

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: P835147

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-50-120-EDD-90**

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P835147
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-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

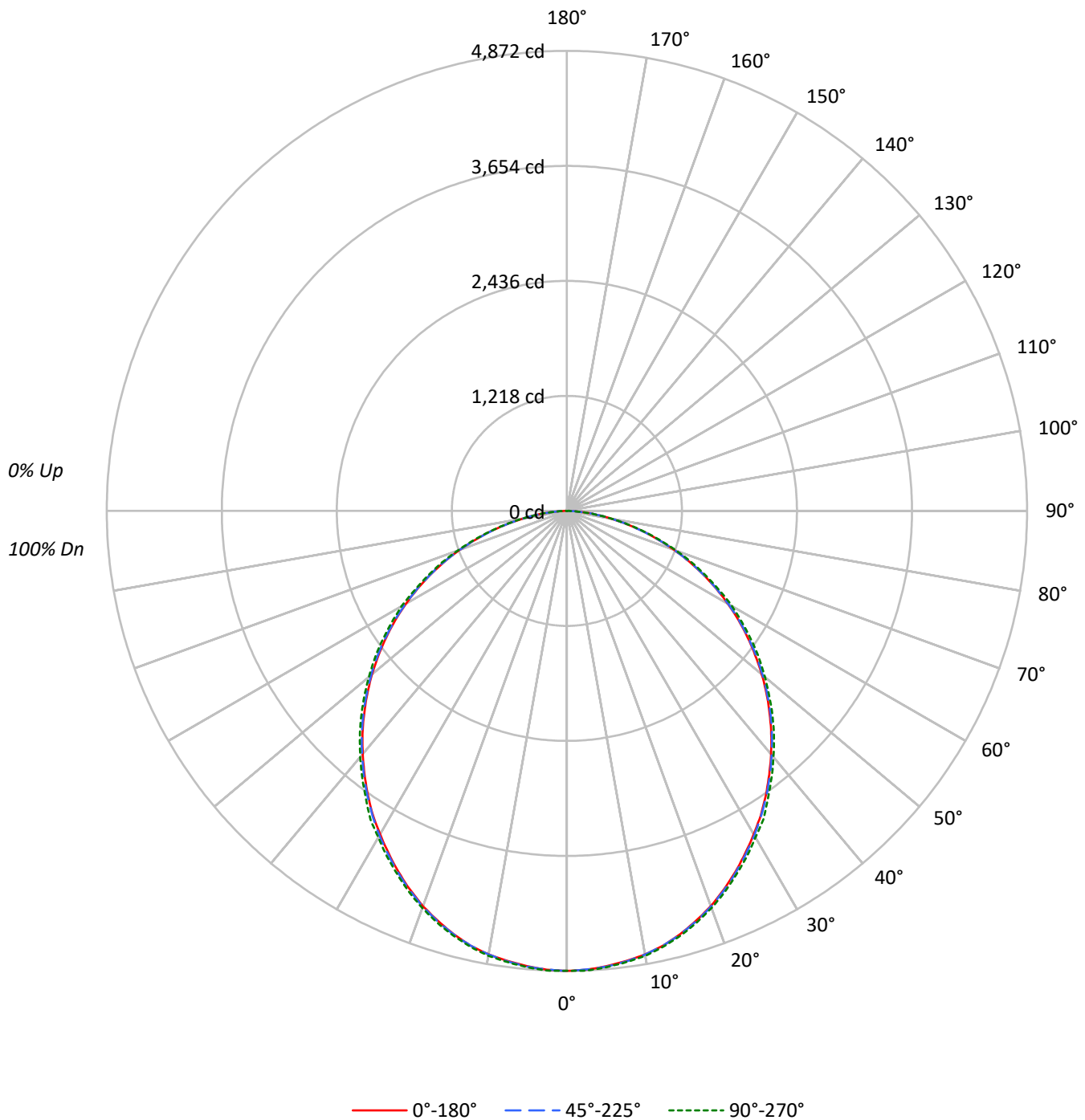
Lumens per Lamp: N/A
Luminaire Lumens: 13162.5 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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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
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°	6554	6554	6554
5°	6537	6542	6551
10°	6516	6518	6537
15°	6462	6467	6485
20°	6378	6386	6409
25°	6263	6278	6306
30°	6145	6166	6203
35°	6033	6048	6096
40°	5906	5925	5978
45°	5776	5801	5861
50°	5637	5662	5727
55°	5477	5503	5593
60°	5295	5317	5436
65°	5064	5080	5176
70°	4753	4757	4860
75°	4320	4304	4404
80°	3712	3696	3759
85°	2881	2834	2850

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.3	3.5
10°-20°	1309.4	9.9
20°-30°	1949.3	14.8
30°-40°	2305.2	17.5
40°-50°	2353.3	17.9
50°-60°	2100.2	16.0
60°-70°	1581.8	12.0
70°-80°	882.1	6.7
80°-90°	221.0	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°	3718.9	28.3
0°-40°	6024.1	45.8
0°-60°	10477.6	79.6
0°-90°	13162.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13162.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4871	4871	4871	4871	4871	
5°	4840	4849	4844	4845	4850	460
15°	4639	4644	4642	4646	4655	1308
25°	4219	4224	4229	4240	4248	1943
35°	3673	3669	3682	3696	3711	2297
45°	3036	3035	3049	3064	3080	2342
55°	2335	2332	2346	2362	2384	2087
65°	1590	1584	1596	1610	1626	1573
75°	831	824	828	832	847	881
85°	187	182	184	182	185	224
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4871.2	4871.2	4871.2	4871.2	4871.2
2.5°	4863.1	4871.2	4861.1	4863.1	4872.2
5°	4839.9	4849.0	4844.0	4845.0	4850.0
7.5°	4807.7	4819.8	4812.7	4814.7	4819.8
10°	4769.3	4778.4	4770.4	4775.4	4784.5
12.5°	4714.9	4718.9	4714.9	4716.9	4727.0
15°	4639.2	4644.3	4642.3	4646.3	4655.4
17.5°	4550.5	4556.5	4555.5	4563.6	4570.7
20°	4454.7	4455.7	4459.7	4467.8	4475.9
22.5°	4341.7	4344.8	4348.8	4359.9	4367.9
25°	4218.7	4223.7	4228.8	4239.9	4247.9
27.5°	4088.6	4093.6	4100.7	4112.8	4125.9
30°	3955.5	3955.5	3968.6	3980.7	3992.8
32.5°	3821.3	3816.3	3828.4	3843.5	3872.8
35°	3673.1	3669.0	3682.1	3696.3	3711.4
37.5°	3518.8	3515.7	3530.9	3546.0	3560.1
40°	3362.4	3358.4	3373.5	3388.7	3403.8
42.5°	3202.1	3200.1	3214.2	3229.3	3245.5
45°	3035.7	3034.7	3048.8	3063.9	3080.1
47.5°	2866.2	2864.2	2878.3	2894.5	2908.6
50°	2692.8	2690.8	2704.9	2721.0	2736.1
52.5°	2514.3	2514.3	2527.4	2541.5	2564.7
55°	2334.8	2331.7	2345.8	2362.0	2384.2
57.5°	2153.2	2149.2	2162.3	2178.4	2198.6
60°	1967.6	1963.6	1975.7	1991.8	2020.1
62.5°	1780.1	1774.0	1786.1	1801.2	1818.4
65°	1590.5	1584.4	1595.5	1609.6	1625.8
67.5°	1399.8	1392.8	1403.9	1416.0	1431.1
70°	1208.2	1201.2	1209.2	1221.3	1235.5
72.5°	1017.6	1010.5	1017.6	1022.7	1039.8
75°	831.0	824.0	828.0	832.0	847.2
77.5°	649.5	642.4	650.5	652.5	661.6
80°	479.1	472.0	477.0	478.0	485.1
82.5°	323.7	317.7	324.7	319.7	325.8
85°	186.6	181.5	183.6	181.5	184.6
87.5°	73.6	69.6	70.6	66.6	66.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)