

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: P245465

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245465  
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 EC8B50830 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5409.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 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

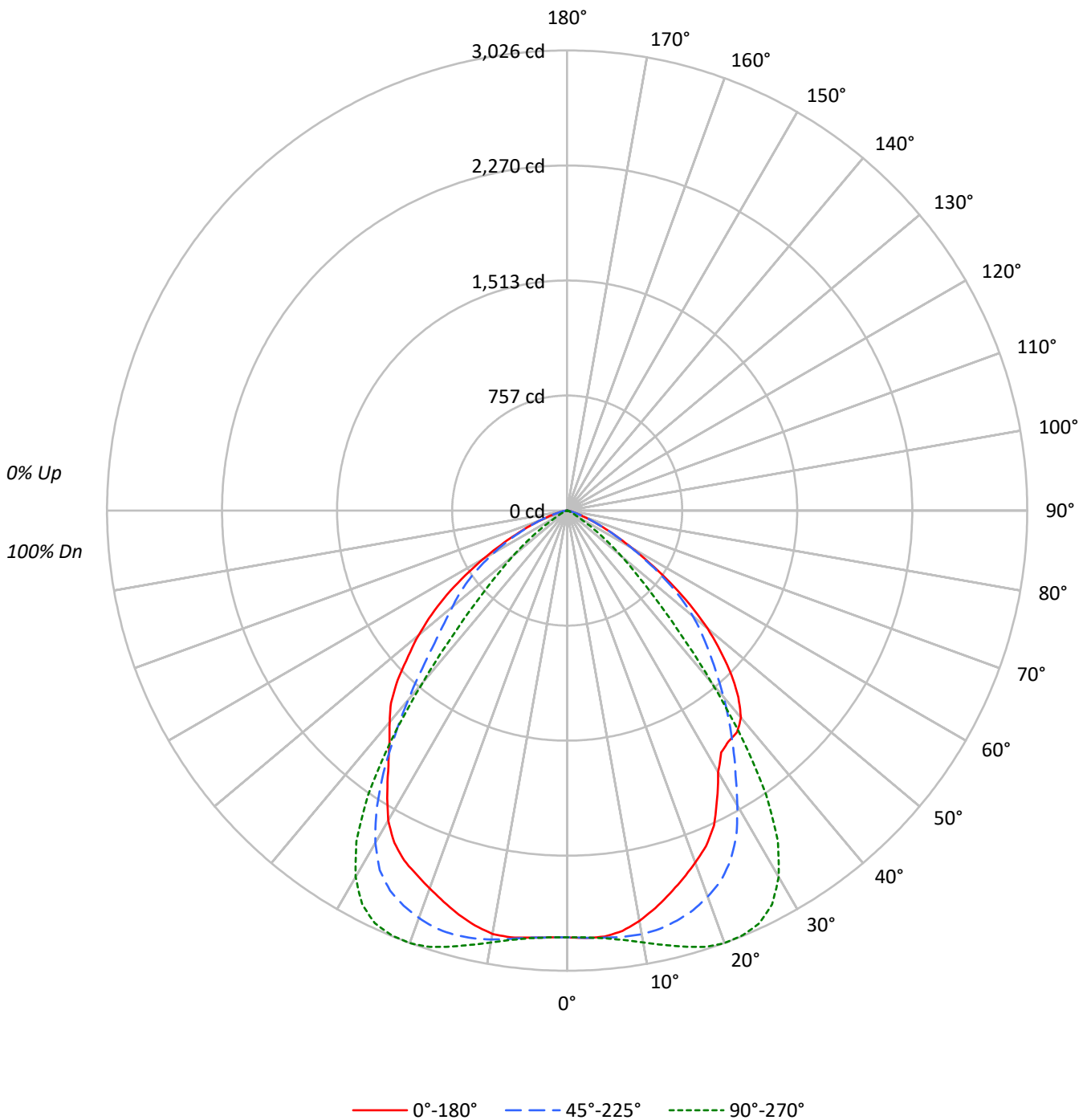
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	86527	86527	86527
5°	87043	87365	87272
10°	85764	90288	88516
15°	83255	94764	87820
20°	80841	99312	86754
25°	77735	101858	86350
30°	70743	99065	83790
35°	69691	85840	77092
40°	71584	59536	73085
45°	66639	35982	68719
50°	57802	22221	61232
55°	44359	11612	51966
60°	30220	4681	39224
65°	18803	2393	27055
70°	10206	1479	16517
75°	5326	703	9758
80°	2380	799	5292
85°	1592	531	4741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.8	5.0
10°-20°	799.4	14.8
20°-30°	1219.6	22.5
30°-40°	1272.6	23.5
40°-50°	955.9	17.7
50°-60°	588.1	10.9
60°-70°	239.4	4.4
70°-80°	56.4	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°	2288.8	42.3
0°-40°	3561.4	65.8
0°-60°	5105.5	94.4
0°-90°	5409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5409.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2806	2806	2806	2806	2806	
5°	2812	2819	2822	2819	2819	266
15°	2608	2791	2968	2886	2751	735
25°	2285	2541	2994	2757	2538	1039
35°	1851	1904	2280	2108	2048	1169
45°	1528	1323	825	1232	1576	1166
55°	825	783	216	783	967	742
65°	258	261	33	350	371	269
75°	45	45	6	79	82	54
85°	4	4	2	10	13	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°	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0
2.5°	2813.5	2809.0	2813.5	2813.5	2815.0	2812.0	2813.5	2815.0	2812.0	2812.0	2812.0
5°	2812.0	2809.0	2812.0	2810.5	2813.5	2813.5	2816.5	2816.5	2819.4	2819.4	2823.9
7.5°	2788.1	2782.2	2788.1	2792.6	2795.6	2801.6	2809.0	2815.0	2820.9	2826.9	2834.3
10°	2739.0	2739.0	2743.5	2752.4	2761.3	2771.7	2785.2	2800.1	2815.0	2828.3	2841.7
12.5°	2677.9	2673.5	2682.4	2694.3	2707.7	2724.1	2745.0	2767.3	2791.1	2817.9	2838.8
15°	2607.9	2603.4	2613.9	2625.8	2642.2	2666.0	2691.3	2721.1	2755.4	2791.1	2825.4
17.5°	2536.4	2534.9	2545.4	2561.8	2575.2	2600.5	2633.3	2669.0	2707.7	2755.4	2800.1
20°	2463.5	2462.0	2472.4	2485.8	2503.7	2527.5	2560.3	2602.0	2648.1	2701.8	2753.9
22.5°	2387.5	2389.0	2397.9	2412.8	2427.7	2453.0	2487.3	2529.0	2579.6	2637.7	2695.8
25°	2284.7	2277.3	2289.2	2304.1	2329.4	2350.2	2383.0	2427.7	2479.8	2540.9	2609.4
27.5°	2135.8	2134.3	2144.7	2158.1	2180.5	2205.8	2241.5	2287.7	2342.8	2409.8	2476.8
30°	1986.8	1989.8	1994.3	2007.7	2022.6	2047.9	2083.7	2122.4	2174.5	2238.5	2310.0
32.5°	1885.6	1885.6	1891.5	1900.5	1910.9	1924.3	1949.6	1977.9	2018.1	2062.8	2114.9
35°	1851.3	1845.4	1851.3	1852.8	1854.3	1857.3	1861.7	1870.7	1884.1	1903.5	1922.8
37.5°	1836.4	1832.0	1832.0	1826.0	1818.5	1809.6	1797.7	1784.3	1769.4	1750.0	1735.2
40°	1778.3	1775.4	1772.4	1766.4	1750.0	1732.2	1712.8	1681.5	1647.3	1599.6	1552.0
42.5°	1666.6	1663.7	1662.2	1650.2	1635.3	1614.5	1592.2	1559.4	1516.2	1455.1	1386.6
45°	1528.1	1522.1	1517.7	1507.3	1496.8	1479.0	1458.1	1428.3	1385.1	1322.6	1240.7
47.5°	1367.3	1364.3	1362.8	1358.3	1347.9	1337.5	1324.1	1300.2	1261.5	1201.9	1117.0
50°	1204.9	1199.0	1201.9	1200.5	1196.0	1188.5	1179.6	1163.2	1133.4	1079.8	1002.4
52.5°	1018.7	1018.7	1017.3	1021.7	1023.2	1021.7	1023.2	1005.4	980.0	939.8	874.3
55°	825.1	825.1	829.6	835.6	841.5	843.0	841.5	834.1	816.2	783.4	725.3
57.5°	643.4	640.4	649.4	658.3	664.3	670.2	665.7	659.8	649.4	622.6	577.9
60°	490.0	490.0	496.0	501.9	507.9	513.8	512.4	510.9	501.9	484.0	448.3
62.5°	360.4	361.9	361.9	366.4	372.3	378.3	382.8	378.3	373.8	361.9	338.1
65°	257.7	256.2	257.7	262.1	266.6	272.6	275.5	274.1	269.6	260.6	242.8
67.5°	172.8	171.3	177.2	178.7	181.7	187.7	186.2	187.7	186.2	178.7	163.8
70°	113.2	110.2	113.2	111.7	116.2	117.7	120.6	122.1	120.6	116.2	111.7
72.5°	70.0	68.5	70.0	71.5	73.0	74.5	77.4	77.4	75.9	73.0	67.0
75°	44.7	40.2	41.7	38.7	41.7	41.7	44.7	46.2	44.7	44.7	41.7
77.5°	26.8	26.8	26.8	26.8	26.8	26.8	26.8	28.3	29.8	26.8	25.3
80°	13.4	13.4	14.9	14.9	14.9	16.4	14.9	14.9	14.9	16.4	11.9
82.5°	10.4	8.9	8.9	8.9	10.4	8.9	8.9	8.9	8.9	8.9	8.9
85°	4.5	5.9	4.5	3.0	4.5	4.5	5.9	4.5	4.5	4.5	5.9
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°	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0
2.5°	2813.5	2810.5	2810.5	2809.0	2812.0	2809.0	2810.5	2809.0	2809.0	2812.0	2809.0
5°	2823.9	2825.4	2822.4	2820.9	2825.4	2825.4	2825.4	2822.4	2822.4	2823.9	2822.4
7.5°	2838.8	2841.7	2843.2	2844.7	2847.7	2849.2	2849.2	2847.7	2846.2	2850.7	2844.7
10°	2855.2	2859.6	2868.6	2873.1	2880.5	2880.5	2883.5	2883.5	2880.5	2883.5	2882.0
12.5°	2849.2	2876.0	2890.9	2901.3	2911.8	2920.7	2923.7	2925.2	2923.7	2929.6	2923.7
15°	2859.6	2882.0	2905.8	2923.7	2943.0	2953.4	2956.4	2968.4	2971.3	2972.8	2963.9
17.5°	2843.2	2883.5	2908.8	2935.6	2963.9	2983.3	3001.1	3008.6	3010.1	3013.0	3001.1
20°	2806.0	2850.7	2889.4	2928.2	2960.9	2990.7	3005.6	3026.4	3020.5	3032.4	3016.0
22.5°	2755.4	2806.0	2855.2	2905.8	2940.1	2975.8	3007.1	3022.0	3029.4	3029.4	3011.5
25°	2674.9	2734.5	2788.1	2840.3	2892.4	2935.6	2971.3	2993.7	2998.2	2996.7	2975.8
27.5°	2549.8	2613.9	2676.4	2736.0	2800.1	2850.7	2892.4	2919.2	2926.7	2926.7	2904.3
30°	2377.1	2445.6	2506.7	2578.1	2643.7	2700.3	2758.4	2782.2	2795.6	2795.6	2770.3
32.5°	2171.5	2229.6	2286.2	2356.2	2427.7	2491.8	2546.9	2579.6	2596.0	2594.5	2572.2
35°	1948.1	1976.4	2019.6	2071.7	2135.8	2195.4	2249.0	2280.3	2308.6	2307.1	2286.2
37.5°	1724.7	1717.3	1721.7	1741.1	1781.3	1823.0	1864.7	1894.5	1918.3	1928.8	1924.3
40°	1505.8	1467.0	1429.8	1416.4	1419.4	1434.3	1456.6	1479.0	1505.8	1519.2	1525.1
42.5°	1309.2	1243.7	1178.1	1129.0	1100.7	1091.7	1102.1	1109.6	1126.0	1145.3	1164.7
45°	1151.3	1063.4	977.0	901.1	853.4	825.1	819.2	825.1	834.1	853.4	878.7
47.5°	1021.7	918.9	822.2	737.2	667.2	630.0	619.6	616.6	625.5	643.4	677.7
50°	907.0	804.3	697.0	598.7	525.8	484.0	469.2	463.2	473.6	487.0	518.3
52.5°	781.9	680.6	570.4	475.1	399.2	356.0	339.6	330.6	336.6	354.5	385.7
55°	646.4	552.5	452.8	354.5	281.5	241.3	221.9	216.0	221.9	241.3	272.6
57.5°	510.9	431.9	348.5	256.2	190.6	150.4	131.0	125.1	141.5	148.9	181.7
60°	399.2	335.1	263.6	187.7	131.0	99.8	80.4	75.9	83.4	96.8	123.6
62.5°	299.4	259.1	202.6	134.0	96.8	64.0	53.6	49.2	53.6	64.0	84.9
65°	217.5	186.2	141.5	98.3	65.5	47.7	35.8	32.8	37.2	44.7	62.6
67.5°	148.9	125.1	98.3	68.5	44.7	29.8	25.3	25.3	26.8	32.8	46.2
70°	96.8	81.9	62.6	44.7	29.8	22.3	19.4	16.4	19.4	23.8	31.3
72.5°	61.1	52.1	40.2	31.3	22.3	16.4	13.4	11.9	14.9	17.9	23.8
75°	37.2	28.3	20.8	16.4	11.9	11.9	11.9	5.9	7.4	11.9	14.9
77.5°	22.3	19.4	16.4	13.4	10.4	5.9	5.9	5.9	7.4	8.9	13.4
80°	11.9	10.4	7.4	7.4	5.9	4.5	5.9	4.5	3.0	7.4	8.9
82.5°	7.4	5.9	5.9	5.9	7.4	3.0	4.5	3.0	4.5	5.9	4.5
85°	4.5	4.5	4.5	3.0	7.4	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°	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0	2806.0
2.5°	2810.5	2809.0	2810.5	2809.0	2809.0	2809.0	2810.5	2810.5	2809.0	2809.0	2812.0
5°	2822.4	2822.4	2822.4	2820.9	2819.4	2819.4	2822.4	2822.4	2817.9	2822.4	2822.4
7.5°	2847.7	2843.2	2847.7	2841.7	2838.8	2840.3	2841.7	2838.8	2835.8	2837.3	2837.3
10°	2880.5	2876.0	2876.0	2871.6	2867.1	2864.1	2861.1	2853.7	2846.2	2844.7	2838.8
12.5°	2919.2	2911.8	2907.3	2898.3	2890.9	2880.5	2871.6	2859.6	2844.7	2834.3	2823.9
15°	2957.9	2946.0	2935.6	2920.7	2904.3	2886.4	2867.1	2847.7	2823.9	2803.0	2785.2
17.5°	2989.2	2972.8	2953.4	2929.6	2905.8	2879.0	2850.7	2822.4	2788.1	2761.3	2740.5
20°	2999.6	2975.8	2950.5	2919.2	2887.9	2850.7	2815.0	2777.7	2739.0	2710.7	2686.9
22.5°	2986.2	2957.9	2926.7	2893.9	2852.2	2812.0	2770.3	2727.1	2692.8	2654.1	2631.8
25°	2949.0	2914.7	2880.5	2841.7	2801.6	2756.9	2712.2	2667.5	2625.8	2604.9	2576.7
27.5°	2873.1	2835.8	2798.6	2758.4	2712.2	2667.5	2621.3	2578.1	2542.4	2514.1	2497.7
30°	2739.0	2695.8	2652.6	2609.4	2569.2	2523.0	2479.8	2444.1	2408.3	2386.0	2369.6
32.5°	2533.4	2494.7	2451.6	2409.8	2372.6	2333.9	2298.1	2266.9	2241.5	2226.6	2214.7
35°	2256.4	2217.7	2184.9	2155.2	2123.9	2107.5	2085.2	2067.3	2056.8	2050.9	2049.4
37.5°	1907.9	1885.6	1875.1	1869.2	1863.2	1858.8	1861.7	1869.2	1875.1	1885.6	1897.5
40°	1535.6	1554.9	1560.9	1581.7	1601.1	1626.4	1654.7	1687.5	1714.3	1748.5	1772.4
42.5°	1196.0	1231.7	1273.4	1318.1	1365.8	1411.9	1468.5	1520.7	1568.3	1611.5	1648.8
45°	918.9	974.0	1036.6	1100.7	1164.7	1231.7	1300.2	1364.3	1420.9	1467.0	1505.8
47.5°	716.4	777.5	857.9	936.8	1014.3	1093.2	1169.2	1236.2	1283.8	1328.5	1362.8
50°	567.5	637.5	725.3	816.2	901.1	984.5	1064.9	1127.5	1175.1	1210.9	1236.2
52.5°	439.4	522.8	612.1	707.5	798.3	889.2	963.6	1021.7	1060.5	1091.7	1111.1
55°	327.7	409.6	504.9	603.2	695.5	783.4	853.4	904.1	938.3	956.2	966.6
57.5°	236.8	311.3	406.6	504.9	588.3	671.7	728.3	774.5	793.8	804.3	808.7
60°	172.8	241.3	326.2	411.1	490.0	557.0	606.2	637.5	652.4	658.3	656.8
62.5°	126.6	186.2	259.1	330.6	394.7	449.8	488.5	509.4	516.8	519.8	515.3
65°	96.8	143.0	205.5	260.6	309.8	350.0	378.3	391.7	396.2	394.7	391.7
67.5°	71.5	107.3	153.4	195.1	230.9	262.1	277.0	289.0	291.9	287.5	283.0
70°	50.7	78.9	111.7	140.0	166.8	184.7	201.1	202.6	202.6	201.1	198.1
72.5°	35.8	55.1	75.9	95.3	111.7	125.1	131.0	135.5	134.0	132.5	129.6
75°	23.8	34.3	55.1	59.6	74.5	78.9	84.9	84.9	86.4	81.9	81.9
77.5°	14.9	23.8	32.8	38.7	44.7	50.7	53.6	53.6	55.1	53.6	53.6
80°	8.9	14.9	17.9	26.8	26.8	31.3	32.8	34.3	31.3	35.8	31.3
82.5°	5.9	8.9	13.4	13.4	16.4	19.4	19.4	20.8	20.8	19.4	19.4
85°	4.5	5.9	7.4	8.9	8.9	10.4	8.9	8.9	10.4	11.9	10.4
87.5°	1.5	3.0	1.5	3.0	3.0	5.9	4.5	4.5	4.5	5.9	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





TEST NUMBER: P245465

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2806.0	2806.0	2806.0	2806.0
2.5°	2809.0	2810.5	2809.0	2809.0
5°	2822.4	2820.9	2822.4	2819.4
7.5°	2832.8	2832.8	2831.3	2831.3
10°	2832.8	2826.9	2826.9	2826.9
12.5°	2810.5	2803.0	2798.6	2795.6
15°	2771.7	2758.4	2752.4	2750.9
17.5°	2721.1	2709.2	2701.8	2697.3
20°	2663.0	2651.1	2642.2	2643.7
22.5°	2612.4	2599.0	2593.0	2590.0
25°	2561.8	2545.4	2540.9	2537.9
27.5°	2479.8	2470.9	2466.4	2462.0
30°	2354.7	2350.2	2342.8	2353.2
32.5°	2210.3	2202.8	2196.9	2201.3
35°	2050.9	2046.4	2050.9	2047.9
37.5°	1904.9	1909.4	1915.4	1918.3
40°	1790.3	1806.6	1812.6	1815.6
42.5°	1675.6	1694.9	1706.8	1714.3
45°	1534.1	1553.4	1566.8	1575.8
47.5°	1388.1	1404.5	1417.9	1416.4
50°	1255.6	1264.5	1270.4	1276.4
52.5°	1121.5	1121.5	1123.0	1123.0
55°	969.6	966.6	965.1	966.6
57.5°	802.8	799.8	798.3	793.8
60°	650.9	641.9	636.0	636.0
62.5°	509.4	498.9	494.5	493.0
65°	382.8	381.3	372.3	370.8
67.5°	277.0	271.1	265.1	266.6
70°	195.1	186.2	186.2	183.2
72.5°	126.6	122.1	120.6	120.6
75°	78.9	78.9	75.9	81.9
77.5°	52.1	52.1	50.7	52.1
80°	31.3	31.3	31.3	29.8
82.5°	19.4	20.8	19.4	19.4
85°	10.4	11.9	8.9	13.4
87.5°	5.9	7.4	5.9	7.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)