

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: P554227

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-80-85-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: P554227  
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-80-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

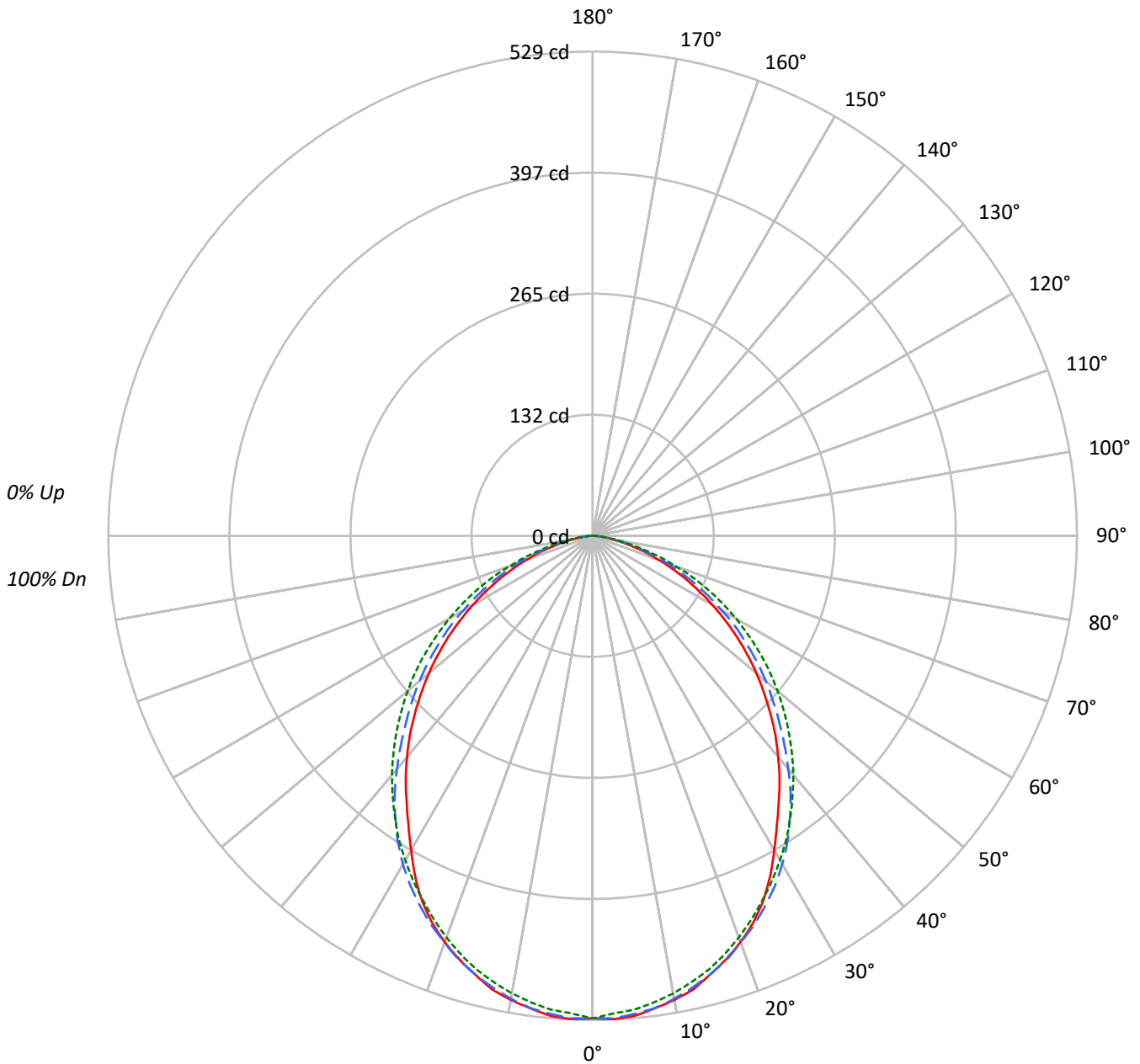
Lumens per Lamp: N/A  
Luminaire Lumens: 1219.0 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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°	2837	2837	2837
5°	2845	2833	2809
10°	2814	2807	2775
15°	2765	2765	2733
20°	2706	2710	2675
25°	2617	2650	2608
30°	2465	2575	2544
35°	2328	2468	2472
40°	2215	2335	2396
45°	2089	2194	2306
50°	1955	2067	2208
55°	1803	1924	2089
60°	1624	1755	1943
65°	1434	1560	1766
70°	1194	1330	1501
75°	940	1061	1175
80°	673	747	828
85°	438	438	414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.6	4.1
10°-20°	139.4	11.4
20°-30°	203.8	16.7
30°-40°	231.3	19.0
40°-50°	223.3	18.3
50°-60°	184.2	15.1
60°-70°	122.7	10.1
70°-80°	54.9	4.5
80°-90°	9.8	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°	392.9	32.2
0°-40°	624.2	51.2
0°-60°	1031.6	84.6
0°-90°	1219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1219.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	527	526	524	522	520	50
15°	496	497	496	494	490	140
25°	441	444	446	443	439	202
35°	354	359	376	378	376	222
45°	274	279	288	301	303	212
55°	192	195	205	216	223	172
65°	113	116	122	131	139	112
75°	45	48	51	54	56	49
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	527.2	527.2	527.2	527.2	527.2
2.5°	528.6	528.8	527.6	524.4	522.3
5°	526.6	526.4	524.4	521.5	519.9
7.5°	520.7	521.1	520.5	516.5	514.2
10°	515.0	515.2	513.6	510.4	507.7
12.5°	507.7	507.5	505.3	503.7	499.4
15°	496.2	497.4	496.2	494.0	490.5
17.5°	485.1	485.1	485.9	482.0	479.4
20°	472.5	473.1	473.1	470.1	467.0
22.5°	457.9	459.7	460.4	457.1	453.5
25°	440.7	444.1	446.2	442.9	439.1
27.5°	419.8	425.1	431.2	428.8	424.5
30°	396.6	404.3	414.4	412.4	409.3
32.5°	374.5	382.2	396.1	395.3	393.7
35°	354.4	359.3	375.7	377.7	376.3
37.5°	335.4	339.8	355.2	359.9	358.7
40°	315.3	320.2	332.4	340.7	341.1
42.5°	295.5	300.1	310.1	322.0	322.0
45°	274.4	279.1	288.2	301.4	303.0
47.5°	253.8	258.6	267.5	280.7	283.3
50°	233.5	238.0	246.9	259.6	263.7
52.5°	212.5	217.3	226.0	237.8	243.6
55°	192.2	195.4	205.0	216.3	222.6
57.5°	171.1	174.2	184.9	194.6	201.1
60°	150.9	154.7	163.0	173.0	180.5
62.5°	131.4	135.5	142.6	151.3	159.8
65°	112.6	115.6	122.5	131.2	138.7
67.5°	94.4	97.0	103.9	110.0	117.9
70°	75.9	79.4	84.5	90.3	95.4
72.5°	61.2	62.6	66.8	71.1	76.4
75°	45.2	47.6	51.0	53.5	56.5
77.5°	32.4	33.8	35.8	37.9	40.7
80°	21.7	22.3	24.1	24.5	26.7
82.5°	13.2	13.6	14.0	14.2	15.0
85°	7.1	7.1	7.1	6.7	6.7
87.5°	4.1	4.1	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)