

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: P835589

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835589
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-LD4-2STD-20-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

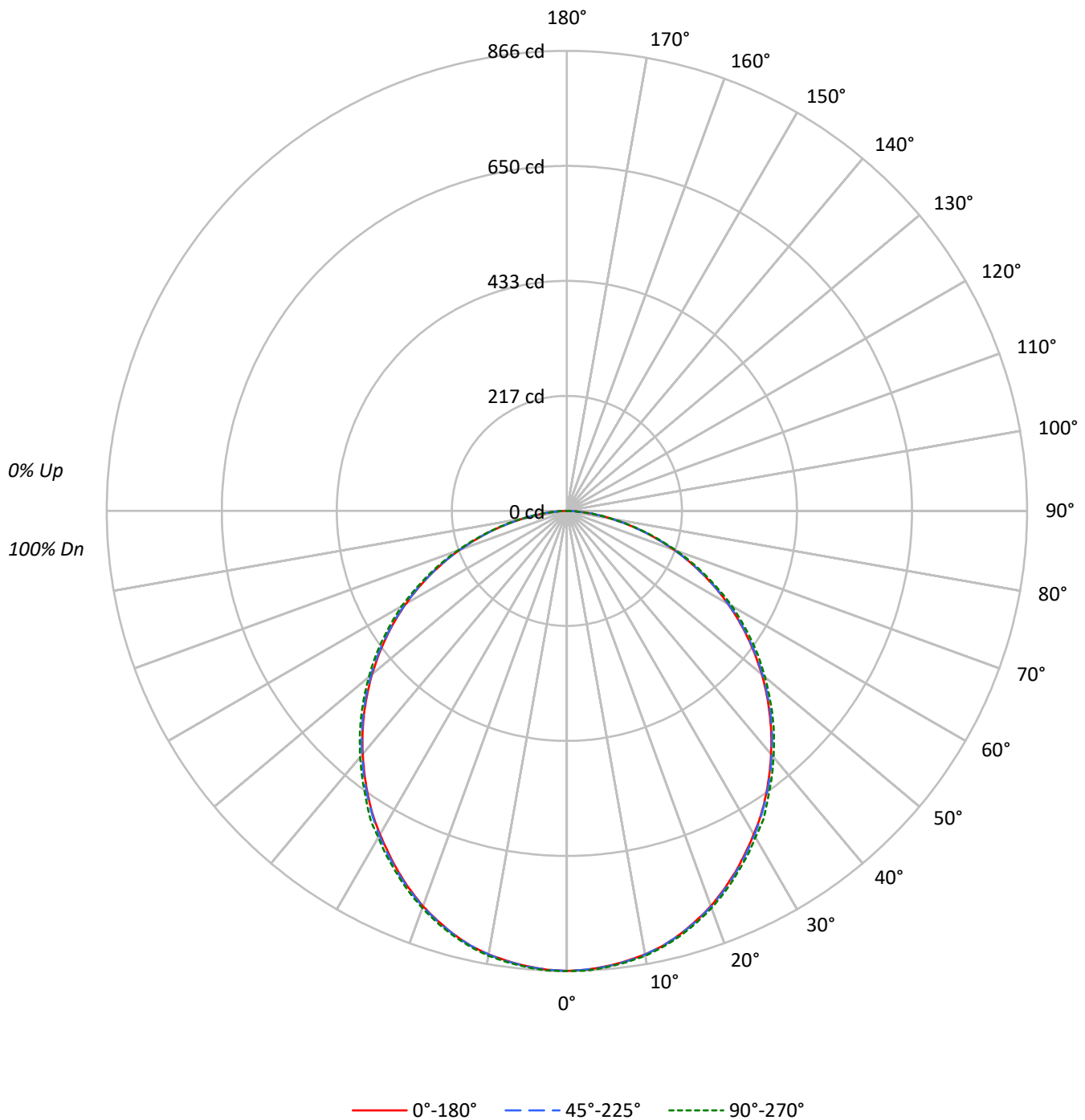
Lumens per Lamp: N/A
Luminaire Lumens: 2339.9 lumens
Efficiency: N/A
Efficacy: 70.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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: P835589

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

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835589

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2STD-20-120-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°	2330	2330	2330
5°	2324	2326	2329
10°	2317	2317	2324
15°	2298	2299	2306
20°	2268	2270	2279
25°	2227	2232	2242
30°	2185	2192	2206
35°	2145	2150	2167
40°	2100	2107	2126
45°	2054	2063	2084
50°	2004	2013	2036
55°	1947	1956	1988
60°	1883	1890	1933
65°	1800	1806	1840
70°	1690	1692	1728
75°	1536	1530	1566
80°	1320	1314	1336
85°	1025	1007	1013

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835589

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	3.5
10°-20°	232.8	9.9
20°-30°	346.5	14.8
30°-40°	409.8	17.5
40°-50°	418.3	17.9
50°-60°	373.3	16.0
60°-70°	281.2	12.0
70°-80°	156.8	6.7
80°-90°	39.3	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°	661.1	28.3
0°-40°	1070.9	45.8
0°-60°	1862.6	79.6
0°-90°	2339.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2339.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	860	862	861	861	862	82
15°	825	826	825	826	828	232
25°	750	751	752	754	755	345
35°	653	652	655	657	660	408
45°	540	540	542	545	548	416
55°	415	414	417	420	424	371
65°	283	282	284	286	289	280
75°	148	146	147	148	151	157
85°	33	32	33	32	33	40
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835589

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	866.0	866.0	866.0	866.0	866.0
2.5°	864.5	866.0	864.2	864.5	866.1
5°	860.4	862.0	861.1	861.3	862.2
7.5°	854.7	856.8	855.6	855.9	856.8
10°	847.8	849.5	848.0	848.9	850.5
12.5°	838.2	838.9	838.2	838.5	840.3
15°	824.7	825.6	825.3	826.0	827.6
17.5°	808.9	810.0	809.8	811.3	812.5
20°	791.9	792.1	792.8	794.2	795.7
22.5°	771.8	772.4	773.1	775.1	776.5
25°	750.0	750.9	751.7	753.7	755.2
27.5°	726.8	727.7	729.0	731.1	733.5
30°	703.2	703.2	705.5	707.6	709.8
32.5°	679.3	678.4	680.6	683.3	688.5
35°	653.0	652.2	654.6	657.1	659.8
37.5°	625.5	625.0	627.7	630.4	632.9
40°	597.7	597.0	599.7	602.4	605.1
42.5°	569.2	568.9	571.4	574.1	576.9
45°	539.7	539.5	542.0	544.7	547.5
47.5°	509.5	509.2	511.7	514.6	517.1
50°	478.7	478.3	480.8	483.7	486.4
52.5°	447.0	447.0	449.3	451.8	455.9
55°	415.0	414.5	417.0	419.9	423.8
57.5°	382.8	382.1	384.4	387.3	390.8
60°	349.8	349.1	351.2	354.1	359.1
62.5°	316.4	315.4	317.5	320.2	323.3
65°	282.7	281.7	283.6	286.1	289.0
67.5°	248.8	247.6	249.6	251.7	254.4
70°	214.8	213.5	215.0	217.1	219.6
72.5°	180.9	179.6	180.9	181.8	184.8
75°	147.7	146.5	147.2	147.9	150.6
77.5°	115.5	114.2	115.6	116.0	117.6
80°	85.2	83.9	84.8	85.0	86.2
82.5°	57.6	56.5	57.7	56.8	57.9
85°	33.2	32.3	32.6	32.3	32.8
87.5°	13.1	12.4	12.6	11.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)