

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: P834949

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834949
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-LD4-5LO-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

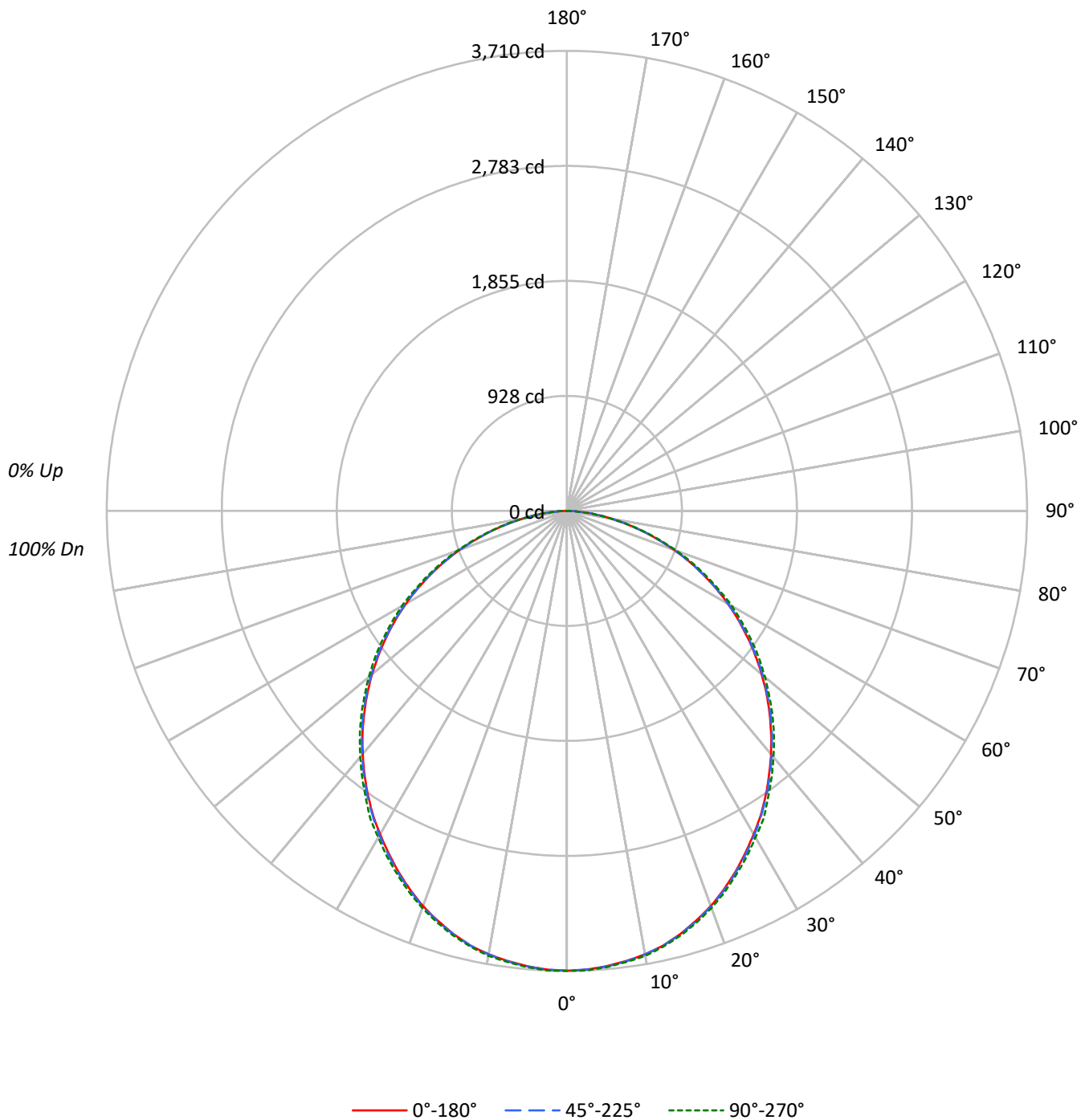
Lumens per Lamp: N/A
Luminaire Lumens: 10021.5 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 117
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

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Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

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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°	4990	4990	4990
5°	4977	4981	4987
10°	4961	4962	4977
15°	4920	4923	4937
20°	4856	4862	4879
25°	4768	4780	4801
30°	4679	4694	4723
35°	4593	4605	4641
40°	4496	4511	4552
45°	4398	4417	4462
50°	4291	4311	4361
55°	4170	4190	4258
60°	4031	4048	4139
65°	3855	3868	3941
70°	3619	3622	3700
75°	3289	3277	3353
80°	2826	2814	2861
85°	2194	2158	2169

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.5	3.5
10°-20°	996.9	9.9
20°-30°	1484.1	14.8
30°-40°	1755.1	17.5
40°-50°	1791.7	17.9
50°-60°	1599.0	16.0
60°-70°	1204.4	12.0
70°-80°	671.6	6.7
80°-90°	168.3	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°	2831.5	28.3
0°-40°	4586.5	45.8
0°-60°	7977.2	79.6
0°-90°	10021.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10021.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3709	3709	3709	3709	3709	
5°	3685	3692	3688	3689	3693	350
15°	3532	3536	3534	3538	3544	996
25°	3212	3216	3220	3228	3234	1480
35°	2796	2794	2804	2814	2826	1749
45°	2311	2310	2321	2333	2345	1783
55°	1778	1775	1786	1798	1815	1589
65°	1211	1206	1215	1226	1238	1198
75°	633	627	630	634	645	671
85°	142	138	140	138	140	171
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3708.8	3708.8	3708.8	3708.8	3708.8
2.5°	3702.6	3708.8	3701.1	3702.6	3709.5
5°	3685.0	3691.9	3688.0	3688.8	3692.6
7.5°	3660.4	3669.6	3664.2	3665.8	3669.6
10°	3631.2	3638.1	3632.0	3635.8	3642.7
12.5°	3589.7	3592.8	3589.7	3591.3	3599.0
15°	3532.2	3536.0	3534.5	3537.5	3544.4
17.5°	3464.6	3469.2	3468.4	3474.6	3479.9
20°	3391.6	3392.4	3395.5	3401.6	3407.8
22.5°	3305.6	3307.9	3311.0	3319.5	3325.6
25°	3212.0	3215.8	3219.6	3228.1	3234.2
27.5°	3112.9	3116.7	3122.1	3131.3	3141.3
30°	3011.5	3011.5	3021.5	3030.7	3040.0
32.5°	2909.4	2905.6	2914.8	2926.3	2948.6
35°	2796.5	2793.5	2803.5	2814.2	2825.7
37.5°	2679.1	2676.8	2688.3	2699.8	2710.5
40°	2560.0	2557.0	2568.5	2580.0	2591.5
42.5°	2438.0	2436.4	2447.2	2458.7	2471.0
45°	2311.3	2310.5	2321.2	2332.8	2345.0
47.5°	2182.3	2180.7	2191.5	2203.8	2214.5
50°	2050.2	2048.6	2059.4	2071.7	2083.2
52.5°	1914.3	1914.3	1924.3	1935.0	1952.7
55°	1777.6	1775.3	1786.0	1798.3	1815.2
57.5°	1639.4	1636.3	1646.3	1658.6	1673.9
60°	1498.1	1495.0	1504.2	1516.5	1538.0
62.5°	1355.3	1350.7	1359.9	1371.4	1384.5
65°	1210.9	1206.3	1214.8	1225.5	1237.8
67.5°	1065.8	1060.4	1068.9	1078.1	1089.6
70°	919.9	914.5	920.7	929.9	940.6
72.5°	774.8	769.4	774.8	778.6	791.7
75°	632.7	627.3	630.4	633.5	645.0
77.5°	494.5	489.1	495.3	496.8	503.7
80°	364.7	359.4	363.2	364.0	369.3
82.5°	246.5	241.9	247.3	243.4	248.0
85°	142.1	138.2	139.8	138.2	140.5
87.5°	56.1	53.0	53.8	50.7	50.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)