

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: P554054

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-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: P554054  
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-LD4-1HI-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

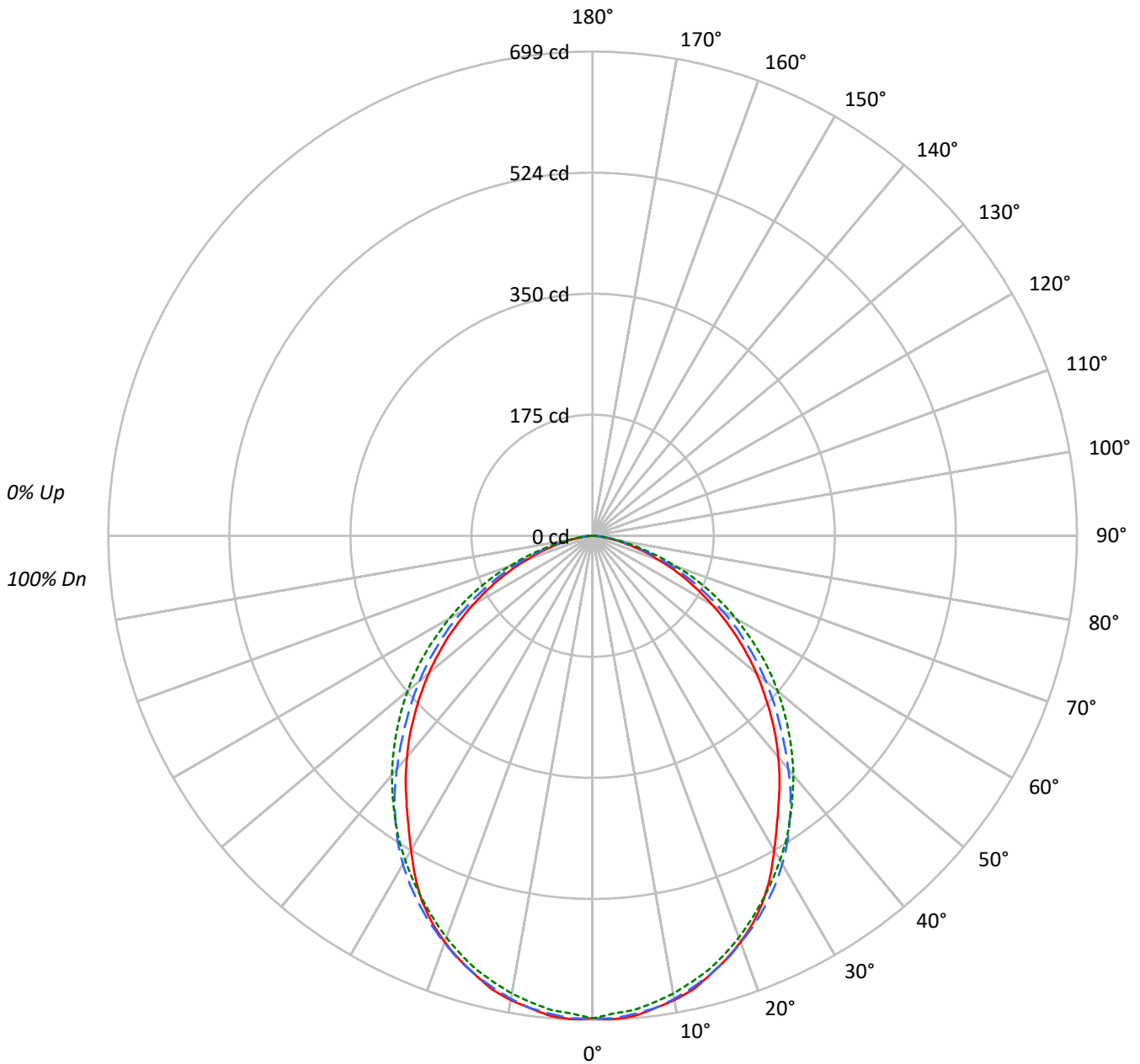
Lumens per Lamp: N/A  
Luminaire Lumens: 1611.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	3750	3750	3750
5°	3760	3744	3712
10°	3720	3710	3667
15°	3654	3654	3612
20°	3576	3581	3535
25°	3458	3502	3446
30°	3257	3403	3361
35°	3077	3262	3267
40°	2928	3086	3166
45°	2761	2899	3048
50°	2584	2732	2918
55°	2383	2542	2761
60°	2146	2320	2567
65°	1895	2062	2334
70°	1580	1756	1984
75°	1241	1404	1553
80°	886	989	1094
85°	580	580	543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	4.1
10°-20°	184.3	11.4
20°-30°	269.3	16.7
30°-40°	305.7	19.0
40°-50°	295.1	18.3
50°-60°	243.4	15.1
60°-70°	162.1	10.1
70°-80°	72.5	4.5
80°-90°	13.0	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°	519.2	32.2
0°-40°	824.9	51.2
0°-60°	1363.4	84.6
0°-90°	1611.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1611.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	697	697	697	697	697	
5°	696	696	693	689	687	66
15°	656	657	656	653	648	185
25°	582	587	590	585	580	267
35°	468	475	496	499	497	293
45°	363	369	381	398	400	280
55°	254	258	271	286	294	227
65°	149	153	162	173	183	148
75°	60	63	68	71	75	65
85°	9	9	9	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	696.7	696.7	696.7	696.7	696.7
2.5°	698.6	698.9	697.3	693.0	690.3
5°	695.9	695.6	693.0	689.2	687.1
7.5°	688.2	688.7	687.9	682.5	679.6
10°	680.7	680.9	678.8	674.5	671.0
12.5°	671.0	670.8	667.8	665.7	660.0
15°	655.8	657.4	655.8	652.8	648.3
17.5°	641.0	641.0	642.1	637.0	633.5
20°	624.4	625.3	625.3	621.2	617.2
22.5°	605.2	607.6	608.4	604.1	599.3
25°	582.4	587.0	589.7	585.4	580.3
27.5°	554.9	561.8	569.8	566.6	561.0
30°	524.1	534.2	547.6	545.0	540.9
32.5°	494.9	505.1	523.5	522.5	520.3
35°	468.4	474.8	496.5	499.2	497.3
37.5°	443.2	449.1	469.5	475.6	474.0
40°	416.7	423.2	439.2	450.2	450.7
42.5°	390.5	396.7	409.8	425.6	425.6
45°	362.7	368.8	380.9	398.3	400.4
47.5°	335.4	341.8	353.6	371.0	374.5
50°	308.6	314.5	326.3	343.1	348.5
52.5°	280.8	287.2	298.7	314.2	322.0
55°	254.0	258.3	270.9	285.9	294.2
57.5°	226.2	230.2	244.4	257.2	265.8
60°	199.4	204.5	215.5	228.6	238.5
62.5°	173.7	179.1	188.4	199.9	211.2
65°	148.8	152.8	161.9	173.4	183.3
67.5°	124.7	128.2	137.3	145.3	155.8
70°	100.4	104.9	111.6	119.4	126.1
72.5°	80.8	82.7	88.3	93.9	100.9
75°	59.7	62.9	67.5	70.7	74.7
77.5°	42.8	44.7	47.4	50.1	53.8
80°	28.6	29.4	31.9	32.4	35.3
82.5°	17.4	17.9	18.5	18.7	19.8
85°	9.4	9.4	9.4	8.8	8.8
87.5°	5.4	5.4	4.6	3.7	2.7
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)