

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: P835018

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4LO-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835018
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-LD4-4LO-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

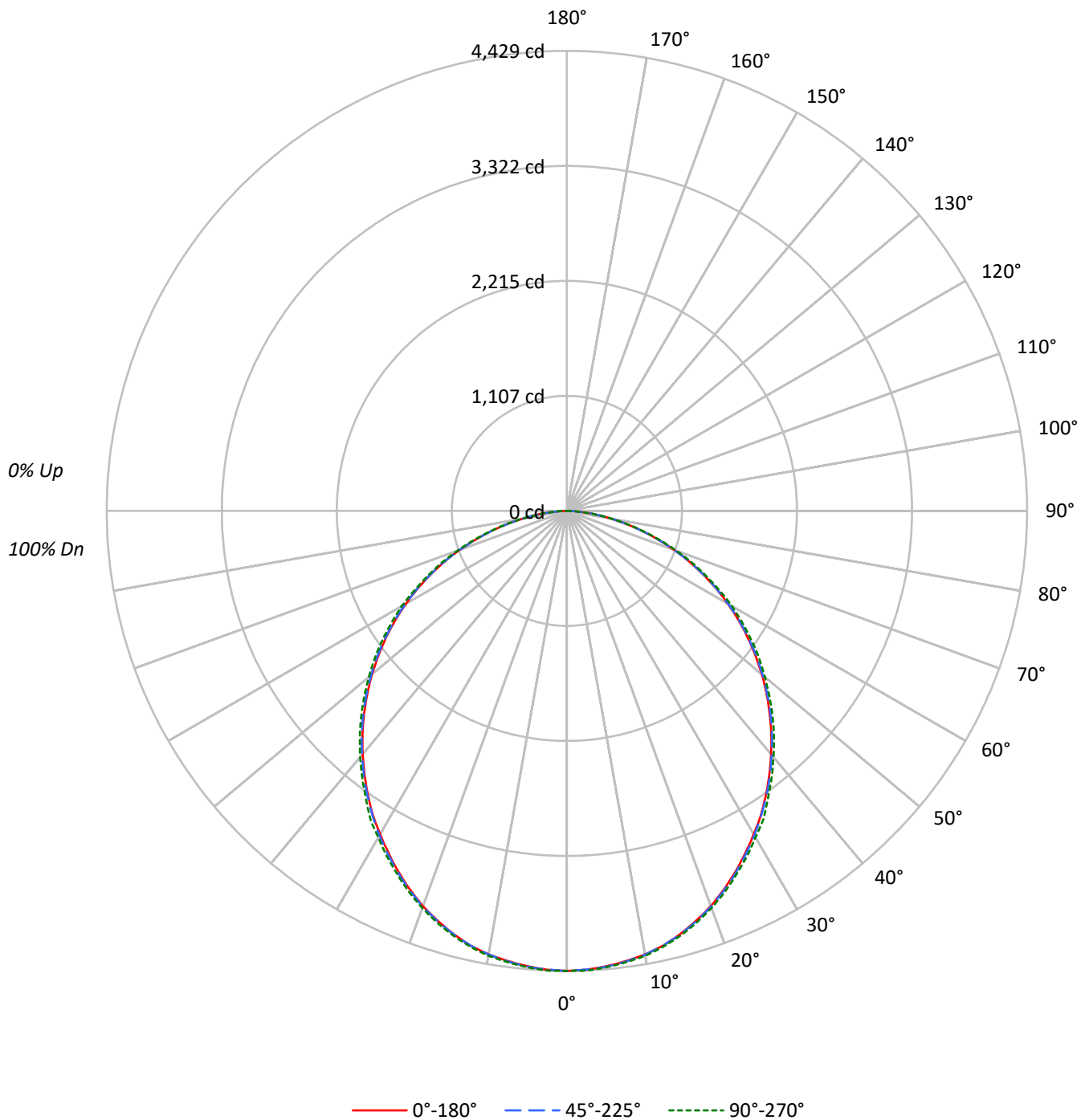
Lumens per Lamp: N/A
Luminaire Lumens: 11966.3 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 93.6
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°	5958	5958	5958
5°	5943	5948	5955
10°	5924	5925	5943
15°	5875	5879	5895
20°	5799	5805	5826
25°	5694	5707	5733
30°	5587	5605	5640
35°	5485	5498	5542
40°	5369	5387	5435
45°	5251	5274	5328
50°	5124	5147	5207
55°	4979	5003	5084
60°	4814	4834	4942
65°	4603	4618	4706
70°	4321	4325	4419
75°	3928	3913	4004
80°	3374	3360	3417
85°	2618	2577	2590

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.5	3.5
10°-20°	1190.4	9.9
20°-30°	1772.1	14.8
30°-40°	2095.7	17.5
40°-50°	2139.4	17.9
50°-60°	1909.3	16.0
60°-70°	1438.1	12.0
70°-80°	802.0	6.7
80°-90°	200.9	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°	3381.0	28.3
0°-40°	5476.7	45.8
0°-60°	9525.4	79.6
0°-90°	11966.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11966.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4428	4428	4428	4428	4428	
5°	4400	4408	4404	4405	4409	418
15°	4218	4222	4220	4224	4232	1189
25°	3835	3840	3844	3854	3862	1767
35°	3339	3336	3348	3360	3374	2088
45°	2760	2759	2772	2786	2800	2129
55°	2123	2120	2133	2147	2168	1897
65°	1446	1440	1450	1463	1478	1430
75°	756	749	753	756	770	801
85°	170	165	167	165	168	204
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4428.5	4428.5	4428.5	4428.5	4428.5
2.5°	4421.2	4428.5	4419.3	4421.2	4429.4
5°	4400.1	4408.3	4403.8	4404.7	4409.3
7.5°	4370.7	4381.8	4375.3	4377.2	4381.8
10°	4335.9	4344.2	4336.8	4341.4	4349.7
12.5°	4286.4	4290.1	4286.4	4288.2	4297.4
15°	4217.6	4222.2	4220.4	4224.0	4232.3
17.5°	4136.9	4142.4	4141.5	4148.9	4155.3
20°	4049.8	4050.8	4054.4	4061.8	4069.1
22.5°	3947.2	3949.9	3953.6	3963.7	3971.0
25°	3835.3	3839.9	3844.5	3854.5	3861.9
27.5°	3717.0	3721.6	3728.0	3739.0	3750.9
30°	3596.0	3596.0	3607.9	3618.9	3629.9
32.5°	3474.0	3469.5	3480.5	3494.2	3520.8
35°	3339.3	3335.6	3347.5	3360.4	3374.1
37.5°	3199.0	3196.2	3210.0	3223.7	3236.6
40°	3056.9	3053.2	3067.0	3080.7	3094.5
42.5°	2911.1	2909.2	2922.1	2935.8	2950.5
45°	2759.8	2758.9	2771.7	2785.5	2800.1
47.5°	2605.8	2603.9	2616.8	2631.4	2644.3
50°	2448.1	2446.2	2459.1	2473.7	2487.5
52.5°	2285.8	2285.8	2297.7	2310.5	2331.6
55°	2122.6	2119.8	2132.7	2147.3	2167.5
57.5°	1957.5	1953.9	1965.8	1980.5	1998.8
60°	1788.8	1785.2	1796.2	1810.8	1836.5
62.5°	1618.3	1612.8	1623.8	1637.5	1653.1
65°	1445.9	1440.4	1450.5	1463.3	1478.0
67.5°	1272.6	1266.2	1276.3	1287.3	1301.0
70°	1098.4	1092.0	1099.3	1110.3	1123.2
72.5°	925.1	918.7	925.1	929.7	945.3
75°	755.5	749.1	752.8	756.4	770.2
77.5°	590.5	584.1	591.4	593.2	601.5
80°	435.5	429.1	433.7	434.6	441.0
82.5°	294.3	288.8	295.2	290.6	296.2
85°	169.6	165.0	166.9	165.0	167.8
87.5°	66.9	63.3	64.2	60.5	60.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)