

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: P835149

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5HI-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835149
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-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

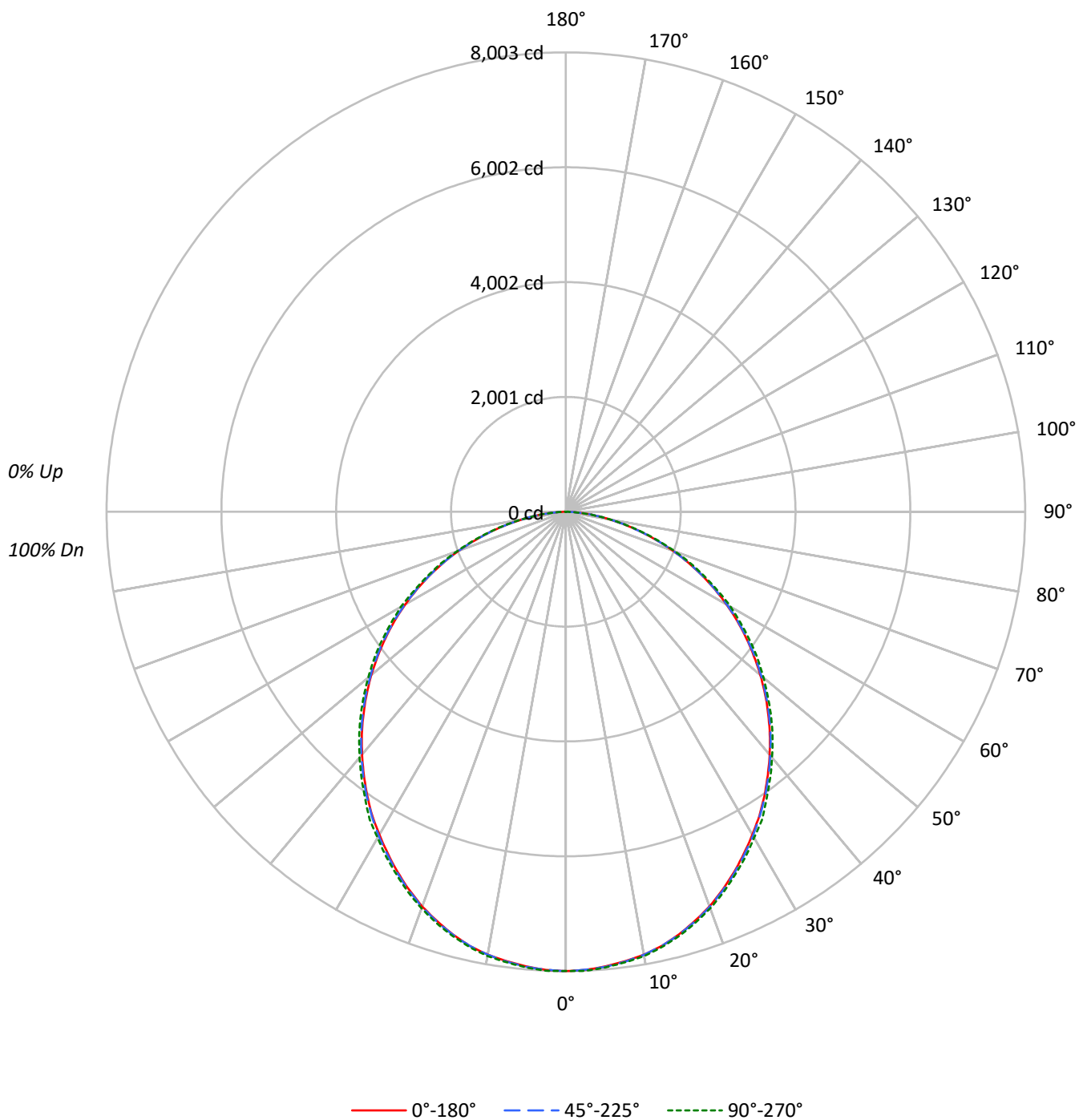
Lumens per Lamp: N/A
Luminaire Lumens: 21621.3 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	10766	10766	10766
5°	10738	10747	10760
10°	10704	10706	10738
15°	10615	10622	10652
20°	10477	10489	10527
25°	10288	10312	10359
30°	10095	10128	10190
35°	9910	9935	10014
40°	9701	9733	9820
45°	9488	9529	9627
50°	9259	9300	9408
55°	8997	9039	9187
60°	8698	8733	8929
65°	8317	8344	8502
70°	7808	7814	7984
75°	7097	7071	7234
80°	6097	6072	6174
85°	4732	4654	4681

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	756.1	3.5
10°-20°	2150.8	9.9
20°-30°	3201.9	14.8
30°-40°	3786.6	17.5
40°-50°	3865.6	17.9
50°-60°	3449.8	16.0
60°-70°	2598.4	12.0
70°-80°	1449.1	6.7
80°-90°	363.0	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°	6108.9	28.3
0°-40°	9895.5	45.8
0°-60°	17210.9	79.6
0°-90°	21621.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21621.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8002	8002	8002	8002	8002	
5°	7950	7965	7957	7959	7967	755
15°	7621	7629	7626	7632	7647	2148
25°	6930	6938	6946	6965	6978	3192
35°	6034	6027	6048	6072	6096	3773
45°	4986	4985	5008	5033	5059	3847
55°	3835	3830	3853	3880	3916	3428
65°	2612	2603	2621	2644	2670	2584
75°	1365	1354	1360	1367	1392	1447
85°	306	298	302	298	303	368
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8001.6	8001.6	8001.6	8001.6	8001.6
2.5°	7988.4	8001.6	7985.1	7988.4	8003.3
5°	7950.3	7965.2	7956.9	7958.6	7966.8
7.5°	7897.3	7917.1	7905.5	7908.9	7917.1
10°	7834.3	7849.2	7836.0	7844.2	7859.2
12.5°	7744.9	7751.5	7744.9	7748.2	7764.7
15°	7620.6	7628.9	7625.6	7632.2	7647.1
17.5°	7474.8	7484.8	7483.1	7496.4	7507.9
20°	7317.4	7319.1	7325.7	7339.0	7352.2
22.5°	7131.9	7136.9	7143.5	7161.7	7175.0
25°	6929.8	6938.1	6946.3	6964.6	6977.8
27.5°	6716.1	6724.4	6735.9	6755.8	6777.4
30°	6497.4	6497.4	6518.9	6538.8	6558.7
32.5°	6277.1	6268.8	6288.7	6313.5	6361.5
35°	6033.5	6026.9	6048.4	6071.6	6096.5
37.5°	5780.1	5775.1	5799.9	5824.8	5848.0
40°	5523.3	5516.7	5541.5	5566.4	5591.2
42.5°	5259.9	5256.6	5279.8	5304.6	5331.1
45°	4986.5	4984.9	5008.1	5032.9	5059.4
47.5°	4708.2	4704.9	4728.1	4754.6	4777.8
50°	4423.3	4419.9	4443.1	4469.6	4494.5
52.5°	4130.0	4130.0	4151.6	4174.8	4212.9
55°	3835.2	3830.2	3853.4	3879.9	3916.3
57.5°	3537.0	3530.3	3551.9	3578.4	3611.5
60°	3232.1	3225.5	3245.4	3271.9	3318.3
62.5°	2924.0	2914.1	2933.9	2958.8	2986.9
65°	2612.5	2602.6	2620.8	2644.0	2670.5
67.5°	2299.4	2287.8	2306.1	2325.9	2350.8
70°	1984.7	1973.1	1986.3	2006.2	2029.4
72.5°	1671.6	1660.0	1671.6	1679.8	1708.0
75°	1365.1	1353.5	1360.1	1366.7	1391.6
77.5°	1066.9	1055.3	1068.5	1071.9	1086.8
80°	786.9	775.3	783.6	785.3	796.8
82.5°	531.8	521.8	533.4	525.2	535.1
85°	306.5	298.2	301.5	298.2	303.2
87.5°	120.9	114.3	116.0	109.3	109.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)