

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: P834451

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-1LO-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834451
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-1LO-20-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

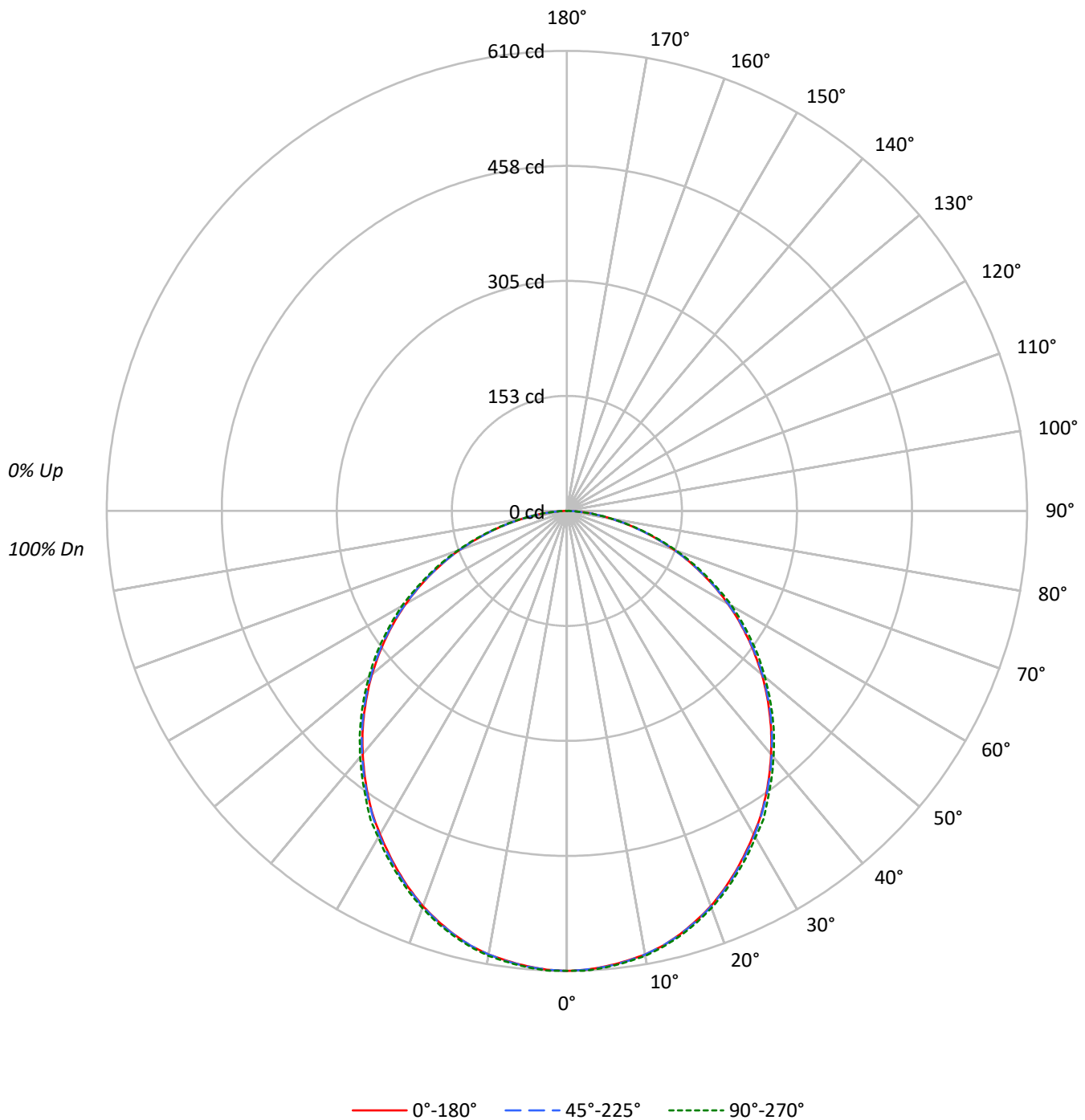
Lumens per Lamp: N/A
Luminaire Lumens: 1648.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P834451

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-1LO-20-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834451

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-1LO-20-120-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°	1641	1641	1641
5°	1637	1638	1640
10°	1632	1632	1637
15°	1618	1619	1624
20°	1597	1599	1605
25°	1568	1572	1579
30°	1539	1544	1553
35°	1511	1514	1527
40°	1479	1484	1497
45°	1447	1453	1467
50°	1412	1418	1434
55°	1371	1378	1400
60°	1326	1331	1361
65°	1268	1272	1296
70°	1190	1191	1217
75°	1082	1078	1103
80°	930	925	941
85°	722	710	713

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834451

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-1LO-20-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	3.5
10°-20°	163.9	9.9
20°-30°	244.1	14.8
30°-40°	288.6	17.5
40°-50°	294.6	17.9
50°-60°	263.0	16.0
60°-70°	198.1	12.0
70°-80°	110.4	6.7
80°-90°	27.7	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°	465.6	28.3
0°-40°	754.3	45.8
0°-60°	1311.9	79.6
0°-90°	1648.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1648.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	610	610	610	610	610	
5°	606	607	606	607	607	58
15°	581	582	581	582	583	164
25°	528	529	530	531	532	243
35°	460	459	461	463	465	288
45°	380	380	382	384	386	293
55°	292	292	294	296	298	261
65°	199	198	200	202	204	197
75°	104	103	104	104	106	110
85°	23	23	23	23	23	28
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834451

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-1LO-20-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	609.9	609.9	609.9	609.9	609.9
2.5°	608.9	609.9	608.7	608.9	610.0
5°	606.0	607.1	606.5	606.6	607.3
7.5°	602.0	603.5	602.6	602.8	603.5
10°	597.2	598.3	597.3	597.9	599.1
12.5°	590.3	590.8	590.3	590.6	591.9
15°	580.9	581.5	581.3	581.8	582.9
17.5°	569.8	570.5	570.4	571.4	572.3
20°	557.8	557.9	558.4	559.4	560.4
22.5°	543.6	544.0	544.5	545.9	546.9
25°	528.2	528.8	529.5	530.9	531.9
27.5°	511.9	512.6	513.4	515.0	516.6
30°	495.3	495.3	496.9	498.4	499.9
32.5°	478.5	477.8	479.3	481.2	484.9
35°	459.9	459.4	461.0	462.8	464.7
37.5°	440.6	440.2	442.1	444.0	445.8
40°	421.0	420.5	422.4	424.3	426.2
42.5°	400.9	400.7	402.4	404.3	406.4
45°	380.1	380.0	381.7	383.6	385.6
47.5°	358.9	358.6	360.4	362.4	364.2
50°	337.2	336.9	338.7	340.7	342.6
52.5°	314.8	314.8	316.4	318.2	321.1
55°	292.3	292.0	293.7	295.7	298.5
57.5°	269.6	269.1	270.7	272.8	275.3
60°	246.4	245.9	247.4	249.4	252.9
62.5°	222.9	222.1	223.6	225.5	227.7
65°	199.1	198.4	199.8	201.5	203.6
67.5°	175.3	174.4	175.8	177.3	179.2
70°	151.3	150.4	151.4	152.9	154.7
72.5°	127.4	126.5	127.4	128.0	130.2
75°	104.1	103.2	103.7	104.2	106.1
77.5°	81.3	80.4	81.4	81.7	82.8
80°	60.0	59.1	59.7	59.9	60.7
82.5°	40.5	39.8	40.7	40.0	40.8
85°	23.4	22.7	23.0	22.7	23.1
87.5°	9.2	8.7	8.8	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)