

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: P835741

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5LO-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835741
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-LD4-5LO-30-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

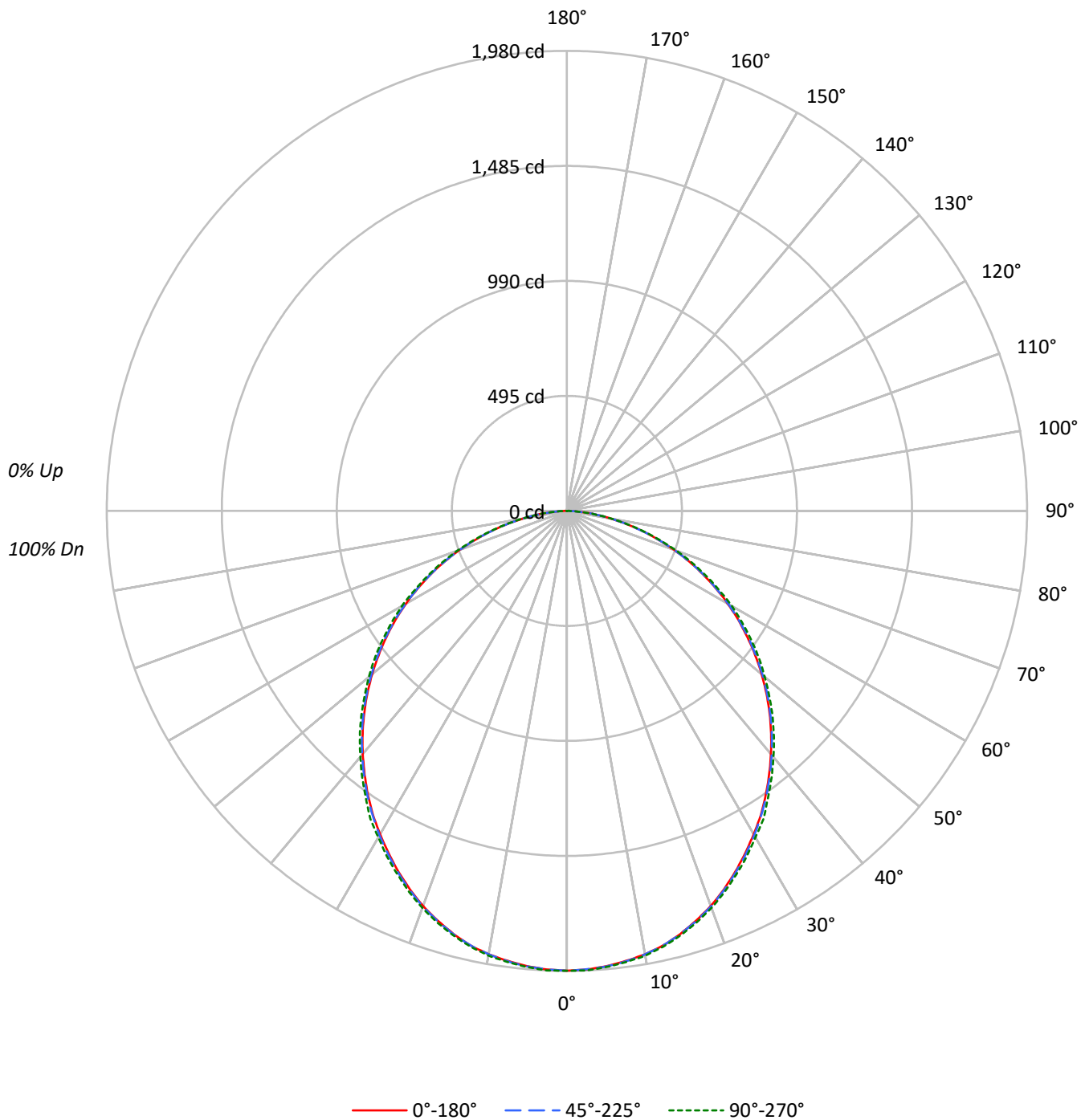
Lumens per Lamp: N/A
Luminaire Lumens: 5347.8 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 58.5
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

TEST NUMBER: P835741

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-5LO-30-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835741

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-5LO-30-120-EDD-90

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°	5326	5326	5326
5°	5312	5316	5323
10°	5295	5296	5312
15°	5251	5254	5269
20°	5183	5189	5208
25°	5089	5101	5124
30°	4994	5010	5041
35°	4902	4914	4954
40°	4799	4815	4858
45°	4694	4714	4762
50°	4580	4601	4654
55°	4450	4472	4545
60°	4302	4320	4417
65°	4115	4127	4206
70°	3862	3865	3949
75°	3510	3498	3579
80°	3016	3003	3054
85°	2340	2303	2316



TEST NUMBER: P835741

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-5LO-30-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.0	3.5
10°-20°	532.0	9.9
20°-30°	792.0	14.8
30°-40°	936.6	17.5
40°-50°	956.1	17.9
50°-60°	853.3	16.0
60°-70°	642.7	12.0
70°-80°	358.4	6.7
80°-90°	89.8	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°	1511.0	28.3
0°-40°	2447.5	45.8
0°-60°	4256.9	79.6
0°-90°	5347.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5347.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1979	1979	1979	1979	1979	
5°	1966	1970	1968	1968	1970	187
15°	1885	1887	1886	1888	1891	531
25°	1714	1716	1718	1723	1726	790
35°	1492	1491	1496	1502	1508	933
45°	1233	1233	1239	1245	1251	951
55°	949	947	953	960	969	848
65°	646	644	648	654	660	639
75°	338	335	336	338	344	358
85°	76	74	75	74	75	91
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835741

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-5LO-30-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1979.1	1979.1	1979.1	1979.1	1979.1
2.5°	1975.8	1979.1	1975.0	1975.8	1979.5
5°	1966.4	1970.1	1968.1	1968.5	1970.5
7.5°	1953.3	1958.2	1955.4	1956.2	1958.2
10°	1937.7	1941.4	1938.1	1940.2	1943.9
12.5°	1915.6	1917.2	1915.6	1916.4	1920.5
15°	1884.9	1886.9	1886.1	1887.7	1891.4
17.5°	1848.8	1851.3	1850.9	1854.1	1857.0
20°	1809.9	1810.3	1811.9	1815.2	1818.5
22.5°	1764.0	1765.2	1766.9	1771.4	1774.6
25°	1714.0	1716.1	1718.1	1722.6	1725.9
27.5°	1661.1	1663.2	1666.1	1671.0	1676.3
30°	1607.1	1607.1	1612.4	1617.3	1622.2
32.5°	1552.6	1550.5	1555.4	1561.6	1573.5
35°	1492.3	1490.7	1496.0	1501.8	1507.9
37.5°	1429.6	1428.4	1434.6	1440.7	1446.4
40°	1366.1	1364.5	1370.6	1376.8	1382.9
42.5°	1301.0	1300.2	1305.9	1312.0	1318.6
45°	1233.4	1233.0	1238.7	1244.8	1251.4
47.5°	1164.5	1163.7	1169.4	1176.0	1181.7
50°	1094.0	1093.2	1099.0	1105.5	1111.7
52.5°	1021.5	1021.5	1026.8	1032.6	1042.0
55°	948.6	947.4	953.1	959.6	968.7
57.5°	874.8	873.2	878.5	885.1	893.3
60°	799.4	797.8	802.7	809.3	820.7
62.5°	723.2	720.8	725.7	731.8	738.8
65°	646.2	643.7	648.2	654.0	660.5
67.5°	568.7	565.9	570.4	575.3	581.4
70°	490.9	488.0	491.3	496.2	501.9
72.5°	413.4	410.6	413.4	415.5	422.5
75°	337.6	334.8	336.4	338.0	344.2
77.5°	263.9	261.0	264.3	265.1	268.8
80°	194.6	191.8	193.8	194.2	197.1
82.5°	131.5	129.1	131.9	129.9	132.4
85°	75.8	73.8	74.6	73.8	75.0
87.5°	29.9	28.3	28.7	27.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)