

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: P554912

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-93-84-EDD-90**

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: P554912
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-LD4-2LO-30-UNV-93-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

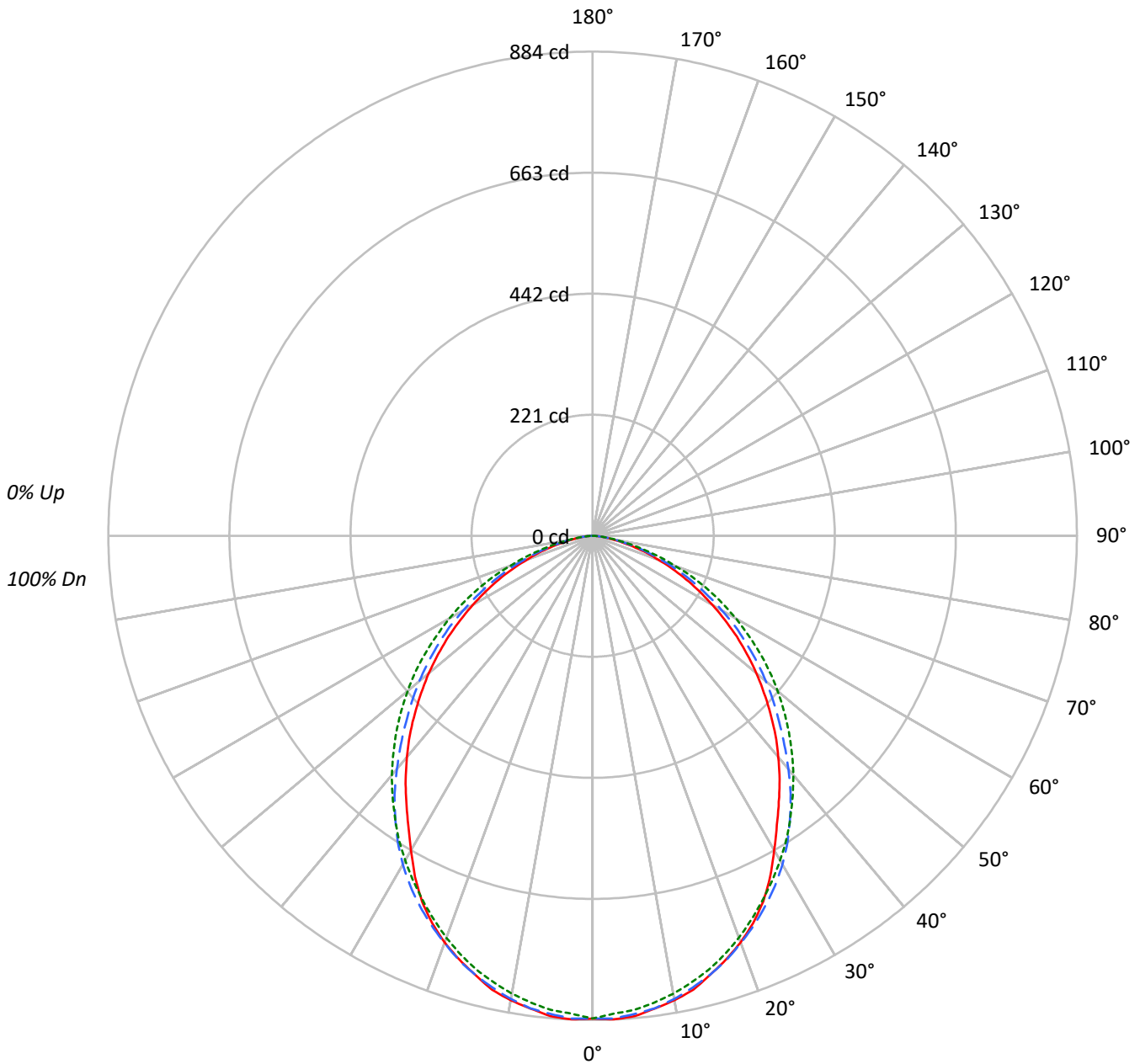
Lumens per Lamp: N/A
Luminaire Lumens: 2038.0 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P554912

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-93-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P554912

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-93-84-EDD-90

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°	4744	4744	4744
5°	4756	4736	4696
10°	4706	4693	4639
15°	4622	4622	4569
20°	4525	4530	4472
25°	4375	4429	4359
30°	4120	4305	4253
35°	3893	4127	4133
40°	3704	3903	4006
45°	3492	3667	3855
50°	3269	3456	3692
55°	3015	3216	3491
60°	2716	2934	3247
65°	2398	2609	2953
70°	1998	2222	2510
75°	1570	1774	1965
80°	1122	1249	1385
85°	735	735	692



TEST NUMBER: P554912

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-93-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	4.1
10°-20°	233.1	11.4
20°-30°	340.7	16.7
30°-40°	386.7	19.0
40°-50°	373.3	18.3
50°-60°	308.0	15.1
60°-70°	205.1	10.1
70°-80°	91.8	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°	656.8	32.2
0°-40°	1043.5	51.2
0°-60°	1724.7	84.6
0°-90°	2038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2038.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	880	880	877	872	869	83
15°	830	832	830	826	820	234
25°	737	743	746	740	734	337
35°	593	601	628	632	629	371
45°	459	467	482	504	506	354
55°	321	327	343	362	372	287
65°	188	193	205	219	232	187
75°	76	80	85	89	94	83
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P554912

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-93-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.4	881.4	881.4	881.4	881.4
2.5°	883.8	884.1	882.1	876.6	873.3
5°	880.4	880.0	876.6	871.9	869.2
7.5°	870.5	871.2	870.2	863.4	859.7
10°	861.1	861.4	858.7	853.3	848.9
12.5°	848.9	848.5	844.8	842.1	835.0
15°	829.6	831.6	829.6	825.9	820.1
17.5°	811.0	811.0	812.3	805.9	801.5
20°	790.0	791.0	791.0	785.9	780.8
22.5°	765.6	768.6	769.6	764.2	758.1
25°	736.8	742.6	745.9	740.5	734.1
27.5°	701.9	710.7	720.9	716.8	709.7
30°	663.0	675.9	692.8	689.4	684.3
32.5°	626.1	638.9	662.3	661.0	658.2
35°	592.6	600.7	628.1	631.5	629.1
37.5°	560.7	568.2	593.9	601.7	599.7
40°	527.2	535.3	555.6	569.5	570.2
42.5°	494.0	501.8	518.4	538.4	538.4
45°	458.8	466.6	481.8	503.8	506.5
47.5°	424.3	432.4	447.3	469.3	473.7
50°	390.4	397.9	412.8	434.1	440.9
52.5°	355.2	363.3	377.9	397.5	407.3
55°	321.3	326.8	342.7	361.6	372.1
57.5°	286.1	291.2	309.1	325.4	336.2
60°	252.3	258.7	272.6	289.2	301.7
62.5°	219.8	226.5	238.4	252.9	267.2
65°	188.3	193.3	204.9	219.4	231.9
67.5°	157.8	162.2	173.7	183.9	197.1
70°	127.0	132.7	141.2	151.0	159.5
72.5°	102.3	104.6	111.7	118.8	127.7
75°	75.5	79.6	85.3	89.4	94.5
77.5°	54.2	56.5	59.9	63.3	68.1
80°	36.2	37.2	40.3	41.0	44.7
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)