

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: P835686

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835686
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-LD4-4HI-50-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

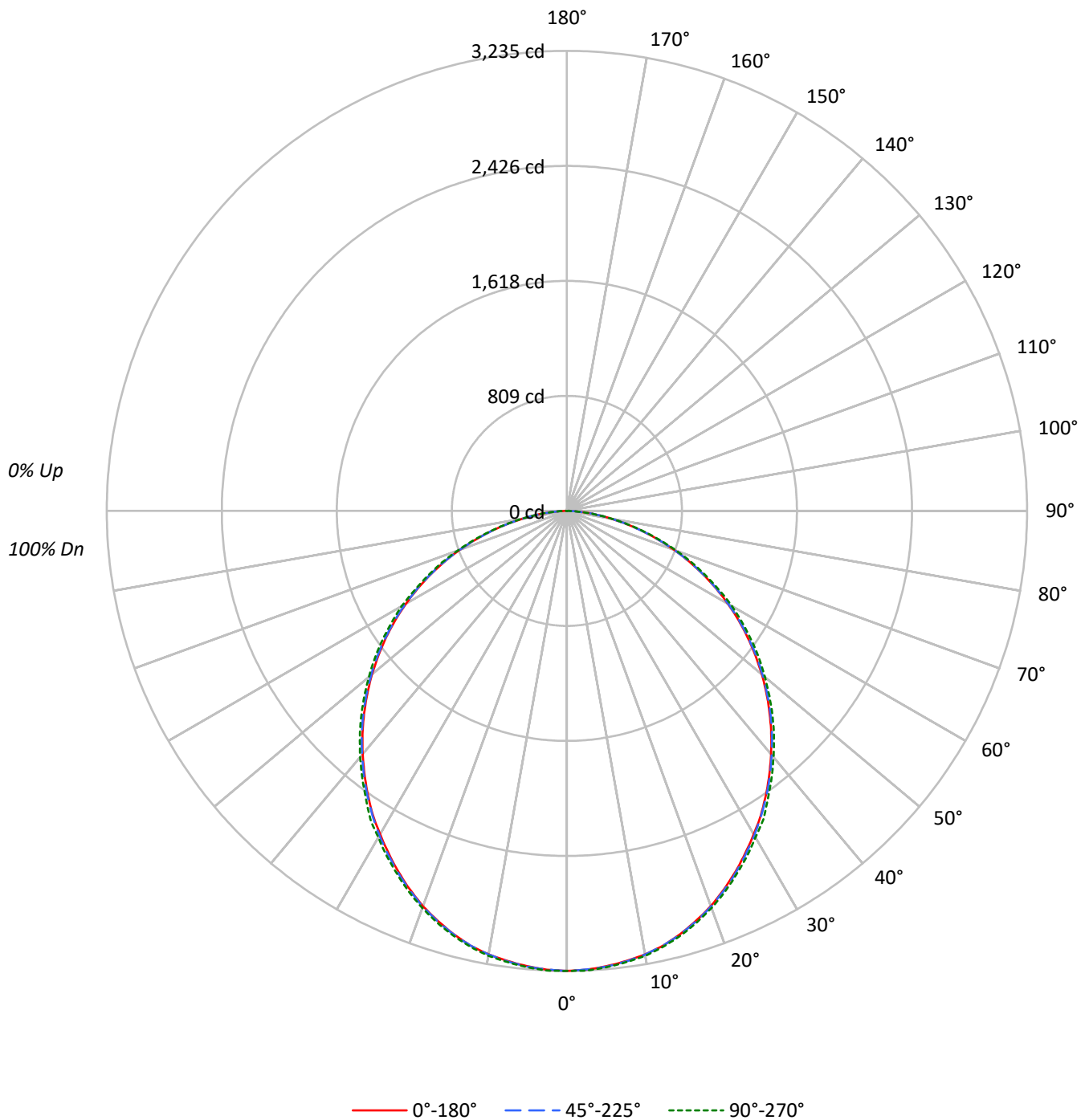
Lumens per Lamp: N/A
Luminaire Lumens: 8740.4 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8705	8705	8705
5°	8682	8689	8700
10°	8654	8656	8681
15°	8582	8588	8612
20°	8471	8481	8511
25°	8318	8338	8375
30°	8162	8189	8239
35°	8013	8032	8096
40°	7843	7869	7940
45°	7671	7704	7784
50°	7486	7519	7606
55°	7274	7308	7428
60°	7032	7061	7219
65°	6725	6746	6874
70°	6312	6318	6455
75°	5737	5716	5849
80°	4930	4909	4991
85°	3825	3764	3785

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.7	3.5
10°-20°	869.5	9.9
20°-30°	1294.4	14.8
30°-40°	1530.7	17.5
40°-50°	1562.7	17.9
50°-60°	1394.6	16.0
60°-70°	1050.4	12.0
70°-80°	585.8	6.7
80°-90°	146.8	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°	2469.5	28.3
0°-40°	4000.3	45.8
0°-60°	6957.5	79.6
0°-90°	8740.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8740.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3235	3235	3235	3235	3235	
5°	3214	3220	3217	3217	3221	305
15°	3081	3084	3083	3085	3091	868
25°	2801	2805	2808	2815	2821	1291
35°	2439	2436	2445	2454	2464	1525
45°	2016	2015	2024	2035	2045	1555
55°	1550	1548	1558	1568	1583	1386
65°	1056	1052	1060	1069	1080	1045
75°	552	547	550	552	563	585
85°	124	120	122	120	123	149
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3234.7	3234.7	3234.7	3234.7	3234.7
2.5°	3229.3	3234.7	3228.0	3229.3	3235.3
5°	3213.9	3219.9	3216.6	3217.3	3220.6
7.5°	3192.5	3200.5	3195.8	3197.2	3200.5
10°	3167.0	3173.1	3167.7	3171.0	3177.1
12.5°	3130.9	3133.5	3130.9	3132.2	3138.9
15°	3080.6	3084.0	3082.6	3085.3	3091.4
17.5°	3021.7	3025.7	3025.1	3030.4	3035.1
20°	2958.1	2958.8	2961.4	2966.8	2972.1
22.5°	2883.1	2885.1	2887.8	2895.1	2900.5
25°	2801.4	2804.7	2808.1	2815.4	2820.8
27.5°	2715.0	2718.3	2723.0	2731.1	2739.8
30°	2626.6	2626.6	2635.3	2643.3	2651.4
32.5°	2537.5	2534.2	2542.2	2552.2	2571.7
35°	2439.1	2436.4	2445.1	2454.5	2464.5
37.5°	2336.6	2334.6	2344.6	2354.7	2364.1
40°	2232.8	2230.1	2240.2	2250.2	2260.3
42.5°	2126.3	2125.0	2134.3	2144.4	2155.1
45°	2015.8	2015.1	2024.5	2034.6	2045.3
47.5°	1903.3	1902.0	1911.3	1922.1	1931.4
50°	1788.1	1786.8	1796.1	1806.9	1816.9
52.5°	1669.6	1669.6	1678.3	1687.7	1703.1
55°	1550.4	1548.4	1557.7	1568.4	1583.2
57.5°	1429.8	1427.1	1435.8	1446.6	1460.0
60°	1306.6	1303.9	1312.0	1322.7	1341.4
62.5°	1182.0	1178.0	1186.0	1196.1	1207.5
65°	1056.1	1052.1	1059.5	1068.8	1079.6
67.5°	929.5	924.9	932.2	940.3	950.3
70°	802.3	797.6	803.0	811.0	820.4
72.5°	675.7	671.0	675.7	679.1	690.5
75°	551.8	547.1	549.8	552.5	562.6
77.5°	431.3	426.6	432.0	433.3	439.3
80°	318.1	313.4	316.8	317.4	322.1
82.5°	215.0	211.0	215.6	212.3	216.3
85°	123.9	120.5	121.9	120.5	122.6
87.5°	48.9	46.2	46.9	44.2	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)