

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: P554869

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-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: P554869  
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  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

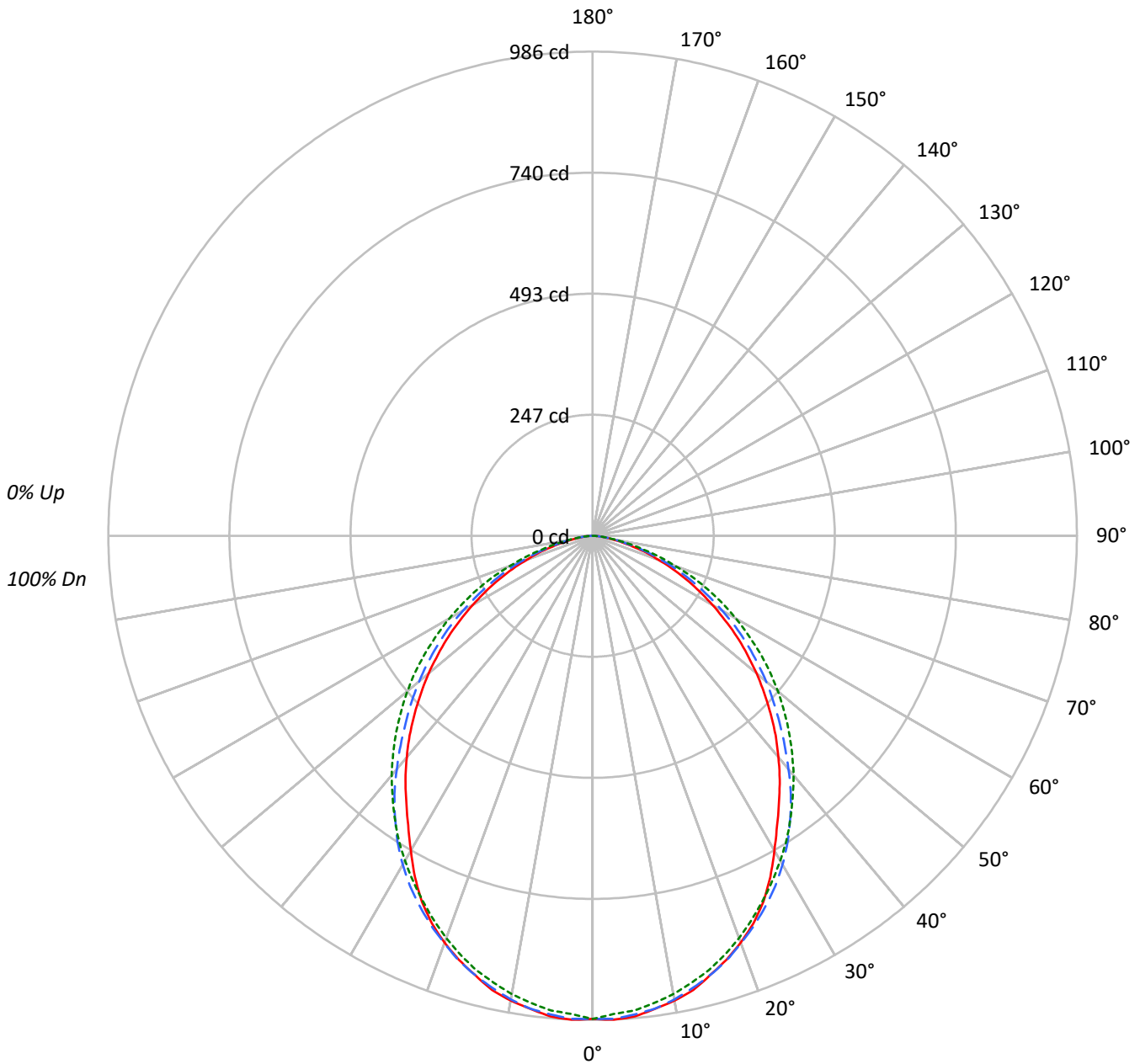
Lumens per Lamp: N/A  
Luminaire Lumens: 2275.0 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5295	5295	5295
5°	5309	5287	5242
10°	5253	5239	5179
15°	5159	5159	5101
20°	5050	5057	4992
25°	4884	4945	4866
30°	4599	4806	4747
35°	4346	4607	4614
40°	4135	4358	4472
45°	3898	4094	4304
50°	3649	3858	4120
55°	3366	3589	3898
60°	3031	3275	3625
65°	2677	2912	3297
70°	2230	2480	2801
75°	1753	1982	2194
80°	1252	1395	1547
85°	815	815	772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.6	4.1
10°-20°	260.2	11.4
20°-30°	380.3	16.7
30°-40°	431.7	19.0
40°-50°	416.7	18.3
50°-60°	343.8	15.1
60°-70°	228.9	10.1
70°-80°	102.4	4.5
80°-90°	18.3	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°	733.2	32.2
0°-40°	1164.8	51.2
0°-60°	1925.3	84.6
0°-90°	2275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2275.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	983	982	979	973	970	93
15°	926	928	926	922	916	261
25°	822	829	833	827	820	377
35°	662	670	701	705	702	414
45°	512	521	538	562	566	395
55°	359	365	382	404	415	320
65°	210	216	229	245	259	208
75°	84	89	95	100	106	92
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	983.9	983.9	983.9	983.9	983.9
2.5°	986.5	986.9	984.6	978.6	974.8
5°	982.7	982.4	978.6	973.3	970.3
7.5°	971.8	972.5	971.4	963.8	959.7
10°	961.2	961.6	958.6	952.5	947.6
12.5°	947.6	947.2	943.1	940.0	932.1
15°	926.0	928.3	926.0	921.9	915.5
17.5°	905.3	905.3	906.8	899.6	894.7
20°	881.8	883.0	883.0	877.3	871.6
22.5°	854.6	858.0	859.1	853.1	846.3
25°	822.5	828.9	832.7	826.6	819.5
27.5°	783.5	793.4	804.7	800.2	792.2
30°	740.1	754.4	773.3	769.6	763.9
32.5°	698.9	713.2	739.3	737.8	734.8
35°	661.5	670.5	701.2	704.9	702.3
37.5°	625.9	634.2	663.0	671.7	669.4
40°	588.5	597.6	620.3	635.8	636.5
42.5°	551.5	560.2	578.7	601.0	601.0
45°	512.2	520.9	537.9	562.4	565.5
47.5°	473.6	482.7	499.3	523.9	528.8
50°	435.8	444.1	460.8	484.6	492.1
52.5°	396.5	405.6	421.8	443.7	454.7
55°	358.7	364.7	382.5	403.7	415.4
57.5°	319.4	325.1	345.1	363.2	375.3
60°	281.6	288.8	304.3	322.8	336.8
62.5°	245.3	252.9	266.1	282.4	298.2
65°	210.2	215.8	228.7	244.9	258.9
67.5°	176.1	181.1	193.9	205.2	220.0
70°	141.7	148.2	157.6	168.6	178.0
72.5°	114.1	116.8	124.7	132.7	142.5
75°	84.3	88.8	95.3	99.8	105.5
77.5°	60.5	63.1	66.9	70.7	76.0
80°	40.4	41.6	45.0	45.7	49.9
82.5°	24.6	25.3	26.1	26.5	28.0
85°	13.2	13.2	13.2	12.5	12.5
87.5°	7.6	7.6	6.4	5.3	3.8
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)