

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: FAIL-SAFE

Report Number: P837727

Luminaire Tested: **ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P837727
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD
Description: 1FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

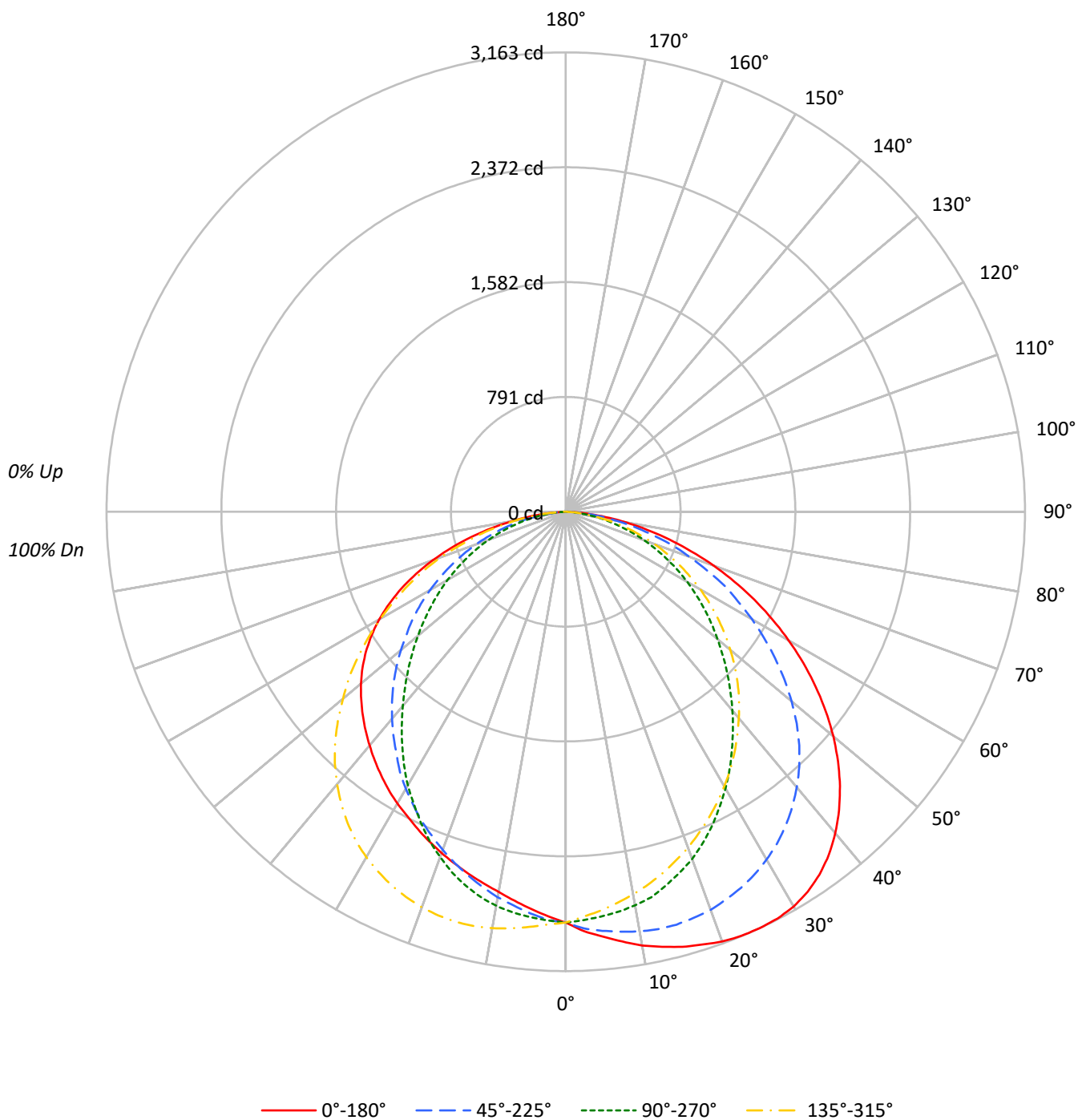
Lumens per Lamp: N/A
Luminaire Lumens: 8298.2 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
Input Voltage (V): 120
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

TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7611	7611	7611	7611
5°	7933	7556	7414	7569
10°	8286	7518	7264	7529
15°	8641	7422	7192	7424
20°	9018	7287	7161	7246
25°	9391	7084	7160	7011
30°	9754	6837	7208	6761
35°	10013	6556	7280	6452
40°	10147	6274	7382	6132
45°	10166	5988	7525	5838
50°	10070	5715	7709	5563
55°	9862	5460	7881	5309
60°	9552	5195	7986	5060
65°	9124	4890	7944	4777
70°	8523	4532	7662	4449
75°	7669	4040	7032	4020
80°	6502	3384	5909	3436
85°	4523	2242	3748	2303



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.5	3.2
10°-20°	777.6	9.4
20°-30°	1191.7	14.4
30°-40°	1449.1	17.5
40°-50°	1506.4	18.2
50°-60°	1360.7	16.4
60°-70°	1034.5	12.5
70°-80°	576.7	7.0
80°-90°	132.8	1.6
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°	2237.9	27.0
0°-40°	3687.0	44.4
0°-60°	6554.2	79.0
0°-90°	8298.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8298.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2828	2828	2828	2828	2828	
5°	2937	2797	2745	2802	2937	283
15°	3102	2664	2582	2665	3102	879
25°	3163	2386	2411	2361	3163	1461
35°	3048	1996	2216	1964	3048	1904
45°	2671	1574	1977	1534	2671	2057
55°	2102	1164	1680	1132	2102	1876
65°	1433	768	1248	750	1433	1416
75°	738	389	676	387	738	783
85°	146	73	121	75	146	184
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4
2.5°	2891.1	2848.9	2849.5	2886.5	2858.1	2872.0	2832.4	2847.6	2842.9	2846.2	2813.9
5°	2936.6	2891.1	2890.4	2922.1	2890.4	2896.4	2846.2	2856.1	2841.6	2832.4	2797.4
7.5°	2984.8	2939.3	2934.6	2962.4	2920.8	2916.2	2860.7	2860.7	2834.4	2811.3	2778.3
10°	3032.3	2985.4	2979.5	3000.6	2949.2	2934.0	2866.7	2856.1	2821.2	2786.9	2751.2
12.5°	3067.9	3020.4	3015.8	3029.0	2970.9	2943.2	2866.7	2846.2	2794.8	2746.6	2718.9
15°	3101.6	3052.7	3040.2	3046.8	2980.2	2943.2	2857.4	2825.8	2759.8	2696.5	2664.1
17.5°	3125.3	3078.5	3065.9	3065.3	2984.8	2932.0	2837.7	2794.1	2714.9	2638.4	2606.1
20°	3149.1	3102.2	3086.4	3074.5	2983.5	2916.8	2808.6	2749.9	2657.5	2571.8	2544.7
22.5°	3160.9	3112.8	3095.6	3077.8	2974.9	2889.1	2773.0	2698.4	2592.9	2490.6	2468.2
25°	3162.9	3113.4	3095.0	3069.2	2957.7	2856.1	2726.8	2636.4	2518.3	2404.8	2385.7
27.5°	3157.6	3103.5	3085.1	3054.1	2932.0	2815.9	2672.1	2565.8	2439.2	2313.8	2293.3
30°	3139.2	3084.4	3066.6	3026.3	2895.7	2766.4	2612.0	2487.3	2351.4	2218.1	2200.3
32.5°	3102.2	3048.8	3034.3	2994.0	2856.1	2709.0	2542.1	2402.9	2254.4	2127.1	2100.7
35°	3048.1	2994.7	2985.4	2943.2	2800.7	2640.4	2465.5	2310.5	2151.5	2021.5	1995.8
37.5°	2977.5	2932.7	2918.8	2877.2	2735.4	2562.5	2377.8	2210.2	2046.6	1906.7	1890.9
40°	2888.5	2846.2	2835.7	2798.7	2659.5	2476.1	2282.8	2106.6	1938.4	1808.4	1786.0
42.5°	2786.9	2747.3	2741.3	2703.1	2565.8	2380.4	2179.9	1999.1	1825.6	1700.2	1677.8
45°	2671.4	2633.1	2631.8	2595.5	2463.6	2274.2	2071.7	1890.2	1715.4	1585.4	1573.5
47.5°	2544.1	2509.8	2509.8	2476.1	2349.4	2157.4	1960.2	1776.8	1604.6	1489.8	1468.6
50°	2405.5	2373.2	2363.3	2346.8	2223.4	2030.1	1842.7	1665.9	1495.0	1385.5	1365.1
52.5°	2257.7	2230.0	2236.6	2206.3	2086.8	1897.5	1724.0	1541.2	1384.9	1285.2	1264.8
55°	2102.0	2062.4	2068.4	2057.2	1944.3	1760.9	1590.7	1438.3	1276.6	1183.0	1163.8
57.5°	1940.4	1888.9	1910.0	1903.4	1792.6	1621.0	1468.6	1321.5	1169.1	1082.7	1064.2
60°	1774.8	1725.3	1747.1	1741.1	1636.9	1481.2	1342.6	1206.1	1062.2	983.7	965.2
62.5°	1604.6	1559.0	1578.8	1574.2	1478.5	1338.0	1217.3	1091.9	954.7	884.1	866.9
65°	1433.0	1389.5	1407.3	1404.0	1315.6	1208.7	1088.6	973.8	846.5	785.1	768.0
67.5°	1257.5	1217.3	1233.8	1233.8	1152.6	1050.3	959.3	854.4	740.3	687.5	671.6
70°	1083.3	1045.7	1060.2	1058.9	990.3	907.2	828.7	735.0	632.7	589.2	576.0
72.5°	907.8	874.9	888.0	886.7	829.3	775.9	698.0	616.9	527.8	492.8	481.0
75°	737.6	706.6	719.1	717.8	671.0	620.8	568.7	501.4	424.9	400.5	388.6
77.5°	575.3	543.6	554.2	554.2	519.9	483.6	442.0	389.9	335.8	309.4	300.9
80°	419.6	404.4	399.2	399.8	376.7	353.0	331.9	281.7	242.1	224.3	218.4
82.5°	275.8	263.2	258.0	259.3	246.1	231.6	218.4	183.4	157.0	146.5	143.2
85°	146.5	137.2	132.6	135.9	133.3	125.4	118.8	95.0	78.5	74.6	72.6
87.5°	46.2	40.2	36.9	48.8	41.6	36.9	35.6	28.4	21.8	21.8	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4
2.5°	2824.5	2824.5	2798.7	2792.8	2790.2	2793.5	2767.7	2763.1	2800.0	2787.5	2759.1
5°	2802.0	2800.7	2764.4	2757.8	2757.8	2753.9	2724.8	2718.2	2755.2	2744.6	2713.6
7.5°	2774.3	2770.4	2727.5	2722.9	2716.3	2713.6	2681.3	2676.7	2708.3	2701.7	2672.7
10°	2740.7	2736.7	2685.9	2682.6	2675.4	2670.1	2639.7	2636.4	2668.8	2658.2	2635.1
12.5°	2696.5	2689.2	2637.1	2633.8	2627.9	2625.9	2596.2	2594.9	2630.5	2619.9	2595.5
15°	2638.4	2632.5	2574.4	2575.7	2576.4	2576.4	2552.6	2551.3	2586.3	2581.7	2555.3
17.5°	2574.4	2566.5	2511.1	2515.0	2519.6	2524.9	2506.5	2509.8	2546.7	2540.8	2517.0
20°	2501.8	2493.9	2439.8	2451.0	2460.9	2471.5	2459.6	2468.8	2503.2	2500.5	2482.7
22.5°	2420.7	2412.8	2362.6	2379.8	2396.3	2416.1	2410.8	2421.3	2457.6	2457.0	2441.1
25°	2321.7	2323.7	2279.5	2300.6	2328.3	2356.0	2358.0	2375.2	2415.4	2411.4	2396.9
27.5°	2229.4	2232.0	2185.1	2220.8	2257.7	2293.3	2301.9	2325.7	2366.6	2363.3	2350.7
30°	2132.4	2135.7	2090.1	2139.0	2183.8	2227.4	2245.8	2278.2	2319.7	2319.7	2306.5
32.5°	2031.4	2037.4	1989.9	2055.2	2107.3	2158.1	2190.4	2224.1	2271.6	2270.3	2259.0
35°	1927.8	1934.4	1890.9	1974.0	2026.1	2088.2	2128.4	2173.3	2215.5	2216.2	2207.6
37.5°	1822.3	1830.2	1790.6	1881.7	1941.0	2014.3	2065.7	2110.6	2157.4	2160.1	2152.2
40°	1717.4	1725.9	1691.6	1779.4	1854.6	1936.4	1995.8	2048.6	2100.0	2101.4	2096.1
42.5°	1612.5	1621.7	1596.0	1681.7	1766.9	1854.6	1924.5	1984.6	2037.4	2040.7	2034.7
45°	1510.2	1518.1	1499.6	1593.3	1675.1	1770.8	1851.3	1919.3	1972.7	1977.3	1975.3
47.5°	1408.6	1415.9	1399.4	1485.1	1579.5	1681.1	1774.1	1849.3	1906.1	1911.3	1910.0
50°	1309.0	1314.9	1297.1	1386.8	1480.5	1588.7	1685.7	1772.8	1836.1	1841.4	1840.7
52.5°	1210.0	1216.0	1200.8	1295.1	1380.2	1494.4	1599.9	1694.3	1757.0	1764.9	1766.2
55°	1114.3	1117.0	1105.1	1195.5	1278.0	1397.4	1518.8	1610.5	1673.2	1679.8	1683.7
57.5°	1018.7	1019.3	1009.4	1095.9	1175.0	1297.1	1424.4	1520.8	1580.1	1586.7	1592.7
60°	923.7	923.0	911.8	995.6	1071.5	1192.2	1324.8	1420.5	1477.9	1483.8	1491.7
62.5°	829.3	827.3	817.5	894.6	965.9	1085.3	1218.6	1311.0	1365.7	1369.7	1380.2
65°	735.6	733.7	724.4	795.7	860.3	974.5	1105.1	1192.9	1242.3	1247.6	1245.6
67.5°	643.3	639.3	632.1	696.1	754.8	860.3	985.7	1069.5	1110.4	1115.0	1127.5
70°	550.9	546.3	529.8	597.7	649.2	743.6	860.3	934.9	969.2	973.8	971.8
72.5°	459.9	455.2	437.4	500.1	543.6	626.1	730.4	792.4	822.1	826.0	826.0
75°	371.4	368.8	357.6	405.1	441.4	508.7	597.1	648.6	671.6	676.3	674.9
77.5°	286.3	284.4	273.1	314.0	342.4	392.6	463.8	504.1	521.2	526.5	537.7
80°	205.2	204.5	186.7	227.0	239.5	281.7	333.8	364.9	374.1	381.3	389.3
82.5°	131.3	132.0	114.1	148.4	153.7	180.8	213.1	232.2	238.8	244.8	250.7
85°	64.0	66.6	56.7	78.5	79.2	93.0	106.9	114.1	116.8	121.4	126.7
87.5°	16.5	19.1	10.6	22.4	19.8	25.7	29.7	31.7	31.0	34.3	36.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4
2.5°	2768.4	2789.5	2778.9	2813.2	2826.4	2805.3	2842.3	2842.9	2816.5	2847.6	2864.7
5°	2725.5	2747.3	2740.7	2776.3	2792.8	2774.3	2819.2	2827.8	2802.0	2837.0	2864.7
7.5°	2682.0	2707.7	2699.1	2735.4	2755.2	2740.7	2788.8	2802.7	2782.9	2821.2	2858.1
10°	2644.3	2666.1	2656.9	2695.1	2712.3	2700.4	2747.9	2773.7	2755.2	2802.0	2846.2
12.5°	2607.4	2625.2	2614.7	2646.3	2662.8	2647.6	2705.7	2729.5	2716.3	2765.1	2821.8
15°	2559.9	2579.7	2565.2	2593.5	2606.1	2592.9	2640.4	2681.3	2664.8	2718.2	2780.9
17.5°	2523.6	2534.8	2515.0	2537.5	2544.7	2526.9	2575.1	2615.3	2603.4	2661.5	2734.1
20°	2483.4	2492.6	2464.9	2477.4	2476.8	2454.3	2498.5	2538.1	2530.2	2594.2	2676.7
22.5°	2438.5	2443.1	2410.8	2413.4	2412.1	2375.2	2414.7	2455.0	2451.7	2516.4	2608.7
25°	2391.0	2391.7	2350.1	2348.8	2334.3	2290.7	2325.7	2371.2	2361.3	2431.2	2528.2
27.5°	2344.2	2337.6	2287.4	2275.5	2252.4	2200.3	2231.3	2272.2	2266.3	2334.9	2442.5
30°	2294.0	2285.4	2224.1	2202.3	2168.7	2108.6	2134.3	2172.6	2175.9	2235.9	2348.8
32.5°	2246.5	2224.7	2156.8	2125.1	2082.9	2012.9	2026.8	2065.7	2071.0	2131.7	2247.8
35°	2185.1	2170.6	2086.8	2032.7	1991.2	1914.6	1929.2	1956.2	1964.1	2023.5	2141.6
37.5°	2127.1	2104.0	2014.9	1949.0	1895.5	1815.0	1819.0	1846.7	1854.6	1914.6	2031.4
40°	2067.0	2034.1	1938.4	1861.2	1799.8	1715.4	1710.8	1739.8	1745.7	1804.5	1910.0
42.5°	2003.1	1963.5	1855.9	1771.5	1700.9	1615.1	1605.9	1630.9	1637.5	1694.9	1798.5
45°	1938.4	1890.9	1771.5	1679.1	1601.9	1514.2	1504.9	1524.1	1534.0	1588.1	1687.7
47.5°	1869.8	1814.4	1684.4	1581.5	1501.6	1413.9	1402.7	1421.8	1429.7	1483.2	1577.5
50°	1797.9	1730.6	1594.7	1481.2	1402.0	1315.6	1299.1	1321.5	1328.8	1378.9	1471.3
52.5°	1718.7	1644.1	1499.0	1380.2	1301.1	1218.6	1198.8	1220.6	1229.1	1278.0	1363.1
55°	1634.9	1554.4	1402.7	1287.2	1201.4	1120.9	1104.4	1113.0	1131.5	1177.7	1256.9
57.5°	1540.6	1460.7	1301.1	1183.6	1101.2	1024.0	1010.1	1018.0	1035.2	1080.0	1151.3
60°	1440.3	1355.8	1197.5	1080.0	1000.2	927.0	914.4	921.7	940.2	981.1	1047.0
62.5°	1341.3	1246.3	1090.6	973.8	901.2	833.3	830.0	827.3	844.5	884.1	942.1
65°	1221.2	1130.2	979.1	868.3	802.3	740.9	727.7	733.7	750.2	786.4	847.1
67.5°	1092.6	1010.1	865.0	762.7	704.0	649.2	638.0	640.6	657.8	689.5	742.2
70°	956.0	883.4	748.2	656.5	607.0	555.5	548.3	548.9	565.4	593.1	639.3
72.5°	812.8	747.5	630.1	551.6	510.7	473.7	467.1	459.2	474.4	498.1	537.7
75°	667.0	609.6	512.6	448.6	416.3	385.3	379.4	371.4	386.6	407.1	438.1
77.5°	519.9	473.7	398.5	349.0	323.9	300.9	295.6	287.0	302.2	317.3	341.8
80°	376.1	342.4	297.6	245.4	236.9	221.7	216.4	207.2	221.7	231.6	250.1
82.5°	242.8	220.4	194.6	158.3	157.0	145.8	143.2	132.6	145.8	151.7	165.6
85°	122.7	112.2	105.6	80.5	83.1	75.9	75.2	64.0	74.6	77.2	85.1
87.5°	35.0	36.9	33.0	19.8	25.1	23.8	23.8	17.2	23.8	23.8	27.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837727

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-2HI-27-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4	2828.4
2.5°	2831.1	2842.3	2844.9	2844.3	2851.5	2891.1	2877.9	2891.1
5°	2837.7	2862.7	2869.3	2878.6	2890.4	2935.3	2920.8	2936.6
7.5°	2841.6	2879.2	2893.7	2911.6	2930.7	2980.8	2969.0	2984.8
10°	2841.6	2890.4	2911.6	2941.2	2967.0	3025.0	3013.8	3032.3
12.5°	2829.7	2892.4	2922.1	2963.7	2996.7	3059.3	3054.7	3067.9
15°	2805.3	2882.5	2923.4	2976.9	3017.8	3087.7	3085.7	3101.6
17.5°	2772.3	2865.4	2914.8	2982.1	3033.6	3112.1	3116.7	3125.3
20°	2730.8	2833.0	2897.7	2980.2	3044.8	3131.3	3137.2	3149.1
22.5°	2676.0	2794.1	2872.0	2971.6	3046.1	3139.2	3149.7	3160.9
25°	2611.4	2747.3	2838.3	2955.1	3039.5	3138.5	3153.0	3162.9
27.5°	2537.5	2686.6	2795.4	2928.7	3021.1	3128.0	3145.8	3157.6
30°	2451.7	2621.9	2746.6	2894.4	2996.0	3108.2	3127.3	3139.2
32.5°	2363.3	2550.7	2688.5	2850.2	2959.7	3076.5	3093.0	3102.2
35°	2267.0	2464.2	2618.6	2793.5	2912.9	3025.7	3038.2	3048.1
37.5°	2162.1	2370.5	2538.8	2729.5	2846.9	2955.1	2966.3	2977.5
40°	2053.9	2272.2	2449.1	2650.9	2768.4	2868.7	2880.5	2888.5
42.5°	1945.0	2163.4	2353.4	2558.6	2675.4	2771.7	2778.9	2786.9
45°	1834.8	2050.6	2245.8	2456.3	2571.8	2662.2	2664.8	2671.4
47.5°	1722.7	1933.8	2127.7	2339.5	2453.7	2536.1	2538.8	2544.1
50°	1609.8	1817.0	2001.7	2213.5	2325.0	2412.1	2400.2	2405.5
52.5°	1499.0	1694.3	1883.0	2077.6	2187.8	2265.0	2268.3	2257.7
55°	1390.1	1574.2	1747.7	1935.1	2040.0	2100.0	2098.1	2102.0
57.5°	1279.9	1452.8	1611.8	1783.3	1885.6	1942.4	1954.2	1940.4
60°	1167.8	1330.1	1472.6	1627.6	1726.6	1774.1	1788.0	1774.8
62.5°	1056.3	1205.4	1334.7	1470.0	1561.7	1620.4	1619.1	1604.6
65°	944.8	1080.0	1195.5	1310.3	1390.1	1448.8	1446.2	1433.0
67.5°	841.9	953.4	1056.9	1150.0	1219.2	1259.5	1273.3	1257.5
70°	728.4	824.7	915.8	990.3	1047.7	1084.0	1097.2	1083.3
72.5°	614.9	696.7	760.7	832.6	876.8	907.2	921.0	907.8
75°	502.7	570.0	622.2	678.2	709.2	735.0	750.8	737.6
77.5°	393.9	446.0	487.6	528.5	564.1	570.0	583.9	575.3
80°	290.3	327.9	358.3	385.3	411.0	413.7	424.9	419.6
82.5°	193.3	218.4	226.3	254.7	271.2	268.5	279.7	275.8
85°	102.3	117.4	131.3	139.9	149.1	140.5	150.4	146.5
87.5°	34.3	36.3	31.7	44.9	49.5	42.2	48.2	46.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)