

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: P835074

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4HI-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835074
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-LD4-4HI-27-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

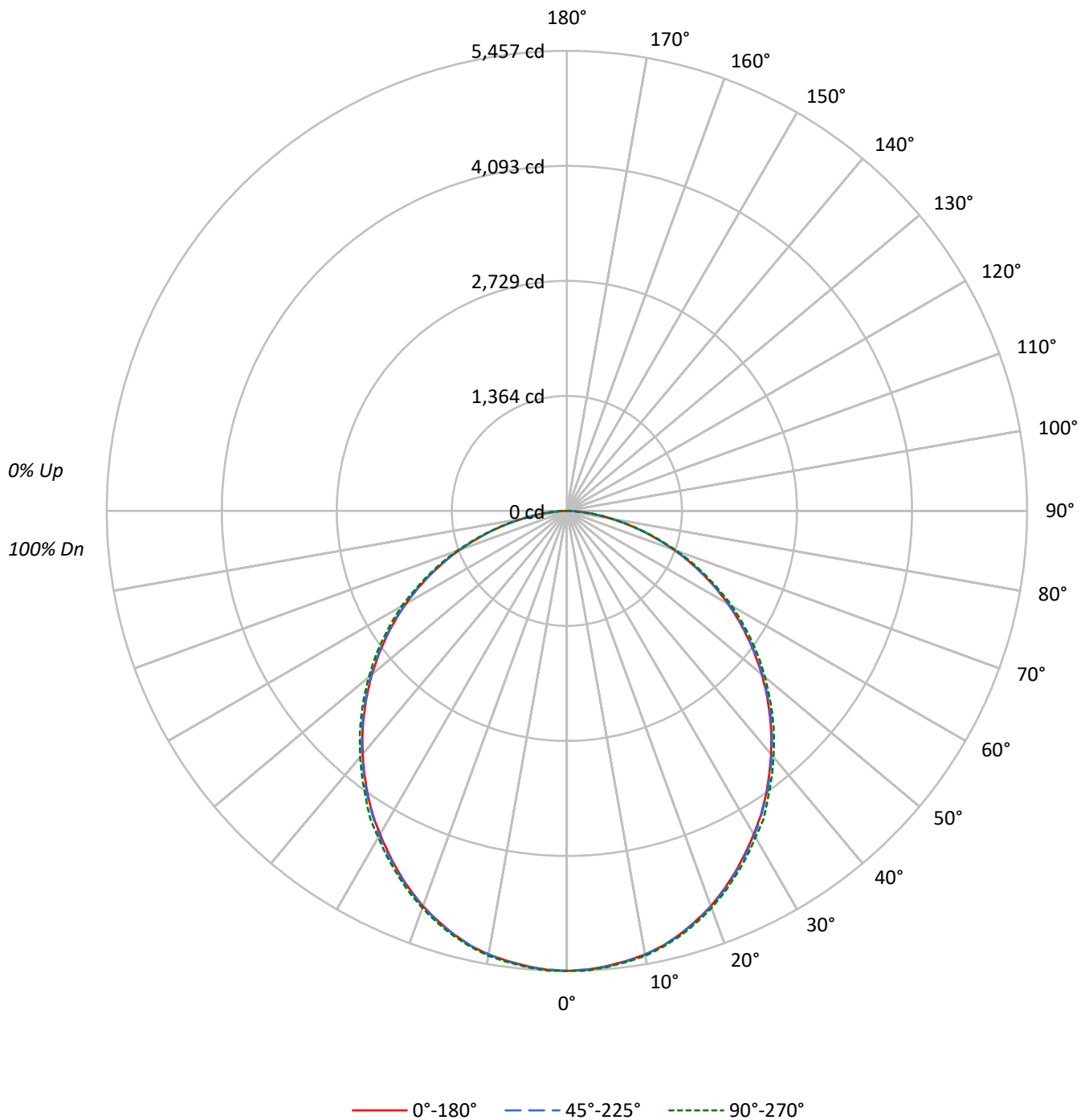
Lumens per Lamp: N/A
Luminaire Lumens: 14742.1 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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: P835074

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4HI-27-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835074

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4HI-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°	7341	7341	7341
5°	7321	7328	7337
10°	7298	7300	7321
15°	7238	7243	7263
20°	7144	7152	7178
25°	7015	7031	7063
30°	6883	6906	6948
35°	6757	6774	6828
40°	6614	6636	6696
45°	6470	6498	6564
50°	6313	6341	6415
55°	6134	6163	6264
60°	5930	5955	6088
65°	5671	5689	5797
70°	5323	5328	5443
75°	4839	4821	4932
80°	4157	4140	4210
85°	3226	3174	3191

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835074

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4HI-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.5	3.5
10°-20°	1466.5	9.9
20°-30°	2183.2	14.8
30°-40°	2581.8	17.5
40°-50°	2635.7	17.9
50°-60°	2352.2	16.0
60°-70°	1771.6	12.0
70°-80°	988.0	6.7
80°-90°	247.5	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°	4165.2	28.3
0°-40°	6747.0	45.8
0°-60°	11734.9	79.6
0°-90°	14742.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14742.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5456	5456	5456	5456	5456	
5°	5421	5431	5425	5426	5432	515
15°	5196	5202	5199	5204	5214	1465
25°	4725	4731	4736	4749	4758	2177
35°	4114	4109	4124	4140	4157	2573
45°	3400	3399	3415	3432	3450	2623
55°	2615	2612	2627	2645	2670	2337
65°	1781	1774	1787	1803	1821	1762
75°	931	923	927	932	949	987
85°	209	203	206	203	207	251
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835074

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4HI-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5455.8	5455.8	5455.8	5455.8	5455.8
2.5°	5446.7	5455.8	5444.5	5446.7	5456.9
5°	5420.7	5430.9	5425.3	5426.4	5432.0
7.5°	5384.6	5398.2	5390.2	5392.5	5398.2
10°	5341.7	5351.8	5342.8	5348.5	5358.6
12.5°	5280.7	5285.2	5280.7	5282.9	5294.2
15°	5196.0	5201.6	5199.4	5203.9	5214.0
17.5°	5096.6	5103.3	5102.2	5111.2	5119.2
20°	4989.3	4990.4	4994.9	5003.9	5013.0
22.5°	4862.7	4866.1	4870.7	4883.1	4892.1
25°	4724.9	4730.6	4736.2	4748.7	4757.7
27.5°	4579.2	4584.9	4592.8	4606.3	4621.0
30°	4430.1	4430.1	4444.8	4458.4	4471.9
32.5°	4279.9	4274.2	4287.8	4304.7	4337.5
35°	4113.8	4109.3	4124.0	4139.8	4156.8
37.5°	3941.0	3937.6	3954.6	3971.5	3987.3
40°	3765.9	3761.4	3778.4	3795.3	3812.3
42.5°	3586.3	3584.1	3599.9	3616.8	3634.9
45°	3400.0	3398.8	3414.7	3431.6	3449.7
47.5°	3210.2	3207.9	3223.8	3241.8	3257.6
50°	3015.9	3013.7	3029.5	3047.5	3064.5
52.5°	2816.0	2816.0	2830.7	2846.5	2872.5
55°	2614.9	2611.5	2627.4	2645.4	2670.3
57.5°	2411.6	2407.1	2421.8	2439.8	2462.4
60°	2203.8	2199.2	2212.8	2230.9	2262.5
62.5°	1993.7	1986.9	2000.4	2017.4	2036.6
65°	1781.3	1774.5	1787.0	1802.8	1820.8
67.5°	1567.8	1559.9	1572.3	1585.9	1602.8
70°	1353.2	1345.3	1354.3	1367.9	1383.7
72.5°	1139.7	1131.8	1139.7	1145.4	1164.6
75°	930.8	922.8	927.4	931.9	948.8
77.5°	727.4	719.5	728.6	730.8	741.0
80°	536.5	528.6	534.3	535.4	543.3
82.5°	362.6	355.8	363.7	358.1	364.8
85°	209.0	203.3	205.6	203.3	206.7
87.5°	82.5	77.9	79.1	74.6	74.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)