

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: P331250-830

Luminaire Tested: **SA2XXDIP-C290D530U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331250-830  
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: SA2XXDIP-C290D530U830-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 530 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

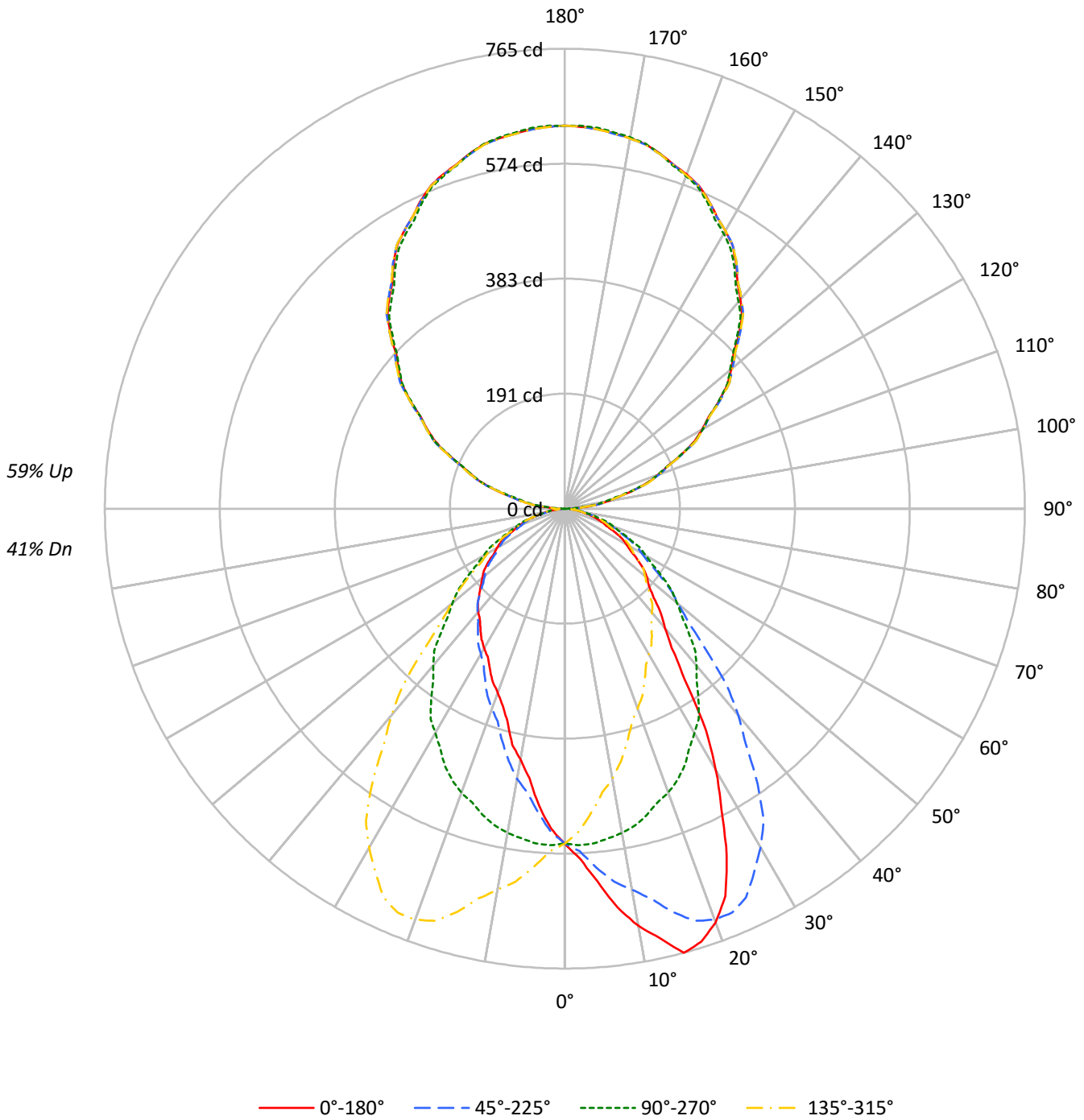
Lumens per Lamp: N/A  
Luminaire Lumens: 3012.6 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41				41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41				35	
2	88	81	75	70	80	74	69	65	61	57	54	49	47	45	38	37	35				30	
3	80	71	64	59	73	65	59	54	54	50	46	44	41	38	34	32	30				26	
4	74	63	56	50	67	58	52	46	48	43	40	39	36	33	31	28	26				23	
5	68	57	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23				20	
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21				18	
7	58	46	38	33	53	42	36	31	36	30	27	29	25	23	23	21	19				16	
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	21	19	17				14	
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15				13	
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	18	16	14				12	

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

	0°	90°	180°	270°
0°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	1.8
10°-20°	154.2	5.1
20°-30°	223.9	7.4
30°-40°	236.2	7.8
40°-50°	209.2	6.9
50°-60°	166.9	5.5
60°-70°	113.4	3.8
70°-80°	58.2	1.9
80°-90°	16.6	0.5
90°-100°	40.4	1.3
100°-110°	125.3	4.2
110°-120°	214.3	7.1
120°-130°	281.8	9.4
130°-140°	316.2	10.5
140°-150°	310.1	10.3
150°-160°	260.1	8.6
160°-170°	172.5	5.7
170°-180°	60.3	2.0
0°-30°	431.2	14.3
0°-40°	667.4	22.2
0°-60°	1043.5	34.6
0°-90°	1231.7	40.9
90°-120°	380.0	12.6
90°-150°	1288.0	42.8
90°-180°	1781.0	59.1
0°-180°	3012.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	13
90°	18	1	18	1	18	9
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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	8.1	8.1	8.2	8.0	8.0	8.2	8.2	8.1	8.3	8.6	8.2
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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	7.8	7.4	6.8	6.7	5.9	5.7	4.7	3.9	4.0	4.1	4.1
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: P331250-830

CATALOG NUMBER: SA2XXDIP-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: P331250-830

CATALOG NUMBER: SA2XXDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	4.1	4.4	4.7	5.3	5.7	6.0	5.7	5.7	5.7	5.3	5.3
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: P331250-830

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**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: P331250-830

CATALOG NUMBER: SA2XXDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	5.3	5.2	5.2	5.0	5.2	5.2	5.3	5.3	5.3	5.7	5.7
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: P331250-830

CATALOG NUMBER: SA2XXDIP-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: P331250-830

CATALOG NUMBER: SA2XXDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	5.7	6.0	5.7	5.3	4.7	4.4	4.1	4.1	4.1	4.0	3.9
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: P331250-830

CATALOG NUMBER: SA2XXDIP-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: P331250-830

CATALOG NUMBER: SA2XXDIP-C290D530U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	4.7	5.7	5.9	6.7	6.8	7.4	7.8	8.2	8.6	8.3	8.1
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: P331250-830

CATALOG NUMBER: SA2XXDIP-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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	8.2	8.2	8.0	8.0	8.2	8.1	8.1
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)