

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: P554213

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-93-86-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: P554213  
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-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

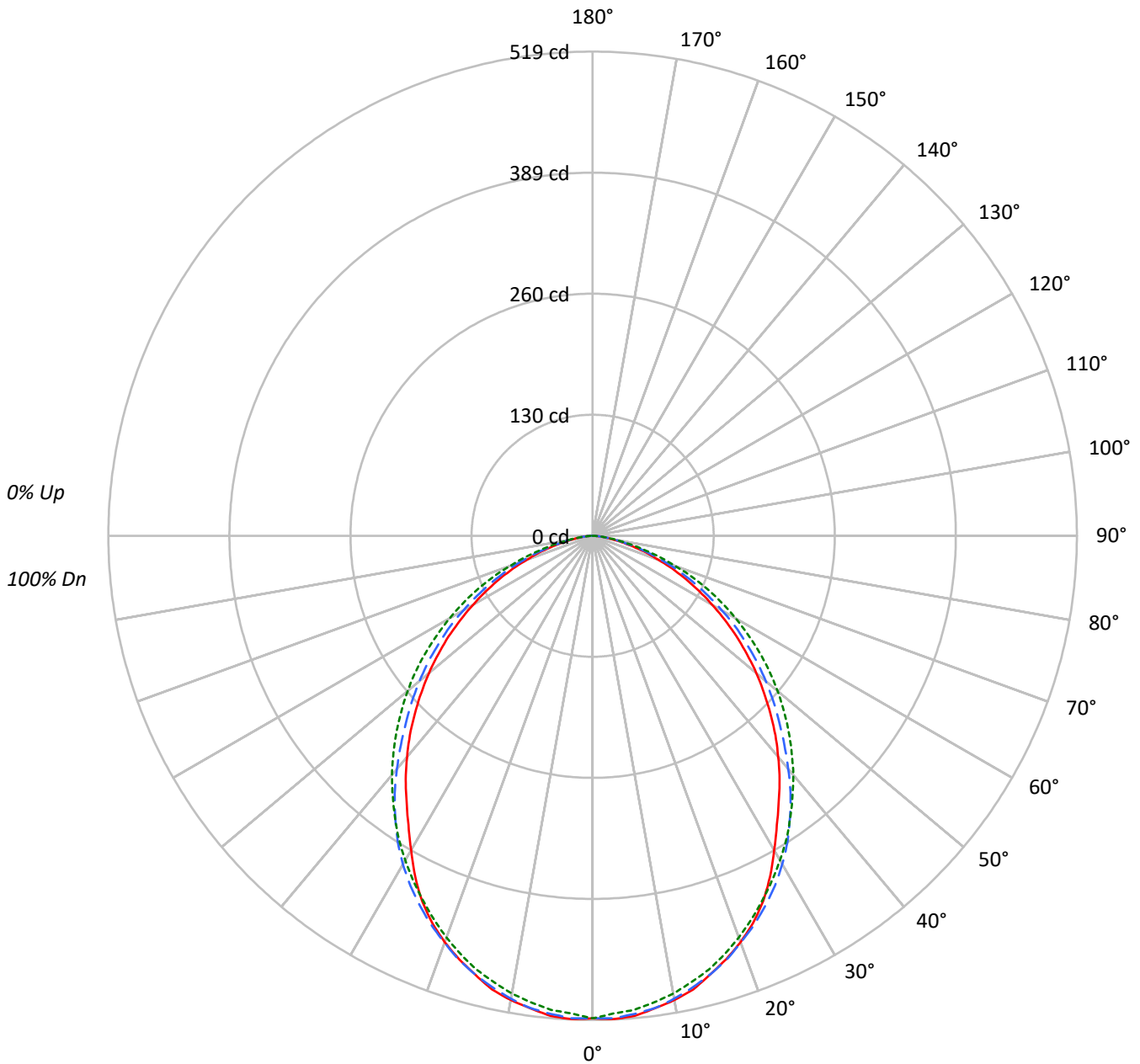
Lumens per Lamp: N/A  
Luminaire Lumens: 1196.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2784	2784	2784
5°	2791	2780	2756
10°	2761	2754	2723
15°	2712	2712	2682
20°	2655	2659	2624
25°	2568	2600	2558
30°	2418	2527	2496
35°	2284	2422	2426
40°	2174	2291	2351
45°	2050	2152	2263
50°	1918	2028	2166
55°	1770	1887	2049
60°	1593	1722	1905
65°	1407	1531	1733
70°	1172	1304	1473
75°	921	1042	1152
80°	660	731	812
85°	432	432	408



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.7	4.1
10°-20°	136.8	11.4
20°-30°	199.9	16.7
30°-40°	226.9	19.0
40°-50°	219.1	18.3
50°-60°	180.7	15.1
60°-70°	120.3	10.1
70°-80°	53.9	4.5
80°-90°	9.6	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°	385.4	32.2
0°-40°	612.4	51.2
0°-60°	1012.2	84.6
0°-90°	1196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1196.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	517	517	517	517	517	
5°	517	516	514	512	510	49
15°	487	488	487	485	481	137
25°	432	436	438	435	431	198
35°	348	352	369	371	369	218
45°	269	274	283	296	297	208
55°	189	192	201	212	218	168
65°	110	114	120	129	136	110
75°	44	47	50	52	55	48
85°	7	7	7	7	7	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	517.2	517.2	517.2	517.2	517.2
2.5°	518.6	518.8	517.6	514.5	512.5
5°	516.6	516.4	514.5	511.7	510.1
7.5°	510.9	511.3	510.7	506.7	504.5
10°	505.3	505.5	503.9	500.7	498.2
12.5°	498.2	498.0	495.8	494.2	490.0
15°	486.8	488.0	486.8	484.7	481.3
17.5°	475.9	475.9	476.7	472.9	470.3
20°	463.6	464.2	464.2	461.2	458.2
22.5°	449.3	451.1	451.7	448.5	444.9
25°	432.4	435.8	437.8	434.6	430.8
27.5°	411.9	417.1	423.1	420.7	416.5
30°	389.1	396.6	406.6	404.6	401.6
32.5°	367.4	375.0	388.7	387.9	386.3
35°	347.7	352.5	368.6	370.6	369.2
37.5°	329.1	333.4	348.5	353.1	351.9
40°	309.4	314.2	326.1	334.2	334.6
42.5°	289.9	294.5	304.2	315.9	315.9
45°	269.3	273.8	282.8	295.7	297.3
47.5°	249.0	253.8	262.5	275.4	278.0
50°	229.1	233.5	242.2	254.7	258.7
52.5°	208.4	213.2	221.8	233.3	239.0
55°	188.6	191.8	201.1	212.2	218.4
57.5°	167.9	170.9	181.4	191.0	197.3
60°	148.0	151.8	160.0	169.7	177.0
62.5°	129.0	132.9	139.9	148.4	156.8
65°	110.5	113.5	120.2	128.8	136.1
67.5°	92.6	95.2	101.9	107.9	115.6
70°	74.5	77.9	82.9	88.6	93.6
72.5°	60.0	61.4	65.6	69.7	74.9
75°	44.3	46.7	50.1	52.5	55.4
77.5°	31.8	33.2	35.2	37.2	39.9
80°	21.3	21.9	23.6	24.0	26.2
82.5°	12.9	13.3	13.7	13.9	14.7
85°	7.0	7.0	7.0	6.6	6.6
87.5°	4.0	4.0	3.4	2.8	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)