

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: P835714

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835714
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-LD4-2LO-27-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

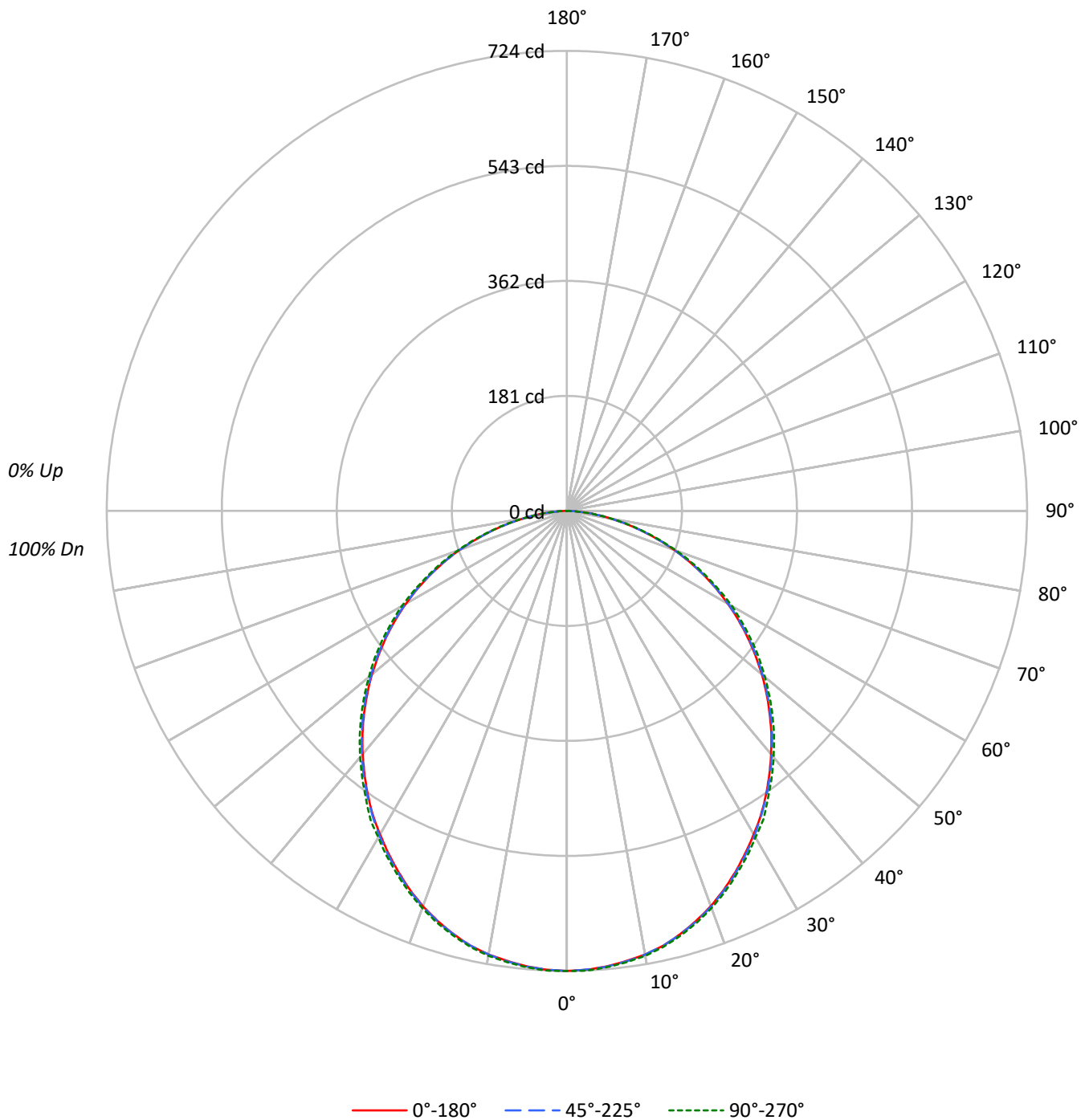
Lumens per Lamp: N/A
Luminaire Lumens: 1956.4 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P835714

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835714

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1948	1948	1948
5°	1943	1945	1947
10°	1937	1937	1943
15°	1921	1922	1928
20°	1896	1898	1905
25°	1862	1866	1875
30°	1827	1833	1844
35°	1793	1798	1812
40°	1756	1761	1777
45°	1717	1725	1742
50°	1675	1683	1703
55°	1628	1636	1663
60°	1574	1581	1616
65°	1505	1510	1538
70°	1413	1414	1445
75°	1284	1280	1309
80°	1103	1099	1117
85°	855	843	846

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835714

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	3.5
10°-20°	194.6	9.9
20°-30°	289.7	14.8
30°-40°	342.6	17.5
40°-50°	349.8	17.9
50°-60°	312.2	16.0
60°-70°	235.1	12.0
70°-80°	131.1	6.7
80°-90°	32.8	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°	552.8	28.3
0°-40°	895.4	45.8
0°-60°	1557.3	79.6
0°-90°	1956.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	719	721	720	720	721	68
15°	690	690	690	691	692	194
25°	627	628	628	630	631	289
35°	546	545	547	549	552	341
45°	451	451	453	455	458	348
55°	347	347	349	351	354	310
65°	236	236	237	239	242	234
75°	124	122	123	124	126	131
85°	28	27	27	27	27	33
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835714

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2LO-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	724.0	724.0	724.0	724.0	724.0
2.5°	722.8	724.0	722.5	722.8	724.2
5°	719.4	720.7	720.0	720.1	720.9
7.5°	714.6	716.4	715.3	715.6	716.4
10°	708.9	710.2	709.0	709.8	711.1
12.5°	700.8	701.4	700.8	701.1	702.6
15°	689.5	690.3	690.0	690.6	691.9
17.5°	676.4	677.3	677.1	678.3	679.4
20°	662.1	662.3	662.9	664.1	665.3
22.5°	645.3	645.8	646.4	648.0	649.2
25°	627.0	627.8	628.5	630.2	631.4
27.5°	607.7	608.5	609.5	611.3	613.2
30°	587.9	587.9	589.9	591.7	593.5
32.5°	568.0	567.2	569.0	571.3	575.6
35°	545.9	545.3	547.3	549.4	551.6
37.5°	523.0	522.6	524.8	527.1	529.2
40°	499.8	499.2	501.4	503.7	505.9
42.5°	475.9	475.6	477.7	480.0	482.4
45°	451.2	451.1	453.2	455.4	457.8
47.5°	426.0	425.7	427.8	430.2	432.3
50°	400.2	399.9	402.0	404.4	406.7
52.5°	373.7	373.7	375.7	377.8	381.2
55°	347.0	346.6	348.7	351.1	354.4
57.5°	320.0	319.4	321.4	323.8	326.8
60°	292.5	291.9	293.7	296.1	300.3
62.5°	264.6	263.7	265.5	267.7	270.3
65°	236.4	235.5	237.1	239.2	241.6
67.5°	208.1	207.0	208.7	210.5	212.7
70°	179.6	178.5	179.7	181.5	183.6
72.5°	151.3	150.2	151.3	152.0	154.5
75°	123.5	122.5	123.1	123.7	125.9
77.5°	96.5	95.5	96.7	97.0	98.3
80°	71.2	70.2	70.9	71.1	72.1
82.5°	48.1	47.2	48.3	47.5	48.4
85°	27.7	27.0	27.3	27.0	27.4
87.5°	10.9	10.3	10.5	9.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)