

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: P835111

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835111
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-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

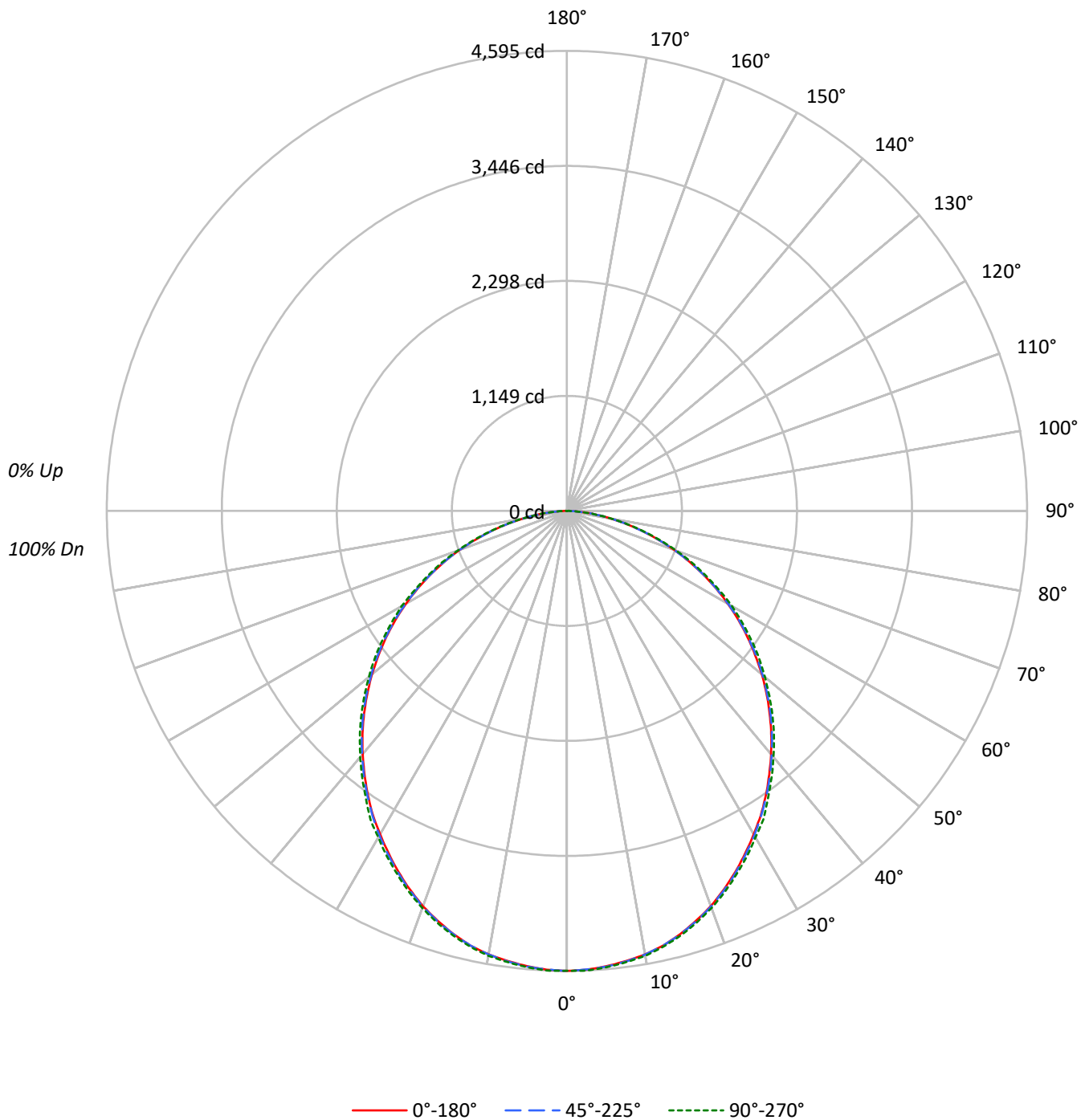
Lumens per Lamp: N/A
Luminaire Lumens: 12414.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6182	6182	6182
5°	6165	6171	6178
10°	6146	6147	6165
15°	6095	6099	6116
20°	6016	6023	6045
25°	5907	5921	5948
30°	5796	5815	5851
35°	5690	5704	5750
40°	5570	5589	5639
45°	5448	5472	5528
50°	5316	5340	5402
55°	5166	5190	5275
60°	4994	5015	5127
65°	4776	4791	4882
70°	4483	4487	4584
75°	4075	4060	4154
80°	3501	3486	3545
85°	2717	2672	2688

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.2	3.5
10°-20°	1235.0	9.9
20°-30°	1838.5	14.8
30°-40°	2174.2	17.5
40°-50°	2219.6	17.9
50°-60°	1980.8	16.0
60°-70°	1491.9	12.0
70°-80°	832.0	6.7
80°-90°	208.4	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°	3507.6	28.3
0°-40°	5681.8	45.8
0°-60°	9882.2	79.6
0°-90°	12414.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12414.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4594	4594	4594	4594	4594	
5°	4565	4574	4569	4570	4574	434
15°	4376	4380	4378	4382	4391	1233
25°	3979	3984	3988	3999	4007	1833
35°	3464	3461	3473	3486	3500	2166
45°	2863	2862	2876	2890	2905	2209
55°	2202	2199	2213	2228	2249	1968
65°	1500	1494	1505	1518	1533	1484
75°	784	777	781	785	799	831
85°	176	171	173	171	174	211
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4594.4	4594.4	4594.4	4594.4	4594.4
2.5°	4586.8	4594.4	4584.9	4586.8	4595.4
5°	4564.9	4573.5	4568.8	4569.7	4574.5
7.5°	4534.5	4545.9	4539.3	4541.2	4545.9
10°	4498.4	4506.9	4499.3	4504.1	4512.6
12.5°	4447.0	4450.8	4447.0	4448.9	4458.4
15°	4375.7	4380.4	4378.5	4382.3	4390.9
17.5°	4291.9	4297.7	4296.7	4304.3	4311.0
20°	4201.6	4202.5	4206.3	4213.9	4221.6
22.5°	4095.0	4097.9	4101.7	4112.2	4119.8
25°	3979.0	3983.7	3988.5	3999.0	4006.6
27.5°	3856.3	3861.0	3867.7	3879.1	3891.5
30°	3730.7	3730.7	3743.1	3754.5	3765.9
32.5°	3604.2	3599.4	3610.9	3625.1	3652.7
35°	3464.4	3460.6	3472.9	3486.3	3500.5
37.5°	3318.8	3316.0	3330.3	3344.5	3357.8
40°	3171.4	3167.6	3181.9	3196.1	3210.4
42.5°	3020.2	3018.2	3031.6	3045.8	3061.1
45°	2863.2	2862.2	2875.6	2889.8	2905.1
47.5°	2703.4	2701.5	2714.8	2730.0	2743.3
50°	2539.8	2537.9	2551.2	2566.4	2580.7
52.5°	2371.4	2371.4	2383.8	2397.1	2419.0
55°	2202.1	2199.2	2212.6	2227.8	2248.7
57.5°	2030.9	2027.1	2039.4	2054.7	2073.7
60°	1855.8	1852.0	1863.5	1878.7	1905.3
62.5°	1678.9	1673.2	1684.6	1698.9	1715.1
65°	1500.1	1494.4	1504.8	1518.2	1533.4
67.5°	1320.3	1313.6	1324.1	1335.5	1349.8
70°	1139.6	1132.9	1140.5	1151.9	1165.3
72.5°	959.8	953.1	959.8	964.5	980.7
75°	783.8	777.2	781.0	784.8	799.0
77.5°	612.6	605.9	613.5	615.4	624.0
80°	451.8	445.2	449.9	450.9	457.5
82.5°	305.3	299.6	306.3	301.5	307.2
85°	176.0	171.2	173.1	171.2	174.1
87.5°	69.4	65.6	66.6	62.8	62.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)