

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: P835077

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5HI-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835077
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-27-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

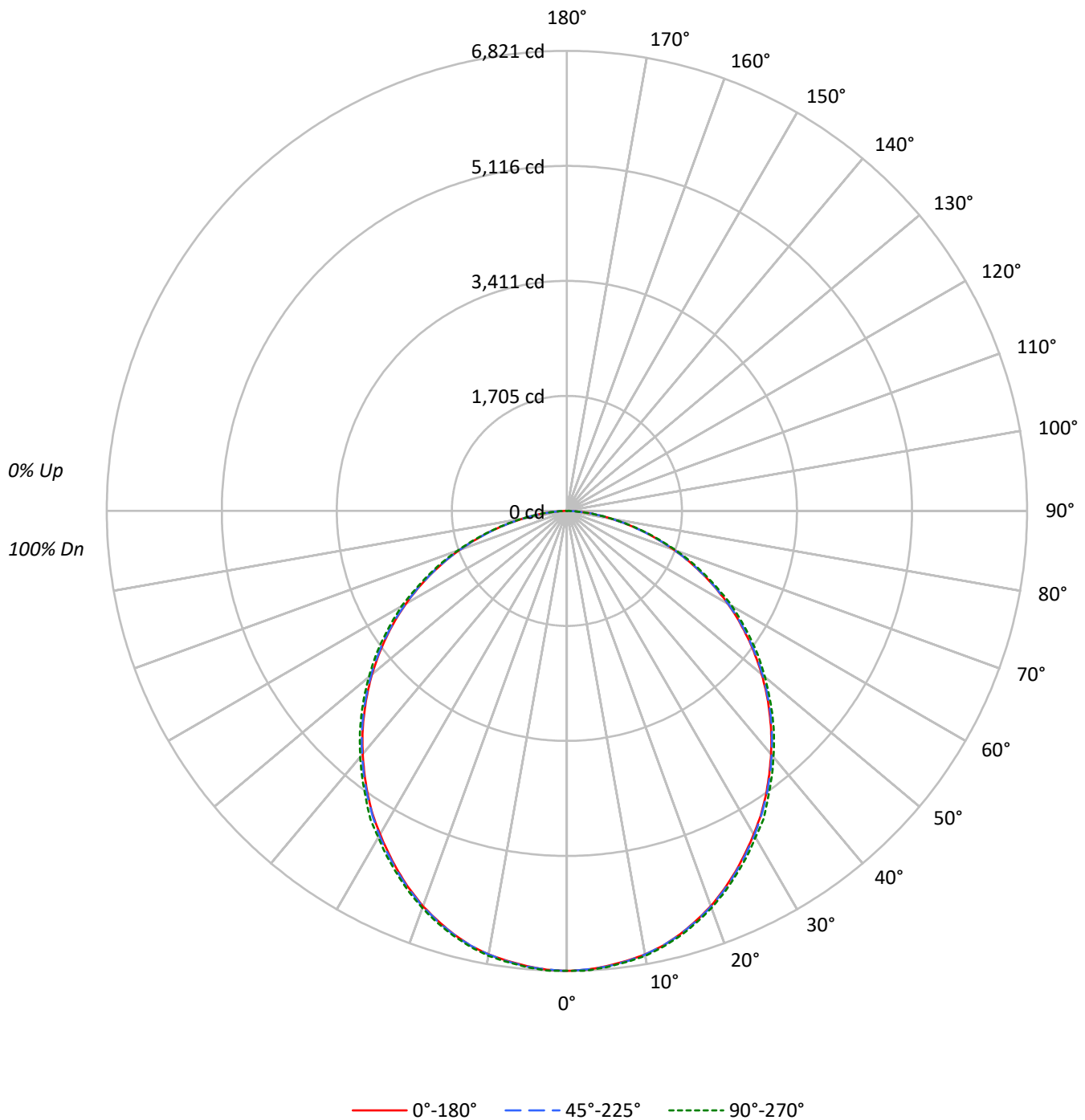
Lumens per Lamp: N/A
Luminaire Lumens: 18427.2 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	9176	9176	9176
5°	9152	9159	9171
10°	9122	9124	9151
15°	9047	9053	9078
20°	8930	8940	8972
25°	8768	8789	8829
30°	8603	8632	8685
35°	8446	8467	8534
40°	8268	8295	8370
45°	8087	8122	8205
50°	7891	7927	8018
55°	7667	7704	7830
60°	7413	7443	7610
65°	7089	7111	7246
70°	6654	6660	6804
75°	6048	6026	6166
80°	5197	5174	5262
85°	4032	3968	3989

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	644.4	3.5
10°-20°	1833.1	9.9
20°-30°	2728.9	14.8
30°-40°	3227.2	17.5
40°-50°	3294.5	17.9
50°-60°	2940.2	16.0
60°-70°	2214.5	12.0
70°-80°	1235.0	6.7
80°-90°	309.4	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°	5206.4	28.3
0°-40°	8433.6	45.8
0°-60°	14668.3	79.6
0°-90°	18427.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18427.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6820	6820	6820	6820	6820	
5°	6776	6788	6782	6783	6790	644
15°	6495	6502	6499	6505	6517	1831
25°	5906	5913	5920	5936	5947	2721
35°	5142	5137	5155	5175	5196	3216
45°	4250	4248	4268	4289	4312	3278
55°	3269	3264	3284	3307	3338	2922
65°	2227	2218	2234	2253	2276	2202
75°	1163	1154	1159	1165	1186	1233
85°	261	254	257	254	258	314
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6819.6	6819.6	6819.6	6819.6	6819.6
2.5°	6808.3	6819.6	6805.5	6808.3	6821.0
5°	6775.8	6788.5	6781.5	6782.9	6789.9
7.5°	6730.6	6747.6	6737.7	6740.5	6747.6
10°	6677.0	6689.7	6678.4	6685.4	6698.1
12.5°	6600.7	6606.4	6600.7	6603.5	6617.7
15°	6494.8	6501.9	6499.1	6504.7	6517.4
17.5°	6370.6	6379.1	6377.6	6388.9	6398.8
20°	6236.4	6237.9	6243.5	6254.8	6266.1
22.5°	6078.3	6082.5	6088.2	6103.7	6115.0
25°	5906.1	5913.1	5920.2	5935.7	5947.0
27.5°	5723.9	5731.0	5740.9	5757.8	5776.2
30°	5537.5	5537.5	5555.9	5572.8	5589.8
32.5°	5349.8	5342.7	5359.6	5380.8	5421.8
35°	5142.2	5136.6	5154.9	5174.7	5195.9
37.5°	4926.2	4922.0	4943.1	4964.3	4984.1
40°	4707.3	4701.7	4722.9	4744.1	4765.2
42.5°	4482.8	4480.0	4499.8	4521.0	4543.6
45°	4249.9	4248.5	4268.2	4289.4	4312.0
47.5°	4012.7	4009.9	4029.6	4052.2	4072.0
50°	3769.8	3767.0	3786.8	3809.4	3830.5
52.5°	3519.9	3519.9	3538.3	3558.0	3590.5
55°	3268.6	3264.4	3284.1	3306.7	3337.8
57.5°	3014.4	3008.8	3027.2	3049.7	3078.0
60°	2754.7	2749.0	2766.0	2788.5	2828.1
62.5°	2492.0	2483.6	2500.5	2521.7	2545.7
65°	2226.6	2218.1	2233.7	2253.4	2276.0
67.5°	1959.7	1949.9	1965.4	1982.3	2003.5
70°	1691.5	1681.6	1692.9	1709.8	1729.6
72.5°	1424.6	1414.7	1424.6	1431.7	1455.7
75°	1163.4	1153.5	1159.2	1164.8	1186.0
77.5°	909.3	899.4	910.7	913.5	926.2
80°	670.7	660.8	667.8	669.2	679.1
82.5°	453.2	444.8	454.6	447.6	456.1
85°	261.2	254.1	257.0	254.1	258.4
87.5°	103.1	97.4	98.8	93.2	93.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)