

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: P554271

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-82-97-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: P554271  
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-40-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

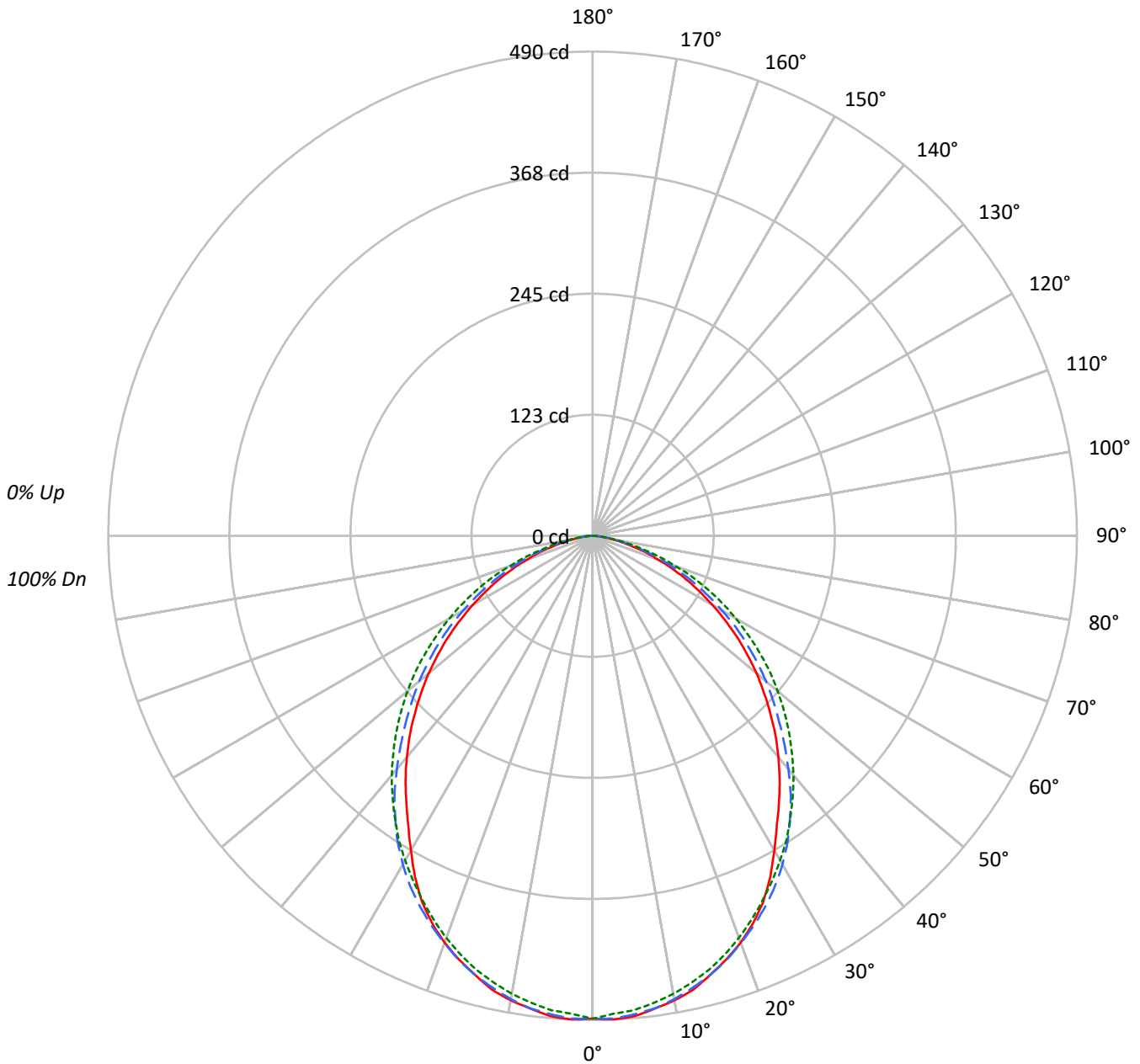
Lumens per Lamp: N/A  
Luminaire Lumens: 1130.0 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2630	2630	2630
5°	2637	2626	2603
10°	2609	2602	2572
15°	2563	2563	2534
20°	2509	2512	2479
25°	2426	2456	2417
30°	2284	2387	2358
35°	2159	2288	2292
40°	2054	2165	2222
45°	1936	2034	2138
50°	1813	1917	2046
55°	1672	1783	1936
60°	1506	1626	1801
65°	1330	1447	1638
70°	1108	1232	1391
75°	871	984	1090
80°	623	691	769
85°	408	408	383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	4.1
10°-20°	129.3	11.4
20°-30°	188.9	16.7
30°-40°	214.4	19.0
40°-50°	207.0	18.3
50°-60°	170.7	15.1
60°-70°	113.7	10.1
70°-80°	50.9	4.5
80°-90°	9.1	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°	364.2	32.2
0°-40°	578.6	51.2
0°-60°	956.3	84.6
0°-90°	1130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1130.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	489	489	489	489	489	
5°	488	488	486	483	482	46
15°	460	461	460	458	455	130
25°	408	412	414	411	407	187
35°	329	333	348	350	349	206
45°	254	259	267	279	281	196
55°	178	181	190	200	206	159
65°	104	107	114	122	129	104
75°	42	44	47	50	52	46
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°	488.7	488.7	488.7	488.7	488.7
2.5°	490.0	490.2	489.1	486.1	484.2
5°	488.1	487.9	486.1	483.4	481.9
7.5°	482.7	483.1	482.5	478.7	476.7
10°	477.4	477.6	476.1	473.1	470.7
12.5°	470.7	470.5	468.4	466.9	463.0
15°	460.0	461.1	460.0	457.9	454.7
17.5°	449.6	449.6	450.4	446.8	444.4
20°	438.0	438.6	438.6	435.8	432.9
22.5°	424.5	426.2	426.7	423.7	420.4
25°	408.5	411.7	413.6	410.6	407.0
27.5°	389.2	394.1	399.7	397.5	393.5
30°	367.6	374.7	384.1	382.2	379.4
32.5°	347.1	354.3	367.2	366.5	365.0
35°	328.6	333.1	348.3	350.1	348.8
37.5°	310.9	315.0	329.3	333.6	332.5
40°	292.3	296.8	308.1	315.8	316.2
42.5°	273.9	278.2	287.4	298.5	298.5
45°	254.4	258.7	267.2	279.4	280.9
47.5°	235.2	239.7	248.0	260.2	262.7
50°	216.5	220.6	228.9	240.7	244.4
52.5°	196.9	201.4	209.5	220.4	225.9
55°	178.2	181.2	190.0	200.5	206.3
57.5°	158.6	161.5	171.4	180.4	186.4
60°	139.9	143.4	151.1	160.3	167.3
62.5°	121.8	125.6	132.2	140.2	148.1
65°	104.4	107.2	113.6	121.7	128.6
67.5°	87.5	89.9	96.3	101.9	109.3
70°	70.4	73.6	78.3	83.7	88.4
72.5°	56.7	58.0	62.0	65.9	70.8
75°	41.9	44.1	47.3	49.6	52.4
77.5°	30.0	31.4	33.2	35.1	37.7
80°	20.1	20.7	22.3	22.7	24.8
82.5°	12.2	12.6	13.0	13.1	13.9
85°	6.6	6.6	6.6	6.2	6.2
87.5°	3.8	3.8	3.2	2.6	1.9
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)