

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: P554331

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-82-94-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: P554331  
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-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

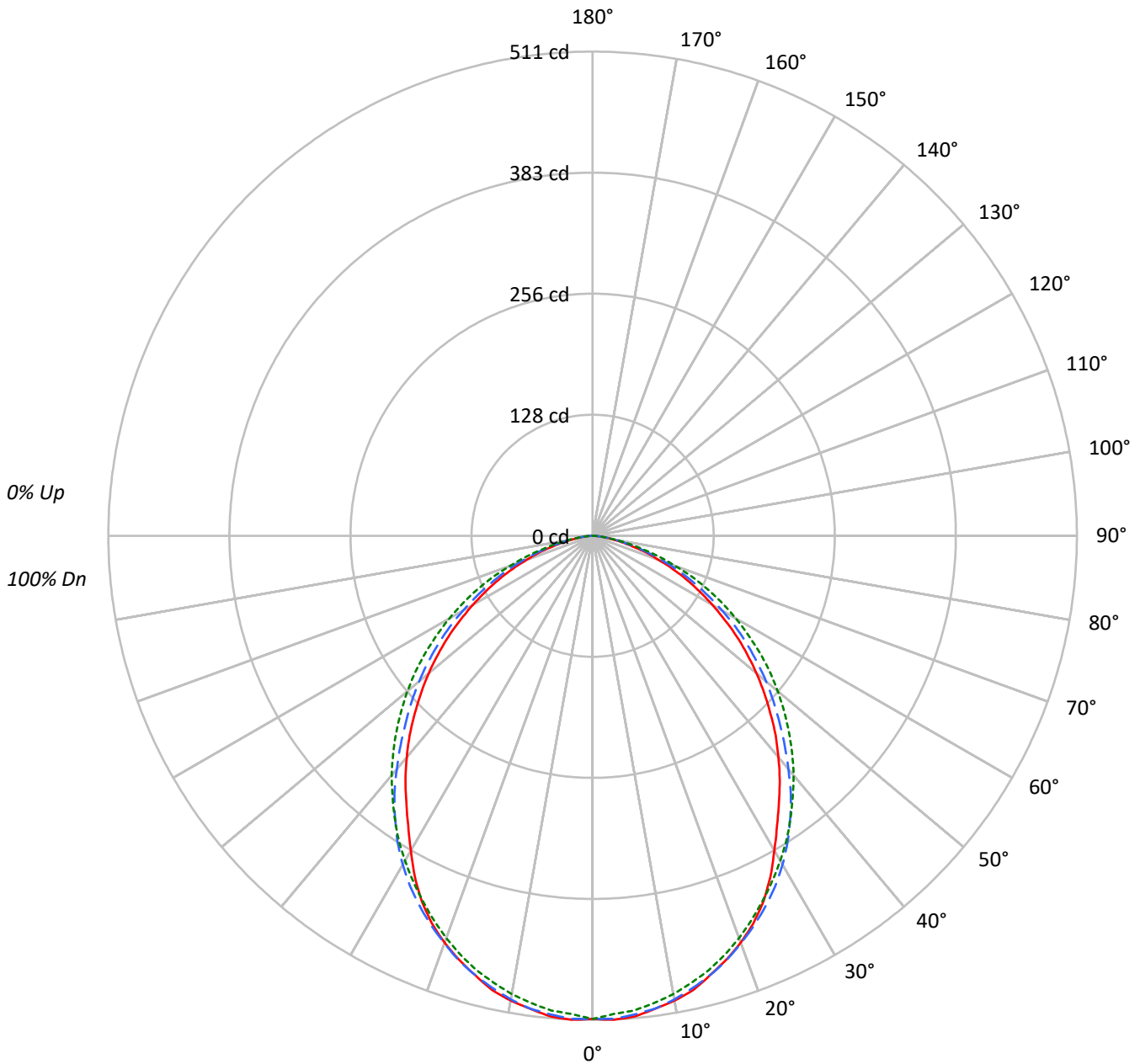
Lumens per Lamp: N/A  
Luminaire Lumens: 1179.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2744	2744	2744
5°	2752	2740	2716
10°	2722	2715	2684
15°	2674	2674	2643
20°	2617	2621	2587
25°	2531	2562	2522
30°	2383	2491	2460
35°	2252	2388	2392
40°	2143	2258	2318
45°	2020	2121	2230
50°	1891	1999	2135
55°	1744	1860	2020
60°	1570	1697	1878
65°	1387	1509	1709
70°	1157	1286	1452
75°	909	1027	1137
80°	651	722	803
85°	426	426	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.0	4.1
10°-20°	134.9	11.4
20°-30°	197.1	16.7
30°-40°	223.7	19.0
40°-50°	216.0	18.3
50°-60°	178.1	15.1
60°-70°	118.6	10.1
70°-80°	53.1	4.5
80°-90°	9.5	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°	380.0	32.2
0°-40°	603.7	51.2
0°-60°	997.8	84.6
0°-90°	1179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1179.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	509	509	507	504	503	48
15°	480	481	480	478	474	135
25°	426	430	432	428	425	195
35°	343	348	363	365	364	215
45°	265	270	279	292	293	205
55°	186	189	198	209	215	166
65°	109	112	118	127	134	108
75°	44	46	49	52	55	48
85°	7	7	7	6	6	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	509.9	509.9	509.9	509.9	509.9
2.5°	511.3	511.5	510.3	507.1	505.2
5°	509.3	509.1	507.1	504.4	502.8
7.5°	503.6	504.0	503.4	499.5	497.4
10°	498.1	498.3	496.8	493.6	491.1
12.5°	491.1	490.9	488.7	487.2	483.1
15°	479.9	481.1	479.9	477.8	474.4
17.5°	469.1	469.1	469.9	466.2	463.7
20°	457.0	457.6	457.6	454.6	451.7
22.5°	442.9	444.7	445.2	442.1	438.6
25°	426.2	429.6	431.5	428.4	424.7
27.5°	406.1	411.2	417.0	414.7	410.6
30°	383.5	391.0	400.8	398.8	395.9
32.5°	362.2	369.6	383.1	382.4	380.8
35°	342.8	347.5	363.4	365.3	364.0
37.5°	324.4	328.7	343.6	348.1	346.9
40°	305.0	309.7	321.4	329.5	329.9
42.5°	285.8	290.3	299.9	311.5	311.5
45°	265.4	269.9	278.7	291.5	293.0
47.5°	245.4	250.1	258.8	271.5	274.0
50°	225.9	230.2	238.8	251.1	255.0
52.5°	205.5	210.2	218.6	230.0	235.6
55°	185.9	189.0	198.2	209.2	215.3
57.5°	165.5	168.5	178.8	188.2	194.5
60°	145.9	149.7	157.7	167.3	174.5
62.5°	127.1	131.0	137.9	146.3	154.6
65°	108.9	111.8	118.5	126.9	134.2
67.5°	91.3	93.8	100.5	106.4	114.0
70°	73.5	76.8	81.7	87.4	92.3
72.5°	59.2	60.5	64.6	68.8	73.8
75°	43.7	46.0	49.4	51.7	54.7
77.5°	31.3	32.7	34.7	36.6	39.4
80°	21.0	21.5	23.3	23.7	25.9
82.5°	12.7	13.1	13.5	13.7	14.5
85°	6.9	6.9	6.9	6.5	6.5
87.5°	3.9	3.9	3.3	2.7	2.0
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)