

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: P838190

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-4LO-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: P838190
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-LD4-4LO-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

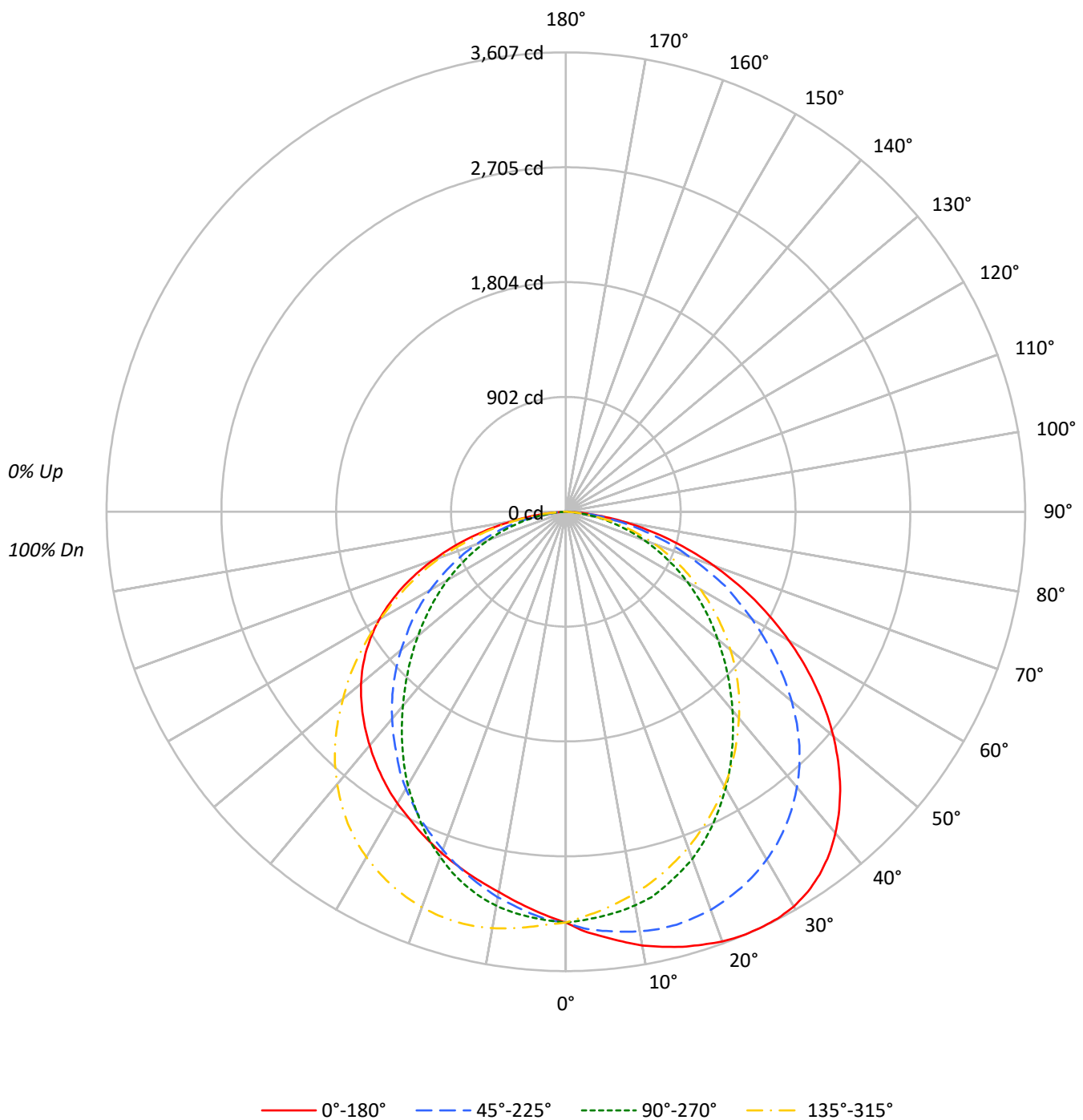
Lumens per Lamp: N/A
Luminaire Lumens: 9463.2 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 93.6
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°	4340	4340	4340	4340
5°	4523	4309	4227	4316
10°	4724	4287	4142	4293
15°	4927	4232	4101	4233
20°	5142	4155	4083	4131
25°	5355	4039	4083	3998
30°	5562	3898	4110	3855
35°	5710	3738	4151	3679
40°	5786	3577	4209	3497
45°	5797	3415	4291	3329
50°	5742	3258	4396	3172
55°	5623	3113	4494	3027
60°	5446	2962	4553	2885
65°	5203	2788	4530	2724
70°	4860	2584	4369	2537
75°	4373	2304	4009	2292
80°	3708	1929	3370	1959
85°	2578	1278	2137	1312

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.2	3.2
10°-20°	886.8	9.4
20°-30°	1359.1	14.4
30°-40°	1652.5	17.5
40°-50°	1717.9	18.2
50°-60°	1551.8	16.4
60°-70°	1179.8	12.5
70°-80°	657.7	7.0
80°-90°	151.4	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°	2552.1	27.0
0°-40°	4204.7	44.4
0°-60°	7474.4	79.0
0°-90°	9463.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9463.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3226	3226	3226	3226	3226	
5°	3349	3190	3130	3195	3349	323
15°	3537	3038	2944	3039	3537	1003
25°	3607	2721	2750	2693	3607	1666
35°	3476	2276	2527	2240	3476	2171
45°	3046	1794	2255	1749	3046	2345
55°	2397	1327	1916	1290	2397	2140
65°	1634	876	1423	856	1634	1615
75°	841	443	771	441	841	894
85°	167	83	138	85	167	210
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°	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5
2.5°	3297.0	3248.9	3249.6	3291.7	3259.4	3275.2	3230.0	3247.3	3242.1	3245.8	3209.0
5°	3348.9	3297.0	3296.3	3332.4	3296.3	3303.0	3245.8	3257.1	3240.6	3230.0	3190.2
7.5°	3403.8	3351.9	3346.7	3378.3	3330.9	3325.6	3262.4	3262.4	3232.3	3206.0	3168.3
10°	3458.0	3404.6	3397.8	3421.9	3363.2	3345.9	3269.2	3257.1	3217.3	3178.1	3137.5
12.5°	3498.6	3444.5	3439.2	3454.3	3388.0	3356.4	3269.2	3245.8	3187.2	3132.2	3100.6
15°	3537.0	3481.3	3467.0	3474.6	3398.6	3356.4	3258.6	3222.5	3147.3	3075.0	3038.2
17.5°	3564.1	3510.7	3496.4	3495.6	3403.8	3343.7	3236.1	3186.4	3096.1	3008.8	2972.0
20°	3591.2	3537.8	3519.7	3506.2	3402.3	3326.4	3203.0	3136.0	3030.7	2932.8	2902.0
22.5°	3604.7	3549.8	3530.3	3509.9	3392.6	3294.7	3162.3	3077.3	2956.9	2840.3	2814.7
25°	3607.0	3550.6	3529.5	3500.2	3373.0	3257.1	3109.7	3006.6	2871.9	2742.5	2720.7
27.5°	3601.0	3539.3	3518.2	3482.8	3343.7	3211.2	3047.2	2926.1	2781.6	2638.7	2615.3
30°	3579.9	3517.5	3497.1	3451.2	3302.3	3154.8	2978.7	2836.5	2681.5	2529.6	2509.2
32.5°	3537.8	3476.8	3460.3	3414.4	3257.1	3089.3	2899.0	2740.2	2570.9	2425.7	2395.6
35°	3476.1	3415.1	3404.6	3356.4	3193.9	3011.1	2811.7	2634.9	2453.6	2305.3	2276.0
37.5°	3395.6	3344.4	3328.6	3281.2	3119.4	2922.3	2711.6	2520.5	2333.9	2174.4	2156.4
40°	3294.0	3245.8	3233.8	3191.7	3032.9	2823.7	2603.3	2402.4	2210.5	2062.3	2036.7
42.5°	3178.1	3133.0	3126.2	3082.6	2926.1	2714.7	2485.9	2279.8	2081.9	1938.9	1913.3
45°	3046.5	3002.8	3001.3	2959.9	2809.5	2593.5	2362.5	2155.6	1956.2	1808.0	1794.5
47.5°	2901.2	2862.1	2862.1	2823.7	2679.3	2460.3	2235.4	2026.2	1829.8	1698.9	1674.8
50°	2743.2	2706.4	2695.1	2676.3	2535.6	2315.1	2101.4	1899.8	1704.9	1580.0	1556.7
52.5°	2574.7	2543.1	2550.6	2516.0	2379.8	2163.9	1966.0	1757.6	1579.3	1465.7	1442.3
55°	2397.1	2352.0	2358.8	2346.0	2217.3	2008.1	1814.0	1640.2	1455.9	1349.0	1327.2
57.5°	2212.8	2154.1	2178.2	2170.7	2044.3	1848.6	1674.8	1507.1	1333.2	1234.7	1213.6
60°	2023.9	1967.5	1992.3	1985.6	1866.7	1689.1	1531.1	1375.4	1211.4	1121.8	1100.8
62.5°	1829.8	1777.9	1800.5	1795.2	1686.1	1525.9	1388.2	1245.2	1088.7	1008.2	988.7
65°	1634.2	1584.5	1604.9	1601.1	1500.3	1378.4	1241.5	1110.5	965.3	895.4	875.8
67.5°	1434.1	1388.2	1407.0	1407.0	1314.4	1197.8	1094.0	974.4	844.2	784.0	765.9
70°	1235.4	1192.6	1209.1	1207.6	1129.3	1034.5	945.0	838.2	721.5	671.9	656.8
72.5°	1035.3	997.7	1012.7	1011.2	945.8	884.8	796.0	703.5	601.9	562.0	548.5
75°	841.2	805.8	820.1	818.6	765.2	708.0	648.6	571.8	484.5	456.7	443.2
77.5°	656.1	620.0	632.0	632.0	592.9	551.5	504.1	444.7	383.0	352.9	343.1
80°	478.5	461.2	455.2	456.0	429.6	402.5	378.5	321.3	276.1	255.8	249.0
82.5°	314.5	300.2	294.2	295.7	280.6	264.1	249.0	209.2	179.1	167.0	163.3
85°	167.0	156.5	151.2	155.0	152.0	143.0	135.4	108.3	89.5	85.0	82.8
87.5°	52.7	45.9	42.1	55.7	47.4	42.1	40.6	32.4	24.8	24.8	24.1
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°	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5
2.5°	3221.0	3221.0	3191.7	3184.9	3181.9	3185.7	3156.3	3151.0	3193.2	3178.9	3146.5
5°	3195.4	3193.9	3152.5	3145.0	3145.0	3140.5	3107.4	3099.9	3142.0	3130.0	3094.6
7.5°	3163.8	3159.3	3110.4	3105.1	3097.6	3094.6	3057.7	3052.5	3088.6	3081.1	3048.0
10°	3125.5	3120.9	3063.0	3059.2	3051.0	3045.0	3010.3	3006.6	3043.4	3031.4	3005.1
12.5°	3075.0	3066.8	3007.3	3003.6	2996.8	2994.5	2960.7	2959.2	2999.8	2987.8	2959.9
15°	3008.8	3002.1	2935.9	2937.4	2938.1	2938.1	2911.0	2909.5	2949.4	2944.1	2914.0
17.5°	2935.9	2926.8	2863.6	2868.1	2873.4	2879.4	2858.4	2862.1	2904.3	2897.5	2870.4
20°	2853.1	2844.1	2782.4	2795.2	2806.4	2818.5	2804.9	2815.5	2854.6	2851.6	2831.3
22.5°	2760.5	2751.5	2694.3	2713.9	2732.7	2755.3	2749.3	2761.3	2802.7	2801.9	2783.9
25°	2647.7	2649.9	2599.5	2623.6	2655.2	2686.8	2689.1	2708.6	2754.5	2750.0	2733.5
27.5°	2542.4	2545.4	2491.9	2532.6	2574.7	2615.3	2625.1	2652.2	2698.9	2695.1	2680.8
30°	2431.7	2435.5	2383.6	2439.3	2490.4	2540.1	2561.2	2598.0	2645.4	2645.4	2630.4
32.5°	2316.6	2323.4	2269.2	2343.7	2403.2	2461.1	2498.0	2536.3	2590.5	2589.0	2576.2
35°	2198.5	2206.0	2156.4	2251.2	2310.6	2381.3	2427.2	2478.4	2526.6	2527.3	2517.5
37.5°	2078.1	2087.2	2042.0	2145.8	2213.6	2297.1	2355.8	2406.9	2460.3	2463.4	2454.3
40°	1958.5	1968.3	1929.1	2029.2	2115.0	2208.3	2276.0	2336.2	2394.9	2396.4	2390.4
42.5°	1838.9	1849.4	1820.1	1917.9	2014.9	2115.0	2194.7	2263.2	2323.4	2327.2	2320.4
45°	1722.2	1731.3	1710.2	1817.0	1910.3	2019.4	2111.2	2188.7	2249.7	2254.9	2252.7
47.5°	1606.4	1614.6	1595.8	1693.6	1801.2	1917.1	2023.2	2109.0	2173.7	2179.7	2178.2
50°	1492.8	1499.5	1479.2	1581.5	1688.4	1811.8	1922.4	2021.7	2093.9	2099.9	2099.2
52.5°	1379.9	1386.7	1369.4	1477.0	1574.0	1704.2	1824.6	1932.2	2003.6	2012.7	2014.2
55°	1270.8	1273.8	1260.3	1363.3	1457.4	1593.6	1732.0	1836.6	1908.1	1915.6	1920.1
57.5°	1161.7	1162.5	1151.2	1249.7	1340.0	1479.2	1624.4	1734.3	1802.0	1809.5	1816.3
60°	1053.4	1052.6	1039.8	1135.4	1221.9	1359.6	1510.8	1619.9	1685.4	1692.1	1701.2
62.5°	945.8	943.5	932.2	1020.3	1101.5	1237.7	1389.7	1495.0	1557.5	1562.0	1574.0
65°	838.9	836.7	826.1	907.4	981.1	1111.3	1260.3	1360.3	1416.8	1422.8	1420.5
67.5°	733.6	729.1	720.8	793.8	860.7	981.1	1124.1	1219.6	1266.3	1271.6	1285.8
70°	628.3	623.0	604.2	681.7	740.4	848.0	981.1	1066.1	1105.3	1110.5	1108.3
72.5°	524.4	519.2	498.8	570.3	620.0	714.0	832.9	903.6	937.5	942.0	942.0
75°	423.6	420.6	407.8	462.0	503.4	580.1	680.9	739.6	765.9	771.2	769.7
77.5°	326.5	324.3	311.5	358.1	390.5	447.7	528.9	574.8	594.4	600.4	613.2
80°	234.0	233.2	212.9	258.8	273.1	321.3	380.7	416.1	426.6	434.9	443.9
82.5°	149.7	150.5	130.2	169.3	175.3	206.2	243.0	264.8	272.4	279.1	285.9
85°	73.0	76.0	64.7	89.5	90.3	106.1	121.9	130.2	133.2	138.4	144.5
87.5°	18.8	21.8	12.0	25.6	22.6	29.3	33.9	36.1	35.4	39.1	41.4
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°	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5
2.5°	3157.1	3181.1	3169.1	3208.2	3223.3	3199.2	3241.3	3242.1	3212.0	3247.3	3266.9
5°	3108.2	3133.0	3125.5	3166.1	3184.9	3163.8	3215.0	3224.8	3195.4	3235.3	3266.9
7.5°	3058.5	3087.8	3078.1	3119.4	3142.0	3125.5	3180.4	3196.2	3173.6	3217.3	3259.4
10°	3015.6	3040.4	3029.9	3073.5	3093.1	3079.6	3133.7	3163.1	3142.0	3195.4	3245.8
12.5°	2973.5	2993.8	2981.8	3017.9	3036.7	3019.4	3085.6	3112.7	3097.6	3153.3	3218.0
15°	2919.3	2941.9	2925.3	2957.7	2972.0	2956.9	3011.1	3057.7	3038.9	3099.9	3171.4
17.5°	2877.9	2890.7	2868.1	2893.7	2902.0	2881.7	2936.6	2982.5	2969.0	3035.2	3117.9
20°	2832.0	2842.6	2811.0	2825.3	2824.5	2798.9	2849.3	2894.5	2885.4	2958.4	3052.5
22.5°	2780.9	2786.1	2749.3	2752.3	2750.8	2708.6	2753.8	2799.7	2795.9	2869.6	2975.0
25°	2726.7	2727.4	2680.0	2678.5	2662.0	2612.3	2652.2	2704.1	2692.8	2772.6	2883.2
27.5°	2673.3	2665.7	2608.6	2595.0	2568.7	2509.2	2544.6	2591.3	2584.5	2662.7	2785.4
30°	2616.1	2606.3	2536.3	2511.5	2473.1	2404.7	2434.0	2477.6	2481.4	2549.9	2678.5
32.5°	2561.9	2537.1	2459.6	2423.5	2375.3	2295.6	2311.4	2355.8	2361.8	2431.0	2563.4
35°	2491.9	2475.4	2379.8	2318.1	2270.7	2183.5	2200.0	2230.9	2239.9	2307.6	2442.3
37.5°	2425.7	2399.4	2297.8	2222.6	2161.6	2069.8	2074.4	2106.0	2115.0	2183.5	2316.6
40°	2357.3	2319.6	2210.5	2122.5	2052.5	1956.2	1951.0	1984.1	1990.8	2057.8	2178.2
42.5°	2284.3	2239.1	2116.5	2020.2	1939.7	1841.9	1831.3	1859.9	1867.5	1932.9	2051.0
45°	2210.5	2156.4	2020.2	1914.9	1826.8	1726.8	1716.2	1738.0	1749.3	1811.0	1924.6
47.5°	2132.3	2069.1	1920.9	1803.5	1712.5	1612.4	1599.6	1621.4	1630.4	1691.4	1799.0
50°	2050.3	1973.5	1818.5	1689.1	1598.8	1500.3	1481.5	1507.1	1515.3	1572.5	1677.8
52.5°	1960.0	1875.0	1709.4	1574.0	1483.7	1389.7	1367.1	1391.9	1401.7	1457.4	1554.5
55°	1864.4	1772.6	1599.6	1467.9	1370.1	1278.3	1259.5	1269.3	1290.4	1343.0	1433.3
57.5°	1756.8	1665.8	1483.7	1349.8	1255.8	1167.7	1151.9	1160.9	1180.5	1231.7	1312.9
60°	1642.5	1546.2	1365.6	1231.7	1140.6	1057.1	1042.8	1051.1	1072.2	1118.8	1194.1
62.5°	1529.6	1421.3	1243.7	1110.5	1027.8	950.3	946.5	943.5	963.1	1008.2	1074.4
65°	1392.7	1288.9	1116.6	990.2	914.9	844.9	829.9	836.7	855.5	896.9	966.1
67.5°	1246.0	1151.9	986.4	869.8	802.8	740.4	727.6	730.6	750.1	786.3	846.4
70°	1090.2	1007.5	853.2	748.6	692.2	633.5	625.2	626.0	644.8	676.4	729.1
72.5°	927.0	852.5	718.5	629.0	582.4	540.2	532.7	523.7	541.0	568.1	613.2
75°	760.7	695.2	584.6	511.6	474.8	439.4	432.6	423.6	440.9	464.2	499.6
77.5°	592.9	540.2	454.4	398.0	369.4	343.1	337.1	327.3	344.6	361.9	389.7
80°	428.9	390.5	339.3	279.9	270.1	252.8	246.8	236.3	252.8	264.1	285.2
82.5°	276.9	251.3	222.0	180.6	179.1	166.3	163.3	151.2	166.3	173.1	188.9
85°	139.9	127.9	120.4	91.8	94.8	86.5	85.8	73.0	85.0	88.0	97.1
87.5°	39.9	42.1	37.6	22.6	28.6	27.1	27.1	19.6	27.1	27.1	30.8
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: P838190

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

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5	3225.5
2.5°	3228.5	3241.3	3244.3	3243.6	3251.9	3297.0	3282.0	3297.0
5°	3236.1	3264.7	3272.2	3282.7	3296.3	3347.4	3330.9	3348.9
7.5°	3240.6	3283.5	3300.0	3320.3	3342.2	3399.3	3385.8	3403.8
10°	3240.6	3296.3	3320.3	3354.2	3383.5	3449.7	3437.0	3458.0
12.5°	3227.0	3298.5	3332.4	3379.8	3417.4	3488.9	3483.6	3498.6
15°	3199.2	3287.2	3333.9	3394.8	3441.5	3521.2	3519.0	3537.0
17.5°	3161.6	3267.7	3324.1	3400.8	3459.5	3549.1	3554.3	3564.1
20°	3114.2	3230.8	3304.5	3398.6	3472.3	3570.9	3577.7	3591.2
22.5°	3051.7	3186.4	3275.2	3388.8	3473.8	3579.9	3591.9	3604.7
25°	2978.0	3133.0	3236.8	3370.0	3466.3	3579.2	3595.7	3607.0
27.5°	2893.7	3063.8	3187.9	3339.9	3445.2	3567.1	3587.4	3601.0
30°	2795.9	2990.0	3132.2	3300.8	3416.6	3544.5	3566.4	3579.9
32.5°	2695.1	2908.8	3066.0	3250.4	3375.3	3508.4	3527.2	3537.8
35°	2585.2	2810.2	2986.3	3185.7	3321.8	3450.5	3464.8	3476.1
37.5°	2465.6	2703.4	2895.2	3112.7	3246.6	3370.0	3382.8	3395.6
40°	2342.2	2591.3	2792.9	3023.1	3157.1	3271.4	3285.0	3294.0
42.5°	2218.1	2467.1	2683.8	2917.8	3051.0	3160.8	3169.1	3178.1
45°	2092.4	2338.5	2561.2	2801.2	2932.8	3035.9	3038.9	3046.5
47.5°	1964.5	2205.3	2426.5	2668.0	2798.2	2892.2	2895.2	2901.2
50°	1835.9	2072.1	2282.8	2524.3	2651.4	2750.8	2737.2	2743.2
52.5°	1709.4	1932.2	2147.3	2369.3	2495.0	2583.0	2586.7	2574.7
55°	1585.3	1795.2	1993.1	2206.8	2326.4	2394.9	2392.6	2397.1
57.5°	1459.7	1656.8	1838.1	2033.7	2150.4	2215.1	2228.6	2212.8
60°	1331.7	1516.8	1679.4	1856.2	1969.0	2023.2	2039.0	2023.9
62.5°	1204.6	1374.6	1522.1	1676.3	1780.9	1847.9	1846.4	1829.8
65°	1077.4	1231.7	1363.3	1494.3	1585.3	1652.3	1649.3	1634.2
67.5°	960.1	1087.2	1205.3	1311.4	1390.4	1436.3	1452.1	1434.1
70°	830.6	940.5	1044.3	1129.3	1194.8	1236.2	1251.2	1235.4
72.5°	701.2	794.5	867.5	949.5	999.9	1034.5	1050.3	1035.3
75°	573.3	650.1	709.5	773.5	808.8	838.2	856.2	841.2
77.5°	449.2	508.6	556.0	602.7	643.3	650.1	665.9	656.1
80°	331.1	373.9	408.6	439.4	468.7	471.8	484.5	478.5
82.5°	220.5	249.0	258.1	290.4	309.2	306.2	319.0	314.5
85°	116.6	133.9	149.7	159.5	170.0	160.3	171.5	167.0
87.5°	39.1	41.4	36.1	51.2	56.4	48.2	54.9	52.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)