

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: P554246

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-81-87-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: P554246  
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-40-UNV-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

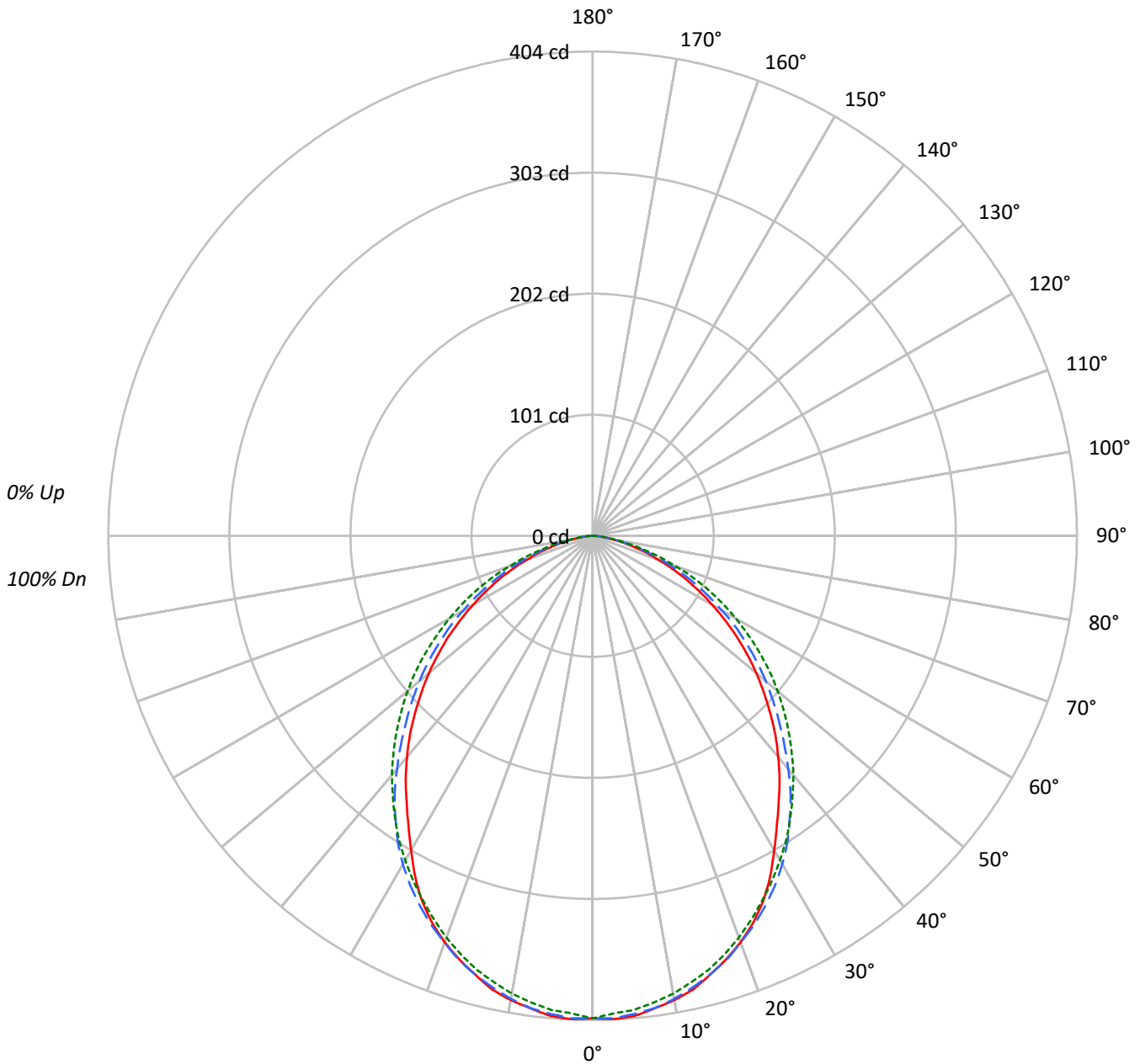
Lumens per Lamp: N/A  
Luminaire Lumens: 931.0 lumens  
Efficiency: N/A  
Efficacy: 79.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2167	2167	2167
5°	2173	2164	2145
10°	2150	2144	2119
15°	2112	2112	2087
20°	2067	2069	2043
25°	1999	2024	1991
30°	1882	1967	1943
35°	1779	1885	1888
40°	1692	1783	1830
45°	1595	1675	1761
50°	1493	1579	1686
55°	1377	1468	1595
60°	1240	1340	1483
65°	1095	1192	1350
70°	913	1015	1147
75°	717	811	898
80°	514	570	632
85°	333	333	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.9	4.1
10°-20°	106.5	11.4
20°-30°	155.6	16.7
30°-40°	176.7	19.0
40°-50°	170.5	18.3
50°-60°	140.7	15.1
60°-70°	93.7	10.1
70°-80°	41.9	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°	300.0	32.2
0°-40°	476.7	51.2
0°-60°	787.9	84.6
0°-90°	931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	931.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	402	402	400	398	397	38
15°	379	380	379	377	375	107
25°	337	339	341	338	335	154
35°	271	274	287	288	287	170
45°	210	213	220	230	231	162
55°	147	149	156	165	170	131
65°	86	88	94	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°	402.6	402.6	402.6	402.6	402.6
2.5°	403.7	403.9	402.9	400.5	398.9
5°	402.2	402.0	400.5	398.3	397.1
7.5°	397.7	398.0	397.5	394.4	392.7
10°	393.4	393.5	392.3	389.8	387.8
12.5°	387.8	387.6	385.9	384.7	381.4
15°	379.0	379.9	379.0	377.3	374.6
17.5°	370.5	370.5	371.1	368.1	366.1
20°	360.9	361.3	361.3	359.0	356.7
22.5°	349.7	351.1	351.6	349.1	346.3
25°	336.6	339.2	340.8	338.3	335.3
27.5°	320.7	324.7	329.3	327.5	324.2
30°	302.9	308.7	316.5	314.9	312.6
32.5°	286.0	291.9	302.6	301.9	300.7
35°	270.7	274.4	286.9	288.5	287.4
37.5°	256.2	259.6	271.3	274.9	273.9
40°	240.8	244.5	253.8	260.2	260.5
42.5°	225.7	229.2	236.8	245.9	245.9
45°	209.6	213.1	220.1	230.2	231.4
47.5°	193.8	197.5	204.3	214.4	216.4
50°	178.3	181.7	188.6	198.3	201.4
52.5°	162.3	166.0	172.6	181.6	186.1
55°	146.8	149.3	156.5	165.2	170.0
57.5°	130.7	133.0	141.2	148.6	153.6
60°	115.2	118.2	124.5	132.1	137.8
62.5°	100.4	103.5	108.9	115.5	122.0
65°	86.0	88.3	93.6	100.2	106.0
67.5°	72.1	74.1	79.4	84.0	90.0
70°	58.0	60.6	64.5	69.0	72.9
72.5°	46.7	47.8	51.0	54.3	58.3
75°	34.5	36.3	39.0	40.8	43.2
77.5°	24.7	25.8	27.4	28.9	31.1
80°	16.6	17.0	18.4	18.7	20.4
82.5°	10.1	10.4	10.7	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)