

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: P554339

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-93-85-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: P554339  
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-12-2-LD4-1LO-50-UNV-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

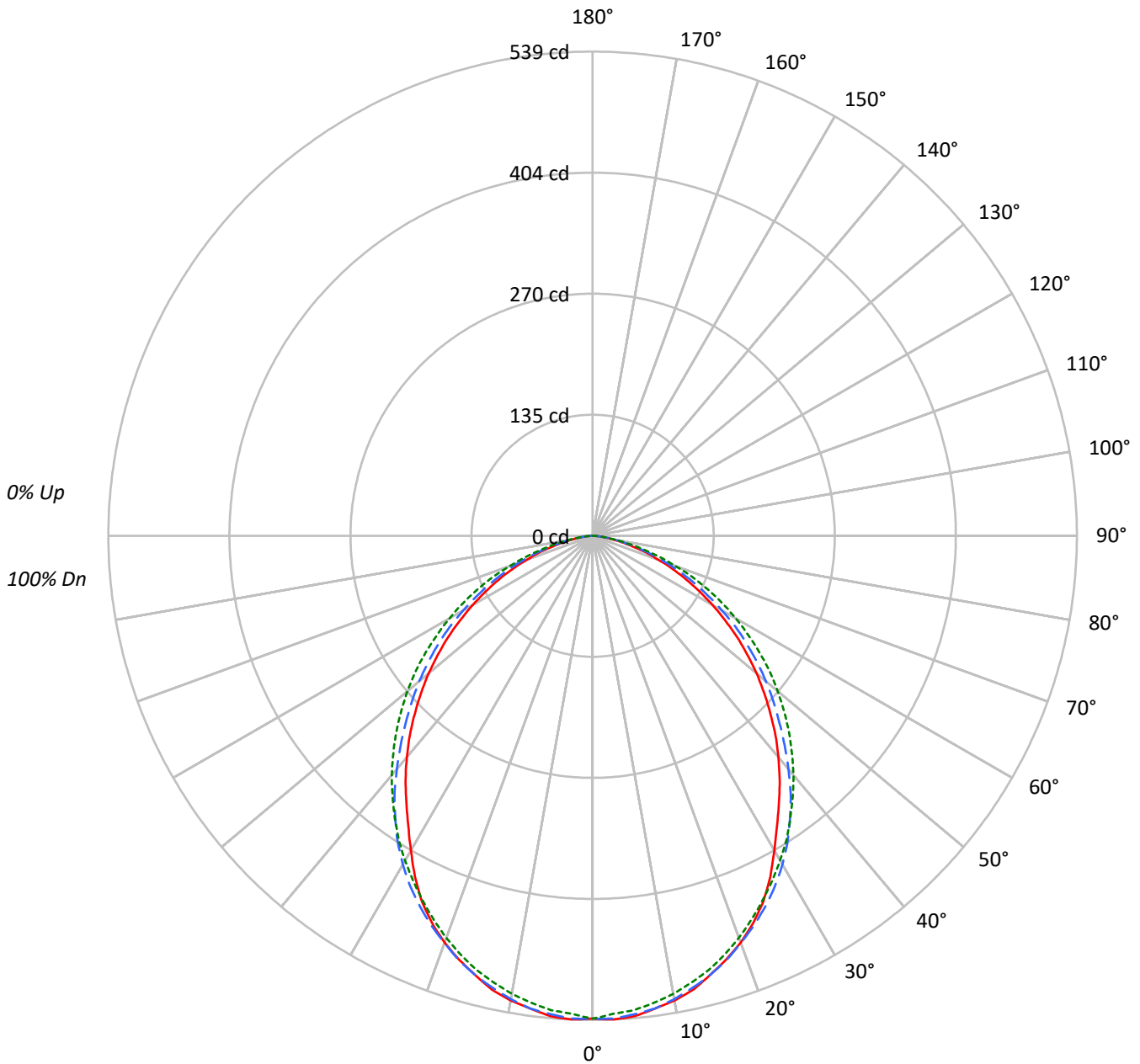
Lumens per Lamp: N/A  
Luminaire Lumens: 1243.0 lumens  
Efficiency: N/A  
Efficacy: 106.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P554339

CATALOG NUMBER: FUSL-12-2-LD4-1LO-50-UNV-93-85-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554339

CATALOG NUMBER: FUSL-12-2-LD4-1LO-50-UNV-93-85-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°	2893	2893	2893
5°	2901	2889	2864
10°	2870	2862	2829
15°	2819	2819	2787
20°	2759	2763	2727
25°	2669	2702	2659
30°	2513	2626	2594
35°	2374	2517	2521
40°	2259	2381	2444
45°	2130	2237	2352
50°	1994	2107	2251
55°	1839	1961	2130
60°	1657	1789	1981
65°	1462	1591	1802
70°	1218	1355	1531
75°	959	1081	1198
80°	685	762	846
85°	445	445	420



TEST NUMBER: P554339

CATALOG NUMBER: FUSL-12-2-LD4-1LO-50-UNV-93-85-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.6	4.1
10°-20°	142.2	11.4
20°-30°	207.8	16.7
30°-40°	235.9	19.0
40°-50°	227.7	18.3
50°-60°	187.8	15.1
60°-70°	125.1	10.1
70°-80°	56.0	4.5
80°-90°	10.0	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°	400.6	32.2
0°-40°	636.4	51.2
0°-60°	1052.0	84.6
0°-90°	1243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1243.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	537	537	535	532	530	51
15°	506	507	506	504	500	143
25°	449	453	455	452	448	206
35°	361	366	383	385	384	226
45°	280	285	294	307	309	216
55°	196	199	209	221	227	175
65°	115	118	125	134	142	114
75°	46	48	52	54	58	50
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



TEST NUMBER: P554339

CATALOG NUMBER: FUSL-12-2-LD4-1LO-50-UNV-93-85-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	537.6	537.6	537.6	537.6	537.6
2.5°	539.0	539.2	538.0	534.7	532.6
5°	536.9	536.7	534.7	531.8	530.1
7.5°	531.0	531.4	530.8	526.6	524.3
10°	525.2	525.4	523.7	520.4	517.7
12.5°	517.7	517.5	515.3	513.6	509.3
15°	506.0	507.2	506.0	503.7	500.2
17.5°	494.6	494.6	495.4	491.5	488.8
20°	481.8	482.4	482.4	479.3	476.2
22.5°	466.9	468.8	469.4	466.1	462.4
25°	449.4	452.9	455.0	451.7	447.7
27.5°	428.1	433.5	439.7	437.2	432.9
30°	404.4	412.2	422.5	420.5	417.4
32.5°	381.9	389.7	403.9	403.1	401.5
35°	361.4	366.4	383.1	385.2	383.7
37.5°	342.0	346.5	362.2	367.0	365.7
40°	321.5	326.5	338.9	347.4	347.8
42.5°	301.3	306.1	316.2	328.4	328.4
45°	279.8	284.6	293.9	307.3	309.0
47.5°	258.8	263.7	272.8	286.2	288.9
50°	238.1	242.7	251.7	264.8	268.9
52.5°	216.6	221.6	230.5	242.5	248.4
55°	196.0	199.3	209.0	220.6	227.0
57.5°	174.5	177.6	188.6	198.5	205.1
60°	153.9	157.8	166.2	176.4	184.0
62.5°	134.0	138.2	145.4	154.3	162.9
65°	114.8	117.9	124.9	133.8	141.5
67.5°	96.2	98.9	105.9	112.1	120.2
70°	77.4	81.0	86.1	92.1	97.3
72.5°	62.4	63.8	68.2	72.5	77.9
75°	46.1	48.5	52.0	54.5	57.6
77.5°	33.0	34.5	36.6	38.6	41.5
80°	22.1	22.7	24.6	25.0	27.3
82.5°	13.4	13.8	14.2	14.5	15.3
85°	7.2	7.2	7.2	6.8	6.8
87.5°	4.1	4.1	3.5	2.9	2.1
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)