

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: P835014

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835014
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-LD4-2HI-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

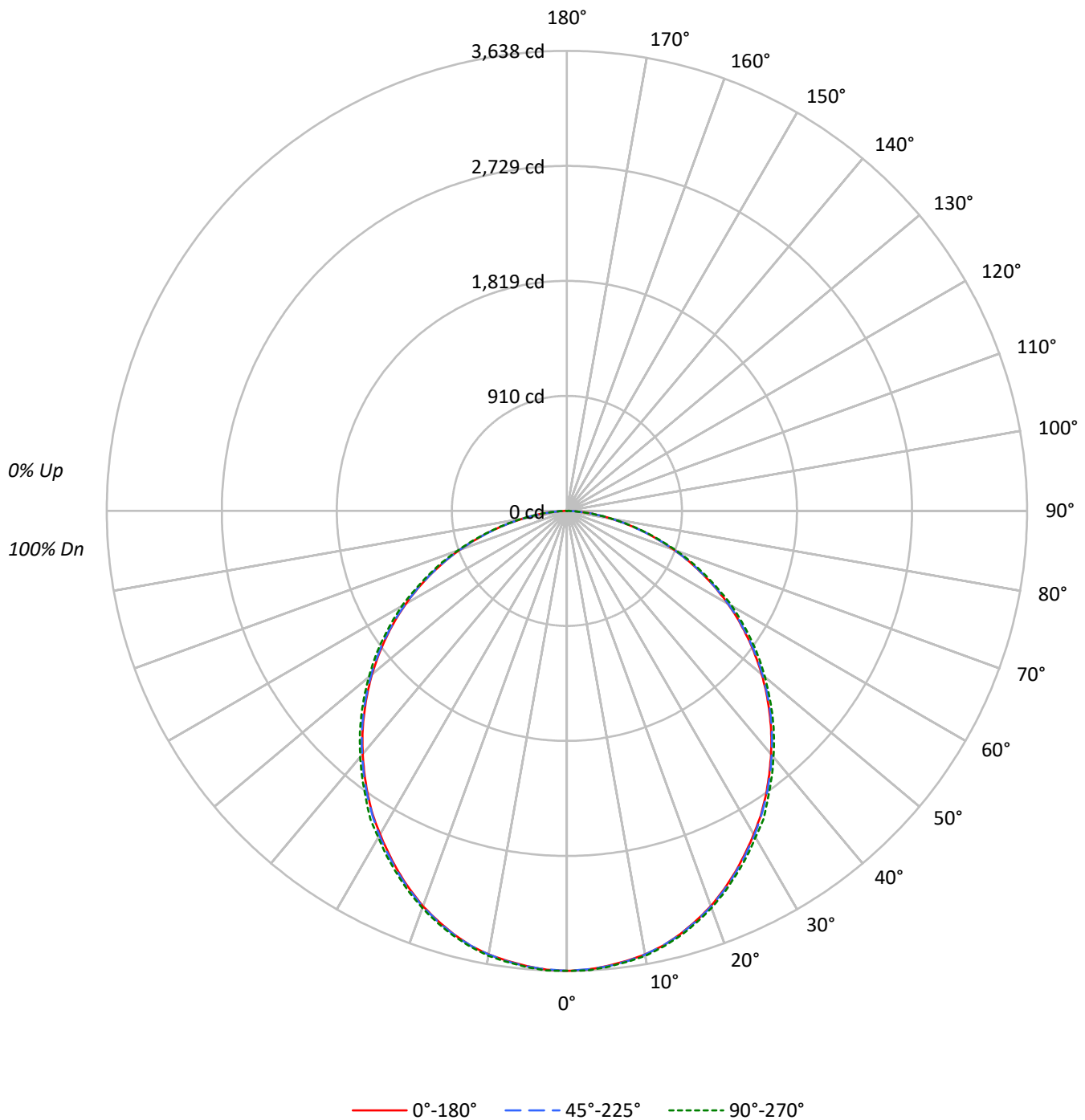
Lumens per Lamp: N/A
Luminaire Lumens: 9828.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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: P835014

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835014

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-40-120-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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4894	4894	4894
5°	4881	4885	4891
10°	4865	4866	4881
15°	4825	4828	4842
20°	4763	4768	4785
25°	4676	4688	4709
30°	4589	4604	4632
35°	4505	4516	4552
40°	4410	4424	4464
45°	4313	4332	4376
50°	4209	4227	4276
55°	4089	4109	4176
60°	3954	3970	4059
65°	3781	3793	3865
70°	3549	3552	3629
75°	3226	3214	3289
80°	2772	2760	2806
85°	2150	2117	2127

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835014

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.7	3.5
10°-20°	977.7	9.9
20°-30°	1455.5	14.8
30°-40°	1721.2	17.5
40°-50°	1757.1	17.9
50°-60°	1568.1	16.0
60°-70°	1181.1	12.0
70°-80°	658.7	6.7
80°-90°	165.0	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°	2776.8	28.3
0°-40°	4498.0	45.8
0°-60°	7823.3	79.6
0°-90°	9828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9828.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3637	3637	3637	3637	3637	
5°	3614	3621	3617	3618	3621	343
15°	3464	3468	3466	3469	3476	976
25°	3150	3154	3158	3166	3172	1451
35°	2743	2740	2749	2760	2771	1715
45°	2267	2266	2276	2288	2300	1748
55°	1743	1741	1752	1764	1780	1558
65°	1188	1183	1191	1202	1214	1175
75°	620	615	618	621	633	658
85°	139	136	137	136	138	167
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835014

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3637.2	3637.2	3637.2	3637.2	3637.2
2.5°	3631.2	3637.2	3629.6	3631.2	3637.9
5°	3613.8	3620.6	3616.8	3617.6	3621.4
7.5°	3589.7	3598.8	3593.5	3595.0	3598.8
10°	3561.1	3567.9	3561.9	3565.6	3572.4
12.5°	3520.5	3523.5	3520.5	3522.0	3529.5
15°	3464.0	3467.7	3466.2	3469.2	3476.0
17.5°	3397.7	3402.2	3401.5	3407.5	3412.8
20°	3326.2	3326.9	3329.9	3336.0	3342.0
22.5°	3241.8	3244.1	3247.1	3255.4	3261.4
25°	3150.0	3153.7	3157.5	3165.8	3171.8
27.5°	3052.8	3056.6	3061.9	3070.9	3080.7
30°	2953.4	2953.4	2963.2	2972.2	2981.3
32.5°	2853.3	2849.5	2858.5	2869.8	2891.7
35°	2742.6	2739.6	2749.3	2759.9	2771.2
37.5°	2627.4	2625.1	2636.4	2647.7	2658.2
40°	2510.6	2507.6	2518.9	2530.2	2541.5
42.5°	2390.9	2389.4	2399.9	2411.2	2423.3
45°	2266.6	2265.9	2276.4	2287.7	2299.8
47.5°	2140.1	2138.6	2149.2	2161.2	2171.8
50°	2010.6	2009.1	2019.6	2031.7	2043.0
52.5°	1877.3	1877.3	1887.1	1897.7	1915.0
55°	1743.3	1741.0	1751.6	1763.6	1780.2
57.5°	1607.7	1604.7	1614.5	1626.6	1641.6
60°	1469.2	1466.2	1475.2	1487.3	1508.3
62.5°	1329.1	1324.6	1333.6	1344.9	1357.7
65°	1187.5	1183.0	1191.3	1201.8	1213.9
67.5°	1045.2	1039.9	1048.2	1057.3	1068.6
70°	902.1	896.9	902.9	911.9	922.5
72.5°	759.8	754.5	759.8	763.6	776.4
75°	620.5	615.2	618.2	621.3	632.6
77.5°	485.0	479.7	485.7	487.2	494.0
80°	357.7	352.4	356.2	356.9	362.2
82.5°	241.7	237.2	242.5	238.7	243.2
85°	139.3	135.5	137.1	135.5	137.8
87.5°	55.0	52.0	52.7	49.7	49.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)