

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: P553961

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-88-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: P553961  
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-93-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

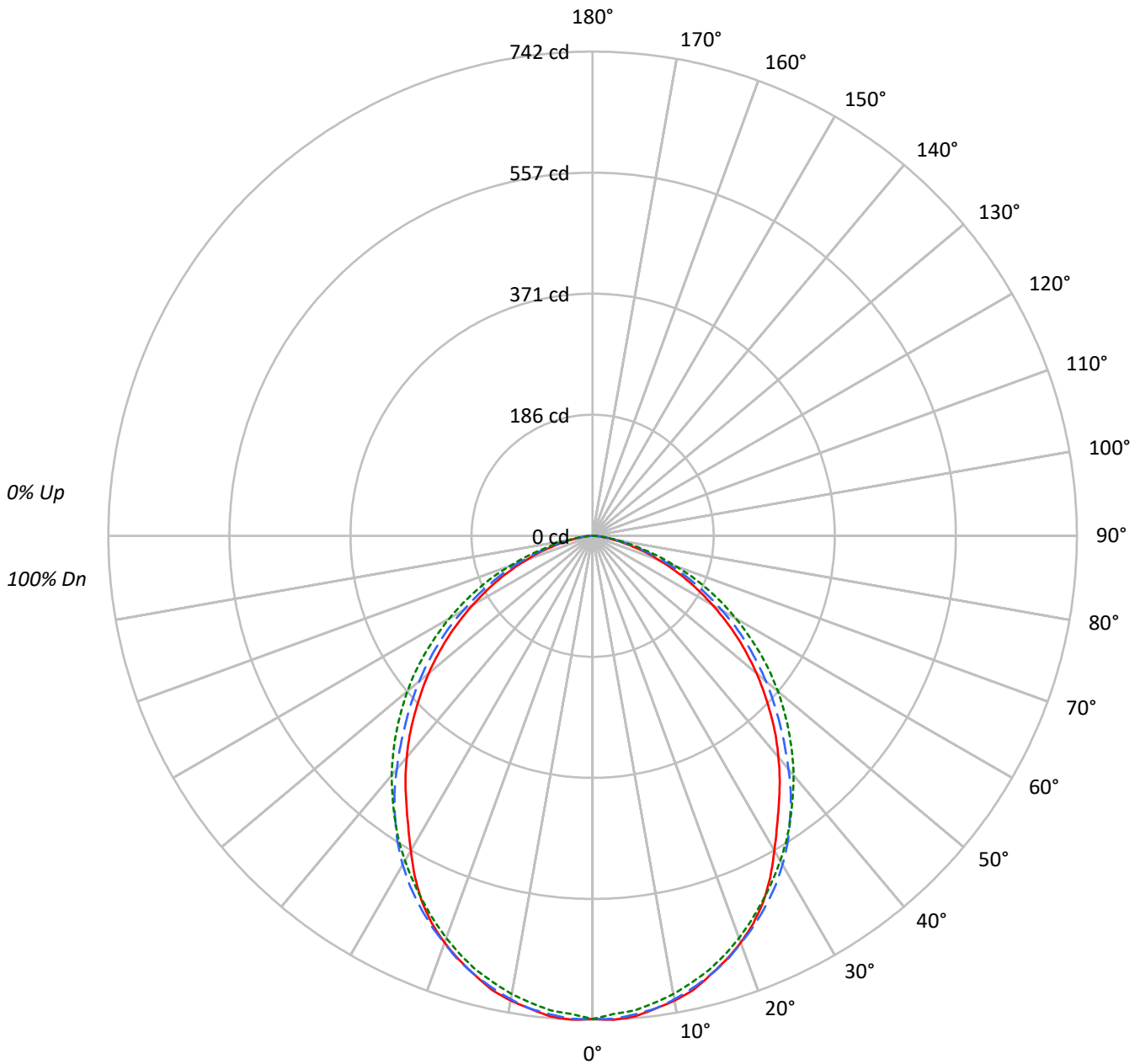
Lumens per Lamp: N/A  
Luminaire Lumens: 1712.0 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P553961

CATALOG NUMBER: FUSL-12-2-LD4-1HI-35-UNV-93-88-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P553961

CATALOG NUMBER: FUSL-12-2-LD4-1HI-35-UNV-93-88-EDD

**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°	3985	3985	3985
5°	3995	3978	3945
10°	3953	3942	3897
15°	3883	3883	3838
20°	3801	3806	3757
25°	3675	3721	3662
30°	3461	3617	3573
35°	3271	3466	3472
40°	3112	3280	3365
45°	2933	3081	3239
50°	2746	2903	3100
55°	2533	2701	2933
60°	2281	2465	2728
65°	2013	2192	2481
70°	1679	1866	2109
75°	1318	1491	1651
80°	942	1048	1162
85°	618	618	580



TEST NUMBER: P553961

CATALOG NUMBER: FUSL-12-2-LD4-1HI-35-UNV-93-88-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.7	4.1
10°-20°	195.8	11.4
20°-30°	286.2	16.7
30°-40°	324.8	19.0
40°-50°	313.6	18.3
50°-60°	258.7	15.1
60°-70°	172.3	10.1
70°-80°	77.1	4.5
80°-90°	13.8	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°	551.7	32.2
0°-40°	876.6	51.2
0°-60°	1448.9	84.6
0°-90°	1712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1712.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	740	739	736	732	730	70
15°	697	699	697	694	689	196
25°	619	624	627	622	617	283
35°	498	505	528	530	528	312
45°	385	392	405	423	426	297
55°	270	274	288	304	313	241
65°	158	162	172	184	195	157
75°	63	67	72	75	79	69
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



TEST NUMBER: P553961

CATALOG NUMBER: FUSL-12-2-LD4-1HI-35-UNV-93-88-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	740.4	740.4	740.4	740.4	740.4
2.5°	742.4	742.7	741.0	736.4	733.6
5°	739.5	739.3	736.4	732.4	730.2
7.5°	731.3	731.9	731.0	725.3	722.2
10°	723.3	723.6	721.3	716.8	713.1
12.5°	713.1	712.8	709.7	707.4	701.4
15°	696.9	698.6	696.9	693.7	688.9
17.5°	681.2	681.2	682.4	677.0	673.3
20°	663.6	664.5	664.5	660.2	655.9
22.5°	643.1	645.7	646.5	642.0	636.9
25°	618.9	623.8	626.6	622.1	616.7
27.5°	589.6	597.0	605.6	602.2	596.2
30°	556.9	567.7	582.0	579.1	574.9
32.5°	525.9	536.7	556.4	555.2	553.0
35°	497.8	504.6	527.6	530.5	528.5
37.5°	471.0	477.3	498.9	505.4	503.7
40°	442.9	449.7	466.8	478.4	479.0
42.5°	415.0	421.5	435.5	452.3	452.3
45°	385.4	392.0	404.8	423.2	425.5
47.5°	356.4	363.2	375.7	394.2	397.9
50°	328.0	334.2	346.7	364.7	370.3
52.5°	298.4	305.2	317.4	333.9	342.2
55°	269.9	274.5	287.9	303.8	312.6
57.5°	240.4	244.6	259.7	273.3	282.4
60°	211.9	217.3	229.0	242.9	253.4
62.5°	184.6	190.3	200.2	212.5	224.4
65°	158.1	162.4	172.1	184.3	194.8
67.5°	132.5	136.2	145.9	154.5	165.5
70°	106.7	111.5	118.6	126.9	134.0
72.5°	85.9	87.9	93.9	99.8	107.2
75°	63.4	66.8	71.7	75.1	79.4
77.5°	45.5	47.5	50.3	53.2	57.2
80°	30.4	31.3	33.8	34.4	37.5
82.5°	18.5	19.1	19.6	19.9	21.0
85°	10.0	10.0	10.0	9.4	9.4
87.5°	5.7	5.7	4.8	4.0	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)