

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: P249406

Luminaire Tested: **LSR8B60D010 EC8B60827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249406
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 EC8B60827 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5249.0 lumens
Efficiency: N/A
Efficacy: 88.2 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

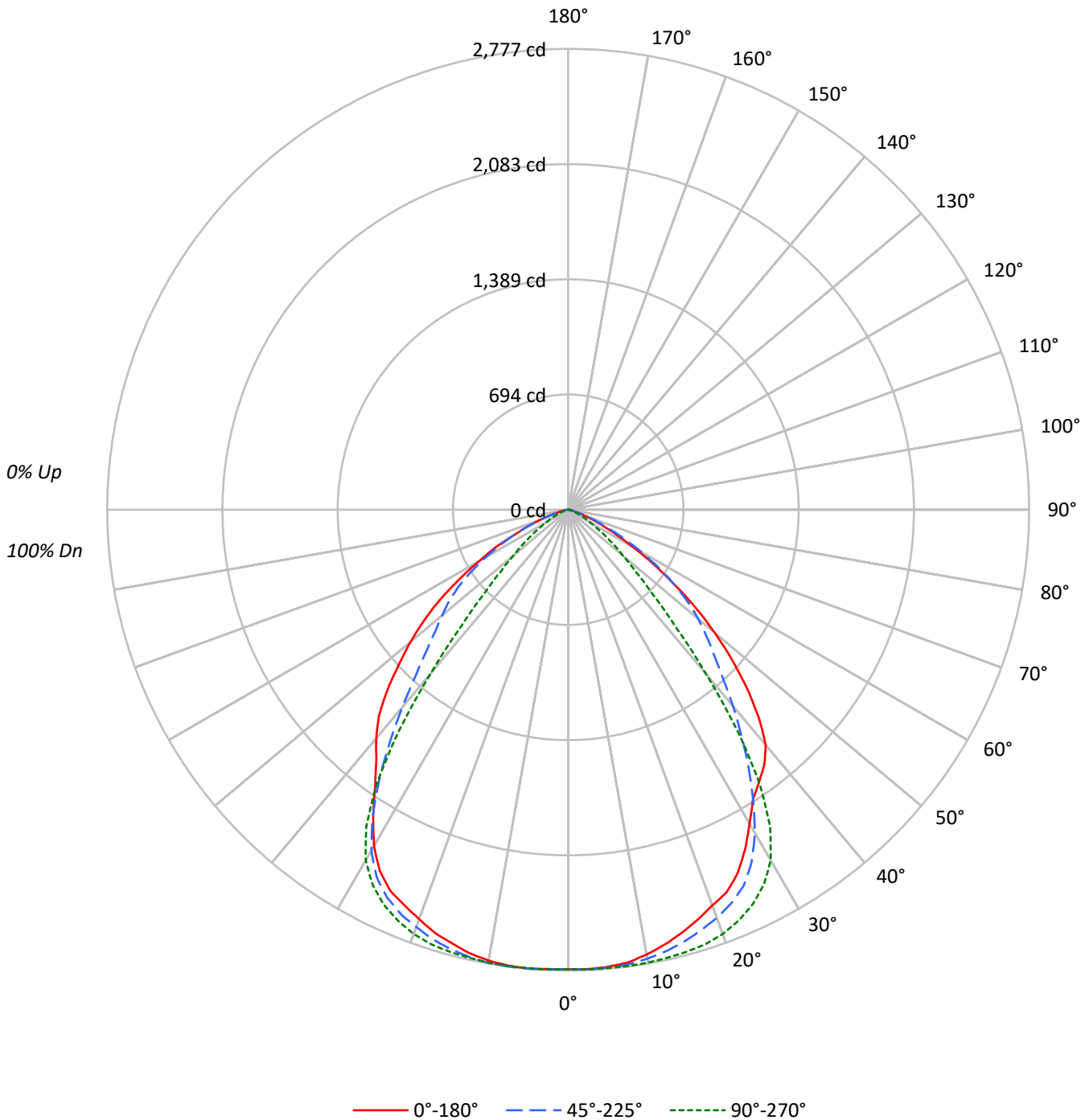
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	85401	85401	85401
5°	85588	85820	85910
10°	85228	86766	86393
15°	84283	88034	86374
20°	83272	89271	86150
25°	82192	89375	86238
30°	77758	86863	83316
35°	75435	75492	76275
40°	74502	51940	72409
45°	66382	31181	67293
50°	55197	20753	59477
55°	41396	14306	50428
60°	28055	9535	38046
65°	16921	6187	26136
70°	9386	3354	16084
75°	4253	1418	8328
80°	3694	1580	5807
85°	4210	2087	5802



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	5.0
10°-20°	767.6	14.6
20°-30°	1165.0	22.2
30°-40°	1223.7	23.3
40°-50°	917.4	17.5
50°-60°	588.6	11.2
60°-70°	251.8	4.8
70°-80°	59.5	1.1
80°-90°	11.1	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°	2196.9	41.9
0°-40°	3420.6	65.2
0°-60°	4926.6	93.9
0°-90°	5249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5249.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2770	2770	2770	2770	2770	
5°	2765	2770	2772	2777	2775	263
15°	2640	2695	2758	2740	2706	745
25°	2416	2500	2627	2579	2535	1104
35°	2004	1892	2005	1982	2026	1258
45°	1522	1244	715	1209	1543	1166
55°	770	770	266	803	938	698
65°	232	274	85	352	358	248
75°	36	42	12	71	70	52
85°	12	7	6	12	16	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°	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5
2.5°	2771.0	2773.9	2772.5	2772.5	2771.0	2772.5	2772.5	2775.4	2775.4	2772.5	2771.0
5°	2765.0	2768.0	2768.0	2765.0	2765.0	2772.5	2768.0	2771.0	2771.0	2769.5	2769.5
7.5°	2751.7	2751.7	2757.6	2753.1	2753.1	2757.6	2756.1	2759.1	2762.1	2763.5	2763.5
10°	2721.9	2724.9	2726.4	2726.4	2727.9	2732.3	2735.3	2741.2	2744.2	2747.2	2748.7
12.5°	2684.8	2689.2	2690.7	2689.2	2693.7	2699.6	2707.1	2714.5	2719.0	2724.9	2729.4
15°	2640.1	2640.1	2643.1	2647.6	2650.6	2659.5	2666.9	2675.8	2687.7	2695.2	2702.6
17.5°	2591.1	2594.1	2598.5	2598.5	2604.5	2619.3	2623.8	2637.2	2650.6	2658.0	2672.9
20°	2537.6	2540.5	2545.0	2548.0	2555.4	2567.3	2576.2	2588.1	2603.0	2616.4	2631.2
22.5°	2495.9	2490.0	2493.0	2495.9	2503.4	2513.8	2524.2	2539.0	2553.9	2567.3	2582.2
25°	2415.7	2417.2	2421.6	2424.6	2433.5	2442.4	2454.3	2472.2	2485.5	2500.4	2516.7
27.5°	2307.2	2308.7	2316.1	2316.1	2323.5	2338.4	2345.8	2360.7	2378.5	2393.4	2412.7
30°	2183.8	2186.7	2186.7	2192.7	2197.1	2204.6	2212.0	2226.9	2235.8	2249.2	2276.0
32.5°	2070.8	2073.8	2072.3	2070.8	2066.3	2064.8	2063.3	2066.3	2069.3	2073.8	2084.2
35°	2003.9	1996.5	1990.5	1980.1	1968.2	1953.4	1940.0	1922.1	1905.8	1892.4	1877.5
37.5°	1940.0	1938.5	1929.6	1914.7	1890.9	1864.2	1833.0	1794.3	1755.6	1714.0	1673.9
40°	1850.8	1846.3	1838.9	1818.1	1791.3	1758.6	1717.0	1669.4	1607.0	1543.1	1477.7
42.5°	1699.1	1700.6	1691.7	1675.3	1650.1	1618.9	1575.8	1523.7	1456.8	1381.0	1296.3
45°	1522.2	1522.2	1519.3	1505.9	1488.1	1462.8	1430.1	1387.0	1321.6	1244.2	1153.6
47.5°	1337.9	1339.4	1334.9	1332.0	1324.5	1308.2	1284.4	1251.7	1205.6	1131.3	1040.6
50°	1150.6	1150.6	1158.0	1156.5	1156.5	1150.6	1140.2	1120.9	1080.7	1021.3	936.6
52.5°	963.3	966.3	970.7	976.7	984.1	996.0	984.1	975.2	949.9	903.8	831.0
55°	770.0	773.0	780.4	790.8	799.8	811.7	814.6	814.6	801.2	770.0	715.0
57.5°	605.0	600.6	606.5	615.4	627.3	639.2	648.1	658.6	657.1	636.3	591.7
60°	454.9	456.4	460.8	469.8	478.7	489.1	501.0	509.9	514.4	504.0	475.7
62.5°	331.5	331.5	337.4	346.4	350.8	365.7	373.1	377.6	382.0	380.5	362.7
65°	231.9	234.9	237.8	242.3	246.8	255.7	260.1	269.1	272.0	273.5	260.1
67.5°	163.5	159.1	162.0	165.0	169.5	175.4	184.3	184.3	188.8	188.8	179.9
70°	104.1	104.1	105.6	110.0	113.0	114.5	117.5	120.4	124.9	123.4	123.4
72.5°	69.9	68.4	69.9	71.4	72.9	77.3	77.3	78.8	81.8	83.3	77.3
75°	35.7	37.2	40.1	38.7	43.1	40.1	41.6	46.1	44.6	41.6	41.6
77.5°	29.7	29.7	29.7	28.3	31.2	31.2	29.7	32.7	31.2	31.2	29.7
80°	20.8	22.3	20.8	19.3	20.8	19.3	19.3	19.3	19.3	19.3	17.8
82.5°	16.4	13.4	14.9	13.4	14.9	14.9	13.4	11.9	11.9	13.4	11.9
85°	11.9	8.9	10.4	10.4	8.9	8.9	8.9	8.9	8.9	7.4	7.4
87.5°	7.4	4.5	4.5	4.5	5.9	5.9	5.9	4.5	5.9	5.9	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5
2.5°	2773.9	2772.5	2775.4	2773.9	2773.9	2772.5	2773.9	2772.5	2775.4	2769.5	2771.0
5°	2773.9	2771.0	2772.5	2773.9	2775.4	2772.5	2772.5	2772.5	2775.4	2772.5	2773.9
7.5°	2768.0	2766.5	2771.0	2773.9	2772.5	2771.0	2773.9	2772.5	2775.4	2773.9	2776.9
10°	2756.1	2757.6	2760.6	2765.0	2766.5	2768.0	2771.0	2771.0	2775.4	2769.5	2772.5
12.5°	2738.3	2744.2	2751.7	2754.6	2760.6	2760.6	2763.5	2765.0	2768.0	2766.5	2771.0
15°	2716.0	2723.4	2732.3	2739.8	2747.2	2751.7	2756.1	2757.6	2762.1	2757.6	2759.1
17.5°	2689.2	2698.1	2711.5	2720.4	2732.3	2736.8	2742.7	2745.7	2750.2	2747.2	2748.7
20°	2652.0	2662.5	2677.3	2690.7	2698.1	2708.5	2716.0	2720.4	2723.4	2720.4	2721.9
22.5°	2600.0	2614.9	2634.2	2644.6	2659.5	2668.4	2669.9	2680.3	2687.7	2680.3	2683.3
25°	2539.0	2553.9	2568.8	2591.1	2604.5	2614.9	2625.3	2626.8	2634.2	2632.7	2631.2
27.5°	2438.0	2457.3	2482.6	2500.4	2518.2	2534.6	2546.5	2549.5	2556.9	2553.9	2555.4
30°	2299.7	2320.5	2344.3	2372.6	2397.8	2414.2	2429.1	2439.5	2446.9	2442.4	2440.9
32.5°	2103.5	2124.3	2149.6	2177.8	2207.6	2231.3	2249.2	2262.6	2271.5	2268.5	2261.1
35°	1879.0	1885.0	1901.3	1923.6	1948.9	1974.2	1990.5	2005.4	2015.8	2018.8	2018.8
37.5°	1648.6	1629.3	1617.4	1617.4	1632.2	1642.6	1657.5	1666.4	1682.8	1688.7	1693.2
40°	1425.6	1381.0	1339.4	1308.2	1287.4	1285.9	1285.9	1290.3	1305.2	1324.5	1342.4
42.5°	1226.4	1155.1	1091.1	1033.2	991.6	967.8	957.4	958.9	970.7	988.6	1018.3
45°	1067.4	978.2	897.9	828.0	771.5	734.4	716.5	715.0	724.0	744.8	777.5
47.5°	944.0	848.8	758.1	677.9	616.9	576.8	556.0	550.0	556.0	575.3	614.0
50°	841.4	743.3	649.6	566.4	501.0	459.4	440.0	432.6	440.0	456.4	495.0
52.5°	746.2	645.2	557.5	477.2	407.3	371.6	350.8	346.4	350.8	370.1	401.4
55°	636.3	550.0	463.8	383.5	322.6	286.9	270.5	266.1	270.5	288.4	321.1
57.5°	527.7	453.4	377.6	304.7	252.7	221.5	206.6	200.7	211.1	223.0	261.6
60°	426.6	367.2	303.3	239.3	196.2	168.0	156.1	154.6	157.6	172.4	199.2
62.5°	334.5	285.4	234.9	182.9	147.2	135.3	120.4	118.9	121.9	130.8	151.6
65°	240.8	209.6	171.0	133.8	105.6	89.2	83.3	84.8	87.7	93.7	113.0
67.5°	168.0	145.7	118.9	93.7	72.9	65.4	59.5	58.0	59.5	69.9	80.3
70°	113.0	99.6	80.3	71.4	50.6	40.1	41.6	37.2	43.1	43.1	52.0
72.5°	74.3	65.4	53.5	41.6	35.7	28.3	28.3	26.8	29.7	31.2	38.7
75°	38.7	29.7	29.7	20.8	14.9	7.4	13.4	11.9	10.4	11.9	14.9
77.5°	26.8	22.3	20.8	16.4	14.9	11.9	11.9	11.9	11.9	13.4	14.9
80°	16.4	16.4	11.9	10.4	8.9	7.4	8.9	8.9	8.9	8.9	10.4
82.5°	10.4	8.9	8.9	7.4	7.4	5.9	5.9	5.9	5.9	5.9	8.9
85°	8.9	5.9	5.9	4.5	5.9	10.4	4.5	5.9	5.9	5.9	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.4	5.9
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°	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5	2769.5
2.5°	2773.9	2775.4	2775.4	2773.9	2773.9	2771.0	2776.9	2772.5	2773.9	2779.9	2775.4
5°	2776.9	2778.4	2778.4	2776.9	2776.9	2776.9	2778.4	2778.4	2776.9	2775.4	2778.4
7.5°	2782.9	2781.4	2781.4	2778.4	2778.4	2775.4	2778.4	2773.9	2776.9	2773.9	2778.4
10°	2775.4	2776.9	2775.4	2773.9	2773.9	2772.5	2772.5	2768.0	2769.5	2765.0	2768.0
12.5°	2771.0	2769.5	2769.5	2766.5	2763.5	2760.6	2759.1	2754.6	2754.6	2744.2	2748.7
15°	2759.1	2760.6	2756.1	2750.2	2747.2	2739.8	2736.8	2730.8	2724.9	2717.5	2719.0
17.5°	2748.7	2744.2	2738.3	2732.3	2720.4	2714.5	2708.5	2699.6	2696.6	2687.7	2684.8
20°	2717.5	2714.5	2707.1	2696.6	2689.2	2675.8	2669.9	2661.0	2653.5	2644.6	2640.1
22.5°	2677.3	2674.3	2665.4	2655.0	2643.1	2637.2	2631.2	2614.9	2607.4	2598.5	2597.0
25°	2626.8	2622.3	2613.4	2601.5	2595.5	2579.2	2573.2	2561.3	2558.4	2549.5	2548.0
27.5°	2549.5	2543.5	2533.1	2518.2	2507.8	2497.4	2491.5	2482.6	2479.6	2470.7	2469.2
30°	2433.5	2426.1	2405.3	2399.3	2381.5	2371.1	2371.1	2359.2	2360.7	2354.7	2354.7
32.5°	2250.7	2238.8	2222.4	2210.5	2198.6	2192.7	2192.7	2188.2	2191.2	2191.2	2194.2
35°	2008.4	1992.0	1983.1	1975.7	1975.7	1981.6	1999.4	2003.9	2012.8	2020.2	2026.2
37.5°	1697.6	1696.2	1706.6	1715.5	1737.8	1763.1	1794.3	1821.1	1846.3	1864.2	1882.0
40°	1361.7	1398.9	1428.6	1470.2	1504.4	1553.5	1609.9	1656.0	1699.1	1730.4	1763.1
42.5°	1062.9	1110.5	1172.9	1233.8	1294.8	1361.7	1436.0	1500.0	1556.4	1599.5	1633.7
45°	828.0	893.4	969.3	1046.6	1125.3	1208.6	1285.9	1351.3	1410.8	1455.4	1489.5
47.5°	667.5	738.8	825.0	909.8	999.0	1086.7	1172.9	1229.4	1278.4	1314.1	1345.4
50°	551.5	627.3	718.0	814.6	903.8	991.6	1065.9	1120.9	1161.0	1192.2	1211.5
52.5°	460.8	541.1	637.7	734.4	823.5	903.8	970.7	1012.4	1045.1	1067.4	1085.2
55°	380.5	457.9	548.6	639.2	726.9	802.7	857.7	889.0	914.2	927.6	938.0
57.5°	310.7	382.0	465.3	548.6	624.4	686.8	729.9	761.1	773.0	783.4	781.9
60°	243.8	310.7	386.5	457.9	523.3	573.8	605.0	622.9	631.8	636.3	633.3
62.5°	191.8	252.7	310.7	373.1	420.7	463.8	493.6	493.6	498.0	499.5	504.0
65°	142.7	188.8	239.3	285.4	324.1	352.3	368.7	373.1	379.1	377.6	374.6
67.5°	105.6	139.7	176.9	211.1	237.8	255.7	267.6	278.0	276.5	273.5	272.0
70°	72.9	95.2	127.9	148.7	168.0	185.8	188.8	190.3	191.8	193.3	190.3
72.5°	50.6	66.9	84.8	102.6	114.5	121.9	129.3	130.8	130.8	130.8	129.3
75°	25.3	34.2	50.6	58.0	68.4	71.4	77.3	77.3	81.8	75.8	74.3
77.5°	22.3	26.8	35.7	41.6	46.1	50.6	52.0	56.5	55.0	52.0	53.5
80°	13.4	16.4	22.3	25.3	31.2	32.7	34.2	35.7	34.2	35.7	35.7
82.5°	10.4	11.9	14.9	14.9	19.3	19.3	20.8	20.8	22.3	22.3	22.3
85°	5.9	10.4	8.9	17.8	11.9	11.9	14.9	17.8	14.9	14.9	17.8
87.5°	5.9	5.9	4.5	5.9	5.9	5.9	7.4	8.9	8.9	10.4	8.9
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: P249406

CATALOG NUMBER: LSR8B60D010 EC8B60827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2769.5	2769.5	2769.5	2769.5
2.5°	2773.9	2776.9	2772.5	2771.0
5°	2778.4	2778.4	2775.4	2775.4
7.5°	2778.4	2778.4	2773.9	2771.0
10°	2766.5	2766.5	2762.1	2759.1
12.5°	2744.2	2744.2	2742.7	2738.3
15°	2716.0	2716.0	2710.0	2705.6
17.5°	2677.3	2680.3	2672.9	2672.9
20°	2635.7	2634.2	2628.3	2625.3
22.5°	2592.6	2589.6	2588.1	2579.2
25°	2546.5	2543.5	2539.0	2534.6
27.5°	2467.7	2466.2	2461.8	2455.8
30°	2347.3	2345.8	2339.9	2339.9
32.5°	2191.2	2189.7	2183.8	2185.3
35°	2029.2	2035.1	2032.1	2026.2
37.5°	1893.9	1898.4	1901.3	1898.4
40°	1780.9	1794.3	1795.8	1798.8
42.5°	1660.5	1678.3	1684.3	1687.2
45°	1516.3	1532.7	1546.0	1543.1
47.5°	1369.1	1381.0	1392.9	1384.0
50°	1227.9	1235.3	1239.8	1239.8
52.5°	1094.1	1094.1	1092.6	1094.1
55°	941.0	941.0	935.1	938.0
57.5°	780.4	783.4	778.9	771.5
60°	631.8	624.4	621.4	616.9
62.5°	492.1	492.1	481.7	495.0
65°	368.7	364.2	359.7	358.2
67.5°	267.6	266.1	261.6	260.1
70°	188.8	182.9	181.4	178.4
72.5°	126.4	126.4	123.4	123.4
75°	77.3	69.9	68.4	69.9
77.5°	53.5	52.0	52.0	50.6
80°	35.7	34.2	37.2	32.7
82.5°	22.3	23.8	22.3	23.8
85°	14.9	17.8	16.4	16.4
87.5°	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)