

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: P331635-830

Luminaire Tested: **SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331635-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 925 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

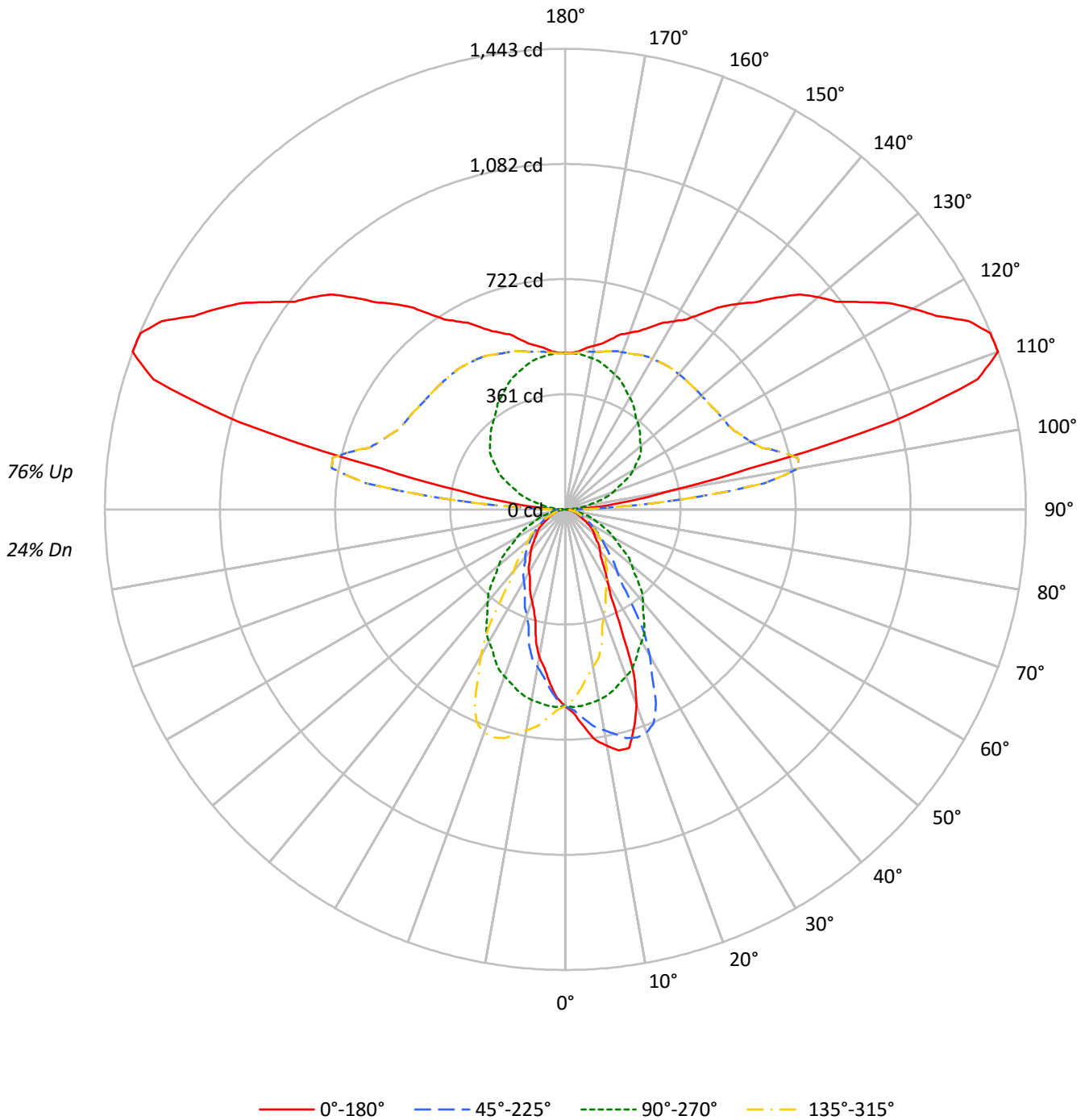
Lumens per Lamp: N/A  
Luminaire Lumens: 4473.2 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 37.3  
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



TEST NUMBER: P331635-830  
CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

### Luminous Intensity Polar Plot





TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	85	81	82	79	76	73	61	59	57	44	43	42	29	28	28	21
2	84	77	72	67	75	69	64	60	54	50	48	39	37	36	26	25	24	18
3	77	68	62	56	68	61	55	51	48	44	41	35	33	30	23	22	21	16
4	71	61	53	48	63	54	48	43	42	38	35	31	29	26	21	20	18	14
5	65	54	47	41	58	49	42	37	38	34	30	28	25	23	19	18	16	12
6	60	49	41	36	53	44	37	32	34	30	26	26	23	20	18	16	14	11
7	55	44	36	31	49	39	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	24	42	33	27	22	26	22	19	20	17	15	14	12	11	8
10	44	33	26	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

**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



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.4	1.3
10°-20°	162.8	3.6
20°-30°	209.7	4.7
30°-40°	199.3	4.5
40°-50°	170.7	3.8
50°-60°	130.0	2.9
60°-70°	82.2	1.8
70°-80°	41.0	0.9
80°-90°	15.1	0.3
90°-100°	195.6	4.4
100°-110°	663.7	14.8
110°-120°	705.1	15.8
120°-130°	580.4	13.0
130°-140°	466.1	10.4
140°-150°	352.2	7.9
150°-160°	247.5	5.5
160°-170°	145.7	3.3
170°-180°	47.4	1.1
0°-30°	430.9	9.6
0°-40°	630.2	14.1
0°-60°	931.0	20.8
0°-90°	1069.3	23.9
90°-120°	1564.4	35.0
90°-150°	2963.2	66.2
90°-180°	3404.0	76.1
0°-180°	4473.2	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°	31	1	31	1	31	17
95°	107	33	107	33	107	139
105°	1060	115	1060	115	1060	1026
115°	1395	202	1395	202	1395	1366
125°	1132	282	1132	282	1132	1023
135°	938	331	938	331	938	729
145°	749	378	749	378	749	476
155°	629	430	629	430	629	294
165°	552	468	552	468	552	158
175°	498	488	498	488	498	48
180°	489	489	489	489	489	



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	9.0	9.1	9.1	9.1	9.1	9.0	8.6	9.1	9.1	9.5	9.1
90°	31.0	31.0	31.0	31.0	31.0	30.1	28.2	30.1	31.0	32.0	31.0
92.5°	52.1	53.6	52.9	55.9	56.6	62.5	70.4	82.0	103.3	122.2	120.6
95°	107.3	106.3	109.1	116.7	128.8	149.6	189.1	246.5	322.6	368.7	326.4
97.5°	211.1	219.0	232.7	255.9	300.9	368.7	470.5	575.1	660.3	629.5	474.1
100°	336.8	353.7	381.0	421.4	499.5	613.3	742.2	858.8	878.6	743.1	511.7
102.5°	592.7	615.6	649.6	718.7	803.5	924.2	1018.4	1044.7	959.9	746.9	497.5
105°	1060.2	1073.3	1113.8	1172.1	1230.4	1261.5	1249.2	1142.9	947.3	697.0	469.4
107.5°	1354.2	1371.7	1379.8	1383.0	1375.6	1330.1	1232.3	1072.2	864.7	643.7	455.4
110°	1443.0	1444.0	1435.5	1417.6	1377.1	1300.0	1179.6	1011.3	812.8	618.0	452.5



TEST NUMBER: P331635-830  
 CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1441.5	1436.4	1420.4	1390.5	1334.3	1245.9	1117.2	955.5	776.7	601.4	453.2
115°	1395.1	1386.6	1362.1	1318.8	1252.1	1155.2	1031.9	887.0	731.9	583.2	457.1
117.5°	1312.0	1305.0	1279.1	1233.4	1165.4	1074.4	962.7	835.5	703.6	574.4	463.9
120°	1258.7	1249.2	1221.9	1177.7	1111.9	1026.2	926.6	809.9	688.6	569.1	468.4
122.5°	1203.0	1195.0	1170.7	1127.3	1068.3	990.9	896.5	789.6	675.8	566.1	473.7
125°	1131.6	1124.1	1100.6	1064.9	1010.3	939.7	857.0	760.1	657.5	560.6	481.6
127.5°	1069.2	1063.2	1042.8	1009.4	961.8	896.6	818.6	730.9	640.6	557.4	489.7
130°	1033.8	1026.2	1007.5	975.5	929.4	867.3	793.0	712.1	629.3	555.9	495.8
132.5°	996.9	990.1	972.9	940.8	895.5	837.2	768.9	694.0	620.3	555.2	501.7
135°	937.8	934.1	917.2	886.1	845.6	793.0	730.9	668.8	607.7	554.0	508.9
137.5°	880.0	874.3	859.4	832.7	795.8	749.9	700.6	648.7	598.8	553.8	515.3
140°	840.0	834.4	820.3	795.8	765.7	724.3	681.1	635.9	593.6	553.1	518.3
142.5°	800.1	799.0	786.5	764.2	735.7	701.0	663.7	625.4	588.3	553.1	520.6
145°	748.8	745.9	736.6	720.6	698.0	670.7	641.6	610.5	581.4	551.2	523.0
147.5°	705.7	704.0	697.6	684.9	666.2	646.2	623.5	599.0	574.2	547.9	523.8
150°	680.1	679.2	673.5	662.2	648.1	631.2	611.4	590.8	568.2	545.6	523.0
152.5°	658.3	658.1	653.9	644.1	633.1	618.4	601.6	582.5	562.9	541.9	521.5
155°	629.3	631.2	627.5	620.9	610.5	600.1	586.1	571.0	553.1	535.3	519.2
157.5°	604.6	604.6	602.9	597.5	590.2	582.1	570.2	557.6	543.9	528.5	514.9
160°	588.9	588.9	588.0	583.2	576.6	570.0	559.7	549.3	537.2	524.0	512.6
162.5°	573.8	574.6	573.6	570.4	563.8	558.7	549.9	541.1	531.1	520.2	510.4
165°	552.1	553.1	553.1	549.3	545.6	541.9	535.3	528.7	521.1	512.6	506.1
167.5°	532.3	533.4	533.6	531.5	529.8	526.4	521.9	516.8	511.3	506.1	501.7
170°	520.2	522.1	523.0	520.2	519.2	517.4	513.6	510.8	506.1	502.3	499.5
172.5°	510.4	511.5	512.5	511.1	510.2	509.1	506.1	504.0	500.9	497.9	496.5
175°	497.7	499.5	500.5	499.5	499.5	498.6	497.7	496.7	493.9	492.9	492.0
177.5°	489.9	491.4	492.2	492.2	492.2	492.2	491.4	491.4	489.9	489.2	489.9
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	8.0	6.9	5.9	5.2	5.0	4.7	4.9	5.2	5.0	5.3	5.3
90°	25.4	18.9	14.1	11.3	9.4	7.5	3.8	0.9	3.8	7.5	9.4
92.5°	93.9	64.0	42.7	33.8	27.4	23.4	16.6	11.5	16.6	23.4	27.4
95°	217.3	135.4	92.2	69.7	54.6	46.1	36.7	32.9	36.7	46.1	54.6
97.5°	292.8	178.7	124.3	98.8	81.4	68.7	58.7	53.6	58.7	68.7	81.4
100°	308.6	193.8	143.9	117.6	98.8	83.7	75.2	72.4	75.2	83.7	98.8
102.5°	309.3	207.4	161.3	134.9	115.4	100.3	91.8	89.7	91.8	100.3	115.4
105°	314.1	230.5	186.2	159.9	139.2	125.1	118.6	114.8	118.6	125.1	139.2
107.5°	327.2	254.2	211.3	184.7	164.3	151.3	144.9	141.9	144.9	151.3	164.3
110°	337.7	269.9	228.6	201.3	181.5	169.3	163.7	159.9	163.7	169.3	181.5





TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	349.0	285.0	245.2	217.1	198.1	186.6	180.2	176.4	180.2	186.6	198.1
115°	365.9	308.6	268.1	242.7	223.9	212.6	207.0	202.3	207.0	212.6	223.9
117.5°	384.0	330.2	292.8	266.4	248.4	238.4	232.7	228.9	232.7	238.4	248.4
120°	396.1	345.3	308.6	282.2	263.3	255.0	249.3	245.5	249.3	255.0	263.3
122.5°	406.5	359.5	325.1	298.0	279.2	269.9	264.3	261.4	264.3	269.9	279.2
125°	423.3	381.0	347.1	320.7	302.0	290.7	285.0	282.2	285.0	290.7	302.0
127.5°	438.9	401.0	368.0	340.9	322.8	310.4	302.6	298.8	302.6	310.4	322.8
130°	448.7	412.9	380.0	353.7	334.9	321.7	312.3	308.6	312.3	321.7	334.9
132.5°	458.5	423.5	392.1	365.7	346.2	332.2	322.1	317.5	322.1	332.2	346.2
135°	471.3	438.4	408.2	381.9	360.2	346.2	334.9	331.1	334.9	346.2	360.2
137.5°	481.1	450.4	420.7	396.2	374.8	359.7	348.5	343.9	348.5	359.7	374.8
140°	486.4	457.1	429.0	404.5	383.8	368.7	357.5	353.7	357.5	368.7	383.8
142.5°	490.9	462.4	435.0	412.0	392.1	377.0	366.5	363.4	366.5	377.0	392.1
145°	496.7	470.3	445.0	424.2	405.5	391.3	381.9	378.1	381.9	391.3	405.5
147.5°	499.9	476.7	452.9	434.4	418.8	405.8	396.8	394.0	396.8	405.8	418.8
150°	501.3	479.8	458.1	441.2	427.1	414.8	407.3	404.5	407.3	414.8	427.1
152.5°	502.1	482.8	463.4	448.0	434.6	423.9	416.3	415.0	416.3	423.9	434.6
155°	503.2	487.3	471.3	457.1	446.9	436.5	430.8	429.9	430.8	436.5	446.9
157.5°	503.2	490.5	476.9	465.1	456.8	447.8	443.3	442.3	443.3	447.8	456.8
160°	503.2	492.0	480.7	470.3	462.8	455.2	451.6	450.6	451.6	455.2	462.8
162.5°	502.5	492.8	483.0	474.9	468.1	462.0	458.3	458.8	458.3	462.0	468.1
165°	500.5	493.9	485.4	479.8	475.0	469.4	467.5	468.4	467.5	469.4	475.0
167.5°	499.2	493.7	487.5	483.9	480.5	476.9	475.2	476.4	475.2	476.9	480.5
170°	497.7	492.9	488.2	485.4	483.5	480.7	479.8	481.6	479.8	480.7	483.5
172.5°	495.4	492.2	489.0	486.9	485.8	483.0	483.5	484.7	483.5	483.0	485.8
175°	492.9	491.1	489.2	488.2	488.2	486.4	487.3	488.2	487.3	486.4	488.2
177.5°	491.4	489.9	489.2	489.2	489.2	487.7	488.4	489.9	488.4	487.7	489.2
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	5.5	5.9	6.5	7.8	9.0	9.0	8.8	8.4	8.0	8.4	8.4
90°	11.3	14.1	18.9	25.4	31.0	32.0	31.0	30.1	28.2	30.1	31.0
92.5°	33.8	42.7	64.0	93.9	120.6	122.2	103.3	82.0	70.4	62.5	56.6
95°	69.7	92.2	135.4	217.3	326.4	368.7	322.6	246.5	189.1	149.6	128.8
97.5°	98.8	124.3	178.7	292.8	474.1	629.5	660.3	575.1	470.5	368.7	300.9
100°	117.6	143.9	193.8	308.6	511.7	743.1	878.6	858.8	742.2	613.3	499.5
102.5°	134.9	161.3	207.4	309.3	497.5	746.9	959.9	1044.7	1018.4	924.2	803.5
105°	159.9	186.2	230.5	314.1	469.4	697.0	947.3	1142.9	1249.2	1261.5	1230.4
107.5°	184.7	211.3	254.2	327.2	455.4	643.7	864.7	1072.2	1232.3	1330.1	1375.6
110°	201.3	228.6	269.9	337.7	452.5	618.0	812.8	1011.3	1179.6	1300.0	1377.1



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	217.1	245.2	285.0	349.0	453.2	601.4	776.7	955.5	1117.2	1245.9	1334.3
115°	242.7	268.1	308.6	365.9	457.1	583.2	731.9	887.0	1031.9	1155.2	1252.1
117.5°	266.4	292.8	330.2	384.0	463.9	574.4	703.6	835.5	962.7	1074.4	1165.4
120°	282.2	308.6	345.3	396.1	468.4	569.1	688.6	809.9	926.6	1026.2	1111.9
122.5°	298.0	325.1	359.5	406.5	473.7	566.1	675.8	789.6	896.5	990.9	1068.3
125°	320.7	347.1	381.0	423.3	481.6	560.6	657.5	760.1	857.0	939.7	1010.3
127.5°	340.9	368.0	401.0	438.9	489.7	557.4	640.6	730.9	818.6	896.6	961.8
130°	353.7	380.0	412.9	448.7	495.8	555.9	629.3	712.1	793.0	867.3	929.4
132.5°	365.7	392.1	423.5	458.5	501.7	555.2	620.3	694.0	768.9	837.2	895.5
135°	381.9	408.2	438.4	471.3	508.9	554.0	607.7	668.8	730.9	793.0	845.6
137.5°	396.2	420.7	450.4	481.1	515.3	553.8	598.8	648.7	700.6	749.9	795.8
140°	404.5	429.0	457.1	486.4	518.3	553.1	593.6	635.9	681.1	724.3	765.7
142.5°	412.0	435.0	462.4	490.9	520.6	553.1	588.3	625.4	663.7	701.0	735.7
145°	424.2	445.0	470.3	496.7	523.0	551.2	581.4	610.5	641.6	670.7	698.0
147.5°	434.4	452.9	476.7	499.9	523.8	547.9	574.2	599.0	623.5	646.2	666.2
150°	441.2	458.1	479.8	501.3	523.0	545.6	568.2	590.8	611.4	631.2	648.1
152.5°	448.0	463.4	482.8	502.1	521.5	541.9	562.9	582.5	601.6	618.4	633.1
155°	457.1	471.3	487.3	503.2	519.2	535.3	553.1	571.0	586.1	600.1	610.5
157.5°	465.1	476.9	490.5	503.2	514.9	528.5	543.9	557.6	570.2	582.1	590.2
160°	470.3	480.7	492.0	503.2	512.6	524.0	537.2	549.3	559.7	570.0	576.6
162.5°	474.9	483.0	492.8	502.5	510.4	520.2	531.1	541.1	549.9	558.7	563.8
165°	479.8	485.4	493.9	500.5	506.1	512.6	521.1	528.7	535.3	541.9	545.6
167.5°	483.9	487.5	493.7	499.2	501.7	506.1	511.3	516.8	521.9	526.4	529.8
170°	485.4	488.2	492.9	497.7	499.5	502.3	506.1	510.8	513.6	517.4	519.2
172.5°	486.9	489.0	492.2	495.4	496.5	497.9	500.9	504.0	506.1	509.1	510.2
175°	488.2	489.2	491.1	492.9	492.0	492.9	493.9	496.7	497.7	498.6	499.5
177.5°	489.2	489.2	489.9	491.4	489.9	489.2	489.9	491.4	491.4	492.2	492.2
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	8.4	8.3	8.4	8.3	8.4	8.3	8.4	8.4	8.4	8.0	8.4
90°	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	30.1	28.2	30.1
92.5°	55.9	52.9	53.6	52.1	53.6	52.9	55.9	56.6	62.5	70.4	82.0
95°	116.7	109.1	106.3	107.3	106.3	109.1	116.7	128.8	149.6	189.1	246.5
97.5°	255.9	232.7	219.0	211.1	219.0	232.7	255.9	300.9	368.7	470.5	575.1
100°	421.4	381.0	353.7	336.8	353.7	381.0	421.4	499.5	613.3	742.2	858.8
102.5°	718.7	649.6	615.6	592.7	615.6	649.6	718.7	803.5	924.2	1018.4	1044.7
105°	1172.1	1113.8	1073.3	1060.2	1073.3	1113.8	1172.1	1230.4	1261.5	1249.2	1142.9
107.5°	1383.0	1379.8	1371.7	1354.2	1371.7	1379.8	1383.0	1375.6	1330.1	1232.3	1072.2
110°	1417.6	1435.5	1444.0	1443.0	1444.0	1435.5	1417.6	1377.1	1300.0	1179.6	1011.3



TEST NUMBER: P331635-830  
 CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1390.5	1420.4	1436.4	1441.5	1436.4	1420.4	1390.5	1334.3	1245.9	1117.2	955.5
115°	1318.8	1362.1	1386.6	1395.1	1386.6	1362.1	1318.8	1252.1	1155.2	1031.9	887.0
117.5°	1233.4	1279.1	1305.0	1312.0	1305.0	1279.1	1233.4	1165.4	1074.4	962.7	835.5
120°	1177.7	1221.9	1249.2	1258.7	1249.2	1221.9	1177.7	1111.9	1026.2	926.6	809.9
122.5°	1127.3	1170.7	1195.0	1203.0	1195.0	1170.7	1127.3	1068.3	990.9	896.5	789.6
125°	1064.9	1100.6	1124.1	1131.6	1124.1	1100.6	1064.9	1010.3	939.7	857.0	760.1
127.5°	1009.4	1042.8	1063.2	1069.2	1063.2	1042.8	1009.4	961.8	896.6	818.6	730.9
130°	975.5	1007.5	1026.2	1033.8	1026.2	1007.5	975.5	929.4	867.3	793.0	712.1
132.5°	940.8	972.9	990.1	996.9	990.1	972.9	940.8	895.5	837.2	768.9	694.0
135°	886.1	917.2	934.1	937.8	934.1	917.2	886.1	845.6	793.0	730.9	668.8
137.5°	832.7	859.4	874.3	880.0	874.3	859.4	832.7	795.8	749.9	700.6	648.7
140°	795.8	820.3	834.4	840.0	834.4	820.3	795.8	765.7	724.3	681.1	635.9
142.5°	764.2	786.5	799.0	800.1	799.0	786.5	764.2	735.7	701.0	663.7	625.4
145°	720.6	736.6	745.9	748.8	745.9	736.6	720.6	698.0	670.7	641.6	610.5
147.5°	684.9	697.6	704.0	705.7	704.0	697.6	684.9	666.2	646.2	623.5	599.0
150°	662.2	673.5	679.2	680.1	679.2	673.5	662.2	648.1	631.2	611.4	590.8
152.5°	644.1	653.9	658.1	658.3	658.1	653.9	644.1	633.1	618.4	601.6	582.5
155°	620.9	627.5	631.2	629.3	631.2	627.5	620.9	610.5	600.1	586.1	571.0
157.5°	597.5	602.9	604.6	604.6	604.6	602.9	597.5	590.2	582.1	570.2	557.6
160°	583.2	588.0	588.9	588.9	588.9	588.0	583.2	576.6	570.0	559.7	549.3
162.5°	570.4	573.6	574.6	573.8	574.6	573.6	570.4	563.8	558.7	549.9	541.1
165°	549.3	553.1	553.1	552.1	553.1	553.1	549.3	545.6	541.9	535.3	528.7
167.5°	531.5	533.6	533.4	532.3	533.4	533.6	531.5	529.8	526.4	521.9	516.8
170°	520.2	523.0	522.1	520.2	522.1	523.0	520.2	519.2	517.4	513.6	510.8
172.5°	511.1	512.5	511.5	510.4	511.5	512.5	511.1	510.2	509.1	506.1	504.0
175°	499.5	500.5	499.5	497.7	499.5	500.5	499.5	499.5	498.6	497.7	496.7
177.5°	492.2	492.2	491.4	489.9	491.4	492.2	492.2	492.2	492.2	491.4	491.4
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830  
 CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	8.8	9.0	9.0	7.8	6.5	5.9	5.5	5.3	5.3	5.0	5.2
90°	31.0	32.0	31.0	25.4	18.9	14.1	11.3	9.4	7.5	3.8	0.9
92.5°	103.3	122.2	120.6	93.9	64.0	42.7	33.8	27.4	23.4	16.6	11.5
95°	322.6	368.7	326.4	217.3	135.4	92.2	69.7	54.6	46.1	36.7	32.9
97.5°	660.3	629.5	474.1	292.8	178.7	124.3	98.8	81.4	68.7	58.7	53.6
100°	878.6	743.1	511.7	308.6	193.8	143.9	117.6	98.8	83.7	75.2	72.4
102.5°	959.9	746.9	497.5	309.3	207.4	161.3	134.9	115.4	100.3	91.8	89.7
105°	947.3	697.0	469.4	314.1	230.5	186.2	159.9	139.2	125.1	118.6	114.8
107.5°	864.7	643.7	455.4	327.2	254.2	211.3	184.7	164.3	151.3	144.9	141.9
110°	812.8	618.0	452.5	337.7	269.9	228.6	201.3	181.5	169.3	163.7	159.9



TEST NUMBER: P331635-830  
 CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	776.7	601.4	453.2	349.0	285.0	245.2	217.1	198.1	186.6	180.2	176.4
115°	731.9	583.2	457.1	365.9	308.6	268.1	242.7	223.9	212.6	207.0	202.3
117.5°	703.6	574.4	463.9	384.0	330.2	292.8	266.4	248.4	238.4	232.7	228.9
120°	688.6	569.1	468.4	396.1	345.3	308.6	282.2	263.3	255.0	249.3	245.5
122.5°	675.8	566.1	473.7	406.5	359.5	325.1	298.0	279.2	269.9	264.3	261.4
125°	657.5	560.6	481.6	423.3	381.0	347.1	320.7	302.0	290.7	285.0	282.2
127.5°	640.6	557.4	489.7	438.9	401.0	368.0	340.9	322.8	310.4	302.6	298.8
130°	629.3	555.9	495.8	448.7	412.9	380.0	353.7	334.9	321.7	312.3	308.6
132.5°	620.3	555.2	501.7	458.5	423.5	392.1	365.7	346.2	332.2	322.1	317.5
135°	607.7	554.0	508.9	471.3	438.4	408.2	381.9	360.2	346.2	334.9	331.1
137.5°	598.8	553.8	515.3	481.1	450.4	420.7	396.2	374.8	359.7	348.5	343.9
140°	593.6	553.1	518.3	486.4	457.1	429.0	404.5	383.8	368.7	357.5	353.7
142.5°	588.3	553.1	520.6	490.9	462.4	435.0	412.0	392.1	377.0	366.5	363.4
145°	581.4	551.2	523.0	496.7	470.3	445.0	424.2	405.5	391.3	381.9	378.1
147.5°	574.2	547.9	523.8	499.9	476.7	452.9	434.4	418.8	405.8	396.8	394.0
150°	568.2	545.6	523.0	501.3	479.8	458.1	441.2	427.1	414.8	407.3	404.5
152.5°	562.9	541.9	521.5	502.1	482.8	463.4	448.0	434.6	423.9	416.3	415.0
155°	553.1	535.3	519.2	503.2	487.3	471.3	457.1	446.9	436.5	430.8	429.9
157.5°	543.9	528.5	514.9	503.2	490.5	476.9	465.1	456.8	447.8	443.3	442.3
160°	537.2	524.0	512.6	503.2	492.0	480.7	470.3	462.8	455.2	451.6	450.6
162.5°	531.1	520.2	510.4	502.5	492.8	483.0	474.9	468.1	462.0	458.3	458.8
165°	521.1	512.6	506.1	500.5	493.9	485.4	479.8	475.0	469.4	467.5	468.4
167.5°	511.3	506.1	501.7	499.2	493.7	487.5	483.9	480.5	476.9	475.2	476.4
170°	506.1	502.3	499.5	497.7	492.9	488.2	485.4	483.5	480.7	479.8	481.6
172.5°	500.9	497.9	496.5	495.4	492.2	489.0	486.9	485.8	483.0	483.5	484.7
175°	493.9	492.9	492.0	492.9	491.1	489.2	488.2	488.2	486.4	487.3	488.2
177.5°	489.9	489.2	489.9	491.4	489.9	489.2	489.2	489.2	487.7	488.4	489.9
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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	4.7	5.0	5.2	5.9	6.9	8.0	9.1	9.5	9.1	9.1
90°	3.8	7.5	9.4	11.3	14.1	18.9	25.4	31.0	32.0	31.0	30.1
92.5°	16.6	23.4	27.4	33.8	42.7	64.0	93.9	120.6	122.2	103.3	82.0
95°	36.7	46.1	54.6	69.7	92.2	135.4	217.3	326.4	368.7	322.6	246.5
97.5°	58.7	68.7	81.4	98.8	124.3	178.7	292.8	474.1	629.5	660.3	575.1
100°	75.2	83.7	98.8	117.6	143.9	193.8	308.6	511.7	743.1	878.6	858.8
102.5°	91.8	100.3	115.4	134.9	161.3	207.4	309.3	497.5	746.9	959.9	1044.7
105°	118.6	125.1	139.2	159.9	186.2	230.5	314.1	469.4	697.0	947.3	1142.9
107.5°	144.9	151.3	164.3	184.7	211.3	254.2	327.2	455.4	643.7	864.7	1072.2
110°	163.7	169.3	181.5	201.3	228.6	269.9	337.7	452.5	618.0	812.8	1011.3





TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	180.2	186.6	198.1	217.1	245.2	285.0	349.0	453.2	601.4	776.7	955.5
115°	207.0	212.6	223.9	242.7	268.1	308.6	365.9	457.1	583.2	731.9	887.0
117.5°	232.7	238.4	248.4	266.4	292.8	330.2	384.0	463.9	574.4	703.6	835.5
120°	249.3	255.0	263.3	282.2	308.6	345.3	396.1	468.4	569.1	688.6	809.9
122.5°	264.3	269.9	279.2	298.0	325.1	359.5	406.5	473.7	566.1	675.8	789.6
125°	285.0	290.7	302.0	320.7	347.1	381.0	423.3	481.6	560.6	657.5	760.1
127.5°	302.6	310.4	322.8	340.9	368.0	401.0	438.9	489.7	557.4	640.6	730.9
130°	312.3	321.7	334.9	353.7	380.0	412.9	448.7	495.8	555.9	629.3	712.1
132.5°	322.1	332.2	346.2	365.7	392.1	423.5	458.5	501.7	555.2	620.3	694.0
135°	334.9	346.2	360.2	381.9	408.2	438.4	471.3	508.9	554.0	607.7	668.8
137.5°	348.5	359.7	374.8	396.2	420.7	450.4	481.1	515.3	553.8	598.8	648.7
140°	357.5	368.7	383.8	404.5	429.0	457.1	486.4	518.3	553.1	593.6	635.9
142.5°	366.5	377.0	392.1	412.0	435.0	462.4	490.9	520.6	553.1	588.3	625.4
145°	381.9	391.3	405.5	424.2	445.0	470.3	496.7	523.0	551.2	581.4	610.5
147.5°	396.8	405.8	418.8	434.4	452.9	476.7	499.9	523.8	547.9	574.2	599.0
150°	407.3	414.8	427.1	441.2	458.1	479.8	501.3	523.0	545.6	568.2	590.8
152.5°	416.3	423.9	434.6	448.0	463.4	482.8	502.1	521.5	541.9	562.9	582.5
155°	430.8	436.5	446.9	457.1	471.3	487.3	503.2	519.2	535.3	553.1	571.0
157.5°	443.3	447.8	456.8	465.1	476.9	490.5	503.2	514.9	528.5	543.9	557.6
160°	451.6	455.2	462.8	470.3	480.7	492.0	503.2	512.6	524.0	537.2	549.3
162.5°	458.3	462.0	468.1	474.9	483.0	492.8	502.5	510.4	520.2	531.1	541.1
165°	467.5	469.4	475.0	479.8	485.4	493.9	500.5	506.1	512.6	521.1	528.7
167.5°	475.2	476.9	480.5	483.9	487.5	493.7	499.2	501.7	506.1	511.3	516.8
170°	479.8	480.7	483.5	485.4	488.2	492.9	497.7	499.5	502.3	506.1	510.8
172.5°	483.5	483.0	485.8	486.9	489.0	492.2	495.4	496.5	497.9	500.9	504.0
175°	487.3	486.4	488.2	488.2	489.2	491.1	492.9	492.0	492.9	493.9	496.7
177.5°	488.4	487.7	489.2	489.2	489.2	489.9	491.4	489.9	489.2	489.9	491.4
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2



TEST NUMBER: P331635-830  
 CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**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°	8.6	9.0	9.1	9.1	9.1	9.1	9.0
90°	28.2	30.1	31.0	31.0	31.0	31.0	31.0
92.5°	70.4	62.5	56.6	55.9	52.9	53.6	52.1
95°	189.1	149.6	128.8	116.7	109.1	106.3	107.3
97.5°	470.5	368.7	300.9	255.9	232.7	219.0	211.1
100°	742.2	613.3	499.5	421.4	381.0	353.7	336.8
102.5°	1018.4	924.2	803.5	718.7	649.6	615.6	592.7
105°	1249.2	1261.5	1230.4	1172.1	1113.8	1073.3	1060.2
107.5°	1232.3	1330.1	1375.6	1383.0	1379.8	1371.7	1354.2
110°	1179.6	1300.0	1377.1	1417.6	1435.5	1444.0	1443.0



TEST NUMBER: P331635-830

CATALOG NUMBER: SA2XXRDIP-C290D925U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1117.2	1245.9	1334.3	1390.5	1420.4	1436.4	1441.5
115°	1031.9	1155.2	1252.1	1318.8	1362.1	1386.6	1395.1
117.5°	962.7	1074.4	1165.4	1233.4	1279.1	1305.0	1312.0
120°	926.6	1026.2	1111.9	1177.7	1221.9	1249.2	1258.7
122.5°	896.5	990.9	1068.3	1127.3	1170.7	1195.0	1203.0
125°	857.0	939.7	1010.3	1064.9	1100.6	1124.1	1131.6
127.5°	818.6	896.6	961.8	1009.4	1042.8	1063.2	1069.2
130°	793.0	867.3	929.4	975.5	1007.5	1026.2	1033.8
132.5°	768.9	837.2	895.5	940.8	972.9	990.1	996.9
135°	730.9	793.0	845.6	886.1	917.2	934.1	937.8
137.5°	700.6	749.9	795.8	832.7	859.4	874.3	880.0
140°	681.1	724.3	765.7	795.8	820.3	834.4	840.0
142.5°	663.7	701.0	735.7	764.2	786.5	799.0	800.1
145°	641.6	670.7	698.0	720.6	736.6	745.9	748.8
147.5°	623.5	646.2	666.2	684.9	697.6	704.0	705.7
150°	611.4	631.2	648.1	662.2	673.5	679.2	680.1
152.5°	601.6	618.4	633.1	644.1	653.9	658.1	658.3
155°	586.1	600.1	610.5	620.9	627.5	631.2	629.3
157.5°	570.2	582.1	590.2	597.5	602.9	604.6	604.6
160°	559.7	570.0	576.6	583.2	588.0	588.9	588.9
162.5°	549.9	558.7	563.8	570.4	573.6	574.6	573.8
165°	535.3	541.9	545.6	549.3	553.1	553.1	552.1
167.5°	521.9	526.4	529.8	531.5	533.6	533.4	532.3
170°	513.6	517.4	519.2	520.2	523.0	522.1	520.2
172.5°	506.1	509.1	510.2	511.1	512.5	511.5	510.4
175°	497.7	498.6	499.5	499.5	500.5	499.5	497.7
177.5°	491.4	492.2	492.2	492.2	492.2	491.4	489.9
180°	489.2	489.2	489.2	489.2	489.2	489.2	489.2

(END OF REPORT)