

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: P554346

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-93-94-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: P554346  
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-LD4-1LO-50-UNV-93-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

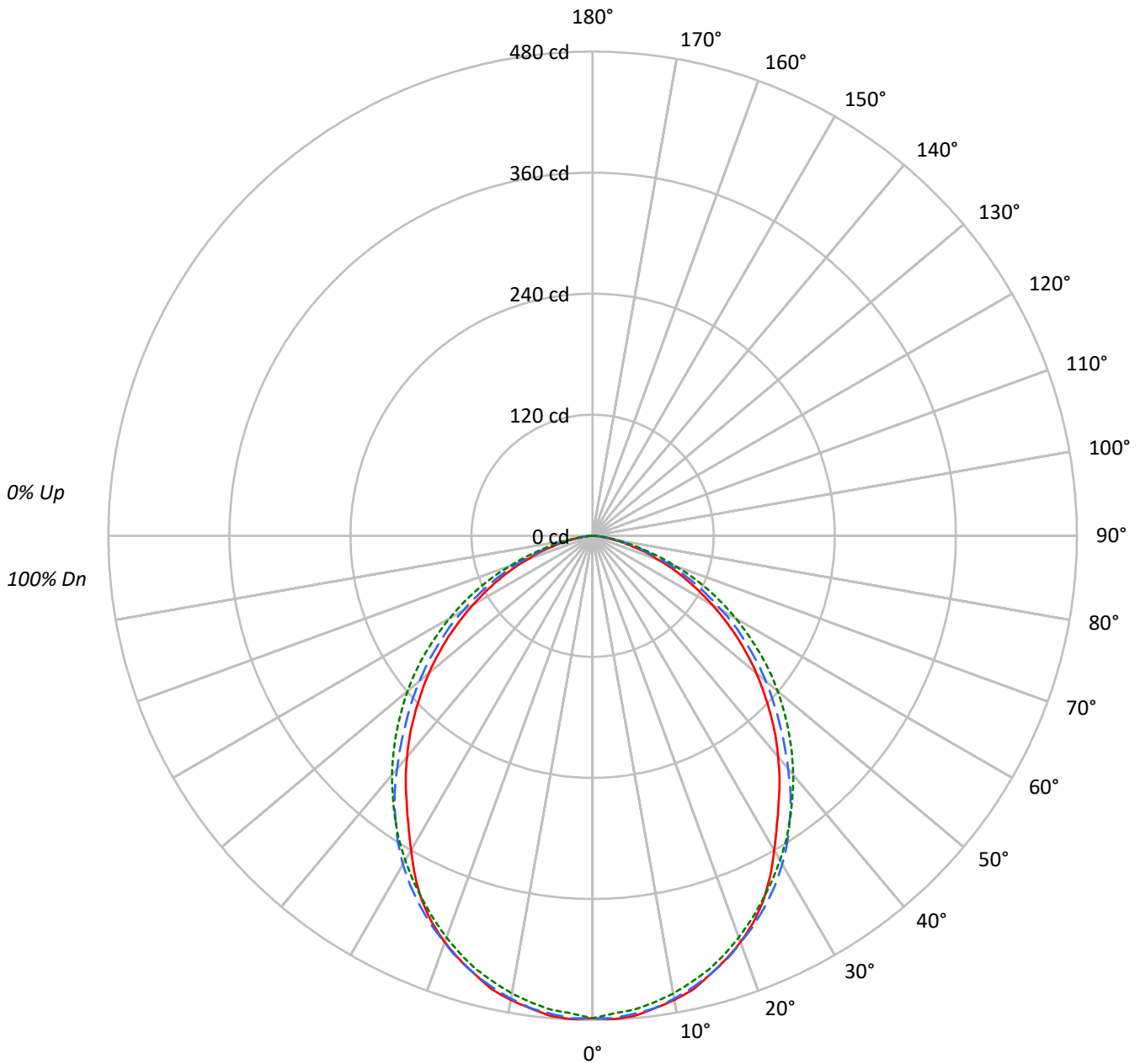
Lumens per Lamp: N/A  
Luminaire Lumens: 1106.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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

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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°	2574	2574	2574
5°	2581	2570	2548
10°	2554	2547	2518
15°	2508	2508	2480
20°	2455	2459	2427
25°	2375	2404	2366
30°	2236	2337	2308
35°	2113	2240	2243
40°	2010	2118	2174
45°	1895	1990	2092
50°	1774	1876	2004
55°	1636	1745	1894
60°	1474	1592	1762
65°	1301	1416	1603
70°	1084	1205	1361
75°	853	963	1067
80°	611	679	753
85°	395	395	377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.0	4.1
10°-20°	126.5	11.4
20°-30°	184.9	16.7
30°-40°	209.9	19.0
40°-50°	202.6	18.3
50°-60°	167.1	15.1
60°-70°	111.3	10.1
70°-80°	49.8	4.5
80°-90°	8.9	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°	356.4	32.2
0°-40°	566.3	51.2
0°-60°	936.0	84.6
0°-90°	1106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1106.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	478	478	476	473	472	45
15°	450	451	450	448	445	127
25°	400	403	405	402	398	183
35°	322	326	341	343	341	201
45°	249	253	262	273	275	192
55°	174	177	186	196	202	156
65°	102	105	111	119	126	101
75°	41	43	46	48	51	45
85°	6	6	6	6	6	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	478.3	478.3	478.3	478.3	478.3
2.5°	479.6	479.8	478.7	475.7	473.9
5°	477.8	477.6	475.7	473.2	471.7
7.5°	472.4	472.8	472.3	468.6	466.6
10°	467.3	467.5	466.0	463.1	460.7
12.5°	460.7	460.5	458.5	457.0	453.1
15°	450.2	451.3	450.2	448.2	445.1
17.5°	440.1	440.1	440.8	437.3	435.0
20°	428.7	429.3	429.3	426.5	423.7
22.5°	415.5	417.1	417.7	414.7	411.4
25°	399.9	403.0	404.8	401.9	398.4
27.5°	380.9	385.7	391.2	389.0	385.2
30°	359.8	366.8	376.0	374.1	371.4
32.5°	339.8	346.7	359.4	358.7	357.2
35°	321.6	326.0	340.9	342.7	341.4
37.5°	304.3	308.3	322.3	326.5	325.4
40°	286.1	290.5	301.5	309.1	309.4
42.5°	268.1	272.3	281.3	292.2	292.2
45°	249.0	253.2	261.5	273.4	274.9
47.5°	230.2	234.7	242.7	254.7	257.1
50°	211.9	215.9	224.0	235.6	239.3
52.5°	192.8	197.2	205.1	215.7	221.1
55°	174.4	177.3	186.0	196.3	201.9
57.5°	155.3	158.0	167.8	176.6	182.5
60°	136.9	140.4	147.9	156.9	163.7
62.5°	119.3	122.9	129.4	137.3	145.0
65°	102.2	104.9	111.2	119.1	125.9
67.5°	85.6	88.0	94.3	99.8	106.9
70°	68.9	72.0	76.6	82.0	86.5
72.5°	55.5	56.8	60.6	64.5	69.3
75°	41.0	43.2	46.3	48.5	51.3
77.5°	29.4	30.7	32.5	34.4	36.9
80°	19.7	20.2	21.9	22.2	24.3
82.5°	11.9	12.3	12.7	12.9	13.6
85°	6.4	6.4	6.4	6.1	6.1
87.5°	3.7	3.7	3.1	2.6	1.8
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)