

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: P554419

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-80-85-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: P554419  
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-35-UNV-80-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

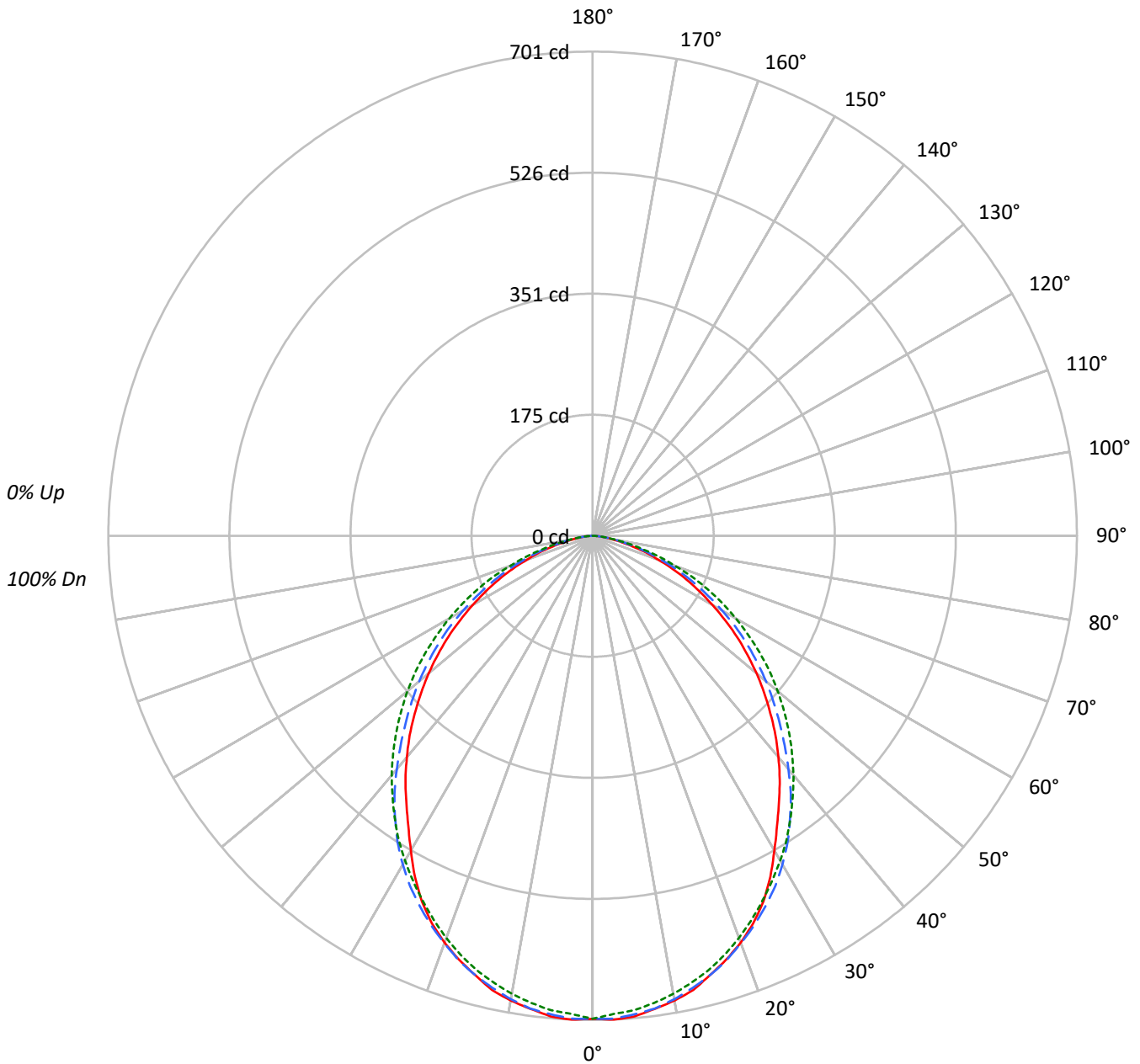
Lumens per Lamp: N/A  
Luminaire Lumens: 1617.0 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P554419

CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-80-85-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554419

CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-80-85-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°	3764	3764	3764
5°	3774	3757	3726
10°	3734	3723	3681
15°	3667	3667	3626
20°	3590	3594	3548
25°	3472	3514	3458
30°	3269	3416	3375
35°	3089	3275	3280
40°	2939	3098	3178
45°	2770	2910	3059
50°	2594	2742	2929
55°	2393	2551	2771
60°	2154	2328	2577
65°	1903	2069	2343
70°	1585	1762	1991
75°	1246	1408	1560
80°	890	992	1100
85°	580	580	550



TEST NUMBER: P554419

CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-80-85-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.8	4.1
10°-20°	185.0	11.4
20°-30°	270.3	16.7
30°-40°	306.8	19.0
40°-50°	296.2	18.3
50°-60°	244.3	15.1
60°-70°	162.7	10.1
70°-80°	72.8	4.5
80°-90°	13.0	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°	521.1	32.2
0°-40°	827.9	51.2
0°-60°	1368.5	84.6
0°-90°	1617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1617.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	698	698	696	692	690	66
15°	658	660	658	655	651	186
25°	585	589	592	588	582	268
35°	470	477	498	501	499	295
45°	364	370	382	400	402	281
55°	255	259	272	287	295	228
65°	149	153	162	174	184	148
75°	60	63	68	71	75	65
85°	9	9	9	9	9	13
90°	0	0	0	0	0	



TEST NUMBER: P554419

CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-80-85-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	699.3	699.3	699.3	699.3	699.3
2.5°	701.2	701.5	699.8	695.5	692.9
5°	698.5	698.2	695.5	691.8	689.6
7.5°	690.7	691.3	690.4	685.1	682.1
10°	683.2	683.5	681.3	677.0	673.5
12.5°	673.5	673.3	670.3	668.1	662.5
15°	658.2	659.8	658.2	655.3	650.7
17.5°	643.4	643.4	644.5	639.4	635.9
20°	626.8	627.6	627.6	623.5	619.5
22.5°	607.4	609.8	610.7	606.4	601.5
25°	584.6	589.2	591.8	587.5	582.4
27.5°	556.9	563.9	572.0	568.7	563.1
30°	526.0	536.2	549.7	547.0	543.0
32.5°	496.7	507.0	525.5	524.4	522.3
35°	470.1	476.6	498.4	501.0	499.2
37.5°	444.9	450.8	471.2	477.4	475.8
40°	418.3	424.7	440.9	451.9	452.4
42.5°	392.0	398.1	411.3	427.2	427.2
45°	364.0	370.2	382.3	399.8	401.9
47.5°	336.6	343.1	354.9	372.4	375.8
50°	309.8	315.7	327.5	344.4	349.8
52.5°	281.8	288.3	299.8	315.4	323.2
55°	255.0	259.3	271.9	286.9	295.3
57.5°	227.0	231.0	245.3	258.2	266.8
60°	200.1	205.3	216.3	229.4	239.4
62.5°	174.4	179.7	189.1	200.7	212.0
65°	149.4	153.4	162.5	174.1	184.0
67.5°	125.2	128.7	137.8	145.9	156.4
70°	100.7	105.3	112.0	119.8	126.5
72.5°	81.1	83.0	88.7	94.3	101.3
75°	59.9	63.1	67.7	70.9	75.0
77.5°	43.0	44.9	47.6	50.2	54.0
80°	28.7	29.6	32.0	32.5	35.5
82.5°	17.5	18.0	18.5	18.8	19.9
85°	9.4	9.4	9.4	8.9	8.9
87.5°	5.4	5.4	4.6	3.8	2.7
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)