

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: P554093

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-96-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: P554093  
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-93-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

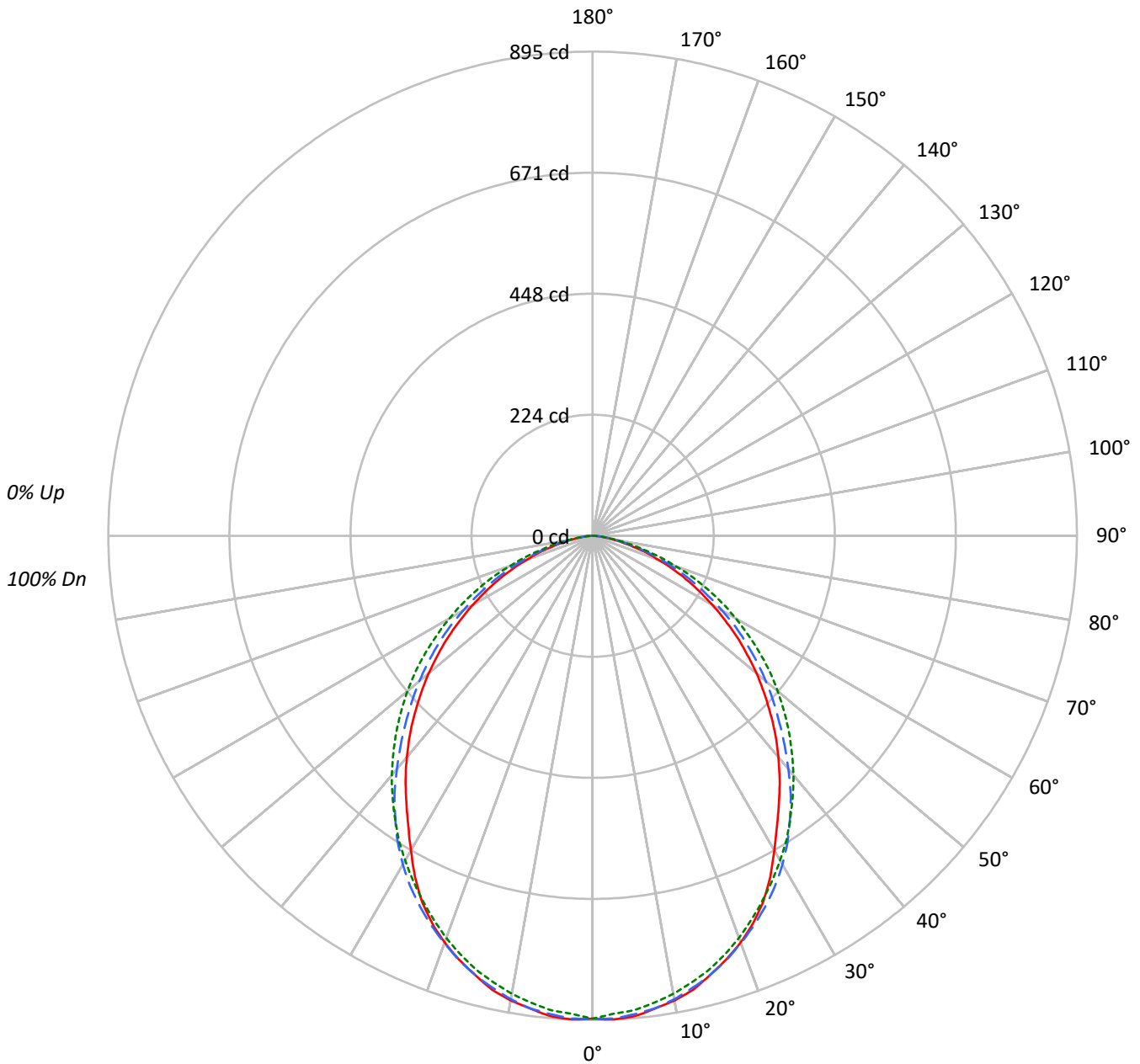
Lumens per Lamp: N/A  
Luminaire Lumens: 2064.0 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (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°	4804	4804	4804
5°	4817	4796	4756
10°	4766	4753	4698
15°	4681	4681	4628
20°	4582	4588	4529
25°	4431	4486	4415
30°	4172	4360	4307
35°	3943	4179	4186
40°	3751	3953	4057
45°	3537	3714	3905
50°	3311	3500	3738
55°	3053	3256	3537
60°	2750	2972	3288
65°	2429	2642	2991
70°	2024	2250	2541
75°	1591	1797	1990
80°	1137	1265	1404
85°	741	741	698



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	4.1
10°-20°	236.1	11.4
20°-30°	345.0	16.7
30°-40°	391.6	19.0
40°-50°	378.1	18.3
50°-60°	311.9	15.1
60°-70°	207.7	10.1
70°-80°	92.9	4.5
80°-90°	16.6	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°	665.2	32.2
0°-40°	1056.8	51.2
0°-60°	1746.7	84.6
0°-90°	2064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	892	891	888	883	880	84
15°	840	842	840	836	831	237
25°	746	752	756	750	744	342
35°	600	608	636	640	637	376
45°	465	472	488	510	513	359
55°	325	331	347	366	377	290
65°	191	196	208	222	235	189
75°	76	81	86	90	96	84
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°	892.6	892.6	892.6	892.6	892.6
2.5°	895.0	895.4	893.3	887.8	884.4
5°	891.6	891.3	887.8	883.0	880.3
7.5°	881.7	882.3	881.3	874.5	870.7
10°	872.1	872.4	869.7	864.2	859.7
12.5°	859.7	859.4	855.6	852.8	845.6
15°	840.2	842.2	840.2	836.4	830.6
17.5°	821.3	821.3	822.7	816.2	811.7
20°	800.0	801.1	801.1	795.9	790.8
22.5°	775.3	778.4	779.5	774.0	767.8
25°	746.2	752.0	755.5	750.0	743.5
27.5°	710.9	719.8	730.1	726.0	718.8
30°	671.4	684.5	701.6	698.2	693.0
32.5°	634.1	647.1	670.8	669.4	666.6
35°	600.1	608.3	636.1	639.6	637.1
37.5°	567.9	575.4	601.5	609.4	607.3
40°	533.9	542.2	562.7	576.8	577.5
42.5°	500.3	508.2	525.0	545.2	545.2
45°	464.7	472.5	488.0	510.3	513.0
47.5°	429.7	437.9	453.0	475.3	479.7
50°	395.4	402.9	418.0	439.6	446.5
52.5°	359.7	368.0	382.7	402.6	412.5
55°	325.4	330.9	347.0	366.2	376.9
57.5°	289.8	294.9	313.1	329.5	340.5
60°	255.5	262.0	276.1	292.9	305.5
62.5°	222.6	229.4	241.4	256.2	270.6
65°	190.7	195.8	207.5	222.2	234.9
67.5°	159.8	164.3	175.9	186.2	199.6
70°	128.6	134.4	143.0	152.9	161.5
72.5°	103.6	106.0	113.2	120.4	129.3
75°	76.5	80.6	86.4	90.5	95.7
77.5°	54.9	57.3	60.7	64.1	68.9
80°	36.7	37.7	40.8	41.5	45.3
82.5°	22.3	23.0	23.7	24.0	25.4
85°	12.0	12.0	12.0	11.3	11.3
87.5°	6.9	6.9	5.8	4.8	3.4
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)