

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: P244187

Luminaire Tested: **LD8B50D010 ER8B50850 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B50D010 ER8B50850 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE 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: 5859.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

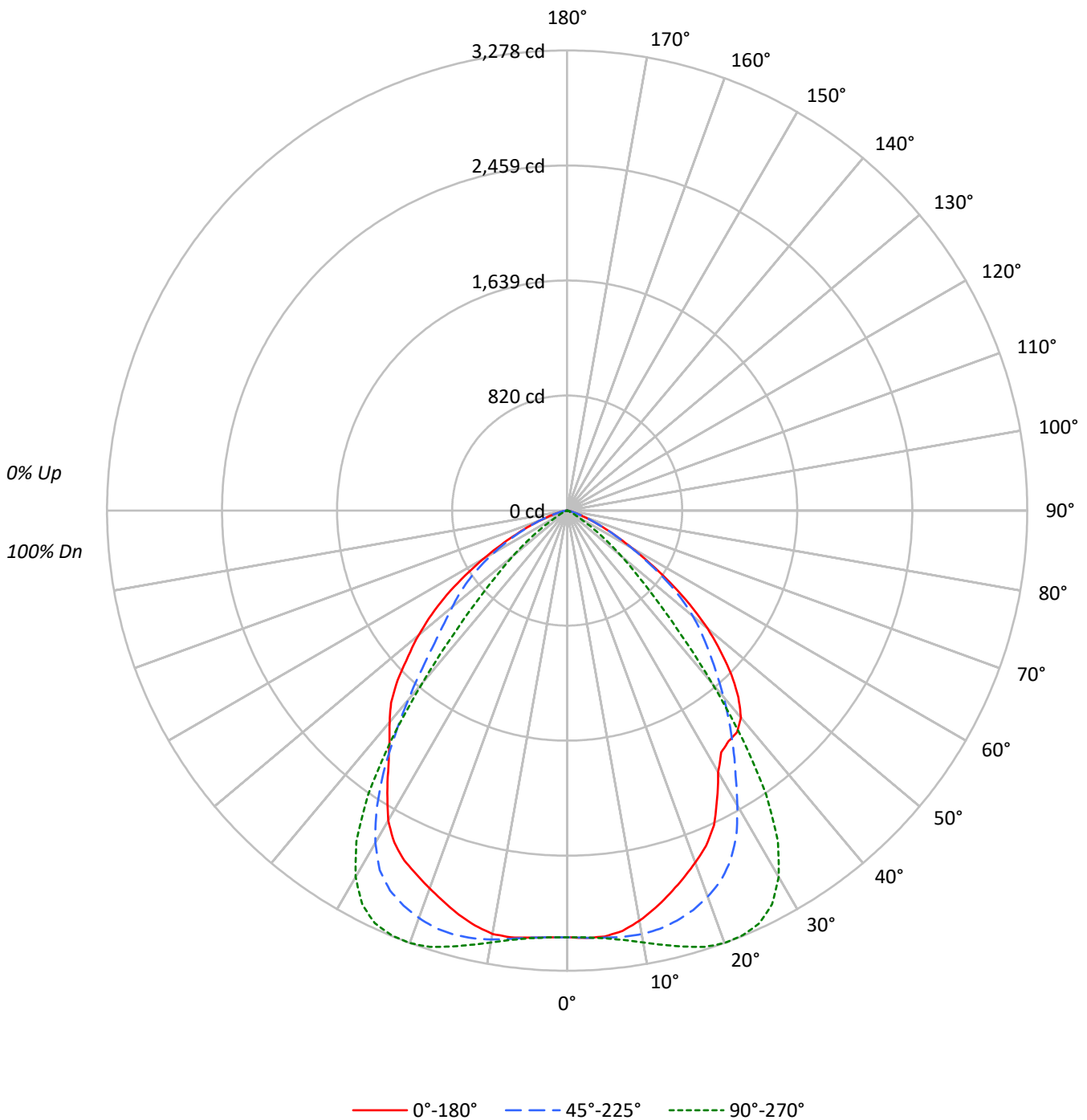
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	93724	93724	93724
5°	94283	94633	94534
10°	92896	97800	95881
15°	90182	102646	95127
20°	87564	107575	93970
25°	84203	110330	93536
30°	76629	107308	90762
35°	75488	92981	83506
40°	77541	64487	79163
45°	72186	38978	74436
50°	62614	24068	66327
55°	48052	12575	56288
60°	32736	5076	42486
65°	20365	2590	29310
70°	11054	1605	17888
75°	5766	763	10568
80°	2575	870	5736
85°	1734	566	5130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.3	5.0
10°-20°	865.9	14.8
20°-30°	1321.0	22.5
30°-40°	1378.5	23.5
40°-50°	1035.4	17.7
50°-60°	637.1	10.9
60°-70°	259.3	4.4
70°-80°	61.1	1.0
80°-90°	8.4	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°	2479.2	42.3
0°-40°	3857.7	65.8
0°-60°	5530.2	94.4
0°-90°	5859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5859.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3039	3039	3039	3039	3039	
5°	3046	3054	3057	3054	3054	288
15°	2825	3023	3215	3127	2980	796
25°	2475	2752	3243	2986	2749	1125
35°	2005	2062	2470	2283	2218	1266
45°	1655	1433	894	1334	1707	1263
55°	894	849	234	849	1047	803
65°	279	282	36	379	402	291
75°	48	48	6	86	89	58
85°	5	5	2	11	14	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4
2.5°	3047.5	3042.7	3047.5	3047.5	3049.2	3045.9	3047.5	3049.2	3045.9	3045.9	3045.9
5°	3045.9	3042.7	3045.9	3044.3	3047.5	3047.5	3050.8	3050.8	3054.0	3054.0	3058.8
7.5°	3020.1	3013.7	3020.1	3025.0	3028.2	3034.6	3042.7	3049.2	3055.6	3062.1	3070.1
10°	2966.8	2966.8	2971.7	2981.4	2991.0	3002.3	3016.9	3033.0	3049.2	3063.6	3078.2
12.5°	2900.7	2895.9	2905.5	2918.5	2933.0	2950.7	2973.3	2997.5	3023.3	3052.4	3075.0
15°	2824.9	2820.0	2831.3	2844.2	2862.0	2887.8	2915.3	2947.5	2984.6	3023.3	3060.4
17.5°	2747.4	2745.8	2757.1	2774.9	2789.4	2816.8	2852.3	2891.0	2933.0	2984.6	3033.0
20°	2668.4	2666.8	2678.1	2692.6	2712.0	2737.8	2773.3	2818.4	2868.4	2926.5	2983.0
22.5°	2586.1	2587.7	2597.4	2613.5	2629.7	2657.1	2694.2	2739.4	2794.2	2857.1	2920.1
25°	2474.8	2466.7	2479.6	2495.8	2523.2	2545.8	2581.3	2629.7	2686.1	2752.3	2826.5
27.5°	2313.5	2311.8	2323.2	2337.7	2361.9	2389.3	2428.0	2478.0	2537.7	2610.3	2682.9
30°	2152.1	2155.4	2160.2	2174.7	2190.9	2218.3	2257.0	2299.0	2355.4	2424.8	2502.2
32.5°	2042.4	2042.4	2048.9	2058.6	2069.9	2084.4	2111.8	2142.5	2186.0	2234.4	2290.9
35°	2005.3	1998.9	2005.3	2006.9	2008.6	2011.8	2016.6	2026.3	2040.8	2061.8	2082.8
37.5°	1989.2	1984.4	1984.4	1977.9	1969.8	1960.2	1947.3	1932.7	1916.6	1895.6	1879.5
40°	1926.3	1923.1	1919.8	1913.4	1895.6	1876.3	1855.3	1821.4	1784.3	1732.7	1681.1
42.5°	1805.3	1802.1	1800.4	1787.5	1771.4	1748.8	1724.6	1689.1	1642.3	1576.2	1502.0
45°	1655.3	1648.8	1644.0	1632.7	1621.3	1602.0	1579.4	1547.1	1500.4	1432.6	1343.9
47.5°	1481.0	1477.8	1476.2	1471.3	1460.1	1448.7	1434.2	1408.4	1366.5	1301.9	1210.0
50°	1305.2	1298.7	1301.9	1300.3	1295.5	1287.4	1277.7	1260.0	1227.7	1169.6	1085.8
52.5°	1103.5	1103.5	1101.9	1106.7	1108.3	1106.7	1108.3	1089.0	1061.6	1018.0	947.0
55°	893.8	893.8	898.6	905.1	911.5	913.1	911.5	903.5	884.1	848.6	785.7
57.5°	696.9	693.7	703.4	713.1	719.5	726.0	721.1	714.7	703.4	674.3	626.0
60°	530.8	530.8	537.2	543.7	550.1	556.6	555.0	553.4	543.7	524.3	485.6
62.5°	390.4	392.0	392.0	396.9	403.3	409.8	414.6	409.8	404.9	392.0	366.2
65°	279.1	277.5	279.1	283.9	288.8	295.2	298.5	296.9	292.0	282.3	263.0
67.5°	187.1	185.5	192.0	193.6	196.8	203.3	201.7	203.3	201.7	193.6	177.5
70°	122.6	119.4	122.6	121.0	125.8	127.5	130.7	132.3	130.7	125.8	121.0
72.5°	75.8	74.2	75.8	77.4	79.1	80.6	83.9	83.9	82.3	79.1	72.6
75°	48.4	43.5	45.2	42.0	45.2	45.2	48.4	50.0	48.4	48.4	45.2
77.5°	29.1	29.1	29.1	29.1	29.1	29.1	29.1	30.7	32.3	29.1	27.4
80°	14.5	14.5	16.1	16.1	16.1	17.8	16.1	16.1	16.1	17.8	12.9
82.5°	11.3	9.7	9.7	9.7	11.3	9.7	9.7	9.7	9.7	9.7	9.7
85°	4.9	6.4	4.9	3.2	4.9	4.9	6.4	4.9	4.9	4.9	6.4
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.2	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4
2.5°	3047.5	3044.3	3044.3	3042.7	3045.9	3042.7	3044.3	3042.7	3042.7	3045.9	3042.7
5°	3058.8	3060.4	3057.2	3055.6	3060.4	3060.4	3060.4	3057.2	3057.2	3058.8	3057.2
7.5°	3075.0	3078.2	3079.8	3081.4	3084.6	3086.3	3086.3	3084.6	3083.0	3087.9	3081.4
10°	3092.7	3097.5	3107.2	3112.1	3120.1	3120.1	3123.4	3123.4	3120.1	3123.4	3121.7
12.5°	3086.3	3115.3	3131.4	3142.7	3154.0	3163.7	3166.9	3168.5	3166.9	3173.4	3166.9
15°	3097.5	3121.7	3147.6	3166.9	3187.9	3199.2	3202.4	3215.3	3218.5	3220.2	3210.5
17.5°	3079.8	3123.4	3150.8	3179.8	3210.5	3231.4	3250.8	3258.9	3260.5	3263.7	3250.8
20°	3039.4	3087.9	3129.8	3171.8	3207.2	3239.5	3255.6	3278.2	3271.8	3284.7	3266.9
22.5°	2984.6	3039.4	3092.7	3147.6	3184.7	3223.4	3257.3	3273.4	3281.5	3281.5	3262.1
25°	2897.5	2962.0	3020.1	3076.5	3133.0	3179.8	3218.5	3242.7	3247.6	3246.0	3223.4
27.5°	2762.0	2831.3	2899.1	2963.6	3033.0	3087.9	3133.0	3162.1	3170.1	3170.1	3145.9
30°	2574.8	2649.0	2715.2	2792.6	2863.6	2924.9	2987.8	3013.7	3028.2	3028.2	3000.8
32.5°	2352.2	2415.1	2476.4	2552.2	2629.7	2699.1	2758.7	2794.2	2812.0	2810.4	2786.2
35°	2110.2	2140.8	2187.7	2244.1	2313.5	2378.0	2436.1	2470.0	2500.6	2499.0	2476.4
37.5°	1868.2	1860.1	1865.0	1885.9	1929.5	1974.7	2019.8	2052.1	2077.9	2089.2	2084.4
40°	1631.1	1589.1	1548.8	1534.3	1537.5	1553.6	1577.8	1602.0	1631.1	1645.6	1652.0
42.5°	1418.1	1347.1	1276.1	1222.9	1192.2	1182.5	1193.8	1201.9	1219.7	1240.6	1261.6
45°	1247.1	1151.9	1058.3	976.1	924.4	893.8	887.3	893.8	903.5	924.4	951.9
47.5°	1106.7	995.4	890.6	798.6	722.7	682.4	671.1	667.9	677.6	696.9	734.0
50°	982.5	871.2	755.0	648.5	569.5	524.3	508.2	501.7	513.0	527.5	561.4
52.5°	847.0	737.3	617.9	514.6	432.4	385.6	367.8	358.2	364.6	384.0	417.8
55°	700.2	598.5	490.4	384.0	304.9	261.4	240.4	233.9	240.4	261.4	295.2
57.5°	553.4	467.9	377.5	277.5	206.5	163.0	142.0	135.5	153.3	161.3	196.8
60°	432.4	363.0	285.6	203.3	142.0	108.1	87.1	82.3	90.4	104.8	133.9
62.5°	324.3	280.7	219.4	145.2	104.8	69.4	58.1	53.3	58.1	69.4	92.0
65°	235.5	201.7	153.3	106.5	71.0	51.6	38.7	35.5	40.3	48.4	67.8
67.5°	161.3	135.5	106.5	74.2	48.4	32.3	27.4	27.4	29.1	35.5	50.0
70°	104.8	88.7	67.8	48.4	32.3	24.2	21.0	17.8	21.0	25.8	33.9
72.5°	66.2	56.4	43.5	33.9	24.2	17.8	14.5	12.9	16.1	19.3	25.8
75°	40.3	30.7	22.6	17.8	12.9	12.9	12.9	6.4	8.1	12.9	16.1
77.5°	24.2	21.0	17.8	14.5	11.3	6.4	6.4	6.4	8.1	9.7	14.5
80°	12.9	11.3	8.1	8.1	6.4	4.9	6.4	4.9	3.2	8.1	9.7
82.5°	8.1	6.4	6.4	6.4	8.1	3.2	4.9	3.2	4.9	6.4	4.9
85°	4.9	4.9	4.9	3.2	8.1	3.2	3.2	1.6	1.6	3.2	3.2
87.5°	0.0	1.6	1.6	0.0	1.6	0.0	1.6	1.6	1.6	1.6	1.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4	3039.4
2.5°	3044.3	3042.7	3044.3	3042.7	3042.7	3042.7	3044.3	3044.3	3042.7	3042.7	3045.9
5°	3057.2	3057.2	3057.2	3055.6	3054.0	3054.0	3057.2	3057.2	3052.4	3057.2	3057.2
7.5°	3084.6	3079.8	3084.6	3078.2	3075.0	3076.5	3078.2	3075.0	3071.7	3073.4	3073.4
10°	3120.1	3115.3	3115.3	3110.5	3105.6	3102.4	3099.2	3091.1	3083.0	3081.4	3075.0
12.5°	3162.1	3154.0	3149.2	3139.5	3131.4	3120.1	3110.5	3097.5	3081.4	3070.1	3058.8
15°	3204.0	3191.1	3179.8	3163.7	3145.9	3126.6	3105.6	3084.6	3058.8	3036.2	3016.9
17.5°	3237.9	3220.2	3199.2	3173.4	3147.6	3118.5	3087.9	3057.2	3020.1	2991.0	2968.5
20°	3249.2	3223.4	3196.0	3162.1	3128.2	3087.9	3049.2	3008.8	2966.8	2936.2	2910.4
22.5°	3234.7	3204.0	3170.1	3134.7	3089.5	3045.9	3000.8	2953.9	2916.8	2874.9	2850.7
25°	3194.3	3157.2	3120.1	3078.2	3034.6	2986.2	2937.8	2889.4	2844.2	2821.7	2791.0
27.5°	3112.1	3071.7	3031.4	2987.8	2937.8	2889.4	2839.4	2792.6	2753.9	2723.2	2705.5
30°	2966.8	2920.1	2873.3	2826.5	2782.9	2732.9	2686.1	2647.4	2608.7	2584.5	2566.8
32.5°	2744.2	2702.3	2655.5	2610.3	2570.0	2528.0	2489.3	2455.5	2428.0	2411.9	2399.0
35°	2444.2	2402.2	2366.7	2334.5	2300.6	2282.8	2258.6	2239.2	2228.0	2221.5	2219.9
37.5°	2066.6	2042.4	2031.1	2024.7	2018.2	2013.4	2016.6	2024.7	2031.1	2042.4	2055.3
40°	1663.3	1684.3	1690.7	1713.3	1734.3	1761.7	1792.4	1827.9	1856.9	1894.0	1919.8
42.5°	1295.5	1334.2	1379.4	1427.8	1479.4	1529.4	1590.7	1647.2	1698.8	1745.6	1785.9
45°	995.4	1055.1	1122.9	1192.2	1261.6	1334.2	1408.4	1477.8	1539.1	1589.1	1631.1
47.5°	776.0	842.2	929.3	1014.8	1098.7	1184.2	1266.4	1339.0	1390.7	1439.1	1476.2
50°	614.7	690.5	785.7	884.1	976.1	1066.4	1153.5	1221.3	1272.9	1311.6	1339.0
52.5°	475.9	566.3	663.1	766.3	864.7	963.1	1043.8	1106.7	1148.7	1182.5	1203.5
55°	354.9	443.7	546.9	653.4	753.4	848.6	924.4	979.3	1016.4	1035.7	1047.0
57.5°	256.5	337.2	440.4	546.9	637.2	727.6	788.9	838.9	859.9	871.2	876.0
60°	187.1	261.4	353.3	445.3	530.8	603.4	656.6	690.5	706.6	713.1	711.5
62.5°	137.1	201.7	280.7	358.2	427.5	487.2	529.2	551.7	559.8	563.0	558.2
65°	104.8	154.9	222.6	282.3	335.6	379.1	409.8	424.3	429.1	427.5	424.3
67.5°	77.4	116.2	166.2	211.3	250.1	283.9	300.1	313.0	316.2	311.4	306.5
70°	54.9	85.5	121.0	151.7	180.7	200.1	217.8	219.4	219.4	217.8	214.6
72.5°	38.7	59.7	82.3	103.3	121.0	135.5	142.0	146.8	145.2	143.6	140.4
75°	25.8	37.1	59.7	64.5	80.6	85.5	92.0	92.0	93.6	88.7	88.7
77.5°	16.1	25.8	35.5	42.0	48.4	54.9	58.1	58.1	59.7	58.1	58.1
80°	9.7	16.1	19.3	29.1	29.1	33.9	35.5	37.1	33.9	38.7	33.9
82.5°	6.4	9.7	14.5	14.5	17.8	21.0	21.0	22.6	22.6	21.0	21.0
85°	4.9	6.4	8.1	9.7	9.7	11.3	9.7	9.7	11.3	12.9	11.3
87.5°	1.6	3.2	1.6	3.2	3.2	6.4	4.9	4.9	4.9	6.4	6.4
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: P244187

CATALOG NUMBER: LD8B50D010 ER8B50850 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3039.4	3039.4	3039.4	3039.4
2.5°	3042.7	3044.3	3042.7	3042.7
5°	3057.2	3055.6	3057.2	3054.0
7.5°	3068.5	3068.5	3066.9	3066.9
10°	3068.5	3062.1	3062.1	3062.1
12.5°	3044.3	3036.2	3031.4	3028.2
15°	3002.3	2987.8	2981.4	2979.8
17.5°	2947.5	2934.6	2926.5	2921.7
20°	2884.6	2871.7	2862.0	2863.6
22.5°	2829.7	2815.2	2808.8	2805.5
25°	2774.9	2757.1	2752.3	2749.1
27.5°	2686.1	2676.5	2671.6	2666.8
30°	2550.6	2545.8	2537.7	2549.0
32.5°	2394.1	2386.1	2379.6	2384.5
35°	2221.5	2216.7	2221.5	2218.3
37.5°	2063.4	2068.2	2074.7	2077.9
40°	1939.2	1956.9	1963.4	1966.6
42.5°	1815.0	1835.9	1848.8	1856.9
45°	1661.7	1682.7	1697.2	1706.9
47.5°	1503.6	1521.4	1535.8	1534.3
50°	1360.0	1369.7	1376.1	1382.6
52.5°	1214.8	1214.8	1216.4	1216.4
55°	1050.3	1047.0	1045.4	1047.0
57.5°	869.6	866.4	864.7	859.9
60°	705.0	695.3	688.9	688.9
62.5°	551.7	540.4	535.6	534.0
65°	414.6	413.0	403.3	401.7
67.5°	300.1	293.6	287.2	288.8
70°	211.3	201.7	201.7	198.4
72.5°	137.1	132.3	130.7	130.7
75°	85.5	85.5	82.3	88.7
77.5°	56.4	56.4	54.9	56.4
80°	33.9	33.9	33.9	32.3
82.5°	21.0	22.6	21.0	21.0
85°	11.3	12.9	9.7	14.5
87.5°	6.4	8.1	6.4	8.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)