

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: P244607

Luminaire Tested: **LSR8B50D010 EC8B50835 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244607  
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 EC8B50835 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5581.0 lumens  
Efficiency: N/A  
Efficacy: 105.3 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

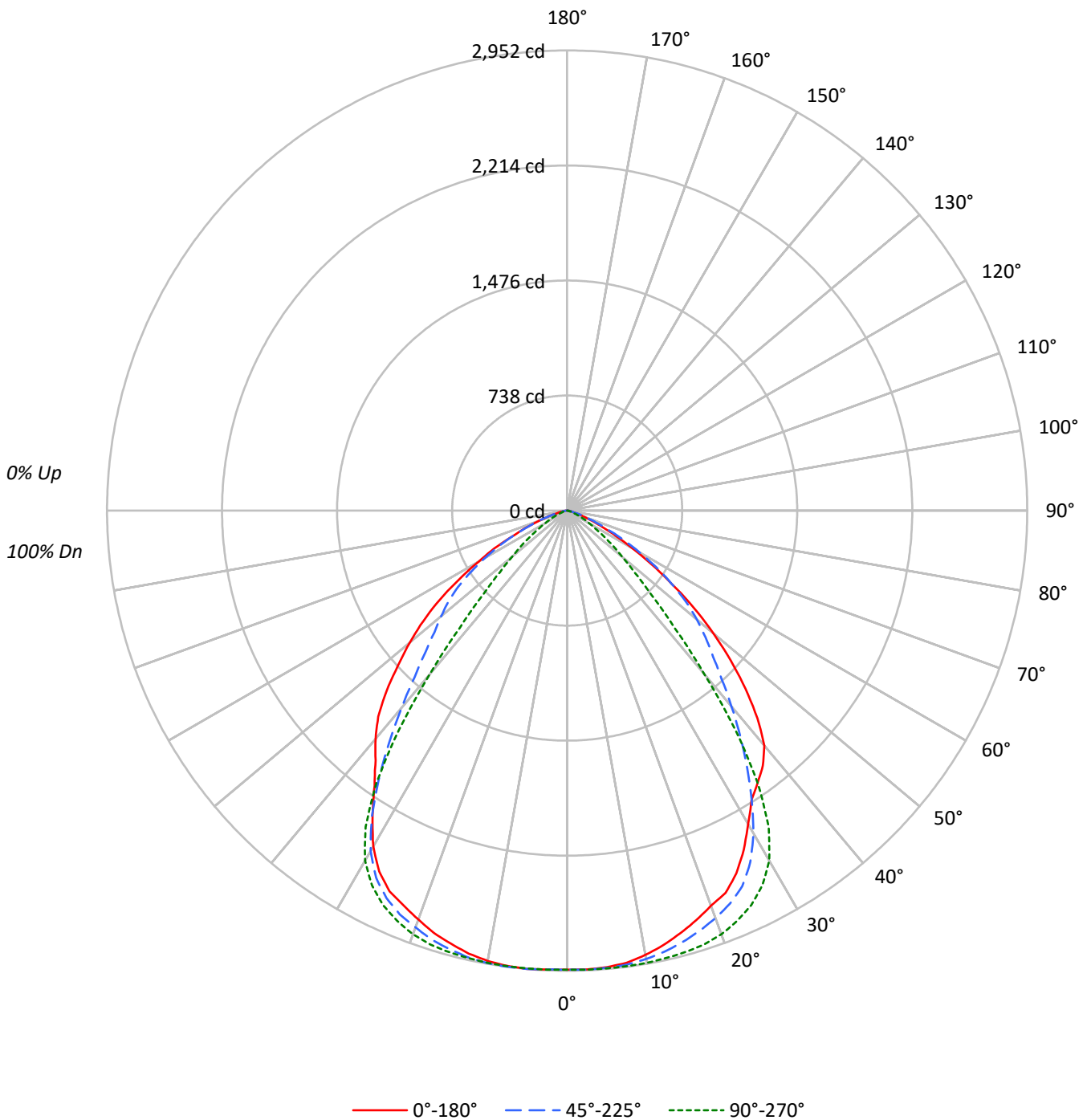
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	90801	90801	90801
5°	91002	91247	91346
10°	90620	92251	91857
15°	89614	93601	91836
20°	88539	94918	91597
25°	87391	95026	91692
30°	82675	92357	88586
35°	80208	80265	81101
40°	79212	55224	76986
45°	70581	33156	71550
50°	58690	22067	63238
55°	44015	15209	53616
60°	29831	10139	40457
65°	17993	6574	27792
70°	9972	3561	17103
75°	4515	1501	8852
80°	3925	1687	6180
85°	4458	2229	6156



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	281.0	5.0
10°-20°	816.1	14.6
20°-30°	1238.7	22.2
30°-40°	1301.0	23.3
40°-50°	975.4	17.5
50°-60°	625.9	11.2
60°-70°	267.7	4.8
70°-80°	63.3	1.1
80°-90°	11.8	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°	2335.9	41.9
0°-40°	3636.9	65.2
0°-60°	5238.2	93.9
0°-90°	5581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5581.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2945	2945	2945	2945	2945	
5°	2940	2945	2948	2952	2951	279
15°	2807	2866	2932	2913	2877	792
25°	2568	2659	2793	2742	2695	1173
35°	2131	2012	2132	2107	2154	1337
45°	1618	1323	760	1285	1641	1240
55°	819	819	283	854	997	743
65°	247	291	90	375	381	263
75°	38	44	13	76	74	55
85°	13	8	6	13	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°	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6
2.5°	2946.2	2949.4	2947.8	2947.8	2946.2	2947.8	2947.8	2951.0	2951.0	2947.8	2946.2
5°	2939.9	2943.1	2943.1	2939.9	2939.9	2947.8	2943.1	2946.2	2946.2	2944.6	2944.6
7.5°	2925.7	2925.7	2932.0	2927.3	2927.3	2932.0	2930.4	2933.6	2936.8	2938.3	2938.3
10°	2894.1	2897.2	2898.8	2898.8	2900.4	2905.1	2908.3	2914.6	2917.8	2920.9	2922.5
12.5°	2854.6	2859.3	2860.9	2859.3	2864.0	2870.4	2878.3	2886.2	2890.9	2897.2	2902.0
15°	2807.1	2807.1	2810.3	2815.0	2818.2	2827.7	2835.6	2845.1	2857.7	2865.6	2873.5
17.5°	2755.0	2758.2	2762.9	2762.9	2769.2	2785.0	2789.8	2804.0	2818.2	2826.1	2841.9
20°	2698.1	2701.2	2706.0	2709.2	2717.0	2729.7	2739.2	2751.8	2767.6	2781.9	2797.6
22.5°	2653.8	2647.5	2650.6	2653.8	2661.7	2672.8	2683.9	2699.6	2715.5	2729.7	2745.5
25°	2568.5	2570.0	2574.8	2577.9	2587.4	2596.9	2609.6	2628.5	2642.8	2658.6	2675.9
27.5°	2453.1	2454.7	2462.6	2462.6	2470.5	2486.3	2494.2	2510.0	2529.0	2544.8	2565.3
30°	2321.9	2325.0	2325.0	2331.4	2336.1	2344.0	2351.9	2367.7	2377.2	2391.4	2419.9
32.5°	2201.8	2204.9	2203.3	2201.8	2197.0	2195.4	2193.9	2197.0	2200.2	2204.9	2216.0
35°	2130.7	2122.7	2116.4	2105.4	2092.7	2076.9	2062.7	2043.7	2026.3	2012.1	1996.3
37.5°	2062.7	2061.1	2051.6	2035.8	2010.5	1982.1	1948.9	1907.8	1866.7	1822.4	1779.8
40°	1967.8	1963.1	1955.2	1933.1	1904.6	1869.8	1825.6	1775.0	1708.6	1640.7	1571.1
42.5°	1806.6	1808.2	1798.7	1781.3	1754.5	1721.3	1675.4	1620.1	1549.0	1468.4	1378.3
45°	1618.5	1618.5	1615.4	1601.1	1582.2	1555.3	1520.5	1474.7	1405.2	1322.9	1226.5
47.5°	1422.5	1424.1	1419.4	1416.2	1408.3	1390.9	1365.6	1330.9	1281.9	1202.8	1106.4
50°	1223.4	1223.4	1231.3	1229.7	1229.7	1223.4	1212.3	1191.8	1149.1	1085.9	995.8
52.5°	1024.2	1027.4	1032.1	1038.5	1046.3	1059.0	1046.3	1036.9	1010.0	961.0	883.6
55°	818.7	821.9	829.8	840.9	850.4	863.0	866.2	866.2	851.9	818.7	760.3
57.5°	643.3	638.6	644.9	654.4	667.0	679.7	689.1	700.2	698.6	676.5	629.1
60°	483.7	485.2	490.0	499.5	509.0	520.0	532.7	542.1	546.9	535.8	505.8
62.5°	352.5	352.5	358.8	368.3	373.0	388.8	396.7	401.5	406.2	404.6	385.7
65°	246.6	249.7	252.9	257.6	262.4	271.8	276.6	286.1	289.2	290.8	276.6
67.5°	173.9	169.1	172.3	175.4	180.2	186.5	196.0	196.0	200.7	200.7	191.2
70°	110.6	110.6	112.2	117.0	120.1	121.7	124.9	128.0	132.8	131.2	131.2
72.5°	74.3	72.7	74.3	75.9	77.5	82.2	82.2	83.8	86.9	88.5	82.2
75°	37.9	39.5	42.7	41.1	45.8	42.7	44.2	49.0	47.4	44.2	44.2
77.5°	31.6	31.6	31.6	30.0	33.2	33.2	31.6	34.8	33.2	33.2	31.6
80°	22.1	23.7	22.1	20.5	22.1	20.5	20.5	20.5	20.5	20.5	19.0
82.5°	17.4	14.2	15.8	14.2	15.8	15.8	14.2	12.6	12.6	14.2	12.6
85°	12.6	9.5	11.1	11.1	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.8	4.8	4.8	6.3	6.3	6.3	4.8	6.3	6.3	3.2
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°	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6
2.5°	2949.4	2947.8	2951.0	2949.4	2949.4	2947.8	2949.4	2947.8	2951.0	2944.6	2946.2
5°	2949.4	2946.2	2947.8	2949.4	2951.0	2947.8	2947.8	2947.8	2951.0	2947.8	2949.4
7.5°	2943.1	2941.5	2946.2	2949.4	2947.8	2946.2	2949.4	2947.8	2951.0	2949.4	2952.5
10°	2930.4	2932.0	2935.2	2939.9	2941.5	2943.1	2946.2	2946.2	2951.0	2944.6	2947.8
12.5°	2911.5	2917.8	2925.7	2928.8	2935.2	2935.2	2938.3	2939.9	2943.1	2941.5	2946.2
15°	2887.8	2895.6	2905.1	2913.0	2920.9	2925.7	2930.4	2932.0	2936.8	2932.0	2933.6
17.5°	2859.3	2868.8	2883.0	2892.5	2905.1	2909.9	2916.2	2919.4	2924.1	2920.9	2922.5
20°	2819.8	2830.9	2846.6	2860.9	2868.8	2879.8	2887.8	2892.5	2895.6	2892.5	2894.1
22.5°	2764.5	2780.3	2800.8	2811.9	2827.7	2837.2	2838.8	2849.8	2857.7	2849.8	2853.0
25°	2699.6	2715.5	2731.3	2755.0	2769.2	2780.3	2791.3	2792.9	2800.8	2799.2	2797.6
27.5°	2592.2	2612.7	2639.6	2658.6	2677.5	2694.9	2707.6	2710.7	2718.6	2715.5	2717.0
30°	2445.2	2467.3	2492.6	2522.6	2549.5	2566.9	2582.7	2593.8	2601.6	2596.9	2595.3
32.5°	2236.6	2258.7	2285.6	2315.6	2347.2	2372.5	2391.4	2405.7	2415.2	2412.0	2404.1
35°	1997.9	2004.2	2021.6	2045.3	2072.1	2099.0	2116.4	2132.2	2143.3	2146.4	2146.4
37.5°	1752.9	1732.4	1719.7	1719.7	1735.5	1746.5	1762.4	1771.8	1789.2	1795.5	1800.3
40°	1515.8	1468.4	1424.1	1390.9	1368.8	1367.2	1367.2	1371.9	1387.8	1408.3	1427.3
42.5°	1304.0	1228.1	1160.2	1098.5	1054.3	1029.0	1017.9	1019.5	1032.1	1051.1	1082.7
45°	1134.9	1040.0	954.7	880.4	820.3	780.8	761.9	760.3	769.7	791.9	826.7
47.5°	1003.7	902.5	806.1	720.7	656.0	613.3	591.1	584.8	591.1	611.7	652.8
50°	894.6	790.3	690.7	602.2	532.7	488.4	467.8	460.0	467.8	485.2	526.3
52.5°	793.4	686.0	592.7	507.4	433.1	395.1	373.0	368.3	373.0	393.6	426.8
55°	676.5	584.8	493.1	407.8	343.0	305.1	287.7	282.9	287.7	306.7	341.4
57.5°	561.1	482.1	401.5	324.0	268.7	235.5	219.7	213.4	224.4	237.1	278.2
60°	453.6	390.4	322.4	254.5	208.6	178.6	166.0	164.4	167.5	183.4	211.8
62.5°	355.7	303.5	249.7	194.4	156.5	143.8	128.0	126.5	129.6	139.1	161.2
65°	256.1	222.9	181.8	142.2	112.2	94.8	88.5	90.1	93.2	99.6	120.1
67.5°	178.6	154.9	126.5	99.6	77.5	69.5	63.2	61.6	63.2	74.3	85.4
70°	120.1	105.9	85.4	75.9	53.8	42.7	44.2	39.5	45.8	45.8	55.3
72.5°	79.0	69.5	56.9	44.2	37.9	30.0	30.0	28.5	31.6	33.2	41.1
75°	41.1	31.6	31.6	22.1	15.8	7.9	14.2	12.6	11.1	12.6	15.8
77.5°	28.5	23.7	22.1	17.4	15.8	12.6	12.6	12.6	12.6	14.2	15.8
80°	17.4	17.4	12.6	11.1	9.5	7.9	9.5	9.5	9.5	9.5	11.1
82.5°	11.1	9.5	9.5	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.5
85°	9.5	6.3	6.3	4.8	6.3	11.1	4.8	6.3	6.3	6.3	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	7.9	6.3
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°	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6	2944.6
2.5°	2949.4	2951.0	2951.0	2949.4	2949.4	2946.2	2952.5	2947.8	2949.4	2955.7	2951.0
5°	2952.5	2954.1	2954.1	2952.5	2952.5	2952.5	2954.1	2954.1	2952.5	2951.0	2954.1
7.5°	2958.9	2957.3	2957.3	2954.1	2954.1	2951.0	2954.1	2949.4	2952.5	2949.4	2954.1
10°	2951.0	2952.5	2951.0	2949.4	2949.4	2947.8	2947.8	2943.1	2944.6	2939.9	2943.1
12.5°	2946.2	2944.6	2944.6	2941.5	2938.3	2935.2	2933.6	2928.8	2928.8	2917.8	2922.5
15°	2933.6	2935.2	2930.4	2924.1	2920.9	2913.0	2909.9	2903.5	2897.2	2889.3	2890.9
17.5°	2922.5	2917.8	2911.5	2905.1	2892.5	2886.2	2879.8	2870.4	2867.2	2857.7	2854.6
20°	2889.3	2886.2	2878.3	2867.2	2859.3	2845.1	2838.8	2829.3	2821.4	2811.9	2807.1
22.5°	2846.6	2843.5	2834.0	2822.9	2810.3	2804.0	2797.6	2780.3	2772.4	2762.9	2761.3
25°	2792.9	2788.2	2778.7	2766.0	2759.7	2742.3	2736.0	2723.3	2720.2	2710.7	2709.2
27.5°	2710.7	2704.4	2693.3	2677.5	2666.5	2655.4	2649.1	2639.6	2636.4	2626.9	2625.4
30°	2587.4	2579.5	2557.4	2551.1	2532.1	2521.0	2521.0	2508.4	2510.0	2503.7	2503.7
32.5°	2393.0	2380.4	2363.0	2350.3	2337.7	2331.4	2331.4	2326.6	2329.8	2329.8	2333.0
35°	2135.4	2118.0	2108.5	2100.6	2100.6	2106.9	2125.9	2130.7	2140.1	2148.0	2154.4
37.5°	1805.0	1803.5	1814.5	1824.0	1847.7	1874.6	1907.8	1936.2	1963.1	1982.1	2001.0
40°	1447.8	1487.3	1518.9	1563.2	1599.5	1651.7	1711.8	1760.8	1806.6	1839.8	1874.6
42.5°	1130.1	1180.7	1247.1	1311.9	1376.7	1447.8	1526.9	1594.8	1654.9	1700.7	1737.1
45°	880.4	949.9	1030.6	1112.7	1196.5	1285.0	1367.2	1436.8	1500.0	1547.4	1583.8
47.5°	709.7	785.6	877.2	967.3	1062.2	1155.4	1247.1	1307.2	1359.3	1397.2	1430.5
50°	586.4	667.0	763.4	866.2	961.0	1054.3	1133.3	1191.8	1234.5	1267.6	1288.2
52.5°	490.0	575.3	678.1	780.8	875.6	961.0	1032.1	1076.4	1111.2	1134.9	1153.8
55°	404.6	486.8	583.3	679.7	772.9	853.5	912.0	945.2	972.0	986.3	997.3
57.5°	330.4	406.2	494.7	583.3	663.8	730.3	776.1	809.3	821.9	833.0	831.4
60°	259.2	330.4	411.0	486.8	556.4	610.1	643.3	662.3	671.7	676.5	673.3
62.5°	203.9	268.7	330.4	396.7	447.3	493.1	524.8	524.8	529.5	531.1	535.8
65°	151.7	200.7	254.5	303.5	344.6	374.6	392.0	396.7	403.1	401.5	398.3
67.5°	112.2	148.6	188.1	224.4	252.9	271.8	284.5	295.6	294.0	290.8	289.2
70°	77.5	101.2	135.9	158.1	178.6	197.6	200.7	202.3	203.9	205.5	202.3
72.5°	53.8	71.1	90.1	109.1	121.7	129.6	137.5	139.1	139.1	139.1	137.5
75°	26.9	36.4	53.8	61.6	72.7	75.9	82.2	82.2	86.9	80.6	79.0
77.5°	23.7	28.5	37.9	44.2	49.0	53.8	55.3	60.1	58.5	55.3	56.9
80°	14.2	17.4	23.7	26.9	33.2	34.8	36.4	37.9	36.4	37.9	37.9
82.5°	11.1	12.6	15.8	15.8	20.5	20.5	22.1	22.1	23.7	23.7	23.7
85°	6.3	11.1	9.5	19.0	12.6	12.6	15.8	19.0	15.8	15.8	19.0
87.5°	6.3	6.3	4.8	6.3	6.3	6.3	7.9	9.5	9.5	11.1	9.5
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: P244607

CATALOG NUMBER: LSR8B50D010 EC8B50835 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2944.6	2944.6	2944.6	2944.6
2.5°	2949.4	2952.5	2947.8	2946.2
5°	2954.1	2954.1	2951.0	2951.0
7.5°	2954.1	2954.1	2949.4	2946.2
10°	2941.5	2941.5	2936.8	2933.6
12.5°	2917.8	2917.8	2916.2	2911.5
15°	2887.8	2887.8	2881.4	2876.7
17.5°	2846.6	2849.8	2841.9	2841.9
20°	2802.4	2800.8	2794.5	2791.3
22.5°	2756.6	2753.4	2751.8	2742.3
25°	2707.6	2704.4	2699.6	2694.9
27.5°	2623.8	2622.2	2617.5	2611.2
30°	2495.7	2494.2	2487.9	2487.9
32.5°	2329.8	2328.2	2321.9	2323.5
35°	2157.5	2163.8	2160.7	2154.4
37.5°	2013.7	2018.4	2021.6	2018.4
40°	1893.5	1907.8	1909.4	1912.5
42.5°	1765.5	1784.5	1790.8	1794.0
45°	1612.2	1629.6	1643.8	1640.7
47.5°	1455.7	1468.4	1481.0	1471.5
50°	1305.6	1313.5	1318.2	1318.2
52.5°	1163.3	1163.3	1161.7	1163.3
55°	1000.5	1000.5	994.2	997.3
57.5°	829.8	833.0	828.2	820.3
60°	671.7	663.8	660.7	656.0
62.5°	523.2	523.2	512.1	526.3
65°	392.0	387.2	382.5	380.9
67.5°	284.5	282.9	278.2	276.6
70°	200.7	194.4	192.8	189.7
72.5°	134.4	134.4	131.2	131.2
75°	82.2	74.3	72.7	74.3
77.5°	56.9	55.3	55.3	53.8
80°	37.9	36.4	39.5	34.8
82.5°	23.7	25.3	23.7	25.3
85°	15.8	19.0	17.4	17.4
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)