

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: P835072

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835072
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-LD4-4LO-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

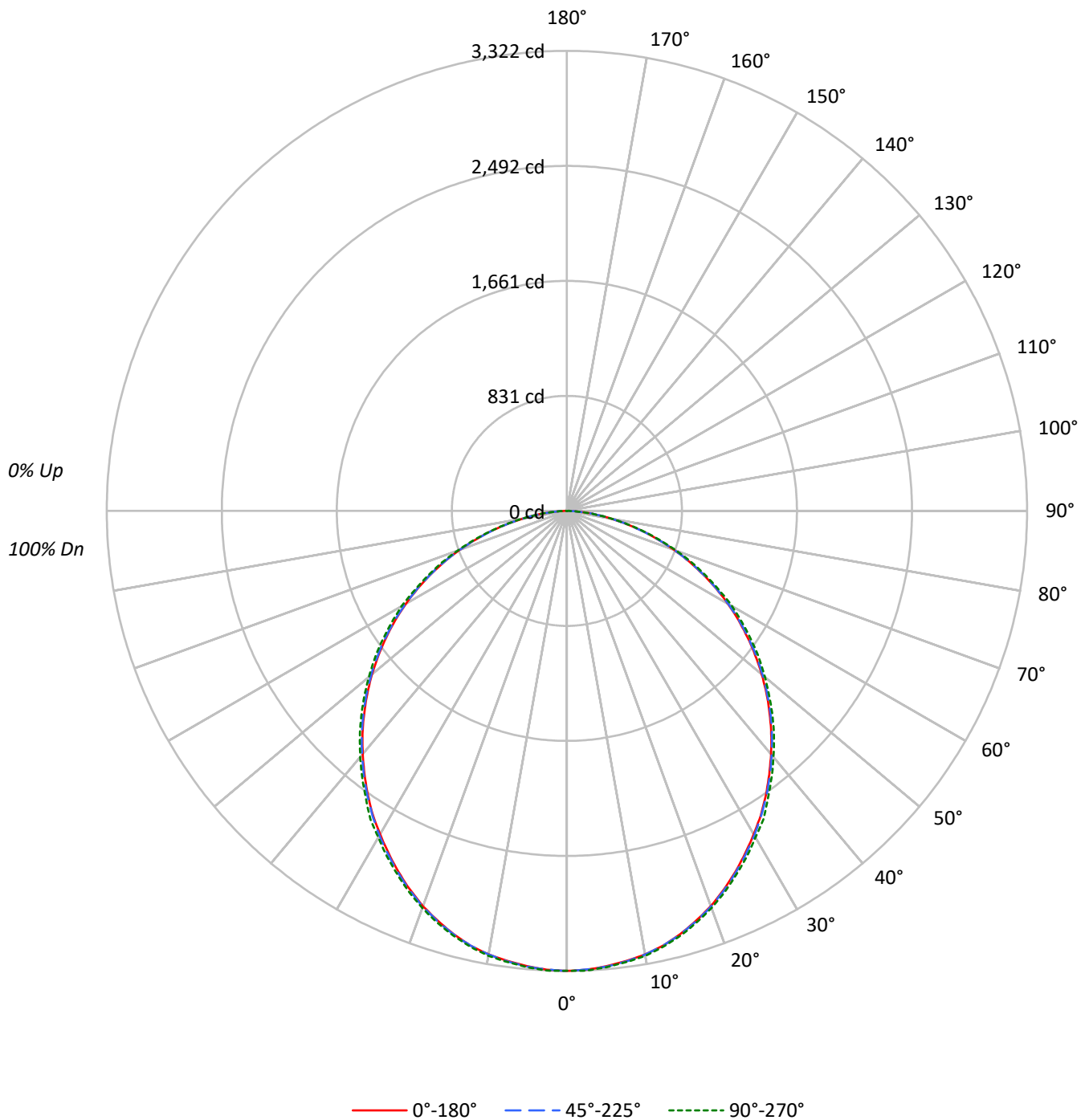
Lumens per Lamp: N/A
Luminaire Lumens: 8974.7 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 93.6
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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4469	4469	4469
5°	4457	4461	4466
10°	4443	4444	4457
15°	4406	4409	4422
20°	4349	4354	4370
25°	4270	4280	4300
30°	4190	4204	4230
35°	4114	4124	4157
40°	4027	4040	4076
45°	3938	3956	3996
50°	3843	3861	3905
55°	3734	3752	3813
60°	3610	3625	3707
65°	3452	3464	3529
70°	3241	3244	3314
75°	2946	2935	3003
80°	2531	2521	2563
85°	1964	1933	1942

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.9	3.5
10°-20°	892.8	9.9
20°-30°	1329.1	14.8
30°-40°	1571.8	17.5
40°-50°	1604.6	17.9
50°-60°	1432.0	16.0
60°-70°	1078.6	12.0
70°-80°	601.5	6.7
80°-90°	150.7	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°	2535.7	28.3
0°-40°	4107.5	45.8
0°-60°	7144.0	79.6
0°-90°	8974.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8974.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3321	3321	3321	3321	3321	
5°	3300	3306	3303	3304	3307	313
15°	3163	3167	3165	3168	3174	892
25°	2876	2880	2883	2891	2896	1325
35°	2504	2502	2511	2520	2531	1566
45°	2070	2069	2079	2089	2100	1597
55°	1592	1590	1600	1610	1626	1423
65°	1084	1080	1088	1098	1108	1073
75°	567	562	565	567	578	601
85°	127	124	125	124	126	153
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3321.4	3321.4	3321.4	3321.4	3321.4
2.5°	3315.9	3321.4	3314.5	3315.9	3322.1
5°	3300.1	3306.3	3302.8	3303.5	3306.9
7.5°	3278.1	3286.3	3281.5	3282.9	3286.3
10°	3251.9	3258.1	3252.6	3256.1	3262.2
12.5°	3214.8	3217.5	3214.8	3216.2	3223.0
15°	3163.2	3166.7	3165.3	3168.0	3174.2
17.5°	3102.7	3106.8	3106.1	3111.6	3116.5
20°	3037.4	3038.1	3040.8	3046.3	3051.8
22.5°	2960.4	2962.4	2965.2	2972.7	2978.2
25°	2876.5	2879.9	2883.3	2890.9	2896.4
27.5°	2787.8	2791.2	2796.0	2804.3	2813.2
30°	2697.0	2697.0	2705.9	2714.2	2722.4
32.5°	2605.5	2602.1	2610.3	2620.7	2640.6
35°	2504.4	2501.7	2510.6	2520.3	2530.6
37.5°	2399.2	2397.2	2407.5	2417.8	2427.4
40°	2292.6	2289.9	2300.2	2310.5	2320.8
42.5°	2183.3	2181.9	2191.6	2201.9	2212.9
45°	2069.8	2069.2	2078.8	2089.1	2100.1
47.5°	1954.3	1952.9	1962.6	1973.6	1983.2
50°	1836.0	1834.7	1844.3	1855.3	1865.6
52.5°	1714.3	1714.3	1723.3	1732.9	1748.7
55°	1591.9	1589.9	1599.5	1610.5	1625.6
57.5°	1468.1	1465.4	1474.3	1485.3	1499.1
60°	1341.6	1338.9	1347.1	1358.1	1377.4
62.5°	1213.7	1209.6	1217.8	1228.2	1239.8
65°	1084.4	1080.3	1087.9	1097.5	1108.5
67.5°	954.5	949.7	957.2	965.5	975.8
70°	823.8	819.0	824.5	832.8	842.4
72.5°	693.8	689.0	693.8	697.3	709.0
75°	566.6	561.8	564.6	567.3	577.6
77.5°	442.9	438.0	443.5	444.9	451.1
80°	326.6	321.8	325.3	325.9	330.8
82.5°	220.7	216.6	221.4	218.0	222.1
85°	127.2	123.8	125.2	123.8	125.8
87.5°	50.2	47.4	48.1	45.4	45.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)