

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: P331622-830

Luminaire Tested: **SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331622-830  
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-C290D530U830-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 530 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

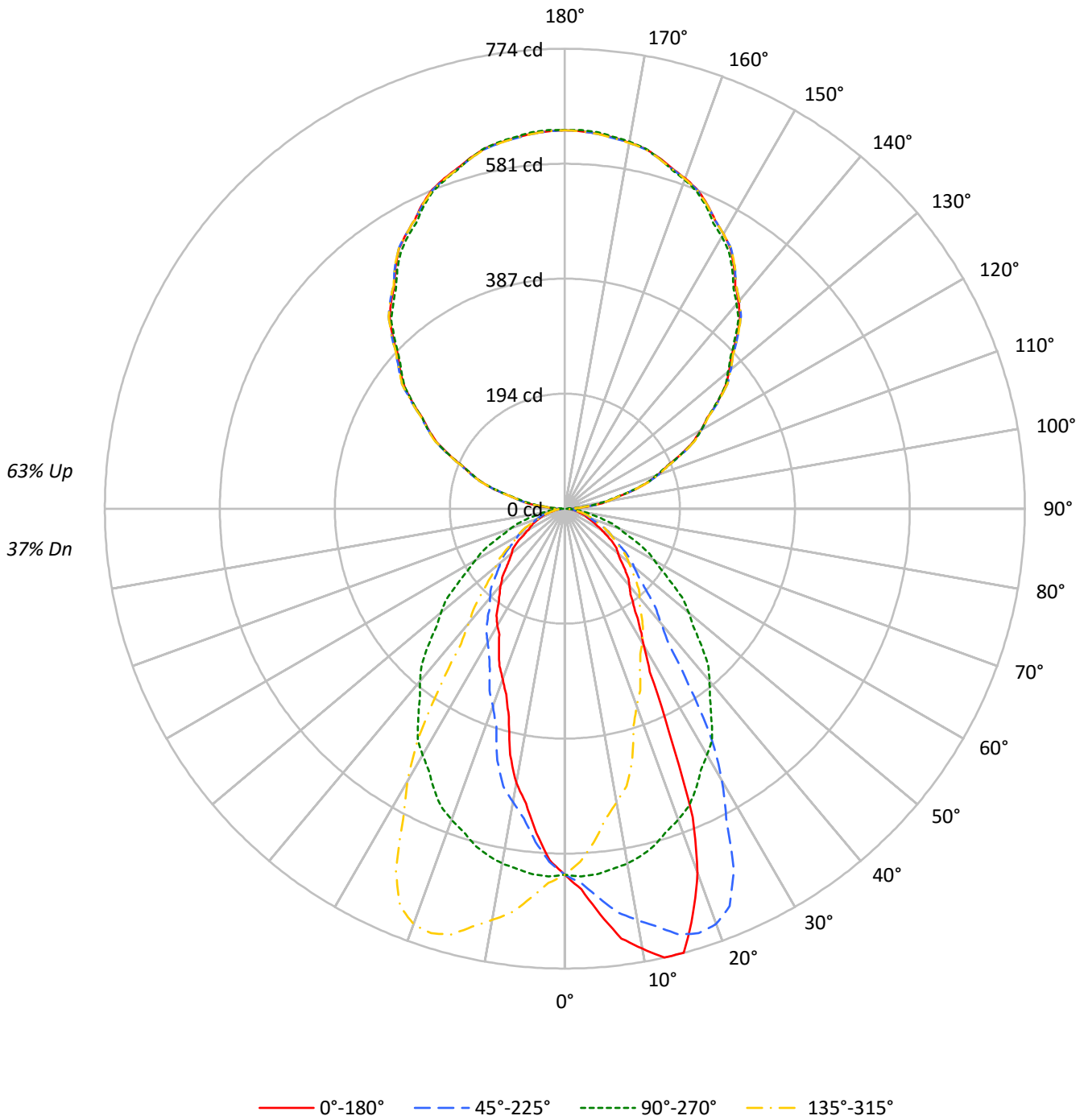
Lumens per Lamp: N/A  
Luminaire Lumens: 2848.4 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 25.6  
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	96	91	88	85	87	83	80	77	68	66	64	53	52	51	40	39	39	33
2	87	81	75	70	79	73	69	64	60	57	54	48	45	43	36	35	34	28
3	80	71	65	59	73	65	59	55	53	49	46	43	40	37	33	31	29	25
4	74	64	56	51	67	58	52	47	48	43	40	38	35	33	30	28	26	22
5	68	57	49	44	61	52	46	41	43	38	35	35	31	29	27	25	23	19
6	63	51	44	38	57	47	40	36	39	34	30	32	28	25	25	22	21	17
7	58	46	39	34	53	43	36	31	36	31	27	29	25	23	23	20	19	16
8	54	42	35	30	49	39	33	28	33	28	24	27	23	21	21	19	17	14
9	50	39	32	27	46	36	29	25	30	25	22	25	21	19	20	17	15	13
10	47	36	29	24	43	33	27	23	28	23	20	23	19	17	18	16	14	12

**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	2.1
10°-20°	162.8	5.7
20°-30°	209.7	7.4
30°-40°	199.3	7.0
40°-50°	170.7	6.0
50°-60°	130.0	4.6
60°-70°	82.2	2.9
70°-80°	41.0	1.4
80°-90°	13.2	0.5
90°-100°	40.4	1.4
100°-110°	125.3	4.4
110°-120°	214.3	7.5
120°-130°	281.8	9.9
130°-140°	316.2	11.1
140°-150°	310.1	10.9
150°-160°	260.1	9.1
160°-170°	172.5	6.1
170°-180°	60.3	2.1
0°-30°	430.9	15.1
0°-40°	630.2	22.1
0°-60°	931.0	32.7
0°-90°	1067.4	37.5
90°-120°	380.0	13.3
90°-150°	1288.0	45.2
90°-180°	1781.0	62.5
0°-180°	2848.4	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°	18	1	18	1	18	8
95°	33	28	33	28	33	37
105°	119	116	119	116	119	125
115°	215	215	215	215	215	212
125°	314	313	314	313	314	280
135°	410	405	410	405	410	315
145°	497	491	497	491	497	310
155°	566	562	566	562	566	260
165°	612	611	612	611	612	172
175°	634	636	634	636	634	60
180°	637	637	637	637	637	



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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°	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.6	6.9	6.1
90°	18.3	18.2	18.0	17.9	17.8	17.8	18.1	18.4	18.6	18.9	16.2
92.5°	17.4	17.4	17.3	17.3	17.3	17.2	17.2	17.2	17.2	17.1	16.5
95°	33.4	33.6	33.8	34.0	34.3	34.4	34.4	34.4	34.4	34.4	34.1
97.5°	57.7	57.8	57.8	57.8	57.8	57.9	57.9	57.9	57.9	57.9	57.4
100°	73.6	73.8	73.9	74.0	74.1	74.2	74.2	74.2	74.2	74.2	73.8
102.5°	91.7	91.8	91.9	92.1	92.2	92.2	92.1	92.0	91.9	91.8	91.3
105°	119.3	119.3	119.3	119.3	119.3	119.2	118.9	118.8	118.5	118.3	118.0
107.5°	145.3	145.9	146.5	146.9	147.5	147.8	147.7	147.6	147.5	147.4	147.4
110°	165.5	165.9	166.3	166.6	167.0	167.1	167.1	167.1	167.1	167.1	167.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.9	185.1	185.4	185.7	186.0	186.2	186.5	186.8	187.1	187.4	187.5
115°	215.0	215.4	215.7	216.0	216.4	216.7	216.8	216.9	217.1	217.2	217.4
117.5°	243.6	244.0	244.4	244.8	245.2	245.4	245.7	246.0	246.3	246.6	247.2
120°	263.9	264.3	264.7	264.9	265.3	265.5	265.5	265.5	265.5	265.5	266.5
122.5°	283.7	284.0	284.2	284.5	284.7	285.0	285.3	285.6	285.9	286.2	286.8
125°	313.9	314.0	314.1	314.2	314.3	314.6	315.0	315.3	315.7	316.0	316.4
127.5°	341.4	341.8	342.1	342.5	342.9	343.4	343.7	344.2	344.6	345.1	345.5
130°	361.2	361.7	362.1	362.6	363.1	363.4	363.7	363.9	364.2	364.4	364.7
132.5°	380.1	380.5	380.9	381.3	381.6	382.1	382.6	383.1	383.7	384.2	384.2
135°	409.5	409.9	410.3	410.7	410.9	411.2	411.3	411.5	411.6	411.7	411.5
137.5°	436.2	436.7	437.2	437.6	438.1	438.4	438.5	438.6	438.7	438.8	438.5
140°	454.7	455.2	455.6	456.1	456.7	456.9	456.9	456.9	456.9	456.9	456.3
142.5°	471.5	471.9	472.4	472.9	473.3	473.5	473.4	473.3	473.3	473.2	472.8
145°	496.6	497.1	497.6	498.0	498.5	498.7	498.6	498.5	498.3	498.2	497.6
147.5°	519.1	519.5	520.0	520.5	520.9	521.0	520.8	520.5	520.2	520.0	519.4
150°	533.8	534.0	534.4	534.8	535.2	535.2	534.8	534.4	534.0	533.8	533.2
152.5°	547.5	547.9	548.4	548.8	549.3	549.3	548.8	548.4	547.9	547.5	546.9
155°	566.0	566.3	566.7	567.0	567.4	567.3	566.7	566.1	565.5	564.9	564.5
157.5°	581.8	582.5	583.1	583.6	584.2	584.1	583.2	582.4	581.6	580.8	580.6
160°	591.7	592.2	592.8	593.2	593.7	593.5	592.9	592.1	591.4	590.7	590.6
162.5°	600.4	601.0	601.5	602.1	602.7	602.6	601.7	600.9	600.1	599.3	599.2
165°	611.6	612.3	612.8	613.4	614.1	613.9	613.1	612.3	611.4	610.6	610.6
167.5°	620.9	621.5	622.2	622.7	623.4	623.3	622.5	621.6	620.8	619.9	619.9
170°	625.7	626.3	627.1	627.7	628.5	628.4	627.6	626.8	625.9	625.1	625.2
172.5°	629.5	630.2	630.9	631.7	632.4	632.3	631.5	630.7	629.8	629.0	629.1
175°	633.7	634.4	635.1	635.8	636.6	636.5	635.7	634.8	634.0	633.1	633.4
177.5°	635.7	636.2	636.8	637.3	637.9	637.9	637.3	636.8	636.2	635.7	635.8
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



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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°	5.7	5.3	4.7	4.1	4.1	4.0	4.5	5.1	4.7	4.4	4.4
90°	13.6	10.9	8.3	6.3	4.8	3.4	2.0	0.6	2.0	3.4	4.8
92.5°	15.8	15.3	14.6	13.8	12.7	11.7	10.7	9.6	10.7	11.7	12.7
95°	33.9	33.6	33.5	32.7	31.6	30.3	29.1	28.0	29.1	30.3	31.6
97.5°	56.9	56.5	56.0	55.2	54.2	53.2	52.1	51.1	52.1	53.2	54.2
100°	73.4	73.1	72.8	72.1	71.2	70.1	69.2	68.2	69.2	70.1	71.2
102.5°	90.9	90.5	90.0	89.4	88.6	87.8	87.1	86.3	87.1	87.8	88.6
105°	117.7	117.5	117.3	117.0	116.6	116.3	115.9	115.6	115.9	116.3	116.6
107.5°	147.4	147.4	147.4	147.1	146.6	146.1	145.5	145.1	145.5	146.1	146.6
110°	167.1	167.1	167.1	166.8	166.1	165.3	164.7	163.9	164.7	165.3	166.1





TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	187.6	187.7	187.8	187.5	186.7	186.0	185.3	184.5	185.3	186.0	186.7
115°	217.6	217.8	218.1	217.8	217.2	216.4	215.7	215.0	215.7	216.4	217.2
117.5°	247.9	248.6	249.3	249.1	248.2	247.2	246.3	245.3	246.3	247.2	248.2
120°	267.4	268.3	269.4	269.4	268.3	267.4	266.5	265.5	266.5	267.4	268.3
122.5°	287.5	288.1	288.8	288.6	287.5	286.3	285.1	284.0	285.1	286.3	287.5
125°	316.8	317.1	317.4	317.1	316.0	315.0	313.9	312.8	313.9	315.0	316.0
127.5°	345.9	346.4	346.8	346.3	345.0	343.6	342.2	340.8	342.2	343.6	345.0
130°	364.9	365.1	365.3	364.7	363.2	361.6	360.1	358.5	360.1	361.6	363.2
132.5°	384.1	384.1	384.0	383.3	382.1	380.8	379.6	378.2	379.6	380.8	382.1
135°	411.2	410.9	410.8	410.0	408.7	407.4	406.0	404.7	406.0	407.4	408.7
137.5°	438.2	437.9	437.5	436.9	435.8	434.7	433.7	432.5	433.7	434.7	435.8
140°	455.6	455.1	454.5	453.6	452.5	451.5	450.4	449.3	450.4	451.5	452.5
142.5°	472.4	472.0	471.6	470.8	469.8	468.7	467.6	466.6	467.6	468.7	469.8
145°	496.8	496.1	495.4	494.6	493.8	492.9	492.1	491.3	492.1	492.9	493.8
147.5°	519.0	518.5	518.0	517.3	516.3	515.3	514.3	513.3	514.3	515.3	516.3
150°	532.7	532.3	531.8	531.2	530.5	529.8	529.0	528.4	529.0	529.8	530.5
152.5°	546.3	545.7	545.2	544.5	543.8	543.1	542.4	541.7	542.4	543.1	543.8
155°	564.2	563.8	563.5	563.1	562.7	562.4	562.0	561.7	562.0	562.4	562.7
157.5°	580.4	580.1	579.9	579.8	579.5	579.2	579.0	578.7	579.0	579.2	579.5
160°	590.4	590.3	590.2	590.0	589.7	589.6	589.3	589.1	589.3	589.6	589.7
162.5°	599.1	598.9	598.8	598.7	598.7	598.6	598.6	598.5	598.6	598.6	598.7
165°	610.6	610.6	610.6	610.7	610.8	610.9	611.0	611.1	611.0	610.9	610.8
167.5°	620.0	620.0	620.0	620.2	620.6	620.9	621.3	621.6	621.3	620.9	620.6
170°	625.3	625.5	625.6	625.8	626.1	626.5	626.9	627.3	626.9	626.5	626.1
172.5°	629.2	629.3	629.4	629.7	630.0	630.4	630.7	631.1	630.7	630.4	630.0
175°	633.7	633.9	634.1	634.4	634.8	635.1	635.5	635.8	635.5	635.1	634.8
177.5°	636.0	636.2	636.4	636.6	636.9	637.2	637.4	637.8	637.4	637.2	636.9
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-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°	4.5	4.7	4.9	5.5	5.9	6.3	6.3	6.0	6.0	5.9	5.7
90°	6.3	8.3	10.9	13.6	16.2	18.9	18.6	18.4	18.1	17.8	17.8
92.5°	13.8	14.6	15.3	15.8	16.5	17.1	17.2	17.2	17.2	17.2	17.3
95°	32.7	33.5	33.6	33.9	34.1	34.4	34.4	34.4	34.4	34.4	34.3
97.5°	55.2	56.0	56.5	56.9	57.4	57.9	57.9	57.9	57.9	57.9	57.8
100°	72.1	72.8	73.1	73.4	73.8	74.2	74.2	74.2	74.2	74.2	74.1
102.5°	89.4	90.0	90.5	90.9	91.3	91.8	91.9	92.0	92.1	92.2	92.2
105°	117.0	117.3	117.5	117.7	118.0	118.3	118.5	118.8	118.9	119.2	119.3
107.5°	147.1	147.4	147.4	147.4	147.4	147.4	147.5	147.6	147.7	147.8	147.5
110°	166.8	167.1	167.1	167.1	167.1	167.1	167.1	167.1	167.1	167.1	167.0



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	187.5	187.8	187.7	187.6	187.5	187.4	187.1	186.8	186.5	186.2	186.0
115°	217.8	218.1	217.8	217.6	217.4	217.2	217.1	216.9	216.8	216.7	216.4
117.5°	249.1	249.3	248.6	247.9	247.2	246.6	246.3	246.0	245.7	245.4	245.2
120°	269.4	269.4	268.3	267.4	266.5	265.5	265.5	265.5	265.5	265.5	265.3
122.5°	288.6	288.8	288.1	287.5	286.8	286.2	285.9	285.6	285.3	285.0	284.7
125°	317.1	317.4	317.1	316.8	316.4	316.0	315.7	315.3	315.0	314.6	314.3
127.5°	346.3	346.8	346.4	345.9	345.5	345.1	344.6	344.2	343.7	343.4	342.9
130°	364.7	365.3	365.1	364.9	364.7	364.4	364.2	363.9	363.7	363.4	363.1
132.5°	383.3	384.0	384.1	384.1	384.2	384.2	383.7	383.1	382.6	382.1	381.6
135°	410.0	410.8	410.9	411.2	411.5	411.7	411.6	411.5	411.3	411.2	410.9
137.5°	436.9	437.5	437.9	438.2	438.5	438.8	438.7	438.6	438.5	438.4	438.1
140°	453.6	454.5	455.1	455.6	456.3	456.9	456.9	456.9	456.9	456.9	456.7
142.5°	470.8	471.6	472.0	472.4	472.8	473.2	473.3	473.3	473.4	473.5	473.3
145°	494.6	495.4	496.1	496.8	497.6	498.2	498.3	498.5	498.6	498.7	498.5
147.5°	517.3	518.0	518.5	519.0	519.4	520.0	520.2	520.5	520.8	521.0	520.9
150°	531.2	531.8	532.3	532.7	533.2	533.8	534.0	534.4	534.8	535.2	535.2
152.5°	544.5	545.2	545.7	546.3	546.9	547.5	547.9	548.4	548.8	549.3	549.3
155°	563.1	563.5	563.8	564.2	564.5	564.9	565.5	566.1	566.7	567.3	567.4
157.5°	579.8	579.9	580.1	580.4	580.6	580.8	581.6	582.4	583.2	584.1	584.2
160°	590.0	590.2	590.3	590.4	590.6	590.7	591.4	592.1	592.9	593.5	593.7
162.5°	598.7	598.8	598.9	599.1	599.2	599.3	600.1	600.9	601.7	602.6	602.7
165°	610.7	610.6	610.6	610.6	610.6	610.6	611.4	612.3	613.1	613.9	614.1
167.5°	620.2	620.0	620.0	620.0	619.9	619.9	620.8	621.6	622.5	623.3	623.4
170°	625.8	625.6	625.5	625.3	625.2	625.1	625.9	626.8	627.6	628.4	628.5
172.5°	629.7	629.4	629.3	629.2	629.1	629.0	629.8	630.7	631.5	632.3	632.4
175°	634.4	634.1	633.9	633.7	633.4	633.1	634.0	634.8	635.7	636.5	636.6
177.5°	636.6	636.4	636.2	636.0	635.8	635.7	636.2	636.8	637.3	637.9	637.9
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**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°	5.8	5.7	5.8	5.7	5.8	5.7	5.8	5.7	5.9	6.0	6.0
90°	17.9	18.0	18.2	18.3	18.2	18.0	17.9	17.8	17.8	18.1	18.4
92.5°	17.3	17.3	17.4	17.4	17.4	17.3	17.3	17.3	17.2	17.2	17.2
95°	34.0	33.8	33.6	33.4	33.6	33.8	34.0	34.3	34.4	34.4	34.4
97.5°	57.8	57.8	57.8	57.7	57.8	57.8	57.8	57.8	57.9	57.9	57.9
100°	74.0	73.9	73.8	73.6	73.8	73.9	74.0	74.1	74.2	74.2	74.2
102.5°	92.1	91.9	91.8	91.7	91.8	91.9	92.1	92.2	92.2	92.1	92.0
105°	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.2	118.9	118.8
107.5°	146.9	146.5	145.9	145.3	145.9	146.5	146.9	147.5	147.8	147.7	147.6
110°	166.6	166.3	165.9	165.5	165.9	166.3	166.6	167.0	167.1	167.1	167.1



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	185.7	185.4	185.1	184.9	185.1	185.4	185.7	186.0	186.2	186.5	186.8
115°	216.0	215.7	215.4	215.0	215.4	215.7	216.0	216.4	216.7	216.8	216.9
117.5°	244.8	244.4	244.0	243.6	244.0	244.4	244.8	245.2	245.4	245.7	246.0
120°	264.9	264.7	264.3	263.9	264.3	264.7	264.9	265.3	265.5	265.5	265.5
122.5°	284.5	284.2	284.0	283.7	284.0	284.2	284.5	284.7	285.0	285.3	285.6
125°	314.2	314.1	314.0	313.9	314.0	314.1	314.2	314.3	314.6	315.0	315.3
127.5°	342.5	342.1	341.8	341.4	341.8	342.1	342.5	342.9	343.4	343.7	344.2
130°	362.6	362.1	361.7	361.2	361.7	362.1	362.6	363.1	363.4	363.7	363.9
132.5°	381.3	380.9	380.5	380.1	380.5	380.9	381.3	381.6	382.1	382.6	383.1
135°	410.7	410.3	409.9	409.5	409.9	410.3	410.7	410.9	411.2	411.3	411.5
137.5°	437.6	437.2	436.7	436.2	436.7	437.2	437.6	438.1	438.4	438.5	438.6
140°	456.1	455.6	455.2	454.7	455.2	455.6	456.1	456.7	456.9	456.9	456.9
142.5°	472.9	472.4	471.9	471.5	471.9	472.4	472.9	473.3	473.5	473.4	473.3
145°	498.0	497.6	497.1	496.6	497.1	497.6	498.0	498.5	498.7	498.6	498.5
147.5°	520.5	520.0	519.5	519.1	519.5	520.0	520.5	520.9	521.0	520.8	520.5
150°	534.8	534.4	534.0	533.8	534.0	534.4	534.8	535.2	535.2	534.8	534.4
152.5°	548.8	548.4	547.9	547.5	547.9	548.4	548.8	549.3	549.3	548.8	548.4
155°	567.0	566.7	566.3	566.0	566.3	566.7	567.0	567.4	567.3	566.7	566.1
157.5°	583.6	583.1	582.5	581.8	582.5	583.1	583.6	584.2	584.1	583.2	582.4
160°	593.2	592.8	592.2	591.7	592.2	592.8	593.2	593.7	593.5	592.9	592.1
162.5°	602.1	601.5	601.0	600.4	601.0	601.5	602.1	602.7	602.6	601.7	600.9
165°	613.4	612.8	612.3	611.6	612.3	612.8	613.4	614.1	613.9	613.1	612.3
167.5°	622.7	622.2	621.5	620.9	621.5	622.2	622.7	623.4	623.3	622.5	621.6
170°	627.7	627.1	626.3	625.7	626.3	627.1	627.7	628.5	628.4	627.6	626.8
172.5°	631.7	630.9	630.2	629.5	630.2	630.9	631.7	632.4	632.3	631.5	630.7
175°	635.8	635.1	634.4	633.7	634.4	635.1	635.8	636.6	636.5	635.7	634.8
177.5°	637.3	636.8	636.2	635.7	636.2	636.8	637.3	637.9	637.9	637.3	636.8
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-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°	6.3	6.3	5.9	5.5	4.9	4.7	4.5	4.4	4.4	4.7	5.1
90°	18.6	18.9	16.2	13.6	10.9	8.3	6.3	4.8	3.4	2.0	0.6
92.5°	17.2	17.1	16.5	15.8	15.3	14.6	13.8	12.7	11.7	10.7	9.6
95°	34.4	34.4	34.1	33.9	33.6	33.5	32.7	31.6	30.3	29.1	28.0
97.5°	57.9	57.9	57.4	56.9	56.5	56.0	55.2	54.2	53.2	52.1	51.1
100°	74.2	74.2	73.8	73.4	73.1	72.8	72.1	71.2	70.1	69.2	68.2
102.5°	91.9	91.8	91.3	90.9	90.5	90.0	89.4	88.6	87.8	87.1	86.3
105°	118.5	118.3	118.0	117.7	117.5	117.3	117.0	116.6	116.3	115.9	115.6
107.5°	147.5	147.4	147.4	147.4	147.4	147.4	147.1	146.6	146.1	145.5	145.1
110°	167.1	167.1	167.1	167.1	167.1	167.1	166.8	166.1	165.3	164.7	163.9



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	187.1	187.4	187.5	187.6	187.7	187.8	187.5	186.7	186.0	185.3	184.5
115°	217.1	217.2	217.4	217.6	217.8	218.1	217.8	217.2	216.4	215.7	215.0
117.5°	246.3	246.6	247.2	247.9	248.6	249.3	249.1	248.2	247.2	246.3	245.3
120°	265.5	265.5	266.5	267.4	268.3	269.4	269.4	268.3	267.4	266.5	265.5
122.5°	285.9	286.2	286.8	287.5	288.1	288.8	288.6	287.5	286.3	285.1	284.0
125°	315.7	316.0	316.4	316.8	317.1	317.4	317.1	316.0	315.0	313.9	312.8
127.5°	344.6	345.1	345.5	345.9	346.4	346.8	346.3	345.0	343.6	342.2	340.8
130°	364.2	364.4	364.7	364.9	365.1	365.3	364.7	363.2	361.6	360.1	358.5
132.5°	383.7	384.2	384.2	384.1	384.1	384.0	383.3	382.1	380.8	379.6	378.2
135°	411.6	411.7	411.5	411.2	410.9	410.8	410.0	408.7	407.4	406.0	404.7
137.5°	438.7	438.8	438.5	438.2	437.9	437.5	436.9	435.8	434.7	433.7	432.5
140°	456.9	456.9	456.3	455.6	455.1	454.5	453.6	452.5	451.5	450.4	449.3
142.5°	473.3	473.2	472.8	472.4	472.0	471.6	470.8	469.8	468.7	467.6	466.6
145°	498.3	498.2	497.6	496.8	496.1	495.4	494.6	493.8	492.9	492.1	491.3
147.5°	520.2	520.0	519.4	519.0	518.5	518.0	517.3	516.3	515.3	514.3	513.3
150°	534.0	533.8	533.2	532.7	532.3	531.8	531.2	530.5	529.8	529.0	528.4
152.5°	547.9	547.5	546.9	546.3	545.7	545.2	544.5	543.8	543.1	542.4	541.7
155°	565.5	564.9	564.5	564.2	563.8	563.5	563.1	562.7	562.4	562.0	561.7
157.5°	581.6	580.8	580.6	580.4	580.1	579.9	579.8	579.5	579.2	579.0	578.7
160°	591.4	590.7	590.6	590.4	590.3	590.2	590.0	589.7	589.6	589.3	589.1
162.5°	600.1	599.3	599.2	599.1	598.9	598.8	598.7	598.7	598.6	598.6	598.5
165°	611.4	610.6	610.6	610.6	610.6	610.6	610.7	610.8	610.9	611.0	611.1
167.5°	620.8	619.9	619.9	620.0	620.0	620.0	620.2	620.6	620.9	621.3	621.6
170°	625.9	625.1	625.2	625.3	625.5	625.6	625.8	626.1	626.5	626.9	627.3
172.5°	629.8	629.0	629.1	629.2	629.3	629.4	629.7	630.0	630.4	630.7	631.1
175°	634.0	633.1	633.4	633.7	633.9	634.1	634.4	634.8	635.1	635.5	635.8
177.5°	636.2	635.7	635.8	636.0	636.2	636.4	636.6	636.9	637.2	637.4	637.8
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**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°	4.5	4.0	4.1	4.1	4.7	5.3	5.7	6.1	6.9	6.6	6.8
90°	2.0	3.4	4.8	6.3	8.3	10.9	13.6	16.2	18.9	18.6	18.4
92.5°	10.7	11.7	12.7	13.8	14.6	15.3	15.8	16.5	17.1	17.2	17.2
95°	29.1	30.3	31.6	32.7	33.5	33.6	33.9	34.1	34.4	34.4	34.4
97.5°	52.1	53.2	54.2	55.2	56.0	56.5	56.9	57.4	57.9	57.9	57.9
100°	69.2	70.1	71.2	72.1	72.8	73.1	73.4	73.8	74.2	74.2	74.2
102.5°	87.1	87.8	88.6	89.4	90.0	90.5	90.9	91.3	91.8	91.9	92.0
105°	115.9	116.3	116.6	117.0	117.3	117.5	117.7	118.0	118.3	118.5	118.8
107.5°	145.5	146.1	146.6	147.1	147.4	147.4	147.4	147.4	147.4	147.5	147.6
110°	164.7	165.3	166.1	166.8	167.1	167.1	167.1	167.1	167.1	167.1	167.1





TEST NUMBER: P331622-830

CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	185.3	186.0	186.7	187.5	187.8	187.7	187.6	187.5	187.4	187.1	186.8
115°	215.7	216.4	217.2	217.8	218.1	217.8	217.6	217.4	217.2	217.1	216.9
117.5°	246.3	247.2	248.2	249.1	249.3	248.6	247.9	247.2	246.6	246.3	246.0
120°	266.5	267.4	268.3	269.4	269.4	268.3	267.4	266.5	265.5	265.5	265.5
122.5°	285.1	286.3	287.5	288.6	288.8	288.1	287.5	286.8	286.2	285.9	285.6
125°	313.9	315.0	316.0	317.1	317.4	317.1	316.8	316.4	316.0	315.7	315.3
127.5°	342.2	343.6	345.0	346.3	346.8	346.4	345.9	345.5	345.1	344.6	344.2
130°	360.1	361.6	363.2	364.7	365.3	365.1	364.9	364.7	364.4	364.2	363.9
132.5°	379.6	380.8	382.1	383.3	384.0	384.1	384.1	384.2	384.2	383.7	383.1
135°	406.0	407.4	408.7	410.0	410.8	410.9	411.2	411.5	411.7	411.6	411.5
137.5°	433.7	434.7	435.8	436.9	437.5	437.9	438.2	438.5	438.8	438.7	438.6
140°	450.4	451.5	452.5	453.6	454.5	455.1	455.6	456.3	456.9	456.9	456.9
142.5°	467.6	468.7	469.8	470.8	471.6	472.0	472.4	472.8	473.2	473.3	473.3
145°	492.1	492.9	493.8	494.6	495.4	496.1	496.8	497.6	498.2	498.3	498.5
147.5°	514.3	515.3	516.3	517.3	518.0	518.5	519.0	519.4	520.0	520.2	520.5
150°	529.0	529.8	530.5	531.2	531.8	532.3	532.7	533.2	533.8	534.0	534.4
152.5°	542.4	543.1	543.8	544.5	545.2	545.7	546.3	546.9	547.5	547.9	548.4
155°	562.0	562.4	562.7	563.1	563.5	563.8	564.2	564.5	564.9	565.5	566.1
157.5°	579.0	579.2	579.5	579.8	579.9	580.1	580.4	580.6	580.8	581.6	582.4
160°	589.3	589.6	589.7	590.0	590.2	590.3	590.4	590.6	590.7	591.4	592.1
162.5°	598.6	598.6	598.7	598.7	598.8	598.9	599.1	599.2	599.3	600.1	600.9
165°	611.0	610.9	610.8	610.7	610.6	610.6	610.6	610.6	610.6	611.4	612.3
167.5°	621.3	620.9	620.6	620.2	620.0	620.0	620.0	619.9	619.9	620.8	621.6
170°	626.9	626.5	626.1	625.8	625.6	625.5	625.3	625.2	625.1	625.9	626.8
172.5°	630.7	630.4	630.0	629.7	629.4	629.3	629.2	629.1	629.0	629.8	630.7
175°	635.5	635.1	634.8	634.4	634.1	633.9	633.7	633.4	633.1	634.0	634.8
177.5°	637.4	637.2	636.9	636.6	636.4	636.2	636.0	635.8	635.7	636.2	636.8
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



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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°	6.5	6.5	6.5	6.5	6.5	6.5	6.4
90°	18.1	17.8	17.8	17.9	18.0	18.2	18.3
92.5°	17.2	17.2	17.3	17.3	17.3	17.4	17.4
95°	34.4	34.4	34.3	34.0	33.8	33.6	33.4
97.5°	57.9	57.9	57.8	57.8	57.8	57.8	57.7
100°	74.2	74.2	74.1	74.0	73.9	73.8	73.6
102.5°	92.1	92.2	92.2	92.1	91.9	91.8	91.7
105°	118.9	119.2	119.3	119.3	119.3	119.3	119.3
107.5°	147.7	147.8	147.5	146.9	146.5	145.9	145.3
110°	167.1	167.1	167.0	166.6	166.3	165.9	165.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	186.5	186.2	186.0	185.7	185.4	185.1	184.9
115°	216.8	216.7	216.4	216.0	215.7	215.4	215.0
117.5°	245.7	245.4	245.2	244.8	244.4	244.0	243.6
120°	265.5	265.5	265.3	264.9	264.7	264.3	263.9
122.5°	285.3	285.0	284.7	284.5	284.2	284.0	283.7
125°	315.0	314.6	314.3	314.2	314.1	314.0	313.9
127.5°	343.7	343.4	342.9	342.5	342.1	341.8	341.4
130°	363.7	363.4	363.1	362.6	362.1	361.7	361.2
132.5°	382.6	382.1	381.6	381.3	380.9	380.5	380.1
135°	411.3	411.2	410.9	410.7	410.3	409.9	409.5
137.5°	438.5	438.4	438.1	437.6	437.2	436.7	436.2
140°	456.9	456.9	456.7	456.1	455.6	455.2	454.7
142.5°	473.4	473.5	473.3	472.9	472.4	471.9	471.5
145°	498.6	498.7	498.5	498.0	497.6	497.1	496.6
147.5°	520.8	521.0	520.9	520.5	520.0	519.5	519.1
150°	534.8	535.2	535.2	534.8	534.4	534.0	533.8
152.5°	548.8	549.3	549.3	548.8	548.4	547.9	547.5
155°	566.7	567.3	567.4	567.0	566.7	566.3	566.0
157.5°	583.2	584.1	584.2	583.6	583.1	582.5	581.8
160°	592.9	593.5	593.7	593.2	592.8	592.2	591.7
162.5°	601.7	602.6	602.7	602.1	601.5	601.0	600.4
165°	613.1	613.9	614.1	613.4	612.8	612.3	611.6
167.5°	622.5	623.3	623.4	622.7	622.2	621.5	620.9
170°	627.6	628.4	628.5	627.7	627.1	626.3	625.7
172.5°	631.5	632.3	632.4	631.7	630.9	630.2	629.5
175°	635.7	636.5	636.6	635.8	635.1	634.4	633.7
177.5°	637.3	637.9	637.9	637.3	636.8	636.2	635.7
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9

(END OF REPORT)