

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: P248426

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248426
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 EC8B709730 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5827.0 lumens
Efficiency: N/A
Efficacy: 76.8 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

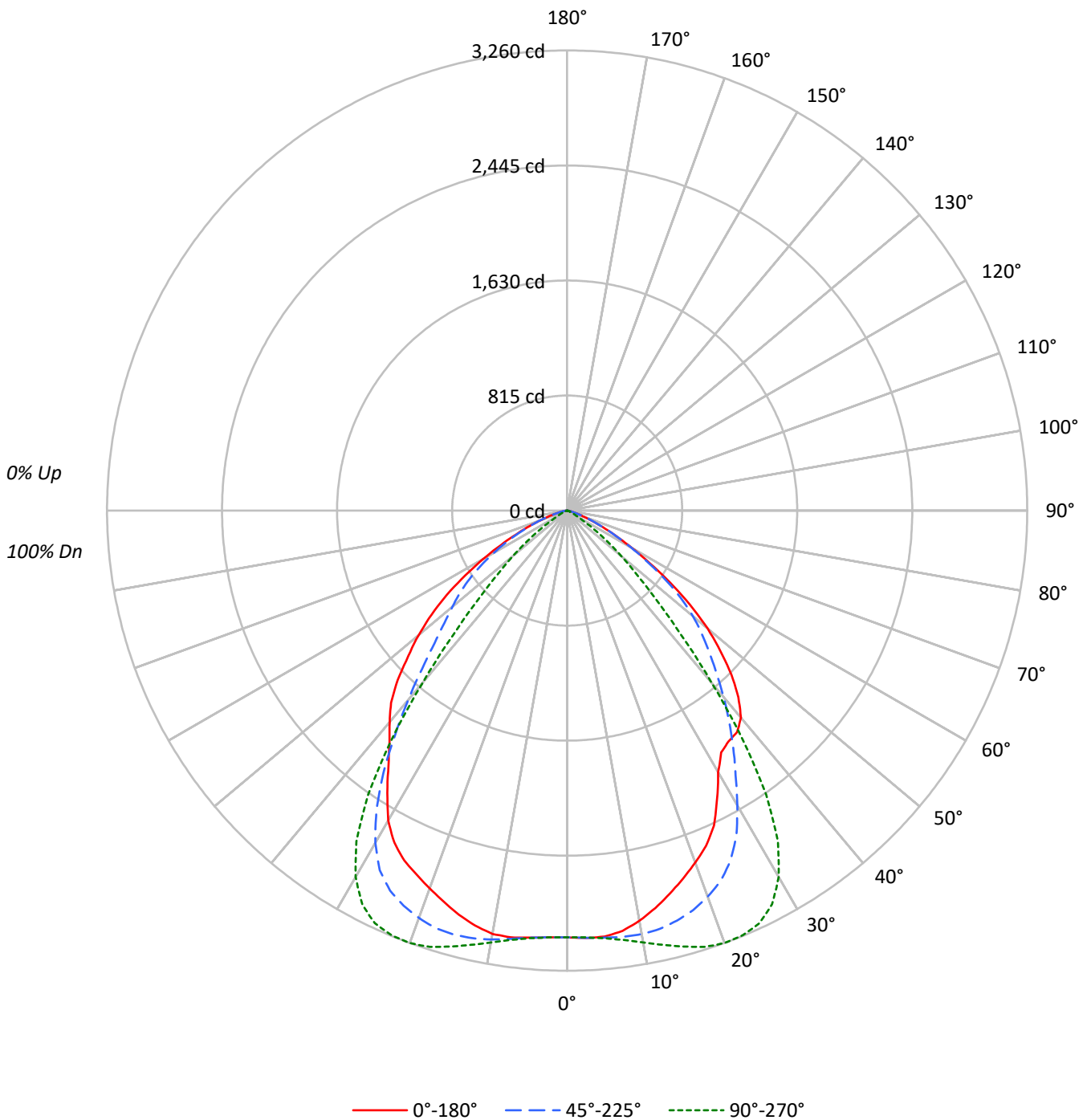
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	290.7	5.0
10°-20°	861.2	14.8
20°-30°	1313.8	22.5
30°-40°	1371.0	23.5
40°-50°	1029.8	17.7
50°-60°	633.6	10.9
60°-70°	257.9	4.4
70°-80°	60.7	1.0
80°-90°	8.4	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°	2465.7	42.3
0°-40°	3836.7	65.8
0°-60°	5500.0	94.4
0°-90°	5827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5827.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3023	3023	3023	3023	3023	
5°	3029	3037	3040	3037	3037	287
15°	2810	3007	3198	3110	2964	791
25°	2461	2737	3225	2970	2734	1119
35°	1994	2050	2456	2270	2206	1259
45°	1646	1425	889	1327	1698	1256
55°	889	844	233	844	1041	799
65°	278	281	35	377	400	289
75°	48	48	6	85	88	58
85°	5	5	2	11	14	7
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°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3030.9	3026.1	3030.9	3030.9	3032.5	3029.3	3030.9	3032.5	3029.3	3029.3	3029.3
5°	3029.3	3026.1	3029.3	3027.7	3030.9	3030.9	3034.1	3034.1	3037.3	3037.3	3042.1
7.5°	3003.6	2997.2	3003.6	3008.4	3011.6	3018.1	3026.1	3032.5	3038.9	3045.3	3053.3
10°	2950.6	2950.6	2955.5	2965.1	2974.7	2985.9	3000.4	3016.4	3032.5	3046.9	3061.4
12.5°	2884.9	2880.1	2889.7	2902.5	2917.0	2934.6	2957.1	2981.1	3006.8	3035.7	3058.2
15°	2809.5	2804.6	2815.9	2828.7	2846.4	2872.0	2899.3	2931.4	2968.3	3006.8	3043.7
17.5°	2732.4	2730.8	2742.1	2759.7	2774.2	2801.4	2836.8	2875.2	2917.0	2968.3	3016.4
20°	2653.8	2652.2	2663.5	2677.9	2697.1	2722.8	2758.1	2803.0	2852.8	2910.6	2966.7
22.5°	2572.0	2573.6	2583.2	2599.3	2615.3	2642.6	2679.5	2724.4	2779.0	2841.5	2904.1
25°	2461.3	2453.3	2466.1	2482.2	2509.4	2531.9	2567.2	2615.3	2671.5	2737.3	2811.1
27.5°	2300.8	2299.2	2310.5	2324.9	2349.0	2376.2	2414.8	2464.5	2523.9	2596.1	2668.3
30°	2140.4	2143.6	2148.4	2162.9	2178.9	2206.2	2244.7	2286.4	2342.6	2411.5	2488.6
32.5°	2031.3	2031.3	2037.7	2047.3	2058.6	2073.0	2100.3	2130.8	2174.1	2222.2	2278.4
35°	1994.4	1988.0	1994.4	1996.0	1997.6	2000.8	2005.6	2015.3	2029.7	2050.5	2071.4
37.5°	1978.3	1973.5	1973.5	1967.1	1959.1	1949.5	1936.6	1922.2	1906.2	1885.3	1869.2
40°	1915.8	1912.6	1909.3	1902.9	1885.3	1866.0	1845.1	1811.5	1774.6	1723.2	1671.9
42.5°	1795.4	1792.2	1790.6	1777.8	1761.7	1739.3	1715.2	1679.9	1633.4	1567.6	1493.8
45°	1646.2	1639.8	1635.0	1623.8	1612.5	1593.3	1570.8	1538.7	1492.2	1424.8	1336.5
47.5°	1472.9	1469.7	1468.1	1463.3	1452.1	1440.8	1426.4	1400.7	1359.0	1294.8	1203.4
50°	1298.0	1291.6	1294.8	1293.2	1288.4	1280.4	1270.7	1253.1	1221.0	1163.3	1079.8
52.5°	1097.5	1097.5	1095.9	1100.7	1102.3	1100.7	1102.3	1083.0	1055.8	1012.4	941.8
55°	888.9	888.9	893.7	900.1	906.5	908.1	906.5	898.5	879.2	844.0	781.4
57.5°	693.1	689.9	699.6	709.2	715.6	722.0	717.2	710.8	699.6	670.7	622.5
60°	527.9	527.9	534.3	540.7	547.1	553.6	551.9	550.3	540.7	521.4	483.0
62.5°	388.3	389.9	389.9	394.7	401.1	407.5	412.3	407.5	402.7	389.9	364.2
65°	277.6	276.0	277.6	282.4	287.2	293.6	296.8	295.2	290.4	280.8	261.5
67.5°	186.1	184.5	190.9	192.5	195.7	202.2	200.6	202.2	200.6	192.5	176.5
70°	121.9	118.7	121.9	120.3	125.2	126.8	129.9	131.6	129.9	125.2	120.3
72.5°	75.4	73.8	75.4	77.0	78.6	80.2	83.4	83.4	81.8	78.6	72.2
75°	48.1	43.3	44.9	41.7	44.9	44.9	48.1	49.7	48.1	48.1	44.9
77.5°	28.9	28.9	28.9	28.9	28.9	28.9	28.9	30.5	32.1	28.9	27.3
80°	14.4	14.4	16.1	16.1	16.1	17.7	16.1	16.1	16.1	17.7	12.8
82.5°	11.2	9.6	9.6	9.6	11.2	9.6	9.6	9.6	9.6	9.6	9.6
85°	4.8	6.4	4.8	3.2	4.8	4.8	6.4	4.8	4.8	4.8	6.4
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.2	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°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3030.9	3027.7	3027.7	3026.1	3029.3	3026.1	3027.7	3026.1	3026.1	3029.3	3026.1
5°	3042.1	3043.7	3040.5	3038.9	3043.7	3043.7	3043.7	3040.5	3040.5	3042.1	3040.5
7.5°	3058.2	3061.4	3063.0	3064.6	3067.8	3069.4	3069.4	3067.8	3066.2	3071.0	3064.6
10°	3075.8	3080.6	3090.2	3095.1	3103.1	3103.1	3106.3	3106.3	3103.1	3106.3	3104.7
12.5°	3069.4	3098.3	3114.3	3125.5	3136.8	3146.4	3149.6	3151.2	3149.6	3156.0	3149.6
15°	3080.6	3104.7	3130.4	3149.6	3170.5	3181.7	3184.9	3197.7	3201.0	3202.6	3193.0
17.5°	3063.0	3106.3	3133.6	3162.4	3193.0	3213.8	3233.0	3241.1	3242.7	3245.9	3233.0
20°	3022.8	3071.0	3112.7	3154.4	3189.7	3221.8	3237.9	3260.3	3253.9	3266.8	3249.1
22.5°	2968.3	3022.8	3075.8	3130.4	3167.3	3205.8	3239.5	3255.5	3263.5	3263.5	3244.3
25°	2881.7	2945.9	3003.6	3059.7	3115.9	3162.4	3201.0	3225.0	3229.9	3228.2	3205.8
27.5°	2746.9	2815.9	2883.3	2947.5	3016.4	3071.0	3115.9	3144.8	3152.8	3152.8	3128.8
30°	2560.8	2634.6	2700.4	2777.4	2848.0	2909.0	2971.5	2997.2	3011.6	3011.6	2984.4
32.5°	2339.3	2401.9	2462.9	2538.3	2615.3	2684.3	2743.7	2779.0	2796.6	2795.0	2771.0
35°	2098.7	2129.1	2175.7	2231.8	2300.8	2365.0	2422.8	2456.5	2487.0	2485.3	2462.9
37.5°	1858.0	1850.0	1854.8	1875.6	1919.0	1963.9	2008.8	2040.9	2066.6	2077.8	2073.0
40°	1622.2	1580.4	1540.3	1525.9	1529.1	1545.1	1569.2	1593.3	1622.2	1636.6	1643.0
42.5°	1410.3	1339.8	1269.1	1216.2	1185.7	1176.1	1187.3	1195.3	1213.0	1233.8	1254.7
45°	1240.3	1145.6	1052.5	970.7	919.4	888.9	882.5	888.9	898.5	919.4	946.7
47.5°	1100.7	990.0	885.7	794.2	718.8	678.7	667.5	664.3	673.9	693.1	730.0
50°	977.1	866.4	750.9	645.0	566.4	521.4	505.4	499.0	510.2	524.7	558.3
52.5°	842.3	733.2	614.5	511.8	430.0	383.5	365.8	356.2	362.6	381.9	415.6
55°	696.3	595.2	487.8	381.9	303.2	259.9	239.1	232.7	239.1	259.9	293.6
57.5°	550.3	465.3	375.4	276.0	205.4	162.1	141.2	134.8	152.4	160.5	195.7
60°	430.0	361.0	284.0	202.2	141.2	107.5	86.6	81.8	89.9	104.3	133.2
62.5°	322.5	279.2	218.2	144.4	104.3	69.0	57.8	53.0	57.8	69.0	91.5
65°	234.3	200.6	152.4	105.9	70.6	51.4	38.5	35.3	40.1	48.1	67.4
67.5°	160.5	134.8	105.9	73.8	48.1	32.1	27.3	27.3	28.9	35.3	49.7
70°	104.3	88.3	67.4	48.1	32.1	24.1	20.8	17.7	20.8	25.7	33.7
72.5°	65.8	56.1	43.3	33.7	24.1	17.7	14.4	12.8	16.1	19.2	25.7
75°	40.1	30.5	22.5	17.7	12.8	12.8	12.8	6.4	8.0	12.8	16.1
77.5°	24.1	20.8	17.7	14.4	11.2	6.4	6.4	6.4	8.0	9.6	14.4
80°	12.8	11.2	8.0	8.0	6.4	4.8	6.4	4.8	3.2	8.0	9.6
82.5°	8.0	6.4	6.4	6.4	8.0	3.2	4.8	3.2	4.8	6.4	4.8
85°	4.8	4.8	4.8	3.2	8.0	3.2	3.2	1.6	1.6	3.2	3.2
87.5°	0.0	1.6	1.6	0.0	1.6	0.0	1.6	1.6	1.6	1.6	1.6
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°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3027.7	3026.1	3027.7	3026.1	3026.1	3026.1	3027.7	3027.7	3026.1	3026.1	3029.3
5°	3040.5	3040.5	3040.5	3038.9	3037.3	3037.3	3040.5	3040.5	3035.7	3040.5	3040.5
7.5°	3067.8	3063.0	3067.8	3061.4	3058.2	3059.7	3061.4	3058.2	3055.0	3056.6	3056.6
10°	3103.1	3098.3	3098.3	3093.5	3088.6	3085.4	3082.2	3074.2	3066.2	3064.6	3058.2
12.5°	3144.8	3136.8	3132.0	3122.3	3114.3	3103.1	3093.5	3080.6	3064.6	3053.3	3042.1
15°	3186.5	3173.7	3162.4	3146.4	3128.8	3109.5	3088.6	3067.8	3042.1	3019.7	3000.4
17.5°	3220.2	3202.6	3181.7	3156.0	3130.4	3101.5	3071.0	3040.5	3003.6	2974.7	2952.3
20°	3231.4	3205.8	3178.5	3144.8	3111.1	3071.0	3032.5	2992.4	2950.6	2920.2	2894.5
22.5°	3217.0	3186.5	3152.8	3117.5	3072.6	3029.3	2984.4	2937.8	2900.9	2859.2	2835.1
25°	3176.9	3140.0	3103.1	3061.4	3018.1	2969.9	2921.8	2873.7	2828.7	2806.2	2775.8
27.5°	3095.1	3055.0	3014.8	2971.5	2921.8	2873.7	2823.9	2777.4	2738.9	2708.4	2690.7
30°	2950.6	2904.1	2857.6	2811.1	2767.7	2718.0	2671.5	2633.0	2594.4	2570.4	2552.8
32.5°	2729.2	2687.5	2641.0	2596.1	2556.0	2514.2	2475.7	2442.0	2414.8	2398.7	2385.9
35°	2430.8	2389.1	2353.8	2321.7	2288.0	2270.4	2246.3	2227.0	2215.8	2209.4	2207.8
37.5°	2055.3	2031.3	2020.0	2013.6	2007.2	2002.4	2005.6	2013.6	2020.0	2031.3	2044.1
40°	1654.2	1675.1	1681.5	1704.0	1724.8	1752.1	1782.6	1817.9	1846.8	1883.7	1909.3
42.5°	1288.4	1326.9	1371.8	1420.0	1471.3	1521.1	1582.0	1638.2	1689.5	1736.0	1776.2
45°	990.0	1049.3	1116.7	1185.7	1254.7	1326.9	1400.7	1469.7	1530.7	1580.4	1622.2
47.5°	771.8	837.6	924.2	1009.2	1092.7	1177.7	1259.5	1331.7	1383.1	1431.2	1468.1
50°	611.3	686.7	781.4	879.2	970.7	1060.5	1147.2	1214.6	1266.0	1304.5	1331.7
52.5°	473.3	563.2	659.4	762.1	860.0	957.9	1038.1	1100.7	1142.4	1176.1	1196.9
55°	353.0	441.2	543.9	649.8	749.3	844.0	919.4	973.9	1010.8	1030.1	1041.3
57.5°	255.1	335.4	438.0	543.9	633.8	723.6	784.6	834.3	855.2	866.4	871.2
60°	186.1	259.9	351.4	442.8	527.9	600.1	653.0	686.7	702.8	709.2	707.6
62.5°	136.4	200.6	279.2	356.2	425.2	484.5	526.3	548.7	556.8	560.0	555.2
65°	104.3	154.0	221.4	280.8	333.7	377.0	407.5	422.0	426.8	425.2	422.0
67.5°	77.0	115.5	165.3	210.2	248.7	282.4	298.4	311.3	314.5	309.7	304.8
70°	54.6	85.0	120.3	150.8	179.7	199.0	216.6	218.2	218.2	216.6	213.4
72.5°	38.5	59.4	81.8	102.7	120.3	134.8	141.2	146.0	144.4	142.8	139.6
75°	25.7	36.9	59.4	64.2	80.2	85.0	91.5	91.5	93.0	88.3	88.3
77.5°	16.1	25.7	35.3	41.7	48.1	54.6	57.8	57.8	59.4	57.8	57.8
80°	9.6	16.1	19.2	28.9	28.9	33.7	35.3	36.9	33.7	38.5	33.7
82.5°	6.4	9.6	14.4	14.4	17.7	20.8	20.8	22.5	22.5	20.8	20.8
85°	4.8	6.4	8.0	9.6	9.6	11.2	9.6	9.6	11.2	12.8	11.2
87.5°	1.6	3.2	1.6	3.2	3.2	6.4	4.8	4.8	4.8	6.4	6.4
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: P248426

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3022.8	3022.8	3022.8	3022.8
2.5°	3026.1	3027.7	3026.1	3026.1
5°	3040.5	3038.9	3040.5	3037.3
7.5°	3051.7	3051.7	3050.1	3050.1
10°	3051.7	3045.3	3045.3	3045.3
12.5°	3027.7	3019.7	3014.8	3011.6
15°	2985.9	2971.5	2965.1	2963.5
17.5°	2931.4	2918.6	2910.6	2905.7
20°	2868.8	2856.0	2846.4	2848.0
22.5°	2814.3	2799.8	2793.4	2790.2
25°	2759.7	2742.1	2737.3	2734.1
27.5°	2671.5	2661.9	2657.0	2652.2
30°	2536.7	2531.9	2523.9	2535.1
32.5°	2381.1	2373.0	2366.6	2371.5
35°	2209.4	2204.6	2209.4	2206.2
37.5°	2052.2	2056.9	2063.4	2066.6
40°	1928.6	1946.2	1952.7	1955.9
42.5°	1805.1	1825.9	1838.7	1846.8
45°	1652.6	1673.5	1687.9	1697.6
47.5°	1495.4	1513.0	1527.5	1525.9
50°	1352.6	1362.2	1368.6	1375.1
52.5°	1208.2	1208.2	1209.8	1209.8
55°	1044.5	1041.3	1039.7	1041.3
57.5°	864.8	861.6	860.0	855.2
60°	701.2	691.6	685.1	685.1
62.5°	548.7	537.5	532.7	531.1
65°	412.3	410.7	401.1	399.5
67.5°	298.4	292.0	285.6	287.2
70°	210.2	200.6	200.6	197.4
72.5°	136.4	131.6	129.9	129.9
75°	85.0	85.0	81.8	88.3
77.5°	56.1	56.1	54.6	56.1
80°	33.7	33.7	33.7	32.1
82.5°	20.8	22.5	20.8	20.8
85°	11.2	12.8	9.6	14.4
87.5°	6.4	8.0	6.4	8.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)