

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: P554136

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-82-88-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: P554136  
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-82-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

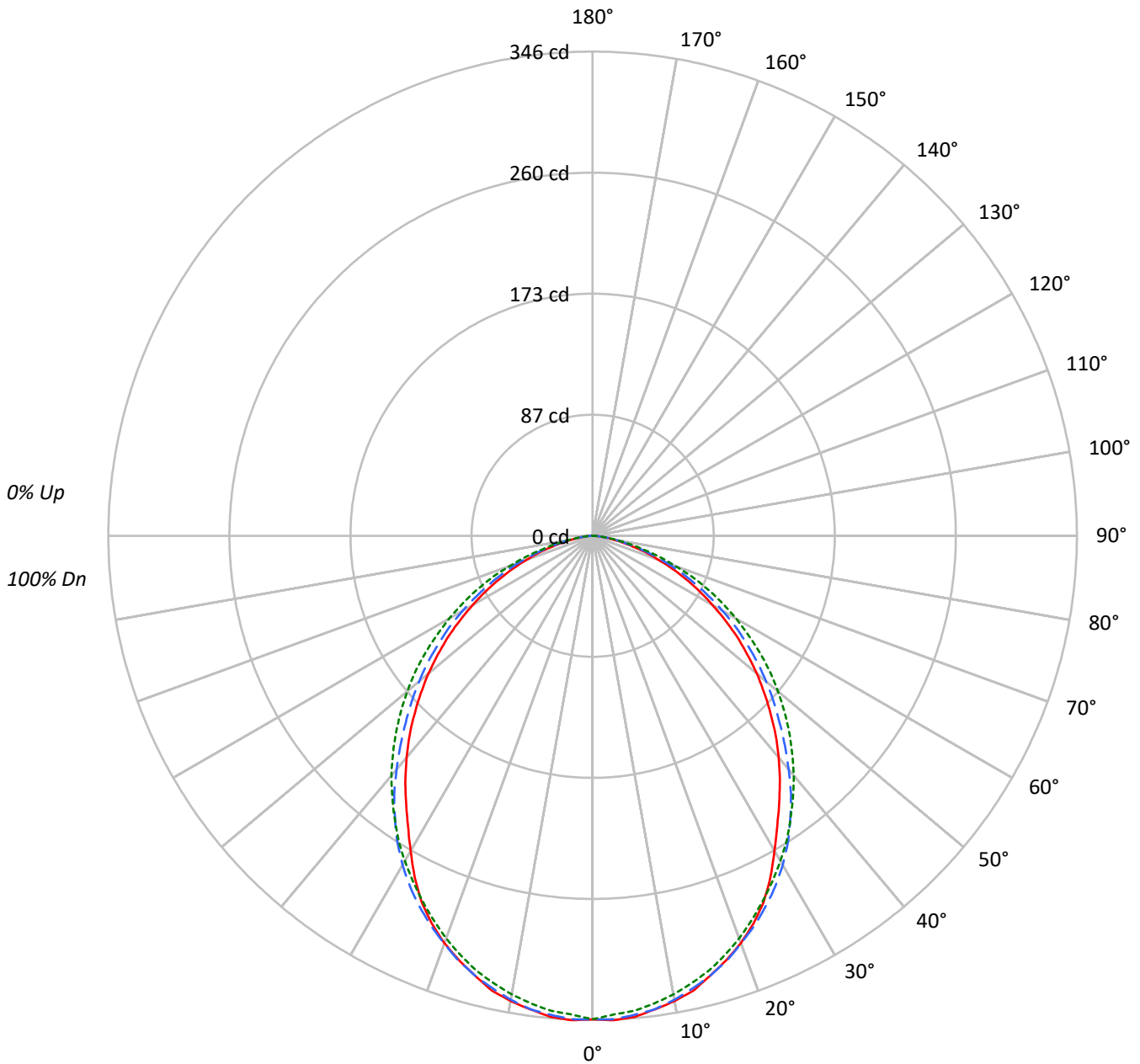
Lumens per Lamp: N/A  
Luminaire Lumens: 799.0 lumens  
Efficiency: N/A  
Efficacy: 68.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (Ain): 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°	1859	1859	1859
5°	1864	1857	1841
10°	1845	1840	1819
15°	1812	1812	1791
20°	1774	1776	1753
25°	1716	1736	1709
30°	1615	1688	1667
35°	1526	1618	1620
40°	1452	1530	1571
45°	1369	1438	1512
50°	1282	1355	1447
55°	1182	1260	1369
60°	1065	1151	1273
65°	940	1023	1158
70°	784	872	983
75°	616	697	769
80°	440	490	542
85°	284	284	272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.5	4.1
10°-20°	91.4	11.4
20°-30°	133.6	16.7
30°-40°	151.6	19.0
40°-50°	146.4	18.3
50°-60°	120.7	15.1
60°-70°	80.4	10.1
70°-80°	36.0	4.5
80°-90°	6.4	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°	257.5	32.2
0°-40°	409.1	51.2
0°-60°	676.2	84.6
0°-90°	799.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	799.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	346	346	346	346	346	
5°	345	345	344	342	341	33
15°	325	326	325	324	322	92
25°	289	291	292	290	288	132
35°	232	236	246	248	247	146
45°	180	183	189	198	199	139
55°	126	128	134	142	146	112
65°	74	76	80	86	91	73
75°	30	31	34	35	37	32
85°	5	5	5	4	4	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	345.5	345.5	345.5	345.5	345.5
2.5°	346.5	346.6	345.8	343.7	342.4
5°	345.1	345.0	343.7	341.8	340.8
7.5°	341.3	341.6	341.2	338.5	337.1
10°	337.6	337.7	336.7	334.5	332.8
12.5°	332.8	332.7	331.2	330.1	327.4
15°	325.2	326.0	325.2	323.8	321.5
17.5°	317.9	317.9	318.5	315.9	314.2
20°	309.7	310.1	310.1	308.1	306.1
22.5°	300.1	301.3	301.7	299.6	297.2
25°	288.9	291.1	292.4	290.3	287.8
27.5°	275.2	278.6	282.6	281.0	278.2
30°	259.9	265.0	271.6	270.3	268.3
32.5°	245.5	250.5	259.7	259.1	258.1
35°	232.3	235.5	246.3	247.6	246.6
37.5°	219.8	222.8	232.8	235.9	235.1
40°	206.7	209.9	217.8	223.3	223.6
42.5°	193.7	196.7	203.2	211.1	211.1
45°	179.9	182.9	188.9	197.5	198.6
47.5°	166.3	169.5	175.4	184.0	185.7
50°	153.1	156.0	161.8	170.2	172.8
52.5°	139.3	142.4	148.1	155.8	159.7
55°	126.0	128.1	134.3	141.8	145.9
57.5°	112.2	114.2	121.2	127.6	131.8
60°	98.9	101.4	106.9	113.4	118.3
62.5°	86.2	88.8	93.5	99.2	104.7
65°	73.8	75.8	80.3	86.0	90.9
67.5°	61.9	63.6	68.1	72.1	77.3
70°	49.8	52.0	55.4	59.2	62.5
72.5°	40.1	41.0	43.8	46.6	50.0
75°	29.6	31.2	33.5	35.0	37.0
77.5°	21.2	22.2	23.5	24.8	26.7
80°	14.2	14.6	15.8	16.1	17.5
82.5°	8.6	8.9	9.2	9.3	9.8
85°	4.6	4.6	4.6	4.4	4.4
87.5°	2.7	2.7	2.3	1.9	1.3
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)