

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: P555088

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-82-84-EDD-90**

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: P555088  
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-50-UNV-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

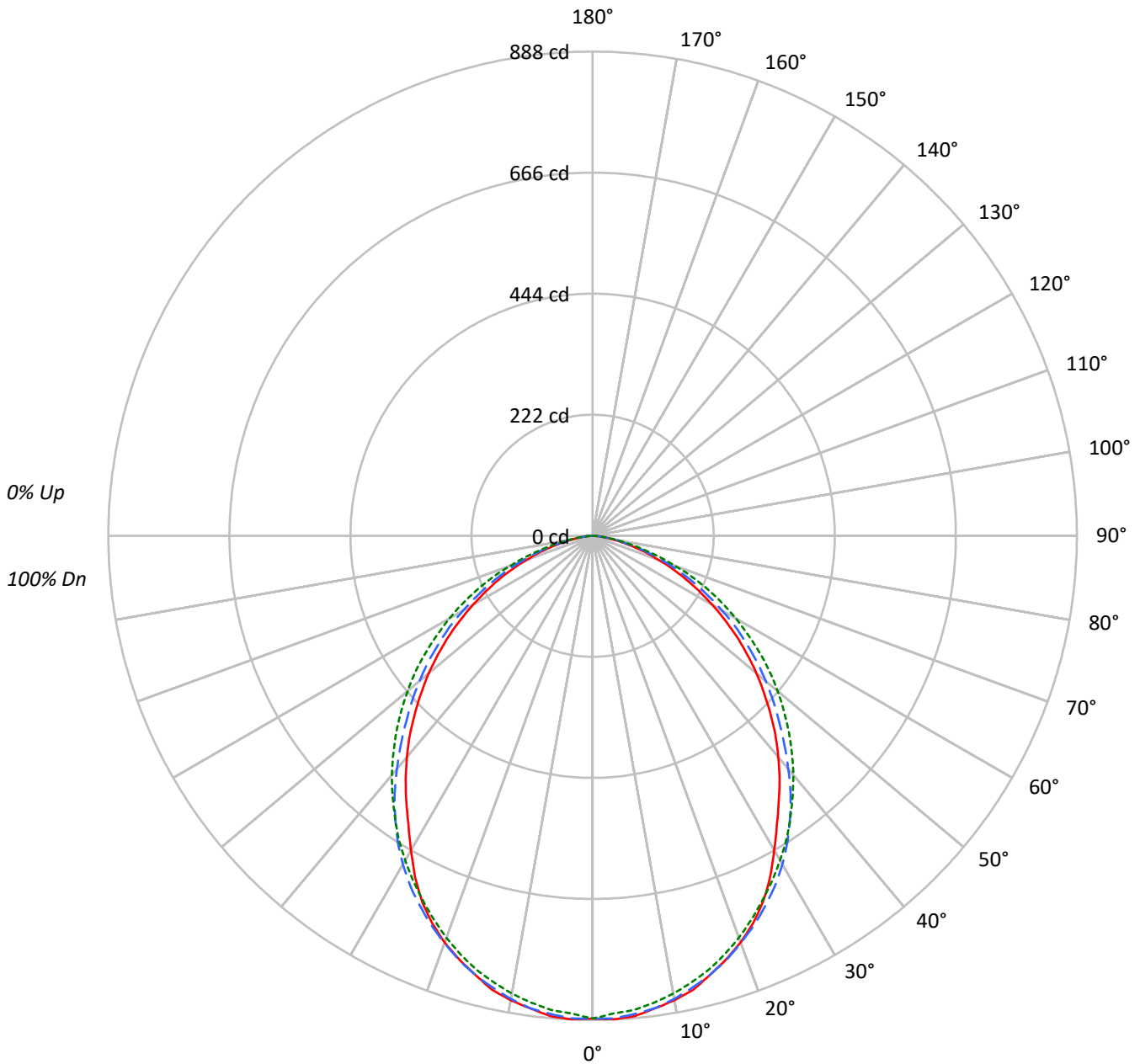
Lumens per Lamp: N/A  
Luminaire Lumens: 2047.0 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P555088

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-82-84-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555088

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-82-84-EDD-90

**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°	4765	4765	4765
5°	4777	4757	4716
10°	4727	4714	4659
15°	4642	4642	4590
20°	4544	4550	4492
25°	4395	4449	4378
30°	4138	4324	4271
35°	3911	4145	4152
40°	3720	3921	4024
45°	3507	3684	3873
50°	3283	3471	3707
55°	3029	3230	3507
60°	2728	2947	3261
65°	2408	2621	2967
70°	2006	2231	2521
75°	1576	1782	1973
80°	1128	1255	1392
85°	735	735	692



TEST NUMBER: P555088

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-82-84-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.4	4.1
10°-20°	234.2	11.4
20°-30°	342.2	16.7
30°-40°	388.4	19.0
40°-50°	375.0	18.3
50°-60°	309.3	15.1
60°-70°	206.0	10.1
70°-80°	92.2	4.5
80°-90°	16.5	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°	659.7	32.2
0°-40°	1048.1	51.2
0°-60°	1732.4	84.6
0°-90°	2047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	884	884	880	876	873	84
15°	833	835	833	830	824	235
25°	740	746	749	744	737	339
35°	595	603	631	634	632	373
45°	461	469	484	506	509	356
55°	323	328	344	363	374	288
65°	189	194	206	220	233	187
75°	76	80	86	90	95	83
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P555088

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-82-84-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	885.3	885.3	885.3	885.3	885.3
2.5°	887.7	888.0	886.0	880.5	877.1
5°	884.3	883.9	880.5	875.8	873.0
7.5°	874.4	875.1	874.1	867.2	863.5
10°	864.9	865.2	862.5	857.0	852.6
12.5°	852.6	852.3	848.5	845.8	838.7
15°	833.2	835.3	833.2	829.5	823.7
17.5°	814.5	814.5	815.9	809.4	805.0
20°	793.4	794.5	794.5	789.4	784.3
22.5°	769.0	772.0	773.0	767.6	761.5
25°	740.1	745.8	749.2	743.8	737.3
27.5°	705.0	713.9	724.1	720.0	712.8
30°	665.9	678.8	695.8	692.4	687.3
32.5°	628.8	641.8	665.2	663.9	661.2
35°	595.2	603.3	630.9	634.3	631.9
37.5°	563.2	570.7	596.5	604.4	602.3
40°	529.5	537.7	558.1	572.0	572.7
42.5°	496.2	504.0	520.7	540.8	540.8
45°	460.8	468.7	484.0	506.1	508.8
47.5°	426.1	434.3	449.3	471.4	475.8
50°	392.1	399.6	414.6	436.0	442.8
52.5°	356.8	364.9	379.5	399.3	409.1
55°	322.8	328.2	344.2	363.2	373.8
57.5°	287.4	292.5	310.5	326.8	337.7
60°	253.4	259.8	273.8	290.4	303.0
62.5°	220.7	227.5	239.4	254.1	268.3
65°	189.1	194.2	205.8	220.4	233.0
67.5°	158.5	162.9	174.5	184.7	197.9
70°	127.5	133.3	141.8	151.7	160.2
72.5°	102.7	105.1	112.2	119.4	128.2
75°	75.8	79.9	85.7	89.8	94.9
77.5°	54.4	56.8	60.2	63.6	68.4
80°	36.4	37.4	40.5	41.2	44.9
82.5°	22.1	22.8	23.5	23.8	25.2
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	4.8	3.4
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)