

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: P838096

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-2HI-35-120-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: P838096
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-LD4-2HI-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

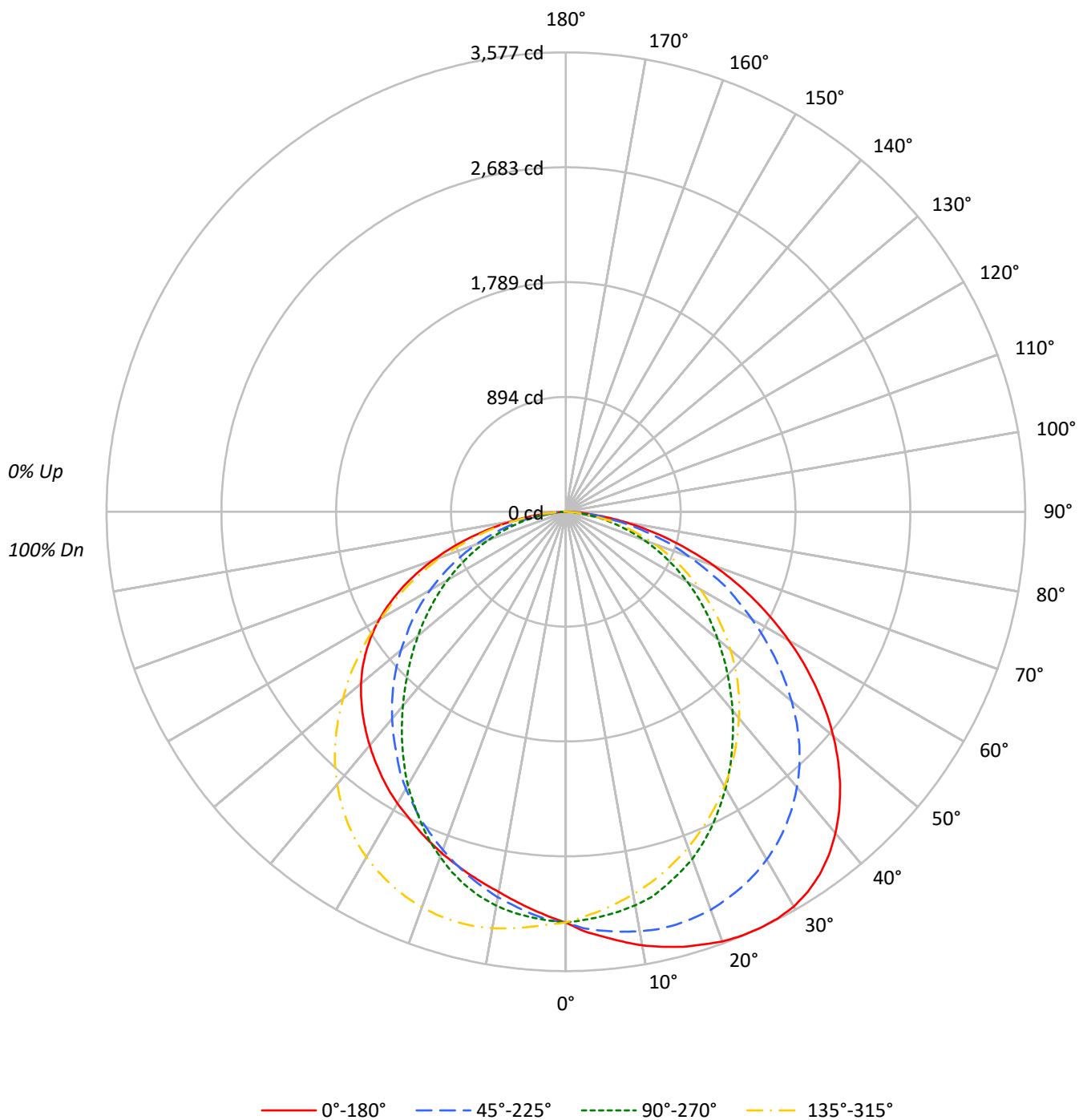
Lumens per Lamp: N/A
Luminaire Lumens: 9383.6 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	4303	4303	4303	4303
5°	4485	4272	4192	4279
10°	4685	4251	4107	4257
15°	4885	4196	4066	4197
20°	5099	4120	4049	4097
25°	5310	4005	4048	3964
30°	5515	3866	4076	3823
35°	5662	3707	4116	3648
40°	5737	3547	4174	3467
45°	5748	3386	4254	3301
50°	5694	3231	4359	3145
55°	5576	3087	4456	3001
60°	5401	2937	4515	2861
65°	5159	2765	4492	2701
70°	4819	2562	4332	2515
75°	4336	2284	3975	2273
80°	3677	1913	3341	1943
85°	2556	1267	2120	1301

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.7	3.2
10°-20°	879.3	9.4
20°-30°	1347.6	14.4
30°-40°	1638.6	17.5
40°-50°	1703.4	18.2
50°-60°	1538.7	16.4
60°-70°	1169.8	12.5
70°-80°	652.2	7.0
80°-90°	150.2	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°	2530.6	27.0
0°-40°	4169.3	44.4
0°-60°	7411.4	79.0
0°-90°	9383.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9383.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3198	3198	3198	3198	3198	
5°	3321	3163	3104	3168	3321	320
15°	3507	3013	2919	3013	3507	994
25°	3577	2698	2727	2670	3577	1652
35°	3447	2257	2506	2221	3447	2153
45°	3021	1779	2236	1735	3021	2326
55°	2377	1316	1900	1280	2377	2122
65°	1620	868	1411	848	1620	1601
75°	834	439	765	437	834	886
85°	166	82	137	84	166	209
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°	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4
2.5°	3269.2	3221.5	3222.2	3264.0	3231.9	3247.6	3202.8	3220.0	3214.8	3218.5	3182.0
5°	3320.7	3269.2	3268.5	3304.3	3268.5	3275.2	3218.5	3229.7	3213.3	3202.8	3163.3
7.5°	3375.2	3323.7	3318.5	3349.8	3302.8	3297.6	3234.9	3234.9	3205.1	3179.0	3141.7
10°	3428.9	3375.9	3369.2	3393.1	3334.9	3317.7	3241.6	3229.7	3190.2	3151.4	3111.1
12.5°	3469.2	3415.5	3410.3	3425.2	3359.5	3328.2	3241.6	3218.5	3160.3	3105.9	3074.5
15°	3507.2	3452.0	3437.9	3445.3	3370.0	3328.2	3231.2	3195.4	3120.8	3049.2	3012.6
17.5°	3534.1	3481.1	3467.0	3466.2	3375.2	3315.5	3208.8	3159.6	3070.0	2983.5	2946.9
20°	3561.0	3508.0	3490.1	3476.7	3373.7	3298.3	3176.0	3109.6	3005.1	2908.2	2877.6
22.5°	3574.4	3519.9	3500.5	3480.4	3364.0	3267.0	3135.7	3051.4	2932.0	2816.4	2791.0
25°	3576.6	3520.7	3499.8	3470.7	3344.6	3229.7	3083.5	2981.3	2847.7	2719.4	2697.8
27.5°	3570.7	3509.5	3488.6	3453.5	3315.5	3184.2	3021.6	2901.4	2758.2	2616.4	2593.3
30°	3549.8	3487.8	3467.7	3422.2	3274.5	3128.2	2953.7	2812.7	2659.0	2508.3	2488.1
32.5°	3508.0	3447.6	3431.1	3385.6	3229.7	3063.3	2874.6	2717.2	2549.3	2405.3	2375.5
35°	3446.8	3386.4	3375.9	3328.2	3167.0	2985.7	2788.0	2612.7	2432.9	2285.9	2256.8
37.5°	3367.0	3316.2	3300.6	3253.6	3093.2	2897.7	2688.8	2499.3	2314.3	2156.1	2138.2
40°	3266.3	3218.5	3206.6	3164.8	3007.4	2800.0	2581.4	2382.2	2191.9	2045.0	2019.6
42.5°	3151.4	3106.6	3099.9	3056.6	2901.4	2691.8	2465.0	2260.6	2064.4	1922.6	1897.2
45°	3020.8	2977.5	2976.0	2935.0	2785.8	2571.7	2342.6	2137.5	1939.8	1792.8	1779.4
47.5°	2876.8	2838.0	2838.0	2800.0	2656.7	2439.6	2216.6	2009.1	1814.4	1684.6	1660.7
50°	2720.1	2683.6	2672.4	2653.7	2514.2	2295.6	2083.8	1883.8	1690.6	1566.7	1543.6
52.5°	2553.0	2521.7	2529.2	2494.8	2359.8	2145.7	1949.5	1742.8	1566.0	1453.3	1430.2
55°	2377.0	2332.2	2338.9	2326.2	2198.6	1991.2	1798.8	1626.4	1443.6	1337.7	1316.1
57.5°	2194.2	2136.0	2159.9	2152.4	2027.1	1833.1	1660.7	1494.4	1322.0	1224.3	1203.4
60°	2006.9	1951.0	1975.6	1968.9	1851.0	1674.9	1518.2	1363.8	1201.2	1112.4	1091.5
62.5°	1814.4	1762.9	1785.3	1780.1	1671.9	1513.0	1376.5	1234.7	1079.6	999.7	980.3
65°	1620.4	1571.2	1591.4	1587.6	1487.6	1366.8	1231.0	1101.2	957.2	887.8	868.4
67.5°	1422.0	1376.5	1395.1	1395.1	1303.4	1187.7	1084.8	966.2	837.1	777.4	759.5
70°	1225.0	1182.5	1198.9	1197.4	1119.8	1025.8	937.1	831.1	715.5	666.2	651.3
72.5°	1026.6	989.3	1004.2	1002.7	937.8	877.4	789.3	697.6	596.9	557.3	543.9
75°	834.1	799.0	813.2	811.7	758.7	702.0	643.1	567.0	480.5	452.9	439.4
77.5°	650.6	614.8	626.7	626.7	587.9	546.9	499.9	440.9	379.7	349.9	340.2
80°	474.5	457.3	451.4	452.1	426.0	399.1	375.3	318.6	273.8	253.7	246.9
82.5°	311.9	297.7	291.7	293.2	278.3	261.9	246.9	207.4	177.6	165.6	161.9
85°	165.6	155.2	150.0	153.7	150.7	141.8	134.3	107.4	88.8	84.3	82.1
87.5°	52.2	45.5	41.8	55.2	47.0	41.8	40.3	32.1	24.6	24.6	23.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4
2.5°	3193.9	3193.9	3164.8	3158.1	3155.1	3158.8	3129.7	3124.5	3166.3	3152.1	3120.0
5°	3168.5	3167.0	3126.0	3118.5	3118.5	3114.1	3081.2	3073.8	3115.6	3103.6	3068.6
7.5°	3137.2	3132.7	3084.2	3079.0	3071.5	3068.6	3032.0	3026.8	3062.6	3055.1	3022.3
10°	3099.1	3094.7	3037.2	3033.5	3025.3	3019.3	2985.0	2981.3	3017.8	3005.9	2979.8
12.5°	3049.2	3041.0	2982.0	2978.3	2971.6	2969.3	2935.8	2934.3	2974.6	2962.6	2935.0
15°	2983.5	2976.8	2911.1	2912.6	2913.4	2913.4	2886.5	2885.0	2924.6	2919.3	2889.5
17.5°	2911.1	2902.2	2839.5	2844.0	2849.2	2855.2	2834.3	2838.0	2879.8	2873.1	2846.2
20°	2829.1	2820.1	2758.9	2771.6	2782.8	2794.8	2781.3	2791.8	2830.6	2827.6	2807.4
22.5°	2737.3	2728.4	2671.7	2691.0	2709.7	2732.1	2726.1	2738.1	2779.1	2778.3	2760.4
25°	2625.4	2627.6	2577.6	2601.5	2632.9	2664.2	2666.4	2685.8	2731.3	2726.9	2710.4
27.5°	2520.9	2523.9	2471.0	2511.2	2553.0	2593.3	2603.0	2629.9	2676.1	2672.4	2658.2
30°	2411.3	2415.0	2363.5	2418.7	2469.5	2518.7	2539.6	2576.2	2623.2	2623.2	2608.2
32.5°	2297.1	2303.8	2250.1	2324.0	2382.9	2440.4	2476.9	2515.0	2568.7	2567.2	2554.5
35°	2180.0	2187.5	2138.2	2232.2	2291.2	2361.3	2406.8	2457.5	2505.3	2506.0	2496.3
37.5°	2060.6	2069.6	2024.8	2127.8	2194.9	2277.7	2335.9	2386.7	2439.6	2442.6	2433.7
40°	1942.0	1951.7	1912.9	2012.1	2097.2	2189.7	2256.8	2316.5	2374.7	2376.2	2370.2
42.5°	1823.4	1833.8	1804.7	1901.7	1998.0	2097.2	2176.3	2244.2	2303.8	2307.6	2300.9
45°	1707.7	1716.7	1695.8	1801.7	1894.3	2002.4	2093.5	2170.3	2230.7	2235.9	2233.7
47.5°	1592.8	1601.1	1582.4	1679.4	1786.1	1901.0	2006.2	2091.2	2155.4	2161.3	2159.9
50°	1480.2	1486.9	1466.8	1568.2	1674.2	1796.5	1906.2	2004.7	2076.3	2082.3	2081.5
52.5°	1368.3	1375.0	1357.8	1464.5	1560.8	1689.8	1809.2	1915.9	1986.8	1995.7	1997.2
55°	1260.1	1263.1	1249.7	1351.9	1445.1	1580.2	1717.4	1821.1	1892.0	1899.5	1904.0
57.5°	1151.9	1152.7	1141.5	1239.2	1328.7	1466.8	1610.7	1719.7	1786.8	1794.3	1801.0
60°	1044.5	1043.7	1031.1	1125.8	1211.6	1348.1	1498.1	1606.3	1671.2	1677.9	1686.8
62.5°	937.8	935.6	924.4	1011.7	1092.2	1227.3	1378.0	1482.4	1544.3	1548.8	1560.8
65°	831.9	829.6	819.2	899.8	972.9	1101.9	1249.7	1348.9	1404.8	1410.8	1408.6
67.5°	727.4	722.9	714.7	787.1	853.5	972.9	1114.6	1209.4	1255.6	1260.8	1275.0
70°	623.0	617.7	599.1	675.9	734.1	840.8	972.9	1057.2	1096.0	1101.2	1099.0
72.5°	520.0	514.8	494.6	565.5	614.8	708.0	825.9	896.0	929.6	934.1	934.1
75°	420.0	417.0	404.4	458.1	499.1	575.2	675.2	733.4	759.5	764.7	763.2
77.5°	323.8	321.6	308.9	355.1	387.2	443.9	524.5	570.0	589.4	595.4	608.0
80°	232.0	231.3	211.1	256.6	270.8	318.6	377.5	412.6	423.0	431.2	440.2
82.5°	148.5	149.2	129.1	167.9	173.8	204.4	241.0	262.6	270.1	276.8	283.5
85°	72.4	75.4	64.2	88.8	89.5	105.2	120.9	129.1	132.1	137.3	143.2
87.5°	18.7	21.6	11.9	25.4	22.4	29.1	33.6	35.8	35.1	38.8	41.0
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4
2.5°	3130.5	3154.4	3142.4	3181.2	3196.1	3172.3	3214.0	3214.8	3184.9	3220.0	3239.4
5°	3082.0	3106.6	3099.1	3139.4	3158.1	3137.2	3187.9	3197.6	3168.5	3208.1	3239.4
7.5°	3032.7	3061.8	3052.1	3093.2	3115.6	3099.1	3153.6	3169.3	3146.9	3190.2	3231.9
10°	2990.2	3014.8	3004.4	3047.7	3067.1	3053.6	3107.4	3136.4	3115.6	3168.5	3218.5
12.5°	2948.4	2968.6	2956.6	2992.5	3011.1	2993.9	3059.6	3086.5	3071.5	3126.7	3190.9
15°	2894.7	2917.1	2900.7	2932.8	2946.9	2932.0	2985.7	3032.0	3013.3	3073.8	3144.7
17.5°	2853.7	2866.4	2844.0	2869.4	2877.6	2857.4	2911.9	2957.4	2944.0	3009.6	3091.7
20°	2808.2	2818.6	2787.3	2801.5	2800.7	2775.4	2825.3	2870.1	2861.2	2933.5	3026.8
22.5°	2757.4	2762.7	2726.1	2729.1	2727.6	2685.8	2730.6	2776.1	2772.4	2845.5	2949.9
25°	2703.7	2704.5	2657.5	2656.0	2639.6	2590.3	2629.9	2681.3	2670.2	2749.2	2858.9
27.5°	2650.8	2643.3	2586.6	2573.2	2547.1	2488.1	2523.2	2569.4	2562.7	2640.3	2761.9
30°	2594.1	2584.4	2515.0	2490.4	2452.3	2384.4	2413.5	2456.8	2460.5	2528.4	2656.0
32.5°	2540.3	2515.7	2438.9	2403.1	2355.3	2276.2	2291.9	2335.9	2341.9	2410.5	2541.8
35°	2471.0	2454.5	2359.8	2298.6	2251.6	2165.1	2181.5	2212.1	2221.0	2288.2	2421.7
37.5°	2405.3	2379.2	2278.5	2203.9	2143.4	2052.4	2056.9	2088.2	2097.2	2165.1	2297.1
40°	2337.4	2300.1	2191.9	2104.6	2035.3	1939.8	1934.5	1967.4	1974.1	2040.5	2159.9
42.5°	2265.0	2220.3	2098.7	2003.2	1923.3	1826.4	1815.9	1844.3	1851.7	1916.6	2033.8
45°	2191.9	2138.2	2003.2	1898.7	1811.4	1712.2	1701.8	1723.4	1734.6	1795.8	1908.4
47.5°	2114.3	2051.7	1904.7	1788.3	1698.0	1598.8	1586.1	1607.8	1616.7	1677.1	1783.8
50°	2033.0	1956.9	1803.2	1674.9	1585.4	1487.6	1469.0	1494.4	1502.6	1559.3	1663.7
52.5°	1943.5	1859.2	1695.1	1560.8	1471.2	1378.0	1355.6	1380.2	1389.9	1445.1	1541.4
55°	1848.7	1757.7	1586.1	1455.6	1358.6	1267.6	1248.9	1258.6	1279.5	1331.7	1421.2
57.5°	1742.1	1651.8	1471.2	1338.4	1245.2	1157.9	1142.2	1151.2	1170.6	1221.3	1301.9
60°	1628.7	1533.2	1354.1	1221.3	1131.0	1048.2	1034.0	1042.2	1063.1	1109.4	1184.0
62.5°	1516.7	1409.3	1233.2	1101.2	1019.1	942.3	938.5	935.6	955.0	999.7	1065.4
65°	1381.0	1278.0	1107.2	981.8	907.2	837.8	822.9	829.6	848.3	889.3	957.9
67.5°	1235.5	1142.2	978.1	862.4	796.0	734.1	721.4	724.4	743.8	779.6	839.3
70°	1081.0	999.0	846.0	742.3	686.4	628.2	620.0	620.7	639.4	670.7	722.9
72.5°	919.1	845.3	712.5	623.7	577.5	535.7	528.2	519.3	536.4	563.3	608.0
75°	754.3	689.4	579.7	507.3	470.8	435.7	429.0	420.0	437.2	460.3	495.4
77.5°	587.9	535.7	450.6	394.7	366.3	340.2	334.2	324.5	341.7	358.9	386.5
80°	425.3	387.2	336.5	277.5	267.8	250.7	244.7	234.3	250.7	261.9	282.8
82.5°	274.6	249.2	220.1	179.1	177.6	164.9	161.9	150.0	164.9	171.6	187.3
85°	138.8	126.8	119.4	91.0	94.0	85.8	85.1	72.4	84.3	87.3	96.2
87.5°	39.5	41.8	37.3	22.4	28.4	26.9	26.9	19.4	26.9	26.9	30.6
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: P838096

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2HI-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4	3198.4
2.5°	3201.4	3214.0	3217.0	3216.3	3224.5	3269.2	3254.3	3269.2
5°	3208.8	3237.2	3244.6	3255.1	3268.5	3319.2	3302.8	3320.7
7.5°	3213.3	3255.8	3272.2	3292.4	3314.0	3370.7	3357.3	3375.2
10°	3213.3	3268.5	3292.4	3325.9	3355.0	3420.7	3408.0	3428.9
12.5°	3199.9	3270.7	3304.3	3351.3	3388.6	3459.5	3454.3	3469.2
15°	3172.3	3259.5	3305.8	3366.2	3412.5	3491.6	3489.3	3507.2
17.5°	3135.0	3240.2	3296.1	3372.2	3430.4	3519.2	3524.4	3534.1
20°	3088.0	3203.6	3276.7	3370.0	3443.1	3540.8	3547.5	3561.0
22.5°	3026.0	3159.6	3247.6	3360.3	3444.6	3549.8	3561.7	3574.4
25°	2952.9	3106.6	3209.6	3341.6	3437.1	3549.0	3565.4	3576.6
27.5°	2869.4	3038.0	3161.1	3311.8	3416.2	3537.1	3557.2	3570.7
30°	2772.4	2964.9	3105.9	3273.0	3387.9	3514.7	3536.3	3549.8
32.5°	2672.4	2884.3	3040.2	3223.0	3346.8	3478.9	3497.5	3508.0
35°	2563.5	2786.5	2961.1	3158.8	3293.9	3421.4	3435.6	3446.8
37.5°	2444.8	2680.6	2870.8	3086.5	3219.3	3341.6	3354.3	3367.0
40°	2322.5	2569.4	2769.4	2997.7	3130.5	3243.9	3257.3	3266.3
42.5°	2199.4	2446.3	2661.2	2893.2	3025.3	3134.2	3142.4	3151.4
45°	2074.8	2318.8	2539.6	2777.6	2908.2	3010.4	3013.3	3020.8
47.5°	1948.0	2186.7	2406.1	2645.5	2774.6	2867.9	2870.8	2876.8
50°	1820.4	2054.7	2263.6	2503.0	2629.1	2727.6	2714.2	2720.1
52.5°	1695.1	1915.9	2129.3	2349.4	2473.9	2561.2	2565.0	2553.0
55°	1572.0	1780.1	1976.3	2188.2	2306.8	2374.7	2372.5	2377.0
57.5°	1447.4	1642.8	1822.6	2016.6	2132.2	2196.4	2209.8	2194.2
60°	1320.5	1504.1	1665.2	1840.5	1952.4	2006.2	2021.8	2006.9
62.5°	1194.4	1363.1	1509.3	1662.2	1765.9	1832.3	1830.8	1814.4
65°	1068.4	1221.3	1351.9	1481.7	1572.0	1638.4	1635.4	1620.4
67.5°	952.0	1078.1	1195.2	1300.4	1378.7	1424.2	1439.9	1422.0
70°	823.7	932.6	1035.5	1119.8	1184.7	1225.8	1240.7	1225.0
72.5°	695.3	787.8	860.2	941.5	991.5	1025.8	1041.5	1026.6
75°	568.5	644.6	703.5	767.0	802.0	831.1	849.0	834.1
77.5°	445.4	504.3	551.3	597.6	637.9	644.6	660.3	650.6
80°	328.3	370.8	405.1	435.7	464.8	467.8	480.5	474.5
82.5°	218.6	246.9	255.9	288.0	306.6	303.6	316.3	311.9
85°	115.6	132.8	148.5	158.2	168.6	158.9	170.1	165.6
87.5°	38.8	41.0	35.8	50.7	56.0	47.7	54.5	52.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)