

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: P835057

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835057
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-LD4-5LO-20-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

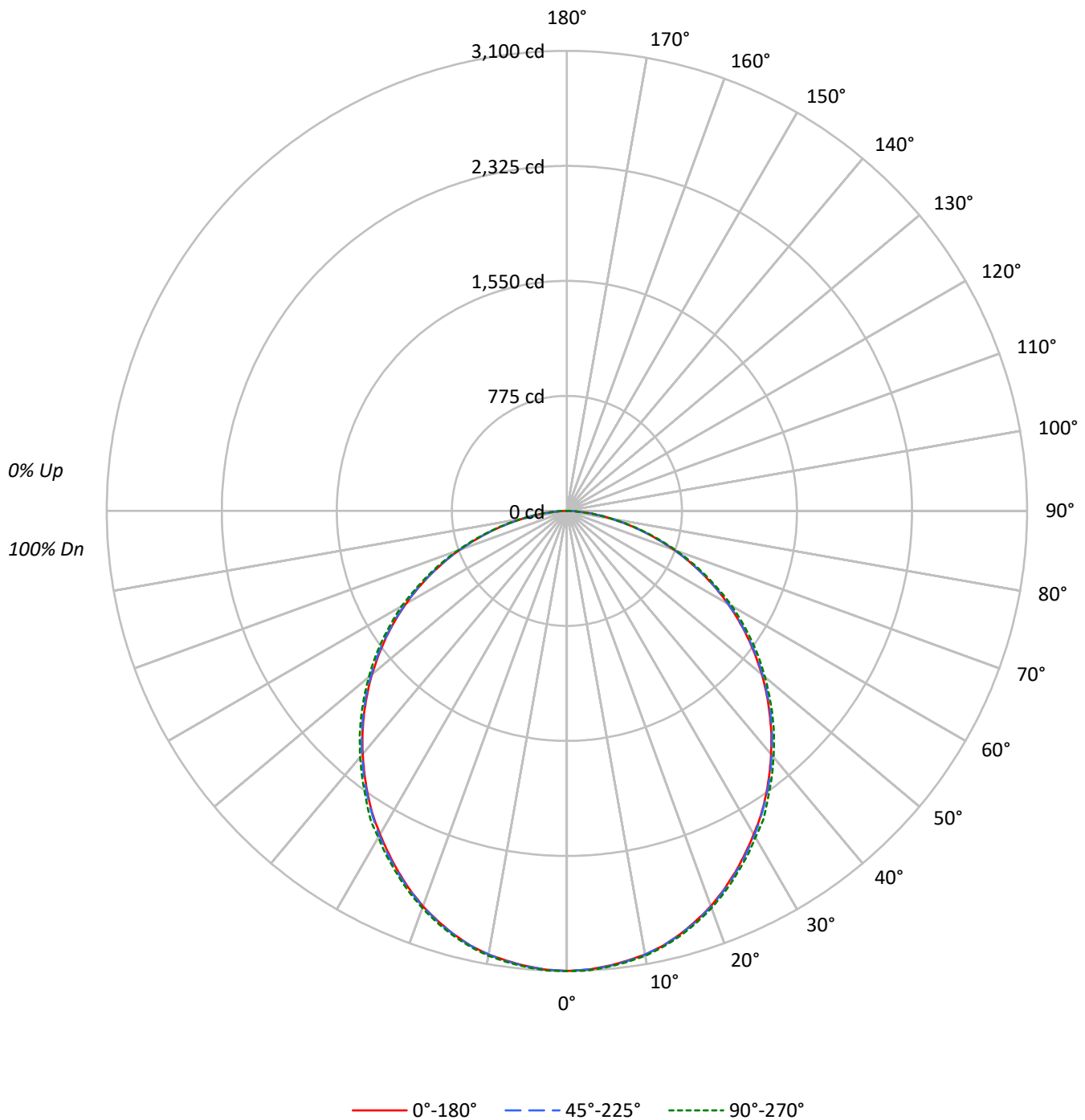
Lumens per Lamp: N/A
Luminaire Lumens: 8376.2 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 117
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°	4171	4171	4171
5°	4160	4163	4169
10°	4147	4148	4160
15°	4112	4115	4127
20°	4059	4064	4078
25°	3986	3995	4013
30°	3911	3924	3948
35°	3839	3849	3879
40°	3758	3771	3805
45°	3676	3692	3730
50°	3587	3603	3645
55°	3485	3502	3559
60°	3369	3383	3459
65°	3222	3232	3294
70°	3025	3027	3093
75°	2749	2739	2803
80°	2362	2352	2392
85°	1832	1803	1812

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.9	3.5
10°-20°	833.2	9.9
20°-30°	1240.4	14.8
30°-40°	1466.9	17.5
40°-50°	1497.5	17.9
50°-60°	1336.5	16.0
60°-70°	1006.6	12.0
70°-80°	561.4	6.7
80°-90°	140.6	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°	2366.6	28.3
0°-40°	3833.5	45.8
0°-60°	6667.5	79.6
0°-90°	8376.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8376.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3100	3100	3100	3100	3100	
5°	3080	3086	3082	3083	3086	293
15°	2952	2956	2954	2957	2962	832
25°	2685	2688	2691	2698	2703	1237
35°	2337	2335	2343	2352	2362	1462
45°	1932	1931	1940	1950	1960	1490
55°	1486	1484	1493	1503	1517	1328
65°	1012	1008	1015	1024	1035	1001
75°	529	524	527	530	539	561
85°	119	116	117	116	117	143
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3099.9	3099.9	3099.9	3099.9	3099.9
2.5°	3094.7	3099.9	3093.4	3094.7	3100.5
5°	3080.0	3085.7	3082.5	3083.2	3086.4
7.5°	3059.4	3067.1	3062.6	3063.9	3067.1
10°	3035.0	3040.8	3035.7	3038.9	3044.7
12.5°	3000.4	3002.9	3000.4	3001.7	3008.1
15°	2952.2	2955.5	2954.2	2956.7	2962.5
17.5°	2895.8	2899.6	2899.0	2904.1	2908.6
20°	2834.8	2835.4	2838.0	2843.1	2848.3
22.5°	2762.9	2764.8	2767.4	2774.5	2779.6
25°	2684.6	2687.8	2691.0	2698.1	2703.2
27.5°	2601.8	2605.0	2609.5	2617.2	2625.6
30°	2517.1	2517.1	2525.5	2533.2	2540.9
32.5°	2431.8	2428.5	2436.2	2445.9	2464.5
35°	2337.4	2334.8	2343.2	2352.2	2361.8
37.5°	2239.2	2237.3	2246.9	2256.5	2265.5
40°	2139.7	2137.2	2146.8	2156.4	2166.1
42.5°	2037.7	2036.4	2045.4	2055.0	2065.3
45°	1931.8	1931.2	1940.1	1949.8	1960.0
47.5°	1824.0	1822.7	1831.7	1841.9	1850.9
50°	1713.6	1712.3	1721.3	1731.6	1741.2
52.5°	1600.0	1600.0	1608.3	1617.3	1632.1
55°	1485.8	1483.8	1492.8	1503.1	1517.2
57.5°	1370.2	1367.7	1376.0	1386.3	1399.1
60°	1252.1	1249.6	1257.3	1267.5	1285.5
62.5°	1132.8	1128.9	1136.6	1146.2	1157.2
65°	1012.1	1008.3	1015.3	1024.3	1034.6
67.5°	890.8	886.3	893.4	901.1	910.7
70°	768.9	764.4	769.5	777.2	786.2
72.5°	647.6	643.1	647.6	650.8	661.7
75°	528.8	524.3	526.9	529.5	539.1
77.5°	413.3	408.8	414.0	415.2	421.0
80°	304.9	300.4	303.6	304.2	308.7
82.5°	206.0	202.2	206.7	203.4	207.3
85°	118.7	115.5	116.8	115.5	117.4
87.5°	46.9	44.3	44.9	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)