

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: P554165

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-80-86-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: P554165  
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-80-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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**

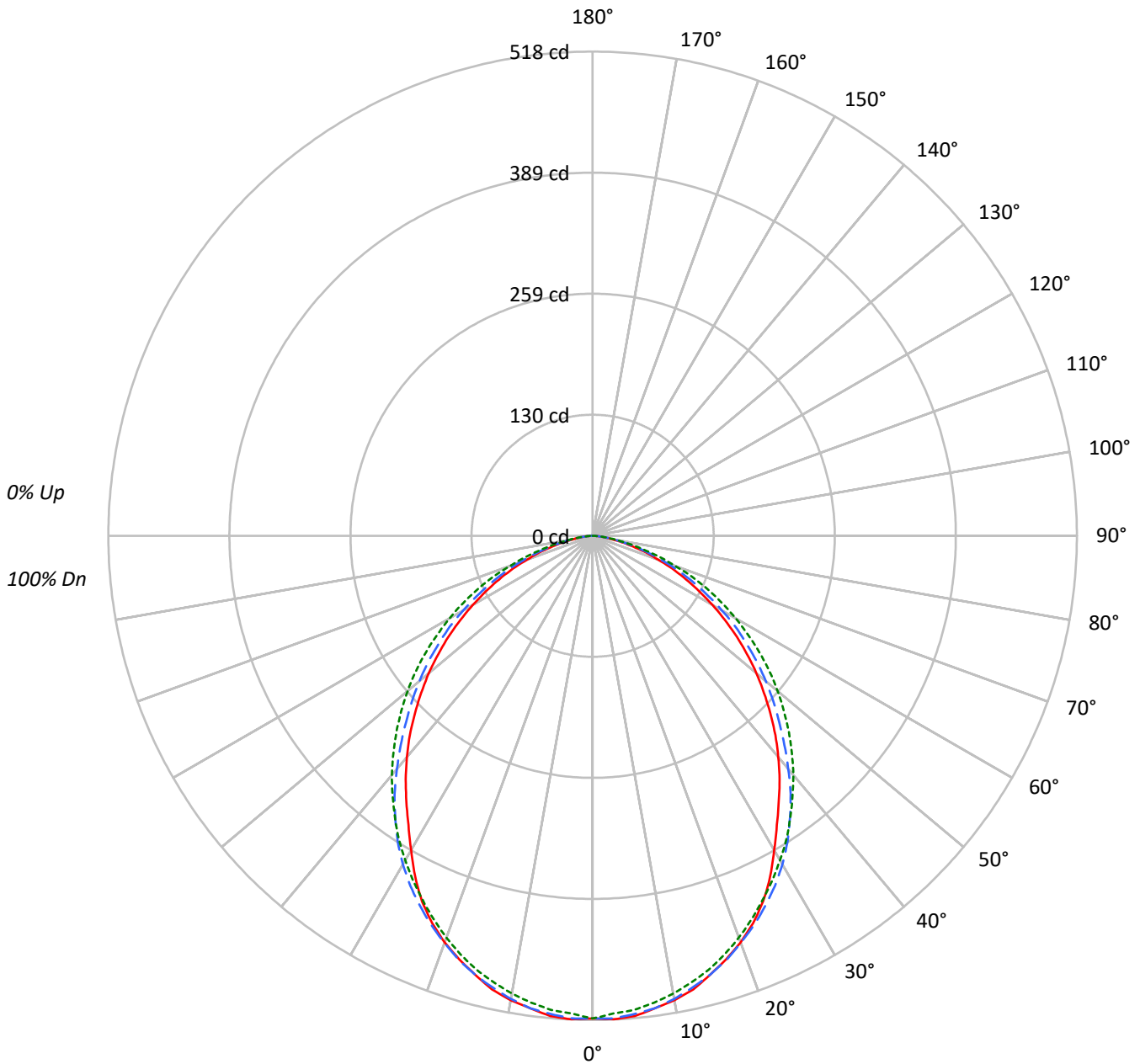
Lumens per Lamp: N/A  
Luminaire Lumens: 1194.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (Ain): 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°	2779	2779	2779
5°	2787	2775	2751
10°	2757	2749	2718
15°	2708	2708	2677
20°	2651	2654	2620
25°	2564	2595	2554
30°	2414	2522	2491
35°	2281	2418	2422
40°	2170	2287	2347
45°	2046	2149	2259
50°	1915	2025	2163
55°	1767	1884	2046
60°	1591	1719	1903
65°	1405	1528	1731
70°	1171	1301	1470
75°	919	1040	1150
80°	657	731	812
85°	426	426	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.6	4.1
10°-20°	136.6	11.4
20°-30°	199.6	16.7
30°-40°	226.6	19.0
40°-50°	218.7	18.3
50°-60°	180.4	15.1
60°-70°	120.1	10.1
70°-80°	53.8	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°	384.8	32.2
0°-40°	611.3	51.2
0°-60°	1010.5	84.6
0°-90°	1194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1194.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	516	516	514	511	509	49
15°	486	487	486	484	480	137
25°	432	435	437	434	430	198
35°	347	352	368	370	369	218
45°	269	273	282	295	297	207
55°	188	191	201	212	218	168
65°	110	113	120	128	136	109
75°	44	47	50	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°	516.4	516.4	516.4	516.4	516.4
2.5°	517.8	518.0	516.8	513.6	511.6
5°	515.8	515.6	513.6	510.8	509.2
7.5°	510.0	510.4	509.8	505.9	503.7
10°	504.5	504.7	503.1	499.9	497.3
12.5°	497.3	497.1	494.9	493.4	489.2
15°	486.0	487.2	486.0	483.8	480.5
17.5°	475.1	475.1	475.9	472.1	469.6
20°	462.8	463.4	463.4	460.4	457.5
22.5°	448.5	450.3	450.9	447.7	444.2
25°	431.7	435.0	437.0	433.8	430.1
27.5°	411.2	416.4	422.3	420.0	415.8
30°	388.4	396.0	405.9	403.9	400.9
32.5°	366.8	374.3	388.0	387.2	385.6
35°	347.2	351.9	368.0	370.0	368.6
37.5°	328.5	332.9	348.0	352.5	351.3
40°	308.9	313.6	325.5	333.7	334.1
42.5°	289.4	294.0	303.7	315.4	315.4
45°	268.8	273.4	282.3	295.2	296.8
47.5°	248.6	253.3	262.1	274.9	277.5
50°	228.7	233.1	241.8	254.3	258.3
52.5°	208.1	212.9	221.4	232.9	238.6
55°	188.3	191.4	200.8	211.9	218.0
57.5°	167.6	170.6	181.1	190.6	197.0
60°	147.8	151.6	159.7	169.4	176.8
62.5°	128.7	132.7	139.7	148.2	156.5
65°	110.3	113.3	120.0	128.5	135.9
67.5°	92.4	95.0	101.8	107.7	115.5
70°	74.4	77.8	82.7	88.5	93.4
72.5°	59.9	61.3	65.5	69.6	74.8
75°	44.2	46.6	50.0	52.4	55.3
77.5°	31.7	33.1	35.1	37.1	39.9
80°	21.2	21.8	23.6	24.0	26.2
82.5°	12.9	13.3	13.7	13.9	14.7
85°	6.9	6.9	6.9	6.5	6.5
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)