

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: P331466-840

Luminaire Tested: **S122DIW-S290D435U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331466-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D435U840-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 435 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2835.1 lumens
Efficiency: N/A
Efficacy: 123.3 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

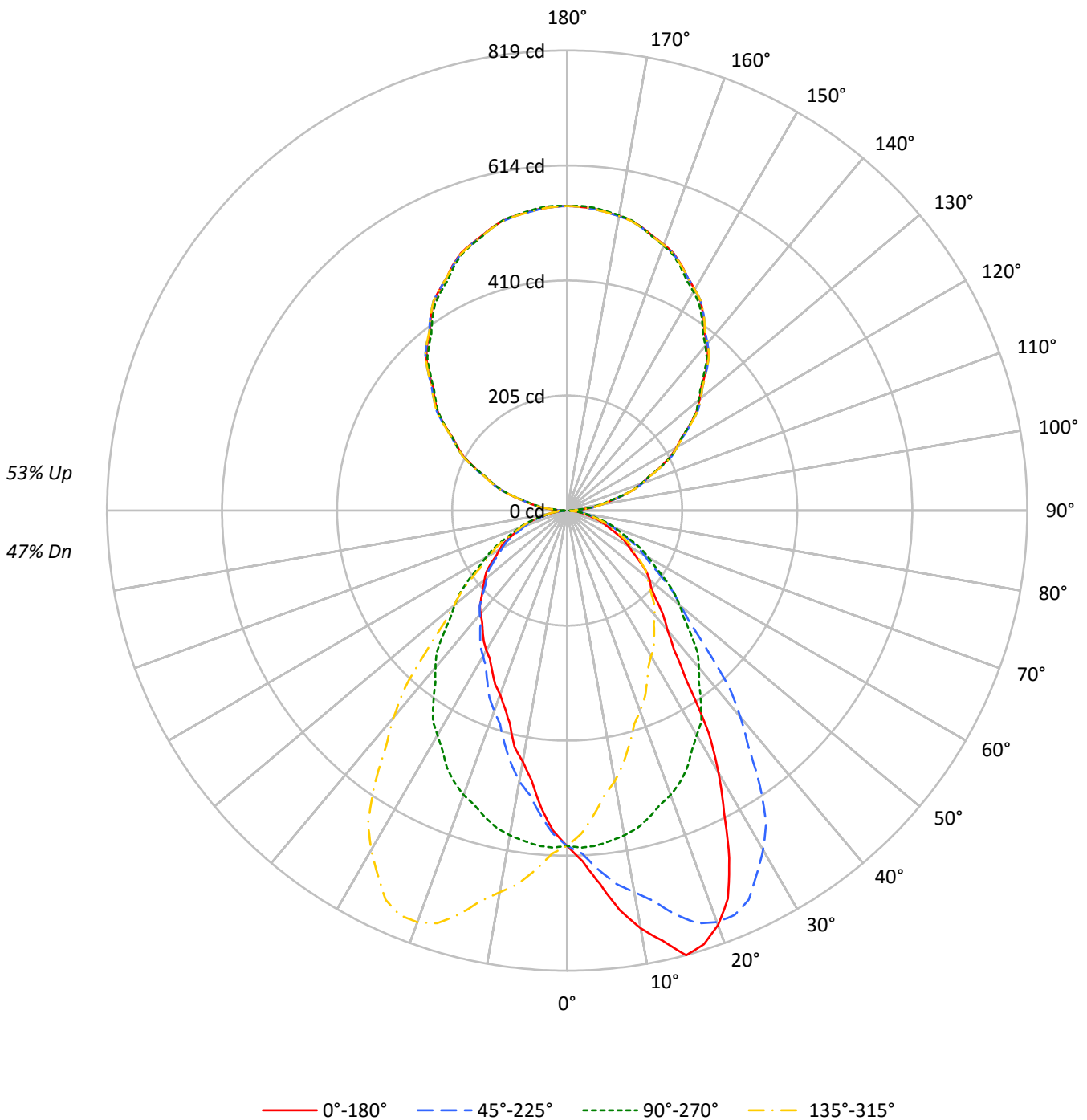
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47
1	97	93	90	86	89	86	83	80	72	70	68	59	58	56	47	46	46	40
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	42	41	39	34
3	82	72	65	60	75	67	61	56	56	52	48	47	44	41	38	36	34	30
4	75	64	57	51	69	60	53	48	50	45	41	42	38	35	34	32	29	26
5	69	58	50	44	63	53	46	41	45	40	36	38	34	31	31	28	26	23
6	64	52	44	38	58	48	41	36	41	36	32	34	30	27	28	25	23	20
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	14

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	2.0
10°-20°	165.3	5.8
20°-30°	239.9	8.5
30°-40°	253.1	8.9
40°-50°	224.1	7.9
50°-60°	178.8	6.3
60°-70°	121.6	4.3
70°-80°	62.3	2.2
80°-90°	17.2	0.6
90°-100°	34.4	1.2
100°-110°	106.7	3.8
110°-120°	182.4	6.4
120°-130°	239.9	8.5
130°-140°	269.2	9.5
140°-150°	263.9	9.3
150°-160°	221.4	7.8
160°-170°	146.8	5.2
170°-180°	51.3	1.8
0°-30°	462.0	16.3
0°-40°	715.1	25.2
0°-60°	1118.0	39.4
0°-90°	1319.1	46.5
90°-120°	323.4	11.4
90°-150°	1096.4	38.7
90°-180°	1516.0	53.5
0°-180°	2835.1	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°	16	0	16	0	16	7
95°	28	24	28	24	28	32
105°	102	98	102	98	102	107
115°	183	183	183	183	183	181
125°	267	266	267	266	267	238
135°	349	345	349	345	349	268
145°	423	418	423	418	423	264
155°	482	478	482	478	482	222
165°	521	520	521	520	521	147
175°	540	541	540	541	540	51
180°	542	542	542	542	542	



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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°	7.9	7.9	8.0	7.8	7.8	8.0	8.1	7.9	8.1	8.4	8.1
90°	15.6	15.5	15.3	15.2	15.1	15.2	15.5	15.7	15.9	16.1	13.7
92.5°	14.8	14.8	14.7	14.7	14.7	14.7	14.6	14.6	14.5	14.5	14.0
95°	28.4	28.6	28.8	29.0	29.2	29.3	29.3	29.3	29.3	29.3	29.1
97.5°	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	48.9
100°	62.7	62.8	62.9	63.0	63.1	63.1	63.1	63.1	63.1	63.1	62.8
102.5°	78.1	78.2	78.3	78.4	78.5	78.5	78.4	78.3	78.3	78.2	77.8
105°	101.6	101.6	101.6	101.6	101.6	101.5	101.3	101.1	100.9	100.7	100.5
107.5°	123.7	124.2	124.6	125.1	125.6	125.8	125.7	125.6	125.5	125.4	125.4
110°	140.9	141.2	141.5	141.8	142.1	142.3	142.3	142.3	142.3	142.3	142.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.4	157.6	157.8	158.0	158.2	158.5	158.8	159.1	159.3	159.5	159.6
115°	183.0	183.3	183.6	183.9	184.2	184.4	184.5	184.6	184.7	184.8	185.0
117.5°	207.4	207.7	208.0	208.3	208.6	208.9	209.1	209.4	209.6	210.0	210.5
120°	224.7	225.0	225.3	225.6	225.9	226.0	226.0	226.0	226.0	226.0	226.8
122.5°	241.5	241.7	242.0	242.2	242.4	242.6	242.9	243.1	243.4	243.6	244.2
125°	267.2	267.3	267.4	267.5	267.6	267.8	268.1	268.4	268.7	269.0	269.3
127.5°	290.6	290.9	291.2	291.5	292.0	292.3	292.7	293.0	293.4	293.8	294.1
130°	307.5	307.9	308.3	308.7	309.1	309.4	309.6	309.8	310.0	310.2	310.4
132.5°	323.6	323.9	324.2	324.6	324.9	325.3	325.7	326.2	326.6	327.0	327.0
135°	348.6	348.9	349.2	349.5	349.8	350.0	350.1	350.2	350.3	350.4	350.2
137.5°	371.3	371.7	372.1	372.5	372.9	373.2	373.2	373.3	373.4	373.5	373.2
140°	387.1	387.5	387.9	388.3	388.7	388.9	388.9	388.9	388.9	388.9	388.4
142.5°	401.3	401.7	402.1	402.5	402.9	403.1	403.0	402.9	402.9	402.8	402.4
145°	422.7	423.1	423.5	423.9	424.3	424.5	424.4	424.3	424.2	424.1	423.5
147.5°	441.9	442.2	442.6	443.0	443.4	443.5	443.3	443.0	442.8	442.6	442.2
150°	454.3	454.6	454.9	455.2	455.6	455.6	455.2	454.9	454.6	454.3	453.9
152.5°	466.1	466.5	466.8	467.2	467.6	467.6	467.2	466.8	466.5	466.1	465.5
155°	481.8	482.1	482.4	482.7	483.0	482.9	482.4	481.9	481.4	480.9	480.6
157.5°	495.3	495.8	496.2	496.8	497.3	497.2	496.4	495.7	495.1	494.4	494.2
160°	503.7	504.1	504.5	504.9	505.3	505.2	504.6	504.0	503.4	502.8	502.7
162.5°	511.1	511.5	512.0	512.5	513.0	512.9	512.2	511.5	510.8	510.2	510.1
165°	520.7	521.2	521.7	522.2	522.7	522.6	521.9	521.2	520.5	519.8	519.8
167.5°	528.6	529.1	529.6	530.1	530.7	530.6	529.9	529.2	528.5	527.8	527.8
170°	532.6	533.2	533.8	534.4	535.0	534.9	534.2	533.5	532.8	532.1	532.2
172.5°	535.8	536.4	537.0	537.7	538.3	538.3	537.6	536.8	536.1	535.4	535.5
175°	539.5	540.1	540.7	541.3	541.9	541.8	541.1	540.4	539.7	539.0	539.2
177.5°	541.1	541.6	542.1	542.5	543.0	543.0	542.5	542.1	541.6	541.1	541.2
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



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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°	7.8	7.4	7.0	7.0	6.2	5.9	4.9	4.1	4.1	4.2	4.1
90°	11.5	9.3	7.1	5.4	4.1	2.9	1.7	0.5	1.7	2.9	4.1
92.5°	13.5	12.9	12.4	11.7	10.8	9.9	9.1	8.2	9.1	9.9	10.8
95°	28.9	28.7	28.5	27.9	26.9	25.9	24.8	23.8	24.8	25.9	26.9
97.5°	48.5	48.1	47.7	47.1	46.2	45.2	44.3	43.4	44.3	45.2	46.2
100°	62.5	62.2	61.9	61.4	60.6	59.7	58.9	58.1	58.9	59.7	60.6
102.5°	77.4	77.0	76.6	76.0	75.4	74.7	74.1	73.5	74.1	74.7	75.4
105°	100.3	100.1	99.9	99.6	99.3	99.0	98.7	98.4	98.7	99.0	99.3
107.5°	125.4	125.4	125.4	125.2	124.8	124.3	123.9	123.4	123.9	124.3	124.8
110°	142.3	142.3	142.3	142.0	141.4	140.8	140.2	139.6	140.2	140.8	141.4



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	159.7	159.8	159.9	159.6	159.0	158.3	157.7	157.1	157.7	158.3	159.0
115°	185.2	185.4	185.6	185.4	184.8	184.2	183.6	183.0	183.6	184.2	184.8
117.5°	211.1	211.7	212.2	212.1	211.3	210.5	209.6	208.8	209.6	210.5	211.3
120°	227.6	228.4	229.2	229.2	228.4	227.6	226.8	226.0	226.8	227.6	228.4
122.5°	244.7	245.3	245.9	245.7	244.7	243.7	242.8	241.8	242.8	243.7	244.7
125°	269.6	269.9	270.2	269.9	269.0	268.1	267.2	266.3	267.2	268.1	269.0
127.5°	294.5	294.9	295.2	294.8	293.7	292.5	291.3	290.1	291.3	292.5	293.7
130°	310.6	310.8	311.0	310.4	309.1	307.8	306.5	305.2	306.5	307.8	309.1
132.5°	327.0	326.9	326.9	326.3	325.3	324.2	323.1	322.0	323.1	324.2	325.3
135°	350.0	349.8	349.6	349.0	347.9	346.8	345.7	344.6	345.7	346.8	347.9
137.5°	373.0	372.7	372.4	371.8	370.9	370.0	369.1	368.2	369.1	370.0	370.9
140°	387.9	387.4	386.9	386.2	385.3	384.4	383.4	382.5	383.4	384.4	385.3
142.5°	402.1	401.7	401.4	400.8	399.9	399.0	398.1	397.2	398.1	399.0	399.9
145°	422.9	422.3	421.7	421.0	420.3	419.6	418.9	418.2	418.9	419.6	420.3
147.5°	441.8	441.4	441.0	440.4	439.5	438.7	437.8	437.0	437.8	438.7	439.5
150°	453.5	453.1	452.7	452.2	451.6	451.0	450.4	449.8	450.4	451.0	451.6
152.5°	465.0	464.5	464.1	463.5	462.9	462.3	461.7	461.1	461.7	462.3	462.9
155°	480.3	480.0	479.7	479.4	479.1	478.7	478.4	478.1	478.4	478.7	479.1
157.5°	494.0	493.8	493.6	493.5	493.3	493.1	492.9	492.7	492.9	493.1	493.3
160°	502.6	502.5	502.4	502.3	502.1	501.9	501.7	501.5	501.7	501.9	502.1
162.5°	510.0	509.9	509.8	509.7	509.6	509.6	509.6	509.5	509.6	509.6	509.6
165°	519.8	519.8	519.8	519.8	519.9	520.0	520.1	520.2	520.1	520.0	519.9
167.5°	527.8	527.8	527.8	528.0	528.3	528.6	528.9	529.2	528.9	528.6	528.3
170°	532.3	532.4	532.5	532.7	533.0	533.3	533.6	533.9	533.6	533.3	533.0
172.5°	535.6	535.7	535.8	536.0	536.3	536.6	536.9	537.2	536.9	536.6	536.3
175°	539.4	539.6	539.8	540.1	540.4	540.7	541.0	541.3	541.0	540.7	540.4
177.5°	541.4	541.6	541.7	541.9	542.2	542.4	542.7	542.9	542.7	542.4	542.2
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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°	4.1	4.3	4.6	5.0	5.4	5.6	5.4	5.4	5.3	4.8	4.8
90°	5.4	7.1	9.3	11.5	13.7	16.1	15.9	15.7	15.5	15.2	15.1
92.5°	11.7	12.4	12.9	13.5	14.0	14.5	14.5	14.6	14.6	14.7	14.7
95°	27.9	28.5	28.7	28.9	29.1	29.3	29.3	29.3	29.3	29.3	29.2
97.5°	47.1	47.7	48.1	48.5	48.9	49.2	49.2	49.2	49.2	49.2	49.2
100°	61.4	61.9	62.2	62.5	62.8	63.1	63.1	63.1	63.1	63.1	63.1
102.5°	76.0	76.6	77.0	77.4	77.8	78.2	78.3	78.3	78.4	78.5	78.5
105°	99.6	99.9	100.1	100.3	100.5	100.7	100.9	101.1	101.3	101.5	101.6
107.5°	125.2	125.4	125.4	125.4	125.4	125.4	125.5	125.6	125.7	125.8	125.6
110°	142.0	142.3	142.3	142.3	142.3	142.3	142.3	142.3	142.3	142.3	142.1



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	159.6	159.9	159.8	159.7	159.6	159.5	159.3	159.1	158.8	158.5	158.2
115°	185.4	185.6	185.4	185.2	185.0	184.8	184.7	184.6	184.5	184.4	184.2
117.5°	212.1	212.2	211.7	211.1	210.5	210.0	209.6	209.4	209.1	208.9	208.6
120°	229.2	229.2	228.4	227.6	226.8	226.0	226.0	226.0	226.0	226.0	225.9
122.5°	245.7	245.9	245.3	244.7	244.2	243.6	243.4	243.1	242.9	242.6	242.4
125°	269.9	270.2	269.9	269.6	269.3	269.0	268.7	268.4	268.1	267.8	267.6
127.5°	294.8	295.2	294.9	294.5	294.1	293.8	293.4	293.0	292.7	292.3	292.0
130°	310.4	311.0	310.8	310.6	310.4	310.2	310.0	309.8	309.6	309.4	309.1
132.5°	326.3	326.9	326.9	327.0	327.0	327.0	326.6	326.2	325.7	325.3	324.9
135°	349.0	349.6	349.8	350.0	350.2	350.4	350.3	350.2	350.1	350.0	349.8
137.5°	371.8	372.4	372.7	373.0	373.2	373.5	373.4	373.3	373.2	373.2	372.9
140°	386.2	386.9	387.4	387.9	388.4	388.9	388.9	388.9	388.9	388.9	388.7
142.5°	400.8	401.4	401.7	402.1	402.4	402.8	402.9	402.9	403.0	403.1	402.9
145°	421.0	421.7	422.3	422.9	423.5	424.1	424.2	424.3	424.4	424.5	424.3
147.5°	440.4	441.0	441.4	441.8	442.2	442.6	442.8	443.0	443.3	443.5	443.4
150°	452.2	452.7	453.1	453.5	453.9	454.3	454.6	454.9	455.2	455.6	455.6
152.5°	463.5	464.1	464.5	465.0	465.5	466.1	466.5	466.8	467.2	467.6	467.6
155°	479.4	479.7	480.0	480.3	480.6	480.9	481.4	481.9	482.4	482.9	483.0
157.5°	493.5	493.6	493.8	494.0	494.2	494.4	495.1	495.7	496.4	497.2	497.3
160°	502.3	502.4	502.5	502.6	502.7	502.8	503.4	504.0	504.6	505.2	505.3
162.5°	509.7	509.8	509.9	510.0	510.1	510.2	510.8	511.5	512.2	512.9	513.0
165°	519.8	519.8	519.8	519.8	519.8	519.8	520.5	521.2	521.9	522.6	522.7
167.5°	528.0	527.8	527.8	527.8	527.8	527.8	528.5	529.2	529.9	530.6	530.7
170°	532.7	532.5	532.4	532.3	532.2	532.1	532.8	533.5	534.2	534.9	535.0
172.5°	536.0	535.8	535.7	535.6	535.5	535.4	536.1	536.8	537.6	538.3	538.3
175°	540.1	539.8	539.6	539.4	539.2	539.0	539.7	540.4	541.1	541.8	541.9
177.5°	541.9	541.7	541.6	541.4	541.2	541.1	541.6	542.1	542.5	543.0	543.0
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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°	4.8	4.7	4.7	4.5	4.7	4.7	4.8	4.8	4.8	5.3	5.4
90°	15.2	15.3	15.5	15.6	15.5	15.3	15.2	15.1	15.2	15.5	15.7
92.5°	14.7	14.7	14.8	14.8	14.8	14.7	14.7	14.7	14.7	14.6	14.6
95°	29.0	28.8	28.6	28.4	28.6	28.8	29.0	29.2	29.3	29.3	29.3
97.5°	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2
100°	63.0	62.9	62.8	62.7	62.8	62.9	63.0	63.1	63.1	63.1	63.1
102.5°	78.4	78.3	78.2	78.1	78.2	78.3	78.4	78.5	78.5	78.4	78.3
105°	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.5	101.3	101.1
107.5°	125.1	124.6	124.2	123.7	124.2	124.6	125.1	125.6	125.8	125.7	125.6
110°	141.8	141.5	141.2	140.9	141.2	141.5	141.8	142.1	142.3	142.3	142.3



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	158.0	157.8	157.6	157.4	157.6	157.8	158.0	158.2	158.5	158.8	159.1
115°	183.9	183.6	183.3	183.0	183.3	183.6	183.9	184.2	184.4	184.5	184.6
117.5°	208.3	208.0	207.7	207.4	207.7	208.0	208.3	208.6	208.9	209.1	209.4
120°	225.6	225.3	225.0	224.7	225.0	225.3	225.6	225.9	226.0	226.0	226.0
122.5°	242.2	242.0	241.7	241.5	241.7	242.0	242.2	242.4	242.6	242.9	243.1
125°	267.5	267.4	267.3	267.2	267.3	267.4	267.5	267.6	267.8	268.1	268.4
127.5°	291.5	291.2	290.9	290.6	290.9	291.2	291.5	292.0	292.3	292.7	293.0
130°	308.7	308.3	307.9	307.5	307.9	308.3	308.7	309.1	309.4	309.6	309.8
132.5°	324.6	324.2	323.9	323.6	323.9	324.2	324.6	324.9	325.3	325.7	326.2
135°	349.5	349.2	348.9	348.6	348.9	349.2	349.5	349.8	350.0	350.1	350.2
137.5°	372.5	372.1	371.7	371.3	371.7	372.1	372.5	372.9	373.2	373.2	373.3
140°	388.3	387.9	387.5	387.1	387.5	387.9	388.3	388.7	388.9	388.9	388.9
142.5°	402.5	402.1	401.7	401.3	401.7	402.1	402.5	402.9	403.1	403.0	402.9
145°	423.9	423.5	423.1	422.7	423.1	423.5	423.9	424.3	424.5	424.4	424.3
147.5°	443.0	442.6	442.2	441.9	442.2	442.6	443.0	443.4	443.5	443.3	443.0
150°	455.2	454.9	454.6	454.3	454.6	454.9	455.2	455.6	455.6	455.2	454.9
152.5°	467.2	466.8	466.5	466.1	466.5	466.8	467.2	467.6	467.6	467.2	466.8
155°	482.7	482.4	482.1	481.8	482.1	482.4	482.7	483.0	482.9	482.4	481.9
157.5°	496.8	496.2	495.8	495.3	495.8	496.2	496.8	497.3	497.2	496.4	495.7
160°	504.9	504.5	504.1	503.7	504.1	504.5	504.9	505.3	505.2	504.6	504.0
162.5°	512.5	512.0	511.5	511.1	511.5	512.0	512.5	513.0	512.9	512.2	511.5
165°	522.2	521.7	521.2	520.7	521.2	521.7	522.2	522.7	522.6	521.9	521.2
167.5°	530.1	529.6	529.1	528.6	529.1	529.6	530.1	530.7	530.6	529.9	529.2
170°	534.4	533.8	533.2	532.6	533.2	533.8	534.4	535.0	534.9	534.2	533.5
172.5°	537.7	537.0	536.4	535.8	536.4	537.0	537.7	538.3	538.3	537.6	536.8
175°	541.3	540.7	540.1	539.5	540.1	540.7	541.3	541.9	541.8	541.1	540.4
177.5°	542.5	542.1	541.6	541.1	541.6	542.1	542.5	543.0	543.0	542.5	542.1
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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°	5.4	5.6	5.4	5.0	4.6	4.3	4.1	4.1	4.2	4.1	4.1
90°	15.9	16.1	13.7	11.5	9.3	7.1	5.4	4.1	2.9	1.7	0.5
92.5°	14.5	14.5	14.0	13.5	12.9	12.4	11.7	10.8	9.9	9.1	8.2
95°	29.3	29.3	29.1	28.9	28.7	28.5	27.9	26.9	25.9	24.8	23.8
97.5°	49.2	49.2	48.9	48.5	48.1	47.7	47.1	46.2	45.2	44.3	43.4
100°	63.1	63.1	62.8	62.5	62.2	61.9	61.4	60.6	59.7	58.9	58.1
102.5°	78.3	78.2	77.8	77.4	77.0	76.6	76.0	75.4	74.7	74.1	73.5
105°	100.9	100.7	100.5	100.3	100.1	99.9	99.6	99.3	99.0	98.7	98.4
107.5°	125.5	125.4	125.4	125.4	125.4	125.4	125.2	124.8	124.3	123.9	123.4
110°	142.3	142.3	142.3	142.3	142.3	142.3	142.0	141.4	140.8	140.2	139.6



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	159.3	159.5	159.6	159.7	159.8	159.9	159.6	159.0	158.3	157.7	157.1
115°	184.7	184.8	185.0	185.2	185.4	185.6	185.4	184.8	184.2	183.6	183.0
117.5°	209.6	210.0	210.5	211.1	211.7	212.2	212.1	211.3	210.5	209.6	208.8
120°	226.0	226.0	226.8	227.6	228.4	229.2	229.2	228.4	227.6	226.8	226.0
122.5°	243.4	243.6	244.2	244.7	245.3	245.9	245.7	244.7	243.7	242.8	241.8
125°	268.7	269.0	269.3	269.6	269.9	270.2	269.9	269.0	268.1	267.2	266.3
127.5°	293.4	293.8	294.1	294.5	294.9	295.2	294.8	293.7	292.5	291.3	290.1
130°	310.0	310.2	310.4	310.6	310.8	311.0	310.4	309.1	307.8	306.5	305.2
132.5°	326.6	327.0	327.0	327.0	326.9	326.9	326.3	325.3	324.2	323.1	322.0
135°	350.3	350.4	350.2	350.0	349.8	349.6	349.0	347.9	346.8	345.7	344.6
137.5°	373.4	373.5	373.2	373.0	372.7	372.4	371.8	370.9	370.0	369.1	368.2
140°	388.9	388.9	388.4	387.9	387.4	386.9	386.2	385.3	384.4	383.4	382.5
142.5°	402.9	402.8	402.4	402.1	401.7	401.4	400.8	399.9	399.0	398.1	397.2
145°	424.2	424.1	423.5	422.9	422.3	421.7	421.0	420.3	419.6	418.9	418.2
147.5°	442.8	442.6	442.2	441.8	441.4	441.0	440.4	439.5	438.7	437.8	437.0
150°	454.6	454.3	453.9	453.5	453.1	452.7	452.2	451.6	451.0	450.4	449.8
152.5°	466.5	466.1	465.5	465.0	464.5	464.1	463.5	462.9	462.3	461.7	461.1
155°	481.4	480.9	480.6	480.3	480.0	479.7	479.4	479.1	478.7	478.4	478.1
157.5°	495.1	494.4	494.2	494.0	493.8	493.6	493.5	493.3	493.1	492.9	492.7
160°	503.4	502.8	502.7	502.6	502.5	502.4	502.3	502.1	501.9	501.7	501.5
162.5°	510.8	510.2	510.1	510.0	509.9	509.8	509.7	509.6	509.6	509.6	509.5
165°	520.5	519.8	519.8	519.8	519.8	519.8	519.8	519.9	520.0	520.1	520.2
167.5°	528.5	527.8	527.8	527.8	527.8	527.8	528.0	528.3	528.6	528.9	529.2
170°	532.8	532.1	532.2	532.3	532.4	532.5	532.7	533.0	533.3	533.6	533.9
172.5°	536.1	535.4	535.5	535.6	535.7	535.8	536.0	536.3	536.6	536.9	537.2
175°	539.7	539.0	539.2	539.4	539.6	539.8	540.1	540.4	540.7	541.0	541.3
177.5°	541.6	541.1	541.2	541.4	541.6	541.7	541.9	542.2	542.4	542.7	542.9
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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°	4.9	5.9	6.2	7.0	7.0	7.4	7.8	8.1	8.4	8.1	7.9
90°	1.7	2.9	4.1	5.4	7.1	9.3	11.5	13.7	16.1	15.9	15.7
92.5°	9.1	9.9	10.8	11.7	12.4	12.9	13.5	14.0	14.5	14.5	14.6
95°	24.8	25.9	26.9	27.9	28.5	28.7	28.9	29.1	29.3	29.3	29.3
97.5°	44.3	45.2	46.2	47.1	47.7	48.1	48.5	48.9	49.2	49.2	49.2
100°	58.9	59.7	60.6	61.4	61.9	62.2	62.5	62.8	63.1	63.1	63.1
102.5°	74.1	74.7	75.4	76.0	76.6	77.0	77.4	77.8	78.2	78.3	78.3
105°	98.7	99.0	99.3	99.6	99.9	100.1	100.3	100.5	100.7	100.9	101.1
107.5°	123.9	124.3	124.8	125.2	125.4	125.4	125.4	125.4	125.4	125.5	125.6
110°	140.2	140.8	141.4	142.0	142.3	142.3	142.3	142.3	142.3	142.3	142.3



TEST NUMBER: P331466-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	157.7	158.3	159.0	159.6	159.9	159.8	159.7	159.6	159.5	159.3	159.1
115°	183.6	184.2	184.8	185.4	185.6	185.4	185.2	185.0	184.8	184.7	184.6
117.5°	209.6	210.5	211.3	212.1	212.2	211.7	211.1	210.5	210.0	209.6	209.4
120°	226.8	227.6	228.4	229.2	229.2	228.4	227.6	226.8	226.0	226.0	226.0
122.5°	242.8	243.7	244.7	245.7	245.9	245.3	244.7	244.2	243.6	243.4	243.1
125°	267.2	268.1	269.0	269.9	270.2	269.9	269.6	269.3	269.0	268.7	268.4
127.5°	291.3	292.5	293.7	294.8	295.2	294.9	294.5	294.1	293.8	293.4	293.0
130°	306.5	307.8	309.1	310.4	311.0	310.8	310.6	310.4	310.2	310.0	309.8
132.5°	323.1	324.2	325.3	326.3	326.9	326.9	327.0	327.0	327.0	326.6	326.2
135°	345.7	346.8	347.9	349.0	349.6	349.8	350.0	350.2	350.4	350.3	350.2
137.5°	369.1	370.0	370.9	371.8	372.4	372.7	373.0	373.2	373.5	373.4	373.3
140°	383.4	384.4	385.3	386.2	386.9	387.4	387.9	388.4	388.9	388.9	388.9
142.5°	398.1	399.0	399.9	400.8	401.4	401.7	402.1	402.4	402.8	402.9	402.9
145°	418.9	419.6	420.3	421.0	421.7	422.3	422.9	423.5	424.1	424.2	424.3
147.5°	437.8	438.7	439.5	440.4	441.0	441.4	441.8	442.2	442.6	442.8	443.0
150°	450.4	451.0	451.6	452.2	452.7	453.1	453.5	453.9	454.3	454.6	454.9
152.5°	461.7	462.3	462.9	463.5	464.1	464.5	465.0	465.5	466.1	466.5	466.8
155°	478.4	478.7	479.1	479.4	479.7	480.0	480.3	480.6	480.9	481.4	481.9
157.5°	492.9	493.1	493.3	493.5	493.6	493.8	494.0	494.2	494.4	495.1	495.7
160°	501.7	501.9	502.1	502.3	502.4	502.5	502.6	502.7	502.8	503.4	504.0
162.5°	509.6	509.6	509.6	509.7	509.8	509.9	510.0	510.1	510.2	510.8	511.5
165°	520.1	520.0	519.9	519.8	519.8	519.8	519.8	519.8	519.8	520.5	521.2
167.5°	528.9	528.6	528.3	528.0	527.8	527.8	527.8	527.8	527.8	528.5	529.2
170°	533.6	533.3	533.0	532.7	532.5	532.4	532.3	532.2	532.1	532.8	533.5
172.5°	536.9	536.6	536.3	536.0	535.8	535.7	535.6	535.5	535.4	536.1	536.8
175°	541.0	540.7	540.4	540.1	539.8	539.6	539.4	539.2	539.0	539.7	540.4
177.5°	542.7	542.4	542.2	541.9	541.7	541.6	541.4	541.2	541.1	541.6	542.1
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2	542.2



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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°	8.1	8.0	7.8	7.8	8.0	7.9	7.9
90°	15.5	15.2	15.1	15.2	15.3	15.5	15.6
92.5°	14.6	14.7	14.7	14.7	14.7	14.8	14.8
95°	29.3	29.3	29.2	29.0	28.8	28.6	28.4
97.5°	49.2	49.2	49.2	49.2	49.2	49.2	49.2
100°	63.1	63.1	63.1	63.0	62.9	62.8	62.7
102.5°	78.4	78.5	78.5	78.4	78.3	78.2	78.1
105°	101.3	101.5	101.6	101.6	101.6	101.6	101.6
107.5°	125.7	125.8	125.6	125.1	124.6	124.2	123.7
110°	142.3	142.3	142.1	141.8	141.5	141.2	140.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	158.8	158.5	158.2	158.0	157.8	157.6	157.4
115°	184.5	184.4	184.2	183.9	183.6	183.3	183.0
117.5°	209.1	208.9	208.6	208.3	208.0	207.7	207.4
120°	226.0	226.0	225.9	225.6	225.3	225.0	224.7
122.5°	242.9	242.6	242.4	242.2	242.0	241.7	241.5
125°	268.1	267.8	267.6	267.5	267.4	267.3	267.2
127.5°	292.7	292.3	292.0	291.5	291.2	290.9	290.6
130°	309.6	309.4	309.1	308.7	308.3	307.9	307.5
132.5°	325.7	325.3	324.9	324.6	324.2	323.9	323.6
135°	350.1	350.0	349.8	349.5	349.2	348.9	348.6
137.5°	373.2	373.2	372.9	372.5	372.1	371.7	371.3
140°	388.9	388.9	388.7	388.3	387.9	387.5	387.1
142.5°	403.0	403.1	402.9	402.5	402.1	401.7	401.3
145°	424.4	424.5	424.3	423.9	423.5	423.1	422.7
147.5°	443.3	443.5	443.4	443.0	442.6	442.2	441.9
150°	455.2	455.6	455.6	455.2	454.9	454.6	454.3
152.5°	467.2	467.6	467.6	467.2	466.8	466.5	466.1
155°	482.4	482.9	483.0	482.7	482.4	482.1	481.8
157.5°	496.4	497.2	497.3	496.8	496.2	495.8	495.3
160°	504.6	505.2	505.3	504.9	504.5	504.1	503.7
162.5°	512.2	512.9	513.0	512.5	512.0	511.5	511.1
165°	521.9	522.6	522.7	522.2	521.7	521.2	520.7
167.5°	529.9	530.6	530.7	530.1	529.6	529.1	528.6
170°	534.2	534.9	535.0	534.4	533.8	533.2	532.6
172.5°	537.6	538.3	538.3	537.7	537.0	536.4	535.8
175°	541.1	541.8	541.9	541.3	540.7	540.1	539.5
177.5°	542.5	543.0	543.0	542.5	542.1	541.6	541.1
180°	542.2	542.2	542.2	542.2	542.2	542.2	542.2

(END OF REPORT)