

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: P553981

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-80-96-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: P553981  
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-80-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

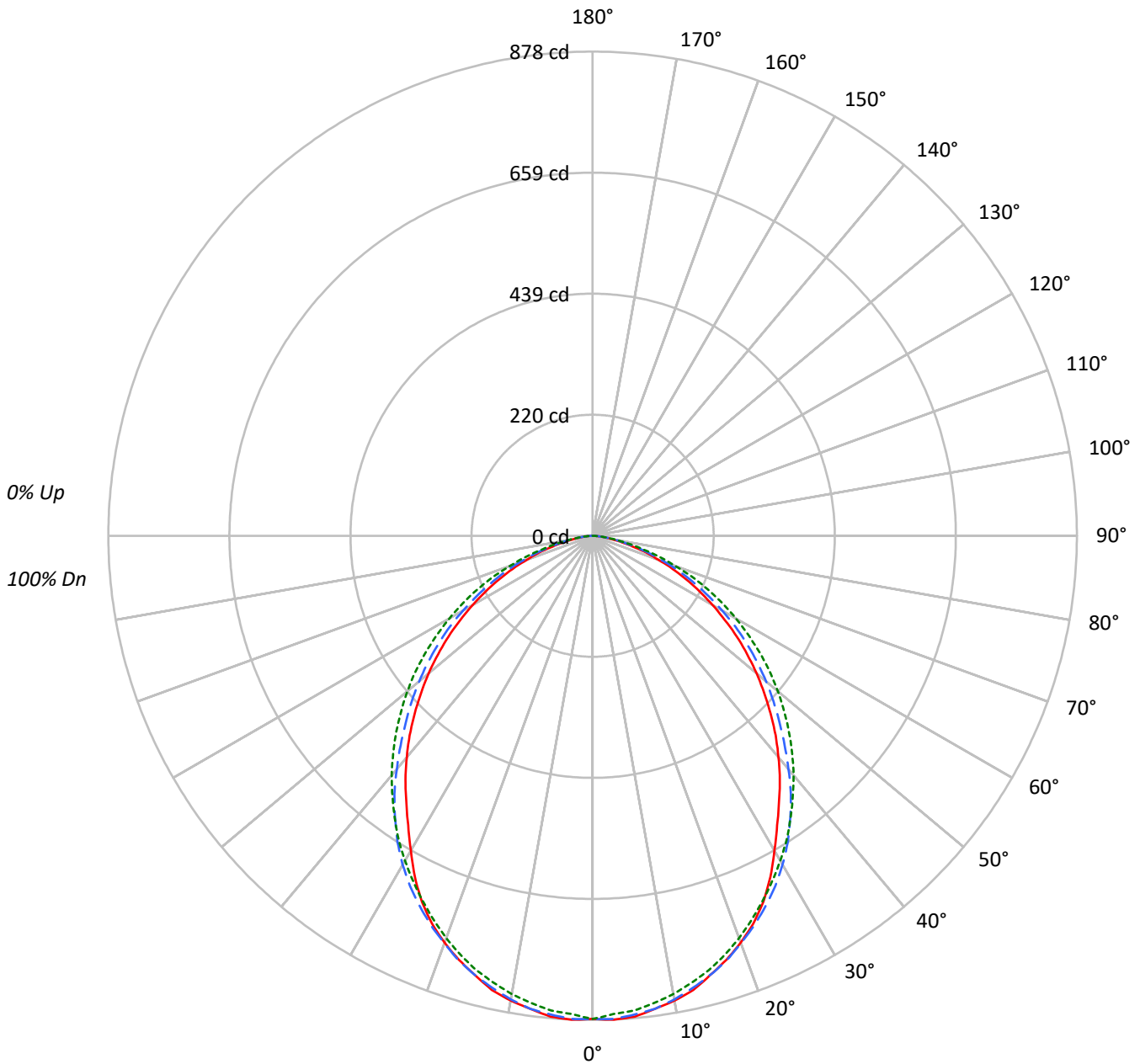
Lumens per Lamp: N/A  
Luminaire Lumens: 2026.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P553981

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-80-96-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P553981

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-80-96-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°	4716	4716	4716
5°	4728	4708	4668
10°	4678	4665	4612
15°	4595	4595	4543
20°	4498	4503	4446
25°	4350	4403	4334
30°	4096	4280	4228
35°	3870	4102	4109
40°	3682	3881	3982
45°	3471	3646	3833
50°	3249	3435	3670
55°	2997	3196	3471
60°	2700	2917	3228
65°	2384	2593	2937
70°	1986	2209	2494
75°	1562	1763	1953
80°	1116	1243	1376
85°	729	729	685



TEST NUMBER: P553981

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-80-96-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.5	4.1
10°-20°	231.8	11.4
20°-30°	338.7	16.7
30°-40°	384.4	19.0
40°-50°	371.1	18.3
50°-60°	306.1	15.1
60°-70°	203.9	10.1
70°-80°	91.2	4.5
80°-90°	16.3	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°	652.9	32.2
0°-40°	1037.3	51.2
0°-60°	1714.6	84.6
0°-90°	2026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2026.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	875	875	872	867	864	83
15°	825	827	825	821	815	232
25°	732	738	742	736	730	335
35°	589	597	624	628	625	369
45°	456	464	479	501	504	352
55°	319	325	341	360	370	285
65°	187	192	204	218	231	186
75°	75	79	85	89	94	82
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P553981

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-80-96-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	876.2	876.2	876.2	876.2	876.2
2.5°	878.5	878.9	876.9	871.5	868.1
5°	875.2	874.8	871.5	866.8	864.1
7.5°	865.4	866.1	865.1	858.4	854.6
10°	856.0	856.3	853.6	848.3	843.9
12.5°	843.9	843.5	839.8	837.1	830.1
15°	824.7	826.7	824.7	821.0	815.3
17.5°	806.2	806.2	807.5	801.1	796.8
20°	785.3	786.3	786.3	781.3	776.2
22.5°	761.1	764.1	765.1	759.7	753.7
25°	732.5	738.2	741.5	736.2	729.8
27.5°	697.8	706.5	716.6	712.6	705.5
30°	659.1	671.9	688.7	685.3	680.3
32.5°	622.4	635.2	658.4	657.1	654.4
35°	589.1	597.1	624.4	627.8	625.4
37.5°	557.4	564.8	590.4	598.2	596.1
40°	524.1	532.2	552.4	566.2	566.8
42.5°	491.1	498.9	515.3	535.2	535.2
45°	456.1	463.8	479.0	500.9	503.6
47.5°	421.8	429.8	444.7	466.5	470.9
50°	388.1	395.5	410.3	431.5	438.3
52.5°	353.1	361.2	375.7	395.2	404.9
55°	319.4	324.8	340.6	359.5	369.9
57.5°	284.4	289.5	307.3	323.5	334.3
60°	250.8	257.2	271.0	287.5	299.9
62.5°	218.5	225.2	237.0	251.4	265.6
65°	187.2	192.2	203.6	218.1	230.6
67.5°	156.9	161.2	172.7	182.8	195.9
70°	126.2	132.0	140.4	150.1	158.5
72.5°	101.7	104.0	111.1	118.1	126.9
75°	75.1	79.1	84.8	88.9	93.9
77.5°	53.9	56.2	59.6	62.9	67.7
80°	36.0	37.0	40.1	40.7	44.4
82.5°	21.9	22.6	23.2	23.6	24.9
85°	11.8	11.8	11.8	11.1	11.1
87.5°	6.7	6.7	5.7	4.7	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)