

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: P249145

Luminaire Tested: **LSR8B60D010 EC8B60935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249145
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 EC8B60935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5392.0 lumens
Efficiency: N/A
Efficacy: 90.6 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

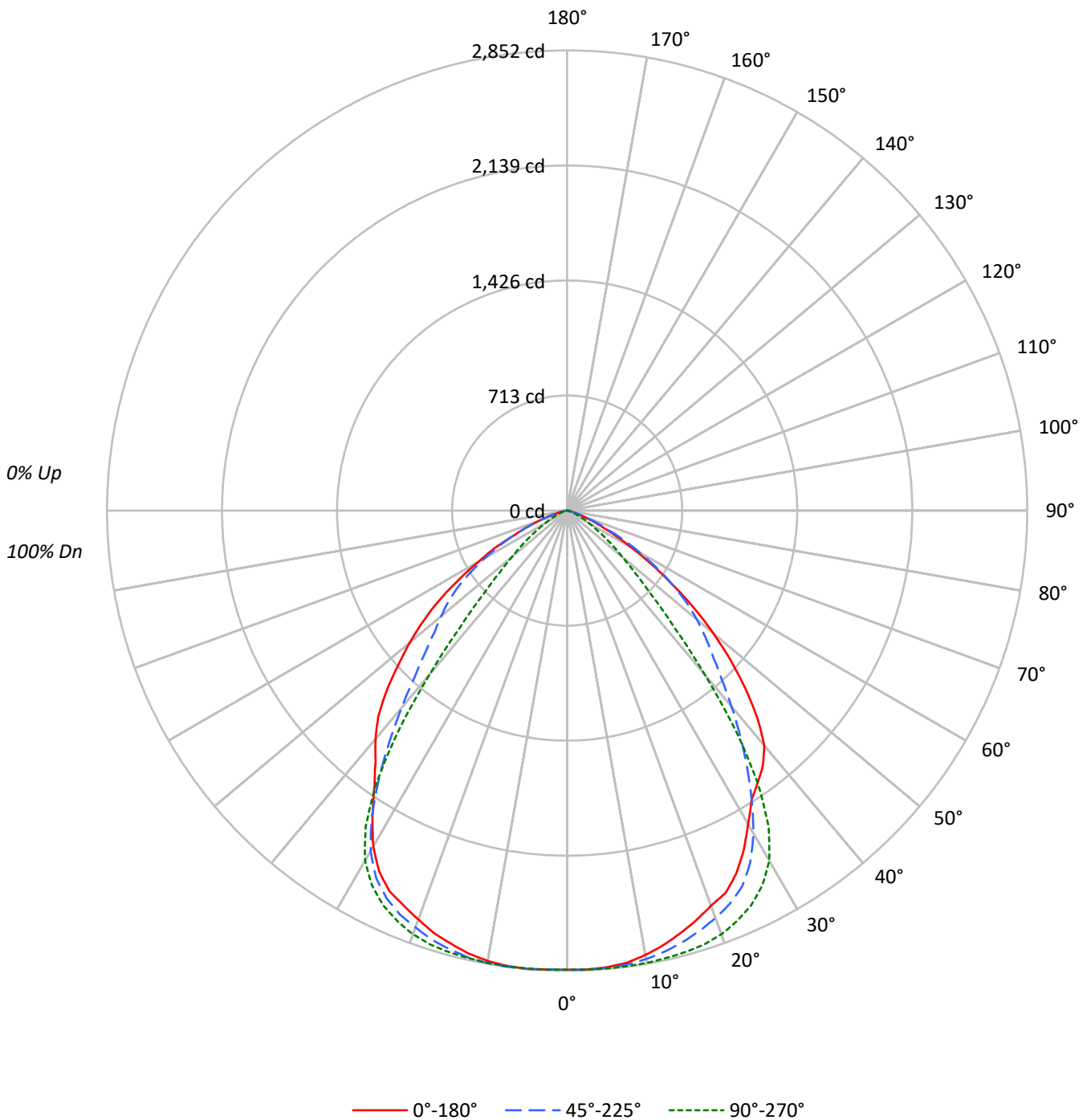
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	87726	87726	87726
5°	87919	88157	88253
10°	87552	89130	88745
15°	86581	90431	88727
20°	85540	91702	88496
25°	84431	91807	88589
30°	79877	89227	85584
35°	77491	77547	78353
40°	76531	53357	74381
45°	68192	32031	69125
50°	56704	21319	61098
55°	42525	14698	51805
60°	28820	9794	39082
65°	17380	6355	26851
70°	9638	3444	16517
75°	4373	1454	8554
80°	3800	1634	5967
85°	4316	2158	5944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	5.0
10°-20°	788.5	14.6
20°-30°	1196.8	22.2
30°-40°	1257.0	23.3
40°-50°	942.4	17.5
50°-60°	604.7	11.2
60°-70°	258.7	4.8
70°-80°	61.1	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°	2256.8	41.9
0°-40°	3513.8	65.2
0°-60°	5060.9	93.9
0°-90°	5392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5392.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2845	2845	2845	2845	2845	
5°	2840	2845	2848	2852	2851	270
15°	2712	2769	2833	2814	2779	765
25°	2482	2568	2698	2650	2604	1134
35°	2058	1944	2060	2036	2081	1292
45°	1564	1278	734	1242	1585	1198
55°	791	791	273	825	964	718
65°	238	281	87	362	368	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°	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9
2.5°	2846.5	2849.5	2848.0	2848.0	2846.5	2848.0	2848.0	2851.1	2851.1	2848.0	2846.5
5°	2840.3	2843.4	2843.4	2840.3	2840.3	2848.0	2843.4	2846.5	2846.5	2844.9	2844.9
7.5°	2826.6	2826.6	2832.7	2828.1	2828.1	2832.7	2831.2	2834.2	2837.3	2838.8	2838.8
10°	2796.1	2799.1	2800.6	2800.6	2802.2	2806.7	2809.8	2815.9	2819.0	2822.0	2823.6
12.5°	2757.9	2762.5	2764.0	2762.5	2767.1	2773.1	2780.8	2788.4	2793.0	2799.1	2803.7
15°	2712.1	2712.1	2715.1	2719.7	2722.8	2731.9	2739.6	2748.7	2760.9	2768.6	2776.2
17.5°	2661.7	2664.8	2669.3	2669.3	2675.4	2690.7	2695.3	2709.0	2722.8	2730.4	2745.7
20°	2606.7	2609.8	2614.3	2617.4	2625.0	2637.3	2646.4	2658.6	2673.9	2687.7	2702.9
22.5°	2563.9	2557.9	2560.9	2563.9	2571.6	2582.3	2593.0	2608.2	2623.5	2637.3	2652.5
25°	2481.5	2483.0	2487.6	2490.6	2499.8	2509.0	2521.2	2539.5	2553.3	2568.5	2585.3
27.5°	2370.0	2371.5	2379.2	2379.2	2386.8	2402.1	2409.7	2425.0	2443.3	2458.6	2478.4
30°	2243.3	2246.3	2246.3	2252.4	2257.0	2264.6	2272.3	2287.6	2296.7	2310.5	2338.0
32.5°	2127.2	2130.2	2128.7	2127.2	2122.6	2121.1	2119.6	2122.6	2125.7	2130.2	2140.9
35°	2058.5	2050.8	2044.8	2034.1	2021.9	2006.6	1992.8	1974.5	1957.7	1943.9	1928.7
37.5°	1992.8	1991.3	1982.1	1966.9	1942.4	1915.0	1882.9	1843.2	1803.5	1760.7	1719.5
40°	1901.2	1896.6	1889.0	1867.6	1840.1	1806.5	1763.8	1714.9	1650.7	1585.1	1517.9
42.5°	1745.4	1747.0	1737.8	1721.0	1695.1	1663.0	1618.7	1565.3	1496.5	1418.6	1331.6
45°	1563.7	1563.7	1560.7	1546.9	1528.6	1502.6	1469.0	1424.8	1357.6	1278.1	1185.0
47.5°	1374.4	1375.9	1371.3	1368.3	1360.6	1343.8	1319.4	1285.8	1238.5	1162.1	1068.9
50°	1182.0	1182.0	1189.6	1188.1	1188.1	1182.0	1171.3	1151.4	1110.2	1049.1	962.1
52.5°	989.5	992.6	997.2	1003.3	1010.9	1023.1	1010.9	1001.8	975.8	928.4	853.6
55°	791.0	794.1	801.7	812.4	821.6	833.8	836.8	836.8	823.1	791.0	734.5
57.5°	621.5	616.9	623.1	632.2	644.4	656.7	665.8	676.5	675.0	653.6	607.8
60°	467.3	468.8	473.4	482.6	491.7	502.4	514.6	523.8	528.4	517.7	488.7
62.5°	340.5	340.5	346.6	355.8	360.4	375.7	383.3	387.9	392.4	390.9	372.6
65°	238.2	241.3	244.3	248.9	253.5	262.6	267.2	276.4	279.5	281.0	267.2
67.5°	168.0	163.4	166.5	169.5	174.1	180.2	189.4	189.4	193.9	193.9	184.8
70°	106.9	106.9	108.4	113.0	116.1	117.6	120.7	123.7	128.3	126.7	126.7
72.5°	71.8	70.2	71.8	73.3	74.8	79.4	79.4	80.9	84.0	85.5	79.4
75°	36.7	38.2	41.2	39.7	44.3	41.2	42.7	47.3	45.8	42.7	42.7
77.5°	30.5	30.5	30.5	29.0	32.1	32.1	30.5	33.6	32.1	32.1	30.5
80°	21.4	22.9	21.4	19.8	21.4	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	9.2	10.7	10.7	9.2	9.2	9.2	9.2	9.2	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



TEST NUMBER: P249145

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9
2.5°	2849.5	2848.0	2851.1	2849.5	2849.5	2848.0	2849.5	2848.0	2851.1	2844.9	2846.5
5°	2849.5	2846.5	2848.0	2849.5	2851.1	2848.0	2848.0	2848.0	2851.1	2848.0	2849.5
7.5°	2843.4	2841.9	2846.5	2849.5	2848.0	2846.5	2849.5	2848.0	2851.1	2849.5	2852.5
10°	2831.2	2832.7	2835.8	2840.3	2841.9	2843.4	2846.5	2846.5	2851.1	2844.9	2848.0
12.5°	2812.9	2819.0	2826.6	2829.6	2835.8	2835.8	2838.8	2840.3	2843.4	2841.9	2846.5
15°	2790.0	2797.6	2806.7	2814.4	2822.0	2826.6	2831.2	2832.7	2837.3	2832.7	2834.2
17.5°	2762.5	2771.6	2785.4	2794.5	2806.7	2811.3	2817.4	2820.5	2825.1	2822.0	2823.6
20°	2724.3	2735.0	2750.2	2764.0	2771.6	2782.3	2790.0	2794.5	2797.6	2794.5	2796.1
22.5°	2670.8	2686.1	2706.0	2716.7	2731.9	2741.1	2742.6	2753.3	2760.9	2753.3	2756.4
25°	2608.2	2623.5	2638.8	2661.7	2675.4	2686.1	2696.8	2698.3	2706.0	2704.4	2702.9
27.5°	2504.4	2524.3	2550.2	2568.5	2586.8	2603.7	2615.9	2618.9	2626.6	2623.5	2625.0
30°	2362.4	2383.8	2408.2	2437.2	2463.2	2479.9	2495.2	2505.9	2513.5	2509.0	2507.4
32.5°	2160.8	2182.2	2208.2	2237.1	2267.7	2292.1	2310.5	2324.2	2333.4	2330.3	2322.7
35°	1930.2	1936.3	1953.1	1976.0	2002.0	2027.9	2044.8	2060.0	2070.7	2073.8	2073.8
37.5°	1693.5	1673.7	1661.5	1661.5	1676.7	1687.4	1702.7	1711.8	1728.6	1734.7	1739.3
40°	1464.4	1418.6	1375.9	1343.8	1322.5	1320.9	1320.9	1325.5	1340.8	1360.6	1379.0
42.5°	1259.8	1186.5	1120.9	1061.3	1018.6	994.1	983.4	985.0	997.2	1015.5	1046.0
45°	1096.4	1004.8	922.4	850.6	792.5	754.4	736.1	734.5	743.7	765.0	798.7
47.5°	969.7	871.9	778.8	696.3	633.7	592.5	571.1	565.0	571.1	591.0	630.7
50°	864.3	763.6	667.3	581.8	514.6	471.9	452.0	444.4	452.0	468.8	508.5
52.5°	766.6	662.7	572.7	490.2	418.4	381.8	360.4	355.8	360.4	380.2	412.3
55°	653.6	565.0	476.4	394.0	331.4	294.7	277.9	273.4	277.9	296.3	329.9
57.5°	542.1	465.8	387.9	313.0	259.6	227.5	212.3	206.1	216.8	229.0	268.8
60°	438.3	377.2	311.5	245.9	201.6	172.6	160.3	158.8	161.9	177.1	204.6
62.5°	343.6	293.2	241.3	187.8	151.2	139.0	123.7	122.2	125.2	134.4	155.8
65°	247.4	215.3	175.6	137.4	108.4	91.6	85.5	87.1	90.1	96.2	116.1
67.5°	172.6	149.6	122.2	96.2	74.8	67.2	61.1	59.6	61.1	71.8	82.5
70°	116.1	102.3	82.5	73.3	51.9	41.2	42.7	38.2	44.3	44.3	53.4
72.5°	76.3	67.2	55.0	42.7	36.7	29.0	29.0	27.5	30.5	32.1	39.7
75°	39.7	30.5	30.5	21.4	15.3	7.6	13.7	12.2	10.7	12.2	15.3
77.5°	27.5	22.9	21.4	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	9.2	7.6	9.2	9.2	9.2	9.2	10.7
82.5°	10.7	9.2	9.2	7.6	7.6	6.1	6.1	6.1	6.1	6.1	9.2
85°	9.2	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



TEST NUMBER: P249145

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9	2844.9
2.5°	2849.5	2851.1	2851.1	2849.5	2849.5	2846.5	2852.5	2848.0	2849.5	2855.6	2851.1
5°	2852.5	2854.1	2854.1	2852.5	2852.5	2852.5	2854.1	2854.1	2852.5	2851.1	2854.1
7.5°	2858.7	2857.1	2857.1	2854.1	2854.1	2851.1	2854.1	2849.5	2852.5	2849.5	2854.1
10°	2851.1	2852.5	2851.1	2849.5	2849.5	2848.0	2848.0	2843.4	2844.9	2840.3	2843.4
12.5°	2846.5	2844.9	2844.9	2841.9	2838.8	2835.8	2834.2	2829.6	2829.6	2819.0	2823.6
15°	2834.2	2835.8	2831.2	2825.1	2822.0	2814.4	2811.3	2805.2	2799.1	2791.5	2793.0
17.5°	2823.6	2819.0	2812.9	2806.7	2794.5	2788.4	2782.3	2773.1	2770.1	2760.9	2757.9
20°	2791.5	2788.4	2780.8	2770.1	2762.5	2748.7	2742.6	2733.5	2725.8	2716.7	2712.1
22.5°	2750.2	2747.2	2738.0	2727.3	2715.1	2709.0	2702.9	2686.1	2678.5	2669.3	2667.8
25°	2698.3	2693.7	2684.6	2672.4	2666.2	2649.5	2643.3	2631.1	2628.1	2618.9	2617.4
27.5°	2618.9	2612.8	2602.1	2586.8	2576.2	2565.5	2559.4	2550.2	2547.2	2538.0	2536.5
30°	2499.8	2492.2	2470.8	2464.7	2446.4	2435.7	2435.7	2423.4	2425.0	2418.9	2418.9
32.5°	2312.0	2299.8	2283.0	2270.7	2258.5	2252.4	2252.4	2247.8	2250.9	2250.9	2254.0
35°	2063.1	2046.3	2037.1	2029.5	2029.5	2035.6	2053.9	2058.5	2067.7	2075.3	2081.4
37.5°	1743.9	1742.4	1753.1	1762.2	1785.1	1811.1	1843.2	1870.7	1896.6	1915.0	1933.3
40°	1398.8	1437.0	1467.5	1510.3	1545.4	1595.8	1653.8	1701.1	1745.4	1777.5	1811.1
42.5°	1091.8	1140.7	1204.9	1267.5	1330.1	1398.8	1475.2	1540.8	1598.8	1643.1	1678.2
45°	850.6	917.8	995.7	1075.1	1156.0	1241.5	1320.9	1388.1	1449.2	1495.0	1530.1
47.5°	685.6	759.0	847.5	934.6	1026.2	1116.3	1204.9	1262.9	1313.3	1349.9	1382.0
50°	566.5	644.4	737.6	836.8	928.4	1018.6	1094.9	1151.4	1192.6	1224.7	1244.6
52.5°	473.4	555.8	655.1	754.4	846.0	928.4	997.2	1039.9	1073.5	1096.4	1114.7
55°	390.9	470.3	563.5	656.7	746.7	824.6	881.1	913.2	939.1	952.9	963.6
57.5°	319.2	392.4	478.0	563.5	641.4	705.5	749.8	781.9	794.1	804.8	803.2
60°	250.5	319.2	397.0	470.3	537.5	589.4	621.5	639.8	649.0	653.6	650.5
62.5°	197.0	259.6	319.2	383.3	432.2	476.4	507.0	507.0	511.6	513.1	517.7
65°	146.6	193.9	245.9	293.2	332.9	361.9	378.7	383.3	389.4	387.9	384.8
67.5°	108.4	143.6	181.7	216.8	244.3	262.6	274.9	285.6	284.0	281.0	279.5
70°	74.8	97.7	131.3	152.7	172.6	190.9	193.9	195.5	197.0	198.5	195.5
72.5°	51.9	68.7	87.1	105.4	117.6	125.2	132.9	134.4	134.4	134.4	132.9
75°	26.0	35.1	51.9	59.6	70.2	73.3	79.4	79.4	84.0	77.9	76.3
77.5°	22.9	27.5	36.7	42.7	47.3	51.9	53.4	58.0	56.5	53.4	55.0
80°	13.7	16.8	22.9	26.0	32.1	33.6	35.1	36.7	35.1	36.7	36.7
82.5°	10.7	12.2	15.3	15.3	19.8	19.8	21.4	21.4	22.9	22.9	22.9
85°	6.1	10.7	9.2	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	9.2	9.2	10.7	9.2
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: P249145

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2844.9	2844.9	2844.9	2844.9
2.5°	2849.5	2852.5	2848.0	2846.5
5°	2854.1	2854.1	2851.1	2851.1
7.5°	2854.1	2854.1	2849.5	2846.5
10°	2841.9	2841.9	2837.3	2834.2
12.5°	2819.0	2819.0	2817.4	2812.9
15°	2790.0	2790.0	2783.8	2779.3
17.5°	2750.2	2753.3	2745.7	2745.7
20°	2707.5	2706.0	2699.9	2696.8
22.5°	2663.2	2660.2	2658.6	2649.5
25°	2615.9	2612.8	2608.2	2603.7
27.5°	2534.9	2533.4	2528.8	2522.7
30°	2411.2	2409.7	2403.6	2403.6
32.5°	2250.9	2249.4	2243.3	2244.8
35°	2084.4	2090.6	2087.5	2081.4
37.5°	1945.5	1950.1	1953.1	1950.1
40°	1829.4	1843.2	1844.7	1847.8
42.5°	1705.7	1724.1	1730.2	1733.2
45°	1557.6	1574.4	1588.2	1585.1
47.5°	1406.4	1418.6	1430.9	1421.7
50°	1261.4	1269.0	1273.6	1273.6
52.5°	1123.9	1123.9	1122.4	1123.9
55°	966.6	966.6	960.5	963.6
57.5°	801.7	804.8	800.2	792.5
60°	649.0	641.4	638.3	633.7
62.5°	505.5	505.5	494.8	508.5
65°	378.7	374.1	369.5	368.0
67.5°	274.9	273.4	268.8	267.2
70°	193.9	187.8	186.3	183.2
72.5°	129.8	129.8	126.7	126.7
75°	79.4	71.8	70.2	71.8
77.5°	55.0	53.4	53.4	51.9
80°	36.7	35.1	38.2	33.6
82.5°	22.9	24.4	22.9	24.4
85°	15.3	18.3	16.8	16.8
87.5°	9.2	9.2	9.2	9.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)