

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: P834947

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834947
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-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

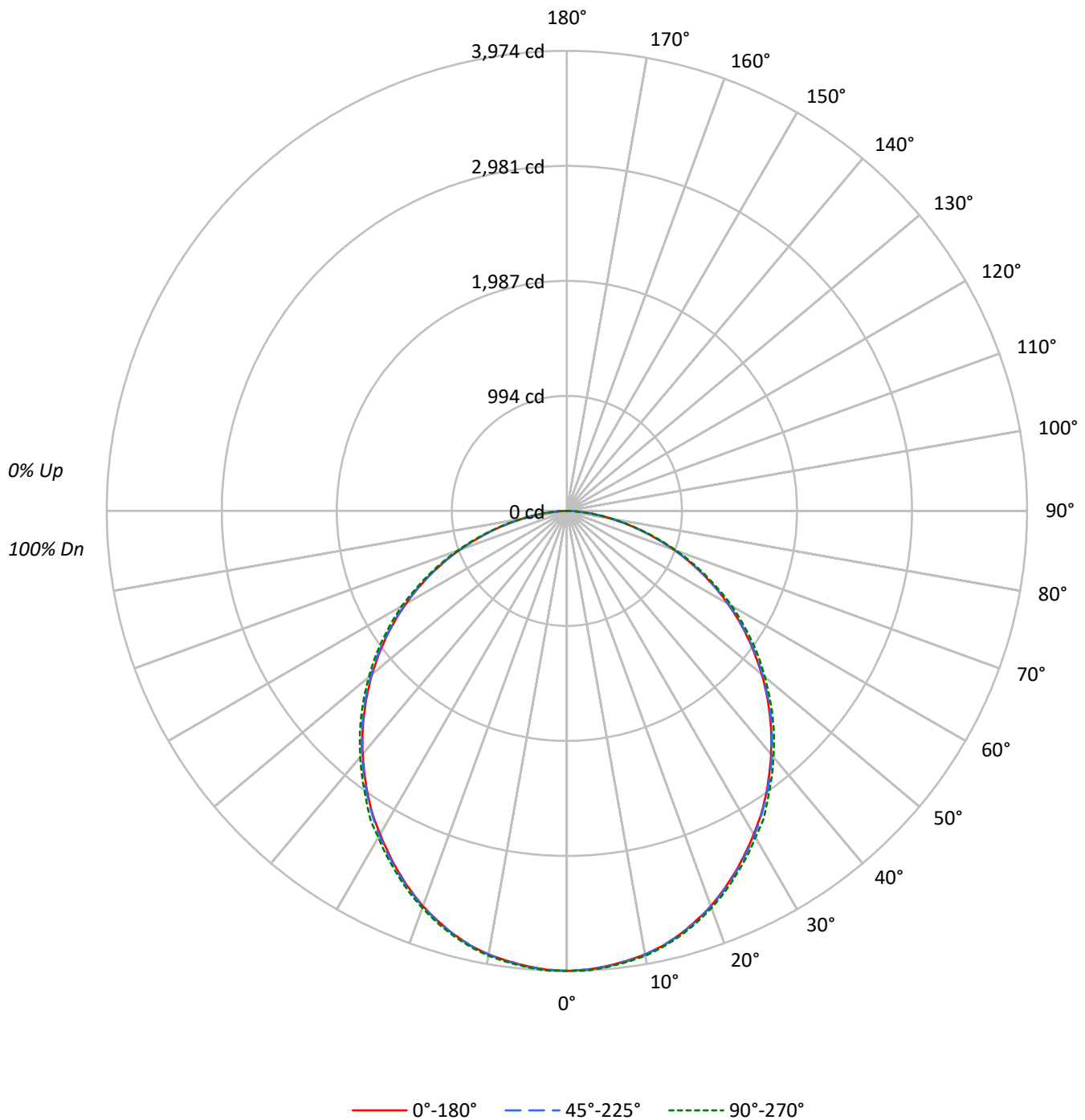
Lumens per Lamp: N/A
Luminaire Lumens: 10736.9 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P834947

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-20-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834947

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-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
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°	5346	5346	5346
5°	5332	5337	5343
10°	5315	5316	5332
15°	5271	5275	5290
20°	5203	5209	5228
25°	5109	5121	5144
30°	5013	5029	5060
35°	4921	4934	4973
40°	4817	4833	4877
45°	4712	4732	4781
50°	4598	4618	4672
55°	4468	4489	4562
60°	4319	4337	4434
65°	4131	4144	4222
70°	3877	3880	3965
75°	3524	3511	3592
80°	3028	3015	3066
85°	2350	2311	2323



TEST NUMBER: P834947

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-20-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.5	3.5
10°-20°	1068.1	9.9
20°-30°	1590.0	14.8
30°-40°	1880.4	17.5
40°-50°	1919.6	17.9
50°-60°	1713.1	16.0
60°-70°	1290.3	12.0
70°-80°	719.6	6.7
80°-90°	180.3	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°	3033.6	28.3
0°-40°	4914.0	45.8
0°-60°	8546.7	79.6
0°-90°	10736.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10736.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3974	3974	3974	3974	3974	
5°	3948	3955	3951	3952	3956	375
15°	3784	3788	3787	3790	3798	1067
25°	3441	3445	3450	3458	3465	1585
35°	2996	2993	3004	3015	3027	1874
45°	2476	2475	2487	2499	2512	1910
55°	1904	1902	1914	1927	1945	1702
65°	1297	1292	1302	1313	1326	1283
75°	678	672	675	679	691	719
85°	152	148	150	148	150	183
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P834947

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-4STD-20-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3973.5	3973.5	3973.5	3973.5	3973.5
2.5°	3966.9	3973.5	3965.3	3966.9	3974.3
5°	3948.0	3955.4	3951.3	3952.1	3956.2
7.5°	3921.7	3931.5	3925.8	3927.4	3931.5
10°	3890.4	3897.8	3891.2	3895.3	3902.8
12.5°	3846.0	3849.3	3846.0	3847.6	3855.9
15°	3784.3	3788.4	3786.8	3790.0	3797.5
17.5°	3711.9	3716.8	3716.0	3722.6	3728.3
20°	3633.7	3634.6	3637.9	3644.4	3651.0
22.5°	3541.6	3544.1	3547.4	3556.4	3563.0
25°	3441.2	3445.3	3449.5	3458.5	3465.1
27.5°	3335.1	3339.2	3345.0	3354.9	3365.5
30°	3226.5	3226.5	3237.2	3247.1	3257.0
32.5°	3117.1	3113.0	3122.9	3135.2	3159.1
35°	2996.2	2992.9	3003.6	3015.1	3027.4
37.5°	2870.3	2867.8	2880.2	2892.5	2904.0
40°	2742.8	2739.5	2751.8	2764.2	2776.5
42.5°	2612.0	2610.3	2621.9	2634.2	2647.4
45°	2476.2	2475.4	2486.9	2499.3	2512.4
47.5°	2338.0	2336.4	2347.9	2361.1	2372.6
50°	2196.5	2194.9	2206.4	2219.6	2231.9
52.5°	2050.9	2050.9	2061.6	2073.1	2092.1
55°	1904.5	1902.0	1913.5	1926.7	1944.8
57.5°	1756.4	1753.1	1763.8	1777.0	1793.4
60°	1605.0	1601.7	1611.6	1624.8	1647.8
62.5°	1452.0	1447.1	1457.0	1469.3	1483.3
65°	1297.4	1292.4	1301.5	1313.0	1326.1
67.5°	1141.9	1136.1	1145.2	1155.0	1167.4
70°	985.6	979.8	986.4	996.3	1007.8
72.5°	830.1	824.3	830.1	834.2	848.2
75°	677.9	672.1	675.4	678.7	691.0
77.5°	529.8	524.0	530.6	532.3	539.7
80°	390.8	385.0	389.1	389.9	395.7
82.5°	264.1	259.1	264.9	260.8	265.7
85°	152.2	148.1	149.7	148.1	150.5
87.5°	60.1	56.8	57.6	54.3	54.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)