

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: P835666

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4LO-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835666
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-40-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

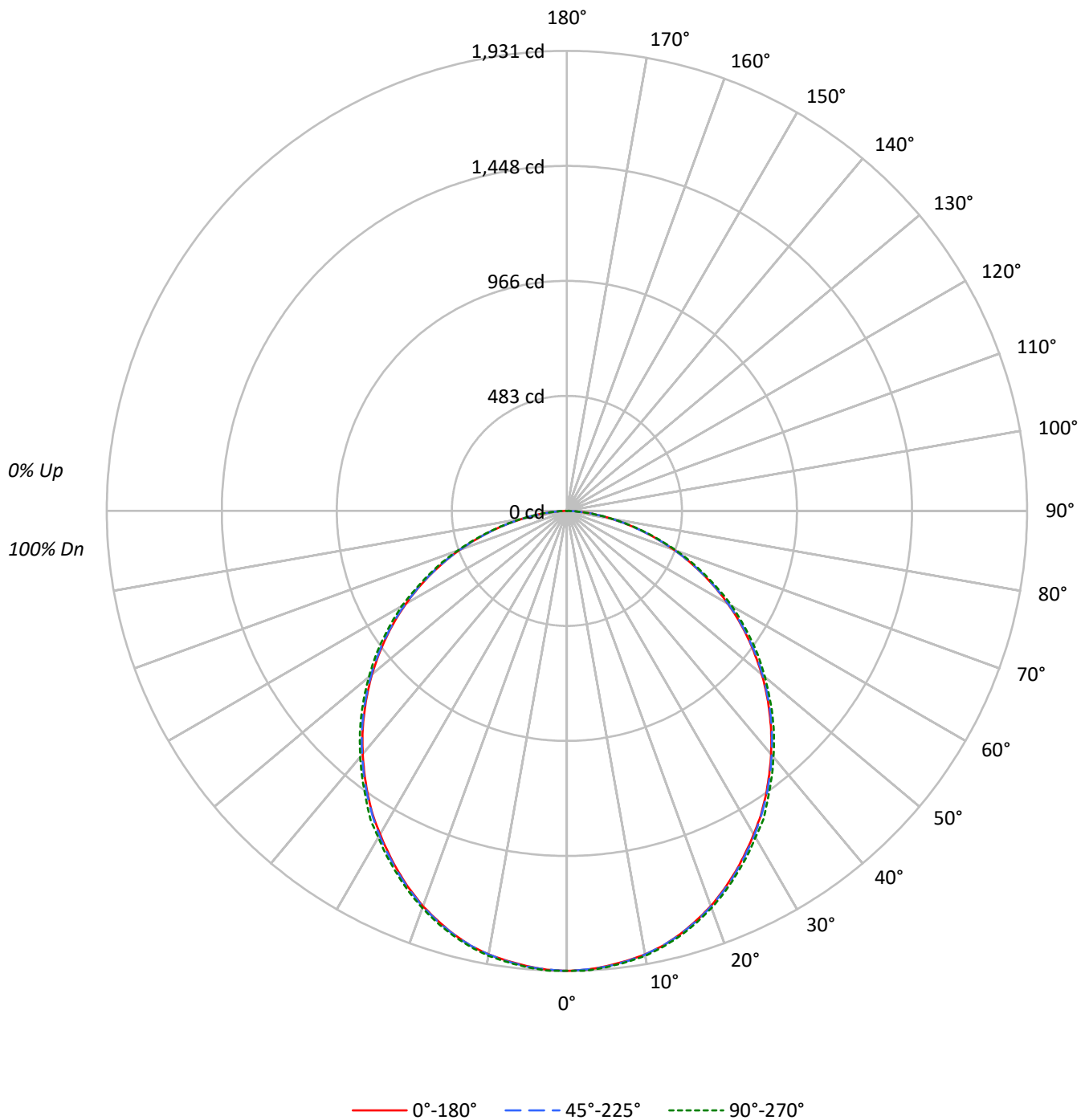
Lumens per Lamp: N/A
Luminaire Lumens: 5217.0 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5195	5195	5195
5°	5182	5186	5193
10°	5165	5166	5182
15°	5123	5126	5141
20°	5056	5062	5080
25°	4965	4977	4999
30°	4871	4887	4917
35°	4782	4794	4832
40°	4682	4697	4739
45°	4579	4599	4646
50°	4468	4488	4540
55°	4342	4362	4434
60°	4197	4215	4309
65°	4014	4027	4103
70°	3768	3771	3853
75°	3425	3412	3491
80°	2943	2930	2980
85°	2285	2248	2260

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.4	3.5
10°-20°	519.0	9.9
20°-30°	772.6	14.8
30°-40°	913.7	17.5
40°-50°	932.7	17.9
50°-60°	832.4	16.0
60°-70°	627.0	12.0
70°-80°	349.6	6.7
80°-90°	87.6	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°	1474.0	28.3
0°-40°	2387.7	45.8
0°-60°	4152.8	79.6
0°-90°	5217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1918	1922	1920	1920	1922	182
15°	1839	1841	1840	1842	1845	518
25°	1672	1674	1676	1680	1684	770
35°	1456	1454	1459	1465	1471	910
45°	1203	1203	1208	1214	1221	928
55°	925	924	930	936	945	827
65°	630	628	632	638	644	623
75°	329	327	328	330	336	349
85°	74	72	73	72	73	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1930.7	1930.7	1930.7	1930.7	1930.7
2.5°	1927.5	1930.7	1926.7	1927.5	1931.1
5°	1918.3	1921.9	1919.9	1920.3	1922.3
7.5°	1905.5	1910.3	1907.5	1908.3	1910.3
10°	1890.3	1893.9	1890.7	1892.7	1896.3
12.5°	1868.7	1870.3	1868.7	1869.5	1873.5
15°	1838.8	1840.8	1840.0	1841.6	1845.2
17.5°	1803.6	1806.0	1805.6	1808.8	1811.6
20°	1765.6	1766.0	1767.6	1770.8	1774.0
22.5°	1720.8	1722.0	1723.6	1728.0	1731.2
25°	1672.1	1674.1	1676.1	1680.5	1683.7
27.5°	1620.5	1622.5	1625.3	1630.1	1635.3
30°	1567.7	1567.7	1572.9	1577.7	1582.5
32.5°	1514.6	1512.6	1517.4	1523.4	1535.0
35°	1455.8	1454.2	1459.4	1465.0	1471.0
37.5°	1394.7	1393.5	1399.5	1405.5	1411.0
40°	1332.7	1331.1	1337.1	1343.1	1349.1
42.5°	1269.1	1268.3	1273.9	1279.9	1286.3
45°	1203.2	1202.8	1208.4	1214.4	1220.8
47.5°	1136.0	1135.2	1140.8	1147.2	1152.8
50°	1067.3	1066.5	1072.1	1078.5	1084.5
52.5°	996.5	996.5	1001.7	1007.3	1016.5
55°	925.4	924.2	929.8	936.2	945.0
57.5°	853.4	851.8	857.0	863.4	871.4
60°	779.9	778.3	783.1	789.5	800.7
62.5°	705.5	703.1	707.9	713.9	720.7
65°	630.4	628.0	632.4	638.0	644.4
67.5°	554.8	552.0	556.4	561.2	567.2
70°	478.9	476.1	479.3	484.1	489.7
72.5°	403.3	400.5	403.3	405.3	412.1
75°	329.4	326.6	328.2	329.8	335.8
77.5°	257.4	254.6	257.8	258.6	262.2
80°	189.9	187.1	189.1	189.5	192.3
82.5°	128.3	125.9	128.7	126.7	129.1
85°	74.0	72.0	72.8	72.0	73.2
87.5°	29.2	27.6	28.0	26.4	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)