

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: P835088

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3STD-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835088
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-LD4-3STD-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

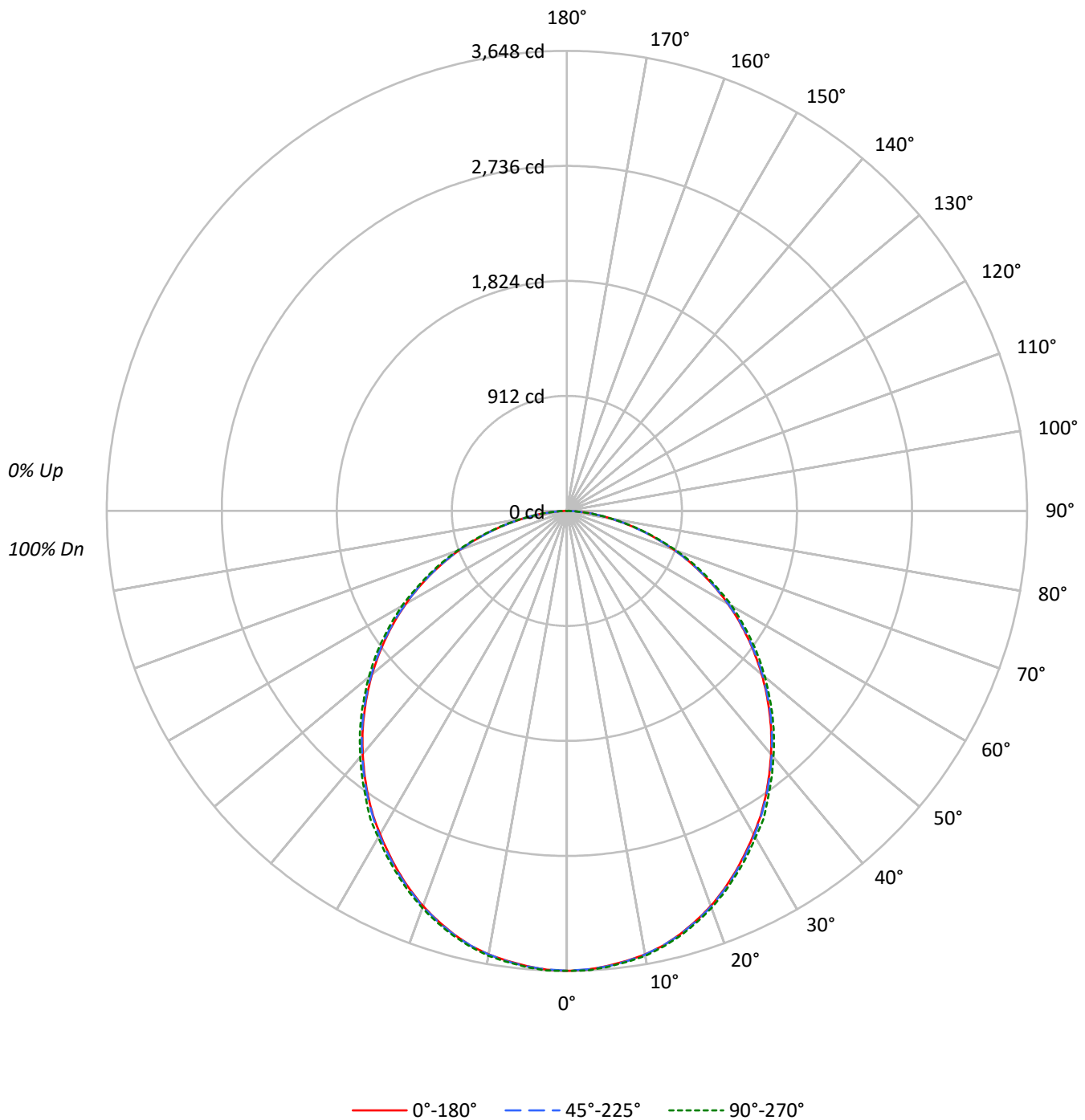
Lumens per Lamp: N/A
Luminaire Lumens: 9854.7 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	4907	4907	4907
5°	4894	4898	4904
10°	4879	4880	4894
15°	4838	4841	4855
20°	4775	4781	4798
25°	4689	4700	4722
30°	4601	4616	4644
35°	4517	4528	4564
40°	4422	4436	4476
45°	4325	4343	4388
50°	4220	4239	4288
55°	4100	4120	4187
60°	3964	3980	4070
65°	3791	3803	3875
70°	3559	3561	3639
75°	3235	3223	3297
80°	2779	2768	2814
85°	2157	2121	2133

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.6	3.5
10°-20°	980.3	9.9
20°-30°	1459.4	14.8
30°-40°	1725.9	17.5
40°-50°	1761.9	17.9
50°-60°	1572.4	16.0
60°-70°	1184.3	12.0
70°-80°	660.5	6.7
80°-90°	165.5	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°	2784.3	28.3
0°-40°	4510.2	45.8
0°-60°	7844.4	79.6
0°-90°	9854.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9854.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3647	3647	3647	3647	3647	
5°	3624	3630	3627	3627	3631	344
15°	3473	3477	3476	3479	3485	979
25°	3158	3162	3166	3174	3180	1455
35°	2750	2747	2757	2767	2779	1720
45°	2273	2272	2283	2294	2306	1753
55°	1748	1746	1756	1768	1785	1563
65°	1191	1186	1194	1205	1217	1178
75°	622	617	620	623	634	660
85°	140	136	137	136	138	168
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3647.0	3647.0	3647.0	3647.0	3647.0
2.5°	3641.0	3647.0	3639.5	3641.0	3647.8
5°	3623.6	3630.4	3626.6	3627.4	3631.2
7.5°	3599.5	3608.5	3603.2	3604.7	3608.5
10°	3570.8	3577.6	3571.5	3575.3	3582.1
12.5°	3530.0	3533.0	3530.0	3531.5	3539.1
15°	3473.4	3477.1	3475.6	3478.6	3485.4
17.5°	3406.9	3411.4	3410.7	3416.7	3422.0
20°	3335.2	3335.9	3339.0	3345.0	3351.0
22.5°	3250.6	3252.9	3255.9	3264.2	3270.2
25°	3158.5	3162.3	3166.0	3174.4	3180.4
27.5°	3061.1	3064.9	3070.1	3079.2	3089.0
30°	2961.4	2961.4	2971.2	2980.3	2989.4
32.5°	2861.0	2857.2	2866.3	2877.6	2899.5
35°	2750.0	2747.0	2756.8	2767.4	2778.7
37.5°	2634.5	2632.2	2643.5	2654.9	2665.4
40°	2517.4	2514.4	2525.7	2537.1	2548.4
42.5°	2397.4	2395.9	2406.4	2417.8	2429.8
45°	2272.8	2272.0	2282.6	2293.9	2306.0
47.5°	2145.9	2144.4	2155.0	2167.1	2177.6
50°	2016.1	2014.5	2025.1	2037.2	2048.5
52.5°	1882.4	1882.4	1892.2	1902.8	1920.2
55°	1748.0	1745.7	1756.3	1768.4	1785.0
57.5°	1612.1	1609.1	1618.9	1631.0	1646.1
60°	1473.2	1470.1	1479.2	1491.3	1512.4
62.5°	1332.7	1328.2	1337.2	1348.6	1361.4
65°	1190.8	1186.2	1194.5	1205.1	1217.2
67.5°	1048.0	1042.8	1051.1	1060.1	1071.5
70°	904.6	899.3	905.3	914.4	925.0
72.5°	761.9	756.6	761.9	765.6	778.5
75°	622.2	616.9	619.9	622.9	634.3
77.5°	486.3	481.0	487.0	488.5	495.3
80°	358.7	353.4	357.2	357.9	363.2
82.5°	242.4	237.8	243.1	239.4	243.9
85°	139.7	135.9	137.4	135.9	138.2
87.5°	55.1	52.1	52.9	49.8	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)