

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: P835080

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6HI-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835080
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-LD4-6HI-27-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

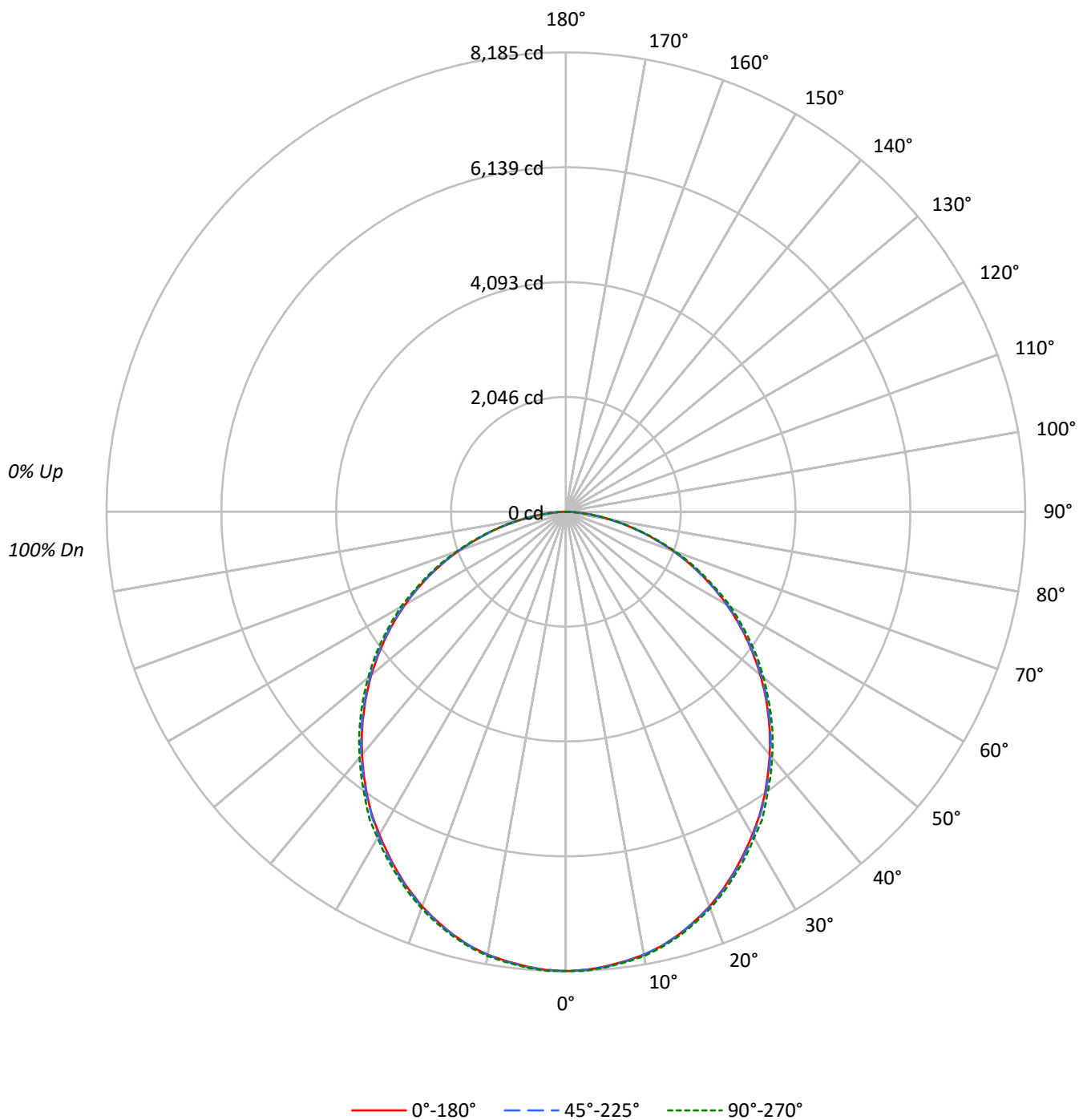
Lumens per Lamp: N/A
Luminaire Lumens: 22112.4 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 264
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°	11011	11011	11011
5°	10982	10991	11005
10°	10947	10949	10981
15°	10856	10863	10894
20°	10715	10727	10766
25°	10522	10547	10594
30°	10324	10358	10421
35°	10135	10160	10241
40°	9921	9954	10044
45°	9704	9746	9846
50°	9469	9512	9622
55°	9201	9245	9396
60°	8895	8932	9132
65°	8507	8534	8695
70°	7985	7991	8165
75°	7258	7231	7399
80°	6236	6210	6314
85°	4838	4761	4787

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	773.3	3.5
10°-20°	2199.7	9.9
20°-30°	3274.7	14.8
30°-40°	3872.6	17.5
40°-50°	3953.4	17.9
50°-60°	3528.2	16.0
60°-70°	2657.4	12.0
70°-80°	1482.0	6.7
80°-90°	371.3	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°	6247.6	28.3
0°-40°	10120.2	45.8
0°-60°	17601.8	79.6
0°-90°	22112.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22112.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8183	8183	8183	8183	8183	
5°	8131	8146	8138	8139	8148	772
15°	7794	7802	7799	7806	7821	2197
25°	7087	7096	7104	7123	7136	3265
35°	6171	6164	6186	6210	6235	3859
45°	5100	5098	5122	5147	5174	3934
55°	3922	3917	3941	3968	4005	3506
65°	2672	2662	2680	2704	2731	2643
75°	1396	1384	1391	1398	1423	1480
85°	313	305	308	305	310	376
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8183.4	8183.4	8183.4	8183.4	8183.4
2.5°	8169.8	8183.4	8166.4	8169.8	8185.1
5°	8130.9	8146.1	8137.6	8139.3	8147.8
7.5°	8076.6	8097.0	8085.1	8088.5	8097.0
10°	8012.3	8027.5	8014.0	8022.4	8037.7
12.5°	7920.8	7927.5	7920.8	7924.2	7941.1
15°	7793.7	7802.2	7798.8	7805.6	7820.8
17.5°	7644.6	7654.8	7653.1	7666.6	7678.5
20°	7483.6	7485.3	7492.1	7505.7	7519.2
22.5°	7293.9	7299.0	7305.7	7324.4	7337.9
25°	7087.2	7095.7	7104.1	7122.8	7136.3
27.5°	6868.6	6877.1	6888.9	6909.3	6931.3
30°	6645.0	6645.0	6667.0	6687.3	6707.7
32.5°	6419.6	6411.2	6431.5	6456.9	6506.0
35°	6170.6	6163.8	6185.8	6209.5	6235.0
37.5°	5911.3	5906.3	5931.7	5957.1	5980.8
40°	5648.7	5642.0	5667.4	5692.8	5718.2
42.5°	5379.3	5376.0	5399.7	5425.1	5452.2
45°	5099.8	5098.1	5121.8	5147.2	5174.3
47.5°	4815.1	4811.8	4835.5	4862.6	4886.3
50°	4523.7	4520.3	4544.1	4571.2	4596.6
52.5°	4223.8	4223.8	4245.9	4269.6	4308.6
55°	3922.3	3917.2	3940.9	3968.0	4005.3
57.5°	3617.3	3610.5	3632.5	3659.6	3693.5
60°	3305.5	3298.8	3319.1	3346.2	3393.6
62.5°	2990.4	2980.2	3000.6	3026.0	3054.8
65°	2671.9	2661.7	2680.4	2704.1	2731.2
67.5°	2351.7	2339.8	2358.4	2378.8	2404.2
70°	2029.7	2017.9	2031.4	2051.8	2075.5
72.5°	1709.5	1697.7	1709.5	1718.0	1746.8
75°	1396.1	1384.2	1391.0	1397.8	1423.2
77.5°	1091.1	1079.3	1092.8	1096.2	1111.4
80°	804.8	792.9	801.4	803.1	814.9
82.5°	543.9	533.7	545.6	537.1	547.3
85°	313.4	305.0	308.4	305.0	310.1
87.5°	123.7	116.9	118.6	111.8	111.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)