

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: P555078

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-81-87-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: P555078  
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-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

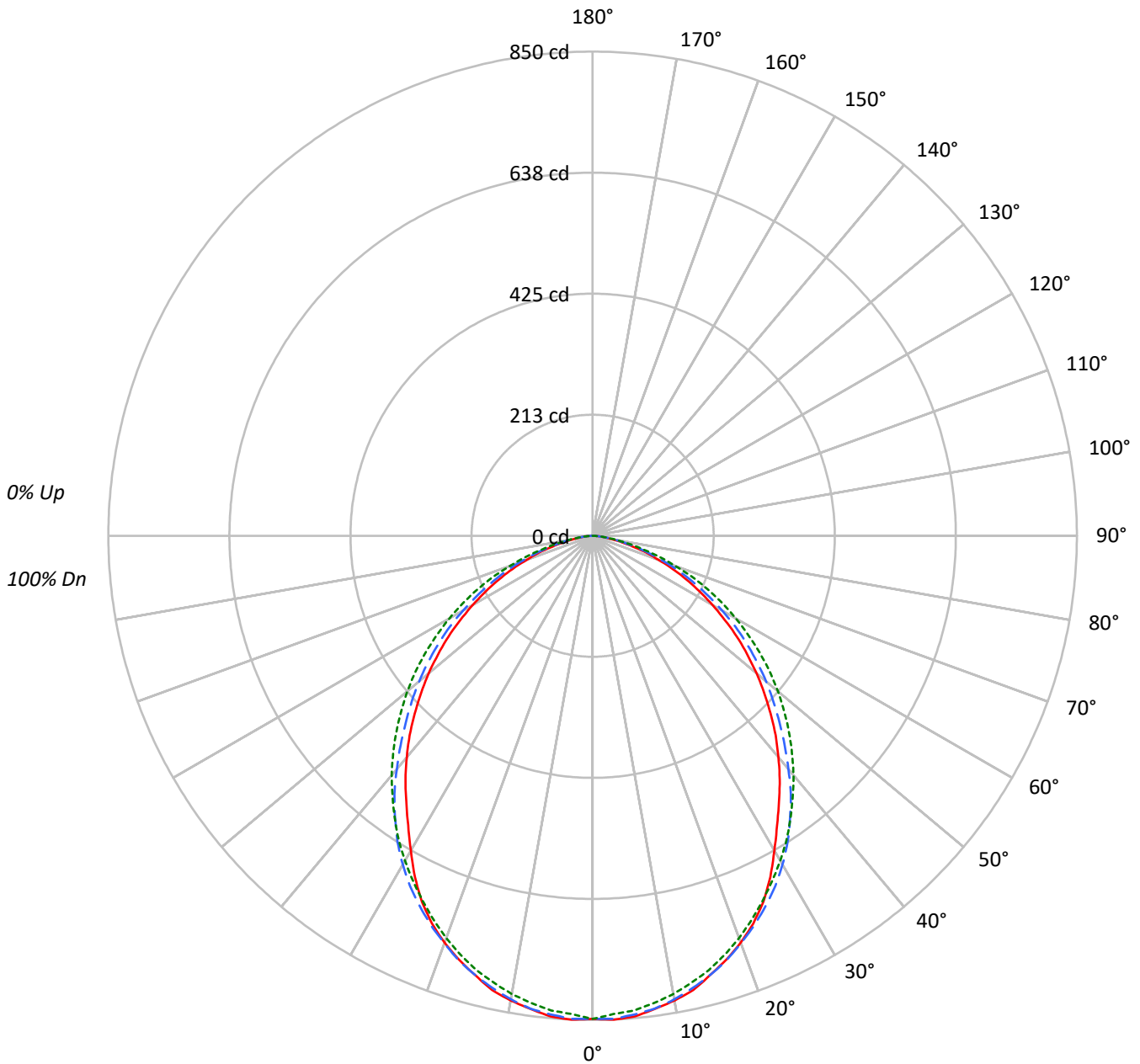
Lumens per Lamp: N/A  
Luminaire Lumens: 1961.0 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (Ain): 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: P555078

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-81-87-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555078

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-81-87-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°	4564	4564	4564
5°	4576	4557	4519
10°	4528	4516	4464
15°	4447	4447	4397
20°	4353	4359	4303
25°	4210	4263	4195
30°	3964	4143	4092
35°	3746	3971	3978
40°	3564	3757	3855
45°	3360	3529	3710
50°	3146	3326	3552
55°	2901	3094	3360
60°	2612	2823	3125
65°	2308	2510	2842
70°	1923	2138	2415
75°	1512	1707	1890
80°	1082	1203	1333
85°	704	704	667



TEST NUMBER: P555078

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-81-87-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.8	4.1
10°-20°	224.3	11.4
20°-30°	327.8	16.7
30°-40°	372.1	19.0
40°-50°	359.2	18.3
50°-60°	296.3	15.1
60°-70°	197.3	10.1
70°-80°	88.3	4.5
80°-90°	15.8	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°	632.0	32.2
0°-40°	1004.1	51.2
0°-60°	1659.6	84.6
0°-90°	1961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	847	847	844	839	836	80
15°	798	800	798	795	789	225
25°	709	714	718	712	706	325
35°	570	578	604	608	605	357
45°	442	449	464	485	487	341
55°	309	314	330	348	358	276
65°	181	186	197	211	223	180
75°	73	77	82	86	91	79
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



TEST NUMBER: P555078

CATALOG NUMBER: FUSL-12-2-LD4-2LO-50-UNV-81-87-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	848.1	848.1	848.1	848.1	848.1
2.5°	850.4	850.7	848.7	843.5	840.3
5°	847.1	846.8	843.5	839.0	836.4
7.5°	837.7	838.3	837.3	830.8	827.2
10°	828.5	828.9	826.3	821.0	816.8
12.5°	816.8	816.5	812.9	810.3	803.4
15°	798.2	800.2	798.2	794.6	789.1
17.5°	780.3	780.3	781.6	775.4	771.2
20°	760.1	761.1	761.1	756.2	751.3
22.5°	736.7	739.6	740.6	735.4	729.5
25°	709.0	714.5	717.8	712.5	706.4
27.5°	675.4	683.9	693.6	689.7	682.9
30°	637.9	650.3	666.6	663.3	658.5
32.5°	602.4	614.8	637.3	636.0	633.4
35°	570.2	578.0	604.4	607.6	605.4
37.5°	539.5	546.7	571.5	579.0	577.0
40°	507.3	515.1	534.7	548.0	548.7
42.5°	475.4	482.8	498.8	518.0	518.0
45°	441.5	449.0	463.6	484.8	487.4
47.5°	408.2	416.1	430.4	451.6	455.8
50°	375.7	382.8	397.2	417.7	424.2
52.5°	341.8	349.6	363.6	382.5	391.9
55°	309.2	314.4	329.7	348.0	358.1
57.5°	275.3	280.2	297.5	313.1	323.5
60°	242.7	248.9	262.3	278.2	290.3
62.5°	211.5	218.0	229.4	243.4	257.1
65°	181.2	186.0	197.1	211.1	223.2
67.5°	151.8	156.1	167.1	176.9	189.6
70°	122.2	127.7	135.9	145.3	153.5
72.5°	98.4	100.7	107.5	114.4	122.8
75°	72.7	76.6	82.1	86.0	90.9
77.5°	52.1	54.4	57.7	60.9	65.5
80°	34.9	35.8	38.8	39.4	43.0
82.5°	21.2	21.8	22.5	22.8	24.1
85°	11.4	11.4	11.4	10.8	10.8
87.5°	6.5	6.5	5.5	4.6	3.3
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)