

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: P835117

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1LO-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835117
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-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

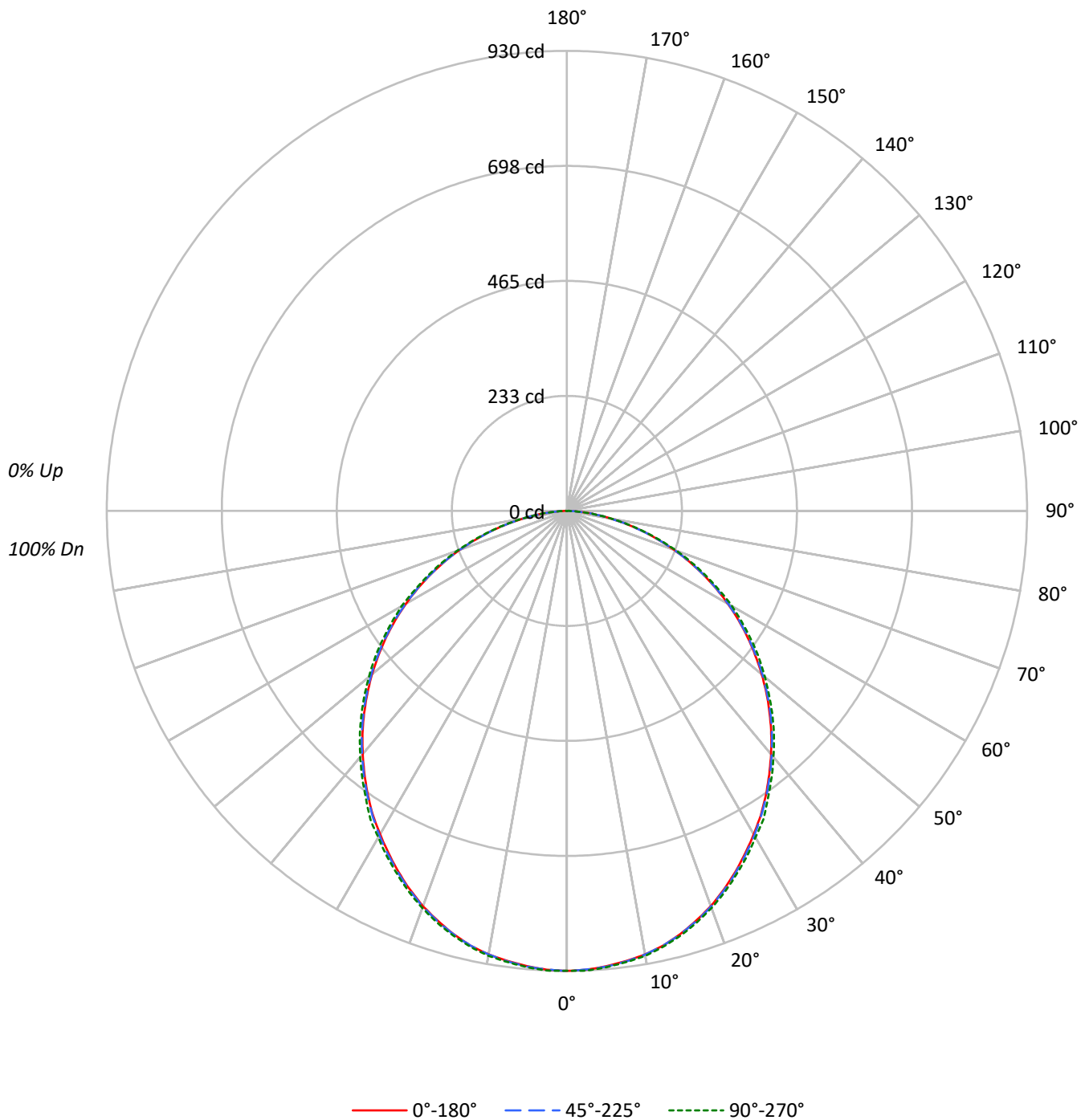
Lumens per Lamp: N/A
Luminaire Lumens: 2512.5 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P835117

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-40-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835117

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-40-120-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	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1251	1251	1251
5°	1248	1249	1250
10°	1244	1244	1248
15°	1234	1234	1238
20°	1217	1219	1223
25°	1196	1198	1204
30°	1173	1177	1184
35°	1152	1155	1164
40°	1127	1131	1141
45°	1103	1107	1119
50°	1076	1081	1093
55°	1046	1050	1068
60°	1011	1015	1038
65°	967	970	988
70°	907	908	928
75°	824	822	841
80°	708	706	717
85°	550	540	543

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835117

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-40-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	3.5
10°-20°	249.9	9.9
20°-30°	372.1	14.8
30°-40°	440.0	17.5
40°-50°	449.2	17.9
50°-60°	400.9	16.0
60°-70°	301.9	12.0
70°-80°	168.4	6.7
80°-90°	42.2	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°	709.9	28.3
0°-40°	1149.9	45.8
0°-60°	2000.0	79.6
0°-90°	2512.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2512.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	924	926	925	925	926	88
15°	886	886	886	887	889	250
25°	805	806	807	809	811	371
35°	701	700	703	706	708	438
45°	580	579	582	585	588	447
55°	446	445	448	451	455	398
65°	304	302	305	307	310	300
75°	159	157	158	159	162	168
85°	36	35	35	35	35	43
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835117

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1LO-40-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.8	929.8	929.8	929.8	929.8
2.5°	928.3	929.8	927.9	928.3	930.0
5°	923.9	925.6	924.6	924.8	925.8
7.5°	917.7	920.0	918.7	919.1	920.0
10°	910.4	912.1	910.6	911.6	913.3
12.5°	900.0	900.8	900.0	900.4	902.3
15°	885.6	886.5	886.1	886.9	888.6
17.5°	868.6	869.8	869.6	871.1	872.5
20°	850.3	850.5	851.3	852.8	854.4
22.5°	828.8	829.3	830.1	832.2	833.8
25°	805.3	806.2	807.2	809.3	810.9
27.5°	780.4	781.4	782.8	785.1	787.6
30°	755.0	755.0	757.5	759.8	762.2
32.5°	729.4	728.5	730.8	733.7	739.3
35°	701.1	700.4	702.9	705.6	708.4
37.5°	671.7	671.1	674.0	676.9	679.6
40°	641.8	641.1	644.0	646.8	649.7
42.5°	611.2	610.8	613.5	616.4	619.5
45°	579.5	579.3	582.0	584.9	587.9
47.5°	547.1	546.7	549.4	552.5	555.2
50°	514.0	513.6	516.3	519.4	522.3
52.5°	479.9	479.9	482.4	485.1	489.6
55°	445.7	445.1	447.8	450.9	455.1
57.5°	411.0	410.2	412.7	415.8	419.7
60°	375.6	374.8	377.1	380.2	385.6
62.5°	339.8	338.6	340.9	343.8	347.1
65°	303.6	302.4	304.6	307.3	310.3
67.5°	267.2	265.9	268.0	270.3	273.2
70°	230.6	229.3	230.8	233.1	235.8
72.5°	194.2	192.9	194.2	195.2	198.5
75°	158.6	157.3	158.1	158.8	161.7
77.5°	124.0	122.6	124.2	124.6	126.3
80°	91.4	90.1	91.1	91.3	92.6
82.5°	61.8	60.6	62.0	61.0	62.2
85°	35.6	34.7	35.0	34.7	35.2
87.5°	14.1	13.3	13.5	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)