

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: P835087

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3LO-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835087
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-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

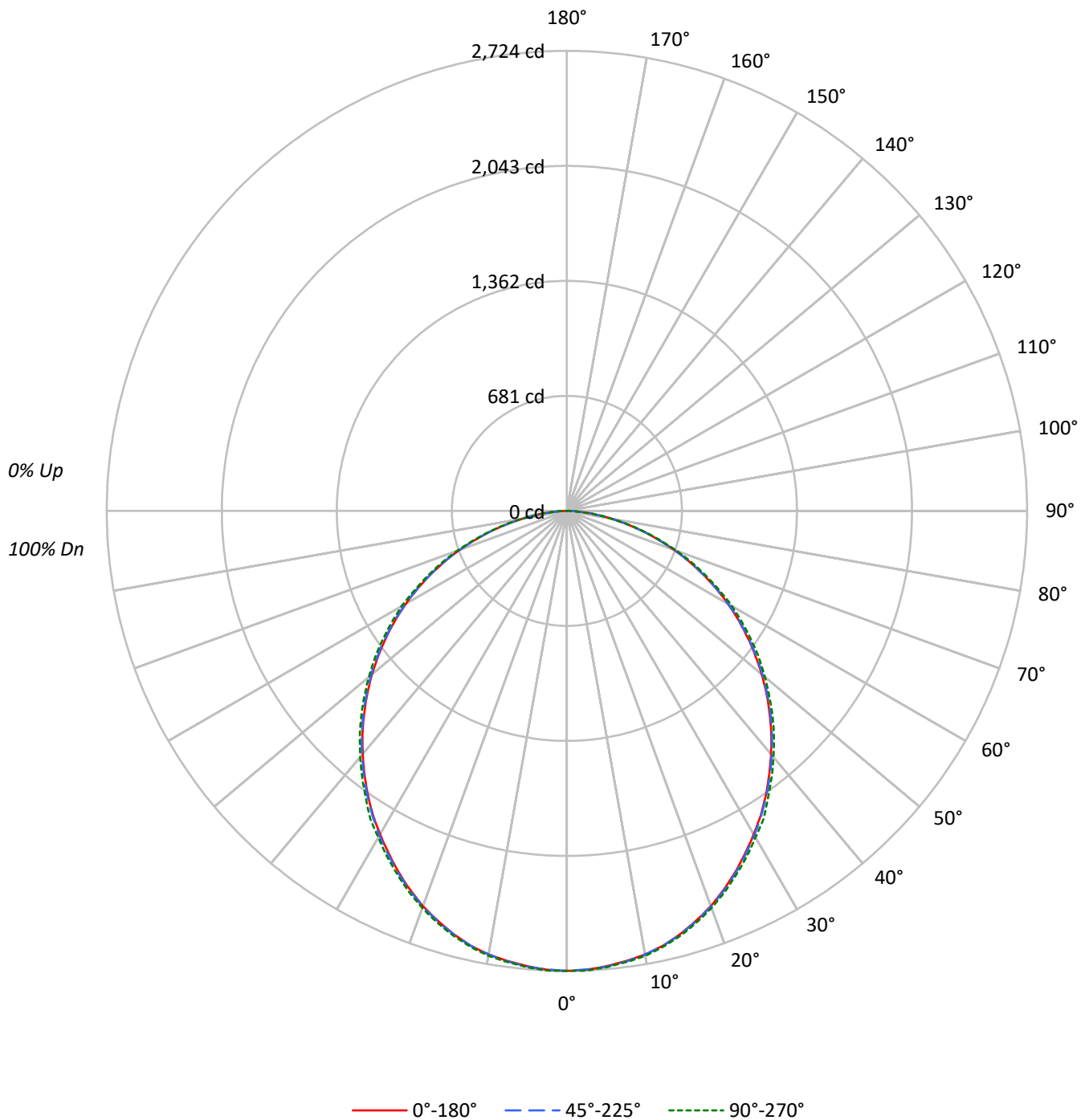
Lumens per Lamp: N/A
Luminaire Lumens: 7358.9 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3664	3664	3664
5°	3655	3658	3662
10°	3643	3644	3655
15°	3613	3615	3625
20°	3566	3570	3583
25°	3502	3510	3526
30°	3436	3447	3468
35°	3373	3381	3408
40°	3302	3313	3342
45°	3229	3243	3277
50°	3151	3165	3202
55°	3062	3077	3127
60°	2960	2972	3039
65°	2831	2840	2894
70°	2657	2660	2717
75°	2415	2406	2462
80°	2075	2066	2101
85°	1610	1584	1593

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.3	3.5
10°-20°	732.0	9.9
20°-30°	1089.8	14.8
30°-40°	1288.8	17.5
40°-50°	1315.7	17.9
50°-60°	1174.2	16.0
60°-70°	884.4	12.0
70°-80°	493.2	6.7
80°-90°	123.6	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°	2079.2	28.3
0°-40°	3368.0	45.8
0°-60°	5857.8	79.6
0°-90°	7358.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7358.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2723	2723	2723	2723	2723	
5°	2706	2711	2708	2709	2712	257
15°	2594	2596	2595	2598	2603	731
25°	2359	2361	2364	2370	2375	1087
35°	2054	2051	2059	2066	2075	1284
45°	1697	1697	1704	1713	1722	1309
55°	1305	1304	1312	1320	1333	1167
65°	889	886	892	900	909	879
75°	465	461	463	465	474	493
85°	104	102	103	102	103	125
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2723.4	2723.4	2723.4	2723.4	2723.4
2.5°	2718.9	2723.4	2717.8	2718.9	2724.0
5°	2705.9	2711.0	2708.2	2708.7	2711.5
7.5°	2687.9	2694.6	2690.7	2691.8	2694.6
10°	2666.4	2671.5	2667.0	2669.8	2674.9
12.5°	2636.0	2638.2	2636.0	2637.1	2642.8
15°	2593.7	2596.5	2595.4	2597.7	2602.7
17.5°	2544.1	2547.5	2546.9	2551.4	2555.4
20°	2490.5	2491.1	2493.3	2497.9	2502.4
22.5°	2427.4	2429.1	2431.3	2437.5	2442.0
25°	2358.6	2361.4	2364.2	2370.4	2374.9
27.5°	2285.8	2288.7	2292.6	2299.4	2306.7
30°	2211.4	2211.4	2218.7	2225.5	2232.3
32.5°	2136.4	2133.6	2140.4	2148.8	2165.2
35°	2053.5	2051.3	2058.6	2066.5	2075.0
37.5°	1967.3	1965.6	1974.0	1982.5	1990.4
40°	1879.9	1877.6	1886.1	1894.5	1903.0
42.5°	1790.2	1789.1	1797.0	1805.4	1814.5
45°	1697.2	1696.6	1704.5	1713.0	1722.0
47.5°	1602.5	1601.3	1609.2	1618.2	1626.1
50°	1505.5	1504.3	1512.2	1521.3	1529.7
52.5°	1405.7	1405.7	1413.0	1420.9	1433.9
55°	1305.3	1303.6	1311.5	1320.5	1332.9
57.5°	1203.8	1201.6	1208.9	1217.9	1229.2
60°	1100.1	1097.8	1104.6	1113.6	1129.4
62.5°	995.2	991.8	998.6	1007.0	1016.6
65°	889.2	885.8	892.0	899.9	908.9
67.5°	782.6	778.7	784.9	791.6	800.1
70°	675.5	671.5	676.1	682.8	690.7
72.5°	568.9	565.0	568.9	571.7	581.3
75°	464.6	460.7	462.9	465.2	473.6
77.5°	363.1	359.2	363.7	364.8	369.9
80°	267.8	263.9	266.7	267.3	271.2
82.5°	181.0	177.6	181.6	178.7	182.1
85°	104.3	101.5	102.6	101.5	103.2
87.5°	41.2	38.9	39.5	37.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)