

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: P555114

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-93-94-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: P555114  
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-LD4-2LO-50-UNV-93-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

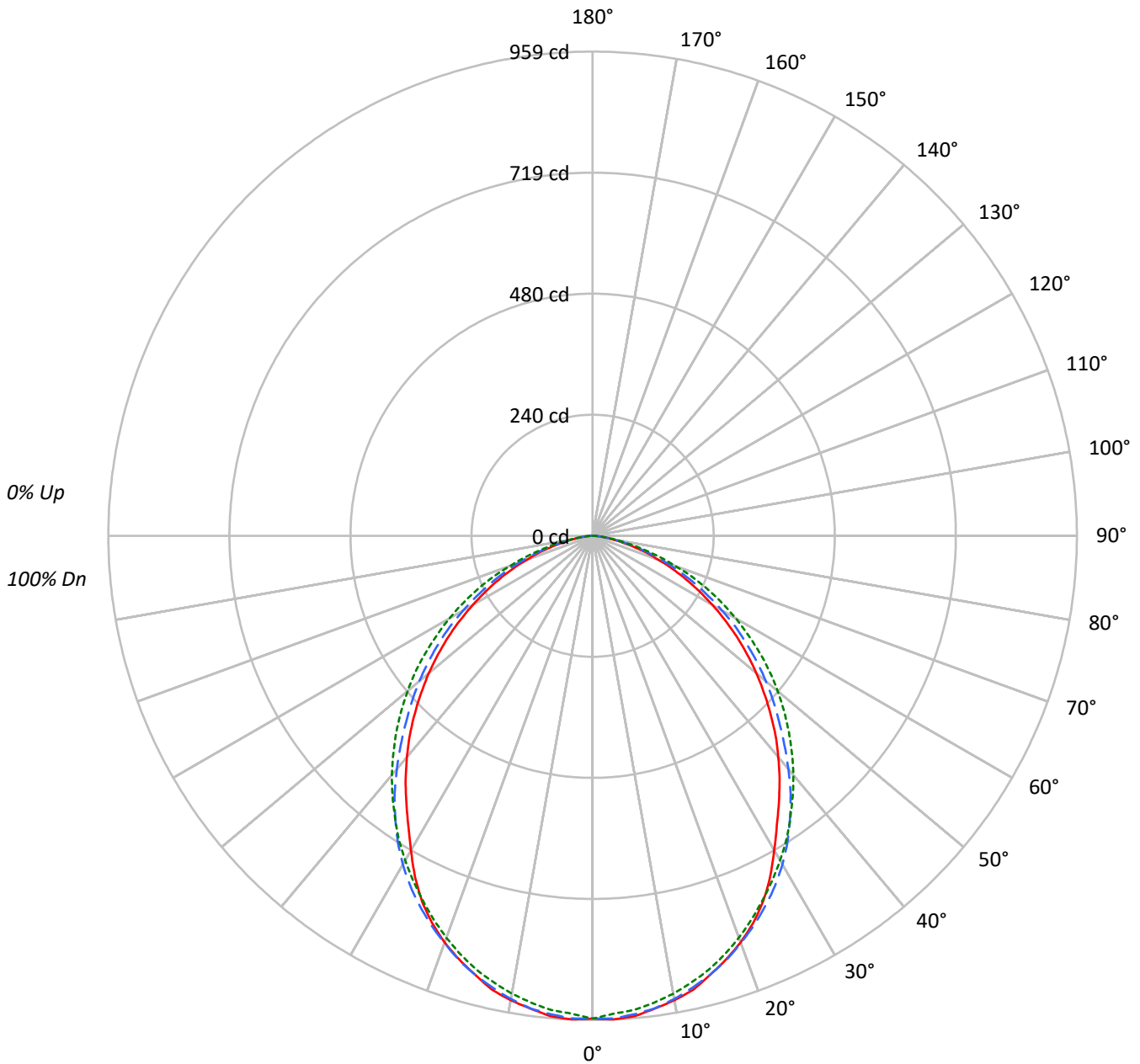
Lumens per Lamp: N/A  
Luminaire Lumens: 2211.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	5146	5146	5146
5°	5160	5138	5095
10°	5105	5091	5033
15°	5015	5015	4957
20°	4908	4915	4852
25°	4747	4806	4729
30°	4470	4671	4614
35°	4224	4477	4484
40°	4019	4235	4346
45°	3789	3978	4182
50°	3546	3749	4005
55°	3271	3489	3788
60°	2946	3183	3523
65°	2600	2830	3204
70°	2168	2411	2722
75°	1703	1926	2131
80°	1218	1354	1503
85°	797	797	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.0	4.1
10°-20°	252.9	11.4
20°-30°	369.6	16.7
30°-40°	419.5	19.0
40°-50°	405.0	18.3
50°-60°	334.1	15.1
60°-70°	222.5	10.1
70°-80°	99.5	4.5
80°-90°	17.8	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°	712.5	32.2
0°-40°	1132.1	51.2
0°-60°	1871.2	84.6
0°-90°	2211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2211.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	955	955	951	946	943	90
15°	900	902	900	896	890	254
25°	799	806	809	803	796	366
35°	643	652	681	685	682	403
45°	498	506	523	547	550	384
55°	349	354	372	392	404	311
65°	204	210	222	238	252	203
75°	82	86	93	97	102	90
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	956.2	956.2	956.2	956.2	956.2
2.5°	958.8	959.1	956.9	951.1	947.4
5°	955.1	954.7	951.1	945.9	943.0
7.5°	944.4	945.2	944.1	936.7	932.7
10°	934.2	934.5	931.6	925.7	920.9
12.5°	920.9	920.6	916.5	913.6	905.9
15°	900.0	902.2	900.0	896.0	889.7
17.5°	879.8	879.8	881.3	874.3	869.5
20°	857.0	858.1	858.1	852.6	847.1
22.5°	830.6	833.9	835.0	829.1	822.5
25°	799.3	805.6	809.3	803.4	796.4
27.5°	761.5	771.1	782.1	777.7	770.0
30°	719.3	733.2	751.6	747.9	742.4
32.5°	679.2	693.2	718.5	717.1	714.1
35°	642.9	651.7	681.4	685.1	682.5
37.5°	608.3	616.4	644.3	652.8	650.6
40°	572.0	580.8	602.8	617.9	618.6
42.5°	536.0	544.4	562.4	584.1	584.1
45°	497.8	506.2	522.7	546.6	549.5
47.5°	460.3	469.1	485.3	509.1	513.9
50°	423.5	431.6	447.8	470.9	478.3
52.5°	385.3	394.2	410.0	431.3	441.9
55°	348.6	354.5	371.8	392.3	403.7
57.5°	310.4	315.9	335.4	353.0	364.8
60°	273.7	280.7	295.7	313.7	327.3
62.5°	238.4	245.8	258.6	274.4	289.8
65°	204.2	209.8	222.2	238.0	251.6
67.5°	171.2	176.0	188.4	199.5	213.8
70°	137.8	144.0	153.2	163.8	173.0
72.5°	110.9	113.5	121.2	128.9	138.5
75°	81.9	86.3	92.6	97.0	102.5
77.5°	58.8	61.3	65.0	68.7	73.8
80°	39.3	40.4	43.7	44.4	48.5
82.5°	23.9	24.6	25.3	25.7	27.2
85°	12.9	12.9	12.9	12.1	12.1
87.5°	7.3	7.3	6.2	5.1	3.7
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)