

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: P554328

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-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: P554328  
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-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

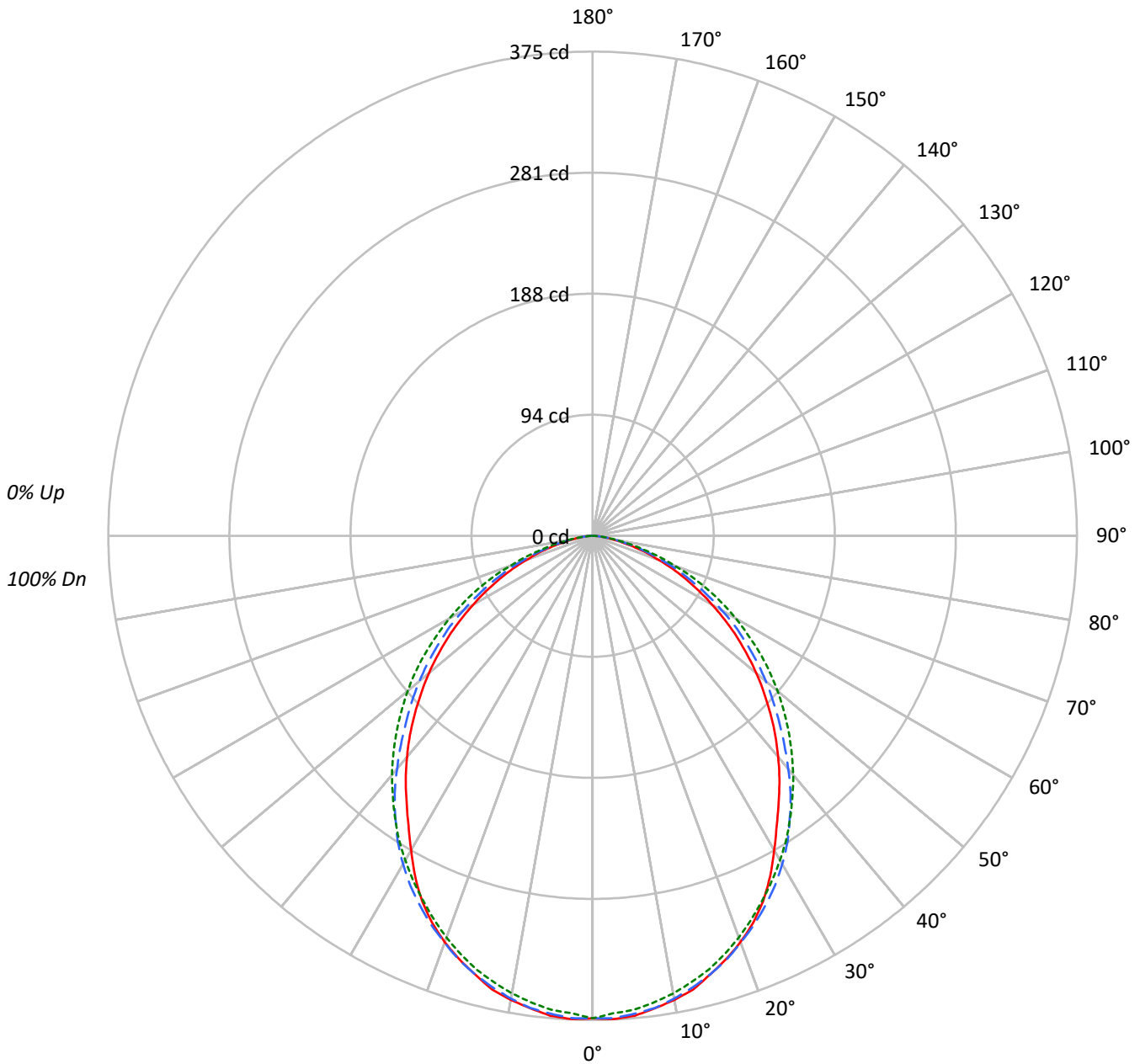
Lumens per Lamp: N/A  
Luminaire Lumens: 864.0 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2011	2011	2011
5°	2016	2008	1991
10°	1995	1989	1967
15°	1960	1960	1937
20°	1918	1920	1896
25°	1855	1878	1848
30°	1747	1825	1803
35°	1650	1750	1752
40°	1570	1655	1698
45°	1480	1555	1634
50°	1386	1465	1565
55°	1278	1363	1481
60°	1151	1244	1377
65°	1016	1105	1252
70°	847	943	1064
75°	665	753	834
80°	477	530	586
85°	309	309	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.2	4.1
10°-20°	98.8	11.4
20°-30°	144.4	16.7
30°-40°	163.9	19.0
40°-50°	158.3	18.3
50°-60°	130.6	15.1
60°-70°	86.9	10.1
70°-80°	38.9	4.5
80°-90°	6.9	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°	278.4	32.2
0°-40°	442.4	51.2
0°-60°	731.2	84.6
0°-90°	864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	864.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	373	373	372	370	368	35
15°	352	353	352	350	348	99
25°	312	315	316	314	311	143
35°	251	255	266	268	267	157
45°	194	198	204	214	215	150
55°	136	138	145	153	158	122
65°	80	82	87	93	98	79
75°	32	34	36	38	40	35
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°	373.7	373.7	373.7	373.7	373.7
2.5°	374.7	374.8	373.9	371.6	370.2
5°	373.2	373.1	371.6	369.6	368.5
7.5°	369.1	369.4	368.9	366.0	364.5
10°	365.0	365.2	364.0	361.7	359.9
12.5°	359.9	359.7	358.2	357.0	354.0
15°	351.7	352.6	351.7	350.1	347.7
17.5°	343.8	343.8	344.4	341.6	339.8
20°	334.9	335.3	335.3	333.2	331.0
22.5°	324.6	325.9	326.3	324.0	321.4
25°	312.4	314.8	316.2	313.9	311.2
27.5°	297.6	301.3	305.6	303.9	300.9
30°	281.1	286.5	293.7	292.3	290.1
32.5°	265.4	270.9	280.8	280.2	279.1
35°	251.2	254.7	266.3	267.7	266.7
37.5°	237.7	240.9	251.8	255.1	254.2
40°	223.5	227.0	235.6	241.4	241.7
42.5°	209.4	212.7	219.8	228.2	228.2
45°	194.5	197.8	204.3	213.6	214.7
47.5°	179.9	183.3	189.6	199.0	200.8
50°	165.5	168.7	175.0	184.0	186.9
52.5°	150.6	154.0	160.2	168.5	172.7
55°	136.2	138.5	145.3	153.3	157.8
57.5°	121.3	123.5	131.1	138.0	142.5
60°	106.9	109.7	115.6	122.6	127.9
62.5°	93.2	96.0	101.1	107.2	113.3
65°	79.8	82.0	86.8	93.0	98.3
67.5°	66.9	68.8	73.6	77.9	83.5
70°	53.8	56.3	59.9	64.0	67.6
72.5°	43.4	44.4	47.4	50.4	54.1
75°	32.0	33.7	36.2	37.9	40.1
77.5°	23.0	24.0	25.4	26.8	28.9
80°	15.4	15.8	17.1	17.4	18.9
82.5°	9.3	9.6	9.9	10.0	10.6
85°	5.0	5.0	5.0	4.7	4.7
87.5°	2.9	2.9	2.4	2.0	1.4
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)