

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: P331249-830

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

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331249-830
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: SA2XXDIP-C290D530U830-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 530 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

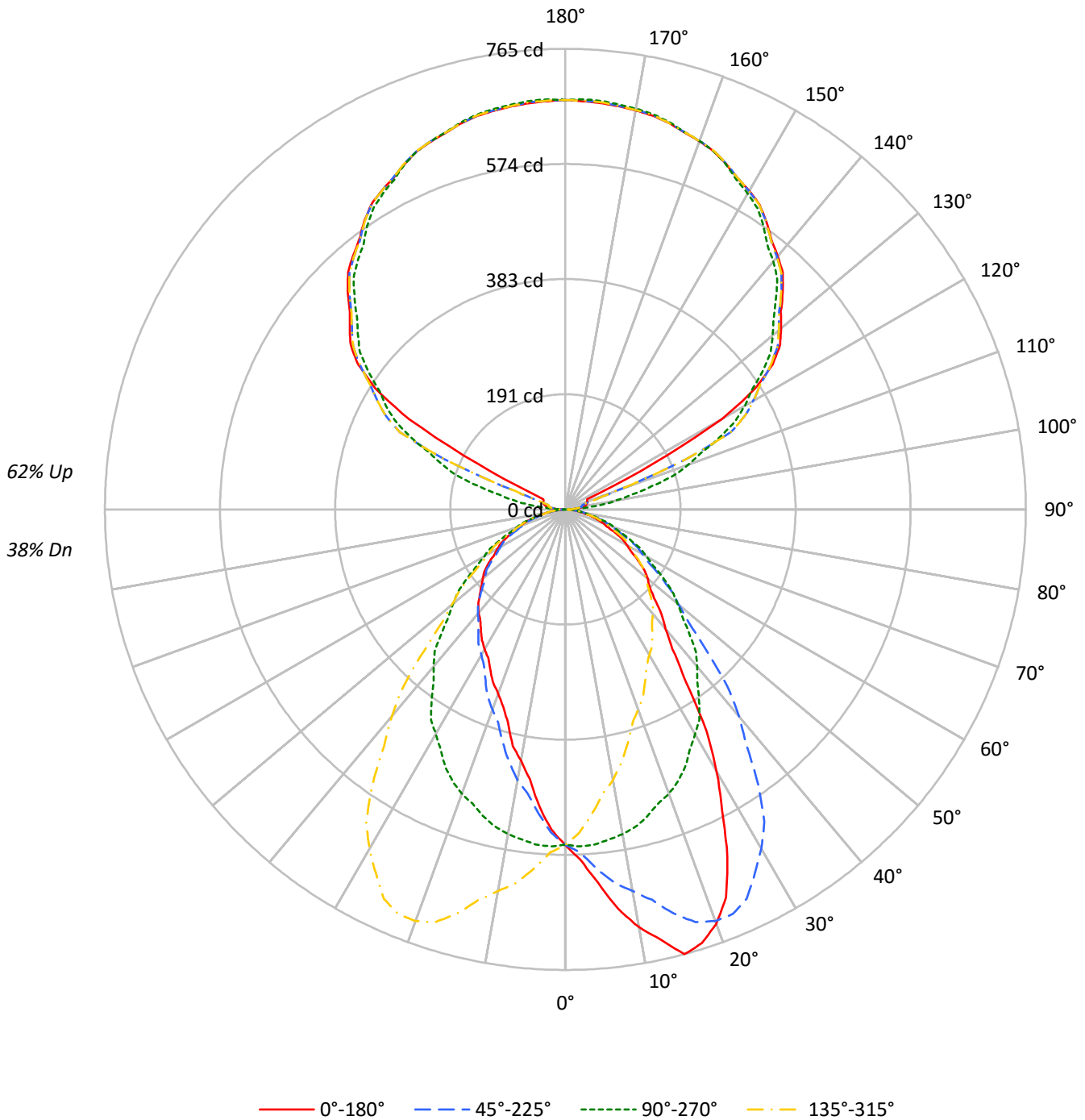
Lumens per Lamp: N/A
Luminaire Lumens: 3222.9 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	80	71	64	58	72	65	59	54	53	49	45	42	39	37	32	30	29	24
4	73	63	55	50	66	57	51	46	47	43	39	38	35	32	29	27	25	21
5	67	56	48	43	61	51	45	40	42	37	34	34	31	28	26	24	22	19
6	62	50	43	37	56	46	39	34	38	33	29	31	27	24	24	22	20	17
7	57	46	38	33	52	42	35	30	35	30	26	28	25	22	22	20	18	15
8	53	41	34	29	48	38	31	27	32	27	23	26	22	19	20	18	16	13
9	50	38	31	26	45	35	28	24	29	24	21	24	20	18	19	16	14	12
10	46	35	28	23	42	32	26	22	27	22	19	22	18	16	18	15	13	11

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	1.6
10°-20°	154.2	4.8
20°-30°	223.9	6.9
30°-40°	236.2	7.3
40°-50°	209.2	6.5
50°-60°	166.9	5.2
60°-70°	113.4	3.5
70°-80°	58.2	1.8
80°-90°	15.7	0.5
90°-100°	22.7	0.7
100°-110°	83.2	2.6
110°-120°	222.3	6.9
120°-130°	366.9	11.4
130°-140°	390.2	12.1
140°-150°	362.7	11.3
150°-160°	291.6	9.0
160°-170°	187.9	5.8
170°-180°	64.7	2.0
0°-30°	431.2	13.4
0°-40°	667.4	20.7
0°-60°	1043.5	32.4
0°-90°	1230.8	38.2
90°-120°	328.1	10.2
90°-150°	1447.9	44.9
90°-180°	1992.0	61.8
0°-180°	3222.9	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°	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°	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°	7.1	7.1	7.2	7.0	7.0	7.1	6.9	6.6	6.7	6.8	6.8
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°	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°	6.8	6.6	6.4	6.5	5.7	5.6	4.6	3.9	4.0	4.0	3.9
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: P331249-830
 CATALOG NUMBER: SA2XXDIP-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: P331249-830

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

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°	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.2	4.3	4.1	4.1
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: P331249-830

CATALOG NUMBER: SA2XXDIP-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: P331249-830

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

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°	4.2	4.1	4.1	4.1	4.1	4.1	4.2	4.1	4.1	4.3	4.2
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: P331249-830
 CATALOG NUMBER: SA2XXDIP-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: P331249-830

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

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°	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9	4.0	4.0	3.9
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: P331249-830

CATALOG NUMBER: SA2XXDIP-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: P331249-830

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

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°	4.6	5.6	5.7	6.5	6.4	6.6	6.8	6.8	6.8	6.7	6.6
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: P331249-830

CATALOG NUMBER: SA2XXDIP-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°	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°	6.9	7.1	7.0	7.0	7.2	7.1	7.1
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)