

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: P553994

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-81-94-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: P553994  
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-40-UNV-81-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

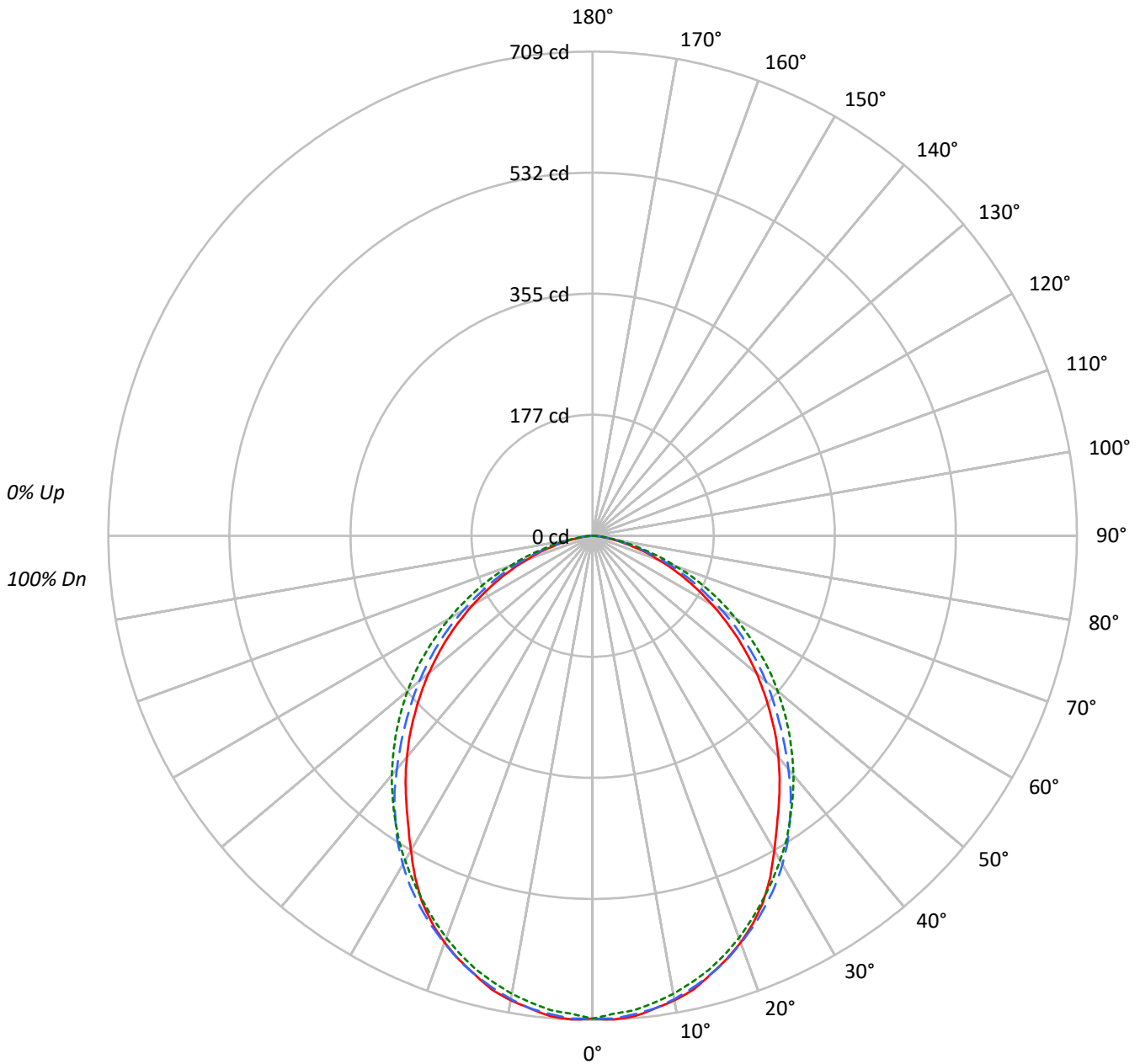
Lumens per Lamp: N/A  
Luminaire Lumens: 1635.0 lumens  
Efficiency: N/A  
Efficacy: 75.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P553994

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P553994

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD-90

**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°	3806	3806	3806
5°	3816	3800	3767
10°	3775	3765	3722
15°	3708	3708	3666
20°	3630	3635	3588
25°	3510	3553	3497
30°	3306	3454	3412
35°	3123	3311	3316
40°	2972	3132	3214
45°	2802	2943	3093
50°	2622	2772	2961
55°	2419	2579	2801
60°	2179	2354	2605
65°	1923	2092	2370
70°	1603	1783	2013
75°	1260	1424	1576
80°	902	1001	1113
85°	587	587	556



TEST NUMBER: P553994

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.6	4.1
10°-20°	187.0	11.4
20°-30°	273.3	16.7
30°-40°	310.2	19.0
40°-50°	299.5	18.3
50°-60°	247.1	15.1
60°-70°	164.5	10.1
70°-80°	73.6	4.5
80°-90°	13.2	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°	526.9	32.2
0°-40°	837.2	51.2
0°-60°	1383.7	84.6
0°-90°	1635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1635.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	706	706	703	700	697	67
15°	666	667	666	662	658	188
25°	591	596	598	594	589	271
35°	475	482	504	507	505	298
45°	368	374	387	404	406	284
55°	258	262	275	290	298	230
65°	151	155	164	176	186	150
75°	61	64	68	72	76	66
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



TEST NUMBER: P553994

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	707.1	707.1	707.1	707.1	707.1
2.5°	709.0	709.3	707.6	703.3	700.6
5°	706.3	706.0	703.3	699.5	697.3
7.5°	698.4	698.9	698.1	692.7	689.7
10°	690.8	691.1	688.9	684.5	681.0
12.5°	681.0	680.7	677.8	675.6	669.9
15°	665.5	667.2	665.5	662.5	657.9
17.5°	650.6	650.6	651.7	646.5	643.0
20°	633.8	634.6	634.6	630.5	626.4
22.5°	614.2	616.6	617.5	613.1	608.2
25°	591.1	595.7	598.4	594.1	588.9
27.5°	563.1	570.2	578.3	575.1	569.4
30°	531.9	542.2	555.8	553.1	549.0
32.5°	502.3	512.6	531.3	530.3	528.1
35°	475.4	481.9	503.9	506.6	504.7
37.5°	449.8	455.8	476.5	482.7	481.1
40°	423.0	429.5	445.8	456.9	457.5
42.5°	396.3	402.6	415.9	431.9	431.9
45°	368.1	374.3	386.6	404.2	406.4
47.5°	340.4	346.9	358.8	376.5	380.0
50°	313.2	319.2	331.1	348.3	353.7
52.5°	285.0	291.5	303.2	318.9	326.8
55°	257.8	262.1	274.9	290.1	298.5
57.5°	229.5	233.6	248.0	261.1	269.7
60°	202.4	207.5	218.7	232.0	242.0
62.5°	176.3	181.7	191.2	202.9	214.3
65°	151.0	155.1	164.3	176.0	186.1
67.5°	126.6	130.1	139.4	147.5	158.1
70°	101.9	106.5	113.3	121.2	127.9
72.5°	82.0	83.9	89.6	95.3	102.4
75°	60.6	63.8	68.5	71.7	75.8
77.5°	43.5	45.4	48.1	50.8	54.6
80°	29.1	29.9	32.3	32.9	35.9
82.5°	17.7	18.2	18.7	19.0	20.1
85°	9.5	9.5	9.5	9.0	9.0
87.5°	5.4	5.4	4.6	3.8	2.7
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)