

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: P835128

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4HI-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835128
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-LD4-4HI-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

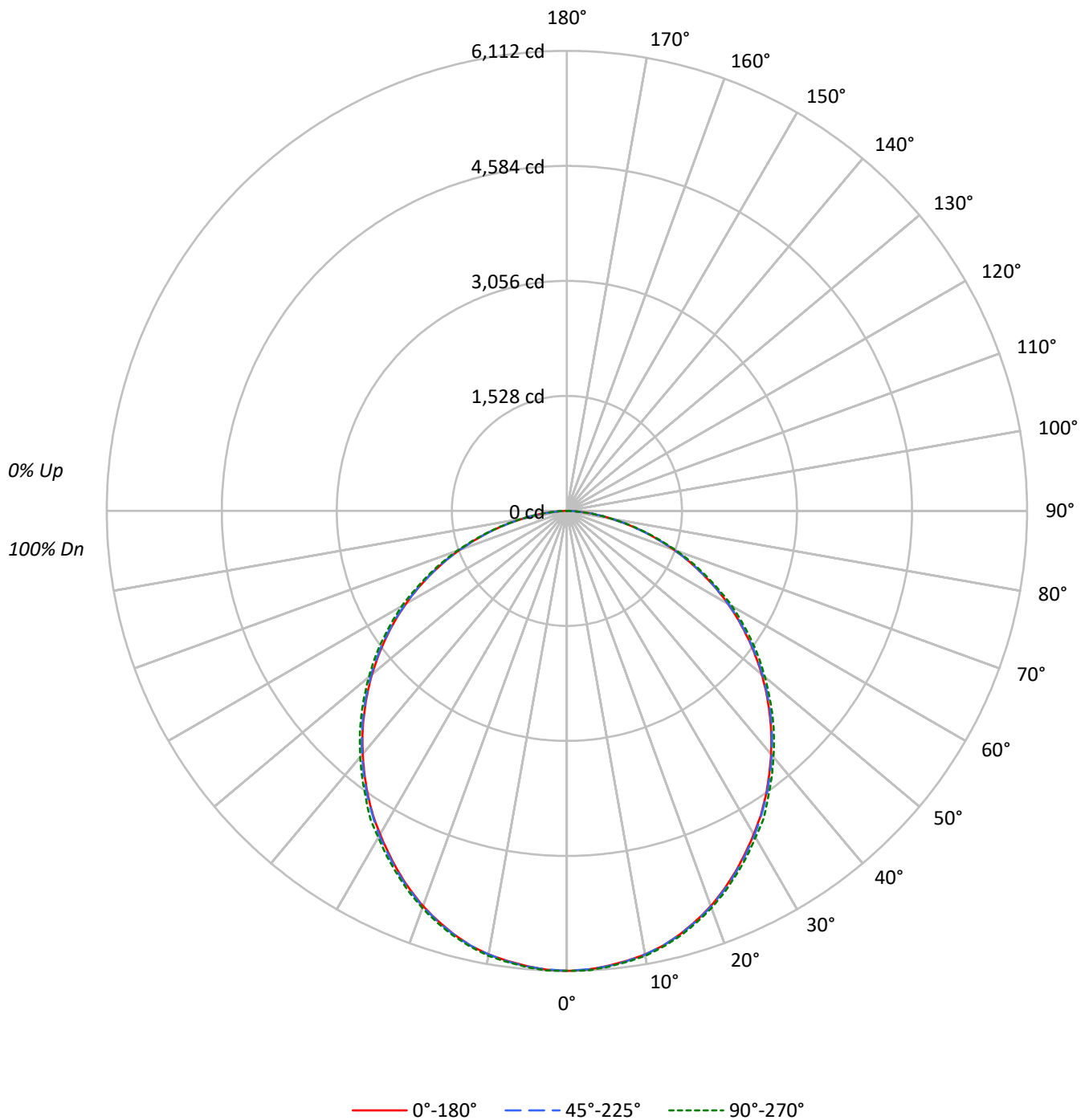
Lumens per Lamp: N/A
Luminaire Lumens: 16511.1 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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°	8222	8222	8222
5°	8200	8207	8217
10°	8174	8175	8200
15°	8106	8112	8134
20°	8001	8010	8039
25°	7856	7875	7911
30°	7709	7734	7781
35°	7568	7587	7647
40°	7408	7433	7499
45°	7246	7277	7352
50°	7070	7102	7184
55°	6870	6903	7016
60°	6642	6669	6819
65°	6352	6372	6493
70°	5962	5967	6097
75°	5419	5400	5525
80°	4656	4637	4715
85°	3612	3554	3574

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	577.4	3.5
10°-20°	1642.5	9.9
20°-30°	2445.2	14.8
30°-40°	2891.6	17.5
40°-50°	2952.0	17.9
50°-60°	2634.5	16.0
60°-70°	1984.3	12.0
70°-80°	1106.6	6.7
80°-90°	277.2	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°	4665.1	28.3
0°-40°	7556.7	45.8
0°-60°	13143.1	79.6
0°-90°	16511.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16511.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6110	6110	6110	6110	6110	
5°	6071	6083	6076	6078	6084	577
15°	5820	5826	5823	5828	5840	1640
25°	5292	5298	5305	5318	5329	2438
35°	4608	4602	4619	4637	4656	2881
45°	3808	3807	3824	3843	3864	2937
55°	2929	2925	2943	2963	2991	2618
65°	1995	1988	2001	2019	2039	1973
75°	1042	1034	1039	1044	1063	1105
85°	234	228	230	228	232	281
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6110.5	6110.5	6110.5	6110.5	6110.5
2.5°	6100.3	6110.5	6097.8	6100.3	6111.7
5°	6071.2	6082.6	6076.3	6077.6	6083.9
7.5°	6030.8	6045.9	6037.1	6039.6	6045.9
10°	5982.7	5994.1	5983.9	5990.3	6001.7
12.5°	5914.4	5919.4	5914.4	5916.9	5929.5
15°	5819.5	5825.8	5823.3	5828.3	5839.7
17.5°	5708.2	5715.7	5714.5	5724.6	5733.5
20°	5588.0	5589.2	5594.3	5604.4	5614.5
22.5°	5446.3	5450.1	5455.1	5469.0	5479.2
25°	5291.9	5298.3	5304.6	5318.5	5328.6
27.5°	5128.7	5135.1	5143.9	5159.1	5175.5
30°	4961.7	4961.7	4978.2	4993.4	5008.5
32.5°	4793.5	4787.2	4802.3	4821.3	4858.0
35°	4607.5	4602.5	4618.9	4636.6	4655.6
37.5°	4414.0	4410.2	4429.1	4448.1	4465.8
40°	4217.9	4212.8	4231.8	4250.8	4269.7
42.5°	4016.7	4014.2	4031.9	4050.9	4071.1
45°	3808.0	3806.7	3824.4	3843.4	3863.6
47.5°	3595.4	3592.9	3610.6	3630.9	3648.6
50°	3377.8	3375.3	3393.0	3413.3	3432.2
52.5°	3153.9	3153.9	3170.4	3188.1	3217.2
55°	2928.7	2924.9	2942.6	2962.9	2990.7
57.5°	2701.0	2695.9	2712.4	2732.6	2757.9
60°	2468.2	2463.2	2478.3	2498.6	2534.0
62.5°	2232.9	2225.3	2240.5	2259.5	2281.0
65°	1995.1	1987.5	2001.4	2019.1	2039.3
67.5°	1756.0	1747.1	1761.0	1776.2	1795.2
70°	1515.6	1506.7	1516.9	1532.0	1549.8
72.5°	1276.5	1267.6	1276.5	1282.8	1304.3
75°	1042.4	1033.6	1038.7	1043.7	1062.7
77.5°	814.7	805.9	816.0	818.5	829.9
80°	600.9	592.1	598.4	599.7	608.5
82.5°	406.1	398.5	407.4	401.0	408.6
85°	234.0	227.7	230.2	227.7	231.5
87.5°	92.4	87.3	88.6	83.5	83.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)