

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: P554159

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-97-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: P554159  
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-LD4-1LO-30-UNV-93-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

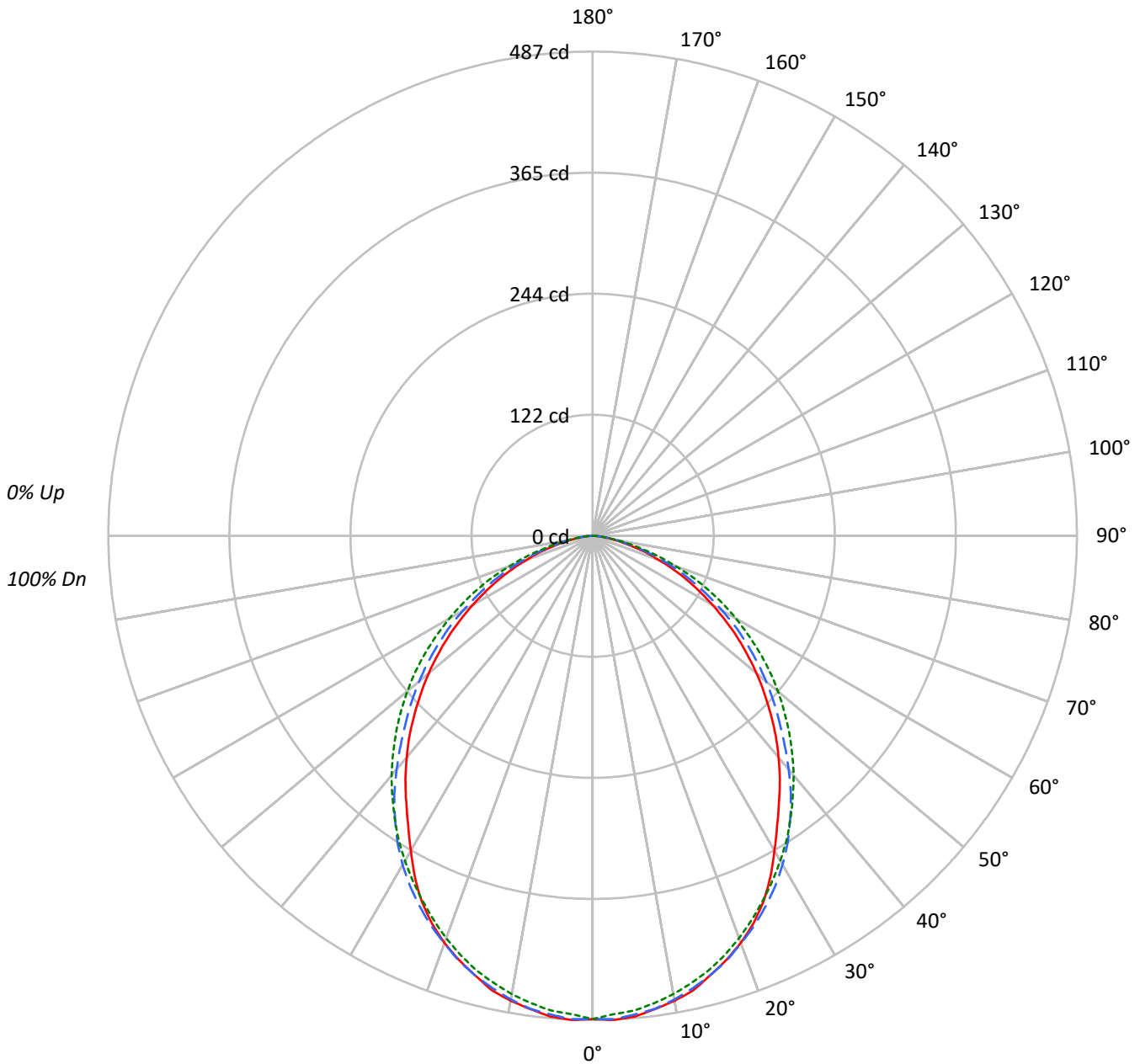
Lumens per Lamp: N/A  
Luminaire Lumens: 1124.0 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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: P554159

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-93-97-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554159

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-93-97-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°	2616	2616	2616
5°	2623	2612	2590
10°	2595	2588	2559
15°	2549	2549	2520
20°	2495	2498	2466
25°	2413	2443	2404
30°	2272	2375	2345
35°	2147	2276	2280
40°	2043	2153	2210
45°	1926	2022	2127
50°	1803	1906	2035
55°	1663	1773	1925
60°	1497	1618	1791
65°	1322	1439	1629
70°	1102	1226	1385
75°	865	979	1083
80°	620	688	766
85°	401	401	383



TEST NUMBER: P554159

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-93-97-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.8	4.1
10°-20°	128.6	11.4
20°-30°	187.9	16.7
30°-40°	213.3	19.0
40°-50°	205.9	18.3
50°-60°	169.8	15.1
60°-70°	113.1	10.1
70°-80°	50.6	4.5
80°-90°	9.0	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°	362.2	32.2
0°-40°	575.5	51.2
0°-60°	951.2	84.6
0°-90°	1124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1124.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	486	485	484	481	479	46
15°	458	459	458	456	452	129
25°	406	410	411	408	405	186
35°	327	331	346	348	347	205
45°	253	257	266	278	279	195
55°	177	180	189	199	205	158
65°	104	107	113	121	128	103
75°	42	44	47	49	52	46
85°	6	6	6	6	6	9
90°	0	0	0	0	0	



TEST NUMBER: P554159

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-93-97-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	486.1	486.1	486.1	486.1	486.1
2.5°	487.4	487.6	486.5	483.5	481.6
5°	485.5	485.4	483.5	480.9	479.4
7.5°	480.1	480.5	479.9	476.2	474.1
10°	474.9	475.1	473.6	470.6	468.2
12.5°	468.2	468.0	465.9	464.4	460.5
15°	457.5	458.6	457.5	455.5	452.3
17.5°	447.3	447.3	448.0	444.5	442.0
20°	435.7	436.2	436.2	433.4	430.6
22.5°	422.2	423.9	424.5	421.5	418.1
25°	406.4	409.5	411.4	408.4	404.9
27.5°	387.1	392.0	397.6	395.3	391.4
30°	365.6	372.7	382.1	380.2	377.4
32.5°	345.3	352.4	365.3	364.5	363.0
35°	326.8	331.3	346.4	348.3	347.0
37.5°	309.3	313.4	327.6	331.8	330.7
40°	290.8	295.2	306.5	314.1	314.5
42.5°	272.5	276.8	285.9	296.9	296.9
45°	253.0	257.3	265.7	277.9	279.4
47.5°	234.0	238.5	246.7	258.8	261.3
50°	215.3	219.4	227.6	239.4	243.1
52.5°	195.9	200.4	208.4	219.2	224.7
55°	177.2	180.2	189.0	199.4	205.2
57.5°	157.8	160.6	170.5	179.5	185.4
60°	139.1	142.7	150.3	159.5	166.4
62.5°	121.2	124.9	131.5	139.5	147.3
65°	103.8	106.6	113.0	121.0	127.9
67.5°	87.0	89.5	95.8	101.4	108.7
70°	70.0	73.2	77.9	83.3	88.0
72.5°	56.4	57.7	61.6	65.5	70.4
75°	41.6	43.9	47.1	49.3	52.1
77.5°	29.9	31.2	33.1	34.9	37.5
80°	20.0	20.5	22.2	22.6	24.7
82.5°	12.1	12.5	12.9	13.1	13.8
85°	6.5	6.5	6.5	6.2	6.2
87.5°	3.7	3.7	3.2	2.6	1.9
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)