

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: P554203

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-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: P554203  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

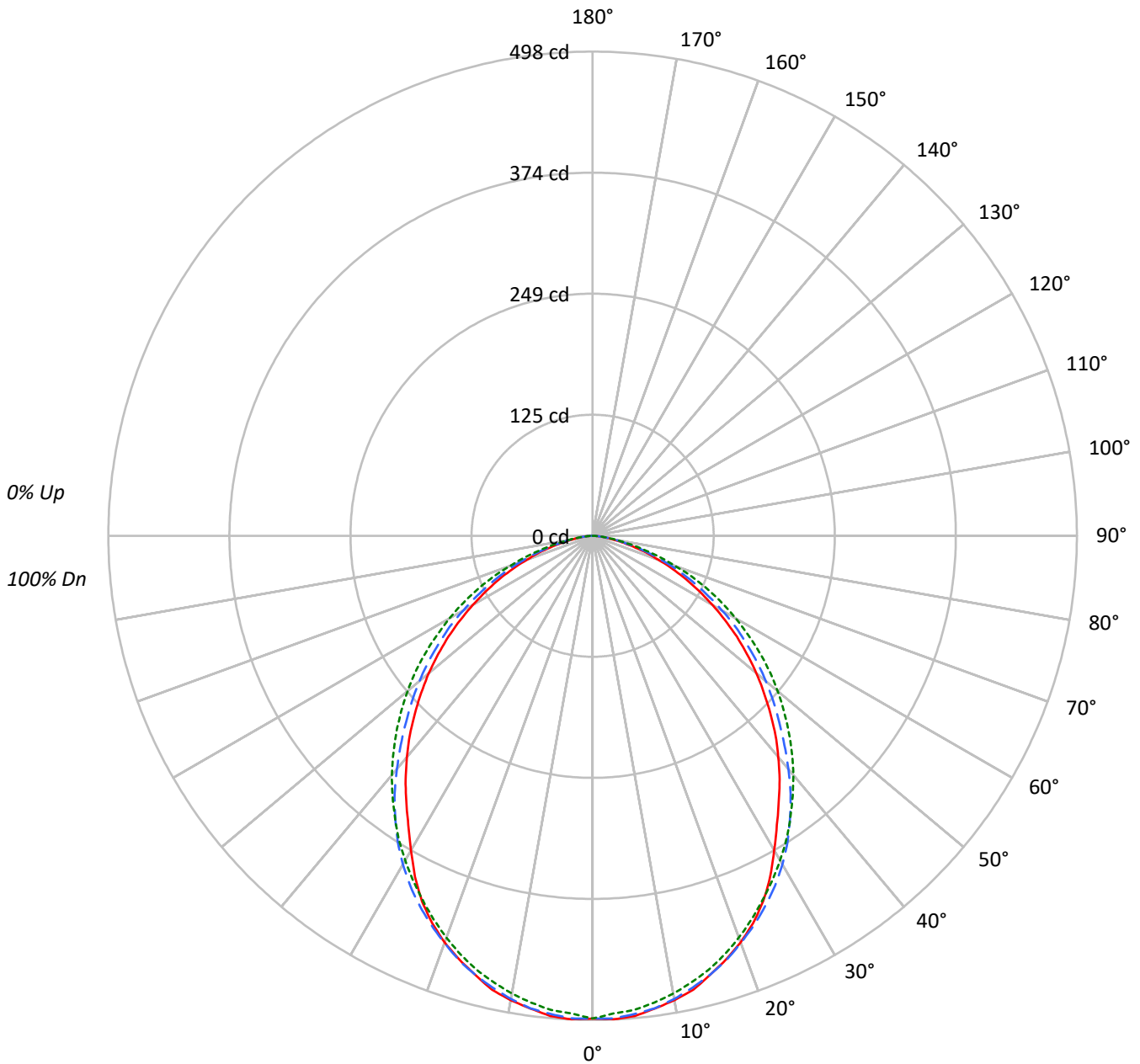
Lumens per Lamp: N/A  
Luminaire Lumens: 1148.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	2672	2672	2672
5°	2679	2668	2645
10°	2651	2643	2613
15°	2604	2604	2574
20°	2549	2552	2519
25°	2464	2495	2456
30°	2321	2425	2396
35°	2193	2325	2328
40°	2087	2199	2257
45°	1967	2066	2171
50°	1841	1947	2079
55°	1698	1811	1967
60°	1530	1652	1829
65°	1350	1470	1664
70°	1125	1251	1413
75°	884	1000	1106
80°	632	704	781
85°	414	414	389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.7	4.1
10°-20°	131.3	11.4
20°-30°	191.9	16.7
30°-40°	217.8	19.0
40°-50°	210.3	18.3
50°-60°	173.5	15.1
60°-70°	115.5	10.1
70°-80°	51.7	4.5
80°-90°	9.3	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°	370.0	32.2
0°-40°	587.8	51.2
0°-60°	971.6	84.6
0°-90°	1148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1148.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	496	496	496	496	496	
5°	496	496	494	491	490	47
15°	467	468	467	465	462	132
25°	415	418	420	417	414	190
35°	334	338	354	356	354	209
45°	258	263	271	284	285	199
55°	181	184	193	204	210	162
65°	106	109	115	124	131	105
75°	42	45	48	50	53	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°	496.5	496.5	496.5	496.5	496.5
2.5°	497.8	498.0	496.9	493.8	491.9
5°	495.9	495.7	493.8	491.1	489.6
7.5°	490.4	490.8	490.2	486.4	484.3
10°	485.0	485.2	483.7	480.6	478.2
12.5°	478.2	478.0	475.9	474.4	470.3
15°	467.3	468.4	467.3	465.2	462.0
17.5°	456.8	456.8	457.6	453.9	451.5
20°	445.0	445.6	445.6	442.7	439.8
22.5°	431.2	433.0	433.5	430.5	427.1
25°	415.0	418.3	420.2	417.1	413.5
27.5°	395.4	400.4	406.1	403.8	399.8
30°	373.5	380.7	390.2	388.3	385.5
32.5°	352.7	359.9	373.1	372.3	370.8
35°	333.8	338.4	353.8	355.7	354.4
37.5°	315.9	320.1	334.5	338.9	337.8
40°	297.0	301.6	313.0	320.8	321.2
42.5°	278.3	282.7	292.0	303.3	303.3
45°	258.4	262.8	271.4	283.8	285.3
47.5°	239.0	243.6	252.0	264.4	266.8
50°	219.9	224.1	232.5	244.5	248.3
52.5°	200.1	204.7	212.9	223.9	229.5
55°	181.0	184.1	193.0	203.7	209.6
57.5°	161.2	164.0	174.1	183.3	189.4
60°	142.1	145.7	153.5	162.9	169.9
62.5°	123.8	127.6	134.3	142.5	150.5
65°	106.0	108.9	115.4	123.6	130.7
67.5°	88.9	91.4	97.8	103.6	111.0
70°	71.5	74.8	79.5	85.1	89.8
72.5°	57.6	58.9	62.9	66.9	71.9
75°	42.5	44.8	48.1	50.4	53.2
77.5°	30.5	31.9	33.8	35.7	38.3
80°	20.4	21.0	22.7	23.1	25.2
82.5°	12.4	12.8	13.2	13.4	14.1
85°	6.7	6.7	6.7	6.3	6.3
87.5°	3.8	3.8	3.2	2.7	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)