

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: P245459

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245459
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: LSR8B50D010 EC8B50827 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5277.0 lumens
Efficiency: N/A
Efficacy: 99.6 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

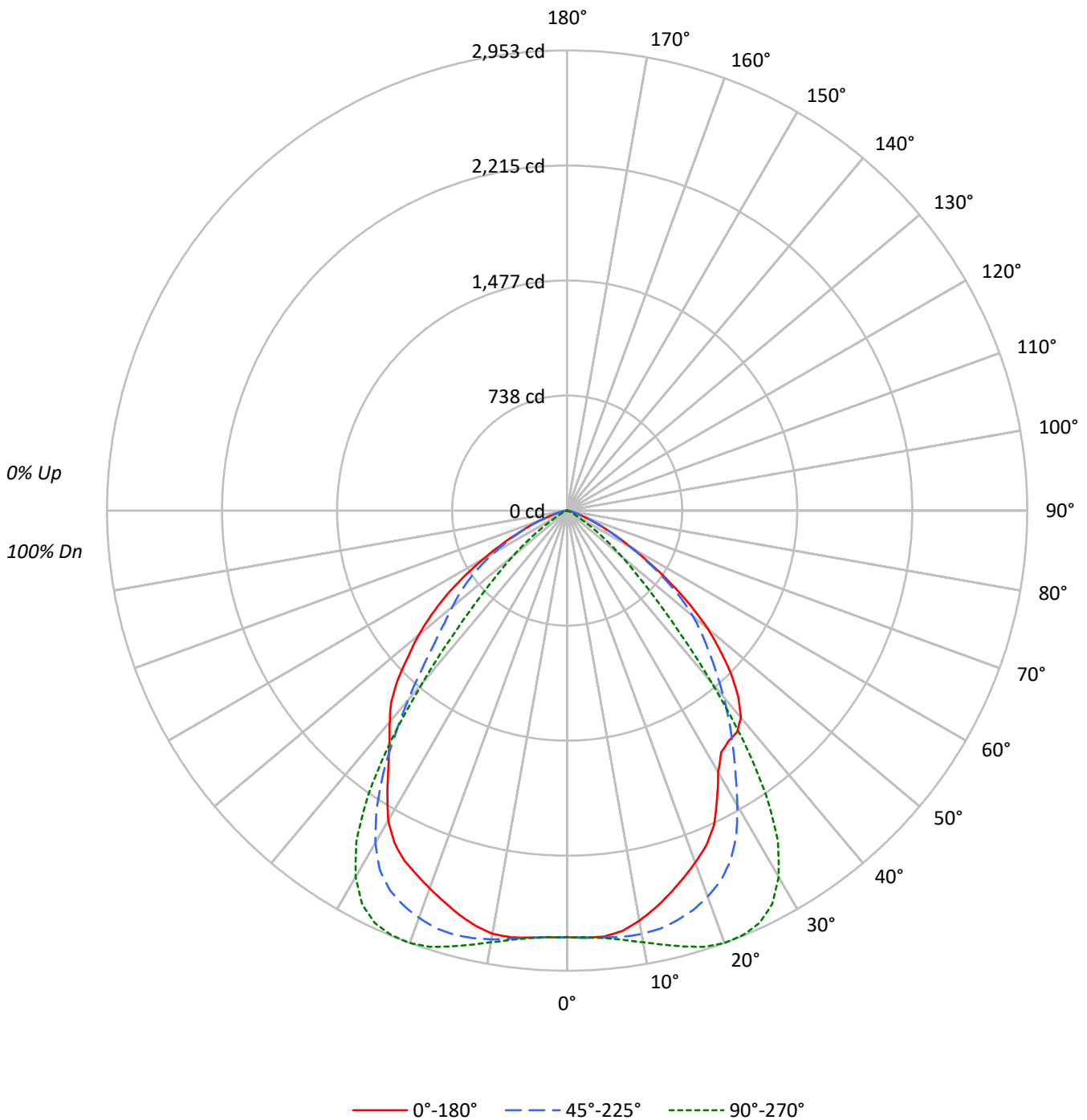
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	84414	84414	84414
5°	84919	85232	85142
10°	83669	88084	86355
15°	81224	92449	85678
20°	78868	96891	84637
25°	75840	99371	84244
30°	69016	96647	81746
35°	67989	83743	75209
40°	69837	58082	71298
45°	65012	35105	67040
50°	56392	21679	59741
55°	43278	11328	50697
60°	29486	4570	38262
65°	18343	2335	26399
70°	9954	1443	16111
75°	5195	691	9519
80°	2326	781	5150
85°	1557	531	4635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	5.0
10°-20°	779.9	14.8
20°-30°	1189.8	22.5
30°-40°	1241.6	23.5
40°-50°	932.6	17.7
50°-60°	573.8	10.9
60°-70°	233.5	4.4
70°-80°	55.0	1.0
80°-90°	7.6	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°	2232.9	42.3
0°-40°	3474.5	65.8
0°-60°	4980.9	94.4
0°-90°	5277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5277.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2738	2738	2738	2738	2738	
5°	2743	2751	2754	2751	2751	260
15°	2544	2723	2896	2816	2684	717
25°	2229	2479	2921	2690	2476	1013
35°	1806	1857	2225	2056	1998	1140
45°	1491	1290	805	1202	1537	1137
55°	805	764	211	764	943	724
65°	251	254	32	342	362	262
75°	44	44	6	77	80	52
85°	4	4	2	10	13	6
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°	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5
2.5°	2744.8	2740.4	2744.8	2744.8	2746.3	2743.4	2744.8	2746.3	2743.4	2743.4	2743.4
5°	2743.4	2740.4	2743.4	2741.9	2744.8	2744.8	2747.7	2747.7	2750.6	2750.6	2755.0
7.5°	2720.1	2714.3	2720.1	2724.5	2727.4	2733.2	2740.4	2746.3	2752.1	2757.9	2765.1
10°	2672.1	2672.1	2676.5	2685.2	2693.9	2704.1	2717.2	2731.7	2746.3	2759.3	2772.4
12.5°	2612.6	2608.2	2616.9	2628.5	2641.6	2657.6	2678.0	2699.8	2723.0	2749.1	2769.5
15°	2544.3	2539.9	2550.1	2561.7	2577.7	2601.0	2625.7	2654.7	2688.1	2723.0	2756.4
17.5°	2474.5	2473.1	2483.2	2499.2	2512.3	2537.0	2569.0	2603.8	2641.6	2688.1	2731.7
20°	2403.4	2401.9	2412.1	2425.1	2442.6	2465.8	2497.8	2538.5	2583.5	2635.8	2686.7
22.5°	2329.2	2330.7	2339.4	2353.9	2368.5	2393.1	2426.6	2467.3	2516.7	2573.3	2630.0
25°	2229.0	2221.7	2233.3	2247.9	2272.6	2292.9	2324.9	2368.5	2419.3	2478.9	2545.7
27.5°	2083.7	2082.2	2092.4	2105.4	2127.2	2152.0	2186.8	2231.9	2285.6	2351.0	2416.4
30°	1938.3	1941.3	1945.6	1958.7	1973.2	1997.9	2032.8	2070.6	2121.4	2183.9	2253.7
32.5°	1839.5	1839.5	1845.4	1854.1	1864.3	1877.3	1902.0	1929.6	1968.9	2012.5	2063.3
35°	1806.1	1800.3	1806.1	1807.6	1809.0	1812.0	1816.3	1825.0	1838.1	1857.0	1875.9
37.5°	1791.6	1787.2	1787.2	1781.4	1774.2	1765.4	1753.8	1740.7	1726.2	1707.3	1692.8
40°	1734.9	1732.0	1729.1	1723.3	1707.3	1689.9	1671.0	1640.5	1607.1	1560.6	1514.1
42.5°	1626.0	1623.1	1621.6	1610.0	1595.4	1575.1	1553.3	1521.3	1479.2	1419.6	1352.8
45°	1490.8	1485.0	1480.7	1470.5	1460.3	1442.9	1422.5	1393.5	1351.3	1290.3	1210.4
47.5°	1333.9	1331.0	1329.5	1325.2	1315.0	1304.8	1291.8	1268.5	1230.7	1172.6	1089.8
50°	1175.5	1169.7	1172.6	1171.2	1166.8	1159.5	1150.8	1134.8	1105.8	1053.5	977.9
52.5°	993.9	993.9	992.4	996.8	998.2	996.8	998.2	980.8	956.1	916.9	852.9
55°	805.0	805.0	809.3	815.2	821.0	822.4	821.0	813.7	796.3	764.3	707.6
57.5°	627.7	624.8	633.5	642.2	648.1	653.9	649.5	643.7	633.5	607.4	563.8
60°	478.1	478.1	483.8	489.7	495.5	501.3	499.8	498.4	489.7	472.2	437.4
62.5°	351.6	353.1	353.1	357.5	363.3	369.1	373.4	369.1	364.7	353.1	329.8
65°	251.4	249.9	251.4	255.7	260.1	265.9	268.8	267.4	263.0	254.3	236.9
67.5°	168.6	167.1	172.9	174.4	177.3	183.1	181.6	183.1	181.6	174.4	159.8
70°	110.4	107.5	110.4	109.0	113.3	114.8	117.7	119.1	117.7	113.3	109.0
72.5°	68.3	66.8	68.3	69.8	71.2	72.6	75.6	75.6	74.1	71.2	65.4
75°	43.6	39.2	40.7	37.8	40.7	40.7	43.6	45.0	43.6	43.6	40.7
77.5°	26.2	26.2	26.2	26.2	26.2	26.2	26.2	27.6	29.0	26.2	24.7
80°	13.1	13.1	14.5	14.5	14.5	16.0	14.5	14.5	14.5	16.0	11.6
82.5°	10.2	8.7	8.7	8.7	10.2	8.7	8.7	8.7	8.7	8.7	8.7
85°	4.4	5.8	4.4	2.9	4.4	4.4	5.8	4.4	4.4	4.4	5.8
87.5°	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	2.9	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°	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5
2.5°	2744.8	2741.9	2741.9	2740.4	2743.4	2740.4	2741.9	2740.4	2740.4	2743.4	2740.4
5°	2755.0	2756.4	2753.5	2752.1	2756.4	2756.4	2756.4	2753.5	2753.5	2755.0	2753.5
7.5°	2769.5	2772.4	2773.9	2775.3	2778.2	2779.7	2779.7	2778.2	2776.8	2781.1	2775.3
10°	2785.5	2789.9	2798.6	2802.9	2810.2	2810.2	2813.1	2813.1	2810.2	2813.1	2811.6
12.5°	2779.7	2805.8	2820.4	2830.5	2840.7	2849.4	2852.3	2853.8	2852.3	2858.2	2852.3
15°	2789.9	2811.6	2834.9	2852.3	2871.2	2881.4	2884.3	2895.9	2898.8	2900.3	2891.6
17.5°	2773.9	2813.1	2837.8	2863.9	2891.6	2910.5	2927.9	2935.2	2936.6	2939.5	2927.9
20°	2737.5	2781.1	2818.9	2856.7	2888.7	2917.7	2932.2	2952.6	2946.8	2958.4	2942.4
22.5°	2688.1	2737.5	2785.5	2834.9	2868.3	2903.2	2933.7	2948.2	2955.5	2955.5	2938.0
25°	2609.7	2667.8	2720.1	2770.9	2821.8	2863.9	2898.8	2920.6	2925.0	2923.5	2903.2
27.5°	2487.6	2550.1	2611.1	2669.3	2731.7	2781.1	2821.8	2848.0	2855.2	2855.2	2833.4
30°	2319.1	2385.9	2445.5	2515.2	2579.2	2634.4	2691.1	2714.3	2727.4	2727.4	2702.7
32.5°	2118.5	2175.2	2230.4	2298.7	2368.5	2430.9	2484.7	2516.7	2532.7	2531.2	2509.4
35°	1900.6	1928.2	1970.3	2021.2	2083.7	2141.8	2194.1	2224.6	2252.2	2250.8	2230.4
37.5°	1682.6	1675.4	1679.7	1698.6	1737.8	1778.5	1819.2	1848.3	1871.5	1881.7	1877.3
40°	1469.0	1431.2	1394.9	1381.9	1384.7	1399.3	1421.1	1442.9	1469.0	1482.1	1487.9
42.5°	1277.2	1213.3	1149.3	1101.4	1073.8	1065.1	1075.2	1082.5	1098.5	1117.4	1136.3
45°	1123.2	1037.5	953.2	879.1	832.6	805.0	799.2	805.0	813.7	832.6	857.3
47.5°	996.8	896.5	802.1	719.2	651.0	614.7	604.5	601.6	610.3	627.7	661.1
50°	884.9	784.6	680.0	584.1	512.9	472.2	457.7	451.9	462.1	475.1	505.6
52.5°	762.8	664.0	556.5	463.5	389.4	347.3	331.3	322.6	328.4	345.8	376.3
55°	630.6	539.1	441.7	345.8	274.6	235.4	216.5	210.7	216.5	235.4	265.9
57.5°	498.4	421.4	340.0	249.9	186.0	146.8	127.9	122.1	138.1	145.3	177.3
60°	389.4	327.0	257.2	183.1	127.9	97.3	78.5	74.1	81.4	94.4	120.6
62.5°	292.1	252.8	197.6	130.8	94.4	62.5	52.3	48.0	52.3	62.5	82.8
65°	212.1	181.6	138.1	95.9	63.9	46.5	34.9	32.0	36.3	43.6	61.0
67.5°	145.3	122.1	95.9	66.8	43.6	29.0	24.7	24.7	26.2	32.0	45.0
70°	94.4	79.9	61.0	43.6	29.0	21.8	18.9	16.0	18.9	23.3	30.5
72.5°	59.6	50.8	39.2	30.5	21.8	16.0	13.1	11.6	14.5	17.4	23.3
75°	36.3	27.6	20.3	16.0	11.6	11.6	11.6	5.8	7.3	11.6	14.5
77.5°	21.8	18.9	16.0	13.1	10.2	5.8	5.8	5.8	7.3	8.7	13.1
80°	11.6	10.2	7.3	7.3	5.8	4.4	5.8	4.4	2.9	7.3	8.7
82.5°	7.3	5.8	5.8	5.8	7.3	2.9	4.4	2.9	4.4	5.8	4.4
85°	4.4	4.4	4.4	2.9	7.3	2.9	2.9	1.5	1.5	2.9	2.9
87.5°	0.0	1.5	1.5	0.0	1.5	0.0	1.5	1.5	1.5	1.5	1.5
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°	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5
2.5°	2741.9	2740.4	2741.9	2740.4	2740.4	2740.4	2741.9	2741.9	2740.4	2740.4	2743.4
5°	2753.5	2753.5	2753.5	2752.1	2750.6	2750.6	2753.5	2753.5	2749.1	2753.5	2753.5
7.5°	2778.2	2773.9	2778.2	2772.4	2769.5	2770.9	2772.4	2769.5	2766.6	2768.1	2768.1
10°	2810.2	2805.8	2805.8	2801.5	2797.1	2794.2	2791.3	2784.0	2776.8	2775.3	2769.5
12.5°	2848.0	2840.7	2836.4	2827.6	2820.4	2810.2	2801.5	2789.9	2775.3	2765.1	2755.0
15°	2885.7	2874.1	2863.9	2849.4	2833.4	2816.0	2797.1	2778.2	2755.0	2734.6	2717.2
17.5°	2916.2	2900.3	2881.4	2858.2	2834.9	2808.7	2781.1	2753.5	2720.1	2693.9	2673.6
20°	2926.4	2903.2	2878.5	2848.0	2817.4	2781.1	2746.3	2709.9	2672.1	2644.5	2621.3
22.5°	2913.4	2885.7	2855.2	2823.3	2782.6	2743.4	2702.7	2660.5	2627.1	2589.3	2567.5
25°	2877.0	2843.6	2810.2	2772.4	2733.2	2689.6	2646.0	2602.4	2561.7	2541.4	2513.8
27.5°	2802.9	2766.6	2730.3	2691.1	2646.0	2602.4	2557.4	2515.2	2480.4	2452.7	2436.8
30°	2672.1	2630.0	2587.9	2545.7	2506.5	2461.4	2419.3	2384.4	2349.6	2327.8	2311.8
32.5°	2471.6	2433.9	2391.7	2351.0	2314.7	2276.9	2242.0	2211.5	2186.8	2172.3	2160.7
35°	2201.4	2163.6	2131.6	2102.6	2072.0	2056.1	2034.3	2016.8	2006.6	2000.8	1999.4
37.5°	1861.3	1839.5	1829.4	1823.6	1817.7	1813.4	1816.3	1823.6	1829.4	1839.5	1851.2
40°	1498.1	1517.0	1522.8	1543.1	1562.0	1586.7	1614.3	1646.3	1672.4	1705.9	1729.1
42.5°	1166.8	1201.7	1242.3	1285.9	1332.4	1377.5	1432.7	1483.5	1530.0	1572.2	1608.5
45°	896.5	950.3	1011.3	1073.8	1136.3	1201.7	1268.5	1331.0	1386.2	1431.2	1469.0
47.5°	698.9	758.5	837.0	914.0	989.5	1066.5	1140.6	1206.0	1252.5	1296.1	1329.5
50°	553.6	621.9	707.6	796.3	879.1	960.4	1038.9	1100.0	1146.5	1181.3	1206.0
52.5°	428.6	510.0	597.2	690.2	778.8	867.5	940.1	996.8	1034.6	1065.1	1084.0
55°	319.7	399.6	492.6	588.5	678.6	764.3	832.6	882.0	915.4	932.9	943.0
57.5°	231.0	303.7	396.7	492.6	573.9	655.3	710.5	755.6	774.5	784.6	789.0
60°	168.6	235.4	318.2	401.0	478.1	543.4	591.4	621.9	636.4	642.2	640.8
62.5°	123.5	181.6	252.8	322.6	385.0	438.8	476.6	496.9	504.2	507.1	502.8
65°	94.4	139.5	200.5	254.3	302.2	341.5	369.1	382.2	386.5	385.0	382.2
67.5°	69.8	104.6	149.7	190.4	225.2	255.7	270.3	281.9	284.8	280.4	276.1
70°	49.4	77.0	109.0	136.6	162.7	180.2	196.1	197.6	197.6	196.1	193.3
72.5°	34.9	53.8	74.1	93.0	109.0	122.1	127.9	132.2	130.8	129.3	126.4
75°	23.3	33.4	53.8	58.1	72.6	77.0	82.8	82.8	84.3	79.9	79.9
77.5°	14.5	23.3	32.0	37.8	43.6	49.4	52.3	52.3	53.8	52.3	52.3
80°	8.7	14.5	17.4	26.2	26.2	30.5	32.0	33.4	30.5	34.9	30.5
82.5°	5.8	8.7	13.1	13.1	16.0	18.9	18.9	20.3	20.3	18.9	18.9
85°	4.4	5.8	7.3	8.7	8.7	10.2	8.7	8.7	10.2	11.6	10.2
87.5°	1.5	2.9	1.5	2.9	2.9	5.8	4.4	4.4	4.4	5.8	5.8
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: P245459

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2737.5	2737.5	2737.5	2737.5
2.5°	2740.4	2741.9	2740.4	2740.4
5°	2753.5	2752.1	2753.5	2750.6
7.5°	2763.7	2763.7	2762.2	2762.2
10°	2763.7	2757.9	2757.9	2757.9
12.5°	2741.9	2734.6	2730.3	2727.4
15°	2704.1	2691.1	2685.2	2683.8
17.5°	2654.7	2643.1	2635.8	2631.5
20°	2598.0	2586.4	2577.7	2579.2
22.5°	2548.6	2535.6	2529.7	2526.8
25°	2499.2	2483.2	2478.9	2476.0
27.5°	2419.3	2410.6	2406.2	2401.9
30°	2297.3	2292.9	2285.6	2295.8
32.5°	2156.3	2149.0	2143.2	2147.6
35°	2000.8	1996.5	2000.8	1997.9
37.5°	1858.5	1862.8	1868.6	1871.5
40°	1746.6	1762.5	1768.4	1771.2
42.5°	1634.7	1653.6	1665.2	1672.4
45°	1496.6	1515.5	1528.6	1537.3
47.5°	1354.2	1370.2	1383.3	1381.9
50°	1224.9	1233.6	1239.4	1245.3
52.5°	1094.1	1094.1	1095.6	1095.6
55°	945.9	943.0	941.6	943.0
57.5°	783.2	780.3	778.8	774.5
60°	635.0	626.3	620.4	620.4
62.5°	496.9	486.8	482.4	481.0
65°	373.4	372.0	363.3	361.8
67.5°	270.3	264.4	258.7	260.1
70°	190.4	181.6	181.6	178.7
72.5°	123.5	119.1	117.7	117.7
75°	77.0	77.0	74.1	79.9
77.5°	50.8	50.8	49.4	50.8
80°	30.5	30.5	30.5	29.0
82.5°	18.9	20.3	18.9	18.9
85°	10.2	11.6	8.7	13.1
87.5°	5.8	7.3	5.8	7.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)