

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: P835107

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3HI-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835107
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-LD4-3HI-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

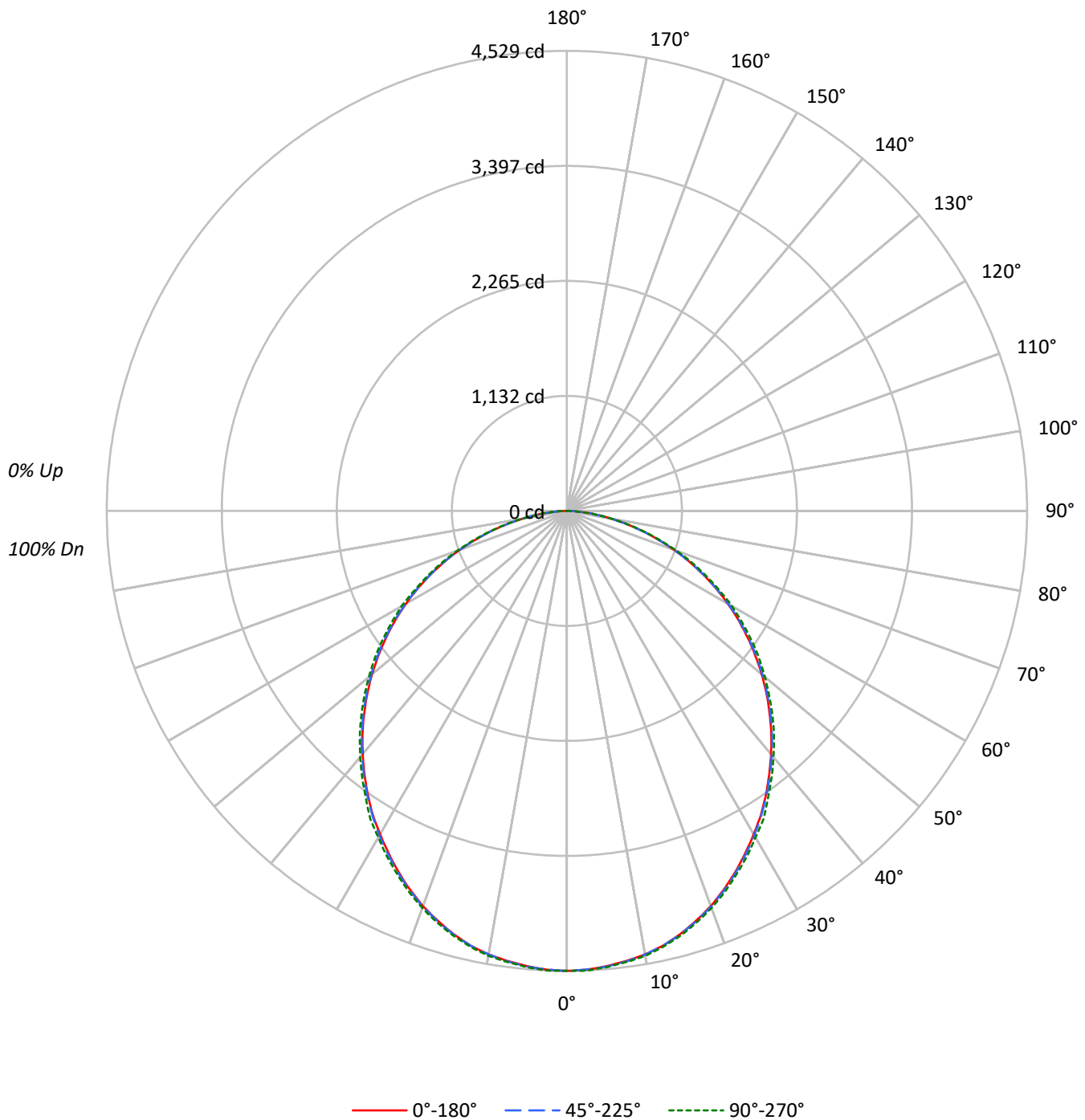
Lumens per Lamp: N/A
Luminaire Lumens: 12235.5 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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

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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6093	6093	6093
5°	6077	6082	6089
10°	6057	6058	6076
15°	6007	6011	6028
20°	5929	5936	5957
25°	5822	5836	5862
30°	5713	5732	5766
35°	5608	5622	5667
40°	5490	5508	5557
45°	5370	5393	5448
50°	5240	5263	5324
55°	5091	5115	5199
60°	4922	4942	5053
65°	4707	4722	4812
70°	4418	4422	4518
75°	4016	4001	4094
80°	3450	3436	3494
85°	2677	2634	2649

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.9	3.5
10°-20°	1217.2	9.9
20°-30°	1812.0	14.8
30°-40°	2142.8	17.5
40°-50°	2187.5	17.9
50°-60°	1952.3	16.0
60°-70°	1470.4	12.0
70°-80°	820.0	6.7
80°-90°	205.4	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°	3457.0	28.3
0°-40°	5599.9	45.8
0°-60°	9739.6	79.6
0°-90°	12235.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12235.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4528	4528	4528	4528	4528	
5°	4499	4508	4503	4504	4508	427
15°	4312	4317	4315	4319	4328	1215
25°	3922	3926	3931	3941	3949	1807
35°	3414	3411	3423	3436	3450	2135
45°	2822	2821	2834	2848	2863	2177
55°	2170	2168	2181	2196	2216	1940
65°	1478	1473	1483	1496	1511	1462
75°	772	766	770	773	788	819
85°	173	169	171	169	172	208
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4528.1	4528.1	4528.1	4528.1	4528.1
2.5°	4520.6	4528.1	4518.8	4520.6	4529.1
5°	4499.1	4507.5	4502.8	4503.8	4508.4
7.5°	4469.1	4480.3	4473.8	4475.6	4480.3
10°	4433.4	4441.9	4434.4	4439.1	4447.5
12.5°	4382.8	4386.6	4382.8	4384.7	4394.1
15°	4312.5	4317.2	4315.3	4319.1	4327.5
17.5°	4230.0	4235.6	4234.7	4242.2	4248.8
20°	4140.9	4141.9	4145.6	4153.1	4160.6
22.5°	4035.9	4038.8	4042.5	4052.8	4060.3
25°	3921.6	3926.3	3930.9	3941.3	3948.8
27.5°	3800.6	3805.3	3811.9	3823.1	3835.3
30°	3676.9	3676.9	3689.1	3700.3	3711.6
32.5°	3552.2	3547.5	3558.8	3572.8	3600.0
35°	3414.4	3410.6	3422.8	3435.9	3450.0
37.5°	3270.9	3268.1	3282.2	3296.3	3309.4
40°	3125.6	3121.9	3135.9	3150.0	3164.1
42.5°	2976.6	2974.7	2987.8	3001.9	3016.9
45°	2821.9	2820.9	2834.1	2848.1	2863.1
47.5°	2664.4	2662.5	2675.6	2690.6	2703.8
50°	2503.1	2501.3	2514.4	2529.4	2543.4
52.5°	2337.2	2337.2	2349.4	2362.5	2384.1
55°	2170.3	2167.5	2180.6	2195.6	2216.3
57.5°	2001.6	1997.8	2010.0	2025.0	2043.8
60°	1829.1	1825.3	1836.6	1851.6	1877.8
62.5°	1654.7	1649.1	1660.3	1674.4	1690.3
65°	1478.4	1472.8	1483.1	1496.3	1511.3
67.5°	1301.3	1294.7	1305.0	1316.3	1330.3
70°	1123.1	1116.6	1124.1	1135.3	1148.4
72.5°	945.9	939.4	945.9	950.6	966.6
75°	772.5	765.9	769.7	773.4	787.5
77.5°	603.8	597.2	604.7	606.6	615.0
80°	445.3	438.8	443.4	444.4	450.9
82.5°	300.9	295.3	301.9	297.2	302.8
85°	173.4	168.8	170.6	168.8	171.6
87.5°	68.4	64.7	65.6	61.9	61.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)