

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: P554523

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-82-94-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: P554523  
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-LD4-1STD-40-UNV-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

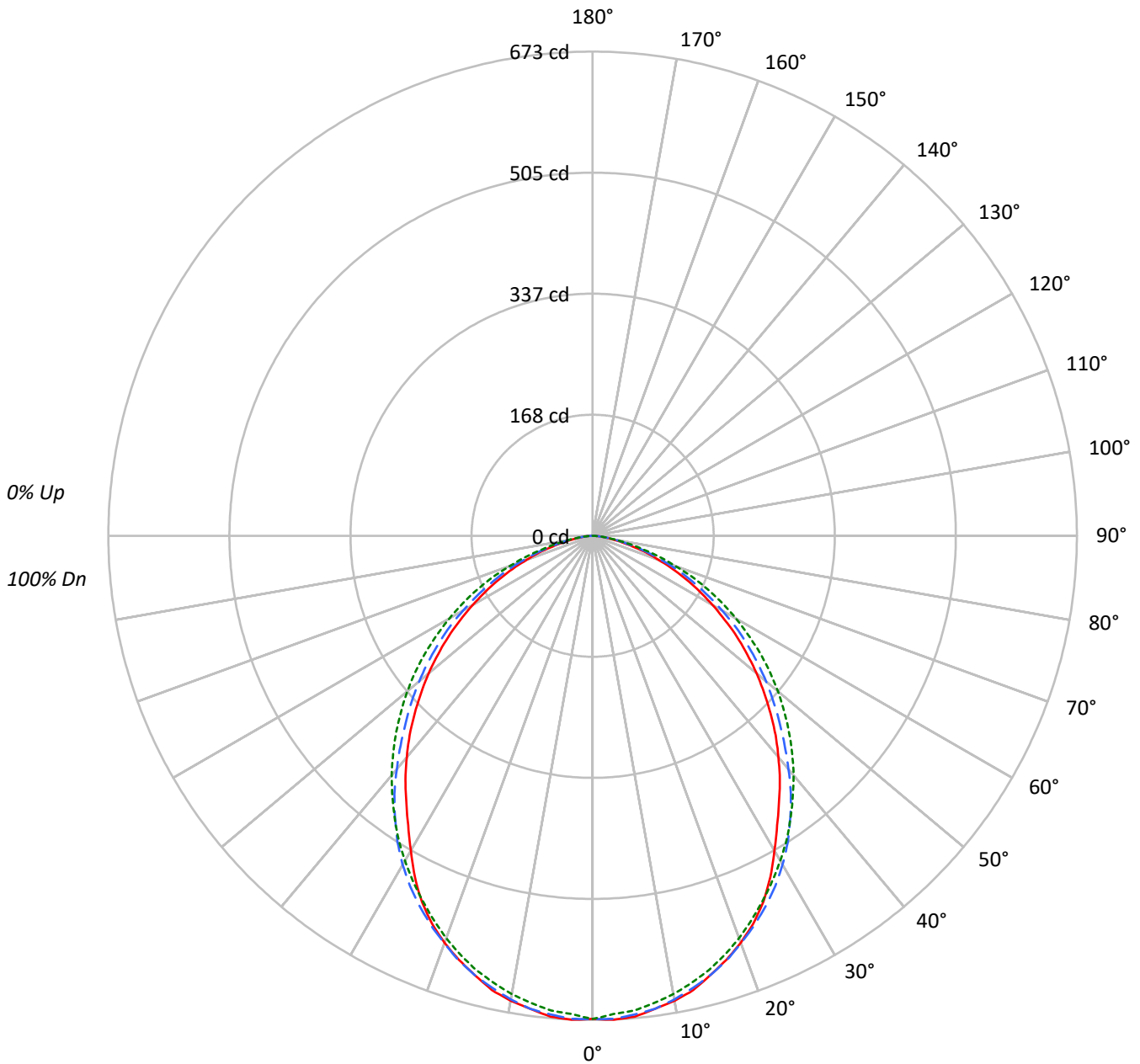
Lumens per Lamp: N/A  
Luminaire Lumens: 1553.0 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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: P554523

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554523

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-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°	3615	3615	3615
5°	3625	3609	3578
10°	3586	3576	3535
15°	3522	3522	3482
20°	3448	3452	3408
25°	3334	3375	3322
30°	3140	3281	3241
35°	2966	3144	3150
40°	2822	2975	3053
45°	2661	2795	2938
50°	2491	2633	2812
55°	2298	2450	2661
60°	2069	2236	2475
65°	1827	1988	2250
70°	1523	1693	1912
75°	1196	1352	1497
80°	855	951	1057
85°	556	556	525



TEST NUMBER: P554523

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	4.1
10°-20°	177.7	11.4
20°-30°	259.6	16.7
30°-40°	294.7	19.0
40°-50°	284.5	18.3
50°-60°	234.7	15.1
60°-70°	156.3	10.1
70°-80°	69.9	4.5
80°-90°	12.5	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°	500.5	32.2
0°-40°	795.2	51.2
0°-60°	1314.3	84.6
0°-90°	1553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1553.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	671	671	668	664	662	63
15°	632	634	632	629	625	178
25°	562	566	568	564	559	257
35°	452	458	479	481	479	283
45°	350	356	367	384	386	270
55°	245	249	261	276	284	219
65°	144	147	156	167	177	142
75°	58	61	65	68	72	63
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



TEST NUMBER: P554523

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	671.6	671.6	671.6	671.6	671.6
2.5°	673.4	673.7	672.1	668.0	665.4
5°	670.9	670.6	668.0	664.4	662.3
7.5°	663.4	663.9	663.1	658.0	655.1
10°	656.2	656.4	654.3	650.2	646.9
12.5°	646.9	646.6	643.8	641.7	636.3
15°	632.2	633.7	632.2	629.3	624.9
17.5°	618.0	618.0	619.0	614.1	610.7
20°	602.0	602.7	602.7	598.9	595.0
22.5°	583.4	585.7	586.5	582.4	577.7
25°	561.5	565.8	568.4	564.3	559.4
27.5°	534.9	541.6	549.3	546.2	540.8
30°	505.2	515.0	527.9	525.3	521.5
32.5°	477.1	486.9	504.7	503.7	501.6
35°	451.5	457.7	478.6	481.2	479.4
37.5°	427.3	433.0	452.6	458.5	457.0
40°	401.7	407.9	423.4	434.0	434.5
42.5°	376.5	382.4	395.0	410.3	410.3
45°	349.6	355.6	367.2	383.9	386.0
47.5°	323.3	329.5	340.8	357.6	361.0
50°	297.5	303.2	314.5	330.8	335.9
52.5°	270.7	276.9	288.0	302.9	310.4
55°	244.9	249.0	261.1	275.6	283.6
57.5°	218.0	221.9	235.6	248.0	256.2
60°	192.2	197.1	207.7	220.4	229.9
62.5°	167.5	172.6	181.6	192.7	203.6
65°	143.5	147.3	156.1	167.2	176.7
67.5°	120.2	123.6	132.4	140.1	150.2
70°	96.8	101.1	107.6	115.1	121.5
72.5°	77.9	79.7	85.1	90.6	97.3
75°	57.5	60.6	65.0	68.1	72.0
77.5°	41.3	43.1	45.7	48.3	51.9
80°	27.6	28.4	30.7	31.2	34.1
82.5°	16.8	17.3	17.8	18.1	19.1
85°	9.0	9.0	9.0	8.5	8.5
87.5°	5.2	5.2	4.4	3.6	2.6
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)