

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: P554579

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-82-85-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: P554579  
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-50-UNV-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

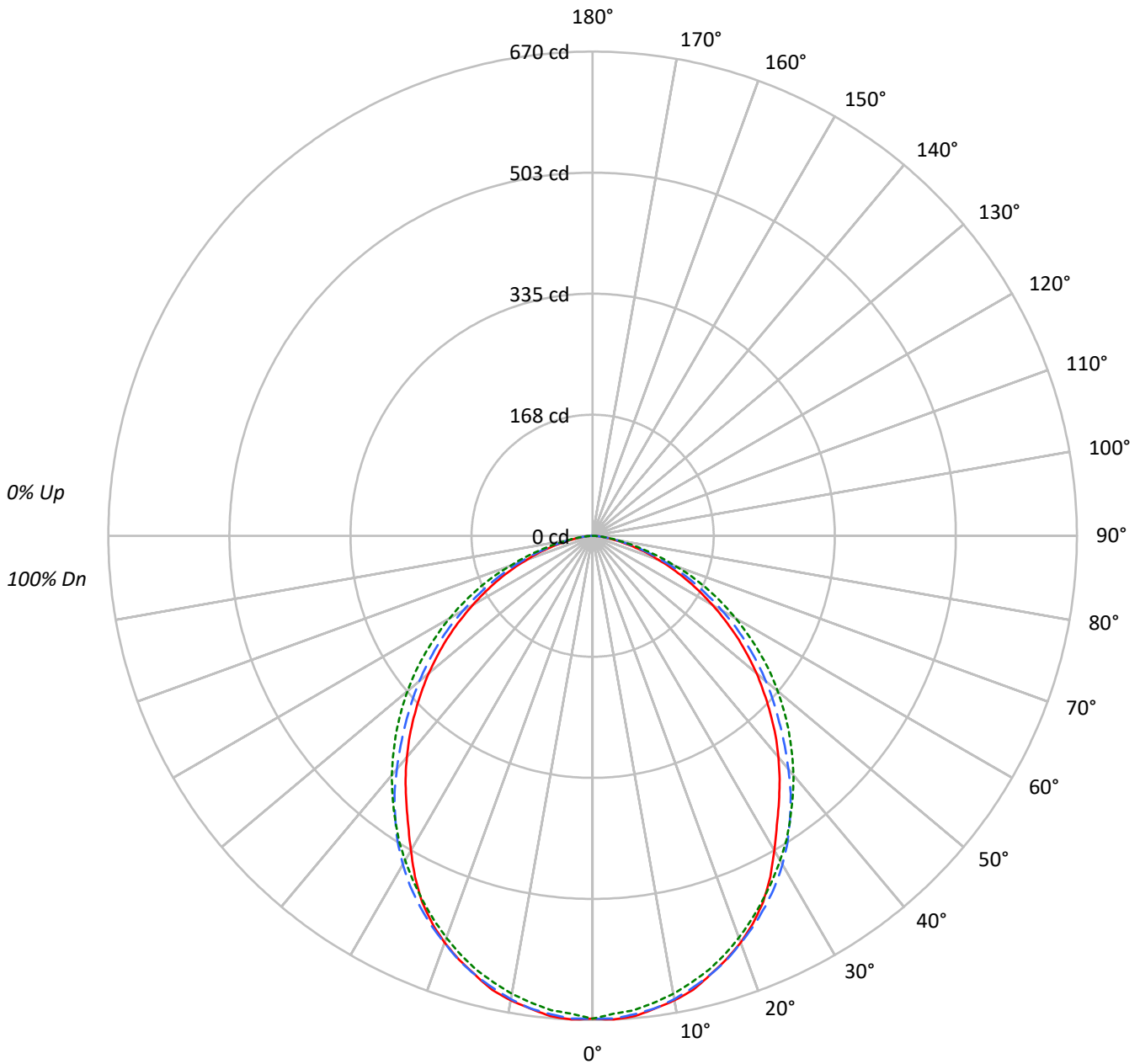
Lumens per Lamp: N/A  
Luminaire Lumens: 1545.0 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (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

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### Luminous Intensity Polar Plot





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**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°	3596	3596	3596
5°	3606	3591	3560
10°	3568	3558	3517
15°	3504	3504	3464
20°	3430	3434	3390
25°	3317	3358	3305
30°	3123	3264	3224
35°	2951	3129	3133
40°	2808	2959	3037
45°	2647	2780	2923
50°	2478	2620	2798
55°	2286	2438	2647
60°	2058	2224	2462
65°	1817	1978	2239
70°	1515	1684	1902
75°	1189	1345	1489
80°	852	945	1051
85°	556	556	525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.9	4.1
10°-20°	176.7	11.4
20°-30°	258.3	16.7
30°-40°	293.2	19.0
40°-50°	283.0	18.3
50°-60°	233.5	15.1
60°-70°	155.5	10.1
70°-80°	69.6	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°	497.9	32.2
0°-40°	791.1	51.2
0°-60°	1307.5	84.6
0°-90°	1545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1545.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	667	667	665	661	659	63
15°	629	630	629	626	622	177
25°	559	563	566	561	556	256
35°	449	455	476	479	477	281
45°	348	354	365	382	384	268
55°	244	248	260	274	282	217
65°	143	147	155	166	176	142
75°	57	60	65	68	72	63
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	668.2	668.2	668.2	668.2	668.2
2.5°	670.0	670.2	668.7	664.6	662.0
5°	667.4	667.1	664.6	661.0	658.9
7.5°	660.0	660.5	659.7	654.6	651.7
10°	652.8	653.0	651.0	646.9	643.5
12.5°	643.5	643.3	640.4	638.4	633.0
15°	628.9	630.4	628.9	626.1	621.7
17.5°	614.8	614.8	615.8	610.9	607.6
20°	598.9	599.6	599.6	595.8	591.9
22.5°	580.4	582.7	583.5	579.4	574.7
25°	558.6	562.9	565.5	561.4	556.5
27.5°	532.1	538.8	546.5	543.4	538.0
30°	502.6	512.4	525.2	522.6	518.8
32.5°	474.6	484.4	502.1	501.1	499.0
35°	449.2	455.4	476.2	478.7	476.9
37.5°	425.1	430.7	450.2	456.1	454.6
40°	399.7	405.8	421.2	431.8	432.3
42.5°	374.5	380.4	393.0	408.1	408.1
45°	347.8	353.7	365.3	382.0	384.0
47.5°	321.6	327.8	339.1	355.8	359.1
50°	296.0	301.6	312.9	329.1	334.2
52.5°	269.3	275.4	286.5	301.4	308.8
55°	243.6	247.7	259.8	274.1	282.1
57.5°	216.9	220.8	234.4	246.7	254.9
60°	191.2	196.1	206.6	219.2	228.7
62.5°	166.6	171.7	180.7	191.7	202.5
65°	142.7	146.6	155.3	166.3	175.8
67.5°	119.6	123.0	131.7	139.4	149.4
70°	96.3	100.6	107.0	114.5	120.9
72.5°	77.5	79.3	84.7	90.1	96.8
75°	57.2	60.3	64.7	67.8	71.6
77.5°	41.1	42.9	45.4	48.0	51.6
80°	27.5	28.2	30.5	31.1	33.9
82.5°	16.7	17.2	17.7	18.0	19.0
85°	9.0	9.0	9.0	8.5	8.5
87.5°	5.1	5.1	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)