

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: P331640

Luminaire Tested: **SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331640  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4984.2 lumens  
Efficiency: N/A  
Efficacy: 118.1 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

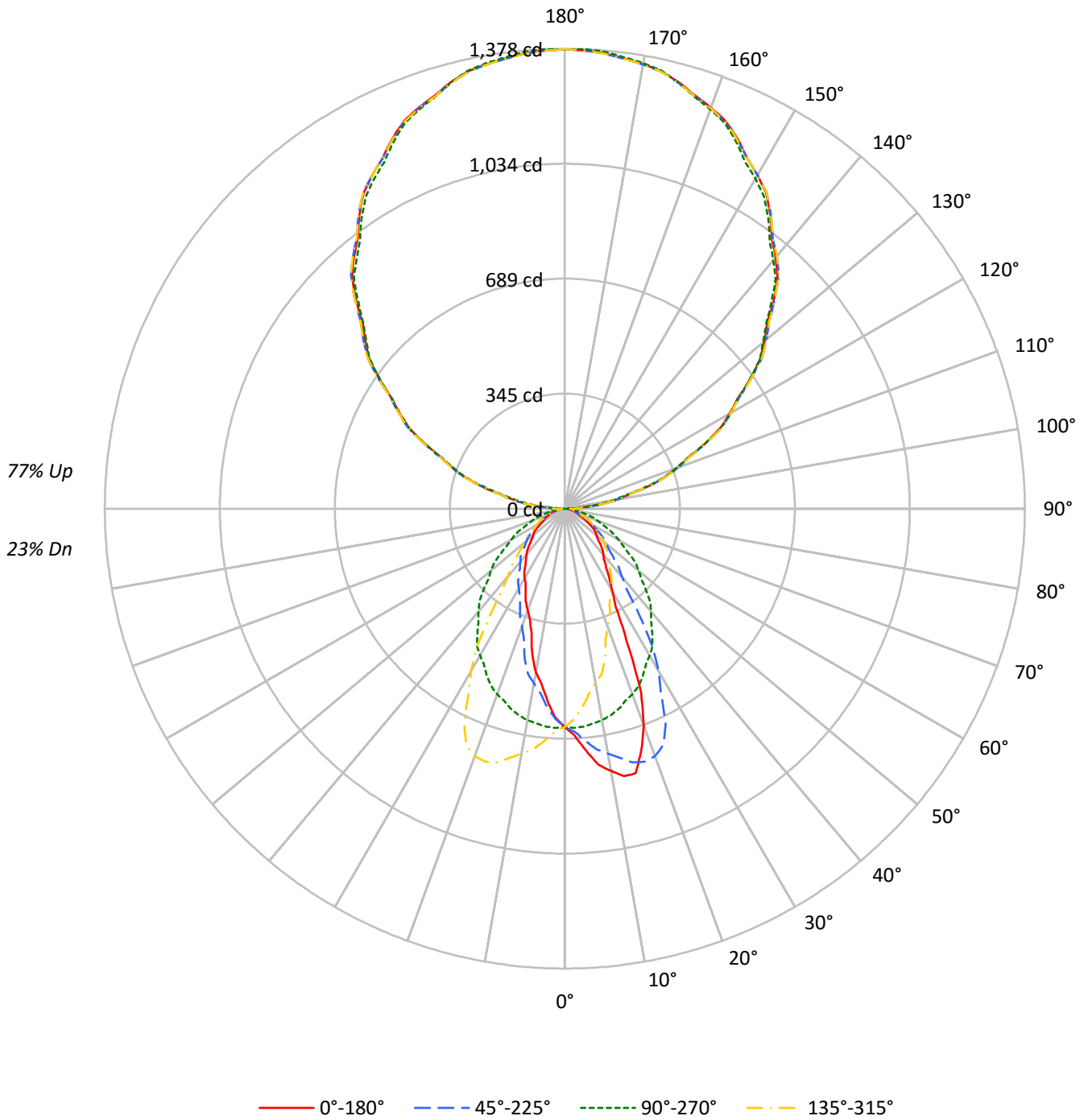
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	61	56	68	61	55	51	47	43	40	34	32	30	23	21	20	15
4	70	60	53	48	62	54	48	43	42	38	34	31	28	26	20	19	18	13
5	65	54	46	41	57	48	42	37	38	33	30	28	25	23	19	17	16	12
6	60	48	41	35	53	43	37	32	34	29	26	25	22	20	17	15	14	11
7	55	44	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10
8	51	40	32	27	45	36	29	25	28	24	20	21	18	16	14	13	11	9
9	47	36	29	24	42	32	26	22	26	21	18	19	16	14	13	12	10	8
10	44	33	26	22	39	30	24	20	24	19	16	18	15	13	12	11	9	7

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

	0°	90°	180°	270°
0°	10555	10555	10555	10555
5°	11788	10621	9418	10621
10°	13080	10547	8163	10547
15°	13722	10392	6432	10392
20°	11897	10163	5565	10163
25°	7801	9850	4969	9850
30°	5252	9469	4497	9469
35°	4254	8990	4056	8990
40°	3781	8469	3754	8469
45°	3423	7857	3350	7857
50°	3115	7252	3105	7252
55°	2928	6579	2891	6579
60°	2451	5964	2422	5964
65°	2067	5414	2342	5414
70°	1907	4834	2209	4834
75°	1784	4211	2040	4211
80°	1646	3468	1813	3468
85°	1519	2742	1593	2742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	1.2
10°-20°	172.7	3.5
20°-30°	222.5	4.5
30°-40°	211.5	4.2
40°-50°	181.1	3.6
50°-60°	137.9	2.8
60°-70°	87.2	1.7
70°-80°	43.5	0.9
80°-90°	16.8	0.3
90°-100°	87.2	1.7
100°-110°	270.9	5.4
110°-120°	463.1	9.3
120°-130°	608.9	12.2
130°-140°	683.5	13.7
140°-150°	670.1	13.4
150°-160°	562.1	11.3
160°-170°	372.8	7.5
170°-180°	130.3	2.6
0°-30°	457.2	9.2
0°-40°	668.6	13.4
0°-60°	987.7	19.8
0°-90°	1135.3	22.8
90°-120°	821.2	16.5
90°-150°	2783.7	55.9
90°-180°	3849.0	77.2
0°-180°	4984.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	654	654	654	654	654	
5°	727	655	581	655	727	72
15°	821	622	385	622	821	221
25°	438	553	279	553	438	208
35°	216	456	206	456	216	138
45°	150	344	147	344	150	116
55°	104	234	103	234	104	91
65°	54	142	61	142	54	55
75°	29	68	33	68	29	30
85°	8	15	9	15	8	10
90°	40	1	40	1	40	17
95°	72	60	72	60	72	80
105°	258	250	258	250	258	271
115°	465	465	465	465	465	459
125°	678	676	678	676	678	605
135°	885	875	885	875	885	681
145°	1073	1062	1073	1062	1073	670
155°	1223	1214	1223	1214	1223	563
165°	1322	1321	1322	1321	1322	373
175°	1370	1374	1370	1374	1370	130
180°	1376	1376	1376	1376	1376	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	680.3	680.8	681.4	680.1	680.1	679.0	676.6	674.8	669.7	669.0	669.0
5°	727.3	726.9	727.8	724.8	720.8	719.8	715.5	709.8	703.9	697.4	696.0
7.5°	774.1	773.4	771.6	771.1	768.0	761.1	754.2	746.8	737.0	727.4	722.6
10°	797.8	805.3	800.7	792.8	794.3	783.7	778.0	768.2	760.0	745.7	742.6
12.5°	821.0	824.0	822.5	818.0	816.0	808.6	800.9	792.4	777.3	764.5	753.3
15°	820.9	825.2	826.4	825.0	826.1	825.7	821.6	814.6	801.4	787.3	775.0
17.5°	760.3	763.3	770.8	775.8	782.2	795.6	802.3	804.8	802.9	794.8	786.2
20°	692.4	687.4	708.3	718.9	728.0	750.7	770.3	777.8	789.8	789.6	787.3
22.5°	596.0	597.2	617.0	629.7	656.2	679.0	701.2	729.4	752.7	768.1	777.1
25°	437.9	446.6	466.3	483.6	513.1	555.4	593.8	638.3	680.3	713.5	745.1
27.5°	328.9	329.6	345.2	361.2	378.7	413.3	461.7	514.8	574.7	624.2	681.0
30°	281.7	280.3	286.9	296.7	311.7	338.5	374.8	427.0	486.8	561.3	627.6
32.5°	248.2	248.3	253.3	260.5	272.9	291.0	315.9	358.4	414.8	488.1	565.8
35°	215.8	215.6	219.2	224.4	229.6	241.2	258.3	280.5	319.4	387.7	467.2
37.5°	192.5	193.5	195.3	198.6	204.3	210.8	221.0	236.0	263.6	304.1	370.9
40°	179.4	179.9	182.4	185.1	188.5	193.5	201.9	214.0	234.2	266.4	315.3
42.5°	167.5	167.9	169.7	172.2	174.9	179.9	186.9	197.3	213.7	238.8	279.1
45°	149.9	149.9	151.5	152.6	155.6	160.1	165.8	174.5	185.8	204.4	231.2
47.5°	133.5	133.5	134.6	136.5	138.4	141.9	147.5	154.6	162.8	177.2	200.1
50°	124.0	124.3	124.9	126.5	127.7	130.8	135.2	141.3	149.9	161.1	180.1
52.5°	116.4	116.3	117.1	117.8	118.6	120.8	124.1	129.5	137.2	146.9	162.7
55°	104.0	103.1	104.5	105.6	106.3	107.2	109.0	112.4	119.0	127.2	139.0
57.5°	88.6	88.2	89.2	90.2	92.4	94.8	96.4	98.5	101.9	107.8	119.5
60°	75.9	75.9	77.9	78.6	81.1	84.3	87.5	89.3	92.7	96.5	105.2
62.5°	64.6	64.8	65.7	66.4	67.8	71.7	76.2	80.2	83.4	87.1	92.8
65°	54.1	54.5	54.5	55.0	55.9	56.8	58.6	61.8	67.5	72.7	77.0
67.5°	45.9	46.0	46.2	46.6	46.8	47.8	48.6	50.0	51.3	56.2	61.6
70°	40.4	41.1	40.9	41.3	41.6	42.0	42.9	43.6	45.7	46.8	50.0
72.5°	35.3	35.8	35.8	36.1	36.7	36.8	37.5	38.2	39.5	40.4	42.2
75°	28.6	28.4	28.6	29.1	29.3	29.5	29.5	30.4	31.1	32.0	33.2
77.5°	22.1	22.3	22.3	22.3	22.4	22.8	22.7	23.1	23.8	24.3	24.8
80°	17.7	17.9	17.7	17.9	18.2	18.4	18.2	18.4	19.1	19.5	19.5
82.5°	13.7	13.8	13.9	13.9	14.0	14.0	14.4	14.4	14.9	14.8	15.0
85°	8.2	8.0	8.0	8.0	8.2	8.4	8.2	8.2	8.4	8.4	8.4
87.5°	10.8	10.9	10.9	10.8	10.8	10.8	10.9	11.2	11.1	11.4	10.1
90°	39.5	39.2	39.0	38.7	38.5	38.6	39.1	39.6	40.1	40.7	35.0
92.5°	37.6	37.6	37.5	37.5	37.4	37.4	37.2	37.1	37.0	36.9	35.6
95°	72.0	72.5	73.1	73.6	74.1	74.3	74.3	74.3	74.3	74.3	73.8
97.5°	124.8	124.8	124.9	124.9	125.0	125.0	125.0	125.0	125.0	125.0	124.0
100°	159.1	159.4	159.7	159.9	160.2	160.3	160.3	160.3	160.3	160.3	159.5
102.5°	198.2	198.4	198.7	198.9	199.2	199.2	199.0	198.8	198.6	198.4	197.4
105°	257.9	257.9	257.9	257.9	257.9	257.6	257.1	256.6	256.1	255.5	255.0
107.5°	314.1	315.3	316.5	317.7	318.8	319.3	319.1	318.9	318.7	318.5	318.5
110°	357.8	358.5	359.3	360.1	360.9	361.3	361.3	361.3	361.3	361.3	361.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	399.6	400.2	400.7	401.3	401.9	402.5	403.1	403.7	404.3	404.9	405.1
115°	464.6	465.4	466.2	467.0	467.7	468.2	468.5	468.8	469.0	469.3	469.8
117.5°	526.7	527.4	528.2	529.0	529.8	530.5	531.1	531.7	532.3	532.9	534.4
120°	570.3	571.1	571.9	572.7	573.4	573.8	573.8	573.8	573.8	573.8	575.9
122.5°	613.1	613.7	614.2	614.8	615.4	615.9	616.6	617.2	617.8	618.4	619.9
125°	678.4	678.6	678.9	679.1	679.4	679.9	680.7	681.5	682.2	683.0	683.8
127.5°	737.8	738.7	739.5	740.3	741.1	742.0	742.9	743.9	744.8	745.7	746.7
130°	780.6	781.6	782.6	783.7	784.7	785.5	786.0	786.5	787.0	787.6	788.1
132.5°	821.5	822.3	823.1	824.0	824.8	825.8	826.9	828.0	829.2	830.3	830.2
135°	885.1	885.9	886.7	887.4	888.2	888.7	889.0	889.3	889.5	889.8	889.3
137.5°	942.7	943.8	944.8	945.8	946.9	947.5	947.7	947.9	948.1	948.3	947.6
140°	982.7	983.7	984.8	985.8	986.8	987.3	987.3	987.3	987.3	987.3	986.1
142.5°	1018.9	1020.0	1021.0	1022.0	1023.1	1023.5	1023.3	1023.1	1022.9	1022.7	1021.8
145°	1073.3	1074.3	1075.4	1076.4	1077.4	1077.8	1077.6	1077.3	1077.0	1076.8	1075.2
147.5°	1121.9	1122.8	1123.8	1124.8	1125.8	1126.0	1125.4	1124.9	1124.3	1123.7	1122.7
150°	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6	1155.8	1155.0	1154.2	1153.5	1152.4
152.5°	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1	1186.1	1185.2	1184.2	1183.2	1182.0
155°	1223.1	1223.9	1224.7	1225.5	1226.2	1226.0	1224.7	1223.4	1222.1	1220.8	1220.1
157.5°	1257.5	1258.8	1260.0	1261.2	1262.5	1262.2	1260.5	1258.7	1257.0	1255.2	1254.7
160°	1278.9	1279.9	1281.0	1282.0	1283.0	1282.8	1281.2	1279.7	1278.1	1276.6	1276.3
162.5°	1297.5	1298.7	1300.0	1301.2	1302.4	1302.2	1300.4	1298.7	1296.9	1295.2	1294.9
165°	1321.9	1323.2	1324.5	1325.8	1327.0	1326.8	1325.0	1323.2	1321.4	1319.6	1319.6
167.5°	1341.9	1343.2	1344.5	1345.9	1347.2	1347.0	1345.2	1343.4	1341.6	1339.8	1339.8
170°	1352.1	1353.6	1355.2	1356.7	1358.3	1358.1	1356.3	1354.5	1352.7	1350.9	1351.2
172.5°	1360.4	1362.0	1363.5	1365.1	1366.6	1366.5	1364.7	1362.9	1361.1	1359.3	1359.5
175°	1369.5	1371.1	1372.6	1374.2	1375.7	1375.6	1373.8	1372.0	1370.2	1368.3	1368.9
177.5°	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6	1377.4	1376.2	1374.9	1373.7	1374.1
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	669.4	667.9	666.6	663.4	661.7	658.1	657.6	657.4	652.7	648.1	646.8
5°	692.4	688.7	683.3	676.9	670.3	663.5	659.0	655.3	646.2	637.6	632.6
7.5°	715.5	707.7	698.3	686.3	676.2	665.0	656.6	649.1	636.2	623.8	615.5
10°	732.8	720.1	707.6	691.0	678.0	665.3	653.5	643.3	628.8	612.4	600.8
12.5°	743.5	729.5	712.3	696.1	679.3	663.1	647.3	634.2	617.1	600.2	586.5
15°	758.0	743.0	722.1	698.9	677.4	656.2	638.1	621.7	599.5	579.2	562.4
17.5°	769.9	749.2	726.8	700.0	675.0	648.2	624.8	603.9	579.1	554.7	534.9
20°	773.7	753.2	727.3	700.5	671.0	639.4	614.2	591.5	564.9	538.3	515.6
22.5°	771.3	755.4	726.6	694.5	664.3	631.3	602.8	576.4	546.9	519.8	493.5
25°	755.3	749.8	722.6	687.6	653.1	614.7	581.7	552.9	519.3	490.2	461.6
27.5°	717.9	729.7	712.8	675.5	637.1	596.0	558.9	526.1	491.2	458.5	430.0
30°	681.9	708.9	701.7	667.1	624.2	583.8	542.2	507.9	470.7	437.0	408.9
32.5°	632.7	677.3	684.4	655.5	611.1	566.7	523.1	489.0	450.1	414.7	387.2
35°	554.2	621.0	651.7	633.3	588.8	540.8	495.9	456.1	417.0	382.1	354.8
37.5°	460.7	551.7	602.8	604.1	563.2	513.4	464.4	424.9	384.9	350.6	321.1
40°	400.0	498.6	565.2	579.9	545.4	491.6	442.0	401.8	362.8	329.1	295.3
42.5°	345.5	443.7	525.5	551.2	523.8	470.3	420.6	378.6	340.6	308.8	274.2
45°	279.4	365.3	455.4	501.3	486.1	436.6	384.1	344.1	308.5	281.0	247.8
47.5°	235.7	296.2	383.5	445.5	445.3	400.1	348.4	310.2	277.1	251.3	224.5
50°	210.8	263.5	337.3	407.7	413.6	375.7	326.6	288.7	257.8	230.8	209.2
52.5°	188.4	231.9	298.2	365.8	382.6	349.7	302.1	267.1	237.1	212.2	193.8
55°	159.2	192.9	243.3	306.4	331.9	308.7	266.4	233.7	209.4	188.5	172.6
57.5°	134.7	159.9	200.4	251.2	280.8	266.3	231.4	204.8	184.0	165.1	152.6
60°	119.3	139.9	174.2	216.7	249.4	239.2	209.4	184.7	167.0	150.6	138.8
62.5°	104.7	122.5	151.9	186.4	216.3	212.1	187.8	167.0	151.5	136.6	126.6
65°	84.3	97.2	120.2	147.2	171.3	173.3	155.8	141.7	127.9	116.1	107.2
67.5°	67.1	75.6	91.7	114.5	132.5	139.0	128.3	117.5	106.5	97.4	89.7
70°	56.6	63.4	75.2	93.6	110.2	117.0	110.8	102.4	92.9	85.4	78.8
72.5°	45.8	52.5	61.2	74.7	88.9	96.3	94.1	88.1	80.4	74.1	67.9
75°	34.5	36.6	42.5	51.6	62.7	69.1	70.6	67.5	61.3	56.6	52.9
77.5°	25.5	26.8	29.6	34.3	41.6	47.3	49.6	49.2	45.0	42.3	38.8
80°	20.4	21.1	22.5	24.5	30.0	35.7	37.3	37.3	34.3	33.2	29.8
82.5°	15.5	16.0	16.9	18.0	20.5	25.5	27.3	27.6	25.8	24.3	21.6
85°	8.9	8.6	9.1	9.8	10.2	11.6	14.3	14.8	14.3	12.5	11.8
87.5°	8.9	8.0	6.9	5.8	5.4	4.9	5.2	5.5	5.4	5.5	5.7
90°	29.3	23.6	17.9	13.6	10.5	7.4	4.3	1.2	4.3	7.4	10.5
92.5°	34.3	32.9	31.6	29.8	27.5	25.2	22.9	20.7	22.9	25.2	27.5
95°	73.3	72.8	72.3	70.7	68.1	65.6	63.0	60.4	63.0	65.6	68.1
97.5°	123.0	122.0	121.1	119.4	117.2	114.9	112.6	110.4	112.6	114.9	117.2
100°	158.7	158.0	157.2	155.8	153.7	151.7	149.6	147.5	149.6	151.7	153.7
102.5°	196.4	195.5	194.5	193.2	191.5	189.9	188.2	186.6	188.2	189.9	191.5
105°	254.5	254.0	253.5	252.8	252.1	251.3	250.5	249.7	250.5	251.3	252.1
107.5°	318.5	318.5	318.5	317.9	316.8	315.7	314.5	313.4	314.5	315.7	316.8
110°	361.3	361.3	361.3	360.5	358.9	357.4	355.8	354.3	355.8	357.4	358.9





TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	405.3	405.5	405.8	405.1	403.5	402.0	400.4	398.9	400.4	402.0	403.5
115°	470.3	470.8	471.3	470.8	469.3	467.7	466.2	464.6	466.2	467.7	469.3
117.5°	535.8	537.3	538.7	538.4	536.3	534.3	532.2	530.1	532.2	534.3	536.3
120°	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8	575.9	578.0	580.0
122.5°	621.3	622.8	624.2	623.7	621.2	618.7	616.3	613.8	616.3	618.7	621.2
125°	684.6	685.3	686.1	685.3	683.0	680.7	678.4	676.0	678.4	680.7	683.0
127.5°	747.6	748.5	749.5	748.4	745.5	742.6	739.6	736.7	739.6	742.6	745.5
130°	788.6	789.1	789.6	788.2	784.8	781.5	778.1	774.8	778.1	781.5	784.8
132.5°	830.1	830.0	829.9	828.5	825.7	823.0	820.3	817.5	820.3	823.0	825.7
135°	888.7	888.2	887.7	886.0	883.2	880.4	877.5	874.7	877.5	880.4	883.2
137.5°	947.0	946.3	945.6	944.1	941.8	939.5	937.2	934.8	937.2	939.5	941.8
140°	984.8	983.5	982.2	980.4	978.1	975.7	973.4	971.1	973.4	975.7	978.1
142.5°	1020.9	1020.0	1019.1	1017.5	1015.2	1012.9	1010.6	1008.3	1010.6	1012.9	1015.2
145°	1073.7	1072.1	1070.6	1068.9	1067.1	1065.3	1063.5	1061.7	1063.5	1065.3	1067.1
147.5°	1121.7	1120.6	1119.6	1118.0	1115.8	1113.6	1111.5	1109.3	1111.5	1113.6	1115.8
150°	1151.4	1150.4	1149.3	1148.0	1146.5	1144.9	1143.4	1141.8	1143.4	1144.9	1146.5
152.5°	1180.7	1179.5	1178.2	1176.8	1175.3	1173.7	1172.2	1170.6	1172.2	1173.7	1175.3
155°	1219.3	1218.5	1217.7	1217.0	1216.2	1215.4	1214.6	1213.9	1214.6	1215.4	1216.2
157.5°	1254.3	1253.8	1253.3	1252.9	1252.3	1251.8	1251.3	1250.8	1251.3	1251.8	1252.3
160°	1276.1	1275.8	1275.5	1275.2	1274.6	1274.1	1273.6	1273.1	1273.6	1274.1	1274.6
162.5°	1294.6	1294.4	1294.1	1294.0	1293.8	1293.7	1293.6	1293.5	1293.6	1293.7	1293.8
165°	1319.6	1319.6	1319.6	1319.7	1319.9	1320.2	1320.5	1320.7	1320.5	1320.2	1319.9
167.5°	1339.9	1339.9	1340.0	1340.4	1341.2	1341.9	1342.7	1343.5	1342.7	1341.9	1341.2
170°	1351.4	1351.7	1352.0	1352.5	1353.2	1354.0	1354.8	1355.6	1354.8	1354.0	1353.2
172.5°	1359.8	1360.1	1360.3	1360.8	1361.6	1362.4	1363.2	1363.9	1363.2	1362.4	1361.6
175°	1369.4	1369.9	1370.4	1371.1	1371.8	1372.6	1373.4	1374.2	1373.4	1372.6	1371.8
177.5°	1374.5	1374.9	1375.3	1375.9	1376.5	1377.1	1377.7	1378.3	1377.7	1377.1	1376.5
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	644.5	643.2	640.8	637.2	635.0	631.2	628.7	630.1	630.5	630.1	629.8
5°	627.2	622.4	615.8	609.4	603.5	597.2	593.5	592.0	588.8	587.0	586.0
7.5°	606.2	598.0	588.7	577.6	568.2	558.3	553.3	550.8	544.3	540.8	537.7
10°	590.6	577.6	568.3	553.8	544.9	532.0	523.1	523.4	514.5	509.5	505.9
12.5°	573.3	559.1	543.6	530.5	518.2	507.8	497.1	492.8	483.4	478.6	468.8
15°	544.7	528.1	511.8	494.1	481.6	465.4	450.0	431.1	415.9	402.7	399.1
17.5°	513.5	492.9	476.5	455.7	434.3	407.2	389.3	378.3	369.2	362.2	357.0
20°	492.0	471.1	453.6	422.3	393.4	375.0	361.9	353.4	343.9	336.4	332.3
22.5°	469.5	447.7	423.8	388.8	366.3	351.6	339.9	330.2	323.7	317.9	314.1
25°	437.5	413.6	374.3	350.3	332.1	316.6	308.5	302.6	295.8	287.8	284.2
27.5°	403.7	365.8	337.5	319.6	302.3	292.3	284.9	276.1	270.0	266.4	262.6
30°	378.4	340.5	318.5	298.9	286.7	275.5	266.9	261.9	256.0	249.9	247.4
32.5°	350.3	320.0	298.8	282.6	270.1	260.6	253.8	245.7	241.5	237.7	232.5
35°	315.3	292.3	273.0	259.9	248.0	240.3	232.4	227.6	219.9	216.7	214.7
37.5°	285.7	265.8	251.4	237.5	228.1	219.6	214.7	207.1	203.8	199.3	195.0
40°	268.9	249.4	235.6	224.2	213.7	207.4	201.3	195.1	190.1	188.1	182.9
42.5°	251.9	236.0	222.1	209.7	202.7	195.9	188.2	183.7	178.5	175.2	172.0
45°	228.3	214.2	202.4	192.2	184.4	177.4	172.4	164.9	162.0	155.4	152.6
47.5°	207.6	194.5	183.2	173.5	166.0	161.4	154.1	148.2	143.5	139.4	135.9
50°	192.9	181.9	171.0	162.4	155.6	149.0	141.5	138.6	131.3	129.2	127.2
52.5°	179.4	169.0	159.1	150.6	143.8	137.4	130.8	126.9	122.0	120.0	118.5
55°	160.6	150.6	141.1	133.6	126.8	120.2	116.1	111.3	109.0	107.4	105.6
57.5°	141.7	132.7	125.4	117.8	110.9	105.7	101.0	98.1	95.8	93.7	91.5
60°	129.7	121.1	114.5	107.4	100.4	96.1	92.5	89.0	86.3	83.1	82.2
62.5°	117.0	109.4	103.4	96.5	90.4	86.5	83.0	79.8	76.5	71.9	70.6
65°	99.5	93.6	87.2	81.5	76.1	72.2	67.2	63.6	62.2	61.8	61.6
67.5°	83.7	78.1	72.6	66.8	61.9	58.3	55.7	55.2	54.2	54.0	53.3
70°	73.1	67.9	62.5	57.0	52.2	51.6	50.7	49.7	48.6	48.2	47.7
72.5°	63.7	58.3	52.8	48.5	46.4	45.6	44.7	43.7	43.0	42.5	42.3
75°	48.8	43.8	40.2	38.6	37.5	36.8	35.4	34.8	34.3	33.6	33.4
77.5°	35.2	32.3	30.7	29.7	28.5	27.8	27.0	26.3	25.8	25.7	25.3
80°	26.8	25.4	24.3	22.9	22.5	21.6	21.4	20.7	20.9	20.2	20.2
82.5°	20.8	19.1	18.1	17.5	17.0	16.3	16.1	15.8	15.8	15.3	15.3
85°	10.7	10.2	9.8	9.3	9.3	8.6	8.9	8.6	8.6	8.2	8.0
87.5°	6.2	6.9	7.6	8.8	9.9	10.9	10.8	10.5	10.4	10.3	10.1
90°	13.6	17.9	23.6	29.3	35.0	40.7	40.1	39.6	39.1	38.6	38.5
92.5°	29.8	31.6	32.9	34.3	35.6	36.9	37.0	37.1	37.2	37.4	37.4
95°	70.7	72.3	72.8	73.3	73.8	74.3	74.3	74.3	74.3	74.3	74.1
97.5°	119.4	121.1	122.0	123.0	124.0	125.0	125.0	125.0	125.0	125.0	125.0
100°	155.8	157.2	158.0	158.7	159.5	160.3	160.3	160.3	160.3	160.3	160.2
102.5°	193.2	194.5	195.5	196.4	197.4	198.4	198.6	198.8	199.0	199.2	199.2
105°	252.8	253.5	254.0	254.5	255.0	255.5	256.1	256.6	257.1	257.6	257.9
107.5°	317.9	318.5	318.5	318.5	318.5	318.5	318.7	318.9	319.1	319.3	318.8
110°	360.5	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	360.9



TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	405.1	405.8	405.5	405.3	405.1	404.9	404.3	403.7	403.1	402.5	401.9
115°	470.8	471.3	470.8	470.3	469.8	469.3	469.0	468.8	468.5	468.2	467.7
117.5°	538.4	538.7	537.3	535.8	534.4	532.9	532.3	531.7	531.1	530.5	529.8
120°	582.1	582.1	580.0	578.0	575.9	573.8	573.8	573.8	573.8	573.8	573.4
122.5°	623.7	624.2	622.8	621.3	619.9	618.4	617.8	617.2	616.6	615.9	615.4
125°	685.3	686.1	685.3	684.6	683.8	683.0	682.2	681.5	680.7	679.9	679.4
127.5°	748.4	749.5	748.5	747.6	746.7	745.7	744.8	743.9	742.9	742.0	741.1
130°	788.2	789.6	789.1	788.6	788.1	787.6	787.0	786.5	786.0	785.5	784.7
132.5°	828.5	829.9	830.0	830.1	830.2	830.3	829.2	828.0	826.9	825.8	824.8
135°	886.0	887.7	888.2	888.7	889.3	889.8	889.5	889.3	889.0	888.7	888.2
137.5°	944.1	945.6	946.3	947.0	947.6	948.3	948.1	947.9	947.7	947.5	946.9
140°	980.4	982.2	983.5	984.8	986.1	987.3	987.3	987.3	987.3	987.3	986.8
142.5°	1017.5	1019.1	1020.0	1020.9	1021.8	1022.7	1022.9	1023.1	1023.3	1023.5	1023.1
145°	1068.9	1070.6	1072.1	1073.7	1075.2	1076.8	1077.0	1077.3	1077.6	1077.8	1077.4
147.5°	1118.0	1119.6	1120.6	1121.7	1122.7	1123.7	1124.3	1124.9	1125.4	1126.0	1125.8
150°	1148.0	1149.3	1150.4	1151.4	1152.4	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6
152.5°	1176.8	1178.2	1179.5	1180.7	1182.0	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1
155°	1217.0	1217.7	1218.5	1219.3	1220.1	1220.8	1222.1	1223.4	1224.7	1226.0	1226.2
157.5°	1252.9	1253.3	1253.8	1254.3	1254.7	1255.2	1257.0	1258.7	1260.5	1262.2	1262.5
160°	1275.2	1275.5	1275.8	1276.1	1276.3	1276.6	1278.1	1279.7	1281.2	1282.8	1283.0
162.5°	1294.0	1294.1	1294.4	1294.6	1294.9	1295.2	1296.9	1298.7	1300.4	1302.2	1302.4
165°	1319.7	1319.6	1319.6	1319.6	1319.6	1319.6	1321.4	1323.2	1325.0	1326.8	1327.0
167.5°	1340.4	1340.0	1339.9	1339.9	1339.8	1339.8	1341.6	1343.4	1345.2	1347.0	1347.2
170°	1352.5	1352.0	1351.7	1351.4	1351.2	1350.9	1352.7	1354.5	1356.3	1358.1	1358.3
172.5°	1360.8	1360.3	1360.1	1359.8	1359.5	1359.3	1361.1	1362.9	1364.7	1366.5	1366.6
175°	1371.1	1370.4	1369.9	1369.4	1368.9	1368.3	1370.2	1372.0	1373.8	1375.6	1375.7
177.5°	1375.9	1375.3	1374.9	1374.5	1374.1	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	627.8	628.1	627.6	627.9	627.6	628.1	627.8	629.8	630.1	630.5	630.1
5°	584.9	582.2	581.7	581.1	581.7	582.2	584.9	586.0	587.0	588.8	592.0
7.5°	533.8	533.4	532.2	530.6	532.2	533.4	533.8	537.7	540.8	544.3	550.8
10°	500.9	499.7	499.5	497.9	499.5	499.7	500.9	505.9	509.5	514.5	523.4
12.5°	462.3	455.0	454.3	450.3	454.3	455.0	462.3	468.8	478.6	483.4	492.8
15°	393.7	392.3	387.7	384.8	387.7	392.3	393.7	399.1	402.7	415.9	431.1
17.5°	354.4	349.9	348.5	347.9	348.5	349.9	354.4	357.0	362.2	369.2	378.3
20°	329.1	325.1	324.4	323.9	324.4	325.1	329.1	332.3	336.4	343.9	353.4
22.5°	311.7	307.4	305.7	304.3	305.7	307.4	311.7	314.1	317.9	323.7	330.2
25°	281.9	280.3	279.4	278.9	279.4	280.3	281.9	284.2	287.8	295.8	302.6
27.5°	258.6	255.1	254.4	253.2	254.4	255.1	258.6	262.6	266.4	270.0	276.1
30°	245.3	244.2	242.6	241.2	242.6	244.2	245.3	247.4	249.9	256.0	261.9
32.5°	229.7	228.7	227.3	226.7	227.3	228.7	229.7	232.5	237.7	241.5	245.7
35°	212.4	209.2	207.8	205.8	207.8	209.2	212.4	214.7	216.7	219.9	227.6
37.5°	194.1	192.4	190.5	191.2	190.5	192.4	194.1	195.0	199.3	203.8	207.1
40°	179.9	178.8	178.3	178.1	178.3	178.8	179.9	182.9	188.1	190.1	195.1
42.5°	168.6	165.5	164.3	164.3	164.3	165.5	168.6	172.0	175.2	178.5	183.7
45°	151.5	148.6	146.5	146.7	146.5	148.6	151.5	152.6	155.4	162.0	164.9
47.5°	134.0	133.9	132.6	133.0	132.6	133.9	134.0	135.9	139.4	143.5	148.2
50°	125.6	124.3	123.3	123.6	123.3	124.3	125.6	127.2	129.2	131.3	138.6
52.5°	117.6	116.4	115.7	116.7	115.7	116.4	117.6	118.5	120.0	122.0	126.9
55°	104.5	103.1	102.9	102.7	102.9	103.1	104.5	105.6	107.4	109.0	111.3
57.5°	89.8	88.9	87.5	87.0	87.5	88.9	89.8	91.5	93.7	95.8	98.1
60°	79.3	77.5	75.2	75.0	75.2	77.5	79.3	82.2	83.1	86.3	89.0
62.5°	69.6	69.3	68.8	68.8	68.8	69.3	69.6	70.6	71.9	76.5	79.8
65°	61.1	60.9	61.1	61.3	61.1	60.9	61.1	61.6	61.8	62.2	63.6
67.5°	53.2	52.8	52.4	52.6	52.4	52.8	53.2	53.3	54.0	54.2	55.2
70°	47.2	47.0	46.8	46.8	46.8	47.0	47.2	47.7	48.2	48.6	49.7
72.5°	41.4	41.4	41.2	41.0	41.2	41.4	41.4	42.3	42.5	43.0	43.7
75°	33.2	32.7	32.7	32.7	32.7	32.7	33.2	33.4	33.6	34.3	34.8
77.5°	25.3	25.0	24.8	24.6	24.8	25.0	25.3	25.3	25.7	25.8	26.3
80°	20.0	19.8	19.5	19.5	19.5	19.8	20.0	20.2	20.2	20.9	20.7
82.5°	15.3	15.0	15.0	14.8	15.0	15.0	15.3	15.3	15.3	15.8	15.8
85°	8.2	8.4	8.2	8.6	8.2	8.4	8.2	8.0	8.2	8.6	8.6
87.5°	10.1	10.0	10.2	10.1	10.2	10.0	10.1	10.1	10.3	10.4	10.5
90°	38.7	39.0	39.2	39.5	39.2	39.0	38.7	38.5	38.6	39.1	39.6
92.5°	37.5	37.5	37.6	37.6	37.6	37.5	37.5	37.4	37.4	37.2	37.1
95°	73.6	73.1	72.5	72.0	72.5	73.1	73.6	74.1	74.3	74.3	74.3
97.5°	124.9	124.9	124.8	124.8	124.8	124.9	124.9	125.0	125.0	125.0	125.0
100°	159.9	159.7	159.4	159.1	159.4	159.7	159.9	160.2	160.3	160.3	160.3
102.5°	198.9	198.7	198.4	198.2	198.4	198.7	198.9	199.2	199.2	199.0	198.8
105°	257.9	257.9	257.9	257.9	257.9	257.9	257.9	257.9	257.6	257.1	256.6
107.5°	317.7	316.5	315.3	314.1	315.3	316.5	317.7	318.8	319.3	319.1	318.9
110°	360.1	359.3	358.5	357.8	358.5	359.3	360.1	360.9	361.3	361.3	361.3



TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	401.3	400.7	400.2	399.6	400.2	400.7	401.3	401.9	402.5	403.1	403.7
115°	467.0	466.2	465.4	464.6	465.4	466.2	467.0	467.7	468.2	468.5	468.8
117.5°	529.0	528.2	527.4	526.7	527.4	528.2	529.0	529.8	530.5	531.1	531.7
120°	572.7	571.9	571.1	570.3	571.1	571.9	572.7	573.4	573.8	573.8	573.8
122.5°	614.8	614.2	613.7	613.1	613.7	614.2	614.8	615.4	615.9	616.6	617.2
125°	679.1	678.9	678.6	678.4	678.6	678.9	679.1	679.4	679.9	680.7	681.5
127.5°	740.3	739.5	738.7	737.8	738.7	739.5	740.3	741.1	742.0	742.9	743.9
130°	783.7	782.6	781.6	780.6	781.6	782.6	783.7	784.7	785.5	786.0	786.5
132.5°	824.0	823.1	822.3	821.5	822.3	823.1	824.0	824.8	825.8	826.9	828.0
135°	887.4	886.7	885.9	885.1	885.9	886.7	887.4	888.2	888.7	889.0	889.3
137.5°	945.8	944.8	943.8	942.7	943.8	944.8	945.8	946.9	947.5	947.7	947.9
140°	985.8	984.8	983.7	982.7	983.7	984.8	985.8	986.8	987.3	987.3	987.3
142.5°	1022.0	1021.0	1020.0	1018.9	1020.0	1021.0	1022.0	1023.1	1023.5	1023.3	1023.1
145°	1076.4	1075.4	1074.3	1073.3	1074.3	1075.4	1076.4	1077.4	1077.8	1077.6	1077.3
147.5°	1124.8	1123.8	1122.8	1121.9	1122.8	1123.8	1124.8	1125.8	1126.0	1125.4	1124.9
150°	1155.8	1155.0	1154.2	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6	1155.8	1155.0
152.5°	1186.1	1185.2	1184.2	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1	1186.1	1185.2
155°	1225.5	1224.7	1223.9	1223.1	1223.9	1224.7	1225.5	1226.2	1226.0	1224.7	1223.4
157.5°	1261.2	1260.0	1258.8	1257.5	1258.8	1260.0	1261.2	1262.5	1262.2	1260.5	1258.7
160°	1282.0	1281.0	1279.9	1278.9	1279.9	1281.0	1282.0	1283.0	1282.8	1281.2	1279.7
162.5°	1301.2	1300.0	1298.7	1297.5	1298.7	1300.0	1301.2	1302.4	1302.2	1300.4	1298.7
165°	1325.8	1324.5	1323.2	1321.9	1323.2	1324.5	1325.8	1327.0	1326.8	1325.0	1323.2
167.5°	1345.9	1344.5	1343.2	1341.9	1343.2	1344.5	1345.9	1347.2	1347.0	1345.2	1343.4
170°	1356.7	1355.2	1353.6	1352.1	1353.6	1355.2	1356.7	1358.3	1358.1	1356.3	1354.5
172.5°	1365.1	1363.5	1362.0	1360.4	1362.0	1363.5	1365.1	1366.6	1366.5	1364.7	1362.9
175°	1374.2	1372.6	1371.1	1369.5	1371.1	1372.6	1374.2	1375.7	1375.6	1373.8	1372.0
177.5°	1377.4	1376.2	1374.9	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6	1377.4	1376.2
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331640

CATALOG NUMBER: SA2XXRDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	628.7	631.2	635.0	637.2	640.8	643.2	644.5	646.8	648.1	652.7	657.4
5°	593.5	597.2	603.5	609.4	615.8	622.4	627.2	632.6	637.6	646.2	655.3
7.5°	553.3	558.3	568.2	577.6	588.7	598.0	606.2	615.5	623.8	636.2	649.1
10°	523.1	532.0	544.9	553.8	568.3	577.6	590.6	600.8	612.4	628.8	643.3
12.5°	497.1	507.8	518.2	530.5	543.6	559.1	573.3	586.5	600.2	617.1	634.2
15°	450.0	465.4	481.6	494.1	511.8	528.1	544.7	562.4	579.2	599.5	621.7
17.5°	389.3	407.2	434.3	455.7	476.5	492.9	513.5	534.9	554.7	579.1	603.9
20°	361.9	375.0	393.4	422.3	453.6	471.1	492.0	515.6	538.3	564.9	591.5
22.5°	339.9	351.6	366.3	388.8	423.8	447.7	469.5	493.5	519.8	546.9	576.4
25°	308.5	316.6	332.1	350.3	374.3	413.6	437.5	461.6	490.2	519.3	552.9
27.5°	284.9	292.3	302.3	319.6	337.5	365.8	403.7	430.0	458.5	491.2	526.1
30°	266.9	275.5	286.7	298.9	318.5	340.5	378.4	408.9	437.0	470.7	507.9
32.5°	253.8	260.6	270.1	282.6	298.8	320.0	350.3	387.2	414.7	450.1	489.0
35°	232.4	240.3	248.0	259.9	273.0	292.3	315.3	354.8	382.1	417.0	456.1
37.5°	214.7	219.6	228.1	237.5	251.4	265.8	285.7	321.1	350.6	384.9	424.9
40°	201.3	207.4	213.7	224.2	235.6	249.4	268.9	295.3	329.1	362.8	401.8
42.5°	188.2	195.9	202.7	209.7	222.1	236.0	251.9	274.2	308.8	340.6	378.6
45°	172.4	177.4	184.4	192.2	202.4	214.2	228.3	247.8	281.0	308.5	344.1
47.5°	154.1	161.4	166.0	173.5	183.2	194.5	207.6	224.5	251.3	277.1	310.2
50°	141.5	149.0	155.6	162.4	171.0	181.9	192.9	209.2	230.8	257.8	288.7
52.5°	130.8	137.4	143.8	150.6	159.1	169.0	179.4	193.8	212.2	237.1	267.1
55°	116.1	120.2	126.8	133.6	141.1	150.6	160.6	172.6	188.5	209.4	233.7
57.5°	101.0	105.7	110.9	117.8	125.4	132.7	141.7	152.6	165.1	184.0	204.8
60°	92.5	96.1	100.4	107.4	114.5	121.1	129.7	138.8	150.6	167.0	184.7
62.5°	83.0	86.5	90.4	96.5	103.4	109.4	117.0	126.6	136.6	151.5	167.0
65°	67.2	72.2	76.1	81.5	87.2	93.6	99.5	107.2	116.1	127.9	141.7
67.5°	55.7	58.3	61.9	66.8	72.6	78.1	83.7	89.7	97.4	106.5	117.5
70°	50.7	51.6	52.2	57.0	62.5	67.9	73.1	78.8	85.4	92.9	102.4
72.5°	44.7	45.6	46.4	48.5	52.8	58.3	63.7	67.9	74.1	80.4	88.1
75°	35.4	36.8	37.5	38.6	40.2	43.8	48.8	52.9	56.6	61.3	67.5
77.5°	27.0	27.8	28.5	29.7	30.7	32.3	35.2	38.8	42.3	45.0	49.2
80°	21.4	21.6	22.5	22.9	24.3	25.4	26.8	29.8	33.2	34.3	37.3
82.5°	16.1	16.3	17.0	17.5	18.1	19.1	20.8	21.6	24.3	25.8	27.6
85°	8.9	8.6	9.3	9.3	9.8	10.2	10.7	11.8	12.5	14.3	14.8
87.5°	10.8	10.9	9.9	8.8	7.6	6.9	6.2	5.7	5.5	5.4	5.5
90°	40.1	40.7	35.0	29.3	23.6	17.9	13.6	10.5	7.4	4.3	1.2
92.5°	37.0	36.9	35.6	34.3	32.9	31.6	29.8	27.5	25.2	22.9	20.7
95°	74.3	74.3	73.8	73.3	72.8	72.3	70.7	68.1	65.6	63.0	60.4
97.5°	125.0	125.0	124.0	123.0	122.0	121.1	119.4	117.2	114.9	112.6	110.4
100°	160.3	160.3	159.5	158.7	158.0	157.2	155.8	153.7	151.7	149.6	147.5
102.5°	198.6	198.4	197.4	196.4	195.5	194.5	193.2	191.5	189.9	188.2	186.6
105°	256.1	255.5	255.0	254.5	254.0	253.5	252.8	252.1	251.3	250.5	249.7
107.5°	318.7	318.5	318.5	318.5	318.5	318.5	317.9	316.8	315.7	314.5	313.4
110°	361.3	361.3	361.3	361.3	361.3	361.3	360.5	358.9	357.4	355.8	354.3



TEST NUMBER: P331640

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	404.3	404.9	405.1	405.3	405.5	405.8	405.1	403.5	402.0	400.4	398.9
115°	469.0	469.3	469.8	470.3	470.8	471.3	470.8	469.3	467.7	466.2	464.6
117.5°	532.3	532.9	534.4	535.8	537.3	538.7	538.4	536.3	534.3	532.2	530.1
120°	573.8	573.8	575.9	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8
122.5°	617.8	618.4	619.9	621.3	622.8	624.2	623.7	621.2	618.7	616.3	613.8
125°	682.2	683.0	683.8	684.6	685.3	686.1	685.3	683.0	680.7	678.4	676.0
127.5°	744.8	745.7	746.7	747.6	748.5	749.5	748.4	745.5	742.6	739.6	736.7
130°	787.0	787.6	788.1	788.6	789.1	789.6	788.2	784.8	781.5	778.1	774.8
132.5°	829.2	830.3	830.2	830.1	830.0	829.9	828.5	825.7	823.0	820.3	817.5
135°	889.5	889.8	889.3	888.7	888.2	887.7	886.0	883.2	880.4	877.5	874.7
137.5°	948.1	948.3	947.6	947.0	946.3	945.6	944.1	941.8	939.5	937.2	934.8
140°	987.3	987.3	986.1	984.8	983.5	982.2	980.4	978.1	975.7	973.4	971.1
142.5°	1022.9	1022.7	1021.8	1020.9	1020.0	1019.1	1017.5	1015.2	1012.9	1010.6	1008.3
145°	1077.0	1076.8	1075.2	1073.7	1072.1	1070.6	1068.9	1067.1	1065.3	1063.5	1061.7
147.5°	1124.3	1123.7	1122.7	1121.7	1120.6	1119.6	1118.0	1115.8	1113.6	1111.5	1109.3
150°	1154.2	1153.5	1152.4	1151.4	1150.4	1149.3	1148.0	1146.5	1144.9	1143.4	1141.8
152.5°	1184.2	1183.2	1182.0	1180.7	1179.5	1178.2	1176.8	1175.3	1173.7	1172.2	1170.6
155°	1222.1	1220.8	1220.1	1219.3	1218.5	1217.7	1217.0	1216.2	1215.4	1214.6	1213.9
157.5°	1257.0	1255.2	1254.7	1254.3	1253.8	1253.3	1252.9	1252.3	1251.8	1251.3	1250.8
160°	1278.1	1276.6	1276.3	1276.1	1275.8	1275.5	1275.2	1274.6	1274.1	1273.6	1273.1
162.5°	1296.9	1295.2	1294.9	1294.6	1294.4	1294.1	1294.0	1293.8	1293.7	1293.6	1293.5
165°	1321.4	1319.6	1319.6	1319.6	1319.6	1319.6	1319.7	1319.9	1320.2	1320.5	1320.7
167.5°	1341.6	1339.8	1339.8	1339.9	1339.9	1340.0	1340.4	1341.2	1341.9	1342.7	1343.5
170°	1352.7	1350.9	1351.2	1351.4	1351.7	1352.0	1352.5	1353.2	1354.0	1354.8	1355.6
172.5°	1361.1	1359.3	1359.5	1359.8	1360.1	1360.3	1360.8	1361.6	1362.4	1363.2	1363.9
175°	1370.2	1368.3	1368.9	1369.4	1369.9	1370.4	1371.1	1371.8	1372.6	1373.4	1374.2
177.5°	1374.9	1373.7	1374.1	1374.5	1374.9	1375.3	1375.9	1376.5	1377.1	1377.7	1378.3
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331640

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	657.6	658.1	661.7	663.4	666.6	667.9	669.4	669.0	669.0	669.7	674.8
5°	659.0	663.5	670.3	676.9	683.3	688.7	692.4	696.0	697.4	703.9	709.8
7.5°	656.6	665.0	676.2	686.3	698.3	707.7	715.5	722.6	727.4	737.0	746.8
10°	653.5	665.3	678.0	691.0	707.6	720.1	732.8	742.6	745.7	760.0	768.2
12.5°	647.3	663.1	679.3	696.1	712.3	729.5	743.5	753.3	764.5	777.3	792.4
15°	638.1	656.2	677.4	698.9	722.1	743.0	758.0	775.0	787.3	801.4	814.6
17.5°	624.8	648.2	675.0	700.0	726.8	749.2	769.9	786.2	794.8	802.9	804.8
20°	614.2	639.4	671.0	700.5	727.3	753.2	773.7	787.3	789.6	789.8	777.8
22.5°	602.8	631.3	664.3	694.5	726.6	755.4	771.3	777.1	768.1	752.7	729.4
25°	581.7	614.7	653.1	687.6	722.6	749.8	755.3	745.1	713.5	680.3	638.3
27.5°	558.9	596.0	637.1	675.5	712.8	729.7	717.9	681.0	624.2	574.7	514.8
30°	542.2	583.8	624.2	667.1	701.7	708.9	681.9	627.6	561.3	486.8	427.0
32.5°	523.1	566.7	611.1	655.5	684.4	677.3	632.7	565.8	488.1	414.8	358.4
35°	495.9	540.8	588.8	633.3	651.7	621.0	554.2	467.2	387.7	319.4	280.5
37.5°	464.4	513.4	563.2	604.1	602.8	551.7	460.7	370.9	304.1	263.6	236.0
40°	442.0	491.6	545.4	579.9	565.2	498.6	400.0	315.3	266.4	234.2	214.0
42.5°	420.6	470.3	523.8	551.2	525.5	443.7	345.5	279.1	238.8	213.7	197.3
45°	384.1	436.6	486.1	501.3	455.4	365.3	279.4	231.2	204.4	185.8	174.5
47.5°	348.4	400.1	445.3	445.5	383.5	296.2	235.7	200.1	177.2	162.8	154.6
50°	326.6	375.7	413.6	407.7	337.3	263.5	210.8	180.1	161.1	149.9	141.3
52.5°	302.1	349.7	382.6	365.8	298.2	231.9	188.4	162.7	146.9	137.2	129.5
55°	266.4	308.7	331.9	306.4	243.3	192.9	159.2	139.0	127.2	119.0	112.4
57.5°	231.4	266.3	280.8	251.2	200.4	159.9	134.7	119.5	107.8	101.9	98.5
60°	209.4	239.2	249.4	216.7	174.2	139.9	119.3	105.2	96.5	92.7	89.3
62.5°	187.8	212.1	216.3	186.4	151.9	122.5	104.7	92.8	87.1	83.4	80.2
65°	155.8	173.3	171.3	147.2	120.2	97.2	84.3	77.0	72.7	67.5	61.8
67.5°	128.3	139.0	132.5	114.5	91.7	75.6	67.1	61.6	56.2	51.3	50.0
70°	110.8	117.0	110.2	93.6	75.2	63.4	56.6	50.0	46.8	45.7	43.6
72.5°	94.1	96.3	88.9	74.7	61.2	52.5	45.8	42.2	40.4	39.5	38.2
75°	70.6	69.1	62.7	51.6	42.5	36.6	34.5	33.2	32.0	31.1	30.4
77.5°	49.6	47.3	41.6	34.3	29.6	26.8	25.5	24.8	24.3	23.8	23.1
80°	37.3	35.7	30.0	24.5	22.5	21.1	20.4	19.5	19.5	19.1	18.4
82.5°	27.3	25.5	20.5	18.0	16.9	16.0	15.5	15.0	14.8	14.9	14.4
85°	14.3	11.6	10.2	9.8	9.1	8.6	8.9	8.4	8.4	8.4	8.2
87.5°	5.2	4.9	5.4	5.8	6.9	8.0	8.9	10.1	11.4	11.1	11.2
90°	4.3	7.4	10.5	13.6	17.9	23.6	29.3	35.0	40.7	40.1	39.6
92.5°	22.9	25.2	27.5	29.8	31.6	32.9	34.3	35.6	36.9	37.0	37.1
95°	63.0	65.6	68.1	70.7	72.3	72.8	73.3	73.8	74.3	74.3	74.3
97.5°	112.6	114.9	117.2	119.4	121.1	122.0	123.0	124.0	125.0	125.0	125.0
100°	149.6	151.7	153.7	155.8	157.2	158.0	158.7	159.5	160.3	160.3	160.3
102.5°	188.2	189.9	191.5	193.2	194.5	195.5	196.4	197.4	198.4	198.6	198.8
105°	250.5	251.3	252.1	252.8	253.5	254.0	254.5	255.0	255.5	256.1	256.6
107.5°	314.5	315.7	316.8	317.9	318.5	318.5	318.5	318.5	318.5	318.7	318.9
110°	355.8	357.4	358.9	360.5	361.3	361.3	361.3	361.3	361.3	361.3	361.3





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	400.4	402.0	403.5	405.1	405.8	405.5	405.3	405.1	404.9	404.3	403.7
115°	466.2	467.7	469.3	470.8	471.3	470.8	470.3	469.8	469.3	469.0	468.8
117.5°	532.2	534.3	536.3	538.4	538.7	537.3	535.8	534.4	532.9	532.3	531.7
120°	575.9	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8	573.8	573.8
122.5°	616.3	618.7	621.2	623.7	624.2	622.8	621.3	619.9	618.4	617.8	617.2
125°	678.4	680.7	683.0	685.3	686.1	685.3	684.6	683.8	683.0	682.2	681.5
127.5°	739.6	742.6	745.5	748.4	749.5	748.5	747.6	746.7	745.7	744.8	743.9
130°	778.1	781.5	784.8	788.2	789.6	789.1	788.6	788.1	787.6	787.0	786.5
132.5°	820.3	823.0	825.7	828.5	829.9	830.0	830.1	830.2	830.3	829.2	828.0
135°	877.5	880.4	883.2	886.0	887.7	888.2	888.7	889.3	889.8	889.5	889.3
137.5°	937.2	939.5	941.8	944.1	945.6	946.3	947.0	947.6	948.3	948.1	947.9
140°	973.4	975.7	978.1	980.4	982.2	983.5	984.8	986.1	987.3	987.3	987.3
142.5°	1010.6	1012.9	1015.2	1017.5	1019.1	1020.0	1020.9	1021.8	1022.7	1022.9	1023.1
145°	1063.5	1065.3	1067.1	1068.9	1070.6	1072.1	1073.7	1075.2	1076.8	1077.0	1077.3
147.5°	1111.5	1113.6	1115.8	1118.0	1119.6	1120.6	1121.7	1122.7	1123.7	1124.3	1124.9
150°	1143.4	1144.9	1146.5	1148.0	1149.3	1150.4	1151.4	1152.4	1153.5	1154.2	1155.0
152.5°	1172.2	1173.7	1175.3	1176.8	1178.2	1179.5	1180.7	1182.0	1183.2	1184.2	1185.2
155°	1214.6	1215.4	1216.2	1217.0	1217.7	1218.5	1219.3	1220.1	1220.8	1222.1	1223.4
157.5°	1251.3	1251.8	1252.3	1252.9	1253.3	1253.8	1254.3	1254.7	1255.2	1257.0	1258.7
160°	1273.6	1274.1	1274.6	1275.2	1275.5	1275.8	1276.1	1276.3	1276.6	1278.1	1279.7
162.5°	1293.6	1293.7	1293.8	1294.0	1294.1	1294.4	1294.6	1294.9	1295.2	1296.9	1298.7
165°	1320.5	1320.2	1319.9	1319.7	1319.6	1319.6	1319.6	1319.6	1319.6	1321.4	1323.2
167.5°	1342.7	1341.9	1341.2	1340.4	1340.0	1339.9	1339.9	1339.8	1339.8	1341.6	1343.4
170°	1354.8	1354.0	1353.2	1352.5	1352.0	1351.7	1351.4	1351.2	1350.9	1352.7	1354.5
172.5°	1363.2	1362.4	1361.6	1360.8	1360.3	1360.1	1359.8	1359.5	1359.3	1361.1	1362.9
175°	1373.4	1372.6	1371.8	1371.1	1370.4	1369.9	1369.4	1368.9	1368.3	1370.2	1372.0
177.5°	1377.7	1377.1	1376.5	1375.9	1375.3	1374.9	1374.5	1374.1	1373.7	1374.9	1376.2
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	676.6	679.0	680.1	680.1	681.4	680.8	680.3
5°	715.5	719.8	720.8	724.8	727.8	726.9	727.3
7.5°	754.2	761.1	768.0	771.1	771.6	773.4	774.1
10°	778.0	783.7	794.3	792.8	800.7	805.3	797.8
12.5°	800.9	808.6	816.0	818.0	822.5	824.0	821.0
15°	821.6	825.7	826.1	825.0	826.4	825.2	820.9
17.5°	802.3	795.6	782.2	775.8	770.8	763.3	760.3
20°	770.3	750.7	728.0	718.9	708.3	687.4	692.4
22.5°	701.2	679.0	656.2	629.7	617.0	597.2	596.0
25°	593.8	555.4	513.1	483.6	466.3	446.6	437.9
27.5°	461.7	413.3	378.7	361.2	345.2	329.6	328.9
30°	374.8	338.5	311.7	296.7	286.9	280.3	281.7
32.5°	315.9	291.0	272.9	260.5	253.3	248.3	248.2
35°	258.3	241.2	229.6	224.4	219.2	215.6	215.8
37.5°	221.0	210.8	204.3	198.6	195.3	193.5	192.5
40°	201.9	193.5	188.5	185.1	182.4	179.9	179.4
42.5°	186.9	179.9	174.9	172.2	169.7	167.9	167.5
45°	165.8	160.1	155.6	152.6	151.5	149.9	149.9
47.5°	147.5	141.9	138.4	136.5	134.6	133.5	133.5
50°	135.2	130.8	127.7	126.5	124.9	124.3	124.0
52.5°	124.1	120.8	118.6	117.8	117.1	116.3	116.4
55°	109.0	107.2	106.3	105.6	104.5	103.1	104.0
57.5°	96.4	94.8	92.4	90.2	89.2	88.2	88.6
60°	87.5	84.3	81.1	78.6	77.9	75.9	75.9
62.5°	76.2	71.7	67.8	66.4	65.7	64.8	64.6
65°	58.6	56.8	55.9	55.0	54.5	54.5	54.1
67.5°	48.6	47.8	46.8	46.6	46.2	46.0	45.9
70°	42.9	42.0	41.6	41.3	40.9	41.1	40.4
72.5°	37.5	36.8	36.7	36.1	35.8	35.8	35.3
75°	29.5	29.5	29.3	29.1	28.6	28.4	28.6
77.5°	22.7	22.8	22.4	22.3	22.3	22.3	22.1
80°	18.2	18.4	18.2	17.9	17.7	17.9	17.7
82.5°	14.4	14.0	14.0	13.9	13.9	13.8	13.7
85°	8.2	8.4	8.2	8.0	8.0	8.0	8.2
87.5°	10.9	10.8	10.8	10.8	10.9	10.9	10.8
90°	39.1	38.6	38.5	38.7	39.0	39.2	39.5
92.5°	37.2	37.4	37.4	37.5	37.5	37.6	37.6
95°	74.3	74.3	74.1	73.6	73.1	72.5	72.0
97.5°	125.0	125.0	125.0	124.9	124.9	124.8	124.8
100°	160.3	160.3	160.2	159.9	159.7	159.4	159.1
102.5°	199.0	199.2	199.2	198.9	198.7	198.4	198.2
105°	257.1	257.6	257.9	257.9	257.9	257.9	257.9
107.5°	319.1	319.3	318.8	317.7	316.5	315.3	314.1
110°	361.3	361.3	360.9	360.1	359.3	358.5	357.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	403.1	402.5	401.9	401.3	400.7	400.2	399.6
115°	468.5	468.2	467.7	467.0	466.2	465.4	464.6
117.5°	531.1	530.5	529.8	529.0	528.2	527.4	526.7
120°	573.8	573.8	573.4	572.7	571.9	571.1	570.3
122.5°	616.6	615.9	615.4	614.8	614.2	613.7	613.1
125°	680.7	679.9	679.4	679.1	678.9	678.6	678.4
127.5°	742.9	742.0	741.1	740.3	739.5	738.7	737.8
130°	786.0	785.5	784.7	783.7	782.6	781.6	780.6
132.5°	826.9	825.8	824.8	824.0	823.1	822.3	821.5
135°	889.0	888.7	888.2	887.4	886.7	885.9	885.1
137.5°	947.7	947.5	946.9	945.8	944.8	943.8	942.7
140°	987.3	987.3	986.8	985.8	984.8	983.7	982.7
142.5°	1023.3	1023.5	1023.1	1022.0	1021.0	1020.0	1018.9
145°	1077.6	1077.8	1077.4	1076.4	1075.4	1074.3	1073.3
147.5°	1125.4	1126.0	1125.8	1124.8	1123.8	1122.8	1121.9
150°	1155.8	1156.6	1156.6	1155.8	1155.0	1154.2	1153.5
152.5°	1186.1	1187.1	1187.1	1186.1	1185.2	1184.2	1183.2
155°	1224.7	1226.0	1226.2	1225.5	1224.7	1223.9	1223.1
157.5°	1260.5	1262.2	1262.5	1261.2	1260.0	1258.8	1257.5
160°	1281.2	1282.8	1283.0	1282.0	1281.0	1279.9	1278.9
162.5°	1300.4	1302.2	1302.4	1301.2	1300.0	1298.7	1297.5
165°	1325.0	1326.8	1327.0	1325.8	1324.5	1323.2	1321.9
167.5°	1345.2	1347.0	1347.2	1345.9	1344.5	1343.2	1341.9
170°	1356.3	1358.1	1358.3	1356.7	1355.2	1353.6	1352.1
172.5°	1364.7	1366.5	1366.6	1365.1	1363.5	1362.0	1360.4
175°	1373.8	1375.6	1375.7	1374.2	1372.6	1371.1	1369.5
177.5°	1377.4	1378.6	1378.6	1377.4	1376.2	1374.9	1373.7
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5

(END OF REPORT)