

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: P834463

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-2LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834463
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-2LO-27-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

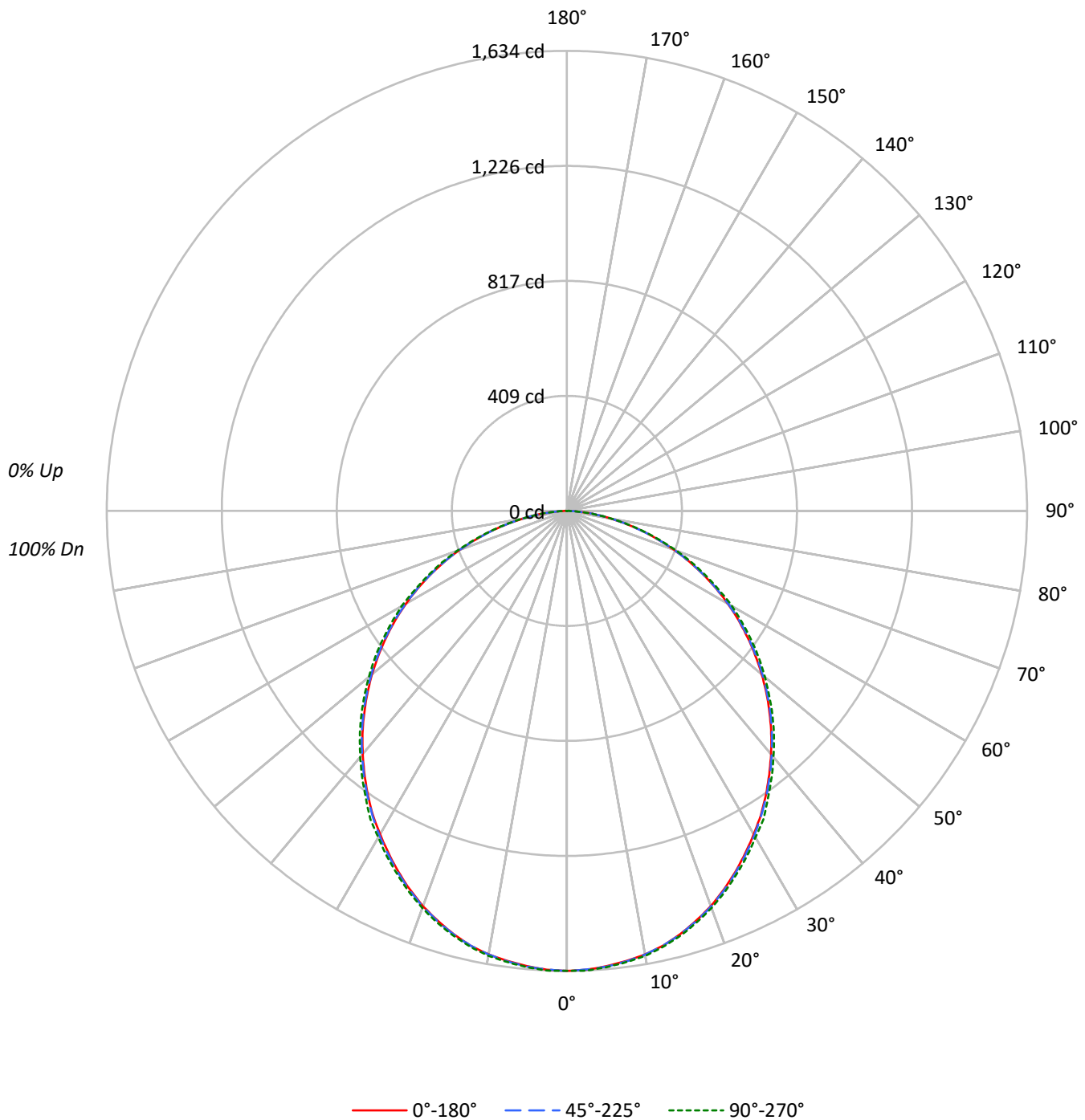
Lumens per Lamp: N/A
Luminaire Lumens: 4414.4 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4396	4396	4396
5°	4385	4388	4394
10°	4371	4372	4385
15°	4335	4337	4350
20°	4278	4283	4299
25°	4201	4211	4230
30°	4122	4136	4161
35°	4047	4057	4089
40°	3961	3974	4010
45°	3875	3891	3931
50°	3781	3798	3841
55°	3674	3691	3751
60°	3552	3566	3646
65°	3396	3407	3472
70°	3188	3191	3260
75°	2898	2887	2954
80°	2490	2479	2521
85°	1933	1902	1911

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.4	3.5
10°-20°	439.1	9.9
20°-30°	653.7	14.8
30°-40°	773.1	17.5
40°-50°	789.2	17.9
50°-60°	704.4	16.0
60°-70°	530.5	12.0
70°-80°	295.9	6.7
80°-90°	74.1	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°	1247.3	28.3
0°-40°	2020.4	45.8
0°-60°	3514.0	79.6
0°-90°	4414.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4414.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1634	1634	1634	1634	1634	
5°	1623	1626	1625	1625	1627	154
15°	1556	1558	1557	1558	1561	439
25°	1415	1417	1418	1422	1425	652
35°	1232	1230	1235	1240	1245	770
45°	1018	1018	1022	1028	1033	785
55°	783	782	787	792	800	700
65°	533	531	535	540	545	528
75°	279	276	278	279	284	295
85°	63	61	62	61	62	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1633.7	1633.7	1633.7	1633.7	1633.7
2.5°	1631.0	1633.7	1630.3	1631.0	1634.0
5°	1623.2	1626.3	1624.6	1624.9	1626.6
7.5°	1612.4	1616.5	1614.1	1614.8	1616.5
10°	1599.5	1602.6	1599.9	1601.6	1604.6
12.5°	1581.3	1582.6	1581.3	1582.0	1585.3
15°	1555.9	1557.6	1556.9	1558.3	1561.3
17.5°	1526.1	1528.2	1527.8	1530.5	1532.9
20°	1494.0	1494.4	1495.7	1498.4	1501.1
22.5°	1456.1	1457.1	1458.5	1462.2	1464.9
25°	1414.9	1416.6	1418.2	1422.0	1424.7
27.5°	1371.2	1372.9	1375.3	1379.3	1383.7
30°	1326.6	1326.6	1331.0	1335.0	1339.1
32.5°	1281.6	1279.9	1284.0	1289.0	1298.8
35°	1231.9	1230.5	1234.9	1239.7	1244.7
37.5°	1180.1	1179.1	1184.2	1189.3	1194.0
40°	1127.7	1126.3	1131.4	1136.5	1141.6
42.5°	1073.9	1073.2	1078.0	1083.0	1088.5
45°	1018.1	1017.8	1022.5	1027.6	1033.0
47.5°	961.3	960.6	965.3	970.8	975.5
50°	903.1	902.4	907.2	912.6	917.6
52.5°	843.2	843.2	847.6	852.4	860.1
55°	783.0	782.0	786.8	792.2	799.6
57.5°	722.1	720.8	725.2	730.6	737.4
60°	659.9	658.6	662.6	668.0	677.5
62.5°	597.0	595.0	599.0	604.1	609.8
65°	533.4	531.4	535.1	539.8	545.2
67.5°	469.5	467.1	470.8	474.9	480.0
70°	405.2	402.8	405.6	409.6	414.3
72.5°	341.3	338.9	341.3	343.0	348.7
75°	278.7	276.3	277.7	279.0	284.1
77.5°	217.8	215.5	218.2	218.8	221.9
80°	160.7	158.3	160.0	160.3	162.7
82.5°	108.6	106.5	108.9	107.2	109.3
85°	62.6	60.9	61.6	60.9	61.9
87.5°	24.7	23.3	23.7	22.3	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)