

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: P835109

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-35-120-EDD-90**

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P835109
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-LD4-4STD-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

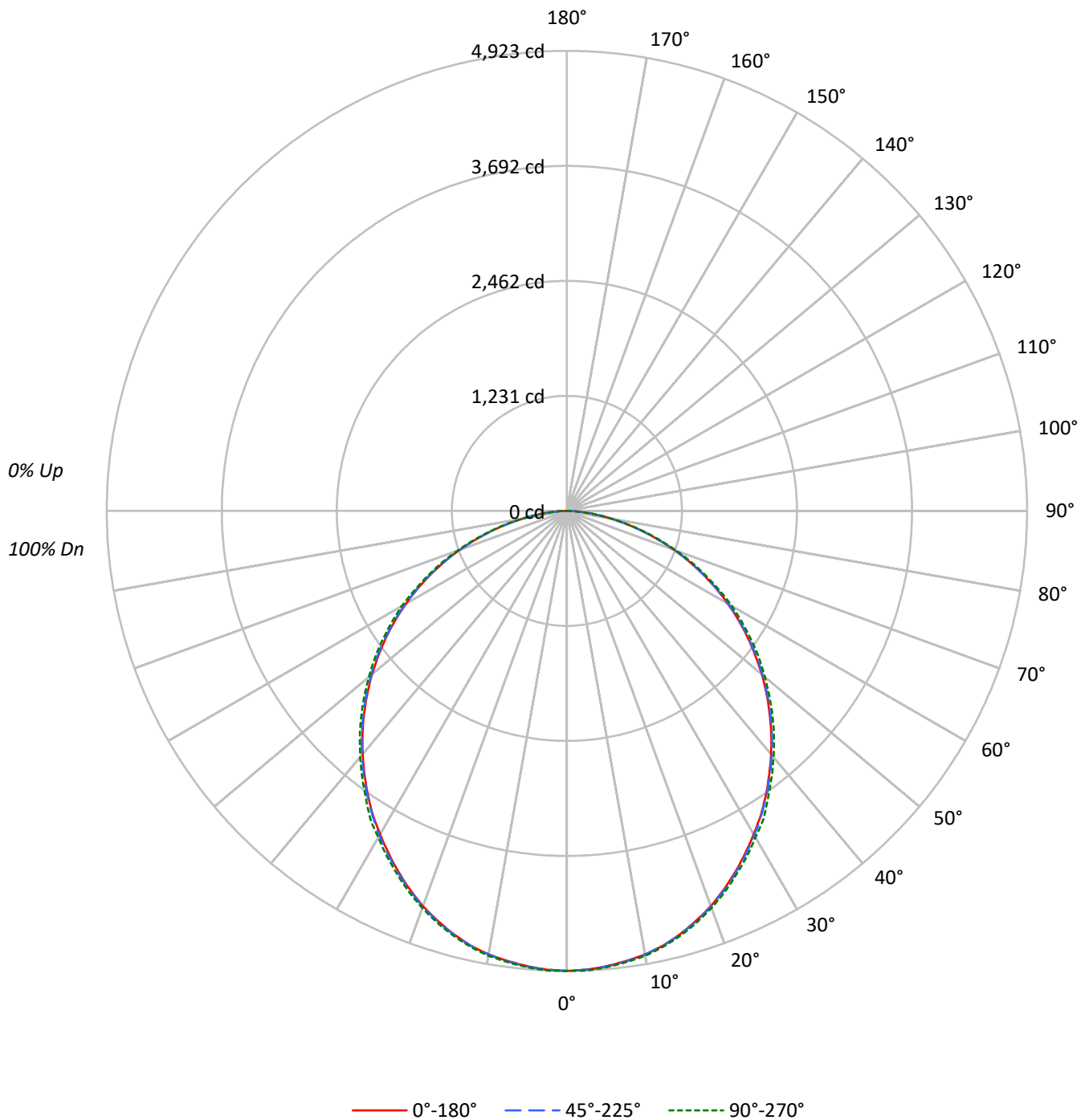
Lumens per Lamp: N/A
Luminaire Lumens: 13300.9 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 133.2
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: P835109

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-35-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835109

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-35-120-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°	6623	6623	6623
5°	6606	6611	6619
10°	6585	6586	6606
15°	6530	6534	6553
20°	6445	6453	6476
25°	6329	6344	6373
30°	6210	6231	6268
35°	6097	6112	6160
40°	5968	5988	6041
45°	5837	5862	5922
50°	5696	5721	5788
55°	5534	5561	5651
60°	5350	5373	5493
65°	5117	5133	5230
70°	4803	4807	4911
75°	4366	4350	4450
80°	3751	3735	3798
85°	2910	2864	2879

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835109

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	465.1	3.5
10°-20°	1323.1	9.9
20°-30°	1969.7	14.8
30°-40°	2329.4	17.5
40°-50°	2378.0	17.9
50°-60°	2122.2	16.0
60°-70°	1598.5	12.0
70°-80°	891.4	6.7
80°-90°	223.3	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°	3758.0	28.3
0°-40°	6087.4	45.8
0°-60°	10587.7	79.6
0°-90°	13300.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13300.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4922	4922	4922	4922	4922	
5°	4891	4900	4895	4896	4901	465
15°	4688	4693	4691	4695	4704	1321
25°	4263	4268	4273	4284	4293	1964
35°	3712	3708	3721	3735	3750	2321
45°	3068	3067	3081	3096	3112	2366
55°	2359	2356	2370	2387	2409	2109
65°	1607	1601	1612	1626	1643	1590
75°	840	833	837	841	856	890
85°	188	183	186	183	186	226
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835109

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4922.4	4922.4	4922.4	4922.4	4922.4
2.5°	4914.2	4922.4	4912.2	4914.2	4923.4
5°	4890.8	4900.0	4894.9	4895.9	4901.0
7.5°	4858.2	4870.4	4863.3	4865.3	4870.4
10°	4819.5	4828.6	4820.5	4825.6	4834.8
12.5°	4764.4	4768.5	4764.4	4766.5	4776.7
15°	4688.0	4693.1	4691.1	4695.1	4704.3
17.5°	4598.3	4604.4	4603.4	4611.6	4618.7
20°	4501.5	4502.5	4506.6	4514.7	4522.9
22.5°	4387.4	4390.4	4394.5	4405.7	4413.9
25°	4263.0	4268.1	4273.2	4284.4	4292.6
27.5°	4131.6	4136.6	4143.8	4156.0	4169.3
30°	3997.0	3997.0	4010.3	4022.5	4034.7
32.5°	3861.5	3856.4	3868.6	3883.9	3913.5
35°	3711.7	3707.6	3720.8	3735.1	3750.4
37.5°	3555.7	3552.7	3568.0	3583.3	3597.5
40°	3397.8	3393.7	3409.0	3424.3	3439.6
42.5°	3235.7	3233.7	3248.0	3263.3	3279.6
45°	3067.6	3066.6	3080.8	3096.1	3112.4
47.5°	2896.4	2894.3	2908.6	2924.9	2939.2
50°	2721.1	2719.0	2733.3	2749.6	2764.9
52.5°	2540.7	2540.7	2553.9	2568.2	2591.6
55°	2359.3	2356.2	2370.5	2386.8	2409.2
57.5°	2175.8	2171.8	2185.0	2201.3	2221.7
60°	1988.3	1984.2	1996.5	2012.8	2041.3
62.5°	1798.8	1792.6	1804.9	1820.2	1837.5
65°	1607.2	1601.1	1612.3	1626.5	1642.8
67.5°	1414.6	1407.4	1418.6	1430.9	1446.1
70°	1220.9	1213.8	1221.9	1234.2	1248.4
72.5°	1028.3	1021.2	1028.3	1033.4	1050.7
75°	839.8	832.6	836.7	840.8	856.1
77.5°	656.3	649.2	657.3	659.4	668.5
80°	484.1	477.0	482.0	483.1	490.2
82.5°	327.1	321.0	328.2	323.1	329.2
85°	188.5	183.4	185.5	183.4	186.5
87.5°	74.4	70.3	71.3	67.3	67.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)