

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: P331241-840

Luminaire Tested: **SA2XXDIP-C290D330U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331241-840  
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-C290D330U840-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 330 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

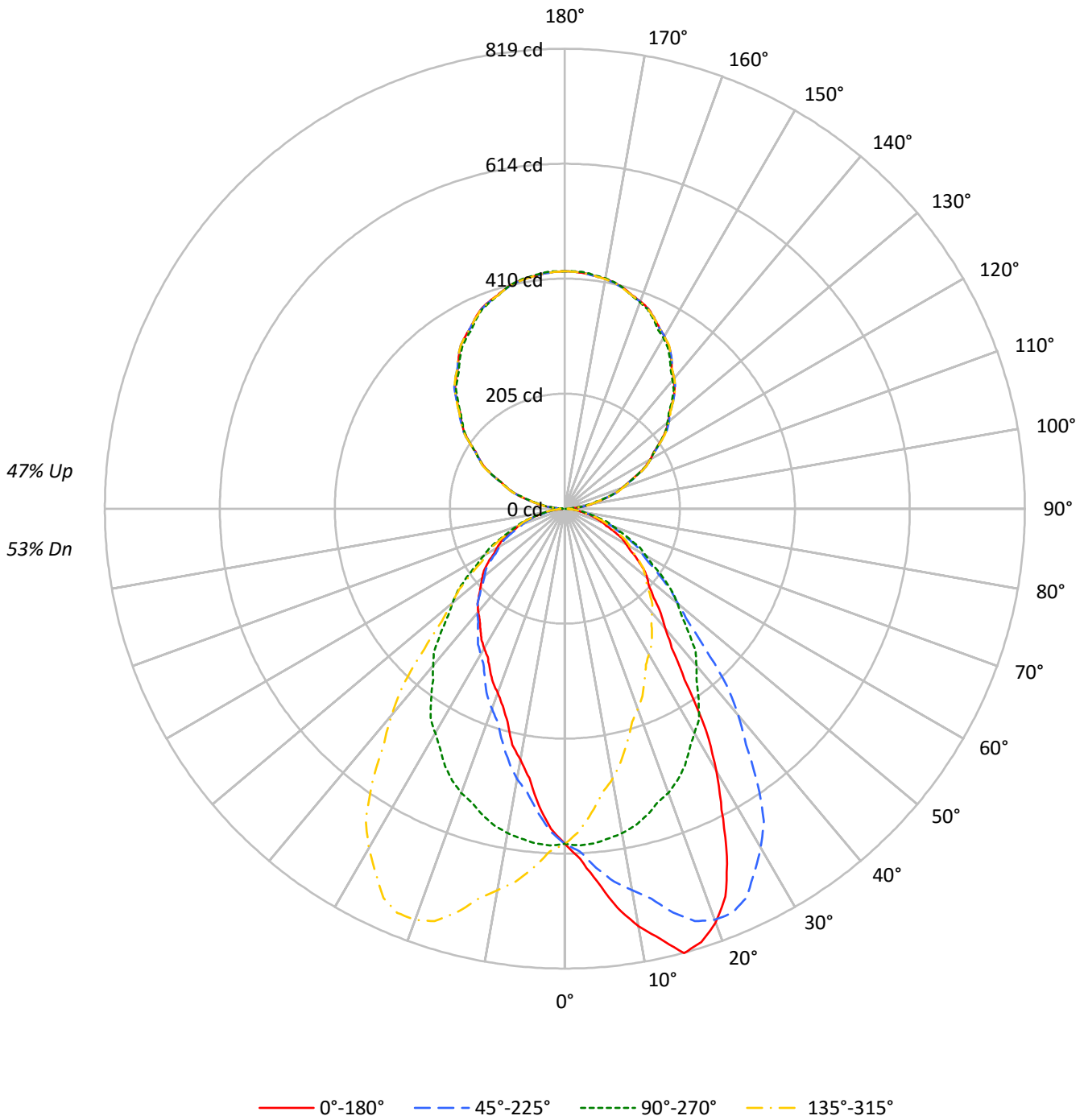
Lumens per Lamp: N/A  
Luminaire Lumens: 2500.8 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	95	91	88	91	88	85	82	75	73	71	63	62	60	53	51	50	45
2	90	83	77	72	84	77	72	68	66	63	59	56	54	51	47	45	43	39
3	83	74	67	61	77	69	62	57	59	54	51	50	47	44	42	40	37	33
4	76	66	58	52	70	61	54	49	53	48	44	45	41	38	38	35	33	29
5	70	59	51	45	65	55	48	43	48	42	38	41	37	33	34	31	29	26
6	65	53	45	39	60	49	42	37	43	37	33	37	33	29	31	28	26	23
7	60	48	40	35	55	45	38	33	39	34	30	34	30	26	29	26	23	20
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	23	21	18
9	52	40	33	28	48	38	31	26	33	28	24	29	24	21	25	21	19	17
10	49	37	30	25	45	35	28	24	30	25	22	27	22	19	23	20	17	15

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

	0°	90°	180°	270°
0°	9637	9637	9637	9637
5°	10804	9700	8596	9700
10°	12381	9621	7438	9621
15°	13697	9444	6572	9444
20°	13490	9256	5991	9256
25°	12162	9002	5624	9002
30°	10051	8600	5354	8600
35°	7324	8180	5164	8180
40°	5851	7685	5056	7685
45°	5112	7108	4914	7108
50°	4808	6551	4818	6551
55°	4428	5987	4687	5987
60°	4059	5383	4492	5383
65°	3698	4844	4294	4844
70°	3356	4319	4008	4319
75°	2982	3737	3550	3737
80°	2566	3087	2854	3087
85°	2297	2297	1704	2297



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	2.3
10°-20°	165.3	6.6
20°-30°	239.9	9.6
30°-40°	253.1	10.1
40°-50°	224.1	9.0
50°-60°	178.8	7.2
60°-70°	121.6	4.9
70°-80°	62.3	2.5
80°-90°	16.7	0.7
90°-100°	26.8	1.1
100°-110°	83.2	3.3
110°-120°	142.2	5.7
120°-130°	187.0	7.5
130°-140°	209.9	8.4
140°-150°	205.8	8.2
150°-160°	172.7	6.9
160°-170°	114.5	4.6
170°-180°	40.0	1.6
0°-30°	462.0	18.5
0°-40°	715.1	28.6
0°-60°	1118.0	44.7
0°-90°	1318.6	52.7
90°-120°	252.2	10.1
90°-150°	855.0	34.2
90°-180°	1182.0	47.3
0°-180°	2500.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	597	597	597	597	597	
5°	667	598	530	598	667	67
15°	819	565	393	565	819	226
25°	683	505	316	505	683	309
35°	372	415	262	415	372	242
45°	224	311	215	311	224	176
55°	157	213	166	213	157	141
65°	97	127	112	127	97	96
75°	48	60	57	60	48	51
85°	12	12	9	12	12	14
90°	12	0	12	0	12	6
95°	22	19	22	19	22	25
105°	79	77	79	77	79	83
115°	143	143	143	143	143	141
125°	208	208	208	208	208	186
135°	272	269	272	269	272	209
145°	330	326	330	326	330	206
155°	376	373	376	373	376	173
165°	406	406	406	406	406	115
175°	421	422	421	422	421	40
180°	423	423	423	423	423	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	624.4	624.6	625.0	622.1	621.7	621.7	619.1	616.9	614.3	610.9	611.3
5°	666.6	669.1	670.0	667.3	663.2	662.8	658.8	652.5	646.4	641.7	638.2
7.5°	717.0	718.0	715.8	712.2	709.1	703.6	696.3	689.2	679.2	670.1	663.4
10°	755.2	756.6	752.7	747.4	743.1	736.6	726.1	715.3	702.3	689.6	679.5
12.5°	784.2	787.6	782.5	781.9	774.5	765.6	753.1	747.6	729.2	711.7	700.7
15°	819.4	819.2	819.7	815.3	809.8	808.4	795.2	780.6	754.8	744.4	726.5
17.5°	809.2	812.7	814.4	814.3	814.2	813.2	809.0	799.9	786.9	770.1	749.5
20°	785.1	789.6	790.3	795.6	798.6	802.4	804.1	801.5	793.6	779.5	761.6
22.5°	747.6	748.9	751.0	759.2	765.7	775.5	780.5	789.1	786.0	779.1	764.2
25°	682.7	680.4	688.4	692.6	707.5	723.1	734.4	746.7	757.7	764.4	760.0
27.5°	604.8	601.4	613.4	624.4	636.4	653.4	670.9	691.6	708.7	730.3	737.7
30°	539.1	541.2	552.6	564.3	582.7	606.5	626.3	648.9	673.6	697.6	714.4
32.5°	468.3	476.2	483.4	501.4	517.6	544.1	573.1	601.5	632.1	659.4	685.4
35°	371.6	380.8	390.9	403.9	426.7	453.0	481.3	519.6	561.4	598.7	629.4
37.5°	312.9	311.3	317.1	326.6	345.0	366.3	398.8	436.6	485.7	529.7	573.1
40°	277.6	276.7	280.7	289.5	303.5	319.1	347.6	380.8	426.5	480.2	531.8
42.5°	253.4	253.9	256.2	262.4	272.0	284.8	306.1	334.4	376.2	426.8	482.2
45°	223.9	225.5	228.0	231.1	236.5	247.1	259.0	279.2	312.3	354.5	409.0
47.5°	202.7	202.8	205.3	207.9	211.2	217.1	226.9	239.5	262.9	297.2	344.2
50°	191.4	189.8	191.6	193.6	197.0	201.2	207.6	219.5	235.1	262.9	302.2
52.5°	177.3	177.4	179.0	179.9	182.9	187.0	192.9	201.2	215.3	237.0	269.2
55°	157.3	158.5	159.5	160.8	163.6	166.5	171.2	176.6	187.6	203.9	227.8
57.5°	138.6	139.0	139.9	142.5	144.2	146.9	151.3	156.3	163.5	175.5	193.5
60°	125.7	125.7	127.5	128.7	131.0	133.7	137.1	142.0	148.5	158.2	172.8
62.5°	114.0	113.8	114.5	116.4	118.2	120.7	124.1	128.3	134.3	143.1	154.9
65°	96.8	96.3	97.8	98.2	100.0	102.5	105.3	109.7	114.5	120.9	131.5
67.5°	80.3	80.9	81.6	82.4	83.4	86.1	88.0	91.0	95.1	100.5	107.6
70°	71.1	71.1	71.1	71.8	73.2	74.5	76.3	78.9	82.8	87.4	93.8
72.5°	60.8	61.6	62.3	61.9	63.6	64.4	66.7	68.1	71.8	74.7	80.4
75°	47.8	47.8	47.8	48.9	49.6	50.2	51.6	53.0	54.8	58.5	61.5
77.5°	35.6	35.5	35.7	36.1	36.8	37.6	38.0	39.2	40.9	42.6	45.1
80°	27.6	28.0	28.2	28.7	28.7	29.1	29.4	31.0	32.1	33.2	34.8
82.5°	21.3	21.4	21.4	21.5	21.7	22.0	22.6	23.1	23.5	24.4	25.7
85°	12.4	12.1	12.1	12.6	12.4	12.4	12.8	13.3	13.3	13.5	14.2
87.5°	7.2	7.2	7.4	7.2	7.2	7.4	7.4	7.2	7.4	7.7	7.5
90°	12.1	12.0	12.0	11.9	11.8	11.8	12.0	12.2	12.3	12.5	10.7
92.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.4	11.4	11.4	11.3	10.9
95°	22.1	22.3	22.4	22.6	22.7	22.8	22.8	22.8	22.8	22.8	22.7
97.5°	38.3	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.1
100°	48.9	49.0	49.1	49.1	49.2	49.3	49.3	49.3	49.3	49.3	49.0
102.5°	60.9	61.0	61.0	61.1	61.2	61.2	61.1	61.1	61.0	60.9	60.6
105°	79.2	79.2	79.2	79.2	79.2	79.2	79.0	78.8	78.7	78.5	78.4
107.5°	96.4	96.8	97.3	97.6	98.0	98.1	98.1	98.0	97.9	97.9	97.9
110°	109.9	110.2	110.4	110.6	110.9	111.0	111.0	111.0	111.0	111.0	111.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	122.7	122.9	123.1	123.3	123.4	123.6	123.8	124.0	124.2	124.4	124.4
115°	142.7	143.0	143.2	143.4	143.7	143.8	143.9	144.0	144.1	144.1	144.3
117.5°	161.8	162.0	162.3	162.5	162.7	162.9	163.1	163.3	163.5	163.7	164.1
120°	175.2	175.4	175.6	175.9	176.1	176.2	176.2	176.2	176.2	176.2	176.9
122.5°	188.3	188.4	188.6	188.8	189.0	189.1	189.3	189.6	189.8	190.0	190.4
125°	208.3	208.4	208.5	208.6	208.6	208.8	209.0	209.3	209.5	209.7	210.1
127.5°	226.6	226.9	227.1	227.4	227.6	227.9	228.2	228.5	228.7	229.0	229.3
130°	239.7	240.0	240.3	240.8	241.1	241.3	241.5	241.6	241.8	241.9	242.1
132.5°	252.4	252.6	252.9	253.1	253.4	253.7	254.0	254.3	254.7	255.0	255.0
135°	271.9	272.2	272.4	272.6	272.9	273.0	273.1	273.2	273.2	273.3	273.2
137.5°	289.5	289.9	290.2	290.5	290.8	291.0	291.0	291.1	291.2	291.2	291.0
140°	301.8	302.2	302.5	302.8	303.1	303.3	303.3	303.3	303.3	303.3	302.9
142.5°	313.0	313.3	313.6	314.0	314.3	314.4	314.3	314.3	314.2	314.1	313.9
145°	329.6	330.0	330.3	330.6	330.9	331.0	330.9	330.9	330.8	330.7	330.2
147.5°	344.6	344.9	345.2	345.5	345.8	345.9	345.7	345.5	345.4	345.2	344.9
150°	354.3	354.6	354.8	355.0	355.3	355.3	355.0	354.8	354.6	354.3	354.0
152.5°	363.5	363.8	364.1	364.4	364.7	364.7	364.4	364.1	363.8	363.5	363.0
155°	375.7	376.0	376.2	376.4	376.7	376.6	376.2	375.8	375.4	375.0	374.8
157.5°	386.3	386.7	387.0	387.4	387.8	387.7	387.2	386.6	386.1	385.6	385.4
160°	392.8	393.1	393.4	393.7	394.0	394.0	393.5	393.0	392.5	392.1	392.0
162.5°	398.5	398.9	399.3	399.7	400.0	400.0	399.4	398.9	398.4	397.8	397.8
165°	406.1	406.4	406.8	407.2	407.6	407.5	407.0	406.4	405.9	405.3	405.3
167.5°	412.1	412.5	412.9	413.4	413.8	413.7	413.1	412.6	412.0	411.5	411.5
170°	415.3	415.8	416.3	416.8	417.2	417.2	416.6	416.1	415.5	415.0	415.1
172.5°	417.9	418.4	418.8	419.3	419.8	419.7	419.2	418.6	418.1	417.5	417.6
175°	420.6	421.1	421.6	422.1	422.5	422.5	421.9	421.4	420.8	420.3	420.4
177.5°	421.9	422.3	422.7	423.0	423.4	423.4	423.0	422.7	422.3	421.9	422.0
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	612.5	611.1	610.2	606.8	603.9	601.0	600.1	600.4	596.3	592.5	590.9
5°	636.4	631.8	627.4	621.3	613.9	605.8	601.8	598.5	590.5	581.8	576.7
7.5°	657.7	651.2	642.8	631.2	620.5	607.8	599.8	592.7	581.0	568.7	561.1
10°	670.8	661.9	651.1	636.8	623.8	608.3	597.6	586.8	573.1	558.4	549.2
12.5°	682.0	669.9	659.3	641.1	625.6	606.3	593.6	578.3	563.9	546.4	537.5
15°	708.6	686.4	666.2	645.5	626.5	599.7	585.4	565.0	546.0	524.4	514.1
17.5°	729.2	704.2	672.5	646.2	624.0	594.2	573.4	549.0	526.4	501.8	487.8
20°	740.9	712.3	678.1	646.9	620.4	586.3	563.6	538.7	512.3	484.5	469.4
22.5°	747.9	717.8	684.0	644.2	613.0	580.0	551.4	523.9	497.3	467.3	451.4
25°	750.1	722.7	686.8	641.9	603.8	566.4	532.0	505.3	473.0	445.0	421.9
27.5°	739.2	719.5	685.1	637.5	593.2	549.5	511.1	481.0	446.9	416.5	393.1
30°	725.8	714.4	680.9	633.2	584.7	537.8	495.5	461.3	427.4	396.7	372.7
32.5°	705.1	702.7	673.2	626.9	575.7	522.9	479.2	444.6	407.0	376.8	354.1
35°	664.4	675.4	656.8	613.0	558.9	501.7	454.4	415.0	376.0	347.1	325.8
37.5°	609.8	637.1	632.3	592.6	535.9	478.7	426.5	385.3	348.1	318.9	298.0
40°	572.1	607.0	612.1	576.9	519.9	460.9	405.6	364.6	328.3	301.6	280.5
42.5°	531.8	572.5	586.3	558.3	502.2	442.1	386.9	344.4	308.4	282.6	263.9
45°	464.1	518.0	543.0	526.9	472.8	411.3	354.5	311.3	278.7	254.4	239.9
47.5°	400.8	459.7	493.3	487.7	440.1	379.2	323.0	281.6	249.8	230.5	217.5
50°	356.1	416.6	457.2	459.1	416.6	356.3	299.8	260.8	231.7	213.6	203.0
52.5°	317.1	375.0	419.2	429.0	390.3	332.4	279.1	240.2	214.6	197.9	188.5
55°	266.3	315.2	364.3	382.2	351.2	296.2	246.8	212.7	188.5	177.1	168.8
57.5°	221.5	262.2	307.5	327.3	308.2	261.1	214.8	185.1	165.6	155.5	149.2
60°	197.7	229.8	270.2	293.9	277.3	235.4	195.0	166.7	150.7	141.8	135.8
62.5°	175.7	204.2	238.3	259.9	251.0	211.4	175.2	150.3	136.4	128.1	123.7
65°	145.0	167.4	193.9	213.8	207.8	177.8	148.1	126.8	115.8	109.2	105.7
67.5°	119.4	135.6	153.9	171.4	166.6	145.3	121.6	104.9	96.7	91.0	88.9
70°	103.2	115.6	131.9	145.9	142.0	124.6	105.7	91.5	84.4	79.6	77.6
72.5°	87.9	98.0	110.5	121.9	119.3	104.7	89.1	78.4	72.8	68.4	66.8
75°	66.3	74.1	81.7	89.3	88.6	77.4	68.2	59.9	55.5	52.1	51.4
77.5°	49.0	53.3	58.5	62.9	61.7	55.2	48.1	43.3	40.2	37.9	37.5
80°	37.4	39.9	43.6	46.8	45.2	42.4	36.7	33.2	31.0	28.7	27.8
82.5°	27.2	29.6	31.8	33.6	32.3	29.8	26.3	23.9	22.5	21.0	20.6
85°	14.2	15.6	16.6	17.0	16.6	14.9	13.3	12.4	11.2	10.5	10.3
87.5°	7.3	7.0	6.6	6.7	6.0	5.8	4.8	4.1	4.1	4.1	3.9
90°	9.0	7.3	5.6	4.1	3.2	2.2	1.3	0.4	1.3	2.2	3.2
92.5°	10.5	10.1	9.7	9.2	8.5	7.8	7.1	6.4	7.1	7.8	8.5
95°	22.5	22.3	22.2	21.7	20.9	20.1	19.4	18.6	19.4	20.1	20.9
97.5°	37.8	37.5	37.2	36.7	36.0	35.2	34.6	33.9	34.6	35.2	36.0
100°	48.8	48.5	48.3	47.9	47.3	46.6	45.9	45.3	45.9	46.6	47.3
102.5°	60.3	60.0	59.8	59.3	58.8	58.3	57.8	57.3	57.8	58.3	58.8
105°	78.2	78.1	77.9	77.7	77.5	77.2	77.0	76.7	77.0	77.2	77.5
107.5°	97.9	97.9	97.9	97.7	97.4	96.9	96.6	96.2	96.6	96.9	97.4
110°	111.0	111.0	111.0	110.7	110.3	109.8	109.3	108.9	109.3	109.8	110.3





TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	124.5	124.5	124.6	124.4	123.9	123.5	123.0	122.5	123.0	123.5	123.9
115°	144.4	144.6	144.8	144.6	144.1	143.7	143.2	142.7	143.2	143.7	144.1
117.5°	164.6	165.0	165.5	165.4	164.7	164.1	163.5	162.8	163.5	164.1	164.7
120°	177.5	178.1	178.7	178.7	178.1	177.5	176.9	176.2	176.9	177.5	178.1
122.5°	190.9	191.3	191.8	191.6	190.8	190.1	189.2	188.5	189.2	190.1	190.8
125°	210.3	210.5	210.8	210.5	209.7	209.0	208.3	207.6	208.3	209.0	209.7
127.5°	229.6	229.9	230.1	229.8	228.9	228.1	227.2	226.3	227.2	228.1	228.9
130°	242.3	242.4	242.6	242.1	241.1	240.0	239.0	238.0	239.0	240.0	241.1
132.5°	255.0	254.9	254.9	254.5	253.6	252.8	252.0	251.2	252.0	252.8	253.6
135°	273.0	272.9	272.7	272.2	271.2	270.4	269.5	268.6	269.5	270.4	271.2
137.5°	290.8	290.6	290.4	290.0	289.3	288.5	287.8	287.1	287.8	288.5	289.3
140°	302.5	302.1	301.6	301.1	300.4	299.7	299.0	298.3	299.0	299.7	300.4
142.5°	313.6	313.3	313.1	312.6	311.8	311.1	310.4	309.7	310.4	311.1	311.8
145°	329.8	329.3	328.8	328.3	327.8	327.2	326.7	326.1	326.7	327.2	327.8
147.5°	344.6	344.2	343.9	343.4	342.7	342.0	341.4	340.7	341.4	342.0	342.7
150°	353.7	353.4	353.0	352.6	352.1	351.6	351.2	350.7	351.2	351.6	352.1
152.5°	362.6	362.2	361.9	361.4	361.0	360.5	360.0	359.6	360.0	360.5	361.0
155°	374.5	374.3	374.1	373.8	373.5	373.3	373.0	372.8	373.0	373.3	373.5
157.5°	385.3	385.2	385.0	384.9	384.7	384.5	384.4	384.2	384.4	384.5	384.7
160°	391.9	391.8	391.8	391.6	391.5	391.3	391.2	391.0	391.2	391.3	391.5
162.5°	397.7	397.6	397.5	397.5	397.4	397.4	397.4	397.3	397.4	397.4	397.4
165°	405.3	405.3	405.3	405.4	405.5	405.5	405.6	405.7	405.6	405.5	405.5
167.5°	411.5	411.5	411.6	411.7	411.9	412.2	412.4	412.6	412.4	412.2	411.9
170°	415.1	415.2	415.3	415.5	415.7	415.9	416.2	416.4	416.2	415.9	415.7
172.5°	417.7	417.8	417.8	418.0	418.2	418.5	418.7	418.9	418.7	418.5	418.2
175°	420.6	420.8	420.9	421.1	421.3	421.6	421.8	422.1	421.8	421.6	421.3
177.5°	422.2	422.3	422.4	422.6	422.8	422.9	423.1	423.3	423.1	422.9	422.8
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	589.1	587.9	584.1	582.1	578.8	575.6	573.6	574.5	575.2	574.9	574.3
5°	572.1	567.7	561.1	555.4	551.3	543.7	540.5	538.9	537.5	535.9	534.3
7.5°	552.0	545.1	535.6	527.5	519.8	510.3	504.9	501.8	498.5	494.8	491.6
10°	537.8	528.1	518.0	506.5	497.4	488.9	481.3	476.3	471.6	467.3	464.1
12.5°	522.7	511.6	499.1	483.4	473.3	461.1	460.0	451.1	443.9	441.2	437.5
15°	498.8	483.1	467.3	448.7	440.7	429.7	422.8	415.9	409.7	405.4	404.2
17.5°	471.5	451.3	435.6	422.2	409.1	397.8	391.4	386.0	380.8	375.1	374.3
20°	450.8	433.3	416.2	404.5	390.9	379.4	371.6	366.2	361.7	358.3	355.4
22.5°	431.1	412.0	396.3	383.5	370.2	360.9	354.8	349.4	345.8	342.0	339.2
25°	399.6	384.8	367.5	353.0	342.0	336.1	331.0	326.5	324.2	321.6	318.4
27.5°	372.0	355.5	339.4	328.2	318.5	313.3	309.6	306.5	304.4	302.9	301.0
30°	352.6	335.9	323.3	312.3	304.2	298.9	296.6	294.8	292.3	291.3	290.4
32.5°	333.9	318.8	308.0	298.4	290.8	287.3	285.3	283.6	281.7	280.7	278.8
35°	307.4	294.8	284.3	278.9	272.8	269.7	268.2	265.9	264.1	263.2	262.9
37.5°	282.5	271.6	264.6	257.8	255.2	253.4	251.2	249.6	249.0	248.9	248.6
40°	266.3	257.4	251.2	245.7	244.6	241.8	239.9	238.6	238.6	238.8	238.6
42.5°	251.7	243.6	238.1	233.4	232.1	230.5	228.5	228.5	228.8	229.6	228.8
45°	229.4	223.7	219.7	217.5	215.0	213.4	213.1	213.8	214.0	214.3	215.0
47.5°	208.9	205.1	201.6	199.0	197.9	197.7	197.4	198.6	199.8	200.2	201.2
50°	196.8	192.5	189.5	187.8	186.9	186.5	186.9	188.3	189.2	190.4	191.1
52.5°	183.3	180.2	178.1	176.8	176.5	176.8	176.8	178.4	179.9	180.4	180.7
55°	164.5	162.2	161.8	159.7	160.6	160.4	161.5	162.4	163.8	165.2	165.4
57.5°	145.7	143.9	142.7	142.9	143.2	144.2	145.1	146.7	148.1	149.7	149.8
60°	133.3	132.4	131.7	131.7	132.1	133.5	134.6	136.2	137.1	138.1	138.8
62.5°	121.9	121.0	120.3	120.7	121.9	122.7	124.0	124.9	125.8	126.7	127.0
65°	103.9	103.5	104.1	104.6	104.8	105.9	107.6	108.3	109.2	109.7	111.3
67.5°	87.4	87.5	87.4	88.0	89.4	89.6	91.1	92.7	92.9	93.8	94.8
70°	76.1	76.6	77.1	77.6	78.7	79.2	80.3	81.0	81.9	82.6	83.3
72.5°	65.8	65.9	66.4	66.3	67.4	68.3	69.3	70.0	70.9	71.8	72.4
75°	50.7	50.7	51.2	51.4	52.5	53.7	53.4	53.9	54.8	55.7	56.2
77.5°	37.1	36.6	37.1	37.3	37.7	38.6	38.8	39.4	40.5	40.2	40.7
80°	28.2	27.6	28.2	28.5	28.5	29.6	29.6	30.1	30.7	30.1	30.7
82.5°	20.1	19.8	20.3	20.4	20.7	20.8	21.1	21.2	21.9	21.6	21.9
85°	10.1	9.9	10.1	9.9	10.1	10.3	10.3	10.1	10.1	10.5	9.9
87.5°	3.9	4.0	4.2	4.5	4.7	4.8	4.6	4.6	4.6	4.2	4.2
90°	4.1	5.6	7.3	9.0	10.7	12.5	12.3	12.2	12.0	11.8	11.8
92.5°	9.2	9.7	10.1	10.5	10.9	11.3	11.4	11.4	11.4	11.5	11.5
95°	21.7	22.2	22.3	22.5	22.7	22.8	22.8	22.8	22.8	22.8	22.7
97.5°	36.7	37.2	37.5	37.8	38.1	38.4	38.4	38.4	38.4	38.4	38.4
100°	47.9	48.3	48.5	48.8	49.0	49.3	49.3	49.3	49.3	49.3	49.2
102.5°	59.3	59.8	60.0	60.3	60.6	60.9	61.0	61.1	61.1	61.2	61.2
105°	77.7	77.9	78.1	78.2	78.4	78.5	78.7	78.8	79.0	79.2	79.2
107.5°	97.7	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.1	98.1	98.0
110°	110.7	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	110.9



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	124.4	124.6	124.5	124.5	124.4	124.4	124.2	124.0	123.8	123.6	123.4
115°	144.6	144.8	144.6	144.4	144.3	144.1	144.1	144.0	143.9	143.8	143.7
117.5°	165.4	165.5	165.0	164.6	164.1	163.7	163.5	163.3	163.1	162.9	162.7
120°	178.7	178.7	178.1	177.5	176.9	176.2	176.2	176.2	176.2	176.2	176.1
122.5°	191.6	191.8	191.3	190.9	190.4	190.0	189.8	189.6	189.3	189.1	189.0
125°	210.5	210.8	210.5	210.3	210.1	209.7	209.5	209.3	209.0	208.8	208.6
127.5°	229.8	230.1	229.9	229.6	229.3	229.0	228.7	228.5	228.2	227.9	227.6
130°	242.1	242.6	242.4	242.3	242.1	241.9	241.8	241.6	241.5	241.3	241.1
132.5°	254.5	254.9	254.9	255.0	255.0	255.0	254.7	254.3	254.0	253.7	253.4
135°	272.2	272.7	272.9	273.0	273.2	273.3	273.2	273.2	273.1	273.0	272.9
137.5°	290.0	290.4	290.6	290.8	291.0	291.2	291.2	291.1	291.0	291.0	290.8
140°	301.1	301.6	302.1	302.5	302.9	303.3	303.3	303.3	303.3	303.3	303.1
142.5°	312.6	313.1	313.3	313.6	313.9	314.1	314.2	314.3	314.3	314.4	314.3
145°	328.3	328.8	329.3	329.8	330.2	330.7	330.8	330.9	330.9	331.0	330.9
147.5°	343.4	343.9	344.2	344.6	344.9	345.2	345.4	345.5	345.7	345.9	345.8
150°	352.6	353.0	353.4	353.7	354.0	354.3	354.6	354.8	355.0	355.3	355.3
152.5°	361.4	361.9	362.2	362.6	363.0	363.5	363.8	364.1	364.4	364.7	364.7
155°	373.8	374.1	374.3	374.5	374.8	375.0	375.4	375.8	376.2	376.6	376.7
157.5°	384.9	385.0	385.2	385.3	385.4	385.6	386.1	386.6	387.2	387.7	387.8
160°	391.6	391.8	391.8	391.9	392.0	392.1	392.5	393.0	393.5	394.0	394.0
162.5°	397.5	397.5	397.6	397.7	397.8	397.8	398.4	398.9	399.4	400.0	400.0
165°	405.4	405.3	405.3	405.3	405.3	405.3	405.9	406.4	407.0	407.5	407.6
167.5°	411.7	411.6	411.5	411.5	411.5	411.5	412.0	412.6	413.1	413.7	413.8
170°	415.5	415.3	415.2	415.1	415.1	415.0	415.5	416.1	416.6	417.2	417.2
172.5°	418.0	417.8	417.8	417.7	417.6	417.5	418.1	418.6	419.2	419.7	419.8
175°	421.1	420.9	420.8	420.6	420.4	420.3	420.8	421.4	421.9	422.5	422.5
177.5°	422.6	422.4	422.3	422.2	422.0	421.9	422.3	422.7	423.0	423.4	423.4
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	572.5	572.1	572.1	570.5	572.1	572.1	572.5	574.3	574.9	575.2	574.5
5°	531.1	530.4	529.3	530.4	529.3	530.4	531.1	534.3	535.9	537.5	538.9
7.5°	490.1	487.4	487.0	484.2	487.0	487.4	490.1	491.6	494.8	498.5	501.8
10°	460.2	458.4	458.1	453.7	458.1	458.4	460.2	464.1	467.3	471.6	476.3
12.5°	437.5	433.0	433.9	431.4	433.9	433.0	437.5	437.5	441.2	443.9	451.1
15°	398.0	398.0	397.1	393.2	397.1	398.0	398.0	404.2	405.4	409.7	415.9
17.5°	369.7	369.2	367.1	368.2	367.1	369.2	369.7	374.3	375.1	380.8	386.0
20°	352.8	351.4	348.7	348.7	348.7	351.4	352.8	355.4	358.3	361.7	366.2
22.5°	336.9	336.8	333.9	334.8	333.9	336.8	336.9	339.2	342.0	345.8	349.4
25°	318.2	316.4	315.0	315.7	315.0	316.4	318.2	318.4	321.6	324.2	326.5
27.5°	300.4	299.4	299.3	297.5	299.3	299.4	300.4	301.0	302.9	304.4	306.5
30°	290.2	287.9	288.3	287.2	288.3	287.9	290.2	290.4	291.3	292.3	294.8
32.5°	278.4	277.6	277.2	276.2	277.2	277.6	278.4	278.8	280.7	281.7	283.6
35°	262.5	262.7	261.6	262.0	261.6	262.7	262.5	262.9	263.2	264.1	265.9
37.5°	248.4	249.1	248.6	248.7	248.6	249.1	248.4	248.6	248.9	249.0	249.6
40°	239.2	239.2	239.2	239.9	239.2	239.2	239.2	238.6	238.8	238.6	238.6
42.5°	230.5	230.0	229.7	229.6	229.7	230.0	230.5	228.8	229.6	228.8	228.5
45°	215.4	216.1	216.3	215.2	216.3	216.1	215.4	215.0	214.3	214.0	213.8
47.5°	201.8	201.9	201.8	202.8	201.8	201.9	201.8	201.2	200.2	199.8	198.6
50°	192.3	191.8	192.3	191.8	192.3	191.8	192.3	191.1	190.4	189.2	188.3
52.5°	182.2	182.3	182.0	181.9	182.0	182.3	182.2	180.7	180.4	179.9	178.4
55°	166.3	166.7	166.5	166.5	166.5	166.7	166.3	165.4	165.2	163.8	162.4
57.5°	150.0	150.4	150.7	149.7	150.7	150.4	150.0	149.8	149.7	148.1	146.7
60°	138.6	139.7	139.5	139.1	139.5	139.7	138.6	138.8	138.1	137.1	136.2
62.5°	128.1	128.6	128.5	128.4	128.5	128.6	128.1	127.0	126.7	125.8	124.9
65°	112.0	112.4	111.7	112.4	111.7	112.4	112.0	111.3	109.7	109.2	108.3
67.5°	94.5	94.7	95.2	95.5	95.2	94.7	94.5	94.8	93.8	92.9	92.7
70°	83.7	83.5	84.2	84.9	84.2	83.5	83.7	83.3	82.6	81.9	81.0
72.5°	72.3	72.8	72.6	73.1	72.6	72.8	72.3	72.4	71.8	70.9	70.0
75°	55.7	56.5	56.2	56.9	56.2	56.5	55.7	56.2	55.7	54.8	53.9
77.5°	40.3	40.4	40.3	40.7	40.3	40.4	40.3	40.7	40.2	40.5	39.4
80°	30.7	30.3	29.8	30.7	29.8	30.3	30.7	30.7	30.1	30.7	30.1
82.5°	21.4	21.6	21.2	21.2	21.2	21.6	21.4	21.9	21.6	21.9	21.2
85°	9.9	9.6	9.2	9.2	9.2	9.6	9.9	9.9	10.5	10.1	10.1
87.5°	4.2	4.0	4.0	3.9	4.0	4.0	4.2	4.2	4.2	4.6	4.6
90°	11.9	12.0	12.0	12.1	12.0	12.0	11.9	11.8	11.8	12.0	12.2
92.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.4	11.4
95°	22.6	22.4	22.3	22.1	22.3	22.4	22.6	22.7	22.8	22.8	22.8
97.5°	38.4	38.4	38.4	38.3	38.4	38.4	38.4	38.4	38.4	38.4	38.4
100°	49.1	49.1	49.0	48.9	49.0	49.1	49.1	49.2	49.3	49.3	49.3
102.5°	61.1	61.0	61.0	60.9	61.0	61.0	61.1	61.2	61.2	61.1	61.1
105°	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.0	78.8
107.5°	97.6	97.3	96.8	96.4	96.8	97.3	97.6	98.0	98.1	98.1	98.0
110°	110.6	110.4	110.2	109.9	110.2	110.4	110.6	110.9	111.0	111.0	111.0



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	123.3	123.1	122.9	122.7	122.9	123.1	123.3	123.4	123.6	123.8	124.0
115°	143.4	143.2	143.0	142.7	143.0	143.2	143.4	143.7	143.8	143.9	144.0
117.5°	162.5	162.3	162.0	161.8	162.0	162.3	162.5	162.7	162.9	163.1	163.3
120°	175.9	175.6	175.4	175.2	175.4	175.6	175.9	176.1	176.2	176.2	176.2
122.5°	188.8	188.6	188.4	188.3	188.4	188.6	188.8	189.0	189.1	189.3	189.6
125°	208.6	208.5	208.4	208.3	208.4	208.5	208.6	208.6	208.8	209.0	209.3
127.5°	227.4	227.1	226.9	226.6	226.9	227.1	227.4	227.6	227.9	228.2	228.5
130°	240.8	240.3	240.0	239.7	240.0	240.3	240.8	241.1	241.3	241.5	241.6
132.5°	253.1	252.9	252.6	252.4	252.6	252.9	253.1	253.4	253.7	254.0	254.3
135°	272.6	272.4	272.2	271.9	272.2	272.4	272.6	272.9	273.0	273.1	273.2
137.5°	290.5	290.2	289.9	289.5	289.9	290.2	290.5	290.8	291.0	291.0	291.1
140°	302.8	302.5	302.2	301.8	302.2	302.5	302.8	303.1	303.3	303.3	303.3
142.5°	314.0	313.6	313.3	313.0	313.3	313.6	314.0	314.3	314.4	314.3	314.3
145°	330.6	330.3	330.0	329.6	330.0	330.3	330.6	330.9	331.0	330.9	330.9
147.5°	345.5	345.2	344.9	344.6	344.9	345.2	345.5	345.8	345.9	345.7	345.5
150°	355.0	354.8	354.6	354.3	354.6	354.8	355.0	355.3	355.3	355.0	354.8
152.5°	364.4	364.1	363.8	363.5	363.8	364.1	364.4	364.7	364.7	364.4	364.1
155°	376.4	376.2	376.0	375.7	376.0	376.2	376.4	376.7	376.6	376.2	375.8
157.5°	387.4	387.0	386.7	386.3	386.7	387.0	387.4	387.8	387.7	387.2	386.6
160°	393.7	393.4	393.1	392.8	393.1	393.4	393.7	394.0	394.0	393.5	393.0
162.5°	399.7	399.3	398.9	398.5	398.9	399.3	399.7	400.0	400.0	399.4	398.9
165°	407.2	406.8	406.4	406.1	406.4	406.8	407.2	407.6	407.5	407.0	406.4
167.5°	413.4	412.9	412.5	412.1	412.5	412.9	413.4	413.8	413.7	413.1	412.6
170°	416.8	416.3	415.8	415.3	415.8	416.3	416.8	417.2	417.2	416.6	416.1
172.5°	419.3	418.8	418.4	417.9	418.4	418.8	419.3	419.8	419.7	419.2	418.6
175°	422.1	421.6	421.1	420.6	421.1	421.6	422.1	422.5	422.5	421.9	421.4
177.5°	423.0	422.7	422.3	421.9	422.3	422.7	423.0	423.4	423.4	423.0	422.7
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	573.6	575.6	578.8	582.1	584.1	587.9	589.1	590.9	592.5	596.3	600.4
5°	540.5	543.7	551.3	555.4	561.1	567.7	572.1	576.7	581.8	590.5	598.5
7.5°	504.9	510.3	519.8	527.5	535.6	545.1	552.0	561.1	568.7	581.0	592.7
10°	481.3	488.9	497.4	506.5	518.0	528.1	537.8	549.2	558.4	573.1	586.8
12.5°	460.0	461.1	473.3	483.4	499.1	511.6	522.7	537.5	546.4	563.9	578.3
15°	422.8	429.7	440.7	448.7	467.3	483.1	498.8	514.1	524.4	546.0	565.0
17.5°	391.4	397.8	409.1	422.2	435.6	451.3	471.5	487.8	501.8	526.4	549.0
20°	371.6	379.4	390.9	404.5	416.2	433.3	450.8	469.4	484.5	512.3	538.7
22.5°	354.8	360.9	370.2	383.5	396.3	412.0	431.1	451.4	467.3	497.3	523.9
25°	331.0	336.1	342.0	353.0	367.5	384.8	399.6	421.9	445.0	473.0	505.3
27.5°	309.6	313.3	318.5	328.2	339.4	355.5	372.0	393.1	416.5	446.9	481.0
30°	296.6	298.9	304.2	312.3	323.3	335.9	352.6	372.7	396.7	427.4	461.3
32.5°	285.3	287.3	290.8	298.4	308.0	318.8	333.9	354.1	376.8	407.0	444.6
35°	268.2	269.7	272.8	278.9	284.3	294.8	307.4	325.8	347.1	376.0	415.0
37.5°	251.2	253.4	255.2	257.8	264.6	271.6	282.5	298.0	318.9	348.1	385.3
40°	239.9	241.8	244.6	245.7	251.2	257.4	266.3	280.5	301.6	328.3	364.6
42.5°	228.5	230.5	232.1	233.4	238.1	243.6	251.7	263.9	282.6	308.4	344.4
45°	213.1	213.4	215.0	217.5	219.7	223.7	229.4	239.9	254.4	278.7	311.3
47.5°	197.4	197.7	197.9	199.0	201.6	205.1	208.9	217.5	230.5	249.8	281.6
50°	186.9	186.5	186.9	187.8	189.5	192.5	196.8	203.0	213.6	231.7	260.8
52.5°	176.8	176.8	176.5	176.8	178.1	180.2	183.3	188.5	197.9	214.6	240.2
55°	161.5	160.4	160.6	159.7	161.8	162.2	164.5	168.8	177.1	188.5	212.7
57.5°	145.1	144.2	143.2	142.9	142.7	143.9	145.7	149.2	155.5	165.6	185.1
60°	134.6	133.5	132.1	131.7	131.7	132.4	133.3	135.8	141.8	150.7	166.7
62.5°	124.0	122.7	121.9	120.7	120.3	121.0	121.9	123.7	128.1	136.4	150.3
65°	107.6	105.9	104.8	104.6	104.1	103.5	103.9	105.7	109.2	115.8	126.8
67.5°	91.1	89.6	89.4	88.0	87.4	87.5	87.4	88.9	91.0	96.7	104.9
70°	80.3	79.2	78.7	77.6	77.1	76.6	76.1	77.6	79.6	84.4	91.5
72.5°	69.3	68.3	67.4	66.3	66.4	65.9	65.8	66.8	68.4	72.8	78.4
75°	53.4	53.7	52.5	51.4	51.2	50.7	50.7	51.4	52.1	55.5	59.9
77.5°	38.8	38.6	37.7	37.3	37.1	36.6	37.1	37.5	37.9	40.2	43.3
80°	29.6	29.6	28.5	28.5	28.2	27.6	28.2	27.8	28.7	31.0	33.2
82.5°	21.1	20.8	20.7	20.4	20.3	19.8	20.1	20.6	21.0	22.5	23.9
85°	10.3	10.3	10.1	9.9	10.1	9.9	10.1	10.3	10.5	11.2	12.4
87.5°	4.6	4.8	4.7	4.5	4.2	4.0	3.9	3.9	4.1	4.1	4.1
90°	12.3	12.5	10.7	9.0	7.3	5.6	4.1	3.2	2.2	1.3	0.4
92.5°	11.4	11.3	10.9	10.5	10.1	9.7	9.2	8.5	7.8	7.1	6.4
95°	22.8	22.8	22.7	22.5	22.3	22.2	21.7	20.9	20.1	19.4	18.6
97.5°	38.4	38.4	38.1	37.8	37.5	37.2	36.7	36.0	35.2	34.6	33.9
100°	49.3	49.3	49.0	48.8	48.5	48.3	47.9	47.3	46.6	45.9	45.3
102.5°	61.0	60.9	60.6	60.3	60.0	59.8	59.3	58.8	58.3	57.8	57.3
105°	78.7	78.5	78.4	78.2	78.1	77.9	77.7	77.5	77.2	77.0	76.7
107.5°	97.9	97.9	97.9	97.9	97.9	97.9	97.7	97.4	96.9	96.6	96.2
110°	111.0	111.0	111.0	111.0	111.0	111.0	110.7	110.3	109.8	109.3	108.9



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	124.2	124.4	124.4	124.5	124.5	124.6	124.4	123.9	123.5	123.0	122.5
115°	144.1	144.1	144.3	144.4	144.6	144.8	144.6	144.1	143.7	143.2	142.7
117.5°	163.5	163.7	164.1	164.6	165.0	165.5	165.4	164.7	164.1	163.5	162.8
120°	176.2	176.2	176.9	177.5	178.1	178.7	178.7	178.1	177.5	176.9	176.2
122.5°	189.8	190.0	190.4	190.9	191.3	191.8	191.6	190.8	190.1	189.2	188.5
125°	209.5	209.7	210.1	210.3	210.5	210.8	210.5	209.7	209.0	208.3	207.6
127.5°	228.7	229.0	229.3	229.6	229.9	230.1	229.8	228.9	228.1	227.2	226.3
130°	241.8	241.9	242.1	242.3	242.4	242.6	242.1	241.1	240.0	239.0	238.0
132.5°	254.7	255.0	255.0	255.0	254.9	254.9	254.5	253.6	252.8	252.0	251.2
135°	273.2	273.3	273.2	273.0	272.9	272.7	272.2	271.2	270.4	269.5	268.6
137.5°	291.2	291.2	291.0	290.8	290.6	290.4	290.0	289.3	288.5	287.8	287.1
140°	303.3	303.3	302.9	302.5	302.1	301.6	301.1	300.4	299.7	299.0	298.3
142.5°	314.2	314.1	313.9	313.6	313.3	313.1	312.6	311.8	311.1	310.4	309.7
145°	330.8	330.7	330.2	329.8	329.3	328.8	328.3	327.8	327.2	326.7	326.1
147.5°	345.4	345.2	344.9	344.6	344.2	343.9	343.4	342.7	342.0	341.4	340.7
150°	354.6	354.3	354.0	353.7	353.4	353.0	352.6	352.1	351.6	351.2	350.7
152.5°	363.8	363.5	363.0	362.6	362.2	361.9	361.4	361.0	360.5	360.0	359.6
155°	375.4	375.0	374.8	374.5	374.3	374.1	373.8	373.5	373.3	373.0	372.8
157.5°	386.1	385.6	385.4	385.3	385.2	385.0	384.9	384.7	384.5	384.4	384.2
160°	392.5	392.1	392.0	391.9	391.8	391.8	391.6	391.5	391.3	391.2	391.0
162.5°	398.4	397.8	397.8	397.7	397.6	397.5	397.5	397.4	397.4	397.4	397.3
165°	405.9	405.3	405.3	405.3	405.3	405.3	405.4	405.5	405.5	405.6	405.7
167.5°	412.0	411.5	411.5	411.5	411.5	411.6	411.7	411.9	412.2	412.4	412.6
170°	415.5	415.0	415.1	415.1	415.2	415.3	415.5	415.7	415.9	416.2	416.4
172.5°	418.1	417.5	417.6	417.7	417.8	417.8	418.0	418.2	418.5	418.7	418.9
175°	420.8	420.3	420.4	420.6	420.8	420.9	421.1	421.3	421.6	421.8	422.1
177.5°	422.3	421.9	422.0	422.2	422.3	422.4	422.6	422.8	422.9	423.1	423.3
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	600.1	601.0	603.9	606.8	610.2	611.1	612.5	611.3	610.9	614.3	616.9
5°	601.8	605.8	613.9	621.3	627.4	631.8	636.4	638.2	641.7	646.4	652.5
7.5°	599.8	607.8	620.5	631.2	642.8	651.2	657.7	663.4	670.1	679.2	689.2
10°	597.6	608.3	623.8	636.8	651.1	661.9	670.8	679.5	689.6	702.3	715.3
12.5°	593.6	606.3	625.6	641.1	659.3	669.9	682.0	700.7	711.7	729.2	747.6
15°	585.4	599.7	626.5	645.5	666.2	686.4	708.6	726.5	744.4	754.8	780.6
17.5°	573.4	594.2	624.0	646.2	672.5	704.2	729.2	749.5	770.1	786.9	799.9
20°	563.6	586.3	620.4	646.9	678.1	712.3	740.9	761.6	779.5	793.6	801.5
22.5°	551.4	580.0	613.0	644.2	684.0	717.8	747.9	764.2	779.1	786.0	789.1
25°	532.0	566.4	603.8	641.9	686.8	722.7	750.1	760.0	764.4	757.7	746.7
27.5°	511.1	549.5	593.2	637.5	685.1	719.5	739.2	737.7	730.3	708.7	691.6
30°	495.5	537.8	584.7	633.2	680.9	714.4	725.8	714.4	697.6	673.6	648.9
32.5°	479.2	522.9	575.7	626.9	673.2	702.7	705.1	685.4	659.4	632.1	601.5
35°	454.4	501.7	558.9	613.0	656.8	675.4	664.4	629.4	598.7	561.4	519.6
37.5°	426.5	478.7	535.9	592.6	632.3	637.1	609.8	573.1	529.7	485.7	436.6
40°	405.6	460.9	519.9	576.9	612.1	607.0	572.1	531.8	480.2	426.5	380.8
42.5°	386.9	442.1	502.2	558.3	586.3	572.5	531.8	482.2	426.8	376.2	334.4
45°	354.5	411.3	472.8	526.9	543.0	518.0	464.1	409.0	354.5	312.3	279.2
47.5°	323.0	379.2	440.1	487.7	493.3	459.7	400.8	344.2	297.2	262.9	239.5
50°	299.8	356.3	416.6	459.1	457.2	416.6	356.1	302.2	262.9	235.1	219.5
52.5°	279.1	332.4	390.3	429.0	419.2	375.0	317.1	269.2	237.0	215.3	201.2
55°	246.8	296.2	351.2	382.2	364.3	315.2	266.3	227.8	203.9	187.6	176.6
57.5°	214.8	261.1	308.2	327.3	307.5	262.2	221.5	193.5	175.5	163.5	156.3
60°	195.0	235.4	277.3	293.9	270.2	229.8	197.7	172.8	158.2	148.5	142.0
62.5°	175.2	211.4	251.0	259.9	238.3	204.2	175.7	154.9	143.1	134.3	128.3
65°	148.1	177.8	207.8	213.8	193.9	167.4	145.0	131.5	120.9	114.5	109.7
67.5°	121.6	145.3	166.6	171.4	153.9	135.6	119.4	107.6	100.5	95.1	91.0
70°	105.7	124.6	142.0	145.9	131.9	115.6	103.2	93.8	87.4	82.8	78.9
72.5°	89.1	104.7	119.3	121.9	110.5	98.0	87.9	80.4	74.7	71.8	68.1
75°	68.2	77.4	88.6	89.3	81.7	74.1	66.3	61.5	58.5	54.8	53.0
77.5°	48.1	55.2	61.7	62.9	58.5	53.3	49.0	45.1	42.6	40.9	39.2
80°	36.7	42.4	45.2	46.8	43.6	39.9	37.4	34.8	33.2	32.1	31.0
82.5°	26.3	29.8	32.3	33.6	31.8	29.6	27.2	25.7	24.4	23.5	23.1
85°	13.3	14.9	16.6	17.0	16.6	15.6	14.2	14.2	13.5	13.3	13.3
87.5°	4.8	5.8	6.0	6.7	6.6	7.0	7.3	7.5	7.7	7.4	7.2
90°	1.3	2.2	3.2	4.1	5.6	7.3	9.0	10.7	12.5	12.3	12.2
92.5°	7.1	7.8	8.5	9.2	9.7	10.1	10.5	10.9	11.3	11.4	11.4
95°	19.4	20.1	20.9	21.7	22.2	22.3	22.5	22.7	22.8	22.8	22.8
97.5°	34.6	35.2	36.0	36.7	37.2	37.5	37.8	38.1	38.4	38.4	38.4
100°	45.9	46.6	47.3	47.9	48.3	48.5	48.8	49.0	49.3	49.3	49.3
102.5°	57.8	58.3	58.8	59.3	59.8	60.0	60.3	60.6	60.9	61.0	61.1
105°	77.0	77.2	77.5	77.7	77.9	78.1	78.2	78.4	78.5	78.7	78.8
107.5°	96.6	96.9	97.4	97.7	97.9	97.9	97.9	97.9	97.9	97.9	98.0
110°	109.3	109.8	110.3	110.7	111.0	111.0	111.0	111.0	111.0	111.0	111.0





TEST NUMBER: P331241-840

CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	123.0	123.5	123.9	124.4	124.6	124.5	124.5	124.4	124.4	124.2	124.0
115°	143.2	143.7	144.1	144.6	144.8	144.6	144.4	144.3	144.1	144.1	144.0
117.5°	163.5	164.1	164.7	165.4	165.5	165.0	164.6	164.1	163.7	163.5	163.3
120°	176.9	177.5	178.1	178.7	178.7	178.1	177.5	176.9	176.2	176.2	176.2
122.5°	189.2	190.1	190.8	191.6	191.8	191.3	190.9	190.4	190.0	189.8	189.6
125°	208.3	209.0	209.7	210.5	210.8	210.5	210.3	210.1	209.7	209.5	209.3
127.5°	227.2	228.1	228.9	229.8	230.1	229.9	229.6	229.3	229.0	228.7	228.5
130°	239.0	240.0	241.1	242.1	242.6	242.4	242.3	242.1	241.9	241.8	241.6
132.5°	252.0	252.8	253.6	254.5	254.9	254.9	255.0	255.0	255.0	254.7	254.3
135°	269.5	270.4	271.2	272.2	272.7	272.9	273.0	273.2	273.3	273.2	273.2
137.5°	287.8	288.5	289.3	290.0	290.4	290.6	290.8	291.0	291.2	291.2	291.1
140°	299.0	299.7	300.4	301.1	301.6	302.1	302.5	302.9	303.3	303.3	303.3
142.5°	310.4	311.1	311.8	312.6	313.1	313.3	313.6	313.9	314.1	314.2	314.3
145°	326.7	327.2	327.8	328.3	328.8	329.3	329.8	330.2	330.7	330.8	330.9
147.5°	341.4	342.0	342.7	343.4	343.9	344.2	344.6	344.9	345.2	345.4	345.5
150°	351.2	351.6	352.1	352.6	353.0	353.4	353.7	354.0	354.3	354.6	354.8
152.5°	360.0	360.5	361.0	361.4	361.9	362.2	362.6	363.0	363.5	363.8	364.1
155°	373.0	373.3	373.5	373.8	374.1	374.3	374.5	374.8	375.0	375.4	375.8
157.5°	384.4	384.5	384.7	384.9	385.0	385.2	385.3	385.4	385.6	386.1	386.6
160°	391.2	391.3	391.5	391.6	391.8	391.8	391.9	392.0	392.1	392.5	393.0
162.5°	397.4	397.4	397.4	397.5	397.5	397.6	397.7	397.8	397.8	398.4	398.9
165°	405.6	405.5	405.5	405.4	405.3	405.3	405.3	405.3	405.3	405.9	406.4
167.5°	412.4	412.2	411.9	411.7	411.6	411.5	411.5	411.5	411.5	412.0	412.6
170°	416.2	415.9	415.7	415.5	415.3	415.2	415.1	415.1	415.0	415.5	416.1
172.5°	418.7	418.5	418.2	418.0	417.8	417.8	417.7	417.6	417.5	418.1	418.6
175°	421.8	421.6	421.3	421.1	420.9	420.8	420.6	420.4	420.3	420.8	421.4
177.5°	423.1	422.9	422.8	422.6	422.4	422.3	422.2	422.0	421.9	422.3	422.7
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	619.1	621.7	621.7	622.1	625.0	624.6	624.4
5°	658.8	662.8	663.2	667.3	670.0	669.1	666.6
7.5°	696.3	703.6	709.1	712.2	715.8	718.0	717.0
10°	726.1	736.6	743.1	747.4	752.7	756.6	755.2
12.5°	753.1	765.6	774.5	781.9	782.5	787.6	784.2
15°	795.2	808.4	809.8	815.3	819.7	819.2	819.4
17.5°	809.0	813.2	814.2	814.3	814.4	812.7	809.2
20°	804.1	802.4	798.6	795.6	790.3	789.6	785.1
22.5°	780.5	775.5	765.7	759.2	751.0	748.9	747.6
25°	734.4	723.1	707.5	692.6	688.4	680.4	682.7
27.5°	670.9	653.4	636.4	624.4	613.4	601.4	604.8
30°	626.3	606.5	582.7	564.3	552.6	541.2	539.1
32.5°	573.1	544.1	517.6	501.4	483.4	476.2	468.3
35°	481.3	453.0	426.7	403.9	390.9	380.8	371.6
37.5°	398.8	366.3	345.0	326.6	317.1	311.3	312.9
40°	347.6	319.1	303.5	289.5	280.7	276.7	277.6
42.5°	306.1	284.8	272.0	262.4	256.2	253.9	253.4
45°	259.0	247.1	236.5	231.1	228.0	225.5	223.9
47.5°	226.9	217.1	211.2	207.9	205.3	202.8	202.7
50°	207.6	201.2	197.0	193.6	191.6	189.8	191.4
52.5°	192.9	187.0	182.9	179.9	179.0	177.4	177.3
55°	171.2	166.5	163.6	160.8	159.5	158.5	157.3
57.5°	151.3	146.9	144.2	142.5	139.9	139.0	138.6
60°	137.1	133.7	131.0	128.7	127.5	125.7	125.7
62.5°	124.1	120.7	118.2	116.4	114.5	113.8	114.0
65°	105.3	102.5	100.0	98.2	97.8	96.3	96.8
67.5°	88.0	86.1	83.4	82.4	81.6	80.9	80.3
70°	76.3	74.5	73.2	71.8	71.1	71.1	71.1
72.5°	66.7	64.4	63.6	61.9	62.3	61.6	60.8
75°	51.6	50.2	49.6	48.9	47.8	47.8	47.8
77.5°	38.0	37.6	36.8	36.1	35.7	35.5	35.6
80°	29.4	29.1	28.7	28.7	28.2	28.0	27.6
82.5°	22.6	22.0	21.7	21.5	21.4	21.4	21.3
85°	12.8	12.4	12.4	12.6	12.1	12.1	12.4
87.5°	7.4	7.4	7.2	7.2	7.4	7.2	7.2
90°	12.0	11.8	11.8	11.9	12.0	12.0	12.1
92.5°	11.4	11.5	11.5	11.5	11.5	11.5	11.5
95°	22.8	22.8	22.7	22.6	22.4	22.3	22.1
97.5°	38.4	38.4	38.4	38.4	38.4	38.4	38.3
100°	49.3	49.3	49.2	49.1	49.1	49.0	48.9
102.5°	61.1	61.2	61.2	61.1	61.0	61.0	60.9
105°	79.0	79.2	79.2	79.2	79.2	79.2	79.2
107.5°	98.1	98.1	98.0	97.6	97.3	96.8	96.4
110°	111.0	111.0	110.9	110.6	110.4	110.2	109.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	123.8	123.6	123.4	123.3	123.1	122.9	122.7
115°	143.9	143.8	143.7	143.4	143.2	143.0	142.7
117.5°	163.1	162.9	162.7	162.5	162.3	162.0	161.8
120°	176.2	176.2	176.1	175.9	175.6	175.4	175.2
122.5°	189.3	189.1	189.0	188.8	188.6	188.4	188.3
125°	209.0	208.8	208.6	208.6	208.5	208.4	208.3
127.5°	228.2	227.9	227.6	227.4	227.1	226.9	226.6
130°	241.5	241.3	241.1	240.8	240.3	240.0	239.7
132.5°	254.0	253.7	253.4	253.1	252.9	252.6	252.4
135°	273.1	273.0	272.9	272.6	272.4	272.2	271.9
137.5°	291.0	291.0	290.8	290.5	290.2	289.9	289.5
140°	303.3	303.3	303.1	302.8	302.5	302.2	301.8
142.5°	314.3	314.4	314.3	314.0	313.6	313.3	313.0
145°	330.9	331.0	330.9	330.6	330.3	330.0	329.6
147.5°	345.7	345.9	345.8	345.5	345.2	344.9	344.6
150°	355.0	355.3	355.3	355.0	354.8	354.6	354.3
152.5°	364.4	364.7	364.7	364.4	364.1	363.8	363.5
155°	376.2	376.6	376.7	376.4	376.2	376.0	375.7
157.5°	387.2	387.7	387.8	387.4	387.0	386.7	386.3
160°	393.5	394.0	394.0	393.7	393.4	393.1	392.8
162.5°	399.4	400.0	400.0	399.7	399.3	398.9	398.5
165°	407.0	407.5	407.6	407.2	406.8	406.4	406.1
167.5°	413.1	413.7	413.8	413.4	412.9	412.5	412.1
170°	416.6	417.2	417.2	416.8	416.3	415.8	415.3
172.5°	419.2	419.7	419.8	419.3	418.8	418.4	417.9
175°	421.9	422.5	422.5	422.1	421.6	421.1	420.6
177.5°	423.0	423.4	423.4	423.0	422.7	422.3	421.9
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8

(END OF REPORT)