

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: P835723

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835723
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-5LO-27-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

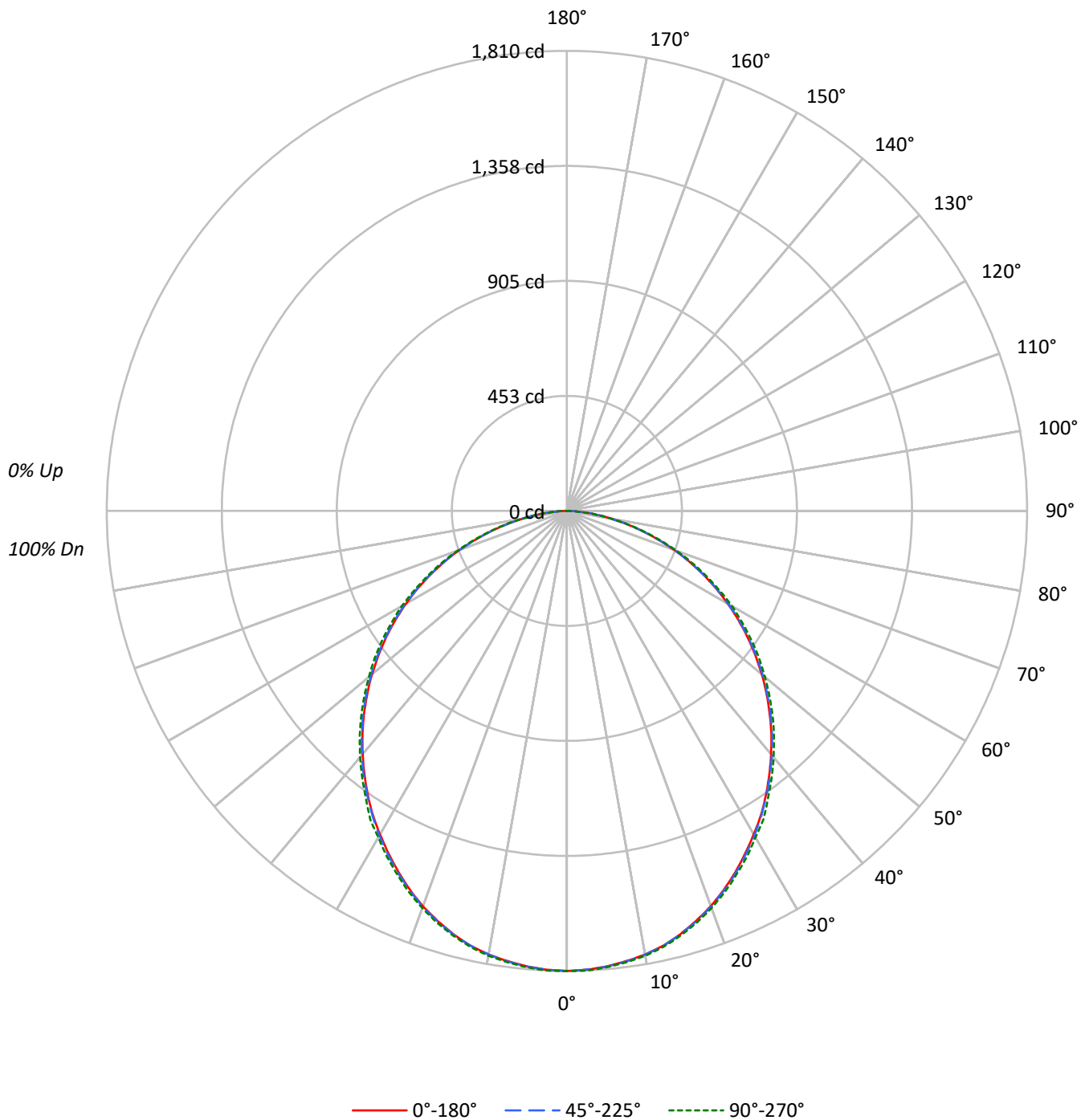
Lumens per Lamp: N/A
Luminaire Lumens: 4891.3 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 58.5
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°	4871	4871	4871
5°	4858	4862	4868
10°	4843	4844	4858
15°	4803	4806	4820
20°	4741	4746	4763
25°	4655	4666	4687
30°	4567	4582	4610
35°	4484	4495	4531
40°	4389	4404	4443
45°	4293	4311	4356
50°	4189	4208	4257
55°	4070	4090	4157
60°	3935	3951	4040
65°	3763	3775	3847
70°	3533	3536	3612
75°	3211	3199	3273
80°	2758	2748	2794
85°	2140	2106	2118

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	3.5
10°-20°	486.6	9.9
20°-30°	724.4	14.8
30°-40°	856.6	17.5
40°-50°	874.5	17.9
50°-60°	780.4	16.0
60°-70°	587.8	12.0
70°-80°	327.8	6.7
80°-90°	82.1	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°	1382.0	28.3
0°-40°	2238.6	45.8
0°-60°	3893.5	79.6
0°-90°	4891.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4891.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1810	1810	1810	1810	1810	
5°	1798	1802	1800	1800	1802	171
15°	1724	1726	1725	1727	1730	486
25°	1568	1570	1571	1576	1579	722
35°	1365	1363	1368	1374	1379	854
45°	1128	1128	1133	1139	1145	870
55°	868	866	872	878	886	776
65°	591	589	593	598	604	585
75°	309	306	308	309	315	327
85°	69	68	68	68	69	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1810.2	1810.2	1810.2	1810.2	1810.2
2.5°	1807.2	1810.2	1806.4	1807.2	1810.5
5°	1798.5	1801.9	1800.0	1800.4	1802.3
7.5°	1786.6	1791.1	1788.4	1789.2	1791.1
10°	1772.3	1775.7	1772.7	1774.6	1777.9
12.5°	1752.1	1753.6	1752.1	1752.8	1756.6
15°	1724.0	1725.8	1725.1	1726.6	1730.0
17.5°	1691.0	1693.2	1692.9	1695.9	1698.5
20°	1655.4	1655.8	1657.3	1660.3	1663.3
22.5°	1613.4	1614.5	1616.0	1620.2	1623.2
25°	1567.7	1569.6	1571.4	1575.6	1578.6
27.5°	1519.3	1521.2	1523.8	1528.3	1533.2
30°	1469.9	1469.9	1474.7	1479.2	1483.7
32.5°	1420.0	1418.2	1422.6	1428.3	1439.1
35°	1364.9	1363.4	1368.3	1373.6	1379.2
37.5°	1307.6	1306.5	1312.1	1317.7	1323.0
40°	1249.5	1248.0	1253.6	1259.2	1264.9
42.5°	1189.9	1189.2	1194.4	1200.0	1206.0
45°	1128.1	1127.7	1132.9	1138.6	1144.6
47.5°	1065.1	1064.4	1069.6	1075.6	1080.9
50°	1000.7	999.9	1005.1	1011.1	1016.8
52.5°	934.3	934.3	939.2	944.4	953.1
55°	867.6	866.5	871.7	877.7	886.0
57.5°	800.1	798.6	803.5	809.5	817.0
60°	731.2	729.7	734.2	740.2	750.7
62.5°	661.5	659.2	663.7	669.3	675.7
65°	591.0	588.8	592.9	598.1	604.1
67.5°	520.2	517.6	521.7	526.2	531.8
70°	449.0	446.4	449.4	453.9	459.1
72.5°	378.1	375.5	378.1	380.0	386.4
75°	308.8	306.2	307.7	309.2	314.8
77.5°	241.4	238.7	241.7	242.5	245.9
80°	178.0	175.4	177.3	177.6	180.3
82.5°	120.3	118.1	120.7	118.8	121.1
85°	69.3	67.5	68.2	67.5	68.6
87.5°	27.4	25.9	26.2	24.7	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)