

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: P834987

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5HI-30-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834987
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-LD4-5HI-30-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

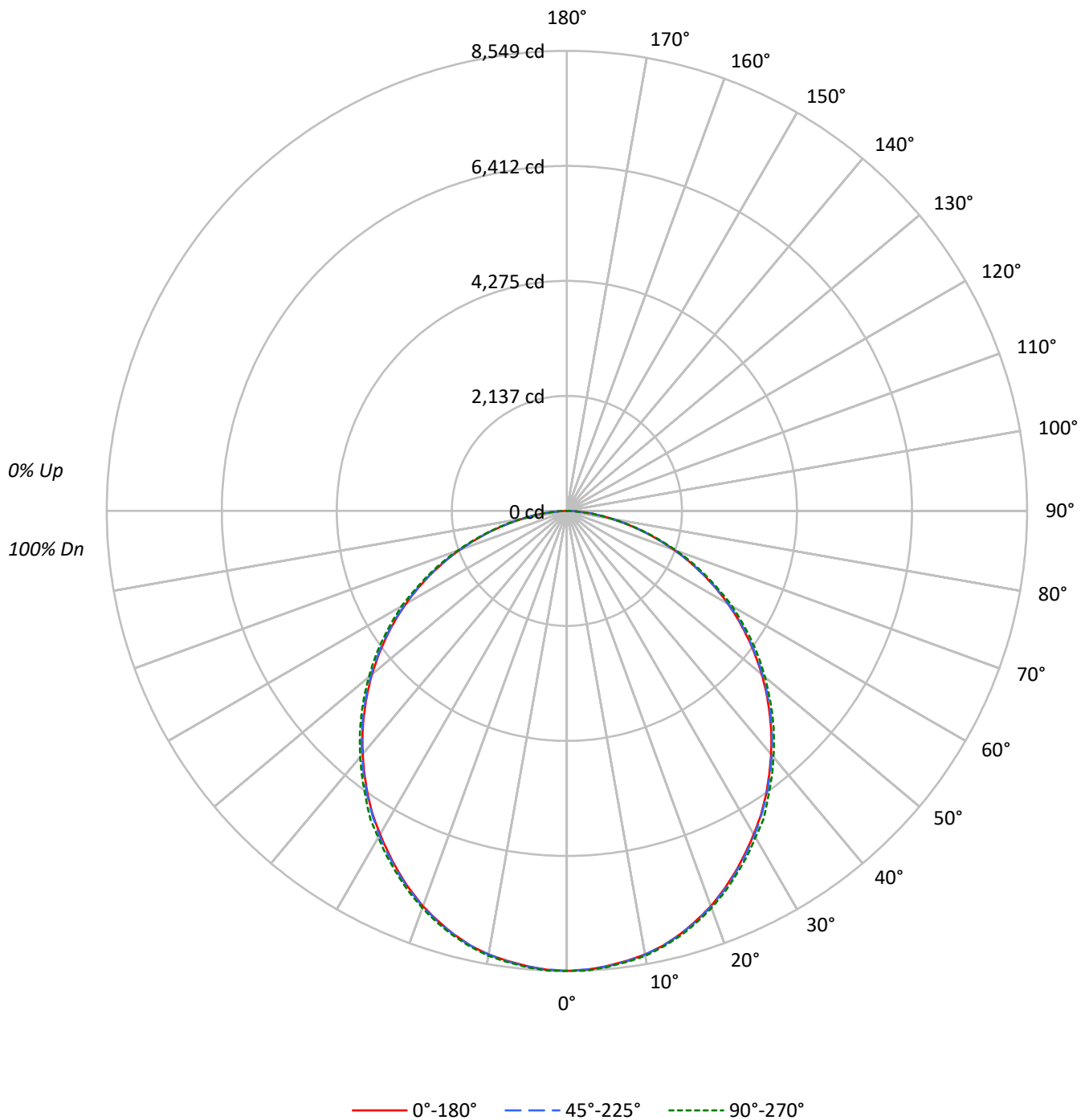
Lumens per Lamp: N/A
Luminaire Lumens: 23095.5 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 220
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: P834987

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-5HI-30-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834987

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-5HI-30-120-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
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°	11500	11500	11500
5°	11470	11480	11494
10°	11433	11436	11470
15°	11339	11346	11378
20°	11192	11204	11245
25°	10989	11016	11065
30°	10783	10819	10885
35°	10586	10612	10697
40°	10363	10397	10490
45°	10135	10179	10284
50°	9890	9935	10049
55°	9610	9656	9813
60°	9291	9329	9538
65°	8885	8913	9082
70°	8340	8347	8528
75°	7581	7552	7728
80°	6513	6485	6595
85°	5054	4973	4999

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834987

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-5HI-30-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	807.7	3.5
10°-20°	2297.5	9.9
20°-30°	3420.2	14.8
30°-40°	4044.8	17.5
40°-50°	4129.1	17.9
50°-60°	3685.0	16.0
60°-70°	2775.5	12.0
70°-80°	1547.9	6.7
80°-90°	387.8	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°	6525.4	28.3
0°-40°	10570.1	45.8
0°-60°	18384.3	79.6
0°-90°	23095.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23095.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8547	8547	8547	8547	8547	
5°	8492	8508	8499	8501	8510	807
15°	8140	8149	8146	8153	8168	2294
25°	7402	7411	7420	7439	7454	3410
35°	6445	6438	6461	6486	6512	4030
45°	5326	5325	5350	5376	5404	4109
55°	4097	4091	4116	4144	4183	3662
65°	2791	2780	2800	2824	2853	2760
75°	1458	1446	1453	1460	1486	1546
85°	327	318	322	318	324	393
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834987

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-5HI-30-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8547.2	8547.2	8547.2	8547.2	8547.2
2.5°	8533.0	8547.2	8529.5	8533.0	8549.0
5°	8492.3	8508.3	8499.4	8501.2	8510.0
7.5°	8435.7	8456.9	8444.6	8448.1	8456.9
10°	8368.5	8384.4	8370.2	8379.1	8395.0
12.5°	8272.9	8280.0	8272.9	8276.4	8294.1
15°	8140.2	8149.0	8145.5	8152.6	8168.5
17.5°	7984.5	7995.1	7993.3	8007.5	8019.9
20°	7816.3	7818.1	7825.2	7839.4	7853.5
22.5°	7618.2	7623.5	7630.5	7650.0	7664.2
25°	7402.3	7411.1	7420.0	7439.4	7453.6
27.5°	7174.0	7182.8	7195.2	7216.5	7239.5
30°	6940.4	6940.4	6963.4	6984.6	7005.9
32.5°	6705.0	6696.2	6717.4	6744.0	6795.3
35°	6444.9	6437.8	6460.8	6485.6	6512.2
37.5°	6174.2	6168.8	6195.4	6221.9	6246.7
40°	5899.9	5892.8	5919.3	5945.9	5972.4
42.5°	5618.5	5615.0	5639.7	5666.3	5694.6
45°	5326.5	5324.7	5349.5	5376.1	5404.4
47.5°	5029.2	5025.7	5050.5	5078.8	5103.5
50°	4724.8	4721.3	4746.1	4774.4	4800.9
52.5°	4411.6	4411.6	4434.6	4459.4	4500.1
55°	4096.6	4091.3	4116.1	4144.4	4183.3
57.5°	3778.1	3771.0	3794.0	3822.3	3857.7
60°	3452.5	3445.4	3466.7	3495.0	3544.5
62.5°	3123.4	3112.7	3134.0	3160.5	3190.6
65°	2790.7	2780.1	2799.5	2824.3	2852.6
67.5°	2456.2	2443.8	2463.3	2484.5	2511.1
70°	2120.0	2107.6	2121.8	2143.0	2167.8
72.5°	1785.5	1773.1	1785.5	1794.4	1824.5
75°	1458.2	1445.8	1452.8	1459.9	1486.5
77.5°	1139.6	1127.2	1141.4	1144.9	1160.9
80°	840.6	828.2	837.0	838.8	851.2
82.5°	568.0	557.4	569.8	561.0	571.6
85°	327.4	318.5	322.1	318.5	323.8
87.5°	129.2	122.1	123.9	116.8	116.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)