

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: P554894

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-81-97-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: P554894
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-81-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

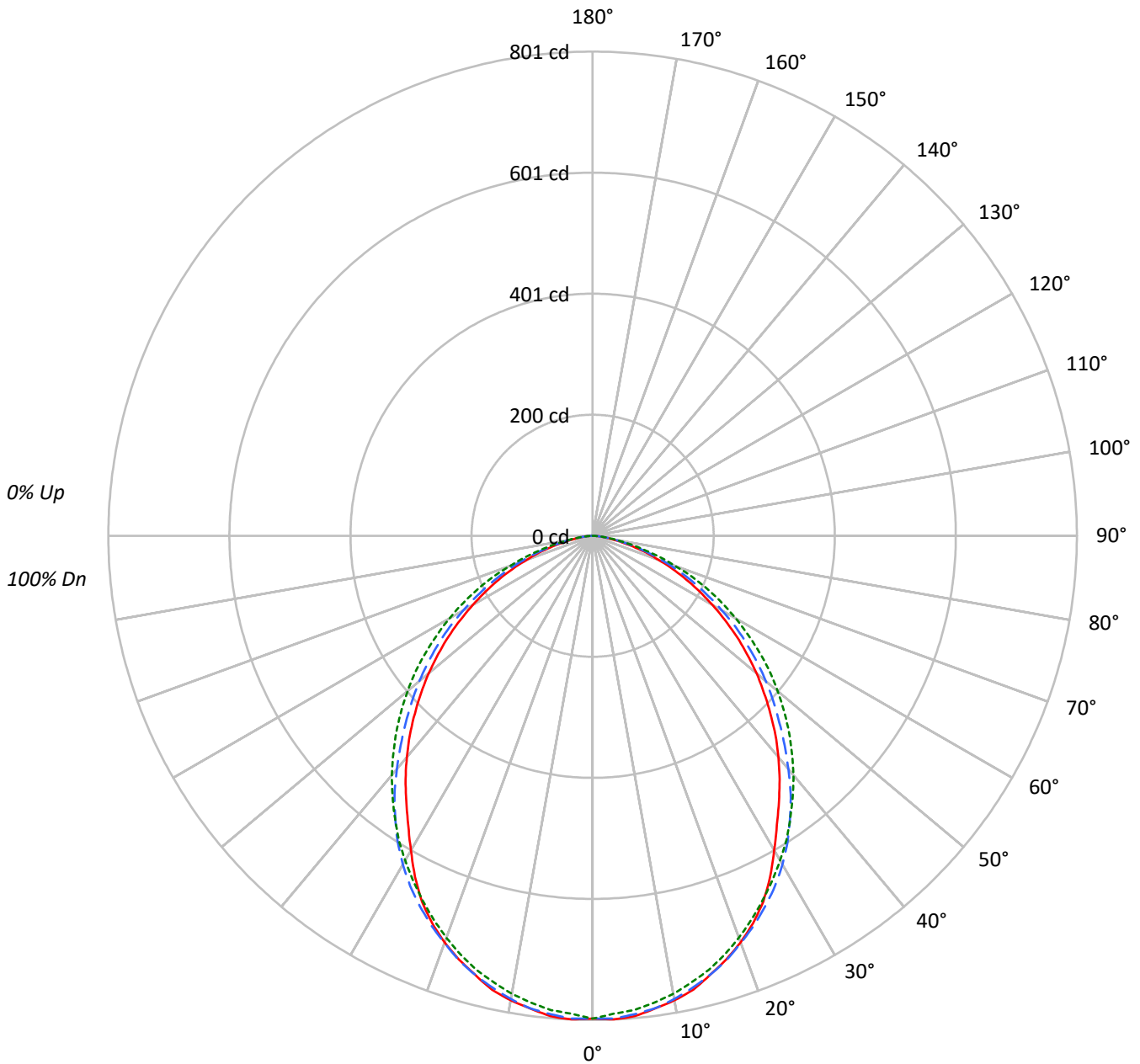
Lumens per Lamp: N/A
Luminaire Lumens: 1847.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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: P554894

CATALOG NUMBER: FUSL-12-2-LD4-2LO-30-UNV-81-97-EDD-90

Luminous Intensity Polar Plot





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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°	4299	4299	4299
5°	4311	4292	4256
10°	4265	4253	4204
15°	4189	4189	4141
20°	4100	4105	4053
25°	3965	4014	3951
30°	3734	3902	3854
35°	3528	3740	3746
40°	3357	3538	3631
45°	3165	3324	3494
50°	2962	3132	3345
55°	2732	2914	3164
60°	2461	2659	2943
65°	2173	2365	2677
70°	1811	2014	2274
75°	1422	1607	1780
80°	1017	1131	1255
85°	661	661	624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	4.1
10°-20°	211.3	11.4
20°-30°	308.7	16.7
30°-40°	350.5	19.0
40°-50°	338.3	18.3
50°-60°	279.1	15.1
60°-70°	185.8	10.1
70°-80°	83.2	4.5
80°-90°	14.9	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°	595.2	32.2
0°-40°	945.7	51.2
0°-60°	1563.1	84.6
0°-90°	1847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1847.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	798	798	794	790	788	76
15°	752	754	752	748	743	212
25°	668	673	676	671	665	306
35°	537	544	569	572	570	336
45°	416	423	437	457	459	321
55°	291	296	311	328	337	260
65°	171	175	186	199	210	169
75°	68	72	77	81	86	75
85°	11	11	11	10	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.8	798.8	798.8	798.8	798.8
2.5°	800.9	801.2	799.4	794.5	791.4
5°	797.9	797.6	794.5	790.2	787.7
7.5°	789.0	789.6	788.7	782.5	779.1
10°	780.4	780.7	778.2	773.3	769.3
12.5°	769.3	769.0	765.6	763.2	756.7
15°	751.8	753.7	751.8	748.5	743.2
17.5°	735.0	735.0	736.2	730.3	726.4
20°	715.9	716.8	716.8	712.2	707.6
22.5°	693.8	696.6	697.5	692.6	687.1
25°	667.7	673.0	676.0	671.1	665.3
27.5°	636.1	644.1	653.3	649.6	643.2
30°	600.8	612.5	627.9	624.8	620.2
32.5°	567.4	579.1	600.2	599.0	596.6
35°	537.0	544.4	569.2	572.3	570.2
37.5°	508.2	514.9	538.2	545.3	543.5
40°	477.8	485.2	503.6	516.2	516.8
42.5°	447.7	454.8	469.8	487.9	487.9
45°	415.8	422.9	436.7	456.6	459.1
47.5°	384.5	391.9	405.4	425.3	429.3
50°	353.8	360.6	374.1	393.4	399.5
52.5°	321.9	329.3	342.5	360.3	369.2
55°	291.2	296.1	310.6	327.7	337.2
57.5°	259.3	263.9	280.2	294.9	304.7
60°	228.6	234.4	247.0	262.1	273.4
62.5°	199.2	205.3	216.0	229.2	242.1
65°	170.6	175.2	185.7	198.9	210.2
67.5°	143.0	147.0	157.4	166.6	178.6
70°	115.1	120.3	128.0	136.9	144.5
72.5°	92.7	94.8	101.3	107.7	115.7
75°	68.4	72.1	77.3	81.0	85.6
77.5°	49.1	51.2	54.3	57.4	61.7
80°	32.8	33.8	36.5	37.1	40.5
82.5°	19.9	20.6	21.2	21.5	22.7
85°	10.7	10.7	10.7	10.1	10.1
87.5°	6.1	6.1	5.2	4.3	3.1
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)