

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: P838015

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-5HI-40-120-EDD-90**

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: P838015
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-5HI-40-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

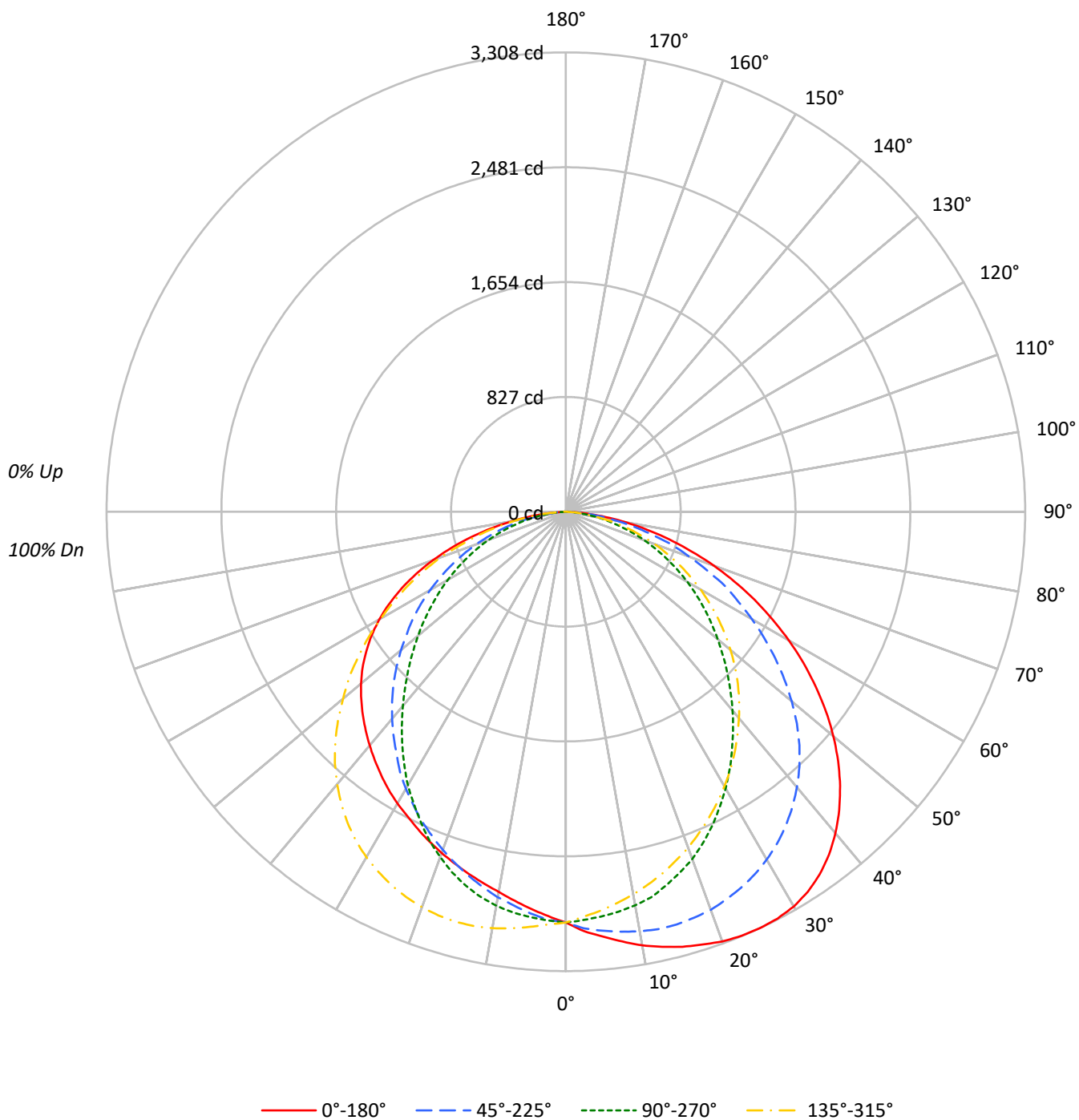
Lumens per Lamp: N/A
Luminaire Lumens: 8677.7 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 110
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

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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
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°	7959	7959	7959	7959
5°	8295	7902	7753	7915
10°	8665	7862	7596	7873
15°	9036	7762	7521	7763
20°	9430	7621	7488	7577
25°	9821	7407	7487	7332
30°	10200	7150	7538	7070
35°	10471	6856	7613	6748
40°	10611	6561	7719	6413
45°	10631	6262	7869	6105
50°	10531	5976	8061	5817
55°	10313	5710	8241	5551
60°	9988	5433	8351	5292
65°	9542	5114	8308	4995
70°	8914	4739	8013	4652
75°	8020	4225	7353	4204
80°	6800	3539	6180	3592
85°	4730	2343	3918	2408

Classified

Scaled Data Report

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Peachtree City, GA 30269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.8	3.2
10°-20°	813.2	9.4
20°-30°	1246.2	14.4
30°-40°	1515.4	17.5
40°-50°	1575.3	18.2
50°-60°	1423.0	16.4
60°-70°	1081.8	12.5
70°-80°	603.1	7.0
80°-90°	138.9	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°	2340.3	27.0
0°-40°	3855.6	44.4
0°-60°	6853.9	79.0
0°-90°	8677.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8677.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2958	2958	2958	2958	2958	
5°	3071	2925	2870	2930	3071	296
15°	3243	2786	2700	2787	3243	920
25°	3308	2495	2522	2469	3308	1528
35°	3188	2087	2318	2054	3188	1991
45°	2794	1646	2068	1604	2794	2151
55°	2198	1217	1757	1183	2198	1962
65°	1499	803	1305	784	1499	1481
75°	771	406	707	404	771	819
85°	153	76	127	78	153	193
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8
2.5°	3023.3	2979.2	2979.9	3018.5	2988.8	3003.3	2961.9	2977.8	2973.0	2976.4	2942.6
5°	3070.9	3023.3	3022.6	3055.7	3022.6	3028.8	2976.4	2986.8	2971.6	2961.9	2925.3
7.5°	3121.3	3073.7	3068.9	3097.8	3054.4	3049.5	2991.6	2991.6	2964.0	2939.8	2905.3
10°	3171.0	3122.0	3115.8	3137.8	3084.0	3068.2	2997.8	2986.8	2950.2	2914.3	2877.1
12.5°	3208.2	3158.5	3153.7	3167.5	3106.8	3077.8	2997.8	2976.4	2922.6	2872.2	2843.2
15°	3243.4	3192.4	3179.2	3186.1	3116.5	3077.8	2988.1	2955.0	2886.0	2819.8	2786.0
17.5°	3268.2	3219.3	3206.2	3205.5	3121.3	3066.1	2967.4	2921.9	2839.1	2759.1	2725.3
20°	3293.1	3244.1	3227.5	3215.1	3119.9	3050.2	2937.1	2875.7	2779.1	2689.4	2661.1
22.5°	3305.5	3255.1	3237.2	3218.6	3110.9	3021.2	2899.8	2821.9	2711.5	2604.5	2581.1
25°	3307.6	3255.8	3236.5	3209.6	3093.0	2986.8	2851.5	2757.0	2633.5	2514.8	2494.8
27.5°	3302.1	3245.5	3226.2	3193.7	3066.1	2944.7	2794.3	2683.2	2550.7	2419.6	2398.2
30°	3282.7	3225.5	3206.8	3164.8	3028.1	2892.9	2731.5	2601.1	2458.9	2319.6	2301.0
32.5°	3244.1	3188.2	3173.0	3130.9	2986.8	2832.9	2658.3	2512.8	2357.5	2224.4	2196.8
35°	3187.5	3131.6	3122.0	3077.8	2928.8	2761.1	2578.3	2416.2	2249.9	2114.0	2087.1
37.5°	3113.7	3066.8	3052.3	3008.8	2860.5	2679.7	2486.5	2311.3	2140.2	1993.9	1977.4
40°	3020.6	2976.4	2965.4	2926.7	2781.1	2589.3	2387.2	2203.0	2027.0	1891.1	1867.7
42.5°	2914.3	2872.9	2866.7	2826.7	2683.2	2489.3	2279.6	2090.5	1909.1	1778.0	1754.5
45°	2793.6	2753.6	2752.2	2714.2	2576.2	2378.2	2166.4	1976.7	1793.8	1657.9	1645.5
47.5°	2660.4	2624.5	2624.5	2589.3	2456.9	2256.1	2049.8	1858.0	1677.9	1557.9	1535.8
50°	2515.5	2481.7	2471.4	2454.1	2325.1	2122.9	1927.0	1742.1	1563.4	1448.9	1427.5
52.5°	2361.0	2332.0	2338.9	2307.2	2182.3	1984.3	1802.8	1611.7	1448.2	1344.0	1322.6
55°	2198.1	2156.8	2163.0	2151.2	2033.3	1841.5	1663.4	1504.1	1335.0	1237.1	1217.1
57.5°	2029.1	1975.3	1997.4	1990.5	1874.6	1695.2	1535.8	1382.0	1222.6	1132.2	1112.9
60°	1855.9	1804.2	1827.0	1820.8	1711.7	1548.9	1404.0	1261.2	1110.8	1028.7	1009.4
62.5°	1677.9	1630.3	1651.0	1646.2	1546.2	1399.2	1272.9	1141.9	998.3	924.5	906.6
65°	1498.6	1453.0	1471.6	1468.2	1375.7	1264.0	1138.4	1018.4	885.2	821.0	803.1
67.5°	1315.0	1272.9	1290.2	1290.2	1205.3	1098.4	1003.2	893.5	774.1	718.9	702.4
70°	1132.9	1093.6	1108.7	1107.4	1035.6	948.7	866.6	768.6	661.7	616.1	602.3
72.5°	949.4	914.9	928.7	927.3	867.3	811.4	730.0	645.1	552.0	515.4	503.0
75°	771.4	738.9	752.0	750.7	701.7	649.2	594.7	524.4	444.3	418.8	406.4
77.5°	601.6	568.5	579.5	579.5	543.7	505.7	462.3	407.8	351.2	323.6	314.6
80°	438.8	422.9	417.4	418.1	394.0	369.1	347.0	294.6	253.2	234.6	228.4
82.5°	288.4	275.3	269.8	271.1	257.3	242.2	228.4	191.8	164.2	153.2	149.7
85°	153.2	143.5	138.7	142.1	139.4	131.1	124.2	99.4	82.1	78.0	75.9
87.5°	48.3	42.1	38.6	51.1	43.5	38.6	37.3	29.7	22.8	22.8	22.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8
2.5°	2953.6	2953.6	2926.7	2920.5	2917.8	2921.2	2894.3	2889.5	2928.1	2915.0	2885.3
5°	2930.2	2928.8	2890.8	2884.0	2884.0	2879.8	2849.5	2842.6	2881.2	2870.2	2837.7
7.5°	2901.2	2897.1	2852.2	2847.4	2840.5	2837.7	2803.9	2799.1	2832.2	2825.3	2794.9
10°	2866.0	2861.9	2808.7	2805.3	2797.7	2792.2	2760.5	2757.0	2790.8	2779.8	2755.6
12.5°	2819.8	2812.2	2757.7	2754.2	2748.0	2746.0	2714.9	2713.5	2750.8	2739.8	2714.2
15°	2759.1	2752.9	2692.1	2693.5	2694.2	2694.2	2669.4	2668.0	2704.6	2699.7	2672.1
17.5°	2692.1	2683.9	2625.9	2630.1	2634.9	2640.4	2621.1	2624.5	2663.2	2657.0	2632.1
20°	2616.3	2608.0	2551.4	2563.1	2573.5	2584.5	2572.1	2581.8	2617.6	2614.9	2596.2
22.5°	2531.4	2523.1	2470.7	2488.6	2505.9	2526.6	2521.0	2532.1	2570.0	2569.3	2552.8
25°	2427.9	2430.0	2383.7	2405.8	2434.8	2463.8	2465.8	2483.8	2525.9	2521.7	2506.6
27.5°	2331.3	2334.1	2285.1	2322.3	2361.0	2398.2	2407.2	2432.0	2474.8	2471.4	2458.3
30°	2229.9	2233.3	2185.7	2236.8	2283.7	2329.2	2348.6	2382.4	2425.8	2425.8	2412.0
32.5°	2124.3	2130.5	2080.9	2149.2	2203.7	2256.8	2290.6	2325.8	2375.5	2374.1	2362.4
35°	2016.0	2022.9	1977.4	2064.3	2118.8	2183.7	2225.7	2272.7	2316.8	2317.5	2308.5
37.5°	1905.6	1913.9	1872.5	1967.7	2029.8	2106.4	2160.2	2207.1	2256.1	2258.9	2250.6
40°	1795.9	1804.9	1769.0	1860.8	1939.4	2025.0	2087.1	2142.3	2196.1	2197.5	2191.9
42.5°	1686.2	1695.9	1669.0	1758.7	1847.7	1939.4	2012.6	2075.3	2130.5	2134.0	2127.8
45°	1579.3	1587.6	1568.2	1666.2	1751.8	1851.8	1936.0	2007.0	2062.9	2067.8	2065.7
47.5°	1473.0	1480.6	1463.4	1553.1	1651.7	1758.0	1855.2	1933.9	1993.2	1998.8	1997.4
50°	1368.8	1375.1	1356.4	1450.3	1548.2	1661.4	1762.8	1853.9	1920.1	1925.6	1924.9
52.5°	1265.4	1271.6	1255.7	1354.4	1443.4	1562.7	1673.1	1771.8	1837.3	1845.6	1847.0
55°	1165.3	1168.1	1155.6	1250.2	1336.4	1461.3	1588.2	1684.1	1749.7	1756.6	1760.7
57.5°	1065.3	1066.0	1055.6	1146.0	1228.8	1356.4	1489.6	1590.3	1652.4	1659.3	1665.5
60°	965.9	965.2	953.5	1041.1	1120.5	1246.7	1385.4	1485.4	1545.5	1551.7	1560.0
62.5°	867.3	865.2	854.8	935.6	1010.1	1135.0	1274.3	1370.9	1428.2	1432.3	1443.4
65°	769.3	767.2	757.6	832.1	899.7	1019.0	1155.6	1247.4	1299.2	1304.7	1302.6
67.5°	672.7	668.6	661.0	727.9	789.3	899.7	1030.8	1118.4	1161.2	1166.0	1179.1
70°	576.1	571.3	554.0	625.1	678.9	777.6	899.7	977.6	1013.5	1018.4	1016.3
72.5°	480.9	476.1	457.4	523.0	568.5	654.8	763.8	828.6	859.7	863.8	863.8
75°	388.4	385.7	373.9	423.6	461.6	531.9	624.4	678.2	702.4	707.2	705.8
77.5°	299.4	297.4	285.6	328.4	358.1	410.5	485.0	527.1	545.1	550.6	562.3
80°	214.6	213.9	195.3	237.3	250.4	294.6	349.1	381.5	391.2	398.8	407.1
82.5°	137.3	138.0	119.4	155.2	160.8	189.0	222.9	242.9	249.8	256.0	262.2
85°	66.9	69.7	59.3	82.1	82.8	97.3	111.8	119.4	122.1	126.9	132.5
87.5°	17.2	20.0	11.0	23.5	20.7	26.9	31.0	33.1	32.4	35.9	37.9
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8
2.5°	2895.0	2917.1	2906.0	2941.9	2955.7	2933.6	2972.3	2973.0	2945.4	2977.8	2995.7
5°	2850.1	2872.9	2866.0	2903.3	2920.5	2901.2	2948.1	2957.1	2930.2	2966.7	2995.7
7.5°	2804.6	2831.5	2822.5	2860.5	2881.2	2866.0	2916.4	2930.9	2910.2	2950.2	2988.8
10°	2765.3	2788.0	2778.4	2818.4	2836.3	2823.9	2873.6	2900.5	2881.2	2930.2	2976.4
12.5°	2726.6	2745.3	2734.2	2767.4	2784.6	2768.7	2829.4	2854.3	2840.5	2891.5	2950.9
15°	2677.0	2697.7	2682.5	2712.2	2725.3	2711.5	2761.1	2803.9	2786.7	2842.6	2908.1
17.5°	2639.0	2650.8	2630.1	2653.5	2661.1	2642.5	2692.8	2734.9	2722.5	2783.2	2859.1
20°	2596.9	2606.6	2577.6	2590.7	2590.0	2566.6	2612.8	2654.2	2645.9	2712.8	2799.1
22.5°	2550.0	2554.8	2521.0	2523.8	2522.4	2483.8	2525.2	2567.3	2563.8	2631.4	2728.0
25°	2500.3	2501.0	2457.6	2456.2	2441.0	2395.5	2432.0	2479.6	2469.3	2542.4	2643.9
27.5°	2451.4	2444.5	2392.0	2379.6	2355.5	2301.0	2333.4	2376.2	2369.9	2441.7	2554.2
30°	2398.9	2390.0	2325.8	2303.0	2267.8	2205.0	2232.0	2272.0	2275.4	2338.2	2456.2
32.5°	2349.2	2326.5	2255.4	2222.3	2178.1	2105.0	2119.5	2160.2	2165.7	2229.2	2350.6
35°	2285.1	2269.9	2182.3	2125.7	2082.2	2002.2	2017.4	2045.7	2054.0	2116.0	2239.5
37.5°	2224.4	2200.2	2107.1	2038.1	1982.2	1898.0	1902.2	1931.1	1939.4	2002.2	2124.3
40°	2161.6	2127.1	2027.0	1946.3	1882.2	1793.8	1789.0	1819.4	1825.6	1887.0	1997.4
42.5°	2094.7	2053.3	1940.8	1852.5	1778.7	1689.0	1679.3	1705.5	1712.4	1772.5	1880.8
45°	2027.0	1977.4	1852.5	1755.9	1675.2	1583.4	1573.8	1593.8	1604.1	1660.7	1764.9
47.5°	1955.3	1897.3	1761.4	1653.8	1570.3	1478.5	1466.8	1486.8	1495.1	1551.0	1649.6
50°	1880.1	1809.7	1667.6	1548.9	1466.1	1375.7	1358.5	1382.0	1389.5	1442.0	1538.6
52.5°	1797.3	1719.3	1567.5	1443.4	1360.6	1274.3	1253.6	1276.4	1285.4	1336.4	1425.4
55°	1709.7	1625.5	1466.8	1346.1	1256.4	1172.2	1155.0	1163.9	1183.2	1231.5	1314.3
57.5°	1611.0	1527.5	1360.6	1237.8	1151.5	1070.8	1056.3	1064.6	1082.5	1129.4	1203.9
60°	1506.1	1417.8	1252.2	1129.4	1045.9	969.4	956.3	963.8	983.2	1025.9	1094.9
62.5°	1402.6	1303.3	1140.5	1018.4	942.5	871.4	867.9	865.2	883.1	924.5	985.2
65°	1277.1	1181.9	1023.9	908.0	839.0	774.8	761.0	767.2	784.5	822.4	885.9
67.5°	1142.5	1056.3	904.5	797.6	736.2	678.9	667.2	669.9	687.9	721.0	776.2
70°	999.7	923.8	782.4	686.5	634.7	580.9	573.3	574.0	591.3	620.3	668.6
72.5°	850.0	781.7	658.9	576.8	534.0	495.4	488.5	480.2	496.1	520.9	562.3
75°	697.5	637.5	536.1	469.2	435.4	402.9	396.7	388.4	404.3	425.7	458.1
77.5°	543.7	495.4	416.7	365.0	338.8	314.6	309.1	300.1	316.0	331.9	357.4
80°	393.3	358.1	311.2	256.7	247.7	231.8	226.3	216.6	231.8	242.2	261.5
82.5°	253.9	230.4	203.5	165.6	164.2	152.5	149.7	138.7	152.5	158.7	173.2
85°	128.3	117.3	110.4	84.2	86.9	79.3	78.7	66.9	78.0	80.7	89.0
87.5°	36.6	38.6	34.5	20.7	26.2	24.8	24.8	17.9	24.8	24.8	28.3
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: P838015

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5HI-40-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8	2957.8
2.5°	2960.5	2972.3	2975.0	2974.3	2981.9	3023.3	3009.5	3023.3
5°	2967.4	2993.7	3000.6	3010.2	3022.6	3069.5	3054.4	3070.9
7.5°	2971.6	3010.9	3026.1	3044.7	3064.7	3117.1	3104.7	3121.3
10°	2971.6	3022.6	3044.7	3075.8	3102.7	3163.4	3151.6	3171.0
12.5°	2959.2	3024.7	3055.7	3099.2	3133.7	3199.3	3194.4	3208.2
15°	2933.6	3014.3	3057.1	3113.0	3155.8	3228.9	3226.9	3243.4
17.5°	2899.1	2996.4	3048.2	3118.5	3172.3	3254.4	3259.3	3268.2
20°	2855.7	2962.6	3030.2	3116.5	3184.1	3274.5	3280.7	3293.1
22.5°	2798.4	2921.9	3003.3	3107.5	3185.5	3282.7	3293.8	3305.5
25°	2730.8	2872.9	2968.1	3090.2	3178.6	3282.0	3297.2	3307.6
27.5°	2653.5	2809.4	2923.3	3062.6	3159.2	3271.0	3289.6	3302.1
30°	2563.8	2741.8	2872.2	3026.8	3133.0	3250.3	3270.3	3282.7
32.5°	2471.4	2667.3	2811.5	2980.5	3095.1	3217.2	3234.4	3244.1
35°	2370.6	2576.9	2738.4	2921.2	3046.1	3164.1	3177.2	3187.5
37.5°	2260.9	2479.0	2654.9	2854.3	2977.1	3090.2	3102.0	3113.7
40°	2147.8	2376.2	2561.1	2772.2	2895.0	2999.9	3012.3	3020.6
42.5°	2033.9	2262.3	2461.0	2675.6	2797.7	2898.4	2906.0	2914.3
45°	1918.7	2144.3	2348.6	2568.6	2689.4	2783.9	2786.7	2793.6
47.5°	1801.4	2022.2	2225.1	2446.5	2565.9	2652.1	2654.9	2660.4
50°	1683.5	1900.1	2093.3	2314.7	2431.3	2522.4	2510.0	2515.5
52.5°	1567.5	1771.8	1969.1	2172.6	2287.8	2368.6	2372.0	2361.0
55°	1453.7	1646.2	1827.7	2023.6	2133.3	2196.1	2194.0	2198.1
57.5°	1338.5	1519.2	1685.5	1864.9	1971.8	2031.2	2043.6	2029.1
60°	1221.2	1390.9	1539.9	1702.1	1805.6	1855.2	1869.7	1855.9
62.5°	1104.6	1260.5	1395.7	1537.2	1633.1	1694.5	1693.1	1677.9
65°	988.0	1129.4	1250.2	1370.2	1453.7	1515.1	1512.3	1498.6
67.5°	880.4	997.0	1105.3	1202.6	1275.0	1317.1	1331.6	1315.0
70°	761.7	862.4	957.6	1035.6	1095.6	1133.6	1147.4	1132.9
72.5°	643.0	728.6	795.5	870.7	916.9	948.7	963.2	949.4
75°	525.7	596.1	650.6	709.3	741.7	768.6	785.2	771.4
77.5°	411.9	466.4	509.9	552.6	589.9	596.1	610.6	601.6
80°	303.6	342.9	374.6	402.9	429.8	432.6	444.3	438.8
82.5°	202.2	228.4	236.6	266.3	283.6	280.8	292.5	288.4
85°	106.9	122.8	137.3	146.3	155.9	147.0	157.3	153.2
87.5°	35.9	37.9	33.1	46.9	51.7	44.2	50.4	48.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)