

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: P835146

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835146
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-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

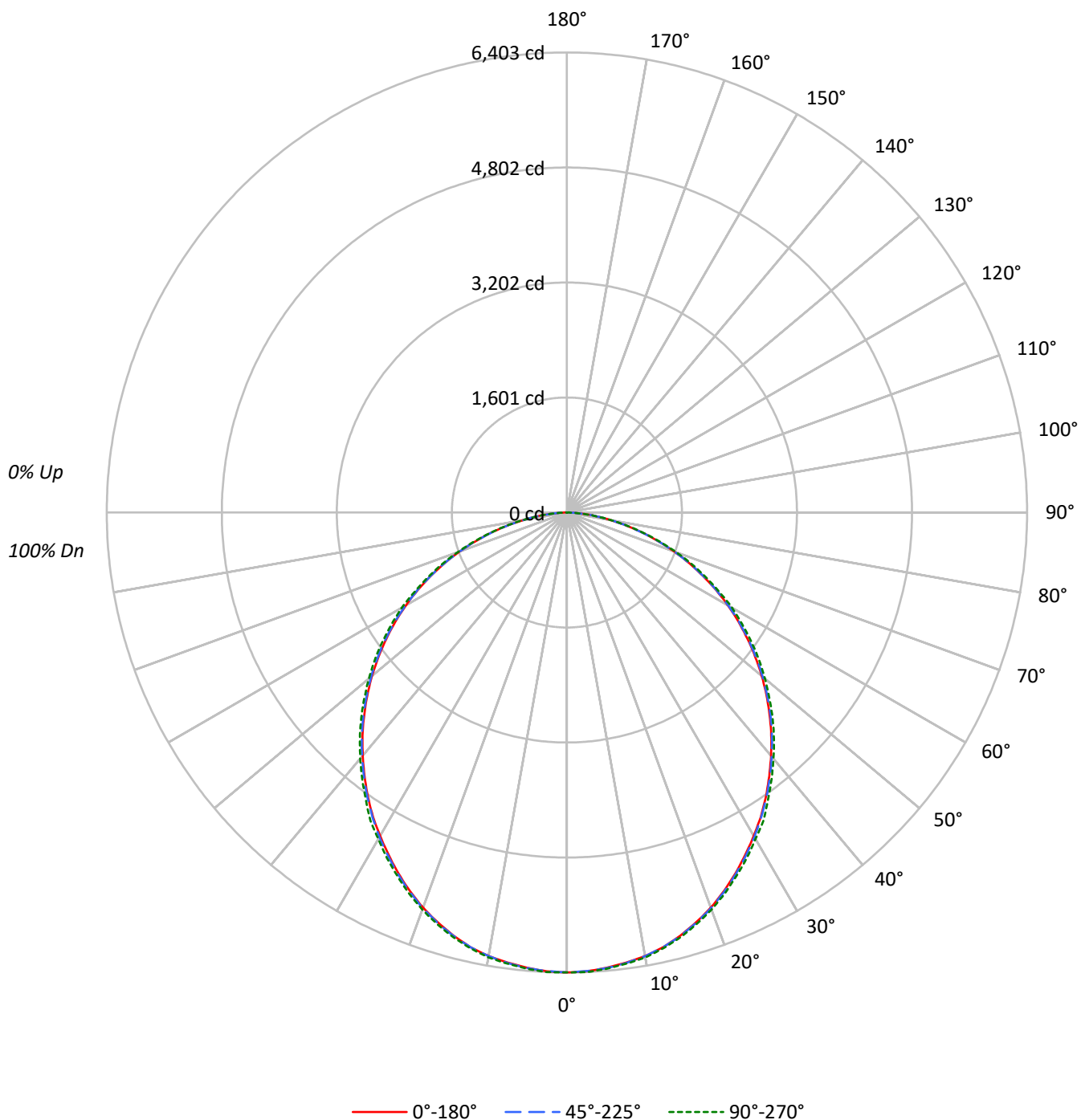
Lumens per Lamp: N/A
Luminaire Lumens: 17297.4 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	8613	8613	8613
5°	8590	8598	8608
10°	8563	8565	8590
15°	8492	8498	8522
20°	8382	8392	8422
25°	8230	8250	8288
30°	8076	8103	8152
35°	7928	7948	8011
40°	7761	7787	7856
45°	7591	7624	7702
50°	7407	7441	7527
55°	7197	7232	7350
60°	6958	6987	7144
65°	6654	6675	6802
70°	6246	6251	6387
75°	5677	5657	5788
80°	4878	4857	4940
85°	3785	3724	3744

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.9	3.5
10°-20°	1720.7	9.9
20°-30°	2561.6	14.8
30°-40°	3029.3	17.5
40°-50°	3092.5	17.9
50°-60°	2759.9	16.0
60°-70°	2078.8	12.0
70°-80°	1159.3	6.7
80°-90°	290.4	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°	4887.2	28.3
0°-40°	7916.5	45.8
0°-60°	13768.9	79.6
0°-90°	17297.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17297.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6401	6401	6401	6401	6401	
5°	6360	6372	6366	6367	6374	604
15°	6097	6103	6101	6106	6118	1718
25°	5544	5551	5557	5572	5582	2554
35°	4827	4822	4839	4857	4877	3018
45°	3989	3988	4006	4026	4048	3077
55°	3068	3064	3083	3104	3133	2743
65°	2090	2082	2097	2115	2136	2067
75°	1092	1083	1088	1093	1113	1158
85°	245	239	241	239	242	294
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6401.4	6401.4	6401.4	6401.4	6401.4
2.5°	6390.8	6401.4	6388.2	6390.8	6402.8
5°	6360.3	6372.3	6365.6	6367.0	6373.6
7.5°	6317.9	6333.8	6324.6	6327.2	6333.8
10°	6267.6	6279.5	6268.9	6275.5	6287.4
12.5°	6196.0	6201.3	6196.0	6198.7	6211.9
15°	6096.6	6103.2	6100.6	6105.9	6117.8
17.5°	5980.0	5987.9	5986.6	5997.2	6006.5
20°	5854.1	5855.4	5860.7	5871.3	5881.9
22.5°	5705.6	5709.6	5714.9	5729.5	5740.1
25°	5543.9	5550.6	5557.2	5571.8	5582.4
27.5°	5373.0	5379.6	5388.9	5404.8	5422.0
30°	5198.0	5198.0	5215.2	5231.1	5247.1
32.5°	5021.7	5015.1	5031.0	5050.9	5089.3
35°	4826.9	4821.6	4838.8	4857.4	4877.3
37.5°	4624.1	4620.2	4640.0	4659.9	4678.5
40°	4418.7	4413.4	4433.3	4453.2	4473.0
42.5°	4208.0	4205.3	4223.9	4243.8	4265.0
45°	3989.3	3988.0	4006.5	4026.4	4047.6
47.5°	3766.6	3764.0	3782.5	3803.7	3822.3
50°	3538.7	3536.0	3554.6	3575.8	3595.7
52.5°	3304.1	3304.1	3321.3	3339.9	3370.4
55°	3068.2	3064.2	3082.8	3104.0	3133.1
57.5°	2829.6	2824.3	2841.5	2862.8	2889.3
60°	2585.8	2580.5	2596.4	2617.6	2654.7
62.5°	2339.2	2331.3	2347.2	2367.1	2389.6
65°	2090.1	2082.1	2096.7	2115.3	2136.5
67.5°	1839.6	1830.3	1844.9	1860.8	1880.7
70°	1587.8	1578.5	1589.1	1605.0	1623.6
72.5°	1337.3	1328.0	1337.3	1343.9	1366.4
75°	1092.1	1082.8	1088.1	1093.4	1113.3
77.5°	853.5	844.2	854.8	857.5	869.4
80°	629.5	620.3	626.9	628.2	637.5
82.5°	425.4	417.5	426.8	420.1	428.1
85°	245.2	238.6	241.2	238.6	242.5
87.5°	96.8	91.4	92.8	87.5	87.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)