

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: P554130

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-82-85-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: P554130  
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-82-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

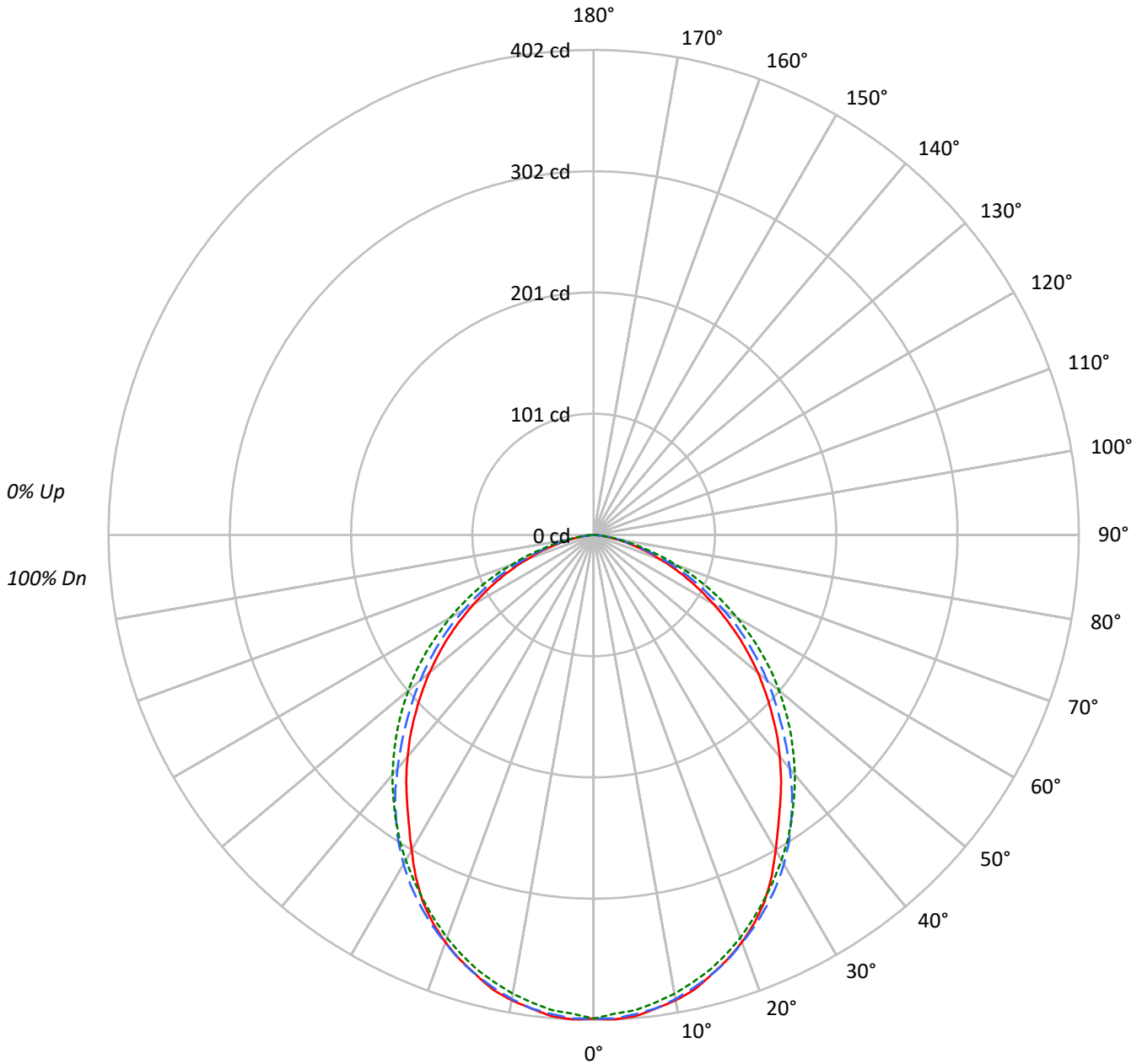
Lumens per Lamp: N/A  
Luminaire Lumens: 927.0 lumens  
Efficiency: N/A  
Efficacy: 79.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2158	2158	2158
5°	2163	2154	2136
10°	2141	2135	2110
15°	2102	2102	2078
20°	2058	2061	2034
25°	1990	2015	1983
30°	1874	1958	1935
35°	1771	1877	1880
40°	1685	1775	1822
45°	1588	1668	1754
50°	1487	1572	1679
55°	1372	1463	1589
60°	1235	1335	1477
65°	1090	1187	1344
70°	910	1010	1141
75°	713	807	894
80°	511	567	629
85°	333	333	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.7	4.1
10°-20°	106.0	11.4
20°-30°	155.0	16.7
30°-40°	175.9	19.0
40°-50°	169.8	18.3
50°-60°	140.1	15.1
60°-70°	93.3	10.1
70°-80°	41.7	4.5
80°-90°	7.5	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°	298.7	32.2
0°-40°	474.6	51.2
0°-60°	784.5	84.6
0°-90°	927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	927.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	401	401	401	401	401	
5°	400	400	399	397	395	38
15°	377	378	377	376	373	106
25°	335	338	339	337	334	153
35°	270	273	286	287	286	169
45°	209	212	219	229	230	161
55°	146	149	156	164	169	130
65°	86	88	93	100	106	85
75°	34	36	39	41	43	38
85°	5	5	5	5	5	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	400.9	400.9	400.9	400.9	400.9
2.5°	402.0	402.1	401.2	398.7	397.2
5°	400.4	400.3	398.7	396.6	395.4
7.5°	396.0	396.3	395.8	392.7	391.0
10°	391.7	391.8	390.6	388.1	386.1
12.5°	386.1	386.0	384.3	383.0	379.8
15°	377.3	378.3	377.3	375.6	373.0
17.5°	368.9	368.9	369.5	366.6	364.6
20°	359.3	359.8	359.8	357.5	355.2
22.5°	348.2	349.6	350.1	347.6	344.8
25°	335.1	337.8	339.3	336.8	333.9
27.5°	319.3	323.3	327.9	326.1	322.8
30°	301.6	307.4	315.1	313.6	311.3
32.5°	284.8	290.6	301.3	300.6	299.4
35°	269.5	273.2	285.7	287.2	286.2
37.5°	255.1	258.4	270.1	273.7	272.8
40°	239.8	243.5	252.7	259.1	259.4
42.5°	224.7	228.3	235.8	244.9	244.9
45°	208.7	212.2	219.2	229.2	230.4
47.5°	193.0	196.7	203.5	213.5	215.5
50°	177.6	181.0	187.7	197.4	200.5
52.5°	161.6	165.3	171.9	180.8	185.3
55°	146.2	148.6	155.9	164.5	169.3
57.5°	130.1	132.5	140.6	148.0	152.9
60°	114.7	117.7	124.0	131.5	137.2
62.5°	100.0	103.0	108.4	115.0	121.5
65°	85.6	87.9	93.2	99.8	105.5
67.5°	71.8	73.8	79.0	83.6	89.6
70°	57.8	60.4	64.2	68.7	72.5
72.5°	46.5	47.6	50.8	54.1	58.1
75°	34.3	36.2	38.8	40.7	43.0
77.5°	24.6	25.7	27.3	28.8	31.0
80°	16.5	16.9	18.3	18.6	20.3
82.5°	10.0	10.3	10.6	10.8	11.4
85°	5.4	5.4	5.4	5.1	5.1
87.5°	3.1	3.1	2.6	2.2	1.5
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)