

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: P834941

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2STD-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834941
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-LD4-2STD-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

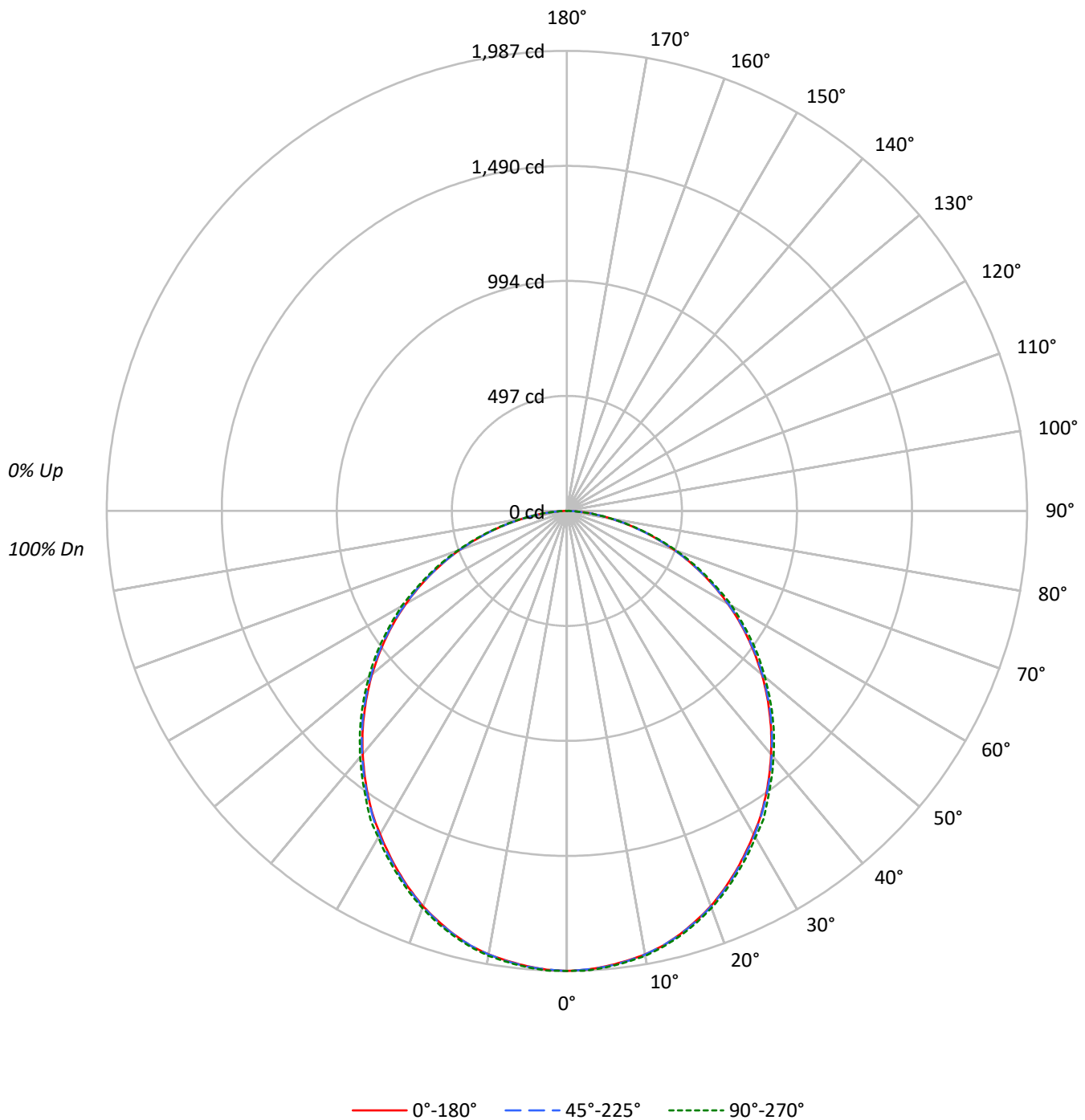
Lumens per Lamp: N/A
Luminaire Lumens: 5368.4 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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

1121 Highway 74 South

Peachtree City, GA 30269



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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°	2673	2673	2673
5°	2666	2668	2672
10°	2658	2658	2666
15°	2636	2637	2645
20°	2602	2604	2614
25°	2554	2560	2572
30°	2506	2515	2530
35°	2461	2467	2486
40°	2409	2417	2438
45°	2356	2366	2390
50°	2299	2309	2336
55°	2234	2244	2281
60°	2160	2168	2217
65°	2065	2072	2111
70°	1939	1940	1982
75°	1762	1756	1796
80°	1514	1508	1533
85°	1175	1156	1162



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.7	3.5
10°-20°	534.0	9.9
20°-30°	795.0	14.8
30°-40°	940.2	17.5
40°-50°	959.8	17.9
50°-60°	856.6	16.0
60°-70°	645.2	12.0
70°-80°	359.8	6.7
80°-90°	90.1	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°	1516.8	28.3
0°-40°	2457.0	45.8
0°-60°	4273.3	79.6
0°-90°	5368.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5368.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1987	1987	1987	1987	1987	
5°	1974	1978	1976	1976	1978	188
15°	1892	1894	1893	1895	1899	533
25°	1721	1723	1725	1729	1732	793
35°	1498	1496	1502	1508	1514	937
45°	1238	1238	1244	1250	1256	955
55°	952	951	957	963	972	851
65°	649	646	651	656	663	642
75°	339	336	338	339	346	359
85°	76	74	75	74	75	91
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1986.8	1986.8	1986.8	1986.8	1986.8
2.5°	1983.5	1986.8	1982.6	1983.5	1987.2
5°	1974.0	1977.7	1975.6	1976.1	1978.1
7.5°	1960.8	1965.8	1962.9	1963.7	1965.8
10°	1945.2	1948.9	1945.6	1947.7	1951.4
12.5°	1923.0	1924.6	1923.0	1923.8	1927.9
15°	1892.1	1894.2	1893.4	1895.0	1898.7
17.5°	1855.9	1858.4	1858.0	1861.3	1864.2
20°	1816.9	1817.3	1818.9	1822.2	1825.5
22.5°	1770.8	1772.0	1773.7	1778.2	1781.5
25°	1720.6	1722.7	1724.7	1729.3	1732.5
27.5°	1667.6	1669.6	1672.5	1677.4	1682.8
30°	1613.3	1613.3	1618.6	1623.5	1628.5
32.5°	1558.6	1556.5	1561.4	1567.6	1579.5
35°	1498.1	1496.4	1501.8	1507.5	1513.7
37.5°	1435.2	1433.9	1440.1	1446.3	1452.0
40°	1371.4	1369.7	1375.9	1382.1	1388.3
42.5°	1306.0	1305.2	1310.9	1317.1	1323.7
45°	1238.1	1237.7	1243.5	1249.6	1256.2
47.5°	1169.0	1168.2	1174.0	1180.5	1186.3
50°	1098.3	1097.4	1103.2	1109.8	1116.0
52.5°	1025.5	1025.5	1030.8	1036.6	1046.0
55°	952.2	951.0	956.8	963.3	972.4
57.5°	878.2	876.6	881.9	888.5	896.7
60°	802.5	800.9	805.8	812.4	823.9
62.5°	726.0	723.5	728.5	734.6	741.6
65°	648.7	646.2	650.7	656.5	663.1
67.5°	570.9	568.1	572.6	577.5	583.7
70°	492.8	489.9	493.2	498.1	503.9
72.5°	415.0	412.2	415.0	417.1	424.1
75°	338.9	336.1	337.7	339.4	345.5
77.5°	264.9	262.0	265.3	266.1	269.8
80°	195.4	192.5	194.6	195.0	197.9
82.5°	132.0	129.6	132.5	130.4	132.9
85°	76.1	74.0	74.9	74.0	75.3
87.5°	30.0	28.4	28.8	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)