

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: P835091

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835091
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-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

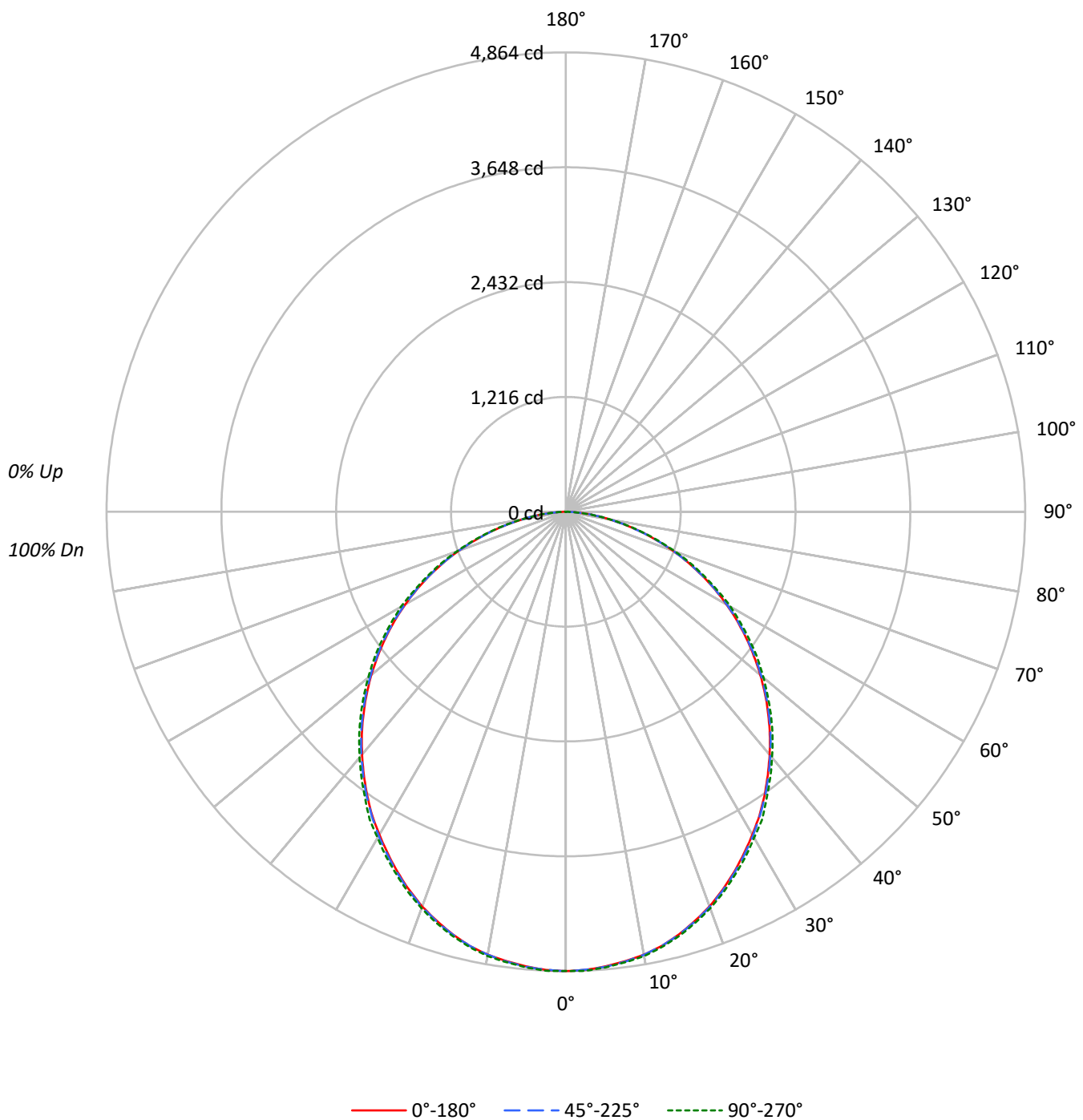
Lumens per Lamp: N/A
Luminaire Lumens: 13140.6 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	6543	6543	6543
5°	6526	6532	6540
10°	6505	6507	6526
15°	6451	6456	6474
20°	6368	6375	6398
25°	6253	6267	6296
30°	6135	6156	6193
35°	6023	6038	6086
40°	5896	5915	5968
45°	5767	5792	5851
50°	5627	5653	5718
55°	5468	5494	5583
60°	5286	5308	5427
65°	5055	5071	5167
70°	4745	4749	4852
75°	4313	4297	4397
80°	3706	3690	3753
85°	2876	2828	2845

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	459.5	3.5
10°-20°	1307.2	9.9
20°-30°	1946.0	14.8
30°-40°	2301.3	17.5
40°-50°	2349.3	17.9
50°-60°	2096.7	16.0
60°-70°	1579.2	12.0
70°-80°	880.7	6.7
80°-90°	220.6	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°	3712.7	28.3
0°-40°	6014.1	45.8
0°-60°	10460.1	79.6
0°-90°	13140.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13140.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4863	4863	4863	4863	4863	
5°	4832	4841	4836	4837	4842	459
15°	4632	4637	4634	4639	4648	1305
25°	4212	4217	4222	4233	4241	1940
35°	3667	3663	3676	3690	3705	2293
45°	3031	3030	3044	3059	3075	2338
55°	2331	2328	2342	2358	2380	2084
65°	1588	1582	1593	1607	1623	1570
75°	830	823	827	831	846	880
85°	186	181	183	181	184	224
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4863.1	4863.1	4863.1	4863.1	4863.1
2.5°	4855.0	4863.1	4853.0	4855.0	4864.1
5°	4831.9	4840.9	4835.9	4836.9	4841.9
7.5°	4799.7	4811.7	4804.7	4806.7	4811.7
10°	4761.4	4770.5	4762.4	4767.4	4776.5
12.5°	4707.0	4711.1	4707.0	4709.0	4719.1
15°	4631.5	4636.6	4634.5	4638.6	4647.6
17.5°	4542.9	4549.0	4547.9	4556.0	4563.1
20°	4447.3	4448.3	4452.3	4460.4	4468.4
22.5°	4334.5	4337.5	4341.5	4352.6	4360.7
25°	4211.7	4216.7	4221.7	4232.8	4240.9
27.5°	4081.8	4086.8	4093.9	4105.9	4119.0
30°	3948.9	3948.9	3962.0	3974.0	3986.1
32.5°	3815.0	3809.9	3822.0	3837.1	3866.3
35°	3667.0	3662.9	3676.0	3690.1	3705.2
37.5°	3512.9	3509.9	3525.0	3540.1	3554.2
40°	3356.8	3352.8	3367.9	3383.0	3398.1
42.5°	3196.8	3194.7	3208.8	3223.9	3240.0
45°	3030.6	3029.6	3043.7	3058.8	3074.9
47.5°	2861.5	2859.5	2873.6	2889.7	2903.8
50°	2688.3	2686.3	2700.4	2716.5	2731.6
52.5°	2510.1	2510.1	2523.2	2537.3	2560.4
55°	2330.9	2327.8	2341.9	2358.0	2380.2
57.5°	2149.6	2145.6	2158.7	2174.8	2194.9
60°	1964.4	1960.3	1972.4	1988.5	2016.7
62.5°	1777.1	1771.1	1783.1	1798.2	1815.4
65°	1587.8	1581.8	1592.8	1606.9	1623.0
67.5°	1397.5	1390.5	1401.5	1413.6	1428.7
70°	1206.2	1199.2	1207.2	1219.3	1233.4
72.5°	1015.9	1008.9	1015.9	1020.9	1038.1
75°	829.6	822.6	826.6	830.7	845.8
77.5°	648.4	641.4	649.4	651.4	660.5
80°	478.3	471.2	476.2	477.2	484.3
82.5°	323.2	317.2	324.2	319.2	325.2
85°	186.3	181.2	183.2	181.2	184.3
87.5°	73.5	69.5	70.5	66.5	66.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)