

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: P835148

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

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P835148
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-LD4-5STD-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

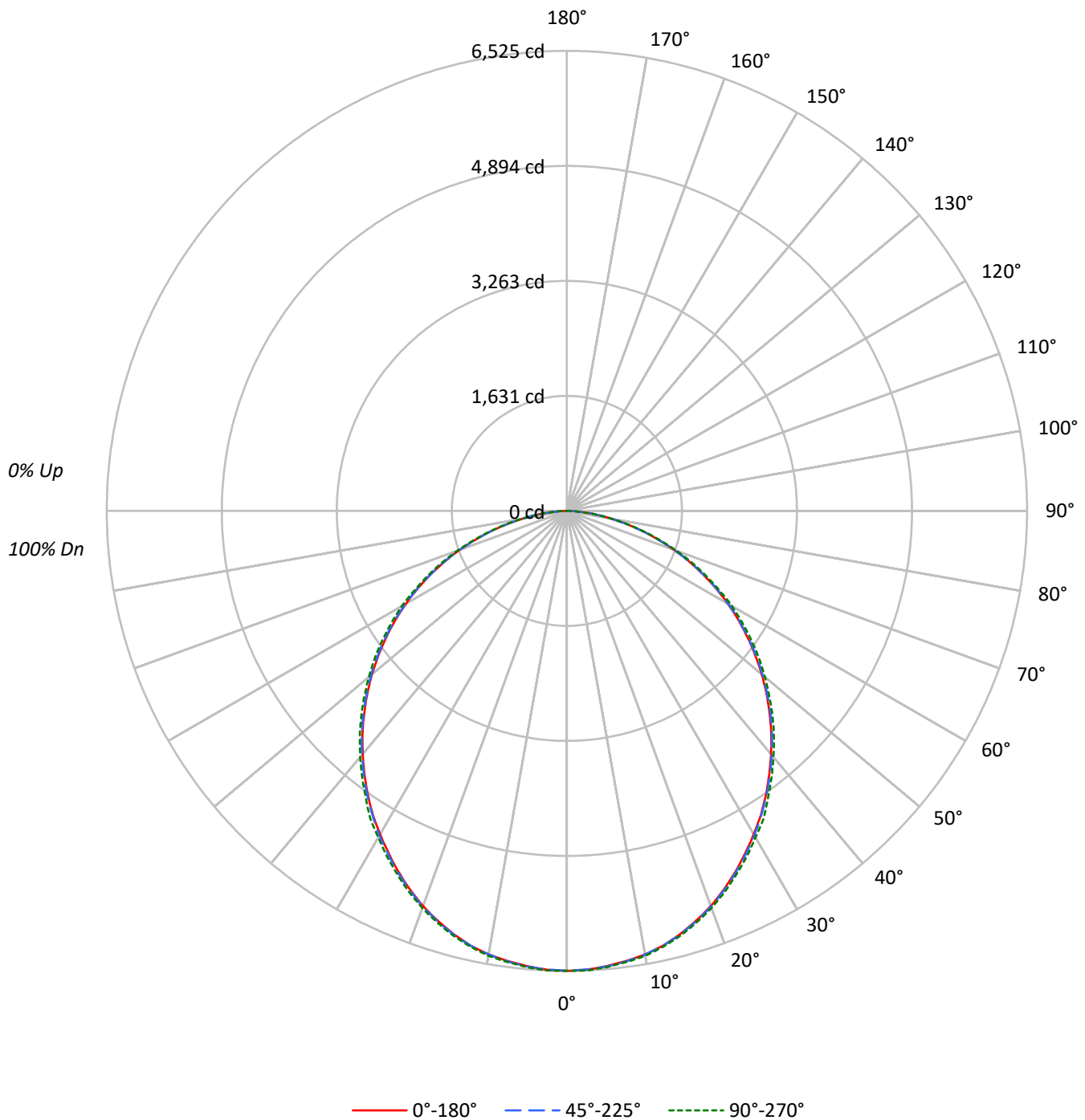
Lumens per Lamp: N/A
Luminaire Lumens: 17626.8 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 166.5
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



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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	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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8777	8777	8777
5°	8754	8761	8772
10°	8726	8728	8754
15°	8654	8660	8684
20°	8542	8551	8582
25°	8387	8407	8445
30°	8230	8257	8307
35°	8079	8099	8164
40°	7909	7935	8006
45°	7735	7769	7849
50°	7548	7582	7670
55°	7334	7369	7490
60°	7091	7120	7280
65°	6781	6802	6932
70°	6365	6371	6509
75°	5785	5764	5898
80°	4971	4950	5033
85°	3858	3795	3816

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.4	3.5
10°-20°	1753.5	9.9
20°-30°	2610.4	14.8
30°-40°	3087.0	17.5
40°-50°	3151.4	17.9
50°-60°	2812.5	16.0
60°-70°	2118.3	12.0
70°-80°	1181.3	6.7
80°-90°	296.0	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°	4980.3	28.3
0°-40°	8067.3	45.8
0°-60°	14031.2	79.6
0°-90°	17626.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17626.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6523	6523	6523	6523	6523	
5°	6482	6494	6487	6488	6495	616
15°	6213	6220	6217	6222	6234	1751
25°	5650	5656	5663	5678	5689	2603
35°	4919	4913	4931	4950	4970	3076
45°	4065	4064	4083	4103	4125	3136
55°	3127	3123	3142	3163	3193	2795
65°	2130	2122	2137	2156	2177	2107
75°	1113	1103	1109	1114	1134	1180
85°	250	243	246	243	247	300
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6523.3	6523.3	6523.3	6523.3	6523.3
2.5°	6512.5	6523.3	6509.8	6512.5	6524.7
5°	6481.5	6493.6	6486.9	6488.2	6495.0
7.5°	6438.3	6454.5	6445.0	6447.7	6454.5
10°	6386.9	6399.1	6388.3	6395.0	6407.2
12.5°	6314.0	6319.4	6314.0	6316.7	6330.2
15°	6212.7	6219.5	6216.8	6222.2	6234.3
17.5°	6093.9	6102.0	6100.6	6111.4	6120.9
20°	5965.6	5966.9	5972.3	5983.1	5993.9
22.5°	5814.3	5818.3	5823.7	5838.6	5849.4
25°	5649.5	5656.3	5663.0	5677.9	5688.7
27.5°	5475.3	5482.0	5491.5	5507.7	5525.3
30°	5297.0	5297.0	5314.6	5330.8	5347.0
32.5°	5117.4	5110.6	5126.8	5147.1	5186.3
35°	4918.8	4913.4	4931.0	4949.9	4970.2
37.5°	4712.2	4708.2	4728.4	4748.7	4767.6
40°	4502.9	4497.5	4517.7	4538.0	4558.2
42.5°	4288.1	4285.4	4304.3	4324.6	4346.2
45°	4065.3	4063.9	4082.8	4103.1	4124.7
47.5°	3838.4	3835.7	3854.6	3876.2	3895.1
50°	3606.1	3603.4	3622.3	3643.9	3664.2
52.5°	3367.0	3367.0	3384.6	3403.5	3434.6
55°	3126.6	3122.6	3141.5	3163.1	3192.8
57.5°	2883.5	2878.1	2895.7	2917.3	2944.3
60°	2635.0	2629.6	2645.8	2667.4	2705.2
62.5°	2383.8	2375.7	2391.9	2412.2	2435.1
65°	2129.9	2121.8	2136.6	2155.5	2177.2
67.5°	1874.6	1865.2	1880.0	1896.2	1916.5
70°	1618.0	1608.6	1619.4	1635.6	1654.5
72.5°	1362.7	1353.3	1362.7	1369.5	1392.5
75°	1112.9	1103.4	1108.8	1114.2	1134.5
77.5°	869.8	860.3	871.1	873.8	886.0
80°	641.5	632.1	638.8	640.2	649.6
82.5°	433.5	425.4	434.9	428.1	436.2
85°	249.9	243.1	245.8	243.1	247.2
87.5°	98.6	93.2	94.5	89.1	89.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)