

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: P249415

Luminaire Tested: **LSR8B60D010 EC8B60830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249415
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: LSR8B60D010 EC8B60830 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5381.0 lumens
Efficiency: N/A
Efficacy: 90.4 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

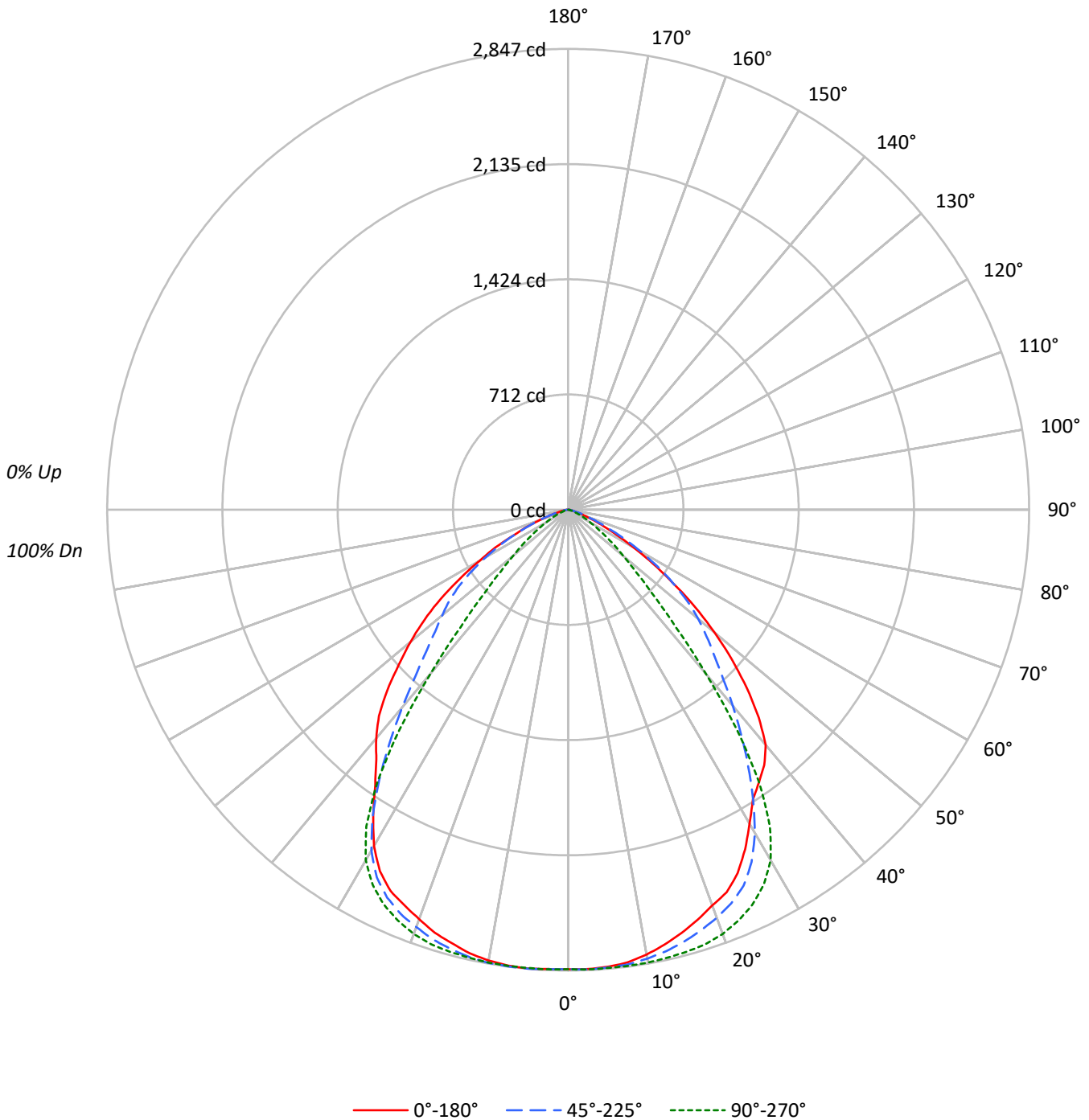
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	87547	87547	87547
5°	87739	87978	88071
10°	87370	88948	88566
15°	86403	90246	88545
20°	85366	91515	88316
25°	84257	91620	88405
30°	79713	89045	85410
35°	77332	77389	78195
40°	76374	53248	74228
45°	68052	31965	68985
50°	56589	21276	60973
55°	42439	14666	51697
60°	28758	9775	39008
65°	17351	6341	26800
70°	9620	3435	16490
75°	4361	1454	8531
80°	3782	1616	5949
85°	4316	2158	5944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.0	5.0
10°-20°	786.9	14.6
20°-30°	1194.3	22.2
30°-40°	1254.4	23.3
40°-50°	940.5	17.5
50°-60°	603.4	11.2
60°-70°	258.1	4.8
70°-80°	61.0	1.1
80°-90°	11.4	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°	2252.2	41.9
0°-40°	3506.6	65.2
0°-60°	5050.5	93.9
0°-90°	5381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5381.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2839	2839	2839	2839	2839	
5°	2834	2839	2842	2847	2845	269
15°	2706	2763	2827	2809	2774	763
25°	2476	2563	2693	2644	2598	1131
35°	2054	1940	2056	2031	2077	1289
45°	1560	1276	733	1239	1582	1195
55°	789	789	273	823	962	716
65°	238	280	87	361	367	254
75°	37	43	12	73	72	53
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°	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1
2.5°	2840.7	2843.7	2842.2	2842.2	2840.7	2842.2	2842.2	2845.2	2845.2	2842.2	2840.7
5°	2834.5	2837.6	2837.6	2834.5	2834.5	2842.2	2837.6	2840.7	2840.7	2839.1	2839.1
7.5°	2820.8	2820.8	2826.9	2822.4	2822.4	2826.9	2825.4	2828.5	2831.5	2833.0	2833.0
10°	2790.3	2793.4	2794.9	2794.9	2796.5	2801.0	2804.1	2810.2	2813.2	2816.3	2817.8
12.5°	2752.3	2756.8	2758.4	2756.8	2761.4	2767.5	2775.1	2782.7	2787.3	2793.4	2798.0
15°	2706.5	2706.5	2709.6	2714.2	2717.2	2726.4	2734.0	2743.1	2755.3	2762.9	2770.5
17.5°	2656.3	2659.3	2663.9	2663.9	2670.0	2685.2	2689.8	2703.5	2717.2	2724.8	2740.1
20°	2601.4	2604.4	2609.0	2612.1	2619.7	2631.9	2641.0	2653.2	2668.5	2682.2	2697.4
22.5°	2558.7	2552.6	2555.7	2558.7	2566.4	2577.0	2587.7	2602.9	2618.1	2631.9	2647.1
25°	2476.4	2477.9	2482.5	2485.6	2494.7	2503.9	2516.1	2534.3	2548.0	2563.3	2580.0
27.5°	2365.2	2366.7	2374.3	2374.3	2381.9	2397.2	2404.8	2420.0	2438.3	2453.6	2473.4
30°	2238.7	2241.7	2241.7	2247.8	2252.4	2260.0	2267.6	2282.9	2292.0	2305.7	2333.2
32.5°	2122.9	2125.9	2124.4	2122.9	2118.3	2116.8	2115.2	2118.3	2121.4	2125.9	2136.6
35°	2054.3	2046.7	2040.6	2029.9	2017.7	2002.5	1988.8	1970.5	1953.7	1940.0	1924.8
37.5°	1988.8	1987.2	1978.1	1962.8	1938.5	1911.0	1879.0	1839.4	1799.8	1757.1	1716.0
40°	1897.3	1892.7	1885.1	1863.8	1836.4	1802.8	1760.2	1711.4	1647.4	1581.9	1514.8
42.5°	1741.9	1743.4	1734.3	1717.5	1691.6	1659.6	1615.4	1562.1	1493.5	1415.7	1328.9
45°	1560.5	1560.5	1557.5	1543.8	1525.5	1499.6	1466.0	1421.9	1354.8	1275.5	1182.6
47.5°	1371.6	1373.1	1368.5	1365.5	1357.8	1341.1	1316.7	1283.2	1235.9	1159.7	1066.8
50°	1179.6	1179.6	1187.2	1185.6	1185.6	1179.6	1168.9	1149.1	1107.9	1047.0	960.1
52.5°	987.5	990.6	995.2	1001.2	1008.8	1021.0	1008.8	999.7	973.8	926.5	851.9
55°	789.4	792.5	800.1	810.7	819.9	832.1	835.1	835.1	821.4	789.4	733.0
57.5°	620.3	615.7	621.8	630.9	643.1	655.3	664.4	675.1	673.6	652.3	606.5
60°	466.3	467.9	472.4	481.6	490.7	501.4	513.6	522.7	527.3	516.6	487.7
62.5°	339.8	339.8	345.9	355.1	359.6	374.9	382.5	387.1	391.6	390.1	371.8
65°	237.8	240.8	243.8	248.4	253.0	262.1	266.7	275.8	278.9	280.4	266.7
67.5°	167.6	163.1	166.1	169.1	173.7	179.8	189.0	189.0	193.5	193.5	184.4
70°	106.7	106.7	108.2	112.8	115.8	117.3	120.4	123.4	128.0	126.5	126.5
72.5°	71.6	70.1	71.6	73.2	74.7	79.2	79.2	80.8	83.8	85.4	79.2
75°	36.6	38.1	41.1	39.6	44.2	41.1	42.7	47.2	45.7	42.7	42.7
77.5°	30.5	30.5	30.5	29.0	32.0	32.0	30.5	33.5	32.0	32.0	30.5
80°	21.3	22.9	21.3	19.8	21.3	19.8	19.8	19.8	19.8	19.8	18.3
82.5°	16.8	13.7	15.3	13.7	15.3	15.3	13.7	12.2	12.2	13.7	12.2
85°	12.2	9.1	10.7	10.7	9.1	9.1	9.1	9.1	9.1	7.6	7.6
87.5°	7.6	4.6	4.6	4.6	6.1	6.1	6.1	4.6	6.1	6.1	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°	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1
2.5°	2843.7	2842.2	2845.2	2843.7	2843.7	2842.2	2843.7	2842.2	2845.2	2839.1	2840.7
5°	2843.7	2840.7	2842.2	2843.7	2845.2	2842.2	2842.2	2842.2	2845.2	2842.2	2843.7
7.5°	2837.6	2836.1	2840.7	2843.7	2842.2	2840.7	2843.7	2842.2	2845.2	2843.7	2846.7
10°	2825.4	2826.9	2830.0	2834.5	2836.1	2837.6	2840.7	2840.7	2845.2	2839.1	2842.2
12.5°	2807.1	2813.2	2820.8	2823.9	2830.0	2830.0	2833.0	2834.5	2837.6	2836.1	2840.7
15°	2784.3	2791.9	2801.0	2808.7	2816.3	2820.8	2825.4	2826.9	2831.5	2826.9	2828.5
17.5°	2756.8	2766.0	2779.7	2788.8	2801.0	2805.6	2811.7	2814.7	2819.3	2816.3	2817.8
20°	2718.7	2729.4	2744.6	2758.4	2766.0	2776.6	2784.3	2788.8	2791.9	2788.8	2790.3
22.5°	2665.4	2680.6	2700.4	2711.1	2726.4	2735.5	2737.0	2747.7	2755.3	2747.7	2750.7
25°	2602.9	2618.1	2633.4	2656.3	2670.0	2680.6	2691.3	2692.8	2700.4	2698.9	2697.4
27.5°	2499.3	2519.1	2545.0	2563.3	2581.6	2598.3	2610.5	2613.6	2621.2	2618.1	2619.7
30°	2357.5	2378.9	2403.3	2432.2	2458.1	2474.9	2490.1	2500.8	2508.4	2503.9	2502.3
32.5°	2156.4	2177.7	2203.6	2232.6	2263.1	2287.4	2305.7	2319.5	2328.6	2325.5	2317.9
35°	1926.3	1932.4	1949.2	1972.0	1997.9	2023.8	2040.6	2055.8	2066.5	2069.5	2069.5
37.5°	1690.1	1670.3	1658.1	1658.1	1673.3	1684.0	1699.2	1708.3	1725.1	1731.2	1735.8
40°	1461.5	1415.7	1373.1	1341.1	1319.8	1318.2	1318.2	1322.8	1338.0	1357.8	1376.1
42.5°	1257.3	1184.1	1118.6	1059.1	1016.5	992.1	981.4	983.0	995.2	1013.4	1043.9
45°	1094.2	1002.8	920.5	848.8	790.9	752.8	734.5	733.0	742.2	763.5	797.0
47.5°	967.7	870.2	777.2	694.9	632.5	591.3	570.0	563.9	570.0	589.8	629.4
50°	862.6	762.0	666.0	580.6	513.6	470.9	451.1	443.5	451.1	467.9	507.5
52.5°	765.0	661.4	571.5	489.2	417.6	381.0	359.6	355.1	359.6	379.5	411.5
55°	652.3	563.9	475.5	393.2	330.7	294.1	277.4	272.8	277.4	295.7	329.2
57.5°	541.0	464.8	387.1	312.4	259.1	227.1	211.8	205.7	216.4	228.6	268.2
60°	437.4	376.4	310.9	245.4	201.2	172.2	160.0	158.5	161.5	176.8	204.2
62.5°	342.9	292.6	240.8	187.4	150.9	138.7	123.4	121.9	125.0	134.1	155.5
65°	246.9	214.9	175.3	137.1	108.2	91.4	85.4	86.9	89.9	96.0	115.8
67.5°	172.2	149.3	121.9	96.0	74.7	67.0	61.0	59.4	61.0	71.6	82.3
70°	115.8	102.1	82.3	73.2	51.8	41.1	42.7	38.1	44.2	44.2	53.3
72.5°	76.2	67.0	54.9	42.7	36.6	29.0	29.0	27.4	30.5	32.0	39.6
75°	39.6	30.5	30.5	21.3	15.3	7.6	13.7	12.2	10.7	12.2	15.3
77.5°	27.4	22.9	21.3	16.8	15.3	12.2	12.2	12.2	12.2	13.7	15.3
80°	16.8	16.8	12.2	10.7	9.1	7.6	9.1	9.1	9.1	9.1	10.7
82.5°	10.7	9.1	9.1	7.6	7.6	6.1	6.1	6.1	6.1	6.1	9.1
85°	9.1	6.1	6.1	4.6	6.1	10.7	4.6	6.1	6.1	6.1	4.6
87.5°	3.1	4.6	4.6	4.6	3.1	1.5	3.1	4.6	4.6	7.6	6.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1	2839.1
2.5°	2843.7	2845.2	2845.2	2843.7	2843.7	2840.7	2846.7	2842.2	2843.7	2849.8	2845.2
5°	2846.7	2848.3	2848.3	2846.7	2846.7	2846.7	2848.3	2848.3	2846.7	2845.2	2848.3
7.5°	2852.8	2851.3	2851.3	2848.3	2848.3	2845.2	2848.3	2843.7	2846.7	2843.7	2848.3
10°	2845.2	2846.7	2845.2	2843.7	2843.7	2842.2	2842.2	2837.6	2839.1	2834.5	2837.6
12.5°	2840.7	2839.1	2839.1	2836.1	2833.0	2830.0	2828.5	2823.9	2823.9	2813.2	2817.8
15°	2828.5	2830.0	2825.4	2819.3	2816.3	2808.7	2805.6	2799.5	2793.4	2785.8	2787.3
17.5°	2817.8	2813.2	2807.1	2801.0	2788.8	2782.7	2776.6	2767.5	2764.4	2755.3	2752.3
20°	2785.8	2782.7	2775.1	2764.4	2756.8	2743.1	2737.0	2727.9	2720.2	2711.1	2706.5
22.5°	2744.6	2741.6	2732.4	2721.8	2709.6	2703.5	2697.4	2680.6	2673.0	2663.9	2662.3
25°	2692.8	2688.3	2679.1	2666.9	2660.8	2644.1	2637.9	2625.8	2622.7	2613.6	2612.1
27.5°	2613.6	2607.5	2596.8	2581.6	2570.9	2560.2	2554.2	2545.0	2542.0	2532.8	2531.3
30°	2494.7	2487.1	2465.8	2459.7	2441.4	2430.7	2430.7	2418.5	2420.0	2414.0	2414.0
32.5°	2307.3	2295.1	2278.3	2266.1	2253.9	2247.8	2247.8	2243.2	2246.3	2246.3	2249.4
35°	2058.9	2042.1	2032.9	2025.3	2025.3	2031.4	2049.7	2054.3	2063.4	2071.0	2077.2
37.5°	1740.3	1738.8	1749.5	1758.6	1781.5	1807.4	1839.4	1866.9	1892.7	1911.0	1929.3
40°	1395.9	1434.0	1464.5	1507.2	1542.2	1592.5	1650.4	1697.7	1741.9	1773.9	1807.4
42.5°	1089.6	1138.4	1202.4	1264.9	1327.4	1395.9	1472.2	1537.7	1595.6	1639.8	1674.8
45°	848.8	915.9	993.6	1072.9	1153.6	1239.0	1318.2	1385.3	1446.2	1492.0	1527.0
47.5°	684.2	757.4	845.8	932.7	1024.1	1114.0	1202.4	1260.3	1310.6	1347.2	1379.2
50°	565.4	643.1	736.1	835.1	926.5	1016.5	1092.7	1149.1	1190.2	1222.2	1242.0
52.5°	472.4	554.7	653.8	752.8	844.3	926.5	995.2	1037.8	1071.3	1094.2	1112.5
55°	390.1	469.4	562.3	655.3	745.2	822.9	879.3	911.3	937.2	950.9	961.6
57.5°	318.5	391.6	477.0	562.3	640.1	704.1	748.3	780.3	792.5	803.1	801.6
60°	249.9	318.5	396.2	469.4	536.4	588.2	620.3	638.5	647.7	652.3	649.2
62.5°	196.6	259.1	318.5	382.5	431.3	475.5	506.0	506.0	510.5	512.0	516.6
65°	146.3	193.5	245.4	292.6	332.2	361.2	378.0	382.5	388.6	387.1	384.0
67.5°	108.2	143.3	181.3	216.4	243.8	262.1	274.3	285.0	283.5	280.4	278.9
70°	74.7	97.5	131.1	152.4	172.2	190.5	193.5	195.1	196.6	198.1	195.1
72.5°	51.8	68.6	86.9	105.2	117.3	125.0	132.6	134.1	134.1	134.1	132.6
75°	25.9	35.1	51.8	59.4	70.1	73.2	79.2	79.2	83.8	77.7	76.2
77.5°	22.9	27.4	36.6	42.7	47.2	51.8	53.3	57.9	56.4	53.3	54.9
80°	13.7	16.8	22.9	25.9	32.0	33.5	35.1	36.6	35.1	36.6	36.6
82.5°	10.7	12.2	15.3	15.3	19.8	19.8	21.3	21.3	22.9	22.9	22.9
85°	6.1	10.7	9.1	18.3	12.2	12.2	15.3	18.3	15.3	15.3	18.3
87.5°	6.1	6.1	4.6	6.1	6.1	6.1	7.6	9.1	9.1	10.7	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: P249415

CATALOG NUMBER: LSR8B60D010 EC8B60830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2839.1	2839.1	2839.1	2839.1
2.5°	2843.7	2846.7	2842.2	2840.7
5°	2848.3	2848.3	2845.2	2845.2
7.5°	2848.3	2848.3	2843.7	2840.7
10°	2836.1	2836.1	2831.5	2828.5
12.5°	2813.2	2813.2	2811.7	2807.1
15°	2784.3	2784.3	2778.2	2773.6
17.5°	2744.6	2747.7	2740.1	2740.1
20°	2702.0	2700.4	2694.4	2691.3
22.5°	2657.8	2654.7	2653.2	2644.1
25°	2610.5	2607.5	2602.9	2598.3
27.5°	2529.8	2528.2	2523.7	2517.6
30°	2406.3	2404.8	2398.7	2398.7
32.5°	2246.3	2244.8	2238.7	2240.2
35°	2080.2	2086.3	2083.2	2077.2
37.5°	1941.5	1946.1	1949.2	1946.1
40°	1825.7	1839.4	1840.9	1844.0
42.5°	1702.3	1720.5	1726.7	1729.7
45°	1554.4	1571.2	1584.9	1581.9
47.5°	1403.5	1415.7	1427.9	1418.8
50°	1258.8	1266.4	1271.0	1271.0
52.5°	1121.6	1121.6	1120.1	1121.6
55°	964.7	964.7	958.6	961.6
57.5°	800.1	803.1	798.5	790.9
60°	647.7	640.1	637.0	632.5
62.5°	504.4	504.4	493.8	507.5
65°	378.0	373.4	368.8	367.3
67.5°	274.3	272.8	268.2	266.7
70°	193.5	187.4	185.9	182.9
72.5°	129.5	129.5	126.5	126.5
75°	79.2	71.6	70.1	71.6
77.5°	54.9	53.3	53.3	51.8
80°	36.6	35.1	38.1	33.5
82.5°	22.9	24.4	22.9	24.4
85°	15.3	18.3	16.8	16.8
87.5°	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)