

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: P838188

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-3STD-30-120-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: P838188
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-3STD-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

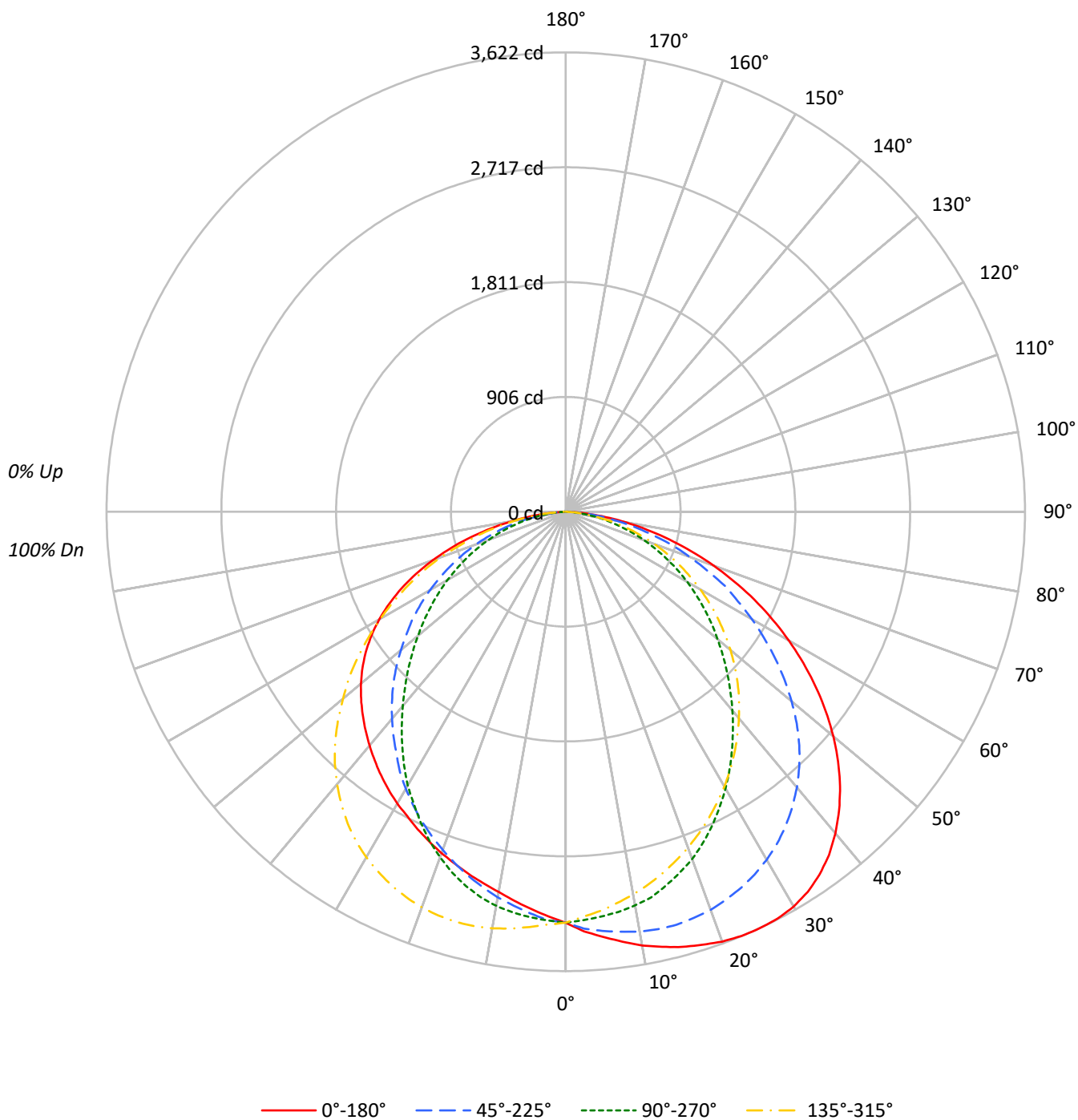
Lumens per Lamp: N/A
Luminaire Lumens: 9504.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	4359	4359	4359	4359
5°	4543	4327	4246	4334
10°	4745	4305	4160	4311
15°	4948	4250	4119	4251
20°	5164	4173	4101	4149
25°	5378	4056	4100	4015
30°	5586	3915	4128	3872
35°	5734	3755	4169	3695
40°	5811	3593	4227	3512
45°	5822	3429	4309	3343
50°	5767	3273	4415	3186
55°	5647	3127	4513	3040
60°	5470	2975	4573	2898
65°	5225	2800	4549	2735
70°	4881	2595	4388	2548
75°	4392	2314	4026	2302
80°	3724	1938	3384	1967
85°	2590	1283	2146	1318

Classified

Scaled Data Report

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Peachtree City, GA 30269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.6	3.2
10°-20°	890.6	9.4
20°-30°	1364.9	14.4
30°-40°	1659.7	17.5
40°-50°	1725.3	18.2
50°-60°	1558.5	16.4
60°-70°	1184.9	12.5
70°-80°	660.5	7.0
80°-90°	152.1	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°	2563.1	27.0
0°-40°	4222.8	44.4
0°-60°	7506.6	79.0
0°-90°	9504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9504.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3239	3239	3239	3239	3239	
5°	3363	3204	3144	3209	3363	324
15°	3552	3051	2957	3052	3552	1007
25°	3622	2732	2762	2704	3622	1673
35°	3491	2286	2538	2250	3491	2180
45°	3060	1802	2265	1757	3060	2356
55°	2408	1333	1924	1296	2408	2149
65°	1641	880	1429	859	1641	1622
75°	845	445	774	443	845	897
85°	168	83	139	85	168	211
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°	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4
2.5°	3311.2	3262.9	3263.6	3305.9	3273.4	3289.3	3244.0	3261.3	3256.1	3259.8	3222.8
5°	3363.4	3311.2	3310.5	3346.7	3310.5	3317.3	3259.8	3271.2	3254.5	3244.0	3203.9
7.5°	3418.5	3366.4	3361.1	3392.8	3345.2	3339.9	3276.5	3276.5	3246.2	3219.8	3182.0
10°	3472.9	3419.3	3412.5	3436.7	3377.7	3360.3	3283.3	3271.2	3231.1	3191.8	3151.0
12.5°	3513.7	3459.3	3454.0	3469.1	3402.6	3370.9	3283.3	3259.8	3200.9	3145.7	3114.0
15°	3552.3	3496.3	3482.0	3489.5	3413.2	3370.9	3272.7	3236.4	3160.8	3088.3	3051.3
17.5°	3579.5	3525.8	3511.5	3510.7	3418.5	3358.1	3250.0	3200.1	3109.5	3021.8	2984.8
20°	3606.7	3553.0	3534.9	3521.3	3417.0	3340.7	3216.8	3149.5	3043.7	2945.5	2914.5
22.5°	3620.3	3565.1	3545.5	3525.1	3407.2	3308.9	3176.0	3090.6	2969.7	2852.5	2826.9
25°	3622.5	3565.9	3544.7	3515.2	3387.5	3271.2	3123.1	3019.5	2884.3	2754.3	2732.4
27.5°	3616.5	3554.5	3533.4	3497.9	3358.1	3225.1	3060.3	2938.7	2793.6	2650.0	2626.6
30°	3595.3	3532.6	3512.2	3466.1	3316.5	3168.4	2991.6	2848.8	2693.1	2540.5	2520.1
32.5°	3553.0	3491.8	3475.2	3429.1	3271.2	3102.7	2911.5	2752.0	2582.0	2436.2	2406.0
35°	3491.1	3429.9	3419.3	3370.9	3207.7	3024.1	2823.8	2646.3	2464.1	2315.3	2285.8
37.5°	3410.2	3358.8	3343.0	3295.3	3132.9	2934.9	2723.3	2531.4	2344.0	2183.8	2165.7
40°	3308.2	3259.8	3247.7	3205.4	3046.0	2835.9	2614.5	2412.8	2220.1	2071.2	2045.5
42.5°	3191.8	3146.5	3139.7	3095.9	2938.7	2726.4	2496.6	2289.6	2090.9	1947.3	1921.6
45°	3059.6	3015.8	3014.2	2972.7	2821.6	2604.7	2372.7	2164.9	1964.7	1815.8	1802.2
47.5°	2913.7	2874.5	2874.5	2835.9	2690.8	2470.9	2245.0	2034.9	1837.7	1706.2	1682.1
50°	2755.1	2718.0	2706.7	2687.8	2546.5	2325.1	2110.5	1908.0	1712.3	1586.8	1563.4
52.5°	2585.8	2554.1	2561.6	2526.9	2390.1	2173.2	1974.5	1765.2	1586.1	1472.0	1448.6
55°	2407.5	2362.1	2368.9	2356.1	2226.9	2016.8	1821.8	1647.3	1462.2	1354.9	1332.9
57.5°	2222.3	2163.4	2187.6	2180.0	2053.1	1856.6	1682.1	1513.5	1339.0	1240.0	1218.8
60°	2032.7	1976.0	2000.9	1994.1	1874.7	1696.4	1537.7	1381.3	1216.6	1126.7	1105.5
62.5°	1837.7	1785.6	1808.2	1803.0	1693.4	1532.4	1394.2	1250.6	1093.4	1012.6	992.9
65°	1641.3	1591.4	1611.8	1608.0	1506.7	1384.3	1246.8	1115.3	969.5	899.2	879.6
67.5°	1440.3	1394.2	1413.0	1413.0	1320.1	1203.0	1098.7	978.6	847.8	787.4	769.2
70°	1240.8	1197.7	1214.3	1212.8	1134.2	1039.0	949.1	841.8	724.7	674.8	659.7
72.5°	1039.8	1002.0	1017.1	1015.6	949.8	888.6	799.5	706.5	604.5	564.5	550.9
75°	844.8	809.3	823.6	822.1	768.5	711.1	651.4	574.3	486.6	458.7	445.1
77.5°	658.9	622.6	634.7	634.7	595.4	553.9	506.3	446.6	384.6	354.4	344.6
80°	480.6	463.2	457.2	457.9	431.5	404.3	380.1	322.7	277.3	256.9	250.1
82.5°	315.9	301.5	295.5	297.0	281.9	265.2	250.1	210.1	179.8	167.8	164.0
85°	167.8	157.2	151.9	155.7	152.6	143.6	136.0	108.8	89.9	85.4	83.1
87.5°	52.9	46.1	42.3	55.9	47.6	42.3	40.8	32.5	24.9	24.9	24.2
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°	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4
2.5°	3234.9	3234.9	3205.4	3198.6	3195.6	3199.4	3169.9	3164.6	3206.9	3192.6	3160.1
5°	3209.2	3207.7	3166.1	3158.6	3158.6	3154.0	3120.8	3113.2	3155.6	3143.5	3107.9
7.5°	3177.5	3172.9	3123.8	3118.5	3111.0	3107.9	3070.9	3065.6	3101.9	3094.3	3061.1
10°	3138.9	3134.4	3076.2	3072.4	3064.1	3058.1	3023.3	3019.5	3056.6	3044.5	3018.0
12.5°	3088.3	3080.0	3020.3	3016.5	3009.7	3007.4	2973.4	2971.9	3012.7	3000.6	2972.7
15°	3021.8	3015.0	2948.5	2950.0	2950.8	2950.8	2923.6	2922.1	2962.1	2956.8	2926.6
17.5°	2948.5	2939.4	2876.0	2880.5	2885.8	2891.8	2870.7	2874.5	2916.8	2910.0	2882.8
20°	2865.4	2856.3	2794.4	2807.2	2818.5	2830.6	2817.0	2827.6	2866.9	2863.9	2843.5
22.5°	2772.4	2763.4	2705.9	2725.6	2744.5	2767.2	2761.1	2773.2	2814.8	2814.0	2795.9
25°	2659.1	2661.4	2610.7	2634.9	2666.7	2698.4	2700.7	2720.3	2766.4	2761.9	2745.2
27.5°	2553.3	2556.3	2502.7	2543.5	2585.8	2626.6	2636.4	2663.6	2710.5	2706.7	2692.3
30°	2442.2	2446.0	2393.9	2449.8	2501.2	2551.0	2572.2	2609.2	2656.8	2656.8	2641.7
32.5°	2326.6	2333.4	2279.0	2353.8	2413.5	2471.7	2508.7	2547.3	2601.7	2600.2	2587.3
35°	2208.0	2215.5	2165.7	2260.9	2320.6	2391.6	2437.7	2489.1	2537.4	2538.2	2528.4
37.5°	2087.1	2096.1	2050.8	2155.1	2223.1	2307.0	2365.9	2417.3	2470.9	2474.0	2464.9
40°	1966.9	1976.8	1937.5	2038.0	2124.1	2217.8	2285.8	2346.3	2405.2	2406.7	2400.7
42.5°	1846.8	1857.4	1827.9	1926.1	2023.6	2124.1	2204.2	2273.0	2333.4	2337.2	2330.4
45°	1729.7	1738.7	1717.6	1824.9	1918.6	2028.1	2120.3	2198.2	2259.4	2264.7	2262.4
47.5°	1613.3	1621.6	1602.7	1700.9	1809.0	1925.4	2031.9	2118.1	2183.0	2189.1	2187.6
50°	1499.2	1506.0	1485.6	1588.4	1695.7	1819.6	1930.7	2030.4	2102.9	2109.0	2108.2
52.5°	1385.8	1392.6	1375.3	1483.3	1580.8	1711.5	1832.4	1940.5	2012.3	2021.3	2022.8
55°	1276.3	1279.3	1265.7	1369.2	1463.7	1600.4	1739.5	1844.5	1916.3	1923.9	1928.4
57.5°	1166.7	1167.5	1156.1	1255.1	1345.8	1485.6	1631.4	1741.8	1809.8	1817.3	1824.1
60°	1057.9	1057.1	1044.3	1140.3	1227.2	1365.4	1517.3	1626.9	1692.6	1699.4	1708.5
62.5°	949.8	947.6	936.2	1024.6	1106.3	1243.0	1395.7	1501.5	1564.2	1568.7	1580.8
65°	842.5	840.3	829.7	911.3	985.4	1116.1	1265.7	1366.2	1422.9	1428.9	1426.6
67.5°	736.7	732.2	723.9	797.2	864.5	985.4	1128.9	1224.9	1271.7	1277.0	1291.4
70°	631.0	625.7	606.8	684.6	743.6	851.6	985.4	1070.7	1110.0	1115.3	1113.1
72.5°	526.7	521.4	501.0	572.8	622.6	717.1	836.5	907.5	941.5	946.1	946.1
75°	425.4	422.4	409.6	464.0	505.5	582.6	683.9	742.8	769.2	774.5	773.0
77.5°	327.9	325.7	312.8	359.7	392.2	449.6	531.2	577.3	597.0	603.0	615.8
80°	235.0	234.2	213.8	259.9	274.3	322.7	382.4	417.9	428.4	436.8	445.8
82.5°	150.4	151.1	130.7	170.0	176.1	207.0	244.1	266.0	273.5	280.3	287.1
85°	73.3	76.3	65.0	89.9	90.7	106.5	122.4	130.7	133.7	139.0	145.1
87.5°	18.9	21.9	12.1	25.7	22.7	29.5	34.0	36.3	35.5	39.3	41.6
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4
2.5°	3170.7	3194.8	3182.8	3222.1	3237.2	3213.0	3255.3	3256.1	3225.8	3261.3	3281.0
5°	3121.6	3146.5	3138.9	3179.7	3198.6	3177.5	3228.9	3238.7	3209.2	3249.3	3281.0
7.5°	3071.7	3101.1	3091.3	3132.9	3155.6	3138.9	3194.1	3210.0	3187.3	3231.1	3273.4
10°	3028.6	3053.5	3043.0	3086.8	3106.4	3092.8	3147.2	3176.7	3155.6	3209.2	3259.8
12.5°	2986.3	3006.7	2994.6	3030.9	3049.8	3032.4	3098.9	3126.1	3111.0	3166.9	3231.9
15°	2931.9	2954.6	2937.9	2970.4	2984.8	2969.7	3024.1	3070.9	3052.0	3113.2	3185.0
17.5°	2890.3	2903.2	2880.5	2906.2	2914.5	2894.1	2949.3	2995.4	2981.8	3048.3	3131.4
20°	2844.2	2854.8	2823.1	2837.4	2836.7	2811.0	2861.6	2906.9	2897.9	2971.2	3065.6
22.5°	2792.8	2798.1	2761.1	2764.1	2762.6	2720.3	2765.6	2811.7	2808.0	2882.0	2987.8
25°	2738.4	2739.2	2691.6	2690.1	2673.5	2623.6	2663.6	2715.8	2704.4	2784.5	2895.6
27.5°	2684.8	2677.2	2619.8	2606.2	2579.8	2520.1	2555.6	2602.4	2595.6	2674.2	2797.4
30°	2627.4	2617.5	2547.3	2522.3	2483.8	2415.0	2444.5	2488.3	2492.1	2560.9	2690.1
32.5°	2573.0	2548.0	2470.2	2433.9	2385.6	2305.5	2321.3	2365.9	2372.0	2441.5	2574.5
35°	2502.7	2486.1	2390.1	2328.1	2280.5	2192.9	2209.5	2240.5	2249.5	2317.5	2452.8
37.5°	2436.2	2409.7	2307.7	2232.2	2171.0	2078.8	2083.3	2115.0	2124.1	2192.9	2326.6
40°	2367.4	2329.6	2220.1	2131.7	2061.4	1964.7	1959.4	1992.6	1999.4	2066.7	2187.6
42.5°	2294.1	2248.8	2125.6	2028.9	1948.0	1849.8	1839.2	1867.9	1875.5	1941.2	2059.9
45°	2220.1	2165.7	2028.9	1923.1	1834.7	1734.2	1723.6	1745.5	1756.9	1818.8	1932.9
47.5°	2141.5	2078.0	1929.1	1811.3	1719.8	1619.3	1606.5	1628.4	1637.5	1698.7	1806.7
50°	2059.1	1982.0	1826.4	1696.4	1605.7	1506.7	1487.9	1513.5	1521.9	1579.3	1685.1
52.5°	1968.4	1883.1	1716.8	1580.8	1490.1	1395.7	1373.0	1397.9	1407.8	1463.7	1561.2
55°	1872.5	1780.3	1606.5	1474.3	1376.0	1283.8	1264.9	1274.8	1295.9	1348.8	1439.5
57.5°	1764.4	1673.0	1490.1	1355.6	1261.2	1172.8	1156.9	1166.0	1185.6	1237.0	1318.6
60°	1649.6	1552.8	1371.5	1237.0	1145.6	1061.7	1047.3	1055.6	1076.8	1123.6	1199.2
62.5°	1536.2	1427.4	1249.1	1115.3	1032.2	954.4	950.6	947.6	967.2	1012.6	1079.1
65°	1398.7	1294.4	1121.4	994.4	918.9	848.6	833.5	840.3	859.2	900.7	970.2
67.5°	1251.3	1156.9	990.6	873.5	806.3	743.6	730.7	733.7	753.4	789.6	850.1
70°	1094.9	1011.8	856.9	751.9	695.2	636.2	627.9	628.7	647.6	679.3	732.2
72.5°	930.9	856.1	721.6	631.7	584.9	542.5	535.0	525.9	543.3	570.5	615.8
75°	764.0	698.2	587.1	513.8	476.8	441.3	434.5	425.4	442.8	466.2	501.7
77.5°	595.4	542.5	456.4	399.7	371.0	344.6	338.5	328.7	346.1	363.5	391.4
80°	430.7	392.2	340.8	281.1	271.3	253.9	247.9	237.3	253.9	265.2	286.4
82.5°	278.1	252.4	222.9	181.4	179.8	167.0	164.0	151.9	167.0	173.8	189.7
85°	140.5	128.5	120.9	92.2	95.2	86.9	86.1	73.3	85.4	88.4	97.5
87.5°	40.0	42.3	37.8	22.7	28.7	27.2	27.2	19.6	27.2	27.2	31.0
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: P838188

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-3STD-30-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4	3239.4
2.5°	3242.5	3255.3	3258.3	3257.6	3265.9	3311.2	3296.1	3311.2
5°	3250.0	3278.7	3286.3	3296.9	3310.5	3361.8	3345.2	3363.4
7.5°	3254.5	3297.6	3314.2	3334.6	3356.6	3414.0	3400.4	3418.5
10°	3254.5	3310.5	3334.6	3368.6	3398.1	3464.6	3451.8	3472.9
12.5°	3240.9	3312.7	3346.7	3394.3	3432.1	3503.9	3498.6	3513.7
15°	3213.0	3301.4	3348.2	3409.4	3456.3	3536.4	3534.1	3552.3
17.5°	3175.2	3281.7	3338.4	3415.5	3474.4	3564.4	3569.6	3579.5
20°	3127.6	3244.7	3318.8	3413.2	3487.3	3586.3	3593.1	3606.7
22.5°	3064.9	3200.1	3289.3	3403.4	3488.8	3595.3	3607.4	3620.3
25°	2990.8	3146.5	3250.8	3384.5	3481.2	3594.6	3611.2	3622.5
27.5°	2906.2	3077.0	3201.6	3354.3	3460.1	3582.5	3602.9	3616.5
30°	2808.0	3002.9	3145.7	3315.0	3431.4	3559.8	3581.7	3595.3
32.5°	2706.7	2921.3	3079.2	3264.4	3389.8	3523.6	3542.4	3553.0
35°	2596.4	2822.3	2999.1	3199.4	3336.2	3465.4	3479.7	3491.1
37.5°	2476.2	2715.0	2907.7	3126.1	3260.6	3384.5	3397.4	3410.2
40°	2352.3	2602.4	2804.9	3036.2	3170.7	3285.5	3299.1	3308.2
42.5°	2227.6	2477.7	2695.4	2930.4	3064.1	3174.4	3182.8	3191.8
45°	2101.4	2348.5	2572.2	2813.2	2945.5	3049.0	3052.0	3059.6
47.5°	1973.0	2214.8	2436.9	2679.5	2810.2	2904.7	2907.7	2913.7
50°	1843.8	2081.0	2292.6	2535.2	2662.9	2762.6	2749.0	2755.1
52.5°	1716.8	1940.5	2156.6	2379.5	2505.7	2594.1	2597.9	2585.8
55°	1592.1	1803.0	2001.7	2216.3	2336.4	2405.2	2402.9	2407.5
57.5°	1465.9	1663.9	1846.0	2042.5	2159.6	2224.6	2238.2	2222.3
60°	1337.5	1523.4	1686.6	1864.2	1977.5	2031.9	2047.8	2032.7
62.5°	1209.8	1380.6	1528.7	1683.6	1788.6	1855.9	1854.3	1837.7
65°	1082.1	1237.0	1369.2	1500.7	1592.1	1659.4	1656.4	1641.3
67.5°	964.2	1091.9	1210.5	1317.1	1396.4	1442.5	1458.4	1440.3
70°	834.2	944.6	1048.8	1134.2	1200.0	1241.5	1256.6	1240.8
72.5°	704.3	798.0	871.3	953.6	1004.2	1039.0	1054.9	1039.8
75°	575.8	652.9	712.6	776.8	812.3	841.8	859.9	844.8
77.5°	451.1	510.8	558.4	605.3	646.1	652.9	668.7	658.9
80°	332.5	375.6	410.3	441.3	470.8	473.8	486.6	480.6
82.5°	221.4	250.1	259.2	291.7	310.6	307.5	320.4	315.9
85°	117.1	134.5	150.4	160.2	170.8	161.0	172.3	167.8
87.5°	39.3	41.6	36.3	51.4	56.7	48.4	55.2	52.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)