

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: PORTFOLIO

Report Number: P244115

Luminaire Tested: **LD8B50D010 ER8B50850 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244115  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B50D010 ER8B50850 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

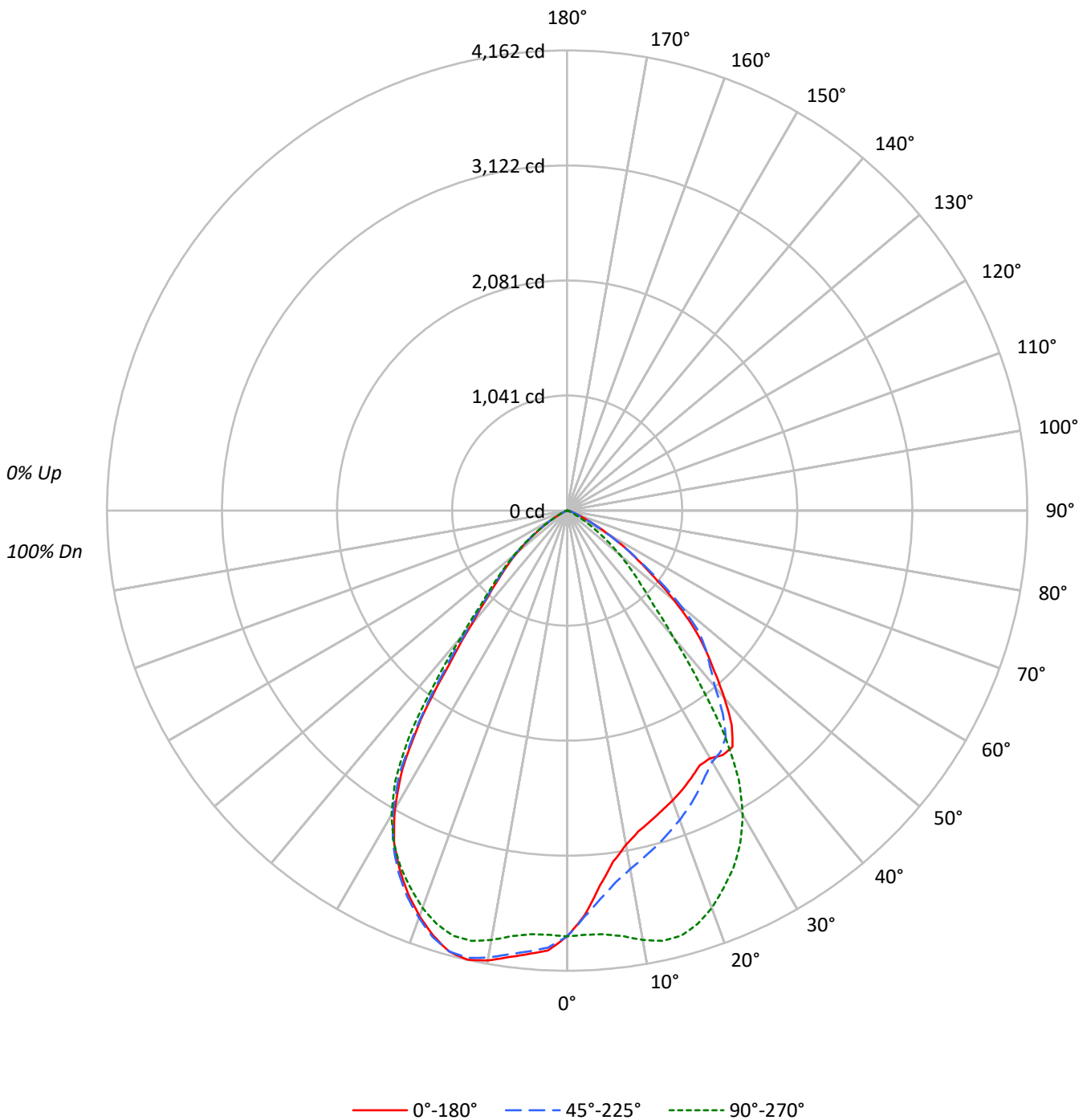
Lumens per Lamp: N/A  
Luminaire Lumens: 5895.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	118754	118754	118754
5°	105362	119049	124624
10°	96062	123470	129362
15°	92835	127077	131824
20°	91509	125512	128101
25°	90613	121184	121942
30°	92090	113094	111004
35°	98157	93587	86807
40°	88957	59914	54254
45°	76778	40993	38167
50°	60580	29901	28155
55°	42052	18386	17300
60°	26772	9300	8301
65°	13360	3692	2809
70°	7393	1821	1001
75°	5302	1322	477
80°	4315	906	178
85°	4670	708	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	358.9	6.1
10°-20°	1036.7	17.6
20°-30°	1504.7	25.5
30°-40°	1482.0	25.1
40°-50°	929.0	15.8
50°-60°	448.3	7.6
60°-70°	108.5	1.8
70°-80°	21.9	0.4
80°-90°	5.0	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2900.3	49.2
0°-40°	4382.3	74.3
0°-60°	5759.6	97.7
0°-90°	5895.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5895.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3851	3851	3851	3851	3851	
5°	3404	3519	3846	4002	4026	315
15°	2908	3137	3981	4126	4129	822
25°	2663	2802	3562	3610	3584	1232
35°	2608	2501	2486	2344	2306	1578
45°	1761	1773	940	900	875	1346
55°	782	808	342	338	322	720
65°	183	181	51	44	38	209
75°	44	38	11	5	4	50
85°	13	10	2	0	0	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1
2.5°	3660.9	3637.6	3594.1	3646.7	3646.7	3617.3	3676.0	3640.6	3669.0	3713.5	3674.0
5°	3403.8	3384.6	3348.2	3403.8	3410.9	3383.6	3454.4	3428.1	3469.6	3524.3	3519.2
7.5°	3200.5	3176.2	3142.8	3200.5	3211.6	3193.4	3261.2	3249.0	3303.7	3374.5	3386.6
10°	3067.9	3042.6	3013.3	3065.9	3074.0	3061.8	3130.6	3123.6	3177.2	3259.2	3291.5
12.5°	2973.8	2952.6	2920.2	2975.8	2984.9	2967.7	3032.5	3029.5	3085.1	3171.1	3211.6
15°	2908.0	2882.7	2853.4	2901.0	2913.1	2893.9	2955.6	2949.5	3006.2	3091.2	3136.7
17.5°	2846.3	2823.0	2792.7	2837.2	2849.4	2829.1	2889.8	2879.7	2928.3	3009.2	3055.8
20°	2788.6	2763.4	2736.0	2781.6	2788.6	2765.4	2826.1	2812.9	2856.4	2931.3	2976.8
22.5°	2728.9	2702.6	2674.3	2718.8	2725.9	2702.6	2758.3	2743.1	2783.6	2851.4	2892.9
25°	2663.2	2638.9	2610.6	2652.0	2658.1	2632.8	2691.5	2672.3	2707.7	2767.4	2801.8
27.5°	2597.4	2574.1	2542.8	2585.3	2588.3	2564.0	2617.6	2591.3	2620.7	2675.3	2704.7
30°	2586.3	2560.0	2527.6	2562.0	2563.0	2531.6	2582.2	2550.9	2567.1	2607.5	2624.7
32.5°	2621.7	2595.4	2562.0	2590.3	2587.3	2552.9	2601.5	2563.0	2568.1	2589.3	2585.3
35°	2607.5	2576.2	2536.7	2567.1	2567.1	2525.6	2574.1	2528.6	2523.5	2526.6	2501.3
37.5°	2446.6	2422.4	2384.9	2414.3	2411.2	2379.9	2417.3	2379.9	2362.7	2355.6	2310.0
40°	2209.9	2180.5	2152.2	2183.6	2186.6	2153.2	2201.8	2159.3	2154.2	2134.0	2080.4
42.5°	1970.1	1959.9	1932.6	1958.9	1973.1	1944.8	1985.2	1965.0	1968.0	1963.0	1912.4
45°	1760.6	1743.4	1723.2	1753.5	1762.6	1748.5	1788.9	1776.8	1788.9	1814.2	1772.8
47.5°	1535.0	1517.8	1495.5	1527.9	1544.1	1517.8	1552.2	1548.1	1566.3	1609.8	1605.8
50°	1262.8	1250.6	1246.6	1250.6	1260.8	1248.6	1272.9	1273.9	1286.1	1345.8	1349.8
52.5°	999.7	996.7	982.5	995.7	995.7	976.4	1000.7	989.6	1001.7	1042.2	1068.5
55°	782.2	779.1	770.0	782.2	769.0	761.9	769.0	757.9	748.8	780.1	807.5
57.5°	609.1	599.0	587.9	592.9	591.9	576.8	584.8	571.7	564.6	575.7	600.0
60°	434.1	431.0	420.9	426.0	430.0	418.9	427.0	420.9	408.8	417.9	418.9
62.5°	288.4	290.4	284.3	285.3	282.3	280.3	285.3	288.4	285.3	281.3	282.3
65°	183.1	182.1	181.1	182.1	184.2	180.1	183.1	185.2	182.1	182.1	181.1
67.5°	121.4	118.4	115.4	117.4	119.4	116.4	119.4	118.4	119.4	118.4	115.4
70°	82.0	80.9	79.9	80.9	80.9	78.9	80.9	79.9	80.9	79.9	76.9
72.5°	59.7	59.7	58.7	59.7	59.7	57.7	58.7	56.7	57.7	56.7	54.6
75°	44.5	44.5	43.5	44.5	43.5	42.5	43.5	42.5	40.5	40.5	38.5
77.5°	32.4	32.4	32.4	32.4	32.4	31.4	31.4	30.4	29.3	28.3	28.3
80°	24.3	23.3	23.3	23.3	23.3	22.3	23.3	22.3	21.2	20.2	19.2
82.5°	17.2	18.2	17.2	17.2	17.2	16.2	17.2	16.2	16.2	15.2	13.2
85°	13.2	13.2	13.2	13.2	13.2	12.1	12.1	12.1	11.1	11.1	10.1
87.5°	7.1	7.1	7.1	8.1	7.1	7.1	7.1	6.1	6.1	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1
2.5°	3726.6	3731.7	3720.6	3737.8	3804.5	3750.9	3773.2	3780.3	3830.8	3840.0	3833.9
5°	3585.0	3607.2	3621.4	3659.8	3733.7	3695.3	3734.7	3760.0	3824.8	3846.0	3851.1
7.5°	3473.7	3520.2	3554.6	3617.3	3704.4	3675.0	3734.7	3776.2	3855.1	3882.5	3895.6
10°	3390.7	3461.5	3521.2	3607.2	3705.4	3686.2	3764.1	3822.8	3910.8	3943.2	3959.4
12.5°	3328.0	3414.0	3493.9	3603.2	3709.4	3700.3	3794.4	3861.2	3954.3	3986.7	4005.9
15°	3259.2	3358.3	3451.4	3573.8	3688.2	3686.2	3787.3	3858.2	3953.3	3980.6	3998.8
17.5°	3177.2	3283.4	3385.6	3518.2	3631.5	3633.5	3735.7	3805.6	3898.6	3920.9	3933.0
20°	3094.2	3199.5	3301.7	3438.3	3549.6	3552.6	3652.8	3717.5	3806.6	3824.8	3827.8
22.5°	3006.2	3104.3	3206.5	3342.1	3449.4	3451.4	3550.6	3611.3	3687.2	3696.3	3704.4
25°	2906.0	3002.1	3098.3	3232.8	3335.0	3341.1	3431.2	3484.8	3554.6	3561.7	3564.7
27.5°	2801.8	2880.7	2972.8	3088.2	3191.4	3187.3	3272.3	3333.0	3395.8	3391.7	3390.7
30°	2696.6	2762.3	2819.0	2930.3	3006.2	3009.2	3089.2	3118.5	3184.3	3176.2	3175.2
32.5°	2622.7	2639.9	2655.1	2711.7	2783.6	2758.3	2812.9	2849.4	2894.9	2891.9	2892.9
35°	2487.1	2455.7	2410.2	2418.3	2461.8	2422.4	2451.7	2450.7	2497.2	2486.1	2499.3
37.5°	2255.4	2166.4	2065.2	2007.5	2015.6	1966.0	1955.9	1980.2	1996.4	1965.0	1976.1
40°	2008.5	1877.0	1719.1	1587.6	1580.5	1518.8	1507.6	1483.4	1514.7	1488.4	1496.5
42.5°	1826.4	1652.3	1444.9	1285.0	1250.6	1199.0	1168.7	1164.6	1173.7	1155.5	1150.5
45°	1686.7	1501.6	1263.8	1080.7	1042.2	986.5	956.2	945.1	946.1	940.0	934.9
47.5°	1522.8	1336.6	1095.8	908.6	865.1	812.5	782.2	775.1	779.1	771.0	765.0
50°	1296.2	1129.2	909.6	738.6	700.2	661.7	637.5	630.4	629.4	623.3	619.2
52.5°	1052.3	913.7	723.5	580.8	546.4	509.0	491.8	482.7	483.7	477.6	471.5
55°	814.5	728.5	560.6	439.1	407.8	378.4	362.2	351.1	348.1	342.0	339.0
57.5°	606.1	548.4	419.9	316.7	298.5	270.2	254.0	240.8	238.8	235.8	234.7
60°	425.0	383.5	295.5	225.6	204.4	187.2	171.0	157.8	151.8	150.8	147.7
62.5°	275.2	249.9	194.3	150.8	134.6	122.4	106.2	97.1	93.1	89.0	90.1
65°	171.0	151.8	121.4	97.1	88.0	78.9	66.8	58.7	54.6	50.6	51.6
67.5°	106.2	95.1	76.9	62.7	56.7	49.6	40.5	34.4	31.4	28.3	26.3
70°	71.8	61.7	52.6	44.5	40.5	35.4	29.3	24.3	22.3	20.2	18.2
72.5°	50.6	45.5	38.5	33.4	30.4	26.3	22.3	19.2	17.2	15.2	13.2
75°	36.4	32.4	28.3	24.3	22.3	20.2	17.2	15.2	13.2	11.1	9.1
77.5°	26.3	23.3	20.2	18.2	17.2	14.2	12.1	11.1	10.1	8.1	6.1
80°	18.2	16.2	13.2	12.1	12.1	10.1	9.1	8.1	7.1	5.1	4.0
82.5°	12.1	11.1	10.1	9.1	8.1	7.1	7.1	5.1	4.0	3.0	2.0
85°	9.1	8.1	7.1	6.1	6.1	5.1	4.0	3.0	3.0	2.0	1.0
87.5°	5.1	5.1	4.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1
2.5°	3885.5	3888.5	3905.7	3892.6	3926.0	3950.2	3938.1	3965.4	3956.3	3954.3	3985.7
5°	3911.8	3918.9	3942.2	3930.0	3966.4	3992.7	3980.6	4011.0	4001.8	3999.8	4032.2
7.5°	3962.4	3969.5	3989.7	3979.6	4018.0	4041.3	4026.1	4059.5	4047.4	4046.4	4077.7
10°	4026.1	4036.3	4053.5	4043.3	4078.7	4099.0	4083.8	4116.2	4105.1	4100.0	4134.4
12.5°	4073.7	4080.8	4098.0	4089.9	4124.3	4139.5	4126.3	4157.7	4143.5	4139.5	4169.8
15°	4062.6	4069.6	4083.8	4076.7	4109.1	4123.3	4106.1	4140.5	4126.3	4118.2	4145.5
17.5°	3991.7	3995.8	4005.9	3998.8	4033.2	4042.3	4023.1	4057.5	4044.3	4030.2	4056.5
20°	3887.5	3885.5	3891.6	3888.5	3916.9	3921.9	3909.8	3935.1	3919.9	3911.8	3927.0
22.5°	3758.0	3756.0	3760.0	3751.9	3780.3	3783.3	3765.1	3795.4	3780.3	3765.1	3790.4
25°	3614.3	3603.2	3601.2	3604.2	3623.4	3626.5	3607.2	3629.5	3610.3	3598.1	3622.4
27.5°	3437.2	3423.1	3420.0	3423.1	3442.3	3428.1	3411.9	3428.1	3408.9	3397.8	3413.0
30°	3218.7	3198.4	3189.3	3183.3	3203.5	3198.4	3161.0	3179.2	3148.9	3132.7	3143.8
32.5°	2924.2	2913.1	2888.8	2874.7	2893.9	2855.4	2832.2	2832.2	2820.0	2792.7	2798.8
35°	2515.4	2498.2	2476.0	2463.8	2466.9	2415.3	2376.8	2384.9	2344.4	2337.4	2340.4
37.5°	1998.4	1970.1	1962.0	1936.7	1942.7	1897.2	1844.6	1845.6	1824.4	1802.1	1795.0
40°	1501.6	1496.5	1488.4	1467.2	1475.3	1425.7	1405.5	1406.5	1392.3	1376.1	1384.2
42.5°	1160.6	1144.4	1139.3	1132.3	1134.3	1126.2	1099.9	1102.9	1090.8	1086.7	1082.7
45°	943.0	925.8	913.7	919.8	919.8	910.7	900.5	906.6	900.5	892.4	896.5
47.5°	777.1	760.9	754.8	753.8	760.9	754.8	744.7	746.7	745.7	742.7	740.7
50°	620.3	616.2	611.2	608.1	611.2	609.1	600.0	605.1	608.1	598.0	601.0
52.5°	472.5	472.5	471.5	464.4	470.5	464.4	463.4	465.4	462.4	458.4	457.4
55°	346.1	343.0	338.0	336.9	339.0	336.9	334.9	335.9	338.0	327.8	327.8
57.5°	236.8	234.7	231.7	231.7	235.8	230.7	227.7	231.7	227.7	223.6	223.6
60°	151.8	150.8	147.7	147.7	147.7	146.7	143.7	144.7	146.7	140.6	141.7
62.5°	91.1	88.0	87.0	86.0	87.0	86.0	86.0	85.0	84.0	84.0	80.9
65°	49.6	47.6	45.5	46.5	46.5	45.5	45.5	45.5	43.5	42.5	41.5
67.5°	25.3	23.3	23.3	22.3	22.3	22.3	22.3	21.2	21.2	21.2	20.2
70°	16.2	15.2	14.2	14.2	14.2	13.2	13.2	13.2	13.2	13.2	12.1
72.5°	11.1	10.1	9.1	9.1	9.1	8.1	8.1	8.1	8.1	7.1	7.1
75°	8.1	7.1	6.1	6.1	6.1	5.1	5.1	5.1	5.1	5.1	5.1
77.5°	5.1	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0
80°	3.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
82.5°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P244115

CATALOG NUMBER: LD8B50D010 ER8B50850 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1	3851.1
2.5°	3974.5	3966.4	3971.5	4008.9	3992.7	3987.7	3945.2	3982.6
5°	4022.1	4016.0	4016.0	4058.5	4039.3	4035.2	3993.8	4026.1
7.5°	4066.6	4060.5	4061.5	4105.1	4089.9	4083.8	4042.3	4074.7
10°	4124.3	4120.2	4121.2	4162.7	4146.5	4140.5	4098.0	4131.4
12.5°	4158.7	4152.6	4152.6	4197.1	4178.9	4169.8	4129.3	4161.7
15°	4132.4	4123.3	4123.3	4167.8	4147.6	4134.4	4099.0	4129.3
17.5°	4042.3	4033.2	4033.2	4071.7	4056.5	4037.3	4000.8	4029.2
20°	3916.9	3905.7	3902.7	3947.2	3926.0	3908.8	3876.4	3903.7
22.5°	3775.2	3770.1	3761.0	3805.6	3786.3	3768.1	3733.7	3755.0
25°	3605.2	3597.1	3588.0	3631.5	3612.3	3594.1	3566.8	3584.0
27.5°	3393.7	3394.7	3389.7	3424.1	3404.9	3394.7	3361.4	3389.7
30°	3137.7	3126.6	3122.6	3163.0	3144.8	3131.7	3090.2	3117.5
32.5°	2803.8	2787.6	2766.4	2811.9	2780.6	2769.4	2734.0	2773.5
35°	2318.1	2313.1	2293.9	2332.3	2315.1	2294.9	2272.6	2306.0
37.5°	1792.0	1796.0	1794.0	1804.1	1794.0	1780.8	1756.6	1744.4
40°	1368.0	1357.9	1349.8	1368.0	1346.8	1346.8	1332.6	1347.8
42.5°	1072.6	1068.5	1078.6	1082.7	1070.5	1068.5	1066.5	1065.5
45°	885.4	885.4	887.4	891.4	887.4	885.4	879.3	875.2
47.5°	729.5	733.6	729.5	742.7	735.6	733.6	721.4	726.5
50°	590.9	585.9	590.9	595.0	596.0	589.9	583.8	586.9
52.5°	458.4	450.3	448.2	454.3	450.3	450.3	446.2	445.2
55°	322.8	325.8	320.8	325.8	323.8	320.8	317.7	321.8
57.5°	218.6	219.6	217.5	220.6	215.5	216.5	215.5	214.5
60°	141.7	137.6	137.6	140.6	135.6	135.6	134.6	134.6
62.5°	80.9	79.9	79.9	78.9	77.9	77.9	77.9	75.9
65°	41.5	40.5	39.5	39.5	39.5	39.5	38.5	38.5
67.5°	20.2	19.2	19.2	20.2	19.2	19.2	19.2	19.2
70°	12.1	12.1	11.1	12.1	11.1	11.1	11.1	11.1
72.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)