

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P835039

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-50-120-EDD**

Issue Date: 5/16/2024

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**Test Information**

Test Method: LM-79-08  
Report Number: P835039  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-4-INS-OPL-LD4-5LO-50-120-EDD  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

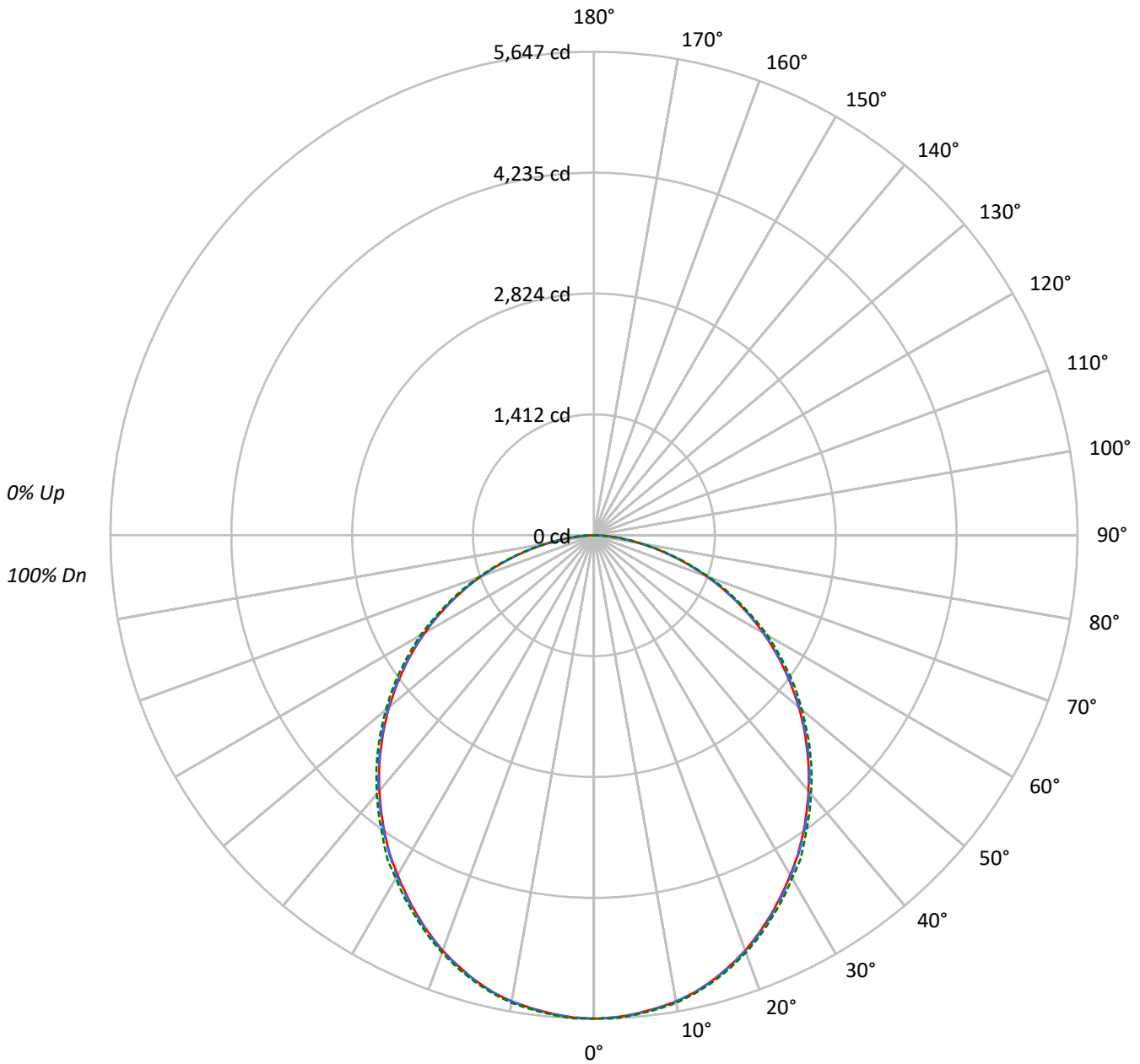
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15256.6 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 117  
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: 28.75 FT

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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7597	7597	7597
5°	7577	7583	7593
10°	7553	7554	7577
15°	7490	7495	7516
20°	7393	7401	7428
25°	7259	7277	7310
30°	7123	7147	7190
35°	6993	7010	7066
40°	6845	6868	6930
45°	6695	6724	6793
50°	6533	6563	6638
55°	6348	6378	6483
60°	6137	6162	6301
65°	5869	5888	5999
70°	5509	5514	5633
75°	5007	4989	5104
80°	4303	4284	4357
85°	3339	3285	3302



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	533.5	3.5
10°-20°	1517.7	9.9
20°-30°	2259.4	14.8
30°-40°	2671.9	17.5
40°-50°	2727.7	17.9
50°-60°	2434.3	16.0
60°-70°	1833.5	12.0
70°-80°	1022.5	6.7
80°-90°	256.2	1.7
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°	4310.6	28.3
0°-40°	6982.5	45.8
0°-60°	12144.4	79.6
0°-90°	15256.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15256.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5646	5646	5646	5646	5646	
5°	5610	5620	5615	5616	5622	533
15°	5377	5383	5381	5386	5396	1516
25°	4890	4896	4902	4914	4924	2253
35°	4257	4253	4268	4284	4302	2662
45°	3519	3518	3534	3551	3570	2714
55°	2706	2703	2719	2738	2764	2419
65°	1844	1836	1849	1866	1884	1823
75°	963	955	960	964	982	1021
85°	216	210	213	210	214	260
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5646.2	5646.2	5646.2	5646.2	5646.2
2.5°	5636.8	5646.2	5634.5	5636.8	5647.3
5°	5609.9	5620.5	5614.6	5615.8	5621.6
7.5°	5572.5	5586.6	5578.4	5580.7	5586.6
10°	5528.1	5538.6	5529.3	5535.1	5545.6
12.5°	5465.0	5469.7	5465.0	5467.3	5479.0
15°	5377.3	5383.2	5380.8	5385.5	5396.0
17.5°	5274.4	5281.5	5280.3	5289.6	5297.8
20°	5163.4	5164.6	5169.2	5178.6	5187.9
22.5°	5032.5	5036.0	5040.6	5053.5	5062.9
25°	4889.8	4895.7	4901.5	4914.4	4923.7
27.5°	4739.0	4744.9	4753.1	4767.1	4782.3
30°	4584.7	4584.7	4599.9	4614.0	4628.0
32.5°	4429.3	4423.4	4437.4	4455.0	4488.9
35°	4257.4	4252.7	4267.9	4284.3	4301.8
37.5°	4078.6	4075.1	4092.6	4110.1	4126.5
40°	3897.4	3892.7	3910.2	3927.8	3945.3
42.5°	3711.5	3709.2	3725.5	3743.1	3761.8
45°	3518.6	3517.5	3533.8	3551.4	3570.1
47.5°	3322.2	3319.9	3336.3	3355.0	3371.3
50°	3121.2	3118.8	3135.2	3153.9	3171.4
52.5°	2914.3	2914.3	2929.5	2945.8	2972.7
55°	2706.2	2702.7	2719.0	2737.8	2763.5
57.5°	2495.8	2491.1	2506.3	2525.0	2548.4
60°	2280.7	2276.0	2290.0	2308.7	2341.5
62.5°	2063.2	2056.2	2070.3	2087.8	2107.7
65°	1843.5	1836.5	1849.3	1865.7	1884.4
67.5°	1622.5	1614.4	1627.2	1641.2	1658.8
70°	1400.4	1392.3	1401.6	1415.6	1432.0
72.5°	1179.5	1171.3	1179.5	1185.3	1205.2
75°	963.2	955.1	959.7	964.4	981.9
77.5°	752.8	744.6	754.0	756.3	766.9
80°	555.3	547.1	552.9	554.1	562.3
82.5°	375.2	368.2	376.4	370.6	377.6
85°	216.3	210.4	212.8	210.4	213.9
87.5°	85.3	80.7	81.8	77.2	77.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)