

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: P834453

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-1HI-20-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834453
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-1HI-20-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

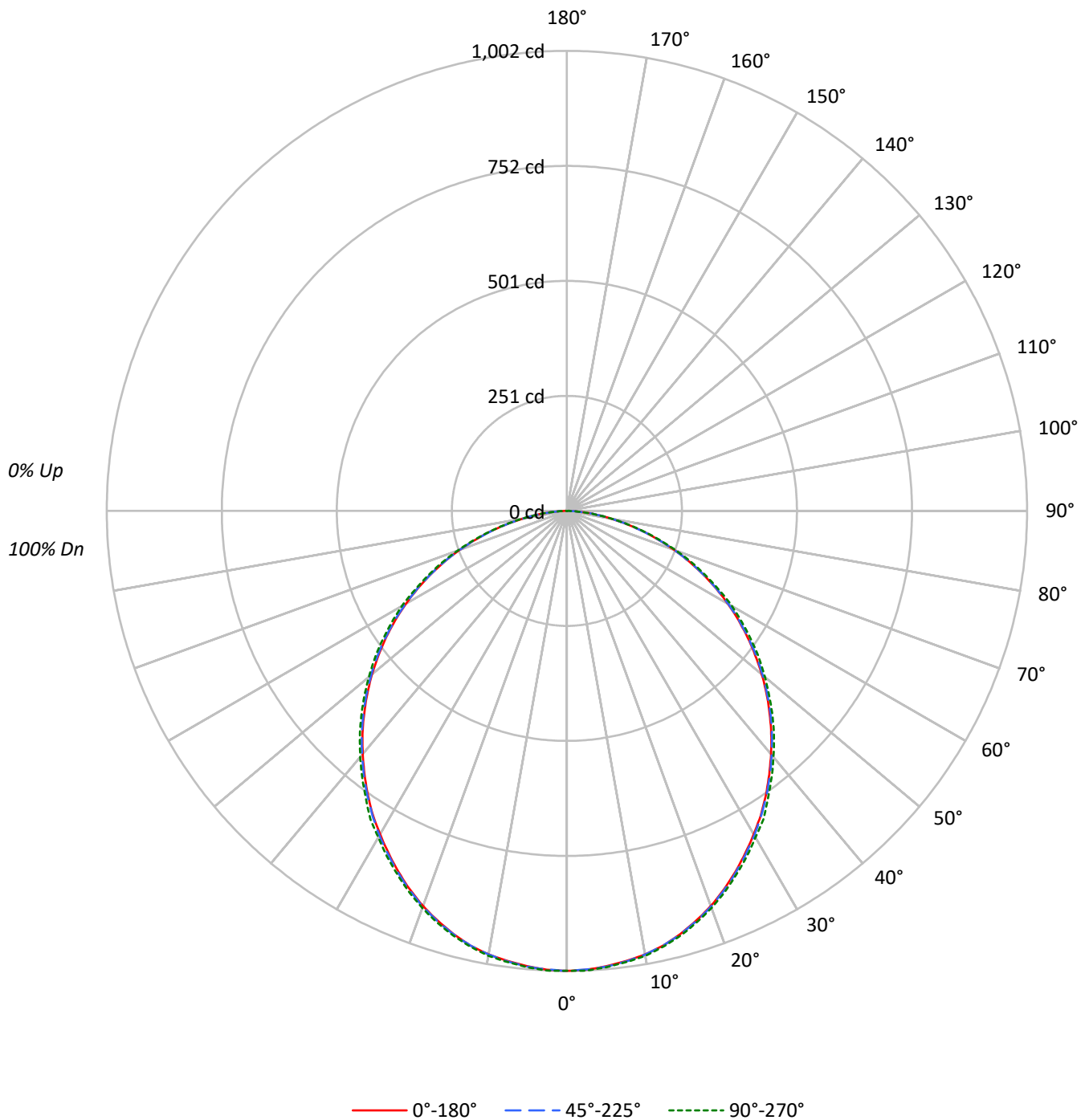
Lumens per Lamp: N/A
Luminaire Lumens: 2707.0 lumens
Efficiency: N/A
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2696	2696	2696
5°	2689	2691	2694
10°	2680	2681	2689
15°	2658	2660	2667
20°	2623	2627	2636
25°	2576	2582	2594
30°	2528	2536	2551
35°	2482	2488	2508
40°	2429	2437	2459
45°	2376	2386	2410
50°	2318	2329	2356
55°	2253	2263	2300
60°	2178	2187	2236
65°	2083	2089	2129
70°	1955	1957	1999
75°	1777	1771	1811
80°	1526	1520	1547
85°	1186	1164	1173

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	3.5
10°-20°	269.3	9.9
20°-30°	400.9	14.8
30°-40°	474.1	17.5
40°-50°	484.0	17.9
50°-60°	431.9	16.0
60°-70°	325.3	12.0
70°-80°	181.4	6.7
80°-90°	45.4	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°	764.8	28.3
0°-40°	1238.9	45.8
0°-60°	2154.8	79.6
0°-90°	2707.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2707.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	995	997	996	996	997	95
15°	954	955	955	956	957	269
25°	868	869	870	872	874	400
35°	755	755	757	760	763	472
45°	624	624	627	630	633	482
55°	480	480	482	486	490	429
65°	327	326	328	331	334	324
75°	171	170	170	171	174	181
85°	38	37	38	37	38	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.8	1001.8	1001.8	1001.8	1001.8
2.5°	1000.1	1001.8	999.7	1000.1	1002.0
5°	995.4	997.2	996.2	996.4	997.4
7.5°	988.7	991.2	989.8	990.2	991.2
10°	980.9	982.7	981.1	982.1	984.0
12.5°	969.7	970.5	969.7	970.1	972.1
15°	954.1	955.1	954.7	955.6	957.4
17.5°	935.8	937.1	936.9	938.5	940.0
20°	916.1	916.3	917.2	918.8	920.5
22.5°	892.9	893.5	894.4	896.6	898.3
25°	867.6	868.6	869.7	872.0	873.6
27.5°	840.9	841.9	843.3	845.8	848.5
30°	813.5	813.5	816.2	818.7	821.1
32.5°	785.9	784.8	787.3	790.4	796.5
35°	755.4	754.6	757.3	760.2	763.3
37.5°	723.7	723.0	726.2	729.3	732.2
40°	691.5	690.7	693.8	696.9	700.0
42.5°	658.5	658.1	661.0	664.1	667.5
45°	624.3	624.1	627.0	630.1	633.4
47.5°	589.5	589.1	592.0	595.3	598.2
50°	553.8	553.4	556.3	559.6	562.7
52.5°	517.1	517.1	519.8	522.7	527.5
55°	480.2	479.5	482.4	485.8	490.3
57.5°	442.8	442.0	444.7	448.0	452.2
60°	404.7	403.8	406.3	409.6	415.4
62.5°	366.1	364.8	367.3	370.4	374.0
65°	327.1	325.8	328.1	331.0	334.3
67.5°	287.9	286.4	288.7	291.2	294.3
70°	248.5	247.0	248.7	251.2	254.1
72.5°	209.3	207.8	209.3	210.3	213.8
75°	170.9	169.5	170.3	171.1	174.2
77.5°	133.6	132.1	133.8	134.2	136.1
80°	98.5	97.1	98.1	98.3	99.8
82.5°	66.6	65.3	66.8	65.7	67.0
85°	38.4	37.3	37.7	37.3	38.0
87.5°	15.1	14.3	14.5	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)