

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: P555016

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-81-88-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: P555016  
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-40-UNV-81-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

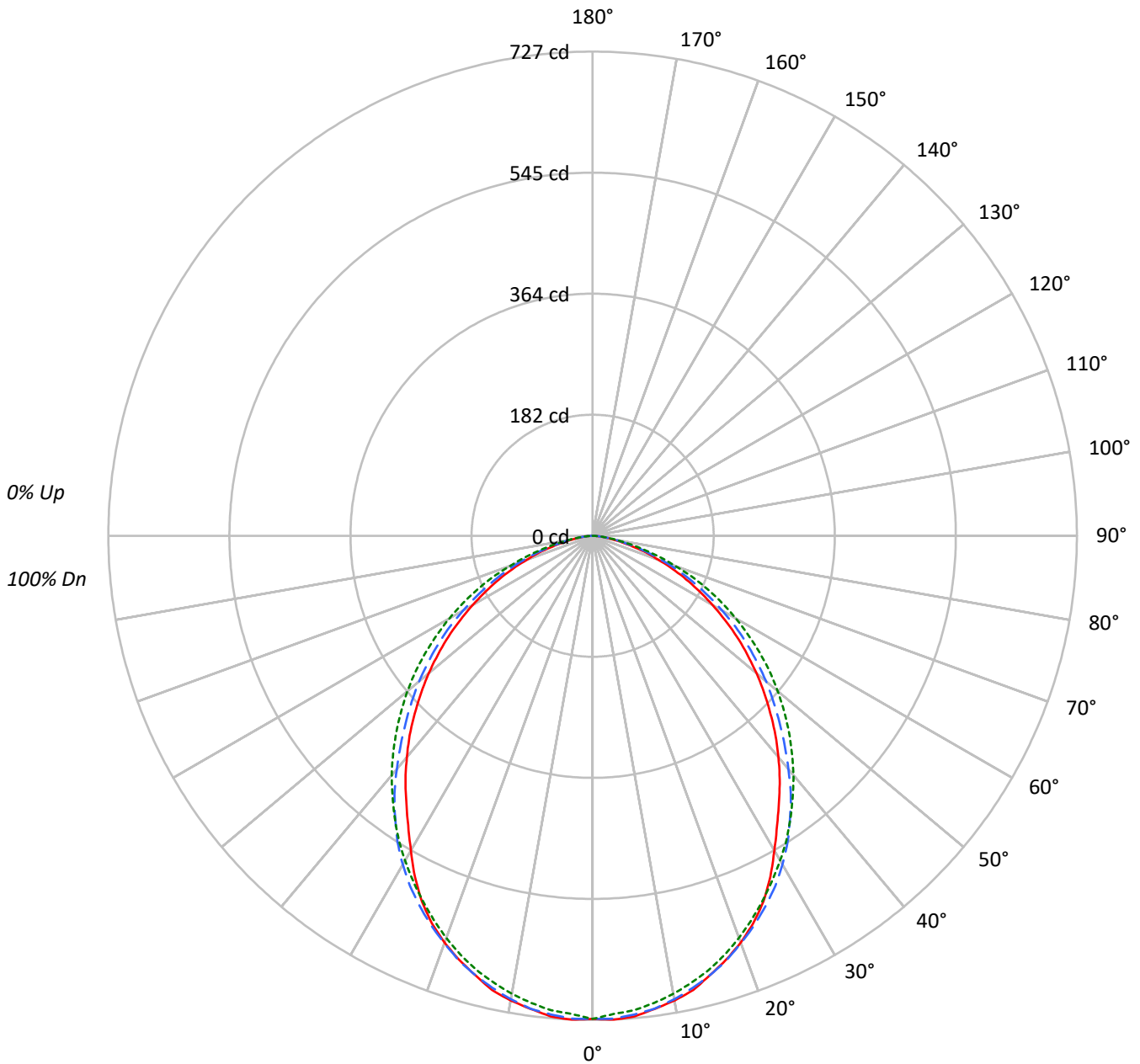
Lumens per Lamp: N/A  
Luminaire Lumens: 1677.0 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (Ain): 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°	3904	3904	3904
5°	3914	3897	3864
10°	3872	3862	3817
15°	3803	3803	3760
20°	3723	3728	3680
25°	3600	3645	3587
30°	3390	3543	3499
35°	3204	3395	3401
40°	3048	3212	3296
45°	2873	3018	3172
50°	2690	2843	3038
55°	2481	2646	2873
60°	2235	2414	2673
65°	1973	2147	2431
70°	1644	1828	2065
75°	1291	1460	1616
80°	924	1029	1141
85°	605	605	568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	4.1
10°-20°	191.8	11.4
20°-30°	280.3	16.7
30°-40°	318.2	19.0
40°-50°	307.2	18.3
50°-60°	253.4	15.1
60°-70°	168.7	10.1
70°-80°	75.5	4.5
80°-90°	13.5	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°	540.4	32.2
0°-40°	858.6	51.2
0°-60°	1419.2	84.6
0°-90°	1677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1677.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	725	725	725	725	725	
5°	724	724	721	718	715	69
15°	683	684	683	680	675	192
25°	606	611	614	609	604	278
35°	488	494	517	520	518	306
45°	378	384	396	415	417	291
55°	264	269	282	298	306	236
65°	155	159	169	180	191	154
75°	62	66	70	74	78	68
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	725.3	725.3	725.3	725.3	725.3
2.5°	727.2	727.5	725.8	721.4	718.6
5°	724.4	724.1	721.4	717.5	715.2
7.5°	716.3	716.9	716.1	710.5	707.4
10°	708.5	708.8	706.6	702.1	698.5
12.5°	698.5	698.2	695.2	692.9	687.1
15°	682.6	684.3	682.6	679.6	674.8
17.5°	667.3	667.3	668.4	663.1	659.5
20°	650.0	650.9	650.9	646.7	642.5
22.5°	630.0	632.5	633.3	628.9	623.8
25°	606.3	611.0	613.8	609.4	604.1
27.5°	577.6	584.8	593.2	589.8	584.0
30°	545.5	556.1	570.1	567.3	563.1
32.5°	515.2	525.8	545.0	543.9	541.6
35°	487.6	494.3	516.8	519.6	517.7
37.5°	461.4	467.5	488.7	495.1	493.4
40°	433.8	440.5	457.2	468.6	469.2
42.5°	406.5	412.9	426.6	443.0	443.0
45°	377.5	383.9	396.5	414.6	416.8
47.5°	349.1	355.8	368.1	386.2	389.8
50°	321.3	327.4	339.6	357.2	362.8
52.5°	292.3	299.0	310.9	327.1	335.2
55°	264.4	268.9	282.0	297.6	306.2
57.5°	235.4	239.6	254.4	267.8	276.7
60°	207.6	212.9	224.3	237.9	248.3
62.5°	180.8	186.4	196.2	208.1	219.8
65°	154.9	159.1	168.6	180.5	190.9
67.5°	129.8	133.5	142.9	151.3	162.2
70°	104.5	109.2	116.2	124.3	131.2
72.5°	84.1	86.1	91.9	97.8	105.0
75°	62.1	65.5	70.2	73.6	77.7
77.5°	44.6	46.5	49.3	52.1	56.0
80°	29.8	30.6	33.2	33.7	36.8
82.5°	18.1	18.7	19.2	19.5	20.6
85°	9.8	9.8	9.8	9.2	9.2
87.5°	5.6	5.6	4.7	3.9	2.8
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)