

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: P554403

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-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: P554403
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-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 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

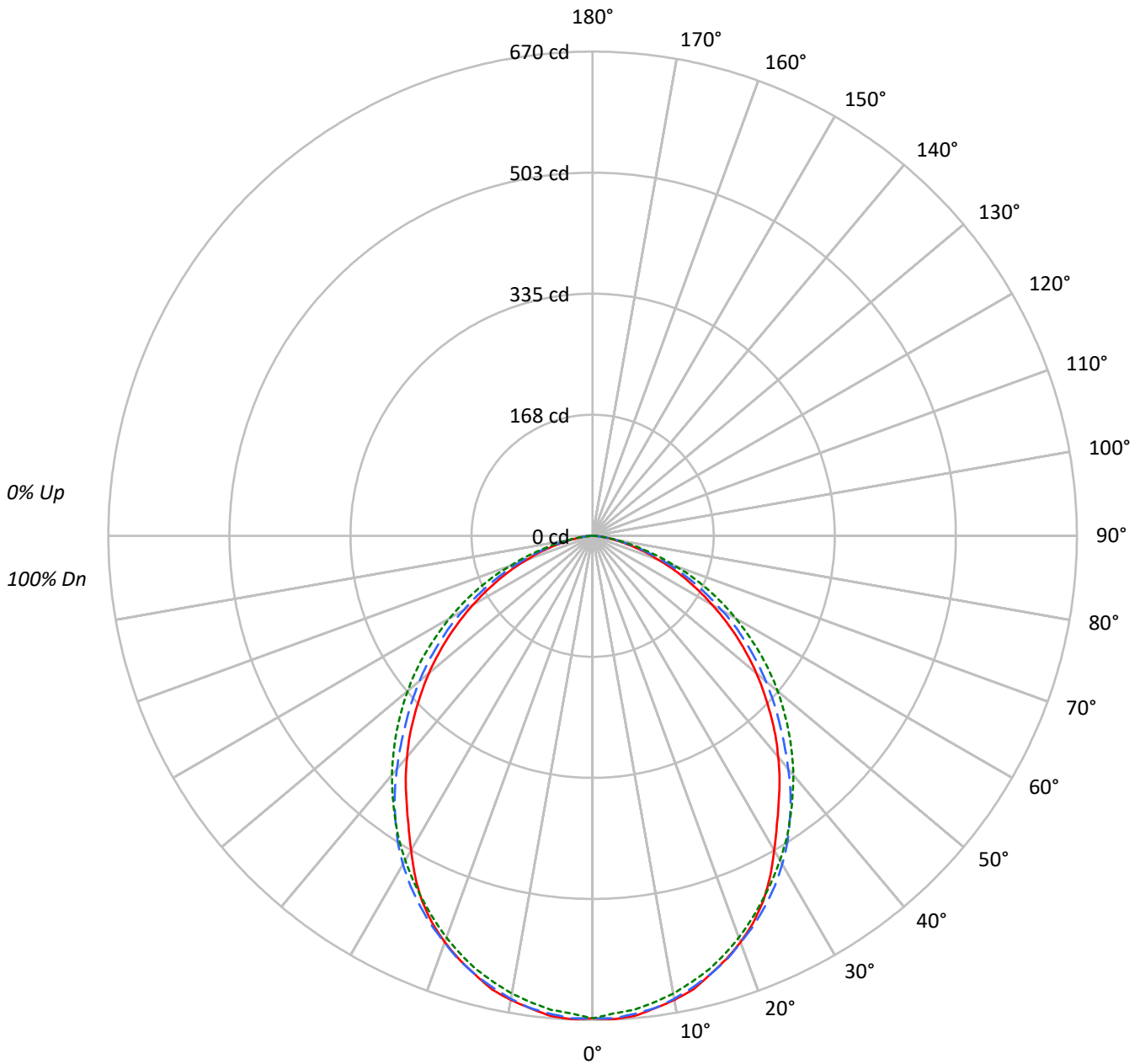
Lumens per Lamp: N/A
Luminaire Lumens: 1544.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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: P554403

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-93-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P554403

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-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°	3594	3594	3594
5°	3603	3588	3558
10°	3565	3556	3515
15°	3502	3502	3462
20°	3428	3432	3388
25°	3315	3356	3303
30°	3122	3262	3222
35°	2949	3127	3131
40°	2806	2958	3035
45°	2646	2778	2921
50°	2477	2618	2797
55°	2284	2436	2645
60°	2057	2223	2461
65°	1816	1976	2238
70°	1514	1684	1901
75°	1189	1343	1489
80°	849	945	1051
85°	556	556	525



TEST NUMBER: P554403

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-93-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	4.1
10°-20°	176.6	11.4
20°-30°	258.1	16.7
30°-40°	293.0	19.0
40°-50°	282.8	18.3
50°-60°	233.3	15.1
60°-70°	155.4	10.1
70°-80°	69.5	4.5
80°-90°	12.4	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°	497.6	32.2
0°-40°	790.6	51.2
0°-60°	1306.7	84.6
0°-90°	1544.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1544.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	667	667	664	661	658	63
15°	628	630	628	626	621	177
25°	558	563	565	561	556	256
35°	449	455	476	478	477	281
45°	348	354	365	382	384	268
55°	243	248	260	274	282	217
65°	143	146	155	166	176	141
75°	57	60	65	68	72	63
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



TEST NUMBER: P554403

CATALOG NUMBER: FUSL-12-2-LD4-1STD-30-UNV-93-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	667.7	667.7	667.7	667.7	667.7
2.5°	669.5	669.8	668.3	664.1	661.6
5°	667.0	666.7	664.1	660.6	658.5
7.5°	659.5	660.0	659.3	654.1	651.3
10°	652.3	652.6	650.6	646.4	643.1
12.5°	643.1	642.9	640.0	638.0	632.6
15°	628.5	630.0	628.5	625.7	621.3
17.5°	614.4	614.4	615.4	610.5	607.2
20°	598.5	599.2	599.2	595.4	591.6
22.5°	580.0	582.3	583.1	579.0	574.4
25°	558.2	562.6	565.1	561.0	556.2
27.5°	531.8	538.5	546.1	543.1	537.7
30°	502.3	512.0	524.9	522.3	518.4
32.5°	474.3	484.1	501.8	500.7	498.7
35°	448.9	455.1	475.9	478.4	476.6
37.5°	424.8	430.5	449.9	455.8	454.3
40°	399.4	405.6	421.0	431.5	432.0
42.5°	374.3	380.2	392.7	407.9	407.9
45°	347.6	353.5	365.0	381.7	383.8
47.5°	321.4	327.6	338.9	355.5	358.9
50°	295.8	301.4	312.7	328.9	334.0
52.5°	269.1	275.3	286.3	301.2	308.6
55°	243.4	247.5	259.6	274.0	281.9
57.5°	216.8	220.6	234.2	246.5	254.7
60°	191.1	196.0	206.5	219.1	228.6
62.5°	166.5	171.6	180.6	191.6	202.4
65°	142.6	146.5	155.2	166.2	175.7
67.5°	119.5	122.9	131.6	139.3	149.3
70°	96.2	100.6	107.0	114.4	120.8
72.5°	77.5	79.3	84.7	90.0	96.7
75°	57.2	60.3	64.6	67.7	71.6
77.5°	41.0	42.8	45.4	48.0	51.6
80°	27.4	28.2	30.5	31.0	33.9
82.5°	16.7	17.2	17.7	18.0	19.0
85°	9.0	9.0	9.0	8.5	8.5
87.5°	5.1	5.1	4.4	3.6	2.6
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)