

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: P835606

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835606
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-LD4-2LO-27-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

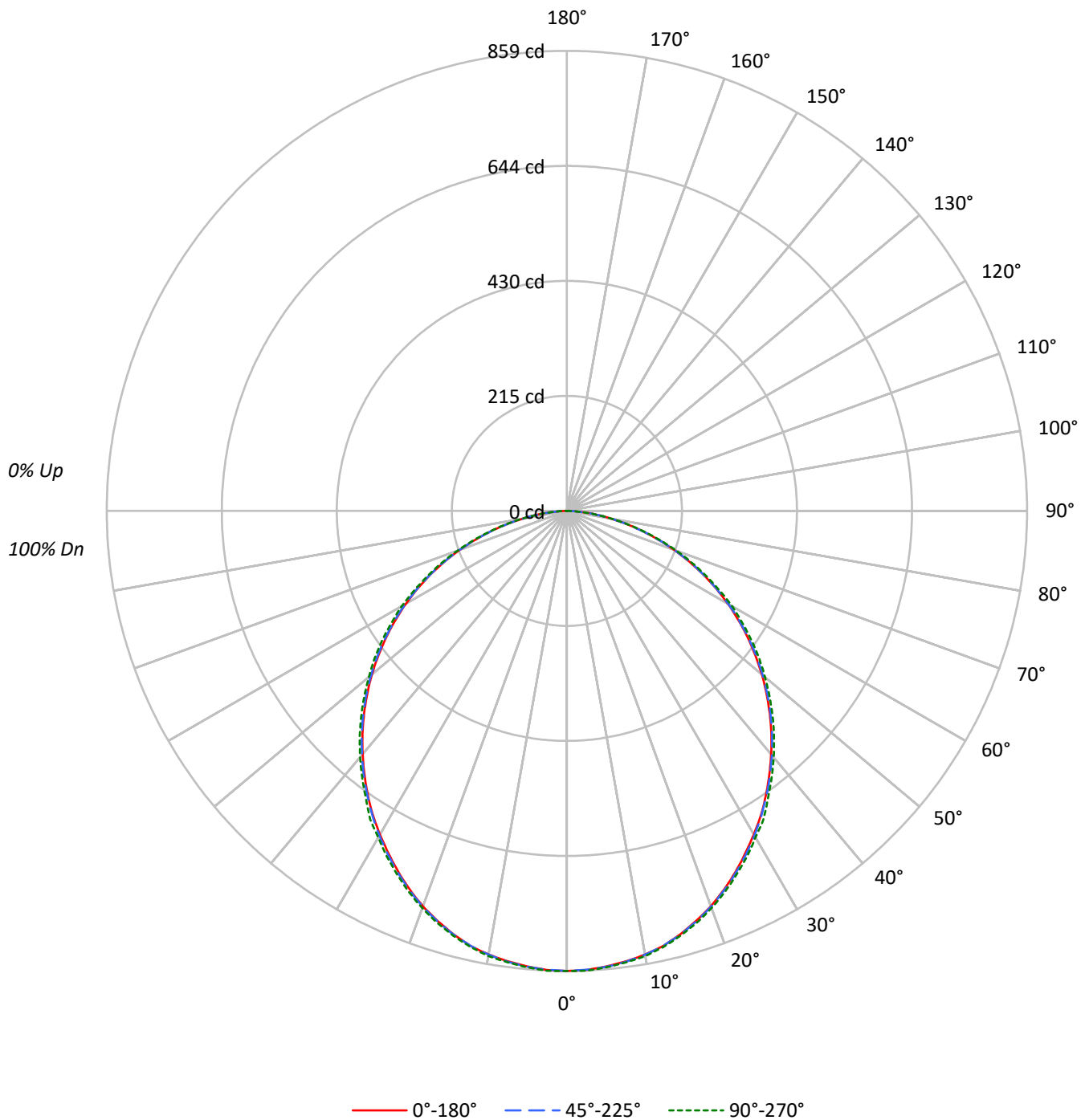
Lumens per Lamp: N/A
Luminaire Lumens: 2321.6 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P835606

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835606

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-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	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	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2312	2312	2312
5°	2306	2308	2311
10°	2299	2299	2306
15°	2280	2281	2288
20°	2250	2253	2261
25°	2209	2215	2224
30°	2168	2175	2188
35°	2128	2134	2150
40°	2083	2090	2109
45°	2038	2046	2068
50°	1988	1997	2020
55°	1932	1941	1973
60°	1868	1876	1918
65°	1786	1792	1826
70°	1677	1678	1714
75°	1524	1518	1553
80°	1309	1303	1327
85°	1016	1000	1007



TEST NUMBER: P835606

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	3.5
10°-20°	230.9	9.9
20°-30°	343.8	14.8
30°-40°	406.6	17.5
40°-50°	415.1	17.9
50°-60°	370.4	16.0
60°-70°	279.0	12.0
70°-80°	155.6	6.7
80°-90°	39.0	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°	655.9	28.3
0°-40°	1062.5	45.8
0°-60°	1848.0	79.6
0°-90°	2321.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2321.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	854	855	854	855	855	81
15°	818	819	819	820	821	231
25°	744	745	746	748	749	343
35°	648	647	650	652	655	405
45°	535	535	538	540	543	413
55°	412	411	414	417	420	368
65°	280	280	281	284	287	277
75°	147	145	146	147	149	155
85°	33	32	32	32	33	40
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835606

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	859.2	859.2	859.2	859.2	859.2
2.5°	857.8	859.2	857.4	857.8	859.4
5°	853.7	855.3	854.4	854.6	855.4
7.5°	848.0	850.1	848.9	849.2	850.1
10°	841.2	842.8	841.4	842.3	843.9
12.5°	831.6	832.3	831.6	832.0	833.7
15°	818.3	819.2	818.8	819.5	821.1
17.5°	802.6	803.7	803.5	804.9	806.2
20°	785.7	785.9	786.6	788.0	789.4
22.5°	765.8	766.3	767.0	769.0	770.4
25°	744.1	745.0	745.9	747.8	749.2
27.5°	721.1	722.0	723.3	725.4	727.7
30°	697.7	697.7	700.0	702.1	704.2
32.5°	674.0	673.1	675.2	677.9	683.1
35°	647.9	647.1	649.5	651.9	654.6
37.5°	620.6	620.1	622.8	625.4	627.9
40°	593.1	592.4	595.0	597.7	600.4
42.5°	564.8	564.4	566.9	569.6	572.4
45°	535.4	535.3	537.7	540.4	543.3
47.5°	505.5	505.2	507.7	510.5	513.0
50°	474.9	474.6	477.1	479.9	482.6
52.5°	443.5	443.5	445.8	448.3	452.4
55°	411.8	411.3	413.8	416.6	420.5
57.5°	379.8	379.1	381.4	384.2	387.8
60°	347.1	346.3	348.5	351.3	356.3
62.5°	314.0	312.9	315.0	317.7	320.7
65°	280.5	279.5	281.4	283.9	286.7
67.5°	246.9	245.7	247.6	249.7	252.4
70°	213.1	211.9	213.3	215.4	217.9
72.5°	179.5	178.2	179.5	180.4	183.4
75°	146.6	145.3	146.0	146.8	149.4
77.5°	114.6	113.3	114.7	115.1	116.7
80°	84.5	83.2	84.1	84.3	85.6
82.5°	57.1	56.0	57.3	56.4	57.5
85°	32.9	32.0	32.4	32.0	32.6
87.5°	13.0	12.3	12.5	11.7	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)