

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: P554946

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-81-85-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: P554946  
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-35-UNV-81-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

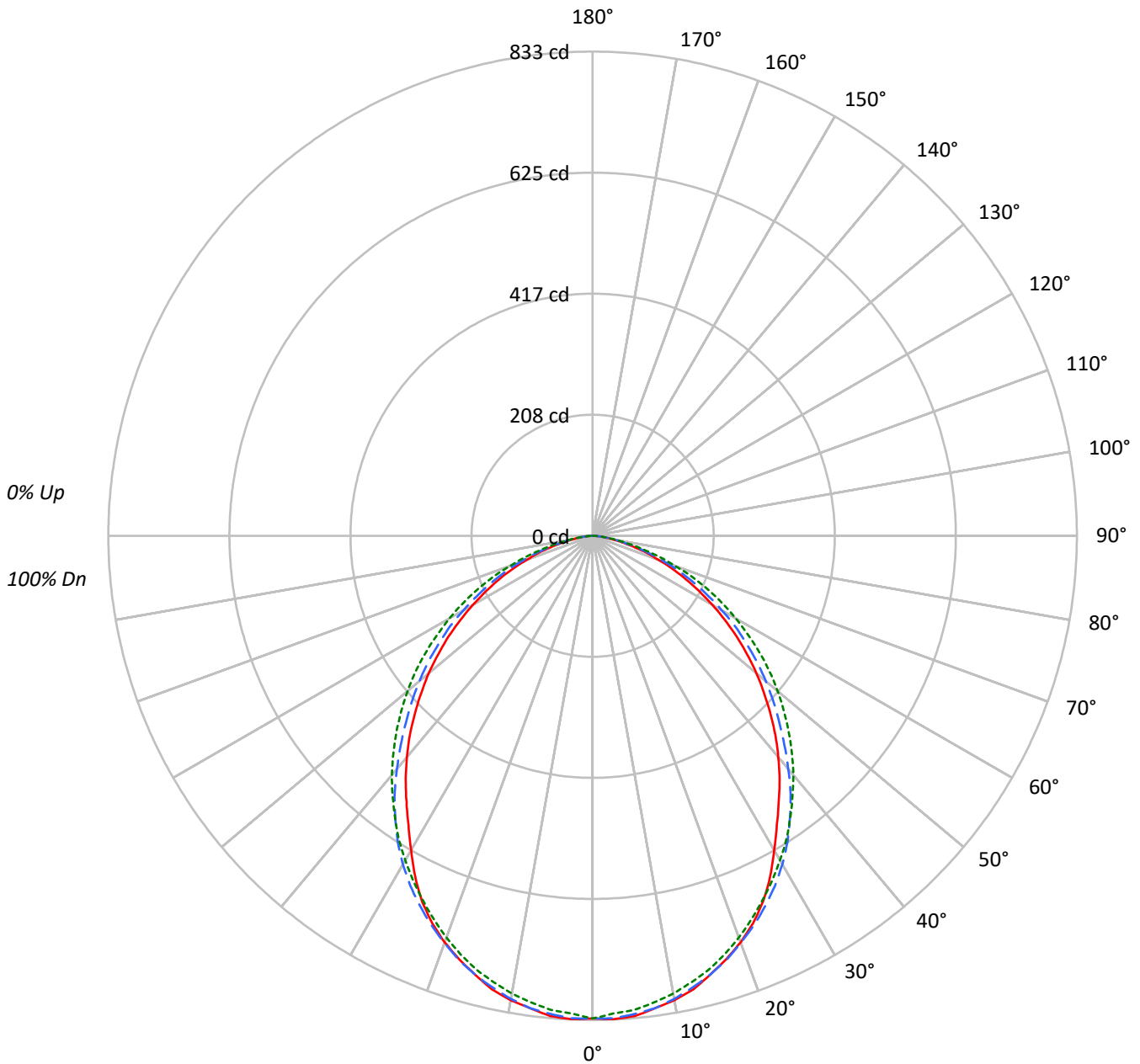
Lumens per Lamp: N/A  
Luminaire Lumens: 1920.0 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4469	4469	4469
5°	4481	4462	4424
10°	4433	4421	4370
15°	4354	4354	4305
20°	4262	4268	4213
25°	4122	4173	4107
30°	3882	4056	4007
35°	3667	3888	3894
40°	3490	3678	3774
45°	3290	3455	3632
50°	3080	3256	3477
55°	2840	3029	3290
60°	2559	2764	3059
65°	2259	2458	2783
70°	1882	2093	2364
75°	1478	1672	1851
80°	1057	1178	1305
85°	692	692	648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.2	4.1
10°-20°	219.6	11.4
20°-30°	321.0	16.7
30°-40°	364.3	19.0
40°-50°	351.7	18.3
50°-60°	290.1	15.1
60°-70°	193.2	10.1
70°-80°	86.5	4.5
80°-90°	15.5	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°	618.8	32.2
0°-40°	983.1	51.2
0°-60°	1624.9	84.6
0°-90°	1920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1920.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	829	829	826	821	819	79
15°	782	784	782	778	773	220
25°	694	700	703	698	692	318
35°	558	566	592	595	593	350
45°	432	440	454	475	477	333
55°	303	308	323	341	351	270
65°	177	182	193	207	218	176
75°	71	75	80	84	89	78
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°	830.4	830.4	830.4	830.4	830.4
2.5°	832.6	832.9	831.0	825.9	822.7
5°	829.4	829.1	825.9	821.4	818.9
7.5°	820.1	820.8	819.8	813.4	809.9
10°	811.2	811.5	809.0	803.9	799.7
12.5°	799.7	799.4	795.9	793.3	786.6
15°	781.5	783.5	781.5	778.0	772.6
17.5°	764.0	764.0	765.3	759.2	755.1
20°	744.2	745.2	745.2	740.4	735.6
22.5°	721.3	724.1	725.1	720.0	714.2
25°	694.1	699.6	702.8	697.6	691.6
27.5°	661.3	669.6	679.1	675.3	668.6
30°	624.6	636.7	652.7	649.5	644.7
32.5°	589.8	601.9	624.0	622.7	620.1
35°	558.2	565.9	591.7	594.9	592.7
37.5°	528.3	535.3	559.5	566.9	564.9
40°	496.7	504.3	523.5	536.6	537.2
42.5°	465.4	472.8	488.4	507.2	507.2
45°	432.2	439.6	453.9	474.7	477.2
47.5°	399.7	407.4	421.4	442.1	446.3
50°	367.8	374.8	388.9	409.0	415.3
52.5°	334.6	342.3	356.0	374.5	383.8
55°	302.7	307.8	322.8	340.7	350.6
57.5°	269.6	274.3	291.2	306.6	316.8
60°	237.7	243.7	256.8	272.4	284.2
62.5°	207.0	213.4	224.6	238.3	251.7
65°	177.4	182.1	193.0	206.7	218.5
67.5°	148.7	152.8	163.6	173.2	185.7
70°	119.6	125.0	133.0	142.3	150.2
72.5°	96.3	98.6	105.3	112.0	120.3
75°	71.1	75.0	80.4	84.2	89.0
77.5°	51.0	53.3	56.5	59.7	64.1
80°	34.1	35.1	38.0	38.6	42.1
82.5°	20.7	21.4	22.0	22.3	23.6
85°	11.2	11.2	11.2	10.5	10.5
87.5°	6.4	6.4	5.4	4.5	3.2
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)