

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: P835040

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835040
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
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

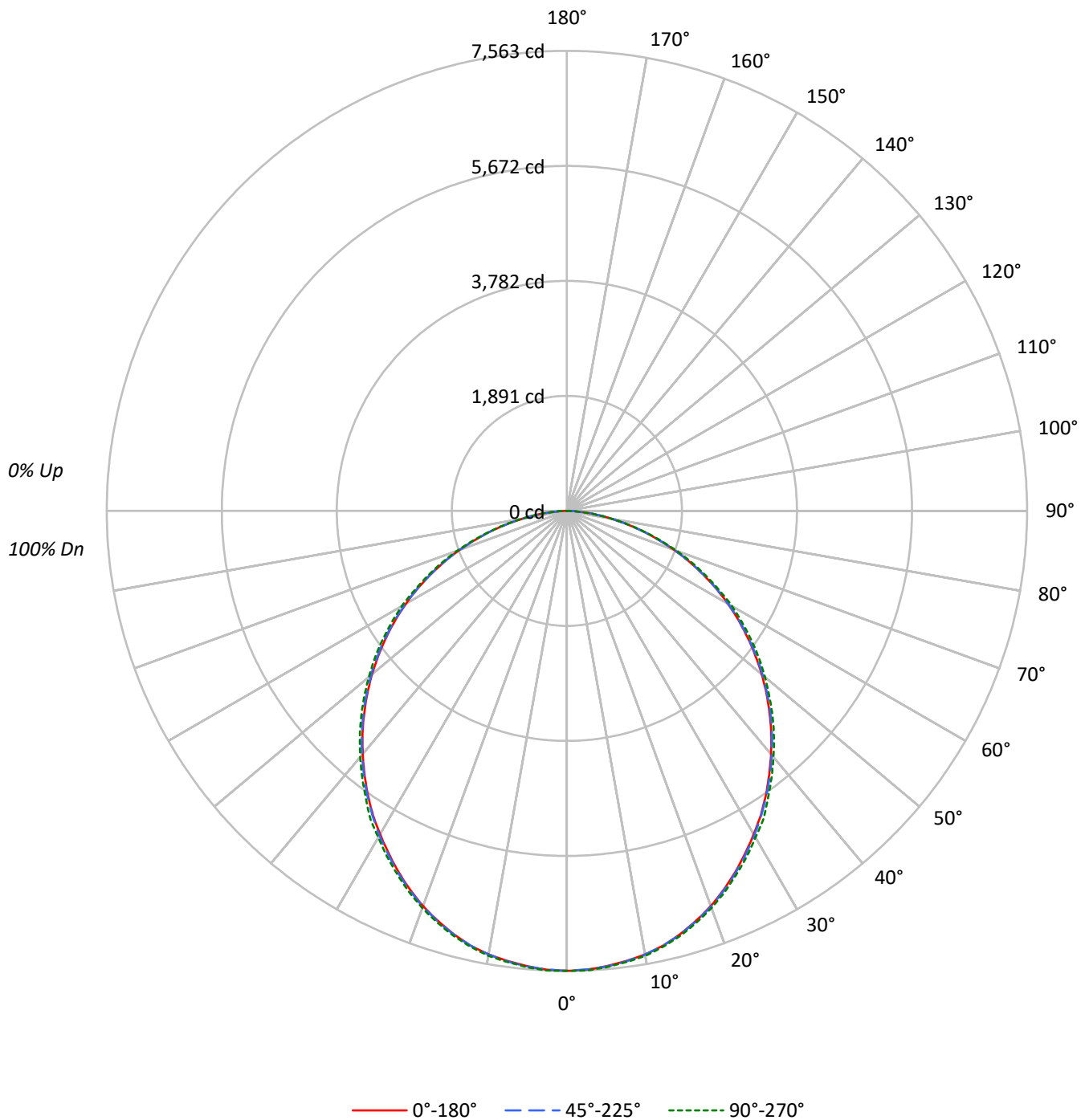
Lumens per Lamp: N/A
Luminaire Lumens: 20431.1 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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°	10174	10174	10174
5°	10147	10155	10168
10°	10114	10117	10146
15°	10031	10037	10066
20°	9901	9912	9948
25°	9721	9745	9789
30°	9539	9571	9629
35°	9365	9388	9463
40°	9167	9197	9280
45°	8966	9005	9097
50°	8749	8789	8890
55°	8501	8542	8681
60°	8219	8252	8438
65°	7860	7885	8034
70°	7378	7384	7544
75°	6706	6681	6836
80°	5762	5738	5835
85°	4471	4398	4423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	714.5	3.5
10°-20°	2032.4	9.9
20°-30°	3025.7	14.8
30°-40°	3578.1	17.5
40°-50°	3652.8	17.9
50°-60°	3259.9	16.0
60°-70°	2455.3	12.0
70°-80°	1369.3	6.7
80°-90°	343.0	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°	5772.6	28.3
0°-40°	9350.7	45.8
0°-60°	16263.4	79.6
0°-90°	20431.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20431.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7561	7561	7561	7561	7561	
5°	7513	7527	7519	7520	7528	714
15°	7201	7209	7206	7212	7226	2030
25°	6548	6556	6564	6581	6594	3017
35°	5701	5695	5716	5737	5761	3565
45°	4712	4710	4732	4756	4781	3635
55°	3624	3619	3641	3666	3701	3239
65°	2469	2459	2477	2498	2524	2442
75°	1290	1279	1285	1292	1315	1367
85°	290	282	285	282	286	348
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7561.2	7561.2	7561.2	7561.2	7561.2
2.5°	7548.6	7561.2	7545.5	7548.6	7562.7
5°	7512.6	7526.7	7518.9	7520.5	7528.3
7.5°	7462.5	7481.3	7470.4	7473.5	7481.3
10°	7403.0	7417.1	7404.6	7412.4	7426.5
12.5°	7318.5	7324.8	7318.5	7321.6	7337.3
15°	7201.1	7208.9	7205.8	7212.1	7226.1
17.5°	7063.3	7072.7	7071.2	7083.7	7094.6
20°	6914.6	6916.2	6922.4	6935.0	6947.5
22.5°	6739.3	6744.0	6750.2	6767.5	6780.0
25°	6548.3	6556.1	6564.0	6581.2	6593.7
27.5°	6346.4	6354.2	6365.1	6383.9	6404.3
30°	6139.7	6139.7	6160.1	6178.9	6197.6
32.5°	5931.5	5923.7	5942.5	5966.0	6011.4
35°	5701.4	5695.1	5715.5	5737.4	5760.9
37.5°	5461.9	5457.2	5480.7	5504.1	5526.1
40°	5219.2	5213.0	5236.5	5259.9	5283.4
42.5°	4970.3	4967.2	4989.1	5012.6	5037.6
45°	4712.0	4710.5	4732.4	4755.9	4780.9
47.5°	4449.0	4445.9	4467.8	4492.9	4514.8
50°	4179.8	4176.6	4198.6	4223.6	4247.1
52.5°	3902.7	3902.7	3923.0	3945.0	3981.0
55°	3624.0	3619.3	3641.3	3666.3	3700.7
57.5°	3342.2	3336.0	3356.3	3381.4	3412.7
60°	3054.2	3047.9	3066.7	3091.8	3135.6
62.5°	2763.0	2753.6	2772.4	2795.9	2822.5
65°	2468.7	2459.3	2476.6	2498.5	2523.5
67.5°	2172.9	2161.9	2179.1	2197.9	2221.4
70°	1875.4	1864.5	1877.0	1895.8	1917.7
72.5°	1579.5	1568.6	1579.5	1587.4	1614.0
75°	1289.9	1279.0	1285.2	1291.5	1315.0
77.5°	1008.2	997.2	1009.7	1012.9	1026.9
80°	743.6	732.6	740.5	742.0	753.0
82.5°	502.5	493.1	504.1	496.2	505.6
85°	289.6	281.8	284.9	281.8	286.5
87.5°	114.3	108.0	109.6	103.3	103.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)