

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: P554909

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-82-96-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: P554909  
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-LD4-2LO-30-UNV-82-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

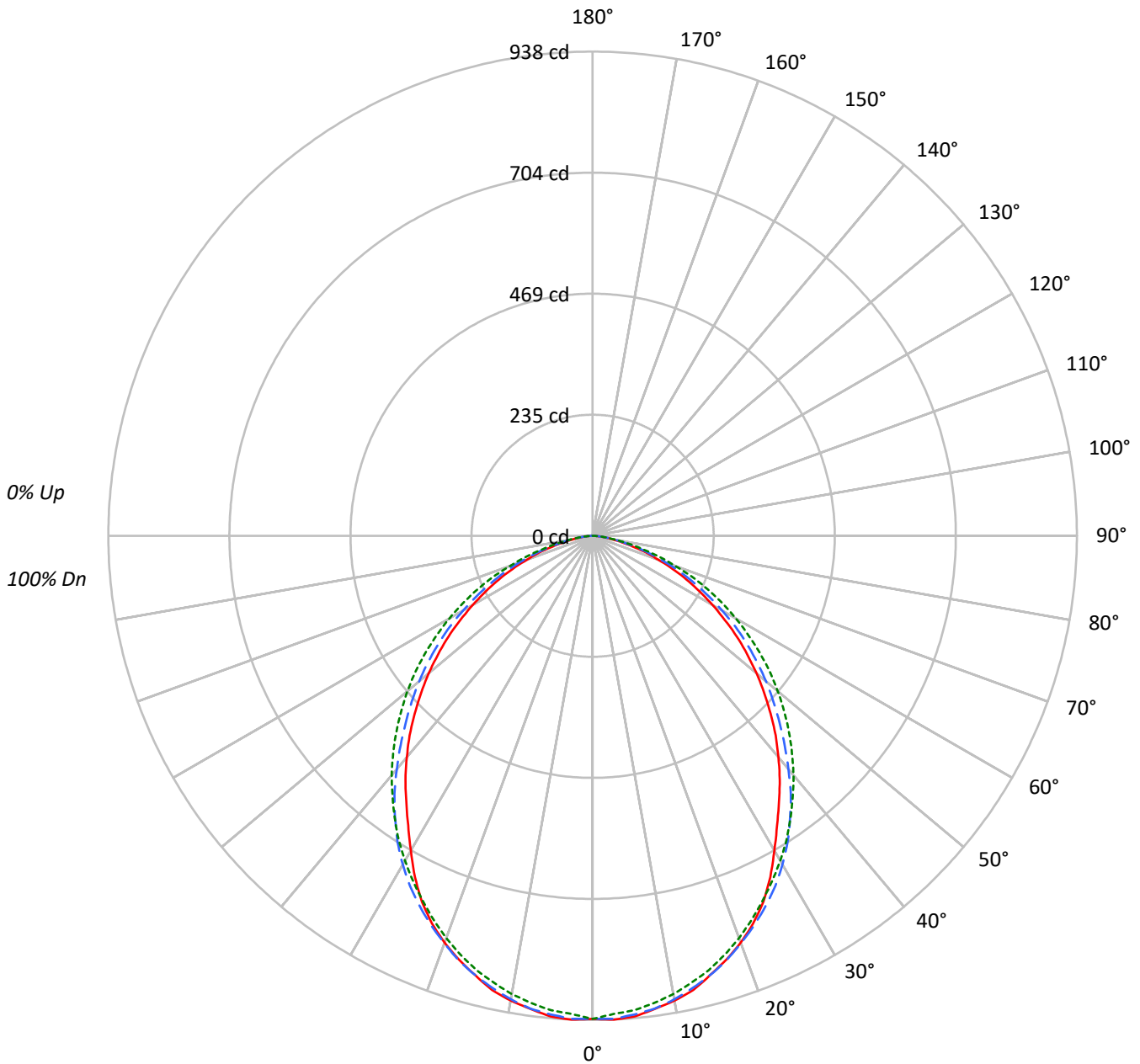
Lumens per Lamp: N/A  
Luminaire Lumens: 2164.0 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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: P554909

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-82-96-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554909

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-82-96-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°	5037	5037	5037
5°	5050	5029	4986
10°	4997	4983	4926
15°	4908	4908	4852
20°	4804	4810	4749
25°	4646	4704	4629
30°	4375	4571	4515
35°	4134	4382	4389
40°	3933	4145	4254
45°	3708	3894	4094
50°	3471	3670	3919
55°	3202	3415	3707
60°	2884	3115	3448
65°	2546	2770	3137
70°	2121	2359	2664
75°	1668	1884	2086
80°	1193	1327	1472
85°	778	778	735



TEST NUMBER: P554909

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-82-96-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.1	4.1
10°-20°	247.5	11.4
20°-30°	361.7	16.7
30°-40°	410.6	19.0
40°-50°	396.4	18.3
50°-60°	327.0	15.1
60°-70°	217.7	10.1
70°-80°	97.4	4.5
80°-90°	17.4	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°	697.4	32.2
0°-40°	1108.0	51.2
0°-60°	1831.4	84.6
0°-90°	2164.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	936	936	936	936	936	
5°	935	934	931	926	923	88
15°	881	883	881	877	871	248
25°	782	788	792	786	780	358
35°	629	638	667	670	668	394
45°	487	495	512	535	538	376
55°	341	347	364	384	395	305
65°	200	205	218	233	246	198
75°	80	84	91	95	100	88
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



TEST NUMBER: P554909

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-82-96-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	935.9	935.9	935.9	935.9	935.9
2.5°	938.4	938.8	936.6	930.8	927.2
5°	934.8	934.4	930.8	925.8	922.9
7.5°	924.4	925.1	924.0	916.8	912.9
10°	914.3	914.7	911.8	906.0	901.4
12.5°	901.4	901.0	897.0	894.2	886.6
15°	880.9	883.0	880.9	876.9	870.8
17.5°	861.1	861.1	862.5	855.7	851.0
20°	838.8	839.9	839.9	834.5	829.1
22.5°	812.9	816.1	817.2	811.5	805.0
25°	782.4	788.5	792.1	786.3	779.5
27.5°	745.3	754.7	765.5	761.1	753.6
30°	704.0	717.6	735.6	732.0	726.6
32.5°	664.8	678.4	703.3	701.8	698.9
35°	629.2	637.8	666.9	670.5	668.0
37.5°	595.4	603.3	630.6	638.9	636.7
40°	559.8	568.4	590.0	604.7	605.5
42.5°	524.6	532.8	550.5	571.7	571.7
45°	487.2	495.4	511.6	535.0	537.9
47.5°	450.5	459.1	474.9	498.3	503.0
50°	414.5	422.5	438.3	460.9	468.1
52.5°	377.2	385.8	401.2	422.1	432.5
55°	341.2	347.0	363.9	384.0	395.1
57.5°	303.8	309.2	328.3	345.5	357.0
60°	267.9	274.7	289.4	307.0	320.3
62.5°	233.3	240.5	253.1	268.6	283.7
65°	199.9	205.3	217.5	233.0	246.3
67.5°	167.5	172.2	184.4	195.2	209.3
70°	134.8	140.9	149.9	160.4	169.3
72.5°	108.6	111.1	118.6	126.2	135.5
75°	80.2	84.5	90.6	94.9	100.3
77.5°	57.5	60.0	63.6	67.2	72.3
80°	38.5	39.5	42.8	43.5	47.5
82.5°	23.4	24.1	24.8	25.2	26.6
85°	12.6	12.6	12.6	11.9	11.9
87.5°	7.2	7.2	6.1	5.0	3.6
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)