

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: P331640-830

Luminaire Tested: **SA2XXRDIP-C290D1080U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331640-830  
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-C290D1080U830-4F0-1E-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: 4697.8 lumens  
Efficiency: N/A  
Efficacy: 111.3 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

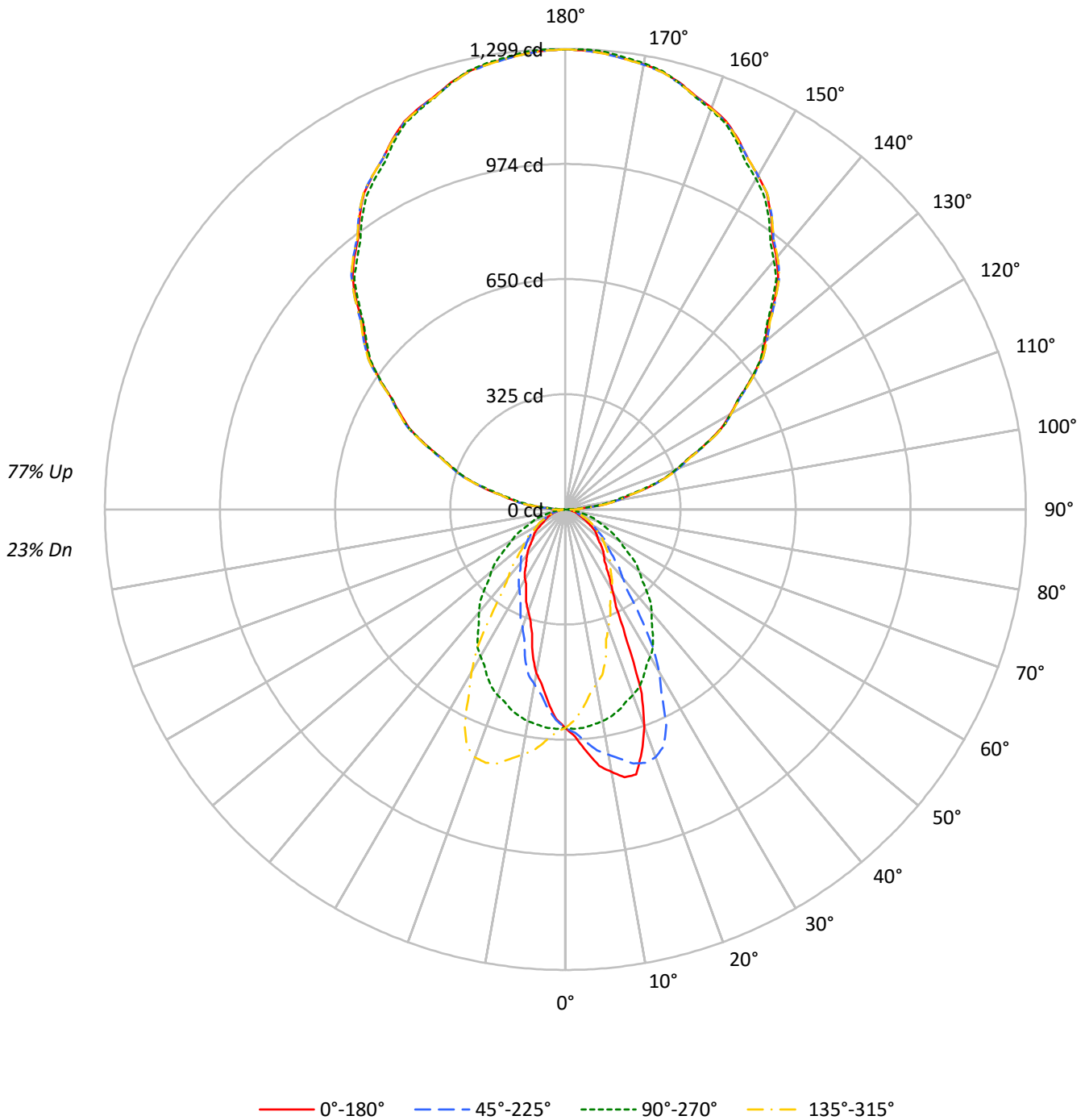
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	9947	9947	9947	9947
5°	11110	10010	8877	10010
10°	12329	9940	7694	9940
15°	12933	9795	6063	9795
20°	11213	9579	5246	9579
25°	7352	9283	4684	9283
30°	4950	8925	4238	8925
35°	4009	8474	3824	8474
40°	3564	7982	3539	7982
45°	3226	7405	3158	7405
50°	2936	6835	2926	6835
55°	2759	6201	2725	6201
60°	2309	5622	2283	5622
65°	1948	5104	2208	5104
70°	1799	4556	2082	4556
75°	1684	3968	1921	3968
80°	1553	3273	1711	3273
85°	1426	2575	1501	2575



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.4	1.2
10°-20°	162.8	3.5
20°-30°	209.7	4.5
30°-40°	199.3	4.2
40°-50°	170.7	3.6
50°-60°	130.0	2.8
60°-70°	82.2	1.7
70°-80°	41.0	0.9
80°-90°	15.9	0.3
90°-100°	82.2	1.7
100°-110°	255.3	5.4
110°-120°	436.4	9.3
120°-130°	573.9	12.2
130°-140°	644.2	13.7
140°-150°	631.6	13.4
150°-160°	529.8	11.3
160°-170°	351.4	7.5
170°-180°	122.8	2.6
0°-30°	430.9	9.2
0°-40°	630.2	13.4
0°-60°	931.0	19.8
0°-90°	1070.1	22.8
90°-120°	774.0	16.5
90°-150°	2623.7	55.9
90°-180°	3628.0	77.2
0°-180°	4697.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	616	616	616	616	616	
5°	686	618	548	618	686	68
15°	774	586	363	586	774	209
25°	413	521	263	521	413	196
35°	203	430	194	430	203	130
45°	141	324	138	324	141	109
55°	98	220	97	220	98	86
65°	51	134	58	134	51	52
75°	27	64	31	64	27	29
85°	8	14	8	14	8	9
90°	37	1	37	1	37	16
95°	68	57	68	57	68	76
105°	243	235	243	235	243	256
115°	438	438	438	438	438	432
125°	639	637	639	637	639	570
135°	834	824	834	824	834	642
145°	1012	1001	1012	1001	1012	632
155°	1153	1144	1153	1144	1153	531
165°	1246	1245	1246	1245	1246	351
175°	1291	1295	1291	1295	1291	123
180°	1297	1297	1297	1297	1297	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	641.2	641.7	642.2	641.0	641.0	640.0	637.7	636.0	631.2	630.6	630.6
5°	685.5	685.1	686.0	683.2	679.4	678.4	674.4	669.0	663.5	657.3	656.0
7.5°	729.6	729.0	727.3	726.8	723.9	717.4	710.9	703.9	694.7	685.6	681.1
10°	752.0	759.0	754.7	747.2	748.7	738.7	733.3	724.1	716.3	702.9	699.9
12.5°	773.8	776.7	775.2	771.0	769.1	762.1	754.9	746.9	732.6	720.6	710.0
15°	773.7	777.8	778.9	777.6	778.6	778.3	774.4	767.8	755.4	742.1	730.5
17.5°	716.6	719.4	726.5	731.2	737.3	749.9	756.2	758.6	756.8	749.1	741.0
20°	652.6	647.9	667.6	677.6	686.2	707.6	726.0	733.1	744.4	744.2	742.1
22.5°	561.8	562.9	581.5	593.5	618.5	640.0	660.9	687.5	709.5	724.0	732.4
25°	412.7	420.9	439.5	455.8	483.6	523.5	559.7	601.6	641.2	672.5	702.3
27.5°	310.0	310.7	325.4	340.4	356.9	389.6	435.2	485.2	541.7	588.3	641.9
30°	265.5	264.2	270.4	279.7	293.8	319.1	353.3	402.5	458.8	529.0	591.5
32.5°	233.9	234.0	238.7	245.5	257.2	274.3	297.7	337.8	391.0	460.1	533.3
35°	203.4	203.2	206.6	211.5	216.4	227.3	243.5	264.4	301.0	365.4	440.4
37.5°	181.4	182.4	184.1	187.2	192.6	198.7	208.3	222.4	248.5	286.6	349.6
40°	169.1	169.6	171.9	174.5	177.7	182.4	190.3	201.7	220.7	251.1	297.2
42.5°	157.9	158.3	159.9	162.3	164.9	169.6	176.2	186.0	201.4	225.1	263.1
45°	141.3	141.3	142.8	143.8	146.7	150.9	156.3	164.5	175.1	192.7	217.9
47.5°	125.8	125.8	126.9	128.7	130.4	133.7	139.0	145.7	153.4	167.0	188.6
50°	116.9	117.2	117.7	119.2	120.4	123.3	127.4	133.2	141.3	151.8	169.8
52.5°	109.7	109.6	110.4	111.0	111.8	113.9	117.0	122.1	129.3	138.5	153.4
55°	98.0	97.2	98.5	99.5	100.2	101.0	102.7	105.9	112.2	119.9	131.0
57.5°	83.5	83.1	84.1	85.0	87.1	89.4	90.9	92.8	96.0	101.6	112.6
60°	71.5	71.5	73.4	74.1	76.4	79.5	82.5	84.2	87.4	91.0	99.2
62.5°	60.9	61.1	61.9	62.6	63.9	67.6	71.8	75.6	78.6	82.1	87.5
65°	51.0	51.4	51.4	51.8	52.7	53.5	55.2	58.2	63.6	68.5	72.6
67.5°	43.3	43.4	43.5	43.9	44.1	45.1	45.8	47.1	48.4	53.0	58.1
70°	38.1	38.7	38.5	38.9	39.2	39.6	40.4	41.1	43.1	44.1	47.1
72.5°	33.3	33.7	33.7	34.0	34.6	34.7	35.3	36.0	37.2	38.1	39.8
75°	27.0	26.8	27.0	27.4	27.6	27.8	27.8	28.7	29.3	30.2	31.3
77.5°	20.8	21.0	21.0	21.0	21.1	21.5	21.4	21.8	22.4	22.9	23.4
80°	16.7	16.9	16.7	16.9	17.2	17.3	17.2	17.3	18.0	18.4	18.4
82.5°	12.9	13.0	13.1	13.1	13.2	13.2	13.6	13.6	14.0	13.9	14.1
85°	7.7	7.5	7.5	7.5	7.7	7.9	7.7	7.7	7.9	7.9	7.9
87.5°	10.2	10.3	10.3	10.2	10.2	10.2	10.3	10.6	10.5	10.7	9.5
90°	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3	37.8	38.4	33.0
92.5°	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0	34.9	34.8	33.6
95°	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0	70.0	70.0	69.6
97.5°	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8	117.8	117.8	116.9
100°	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1	151.1	151.1	150.3
102.5°	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4	187.2	187.0	186.1
105°	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9	241.4	240.8	240.3
107.5°	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6	300.4	300.2	300.2
110°	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5	340.5	340.5	340.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5	381.1	381.6	381.8
115°	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9	442.1	442.3	442.8
117.5°	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1	501.7	502.3	503.7
120°	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8	540.8	540.8	542.8
122.5°	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7	582.3	582.9	584.3
125°	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3	643.0	643.8	644.5
127.5°	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2	702.0	702.9	703.8
130°	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3	741.8	742.3	742.8
132.5°	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4	781.6	782.6	782.5
135°	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2	838.4	838.7	838.2
137.5°	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4	893.6	893.8	893.2
140°	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6	930.6	930.6	929.4
142.5°	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3	964.1	963.9	963.1
145°	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4	1015.1	1014.9	1013.4
147.5°	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3	1059.7	1059.1	1058.2
150°	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2	1086.2
152.5°	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2	1114.1
155°	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1	1151.9	1150.7	1150.0
157.5°	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4	1184.8	1183.1	1182.6
160°	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2	1204.7	1203.2	1203.0
162.5°	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1	1222.4	1220.8	1220.5
165°	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2	1245.5	1243.8	1243.8
167.5°	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2	1264.5	1262.8	1262.8
170°	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7	1275.0	1273.3	1273.6
172.5°	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6	1282.9	1281.2	1281.4
175°	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2	1291.5	1289.7	1290.2
177.5°	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8	1295.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	630.9	629.5	628.3	625.3	623.7	620.3	619.8	619.6	615.2	610.9	609.6
5°	652.6	649.1	644.0	638.0	631.8	625.4	621.1	617.6	609.1	601.0	596.3
7.5°	674.4	667.0	658.2	646.9	637.3	626.8	618.9	611.8	599.6	588.0	580.1
10°	690.7	678.7	666.9	651.3	639.0	627.1	616.0	606.3	592.7	577.2	566.3
12.5°	700.8	687.6	671.4	656.1	640.3	625.0	610.1	597.8	581.6	565.7	552.8
15°	714.4	700.3	680.6	658.7	638.5	618.5	601.4	586.0	565.1	545.9	530.1
17.5°	725.7	706.2	685.0	659.8	636.2	611.0	588.9	569.2	545.8	522.8	504.2
20°	729.2	709.9	685.5	660.3	632.4	602.7	578.9	557.5	532.4	507.4	486.0
22.5°	727.0	712.0	684.9	654.6	626.1	595.0	568.2	543.3	515.5	489.9	465.1
25°	711.9	706.7	681.1	648.1	615.6	579.4	548.3	521.1	489.5	462.0	435.1
27.5°	676.7	687.8	671.8	636.7	600.5	561.8	526.8	495.9	463.0	432.2	405.3
30°	642.7	668.2	661.4	628.8	588.3	550.3	511.0	478.7	443.7	411.9	385.4
32.5°	596.3	638.4	645.1	617.8	576.0	534.1	493.0	460.9	424.2	390.9	365.0
35°	522.4	585.3	614.3	596.9	555.0	509.7	467.4	429.9	393.0	360.1	334.4
37.5°	434.2	520.0	568.2	569.4	530.8	483.9	437.7	400.5	362.8	330.5	302.7
40°	377.0	470.0	532.7	546.6	514.1	463.4	416.6	378.7	342.0	310.2	278.3
42.5°	325.6	418.2	495.3	519.5	493.7	443.3	396.4	356.8	321.0	291.1	258.4
45°	263.3	344.3	429.2	472.5	458.2	411.5	362.0	324.3	290.8	264.9	233.6
47.5°	222.2	279.2	361.5	419.9	419.7	377.1	328.4	292.4	261.2	236.9	211.6
50°	198.7	248.4	317.9	384.3	389.8	354.1	307.8	272.1	243.0	217.5	197.2
52.5°	177.6	218.6	281.1	344.8	360.6	329.6	284.7	251.8	223.5	200.0	182.7
55°	150.1	181.8	229.3	288.8	312.8	291.0	251.1	220.3	197.4	177.7	162.7
57.5°	127.0	150.7	188.9	236.8	264.7	251.0	218.1	193.0	173.4	155.6	143.8
60°	112.4	131.9	164.2	204.2	235.1	225.5	197.4	174.1	157.4	141.9	130.8
62.5°	98.7	115.5	143.2	175.7	203.9	199.9	177.0	157.4	142.8	128.8	119.3
65°	79.5	91.6	113.3	138.7	161.5	163.3	146.8	133.6	120.6	109.4	101.0
67.5°	63.2	71.3	86.4	107.9	124.9	131.0	120.9	110.7	100.4	91.8	84.5
70°	53.3	59.8	70.9	88.2	103.9	110.3	104.4	96.5	87.6	80.5	74.3
72.5°	43.2	49.5	57.7	70.4	83.8	90.8	88.7	83.0	75.8	69.8	64.0
75°	32.5	34.5	40.1	48.6	59.1	65.1	66.5	63.6	57.8	53.3	49.9
77.5°	24.0	25.3	27.9	32.3	39.2	44.6	46.8	46.4	42.4	39.9	36.6
80°	19.2	19.9	21.2	23.1	28.3	33.6	35.2	35.2	32.3	31.3	28.1
82.5°	14.6	15.1	15.9	17.0	19.3	24.0	25.7	26.0	24.3	22.9	20.4
85°	8.4	8.1	8.6	9.2	9.6	10.9	13.5	13.9	13.5	11.8	11.1
87.5°	8.4	7.5	6.5	5.5	5.1	4.6	4.9	5.2	5.1	5.2	5.4
90°	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1	4.1	7.0	9.9
92.5°	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5	21.6	23.8	25.9
95°	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9	59.4	61.8	64.2
97.5°	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1	106.1	108.3	110.5
100°	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0	141.0	143.0	144.9
102.5°	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9	177.4	179.0	180.5
105°	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4	236.1	236.9	237.6
107.5°	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4	296.4	297.6	298.6
110°	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9	335.4	336.9	338.3





TEST NUMBER: P331640-830

CATALOG NUMBER: SA2XXRDIP-C290D1080U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0	377.4	378.9	380.3
115°	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9	439.4	440.8	442.3
117.5°	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6	501.6	503.6	505.5
120°	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	542.8	544.8	546.7
122.5°	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5	580.9	583.2	585.5
125°	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2	639.4	641.6	643.8
127.5°	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4	697.1	699.9	702.7
130°	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3	733.4	736.6	739.7
132.5°	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5	773.2	775.7	778.3
135°	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4	827.1	829.8	832.5
137.5°	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1	883.4	885.5	887.7
140°	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3	917.5	919.6	921.9
142.5°	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4	952.5	954.7	956.9
145°	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7	1002.4	1004.1	1005.8
147.5°	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6	1047.6	1049.6	1051.7
150°	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2	1077.7	1079.1	1080.6
152.5°	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3	1104.8	1106.3	1107.8
155°	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2	1144.8	1145.6	1146.3
157.5°	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9	1179.4	1179.9	1180.3
160°	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0	1200.4	1200.9	1201.4
162.5°	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2	1219.3	1219.4	1219.5
165°	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8	1244.6	1244.3	1244.1
167.5°	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3	1265.6	1264.8	1264.1
170°	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7	1277.0	1276.2	1275.4
172.5°	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5	1284.9	1284.1	1283.4
175°	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2	1294.5	1293.7	1293.0
177.5°	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1	1298.5	1298.0	1297.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331640-830

CATALOG NUMBER: SA2XXRDIP-C290D1080U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	607.5	606.2	604.0	600.6	598.5	594.9	592.6	593.9	594.3	593.9	593.6
5°	591.2	586.6	580.4	574.4	568.8	562.9	559.4	558.0	555.0	553.3	552.3
7.5°	571.4	563.6	554.9	544.4	535.6	526.2	521.5	519.2	513.0	509.7	506.8
10°	556.7	544.4	535.6	522.0	513.6	501.4	493.0	493.3	484.9	480.2	476.8
12.5°	540.4	527.0	512.4	500.0	488.4	478.6	468.5	464.5	455.6	451.1	441.9
15°	513.4	497.8	482.4	465.7	453.9	438.7	424.1	406.3	392.0	379.6	376.2
17.5°	484.0	464.6	449.1	429.5	409.3	383.8	366.9	356.6	348.0	341.4	336.5
20°	463.7	444.0	427.5	398.0	370.8	353.5	341.1	333.1	324.1	317.1	313.2
22.5°	442.5	422.0	399.4	366.5	345.3	331.4	320.4	311.2	305.1	299.6	296.1
25°	412.4	389.8	352.8	330.2	313.0	298.4	290.8	285.2	278.8	271.3	267.9
27.5°	380.5	344.8	318.1	301.2	284.9	275.5	268.5	260.2	254.5	251.1	247.5
30°	356.7	320.9	300.2	281.7	270.2	259.7	251.6	246.9	241.3	235.5	233.2
32.5°	330.2	301.6	281.6	266.4	254.6	245.6	239.2	231.6	227.6	224.0	219.1
35°	297.2	275.5	257.3	245.0	233.8	226.5	219.0	214.5	207.3	204.2	202.4
37.5°	269.3	250.5	237.0	223.9	215.0	207.0	202.4	195.2	192.1	187.8	183.8
40°	253.4	235.1	222.1	211.3	201.4	195.5	189.7	183.9	179.2	177.3	172.4
42.5°	237.4	222.4	209.3	197.7	191.1	184.6	177.4	173.1	168.2	165.1	162.1
45°	215.2	201.9	190.8	181.2	173.8	167.2	162.5	155.4	152.7	146.5	143.8
47.5°	195.7	183.3	172.7	163.5	156.5	152.1	145.2	139.7	135.3	131.4	128.1
50°	181.8	171.4	161.2	153.1	146.7	140.4	133.4	130.6	123.8	121.8	119.9
52.5°	169.1	159.3	150.0	141.9	135.5	129.5	123.3	119.6	115.0	113.1	111.7
55°	151.4	141.9	133.0	125.9	119.5	113.3	109.4	104.9	102.7	101.2	99.5
57.5°	133.6	125.1	118.2	111.0	104.5	99.6	95.2	92.5	90.3	88.3	86.2
60°	122.2	114.1	107.9	101.2	94.6	90.6	87.2	83.9	81.3	78.3	77.5
62.5°	110.3	103.1	97.5	91.0	85.2	81.5	78.2	75.2	72.1	67.8	66.5
65°	93.8	88.2	82.2	76.8	71.7	68.1	63.3	59.9	58.6	58.2	58.1
67.5°	78.9	73.6	68.4	63.0	58.3	55.0	52.5	52.0	51.1	50.9	50.2
70°	68.9	64.0	58.9	53.7	49.2	48.6	47.8	46.8	45.8	45.4	45.0
72.5°	60.0	55.0	49.8	45.7	43.7	43.0	42.1	41.2	40.5	40.1	39.9
75°	46.0	41.3	37.9	36.4	35.3	34.7	33.4	32.8	32.3	31.7	31.5
77.5°	33.2	30.4	28.9	28.0	26.9	26.2	25.4	24.8	24.3	24.2	23.8
80°	25.3	23.9	22.9	21.6	21.2	20.4	20.2	19.5	19.7	19.0	19.0
82.5°	19.6	18.0	17.1	16.5	16.0	15.4	15.2	14.9	14.9	14.4	14.4
85°	10.1	9.6	9.2	8.8	8.8	8.1	8.4	8.1	8.1	7.7	7.5
87.5°	5.8	6.5	7.2	8.3	9.3	10.3	10.2	9.9	9.8	9.7	9.5
90°	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3	36.9	36.4	36.3
92.5°	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0	35.1	35.3	35.3
95°	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0	70.0	70.0	69.8
97.5°	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8	117.8	117.8	117.8
100°	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1	151.1	151.1	151.0
102.5°	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4	187.6	187.8	187.8
105°	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9	242.3	242.8	243.1
107.5°	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6	300.8	301.0	300.5
110°	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.2



TEST NUMBER: P331640-830

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5	379.9	379.4	378.8
115°	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9	441.6	441.3	440.8
117.5°	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1	500.6	500.0	499.4
120°	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8	540.8	540.8	540.5
122.5°	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7	581.2	580.5	580.0
125°	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3	641.6	640.8	640.4
127.5°	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2	700.2	699.4	698.5
130°	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3	740.8	740.4	739.6
132.5°	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4	779.4	778.4	777.4
135°	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2	837.9	837.6	837.2
137.5°	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4	893.2	893.1	892.5
140°	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6	930.6	930.6	930.1
142.5°	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3	964.5	964.7	964.3
145°	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4	1015.7	1015.9	1015.5
147.5°	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3	1060.7	1061.3	1061.1
150°	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1
152.5°	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9
155°	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1	1154.3	1155.6	1155.7
157.5°	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4	1188.1	1189.7	1190.0
160°	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2	1207.6	1209.1	1209.3
162.5°	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1	1225.7	1227.4	1227.6
165°	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2	1248.9	1250.6	1250.8
167.5°	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2	1267.9	1269.6	1269.8
170°	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7	1278.4	1280.1	1280.3
172.5°	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6	1286.3	1288.0	1288.1
175°	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2	1294.9	1296.6	1296.7
177.5°	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331640-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	591.7	592.0	591.5	591.8	591.5	592.0	591.7	593.6	593.9	594.3	593.9
5°	551.3	548.7	548.3	547.7	548.3	548.7	551.3	552.3	553.3	555.0	558.0
7.5°	503.1	502.8	501.6	500.1	501.6	502.8	503.1	506.8	509.7	513.0	519.2
10°	472.1	471.0	470.8	469.3	470.8	471.0	472.1	476.8	480.2	484.9	493.3
12.5°	435.7	428.9	428.2	424.4	428.2	428.9	435.7	441.9	451.1	455.6	464.5
15°	371.1	369.8	365.4	362.7	365.4	369.8	371.1	376.2	379.6	392.0	406.3
17.5°	334.0	329.8	328.5	327.9	328.5	329.8	334.0	336.5	341.4	348.0	356.6
20°	310.2	306.4	305.8	305.3	305.8	306.4	310.2	313.2	317.1	324.1	333.1
22.5°	293.8	289.7	288.1	286.8	288.1	289.7	293.8	296.1	299.6	305.1	311.2
25°	265.7	264.2	263.3	262.9	263.3	264.2	265.7	267.9	271.3	278.8	285.2
27.5°	243.7	240.4	239.8	238.7	239.8	240.4	243.7	247.5	251.1	254.5	260.2
30°	231.2	230.2	228.7	227.3	228.7	230.2	231.2	233.2	235.5	241.3	246.9
32.5°	216.5	215.6	214.2	213.7	214.2	215.6	216.5	219.1	224.0	227.6	231.6
35°	200.2	197.2	195.9	194.0	195.9	197.2	200.2	202.4	204.2	207.3	214.5
37.5°	182.9	181.3	179.6	180.2	179.6	181.3	182.9	183.8	187.8	192.1	195.2
40°	169.6	168.5	168.1	167.9	168.1	168.5	169.6	172.4	177.3	179.2	183.9
42.5°	158.9	156.0	154.9	154.9	154.9	156.0	158.9	162.1	165.1	168.2	173.1
45°	142.8	140.1	138.1	138.3	138.1	140.1	142.8	143.8	146.5	152.7	155.4
47.5°	126.3	126.2	125.0	125.4	125.0	126.2	126.3	128.1	131.4	135.3	139.7
50°	118.4	117.2	116.2	116.5	116.2	117.2	118.4	119.9	121.8	123.8	130.6
52.5°	110.8	109.7	109.1	110.0	109.1	109.7	110.8	111.7	113.1	115.0	119.6
55°	98.5	97.2	97.0	96.8	97.0	97.2	98.5	99.5	101.2	102.7	104.9
57.5°	84.6	83.8	82.5	82.0	82.5	83.8	84.6	86.2	88.3	90.3	92.5
60°	74.7	73.0	70.9	70.7	70.9	73.0	74.7	77.5	78.3	81.3	83.9
62.5°	65.6	65.3	64.8	64.8	64.8	65.3	65.6	66.5	67.8	72.1	75.2
65°	57.6	57.4	57.6	57.8	57.6	57.4	57.6	58.1	58.2	58.6	59.9
67.5°	50.1	49.8	49.4	49.6	49.4	49.8	50.1	50.2	50.9	51.1	52.0
70°	44.5	44.3	44.1	44.1	44.1	44.3	44.5	45.0	45.4	45.8	46.8
72.5°	39.0	39.0	38.8	38.6	38.8	39.0	39.0	39.9	40.1	40.5	41.2
75°	31.3	30.8	30.8	30.8	30.8	30.8	31.3	31.5	31.7	32.3	32.8
77.5°	23.8	23.6	23.4	23.2	23.4	23.6	23.8	23.8	24.2	24.3	24.8
80°	18.9	18.7	18.4	18.4	18.4	18.7	18.9	19.0	19.0	19.7	19.5
82.5°	14.4	14.1	14.1	13.9	14.1	14.1	14.4	14.4	14.4	14.9	14.9
85°	7.7	7.9	7.7	8.1	7.7	7.9	7.7	7.5	7.7	8.1	8.1
87.5°	9.5	9.4	9.6	9.5	9.6	9.4	9.5	9.5	9.7	9.8	9.9
90°	36.5	36.8	36.9	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3
92.5°	35.3	35.3	35.4	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0
95°	69.4	68.9	68.3	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0
97.5°	117.7	117.7	117.6	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8
100°	150.7	150.5	150.2	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1
102.5°	187.5	187.3	187.0	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4
105°	243.1	243.1	243.1	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9
107.5°	299.4	298.3	297.2	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6
110°	339.4	338.7	337.9	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5



TEST NUMBER: P331640-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	378.2	377.7	377.2	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5
115°	440.2	439.4	438.7	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9
117.5°	498.6	497.9	497.1	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1
120°	539.8	539.0	538.3	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8
122.5°	579.5	578.9	578.4	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7
125°	640.1	639.9	639.6	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3
127.5°	697.8	697.0	696.3	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2
130°	738.7	737.6	736.7	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3
132.5°	776.7	775.8	775.1	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4
135°	836.4	835.8	835.0	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2
137.5°	891.5	890.5	889.6	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4
140°	929.2	928.2	927.2	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6
142.5°	963.3	962.3	961.4	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3
145°	1014.6	1013.6	1012.6	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4
147.5°	1060.2	1059.2	1058.3	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3
150°	1089.4	1088.6	1087.9	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6
152.5°	1117.9	1117.1	1116.2	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1
155°	1155.1	1154.3	1153.6	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1
157.5°	1188.7	1187.6	1186.5	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4
160°	1208.3	1207.4	1206.4	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2
162.5°	1226.4	1225.3	1224.1	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1
165°	1249.6	1248.4	1247.2	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2
167.5°	1268.6	1267.2	1266.0	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2
170°	1278.7	1277.3	1275.8	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7
172.5°	1286.7	1285.2	1283.7	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6
175°	1295.2	1293.7	1292.3	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2
177.5°	1298.3	1297.1	1295.9	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331640-830

CATALOG NUMBER: SA2XXRDIP-C290D1080U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	592.6	594.9	598.5	600.6	604.0	606.2	607.5	609.6	610.9	615.2	619.6
5°	559.4	562.9	568.8	574.4	580.4	586.6	591.2	596.3	601.0	609.1	617.6
7.5°	521.5	526.2	535.6	544.4	554.9	563.6	571.4	580.1	588.0	599.6	611.8
10°	493.0	501.4	513.6	522.0	535.6	544.4	556.7	566.3	577.2	592.7	606.3
12.5°	468.5	478.6	488.4	500.0	512.4	527.0	540.4	552.8	565.7	581.6	597.8
15°	424.1	438.7	453.9	465.7	482.4	497.8	513.4	530.1	545.9	565.1	586.0
17.5°	366.9	383.8	409.3	429.5	449.1	464.6	484.0	504.2	522.8	545.8	569.2
20°	341.1	353.5	370.8	398.0	427.5	444.0	463.7	486.0	507.4	532.4	557.5
22.5°	320.4	331.4	345.3	366.5	399.4	422.0	442.5	465.1	489.9	515.5	543.3
25°	290.8	298.4	313.0	330.2	352.8	389.8	412.4	435.1	462.0	489.5	521.1
27.5°	268.5	275.5	284.9	301.2	318.1	344.8	380.5	405.3	432.2	463.0	495.9
30°	251.6	259.7	270.2	281.7	300.2	320.9	356.7	385.4	411.9	443.7	478.7
32.5°	239.2	245.6	254.6	266.4	281.6	301.6	330.2	365.0	390.9	424.2	460.9
35°	219.0	226.5	233.8	245.0	257.3	275.5	297.2	334.4	360.1	393.0	429.9
37.5°	202.4	207.0	215.0	223.9	237.0	250.5	269.3	302.7	330.5	362.8	400.5
40°	189.7	195.5	201.4	211.3	222.1	235.1	253.4	278.3	310.2	342.0	378.7
42.5°	177.4	184.6	191.1	197.7	209.3	222.4	237.4	258.4	291.1	321.0	356.8
45°	162.5	167.2	173.8	181.2	190.8	201.9	215.2	233.6	264.9	290.8	324.3
47.5°	145.2	152.1	156.5	163.5	172.7	183.3	195.7	211.6	236.9	261.2	292.4
50°	133.4	140.4	146.7	153.1	161.2	171.4	181.8	197.2	217.5	243.0	272.1
52.5°	123.3	129.5	135.5	141.9	150.0	159.3	169.1	182.7	200.0	223.5	251.8
55°	109.4	113.3	119.5	125.9	133.0	141.9	151.4	162.7	177.7	197.4	220.3
57.5°	95.2	99.6	104.5	111.0	118.2	125.1	133.6	143.8	155.6	173.4	193.0
60°	87.2	90.6	94.6	101.2	107.9	114.1	122.2	130.8	141.9	157.4	174.1
62.5°	78.2	81.5	85.2	91.0	97.5	103.1	110.3	119.3	128.8	142.8	157.4
65°	63.3	68.1	71.7	76.8	82.2	88.2	93.8	101.0	109.4	120.6	133.6
67.5°	52.5	55.0	58.3	63.0	68.4	73.6	78.9	84.5	91.8	100.4	110.7
70°	47.8	48.6	49.2	53.7	58.9	64.0	68.9	74.3	80.5	87.6	96.5
72.5°	42.1	43.0	43.7	45.7	49.8	55.0	60.0	64.0	69.8	75.8	83.0
75°	33.4	34.7	35.3	36.4	37.9	41.3	46.0	49.9	53.3	57.8	63.6
77.5°	25.4	26.2	26.9	28.0	28.9	30.4	33.2	36.6	39.9	42.4	46.4
80°	20.2	20.4	21.2	21.6	22.9	23.9	25.3	28.1	31.3	32.3	35.2
82.5°	15.2	15.4	16.0	16.5	17.1	18.0	19.6	20.4	22.9	24.3	26.0
85°	8.4	8.1	8.8	8.8	9.2	9.6	10.1	11.1	11.8	13.5	13.9
87.5°	10.2	10.3	9.3	8.3	7.2	6.5	5.8	5.4	5.2	5.1	5.2
90°	37.8	38.4	33.0	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1
92.5°	34.9	34.8	33.6	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5
95°	70.0	70.0	69.6	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9
97.5°	117.8	117.8	116.9	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1
100°	151.1	151.1	150.3	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0
102.5°	187.2	187.0	186.1	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9
105°	241.4	240.8	240.3	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4
107.5°	300.4	300.2	300.2	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4
110°	340.5	340.5	340.5	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9



TEST NUMBER: P331640-830

CATALOG NUMBER: SA2XXRDIP-C290D1080U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	381.1	381.6	381.8	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0
115°	442.1	442.3	442.8	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9
117.5°	501.7	502.3	503.7	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6
120°	540.8	540.8	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8
122.5°	582.3	582.9	584.3	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5
125°	643.0	643.8	644.5	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2
127.5°	702.0	702.9	703.8	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4
130°	741.8	742.3	742.8	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3
132.5°	781.6	782.6	782.5	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5
135°	838.4	838.7	838.2	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4
137.5°	893.6	893.8	893.2	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1
140°	930.6	930.6	929.4	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3
142.5°	964.1	963.9	963.1	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4
145°	1015.1	1014.9	1013.4	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7
147.5°	1059.7	1059.1	1058.2	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6
150°	1087.9	1087.2	1086.2	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2
152.5°	1116.2	1115.2	1114.1	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3
155°	1151.9	1150.7	1150.0	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2
157.5°	1184.8	1183.1	1182.6	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9
160°	1204.7	1203.2	1203.0	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0
162.5°	1222.4	1220.8	1220.5	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2
165°	1245.5	1243.8	1243.8	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8
167.5°	1264.5	1262.8	1262.8	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3
170°	1275.0	1273.3	1273.6	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7
172.5°	1282.9	1281.2	1281.4	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5
175°	1291.5	1289.7	1290.2	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2
177.5°	1295.9	1294.8	1295.1	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331640-830

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	619.8	620.3	623.7	625.3	628.3	629.5	630.9	630.6	630.6	631.2	636.0
5°	621.1	625.4	631.8	638.0	644.0	649.1	652.6	656.0	657.3	663.5	669.0
7.5°	618.9	626.8	637.3	646.9	658.2	667.0	674.4	681.1	685.6	694.7	703.9
10°	616.0	627.1	639.0	651.3	666.9	678.7	690.7	699.9	702.9	716.3	724.1
12.5°	610.1	625.0	640.3	656.1	671.4	687.6	700.8	710.0	720.6	732.6	746.9
15°	601.4	618.5	638.5	658.7	680.6	700.3	714.4	730.5	742.1	755.4	767.8
17.5°	588.9	611.0	636.2	659.8	685.0	706.2	725.7	741.0	749.1	756.8	758.6
20°	578.9	602.7	632.4	660.3	685.5	709.9	729.2	742.1	744.2	744.4	733.1
22.5°	568.2	595.0	626.1	654.6	684.9	712.0	727.0	732.4	724.0	709.5	687.5
25°	548.3	579.4	615.6	648.1	681.1	706.7	711.9	702.3	672.5	641.2	601.6
27.5°	526.8	561.8	600.5	636.7	671.8	687.8	676.7	641.9	588.3	541.7	485.2
30°	511.0	550.3	588.3	628.8	661.4	668.2	642.7	591.5	529.0	458.8	402.5
32.5°	493.0	534.1	576.0	617.8	645.1	638.4	596.3	533.3	460.1	391.0	337.8
35°	467.4	509.7	555.0	596.9	614.3	585.3	522.4	440.4	365.4	301.0	264.4
37.5°	437.7	483.9	530.8	569.4	568.2	520.0	434.2	349.6	286.6	248.5	222.4
40°	416.6	463.4	514.1	546.6	532.7	470.0	377.0	297.2	251.1	220.7	201.7
42.5°	396.4	443.3	493.7	519.5	495.3	418.2	325.6	263.1	225.1	201.4	186.0
45°	362.0	411.5	458.2	472.5	429.2	344.3	263.3	217.9	192.7	175.1	164.5
47.5°	328.4	377.1	419.7	419.9	361.5	279.2	222.2	188.6	167.0	153.4	145.7
50°	307.8	354.1	389.8	384.3	317.9	248.4	198.7	169.8	151.8	141.3	133.2
52.5°	284.7	329.6	360.6	344.8	281.1	218.6	177.6	153.4	138.5	129.3	122.1
55°	251.1	291.0	312.8	288.8	229.3	181.8	150.1	131.0	119.9	112.2	105.9
57.5°	218.1	251.0	264.7	236.8	188.9	150.7	127.0	112.6	101.6	96.0	92.8
60°	197.4	225.5	235.1	204.2	164.2	131.9	112.4	99.2	91.0	87.4	84.2
62.5°	177.0	199.9	203.9	175.7	143.2	115.5	98.7	87.5	82.1	78.6	75.6
65°	146.8	163.3	161.5	138.7	113.3	91.6	79.5	72.6	68.5	63.6	58.2
67.5°	120.9	131.0	124.9	107.9	86.4	71.3	63.2	58.1	53.0	48.4	47.1
70°	104.4	110.3	103.9	88.2	70.9	59.8	53.3	47.1	44.1	43.1	41.1
72.5°	88.7	90.8	83.8	70.4	57.7	49.5	43.2	39.8	38.1	37.2	36.0
75°	66.5	65.1	59.1	48.6	40.1	34.5	32.5	31.3	30.2	29.3	28.7
77.5°	46.8	44.6	39.2	32.3	27.9	25.3	24.0	23.4	22.9	22.4	21.8
80°	35.2	33.6	28.3	23.1	21.2	19.9	19.2	18.4	18.4	18.0	17.3
82.5°	25.7	24.0	19.3	17.0	15.9	15.1	14.6	14.1	13.9	14.0	13.6
85°	13.5	10.9	9.6	9.2	8.6	8.1	8.4	7.9	7.9	7.9	7.7
87.5°	4.9	4.6	5.1	5.5	6.5	7.5	8.4	9.5	10.7	10.5	10.6
90°	4.1	7.0	9.9	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3
92.5°	21.6	23.8	25.9	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0
95°	59.4	61.8	64.2	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0
97.5°	106.1	108.3	110.5	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8
100°	141.0	143.0	144.9	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1
102.5°	177.4	179.0	180.5	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4
105°	236.1	236.9	237.6	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9
107.5°	296.4	297.6	298.6	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6
110°	335.4	336.9	338.3	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	377.4	378.9	380.3	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5
115°	439.4	440.8	442.3	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9
117.5°	501.6	503.6	505.5	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1
120°	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8
122.5°	580.9	583.2	585.5	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7
125°	639.4	641.6	643.8	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3
127.5°	697.1	699.9	702.7	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2
130°	733.4	736.6	739.7	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3
132.5°	773.2	775.7	778.3	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4
135°	827.1	829.8	832.5	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2
137.5°	883.4	885.5	887.7	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4
140°	917.5	919.6	921.9	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6
142.5°	952.5	954.7	956.9	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3
145°	1002.4	1004.1	1005.8	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4
147.5°	1047.6	1049.6	1051.7	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3
150°	1077.7	1079.1	1080.6	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6
152.5°	1104.8	1106.3	1107.8	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1
155°	1144.8	1145.6	1146.3	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1
157.5°	1179.4	1179.9	1180.3	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4
160°	1200.4	1200.9	1201.4	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2
162.5°	1219.3	1219.4	1219.5	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1
165°	1244.6	1244.3	1244.1	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2
167.5°	1265.6	1264.8	1264.1	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2
170°	1277.0	1276.2	1275.4	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7
172.5°	1284.9	1284.1	1283.4	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6
175°	1294.5	1293.7	1293.0	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2
177.5°	1298.5	1298.0	1297.4	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	637.7	640.0	641.0	641.0	642.2	641.7	641.2
5°	674.4	678.4	679.4	683.2	686.0	685.1	685.5
7.5°	710.9	717.4	723.9	726.8	727.3	729.0	729.6
10°	733.3	738.7	748.7	747.2	754.7	759.0	752.0
12.5°	754.9	762.1	769.1	771.0	775.2	776.7	773.8
15°	774.4	778.3	778.6	777.6	778.9	777.8	773.7
17.5°	756.2	749.9	737.3	731.2	726.5	719.4	716.6
20°	726.0	707.6	686.2	677.6	667.6	647.9	652.6
22.5°	660.9	640.0	618.5	593.5	581.5	562.9	561.8
25°	559.7	523.5	483.6	455.8	439.5	420.9	412.7
27.5°	435.2	389.6	356.9	340.4	325.4	310.7	310.0
30°	353.3	319.1	293.8	279.7	270.4	264.2	265.5
32.5°	297.7	274.3	257.2	245.5	238.7	234.0	233.9
35°	243.5	227.3	216.4	211.5	206.6	203.2	203.4
37.5°	208.3	198.7	192.6	187.2	184.1	182.4	181.4
40°	190.3	182.4	177.7	174.5	171.9	169.6	169.1
42.5°	176.2	169.6	164.9	162.3	159.9	158.3	157.9
45°	156.3	150.9	146.7	143.8	142.8	141.3	141.3
47.5°	139.0	133.7	130.4	128.7	126.9	125.8	125.8
50°	127.4	123.3	120.4	119.2	117.7	117.2	116.9
52.5°	117.0	113.9	111.8	111.0	110.4	109.6	109.7
55°	102.7	101.0	100.2	99.5	98.5	97.2	98.0
57.5°	90.9	89.4	87.1	85.0	84.1	83.1	83.5
60°	82.5	79.5	76.4	74.1	73.4	71.5	71.5
62.5°	71.8	67.6	63.9	62.6	61.9	61.1	60.9
65°	55.2	53.5	52.7	51.8	51.4	51.4	51.0
67.5°	45.8	45.1	44.1	43.9	43.5	43.4	43.3
70°	40.4	39.6	39.2	38.9	38.5	38.7	38.1
72.5°	35.3	34.7	34.6	34.0	33.7	33.7	33.3
75°	27.8	27.8	27.6	27.4	27.0	26.8	27.0
77.5°	21.4	21.5	21.1	21.0	21.0	21.0	20.8
80°	17.2	17.3	17.2	16.9	16.7	16.9	16.7
82.5°	13.6	13.2	13.2	13.1	13.1	13.0	12.9
85°	7.7	7.9	7.7	7.5	7.5	7.5	7.7
87.5°	10.3	10.2	10.2	10.2	10.3	10.3	10.2
90°	36.9	36.4	36.3	36.5	36.8	36.9	37.2
92.5°	35.1	35.3	35.3	35.3	35.3	35.4	35.4
95°	70.0	70.0	69.8	69.4	68.9	68.3	67.9
97.5°	117.8	117.8	117.8	117.7	117.7	117.6	117.6
100°	151.1	151.1	151.0	150.7	150.5	150.2	150.0
102.5°	187.6	187.8	187.8	187.5	187.3	187.0	186.8
105°	242.3	242.8	243.1	243.1	243.1	243.1	243.1
107.5°	300.8	301.0	300.5	299.4	298.3	297.2	296.1
110°	340.5	340.5	340.2	339.4	338.7	337.9	337.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	379.9	379.4	378.8	378.2	377.7	377.2	376.6
115°	441.6	441.3	440.8	440.2	439.4	438.7	437.9
117.5°	500.6	500.0	499.4	498.6	497.9	497.1	496.4
120°	540.8	540.8	540.5	539.8	539.0	538.3	537.5
122.5°	581.2	580.5	580.0	579.5	578.9	578.4	577.9
125°	641.6	640.8	640.4	640.1	639.9	639.6	639.4
127.5°	700.2	699.4	698.5	697.8	697.0	696.3	695.4
130°	740.8	740.4	739.6	738.7	737.6	736.7	735.7
132.5°	779.4	778.4	777.4	776.7	775.8	775.1	774.3
135°	837.9	837.6	837.2	836.4	835.8	835.0	834.2
137.5°	893.2	893.1	892.5	891.5	890.5	889.6	888.5
140°	930.6	930.6	930.1	929.2	928.2	927.2	926.2
142.5°	964.5	964.7	964.3	963.3	962.3	961.4	960.4
145°	1015.7	1015.9	1015.5	1014.6	1013.6	1012.6	1011.6
147.5°	1060.7	1061.3	1061.1	1060.2	1059.2	1058.3	1057.4
150°	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2
152.5°	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2
155°	1154.3	1155.6	1155.7	1155.1	1154.3	1153.6	1152.8
157.5°	1188.1	1189.7	1190.0	1188.7	1187.6	1186.5	1185.2
160°	1207.6	1209.1	1209.3	1208.3	1207.4	1206.4	1205.4
162.5°	1225.7	1227.4	1227.6	1226.4	1225.3	1224.1	1222.9
165°	1248.9	1250.6	1250.8	1249.6	1248.4	1247.2	1245.9
167.5°	1267.9	1269.6	1269.8	1268.6	1267.2	1266.0	1264.8
170°	1278.4	1280.1	1280.3	1278.7	1277.3	1275.8	1274.4
172.5°	1286.3	1288.0	1288.1	1286.7	1285.2	1283.7	1282.2
175°	1294.9	1296.6	1296.7	1295.2	1293.7	1292.3	1290.8
177.5°	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4

(END OF REPORT)