

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: P557447

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P557447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

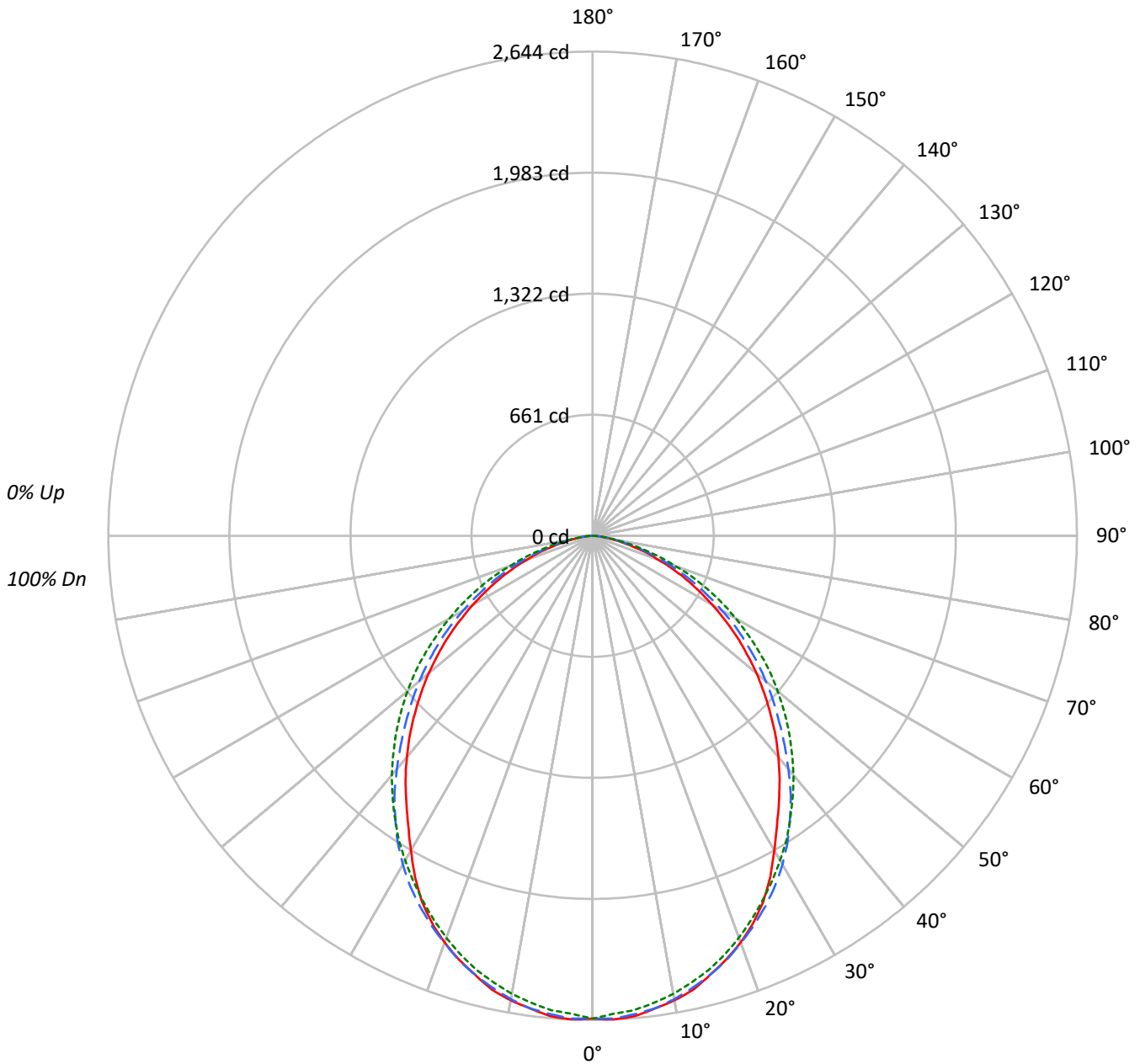
Lumens per Lamp: N/A
Luminaire Lumens: 6097.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
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: 25 FT

TEST NUMBER: P557447

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557447

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7096	7096	7096
5°	7115	7084	7024
10°	7039	7019	6939
15°	6914	6914	6835
20°	6768	6776	6689
25°	6545	6626	6521
30°	6163	6440	6361
35°	5823	6173	6183
40°	5540	5839	5993
45°	5224	5486	5767
50°	4890	5169	5521
55°	4510	4809	5223
60°	4062	4389	4858
65°	3586	3903	4418
70°	2989	3323	3754
75°	2349	2654	2938
80°	1680	1867	2072
85°	1096	1096	1031



TEST NUMBER: P557447

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	4.1
10°-20°	697.4	11.4
20°-30°	1019.2	16.7
30°-40°	1156.9	19.0
40°-50°	1116.8	18.3
50°-60°	921.3	15.1
60°-70°	613.5	10.1
70°-80°	274.5	4.5
80°-90°	49.1	0.8
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°	1964.9	32.2
0°-40°	3121.8	51.2
0°-60°	5159.9	84.6
0°-90°	6097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6097.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2637	2637	2637	2637	2637	
5°	2634	2633	2623	2608	2600	249
15°	2482	2488	2482	2471	2453	700
25°	2204	2222	2232	2215	2196	1009
35°	1773	1797	1879	1889	1882	1111
45°	1373	1396	1442	1507	1515	1059
55°	961	978	1025	1082	1113	858
65°	563	578	613	656	694	558
75°	226	238	255	267	283	247
85°	36	36	36	33	33	48
90°	0	0	0	0	0	



TEST NUMBER: P557447

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-81-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2636.8	2636.8	2636.8	2636.8	2636.8
2.5°	2643.9	2644.9	2638.8	2622.6	2612.5
5°	2633.8	2632.7	2622.6	2608.4	2600.3
7.5°	2604.4	2606.4	2603.4	2583.1	2572.0
10°	2576.0	2577.0	2568.9	2552.7	2539.5
12.5°	2539.5	2538.5	2527.4	2519.3	2498.0
15°	2481.8	2487.9	2481.8	2470.7	2453.4
17.5°	2426.1	2426.1	2430.1	2410.9	2397.7
20°	2363.3	2366.3	2366.3	2351.1	2335.9
22.5°	2290.4	2299.5	2302.5	2286.3	2268.1
25°	2204.3	2221.5	2231.6	2215.4	2196.1
27.5°	2099.9	2126.3	2156.6	2144.5	2123.2
30°	1983.4	2021.9	2072.6	2062.4	2047.2
32.5°	1873.0	1911.5	1981.4	1977.3	1969.2
35°	1772.7	1797.0	1879.1	1889.2	1882.1
37.5°	1677.5	1699.8	1776.8	1800.1	1794.0
40°	1577.2	1601.5	1662.3	1703.8	1705.9
42.5°	1477.9	1501.2	1550.9	1610.6	1610.6
45°	1372.6	1395.9	1441.5	1507.3	1515.4
47.5°	1269.3	1293.6	1338.2	1404.0	1417.2
50°	1168.0	1190.3	1234.8	1298.6	1318.9
52.5°	1062.6	1086.9	1130.5	1189.2	1218.6
55°	961.3	977.5	1025.1	1081.9	1113.3
57.5°	856.0	871.2	924.9	973.5	1005.9
60°	754.7	773.9	815.5	865.1	902.6
62.5°	657.4	677.7	713.1	756.7	799.2
65°	563.2	578.4	612.9	656.4	693.9
67.5°	472.1	485.2	519.7	550.0	589.6
70°	379.9	397.1	422.4	451.8	477.1
72.5°	305.9	313.0	334.3	355.6	381.9
75°	225.9	238.1	255.3	267.4	282.6
77.5°	162.1	169.2	179.3	189.4	203.6
80°	108.4	111.4	120.5	122.6	133.7
82.5°	65.8	67.9	69.9	70.9	75.0
85°	35.5	35.5	35.5	33.4	33.4
87.5°	20.3	20.3	17.2	14.2	10.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)