

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: P554522

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-82-94-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: P554522  
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-LD4-1STD-40-UNV-82-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 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**

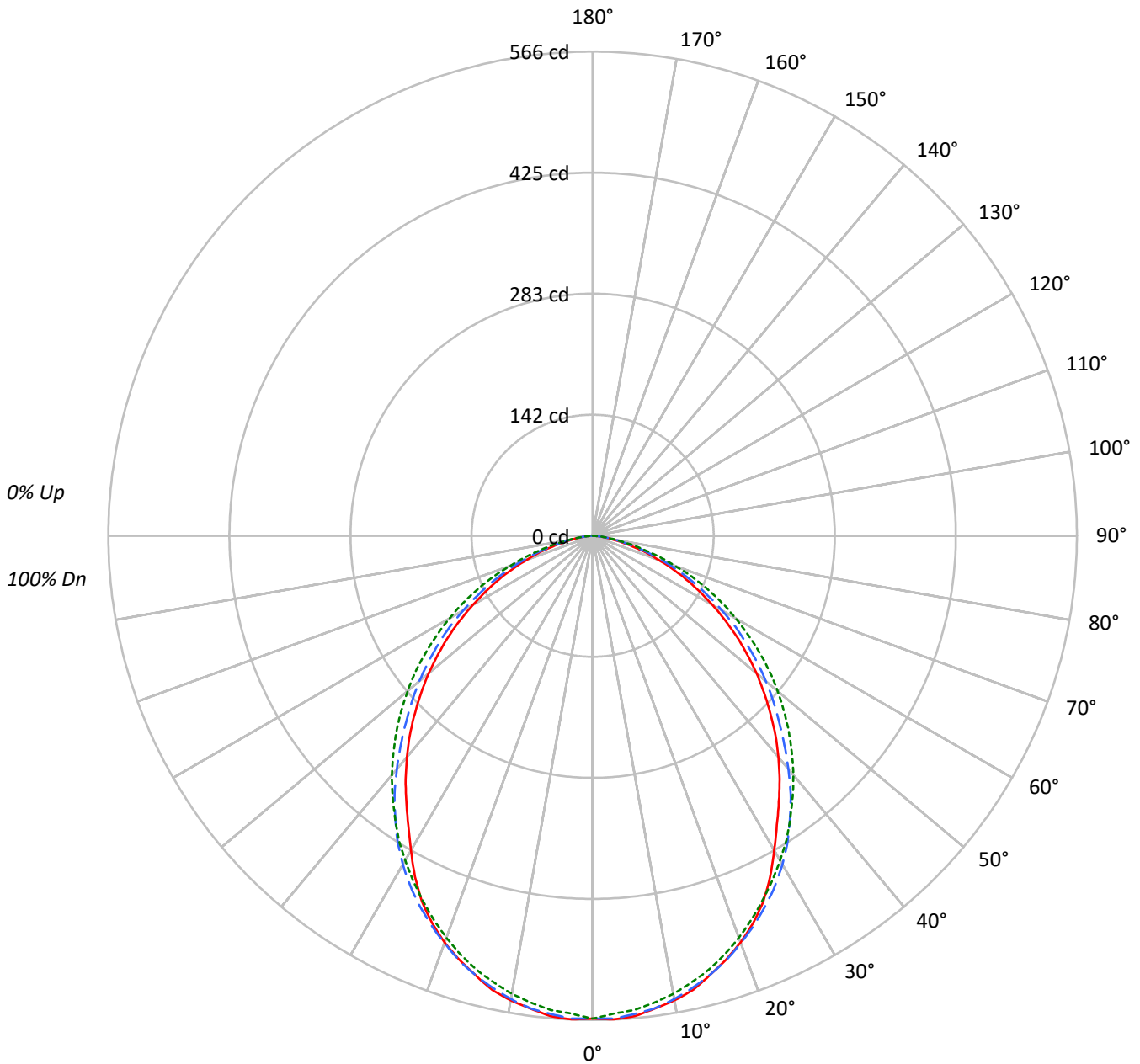
Lumens per Lamp: N/A  
Luminaire Lumens: 1305.0 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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: P554522

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554522

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD-90

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				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	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54	54	54	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47	47	47	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34	34	34	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28	28	28	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3038	3038	3038
5°	3045	3032	3007
10°	3013	3005	2971
15°	2960	2960	2926
20°	2897	2901	2864
25°	2802	2837	2792
30°	2638	2757	2723
35°	2493	2643	2646
40°	2372	2500	2565
45°	2236	2348	2469
50°	2093	2213	2364
55°	1931	2059	2236
60°	1738	1878	2080
65°	1536	1671	1891
70°	1279	1423	1607
75°	1006	1135	1258
80°	719	800	886
85°	469	469	445



TEST NUMBER: P554522

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	4.1
10°-20°	149.3	11.4
20°-30°	218.2	16.7
30°-40°	247.6	19.0
40°-50°	239.0	18.3
50°-60°	197.2	15.1
60°-70°	131.3	10.1
70°-80°	58.8	4.5
80°-90°	10.5	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°	420.6	32.2
0°-40°	668.2	51.2
0°-60°	1104.4	84.6
0°-90°	1305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1305.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	564	564	561	558	557	53
15°	531	532	531	529	525	150
25°	472	476	478	474	470	216
35°	379	385	402	404	403	238
45°	294	299	308	323	324	227
55°	206	209	219	232	238	184
65°	121	124	131	140	148	120
75°	48	51	55	57	60	53
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



TEST NUMBER: P554522

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-82-94-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	564.4	564.4	564.4	564.4	564.4
2.5°	565.9	566.1	564.8	561.3	559.2
5°	563.7	563.5	561.3	558.3	556.6
7.5°	557.4	557.9	557.2	552.9	550.5
10°	551.4	551.6	549.9	546.4	543.6
12.5°	543.6	543.3	541.0	539.2	534.7
15°	531.2	532.5	531.2	528.8	525.1
17.5°	519.3	519.3	520.1	516.0	513.2
20°	505.8	506.5	506.5	503.2	500.0
22.5°	490.2	492.2	492.8	489.4	485.5
25°	471.8	475.5	477.7	474.2	470.1
27.5°	449.5	455.1	461.6	459.0	454.5
30°	424.5	432.8	443.6	441.4	438.2
32.5°	400.9	409.1	424.1	423.2	421.5
35°	379.4	384.6	402.2	404.4	402.8
37.5°	359.1	363.8	380.3	385.3	384.0
40°	337.6	342.8	355.8	364.7	365.1
42.5°	316.3	321.3	331.9	344.7	344.7
45°	293.8	298.8	308.5	322.6	324.4
47.5°	271.7	276.9	286.4	300.5	303.3
50°	250.0	254.8	264.3	278.0	282.3
52.5°	227.4	232.6	242.0	254.5	260.8
55°	205.8	209.2	219.4	231.6	238.3
57.5°	183.2	186.5	198.0	208.4	215.3
60°	161.5	165.6	174.5	185.2	193.2
62.5°	140.7	145.1	152.6	162.0	171.1
65°	120.6	123.8	131.2	140.5	148.5
67.5°	101.0	103.9	111.2	117.7	126.2
70°	81.3	85.0	90.4	96.7	102.1
72.5°	65.5	67.0	71.6	76.1	81.7
75°	48.4	51.0	54.6	57.2	60.5
77.5°	34.7	36.2	38.4	40.5	43.6
80°	23.2	23.9	25.8	26.2	28.6
82.5°	14.1	14.5	15.0	15.2	16.0
85°	7.6	7.6	7.6	7.2	7.2
87.5°	4.3	4.3	3.7	3.0	2.2
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)