

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: P834412

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-3LO-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834412
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-LD4-3LO-27-120-EDD
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

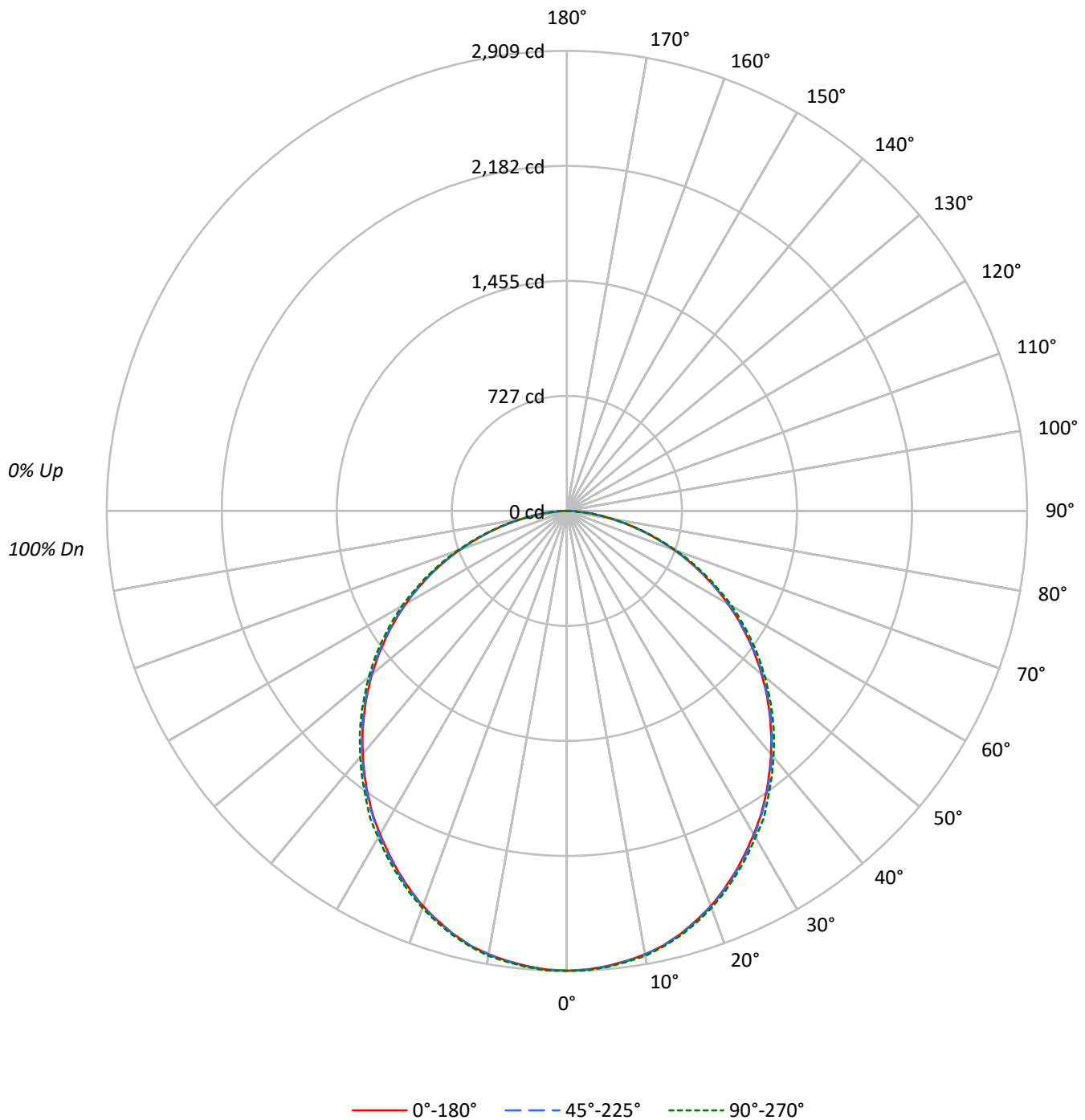
Lumens per Lamp: N/A
Luminaire Lumens: 7857.8 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P834412

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-3LO-27-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834412

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-3LO-27-120-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
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°	7825	7825	7825
5°	7805	7811	7821
10°	7780	7782	7805
15°	7716	7721	7743
20°	7615	7624	7652
25°	7478	7496	7530
30°	7337	7361	7406
35°	7203	7221	7278
40°	7051	7074	7138
45°	6897	6927	6997
50°	6730	6760	6838
55°	6539	6570	6678
60°	6322	6348	6490
65°	6046	6065	6180
70°	5675	5680	5803
75°	5158	5139	5258
80°	4432	4413	4488
85°	3440	3384	3402

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834412

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-3LO-27-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.8	3.5
10°-20°	781.7	9.9
20°-30°	1163.7	14.8
30°-40°	1376.1	17.5
40°-50°	1404.9	17.9
50°-60°	1253.7	16.0
60°-70°	944.3	12.0
70°-80°	526.6	6.7
80°-90°	131.9	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°	2220.1	28.3
0°-40°	3596.3	45.8
0°-60°	6254.9	79.6
0°-90°	7857.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7857.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2908	2908	2908	2908	2908	
5°	2889	2895	2892	2892	2895	274
15°	2770	2772	2771	2774	2779	781
25°	2518	2522	2524	2531	2536	1160
35°	2193	2190	2198	2207	2216	1371
45°	1812	1812	1820	1829	1839	1398
55°	1394	1392	1400	1410	1423	1246
65°	950	946	952	961	970	939
75°	496	492	494	497	506	526
85°	111	108	110	108	110	134
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834412

CATALOG NUMBER: ORLG-12-4-INS-OPL-LD4-3LO-27-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2908.0	2908.0	2908.0	2908.0	2908.0
2.5°	2903.2	2908.0	2902.0	2903.2	2908.6
5°	2889.3	2894.8	2891.7	2892.3	2895.4
7.5°	2870.1	2877.3	2873.1	2874.3	2877.3
10°	2847.2	2852.6	2847.8	2850.8	2856.2
12.5°	2814.7	2817.1	2814.7	2815.9	2821.9
15°	2769.5	2772.5	2771.3	2773.7	2779.2
17.5°	2716.5	2720.2	2719.6	2724.4	2728.6
20°	2659.3	2659.9	2662.4	2667.2	2672.0
22.5°	2591.9	2593.7	2596.1	2602.7	2607.6
25°	2518.5	2521.5	2524.5	2531.1	2535.9
27.5°	2440.8	2443.8	2448.0	2455.2	2463.1
30°	2361.3	2361.3	2369.1	2376.4	2383.6
32.5°	2281.2	2278.2	2285.5	2294.5	2311.9
35°	2192.7	2190.3	2198.2	2206.6	2215.6
37.5°	2100.6	2098.8	2107.8	2116.9	2125.3
40°	2007.3	2004.9	2013.9	2023.0	2032.0
42.5°	1911.6	1910.4	1918.8	1927.8	1937.5
45°	1812.2	1811.6	1820.1	1829.1	1838.7
47.5°	1711.1	1709.9	1718.3	1727.9	1736.4
50°	1607.5	1606.3	1614.8	1624.4	1633.4
52.5°	1501.0	1501.0	1508.8	1517.2	1531.1
55°	1393.8	1392.0	1400.4	1410.0	1423.3
57.5°	1285.4	1283.0	1290.8	1300.5	1312.5
60°	1174.6	1172.2	1179.5	1189.1	1205.9
62.5°	1062.7	1059.0	1066.3	1075.3	1085.5
65°	949.5	945.9	952.5	960.9	970.5
67.5°	835.7	831.5	838.1	845.3	854.3
70°	721.3	717.1	721.9	729.1	737.5
72.5°	607.5	603.3	607.5	610.5	620.7
75°	496.1	491.9	494.3	496.7	505.7
77.5°	387.7	383.5	388.3	389.5	395.0
80°	286.0	281.8	284.8	285.4	289.6
82.5°	193.3	189.7	193.9	190.9	194.5
85°	111.4	108.4	109.6	108.4	110.2
87.5°	44.0	41.5	42.1	39.7	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)