

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: P835790

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-3STD-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835790
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-LD4-3STD-50-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

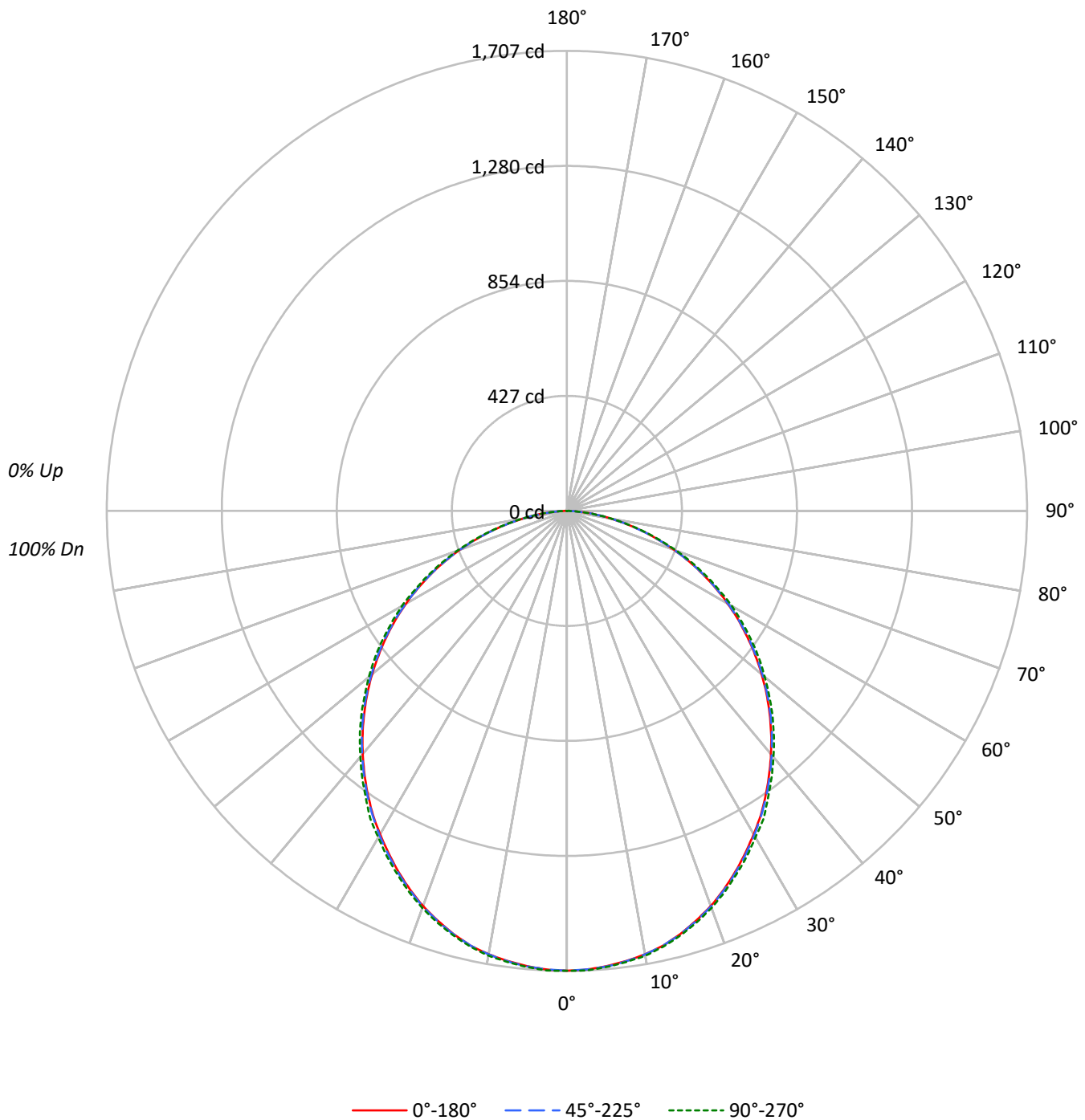
Lumens per Lamp: N/A
Luminaire Lumens: 4610.7 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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: P835790

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3STD-50-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835790

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3STD-50-120-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4592	4592	4592
5°	4580	4583	4589
10°	4565	4566	4579
15°	4527	4530	4543
20°	4468	4474	4490
25°	4388	4398	4418
30°	4305	4319	4346
35°	4227	4237	4271
40°	4137	4151	4188
45°	4047	4064	4106
50°	3949	3967	4012
55°	3837	3855	3918
60°	3709	3725	3808
65°	3547	3559	3626
70°	3330	3333	3405
75°	3027	3015	3086
80°	2600	2590	2633
85°	2019	1985	1995

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835790

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3STD-50-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	3.5
10°-20°	458.7	9.9
20°-30°	682.8	14.8
30°-40°	807.5	17.5
40°-50°	824.3	17.9
50°-60°	735.7	16.0
60°-70°	554.1	12.0
70°-80°	309.0	6.7
80°-90°	77.4	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°	1302.7	28.3
0°-40°	2110.2	45.8
0°-60°	3670.1	79.6
0°-90°	4610.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4610.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1706	1706	1706	1706	1706	
5°	1695	1699	1697	1697	1699	161
15°	1625	1627	1626	1628	1631	458
25°	1478	1480	1481	1485	1488	681
35°	1287	1285	1290	1295	1300	805
45°	1063	1063	1068	1073	1079	820
55°	818	817	822	827	835	731
65°	557	555	559	564	570	551
75°	291	289	290	292	297	309
85°	65	64	64	64	65	78
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835790

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3STD-50-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1706.3	1706.3	1706.3	1706.3	1706.3
2.5°	1703.5	1706.3	1702.8	1703.5	1706.7
5°	1695.4	1698.6	1696.8	1697.1	1698.9
7.5°	1684.1	1688.3	1685.8	1686.5	1688.3
10°	1670.6	1673.8	1671.0	1672.8	1675.9
12.5°	1651.6	1653.0	1651.6	1652.3	1655.8
15°	1625.1	1626.8	1626.1	1627.5	1630.7
17.5°	1594.0	1596.1	1595.7	1598.6	1601.0
20°	1560.4	1560.8	1562.2	1565.0	1567.8
22.5°	1520.9	1521.9	1523.3	1527.2	1530.0
25°	1477.8	1479.5	1481.3	1485.2	1488.0
27.5°	1432.2	1433.9	1436.4	1440.7	1445.3
30°	1385.5	1385.5	1390.1	1394.4	1398.6
32.5°	1338.6	1336.8	1341.0	1346.3	1356.6
35°	1286.6	1285.2	1289.8	1294.8	1300.1
37.5°	1232.6	1231.5	1236.8	1242.1	1247.1
40°	1177.8	1176.4	1181.7	1187.0	1192.3
42.5°	1121.7	1120.9	1125.9	1131.2	1136.8
45°	1063.4	1063.0	1068.0	1073.3	1078.9
47.5°	1004.0	1003.3	1008.2	1013.9	1018.8
50°	943.2	942.5	947.5	953.1	958.4
52.5°	880.7	880.7	885.3	890.3	898.4
55°	817.8	816.8	821.7	827.4	835.1
57.5°	754.2	752.8	757.4	763.1	770.1
60°	689.2	687.8	692.1	697.7	707.6
62.5°	623.5	621.4	625.7	631.0	637.0
65°	557.1	555.0	558.9	563.8	569.5
67.5°	490.3	487.9	491.8	496.0	501.3
70°	423.2	420.8	423.6	427.8	432.8
72.5°	356.5	354.0	356.5	358.2	364.2
75°	291.1	288.6	290.0	291.5	296.8
77.5°	227.5	225.0	227.9	228.6	231.7
80°	167.8	165.3	167.1	167.5	169.9
82.5°	113.4	111.3	113.8	112.0	114.1
85°	65.4	63.6	64.3	63.6	64.6
87.5°	25.8	24.4	24.7	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)