

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: P834971

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6STD-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834971
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-LD4-6STD-27-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

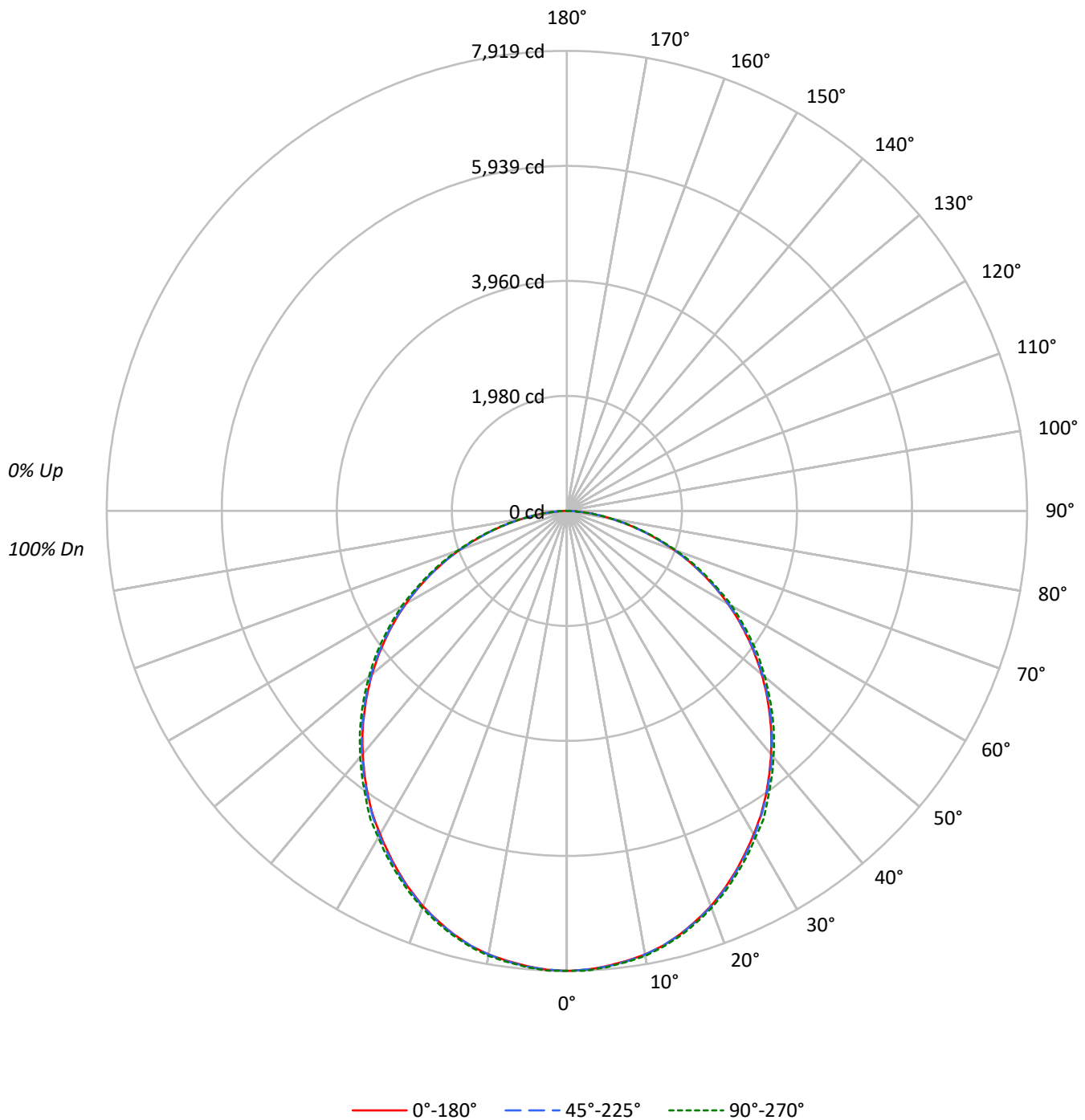
Lumens per Lamp: N/A
Luminaire Lumens: 21393.6 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 199.8
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

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Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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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°	10653	10653	10653
5°	10625	10634	10647
10°	10591	10593	10624
15°	10503	10510	10540
20°	10367	10379	10416
25°	10179	10204	10250
30°	9988	10021	10082
35°	9806	9830	9908
40°	9599	9631	9717
45°	9388	9429	9526
50°	9161	9202	9309
55°	8902	8944	9090
60°	8606	8641	8835
65°	8230	8256	8413
70°	7725	7732	7899
75°	7022	6996	7158
80°	6033	6007	6110
85°	4682	4605	4631

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	748.2	3.5
10°-20°	2128.2	9.9
20°-30°	3168.2	14.8
30°-40°	3746.7	17.5
40°-50°	3824.9	17.9
50°-60°	3413.5	16.0
60°-70°	2571.0	12.0
70°-80°	1433.8	6.7
80°-90°	359.2	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°	6044.5	28.3
0°-40°	9791.2	45.8
0°-60°	17029.6	79.6
0°-90°	21393.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21393.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7917	7917	7917	7917	7917	
5°	7866	7881	7873	7875	7883	747
15°	7540	7548	7545	7552	7567	2125
25°	6857	6865	6873	6891	6904	3159
35°	5970	5963	5985	6008	6032	3733
45°	4934	4932	4955	4980	5006	3806
55°	3795	3790	3813	3839	3875	3392
65°	2585	2575	2593	2616	2642	2557
75°	1351	1339	1346	1352	1377	1432
85°	303	295	298	295	300	364
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7917.4	7917.4	7917.4	7917.4	7917.4
2.5°	7904.2	7917.4	7901.0	7904.2	7919.0
5°	7866.5	7881.3	7873.1	7874.7	7882.9
7.5°	7814.1	7833.8	7822.3	7825.6	7833.8
10°	7751.8	7766.5	7753.4	7761.6	7776.4
12.5°	7663.3	7669.8	7663.3	7666.6	7682.9
15°	7540.3	7548.5	7545.3	7551.8	7566.6
17.5°	7396.1	7405.9	7404.3	7417.4	7428.9
20°	7240.4	7242.0	7248.6	7261.7	7274.8
22.5°	7056.8	7061.7	7068.2	7086.3	7099.4
25°	6856.8	6865.0	6873.2	6891.2	6904.3
27.5°	6645.3	6653.5	6665.0	6684.7	6706.0
30°	6429.0	6429.0	6450.3	6469.9	6489.6
32.5°	6210.9	6202.7	6222.4	6247.0	6294.5
35°	5970.0	5963.4	5984.7	6007.7	6032.3
37.5°	5719.2	5714.3	5738.9	5763.4	5786.4
40°	5465.1	5458.5	5483.1	5507.7	5532.3
42.5°	5204.5	5201.2	5224.1	5248.7	5275.0
45°	4934.0	4932.4	4955.3	4979.9	5006.1
47.5°	4658.6	4655.3	4678.3	4704.5	4727.5
50°	4376.7	4373.4	4396.3	4422.6	4447.2
52.5°	4086.5	4086.5	4107.8	4130.8	4168.5
55°	3794.8	3789.8	3812.8	3839.0	3875.1
57.5°	3499.7	3493.1	3514.5	3540.7	3573.5
60°	3198.1	3191.5	3211.2	3237.4	3283.3
62.5°	2893.2	2883.4	2903.0	2927.6	2955.5
65°	2585.0	2575.2	2593.2	2616.2	2642.4
67.5°	2275.2	2263.7	2281.8	2301.4	2326.0
70°	1963.8	1952.3	1965.4	1985.1	2008.0
72.5°	1654.0	1642.5	1654.0	1662.2	1690.0
75°	1350.7	1339.2	1345.8	1352.3	1376.9
77.5°	1055.6	1044.2	1057.3	1060.6	1075.3
80°	778.6	767.1	775.3	777.0	788.5
82.5°	526.2	516.3	527.8	519.6	529.5
85°	303.3	295.1	298.3	295.1	300.0
87.5°	119.7	113.1	114.7	108.2	108.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)