

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: P835598

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5STD-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835598
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-5STD-20-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

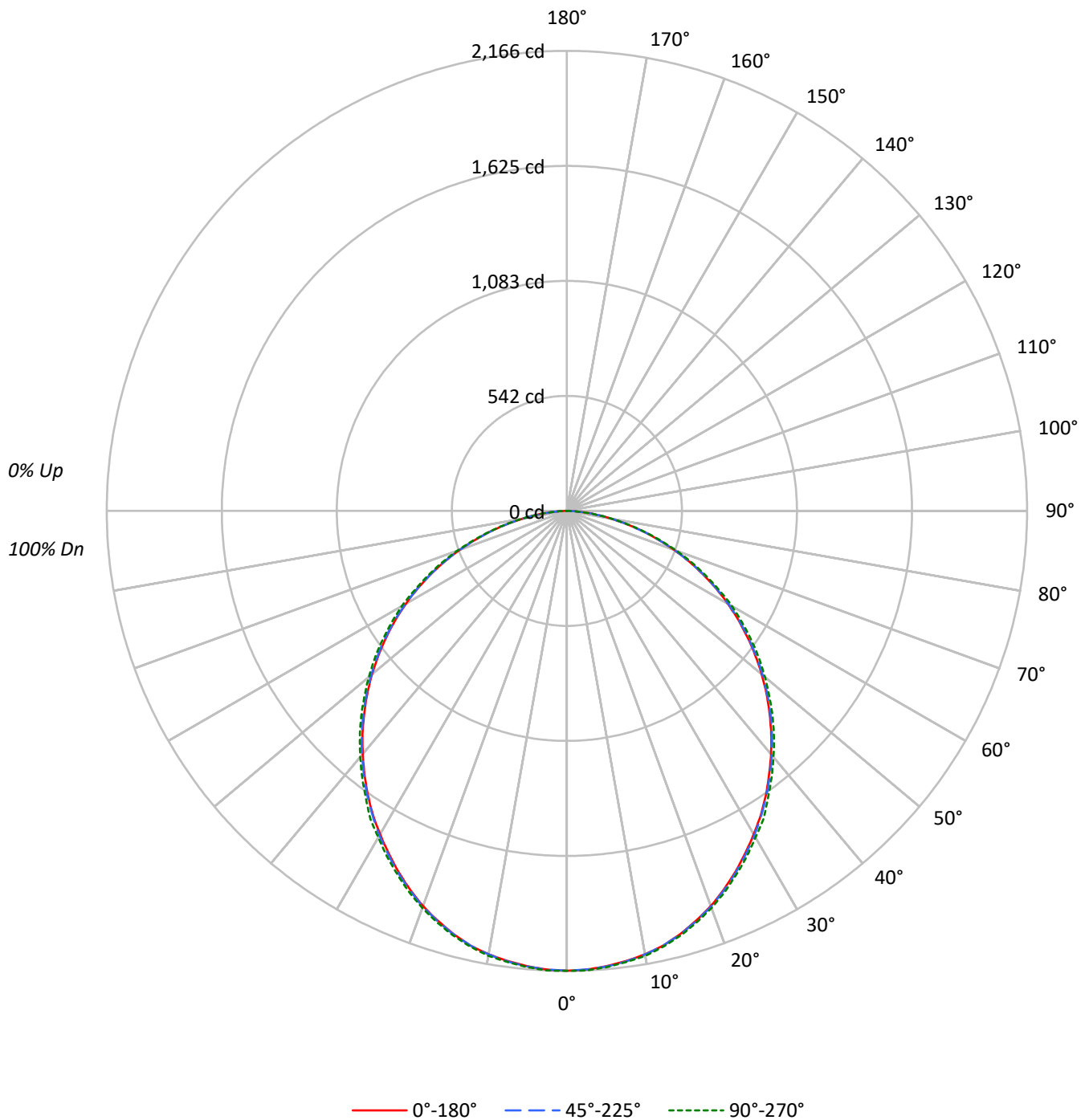
Lumens per Lamp: N/A
Luminaire Lumens: 5851.0 lumens
Efficiency: N/A
Efficacy: 70.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 83.2
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	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°	5827	5827	5827
5°	5811	5816	5824
10°	5793	5794	5811
15°	5745	5749	5765
20°	5671	5677	5698
25°	5568	5581	5607
30°	5464	5482	5515
35°	5364	5377	5420
40°	5251	5268	5315
45°	5135	5157	5210
50°	5011	5034	5092
55°	4869	4892	4972
60°	4707	4726	4833
65°	4502	4516	4602
70°	4226	4229	4321
75°	3841	3827	3916
80°	3299	3285	3341
85°	2560	2519	2532

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.6	3.5
10°-20°	582.0	9.9
20°-30°	866.5	14.8
30°-40°	1024.7	17.5
40°-50°	1046.1	17.9
50°-60°	933.5	16.0
60°-70°	703.1	12.0
70°-80°	392.1	6.7
80°-90°	98.2	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°	1653.1	28.3
0°-40°	2677.8	45.8
0°-60°	4657.4	79.6
0°-90°	5851.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2151	2156	2153	2154	2156	204
15°	2062	2064	2064	2065	2069	581
25°	1875	1878	1880	1885	1888	864
35°	1633	1631	1637	1643	1650	1021
45°	1349	1349	1355	1362	1369	1041
55°	1038	1036	1043	1050	1060	928
65°	707	704	709	716	723	699
75°	369	366	368	370	377	392
85°	83	81	82	81	82	100
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2165.3	2165.3	2165.3	2165.3	2165.3
2.5°	2161.7	2165.3	2160.8	2161.7	2165.8
5°	2151.4	2155.5	2153.2	2153.7	2155.9
7.5°	2137.1	2142.5	2139.3	2140.2	2142.5
10°	2120.0	2124.1	2120.5	2122.7	2126.8
12.5°	2095.8	2097.6	2095.8	2096.7	2101.2
15°	2062.2	2064.5	2063.6	2065.3	2069.4
17.5°	2022.8	2025.5	2025.0	2028.6	2031.7
20°	1980.2	1980.6	1982.4	1986.0	1989.6
22.5°	1930.0	1931.3	1933.1	1938.0	1941.6
25°	1875.3	1877.5	1879.8	1884.7	1888.3
27.5°	1817.4	1819.7	1822.8	1828.2	1834.0
30°	1758.3	1758.3	1764.1	1769.5	1774.8
32.5°	1698.6	1696.4	1701.8	1708.5	1721.5
35°	1632.7	1630.9	1636.8	1643.0	1649.8
37.5°	1564.1	1562.8	1569.5	1576.2	1582.5
40°	1494.7	1492.9	1499.6	1506.3	1513.0
42.5°	1423.4	1422.5	1428.8	1435.5	1442.7
45°	1349.4	1349.0	1355.2	1362.0	1369.1
47.5°	1274.1	1273.2	1279.5	1286.6	1292.9
50°	1197.0	1196.1	1202.4	1209.5	1216.3
52.5°	1117.6	1117.6	1123.5	1129.7	1140.0
55°	1037.8	1036.5	1042.8	1049.9	1059.8
57.5°	957.1	955.3	961.2	968.3	977.3
60°	874.6	872.9	878.2	885.4	898.0
62.5°	791.3	788.6	794.0	800.7	808.3
65°	707.0	704.3	709.2	715.5	722.7
67.5°	622.2	619.1	624.0	629.4	636.1
70°	537.1	533.9	537.5	542.9	549.2
72.5°	452.3	449.2	452.3	454.6	462.2
75°	369.4	366.3	368.1	369.9	376.6
77.5°	288.7	285.6	289.2	290.1	294.1
80°	212.9	209.8	212.0	212.5	215.6
82.5°	143.9	141.2	144.4	142.1	144.8
85°	82.9	80.7	81.6	80.7	82.0
87.5°	32.7	30.9	31.4	29.6	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)