

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: P249390

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249390
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: LSR8B80D010 EC8B809727 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: 5777.0 lumens
Efficiency: N/A
Efficacy: 77.6 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

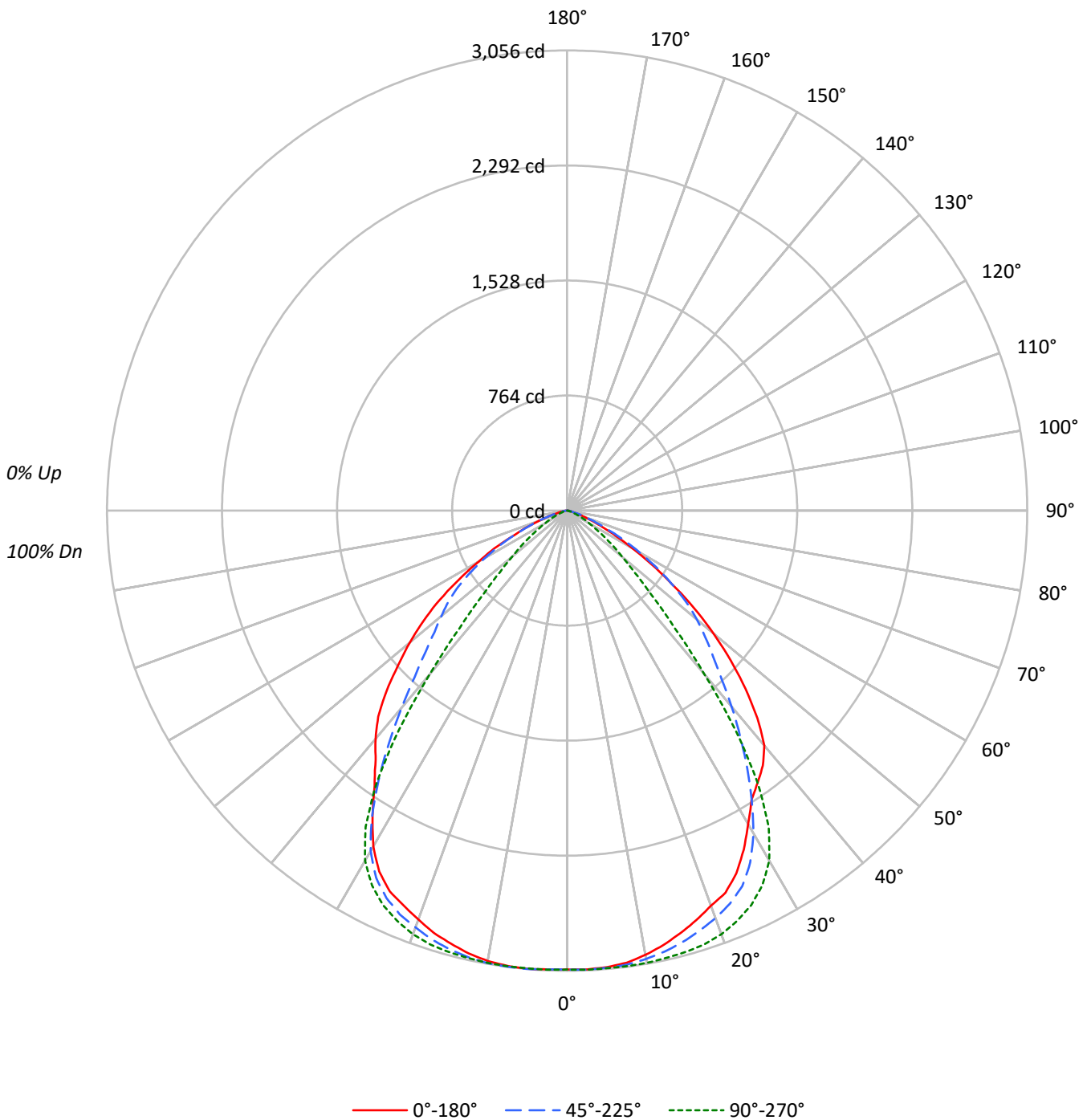
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	290.9	5.0
10°-20°	844.8	14.6
20°-30°	1282.2	22.2
30°-40°	1346.7	23.3
40°-50°	1009.7	17.5
50°-60°	647.8	11.2
60°-70°	277.1	4.8
70°-80°	65.5	1.1
80°-90°	12.2	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°	2417.9	41.9
0°-40°	3764.7	65.2
0°-60°	5422.2	93.9
0°-90°	5777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5777.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3048	3048	3048	3048	3048	
5°	3043	3048	3051	3056	3055	289
15°	2906	2966	3035	3015	2978	820
25°	2659	2752	2891	2839	2790	1215
35°	2206	2083	2207	2181	2230	1384
45°	1675	1369	787	1330	1698	1283
55°	848	848	293	884	1032	769
65°	255	301	93	388	394	272
75°	39	46	13	78	77	57
85°	13	8	6	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°	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1
2.5°	3049.7	3053.0	3051.3	3051.3	3049.7	3051.3	3051.3	3054.6	3054.6	3051.3	3049.7
5°	3043.1	3046.4	3046.4	3043.1	3043.1	3051.3	3046.4	3049.7	3049.7	3048.1	3048.1
7.5°	3028.4	3028.4	3035.0	3030.1	3030.1	3035.0	3033.3	3036.6	3039.9	3041.5	3041.5
10°	2995.7	2999.0	3000.6	3000.6	3002.3	3007.1	3010.4	3017.0	3020.2	3023.5	3025.2
12.5°	2954.8	2959.7	2961.3	2959.7	2964.6	2971.2	2979.4	2987.5	2992.5	2999.0	3003.9
15°	2905.7	2905.7	2909.0	2913.9	2917.2	2927.0	2935.2	2945.0	2958.1	2966.3	2974.4
17.5°	2851.7	2855.0	2859.9	2859.9	2866.5	2882.8	2887.7	2902.5	2917.2	2925.4	2941.7
20°	2792.8	2796.1	2801.0	2804.3	2812.5	2825.6	2835.4	2848.5	2864.8	2879.6	2895.9
22.5°	2747.0	2740.5	2743.7	2747.0	2755.2	2766.7	2778.1	2794.5	2810.8	2825.6	2841.9
25°	2658.7	2660.3	2665.2	2668.5	2678.3	2688.1	2701.2	2720.8	2735.6	2751.9	2769.9
27.5°	2539.2	2540.9	2549.0	2549.0	2557.2	2573.6	2581.8	2598.1	2617.8	2634.1	2655.4
30°	2403.4	2406.7	2406.7	2413.3	2418.1	2426.3	2434.5	2450.9	2460.7	2475.4	2504.9
32.5°	2279.1	2282.4	2280.7	2279.1	2274.2	2272.5	2270.9	2274.2	2277.5	2282.4	2293.8
35°	2205.5	2197.3	2190.8	2179.3	2166.2	2149.8	2135.1	2115.5	2097.5	2082.7	2066.4
37.5°	2135.1	2133.5	2123.7	2107.3	2081.1	2051.7	2017.3	1974.8	1932.2	1886.4	1842.3
40°	2036.9	2032.0	2023.9	2001.0	1971.5	1935.5	1889.7	1837.3	1768.6	1698.3	1626.3
42.5°	1870.1	1871.7	1861.9	1843.9	1816.1	1781.7	1734.3	1677.0	1603.4	1519.9	1426.7
45°	1675.4	1675.4	1672.1	1657.4	1637.7	1609.9	1573.9	1526.5	1454.5	1369.4	1269.6
47.5°	1472.5	1474.1	1469.2	1466.0	1457.8	1439.8	1413.6	1377.6	1326.9	1245.1	1145.3
50°	1266.4	1266.4	1274.5	1272.9	1272.9	1266.4	1254.9	1233.6	1189.5	1124.0	1030.8
52.5°	1060.2	1063.5	1068.4	1074.9	1083.1	1096.2	1083.1	1073.3	1045.5	994.7	914.6
55°	847.5	850.8	858.9	870.4	880.2	893.3	896.6	896.6	881.8	847.5	787.0
57.5°	665.9	661.0	667.5	677.4	690.4	703.5	713.3	724.8	723.2	700.3	651.2
60°	500.7	502.3	507.2	517.0	526.8	538.3	551.4	561.2	566.1	554.7	523.5
62.5°	364.9	364.9	371.4	381.2	386.1	402.5	410.7	415.6	420.5	418.8	399.2
65°	255.2	258.5	261.8	266.7	271.6	281.4	286.3	296.1	299.4	301.0	286.3
67.5°	180.0	175.1	178.3	181.6	186.5	193.1	202.9	202.9	207.8	207.8	198.0
70°	114.5	114.5	116.2	121.1	124.3	126.0	129.3	132.5	137.4	135.8	135.8
72.5°	76.9	75.3	76.9	78.5	80.2	85.1	85.1	86.7	90.0	91.6	85.1
75°	39.3	40.9	44.2	42.6	47.4	44.2	45.8	50.7	49.1	45.8	45.8
77.5°	32.7	32.7	32.7	31.1	34.3	34.3	32.7	36.0	34.3	34.3	32.7
80°	22.9	24.5	22.9	21.3	22.9	21.3	21.3	21.3	21.3	21.3	19.6
82.5°	18.0	14.7	16.4	14.7	16.4	16.4	14.7	13.1	13.1	14.7	13.1
85°	13.1	9.8	11.4	11.4	9.8	9.8	9.8	9.8	9.8	8.2	8.2
87.5°	8.2	4.9	4.9	4.9	6.5	6.5	6.5	4.9	6.5	6.5	3.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1
2.5°	3053.0	3051.3	3054.6	3053.0	3053.0	3051.3	3053.0	3051.3	3054.6	3048.1	3049.7
5°	3053.0	3049.7	3051.3	3053.0	3054.6	3051.3	3051.3	3051.3	3054.6	3051.3	3053.0
7.5°	3046.4	3044.8	3049.7	3053.0	3051.3	3049.7	3053.0	3051.3	3054.6	3053.0	3056.2
10°	3033.3	3035.0	3038.3	3043.1	3044.8	3046.4	3049.7	3049.7	3054.6	3048.1	3051.3
12.5°	3013.7	3020.2	3028.4	3031.7	3038.3	3038.3	3041.5	3043.1	3046.4	3044.8	3049.7
15°	2989.2	2997.3	3007.1	3015.4	3023.5	3028.4	3033.3	3035.0	3039.9	3035.0	3036.6
17.5°	2959.7	2969.5	2984.2	2994.1	3007.1	3012.1	3018.6	3021.9	3026.8	3023.5	3025.2
20°	2918.8	2930.3	2946.6	2961.3	2969.5	2981.0	2989.2	2994.1	2997.3	2994.1	2995.7
22.5°	2861.5	2877.9	2899.2	2910.6	2927.0	2936.8	2938.4	2949.9	2958.1	2949.9	2953.2
25°	2794.5	2810.8	2827.2	2851.7	2866.5	2877.9	2889.4	2891.0	2899.2	2897.5	2895.9
27.5°	2683.2	2704.5	2732.3	2751.9	2771.6	2789.6	2802.7	2805.9	2814.1	2810.8	2812.5
30°	2531.0	2554.0	2580.2	2611.2	2639.0	2657.0	2673.4	2684.8	2693.0	2688.1	2686.5
32.5°	2315.1	2338.0	2365.8	2396.9	2429.6	2455.8	2475.4	2490.2	2500.0	2496.7	2488.5
35°	2068.1	2074.6	2092.6	2117.1	2144.9	2172.7	2190.8	2207.1	2218.5	2221.8	2221.8
37.5°	1814.4	1793.2	1780.1	1780.1	1796.4	1807.9	1824.3	1834.1	1852.1	1858.6	1863.5
40°	1569.0	1519.9	1474.1	1439.8	1416.9	1415.2	1415.2	1420.1	1436.5	1457.8	1477.4
42.5°	1349.8	1271.2	1200.9	1137.1	1091.3	1065.1	1053.7	1055.3	1068.4	1088.0	1120.7
45°	1174.7	1076.6	988.2	911.3	849.1	808.2	788.6	787.0	796.8	819.7	855.7
47.5°	1038.9	934.2	834.4	746.1	679.0	634.8	611.9	605.4	611.9	633.2	675.7
50°	926.0	818.1	715.0	623.4	551.4	505.6	484.3	476.1	484.3	502.3	544.8
52.5°	821.3	710.1	613.5	525.2	448.3	409.0	386.1	381.2	386.1	407.4	441.8
55°	700.3	605.4	510.5	422.1	355.1	315.8	297.8	292.9	297.8	317.4	353.4
57.5°	580.8	499.0	415.6	335.4	278.1	243.8	227.4	220.9	232.3	245.4	288.0
60°	469.5	404.1	333.8	263.4	216.0	184.9	171.8	170.1	173.4	189.8	219.2
62.5°	368.1	314.1	258.5	201.2	162.0	148.9	132.5	130.9	134.2	144.0	166.9
65°	265.1	230.7	188.2	147.2	116.2	98.2	91.6	93.3	96.5	103.1	124.3
67.5°	184.9	160.3	130.9	103.1	80.2	72.0	65.5	63.8	65.5	76.9	88.4
70°	124.3	109.6	88.4	78.5	55.6	44.2	45.8	40.9	47.4	47.4	57.2
72.5°	81.8	72.0	58.9	45.8	39.3	31.1	31.1	29.5	32.7	34.3	42.6
75°	42.6	32.7	32.7	22.9	16.4	8.2	14.7	13.1	11.4	13.1	16.4
77.5°	29.5	24.5	22.9	18.0	16.4	13.1	13.1	13.1	13.1	14.7	16.4
80°	18.0	18.0	13.1	11.4	9.8	8.2	9.8	9.8	9.8	9.8	11.4
82.5°	11.4	9.8	9.8	8.2	8.2	6.5	6.5	6.5	6.5	6.5	9.8
85°	9.8	6.5	6.5	4.9	6.5	11.4	4.9	6.5	6.5	6.5	4.9
87.5°	3.3	4.9	4.9	4.9	3.3	1.6	3.3	4.9	4.9	8.2	6.5
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°	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1	3048.1
2.5°	3053.0	3054.6	3054.6	3053.0	3053.0	3049.7	3056.2	3051.3	3053.0	3059.5	3054.6
5°	3056.2	3057.9	3057.9	3056.2	3056.2	3056.2	3057.9	3057.9	3056.2	3054.6	3057.9
7.5°	3062.8	3061.1	3061.1	3057.9	3057.9	3054.6	3057.9	3053.0	3056.2	3053.0	3057.9
10°	3054.6	3056.2	3054.6	3053.0	3053.0	3051.3	3051.3	3046.4	3048.1	3043.1	3046.4
12.5°	3049.7	3048.1	3048.1	3044.8	3041.5	3038.3	3036.6	3031.7	3031.7	3020.2	3025.2
15°	3036.6	3038.3	3033.3	3026.8	3023.5	3015.4	3012.1	3005.5	2999.0	2990.8	2992.5
17.5°	3025.2	3020.2	3013.7	3007.1	2994.1	2987.5	2981.0	2971.2	2967.9	2958.1	2954.8
20°	2990.8	2987.5	2979.4	2967.9	2959.7	2945.0	2938.4	2928.6	2920.4	2910.6	2905.7
22.5°	2946.6	2943.3	2933.5	2922.1	2909.0	2902.5	2895.9	2877.9	2869.7	2859.9	2858.3
25°	2891.0	2886.1	2876.3	2863.2	2856.6	2838.6	2832.1	2819.0	2815.7	2805.9	2804.3
27.5°	2805.9	2799.4	2787.9	2771.6	2760.1	2748.7	2742.1	2732.3	2729.0	2719.2	2717.6
30°	2678.3	2670.1	2647.2	2640.7	2621.0	2609.6	2609.6	2596.5	2598.1	2591.6	2591.6
32.5°	2477.1	2464.0	2446.0	2432.9	2419.8	2413.3	2413.3	2408.3	2411.6	2411.6	2414.9
35°	2210.4	2192.4	2182.5	2174.4	2174.4	2180.9	2200.6	2205.5	2215.3	2223.5	2230.0
37.5°	1868.4	1866.8	1878.3	1888.1	1912.6	1940.4	1974.8	2004.2	2032.0	2051.7	2071.3
40°	1498.7	1539.6	1572.3	1618.1	1655.7	1709.7	1771.9	1822.6	1870.1	1904.4	1940.4
42.5°	1169.8	1222.2	1290.9	1358.0	1425.0	1498.7	1580.5	1650.8	1713.0	1760.4	1798.1
45°	911.3	983.3	1066.8	1151.8	1238.5	1330.2	1415.2	1487.2	1552.7	1601.8	1639.4
47.5°	734.6	813.1	908.0	1001.3	1099.5	1196.0	1290.9	1353.1	1407.0	1446.3	1480.7
50°	607.0	690.4	790.2	896.6	994.7	1091.3	1173.1	1233.6	1277.8	1312.2	1333.4
52.5°	507.2	595.5	701.9	808.2	906.4	994.7	1068.4	1114.2	1150.2	1174.7	1194.3
55°	418.8	503.9	603.7	703.5	800.1	883.5	944.0	978.4	1006.2	1020.9	1032.4
57.5°	342.0	420.5	512.1	603.7	687.2	755.9	803.3	837.7	850.8	862.2	860.6
60°	268.3	342.0	425.4	503.9	575.9	631.5	665.9	685.5	695.3	700.3	697.0
62.5°	211.1	278.1	342.0	410.7	463.0	510.5	543.2	543.2	548.1	549.7	554.7
65°	157.0	207.8	263.4	314.1	356.7	387.8	405.8	410.7	417.2	415.6	412.3
67.5°	116.2	153.8	194.7	232.3	261.8	281.4	294.5	306.0	304.3	301.0	299.4
70°	80.2	104.7	140.7	163.6	184.9	204.5	207.8	209.4	211.1	212.7	209.4
72.5°	55.6	73.6	93.3	112.9	126.0	134.2	142.4	144.0	144.0	144.0	142.4
75°	27.8	37.6	55.6	63.8	75.3	78.5	85.1	85.1	90.0	83.4	81.8
77.5°	24.5	29.5	39.3	45.8	50.7	55.6	57.2	62.2	60.5	57.2	58.9
80°	14.7	18.0	24.5	27.8	34.3	36.0	37.6	39.3	37.6	39.3	39.3
82.5°	11.4	13.1	16.4	16.4	21.3	21.3	22.9	22.9	24.5	24.5	24.5
85°	6.5	11.4	9.8	19.6	13.1	13.1	16.4	19.6	16.4	16.4	19.6
87.5°	6.5	6.5	4.9	6.5	6.5	6.5	8.2	9.8	9.8	11.4	9.8
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: P249390

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3048.1	3048.1	3048.1	3048.1
2.5°	3053.0	3056.2	3051.3	3049.7
5°	3057.9	3057.9	3054.6	3054.6
7.5°	3057.9	3057.9	3053.0	3049.7
10°	3044.8	3044.8	3039.9	3036.6
12.5°	3020.2	3020.2	3018.6	3013.7
15°	2989.2	2989.2	2982.6	2977.7
17.5°	2946.6	2949.9	2941.7	2941.7
20°	2900.8	2899.2	2892.7	2889.4
22.5°	2853.4	2850.1	2848.5	2838.6
25°	2802.7	2799.4	2794.5	2789.6
27.5°	2715.9	2714.3	2709.4	2702.9
30°	2583.4	2581.8	2575.2	2575.2
32.5°	2411.6	2410.0	2403.4	2405.1
35°	2233.3	2239.8	2236.6	2230.0
37.5°	2084.4	2089.3	2092.6	2089.3
40°	1960.0	1974.8	1976.4	1979.7
42.5°	1827.5	1847.2	1853.7	1857.0
45°	1668.8	1686.8	1701.6	1698.3
47.5°	1506.8	1519.9	1533.0	1523.2
50°	1351.4	1359.6	1364.5	1364.5
52.5°	1204.2	1204.2	1202.5	1204.2
55°	1035.6	1035.6	1029.1	1032.4
57.5°	858.9	862.2	857.3	849.1
60°	695.3	687.2	683.9	679.0
62.5°	541.6	541.6	530.1	544.8
65°	405.8	400.8	395.9	394.3
67.5°	294.5	292.9	288.0	286.3
70°	207.8	201.2	199.6	196.3
72.5°	139.1	139.1	135.8	135.8
75°	85.1	76.9	75.3	76.9
77.5°	58.9	57.2	57.2	55.6
80°	39.3	37.6	40.9	36.0
82.5°	24.5	26.2	24.5	26.2
85°	16.4	19.6	18.0	18.0
87.5°	9.8	9.8	9.8	9.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)