

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: P835020

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835020
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-LD4-4HI-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

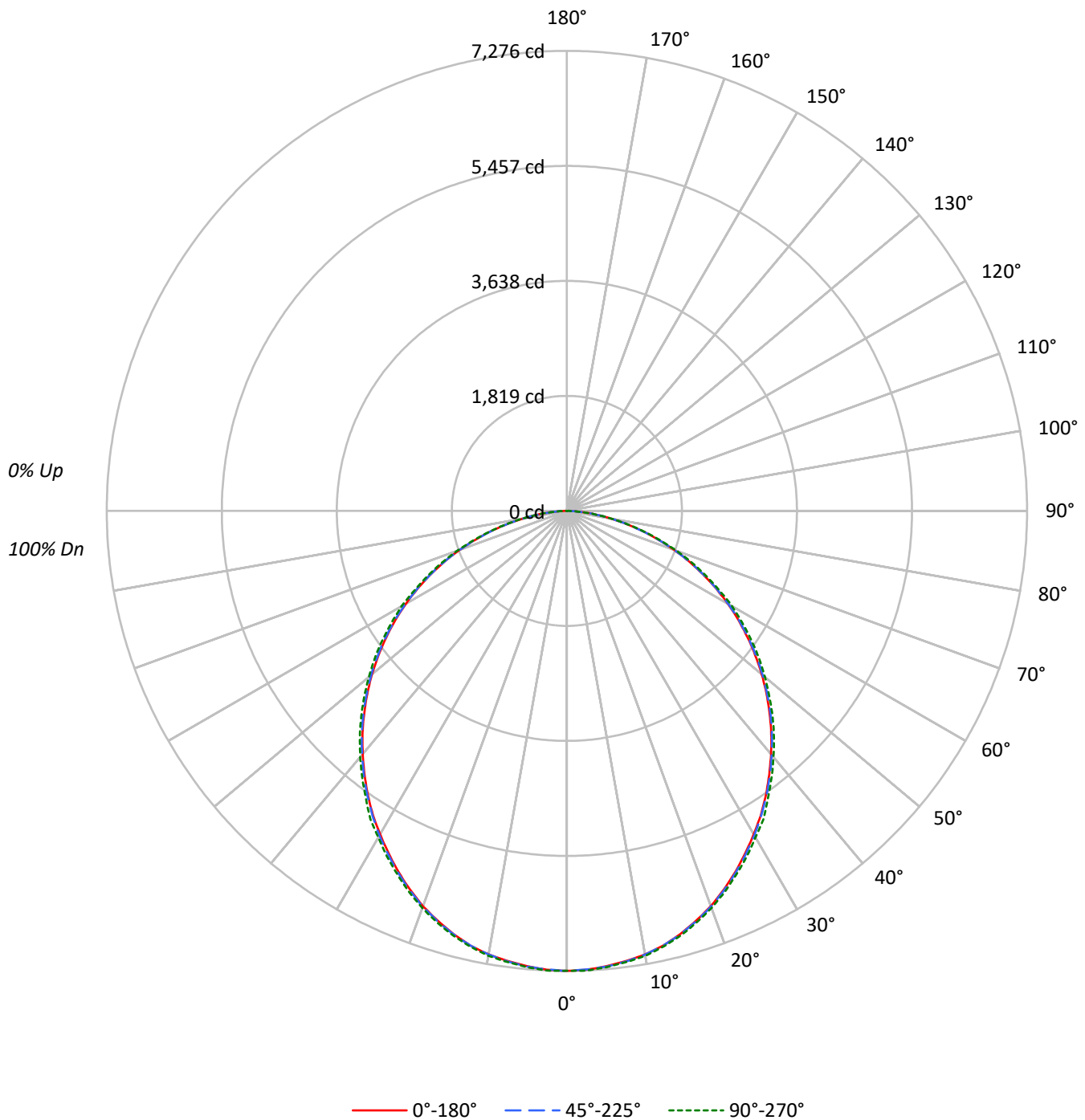
Lumens per Lamp: N/A
Luminaire Lumens: 19656.1 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9788	9788	9788
5°	9762	9770	9782
10°	9731	9733	9762
15°	9650	9657	9684
20°	9525	9536	9570
25°	9353	9375	9418
30°	9177	9207	9264
35°	9009	9032	9104
40°	8819	8848	8928
45°	8626	8663	8752
50°	8417	8455	8553
55°	8179	8218	8352
60°	7907	7939	8118
65°	7562	7585	7729
70°	7098	7104	7258
75°	6451	6428	6577
80°	5543	5520	5613
85°	4301	4231	4255

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	687.4	3.5
10°-20°	1955.3	9.9
20°-30°	2910.9	14.8
30°-40°	3442.4	17.5
40°-50°	3514.2	17.9
50°-60°	3136.2	16.0
60°-70°	2362.2	12.0
70°-80°	1317.4	6.7
80°-90°	330.0	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°	5553.6	28.3
0°-40°	8996.1	45.8
0°-60°	15646.5	79.6
0°-90°	19656.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19656.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7274	7274	7274	7274	7274	
5°	7228	7241	7234	7235	7243	687
15°	6928	6936	6932	6938	6952	1953
25°	6300	6308	6315	6332	6344	2902
35°	5485	5479	5499	5520	5542	3430
45°	4533	4532	4553	4576	4600	3497
55°	3487	3482	3503	3527	3560	3117
65°	2375	2366	2383	2404	2428	2349
75°	1241	1230	1236	1242	1265	1316
85°	279	271	274	271	276	334
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7274.4	7274.4	7274.4	7274.4	7274.4
2.5°	7262.3	7274.4	7259.3	7262.3	7275.9
5°	7227.7	7241.2	7233.7	7235.2	7242.7
7.5°	7179.5	7197.5	7187.0	7190.0	7197.5
10°	7122.2	7135.8	7123.7	7131.3	7144.8
12.5°	7040.9	7046.9	7040.9	7043.9	7059.0
15°	6928.0	6935.5	6932.5	6938.5	6952.1
17.5°	6795.4	6804.5	6802.9	6815.0	6825.5
20°	6652.3	6653.8	6659.9	6671.9	6684.0
22.5°	6483.7	6488.2	6494.2	6510.8	6522.8
25°	6299.9	6307.5	6315.0	6331.5	6343.6
27.5°	6105.6	6113.2	6123.7	6141.8	6161.4
30°	5906.8	5906.8	5926.4	5944.5	5962.6
32.5°	5706.5	5699.0	5717.1	5739.7	5783.3
35°	5485.1	5479.1	5498.7	5519.8	5542.4
37.5°	5254.7	5250.2	5272.8	5295.4	5316.5
40°	5021.3	5015.2	5037.8	5060.4	5083.0
42.5°	4781.8	4778.8	4799.9	4822.5	4846.6
45°	4533.3	4531.8	4552.9	4575.5	4599.6
47.5°	4280.3	4277.3	4298.3	4322.4	4343.5
50°	4021.2	4018.2	4039.3	4063.4	4086.0
52.5°	3754.6	3754.6	3774.2	3795.3	3830.0
55°	3486.6	3482.0	3503.1	3527.2	3560.4
57.5°	3215.5	3209.4	3229.0	3253.1	3283.2
60°	2938.4	2932.3	2950.4	2974.5	3016.7
62.5°	2658.2	2649.2	2667.3	2689.9	2715.5
65°	2375.1	2366.0	2382.6	2403.7	2427.8
67.5°	2090.4	2079.9	2096.5	2114.5	2137.1
70°	1804.3	1793.7	1805.8	1823.9	1844.9
72.5°	1519.6	1509.1	1519.6	1527.2	1552.8
75°	1241.0	1230.5	1236.5	1242.5	1265.1
77.5°	969.9	959.4	971.4	974.4	988.0
80°	715.4	704.8	712.4	713.9	724.4
82.5°	483.5	474.4	485.0	477.4	486.5
85°	278.6	271.1	274.1	271.1	275.6
87.5°	109.9	103.9	105.4	99.4	99.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)