

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: P331621-830

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

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331621-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 530 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

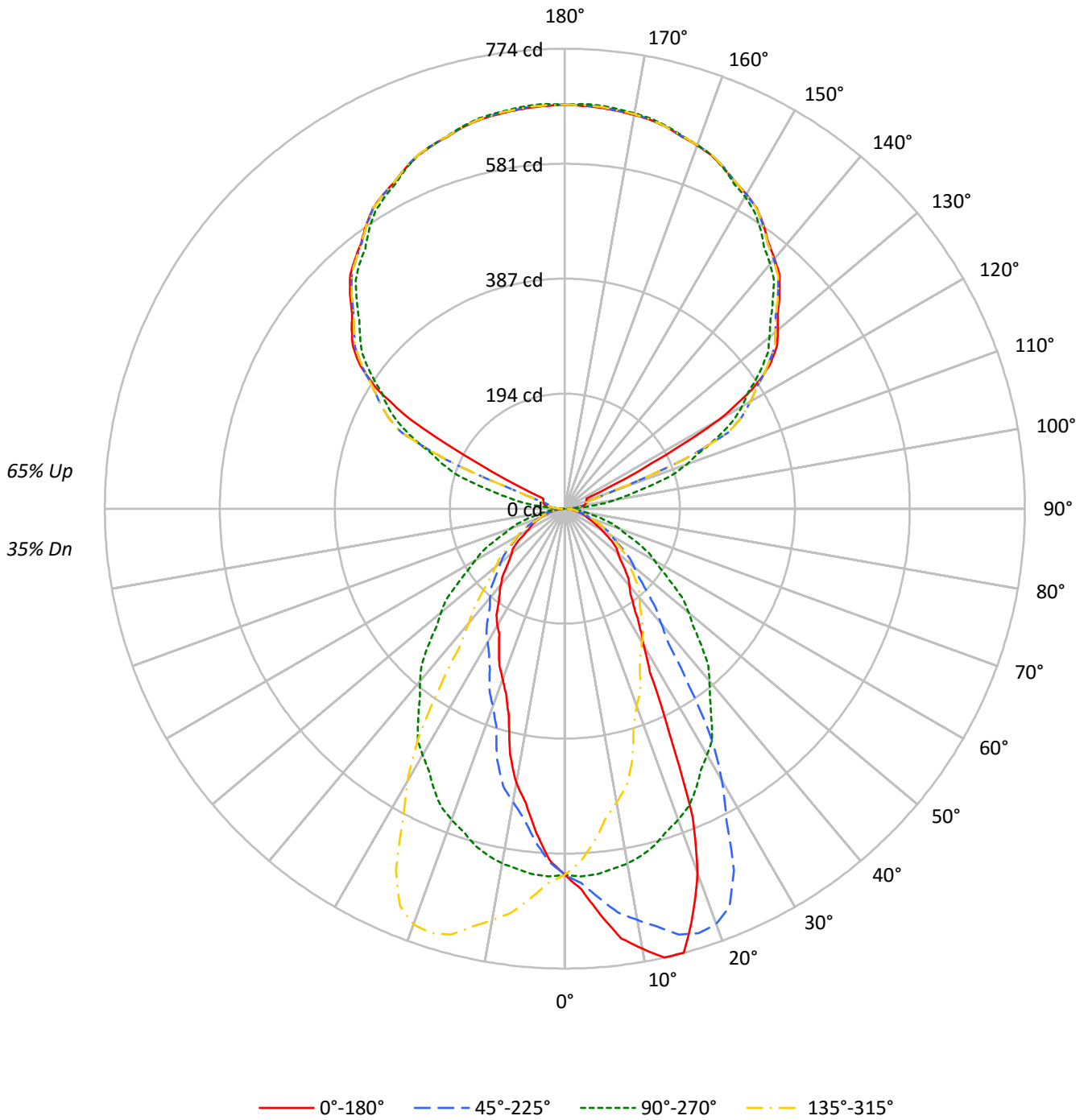
Lumens per Lamp: N/A  
Luminaire Lumens: 3058.7 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

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	75	75	75	58	58	58	42	42	42	35
1	95	91	87	84	86	82	79	77	66	64	62	52	50	49	38	37	37	30
2	87	80	74	70	78	73	68	64	59	55	53	46	44	42	34	33	32	26
3	80	71	64	59	72	64	59	54	52	48	45	41	38	36	31	29	28	23
4	73	63	56	50	66	57	51	46	47	42	39	37	34	31	28	26	24	20
5	67	56	49	43	61	51	45	40	42	37	34	34	30	28	26	23	22	18
6	62	51	43	38	56	46	40	35	38	33	30	31	27	24	23	21	19	16
7	58	46	38	33	52	42	36	31	35	30	26	28	24	22	22	19	17	15
8	53	42	35	29	48	38	32	27	32	27	24	26	22	20	20	18	16	13
9	50	38	31	26	45	35	29	25	29	25	21	24	20	18	19	16	14	12
10	47	35	28	24	42	32	26	22	27	22	19	22	19	16	17	15	13	11

**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	1.9
10°-20°	162.8	5.3
20°-30°	209.7	6.9
30°-40°	199.3	6.5
40°-50°	170.7	5.6
50°-60°	130.0	4.3
60°-70°	82.2	2.7
70°-80°	41.0	1.3
80°-90°	12.4	0.4
90°-100°	22.7	0.7
100°-110°	83.2	2.7
110°-120°	222.3	7.3
120°-130°	366.9	12.0
130°-140°	390.2	12.8
140°-150°	362.7	11.9
150°-160°	291.6	9.5
160°-170°	187.9	6.1
170°-180°	64.7	2.1
0°-30°	430.9	14.1
0°-40°	630.2	20.6
0°-60°	931.0	30.4
0°-90°	1066.6	34.9
90°-120°	328.1	10.7
90°-150°	1447.9	47.3
90°-180°	1992.0	65.1
0°-180°	3058.7	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°	13	0	13	0	13	6
95°	21	32	21	32	21	20
105°	37	150	37	150	37	39
115°	40	283	40	283	40	101
125°	421	400	421	400	421	364
135°	511	495	511	495	511	394
145°	583	574	583	574	583	365
155°	632	632	632	632	632	292
165°	664	666	664	666	664	188
175°	677	681	677	681	677	65
180°	680	680	680	680	680	



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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°	5.4	5.6	5.5	5.5	5.4	5.3	5.2	5.3	5.0	5.1	4.7
90°	13.3	13.1	12.8	12.6	12.4	12.1	11.5	10.9	10.4	9.8	9.0
92.5°	13.3	13.2	13.0	12.9	12.7	12.5	12.3	12.0	11.7	11.4	10.9
95°	21.1	21.3	21.4	21.5	21.6	21.4	20.8	20.3	19.7	19.2	18.4
97.5°	28.3	28.1	28.0	27.8	27.7	27.4	27.0	26.6	26.1	25.6	23.9
100°	33.0	32.7	32.5	32.3	32.0	31.6	30.6	29.8	28.9	28.0	26.2
102.5°	35.3	35.0	34.7	34.4	34.1	33.4	32.2	31.1	30.0	28.8	44.4
105°	37.4	36.9	36.5	36.1	35.6	34.8	33.6	32.4	31.2	30.0	59.9
107.5°	38.5	38.0	37.6	37.1	36.8	37.1	38.4	39.6	40.8	42.0	77.8
110°	38.8	38.5	38.0	37.5	37.1	42.3	53.3	64.2	75.1	86.1	117.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	39.2	38.9	38.5	38.2	37.9	57.6	97.5	137.3	177.2	217.2	224.9
115°	40.3	48.2	56.1	63.9	71.8	101.0	151.7	202.3	252.9	303.5	300.8
117.5°	164.7	190.6	216.4	242.2	268.2	287.2	299.4	311.7	324.0	336.1	334.3
120°	300.0	314.8	329.6	344.3	359.1	365.8	364.5	363.2	361.8	360.5	358.5
122.5°	374.4	377.3	380.1	383.0	385.9	386.9	386.2	385.3	384.6	383.8	381.6
125°	420.6	420.3	419.9	419.6	419.2	418.7	417.9	417.2	416.4	415.7	413.6
127.5°	449.7	449.6	449.6	449.5	449.4	448.8	447.7	446.6	445.4	444.4	442.8
130°	467.8	467.9	468.0	468.1	468.3	467.7	466.5	465.2	464.1	462.9	461.7
132.5°	485.5	485.6	485.7	485.8	485.9	485.5	484.5	483.4	482.4	481.4	480.1
135°	511.0	511.3	511.5	511.7	512.0	511.5	510.4	509.3	508.2	507.1	506.1
137.5°	534.4	534.8	535.1	535.5	535.8	535.6	534.4	533.4	532.3	531.2	530.1
140°	548.9	549.5	550.1	550.5	551.1	550.9	549.9	548.9	548.0	547.0	545.7
142.5°	563.1	563.6	564.2	564.8	565.3	565.1	564.2	563.4	562.4	561.6	560.2
145°	582.9	583.4	584.0	584.6	585.0	584.9	584.2	583.4	582.7	581.9	580.0
147.5°	600.3	600.8	601.2	601.7	602.1	602.1	601.5	601.0	600.4	599.8	597.9
150°	611.0	611.4	612.0	612.6	613.1	613.0	612.4	611.7	611.1	610.4	608.7
152.5°	620.0	620.7	621.4	622.2	622.8	622.9	622.3	621.6	620.9	620.3	618.6
155°	632.5	633.5	634.3	635.2	636.0	636.2	635.6	634.9	634.2	633.6	632.3
157.5°	644.0	644.9	645.7	646.6	647.5	647.5	646.8	646.0	645.3	644.6	643.7
160°	650.7	651.5	652.3	653.1	653.8	653.8	653.2	652.5	652.0	651.3	650.6
162.5°	656.3	657.2	658.2	659.1	660.1	660.2	659.4	658.6	657.9	657.1	656.6
165°	664.5	665.3	666.1	666.8	667.6	667.6	666.8	666.1	665.3	664.5	664.2
167.5°	669.8	670.7	671.8	672.7	673.7	673.8	673.1	672.2	671.5	670.7	670.4
170°	672.9	673.9	674.9	675.8	676.8	676.9	676.2	675.4	674.7	673.9	673.6
172.5°	675.2	676.3	677.2	678.3	679.2	679.3	678.5	677.8	677.0	676.3	676.0
175°	677.3	678.4	679.5	680.6	681.7	681.8	681.1	680.3	679.6	678.8	678.5
177.5°	678.6	679.4	680.1	681.0	681.7	681.8	681.3	680.6	680.0	679.4	679.3
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



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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°	4.5	4.5	4.3	4.0	3.9	3.9	4.4	5.1	4.6	4.3	4.2
90°	8.1	7.3	6.3	5.3	4.1	2.9	1.7	0.5	1.7	2.9	4.1
92.5°	10.6	10.1	9.7	9.5	9.6	9.7	9.8	9.9	9.8	9.7	9.6
95°	17.6	16.9	16.1	17.5	21.1	24.8	28.4	32.0	28.4	24.8	21.1
97.5°	22.1	20.4	18.6	22.8	33.0	43.2	53.3	63.4	53.3	43.2	33.0
100°	24.3	22.4	20.6	27.1	42.1	57.1	72.1	87.1	72.1	57.1	42.1
102.5°	59.9	75.5	91.0	100.4	103.5	106.7	109.9	113.0	109.9	106.7	103.5
105°	89.7	119.5	149.4	162.7	159.4	156.1	152.8	149.5	152.8	156.1	159.4
107.5°	113.6	149.4	185.1	201.7	199.1	196.4	193.8	191.1	193.8	196.4	199.1
110°	149.3	180.9	212.4	227.1	224.8	222.5	220.2	217.9	220.2	222.5	224.8





TEST NUMBER: P331621-830

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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	232.7	240.5	248.4	251.2	249.2	247.1	245.2	243.1	245.2	247.1	249.2
115°	298.0	295.3	292.6	290.3	288.4	286.5	284.6	282.9	284.6	286.5	288.4
117.5°	332.4	330.5	328.7	326.7	324.6	322.5	320.5	318.4	320.5	322.5	324.6
120°	356.7	354.7	352.7	350.9	349.2	347.6	345.9	344.3	345.9	347.6	349.2
122.5°	379.5	377.3	375.2	373.2	371.6	369.9	368.1	366.4	368.1	369.9	371.6
125°	411.5	409.4	407.4	405.6	404.2	402.7	401.3	399.9	401.3	402.7	404.2
127.5°	441.3	439.7	438.2	436.6	435.0	433.5	431.9	430.3	431.9	433.5	435.0
130°	460.4	459.3	458.1	456.6	454.9	453.1	451.3	449.6	451.3	453.1	454.9
132.5°	479.0	477.8	476.5	475.2	473.7	472.2	470.7	469.3	470.7	472.2	473.7
135°	505.2	504.2	503.2	501.8	500.1	498.3	496.6	494.8	496.6	498.3	500.1
137.5°	529.0	527.9	526.8	525.6	524.3	523.1	521.9	520.8	521.9	523.1	524.3
140°	544.6	543.4	542.2	541.1	540.3	539.4	538.5	537.6	538.5	539.4	540.3
142.5°	558.7	557.4	556.0	555.0	554.1	553.4	552.6	551.8	552.6	553.4	554.1
145°	578.2	576.4	574.5	573.6	573.7	573.8	573.9	574.0	573.9	573.8	573.7
147.5°	596.2	594.3	592.5	591.7	592.2	592.6	593.0	593.4	593.0	592.6	592.2
150°	606.9	605.2	603.4	602.9	603.7	604.5	605.2	606.0	605.2	604.5	603.7
152.5°	617.0	615.3	613.6	613.2	614.1	614.9	615.8	616.6	615.8	614.9	614.1
155°	630.9	629.6	628.3	628.1	629.1	630.1	631.1	632.1	631.1	630.1	629.1
157.5°	642.7	641.8	640.9	640.8	641.7	642.5	643.4	644.1	643.4	642.5	641.7
160°	650.0	649.3	648.7	648.7	649.3	650.0	650.6	651.3	650.6	650.0	649.3
162.5°	656.0	655.4	654.9	655.0	655.5	656.2	656.9	657.5	656.9	656.2	655.5
165°	663.8	663.5	663.3	663.4	664.0	664.7	665.3	666.0	665.3	664.7	664.0
167.5°	670.1	669.8	669.5	669.7	670.3	671.0	671.7	672.3	671.7	671.0	670.3
170°	673.4	673.3	673.0	673.3	673.9	674.6	675.2	675.8	675.2	674.6	673.9
172.5°	675.8	675.6	675.3	675.6	676.3	676.9	677.6	678.3	677.6	676.9	676.3
175°	678.3	678.2	678.0	678.2	679.0	679.8	680.5	681.3	680.5	679.8	679.0
177.5°	679.2	679.1	679.0	679.3	680.0	680.5	681.2	681.7	681.2	680.5	680.0
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



TEST NUMBER: P331621-830

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

**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°	4.3	4.3	4.1	4.3	4.5	4.5	4.6	4.6	4.7	4.8	4.7
90°	5.3	6.3	7.3	8.1	9.0	9.8	10.4	10.9	11.5	12.1	12.4
92.5°	9.5	9.7	10.1	10.6	10.9	11.4	11.7	12.0	12.3	12.5	12.7
95°	17.5	16.1	16.9	17.6	18.4	19.2	19.7	20.3	20.8	21.4	21.6
97.5°	22.8	18.6	20.4	22.1	23.9	25.6	26.1	26.6	27.0	27.4	27.7
100°	27.1	20.6	22.4	24.3	26.2	28.0	28.9	29.8	30.6	31.6	32.0
102.5°	100.4	91.0	75.5	59.9	44.4	28.8	30.0	31.1	32.2	33.4	34.1
105°	162.7	149.4	119.5	89.7	59.9	30.0	31.2	32.4	33.6	34.8	35.6
107.5°	201.7	185.1	149.4	113.6	77.8	42.0	40.8	39.6	38.4	37.1	36.8
110°	227.1	212.4	180.9	149.3	117.6	86.1	75.1	64.2	53.3	42.3	37.1



TEST NUMBER: P331621-830

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

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	251.2	248.4	240.5	232.7	224.9	217.2	177.2	137.3	97.5	57.6	37.9
115°	290.3	292.6	295.3	298.0	300.8	303.5	252.9	202.3	151.7	101.0	71.8
117.5°	326.7	328.7	330.5	332.4	334.3	336.1	324.0	311.7	299.4	287.2	268.2
120°	350.9	352.7	354.7	356.7	358.5	360.5	361.8	363.2	364.5	365.8	359.1
122.5°	373.2	375.2	377.3	379.5	381.6	383.8	384.6	385.3	386.2	386.9	385.9
125°	405.6	407.4	409.4	411.5	413.6	415.7	416.4	417.2	417.9	418.7	419.2
127.5°	436.6	438.2	439.7	441.3	442.8	444.4	445.4	446.6	447.7	448.8	449.4
130°	456.6	458.1	459.3	460.4	461.7	462.9	464.1	465.2	466.5	467.7	468.3
132.5°	475.2	476.5	477.8	479.0	480.1	481.4	482.4	483.4	484.5	485.5	485.9
135°	501.8	503.2	504.2	505.2	506.1	507.1	508.2	509.3	510.4	511.5	512.0
137.5°	525.6	526.8	527.9	529.0	530.1	531.2	532.3	533.4	534.4	535.6	535.8
140°	541.1	542.2	543.4	544.6	545.7	547.0	548.0	548.9	549.9	550.9	551.1
142.5°	555.0	556.0	557.4	558.7	560.2	561.6	562.4	563.4	564.2	565.1	565.3
145°	573.6	574.5	576.4	578.2	580.0	581.9	582.7	583.4	584.2	584.9	585.0
147.5°	591.7	592.5	594.3	596.2	597.9	599.8	600.4	601.0	601.5	602.1	602.1
150°	602.9	603.4	605.2	606.9	608.7	610.4	611.1	611.7	612.4	613.0	613.1
152.5°	613.2	613.6	615.3	617.0	618.6	620.3	620.9	621.6	622.3	622.9	622.8
155°	628.1	628.3	629.6	630.9	632.3	633.6	634.2	634.9	635.6	636.2	636.0
157.5°	640.8	640.9	641.8	642.7	643.7	644.6	645.3	646.0	646.8	647.5	647.5
160°	648.7	648.7	649.3	650.0	650.6	651.3	652.0	652.5	653.2	653.8	653.8
162.5°	655.0	654.9	655.4	656.0	656.6	657.1	657.9	658.6	659.4	660.2	660.1
165°	663.4	663.3	663.5	663.8	664.2	664.5	665.3	666.1	666.8	667.6	667.6
167.5°	669.7	669.5	669.8	670.1	670.4	670.7	671.5	672.2	673.1	673.8	673.7
170°	673.3	673.0	673.3	673.4	673.6	673.9	674.7	675.4	676.2	676.9	676.8
172.5°	675.6	675.3	675.6	675.8	676.0	676.3	677.0	677.8	678.5	679.3	679.2
175°	678.2	678.0	678.2	678.3	678.5	678.8	679.6	680.3	681.1	681.8	681.7
177.5°	679.3	679.0	679.1	679.2	679.3	679.4	680.0	680.6	681.3	681.8	681.7
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



TEST NUMBER: P331621-830

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

**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°	4.7	4.6	4.8	4.7	4.8	4.6	4.7	4.7	4.8	4.7	4.6
90°	12.6	12.8	13.1	13.3	13.1	12.8	12.6	12.4	12.1	11.5	10.9
92.5°	12.9	13.0	13.2	13.3	13.2	13.0	12.9	12.7	12.5	12.3	12.0
95°	21.5	21.4	21.3	21.1	21.3	21.4	21.5	21.6	21.4	20.8	20.3
97.5°	27.8	28.0	28.1	28.3	28.1	28.0	27.8	27.7	27.4	27.0	26.6
100°	32.3	32.5	32.7	33.0	32.7	32.5	32.3	32.0	31.6	30.6	29.8
102.5°	34.4	34.7	35.0	35.3	35.0	34.7	34.4	34.1	33.4	32.2	31.1
105°	36.1	36.5	36.9	37.4	36.9	36.5	36.1	35.6	34.8	33.6	32.4
107.5°	37.1	37.6	38.0	38.5	38.0	37.6	37.1	36.8	37.1	38.4	39.6
110°	37.5	38.0	38.5	38.8	38.5	38.0	37.5	37.1	42.3	53.3	64.2



TEST NUMBER: P331621-830  
 CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	38.2	38.5	38.9	39.2	38.9	38.5	38.2	37.9	57.6	97.5	137.3
115°	63.9	56.1	48.2	40.3	48.2	56.1	63.9	71.8	101.0	151.7	202.3
117.5°	242.2	216.4	190.6	164.7	190.6	216.4	242.2	268.2	287.2	299.4	311.7
120°	344.3	329.6	314.8	300.0	314.8	329.6	344.3	359.1	365.8	364.5	363.2
122.5°	383.0	380.1	377.3	374.4	377.3	380.1	383.0	385.9	386.9	386.2	385.3
125°	419.6	419.9	420.3	420.6	420.3	419.9	419.6	419.2	418.7	417.9	417.2
127.5°	449.5	449.6	449.6	449.7	449.6	449.6	449.5	449.4	448.8	447.7	446.6
130°	468.1	468.0	467.9	467.8	467.9	468.0	468.1	468.3	467.7	466.5	465.2
132.5°	485.8	485.7	485.6	485.5	485.6	485.7	485.8	485.9	485.5	484.5	483.4
135°	511.7	511.5	511.3	511.0	511.3	511.5	511.7	512.0	511.5	510.4	509.3
137.5°	535.5	535.1	534.8	534.4	534.8	535.1	535.5	535.8	535.6	534.4	533.4
140°	550.5	550.1	549.5	548.9	549.5	550.1	550.5	551.1	550.9	549.9	548.9
142.5°	564.8	564.2	563.6	563.1	563.6	564.2	564.8	565.3	565.1	564.2	563.4
145°	584.6	584.0	583.4	582.9	583.4	584.0	584.6	585.0	584.9	584.2	583.4
147.5°	601.7	601.2	600.8	600.3	600.8	601.2	601.7	602.1	602.1	601.5	601.0
150°	612.6	612.0	611.4	611.0	611.4	612.0	612.6	613.1	613.0	612.4	611.7
152.5°	622.2	621.4	620.7	620.0	620.7	621.4	622.2	622.8	622.9	622.3	621.6
155°	635.2	634.3	633.5	632.5	633.5	634.3	635.2	636.0	636.2	635.6	634.9
157.5°	646.6	645.7	644.9	644.0	644.9	645.7	646.6	647.5	647.5	646.8	646.0
160°	653.1	652.3	651.5	650.7	651.5	652.3	653.1	653.8	653.8	653.2	652.5
162.5°	659.1	658.2	657.2	656.3	657.2	658.2	659.1	660.1	660.2	659.4	658.6
165°	666.8	666.1	665.3	664.5	665.3	666.1	666.8	667.6	667.6	666.8	666.1
167.5°	672.7	671.8	670.7	669.8	670.7	671.8	672.7	673.7	673.8	673.1	672.2
170°	675.8	674.9	673.9	672.9	673.9	674.9	675.8	676.8	676.9	676.2	675.4
172.5°	678.3	677.2	676.3	675.2	676.3	677.2	678.3	679.2	679.3	678.5	677.8
175°	680.6	679.5	678.4	677.3	678.4	679.5	680.6	681.7	681.8	681.1	680.3
177.5°	681.0	680.1	679.4	678.6	679.4	680.1	681.0	681.7	681.8	681.3	680.6
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



TEST NUMBER: P331621-830

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

**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°	4.6	4.5	4.5	4.3	4.1	4.3	4.3	4.2	4.3	4.6	5.1
90°	10.4	9.8	9.0	8.1	7.3	6.3	5.3	4.1	2.9	1.7	0.5
92.5°	11.7	11.4	10.9	10.6	10.1	9.7	9.5	9.6	9.7	9.8	9.9
95°	19.7	19.2	18.4	17.6	16.9	16.1	17.5	21.1	24.8	28.4	32.0
97.5°	26.1	25.6	23.9	22.1	20.4	18.6	22.8	33.0	43.2	53.3	63.4
100°	28.9	28.0	26.2	24.3	22.4	20.6	27.1	42.1	57.1	72.1	87.1
102.5°	30.0	28.8	44.4	59.9	75.5	91.0	100.4	103.5	106.7	109.9	113.0
105°	31.2	30.0	59.9	89.7	119.5	149.4	162.7	159.4	156.1	152.8	149.5
107.5°	40.8	42.0	77.8	113.6	149.4	185.1	201.7	199.1	196.4	193.8	191.1
110°	75.1	86.1	117.6	149.3	180.9	212.4	227.1	224.8	222.5	220.2	217.9



TEST NUMBER: P331621-830

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

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	177.2	217.2	224.9	232.7	240.5	248.4	251.2	249.2	247.1	245.2	243.1
115°	252.9	303.5	300.8	298.0	295.3	292.6	290.3	288.4	286.5	284.6	282.9
117.5°	324.0	336.1	334.3	332.4	330.5	328.7	326.7	324.6	322.5	320.5	318.4
120°	361.8	360.5	358.5	356.7	354.7	352.7	350.9	349.2	347.6	345.9	344.3
122.5°	384.6	383.8	381.6	379.5	377.3	375.2	373.2	371.6	369.9	368.1	366.4
125°	416.4	415.7	413.6	411.5	409.4	407.4	405.6	404.2	402.7	401.3	399.9
127.5°	445.4	444.4	442.8	441.3	439.7	438.2	436.6	435.0	433.5	431.9	430.3
130°	464.1	462.9	461.7	460.4	459.3	458.1	456.6	454.9	453.1	451.3	449.6
132.5°	482.4	481.4	480.1	479.0	477.8	476.5	475.2	473.7	472.2	470.7	469.3
135°	508.2	507.1	506.1	505.2	504.2	503.2	501.8	500.1	498.3	496.6	494.8
137.5°	532.3	531.2	530.1	529.0	527.9	526.8	525.6	524.3	523.1	521.9	520.8
140°	548.0	547.0	545.7	544.6	543.4	542.2	541.1	540.3	539.4	538.5	537.6
142.5°	562.4	561.6	560.2	558.7	557.4	556.0	555.0	554.1	553.4	552.6	551.8
145°	582.7	581.9	580.0	578.2	576.4	574.5	573.6	573.7	573.8	573.9	574.0
147.5°	600.4	599.8	597.9	596.2	594.3	592.5	591.7	592.2	592.6	593.0	593.4
150°	611.1	610.4	608.7	606.9	605.2	603.4	602.9	603.7	604.5	605.2	606.0
152.5°	620.9	620.3	618.6	617.0	615.3	613.6	613.2	614.1	614.9	615.8	616.6
155°	634.2	633.6	632.3	630.9	629.6	628.3	628.1	629.1	630.1	631.1	632.1
157.5°	645.3	644.6	643.7	642.7	641.8	640.9	640.8	641.7	642.5	643.4	644.1
160°	652.0	651.3	650.6	650.0	649.3	648.7	648.7	649.3	650.0	650.6	651.3
162.5°	657.9	657.1	656.6	656.0	655.4	654.9	655.0	655.5	656.2	656.9	657.5
165°	665.3	664.5	664.2	663.8	663.5	663.3	663.4	664.0	664.7	665.3	666.0
167.5°	671.5	670.7	670.4	670.1	669.8	669.5	669.7	670.3	671.0	671.7	672.3
170°	674.7	673.9	673.6	673.4	673.3	673.0	673.3	673.9	674.6	675.2	675.8
172.5°	677.0	676.3	676.0	675.8	675.6	675.3	675.6	676.3	676.9	677.6	678.3
175°	679.6	678.8	678.5	678.3	678.2	678.0	678.2	679.0	679.8	680.5	681.3
177.5°	680.0	679.4	679.3	679.2	679.1	679.0	679.3	680.0	680.5	681.2	681.7
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



TEST NUMBER: P331621-830

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

**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°	4.4	3.9	3.9	4.0	4.3	4.5	4.5	4.7	5.1	5.0	5.3
90°	1.7	2.9	4.1	5.3	6.3	7.3	8.1	9.0	9.8	10.4	10.9
92.5°	9.8	9.7	9.6	9.5	9.7	10.1	10.6	10.9	11.4	11.7	12.0
95°	28.4	24.8	21.1	17.5	16.1	16.9	17.6	18.4	19.2	19.7	20.3
97.5°	53.3	43.2	33.0	22.8	18.6	20.4	22.1	23.9	25.6	26.1	26.6
100°	72.1	57.1	42.1	27.1	20.6	22.4	24.3	26.2	28.0	28.9	29.8
102.5°	109.9	106.7	103.5	100.4	91.0	75.5	59.9	44.4	28.8	30.0	31.1
105°	152.8	156.1	159.4	162.7	149.4	119.5	89.7	59.9	30.0	31.2	32.4
107.5°	193.8	196.4	199.1	201.7	185.1	149.4	113.6	77.8	42.0	40.8	39.6
110°	220.2	222.5	224.8	227.1	212.4	180.9	149.3	117.6	86.1	75.1	64.2





TEST NUMBER: P331621-830  
 CATALOG NUMBER: SA2XXRDIP-C290D530U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	245.2	247.1	249.2	251.2	248.4	240.5	232.7	224.9	217.2	177.2	137.3
115°	284.6	286.5	288.4	290.3	292.6	295.3	298.0	300.8	303.5	252.9	202.3
117.5°	320.5	322.5	324.6	326.7	328.7	330.5	332.4	334.3	336.1	324.0	311.7
120°	345.9	347.6	349.2	350.9	352.7	354.7	356.7	358.5	360.5	361.8	363.2
122.5°	368.1	369.9	371.6	373.2	375.2	377.3	379.5	381.6	383.8	384.6	385.3
125°	401.3	402.7	404.2	405.6	407.4	409.4	411.5	413.6	415.7	416.4	417.2
127.5°	431.9	433.5	435.0	436.6	438.2	439.7	441.3	442.8	444.4	445.4	446.6
130°	451.3	453.1	454.9	456.6	458.1	459.3	460.4	461.7	462.9	464.1	465.2
132.5°	470.7	472.2	473.7	475.2	476.5	477.8	479.0	480.1	481.4	482.4	483.4
135°	496.6	498.3	500.1	501.8	503.2	504.2	505.2	506.1	507.1	508.2	509.3
137.5°	521.9	523.1	524.3	525.6	526.8	527.9	529.0	530.1	531.2	532.3	533.4
140°	538.5	539.4	540.3	541.1	542.2	543.4	544.6	545.7	547.0	548.0	548.9
142.5°	552.6	553.4	554.1	555.0	556.0	557.4	558.7	560.2	561.6	562.4	563.4
145°	573.9	573.8	573.7	573.6	574.5	576.4	578.2	580.0	581.9	582.7	583.4
147.5°	593.0	592.6	592.2	591.7	592.5	594.3	596.2	597.9	599.8	600.4	601.0
150°	605.2	604.5	603.7	602.9	603.4	605.2	606.9	608.7	610.4	611.1	611.7
152.5°	615.8	614.9	614.1	613.2	613.6	615.3	617.0	618.6	620.3	620.9	621.6
155°	631.1	630.1	629.1	628.1	628.3	629.6	630.9	632.3	633.6	634.2	634.9
157.5°	643.4	642.5	641.7	640.8	640.9	641.8	642.7	643.7	644.6	645.3	646.0
160°	650.6	650.0	649.3	648.7	648.7	649.3	650.0	650.6	651.3	652.0	652.5
162.5°	656.9	656.2	655.5	655.0	654.9	655.4	656.0	656.6	657.1	657.9	658.6
165°	665.3	664.7	664.0	663.4	663.3	663.5	663.8	664.2	664.5	665.3	666.1
167.5°	671.7	671.0	670.3	669.7	669.5	669.8	670.1	670.4	670.7	671.5	672.2
170°	675.2	674.6	673.9	673.3	673.0	673.3	673.4	673.6	673.9	674.7	675.4
172.5°	677.6	676.9	676.3	675.6	675.3	675.6	675.8	676.0	676.3	677.0	677.8
175°	680.5	679.8	679.0	678.2	678.0	678.2	678.3	678.5	678.8	679.6	680.3
177.5°	681.2	680.5	680.0	679.3	679.0	679.1	679.2	679.3	679.4	680.0	680.6
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8



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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°	5.2	5.3	5.4	5.5	5.5	5.6	5.4
90°	11.5	12.1	12.4	12.6	12.8	13.1	13.3
92.5°	12.3	12.5	12.7	12.9	13.0	13.2	13.3
95°	20.8	21.4	21.6	21.5	21.4	21.3	21.1
97.5°	27.0	27.4	27.7	27.8	28.0	28.1	28.3
100°	30.6	31.6	32.0	32.3	32.5	32.7	33.0
102.5°	32.2	33.4	34.1	34.4	34.7	35.0	35.3
105°	33.6	34.8	35.6	36.1	36.5	36.9	37.4
107.5°	38.4	37.1	36.8	37.1	37.6	38.0	38.5
110°	53.3	42.3	37.1	37.5	38.0	38.5	38.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	97.5	57.6	37.9	38.2	38.5	38.9	39.2
115°	151.7	101.0	71.8	63.9	56.1	48.2	40.3
117.5°	299.4	287.2	268.2	242.2	216.4	190.6	164.7
120°	364.5	365.8	359.1	344.3	329.6	314.8	300.0
122.5°	386.2	386.9	385.9	383.0	380.1	377.3	374.4
125°	417.9	418.7	419.2	419.6	419.9	420.3	420.6
127.5°	447.7	448.8	449.4	449.5	449.6	449.6	449.7
130°	466.5	467.7	468.3	468.1	468.0	467.9	467.8
132.5°	484.5	485.5	485.9	485.8	485.7	485.6	485.5
135°	510.4	511.5	512.0	511.7	511.5	511.3	511.0
137.5°	534.4	535.6	535.8	535.5	535.1	534.8	534.4
140°	549.9	550.9	551.1	550.5	550.1	549.5	548.9
142.5°	564.2	565.1	565.3	564.8	564.2	563.6	563.1
145°	584.2	584.9	585.0	584.6	584.0	583.4	582.9
147.5°	601.5	602.1	602.1	601.7	601.2	600.8	600.3
150°	612.4	613.0	613.1	612.6	612.0	611.4	611.0
152.5°	622.3	622.9	622.8	622.2	621.4	620.7	620.0
155°	635.6	636.2	636.0	635.2	634.3	633.5	632.5
157.5°	646.8	647.5	647.5	646.6	645.7	644.9	644.0
160°	653.2	653.8	653.8	653.1	652.3	651.5	650.7
162.5°	659.4	660.2	660.1	659.1	658.2	657.2	656.3
165°	666.8	667.6	667.6	666.8	666.1	665.3	664.5
167.5°	673.1	673.8	673.7	672.7	671.8	670.7	669.8
170°	676.2	676.9	676.8	675.8	674.9	673.9	672.9
172.5°	678.5	679.3	679.2	678.3	677.2	676.3	675.2
175°	681.1	681.8	681.7	680.6	679.5	678.4	677.3
177.5°	681.3	681.8	681.7	681.0	680.1	679.4	678.6
180°	679.8	679.8	679.8	679.8	679.8	679.8	679.8

(END OF REPORT)