

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: P244163

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244163
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 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5426.0 lumens
Efficiency: N/A
Efficacy: 102.4 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

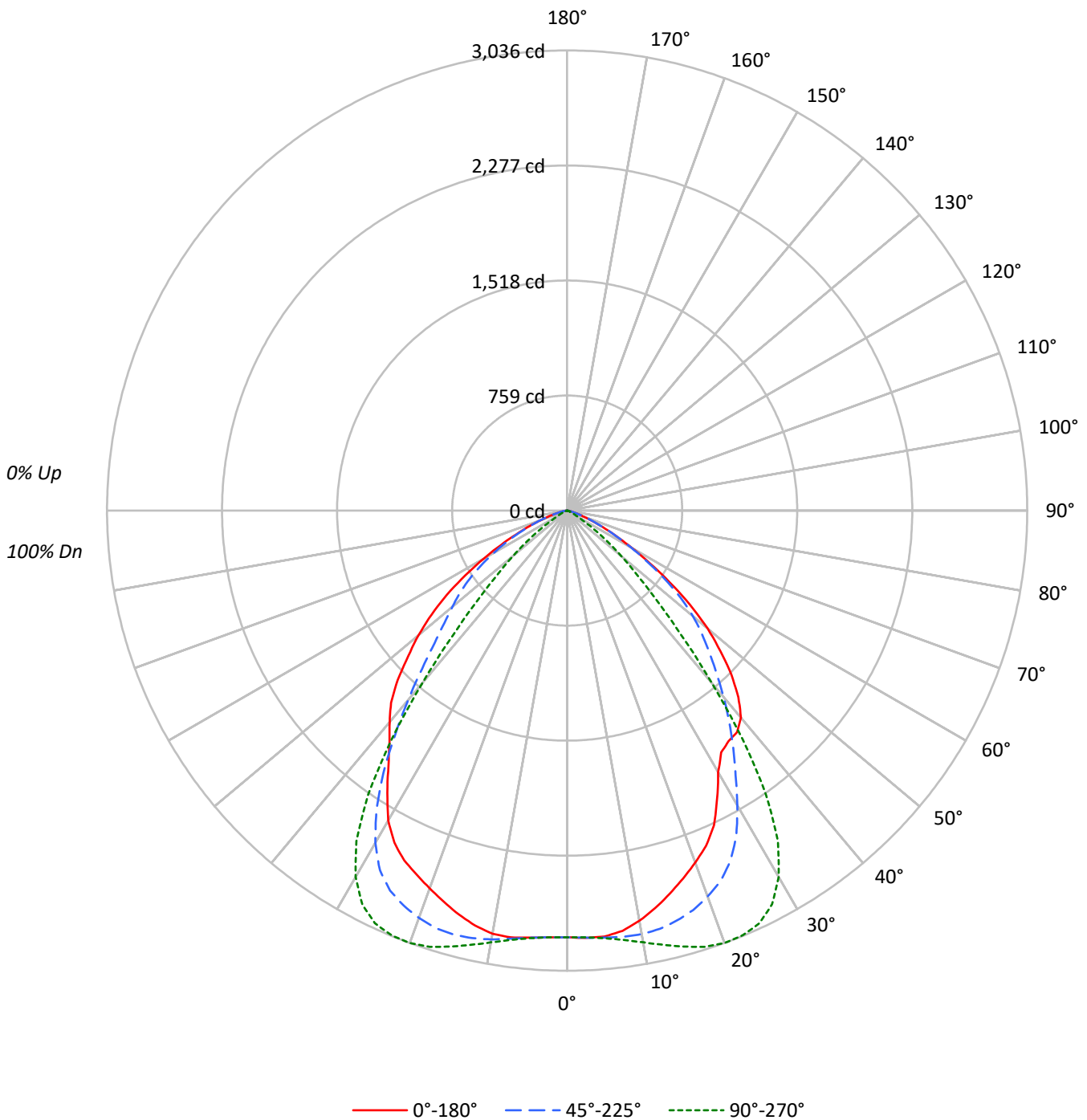
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	86798	86798	86798
5°	87315	87640	87547
10°	86033	90570	88795
15°	83517	95060	88095
20°	81093	99627	87026
25°	77980	102178	86622
30°	70968	99375	84053
35°	69909	86107	77332
40°	71809	59721	73315
45°	66848	36095	68933
50°	57985	22288	61424
55°	44498	11645	52133
60°	30318	4699	39347
65°	18861	2401	27143
70°	10233	1488	16571
75°	5338	715	9794
80°	2397	799	5310
85°	1592	531	4776



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.7	5.0
10°-20°	801.9	14.8
20°-30°	1223.4	22.5
30°-40°	1276.6	23.5
40°-50°	958.9	17.7
50°-60°	590.0	10.9
60°-70°	240.1	4.4
70°-80°	56.6	1.0
80°-90°	7.8	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°	2296.0	42.3
0°-40°	3572.6	65.8
0°-60°	5121.5	94.4
0°-90°	5426.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5426.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2815	2815	2815	2815	2815	
5°	2821	2828	2831	2828	2828	267
15°	2616	2800	2978	2896	2760	737
25°	2292	2549	3003	2766	2546	1042
35°	1857	1909	2287	2114	2054	1173
45°	1533	1327	828	1236	1581	1170
55°	828	786	217	786	970	744
65°	258	262	33	351	372	270
75°	45	45	6	79	82	54
85°	4	4	2	10	14	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°	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8
2.5°	2822.3	2817.8	2822.3	2822.3	2823.8	2820.8	2822.3	2823.8	2820.8	2820.8	2820.8
5°	2820.8	2817.8	2820.8	2819.3	2822.3	2822.3	2825.3	2825.3	2828.3	2828.3	2832.8
7.5°	2796.9	2790.9	2796.9	2801.4	2804.4	2810.4	2817.8	2823.8	2829.8	2835.8	2843.2
10°	2747.6	2747.6	2752.1	2761.0	2770.0	2780.5	2793.9	2808.9	2823.8	2837.2	2850.7
12.5°	2686.4	2681.9	2690.8	2702.8	2716.2	2732.7	2753.6	2776.0	2799.9	2826.8	2847.7
15°	2616.1	2611.6	2622.1	2634.0	2650.5	2674.4	2699.8	2729.7	2764.0	2799.9	2834.3
17.5°	2544.4	2542.9	2553.4	2569.8	2583.3	2608.6	2641.5	2677.4	2716.2	2764.0	2808.9
20°	2471.2	2469.7	2480.2	2493.6	2511.5	2535.4	2568.3	2610.1	2656.5	2710.3	2762.5
22.5°	2395.0	2396.5	2405.4	2420.4	2435.3	2460.7	2495.1	2536.9	2587.7	2646.0	2704.3
25°	2291.9	2284.4	2296.4	2311.3	2336.7	2357.6	2390.5	2435.3	2487.6	2548.9	2617.6
27.5°	2142.5	2141.0	2151.5	2164.9	2187.3	2212.7	2248.6	2294.9	2350.2	2417.4	2484.6
30°	1993.1	1996.1	2000.6	2014.0	2028.9	2054.3	2090.2	2129.1	2181.3	2245.6	2317.3
32.5°	1891.5	1891.5	1897.5	1906.4	1916.9	1930.3	1955.8	1984.1	2024.5	2069.3	2121.6
35°	1857.1	1851.2	1857.1	1858.6	1860.1	1863.1	1867.6	1876.6	1890.0	1909.4	1928.8
37.5°	1842.2	1837.7	1837.7	1831.7	1824.3	1815.3	1803.3	1789.9	1775.0	1755.5	1740.6
40°	1783.9	1780.9	1777.9	1772.0	1755.5	1737.6	1718.2	1686.8	1652.4	1604.6	1556.8
42.5°	1671.9	1668.9	1667.4	1655.4	1640.5	1619.6	1597.2	1564.3	1521.0	1459.7	1391.0
45°	1532.9	1526.9	1522.5	1512.0	1501.5	1483.6	1462.7	1432.8	1389.5	1326.7	1244.6
47.5°	1371.6	1368.6	1367.1	1362.6	1352.2	1341.7	1328.2	1304.3	1265.5	1205.7	1120.6
50°	1208.7	1202.7	1205.7	1204.2	1199.7	1192.3	1183.3	1166.9	1137.0	1083.2	1005.5
52.5°	1021.9	1021.9	1020.5	1024.9	1026.4	1024.9	1026.4	1008.5	983.1	942.7	877.0
55°	827.7	827.7	832.2	838.2	844.1	845.6	844.1	836.7	818.7	785.9	727.6
57.5°	645.4	642.5	651.4	660.4	666.4	672.3	667.8	661.9	651.4	624.5	579.7
60°	491.6	491.6	497.5	503.5	509.5	515.5	514.0	512.5	503.5	485.6	449.7
62.5°	361.6	363.1	363.1	367.5	373.5	379.5	384.0	379.5	375.0	363.1	339.1
65°	258.5	257.0	258.5	263.0	267.5	273.4	276.4	274.9	270.4	261.5	243.5
67.5°	173.3	171.8	177.8	179.3	182.3	188.3	186.8	188.3	186.8	179.3	164.4
70°	113.5	110.6	113.5	112.0	116.5	118.0	121.0	122.5	121.0	116.5	112.0
72.5°	70.2	68.7	70.2	71.7	73.2	74.7	77.7	77.7	76.2	73.2	67.2
75°	44.8	40.3	41.8	38.9	41.8	41.8	44.8	46.3	44.8	44.8	41.8
77.5°	26.9	26.9	26.9	26.9	26.9	26.9	26.9	28.4	29.9	26.9	25.4
80°	13.5	13.5	15.0	15.0	15.0	16.5	15.0	15.0	15.0	16.5	12.0
82.5°	10.5	9.0	9.0	9.0	10.5	9.0	9.0	9.0	9.0	9.0	9.0
85°	4.5	6.0	4.5	3.0	4.5	4.5	6.0	4.5	4.5	4.5	6.0
87.5°	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	3.0	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°	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8
2.5°	2822.3	2819.3	2819.3	2817.8	2820.8	2817.8	2819.3	2817.8	2817.8	2820.8	2817.8
5°	2832.8	2834.3	2831.3	2829.8	2834.3	2834.3	2834.3	2831.3	2831.3	2832.8	2831.3
7.5°	2847.7	2850.7	2852.2	2853.7	2856.7	2858.2	2858.2	2856.7	2855.2	2859.7	2853.7
10°	2864.1	2868.6	2877.6	2882.1	2889.5	2889.5	2892.5	2892.5	2889.5	2892.5	2891.0
12.5°	2858.2	2885.0	2900.0	2910.5	2920.9	2929.9	2932.9	2934.4	2932.9	2938.9	2932.9
15°	2868.6	2891.0	2914.9	2932.9	2952.3	2962.7	2965.7	2977.7	2980.7	2982.2	2973.2
17.5°	2852.2	2892.5	2917.9	2944.8	2973.2	2992.6	3010.5	3018.0	3019.5	3022.5	3010.5
20°	2814.8	2859.7	2898.5	2937.4	2970.2	3000.1	3015.0	3036.0	3030.0	3041.9	3025.5
22.5°	2764.0	2814.8	2864.1	2914.9	2949.3	2985.2	3016.5	3031.5	3039.0	3039.0	3021.0
25°	2683.4	2743.1	2796.9	2849.2	2901.5	2944.8	2980.7	3003.1	3007.6	3006.1	2985.2
27.5°	2557.9	2622.1	2684.9	2744.6	2808.9	2859.7	2901.5	2928.4	2935.9	2935.9	2913.4
30°	2384.5	2453.3	2514.5	2586.2	2652.0	2708.8	2767.0	2790.9	2804.4	2804.4	2779.0
32.5°	2178.4	2236.6	2293.4	2363.6	2435.3	2499.6	2554.9	2587.7	2604.2	2602.7	2580.3
35°	1954.3	1982.6	2026.0	2078.3	2142.5	2202.3	2256.0	2287.4	2315.8	2314.3	2293.4
37.5°	1730.1	1722.7	1727.2	1746.6	1786.9	1828.8	1870.6	1900.5	1924.4	1934.8	1930.3
40°	1510.5	1471.7	1434.3	1420.9	1423.8	1438.8	1461.2	1483.6	1510.5	1524.0	1529.9
42.5°	1313.3	1247.6	1181.8	1132.5	1104.1	1095.2	1105.6	1113.1	1129.5	1148.9	1168.4
45°	1154.9	1066.8	980.1	903.9	856.1	827.7	821.7	827.7	836.7	856.1	881.5
47.5°	1024.9	921.8	824.7	739.6	669.3	632.0	621.5	618.6	627.5	645.4	679.8
50°	909.9	806.8	699.2	600.6	527.4	485.6	470.6	464.6	475.1	488.6	519.9
52.5°	784.4	682.8	572.2	476.6	400.4	357.1	340.6	331.7	337.6	355.6	387.0
55°	648.4	554.3	454.2	355.6	282.4	242.0	222.6	216.6	222.6	242.0	273.4
57.5°	512.5	433.3	349.6	257.0	191.2	150.9	131.5	125.5	142.0	149.4	182.3
60°	400.4	336.2	264.5	188.3	131.5	100.1	80.7	76.2	83.7	97.1	124.0
62.5°	300.3	260.0	203.2	134.5	97.1	64.2	53.8	49.3	53.8	64.2	85.2
65°	218.1	186.8	142.0	98.6	65.7	47.8	35.9	32.9	37.4	44.8	62.8
67.5°	149.4	125.5	98.6	68.7	44.8	29.9	25.4	25.4	26.9	32.9	46.3
70°	97.1	82.2	62.8	44.8	29.9	22.4	19.4	16.5	19.4	23.9	31.4
72.5°	61.3	52.3	40.3	31.4	22.4	16.5	13.5	12.0	15.0	17.9	23.9
75°	37.4	28.4	20.9	16.5	12.0	12.0	12.0	6.0	7.5	12.0	15.0
77.5°	22.4	19.4	16.5	13.5	10.5	6.0	6.0	6.0	7.5	9.0	13.5
80°	12.0	10.5	7.5	7.5	6.0	4.5	6.0	4.5	3.0	7.5	9.0
82.5°	7.5	6.0	6.0	6.0	7.5	3.0	4.5	3.0	4.5	6.0	4.5
85°	4.5	4.5	4.5	3.0	7.5	3.0	3.0	1.5	1.5	3.0	3.0
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°	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8	2814.8
2.5°	2819.3	2817.8	2819.3	2817.8	2817.8	2817.8	2819.3	2819.3	2817.8	2817.8	2820.8
5°	2831.3	2831.3	2831.3	2829.8	2828.3	2828.3	2831.3	2831.3	2826.8	2831.3	2831.3
7.5°	2856.7	2852.2	2856.7	2850.7	2847.7	2849.2	2850.7	2847.7	2844.7	2846.2	2846.2
10°	2889.5	2885.0	2885.0	2880.6	2876.1	2873.1	2870.1	2862.6	2855.2	2853.7	2847.7
12.5°	2928.4	2920.9	2916.4	2907.5	2900.0	2889.5	2880.6	2868.6	2853.7	2843.2	2832.8
15°	2967.2	2955.3	2944.8	2929.9	2913.4	2895.5	2876.1	2856.7	2832.8	2811.9	2793.9
17.5°	2998.6	2982.2	2962.7	2938.9	2914.9	2888.0	2859.7	2831.3	2796.9	2770.0	2749.1
20°	3009.0	2985.2	2959.8	2928.4	2897.0	2859.7	2823.8	2786.4	2747.6	2719.2	2695.3
22.5°	2995.6	2967.2	2935.9	2903.0	2861.1	2820.8	2779.0	2735.6	2701.3	2662.4	2640.0
25°	2958.3	2923.9	2889.5	2850.7	2810.4	2765.5	2720.7	2675.9	2634.0	2613.1	2584.8
27.5°	2882.1	2844.7	2807.4	2767.0	2720.7	2675.9	2629.6	2586.2	2550.4	2522.0	2505.6
30°	2747.6	2704.3	2660.9	2617.6	2577.3	2530.9	2487.6	2451.8	2415.9	2393.5	2377.1
32.5°	2541.4	2502.6	2459.3	2417.4	2380.1	2341.2	2305.4	2274.0	2248.6	2233.6	2221.7
35°	2263.5	2224.7	2191.8	2161.9	2130.5	2114.1	2091.7	2073.8	2063.3	2057.3	2055.8
37.5°	1913.9	1891.5	1881.0	1875.1	1869.1	1864.6	1867.6	1875.1	1881.0	1891.5	1903.4
40°	1540.4	1559.8	1565.8	1586.7	1606.1	1631.5	1659.9	1692.8	1719.7	1754.0	1777.9
42.5°	1199.7	1235.6	1277.4	1322.2	1370.1	1416.4	1473.2	1525.4	1573.3	1616.6	1653.9
45°	921.8	977.1	1039.9	1104.1	1168.4	1235.6	1304.3	1368.6	1425.3	1471.7	1510.5
47.5°	718.6	779.9	860.6	939.8	1017.5	1096.7	1172.8	1240.1	1287.9	1332.7	1367.1
50°	569.2	639.5	727.6	818.7	903.9	987.6	1068.2	1131.0	1178.8	1214.7	1240.1
52.5°	440.7	524.4	614.1	709.7	800.8	892.0	966.7	1024.9	1063.8	1095.2	1114.6
55°	328.7	410.9	506.5	605.1	697.7	785.9	856.1	906.9	941.3	959.2	969.7
57.5°	237.6	312.3	407.9	506.5	590.1	673.8	730.6	776.9	796.3	806.8	811.3
60°	173.3	242.0	327.2	412.4	491.6	558.8	608.1	639.5	654.4	660.4	658.9
62.5°	127.0	186.8	260.0	331.7	395.9	451.2	490.1	511.0	518.5	521.4	517.0
65°	97.1	143.4	206.2	261.5	310.8	351.1	379.5	393.0	397.4	395.9	393.0
67.5°	71.7	107.6	153.9	195.7	231.6	263.0	277.9	289.9	292.8	288.4	283.9
70°	50.8	79.2	112.0	140.5	167.3	185.3	201.7	203.2	203.2	201.7	198.7
72.5°	35.9	55.3	76.2	95.6	112.0	125.5	131.5	136.0	134.5	133.0	130.0
75°	23.9	34.4	55.3	59.8	74.7	79.2	85.2	85.2	86.6	82.2	82.2
77.5°	15.0	23.9	32.9	38.9	44.8	50.8	53.8	53.8	55.3	53.8	53.8
80°	9.0	15.0	17.9	26.9	26.9	31.4	32.9	34.4	31.4	35.9	31.4
82.5°	6.0	9.0	13.5	13.5	16.5	19.4	19.4	20.9	20.9	19.4	19.4
85°	4.5	6.0	7.5	9.0	9.0	10.5	9.0	9.0	10.5	12.0	10.5
87.5°	1.5	3.0	1.5	3.0	3.0	6.0	4.5	4.5	4.5	6.0	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: P244163

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2814.8	2814.8	2814.8	2814.8
2.5°	2817.8	2819.3	2817.8	2817.8
5°	2831.3	2829.8	2831.3	2828.3
7.5°	2841.7	2841.7	2840.2	2840.2
10°	2841.7	2835.8	2835.8	2835.8
12.5°	2819.3	2811.9	2807.4	2804.4
15°	2780.5	2767.0	2761.0	2759.5
17.5°	2729.7	2717.7	2710.3	2705.8
20°	2671.4	2659.4	2650.5	2652.0
22.5°	2620.6	2607.2	2601.2	2598.2
25°	2569.8	2553.4	2548.9	2545.9
27.5°	2487.6	2478.7	2474.2	2469.7
30°	2362.1	2357.6	2350.2	2360.6
32.5°	2217.2	2209.7	2203.8	2208.3
35°	2057.3	2052.8	2057.3	2054.3
37.5°	1910.9	1915.4	1921.4	1924.4
40°	1795.9	1812.3	1818.3	1821.3
42.5°	1680.8	1700.3	1712.2	1719.7
45°	1538.9	1558.3	1571.8	1580.7
47.5°	1392.5	1408.9	1422.3	1420.9
50°	1259.5	1268.5	1274.4	1280.4
52.5°	1125.0	1125.0	1126.5	1126.5
55°	972.6	969.7	968.2	969.7
57.5°	805.3	802.3	800.8	796.3
60°	652.9	644.0	638.0	638.0
62.5°	511.0	500.5	496.0	494.5
65°	384.0	382.5	373.5	372.0
67.5°	277.9	271.9	266.0	267.5
70°	195.7	186.8	186.8	183.8
72.5°	127.0	122.5	121.0	121.0
75°	79.2	79.2	76.2	82.2
77.5°	52.3	52.3	50.8	52.3
80°	31.4	31.4	31.4	29.9
82.5°	19.4	20.9	19.4	19.4
85°	10.5	12.0	9.0	13.5
87.5°	6.0	7.5	6.0	7.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)