

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: P835021

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5LO-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835021
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-LD4-5LO-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

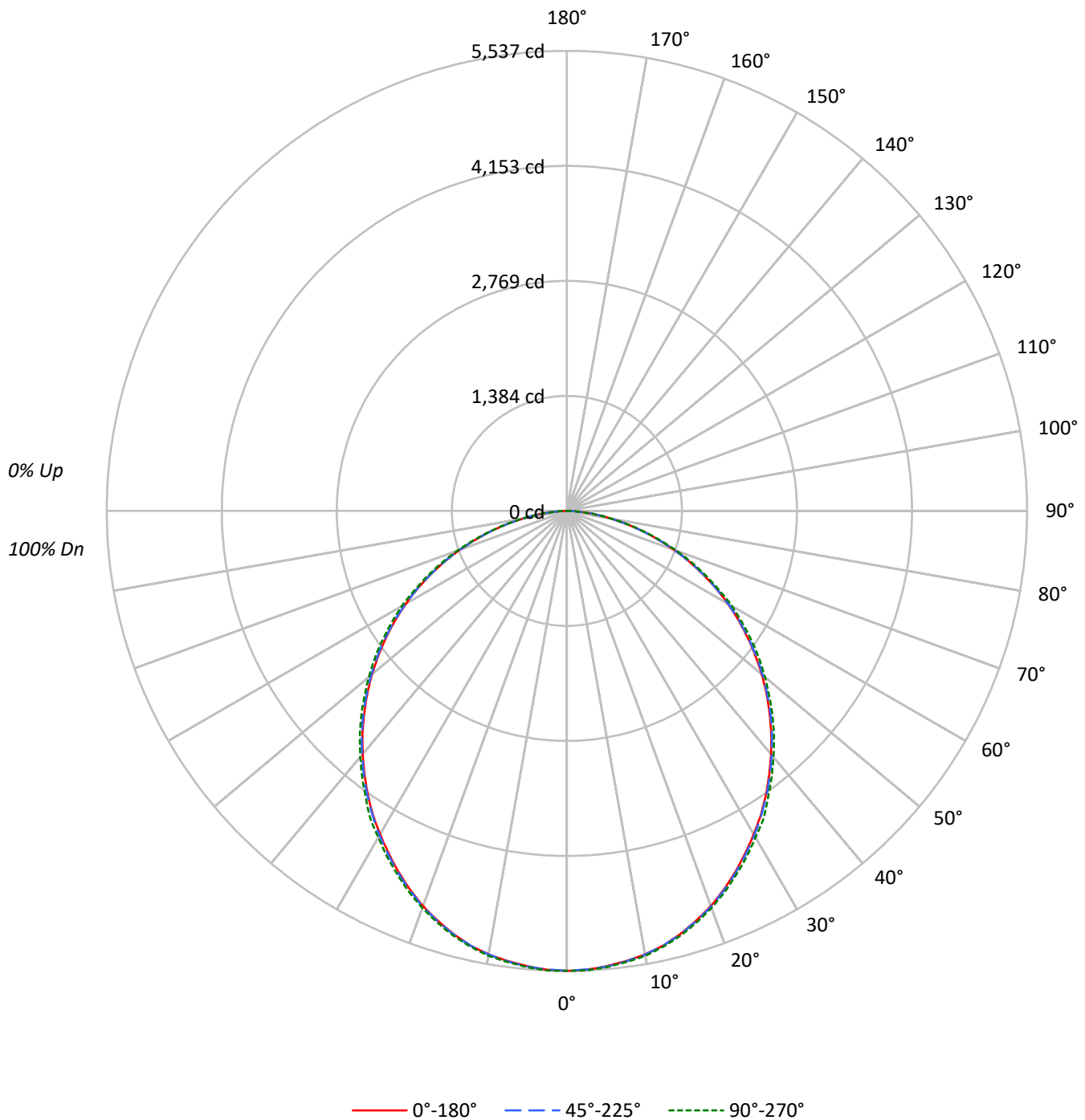
Lumens per Lamp: N/A
Luminaire Lumens: 14957.5 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 117
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°	7448	7448	7448
5°	7428	7435	7444
10°	7405	7406	7428
15°	7344	7348	7369
20°	7248	7256	7283
25°	7117	7134	7166
30°	6983	7006	7049
35°	6856	6873	6927
40°	6711	6733	6794
45°	6564	6592	6660
50°	6405	6434	6508
55°	6224	6253	6355
60°	6017	6042	6177
65°	5754	5772	5882
70°	5401	5406	5523
75°	4910	4891	5005
80°	4218	4200	4272
85°	3273	3220	3237

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	523.1	3.5
10°-20°	1487.9	9.9
20°-30°	2215.1	14.8
30°-40°	2619.5	17.5
40°-50°	2674.2	17.9
50°-60°	2386.6	16.0
60°-70°	1797.5	12.0
70°-80°	1002.5	6.7
80°-90°	251.1	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°	4226.1	28.3
0°-40°	6845.6	45.8
0°-60°	11906.3	79.6
0°-90°	14957.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14957.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5536	5536	5536	5536	5536	
5°	5500	5510	5504	5506	5511	522
15°	5272	5278	5275	5280	5290	1486
25°	4794	4800	4805	4818	4827	2209
35°	4174	4169	4184	4200	4218	2610
45°	3450	3448	3464	3482	3500	2661
55°	2653	2650	2666	2684	2709	2372
65°	1807	1800	1813	1829	1847	1788
75°	944	936	941	946	963	1001
85°	212	206	209	206	210	255
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5535.5	5535.5	5535.5	5535.5	5535.5
2.5°	5526.3	5535.5	5524.0	5526.3	5536.6
5°	5499.9	5510.2	5504.5	5505.7	5511.4
7.5°	5463.3	5477.0	5469.0	5471.3	5477.0
10°	5419.7	5430.0	5420.9	5426.6	5436.9
12.5°	5357.8	5362.4	5357.8	5360.1	5371.6
15°	5271.9	5277.6	5275.3	5279.9	5290.2
17.5°	5171.0	5177.9	5176.7	5185.9	5193.9
20°	5062.1	5063.3	5067.9	5077.0	5086.2
22.5°	4933.8	4937.2	4941.8	4954.4	4963.6
25°	4794.0	4799.7	4805.4	4818.0	4827.2
27.5°	4646.1	4651.9	4659.9	4673.6	4688.5
30°	4494.8	4494.8	4509.7	4523.5	4537.2
32.5°	4342.4	4336.7	4350.4	4367.6	4400.9
35°	4173.9	4169.4	4184.3	4200.3	4217.5
37.5°	3998.6	3995.2	4012.4	4029.5	4045.6
40°	3821.0	3816.4	3833.6	3850.8	3867.9
42.5°	3638.7	3636.4	3652.5	3669.7	3688.0
45°	3449.6	3448.5	3464.5	3481.7	3500.1
47.5°	3257.1	3254.8	3270.9	3289.2	3305.2
50°	3060.0	3057.7	3073.7	3092.1	3109.3
52.5°	2857.1	2857.1	2872.0	2888.1	2914.4
55°	2653.1	2649.7	2665.7	2684.1	2709.3
57.5°	2446.8	2442.3	2457.1	2475.5	2498.4
60°	2236.0	2231.4	2245.1	2263.5	2295.6
62.5°	2022.8	2015.9	2029.7	2046.9	2066.3
65°	1807.3	1800.5	1813.1	1829.1	1847.4
67.5°	1590.7	1582.7	1595.3	1609.1	1626.3
70°	1373.0	1365.0	1374.1	1387.9	1403.9
72.5°	1156.4	1148.4	1156.4	1162.1	1181.6
75°	944.4	936.3	940.9	945.5	962.7
77.5°	738.1	730.0	739.2	741.5	751.8
80°	544.4	536.4	542.1	543.2	551.3
82.5°	367.9	361.0	369.0	363.3	370.2
85°	212.0	206.3	208.6	206.3	209.7
87.5°	83.7	79.1	80.2	75.6	75.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)