

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: P331471-830

Luminaire Tested: **S122DIW-S290D710U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331471-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIW-S290D710U830-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 710 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3903.7 lumens  
Efficiency: N/A  
Efficacy: 128.4 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

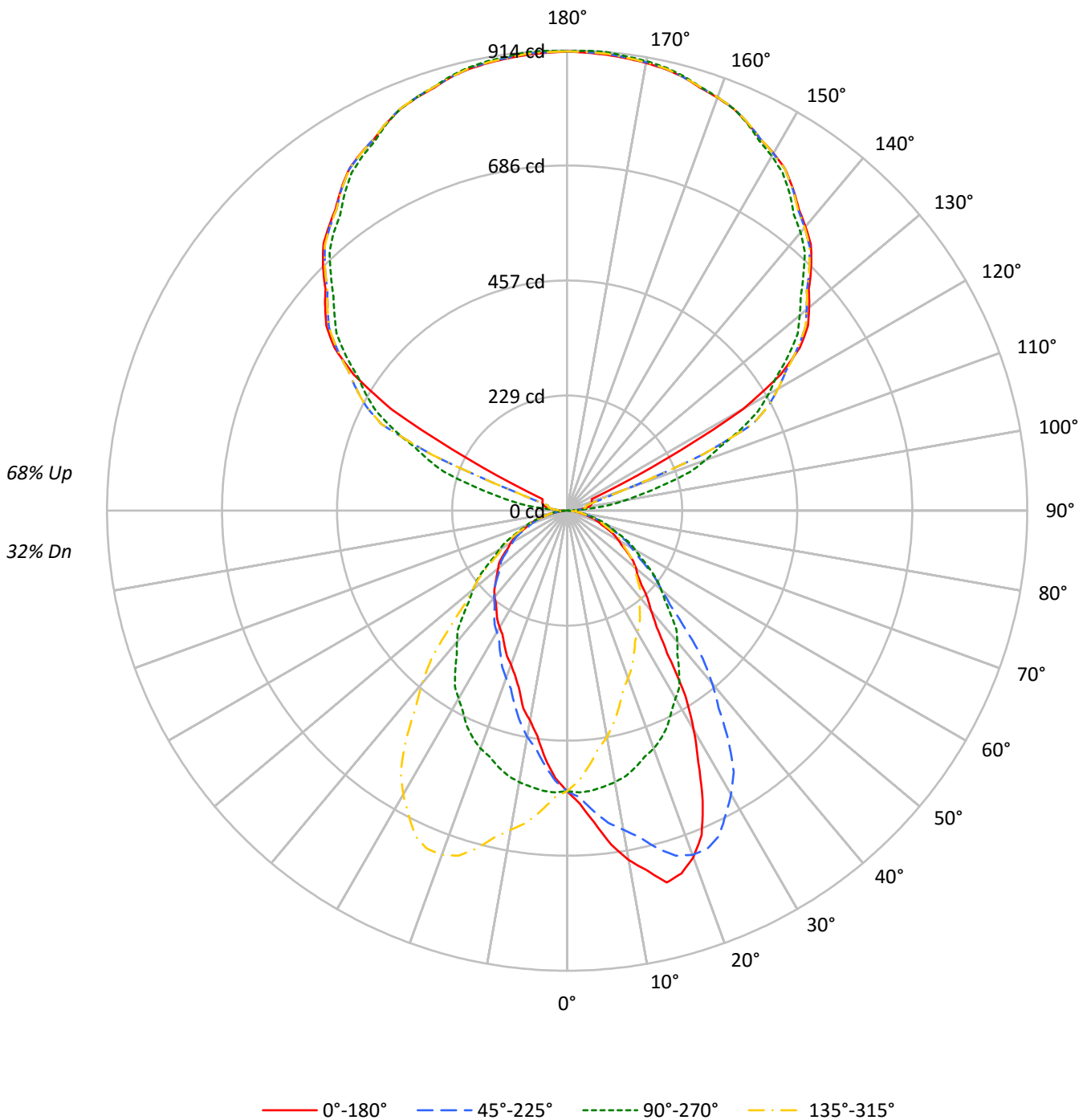
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

### Luminous Intensity Polar Plot



68% Up  
32% Dn



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	63	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	62	54	48	64	56	49	44	45	40	37	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	32	31	28	25	23	21	19	15
6	61	49	42	36	54	45	38	33	36	31	28	28	25	22	21	19	17	14
7	56	44	37	32	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	17	15	14	11
9	48	37	30	25	44	34	27	23	27	23	19	22	18	16	16	14	12	10
10	45	34	27	22	41	31	25	21	25	21	17	20	17	14	15	13	11	9

**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



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	1.4
10°-20°	154.2	4.0
20°-30°	223.9	5.7
30°-40°	236.2	6.1
40°-50°	209.2	5.4
50°-60°	166.9	4.3
60°-70°	113.4	2.9
70°-80°	58.2	1.5
80°-90°	16.3	0.4
90°-100°	30.4	0.8
100°-110°	111.6	2.9
110°-120°	298.2	7.6
120°-130°	492.2	12.6
130°-140°	523.5	13.4
140°-150°	486.5	12.5
150°-160°	391.2	10.0
160°-170°	252.1	6.5
170°-180°	86.8	2.2
0°-30°	431.2	11.0
0°-40°	667.4	17.1
0°-60°	1043.5	26.7
0°-90°	1231.4	31.5
90°-120°	440.1	11.3
90°-150°	1942.3	49.8
90°-180°	2672.0	68.4
0°-180°	3903.7	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	13
90°	18	1	18	1	18	8
95°	28	43	28	43	28	26
105°	50	201	50	201	50	52
115°	54	379	54	379	54	136
125°	564	536	564	536	564	488
135°	686	664	686	664	686	528
145°	782	770	782	770	782	489
155°	849	848	849	848	849	392
165°	892	893	892	893	892	252
175°	909	914	909	914	909	87
180°	912	912	912	912	912	



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	8.0	7.9	8.1	7.8	7.8	7.8	7.7	7.4	7.4	7.4	7.4
90°	17.8	17.5	17.2	17.0	16.7	16.1	15.4	14.7	13.9	13.2	12.1
92.5°	17.8	17.6	17.4	17.2	17.2	16.9	16.5	16.1	15.6	15.3	14.7
95°	28.4	28.6	28.7	28.8	28.9	28.7	27.9	27.2	26.5	25.7	24.7
97.5°	37.9	37.7	37.5	37.3	37.1	36.8	36.2	35.6	35.1	34.4	32.0
100°	44.2	43.9	43.6	43.4	43.1	42.3	41.1	40.0	38.7	37.6	35.2
102.5°	47.4	46.9	46.6	46.2	45.7	44.8	43.3	41.8	40.2	38.6	35.5
105°	50.1	49.6	49.0	48.4	47.8	46.7	45.1	43.5	41.8	40.2	38.3
107.5°	51.6	51.0	50.4	49.9	49.3	49.8	51.5	53.1	54.7	56.4	104.3
110°	52.1	51.6	51.0	50.3	49.8	56.8	71.4	86.1	100.9	115.5	157.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	52.7	52.2	51.7	51.3	50.8	77.3	130.8	184.3	237.8	291.2	301.7
115°	54.1	64.7	75.2	85.8	96.3	135.5	203.4	271.4	339.2	407.1	403.4
117.5°	220.9	255.6	290.3	325.0	359.7	385.2	401.6	418.1	434.5	450.9	448.4
120°	402.5	422.3	442.1	461.8	481.6	490.7	488.9	487.2	485.4	483.6	481.0
122.5°	502.3	506.1	509.9	513.8	517.6	519.1	517.9	516.9	515.9	514.8	511.9
125°	564.1	563.7	563.3	562.8	562.4	561.7	560.6	559.6	558.6	557.5	554.8
127.5°	603.2	603.1	603.0	602.9	602.9	602.1	600.6	599.1	597.6	596.1	594.0
130°	627.5	627.6	627.8	627.9	628.1	627.4	625.8	624.2	622.5	620.9	619.3
132.5°	651.3	651.4	651.6	651.7	651.9	651.2	649.9	648.5	647.1	645.7	644.1
135°	685.6	685.9	686.2	686.5	686.7	686.2	684.7	683.2	681.7	680.3	679.0
137.5°	716.8	717.4	717.8	718.3	718.9	718.4	716.9	715.5	714.1	712.7	711.1
140°	736.4	737.1	737.8	738.6	739.3	739.0	737.7	736.4	735.1	733.8	732.1
142.5°	755.4	756.1	756.9	757.6	758.3	758.1	756.9	755.6	754.5	753.3	751.4
145°	781.9	782.6	783.3	784.1	784.9	784.7	783.6	782.6	781.7	780.6	778.1
147.5°	805.2	805.9	806.5	807.1	807.8	807.7	806.9	806.2	805.4	804.6	802.1
150°	819.5	820.2	821.0	821.7	822.5	822.4	821.5	820.6	819.7	818.9	816.5
152.5°	831.6	832.6	833.6	834.5	835.6	835.6	834.7	833.8	832.9	832.1	829.8
155°	848.6	849.7	850.9	852.1	853.2	853.4	852.5	851.6	850.7	849.9	848.1
157.5°	863.9	865.2	866.3	867.4	868.6	868.6	867.6	866.7	865.6	864.6	863.4
160°	873.0	874.0	875.0	876.0	877.0	877.1	876.3	875.3	874.5	873.6	872.7
162.5°	880.3	881.6	882.9	884.1	885.4	885.5	884.5	883.5	882.5	881.6	880.8
165°	891.5	892.5	893.5	894.5	895.5	895.5	894.5	893.5	892.5	891.5	891.0
167.5°	898.4	899.8	901.1	902.4	903.7	903.8	902.9	901.8	900.8	899.8	899.4
170°	902.7	904.0	905.3	906.6	908.0	908.0	907.0	906.1	905.0	904.0	903.7
172.5°	905.8	907.1	908.4	909.7	911.1	911.3	910.2	909.2	908.1	907.1	906.8
175°	908.6	910.0	911.5	912.9	914.5	914.6	913.6	912.7	911.6	910.6	910.3
177.5°	910.3	911.3	912.4	913.5	914.5	914.6	913.8	913.0	912.2	911.3	911.3
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	7.4	7.1	6.9	6.9	6.0	5.7	4.7	3.9	4.1	4.2	4.1
90°	10.8	9.7	8.5	7.1	5.5	3.9	2.3	0.7	2.3	3.9	5.5
92.5°	14.1	13.6	13.0	12.7	12.9	13.0	13.2	13.3	13.2	13.0	12.9
95°	23.7	22.6	21.6	23.6	28.4	33.2	38.1	42.9	38.1	33.2	28.4
97.5°	29.7	27.3	25.0	30.5	44.2	57.9	71.4	85.1	71.4	57.9	44.2
100°	32.6	30.2	27.6	36.5	56.6	76.6	96.7	116.8	96.7	76.6	56.6
102.5°	80.4	101.2	122.1	134.6	138.8	143.1	147.4	151.7	147.4	143.1	138.8
105°	120.3	160.3	200.4	218.2	213.8	209.4	205.0	200.6	205.0	209.4	213.8
107.5°	152.4	200.4	248.4	270.6	267.0	263.5	260.0	256.4	260.0	263.5	267.0
110°	200.2	242.6	284.9	304.6	301.5	298.5	295.4	292.3	295.4	298.5	301.5





TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	312.2	322.6	333.1	337.0	334.2	331.6	328.9	326.1	328.9	331.6	334.2
115°	399.8	396.2	392.5	389.4	386.9	384.4	381.9	379.4	381.9	384.4	386.9
117.5°	445.9	443.4	440.8	438.2	435.4	432.6	429.8	427.1	429.8	432.6	435.4
120°	478.3	475.7	473.1	470.7	468.4	466.3	464.1	461.8	464.1	466.3	468.4
122.5°	509.1	506.1	503.3	500.7	498.4	496.1	493.8	491.4	493.8	496.1	498.4
125°	552.0	549.2	546.4	544.0	542.2	540.3	538.4	536.4	538.4	540.3	542.2
127.5°	591.9	589.8	587.8	585.7	583.5	581.5	579.3	577.2	579.3	581.5	583.5
130°	617.6	616.0	614.4	612.5	610.1	607.8	605.4	603.0	605.4	607.8	610.1
132.5°	642.4	640.8	639.2	637.4	635.5	633.5	631.5	629.5	631.5	633.5	635.5
135°	677.7	676.4	675.0	673.2	670.8	668.5	666.1	663.8	666.1	668.5	670.8
137.5°	709.6	708.1	706.6	705.0	703.4	701.8	700.1	698.5	700.1	701.8	703.4
140°	730.5	728.9	727.3	725.9	724.7	723.5	722.4	721.2	722.4	723.5	724.7
142.5°	749.6	747.7	745.8	744.4	743.4	742.3	741.2	740.2	741.2	742.3	743.4
145°	775.6	773.1	770.6	769.4	769.6	769.8	769.9	770.1	769.9	769.8	769.6
147.5°	799.7	797.2	794.8	793.8	794.4	794.9	795.5	796.0	795.5	794.9	794.4
150°	814.2	811.8	809.5	808.8	809.8	810.9	811.9	812.9	811.9	810.9	809.8
152.5°	827.6	825.4	823.1	822.6	823.7	824.9	826.0	827.2	826.0	824.9	823.7
155°	846.3	844.6	842.8	842.6	844.0	845.3	846.6	847.9	846.6	845.3	844.0
157.5°	862.1	860.9	859.7	859.7	860.7	861.9	863.0	864.1	863.0	861.9	860.7
160°	871.9	871.0	870.1	870.1	871.0	871.9	872.7	873.6	872.7	871.9	871.0
162.5°	880.1	879.2	878.4	878.5	879.4	880.3	881.2	882.0	881.2	880.3	879.4
165°	890.5	890.1	889.7	889.9	890.8	891.6	892.5	893.4	892.5	891.6	890.8
167.5°	898.9	898.5	898.1	898.3	899.2	900.1	901.0	901.8	901.0	900.1	899.2
170°	903.4	903.1	902.8	903.1	904.0	904.8	905.7	906.6	905.7	904.8	904.0
172.5°	906.5	906.3	906.0	906.3	907.1	908.0	908.9	909.7	908.9	908.0	907.1
175°	910.0	909.6	909.4	909.7	910.8	911.8	912.9	913.9	912.9	911.8	910.8
177.5°	911.2	911.0	910.9	911.3	912.1	912.9	913.7	914.5	913.7	912.9	912.1
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	4.3	4.4	4.5	4.7	4.8	4.9	4.8	5.0	5.1	4.9	5.0
90°	7.1	8.5	9.7	10.8	12.1	13.2	13.9	14.7	15.4	16.1	16.7
92.5°	12.7	13.0	13.6	14.1	14.7	15.3	15.6	16.1	16.5	16.9	17.2
95°	23.6	21.6	22.6	23.7	24.7	25.7	26.5	27.2	27.9	28.7	28.9
97.5°	30.5	25.0	27.3	29.7	32.0	34.4	35.1	35.6	36.2	36.8	37.1
100°	36.5	27.6	30.2	32.6	35.2	37.6	38.7	40.0	41.1	42.3	43.1
102.5°	134.6	122.1	101.2	80.4	59.5	38.6	40.2	41.8	43.3	44.8	45.7
105°	218.2	200.4	160.3	120.3	80.3	40.2	41.8	43.5	45.1	46.7	47.8
107.5°	270.6	248.4	200.4	152.4	104.3	56.4	54.7	53.1	51.5	49.8	49.3
110°	304.6	284.9	242.6	200.2	157.9	115.5	100.9	86.1	71.4	56.8	49.8



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	337.0	333.1	322.6	312.2	301.7	291.2	237.8	184.3	130.8	77.3	50.8
115°	389.4	392.5	396.2	399.8	403.4	407.1	339.2	271.4	203.4	135.5	96.3
117.5°	438.2	440.8	443.4	445.9	448.4	450.9	434.5	418.1	401.6	385.2	359.7
120°	470.7	473.1	475.7	478.3	481.0	483.6	485.4	487.2	488.9	490.7	481.6
122.5°	500.7	503.3	506.1	509.1	511.9	514.8	515.9	516.9	517.9	519.1	517.6
125°	544.0	546.4	549.2	552.0	554.8	557.5	558.6	559.6	560.6	561.7	562.4
127.5°	585.7	587.8	589.8	591.9	594.0	596.1	597.6	599.1	600.6	602.1	602.9
130°	612.5	614.4	616.0	617.6	619.3	620.9	622.5	624.2	625.8	627.4	628.1
132.5°	637.4	639.2	640.8	642.4	644.1	645.7	647.1	648.5	649.9	651.2	651.9
135°	673.2	675.0	676.4	677.7	679.0	680.3	681.7	683.2	684.7	686.2	686.7
137.5°	705.0	706.6	708.1	709.6	711.1	712.7	714.1	715.5	716.9	718.4	718.9
140°	725.9	727.3	728.9	730.5	732.1	733.8	735.1	736.4	737.7	739.0	739.3
142.5°	744.4	745.8	747.7	749.6	751.4	753.3	754.5	755.6	756.9	758.1	758.3
145°	769.4	770.6	773.1	775.6	778.1	780.6	781.7	782.6	783.6	784.7	784.9
147.5°	793.8	794.8	797.2	799.7	802.1	804.6	805.4	806.2	806.9	807.7	807.8
150°	808.8	809.5	811.8	814.2	816.5	818.9	819.7	820.6	821.5	822.4	822.5
152.5°	822.6	823.1	825.4	827.6	829.8	832.1	832.9	833.8	834.7	835.6	835.6
155°	842.6	842.8	844.6	846.3	848.1	849.9	850.7	851.6	852.5	853.4	853.2
157.5°	859.7	859.7	860.9	862.1	863.4	864.6	865.6	866.7	867.6	868.6	868.6
160°	870.1	870.1	871.0	871.9	872.7	873.6	874.5	875.3	876.3	877.1	877.0
162.5°	878.5	878.4	879.2	880.1	880.8	881.6	882.5	883.5	884.5	885.5	885.4
165°	889.9	889.7	890.1	890.5	891.0	891.5	892.5	893.5	894.5	895.5	895.5
167.5°	898.3	898.1	898.5	898.9	899.4	899.8	900.8	901.8	902.9	903.8	903.7
170°	903.1	902.8	903.1	903.4	903.7	904.0	905.0	906.1	907.0	908.0	908.0
172.5°	906.3	906.0	906.3	906.5	906.8	907.1	908.1	909.2	910.2	911.3	911.1
175°	909.7	909.4	909.6	910.0	910.3	910.6	911.6	912.7	913.6	914.6	914.5
177.5°	911.3	910.9	911.0	911.2	911.3	911.3	912.2	913.0	913.8	914.6	914.5
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	5.1	5.0	5.1	4.9	5.1	5.0	5.1	5.0	4.9	5.1	5.0
90°	17.0	17.2	17.5	17.8	17.5	17.2	17.0	16.7	16.1	15.4	14.7
92.5°	17.2	17.4	17.6	17.8	17.6	17.4	17.2	17.2	16.9	16.5	16.1
95°	28.8	28.7	28.6	28.4	28.6	28.7	28.8	28.9	28.7	27.9	27.2
97.5°	37.3	37.5	37.7	37.9	37.7	37.5	37.3	37.1	36.8	36.2	35.6
100°	43.4	43.6	43.9	44.2	43.9	43.6	43.4	43.1	42.3	41.1	40.0
102.5°	46.2	46.6	46.9	47.4	46.9	46.6	46.2	45.7	44.8	43.3	41.8
105°	48.4	49.0	49.6	50.1	49.6	49.0	48.4	47.8	46.7	45.1	43.5
107.5°	49.9	50.4	51.0	51.6	51.0	50.4	49.9	49.3	49.8	51.5	53.1
110°	50.3	51.0	51.6	52.1	51.6	51.0	50.3	49.8	56.8	71.4	86.1



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	51.3	51.7	52.2	52.7	52.2	51.7	51.3	50.8	77.3	130.8	184.3
115°	85.8	75.2	64.7	54.1	64.7	75.2	85.8	96.3	135.5	203.4	271.4
117.5°	325.0	290.3	255.6	220.9	255.6	290.3	325.0	359.7	385.2	401.6	418.1
120°	461.8	442.1	422.3	402.5	422.3	442.1	461.8	481.6	490.7	488.9	487.2
122.5°	513.8	509.9	506.1	502.3	506.1	509.9	513.8	517.6	519.1	517.9	516.9
125°	562.8	563.3	563.7	564.1	563.7	563.3	562.8	562.4	561.7	560.6	559.6
127.5°	602.9	603.0	603.1	603.2	603.1	603.0	602.9	602.9	602.1	600.6	599.1
130°	627.9	627.8	627.6	627.5	627.6	627.8	627.9	628.1	627.4	625.8	624.2
132.5°	651.7	651.6	651.4	651.3	651.4	651.6	651.7	651.9	651.2	649.9	648.5
135°	686.5	686.2	685.9	685.6	685.9	686.2	686.5	686.7	686.2	684.7	683.2
137.5°	718.3	717.8	717.4	716.8	717.4	717.8	718.3	718.9	718.4	716.9	715.5
140°	738.6	737.8	737.1	736.4	737.1	737.8	738.6	739.3	739.0	737.7	736.4
142.5°	757.6	756.9	756.1	755.4	756.1	756.9	757.6	758.3	758.1	756.9	755.6
145°	784.1	783.3	782.6	781.9	782.6	783.3	784.1	784.9	784.7	783.6	782.6
147.5°	807.1	806.5	805.9	805.2	805.9	806.5	807.1	807.8	807.7	806.9	806.2
150°	821.7	821.0	820.2	819.5	820.2	821.0	821.7	822.5	822.4	821.5	820.6
152.5°	834.5	833.6	832.6	831.6	832.6	833.6	834.5	835.6	835.6	834.7	833.8
155°	852.1	850.9	849.7	848.6	849.7	850.9	852.1	853.2	853.4	852.5	851.6
157.5°	867.4	866.3	865.2	863.9	865.2	866.3	867.4	868.6	868.6	867.6	866.7
160°	876.0	875.0	874.0	873.0	874.0	875.0	876.0	877.0	877.1	876.3	875.3
162.5°	884.1	882.9	881.6	880.3	881.6	882.9	884.1	885.4	885.5	884.5	883.5
165°	894.5	893.5	892.5	891.5	892.5	893.5	894.5	895.5	895.5	894.5	893.5
167.5°	902.4	901.1	899.8	898.4	899.8	901.1	902.4	903.7	903.8	902.9	901.8
170°	906.6	905.3	904.0	902.7	904.0	905.3	906.6	908.0	908.0	907.0	906.1
172.5°	909.7	908.4	907.1	905.8	907.1	908.4	909.7	911.1	911.3	910.2	909.2
175°	912.9	911.5	910.0	908.6	910.0	911.5	912.9	914.5	914.6	913.6	912.7
177.5°	913.5	912.4	911.3	910.3	911.3	912.4	913.5	914.5	914.6	913.8	913.0
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	4.8	4.9	4.8	4.7	4.5	4.4	4.3	4.1	4.2	4.1	3.9
90°	13.9	13.2	12.1	10.8	9.7	8.5	7.1	5.5	3.9	2.3	0.7
92.5°	15.6	15.3	14.7	14.1	13.6	13.0	12.7	12.9	13.0	13.2	13.3
95°	26.5	25.7	24.7	23.7	22.6	21.6	23.6	28.4	33.2	38.1	42.9
97.5°	35.1	34.4	32.0	29.7	27.3	25.0	30.5	44.2	57.9	71.4	85.1
100°	38.7	37.6	35.2	32.6	30.2	27.6	36.5	56.6	76.6	96.7	116.8
102.5°	40.2	38.6	59.5	80.4	101.2	122.1	134.6	138.8	143.1	147.4	151.7
105°	41.8	40.2	80.3	120.3	160.3	200.4	218.2	213.8	209.4	205.0	200.6
107.5°	54.7	56.4	104.3	152.4	200.4	248.4	270.6	267.0	263.5	260.0	256.4
110°	100.9	115.5	157.9	200.2	242.6	284.9	304.6	301.5	298.5	295.4	292.3



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	237.8	291.2	301.7	312.2	322.6	333.1	337.0	334.2	331.6	328.9	326.1
115°	339.2	407.1	403.4	399.8	396.2	392.5	389.4	386.9	384.4	381.9	379.4
117.5°	434.5	450.9	448.4	445.9	443.4	440.8	438.2	435.4	432.6	429.8	427.1
120°	485.4	483.6	481.0	478.3	475.7	473.1	470.7	468.4	466.3	464.1	461.8
122.5°	515.9	514.8	511.9	509.1	506.1	503.3	500.7	498.4	496.1	493.8	491.4
125°	558.6	557.5	554.8	552.0	549.2	546.4	544.0	542.2	540.3	538.4	536.4
127.5°	597.6	596.1	594.0	591.9	589.8	587.8	585.7	583.5	581.5	579.3	577.2
130°	622.5	620.9	619.3	617.6	616.0	614.4	612.5	610.1	607.8	605.4	603.0
132.5°	647.1	645.7	644.1	642.4	640.8	639.2	637.4	635.5	633.5	631.5	629.5
135°	681.7	680.3	679.0	677.7	676.4	675.0	673.2	670.8	668.5	666.1	663.8
137.5°	714.1	712.7	711.1	709.6	708.1	706.6	705.0	703.4	701.8	700.1	698.5
140°	735.1	733.8	732.1	730.5	728.9	727.3	725.9	724.7	723.5	722.4	721.2
142.5°	754.5	753.3	751.4	749.6	747.7	745.8	744.4	743.4	742.3	741.2	740.2
145°	781.7	780.6	778.1	775.6	773.1	770.6	769.4	769.6	769.8	769.9	770.1
147.5°	805.4	804.6	802.1	799.7	797.2	794.8	793.8	794.4	794.9	795.5	796.0
150°	819.7	818.9	816.5	814.2	811.8	809.5	808.8	809.8	810.9	811.9	812.9
152.5°	832.9	832.1	829.8	827.6	825.4	823.1	822.6	823.7	824.9	826.0	827.2
155°	850.7	849.9	848.1	846.3	844.6	842.8	842.6	844.0	845.3	846.6	847.9
157.5°	865.6	864.6	863.4	862.1	860.9	859.7	859.7	860.7	861.9	863.0	864.1
160°	874.5	873.6	872.7	871.9	871.0	870.1	870.1	871.0	871.9	872.7	873.6
162.5°	882.5	881.6	880.8	880.1	879.2	878.4	878.5	879.4	880.3	881.2	882.0
165°	892.5	891.5	891.0	890.5	890.1	889.7	889.9	890.8	891.6	892.5	893.4
167.5°	900.8	899.8	899.4	898.9	898.5	898.1	898.3	899.2	900.1	901.0	901.8
170°	905.0	904.0	903.7	903.4	903.1	902.8	903.1	904.0	904.8	905.7	906.6
172.5°	908.1	907.1	906.8	906.5	906.3	906.0	906.3	907.1	908.0	908.9	909.7
175°	911.6	910.6	910.3	910.0	909.6	909.4	909.7	910.8	911.8	912.9	913.9
177.5°	912.2	911.3	911.3	911.2	911.0	910.9	911.3	912.1	912.9	913.7	914.5
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	4.7	5.7	6.0	6.9	6.9	7.1	7.4	7.4	7.4	7.4	7.4
90°	2.3	3.9	5.5	7.1	8.5	9.7	10.8	12.1	13.2	13.9	14.7
92.5°	13.2	13.0	12.9	12.7	13.0	13.6	14.1	14.7	15.3	15.6	16.1
95°	38.1	33.2	28.4	23.6	21.6	22.6	23.7	24.7	25.7	26.5	27.2
97.5°	71.4	57.9	44.2	30.5	25.0	27.3	29.7	32.0	34.4	35.1	35.6
100°	96.7	76.6	56.6	36.5	27.6	30.2	32.6	35.2	37.6	38.7	40.0
102.5°	147.4	143.1	138.8	134.6	122.1	101.2	80.4	59.5	38.6	40.2	41.8
105°	205.0	209.4	213.8	218.2	200.4	160.3	120.3	80.3	40.2	41.8	43.5
107.5°	260.0	263.5	267.0	270.6	248.4	200.4	152.4	104.3	56.4	54.7	53.1
110°	295.4	298.5	301.5	304.6	284.9	242.6	200.2	157.9	115.5	100.9	86.1





TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	328.9	331.6	334.2	337.0	333.1	322.6	312.2	301.7	291.2	237.8	184.3
115°	381.9	384.4	386.9	389.4	392.5	396.2	399.8	403.4	407.1	339.2	271.4
117.5°	429.8	432.6	435.4	438.2	440.8	443.4	445.9	448.4	450.9	434.5	418.1
120°	464.1	466.3	468.4	470.7	473.1	475.7	478.3	481.0	483.6	485.4	487.2
122.5°	493.8	496.1	498.4	500.7	503.3	506.1	509.1	511.9	514.8	515.9	516.9
125°	538.4	540.3	542.2	544.0	546.4	549.2	552.0	554.8	557.5	558.6	559.6
127.5°	579.3	581.5	583.5	585.7	587.8	589.8	591.9	594.0	596.1	597.6	599.1
130°	605.4	607.8	610.1	612.5	614.4	616.0	617.6	619.3	620.9	622.5	624.2
132.5°	631.5	633.5	635.5	637.4	639.2	640.8	642.4	644.1	645.7	647.1	648.5
135°	666.1	668.5	670.8	673.2	675.0	676.4	677.7	679.0	680.3	681.7	683.2
137.5°	700.1	701.8	703.4	705.0	706.6	708.1	709.6	711.1	712.7	714.1	715.5
140°	722.4	723.5	724.7	725.9	727.3	728.9	730.5	732.1	733.8	735.1	736.4
142.5°	741.2	742.3	743.4	744.4	745.8	747.7	749.6	751.4	753.3	754.5	755.6
145°	769.9	769.8	769.6	769.4	770.6	773.1	775.6	778.1	780.6	781.7	782.6
147.5°	795.5	794.9	794.4	793.8	794.8	797.2	799.7	802.1	804.6	805.4	806.2
150°	811.9	810.9	809.8	808.8	809.5	811.8	814.2	816.5	818.9	819.7	820.6
152.5°	826.0	824.9	823.7	822.6	823.1	825.4	827.6	829.8	832.1	832.9	833.8
155°	846.6	845.3	844.0	842.6	842.8	844.6	846.3	848.1	849.9	850.7	851.6
157.5°	863.0	861.9	860.7	859.7	859.7	860.9	862.1	863.4	864.6	865.6	866.7
160°	872.7	871.9	871.0	870.1	870.1	871.0	871.9	872.7	873.6	874.5	875.3
162.5°	881.2	880.3	879.4	878.5	878.4	879.2	880.1	880.8	881.6	882.5	883.5
165°	892.5	891.6	890.8	889.9	889.7	890.1	890.5	891.0	891.5	892.5	893.5
167.5°	901.0	900.1	899.2	898.3	898.1	898.5	898.9	899.4	899.8	900.8	901.8
170°	905.7	904.8	904.0	903.1	902.8	903.1	903.4	903.7	904.0	905.0	906.1
172.5°	908.9	908.0	907.1	906.3	906.0	906.3	906.5	906.8	907.1	908.1	909.2
175°	912.9	911.8	910.8	909.7	909.4	909.6	910.0	910.3	910.6	911.6	912.7
177.5°	913.7	912.9	912.1	911.3	910.9	911.0	911.2	911.3	911.3	912.2	913.0
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9	911.9



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**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°	7.7	7.8	7.8	7.8	8.1	7.9	8.0
90°	15.4	16.1	16.7	17.0	17.2	17.5	17.8
92.5°	16.5	16.9	17.2	17.2	17.4	17.6	17.8
95°	27.9	28.7	28.9	28.8	28.7	28.6	28.4
97.5°	36.2	36.8	37.1	37.3	37.5	37.7	37.9
100°	41.1	42.3	43.1	43.4	43.6	43.9	44.2
102.5°	43.3	44.8	45.7	46.2	46.6	46.9	47.4
105°	45.1	46.7	47.8	48.4	49.0	49.6	50.1
107.5°	51.5	49.8	49.3	49.9	50.4	51.0	51.6
110°	71.4	56.8	49.8	50.3	51.0	51.6	52.1



TEST NUMBER: P331471-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	130.8	77.3	50.8	51.3	51.7	52.2	52.7
115°	203.4	135.5	96.3	85.8	75.2	64.7	54.1
117.5°	401.6	385.2	359.7	325.0	290.3	255.6	220.9
120°	488.9	490.7	481.6	461.8	442.1	422.3	402.5
122.5°	517.9	519.1	517.6	513.8	509.9	506.1	502.3
125°	560.6	561.7	562.4	562.8	563.3	563.7	564.1
127.5°	600.6	602.1	602.9	602.9	603.0	603.1	603.2
130°	625.8	627.4	628.1	627.9	627.8	627.6	627.5
132.5°	649.9	651.2	651.9	651.7	651.6	651.4	651.3
135°	684.7	686.2	686.7	686.5	686.2	685.9	685.6
137.5°	716.9	718.4	718.9	718.3	717.8	717.4	716.8
140°	737.7	739.0	739.3	738.6	737.8	737.1	736.4
142.5°	756.9	758.1	758.3	757.6	756.9	756.1	755.4
145°	783.6	784.7	784.9	784.1	783.3	782.6	781.9
147.5°	806.9	807.7	807.8	807.1	806.5	805.9	805.2
150°	821.5	822.4	822.5	821.7	821.0	820.2	819.5
152.5°	834.7	835.6	835.6	834.5	833.6	832.6	831.6
155°	852.5	853.4	853.2	852.1	850.9	849.7	848.6
157.5°	867.6	868.6	868.6	867.4	866.3	865.2	863.9
160°	876.3	877.1	877.0	876.0	875.0	874.0	873.0
162.5°	884.5	885.5	885.4	884.1	882.9	881.6	880.3
165°	894.5	895.5	895.5	894.5	893.5	892.5	891.5
167.5°	902.9	903.8	903.7	902.4	901.1	899.8	898.4
170°	907.0	908.0	908.0	906.6	905.3	904.0	902.7
172.5°	910.2	911.3	911.1	909.7	908.4	907.1	905.8
175°	913.6	914.6	914.5	912.9	911.5	910.0	908.6
177.5°	913.8	914.6	914.5	913.5	912.4	911.3	910.3
180°	911.9	911.9	911.9	911.9	911.9	911.9	911.9

(END OF REPORT)