

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: P554216

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-93-88-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: P554216  
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-35-UNV-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

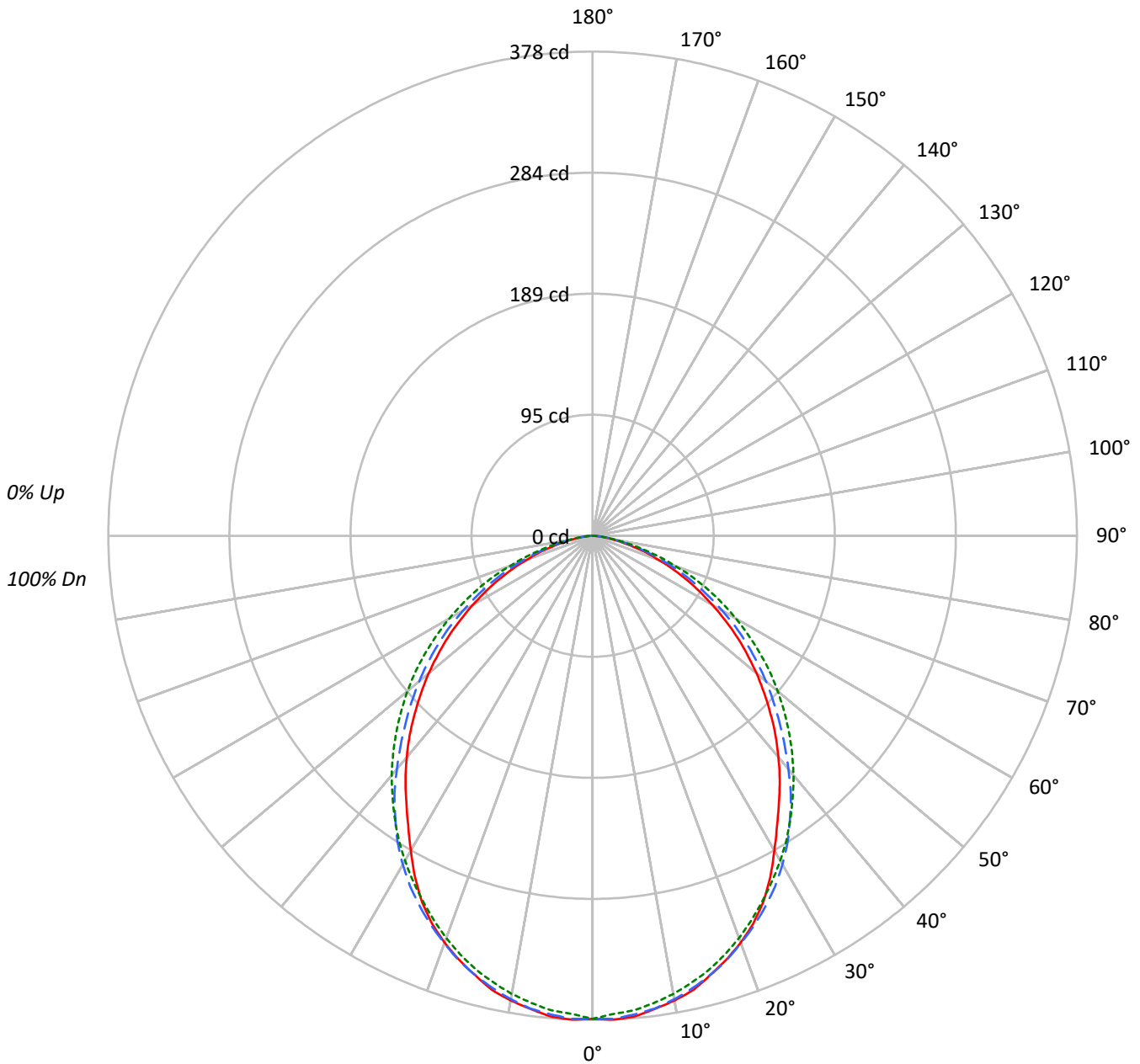
Lumens per Lamp: N/A  
Luminaire Lumens: 872.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				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°	2030	2030	2030
5°	2035	2026	2009
10°	2013	2008	1985
15°	1978	1978	1955
20°	1936	1938	1914
25°	1872	1896	1865
30°	1763	1842	1820
35°	1666	1765	1769
40°	1585	1670	1714
45°	1494	1569	1649
50°	1398	1479	1579
55°	1290	1376	1494
60°	1161	1255	1390
65°	1026	1117	1263
70°	854	950	1073
75°	672	759	840
80°	480	533	592
85°	315	315	296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	4.1
10°-20°	99.8	11.4
20°-30°	145.8	16.7
30°-40°	165.5	19.0
40°-50°	159.7	18.3
50°-60°	131.8	15.1
60°-70°	87.7	10.1
70°-80°	39.3	4.5
80°-90°	7.0	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°	281.0	32.2
0°-40°	446.5	51.2
0°-60°	738.0	84.6
0°-90°	872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	872.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	377	376	375	373	372	36
15°	355	356	355	353	351	100
25°	315	318	319	317	314	144
35°	254	257	269	270	269	159
45°	196	200	206	216	217	151
55°	138	140	147	155	159	123
65°	81	83	88	94	99	80
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°	377.1	377.1	377.1	377.1	377.1
2.5°	378.1	378.3	377.4	375.1	373.6
5°	376.7	376.5	375.1	373.1	371.9
7.5°	372.5	372.8	372.3	369.4	367.8
10°	368.4	368.6	367.4	365.1	363.2
12.5°	363.2	363.1	361.5	360.3	357.3
15°	355.0	355.8	355.0	353.4	350.9
17.5°	347.0	347.0	347.6	344.8	342.9
20°	338.0	338.4	338.4	336.3	334.1
22.5°	327.6	328.9	329.3	327.0	324.4
25°	315.3	317.7	319.2	316.8	314.1
27.5°	300.3	304.1	308.4	306.7	303.7
30°	283.7	289.2	296.4	295.0	292.8
32.5°	267.9	273.4	283.4	282.8	281.6
35°	253.5	257.0	268.7	270.2	269.2
37.5°	239.9	243.1	254.1	257.4	256.6
40°	225.6	229.1	237.7	243.7	244.0
42.5°	211.4	214.7	221.8	230.4	230.4
45°	196.3	199.6	206.2	215.6	216.7
47.5°	181.5	185.0	191.4	200.8	202.7
50°	167.0	170.2	176.6	185.7	188.6
52.5°	152.0	155.5	161.7	170.1	174.3
55°	137.5	139.8	146.6	154.7	159.2
57.5°	122.4	124.6	132.3	139.2	143.9
60°	107.9	110.7	116.6	123.7	129.1
62.5°	94.0	96.9	102.0	108.2	114.3
65°	80.6	82.7	87.7	93.9	99.2
67.5°	67.5	69.4	74.3	78.7	84.3
70°	54.3	56.8	60.4	64.6	68.2
72.5°	43.8	44.8	47.8	50.9	54.6
75°	32.3	34.0	36.5	38.2	40.4
77.5°	23.2	24.2	25.6	27.1	29.1
80°	15.5	15.9	17.2	17.5	19.1
82.5°	9.4	9.7	10.0	10.1	10.7
85°	5.1	5.1	5.1	4.8	4.8
87.5°	2.9	2.9	2.5	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)