

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: P249389

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249389
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: LSR8B70D010 EC8B70927 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5844.4 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

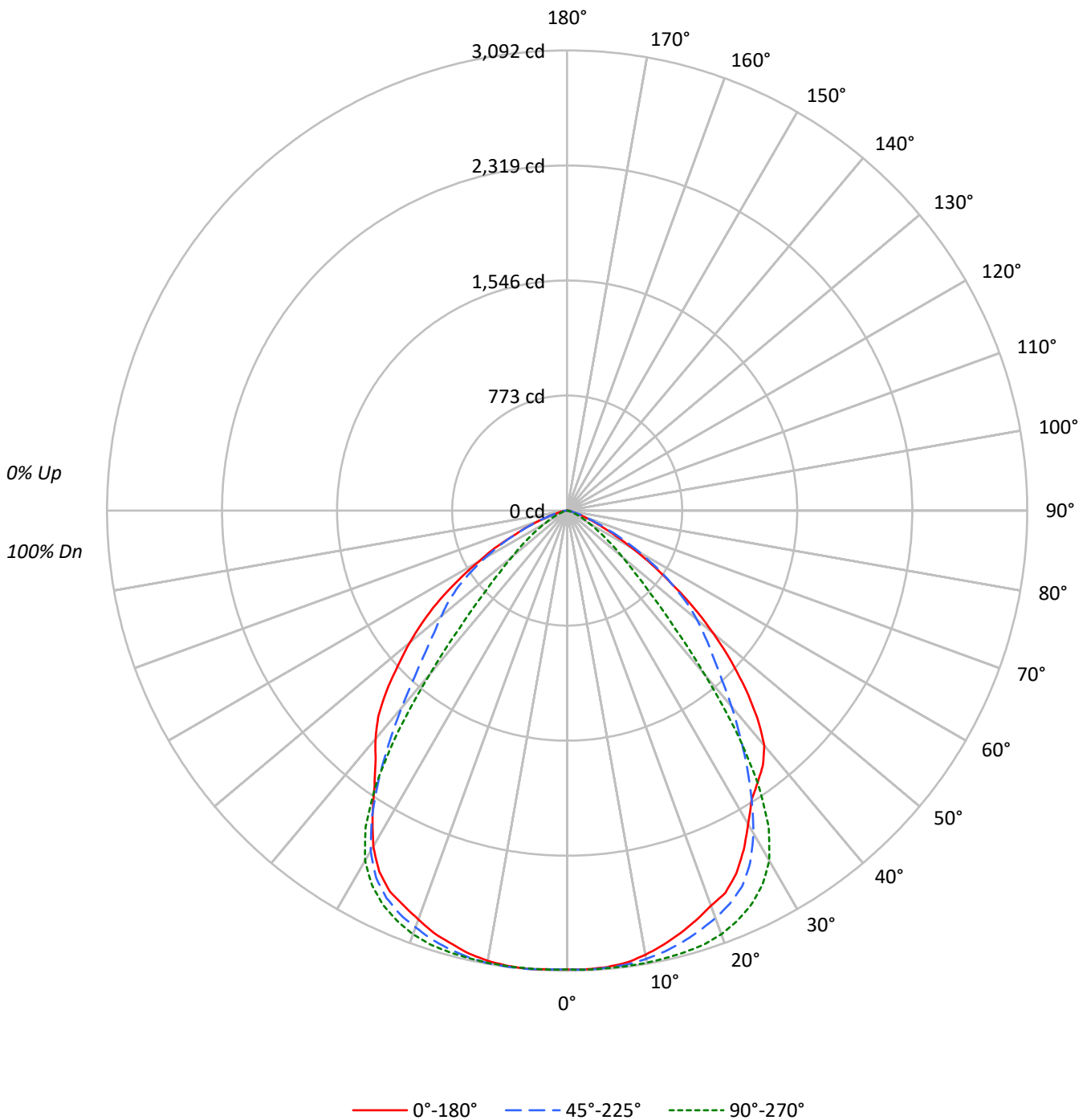
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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°	294.3	5.0
10°-20°	854.7	14.6
20°-30°	1297.2	22.2
30°-40°	1362.4	23.3
40°-50°	1021.5	17.5
50°-60°	655.4	11.2
60°-70°	280.4	4.8
70°-80°	66.2	1.1
80°-90°	12.3	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°	2446.1	41.9
0°-40°	3808.6	65.2
0°-60°	5485.4	93.9
0°-90°	5844.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5844.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3084	3084	3084	3084	3084	
5°	3079	3084	3087	3092	3090	292
15°	2940	3001	3070	3050	3012	829
25°	2690	2784	2925	2872	2822	1229
35°	2231	2107	2233	2206	2256	1400
45°	1695	1385	796	1346	1718	1298
55°	857	857	296	894	1044	778
65°	258	304	94	392	399	276
75°	40	46	13	79	78	58
85°	13	8	7	13	18	14
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°	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6
2.5°	3085.3	3088.6	3086.9	3086.9	3085.3	3086.9	3086.9	3090.3	3090.3	3086.9	3085.3
5°	3078.7	3081.9	3081.9	3078.7	3078.7	3086.9	3081.9	3085.3	3085.3	3083.6	3083.6
7.5°	3063.7	3063.7	3070.4	3065.4	3065.4	3070.4	3068.7	3072.0	3075.3	3077.0	3077.0
10°	3030.6	3033.9	3035.6	3035.6	3037.3	3042.2	3045.5	3052.1	3055.5	3058.8	3060.5
12.5°	2989.2	2994.2	2995.9	2994.2	2999.2	3005.8	3014.1	3022.4	3027.4	3033.9	3039.0
15°	2939.6	2939.6	2942.9	2947.8	2951.2	2961.1	2969.4	2979.3	2992.6	3000.8	3009.2
17.5°	2885.0	2888.3	2893.3	2893.3	2899.9	2916.5	2921.4	2936.4	2951.2	2959.4	2976.1
20°	2825.4	2828.7	2833.6	2837.0	2845.2	2858.5	2868.4	2881.7	2898.2	2913.2	2929.6
22.5°	2779.1	2772.5	2775.7	2779.1	2787.3	2798.9	2810.5	2827.0	2843.5	2858.5	2875.0
25°	2689.6	2691.3	2696.3	2699.5	2709.6	2719.5	2732.7	2752.5	2767.5	2784.0	2802.3
27.5°	2568.8	2570.5	2578.7	2578.7	2587.0	2603.6	2611.9	2628.5	2648.4	2664.8	2686.4
30°	2431.5	2434.7	2434.7	2441.4	2446.3	2454.6	2463.0	2479.5	2489.4	2504.2	2534.1
32.5°	2305.7	2309.0	2307.3	2305.7	2300.7	2299.0	2297.4	2300.7	2304.0	2309.0	2320.5
35°	2231.2	2222.9	2216.2	2204.8	2191.5	2175.0	2160.0	2140.2	2122.0	2107.0	2090.5
37.5°	2160.0	2158.3	2148.4	2131.9	2105.3	2075.6	2040.9	1997.8	1954.8	1908.4	1863.8
40°	2060.7	2055.7	2047.5	2024.3	1994.5	1958.1	1911.7	1858.7	1789.2	1718.1	1645.3
42.5°	1891.9	1893.5	1883.6	1865.4	1837.2	1802.5	1754.4	1696.6	1622.1	1537.6	1443.4
45°	1694.9	1694.9	1691.6	1676.7	1656.8	1628.7	1592.3	1544.3	1471.5	1385.3	1284.4
47.5°	1489.6	1491.3	1486.4	1483.1	1474.8	1456.5	1430.1	1393.6	1342.4	1259.6	1158.6
50°	1281.1	1281.1	1289.4	1287.7	1287.7	1281.1	1269.6	1248.0	1203.3	1137.1	1042.8
52.5°	1072.6	1075.8	1080.9	1087.4	1095.8	1108.9	1095.8	1085.9	1057.6	1006.3	925.2
55°	857.4	860.7	869.0	880.5	890.6	903.7	907.1	907.1	892.1	857.4	796.2
57.5°	673.6	668.7	675.3	685.2	698.5	711.8	721.7	733.3	731.6	708.4	658.8
60°	506.5	508.2	513.1	523.0	533.0	544.6	557.8	567.7	572.7	561.2	529.6
62.5°	369.1	369.1	375.8	385.7	390.6	407.1	415.5	420.4	425.4	423.7	403.9
65°	258.2	261.6	264.8	269.8	274.7	284.6	289.7	299.6	302.8	304.5	289.7
67.5°	182.1	177.1	180.5	183.7	188.7	195.3	205.2	205.2	210.2	210.2	200.2
70°	115.9	115.9	117.6	122.5	125.8	127.5	130.7	134.1	139.0	137.4	137.4
72.5°	77.9	76.2	77.9	79.4	81.1	86.1	86.1	87.8	91.0	92.7	86.1
75°	39.7	41.4	44.7	43.1	48.0	44.7	46.4	51.3	49.6	46.4	46.4
77.5°	33.1	33.1	33.1	31.5	34.8	34.8	33.1	36.4	34.8	34.8	33.1
80°	23.2	24.9	23.2	21.5	23.2	21.5	21.5	21.5	21.5	21.5	19.8
82.5°	18.2	14.8	16.5	14.8	16.5	16.5	14.8	13.3	13.3	14.8	13.3
85°	13.3	9.9	11.6	11.6	9.9	9.9	9.9	9.9	9.9	8.2	8.2
87.5°	8.2	5.0	5.0	5.0	6.6	6.6	6.6	5.0	6.6	6.6	3.4
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°	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6
2.5°	3088.6	3086.9	3090.3	3088.6	3088.6	3086.9	3088.6	3086.9	3090.3	3083.6	3085.3
5°	3088.6	3085.3	3086.9	3088.6	3090.3	3086.9	3086.9	3086.9	3090.3	3086.9	3088.6
7.5°	3081.9	3080.2	3085.3	3088.6	3086.9	3085.3	3088.6	3086.9	3090.3	3088.6	3091.8
10°	3068.7	3070.4	3073.7	3078.7	3080.2	3081.9	3085.3	3085.3	3090.3	3083.6	3086.9
12.5°	3048.9	3055.5	3063.7	3067.1	3073.7	3073.7	3077.0	3078.7	3081.9	3080.2	3085.3
15°	3024.0	3032.3	3042.2	3050.5	3058.8	3063.7	3068.7	3070.4	3075.3	3070.4	3072.0
17.5°	2994.2	3004.2	3019.0	3029.0	3042.2	3047.2	3053.8	3057.1	3062.1	3058.8	3060.5
20°	2952.8	2964.5	2981.0	2995.9	3004.2	3015.7	3024.0	3029.0	3032.3	3029.0	3030.6
22.5°	2895.0	2911.5	2933.0	2944.6	2961.1	2971.0	2972.7	2984.3	2992.6	2984.3	2987.7
25°	2827.0	2843.5	2860.2	2885.0	2899.9	2911.5	2923.1	2924.8	2933.0	2931.3	2929.6
27.5°	2714.5	2736.0	2764.1	2784.0	2803.8	2822.1	2835.3	2838.6	2846.9	2843.5	2845.2
30°	2560.5	2583.8	2610.2	2641.7	2669.8	2688.0	2704.6	2716.2	2724.4	2719.5	2717.8
32.5°	2342.1	2365.3	2393.4	2424.8	2458.0	2484.5	2504.2	2519.2	2529.1	2525.8	2517.5
35°	2092.2	2098.8	2117.0	2141.8	2169.9	2198.1	2216.2	2232.8	2244.4	2247.8	2247.8
37.5°	1835.7	1814.1	1800.9	1800.9	1817.4	1828.9	1845.6	1855.5	1873.7	1880.3	1885.3
40°	1587.3	1537.6	1491.3	1456.5	1433.4	1431.8	1431.8	1436.7	1453.3	1474.8	1494.7
42.5°	1365.5	1286.1	1214.9	1150.3	1104.1	1077.5	1065.9	1067.6	1080.9	1100.7	1133.8
45°	1188.4	1089.1	999.8	921.9	859.0	817.6	797.8	796.2	806.1	829.2	865.7
47.5°	1051.1	945.1	844.1	754.8	686.9	642.2	619.1	612.4	619.1	640.6	683.6
50°	936.8	827.7	723.4	630.7	557.8	511.4	489.9	481.6	489.9	508.2	551.1
52.5°	830.9	718.3	620.7	531.3	453.5	413.8	390.6	385.7	390.6	412.1	447.0
55°	708.4	612.4	516.4	427.0	359.2	319.5	301.3	296.3	301.3	321.1	357.5
57.5°	587.6	504.8	420.4	339.3	281.4	246.6	230.1	223.4	235.0	248.3	291.3
60°	475.0	408.8	337.6	266.5	218.5	187.0	173.8	172.1	175.5	192.0	221.7
62.5°	372.5	317.8	261.6	203.6	163.9	150.6	134.1	132.4	135.7	145.7	168.9
65°	268.2	233.4	190.4	149.0	117.6	99.3	92.7	94.4	97.6	104.3	125.8
67.5°	187.0	162.2	132.4	104.3	81.1	72.8	66.3	64.6	66.3	77.9	89.4
70°	125.8	110.9	89.4	79.4	56.2	44.7	46.4	41.4	48.0	48.0	57.9
72.5°	82.7	72.8	59.6	46.4	39.7	31.5	31.5	29.8	33.1	34.8	43.1
75°	43.1	33.1	33.1	23.2	16.5	8.2	14.8	13.3	11.6	13.3	16.5
77.5°	29.8	24.9	23.2	18.2	16.5	13.3	13.3	13.3	13.3	14.8	16.5
80°	18.2	18.2	13.3	11.6	9.9	8.2	9.9	9.9	9.9	9.9	11.6
82.5°	11.6	9.9	9.9	8.2	8.2	6.6	6.6	6.6	6.6	6.6	9.9
85°	9.9	6.6	6.6	5.0	6.6	11.6	5.0	6.6	6.6	6.6	5.0
87.5°	3.4	5.0	5.0	5.0	3.4	1.7	3.4	5.0	5.0	8.2	6.6
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°	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6	3083.6
2.5°	3088.6	3090.3	3090.3	3088.6	3088.6	3085.3	3091.8	3086.9	3088.6	3095.2	3090.3
5°	3091.8	3093.5	3093.5	3091.8	3091.8	3091.8	3093.5	3093.5	3091.8	3090.3	3093.5
7.5°	3098.5	3096.9	3096.9	3093.5	3093.5	3090.3	3093.5	3088.6	3091.8	3088.6	3093.5
10°	3090.3	3091.8	3090.3	3088.6	3088.6	3086.9	3086.9	3081.9	3083.6	3078.7	3081.9
12.5°	3085.3	3083.6	3083.6	3080.2	3077.0	3073.7	3072.0	3067.1	3067.1	3055.5	3060.5
15°	3072.0	3073.7	3068.7	3062.1	3058.8	3050.5	3047.2	3040.5	3033.9	3025.7	3027.4
17.5°	3060.5	3055.5	3048.9	3042.2	3029.0	3022.4	3015.7	3005.8	3002.5	2992.6	2989.2
20°	3025.7	3022.4	3014.1	3002.5	2994.2	2979.3	2972.7	2962.8	2954.5	2944.6	2939.6
22.5°	2981.0	2977.6	2967.8	2956.2	2942.9	2936.4	2929.6	2911.5	2903.2	2893.3	2891.6
25°	2924.8	2919.7	2909.8	2896.5	2889.9	2871.8	2865.2	2851.9	2848.6	2838.6	2837.0
27.5°	2838.6	2832.1	2820.5	2803.8	2792.2	2780.7	2774.1	2764.1	2760.9	2750.8	2749.3
30°	2709.6	2701.2	2678.1	2671.5	2651.6	2640.0	2640.0	2626.8	2628.5	2621.8	2621.8
32.5°	2505.9	2492.7	2474.4	2461.3	2448.0	2441.4	2441.4	2436.4	2439.8	2439.8	2443.0
35°	2236.2	2217.9	2208.0	2199.7	2199.7	2206.4	2226.3	2231.2	2241.1	2249.4	2256.1
37.5°	1890.2	1888.5	1900.1	1910.1	1934.9	1963.0	1997.8	2027.6	2055.7	2075.6	2095.4
40°	1516.2	1557.6	1590.6	1637.0	1675.0	1729.7	1792.6	1843.9	1891.9	1926.7	1963.0
42.5°	1183.4	1236.4	1305.9	1373.7	1441.7	1516.2	1599.0	1670.1	1733.0	1781.0	1819.0
45°	921.9	994.7	1079.2	1165.3	1253.0	1345.7	1431.8	1504.6	1570.7	1620.4	1658.5
47.5°	743.2	822.6	918.6	1013.0	1112.3	1209.9	1305.9	1368.9	1423.5	1463.2	1497.9
50°	614.0	698.5	799.4	907.1	1006.3	1104.1	1186.8	1248.0	1292.7	1327.5	1349.0
52.5°	513.1	602.4	710.1	817.6	917.0	1006.3	1080.9	1127.1	1163.6	1188.4	1208.2
55°	423.7	509.8	610.8	711.8	809.4	893.8	955.0	989.8	1017.9	1032.9	1044.4
57.5°	345.9	425.4	518.1	610.8	695.1	764.7	812.7	847.5	860.7	872.3	870.6
60°	271.5	345.9	430.3	509.8	582.6	638.9	673.6	693.6	703.5	708.4	705.2
62.5°	213.5	281.4	345.9	415.5	468.4	516.4	549.6	549.6	554.5	556.1	561.2
65°	158.8	210.2	266.5	317.8	360.8	392.3	410.5	415.5	422.1	420.4	417.2
67.5°	117.6	155.6	197.0	235.0	264.8	284.6	297.9	309.5	307.9	304.5	302.8
70°	81.1	106.0	142.3	165.5	187.0	206.9	210.2	211.8	213.5	215.2	211.8
72.5°	56.2	74.5	94.4	114.2	127.5	135.7	144.0	145.7	145.7	145.7	144.0
75°	28.1	38.0	56.2	64.6	76.2	79.4	86.1	86.1	91.0	84.4	82.7
77.5°	24.9	29.8	39.7	46.4	51.3	56.2	57.9	62.9	61.2	57.9	59.6
80°	14.8	18.2	24.9	28.1	34.8	36.4	38.0	39.7	38.0	39.7	39.7
82.5°	11.6	13.3	16.5	16.5	21.5	21.5	23.2	23.2	24.9	24.9	24.9
85°	6.6	11.6	9.9	19.8	13.3	13.3	16.5	19.8	16.5	16.5	19.8
87.5°	6.6	6.6	5.0	6.6	6.6	6.6	8.2	9.9	9.9	11.6	9.9
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: P249389

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3083.6	3083.6	3083.6	3083.6
2.5°	3088.6	3091.8	3086.9	3085.3
5°	3093.5	3093.5	3090.3	3090.3
7.5°	3093.5	3093.5	3088.6	3085.3
10°	3080.2	3080.2	3075.3	3072.0
12.5°	3055.5	3055.5	3053.8	3048.9
15°	3024.0	3024.0	3017.4	3012.4
17.5°	2981.0	2984.3	2976.1	2976.1
20°	2934.7	2933.0	2926.4	2923.1
22.5°	2886.6	2883.4	2881.7	2871.8
25°	2835.3	2832.1	2827.0	2822.1
27.5°	2747.6	2746.0	2741.0	2734.4
30°	2613.5	2611.9	2605.3	2605.3
32.5°	2439.8	2438.1	2431.5	2433.2
35°	2259.3	2266.0	2262.6	2256.1
37.5°	2108.7	2113.6	2117.0	2113.6
40°	1982.9	1997.8	1999.5	2002.8
42.5°	1848.8	1868.7	1875.4	1878.6
45°	1688.3	1706.5	1721.4	1718.1
47.5°	1524.4	1537.6	1550.9	1541.0
50°	1367.2	1375.4	1380.5	1380.5
52.5°	1218.3	1218.3	1216.6	1218.3
55°	1047.7	1047.7	1041.1	1044.4
57.5°	869.0	872.3	867.3	859.0
60°	703.5	695.1	691.9	686.9
62.5°	547.9	547.9	536.3	551.1
65°	410.5	405.6	400.5	398.9
67.5°	297.9	296.3	291.3	289.7
70°	210.2	203.6	201.9	198.6
72.5°	140.7	140.7	137.4	137.4
75°	86.1	77.9	76.2	77.9
77.5°	59.6	57.9	57.9	56.2
80°	39.7	38.0	41.4	36.4
82.5°	24.9	26.4	24.9	26.4
85°	16.5	19.8	18.2	18.2
87.5°	9.9	9.9	9.9	9.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)