

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: P835076

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5STD-27-120-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: P835076
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-LD4-5STD-27-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

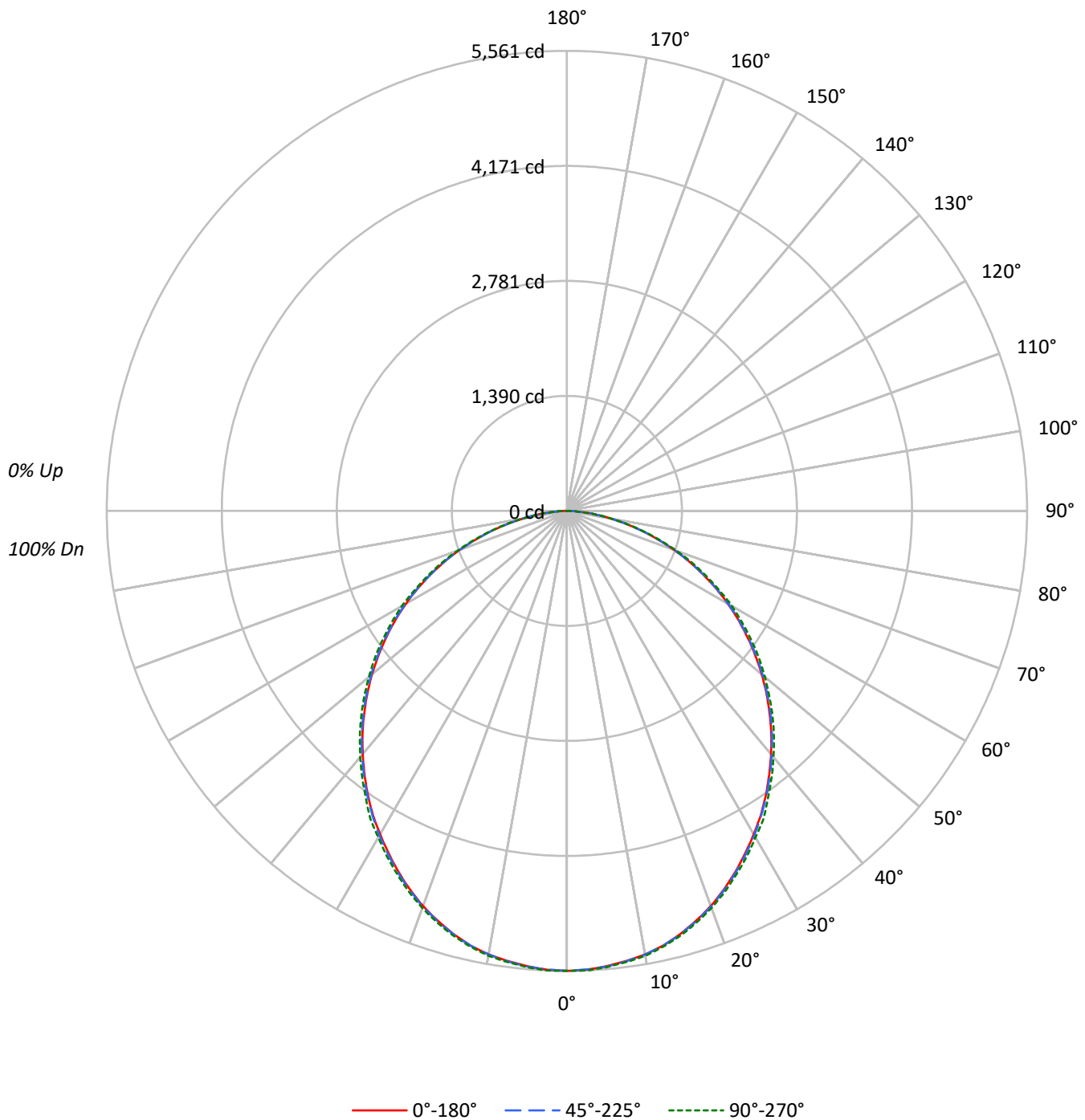
Lumens per Lamp: N/A
Luminaire Lumens: 15022.8 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 166.5
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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7481	7481	7481
5°	7461	7467	7476
10°	7437	7439	7461
15°	7376	7380	7401
20°	7280	7288	7315
25°	7148	7165	7198
30°	7014	7037	7080
35°	6886	6903	6958
40°	6741	6763	6823
45°	6593	6621	6689
50°	6433	6462	6537
55°	6251	6281	6383
60°	6043	6068	6204
65°	5779	5798	5907
70°	5425	5429	5547
75°	4931	4913	5026
80°	4237	4219	4290
85°	3287	3234	3251

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.4	3.5
10°-20°	1494.4	9.9
20°-30°	2224.8	14.8
30°-40°	2631.0	17.5
40°-50°	2685.9	17.9
50°-60°	2397.0	16.0
60°-70°	1805.4	12.0
70°-80°	1006.8	6.7
80°-90°	252.2	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°	4244.6	28.3
0°-40°	6875.5	45.8
0°-60°	11958.4	79.6
0°-90°	15022.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15022.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5560	5560	5560	5560	5560	
5°	5524	5534	5529	5530	5536	525
15°	5295	5301	5298	5303	5313	1492
25°	4815	4821	4826	4839	4848	2218
35°	4192	4188	4203	4219	4236	2622
45°	3465	3464	3480	3497	3515	2673
55°	2665	2661	2677	2696	2721	2382
65°	1815	1808	1821	1837	1856	1795
75°	948	940	945	950	967	1006
85°	213	207	210	207	211	256
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5559.7	5559.7	5559.7	5559.7	5559.7
2.5°	5550.5	5559.7	5548.2	5550.5	5560.8
5°	5524.0	5534.3	5528.6	5529.7	5535.5
7.5°	5487.2	5501.0	5492.9	5495.2	5501.0
10°	5443.4	5453.8	5444.6	5450.3	5460.7
12.5°	5381.3	5385.9	5381.3	5383.6	5395.1
15°	5294.9	5300.7	5298.4	5303.0	5313.3
17.5°	5193.6	5200.5	5199.4	5208.6	5216.7
20°	5084.3	5085.4	5090.0	5099.2	5108.5
22.5°	4955.4	4958.8	4963.4	4976.1	4985.3
25°	4814.9	4820.7	4826.4	4839.1	4848.3
27.5°	4666.4	4672.2	4680.3	4694.1	4709.0
30°	4514.5	4514.5	4529.5	4543.3	4557.1
32.5°	4361.4	4355.7	4369.5	4386.7	4420.1
35°	4192.2	4187.6	4202.6	4218.7	4235.9
37.5°	4016.1	4012.6	4029.9	4047.2	4063.3
40°	3837.7	3833.1	3850.3	3867.6	3884.9
42.5°	3654.7	3652.3	3668.5	3685.7	3704.1
45°	3464.7	3463.6	3479.7	3497.0	3515.4
47.5°	3271.3	3269.0	3285.2	3303.6	3319.7
50°	3073.4	3071.1	3087.2	3105.6	3122.9
52.5°	2869.6	2869.6	2884.6	2900.7	2927.2
55°	2664.7	2661.3	2677.4	2695.8	2721.1
57.5°	2457.5	2452.9	2467.9	2486.3	2509.3
60°	2245.7	2241.1	2254.9	2273.4	2305.6
62.5°	2031.6	2024.7	2038.5	2055.8	2075.4
65°	1815.2	1808.3	1821.0	1837.1	1855.5
67.5°	1597.7	1589.6	1602.3	1616.1	1633.4
70°	1379.0	1370.9	1380.1	1393.9	1410.1
72.5°	1161.4	1153.4	1161.4	1167.2	1186.8
75°	948.5	940.4	945.0	949.6	966.9
77.5°	741.3	733.2	742.4	744.7	755.1
80°	546.8	538.7	544.5	545.6	553.7
82.5°	369.5	362.6	370.6	364.9	371.8
85°	212.9	207.2	209.5	207.2	210.6
87.5°	84.0	79.4	80.6	76.0	76.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)