

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: P835102

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835102
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-LD4-2LO-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

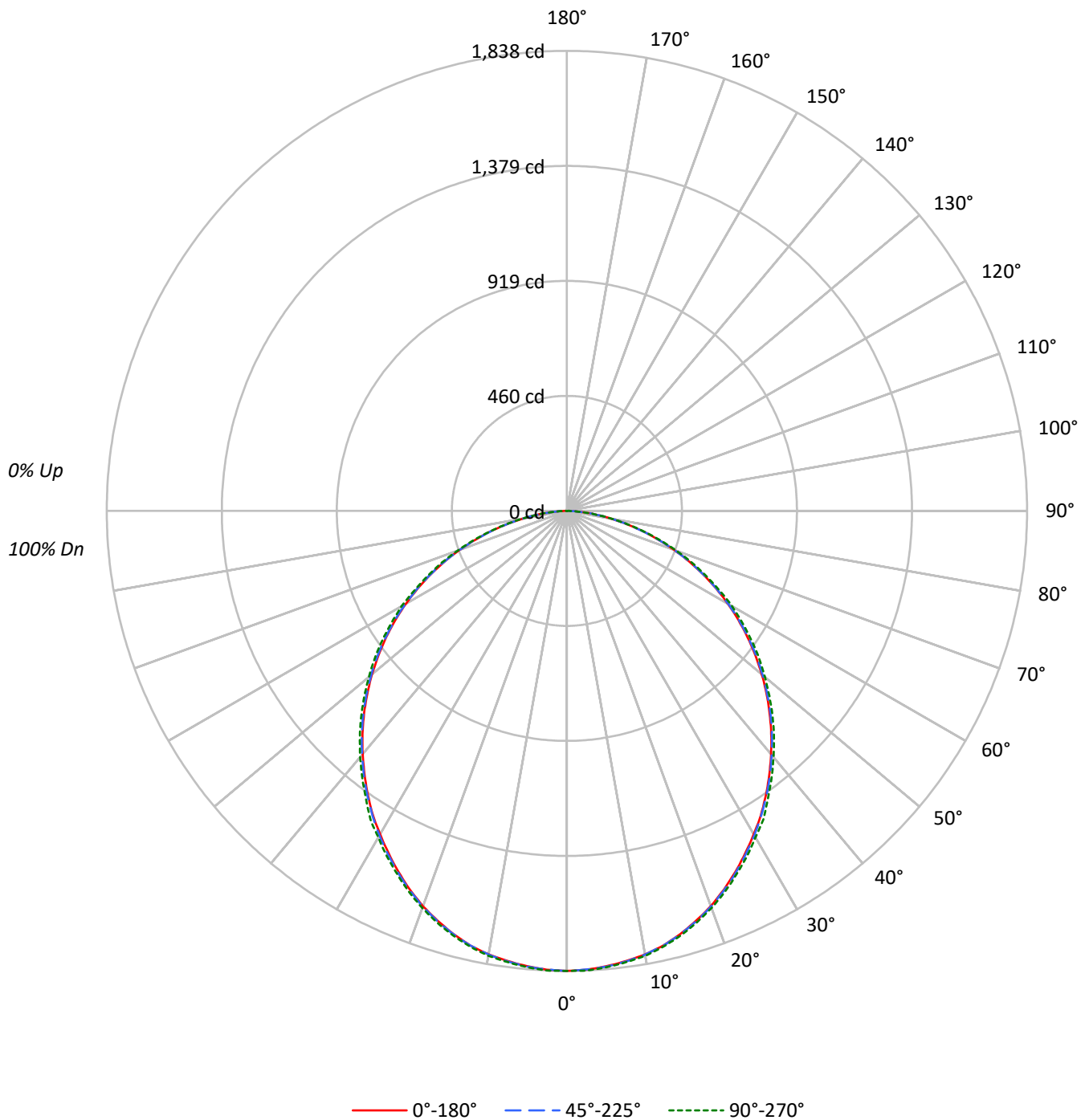
Lumens per Lamp: N/A
Luminaire Lumens: 4966.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

1121 Highway 74 South

Peachtree City, GA 30269



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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°	2473	2473	2473
5°	2466	2468	2471
10°	2458	2459	2466
15°	2438	2440	2447
20°	2406	2409	2418
25°	2363	2369	2379
30°	2318	2326	2340
35°	2276	2282	2300
40°	2228	2236	2256
45°	2179	2189	2211
50°	2126	2136	2161
55°	2066	2076	2110
60°	1998	2006	2051
65°	1911	1917	1953
70°	1793	1795	1834
75°	1630	1624	1661
80°	1400	1395	1418
85°	1087	1070	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.7	3.5
10°-20°	494.0	9.9
20°-30°	735.4	14.8
30°-40°	869.7	17.5
40°-50°	887.9	17.9
50°-60°	792.4	16.0
60°-70°	596.8	12.0
70°-80°	332.8	6.7
80°-90°	83.4	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°	1403.1	28.3
0°-40°	2272.8	45.8
0°-60°	3953.0	79.6
0°-90°	4966.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1838	1838	1838	1838	1838	
5°	1826	1830	1828	1828	1830	173
15°	1750	1752	1752	1753	1756	493
25°	1592	1594	1596	1600	1603	733
35°	1386	1384	1389	1394	1400	867
45°	1145	1145	1150	1156	1162	883
55°	881	880	885	891	900	787
65°	600	598	602	607	613	593
75°	314	311	312	314	320	332
85°	70	68	69	68	70	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1837.8	1837.8	1837.8	1837.8	1837.8
2.5°	1834.8	1837.8	1834.0	1834.8	1838.2
5°	1826.0	1829.5	1827.6	1827.9	1829.8
7.5°	1813.9	1818.4	1815.8	1816.5	1818.4
10°	1799.4	1802.8	1799.8	1801.7	1805.1
12.5°	1778.9	1780.4	1778.9	1779.6	1783.4
15°	1750.3	1752.2	1751.5	1753.0	1756.4
17.5°	1716.8	1719.1	1718.7	1721.8	1724.4
20°	1680.7	1681.1	1682.6	1685.6	1688.7
22.5°	1638.1	1639.2	1640.7	1644.9	1648.0
25°	1591.6	1593.5	1595.5	1599.6	1602.7
27.5°	1542.6	1544.5	1547.1	1551.7	1556.6
30°	1492.3	1492.3	1497.3	1501.8	1506.4
32.5°	1441.7	1439.8	1444.4	1450.1	1461.1
35°	1385.8	1384.3	1389.2	1394.5	1400.3
37.5°	1327.6	1326.4	1332.1	1337.9	1343.2
40°	1268.6	1267.1	1272.8	1278.5	1284.2
42.5°	1208.1	1207.3	1212.7	1218.4	1224.5
45°	1145.3	1144.9	1150.3	1156.0	1162.1
47.5°	1081.4	1080.6	1086.0	1092.0	1097.4
50°	1015.9	1015.2	1020.5	1026.6	1032.3
52.5°	948.6	948.6	953.5	958.9	967.6
55°	880.9	879.7	885.1	891.1	899.5
57.5°	812.4	810.9	815.8	821.9	829.5
60°	742.4	740.8	745.4	751.5	762.1
62.5°	671.6	669.3	673.9	679.6	686.0
65°	600.1	597.8	602.0	607.3	613.4
67.5°	528.1	525.5	529.7	534.2	539.9
70°	455.8	453.2	456.2	460.8	466.1
72.5°	383.9	381.3	383.9	385.8	392.3
75°	313.5	310.9	312.4	313.9	319.6
77.5°	245.0	242.4	245.4	246.2	249.6
80°	180.7	178.1	180.0	180.4	183.0
82.5°	122.1	119.9	122.5	120.6	122.9
85°	70.4	68.5	69.3	68.5	69.6
87.5°	27.8	26.3	26.6	25.1	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)