

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: P244109

Luminaire Tested: **LD8B50D010 ER8B50840 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244109
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 ER8B50840 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

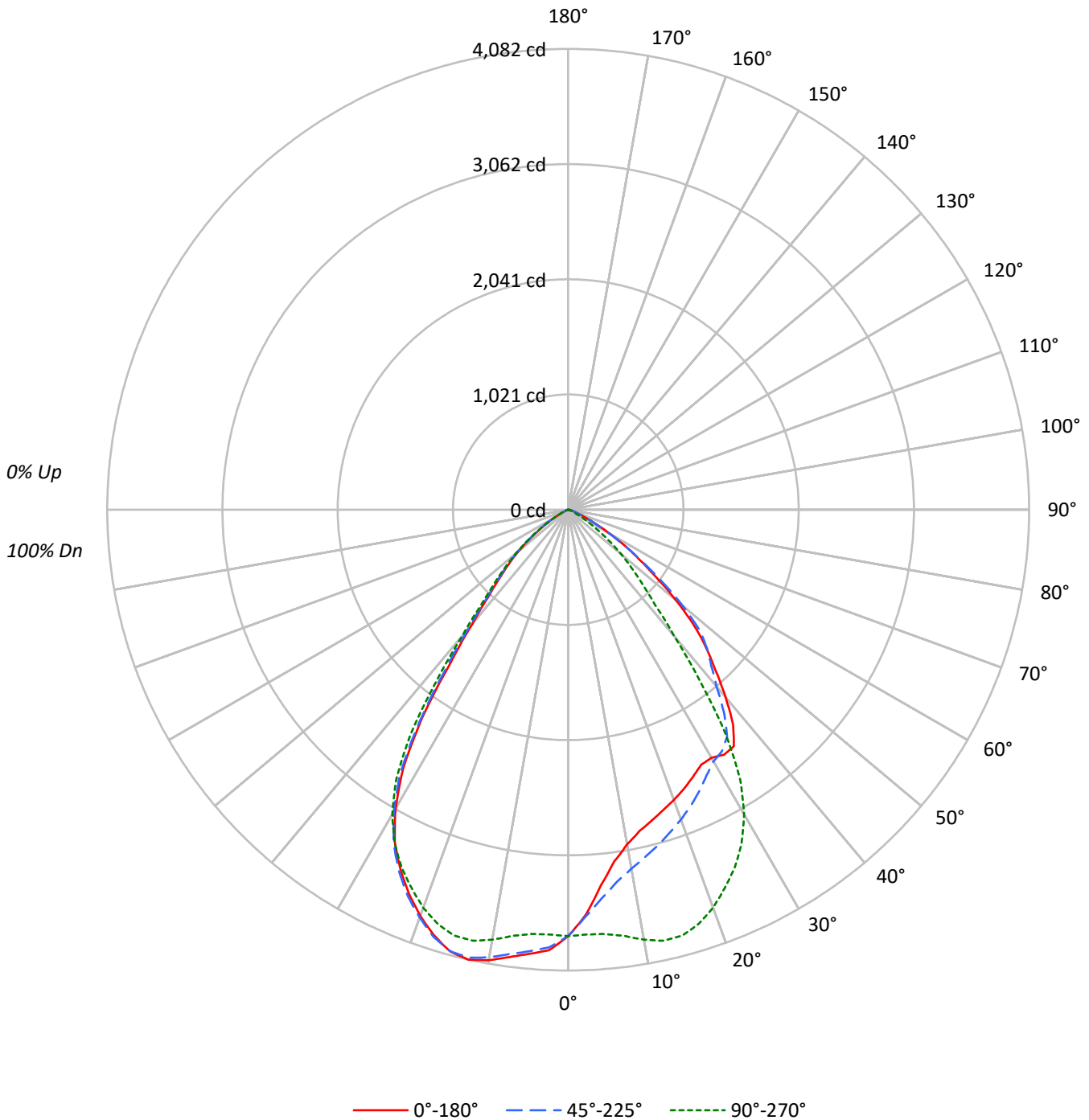
Lumens per Lamp: N/A
Luminaire Lumens: 5782.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	116478	116478	116478
5°	103343	116768	122238
10°	94221	121102	126883
15°	91057	124641	129299
20°	89756	123107	125647
25°	88874	118860	119605
30°	90324	110926	108875
35°	96275	91792	85144
40°	87250	58767	53212
45°	75309	40208	37438
50°	59419	29326	27613
55°	41246	18032	16967
60°	26260	9121	8141
65°	13105	3619	2751
70°	7249	1785	983
75°	5207	1299	477
80°	4226	888	178
85°	4564	708	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.0	6.1
10°-20°	1016.8	17.6
20°-30°	1475.9	25.5
30°-40°	1453.6	25.1
40°-50°	911.2	15.8
50°-60°	439.7	7.6
60°-70°	106.4	1.8
70°-80°	21.5	0.4
80°-90°	4.9	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°	2844.7	49.2
0°-40°	4298.3	74.3
0°-60°	5649.2	97.7
0°-90°	5782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5782.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3777	3777	3777	3777	3777	
5°	3339	3452	3772	3925	3949	309
15°	2852	3077	3904	4047	4050	806
25°	2612	2748	3493	3541	3515	1209
35°	2558	2453	2438	2300	2262	1547
45°	1727	1739	922	883	858	1320
55°	767	792	335	332	316	706
65°	180	178	50	43	38	205
75°	44	38	11	5	4	49
85°	13	10	2	0	0	13
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°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	3590.7	3567.9	3525.2	3576.8	3576.8	3548.0	3605.6	3570.8	3598.6	3642.3	3603.6
5°	3338.6	3319.7	3284.0	3338.6	3345.5	3318.8	3388.2	3362.4	3403.1	3456.7	3451.7
7.5°	3139.1	3115.3	3082.5	3139.1	3150.0	3132.2	3198.7	3186.8	3240.3	3309.8	3321.7
10°	3009.1	2984.3	2955.5	3007.1	3015.1	3003.2	3070.6	3063.7	3116.3	3196.7	3228.4
12.5°	2916.8	2896.0	2864.2	2918.8	2927.7	2910.9	2974.4	2971.4	3026.0	3110.3	3150.0
15°	2852.3	2827.5	2798.7	2845.4	2857.3	2838.4	2898.9	2893.0	2948.6	3031.9	3076.6
17.5°	2791.8	2768.9	2739.2	2782.8	2794.7	2774.9	2834.4	2824.5	2872.1	2951.5	2997.2
20°	2735.2	2710.4	2683.6	2728.2	2735.2	2712.4	2771.9	2759.0	2801.7	2875.1	2919.8
22.5°	2676.6	2650.8	2623.0	2666.7	2673.7	2650.8	2705.4	2690.5	2730.2	2796.7	2837.4
25°	2612.1	2588.3	2560.5	2601.2	2607.2	2582.4	2639.9	2621.1	2655.8	2714.3	2748.1
27.5°	2547.6	2524.8	2494.0	2535.7	2538.7	2514.9	2567.5	2541.7	2570.4	2624.0	2652.8
30°	2536.7	2510.9	2479.1	2512.9	2513.9	2483.1	2532.7	2502.0	2517.8	2557.5	2574.4
32.5°	2571.4	2545.6	2512.9	2540.7	2537.7	2504.0	2551.6	2513.9	2518.8	2539.7	2535.7
35°	2557.5	2526.8	2488.1	2517.8	2517.8	2477.2	2524.8	2480.1	2475.2	2478.1	2453.3
37.5°	2399.7	2375.9	2339.2	2368.0	2365.0	2334.2	2371.0	2334.2	2317.4	2310.4	2265.8
40°	2167.5	2138.7	2110.9	2141.7	2144.7	2111.9	2159.6	2117.9	2112.9	2093.1	2040.5
42.5°	1932.3	1922.4	1895.6	1921.4	1935.3	1907.5	1947.2	1927.3	1930.3	1925.4	1875.7
45°	1726.9	1710.0	1690.1	1719.9	1728.8	1715.0	1754.7	1742.7	1754.7	1779.5	1738.8
47.5°	1505.5	1488.7	1466.8	1498.6	1514.5	1488.7	1522.4	1518.4	1536.3	1579.0	1575.0
50°	1238.6	1226.7	1222.7	1226.7	1236.6	1224.7	1248.5	1249.5	1261.4	1320.0	1323.9
52.5°	980.5	977.6	963.7	976.6	976.6	957.7	981.5	970.6	982.5	1022.2	1048.0
55°	767.2	764.2	755.3	767.2	754.3	747.3	754.3	743.3	734.4	765.2	792.0
57.5°	597.5	587.5	576.6	581.6	580.6	565.7	573.6	560.7	553.8	564.7	588.5
60°	425.8	422.8	412.9	417.8	421.8	410.9	418.8	412.9	400.9	409.9	410.9
62.5°	282.8	284.8	278.9	279.9	276.9	274.9	279.9	282.8	279.9	275.9	276.9
65°	179.6	178.6	177.6	178.6	180.6	176.7	179.6	181.6	178.6	178.6	177.6
67.5°	119.1	116.1	113.1	115.1	117.1	114.1	117.1	116.1	117.1	116.1	113.1
70°	80.4	79.4	78.4	79.4	79.4	77.4	79.4	78.4	79.4	78.4	75.4
72.5°	58.6	58.6	57.6	58.6	58.6	56.6	57.6	55.6	56.6	55.6	53.6
75°	43.7	43.7	42.7	43.7	42.7	41.7	42.7	41.7	39.7	39.7	37.7
77.5°	31.8	31.8	31.8	31.8	31.8	30.8	30.8	29.8	28.8	27.8	27.8
80°	23.8	22.8	22.8	22.8	22.8	21.8	22.8	21.8	20.8	19.8	18.9
82.5°	16.9	17.9	16.9	16.9	16.9	15.9	16.9	15.9	15.9	14.9	12.9
85°	12.9	12.9	12.9	12.9	12.9	11.9	11.9	11.9	10.9	10.9	9.9
87.5°	6.9	6.9	6.9	7.9	6.9	6.9	6.9	6.0	6.0	5.0	5.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	3655.2	3660.2	3649.2	3666.1	3731.6	3679.0	3700.8	3707.8	3757.4	3766.3	3760.4
5°	3516.2	3538.1	3552.0	3589.7	3662.1	3624.4	3663.1	3687.9	3751.5	3772.3	3777.3
7.5°	3407.1	3452.7	3486.5	3548.0	3633.4	3604.6	3663.1	3703.8	3781.2	3808.0	3820.9
10°	3325.7	3395.2	3453.7	3538.1	3634.4	3615.5	3691.9	3749.5	3835.8	3867.6	3883.5
12.5°	3264.2	3348.5	3426.9	3534.1	3638.3	3629.4	3721.7	3787.2	3878.5	3910.3	3929.1
15°	3196.7	3293.9	3385.2	3505.3	3617.5	3615.5	3714.7	3784.2	3877.5	3904.3	3922.2
17.5°	3116.3	3220.5	3320.7	3450.7	3561.9	3563.9	3664.1	3732.6	3823.9	3845.7	3857.7
20°	3034.9	3138.1	3238.4	3372.3	3481.5	3484.5	3582.7	3646.3	3733.6	3751.5	3754.4
22.5°	2948.6	3044.8	3145.1	3278.1	3383.3	3385.2	3482.5	3542.1	3616.5	3625.4	3633.4
25°	2850.3	2944.6	3038.9	3170.9	3271.1	3277.1	3365.4	3418.0	3486.5	3493.4	3496.4
27.5°	2748.1	2825.5	2915.8	3029.0	3130.2	3126.2	3209.6	3269.1	3330.7	3326.7	3325.7
30°	2644.9	2709.4	2765.0	2874.1	2948.6	2951.5	3029.9	3058.7	3123.2	3115.3	3114.3
32.5°	2572.4	2589.3	2604.2	2659.8	2730.2	2705.4	2759.0	2794.7	2839.4	2836.4	2837.4
35°	2439.4	2408.7	2364.0	2372.0	2414.6	2375.9	2404.7	2403.7	2449.4	2438.4	2451.4
37.5°	2212.2	2124.8	2025.6	1969.0	1977.0	1928.3	1918.4	1942.2	1958.1	1927.3	1938.3
40°	1970.0	1841.0	1686.2	1557.2	1550.2	1489.7	1478.7	1454.9	1485.7	1459.9	1467.8
42.5°	1791.4	1620.7	1417.2	1260.4	1226.7	1176.1	1146.3	1142.3	1151.2	1133.4	1128.4
45°	1654.4	1472.8	1239.6	1059.9	1022.2	967.6	937.9	926.9	927.9	922.0	917.0
47.5°	1493.6	1311.0	1074.8	891.2	848.5	796.9	767.2	760.2	764.2	756.2	750.3
50°	1271.3	1107.6	892.2	724.5	686.8	649.1	625.2	618.3	617.3	611.3	607.4
52.5°	1032.1	896.2	709.6	569.7	535.9	499.2	482.3	473.4	474.4	468.4	462.5
55°	798.9	714.6	549.8	430.7	400.0	371.2	355.3	344.4	341.4	335.4	332.5
57.5°	594.5	537.9	411.9	310.6	292.8	265.0	249.1	236.2	234.2	231.2	230.2
60°	416.8	376.1	289.8	221.3	200.5	183.6	167.7	154.8	148.9	147.9	144.9
62.5°	269.9	245.1	190.6	147.9	132.0	120.1	104.2	95.3	91.3	87.3	88.3
65°	167.7	148.9	119.1	95.3	86.3	77.4	65.5	57.6	53.6	49.6	50.6
67.5°	104.2	93.3	75.4	61.5	55.6	48.6	39.7	33.7	30.8	27.8	25.8
70°	70.5	60.5	51.6	43.7	39.7	34.7	28.8	23.8	21.8	19.8	17.9
72.5°	49.6	44.7	37.7	32.8	29.8	25.8	21.8	18.9	16.9	14.9	12.9
75°	35.7	31.8	27.8	23.8	21.8	19.8	16.9	14.9	12.9	10.9	8.9
77.5°	25.8	22.8	19.8	17.9	16.9	13.9	11.9	10.9	9.9	7.9	6.0
80°	17.9	15.9	12.9	11.9	11.9	9.9	8.9	7.9	6.9	5.0	4.0
82.5°	11.9	10.9	9.9	8.9	7.9	6.9	6.9	5.0	4.0	3.0	2.0
85°	8.9	7.9	6.9	6.0	6.0	5.0	4.0	3.0	3.0	2.0	1.0
87.5°	5.0	5.0	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°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	3811.0	3814.0	3830.9	3818.0	3850.7	3874.5	3862.6	3889.4	3880.5	3878.5	3909.3
5°	3836.8	3843.8	3866.6	3854.7	3890.4	3916.2	3904.3	3934.1	3925.1	3923.2	3954.9
7.5°	3886.4	3893.4	3913.2	3903.3	3941.0	3963.8	3949.0	3981.7	3969.8	3968.8	3999.6
10°	3949.0	3958.9	3975.8	3965.8	4000.6	4020.4	4005.5	4037.3	4026.4	4021.4	4055.1
12.5°	3995.6	4002.5	4019.4	4011.5	4045.2	4060.1	4047.2	4078.0	4064.1	4060.1	4089.9
15°	3984.7	3991.6	4005.5	3998.6	4030.3	4044.2	4027.4	4061.1	4047.2	4039.3	4066.1
17.5°	3915.2	3919.2	3929.1	3922.2	3955.9	3964.8	3946.0	3979.7	3966.8	3952.9	3978.7
20°	3813.0	3811.0	3817.0	3814.0	3841.8	3846.7	3834.8	3859.6	3844.7	3836.8	3851.7
22.5°	3686.0	3684.0	3687.9	3680.0	3707.8	3710.8	3692.9	3722.7	3707.8	3692.9	3717.7
25°	3545.0	3534.1	3532.1	3535.1	3554.0	3556.9	3538.1	3559.9	3541.1	3529.2	3553.0
27.5°	3371.4	3357.5	3354.5	3357.5	3376.3	3362.4	3346.5	3362.4	3343.6	3332.6	3347.5
30°	3157.0	3137.1	3128.2	3122.2	3142.1	3137.1	3100.4	3118.3	3088.5	3072.6	3083.5
32.5°	2868.2	2857.3	2833.4	2819.5	2838.4	2800.7	2777.9	2777.9	2766.0	2739.2	2745.1
35°	2467.2	2450.4	2428.5	2416.6	2419.6	2369.0	2331.3	2339.2	2299.5	2292.6	2295.5
37.5°	1960.1	1932.3	1924.4	1899.5	1905.5	1860.8	1809.2	1810.2	1789.4	1767.6	1760.6
40°	1472.8	1467.8	1459.9	1439.1	1447.0	1398.4	1378.5	1379.5	1365.6	1349.7	1357.7
42.5°	1138.3	1122.5	1117.5	1110.6	1112.5	1104.6	1078.8	1081.8	1069.9	1065.9	1061.9
45°	925.0	908.1	896.2	902.1	902.1	893.2	883.3	889.2	883.3	875.3	879.3
47.5°	762.2	746.3	740.4	739.4	746.3	740.4	730.4	732.4	731.4	728.5	726.5
50°	608.4	604.4	599.4	596.5	599.4	597.5	588.5	593.5	596.5	586.5	589.5
52.5°	463.5	463.5	462.5	455.5	461.5	455.5	454.5	456.5	453.5	449.6	448.6
55°	339.4	336.4	331.5	330.5	332.5	330.5	328.5	329.5	331.5	321.6	321.6
57.5°	232.2	230.2	227.3	227.3	231.2	226.3	223.3	227.3	223.3	219.3	219.3
60°	148.9	147.9	144.9	144.9	144.9	143.9	140.9	141.9	143.9	138.0	138.9
62.5°	89.3	86.3	85.4	84.4	85.4	84.4	84.4	83.4	82.4	82.4	79.4
65°	48.6	46.6	44.7	45.7	45.7	44.7	44.7	44.7	42.7	41.7	40.7
67.5°	24.8	22.8	22.8	21.8	21.8	21.8	21.8	20.8	20.8	20.8	19.8
70°	15.9	14.9	13.9	13.9	13.9	12.9	12.9	12.9	12.9	12.9	11.9
72.5°	10.9	9.9	8.9	8.9	8.9	7.9	7.9	7.9	7.9	6.9	6.9
75°	7.9	6.9	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0
77.5°	5.0	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: P244109

CATALOG NUMBER: LD8B50D010 ER8B50840 8LBSW01

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	3898.3	3890.4	3895.4	3932.1	3916.2	3911.2	3869.6	3906.3
5°	3945.0	3939.0	3939.0	3980.7	3961.9	3957.9	3917.2	3949.0
7.5°	3988.7	3982.7	3983.7	4026.4	4011.5	4005.5	3964.8	3996.6
10°	4045.2	4041.3	4042.2	4082.9	4067.1	4061.1	4019.4	4052.2
12.5°	4079.0	4073.0	4073.0	4116.7	4098.8	4089.9	4050.2	4081.9
15°	4053.2	4044.2	4044.2	4087.9	4068.1	4055.1	4020.4	4050.2
17.5°	3964.8	3955.9	3955.9	3993.6	3978.7	3959.9	3924.1	3951.9
20°	3841.8	3830.9	3827.9	3871.5	3850.7	3833.8	3802.1	3828.9
22.5°	3702.8	3697.9	3688.9	3732.6	3713.7	3695.9	3662.1	3683.0
25°	3536.1	3528.2	3519.2	3561.9	3543.0	3525.2	3498.4	3515.3
27.5°	3328.7	3329.7	3324.7	3358.4	3339.6	3329.7	3296.9	3324.7
30°	3077.6	3066.7	3062.7	3102.4	3084.5	3071.6	3030.9	3057.7
32.5°	2750.1	2734.2	2713.4	2758.0	2727.3	2716.3	2681.6	2720.3
35°	2273.7	2268.7	2249.9	2287.6	2270.7	2250.9	2229.0	2261.8
37.5°	1757.6	1761.6	1759.6	1769.5	1759.6	1746.7	1722.9	1711.0
40°	1341.8	1331.9	1323.9	1341.8	1321.0	1321.0	1307.1	1321.9
42.5°	1052.0	1048.0	1058.0	1061.9	1050.0	1048.0	1046.0	1045.0
45°	868.4	868.4	870.4	874.3	870.4	868.4	862.4	858.5
47.5°	715.6	719.5	715.6	728.5	721.5	719.5	707.6	712.6
50°	579.6	574.6	579.6	583.6	584.6	578.6	572.6	575.6
52.5°	449.6	441.6	439.7	445.6	441.6	441.6	437.7	436.7
55°	316.6	319.6	314.6	319.6	317.6	314.6	311.6	315.6
57.5°	214.4	215.4	213.4	216.4	211.4	212.4	211.4	210.4
60°	138.9	135.0	135.0	138.0	133.0	133.0	132.0	132.0
62.5°	79.4	78.4	78.4	77.4	76.4	76.4	76.4	74.4
65°	40.7	39.7	38.7	38.7	38.7	38.7	37.7	37.7
67.5°	19.8	18.9	18.9	19.8	18.9	18.9	18.9	18.9
70°	11.9	11.9	10.9	11.9	10.9	10.9	10.9	10.9
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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)