

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: P835050

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835050
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-LD4-2HI-20-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

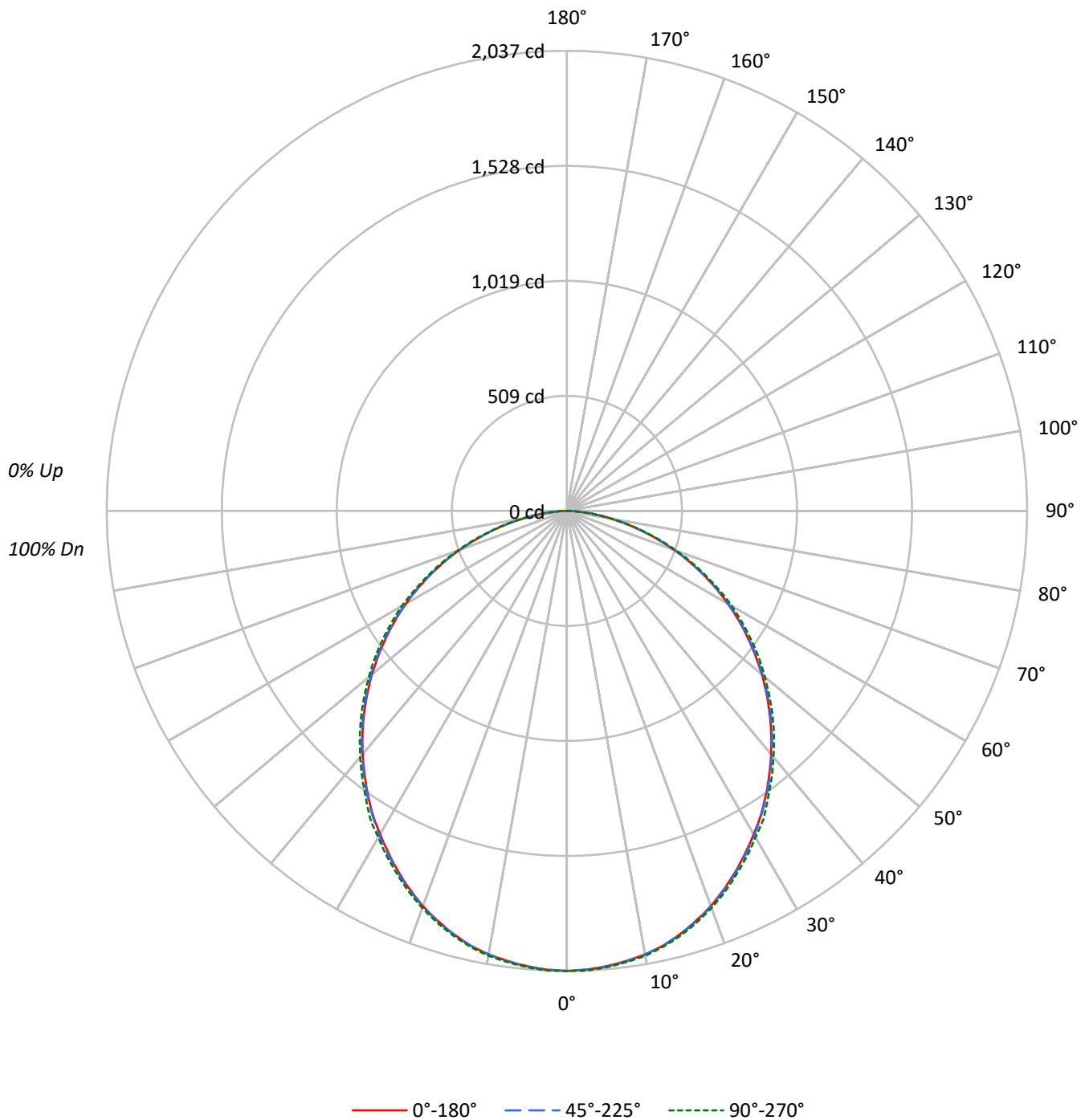
Lumens per Lamp: N/A
Luminaire Lumens: 5503.7 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2740	2740	2740
5°	2733	2736	2739
10°	2725	2725	2733
15°	2702	2704	2712
20°	2667	2670	2680
25°	2619	2625	2637
30°	2570	2578	2594
35°	2523	2529	2549
40°	2470	2478	2500
45°	2415	2426	2451
50°	2357	2367	2395
55°	2290	2301	2339
60°	2214	2223	2273
65°	2117	2124	2164
70°	1987	1989	2032
75°	1807	1800	1841
80°	1552	1546	1571
85°	1204	1184	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	3.5
10°-20°	547.5	9.9
20°-30°	815.1	14.8
30°-40°	963.9	17.5
40°-50°	984.0	17.9
50°-60°	878.2	16.0
60°-70°	661.4	12.0
70°-80°	368.8	6.7
80°-90°	92.4	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°	1555.0	28.3
0°-40°	2518.9	45.8
0°-60°	4381.0	79.6
0°-90°	5503.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5503.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2037	2037	2037	2037	2037	
5°	2024	2028	2025	2026	2028	192
15°	1940	1942	1941	1943	1947	547
25°	1764	1766	1768	1773	1776	813
35°	1536	1534	1540	1546	1552	960
45°	1269	1269	1275	1281	1288	979
55°	976	975	981	988	997	873
65°	665	662	667	673	680	658
75°	348	344	346	348	354	368
85°	78	76	77	76	77	94
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2036.8	2036.8	2036.8	2036.8	2036.8
2.5°	2033.4	2036.8	2032.6	2033.4	2037.2
5°	2023.7	2027.5	2025.4	2025.9	2028.0
7.5°	2010.3	2015.3	2012.4	2013.2	2015.3
10°	1994.2	1998.0	1994.6	1996.8	2000.6
12.5°	1971.5	1973.1	1971.5	1972.3	1976.5
15°	1939.8	1941.9	1941.1	1942.8	1946.6
17.5°	1902.7	1905.2	1904.8	1908.2	1911.2
20°	1862.7	1863.1	1864.8	1868.1	1871.5
22.5°	1815.4	1816.7	1818.4	1823.0	1826.4
25°	1764.0	1766.1	1768.2	1772.8	1776.2
27.5°	1709.6	1711.7	1714.6	1719.7	1725.2
30°	1653.9	1653.9	1659.4	1664.5	1669.5
32.5°	1597.8	1595.7	1600.8	1607.1	1619.3
35°	1535.8	1534.2	1539.6	1545.5	1551.9
37.5°	1471.3	1470.1	1476.4	1482.7	1488.6
40°	1406.0	1404.3	1410.6	1416.9	1423.2
42.5°	1338.9	1338.1	1344.0	1350.3	1357.0
45°	1269.3	1268.9	1274.8	1281.1	1287.9
47.5°	1198.5	1197.6	1203.5	1210.3	1216.2
50°	1125.9	1125.1	1131.0	1137.8	1144.1
52.5°	1051.3	1051.3	1056.8	1062.7	1072.4
55°	976.2	975.0	980.9	987.6	996.9
57.5°	900.3	898.6	904.1	910.9	919.3
60°	822.7	821.1	826.1	832.9	844.7
62.5°	744.3	741.8	746.8	753.2	760.3
65°	665.0	662.5	667.1	673.0	679.8
67.5°	585.3	582.4	587.0	592.1	598.4
70°	505.2	502.2	505.6	510.7	516.6
72.5°	425.5	422.5	425.5	427.6	434.8
75°	347.5	344.5	346.2	347.9	354.2
77.5°	271.6	268.6	272.0	272.8	276.6
80°	200.3	197.4	199.5	199.9	202.8
82.5°	135.4	132.8	135.8	133.7	136.2
85°	78.0	75.9	76.7	75.9	77.2
87.5°	30.8	29.1	29.5	27.8	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)