

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331639-840

Luminaire Tested: **SA2XXRDIP-C290D1080U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331639-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D1080U840-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1080 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

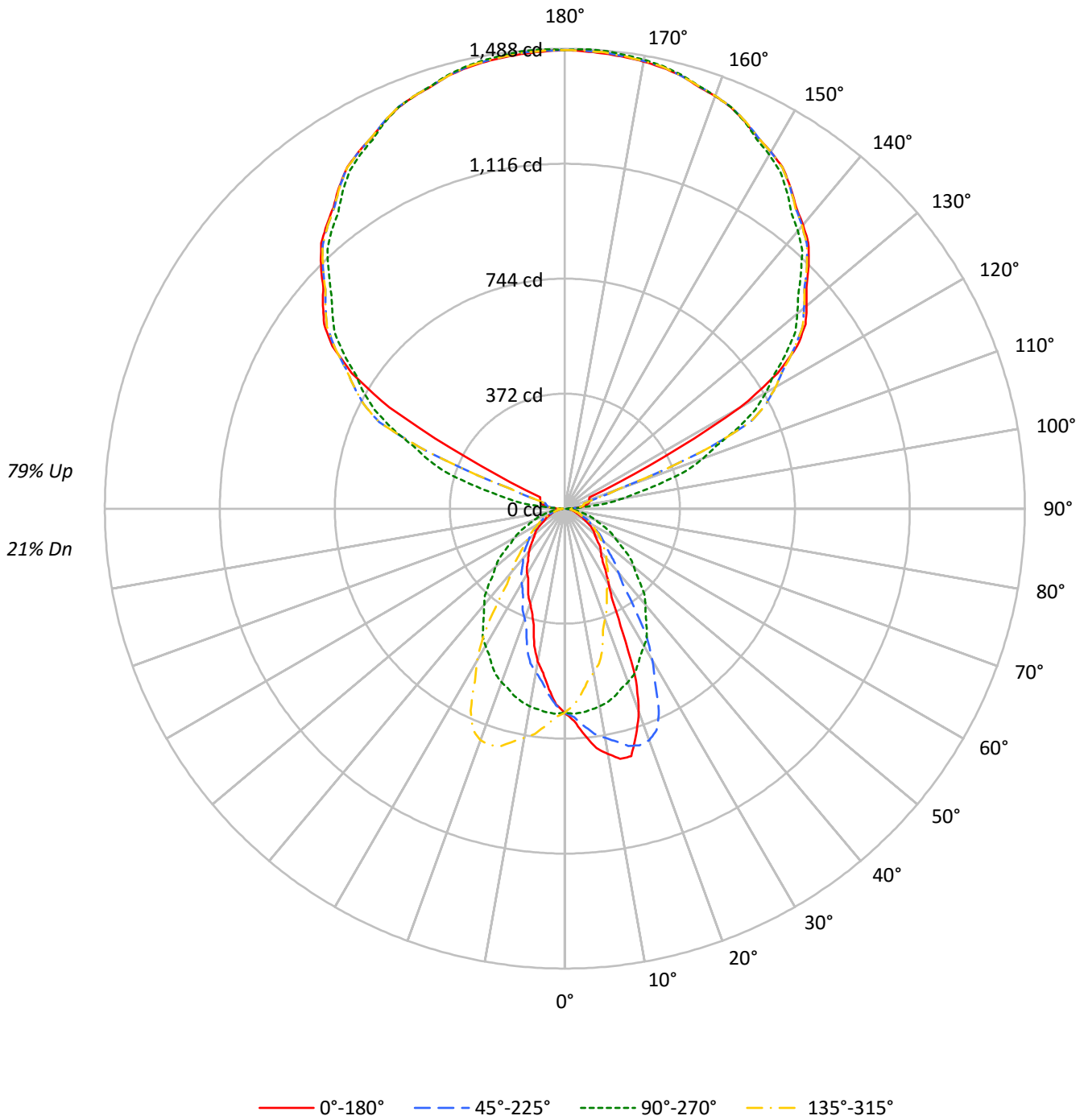
Lumens per Lamp: N/A  
Luminaire Lumens: 5492.4 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21
1	92	88	84	81	81	78	75	72	59	57	55	42	41	40	26	26	25	18
2	84	77	71	66	74	68	64	60	52	49	46	37	35	34	24	23	22	16
3	76	68	61	56	67	60	55	50	46	42	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	17	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	24	21	19	16	14	13	10
7	55	43	36	31	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	25	27	23	20	20	17	15	13	12	11	8
9	47	36	29	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7
10	44	33	26	21	39	29	24	20	23	19	16	17	14	12	12	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	10658	10658	10658	10658
5°	11904	10726	9511	10726
10°	13209	10650	8243	10650
15°	13857	10494	6496	10494
20°	12014	10263	5620	10263
25°	7878	9948	5018	9948
30°	5304	9562	4542	9562
35°	4295	9079	4096	9079
40°	3819	8553	3792	8553
45°	3457	7935	3382	7935
50°	3145	7322	3135	7322
55°	2956	6643	2919	6643
60°	2474	6022	2444	6022
65°	2086	5467	2365	5467
70°	1926	4881	2233	4881
75°	1803	4255	2059	4255
80°	1664	3505	1832	3505
85°	1538	2760	1612	2760



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	1.1
10°-20°	174.4	3.2
20°-30°	224.7	4.1
30°-40°	213.5	3.9
40°-50°	182.9	3.3
50°-60°	139.3	2.5
60°-70°	88.1	1.6
70°-80°	44.0	0.8
80°-90°	15.1	0.3
90°-100°	49.5	0.9
100°-110°	181.5	3.3
110°-120°	485.1	8.8
120°-130°	800.8	14.6
130°-140°	851.6	15.5
140°-150°	791.6	14.4
150°-160°	636.4	11.6
160°-170°	410.1	7.5
170°-180°	141.2	2.6
0°-30°	461.7	8.4
0°-40°	675.2	12.3
0°-60°	997.5	18.2
0°-90°	1144.6	20.8
90°-120°	716.1	13.0
90°-150°	3160.1	57.5
90°-180°	4348.0	79.2
0°-180°	5492.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	660	660	660	660	660	
5°	734	662	587	662	734	72
15°	829	628	389	628	829	224
25°	442	558	282	558	442	210
35°	218	461	208	461	218	139
45°	151	348	148	348	151	117
55°	105	236	104	236	105	92
65°	55	143	62	143	55	56
75°	29	68	33	68	29	31
85°	8	15	9	15	8	10
90°	29	1	29	1	29	13
95°	46	70	46	70	46	43
105°	82	326	82	326	82	85
115°	88	617	88	617	88	220
125°	918	873	918	873	918	794
135°	1115	1080	1115	1080	1115	860
145°	1272	1253	1272	1253	1272	796
155°	1381	1380	1381	1380	1381	637
165°	1450	1454	1450	1454	1450	409
175°	1478	1487	1478	1487	1478	141
180°	1484	1484	1484	1484	1484	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	687.0	687.5	688.1	686.8	686.8	685.7	683.3	681.5	676.3	675.6	675.6
5°	734.5	734.1	735.0	732.0	727.9	726.9	722.6	716.8	710.8	704.3	702.9
7.5°	781.7	781.0	779.2	778.7	775.6	768.6	761.6	754.2	744.3	734.6	729.7
10°	805.7	813.2	808.6	800.6	802.1	791.4	785.7	775.8	767.5	753.1	749.9
12.5°	829.1	832.1	830.6	826.1	824.0	816.6	808.8	800.2	785.0	772.0	760.7
15°	829.0	833.3	834.6	833.1	834.2	833.8	829.7	822.6	809.3	795.1	782.6
17.5°	767.8	770.8	778.4	783.5	789.9	803.4	810.2	812.7	810.8	802.6	794.0
20°	699.2	694.2	715.3	726.0	735.2	758.1	777.9	785.5	797.6	797.4	795.1
22.5°	601.9	603.1	623.1	635.9	662.7	685.7	708.1	736.6	760.1	775.7	784.8
25°	442.2	451.0	470.9	488.4	518.2	560.9	599.7	644.6	687.0	720.5	752.5
27.5°	332.1	332.9	348.6	364.8	382.4	417.4	466.3	519.9	580.4	630.4	687.7
30°	284.5	283.1	289.7	299.6	314.8	341.8	378.5	431.2	491.6	566.8	633.8
32.5°	250.6	250.7	255.8	263.1	275.6	293.9	319.0	361.9	418.9	492.9	571.4
35°	217.9	217.7	221.4	226.6	231.9	243.6	260.8	283.3	322.6	391.5	471.8
37.5°	194.4	195.4	197.2	200.6	206.3	212.9	223.2	238.3	266.2	307.1	374.6
40°	181.2	181.7	184.2	186.9	190.4	195.4	203.9	216.1	236.5	269.0	318.4
42.5°	169.2	169.6	171.4	173.9	176.6	181.7	188.7	199.2	215.8	241.2	281.9
45°	151.4	151.4	153.0	154.1	157.1	161.7	167.4	176.2	187.6	206.4	233.5
47.5°	134.8	134.8	135.9	137.8	139.8	143.3	149.0	156.1	164.4	178.9	202.1
50°	125.2	125.5	126.1	127.7	129.0	132.1	136.5	142.7	151.4	162.7	181.9
52.5°	117.5	117.4	118.3	119.0	119.8	122.0	125.3	130.8	138.6	148.3	164.3
55°	105.0	104.1	105.5	106.6	107.3	108.3	110.1	113.5	120.2	128.5	140.4
57.5°	89.5	89.1	90.1	91.1	93.3	95.7	97.4	99.5	102.9	108.9	120.7
60°	76.6	76.6	78.7	79.4	81.9	85.1	88.4	90.2	93.6	97.5	106.2
62.5°	65.2	65.4	66.3	67.1	68.5	72.4	77.0	81.0	84.2	88.0	93.7
65°	54.6	55.0	55.0	55.5	56.5	57.4	59.2	62.4	68.2	73.4	77.8
67.5°	46.4	46.5	46.7	47.1	47.3	48.3	49.1	50.5	51.8	56.8	62.2
70°	40.8	41.5	41.3	41.7	42.0	42.4	43.3	44.0	46.2	47.3	50.5
72.5°	35.6	36.2	36.2	36.5	37.1	37.2	37.9	38.6	39.9	40.8	42.6
75°	28.9	28.7	28.9	29.4	29.6	29.8	29.8	30.7	31.4	32.3	33.5
77.5°	22.3	22.5	22.5	22.5	22.6	23.0	22.9	23.3	24.0	24.5	25.0
80°	17.9	18.1	17.9	18.1	18.4	18.6	18.4	18.6	19.3	19.7	19.7
82.5°	13.8	13.9	14.0	14.0	14.1	14.1	14.5	14.5	15.0	14.9	15.1
85°	8.3	8.1	8.1	8.1	8.3	8.5	8.3	8.3	8.5	8.5	8.5
87.5°	8.7	8.8	8.7	8.6	8.6	8.4	8.2	8.1	7.7	7.6	7.1
90°	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8	22.6	21.5	19.6
92.5°	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2	25.5	24.9	23.9
95°	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2	43.0	41.9	40.2
97.5°	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0	57.0	56.0	52.2
100°	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0	63.1	61.2	57.2
102.5°	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9	65.4	62.9	96.8
105°	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7	68.1	65.4	130.6
107.5°	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3	89.0	91.7	169.8
110°	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2	164.0	187.8	256.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8	386.9	473.8	490.9
115°	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4	551.9	662.4	656.4
117.5°	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2	706.9	733.7	729.5
120°	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6	789.7	786.9	782.6
122.5°	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0	839.3	837.6	832.9
125°	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5	908.8	907.2	902.6
127.5°	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7	972.3	969.9	966.4
130°	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4	1012.8	1010.2	1007.5
132.5°	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0	1052.8	1050.6	1047.9
135°	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6	1109.2	1106.8	1104.7
137.5°	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1	1161.7	1159.4	1157.0
140°	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1	1195.9	1193.8	1191.1
142.5°	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4	1227.5	1225.6	1222.5
145°	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3	1271.6	1270.0	1266.0
147.5°	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5	1310.3	1309.1	1305.0
150°	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1	1333.7	1332.2	1328.5
152.5°	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6	1355.1	1353.7	1350.1
155°	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5	1384.1	1382.7	1379.9
157.5°	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0	1408.4	1406.7	1404.7
160°	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2	1422.8	1421.4	1420.0
162.5°	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4	1435.8	1434.2	1433.0
165°	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4	1449.7
167.5°	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2	1465.5	1463.9	1463.2
170°	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1	1472.4	1470.8	1470.3
172.5°	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3	1477.5	1475.9	1475.4
175°	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8	1483.2	1481.5	1481.0
177.5°	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4	1484.1	1482.8	1482.6
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	676.0	674.5	673.2	669.9	668.2	664.6	664.1	663.9	659.1	654.5	653.2
5°	699.2	695.5	690.0	683.6	676.9	670.0	665.5	661.8	652.6	643.9	638.8
7.5°	722.6	714.7	705.2	693.1	682.9	671.6	663.1	655.5	642.5	630.0	621.6
10°	740.0	727.2	714.6	697.8	684.7	671.9	659.9	649.6	635.0	618.4	606.7
12.5°	750.8	736.7	719.3	703.0	686.0	669.6	653.7	640.5	623.2	606.1	592.3
15°	765.5	750.3	729.2	705.8	684.1	662.7	644.4	627.8	605.4	584.9	567.9
17.5°	777.5	756.6	734.0	706.9	681.7	654.6	631.0	609.9	584.8	560.2	540.2
20°	781.3	760.6	734.5	707.4	677.6	645.7	620.3	597.3	570.5	543.6	520.7
22.5°	778.9	762.9	733.8	701.4	670.9	637.5	608.7	582.1	552.3	524.9	498.4
25°	762.8	757.2	729.7	694.4	659.5	620.8	587.4	558.4	524.4	495.0	466.2
27.5°	725.0	736.9	719.8	682.2	643.4	601.9	564.4	531.3	496.0	463.0	434.2
30°	688.6	715.9	708.6	673.7	630.4	589.6	547.5	512.9	475.3	441.3	412.9
32.5°	638.9	684.0	691.2	662.0	617.1	572.3	528.3	493.8	454.5	418.8	391.0
35°	559.7	627.1	658.1	639.5	594.6	546.1	500.8	460.6	421.1	385.9	358.3
37.5°	465.2	557.1	608.7	610.1	568.8	518.5	469.0	429.1	388.7	354.1	324.3
40°	403.9	503.5	570.8	585.6	550.8	496.4	446.4	405.8	366.4	332.3	298.2
42.5°	348.9	448.1	530.7	556.6	529.0	474.9	424.7	382.3	344.0	311.8	276.9
45°	282.2	368.9	459.9	506.2	490.9	440.9	387.9	347.5	311.5	283.8	250.2
47.5°	238.0	299.1	387.3	449.9	449.7	404.0	351.8	313.3	279.8	253.8	226.7
50°	212.9	266.1	340.6	411.7	417.7	379.4	329.8	291.5	260.3	233.1	211.3
52.5°	190.3	234.2	301.1	369.4	386.4	353.1	305.1	269.7	239.4	214.3	195.7
55°	160.8	194.8	245.7	309.4	335.2	311.7	269.0	236.0	211.5	190.4	174.3
57.5°	136.0	161.5	202.4	253.7	283.6	268.9	233.7	206.8	185.8	166.7	154.1
60°	120.5	141.3	175.9	218.8	251.9	241.6	211.5	186.5	168.6	152.1	140.2
62.5°	105.7	123.7	153.4	188.2	218.4	214.2	189.7	168.6	153.0	137.9	127.8
65°	85.1	98.2	121.4	148.7	173.0	175.0	157.3	143.1	129.2	117.2	108.3
67.5°	67.8	76.3	92.6	115.6	133.8	140.4	129.6	118.7	107.6	98.4	90.6
70°	57.2	64.0	75.9	94.5	111.3	118.2	111.9	103.4	93.8	86.2	79.6
72.5°	46.3	53.0	61.8	75.4	89.8	97.3	95.0	89.0	81.2	74.8	68.6
75°	34.8	37.0	42.9	52.1	63.3	69.8	71.3	68.2	61.9	57.2	53.4
77.5°	25.8	27.1	29.9	34.6	42.0	47.8	50.1	49.7	45.4	42.7	39.2
80°	20.6	21.3	22.7	24.7	30.3	36.1	37.7	37.7	34.6	33.5	30.1
82.5°	15.7	16.2	17.1	18.2	20.7	25.8	27.6	27.9	26.1	24.5	21.8
85°	9.0	8.7	9.2	9.9	10.3	11.7	14.4	14.9	14.4	12.6	11.9
87.5°	6.7	6.5	6.1	5.5	5.0	4.7	5.2	5.6	5.4	5.3	5.5
90°	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1	3.7	6.4	9.0
92.5°	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7	21.4	21.2	21.0
95°	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8	61.9	54.0	46.2
97.5°	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5	116.3	94.1	71.9
100°	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1	157.3	124.6	92.0
102.5°	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7	239.7	232.9	225.9
105°	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4	333.6	340.6	347.8
107.5°	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2	422.9	428.7	434.4
110°	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5	480.6	485.6	490.6





TEST NUMBER: P331639-840

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6	535.0	539.4	543.8
115°	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3	621.4	625.4	629.4
117.5°	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8	699.3	703.9	708.4
120°	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4	755.1	758.6	762.2
122.5°	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6	803.3	807.1	810.9
125°	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8	875.9	879.0	882.1
127.5°	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2	942.6	946.0	949.5
130°	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2	985.0	988.9	992.7
132.5°	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1	1027.4	1030.7	1033.9
135°	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9	1083.8	1087.6	1091.5
137.5°	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4	1139.1	1141.8	1144.5
140°	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4	1175.3	1177.2	1179.1
142.5°	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3	1206.0	1207.7	1209.4
145°	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8	1252.5	1252.3	1252.1
147.5°	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2	1294.2	1293.3	1292.4
150°	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6	1320.9	1319.3	1317.6
152.5°	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7	1343.9	1342.0	1340.2
155°	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5	1377.4	1375.2	1373.0
157.5°	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9	1404.1	1402.3	1400.5
160°	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1420.0	1418.5	1417.0
162.5°	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1	1433.7	1432.2	1430.8
165°	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6	1452.1	1450.7	1449.3
167.5°	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3	1465.9	1464.4	1463.0
170°	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0	1473.6	1472.2	1470.8
172.5°	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2	1478.7	1477.3	1475.9
175°	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8	1485.2	1483.5	1481.9
177.5°	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9	1486.6	1485.2	1483.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331639-840

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	650.9	649.5	647.1	643.5	641.3	637.4	634.9	636.3	636.7	636.3	636.0
5°	633.4	628.5	621.9	615.4	609.5	603.1	599.4	597.8	594.6	592.8	591.8
7.5°	612.2	603.9	594.5	583.3	573.8	563.8	558.8	556.2	549.7	546.1	543.0
10°	596.4	583.3	573.9	559.3	550.3	537.2	528.3	528.6	519.6	514.5	510.9
12.5°	579.0	564.6	549.0	535.7	523.3	512.8	502.0	497.7	488.2	483.3	473.4
15°	550.1	533.3	516.8	499.0	486.4	470.0	454.4	435.4	420.0	406.7	403.0
17.5°	518.6	497.8	481.2	460.2	438.6	411.2	393.1	382.0	372.8	365.8	360.5
20°	496.9	475.7	458.1	426.5	397.3	378.7	365.5	356.9	347.3	339.7	335.6
22.5°	474.1	452.1	428.0	392.6	369.9	355.1	343.3	333.5	326.9	321.0	317.2
25°	441.8	417.7	378.0	353.8	335.4	319.7	311.5	305.6	298.7	290.6	287.0
27.5°	407.7	369.4	340.8	322.8	305.3	295.2	287.7	278.8	272.7	269.0	265.2
30°	382.1	343.9	321.6	301.8	289.5	278.2	269.5	264.5	258.5	252.4	249.8
32.5°	353.8	323.2	301.7	285.4	272.8	263.2	256.3	248.1	243.9	240.0	234.8
35°	318.4	295.2	275.7	262.5	250.4	242.7	234.7	229.8	222.1	218.8	216.8
37.5°	288.5	268.4	253.9	239.8	230.4	221.8	216.8	209.1	205.8	201.3	196.9
40°	271.6	251.9	237.9	226.4	215.8	209.4	203.3	197.0	192.0	190.0	184.7
42.5°	254.4	238.3	224.3	211.8	204.7	197.8	190.1	185.5	180.3	176.9	173.7
45°	230.6	216.3	204.4	194.1	186.2	179.2	174.1	166.5	163.6	156.9	154.1
47.5°	209.6	196.4	185.0	175.2	167.6	163.0	155.6	149.7	144.9	140.8	137.2
50°	194.8	183.7	172.7	164.0	157.1	150.5	142.9	140.0	132.6	130.5	128.5
52.5°	181.2	170.7	160.7	152.1	145.2	138.8	132.1	128.2	123.2	121.2	119.7
55°	162.2	152.1	142.5	134.9	128.1	121.4	117.2	112.4	110.1	108.5	106.6
57.5°	143.1	134.0	126.6	119.0	112.0	106.7	102.0	99.1	96.7	94.6	92.4
60°	131.0	122.3	115.6	108.5	101.4	97.0	93.4	89.9	87.2	83.9	83.0
62.5°	118.2	110.5	104.4	97.5	91.3	87.4	83.8	80.6	77.3	72.6	71.3
65°	100.5	94.5	88.1	82.3	76.9	72.9	67.9	64.2	62.8	62.4	62.2
67.5°	84.5	78.9	73.3	67.5	62.5	58.9	56.2	55.7	54.7	54.5	53.8
70°	73.8	68.6	63.1	57.6	52.7	52.1	51.2	50.2	49.1	48.7	48.2
72.5°	64.3	58.9	53.3	49.0	46.9	46.0	45.1	44.1	43.4	42.9	42.7
75°	49.3	44.2	40.6	39.0	37.9	37.2	35.7	35.1	34.6	33.9	33.7
77.5°	35.5	32.6	31.0	30.0	28.8	28.1	27.3	26.6	26.1	26.0	25.5
80°	27.1	25.7	24.5	23.1	22.7	21.8	21.6	20.9	21.1	20.4	20.4
82.5°	21.0	19.3	18.3	17.7	17.2	16.5	16.3	16.0	16.0	15.5	15.5
85°	10.8	10.3	9.9	9.4	9.4	8.7	9.0	8.7	8.7	8.3	8.1
87.5°	5.8	6.1	6.1	6.5	6.9	7.1	7.3	7.4	7.6	7.8	7.8
90°	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8	25.0	26.3	27.1
92.5°	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2	26.8	27.4	27.9
95°	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2	45.4	46.7	47.2
97.5°	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0	58.9	59.9	60.5
100°	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0	67.0	68.9	70.0
102.5°	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9	70.4	72.8	74.4
105°	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7	73.3	75.9	77.8
107.5°	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3	83.6	81.0	80.2
110°	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2	116.3	92.4	81.0



TEST NUMBER: P331639-840

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8	212.8	125.7	82.6
115°	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4	331.0	220.6	156.7
117.5°	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2	653.5	626.8	585.2
120°	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6	795.5	798.4	783.7
122.5°	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0	842.7	844.4	842.1
125°	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5	912.1	913.8	915.0
127.5°	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7	977.1	979.6	980.9
130°	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4	1018.0	1020.7	1021.9
132.5°	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0	1057.3	1059.6	1060.6
135°	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6	1114.0	1116.3	1117.3
137.5°	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1	1166.4	1168.7	1169.5
140°	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1	1200.2	1202.3	1202.9
142.5°	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4	1231.4	1233.3	1233.8
145°	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3	1275.0	1276.7	1276.9
147.5°	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5	1312.8	1314.0	1314.1
150°	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1	1336.6	1338.0	1338.1
152.5°	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6	1358.1	1359.5	1359.4
155°	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5	1387.0	1388.5	1388.2
157.5°	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0	1411.6	1413.2	1413.1
160°	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2	1425.6	1427.0	1426.9
162.5°	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4	1439.1	1440.8	1440.5
165°	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0
167.5°	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2	1468.8	1470.6	1470.3
170°	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1	1475.7	1477.4	1477.1
172.5°	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3	1480.9	1482.6	1482.4
175°	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8	1486.5	1488.1	1487.8
177.5°	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4	1486.7	1488.1	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331639-840

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.0	634.3	633.8	634.1	633.8	634.3	634.0	636.0	636.3	636.7	636.3
5°	590.7	587.9	587.4	586.8	587.4	587.9	590.7	591.8	592.8	594.6	597.8
7.5°	539.1	538.7	537.5	535.8	537.5	538.7	539.1	543.0	546.1	549.7	556.2
10°	505.8	504.6	504.4	502.8	504.4	504.6	505.8	510.9	514.5	519.6	528.6
12.5°	466.9	459.5	458.8	454.7	458.8	459.5	466.9	473.4	483.3	488.2	497.7
15°	397.6	396.2	391.5	388.6	391.5	396.2	397.6	403.0	406.7	420.0	435.4
17.5°	357.9	353.4	351.9	351.3	351.9	353.4	357.9	360.5	365.8	372.8	382.0
20°	332.3	328.3	327.6	327.1	327.6	328.3	332.3	335.6	339.7	347.3	356.9
22.5°	314.8	310.4	308.7	307.3	308.7	310.4	314.8	317.2	321.0	326.9	333.5
25°	284.7	283.1	282.2	281.7	282.2	283.1	284.7	287.0	290.6	298.7	305.6
27.5°	261.2	257.6	256.9	255.7	256.9	257.6	261.2	265.2	269.0	272.7	278.8
30°	247.7	246.6	245.0	243.6	245.0	246.6	247.7	249.8	252.4	258.5	264.5
32.5°	232.0	231.0	229.5	228.9	229.5	231.0	232.0	234.8	240.0	243.9	248.1
35°	214.5	211.3	209.8	207.8	209.8	211.3	214.5	216.8	218.8	222.1	229.8
37.5°	196.0	194.3	192.4	193.1	192.4	194.3	196.0	196.9	201.3	205.8	209.1
40°	181.7	180.6	180.1	179.9	180.1	180.6	181.7	184.7	190.0	192.0	197.0
42.5°	170.3	167.1	165.9	165.9	165.9	167.1	170.3	173.7	176.9	180.3	185.5
45°	153.0	150.1	147.9	148.1	147.9	150.1	153.0	154.1	156.9	163.6	166.5
47.5°	135.3	135.2	133.9	134.3	133.9	135.2	135.3	137.2	140.8	144.9	149.7
50°	126.8	125.5	124.5	124.8	124.5	125.5	126.8	128.5	130.5	132.6	140.0
52.5°	118.8	117.5	116.8	117.9	116.8	117.5	118.8	119.7	121.2	123.2	128.2
55°	105.5	104.1	103.9	103.7	103.9	104.1	105.5	106.6	108.5	110.1	112.4
57.5°	90.7	89.8	88.4	87.9	88.4	89.8	90.7	92.4	94.6	96.7	99.1
60°	80.1	78.3	75.9	75.7	75.9	78.3	80.1	83.0	83.9	87.2	89.9
62.5°	70.3	70.0	69.5	69.5	69.5	70.0	70.3	71.3	72.6	77.3	80.6
65°	61.7	61.5	61.7	61.9	61.7	61.5	61.7	62.2	62.4	62.8	64.2
67.5°	53.7	53.3	52.9	53.1	52.9	53.3	53.7	53.8	54.5	54.7	55.7
70°	47.7	47.5	47.3	47.3	47.3	47.5	47.7	48.2	48.7	49.1	50.2
72.5°	41.8	41.8	41.6	41.4	41.6	41.8	41.8	42.7	42.9	43.4	44.1
75°	33.5	33.0	33.0	33.0	33.0	33.0	33.5	33.7	33.9	34.6	35.1
77.5°	25.5	25.2	25.0	24.8	25.0	25.2	25.5	25.5	26.0	26.1	26.6
80°	20.2	20.0	19.7	19.7	19.7	20.0	20.2	20.4	20.4	21.1	20.9
82.5°	15.5	15.1	15.1	14.9	15.1	15.1	15.5	15.5	15.5	16.0	16.0
85°	8.3	8.5	8.3	8.7	8.3	8.5	8.3	8.1	8.3	8.7	8.7
87.5°	7.9	7.8	8.1	8.0	8.1	7.8	7.9	7.8	7.8	7.6	7.4
90°	27.6	28.1	28.5	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8
92.5°	28.2	28.4	28.7	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2
95°	46.9	46.7	46.4	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2
97.5°	60.8	61.1	61.3	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0
100°	70.5	71.0	71.5	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0
102.5°	75.0	75.7	76.4	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9
105°	78.8	79.7	80.6	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7
107.5°	81.1	82.0	83.0	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3
110°	81.9	82.9	83.8	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	83.4	84.1	84.9	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8
115°	139.6	122.4	105.2	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4
117.5°	528.8	472.3	415.9	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2
120°	751.4	719.2	687.0	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6
122.5°	836.0	829.7	823.4	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0
125°	915.7	916.5	917.2	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5
127.5°	981.0	981.2	981.3	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7
130°	1021.7	1021.4	1021.2	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4
132.5°	1060.3	1060.1	1059.9	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0
135°	1116.8	1116.3	1115.9	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6
137.5°	1168.7	1167.9	1167.1	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1
140°	1201.6	1200.4	1199.2	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1
142.5°	1232.5	1231.3	1230.2	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4
145°	1275.8	1274.6	1273.3	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3
147.5°	1313.1	1312.1	1311.1	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5
150°	1336.9	1335.7	1334.5	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1
152.5°	1357.8	1356.2	1354.6	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6
155°	1386.2	1384.4	1382.5	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5
157.5°	1411.3	1409.4	1407.5	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0
160°	1425.3	1423.6	1422.0	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2
162.5°	1438.5	1436.4	1434.3	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4
165°	1455.3	1453.7	1452.0	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7
167.5°	1468.1	1466.0	1463.9	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2
170°	1475.0	1472.9	1470.8	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1
172.5°	1480.2	1478.0	1475.9	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3
175°	1485.4	1483.0	1480.7	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8
177.5°	1486.2	1484.5	1482.8	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.9	637.4	641.3	643.5	647.1	649.5	650.9	653.2	654.5	659.1	663.9
5°	599.4	603.1	609.5	615.4	621.9	628.5	633.4	638.8	643.9	652.6	661.8
7.5°	558.8	563.8	573.8	583.3	594.5	603.9	612.2	621.6	630.0	642.5	655.5
10°	528.3	537.2	550.3	559.3	573.9	583.3	596.4	606.7	618.4	635.0	649.6
12.5°	502.0	512.8	523.3	535.7	549.0	564.6	579.0	592.3	606.1	623.2	640.5
15°	454.4	470.0	486.4	499.0	516.8	533.3	550.1	567.9	584.9	605.4	627.8
17.5°	393.1	411.2	438.6	460.2	481.2	497.8	518.6	540.2	560.2	584.8	609.9
20°	365.5	378.7	397.3	426.5	458.1	475.7	496.9	520.7	543.6	570.5	597.3
22.5°	343.3	355.1	369.9	392.6	428.0	452.1	474.1	498.4	524.9	552.3	582.1
25°	311.5	319.7	335.4	353.8	378.0	417.7	441.8	466.2	495.0	524.4	558.4
27.5°	287.7	295.2	305.3	322.8	340.8	369.4	407.7	434.2	463.0	496.0	531.3
30°	269.5	278.2	289.5	301.8	321.6	343.9	382.1	412.9	441.3	475.3	512.9
32.5°	256.3	263.2	272.8	285.4	301.7	323.2	353.8	391.0	418.8	454.5	493.8
35°	234.7	242.7	250.4	262.5	275.7	295.2	318.4	358.3	385.9	421.1	460.6
37.5°	216.8	221.8	230.4	239.8	253.9	268.4	288.5	324.3	354.1	388.7	429.1
40°	203.3	209.4	215.8	226.4	237.9	251.9	271.6	298.2	332.3	366.4	405.8
42.5°	190.1	197.8	204.7	211.8	224.3	238.3	254.4	276.9	311.8	344.0	382.3
45°	174.1	179.2	186.2	194.1	204.4	216.3	230.6	250.2	283.8	311.5	347.5
47.5°	155.6	163.0	167.6	175.2	185.0	196.4	209.6	226.7	253.8	279.8	313.3
50°	142.9	150.5	157.1	164.0	172.7	183.7	194.8	211.3	233.1	260.3	291.5
52.5°	132.1	138.8	145.2	152.1	160.7	170.7	181.2	195.7	214.3	239.4	269.7
55°	117.2	121.4	128.1	134.9	142.5	152.1	162.2	174.3	190.4	211.5	236.0
57.5°	102.0	106.7	112.0	119.0	126.6	134.0	143.1	154.1	166.7	185.8	206.8
60°	93.4	97.0	101.4	108.5	115.6	122.3	131.0	140.2	152.1	168.6	186.5
62.5°	83.8	87.4	91.3	97.5	104.4	110.5	118.2	127.8	137.9	153.0	168.6
65°	67.9	72.9	76.9	82.3	88.1	94.5	100.5	108.3	117.2	129.2	143.1
67.5°	56.2	58.9	62.5	67.5	73.3	78.9	84.5	90.6	98.4	107.6	118.7
70°	51.2	52.1	52.7	57.6	63.1	68.6	73.8	79.6	86.2	93.8	103.4
72.5°	45.1	46.0	46.9	49.0	53.3	58.9	64.3	68.6	74.8	81.2	89.0
75°	35.7	37.2	37.9	39.0	40.6	44.2	49.3	53.4	57.2	61.9	68.2
77.5°	27.3	28.1	28.8	30.0	31.0	32.6	35.5	39.2	42.7	45.4	49.7
80°	21.6	21.8	22.7	23.1	24.5	25.7	27.1	30.1	33.5	34.6	37.7
82.5°	16.3	16.5	17.2	17.7	18.3	19.3	21.0	21.8	24.5	26.1	27.9
85°	9.0	8.7	9.4	9.4	9.9	10.3	10.8	11.9	12.6	14.4	14.9
87.5°	7.3	7.1	6.9	6.5	6.1	6.1	5.8	5.5	5.3	5.4	5.6
90°	22.6	21.5	19.6	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1
92.5°	25.5	24.9	23.9	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7
95°	43.0	41.9	40.2	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8
97.5°	57.0	56.0	52.2	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5
100°	63.1	61.2	57.2	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1
102.5°	65.4	62.9	96.8	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7
105°	68.1	65.4	130.6	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4
107.5°	89.0	91.7	169.8	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2
110°	164.0	187.8	256.8	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	386.9	473.8	490.9	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6
115°	551.9	662.4	656.4	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3
117.5°	706.9	733.7	729.5	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8
120°	789.7	786.9	782.6	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4
122.5°	839.3	837.6	832.9	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6
125°	908.8	907.2	902.6	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8
127.5°	972.3	969.9	966.4	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2
130°	1012.8	1010.2	1007.5	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2
132.5°	1052.8	1050.6	1047.9	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1
135°	1109.2	1106.8	1104.7	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9
137.5°	1161.7	1159.4	1157.0	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4
140°	1195.9	1193.8	1191.1	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4
142.5°	1227.5	1225.6	1222.5	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3
145°	1271.6	1270.0	1266.0	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8
147.5°	1310.3	1309.1	1305.0	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2
150°	1333.7	1332.2	1328.5	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6
152.5°	1355.1	1353.7	1350.1	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7
155°	1384.1	1382.7	1379.9	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5
157.5°	1408.4	1406.7	1404.7	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9
160°	1422.8	1421.4	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4
162.5°	1435.8	1434.2	1433.0	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1
165°	1452.0	1450.4	1449.7	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6
167.5°	1465.5	1463.9	1463.2	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3
170°	1472.4	1470.8	1470.3	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0
172.5°	1477.5	1475.9	1475.4	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2
175°	1483.2	1481.5	1481.0	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8
177.5°	1484.1	1482.8	1482.6	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	664.1	664.6	668.2	669.9	673.2	674.5	676.0	675.6	675.6	676.3	681.5
5°	665.5	670.0	676.9	683.6	690.0	695.5	699.2	702.9	704.3	710.8	716.8
7.5°	663.1	671.6	682.9	693.1	705.2	714.7	722.6	729.7	734.6	744.3	754.2
10°	659.9	671.9	684.7	697.8	714.6	727.2	740.0	749.9	753.1	767.5	775.8
12.5°	653.7	669.6	686.0	703.0	719.3	736.7	750.8	760.7	772.0	785.0	800.2
15°	644.4	662.7	684.1	705.8	729.2	750.3	765.5	782.6	795.1	809.3	822.6
17.5°	631.0	654.6	681.7	706.9	734.0	756.6	777.5	794.0	802.6	810.8	812.7
20°	620.3	645.7	677.6	707.4	734.5	760.6	781.3	795.1	797.4	797.6	785.5
22.5°	608.7	637.5	670.9	701.4	733.8	762.9	778.9	784.8	775.7	760.1	736.6
25°	587.4	620.8	659.5	694.4	729.7	757.2	762.8	752.5	720.5	687.0	644.6
27.5°	564.4	601.9	643.4	682.2	719.8	736.9	725.0	687.7	630.4	580.4	519.9
30°	547.5	589.6	630.4	673.7	708.6	715.9	688.6	633.8	566.8	491.6	431.2
32.5°	528.3	572.3	617.1	662.0	691.2	684.0	638.9	571.4	492.9	418.9	361.9
35°	500.8	546.1	594.6	639.5	658.1	627.1	559.7	471.8	391.5	322.6	283.3
37.5°	469.0	518.5	568.8	610.1	608.7	557.1	465.2	374.6	307.1	266.2	238.3
40°	446.4	496.4	550.8	585.6	570.8	503.5	403.9	318.4	269.0	236.5	216.1
42.5°	424.7	474.9	529.0	556.6	530.7	448.1	348.9	281.9	241.2	215.8	199.2
45°	387.9	440.9	490.9	506.2	459.9	368.9	282.2	233.5	206.4	187.6	176.2
47.5°	351.8	404.0	449.7	449.9	387.3	299.1	238.0	202.1	178.9	164.4	156.1
50°	329.8	379.4	417.7	411.7	340.6	266.1	212.9	181.9	162.7	151.4	142.7
52.5°	305.1	353.1	386.4	369.4	301.1	234.2	190.3	164.3	148.3	138.6	130.8
55°	269.0	311.7	335.2	309.4	245.7	194.8	160.8	140.4	128.5	120.2	113.5
57.5°	233.7	268.9	283.6	253.7	202.4	161.5	136.0	120.7	108.9	102.9	99.5
60°	211.5	241.6	251.9	218.8	175.9	141.3	120.5	106.2	97.5	93.6	90.2
62.5°	189.7	214.2	218.4	188.2	153.4	123.7	105.7	93.7	88.0	84.2	81.0
65°	157.3	175.0	173.0	148.7	121.4	98.2	85.1	77.8	73.4	68.2	62.4
67.5°	129.6	140.4	133.8	115.6	92.6	76.3	67.8	62.2	56.8	51.8	50.5
70°	111.9	118.2	111.3	94.5	75.9	64.0	57.2	50.5	47.3	46.2	44.0
72.5°	95.0	97.3	89.8	75.4	61.8	53.0	46.3	42.6	40.8	39.9	38.6
75°	71.3	69.8	63.3	52.1	42.9	37.0	34.8	33.5	32.3	31.4	30.7
77.5°	50.1	47.8	42.0	34.6	29.9	27.1	25.8	25.0	24.5	24.0	23.3
80°	37.7	36.1	30.3	24.7	22.7	21.3	20.6	19.7	19.7	19.3	18.6
82.5°	27.6	25.8	20.7	18.2	17.1	16.2	15.7	15.1	14.9	15.0	14.5
85°	14.4	11.7	10.3	9.9	9.2	8.7	9.0	8.5	8.5	8.5	8.3
87.5°	5.2	4.7	5.0	5.5	6.1	6.5	6.7	7.1	7.6	7.7	8.1
90°	3.7	6.4	9.0	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8
92.5°	21.4	21.2	21.0	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2
95°	61.9	54.0	46.2	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2
97.5°	116.3	94.1	71.9	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0
100°	157.3	124.6	92.0	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0
102.5°	239.7	232.9	225.9	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9
105°	333.6	340.6	347.8	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7
107.5°	422.9	428.7	434.4	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3
110°	480.6	485.6	490.6	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	535.0	539.4	543.8	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8
115°	621.4	625.4	629.4	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4
117.5°	699.3	703.9	708.4	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2
120°	755.1	758.6	762.2	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6
122.5°	803.3	807.1	810.9	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0
125°	875.9	879.0	882.1	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5
127.5°	942.6	946.0	949.5	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7
130°	985.0	988.9	992.7	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4
132.5°	1027.4	1030.7	1033.9	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0
135°	1083.8	1087.6	1091.5	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6
137.5°	1139.1	1141.8	1144.5	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1
140°	1175.3	1177.2	1179.1	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1
142.5°	1206.0	1207.7	1209.4	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4
145°	1252.5	1252.3	1252.1	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3
147.5°	1294.2	1293.3	1292.4	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5
150°	1320.9	1319.3	1317.6	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1
152.5°	1343.9	1342.0	1340.2	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6
155°	1377.4	1375.2	1373.0	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5
157.5°	1404.1	1402.3	1400.5	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0
160°	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2
162.5°	1433.7	1432.2	1430.8	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4
165°	1452.1	1450.7	1449.3	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7
167.5°	1465.9	1464.4	1463.0	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2
170°	1473.6	1472.2	1470.8	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1
172.5°	1478.7	1477.3	1475.9	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3
175°	1485.2	1483.5	1481.9	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8
177.5°	1486.6	1485.2	1483.9	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	683.3	685.7	686.8	686.8	688.1	687.5	687.0
5°	722.6	726.9	727.9	732.0	735.0	734.1	734.5
7.5°	761.6	768.6	775.6	778.7	779.2	781.0	781.7
10°	785.7	791.4	802.1	800.6	808.6	813.2	805.7
12.5°	808.8	816.6	824.0	826.1	830.6	832.1	829.1
15°	829.7	833.8	834.2	833.1	834.6	833.3	829.0
17.5°	810.2	803.4	789.9	783.5	778.4	770.8	767.8
20°	777.9	758.1	735.2	726.0	715.3	694.2	699.2
22.5°	708.1	685.7	662.7	635.9	623.1	603.1	601.9
25°	599.7	560.9	518.2	488.4	470.9	451.0	442.2
27.5°	466.3	417.4	382.4	364.8	348.6	332.9	332.1
30°	378.5	341.8	314.8	299.6	289.7	283.1	284.5
32.5°	319.0	293.9	275.6	263.1	255.8	250.7	250.6
35°	260.8	243.6	231.9	226.6	221.4	217.7	217.9
37.5°	223.2	212.9	206.3	200.6	197.2	195.4	194.4
40°	203.9	195.4	190.4	186.9	184.2	181.7	181.2
42.5°	188.7	181.7	176.6	173.9	171.4	169.6	169.2
45°	167.4	161.7	157.1	154.1	153.0	151.4	151.4
47.5°	149.0	143.3	139.8	137.8	135.9	134.8	134.8
50°	136.5	132.1	129.0	127.7	126.1	125.5	125.2
52.5°	125.3	122.0	119.8	119.0	118.3	117.4	117.5
55°	110.1	108.3	107.3	106.6	105.5	104.1	105.0
57.5°	97.4	95.7	93.3	91.1	90.1	89.1	89.5
60°	88.4	85.1	81.9	79.4	78.7	76.6	76.6
62.5°	77.0	72.4	68.5	67.1	66.3	65.4	65.2
65°	59.2	57.4	56.5	55.5	55.0	55.0	54.6
67.5°	49.1	48.3	47.3	47.1	46.7	46.5	46.4
70°	43.3	42.4	42.0	41.7	41.3	41.5	40.8
72.5°	37.9	37.2	37.1	36.5	36.2	36.2	35.6
75°	29.8	29.8	29.6	29.4	28.9	28.7	28.9
77.5°	22.9	23.0	22.6	22.5	22.5	22.5	22.3
80°	18.4	18.6	18.4	18.1	17.9	18.1	17.9
82.5°	14.5	14.1	14.1	14.0	14.0	13.9	13.8
85°	8.3	8.5	8.3	8.1	8.1	8.1	8.3
87.5°	8.2	8.4	8.6	8.6	8.7	8.8	8.7
90°	25.0	26.3	27.1	27.6	28.1	28.5	29.0
92.5°	26.8	27.4	27.9	28.2	28.4	28.7	29.0
95°	45.4	46.7	47.2	46.9	46.7	46.4	46.2
97.5°	58.9	59.9	60.5	60.8	61.1	61.3	61.6
100°	67.0	68.9	70.0	70.5	71.0	71.5	71.9
102.5°	70.4	72.8	74.4	75.0	75.7	76.4	77.1
105°	73.3	75.9	77.8	78.8	79.7	80.6	81.6
107.5°	83.6	81.0	80.2	81.1	82.0	83.0	83.9
110°	116.3	92.4	81.0	81.9	82.9	83.8	84.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.8	125.7	82.6	83.4	84.1	84.9	85.6
115°	331.0	220.6	156.7	139.6	122.4	105.2	88.1
117.5°	653.5	626.8	585.2	528.8	472.3	415.9	359.4
120°	795.5	798.4	783.7	751.4	719.2	687.0	654.9
122.5°	842.7	844.4	842.1	836.0	829.7	823.4	817.2
125°	912.1	913.8	915.0	915.7	916.5	917.2	917.9
127.5°	977.1	979.6	980.9	981.0	981.2	981.3	981.4
130°	1018.0	1020.7	1021.9	1021.7	1021.4	1021.2	1021.0
132.5°	1057.3	1059.6	1060.6	1060.3	1060.1	1059.9	1059.6
135°	1114.0	1116.3	1117.3	1116.8	1116.3	1115.9	1115.4
137.5°	1166.4	1168.7	1169.5	1168.7	1167.9	1167.1	1166.3
140°	1200.2	1202.3	1202.9	1201.6	1200.4	1199.2	1198.1
142.5°	1231.4	1233.3	1233.8	1232.5	1231.3	1230.2	1229.0
145°	1275.0	1276.7	1276.9	1275.8	1274.6	1273.3	1272.1
147.5°	1312.8	1314.0	1314.1	1313.1	1312.1	1311.1	1310.1
150°	1336.6	1338.0	1338.1	1336.9	1335.7	1334.5	1333.3
152.5°	1358.1	1359.5	1359.4	1357.8	1356.2	1354.6	1353.1
155°	1387.0	1388.5	1388.2	1386.2	1384.4	1382.5	1380.6
157.5°	1411.6	1413.2	1413.1	1411.3	1409.4	1407.5	1405.6
160°	1425.6	1427.0	1426.9	1425.3	1423.6	1422.0	1420.3
162.5°	1439.1	1440.8	1440.5	1438.5	1436.4	1434.3	1432.3
165°	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4
167.5°	1468.8	1470.6	1470.3	1468.1	1466.0	1463.9	1461.7
170°	1475.7	1477.4	1477.1	1475.0	1472.9	1470.8	1468.5
172.5°	1480.9	1482.6	1482.4	1480.2	1478.0	1475.9	1473.7
175°	1486.5	1488.1	1487.8	1485.4	1483.0	1480.7	1478.2
177.5°	1486.7	1488.1	1487.9	1486.2	1484.5	1482.8	1481.1
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6

(END OF REPORT)