

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: P834996

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-35-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834996
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-LD4-2HI-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

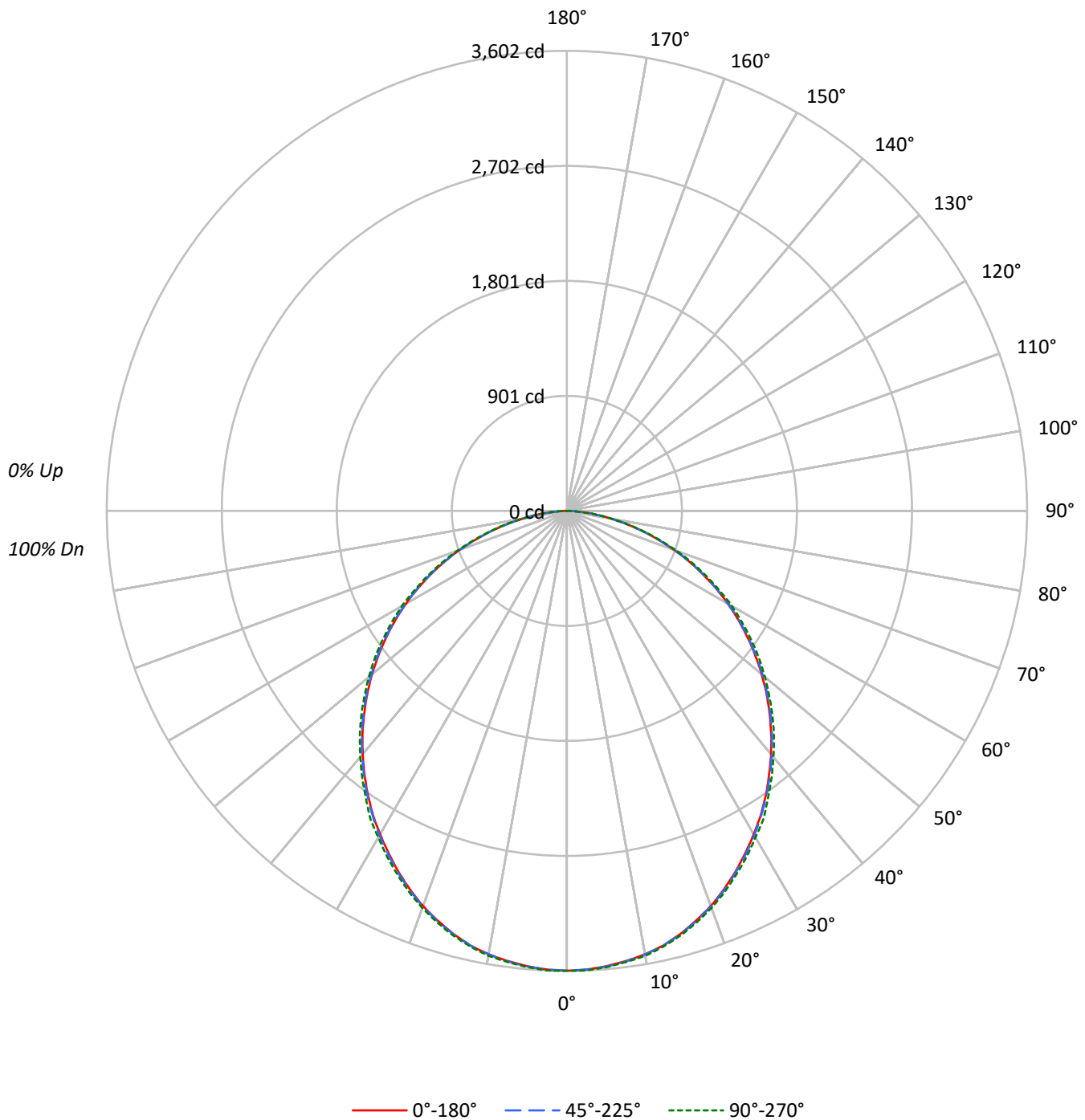
Lumens per Lamp: N/A
Luminaire Lumens: 9729.8 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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



Cooper Lighting Solutions Photometric Lab

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4845	4845	4845
5°	4832	4836	4842
10°	4817	4818	4832
15°	4777	4780	4794
20°	4715	4720	4737
25°	4630	4641	4662
30°	4543	4558	4586
35°	4460	4471	4506
40°	4366	4380	4419
45°	4270	4288	4332
50°	4167	4185	4234
55°	4049	4068	4134
60°	3914	3930	4018
65°	3743	3755	3826
70°	3513	3517	3592
75°	3193	3182	3255
80°	2744	2732	2779
85°	2129	2095	2106

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.3	3.5
10°-20°	967.9	9.9
20°-30°	1440.9	14.8
30°-40°	1704.0	17.5
40°-50°	1739.5	17.9
50°-60°	1552.5	16.0
60°-70°	1169.3	12.0
70°-80°	652.1	6.7
80°-90°	163.4	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°	2749.0	28.3
0°-40°	4453.0	45.8
0°-60°	7745.0	79.6
0°-90°	9729.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9729.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3601	3601	3601	3601	3601	
5°	3578	3584	3581	3581	3585	340
15°	3429	3433	3432	3435	3441	967
25°	3118	3122	3126	3134	3140	1437
35°	2715	2712	2722	2732	2744	1698
45°	2244	2243	2254	2265	2277	1731
55°	1726	1724	1734	1746	1762	1543
65°	1176	1171	1179	1190	1202	1163
75°	614	609	612	615	626	651
85°	138	134	136	134	136	166
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3600.8	3600.8	3600.8	3600.8	3600.8
2.5°	3594.8	3600.8	3593.3	3594.8	3601.5
5°	3577.7	3584.4	3580.7	3581.4	3585.1
7.5°	3553.8	3562.8	3557.6	3559.1	3562.8
10°	3525.5	3532.2	3526.3	3530.0	3536.7
12.5°	3485.3	3488.2	3485.3	3486.7	3494.2
15°	3429.3	3433.1	3431.6	3434.6	3441.3
17.5°	3363.7	3368.2	3367.5	3373.4	3378.6
20°	3292.9	3293.7	3296.6	3302.6	3308.6
22.5°	3209.4	3211.6	3214.6	3222.8	3228.8
25°	3118.5	3122.2	3125.9	3134.1	3140.1
27.5°	3022.3	3026.0	3031.2	3040.2	3049.9
30°	2923.9	2923.9	2933.6	2942.5	2951.5
32.5°	2824.7	2821.0	2829.9	2841.1	2862.8
35°	2715.1	2712.2	2721.8	2732.3	2743.5
37.5°	2601.1	2598.8	2610.0	2621.2	2631.6
40°	2485.5	2482.5	2493.7	2504.9	2516.1
42.5°	2367.0	2365.5	2375.9	2387.1	2399.0
45°	2244.0	2243.2	2253.7	2264.9	2276.8
47.5°	2118.7	2117.2	2127.7	2139.6	2150.0
50°	1990.5	1989.0	1999.5	2011.4	2022.6
52.5°	1858.6	1858.6	1868.2	1878.7	1895.8
55°	1725.9	1723.6	1734.1	1746.0	1762.4
57.5°	1591.7	1588.7	1598.4	1610.3	1625.2
60°	1454.5	1451.5	1460.5	1472.4	1493.3
62.5°	1315.8	1311.3	1320.3	1331.5	1344.2
65°	1175.7	1171.2	1179.4	1189.8	1201.8
67.5°	1034.8	1029.5	1037.7	1046.7	1057.9
70°	893.1	887.9	893.9	902.8	913.2
72.5°	752.2	747.0	752.2	755.9	768.6
75°	614.3	609.1	612.1	615.0	626.2
77.5°	480.1	474.9	480.9	482.3	489.1
80°	354.1	348.9	352.6	353.4	358.6
82.5°	239.3	234.8	240.1	236.3	240.8
85°	137.9	134.2	135.7	134.2	136.4
87.5°	54.4	51.4	52.2	49.2	49.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)