

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: P835659

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-1HI-40-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P835659  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-2-INS-OPL-LD4-1HI-40-120-EDD  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

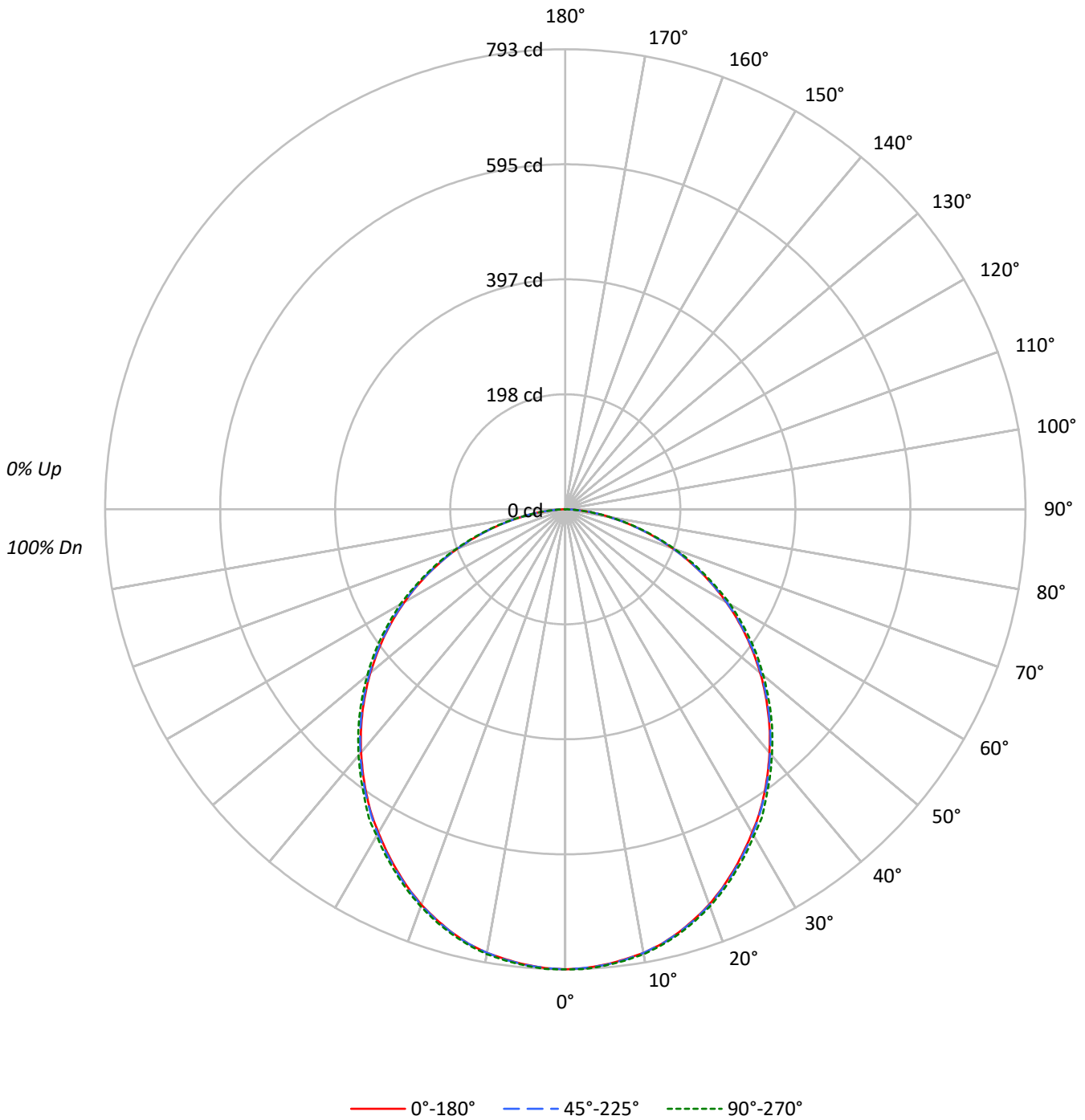
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2142.7 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 22  
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°	2134	2134	2134
5°	2128	2130	2133
10°	2122	2122	2128
15°	2104	2105	2111
20°	2077	2079	2086
25°	2039	2044	2053
30°	2001	2007	2020
35°	1964	1969	1985
40°	1923	1929	1946
45°	1881	1889	1908
50°	1835	1843	1865
55°	1783	1792	1821
60°	1724	1731	1770
65°	1649	1654	1685
70°	1548	1548	1582
75°	1407	1402	1434
80°	1209	1204	1224
85°	939	923	926



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	3.5
10°-20°	213.1	9.9
20°-30°	317.3	14.8
30°-40°	375.3	17.5
40°-50°	383.1	17.9
50°-60°	341.9	16.0
60°-70°	257.5	12.0
70°-80°	143.6	6.7
80°-90°	36.0	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°	605.4	28.3
0°-40°	980.6	45.8
0°-60°	1705.6	79.6
0°-90°	2142.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2142.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	788	789	788	789	790	75
15°	755	756	756	756	758	213
25°	687	688	688	690	692	316
35°	598	597	599	602	604	374
45°	494	494	496	499	501	381
55°	380	380	382	384	388	340
65°	259	258	260	262	265	256
75°	135	134	135	135	138	143
85°	30	30	30	30	30	36
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	793.0	793.0	793.0	793.0	793.0
2.5°	791.6	793.0	791.3	791.6	793.1
5°	787.9	789.3	788.5	788.7	789.5
7.5°	782.6	784.6	783.4	783.8	784.6
10°	776.4	777.9	776.5	777.4	778.8
12.5°	767.5	768.2	767.5	767.8	769.5
15°	755.2	756.0	755.7	756.4	757.8
17.5°	740.8	741.7	741.6	742.9	744.0
20°	725.2	725.3	726.0	727.3	728.6
22.5°	706.8	707.3	707.9	709.7	711.0
25°	686.7	687.6	688.4	690.2	691.5
27.5°	665.6	666.4	667.5	669.5	671.6
30°	643.9	643.9	646.0	648.0	650.0
32.5°	622.1	621.2	623.2	625.7	630.4
35°	597.9	597.3	599.4	601.7	604.2
37.5°	572.8	572.3	574.8	577.2	579.5
40°	547.4	546.7	549.2	551.6	554.1
42.5°	521.3	520.9	523.2	525.7	528.3
45°	494.2	494.0	496.3	498.8	501.4
47.5°	466.6	466.3	468.6	471.2	473.5
50°	438.3	438.0	440.3	442.9	445.4
52.5°	409.3	409.3	411.4	413.7	417.5
55°	380.1	379.6	381.9	384.5	388.1
57.5°	350.5	349.9	352.0	354.6	357.9
60°	320.3	319.6	321.6	324.2	328.8
62.5°	289.8	288.8	290.8	293.2	296.0
65°	258.9	257.9	259.7	262.0	264.6
67.5°	227.9	226.7	228.5	230.5	233.0
70°	196.7	195.5	196.8	198.8	201.1
72.5°	165.7	164.5	165.7	166.5	169.3
75°	135.3	134.1	134.8	135.4	137.9
77.5°	105.7	104.6	105.9	106.2	107.7
80°	78.0	76.8	77.7	77.8	79.0
82.5°	52.7	51.7	52.9	52.0	53.0
85°	30.4	29.6	29.9	29.6	30.0
87.5°	12.0	11.3	11.5	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)