

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: P246059

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246059
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 EC8B50850 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5526.0 lumens
Efficiency: N/A
Efficacy: 104.3 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

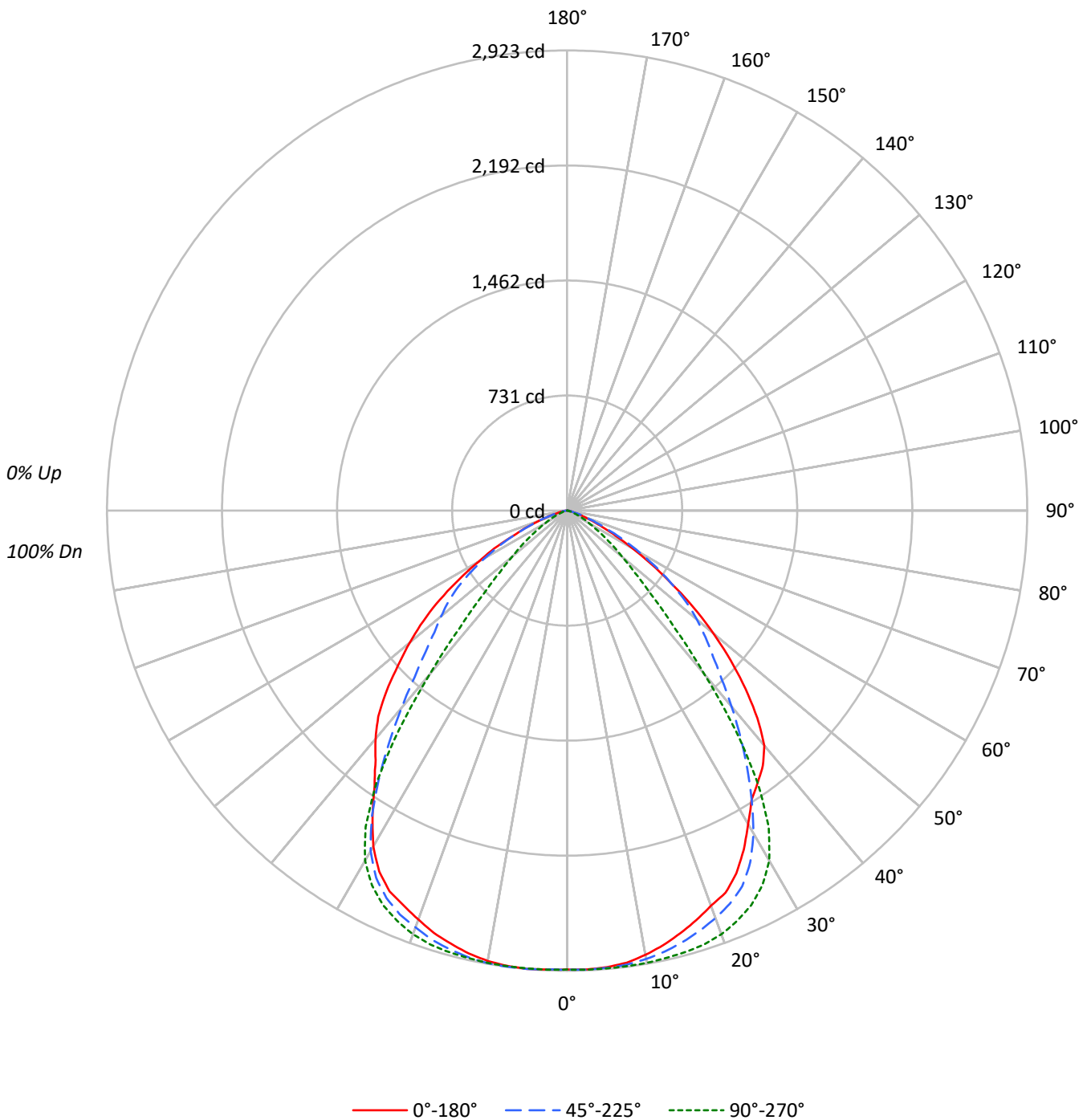
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	89906	89906	89906
5°	90104	90349	90445
10°	89725	91343	90952
15°	88733	92679	90929
20°	87666	93983	90695
25°	86527	94090	90790
30°	81860	91445	87710
35°	79418	79474	80299
40°	78431	54681	76229
45°	69888	32829	70843
50°	58109	21847	62614
55°	43584	15064	53089
60°	29535	10034	40056
65°	17818	6508	27522
70°	9881	3525	16932
75°	4480	1489	8769
80°	3889	1669	6109
85°	4423	2194	6085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.3	5.0
10°-20°	808.1	14.6
20°-30°	1226.5	22.2
30°-40°	1288.2	23.3
40°-50°	965.8	17.5
50°-60°	619.7	11.2
60°-70°	265.1	4.8
70°-80°	62.6	1.1
80°-90°	11.6	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°	2312.9	41.9
0°-40°	3601.1	65.2
0°-60°	5186.6	93.9
0°-90°	5526.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5526.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2916	2916	2916	2916	2916	
5°	2911	2916	2919	2923	2922	277
15°	2780	2837	2903	2884	2848	784
25°	2543	2632	2765	2715	2668	1162
35°	2110	1992	2111	2086	2133	1324
45°	1603	1310	753	1272	1624	1227
55°	811	811	280	845	988	735
65°	244	288	89	371	377	261
75°	38	44	12	75	74	55
85°	12	8	6	12	17	13
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°	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6
2.5°	2917.2	2920.3	2918.8	2918.8	2917.2	2918.8	2918.8	2921.9	2921.9	2918.8	2917.2
5°	2910.9	2914.1	2914.1	2910.9	2910.9	2918.8	2914.1	2917.2	2917.2	2915.6	2915.6
7.5°	2896.9	2896.9	2903.1	2898.4	2898.4	2903.1	2901.5	2904.7	2907.8	2909.4	2909.4
10°	2865.5	2868.7	2870.2	2870.2	2871.8	2876.5	2879.6	2885.9	2889.0	2892.2	2893.7
12.5°	2826.4	2831.1	2832.7	2831.1	2835.8	2842.1	2849.9	2857.7	2862.4	2868.7	2873.4
15°	2779.5	2779.5	2782.6	2787.3	2790.4	2799.8	2807.6	2817.0	2829.5	2837.4	2845.2
17.5°	2727.8	2731.0	2735.6	2735.6	2741.9	2757.6	2762.3	2776.4	2790.4	2798.3	2813.9
20°	2671.5	2674.6	2679.3	2682.5	2690.3	2702.8	2712.2	2724.7	2740.4	2754.4	2770.1
22.5°	2627.7	2621.4	2624.5	2627.7	2635.5	2646.5	2657.4	2673.0	2688.7	2702.8	2718.5
25°	2543.1	2544.7	2549.4	2552.5	2561.9	2571.3	2583.9	2602.6	2616.7	2632.4	2649.6
27.5°	2428.9	2430.5	2438.3	2438.3	2446.1	2461.8	2469.6	2485.2	2504.0	2519.7	2540.0
30°	2299.0	2302.1	2302.1	2308.4	2313.1	2320.9	2328.7	2344.4	2353.8	2367.9	2396.1
32.5°	2180.1	2183.2	2181.6	2180.1	2175.4	2173.8	2172.2	2175.4	2178.5	2183.2	2194.1
35°	2109.7	2101.8	2095.6	2084.6	2072.1	2056.4	2042.3	2023.6	2006.3	1992.3	1976.6
37.5°	2042.3	2040.8	2031.4	2015.7	1990.7	1962.5	1929.7	1889.0	1848.3	1804.5	1762.2
40°	1948.4	1943.7	1935.9	1914.0	1885.8	1851.4	1807.6	1757.5	1691.8	1624.5	1555.6
42.5°	1788.8	1790.4	1781.0	1763.8	1737.2	1704.3	1658.9	1604.2	1533.7	1453.9	1364.7
45°	1602.6	1602.6	1599.4	1585.4	1566.6	1540.0	1505.5	1460.2	1391.3	1309.9	1214.4
47.5°	1408.5	1410.1	1405.4	1402.3	1394.4	1377.2	1352.2	1317.8	1269.2	1191.0	1095.5
50°	1211.3	1211.3	1219.1	1217.6	1217.6	1211.3	1200.4	1180.0	1137.8	1075.2	986.0
52.5°	1014.1	1017.3	1022.0	1028.2	1036.0	1048.6	1036.0	1026.6	1000.0	951.5	874.9
55°	810.7	813.8	821.6	832.6	842.0	854.5	857.6	857.6	843.5	810.7	752.8
57.5°	637.0	632.3	638.5	647.9	660.4	673.0	682.4	693.3	691.7	669.8	622.9
60°	478.9	480.5	485.1	494.6	503.9	514.9	527.4	536.8	541.5	530.6	500.8
62.5°	349.0	349.0	355.2	364.6	369.3	385.0	392.8	397.5	402.2	400.6	381.9
65°	244.2	247.3	250.4	255.1	259.8	269.2	273.9	283.3	286.4	288.0	273.9
67.5°	172.2	167.5	170.6	173.7	178.4	184.7	194.1	194.1	198.7	198.7	189.4
70°	109.6	109.6	111.1	115.8	118.9	120.5	123.6	126.8	131.5	129.9	129.9
72.5°	73.6	72.0	73.6	75.1	76.7	81.4	81.4	82.9	86.1	87.7	81.4
75°	37.6	39.1	42.2	40.7	45.4	42.2	43.8	48.5	46.9	43.8	43.8
77.5°	31.3	31.3	31.3	29.8	32.9	32.9	31.3	34.4	32.9	32.9	31.3
80°	21.9	23.5	21.9	20.3	21.9	20.3	20.3	20.3	20.3	20.3	18.8
82.5°	17.2	14.1	15.7	14.1	15.7	15.7	14.1	12.5	12.5	14.1	12.5
85°	12.5	9.4	11.0	11.0	9.4	9.4	9.4	9.4	9.4	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.2	6.2	6.2	4.7	6.2	6.2	3.1
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°	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6
2.5°	2920.3	2918.8	2921.9	2920.3	2920.3	2918.8	2920.3	2918.8	2921.9	2915.6	2917.2
5°	2920.3	2917.2	2918.8	2920.3	2921.9	2918.8	2918.8	2918.8	2921.9	2918.8	2920.3
7.5°	2914.1	2912.5	2917.2	2920.3	2918.8	2917.2	2920.3	2918.8	2921.9	2920.3	2923.4
10°	2901.5	2903.1	2906.2	2910.9	2912.5	2914.1	2917.2	2917.2	2921.9	2915.6	2918.8
12.5°	2882.8	2889.0	2896.9	2900.0	2906.2	2906.2	2909.4	2910.9	2914.1	2912.5	2917.2
15°	2859.3	2867.1	2876.5	2884.3	2892.2	2896.9	2901.5	2903.1	2907.8	2903.1	2904.7
17.5°	2831.1	2840.5	2854.6	2864.0	2876.5	2881.2	2887.4	2890.6	2895.3	2892.2	2893.7
20°	2792.0	2803.0	2818.6	2832.7	2840.5	2851.4	2859.3	2864.0	2867.1	2864.0	2865.5
22.5°	2737.2	2752.9	2773.2	2784.2	2799.8	2809.2	2810.8	2821.7	2829.5	2821.7	2824.9
25°	2673.0	2688.7	2704.4	2727.8	2741.9	2752.9	2763.8	2765.4	2773.2	2771.6	2770.1
27.5°	2566.6	2587.0	2613.6	2632.4	2651.1	2668.4	2680.9	2684.0	2691.8	2688.7	2690.3
30°	2421.1	2443.0	2468.1	2497.8	2524.4	2541.6	2557.2	2568.2	2576.0	2571.3	2569.8
32.5°	2214.5	2236.4	2263.0	2292.7	2324.1	2349.1	2367.9	2382.0	2391.4	2388.2	2380.4
35°	1978.2	1984.4	2001.7	2025.1	2051.7	2078.3	2095.6	2111.2	2122.1	2125.3	2125.3
37.5°	1735.6	1715.3	1702.8	1702.8	1718.4	1729.3	1745.0	1754.4	1771.6	1777.9	1782.6
40°	1500.8	1453.9	1410.1	1377.2	1355.3	1353.8	1353.8	1358.4	1374.1	1394.4	1413.2
42.5°	1291.1	1216.0	1148.7	1087.7	1043.9	1018.8	1007.9	1009.5	1022.0	1040.7	1072.0
45°	1123.7	1029.8	945.3	871.7	812.2	773.1	754.3	752.8	762.2	784.1	818.5
47.5°	993.8	893.6	798.2	713.6	649.5	607.2	585.3	579.1	585.3	605.7	646.4
50°	885.8	782.5	683.9	596.3	527.4	483.6	463.2	455.4	463.2	480.5	521.1
52.5°	785.6	679.2	586.9	502.4	428.8	391.2	369.3	364.6	369.3	389.7	422.6
55°	669.8	579.1	488.3	403.8	339.6	302.1	284.8	280.2	284.8	303.6	338.1
57.5°	555.6	477.3	397.5	320.8	266.1	233.2	217.5	211.3	222.2	234.7	275.4
60°	449.1	386.6	319.3	252.0	206.6	176.8	164.3	162.7	165.9	181.5	209.7
62.5°	352.1	300.5	247.3	192.5	154.9	142.4	126.8	125.2	128.3	137.7	159.6
65°	253.5	220.7	180.0	140.8	111.1	93.9	87.7	89.2	92.3	98.6	118.9
67.5°	176.8	153.4	125.2	98.6	76.7	68.9	62.6	61.0	62.6	73.6	84.5
70°	118.9	104.8	84.5	75.1	53.2	42.2	43.8	39.1	45.4	45.4	54.8
72.5°	78.2	68.9	56.3	43.8	37.6	29.8	29.8	28.2	31.3	32.9	40.7
75°	40.7	31.3	31.3	21.9	15.7	7.8	14.1	12.5	11.0	12.5	15.7
77.5°	28.2	23.5	21.9	17.2	15.7	12.5	12.5	12.5	12.5	14.1	15.7
80°	17.2	17.2	12.5	11.0	9.4	7.8	9.4	9.4	9.4	9.4	11.0
82.5°	11.0	9.4	9.4	7.8	7.8	6.2	6.2	6.2	6.2	6.2	9.4
85°	9.4	6.2	6.2	4.7	6.2	11.0	4.7	6.2	6.2	6.2	4.7
87.5°	3.1	4.7	4.7	4.7	3.1	1.6	3.1	4.7	4.7	7.8	6.2
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°	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6	2915.6
2.5°	2920.3	2921.9	2921.9	2920.3	2920.3	2917.2	2923.4	2918.8	2920.3	2926.6	2921.9
5°	2923.4	2925.0	2925.0	2923.4	2923.4	2923.4	2925.0	2925.0	2923.4	2921.9	2925.0
7.5°	2929.7	2928.1	2928.1	2925.0	2925.0	2921.9	2925.0	2920.3	2923.4	2920.3	2925.0
10°	2921.9	2923.4	2921.9	2920.3	2920.3	2918.8	2918.8	2914.1	2915.6	2910.9	2914.1
12.5°	2917.2	2915.6	2915.6	2912.5	2909.4	2906.2	2904.7	2900.0	2900.0	2889.0	2893.7
15°	2904.7	2906.2	2901.5	2895.3	2892.2	2884.3	2881.2	2874.9	2868.7	2860.9	2862.4
17.5°	2893.7	2889.0	2882.8	2876.5	2864.0	2857.7	2851.4	2842.1	2838.9	2829.5	2826.4
20°	2860.9	2857.7	2849.9	2838.9	2831.1	2817.0	2810.8	2801.4	2793.5	2784.2	2779.5
22.5°	2818.6	2815.5	2806.1	2795.1	2782.6	2776.4	2770.1	2752.9	2745.0	2735.6	2734.1
25°	2765.4	2760.7	2751.3	2738.8	2732.5	2715.3	2709.0	2696.5	2693.4	2684.0	2682.5
27.5°	2684.0	2677.7	2666.8	2651.1	2640.2	2629.2	2623.0	2613.6	2610.5	2601.0	2599.5
30°	2561.9	2554.1	2532.2	2526.0	2507.2	2496.2	2496.2	2483.7	2485.2	2479.0	2479.0
32.5°	2369.4	2356.9	2339.7	2327.2	2314.6	2308.4	2308.4	2303.7	2306.8	2306.8	2310.0
35°	2114.3	2097.1	2087.7	2079.9	2079.9	2086.2	2105.0	2109.7	2119.0	2126.9	2133.1
37.5°	1787.2	1785.7	1796.7	1806.0	1829.5	1856.1	1889.0	1917.2	1943.7	1962.5	1981.3
40°	1433.6	1472.7	1504.0	1547.8	1583.8	1635.4	1694.9	1743.4	1788.8	1821.7	1856.1
42.5°	1119.0	1169.1	1234.8	1299.0	1363.1	1433.6	1511.8	1579.1	1638.6	1684.0	1720.0
45°	871.7	940.6	1020.4	1101.8	1184.7	1272.4	1353.8	1422.6	1485.2	1532.2	1568.2
47.5°	702.7	777.8	868.6	957.8	1051.7	1144.0	1234.8	1294.3	1345.9	1383.5	1416.4
50°	580.6	660.4	755.9	857.6	951.5	1043.9	1122.1	1180.0	1222.3	1255.1	1275.5
52.5°	485.1	569.7	671.4	773.1	867.0	951.5	1022.0	1065.8	1100.2	1123.7	1142.4
55°	400.6	482.0	577.5	673.0	765.3	845.1	903.0	935.9	962.5	976.6	987.5
57.5°	327.1	402.2	489.9	577.5	657.3	723.1	768.4	801.3	813.8	824.8	823.2
60°	256.7	327.1	406.9	482.0	550.9	604.1	637.0	655.7	665.1	669.8	666.7
62.5°	201.9	266.1	327.1	392.8	442.9	488.3	519.6	519.6	524.3	525.8	530.6
65°	150.2	198.7	252.0	300.5	341.2	370.9	388.1	392.8	399.1	397.5	394.4
67.5°	111.1	147.1	186.2	222.2	250.4	269.2	281.7	292.7	291.1	288.0	286.4
70°	76.7	100.2	134.6	156.5	176.8	195.6	198.7	200.3	201.9	203.5	200.3
72.5°	53.2	70.4	89.2	108.0	120.5	128.3	136.2	137.7	137.7	137.7	136.2
75°	26.6	36.0	53.2	61.0	72.0	75.1	81.4	81.4	86.1	79.8	78.2
77.5°	23.5	28.2	37.6	43.8	48.5	53.2	54.8	59.5	57.9	54.8	56.3
80°	14.1	17.2	23.5	26.6	32.9	34.4	36.0	37.6	36.0	37.6	37.6
82.5°	11.0	12.5	15.7	15.7	20.3	20.3	21.9	21.9	23.5	23.5	23.5
85°	6.2	11.0	9.4	18.8	12.5	12.5	15.7	18.8	15.7	15.7	18.8
87.5°	6.2	6.2	4.7	6.2	6.2	6.2	7.8	9.4	9.4	11.0	9.4
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: P246059

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2915.6	2915.6	2915.6	2915.6
2.5°	2920.3	2923.4	2918.8	2917.2
5°	2925.0	2925.0	2921.9	2921.9
7.5°	2925.0	2925.0	2920.3	2917.2
10°	2912.5	2912.5	2907.8	2904.7
12.5°	2889.0	2889.0	2887.4	2882.8
15°	2859.3	2859.3	2853.0	2848.3
17.5°	2818.6	2821.7	2813.9	2813.9
20°	2774.8	2773.2	2767.0	2763.8
22.5°	2729.4	2726.3	2724.7	2715.3
25°	2680.9	2677.7	2673.0	2668.4
27.5°	2597.9	2596.4	2591.7	2585.4
30°	2471.2	2469.6	2463.3	2463.3
32.5°	2306.8	2305.3	2299.0	2300.6
35°	2136.2	2142.5	2139.4	2133.1
37.5°	1993.8	1998.5	2001.7	1998.5
40°	1874.9	1889.0	1890.5	1893.7
42.5°	1748.1	1766.9	1773.2	1776.3
45°	1596.3	1613.5	1627.6	1624.5
47.5°	1441.4	1453.9	1466.4	1457.0
50°	1292.7	1300.5	1305.2	1305.2
52.5°	1151.9	1151.9	1150.3	1151.9
55°	990.7	990.7	984.4	987.5
57.5°	821.6	824.8	820.1	812.2
60°	665.1	657.3	654.2	649.5
62.5°	518.0	518.0	507.1	521.1
65°	388.1	383.4	378.7	377.2
67.5°	281.7	280.2	275.4	273.9
70°	198.7	192.5	190.9	187.8
72.5°	133.0	133.0	129.9	129.9
75°	81.4	73.6	72.0	73.6
77.5°	56.3	54.8	54.8	53.2
80°	37.6	36.0	39.1	34.4
82.5°	23.5	25.0	23.5	25.0
85°	15.7	18.8	17.2	17.2
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)