

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: P246185

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246185
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 EC8B50830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5307.0 lumens
Efficiency: N/A
Efficacy: 100.1 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

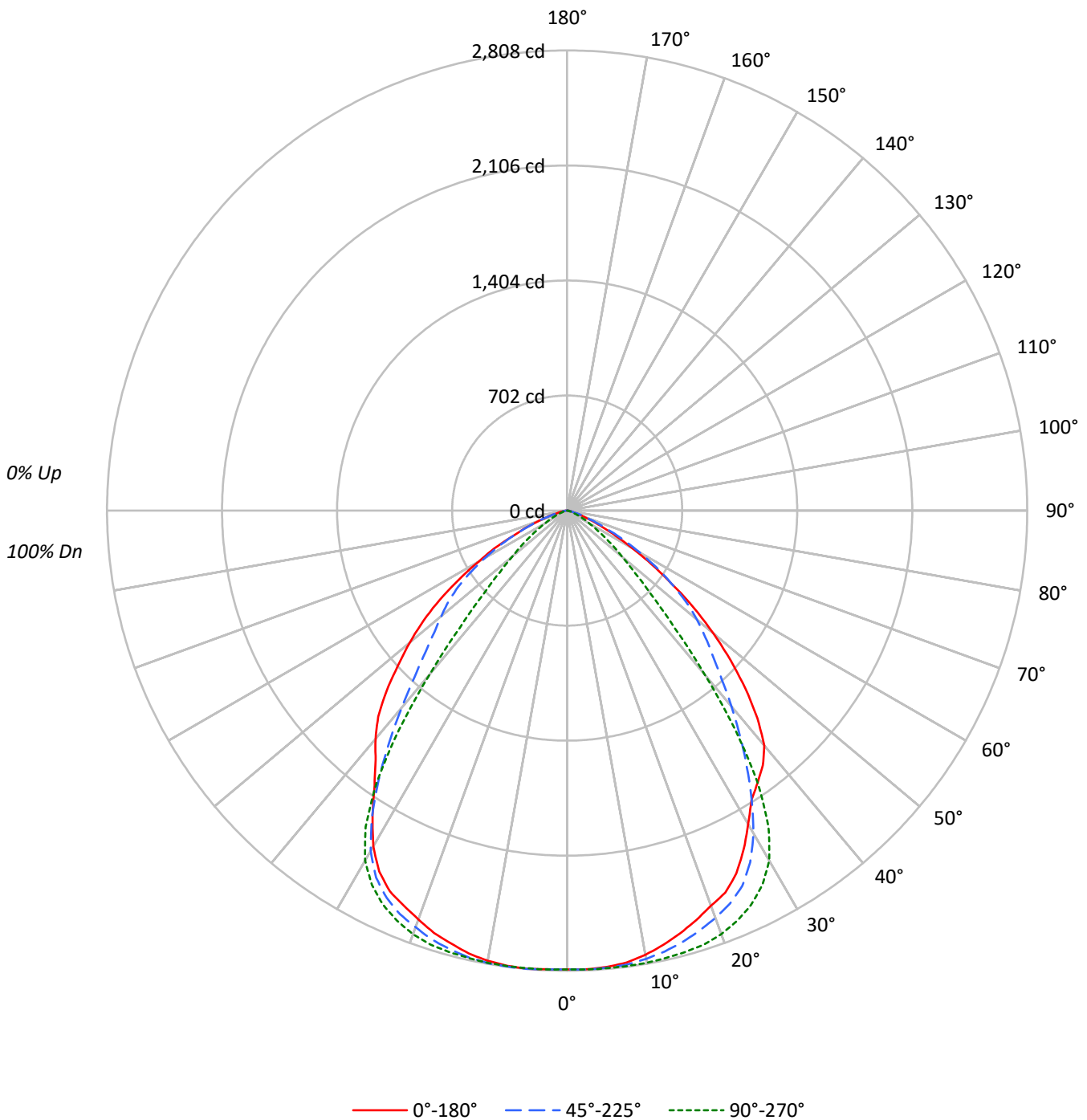
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

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°	86345	86345	86345
5°	86535	86767	86860
10°	86171	87724	87348
15°	85215	89008	87328
20°	84191	90259	87102
25°	83100	90361	87190
30°	78616	87820	84235
35°	76271	76324	77118
40°	75323	52515	73206
45°	67119	31525	68035
50°	55807	20983	60134
55°	41853	14467	50987
60°	28363	9639	38471
65°	17110	6253	26428
70°	9485	3390	16256
75°	4301	1430	8411
80°	3729	1598	5878
85°	4246	2123	5838



TEST NUMBER: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.2	5.0
10°-20°	776.1	14.6
20°-30°	1177.9	22.2
30°-40°	1237.2	23.3
40°-50°	927.5	17.5
50°-60°	595.1	11.2
60°-70°	254.6	4.8
70°-80°	60.1	1.1
80°-90°	11.2	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°	2221.2	41.9
0°-40°	3458.4	65.2
0°-60°	4981.1	93.9
0°-90°	5307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5307.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2800	2800	2800	2800	2800	
5°	2796	2800	2803	2808	2806	266
15°	2669	2725	2788	2770	2736	753
25°	2442	2528	2656	2608	2563	1116
35°	2026	1913	2028	2004	2049	1272
45°	1539	1258	723	1222	1560	1179
55°	778	778	269	812	948	706
65°	234	277	86	356	362	250
75°	36	42	12	72	71	53
85°	12	8	6	12	16	13
90°	0	0	0	0	0	



TEST NUMBER: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1
2.5°	2801.6	2804.6	2803.1	2803.1	2801.6	2803.1	2803.1	2806.1	2806.1	2803.1	2801.6
5°	2795.6	2798.6	2798.6	2795.6	2795.6	2803.1	2798.6	2801.6	2801.6	2800.1	2800.1
7.5°	2782.1	2782.1	2788.1	2783.6	2783.6	2788.1	2786.5	2789.6	2792.6	2794.1	2794.1
10°	2752.0	2755.0	2756.5	2756.5	2758.0	2762.5	2765.5	2771.5	2774.5	2777.5	2779.0
12.5°	2714.4	2718.9	2720.4	2718.9	2723.4	2729.4	2737.0	2744.5	2749.0	2755.0	2759.5
15°	2669.3	2669.3	2672.3	2676.8	2679.9	2688.9	2696.4	2705.4	2717.4	2724.9	2732.4
17.5°	2619.7	2622.7	2627.2	2627.2	2633.3	2648.3	2652.8	2666.3	2679.9	2687.4	2702.4
20°	2565.6	2568.6	2573.1	2576.1	2583.7	2595.7	2604.7	2616.7	2631.8	2645.3	2660.3
22.5°	2523.5	2517.5	2520.5	2523.5	2531.1	2541.6	2552.1	2567.1	2582.1	2595.7	2610.7
25°	2442.4	2443.9	2448.4	2451.4	2460.4	2469.4	2481.5	2499.5	2513.0	2528.0	2544.6
27.5°	2332.7	2334.2	2341.7	2341.7	2349.2	2364.2	2371.7	2386.8	2404.8	2419.8	2439.4
30°	2207.9	2210.9	2210.9	2216.9	2221.4	2228.9	2236.5	2251.5	2260.5	2274.0	2301.1
32.5°	2093.7	2096.7	2095.2	2093.7	2089.2	2087.7	2086.1	2089.2	2092.2	2096.7	2107.2
35°	2026.1	2018.5	2012.5	2002.0	1990.0	1974.9	1961.4	1943.4	1926.8	1913.3	1898.3
37.5°	1961.4	1959.9	1950.9	1935.8	1911.8	1884.8	1853.2	1814.1	1775.0	1733.0	1692.4
40°	1871.2	1866.7	1859.2	1838.2	1811.1	1778.0	1736.0	1687.9	1624.7	1560.1	1494.0
42.5°	1717.9	1719.4	1710.4	1693.9	1668.3	1636.7	1593.2	1540.6	1472.9	1396.3	1310.6
45°	1539.1	1539.1	1536.1	1522.5	1504.5	1478.9	1445.9	1402.3	1336.2	1258.0	1166.3
47.5°	1352.7	1354.2	1349.7	1346.7	1339.2	1322.6	1298.6	1265.5	1218.9	1143.8	1052.1
50°	1163.3	1163.3	1170.8	1169.3	1169.3	1163.3	1152.8	1133.2	1092.7	1032.6	946.9
52.5°	973.9	977.0	981.5	987.5	995.0	1007.0	995.0	986.0	960.4	913.8	840.2
55°	778.5	781.6	789.1	799.6	808.6	820.7	823.6	823.6	810.1	778.5	722.9
57.5°	611.7	607.2	613.2	622.2	634.3	646.3	655.3	665.8	664.3	643.3	598.2
60°	459.9	461.4	465.9	475.0	484.0	494.5	506.5	515.5	520.0	509.5	481.0
62.5°	335.2	335.2	341.2	350.2	354.7	369.7	377.2	381.8	386.3	384.7	366.7
65°	234.5	237.5	240.5	245.0	249.5	258.5	263.0	272.0	275.0	276.6	263.0
67.5°	165.3	160.8	163.8	166.8	171.3	177.4	186.4	186.4	190.9	190.9	181.9
70°	105.2	105.2	106.7	111.2	114.2	115.7	118.7	121.7	126.3	124.7	124.7
72.5°	70.6	69.1	70.6	72.2	73.7	78.1	78.1	79.7	82.7	84.2	78.1
75°	36.1	37.6	40.6	39.1	43.6	40.6	42.1	46.6	45.1	42.1	42.1
77.5°	30.0	30.0	30.0	28.6	31.6	31.6	30.0	33.1	31.6	31.6	30.0
80°	21.0	22.5	21.0	19.5	21.0	19.5	19.5	19.5	19.5	19.5	18.0
82.5°	16.5	13.5	15.0	13.5	15.0	15.0	13.5	12.0	12.0	13.5	12.0
85°	12.0	9.0	10.5	10.5	9.0	9.0	9.0	9.0	9.0	7.5	7.5
87.5°	7.5	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0	6.0	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: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1
2.5°	2804.6	2803.1	2806.1	2804.6	2804.6	2803.1	2804.6	2803.1	2806.1	2800.1	2801.6
5°	2804.6	2801.6	2803.1	2804.6	2806.1	2803.1	2803.1	2803.1	2806.1	2803.1	2804.6
7.5°	2798.6	2797.1	2801.6	2804.6	2803.1	2801.6	2804.6	2803.1	2806.1	2804.6	2807.6
10°	2786.5	2788.1	2791.1	2795.6	2797.1	2798.6	2801.6	2801.6	2806.1	2800.1	2803.1
12.5°	2768.5	2774.5	2782.1	2785.0	2791.1	2791.1	2794.1	2795.6	2798.6	2797.1	2801.6
15°	2746.0	2753.5	2762.5	2770.0	2777.5	2782.1	2786.5	2788.1	2792.6	2788.1	2789.6
17.5°	2718.9	2727.9	2741.5	2750.5	2762.5	2767.0	2773.0	2776.0	2780.5	2777.5	2779.0
20°	2681.3	2691.9	2706.9	2720.4	2727.9	2738.4	2746.0	2750.5	2753.5	2750.5	2752.0
22.5°	2628.7	2643.8	2663.3	2673.8	2688.9	2697.9	2699.4	2709.9	2717.4	2709.9	2712.9
25°	2567.1	2582.1	2597.2	2619.7	2633.3	2643.8	2654.3	2655.8	2663.3	2661.8	2660.3
27.5°	2464.9	2484.5	2510.0	2528.0	2546.1	2562.6	2574.6	2577.6	2585.2	2582.1	2583.7
30°	2325.1	2346.2	2370.2	2398.8	2424.3	2440.9	2455.9	2466.4	2473.9	2469.4	2467.9
32.5°	2126.7	2147.8	2173.3	2201.9	2232.0	2256.0	2274.0	2287.6	2296.6	2293.6	2286.1
35°	1899.8	1905.8	1922.3	1944.9	1970.4	1996.0	2012.5	2027.5	2038.0	2041.1	2041.1
37.5°	1666.8	1647.3	1635.3	1635.3	1650.3	1660.8	1675.8	1684.8	1701.4	1707.4	1711.9
40°	1441.4	1396.3	1354.2	1322.6	1301.6	1300.1	1300.1	1304.6	1319.6	1339.2	1357.2
42.5°	1240.0	1167.8	1103.2	1044.6	1002.5	978.5	967.9	969.4	981.5	999.5	1029.5
45°	1079.2	989.0	907.8	837.2	780.1	742.5	724.4	722.9	732.0	753.0	786.1
47.5°	954.4	858.2	766.5	685.4	623.8	583.2	562.1	556.1	562.1	581.6	620.7
50°	850.7	751.5	656.8	572.6	506.5	464.4	444.9	437.4	444.9	461.4	500.5
52.5°	754.5	652.3	563.6	482.5	411.8	375.7	354.7	350.2	354.7	374.2	405.8
55°	643.3	556.1	468.9	387.8	326.2	290.1	273.5	269.1	273.5	291.6	324.7
57.5°	533.6	458.4	381.8	308.1	255.5	223.9	208.9	202.9	213.4	225.4	264.5
60°	431.3	371.3	306.6	242.0	198.4	169.8	157.8	156.3	159.3	174.4	201.4
62.5°	338.2	288.6	237.5	184.9	148.8	136.8	121.7	120.3	123.2	132.2	153.3
65°	243.5	211.9	172.8	135.3	106.7	90.2	84.2	85.7	88.7	94.7	114.2
67.5°	169.8	147.3	120.3	94.7	73.7	66.1	60.1	58.6	60.1	70.6	81.2
70°	114.2	100.7	81.2	72.2	51.1	40.6	42.1	37.6	43.6	43.6	52.6
72.5°	75.1	66.1	54.1	42.1	36.1	28.6	28.6	27.1	30.0	31.6	39.1
75°	39.1	30.0	30.0	21.0	15.0	7.5	13.5	12.0	10.5	12.0	15.0
77.5°	27.1	22.5	21.0	16.5	15.0	12.0	12.0	12.0	12.0	13.5	15.0
80°	16.5	16.5	12.0	10.5	9.0	7.5	9.0	9.0	9.0	9.0	10.5
82.5°	10.5	9.0	9.0	7.5	7.5	6.0	6.0	6.0	6.0	6.0	9.0
85°	9.0	6.0	6.0	4.5	6.0	10.5	4.5	6.0	6.0	6.0	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.5	6.0
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: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1	2800.1
2.5°	2804.6	2806.1	2806.1	2804.6	2804.6	2801.6	2807.6	2803.1	2804.6	2810.6	2806.1
5°	2807.6	2809.1	2809.1	2807.6	2807.6	2807.6	2809.1	2809.1	2807.6	2806.1	2809.1
7.5°	2813.6	2812.1	2812.1	2809.1	2809.1	2806.1	2809.1	2804.6	2807.6	2804.6	2809.1
10°	2806.1	2807.6	2806.1	2804.6	2804.6	2803.1	2803.1	2798.6	2800.1	2795.6	2798.6
12.5°	2801.6	2800.1	2800.1	2797.1	2794.1	2791.1	2789.6	2785.0	2785.0	2774.5	2779.0
15°	2789.6	2791.1	2786.5	2780.5	2777.5	2770.0	2767.0	2761.0	2755.0	2747.5	2749.0
17.5°	2779.0	2774.5	2768.5	2762.5	2750.5	2744.5	2738.4	2729.4	2726.4	2717.4	2714.4
20°	2747.5	2744.5	2737.0	2726.4	2718.9	2705.4	2699.4	2690.4	2682.8	2673.8	2669.3
22.5°	2706.9	2703.9	2694.9	2684.3	2672.3	2666.3	2660.3	2643.8	2636.2	2627.2	2625.7
25°	2655.8	2651.3	2642.3	2630.2	2624.2	2607.7	2601.7	2589.6	2586.7	2577.6	2576.1
27.5°	2577.6	2571.6	2561.1	2546.1	2535.5	2525.0	2519.0	2510.0	2507.0	2498.0	2496.5
30°	2460.4	2452.9	2431.8	2425.8	2407.8	2397.3	2397.3	2385.2	2386.8	2380.8	2380.8
32.5°	2275.5	2263.5	2247.0	2234.9	2222.9	2216.9	2216.9	2212.4	2215.4	2215.4	2218.4
35°	2030.5	2014.0	2005.0	1997.5	1997.5	2003.5	2021.5	2026.1	2035.1	2042.6	2048.6
37.5°	1716.4	1714.9	1725.4	1734.5	1757.0	1782.6	1814.1	1841.2	1866.7	1884.8	1902.8
40°	1376.7	1414.3	1444.4	1486.5	1521.0	1570.6	1627.7	1674.3	1717.9	1749.5	1782.6
42.5°	1074.6	1122.7	1185.9	1247.5	1309.1	1376.7	1451.9	1516.5	1573.6	1617.2	1651.8
45°	837.2	903.3	980.0	1058.1	1137.8	1222.0	1300.1	1366.2	1426.4	1471.4	1506.0
47.5°	674.8	747.0	834.2	919.8	1010.0	1098.7	1185.9	1243.0	1292.6	1328.6	1360.2
50°	557.6	634.3	726.0	823.6	913.8	1002.5	1077.6	1133.2	1173.8	1205.4	1224.9
52.5°	465.9	547.1	644.8	742.5	832.6	913.8	981.5	1023.5	1056.6	1079.2	1097.2
55°	384.7	462.9	554.6	646.3	735.0	811.6	867.2	898.8	924.3	937.9	948.4
57.5°	314.1	386.3	470.4	554.6	631.3	694.4	738.0	769.5	781.6	792.1	790.6
60°	246.5	314.1	390.8	462.9	529.1	580.1	611.7	629.8	638.8	643.3	640.3
62.5°	193.9	255.5	314.1	377.2	425.3	468.9	499.0	499.0	503.5	505.0	509.5
65°	144.3	190.9	242.0	288.6	327.6	356.2	372.8	377.2	383.3	381.8	378.8
67.5°	106.7	141.3	178.8	213.4	240.5	258.5	270.5	281.1	279.6	276.6	275.0
70°	73.7	96.2	129.3	150.3	169.8	187.9	190.9	192.4	193.9	195.4	192.4
72.5°	51.1	67.6	85.7	103.7	115.7	123.2	130.8	132.2	132.2	132.2	130.8
75°	25.6	34.6	51.1	58.6	69.1	72.2	78.1	78.1	82.7	76.6	75.1
77.5°	22.5	27.1	36.1	42.1	46.6	51.1	52.6	57.1	55.6	52.6	54.1
80°	13.5	16.5	22.5	25.6	31.6	33.1	34.6	36.1	34.6	36.1	36.1
82.5°	10.5	12.0	15.0	15.0	19.5	19.5	21.0	21.0	22.5	22.5	22.5
85°	6.0	10.5	9.0	18.0	12.0	12.0	15.0	18.0	15.0	15.0	18.0
87.5°	6.0	6.0	4.5	6.0	6.0	6.0	7.5	9.0	9.0	10.5	9.0
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: P246185

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2800.1	2800.1	2800.1	2800.1
2.5°	2804.6	2807.6	2803.1	2801.6
5°	2809.1	2809.1	2806.1	2806.1
7.5°	2809.1	2809.1	2804.6	2801.6
10°	2797.1	2797.1	2792.6	2789.6
12.5°	2774.5	2774.5	2773.0	2768.5
15°	2746.0	2746.0	2739.9	2735.5
17.5°	2706.9	2709.9	2702.4	2702.4
20°	2664.8	2663.3	2657.3	2654.3
22.5°	2621.2	2618.2	2616.7	2607.7
25°	2574.6	2571.6	2567.1	2562.6
27.5°	2495.0	2493.5	2489.0	2483.0
30°	2373.2	2371.7	2365.7	2365.7
32.5°	2215.4	2213.9	2207.9	2209.4
35°	2051.6	2057.6	2054.6	2048.6
37.5°	1914.8	1919.3	1922.3	1919.3
40°	1800.6	1814.1	1815.6	1818.6
42.5°	1678.9	1696.9	1702.9	1705.9
45°	1533.0	1549.6	1563.1	1560.1
47.5°	1384.2	1396.3	1408.3	1399.3
50°	1241.5	1249.0	1253.5	1253.5
52.5°	1106.2	1106.2	1104.7	1106.2
55°	951.4	951.4	945.4	948.4
57.5°	789.1	792.1	787.6	780.1
60°	638.8	631.3	628.2	623.8
62.5°	497.5	497.5	487.0	500.5
65°	372.8	368.2	363.7	362.2
67.5°	270.5	269.1	264.5	263.0
70°	190.9	184.9	183.4	180.3
72.5°	127.8	127.8	124.7	124.7
75°	78.1	70.6	69.1	70.6
77.5°	54.1	52.6	52.6	51.1
80°	36.1	34.6	37.6	33.1
82.5°	22.5	24.1	22.5	24.1
85°	15.0	18.0	16.5	16.5
87.5°	9.0	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)