

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: P834993

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834993
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-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

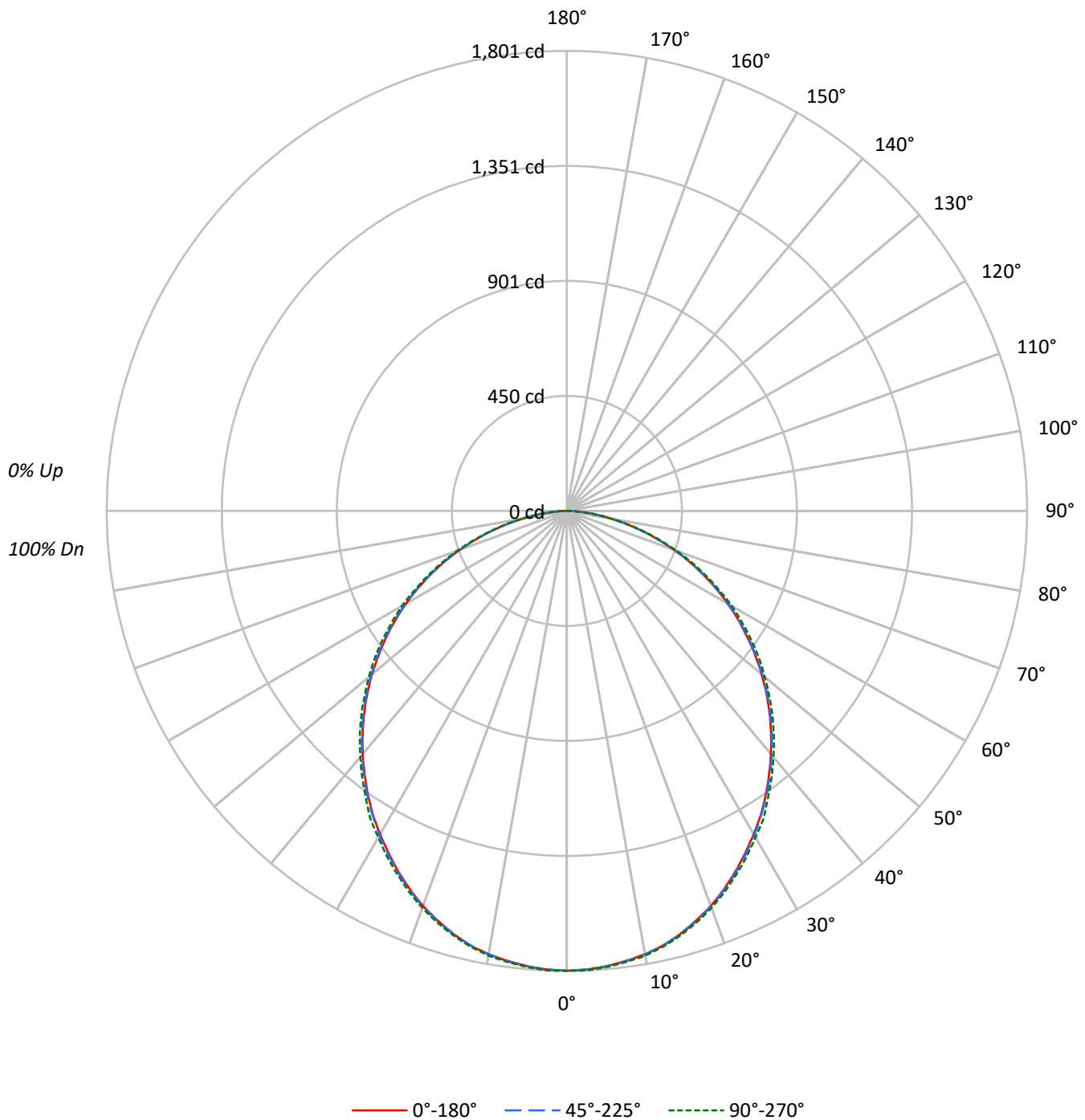
Lumens per Lamp: N/A
Luminaire Lumens: 4864.4 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P834993

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834993

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD

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	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2422	2422	2422
5°	2416	2418	2421
10°	2408	2409	2416
15°	2388	2390	2397
20°	2357	2360	2368
25°	2315	2320	2331
30°	2271	2279	2293
35°	2230	2235	2253
40°	2183	2190	2209
45°	2135	2144	2166
50°	2083	2092	2117
55°	2024	2034	2067
60°	1957	1965	2009
65°	1871	1877	1913
70°	1757	1758	1796
75°	1596	1591	1628
80°	1371	1366	1389
85°	1065	1047	1053



TEST NUMBER: P834993

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.1	3.5
10°-20°	483.9	9.9
20°-30°	720.4	14.8
30°-40°	851.9	17.5
40°-50°	869.7	17.9
50°-60°	776.1	16.0
60°-70°	584.6	12.0
70°-80°	326.0	6.7
80°-90°	81.7	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°	1374.4	28.3
0°-40°	2226.3	45.8
0°-60°	3872.1	79.6
0°-90°	4864.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4864.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1800	1800	1800	1800	1800	
5°	1789	1792	1790	1790	1792	170
15°	1714	1716	1716	1717	1720	483
25°	1559	1561	1563	1567	1570	718
35°	1357	1356	1361	1366	1372	849
45°	1122	1122	1127	1132	1138	865
55°	863	862	867	873	881	771
65°	588	586	590	595	601	581
75°	307	304	306	308	313	326
85°	69	67	68	67	68	83
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834993

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1800.2	1800.2	1800.2	1800.2	1800.2
2.5°	1797.2	1800.2	1796.5	1797.2	1800.6
5°	1788.7	1792.0	1790.2	1790.5	1792.4
7.5°	1776.7	1781.2	1778.6	1779.4	1781.2
10°	1762.6	1765.9	1763.0	1764.8	1768.2
12.5°	1742.5	1743.9	1742.5	1743.2	1746.9
15°	1714.5	1716.4	1715.6	1717.1	1720.5
17.5°	1681.7	1683.9	1683.6	1686.5	1689.2
20°	1646.3	1646.7	1648.2	1651.1	1654.1
22.5°	1604.6	1605.7	1607.2	1611.3	1614.2
25°	1559.1	1560.9	1562.8	1566.9	1569.9
27.5°	1511.0	1512.9	1515.5	1519.9	1524.8
30°	1461.8	1461.8	1466.6	1471.1	1475.6
32.5°	1412.2	1410.4	1414.8	1420.4	1431.2
35°	1357.4	1355.9	1360.8	1366.0	1371.6
37.5°	1300.4	1299.3	1304.9	1310.5	1315.7
40°	1242.6	1241.2	1246.7	1252.3	1257.9
42.5°	1183.4	1182.6	1187.9	1193.4	1199.4
45°	1121.9	1121.5	1126.7	1132.3	1138.3
47.5°	1059.3	1058.5	1063.7	1069.7	1074.9
50°	995.2	994.4	999.6	1005.6	1011.2
52.5°	929.2	929.2	934.0	939.2	947.8
55°	862.8	861.7	866.9	872.9	881.1
57.5°	795.8	794.3	799.1	805.1	812.5
60°	727.2	725.7	730.2	736.1	746.6
62.5°	657.8	655.6	660.1	665.7	672.0
65°	587.8	585.5	589.6	594.9	600.8
67.5°	517.3	514.7	518.8	523.3	528.9
70°	446.5	443.9	446.9	451.4	456.6
72.5°	376.1	373.5	376.1	377.9	384.3
75°	307.1	304.5	306.0	307.5	313.1
77.5°	240.0	237.4	240.4	241.1	244.5
80°	177.0	174.4	176.3	176.7	179.3
82.5°	119.6	117.4	120.0	118.2	120.4
85°	69.0	67.1	67.8	67.1	68.2
87.5°	27.2	25.7	26.1	24.6	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)