

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: P553952

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-84-EDD-90**

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: P553952  
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-35-UNV-93-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

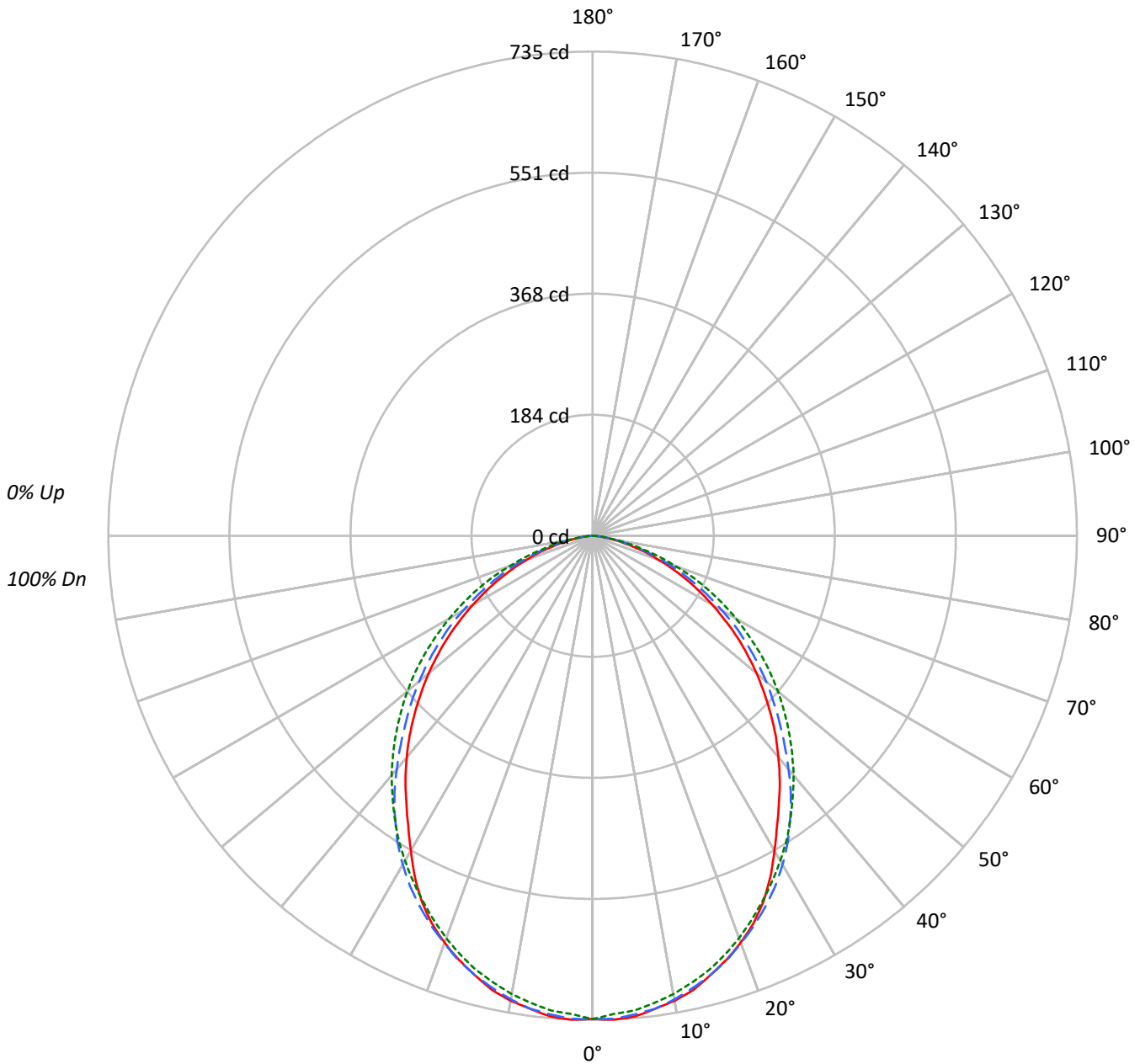
Lumens per Lamp: N/A  
Luminaire Lumens: 1696.0 lumens  
Efficiency: N/A  
Efficacy: 78.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3948	3948	3948
5°	3958	3941	3908
10°	3916	3905	3860
15°	3847	3847	3803
20°	3765	3770	3722
25°	3641	3687	3628
30°	3429	3583	3539
35°	3240	3434	3439
40°	3082	3249	3334
45°	2906	3052	3208
50°	2720	2876	3072
55°	2509	2676	2906
60°	2259	2441	2703
65°	1996	2171	2458
70°	1663	1849	2088
75°	1306	1476	1634
80°	936	1038	1153
85°	611	611	574



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	4.1
10°-20°	194.0	11.4
20°-30°	283.5	16.7
30°-40°	321.8	19.0
40°-50°	310.7	18.3
50°-60°	256.3	15.1
60°-70°	170.7	10.1
70°-80°	76.4	4.5
80°-90°	13.7	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°	546.6	32.2
0°-40°	868.4	51.2
0°-60°	1435.3	84.6
0°-90°	1696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1696.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	733	732	730	726	723	69
15°	690	692	690	687	682	195
25°	613	618	621	616	611	281
35°	493	500	523	526	524	309
45°	382	388	401	419	422	295
55°	267	272	285	301	310	239
65°	157	161	170	183	193	155
75°	63	66	71	74	79	69
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	733.5	733.5	733.5	733.5	733.5
2.5°	735.4	735.7	734.0	729.5	726.7
5°	732.6	732.3	729.5	725.6	723.3
7.5°	724.5	725.0	724.2	718.5	715.4
10°	716.6	716.9	714.6	710.1	706.4
12.5°	706.4	706.1	703.0	700.8	694.9
15°	690.4	692.1	690.4	687.3	682.5
17.5°	674.9	674.9	676.0	670.6	667.0
20°	657.4	658.2	658.2	654.0	649.8
22.5°	637.1	639.6	640.5	636.0	630.9
25°	613.2	617.9	620.8	616.3	610.9
27.5°	584.1	591.5	599.9	596.5	590.6
30°	551.7	562.4	576.5	573.7	569.5
32.5°	521.0	531.7	551.2	550.0	547.8
35°	493.1	499.9	522.7	525.5	523.5
37.5°	466.6	472.8	494.2	500.7	499.0
40°	438.7	445.5	462.4	474.0	474.5
42.5°	411.1	417.6	431.4	448.0	448.0
45°	381.8	388.3	401.0	419.3	421.5
47.5°	353.1	359.8	372.2	390.5	394.2
50°	324.9	331.1	343.5	361.2	366.9
52.5°	295.6	302.4	314.5	330.8	339.0
55°	267.4	271.9	285.2	300.9	309.7
57.5°	238.1	242.3	257.3	270.8	279.8
60°	209.9	215.3	226.8	240.6	251.1
62.5°	182.9	188.5	198.4	210.5	222.3
65°	156.7	160.9	170.5	182.6	193.0
67.5°	131.3	135.0	144.6	153.0	164.0
70°	105.7	110.5	117.5	125.7	132.7
72.5°	85.1	87.1	93.0	98.9	106.2
75°	62.8	66.2	71.0	74.4	78.6
77.5°	45.1	47.1	49.9	52.7	56.6
80°	30.2	31.0	33.5	34.1	37.2
82.5°	18.3	18.9	19.4	19.7	20.9
85°	9.9	9.9	9.9	9.3	9.3
87.5°	5.6	5.6	4.8	3.9	2.8
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)