

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: P835150

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6LO-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: P835150
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-LD4-6LO-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

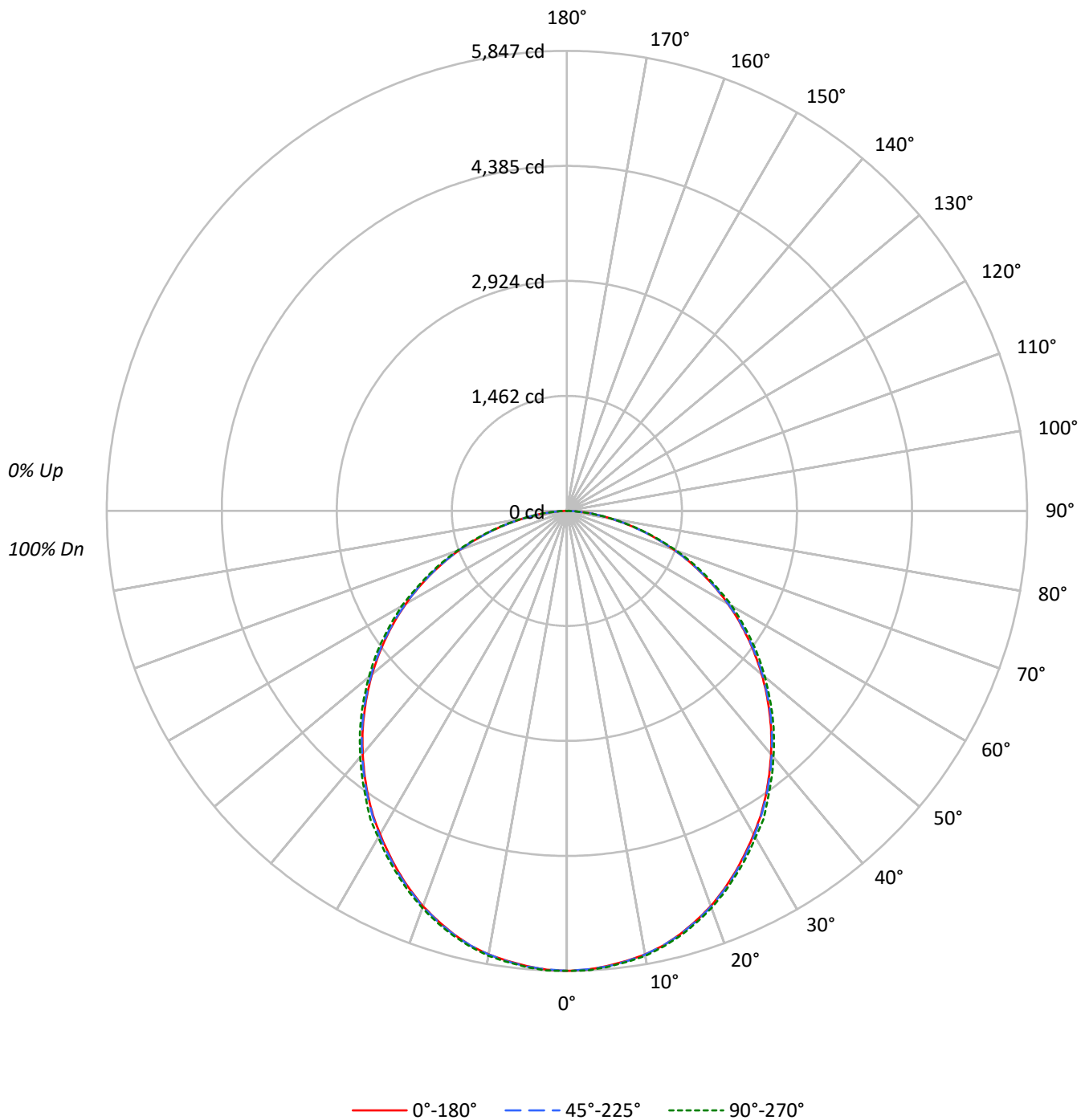
Lumens per Lamp: N/A
Luminaire Lumens: 15795.5 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.4
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°	7865	7865	7865
5°	7845	7851	7861
10°	7820	7821	7844
15°	7755	7760	7782
20°	7654	7663	7691
25°	7516	7534	7568
30°	7375	7399	7444
35°	7240	7258	7316
40°	7087	7111	7174
45°	6932	6962	7033
50°	6764	6795	6873
55°	6572	6604	6712
60°	6354	6380	6523
65°	6076	6096	6211
70°	5704	5709	5832
75°	5185	5165	5285
80°	4455	4436	4510
85°	3457	3401	3419

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.4	3.5
10°-20°	1571.3	9.9
20°-30°	2339.2	14.8
30°-40°	2766.3	17.5
40°-50°	2824.0	17.9
50°-60°	2520.3	16.0
60°-70°	1898.3	12.0
70°-80°	1058.6	6.7
80°-90°	265.2	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°	4462.9	28.3
0°-40°	7229.2	45.8
0°-60°	12573.5	79.6
0°-90°	15795.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15795.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5846	5846	5846	5846	5846	
5°	5808	5819	5813	5814	5820	552
15°	5567	5573	5571	5576	5587	1569
25°	5063	5069	5075	5088	5098	2332
35°	4408	4403	4419	4436	4454	2756
45°	3643	3642	3659	3677	3696	2810
55°	2802	2798	2815	2834	2861	2504
65°	1909	1901	1915	1932	1951	1888
75°	997	989	994	998	1017	1057
85°	224	218	220	218	222	269
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5845.6	5845.6	5845.6	5845.6	5845.6
2.5°	5836.0	5845.6	5833.5	5836.0	5846.8
5°	5808.1	5819.0	5813.0	5814.2	5820.2
7.5°	5769.4	5783.9	5775.4	5777.9	5783.9
10°	5723.4	5734.3	5724.6	5730.7	5741.6
12.5°	5658.0	5662.9	5658.0	5660.5	5672.6
15°	5567.3	5573.3	5570.9	5575.7	5586.6
17.5°	5460.8	5468.0	5466.8	5476.5	5485.0
20°	5345.8	5347.0	5351.8	5361.5	5371.2
22.5°	5210.2	5213.9	5218.7	5232.0	5241.7
25°	5062.6	5068.6	5074.7	5088.0	5097.7
27.5°	4906.5	4912.5	4921.0	4935.5	4951.2
30°	4746.7	4746.7	4762.4	4777.0	4791.5
32.5°	4585.7	4579.7	4594.2	4612.4	4647.5
35°	4407.8	4403.0	4418.7	4435.7	4453.8
37.5°	4222.7	4219.0	4237.2	4255.3	4272.3
40°	4035.1	4030.2	4048.4	4066.5	4084.7
42.5°	3842.6	3840.2	3857.2	3875.3	3894.7
45°	3642.9	3641.7	3658.7	3676.8	3696.2
47.5°	3439.6	3437.2	3454.1	3473.5	3490.4
50°	3231.4	3229.0	3246.0	3265.3	3283.5
52.5°	3017.2	3017.2	3033.0	3049.9	3077.7
55°	2801.8	2798.2	2815.1	2834.5	2861.1
57.5°	2583.9	2579.1	2594.8	2614.2	2638.4
60°	2361.2	2356.4	2370.9	2390.3	2424.2
62.5°	2136.1	2128.9	2143.4	2161.6	2182.1
65°	1908.6	1901.3	1914.7	1931.6	1951.0
67.5°	1679.9	1671.4	1684.7	1699.2	1717.4
70°	1449.9	1441.4	1451.1	1465.6	1482.6
72.5°	1221.2	1212.7	1221.2	1227.2	1247.8
75°	997.3	988.8	993.6	998.5	1016.6
77.5°	779.4	770.9	780.6	783.0	793.9
80°	574.9	566.4	572.5	573.7	582.1
82.5°	388.5	381.2	389.7	383.7	390.9
85°	223.9	217.8	220.3	217.8	221.5
87.5°	88.4	83.5	84.7	79.9	79.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)