

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: P835140

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835140
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-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

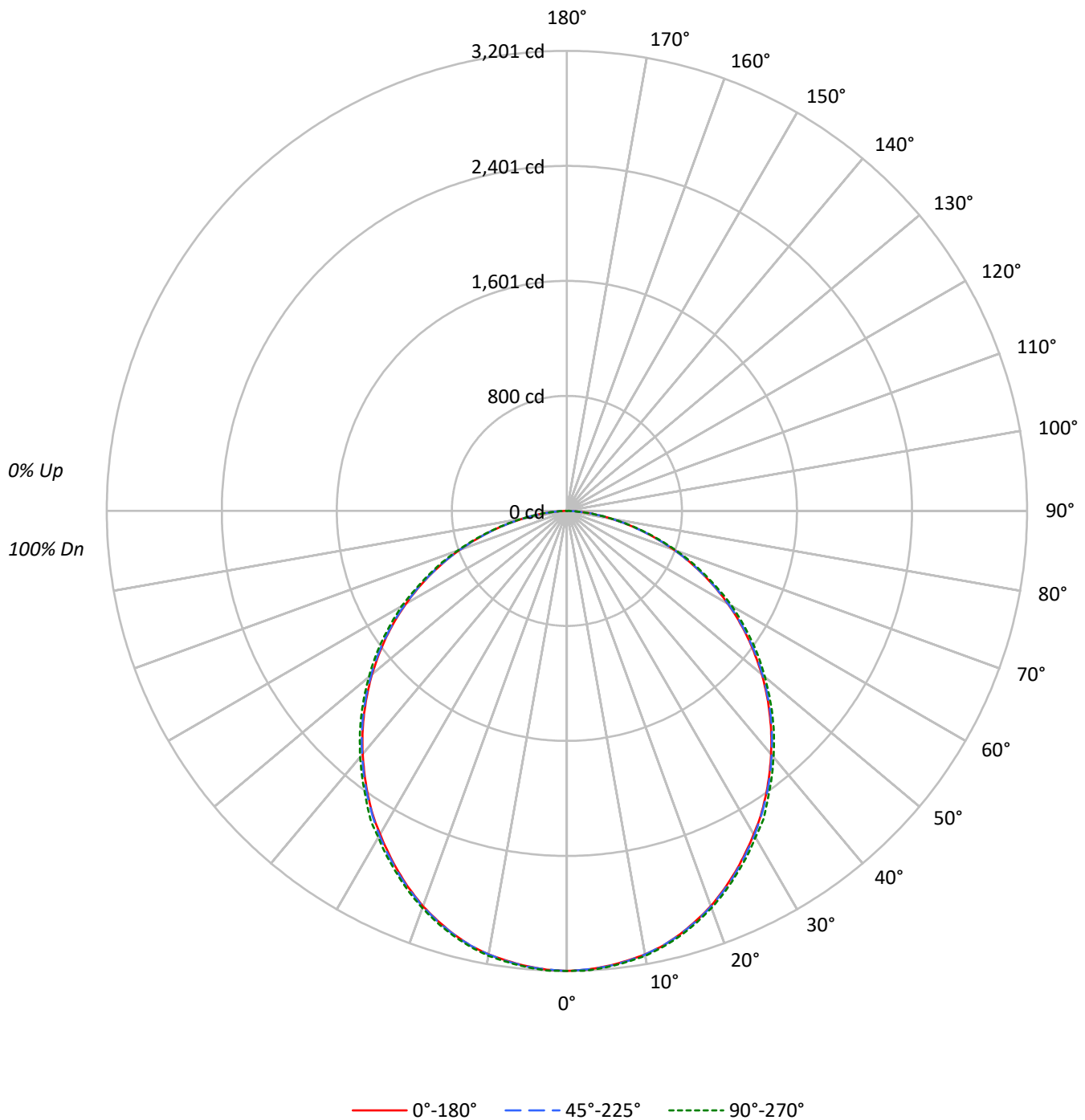
Lumens per Lamp: N/A
Luminaire Lumens: 8648.7 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4307	4307	4307
5°	4295	4299	4304
10°	4282	4282	4295
15°	4246	4249	4261
20°	4191	4196	4211
25°	4115	4125	4144
30°	4038	4051	4076
35°	3964	3974	4005
40°	3881	3893	3928
45°	3795	3812	3851
50°	3704	3720	3763
55°	3599	3616	3675
60°	3479	3493	3572
65°	3327	3338	3401
70°	3123	3126	3194
75°	2838	2829	2894
80°	2439	2428	2469
85°	1893	1862	1873

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.5	3.5
10°-20°	860.3	9.9
20°-30°	1280.8	14.8
30°-40°	1514.7	17.5
40°-50°	1546.3	17.9
50°-60°	1380.0	16.0
60°-70°	1039.4	12.0
70°-80°	579.6	6.7
80°-90°	145.2	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°	2443.6	28.3
0°-40°	3958.3	45.8
0°-60°	6884.5	79.6
0°-90°	8648.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8648.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3201	3201	3201	3201	3201	
5°	3180	3186	3183	3184	3187	302
15°	3048	3052	3050	3053	3059	859
25°	2772	2775	2779	2786	2791	1277
35°	2414	2411	2419	2429	2439	1509
45°	1995	1994	2003	2013	2024	1539
55°	1534	1532	1541	1552	1567	1371
65°	1045	1041	1048	1058	1068	1034
75°	546	541	544	547	557	579
85°	123	119	121	119	121	147
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3200.7	3200.7	3200.7	3200.7	3200.7
2.5°	3195.4	3200.7	3194.1	3195.4	3201.4
5°	3180.2	3186.1	3182.8	3183.5	3186.8
7.5°	3159.0	3166.9	3162.3	3163.6	3166.9
10°	3133.8	3139.7	3134.4	3137.8	3143.7
12.5°	3098.0	3100.7	3098.0	3099.3	3106.0
15°	3048.3	3051.6	3050.3	3052.9	3058.9
17.5°	2990.0	2994.0	2993.3	2998.6	3003.2
20°	2927.0	2927.7	2930.3	2935.6	2940.9
22.5°	2852.8	2854.8	2857.4	2864.7	2870.0
25°	2772.0	2775.3	2778.6	2785.9	2791.2
27.5°	2686.5	2689.8	2694.4	2702.4	2711.0
30°	2599.0	2599.0	2607.6	2615.6	2623.5
32.5°	2510.9	2507.6	2515.5	2525.5	2544.7
35°	2413.5	2410.8	2419.4	2428.7	2438.6
37.5°	2312.1	2310.1	2320.0	2330.0	2339.2
40°	2209.4	2206.7	2216.6	2226.6	2236.5
42.5°	2104.0	2102.7	2111.9	2121.9	2132.5
45°	1994.6	1994.0	2003.3	2013.2	2023.8
47.5°	1883.3	1882.0	1891.3	1901.9	1911.2
50°	1769.3	1768.0	1777.3	1787.9	1797.8
52.5°	1652.0	1652.0	1660.7	1669.9	1685.2
55°	1534.1	1532.1	1541.4	1552.0	1566.6
57.5°	1414.8	1412.2	1420.8	1431.4	1444.6
60°	1292.9	1290.2	1298.2	1308.8	1327.3
62.5°	1169.6	1165.6	1173.6	1183.5	1194.8
65°	1045.0	1041.1	1048.4	1057.6	1068.2
67.5°	919.8	915.2	922.4	930.4	940.3
70°	793.9	789.2	794.5	802.5	811.8
72.5°	668.6	664.0	668.6	672.0	683.2
75°	546.0	541.4	544.1	546.7	556.6
77.5°	426.8	422.1	427.4	428.7	434.7
80°	314.8	310.1	313.4	314.1	318.7
82.5°	212.7	208.7	213.4	210.1	214.0
85°	122.6	119.3	120.6	119.3	121.3
87.5°	48.4	45.7	46.4	43.7	43.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)