

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: P554389

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-82-86-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: P554389
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-30-UNV-82-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

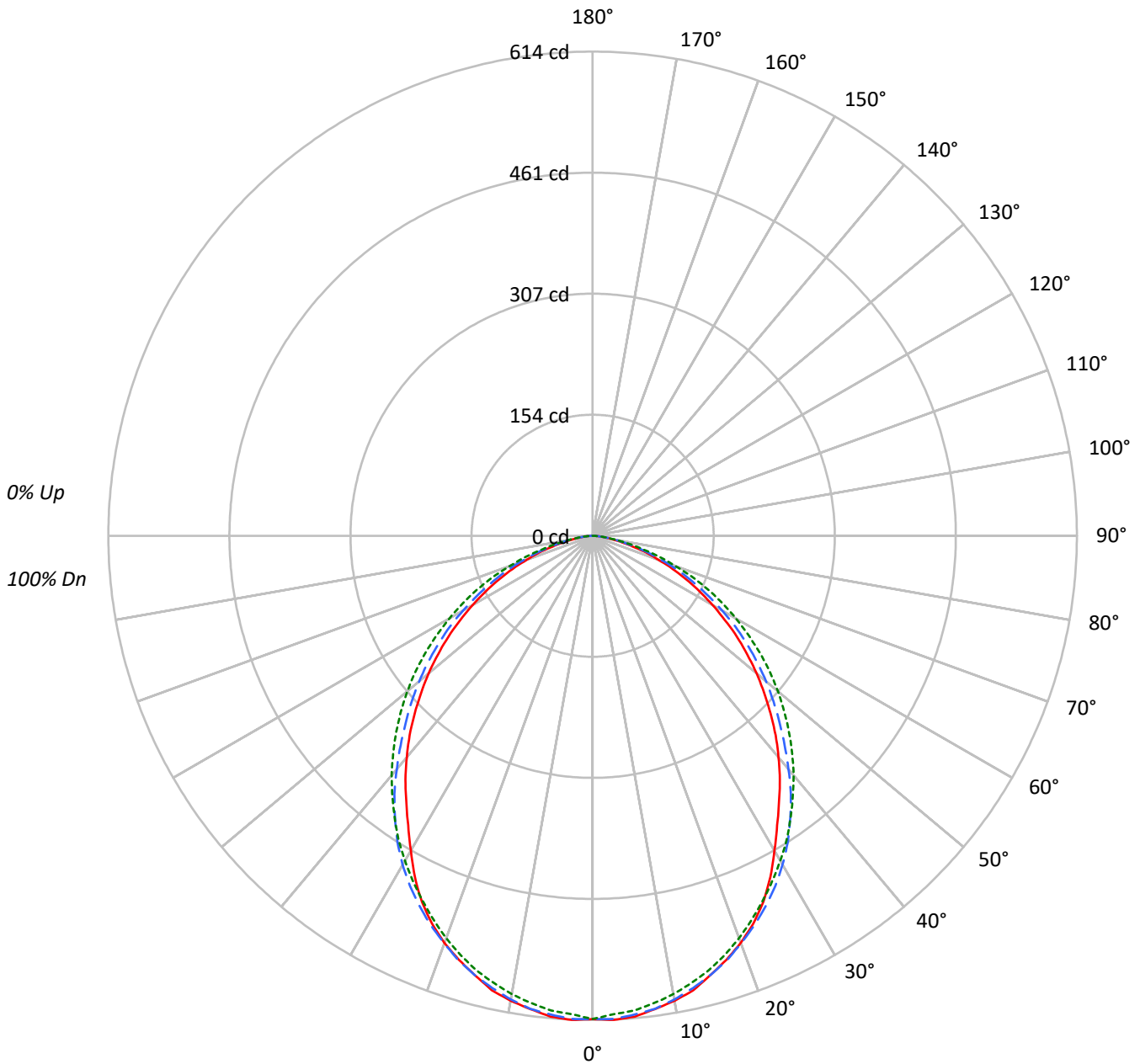
Lumens per Lamp: N/A
Luminaire Lumens: 1417.0 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (A_{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: P554389

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-82-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P554389

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-82-86-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°	3298	3298	3298
5°	3307	3293	3265
10°	3272	3263	3225
15°	3214	3214	3177
20°	3146	3150	3109
25°	3042	3080	3031
30°	2865	2994	2957
35°	2707	2869	2874
40°	2576	2714	2786
45°	2428	2550	2681
50°	2272	2403	2566
55°	2096	2236	2427
60°	1888	2040	2258
65°	1667	1813	2054
70°	1389	1545	1745
75°	1092	1233	1366
80°	781	868	964
85°	506	506	482



TEST NUMBER: P554389

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-82-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	4.1
10°-20°	162.1	11.4
20°-30°	236.9	16.7
30°-40°	268.9	19.0
40°-50°	259.5	18.3
50°-60°	214.1	15.1
60°-70°	142.6	10.1
70°-80°	63.8	4.5
80°-90°	11.4	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°	456.7	32.2
0°-40°	725.5	51.2
0°-60°	1199.2	84.6
0°-90°	1417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1417.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	612	612	610	606	604	58
15°	577	578	577	574	570	163
25°	512	516	519	515	510	235
35°	412	418	437	439	437	258
45°	319	324	335	350	352	246
55°	223	227	238	251	259	199
65°	131	134	142	153	161	130
75°	52	55	59	62	66	57
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



TEST NUMBER: P554389

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-82-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	612.8	612.8	612.8	612.8	612.8
2.5°	614.5	614.7	613.3	609.5	607.2
5°	612.1	611.9	609.5	606.2	604.3
7.5°	605.3	605.8	605.0	600.3	597.7
10°	598.7	598.9	597.0	593.3	590.2
12.5°	590.2	590.0	587.4	585.5	580.6
15°	576.8	578.2	576.8	574.2	570.2
17.5°	563.8	563.8	564.8	560.3	557.3
20°	549.3	550.0	550.0	546.4	542.9
22.5°	532.3	534.4	535.1	531.4	527.1
25°	512.3	516.3	518.6	514.9	510.4
27.5°	488.0	494.2	501.2	498.4	493.5
30°	461.0	469.9	481.7	479.3	475.8
32.5°	435.3	444.3	460.5	459.6	457.7
35°	412.0	417.6	436.7	439.1	437.4
37.5°	389.9	395.0	412.9	418.4	416.9
40°	366.6	372.2	386.3	396.0	396.5
42.5°	343.5	348.9	360.4	374.3	374.3
45°	319.0	324.4	335.0	350.3	352.2
47.5°	295.0	300.6	311.0	326.3	329.4
50°	271.4	276.6	287.0	301.8	306.5
52.5°	247.0	252.6	262.7	276.4	283.2
55°	223.4	227.2	238.3	251.4	258.7
57.5°	198.9	202.5	214.9	226.2	233.8
60°	175.4	179.9	189.5	201.1	209.8
62.5°	152.8	157.5	165.7	175.9	185.8
65°	130.9	134.4	142.4	152.6	161.3
67.5°	109.7	112.8	120.8	127.8	137.0
70°	88.3	92.3	98.2	105.0	110.9
72.5°	71.1	72.7	77.7	82.6	88.8
75°	52.5	55.3	59.3	62.2	65.7
77.5°	37.7	39.3	41.7	44.0	47.3
80°	25.2	25.9	28.0	28.5	31.1
82.5°	15.3	15.8	16.2	16.5	17.4
85°	8.2	8.2	8.2	7.8	7.8
87.5°	4.7	4.7	4.0	3.3	2.4
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)