

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: P834967

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834967
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-LD4-5LO-27-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

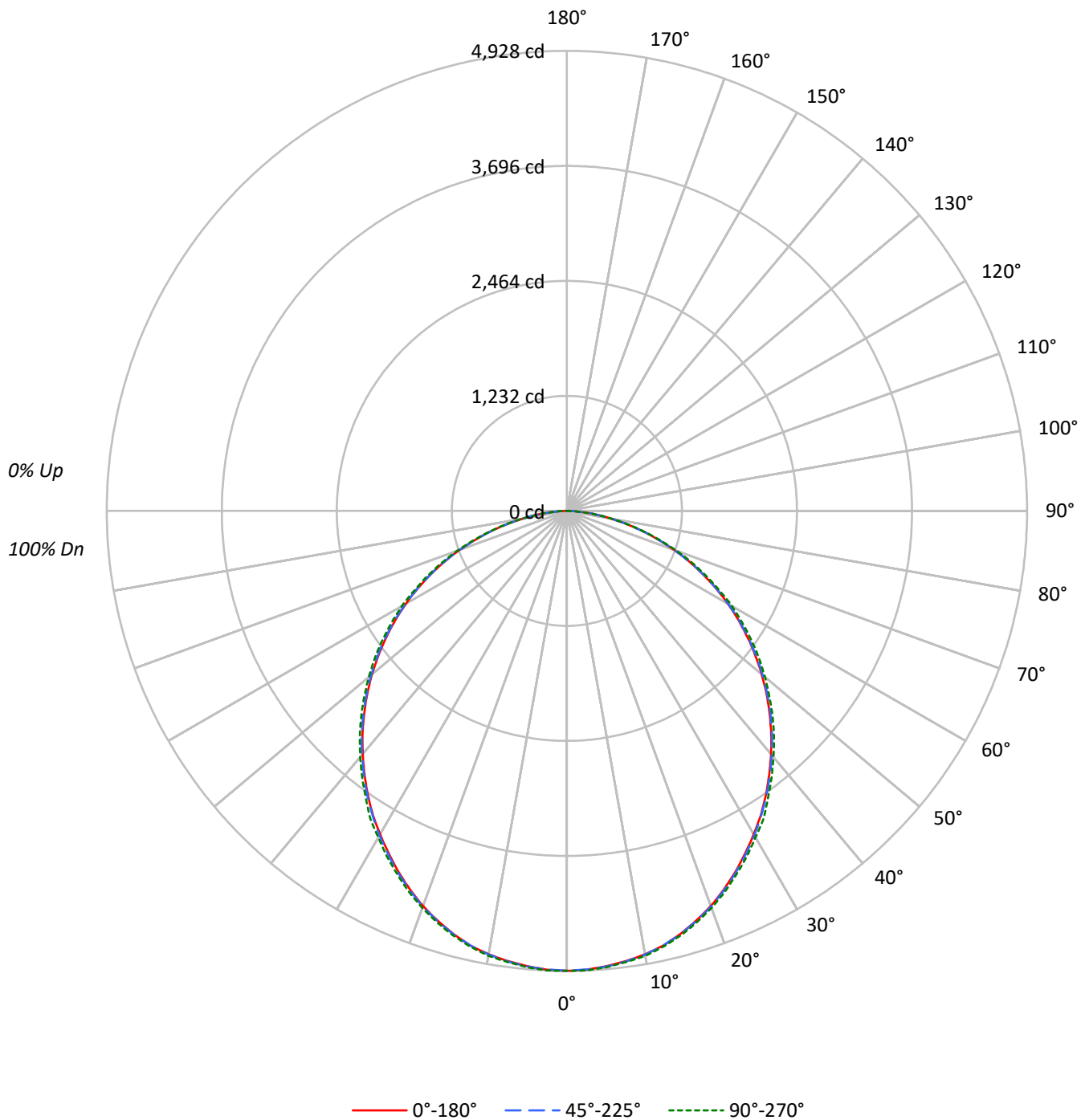
Lumens per Lamp: N/A
Luminaire Lumens: 13312.1 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 117
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°	6629	6629	6629
5°	6611	6617	6625
10°	6590	6592	6611
15°	6536	6540	6558
20°	6451	6458	6482
25°	6334	6349	6378
30°	6215	6236	6274
35°	6102	6117	6165
40°	5973	5993	6046
45°	5842	5867	5927
50°	5701	5726	5792
55°	5539	5565	5656
60°	5355	5377	5498
65°	5121	5137	5235
70°	4807	4811	4915
75°	4369	4353	4454
80°	3754	3739	3801
85°	2913	2865	2882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	465.5	3.5
10°-20°	1324.3	9.9
20°-30°	1971.4	14.8
30°-40°	2331.4	17.5
40°-50°	2380.0	17.9
50°-60°	2124.0	16.0
60°-70°	1599.8	12.0
70°-80°	892.2	6.7
80°-90°	223.5	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°	3761.2	28.3
0°-40°	6092.6	45.8
0°-60°	10596.6	79.6
0°-90°	13312.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13312.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4927	4927	4927	4927	4927	
5°	4895	4904	4899	4900	4905	465
15°	4692	4697	4695	4699	4708	1322
25°	4267	4272	4277	4288	4296	1966
35°	3715	3711	3724	3738	3754	2323
45°	3070	3069	3083	3099	3115	2368
55°	2361	2358	2372	2389	2411	2111
65°	1608	1602	1614	1628	1644	1591
75°	840	833	837	842	857	891
85°	189	184	186	184	187	227
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4926.6	4926.6	4926.6	4926.6	4926.6
2.5°	4918.4	4926.6	4916.4	4918.4	4927.6
5°	4894.9	4904.1	4899.0	4900.0	4905.1
7.5°	4862.3	4874.5	4867.4	4869.4	4874.5
10°	4823.5	4832.7	4824.6	4829.7	4838.8
12.5°	4768.5	4772.5	4768.5	4770.5	4780.7
15°	4692.0	4697.1	4695.0	4699.1	4708.3
17.5°	4602.2	4608.3	4607.3	4615.5	4622.6
20°	4505.3	4506.3	4510.4	4518.6	4526.7
22.5°	4391.1	4394.1	4398.2	4409.4	4417.6
25°	4266.6	4271.7	4276.8	4288.0	4296.2
27.5°	4135.0	4140.1	4147.3	4159.5	4172.8
30°	4000.4	4000.4	4013.7	4025.9	4038.1
32.5°	3864.8	3859.7	3871.9	3887.2	3916.8
35°	3714.8	3710.7	3724.0	3738.3	3753.6
37.5°	3558.8	3555.7	3571.0	3586.3	3600.6
40°	3400.7	3396.6	3411.9	3427.2	3442.5
42.5°	3238.5	3236.4	3250.7	3266.0	3282.3
45°	3070.2	3069.2	3083.4	3098.7	3115.1
47.5°	2898.8	2896.8	2911.1	2927.4	2941.7
50°	2723.4	2721.3	2735.6	2751.9	2767.2
52.5°	2542.8	2542.8	2556.1	2570.4	2593.8
55°	2361.3	2358.2	2372.5	2388.8	2411.3
57.5°	2177.7	2173.6	2186.9	2203.2	2223.6
60°	1990.0	1985.9	1998.2	2014.5	2043.0
62.5°	1800.3	1794.2	1806.4	1821.7	1839.0
65°	1608.5	1602.4	1613.6	1627.9	1644.2
67.5°	1415.7	1408.6	1419.8	1432.1	1447.4
70°	1222.0	1214.8	1223.0	1235.2	1249.5
72.5°	1029.2	1022.0	1029.2	1034.3	1051.6
75°	840.5	833.3	837.4	841.5	856.8
77.5°	656.9	649.7	657.9	659.9	669.1
80°	484.5	477.4	482.5	483.5	490.6
82.5°	327.4	321.3	328.4	323.3	329.5
85°	188.7	183.6	185.6	183.6	186.7
87.5°	74.5	70.4	71.4	67.3	67.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)