

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: P838207

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-3HI-35-120-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: P838207
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-LD4-3HI-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

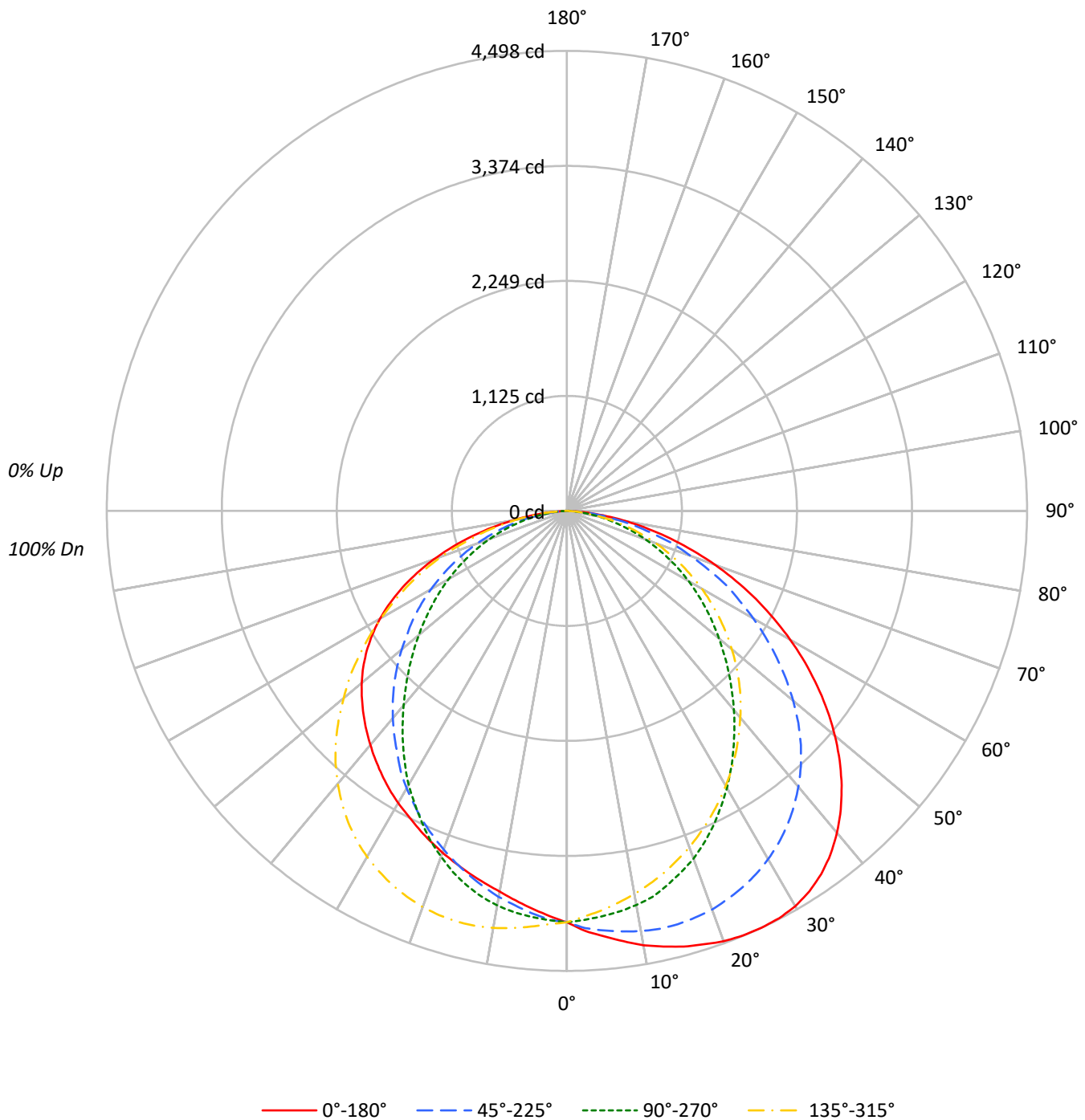
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11800.2 lumens
Efficiency: N/A
Efficacy: 89.4 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): 132
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°	5412	5412	5412	5412
5°	5640	5373	5271	5382
10°	5891	5345	5164	5353
15°	6144	5277	5114	5278
20°	6412	5181	5091	5152
25°	6677	5036	5091	4985
30°	6935	4861	5125	4807
35°	7120	4662	5176	4588
40°	7214	4461	5249	4360
45°	7228	4258	5350	4151
50°	7160	4063	5481	3955
55°	7012	3882	5603	3774
60°	6791	3694	5678	3598
65°	6488	3477	5648	3396
70°	6060	3222	5448	3163
75°	5453	2873	4999	2858
80°	4623	2406	4202	2442
85°	3216	1593	2665	1636

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.9	3.2
10°-20°	1105.8	9.4
20°-30°	1694.7	14.4
30°-40°	2060.6	17.5
40°-50°	2142.1	18.2
50°-60°	1935.0	16.4
60°-70°	1471.1	12.5
70°-80°	820.1	7.0
80°-90°	188.8	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°	3182.4	27.0
0°-40°	5243.0	44.4
0°-60°	9320.1	79.0
0°-90°	11800.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11800.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4022	4022	4022	4022	4022	
5°	4176	3978	3903	3984	4176	403
15°	4410	3788	3671	3789	4410	1251
25°	4498	3392	3429	3358	4498	2077
35°	4334	2838	3151	2793	4334	2707
45°	3799	2238	2812	2181	3799	2925
55°	2989	1655	2389	1609	2989	2668
65°	2038	1092	1774	1067	2038	2014
75°	1049	553	962	550	1049	1114
85°	208	103	173	106	208	262
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°	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1
2.5°	4111.2	4051.1	4052.1	4104.6	4064.3	4084.0	4027.7	4049.3	4042.7	4047.4	4001.4
5°	4175.9	4111.2	4110.3	4155.3	4110.3	4118.7	4047.4	4061.5	4040.8	4027.7	3978.0
7.5°	4244.4	4179.7	4173.1	4212.5	4153.4	4146.8	4068.0	4068.0	4030.5	3997.7	3950.8
10°	4312.0	4245.4	4236.9	4266.9	4193.8	4172.2	4076.5	4061.5	4011.7	3963.0	3912.3
12.5°	4362.6	4295.1	4288.5	4307.3	4224.7	4185.3	4076.5	4047.4	3974.2	3905.7	3866.3
15°	4410.5	4341.1	4323.2	4332.6	4237.8	4185.3	4063.3	4018.3	3924.5	3834.4	3788.5
17.5°	4444.3	4377.6	4359.8	4358.9	4244.4	4169.4	4035.2	3973.3	3860.7	3751.9	3705.9
20°	4478.0	4411.4	4388.9	4372.0	4242.5	4147.8	3993.9	3910.4	3779.1	3657.1	3618.6
22.5°	4494.9	4426.4	4402.0	4376.7	4230.3	4108.4	3943.3	3837.2	3687.1	3541.7	3509.8
25°	4497.7	4427.4	4401.1	4364.5	4206.0	4061.5	3877.6	3749.0	3581.1	3419.7	3392.5
27.5°	4490.2	4413.3	4387.0	4342.9	4169.4	4004.2	3799.7	3648.7	3468.5	3290.3	3261.2
30°	4464.0	4386.1	4360.8	4303.5	4117.8	3933.9	3714.3	3537.0	3343.7	3154.2	3128.9
32.5°	4411.4	4335.4	4314.8	4257.6	4061.5	3852.2	3614.9	3416.9	3205.8	3024.8	2987.2
35°	4334.5	4258.5	4245.4	4185.3	3982.7	3754.7	3506.1	3285.6	3059.5	2874.6	2838.1
37.5°	4234.1	4170.3	4150.6	4091.5	3889.8	3644.0	3381.3	3143.0	2910.3	2711.4	2688.9
40°	4107.4	4047.4	4032.4	3979.8	3781.9	3521.1	3246.2	2995.7	2756.4	2571.6	2539.7
42.5°	3963.0	3906.7	3898.2	3843.8	3648.7	3385.0	3099.8	2842.7	2596.0	2417.7	2385.8
45°	3798.8	3744.4	3742.5	3690.9	3503.2	3234.0	2945.9	2687.9	2439.3	2254.5	2237.6
47.5°	3617.7	3568.9	3568.9	3521.1	3340.9	3067.9	2787.4	2526.6	2281.7	2118.5	2088.4
50°	3420.7	3374.7	3360.6	3337.2	3161.7	2886.8	2620.4	2369.0	2126.0	1970.2	1941.1
52.5°	3210.5	3171.1	3180.5	3137.3	2967.5	2698.3	2451.5	2191.6	1969.3	1827.6	1798.5
55°	2989.1	2932.8	2941.3	2925.3	2764.9	2504.1	2262.0	2045.3	1815.4	1682.2	1655.0
57.5°	2759.2	2686.1	2716.1	2706.7	2549.1	2305.2	2088.4	1879.2	1662.5	1539.6	1513.3
60°	2523.8	2453.4	2484.4	2475.9	2327.7	2106.3	1909.2	1715.0	1510.5	1398.9	1372.6
62.5°	2281.7	2217.0	2245.1	2238.5	2102.5	1902.7	1731.0	1552.7	1357.6	1257.2	1232.8
65°	2037.8	1975.8	2001.2	1996.5	1870.8	1718.8	1548.0	1384.8	1203.7	1116.5	1092.1
67.5°	1788.2	1731.0	1754.4	1754.4	1639.0	1493.6	1364.1	1215.0	1052.7	977.6	955.1
70°	1540.5	1487.0	1507.7	1505.8	1408.2	1290.0	1178.4	1045.2	899.7	837.8	819.0
72.5°	1291.0	1244.1	1262.8	1260.9	1179.3	1103.3	992.6	877.2	750.6	700.8	683.9
75°	1048.9	1004.8	1022.6	1020.8	954.1	882.8	808.7	713.0	604.2	569.5	552.6
77.5°	818.1	773.1	788.1	788.1	739.3	687.7	628.6	554.5	477.5	440.0	427.8
80°	596.7	575.1	567.6	568.5	535.7	501.9	471.9	400.6	344.3	319.0	310.5
82.5°	392.2	374.3	366.8	368.7	349.9	329.3	310.5	260.8	223.3	208.3	203.6
85°	208.3	195.1	188.6	193.3	189.5	178.3	168.9	135.1	111.6	106.0	103.2
87.5°	65.7	57.2	52.5	69.4	59.1	52.5	50.7	40.3	31.0	31.0	30.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1
2.5°	4016.4	4016.4	3979.8	3971.4	3967.6	3972.3	3935.7	3929.2	3981.7	3963.9	3923.6
5°	3984.5	3982.7	3931.1	3921.7	3921.7	3916.0	3874.8	3865.4	3917.9	3902.9	3858.8
7.5°	3945.1	3939.5	3878.5	3872.0	3862.6	3858.8	3812.8	3806.3	3851.3	3841.9	3800.6
10°	3897.3	3891.7	3819.4	3814.7	3804.4	3796.9	3753.7	3749.0	3795.0	3780.0	3747.2
12.5°	3834.4	3824.1	3750.0	3745.3	3736.9	3734.0	3691.8	3689.9	3740.6	3725.6	3690.9
15°	3751.9	3743.4	3660.9	3662.7	3663.7	3663.7	3629.9	3628.0	3677.7	3671.2	3633.6
17.5°	3660.9	3649.6	3570.8	3576.4	3583.0	3590.5	3564.2	3568.9	3621.5	3613.0	3579.2
20°	3557.7	3546.4	3469.5	3485.4	3499.5	3514.5	3497.6	3510.7	3559.5	3555.8	3530.4
22.5°	3442.3	3431.0	3359.7	3384.1	3407.5	3435.7	3428.2	3443.2	3494.8	3493.9	3471.3
25°	3301.5	3304.3	3241.5	3271.5	3310.9	3350.3	3353.1	3377.5	3434.8	3429.1	3408.5
27.5°	3170.2	3173.9	3107.3	3158.0	3210.5	3261.2	3273.4	3307.2	3365.3	3360.6	3342.8
30°	3032.3	3037.0	2972.2	3041.6	3105.4	3167.4	3193.6	3239.6	3298.7	3298.7	3279.9
32.5°	2888.7	2897.2	2829.6	2922.5	2996.6	3068.9	3114.8	3162.7	3230.2	3228.3	3212.4
35°	2741.4	2750.8	2688.9	2807.1	2881.2	2969.4	3026.6	3090.4	3150.5	3151.4	3139.2
37.5°	2591.3	2602.6	2546.3	2675.7	2760.2	2864.3	2937.5	3001.3	3067.9	3071.7	3060.4
40°	2442.1	2454.3	2405.5	2530.3	2637.3	2753.6	2838.1	2913.1	2986.3	2988.2	2980.7
42.5°	2293.0	2306.1	2269.5	2391.5	2512.5	2637.3	2736.7	2822.1	2897.2	2901.9	2893.4
45°	2147.5	2158.8	2132.5	2265.8	2382.1	2518.1	2632.6	2729.2	2805.2	2811.8	2809.0
47.5°	2003.1	2013.4	1989.9	2111.9	2246.1	2390.5	2522.8	2629.8	2710.5	2718.0	2716.1
50°	1861.4	1869.8	1844.5	1972.1	2105.3	2259.2	2397.1	2520.9	2611.0	2618.5	2617.6
52.5°	1720.7	1729.1	1707.5	1841.7	1962.7	2125.0	2275.1	2409.3	2498.4	2509.7	2511.6
55°	1584.6	1588.4	1571.5	1700.0	1817.3	1987.1	2159.7	2290.1	2379.3	2388.7	2394.3
57.5°	1448.6	1449.5	1435.4	1558.4	1670.9	1844.5	2025.6	2162.6	2247.0	2256.4	2264.8
60°	1313.5	1312.5	1296.6	1415.7	1523.6	1695.3	1883.9	2019.9	2101.6	2110.0	2121.3
62.5°	1179.3	1176.5	1162.4	1272.2	1373.5	1543.3	1732.9	1864.2	1942.1	1947.7	1962.7
65°	1046.1	1043.3	1030.1	1131.5	1223.4	1385.7	1571.5	1696.3	1766.6	1774.1	1771.3
67.5°	914.7	909.1	898.8	989.8	1073.3	1223.4	1401.7	1520.8	1579.0	1585.6	1603.4
70°	783.4	776.8	753.4	850.0	923.2	1057.4	1223.4	1329.4	1378.2	1384.8	1382.0
72.5°	653.9	647.4	622.0	711.2	773.1	890.4	1038.6	1126.8	1169.0	1174.6	1174.6
75°	528.2	524.5	508.5	576.1	627.7	723.4	849.1	922.3	955.1	961.7	959.8
77.5°	407.2	404.4	388.4	446.6	486.9	558.2	659.6	716.8	741.2	748.7	764.6
80°	291.8	290.8	265.5	322.7	340.6	400.6	474.7	518.8	532.0	542.3	553.5
82.5°	186.7	187.6	162.3	211.1	218.6	257.1	303.0	330.2	339.6	348.1	356.5
85°	91.0	94.8	80.7	111.6	112.6	132.3	152.0	162.3	166.1	172.6	180.1
87.5°	23.5	27.2	15.0	31.9	28.1	36.6	42.2	45.0	44.1	48.8	51.6
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°	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1
2.5°	3936.7	3966.7	3951.7	4000.5	4019.2	3989.2	4041.8	4042.7	4005.2	4049.3	4073.7
5°	3875.7	3906.7	3897.3	3947.9	3971.4	3945.1	4008.9	4021.1	3984.5	4034.3	4073.7
7.5°	3813.8	3850.4	3838.2	3889.8	3917.9	3897.3	3965.8	3985.5	3957.3	4011.7	4064.3
10°	3760.3	3791.3	3778.1	3832.5	3856.9	3840.1	3907.6	3944.2	3917.9	3984.5	4047.4
12.5°	3707.8	3733.1	3718.1	3763.1	3786.6	3765.0	3847.6	3881.3	3862.6	3932.0	4012.7
15°	3640.2	3668.4	3647.7	3688.1	3705.9	3687.1	3754.7	3812.8	3789.4	3865.4	3954.5
17.5°	3588.6	3604.6	3576.4	3608.3	3618.6	3593.3	3661.8	3719.0	3702.1	3784.7	3887.9
20°	3531.4	3544.5	3505.1	3522.9	3522.0	3490.1	3553.0	3609.3	3598.0	3689.0	3806.3
22.5°	3467.6	3474.2	3428.2	3431.9	3430.1	3377.5	3433.8	3491.0	3486.4	3578.3	3709.6
25°	3400.0	3401.0	3341.9	3340.0	3319.4	3257.4	3307.2	3371.9	3357.8	3457.3	3595.2
27.5°	3333.4	3324.0	3252.7	3235.9	3203.0	3128.9	3173.0	3231.2	3222.7	3320.3	3473.2
30°	3262.1	3249.9	3162.7	3131.7	3083.9	2998.5	3035.1	3089.5	3094.2	3179.6	3340.0
32.5°	3194.6	3163.6	3067.0	3021.9	2961.9	2862.4	2882.2	2937.5	2945.0	3031.3	3196.4
35°	3107.3	3086.7	2967.5	2890.6	2831.5	2722.7	2743.3	2781.8	2793.0	2877.5	3045.4
37.5°	3024.8	2991.9	2865.3	2771.4	2695.4	2581.0	2586.6	2626.0	2637.3	2722.7	2888.7
40°	2939.4	2892.5	2756.4	2646.7	2559.4	2439.3	2432.8	2474.0	2482.5	2566.0	2716.1
42.5°	2848.4	2792.1	2639.2	2519.1	2418.7	2296.7	2283.6	2319.2	2328.6	2410.2	2557.5
45°	2756.4	2688.9	2519.1	2387.7	2277.9	2153.2	2140.0	2167.2	2181.3	2258.2	2399.9
47.5°	2658.9	2580.1	2395.2	2248.9	2135.3	2010.6	1994.6	2021.8	2033.1	2109.1	2243.2
50°	2556.6	2460.9	2267.6	2106.3	1993.7	1870.8	1847.3	1879.2	1889.5	1960.8	2092.2
52.5°	2444.0	2338.0	2131.6	1962.7	1850.1	1732.9	1704.7	1735.7	1747.9	1817.3	1938.3
55°	2324.9	2210.4	1994.6	1830.4	1708.5	1594.0	1570.5	1582.7	1609.0	1674.7	1787.3
57.5°	2190.7	2077.2	1850.1	1683.1	1565.9	1456.1	1436.4	1447.6	1472.0	1535.8	1637.2
60°	2048.1	1928.0	1702.8	1535.8	1422.3	1318.2	1300.3	1310.7	1336.9	1395.1	1488.9
62.5°	1907.4	1772.3	1550.8	1384.8	1281.6	1184.9	1180.3	1176.5	1200.9	1257.2	1339.7
65°	1736.6	1607.1	1392.3	1234.7	1140.9	1053.6	1034.8	1043.3	1066.7	1118.3	1204.6
67.5°	1553.7	1436.4	1230.0	1084.6	1001.1	923.2	907.2	911.0	935.4	980.4	1055.5
70°	1359.5	1256.2	1063.9	933.5	863.1	790.0	779.6	780.6	804.0	843.4	909.1
72.5°	1155.9	1063.0	896.0	784.3	726.2	673.6	664.2	653.0	674.6	708.3	764.6
75°	948.5	866.9	729.0	638.0	592.0	547.9	539.5	528.2	549.8	578.9	623.0
77.5°	739.3	673.6	566.7	496.3	460.7	427.8	420.3	408.1	429.7	451.3	486.0
80°	534.8	486.9	423.1	349.0	336.8	315.2	307.7	294.6	315.2	329.3	355.6
82.5°	345.3	313.4	276.8	225.2	223.3	207.3	203.6	188.6	207.3	215.8	235.5
85°	174.5	159.5	150.1	114.5	118.2	107.9	107.0	91.0	106.0	109.8	121.0
87.5°	49.7	52.5	46.9	28.1	35.7	33.8	33.8	24.4	33.8	33.8	38.5
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: P838207

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-3HI-35-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1	4022.1
2.5°	4025.8	4041.8	4045.5	4044.6	4054.9	4111.2	4092.4	4111.2
5°	4035.2	4070.8	4080.2	4093.4	4110.3	4174.1	4153.4	4175.9
7.5°	4040.8	4094.3	4114.9	4140.3	4167.5	4238.8	4221.9	4244.4
10°	4040.8	4110.3	4140.3	4182.5	4219.1	4301.6	4285.7	4312.0
12.5°	4023.9	4113.1	4155.3	4214.4	4261.3	4350.4	4343.9	4362.6
15°	3989.2	4099.0	4157.2	4233.2	4291.3	4390.8	4388.0	4410.5
17.5°	3942.3	4074.6	4145.0	4240.7	4313.8	4425.5	4432.1	4444.3
20°	3883.2	4028.6	4120.6	4237.8	4329.8	4452.7	4461.1	4478.0
22.5°	3805.3	3973.3	4084.0	4225.7	4331.7	4464.0	4479.0	4494.9
25°	3713.4	3906.7	4036.1	4202.2	4322.3	4463.0	4483.7	4497.7
27.5°	3608.3	3820.4	3975.2	4164.7	4296.0	4448.0	4473.3	4490.2
30°	3486.4	3728.4	3905.7	4115.9	4260.4	4419.9	4447.1	4464.0
32.5°	3360.6	3627.1	3823.2	4053.0	4208.8	4374.8	4398.3	4411.4
35°	3223.7	3504.2	3723.7	3972.3	4142.2	4302.6	4320.4	4334.5
37.5°	3074.5	3371.0	3610.2	3881.3	4048.3	4202.2	4218.1	4234.1
40°	2920.6	3231.2	3482.6	3769.7	3936.7	4079.3	4096.2	4107.4
42.5°	2765.8	3076.4	3346.6	3638.3	3804.4	3941.4	3951.7	3963.0
45°	2609.1	2915.9	3193.6	3492.9	3657.1	3785.6	3789.4	3798.8
47.5°	2449.6	2749.9	3025.7	3326.9	3489.2	3606.4	3610.2	3617.7
50°	2289.2	2583.8	2846.5	3147.7	3306.2	3430.1	3413.2	3420.7
52.5°	2131.6	2409.3	2677.6	2954.4	3111.1	3220.8	3225.5	3210.5
55°	1976.8	2238.5	2485.3	2751.7	2900.9	2986.3	2983.5	2989.1
57.5°	1820.1	2065.9	2292.0	2536.0	2681.4	2762.1	2778.9	2759.2
60°	1660.6	1891.4	2094.1	2314.5	2455.3	2522.8	2542.5	2523.8
62.5°	1502.1	1714.1	1898.0	2090.3	2220.7	2304.2	2302.3	2281.7
65°	1343.5	1535.8	1700.0	1863.3	1976.8	2060.3	2056.5	2037.8
67.5°	1197.1	1355.7	1503.0	1635.3	1733.8	1791.0	1810.7	1788.2
70°	1035.8	1172.8	1302.2	1408.2	1489.9	1541.5	1560.2	1540.5
72.5°	874.4	990.7	1081.7	1184.0	1246.9	1290.0	1309.7	1291.0
75°	714.9	810.6	884.7	964.5	1008.6	1045.2	1067.7	1048.9
77.5°	560.1	634.2	693.3	751.5	802.2	810.6	830.3	818.1
80°	412.8	466.3	509.4	547.9	584.5	588.3	604.2	596.7
82.5°	274.9	310.5	321.8	362.1	385.6	381.8	397.8	392.2
85°	145.4	167.0	186.7	198.9	212.0	199.8	213.9	208.3
87.5°	48.8	51.6	45.0	63.8	70.4	60.0	68.5	65.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)