

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: P554868

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-80-86-EDD-90**

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: P554868  
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-LD4-2LO-30-UNV-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

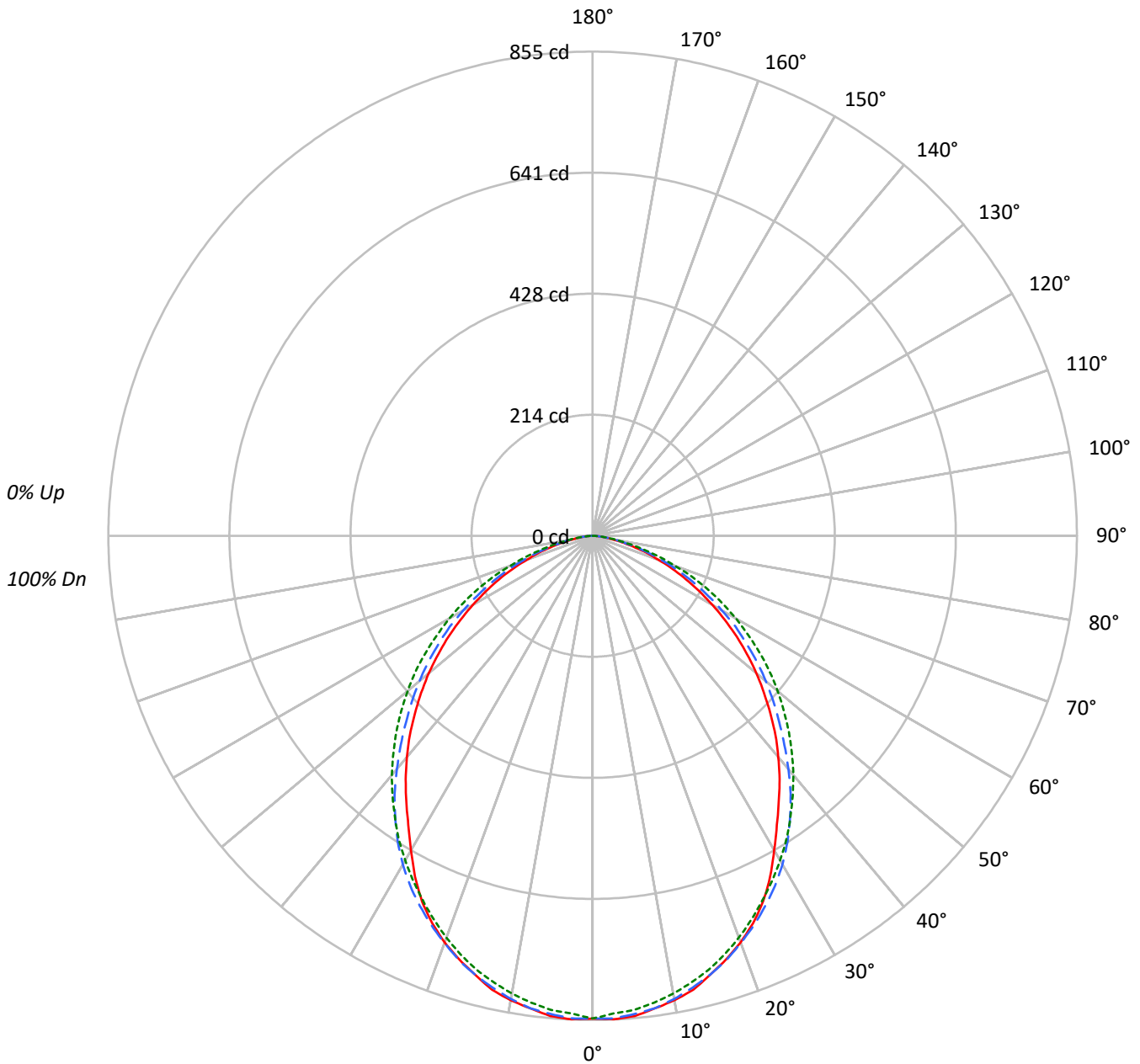
Lumens per Lamp: N/A  
Luminaire Lumens: 1971.0 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	4588	4588	4588
5°	4600	4580	4541
10°	4551	4539	4487
15°	4470	4470	4419
20°	4376	4381	4325
25°	4232	4284	4216
30°	3985	4164	4113
35°	3765	3991	3997
40°	3582	3776	3875
45°	3377	3547	3729
50°	3162	3342	3570
55°	2916	3110	3377
60°	2626	2837	3141
65°	2319	2523	2856
70°	1932	2150	2426
75°	1518	1716	1901
80°	1085	1209	1339
85°	710	710	667



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	4.1
10°-20°	225.5	11.4
20°-30°	329.5	16.7
30°-40°	374.0	19.0
40°-50°	361.0	18.3
50°-60°	297.8	15.1
60°-70°	198.3	10.1
70°-80°	88.8	4.5
80°-90°	15.9	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°	635.2	32.2
0°-40°	1009.2	51.2
0°-60°	1668.1	84.6
0°-90°	1971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1971.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	851	851	848	843	841	81
15°	802	804	802	799	793	226
25°	713	718	721	716	710	326
35°	573	581	608	611	608	359
45°	444	451	466	487	490	342
55°	311	316	331	350	360	277
65°	182	187	198	212	224	181
75°	73	77	82	86	91	80
85°	12	12	12	11	11	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	852.4	852.4	852.4	852.4	852.4
2.5°	854.7	855.0	853.1	847.8	844.5
5°	851.4	851.1	847.8	843.2	840.6
7.5°	841.9	842.6	841.6	835.1	831.4
10°	832.8	833.1	830.5	825.2	821.0
12.5°	821.0	820.6	817.0	814.4	807.5
15°	802.3	804.3	802.3	798.7	793.1
17.5°	784.3	784.3	785.6	779.4	775.1
20°	764.0	765.0	765.0	760.1	755.1
22.5°	740.4	743.4	744.3	739.1	733.2
25°	712.6	718.1	721.4	716.2	710.0
27.5°	678.8	687.4	697.2	693.3	686.4
30°	641.2	653.6	670.0	666.7	661.8
32.5°	605.5	617.9	640.5	639.2	636.6
35°	573.1	580.9	607.5	610.7	608.4
37.5°	542.3	549.5	574.4	581.9	580.0
40°	509.9	517.7	537.4	550.8	551.5
42.5°	477.8	485.3	501.4	520.7	520.7
45°	443.7	451.3	466.0	487.3	489.9
47.5°	410.3	418.2	432.6	453.9	458.1
50°	377.6	384.8	399.2	419.8	426.4
52.5°	343.5	351.4	365.5	384.5	393.9
55°	310.8	316.0	331.4	349.7	359.9
57.5°	276.7	281.6	299.0	314.7	325.2
60°	244.0	250.2	263.6	279.7	291.8
62.5°	212.5	219.1	230.5	244.6	258.4
65°	182.1	187.0	198.1	212.2	224.3
67.5°	152.6	156.9	168.0	177.8	190.6
70°	122.8	128.4	136.6	146.1	154.2
72.5°	98.9	101.2	108.1	114.9	123.5
75°	73.0	77.0	82.5	86.5	91.4
77.5°	52.4	54.7	58.0	61.2	65.8
80°	35.0	36.0	39.0	39.6	43.2
82.5°	21.3	21.9	22.6	22.9	24.2
85°	11.5	11.5	11.5	10.8	10.8
87.5°	6.5	6.5	5.6	4.6	3.3
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)