

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: P834943

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3LO-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834943
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-LD4-3LO-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

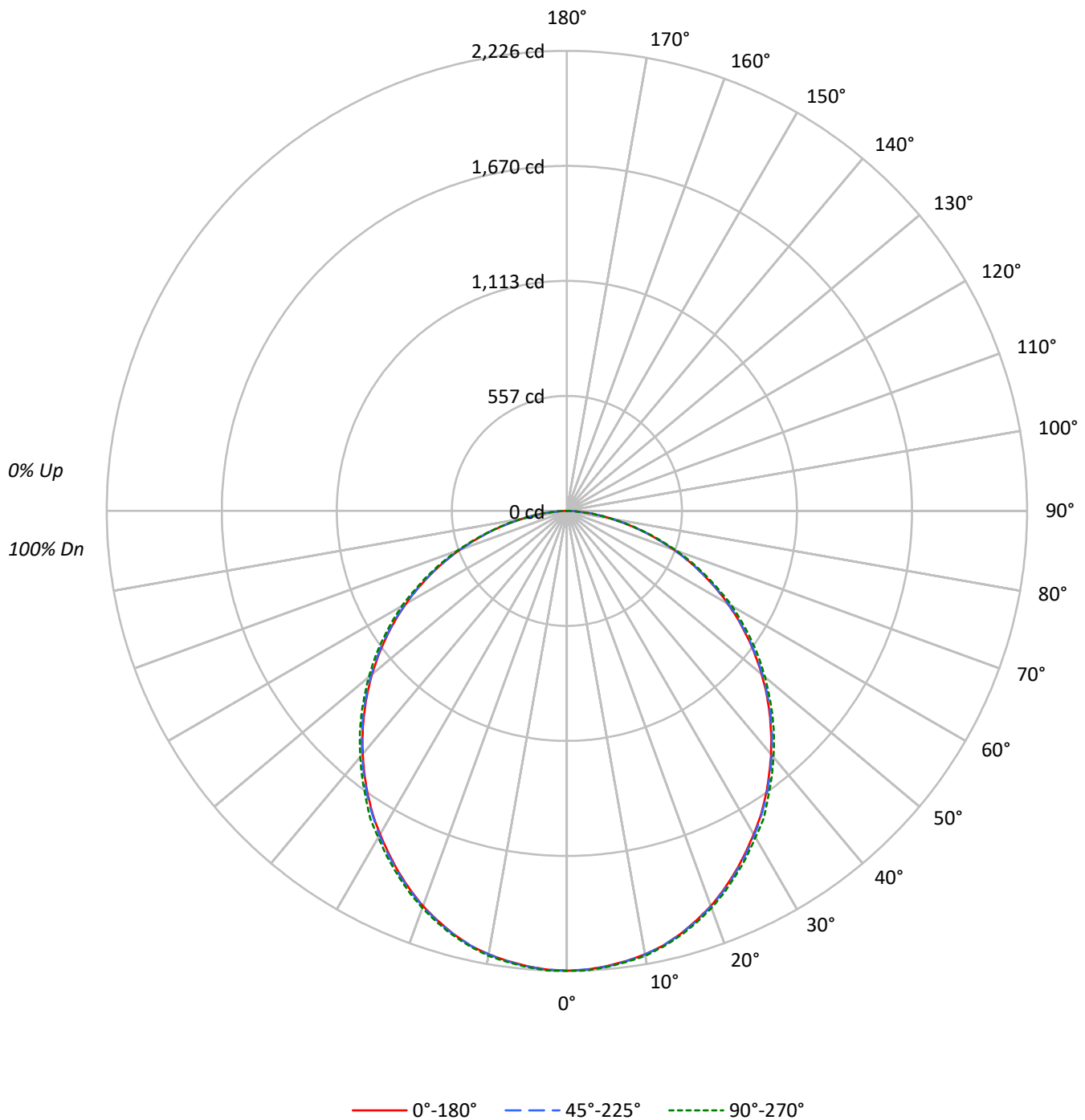
Lumens per Lamp: N/A
Luminaire Lumens: 6012.7 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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	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	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2994	2994	2994
5°	2986	2989	2992
10°	2977	2977	2986
15°	2952	2954	2962
20°	2914	2917	2928
25°	2861	2868	2881
30°	2807	2817	2834
35°	2756	2763	2785
40°	2698	2707	2731
45°	2639	2650	2677
50°	2575	2586	2616
55°	2502	2514	2555
60°	2419	2429	2483
65°	2313	2320	2365
70°	2171	2173	2220
75°	1973	1966	2012
80°	1695	1688	1717
85°	1315	1294	1301

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.3	3.5
10°-20°	598.1	9.9
20°-30°	890.4	14.8
30°-40°	1053.0	17.5
40°-50°	1075.0	17.9
50°-60°	959.4	16.0
60°-70°	722.6	12.0
70°-80°	403.0	6.7
80°-90°	100.9	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°	1698.8	28.3
0°-40°	2751.9	45.8
0°-60°	4786.2	79.6
0°-90°	6012.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6012.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2225	2225	2225	2225	2225	
5°	2211	2215	2213	2213	2216	210
15°	2119	2122	2121	2122	2127	597
25°	1927	1929	1932	1937	1940	888
35°	1678	1676	1682	1688	1695	1049
45°	1387	1386	1393	1400	1407	1070
55°	1066	1065	1072	1079	1089	953
65°	726	724	729	735	743	719
75°	380	376	378	380	387	402
85°	85	83	84	83	84	102
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2225.2	2225.2	2225.2	2225.2	2225.2
2.5°	2221.5	2225.2	2220.6	2221.5	2225.7
5°	2210.9	2215.1	2212.8	2213.2	2215.5
7.5°	2196.2	2201.7	2198.5	2199.4	2201.7
10°	2178.7	2182.8	2179.1	2181.4	2185.6
12.5°	2153.8	2155.6	2153.8	2154.7	2159.3
15°	2119.2	2121.5	2120.6	2122.5	2126.6
17.5°	2078.7	2081.5	2081.0	2084.7	2087.9
20°	2034.9	2035.4	2037.2	2040.9	2044.6
22.5°	1983.3	1984.7	1986.6	1991.6	1995.3
25°	1927.1	1929.4	1931.7	1936.8	1940.5
27.5°	1867.7	1870.0	1873.2	1878.8	1884.7
30°	1806.9	1806.9	1812.9	1818.4	1823.9
32.5°	1745.6	1743.3	1748.8	1755.7	1769.1
35°	1677.9	1676.0	1682.0	1688.5	1695.4
37.5°	1607.4	1606.0	1612.9	1619.8	1626.3
40°	1536.0	1534.2	1541.1	1548.0	1554.9
42.5°	1462.7	1461.8	1468.3	1475.2	1482.6
45°	1386.7	1386.3	1392.7	1399.6	1407.0
47.5°	1309.3	1308.4	1314.9	1322.2	1328.7
50°	1230.1	1229.2	1235.6	1243.0	1249.9
52.5°	1148.5	1148.5	1154.5	1161.0	1171.6
55°	1066.5	1065.2	1071.6	1079.0	1089.1
57.5°	983.6	981.8	987.8	995.1	1004.3
60°	898.8	897.0	902.5	909.9	922.8
62.5°	813.1	810.4	815.9	822.8	830.7
65°	726.5	723.8	728.8	735.3	742.7
67.5°	639.5	636.2	641.3	646.8	653.7
70°	551.9	548.7	552.4	557.9	564.4
72.5°	464.9	461.6	464.9	467.2	475.0
75°	379.6	376.4	378.2	380.1	387.0
77.5°	296.7	293.5	297.2	298.1	302.2
80°	218.8	215.6	217.9	218.4	221.6
82.5°	147.9	145.1	148.3	146.0	148.8
85°	85.2	82.9	83.8	82.9	84.3
87.5°	33.6	31.8	32.2	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)