

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: P834990

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6HI-30-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834990
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-LD4-6HI-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

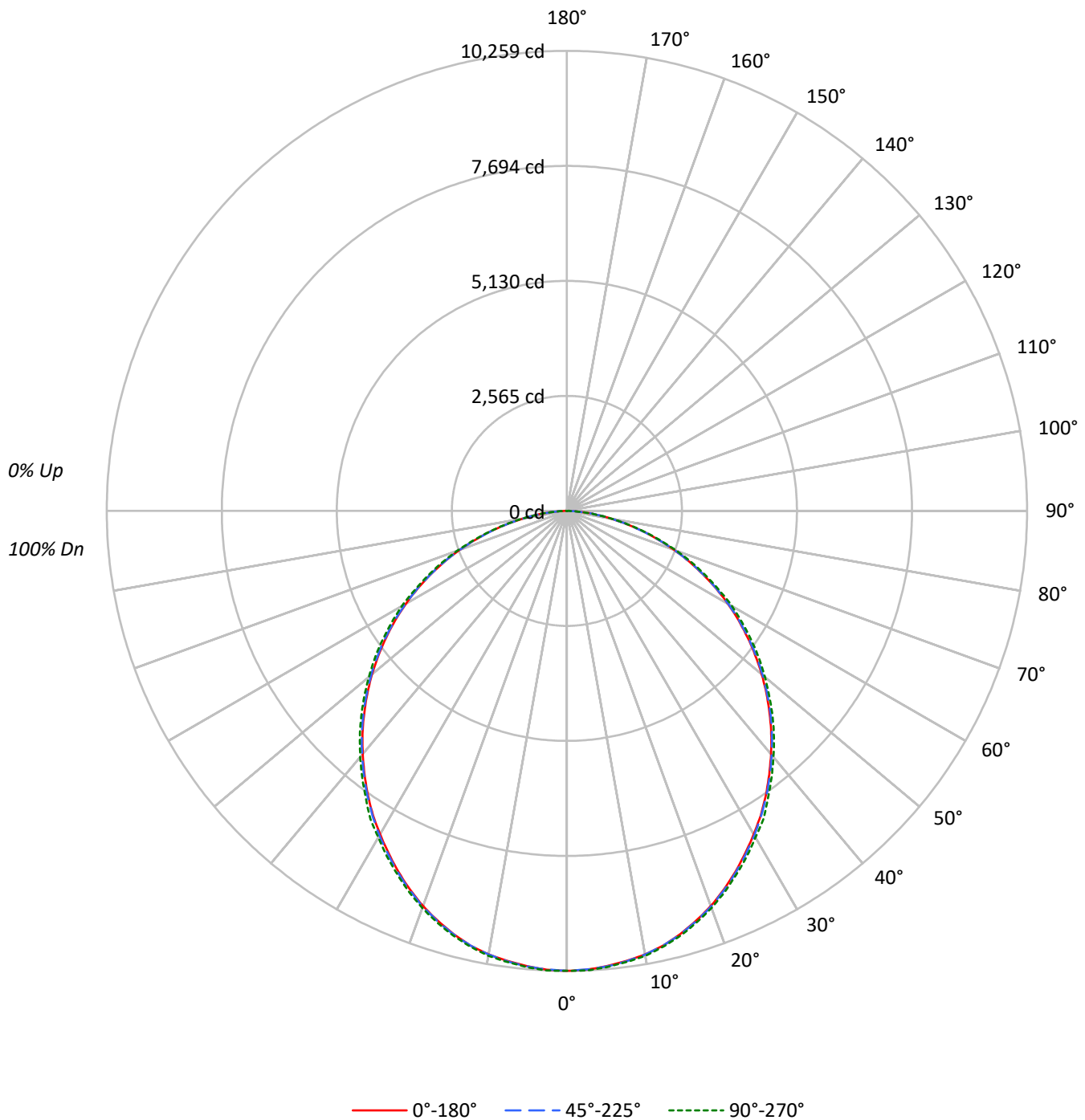
Lumens per Lamp: N/A
Luminaire Lumens: 27714.2 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 264
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°	13800	13800	13800
5°	13764	13775	13792
10°	13720	13723	13763
15°	13607	13615	13654
20°	13430	13445	13494
25°	13187	13218	13278
30°	12939	12982	13061
35°	12703	12734	12836
40°	12435	12476	12588
45°	12162	12215	12340
50°	11868	11921	12059
55°	11532	11587	11776
60°	11148	11194	11446
65°	10662	10695	10898
70°	10008	10016	10233
75°	9096	9063	9273
80°	7816	7782	7914
85°	6064	5967	5999

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	969.2	3.5
10°-20°	2756.9	9.9
20°-30°	4104.2	14.8
30°-40°	4853.7	17.5
40°-50°	4954.9	17.9
50°-60°	4422.0	16.0
60°-70°	3330.6	12.0
70°-80°	1857.4	6.7
80°-90°	465.3	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°	7830.4	28.3
0°-40°	12684.0	45.8
0°-60°	22060.9	79.6
0°-90°	27714.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	27714.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10256	10256	10256	10256	10256	
5°	10191	10210	10199	10201	10212	968
15°	9768	9779	9774	9783	9802	2753
25°	8883	8893	8904	8927	8944	4092
35°	7734	7725	7753	7783	7814	4836
45°	6392	6390	6419	6451	6485	4931
55°	4916	4910	4939	4973	5020	4394
65°	3349	3336	3359	3389	3423	3312
75°	1750	1735	1743	1752	1784	1855
85°	393	382	386	382	389	472
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10256.5	10256.5	10256.5	10256.5	10256.5
2.5°	10239.5	10256.5	10235.3	10239.5	10258.6
5°	10190.7	10209.8	10199.2	10201.3	10211.9
7.5°	10122.7	10148.2	10133.3	10137.6	10148.2
10°	10042.0	10061.1	10044.2	10054.8	10073.9
12.5°	9927.4	9935.9	9927.4	9931.6	9952.8
15°	9768.1	9778.7	9774.5	9783.0	9802.1
17.5°	9581.2	9594.0	9591.8	9608.8	9623.7
20°	9379.5	9381.6	9390.1	9407.1	9424.1
22.5°	9141.7	9148.0	9156.5	9179.9	9196.9
25°	8882.6	8893.2	8903.8	8927.2	8944.2
27.5°	8608.7	8619.3	8634.1	8659.6	8687.2
30°	8328.4	8328.4	8356.0	8381.5	8406.9
32.5°	8045.9	8035.3	8060.8	8092.7	8154.2
35°	7733.8	7725.3	7752.9	7782.6	7814.5
37.5°	7408.9	7402.5	7434.4	7466.2	7496.0
40°	7079.7	7071.3	7103.1	7135.0	7166.8
42.5°	6742.1	6737.9	6767.6	6799.4	6833.4
45°	6391.7	6389.6	6419.3	6451.2	6485.2
47.5°	6035.0	6030.7	6060.5	6094.4	6124.2
50°	5669.7	5665.5	5695.2	5729.2	5761.1
52.5°	5293.9	5293.9	5321.5	5351.2	5400.1
55°	4915.9	4909.5	4939.3	4973.2	5020.0
57.5°	4533.7	4525.2	4552.8	4586.8	4629.2
60°	4142.9	4134.5	4159.9	4193.9	4253.4
62.5°	3748.0	3735.2	3760.7	3792.6	3828.7
65°	3348.8	3336.0	3359.4	3389.1	3423.1
67.5°	2947.4	2932.6	2955.9	2981.4	3013.2
70°	2544.0	2529.1	2546.1	2571.6	2601.3
72.5°	2142.6	2127.7	2142.6	2153.2	2189.3
75°	1749.8	1734.9	1743.4	1751.9	1783.7
77.5°	1367.5	1352.7	1369.7	1373.9	1393.0
80°	1008.7	993.8	1004.4	1006.5	1021.4
82.5°	681.6	668.9	683.8	673.1	685.9
85°	392.8	382.2	386.5	382.2	388.6
87.5°	155.0	146.5	148.6	140.2	140.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)