

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: P835011

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1HI-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835011
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-LD4-1HI-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

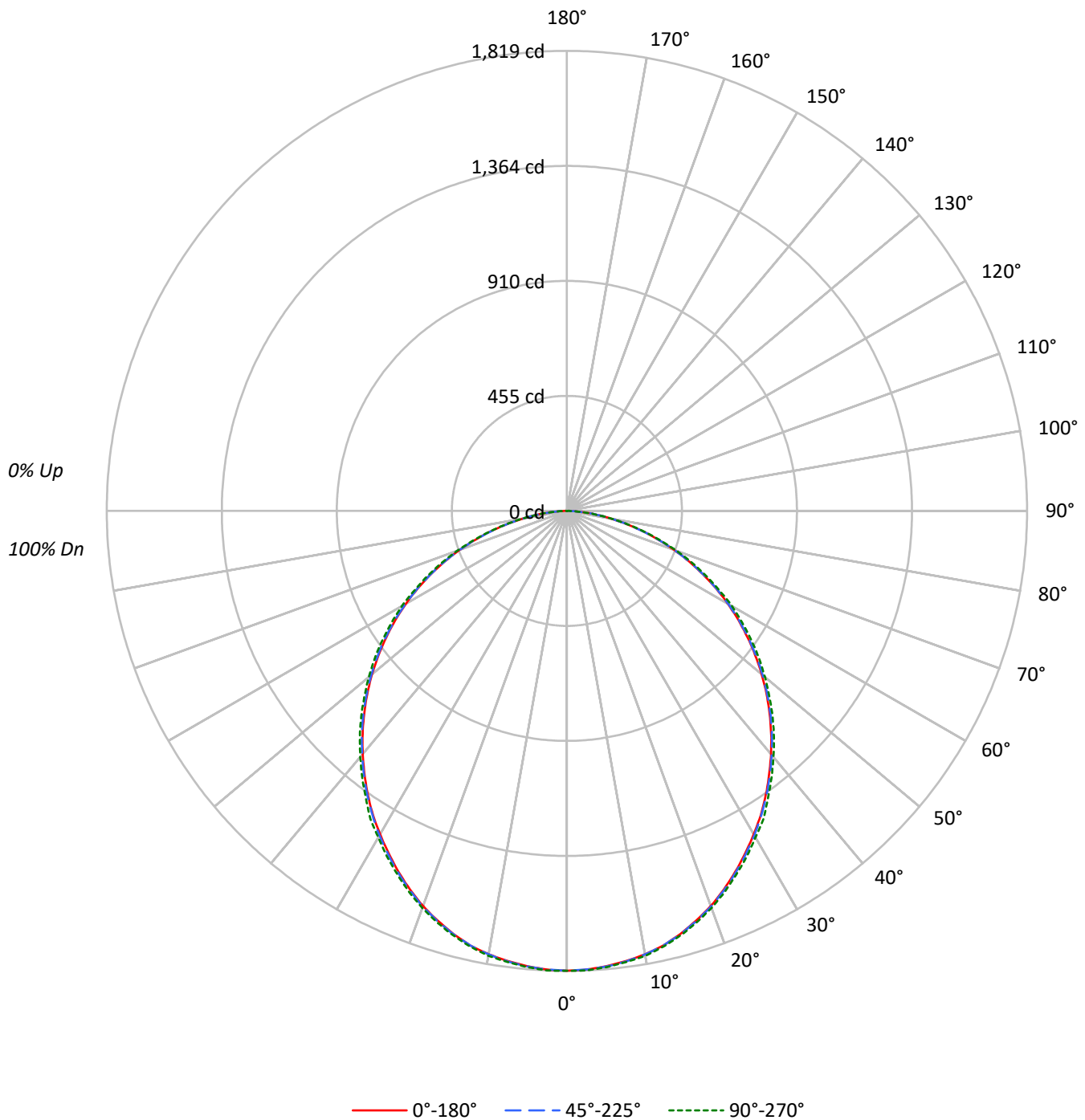
Lumens per Lamp: N/A
Luminaire Lumens: 4913.6 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2447	2447	2447
5°	2440	2442	2445
10°	2432	2433	2440
15°	2412	2414	2421
20°	2381	2384	2392
25°	2338	2344	2354
30°	2294	2302	2316
35°	2252	2258	2276
40°	2205	2212	2232
45°	2156	2166	2188
50°	2104	2114	2138
55°	2045	2054	2088
60°	1977	1985	2029
65°	1890	1896	1932
70°	1774	1776	1814
75°	1613	1607	1644
80°	1385	1380	1403
85°	1074	1057	1064



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.8	3.5
10°-20°	488.8	9.9
20°-30°	727.7	14.8
30°-40°	860.5	17.5
40°-50°	878.5	17.9
50°-60°	784.0	16.0
60°-70°	590.5	12.0
70°-80°	329.3	6.7
80°-90°	82.5	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°	1388.3	28.3
0°-40°	2248.8	45.8
0°-60°	3911.3	79.6
0°-90°	4913.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4913.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1807	1810	1808	1809	1810	172
15°	1732	1734	1733	1734	1738	488
25°	1575	1577	1579	1583	1586	726
35°	1371	1370	1374	1380	1386	857
45°	1133	1133	1138	1144	1150	874
55°	872	870	876	882	890	779
65°	594	592	596	601	607	587
75°	310	308	309	311	316	329
85°	70	68	68	68	69	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.4	1818.4	1818.4	1818.4	1818.4
2.5°	1815.4	1818.4	1814.6	1815.4	1818.8
5°	1806.7	1810.1	1808.2	1808.6	1810.5
7.5°	1794.7	1799.2	1796.6	1797.3	1799.2
10°	1780.4	1783.8	1780.8	1782.6	1786.0
12.5°	1760.1	1761.6	1760.1	1760.8	1764.6
15°	1731.8	1733.7	1732.9	1734.5	1737.8
17.5°	1698.7	1700.9	1700.6	1703.6	1706.2
20°	1662.9	1663.3	1664.8	1667.8	1670.8
22.5°	1620.8	1621.9	1623.4	1627.5	1630.5
25°	1574.8	1576.7	1578.6	1582.7	1585.7
27.5°	1526.3	1528.1	1530.8	1535.3	1540.2
30°	1476.6	1476.6	1481.5	1486.0	1490.5
32.5°	1426.5	1424.6	1429.1	1434.8	1445.7
35°	1371.1	1369.6	1374.5	1379.8	1385.5
37.5°	1313.5	1312.4	1318.1	1323.7	1329.0
40°	1255.2	1253.7	1259.3	1265.0	1270.6
42.5°	1195.3	1194.6	1199.9	1205.5	1211.5
45°	1133.2	1132.8	1138.1	1143.8	1149.8
47.5°	1070.0	1069.2	1074.5	1080.5	1085.8
50°	1005.2	1004.5	1009.7	1015.8	1021.4
52.5°	938.6	938.6	943.5	948.7	957.4
55°	871.6	870.4	875.7	881.7	890.0
57.5°	803.8	802.3	807.2	813.2	820.7
60°	734.5	733.0	737.5	743.6	754.1
62.5°	664.5	662.2	666.8	672.4	678.8
65°	593.7	591.5	595.6	600.9	606.9
67.5°	522.6	519.9	524.1	528.6	534.2
70°	451.0	448.4	451.4	455.9	461.2
72.5°	379.9	377.2	379.9	381.8	388.2
75°	310.2	307.6	309.1	310.6	316.2
77.5°	242.5	239.8	242.8	243.6	247.0
80°	178.8	176.2	178.1	178.5	181.1
82.5°	120.9	118.6	121.2	119.3	121.6
85°	69.6	67.8	68.5	67.8	68.9
87.5°	27.5	26.0	26.4	24.8	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)