

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: P838214

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6LO-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: P838214
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-LD4-6LO-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

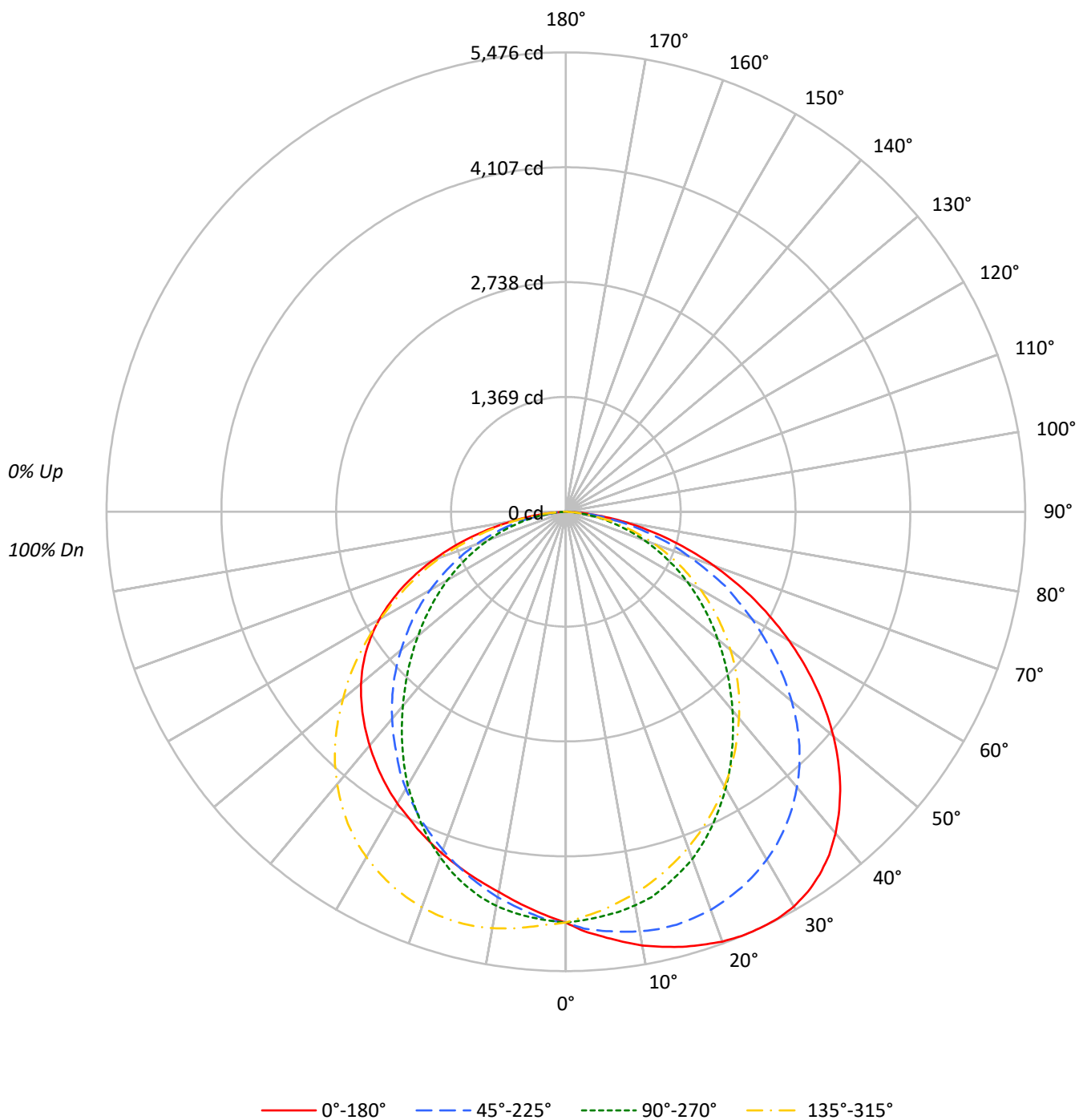
Lumens per Lamp: N/A
Luminaire Lumens: 14368.0 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.4
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°	6589	6589	6589	6589
5°	6867	6542	6418	6553
10°	7173	6508	6288	6518
15°	7480	6425	6227	6427
20°	7807	6309	6199	6273
25°	8130	6133	6199	6070
30°	8444	5919	6240	5853
35°	8669	5676	6303	5586
40°	8784	5432	6391	5309
45°	8801	5184	6515	5054
50°	8718	4947	6674	4816
55°	8538	4727	6822	4596
60°	8269	4497	6914	4381
65°	7899	4233	6877	4135
70°	7379	3923	6633	3851
75°	6640	3498	6087	3480
80°	5629	2930	5116	2974
85°	3915	1941	3245	1993

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	465.0	3.2
10°-20°	1346.4	9.4
20°-30°	2063.5	14.4
30°-40°	2509.0	17.5
40°-50°	2608.3	18.2
50°-60°	2356.1	16.4
60°-70°	1791.2	12.5
70°-80°	998.6	7.0
80°-90°	229.9	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°	3874.9	27.0
0°-40°	6383.9	44.4
0°-60°	11348.3	79.0
0°-90°	14368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14368.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4897	4897	4897	4897	4897	
5°	5085	4844	4752	4852	5085	490
15°	5370	4613	4470	4614	5370	1523
25°	5476	4131	4175	4088	5476	2529
35°	5278	3456	3837	3401	5278	3296
45°	4625	2724	3424	2656	4625	3561
55°	3640	2015	2908	1959	3640	3249
65°	2481	1330	2160	1299	2481	2452
75°	1277	673	1171	669	1277	1357
85°	254	126	210	129	254	319
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°	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3
2.5°	5005.8	4932.7	4933.9	4997.8	4948.7	4972.7	4904.2	4930.4	4922.4	4928.1	4872.2
5°	5084.6	5005.8	5004.7	5059.5	5004.7	5015.0	4928.1	4945.3	4920.1	4904.2	4843.6
7.5°	5168.0	5089.2	5081.2	5129.2	5057.2	5049.2	4953.3	4953.3	4907.6	4867.6	4810.5
10°	5250.3	5169.2	5158.9	5195.5	5106.3	5080.1	4963.6	4945.3	4884.7	4825.3	4763.6
12.5°	5312.0	5229.7	5221.7	5244.6	5144.0	5096.1	4963.6	4928.1	4839.0	4755.6	4707.7
15°	5370.2	5285.7	5264.0	5275.4	5160.0	5096.1	4947.6	4892.7	4778.5	4668.8	4612.8
17.5°	5411.4	5330.3	5308.5	5307.4	5168.0	5076.6	4913.3	4837.9	4700.8	4568.3	4512.3
20°	5452.5	5371.4	5344.0	5323.4	5165.8	5050.4	4863.0	4761.4	4601.4	4452.9	4406.1
22.5°	5473.0	5389.7	5360.0	5329.1	5150.9	5002.4	4801.3	4672.3	4489.5	4312.4	4273.6
25°	5476.5	5390.8	5358.8	5314.3	5121.2	4945.3	4721.4	4564.9	4360.4	4163.9	4130.8
27.5°	5467.3	5373.7	5341.7	5288.0	5076.6	4875.6	4626.6	4442.6	4223.3	4006.3	3970.8
30°	5435.3	5340.5	5309.7	5240.0	5013.8	4789.9	4522.6	4306.7	4071.4	3840.6	3809.8
32.5°	5371.4	5278.8	5253.7	5184.0	4945.3	4690.5	4401.5	4160.5	3903.4	3683.0	3637.3
35°	5277.7	5185.2	5169.2	5096.1	4849.3	4571.7	4269.0	4000.5	3725.2	3500.2	3455.6
37.5°	5155.5	5077.8	5053.8	4981.8	4736.2	4436.9	4117.1	3826.9	3543.6	3301.4	3274.0
40°	5001.3	4928.1	4909.9	4845.9	4604.9	4287.3	3952.6	3647.6	3356.3	3131.2	3092.4
42.5°	4825.3	4756.8	4746.5	4680.2	4442.6	4121.6	3774.4	3461.4	3160.9	2943.9	2905.0
45°	4625.4	4559.2	4556.9	4494.0	4265.6	3937.7	3587.0	3272.9	2970.1	2745.1	2724.5
47.5°	4404.9	4345.5	4345.5	4287.3	4067.9	3735.5	3394.0	3076.4	2778.2	2579.4	2542.9
50°	4165.0	4109.1	4091.9	4063.4	3849.8	3515.0	3190.6	2884.5	2588.6	2399.0	2363.5
52.5°	3909.2	3861.2	3872.6	3820.1	3613.3	3285.4	2985.0	2668.6	2397.8	2225.3	2189.9
55°	3639.6	3571.0	3581.3	3561.9	3366.5	3049.0	2754.2	2490.3	2210.5	2048.3	2015.1
57.5°	3359.7	3270.6	3307.1	3295.7	3103.8	2806.8	2542.9	2288.1	2024.3	1874.6	1842.6
60°	3072.9	2987.3	3025.0	3014.7	2834.2	2564.6	2324.7	2088.2	1839.2	1703.3	1671.3
62.5°	2778.2	2699.4	2733.7	2725.7	2560.0	2316.7	2107.7	1890.6	1653.0	1530.8	1501.1
65°	2481.2	2405.8	2436.7	2430.9	2277.9	2092.8	1884.9	1686.1	1465.6	1359.4	1329.7
67.5°	2177.3	2107.7	2136.2	2136.2	1995.7	1818.6	1661.0	1479.4	1281.7	1190.3	1162.9
70°	1875.8	1810.6	1835.8	1833.5	1714.7	1570.7	1434.8	1272.6	1095.5	1020.1	997.3
72.5°	1571.9	1514.8	1537.6	1535.3	1435.9	1343.4	1208.6	1068.1	913.9	853.3	832.8
75°	1277.2	1223.5	1245.2	1242.9	1161.8	1075.0	984.7	868.2	735.7	693.4	672.9
77.5°	996.1	941.3	959.6	959.6	900.2	837.3	765.4	675.1	581.5	535.8	520.9
80°	726.5	700.3	691.1	692.3	652.3	611.2	574.6	487.8	419.2	388.4	378.1
82.5°	477.5	455.8	446.7	448.9	426.1	401.0	378.1	317.6	271.9	253.6	247.9
85°	253.6	237.6	229.6	235.3	230.8	217.0	205.6	164.5	135.9	129.1	125.7
87.5°	80.0	69.7	64.0	84.5	72.0	64.0	61.7	49.1	37.7	37.7	36.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3
2.5°	4890.4	4890.4	4845.9	4835.6	4831.0	4836.8	4792.2	4784.2	4848.2	4826.5	4777.3
5°	4851.6	4849.3	4786.5	4775.1	4775.1	4768.2	4717.9	4706.5	4770.5	4752.2	4698.5
7.5°	4803.6	4796.8	4722.5	4714.5	4703.1	4698.5	4642.6	4634.6	4689.4	4678.0	4627.7
10°	4745.4	4738.5	4650.5	4644.8	4632.3	4623.1	4570.6	4564.9	4620.8	4602.6	4562.6
12.5°	4668.8	4656.3	4566.0	4560.3	4550.0	4546.6	4495.2	4492.9	4554.6	4536.3	4494.0
15°	4568.3	4558.0	4457.5	4459.8	4460.9	4460.9	4419.8	4417.5	4478.1	4470.1	4424.4
17.5°	4457.5	4443.8	4347.8	4354.7	4362.7	4371.8	4339.8	4345.5	4409.5	4399.2	4358.1
20°	4331.8	4318.1	4224.4	4243.9	4261.0	4279.3	4258.7	4274.7	4334.1	4329.5	4298.7
22.5°	4191.3	4177.6	4090.8	4120.5	4149.1	4183.3	4174.2	4192.5	4255.3	4254.1	4226.7
25°	4020.0	4023.4	3946.9	3983.4	4031.4	4079.4	4082.8	4112.5	4182.2	4175.3	4150.2
27.5°	3860.0	3864.6	3783.5	3845.2	3909.2	3970.8	3985.7	4026.8	4097.6	4091.9	4070.2
30°	3692.1	3697.8	3619.0	3703.5	3781.2	3856.6	3888.6	3944.6	4016.5	4016.5	3993.7
32.5°	3517.3	3527.6	3445.4	3558.5	3648.7	3736.7	3792.6	3850.9	3933.1	3930.9	3911.4
35°	3338.0	3349.4	3274.0	3417.9	3508.2	3615.6	3685.3	3762.9	3836.0	3837.2	3822.3
37.5°	3155.2	3168.9	3100.4	3258.0	3360.8	3487.6	3576.7	3654.4	3735.5	3740.1	3726.4
40°	2973.6	2988.4	2929.0	3080.9	3211.2	3352.8	3455.6	3547.0	3636.1	3638.4	3629.3
42.5°	2791.9	2807.9	2763.4	2911.9	3059.2	3211.2	3332.3	3436.2	3527.6	3533.3	3523.0
45°	2614.9	2628.6	2596.6	2758.8	2900.5	3066.1	3205.5	3323.1	3415.7	3423.7	3420.2
47.5°	2438.9	2451.5	2422.9	2571.5	2734.8	2910.7	3071.8	3202.0	3300.3	3309.4	3307.1
50°	2266.4	2276.7	2245.9	2401.2	2563.5	2750.8	2918.7	3069.5	3179.2	3188.3	3187.2
52.5°	2095.1	2105.4	2079.1	2242.5	2389.8	2587.4	2770.2	2933.6	3042.1	3055.8	3058.1
55°	1929.4	1934.0	1913.5	2070.0	2212.8	2419.5	2629.7	2788.5	2897.0	2908.4	2915.3
57.5°	1763.8	1764.9	1747.8	1897.5	2034.5	2245.9	2466.4	2633.1	2736.0	2747.4	2757.7
60°	1599.3	1598.2	1578.7	1723.8	1855.2	2064.2	2293.9	2459.5	2558.9	2569.2	2582.9
62.5°	1435.9	1432.5	1415.4	1549.0	1672.4	1879.2	2109.9	2269.9	2364.7	2371.5	2389.8
65°	1273.7	1270.3	1254.3	1377.7	1489.6	1687.3	1913.5	2065.4	2151.1	2160.2	2156.8
67.5°	1113.8	1106.9	1094.4	1205.2	1306.9	1489.6	1706.7	1851.8	1922.6	1930.6	1952.3
70°	953.9	945.9	917.3	1035.0	1124.1	1287.4	1489.6	1618.7	1678.1	1686.1	1682.7
72.5°	796.2	788.2	757.4	865.9	941.3	1084.1	1264.6	1372.0	1423.4	1430.2	1430.2
75°	643.1	638.6	619.2	701.4	764.2	880.8	1033.8	1122.9	1162.9	1170.9	1168.6
77.5°	495.8	492.4	472.9	543.8	592.9	679.7	803.1	872.8	902.5	911.6	931.0
80°	355.3	354.1	323.3	393.0	414.7	487.8	578.0	631.7	647.7	660.3	674.0
82.5°	227.3	228.5	197.6	257.0	266.2	313.0	369.0	402.1	413.5	423.8	434.1
85°	110.8	115.4	98.2	135.9	137.1	161.1	185.1	197.6	202.2	210.2	219.3
87.5°	28.6	33.1	18.3	38.8	34.3	44.6	51.4	54.8	53.7	59.4	62.8
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°	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3
2.5°	4793.3	4829.9	4811.6	4871.0	4893.9	4857.3	4921.3	4922.4	4876.7	4930.4	4960.1
5°	4719.1	4756.8	4745.4	4807.1	4835.6	4803.6	4881.3	4896.2	4851.6	4912.1	4960.1
7.5°	4643.7	4688.2	4673.4	4736.2	4770.5	4745.4	4828.8	4852.7	4818.5	4884.7	4948.7
10°	4578.6	4616.3	4600.3	4666.5	4696.2	4675.7	4757.9	4802.5	4770.5	4851.6	4928.1
12.5°	4514.6	4545.5	4527.2	4582.0	4610.6	4584.3	4684.8	4725.9	4703.1	4787.6	4885.9
15°	4432.4	4466.6	4441.5	4490.6	4512.3	4489.5	4571.7	4642.6	4614.0	4706.5	4815.0
17.5°	4369.5	4388.9	4354.7	4393.5	4406.1	4375.2	4458.6	4528.3	4507.8	4608.3	4733.9
20°	4299.8	4315.8	4267.9	4289.6	4288.4	4249.6	4326.1	4394.7	4381.0	4491.8	4634.6
22.5°	4222.2	4230.2	4174.2	4178.8	4176.5	4112.5	4181.0	4250.7	4245.0	4357.0	4516.9
25°	4139.9	4141.1	4069.1	4066.8	4041.7	3966.3	4026.8	4105.6	4088.5	4209.6	4377.5
27.5°	4058.8	4047.4	3960.6	3940.0	3900.0	3809.8	3863.5	3934.3	3924.0	4042.8	4229.0
30°	3972.0	3957.1	3850.9	3813.2	3754.9	3651.0	3695.5	3761.8	3767.5	3871.5	4066.8
32.5°	3889.7	3852.0	3734.4	3679.5	3606.4	3485.3	3509.3	3576.7	3585.9	3691.0	3892.0
35°	3783.5	3758.4	3613.3	3519.6	3447.6	3315.1	3340.3	3387.1	3400.8	3503.6	3708.1
37.5°	3683.0	3643.0	3488.8	3374.5	3282.0	3142.6	3149.5	3197.5	3211.2	3315.1	3517.3
40°	3579.0	3521.9	3356.3	3222.6	3116.4	2970.1	2962.1	3012.4	3022.7	3124.4	3307.1
42.5°	3468.2	3399.7	3213.5	3067.2	2945.0	2796.5	2780.5	2823.9	2835.3	2934.7	3114.1
45°	3356.3	3274.0	3067.2	2907.3	2773.7	2621.7	2605.7	2638.9	2656.0	2749.7	2922.2
47.5°	3237.4	3141.5	2916.4	2738.2	2600.0	2448.1	2428.7	2461.8	2475.5	2568.0	2731.4
50°	3112.9	2996.4	2761.1	2564.6	2427.5	2277.9	2249.3	2288.1	2300.7	2387.5	2547.5
52.5°	2975.8	2846.8	2595.4	2389.8	2252.7	2109.9	2075.7	2113.4	2128.2	2212.8	2360.1
55°	2830.8	2691.4	2428.7	2228.7	2080.2	1940.9	1912.3	1927.2	1959.1	2039.1	2176.2
57.5°	2667.4	2529.2	2252.7	2049.4	1906.6	1772.9	1749.0	1762.7	1792.4	1870.0	1993.4
60°	2493.8	2347.5	2073.4	1870.0	1731.8	1605.0	1583.3	1595.9	1627.9	1698.7	1812.9
62.5°	2322.4	2157.9	1888.3	1686.1	1560.5	1442.8	1437.1	1432.5	1462.2	1530.8	1631.3
65°	2114.5	1956.9	1695.3	1503.3	1389.1	1282.9	1260.0	1270.3	1298.9	1361.7	1466.8
67.5°	1891.7	1749.0	1497.6	1320.6	1218.9	1124.1	1104.7	1109.2	1138.9	1193.8	1285.2
70°	1655.3	1529.6	1295.4	1136.6	1051.0	961.9	949.3	950.4	979.0	1027.0	1106.9
72.5°	1407.4	1294.3	1091.0	955.0	884.2	820.2	808.8	795.1	821.4	862.5	931.0
75°	1154.9	1055.5	887.6	776.8	720.8	667.1	656.9	643.1	669.4	704.8	758.5
77.5°	900.2	820.2	690.0	604.3	560.9	520.9	511.8	496.9	523.2	549.5	591.7
80°	651.1	592.9	515.2	425.0	410.1	383.8	374.7	358.7	383.8	401.0	433.0
82.5°	420.4	381.5	337.0	274.2	271.9	252.5	247.9	229.6	252.5	262.7	286.7
85°	212.5	194.2	182.8	139.4	143.9	131.4	130.2	110.8	129.1	133.7	147.4
87.5°	60.5	64.0	57.1	34.3	43.4	41.1	41.1	29.7	41.1	41.1	46.8
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: P838214

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6LO-35-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3	4897.3
2.5°	4901.9	4921.3	4925.9	4924.7	4937.3	5005.8	4983.0	5005.8
5°	4913.3	4956.7	4968.1	4984.1	5004.7	5082.4	5057.2	5084.6
7.5°	4920.1	4985.3	5010.4	5041.2	5074.4	5161.2	5140.6	5168.0
10°	4920.1	5004.7	5041.2	5092.6	5137.2	5237.7	5218.3	5250.3
12.5°	4899.6	5008.1	5059.5	5131.5	5188.6	5297.1	5289.1	5312.0
15°	4857.3	4991.0	5061.8	5154.3	5225.2	5346.2	5342.8	5370.2
17.5°	4800.2	4961.3	5046.9	5163.5	5252.6	5388.5	5396.5	5411.4
20°	4728.2	4905.3	5017.2	5160.0	5272.0	5421.6	5431.9	5452.5
22.5°	4633.4	4837.9	4972.7	5145.2	5274.3	5435.3	5453.6	5473.0
25°	4521.5	4756.8	4914.4	5116.6	5262.9	5434.2	5459.3	5476.5
27.5°	4393.5	4651.7	4840.2	5070.9	5230.9	5415.9	5446.8	5467.3
30°	4245.0	4539.7	4755.6	5011.5	5187.5	5381.7	5414.8	5435.3
32.5°	4091.9	4416.4	4655.1	4935.0	5124.6	5326.8	5355.4	5371.4
35°	3925.1	4266.7	4534.0	4836.8	5043.5	5238.9	5260.6	5277.7
37.5°	3743.5	4104.5	4395.8	4725.9	4929.3	5116.6	5136.1	5155.5
40°	3556.2	3934.3	4240.4	4590.0	4793.3	4967.0	4987.5	5001.3
42.5°	3367.7	3745.8	4074.8	4430.1	4632.3	4799.1	4811.6	4825.3
45°	3176.9	3550.5	3888.6	4253.0	4452.9	4609.4	4614.0	4625.4
47.5°	2982.7	3348.3	3684.1	4050.8	4248.4	4391.2	4395.8	4404.9
50°	2787.4	3146.1	3465.9	3832.6	4025.7	4176.5	4155.9	4165.0
52.5°	2595.4	2933.6	3260.3	3597.3	3788.1	3921.7	3927.4	3909.2
55°	2407.0	2725.7	3026.1	3350.5	3532.2	3636.1	3632.7	3639.6
57.5°	2216.2	2515.5	2790.8	3087.8	3264.9	3363.1	3383.7	3359.7
60°	2022.0	2303.0	2549.7	2818.2	2989.6	3071.8	3095.8	3072.9
62.5°	1828.9	2087.1	2311.0	2545.2	2704.0	2805.6	2803.4	2778.2
65°	1635.9	1870.0	2070.0	2268.7	2407.0	2508.6	2504.1	2481.2
67.5°	1457.7	1650.7	1830.1	1991.1	2111.1	2180.8	2204.8	2177.3
70°	1261.2	1428.0	1585.6	1714.7	1814.1	1876.9	1899.7	1875.8
72.5°	1064.7	1206.3	1317.1	1441.7	1518.2	1570.7	1594.7	1571.9
75°	870.5	987.0	1077.2	1174.3	1228.0	1272.6	1300.0	1277.2
77.5°	682.0	772.2	844.2	915.0	976.7	987.0	1011.0	996.1
80°	502.6	567.8	620.3	667.1	711.7	716.3	735.7	726.5
82.5°	334.7	378.1	391.8	441.0	469.5	464.9	484.4	477.5
85°	177.1	203.3	227.3	242.2	258.2	243.3	260.5	253.6
87.5°	59.4	62.8	54.8	77.7	85.7	73.1	83.4	80.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)