

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: P835792

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4LO-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835792
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-LD4-4LO-50-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

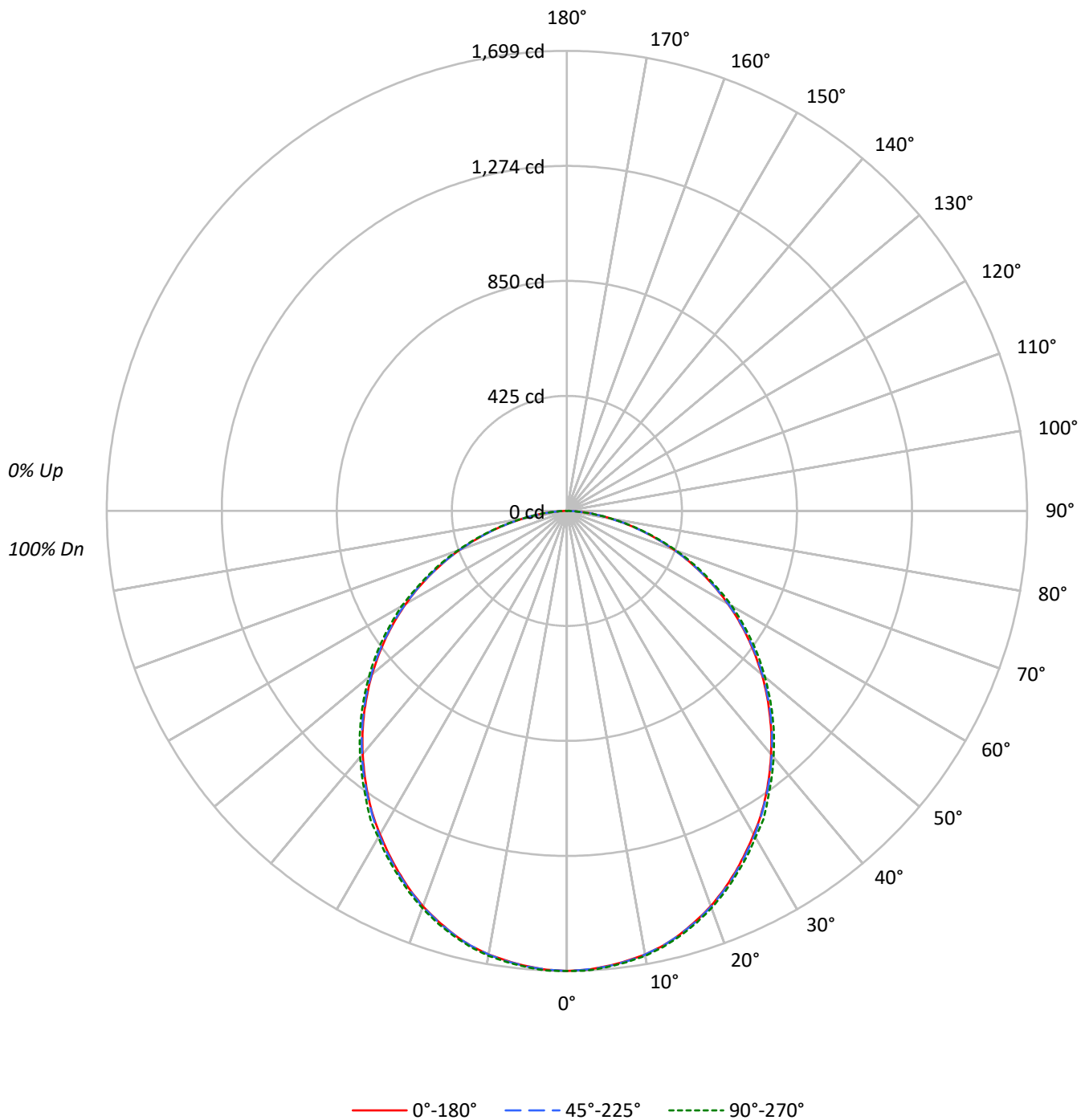
Lumens per Lamp: N/A
Luminaire Lumens: 4590.9 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	4572	4572	4572
5°	4560	4564	4569
10°	4545	4546	4560
15°	4508	4511	4523
20°	4449	4454	4470
25°	4369	4379	4399
30°	4287	4301	4327
35°	4209	4219	4253
40°	4120	4133	4170
45°	4029	4047	4088
50°	3932	3949	3995
55°	3820	3839	3902
60°	3694	3709	3792
65°	3532	3543	3610
70°	3316	3319	3390
75°	3014	3003	3072
80°	2590	2579	2622
85°	2010	1976	1988

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	3.5
10°-20°	456.7	9.9
20°-30°	679.9	14.8
30°-40°	804.0	17.5
40°-50°	820.8	17.9
50°-60°	732.5	16.0
60°-70°	551.7	12.0
70°-80°	307.7	6.7
80°-90°	77.1	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°	1297.1	28.3
0°-40°	2101.1	45.8
0°-60°	3654.4	79.6
0°-90°	4590.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4590.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1699	1699	1699	1699	1699	
5°	1688	1691	1690	1690	1692	160
15°	1618	1620	1619	1621	1624	456
25°	1471	1473	1475	1479	1482	678
35°	1281	1280	1284	1289	1294	801
45°	1059	1058	1063	1069	1074	817
55°	814	813	818	824	832	728
65°	555	553	556	561	567	549
75°	290	287	289	290	296	307
85°	65	63	64	63	64	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1699.0	1699.0	1699.0	1699.0	1699.0
2.5°	1696.2	1699.0	1695.5	1696.2	1699.4
5°	1688.1	1691.3	1689.5	1689.9	1691.6
7.5°	1676.9	1681.1	1678.6	1679.3	1681.1
10°	1663.5	1666.7	1663.8	1665.6	1668.8
12.5°	1644.5	1645.9	1644.5	1645.2	1648.7
15°	1618.1	1619.9	1619.2	1620.6	1623.7
17.5°	1587.2	1589.3	1588.9	1591.7	1594.2
20°	1553.7	1554.1	1555.5	1558.3	1561.1
22.5°	1514.3	1515.4	1516.8	1520.7	1523.5
25°	1471.4	1473.2	1474.9	1478.8	1481.6
27.5°	1426.0	1427.8	1430.3	1434.5	1439.1
30°	1379.6	1379.6	1384.2	1388.4	1392.6
32.5°	1332.8	1331.1	1335.3	1340.6	1350.8
35°	1281.1	1279.7	1284.3	1289.2	1294.5
37.5°	1227.3	1226.2	1231.5	1236.8	1241.7
40°	1172.8	1171.4	1176.6	1181.9	1187.2
42.5°	1116.8	1116.1	1121.1	1126.3	1132.0
45°	1058.8	1058.5	1063.4	1068.7	1074.3
47.5°	999.7	999.0	1003.9	1009.6	1014.5
50°	939.2	938.5	943.4	949.1	954.3
52.5°	876.9	876.9	881.5	886.4	894.5
55°	814.3	813.3	818.2	823.8	831.6
57.5°	751.0	749.6	754.2	759.8	766.8
60°	686.3	684.9	689.1	694.7	704.6
62.5°	620.9	618.8	623.0	628.2	634.2
65°	554.7	552.6	556.5	561.4	567.0
67.5°	488.2	485.8	489.7	493.9	499.2
70°	421.4	418.9	421.8	426.0	430.9
72.5°	354.9	352.5	354.9	356.7	362.7
75°	289.9	287.4	288.8	290.2	295.5
77.5°	226.5	224.1	226.9	227.6	230.8
80°	167.1	164.6	166.4	166.7	169.2
82.5°	112.9	110.8	113.3	111.5	113.6
85°	65.1	63.3	64.0	63.3	64.4
87.5°	25.7	24.3	24.6	23.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)