

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: P835127

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835127
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-LD4-4STD-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

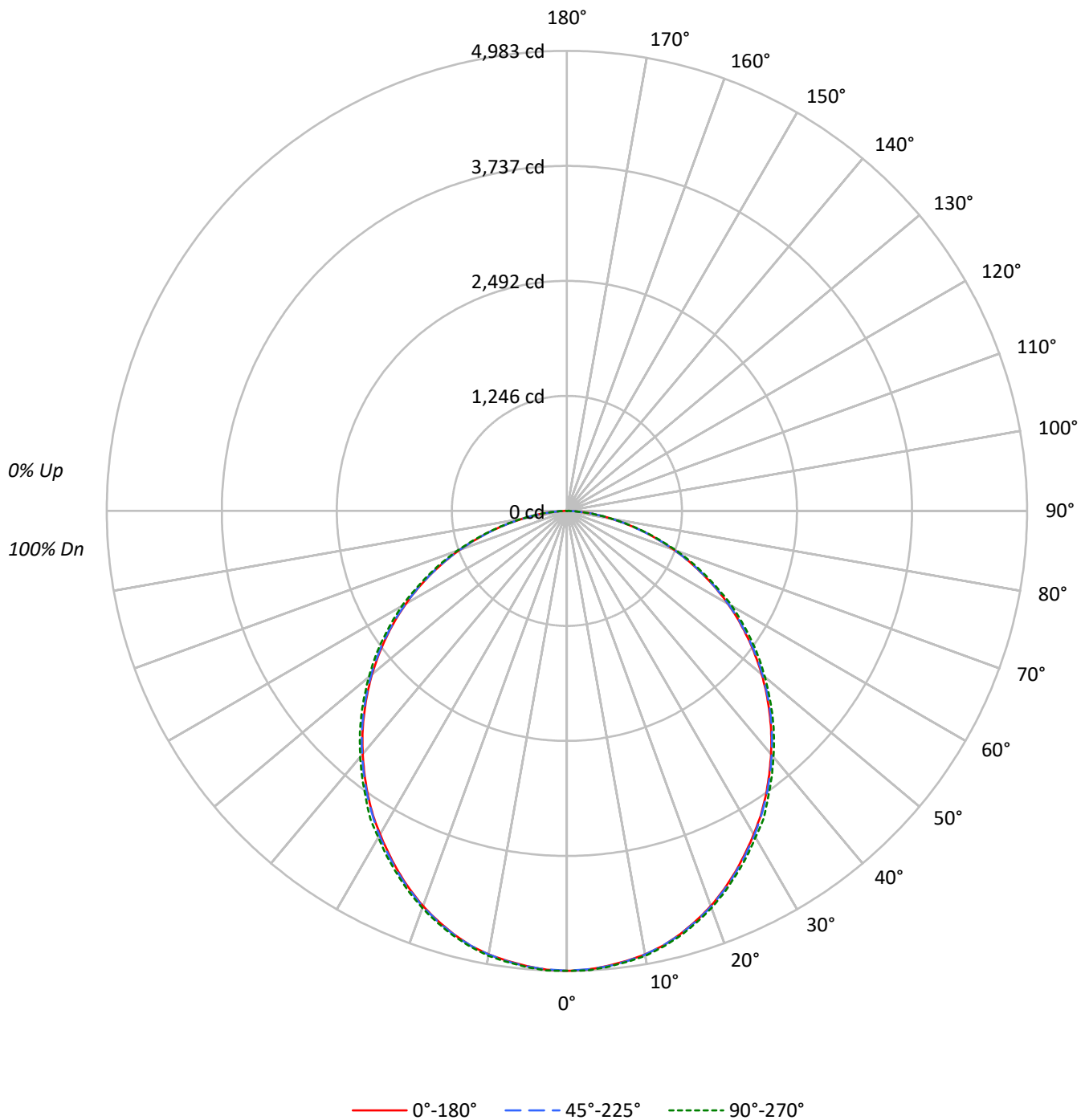
Lumens per Lamp: N/A
Luminaire Lumens: 13461.1 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 133.2
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°	6703	6703	6703
5°	6685	6691	6699
10°	6664	6665	6685
15°	6609	6613	6632
20°	6523	6530	6554
25°	6405	6420	6449
30°	6285	6306	6344
35°	6170	6185	6234
40°	6040	6060	6114
45°	5907	5933	5994
50°	5764	5790	5857
55°	5601	5628	5720
60°	5415	5437	5559
65°	5178	5195	5293
70°	4861	4865	4971
75°	4418	4402	4504
80°	3796	3780	3844
85°	2946	2898	2913

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.7	3.5
10°-20°	1339.1	9.9
20°-30°	1993.5	14.8
30°-40°	2357.5	17.5
40°-50°	2406.6	17.9
50°-60°	2147.8	16.0
60°-70°	1617.7	12.0
70°-80°	902.2	6.7
80°-90°	226.0	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°	3803.3	28.3
0°-40°	6160.8	45.8
0°-60°	10715.2	79.6
0°-90°	13461.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13461.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4982	4982	4982	4982	4982	
5°	4950	4959	4954	4955	4960	470
15°	4744	4750	4748	4752	4761	1337
25°	4314	4320	4325	4336	4344	1988
35°	3756	3752	3766	3780	3796	2349
45°	3104	3104	3118	3133	3150	2395
55°	2388	2385	2399	2416	2438	2134
65°	1626	1620	1632	1646	1663	1609
75°	850	843	847	851	866	901
85°	191	186	188	186	189	229
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4981.7	4981.7	4981.7	4981.7	4981.7
2.5°	4973.5	4981.7	4971.4	4973.5	4982.7
5°	4949.7	4959.0	4953.9	4954.9	4960.0
7.5°	4916.7	4929.1	4921.9	4923.9	4929.1
10°	4877.5	4886.8	4878.6	4883.7	4893.0
12.5°	4821.8	4826.0	4821.8	4823.9	4834.2
15°	4744.5	4749.6	4747.6	4751.7	4761.0
17.5°	4653.7	4659.9	4658.9	4667.1	4674.3
20°	4555.7	4556.8	4560.9	4569.1	4577.4
22.5°	4440.2	4443.3	4447.4	4458.8	4467.0
25°	4314.4	4319.5	4324.7	4336.0	4344.3
27.5°	4181.3	4186.5	4193.7	4206.1	4219.5
30°	4045.2	4045.2	4058.6	4071.0	4083.3
32.5°	3908.0	3902.9	3915.2	3930.7	3960.6
35°	3756.4	3752.3	3765.7	3780.1	3795.6
37.5°	3598.6	3595.5	3611.0	3626.4	3640.9
40°	3438.7	3434.6	3450.1	3465.5	3481.0
42.5°	3274.7	3272.7	3287.1	3302.6	3319.1
45°	3104.5	3103.5	3117.9	3133.4	3149.9
47.5°	2931.3	2929.2	2943.6	2960.1	2974.6
50°	2753.9	2751.8	2766.2	2782.7	2798.2
52.5°	2571.3	2571.3	2584.7	2599.2	2622.9
55°	2387.7	2384.6	2399.1	2415.6	2438.3
57.5°	2202.1	2197.9	2211.3	2227.8	2248.5
60°	2012.3	2008.2	2020.5	2037.0	2065.9
62.5°	1820.4	1814.2	1826.6	1842.1	1859.6
65°	1626.5	1620.3	1631.7	1646.1	1662.6
67.5°	1431.6	1424.4	1435.7	1448.1	1463.6
70°	1235.6	1228.4	1236.7	1249.0	1263.5
72.5°	1040.7	1033.5	1040.7	1045.8	1063.4
75°	849.9	842.7	846.8	850.9	866.4
77.5°	664.2	657.0	665.3	667.3	676.6
80°	489.9	482.7	487.9	488.9	496.1
82.5°	331.1	324.9	332.1	327.0	333.1
85°	190.8	185.7	187.7	185.7	188.7
87.5°	75.3	71.2	72.2	68.1	68.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)