

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: P554594

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-93-85-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: P554594  
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-LD4-1STD-50-UNV-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

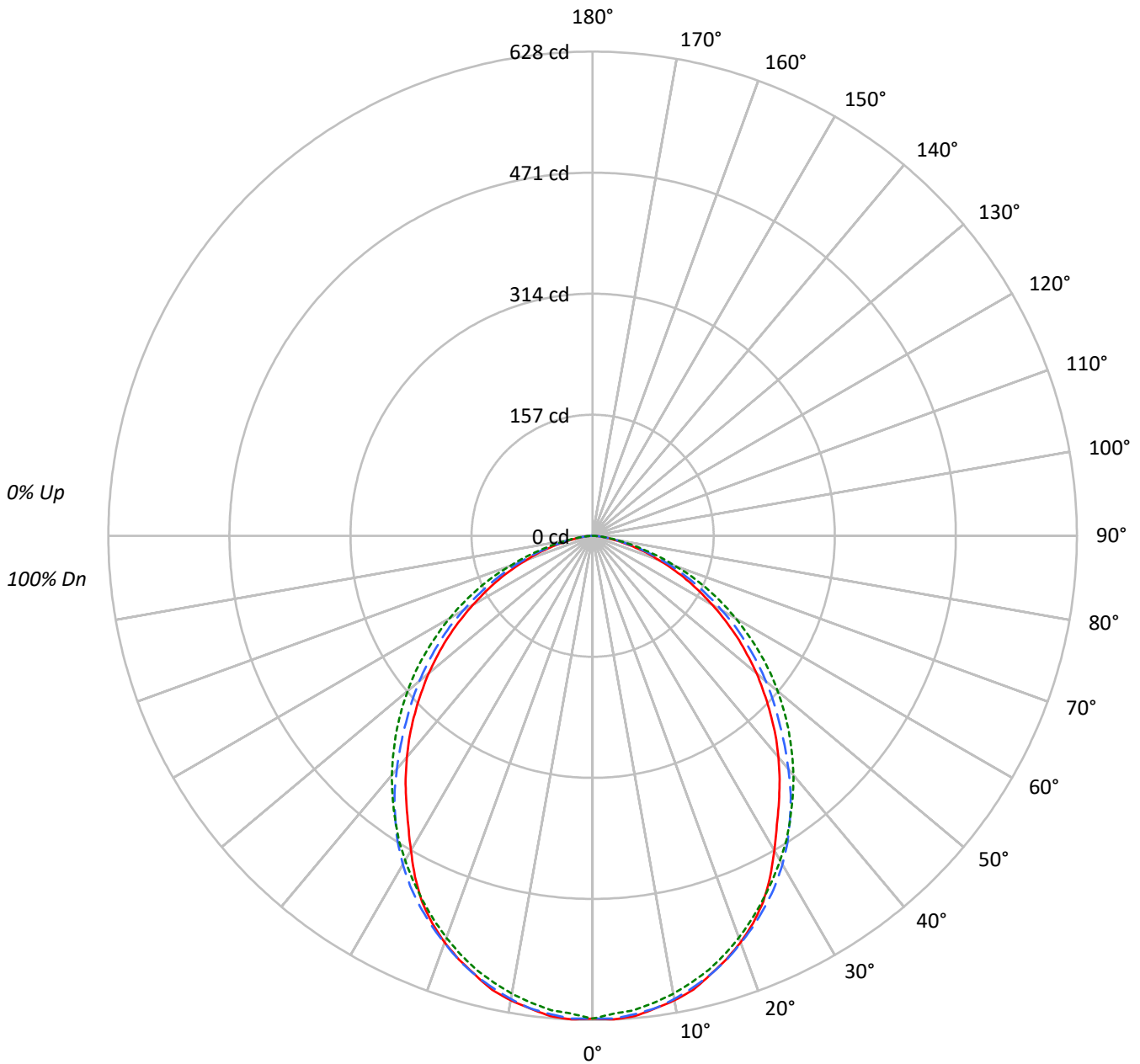
Lumens per Lamp: N/A  
Luminaire Lumens: 1448.0 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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°	3370	3370	3370
5°	3379	3365	3337
10°	3343	3334	3296
15°	3284	3284	3247
20°	3215	3219	3178
25°	3109	3147	3097
30°	2928	3059	3022
35°	2766	2932	2937
40°	2632	2774	2846
45°	2481	2605	2739
50°	2323	2456	2622
55°	2142	2285	2481
60°	1929	2085	2308
65°	1704	1853	2099
70°	1419	1578	1783
75°	1115	1260	1395
80°	797	886	986
85°	519	519	488



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.0	4.1
10°-20°	165.6	11.4
20°-30°	242.1	16.7
30°-40°	274.8	19.0
40°-50°	265.2	18.3
50°-60°	218.8	15.1
60°-70°	145.7	10.1
70°-80°	65.2	4.5
80°-90°	11.7	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°	466.7	32.2
0°-40°	741.4	51.2
0°-60°	1225.4	84.6
0°-90°	1448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1448.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	626	625	623	620	618	59
15°	589	591	589	587	583	166
25°	524	528	530	526	522	240
35°	421	427	446	449	447	264
45°	326	332	342	358	360	252
55°	228	232	244	257	264	204
65°	134	137	146	156	165	133
75°	54	56	61	64	67	59
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	626.2	626.2	626.2	626.2	626.2
2.5°	627.9	628.1	626.7	622.9	620.4
5°	625.5	625.3	622.9	619.5	617.6
7.5°	618.5	619.0	618.3	613.5	610.8
10°	611.8	612.0	610.1	606.3	603.1
12.5°	603.1	602.9	600.2	598.3	593.3
15°	589.4	590.9	589.4	586.8	582.7
17.5°	576.2	576.2	577.1	572.6	569.4
20°	561.3	562.0	562.0	558.4	554.8
22.5°	543.9	546.1	546.8	543.0	538.7
25°	523.5	527.6	530.0	526.1	521.6
27.5°	498.7	505.0	512.2	509.3	504.2
30°	471.1	480.2	492.2	489.8	486.2
32.5°	444.8	454.0	470.6	469.6	467.7
35°	421.0	426.8	446.3	448.7	447.0
37.5°	398.4	403.7	422.0	427.5	426.1
40°	374.6	380.4	394.8	404.7	405.1
42.5°	351.0	356.5	368.3	382.5	382.5
45°	326.0	331.5	342.3	358.0	359.9
47.5°	301.4	307.2	317.8	333.4	336.6
50°	277.4	282.7	293.3	308.4	313.2
52.5°	252.4	258.1	268.5	282.4	289.4
55°	228.3	232.2	243.5	256.9	264.4
57.5°	203.3	206.9	219.6	231.2	238.9
60°	179.2	183.8	193.7	205.5	214.4
62.5°	156.1	160.9	169.4	179.7	189.8
65°	133.8	137.4	145.5	155.9	164.8
67.5°	112.1	115.2	123.4	130.6	140.0
70°	90.2	94.3	100.3	107.3	113.3
72.5°	72.7	74.3	79.4	84.4	90.7
75°	53.6	56.5	60.6	63.5	67.1
77.5°	38.5	40.2	42.6	45.0	48.4
80°	25.7	26.5	28.6	29.1	31.8
82.5°	15.6	16.1	16.6	16.8	17.8
85°	8.4	8.4	8.4	7.9	7.9
87.5°	4.8	4.8	4.1	3.4	2.4
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)