

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: P835042

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6LO-50-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P835042  
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-LD4-6LO-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

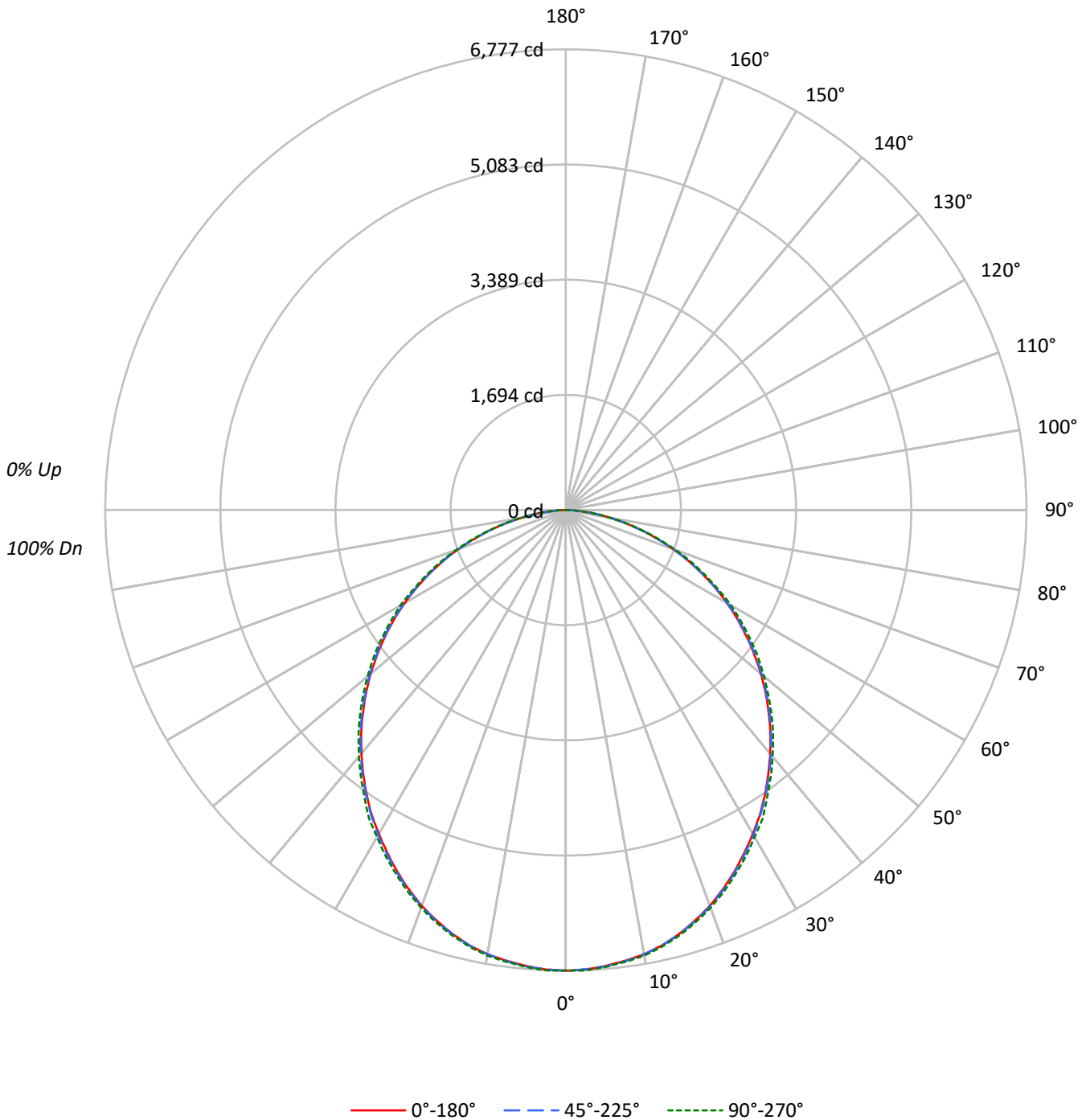
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18308.5 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): 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: 28.75 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				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	27	27	27	27	25

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

	0°	45°	90°
0°	9116	9116	9116
5°	9093	9100	9112
10°	9064	9065	9092
15°	8989	8995	9020
20°	8872	8882	8914
25°	8712	8732	8772
30°	8548	8576	8629
35°	8392	8413	8479
40°	8215	8242	8316
45°	8035	8069	8152
50°	7840	7875	7967
55°	7618	7654	7779
60°	7365	7395	7561
65°	7043	7066	7199
70°	6611	6617	6760
75°	6009	5987	6126
80°	5163	5141	5229
85°	4006	3941	3963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	640.3	3.5
10°-20°	1821.3	9.9
20°-30°	2711.3	14.8
30°-40°	3206.4	17.5
40°-50°	3273.3	17.9
50°-60°	2921.2	16.0
60°-70°	2200.3	12.0
70°-80°	1227.0	6.7
80°-90°	307.4	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°	5172.9	28.3
0°-40°	8379.3	45.8
0°-60°	14573.8	79.6
0°-90°	18308.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18308.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6776	6776	6776	6776	6776	
5°	6732	6745	6738	6739	6746	639
15°	6453	6460	6457	6463	6475	1819
25°	5868	5875	5882	5898	5909	2703
35°	5109	5104	5122	5141	5162	3195
45°	4222	4221	4241	4262	4284	3257
55°	3248	3243	3263	3285	3316	2903
65°	2212	2204	2219	2239	2261	2188
75°	1156	1146	1152	1157	1178	1225
85°	260	252	255	252	257	312
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6775.6	6775.6	6775.6	6775.6	6775.6
2.5°	6764.4	6775.6	6761.6	6764.4	6777.0
5°	6732.1	6744.8	6737.7	6739.1	6746.2
7.5°	6687.2	6704.1	6694.3	6697.1	6704.1
10°	6633.9	6646.6	6635.3	6642.4	6655.0
12.5°	6558.2	6563.8	6558.2	6561.0	6575.0
15°	6453.0	6460.0	6457.2	6462.8	6475.4
17.5°	6329.5	6337.9	6336.5	6347.8	6357.6
20°	6196.3	6197.7	6203.3	6214.5	6225.7
22.5°	6039.1	6043.4	6049.0	6064.4	6075.6
25°	5868.0	5875.0	5882.0	5897.5	5908.7
27.5°	5687.0	5694.0	5703.9	5720.7	5738.9
30°	5501.9	5501.9	5520.1	5536.9	5553.8
32.5°	5315.3	5308.3	5325.1	5346.1	5386.8
35°	5109.1	5103.5	5121.7	5141.3	5162.4
37.5°	4894.4	4890.2	4911.3	4932.3	4952.0
40°	4677.0	4671.4	4692.4	4713.5	4734.5
42.5°	4454.0	4451.1	4470.8	4491.8	4514.3
45°	4222.5	4221.1	4240.7	4261.8	4284.2
47.5°	3986.8	3984.0	4003.6	4026.1	4045.7
50°	3745.5	3742.7	3762.4	3784.8	3805.9
52.5°	3497.2	3497.2	3515.5	3535.1	3567.4
55°	3247.5	3243.3	3263.0	3285.4	3316.3
57.5°	2995.0	2989.4	3007.6	3030.1	3058.1
60°	2736.9	2731.3	2748.1	2770.6	2809.8
62.5°	2476.0	2467.6	2484.4	2505.4	2529.3
65°	2212.2	2203.8	2219.3	2238.9	2261.3
67.5°	1947.1	1937.3	1952.7	1969.6	1990.6
70°	1680.6	1670.8	1682.0	1698.8	1718.5
72.5°	1415.4	1405.6	1415.4	1422.5	1446.3
75°	1155.9	1146.1	1151.7	1157.3	1178.4
77.5°	903.4	893.6	904.8	907.6	920.3
80°	666.3	656.5	663.5	664.9	674.8
82.5°	450.3	441.9	451.7	444.7	453.1
85°	259.5	252.5	255.3	252.5	256.7
87.5°	102.4	96.8	98.2	92.6	92.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)