

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: P835090

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4LO-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835090
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-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

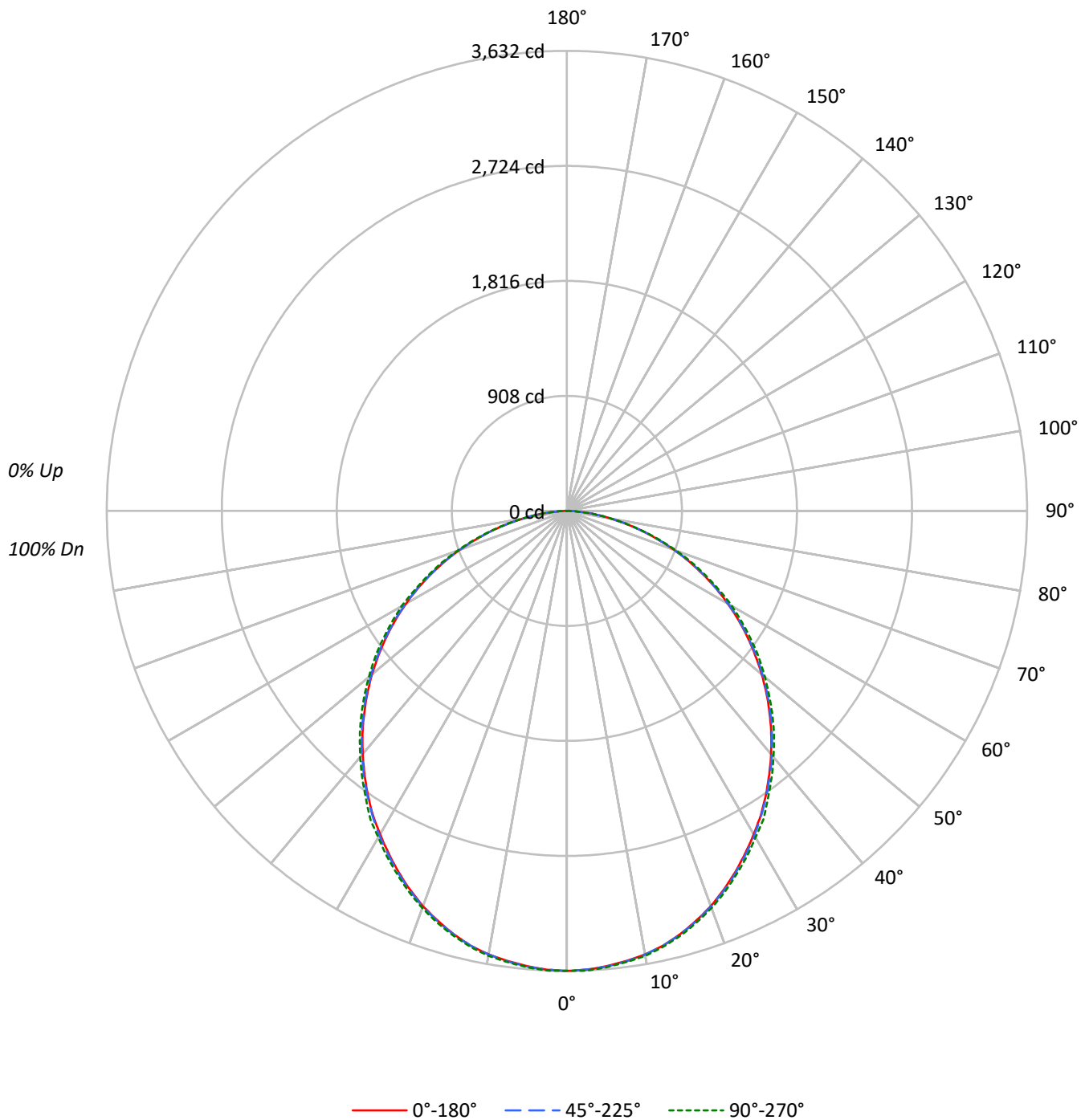
Lumens per Lamp: N/A
Luminaire Lumens: 9812.4 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4886	4886	4886
5°	4873	4877	4883
10°	4858	4859	4873
15°	4818	4821	4834
20°	4755	4760	4778
25°	4669	4680	4701
30°	4581	4596	4624
35°	4498	4509	4545
40°	4403	4417	4457
45°	4306	4325	4369
50°	4202	4221	4270
55°	4083	4102	4169
60°	3947	3964	4052
65°	3775	3787	3859
70°	3543	3546	3623
75°	3221	3209	3283
80°	2767	2755	2802
85°	2147	2112	2124

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.2	3.5
10°-20°	976.1	9.9
20°-30°	1453.1	14.8
30°-40°	1718.5	17.5
40°-50°	1754.3	17.9
50°-60°	1565.6	16.0
60°-70°	1179.2	12.0
70°-80°	657.6	6.7
80°-90°	164.7	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°	2772.4	28.3
0°-40°	4490.9	45.8
0°-60°	7810.8	79.6
0°-90°	9812.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9812.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3631	3631	3631	3631	3631	
5°	3608	3615	3611	3612	3616	343
15°	3458	3462	3461	3464	3470	975
25°	3145	3149	3152	3161	3167	1449
35°	2738	2735	2745	2756	2767	1712
45°	2263	2262	2273	2284	2296	1746
55°	1740	1738	1749	1761	1777	1556
65°	1186	1181	1189	1200	1212	1173
75°	620	614	617	620	632	657
85°	139	135	137	135	138	167
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3631.4	3631.4	3631.4	3631.4	3631.4
2.5°	3625.4	3631.4	3623.9	3625.4	3632.1
5°	3608.1	3614.8	3611.1	3611.8	3615.6
7.5°	3584.0	3593.0	3587.8	3589.3	3593.0
10°	3555.4	3562.2	3556.2	3560.0	3566.7
12.5°	3514.8	3517.9	3514.8	3516.3	3523.9
15°	3458.5	3462.2	3460.7	3463.7	3470.5
17.5°	3392.3	3396.8	3396.1	3402.1	3407.3
20°	3320.9	3321.6	3324.6	3330.6	3336.7
22.5°	3236.7	3238.9	3241.9	3250.2	3256.2
25°	3144.9	3148.7	3152.5	3160.7	3166.7
27.5°	3048.0	3051.7	3057.0	3066.0	3075.8
30°	2948.7	2948.7	2958.5	2967.5	2976.5
32.5°	2848.7	2845.0	2854.0	2865.3	2887.1
35°	2738.2	2735.2	2745.0	2755.5	2766.8
37.5°	2623.2	2620.9	2632.2	2643.5	2654.0
40°	2506.6	2503.6	2514.9	2526.2	2537.5
42.5°	2387.1	2385.6	2396.1	2407.4	2419.4
45°	2263.0	2262.3	2272.8	2284.1	2296.1
47.5°	2136.7	2135.2	2145.7	2157.8	2168.3
50°	2007.4	2005.9	2016.4	2028.5	2039.7
52.5°	1874.3	1874.3	1884.1	1894.6	1911.9
55°	1740.5	1738.3	1748.8	1760.8	1777.3
57.5°	1605.2	1602.2	1611.9	1624.0	1639.0
60°	1466.8	1463.8	1472.9	1484.9	1505.9
62.5°	1327.0	1322.5	1331.5	1342.8	1355.6
65°	1185.6	1181.1	1189.4	1199.9	1212.0
67.5°	1043.6	1038.3	1046.6	1055.6	1066.9
70°	900.7	895.4	901.5	910.5	921.0
72.5°	758.6	753.3	758.6	762.4	775.1
75°	619.5	614.3	617.3	620.3	631.5
77.5°	484.2	478.9	484.9	486.4	493.2
80°	357.1	351.9	355.6	356.4	361.6
82.5°	241.3	236.8	242.1	238.3	242.8
85°	139.1	135.3	136.8	135.3	137.6
87.5°	54.9	51.9	52.6	49.6	49.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)