

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: P835038

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835038
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-LD4-4HI-50-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

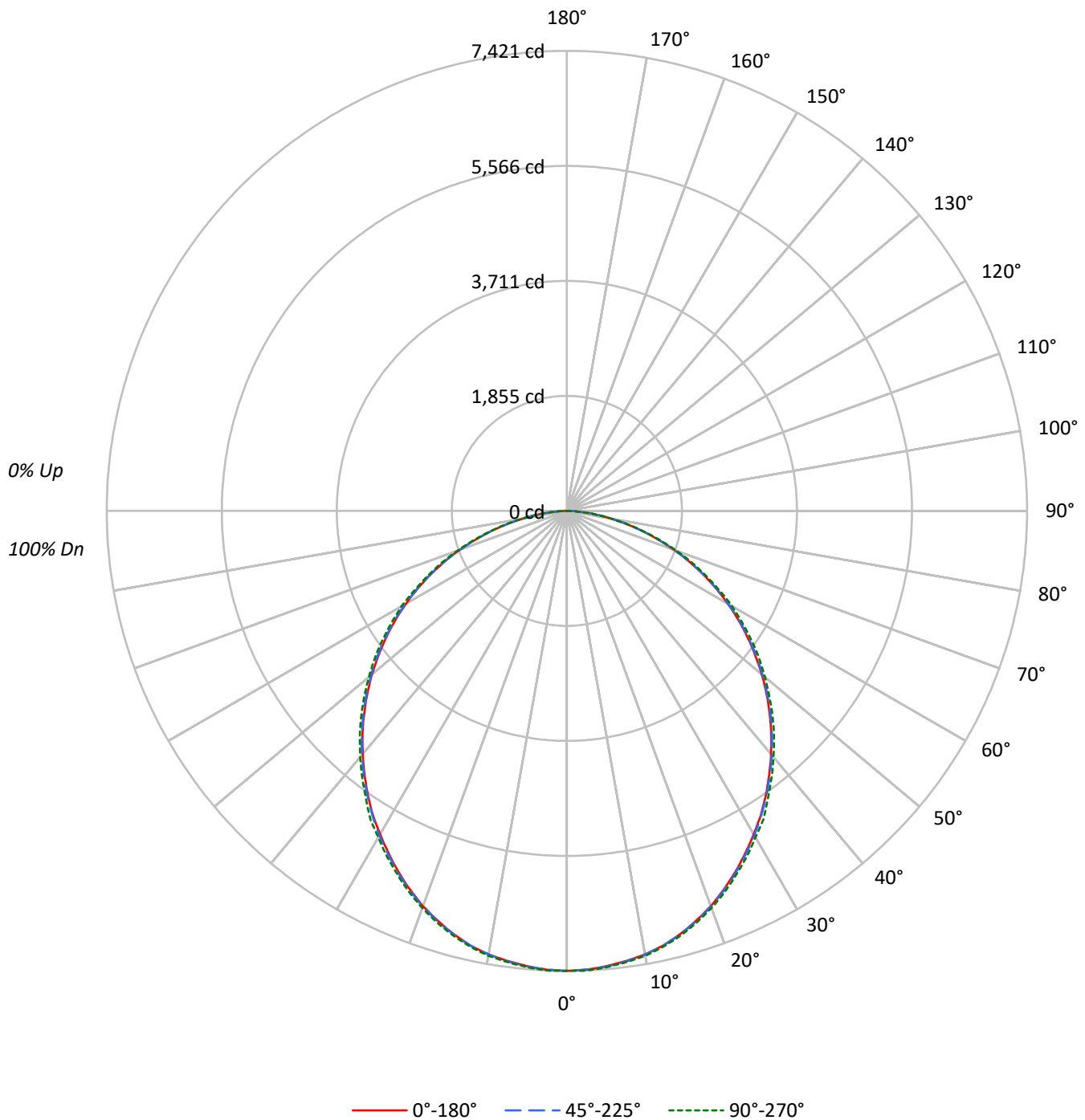
Lumens per Lamp: N/A
Luminaire Lumens: 20049.2 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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°	9983	9983	9983
5°	9957	9965	9978
10°	9925	9927	9957
15°	9843	9850	9878
20°	9716	9727	9762
25°	9540	9563	9606
30°	9361	9392	9449
35°	9190	9213	9286
40°	8996	9025	9106
45°	8799	8836	8927
50°	8586	8624	8724
55°	8342	8382	8519
60°	8065	8098	8280
65°	7713	7737	7884
70°	7240	7246	7403
75°	6580	6556	6708
80°	5654	5630	5725
85°	4387	4316	4340

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	701.1	3.5
10°-20°	1994.4	9.9
20°-30°	2969.1	14.8
30°-40°	3511.3	17.5
40°-50°	3584.5	17.9
50°-60°	3199.0	16.0
60°-70°	2409.5	12.0
70°-80°	1343.7	6.7
80°-90°	336.6	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°	5664.7	28.3
0°-40°	9176.0	45.8
0°-60°	15959.5	79.6
0°-90°	20049.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20049.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7420	7420	7420	7420	7420	
5°	7372	7386	7378	7380	7388	700
15°	7066	7074	7071	7077	7091	1992
25°	6426	6434	6441	6458	6470	2960
35°	5595	5589	5609	5630	5653	3499
45°	4624	4622	4644	4667	4692	3567
55°	3556	3552	3573	3598	3632	3179
65°	2423	2413	2430	2452	2476	2396
75°	1266	1255	1261	1267	1290	1342
85°	284	276	280	276	281	341
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7419.8	7419.8	7419.8	7419.8	7419.8
2.5°	7407.5	7419.8	7404.5	7407.5	7421.4
5°	7372.2	7386.0	7378.4	7379.9	7387.6
7.5°	7323.1	7341.5	7330.7	7333.8	7341.5
10°	7264.7	7278.5	7266.2	7273.9	7287.7
12.5°	7181.7	7187.9	7181.7	7184.8	7200.2
15°	7066.5	7074.2	7071.1	7077.3	7091.1
17.5°	6931.3	6940.5	6939.0	6951.3	6962.1
20°	6785.4	6786.9	6793.1	6805.4	6817.6
22.5°	6613.3	6617.9	6624.1	6641.0	6653.3
25°	6425.9	6433.6	6441.3	6458.2	6470.5
27.5°	6227.7	6235.4	6246.2	6264.6	6284.6
30°	6025.0	6025.0	6044.9	6063.4	6081.8
32.5°	5820.7	5813.0	5831.4	5854.5	5899.0
35°	5594.8	5588.7	5608.7	5630.2	5653.2
37.5°	5359.8	5355.2	5378.2	5401.3	5422.8
40°	5121.7	5115.5	5138.6	5161.6	5184.7
42.5°	4877.4	4874.4	4895.9	4918.9	4943.5
45°	4624.0	4622.4	4643.9	4667.0	4691.6
47.5°	4365.9	4362.8	4384.3	4408.9	4430.4
50°	4101.6	4098.6	4120.1	4144.7	4167.7
52.5°	3829.7	3829.7	3849.7	3871.2	3906.6
55°	3556.3	3551.7	3573.2	3597.8	3631.6
57.5°	3279.8	3273.6	3293.6	3318.2	3348.9
60°	2997.1	2991.0	3009.4	3034.0	3077.0
62.5°	2711.4	2702.2	2720.6	2743.7	2769.8
65°	2422.6	2413.4	2430.3	2451.8	2476.4
67.5°	2132.2	2121.5	2138.4	2156.8	2179.9
70°	1840.4	1829.6	1841.9	1860.3	1881.8
72.5°	1550.0	1539.3	1550.0	1557.7	1583.8
75°	1265.8	1255.1	1261.2	1267.4	1290.4
77.5°	989.3	978.6	990.8	993.9	1007.7
80°	729.7	718.9	726.6	728.2	738.9
82.5°	493.1	483.9	494.7	487.0	496.2
85°	284.2	276.5	279.6	276.5	281.1
87.5°	112.1	106.0	107.5	101.4	101.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)