

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: P554071

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-82-87-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: P554071  
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-LD4-1HI-50-UNV-82-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

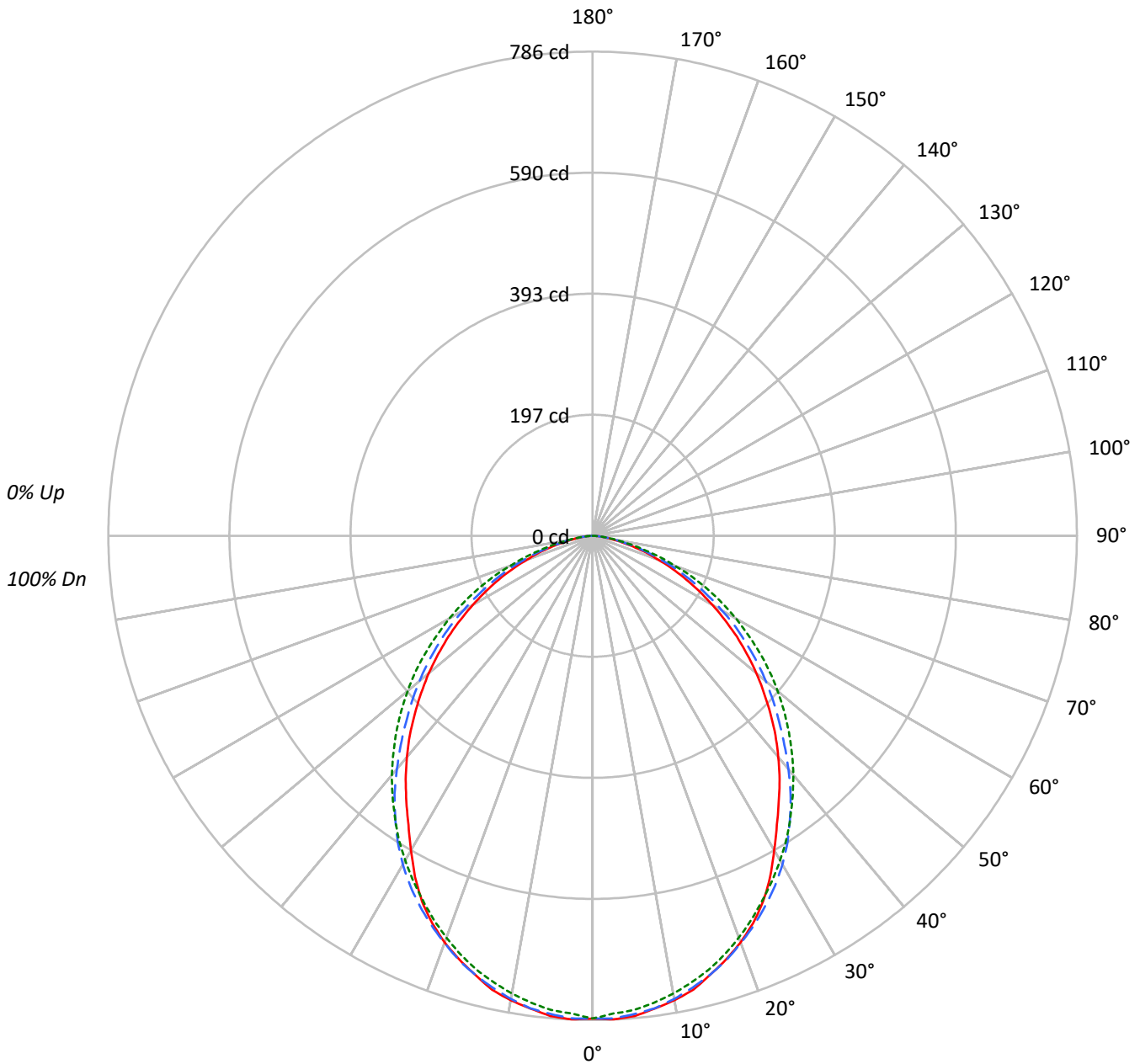
Lumens per Lamp: N/A  
Luminaire Lumens: 1812.0 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4217	4217	4217
5°	4229	4211	4175
10°	4184	4173	4124
15°	4110	4110	4063
20°	4023	4028	3976
25°	3890	3938	3876
30°	3663	3828	3781
35°	3461	3669	3675
40°	3293	3471	3562
45°	3105	3261	3428
50°	2906	3073	3282
55°	2681	2859	3105
60°	2414	2608	2887
65°	2132	2319	2626
70°	1777	1975	2231
75°	1395	1578	1747
80°	998	1110	1230
85°	648	648	611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.8	4.1
10°-20°	207.3	11.4
20°-30°	302.9	16.7
30°-40°	343.8	19.0
40°-50°	331.9	18.3
50°-60°	273.8	15.1
60°-70°	182.3	10.1
70°-80°	81.6	4.5
80°-90°	14.6	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°	584.0	32.2
0°-40°	927.8	51.2
0°-60°	1533.5	84.6
0°-90°	1812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1812.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	784	784	784	784	784	
5°	783	782	779	775	773	74
15°	738	739	738	734	729	208
25°	655	660	663	658	653	300
35°	527	534	558	562	559	330
45°	408	415	428	448	450	315
55°	286	290	305	322	331	255
65°	167	172	182	195	206	166
75°	67	71	76	80	84	73
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	783.6	783.6	783.6	783.6	783.6
2.5°	785.8	786.1	784.2	779.4	776.4
5°	782.7	782.4	779.4	775.2	772.8
7.5°	774.0	774.6	773.7	767.7	764.4
10°	765.6	765.9	763.5	758.7	754.7
12.5°	754.7	754.4	751.1	748.7	742.4
15°	737.6	739.4	737.6	734.3	729.2
17.5°	721.0	721.0	722.2	716.5	712.6
20°	702.4	703.3	703.3	698.7	694.2
22.5°	680.7	683.4	684.3	679.5	674.1
25°	655.1	660.2	663.2	658.4	652.7
27.5°	624.1	631.9	640.9	637.3	631.0
30°	589.5	600.9	616.0	612.9	608.4
32.5°	556.6	568.1	588.9	587.7	585.2
35°	526.8	534.1	558.5	561.5	559.4
37.5°	498.5	505.2	528.0	535.0	533.2
40°	468.7	476.0	494.0	506.4	507.0
42.5°	439.2	446.2	460.9	478.7	478.7
45°	407.9	414.9	428.4	448.0	450.4
47.5°	377.2	384.4	397.7	417.3	421.2
50°	347.1	353.7	367.0	386.0	392.0
52.5°	315.8	323.0	336.0	353.4	362.2
55°	285.7	290.5	304.7	321.5	330.9
57.5°	254.4	258.9	274.9	289.3	298.9
60°	224.3	230.0	242.3	257.1	268.2
62.5°	195.4	201.4	211.9	224.9	237.5
65°	167.4	171.9	182.1	195.1	206.2
67.5°	140.3	144.2	154.4	163.5	175.2
70°	112.9	118.0	125.5	134.3	141.8
72.5°	90.9	93.0	99.3	105.7	113.5
75°	67.1	70.7	75.9	79.5	84.0
77.5°	48.2	50.3	53.3	56.3	60.5
80°	32.2	33.1	35.8	36.4	39.7
82.5°	19.6	20.2	20.8	21.1	22.3
85°	10.5	10.5	10.5	9.9	9.9
87.5°	6.0	6.0	5.1	4.2	3.0
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)