

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: P554137

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-82-88-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: P554137  
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  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

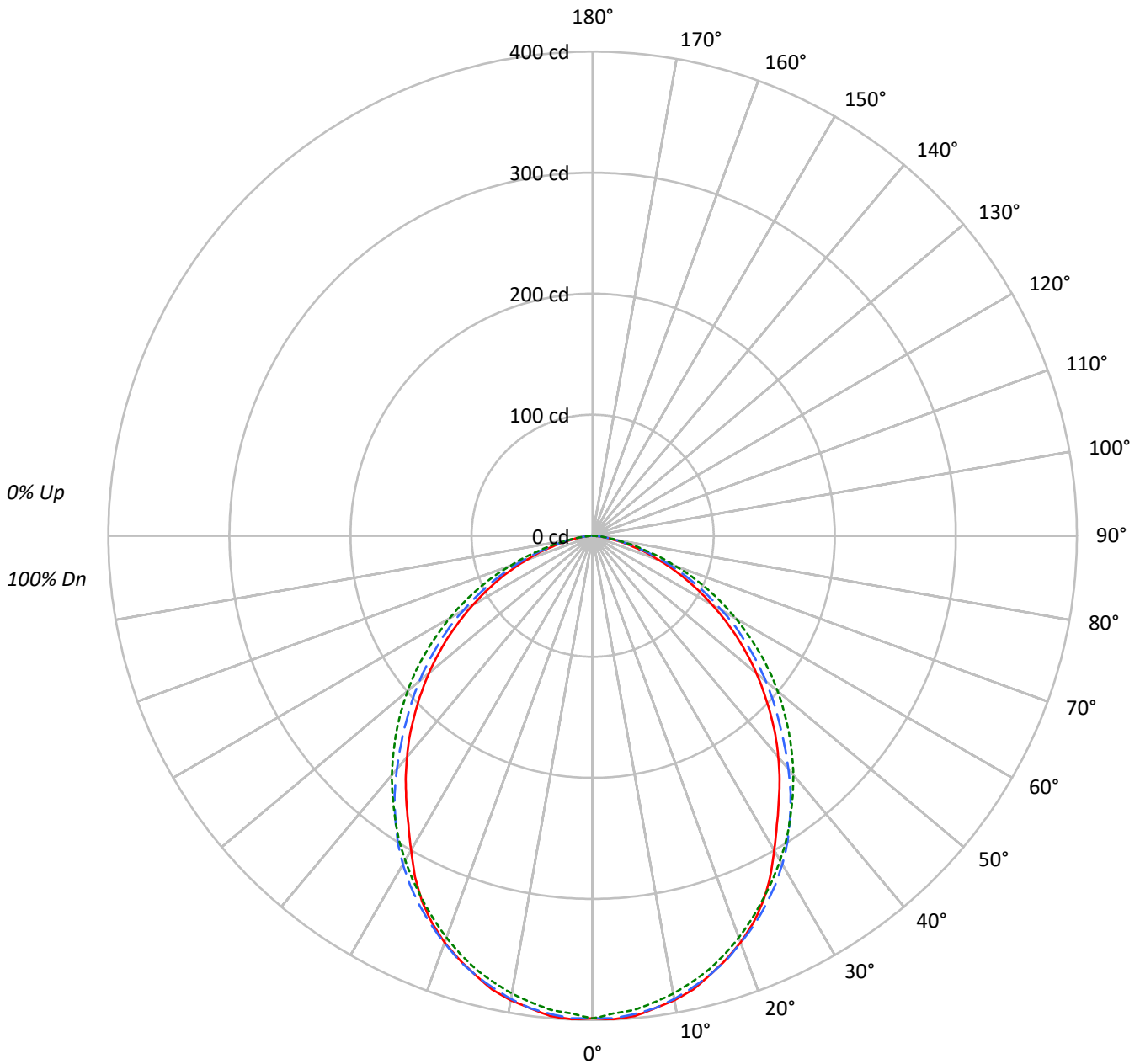
Lumens per Lamp: N/A  
Luminaire Lumens: 922.0 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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°	2146	2146	2146
5°	2152	2143	2124
10°	2129	2123	2099
15°	2091	2091	2067
20°	2047	2049	2023
25°	1979	2004	1972
30°	1864	1948	1924
35°	1761	1867	1870
40°	1676	1766	1813
45°	1580	1659	1744
50°	1479	1563	1670
55°	1364	1454	1580
60°	1228	1327	1469
65°	1085	1181	1336
70°	903	1006	1136
75°	711	803	888
80°	508	564	626
85°	333	333	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.5	4.1
10°-20°	105.5	11.4
20°-30°	154.1	16.7
30°-40°	175.0	19.0
40°-50°	168.9	18.3
50°-60°	139.3	15.1
60°-70°	92.8	10.1
70°-80°	41.5	4.5
80°-90°	7.4	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°	297.1	32.2
0°-40°	472.1	51.2
0°-60°	780.3	84.6
0°-90°	922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	922.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	398	398	397	394	393	38
15°	375	376	375	374	371	106
25°	333	336	338	335	332	153
35°	268	272	284	286	285	168
45°	208	211	218	228	229	160
55°	145	148	155	164	168	130
65°	85	88	93	99	105	84
75°	34	36	39	40	43	37
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°	398.7	398.7	398.7	398.7	398.7
2.5°	399.8	400.0	399.0	396.6	395.1
5°	398.3	398.1	396.6	394.5	393.2
7.5°	393.8	394.1	393.7	390.6	388.9
10°	389.6	389.7	388.5	386.0	384.0
12.5°	384.0	383.9	382.2	381.0	377.8
15°	375.3	376.2	375.3	373.6	371.0
17.5°	366.9	366.9	367.5	364.6	362.6
20°	357.4	357.8	357.8	355.5	353.2
22.5°	346.4	347.7	348.2	345.7	343.0
25°	333.3	335.9	337.5	335.0	332.1
27.5°	317.6	321.5	326.1	324.3	321.1
30°	299.9	305.8	313.4	311.9	309.6
32.5°	283.2	289.1	299.6	299.0	297.8
35°	268.1	271.8	284.2	285.7	284.6
37.5°	253.7	257.0	268.7	272.2	271.3
40°	238.5	242.2	251.4	257.7	258.0
42.5°	223.5	227.0	234.5	243.6	243.6
45°	207.6	211.1	218.0	227.9	229.2
47.5°	191.9	195.6	202.4	212.3	214.3
50°	176.6	180.0	186.7	196.4	199.4
52.5°	160.7	164.4	171.0	179.8	184.3
55°	145.4	147.8	155.0	163.6	168.4
57.5°	129.4	131.7	139.9	147.2	152.1
60°	114.1	117.0	123.3	130.8	136.5
62.5°	99.4	102.5	107.8	114.4	120.9
65°	85.2	87.5	92.7	99.3	104.9
67.5°	71.4	73.4	78.6	83.2	89.2
70°	57.4	60.0	63.9	68.3	72.2
72.5°	46.3	47.3	50.6	53.8	57.8
75°	34.2	36.0	38.6	40.4	42.7
77.5°	24.5	25.6	27.1	28.6	30.8
80°	16.4	16.9	18.2	18.5	20.2
82.5°	10.0	10.3	10.6	10.7	11.3
85°	5.4	5.4	5.4	5.1	5.1
87.5°	3.1	3.1	2.6	2.1	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)