

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: P554115

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-81-85-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: P554115  
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-LD4-1LO-30-UNV-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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**

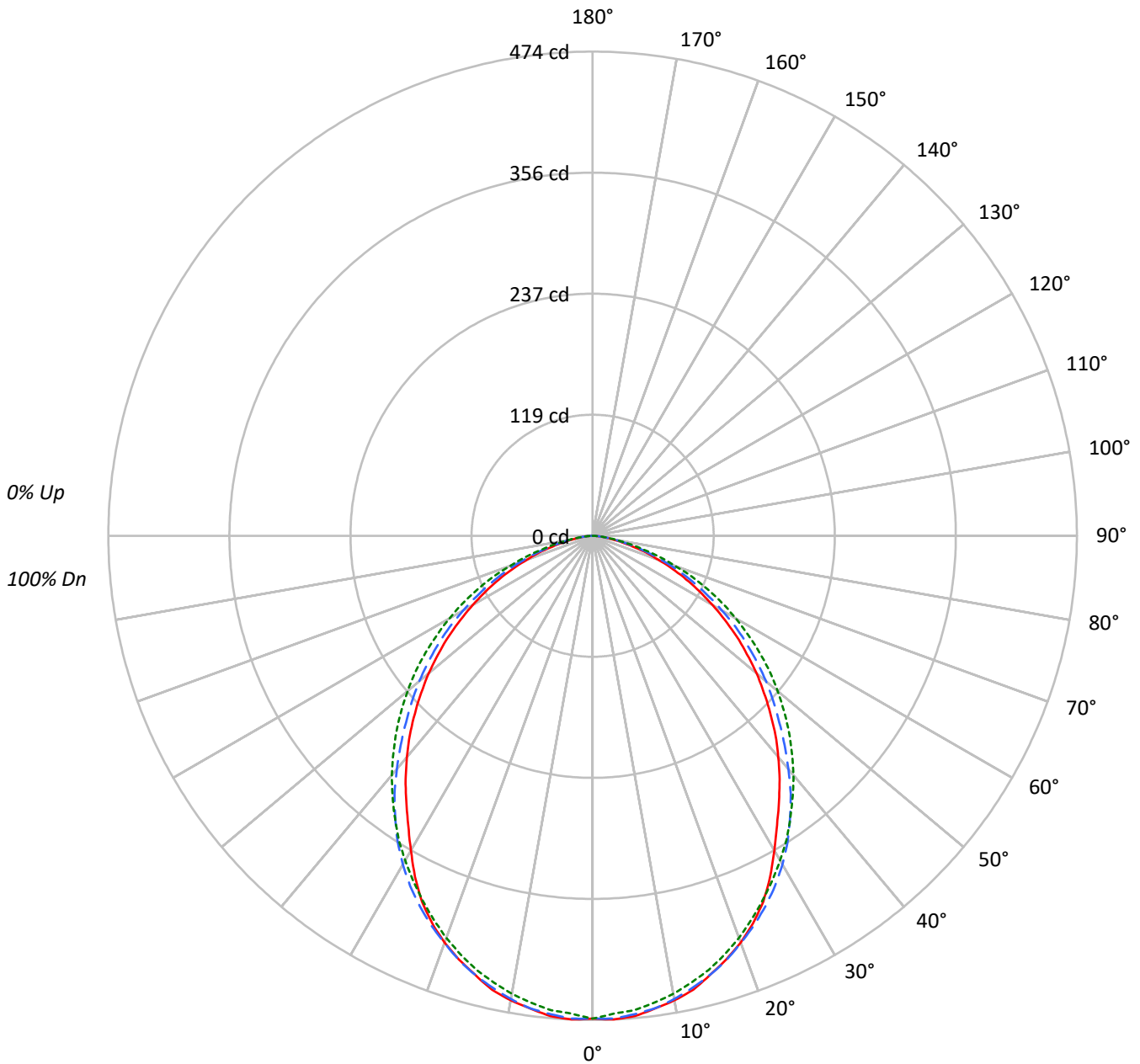
Lumens per Lamp: N/A  
Luminaire Lumens: 1093.0 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

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### 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°	2544	2544	2544
5°	2551	2540	2519
10°	2524	2517	2488
15°	2479	2479	2450
20°	2427	2430	2399
25°	2347	2376	2338
30°	2210	2309	2281
35°	2088	2213	2217
40°	1986	2094	2148
45°	1873	1967	2068
50°	1753	1854	1979
55°	1617	1725	1873
60°	1456	1574	1742
65°	1286	1400	1584
70°	1072	1191	1345
75°	842	952	1054
80°	601	669	744
85°	395	395	371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.5	4.1
10°-20°	125.0	11.4
20°-30°	182.7	16.7
30°-40°	207.4	19.0
40°-50°	200.2	18.3
50°-60°	165.2	15.1
60°-70°	110.0	10.1
70°-80°	49.2	4.5
80°-90°	8.8	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°	352.2	32.2
0°-40°	559.6	51.2
0°-60°	925.0	84.6
0°-90°	1093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	473	473	473	473	473	
5°	472	472	470	468	466	45
15°	445	446	445	443	440	125
25°	395	398	400	397	394	181
35°	318	322	337	339	337	199
45°	246	250	258	270	272	190
55°	172	175	184	194	200	154
65°	101	104	110	118	124	100
75°	40	43	46	48	51	44
85°	6	6	6	6	6	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	472.7	472.7	472.7	472.7	472.7
2.5°	474.0	474.1	473.1	470.2	468.3
5°	472.1	472.0	470.2	467.6	466.2
7.5°	466.9	467.2	466.7	463.1	461.1
10°	461.8	462.0	460.5	457.6	455.3
12.5°	455.3	455.1	453.1	451.6	447.8
15°	444.9	446.0	444.9	442.9	439.8
17.5°	434.9	434.9	435.6	432.2	429.8
20°	423.7	424.2	424.2	421.5	418.8
22.5°	410.6	412.2	412.8	409.9	406.6
25°	395.2	398.2	400.1	397.2	393.7
27.5°	376.4	381.2	386.6	384.4	380.6
30°	355.6	362.5	371.5	369.7	367.0
32.5°	335.8	342.7	355.2	354.5	353.0
35°	317.8	322.2	336.9	338.7	337.4
37.5°	300.7	304.7	318.5	322.7	321.6
40°	282.7	287.1	298.0	305.4	305.8
42.5°	264.9	269.1	278.0	288.7	288.7
45°	246.1	250.2	258.4	270.2	271.7
47.5°	227.5	231.9	239.9	251.7	254.1
50°	209.4	213.4	221.4	232.8	236.4
52.5°	190.5	194.9	202.7	213.2	218.5
55°	172.3	175.2	183.8	193.9	199.6
57.5°	153.4	156.2	165.8	174.5	180.3
60°	135.3	138.7	146.2	155.1	161.8
62.5°	117.9	121.5	127.8	135.7	143.3
65°	101.0	103.7	109.9	117.7	124.4
67.5°	84.6	87.0	93.2	98.6	105.7
70°	68.1	71.2	75.7	81.0	85.5
72.5°	54.8	56.1	59.9	63.7	68.5
75°	40.5	42.7	45.8	47.9	50.7
77.5°	29.1	30.3	32.1	34.0	36.5
80°	19.4	20.0	21.6	22.0	24.0
82.5°	11.8	12.2	12.5	12.7	13.4
85°	6.4	6.4	6.4	6.0	6.0
87.5°	3.6	3.6	3.1	2.5	1.8
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)