

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: P245027

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B50827 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5209.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

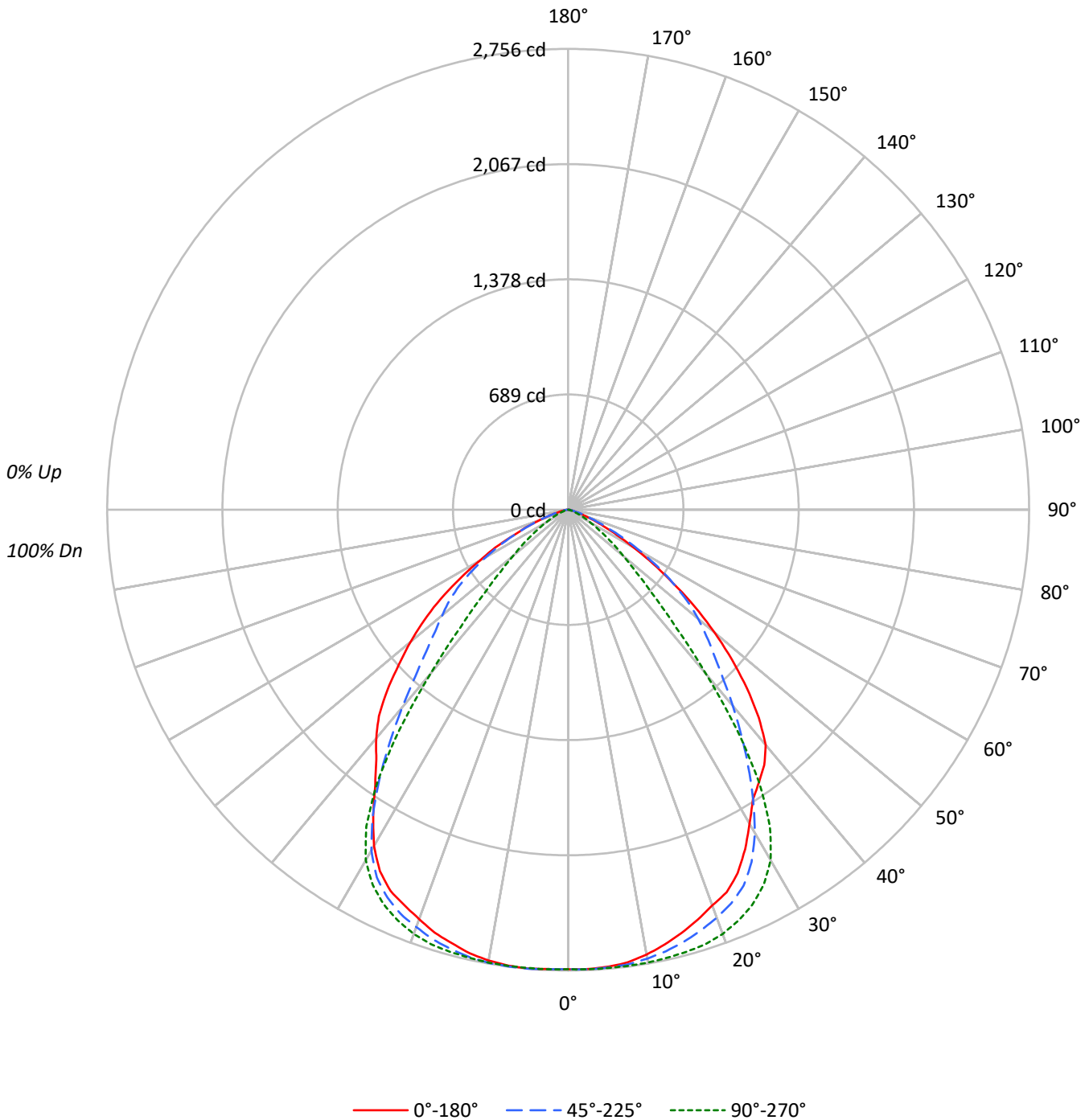
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	84751	84751	84751
5°	84935	85164	85257
10°	84580	86105	85732
15°	83641	87363	85713
20°	82639	88592	85494
25°	81566	88694	85581
30°	77163	86200	82679
35°	74859	74916	75695
40°	73934	51545	71857
45°	65876	30945	66779
50°	54775	20595	59026
55°	41085	14198	50047
60°	27839	9461	37756
65°	16797	6136	25939
70°	9313	3327	15958
75°	4218	1406	8257
80°	3658	1563	5771
85°	4175	2087	5732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.3	5.0
10°-20°	761.7	14.6
20°-30°	1156.2	22.2
30°-40°	1214.3	23.3
40°-50°	910.4	17.5
50°-60°	584.1	11.2
60°-70°	249.9	4.8
70°-80°	59.0	1.1
80°-90°	11.0	0.2
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°	2180.2	41.9
0°-40°	3394.5	65.2
0°-60°	4889.1	93.9
0°-90°	5209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5209.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2748	2748	2748	2748	2748	
5°	2744	2748	2751	2756	2754	261
15°	2620	2675	2737	2719	2685	739
25°	2397	2481	2607	2560	2515	1095
35°	1989	1878	1990	1966	2011	1248
45°	1511	1235	710	1199	1531	1157
55°	764	764	264	797	931	693
65°	230	271	84	350	356	246
75°	35	41	12	71	69	52
85°	12	7	6	12	16	12
90°	0	0	0	0	0	



TEST NUMBER: P245027

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2749.9	2752.8	2751.3	2751.3	2749.9	2751.3	2751.3	2754.3	2754.3	2751.3	2749.9
5°	2743.9	2746.9	2746.9	2743.9	2743.9	2751.3	2746.9	2749.9	2749.9	2748.4	2748.4
7.5°	2730.7	2730.7	2736.6	2732.2	2732.2	2736.6	2735.1	2738.0	2741.0	2742.5	2742.5
10°	2701.2	2704.1	2705.6	2705.6	2707.1	2711.5	2714.4	2720.4	2723.3	2726.2	2727.7
12.5°	2664.3	2668.7	2670.2	2668.7	2673.1	2679.0	2686.4	2693.8	2698.2	2704.1	2708.6
15°	2620.0	2620.0	2623.0	2627.4	2630.4	2639.2	2646.6	2655.4	2667.2	2674.6	2682.0
17.5°	2571.4	2574.3	2578.7	2578.7	2584.6	2599.4	2603.8	2617.1	2630.4	2637.7	2652.5
20°	2518.3	2521.2	2525.6	2528.6	2535.9	2547.7	2556.6	2568.4	2583.2	2596.4	2611.2
22.5°	2476.9	2471.0	2474.0	2476.9	2484.3	2494.6	2505.0	2519.7	2534.5	2547.7	2562.5
25°	2397.3	2398.7	2403.2	2406.1	2415.0	2423.8	2435.6	2453.3	2466.6	2481.4	2497.6
27.5°	2289.6	2291.1	2298.4	2298.4	2305.8	2320.6	2327.9	2342.7	2360.4	2375.1	2394.3
30°	2167.1	2170.1	2170.1	2176.0	2180.4	2187.8	2195.2	2209.9	2218.8	2232.0	2258.6
32.5°	2055.0	2057.9	2056.5	2055.0	2050.6	2049.1	2047.6	2050.6	2053.5	2057.9	2068.3
35°	1988.6	1981.2	1975.4	1965.0	1953.2	1938.5	1925.2	1907.5	1891.3	1878.0	1863.2
37.5°	1925.2	1923.7	1914.9	1900.1	1876.5	1850.0	1819.0	1780.6	1742.2	1701.0	1661.1
40°	1836.7	1832.2	1824.9	1804.2	1777.7	1745.2	1703.9	1656.7	1594.7	1531.3	1466.4
42.5°	1686.2	1687.7	1678.8	1662.6	1637.5	1606.5	1563.7	1512.1	1445.7	1370.5	1286.4
45°	1510.6	1510.6	1507.7	1494.4	1476.7	1451.6	1419.2	1376.4	1311.5	1234.8	1144.8
47.5°	1327.7	1329.2	1324.8	1321.8	1314.4	1298.2	1274.6	1242.2	1196.4	1122.6	1032.7
50°	1141.8	1141.8	1149.2	1147.7	1147.7	1141.8	1131.5	1112.3	1072.5	1013.5	929.4
52.5°	956.0	958.9	963.3	969.2	976.6	988.4	976.6	967.8	942.7	896.9	824.7
55°	764.2	767.1	774.5	784.8	793.7	805.5	808.4	808.4	795.1	764.2	709.6
57.5°	600.4	596.0	601.9	610.8	622.6	634.4	643.2	653.5	652.1	631.4	587.1
60°	451.4	452.9	457.3	466.2	475.0	485.4	497.2	506.0	510.4	500.1	472.1
62.5°	329.0	329.0	334.9	343.7	348.2	362.9	370.3	374.7	379.1	377.6	360.0
65°	230.2	233.1	236.0	240.5	244.9	253.7	258.2	267.0	270.0	271.4	258.2
67.5°	162.3	157.9	160.8	163.7	168.2	174.1	182.9	182.9	187.3	187.3	178.5
70°	103.3	103.3	104.8	109.2	112.1	113.6	116.6	119.5	123.9	122.4	122.4
72.5°	69.3	67.9	69.3	70.8	72.3	76.7	76.7	78.2	81.1	82.6	76.7
75°	35.4	36.9	39.8	38.4	42.8	39.8	41.3	45.7	44.3	41.3	41.3
77.5°	29.5	29.5	29.5	28.0	31.0	31.0	29.5	32.5	31.0	31.0	29.5
80°	20.6	22.1	20.6	19.2	20.6	19.2	19.2	19.2	19.2	19.2	17.7
82.5°	16.2	13.3	14.8	13.3	14.8	14.8	13.3	11.8	11.8	13.3	11.8
85°	11.8	8.8	10.3	10.3	8.8	8.8	8.8	8.8	8.8	7.4	7.4
87.5°	7.4	4.4	4.4	4.4	5.9	5.9	5.9	4.4	5.9	5.9	3.0
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: P245027

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2752.8	2751.3	2754.3	2752.8	2752.8	2751.3	2752.8	2751.3	2754.3	2748.4	2749.9
5°	2752.8	2749.9	2751.3	2752.8	2754.3	2751.3	2751.3	2751.3	2754.3	2751.3	2752.8
7.5°	2746.9	2745.4	2749.9	2752.8	2751.3	2749.9	2752.8	2751.3	2754.3	2752.8	2755.7
10°	2735.1	2736.6	2739.5	2743.9	2745.4	2746.9	2749.9	2749.9	2754.3	2748.4	2751.3
12.5°	2717.4	2723.3	2730.7	2733.6	2739.5	2739.5	2742.5	2743.9	2746.9	2745.4	2749.9
15°	2695.3	2702.6	2711.5	2718.9	2726.2	2730.7	2735.1	2736.6	2741.0	2736.6	2738.0
17.5°	2668.7	2677.5	2690.8	2699.7	2711.5	2715.9	2721.8	2724.8	2729.2	2726.2	2727.7
20°	2631.8	2642.2	2656.9	2670.2	2677.5	2687.9	2695.3	2699.7	2702.6	2699.7	2701.2
22.5°	2580.2	2595.0	2614.1	2624.5	2639.2	2648.1	2649.5	2659.9	2667.2	2659.9	2662.8
25°	2519.7	2534.5	2549.2	2571.4	2584.6	2595.0	2605.3	2606.8	2614.1	2612.6	2611.2
27.5°	2419.4	2438.6	2463.6	2481.4	2499.1	2515.3	2527.1	2530.0	2537.4	2534.5	2535.9
30°	2282.2	2302.9	2326.5	2354.5	2379.6	2395.8	2410.5	2420.9	2428.2	2423.8	2422.3
32.5°	2087.5	2108.1	2133.2	2161.2	2190.7	2214.3	2232.0	2245.3	2254.2	2251.2	2243.8
35°	1864.7	1870.6	1886.8	1909.0	1934.0	1959.1	1975.4	1990.1	2000.4	2003.4	2003.4
37.5°	1636.0	1616.9	1605.1	1605.1	1619.8	1630.1	1644.9	1653.7	1670.0	1675.9	1680.3
40°	1414.7	1370.5	1329.2	1298.2	1277.6	1276.1	1276.1	1280.5	1295.3	1314.4	1332.2
42.5°	1217.1	1146.3	1082.8	1025.3	984.0	960.4	950.1	951.5	963.3	981.0	1010.5
45°	1059.2	970.7	891.0	821.7	765.6	728.8	711.1	709.6	718.4	739.1	771.6
47.5°	936.8	842.4	752.4	672.7	612.2	572.4	551.7	545.9	551.7	570.9	609.3
50°	835.0	737.6	644.7	562.1	497.2	455.9	436.7	429.3	436.7	452.9	491.2
52.5°	740.6	640.2	553.2	473.6	404.2	368.8	348.2	343.7	348.2	367.3	398.3
55°	631.4	545.9	460.3	380.6	320.1	284.7	268.5	264.1	268.5	286.2	318.7
57.5°	523.7	449.9	374.7	302.4	250.8	219.8	205.1	199.1	209.5	221.3	259.6
60°	423.4	364.4	300.9	237.5	194.7	166.7	154.9	153.4	156.4	171.1	197.7
62.5°	331.9	283.3	233.1	181.5	146.0	134.2	119.5	118.0	121.0	129.8	150.5
65°	239.0	208.0	169.7	132.8	104.8	88.5	82.6	84.1	87.0	92.9	112.1
67.5°	166.7	144.6	118.0	92.9	72.3	64.9	59.0	57.5	59.0	69.3	79.7
70°	112.1	98.8	79.7	70.8	50.2	39.8	41.3	36.9	42.8	42.8	51.6
72.5°	73.7	64.9	53.1	41.3	35.4	28.0	28.0	26.6	29.5	31.0	38.4
75°	38.4	29.5	29.5	20.6	14.8	7.4	13.3	11.8	10.3	11.8	14.8
77.5°	26.6	22.1	20.6	16.2	14.8	11.8	11.8	11.8	11.8	13.3	14.8
80°	16.2	16.2	11.8	10.3	8.8	7.4	8.8	8.8	8.8	8.8	10.3
82.5°	10.3	8.8	8.8	7.4	7.4	5.9	5.9	5.9	5.9	5.9	8.8
85°	8.8	5.9	5.9	4.4	5.9	10.3	4.4	5.9	5.9	5.9	4.4
87.5°	3.0	4.4	4.4	4.4	3.0	1.5	3.0	4.4	4.4	7.4	5.9
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: P245027

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2752.8	2754.3	2754.3	2752.8	2752.8	2749.9	2755.7	2751.3	2752.8	2758.7	2754.3
5°	2755.7	2757.2	2757.2	2755.7	2755.7	2755.7	2757.2	2757.2	2755.7	2754.3	2757.2
7.5°	2761.7	2760.2	2760.2	2757.2	2757.2	2754.3	2757.2	2752.8	2755.7	2752.8	2757.2
10°	2754.3	2755.7	2754.3	2752.8	2752.8	2751.3	2751.3	2746.9	2748.4	2743.9	2746.9
12.5°	2749.9	2748.4	2748.4	2745.4	2742.5	2739.5	2738.0	2733.6	2733.6	2723.3	2727.7
15°	2738.0	2739.5	2735.1	2729.2	2726.2	2718.9	2715.9	2710.0	2704.1	2696.8	2698.2
17.5°	2727.7	2723.3	2717.4	2711.5	2699.7	2693.8	2687.9	2679.0	2676.1	2667.2	2664.3
20°	2696.8	2693.8	2686.4	2676.1	2668.7	2655.4	2649.5	2640.7	2633.3	2624.5	2620.0
22.5°	2656.9	2653.9	2645.1	2634.8	2623.0	2617.1	2611.2	2595.0	2587.6	2578.7	2577.2
25°	2606.8	2602.3	2593.5	2581.7	2575.8	2559.5	2553.6	2541.8	2538.9	2530.0	2528.6
27.5°	2530.0	2524.1	2513.8	2499.1	2488.7	2478.4	2472.5	2463.6	2460.7	2451.8	2450.4
30°	2415.0	2407.6	2386.9	2381.0	2363.3	2353.0	2353.0	2341.2	2342.7	2336.8	2336.8
32.5°	2233.5	2221.7	2205.5	2193.7	2181.9	2176.0	2176.0	2171.5	2174.5	2174.5	2177.5
35°	1993.0	1976.8	1968.0	1960.6	1960.6	1966.5	1984.2	1988.6	1997.5	2004.8	2010.8
37.5°	1684.7	1683.3	1693.6	1702.4	1724.6	1749.6	1780.6	1807.2	1832.2	1850.0	1867.6
40°	1351.3	1388.2	1417.7	1459.0	1492.9	1541.6	1597.7	1643.4	1686.2	1717.2	1749.6
42.5°	1054.8	1102.0	1164.0	1224.4	1284.9	1351.3	1425.1	1488.5	1544.6	1587.4	1621.3
45°	821.7	886.6	961.9	1038.6	1116.8	1199.4	1276.1	1341.0	1400.0	1444.3	1478.2
47.5°	662.4	733.2	818.7	902.9	991.4	1078.4	1164.0	1220.0	1268.7	1304.1	1335.1
50°	547.3	622.6	712.5	808.4	896.9	984.0	1057.7	1112.3	1152.2	1183.1	1202.3
52.5°	457.3	537.0	632.9	728.8	817.3	896.9	963.3	1004.6	1037.1	1059.2	1076.9
55°	377.6	454.4	544.4	634.4	721.4	796.6	851.2	882.2	907.3	920.5	930.9
57.5°	308.3	379.1	461.7	544.4	619.6	681.6	724.4	755.3	767.1	777.5	776.0
60°	242.0	308.3	383.6	454.4	519.3	569.4	600.4	618.1	627.0	631.4	628.4
62.5°	190.3	250.8	308.3	370.3	417.5	460.3	489.8	489.8	494.2	495.7	500.1
65°	141.6	187.3	237.5	283.3	321.6	349.6	365.9	370.3	376.2	374.7	371.8
67.5°	104.8	138.7	175.5	209.5	236.0	253.7	265.5	275.9	274.4	271.4	270.0
70°	72.3	94.4	126.9	147.5	166.7	184.4	187.3	188.8	190.3	191.8	188.8
72.5°	50.2	66.4	84.1	101.8	113.6	121.0	128.4	129.8	129.8	129.8	128.4
75°	25.1	33.9	50.2	57.5	67.9	70.8	76.7	76.7	81.1	75.2	73.7
77.5°	22.1	26.6	35.4	41.3	45.7	50.2	51.6	56.1	54.6	51.6	53.1
80°	13.3	16.2	22.1	25.1	31.0	32.5	33.9	35.4	33.9	35.4	35.4
82.5°	10.3	11.8	14.8	14.8	19.2	19.2	20.6	20.6	22.1	22.1	22.1
85°	5.9	10.3	8.8	17.7	11.8	11.8	14.8	17.7	14.8	14.8	17.7
87.5°	5.9	5.9	4.4	5.9	5.9	5.9	7.4	8.8	8.8	10.3	8.8
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: P245027

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2748.4	2748.4	2748.4	2748.4
2.5°	2752.8	2755.7	2751.3	2749.9
5°	2757.2	2757.2	2754.3	2754.3
7.5°	2757.2	2757.2	2752.8	2749.9
10°	2745.4	2745.4	2741.0	2738.0
12.5°	2723.3	2723.3	2721.8	2717.4
15°	2695.3	2695.3	2689.4	2684.9
17.5°	2656.9	2659.9	2652.5	2652.5
20°	2615.6	2614.1	2608.2	2605.3
22.5°	2572.8	2569.9	2568.4	2559.5
25°	2527.1	2524.1	2519.7	2515.3
27.5°	2448.9	2447.4	2443.0	2437.1
30°	2329.4	2327.9	2322.0	2322.0
32.5°	2174.5	2173.0	2167.1	2168.6
35°	2013.7	2019.6	2016.7	2010.8
37.5°	1879.5	1883.9	1886.8	1883.9
40°	1767.3	1780.6	1782.1	1785.1
42.5°	1647.9	1665.5	1671.5	1674.4
45°	1504.7	1521.0	1534.3	1531.3
47.5°	1358.7	1370.5	1382.3	1373.4
50°	1218.6	1225.9	1230.4	1230.4
52.5°	1085.8	1085.8	1084.3	1085.8
55°	933.8	933.8	927.9	930.9
57.5°	774.5	777.5	773.0	765.6
60°	627.0	619.6	616.6	612.2
62.5°	488.3	488.3	478.0	491.2
65°	365.9	361.4	357.0	355.5
67.5°	265.5	264.1	259.6	258.2
70°	187.3	181.5	180.0	177.0
72.5°	125.4	125.4	122.4	122.4
75°	76.7	69.3	67.9	69.3
77.5°	53.1	51.6	51.6	50.2
80°	35.4	33.9	36.9	32.5
82.5°	22.1	23.6	22.1	23.6
85°	14.8	17.7	16.2	16.2
87.5°	8.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)