

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: P554987

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-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: P554987  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

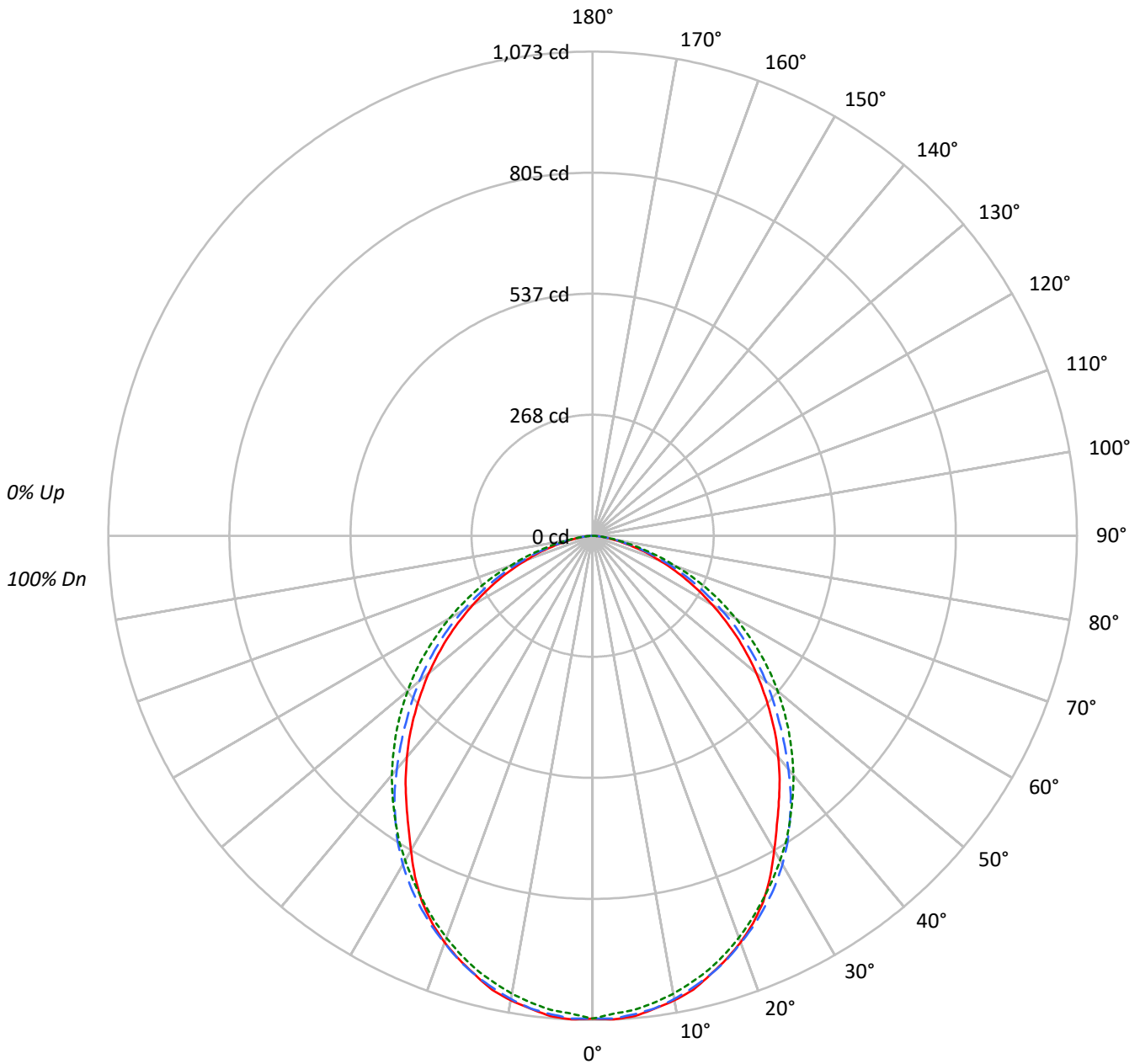
Lumens per Lamp: N/A  
Luminaire Lumens: 2474.0 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	5758	5758	5758
5°	5774	5749	5700
10°	5713	5697	5632
15°	5611	5611	5547
20°	5493	5499	5429
25°	5311	5377	5292
30°	5001	5226	5162
35°	4726	5010	5018
40°	4496	4739	4863
45°	4239	4452	4680
50°	3968	4196	4481
55°	3660	3903	4238
60°	3296	3562	3942
65°	2910	3167	3586
70°	2425	2697	3046
75°	1907	2154	2385
80°	1364	1516	1683
85°	889	889	840



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	4.1
10°-20°	283.0	11.4
20°-30°	413.6	16.7
30°-40°	469.4	19.0
40°-50°	453.2	18.3
50°-60°	373.8	15.1
60°-70°	248.9	10.1
70°-80°	111.4	4.5
80°-90°	19.9	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°	797.3	32.2
0°-40°	1266.7	51.2
0°-60°	2093.7	84.6
0°-90°	2474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2474.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1068	1064	1058	1055	101
15°	1007	1010	1007	1002	996	284
25°	894	901	906	899	891	410
35°	719	729	762	767	764	451
45°	557	566	585	612	615	430
55°	390	397	416	439	452	348
65°	228	235	249	266	282	227
75°	92	97	104	108	115	100
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1069.9	1069.9	1069.9	1069.9	1069.9
2.5°	1072.8	1073.2	1070.8	1064.2	1060.1
5°	1068.7	1068.3	1064.2	1058.4	1055.1
7.5°	1056.8	1057.6	1056.4	1048.2	1043.6
10°	1045.3	1045.7	1042.4	1035.8	1030.5
12.5°	1030.5	1030.1	1025.5	1022.3	1013.6
15°	1007.1	1009.5	1007.1	1002.5	995.5
17.5°	984.4	984.4	986.1	978.3	972.9
20°	959.0	960.2	960.2	954.0	947.9
22.5°	929.4	933.1	934.3	927.7	920.3
25°	894.4	901.4	905.5	898.9	891.1
27.5°	852.1	862.8	875.1	870.2	861.5
30°	804.8	820.4	841.0	836.9	830.7
32.5°	760.0	775.6	804.0	802.4	799.1
35°	719.3	729.2	762.5	766.6	763.7
37.5°	680.7	689.7	721.0	730.4	728.0
40°	640.0	649.9	674.5	691.4	692.2
42.5°	599.7	609.2	629.3	653.6	653.6
45°	557.0	566.4	584.9	611.6	614.9
47.5°	515.0	524.9	543.0	569.7	575.0
50°	473.9	483.0	501.1	527.0	535.2
52.5°	431.2	441.0	458.7	482.6	494.5
55°	390.1	396.7	416.0	439.0	451.7
57.5°	347.3	353.5	375.3	395.0	408.2
60°	306.2	314.0	330.9	351.0	366.2
62.5°	266.8	275.0	289.4	307.0	324.3
65°	228.5	234.7	248.7	266.4	281.6
67.5°	191.5	196.9	210.9	223.2	239.2
70°	154.1	161.1	171.4	183.3	193.6
72.5°	124.1	127.0	135.6	144.3	155.0
75°	91.7	96.6	103.6	108.5	114.7
77.5°	65.8	68.6	72.8	76.9	82.6
80°	44.0	45.2	48.9	49.7	54.3
82.5°	26.7	27.5	28.4	28.8	30.4
85°	14.4	14.4	14.4	13.6	13.6
87.5°	8.2	8.2	7.0	5.8	4.1
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)