

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: P837748

Luminaire Tested: **ORLG-12-4-INS-ASY2R-LD4-3HI-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: P837748
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-35-120-EDD
Description: 1FT 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

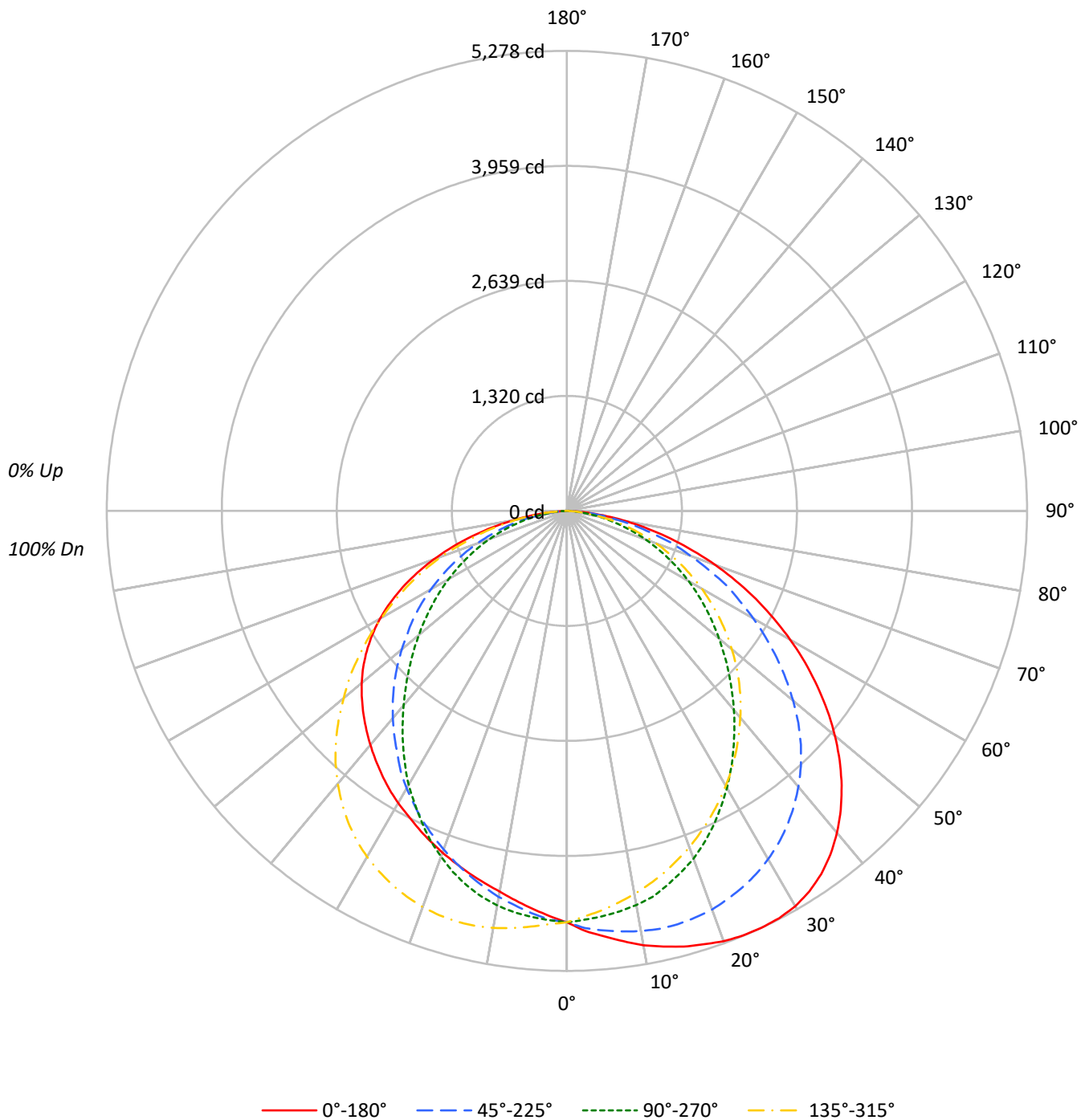
Lumens per Lamp: N/A
Luminaire Lumens: 13846.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12700	12700	12700	12700
5°	13236	12608	12371	12629
10°	13825	12544	12119	12562
15°	14417	12384	12001	12387
20°	15047	12159	11948	12090
25°	15670	11819	11947	11699
30°	16276	11408	12027	11281
35°	16708	10940	12148	10766
40°	16930	10468	12317	10233
45°	16963	9992	12556	9740
50°	16803	9535	12863	9282
55°	16455	9111	13150	8858
60°	15938	8668	13325	8443
65°	15225	8159	13255	7970
70°	14222	7561	12785	7423
75°	12797	6742	11732	6707
80°	10849	5647	9861	5732
85°	7546	3739	6255	3841

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	448.1	3.2
10°-20°	1297.5	9.4
20°-30°	1988.5	14.4
30°-40°	2417.9	17.5
40°-50°	2513.5	18.2
50°-60°	2270.5	16.4
60°-70°	1726.1	12.5
70°-80°	962.3	7.0
80°-90°	221.6	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°	3734.1	27.0
0°-40°	6152.0	44.4
0°-60°	10935.9	79.0
0°-90°	13846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13846.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4719	4719	4719	4719	4719	
5°	4900	4668	4580	4675	4900	472
15°	5175	4445	4308	4446	5175	1467
25°	5278	3981	4024	3940	5278	2438
35°	5086	3330	3698	3277	5086	3177
45°	4457	2626	3299	2560	4457	3432
55°	3507	1942	2803	1888	3507	3131
65°	2391	1281	2082	1252	2391	2363
75°	1231	648	1128	645	1231	1307
85°	244	121	203	124	244	308
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°	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4
2.5°	4823.9	4753.5	4754.6	4816.2	4768.9	4792.0	4726.0	4751.3	4743.6	4749.1	4695.1
5°	4899.9	4823.9	4822.8	4875.7	4822.8	4832.7	4749.1	4765.6	4741.4	4726.0	4667.6
7.5°	4980.3	4904.3	4896.6	4942.8	4873.5	4865.8	4773.3	4773.3	4729.3	4690.7	4635.7
10°	5059.5	4981.4	4971.5	5006.7	4920.8	4895.5	4783.2	4765.6	4707.3	4650.0	4590.6
12.5°	5119.0	5039.7	5032.0	5054.0	4957.1	4910.9	4783.2	4749.1	4663.2	4582.9	4536.6
15°	5175.1	5093.7	5072.7	5083.7	4972.6	4910.9	4767.8	4715.0	4604.9	4499.2	4445.2
17.5°	5214.7	5136.6	5115.7	5114.6	4980.3	4892.2	4734.8	4662.1	4530.0	4402.3	4348.4
20°	5254.4	5176.2	5149.8	5130.0	4978.1	4866.9	4686.3	4588.4	4434.2	4291.1	4246.0
22.5°	5274.2	5193.8	5165.2	5135.5	4963.8	4820.6	4626.9	4502.5	4326.4	4155.7	4118.3
25°	5277.5	5194.9	5164.1	5121.2	4935.1	4765.6	4549.8	4399.0	4202.0	4012.6	3980.7
27.5°	5268.7	5178.4	5147.6	5095.9	4892.2	4698.4	4458.5	4281.2	4069.9	3860.7	3826.6
30°	5237.9	5146.5	5116.8	5049.6	4831.6	4615.9	4358.3	4150.2	3923.4	3701.1	3671.3
32.5°	5176.2	5087.0	5062.8	4995.7	4765.6	4520.1	4241.6	4009.3	3761.6	3549.2	3505.1
35°	5085.9	4996.8	4981.4	4910.9	4673.1	4405.6	4113.9	3855.2	3589.9	3373.0	3330.1
37.5°	4968.2	4893.3	4870.2	4800.8	4564.1	4275.7	3967.5	3687.9	3414.8	3181.5	3155.0
40°	4819.5	4749.1	4731.5	4669.8	4437.5	4131.5	3809.0	3515.0	3234.3	3017.4	2980.0
42.5°	4650.0	4584.0	4574.0	4510.2	4281.2	3971.9	3637.2	3335.6	3046.1	2836.9	2799.5
45°	4457.4	4393.5	4391.3	4330.8	4110.6	3794.6	3456.7	3153.9	2862.2	2645.4	2625.5
47.5°	4244.9	4187.6	4187.6	4131.5	3920.1	3599.8	3270.6	2964.6	2677.3	2485.7	2450.5
50°	4013.7	3959.8	3943.3	3915.7	3709.9	3387.3	3074.7	2779.7	2494.5	2311.8	2277.7
52.5°	3767.1	3720.9	3731.9	3681.3	3482.0	3166.1	2876.5	2571.6	2310.7	2144.5	2110.3
55°	3507.3	3441.3	3451.2	3432.5	3244.2	2938.2	2654.2	2399.9	2130.2	1973.8	1941.9
57.5°	3237.6	3151.7	3187.0	3176.0	2991.0	2704.8	2450.5	2205.0	1950.7	1806.5	1775.7
60°	2961.3	2878.7	2915.1	2905.2	2731.2	2471.4	2240.2	2012.4	1772.4	1641.4	1610.5
62.5°	2677.3	2601.3	2634.3	2626.6	2467.0	2232.5	2031.1	1821.9	1592.9	1475.1	1446.5
65°	2391.1	2318.4	2348.1	2342.6	2195.1	2016.8	1816.4	1624.9	1412.4	1310.0	1281.4
67.5°	2098.2	2031.1	2058.6	2058.6	1923.2	1752.6	1600.6	1425.6	1235.2	1147.1	1120.7
70°	1807.6	1744.9	1769.1	1766.9	1652.4	1513.7	1382.7	1226.4	1055.7	983.1	961.0
72.5°	1514.8	1459.7	1481.7	1479.5	1383.8	1294.6	1164.7	1029.3	880.7	822.3	802.5
75°	1230.8	1179.0	1199.9	1197.7	1119.6	1035.9	948.9	836.6	708.9	668.2	648.4
77.5°	959.9	907.1	924.7	924.7	867.5	806.9	737.6	650.6	560.3	516.3	502.0
80°	700.1	674.8	666.0	667.1	628.6	589.0	553.7	470.1	404.0	374.3	364.4
82.5°	460.2	439.2	430.4	432.6	410.6	386.4	364.4	306.0	262.0	244.4	238.9
85°	244.4	229.0	221.3	226.8	222.4	209.2	198.2	158.5	131.0	124.4	121.1
87.5°	77.1	67.2	61.6	81.5	69.4	61.6	59.4	47.3	36.3	36.3	35.2
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°	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4
2.5°	4712.8	4712.8	4669.8	4659.9	4655.5	4661.0	4618.1	4610.4	4672.0	4651.1	4603.8
5°	4675.3	4673.1	4612.6	4601.6	4601.6	4595.0	4546.5	4535.5	4597.2	4579.6	4527.8
7.5°	4629.1	4622.5	4550.9	4543.2	4532.2	4527.8	4473.9	4466.2	4519.0	4508.0	4459.6
10°	4572.9	4566.3	4481.6	4476.1	4464.0	4455.2	4404.5	4399.0	4453.0	4435.3	4396.8
12.5°	4499.2	4487.1	4400.1	4394.6	4384.7	4381.4	4331.9	4329.7	4389.1	4371.5	4330.8
15°	4402.3	4392.4	4295.5	4297.7	4298.8	4298.8	4259.2	4257.0	4315.3	4307.6	4263.6
17.5°	4295.5	4282.3	4189.9	4196.5	4204.2	4213.0	4182.1	4187.6	4249.3	4239.4	4199.8
20°	4174.4	4161.2	4071.0	4089.7	4106.2	4123.8	4104.0	4119.4	4176.6	4172.2	4142.5
22.5°	4039.0	4025.8	3942.2	3970.8	3998.3	4031.3	4022.5	4040.1	4100.7	4099.6	4073.2
25°	3873.9	3877.2	3803.5	3838.7	3884.9	3931.1	3934.5	3963.1	4030.2	4023.6	3999.4
27.5°	3719.8	3724.2	3646.0	3705.5	3767.1	3826.6	3840.9	3880.5	3948.8	3943.3	3922.3
30°	3558.0	3563.5	3487.5	3569.0	3643.8	3716.5	3747.3	3801.2	3870.6	3870.6	3848.6
32.5°	3389.5	3399.4	3320.2	3429.2	3516.1	3600.9	3654.8	3711.0	3790.2	3788.0	3769.3
35°	3216.7	3227.7	3155.0	3293.8	3380.7	3484.2	3551.4	3626.2	3696.7	3697.8	3683.5
37.5°	3040.6	3053.8	2987.7	3139.6	3238.7	3360.9	3446.8	3521.6	3599.8	3604.2	3591.0
40°	2865.5	2879.8	2822.6	2969.0	3094.5	3231.0	3330.1	3418.2	3504.0	3506.2	3497.4
42.5°	2690.5	2705.9	2663.0	2806.1	2948.1	3094.5	3211.2	3311.4	3399.4	3404.9	3395.0
45°	2519.9	2533.1	2502.2	2658.6	2795.1	2954.7	3089.0	3202.4	3291.6	3299.3	3296.0
47.5°	2350.3	2362.4	2334.9	2478.0	2635.4	2805.0	2960.2	3085.7	3180.4	3189.2	3187.0
50°	2184.1	2194.0	2164.3	2314.0	2470.3	2650.9	2812.7	2958.0	3063.7	3072.5	3071.4
52.5°	2019.0	2028.9	2003.6	2161.0	2303.0	2493.4	2669.6	2827.0	2931.6	2944.8	2947.0
55°	1859.3	1863.7	1843.9	1994.7	2132.4	2331.6	2534.2	2687.2	2791.8	2802.8	2809.4
57.5°	1699.7	1700.8	1684.3	1828.5	1960.6	2164.3	2376.7	2537.5	2636.5	2647.6	2657.5
60°	1541.2	1540.1	1521.4	1661.2	1787.8	1989.2	2210.5	2370.1	2465.9	2475.8	2489.0
62.5°	1383.8	1380.5	1364.0	1492.8	1611.7	1810.9	2033.3	2187.4	2278.8	2285.4	2303.0
65°	1227.5	1224.1	1208.7	1327.6	1435.5	1626.0	1843.9	1990.3	2072.9	2081.7	2078.4
67.5°	1073.3	1066.7	1054.6	1161.4	1259.4	1435.5	1644.7	1784.5	1852.7	1860.4	1881.4
70°	919.2	911.5	884.0	997.4	1083.2	1240.7	1435.5	1559.9	1617.2	1624.9	1621.6
72.5°	767.3	759.6	729.9	834.4	907.1	1044.7	1218.6	1322.1	1371.7	1378.3	1378.3
75°	619.8	615.4	596.7	675.9	736.5	848.8	996.3	1082.1	1120.7	1128.4	1126.2
77.5°	477.8	474.5	455.8	524.0	571.3	655.0	773.9	841.1	869.7	878.5	897.2
80°	342.4	341.3	311.5	378.7	399.6	470.1	557.0	608.8	624.2	636.3	649.5
82.5°	219.1	220.2	190.4	247.7	256.5	301.6	355.6	387.5	398.5	408.4	418.3
85°	106.8	111.2	94.7	131.0	132.1	155.2	178.3	190.4	194.9	202.6	211.4
87.5°	27.5	31.9	17.6	37.4	33.0	42.9	49.5	52.8	51.7	57.2	60.5
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°	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4
2.5°	4619.2	4654.4	4636.8	4694.0	4716.1	4680.8	4742.5	4743.6	4699.5	4751.3	4779.9
5°	4547.6	4584.0	4572.9	4632.4	4659.9	4629.1	4703.9	4718.3	4675.3	4733.7	4779.9
7.5°	4475.0	4517.9	4503.6	4564.1	4597.2	4572.9	4653.3	4676.4	4643.4	4707.3	4768.9
10°	4412.2	4448.6	4433.1	4497.0	4525.6	4505.8	4585.1	4628.0	4597.2	4675.3	4749.1
12.5°	4350.6	4380.3	4362.7	4415.5	4443.0	4417.7	4514.6	4554.2	4532.2	4613.7	4708.4
15°	4271.3	4304.3	4280.1	4327.5	4348.4	4326.4	4405.6	4473.9	4446.3	4535.5	4640.1
17.5°	4210.8	4229.5	4196.5	4233.9	4246.0	4216.3	4296.6	4363.8	4344.0	4440.8	4561.9
20°	4143.6	4159.0	4112.8	4133.7	4132.6	4095.2	4168.9	4235.0	4221.8	4328.6	4466.2
22.5°	4068.8	4076.5	4022.5	4026.9	4024.7	3963.1	4029.1	4096.3	4090.8	4198.7	4352.8
25°	3989.5	3990.6	3921.2	3919.0	3894.8	3822.2	3880.5	3956.5	3940.0	4056.6	4218.5
27.5°	3911.3	3900.3	3816.7	3796.8	3758.3	3671.3	3723.1	3791.3	3781.4	3895.9	4075.4
30°	3827.7	3813.4	3711.0	3674.7	3618.5	3518.3	3561.3	3625.1	3630.6	3730.8	3919.0
32.5°	3748.4	3712.1	3598.7	3545.9	3475.4	3358.7	3381.8	3446.8	3455.6	3556.9	3750.6
35°	3646.0	3621.8	3482.0	3391.7	3322.4	3194.7	3218.9	3264.0	3277.2	3376.3	3573.4
37.5°	3549.2	3510.6	3362.0	3251.9	3162.8	3028.4	3035.1	3081.3	3094.5	3194.7	3389.5
40°	3449.0	3393.9	3234.3	3105.5	3003.1	2862.2	2854.5	2903.0	2912.9	3010.8	3187.0
42.5°	3342.2	3276.1	3096.7	2955.8	2838.0	2694.9	2679.5	2721.3	2732.3	2828.1	3000.9
45°	3234.3	3155.0	2955.8	2801.7	2672.9	2526.5	2511.0	2543.0	2559.5	2649.8	2816.0
47.5°	3119.8	3027.3	2810.5	2638.7	2505.5	2359.1	2340.4	2372.3	2385.6	2474.7	2632.1
50°	2999.8	2887.5	2660.8	2471.4	2339.3	2195.1	2167.6	2205.0	2217.1	2300.8	2454.9
52.5°	2867.7	2743.3	2501.1	2303.0	2170.9	2033.3	2000.3	2036.6	2050.9	2132.4	2274.4
55°	2727.9	2593.6	2340.4	2147.8	2004.7	1870.4	1842.8	1857.1	1888.0	1965.0	2097.1
57.5°	2570.5	2437.3	2170.9	1974.9	1837.3	1708.5	1685.4	1698.6	1727.2	1802.1	1921.0
60°	2403.2	2262.3	1998.0	1802.1	1668.9	1546.7	1525.8	1537.9	1568.7	1637.0	1747.1
62.5°	2238.0	2079.5	1819.7	1624.9	1503.8	1390.4	1384.9	1380.5	1409.1	1475.1	1572.0
65°	2037.7	1885.8	1633.7	1448.7	1338.6	1236.3	1214.2	1224.1	1251.7	1312.2	1413.5
67.5°	1823.0	1685.4	1443.2	1272.6	1174.6	1083.2	1064.5	1068.9	1097.6	1150.4	1238.5
70°	1595.1	1474.0	1248.4	1095.3	1012.8	926.9	914.8	915.9	943.4	989.7	1066.7
72.5°	1356.3	1247.3	1051.3	920.3	852.1	790.4	779.4	766.2	791.5	831.1	897.2
75°	1113.0	1017.2	855.4	748.6	694.6	642.9	633.0	619.8	645.1	679.2	731.0
77.5°	867.5	790.4	664.9	582.4	540.5	502.0	493.2	478.9	504.2	529.5	570.2
80°	627.5	571.3	496.5	409.5	395.2	369.9	361.1	345.7	369.9	386.4	417.2
82.5°	405.1	367.7	324.8	264.2	262.0	243.3	238.9	221.3	243.3	253.2	276.3
85°	204.8	187.1	176.1	134.3	138.7	126.6	125.5	106.8	124.4	128.8	142.0
87.5°	58.3	61.6	55.0	33.0	41.8	39.6	39.6	28.6	39.6	39.6	45.1
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: P837748

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-3HI-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4	4719.4
2.5°	4723.8	4742.5	4746.9	4745.8	4757.9	4823.9	4801.9	4823.9
5°	4734.8	4776.6	4787.6	4803.0	4822.8	4897.7	4873.5	4899.9
7.5°	4741.4	4804.1	4828.3	4858.1	4890.0	4973.7	4953.8	4980.3
10°	4741.4	4822.8	4858.1	4907.6	4950.5	5047.4	5028.7	5059.5
12.5°	4721.6	4826.1	4875.7	4945.0	5000.1	5104.7	5097.0	5119.0
15°	4680.8	4809.6	4877.9	4967.1	5035.3	5152.0	5148.7	5175.1
17.5°	4625.8	4781.0	4863.6	4975.9	5061.7	5192.7	5200.4	5214.7
20°	4556.4	4727.1	4835.0	4972.6	5080.4	5224.7	5234.6	5254.4
22.5°	4465.1	4662.1	4792.0	4958.2	5082.6	5237.9	5255.5	5274.2
25°	4357.2	4584.0	4735.9	4930.7	5071.6	5236.8	5261.0	5277.5
27.5°	4233.9	4482.7	4664.3	4886.7	5040.8	5219.1	5248.9	5268.7
30°	4090.8	4374.8	4582.9	4829.4	4999.0	5186.1	5218.0	5237.9
32.5°	3943.3	4255.9	4486.0	4755.7	4938.4	5133.3	5160.8	5176.2
35°	3782.5	4111.7	4369.3	4661.0	4860.3	5048.5	5069.4	5085.9
37.5°	3607.5	3955.4	4236.1	4554.2	4750.2	4930.7	4949.4	4968.2
40°	3427.0	3791.3	4086.4	4423.2	4619.2	4786.5	4806.3	4819.5
42.5°	3245.3	3609.7	3926.7	4269.1	4464.0	4624.7	4636.8	4650.0
45°	3061.5	3421.5	3747.3	4098.5	4291.1	4441.9	4446.3	4457.4
47.5°	2874.3	3226.6	3550.3	3903.6	4094.1	4231.7	4236.1	4244.9
50°	2686.1	3031.8	3340.0	3693.4	3879.4	4024.7	4004.9	4013.7
52.5°	2501.1	2827.0	3141.8	3466.6	3650.4	3779.2	3784.7	3767.1
55°	2319.5	2626.6	2916.2	3228.8	3403.8	3504.0	3500.7	3507.3
57.5°	2135.7	2424.1	2689.4	2975.6	3146.2	3240.9	3260.7	3237.6
60°	1948.5	2219.3	2457.1	2715.8	2880.9	2960.2	2983.3	2961.3
62.5°	1762.5	2011.3	2227.0	2452.7	2605.7	2703.7	2701.5	2677.3
65°	1576.4	1802.1	1994.7	2186.3	2319.5	2417.5	2413.1	2391.1
67.5°	1404.7	1590.7	1763.6	1918.8	2034.4	2101.5	2124.6	2098.2
70°	1215.3	1376.1	1528.0	1652.4	1748.2	1808.7	1830.7	1807.6
72.5°	1026.0	1162.5	1269.3	1389.3	1463.0	1513.7	1536.8	1514.8
75°	838.9	951.1	1038.1	1131.7	1183.4	1226.4	1252.8	1230.8
77.5°	657.2	744.2	813.5	881.8	941.2	951.1	974.3	959.9
80°	484.4	547.1	597.8	642.9	685.8	690.2	708.9	700.1
82.5°	322.6	364.4	377.6	424.9	452.5	448.0	466.8	460.2
85°	170.6	196.0	219.1	233.4	248.8	234.5	251.0	244.4
87.5°	57.2	60.5	52.8	74.9	82.6	70.5	80.4	77.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)