

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: P837924

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-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: P837924
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-LD4-5STD-50-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

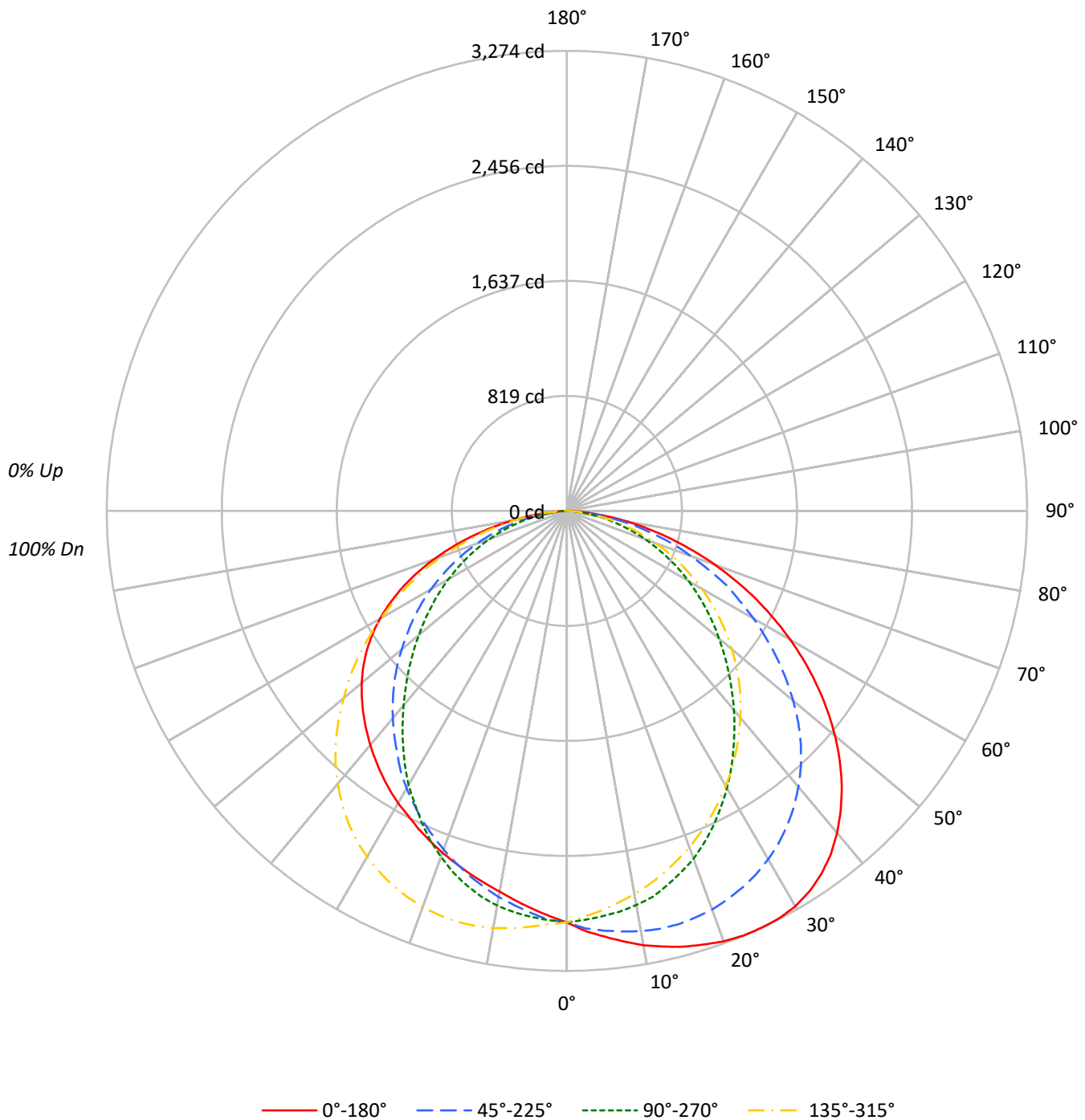
Lumens per Lamp: N/A
Luminaire Lumens: 8590.5 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 83.2
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: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-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°	7879	7879	7879	7879
5°	8212	7823	7675	7836
10°	8578	7782	7519	7794
15°	8945	7684	7446	7685
20°	9336	7544	7413	7501
25°	9722	7333	7412	7258
30°	10098	7078	7462	6999
35°	10366	6787	7537	6680
40°	10504	6495	7642	6348
45°	10524	6199	7790	6043
50°	10425	5916	7981	5759
55°	10209	5652	8158	5496
60°	9888	5378	8267	5238
65°	9446	5062	8224	4945
70°	8824	4692	7932	4605
75°	7939	4183	7279	4161
80°	6732	3504	6118	3556
85°	4681	2319	3881	2384

TEST NUMBER: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.0	3.2
10°-20°	805.0	9.4
20°-30°	1233.7	14.4
30°-40°	1500.1	17.5
40°-50°	1559.5	18.2
50°-60°	1408.7	16.4
60°-70°	1071.0	12.5
70°-80°	597.1	7.0
80°-90°	137.5	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°	2316.7	27.0
0°-40°	3816.9	44.4
0°-60°	6785.0	79.0
0°-90°	8590.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8590.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2928	2928	2928	2928	2928	
5°	3040	2896	2841	2901	3040	293
15°	3211	2758	2673	2759	3211	910
25°	3274	2470	2496	2444	3274	1512
35°	3156	2066	2294	2033	3156	1971
45°	2766	1629	2047	1588	2766	2129
55°	2176	1205	1739	1171	2176	1943
65°	1484	795	1292	777	1484	1466
75°	764	402	700	400	764	811
85°	152	75	126	77	152	191
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0
2.5°	2992.9	2949.2	2949.9	2988.1	2958.8	2973.1	2932.1	2947.8	2943.1	2946.5	2913.0
5°	3040.1	2992.9	2992.2	3025.0	2992.2	2998.4	2946.5	2956.7	2941.7	2932.1	2895.9
7.5°	3089.9	3042.8	3038.0	3066.7	3023.7	3018.9	2961.5	2961.5	2934.2	2910.3	2876.1
10°	3139.1	3090.6	3084.4	3106.3	3053.0	3037.3	2967.7	2956.7	2920.5	2885.0	2848.1
12.5°	3176.0	3126.8	3122.0	3135.7	3075.6	3046.9	2967.7	2946.5	2893.2	2843.3	2814.7
15°	3210.8	3160.3	3147.3	3154.1	3085.1	3046.9	2958.1	2925.3	2857.0	2791.4	2758.0
17.5°	3235.4	3186.9	3173.9	3173.2	3089.9	3035.3	2937.6	2892.5	2810.6	2731.3	2697.9
20°	3260.0	3211.5	3195.1	3182.8	3088.5	3019.6	2907.6	2846.8	2751.1	2662.4	2634.3
22.5°	3272.3	3222.4	3204.7	3186.2	3079.7	2990.9	2870.7	2793.5	2684.2	2578.3	2555.1
25°	3274.3	3223.1	3204.0	3177.3	3061.9	2956.7	2822.9	2729.3	2607.0	2489.6	2469.7
27.5°	3268.9	3212.9	3193.7	3161.6	3035.3	2915.1	2766.2	2656.2	2525.1	2395.3	2374.1
30°	3249.7	3193.0	3174.6	3132.9	2997.7	2863.8	2704.0	2574.9	2434.2	2296.3	2277.8
32.5°	3211.5	3156.2	3141.1	3099.5	2956.7	2804.4	2631.6	2487.5	2333.8	2202.0	2174.7
35°	3155.5	3100.2	3090.6	3046.9	2899.4	2733.4	2552.4	2391.9	2227.3	2092.7	2066.1
37.5°	3082.4	3036.0	3021.6	2978.6	2831.7	2652.8	2461.5	2288.1	2118.7	1973.9	1957.5
40°	2990.2	2946.5	2935.6	2897.3	2753.2	2563.3	2363.2	2180.8	2006.7	1872.1	1848.9
42.5°	2885.0	2844.0	2837.9	2798.3	2656.2	2464.3	2256.6	2069.5	1889.9	1760.1	1736.9
45°	2765.5	2725.9	2724.5	2686.9	2550.3	2354.3	2144.6	1956.8	1775.8	1641.3	1629.0
47.5°	2633.7	2598.1	2598.1	2563.3	2432.2	2233.4	2029.2	1839.3	1661.1	1542.2	1520.4
50°	2490.2	2456.8	2446.5	2429.4	2301.7	2101.6	1907.6	1724.6	1547.7	1434.3	1413.1
52.5°	2337.2	2308.6	2315.4	2284.0	2160.3	1964.3	1784.7	1595.5	1433.6	1330.5	1309.3
55°	2176.1	2135.1	2141.2	2129.6	2012.8	1822.9	1646.7	1489.0	1321.6	1224.6	1204.8
57.5°	2008.7	1955.4	1977.3	1970.5	1855.7	1678.1	1520.4	1368.1	1210.3	1120.8	1101.7
60°	1837.3	1786.1	1808.6	1802.4	1694.5	1533.3	1389.9	1248.5	1099.6	1018.4	999.2
62.5°	1661.1	1613.9	1634.4	1629.6	1530.6	1385.1	1260.1	1130.4	988.3	915.2	897.5
65°	1483.5	1438.4	1456.8	1453.4	1361.9	1251.3	1127.0	1008.1	876.3	812.8	795.0
67.5°	1301.8	1260.1	1277.2	1277.2	1193.2	1087.3	993.1	884.5	766.3	711.7	695.3
70°	1121.5	1082.6	1097.6	1096.2	1025.2	939.1	857.9	760.9	655.0	609.9	596.3
72.5°	939.8	905.7	919.3	918.0	858.5	803.2	722.6	638.6	546.4	510.2	497.9
75°	763.6	731.5	744.5	743.1	694.6	642.7	588.8	519.1	439.9	414.6	402.3
77.5°	595.6	562.8	573.7	573.7	538.2	500.6	457.6	403.7	347.6	320.3	311.5
80°	434.4	418.7	413.2	413.9	390.0	365.4	343.6	291.6	250.7	232.2	226.1
82.5°	285.5	272.5	267.1	268.4	254.8	239.7	226.1	189.9	162.6	151.6	148.2
85°	151.6	142.1	137.3	140.7	138.0	129.8	122.9	98.4	81.3	77.2	75.1
87.5°	47.8	41.7	38.2	50.5	43.0	38.2	36.9	29.4	22.5	22.5	21.9
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: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0
2.5°	2923.9	2923.9	2897.3	2891.2	2888.4	2891.8	2865.2	2860.4	2898.7	2885.7	2856.3
5°	2900.7	2899.4	2861.8	2855.0	2855.0	2850.9	2820.8	2814.0	2852.2	2841.3	2809.2
7.5°	2872.0	2867.9	2823.5	2818.8	2811.9	2809.2	2775.7	2771.0	2803.7	2796.9	2766.9
10°	2837.2	2833.1	2780.5	2777.1	2769.6	2764.1	2732.7	2729.3	2762.8	2751.8	2727.9
12.5°	2791.4	2783.9	2730.0	2726.6	2720.4	2718.4	2687.6	2686.3	2723.1	2712.2	2686.9
15°	2731.3	2725.2	2665.1	2666.5	2667.1	2667.1	2642.5	2641.2	2677.4	2672.6	2645.3
17.5°	2665.1	2656.9	2599.5	2603.6	2608.4	2613.9	2594.7	2598.1	2636.4	2630.3	2605.7
20°	2590.0	2581.8	2525.8	2537.4	2547.6	2558.5	2546.2	2555.8	2591.3	2588.6	2570.1
22.5°	2505.9	2497.7	2445.8	2463.6	2480.7	2501.2	2495.7	2506.6	2544.2	2543.5	2527.1
25°	2403.5	2405.5	2359.8	2381.6	2410.3	2439.0	2441.1	2458.8	2500.5	2496.4	2481.4
27.5°	2307.9	2310.6	2262.1	2299.0	2337.2	2374.1	2383.0	2407.6	2449.9	2446.5	2433.5
30°	2207.5	2210.9	2163.8	2214.3	2260.7	2305.8	2324.9	2358.4	2401.4	2401.4	2387.8
32.5°	2103.0	2109.1	2059.9	2127.6	2181.5	2234.1	2267.6	2302.4	2351.6	2350.2	2338.6
35°	1995.7	2002.6	1957.5	2043.6	2097.5	2161.7	2203.4	2249.8	2293.5	2294.2	2285.3
37.5°	1886.5	1894.7	1853.7	1947.9	2009.4	2085.2	2138.5	2184.9	2233.4	2236.2	2228.0
40°	1777.9	1786.7	1751.2	1842.1	1919.9	2004.6	2066.1	2120.7	2174.0	2175.4	2169.9
42.5°	1669.3	1678.8	1652.2	1741.0	1829.1	1919.9	1992.3	2054.5	2109.1	2112.5	2106.4
45°	1563.4	1571.6	1552.5	1649.5	1734.1	1833.2	1916.5	1986.9	2042.2	2047.0	2044.9
47.5°	1458.2	1465.7	1448.7	1537.4	1635.1	1740.3	1836.6	1914.5	1973.2	1978.7	1977.3
50°	1355.1	1361.2	1342.8	1435.7	1532.7	1644.7	1745.1	1835.2	1900.8	1906.3	1905.6
52.5°	1252.6	1258.8	1243.1	1340.7	1428.8	1547.0	1656.3	1754.0	1818.8	1827.0	1828.4
55°	1153.6	1156.3	1144.0	1237.6	1323.0	1446.6	1572.3	1667.2	1732.1	1738.9	1743.0
57.5°	1054.6	1055.2	1045.0	1134.5	1216.4	1342.8	1474.6	1574.3	1635.8	1642.6	1648.8
60°	956.2	955.5	943.9	1030.7	1109.2	1234.2	1371.5	1470.5	1529.9	1536.1	1544.3
62.5°	858.5	856.5	846.2	926.2	999.9	1123.5	1261.5	1357.1	1413.8	1417.9	1428.8
65°	761.6	759.5	749.9	823.7	890.6	1008.8	1144.0	1234.9	1286.1	1291.6	1289.5
67.5°	665.9	661.8	654.3	720.6	781.4	890.6	1020.4	1107.2	1149.5	1154.3	1167.3
70°	570.3	565.5	548.5	618.8	672.1	769.7	890.6	967.8	1003.3	1008.1	1006.1
72.5°	476.1	471.3	452.8	517.7	562.8	648.2	756.1	820.3	851.0	855.1	855.1
75°	384.5	381.8	370.2	419.4	456.9	526.6	618.1	671.4	695.3	700.1	698.7
77.5°	296.4	294.4	282.8	325.1	354.5	406.4	480.2	521.8	539.6	545.0	556.6
80°	212.4	211.7	193.3	235.0	247.9	291.6	345.6	377.7	387.3	394.8	403.0
82.5°	135.9	136.6	118.2	153.7	159.1	187.1	220.6	240.4	247.2	253.4	259.5
85°	66.3	69.0	58.7	81.3	82.0	96.3	110.6	118.2	120.9	125.7	131.1
87.5°	17.1	19.8	10.9	23.2	20.5	26.6	30.7	32.8	32.1	35.5	37.6
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: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0
2.5°	2865.9	2887.7	2876.8	2912.3	2926.0	2904.1	2942.4	2943.1	2915.7	2947.8	2965.6
5°	2821.5	2844.0	2837.2	2874.1	2891.2	2872.0	2918.5	2927.4	2900.7	2936.9	2965.6
7.5°	2776.4	2803.1	2794.2	2831.7	2852.2	2837.2	2887.1	2901.4	2880.9	2920.5	2958.8
10°	2737.5	2760.0	2750.5	2790.1	2807.8	2795.5	2844.7	2871.4	2852.2	2900.7	2946.5
12.5°	2699.2	2717.7	2706.7	2739.5	2756.6	2740.9	2801.0	2825.6	2811.9	2862.5	2921.2
15°	2650.1	2670.5	2655.5	2684.9	2697.9	2684.2	2733.4	2775.7	2758.7	2814.0	2878.9
17.5°	2612.5	2624.1	2603.6	2626.8	2634.3	2615.9	2665.8	2707.4	2695.1	2755.2	2830.4
20°	2570.8	2580.4	2551.7	2564.7	2564.0	2540.8	2586.5	2627.5	2619.3	2685.6	2771.0
22.5°	2524.4	2529.2	2495.7	2498.4	2497.1	2458.8	2499.8	2541.5	2538.0	2605.0	2700.6
25°	2475.2	2475.9	2432.9	2431.5	2416.5	2371.4	2407.6	2454.7	2444.5	2516.9	2617.3
27.5°	2426.7	2419.9	2368.0	2355.7	2331.8	2277.8	2309.9	2352.3	2346.1	2417.2	2528.5
30°	2374.8	2365.9	2302.4	2279.9	2245.0	2182.9	2209.5	2249.1	2252.5	2314.7	2431.5
32.5°	2325.6	2303.1	2232.7	2200.0	2156.2	2083.8	2098.2	2138.5	2144.0	2206.8	2327.0
35°	2262.1	2247.1	2160.3	2104.3	2061.3	1982.1	1997.1	2025.1	2033.3	2094.8	2217.0
37.5°	2202.0	2178.1	2085.9	2017.6	1962.3	1878.9	1883.0	1911.7	1919.9	1982.1	2103.0
40°	2139.9	2105.7	2006.7	1926.8	1863.2	1775.8	1771.0	1801.1	1807.2	1868.0	1977.3
42.5°	2073.6	2032.6	1921.3	1833.9	1760.8	1672.0	1662.4	1688.4	1695.2	1754.6	1861.9
45°	2006.7	1957.5	1833.9	1738.2	1658.3	1567.5	1557.9	1577.7	1588.0	1644.0	1747.1
47.5°	1935.6	1878.3	1743.7	1637.2	1554.5	1463.7	1452.1	1471.9	1480.1	1535.4	1633.1
50°	1861.2	1791.5	1650.8	1533.3	1451.4	1361.9	1344.8	1368.1	1375.6	1427.5	1523.1
52.5°	1779.2	1702.0	1551.8	1428.8	1346.9	1261.5	1241.0	1263.6	1272.4	1323.0	1411.1
55°	1692.5	1609.2	1452.1	1332.5	1243.8	1160.4	1143.3	1152.2	1171.4	1219.2	1301.1
57.5°	1594.8	1512.2	1346.9	1225.3	1139.9	1060.0	1045.7	1053.9	1071.6	1118.1	1191.8
60°	1491.0	1403.6	1239.7	1118.1	1035.4	959.6	946.6	954.2	973.3	1015.6	1083.9
62.5°	1388.5	1290.2	1129.0	1008.1	933.0	862.6	859.2	856.5	874.2	915.2	975.3
65°	1264.2	1170.0	1013.6	898.8	830.5	767.0	753.4	759.5	776.6	814.1	877.0
67.5°	1131.1	1045.7	895.4	789.6	728.8	672.1	660.5	663.2	681.0	713.7	768.4
70°	989.7	914.5	774.5	679.6	628.4	575.1	567.6	568.3	585.3	614.0	661.8
72.5°	841.5	773.8	652.3	571.0	528.6	490.4	483.6	475.4	491.1	515.7	556.6
75°	690.5	631.1	530.7	464.4	431.0	398.9	392.7	384.5	400.2	421.4	453.5
77.5°	538.2	490.4	412.5	361.3	335.4	311.5	306.0	297.1	312.8	328.5	353.8
80°	389.3	354.5	308.0	254.1	245.2	229.5	224.0	214.5	229.5	239.7	258.9
82.5°	251.3	228.1	201.5	163.9	162.6	150.9	148.2	137.3	150.9	157.1	171.4
85°	127.0	116.1	109.3	83.3	86.1	78.5	77.9	66.3	77.2	79.9	88.1
87.5°	36.2	38.2	34.2	20.5	26.0	24.6	24.6	17.8	24.6	24.6	28.0
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: P837924

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5STD-50-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0	2928.0
2.5°	2930.8	2942.4	2945.1	2944.4	2951.9	2992.9	2979.3	2992.9
5°	2937.6	2963.6	2970.4	2979.9	2992.2	3038.7	3023.7	3040.1
7.5°	2941.7	2980.6	2995.7	3014.1	3033.9	3085.8	3073.5	3089.9
10°	2941.7	2992.2	3014.1	3044.8	3071.5	3131.6	3120.0	3139.1
12.5°	2929.4	2994.3	3025.0	3068.1	3102.2	3167.1	3162.3	3176.0
15°	2904.1	2984.0	3026.4	3081.7	3124.1	3196.5	3194.4	3210.8
17.5°	2870.0	2966.3	3017.5	3087.2	3140.5	3221.7	3226.5	3235.4
20°	2827.0	2932.8	2999.8	3085.1	3152.1	3241.5	3247.7	3260.0
22.5°	2770.3	2892.5	2973.1	3076.3	3153.4	3249.7	3260.7	3272.3
25°	2703.3	2844.0	2938.3	3059.2	3146.6	3249.1	3264.1	3274.3
27.5°	2626.8	2781.2	2893.9	3031.9	3127.5	3238.1	3256.6	3268.9
30°	2538.0	2714.3	2843.3	2996.3	3101.5	3217.6	3237.4	3249.7
32.5°	2446.5	2640.5	2783.2	2950.6	3064.0	3184.9	3201.9	3211.5
35°	2346.8	2551.0	2710.8	2891.8	3015.5	3132.3	3145.2	3155.5
37.5°	2238.2	2454.0	2628.2	2825.6	2947.2	3059.2	3070.8	3082.4
40°	2126.2	2352.3	2535.3	2744.3	2865.9	2969.7	2982.0	2990.2
42.5°	2013.5	2239.6	2436.3	2648.7	2769.6	2869.3	2876.8	2885.0
45°	1899.4	2122.8	2324.9	2542.8	2662.4	2755.9	2758.7	2765.5
47.5°	1783.3	2001.9	2202.7	2421.9	2540.1	2625.5	2628.2	2633.7
50°	1666.5	1881.0	2072.2	2291.5	2406.9	2497.1	2484.8	2490.2
52.5°	1551.8	1754.0	1949.3	2150.8	2264.8	2344.8	2348.2	2337.2
55°	1439.1	1629.6	1809.3	2003.3	2111.9	2174.0	2172.0	2176.1
57.5°	1325.0	1504.0	1668.6	1846.2	1952.0	2010.8	2023.1	2008.7
60°	1208.9	1376.9	1524.5	1685.0	1787.4	1836.6	1850.9	1837.3
62.5°	1093.5	1247.8	1381.7	1521.7	1616.7	1677.5	1676.1	1661.1
65°	978.1	1118.1	1237.6	1356.4	1439.1	1499.9	1497.1	1483.5
67.5°	871.5	986.9	1094.2	1190.5	1262.2	1303.9	1318.2	1301.8
70°	754.0	853.8	948.0	1025.2	1084.6	1122.2	1135.8	1121.5
72.5°	636.6	721.3	787.5	862.0	907.7	939.1	953.5	939.8
75°	520.4	590.1	644.1	702.1	734.2	760.9	777.3	763.6
77.5°	407.8	461.7	504.7	547.1	584.0	590.1	604.5	595.6
80°	300.5	339.5	370.9	398.9	425.5	428.2	439.9	434.4
82.5°	200.1	226.1	234.3	263.6	280.7	278.0	289.6	285.5
85°	105.9	121.6	135.9	144.8	154.4	145.5	155.7	151.6
87.5°	35.5	37.6	32.8	46.4	51.2	43.7	49.9	47.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)