

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: P835012

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2LO-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835012
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-LD4-2LO-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

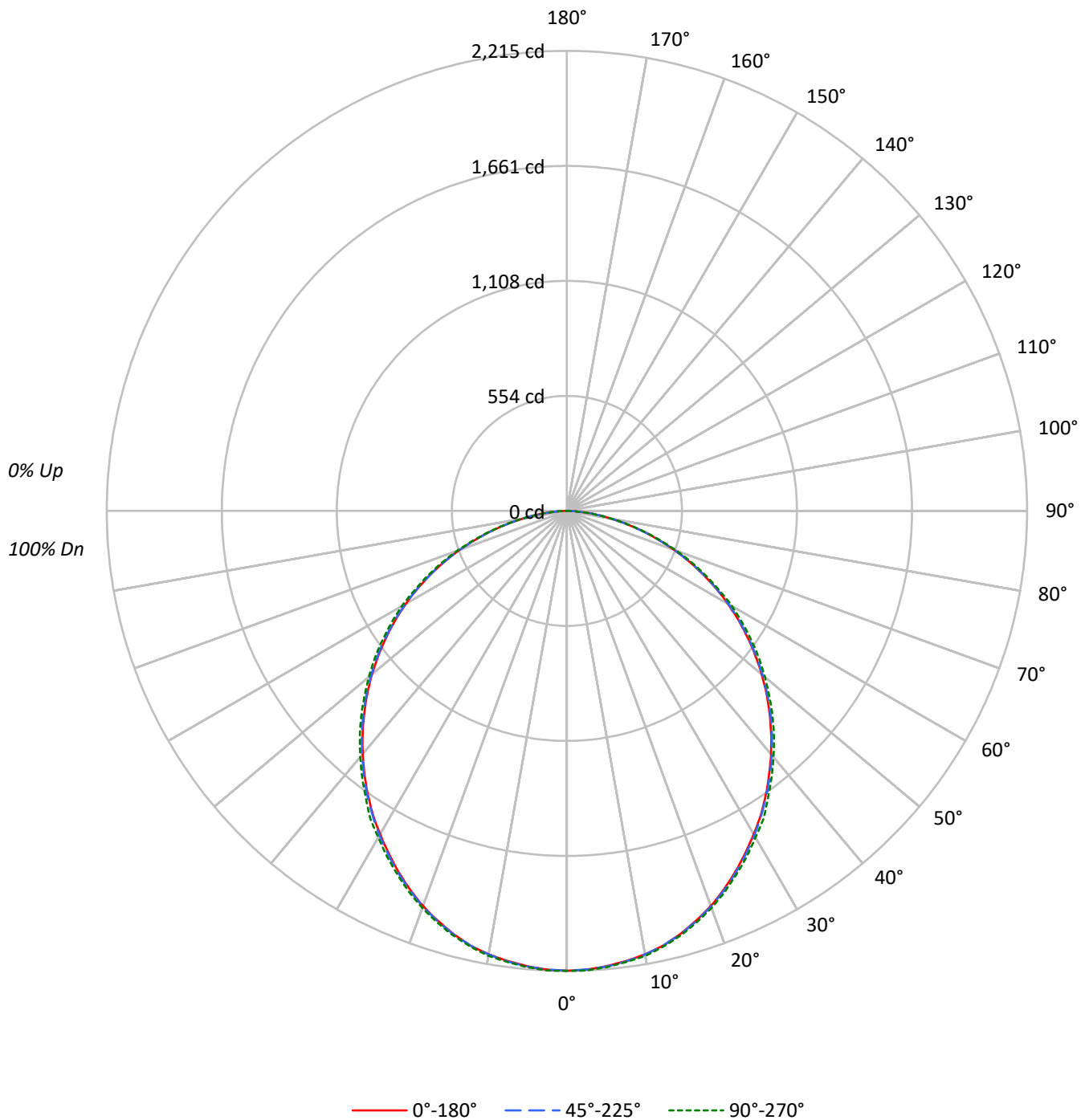
Lumens per Lamp: N/A
Luminaire Lumens: 5983.2 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2979	2979	2979
5°	2971	2974	2978
10°	2962	2963	2971
15°	2937	2939	2948
20°	2899	2903	2913
25°	2847	2854	2867
30°	2793	2803	2820
35°	2742	2749	2771
40°	2684	2693	2718
45°	2626	2637	2664
50°	2562	2574	2603
55°	2490	2501	2542
60°	2407	2417	2471
65°	2302	2309	2353
70°	2161	2162	2209
75°	1964	1957	2002
80°	1688	1680	1709
85°	1309	1288	1295

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	3.5
10°-20°	595.2	9.9
20°-30°	886.1	14.8
30°-40°	1047.8	17.5
40°-50°	1069.7	17.9
50°-60°	954.6	16.0
60°-70°	719.0	12.0
70°-80°	401.0	6.7
80°-90°	100.5	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°	1690.5	28.3
0°-40°	2738.3	45.8
0°-60°	4762.7	79.6
0°-90°	5983.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5983.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2214	2214	2214	2214	2214	
5°	2200	2204	2202	2202	2205	209
15°	2109	2111	2110	2112	2116	594
25°	1918	1920	1922	1927	1931	883
35°	1670	1668	1674	1680	1687	1044
45°	1380	1379	1386	1393	1400	1064
55°	1061	1060	1066	1074	1084	949
65°	723	720	725	732	739	715
75°	378	374	376	378	385	400
85°	85	82	83	82	84	102
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2214.3	2214.3	2214.3	2214.3	2214.3
2.5°	2210.6	2214.3	2209.7	2210.6	2214.7
5°	2200.0	2204.2	2201.9	2202.3	2204.6
7.5°	2185.4	2190.9	2187.7	2188.6	2190.9
10°	2168.0	2172.1	2168.4	2170.7	2174.8
12.5°	2143.2	2145.0	2143.2	2144.1	2148.7
15°	2108.8	2111.1	2110.2	2112.0	2116.2
17.5°	2068.5	2071.2	2070.8	2074.4	2077.6
20°	2024.9	2025.4	2027.2	2030.9	2034.5
22.5°	1973.6	1975.0	1976.8	1981.8	1985.5
25°	1917.6	1919.9	1922.2	1927.3	1930.9
27.5°	1858.5	1860.8	1864.0	1869.5	1875.5
30°	1798.0	1798.0	1804.0	1809.5	1815.0
32.5°	1737.0	1734.7	1740.2	1747.1	1760.4
35°	1669.6	1667.8	1673.8	1680.2	1687.1
37.5°	1599.5	1598.1	1605.0	1611.9	1618.3
40°	1528.4	1526.6	1533.5	1540.4	1547.2
42.5°	1455.5	1454.6	1461.0	1467.9	1475.3
45°	1379.9	1379.4	1385.9	1392.7	1400.1
47.5°	1302.9	1302.0	1308.4	1315.7	1322.1
50°	1224.0	1223.1	1229.5	1236.9	1243.7
52.5°	1142.9	1142.9	1148.8	1155.3	1165.8
55°	1061.3	1059.9	1066.3	1073.7	1083.7
57.5°	978.8	976.9	982.9	990.2	999.4
60°	894.4	892.6	898.1	905.4	918.3
62.5°	809.1	806.4	811.9	818.8	826.6
65°	723.0	720.2	725.2	731.7	739.0
67.5°	636.3	633.1	638.1	643.6	650.5
70°	549.2	546.0	549.7	555.2	561.6
72.5°	462.6	459.4	462.6	464.9	472.6
75°	377.8	374.5	376.4	378.2	385.1
77.5°	295.2	292.0	295.7	296.6	300.7
80°	217.8	214.5	216.8	217.3	220.5
82.5°	147.2	144.4	147.6	145.3	148.1
85°	84.8	82.5	83.4	82.5	83.9
87.5°	33.5	31.6	32.1	30.3	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)