

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: P248525

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248525  
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: LSR8B70D010 EC8B709727 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5356.0 lumens  
Efficiency: N/A  
Efficacy: 70.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

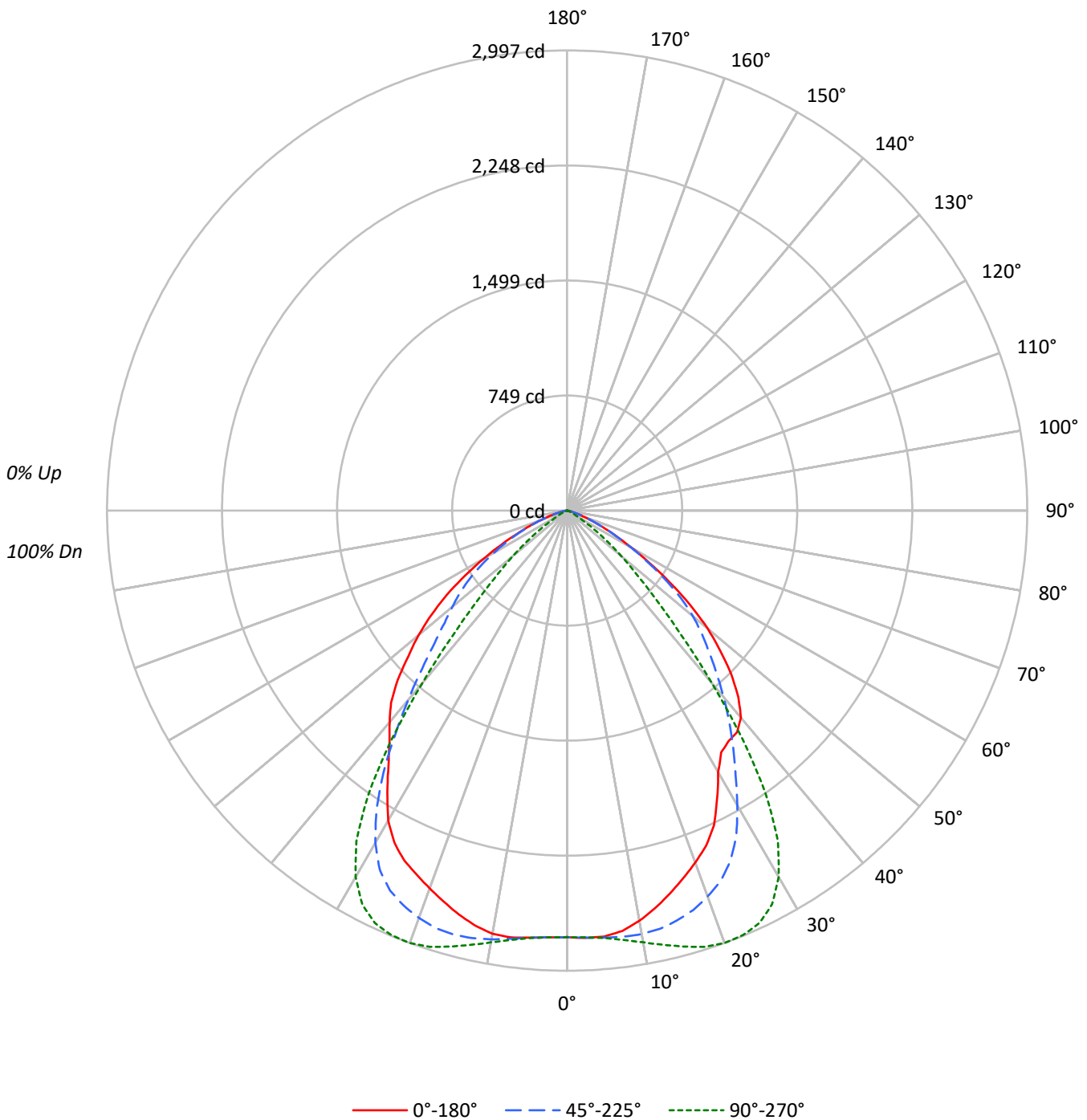
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.2	5.0
10°-20°	791.6	14.8
20°-30°	1207.6	22.5
30°-40°	1260.2	23.5
40°-50°	946.5	17.7
50°-60°	582.4	10.9
60°-70°	237.0	4.4
70°-80°	55.8	1.0
80°-90°	7.7	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°	2266.4	42.3
0°-40°	3526.5	65.8
0°-60°	5055.5	94.4
0°-90°	5356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5356.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2778	2778	2778	2778	2778	
5°	2784	2792	2795	2792	2792	263
15°	2582	2764	2939	2858	2724	727
25°	2262	2516	2964	2730	2513	1029
35°	1833	1885	2258	2087	2028	1157
45°	1513	1310	817	1220	1560	1154
55°	817	776	214	776	957	734
65°	255	258	32	347	367	266
75°	44	44	6	78	81	53
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°	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5
2.5°	2785.9	2781.5	2785.9	2785.9	2787.4	2784.4	2785.9	2787.4	2784.4	2784.4	2784.4
5°	2784.4	2781.5	2784.4	2782.9	2785.9	2785.9	2788.9	2788.9	2791.8	2791.8	2796.2
7.5°	2760.8	2754.9	2760.8	2765.3	2768.2	2774.1	2781.5	2787.4	2793.3	2799.2	2806.5
10°	2712.1	2712.1	2716.6	2725.4	2734.3	2744.6	2757.9	2772.6	2787.4	2800.6	2813.9
12.5°	2651.7	2647.3	2656.1	2667.9	2681.2	2697.4	2718.1	2740.2	2763.8	2790.3	2811.0
15°	2582.4	2577.9	2588.3	2600.1	2616.3	2639.9	2665.0	2694.5	2728.4	2763.8	2797.7
17.5°	2511.6	2510.1	2520.4	2536.7	2549.9	2575.0	2607.5	2642.8	2681.2	2728.4	2772.6
20°	2439.3	2437.9	2448.2	2461.5	2479.1	2502.7	2535.2	2576.5	2622.2	2675.3	2726.9
22.5°	2364.1	2365.6	2374.4	2389.2	2403.9	2429.0	2462.9	2504.2	2554.3	2611.9	2669.4
25°	2262.3	2255.0	2266.8	2281.5	2306.6	2327.2	2359.7	2403.9	2455.5	2516.0	2583.9
27.5°	2114.8	2113.4	2123.7	2137.0	2159.1	2184.2	2219.6	2265.3	2319.9	2386.2	2452.6
30°	1967.4	1970.3	1974.8	1988.0	2002.8	2027.8	2063.2	2101.6	2153.2	2216.6	2287.4
32.5°	1867.1	1867.1	1873.0	1881.8	1892.2	1905.4	1930.5	1958.5	1998.4	2042.6	2094.2
35°	1833.2	1827.3	1833.2	1834.6	1836.1	1839.1	1843.5	1852.4	1865.6	1884.8	1904.0
37.5°	1818.4	1814.0	1814.0	1808.1	1800.7	1791.9	1780.1	1766.8	1752.1	1732.9	1718.2
40°	1760.9	1758.0	1755.0	1749.1	1732.9	1715.2	1696.0	1665.0	1631.1	1583.9	1536.8
42.5°	1650.3	1647.4	1645.9	1634.1	1619.3	1598.7	1576.6	1544.1	1501.4	1440.9	1373.0
45°	1513.2	1507.2	1502.8	1492.5	1482.2	1464.5	1443.8	1414.3	1371.6	1309.6	1228.5
47.5°	1353.9	1350.9	1349.4	1345.0	1334.7	1324.4	1311.1	1287.5	1249.1	1190.1	1106.1
50°	1193.1	1187.2	1190.1	1188.7	1184.3	1176.9	1168.0	1151.8	1122.3	1069.2	992.5
52.5°	1008.7	1008.7	1007.3	1011.7	1013.2	1011.7	1013.2	995.5	970.4	930.6	865.7
55°	817.0	817.0	821.5	827.4	833.3	834.7	833.3	825.9	808.2	775.7	718.2
57.5°	637.1	634.2	643.0	651.9	657.8	663.7	659.2	653.3	643.0	616.5	572.2
60°	485.2	485.2	491.1	497.0	502.9	508.8	507.3	505.9	497.0	479.3	443.9
62.5°	356.9	358.4	358.4	362.8	368.7	374.6	379.0	374.6	370.2	358.4	334.8
65°	255.1	253.6	255.1	259.6	264.0	269.9	272.8	271.4	266.9	258.1	240.4
67.5°	171.1	169.6	175.5	177.0	179.9	185.8	184.4	185.8	184.4	177.0	162.2
70°	112.1	109.1	112.1	110.6	115.0	116.5	119.4	120.9	119.4	115.0	110.6
72.5°	69.3	67.8	69.3	70.8	72.3	73.7	76.7	76.7	75.2	72.3	66.4
75°	44.2	39.8	41.3	38.4	41.3	41.3	44.2	45.7	44.2	44.2	41.3
77.5°	26.6	26.6	26.6	26.6	26.6	26.6	26.6	28.0	29.5	26.6	25.1
80°	13.3	13.3	14.8	14.8	14.8	16.2	14.8	14.8	14.8	16.2	11.8
82.5°	10.3	8.8	8.8	8.8	10.3	8.8	8.8	8.8	8.8	8.8	8.8
85°	4.4	5.9	4.4	3.0	4.4	4.4	5.9	4.4	4.4	4.4	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°	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5
2.5°	2785.9	2782.9	2782.9	2781.5	2784.4	2781.5	2782.9	2781.5	2781.5	2784.4	2781.5
5°	2796.2	2797.7	2794.7	2793.3	2797.7	2797.7	2797.7	2794.7	2794.7	2796.2	2794.7
7.5°	2811.0	2813.9	2815.4	2816.9	2819.8	2821.3	2821.3	2819.8	2818.3	2822.8	2816.9
10°	2827.2	2831.6	2840.5	2844.9	2852.3	2852.3	2855.2	2855.2	2852.3	2855.2	2853.7
12.5°	2821.3	2847.8	2862.6	2872.9	2883.2	2892.1	2895.0	2896.5	2895.0	2900.9	2895.0
15°	2831.6	2853.7	2877.3	2895.0	2914.2	2924.5	2927.5	2939.3	2942.2	2943.7	2934.9
17.5°	2815.4	2855.2	2880.3	2906.8	2934.9	2954.0	2971.7	2979.1	2980.6	2983.5	2971.7
20°	2778.5	2822.8	2861.1	2899.5	2931.9	2961.4	2976.1	2996.8	2990.9	3002.7	2986.5
22.5°	2728.4	2778.5	2827.2	2877.3	2911.3	2946.7	2977.6	2992.3	2999.7	2999.7	2982.0
25°	2648.7	2707.7	2760.8	2812.4	2864.1	2906.8	2942.2	2964.3	2968.8	2967.3	2946.7
27.5°	2524.9	2588.3	2650.2	2709.2	2772.6	2822.8	2864.1	2890.6	2898.0	2898.0	2875.9
30°	2353.8	2421.6	2482.1	2552.9	2617.8	2673.8	2731.3	2754.9	2768.2	2768.2	2743.1
32.5°	2150.2	2207.8	2263.8	2333.1	2403.9	2467.3	2521.9	2554.3	2570.6	2569.1	2547.0
35°	1929.0	1957.0	1999.8	2051.4	2114.8	2173.8	2226.9	2257.9	2285.9	2284.5	2263.8
37.5°	1707.8	1700.4	1704.9	1724.0	1763.8	1805.2	1846.4	1876.0	1899.5	1909.9	1905.4
40°	1491.0	1452.7	1415.8	1402.5	1405.5	1420.2	1442.4	1464.5	1491.0	1504.3	1510.2
42.5°	1296.3	1231.5	1166.5	1117.9	1089.9	1081.0	1091.3	1098.7	1114.9	1134.1	1153.3
45°	1140.0	1053.0	967.5	892.3	845.1	817.0	811.1	817.0	825.9	845.1	870.1
47.5°	1011.7	909.9	814.1	730.0	660.7	623.9	613.5	610.6	619.4	637.1	671.0
50°	898.1	796.4	690.2	592.9	520.6	479.3	464.6	458.7	469.0	482.3	513.2
52.5°	774.3	674.0	564.9	470.5	395.2	352.5	336.2	327.4	333.3	351.0	382.0
55°	640.1	547.1	448.3	351.0	278.7	238.9	219.7	213.8	219.7	238.9	269.9
57.5°	505.9	427.7	345.1	253.6	188.8	149.0	129.8	123.9	140.1	147.5	179.9
60°	395.2	331.8	261.0	185.8	129.8	98.8	79.6	75.2	82.6	95.8	122.4
62.5°	296.4	256.6	200.6	132.7	95.8	63.4	53.1	48.7	53.1	63.4	84.1
65°	215.3	184.4	140.1	97.3	64.9	47.2	35.4	32.4	36.9	44.2	62.0
67.5°	147.5	123.9	97.3	67.8	44.2	29.5	25.1	25.1	26.6	32.4	45.7
70°	95.8	81.1	62.0	44.2	29.5	22.1	19.2	16.2	19.2	23.6	31.0
72.5°	60.5	51.6	39.8	31.0	22.1	16.2	13.3	11.8	14.8	17.7	23.6
75°	36.9	28.0	20.6	16.2	11.8	11.8	11.8	5.9	7.4	11.8	14.8
77.5°	22.1	19.2	16.2	13.3	10.3	5.9	5.9	5.9	7.4	8.8	13.3
80°	11.8	10.3	7.4	7.4	5.9	4.4	5.9	4.4	3.0	7.4	8.8
82.5°	7.4	5.9	5.9	5.9	7.4	3.0	4.4	3.0	4.4	5.9	4.4
85°	4.4	4.4	4.4	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°	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5	2778.5
2.5°	2782.9	2781.5	2782.9	2781.5	2781.5	2781.5	2782.9	2782.9	2781.5	2781.5	2784.4
5°	2794.7	2794.7	2794.7	2793.3	2791.8	2791.8	2794.7	2794.7	2790.3	2794.7	2794.7
7.5°	2819.8	2815.4	2819.8	2813.9	2811.0	2812.4	2813.9	2811.0	2808.0	2809.5	2809.5
10°	2852.3	2847.8	2847.8	2843.4	2839.0	2836.0	2833.1	2825.7	2818.3	2816.9	2811.0
12.5°	2890.6	2883.2	2878.8	2869.9	2862.6	2852.3	2843.4	2831.6	2816.9	2806.5	2796.2
15°	2928.9	2917.1	2906.8	2892.1	2875.9	2858.1	2839.0	2819.8	2796.2	2775.6	2757.9
17.5°	2959.9	2943.7	2924.5	2900.9	2877.3	2850.8	2822.8	2794.7	2760.8	2734.3	2713.6
20°	2970.2	2946.7	2921.6	2890.6	2859.6	2822.8	2787.4	2750.5	2712.1	2684.1	2660.5
22.5°	2957.0	2928.9	2898.0	2865.5	2824.2	2784.4	2743.1	2700.3	2666.4	2628.1	2606.0
25°	2920.1	2886.2	2852.3	2813.9	2774.1	2729.9	2685.6	2641.4	2600.1	2579.4	2551.4
27.5°	2844.9	2808.0	2771.1	2731.3	2685.6	2641.4	2595.7	2552.9	2517.5	2489.5	2473.3
30°	2712.1	2669.4	2626.6	2583.9	2544.0	2498.3	2455.5	2420.1	2384.7	2362.6	2346.4
32.5°	2508.6	2470.3	2427.5	2386.2	2349.4	2311.0	2275.6	2244.6	2219.6	2204.8	2193.0
35°	2234.3	2196.0	2163.5	2134.0	2103.0	2086.8	2064.7	2047.0	2036.7	2030.8	2029.3
37.5°	1889.2	1867.1	1856.8	1850.9	1845.0	1840.6	1843.5	1850.9	1856.8	1867.1	1878.9
40°	1520.5	1539.7	1545.6	1566.2	1585.4	1610.5	1638.5	1671.0	1697.5	1731.4	1755.0
42.5°	1184.3	1219.7	1260.9	1305.2	1352.4	1398.1	1454.2	1505.8	1553.0	1595.7	1632.6
45°	909.9	964.5	1026.5	1089.9	1153.3	1219.7	1287.5	1350.9	1407.0	1452.7	1491.0
47.5°	709.4	769.9	849.5	927.7	1004.3	1082.5	1157.7	1224.1	1271.3	1315.5	1349.4
50°	561.9	631.2	718.2	808.2	892.3	974.8	1054.5	1116.4	1163.6	1199.0	1224.1
52.5°	435.1	517.7	606.1	700.5	790.5	880.5	954.2	1011.7	1050.1	1081.0	1100.2
55°	324.4	405.6	500.0	597.3	688.7	775.7	845.1	895.2	929.1	946.8	957.1
57.5°	234.5	308.2	402.6	500.0	582.5	665.1	721.2	766.9	786.1	796.4	800.8
60°	171.1	238.9	323.0	407.0	485.2	551.6	600.3	631.2	646.0	651.9	650.4
62.5°	125.4	184.4	256.6	327.4	390.8	445.4	483.7	504.4	511.8	514.7	510.3
65°	95.8	141.6	203.5	258.1	306.8	346.6	374.6	387.9	392.3	390.8	387.9
67.5°	70.8	106.2	151.9	193.2	228.6	259.6	274.3	286.1	289.0	284.6	280.2
70°	50.2	78.2	110.6	138.6	165.2	182.9	199.1	200.6	200.6	199.1	196.2
72.5°	35.4	54.6	75.2	94.4	110.6	123.9	129.8	134.2	132.7	131.2	128.3
75°	23.6	33.9	54.6	59.0	73.7	78.2	84.1	84.1	85.5	81.1	81.1
77.5°	14.8	23.6	32.4	38.4	44.2	50.2	53.1	53.1	54.6	53.1	53.1
80°	8.8	14.8	17.7	26.6	26.6	31.0	32.4	33.9	31.0	35.4	31.0
82.5°	5.9	8.8	13.3	13.3	16.2	19.2	19.2	20.6	20.6	19.2	19.2
85°	4.4	5.9	7.4	8.8	8.8	10.3	8.8	8.8	10.3	11.8	10.3
87.5°	1.5	3.0	1.5	3.0	3.0	5.9	4.4	4.4	4.4	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: P248525

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2778.5	2778.5	2778.5	2778.5
2.5°	2781.5	2782.9	2781.5	2781.5
5°	2794.7	2793.3	2794.7	2791.8
7.5°	2805.1	2805.1	2803.6	2803.6
10°	2805.1	2799.2	2799.2	2799.2
12.5°	2782.9	2775.6	2771.1	2768.2
15°	2744.6	2731.3	2725.4	2723.9
17.5°	2694.5	2682.7	2675.3	2670.9
20°	2636.9	2625.1	2616.3	2617.8
22.5°	2586.8	2573.5	2567.6	2564.7
25°	2536.7	2520.4	2516.0	2513.1
27.5°	2455.5	2446.7	2442.3	2437.9
30°	2331.7	2327.2	2319.9	2330.2
32.5°	2188.6	2181.2	2175.3	2179.8
35°	2030.8	2026.4	2030.8	2027.8
37.5°	1886.3	1890.7	1896.6	1899.5
40°	1772.7	1788.9	1794.8	1797.8
42.5°	1659.2	1678.3	1690.1	1697.5
45°	1519.0	1538.2	1551.5	1560.4
47.5°	1374.5	1390.7	1404.0	1402.5
50°	1243.3	1252.1	1258.0	1263.9
52.5°	1110.5	1110.5	1112.0	1112.0
55°	960.1	957.1	955.7	957.1
57.5°	794.9	792.0	790.5	786.1
60°	644.5	635.7	629.7	629.7
62.5°	504.4	494.1	489.6	488.2
65°	379.0	377.5	368.7	367.2
67.5°	274.3	268.4	262.5	264.0
70°	193.2	184.4	184.4	181.4
72.5°	125.4	120.9	119.4	119.4
75°	78.2	78.2	75.2	81.1
77.5°	51.6	51.6	50.2	51.6
80°	31.0	31.0	31.0	29.5
82.5°	19.2	20.6	19.2	19.2
85°	10.3	11.8	8.8	13.3
87.5°	5.9	7.4	5.9	7.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)