00	-0.894033D-01	-142.32	0.021390	121.0	-0.115747D+00	-0.894033D-01	-142.32	0.021390
122.0	-0.860881D+00	-0.443945D+00	-152.72	0.938204	122.0	-0.677959D-01	-0.600234D-01	-138.46	0.008199	122.0	-0.677959D-01	-0.600234D-01	-138.46	0.008199
123.0	-0.103094D+01	-0.180173D+00	-170.09	1.095292	123.0	-0.107354D-01	-0.172493D-01	-122.04	0.000414	123.0	-0.107354D-01	-0.172493D-01	-122.04	0.000414
124.0	-0.110540D+01	0.962053D-01	175.03	1.231161	124.0	0.490110D-01	0.352939D-01	35.76	0.003648	124.0	0.490110D-01	0.352939D-01	35.76	0.003648
125.0	-0.107387D+01	0.359699D+00	161.42	1.282570	125.0	0.104843D+00	0.924093D-01	41.28	0.019465	125.0	0.104843D+00	0.924093D-01	41.28	0.019465
126.0	-0.936050D+00	0.586128D+00	147.95	1.219736	126.0	0.150173D+00	0.146032D+00	44.20	0.043877	126.0	0.150173D+00	0.146032D+00	44.20	0.043877
127.0	-0.702367D+00	0.754889D+00	132.94	1.063177	127.0	0.179508D+00	0.189598D+00	46.57	0.068171	127.0	0.179508D+00	0.189598D+00	46.57	0.068171
128.0	-0.393435D+00	0.850886D+00	114.82	0.878797	128.0	0.189080D+00	0.215400D+00	48.72	0.082148	128.0	0.189080D+00	0.215400D+00	48.72	0.082148
129.0	-0.364590D-01	0.865940D+00	92.54	0.751332	129.0	0.177339D+00	0.217432D+00	50.80	0.078726	129.0	0.177339D+00	0.217432D+00	50.80	0.078726
130.0	0.327394D+00	0.799543D+00	67.73	0.476456	130.0	0.145203D+00	0.192019D+00	52.90	0.057955	130.0	0.145203D+00	0.192019D+00	52.90	0.057955
131.0	0.666424D+00	0.658666D+00	44.67	0.876266	131.0	0.960950D-01	0.138619D+00	55.29	0.028433	131.0	0.960950D-01	0.138619D+00	55.29	0.028433
132.0	0.942305D+00	0.458049D+00	25.92	1.097748	132.0	0.351711D-01	0.603077D-01	59.75	0.004874	132.0	0.351711D-01	0.603077D-01	59.75	0.004874
133.0	0.112405D+01	0.216809D+00	10.92	1.310500	133.0	-0.310326D-01	-0.161636D-01	-130.07	0.002233	133.0	-0.310326D-01	-0.161636D-01	-130.07	0.002233
134.0	0.119965D+01	-0.414686D-01	-2.00	1.416978	134.0	-0.932024D-01	-0.140723D+00	-123.51	0.028507	134.0	-0.932024D-01	-0.140723D+00	-123.51	0.028507
135.0	0.112882D+01	-0.291992D+00	-14.50	1.359491	135.0	-0.145814D+00	-0.241177D+00	-121.16	0.079428	135.0	-0.145814D+00	-0.241177D+00	-121.16	0.079428

CIRCULAR PP POLARIZATION KA= 20.000

THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5	JRCS
135.0	0.112882D+01	-0.291992D+00	-14.50	1.359491	135.0	-0.145814D+00	-0.241177D+00	-121.16	0.079428						
136.0	0.944726D+00	-0.510942D+00	-28.41	1.153570	136.0	-0.182005D+00	-0.323926D+00	-119.33	0.138054						
137.0	0.654172D+00	-0.677746D+00	-46.01	0.867280	137.0	-0.197394D+00	-0.376178D+00	-117.69	0.180474						
138.0	0.286312D+00	-0.777019D+00	-69.77	0.635734	138.0	-0.190021D+00	-0.387379D+00	-116.13	0.185170						
139.0	0.120097D+00	-0.799999D+00	-98.54	0.654422	139.0	-0.160619D+00	-0.350915D+00	-114.59	0.148940						
140.0	-0.520685D+00	-0.743323D+00	-124.94	0.826619	140.0	-0.112599D+00	-0.265446D+00	-112.98	0.083129						
141.0	-0.870258D+00	-0.619089D+00	-148.57	1.140639	141.0	-0.51176D-01	-0.135723D+00	-110.75	0.021064						
142.0	-0.112798D+01	-0.434204D+00	-158.95	1.460872	142.0	0.155810D-01	0.272715D-01	60.26	0.000987						
143.0	-0.126110D+01	-0.209072D+00	-170.59	1.636643	143.0	0.805322D-01	0.605958D+00	66.74	0.049317						
144.0	0.125812D+01	0.342166D-01	178.44	1.573997	144.0	0.135758D+00	0.382570D+00	70.46	0.164790						
145.0	-0.10126D+01	0.272040D+00	166.12	1.286779	145.0	0.174751D+00	0.531263D+00	71.79	0.312778						
146.0	-0.817465D+00	0.481516D+00	149.50	0.900107	146.0	0.192971D+00	0.630765D+00	72.09	0.435054						
147.0	-0.432349D+00	0.642676D+00	123.93	0.599959	147.0	0.188395D+00	0.662045D+00	74.12	0.473796						
148.0	0.117228D+01	0.740335D+00	89.09	0.548234	148.0	0.161761D+00	0.612481D+00	75.21	0.401300						
149.0	0.464160D+00	0.765472D+00	58.77	0.801402	149.0	0.116467D+00	0.477831D+00	76.30	0.241887						
150.0	0.871825D+00	0.756051D+00	39.40	1.272807	150.0	0.581392D-01	0.264022D+00	77.58	0.073088						
151.0	0.118522D+01	0.597072D+00	26.74	1.761250	151.0	-0.607574D-02	-0.123225D-01	-116.25	3.000189						
152.0	-0.136449D+01	0.420093D+00	17.11	2.038368	152.0	-0.684056D-01	-0.324543D+00	-101.90	0.110008						
153.0	0.138443D+01	0.202041D+00	8.30	1.957464	153.0	-0.121419D+00	-0.637885D+00	-100.78	0.421640						
154.0	0.123800D+01	-0.36107D-01	-1.68	1.533961	154.0	-0.158939D+00	-0.912639D+00	-99.88	0.858172						
155.0	0.937712D+00	-0.272798D+00	-16.22	0.953723	155.0	-0.176794D+00	-0.110826D+01	-99.06	1.259493						
156.0	0.518792D+00	-0.484949D+00	-43.29	0.500186	156.0	-0.173300D+00	-0.118809D+01	-98.30	1.441593						
157.0	-0.160205D-01	-0.652999D+00	-88.59	0.426664	157.0	-0.149430D+00	-0.112272D+01	-97.57	1.286316						
158.0	-0.501334D+00	-0.761165D+00	-123.37	0.830708	158.0	-0.108634D+00	-0.902242D+00	-96.87	0.835841						
159.0	-0.959948D+00	-0.799100D+00	-140.69	1.591126	159.0	-0.563545D-01	-0.524372D+00	-96.13	0.278142						
160.0	-0.134979D+01	-0.762737D+00	-150.53	2.403711	160.0	0.709514D-03	-0.122104D-01	-86.67	0.000150						
161.0	-0.157460D+01	-0.654539D+00	-157.43	2.97787	161.0	0.554807D-01	0.593030D+00	84.66	0.354762						
162.0	-0.161819D+01	-0.483162D+00	-163.36	2.851997	162.0	0.101412D+00	0.123195D+01	85.29	1.527997						
163.0	-0.146835D+01	-0.262569D+00	-169.86	2.225007	163.0	0.133305D+00	0.183048D+01	85.83	3.368435						
164.0	-0.113463D+01	-0.106887D-01	-179.46	1.287505	164.0	0.147928D+00	0.230517D+01	86.33	5.335695						
165.0	-0.647535D+00	0.252245D+00	158.72	0.442929	165.0	0.144362D+00	0.257001D+01	86.78	6.625794						
166.0	-0.551958D-01	0.505519D+00	96.23	0.258594	166.0	0.124030D+00	0.254412D+01	87.21	6.487946						
167.0	0.582210D+00	0.727630D+00	51.42	0.817523	167.0	0.904719D-01	0.215970D+01	87.60	4.672476						
168.0	0.119934D+01	0.908614D+00	37.15	2.263986	168.0	0.084539D-01	0.136942D+01	87.97	1.877672						
169.0	0.173353D+01	0.103008D+01	30.72	4.066171	169.0	0.403323D-02	0.152444D+00	88.49	0.023316						
170.0	0.213218D+01	0.108746D+01	27.02	2.764774	170.0	-0.372586D-01	-0.148037D+01	-91.44	2.192871						
171.0	0.235908D+01	0.107985D+01	24.60	6.731145	171.0	-0.704981D-01	-0.348658D+01	-91.16	12.161189						
172.0	0.239846D+01	0.101203D+01	22.88	6.776811	172.0	-0.922665D-01	-0.579170D+01	-90.91	33.545378						
173.0	0.225722D+01	0.893998D+00	21.61	5.894143	173.0	-0.101023D+00	-0.829088D+01	-90.70	68.748956						
174.0	0.196352D+01	0.739672D+00	20.64	4.402521	174.0	-0.972259D-01	-0.108670D+02	-90.51	117.970105						
175.0	0.156341D+01	0.566158D+00	19.91	2.764774	175.0	-0.831747D-01	-0.133629D+02	-90.36	178.574710						
176.0	0.111497D+01	0.391567D+00	19.35	1.396360	176.0	-0.625737D-01	-0.156547D+02	-90.23	245.074325						
177.0	0.680710D+00	0.236676D+00	18.94	0.518053	177.0	-0.399076D-01	-0.176013D+02	-90.13	309.806488						
178.0	0.320492D+00	0.108271D+00	18.67	0.144438	178.0	-0.197138D-01	-0.190847D+02	-90.06	364.226576						
179.0	0.829056D-01	0.077461D-01	18.50	0.007683	179.0	-0.586018D-02	-0.200135D+02	-90.02	400.541148						
180.0	0.297228D-09	0.206025D-09	41.83	0.000000	180.0	-0.938599D-03	-0.203297D+02	-90.00	413.298468						

CIRCULAR OF POLARIZATION KA= 25.000

CIRCULAR OF POLARIZATION KA= 25.000

THETA	REAL	IMAG	PHASE	MNCS	THETA	REAL	IMAG	PHASE	MNCS
0	-0.574048D+00	0.227657D+00	166.84	1.000598	0.0	0.128977D-11	0.481642D-11	75.01	0.000000
1.0	-0.973267D+00	0.230263D+00	166.69	1.000271	1.0	-0.157111D-03	-0.371898D-03	-112.58	0.000000
2.0	-0.970970D+00	0.237968D+00	166.23	0.999412	2.0	-0.588884D-03	-0.143833D-02	-112.11	0.000002
3.0	-0.967278D+00	0.250484D+00	165.48	0.999389	3.0	-0.116072D-02	-0.277233D-02	-111.30	0.000001
4.0	-0.962350D+00	0.267197D+00	164.48	0.997511	4.0	-0.171621D-02	-0.459073D-02	-110.10	0.000025
5.0	-0.956323D+00	0.287637D+00	163.26	0.997293	5.0	-0.207438D-02	-0.723198D-02	-108.41	0.000043
6.0	-0.949268D+00	0.311588D+00	161.85	0.997929	6.0	-0.209576D-02	-0.727298D-02	-106.07	0.000057
7.0	-0.941110D+00	0.337216D+00	160.29	0.998404	7.0	-0.171485D-02	-0.756124D-02	-102.78	0.000060
8.0	-0.931622D+00	0.365407E+00	158.58	1.004481	8.0	-0.958721E-03	-0.696873E-02	-97.83	0.000049
9.0	-0.920406D+00	0.395482D+00	156.75	1.003553	9.0	0.498755E-04	-0.551746D-02	-89.48	0.000030
10.0	-0.906925D+00	0.427375D+00	154.77	1.005162	10.0	0.111903D-02	-0.338049D-02	-71.68	0.000013
11.0	-0.890545D+00	0.461138D+00	152.62	1.005747	11.0	0.202593D-02	-0.856182D-03	-22.91	0.000005
12.0	-0.870670D+00	0.497033D+00	150.28	1.004998	12.0	0.256664D-02	-0.168010D-02	33.21	0.000009
13.0	-0.846489D+00	0.535149D+00	147.70	1.002929	13.0	0.263800D-02	0.383919D-02	55.85	0.000022
14.0	-0.817672D+00	0.575645D+00	144.86	0.999920	14.0	0.210232D-02	0.528549D-02	68.31	0.000034
15.0	-0.783768D+00	0.618358D+00	141.73	0.996660	15.0	0.143450D-02	0.579704D-02	78.84	0.000035
16.0	-0.744539D+00	0.653073D+00	138.31	0.994005	16.0	-0.846921D-04	0.530720D-02	90.91	0.000028
17.0	-0.699872D+00	0.713717D+00	134.62	0.992753	17.0	-0.132267D-02	-0.392004D-02	108.64	0.000017
18.0	-0.649739D+00	0.755812E+00	130.66	0.993813	18.0	-0.229119D-02	0.169585D-02	140.39	0.000009
19.0	-0.594151D+00	0.801876D+00	126.54	0.996021	19.0	-0.275129D-02	-0.391829D-03	-171.89	0.000008
20.0	-0.533101D+00	0.846091D+00	122.21	1.000067	20.0	-0.255793D-02	-0.252088D-02	-135.42	0.000013
21.0	-0.466539D+00	0.887085E+00	117.74	1.004577	21.0	-0.169703D-02	-0.409600D-02	-112.50	0.000020
22.0	-0.394362D+00	0.923484D+00	113.12	1.008344	22.0	-0.296177D-03	-0.487159D-02	-93.52	0.000023
23.0	-0.316409D+00	0.953998D+00	108.35	1.010251	23.0	0.139484D-02	-0.457853D-02	-72.99	0.000021
24.0	-0.237718D+00	0.977473D+00	103.39	1.009608	24.0	0.304947E-02	-0.353386D-02	-47.72	0.000021
25.0	-0.143218D+00	0.992921D+00	98.21	1.006403	25.0	0.433153E-02	-0.143673D-02	-18.35	0.000021
26.0	-0.482189D-01	0.995521D+00	92.76	1.001367	26.0	0.496448D-02	0.819843D-03	9.38	0.010025
27.0	0.516942D-01	0.996575D+00	87.03	0.995834	27.0	0.479403D-02	0.296622D-02	31.75	0.000032
28.0	0.155558D+00	0.998349D+00	81.01	0.991389	28.0	0.362741D-02	0.455868D-02	49.98	0.000035
29.0	0.202034D+00	0.999565D+00	74.73	0.989411	29.0	0.225014D-02	0.524690D-02	66.88	0.000033
30.0	0.369269D+00	0.924264E+00	68.22	0.990623	30.0	0.347417D-03	0.4084233D-02	85.90	0.000024
31.0	0.475259D+00	0.776092D+00	61.11	0.994911	31.0	-0.145591D-02	0.336248D-02	113.41	0.000013
32.0	0.577638D+00	0.816785D+00	54.73	1.000803	32.0	-0.277568D-02	0.103185D-02	159.57	0.000009
33.0	0.739423D+00	0.793353D+00	47.90	1.006771	33.0	-0.330311D-02	-0.174488D-02	-152.16	0.000014
34.0	0.716920D+00	0.656199D+00	40.74	1.010777	34.0	-0.288630D-02	-0.447267D-02	-122.83	0.000028
35.0	0.838506D+00	0.555264D+00	33.51	1.011410	35.0	-0.157234D-02	-0.664462D-02	-103.31	0.000047
36.0	0.902141D+00	0.440974D+00	26.05	1.008316	36.0	0.357213D-03	-0.784753D-02	-87.15	0.000062
37.0	0.950567D+00	0.318376D+00	18.30	1.002409	37.0	0.259160D-02	-0.784702D-02	-71.72	0.000068
38.0	0.981960D+00	0.177231D+00	10.23	0.995656	38.0	0.453759D-02	-0.664016D-02	-55.65	0.000065
39.0	0.994703D+00	0.320463D-01	1.65	0.990462	39.0	0.574878D-02	-0.446434D-02	-37.83	0.000053
40.0	0.987380D+00	-0.117953D+00	-6.11	0.988832	40.0	0.586280D-02	-0.175801D-02	-16.69	0.000037
41.0	0.958791D+00	-0.268929D+00	-15.67	0.991603	41.0	0.478092D-02	0.921172D-03	11.05	0.000021
42.0	0.908070D+00	-0.416580D+00	-24.65	0.998019	42.0	0.240668D-02	0.300662D-02	51.39	0.000015
43.0	0.834471D+00	-0.556368D+00	-33.69	1.005882	43.0	-0.757992D-03	0.403971D-02	100.63	0.000017
44.0	0.738139D+00	-0.683670D+00	-42.01	1.012267	44.0	-0.423462D-02	0.377145D-02	138.31	0.000032
45.0	0.619663D+00	-0.794457D+00	-52.03	1.014524	45.0	-0.741051D-02	0.222555D-02	163.28	0.000060

CIRCULAR PP POLARIZATION KA= 25.000						CIRCULAR OP POLARIZATION KA= 25.000					
THETA	REAL	IMAG	PHASE	MECS	MBCS	THETA	REAL	IMAG	PHASE	MBCS	
45.0	0.619663D+00	-0.794067D+00	-52.03	1.014524	0.000060	45.0	-0.741051D-02	0.222554D-02	163.28	0.000060	
46.0	0.480576D+00	-0.683469D+00	-61.46	1.011471	0.000094	46.0	-0.969321D-02	-0.290983D-03	-178.28	0.000094	
47.0	0.323458D+00	-0.948283D+00	-71.17	1.003866	0.000124	47.0	-0.106393D-01	-0.313524D-02	-163.09	0.000124	
48.0	0.152047D+00	-0.985519D+00	-81.23	0.994365	0.000136	48.0	-0.100525D-01	-0.552767D-02	-149.47	0.000136	
49.0	-0.287467D-01	-0.992872D+00	-91.66	0.986620	0.000124	49.0	-0.803486D-02	-0.769557D-02	-136.27	0.000124	
50.0	-0.212921D-00	-0.968789D+00	-102.40	0.983687	0.000088	50.0	-0.497913D-01	-0.796555D-02	-122.01	0.000088	
51.0	-0.393592D+00	-0.912544D+00	-113.32	0.987651	0.000044	51.0	-0.149700D-02	-0.648642D-02	-103.00	0.000044	
52.0	-0.563309D+00	-0.828232D+00	-124.35	0.996836	0.000014	52.0	0.170007D-02	-0.330598D-02	-62.79	0.000014	
53.0	-0.714460D+00	-0.714460D+00	-135.37	1.008015	0.000017	53.0	0.394964D-02	0.116670D-02	16.46	0.000017	
54.0	-0.839722D+00	-0.558119D+00	-146.39	1.016629	0.000062	54.0	0.478390D-02	0.622993D-02	52.48	0.000062	
55.0	-0.932529D+00	-0.386299D+00	-157.50	1.018838	0.000138	55.0	0.408258D-02	0.110110D-01	69.84	0.000138	
56.0	-0.987509D+00	-0.195129D+00	-168.82	1.013249	0.000218	56.0	0.192488D-02	0.146297D-01	82.50	0.000218	
57.0	-0.100084D+01	0.865239D+00	-179.50	1.001760	0.000269	57.0	-0.103487D-02	0.163724D-01	93.60	0.000269	
58.0	-0.970541D+00	0.216992D+00	167.44	0.989036	0.000267	58.0	-0.408745D-02	0.158420D-01	104.33	0.000267	
59.0	-0.696619D+00	0.420433D+00	154.44	0.980689	0.000210	59.0	-0.625886D-02	0.130515D-01	115.62	0.000210	
60.0	-0.781151D+00	0.608802D+00	142.07	0.980836	0.000119	60.0	-0.690260D-02	0.843813D-02	129.28	0.000119	
61.0	-0.628256D+00	0.771605D+00	129.15	0.990080	0.000038	61.0	-0.549564D-02	0.279275D-02	153.06	0.000038	
62.0	-0.443989D+00	0.893757D+00	116.29	1.004809	0.000012	62.0	-0.196803D-02	-0.284751D-02	-124.28	0.000012	
63.0	-0.236177D+00	0.961357D+00	103.53	1.018840	0.000068	63.0	0.328155D-02	-0.759519D-02	-66.63	0.000068	
64.0	-0.134978D-01	0.101289D+01	90.80	1.025477	0.000199	64.0	0.942504D-02	-0.105193D-01	-48.14	0.000199	
65.0	0.211309D+00	0.987982D+00	77.93	1.020760	0.000361	65.0	0.153379D-01	-0.112200D-01	-36.19	0.000361	
66.0	0.428745D+00	0.906394D+00	64.70	1.006395	0.000487	66.0	0.198047D-01	-0.973203D-02	-26.17	0.000487	
67.0	0.626262D+00	0.771230D+00	50.95	0.988376	0.000517	67.0	0.217593D-01	-0.657224D-02	-16.81	0.000517	
68.0	0.791819D+00	0.590549D+00	36.69	0.975131	0.000428	68.0	0.255136D-01	-0.261449D-02	-7.34	0.000428	
69.0	0.914369D+00	0.370732D+00	22.07	0.973513	0.000255	69.0	0.159260D-01	0.864585D-03	3.45	0.000255	
70.0	0.984392D+00	0.127129D+00	7.36	0.985189	0.000082	70.0	0.646973D-02	0.318173D-02	20.59	0.000082	
71.0	0.994794D+00	-0.125605D+00	-7.20	1.005391	0.000011	71.0	-0.815909D-03	0.325621D-02	104.07	0.000011	
72.0	0.941753D+00	-0.371188D+00	-21.51	1.024642	0.000111	72.0	-0.104922D-01	0.914130D-03	175.02	0.000111	
73.0	0.825463D+00	-0.593063D+00	-35.70	1.033114	0.000372	73.0	-0.189765D-01	-0.351658D-02	-169.50	0.000372	
74.0	0.650671D+00	-0.776048D+00	-50.02	1.025623	0.000700	74.0	-0.248402D-01	-0.912766D-02	-159.82	0.000700	
75.0	0.426885D+00	-0.906929D+00	-64.79	1.004750	0.000946	75.0	-0.270897D-01	-0.145809D-01	-151.71	0.000946	
76.0	0.166171D+00	-0.975692D+00	-80.22	0.980257	0.000981	76.0	-0.253723D-01	-0.183652D-01	-144.10	0.000981	
77.0	-0.107524D+00	-0.976273D+00	-96.29	0.964570	0.000768	77.0	-0.200615D-01	-0.191206D-01	-136.38	0.000768	
78.0	-0.379544D+00	-0.907126D+00	-112.70	0.964931	0.000403	78.0	-0.121969D-01	-0.159544D-01	-127.39	0.000403	
79.0	-0.626100D+00	-0.771547D+00	-129.06	0.972866	0.000087	79.0	-0.326540D-02	-0.871898D-02	-110.65	0.000087	
80.0	-0.826177D+00	-0.577706D+00	-145.04	1.016313	0.000029	80.0	-0.499863D-02	0.191749D-02	20.95	0.000029	
81.0	-0.951542D+00	-0.338360D+00	-160.61	1.039064	0.000333	81.0	0.111634D-01	0.144430D-01	52.30	0.000333	
82.0	-0.101669D+01	0.203556D+00	-176.05	1.023651	0.000919	82.0	0.142410D-01	0.267802D-01	62.04	0.000919	
83.0	-0.990462D+00	0.205486D+00	168.22	1.023651	0.001532	83.0	0.138747D-01	0.365983D-01	68.24	0.001532	
84.0	-0.877136D+00	0.470422D+00	151.79	0.990664	0.001858	84.0	0.106580D-01	0.417713D-01	75.69	0.001858	
85.0	-0.686838D+00	0.699436D+00	134.48	0.996958	0.001699	85.0	0.575999D-02	0.408115D-01	81.97	0.001699	
86.0	-0.435159D+00	0.872991D+00	116.44	0.951476	0.001104	86.0	0.795143D-03	0.332180D-01	88.63	0.001104	
87.0	-0.143975D+00	0.973926D+00	98.41	0.959252	0.000393	87.0	-0.258119D-02	0.196588D-01	97.48	0.000393	
88.0	0.160434D+00	0.990324D+00	80.80	1.006461	0.000013	88.0	-0.308328D-02	0.172609D-02	147.65	0.000013	
89.0	0.449814D+00	0.917134D+00	63.87	1.0467	0.000298	89.0	-0.148800D-03	-0.192609D-01	-90.49	0.000298	
90.0	0.696663D+00	0.757349D+00	47.39	1.0467	0.001246	90.0	0.584992D-02	-0.348616D-01	-80.46	0.001246	

CIRCULAR PP POLARIZATION KA= 25.000

WAVE	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
90.0	0.696663D+00	0.757349D+00	47.39	1.058916	90.0	0.564992D+02	-0.348164D+01	-80.46	0.001246
91.0	0.876978D+00	0.522519D+00	30.79	1.042118	91.0	0.135975D+01	-0.477253D-01	-74.10	0.002463
92.0	0.972747D+00	0.232413D+00	13.44	1.000252	92.0	0.210510D+01	-0.536639D-01	-68.58	0.003323
93.0	0.973890D+00	-0.862269D-01	-5.00	0.955904	93.0	0.258516D+01	-0.514484D-01	-63.32	0.003315
94.0	0.879374D+00	-0.402117D+00	-24.57	0.935173	94.0	0.258577D+01	-0.412959D-01	-57.94	0.002374
95.0	0.698030D+00	-0.682046D+00	-54.34	0.952434	95.0	0.197061D+01	-0.248672D-01	-51.56	0.001005
96.0	0.446935D+00	-0.894879D+00	-63.46	1.009560	96.0	0.723624D+02	-0.479744D+02	-33.54	0.000075
97.0	0.150896D+00	-0.101507D+01	-81.54	1.053138	97.0	-0.102608D+01	0.153998D-01	123.68	0.000342
98.0	-0.160341D+00	-0.102613D+01	-98.88	1.078655	98.0	-0.301163D+01	0.323656D-01	132.94	0.001955
99.0	-0.454852E+00	-0.923359D+00	-116.23	1.059297	99.0	-0.486562D+01	0.433422D-01	138.31	0.004246
100.0	-0.701720D+00	-0.714734D+00	-134.47	1.003255	100.0	-0.618434D+01	0.467410D-01	142.92	0.006009
101.0	-0.872370D+00	-0.621173D+00	-154.25	0.943184	101.0	-0.660793D+01	0.424427D-01	147.29	0.006168
102.0	-0.952849D+00	-0.767069D+00	-175.40	0.913767	102.0	-0.590162D+01	0.317944D-01	151.68	0.004494
103.0	-0.977361D+00	0.280430D+00	163.17	0.938639	103.0	-0.402099D+01	0.173270D-01	156.69	0.001917
104.0	-0.798674D+00	0.606560D+00	142.78	1.005795	104.0	-0.114605D+01	0.216431D-02	169.31	0.000136
105.0	-0.578947D+00	0.860442E+00	123.92	1.076400	105.0	0.232615D+01	-0.106239D-01	-24.55	0.000654
106.0	-0.290959D+00	0.101057D+01	106.06	1.105899	106.0	1.83346D+01	-0.187162D-01	-17.79	0.003753
107.0	0.339023D+01	0.103483D+01	88.12	1.072038	107.0	0.373903D+01	-0.210480D-01	-13.54	0.008080
108.0	0.358723D+00	0.928713D+00	68.88	0.991302	108.0	0.104452D+00	-0.180407D-01	-9.80	0.011238
109.0	0.645022D+00	0.764354D+00	47.52	0.912167	109.0	0.105170D+00	-0.114824D-01	-6.23	0.011193
110.0	0.857209D+00	0.389423D+00	24.43	0.866458	110.0	0.877159D+01	-0.407492D-02	-2.66	0.007711
111.0	0.967066D+00	0.244800D+01	1.45	0.935815	111.0	0.534910D+01	0.126636D+02	1.36	0.002863
112.0	0.957700D+00	-0.342492D+00	-19.68	1.034489	112.0	0.707192D+02	-0.220346D+02	17.31	0.000055
113.0	0.826418D+00	-0.662421D+00	-38.71	1.121768	113.0	-0.443152D+01	-0.232556D+02	-177.00	0.001969
114.0	0.586020D+00	-0.891929D+00	-58.69	1.138957	114.0	-0.319437D+01	-0.116501D-01	-172.76	0.008569
115.0	0.264174D+00	-0.999509D+00	-75.20	1.068806	115.0	-0.127064D+00	-0.234922D-01	-169.53	0.016897
116.0	-0.992611D+01	-0.970196D+00	-55.84	0.951133	116.0	-0.142564D+00	-0.340899D+01	-166.55	0.021487
117.0	-0.456641D+00	-0.807984D+00	-119.48	0.865156	117.0	-0.134363D+00	-0.393146D+01	-163.69	0.019599
118.0	-0.759413D+00	-0.535563D+00	-144.81	0.863537	118.0	-0.102398D+00	-0.355787D+01	-150.64	0.011751
119.0	-0.963178D+00	-0.191340D+00	-164.76	0.964323	119.0	-0.508945D+01	-0.209345D+01	-157.64	0.003029
120.0	-0.103597D+01	0.175887D+00	170.36	1.104178	120.0	0.121341D+01	0.410104D+02	18.67	0.000164
121.0	-0.962828D+00	0.513871D+00	157.91	1.191102	121.0	0.761365D+01	0.361987D+01	25.43	0.007107
122.0	-0.749216D+00	0.774475D+00	134.05	1.161135	122.0	0.129813D+00	0.694958D+01	28.16	0.021681
123.0	-0.421533D+00	0.920723D+00	114.60	1.025422	123.0	0.165490D+00	0.965270D+01	30.61	0.035935
124.0	-0.244229D+01	0.932293D+00	91.50	0.869766	124.0	0.169317D+00	0.109686D+00	32.94	0.040699
125.0	0.384920D+00	0.808576D+00	64.54	0.801958	125.0	0.146082D+00	0.102963D+00	35.18	0.031941
126.0	0.744805D+00	0.568835D+00	37.37	0.873308	126.0	0.964261D+01	0.736005D+01	37.35	0.014715
127.0	0.998396D+00	0.249375D+00	14.02	1.058982	127.0	0.282247D+01	0.232886D+01	39.52	0.001339
128.0	0.110292D	-0.101855D+00	-5.28	1.226810	128.0	-0.469859D+01	-0.414327D+01	-138.59	0.003924
129.0	6.103725E+00	-0.432483D+00	-22.62	1.262899	129.0	-0.116002D+00	-0.109774D+00	-136.58	0.025507
130.0	0.806465D+00	-0.693370D+00	-40.69	1.131147	130.0	-0.166297D+00	-0.168310D+00	-134.66	0.055983
131.0	0.444278D+00	-0.846426D+00	-62.41	0.913135	131.0	-0.188354D+00	-0.203406D+00	-132.80	0.076851
132.0	-0.263787D+03	-0.969505D+00	-90.02	0.756735	132.0	-0.177507D+00	-0.204055D+00	-131.02	0.073147
133.0	-0.451622D+00	0.761846D+00	-120.66	0.844125	133.0	-0.134947D+00	-0.164566D+00	-129.35	0.045299
134.0	-0.837935D+00	-0.540227D+00	-147.19	0.993931	134.0	-0.676607D+01	-0.866474D+01	-127.99	0.012086
135.0	-0.109312D+01	-0.240119D+00	-167.61	1.252565	135.0	0.127053D+01	0.200397D+01	57.63	0.000563



CIRCULAR PP POLARIZATION KA= 25.000					CIRCULAR OP POLARIZATION KA= 25.000				
THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
135.0	-0.109312D+01	-0.240119D+00	-167.61	1.252565	135.0	0.127053D-01	0.200397D-01	57.63	0.000563
136.0	-0.117067D+01	0.977824D-01	175.52	1.379366	136.0	0.918829D-01	0.138486D+00	56.44	0.027621
137.0	-0.105316D+01	0.404378D+00	158.99	1.272670	137.0	0.155559D+00	0.246845D+00	57.78	0.085131
138.0	-0.754622D+00	0.650313D+00	139.26	0.919995	138.0	0.192011D+00	0.322147D+00	59.20	0.140650
139.0	-0.321855D+00	0.711860D+00	112.09	0.730375	139.0	0.198354D+00	0.348779D+00	60.59	0.156646
140.0	0.175263D+00	0.809318D+00	77.78	0.685713	140.0	0.161827D+00	0.302890D+00	61.89	0.117929
141.0	0.650980D+00	0.701225D+00	47.13	0.915992	141.0	0.100015D+00	0.195933D+00	62.93	0.048364
142.0	0.102198D+01	0.465773D+00	25.42	1.280424	142.0	0.201375D-01	0.352683D-01	60.66	0.001689
143.0	0.120265D+01	0.197559D+00	9.20	1.280055	143.0	-0.634888D-01	-0.152729D+00	-112.57	0.027357
144.0	0.120621D+01	-0.119280D+00	-5.58	1.468839	144.0	-0.135589D+00	-0.364660D+00	-111.95	0.131594
145.0	0.976683D+00	-0.411410D+00	-22.84	1.123455	145.0	-0.183014D+00	-0.478431D+00	-110.93	0.262390
146.0	0.567660D+00	-0.637482D+00	-48.32	0.728621	146.0	-0.197145D+00	-0.544914D+00	-109.89	0.335797
147.0	0.477766D+01	-0.761583D+00	-86.41	0.582231	147.0	-0.175516D+00	-0.512523D+00	-108.90	0.292486
148.0	-0.491487D+00	-0.765237D+00	-122.71	0.827146	148.0	-0.122371D+00	-0.371177D+00	-108.10	0.154959
149.0	-0.952387D+00	-0.648752D+00	-145.74	1.272929	149.0	-0.473656D-01	-0.142699D+00	-108.37	0.022607
150.0	-0.124843D+01	-0.431047D+00	-160.95	1.744388	150.0	0.352226D-01	0.149001D+00	76.70	0.023442
151.0	-0.137069D+01	-0.146519D+00	-173.67	1.765677	151.0	0.110335D+00	0.451566D+00	76.27	0.216086
152.0	-0.114960D+01	0.160290D+00	-172.06	1.347276	152.0	0.164262D+00	0.708567D+00	76.91	0.526219
153.0	-0.760047D+00	0.441672D+00	149.84	0.712737	153.0	0.187430D+00	0.856530D+00	77.66	0.768832
154.0	-0.216228D+00	0.653972D+00	108.45	0.475303	154.0	0.176128D+00	0.854368D+00	78.38	0.764388
155.0	0.379128D+00	0.764300D+00	63.62	0.727893	155.0	0.133095D+00	0.683532D+00	78.98	0.484931
156.0	0.521772D+00	0.755410D+00	39.34	1.820307	156.0	0.669326D-01	0.345976D+00	79.05	0.124179
157.0	0.130600D+01	0.628223D+00	25.49	2.100292	157.0	-0.964535D-02	-0.115004D+00	-94.79	0.013319
158.0	0.145423D+01	0.401589D+00	15.44	2.276059	158.0	-0.822546D-01	-0.627535D+00	-97.47	0.400572
159.0	0.133041D+01	0.109376D+00	4.70	1.781956	159.0	-0.137791D+00	-0.470980D+01	-97.15	1.224663
160.0	0.948143D+00	-0.204638D+00	-12.14	0.940851	160.0	-0.166504D+00	-0.142536D+01	-96.66	2.059376
161.0	0.169837D+00	-0.493272D+00	-53.14	0.380097	161.0	-0.164115D+00	-0.151847D+01	-96.17	2.322682
162.0	-0.102630D+00	-0.712862D+00	-113.05	0.600141	162.0	-0.132265D+00	-0.134950D+01	-95.74	1.746547
163.0	-0.948574D+00	-0.829575D+00	-138.83	1.587988	163.0	-0.780281D-01	-0.797323D+00	-95.59	0.641812
164.0	-0.144412D+01	-0.824193D+00	-150.29	2.764767	164.0	-0.123516D-01	-0.437944D-02	-160.48	0.001172
165.0	-0.169088D+01	-0.694711D+00	-157.66	3.341704	165.0	0.522047D-01	0.965436D+00	86.90	0.934792
166.0	-0.163145D+01	-0.456406D+00	-164.37	2.869945	166.0	0.103950D+00	0.195954D+01	86.96	3.850617
167.0	-0.126129D+01	-0.139419D+00	-173.69	1.610244	167.0	0.134264D+00	0.278610D+01	87.24	7.780368
168.0	-0.630394D+00	0.215743D+00	143.31	0.443992	168.0	0.139922D+00	0.322678D+01	87.54	10.494128
169.0	0.165076D+00	0.564112D+00	73.69	0.345473	169.0	0.119443D+00	0.311467D+01	87.80	9.716705
170.0	0.999999D+00	0.862682D+00	40.79	1.744039	170.0	0.808450D-01	0.224477D+01	87.96	5.135714
171.0	0.174244D+01	0.107643D+01	31.71	4.194892	171.0	0.319046D-01	0.598839D+00	86.95	0.359626
172.0	0.227868D+01	0.118311D+01	27.44	6.592131	172.0	-0.176525D-01	-0.183267D+01	-90.54	3.544742
173.0	0.253292D+01	0.117606D+01	24.91	7.198808	173.0	-0.591148D-01	-0.508198D+01	-90.67	25.830046
174.0	0.244817D+01	0.106487D+01	23.22	7.292622	174.0	-0.864410D-01	-0.880660D+01	-90.56	77.563765
175.0	0.215746D+01	0.873586D+00	22.04	5.417786	175.0	-0.976007D-01	-0.127848D+01	-90.44	163.461012
176.0	0.162244D+01	0.636971D+00	21.20	3.102669	176.0	-0.941871D-01	-0.166926D+01	-90.32	278.650681
177.0	0.105133D+01	0.345243D+00	20.60	1.261509	177.0	-0.810010D-01	-0.201886D+02	-90.23	147.584680
178.0	0.511139D+00	0.188115D+00	20.21	0.296650	178.0	-0.672501D-01	-0.229531D+01	-90.16	526.479818
179.0	0.134723D+00	0.489717D-01	19.98	0.020549	179.0	-0.517998D-01	-0.272580D+02	-90.12	611.366630
180.0	0.551300D-10	0.202942D-09	74.80	0.000000	180.0	-0.469211D-01	-0.253364D+02	-90.11	641.933135

CIRCULAR OF POLARIZATION KA= 30.000

CIRCULAR PP POLARIZATION KA= 30.000

THETA	REAL	IMAG	PHASE	MRC5	IBPT(1)	REAL	IMAG	PHASE	MRC5
0.0	0.952253D+00	0.330628D+00	19.15	1.016100	0.0	0.178767E-11	-0.521200D-11	-71.07	0.000000
1.0	0.952527D+00	0.327789D+00	18.99	1.016754	1.0	0.226511D-03	0.335024D-03	55.94	0.000000
2.0	0.953441D+00	0.319393D+00	18.52	1.011061	2.0	0.827394D-03	0.125136D-02	56.53	0.000002
3.0	0.955226D+00	0.305785D+00	17.75	1.005961	3.0	0.159122D-02	0.250394D-02	57.56	0.000009
4.0	0.958170D+00	0.287450D+00	16.70	1.000718	4.0	0.224011D-02	0.375029D-02	59.15	0.000019
5.0	0.962495D+00	0.264909D+00	15.39	0.996573	5.0	0.251780D-02	0.463351D-02	61.48	0.000028
6.0	0.968235D+00	0.238580D+00	13.84	0.994807	6.0	0.227268D-02	0.487019D-02	64.98	0.000029
7.0	0.975154D+00	0.208770D+00	12.08	0.994510	7.0	0.151028D-02	0.432267D-02	70.74	0.000021
8.0	0.982725D+00	0.175440D+00	10.12	0.996528	8.0	0.398563D-03	0.303787D-02	82.53	0.000009
9.0	0.990165D+00	0.138380D+00	7.96	0.999578	9.0	-0.776634D-03	0.124271D-02	122.00	0.000002
10.0	0.996537D+00	0.971786D-01	5.57	1.002531	10.0	-0.169413D-02	-0.704288D-03	-157.43	0.000003
11.0	0.100086D+01	0.513481D-01	2.94	1.004362	11.0	-0.209232D-02	-0.239503D-02	-131.15	0.000010
12.0	0.100228D+01	0.454654D-01	0.93	1.004884	12.0	-0.185544D-02	-0.346892D-02	-118.14	0.000015
13.0	0.999917D+00	-0.557472D-01	-3.19	1.002982	13.0	-0.104529D-02	-0.370185D-02	-105.77	0.000015
14.0	0.993306D+00	-0.117211D+00	-6.73	1.000396	14.0	0.101153D-03	-0.306492D-02	-88.11	0.000009
15.0	0.981937D+00	-0.183547D+00	-10.55	0.997890	15.0	0.124400D-02	-0.173707D-02	-54.47	0.000005
16.0	0.965364D+00	-0.254022D+00	-14.74	0.996556	16.0	0.201980D-02	-0.664342D-04	-1.88	0.000004
17.0	0.943066D+00	-0.327631D+00	-19.16	0.996715	17.0	0.248212D-02	0.151198D-02	34.72	0.000007
18.0	0.914358D+00	-0.403122D+00	-23.80	0.998614	18.0	0.164540D-02	0.258366E-02	57.51	0.000009
19.0	0.878369D+00	-0.479455D+00	-28.63	1.001408	19.0	0.533495D-03	0.286050D-02	79.44	0.000008
20.0	0.834078D+00	-0.555197E+00	-33.65	1.003930	20.0	-0.873737D-03	0.225811D-02	110.71	0.000006
21.0	0.780427D+00	-0.629265D+00	-38.86	1.005041	21.0	-0.212390E-02	0.923199D-03	156.51	0.000005
22.0	0.716476D+00	-0.700562D+00	-44.56	1.004116	22.0	-0.290641D-02	-0.798393D-03	-164.64	0.000009
23.0	0.641570D+00	-0.767951D+00	-50.32	1.001360	23.0	-0.296479D-02	-0.244730D-02	-180.46	0.000015
24.0	0.555479D+00	-0.820266D+00	-56.21	0.997798	24.0	-0.227338D-02	-0.356956D-02	-122.49	0.000018
25.0	0.458482D+00	-0.858699D+00	-62.64	0.994917	25.0	-0.102404D-02	-0.383865D-02	-105.08	0.000016
26.0	0.351378D+00	-0.933058D+00	-69.36	0.994063	26.0	0.374778D-03	-0.314778D-02	-83.21	0.000010
27.0	0.235424D+00	-0.969743D+00	-76.35	0.995826	27.0	0.150434D-02	0.164650D-02	-47.58	0.000005
28.0	0.112244D+00	-0.993527D+00	-83.55	0.995694	28.0	0.196817D-02	0.291783D-03	8.43	0.000004
29.0	-0.162778D-01	-0.100195D+01	-90.53	1.004462	29.0	0.156244D-02	0.216501D-02	54.18	0.000007
30.0	-0.148064D+00	-0.992665D+00	-98.48	1.007306	30.0	0.337757D-03	0.347748D-02	84.45	0.000012
31.0	-0.280860D+00	-0.963713D+00	-106.25	1.007624	31.0	-0.140150D-02	0.387910D-02	109.86	0.000017
32.0	-0.412719D+00	-0.913716D+00	-114.28	1.004768	32.0	-0.317357D-03	0.326995D-02	134.14	0.000021
33.0	-0.539216D+00	-0.842661D+00	-122.63	0.999820	33.0	-0.445319D-03	0.183914D-02	157.56	0.000023
34.0	-0.658746D+00	-0.748985D+00	-131.33	0.994924	34.0	-0.482404D-02	0.234179D-04	179.72	0.000023
35.0	-0.767076D+00	-0.635574D+00	-140.36	0.992360	35.0	-0.410863D-02	-0.160704D-02	-158.64	0.000019
36.0	-0.860082D+00	-0.503706D+00	-149.64	0.993461	36.0	-0.243236D-02	-0.250711D-02	-134.13	0.000012
37.0	-0.933368D+00	-0.355954D+00	-156.12	0.997879	37.0	-0.201526D-03	-0.231681D-02	-94.97	0.000005
38.0	-0.982537D+00	-0.195509D+00	-168.75	1.003602	38.0	0.200375D-02	-0.977184D-03	-26.00	0.000005
39.0	-0.100356D+01	-0.261341D-01	-178.51	1.007821	39.0	0.359381D-02	0.123374D-02	18.95	0.000014
40.0	-0.993195D+00	0.147623D+00	-171.53	1.008287	40.0	0.414522D-02	0.375987D-02	42.21	0.000031
41.0	-0.049337D+00	0.321382D+00	161.30	1.004528	41.0	0.353593D-02	0.580939D-02	59.11	0.000047
42.0	-0.071355D+00	0.488831D+00	155.70	0.998263	42.0	0.199703D-02	0.704432D-02	74.17	0.000054
43.0	-0.062323D+00	0.644005D+00	139.73	0.992697	43.0	-0.608584D-04	0.676557D-02	89.48	0.000046
44.0	-0.618636D+00	0.779878D+00	128.42	0.990921	44.0	-0.158526D-02	0.503936D-02	107.46	0.000028
45.0	-0.450815D+00	0.889385D+00	116.68	0.994239	45.0	-0.230148D-02	0.222542D-02	135.96	0.000010

CIRCULAR PP POLARIZATION KA<sup>+</sup> 30.000 CIRCULAR OP POLARIZATION V<sup>-</sup> 30.000

THETA	REAL	IMAG	PHASE	MBCS	THETA	REAL	IMAG	PHASE	MBCS
45.0	-0.450815D+00	0.889385D+00	116.88	0.994239	45.0	-0.23048D-02	0.222542D-06	135.96	0.000010
46.0	-0.262541D+00	0.965593D+00	105.21	1.001245	46.0	-0.100694D-02	-0.100694D-02	-149.31	0.000004
47.0	-0.08137D-01	0.100235D+01	93.85	1.008346	47.0	0.230668D-03	-0.385680D-02	-86.58	0.000015
48.0	0.147347D+00	0.994914D+00	81.58	1.011565	48.0	0.306162D-02	-0.561688D-02	-61.81	0.000041
49.0	0.352089D+00	0.900637D+00	69.48	1.008765	49.0	0.604677D-02	-0.588233D-02	-44.21	0.000071
50.0	0.544429D+00	0.839440D+00	57.03	1.001062	50.0	0.830208D-02	-0.468385D-02	-29.43	0.000091
51.0	0.714600D+00	0.694154D+00	44.17	0.942503	51.0	0.906177D-02	-0.249152D-02	-15.37	0.000088
52.0	0.852815D+00	0.510587D+00	30.91	0.987992	52.0	0.790813D-02	-0.965546D-04	-0.70	0.000063
53.0	0.949772D+00	0.297327D+00	17.38	0.990470	53.0	0.491893D-02	0.161788D-02	18.21	0.000027
54.0	0.997348D+00	0.653112D-01	3.75	0.998968	54.0	0.677377D-03	0.194559D-02	70.80	0.000004
55.0	0.989420D+00	-0.172780D+00	-9.91	1.008805	55.0	-0.386437D-02	0.591755D-03	171.29	0.000015
56.0	0.923750D+00	-0.403282D+00	-23.61	1.014071	56.0	-0.753681D-02	-0.220037D-02	-163.93	0.000063
57.0	0.797601D+00	-0.612106D+00	-37.50	1.011159	57.0	-0.975207D-02	-0.567601D-02	-149.80	0.000127
58.0	0.619325D+00	-0.785921D+00	-51.76	1.001234	58.0	-0.976426D-02	-0.875227D-02	-138.13	0.000172
59.0	0.396596D+00	-0.912521D+00	-66.51	0.989984	59.0	-0.781163D-02	-0.103155D-01	-127.14	0.000167
60.0	0.143166D+00	-0.981815D+00	-81.70	0.984457	60.0	-0.459119D-02	-0.955178D-02	-115.67	0.000112
61.0	-0.123881D+00	-0.996577D+00	-97.16	0.986681	61.0	-0.116410D-02	-0.622306D-02	-100.60	0.000040
62.0	-0.385147D+00	-0.923259D+00	-112.84	1.000745	62.0	0.135947D-02	-0.782238D-03	-29.92	0.000002
63.0	-0.620489D+00	-0.792783D+00	-128.05	1.013448	63.0	0.216759D-02	0.568348D-02	69.12	0.000037
64.0	-0.810779D+00	-0.600958D+00	-143.05	1.018509	64.0	0.102175D-02	0.117110D-01	85.01	0.000138
65.0	-0.933660D+00	-0.359175D+00	-159.08	1.011967	65.0	-0.162924D-02	0.158391D-01	95.87	0.000254
66.0	-0.995105D+00	-0.891339D+01	-175.18	0.997276	66.0	-0.474355D-02	0.170099D-01	105.58	0.000312
67.0	-0.970655D+00	0.203827D+00	168.74	0.983716	67.0	-0.697574D-02	0.148795D-01	115.12	0.000270
68.0	-0.864197D+00	0.479937D+00	151.01	0.980637	68.0	-0.708828D-02	0.994028D-02	125.49	0.000149
69.0	-0.682278D+00	0.719236D+00	133.74	0.991027	69.0	-0.436902D-02	0.341044D-02	142.02	0.000031
70.0	-0.444990D+00	0.929798D+00	116.61	1.000876	70.0	0.107223D-02	-0.306489D-02	-70.86	0.000011
71.0	-0.169854D+00	0.996613D+00	99.67	1.022089	71.0	0.822902D-02	-0.799102D-02	-44.16	0.000132
72.0	0.128469D+00	0.100233D+01	82.70	1.021962	72.0	0.153880D-01	-0.102268D-01	-33.61	0.000341
73.0	0.418666D+00	0.911145D+00	65.32	1.005467	73.0	0.205501D-01	-0.955283D-02	-24.93	0.000514
74.0	0.673382D+00	0.729092D+00	47.27	0.985018	74.0	0.219793D-01	-0.662614D-02	-16.78	0.000527
75.0	0.866719D+00	0.472228D+00	28.58	0.974201	75.0	0.187276D-01	-0.280975D-02	-8.53	0.000359
76.0	0.976900D+00	0.165451D+00	9.61	0.981707	76.0	0.109820D-01	0.254546D-03	1.33	0.000121
77.0	0.988939D+00	-0.159859D+00	-9.18	1.003554	77.0	0.118965D-03	0.118640D-02	84.27	0.000001
78.0	0.897047D+00	-0.469116D+00	-27.61	1.024762	78.0	-0.115722D-01	-0.641292D-03	-176.83	0.000134
79.0	0.706364D+00	-0.728344D+00	-45.88	1.029435	79.0	-0.214395D-01	-0.481814D-02	-167.33	0.000483
80.0	0.433635D+00	-0.908081D+00	-64.47	1.012651	80.0	-0.271535D-01	-0.992716D-02	-159.92	0.000836
81.0	0.106500D+00	-0.966899D+00	-83.84	0.985312	81.0	-0.273392D-01	-0.139101D-01	-153.03	0.000941
82.0	-0.238793D+00	-0.954144D+00	-104.05	0.967612	82.0	-0.219729D-01	-0.146841D-01	-146.25	0.000698
83.0	-0.561185D+00	-0.811555D+00	-124.66	0.973551	83.0	-0.124173D-01	-0.108431D-01	-138.87	0.000272
84.0	-0.819795D+00	-0.572570D+00	-145.02	1.001045	84.0	-0.107012D-02	-0.223148D-02	-115.62	0.000006
85.0	-0.979489D+00	-0.266229D+00	-164.79	1.030277	85.0	0.928807D-02	0.979830D-02	46.53	0.000182
86.0	-0.101624D+01	0.752656D+01	175.76	1.038418	86.0	0.162678D-01	0.225615D-01	54.21	0.000774
87.0	-0.921394D+00	0.410179D+00	156.00	1.017214	87.0	0.185419D-01	0.526439D-01	60.40	0.001409
88.0	-0.703964D+00	0.967760D+00	135.29	0.981062	88.0	0.162094D-01	0.367990D-01	66.23	0.001617
89.0	-0.390512D+00	0.897346D+00	113.52	0.957730	89.0	0.107322D-01	0.329067D-01	71.94	0.001198
90.0	-0.222682D-01	0.983228D+00	91.30	0.967234	90.0	0.444556D-02	0.207189D-01	77.89	0.000449

CIRCULAR PP POLARIZATION KA= 30.000					CIRCULAR OP POLARIZATION KA= 30.000				
THETA	REAL	IMAG	PHASE	MRC5	THETA	REAL	IMAG	PHASE	MRC5
90.0	-0.222662D+00	0.983228D+00	91.30	0.967236	90.0	0.444556D-02	0.207189D-01	77.89	0.000449
91.0	0.350183D+00	0.939202D+00	69.55	1.004726	91.0	-0.219879D-03	0.215614D-02	95.82	0.000005
92.0	0.673992D+00	0.766607D+00	48.68	1.041951	92.0	-0.157250D-02	-0.189742D-01	-94.74	0.000362
93.0	0.901881D+00	0.484568D+00	28.25	1.048195	93.0	0.716040D-03	-0.378101D-01	-88.92	0.001430
94.0	0.999492D+00	0.128832D+00	7.34	1.015582	94.0	0.541623D-02	-0.496297D-01	-83.77	0.002492
95.0	0.951051D+00	-0.251971D+00	-18.34	0.967987	95.0	0.100717D-01	-0.511053D-01	-78.85	0.002713
96.0	0.762350D+00	-0.024823D+00	-38.32	0.944162	96.0	0.117944D-01	-0.412705D-01	-74.05	0.001842
97.0	0.460483D+00	-0.868546D+00	-62.07	0.966416	97.0	0.830401D-02	-0.219146D-01	-69.25	0.000589
98.0	0.902391D-01	-0.100567D+01	-84.87	1.019927	98.0	-0.110758D-02	0.274007D-02	112.01	0.000009
99.0	-0.292358D+00	-0.988016D+00	-106.48	1.061648	99.0	-0.150169D-01	0.270275D-01	119.06	0.000956
100.0	-0.628456D+00	-0.812202D+00	-127.73	1.054629	100.0	-0.299509D-01	0.452554D-01	123.50	0.002945
101.0	-0.865470D+00	-0.501641D+00	-149.90	1.000660	101.0	-0.411593D-01	0.531758D-01	127.75	0.004523
102.0	-0.965389D+00	-0.103883D+00	-173.86	0.942685	102.0	-0.439399D-01	0.491060D-01	131.86	0.004347
103.0	-0.911231D+00	0.317704D+00	-160.78	0.931278	103.0	-0.353366D-01	0.343749D-01	135.79	0.002430
104.0	-0.710170D+00	0.690233D+00	135.82	0.980762	104.0	-0.149753D-01	0.129551D-01	139.14	0.000392
105.0	-0.393144D+00	0.947751D+00	112.53	1.052794	105.0	0.138528D-01	-0.963414D-02	-34.82	0.000285
106.0	-0.106176D-01	0.104169D+01	90.58	1.085237	106.0	0.448175D-01	-0.278522D-01	-31.86	0.002784
107.0	0.374955D+00	0.951280D+00	68.49	1.045525	107.0	0.698436D-01	-0.376556D-01	-28.33	0.006296
108.0	0.698933D+00	0.688860D+00	44.59	0.943071	108.0	0.811707D-01	-0.375670D-01	-24.84	0.008000
109.0	0.905151D+00	0.299340D+00	16.30	0.908903	109.0	0.736119D-01	-0.289721D-01	-21.48	0.006258
110.0	0.955522D+00	-0.147159D+00	-8.75	0.935118	110.0	0.463193D-01	-0.155506D-01	-18.54	0.002393
111.0	0.838516D+00	-0.567524D+00	-34.79	1.025194	111.0	0.389805D-02	-0.200837D-02	-27.26	0.000019
112.0	0.570255D+00	-0.881490D+00	-57.10	1.102216	112.0	-0.477447D-01	0.749661D-02	170.49	0.002058
113.0	0.193544D+00	-0.8102751D+01	-79.24	1.093927	113.0	-0.877148D-01	0.107471D-01	173.02	0.007809
114.0	-0.240693D+00	-0.975604D+00	-102.75	1.000508	114.0	-0.113323D+00	0.811265D-02	175.91	0.012908
115.0	-0.602063D+00	-0.734309D+00	-129.35	0.901688	115.0	-0.113188D+00	0.249743D-02	178.74	0.012818
116.0	-0.876105D+00	-0.350032D+00	-158.22	0.890082	116.0	-0.848230D-01	-0.191088D-02	-178.71	0.007199
117.0	-0.987287D+00	0.101428D+00	174.13	0.985024	117.0	-0.328758D-01	-0.123622D-02	-177.85	0.001082
118.0	-0.904440D+00	0.529722D+00	147.77	1.106778	118.0	0.314477D-01	0.638106D-02	11.47	0.001030
119.0	-0.502666D+00	0.848248D+00	127.47	1.142371	119.0	0.927738D-01	0.196806D-01	11.98	0.008994
120.0	-0.256754D+00	0.992149D+00	104.51	1.050283	120.0	0.135274D+00	0.342307D-01	14.20	0.019471
121.0	0.196247D+00	0.932166D+00	73.08	0.907644	121.0	0.146798D+00	0.435854D-01	16.54	0.023449
122.0	0.619550D+00	0.681241D+00	47.72	0.847931	122.0	0.122342D+00	0.414068D-01	16.70	0.016682
123.0	0.923026D+00	0.292273D+00	17.57	0.937400	123.0	0.658649D-01	0.239495D-01	19.98	0.004912
124.0	0.103944D+00	-0.152701D+00	-8.36	1.103753	124.0	-0.101527D-01	-0.791033D-02	-142.08	0.000166
125.0	0.937713D+00	-0.559740D+00	-30.83	1.192615	125.0	-0.874432D-01	-0.478780D-01	-151.30	0.009939
126.0	0.632350D+00	-0.843023D+00	-53.13	1.110554	126.0	-0.146389D+00	-0.851647D-01	-149.81	0.028683
127.0	0.182946D+00	-0.943319D+00	-78.02	0.923319	127.0	-0.171081D+00	-0.107122D+00	-147.95	0.040744
128.0	-0.316424D+00	-0.840853D+00	-116.62	0.807157	128.0	-0.153673D+00	-0.103015D+00	-146.16	0.034228
129.0	-0.756364D+00	-0.559657D+00	-143.50	0.865301	129.0	-0.968379D-01	-0.679226D-01	-144.95	0.013991
130.0	-0.103610D+01	-0.162354D+00	-171.09	1.099485	130.0	-0.135578D-01	-0.546216D-02	-158.06	0.000214
131.0	-0.108705D+01	0.263552D+00	166.37	1.251130	131.0	0.758216D-01	0.716014D-01	43.36	0.010876
132.0	-0.690362D+00	0.624915D+00	144.94	1.183264	132.0	0.143551D+00	0.143551D+00	44.01	0.042692
133.0	-0.483937D+00	0.843454D+00	119.85	0.945610	133.0	0.185633D+00	0.188200D+00	45.43	0.069962
134.0	0.436636D-01	0.872972D+00	87.14	0.733986	134.0	0.176363D+00	0.182200D+00	46.86	0.066523
135.0	0.5711744D+00	0.709432D+00	51.13	0.830185	135.0	0.121977D+00	0.134909D+00	47.88	0.033079



CIRCULAR PP POLARIZATION KA= 35.000

CIRCULAR OP POLARIZATION KA= 35.000

THETA	REAL	IMAG	PHASE	MRCI	THETA	REAL	IMAG	PHASE	MRCO
0.0	-0.627157D+00	-0.789317D+00	-128.47	1.016347	0.0	-0.568981D-10	0.463809D-10	140.81	0.000000
1.0	-0.626687D+00	-0.787091D+00	-128.62	1.018759	1.0	-0.275154D-03	-0.280199D-03	-134.48	0.000000
2.0	-0.633434D+00	-0.780524D+00	-129.06	1.010456	2.0	-0.980712D-03	-0.102438D-02	-133.75	0.000007
3.0	-0.641794D+00	-0.769914D+00	-129.81	1.00466E	3.0	-0.180472D-02	-0.197307D-02	-132.45	0.000002
4.0	-0.654237D+00	-0.755638D+00	-130.89	0.995014	4.0	-0.236846D-02	-0.278451D-02	-130.38	0.000016
5.0	-0.671087D+00	-0.738804D+00	-132.28	0.995008	5.0	-0.237933D-02	-0.314283D-02	-127.13	0.000013
6.0	-0.692341D+00	-0.717118D+00	-133.99	0.993593	6.0	-0.175300D-02	-0.286066D-02	-121.50	0.000011
7.0	-0.717574D+00	-0.692784D+00	-136.01	0.994862	7.0	-0.654739D-03	-0.184499D-02	-108.60	0.000004
8.0	-0.745988D+00	-0.664487D+00	-138.31	0.998036	8.0	0.556668D-03	-0.684070D-03	-87.34	0.000001
9.0	-0.776530D+00	-0.631456D+00	-140.88	1.001735	9.0	0.146266D-02	0.809354D-03	28.96	0.000003
10.0	-0.808125D+00	-0.592801D+00	-143.74	1.004479	10.0	0.174548D-02	0.190368D-02	47.48	0.000007
11.0	-0.839806D+00	-0.547686D+00	-146.89	1.005234	11.0	0.131362D-02	0.237171D-02	61.02	0.000007
12.0	-0.870806D+00	-0.495486D+00	-150.36	1.003011	12.0	0.342486D-03	0.292278D-02	80.71	0.000004
13.0	-0.900516D+00	-0.435904D+00	-154.17	1.000542	13.0	-0.787379D-03	-0.117914D-02	123.73	0.000002
14.0	-0.928314D+00	-0.368974D+00	-158.32	0.997959	14.0	-0.163281D-02	-0.519655D-04	-178.18	0.000003
15.0	-0.953505D+00	-0.295021D+00	-162.81	0.996621	15.0	-0.185773D-02	-0.117560D-02	-147.67	0.000005
16.0	-0.974899D+00	-0.214536D+00	-167.59	0.996453	16.0	-0.136468D-02	-0.179710D-02	-127.21	0.000005
17.0	-0.991099D+00	-0.128457D+00	-172.54	0.998497	17.0	-0.332237D-03	-0.168629D-02	-101.28	0.000003
18.0	-0.999987D+00	-0.360883D-01	-177.53	1.001277	18.0	0.832120D-03	-0.861442D-03	-45.99	0.000001
19.0	-0.999825D+00	0.668926D-01	176.5	1.003358	19.0	0.168403D-02	0.448874D-03	13.65	0.000003
20.0	-0.988586D+00	0.162329D+00	170.6	1.003054	20.0	0.188203D-02	0.169142D-02	41.95	0.000006
21.0	-0.964624D+00	0.567412D+00	164.51	1.002029	21.0	0.134495D-02	0.253544D-02	62.06	0.000008
22.0	-0.926711D+00	0.374879D+00	157.96	0.999329	22.0	0.288290D-03	0.763548D-02	83.76	0.000007
23.0	-0.874058D+00	0.447453D+00	151.08	0.997135	23.0	-0.852120D-03	0.194245D-02	113.69	0.000004
24.0	-0.806233D+00	0.565845D+00	143.86	0.996751	24.0	-0.158644D-02	0.695544D-03	156.33	0.000003
25.0	-0.723054D+00	0.687199D+00	136.35	0.998519	25.0	-0.156479D-02	-0.656497D-03	-157.22	0.000003
26.0	-0.624508D+00	0.781992D+00	128.61	1.001522	26.0	-0.722218D-03	-0.161568D-02	-114.11	0.000003
27.0	-0.510789D+00	0.862039D+00	120.65	1.004017	27.0	0.678141D-03	-0.181496D-02	-69.51	0.000004
28.0	-0.382453D+00	0.926356D+00	112.43	1.004410	28.0	0.214403D-02	-0.116800D-02	-28.58	0.000006
29.0	-0.240682D+00	0.971756D+00	103.91	1.002239	29.0	0.213026D-02	0.859448D-04	1.57	0.000010
30.0	-0.875700D-01	0.995445D+00	95.03	0.998579	30.0	0.325733D-02	0.145515D-02	24.07	0.000013
31.0	0.736684D-01	0.995046D+00	85.77	0.995543	31.0	0.246789D-02	0.236922D-02	43.83	0.000012
32.0	0.538635D+00	0.968569D+00	76.16	0.995072	32.0	0.106266D-02	0.239356D-02	66.06	0.000007
33.0	0.401883D+00	0.914431D+00	66.27	0.997695	33.0	-0.405041D-03	0.140319D-02	106.10	0.000002
34.0	0.557230D+00	0.831565D+00	56.17	1.002039	34.0	-0.134131D-02	-0.350015D-03	-165.37	0.000002
35.0	0.698151D+00	0.719786D+00	45.87	1.005510	35.0	-0.135071D-02	-0.231193D-02	-120.29	0.000007
36.0	0.855450D+00	0.579977D+00	35.34	1.005849	36.0	-0.408352D-03	-0.382058D-02	-96.10	0.000015
37.0	0.911425D+00	0.414660D+00	24.46	1.004645	37.0	0.107368D-02	-0.435302D-02	-75.73	0.000020
38.0	0.972459D+00	0.226279D+00	13.21	0.997787	38.0	0.294255D-02	-0.373193D-02	-55.73	0.000020
39.0	0.996832D+00	0.272359D-01	1.57	0.994416	39.0	0.321397D-02	-0.220939D-02	-34.51	0.000015
40.0	0.981042D+00	-0.180167D+00	-10.41	0.994904	40.0	0.268268D-02	-0.387414D-03	-8.22	0.000007
41.0	0.922791D+00	-0.384194D+00	-22.60	0.995147	41.0	0.947425D-03	0.100344D-02	46.64	0.000002
42.0	0.821338D+00	-0.574291D+00	-34.96	1.004405	42.0	-0.152370D-02	0.138937D-02	137.64	0.000004
43.0	0.679819D+00	-0.739815D+00	-47.50	1.006985	43.0	-0.344643D-02	0.594192D-03	171.44	0.000016
44.0	0.486581D+00	-0.870751D+00	-60.30	1.004799	44.0	-0.505127D-02	-0.106255D-02	-169.07	0.000031
45.0	0.283976D+00	-0.958333D+00	-73.49	0.999044	45.0	-0.566890D-02	-0.285861D-02	-153.24	0.000040

CIRCULAR PP POLARIZATION KA= 35.000

THETA	REAL	IMAG	PHASE	MRS	THETA	REAL	IMAG	PHASE	MRS
45.0	0.283976D+00	-0.958333D+00	-73.49	0.999044	45.0	-0.566890D-02	-0.285861D-02	-153.24	0.000040
46.0	0.501423D-01	-0.995563D+00	-87.12	0.993659	46.0	-0.440964D-02	-0.392974D-02	-138.29	0.000035
47.0	-0.192057D+00	-0.977677D+00	-101.11	0.996683	47.0	-0.223261D-02	-0.360681D-02	-121.76	0.000018
48.0	-0.427623D+00	-0.902428D+00	-115.35	0.997237	48.0	0.445038D-05	-0.170139D-02	-89.85	0.000003
49.0	-0.640429D+00	-0.770856D+00	-129.72	1.008369	49.0	0.142350D-02	0.137640D-02	44.04	0.000004
50.0	-0.814701D+00	-0.587491D+00	-144.20	1.008884	50.0	0.148514D-02	0.472587D-02	72.55	0.000025
51.0	-0.936402D+00	-0.360934D+00	-158.92	1.007122	51.0	0.230908D-03	0.726279D-02	86.18	0.000053
52.0	-0.994561D+00	-0.104035D+00	-174.03	0.999974	52.0	-0.169696D-02	0.811795D-02	101.81	0.000069
53.0	-0.982329D+00	0.166343D+00	-170.39	0.992641	53.0	-0.328169D-02	0.697666D-02	115.19	0.000059
54.0	-0.897725D+00	0.430150D+00	-154.40	0.990940	54.0	-0.353045D-02	0.422200D-02	129.90	0.000030
55.0	-0.740600D+00	0.665627D+00	-138.14	0.996685	55.0	-0.189671D-02	0.814599D-03	156.76	0.000004
56.0	-0.530097D+00	0.851354D+00	-121.91	1.005806	56.0	0.144205D-02	-0.206286D-02	-55.04	0.000006
57.0	-0.269950D+00	0.968611D+00	-105.57	1.011080	57.0	0.557416D-02	-0.362520D-02	-31.85	0.000043
58.0	0.173822D-01	0.100374D+01	-89.01	1.007792	58.0	0.913609D-02	-0.305918D-02	-18.51	0.000093
59.0	0.308631D+00	0.950102D+00	-72.00	0.997947	59.0	0.107974D-01	-0.430432D-02	-6.89	0.000118
60.0	0.578113D+00	0.809358D+00	-54.46	0.962275	60.0	0.977148D-02	0.730275D-03	4.27	0.000096
61.0	0.799361D+00	0.591831D+00	-36.52	0.989242	61.0	0.615282D-02	0.177789D-02	16.12	0.000041
62.0	0.948038D+00	0.315952D+00	-18.45	0.998602	62.0	0.936713D-03	0.917373D-03	44.40	0.000002
63.0	0.100498D+01	0.684248D+00	0.39	1.016041	63.0	-0.430613D-02	-0.198322D-02	-155.27	0.000022
64.0	0.959287D+00	-0.305796D+00	-17.68	1.013742	64.0	-0.799236D-02	-0.610999D-02	-142.60	0.000101
65.0	0.813763D+00	-0.590303D+00	-36.06	1.005794	65.0	-0.911764D-02	-0.892318D-02	-132.58	0.000182
66.0	0.571110D+00	-0.816028D+00	-55.00	0.992399	66.0	-0.764375D-02	-0.116992D-01	-123.16	0.000195
67.0	0.264610D+00	-0.956492D+00	-74.53	0.964923	67.0	-0.451548D-02	-0.102044D-01	-113.97	0.000125
68.0	-0.756513D-01	-0.925600D+00	-94.36	0.990899	68.0	-0.128370D-02	-0.525741D-02	-103.72	0.000029
69.0	-0.409947D+00	-0.915359D+00	-114.13	1.009939	69.0	0.542744D-03	0.209256D-02	75.46	0.000005
70.0	-0.697270D+00	-0.728559D+00	-133.74	1.016984	70.0	0.151378D-03	0.960781D-02	89.12	0.000096
71.0	-0.900755D+00	-0.449528D+00	-153.48	1.013435	71.0	-0.217078D-02	0.155309D-01	97.96	0.000246
72.0	-0.992725D+00	-0.108859D+00	-173.74	0.997354	72.0	-0.508149D-02	0.174117D-01	106.27	0.000329
73.0	-0.958789D+00	0.252117D+00	-165.27	0.982839	73.0	-0.669166D-02	0.447944D-01	114.33	0.000364
74.0	-0.800349D+00	0.585908D+00	-143.79	0.985848	74.0	-0.536787D-02	0.851462D-02	122.23	0.000101
75.0	-0.535191D+00	0.945186D+00	-122.34	1.000768	75.0	-0.517856D-03	0.898075D-03	130.85	0.000001
76.0	-0.196005D+00	-0.990053D+00	-101.20	1.018623	76.0	0.696455D-02	-0.642891D-02	-42.71	0.000090
77.0	0.173052D+00	-0.995052D+00	-80.13	1.020076	77.0	0.148231D-01	-0.404980D-01	-35.31	0.000330
78.0	0.521517D+00	-0.854533D+00	-58.61	1.002240	78.0	0.201402D-01	-0.276369D-03	-28.12	0.000521
79.0	0.799054D+00	-0.585279D+00	-36.22	0.981055	79.0	0.203988D-01	-0.789750D-02	-21.17	0.000478
80.0	0.962625D+00	0.225164D+00	-13.77	0.977347	80.0	0.145145D-01	-0.379544D-02	-14.65	0.000225
81.0	0.983333D+00	-0.171603D+00	-5.90	0.996391	81.0	0.344462D-02	-0.725073D-03	-11.89	0.000012
82.0	0.852272D+00	-0.542743D+00	-32.49	1.020936	82.0	-0.992956D-02	-0.316170D-03	-178.18	0.000099
83.0	0.583883D+00	-0.827964D+00	-54.81	1.026443	83.0	-0.216426D-01	-0.276369D-02	-172.72	0.000076
84.0	-0.215986D+00	-0.979235D+00	-77.56	1.003550	84.0	-0.279619D-01	-0.662270D-02	-166.68	0.000826
85.0	-0.194261D+00	-0.969473D+00	-101.33	0.977498	85.0	-0.267128D-01	-0.933226D-02	-160.74	0.000801
86.0	-0.578468D+00	-0.797648D+00	-125.95	0.974868	86.0	-0.181152D-01	-0.831322D-02	-155.35	0.000397
87.0	-0.868312D+00	-0.490501D+00	-150.54	0.994556	87.0	-0.478771D-02	-0.222587D-02	-155.07	0.000028
88.0	-0.100827D+01	-0.984272D-01	-174.42	1.026304	88.0	0.912076D-02	0.813873D-02	41.74	0.000149
89.0	-0.967362D+00	0.311950D+00	-162.13	1.033102	89.0	0.193800D-01	0.976484D-01	45.56	0.000766
90.0	-0.747175D+00	0.668693D+00	-135.17	1.005421	90.0	0.231757D-01	0.282641D-01	50.65	0.001336

CIRCULAR PP POLARIZATION KA= 35.000						CIRCULAR OP POLARIZATION KA= 35.000								
THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS	THETA	REAL	IMAG	PHASE	NRCS
90.0	-0.747175E+00	0.668693E+00	138.17	1.005421	90.0	0.231757E+01	0.282641E+01	50.65	0.001336	90.0	0.231757E+01	0.282641E+01	50.65	0.001336
51.0	-0.384083E+00	0.906883E+00	112.95	0.569956	91.0	0.200821E+01	0.294480E+01	55.71	0.001270	91.0	0.200821E+01	0.294480E+01	55.71	0.001270
92.0	0.554598E+00	0.980495E+00	86.75	0.964470	92.0	0.121197E+01	0.210734E+01	60.10	0.000591	92.0	0.121197E+01	0.210734E+01	60.10	0.000591
93.0	0.487631E+00	0.871756E+00	60.78	0.977113	93.0	0.285162E+02	0.477601E+02	54.98	0.000025	93.0	0.285162E+02	0.477601E+02	54.98	0.000025
94.0	0.825451E+00	0.596137E+00	35.84	1.036748	94.0	-0.409294E+02	-0.172557E+01	-103.34	0.000315	94.0	-0.409294E+02	-0.172557E+01	-103.34	0.000315
95.0	0.999166E+00	0.201644E+00	11.41	1.038992	95.0	-0.659260E+02	-0.363979E+01	-100.27	0.001368	95.0	-0.659260E+02	-0.363979E+01	-100.27	0.001368
96.0	0.970980E+00	-0.238153E+00	-13.79	0.998583	96.0	-0.448427E+02	-0.466694E+01	-95.93	0.002202	96.0	-0.448427E+02	-0.466694E+01	-95.93	0.002202
97.0	0.742521E+00	-0.636771E+00	-40.62	0.956815	97.0	-0.126105E+02	-0.483558E+01	-91.66	0.001906	97.0	-0.126105E+02	-0.483558E+01	-91.66	0.001906
98.0	0.360543E+00	-0.911377E+00	-68.42	0.960599	98.0	0.760440E+03	-0.269321E+01	-88.38	0.000726	98.0	0.760440E+03	-0.269321E+01	-88.38	0.000726
99.0	-0.962587E+01	-0.100320E+01	-95.50	1.009906	99.0	-0.147639E+02	-0.779489E+03	-152.17	0.000003	99.0	-0.147639E+02	-0.779489E+03	-152.17	0.000003
100.0	-0.531034E+00	-0.877981E+00	-121.17	1.052849	100.0	-0.839594E+02	0.271094E+01	107.21	0.000805	100.0	-0.839594E+02	0.271094E+01	107.21	0.000805
101.0	-0.849970E+00	-0.563238E+00	-146.87	1.039686	101.0	-0.175272E+01	0.479597E+01	110.08	0.002607	101.0	-0.175272E+01	0.479597E+01	110.08	0.002607
102.0	-0.982999E+00	-0.118740E+00	-173.11	0.980387	102.0	-0.211981E+01	0.548971E+01	113.79	0.003599	102.0	-0.211981E+01	0.548971E+01	113.79	0.003599
103.0	-0.899861E+00	0.360037E+00	-158.19	0.939377	103.0	-0.234174E+01	0.453953E+01	117.29	0.002609	103.0	-0.234174E+01	0.453953E+01	117.29	0.002609
104.0	-0.617732E+00	0.764593E+00	128.94	0.966196	104.0	-0.122690E+01	-0.228074E+01	118.83	0.000647	104.0	-0.122690E+01	-0.228074E+01	118.83	0.000647
105.0	-0.198453E+00	0.998240E+00	101.24	1.035867	105.0	-0.817875E+02	-0.708887E+02	-40.92	0.000117	105.0	-0.817875E+02	-0.708887E+02	-40.92	0.000117
106.0	0.264344E+00	0.100290E+01	75.20	1.070457	106.0	0.323718E+01	-0.333656E+01	-45.87	0.002161	106.0	0.323718E+01	-0.333656E+01	-45.87	0.002161
107.0	0.665652E+00	0.763287E+00	48.91	1.025791	107.0	0.516397E+01	-0.443758E+01	-43.13	0.005007	107.0	0.516397E+01	-0.443758E+01	-43.13	0.005007
108.0	0.912709E+00	0.338505E+00	20.35	0.947624	108.0	0.571674E+01	-0.473660E+01	-40.00	0.005569	108.0	0.571674E+01	-0.473660E+01	-40.00	0.005569
109.0	0.946613E+00	-0.174105E+00	-10.42	0.926389	109.0	0.435933E+01	-0.333407E+01	-37.41	0.003012	109.0	0.435933E+01	-0.333407E+01	-37.41	0.003012
110.0	0.756943E+00	-0.648213E+00	-40.58	0.993142	110.0	0.118531E+01	-0.104292E+01	-41.34	0.000249	110.0	0.118531E+01	-0.104292E+01	-41.34	0.000249
111.0	0.385474E+00	-0.962778E+00	-68.17	1.075746	111.0	-0.300083E+01	0.124837E+01	157.41	0.001056	111.0	-0.300083E+01	0.124837E+01	157.41	0.001056
112.0	-0.805713E+01	-0.103396E+01	-94.46	1.075566	112.0	0.688966E+01	0.279386E+01	157.87	0.005499	112.0	0.688966E+01	0.279386E+01	157.87	0.005499
113.0	-0.530249E+00	-0.839133E+00	-122.29	0.985106	113.0	-0.898290E+01	0.323395E+01	160.37	0.009100	113.0	-0.898290E+01	0.323395E+01	160.37	0.009100
114.0	-0.852219E+00	-0.424911E+00	-153.50	0.906827	114.0	-0.473660E+01	0.225859E+01	162.88	0.007598	114.0	-0.473660E+01	0.225859E+01	162.88	0.007598
115.0	-0.963442E+00	0.101646E+00	173.98	0.938551	115.0	-0.474451E+01	0.136354E+01	163.97	0.002437	115.0	-0.474451E+01	0.136354E+01	163.97	0.002437
116.0	-0.830926E+00	0.601190E+00	143.11	1.051967	116.0	0.901411E+02	0.232233E+02	14.45	0.000087	116.0	0.901411E+02	0.232233E+02	14.45	0.000087
117.0	-0.482564E+00	0.938730E+00	117.21	1.114082	117.0	0.688966E+01	-0.344380E+02	-2.86	0.004757	117.0	0.688966E+01	-0.344380E+02	-2.86	0.004757
118.0	-0.311705E+02	0.102123E+01	90.17	1.042928	118.0	0.111743E+00	-0.260128E+02	-1.33	0.012493	118.0	0.111743E+00	-0.260128E+02	-1.33	0.012493
119.0	0.844842E+00	0.824660E+00	58.55	0.915136	119.0	0.120223E+00	0.174453E+02	0.81	0.014625	119.0	0.120223E+00	0.174453E+02	0.81	0.014625
120.0	0.851329E+00	0.402320E+00	25.29	0.868622	120.0	0.899245E+01	0.386914E+02	2.46	0.008101	120.0	0.899245E+01	0.386914E+02	2.46	0.008101
121.0	0.943514E+00	-0.128577E+00	-7.37	1.003602	121.0	0.257601E+01	-0.112991E+02	-2.51	0.000665	121.0	0.257601E+01	-0.112991E+02	-2.51	0.000665
122.0	0.865405E+00	-0.619103E+00	-35.58	1.132214	122.0	-0.522728E+01	-0.144634E+02	-164.53	0.002942	122.0	-0.522728E+01	-0.144634E+02	-164.53	0.002942
123.0	0.493932E+00	-0.930714E+00	-62.04	1.110198	123.0	-0.118367E+00	-0.318825E+01	-164.92	0.015027	123.0	-0.118367E+00	-0.318825E+01	-164.92	0.015027
124.0	-0.243290E+01	-0.975272E+00	-91.43	0.951747	124.0	-0.148829E+00	-0.444844E+01	-163.29	0.024147	124.0	-0.148829E+00	-0.444844E+01	-163.29	0.024147
125.0	-0.546595E+00	-0.741118E+00	-126.41	0.848023	125.0	-0.130649E+00	-0.432377E+01	-161.69	0.018939	125.0	-0.130649E+00	-0.432377E+01	-161.69	0.018939
126.0	-0.922425E+00	-0.297190E+00	-162.14	0.939189	126.0	-0.669052E+01	-0.218048E+01	-161.95	0.004952	126.0	-0.669052E+01	-0.218048E+01	-161.95	0.004952
127.0	-0.103731E+01	0.226543E+00	167.68	1.127343	127.0	0.232042E+01	0.174072E+01	36.88	0.000841	127.0	0.232042E+01	0.174072E+01	36.88	0.000841
128.0	-0.848711E+00	0.676921E+00	141.42	1.178532	128.0	0.110085E+00	0.630413E+01	29.80	0.016093	128.0	0.110085E+00	0.630413E+01	29.80	0.016093
129.0	-0.402872E+00	0.922714E+00	113.59	1.013706	129.0	0.163559E+00	0.973778E+01	30.77	0.036234	129.0	0.163559E+00	0.973778E+01	30.77	0.036234
130.0	0.174167E+00	0.893582E+00	78.97	0.828822	130.0	0.163490E+00	0.102675E+00	32.13	0.037271	130.0	0.163490E+00	0.102675E+00	32.13	0.037271
131.0	0.710824E+00	0.601074E+00	40.22	0.866560	131.0	0.107434E+00	0.689656E+01	32.70	0.016298	131.0	0.107434E+00	0.689656E+01	32.70	0.016298
132.0	0.704063E+01	0.135132E+00	7.40	1.101168	132.0	0.120300E+01	0.182366E+03	0.84	0.000154	132.0	0.120300E+01	0.182366E+03	0.84	0.000154
133.0	0.105455E+01	-0.363046E+00	-19.00	1.083844	133.0	-0.902185E+01	-0.843558E+01	-136.92	0.015255	133.0	-0.902185E+01	-0.843558E+01	-136.92	0.015255
134.0	0.738404E+00	-0.743689E+00	-45.20	1.098312	134.0	-0.115119E+00	-0.154643E+00	-136.88	0.051179	134.0	-0.115119E+00	-0.154643E+00	-136.88	0.051179
135.0	0.182148E+00	-0.893765E+00	-78.48	0.831993	135.0	-0.185371E+00	-0.180074E+00	-135.83	0.066789	135.0	-0.185371E+00	-0.180074E+00	-135.83	0.066789



CIRCULAR PP POLARIZATION KA= 35.000

CIRCULAR OP POLARIZATION KA= 35.000

THETA	REAL	IMAG	PHASE	FPCS	THETA	REAL	IMAG	PHASE	MCS
135.0	0.182148D+00	-0.893765D+00	-78.46	0.831993	135.0	-0.185371D+00	-0.160074D+00	-135.83	0.066789
136.0	-0.443832D+00	-0.771079D+00	-119.92	0.791549	136.0	-0.142262D+00	-0.161732D+00	-135.11	0.040326
137.0	-0.940038D+00	-0.416690D+00	-156.09	1.057302	137.0	-0.490196D+00	-0.422498D+00	-139.24	0.004188
138.0	-0.114162D+01	0.581762D+01	177.08	1.306684	138.0	0.631582D+00	0.912290D+00	55.30	0.012312
139.0	-0.974209D+00	0.506689D+00	152.52	1.205817	139.0	0.153560D+00	0.213356D+00	53.90	0.069734
140.0	-0.482622D+00	0.791752D+00	121.36	0.859795	140.0	0.195680D+00	0.275228D+00	54.59	0.114041
141.0	0.178869D+00	0.828096D+00	77.81	0.717730	141.0	0.168460D+00	0.242926D+00	55.26	0.087392
142.0	0.793587D+00	0.608138D+00	37.46	0.995755	142.0	0.824321D+00	0.113266D+00	53.95	0.019624
143.0	0.115329D+01	0.203460D+00	10.01	1.371473	143.0	-0.330727D+00	-0.799129D+00	-112.48	0.007480
144.0	0.112921D+01	-0.257827D+00	-12.86	1.341587	144.0	-0.137933D+00	-0.272867D+00	-116.82	0.093482
145.0	0.719438D+00	-0.631638D+00	-41.28	0.916557	145.0	-0.195325D+00	-0.391819D+00	-116.50	0.191674
146.0	0.545846D+00	-0.802686D+00	-86.11	0.647285	146.0	-0.184843D+00	-0.379825D+00	-115.95	0.178434
147.0	-0.842307D+00	-0.720103D+00	-131.73	0.931106	147.0	-0.109907D+00	-0.221315D+00	-116.41	0.061063
148.0	-0.112988D+01	-0.412572D+00	-159.94	1.446929	148.0	0.327997D+00	0.455292D+00	85.88	0.002084
149.0	-0.123225D+01	0.208743D+01	179.03	1.518883	149.0	0.114985D+00	0.335149D+00	71.07	0.125537
150.0	-0.903316D+00	0.443286D+00	153.86	1.012483	150.0	0.185869D+00	0.540121D+00	71.01	0.326278
151.0	-0.247838D+00	0.721969D+00	108.95	0.582662	151.0	0.191346D+00	0.568919D+00	71.41	0.360282
152.0	0.510194D+00	0.770367D+00	56.48	0.353763	152.0	0.129946D+00	0.383363D+00	71.28	0.163853
153.0	0.110306D+01	0.574672D+00	27.52	1.546989	153.0	0.239086D+00	2.214491D+00	41.90	0.001032
154.0	0.131355D+01	0.197573D+00	8.56	1.764494	154.0	-0.889595D+00	-0.405289D+00	-102.38	0.172173
155.0	0.105486D+01	-0.241266D+00	-12.88	1.170940	155.0	-0.164311D+00	-0.742756D+00	-102.81	0.580219
156.0	0.406654D+00	-0.603969D+00	-56.04	0.529816	156.0	-0.168442D+00	-0.845240D+00	-102.55	0.751633
157.0	-0.407600D+00	-0.775300D+00	-117.73	0.767228	157.0	-0.141901D+00	-0.637018D+00	-102.56	0.425928
158.0	-0.109635D+01	-0.701820D+00	-147.39	1.639976	158.0	-0.470938D+00	-0.141157D+00	-168.21	0.022712
159.0	-0.140344D+01	-0.403988D+00	-163.94	2.132857	159.0	0.615561D+00	0.493202D+00	82.89	0.247037
160.0	-0.120282D+01	0.252253D+00	178.80	1.447403	160.0	0.145667D+00	0.105012D+00	82.10	1.123974
161.0	-0.549571D+00	0.452829D+00	140.51	0.507083	161.0	0.176653D+00	0.129578D+00	82.24	1.710242
162.0	0.333031D+00	0.744749D+00	65.91	0.665562	162.0	0.145584D+00	0.107419D+00	82.28	1.175081
163.0	0.112844D+01	0.807355D+00	35.58	1.925199	163.0	0.650279D+00	0.378232D+00	86.16	0.167366
164.0	0.153869D+01	0.616307D+00	21.83	2.747389	164.0	-0.334608D+00	-0.618710D+00	-93.10	0.383922
165.0	0.139390D+01	0.224506D+00	9.15	1.993353	165.0	-0.116620D+00	-0.159082D+00	-94.19	2.544294
166.0	0.719516D+00	-0.253177D+00	-19.36	0.581776	166.0	-0.156123D+00	-0.214839D+00	-94.16	4.639984
167.0	-0.264695D+00	-0.673348D+00	-111.46	0.523462	167.0	-0.140943D+00	-0.196695D+00	-94.10	3.88J760
168.0	-0.121576D+01	-0.496662D+00	-143.29	2.300036	168.0	-0.706082D+00	-0.923366D+00	-94.94	0.953411
169.0	-0.178515D+01	-0.875009D+00	-153.89	3.952393	169.0	0.413201D+00	0.825315D+00	89.71	6.681162
170.0	-0.174183D+01	-0.574755D+00	-161.74	3.364329	170.0	0.969725D+00	0.279403D+00	86.34	7.813148
171.0	-0.105652D+01	-0.771731D+00	-175.82	1.122197	171.0	0.125870D+00	0.427561D+00	88.31	18.296683
172.0	0.840716D+00	0.492295D+00	80.31	0.244422	172.0	0.127918D+00	0.448616D+00	88.37	20.142007
173.0	0.133934D+01	0.990446D+00	36.48	2.744827	173.0	0.908956D+00	0.776960D+00	88.13	7.719794
174.0	0.233216D+01	0.290738D+00	29.09	7.121163	174.0	0.307108D+00	0.116285D+00	-88.49	1.353175
175.0	0.277997D+01	0.135025D+00	25.91	9.551444	175.0	-0.322987D+00	-0.716821D+00	-90.26	51.384322
176.0	0.255269D+01	0.116007D+00	24.11	8.067780	176.0	-0.815234D+00	-0.145697D+00	-90.32	212.282922
177.0	0.190160D+01	0.806721D+00	22.99	4.267693	177.0	-0.109535D+00	-0.222927D+00	-90.28	496.977399
178.0	0.101010D+01	0.414009D+00	22.29	1.918084	178.0	-0.118877D+00	-0.290574D+00	-90.23	844.927968
179.0	0.279947D+00	0.112575D+00	21.91	0.091043	179.0	-0.118356D+00	-0.337014D+00	-90.20	1135.798871
180.0	0.306716D+08	-0.2251002D+08	-39.130	0.000000	180.0	-0.116946D+00	-0.353381D+00	-90.19	1249.499388

CIRCULAR PP POLARIZATION KA= 40.000				CIRCULAR OP POLARIZATION KA= 40.000			
THETA	REAL	IMAG	PHASE	THETA	REAL	IMAG	PHASE
0.0	0.102398D+00	0.999301D+00	84.15	0.0	-0.599282D-10	0.674830D-11	173.58
1.0	0.104815D+00	0.998552D+00	84.01	1.0	0.308723D-03	0.221164D-03	35.97
2.0	0.112306D+00	0.996291D+00	83.57	2.0	0.10545D-02	0.790509D-03	36.06
3.0	0.125490D+00	0.993031D+00	82.80	3.0	0.183190D-02	0.146121D-02	38.48
4.0	0.145072D+00	0.988680D+00	81.65	4.0	0.220307D-02	0.192836D-02	41.20
5.0	0.171519D+00	0.983396D+00	80.11	5.0	0.186414D-02	0.194866D-02	45.97
6.0	0.204825D+00	0.976905D+00	78.16	6.0	0.943875D-03	0.148257D-02	56.81
7.0	0.244483D+00	0.968564D+00	75.83	7.0	-0.249091D-03	0.538783D-03	114.98
8.0	0.289645D+00	0.957379D+00	73.17	8.0	-0.118702D-02	0.480475D-03	-157.96
9.0	0.339406D+00	0.942132D+00	70.19	9.0	-0.146689D-02	-0.124773D-02	-139.65
10.0	0.393047D+00	0.921565D+00	66.90	10.0	-0.991325D-03	-0.149026D-02	-123.63
11.0	0.450131D+00	0.894563D+00	63.29	11.0	-0.575268D-05	-0.112812D-02	-90.29
12.0	0.510391D+00	0.862600D+00	59.32	12.0	0.100270D-02	-0.322696D-03	-17.84
13.0	0.573462D+00	0.818031D+00	54.97	13.0	0.754556D-02	0.57713D-03	20.50
14.0	0.638585D+00	0.767399D+00	50.23	14.0	0.136714D-02	0.117598D-02	40.70
15.0	0.704408D+00	0.707682D+00	45.14	15.0	0.568658D-03	0.119462D-02	64.54
16.0	0.768917D+00	0.636866D+00	39.72	16.0	-0.441543D-03	0.602395D-03	126.24
17.0	0.829945D+00	0.559704D+00	34.00	17.0	-0.114964D-02	-0.361004D-03	-162.57
18.0	0.884805D+00	0.469661D+00	27.96	18.0	-0.119256D-02	-0.128099D-02	-132.95
19.0	0.931201D+00	0.368362D+00	21.58	19.0	-0.542818D-03	-0.174961D-02	-107.24
20.0	0.966967D+00	0.255980D+00	14.83	20.0	0.471162D-03	-0.155449D-02	-73.14
21.0	0.980098D+00	0.134655D+00	7.68	21.0	0.132300D-02	-0.787312D-03	-30.76
22.0	0.985949D+00	0.261418D-02	0.15	22.0	0.154967D-02	0.184918D-03	6.80
23.0	0.990084D+00	-0.134022D+00	-7.71	23.0	0.987836D-03	0.881530D-03	41.75
24.0	0.962279D+00	-0.273333D+00	-15.86	24.0	-0.134427D-03	0.934247D-03	98.19
25.0	0.912754D+00	-0.411847D+00	-24.29	25.0	-0.130116D-02	0.272927D-03	168.15
26.0	0.839580D+00	-0.545832D+00	-33.03	26.0	-0.196141D-02	-0.821844D-03	-157.27
27.0	0.741764D+00	-0.671267D+00	-42.14	27.0	-0.180879D-02	-0.183387D-02	-134.61
28.0	0.619629D+00	-0.783720D+00	-51.67	28.0	-0.946644D-03	-0.224903D-02	-112.83
29.0	0.474976D+00	-0.878256D+00	-61.59	29.0	0.149533D-03	-0.180677D-02	-85.27
30.0	0.311030D+00	-0.949489D+00	-71.86	30.0	0.862116D-03	-0.642334D-03	-36.69
31.0	0.122200D+00	-0.991887D+00	-82.41	31.0	0.745134D-03	0.757906D-03	45.49
32.0	-0.560367D-01	-0.100032D+01	-93.21	32.0	-0.234326D-03	0.177793D-02	97.51
33.0	-0.247446D+00	-0.370746D+00	-104.30	33.0	-0.165385D-02	0.197144D-02	125.99
34.0	-0.434813D+00	-0.900857D+00	-115.76	34.0	-0.282424D-02	0.129428D-02	155.38
35.0	-0.609960D+00	-0.790561D+00	-127.65	35.0	-0.112461D-02	0.148644D-03	177.28
36.0	-0.763783D+00	-0.642174D+00	-139.94	36.0	-0.232076D-02	-0.795823D-03	-161.07
37.0	-0.886584D+00	-0.460387D+00	-152.56	37.0	-0.703476D-03	-0.529196D-03	-127.13
38.0	-0.968800D+00	-0.252085D+00	-165.41	38.0	0.103346D-02	-0.213231D-04	-1.18
39.0	-0.100204D+01	-0.261681D-01	-176.50	39.0	0.212713D-02	0.162771D-02	37.42
40.0	-0.980247D+00	0.206573D+00	168.10	40.0	0.213174D-02	0.329501D-02	57.10
41.0	-0.900731D+00	0.433583D+00	154.30	41.0	0.116167D-02	0.416413D-02	74.41
42.0	-0.764840D+00	0.640523D+00	140.04	42.0	-0.142206D-03	0.372504D-02	92.19
43.0	-0.578180D+00	0.813400D+00	125.41	43.0	-0.922505D-03	0.204744D-02	114.25
44.0	-0.350437D+00	0.936711D+00	110.51	44.0	-0.549090D-03	0.219520D-03	-158.21
45.0	-0.949187D-01	0.997935D+00	95.43	45.0	0.102390D-02	-0.213873D-02	-64.42

CIRCULAR PP POLARIZATION KA= 40.000

CIRCULAR OP POLARIZATION KA= 40.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
45.0	-0.943187D-01	0.997935D+00	95.43	1.004884	45.0	0.102390D-02	-0.213873D-02	-64.42	0.000006
46.0	0.172027D+00	0.967890D+00	80.12	1.005570	46.0	0.317823D-02	-0.293863D-02	-42.76	0.000019
47.0	0.317701D+00	0.902662D+00	64.44	1.001164	47.0	0.489932D-02	-0.240776D-02	-26.22	0.000030
48.0	0.663921D+00	0.748802D+00	48.29	0.995522	48.0	0.521380D-02	-0.102809D-02	-11.11	0.000028
49.0	0.848276D+00	0.523762D+00	31.69	0.993898	49.0	0.377021D-02	0.265185D-03	4.02	0.000014
50.0	0.965873D+00	0.255513D+00	14.82	0.998197	50.0	0.974874D-03	0.528300D-03	28.27	0.000001
51.0	0.100163D+01	-0.385556D-01	-2.20	1.004687	51.0	-0.211576D-02	-0.659408D-03	-162.69	0.000005
52.0	0.946602D+00	-0.333259D+00	-19.40	1.007116	52.0	-0.428617D-02	-0.289718D-02	-145.96	0.000027
53.0	0.803528D+00	-0.601566D+00	-36.92	1.002728	53.0	-0.476107D-02	-0.511592D-02	-132.94	0.000069
54.0	0.572949D+00	-0.816797D+00	-54.95	0.995428	54.0	-0.359262D-02	-0.604471D-02	-120.65	0.000089
55.0	0.283480D+00	-0.955049D+00	-73.47	0.992479	55.0	-0.162023D-02	-0.484999D-02	-108.47	0.000026
56.0	-0.396056D-01	-0.997880D+00	-92.27	0.997333	56.0	-0.123378D-03	-0.160783D-02	-94.39	0.000003
57.0	-0.362173D+00	-0.855116D+00	-111.17	1.005611	57.0	-0.601498D-04	0.264098D-02	91.30	0.000007
58.0	-0.448031D+00	-0.767426D+00	-130.16	1.006886	58.0	-0.156023D-02	0.631233D-02	103.88	0.000042
59.0	-0.863179D+00	-0.509092D+00	-149.52	1.003236	59.0	-0.376629D-02	0.797865D-02	115.22	0.000078
60.0	-0.979972D+00	-0.183276D+00	-169.41	0.993936	60.0	-0.520602D-02	0.713856D-02	126.10	0.000078
61.0	-0.980770D+00	0.169762D+00	170.18	0.994729	61.0	-0.453457D-02	0.430970D-02	137.46	0.000039
62.0	-0.860767D+00	0.506669D+00	149.52	0.997633	62.0	-0.129186D-02	0.950050D-03	143.67	0.000003
63.0	-0.629760D+00	0.781858D+00	128.85	1.007899	63.0	0.371875D-02	-0.135670D-02	-20.04	0.000016
64.0	-0.312272D+00	0.955355D+00	108.11	1.010377	64.0	0.866483D-02	-0.170218D-02	-11.12	0.000078
65.0	0.525563D-01	0.999910D+00	86.99	1.001582	65.0	0.118459D-02	-0.352277D-03	-1.76	0.000131
66.0	0.417683D+00	0.903626D+00	65.23	0.990470	66.0	0.107052D-01	0.136030D-02	7.24	0.000116
67.0	0.328236D+00	0.677633D+00	42.94	0.999529	67.0	0.696919D-02	0.173801D-02	14.98	0.000045
68.0	0.936842D+00	0.350837D+00	20.53	1.000759	68.0	0.358465D-03	-0.314896D-03	-40.99	0.000000
69.0	0.100510D+01	-0.309671D-01	-1.76	1.012216	69.0	-0.535228D-02	-0.453404D-02	-139.73	0.000049
70.0	0.972150D+00	-0.411379D+00	-24.16	1.010516	70.0	-0.854082D-02	-0.923797D-02	-132.75	0.000158
71.0	0.675422D+00	-0.731245D+00	-47.10	0.996497	71.0	-0.835786D-02	-0.119739D-01	-124.92	0.000213
72.0	0.326876D+00	-0.937518D+00	-70.78	0.995749	72.0	-0.558398D-02	-4.107135D-01	-117.53	0.000146
73.0	-0.440355D-01	-0.992146D+00	-94.86	0.991478	73.0	-0.218130D-02	-0.497098D-02	-113.69	0.000029
74.0	-0.484060D+00	-0.879742D+00	-118.82	1.008261	74.0	-0.221169D-03	6.371686D-02	93.41	0.000014
75.0	-0.800871D+00	-0.612465D+00	-142.59	1.016655	75.0	-0.711630D-03	0.122583D-01	93.34	0.000151
76.0	-0.975070D+00	-0.231482D+00	-166.65	1.005589	76.0	-0.298603D-02	0.172810D-01	99.80	0.001308
77.0	-0.973409D+00	0.198240D+00	168.47	0.986976	77.0	-0.494098D-02	0.164496D-01	106.53	0.000302
78.0	-0.793096D+00	0.548569D+00	142.87	0.993326	78.0	-0.421378D-02	0.108001D-01	111.87	0.000128
79.0	-0.457807D+00	0.809384D+00	117.24	1.000591	79.0	0.402299D-03	0.125562D-02	72.23	0.000002
80.0	-0.353266D-01	0.100876D+01	92.01	1.018094	80.0	0.796564D-02	-0.748370D-02	-43.03	0.000119
81.0	0.396824D+00	0.925978D+00	66.80	1.014904	81.0	0.154899D-01	-0.123731D-01	-38.69	0.000392
82.0	0.753265D+00	0.651428D+00	40.85	0.991768	82.0	0.189655D-01	-0.122531D-01	-32.86	0.000510
83.0	0.957565D+00	0.237572D+00	13.90	0.977551	83.0	0.156551D-01	-0.820519D-02	-27.66	0.000312
84.0	0.968752D+00	-0.229319D+00	-13.35	0.991581	84.0	0.534232D-02	-0.307397D-02	-29.92	0.000038
85.0	0.772013D+00	-0.649664D+00	-48.08	1.018094	85.0	-0.891107D-02	0.183697D-03	178.82	0.000079
86.0	0.434337D+00	-0.927243D+00	-64.44	1.023262	86.0	-0.217861D-01	-0.170218D-02	179.55	0.000475
87.0	-0.590587D-01	-0.997368D+00	-93.35	0.998230	87.0	-0.278896D-01	0.212671D-02	-175.64	0.000782
88.0	-0.516603D+00	-0.840685D+00	-121.57	0.973630	88.0	-0.241988D-01	-0.386776D-02	-170.92	0.000601
89.0	-0.661646D+00	-0.490909D+00	-150.37	0.982622	89.0	-0.116058D-01	-0.206292D-02	-169.92	0.000139
90.0	-0.100776D+01	-0.249121D-01	-178.58	1.016192	90.0	0.524418D-02	0.441892D-02	40.12	0.000047

CIRCULAR PP POLARIZATION KA= 40.000					CIRCULAR OP POLARIZATION KA= 40.000				
THETA	REAL	IMAG	PHASE	BSCS	THETA	REAL	IMAG	PHASE	BSCS
90.0	-0.100776D+01	-0.249121D+01	-178.58	1.016192	90.0	0.52418D-02	0.441692D-02	40.12	0.0000N7
91.0	-0.911984D+00	0.446300D+00	153.92	1.030898	91.0	0.198525D-01	0.136551D-01	34.52	0.000581
92.0	-0.589516D+00	0.810717D+00	126.02	1.004783	92.0	0.266841D-01	0.210937D-01	38.33	0.001157
93.0	-0.114459D+00	0.978039D+00	96.67	0.970039	93.0	0.235957D-01	0.215105D-01	42.49	0.001024
94.0	0.395378D+00	0.904317D+00	66.38	0.978114	94.0	0.127009D-01	0.123165D-01	49.32	0.000313
95.0	0.807206D+00	0.602860D+00	36.75	1.015022	95.0	-0.770280D-03	-0.523847D-02	-96.27	0.000029
96.0	0.100877D+01	0.145485D+00	8.21	1.038780	96.0	-0.110734D-01	-0.251468D-01	-113.77	6.030755
97.0	0.940816D+00	-0.353592D+00	-20.60	1.010162	97.0	-0.147166D-01	-0.386378D-01	-110.83	0.001713
98.0	0.616662D+00	-0.764580D+00	-51.11	0.964866	98.0	-0.119316D-01	-0.386301D-01	-107.23	0.001536
99.0	0.121915D+00	-0.975316D+00	-82.88	0.966104	99.0	-0.639645D-02	-0.227368D-01	-105.71	0.000558
100.0	-0.407005D+00	-0.922464D+00	-113.81	1.016594	100.0	-0.244016D-02	0.445712D-02	118.70	0.000026
101.0	-0.820443D+00	-0.612323D+00	-143.26	1.048065	101.0	-0.271915D-02	0.327993D-01	94.74	0.001083
102.0	-0.998777D+00	-0.123953D+00	-172.93	1.012920	102.0	-0.622461D-02	0.505147D-01	97.03	0.002591
103.0	-0.888524D+00	0.408236D+00	155.32	0.956132	103.0	-0.878512D-02	0.493535D-01	100.09	0.002513
104.0	-0.519985D+00	0.629912D+00	122.07	0.959138	104.0	-0.561108D-02	0.285688D-01	101.11	0.000848
105.0	-0.328352D-03	0.101161D+01	90.12	1.023355	105.0	0.530294D-02	-0.423667D-02	-38.62	0.000046
106.0	0.516724D+00	0.890185D+00	59.87	1.059379	106.0	0.208349D-01	-0.360121D-01	-59.83	0.001735
107.0	0.876123D+00	0.493077D+00	29.37	1.070702	107.0	0.337758D-01	-0.537311D-01	-37.94	0.004026
108.0	0.968523D+00	-0.641894D-01	-3.79	0.942157	108.0	0.347170D-01	-0.502944D-01	-57.38	0.003735
109.0	0.748312D+00	-0.609184D+00	-38.56	0.955278	109.0	0.189648D-01	-0.273429D-01	-55.23	0.001108
110.0	0.324653D+00	-0.965680D+00	-71.42	1.038301	110.0	-0.108922D-01	0.511708D-02	154.84	0.000145
111.0	-0.215442D+00	-0.101259D+01	-102.01	1.071750	111.0	-0.440040D-01	0.334406D-01	142.77	0.003055
112.0	-0.647274D+00	-0.726155D+00	-133.42	0.999487	112.0	-0.649554D-01	0.464820D-01	146.43	0.006377
113.0	-0.940501D+00	-0.194963D+00	-168.29	0.922553	113.0	-0.608449D-01	0.802901D-01	146.49	0.005325
114.0	-0.891315D+00	0.405954D+00	155.51	0.959241	114.0	-0.283372D-01	0.192221D-01	145.16	0.001192
115.0	-0.557415D+00	0.871971D+00	122.31	1.064287	115.0	0.228156D-01	-0.479090D-02	-11.76	0.000543
116.0	-0.275784D-01	0.103933D+01	91.52	1.080974	116.0	0.721994D-01	-0.223278D-01	-17.18	0.005711
117.0	0.509707D+00	0.845457D+00	58.92	0.974594	117.0	0.968433D-01	-0.271615D-01	-15.67	0.010116
118.0	0.802230D+00	0.354404D+00	21.93	0.900394	118.0	0.818449D-01	-0.206464D-01	-14.16	0.007123
119.0	0.958230D+00	-0.261844D+00	-15.34	0.979116	119.0	0.285826D-01	-0.968260D-02	-18.71	0.000911
120.0	0.699066D+00	-0.782924D+00	-48.24	1.101692	120.0	-0.436317D-01	-0.190242D-02	-177.42	0.001908
121.0	0.195308D+00	-0.101964D+01	-79.16	1.077803	121.0	-0.104426D+00	-0.105276D-02	-179.42	0.010906
122.0	-0.385905D+00	-0.844545D+00	-113.57	0.931343	122.0	-0.125174D+00	-0.421772D-02	-178.07	0.015686
123.0	-0.838800D+00	-0.826580D+00	-153.04	0.885506	123.0	-0.925015D-01	-0.443618D-02	-177.25	0.008576
124.0	-0.995456D+00	0.144634D+00	169.48	1.025096	124.0	-0.169651D-01	0.437948D-02	164.75	0.000277
125.0	-0.789308D+00	0.7721697D+00	137.56	1.143655	125.0	0.736619D-01	0.220342D-01	16.65	0.005912
126.0	-0.285489D+00	0.982976D+00	106.20	1.047245	126.0	0.137520D+00	0.401052D-01	16.26	0.020520
127.0	0.346237D+00	0.871400D+00	68.90	0.872792	127.0	0.144917D+00	0.453319D-01	17.37	0.023056
128.0	0.813398D+00	0.431556D+00	27.10	0.897561	128.0	0.885572D-01	0.272670D-01	17.11	0.008586
129.0	0.103736D+01	-0.166334D+00	-9.11	1.103778	129.0	-0.104704D-01	-0.137220D-01	-127.35	0.000298
130.0	0.832559D+00	-0.6591594D+00	-39.72	1.171457	130.0	-0.110350D+00	-0.630167D-01	-150.27	0.016148
131.0	0.286452D+00	-0.942427D+00	-72.54	0.976052	131.0	-0.166313D+00	-0.960769D-01	-149.99	0.036891
132.0	-0.369039D+00	-0.824596D+00	-114.11	0.816152	132.0	-0.150328D+00	-0.893190D-01	-149.24	0.030849
133.0	-0.901516D+00	-0.388263D+00	-156.70	0.864759	133.0	-0.764401D-01	-0.361900D-01	-151.85	0.005885
134.0	-0.108147D+01	0.191995D+00	169.93	1.206442	134.0	0.491587D-01	0.495355D-01	45.22	0.004870
135.0	-0.824461D+00	0.6566407D+00	140.22	1.150889	135.0	0.146310D+00	0.131133D+00	41.48	0.039192

CIRCULAR PP POLARIZATION KA= 40.000

CIRCULAR OF POLARIZATION RA= 40.000

THETA	REAL	IMAG	PHASE	MSCS	THETA	REAL	IMAG	PHASE	MSCS
135.0	-0.82e+61D+00	0.68e+07D+00	140.22	1.150889	135.0	0.14e310D+00	0.131133D+00	41.48	0.039192
136.0	-0.227830D+00	0.901192D+00	103.99	0.861800	136.0	0.18e506D+00	0.165989D+00	41.97	0.061578
137.0	-0.48085D+00	0.755326D+00	57.34	0.804857	137.0	0.139249D+00	0.125928D+00	42.12	0.035247
138.0	0.100351D+01	0.312105D+00	17.28	1.10e+85	138.0	0.303727D+01	0.154663D+01	26.98	0.001162
139.0	0.111080D+01	-0.271202D+00	-12.55	1.294980	139.0	-0.17e+43D+00	-0.124243D+00	-127.35	0.024825
140.0	0.748468D+00	-0.676958D+00	-42.36	1.045949	140.0	-0.180176D+00	-0.229036D+00	-128.19	0.084921
141.0	0.584198D+01	-0.858249D+00	-86.11	0.740004	141.0	-0.186226D+00	-0.280154D+00	-127.79	0.092354
142.0	-0.670765D+00	-0.670561D+00	-135.01	0.895879	142.0	-0.135077D+00	-0.135077D+00	-128.80	0.030045
143.0	-0.112340D+01	0.215091D+00	-169.16	1.308281	143.0	0.189741D+01	0.545277D+01	70.81	0.973333
144.0	-0.109404D+01	0.319549D+00	163.72	1.299025	144.0	0.139508D+00	0.249183D+00	60.76	0.081554
145.0	-0.582727D+00	0.7148976D+00	129.18	0.850761	145.0	0.198247D+00	0.353281D+00	60.70	0.164108
146.0	0.196788D+00	0.812146D+00	76.38	0.698307	146.0	0.167940D+00	0.300217D+00	40.78	0.118334
147.0	0.904136D+00	0.575540D+00	32.48	1.488707	147.0	0.616841D+01	0.905484D+01	55.74	0.012004
148.0	0.122030D+01	0.106392D+00	4.98	1.500450	148.0	-0.728581D+01	-0.197202D+01	-110.23	0.044168
149.0	0.992496D+00	-0.400038D+00	-21.95	1.745079	149.0	-0.174142D+00	-0.432980D+00	-111.91	0.217762
150.0	0.309771D+00	-0.735282D+00	-67.15	0.636598	150.0	-0.196660D+00	-0.491390D+00	-111.81	0.280139
151.0	-0.528624D+00	-0.763182D+00	-124.71	0.861891	151.0	-0.130167D+00	-0.315174D+00	-112.44	0.116278
152.0	-0.114262D+01	-0.475108D+00	-157.42	1.531316	152.0	-0.530386D+02	-0.457173D+01	96.62	0.021118
153.0	-0.124336D+01	0.725335D+02	179.65	1.546005	153.0	0.120770D+00	0.441410D+00	74.70	0.209428
154.0	-0.770061D+01	0.483992D+00	147.85	0.627242	154.0	0.190777D+00	0.680335D+00	74.34	0.499249
155.0	0.733946D+01	0.757209D+00	84.46	0.578753	155.0	0.173605D+00	0.6177482D+00	74.30	0.411422
156.0	0.903765D+00	0.714648D+00	38.34	1.327509	156.0	0.783665D+01	0.234015D+00	71.49	0.060904
157.0	0.133109D+01	0.374231D+00	15.70	1.911817	157.0	-0.503742D+01	-0.322298D+00	-98.62	0.112959
158.0	0.114143D+01	-0.123235D+00	-6.17	1.318061	158.0	-0.153406D+00	-0.328795D+00	-100.50	0.710499
159.0	0.408328D+00	-0.572331D+00	-54.76	0.491044	159.0	-0.185212D+00	-0.993259D+00	-100.56	1.020867
160.0	-0.549193D+00	-0.786321D+00	-124.93	0.919859	160.0	-0.132800D+00	-0.682121D+00	-101.02	0.482926
161.0	-0.127250D+01	-0.674390D+00	-152.08	2.074695	161.0	-0.224850D+01	0.369325D+01	121.33	0.001870
162.0	-0.141204D+01	0.278732D+00	-168.83	2.071536	162.0	0.941983D+01	0.879000D+01	83.88	0.781514
163.0	-0.074829D+00	0.216164D+00	164.59	0.826519	163.0	0.164640D+00	0.144083D+01	83.48	2.103114
164.0	0.106500D+00	0.674425D+00	81.03	0.466191	164.0	0.154261D+00	0.137610D+01	83.40	1.979019
165.0	0.108531D+01	0.839245D+00	37.71	1.882234	165.0	0.837603D+01	0.577673D+00	81.75	0.340722
166.0	0.158505D+01	0.660647D+00	22.58	2.961541	166.0	-0.249540D+01	-0.717776D+00	-91.99	0.515825
167.0	0.134960D+01	0.199839D+00	8.44	1.861348	167.0	-0.117199D+00	-0.196697D+01	-93.41	3.882695
168.0	0.437869D+00	-0.367310D+00	-39.99	0.826645	168.0	-0.153599D+00	-0.251803D+01	-93.50	6.323822
169.0	-0.753346D+00	-0.817331D+00	-132.67	1.234255	169.0	-0.122015D+00	-0.185840D+01	-93.76	3.468523
170.0	-0.167764D+01	-0.965028D+00	-150.04	3.745754	170.0	-0.408692D+01	0.2655357D+01	147.01	0.002374
171.0	-0.187962D+01	0.374749D+00	-158.65	4.072821	171.0	0.516251D+01	0.259522D+01	88.86	6.645020
172.0	0.120571D+01	-0.189550D+00	-171.07	1.489654	172.0	0.116154D+00	0.478212D+01	88.59	22.388649
173.0	0.119191D+00	0.492748D+00	76.40	0.257003	173.0	0.129452D+00	0.513095D+01	88.50	26.343413
174.0	0.158652D+01	0.109704D+01	34.42	3.698703	174.0	0.920496D+01	0.267849D+01	88.03	7.181707
175.0	0.262975D+01	0.140581D+01	28.13	8.891917	175.0	0.240461D+01	-0.303101D+01	-89.55	9.554929
176.0	0.287803D+01	0.136869D+01	25.43	10.356363	176.0	-0.473272D+01	-0.117015D+02	-90.23	136.927529
177.0	0.232068D+01	0.105027D+01	23.94	6.446998	177.0	-0.101413D+00	-0.217829D+02	-90.27	472.763102
178.0	0.130588D+01	0.555919D+00	23.06	2.014379	178.0	-0.131803D+00	-0.311836D+02	-90.24	972.434658
179.0	0.373550D+00	0.153960D+00	22.59	0.163688	179.0	-0.142800D+00	-0.379145D+02	-90.22	1437.527495
180.0	0.360242D+08	-0.400112D+09	-6.34	0.000000	180.0	-0.145115D+00	-0.404534D+02	-90.21	1628.420914

CIRCULAR PP POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MRC5
0.0	0.454140D+00	-0.891496D+00	-63.00	1.001030
1.0	0.451760D+00	-0.892731D+00	-63.16	1.001026
2.0	0.444197D+00	-0.894899D+00	-63.64	1.001021
3.0	0.430604D+00	-0.902351D+00	-64.50	1.000704
4.0	0.410080D+00	-0.912103D+00	-65.80	1.000059
5.0	0.381776D+00	-0.923672D+00	-67.55	0.999292
6.0	0.348373D+00	-0.937370D+00	-69.76	0.998956
7.0	0.312687D+00	-0.952708D+00	-72.38	0.999383
8.0	0.275322D+00	-0.967811D+00	-75.38	1.000431
9.0	0.235920D+00	-0.981354D+00	-78.71	1.001431
10.0	0.192571D+00	-0.992003D+00	-82.39	1.001645
11.0	0.14620156D+01	-0.998452D+00	-86.45	1.000753
12.0	0.101120D+00	-0.999500D+00	-90.92	0.999260
13.0	0.101657D+00	-0.993919D+00	-95.64	0.998209
14.0	0.193717D+00	-0.980274D+00	-121.18	0.998464
15.0	0.193700D+00	-0.956814D+00	-106.90	1.000000
16.0	0.390617D+00	-0.921527D+00	-112.97	1.001789
17.0	0.491357D+00	-0.872360D+00	-119.39	1.002478
18.0	0.590861D+00	-0.807659D+00	-126.19	1.001430
19.0	0.686917D+00	-0.726297D+00	-133.40	0.999322
20.0	0.776860D+00	-0.627815D+00	-141.05	0.997739
21.0	0.872680D+00	-0.512865D+00	-149.11	0.997073
22.0	0.924030D+00	-0.382213D+00	-157.53	0.999118
23.0	0.972460D+00	-0.237406D+00	-166.28	1.002041
24.0	0.998040D+00	-0.805485D-01	-175.39	1.002572
25.0	0.996666D+00	0.853440D-01	175.11	1.001025
26.0	0.966019D+00	0.255966D+00	165.16	0.998721
27.0	0.903648D+00	0.425612D+00	154.78	0.997774
28.0	0.806906D+00	0.587086D+00	144.03	0.999000
29.0	0.681962D+00	0.732352D+00	132.96	1.001412
30.0	0.524270D+00	0.853107D+00	121.57	1.002655
31.0	0.339121D+00	0.941485D+00	109.81	1.001398
32.0	0.132202D+00	0.990567D+00	97.60	0.998700
33.0	0.802813D-01	0.994705D+00	84.94	0.997190
34.0	0.310509D+00	0.949804D+00	71.90	0.918552
35.0	0.522267D+00	0.853757D+00	58.54	1.001685
36.0	0.709595D+00	0.707110D+00	44.90	1.003530
37.0	0.859050D+00	0.513976D+00	30.89	1.002061
38.0	0.958427D+00	0.287630D+00	16.44	0.998537
39.0	0.997904D+00	0.264394D-01	1.52	0.996511
40.0	0.970366D+00	-0.237969D+00	-13.78	0.998240
41.0	0.872555D+00	-0.496651D+00	-29.35	1.002037
42.0	0.706197D+00	-0.710815D+00	-45.19	1.003973
43.0	0.479153D+00	-0.878649D+00	-61.40	1.001613
44.0	0.206197D+00	-0.977162D+00	-78.08	0.97362
45.0	-0.1912182D-01	-0.993801D+00	-95.24	0.995961

CIRCULAR OP POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MRC5
0.0	-0.289582D-10	-0.145124D-10	-153.32	0.000000
1.0	-0.318195D-02	-0.162941D-03	-152.89	0.000000
2.0	-0.106417D-02	-0.570158D-03	-151.62	0.000001
3.0	-0.173867D-02	-0.101222D-02	-146.79	0.000004
4.0	-0.185630D-02	-0.124493D-02	-146.15	0.000005
5.0	-0.124561D-02	-0.110378D-02	-135.45	0.000003
6.0	-0.164577D-03	-0.590851D-03	-105.56	0.000000
7.0	0.439978D-03	0.109374D-03	7.42	0.000001
8.0	0.124901D-02	0.702302D-03	29.37	0.000002
9.0	0.870725D-03	0.919746D-03	46.57	0.000000
10.0	-0.375432D-04	0.659181D-03	93.26	0.000000
11.0	-0.928075D-03	0.521696D-04	176.78	0.000001
12.0	-0.128047D-02	-0.584653D-03	-155.47	0.000002
13.0	-0.910561D-03	-0.904118D-03	-135.20	0.000002
14.0	-0.720798D-04	-0.744924D-03	-95.76	0.000001
15.0	0.697530D-03	-0.971804D-04	-7.93	0.000000
16.0	0.905913D-03	0.624845D-03	34.53	0.000001
17.0	0.437413D-03	0.105427D-02	68.42	0.000001
18.0	-0.479743D-03	0.987387D-03	116.86	0.000001
19.0	-0.122703D-02	-0.366944D-03	163.35	0.000002
20.0	-0.135103D-02	-0.335351D-03	-166.06	0.000002
21.0	-0.755469D-03	-0.711520D-03	-136.72	0.000001
22.0	0.211570D-03	-0.481979D-03	-66.29	0.000000
23.0	0.966895D-03	0.283048D-03	16.32	0.000001
24.0	0.105427D-02	0.118018D-02	48.23	0.000003
25.0	0.437275D-03	0.169776D-02	75.56	0.000003
26.0	-0.462505D-03	0.152044D-02	106.84	0.000003
27.0	-0.101806D-02	0.734761D-03	142.19	0.000002
28.0	-0.784097D-03	-0.207773D-03	-165.50	0.000001
29.0	0.206235D-03	-0.721848D-03	-74.14	0.000001
30.0	0.143980D-02	-0.510900D-03	-19.54	0.000002
31.0	0.222263D-02	0.302452D-03	7.75	0.000005
32.0	0.210753D-02	0.116590D-02	28.95	0.000006
33.0	0.118481D-02	0.143918D-02	50.54	0.000003
34.0	0.451442D-04	0.789296D-03	86.73	0.000001
35.0	-0.578603D-03	-0.573929D-03	-135.23	0.000001
36.0	-0.276242D-03	-0.198621D-02	-98.00	0.000004
37.0	0.739902D-03	-0.270868D-02	-74.72	0.000008
38.0	0.175611D-02	-0.237958D-02	-51.57	0.000009
39.0	0.195923D-02	-0.123693D-02	-32.68	0.000005
40.0	0.969984D-03	-0.833621D-04	-4.91	0.000001
41.0	-0.880525D-03	0.366673D-02	157.39	0.000001
42.0	-0.270334D-03	-0.209148D-03	-175.68	0.000007
43.0	-0.356316D-02	-0.140569D-02	-158.49	0.000015
44.0	-0.306610D-02	-0.231547D-02	-142.94	0.000015
45.0	-0.159593D-02	-0.207756D-02	-127.53	0.000007

CIRCULAR PP POLARIZATION KA= 45.000

CIRCULAR OF POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
45.0	-0.912182D-01	-0.993601D+00	-95.24	0.995961	45.0	-0.159593D-02	-0.207756D-02	-127.53	0.000007
46.0	-0.356415D+00	-0.921953D+00	-112.74	0.993313	46.0	-0.121392D-03	-0.446245D-03	-105.22	0.000000
47.0	-0.650144D+00	-0.762240D+00	-130.46	1.003946	47.0	0.423278D-03	0.198252D-02	77.95	0.000004
48.0	-0.853959D+00	-0.524866D+00	-148.43	1.004522	48.0	-0.247576D-03	0.405804D-02	93.49	0.000017
49.0	-0.973716D+00	-0.227743D+00	-166.83	1.000003	49.0	-0.153866D-02	0.73243D-02	108.01	0.000025
50.0	-0.992647D+00	0.100087D+00	174.24	0.995365	50.0	-0.230534D-02	0.369839D-02	121.94	0.000019
51.0	-0.903753D+00	0.423595D+00	154.69	0.996203	51.0	-0.157773D-02	0.160799D-02	134.55	0.000005
52.0	-0.711430D+00	0.704131E+00	135.30	1.001933	52.0	0.760200D-03	-0.328195D-03	-23.35	0.000001
53.0	-0.432308D+00	0.904977D+00	115.53	1.005656	53.0	0.377942D-02	-0.104967D-02	-15.52	0.000015
54.0	-0.95085D-01	0.996919D+00	95.45	1.002889	54.0	0.596474D-02	-0.380030D-03	-3.65	0.000036
55.0	0.261106D+00	0.963323D+00	74.83	0.996167	55.0	0.608646D-02	0.843651D-03	7.89	0.000038
56.0	0.590296D+00	0.803422D+00	53.69	0.993936	56.0	0.396135D-02	0.127826D-02	17.89	0.000017
57.0	0.845415D+00	0.535234D+00	32.26	0.994866	57.0	0.616585D-03	-0.258801D-04	-2.40	0.000000
58.0	0.985656D+00	0.186575D+00	10.72	1.006328	58.0	-0.228518D-02	-0.28947D-02	-128.29	0.000014
59.0	0.984258D+00	-0.192020D+00	-11.04	1.005635	59.0	-0.343870D-02	-0.596481D-02	-119.96	0.000047
60.0	0.834647D+00	-0.546356E+00	-33.50	0.997667	60.0	-0.269742D-02	-0.739133D-02	-110.05	0.000062
61.0	0.554721D+00	-0.874644D+00	-56.16	0.992411	61.0	-0.115668D-02	-0.595006D-02	-101.00	0.000037
62.0	0.183906D+00	-0.981515D+00	-79.39	0.997193	62.0	-0.421385D-03	-0.186917D-02	-102.70	0.000054
63.0	-0.220102D+00	-0.978766D+00	-102.67	1.006427	63.0	-0.188524D-02	0.315876D-02	115.18	0.000012
64.0	-0.591124E+00	-0.811455D+00	-126.07	1.007663	64.0	-0.393671D-02	0.685614D-02	115.86	0.000063
65.0	-0.864961D+00	-0.500597D+00	-149.94	0.998750	65.0	-0.605304D-02	0.764448D-02	128.37	0.000095
66.0	-0.990518D+00	-0.956212D-01	-174.49	0.990865	66.0	-0.581122D-02	0.555622D-02	136.28	0.000065
67.0	-0.940710D+00	0.322480D+00	160.55	0.995304	67.0	-0.224579D-02	0.218370D-02	135.80	0.000010
68.0	-0.716723D+00	0.702118D+00	135.58	1.006949	68.0	0.369677D-02	-0.347132D-03	-5.36	0.000014
69.0	-0.353548D+00	0.940660D+00	110.60	1.008837	69.0	0.942057D-02	-0.763422D-03	-4.63	0.000022
70.0	0.845594D+00	-0.739869D+00	85.15	0.998939	70.0	0.120100D-01	0.496683D-03	2.37	0.000184
71.0	0.513165D+00	0.851786D+00	58.93	0.988876	71.0	0.989881D-02	0.156003D-02	8.96	0.000100
72.0	0.843062D+00	0.532525D+00	32.28	0.994337	72.0	0.387164D-02	0.429837D-03	6.34	0.000015
73.0	0.993988D+00	0.100108D+00	5.72	1.008798	73.0	-0.326586D-02	-0.346523D-02	-133.30	0.000023
74.0	0.940418D+00	-0.356787D+00	-20.77	1.011654	74.0	-0.822509D-02	-0.651961D-02	-133.99	0.000140
75.0	0.678933D+00	-0.739869D+00	-47.60	0.997557	75.0	-0.909216D-02	-0.116115D-01	-128.06	0.000217
76.0	0.245458D+00	-0.962230D+00	-75.69	0.986155	76.0	-0.636652D-02	-0.992282D-02	-122.64	0.000139
77.0	-0.240805D+00	-0.966000D+00	-103.97	0.995009	77.0	-0.250387D-02	-0.287361D-02	-131.01	0.000015
78.0	-0.673198D+00	-0.747867D+00	-131.99	1.012501	78.0	-0.213586D-02	0.704801D-02	91.73	0.000020
79.0	-0.945070D+00	-0.345492D+00	-159.92	1.012522	79.0	-0.505923D-03	0.153624D-02	92.18	0.000236
80.0	-0.985330D+00	0.147971D+00	171.46	0.993379	80.0	-0.230229D-02	0.177511D-01	97.39	0.000320
81.0	-0.779993D+00	0.612159D+00	141.87	0.983128	81.0	-0.254411D-02	0.144555D-01	101.34	0.000167
82.0	-0.375587D+00	0.926097D+00	112.08	0.998721	82.0	0.882678D-03	0.236774D-02	69.55	0.000006
83.0	0.127202D+00	0.100088D+01	82.76	1.011938	83.0	0.757829D-02	-0.833034D-02	-47.71	0.000127
84.0	0.598783D+00	0.807437D+00	53.44	1.010497	84.0	0.141421D-01	-0.145025D-01	-45.72	0.000410
85.0	0.913009D+00	0.390102D+00	23.14	0.985764	85.0	0.158660D-01	-0.139002D-01	-41.22	0.000445
86.0	0.980960D+00	-0.140410D+00	-8.15	0.981998	86.0	0.970220D-02	-0.803562D-02	-39.63	0.000159
87.0	0.777242D+00	-0.634998D+00	-39.25	1.007328	87.0	-0.327650D-02	-0.100581D-02	-162.94	0.000012
88.0	0.351169D+00	-0.948585D+00	-69.69	1.023133	88.0	-0.176347D-01	0.323702D-02	165.60	0.000321
89.0	-0.181852D+00	-0.948483D+00	-100.46	1.002474	89.0	-0.260195D-01	0.341921D-02	172.51	0.000689
90.0	-0.668795D+00	-0.727140D+00	-132.61	0.976019	90.0	-0.231786D-01	0.159356D-02	176.07	0.000540

CIRCULAR OF POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
90.0	-0.668795D+00	-0.727140D+00	-132.61	0.976019	90.0	-0.231786D-01	0.159356D-02	176.07	0.000540
91.0	-0.961717D+00	-0.289757D+00	-165.44	0.987278	91.0	-0.924015D-02	0.139846D-02	171.39	0.000087
92.0	-0.963650D+00	0.304021D+00	162.49	1.021089	92.0	0.978591D-02	0.503273D-02	27.22	0.000121
93.0	-0.663485D+00	0.763129D+00	171.00	1.022579	93.0	0.248491D-01	0.110390D-01	23.95	0.000739
94.0	-0.146690D+00	0.982139D+00	98.49	0.986116	94.0	0.286190D-01	0.146369D-01	27.35	0.001033
95.0	0.425258D+00	0.888427D+00	64.42	0.70147	95.0	0.194878D-01	0.107535D-01	28.89	0.000495
96.0	0.863744D+00	0.507973D+00	30.46	1.004090	96.0	0.244609D-02	-0.199057D-02	-39.14	0.000010
97.0	0.101623D+00	-0.296794D-01	-2.22	1.034285	97.0	-0.137637D-01	-0.190299D-01	-125.88	0.000552
98.0	0.822375D+00	-0.575900D+00	-35.00	1.007960	98.0	-0.215806D-01	-0.312719D-01	-124.61	0.001444
99.0	0.341373D+00	-0.921373D+00	-69.67	0.965483	99.0	-0.187064D-01	-0.299482D-01	-121.99	0.001247
100.0	-0.262601D+00	-0.954357D+00	-105.38	0.979757	100.0	-0.888077D-02	-0.123257D-01	-125.77	0.000231
101.0	-0.775121D+00	-0.656100D+00	-139.75	1.031279	101.0	0.105441D-02	0.152400D-01	86.05	0.000235
102.0	-0.100841D+01	-0.122843D+00	-173.06	1.032380	102.0	0.583869D-02	0.395688D-01	81.61	0.001600
103.0	-0.873617D+00	0.461373D+00	152.16	0.976071	103.0	0.508930D-02	0.469116D-01	83.81	0.002227
104.0	-0.416215D+00	0.885594D+00	115.17	0.957512	104.0	0.297100D-02	0.311803D-01	84.56	0.000981
105.0	0.195084D+00	0.987862D+00	78.83	1.013929	105.0	0.441798D-02	-0.181369D-02	-22.32	0.000023
106.0	0.730246D+00	0.719366D+00	44.57	1.059776	106.0	0.105723D-01	-0.363067D-01	-73.76	0.001430
107.0	0.994833D+00	0.170870D+00	9.84	0.999092	107.0	0.168831D-01	-0.544705D-01	-72.78	0.003252
108.0	0.859648D+00	-0.453218D+00	-27.80	0.944429	108.0	0.157234D-01	-0.461109D-01	-71.17	0.002373
109.0	0.401923D+00	-0.908498D+00	-66.14	0.986910	109.0	0.226882D-02	-0.146895D-01	81.22	0.000221
110.0	-0.210489D+00	-0.109686D+01	-101.81	1.058071	110.0	-0.202629D-01	0.2440285D-01	130.14	0.000988
111.0	-0.736562D+00	-0.697477D+00	-136.56	1.028997	111.0	-0.401577D-01	0.502684D-01	128.62	0.004140
112.0	-0.966631D+00	-0.948971D-01	-174.30	0.963668	112.0	-0.430171D-01	0.509637D-01	130.17	0.004448
113.0	-0.806835D+00	0.532335D+00	145.61	0.956055	113.0	-0.211390D-01	0.267965D-01	128.27	0.001165
114.0	-0.319415D+00	0.975172D+00	108.14	1.052987	114.0	0.192894D-01	-0.852027D-02	-23.83	0.004485
115.0	0.298870D+00	0.985438D+00	73.13	1.060412	115.0	0.586631D-01	-0.362797D-01	-31.76	0.004751
116.0	0.793873D+00	0.570075D+00	35.68	0.955220	116.0	0.730422D-01	-0.433430D-01	-30.69	0.007214
117.0	0.957496D+00	-0.967661D-01	-5.77	0.926162	117.0	0.487918D-01	-0.289474D-01	-30.71	0.003221
118.0	0.716071D+00	-0.723949D+00	-45.31	1.036860	118.0	-0.745894D-02	-0.401815D-02	-151.69	0.000072
119.0	0.166077D+00	-0.103058D+01	-80.85	1.089686	119.0	-0.687623D-01	0.167951D-01	166.27	0.005010
120.0	-0.460750D+00	-0.874589D+00	-117.78	0.977196	120.0	-0.100658D+00	0.240207D-01	166.58	0.010709
121.0	-0.892244D+00	-0.322468D+00	-160.13	0.900095	121.0	-0.605463D-01	0.184591D-01	167.09	0.006829
122.0	-0.933333D+00	0.375569D+00	158.08	1.012184	122.0	-0.128440D-01	0.874284D-02	145.71	0.000241
123.0	-0.556144D+00	0.897782D+00	121.78	1.115308	123.0	0.699500D-01	0.357300D-02	2.92	0.008906
124.0	0.794730D-01	0.100055D+01	85.46	1.007420	124.0	0.122604D+00	0.459787D-02	2.15	0.015053
125.0	0.689457D+00	0.635164D+00	42.65	0.878785	125.0	0.112097D+00	0.533436D-02	2.72	0.012594
126.0	0.990324D+00	-0.257450D-01	-1.89	0.981405	126.0	0.380932D-01	-0.272501D-02	-4.10	0.001459
127.0	0.817614D+00	-0.667721D+00	-38.76	1.137678	127.0	-0.634457D-01	-0.211377D-01	-161.57	0.004473
128.0	0.274903D+00	-0.942211D+00	-74.39	1.044283	128.0	-0.137591D+00	-0.398860D-01	-163.85	0.020519
129.0	-0.425589D+00	-0.825023D+00	-117.29	0.861789	129.0	-0.140334D+00	-0.418350D-01	-163.40	0.021444
130.0	-0.934581D+00	-0.270385D+00	-163.86	0.946550	130.0	-0.648908D-01	-0.154479D-01	-166.62	0.004449
131.0	-0.996508D+00	0.407030D+00	157.78	1.158701	131.0	0.515136D-01	0.335841D-01	33.10	0.003782
132.0	-0.566375D+00	0.875414D+00	122.90	1.087130	132.0	0.145801D+00	0.798014D-01	28.69	0.027626
133.0	0.156488D+00	0.907322D+00	60.21	1.047722	133.0	0.163483D+00	0.903410D-01	28.93	0.034888
134.0	0.164744D+00	-0.492222D+00	-31.08	0.908912	134.0	0.904507D-01	-0.462636D-01	-27.09	0.010322
135.0	0.107532D+01	-0.158717D+00	-8.40	1.181507	135.0	-0.365615D-01	-0.398755D-01	-132.52	0.003927

CIRCULAR FP POLARIZATION KA= 45.000



CIRCULAR PP POLARIZATION KA= 45.000

THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	0.107532D+01	-0.158717D+00	-8.40	1.121507	135.0	-0.365615D-01	-0.398755D-01	-132.52	0.002927					
136.0	0.787831D+00	-0.718735D+00	-82.39	1.136629	136.0	-0.148258D+00	-0.123779D+00	-140.14	0.037302					
137.0	0.852184D+00	-0.909489D+00	-84.65	0.638723	137.0	0.180853D+00	-0.150917D+00	-140.16	0.055884					
138.0	-0.676779D+00	-0.413272D+00	-136.58	0.869330	138.0	-0.112875D+00	-0.902384D-01	-141.36	0.020885					
139.0	-0.109877D+01	-0.558482D+00	-177.09	1.104620	139.0	0.206921D-01	0.299076D-01	62.59	0.002021					
140.0	-0.946663D+00	-0.546323D+00	150.01	1.194639	140.0	0.146275D+00	0.172603D+00	49.72	0.0051188					
141.0	-0.285242D+00	0.859857D+00	108.35	0.820717	141.0	0.192468D+00	0.225094D+00	49.47	0.087711					
142.0	0.543518D+00	0.730158D+00	53.34	0.828542	142.0	0.131073D+00	0.188539D+00	48.57	0.039244					
143.0	0.109457D+01	0.230572D+00	11.90	1.251244	143.0	-0.546649D-02	-0.341121D-01	-99.10	0.001194					
144.0	0.105924D+01	-0.377466D+00	-19.61	1.264459	144.0	-0.141082D+00	-0.228838D+00	-121.65	0.072271					
145.0	0.441089D+00	-0.780449D+00	-60.53	0.803625	145.0	-0.198718D+00	-0.316663D+00	-122.11	0.139745					
146.0	-0.433535D+00	-0.774815D+00	-119.24	0.787671	146.0	-0.144545D+00	-0.223914D+00	-122.84	0.071031					
147.0	0.108442D+01	-0.368723D+00	161.72	1.311920	147.0	-0.812938D-07	0.230980D-01	109.39	0.000600					
148.0	-0.114121D+01	0.221122D+00	169.03	1.351263	148.0	0.133627D+00	0.297283D+00	65.80	0.106233					
149.0	-0.556374D+00	0.687958D+00	129.00	0.781601	149.0	0.200101D+00	0.432781D+00	65.18	0.227305					
150.0	0.355544D+00	0.788882D+00	65.73	0.748817	150.0	0.153231D+00	0.321908D+00	64.55	0.127104					
151.0	0.108408D+01	-0.478063D+00	23.80	1.403768	151.0	0.196318D-01	-0.732999D-02	-20.47	0.000439					
152.0	0.120709D+01	-0.789028D-01	-3.74	1.463284	152.0	-0.124482D+00	-0.346165D+00	-107.87	0.164419					
153.0	0.637704D+00	-0.568912D+00	-42.72	0.753483	153.0	-0.197056D+00	-0.586480D+00	-108.57	0.382790					
154.0	-0.313676D+00	-0.785718D+00	-111.76	0.715746	154.0	-0.157330D+00	-0.463166D+00	-109.15	0.230113					
155.0	-0.110492D+01	-0.568339D+00	-152.78	1.543866	155.0	-0.230198D-01	-0.132553D-01	-155.45	0.001018					
156.0	-0.126922D+01	-0.526885D-01	-177.62	1.614715	156.0	0.113828D+00	0.509889D+00	77.42	0.272944					
157.0	-0.692718D+00	0.489807D+00	144.74	0.719769	157.0	0.169873D+00	0.820277D+00	76.68	0.678380					
158.0	0.308811D+00	0.774143D+00	68.25	0.694662	158.0	0.157204D+00	0.648504D+00	76.17	0.432401					
159.0	0.115637D+01	0.650286D+00	29.35	1.760065	159.0	0.366509D-01	0.399345D-01	47.46	0.002938					
160.0	0.134166D+01	0.181401D+00	7.70	1.832970	160.0	-0.101488D+00	-0.649573D+00	-98.30	0.494345					
161.0	0.730793D+00	-0.388506D+00	-28.00	0.684996	161.0	-0.178637D+00	-0.112805D+01	-99.00	1.304398					
162.0	-0.340987D+00	-0.760653D+00	-114.15	0.694864	162.0	-0.153318D+00	-0.621409D+00	-99.44	0.022008					
163.0	-0.124934D+01	-0.738766D+00	-149.49	2.102975	163.0	-0.432549D-01	-0.771646D-01	-119.27	0.007826					
164.0	-0.144080D+01	-0.320673D+00	-167.45	2.179018	164.0	0.866782D-01	6.400242E-01	85.06	1.011550					
165.0	-0.766958D+00	0.277091D+00	160.14	0.665004	165.0	0.163172D+00	0.167436D+01	84.43	2.830705					
166.0	0.408781D+00	0.746784D+00	61.37	0.727780	166.0	0.146258D+00	0.140890D+01	84.07	2.006379					
167.0	0.180272D+01	0.943472D+00	31.02	2.674074	167.0	0.500720D-01	0.339656D+00	70.27	0.022008					
168.0	0.160303D+01	0.696786D+00	47.22	2.816507	168.0	-0.481926D-01	-0.357731D+01	-92.48	2.492548					
169.0	0.437166D+00	-0.332123D+00	-8.97	0.716307	169.0	-0.142914D+00	-0.274864D+01	-92.98	7.561149					
170.0	-0.027144D+00	-0.734938D+00	-124.37	0.792856	170.0	-0.136921D+00	-0.241440D+01	-93.24	5.872242					
171.0	-0.165979D+01	-0.100334D+01	-148.85	3.761598	171.0	-0.594789D-01	-0.289162D+00	-101.62	0.087153					
172.0	0.269160D+01	0.779454D+00	156.04	4.342968	172.0	0.431633D-01	0.292318D+01	89.15	8.546851					
173.0	-0.107807D+01	-0.133530D+00	-172.51	1.120095	173.0	0.116560D+00	0.552478D+01	88.79	30.536793					
174.0	0.539181D+00	0.668500D+00	51.11	0.737609	174.0	0.127647D+00	0.541954D+01	88.65	29.387735					
175.0	0.213984D+01	0.1293324D+01	31.45	6.251383	175.0	0.782158D-01	0.999257D+00	85.52	1.004632					
176.0	0.296322D+01	0.149795D+01	26.82	11.024526	176.0	-0.302121D-02	-0.801499D+01	-90.02	64.240032					
177.0	0.269160D+01	0.124444D+01	24.41	8.793616	177.0	-0.844529D-01	-0.201788D+01	-90.23	407.191880					
178.0	0.162140D+01	0.712441D+00	23.72	3.136512	178.0	-0.135595D+00	-0.326121D+02	-90.24	1063.564215					
179.0	0.440946D+00	0.205657D+00	23.15	0.273604	179.0	-0.162687D+00	-0.419126D+02	-90.22	1756.695392					
180.0	0.190320D+06	0.953902D+09	26.62	0.000000	180.0	-0.170205D+00	-0.453586D+02	-90.21	2057.423797					

CIRCULAR OF POLARIZATION KA= 50.000

THETA	REAL	IMAG	PHASE	MRCS	MRCS	REAL	IMAG	PHASE	MRCS	
0.0	-0.8681365+00	0.4991870+00	145.96	0.995918	0.995918	0.0	0.2996290-10	0.5086180-10	59.50	0.000000
1.0	-0.8628830+00	0.5022670+00	149.80	0.996839	0.996839	1.0	0.3188760-07	0.1985980-03	18.81	0.000000
2.0	-0.8586610+00	0.5115580+00	149.22	0.996999	0.996999	2.0	0.1025770-02	0.3748750-03	20.98	0.000001
3.0	-0.8503740+00	0.5271880+00	148.21	1.001022	1.001022	3.0	0.1552710-02	0.6468050-03	22.59	0.000003
4.0	-0.8367930+00	0.5491010+00	146.73	1.003733	1.003733	4.0	0.1422780-02	0.7471880-03	27.62	0.000003
5.0	-0.8171530+00	0.5772710+00	144.75	1.009961	1.009961	5.0	0.6258180-02	0.5743760-03	42.55	0.000001
6.0	-0.7912630+00	0.6112000+00	142.32	0.999862	0.999862	6.0	-0.3973520-03	0.1673150-03	157.17	0.000000
7.0	-0.7591910+00	0.6506870+00	139.43	0.998958	0.998958	7.0	-3.1018700-02	-0.2875750-03	-164.18	0.000001
8.0	-0.7207430+00	0.6957520+00	136.13	0.999383	0.999383	8.0	-0.8627840-03	-0.5853100-03	-147.78	0.000001
9.0	-0.6751270+00	0.7398590+00	132.45	1.000423	1.000423	9.0	-0.9988630-04	-0.4472270-03	-102.58	0.000000
10.0	-0.6209860+00	0.7840070+00	128.36	1.001055	1.001055	10.0	0.7154860-03	-0.3818730-04	-3.05	0.000001
11.0	-0.5569290+00	0.8309880+00	123.83	1.000680	1.000680	11.0	0.1911760-02	0.4360950-03	23.32	0.000001
12.0	-0.4819170+00	0.8760360+00	118.82	0.999684	0.999684	12.0	0.6103760-03	0.6663000-03	47.51	0.000001
13.0	-0.3995090+00	0.9178280+00	113.33	0.999086	0.999086	13.0	-0.1576180-03	0.4881130-03	108.03	0.000000
14.0	-0.3154080+00	0.9539960+00	107.41	0.999584	0.999584	14.0	-0.7001250-03	-0.8058850-05	-179.38	0.000000
15.0	-0.1923660+00	0.9816800+00	101.09	1.000761	1.000761	15.0	-0.5992970-03	-0.4845610-05	-181.02	0.000001
16.0	-0.7643130-01	0.9977670+00	98.38	1.001382	1.001382	16.0	0.8270280-04	-0.6123370-03	-82.31	0.000000
17.0	-0.4791550-01	0.9932500+00	87.25	1.000797	1.000797	17.0	0.8507690-03	-0.2889610-03	-18.76	0.000001
18.0	-0.1793290+00	0.9836700+00	79.67	0.999373	0.999373	18.0	0.1143790-02	0.2592760-03	12.77	0.000001
19.0	0.3154080+00	0.9481560+00	71.60	0.998482	0.998482	19.0	0.7527890-03	0.6186960-03	39.42	0.000001
20.0	0.4523390+00	0.8913090+00	63.09	0.999133	0.999133	20.0	-0.1962260-04	0.4794560-03	92.34	0.000000
21.0	0.5855670+00	0.8111510+00	54.17	1.000855	1.000855	21.0	-0.5815480-03	-0.1251140-03	-167.86	0.000000
22.0	0.7092930+00	0.7063290+00	44.88	1.001997	1.001997	22.0	-0.1764450-03	-0.8165480-03	-121.30	0.000001
23.0	0.8197000+00	0.5768120+00	35.17	1.001325	1.001325	23.0	0.1792390-03	-0.1128840-02	-80.98	0.000001
24.0	0.9060200+00	0.4250500+00	25.00	0.999383	0.999383	24.0	0.9231860-03	-0.8522940-03	-42.71	0.000002
25.0	0.9678600+00	0.2468500+00	14.35	0.996101	0.996101	25.0	0.1129520-02	-0.2091130-03	-10.49	0.000001
26.0	0.9979000+00	0.5707250-01	3.27	0.998860	0.998860	26.0	0.5600540-03	0.2869920-03	26.80	0.000000
27.0	0.9927200+00	-0.1424550+00	-8.19	1.000933	1.000933	27.0	-0.4257970-03	0.2053450-03	154.23	0.000000
28.0	0.8405770+00	-0.3426660+00	-20.02	1.002106	1.002106	28.0	-0.1185370-02	-0.4613570-03	-158.73	0.000002
29.0	0.8459490+00	-0.5342410+00	-32.27	1.001044	1.001044	29.0	-0.1209330-02	-0.1254750-02	-133.94	0.000003
30.0	0.7065600+00	-0.7068860+00	-45.01	0.998886	0.998886	30.0	-0.5516260-03	-0.1562890-02	-109.44	0.000003
31.0	0.5205660+00	-0.8493480+00	-58.23	0.998128	0.998128	31.0	0.1993560-03	-0.1074540-02	-79.89	0.000001
32.0	0.3112500+00	-0.9501190+00	-71.85	0.999773	0.999773	32.0	0.3563240-03	-0.3730810-04	-5.98	0.000000
33.0	0.7312230-01	-0.9983190+00	-85.81	1.001908	1.001908	33.0	-0.3310220-03	0.8937360-03	110.32	0.000001
34.0	-0.1763140+00	-0.9853780+00	-100.14	1.002056	1.002056	34.0	-0.1447650-02	0.1130540-02	142.01	0.000003
35.0	-0.4214950-00	-0.9066450+00	-114.93	0.999667	0.999667	35.0	-0.2186050-02	0.6068450-03	164.49	0.000005
36.0	-0.6449910+00	-0.7526000+00	-130.22	0.998752	0.998752	36.0	-0.1939070-02	-0.1407420-03	-175.85	0.000004
37.0	-0.8278820+00	-0.5636700+00	-145.96	0.998446	0.998446	37.0	-0.7738530-03	-0.3567090-03	-155.25	0.000001
38.0	-0.9519500+00	-0.3086320+00	-162.04	1.001442	1.001442	38.0	0.5842790-03	0.3468380-03	30.69	0.000000
39.0	-0.1001110+01	-0.2722240-01	-176.44	1.002966	1.002966	39.0	0.1274660-02	0.1841680-02	52.17	0.000004
40.0	-0.9651500+00	0.2634410+00	163.73	1.000916	1.000916	40.0	0.9550130-03	0.2663430-02	70.27	0.000008
41.0	-0.8414720+00	0.5382020+00	147.40	0.997737	0.997737	41.0	0.8648560-04	0.2622830-02	88.11	0.000007
42.0	-0.6364300+00	0.6974700+00	129.58	1.000559	1.000559	42.0	-0.3954970-03	0.1409170-02	105.68	0.000002
43.0	-0.3654200+00	0.9312970+00	111.42	1.000848	1.000848	43.0	0.1916400-03	-0.2810260-03	-55.71	0.000000
44.0	-0.5203380-01	0.1003340+01	92.98	1.003387	1.003387	44.0	0.1693400-02	-0.1423710-07	-40.06	0.000005
45.0	0.2733440+00	0.9627330+00	74.15	1.001583	1.001583	45.0	0.3144930-02	-0.1426250-01	-24.59	0.000012

CIRCULAR OF POLARIZATION KA= 50.000

CIRCULAR PP POLARIZATION KA= 50.000

THETA	REAL	IMAG	MPCS	PHASE	THETA	REAL	IMAG	MPCS	PHASE
45.0	0.273366D+00	0.962733D+00	1.001503	74.15	45.0	0.314493D-02	-0.142625D-02	-24.39	0.000012
46.0	0.575717D+00	0.846144D+00	0.997557	54.60	46.0	0.343505D-02	-0.594711D-03	-9.82	0.000012
47.0	0.818344D+00	0.571878D+00	0.996731	34.95	47.0	0.214074D-02	0.769938D-04	2.06	0.000005
48.0	0.967342D+00	0.254666D+00	1.000681	14.75	48.0	-0.100638D-03	-0.318602D-03	-107.53	0.000000
49.0	0.997082D+00	-0.994458D-01	1.000062	-5.70	49.0	-0.200014D-02	-0.183048D-02	-137.54	0.000007
50.0	0.895868D+00	-0.446682D+00	1.002104	-26.50	50.0	-0.254235D-02	-0.349031D-02	-126.07	0.000019
51.0	0.670181D+00	-0.740262D+00	0.997131	-47.04	51.0	-0.174304D-02	-0.394871D-02	-113.82	0.000019
52.0	0.346073D+00	-0.936188D+00	0.996214	-69.71	52.0	-0.639537D-03	-0.248202D-02	-104.45	0.000007
53.0	-0.330776D-01	-0.999993D+00	1.001081	-91.89	53.0	-0.472618D-03	0.380002D-03	141.20	0.000000
54.0	-0.414166D+00	-0.913181D+00	1.004934	-114.28	54.0	-0.165092D-02	0.312245D-02	117.87	0.000012
55.0	-0.732291D+00	-0.682328D+00	1.001820	-137.02	55.0	-0.330620D-02	0.427225D-02	127.74	0.000029
56.0	-0.939798D+00	-0.335594D+00	0.995843	-160.35	56.0	-0.348428D-02	0.344908D-02	138.13	0.000037
57.0	-0.995292D+00	0.730379D-01	0.995941	-175.80	57.0	-0.217499D-02	0.163381D-04	143.09	0.000007
58.0	-0.881677D+00	0.474503D+00	1.001081	151.71	58.0	0.135359D-02	0.401187D-03	16.51	0.000002
59.0	-0.610011D+00	0.796059D+00	1.005824	127.46	59.0	0.496232D-02	0.656941D-03	7.51	0.000025
60.0	-0.221522D+00	0.973332D+00	1.000345	102.80	60.0	0.658879D-02	0.145272D-02	15.69	0.000047
61.0	-0.216035D+00	0.973321D+00	0.994026	77.49	61.0	0.531952D-02	0.233338D-02	23.58	0.000034
62.0	0.618712D+00	0.783700D+00	0.996989	51.71	62.0	0.206540D-02	0.683752D-03	18.31	0.000005
63.0	0.902612D+00	0.436569D+00	1.005301	25.81	63.0	-0.107886D-02	-0.258119D-02	-109.89	0.000010
64.0	0.100291D+01	-0.429151D-02	1.005854	-0.25	64.0	-0.237544D-02	-0.675840D-02	-109.37	0.000051
65.0	0.890850D+00	-0.450999D+00	0.997014	-26.85	65.0	-0.172507D-02	-0.810720D-02	-102.01	0.000061
66.0	0.583626D+00	-0.807466D+00	0.992621	-54.14	66.0	-0.681128D-03	-0.565471D-02	-96.67	0.000042
67.0	0.143862D+00	-0.989641D+00	1.000461	-81.73	67.0	-0.110611D-02	-0.339195D-03	-162.95	0.000031
68.0	-0.332759D+00	-0.947708D+00	1.008413	-109.31	68.0	-0.346765D-02	0.503705D-02	124.54	0.000037
69.0	-0.734491D+00	-0.680760D+00	1.002912	-137.17	69.0	-0.614819D-02	0.763119D-02	124.86	0.000096
70.0	-0.955236D+00	-0.244466D+00	0.992122	-165.78	70.0	-0.644581D-02	0.647966D-01	13.90	0.000084
71.0	-0.963249D+00	0.257611D+00	0.994212	165.03	71.0	-0.274154D-02	0.307988D-02	131.67	0.000017
72.0	-0.714625D+00	0.699210D+00	1.006755	135.82	72.0	0.398391D-02	0.444961D-03	2.12	0.000016
73.0	-0.287501D+00	0.962311D+00	1.008700	106.63	73.0	0.102238D-01	-0.546352D-03	-3.06	0.000105
74.0	0.227154D+00	0.971590D+00	0.995986	76.84	74.0	0.121272D-01	0.443313D-03	2.00	0.000147
75.0	0.688340D+00	0.718014D+00	0.989357	46.21	75.0	0.814338D-02	0.671593D-03	4.71	0.000067
76.0	0.965162D+00	0.265199D+00	1.001868	15.36	76.0	0.271398D-03	-0.182263D-02	-81.53	0.000003
77.0	0.970712D+00	-0.264461D+00	1.012301	-15.25	77.0	-0.711272D-02	-0.658856D+00	-137.19	0.000094
78.0	0.592851D+00	-0.722089D+00	1.007465	-46.18	78.0	-0.101440D-01	-0.103988D-01	-134.29	0.000211
79.0	0.205038D+00	-0.972174D+00	0.987422	-76.09	79.0	-0.600150D-02	-0.643434D-02	-130.42	0.000152
80.0	-0.349714D+00	-0.934442D+00	0.995463	-110.52	80.0	-0.325547D-02	-0.214446D-02	-146.38	0.000015
81.0	-0.799859D+00	-0.611042D+00	1.003168	-142.62	81.0	0.368457D-03	0.899102D-02	87.35	0.000071
82.0	-0.999717D+00	-0.925822D-01	1.008006	-174.71	82.0	0.101483D-02	0.163677D-01	86.45	0.000269
83.0	-0.879329D+00	0.662910D+00	0.987504	152.24	83.0	-0.271722D-04	0.165033D-01	90.09	0.000272
84.0	-0.471811D+00	0.875437D+00	0.988995	118.32	84.0	0.492259D-03	0.790558D-02	86.44	0.000063
85.0	-0.928923D-01	0.100156D+01	1.011784	84.70	85.0	0.448537D-02	-0.493991D-02	-47.76	0.000085
86.0	0.627693D+00	0.787529D+00	1.014201	51.44	86.0	0.101417D-01	-0.148289D-01	-55.63	0.000323
87.0	0.949643D+00	0.296193D+00	0.989553	17.32	87.0	0.125450D-01	-0.164782D-01	-52.67	0.000429
88.0	0.943073D+00	-0.306758D+00	0.983059	-17.96	88.0	0.742601D-02	-0.990216D-02	-53.13	0.000159
89.0	0.603138D+00	-0.803386D+00	1.009205	-53.10	89.0	-0.492863D-02	-0.806407D-04	-179.06	0.000024
90.0	0.434653D-01	-0.100891D+01	1.019786	-87.53	90.0	-0.182936D-01	0.684062D-02	159.50	0.000381

CIRCULAR OP POLARIZATION KM= 50.000

CIRCULAR PP POLARIZATION KM= 50.000

THETA	REAL	IMAG	PHASE	MCS	THETA	REAL	IMAG	PHASE	MCS
90.0	0.438653D-01	-0.100891D+01	-87.53	1.019786	90.0	-0.182936D-01	0.688062D-02	159.50	0.000381
91.0	-0.537706D+00	-0.838556D+00	-122.67	0.001304	91.0	-0.238777D-01	0.795668D-02	161.57	0.000633
92.0	-0.928858D+00	-0.389599D+00	-159.29	0.976888	92.0	-0.162773D-01	0.524730D-02	162.13	0.000292
93.0	-0.968896D+00	0.278362D+00	168.13	1.006823	93.0	0.199200D-02	0.320366D-02	58.13	0.000014
94.0	-0.631058D+00	0.791719D+00	128.56	1.020553	94.0	0.210187D-01	0.440244D-02	11.83	0.000461
95.0	-0.424997D-01	0.996487D+00	92.88	0.988793	95.0	0.293338D-01	0.679819D-02	13.04	0.000907
96.0	0.571997D+00	0.803193D+00	58.58	0.972300	96.0	0.214150D-01	0.527883D-02	13.85	0.000886
97.0	0.960688D+00	0.285539D+00	16.55	1.004377	97.0	-0.165752D-02	-0.333994D-02	-63.61	0.000014
98.0	0.953830D+00	-0.348589D+00	-50.68	1.030548	98.0	-0.182069D-01	-0.160288D-01	-138.64	0.000588
99.0	0.541376D+00	-0.838443D+00	-57.45	0.986075	99.0	-0.267055D-01	-0.239587D-01	-138.10	0.001287
100.0	-0.108509D+00	-0.977078D+00	-96.34	0.968656	100.0	-0.200222D-01	-0.184137D-01	-137.40	0.000740
101.0	-0.716676D+00	-0.700313D+00	-135.66	1.004063	101.0	-0.399811D-02	0.165176D-02	157.55	0.000019
102.0	-0.101155D+01	-0.119772D+00	-173.28	1.036778	102.0	0.105888D-01	0.263914D-01	68.14	0.000809
103.0	-0.852800D+00	0.517472D+00	148.75	0.995045	103.0	0.158456D-01	0.397348D-01	68.28	0.001834
104.0	-0.306313D+00	0.930542D+00	108.22	0.959737	104.0	0.117761D-01	0.302014D-01	66.70	0.001051
105.0	0.381379D+00	0.928863D+00	67.66	1.006752	105.0	0.481608D-02	-0.213382D-03	-2.54	0.000023
106.0	0.891036D+00	0.499962D+00	29.30	1.043906	106.0	0.140151D-02	-0.346576D-01	-87.68	0.001203
107.0	0.980791D+00	-0.167079D+00	-9.67	0.990259	107.0	0.209395D-02	-0.512193D-01	-87.66	0.002628
108.0	0.605604D+00	-0.765247D+00	-51.64	0.952358	108.0	-0.150112D-02	-0.373502D-01	-87.70	0.001397
109.0	-0.575474D-01	-0.100540D+01	-93.28	1.014137	109.0	-0.572092D-02	0.583759D-03	174.17	0.000033
110.0	-0.688968D+00	-0.759338D+00	-132.22	1.051271	110.0	-0.179026D-01	0.599641D-01	114.13	0.001918
111.0	-0.880814D+00	-0.133771D+00	-172.23	0.979891	111.0	-0.251695D-01	0.559744D-01	114.21	0.003767
112.0	-0.788851D+00	0.568711D+00	144.21	0.955718	112.0	-0.165269D-01	0.380131D-01	113.50	0.001716
113.0	-0.206979D+00	0.992654D+00	101.78	1.028203	113.0	0.943410D-02	-0.283606D-02	-16.73	0.000097
114.0	0.475301D+00	0.911489D+00	62.46	1.055690	114.0	0.392107D-01	-0.408185D-01	-46.15	0.003204
115.0	0.914663D+00	0.354215D+00	21.17	0.962131	115.0	0.507667D-01	-0.525195D-01	-45.97	0.005336
116.0	0.896703D+00	-0.396112D+00	-24.07	0.943147	116.0	0.292434D-01	-0.322044D-01	-47.76	0.001892
117.0	0.402642D+00	-0.942342D+00	-66.87	1.050505	117.0	-0.188586D-01	0.516577D-02	164.68	0.000382
118.0	-0.290698D+00	-0.985521D+00	-106.43	1.055757	118.0	-0.650740D-01	0.350363D-01	151.70	0.005462
119.0	-0.832981D+00	-0.492455D+00	-149.41	0.936369	119.0	-0.755566D-01	0.403336D-01	151.91	0.007335
120.0	-0.935848D+00	0.273314D+00	163.72	0.950512	120.0	-0.354702D-01	0.220144D-01	148.17	0.001743
121.0	-0.527886D+00	0.889506D+00	121.16	1.080500	121.0	0.361230D-01	-0.399701D-02	-6.31	0.001321
122.0	0.154809D+00	0.100879D+01	81.28	1.041622	122.0	0.940533D-01	-0.202131D-01	-12.14	0.009255
123.0	0.769807D+00	0.559331D+00	36.00	0.908454	123.0	0.955558D-01	-0.204336D-01	-12.07	0.009548
124.0	-0.966028D+00	-0.206888D+00	-12.07	0.975847	124.0	-0.315895D-01	-0.117432D-01	-23.29	0.001136
125.0	0.624094D+00	-0.850506D+00	-53.73	1.112854	125.0	-0.617901D-01	-0.545768D-02	173.95	0.003848
126.0	-0.765093D-01	-0.100028D+01	-94.37	1.006405	126.0	-0.123197D+00	-0.525805D-02	-177.56	0.015205
127.0	-0.745268D+00	-0.568576D+00	-142.66	0.878733	127.0	-0.106495D+00	-0.399596D-02	-177.87	0.011357
128.0	-0.995100D+00	0.190813D+00	169.14	1.026671	128.0	-0.152861D-01	0.772379D-02	153.19	0.000293
129.0	-0.667802D+00	0.829488D+00	128.82	1.134606	129.0	0.943335D-01	0.282415D-01	16.67	0.009695
130.0	0.608084D-01	0.970536D+00	86.41	0.945639	130.0	0.148164D+00	0.411179D-01	15.53	0.023648
131.0	0.768453D+00	0.532661D+00	34.73	0.874249	131.0	0.104502D+00	0.268394D-01	14.40	0.011641
132.0	0.102800D+01	-0.216881D+00	-11.91	1.103810	132.0	-0.137431D-01	-0.178354D-01	-127.62	0.000507
133.0	0.667326D+00	-0.824270D+00	-51.01	1.124745	133.0	-0.130009D+00	-0.684326D-01	-152.28	0.021571
134.0	-0.111514D+00	-0.924067D+00	-96.88	0.866334	134.0	-0.163840D+00	-0.841120D-01	-152.83	0.033918
135.0	-0.438614D+00	-0.4461893D+00	-151.15	0.916619	135.0	-0.870320D-01	-0.391427D-01	-155.78	0.009107

CIRCULAR POLARIZATION KA= 50.000

CIRCULAR POLARIZATION KA= 50.000

THETA	REAL	IMAG	PHASE	MRCS	THETA	REAL	IMAG	PHASE	MRCS
135.0	-0.61893D+00	-0.461893D+00	-151.15	0.916619	135.0	-0.870320D-01	-0.391827D-01	-155.78	0.009107
136.0	-0.103728D+01	0.273043D+00	165.52	1.152384	136.0	0.532842D-01	0.505173D-01	43.68	0.005392
137.0	-0.611363D+00	0.826952D+00	126.58	1.060393	137.0	0.163231D+00	0.127611E+00	37.99	0.042776
138.0	0.230287D+00	0.862078D+00	75.04	0.796211	138.0	0.165385D+00	0.176301E+00	37.38	0.043319
139.0	0.945091D+00	0.364855D+00	21.11	1.063316	139.0	0.538058D-01	0.289504E-01	28.30	0.003734
140.0	0.105446D+01	-0.348178D+00	-18.11	1.254779	140.0	-0.985260D-01	-0.113320D+00	-131.01	0.022549
141.0	0.493650D+00	-0.830296D+00	-59.27	0.933082	141.0	-0.487488D+00	-0.201170D+00	-132.98	0.075620
142.0	-0.412827D+00	-0.788756D+00	-117.77	0.786632	142.0	-0.149580D+00	-0.155164D+00	-133.93	0.046426
143.0	-0.106636D+01	-0.249066D+00	-166.85	1.199164	143.0	-0.747061D-02	0.176416D-01	112.95	0.000367
144.0	-0.102812D+01	0.432197D+00	157.12	1.235610	144.0	0.182577D+00	0.210917D+00	55.95	0.064837
145.0	-0.195689D+00	0.827739D+00	109.66	0.772588	145.0	0.196699D+00	0.281512D+00	55.06	0.117940
146.0	0.646770D+00	0.692701D+00	46.96	0.898186	146.0	0.115634D+00	0.152266D+00	52.79	0.036556
147.0	0.117019D+01	0.121309D+00	5.92	1.384055	147.0	-0.463194D-01	-0.115865D+00	-111.86	0.015178
148.0	0.906598D+00	-0.516861D+00	-28.69	1.089065	148.0	-0.177637D+00	-0.343255D+00	-117.36	0.149379
149.0	0.160507D-01	-0.814822D+00	-88.87	0.684191	149.0	-0.186824D+00	-0.390819D+00	-118.04	0.157977
150.0	-0.903844D+00	-0.587564D+00	-146.97	1.162166	150.0	-0.667881D-01	-0.396699D-01	-125.47	0.013229
151.0	-0.121617D+01	0.125015D-01	179.41	1.879222	151.0	0.099599D+00	0.278669D+00	70.33	0.087576
152.0	-0.687309D+00	0.595222D+00	139.05	0.828114	152.0	0.196688D+00	0.502623D+00	68.63	0.291314
153.0	0.334631D+00	0.789725D+00	67.04	0.735643	153.0	0.157222D+00	0.381822D+00	67.62	0.170507
154.0	0.114360D+01	0.472017D+00	22.43	1.530616	154.0	0.329335D-02	-0.512162D-01	-79.72	0.002710
155.0	0.116160D+01	-0.147902D+00	-7.26	1.371200	155.0	-0.343592D+00	-0.519806D+00	-105.44	0.290817
156.0	0.353631D+00	-0.668274D+00	-62.11	0.571645	156.0	-0.195338D+00	-0.671137D+00	-106.22	0.489878
157.0	-0.272513D+00	-0.754311D+00	-134.00	1.036935	157.0	-0.111960D+00	-0.333237D+00	-108.49	0.123467
158.0	-0.131490D+01	-0.549217D+00	-165.13	1.850911	158.0	0.477765D-01	0.323048D+00	81.59	0.106642
159.0	-0.970111D+00	0.282834D+00	163.75	1.021111	159.0	0.170766D+00	0.850344D+00	78.64	0.752211
160.0	0.882508D-01	0.733761D+00	83.14	0.546193	160.0	0.173235D+00	0.816760D+00	78.01	0.697172
161.0	0.116770D+01	0.709879D+00	32.44	1.751108	161.0	0.570279D-01	0.139410D+00	67.75	0.022687
162.0	0.134499D+01	0.222077D+00	9.24	1.912510	162.0	-0.949180D-01	-0.700333D+00	-96.90	0.328171
163.0	0.620667D+00	-0.419092D+00	-34.03	0.560866	163.0	-0.177036D+00	-0.124507D+00	-97.84	1.682751
164.0	-0.612161D+00	-0.799844D+00	-127.43	1.040092	164.0	-0.135765D+00	-0.033975D+00	-98.78	0.790563
165.0	-0.144874D+01	-0.667085D+00	-155.28	2.543861	165.0	-0.415909D-02	0.321876D+00	90.74	0.103622
166.0	-0.125237D+01	-0.929072D-01	-175.76	1.577051	166.0	0.124475D+00	0.155883D+00	85.43	2.445451
167.0	0.124368D+00	0.562056D+00	101.25	0.331930	167.0	0.163375D+00	0.195872D+00	84.97	3.481579
168.0	0.118309D+01	0.883381D+00	94.78	2.121828	168.0	0.918847D-01	0.1256106D+00	82.79	0.535459
169.0	0.168506D+01	0.643322D+00	20.90	3.253297	169.0	-0.365320D-01	-0.134928D+00	-91.55	1.821902
170.0	0.965104D+00	-0.338231D-01	-2.01	0.932570	170.0	-0.133373D+00	-0.358637D+00	-92.56	0.939203
171.0	-0.543297D+00	-0.742971D+00	-126.18	0.647178	171.0	-0.138118D+00	-0.289292D+00	-92.98	7.378882
172.0	-0.160454D+01	-0.103325D+00	-150.06	4.336414	172.0	-0.549088D-01	0.500880D-01	137.67	0.905533
173.0	-0.187987D+01	-0.704445D+00	-159.46	4.020159	173.0	0.565421D-01	0.404351D+00	89.20	16.353738
174.0	-0.584395D+00	0.119612D+00	165.83	0.355824	174.0	0.126250D+00	0.855039D+00	88.90	42.923386
175.0	0.136369D+01	0.101258D+00	36.60	7.884955	175.0	0.117895D+00	0.448535D+00	88.49	20.132392
176.0	1.281951D+01	0.152306D+00	28.39	10.263724	176.0	0.441987D-01	-0.389714D+00	-89.35	15.189669
177.0	0.298333D+01	0.143284D+00	25.65	10.953314	177.0	-0.523747D-01	-0.177105D+00	-90.17	313.665688
178.0	0.194693D+01	0.879299D+00	24.30	4.563660	178.0	-0.132266D+00	-0.333285D+00	-90.23	1110.808195
179.0	0.601754D+00	0.263292D+00	22.63	0.431431	179.0	-0.178533D+00	-0.456737D+00	-90.22	2086.121744
180.0	0.205921D+08	0.350666D+08	59.58	0.000000	180.0	-0.192873D+00	-0.503635D+00	-90.22	2536.519119

