

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: P834959

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2STD-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834959
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-27-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

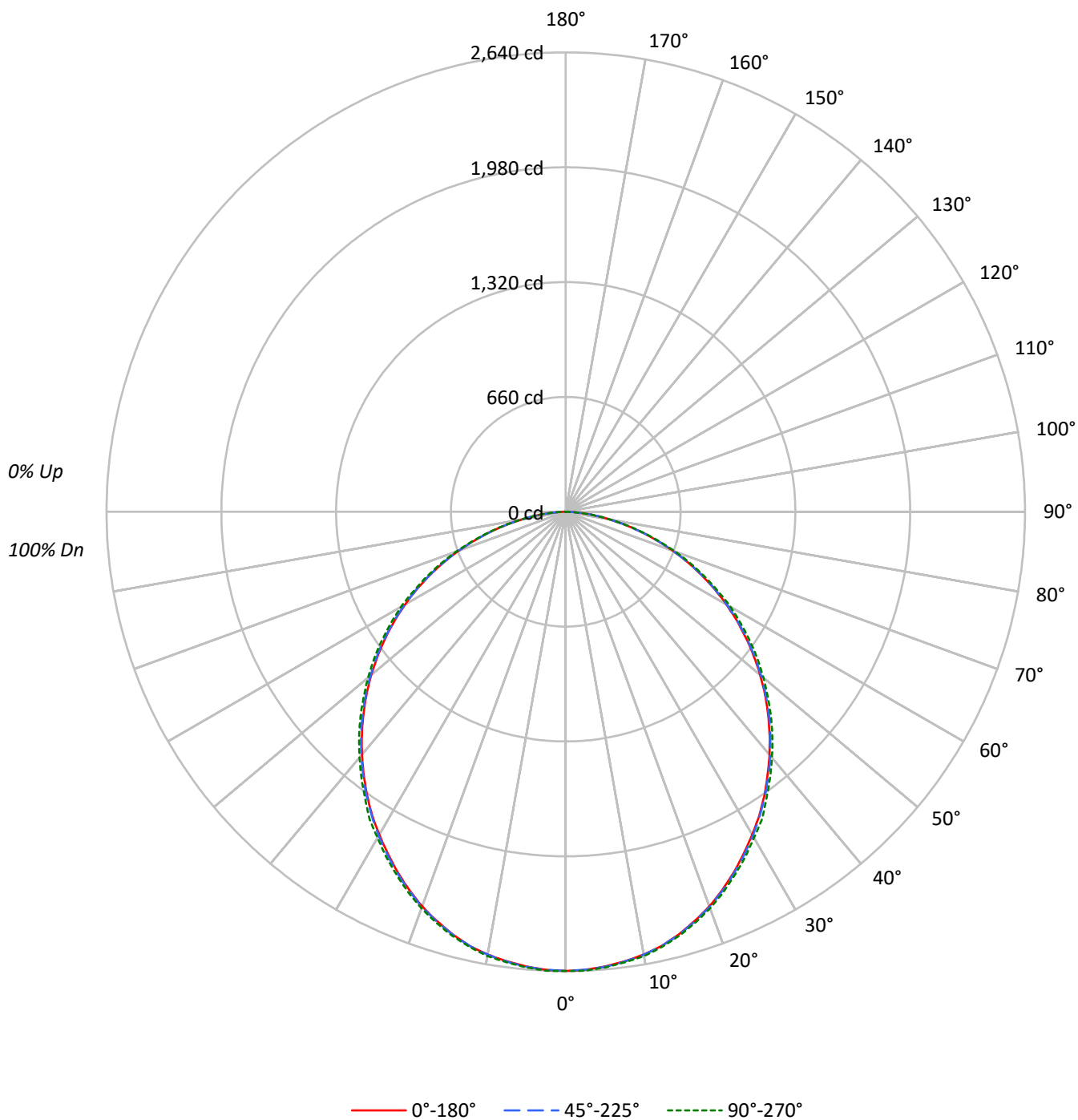
Lumens per Lamp: N/A
Luminaire Lumens: 7131.2 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

1121 Highway 74 South

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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°	3551	3551	3551
5°	3542	3545	3549
10°	3530	3531	3541
15°	3501	3503	3513
20°	3456	3460	3472
25°	3393	3401	3417
30°	3329	3340	3361
35°	3269	3277	3303
40°	3200	3210	3239
45°	3130	3143	3175
50°	3054	3067	3103
55°	2967	2981	3030
60°	2869	2880	2945
65°	2743	2752	2804
70°	2575	2577	2633
75°	2340	2332	2386
80°	2011	2002	2036
85°	1561	1535	1544

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.4	3.5
10°-20°	709.4	9.9
20°-30°	1056.1	14.8
30°-40°	1248.9	17.5
40°-50°	1275.0	17.9
50°-60°	1137.8	16.0
60°-70°	857.0	12.0
70°-80°	477.9	6.7
80°-90°	119.7	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°	2014.8	28.3
0°-40°	3263.7	45.8
0°-60°	5676.5	79.6
0°-90°	7131.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7131.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2639	2639	2639	2639	2639	
5°	2622	2627	2624	2625	2628	249
15°	2513	2516	2515	2517	2522	708
25°	2286	2288	2291	2297	2301	1053
35°	1990	1988	1995	2003	2011	1244
45°	1645	1644	1652	1660	1669	1269
55°	1265	1263	1271	1280	1292	1131
65°	862	858	864	872	881	852
75°	450	446	449	451	459	477
85°	101	98	99	98	100	121
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2639.1	2639.1	2639.1	2639.1	2639.1
2.5°	2634.7	2639.1	2633.7	2634.7	2639.7
5°	2622.2	2627.1	2624.4	2624.9	2627.6
7.5°	2604.7	2611.3	2607.4	2608.5	2611.3
10°	2583.9	2588.8	2584.5	2587.2	2592.1
12.5°	2554.4	2556.6	2554.4	2555.5	2561.0
15°	2513.4	2516.2	2515.1	2517.3	2522.2
17.5°	2465.4	2468.6	2468.1	2472.5	2476.3
20°	2413.5	2414.0	2416.2	2420.6	2424.9
22.5°	2352.3	2353.9	2356.1	2362.1	2366.5
25°	2285.6	2288.3	2291.1	2297.1	2301.4
27.5°	2215.1	2217.8	2221.7	2228.2	2235.3
30°	2143.0	2143.0	2150.1	2156.6	2163.2
32.5°	2070.3	2067.6	2074.1	2082.3	2098.2
35°	1990.0	1987.8	1994.9	2002.6	2010.8
37.5°	1906.4	1904.8	1913.0	1921.1	1928.8
40°	1821.7	1819.5	1827.7	1835.9	1844.1
42.5°	1734.8	1733.7	1741.4	1749.6	1758.3
45°	1644.7	1644.1	1651.8	1660.0	1668.7
47.5°	1552.9	1551.8	1559.4	1568.2	1575.8
50°	1458.9	1457.8	1465.4	1474.2	1482.4
52.5°	1362.2	1362.2	1369.3	1376.9	1389.5
55°	1264.9	1263.3	1270.9	1279.7	1291.7
57.5°	1166.6	1164.4	1171.5	1180.2	1191.2
60°	1066.0	1063.8	1070.4	1079.1	1094.4
62.5°	964.4	961.1	967.7	975.9	985.2
65°	861.7	858.4	864.4	872.1	880.8
67.5°	758.4	754.6	760.6	767.1	775.3
70°	654.6	650.8	655.1	661.7	669.3
72.5°	551.3	547.5	551.3	554.1	563.3
75°	450.2	446.4	448.6	450.8	459.0
77.5°	351.9	348.1	352.4	353.5	358.4
80°	259.5	255.7	258.4	259.0	262.8
82.5°	175.4	172.1	175.9	173.2	176.5
85°	101.1	98.4	99.4	98.4	100.0
87.5°	39.9	37.7	38.2	36.1	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)