

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: P834991

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1LO-35-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834991
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-LD4-1LO-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

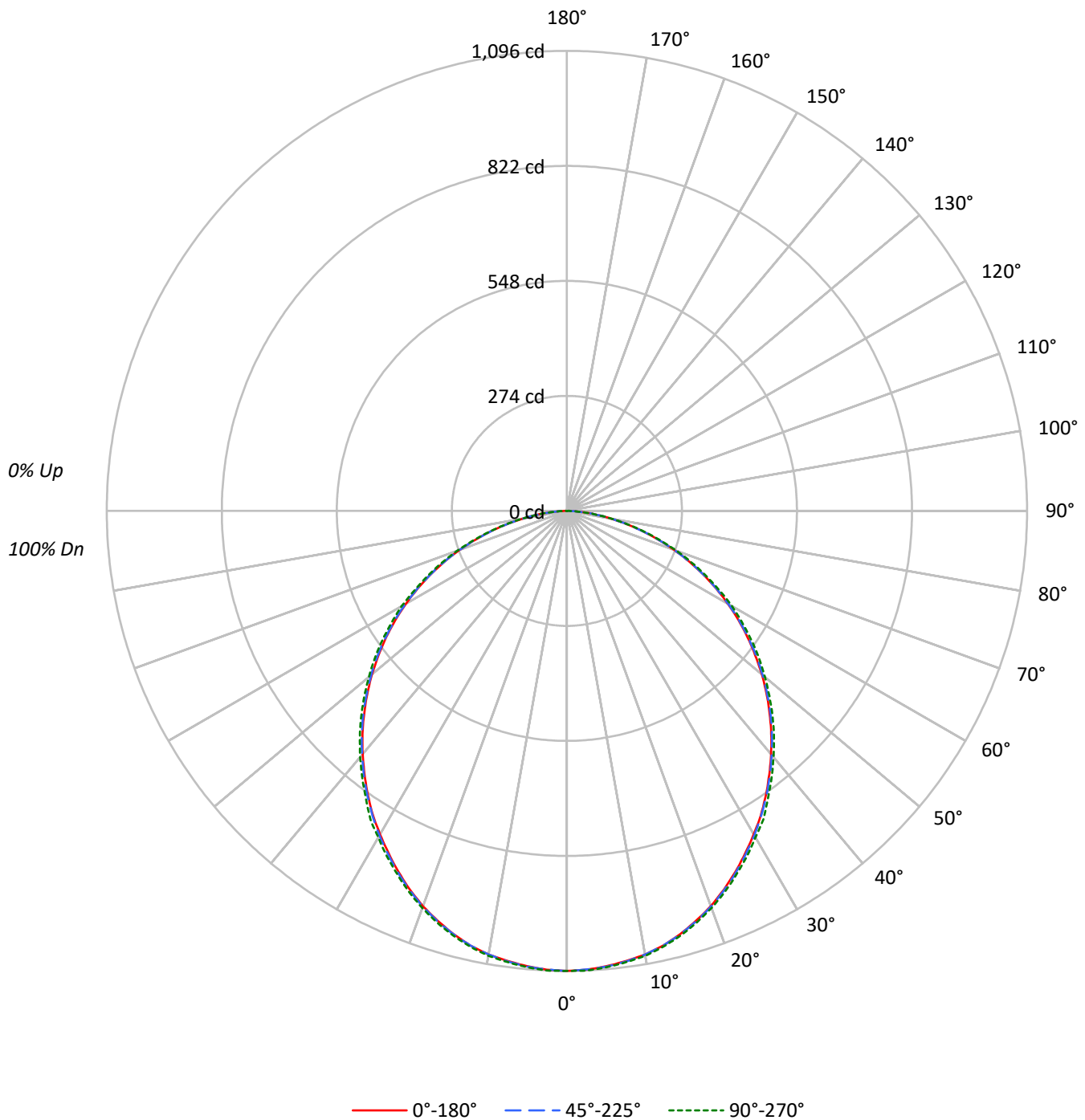
Lumens per Lamp: N/A
Luminaire Lumens: 2961.2 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P834991

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-35-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834991

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-35-120-EDD

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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1475	1475	1475
5°	1471	1472	1474
10°	1466	1466	1471
15°	1454	1455	1459
20°	1435	1437	1442
25°	1409	1412	1419
30°	1383	1387	1396
35°	1357	1361	1372
40°	1329	1333	1345
45°	1299	1305	1318
50°	1268	1274	1289
55°	1232	1238	1258
60°	1191	1196	1223
65°	1139	1143	1164
70°	1069	1070	1093
75°	972	968	991
80°	835	831	845
85°	648	638	641



TEST NUMBER: P834991

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-35-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	3.5
10°-20°	294.6	9.9
20°-30°	438.5	14.8
30°-40°	518.6	17.5
40°-50°	529.4	17.9
50°-60°	472.5	16.0
60°-70°	355.9	12.0
70°-80°	198.5	6.7
80°-90°	49.7	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°	836.7	28.3
0°-40°	1355.3	45.8
0°-60°	2357.2	79.6
0°-90°	2961.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2961.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1089	1091	1090	1090	1091	103
15°	1044	1045	1044	1045	1047	294
25°	949	950	951	954	956	437
35°	826	825	828	832	835	517
45°	683	683	686	689	693	527
55°	525	525	528	531	536	470
65°	358	356	359	362	366	354
75°	187	185	186	187	191	198
85°	42	41	41	41	42	50
90°	0	0	0	0	0	

TEST NUMBER: P834991

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-35-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1095.9	1095.9	1095.9	1095.9	1095.9
2.5°	1094.1	1095.9	1093.6	1094.1	1096.1
5°	1088.8	1090.9	1089.8	1090.0	1091.1
7.5°	1081.6	1084.3	1082.7	1083.2	1084.3
10°	1073.0	1075.0	1073.2	1074.3	1076.4
12.5°	1060.7	1061.6	1060.7	1061.2	1063.4
15°	1043.7	1044.8	1044.4	1045.3	1047.3
17.5°	1023.7	1025.1	1024.9	1026.7	1028.3
20°	1002.2	1002.4	1003.3	1005.1	1006.9
22.5°	976.8	977.4	978.4	980.8	982.7
25°	949.1	950.2	951.4	953.8	955.7
27.5°	919.8	920.9	922.5	925.3	928.2
30°	889.9	889.9	892.8	895.5	898.3
32.5°	859.7	858.6	861.3	864.7	871.3
35°	826.3	825.4	828.4	831.6	835.0
37.5°	791.6	790.9	794.3	797.7	800.9
40°	756.5	755.5	758.9	762.4	765.8
42.5°	720.4	719.9	723.1	726.5	730.1
45°	682.9	682.7	685.9	689.3	692.9
47.5°	644.8	644.4	647.5	651.2	654.4
50°	605.8	605.3	608.5	612.2	615.6
52.5°	565.6	565.6	568.6	571.8	577.0
55°	525.3	524.6	527.7	531.4	536.4
57.5°	484.4	483.5	486.5	490.1	494.6
60°	442.7	441.8	444.5	448.1	454.5
62.5°	400.5	399.1	401.8	405.2	409.1
65°	357.8	356.4	358.9	362.1	365.7
67.5°	314.9	313.3	315.8	318.6	322.0
70°	271.8	270.2	272.0	274.8	277.9
72.5°	228.9	227.3	228.9	230.1	233.9
75°	187.0	185.4	186.3	187.2	190.6
77.5°	146.1	144.5	146.3	146.8	148.8
80°	107.8	106.2	107.3	107.5	109.1
82.5°	72.8	71.5	73.1	71.9	73.3
85°	42.0	40.8	41.3	40.8	41.5
87.5°	16.6	15.7	15.9	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)