

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: P331478-830

Luminaire Tested: **S122DIW-S290D970U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331478-830
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-S290D970U830-4F0-1E-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: 4396.8 lumens
Efficiency: N/A
Efficacy: 115.7 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

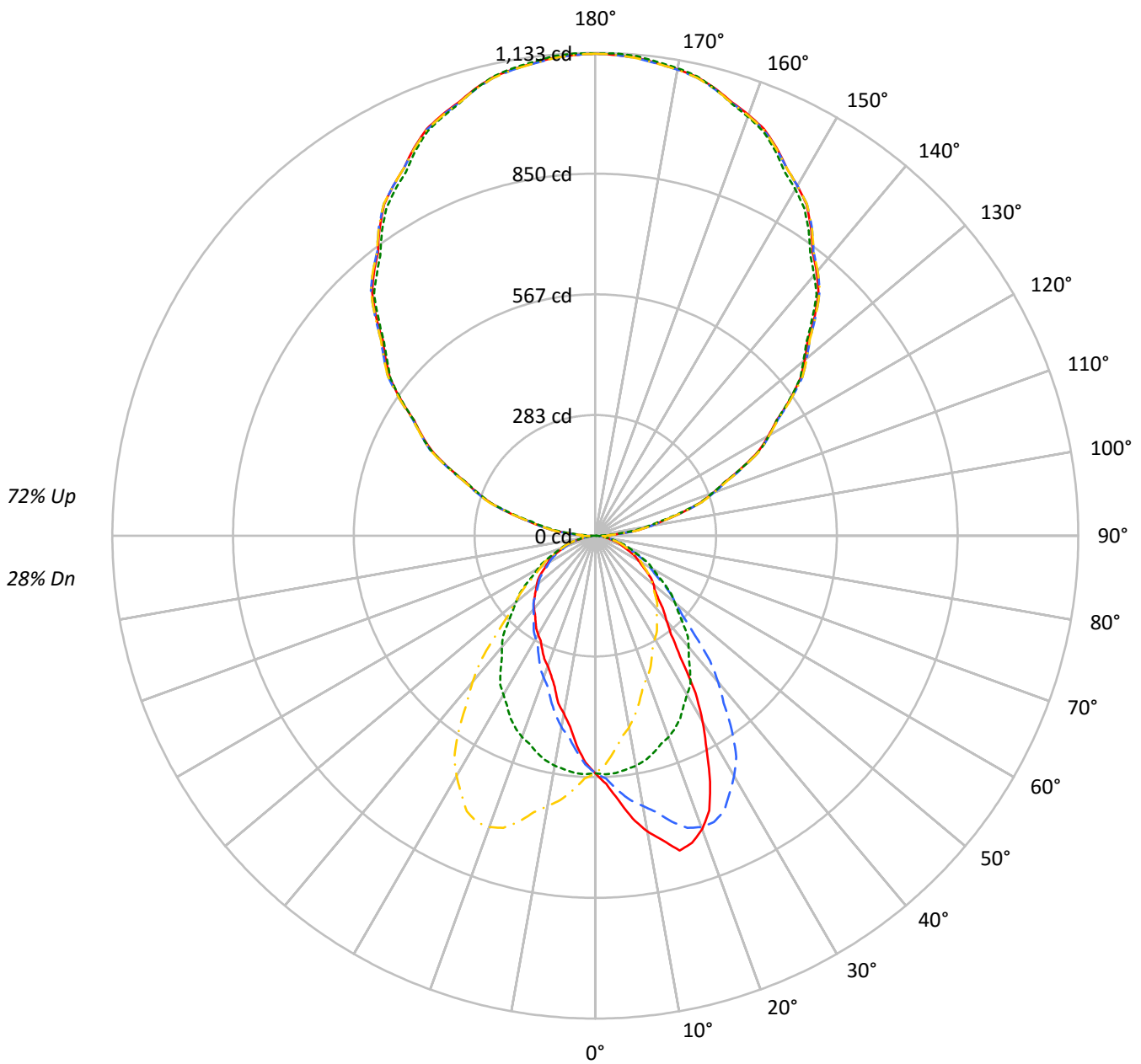
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



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



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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	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°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	1.2
10°-20°	154.2	3.5
20°-30°	223.9	5.1
30°-40°	236.2	5.4
40°-50°	209.2	4.8
50°-60°	166.9	3.8
60°-70°	113.4	2.6
70°-80°	58.2	1.3
80°-90°	18.5	0.4
90°-100°	71.7	1.6
100°-110°	222.6	5.1
110°-120°	380.6	8.7
120°-130°	500.5	11.4
130°-140°	561.7	12.8
140°-150°	550.8	12.5
150°-160°	462.0	10.5
160°-170°	306.4	7.0
170°-180°	107.1	2.4
0°-30°	431.2	9.8
0°-40°	667.4	15.2
0°-60°	1043.5	23.7
0°-90°	1233.6	28.1
90°-120°	674.9	15.3
90°-150°	2287.8	52.0
90°-180°	3163.0	71.9
0°-180°	4396.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	14
90°	32	1	32	1	32	15
95°	59	50	59	50	59	66
105°	212	205	212	205	212	223
115°	382	382	382	382	382	377
125°	558	556	558	556	558	497
135°	728	719	728	719	728	560
145°	882	872	882	872	882	551
155°	1005	998	1005	998	1005	463
165°	1086	1085	1086	1085	1086	306
175°	1126	1129	1126	1129	1126	107
180°	1131	1131	1131	1131	1131	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	10.9	10.9	11.0	10.8	10.7	10.9	11.0	10.9	11.2	11.5	10.7
90°	32.4	32.2	32.0	31.9	31.6	31.7	32.1	32.5	33.0	33.4	28.7
92.5°	30.9	30.9	30.8	30.8	30.7	30.7	30.6	30.5	30.4	30.3	29.2
95°	59.2	59.6	60.0	60.4	60.9	61.1	61.1	61.1	61.1	61.1	60.7
97.5°	102.5	102.5	102.6	102.6	102.7	102.7	102.7	102.7	102.7	102.7	101.9
100°	130.8	131.0	131.2	131.4	131.7	131.8	131.8	131.8	131.8	131.8	131.1
102.5°	162.9	163.1	163.2	163.5	163.7	163.7	163.5	163.4	163.2	163.1	162.2
105°	212.0	212.0	212.0	212.0	212.0	211.7	211.3	210.8	210.5	210.0	209.6
107.5°	258.2	259.1	260.0	261.1	262.0	262.4	262.3	262.1	261.9	261.7	261.7
110°	294.1	294.6	295.3	296.0	296.6	296.9	296.9	296.9	296.9	296.9	296.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	328.4	328.9	329.3	329.8	330.3	330.7	331.3	331.8	332.2	332.8	333.0
115°	381.8	382.5	383.1	383.8	384.4	384.8	385.0	385.2	385.5	385.7	386.1
117.5°	432.8	433.5	434.1	434.8	435.4	435.9	436.5	437.0	437.5	438.0	439.2
120°	468.7	469.4	470.0	470.6	471.3	471.6	471.6	471.6	471.6	471.6	473.3
122.5°	503.9	504.4	504.8	505.3	505.8	506.2	506.7	507.3	507.7	508.2	509.4
125°	557.5	557.7	558.0	558.2	558.4	558.8	559.4	560.1	560.7	561.4	561.9
127.5°	606.4	607.1	607.8	608.4	609.1	609.8	610.6	611.3	612.1	612.9	613.7
130°	641.5	642.3	643.2	644.0	644.9	645.5	646.0	646.4	646.9	647.2	647.7
132.5°	675.1	675.8	676.5	677.2	677.9	678.6	679.6	680.5	681.5	682.4	682.3
135°	727.5	728.1	728.7	729.3	730.0	730.4	730.7	730.8	731.0	731.2	730.8
137.5°	774.8	775.6	776.5	777.3	778.2	778.7	778.9	779.0	779.2	779.4	778.8
140°	807.7	808.5	809.4	810.2	811.1	811.4	811.4	811.4	811.4	811.4	810.4
142.5°	837.4	838.3	839.1	840.0	840.8	841.1	841.0	840.8	840.7	840.5	839.8
145°	882.1	883.0	883.8	884.7	885.5	885.8	885.6	885.4	885.1	885.0	883.7
147.5°	922.0	922.8	923.6	924.4	925.2	925.4	924.9	924.4	924.0	923.5	922.7
150°	948.0	948.6	949.2	949.9	950.6	950.6	949.9	949.2	948.6	948.0	947.2
152.5°	972.4	973.2	974.0	974.9	975.6	975.6	974.9	974.0	973.2	972.4	971.4
155°	1005.2	1005.9	1006.5	1007.2	1007.8	1007.6	1006.5	1005.5	1004.4	1003.3	1002.7
157.5°	1033.5	1034.5	1035.6	1036.6	1037.6	1037.4	1035.9	1034.5	1033.0	1031.6	1031.2
160°	1051.1	1052.0	1052.8	1053.7	1054.5	1054.2	1053.0	1051.7	1050.5	1049.1	1049.0
162.5°	1066.4	1067.3	1068.4	1069.4	1070.4	1070.3	1068.7	1067.3	1065.9	1064.4	1064.2
165°	1086.4	1087.5	1088.5	1089.6	1090.6	1090.4	1088.9	1087.5	1086.0	1084.5	1084.5
167.5°	1102.9	1103.9	1105.0	1106.2	1107.2	1107.0	1105.6	1104.1	1102.6	1101.1	1101.2
170°	1111.3	1112.5	1113.8	1115.0	1116.3	1116.3	1114.7	1113.2	1111.7	1110.3	1110.5
172.5°	1118.1	1119.4	1120.7	1121.9	1123.2	1123.0	1121.6	1120.1	1118.6	1117.1	1117.4
175°	1125.6	1126.8	1128.1	1129.4	1130.7	1130.5	1129.1	1127.6	1126.1	1124.5	1125.0
177.5°	1129.0	1130.0	1131.1	1132.0	1133.0	1133.0	1132.0	1131.1	1130.0	1129.0	1129.4
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	10.0	9.0	8.1	7.7	6.7	6.2	5.0	4.0	4.3	4.6	4.8
90°	24.0	19.4	14.7	11.1	8.6	6.0	3.5	0.9	3.5	6.0	8.6
92.5°	28.2	27.1	25.9	24.5	22.6	20.7	18.9	17.0	18.9	20.7	22.6
95°	60.2	59.9	59.4	58.2	56.0	53.9	51.7	49.7	51.7	53.9	56.0
97.5°	101.1	100.3	99.5	98.1	96.3	94.4	92.6	90.7	92.6	94.4	96.3
100°	130.4	129.8	129.2	128.0	126.3	124.6	122.9	121.2	122.9	124.6	126.3
102.5°	161.5	160.6	159.9	158.7	157.4	156.0	154.7	153.4	154.7	156.0	157.4
105°	209.2	208.8	208.3	207.8	207.2	206.5	205.9	205.3	205.9	206.5	207.2
107.5°	261.7	261.7	261.7	261.3	260.3	259.4	258.5	257.6	258.5	259.4	260.3
110°	296.9	296.9	296.9	296.2	295.0	293.7	292.5	291.2	292.5	293.7	295.0



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	333.1	333.3	333.5	332.9	331.7	330.4	329.1	327.8	329.1	330.4	331.7
115°	386.5	386.9	387.4	386.9	385.7	384.4	383.1	381.8	383.1	384.4	385.7
117.5°	440.4	441.6	442.7	442.5	440.8	439.1	437.4	435.7	437.4	439.1	440.8
120°	475.0	476.7	478.4	478.4	476.7	475.0	473.3	471.6	473.3	475.0	476.7
122.5°	510.7	511.8	513.0	512.6	510.6	508.5	506.5	504.4	506.5	508.5	510.6
125°	562.6	563.3	563.9	563.3	561.4	559.4	557.5	555.6	557.5	559.4	561.4
127.5°	614.4	615.2	616.0	615.1	612.7	610.3	607.8	605.5	607.8	610.3	612.7
130°	648.1	648.6	648.9	647.8	645.1	642.2	639.5	636.8	639.5	642.2	645.1
132.5°	682.2	682.1	682.0	680.9	678.6	676.4	674.1	671.8	674.1	676.4	678.6
135°	730.4	730.0	729.5	728.2	725.9	723.5	721.2	718.9	721.2	723.5	725.9
137.5°	778.3	777.7	777.2	775.9	774.0	772.1	770.2	768.3	770.2	772.1	774.0
140°	809.4	808.3	807.2	805.7	803.8	801.9	800.0	798.1	800.0	801.9	803.8
142.5°	839.1	838.3	837.6	836.3	834.3	832.5	830.6	828.7	830.6	832.5	834.3
145°	882.4	881.2	879.9	878.5	877.0	875.5	874.0	872.5	874.0	875.5	877.0
147.5°	921.8	921.0	920.1	918.8	917.0	915.3	913.5	911.7	913.5	915.3	917.0
150°	946.3	945.5	944.6	943.5	942.3	940.9	939.7	938.4	939.7	940.9	942.3
152.5°	970.3	969.4	968.4	967.2	965.9	964.7	963.4	962.1	963.4	964.7	965.9
155°	1002.1	1001.5	1000.8	1000.1	999.6	998.9	998.2	997.6	998.2	998.9	999.6
157.5°	1030.9	1030.5	1030.1	1029.6	1029.3	1028.8	1028.4	1027.9	1028.4	1028.8	1029.3
160°	1048.8	1048.6	1048.3	1048.0	1047.5	1047.2	1046.7	1046.3	1046.7	1047.2	1047.5
162.5°	1064.0	1063.8	1063.6	1063.5	1063.4	1063.3	1063.2	1063.1	1063.2	1063.3	1063.4
165°	1084.5	1084.5	1084.5	1084.6	1084.8	1085.1	1085.2	1085.4	1085.2	1085.1	1084.8
167.5°	1101.2	1101.3	1101.3	1101.6	1102.2	1102.9	1103.5	1104.2	1103.5	1102.9	1102.2
170°	1110.7	1110.9	1111.2	1111.5	1112.2	1112.9	1113.4	1114.1	1113.4	1112.9	1112.2
172.5°	1117.6	1117.8	1117.9	1118.4	1119.1	1119.6	1120.3	1121.0	1120.3	1119.6	1119.1
175°	1125.4	1125.9	1126.2	1126.8	1127.5	1128.1	1128.7	1129.4	1128.7	1128.1	1127.5
177.5°	1129.6	1130.0	1130.3	1130.8	1131.2	1131.8	1132.3	1132.8	1132.3	1131.8	1131.2
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	5.2	5.7	6.4	7.4	8.1	9.0	8.7	8.6	8.5	8.0	8.0
90°	11.1	14.7	19.4	24.0	28.7	33.4	33.0	32.5	32.1	31.7	31.6
92.5°	24.5	25.9	27.1	28.2	29.2	30.3	30.4	30.5	30.6	30.7	30.7
95°	58.2	59.4	59.9	60.2	60.7	61.1	61.1	61.1	61.1	61.1	60.9
97.5°	98.1	99.5	100.3	101.1	101.9	102.7	102.7	102.7	102.7	102.7	102.7
100°	128.0	129.2	129.8	130.4	131.1	131.8	131.8	131.8	131.8	131.8	131.7
102.5°	158.7	159.9	160.6	161.5	162.2	163.1	163.2	163.4	163.5	163.7	163.7
105°	207.8	208.3	208.8	209.2	209.6	210.0	210.5	210.8	211.3	211.7	212.0
107.5°	261.3	261.7	261.7	261.7	261.7	261.7	261.9	262.1	262.3	262.4	262.0
110°	296.2	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.9	296.6



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	332.9	333.5	333.3	333.1	333.0	332.8	332.2	331.8	331.3	330.7	330.3
115°	386.9	387.4	386.9	386.5	386.1	385.7	385.5	385.2	385.0	384.8	384.4
117.5°	442.5	442.7	441.6	440.4	439.2	438.0	437.5	437.0	436.5	435.9	435.4
120°	478.4	478.4	476.7	475.0	473.3	471.6	471.6	471.6	471.6	471.6	471.3
122.5°	512.6	513.0	511.8	510.7	509.4	508.2	507.7	507.3	506.7	506.2	505.8
125°	563.3	563.9	563.3	562.6	561.9	561.4	560.7	560.1	559.4	558.8	558.4
127.5°	615.1	616.0	615.2	614.4	613.7	612.9	612.1	611.3	610.6	609.8	609.1
130°	647.8	648.9	648.6	648.1	647.7	647.2	646.9	646.4	646.0	645.5	644.9
132.5°	680.9	682.0	682.1	682.2	682.3	682.4	681.5	680.5	679.6	678.6	677.9
135°	728.2	729.5	730.0	730.4	730.8	731.2	731.0	730.8	730.7	730.4	730.0
137.5°	775.9	777.2	777.7	778.3	778.8	779.4	779.2	779.0	778.9	778.7	778.2
140°	805.7	807.2	808.3	809.4	810.4	811.4	811.4	811.4	811.4	811.4	811.1
142.5°	836.3	837.6	838.3	839.1	839.8	840.5	840.7	840.8	841.0	841.1	840.8
145°	878.5	879.9	881.2	882.4	883.7	885.0	885.1	885.4	885.6	885.8	885.5
147.5°	918.8	920.1	921.0	921.8	922.7	923.5	924.0	924.4	924.9	925.4	925.2
150°	943.5	944.6	945.5	946.3	947.2	948.0	948.6	949.2	949.9	950.6	950.6
152.5°	967.2	968.4	969.4	970.3	971.4	972.4	973.2	974.0	974.9	975.6	975.6
155°	1000.1	1000.8	1001.5	1002.1	1002.7	1003.3	1004.4	1005.5	1006.5	1007.6	1007.8
157.5°	1029.6	1030.1	1030.5	1030.9	1031.2	1031.6	1033.0	1034.5	1035.9	1037.4	1037.6
160°	1048.0	1048.3	1048.6	1048.8	1049.0	1049.1	1050.5	1051.7	1053.0	1054.2	1054.5
162.5°	1063.5	1063.6	1063.8	1064.0	1064.2	1064.4	1065.9	1067.3	1068.7	1070.3	1070.4
165°	1084.6	1084.5	1084.5	1084.5	1084.5	1084.5	1086.0	1087.5	1088.9	1090.4	1090.6
167.5°	1101.6	1101.3	1101.3	1101.2	1101.2	1101.1	1102.6	1104.1	1105.6	1107.0	1107.2
170°	1111.5	1111.2	1110.9	1110.7	1110.5	1110.3	1111.7	1113.2	1114.7	1116.3	1116.3
172.5°	1118.4	1117.9	1117.8	1117.6	1117.4	1117.1	1118.6	1120.1	1121.6	1123.0	1123.2
175°	1126.8	1126.2	1125.9	1125.4	1125.0	1124.5	1126.1	1127.6	1129.1	1130.5	1130.7
177.5°	1130.8	1130.3	1130.0	1129.6	1129.4	1129.0	1130.0	1131.1	1132.0	1133.0	1133.0
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	8.1	7.9	8.0	7.8	8.0	7.9	8.1	8.0	8.0	8.5	8.6
90°	31.9	32.0	32.2	32.4	32.2	32.0	31.9	31.6	31.7	32.1	32.5
92.5°	30.8	30.8	30.9	30.9	30.9	30.8	30.8	30.7	30.7	30.6	30.5
95°	60.4	60.0	59.6	59.2	59.6	60.0	60.4	60.9	61.1	61.1	61.1
97.5°	102.6	102.6	102.5	102.5	102.5	102.6	102.6	102.7	102.7	102.7	102.7
100°	131.4	131.2	131.0	130.8	131.0	131.2	131.4	131.7	131.8	131.8	131.8
102.5°	163.5	163.2	163.1	162.9	163.1	163.2	163.5	163.7	163.7	163.5	163.4
105°	212.0	212.0	212.0	212.0	212.0	212.0	212.0	212.0	211.7	211.3	210.8
107.5°	261.1	260.0	259.1	258.2	259.1	260.0	261.1	262.0	262.4	262.3	262.1
110°	296.0	295.3	294.6	294.1	294.6	295.3	296.0	296.6	296.9	296.9	296.9



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	329.8	329.3	328.9	328.4	328.9	329.3	329.8	330.3	330.7	331.3	331.8
115°	383.8	383.1	382.5	381.8	382.5	383.1	383.8	384.4	384.8	385.0	385.2
117.5°	434.8	434.1	433.5	432.8	433.5	434.1	434.8	435.4	435.9	436.5	437.0
120°	470.6	470.0	469.4	468.7	469.4	470.0	470.6	471.3	471.6	471.6	471.6
122.5°	505.3	504.8	504.4	503.9	504.4	504.8	505.3	505.8	506.2	506.7	507.3
125°	558.2	558.0	557.7	557.5	557.7	558.0	558.2	558.4	558.8	559.4	560.1
127.5°	608.4	607.8	607.1	606.4	607.1	607.8	608.4	609.1	609.8	610.6	611.3
130°	644.0	643.2	642.3	641.5	642.3	643.2	644.0	644.9	645.5	646.0	646.4
132.5°	677.2	676.5	675.8	675.1	675.8	676.5	677.2	677.9	678.6	679.6	680.5
135°	729.3	728.7	728.1	727.5	728.1	728.7	729.3	730.0	730.4	730.7	730.8
137.5°	777.3	776.5	775.6	774.8	775.6	776.5	777.3	778.2	778.7	778.9	779.0
140°	810.2	809.4	808.5	807.7	808.5	809.4	810.2	811.1	811.4	811.4	811.4
142.5°	840.0	839.1	838.3	837.4	838.3	839.1	840.0	840.8	841.1	841.0	840.8
145°	884.7	883.8	883.0	882.1	883.0	883.8	884.7	885.5	885.8	885.6	885.4
147.5°	924.4	923.6	922.8	922.0	922.8	923.6	924.4	925.2	925.4	924.9	924.4
150°	949.9	949.2	948.6	948.0	948.6	949.2	949.9	950.6	950.6	949.9	949.2
152.5°	974.9	974.0	973.2	972.4	973.2	974.0	974.9	975.6	975.6	974.9	974.0
155°	1007.2	1006.5	1005.9	1005.2	1005.9	1006.5	1007.2	1007.8	1007.6	1006.5	1005.5
157.5°	1036.6	1035.6	1034.5	1033.5	1034.5	1035.6	1036.6	1037.6	1037.4	1035.9	1034.5
160°	1053.7	1052.8	1052.0	1051.1	1052.0	1052.8	1053.7	1054.5	1054.2	1053.0	1051.7
162.5°	1069.4	1068.4	1067.3	1066.4	1067.3	1068.4	1069.4	1070.4	1070.3	1068.7	1067.3
165°	1089.6	1088.5	1087.5	1086.4	1087.5	1088.5	1089.6	1090.6	1090.4	1088.9	1087.5
167.5°	1106.2	1105.0	1103.9	1102.9	1103.9	1105.0	1106.2	1107.2	1107.0	1105.6	1104.1
170°	1115.0	1113.8	1112.5	1111.3	1112.5	1113.8	1115.0	1116.3	1116.3	1114.7	1113.2
172.5°	1121.9	1120.7	1119.4	1118.1	1119.4	1120.7	1121.9	1123.2	1123.0	1121.6	1120.1
175°	1129.4	1128.1	1126.8	1125.6	1126.8	1128.1	1129.4	1130.7	1130.5	1129.1	1127.6
177.5°	1132.0	1131.1	1130.0	1129.0	1130.0	1131.1	1132.0	1133.0	1133.0	1132.0	1131.1
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	8.7	9.0	8.1	7.4	6.4	5.7	5.2	4.8	4.6	4.3	4.0
90°	33.0	33.4	28.7	24.0	19.4	14.7	11.1	8.6	6.0	3.5	0.9
92.5°	30.4	30.3	29.2	28.2	27.1	25.9	24.5	22.6	20.7	18.9	17.0
95°	61.1	61.1	60.7	60.2	59.9	59.4	58.2	56.0	53.9	51.7	49.7
97.5°	102.7	102.7	101.9	101.1	100.3	99.5	98.1	96.3	94.4	92.6	90.7
100°	131.8	131.8	131.1	130.4	129.8	129.2	128.0	126.3	124.6	122.9	121.2
102.5°	163.2	163.1	162.2	161.5	160.6	159.9	158.7	157.4	156.0	154.7	153.4
105°	210.5	210.0	209.6	209.2	208.8	208.3	207.8	207.2	206.5	205.9	205.3
107.5°	261.9	261.7	261.7	261.7	261.7	261.7	261.3	260.3	259.4	258.5	257.6
110°	296.9	296.9	296.9	296.9	296.9	296.9	296.2	295.0	293.7	292.5	291.2



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	332.2	332.8	333.0	333.1	333.3	333.5	332.9	331.7	330.4	329.1	327.8
115°	385.5	385.7	386.1	386.5	386.9	387.4	386.9	385.7	384.4	383.1	381.8
117.5°	437.5	438.0	439.2	440.4	441.6	442.7	442.5	440.8	439.1	437.4	435.7
120°	471.6	471.6	473.3	475.0	476.7	478.4	478.4	476.7	475.0	473.3	471.6
122.5°	507.7	508.2	509.4	510.7	511.8	513.0	512.6	510.6	508.5	506.5	504.4
125°	560.7	561.4	561.9	562.6	563.3	563.9	563.3	561.4	559.4	557.5	555.6
127.5°	612.1	612.9	613.7	614.4	615.2	616.0	615.1	612.7	610.3	607.8	605.5
130°	646.9	647.2	647.7	648.1	648.6	648.9	647.8	645.1	642.2	639.5	636.8
132.5°	681.5	682.4	682.3	682.2	682.1	682.0	680.9	678.6	676.4	674.1	671.8
135°	731.0	731.2	730.8	730.4	730.0	729.5	728.2	725.9	723.5	721.2	718.9
137.5°	779.2	779.4	778.8	778.3	777.7	777.2	775.9	774.0	772.1	770.2	768.3
140°	811.4	811.4	810.4	809.4	808.3	807.2	805.7	803.8	801.9	800.0	798.1
142.5°	840.7	840.5	839.8	839.1	838.3	837.6	836.3	834.3	832.5	830.6	828.7
145°	885.1	885.0	883.7	882.4	881.2	879.9	878.5	877.0	875.5	874.0	872.5
147.5°	924.0	923.5	922.7	921.8	921.0	920.1	918.8	917.0	915.3	913.5	911.7
150°	948.6	948.0	947.2	946.3	945.5	944.6	943.5	942.3	940.9	939.7	938.4
152.5°	973.2	972.4	971.4	970.3	969.4	968.4	967.2	965.9	964.7	963.4	962.1
155°	1004.4	1003.3	1002.7	1002.1	1001.5	1000.8	1000.1	999.6	998.9	998.2	997.6
157.5°	1033.0	1031.6	1031.2	1030.9	1030.5	1030.1	1029.6	1029.3	1028.8	1028.4	1027.9
160°	1050.5	1049.1	1049.0	1048.8	1048.6	1048.3	1048.0	1047.5	1047.2	1046.7	1046.3
162.5°	1065.9	1064.4	1064.2	1064.0	1063.8	1063.6	1063.5	1063.4	1063.3	1063.2	1063.1
165°	1086.0	1084.5	1084.5	1084.5	1084.5	1084.5	1084.6	1084.8	1085.1	1085.2	1085.4
167.5°	1102.6	1101.1	1101.2	1101.2	1101.3	1101.3	1101.6	1102.2	1102.9	1103.5	1104.2
170°	1111.7	1110.3	1110.5	1110.7	1110.9	1111.2	1111.5	1112.2	1112.9	1113.4	1114.1
172.5°	1118.6	1117.1	1117.4	1117.6	1117.8	1117.9	1118.4	1119.1	1119.6	1120.3	1121.0
175°	1126.1	1124.5	1125.0	1125.4	1125.9	1126.2	1126.8	1127.5	1128.1	1128.7	1129.4
177.5°	1130.0	1129.0	1129.4	1129.6	1130.0	1130.3	1130.8	1131.2	1131.8	1132.3	1132.8
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



TEST NUMBER: P331478-830

CATALOG NUMBER: S122DIW-S290D970U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	5.0	6.2	6.7	7.7	8.1	9.0	10.0	10.7	11.5	11.2	10.9
90°	3.5	6.0	8.6	11.1	14.7	19.4	24.0	28.7	33.4	33.0	32.5
92.5°	18.9	20.7	22.6	24.5	25.9	27.1	28.2	29.2	30.3	30.4	30.5
95°	51.7	53.9	56.0	58.2	59.4	59.9	60.2	60.7	61.1	61.1	61.1
97.5°	92.6	94.4	96.3	98.1	99.5	100.3	101.1	101.9	102.7	102.7	102.7
100°	122.9	124.6	126.3	128.0	129.2	129.8	130.4	131.1	131.8	131.8	131.8
102.5°	154.7	156.0	157.4	158.7	159.9	160.6	161.5	162.2	163.1	163.2	163.4
105°	205.9	206.5	207.2	207.8	208.3	208.8	209.2	209.6	210.0	210.5	210.8
107.5°	258.5	259.4	260.3	261.3	261.7	261.7	261.7	261.7	261.7	261.9	262.1
110°	292.5	293.7	295.0	296.2	296.9	296.9	296.9	296.9	296.9	296.9	296.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	329.1	330.4	331.7	332.9	333.5	333.3	333.1	333.0	332.8	332.2	331.8
115°	383.1	384.4	385.7	386.9	387.4	386.9	386.5	386.1	385.7	385.5	385.2
117.5°	437.4	439.1	440.8	442.5	442.7	441.6	440.4	439.2	438.0	437.5	437.0
120°	473.3	475.0	476.7	478.4	478.4	476.7	475.0	473.3	471.6	471.6	471.6
122.5°	506.5	508.5	510.6	512.6	513.0	511.8	510.7	509.4	508.2	507.7	507.3
125°	557.5	559.4	561.4	563.3	563.9	563.3	562.6	561.9	561.4	560.7	560.1
127.5°	607.8	610.3	612.7	615.1	616.0	615.2	614.4	613.7	612.9	612.1	611.3
130°	639.5	642.2	645.1	647.8	648.9	648.6	648.1	647.7	647.2	646.9	646.4
132.5°	674.1	676.4	678.6	680.9	682.0	682.1	682.2	682.3	682.4	681.5	680.5
135°	721.2	723.5	725.9	728.2	729.5	730.0	730.4	730.8	731.2	731.0	730.8
137.5°	770.2	772.1	774.0	775.9	777.2	777.7	778.3	778.8	779.4	779.2	779.0
140°	800.0	801.9	803.8	805.7	807.2	808.3	809.4	810.4	811.4	811.4	811.4
142.5°	830.6	832.5	834.3	836.3	837.6	838.3	839.1	839.8	840.5	840.7	840.8
145°	874.0	875.5	877.0	878.5	879.9	881.2	882.4	883.7	885.0	885.1	885.4
147.5°	913.5	915.3	917.0	918.8	920.1	921.0	921.8	922.7	923.5	924.0	924.4
150°	939.7	940.9	942.3	943.5	944.6	945.5	946.3	947.2	948.0	948.6	949.2
152.5°	963.4	964.7	965.9	967.2	968.4	969.4	970.3	971.4	972.4	973.2	974.0
155°	998.2	998.9	999.6	1000.1	1000.8	1001.5	1002.1	1002.7	1003.3	1004.4	1005.5
157.5°	1028.4	1028.8	1029.3	1029.6	1030.1	1030.5	1030.9	1031.2	1031.6	1033.0	1034.5
160°	1046.7	1047.2	1047.5	1048.0	1048.3	1048.6	1048.8	1049.0	1049.1	1050.5	1051.7
162.5°	1063.2	1063.3	1063.4	1063.5	1063.6	1063.8	1064.0	1064.2	1064.4	1065.9	1067.3
165°	1085.2	1085.1	1084.8	1084.6	1084.5	1084.5	1084.5	1084.5	1084.5	1086.0	1087.5
167.5°	1103.5	1102.9	1102.2	1101.6	1101.3	1101.3	1101.2	1101.2	1101.1	1102.6	1104.1
170°	1113.4	1112.9	1112.2	1111.5	1111.2	1110.9	1110.7	1110.5	1110.3	1111.7	1113.2
172.5°	1120.3	1119.6	1119.1	1118.4	1117.9	1117.8	1117.6	1117.4	1117.1	1118.6	1120.1
175°	1128.7	1128.1	1127.5	1126.8	1126.2	1125.9	1125.4	1125.0	1124.5	1126.1	1127.6
177.5°	1132.3	1131.8	1131.2	1130.8	1130.3	1130.0	1129.6	1129.4	1129.0	1130.0	1131.1
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	11.0	10.9	10.7	10.8	11.0	10.9	10.9
90°	32.1	31.7	31.6	31.9	32.0	32.2	32.4
92.5°	30.6	30.7	30.7	30.8	30.8	30.9	30.9
95°	61.1	61.1	60.9	60.4	60.0	59.6	59.2
97.5°	102.7	102.7	102.7	102.6	102.6	102.5	102.5
100°	131.8	131.8	131.7	131.4	131.2	131.0	130.8
102.5°	163.5	163.7	163.7	163.5	163.2	163.1	162.9
105°	211.3	211.7	212.0	212.0	212.0	212.0	212.0
107.5°	262.3	262.4	262.0	261.1	260.0	259.1	258.2
110°	296.9	296.9	296.6	296.0	295.3	294.6	294.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	331.3	330.7	330.3	329.8	329.3	328.9	328.4
115°	385.0	384.8	384.4	383.8	383.1	382.5	381.8
117.5°	436.5	435.9	435.4	434.8	434.1	433.5	432.8
120°	471.6	471.6	471.3	470.6	470.0	469.4	468.7
122.5°	506.7	506.2	505.8	505.3	504.8	504.4	503.9
125°	559.4	558.8	558.4	558.2	558.0	557.7	557.5
127.5°	610.6	609.8	609.1	608.4	607.8	607.1	606.4
130°	646.0	645.5	644.9	644.0	643.2	642.3	641.5
132.5°	679.6	678.6	677.9	677.2	676.5	675.8	675.1
135°	730.7	730.4	730.0	729.3	728.7	728.1	727.5
137.5°	778.9	778.7	778.2	777.3	776.5	775.6	774.8
140°	811.4	811.4	811.1	810.2	809.4	808.5	807.7
142.5°	841.0	841.1	840.8	840.0	839.1	838.3	837.4
145°	885.6	885.8	885.5	884.7	883.8	883.0	882.1
147.5°	924.9	925.4	925.2	924.4	923.6	922.8	922.0
150°	949.9	950.6	950.6	949.9	949.2	948.6	948.0
152.5°	974.9	975.6	975.6	974.9	974.0	973.2	972.4
155°	1006.5	1007.6	1007.8	1007.2	1006.5	1005.9	1005.2
157.5°	1035.9	1037.4	1037.6	1036.6	1035.6	1034.5	1033.5
160°	1053.0	1054.2	1054.5	1053.7	1052.8	1052.0	1051.1
162.5°	1068.7	1070.3	1070.4	1069.4	1068.4	1067.3	1066.4
165°	1088.9	1090.4	1090.6	1089.6	1088.5	1087.5	1086.4
167.5°	1105.6	1107.0	1107.2	1106.2	1105.0	1103.9	1102.9
170°	1114.7	1116.3	1116.3	1115.0	1113.8	1112.5	1111.3
172.5°	1121.6	1123.0	1123.2	1121.9	1120.7	1119.4	1118.1
175°	1129.1	1130.5	1130.7	1129.4	1128.1	1126.8	1125.6
177.5°	1132.0	1133.0	1133.0	1132.0	1131.1	1130.0	1129.0
180°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2

(END OF REPORT)