

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: P834948

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4HI-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834948
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-LD4-4HI-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

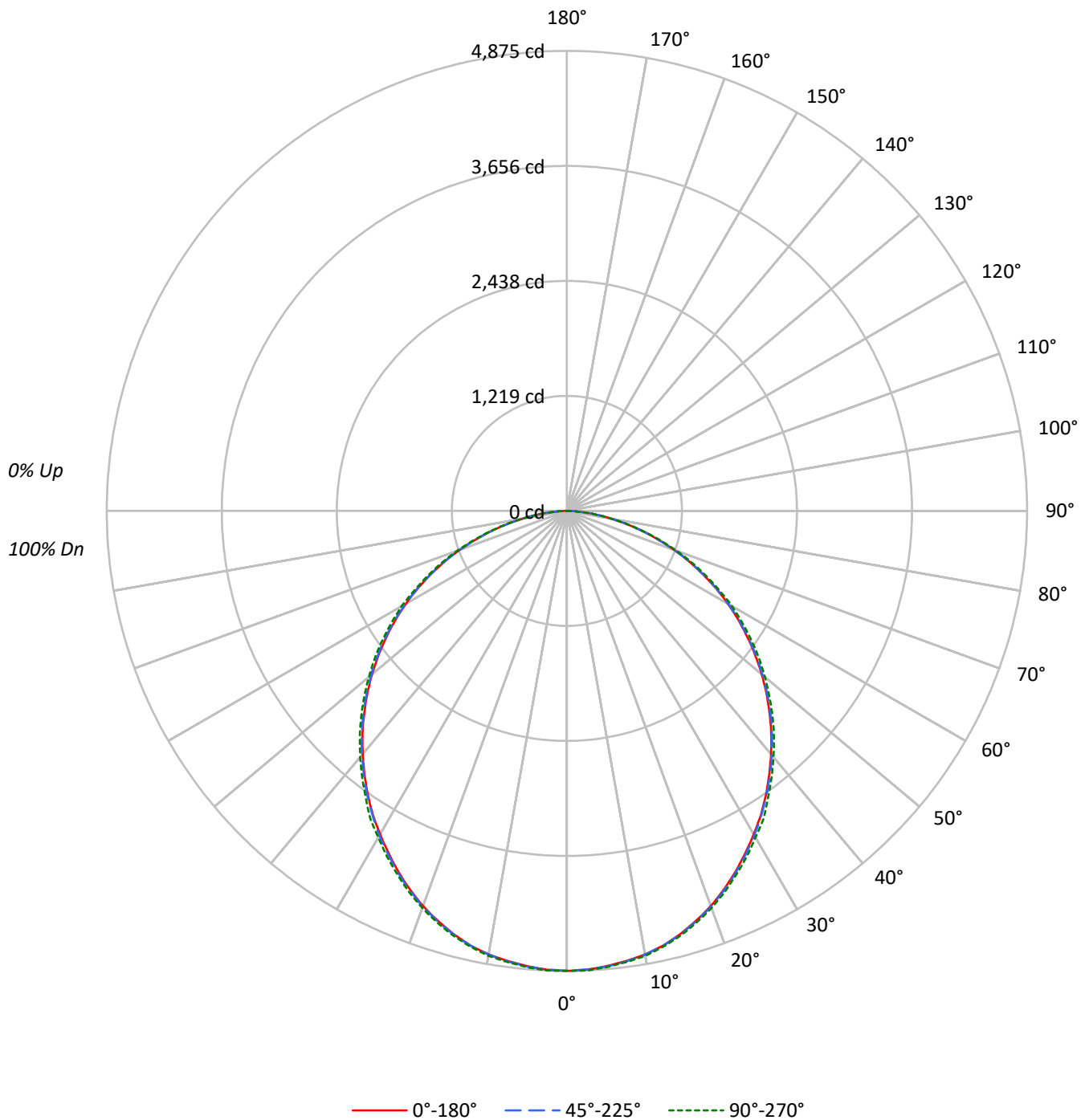
Lumens per Lamp: N/A
Luminaire Lumens: 13169.6 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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°	6558	6558	6558
5°	6540	6546	6554
10°	6520	6521	6540
15°	6466	6470	6488
20°	6382	6389	6412
25°	6266	6281	6310
30°	6149	6169	6207
35°	6036	6051	6099
40°	5909	5928	5982
45°	5779	5804	5864
50°	5640	5665	5730
55°	5480	5506	5596
60°	5298	5320	5439
65°	5066	5082	5179
70°	4756	4760	4863
75°	4323	4306	4406
80°	3714	3698	3761
85°	2882	2836	2851

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.6	3.5
10°-20°	1310.1	9.9
20°-30°	1950.3	14.8
30°-40°	2306.4	17.5
40°-50°	2354.5	17.9
50°-60°	2101.3	16.0
60°-70°	1582.7	12.0
70°-80°	882.6	6.7
80°-90°	221.1	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°	3720.9	28.3
0°-40°	6027.3	45.8
0°-60°	10483.2	79.6
0°-90°	13169.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13169.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4874	4874	4874	4874	4874	
5°	4842	4852	4847	4848	4853	460
15°	4642	4647	4645	4649	4658	1308
25°	4221	4226	4231	4242	4250	1945
35°	3675	3671	3684	3698	3713	2298
45°	3037	3036	3050	3066	3082	2343
55°	2336	2333	2347	2363	2385	2088
65°	1591	1585	1596	1610	1627	1574
75°	832	824	828	832	848	881
85°	187	182	184	182	185	224
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4873.8	4873.8	4873.8	4873.8	4873.8
2.5°	4865.7	4873.8	4863.7	4865.7	4874.8
5°	4842.5	4851.6	4846.6	4847.6	4852.6
7.5°	4810.2	4822.4	4815.3	4817.3	4822.4
10°	4771.9	4781.0	4772.9	4778.0	4787.0
12.5°	4717.4	4721.4	4717.4	4719.4	4729.5
15°	4641.7	4646.8	4644.8	4648.8	4657.9
17.5°	4552.9	4559.0	4558.0	4566.0	4573.1
20°	4457.1	4458.1	4462.1	4470.2	4478.3
22.5°	4344.1	4347.1	4351.1	4362.2	4370.3
25°	4220.9	4226.0	4231.0	4242.1	4250.2
27.5°	4090.8	4095.8	4102.9	4115.0	4128.1
30°	3957.6	3957.6	3970.7	3982.8	3994.9
32.5°	3823.4	3818.3	3830.4	3845.6	3874.8
35°	3675.0	3671.0	3684.1	3698.2	3713.4
37.5°	3520.7	3517.6	3532.8	3547.9	3562.0
40°	3364.2	3360.2	3375.3	3390.5	3405.6
42.5°	3203.8	3201.8	3215.9	3231.0	3247.2
45°	3037.3	3036.3	3050.4	3065.6	3081.7
47.5°	2867.8	2865.8	2879.9	2896.0	2910.2
50°	2694.2	2692.2	2706.3	2722.5	2737.6
52.5°	2515.6	2515.6	2528.7	2542.9	2566.1
55°	2336.0	2333.0	2347.1	2363.2	2385.4
57.5°	2154.4	2150.3	2163.4	2179.6	2199.8
60°	1968.7	1964.7	1976.8	1992.9	2021.2
62.5°	1781.0	1775.0	1787.1	1802.2	1819.4
65°	1591.3	1585.3	1596.4	1610.5	1626.6
67.5°	1400.6	1393.5	1404.6	1416.7	1431.9
70°	1208.9	1201.8	1209.9	1222.0	1236.1
72.5°	1018.2	1011.1	1018.2	1023.2	1040.4
75°	831.5	824.4	828.4	832.5	847.6
77.5°	649.8	642.8	650.9	652.9	662.0
80°	479.3	472.2	477.3	478.3	485.4
82.5°	323.9	317.9	324.9	319.9	325.9
85°	186.7	181.6	183.7	181.6	184.7
87.5°	73.7	69.6	70.6	66.6	66.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)