

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: P838213

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5HI-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: P838213
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-LD4-5HI-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

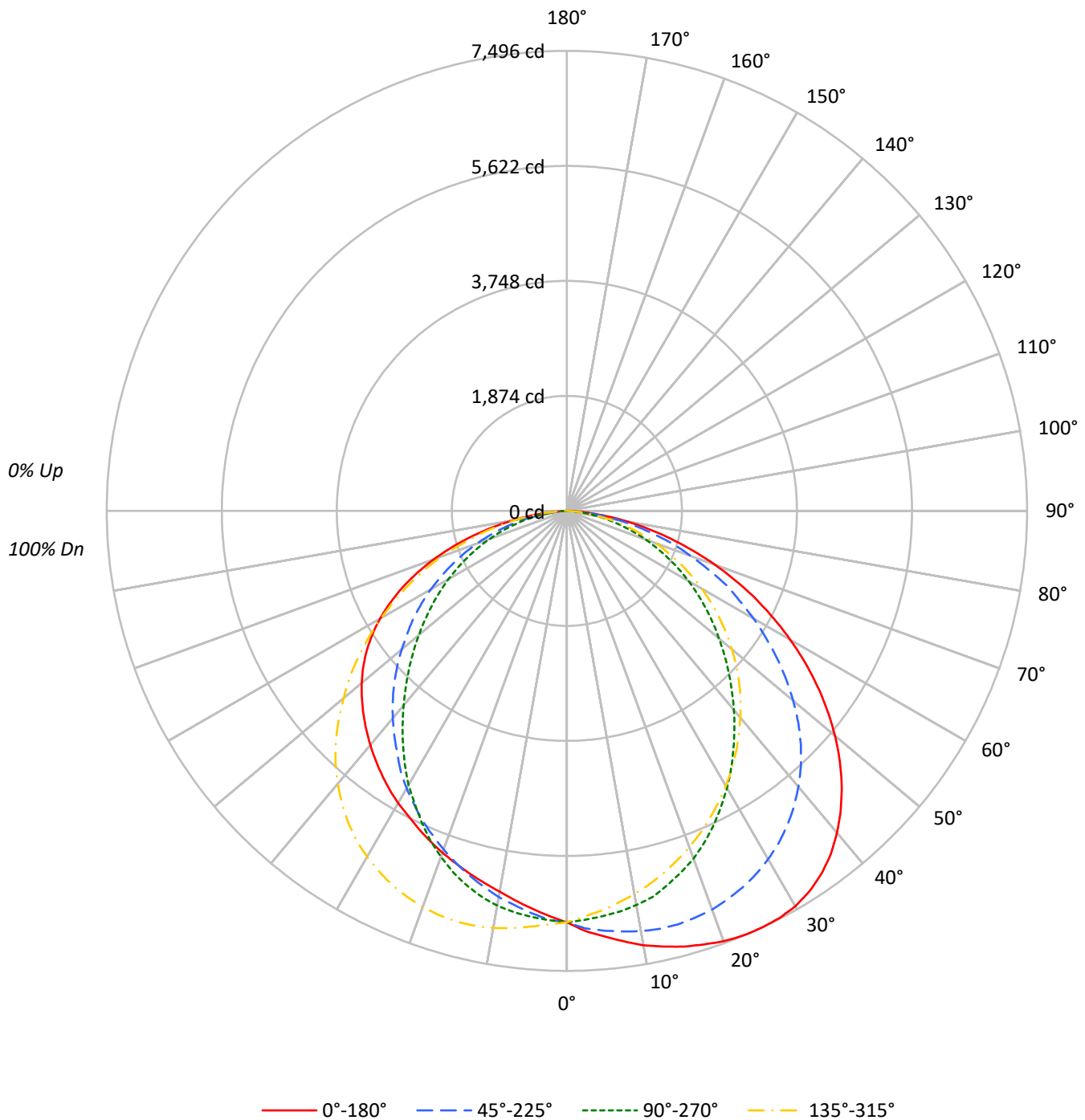
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19667.2 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): 220
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

TEST NUMBER: P838213
CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

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°	9019	9019	9019	9019
5°	9400	8955	8786	8970
10°	9819	8909	8607	8922
15°	10239	8795	8523	8797
20°	10687	8636	8486	8586
25°	11129	8394	8485	8308
30°	11559	8102	8542	8012
35°	11866	7770	8627	7646
40°	12024	7435	8747	7267
45°	12047	7096	8917	6918
50°	11934	6772	9135	6592
55°	11686	6470	9339	6291
60°	11319	6156	9463	5996
65°	10813	5795	9414	5660
70°	10101	5370	9080	5272
75°	9088	4788	8332	4763
80°	7706	4011	7003	4071
85°	5358	2655	4441	2728

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	636.5	3.2
10°-20°	1843.0	9.4
20°-30°	2824.5	14.4
30°-40°	3434.4	17.5
40°-50°	3570.3	18.2
50°-60°	3225.0	16.4
60°-70°	2451.9	12.5
70°-80°	1366.9	7.0
80°-90°	314.7	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°	5304.0	27.0
0°-40°	8738.4	44.4
0°-60°	15533.7	79.0
0°-90°	19667.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19667.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6704	6704	6704	6704	6704	
5°	6960	6630	6505	6641	6960	671
15°	7351	6314	6119	6316	7351	2084
25°	7496	5654	5715	5596	7496	3462
35°	7224	4730	5252	4655	7224	4512
45°	6331	3729	4686	3636	6331	4875
55°	4982	2758	3981	2682	4982	4447
65°	3396	1820	2957	1778	3396	3356
75°	1748	921	1603	916	1748	1857
85°	347	172	288	177	347	437
90°	0	0	0	0	0	

TEST NUMBER: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5
2.5°	6852.1	6752.0	6753.6	6841.1	6773.9	6806.7	6712.9	6748.9	6737.9	6745.7	6669.1
5°	6960.0	6852.1	6850.5	6925.6	6850.5	6864.6	6745.7	6769.2	6734.8	6712.9	6630.0
7.5°	7074.1	6966.2	6955.3	7021.0	6922.4	6911.5	6780.1	6780.1	6717.6	6662.9	6584.7
10°	7186.7	7075.7	7061.6	7111.6	6989.7	6953.7	6794.2	6769.2	6686.3	6605.0	6520.6
12.5°	7271.1	7158.6	7147.6	7178.9	7041.3	6975.6	6794.2	6745.7	6623.8	6509.6	6444.0
15°	7350.9	7235.2	7205.5	7221.1	7063.2	6975.6	6772.3	6697.3	6540.9	6390.8	6314.2
17.5°	7407.2	7296.2	7266.5	7264.9	7074.1	6949.0	6725.4	6622.2	6434.6	6253.2	6176.6
20°	7463.5	7352.5	7314.9	7286.8	7071.0	6913.1	6656.6	6517.4	6298.5	6095.3	6031.1
22.5°	7491.6	7377.5	7336.8	7294.6	7050.7	6847.4	6572.2	6395.5	6145.3	5902.9	5849.8
25°	7496.3	7379.0	7335.3	7274.3	7010.0	6769.2	6462.7	6248.5	5968.6	5699.6	5654.3
27.5°	7483.8	7355.6	7311.8	7238.3	6949.0	6673.8	6332.9	6081.2	5781.0	5483.9	5435.4
30°	7440.0	7310.2	7268.0	7172.6	6863.0	6556.5	6190.6	5895.1	5573.0	5257.1	5214.9
32.5°	7352.5	7225.8	7191.4	7096.0	6769.2	6420.5	6024.9	5694.9	5343.1	5041.3	4978.8
35°	7224.2	7097.6	7075.7	6975.6	6637.9	6257.9	5843.5	5476.0	5099.2	4791.1	4730.2
37.5°	7056.9	6950.6	6917.8	6819.2	6483.0	6073.4	5635.5	5238.4	4850.6	4519.1	4481.5
40°	6845.8	6745.7	6720.7	6633.2	6303.2	5868.5	5410.4	4992.9	4594.1	4286.1	4232.9
42.5°	6605.0	6511.2	6497.1	6406.4	6081.2	5641.8	5166.4	4738.0	4326.7	4029.6	3976.5
45°	6331.4	6240.7	6237.5	6151.5	5838.8	5390.0	4910.0	4480.0	4065.6	3757.5	3729.4
47.5°	6029.6	5948.3	5948.3	5868.5	5568.3	5113.3	4645.7	4211.0	3802.9	3530.8	3480.8
50°	5701.2	5624.6	5601.1	5562.0	5269.6	4811.5	4367.4	3948.3	3543.3	3283.7	3235.3
52.5°	5350.9	5285.3	5300.9	5229.0	4945.9	4497.2	4085.9	3652.8	3282.2	3046.1	2997.6
55°	4981.9	4888.1	4902.2	4875.6	4608.2	4173.5	3770.0	3408.8	3025.7	2803.7	2758.3
57.5°	4598.8	4476.8	4526.9	4511.2	4248.5	3842.0	3480.8	3132.1	2770.9	2566.0	2522.2
60°	4206.3	4089.0	4140.6	4126.6	3879.5	3510.5	3182.1	2858.4	2517.5	2331.5	2287.7
62.5°	3802.9	3695.0	3741.9	3731.0	3504.2	3171.2	2885.0	2587.9	2262.7	2095.3	2054.7
65°	3396.3	3293.1	3335.3	3327.5	3118.0	2864.7	2580.1	2308.0	2006.2	1860.8	1820.1
67.5°	2980.4	2885.0	2924.1	2924.1	2731.8	2489.4	2273.6	2025.0	1754.5	1629.4	1591.8
70°	2567.6	2478.4	2512.8	2509.7	2347.1	2150.1	1964.0	1741.9	1499.6	1396.4	1365.1
72.5°	2151.6	2073.4	2104.7	2101.6	1965.6	1838.9	1654.4	1462.0	1250.9	1168.1	1139.9
75°	1748.2	1674.7	1704.4	1701.3	1590.3	1471.4	1347.9	1188.4	1007.0	949.2	921.0
77.5°	1363.5	1288.5	1313.5	1313.5	1232.2	1146.2	1047.7	924.1	795.9	733.4	713.0
80°	994.5	958.5	946.0	947.6	892.9	836.6	786.5	667.7	573.9	531.7	517.6
82.5°	653.6	623.9	611.4	614.5	583.3	548.9	517.6	434.7	372.2	347.1	339.3
85°	347.1	325.2	314.3	322.1	315.9	297.1	281.5	225.2	186.1	176.7	172.0
87.5°	109.5	95.4	87.6	115.7	98.5	87.6	84.4	67.2	51.6	51.6	50.0
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: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5
2.5°	6694.1	6694.1	6633.2	6619.1	6612.8	6620.7	6559.7	6548.7	6636.3	6606.6	6539.3
5°	6641.0	6637.9	6551.8	6536.2	6536.2	6526.8	6458.0	6442.4	6530.0	6504.9	6431.4
7.5°	6575.3	6565.9	6464.3	6453.3	6437.7	6431.4	6354.8	6343.9	6418.9	6403.3	6334.5
10°	6495.6	6486.2	6365.8	6358.0	6340.8	6328.2	6256.3	6248.5	6325.1	6300.1	6245.4
12.5°	6390.8	6373.6	6250.1	6242.2	6228.2	6223.5	6153.1	6150.0	6234.4	6209.4	6151.5
15°	6253.2	6239.1	6101.5	6104.6	6106.2	6106.2	6049.9	6046.8	6129.7	6118.7	6056.2
17.5°	6101.5	6082.7	5951.4	5960.8	5971.7	5984.2	5940.4	5948.3	6035.8	6021.8	5965.5
20°	5929.5	5910.7	5782.5	5809.1	5832.6	5857.6	5829.4	5851.3	5932.6	5926.4	5884.2
22.5°	5737.2	5718.4	5599.6	5640.2	5679.3	5726.2	5713.7	5738.7	5824.7	5823.2	5785.6
25°	5502.6	5507.3	5402.5	5452.6	5518.3	5583.9	5588.6	5629.3	5724.7	5715.3	5680.9
27.5°	5283.7	5290.0	5178.9	5263.4	5350.9	5435.4	5455.7	5512.0	5608.9	5601.1	5571.4
30°	5053.8	5061.7	4953.8	5069.5	5175.8	5279.0	5322.8	5399.4	5497.9	5497.9	5466.6
32.5°	4814.6	4828.7	4716.1	4870.9	4994.4	5114.8	5191.4	5271.2	5383.8	5380.6	5354.1
35°	4569.1	4584.7	4481.5	4678.6	4802.1	4949.1	5044.5	5150.8	5250.9	5252.4	5232.1
37.5°	4318.9	4337.7	4243.8	4459.6	4600.4	4773.9	4895.9	5002.2	5113.3	5119.5	5100.7
40°	4070.3	4090.6	4009.3	4217.3	4395.5	4589.4	4730.2	4855.2	4977.2	4980.3	4967.8
42.5°	3821.7	3843.5	3782.6	3985.8	4187.6	4395.5	4561.3	4703.6	4828.7	4836.5	4822.4
45°	3579.3	3598.0	3554.3	3776.3	3970.2	4196.9	4387.7	4548.8	4675.4	4686.4	4681.7
47.5°	3338.5	3355.7	3316.6	3519.9	3743.5	3984.3	4204.8	4383.0	4517.5	4530.0	4526.9
50°	3102.4	3116.4	3074.2	3286.9	3508.9	3765.4	3995.2	4201.6	4351.7	4364.3	4362.7
52.5°	2867.8	2881.9	2845.9	3069.5	3271.2	3541.8	3791.9	4015.5	4164.1	4182.9	4186.0
55°	2641.1	2647.3	2619.2	2833.4	3028.9	3311.9	3599.6	3817.0	3965.5	3981.1	3990.5
57.5°	2414.3	2415.9	2392.4	2597.3	2784.9	3074.2	3376.0	3604.3	3745.0	3760.7	3774.7
60°	2189.2	2187.6	2161.0	2359.6	2539.4	2825.6	3139.9	3366.6	3502.7	3516.7	3535.5
62.5°	1965.6	1960.9	1937.4	2120.4	2289.2	2572.3	2888.1	3107.0	3236.8	3246.2	3271.2
65°	1743.5	1738.8	1716.9	1885.8	2039.0	2309.6	2619.2	2827.1	2944.4	2956.9	2952.2
67.5°	1524.6	1515.2	1498.0	1649.7	1788.9	2039.0	2336.1	2534.7	2631.7	2642.6	2672.3
70°	1305.7	1294.7	1255.6	1416.7	1538.7	1762.3	2039.0	2215.7	2297.1	2308.0	2303.3
72.5°	1089.9	1078.9	1036.7	1185.3	1288.5	1483.9	1731.0	1878.0	1948.4	1957.7	1957.7
75°	880.4	874.1	847.5	960.1	1046.1	1205.6	1415.1	1537.1	1591.8	1602.8	1599.7
77.5°	678.6	673.9	647.4	744.3	811.6	930.4	1099.3	1194.7	1235.3	1247.8	1274.4
80°	486.3	484.7	442.5	537.9	567.6	667.7	791.2	864.7	886.6	903.8	922.6
82.5°	311.2	312.7	270.5	351.8	364.3	428.5	505.1	550.4	566.1	580.1	594.2
85°	151.7	157.9	134.5	186.1	187.6	220.5	253.3	270.5	276.8	287.7	300.2
87.5°	39.1	45.3	25.0	53.2	46.9	61.0	70.4	75.1	73.5	81.3	86.0
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: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5
2.5°	6561.2	6611.3	6586.2	6667.6	6698.8	6648.8	6736.4	6737.9	6675.4	6748.9	6789.5
5°	6459.6	6511.2	6495.6	6580.0	6619.1	6575.3	6681.6	6702.0	6641.0	6723.9	6789.5
7.5°	6356.4	6417.4	6397.0	6483.0	6530.0	6495.6	6609.7	6642.5	6595.6	6686.3	6773.9
10°	6267.3	6318.9	6297.0	6387.7	6428.3	6400.2	6512.8	6573.7	6530.0	6641.0	6745.7
12.5°	6179.7	6221.9	6196.9	6271.9	6311.0	6275.1	6412.7	6469.0	6437.7	6553.4	6687.9
15°	6067.1	6114.0	6079.6	6146.9	6176.6	6145.3	6257.9	6354.8	6315.7	6442.4	6590.9
17.5°	5981.1	6007.7	5960.8	6013.9	6031.1	5988.9	6103.1	6198.5	6170.3	6307.9	6479.9
20°	5885.7	5907.6	5841.9	5871.6	5870.1	5816.9	5921.7	6015.5	5996.7	6148.4	6343.9
22.5°	5779.4	5790.3	5713.7	5720.0	5716.8	5629.3	5723.1	5818.5	5810.7	5963.9	6182.8
25°	5666.8	5668.4	5569.9	5566.7	5532.3	5429.1	5512.0	5619.9	5596.4	5762.2	5992.0
27.5°	5555.8	5540.1	5421.3	5393.2	5338.4	5214.9	5288.4	5385.3	5371.3	5533.9	5788.8
30°	5436.9	5416.6	5271.2	5219.6	5139.8	4997.5	5058.5	5149.2	5157.0	5299.3	5566.7
32.5°	5324.4	5272.8	5111.7	5036.6	4936.6	4770.8	4803.6	4895.9	4908.4	5052.3	5327.5
35°	5178.9	5144.5	4945.9	4817.7	4719.2	4537.8	4572.2	4636.3	4655.1	4795.8	5075.7
37.5°	5041.3	4986.6	4775.5	4619.1	4492.5	4301.7	4311.1	4376.8	4395.5	4537.8	4814.6
40°	4899.0	4820.8	4594.1	4411.2	4265.7	4065.6	4054.6	4123.4	4137.5	4276.7	4526.9
42.5°	4747.4	4653.5	4398.7	4198.5	4031.2	3827.9	3806.0	3865.4	3881.1	4017.1	4262.6
45°	4594.1	4481.5	4198.5	3979.6	3796.6	3588.7	3566.8	3612.1	3635.6	3763.8	3999.9
47.5°	4431.5	4300.1	3992.1	3748.2	3559.0	3351.0	3324.4	3369.7	3388.5	3515.2	3738.8
50°	4261.0	4101.6	3779.4	3510.5	3322.8	3118.0	3078.9	3132.1	3149.3	3268.1	3487.0
52.5°	4073.4	3896.7	3552.7	3271.2	3083.6	2888.1	2841.2	2892.8	2913.1	3028.9	3230.6
55°	3874.8	3684.0	3324.4	3050.8	2847.5	2656.7	2617.6	2637.9	2681.7	2791.2	2978.8
57.5°	3651.2	3462.0	3083.6	2805.3	2609.8	2426.8	2394.0	2412.8	2453.4	2559.8	2728.6
60°	3413.5	3213.4	2838.1	2559.8	2370.5	2197.0	2167.3	2184.5	2228.3	2325.2	2481.6
62.5°	3179.0	2953.8	2584.8	2308.0	2136.0	1974.9	1967.1	1960.9	2001.5	2095.3	2232.9
65°	2894.4	2678.6	2320.5	2057.8	1901.4	1756.0	1724.7	1738.8	1777.9	1863.9	2007.8
67.5°	2589.5	2394.0	2050.0	1807.6	1668.5	1538.7	1512.1	1518.3	1559.0	1634.1	1759.1
70°	2265.8	2093.8	1773.2	1555.9	1438.6	1316.6	1299.4	1301.0	1340.1	1405.8	1515.2
72.5°	1926.5	1771.7	1493.3	1307.2	1210.3	1122.7	1107.1	1088.3	1124.3	1180.6	1274.4
75°	1580.9	1444.8	1215.0	1063.3	986.7	913.2	899.1	880.4	916.3	964.8	1038.3
77.5°	1232.2	1122.7	944.5	827.2	767.8	713.0	700.5	680.2	716.2	752.1	810.0
80°	891.3	811.6	705.2	581.7	561.4	525.4	512.9	491.0	525.4	548.9	592.6
82.5°	575.4	522.3	461.3	375.3	372.2	345.6	339.3	314.3	345.6	359.6	392.5
85°	290.8	265.8	250.2	190.8	197.0	179.8	178.3	151.7	176.7	183.0	201.7
87.5°	82.9	87.6	78.2	46.9	59.4	56.3	56.3	40.7	56.3	56.3	64.1
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: P838213

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-35-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5	6703.5
2.5°	6709.8	6736.4	6742.6	6741.1	6758.3	6852.1	6820.8	6852.1
5°	6725.4	6784.8	6800.5	6822.4	6850.5	6956.8	6922.4	6960.0
7.5°	6734.8	6823.9	6858.3	6900.6	6945.9	7064.7	7036.6	7074.1
10°	6734.8	6850.5	6900.6	6970.9	7031.9	7169.5	7142.9	7186.7
12.5°	6706.7	6855.2	6925.6	7024.1	7102.3	7250.8	7239.9	7271.1
15°	6648.8	6831.7	6928.7	7055.4	7152.3	7318.1	7313.4	7350.9
17.5°	6570.6	6791.1	6908.4	7067.9	7189.8	7375.9	7386.9	7407.2
20°	6472.1	6714.5	6867.7	7063.2	7216.4	7421.3	7435.3	7463.5
22.5°	6342.3	6622.2	6806.7	7042.8	7219.5	7440.0	7465.0	7491.6
25°	6189.1	6511.2	6727.0	7003.8	7203.9	7438.5	7472.9	7496.3
27.5°	6013.9	6367.3	6625.3	6941.2	7160.1	7413.4	7455.7	7483.8
30°	5810.7	6214.1	6509.6	6859.9	7100.7	7366.5	7411.9	7440.0
32.5°	5601.1	6045.2	6372.0	6755.1	7014.7	7291.5	7330.6	7352.5
35°	5372.8	5840.4	6206.3	6620.7	6903.7	7171.1	7200.8	7224.2
37.5°	5124.2	5618.3	6017.1	6469.0	6747.3	7003.8	7030.3	7056.9
40°	4867.8	5385.3	5804.4	6282.9	6561.2	6798.9	6827.1	6845.8
42.5°	4609.7	5127.3	5577.7	6064.0	6340.8	6569.0	6586.2	6605.0
45°	4348.6	4859.9	5322.8	5821.6	6095.3	6309.5	6315.7	6331.4
47.5°	4082.8	4583.2	5042.9	5544.8	5815.4	6010.8	6017.1	6029.6
50°	3815.4	4306.4	4744.2	5246.2	5510.4	5716.8	5688.7	5701.2
52.5°	3552.7	4015.5	4462.8	4924.1	5185.2	5368.1	5376.0	5350.9
55°	3294.7	3731.0	4142.2	4586.3	4834.9	4977.2	4972.5	4981.9
57.5°	3033.6	3443.2	3820.1	4226.6	4469.0	4603.5	4631.6	4598.8
60°	2767.7	3152.4	3490.1	3857.6	4092.2	4204.8	4237.6	4206.3
62.5°	2503.5	2856.9	3163.3	3483.9	3701.2	3840.4	3837.3	3802.9
65°	2239.2	2559.8	2833.4	3105.5	3294.7	3433.9	3427.6	3396.3
67.5°	1995.3	2259.5	2505.0	2725.5	2889.7	2985.1	3017.9	2980.4
70°	1726.3	1954.6	2170.4	2347.1	2483.1	2569.1	2600.4	2567.6
72.5°	1457.4	1651.3	1802.9	1973.4	2078.1	2150.1	2182.9	2151.6
75°	1191.5	1351.0	1474.6	1607.5	1681.0	1741.9	1779.5	1748.2
77.5°	933.5	1057.1	1155.6	1252.5	1337.0	1351.0	1383.9	1363.5
80°	688.0	777.2	849.1	913.2	974.2	980.4	1007.0	994.5
82.5°	458.2	517.6	536.3	603.6	642.7	636.4	663.0	653.6
85°	242.4	278.3	311.2	331.5	353.4	333.1	356.5	347.1
87.5°	81.3	86.0	75.1	106.3	117.3	100.1	114.1	109.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)