

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: P244601

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244601  
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 EC8B50830 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5367.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 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

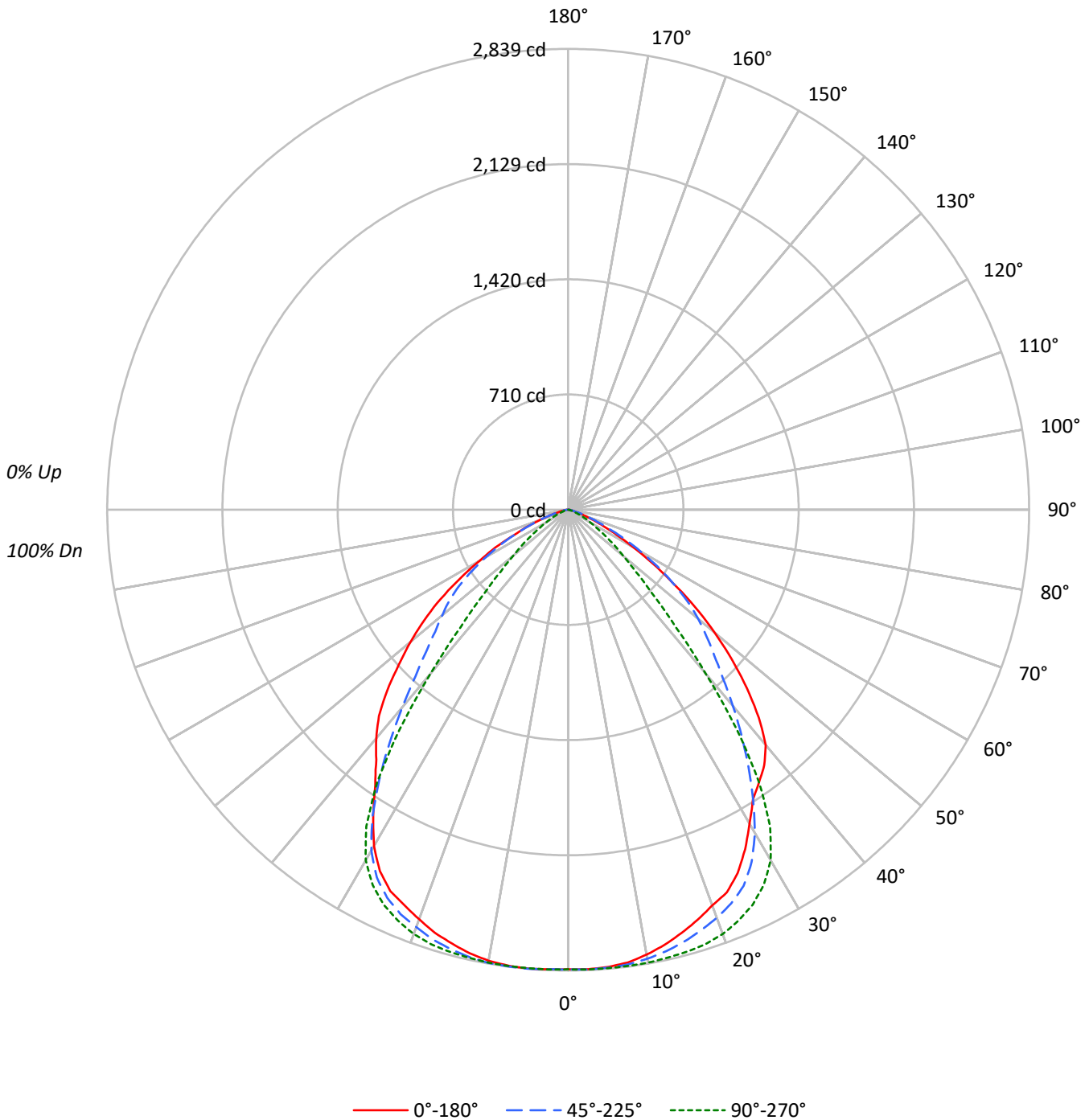
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	87319	87319	87319
5°	87513	87749	87842
10°	87144	88716	88334
15°	86179	90013	88315
20°	85143	91279	88086
25°	84040	91382	88177
30°	79506	88814	85189
35°	77133	77189	77991
40°	76177	53107	74035
45°	67878	31883	68802
50°	56440	21218	60815
55°	42326	14628	51563
60°	28684	9750	38903
65°	17300	6326	26727
70°	9593	3426	16445
75°	4349	1454	8507
80°	3782	1616	5931
85°	4316	2158	5909



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.2	5.0
10°-20°	784.8	14.6
20°-30°	1191.2	22.2
30°-40°	1251.2	23.3
40°-50°	938.0	17.5
50°-60°	601.9	11.2
60°-70°	257.5	4.8
70°-80°	60.8	1.1
80°-90°	11.3	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°	2246.3	41.9
0°-40°	3497.5	65.2
0°-60°	5037.4	93.9
0°-90°	5367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5367.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2832	2832	2832	2832	2832	
5°	2827	2832	2835	2839	2838	269
15°	2700	2756	2820	2801	2766	761
25°	2470	2557	2686	2637	2592	1128
35°	2049	1935	2050	2026	2072	1286
45°	1556	1272	731	1236	1578	1192
55°	787	787	272	821	959	714
65°	237	280	87	360	366	253
75°	36	42	12	73	71	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°	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7
2.5°	2833.3	2836.3	2834.8	2834.8	2833.3	2834.8	2834.8	2837.8	2837.8	2834.8	2833.3
5°	2827.2	2830.2	2830.2	2827.2	2827.2	2834.8	2830.2	2833.3	2833.3	2831.7	2831.7
7.5°	2813.5	2813.5	2819.6	2815.0	2815.0	2819.6	2818.0	2821.1	2824.1	2825.7	2825.7
10°	2783.1	2786.1	2787.7	2787.7	2789.2	2793.7	2796.8	2802.9	2805.9	2808.9	2810.5
12.5°	2745.1	2749.7	2751.2	2749.7	2754.2	2760.3	2767.9	2775.5	2780.1	2786.1	2790.7
15°	2699.5	2699.5	2702.5	2707.1	2710.2	2719.3	2726.9	2736.0	2748.1	2755.8	2763.3
17.5°	2649.3	2652.4	2656.9	2656.9	2663.0	2678.2	2682.8	2696.5	2710.2	2717.7	2733.0
20°	2594.6	2597.7	2602.2	2605.3	2612.9	2625.0	2634.1	2646.3	2661.5	2675.2	2690.4
22.5°	2552.1	2546.0	2549.0	2552.1	2559.7	2570.3	2581.0	2596.1	2611.3	2625.0	2640.2
25°	2470.0	2471.5	2476.1	2479.1	2488.2	2497.3	2509.5	2527.7	2541.4	2556.6	2573.3
27.5°	2359.0	2360.6	2368.1	2368.1	2375.7	2390.9	2398.5	2413.7	2432.0	2447.2	2467.0
30°	2232.9	2235.9	2235.9	2242.0	2246.5	2254.1	2261.7	2276.9	2286.1	2299.7	2327.1
32.5°	2117.4	2120.4	2118.8	2117.4	2112.8	2111.3	2109.7	2112.8	2115.8	2120.4	2131.0
35°	2049.0	2041.3	2035.3	2024.6	2012.5	1997.3	1983.6	1965.4	1948.6	1934.9	1919.8
37.5°	1983.6	1982.1	1972.9	1957.7	1933.4	1906.1	1874.2	1834.6	1795.1	1752.5	1711.5
40°	1892.4	1887.8	1880.2	1858.9	1831.6	1798.1	1755.6	1706.9	1643.1	1577.7	1510.9
42.5°	1737.3	1738.9	1729.7	1713.0	1687.2	1655.3	1611.2	1558.0	1489.6	1412.1	1325.4
45°	1556.5	1556.5	1553.4	1539.7	1521.5	1495.7	1462.2	1418.2	1351.3	1272.2	1179.5
47.5°	1368.0	1369.5	1364.9	1361.9	1354.3	1337.6	1313.3	1279.8	1232.7	1156.7	1064.0
50°	1176.5	1176.5	1184.1	1182.5	1182.5	1176.5	1165.8	1146.1	1105.0	1044.2	957.6
52.5°	984.9	988.0	992.6	998.6	1006.2	1018.4	1006.2	997.1	971.3	924.1	849.7
55°	787.3	790.4	798.0	808.6	817.8	829.9	832.9	832.9	819.3	787.3	731.1
57.5°	618.6	614.1	620.2	629.3	641.4	653.6	662.7	673.4	671.8	650.6	605.0
60°	465.1	466.6	471.2	480.3	489.4	500.1	512.2	521.4	525.9	515.3	486.4
62.5°	339.0	339.0	345.0	354.1	358.7	373.9	381.5	386.1	390.6	389.1	370.9
65°	237.1	240.1	243.2	247.8	252.3	261.4	266.0	275.1	278.2	279.7	266.0
67.5°	167.2	162.6	165.7	168.7	173.3	179.4	188.5	188.5	193.0	193.0	183.9
70°	106.4	106.4	107.9	112.5	115.5	117.0	120.1	123.1	127.7	126.2	126.2
72.5°	71.4	69.9	71.4	73.0	74.5	79.0	79.0	80.6	83.6	85.1	79.0
75°	36.5	38.0	41.0	39.5	44.1	41.0	42.5	47.1	45.6	42.5	42.5
77.5°	30.4	30.4	30.4	28.9	31.9	31.9	30.4	33.4	31.9	31.9	30.4
80°	21.3	22.8	21.3	19.7	21.3	19.7	19.7	19.7	19.7	19.7	18.2
82.5°	16.7	13.7	15.2	13.7	15.2	15.2	13.7	12.2	12.2	13.7	12.2
85°	12.2	9.1	10.6	10.6	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	3.0
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°	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7
2.5°	2836.3	2834.8	2837.8	2836.3	2836.3	2834.8	2836.3	2834.8	2837.8	2831.7	2833.3
5°	2836.3	2833.3	2834.8	2836.3	2837.8	2834.8	2834.8	2834.8	2837.8	2834.8	2836.3
7.5°	2830.2	2828.7	2833.3	2836.3	2834.8	2833.3	2836.3	2834.8	2837.8	2836.3	2839.3
10°	2818.0	2819.6	2822.6	2827.2	2828.7	2830.2	2833.3	2833.3	2837.8	2831.7	2834.8
12.5°	2799.8	2805.9	2813.5	2816.5	2822.6	2822.6	2825.7	2827.2	2830.2	2828.7	2833.3
15°	2777.0	2784.6	2793.7	2801.3	2808.9	2813.5	2818.0	2819.6	2824.1	2819.6	2821.1
17.5°	2749.7	2758.8	2772.5	2781.6	2793.7	2798.3	2804.4	2807.4	2812.0	2808.9	2810.5
20°	2711.6	2722.3	2737.5	2751.2	2758.8	2769.4	2777.0	2781.6	2784.6	2781.6	2783.1
22.5°	2658.5	2673.7	2693.4	2704.1	2719.3	2728.4	2729.9	2740.5	2748.1	2740.5	2743.6
25°	2596.1	2611.3	2626.5	2649.3	2663.0	2673.7	2684.3	2685.8	2693.4	2691.9	2690.4
27.5°	2492.8	2512.6	2538.4	2556.6	2574.9	2591.6	2603.7	2606.8	2614.4	2611.3	2612.9
30°	2351.4	2372.7	2397.0	2425.9	2451.7	2468.4	2483.7	2494.3	2501.9	2497.3	2495.8
32.5°	2150.8	2172.1	2197.9	2226.8	2257.2	2281.5	2299.7	2313.4	2322.5	2319.5	2311.9
35°	1921.3	1927.3	1944.1	1966.9	1992.7	2018.5	2035.3	2050.5	2061.1	2064.1	2064.1
37.5°	1685.7	1665.9	1653.8	1653.8	1668.9	1679.6	1694.8	1703.9	1720.6	1726.7	1731.3
40°	1457.7	1412.1	1369.5	1337.6	1316.3	1314.8	1314.8	1319.3	1334.5	1354.3	1372.6
42.5°	1254.0	1181.0	1115.7	1056.4	1013.8	989.5	978.9	980.4	992.6	1010.8	1041.2
45°	1091.4	1000.2	918.1	846.6	788.9	750.9	732.6	731.1	740.2	761.5	795.0
47.5°	965.2	867.9	775.2	693.1	630.8	589.7	568.5	562.4	568.5	588.2	627.8
50°	860.3	760.0	664.2	579.1	512.2	469.7	449.9	442.3	449.9	466.6	506.1
52.5°	763.0	659.7	570.0	487.9	416.5	380.0	358.7	354.1	358.7	378.5	410.4
55°	650.6	562.4	474.2	392.1	329.9	293.4	276.6	272.1	276.6	294.9	328.3
57.5°	539.6	463.6	386.1	311.6	258.4	226.5	211.3	205.2	215.8	228.0	267.5
60°	436.2	375.4	310.1	244.7	200.6	171.8	159.6	158.1	161.1	176.3	203.7
62.5°	342.0	291.8	240.1	187.0	150.5	138.3	123.1	121.6	124.6	133.7	155.1
65°	246.2	214.3	174.8	136.8	107.9	91.2	85.1	86.7	89.7	95.8	115.5
67.5°	171.8	149.0	121.6	95.8	74.5	66.9	60.8	59.3	60.8	71.4	82.1
70°	115.5	101.8	82.1	73.0	51.7	41.0	42.5	38.0	44.1	44.1	53.2
72.5°	76.0	66.9	54.7	42.5	36.5	28.9	28.9	27.4	30.4	31.9	39.5
75°	39.5	30.4	30.4	21.3	15.2	7.6	13.7	12.2	10.6	12.2	15.2
77.5°	27.4	22.8	21.3	16.7	15.2	12.2	12.2	12.2	12.2	13.7	15.2
80°	16.7	16.7	12.2	10.6	9.1	7.6	9.1	9.1	9.1	9.1	10.6
82.5°	10.6	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	10.6	4.6	6.1	6.1	6.1	4.6
87.5°	3.0	4.6	4.6	4.6	3.0	1.5	3.0	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°	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7	2831.7
2.5°	2836.3	2837.8	2837.8	2836.3	2836.3	2833.3	2839.3	2834.8	2836.3	2842.4	2837.8
5°	2839.3	2840.8	2840.8	2839.3	2839.3	2839.3	2840.8	2840.8	2839.3	2837.8	2840.8
7.5°	2845.4	2843.9	2843.9	2840.8	2840.8	2837.8	2840.8	2836.3	2839.3	2836.3	2840.8
10°	2837.8	2839.3	2837.8	2836.3	2836.3	2834.8	2834.8	2830.2	2831.7	2827.2	2830.2
12.5°	2833.3	2831.7	2831.7	2828.7	2825.7	2822.6	2821.1	2816.5	2816.5	2805.9	2810.5
15°	2821.1	2822.6	2818.0	2812.0	2808.9	2801.3	2798.3	2792.2	2786.1	2778.6	2780.1
17.5°	2810.5	2805.9	2799.8	2793.7	2781.6	2775.5	2769.4	2760.3	2757.2	2748.1	2745.1
20°	2778.6	2775.5	2767.9	2757.2	2749.7	2736.0	2729.9	2720.8	2713.2	2704.1	2699.5
22.5°	2737.5	2734.4	2725.3	2714.7	2702.5	2696.5	2690.4	2673.7	2666.0	2656.9	2655.4
25°	2685.8	2681.3	2672.1	2660.0	2653.9	2637.2	2631.1	2618.9	2615.9	2606.8	2605.3
27.5°	2606.8	2600.7	2590.1	2574.9	2564.2	2553.6	2547.5	2538.4	2535.4	2526.2	2524.7
30°	2488.2	2480.6	2459.3	2453.3	2435.0	2424.4	2424.4	2412.2	2413.7	2407.7	2407.7
32.5°	2301.3	2289.1	2272.4	2260.2	2248.0	2242.0	2242.0	2237.4	2240.5	2240.5	2243.5
35°	2053.5	2036.8	2027.7	2020.1	2020.1	2026.1	2044.4	2049.0	2058.1	2065.7	2071.8
37.5°	1735.8	1734.3	1745.0	1754.1	1776.9	1802.7	1834.6	1862.0	1887.8	1906.1	1924.3
40°	1392.3	1430.3	1460.7	1503.3	1538.2	1588.4	1646.1	1693.3	1737.3	1769.3	1802.7
42.5°	1086.8	1135.4	1199.3	1261.6	1323.9	1392.3	1468.3	1533.7	1591.4	1635.5	1670.5
45°	846.6	913.5	991.0	1070.1	1150.6	1235.8	1314.8	1381.7	1442.5	1488.1	1523.0
47.5°	682.5	755.4	843.6	930.2	1021.4	1111.1	1199.3	1257.0	1307.2	1343.7	1375.6
50°	563.9	641.4	734.2	832.9	924.1	1013.8	1089.8	1146.1	1187.1	1219.0	1238.8
52.5°	471.2	553.3	652.1	750.9	842.1	924.1	992.6	1035.1	1068.6	1091.4	1109.6
55°	389.1	468.2	560.9	653.6	743.3	820.8	877.0	909.0	934.8	948.5	959.1
57.5°	317.7	390.6	475.8	560.9	638.4	702.3	746.3	778.2	790.4	801.0	799.5
60°	249.3	317.7	395.2	468.2	535.0	586.7	618.6	636.9	646.0	650.6	647.5
62.5°	196.1	258.4	317.7	381.5	430.2	474.2	504.7	504.7	509.2	510.7	515.3
65°	145.9	193.0	244.7	291.8	331.3	360.2	377.0	381.5	387.6	386.1	383.0
67.5°	107.9	142.9	180.9	215.8	243.2	261.4	273.6	284.3	282.7	279.7	278.2
70°	74.5	97.3	130.7	152.0	171.8	190.0	193.0	194.5	196.1	197.6	194.5
72.5°	51.7	68.4	86.7	104.9	117.0	124.6	132.3	133.7	133.7	133.7	132.3
75°	25.8	35.0	51.7	59.3	69.9	73.0	79.0	79.0	83.6	77.5	76.0
77.5°	22.8	27.4	36.5	42.5	47.1	51.7	53.2	57.8	56.2	53.2	54.7
80°	13.7	16.7	22.8	25.8	31.9	33.4	35.0	36.5	35.0	36.5	36.5
82.5°	10.6	12.2	15.2	15.2	19.7	19.7	21.3	21.3	22.8	22.8	22.8
85°	6.1	10.6	9.1	18.2	12.2	12.2	15.2	18.2	15.2	15.2	18.2
87.5°	6.1	6.1	4.6	6.1	6.1	6.1	7.6	9.1	9.1	10.6	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: P244601

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2831.7	2831.7	2831.7	2831.7
2.5°	2836.3	2839.3	2834.8	2833.3
5°	2840.8	2840.8	2837.8	2837.8
7.5°	2840.8	2840.8	2836.3	2833.3
10°	2828.7	2828.7	2824.1	2821.1
12.5°	2805.9	2805.9	2804.4	2799.8
15°	2777.0	2777.0	2770.9	2766.4
17.5°	2737.5	2740.5	2733.0	2733.0
20°	2694.9	2693.4	2687.4	2684.3
22.5°	2650.9	2647.8	2646.3	2637.2
25°	2603.7	2600.7	2596.1	2591.6
27.5°	2523.2	2521.7	2517.1	2511.0
30°	2400.1	2398.5	2392.5	2392.5
32.5°	2240.5	2238.9	2232.9	2234.4
35°	2074.8	2080.9	2077.8	2071.8
37.5°	1936.5	1941.0	1944.1	1941.0
40°	1820.9	1834.6	1836.2	1839.2
42.5°	1697.8	1716.1	1722.2	1725.2
45°	1550.4	1567.1	1580.8	1577.7
47.5°	1399.9	1412.1	1424.2	1415.1
50°	1255.5	1263.1	1267.7	1267.7
52.5°	1118.7	1118.7	1117.2	1118.7
55°	962.1	962.1	956.1	959.1
57.5°	798.0	801.0	796.5	788.9
60°	646.0	638.4	635.3	630.8
62.5°	503.1	503.1	492.5	506.1
65°	377.0	372.4	367.8	366.3
67.5°	273.6	272.1	267.5	266.0
70°	193.0	187.0	185.4	182.4
72.5°	129.2	129.2	126.2	126.2
75°	79.0	71.4	69.9	71.4
77.5°	54.7	53.2	53.2	51.7
80°	36.5	35.0	38.0	33.4
82.5°	22.8	24.3	22.8	24.3
85°	15.2	18.2	16.7	16.7
87.5°	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)