

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: P555112

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-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: P555112  
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-93-88-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

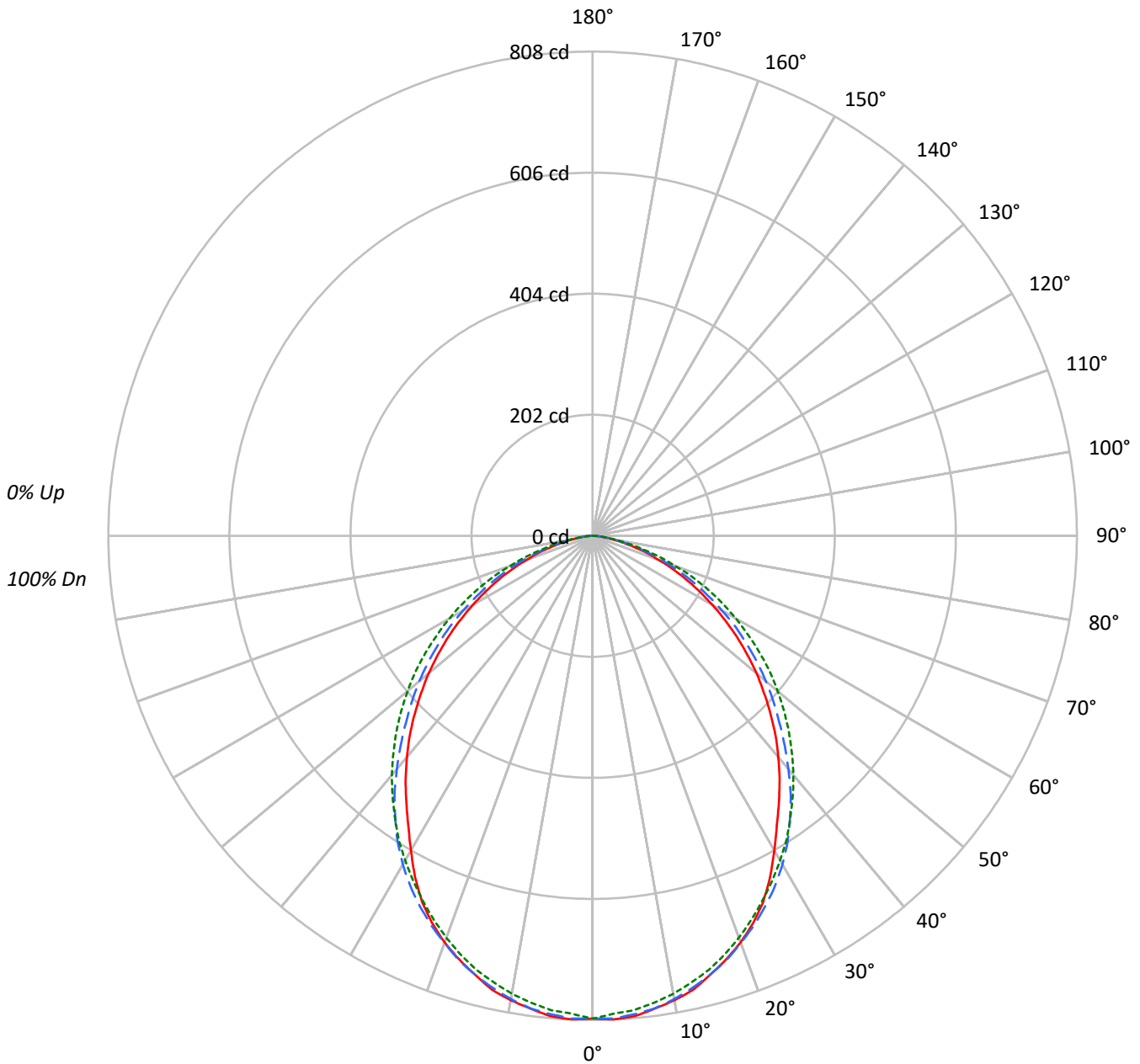
Lumens per Lamp: N/A  
Luminaire Lumens: 1863.0 lumens  
Efficiency: N/A  
Efficacy: 79.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	4336	4336	4336
5°	4348	4330	4293
10°	4301	4290	4241
15°	4225	4225	4177
20°	4136	4141	4088
25°	3999	4049	3985
30°	3767	3936	3888
35°	3559	3773	3778
40°	3386	3568	3662
45°	3192	3353	3525
50°	2988	3159	3374
55°	2756	2939	3192
60°	2482	2682	2969
65°	2192	2385	2700
70°	1827	2031	2294
75°	1435	1622	1797
80°	1026	1141	1268
85°	667	667	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.9	4.1
10°-20°	213.1	11.4
20°-30°	311.4	16.7
30°-40°	353.5	19.0
40°-50°	341.2	18.3
50°-60°	281.5	15.1
60°-70°	187.5	10.1
70°-80°	83.9	4.5
80°-90°	15.0	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°	600.4	32.2
0°-40°	953.9	51.2
0°-60°	1576.7	84.6
0°-90°	1863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	805	804	801	797	795	76
15°	758	760	758	755	750	214
25°	674	679	682	677	671	308
35°	542	549	574	577	575	339
45°	419	426	440	461	463	324
55°	294	299	313	331	340	262
65°	172	177	187	201	212	171
75°	69	73	78	82	86	75
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	805.7	805.7	805.7	805.7	805.7
2.5°	807.9	808.2	806.3	801.4	798.3
5°	804.8	804.5	801.4	797.0	794.6
7.5°	795.8	796.4	795.5	789.3	785.9
10°	787.1	787.4	785.0	780.0	776.0
12.5°	776.0	775.7	772.3	769.8	763.3
15°	758.3	760.2	758.3	754.9	749.7
17.5°	741.3	741.3	742.6	736.7	732.7
20°	722.1	723.1	723.1	718.4	713.8
22.5°	699.8	702.6	703.6	698.6	693.0
25°	673.5	678.8	681.9	676.9	671.1
27.5°	641.6	649.7	659.0	655.3	648.8
30°	606.1	617.8	633.3	630.2	625.6
32.5°	572.3	584.1	605.4	604.2	601.7
35°	541.7	549.1	574.2	577.3	575.1
37.5°	512.6	519.4	542.9	550.0	548.2
40°	481.9	489.4	507.9	520.6	521.2
42.5°	451.6	458.7	473.9	492.1	492.1
45°	419.4	426.5	440.5	460.6	463.1
47.5°	387.8	395.3	408.9	429.0	433.0
50°	356.9	363.7	377.3	396.8	403.0
52.5°	324.7	332.1	345.4	363.4	372.4
55°	293.7	298.7	313.2	330.6	340.2
57.5°	261.6	266.2	282.6	297.5	307.4
60°	230.6	236.5	249.2	264.3	275.8
62.5°	200.9	207.1	217.9	231.2	244.2
65°	172.1	176.7	187.3	200.6	212.0
67.5°	144.2	148.3	158.8	168.1	180.1
70°	116.1	121.3	129.1	138.0	145.8
72.5°	93.5	95.6	102.1	108.6	116.7
75°	69.0	72.7	78.0	81.7	86.4
77.5°	49.5	51.7	54.8	57.9	62.2
80°	33.1	34.0	36.8	37.5	40.9
82.5°	20.1	20.7	21.4	21.7	22.9
85°	10.8	10.8	10.8	10.2	10.2
87.5°	6.2	6.2	5.3	4.3	3.1
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)