

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: P554212

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-93-86-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: P554212  
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-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

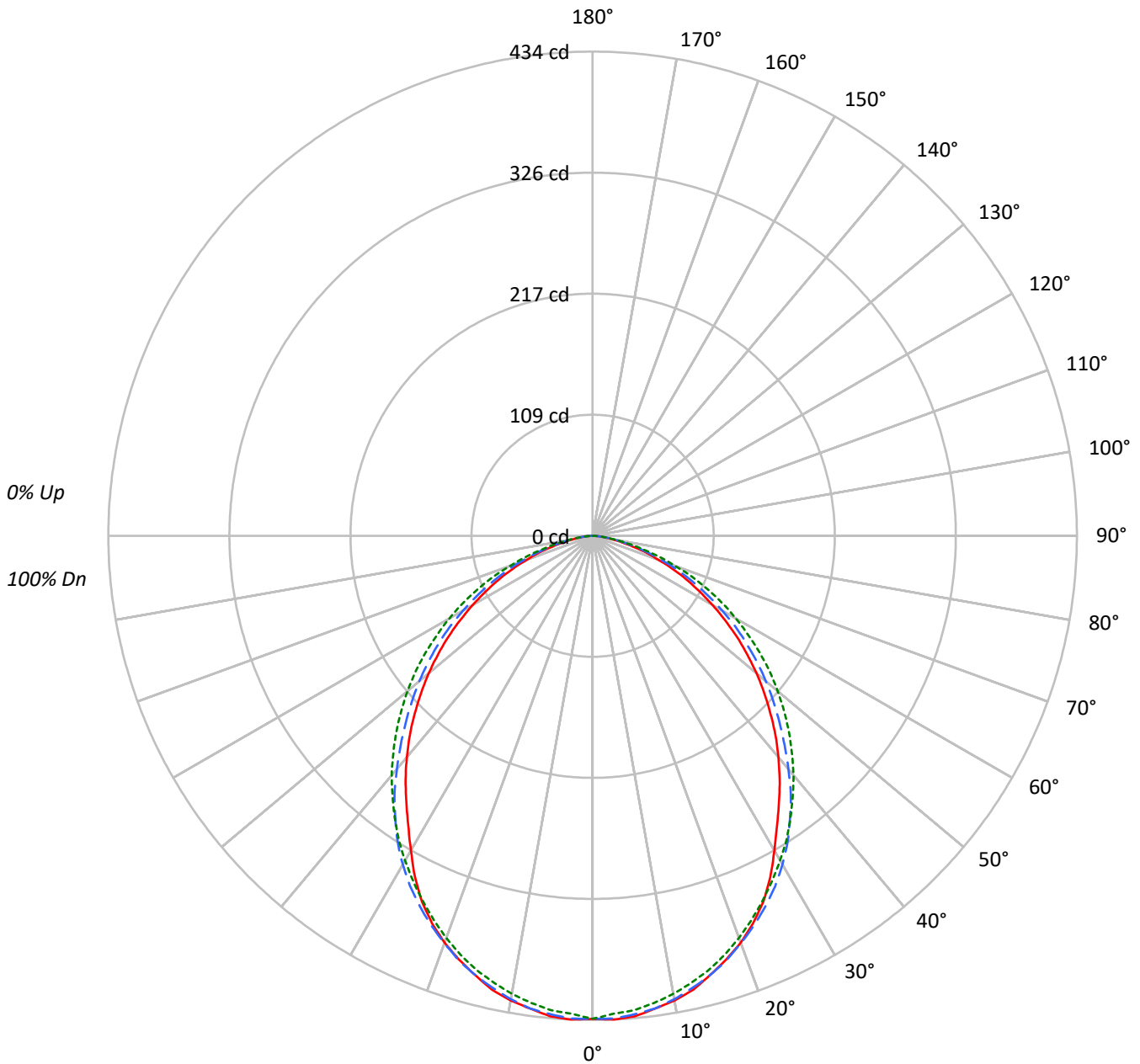
Lumens per Lamp: N/A  
Luminaire Lumens: 1001.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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°	2330	2330	2330
5°	2336	2326	2306
10°	2311	2305	2278
15°	2271	2271	2244
20°	2222	2225	2196
25°	2149	2176	2141
30°	2023	2115	2089
35°	1912	2027	2030
40°	1819	1917	1968
45°	1716	1802	1894
50°	1606	1697	1813
55°	1481	1579	1715
60°	1334	1441	1595
65°	1178	1281	1450
70°	982	1092	1232
75°	771	871	965
80°	552	614	682
85°	358	358	340



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.8	4.1
10°-20°	114.5	11.4
20°-30°	167.3	16.7
30°-40°	189.9	19.0
40°-50°	183.4	18.3
50°-60°	151.2	15.1
60°-70°	100.7	10.1
70°-80°	45.1	4.5
80°-90°	8.1	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°	322.6	32.2
0°-40°	512.5	51.2
0°-60°	847.1	84.6
0°-90°	1001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	433	433	433	433	433	
5°	432	432	431	428	427	41
15°	408	408	408	406	403	115
25°	362	365	366	364	361	166
35°	291	295	308	310	309	182
45°	225	229	237	248	249	174
55°	158	160	168	178	183	141
65°	92	95	101	108	114	92
75°	37	39	42	44	46	41
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	432.9	432.9	432.9	432.9	432.9
2.5°	434.1	434.2	433.2	430.6	428.9
5°	432.4	432.2	430.6	428.2	426.9
7.5°	427.6	427.9	427.4	424.1	422.3
10°	422.9	423.1	421.8	419.1	416.9
12.5°	416.9	416.8	414.9	413.6	410.1
15°	407.5	408.5	407.5	405.6	402.8
17.5°	398.3	398.3	399.0	395.8	393.7
20°	388.0	388.5	388.5	386.0	383.5
22.5°	376.0	377.5	378.0	375.4	372.4
25°	361.9	364.7	366.4	363.7	360.6
27.5°	344.8	349.1	354.1	352.1	348.6
30°	325.6	332.0	340.3	338.6	336.1
32.5°	307.5	313.8	325.3	324.6	323.3
35°	291.0	295.0	308.5	310.2	309.0
37.5°	275.4	279.1	291.7	295.5	294.5
40°	258.9	262.9	272.9	279.7	280.1
42.5°	242.6	246.5	254.6	264.4	264.4
45°	225.4	229.2	236.7	247.5	248.8
47.5°	208.4	212.4	219.7	230.5	232.7
50°	191.8	195.4	202.7	213.2	216.5
52.5°	174.5	178.5	185.6	195.2	200.1
55°	157.8	160.5	168.3	177.6	182.8
57.5°	140.5	143.0	151.8	159.8	165.1
60°	123.9	127.1	133.9	142.0	148.2
62.5°	107.9	111.3	117.1	124.2	131.2
65°	92.5	95.0	100.6	107.8	113.9
67.5°	77.5	79.7	85.3	90.3	96.8
70°	62.4	65.2	69.4	74.2	78.3
72.5°	50.2	51.4	54.9	58.4	62.7
75°	37.1	39.1	41.9	43.9	46.4
77.5°	26.6	27.8	29.4	31.1	33.4
80°	17.8	18.3	19.8	20.1	22.0
82.5°	10.8	11.1	11.5	11.6	12.3
85°	5.8	5.8	5.8	5.5	5.5
87.5°	3.3	3.3	2.8	2.3	1.7
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)