

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: P835105

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835105
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-LD4-3LO-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

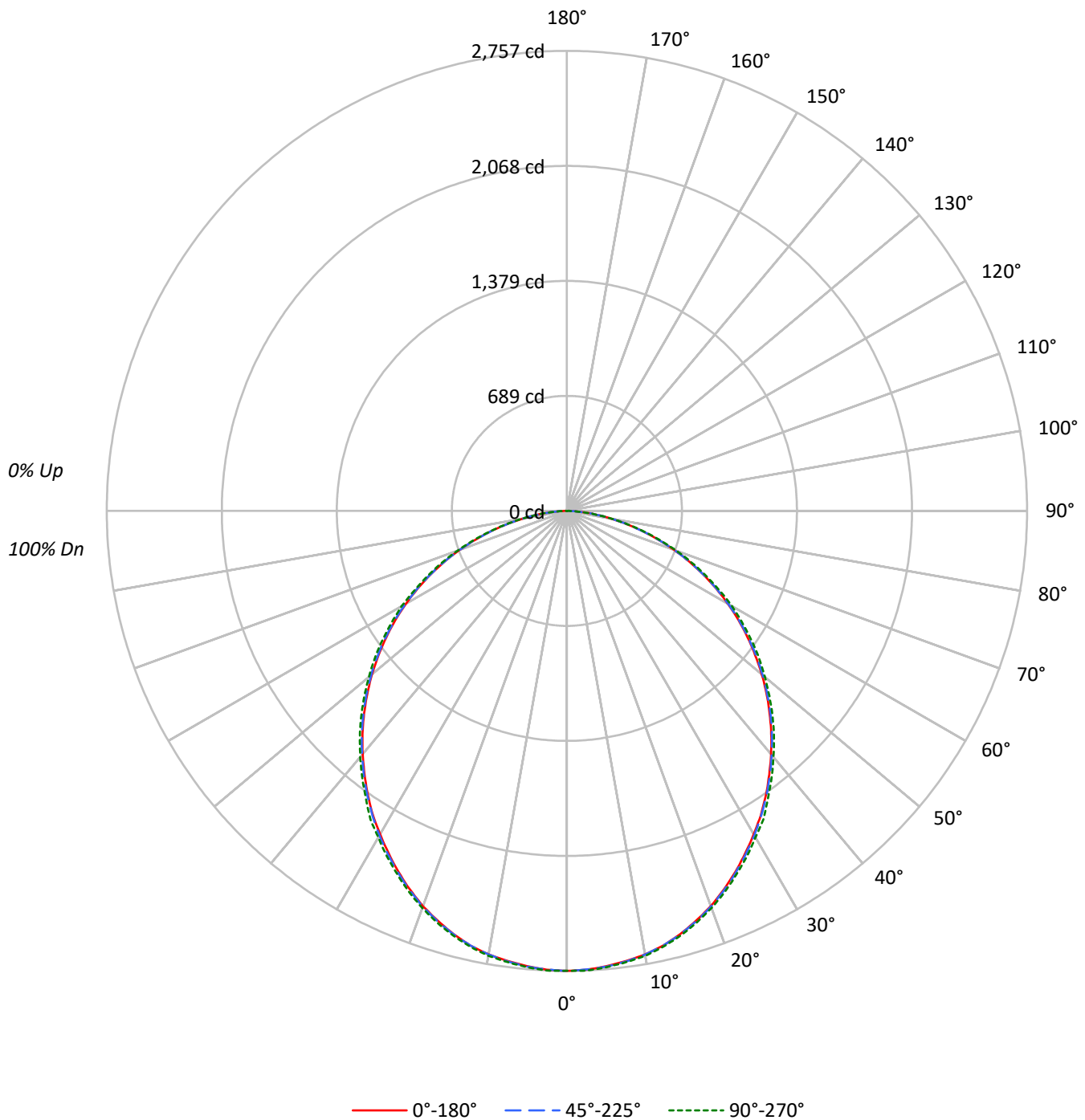
Lumens per Lamp: N/A
Luminaire Lumens: 7448.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	3709	3709	3709
5°	3699	3702	3707
10°	3687	3688	3699
15°	3657	3659	3670
20°	3610	3614	3627
25°	3544	3553	3569
30°	3478	3489	3510
35°	3414	3423	3450
40°	3342	3353	3383
45°	3269	3283	3317
50°	3190	3204	3241
55°	3099	3114	3165
60°	2996	3009	3076
65°	2865	2875	2929
70°	2690	2692	2750
75°	2445	2436	2492
80°	2101	2092	2127
85°	1630	1604	1612

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.5	3.5
10°-20°	741.0	9.9
20°-30°	1103.1	14.8
30°-40°	1304.5	17.5
40°-50°	1331.7	17.9
50°-60°	1188.5	16.0
60°-70°	895.2	12.0
70°-80°	499.2	6.7
80°-90°	125.1	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°	2104.5	28.3
0°-40°	3409.0	45.8
0°-60°	5929.2	79.6
0°-90°	7448.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7448.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2757	2757	2757	2757	2757	
5°	2739	2744	2741	2742	2745	260
15°	2625	2628	2627	2629	2634	740
25°	2387	2390	2393	2399	2404	1100
35°	2079	2076	2084	2092	2100	1300
45°	1718	1717	1725	1734	1743	1325
55°	1321	1320	1328	1337	1349	1181
65°	900	897	903	911	920	890
75°	470	466	469	471	479	499
85°	106	103	104	103	104	127
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2756.6	2756.6	2756.6	2756.6	2756.6
2.5°	2752.0	2756.6	2750.9	2752.0	2757.2
5°	2738.9	2744.0	2741.2	2741.8	2744.6
7.5°	2720.6	2727.5	2723.5	2724.6	2727.5
10°	2699.0	2704.1	2699.5	2702.4	2707.5
12.5°	2668.1	2670.4	2668.1	2669.3	2675.0
15°	2625.3	2628.2	2627.0	2629.3	2634.5
17.5°	2575.1	2578.5	2578.0	2582.5	2586.5
20°	2520.9	2521.5	2523.7	2528.3	2532.9
22.5°	2457.0	2458.7	2461.0	2467.2	2471.8
25°	2387.3	2390.2	2393.0	2399.3	2403.9
27.5°	2313.7	2316.6	2320.6	2327.4	2334.8
30°	2238.4	2238.4	2245.8	2252.7	2259.5
32.5°	2162.5	2159.6	2166.5	2175.0	2191.6
35°	2078.6	2076.3	2083.7	2091.7	2100.3
37.5°	1991.3	1989.5	1998.1	2006.7	2014.7
40°	1902.8	1900.5	1909.1	1917.6	1926.2
42.5°	1812.1	1810.9	1818.9	1827.5	1836.6
45°	1717.9	1717.3	1725.3	1733.9	1743.0
47.5°	1622.0	1620.9	1628.8	1638.0	1646.0
50°	1523.8	1522.7	1530.7	1539.8	1548.4
52.5°	1422.8	1422.8	1430.2	1438.2	1451.4
55°	1321.2	1319.5	1327.5	1336.6	1349.2
57.5°	1218.5	1216.2	1223.6	1232.8	1244.2
60°	1113.5	1111.2	1118.1	1127.2	1143.2
62.5°	1007.3	1003.9	1010.8	1019.3	1029.0
65°	900.0	896.6	902.9	910.9	920.0
67.5°	792.2	788.2	794.4	801.3	809.9
70°	683.7	679.7	684.3	691.1	699.1
72.5°	575.9	571.9	575.9	578.7	588.4
75°	470.3	466.3	468.6	470.8	479.4
77.5°	367.5	363.6	368.1	369.3	374.4
80°	271.1	267.1	270.0	270.5	274.5
82.5°	183.2	179.8	183.8	180.9	184.3
85°	105.6	102.7	103.9	102.7	104.4
87.5°	41.7	39.4	40.0	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)