

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: P834965

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-27-120-EDD**

Issue Date: 5/16/2024

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**Test Information**

Test Method: LM-79-08  
Report Number: P834965  
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-LD4-4STD-27-120-EDD  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

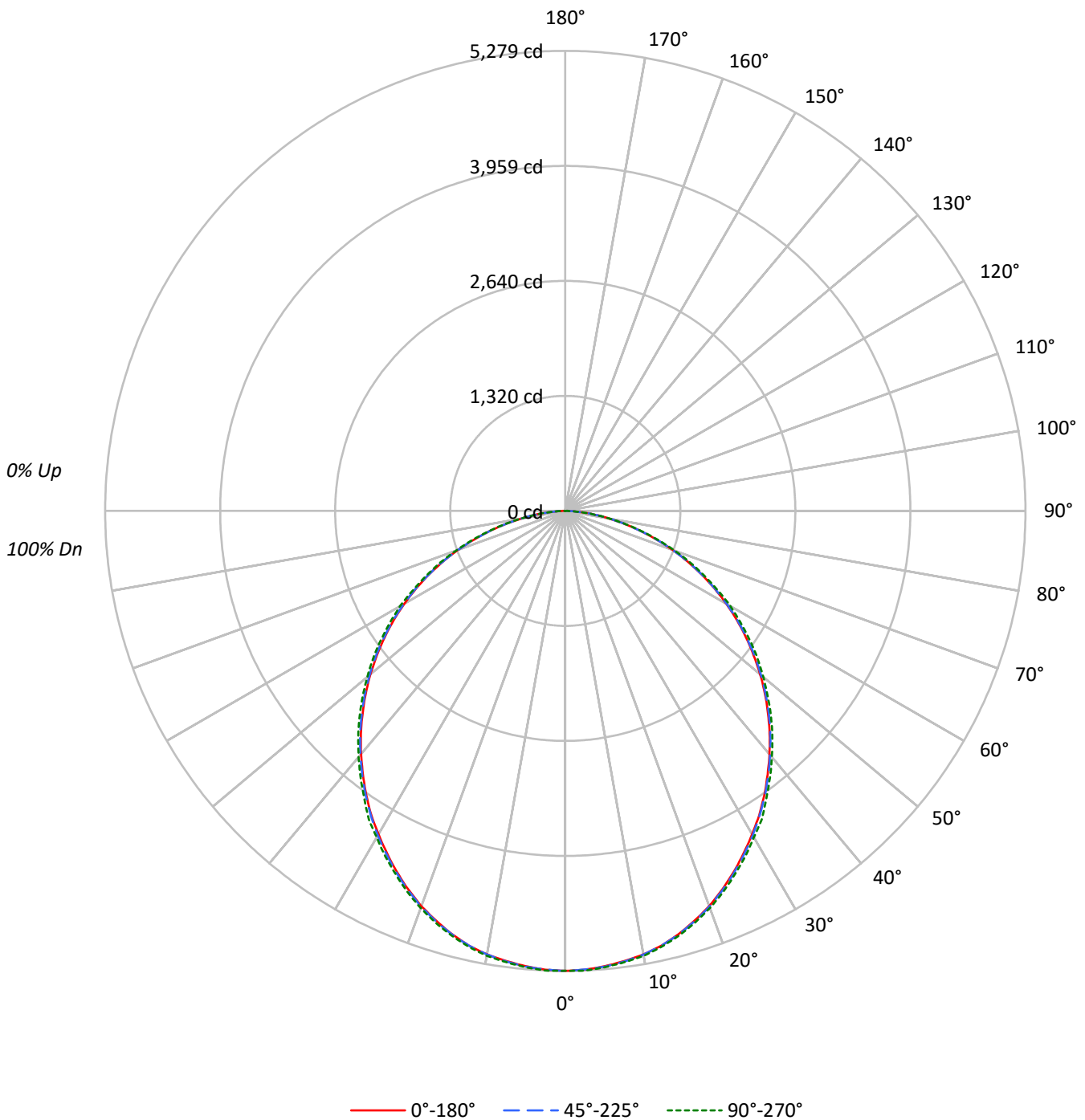
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14262.4 lumens  
Efficiency: N/A  
Efficacy: 107.1 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): 133.2  
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	26	26	26	26	25

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

	0°	45°	90°
0°	7102	7102	7102
5°	7083	7089	7098
10°	7061	7062	7083
15°	7002	7007	7027
20°	6911	6919	6944
25°	6786	6803	6833
30°	6659	6681	6722
35°	6537	6553	6605
40°	6399	6420	6478
45°	6259	6286	6350
50°	6108	6135	6206
55°	5934	5963	6060
60°	5737	5761	5890
65°	5486	5504	5608
70°	5150	5155	5266
75°	4681	4664	4772
80°	4022	4005	4073
85°	3122	3071	3088



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	498.8	3.5
10°-20°	1418.8	9.9
20°-30°	2112.1	14.8
30°-40°	2497.8	17.5
40°-50°	2549.9	17.9
50°-60°	2275.7	16.0
60°-70°	1714.0	12.0
70°-80°	955.9	6.7
80°-90°	239.5	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°	4029.7	28.3
0°-40°	6527.5	45.8
0°-60°	11353.1	79.6
0°-90°	14262.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14262.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5278	5278	5278	5278	5278	
5°	5244	5254	5249	5250	5255	498
15°	5027	5032	5030	5034	5044	1417
25°	4571	4577	4582	4594	4603	2106
35°	3980	3976	3990	4005	4022	2489
45°	3289	3288	3304	3320	3337	2537
55°	2530	2527	2542	2559	2583	2261
65°	1723	1717	1729	1744	1762	1704
75°	900	893	897	902	918	955
85°	202	197	199	197	200	243
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5278.2	5278.2	5278.2	5278.2	5278.2
2.5°	5269.5	5278.2	5267.3	5269.5	5279.3
5°	5244.4	5254.2	5248.7	5249.8	5255.3
7.5°	5209.4	5222.5	5214.9	5217.0	5222.5
10°	5167.9	5177.7	5169.0	5174.4	5184.3
12.5°	5108.9	5113.2	5108.9	5111.0	5122.0
15°	5026.9	5032.4	5030.2	5034.5	5044.4
17.5°	4930.7	4937.3	4936.2	4944.9	4952.6
20°	4826.9	4828.0	4832.4	4841.1	4849.9
22.5°	4704.5	4707.8	4712.2	4724.2	4732.9
25°	4571.2	4576.7	4582.1	4594.1	4602.9
27.5°	4430.2	4435.7	4443.3	4456.4	4470.7
30°	4286.0	4286.0	4300.2	4313.3	4326.4
32.5°	4140.6	4135.2	4148.3	4164.7	4196.4
35°	3980.0	3975.6	3989.8	4005.1	4021.5
37.5°	3812.8	3809.5	3825.9	3842.3	3857.6
40°	3643.4	3639.0	3655.4	3671.8	3688.2
42.5°	3469.6	3467.5	3482.8	3499.2	3516.6
45°	3289.3	3288.2	3303.5	3319.9	3337.4
47.5°	3105.7	3103.6	3118.9	3136.3	3151.6
50°	2917.8	2915.6	2930.9	2948.4	2964.8
52.5°	2724.4	2724.4	2738.6	2753.9	2779.0
55°	2529.8	2526.6	2541.9	2559.3	2583.4
57.5°	2333.1	2328.8	2343.0	2360.5	2382.3
60°	2132.1	2127.7	2140.8	2158.3	2188.9
62.5°	1928.8	1922.2	1935.4	1951.7	1970.3
65°	1723.3	1716.8	1728.8	1744.1	1761.6
67.5°	1516.8	1509.2	1521.2	1534.3	1550.7
70°	1309.2	1301.5	1310.3	1323.4	1338.7
72.5°	1102.6	1095.0	1102.6	1108.1	1126.7
75°	900.5	892.8	897.2	901.6	918.0
77.5°	703.8	696.1	704.9	707.0	716.9
80°	519.1	511.4	516.9	518.0	525.6
82.5°	350.8	344.2	351.9	346.4	353.0
85°	202.2	196.7	198.9	196.7	200.0
87.5°	79.8	75.4	76.5	72.1	72.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)