

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: P835101

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD-90**

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P835101
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-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

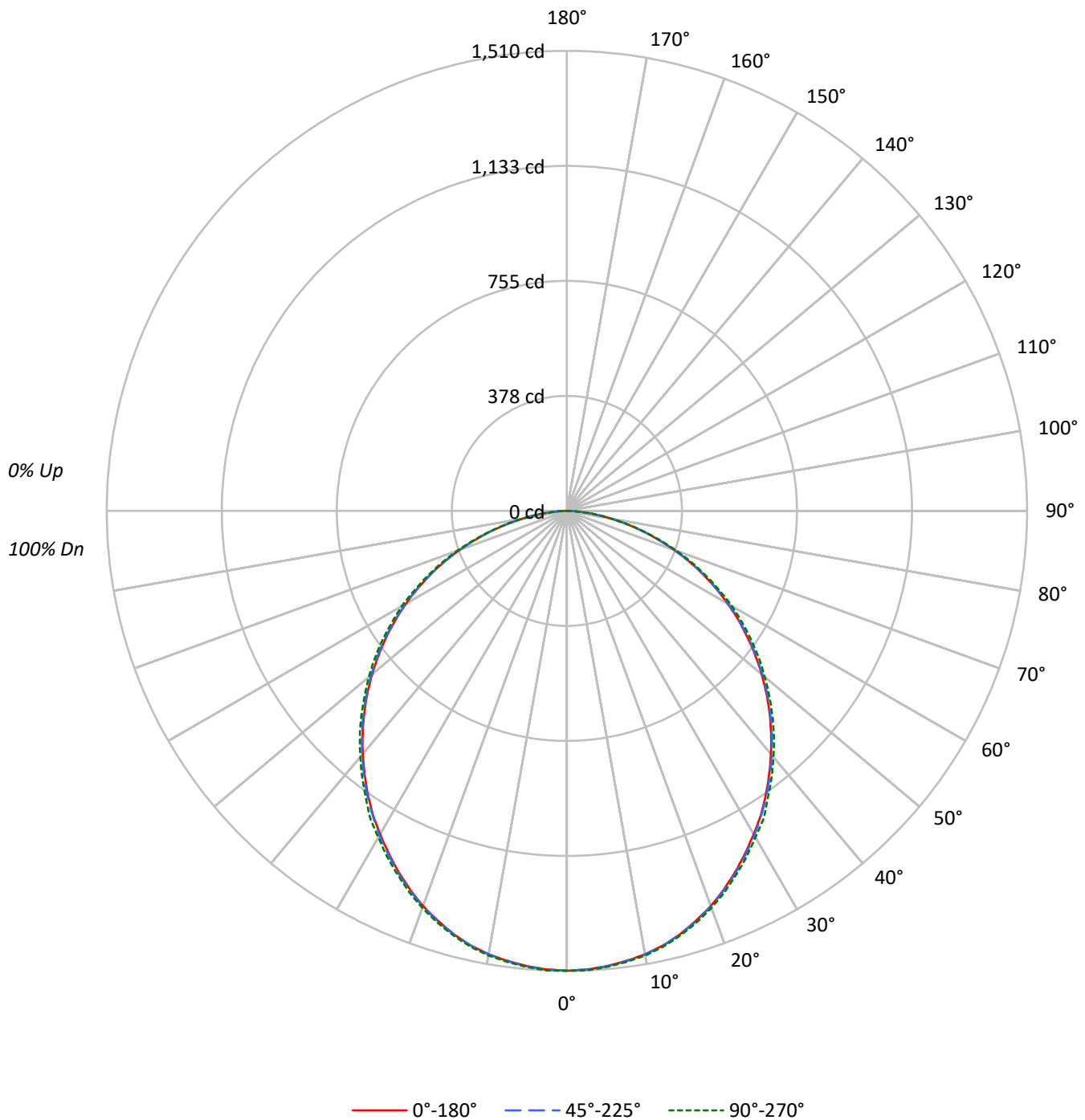
Lumens per Lamp: N/A
Luminaire Lumens: 4078.2 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P835101

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835101

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD-90

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°	2031	2031	2031
5°	2025	2027	2030
10°	2019	2019	2025
15°	2002	2003	2009
20°	1976	1979	1986
25°	1940	1945	1954
30°	1904	1910	1922
35°	1869	1874	1889
40°	1830	1836	1852
45°	1790	1797	1816
50°	1746	1754	1775
55°	1697	1705	1733
60°	1640	1647	1684
65°	1569	1574	1604
70°	1473	1474	1506
75°	1339	1333	1365
80°	1150	1145	1165
85°	892	878	883

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835101

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	3.5
10°-20°	405.7	9.9
20°-30°	604.0	14.8
30°-40°	714.2	17.5
40°-50°	729.1	17.9
50°-60°	650.7	16.0
60°-70°	490.1	12.0
70°-80°	273.3	6.7
80°-90°	68.5	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°	1152.3	28.3
0°-40°	1866.5	45.8
0°-60°	3246.3	79.6
0°-90°	4078.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1509	1509	1509	1509	1509	
5°	1500	1502	1501	1501	1503	142
15°	1437	1439	1438	1440	1442	405
25°	1307	1309	1310	1314	1316	602
35°	1138	1137	1141	1145	1150	712
45°	941	940	945	949	954	726
55°	723	722	727	732	739	647
65°	493	491	494	499	504	487
75°	258	255	256	258	262	273
85°	58	56	57	56	57	69
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835101

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1HI-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1509.3	1509.3	1509.3	1509.3	1509.3
2.5°	1506.8	1509.3	1506.2	1506.8	1509.6
5°	1499.6	1502.4	1500.8	1501.2	1502.7
7.5°	1489.6	1493.3	1491.2	1491.8	1493.3
10°	1477.7	1480.5	1478.0	1479.6	1482.4
12.5°	1460.8	1462.1	1460.8	1461.5	1464.6
15°	1437.4	1439.0	1438.3	1439.6	1442.4
17.5°	1409.9	1411.8	1411.5	1414.0	1416.2
20°	1380.2	1380.5	1381.8	1384.3	1386.8
22.5°	1345.2	1346.2	1347.4	1350.9	1353.4
25°	1307.1	1308.7	1310.2	1313.7	1316.2
27.5°	1266.8	1268.4	1270.5	1274.3	1278.4
30°	1225.5	1225.5	1229.6	1233.4	1237.1
32.5°	1184.0	1182.4	1186.2	1190.9	1199.9
35°	1138.1	1136.8	1140.9	1145.2	1149.9
37.5°	1090.2	1089.3	1094.0	1098.7	1103.1
40°	1041.8	1040.6	1045.2	1049.9	1054.6
42.5°	992.1	991.5	995.9	1000.6	1005.6
45°	940.6	940.3	944.6	949.3	954.3
47.5°	888.1	887.4	891.8	896.8	901.2
50°	834.3	833.7	838.1	843.1	847.8
52.5°	779.0	779.0	783.1	787.5	794.6
55°	723.4	722.5	726.8	731.8	738.7
57.5°	667.1	665.9	670.0	675.0	681.2
60°	609.6	608.4	612.1	617.1	625.9
62.5°	551.5	549.7	553.4	558.1	563.4
65°	492.8	490.9	494.3	498.7	503.7
67.5°	433.7	431.5	435.0	438.7	443.4
70°	374.4	372.2	374.7	378.4	382.8
72.5°	315.3	313.1	315.3	316.9	322.2
75°	257.5	255.3	256.5	257.8	262.5
77.5°	201.2	199.1	201.5	202.2	205.0
80°	148.4	146.2	147.8	148.1	150.3
82.5°	100.3	98.4	100.6	99.1	100.9
85°	57.8	56.2	56.9	56.2	57.2
87.5°	22.8	21.6	21.9	20.6	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)