

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: P245033

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245033
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5339.0 lumens
Efficiency: N/A
Efficacy: 100.7 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

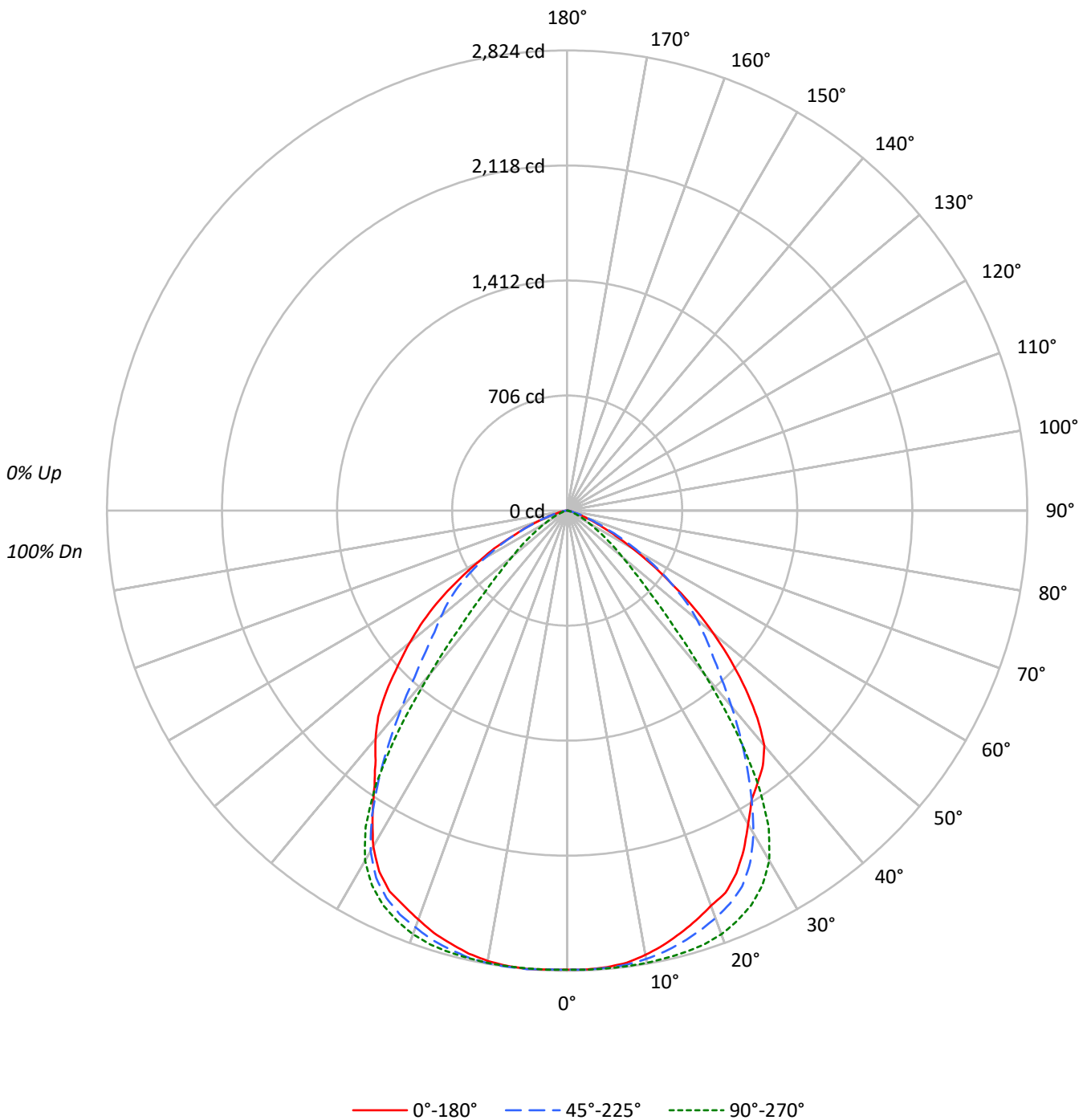
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

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°	86866	86866	86866
5°	87055	87291	87383
10°	86690	88253	87874
15°	85729	89544	87855
20°	84700	90803	87627
25°	83601	90906	87718
30°	79090	88351	84744
35°	76730	76787	77585
40°	75778	52833	73649
45°	67524	31717	68445
50°	56143	21108	60498
55°	42106	14553	51294
60°	28536	9695	38700
65°	17212	6290	26588
70°	9539	3408	16355
75°	4325	1442	8471
80°	3765	1616	5913
85°	4281	2123	5873



TEST NUMBER: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.8	5.0
10°-20°	780.7	14.6
20°-30°	1185.0	22.2
30°-40°	1244.6	23.3
40°-50°	933.1	17.5
50°-60°	598.7	11.2
60°-70°	256.1	4.8
70°-80°	60.5	1.1
80°-90°	11.3	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°	2234.6	41.9
0°-40°	3479.2	65.2
0°-60°	5011.1	93.9
0°-90°	5339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5339.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2817	2817	2817	2817	2817	
5°	2812	2817	2820	2824	2823	267
15°	2685	2741	2805	2787	2752	757
25°	2457	2543	2672	2623	2578	1122
35°	2038	1925	2040	2016	2061	1279
45°	1548	1266	727	1229	1570	1186
55°	783	783	271	816	954	710
65°	236	278	86	358	364	252
75°	36	42	12	73	71	53
85°	12	8	6	12	17	13
90°	0	0	0	0	0	



TEST NUMBER: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0
2.5°	2818.5	2821.5	2820.0	2820.0	2818.5	2820.0	2820.0	2823.0	2823.0	2820.0	2818.5
5°	2812.4	2815.4	2815.4	2812.4	2812.4	2820.0	2815.4	2818.5	2818.5	2817.0	2817.0
7.5°	2798.8	2798.8	2804.9	2800.3	2800.3	2804.9	2803.3	2806.4	2809.4	2810.9	2810.9
10°	2768.6	2771.6	2773.1	2773.1	2774.6	2779.2	2782.2	2788.3	2791.2	2794.3	2795.8
12.5°	2730.8	2735.3	2736.8	2735.3	2739.9	2745.9	2753.5	2761.0	2765.6	2771.6	2776.2
15°	2685.4	2685.4	2688.4	2693.0	2696.0	2705.1	2712.6	2721.7	2733.8	2741.4	2748.9
17.5°	2635.5	2638.6	2643.1	2643.1	2649.1	2664.2	2668.8	2682.4	2696.0	2703.6	2718.7
20°	2581.1	2584.1	2588.6	2591.7	2599.2	2611.3	2620.4	2632.5	2647.6	2661.2	2676.3
22.5°	2538.7	2532.7	2535.7	2538.7	2546.3	2556.9	2567.5	2582.6	2597.7	2611.3	2626.5
25°	2457.1	2458.6	2463.2	2466.2	2475.3	2484.3	2496.4	2514.5	2528.2	2543.3	2559.9
27.5°	2346.7	2348.2	2355.8	2355.8	2363.3	2378.5	2386.0	2401.1	2419.3	2434.4	2454.1
30°	2221.2	2224.2	2224.2	2230.3	2234.8	2242.4	2249.9	2265.1	2274.1	2287.7	2315.0
32.5°	2106.3	2109.3	2107.8	2106.3	2101.8	2100.2	2098.7	2101.8	2104.8	2109.3	2119.9
35°	2038.3	2030.7	2024.7	2014.1	2002.0	1986.8	1973.2	1955.1	1938.5	1924.8	1909.7
37.5°	1973.2	1971.7	1962.6	1947.5	1923.3	1896.1	1864.4	1825.1	1785.7	1743.4	1702.6
40°	1882.5	1878.0	1870.4	1849.3	1822.0	1788.8	1746.4	1698.0	1634.5	1569.5	1503.0
42.5°	1728.3	1729.8	1720.7	1704.1	1678.4	1646.6	1602.8	1549.9	1481.8	1404.7	1318.5
45°	1548.4	1548.4	1545.3	1531.7	1513.6	1487.9	1454.6	1410.8	1344.2	1265.6	1173.3
47.5°	1360.8	1362.4	1357.8	1354.8	1347.2	1330.6	1306.4	1273.2	1226.3	1150.7	1058.4
50°	1170.3	1170.3	1177.9	1176.4	1176.4	1170.3	1159.8	1140.1	1099.3	1038.8	952.6
52.5°	979.8	982.8	987.4	993.4	1001.0	1013.1	1001.0	991.9	966.2	919.3	845.2
55°	783.2	786.3	793.8	804.4	813.5	825.6	828.6	828.6	815.0	783.2	727.3
57.5°	615.4	610.9	616.9	626.0	638.1	650.2	659.3	669.8	668.3	647.2	601.8
60°	462.7	464.2	468.7	477.8	486.9	497.5	509.6	518.6	523.2	512.6	483.9
62.5°	337.2	337.2	343.2	352.3	356.8	372.0	379.5	384.1	388.6	387.1	368.9
65°	235.9	238.9	241.9	246.5	251.0	260.1	264.6	273.7	276.7	278.2	264.6
67.5°	166.3	161.8	164.8	167.8	172.4	178.4	187.5	187.5	192.0	192.0	183.0
70°	105.8	105.8	107.4	111.9	114.9	116.4	119.5	122.5	127.0	125.5	125.5
72.5°	71.1	69.6	71.1	72.6	74.1	78.6	78.6	80.1	83.2	84.7	78.6
75°	36.3	37.8	40.8	39.3	43.8	40.8	42.3	46.9	45.4	42.3	42.3
77.5°	30.2	30.2	30.2	28.7	31.7	31.7	30.2	33.3	31.7	31.7	30.2
80°	21.2	22.7	21.2	19.6	21.2	19.6	19.6	19.6	19.6	19.6	18.1
82.5°	16.6	13.6	15.1	13.6	15.1	15.1	13.6	12.1	12.1	13.6	12.1
85°	12.1	9.1	10.6	10.6	9.1	9.1	9.1	9.1	9.1	7.5	7.5
87.5°	7.5	4.6	4.6	4.6	6.0	6.0	6.0	4.6	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: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0
2.5°	2821.5	2820.0	2823.0	2821.5	2821.5	2820.0	2821.5	2820.0	2823.0	2817.0	2818.5
5°	2821.5	2818.5	2820.0	2821.5	2823.0	2820.0	2820.0	2820.0	2823.0	2820.0	2821.5
7.5°	2815.4	2813.9	2818.5	2821.5	2820.0	2818.5	2821.5	2820.0	2823.0	2821.5	2824.5
10°	2803.3	2804.9	2807.9	2812.4	2813.9	2815.4	2818.5	2818.5	2823.0	2817.0	2820.0
12.5°	2785.2	2791.2	2798.8	2801.8	2807.9	2807.9	2810.9	2812.4	2815.4	2813.9	2818.5
15°	2762.5	2770.1	2779.2	2786.7	2794.3	2798.8	2803.3	2804.9	2809.4	2804.9	2806.4
17.5°	2735.3	2744.4	2758.0	2767.1	2779.2	2783.7	2789.7	2792.8	2797.3	2794.3	2795.8
20°	2697.5	2708.1	2723.2	2736.8	2744.4	2755.0	2762.5	2767.1	2770.1	2767.1	2768.6
22.5°	2644.6	2659.7	2679.4	2689.9	2705.1	2714.1	2715.7	2726.2	2733.8	2726.2	2729.3
25°	2582.6	2597.7	2612.8	2635.5	2649.1	2659.7	2670.3	2671.8	2679.4	2677.9	2676.3
27.5°	2479.8	2499.4	2525.1	2543.3	2561.4	2578.1	2590.2	2593.2	2600.7	2597.7	2599.2
30°	2339.1	2360.3	2384.5	2413.2	2439.0	2455.6	2470.7	2481.3	2488.8	2484.3	2482.8
32.5°	2139.6	2160.7	2186.4	2215.2	2245.4	2269.6	2287.7	2301.4	2310.4	2307.4	2299.8
35°	1911.3	1917.3	1933.9	1956.6	1982.3	2008.0	2024.7	2039.8	2050.3	2053.4	2053.4
37.5°	1676.9	1657.2	1645.1	1645.1	1660.2	1670.8	1685.9	1695.0	1711.7	1717.7	1722.2
40°	1450.0	1404.7	1362.4	1330.6	1309.5	1307.9	1307.9	1312.5	1327.6	1347.2	1365.4
42.5°	1247.4	1174.9	1109.9	1050.9	1008.6	984.4	973.8	975.3	987.4	1005.5	1035.7
45°	1085.7	994.9	913.3	842.2	784.8	746.9	728.8	727.3	736.4	757.5	790.8
47.5°	960.2	863.4	771.1	689.5	627.5	586.7	565.5	559.5	565.5	585.2	624.5
50°	855.8	756.0	660.8	576.1	509.6	467.2	447.6	440.0	447.6	464.2	503.5
52.5°	759.0	656.2	567.0	485.4	414.3	378.0	356.8	352.3	356.8	376.5	408.3
55°	647.2	559.5	471.8	390.1	328.1	291.8	275.2	270.7	275.2	293.4	326.6
57.5°	536.8	461.2	384.1	310.0	257.1	225.3	210.2	204.1	214.7	226.8	266.1
60°	433.9	373.5	308.4	243.4	199.6	170.9	158.8	157.2	160.3	175.4	202.6
62.5°	340.2	290.3	238.9	186.0	149.7	137.6	122.5	121.0	124.0	133.0	154.2
65°	245.0	213.2	173.9	136.1	107.4	90.7	84.7	86.2	89.2	95.3	114.9
67.5°	170.9	148.2	121.0	95.3	74.1	66.5	60.5	59.0	60.5	71.1	81.7
70°	114.9	101.3	81.7	72.6	51.4	40.8	42.3	37.8	43.8	43.8	52.9
72.5°	75.6	66.5	54.4	42.3	36.3	28.7	28.7	27.2	30.2	31.7	39.3
75°	39.3	30.2	30.2	21.2	15.1	7.5	13.6	12.1	10.6	12.1	15.1
77.5°	27.2	22.7	21.2	16.6	15.1	12.1	12.1	12.1	12.1	13.6	15.1
80°	16.6	16.6	12.1	10.6	9.1	7.5	9.1	9.1	9.1	9.1	10.6
82.5°	10.6	9.1	9.1	7.5	7.5	6.0	6.0	6.0	6.0	6.0	9.1
85°	9.1	6.0	6.0	4.6	6.0	10.6	4.6	6.0	6.0	6.0	4.6
87.5°	3.0	4.6	4.6	4.6	3.0	1.5	3.0	4.6	4.6	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: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0	2817.0
2.5°	2821.5	2823.0	2823.0	2821.5	2821.5	2818.5	2824.5	2820.0	2821.5	2827.5	2823.0
5°	2824.5	2826.0	2826.0	2824.5	2824.5	2824.5	2826.0	2826.0	2824.5	2823.0	2826.0
7.5°	2830.6	2829.1	2829.1	2826.0	2826.0	2823.0	2826.0	2821.5	2824.5	2821.5	2826.0
10°	2823.0	2824.5	2823.0	2821.5	2821.5	2820.0	2820.0	2815.4	2817.0	2812.4	2815.4
12.5°	2818.5	2817.0	2817.0	2813.9	2810.9	2807.9	2806.4	2801.8	2801.8	2791.2	2795.8
15°	2806.4	2807.9	2803.3	2797.3	2794.3	2786.7	2783.7	2777.6	2771.6	2764.1	2765.6
17.5°	2795.8	2791.2	2785.2	2779.2	2767.1	2761.0	2755.0	2745.9	2742.9	2733.8	2730.8
20°	2764.1	2761.0	2753.5	2742.9	2735.3	2721.7	2715.7	2706.6	2699.0	2689.9	2685.4
22.5°	2723.2	2720.2	2711.1	2700.5	2688.4	2682.4	2676.3	2659.7	2652.1	2643.1	2641.6
25°	2671.8	2667.3	2658.2	2646.1	2640.0	2623.4	2617.4	2605.3	2602.3	2593.2	2591.7
27.5°	2593.2	2587.1	2576.6	2561.4	2550.8	2540.3	2534.2	2525.1	2522.1	2513.0	2511.5
30°	2475.3	2467.7	2446.5	2440.5	2422.3	2411.7	2411.7	2399.6	2401.1	2395.1	2395.1
32.5°	2289.3	2277.2	2260.5	2248.4	2236.3	2230.3	2230.3	2225.7	2228.8	2228.8	2231.8
35°	2042.8	2026.2	2017.1	2009.5	2009.5	2015.6	2033.7	2038.3	2047.3	2054.9	2061.0
37.5°	1726.8	1725.3	1735.9	1744.9	1767.6	1793.3	1825.1	1852.3	1878.0	1896.1	1914.3
40°	1385.0	1422.9	1453.1	1495.4	1530.2	1580.1	1637.6	1684.4	1728.3	1760.0	1793.3
42.5°	1081.1	1129.5	1193.0	1255.0	1317.0	1385.0	1460.7	1525.7	1583.1	1627.0	1661.7
45°	842.2	908.7	985.9	1064.5	1144.6	1229.3	1307.9	1374.5	1435.0	1480.3	1515.1
47.5°	678.9	751.5	839.2	925.4	1016.1	1105.3	1193.0	1250.5	1300.4	1336.7	1368.4
50°	561.0	638.1	730.3	828.6	919.3	1008.6	1084.1	1140.1	1180.9	1212.7	1232.3
52.5°	468.7	550.4	648.7	746.9	837.7	919.3	987.4	1029.7	1063.0	1085.7	1103.8
55°	387.1	465.7	558.0	650.2	739.4	816.5	872.4	904.2	929.9	943.5	954.1
57.5°	316.0	388.6	473.3	558.0	635.1	698.6	742.4	774.2	786.3	796.9	795.3
60°	248.0	316.0	393.1	465.7	532.2	583.6	615.4	633.5	642.6	647.2	644.1
62.5°	195.1	257.1	316.0	379.5	427.9	471.8	502.0	502.0	506.5	508.1	512.6
65°	145.1	192.0	243.4	290.3	329.6	358.4	375.0	379.5	385.6	384.1	381.0
67.5°	107.4	142.1	179.9	214.7	241.9	260.1	272.2	282.8	281.3	278.2	276.7
70°	74.1	96.8	130.0	151.2	170.9	189.0	192.0	193.5	195.1	196.6	193.5
72.5°	51.4	68.0	86.2	104.3	116.4	124.0	131.6	133.0	133.0	133.0	131.6
75°	25.7	34.8	51.4	59.0	69.6	72.6	78.6	78.6	83.2	77.1	75.6
77.5°	22.7	27.2	36.3	42.3	46.9	51.4	52.9	57.5	55.9	52.9	54.4
80°	13.6	16.6	22.7	25.7	31.7	33.3	34.8	36.3	34.8	36.3	36.3
82.5°	10.6	12.1	15.1	15.1	19.6	19.6	21.2	21.2	22.7	22.7	22.7
85°	6.0	10.6	9.1	18.1	12.1	12.1	15.1	18.1	15.1	15.1	18.1
87.5°	6.0	6.0	4.6	6.0	6.0	6.0	7.5	9.1	9.1	10.6	9.1
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: P245033

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2817.0	2817.0	2817.0	2817.0
2.5°	2821.5	2824.5	2820.0	2818.5
5°	2826.0	2826.0	2823.0	2823.0
7.5°	2826.0	2826.0	2821.5	2818.5
10°	2813.9	2813.9	2809.4	2806.4
12.5°	2791.2	2791.2	2789.7	2785.2
15°	2762.5	2762.5	2756.5	2752.0
17.5°	2723.2	2726.2	2718.7	2718.7
20°	2680.9	2679.4	2673.3	2670.3
22.5°	2637.0	2634.0	2632.5	2623.4
25°	2590.2	2587.1	2582.6	2578.1
27.5°	2510.0	2508.5	2504.0	2497.9
30°	2387.5	2386.0	2380.0	2380.0
32.5°	2228.8	2227.3	2221.2	2222.7
35°	2063.9	2070.0	2067.0	2061.0
37.5°	1926.4	1930.9	1933.9	1930.9
40°	1811.4	1825.1	1826.6	1829.6
42.5°	1689.0	1707.1	1713.2	1716.2
45°	1542.3	1558.9	1572.5	1569.5
47.5°	1392.6	1404.7	1416.8	1407.7
50°	1249.0	1256.5	1261.1	1261.1
52.5°	1112.9	1112.9	1111.4	1112.9
55°	957.1	957.1	951.1	954.1
57.5°	793.8	796.9	792.3	784.8
60°	642.6	635.1	632.0	627.5
62.5°	500.5	500.5	489.9	503.5
65°	375.0	370.5	365.9	364.4
67.5°	272.2	270.7	266.1	264.6
70°	192.0	186.0	184.5	181.4
72.5°	128.5	128.5	125.5	125.5
75°	78.6	71.1	69.6	71.1
77.5°	54.4	52.9	52.9	51.4
80°	36.3	34.8	37.8	33.3
82.5°	22.7	24.2	22.7	24.2
85°	15.1	18.1	16.6	16.6
87.5°	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)