

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: P834481

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-2LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834481
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-2LO-35-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

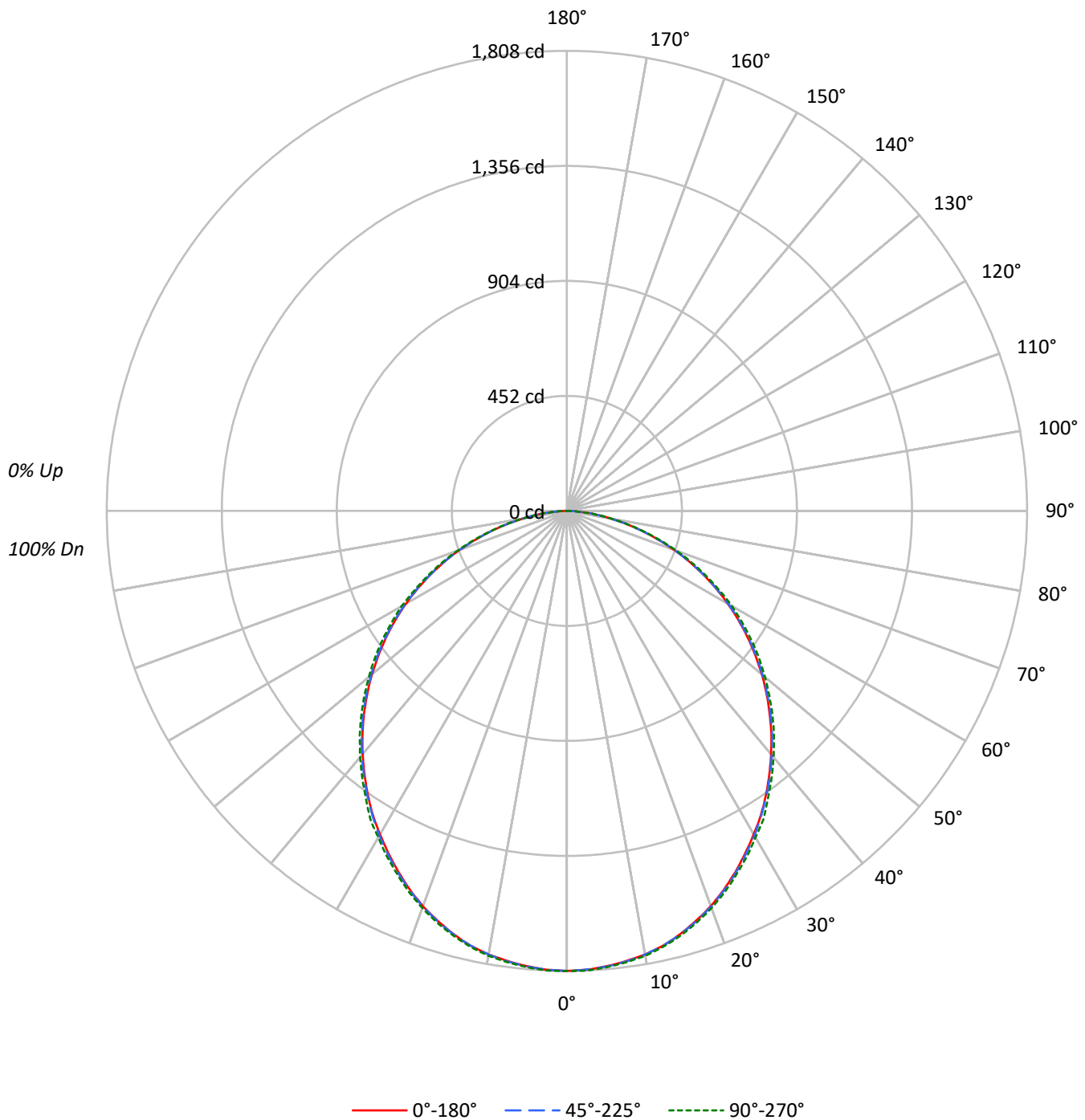
Lumens per Lamp: N/A
Luminaire Lumens: 4885.3 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4865	4865	4865
5°	4853	4857	4863
10°	4837	4838	4852
15°	4797	4800	4814
20°	4735	4740	4757
25°	4649	4660	4681
30°	4562	4577	4605
35°	4479	4489	4525
40°	4384	4398	4438
45°	4288	4306	4351
50°	4184	4203	4251
55°	4066	4085	4152
60°	3930	3947	4035
65°	3759	3771	3842
70°	3528	3531	3607
75°	3206	3195	3269
80°	2755	2744	2789
85°	2137	2103	2115

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	3.5
10°-20°	486.0	9.9
20°-30°	723.5	14.8
30°-40°	855.6	17.5
40°-50°	873.4	17.9
50°-60°	779.5	16.0
60°-70°	587.1	12.0
70°-80°	327.4	6.7
80°-90°	82.0	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°	1380.3	28.3
0°-40°	2235.9	45.8
0°-60°	3888.8	79.6
0°-90°	4885.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4885.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1808	1808	1808	1808	1808	
5°	1796	1800	1798	1798	1800	171
15°	1722	1724	1723	1724	1728	485
25°	1566	1568	1570	1574	1577	721
35°	1363	1362	1367	1372	1378	853
45°	1127	1126	1132	1137	1143	869
55°	867	865	871	877	885	775
65°	590	588	592	597	603	584
75°	308	306	307	309	314	327
85°	69	67	68	67	68	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1808.0	1808.0	1808.0	1808.0	1808.0
2.5°	1805.0	1808.0	1804.2	1805.0	1808.3
5°	1796.4	1799.7	1797.9	1798.2	1800.1
7.5°	1784.4	1788.9	1786.3	1787.0	1788.9
10°	1770.2	1773.5	1770.5	1772.4	1775.8
12.5°	1749.9	1751.4	1749.9	1750.7	1754.4
15°	1721.9	1723.7	1723.0	1724.5	1727.9
17.5°	1688.9	1691.2	1690.8	1693.8	1696.4
20°	1653.4	1653.7	1655.2	1658.2	1661.2
22.5°	1611.5	1612.6	1614.1	1618.2	1621.2
25°	1565.8	1567.7	1569.5	1573.6	1576.6
27.5°	1517.5	1519.4	1522.0	1526.5	1531.3
30°	1468.1	1468.1	1473.0	1477.4	1481.9
32.5°	1418.3	1416.4	1420.9	1426.5	1437.4
35°	1363.3	1361.8	1366.6	1371.9	1377.5
37.5°	1306.0	1304.9	1310.5	1316.1	1321.4
40°	1248.0	1246.5	1252.1	1257.7	1263.3
42.5°	1188.5	1187.7	1193.0	1198.6	1204.6
45°	1126.7	1126.3	1131.6	1137.2	1143.2
47.5°	1063.8	1063.1	1068.3	1074.3	1079.5
50°	999.4	998.7	1003.9	1009.9	1015.5
52.5°	933.2	933.2	938.0	943.3	951.9
55°	866.6	865.4	870.7	876.7	884.9
57.5°	799.2	797.7	802.5	808.5	816.0
60°	730.3	728.8	733.3	739.3	749.8
62.5°	660.7	658.4	662.9	668.5	674.9
65°	590.3	588.1	592.2	597.4	603.4
67.5°	519.6	516.9	521.1	525.5	531.2
70°	448.4	445.8	448.8	453.3	458.5
72.5°	377.7	375.1	377.7	379.6	385.9
75°	308.4	305.8	307.3	308.8	314.4
77.5°	241.1	238.4	241.4	242.2	245.6
80°	177.8	175.2	177.1	177.4	180.0
82.5°	120.2	117.9	120.5	118.7	120.9
85°	69.2	67.4	68.1	67.4	68.5
87.5°	27.3	25.8	26.2	24.7	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)