

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: P835129

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835129
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-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

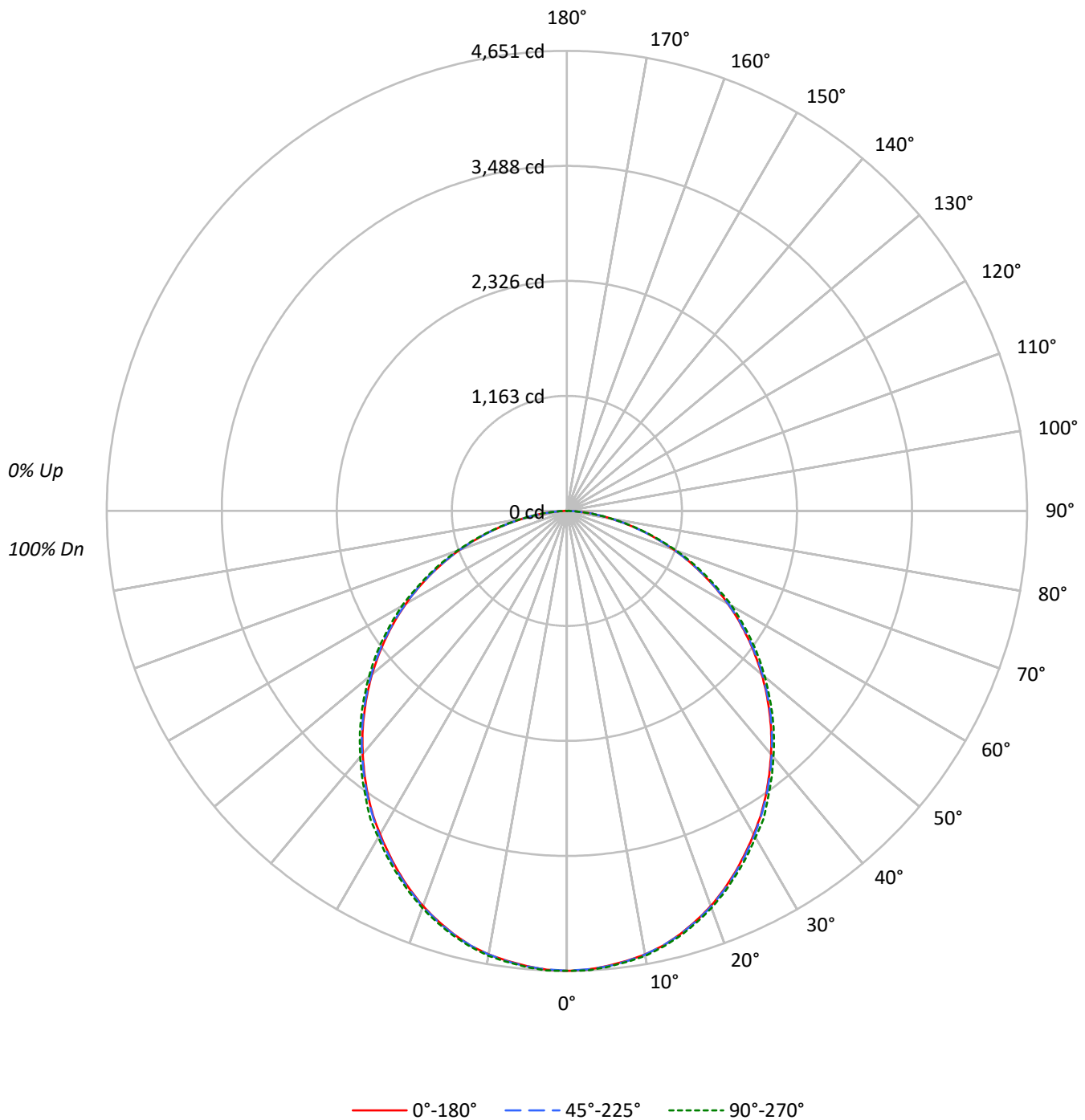
Lumens per Lamp: N/A
Luminaire Lumens: 12564.3 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	6256	6256	6256
5°	6240	6245	6253
10°	6220	6221	6240
15°	6169	6173	6190
20°	6088	6095	6117
25°	5978	5993	6020
30°	5866	5885	5921
35°	5759	5773	5819
40°	5637	5656	5707
45°	5514	5538	5594
50°	5380	5404	5467
55°	5228	5253	5339
60°	5054	5075	5189
65°	4833	4849	4941
70°	4537	4541	4639
75°	4124	4109	4204
80°	3543	3529	3588
85°	2749	2705	2720

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	439.4	3.5
10°-20°	1249.9	9.9
20°-30°	1860.7	14.8
30°-40°	2200.4	17.5
40°-50°	2246.3	17.9
50°-60°	2004.7	16.0
60°-70°	1509.9	12.0
70°-80°	842.1	6.7
80°-90°	211.0	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°	3549.9	28.3
0°-40°	5750.3	45.8
0°-60°	10001.3	79.6
0°-90°	12564.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12564.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4650	4650	4650	4650	4650	
5°	4620	4629	4624	4625	4630	439
15°	4428	4433	4431	4435	4444	1248
25°	4027	4032	4037	4047	4055	1855
35°	3506	3502	3515	3528	3543	2193
45°	2898	2897	2910	2925	2940	2235
55°	2229	2226	2239	2255	2276	1992
65°	1518	1512	1523	1536	1552	1502
75°	793	786	790	794	809	841
85°	178	173	175	173	176	214
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4649.8	4649.8	4649.8	4649.8	4649.8
2.5°	4642.1	4649.8	4640.2	4642.1	4650.8
5°	4619.9	4628.6	4623.8	4624.8	4629.6
7.5°	4589.1	4600.7	4594.0	4595.9	4600.7
10°	4552.6	4561.2	4553.5	4558.3	4567.0
12.5°	4500.6	4504.4	4500.6	4502.5	4512.1
15°	4428.4	4433.2	4431.3	4435.1	4443.8
17.5°	4343.7	4349.4	4348.5	4356.2	4362.9
20°	4252.2	4253.2	4257.0	4264.7	4272.4
22.5°	4144.4	4147.3	4151.1	4161.7	4169.4
25°	4026.9	4031.7	4036.6	4047.1	4054.8
27.5°	3902.7	3907.6	3914.3	3925.8	3938.4
30°	3775.7	3775.7	3788.2	3799.7	3811.3
32.5°	3647.6	3642.8	3654.4	3668.8	3696.7
35°	3506.1	3502.3	3514.8	3528.3	3542.7
37.5°	3358.8	3355.9	3370.4	3384.8	3398.3
40°	3209.6	3205.8	3220.2	3234.6	3249.1
42.5°	3056.5	3054.6	3068.1	3082.5	3097.9
45°	2897.7	2896.7	2910.2	2924.6	2940.1
47.5°	2736.0	2734.0	2747.5	2762.9	2776.4
50°	2570.4	2568.5	2581.9	2597.3	2611.8
52.5°	2400.0	2400.0	2412.5	2426.0	2448.1
55°	2228.6	2225.7	2239.2	2254.6	2275.8
57.5°	2055.3	2051.5	2064.0	2079.4	2098.7
60°	1878.2	1874.4	1885.9	1901.3	1928.3
62.5°	1699.1	1693.4	1704.9	1719.4	1735.7
65°	1518.2	1512.4	1523.0	1536.5	1551.9
67.5°	1336.2	1329.5	1340.1	1351.6	1366.1
70°	1153.3	1146.6	1154.3	1165.8	1179.3
72.5°	971.4	964.6	971.4	976.2	992.5
75°	793.3	786.5	790.4	794.2	808.7
77.5°	620.0	613.2	620.9	622.9	631.5
80°	457.3	450.5	455.4	456.3	463.1
82.5°	309.0	303.2	310.0	305.2	310.9
85°	178.1	173.3	175.2	173.3	176.2
87.5°	70.3	66.4	67.4	63.5	63.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)