

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: P331478-840

Luminaire Tested: **S122DIW-S290D970U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331478-840  
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-S290D970U840-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 970 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4710.9 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

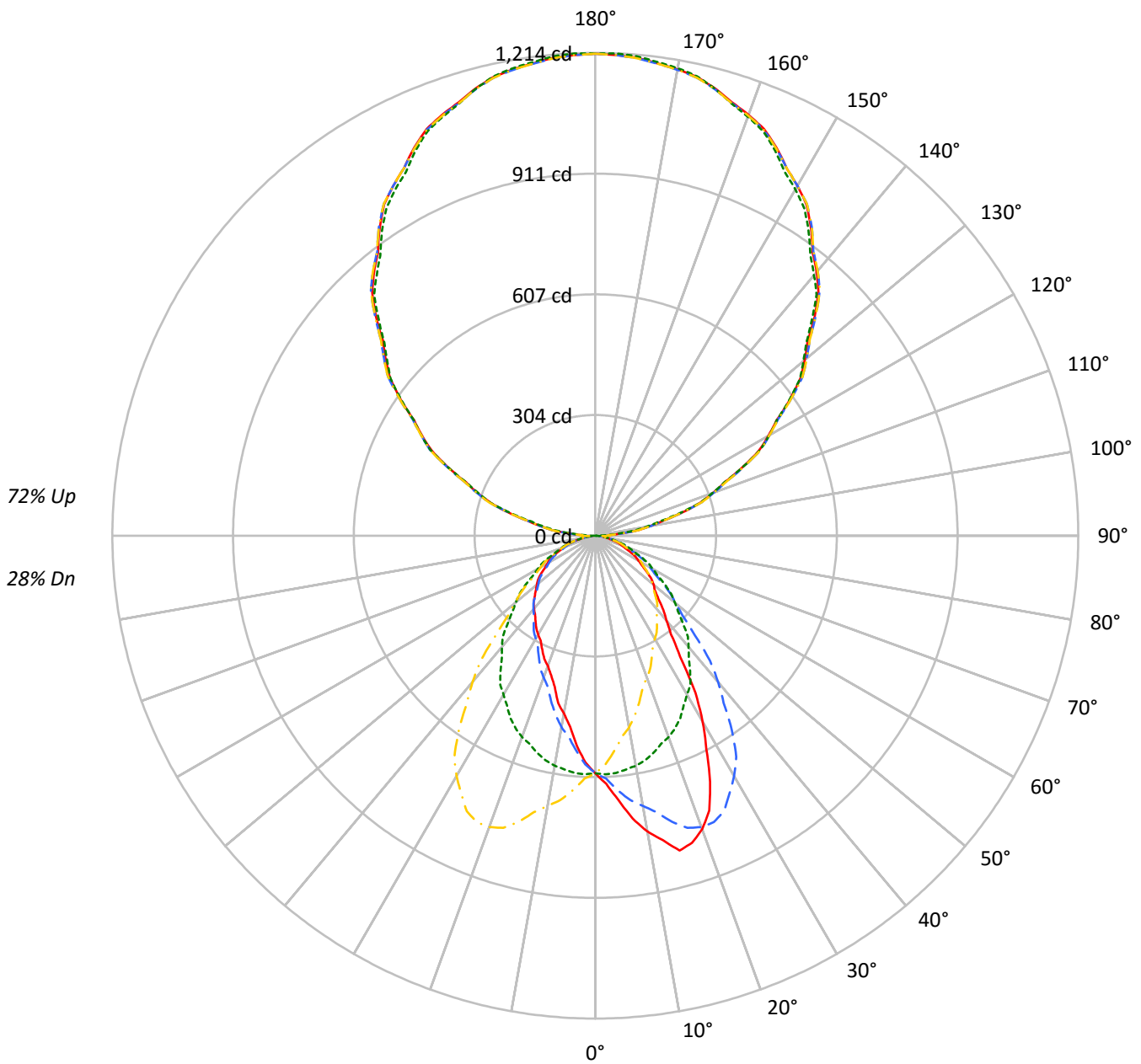
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - 90°-270°    - · - 135°-315°



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	93	89	85	82	83	80	77	74	63	61	59	47	45	44	32	31	31	24				
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	27	26	21				
3	78	69	62	56	69	62	56	51	49	45	41	37	34	32	26	24	23	18				
4	71	61	53	48	63	55	48	44	43	39	35	33	30	27	23	21	20	15				
5	65	54	47	41	58	49	42	37	39	34	31	30	26	24	21	19	17	14				
6	60	49	41	35	54	44	37	32	35	30	27	27	23	21	19	17	15	12				
7	55	44	36	31	50	40	33	28	32	27	23	24	21	19	17	15	14	11				
8	51	40	32	27	46	36	30	25	29	24	21	22	19	17	16	14	12	10				
9	48	36	29	24	43	33	27	22	26	22	19	20	17	15	15	13	11	9				
10	45	33	26	22	40	30	24	20	24	20	17	19	16	13	14	12	10	8				

**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: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	1.2
10°-20°	165.3	3.5
20°-30°	239.9	5.1
30°-40°	253.1	5.4
40°-50°	224.1	4.8
50°-60°	178.8	3.8
60°-70°	121.6	2.6
70°-80°	62.3	1.3
80°-90°	19.9	0.4
90°-100°	76.8	1.6
100°-110°	238.5	5.1
110°-120°	407.7	8.7
120°-130°	536.2	11.4
130°-140°	601.8	12.8
140°-150°	590.1	12.5
150°-160°	494.9	10.5
160°-170°	328.3	7.0
170°-180°	114.7	2.4
0°-30°	462.0	9.8
0°-40°	715.1	15.2
0°-60°	1118.0	23.7
0°-90°	1321.7	28.1
90°-120°	723.1	15.3
90°-150°	2451.2	52.0
90°-180°	3389.0	71.9
0°-180°	4710.9	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	15
90°	35	1	35	1	35	16
95°	63	53	63	53	63	71
105°	227	220	227	220	227	239
115°	409	409	409	409	409	404
125°	597	595	597	595	597	532
135°	779	770	779	770	779	600
145°	945	935	945	935	945	590
155°	1077	1069	1077	1069	1077	496
165°	1164	1163	1164	1163	1164	328
175°	1206	1210	1206	1210	1206	115
180°	1212	1212	1212	1212	1212	



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**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°	11.7	11.7	11.8	11.6	11.5	11.7	11.8	11.7	12.0	12.3	11.5
90°	34.7	34.5	34.3	34.1	33.8	33.9	34.4	34.8	35.3	35.7	30.8
92.5°	33.1	33.1	33.0	33.0	32.9	32.9	32.8	32.7	32.6	32.5	31.3
95°	63.4	63.8	64.3	64.7	65.2	65.4	65.4	65.4	65.4	65.4	65.0
97.5°	109.9	109.9	110.0	110.0	110.1	110.1	110.1	110.1	110.1	110.1	109.2
100°	140.2	140.4	140.6	140.8	141.1	141.2	141.2	141.2	141.2	141.2	140.5
102.5°	174.5	174.7	174.9	175.2	175.4	175.4	175.2	175.1	174.9	174.7	173.8
105°	227.1	227.1	227.1	227.1	227.1	226.8	226.4	225.9	225.5	225.0	224.6
107.5°	276.6	277.6	278.6	279.7	280.7	281.1	281.0	280.8	280.6	280.4	280.4
110°	315.1	315.7	316.4	317.1	317.8	318.1	318.1	318.1	318.1	318.1	318.1



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	351.8	352.3	352.8	353.4	353.9	354.4	355.0	355.5	356.0	356.6	356.8
115°	409.1	409.8	410.5	411.2	411.8	412.3	412.5	412.7	413.0	413.2	413.6
117.5°	463.7	464.4	465.1	465.9	466.5	467.1	467.7	468.2	468.8	469.3	470.6
120°	502.2	502.9	503.6	504.2	504.9	505.3	505.3	505.3	505.3	505.3	507.2
122.5°	539.9	540.4	540.9	541.4	541.9	542.4	542.9	543.5	544.0	544.5	545.8
125°	597.3	597.5	597.8	598.0	598.2	598.7	599.4	600.1	600.8	601.5	602.1
127.5°	649.7	650.5	651.2	651.9	652.6	653.4	654.2	655.0	655.8	656.7	657.5
130°	687.3	688.2	689.1	690.0	690.9	691.7	692.2	692.6	693.1	693.5	694.0
132.5°	723.4	724.1	724.8	725.6	726.3	727.1	728.1	729.1	730.1	731.1	731.0
135°	779.4	780.1	780.7	781.4	782.1	782.5	782.8	783.0	783.3	783.5	783.0
137.5°	830.1	831.0	831.9	832.8	833.7	834.4	834.6	834.7	834.9	835.1	834.5
140°	865.4	866.3	867.2	868.1	869.0	869.4	869.4	869.4	869.4	869.4	868.3
142.5°	897.3	898.2	899.1	900.0	900.9	901.2	901.1	900.9	900.7	900.5	899.8
145°	945.1	946.0	947.0	947.9	948.8	949.1	948.9	948.7	948.4	948.2	946.8
147.5°	987.8	988.8	989.6	990.5	991.3	991.5	991.0	990.5	990.0	989.5	988.6
150°	1015.7	1016.3	1017.0	1017.7	1018.4	1018.4	1017.7	1017.0	1016.3	1015.7	1014.8
152.5°	1041.9	1042.7	1043.6	1044.5	1045.3	1045.3	1044.5	1043.6	1042.7	1041.9	1040.8
155°	1077.0	1077.7	1078.4	1079.1	1079.7	1079.5	1078.4	1077.3	1076.1	1075.0	1074.3
157.5°	1107.3	1108.4	1109.5	1110.6	1111.7	1111.5	1109.9	1108.4	1106.8	1105.3	1104.9
160°	1126.2	1127.1	1128.0	1128.9	1129.8	1129.5	1128.2	1126.8	1125.5	1124.1	1123.9
162.5°	1142.6	1143.6	1144.7	1145.8	1146.9	1146.7	1145.1	1143.6	1142.1	1140.4	1140.2
165°	1164.0	1165.2	1166.3	1167.4	1168.5	1168.3	1166.7	1165.2	1163.6	1162.0	1162.0
167.5°	1181.6	1182.8	1184.0	1185.2	1186.3	1186.1	1184.6	1183.0	1181.3	1179.7	1179.8
170°	1190.6	1191.9	1193.4	1194.7	1196.1	1196.0	1194.4	1192.8	1191.1	1189.6	1189.8
172.5°	1198.0	1199.3	1200.7	1202.0	1203.5	1203.3	1201.7	1200.1	1198.5	1196.9	1197.2
175°	1206.0	1207.3	1208.7	1210.0	1211.4	1211.2	1209.7	1208.1	1206.5	1204.9	1205.4
177.5°	1209.6	1210.7	1211.8	1212.8	1214.0	1214.0	1212.8	1211.8	1210.7	1209.6	1210.0
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**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°	10.7	9.7	8.7	8.3	7.2	6.7	5.4	4.2	4.6	4.9	5.2
90°	25.8	20.8	15.8	11.9	9.2	6.5	3.7	1.0	3.7	6.5	9.2
92.5°	30.2	29.0	27.8	26.3	24.2	22.2	20.2	18.2	20.2	22.2	24.2
95°	64.5	64.1	63.6	62.3	60.0	57.8	55.4	53.2	55.4	57.8	60.0
97.5°	108.4	107.4	106.6	105.1	103.2	101.2	99.2	97.1	99.2	101.2	103.2
100°	139.8	139.1	138.5	137.1	135.3	133.5	131.7	129.9	131.7	133.5	135.3
102.5°	173.0	172.1	171.3	170.1	168.6	167.1	165.7	164.3	165.7	167.1	168.6
105°	224.1	223.7	223.2	222.7	222.0	221.3	220.6	219.9	220.6	221.3	222.0
107.5°	280.4	280.4	280.4	279.9	278.9	277.9	277.0	276.0	277.0	277.9	278.9
110°	318.1	318.1	318.1	317.4	316.1	314.7	313.4	311.9	313.4	314.7	316.1





TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	356.9	357.1	357.3	356.7	355.4	354.0	352.6	351.2	352.6	354.0	355.4
115°	414.1	414.5	415.1	414.5	413.2	411.8	410.5	409.1	410.5	411.8	413.2
117.5°	471.8	473.1	474.3	474.1	472.3	470.5	468.7	466.9	468.7	470.5	472.3
120°	509.0	510.8	512.6	512.6	510.8	509.0	507.2	505.3	507.2	509.0	510.8
122.5°	547.1	548.4	549.7	549.2	547.0	544.8	542.7	540.5	542.7	544.8	547.0
125°	602.8	603.5	604.2	603.5	601.5	599.4	597.3	595.3	597.3	599.4	601.5
127.5°	658.3	659.1	659.9	659.0	656.5	653.9	651.3	648.7	651.3	653.9	656.5
130°	694.4	694.9	695.3	694.1	691.2	688.1	685.2	682.3	685.2	688.1	691.2
132.5°	730.9	730.8	730.7	729.5	727.1	724.7	722.3	719.8	722.3	724.7	727.1
135°	782.5	782.1	781.6	780.2	777.7	775.2	772.7	770.2	772.7	775.2	777.7
137.5°	833.8	833.2	832.7	831.3	829.3	827.3	825.3	823.1	825.3	827.3	829.3
140°	867.2	866.1	864.8	863.2	861.2	859.2	857.2	855.1	857.2	859.2	861.2
142.5°	899.0	898.2	897.5	896.1	893.9	891.9	889.9	887.9	889.9	891.9	893.9
145°	945.4	944.1	942.7	941.3	939.7	938.1	936.4	934.8	936.4	938.1	939.7
147.5°	987.6	986.7	985.8	984.4	982.5	980.7	978.8	976.8	978.8	980.7	982.5
150°	1013.9	1013.0	1012.1	1010.9	1009.6	1008.1	1006.8	1005.4	1006.8	1008.1	1009.6
152.5°	1039.7	1038.6	1037.5	1036.3	1034.9	1033.6	1032.2	1030.9	1032.2	1033.6	1034.9
155°	1073.7	1073.0	1072.3	1071.6	1071.0	1070.3	1069.5	1068.8	1069.5	1070.3	1071.0
157.5°	1104.5	1104.1	1103.7	1103.2	1102.8	1102.3	1101.9	1101.4	1101.9	1102.3	1102.8
160°	1123.7	1123.5	1123.2	1122.9	1122.4	1122.0	1121.5	1121.1	1121.5	1122.0	1122.4
162.5°	1140.0	1139.8	1139.5	1139.4	1139.3	1139.2	1139.1	1139.0	1139.1	1139.2	1139.3
165°	1162.0	1162.0	1162.0	1162.1	1162.3	1162.6	1162.8	1163.0	1162.8	1162.6	1162.3
167.5°	1179.8	1179.9	1179.9	1180.3	1180.9	1181.6	1182.3	1183.1	1182.3	1181.6	1180.9
170°	1190.0	1190.2	1190.5	1190.9	1191.6	1192.3	1193.0	1193.7	1193.0	1192.3	1191.6
172.5°	1197.4	1197.6	1197.8	1198.3	1199.0	1199.6	1200.3	1201.0	1200.3	1199.6	1199.0
175°	1205.8	1206.3	1206.7	1207.3	1208.0	1208.7	1209.3	1210.0	1209.3	1208.7	1208.0
177.5°	1210.3	1210.7	1211.0	1211.5	1212.0	1212.6	1213.2	1213.8	1213.2	1212.6	1212.0
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	5.6	6.1	6.9	7.9	8.7	9.6	9.3	9.2	9.1	8.6	8.6
90°	11.9	15.8	20.8	25.8	30.8	35.7	35.3	34.8	34.4	33.9	33.8
92.5°	26.3	27.8	29.0	30.2	31.3	32.5	32.6	32.7	32.8	32.9	32.9
95°	62.3	63.6	64.1	64.5	65.0	65.4	65.4	65.4	65.4	65.4	65.2
97.5°	105.1	106.6	107.4	108.4	109.2	110.1	110.1	110.1	110.1	110.1	110.1
100°	137.1	138.5	139.1	139.8	140.5	141.2	141.2	141.2	141.2	141.2	141.1
102.5°	170.1	171.3	172.1	173.0	173.8	174.7	174.9	175.1	175.2	175.4	175.4
105°	222.7	223.2	223.7	224.1	224.6	225.0	225.5	225.9	226.4	226.8	227.1
107.5°	279.9	280.4	280.4	280.4	280.4	280.4	280.6	280.8	281.0	281.1	280.7
110°	317.4	318.1	318.1	318.1	318.1	318.1	318.1	318.1	318.1	318.1	317.8



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	356.7	357.3	357.1	356.9	356.8	356.6	356.0	355.5	355.0	354.4	353.9
115°	414.5	415.1	414.5	414.1	413.6	413.2	413.0	412.7	412.5	412.3	411.8
117.5°	474.1	474.3	473.1	471.8	470.6	469.3	468.8	468.2	467.7	467.1	466.5
120°	512.6	512.6	510.8	509.0	507.2	505.3	505.3	505.3	505.3	505.3	504.9
122.5°	549.2	549.7	548.4	547.1	545.8	544.5	544.0	543.5	542.9	542.4	541.9
125°	603.5	604.2	603.5	602.8	602.1	601.5	600.8	600.1	599.4	598.7	598.2
127.5°	659.0	659.9	659.1	658.3	657.5	656.7	655.8	655.0	654.2	653.4	652.6
130°	694.1	695.3	694.9	694.4	694.0	693.5	693.1	692.6	692.2	691.7	690.9
132.5°	729.5	730.7	730.8	730.9	731.0	731.1	730.1	729.1	728.1	727.1	726.3
135°	780.2	781.6	782.1	782.5	783.0	783.5	783.3	783.0	782.8	782.5	782.1
137.5°	831.3	832.7	833.2	833.8	834.5	835.1	834.9	834.7	834.6	834.4	833.7
140°	863.2	864.8	866.1	867.2	868.3	869.4	869.4	869.4	869.4	869.4	869.0
142.5°	896.1	897.5	898.2	899.0	899.8	900.5	900.7	900.9	901.1	901.2	900.9
145°	941.3	942.7	944.1	945.4	946.8	948.2	948.4	948.7	948.9	949.1	948.8
147.5°	984.4	985.8	986.7	987.6	988.6	989.5	990.0	990.5	991.0	991.5	991.3
150°	1010.9	1012.1	1013.0	1013.9	1014.8	1015.7	1016.3	1017.0	1017.7	1018.4	1018.4
152.5°	1036.3	1037.5	1038.6	1039.7	1040.8	1041.9	1042.7	1043.6	1044.5	1045.3	1045.3
155°	1071.6	1072.3	1073.0	1073.7	1074.3	1075.0	1076.1	1077.3	1078.4	1079.5	1079.7
157.5°	1103.2	1103.7	1104.1	1104.5	1104.9	1105.3	1106.8	1108.4	1109.9	1111.5	1111.7
160°	1122.9	1123.2	1123.5	1123.7	1123.9	1124.1	1125.5	1126.8	1128.2	1129.5	1129.8
162.5°	1139.4	1139.5	1139.8	1140.0	1140.2	1140.4	1142.1	1143.6	1145.1	1146.7	1146.9
165°	1162.1	1162.0	1162.0	1162.0	1162.0	1162.0	1163.6	1165.2	1166.7	1168.3	1168.5
167.5°	1180.3	1179.9	1179.9	1179.8	1179.8	1179.7	1181.3	1183.0	1184.6	1186.1	1186.3
170°	1190.9	1190.5	1190.2	1190.0	1189.8	1189.6	1191.1	1192.8	1194.4	1196.0	1196.1
172.5°	1198.3	1197.8	1197.6	1197.4	1197.2	1196.9	1198.5	1200.1	1201.7	1203.3	1203.5
175°	1207.3	1206.7	1206.3	1205.8	1205.4	1204.9	1206.5	1208.1	1209.7	1211.2	1211.4
177.5°	1211.5	1211.0	1210.7	1210.3	1210.0	1209.6	1210.7	1211.8	1212.8	1214.0	1214.0
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	8.7	8.5	8.6	8.4	8.6	8.5	8.7	8.6	8.6	9.1	9.2
90°	34.1	34.3	34.5	34.7	34.5	34.3	34.1	33.8	33.9	34.4	34.8
92.5°	33.0	33.0	33.1	33.1	33.1	33.0	33.0	32.9	32.9	32.8	32.7
95°	64.7	64.3	63.8	63.4	63.8	64.3	64.7	65.2	65.4	65.4	65.4
97.5°	110.0	110.0	109.9	109.9	109.9	110.0	110.0	110.1	110.1	110.1	110.1
100°	140.8	140.6	140.4	140.2	140.4	140.6	140.8	141.1	141.2	141.2	141.2
102.5°	175.2	174.9	174.7	174.5	174.7	174.9	175.2	175.4	175.4	175.2	175.1
105°	227.1	227.1	227.1	227.1	227.1	227.1	227.1	227.1	226.8	226.4	225.9
107.5°	279.7	278.6	277.6	276.6	277.6	278.6	279.7	280.7	281.1	281.0	280.8
110°	317.1	316.4	315.7	315.1	315.7	316.4	317.1	317.8	318.1	318.1	318.1



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	353.4	352.8	352.3	351.8	352.3	352.8	353.4	353.9	354.4	355.0	355.5
115°	411.2	410.5	409.8	409.1	409.8	410.5	411.2	411.8	412.3	412.5	412.7
117.5°	465.9	465.1	464.4	463.7	464.4	465.1	465.9	466.5	467.1	467.7	468.2
120°	504.2	503.6	502.9	502.2	502.9	503.6	504.2	504.9	505.3	505.3	505.3
122.5°	541.4	540.9	540.4	539.9	540.4	540.9	541.4	541.9	542.4	542.9	543.5
125°	598.0	597.8	597.5	597.3	597.5	597.8	598.0	598.2	598.7	599.4	600.1
127.5°	651.9	651.2	650.5	649.7	650.5	651.2	651.9	652.6	653.4	654.2	655.0
130°	690.0	689.1	688.2	687.3	688.2	689.1	690.0	690.9	691.7	692.2	692.6
132.5°	725.6	724.8	724.1	723.4	724.1	724.8	725.6	726.3	727.1	728.1	729.1
135°	781.4	780.7	780.1	779.4	780.1	780.7	781.4	782.1	782.5	782.8	783.0
137.5°	832.8	831.9	831.0	830.1	831.0	831.9	832.8	833.7	834.4	834.6	834.7
140°	868.1	867.2	866.3	865.4	866.3	867.2	868.1	869.0	869.4	869.4	869.4
142.5°	900.0	899.1	898.2	897.3	898.2	899.1	900.0	900.9	901.2	901.1	900.9
145°	947.9	947.0	946.0	945.1	946.0	947.0	947.9	948.8	949.1	948.9	948.7
147.5°	990.5	989.6	988.8	987.8	988.8	989.6	990.5	991.3	991.5	991.0	990.5
150°	1017.7	1017.0	1016.3	1015.7	1016.3	1017.0	1017.7	1018.4	1018.4	1017.7	1017.0
152.5°	1044.5	1043.6	1042.7	1041.9	1042.7	1043.6	1044.5	1045.3	1045.3	1044.5	1043.6
155°	1079.1	1078.4	1077.7	1077.0	1077.7	1078.4	1079.1	1079.7	1079.5	1078.4	1077.3
157.5°	1110.6	1109.5	1108.4	1107.3	1108.4	1109.5	1110.6	1111.7	1111.5	1109.9	1108.4
160°	1128.9	1128.0	1127.1	1126.2	1127.1	1128.0	1128.9	1129.8	1129.5	1128.2	1126.8
162.5°	1145.8	1144.7	1143.6	1142.6	1143.6	1144.7	1145.8	1146.9	1146.7	1145.1	1143.6
165°	1167.4	1166.3	1165.2	1164.0	1165.2	1166.3	1167.4	1168.5	1168.3	1166.7	1165.2
167.5°	1185.2	1184.0	1182.8	1181.6	1182.8	1184.0	1185.2	1186.3	1186.1	1184.6	1183.0
170°	1194.7	1193.4	1191.9	1190.6	1191.9	1193.4	1194.7	1196.1	1196.0	1194.4	1192.8
172.5°	1202.0	1200.7	1199.3	1198.0	1199.3	1200.7	1202.0	1203.5	1203.3	1201.7	1200.1
175°	1210.0	1208.7	1207.3	1206.0	1207.3	1208.7	1210.0	1211.4	1211.2	1209.7	1208.1
177.5°	1212.8	1211.8	1210.7	1209.6	1210.7	1211.8	1212.8	1214.0	1214.0	1212.8	1211.8
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	9.3	9.6	8.7	7.9	6.9	6.1	5.6	5.2	4.9	4.6	4.2
90°	35.3	35.7	30.8	25.8	20.8	15.8	11.9	9.2	6.5	3.7	1.0
92.5°	32.6	32.5	31.3	30.2	29.0	27.8	26.3	24.2	22.2	20.2	18.2
95°	65.4	65.4	65.0	64.5	64.1	63.6	62.3	60.0	57.8	55.4	53.2
97.5°	110.1	110.1	109.2	108.4	107.4	106.6	105.1	103.2	101.2	99.2	97.1
100°	141.2	141.2	140.5	139.8	139.1	138.5	137.1	135.3	133.5	131.7	129.9
102.5°	174.9	174.7	173.8	173.0	172.1	171.3	170.1	168.6	167.1	165.7	164.3
105°	225.5	225.0	224.6	224.1	223.7	223.2	222.7	222.0	221.3	220.6	219.9
107.5°	280.6	280.4	280.4	280.4	280.4	280.4	279.9	278.9	277.9	277.0	276.0
110°	318.1	318.1	318.1	318.1	318.1	318.1	317.4	316.1	314.7	313.4	311.9



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	356.0	356.6	356.8	356.9	357.1	357.3	356.7	355.4	354.0	352.6	351.2
115°	413.0	413.2	413.6	414.1	414.5	415.1	414.5	413.2	411.8	410.5	409.1
117.5°	468.8	469.3	470.6	471.8	473.1	474.3	474.1	472.3	470.5	468.7	466.9
120°	505.3	505.3	507.2	509.0	510.8	512.6	512.6	510.8	509.0	507.2	505.3
122.5°	544.0	544.5	545.8	547.1	548.4	549.7	549.2	547.0	544.8	542.7	540.5
125°	600.8	601.5	602.1	602.8	603.5	604.2	603.5	601.5	599.4	597.3	595.3
127.5°	655.8	656.7	657.5	658.3	659.1	659.9	659.0	656.5	653.9	651.3	648.7
130°	693.1	693.5	694.0	694.4	694.9	695.3	694.1	691.2	688.1	685.2	682.3
132.5°	730.1	731.1	731.0	730.9	730.8	730.7	729.5	727.1	724.7	722.3	719.8
135°	783.3	783.5	783.0	782.5	782.1	781.6	780.2	777.7	775.2	772.7	770.2
137.5°	834.9	835.1	834.5	833.8	833.2	832.7	831.3	829.3	827.3	825.3	823.1
140°	869.4	869.4	868.3	867.2	866.1	864.8	863.2	861.2	859.2	857.2	855.1
142.5°	900.7	900.5	899.8	899.0	898.2	897.5	896.1	893.9	891.9	889.9	887.9
145°	948.4	948.2	946.8	945.4	944.1	942.7	941.3	939.7	938.1	936.4	934.8
147.5°	990.0	989.5	988.6	987.6	986.7	985.8	984.4	982.5	980.7	978.8	976.8
150°	1016.3	1015.7	1014.8	1013.9	1013.0	1012.1	1010.9	1009.6	1008.1	1006.8	1005.4
152.5°	1042.7	1041.9	1040.8	1039.7	1038.6	1037.5	1036.3	1034.9	1033.6	1032.2	1030.9
155°	1076.1	1075.0	1074.3	1073.7	1073.0	1072.3	1071.6	1071.0	1070.3	1069.5	1068.8
157.5°	1106.8	1105.3	1104.9	1104.5	1104.1	1103.7	1103.2	1102.8	1102.3	1101.9	1101.4
160°	1125.5	1124.1	1123.9	1123.7	1123.5	1123.2	1122.9	1122.4	1122.0	1121.5	1121.1
162.5°	1142.1	1140.4	1140.2	1140.0	1139.8	1139.5	1139.4	1139.3	1139.2	1139.1	1139.0
165°	1163.6	1162.0	1162.0	1162.0	1162.0	1162.0	1162.1	1162.3	1162.6	1162.8	1163.0
167.5°	1181.3	1179.7	1179.8	1179.8	1179.9	1179.9	1180.3	1180.9	1181.6	1182.3	1183.1
170°	1191.1	1189.6	1189.8	1190.0	1190.2	1190.5	1190.9	1191.6	1192.3	1193.0	1193.7
172.5°	1198.5	1196.9	1197.2	1197.4	1197.6	1197.8	1198.3	1199.0	1199.6	1200.3	1201.0
175°	1206.5	1204.9	1205.4	1205.8	1206.3	1206.7	1207.3	1208.0	1208.7	1209.3	1210.0
177.5°	1210.7	1209.6	1210.0	1210.3	1210.7	1211.0	1211.5	1212.0	1212.6	1213.2	1213.8
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	5.4	6.7	7.2	8.3	8.7	9.7	10.7	11.5	12.3	12.0	11.7
90°	3.7	6.5	9.2	11.9	15.8	20.8	25.8	30.8	35.7	35.3	34.8
92.5°	20.2	22.2	24.2	26.3	27.8	29.0	30.2	31.3	32.5	32.6	32.7
95°	55.4	57.8	60.0	62.3	63.6	64.1	64.5	65.0	65.4	65.4	65.4
97.5°	99.2	101.2	103.2	105.1	106.6	107.4	108.4	109.2	110.1	110.1	110.1
100°	131.7	133.5	135.3	137.1	138.5	139.1	139.8	140.5	141.2	141.2	141.2
102.5°	165.7	167.1	168.6	170.1	171.3	172.1	173.0	173.8	174.7	174.9	175.1
105°	220.6	221.3	222.0	222.7	223.2	223.7	224.1	224.6	225.0	225.5	225.9
107.5°	277.0	277.9	278.9	279.9	280.4	280.4	280.4	280.4	280.4	280.6	280.8
110°	313.4	314.7	316.1	317.4	318.1	318.1	318.1	318.1	318.1	318.1	318.1





TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	352.6	354.0	355.4	356.7	357.3	357.1	356.9	356.8	356.6	356.0	355.5
115°	410.5	411.8	413.2	414.5	415.1	414.5	414.1	413.6	413.2	413.0	412.7
117.5°	468.7	470.5	472.3	474.1	474.3	473.1	471.8	470.6	469.3	468.8	468.2
120°	507.2	509.0	510.8	512.6	512.6	510.8	509.0	507.2	505.3	505.3	505.3
122.5°	542.7	544.8	547.0	549.2	549.7	548.4	547.1	545.8	544.5	544.0	543.5
125°	597.3	599.4	601.5	603.5	604.2	603.5	602.8	602.1	601.5	600.8	600.1
127.5°	651.3	653.9	656.5	659.0	659.9	659.1	658.3	657.5	656.7	655.8	655.0
130°	685.2	688.1	691.2	694.1	695.3	694.9	694.4	694.0	693.5	693.1	692.6
132.5°	722.3	724.7	727.1	729.5	730.7	730.8	730.9	731.0	731.1	730.1	729.1
135°	772.7	775.2	777.7	780.2	781.6	782.1	782.5	783.0	783.5	783.3	783.0
137.5°	825.3	827.3	829.3	831.3	832.7	833.2	833.8	834.5	835.1	834.9	834.7
140°	857.2	859.2	861.2	863.2	864.8	866.1	867.2	868.3	869.4	869.4	869.4
142.5°	889.9	891.9	893.9	896.1	897.5	898.2	899.0	899.8	900.5	900.7	900.9
145°	936.4	938.1	939.7	941.3	942.7	944.1	945.4	946.8	948.2	948.4	948.7
147.5°	978.8	980.7	982.5	984.4	985.8	986.7	987.6	988.6	989.5	990.0	990.5
150°	1006.8	1008.1	1009.6	1010.9	1012.1	1013.0	1013.9	1014.8	1015.7	1016.3	1017.0
152.5°	1032.2	1033.6	1034.9	1036.3	1037.5	1038.6	1039.7	1040.8	1041.9	1042.7	1043.6
155°	1069.5	1070.3	1071.0	1071.6	1072.3	1073.0	1073.7	1074.3	1075.0	1076.1	1077.3
157.5°	1101.9	1102.3	1102.8	1103.2	1103.7	1104.1	1104.5	1104.9	1105.3	1106.8	1108.4
160°	1121.5	1122.0	1122.4	1122.9	1123.2	1123.5	1123.7	1123.9	1124.1	1125.5	1126.8
162.5°	1139.1	1139.2	1139.3	1139.4	1139.5	1139.8	1140.0	1140.2	1140.4	1142.1	1143.6
165°	1162.8	1162.6	1162.3	1162.1	1162.0	1162.0	1162.0	1162.0	1162.0	1163.6	1165.2
167.5°	1182.3	1181.6	1180.9	1180.3	1179.9	1179.9	1179.8	1179.8	1179.7	1181.3	1183.0
170°	1193.0	1192.3	1191.6	1190.9	1190.5	1190.2	1190.0	1189.8	1189.6	1191.1	1192.8
172.5°	1200.3	1199.6	1199.0	1198.3	1197.8	1197.6	1197.4	1197.2	1196.9	1198.5	1200.1
175°	1209.3	1208.7	1208.0	1207.3	1206.7	1206.3	1205.8	1205.4	1204.9	1206.5	1208.1
177.5°	1213.2	1212.6	1212.0	1211.5	1211.0	1210.7	1210.3	1210.0	1209.6	1210.7	1211.8
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**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°	11.8	11.7	11.5	11.6	11.8	11.7	11.7
90°	34.4	33.9	33.8	34.1	34.3	34.5	34.7
92.5°	32.8	32.9	32.9	33.0	33.0	33.1	33.1
95°	65.4	65.4	65.2	64.7	64.3	63.8	63.4
97.5°	110.1	110.1	110.1	110.0	110.0	109.9	109.9
100°	141.2	141.2	141.1	140.8	140.6	140.4	140.2
102.5°	175.2	175.4	175.4	175.2	174.9	174.7	174.5
105°	226.4	226.8	227.1	227.1	227.1	227.1	227.1
107.5°	281.0	281.1	280.7	279.7	278.6	277.6	276.6
110°	318.1	318.1	317.8	317.1	316.4	315.7	315.1



TEST NUMBER: P331478-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	355.0	354.4	353.9	353.4	352.8	352.3	351.8
115°	412.5	412.3	411.8	411.2	410.5	409.8	409.1
117.5°	467.7	467.1	466.5	465.9	465.1	464.4	463.7
120°	505.3	505.3	504.9	504.2	503.6	502.9	502.2
122.5°	542.9	542.4	541.9	541.4	540.9	540.4	539.9
125°	599.4	598.7	598.2	598.0	597.8	597.5	597.3
127.5°	654.2	653.4	652.6	651.9	651.2	650.5	649.7
130°	692.2	691.7	690.9	690.0	689.1	688.2	687.3
132.5°	728.1	727.1	726.3	725.6	724.8	724.1	723.4
135°	782.8	782.5	782.1	781.4	780.7	780.1	779.4
137.5°	834.6	834.4	833.7	832.8	831.9	831.0	830.1
140°	869.4	869.4	869.0	868.1	867.2	866.3	865.4
142.5°	901.1	901.2	900.9	900.0	899.1	898.2	897.3
145°	948.9	949.1	948.8	947.9	947.0	946.0	945.1
147.5°	991.0	991.5	991.3	990.5	989.6	988.8	987.8
150°	1017.7	1018.4	1018.4	1017.7	1017.0	1016.3	1015.7
152.5°	1044.5	1045.3	1045.3	1044.5	1043.6	1042.7	1041.9
155°	1078.4	1079.5	1079.7	1079.1	1078.4	1077.7	1077.0
157.5°	1109.9	1111.5	1111.7	1110.6	1109.5	1108.4	1107.3
160°	1128.2	1129.5	1129.8	1128.9	1128.0	1127.1	1126.2
162.5°	1145.1	1146.7	1146.9	1145.8	1144.7	1143.6	1142.6
165°	1166.7	1168.3	1168.5	1167.4	1166.3	1165.2	1164.0
167.5°	1184.6	1186.1	1186.3	1185.2	1184.0	1182.8	1181.6
170°	1194.4	1196.0	1196.1	1194.7	1193.4	1191.9	1190.6
172.5°	1201.7	1203.3	1203.5	1202.0	1200.7	1199.3	1198.0
175°	1209.7	1211.2	1211.4	1210.0	1208.7	1207.3	1206.0
177.5°	1212.8	1214.0	1214.0	1212.8	1211.8	1210.7	1209.6
180°	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0	1212.0

(END OF REPORT)