

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: P553997

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-81-96-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: P553997  
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-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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**

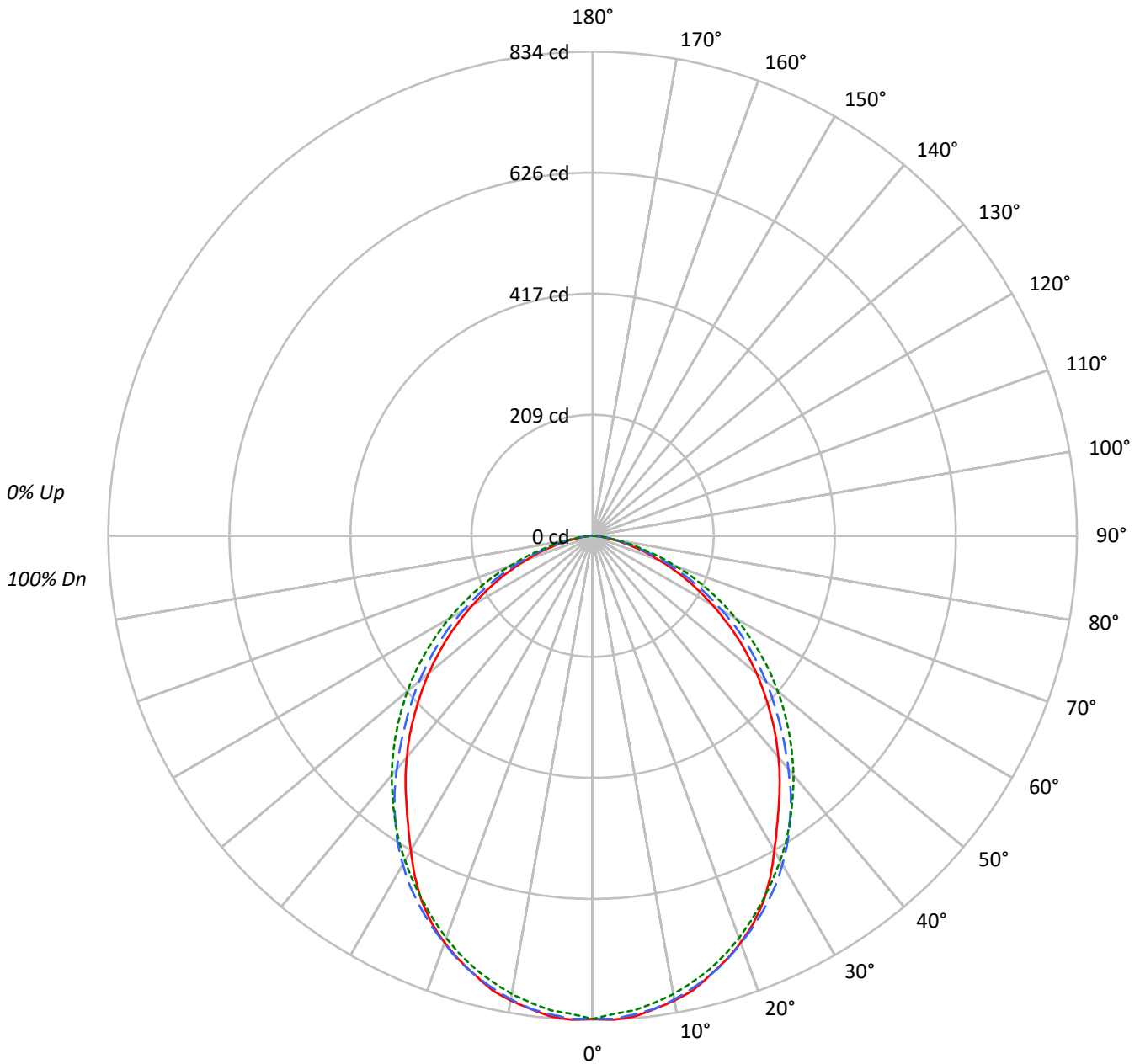
Lumens per Lamp: N/A  
Luminaire Lumens: 1924.0 lumens  
Efficiency: N/A  
Efficacy: 89.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P553997

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-96-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P553997

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-96-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°	4478	4478	4478
5°	4490	4471	4433
10°	4442	4430	4380
15°	4364	4364	4314
20°	4271	4277	4222
25°	4131	4182	4115
30°	3890	4064	4015
35°	3675	3896	3902
40°	3497	3686	3782
45°	3296	3462	3640
50°	3086	3263	3485
55°	2847	3035	3296
60°	2563	2770	3066
65°	2263	2463	2789
70°	1887	2098	2370
75°	1483	1676	1855
80°	1060	1178	1308
85°	692	692	648



TEST NUMBER: P553997

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-96-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	4.1
10°-20°	220.1	11.4
20°-30°	321.6	16.7
30°-40°	365.1	19.0
40°-50°	352.4	18.3
50°-60°	290.7	15.1
60°-70°	193.6	10.1
70°-80°	86.6	4.5
80°-90°	15.5	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°	620.0	32.2
0°-40°	985.1	51.2
0°-60°	1628.3	84.6
0°-90°	1924.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1924.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	831	831	828	823	821	79
15°	783	785	783	780	774	221
25°	696	701	704	699	693	319
35°	559	567	593	596	594	351
45°	433	440	455	476	478	334
55°	303	308	324	341	351	271
65°	178	182	193	207	219	176
75°	71	75	81	84	89	78
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



TEST NUMBER: P553997

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-96-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	832.1	832.1	832.1	832.1	832.1
2.5°	834.3	834.6	832.7	827.6	824.4
5°	831.1	830.8	827.6	823.1	820.6
7.5°	821.9	822.5	821.5	815.1	811.6
10°	812.9	813.2	810.7	805.5	801.4
12.5°	801.4	801.1	797.6	795.0	788.3
15°	783.2	785.1	783.2	779.7	774.2
17.5°	765.6	765.6	766.9	760.8	756.6
20°	745.8	746.7	746.7	741.9	737.1
22.5°	722.8	725.6	726.6	721.5	715.7
25°	695.6	701.0	704.2	699.1	693.0
27.5°	662.7	671.0	680.6	676.7	670.0
30°	625.9	638.0	654.0	650.8	646.0
32.5°	591.1	603.2	625.3	624.0	621.4
35°	559.4	567.1	593.0	596.2	593.9
37.5°	529.4	536.4	560.7	568.0	566.1
40°	497.7	505.4	524.6	537.7	538.3
42.5°	466.4	473.7	489.4	508.3	508.3
45°	433.1	440.5	454.9	475.7	478.2
47.5°	400.5	408.2	422.3	443.1	447.2
50°	368.6	375.6	389.7	409.8	416.2
52.5°	335.3	343.0	356.7	375.3	384.6
55°	303.4	308.5	323.5	341.4	351.3
57.5°	270.1	274.9	291.9	307.2	317.4
60°	238.1	244.2	257.3	273.0	284.8
62.5°	207.5	213.9	225.0	238.8	252.2
65°	177.7	182.5	193.4	207.1	219.0
67.5°	149.0	153.1	164.0	173.6	186.0
70°	119.9	125.3	133.3	142.6	150.6
72.5°	96.5	98.8	105.5	112.2	120.5
75°	71.3	75.1	80.6	84.4	89.2
77.5°	51.1	53.4	56.6	59.8	64.3
80°	34.2	35.2	38.0	38.7	42.2
82.5°	20.8	21.4	22.1	22.4	23.7
85°	11.2	11.2	11.2	10.5	10.5
87.5°	6.4	6.4	5.4	4.5	3.2
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)