

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: P834980

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3STD-30-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834980
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-LD4-3STD-30-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

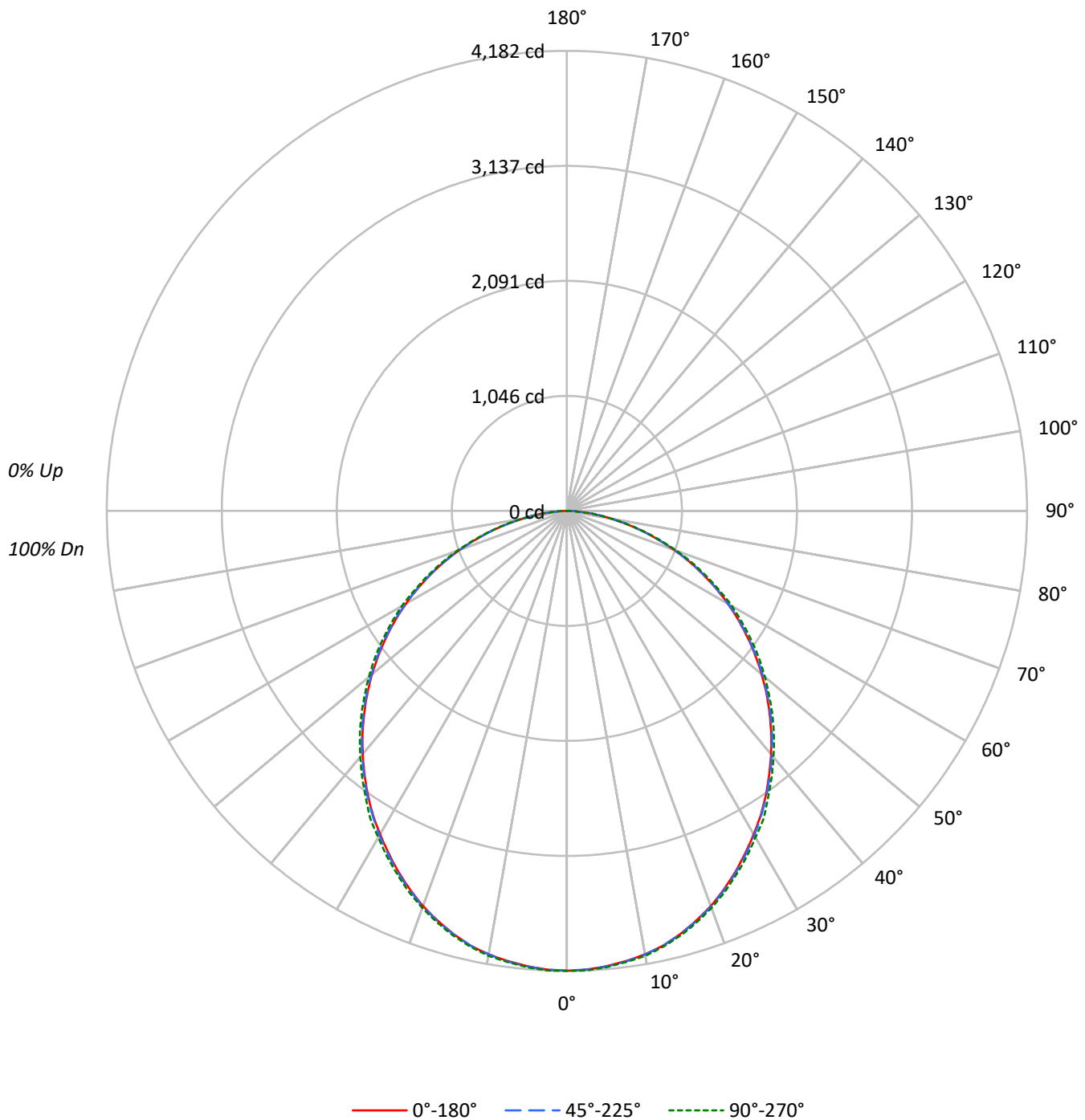
Lumens per Lamp: N/A
Luminaire Lumens: 11296.8 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

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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°	5625	5625	5625
5°	5610	5615	5622
10°	5592	5594	5610
15°	5546	5550	5566
20°	5474	5481	5500
25°	5375	5388	5412
30°	5274	5292	5324
35°	5178	5191	5232
40°	5069	5086	5131
45°	4958	4979	5030
50°	4838	4859	4915
55°	4700	4723	4800
60°	4544	4563	4666
65°	4346	4359	4442
70°	4080	4083	4171
75°	3708	3694	3780
80°	3185	3172	3226
85°	2472	2431	2445

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.1	3.5
10°-20°	1123.8	9.9
20°-30°	1673.0	14.8
30°-40°	1978.4	17.5
40°-50°	2019.7	17.9
50°-60°	1802.5	16.0
60°-70°	1357.6	12.0
70°-80°	757.1	6.7
80°-90°	189.7	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°	3191.8	28.3
0°-40°	5170.2	45.8
0°-60°	8992.4	79.6
0°-90°	11296.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11296.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4181	4181	4181	4181	4181	
5°	4154	4162	4157	4158	4163	395
15°	3982	3986	3984	3988	3996	1122
25°	3621	3625	3629	3639	3646	1668
35°	3152	3149	3160	3172	3185	1971
45°	2605	2604	2617	2630	2644	2010
55°	2004	2001	2013	2027	2046	1791
65°	1365	1360	1369	1382	1395	1350
75°	713	707	711	714	727	756
85°	160	156	158	156	158	192
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4180.7	4180.7	4180.7	4180.7	4180.7
2.5°	4173.8	4180.7	4172.1	4173.8	4181.6
5°	4153.9	4161.7	4157.4	4158.2	4162.6
7.5°	4126.2	4136.6	4130.5	4132.3	4136.6
10°	4093.3	4101.1	4094.2	4098.5	4106.3
12.5°	4046.6	4050.0	4046.6	4048.3	4057.0
15°	3981.7	3986.0	3984.3	3987.7	3995.5
17.5°	3905.5	3910.7	3909.8	3916.7	3922.8
20°	3823.3	3824.1	3827.6	3834.5	3841.4
22.5°	3726.3	3728.9	3732.4	3741.9	3748.8
25°	3620.7	3625.0	3629.4	3638.9	3645.8
27.5°	3509.1	3513.4	3519.4	3529.8	3541.1
30°	3394.8	3394.8	3406.0	3416.4	3426.8
32.5°	3279.7	3275.3	3285.7	3298.7	3323.8
35°	3152.4	3149.0	3160.2	3172.3	3185.3
37.5°	3020.0	3017.4	3030.4	3043.4	3055.5
40°	2885.8	2882.4	2895.4	2908.3	2921.3
42.5°	2748.2	2746.5	2758.6	2771.6	2785.4
45°	2605.4	2604.5	2616.6	2629.6	2643.5
47.5°	2460.0	2458.2	2470.4	2484.2	2496.3
50°	2311.1	2309.4	2321.5	2335.3	2348.3
52.5°	2157.9	2157.9	2169.1	2181.3	2201.2
55°	2003.8	2001.2	2013.3	2027.2	2046.2
57.5°	1848.0	1844.5	1855.8	1869.6	1887.0
60°	1688.7	1685.3	1695.7	1709.5	1733.8
62.5°	1527.7	1522.6	1532.9	1545.9	1560.6
65°	1365.0	1359.8	1369.3	1381.5	1395.3
67.5°	1201.4	1195.4	1204.9	1215.3	1228.3
70°	1037.0	1030.9	1037.8	1048.2	1060.3
72.5°	873.4	867.3	873.4	877.7	892.4
75°	713.2	707.2	710.6	714.1	727.1
77.5°	557.4	551.4	558.3	560.0	567.8
80°	411.1	405.1	409.4	410.3	416.3
82.5°	277.9	272.7	278.7	274.4	279.6
85°	160.1	155.8	157.5	155.8	158.4
87.5°	63.2	59.7	60.6	57.1	57.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)