

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: P837739

Luminaire Tested: **ORLG-12-4-INS-ASY2R-LD4-3HI-30-120-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: P837739
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-ASY2R-LD4-3HI-30-120-EDD
Description: 1FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

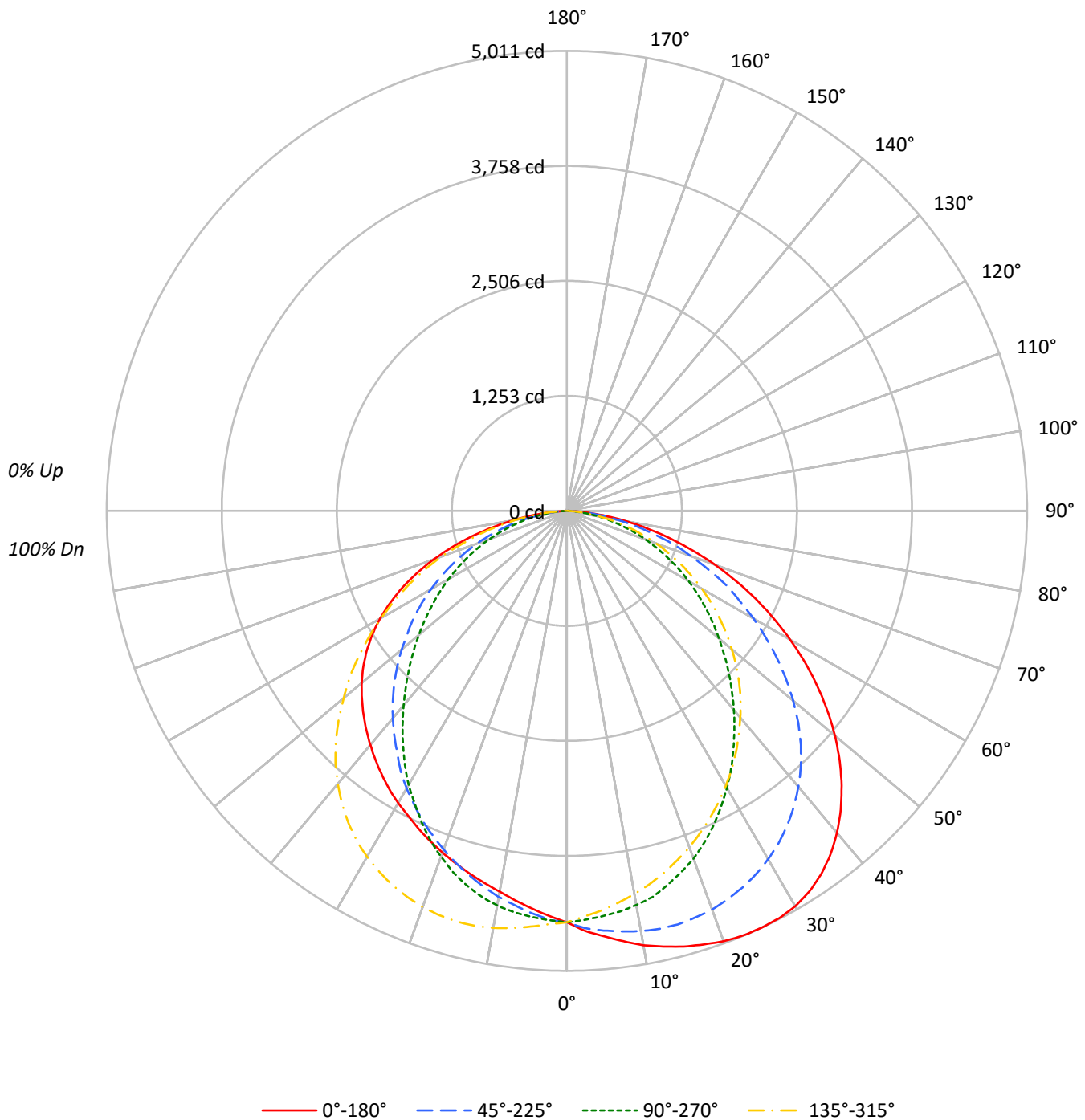
Lumens per Lamp: N/A
Luminaire Lumens: 13146.7 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		90
2	99	91	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	88	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		56
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12058	12058	12058	12058
5°	12567	11972	11746	11991
10°	13127	11910	11507	11927
15°	13689	11758	11395	11762
20°	14287	11545	11344	11479
25°	14878	11222	11343	11108
30°	15453	10832	11420	10712
35°	15864	10387	11534	10222
40°	16075	9940	11695	9715
45°	16106	9487	11921	9248
50°	15954	9054	12213	8813
55°	15624	8650	12485	8410
60°	15132	8230	12652	8016
65°	14456	7747	12586	7568
70°	13504	7179	12139	7048
75°	12150	6402	11139	6368
80°	10302	5362	9363	5442
85°	7163	3551	5937	3646

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.4	3.2
10°-20°	1232.0	9.4
20°-30°	1888.1	14.4
30°-40°	2295.8	17.5
40°-50°	2386.6	18.2
50°-60°	2155.8	16.4
60°-70°	1639.0	12.5
70°-80°	913.7	7.0
80°-90°	210.4	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°	3545.5	27.0
0°-40°	5841.2	44.4
0°-60°	10383.6	79.0
0°-90°	13146.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13146.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4481	4481	4481	4481	4481	
5°	4652	4432	4348	4439	4652	449
15°	4914	4221	4090	4222	4914	1393
25°	5011	3780	3820	3741	5011	2314
35°	4829	3162	3511	3112	4829	3016
45°	4232	2493	3133	2430	4232	3258
55°	3330	1844	2661	1793	3330	2973
65°	2270	1217	1977	1188	2270	2244
75°	1169	616	1071	612	1169	1241
85°	232	115	192	118	232	292
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°	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0
2.5°	4580.3	4513.4	4514.5	4573.0	4528.0	4550.0	4487.3	4511.3	4504.0	4509.2	4458.0
5°	4652.4	4580.3	4579.3	4629.4	4579.3	4588.7	4509.2	4524.9	4501.9	4487.3	4431.9
7.5°	4728.7	4656.6	4649.3	4693.2	4627.3	4620.0	4532.2	4532.2	4490.4	4453.8	4401.6
10°	4804.0	4729.8	4720.4	4753.8	4672.3	4648.3	4541.6	4524.9	4469.5	4415.2	4358.7
12.5°	4860.4	4785.2	4777.9	4798.8	4706.8	4662.9	4541.6	4509.2	4427.7	4351.4	4307.5
15°	4913.7	4836.4	4816.5	4827.0	4721.4	4662.9	4527.0	4476.8	4372.3	4272.0	4220.7
17.5°	4951.4	4877.2	4857.3	4856.3	4728.7	4645.1	4495.6	4426.7	4301.2	4180.0	4128.8
20°	4989.0	4914.8	4889.7	4870.9	4726.6	4621.1	4449.7	4356.6	4210.3	4074.4	4031.5
22.5°	5007.8	4931.5	4904.3	4876.1	4713.1	4577.2	4393.2	4275.1	4107.9	3945.8	3910.3
25°	5011.0	4932.6	4903.3	4862.5	4685.9	4524.9	4320.0	4176.8	3989.7	3810.0	3779.6
27.5°	5002.6	4916.9	4887.6	4838.5	4645.1	4461.1	4233.3	4065.0	3864.3	3665.7	3633.3
30°	4973.3	4886.6	4858.3	4794.6	4587.6	4382.8	4138.2	3940.6	3725.3	3514.1	3485.9
32.5°	4914.8	4830.1	4807.1	4743.4	4524.9	4291.8	4027.4	3806.8	3571.6	3369.9	3328.1
35°	4829.1	4744.4	4729.8	4662.9	4437.1	4183.1	3906.1	3660.5	3408.6	3202.7	3161.9
37.5°	4717.2	4646.2	4624.2	4558.4	4333.6	4059.8	3767.1	3501.6	3242.4	3020.8	2995.7
40°	4576.1	4509.2	4492.5	4434.0	4213.4	3922.8	3616.6	3337.5	3071.0	2865.0	2829.5
42.5°	4415.2	4352.4	4343.0	4282.4	4065.0	3771.3	3453.5	3167.1	2892.2	2693.6	2658.1
45°	4232.2	4171.6	4169.5	4112.0	3903.0	3603.0	3282.1	2994.7	2717.7	2511.7	2492.9
47.5°	4030.5	3976.2	3976.2	3922.8	3722.2	3418.0	3105.5	2814.9	2542.1	2360.2	2326.7
50°	3811.0	3759.8	3744.1	3718.0	3522.5	3216.3	2919.4	2639.3	2368.5	2195.0	2162.6
52.5°	3576.9	3533.0	3543.4	3495.3	3306.1	3006.2	2731.3	2441.7	2194.0	2036.2	2003.8
55°	3330.2	3267.5	3276.9	3259.1	3080.4	2789.8	2520.1	2278.7	2022.6	1874.1	1843.8
57.5°	3074.1	2992.6	3026.0	3015.6	2840.0	2568.2	2326.7	2093.6	1852.2	1715.3	1686.0
60°	2811.7	2733.3	2767.8	2758.4	2593.3	2346.6	2127.1	1910.7	1682.9	1558.5	1529.2
62.5°	2542.1	2469.9	2501.3	2494.0	2342.4	2119.8	1928.5	1729.9	1512.5	1400.6	1373.5
65°	2270.3	2201.3	2229.5	2224.3	2084.2	1914.9	1724.7	1542.8	1341.1	1243.9	1216.7
67.5°	1992.3	1928.5	1954.6	1954.6	1826.1	1664.0	1519.8	1353.6	1172.8	1089.2	1064.1
70°	1716.3	1656.7	1679.7	1677.6	1568.9	1437.2	1312.8	1164.4	1002.4	933.4	912.5
72.5°	1438.3	1386.0	1406.9	1404.8	1313.9	1229.2	1105.9	977.3	836.2	780.8	762.0
75°	1168.6	1119.5	1139.3	1137.2	1063.0	983.6	901.0	794.4	673.1	634.5	615.7
77.5°	911.5	861.3	878.0	878.0	823.7	766.2	700.3	617.7	532.0	490.2	476.6
80°	664.8	640.7	632.4	633.4	596.8	559.2	525.8	446.3	383.6	355.4	346.0
82.5°	436.9	417.1	408.7	410.8	389.9	366.9	346.0	290.6	248.8	232.0	226.8
85°	232.0	217.4	210.1	215.3	211.1	198.6	188.1	150.5	124.4	118.1	115.0
87.5°	73.2	63.8	58.5	77.3	65.9	58.5	56.4	44.9	34.5	34.5	33.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0
2.5°	4474.7	4474.7	4434.0	4424.6	4420.4	4425.6	4384.8	4377.5	4436.1	4416.2	4371.3
5°	4439.2	4437.1	4379.6	4369.2	4369.2	4362.9	4316.9	4306.5	4365.0	4348.3	4299.1
7.5°	4395.3	4389.0	4321.1	4313.8	4303.3	4299.1	4247.9	4240.6	4290.8	4280.3	4234.3
10°	4342.0	4335.7	4255.2	4250.0	4238.5	4230.1	4182.1	4176.8	4228.1	4211.3	4174.7
12.5°	4272.0	4260.5	4177.9	4172.7	4163.3	4160.1	4113.1	4111.0	4167.4	4150.7	4112.0
15°	4180.0	4170.6	4078.6	4080.7	4081.7	4081.7	4044.1	4042.0	4097.4	4090.1	4048.3
17.5°	4078.6	4066.0	3978.2	3984.5	3991.8	4000.2	3970.9	3976.2	4034.7	4025.3	3987.6
20°	3963.6	3951.1	3865.4	3883.1	3898.8	3915.5	3896.7	3911.3	3965.7	3961.5	3933.3
22.5°	3835.0	3822.5	3743.1	3770.2	3796.4	3827.7	3819.4	3836.1	3893.6	3892.5	3867.4
25°	3678.3	3681.4	3611.4	3644.8	3688.7	3732.6	3735.7	3762.9	3826.7	3820.4	3797.4
27.5°	3531.9	3536.1	3461.9	3518.3	3576.9	3633.3	3646.9	3684.5	3749.3	3744.1	3724.2
30°	3378.3	3383.5	3311.4	3388.7	3459.8	3528.8	3558.0	3609.3	3675.1	3675.1	3654.2
32.5°	3218.3	3227.7	3152.5	3256.0	3338.5	3419.0	3470.2	3523.6	3598.8	3596.7	3579.0
35°	3054.2	3064.7	2995.7	3127.4	3210.0	3308.2	3372.0	3443.1	3510.0	3511.0	3497.4
37.5°	2887.0	2899.5	2836.8	2981.1	3075.1	3191.2	3272.7	3343.8	3418.0	3422.2	3409.6
40°	2720.8	2734.4	2680.0	2819.1	2938.2	3067.8	3161.9	3245.5	3327.0	3329.1	3320.8
42.5°	2554.6	2569.2	2528.5	2664.4	2799.2	2938.2	3049.0	3144.1	3227.7	3233.0	3223.6
45°	2392.6	2405.1	2375.9	2524.3	2653.9	2805.5	2933.0	3040.6	3125.3	3132.6	3129.5
47.5°	2231.6	2243.1	2217.0	2352.9	2502.3	2663.3	2810.7	2929.9	3019.7	3028.1	3026.0
50°	2073.8	2083.2	2055.0	2197.1	2345.6	2517.0	2670.6	2808.6	2908.9	2917.3	2916.3
52.5°	1917.0	1926.4	1902.4	2051.8	2186.7	2367.5	2534.7	2684.2	2783.5	2796.1	2798.1
55°	1765.4	1769.6	1750.8	1894.0	2024.7	2213.9	2406.2	2551.5	2650.8	2661.2	2667.5
57.5°	1613.9	1614.9	1599.2	1736.2	1861.6	2055.0	2256.7	2409.3	2503.4	2513.8	2523.2
60°	1463.4	1462.3	1444.5	1577.3	1697.5	1888.8	2098.9	2250.4	2341.4	2350.8	2363.3
62.5°	1313.9	1310.8	1295.1	1417.4	1530.3	1719.4	1930.6	2076.9	2163.7	2169.9	2186.7
65°	1165.5	1162.3	1147.7	1260.6	1363.0	1543.8	1750.8	1889.8	1968.2	1976.6	1973.4
67.5°	1019.1	1012.9	1001.4	1102.7	1195.8	1363.0	1561.6	1694.4	1759.2	1766.5	1786.3
70°	872.8	865.5	839.3	947.0	1028.5	1178.0	1363.0	1481.1	1535.5	1542.8	1539.7
72.5°	728.5	721.2	693.0	792.3	861.3	991.9	1157.1	1255.4	1302.4	1308.7	1308.7
75°	588.5	584.3	566.5	641.8	699.3	805.9	946.0	1027.5	1064.1	1071.4	1069.3
77.5°	453.6	450.5	432.7	497.5	542.5	621.9	734.8	798.6	825.8	834.1	851.9
80°	325.1	324.0	295.8	359.6	379.4	446.3	528.9	578.0	592.7	604.2	616.7
82.5°	208.0	209.1	180.8	235.2	243.5	286.4	337.6	367.9	378.4	387.8	397.2
85°	101.4	105.6	89.9	124.4	125.4	147.4	169.3	180.8	185.0	192.3	200.7
87.5°	26.1	30.3	16.7	35.5	31.4	40.8	47.0	50.2	49.1	54.4	57.5
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°	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0
2.5°	4385.9	4419.3	4402.6	4457.0	4477.9	4444.4	4503.0	4504.0	4462.2	4511.3	4538.5
5°	4317.9	4352.4	4342.0	4398.4	4424.6	4395.3	4466.4	4480.0	4439.2	4494.6	4538.5
7.5°	4249.0	4289.7	4276.1	4333.6	4365.0	4342.0	4418.3	4440.2	4408.9	4469.5	4528.0
10°	4189.4	4223.9	4209.2	4269.9	4297.0	4278.2	4353.5	4394.3	4365.0	4439.2	4509.2
12.5°	4130.8	4159.1	4142.3	4192.5	4218.7	4194.6	4286.6	4324.2	4303.3	4380.7	4470.6
15°	4055.6	4086.9	4064.0	4108.9	4128.8	4107.9	4183.1	4247.9	4221.8	4306.5	4405.8
17.5°	3998.1	4015.9	3984.5	4020.1	4031.5	4003.3	4079.6	4143.4	4124.6	4216.6	4331.5
20°	3934.3	3949.0	3905.1	3924.9	3923.9	3888.3	3958.4	4021.1	4008.6	4109.9	4240.6
22.5°	3863.3	3870.6	3819.4	3823.5	3821.5	3762.9	3825.6	3889.4	3884.2	3986.6	4132.9
25°	3788.0	3789.1	3723.2	3721.1	3698.1	3629.1	3684.5	3756.6	3741.0	3851.8	4005.4
27.5°	3713.8	3703.3	3623.9	3605.1	3568.5	3485.9	3535.1	3599.9	3590.5	3699.2	3869.5
30°	3634.4	3620.8	3523.6	3489.1	3435.8	3340.6	3381.4	3442.0	3447.3	3542.4	3721.1
32.5°	3559.1	3524.6	3416.9	3366.8	3299.9	3189.1	3211.0	3272.7	3281.1	3377.2	3561.2
35°	3461.9	3438.9	3306.1	3220.4	3154.6	3033.3	3056.3	3099.2	3111.7	3205.8	3392.9
37.5°	3369.9	3333.3	3192.2	3087.7	3003.0	2875.5	2881.8	2925.7	2938.2	3033.3	3218.3
40°	3274.8	3222.5	3071.0	2948.7	2851.5	2717.7	2710.3	2756.3	2765.7	2858.8	3026.0
42.5°	3173.4	3110.7	2940.3	2806.5	2694.7	2558.8	2544.2	2583.9	2594.3	2685.3	2849.4
45°	3071.0	2995.7	2806.5	2660.2	2537.9	2398.9	2384.2	2414.5	2430.2	2515.9	2673.8
47.5°	2962.3	2874.5	2668.5	2505.5	2379.0	2240.0	2222.2	2252.5	2265.1	2349.7	2499.2
50°	2848.3	2741.7	2526.4	2346.6	2221.2	2084.2	2058.1	2093.6	2105.1	2184.6	2330.9
52.5°	2722.9	2604.8	2374.8	2186.7	2061.2	1930.6	1899.2	1933.7	1947.3	2024.7	2159.5
55°	2590.1	2462.6	2222.2	2039.3	1903.4	1775.9	1749.8	1763.3	1792.6	1865.8	1991.2
57.5°	2440.7	2314.2	2061.2	1875.2	1744.5	1622.2	1600.3	1612.8	1640.0	1711.1	1824.0
60°	2281.8	2148.0	1897.1	1711.1	1584.6	1468.6	1448.7	1460.2	1489.5	1554.3	1658.8
62.5°	2125.0	1974.5	1727.8	1542.8	1427.8	1320.2	1314.9	1310.8	1337.9	1400.6	1492.6
65°	1934.8	1790.5	1551.2	1375.6	1271.0	1173.8	1152.9	1162.3	1188.5	1245.9	1342.1
67.5°	1730.9	1600.3	1370.3	1208.3	1115.3	1028.5	1010.8	1014.9	1042.1	1092.3	1175.9
70°	1514.6	1399.6	1185.3	1040.0	961.6	880.1	868.6	869.7	895.8	939.7	1012.9
72.5°	1287.8	1184.3	998.2	873.8	809.0	750.5	740.0	727.5	751.5	789.2	851.9
75°	1056.8	965.8	812.2	710.8	659.6	610.4	601.0	588.5	612.5	644.9	694.0
77.5°	823.7	750.5	631.3	552.9	513.2	476.6	468.3	454.7	478.7	502.8	541.4
80°	595.8	542.5	471.4	388.8	375.2	351.2	342.8	328.2	351.2	366.9	396.2
82.5°	384.7	349.1	308.4	250.9	248.8	231.0	226.8	210.1	231.0	240.4	262.4
85°	194.4	177.7	167.2	127.5	131.7	120.2	119.2	101.4	118.1	122.3	134.8
87.5°	55.4	58.5	52.3	31.4	39.7	37.6	37.6	27.2	37.6	37.6	42.9
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: P837739

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-3HI-30-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0	4481.0
2.5°	4485.2	4503.0	4507.1	4506.1	4517.6	4580.3	4559.4	4580.3
5°	4495.6	4535.4	4545.8	4560.4	4579.3	4650.3	4627.3	4652.4
7.5°	4501.9	4561.5	4584.5	4612.7	4643.0	4722.5	4703.6	4728.7
10°	4501.9	4579.3	4612.7	4659.7	4700.5	4792.5	4774.7	4804.0
12.5°	4483.1	4582.4	4629.4	4695.3	4747.5	4846.8	4839.5	4860.4
15°	4444.4	4566.7	4631.5	4716.2	4781.0	4891.8	4888.7	4913.7
17.5°	4392.2	4539.5	4617.9	4724.6	4806.1	4930.5	4937.8	4951.4
20°	4326.3	4488.3	4590.8	4721.4	4823.9	4960.8	4970.2	4989.0
22.5°	4239.6	4426.7	4550.0	4707.8	4825.9	4973.3	4990.0	5007.8
25°	4137.1	4352.4	4496.7	4681.7	4815.5	4972.3	4995.3	5011.0
27.5°	4020.1	4256.3	4428.7	4639.9	4786.2	4955.6	4983.8	5002.6
30°	3884.2	4153.8	4351.4	4585.5	4746.5	4924.2	4954.5	4973.3
32.5°	3744.1	4041.0	4259.4	4515.5	4689.0	4874.0	4900.2	4914.8
35°	3591.5	3904.0	4148.6	4425.6	4614.8	4793.5	4813.4	4829.1
37.5°	3425.3	3755.6	4022.1	4324.2	4510.3	4681.7	4699.5	4717.2
40°	3253.9	3599.9	3880.0	4199.8	4385.9	4544.8	4563.6	4576.1
42.5°	3081.4	3427.4	3728.4	4053.5	4238.5	4391.1	4402.6	4415.2
45°	2906.9	3248.7	3558.0	3891.5	4074.4	4217.6	4221.8	4232.2
47.5°	2729.2	3063.6	3370.9	3706.5	3887.3	4018.0	4022.1	4030.5
50°	2550.4	2878.6	3171.3	3506.8	3683.5	3821.5	3802.6	3811.0
52.5°	2374.8	2684.2	2983.2	3291.5	3466.1	3588.4	3593.6	3576.9
55°	2202.4	2494.0	2768.9	3065.7	3231.9	3327.0	3323.9	3330.2
57.5°	2027.8	2301.7	2553.6	2825.3	2987.3	3077.2	3096.0	3074.1
60°	1850.1	2107.2	2333.0	2578.6	2735.4	2810.7	2832.6	2811.7
62.5°	1673.5	1909.7	2114.6	2328.8	2474.1	2567.1	2565.1	2542.1
65°	1496.8	1711.1	1894.0	2075.9	2202.4	2295.4	2291.2	2270.3
67.5°	1333.7	1510.4	1674.5	1821.9	1931.6	1995.4	2017.3	1992.3
70°	1154.0	1306.6	1450.8	1568.9	1659.9	1717.4	1738.3	1716.3
72.5°	974.2	1103.8	1205.2	1319.1	1389.1	1437.2	1459.2	1438.3
75°	796.5	903.1	985.7	1074.5	1123.6	1164.4	1189.5	1168.6
77.5°	624.0	706.6	772.4	837.2	893.7	903.1	925.1	911.5
80°	459.9	519.5	567.6	610.4	651.2	655.4	673.1	664.8
82.5°	306.3	346.0	358.5	403.5	429.6	425.4	443.2	436.9
85°	162.0	186.1	208.0	221.6	236.2	222.6	238.3	232.0
87.5°	54.4	57.5	50.2	71.1	78.4	66.9	76.3	73.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)