

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: P835049

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2STD-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835049
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-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

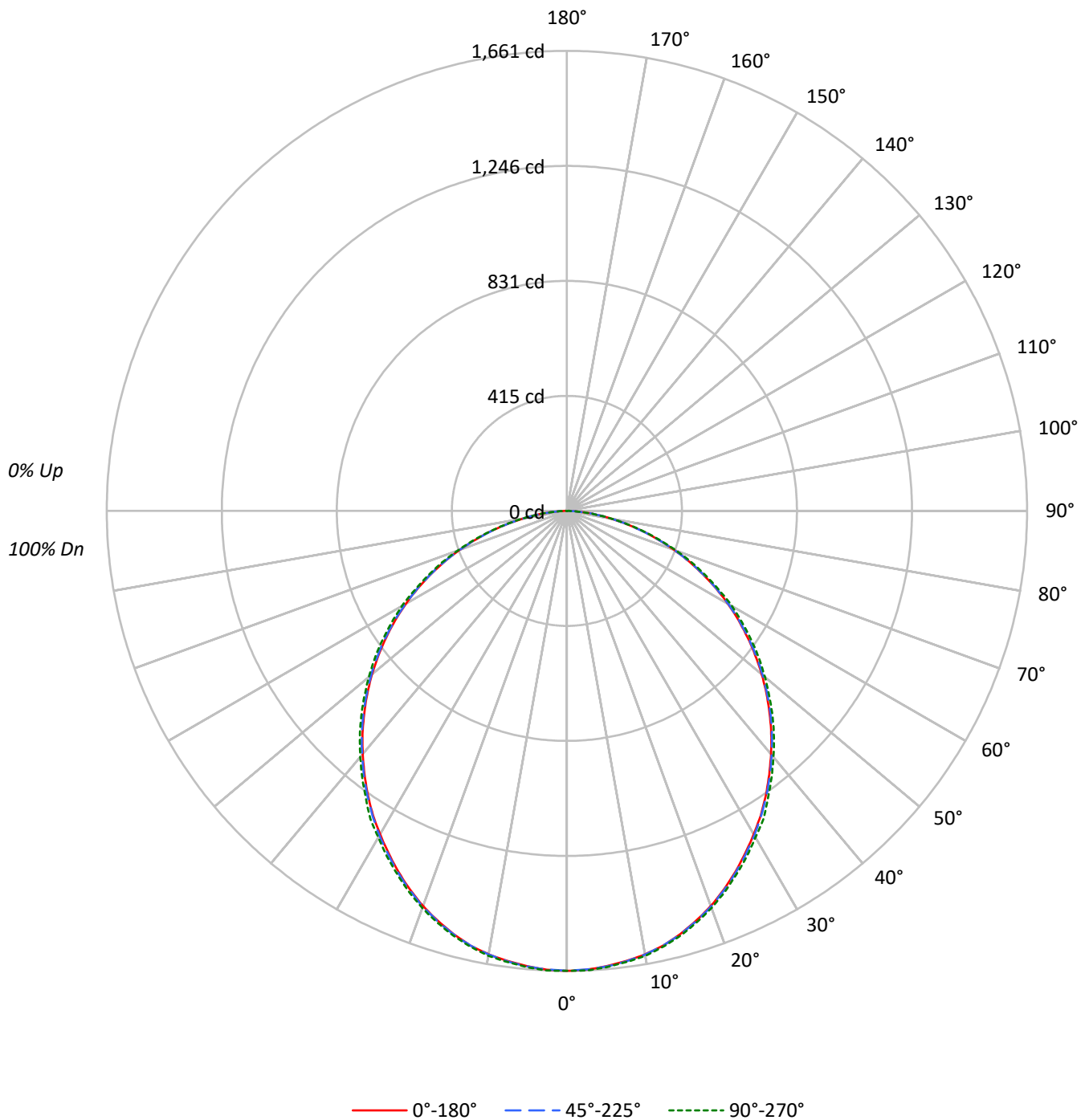
Lumens per Lamp: N/A
Luminaire Lumens: 4487.1 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P835049

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2STD-20-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835049

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2STD-20-120-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	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°	2234	2234	2234
5°	2228	2230	2233
10°	2221	2222	2228
15°	2203	2204	2211
20°	2174	2177	2185
25°	2135	2140	2150
30°	2095	2102	2115
35°	2057	2062	2078
40°	2013	2020	2038
45°	1969	1978	1998
50°	1922	1930	1952
55°	1867	1876	1907
60°	1805	1812	1853
65°	1726	1732	1764
70°	1620	1622	1657
75°	1473	1468	1501
80°	1265	1260	1282
85°	982	966	971

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835049

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2STD-20-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.9	3.5
10°-20°	446.4	9.9
20°-30°	664.5	14.8
30°-40°	785.8	17.5
40°-50°	802.2	17.9
50°-60°	715.9	16.0
60°-70°	539.2	12.0
70°-80°	300.7	6.7
80°-90°	75.3	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°	1267.8	28.3
0°-40°	2053.6	45.8
0°-60°	3571.8	79.6
0°-90°	4487.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4487.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1650	1653	1651	1652	1653	157
15°	1582	1583	1582	1584	1587	446
25°	1438	1440	1442	1445	1448	663
35°	1252	1251	1255	1260	1265	783
45°	1035	1034	1039	1044	1050	798
55°	796	795	800	805	813	711
65°	542	540	544	549	554	536
75°	283	281	282	284	289	300
85°	64	62	63	62	63	76
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835049

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2STD-20-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660.6	1660.6	1660.6	1660.6	1660.6
2.5°	1657.8	1660.6	1657.1	1657.8	1660.9
5°	1649.9	1653.0	1651.3	1651.6	1653.3
7.5°	1638.9	1643.0	1640.6	1641.3	1643.0
10°	1625.8	1628.9	1626.2	1627.9	1631.0
12.5°	1607.3	1608.7	1607.3	1608.0	1611.4
15°	1581.5	1583.2	1582.5	1583.9	1587.0
17.5°	1551.2	1553.3	1553.0	1555.7	1558.1
20°	1518.6	1518.9	1520.3	1523.0	1525.8
22.5°	1480.1	1481.1	1482.5	1486.3	1489.0
25°	1438.1	1439.8	1441.6	1445.3	1448.1
27.5°	1393.8	1395.5	1397.9	1402.0	1406.5
30°	1348.4	1348.4	1352.9	1357.0	1361.1
32.5°	1302.7	1301.0	1305.1	1310.2	1320.2
35°	1252.1	1250.8	1255.2	1260.0	1265.2
37.5°	1199.5	1198.5	1203.7	1208.8	1213.6
40°	1146.2	1144.9	1150.0	1155.2	1160.3
42.5°	1091.6	1090.9	1095.7	1100.9	1106.4
45°	1034.8	1034.5	1039.3	1044.5	1050.0
47.5°	977.1	976.4	981.2	986.7	991.5
50°	918.0	917.3	922.1	927.6	932.7
52.5°	857.1	857.1	861.6	866.4	874.3
55°	795.9	794.9	799.7	805.2	812.8
57.5°	734.0	732.6	737.1	742.6	749.5
60°	670.8	669.4	673.5	679.0	688.6
62.5°	606.8	604.7	608.9	614.0	619.9
65°	542.2	540.1	543.9	548.7	554.2
67.5°	477.2	474.8	478.6	482.7	487.9
70°	411.9	409.5	412.2	416.3	421.2
72.5°	346.9	344.5	346.9	348.6	354.5
75°	283.3	280.9	282.3	283.6	288.8
77.5°	221.4	219.0	221.8	222.4	225.5
80°	163.3	160.9	162.6	163.0	165.4
82.5°	110.4	108.3	110.7	109.0	111.0
85°	63.6	61.9	62.6	61.9	62.9
87.5°	25.1	23.7	24.1	22.7	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)