

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: P834977

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2STD-30-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834977
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-LD4-2STD-30-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

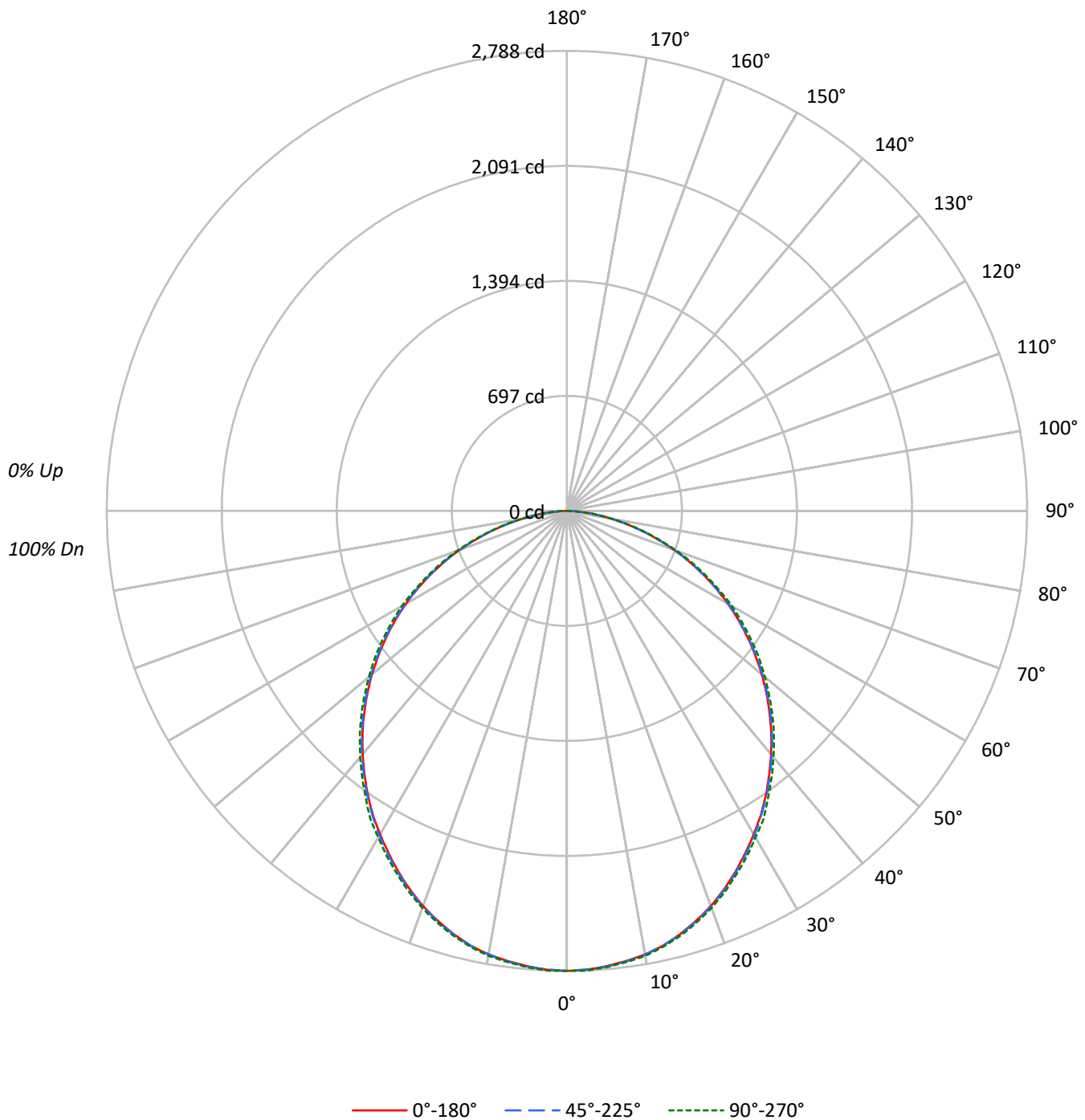
Lumens per Lamp: N/A
Luminaire Lumens: 7531.8 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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	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°	3750	3750	3750
5°	3741	3744	3748
10°	3729	3729	3741
15°	3698	3700	3711
20°	3650	3654	3667
25°	3584	3592	3609
30°	3517	3528	3550
35°	3452	3461	3488
40°	3379	3391	3421
45°	3305	3320	3354
50°	3225	3240	3277
55°	3134	3149	3200
60°	3030	3042	3111
65°	2897	2907	2962
70°	2720	2722	2781
75°	2472	2463	2520
80°	2124	2115	2151
85°	1649	1621	1630

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.4	3.5
10°-20°	749.2	9.9
20°-30°	1115.4	14.8
30°-40°	1319.1	17.5
40°-50°	1346.6	17.9
50°-60°	1201.8	16.0
60°-70°	905.1	12.0
70°-80°	504.8	6.7
80°-90°	126.5	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°	2128.0	28.3
0°-40°	3447.1	45.8
0°-60°	5995.4	79.6
0°-90°	7531.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7531.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2787	2787	2787	2787	2787	
5°	2770	2775	2772	2772	2775	263
15°	2655	2658	2656	2659	2664	748
25°	2414	2417	2420	2426	2431	1112
35°	2102	2100	2107	2115	2124	1314
45°	1737	1736	1745	1753	1762	1340
55°	1336	1334	1342	1352	1364	1194
65°	910	907	913	921	930	900
75°	476	472	474	476	485	504
85°	107	104	105	104	106	128
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2787.4	2787.4	2787.4	2787.4	2787.4
2.5°	2782.8	2787.4	2781.6	2782.8	2788.0
5°	2769.5	2774.7	2771.8	2772.4	2775.3
7.5°	2751.0	2758.0	2753.9	2755.1	2758.0
10°	2729.1	2734.3	2729.7	2732.6	2737.8
12.5°	2697.9	2700.2	2697.9	2699.1	2704.9
15°	2654.6	2657.5	2656.4	2658.7	2663.9
17.5°	2603.9	2607.3	2606.8	2611.4	2615.4
20°	2549.0	2549.6	2551.9	2556.5	2561.2
22.5°	2484.4	2486.1	2488.4	2494.8	2499.4
25°	2414.0	2416.9	2419.8	2426.1	2430.7
27.5°	2339.6	2342.4	2346.5	2353.4	2360.9
30°	2263.4	2263.4	2270.9	2277.8	2284.7
32.5°	2186.6	2183.7	2190.7	2199.3	2216.1
35°	2101.8	2099.5	2107.0	2115.1	2123.7
37.5°	2013.5	2011.8	2020.4	2029.1	2037.2
40°	1924.0	1921.7	1930.4	1939.0	1947.7
42.5°	1832.3	1831.1	1839.2	1847.9	1857.1
45°	1737.1	1736.5	1744.6	1753.2	1762.5
47.5°	1640.1	1639.0	1647.0	1656.3	1664.3
50°	1540.9	1539.7	1547.8	1557.0	1565.7
52.5°	1438.7	1438.7	1446.2	1454.3	1467.6
55°	1336.0	1334.3	1342.3	1351.6	1364.3
57.5°	1232.1	1229.8	1237.3	1246.5	1258.1
60°	1125.9	1123.6	1130.5	1139.8	1155.9
62.5°	1018.6	1015.1	1022.0	1030.7	1040.5
65°	910.1	906.6	913.0	921.0	930.3
67.5°	801.0	797.0	803.3	810.2	818.9
70°	691.4	687.3	691.9	698.9	706.9
72.5°	582.3	578.3	582.3	585.2	595.0
75°	475.5	471.5	473.8	476.1	484.8
77.5°	371.7	367.6	372.2	373.4	378.6
80°	274.1	270.1	273.0	273.5	277.6
82.5°	185.2	181.8	185.8	182.9	186.4
85°	106.8	103.9	105.0	103.9	105.6
87.5°	42.1	39.8	40.4	38.1	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)