

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: P835051

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3LO-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835051
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-LD4-3LO-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

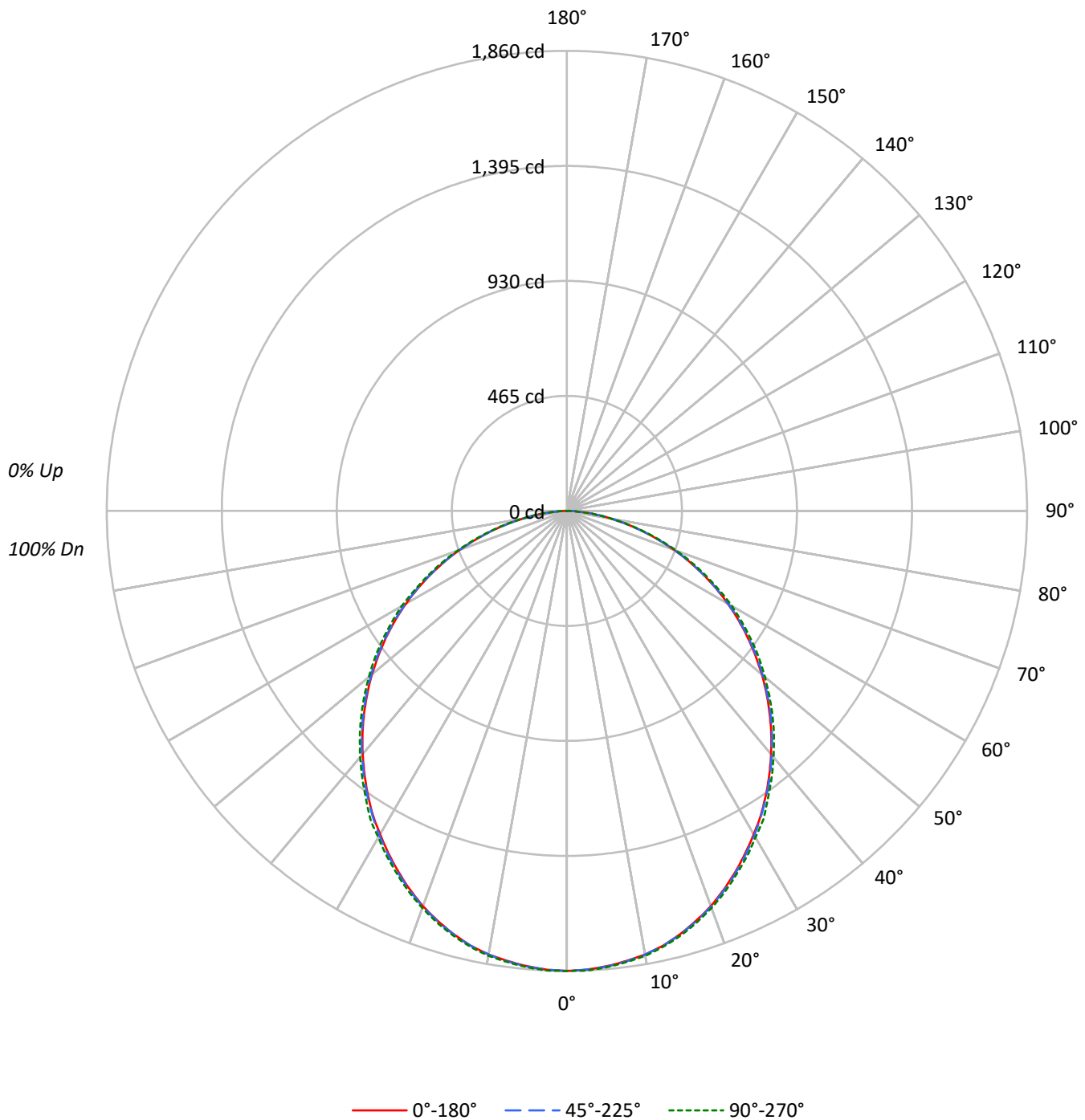
Lumens per Lamp: N/A
Luminaire Lumens: 5025.6 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	2502	2502	2502
5°	2496	2498	2501
10°	2488	2488	2496
15°	2467	2469	2476
20°	2435	2438	2447
25°	2391	2397	2408
30°	2346	2354	2369
35°	2303	2309	2327
40°	2255	2262	2283
45°	2206	2215	2238
50°	2152	2162	2187
55°	2091	2101	2135
60°	2022	2030	2076
65°	1933	1940	1976
70°	1815	1816	1856
75°	1650	1643	1682
80°	1417	1411	1435
85°	1099	1082	1088

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	3.5
10°-20°	499.9	9.9
20°-30°	744.2	14.8
30°-40°	880.1	17.5
40°-50°	898.5	17.9
50°-60°	801.9	16.0
60°-70°	604.0	12.0
70°-80°	336.8	6.7
80°-90°	84.4	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°	1419.9	28.3
0°-40°	2300.1	45.8
0°-60°	4000.4	79.6
0°-90°	5025.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5025.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1848	1851	1850	1850	1852	176
15°	1771	1773	1772	1774	1778	499
25°	1611	1613	1615	1619	1622	742
35°	1402	1401	1406	1411	1417	877
45°	1159	1159	1164	1170	1176	894
55°	891	890	896	902	910	797
65°	607	605	609	615	621	601
75°	317	315	316	318	324	336
85°	71	69	70	69	70	85
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1859.9	1859.9	1859.9	1859.9	1859.9
2.5°	1856.8	1859.9	1856.0	1856.8	1860.3
5°	1847.9	1851.4	1849.5	1849.9	1851.8
7.5°	1835.6	1840.2	1837.5	1838.3	1840.2
10°	1821.0	1824.4	1821.4	1823.3	1826.8
12.5°	1800.2	1801.7	1800.2	1801.0	1804.8
15°	1771.3	1773.2	1772.5	1774.0	1777.5
17.5°	1737.4	1739.7	1739.3	1742.4	1745.1
20°	1700.8	1701.2	1702.8	1705.8	1708.9
22.5°	1657.7	1658.9	1660.4	1664.6	1667.7
25°	1610.7	1612.7	1614.6	1618.8	1621.9
27.5°	1561.1	1563.0	1565.7	1570.3	1575.3
30°	1510.2	1510.2	1515.2	1519.9	1524.5
32.5°	1459.0	1457.1	1461.7	1467.5	1478.7
35°	1402.4	1400.9	1405.9	1411.3	1417.0
37.5°	1343.5	1342.3	1348.1	1353.9	1359.3
40°	1283.8	1282.3	1288.1	1293.8	1299.6
42.5°	1222.6	1221.8	1227.2	1233.0	1239.1
45°	1159.1	1158.7	1164.1	1169.8	1176.0
47.5°	1094.4	1093.6	1099.0	1105.1	1110.5
50°	1028.1	1027.4	1032.8	1038.9	1044.7
52.5°	960.0	960.0	965.0	970.4	979.2
55°	891.4	890.3	895.7	901.8	910.3
57.5°	822.1	820.6	825.6	831.7	839.4
60°	751.3	749.7	754.3	760.5	771.3
62.5°	679.6	677.3	682.0	687.7	694.3
65°	607.3	604.9	609.2	614.6	620.7
67.5°	534.5	531.8	536.0	540.6	546.4
70°	461.3	458.6	461.7	466.3	471.7
72.5°	388.5	385.8	388.5	390.5	397.0
75°	317.3	314.6	316.1	317.7	323.5
77.5°	248.0	245.3	248.4	249.1	252.6
80°	182.9	180.2	182.1	182.5	185.2
82.5°	123.6	121.3	124.0	122.1	124.4
85°	71.2	69.3	70.1	69.3	70.5
87.5°	28.1	26.6	27.0	25.4	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)