

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: P835070

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3STD-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835070
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-LD4-3STD-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

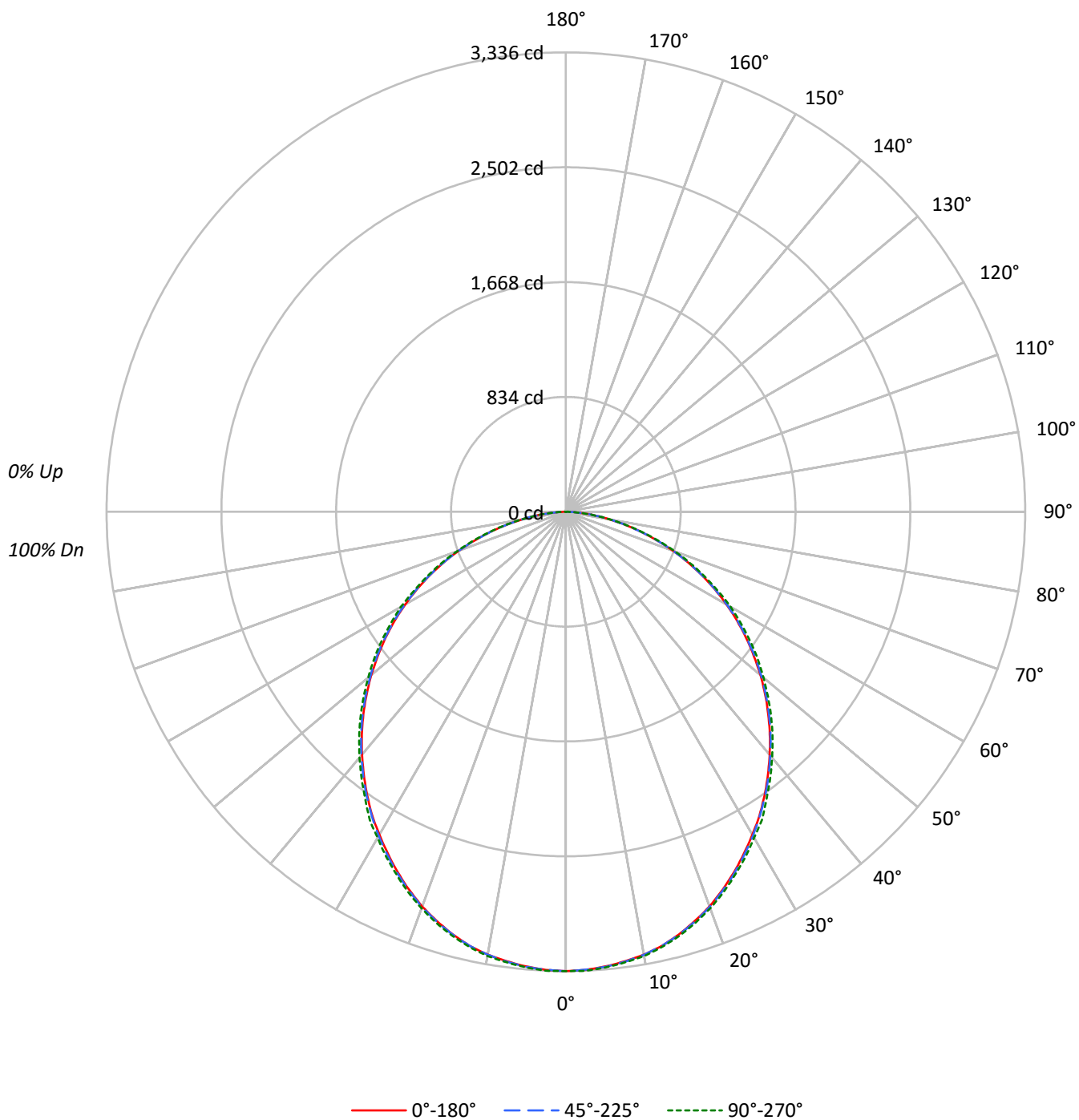
Lumens per Lamp: N/A
Luminaire Lumens: 9013.4 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

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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°	4488	4488	4488
5°	4476	4480	4486
10°	4462	4463	4476
15°	4425	4428	4441
20°	4368	4373	4389
25°	4289	4299	4319
30°	4208	4222	4248
35°	4131	4142	4175
40°	4044	4057	4094
45°	3956	3972	4013
50°	3860	3877	3922
55°	3750	3768	3830
60°	3626	3641	3722
65°	3467	3479	3544
70°	3255	3258	3328
75°	2959	2948	3016
80°	2541	2531	2574
85°	1973	1941	1951

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.2	3.5
10°-20°	896.6	9.9
20°-30°	1334.8	14.8
30°-40°	1578.5	17.5
40°-50°	1611.5	17.9
50°-60°	1438.1	16.0
60°-70°	1083.2	12.0
70°-80°	604.1	6.7
80°-90°	151.3	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°	2546.7	28.3
0°-40°	4125.2	45.8
0°-60°	7174.8	79.6
0°-90°	9013.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9013.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3336	3336	3336	3336	3336	
5°	3314	3320	3317	3318	3321	315
15°	3177	3180	3179	3182	3188	895
25°	2889	2892	2896	2903	2909	1331
35°	2515	2512	2522	2531	2542	1573
45°	2079	2078	2088	2098	2109	1604
55°	1599	1597	1606	1617	1633	1429
65°	1089	1085	1093	1102	1113	1077
75°	569	564	567	570	580	603
85°	128	124	126	124	126	153
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3335.7	3335.7	3335.7	3335.7	3335.7
2.5°	3330.2	3335.7	3328.8	3330.2	3336.4
5°	3314.3	3320.5	3317.1	3317.7	3321.2
7.5°	3292.2	3300.5	3295.6	3297.0	3300.5
10°	3265.9	3272.2	3266.6	3270.1	3276.3
12.5°	3228.7	3231.4	3228.7	3230.0	3236.9
15°	3176.9	3180.3	3178.9	3181.7	3187.9
17.5°	3116.1	3120.2	3119.5	3125.1	3129.9
20°	3050.5	3051.2	3053.9	3059.4	3065.0
22.5°	2973.1	2975.2	2978.0	2985.6	2991.1
25°	2888.9	2892.3	2895.8	2903.4	2908.9
27.5°	2799.8	2803.2	2808.1	2816.4	2825.3
30°	2708.6	2708.6	2717.6	2725.9	2734.2
32.5°	2616.8	2613.3	2621.6	2632.0	2652.0
35°	2515.2	2512.5	2521.5	2531.1	2541.5
37.5°	2409.6	2407.5	2417.9	2428.2	2437.9
40°	2302.5	2299.8	2310.1	2320.5	2330.8
42.5°	2192.7	2191.3	2201.0	2211.4	2222.4
45°	2078.8	2078.1	2087.7	2098.1	2109.2
47.5°	1962.7	1961.4	1971.0	1982.1	1991.7
50°	1844.0	1842.6	1852.2	1863.3	1873.7
52.5°	1721.7	1721.7	1730.7	1740.4	1756.2
55°	1598.8	1596.7	1606.4	1617.4	1632.6
57.5°	1474.5	1471.7	1480.7	1491.7	1505.6
60°	1347.4	1344.6	1352.9	1364.0	1383.3
62.5°	1218.9	1214.8	1223.1	1233.4	1245.2
65°	1089.1	1085.0	1092.6	1102.2	1113.3
67.5°	958.6	953.7	961.3	969.6	980.0
70°	827.4	822.5	828.1	836.3	846.0
72.5°	696.8	692.0	696.8	700.3	712.0
75°	569.1	564.2	567.0	569.8	580.1
77.5°	444.8	439.9	445.5	446.8	453.0
80°	328.0	323.2	326.7	327.4	332.2
82.5°	221.7	217.5	222.4	218.9	223.1
85°	127.8	124.3	125.7	124.3	126.4
87.5°	50.4	47.7	48.3	45.6	45.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)