

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: P331240-840

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

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331240-840
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-C290D330U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 330 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

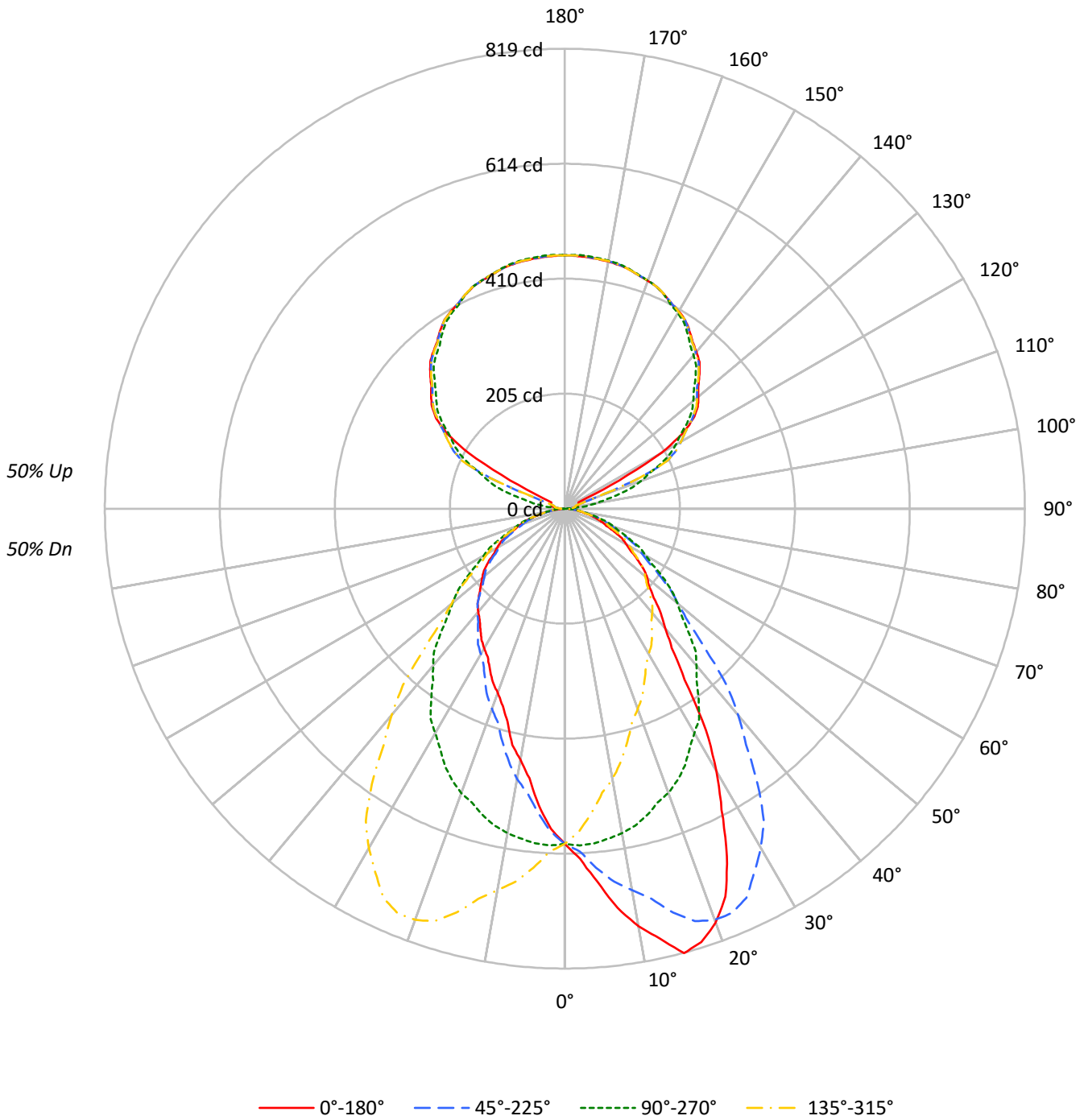
Lumens per Lamp: N/A
Luminaire Lumens: 2640.4 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	91	87	84	81	74	71	69	62	60	58	50	49	48	43
2	90	83	77	72	83	77	72	67	65	61	58	55	52	50	45	43	41	37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	43	40	38	36	32
4	75	65	57	52	69	60	54	49	52	47	43	44	40	37	36	33	31	28
5	69	58	50	45	64	54	47	42	47	41	37	39	35	32	33	30	28	24
6	64	52	45	39	59	49	42	37	42	37	33	36	32	28	30	27	24	22
7	59	47	40	34	55	44	37	32	38	33	29	33	29	25	28	24	22	19
8	55	43	36	30	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	52	40	32	27	48	37	30	26	32	27	23	28	24	21	24	20	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	16	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



TEST NUMBER: P331240-840

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	2.2
10°-20°	165.3	6.3
20°-30°	239.9	9.1
30°-40°	253.1	9.6
40°-50°	224.1	8.5
50°-60°	178.8	6.8
60°-70°	121.6	4.6
70°-80°	62.3	2.4
80°-90°	16.1	0.6
90°-100°	15.1	0.6
100°-110°	55.2	2.1
110°-120°	147.6	5.6
120°-130°	243.6	9.2
130°-140°	259.0	9.8
140°-150°	240.8	9.1
150°-160°	193.6	7.3
160°-170°	124.7	4.7
170°-180°	42.9	1.6
0°-30°	462.0	17.5
0°-40°	715.1	27.1
0°-60°	1118.0	42.3
0°-90°	1318.0	49.9
90°-120°	217.8	8.2
90°-150°	961.2	36.4
90°-180°	1322.0	50.1
0°-180°	2640.4	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°	9	0	9	0	9	5
95°	14	21	14	21	14	13
105°	25	99	25	99	25	26
115°	27	188	27	188	27	67
125°	279	266	279	266	279	242
135°	339	328	339	328	339	261
145°	387	381	387	381	387	242
155°	420	420	420	420	420	194
165°	441	442	441	442	441	125
175°	450	452	450	452	450	43
180°	451	451	451	451	451	



TEST NUMBER: P331240-840

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

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°	6.6	6.5	6.7	6.5	6.5	6.6	6.5	6.3	6.4	6.5	6.5
90°	8.8	8.7	8.5	8.4	8.3	8.0	7.6	7.3	6.9	6.6	6.0
92.5°	8.8	8.7	8.7	8.6	8.5	8.3	8.2	8.0	7.8	7.6	7.3
95°	14.0	14.1	14.1	14.2	14.3	14.1	13.8	13.4	13.1	12.7	12.2
97.5°	18.8	18.7	18.6	18.5	18.4	18.2	17.9	17.7	17.4	17.1	15.9
100°	21.9	21.7	21.6	21.4	21.3	20.9	20.4	19.8	19.2	18.6	17.4
102.5°	23.4	23.2	23.0	22.8	22.6	22.1	21.4	20.6	19.9	19.1	29.5
105°	24.8	24.5	24.2	23.9	23.6	23.1	22.3	21.5	20.7	19.9	39.7
107.5°	25.5	25.2	24.9	24.6	24.3	24.6	25.4	26.3	27.1	27.9	51.6
110°	25.8	25.5	25.2	24.9	24.6	28.1	35.3	42.6	49.9	57.2	78.1



TEST NUMBER: P331240-840

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	26.1	25.9	25.5	25.3	25.1	38.3	64.7	91.2	117.6	144.1	149.3
115°	26.8	32.0	37.3	42.4	47.7	67.1	100.7	134.3	167.8	201.5	199.7
117.5°	109.4	126.5	143.7	160.9	178.0	190.7	198.7	206.9	215.0	223.2	221.9
120°	199.1	208.9	218.7	228.5	238.3	242.8	242.0	241.1	240.2	239.3	238.0
122.5°	248.5	250.4	252.4	254.3	256.1	256.8	256.3	255.8	255.3	254.8	253.4
125°	279.1	278.9	278.7	278.5	278.3	277.9	277.4	276.9	276.4	275.9	274.5
127.5°	298.5	298.4	298.4	298.4	298.3	297.9	297.2	296.5	295.7	295.0	294.0
130°	310.5	310.6	310.6	310.7	310.8	310.4	309.6	308.8	308.0	307.3	306.5
132.5°	322.2	322.3	322.4	322.4	322.6	322.2	321.5	320.9	320.2	319.5	318.7
135°	339.2	339.4	339.5	339.7	339.8	339.5	338.8	338.1	337.4	336.7	336.0
137.5°	354.8	355.0	355.3	355.5	355.7	355.5	354.8	354.1	353.4	352.6	351.9
140°	364.4	364.8	365.2	365.5	365.9	365.7	365.1	364.4	363.8	363.0	362.3
142.5°	373.8	374.2	374.6	374.9	375.3	375.2	374.6	374.0	373.3	372.7	371.8
145°	386.9	387.3	387.7	388.0	388.4	388.3	387.8	387.3	386.8	386.3	385.1
147.5°	398.5	398.8	399.1	399.4	399.7	399.7	399.3	398.9	398.5	398.2	397.0
150°	405.6	405.9	406.3	406.7	407.0	407.0	406.5	406.1	405.7	405.3	404.0
152.5°	411.5	412.0	412.5	412.9	413.4	413.4	413.0	412.6	412.1	411.7	410.6
155°	419.9	420.5	421.1	421.6	422.2	422.3	421.8	421.4	421.0	420.5	419.7
157.5°	427.6	428.1	428.7	429.2	429.8	429.8	429.4	428.9	428.4	427.9	427.3
160°	432.0	432.5	433.0	433.5	434.0	434.0	433.6	433.2	432.7	432.3	431.9
162.5°	435.7	436.3	436.9	437.5	438.2	438.2	437.7	437.2	436.8	436.3	435.9
165°	441.1	441.6	442.1	442.6	443.1	443.1	442.6	442.1	441.6	441.1	440.9
167.5°	444.5	445.2	445.9	446.6	447.2	447.3	446.8	446.3	445.8	445.2	445.0
170°	446.7	447.4	448.0	448.7	449.3	449.4	448.9	448.4	447.9	447.4	447.2
172.5°	448.3	448.9	449.6	450.2	450.9	450.9	450.4	449.9	449.4	448.9	448.8
175°	449.6	450.3	451.1	451.8	452.5	452.6	452.1	451.6	451.1	450.6	450.5
177.5°	450.5	451.0	451.5	452.0	452.5	452.6	452.2	451.8	451.4	451.0	450.9
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

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°	6.6	6.5	6.4	6.6	5.9	5.8	4.8	4.1	4.0	4.0	3.8
90°	5.4	4.7	4.2	3.5	2.7	1.9	1.1	0.3	1.1	1.9	2.7
92.5°	7.0	6.7	6.5	6.3	6.4	6.5	6.6	6.6	6.6	6.5	6.4
95°	11.7	11.2	10.7	11.6	14.0	16.5	18.8	21.2	18.8	16.5	14.0
97.5°	14.6	13.5	12.3	15.1	21.9	28.6	35.3	42.1	35.3	28.6	21.9
100°	16.2	14.9	13.6	18.1	28.0	37.9	47.9	57.8	47.9	37.9	28.0
102.5°	39.8	50.1	60.4	66.7	68.8	70.8	72.9	75.0	72.9	70.8	68.8
105°	59.6	79.4	99.2	108.0	105.8	103.6	101.4	99.3	101.4	103.6	105.8
107.5°	75.4	99.2	122.9	133.9	132.2	130.4	128.7	126.8	128.7	130.4	132.2
110°	99.1	120.1	141.0	150.8	149.3	147.7	146.1	144.6	146.1	147.7	149.3



TEST NUMBER: P331240-840

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	154.5	159.7	164.8	166.7	165.4	164.1	162.7	161.4	162.7	164.1	165.4
115°	197.8	196.0	194.2	192.7	191.5	190.3	188.9	187.7	188.9	190.3	191.5
117.5°	220.7	219.4	218.1	216.8	215.5	214.1	212.7	211.4	212.7	214.1	215.5
120°	236.7	235.4	234.1	232.9	231.9	230.8	229.6	228.5	229.6	230.8	231.9
122.5°	251.9	250.4	249.0	247.8	246.6	245.5	244.4	243.2	244.4	245.5	246.6
125°	273.2	271.8	270.4	269.2	268.3	267.3	266.4	265.5	266.4	267.3	268.3
127.5°	293.0	291.9	290.8	289.8	288.8	287.7	286.7	285.6	286.7	287.7	288.8
130°	305.7	304.9	304.1	303.1	301.9	300.7	299.6	298.4	299.6	300.7	301.9
132.5°	317.9	317.1	316.3	315.5	314.5	313.5	312.5	311.5	312.5	313.5	314.5
135°	335.4	334.7	334.1	333.2	331.9	330.8	329.6	328.5	329.6	330.8	331.9
137.5°	351.1	350.4	349.7	348.9	348.1	347.3	346.5	345.7	346.5	347.3	348.1
140°	361.5	360.7	359.9	359.2	358.6	358.0	357.5	356.9	357.5	358.0	358.6
142.5°	370.9	370.0	369.1	368.4	367.9	367.3	366.8	366.3	366.8	367.3	367.9
145°	383.8	382.5	381.3	380.7	380.8	380.9	381.0	381.0	381.0	380.9	380.8
147.5°	395.8	394.5	393.2	392.8	393.0	393.3	393.6	393.9	393.6	393.3	393.0
150°	402.9	401.7	400.6	400.2	400.7	401.2	401.7	402.2	401.7	401.2	400.7
152.5°	409.5	408.4	407.3	407.1	407.6	408.2	408.8	409.3	408.8	408.2	407.6
155°	418.8	418.0	417.1	417.0	417.6	418.3	418.9	419.6	418.9	418.3	417.6
157.5°	426.7	426.1	425.5	425.4	426.0	426.5	427.1	427.6	427.1	426.5	426.0
160°	431.4	431.0	430.6	430.6	431.0	431.4	431.9	432.3	431.9	431.4	431.0
162.5°	435.5	435.0	434.7	434.7	435.2	435.7	436.1	436.5	436.1	435.7	435.2
165°	440.7	440.5	440.3	440.4	440.8	441.2	441.7	442.1	441.7	441.2	440.8
167.5°	444.8	444.6	444.4	444.5	444.9	445.5	445.9	446.3	445.9	445.5	444.9
170°	447.1	446.9	446.8	446.9	447.4	447.8	448.2	448.7	448.2	447.8	447.4
172.5°	448.6	448.5	448.3	448.5	448.9	449.3	449.8	450.2	449.8	449.3	448.9
175°	450.3	450.2	450.0	450.2	450.7	451.2	451.7	452.2	451.7	451.2	450.7
177.5°	450.9	450.8	450.8	450.9	451.3	451.7	452.1	452.5	452.1	451.7	451.3
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840

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

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°	3.8	3.7	3.7	3.8	3.7	3.7	3.5	3.6	3.7	3.4	3.4
90°	3.5	4.2	4.7	5.4	6.0	6.6	6.9	7.3	7.6	8.0	8.3
92.5°	6.3	6.5	6.7	7.0	7.3	7.6	7.8	8.0	8.2	8.3	8.5
95°	11.6	10.7	11.2	11.7	12.2	12.7	13.1	13.4	13.8	14.1	14.3
97.5°	15.1	12.3	13.5	14.6	15.9	17.1	17.4	17.7	17.9	18.2	18.4
100°	18.1	13.6	14.9	16.2	17.4	18.6	19.2	19.8	20.4	20.9	21.3
102.5°	66.7	60.4	50.1	39.8	29.5	19.1	19.9	20.6	21.4	22.1	22.6
105°	108.0	99.2	79.4	59.6	39.7	19.9	20.7	21.5	22.3	23.1	23.6
107.5°	133.9	122.9	99.2	75.4	51.6	27.9	27.1	26.3	25.4	24.6	24.3
110°	150.8	141.0	120.1	99.1	78.1	57.2	49.9	42.6	35.3	28.1	24.6



TEST NUMBER: P331240-840

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	166.7	164.8	159.7	154.5	149.3	144.1	117.6	91.2	64.7	38.3	25.1
115°	192.7	194.2	196.0	197.8	199.7	201.5	167.8	134.3	100.7	67.1	47.7
117.5°	216.8	218.1	219.4	220.7	221.9	223.2	215.0	206.9	198.7	190.7	178.0
120°	232.9	234.1	235.4	236.7	238.0	239.3	240.2	241.1	242.0	242.8	238.3
122.5°	247.8	249.0	250.4	251.9	253.4	254.8	255.3	255.8	256.3	256.8	256.1
125°	269.2	270.4	271.8	273.2	274.5	275.9	276.4	276.9	277.4	277.9	278.3
127.5°	289.8	290.8	291.9	293.0	294.0	295.0	295.7	296.5	297.2	297.9	298.3
130°	303.1	304.1	304.9	305.7	306.5	307.3	308.0	308.8	309.6	310.4	310.8
132.5°	315.5	316.3	317.1	317.9	318.7	319.5	320.2	320.9	321.5	322.2	322.6
135°	333.2	334.1	334.7	335.4	336.0	336.7	337.4	338.1	338.8	339.5	339.8
137.5°	348.9	349.7	350.4	351.1	351.9	352.6	353.4	354.1	354.8	355.5	355.7
140°	359.2	359.9	360.7	361.5	362.3	363.0	363.8	364.4	365.1	365.7	365.9
142.5°	368.4	369.1	370.0	370.9	371.8	372.7	373.3	374.0	374.6	375.2	375.3
145°	380.7	381.3	382.5	383.8	385.1	386.3	386.8	387.3	387.8	388.3	388.4
147.5°	392.8	393.2	394.5	395.8	397.0	398.2	398.5	398.9	399.3	399.7	399.7
150°	400.2	400.6	401.7	402.9	404.0	405.3	405.7	406.1	406.5	407.0	407.0
152.5°	407.1	407.3	408.4	409.5	410.6	411.7	412.1	412.6	413.0	413.4	413.4
155°	417.0	417.1	418.0	418.8	419.7	420.5	421.0	421.4	421.8	422.3	422.2
157.5°	425.4	425.5	426.1	426.7	427.3	427.9	428.4	428.9	429.4	429.8	429.8
160°	430.6	430.6	431.0	431.4	431.9	432.3	432.7	433.2	433.6	434.0	434.0
162.5°	434.7	434.7	435.0	435.5	435.9	436.3	436.8	437.2	437.7	438.2	438.2
165°	440.4	440.3	440.5	440.7	440.9	441.1	441.6	442.1	442.6	443.1	443.1
167.5°	444.5	444.4	444.6	444.8	445.0	445.2	445.8	446.3	446.8	447.3	447.2
170°	446.9	446.8	446.9	447.1	447.2	447.4	447.9	448.4	448.9	449.4	449.3
172.5°	448.5	448.3	448.5	448.6	448.8	448.9	449.4	449.9	450.4	450.9	450.9
175°	450.2	450.0	450.2	450.3	450.5	450.6	451.1	451.6	452.1	452.6	452.5
177.5°	450.9	450.8	450.8	450.9	450.9	451.0	451.4	451.8	452.2	452.6	452.5
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

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°	3.5	3.3	3.4	3.2	3.4	3.3	3.5	3.4	3.4	3.7	3.6
90°	8.4	8.5	8.7	8.8	8.7	8.5	8.4	8.3	8.0	7.6	7.3
92.5°	8.6	8.7	8.7	8.8	8.7	8.7	8.6	8.5	8.3	8.2	8.0
95°	14.2	14.1	14.1	14.0	14.1	14.1	14.2	14.3	14.1	13.8	13.4
97.5°	18.5	18.6	18.7	18.8	18.7	18.6	18.5	18.4	18.2	17.9	17.7
100°	21.4	21.6	21.7	21.9	21.7	21.6	21.4	21.3	20.9	20.4	19.8
102.5°	22.8	23.0	23.2	23.4	23.2	23.0	22.8	22.6	22.1	21.4	20.6
105°	23.9	24.2	24.5	24.8	24.5	24.2	23.9	23.6	23.1	22.3	21.5
107.5°	24.6	24.9	25.2	25.5	25.2	24.9	24.6	24.3	24.6	25.4	26.3
110°	24.9	25.2	25.5	25.8	25.5	25.2	24.9	24.6	28.1	35.3	42.6



TEST NUMBER: P331240-840

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	25.3	25.5	25.9	26.1	25.9	25.5	25.3	25.1	38.3	64.7	91.2
115°	42.4	37.3	32.0	26.8	32.0	37.3	42.4	47.7	67.1	100.7	134.3
117.5°	160.9	143.7	126.5	109.4	126.5	143.7	160.9	178.0	190.7	198.7	206.9
120°	228.5	218.7	208.9	199.1	208.9	218.7	228.5	238.3	242.8	242.0	241.1
122.5°	254.3	252.4	250.4	248.5	250.4	252.4	254.3	256.1	256.8	256.3	255.8
125°	278.5	278.7	278.9	279.1	278.9	278.7	278.5	278.3	277.9	277.4	276.9
127.5°	298.4	298.4	298.4	298.5	298.4	298.4	298.4	298.3	297.9	297.2	296.5
130°	310.7	310.6	310.6	310.5	310.6	310.6	310.7	310.8	310.4	309.6	308.8
132.5°	322.4	322.4	322.3	322.2	322.3	322.4	322.4	322.6	322.2	321.5	320.9
135°	339.7	339.5	339.4	339.2	339.4	339.5	339.7	339.8	339.5	338.8	338.1
137.5°	355.5	355.3	355.0	354.8	355.0	355.3	355.5	355.7	355.5	354.8	354.1
140°	365.5	365.2	364.8	364.4	364.8	365.2	365.5	365.9	365.7	365.1	364.4
142.5°	374.9	374.6	374.2	373.8	374.2	374.6	374.9	375.3	375.2	374.6	374.0
145°	388.0	387.7	387.3	386.9	387.3	387.7	388.0	388.4	388.3	387.8	387.3
147.5°	399.4	399.1	398.8	398.5	398.8	399.1	399.4	399.7	399.7	399.3	398.9
150°	406.7	406.3	405.9	405.6	405.9	406.3	406.7	407.0	407.0	406.5	406.1
152.5°	412.9	412.5	412.0	411.5	412.0	412.5	412.9	413.4	413.4	413.0	412.6
155°	421.6	421.1	420.5	419.9	420.5	421.1	421.6	422.2	422.3	421.8	421.4
157.5°	429.2	428.7	428.1	427.6	428.1	428.7	429.2	429.8	429.8	429.4	428.9
160°	433.5	433.0	432.5	432.0	432.5	433.0	433.5	434.0	434.0	433.6	433.2
162.5°	437.5	436.9	436.3	435.7	436.3	436.9	437.5	438.2	438.2	437.7	437.2
165°	442.6	442.1	441.6	441.1	441.6	442.1	442.6	443.1	443.1	442.6	442.1
167.5°	446.6	445.9	445.2	444.5	445.2	445.9	446.6	447.2	447.3	446.8	446.3
170°	448.7	448.0	447.4	446.7	447.4	448.0	448.7	449.3	449.4	448.9	448.4
172.5°	450.2	449.6	448.9	448.3	448.9	449.6	450.2	450.9	450.9	450.4	449.9
175°	451.8	451.1	450.3	449.6	450.3	451.1	451.8	452.5	452.6	452.1	451.6
177.5°	452.0	451.5	451.0	450.5	451.0	451.5	452.0	452.5	452.6	452.2	451.8
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

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°	3.5	3.7	3.7	3.8	3.7	3.7	3.8	3.8	4.0	4.0	4.1
90°	6.9	6.6	6.0	5.4	4.7	4.2	3.5	2.7	1.9	1.1	0.3
92.5°	7.8	7.6	7.3	7.0	6.7	6.5	6.3	6.4	6.5	6.6	6.6
95°	13.1	12.7	12.2	11.7	11.2	10.7	11.6	14.0	16.5	18.8	21.2
97.5°	17.4	17.1	15.9	14.6	13.5	12.3	15.1	21.9	28.6	35.3	42.1
100°	19.2	18.6	17.4	16.2	14.9	13.6	18.1	28.0	37.9	47.9	57.8
102.5°	19.9	19.1	29.5	39.8	50.1	60.4	66.7	68.8	70.8	72.9	75.0
105°	20.7	19.9	39.7	59.6	79.4	99.2	108.0	105.8	103.6	101.4	99.3
107.5°	27.1	27.9	51.6	75.4	99.2	122.9	133.9	132.2	130.4	128.7	126.8
110°	49.9	57.2	78.1	99.1	120.1	141.0	150.8	149.3	147.7	146.1	144.6



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	117.6	144.1	149.3	154.5	159.7	164.8	166.7	165.4	164.1	162.7	161.4
115°	167.8	201.5	199.7	197.8	196.0	194.2	192.7	191.5	190.3	188.9	187.7
117.5°	215.0	223.2	221.9	220.7	219.4	218.1	216.8	215.5	214.1	212.7	211.4
120°	240.2	239.3	238.0	236.7	235.4	234.1	232.9	231.9	230.8	229.6	228.5
122.5°	255.3	254.8	253.4	251.9	250.4	249.0	247.8	246.6	245.5	244.4	243.2
125°	276.4	275.9	274.5	273.2	271.8	270.4	269.2	268.3	267.3	266.4	265.5
127.5°	295.7	295.0	294.0	293.0	291.9	290.8	289.8	288.8	287.7	286.7	285.6
130°	308.0	307.3	306.5	305.7	304.9	304.1	303.1	301.9	300.7	299.6	298.4
132.5°	320.2	319.5	318.7	317.9	317.1	316.3	315.5	314.5	313.5	312.5	311.5
135°	337.4	336.7	336.0	335.4	334.7	334.1	333.2	331.9	330.8	329.6	328.5
137.5°	353.4	352.6	351.9	351.1	350.4	349.7	348.9	348.1	347.3	346.5	345.7
140°	363.8	363.0	362.3	361.5	360.7	359.9	359.2	358.6	358.0	357.5	356.9
142.5°	373.3	372.7	371.8	370.9	370.0	369.1	368.4	367.9	367.3	366.8	366.3
145°	386.8	386.3	385.1	383.8	382.5	381.3	380.7	380.8	380.9	381.0	381.0
147.5°	398.5	398.2	397.0	395.8	394.5	393.2	392.8	393.0	393.3	393.6	393.9
150°	405.7	405.3	404.0	402.9	401.7	400.6	400.2	400.7	401.2	401.7	402.2
152.5°	412.1	411.7	410.6	409.5	408.4	407.3	407.1	407.6	408.2	408.8	409.3
155°	421.0	420.5	419.7	418.8	418.0	417.1	417.0	417.6	418.3	418.9	419.6
157.5°	428.4	427.9	427.3	426.7	426.1	425.5	425.4	426.0	426.5	427.1	427.6
160°	432.7	432.3	431.9	431.4	431.0	430.6	430.6	431.0	431.4	431.9	432.3
162.5°	436.8	436.3	435.9	435.5	435.0	434.7	434.7	435.2	435.7	436.1	436.5
165°	441.6	441.1	440.9	440.7	440.5	440.3	440.4	440.8	441.2	441.7	442.1
167.5°	445.8	445.2	445.0	444.8	444.6	444.4	444.5	444.9	445.5	445.9	446.3
170°	447.9	447.4	447.2	447.1	446.9	446.8	446.9	447.4	447.8	448.2	448.7
172.5°	449.4	448.9	448.8	448.6	448.5	448.3	448.5	448.9	449.3	449.8	450.2
175°	451.1	450.6	450.5	450.3	450.2	450.0	450.2	450.7	451.2	451.7	452.2
177.5°	451.4	451.0	450.9	450.9	450.8	450.8	450.9	451.3	451.7	452.1	452.5
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840

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

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	5.9	6.6	6.4	6.5	6.6	6.5	6.5	6.4	6.3
90°	1.1	1.9	2.7	3.5	4.2	4.7	5.4	6.0	6.6	6.9	7.3
92.5°	6.6	6.5	6.4	6.3	6.5	6.7	7.0	7.3	7.6	7.8	8.0
95°	18.8	16.5	14.0	11.6	10.7	11.2	11.7	12.2	12.7	13.1	13.4
97.5°	35.3	28.6	21.9	15.1	12.3	13.5	14.6	15.9	17.1	17.4	17.7
100°	47.9	37.9	28.0	18.1	13.6	14.9	16.2	17.4	18.6	19.2	19.8
102.5°	72.9	70.8	68.8	66.7	60.4	50.1	39.8	29.5	19.1	19.9	20.6
105°	101.4	103.6	105.8	108.0	99.2	79.4	59.6	39.7	19.9	20.7	21.5
107.5°	128.7	130.4	132.2	133.9	122.9	99.2	75.4	51.6	27.9	27.1	26.3
110°	146.1	147.7	149.3	150.8	141.0	120.1	99.1	78.1	57.2	49.9	42.6



TEST NUMBER: P331240-840

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

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	162.7	164.1	165.4	166.7	164.8	159.7	154.5	149.3	144.1	117.6	91.2
115°	188.9	190.3	191.5	192.7	194.2	196.0	197.8	199.7	201.5	167.8	134.3
117.5°	212.7	214.1	215.5	216.8	218.1	219.4	220.7	221.9	223.2	215.0	206.9
120°	229.6	230.8	231.9	232.9	234.1	235.4	236.7	238.0	239.3	240.2	241.1
122.5°	244.4	245.5	246.6	247.8	249.0	250.4	251.9	253.4	254.8	255.3	255.8
125°	266.4	267.3	268.3	269.2	270.4	271.8	273.2	274.5	275.9	276.4	276.9
127.5°	286.7	287.7	288.8	289.8	290.8	291.9	293.0	294.0	295.0	295.7	296.5
130°	299.6	300.7	301.9	303.1	304.1	304.9	305.7	306.5	307.3	308.0	308.8
132.5°	312.5	313.5	314.5	315.5	316.3	317.1	317.9	318.7	319.5	320.2	320.9
135°	329.6	330.8	331.9	333.2	334.1	334.7	335.4	336.0	336.7	337.4	338.1
137.5°	346.5	347.3	348.1	348.9	349.7	350.4	351.1	351.9	352.6	353.4	354.1
140°	357.5	358.0	358.6	359.2	359.9	360.7	361.5	362.3	363.0	363.8	364.4
142.5°	366.8	367.3	367.9	368.4	369.1	370.0	370.9	371.8	372.7	373.3	374.0
145°	381.0	380.9	380.8	380.7	381.3	382.5	383.8	385.1	386.3	386.8	387.3
147.5°	393.6	393.3	393.0	392.8	393.2	394.5	395.8	397.0	398.2	398.5	398.9
150°	401.7	401.2	400.7	400.2	400.6	401.7	402.9	404.0	405.3	405.7	406.1
152.5°	408.8	408.2	407.6	407.1	407.3	408.4	409.5	410.6	411.7	412.1	412.6
155°	418.9	418.3	417.6	417.0	417.1	418.0	418.8	419.7	420.5	421.0	421.4
157.5°	427.1	426.5	426.0	425.4	425.5	426.1	426.7	427.3	427.9	428.4	428.9
160°	431.9	431.4	431.0	430.6	430.6	431.0	431.4	431.9	432.3	432.7	433.2
162.5°	436.1	435.7	435.2	434.7	434.7	435.0	435.5	435.9	436.3	436.8	437.2
165°	441.7	441.2	440.8	440.4	440.3	440.5	440.7	440.9	441.1	441.6	442.1
167.5°	445.9	445.5	444.9	444.5	444.4	444.6	444.8	445.0	445.2	445.8	446.3
170°	448.2	447.8	447.4	446.9	446.8	446.9	447.1	447.2	447.4	447.9	448.4
172.5°	449.8	449.3	448.9	448.5	448.3	448.5	448.6	448.8	448.9	449.4	449.9
175°	451.7	451.2	450.7	450.2	450.0	450.2	450.3	450.5	450.6	451.1	451.6
177.5°	452.1	451.7	451.3	450.9	450.8	450.8	450.9	450.9	451.0	451.4	451.8
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

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°	6.5	6.6	6.5	6.5	6.7	6.5	6.6
90°	7.6	8.0	8.3	8.4	8.5	8.7	8.8
92.5°	8.2	8.3	8.5	8.6	8.7	8.7	8.8
95°	13.8	14.1	14.3	14.2	14.1	14.1	14.0
97.5°	17.9	18.2	18.4	18.5	18.6	18.7	18.8
100°	20.4	20.9	21.3	21.4	21.6	21.7	21.9
102.5°	21.4	22.1	22.6	22.8	23.0	23.2	23.4
105°	22.3	23.1	23.6	23.9	24.2	24.5	24.8
107.5°	25.4	24.6	24.3	24.6	24.9	25.2	25.5
110°	35.3	28.1	24.6	24.9	25.2	25.5	25.8



TEST NUMBER: P331240-840
 CATALOG NUMBER: SA2XXDIP-C290D330U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	64.7	38.3	25.1	25.3	25.5	25.9	26.1
115°	100.7	67.1	47.7	42.4	37.3	32.0	26.8
117.5°	198.7	190.7	178.0	160.9	143.7	126.5	109.4
120°	242.0	242.8	238.3	228.5	218.7	208.9	199.1
122.5°	256.3	256.8	256.1	254.3	252.4	250.4	248.5
125°	277.4	277.9	278.3	278.5	278.7	278.9	279.1
127.5°	297.2	297.9	298.3	298.4	298.4	298.4	298.5
130°	309.6	310.4	310.8	310.7	310.6	310.6	310.5
132.5°	321.5	322.2	322.6	322.4	322.4	322.3	322.2
135°	338.8	339.5	339.8	339.7	339.5	339.4	339.2
137.5°	354.8	355.5	355.7	355.5	355.3	355.0	354.8
140°	365.1	365.7	365.9	365.5	365.2	364.8	364.4
142.5°	374.6	375.2	375.3	374.9	374.6	374.2	373.8
145°	387.8	388.3	388.4	388.0	387.7	387.3	386.9
147.5°	399.3	399.7	399.7	399.4	399.1	398.8	398.5
150°	406.5	407.0	407.0	406.7	406.3	405.9	405.6
152.5°	413.0	413.4	413.4	412.9	412.5	412.0	411.5
155°	421.8	422.3	422.2	421.6	421.1	420.5	419.9
157.5°	429.4	429.8	429.8	429.2	428.7	428.1	427.6
160°	433.6	434.0	434.0	433.5	433.0	432.5	432.0
162.5°	437.7	438.2	438.2	437.5	436.9	436.3	435.7
165°	442.6	443.1	443.1	442.6	442.1	441.6	441.1
167.5°	446.8	447.3	447.2	446.6	445.9	445.2	444.5
170°	448.9	449.4	449.3	448.7	448.0	447.4	446.7
172.5°	450.4	450.9	450.9	450.2	449.6	448.9	448.3
175°	452.1	452.6	452.5	451.8	451.1	450.3	449.6
177.5°	452.2	452.6	452.5	452.0	451.5	451.0	450.5
180°	451.2	451.2	451.2	451.2	451.2	451.2	451.2

(END OF REPORT)