

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: P835108

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835108
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-LD4-4LO-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

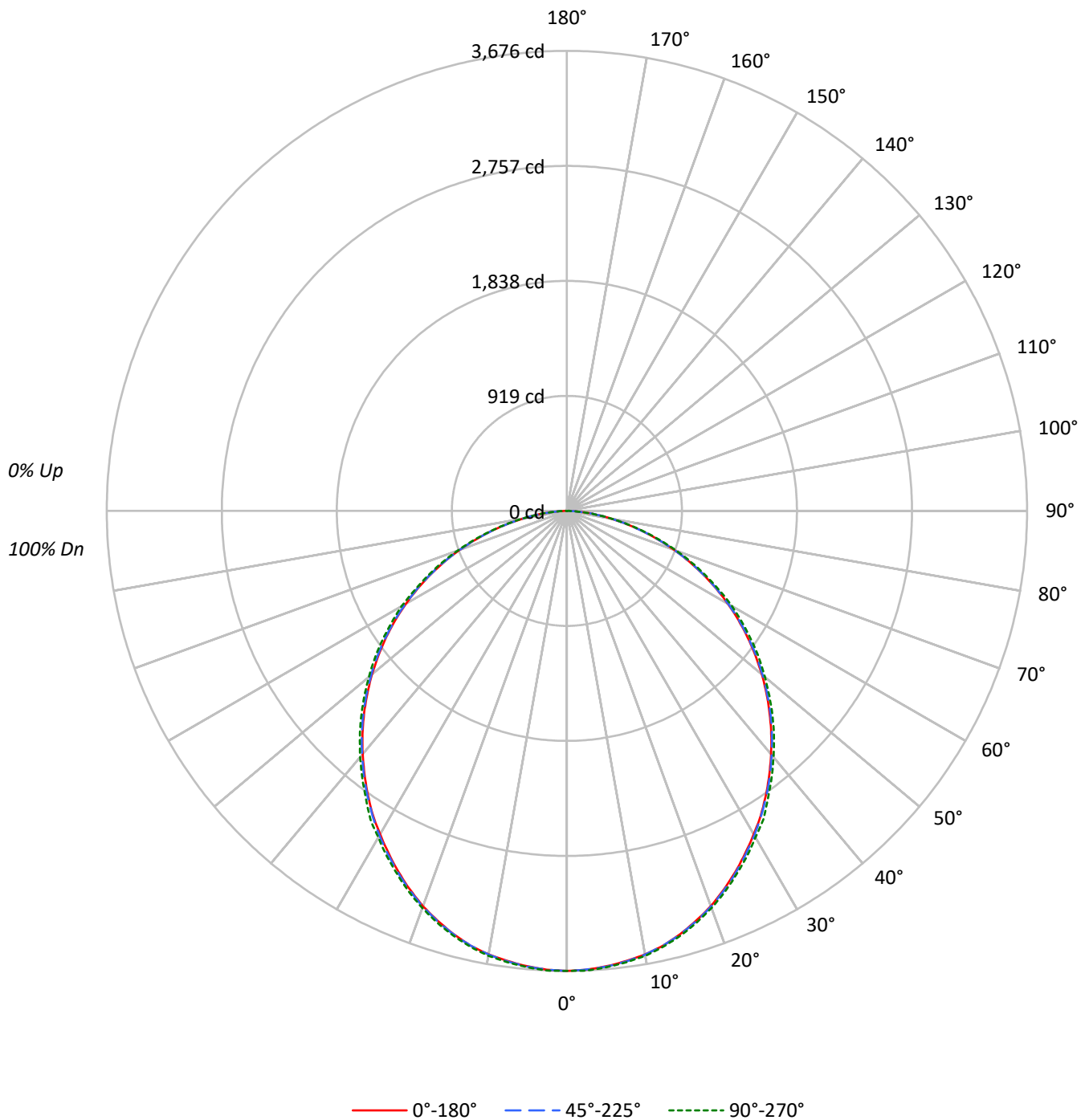
Lumens per Lamp: N/A
Luminaire Lumens: 9932.1 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 93.6
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	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°	4946	4946	4946
5°	4933	4937	4943
10°	4917	4918	4932
15°	4876	4879	4893
20°	4813	4818	4836
25°	4726	4737	4759
30°	4637	4653	4681
35°	4552	4564	4600
40°	4456	4471	4511
45°	4359	4377	4422
50°	4253	4272	4322
55°	4133	4152	4220
60°	3995	4012	4102
65°	3821	3833	3905
70°	3587	3589	3667
75°	3260	3248	3323
80°	2801	2789	2836
85°	2174	2138	2150

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.3	3.5
10°-20°	988.0	9.9
20°-30°	1470.9	14.8
30°-40°	1739.4	17.5
40°-50°	1775.7	17.9
50°-60°	1584.7	16.0
60°-70°	1193.6	12.0
70°-80°	665.6	6.7
80°-90°	166.8	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°	2806.2	28.3
0°-40°	4545.6	45.8
0°-60°	7906.1	79.6
0°-90°	9932.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9932.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3676	3676	3676	3676	3676	
5°	3652	3659	3655	3656	3660	347
15°	3501	3504	3503	3506	3513	987
25°	3183	3187	3191	3199	3205	1466
35°	2772	2768	2778	2789	2800	1733
45°	2291	2290	2300	2312	2324	1767
55°	1762	1759	1770	1782	1799	1575
65°	1200	1196	1204	1215	1227	1187
75°	627	622	625	628	639	665
85°	141	137	138	137	139	169
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3675.7	3675.7	3675.7	3675.7	3675.7
2.5°	3669.6	3675.7	3668.1	3669.6	3676.4
5°	3652.1	3658.9	3655.1	3655.9	3659.7
7.5°	3627.7	3636.9	3631.5	3633.0	3636.9
10°	3598.8	3605.7	3599.6	3603.4	3610.2
12.5°	3557.7	3560.8	3557.7	3559.2	3566.8
15°	3500.6	3504.4	3502.9	3506.0	3512.8
17.5°	3433.7	3438.2	3437.5	3443.6	3448.9
20°	3361.4	3362.1	3365.2	3371.3	3377.3
22.5°	3276.1	3278.4	3281.5	3289.8	3295.9
25°	3183.3	3187.1	3190.9	3199.3	3205.4
27.5°	3085.1	3088.9	3094.3	3103.4	3113.3
30°	2984.7	2984.7	2994.6	3003.7	3012.8
32.5°	2883.5	2879.7	2888.8	2900.2	2922.3
35°	2771.6	2768.5	2778.4	2789.1	2800.5
37.5°	2655.2	2652.9	2664.3	2675.7	2686.4
40°	2537.2	2534.2	2545.6	2557.0	2568.4
42.5°	2416.2	2414.7	2425.3	2436.7	2448.9
45°	2290.6	2289.9	2300.5	2311.9	2324.1
47.5°	2162.8	2161.3	2171.9	2184.1	2194.7
50°	2031.9	2030.4	2041.0	2053.2	2064.6
52.5°	1897.2	1897.2	1907.1	1917.7	1935.2
55°	1761.7	1759.4	1770.1	1782.3	1799.0
57.5°	1624.8	1621.7	1631.6	1643.8	1659.0
60°	1484.7	1481.7	1490.8	1503.0	1524.3
62.5°	1343.2	1338.6	1347.7	1359.2	1372.1
65°	1200.1	1195.5	1203.9	1214.6	1226.7
67.5°	1056.3	1051.0	1059.3	1068.5	1079.9
70°	911.7	906.4	912.4	921.6	932.2
72.5°	767.9	762.5	767.9	771.7	784.6
75°	627.1	621.7	624.8	627.8	639.2
77.5°	490.1	484.8	490.8	492.4	499.2
80°	361.5	356.2	360.0	360.7	366.0
82.5°	244.3	239.7	245.0	241.2	245.8
85°	140.8	137.0	138.5	137.0	139.3
87.5°	55.6	52.5	53.3	50.2	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)