

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: P554091

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-94-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: P554091  
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-93-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

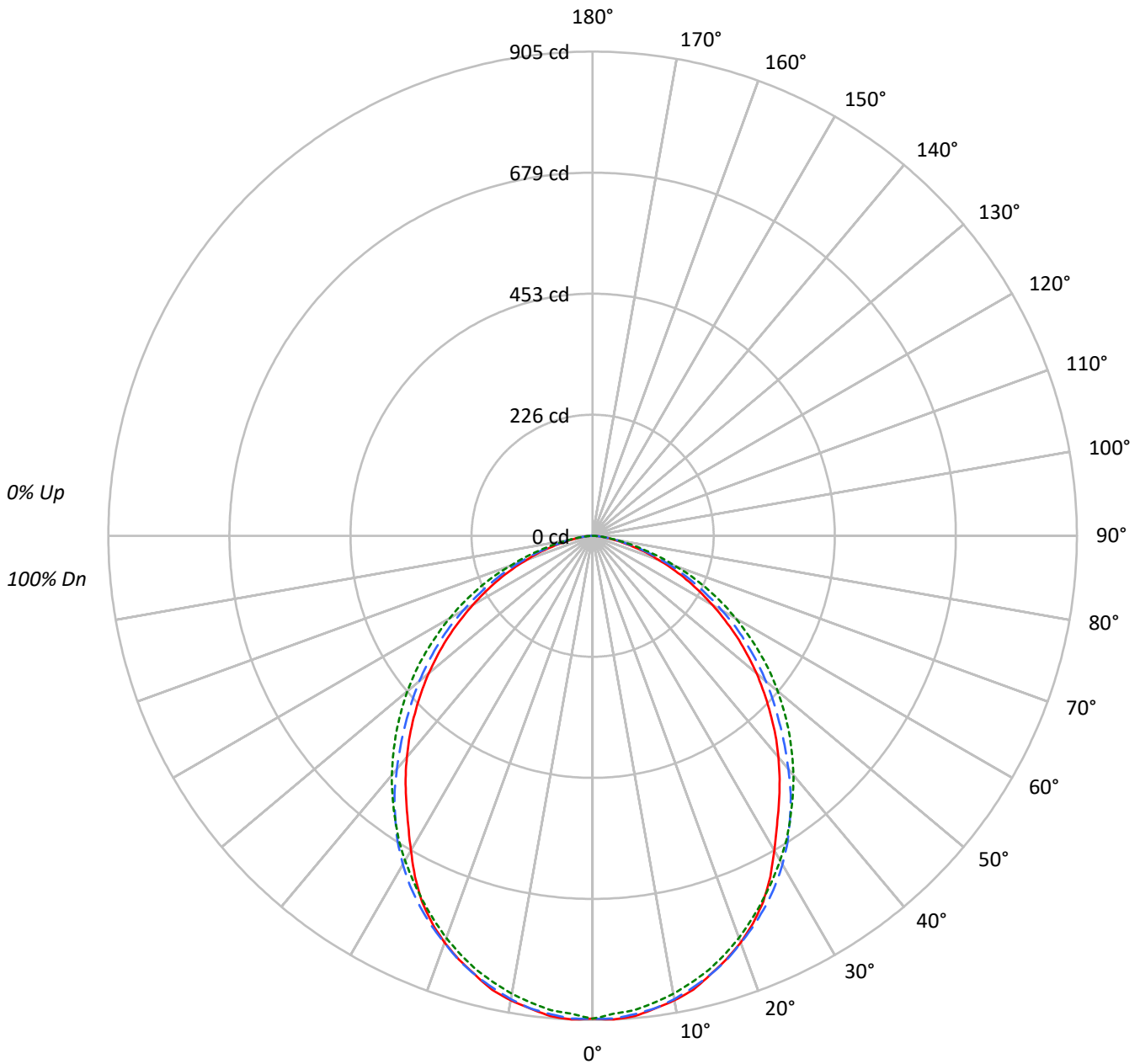
Lumens per Lamp: N/A  
Luminaire Lumens: 2087.0 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4858	4858	4858
5°	4870	4850	4809
10°	4819	4805	4751
15°	4733	4733	4679
20°	4633	4639	4580
25°	4480	4536	4464
30°	4219	4409	4355
35°	3987	4226	4232
40°	3793	3998	4102
45°	3576	3755	3948
50°	3347	3539	3780
55°	3088	3293	3576
60°	2780	3004	3325
65°	2455	2672	3025
70°	2046	2275	2570
75°	1607	1817	2011
80°	1150	1280	1420
85°	747	747	704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	4.1
10°-20°	238.7	11.4
20°-30°	348.9	16.7
30°-40°	396.0	19.0
40°-50°	382.3	18.3
50°-60°	315.4	15.1
60°-70°	210.0	10.1
70°-80°	94.0	4.5
80°-90°	16.8	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°	672.6	32.2
0°-40°	1068.6	51.2
0°-60°	1766.2	84.6
0°-90°	2087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2087.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	902	901	898	893	890	85
15°	850	852	850	846	840	239
25°	754	760	764	758	752	346
35°	607	615	643	647	644	380
45°	470	478	493	516	519	363
55°	329	335	351	370	381	294
65°	193	198	210	225	238	191
75°	77	82	87	92	97	85
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	902.6	902.6	902.6	902.6	902.6
2.5°	905.0	905.3	903.3	897.7	894.3
5°	901.5	901.2	897.7	892.9	890.1
7.5°	891.5	892.2	891.1	884.2	880.4
10°	881.8	882.1	879.3	873.8	869.3
12.5°	869.3	868.9	865.1	862.4	855.1
15°	849.5	851.6	849.5	845.7	839.8
17.5°	830.5	830.5	831.8	825.2	820.7
20°	809.0	810.0	810.0	804.8	799.6
22.5°	784.0	787.1	788.1	782.6	776.4
25°	754.5	760.4	763.9	758.3	751.7
27.5°	718.8	727.8	738.2	734.1	726.8
30°	678.9	692.1	709.4	706.0	700.8
32.5°	641.1	654.3	678.2	676.8	674.1
35°	606.8	615.1	643.2	646.7	644.2
37.5°	574.2	581.8	608.2	616.2	614.1
40°	539.9	548.2	569.0	583.2	583.9
42.5°	505.9	513.9	530.9	551.3	551.3
45°	469.8	477.8	493.4	516.0	518.7
47.5°	434.5	442.8	458.0	480.6	485.1
50°	399.8	407.4	422.7	444.5	451.5
52.5°	363.7	372.1	387.0	407.1	417.1
55°	329.1	334.6	350.9	370.3	381.1
57.5°	293.0	298.2	316.6	333.2	344.3
60°	258.3	264.9	279.1	296.1	308.9
62.5°	225.0	232.0	244.1	259.0	273.6
65°	192.8	198.0	209.8	224.7	237.5
67.5°	161.6	166.1	177.9	188.3	201.8
70°	130.0	135.9	144.6	154.6	163.3
72.5°	104.7	107.1	114.4	121.7	130.7
75°	77.3	81.5	87.4	91.5	96.7
77.5°	55.5	57.9	61.4	64.8	69.7
80°	37.1	38.1	41.3	42.0	45.8
82.5°	22.5	23.2	23.9	24.3	25.7
85°	12.1	12.1	12.1	11.4	11.4
87.5°	6.9	6.9	5.9	4.9	3.5
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)