

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: P554083

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-85-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: P554083
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-50-UNV-93-85-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

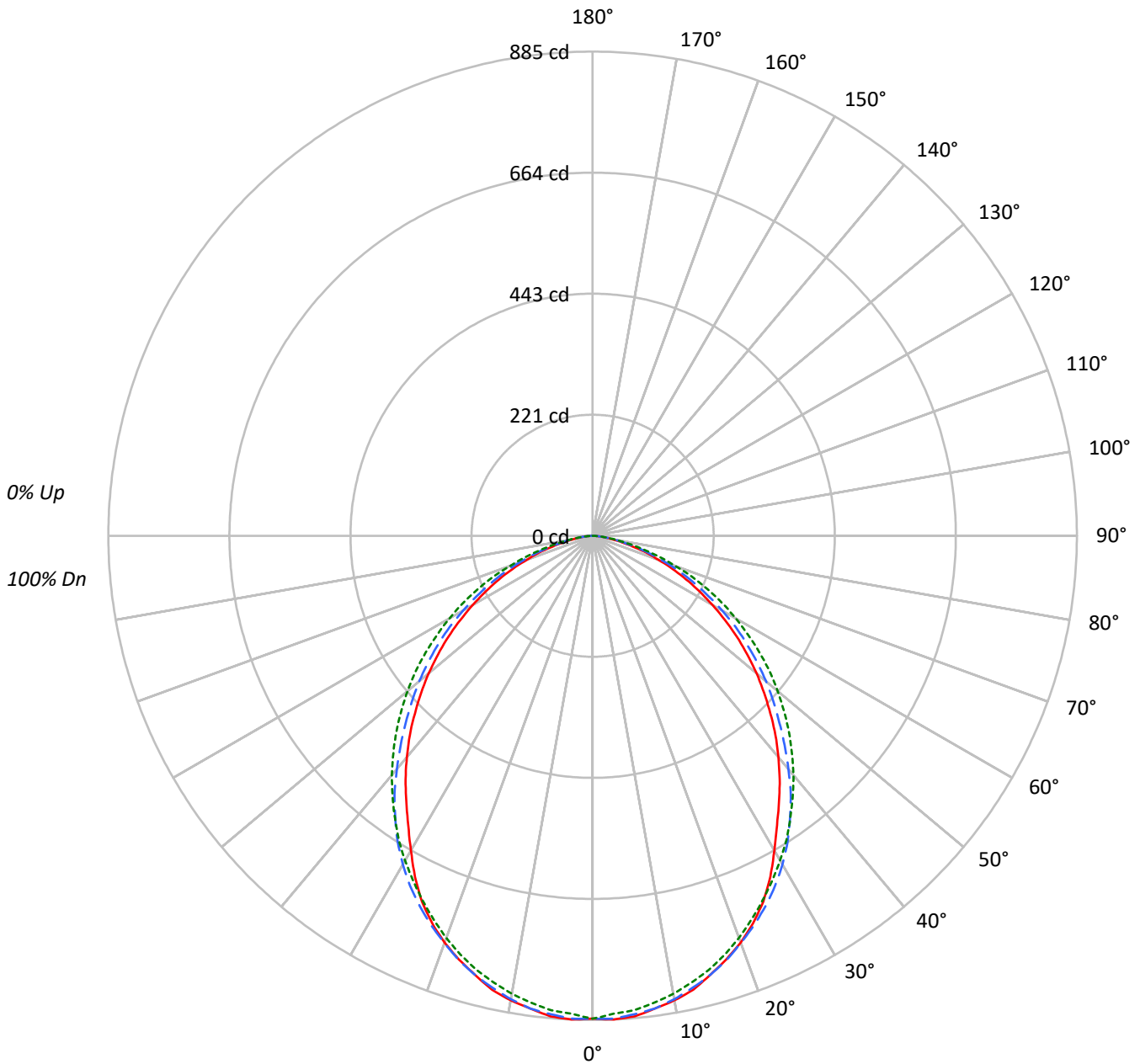
Lumens per Lamp: N/A
Luminaire Lumens: 2041.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P554083

CATALOG NUMBER: FUSL-12-2-LD4-1HI-50-UNV-93-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P554083

CATALOG NUMBER: FUSL-12-2-LD4-1HI-50-UNV-93-85-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°	4751	4751	4751
5°	4763	4743	4703
10°	4712	4700	4646
15°	4629	4629	4576
20°	4531	4537	4479
25°	4382	4436	4366
30°	4126	4312	4259
35°	3899	4133	4139
40°	3710	3910	4012
45°	3497	3672	3861
50°	3274	3461	3697
55°	3019	3220	3497
60°	2719	2939	3252
65°	2401	2613	2958
70°	2002	2225	2513
75°	1572	1778	1967
80°	1125	1252	1389
85°	735	735	692



TEST NUMBER: P554083

CATALOG NUMBER: FUSL-12-2-LD4-1HI-50-UNV-93-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.1	4.1
10°-20°	233.5	11.4
20°-30°	341.2	16.7
30°-40°	387.3	19.0
40°-50°	373.9	18.3
50°-60°	308.4	15.1
60°-70°	205.4	10.1
70°-80°	91.9	4.5
80°-90°	16.4	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°	657.8	32.2
0°-40°	1045.0	51.2
0°-60°	1727.3	84.6
0°-90°	2041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	882	881	878	873	870	83
15°	831	833	831	827	821	234
25°	738	744	747	742	735	338
35°	593	602	629	632	630	372
45°	460	467	482	505	507	355
55°	322	327	343	362	373	287
65°	188	194	205	220	232	187
75°	76	80	86	90	95	83
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P554083

CATALOG NUMBER: FUSL-12-2-LD4-1HI-50-UNV-93-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.7	882.7	882.7	882.7	882.7
2.5°	885.1	885.4	883.4	877.9	874.5
5°	881.7	881.3	877.9	873.2	870.5
7.5°	871.8	872.5	871.5	864.7	861.0
10°	862.3	862.7	860.0	854.5	850.1
12.5°	850.1	849.8	846.1	843.3	836.2
15°	830.8	832.8	830.8	827.1	821.3
17.5°	812.1	812.1	813.5	807.1	802.7
20°	791.1	792.1	792.1	787.1	782.0
22.5°	766.7	769.8	770.8	765.4	759.2
25°	737.9	743.6	747.0	741.6	735.2
27.5°	703.0	711.8	721.9	717.9	710.8
30°	664.0	676.8	693.8	690.4	685.3
32.5°	627.0	639.9	663.3	661.9	659.2
35°	593.4	601.6	629.0	632.4	630.0
37.5°	561.6	569.0	594.8	602.6	600.5
40°	528.0	536.1	556.5	570.4	571.0
42.5°	494.7	502.5	519.2	539.2	539.2
45°	459.5	467.3	482.5	504.6	507.3
47.5°	424.9	433.0	448.0	470.0	474.4
50°	391.0	398.4	413.4	434.7	441.5
52.5°	355.7	363.9	378.4	398.1	407.9
55°	321.8	327.2	343.2	362.2	372.7
57.5°	286.5	291.6	309.6	325.9	336.7
60°	252.6	259.1	273.0	289.6	302.1
62.5°	220.1	226.9	238.7	253.3	267.6
65°	188.5	193.6	205.2	219.7	232.3
67.5°	158.0	162.4	174.0	184.1	197.4
70°	127.2	132.9	141.4	151.2	159.7
72.5°	102.4	104.8	111.9	119.0	127.8
75°	75.6	79.7	85.5	89.5	94.6
77.5°	54.3	56.6	60.0	63.4	68.2
80°	36.3	37.3	40.4	41.0	44.8
82.5°	22.0	22.7	23.4	23.7	25.1
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	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)