

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: P834950

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834950
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-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

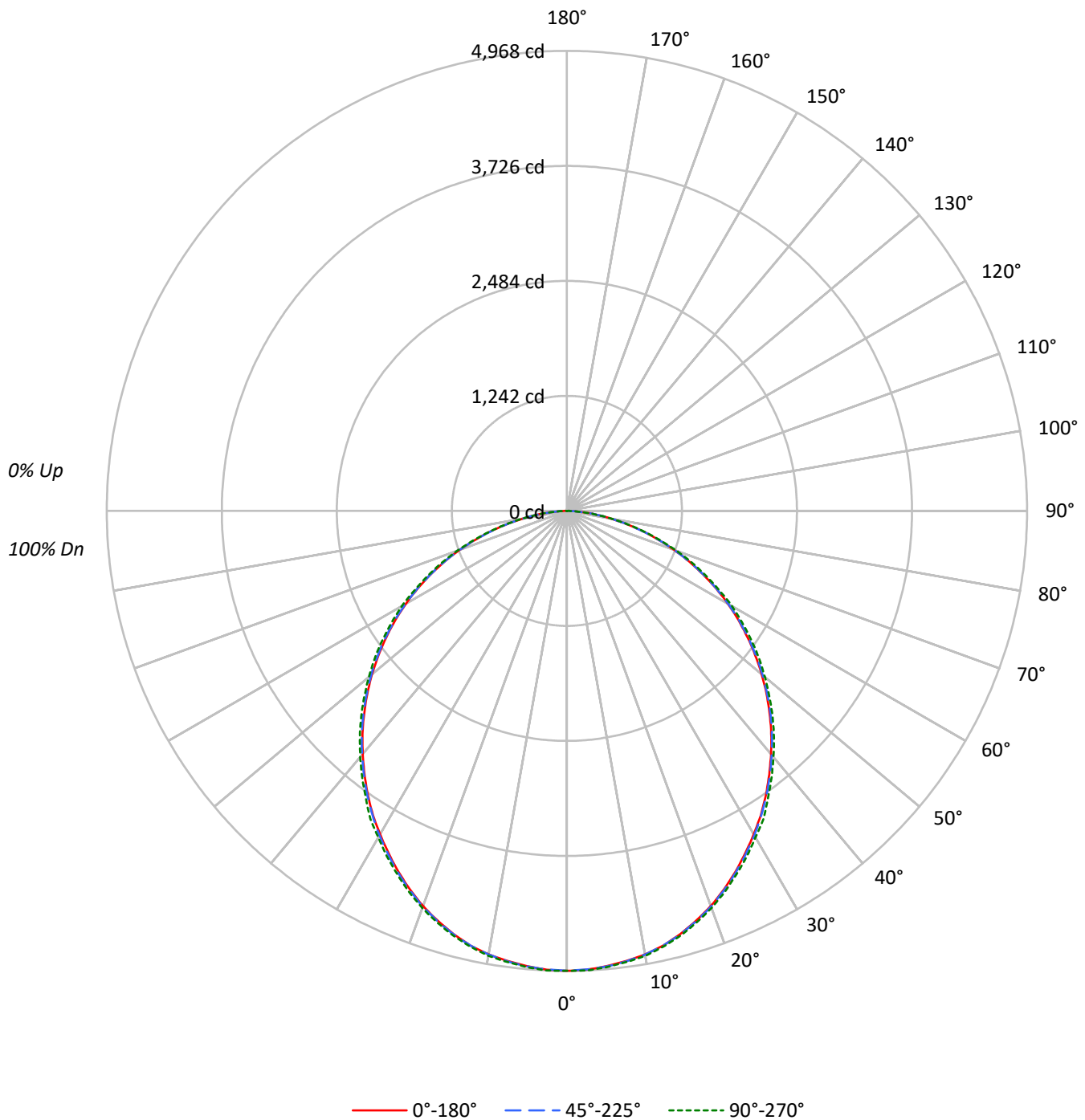
Lumens per Lamp: N/A
Luminaire Lumens: 13420.4 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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°	6683	6683	6683
5°	6665	6671	6679
10°	6644	6645	6665
15°	6589	6593	6612
20°	6503	6511	6534
25°	6386	6401	6430
30°	6266	6286	6325
35°	6151	6167	6216
40°	6022	6041	6096
45°	5890	5915	5976
50°	5747	5773	5840
55°	5584	5611	5702
60°	5399	5421	5543
65°	5163	5179	5277
70°	4846	4850	4956
75°	4405	4389	4491
80°	3784	3769	3832
85°	2936	2888	2905

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.3	3.5
10°-20°	1335.0	9.9
20°-30°	1987.4	14.8
30°-40°	2350.3	17.5
40°-50°	2399.4	17.9
50°-60°	2141.3	16.0
60°-70°	1612.8	12.0
70°-80°	899.4	6.7
80°-90°	225.3	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°	3791.8	28.3
0°-40°	6142.1	45.8
0°-60°	10682.8	79.6
0°-90°	13420.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13420.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4967	4967	4967	4967	4967	
5°	4935	4944	4939	4940	4945	469
15°	4730	4735	4733	4737	4747	1333
25°	4301	4306	4312	4323	4331	1982
35°	3745	3741	3754	3769	3784	2342
45°	3095	3094	3108	3124	3140	2388
55°	2380	2377	2392	2408	2431	2128
65°	1622	1615	1627	1641	1658	1604
75°	847	840	844	848	864	898
85°	190	185	187	185	188	228
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4966.6	4966.6	4966.6	4966.6	4966.6
2.5°	4958.4	4966.6	4956.4	4958.4	4967.7
5°	4934.8	4944.0	4938.9	4939.9	4945.0
7.5°	4901.9	4914.2	4907.0	4909.1	4914.2
10°	4862.8	4872.0	4863.8	4869.0	4878.2
12.5°	4807.3	4811.4	4807.3	4809.3	4819.6
15°	4730.1	4735.3	4733.2	4737.3	4746.6
17.5°	4639.6	4645.8	4644.8	4653.0	4660.2
20°	4542.0	4543.0	4547.1	4555.3	4563.6
22.5°	4426.8	4429.9	4434.0	4445.3	4453.5
25°	4301.3	4306.5	4311.6	4322.9	4331.2
27.5°	4168.7	4173.8	4181.0	4193.4	4206.7
30°	4033.0	4033.0	4046.3	4058.7	4071.0
32.5°	3896.2	3891.0	3903.4	3918.8	3948.6
35°	3745.0	3740.9	3754.3	3768.7	3784.1
37.5°	3587.7	3584.6	3600.0	3615.5	3629.9
40°	3428.3	3424.2	3439.6	3455.1	3470.5
42.5°	3264.8	3262.8	3277.2	3292.6	3309.0
45°	3095.2	3094.1	3108.5	3123.9	3140.4
47.5°	2922.4	2920.3	2934.7	2951.2	2965.6
50°	2745.5	2743.5	2757.9	2774.3	2789.8
52.5°	2563.5	2563.5	2576.9	2591.3	2614.9
55°	2380.5	2377.4	2391.8	2408.3	2430.9
57.5°	2195.4	2191.3	2204.7	2221.1	2241.7
60°	2006.2	2002.1	2014.4	2030.9	2059.7
62.5°	1814.9	1808.8	1821.1	1836.5	1854.0
65°	1621.6	1615.4	1626.8	1641.2	1657.6
67.5°	1427.3	1420.1	1431.4	1443.7	1459.1
70°	1231.9	1224.7	1232.9	1245.3	1259.7
72.5°	1037.5	1030.3	1037.5	1042.7	1060.2
75°	847.3	840.1	844.2	848.3	863.8
77.5°	662.2	655.0	663.2	665.3	674.6
80°	488.4	481.2	486.4	487.4	494.6
82.5°	330.1	323.9	331.1	326.0	332.1
85°	190.2	185.1	187.1	185.1	188.2
87.5°	75.1	71.0	72.0	67.9	67.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)