

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: P835632

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835632
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-4HI-30-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

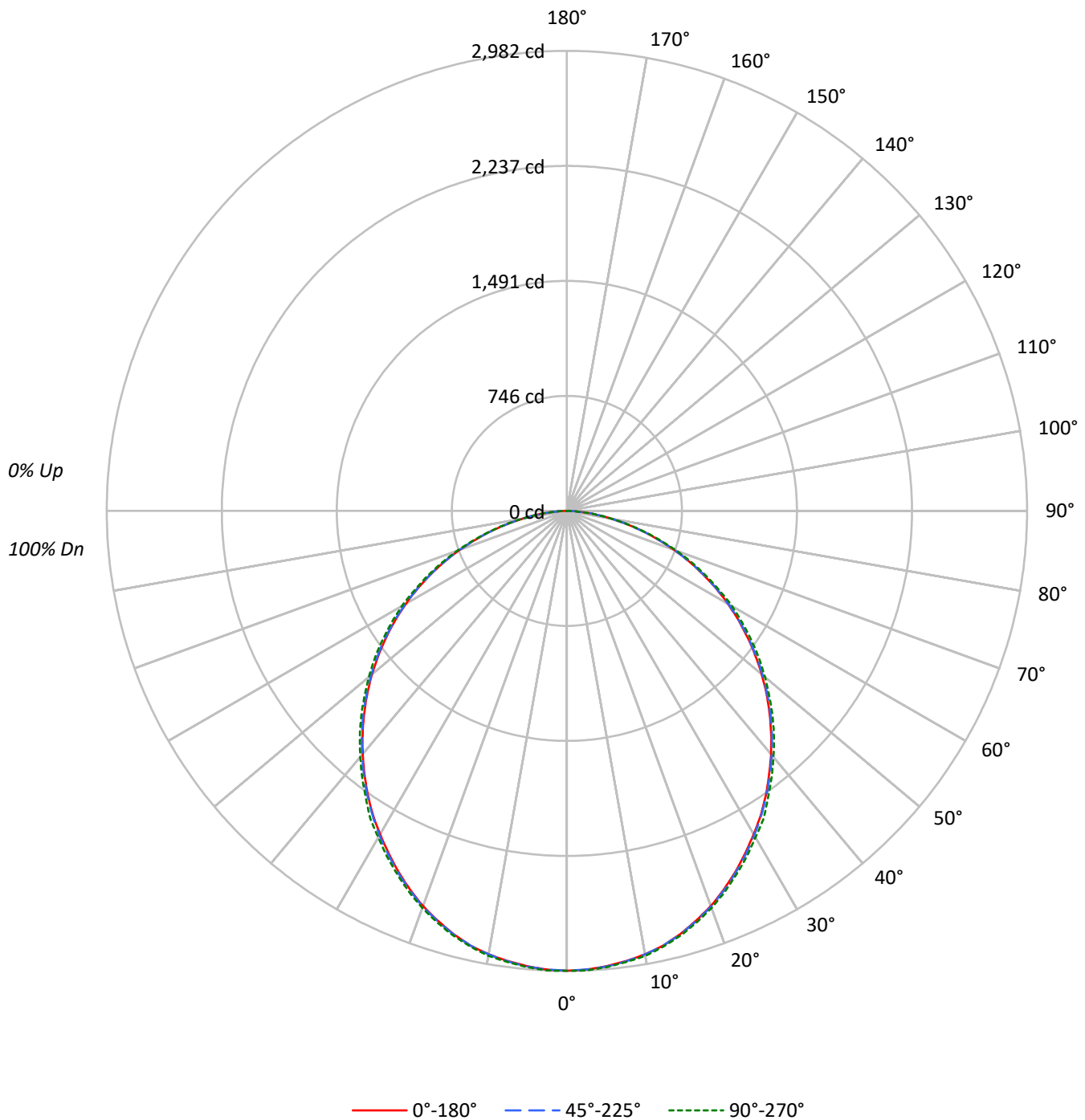
Lumens per Lamp: N/A
Luminaire Lumens: 8054.9 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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	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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8022	8022	8022
5°	8001	8007	8017
10°	7975	7977	8000
15°	7909	7914	7937
20°	7807	7816	7844
25°	7665	7684	7719
30°	7521	7546	7592
35°	7384	7402	7461
40°	7228	7252	7317
45°	7070	7100	7173
50°	6899	6930	7010
55°	6703	6735	6845
60°	6480	6507	6653
65°	6197	6217	6335
70°	5818	5822	5948
75°	5288	5268	5390
80°	4544	4523	4601
85°	3526	3467	3486



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.7	3.5
10°-20°	801.3	9.9
20°-30°	1192.9	14.8
30°-40°	1410.7	17.5
40°-50°	1440.1	17.9
50°-60°	1285.2	16.0
60°-70°	968.0	12.0
70°-80°	539.8	6.7
80°-90°	135.2	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°	2275.8	28.3
0°-40°	3686.5	45.8
0°-60°	6411.8	79.6
0°-90°	8054.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8054.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2981	2981	2981	2981	2981	
5°	2962	2967	2964	2965	2968	281
15°	2839	2842	2841	2843	2849	800
25°	2582	2585	2588	2595	2600	1189
35°	2248	2245	2253	2262	2271	1406
45°	1858	1857	1866	1875	1885	1433
55°	1429	1427	1436	1445	1459	1277
65°	973	970	976	985	995	963
75°	509	504	507	509	518	539
85°	114	111	112	111	113	137
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2981.0	2981.0	2981.0	2981.0	2981.0
2.5°	2976.0	2981.0	2974.8	2976.0	2981.6
5°	2961.8	2967.4	2964.3	2964.9	2968.0
7.5°	2942.1	2949.5	2945.2	2946.4	2949.5
10°	2918.6	2924.2	2919.3	2922.3	2927.9
12.5°	2885.3	2887.8	2885.3	2886.5	2892.7
15°	2839.0	2842.1	2840.9	2843.3	2848.9
17.5°	2784.7	2788.4	2787.8	2792.7	2797.1
20°	2726.1	2726.7	2729.2	2734.1	2739.0
22.5°	2657.0	2658.8	2661.3	2668.1	2673.0
25°	2581.7	2584.7	2587.8	2594.6	2599.6
27.5°	2502.0	2505.1	2509.4	2516.9	2524.9
30°	2420.6	2420.6	2428.6	2436.0	2443.4
32.5°	2338.5	2335.4	2342.8	2352.1	2370.0
35°	2247.8	2245.3	2253.3	2262.0	2271.2
37.5°	2153.3	2151.5	2160.7	2170.0	2178.6
40°	2057.7	2055.2	2064.5	2073.7	2083.0
42.5°	1959.5	1958.3	1966.9	1976.2	1986.1
45°	1857.7	1857.1	1865.7	1875.0	1884.9
47.5°	1754.0	1752.8	1761.4	1771.3	1779.9
50°	1647.9	1646.6	1655.3	1665.1	1674.4
52.5°	1538.6	1538.6	1546.6	1555.3	1569.5
55°	1428.8	1426.9	1435.6	1445.4	1459.0
57.5°	1317.7	1315.2	1323.2	1333.1	1345.4
60°	1204.1	1201.6	1209.1	1218.9	1236.2
62.5°	1089.3	1085.6	1093.0	1102.3	1112.8
65°	973.3	969.6	976.4	985.0	994.9
67.5°	856.6	852.3	859.1	866.5	875.8
70°	739.4	735.1	740.0	747.4	756.0
72.5°	622.7	618.4	622.7	625.8	636.3
75°	508.6	504.2	506.7	509.2	518.4
77.5°	397.5	393.1	398.1	399.3	404.9
80°	293.2	288.8	291.9	292.5	296.9
82.5°	198.1	194.4	198.7	195.6	199.3
85°	114.2	111.1	112.3	111.1	112.9
87.5°	45.1	42.6	43.2	40.7	40.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)