

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: P835138

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835138
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-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

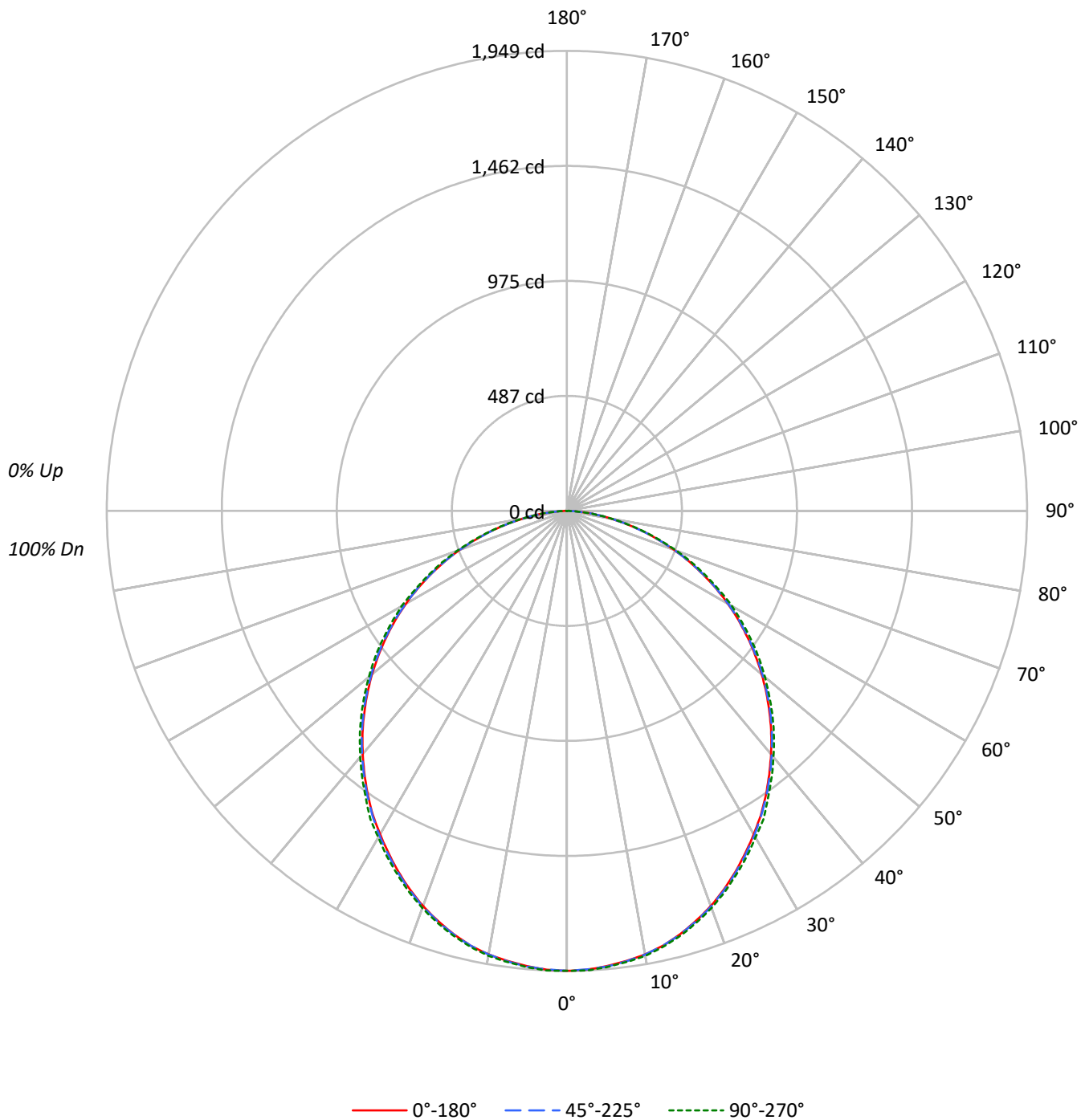
Lumens per Lamp: N/A
Luminaire Lumens: 5265.2 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	2622	2622	2622
5°	2615	2617	2620
10°	2607	2607	2615
15°	2585	2587	2594
20°	2551	2554	2564
25°	2505	2511	2523
30°	2458	2466	2481
35°	2413	2419	2439
40°	2362	2370	2392
45°	2311	2321	2344
50°	2255	2265	2291
55°	2191	2201	2237
60°	2118	2127	2175
65°	2025	2032	2070
70°	1901	1903	1944
75°	1728	1722	1762
80°	1485	1478	1503
85°	1152	1133	1139

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	3.5
10°-20°	523.8	9.9
20°-30°	779.7	14.8
30°-40°	922.1	17.5
40°-50°	941.3	17.9
50°-60°	840.1	16.0
60°-70°	632.8	12.0
70°-80°	352.9	6.7
80°-90°	88.4	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°	1487.6	28.3
0°-40°	2409.7	45.8
0°-60°	4191.2	79.6
0°-90°	5265.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5265.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1948	1948	1948	1948	1948	
5°	1936	1940	1938	1938	1940	184
15°	1856	1858	1857	1859	1862	523
25°	1688	1690	1692	1696	1699	777
35°	1469	1468	1473	1479	1485	919
45°	1214	1214	1220	1226	1232	937
55°	934	933	938	945	954	835
65°	636	634	638	644	650	629
75°	332	330	331	333	339	352
85°	75	73	73	73	74	90
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1948.5	1948.5	1948.5	1948.5	1948.5
2.5°	1945.3	1948.5	1944.5	1945.3	1948.9
5°	1936.0	1939.7	1937.7	1938.1	1940.1
7.5°	1923.1	1928.0	1925.1	1926.0	1928.0
10°	1907.8	1911.4	1908.2	1910.2	1913.9
12.5°	1886.0	1887.6	1886.0	1886.8	1890.9
15°	1855.8	1857.8	1857.0	1858.6	1862.2
17.5°	1820.3	1822.7	1822.3	1825.5	1828.3
20°	1781.9	1782.3	1783.9	1787.2	1790.4
22.5°	1736.7	1738.0	1739.6	1744.0	1747.2
25°	1687.5	1689.5	1691.6	1696.0	1699.2
27.5°	1635.5	1637.5	1640.3	1645.2	1650.4
30°	1582.2	1582.2	1587.5	1592.3	1597.2
32.5°	1528.6	1526.6	1531.4	1537.5	1549.2
35°	1469.3	1467.7	1472.9	1478.6	1484.6
37.5°	1407.6	1406.3	1412.4	1418.4	1424.1
40°	1345.0	1343.4	1349.5	1355.5	1361.6
42.5°	1280.9	1280.1	1285.7	1291.8	1298.2
45°	1214.3	1213.9	1219.6	1225.6	1232.1
47.5°	1146.5	1145.7	1151.4	1157.8	1163.5
50°	1077.1	1076.3	1082.0	1088.4	1094.5
52.5°	1005.7	1005.7	1011.0	1016.6	1025.9
55°	933.9	932.7	938.4	944.8	953.7
57.5°	861.3	859.7	864.9	871.4	879.5
60°	787.1	785.5	790.3	796.8	808.1
62.5°	712.0	709.6	714.5	720.5	727.4
65°	636.2	633.8	638.2	643.9	650.3
67.5°	560.0	557.1	561.6	566.4	572.5
70°	483.3	480.5	483.7	488.5	494.2
72.5°	407.1	404.2	407.1	409.1	415.9
75°	332.4	329.6	331.2	332.8	338.9
77.5°	259.8	257.0	260.2	261.0	264.6
80°	191.6	188.8	190.8	191.2	194.0
82.5°	129.5	127.1	129.9	127.9	130.3
85°	74.6	72.6	73.4	72.6	73.8
87.5°	29.5	27.8	28.2	26.6	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)