

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: P555012

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-81-86-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: P555012  
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-81-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

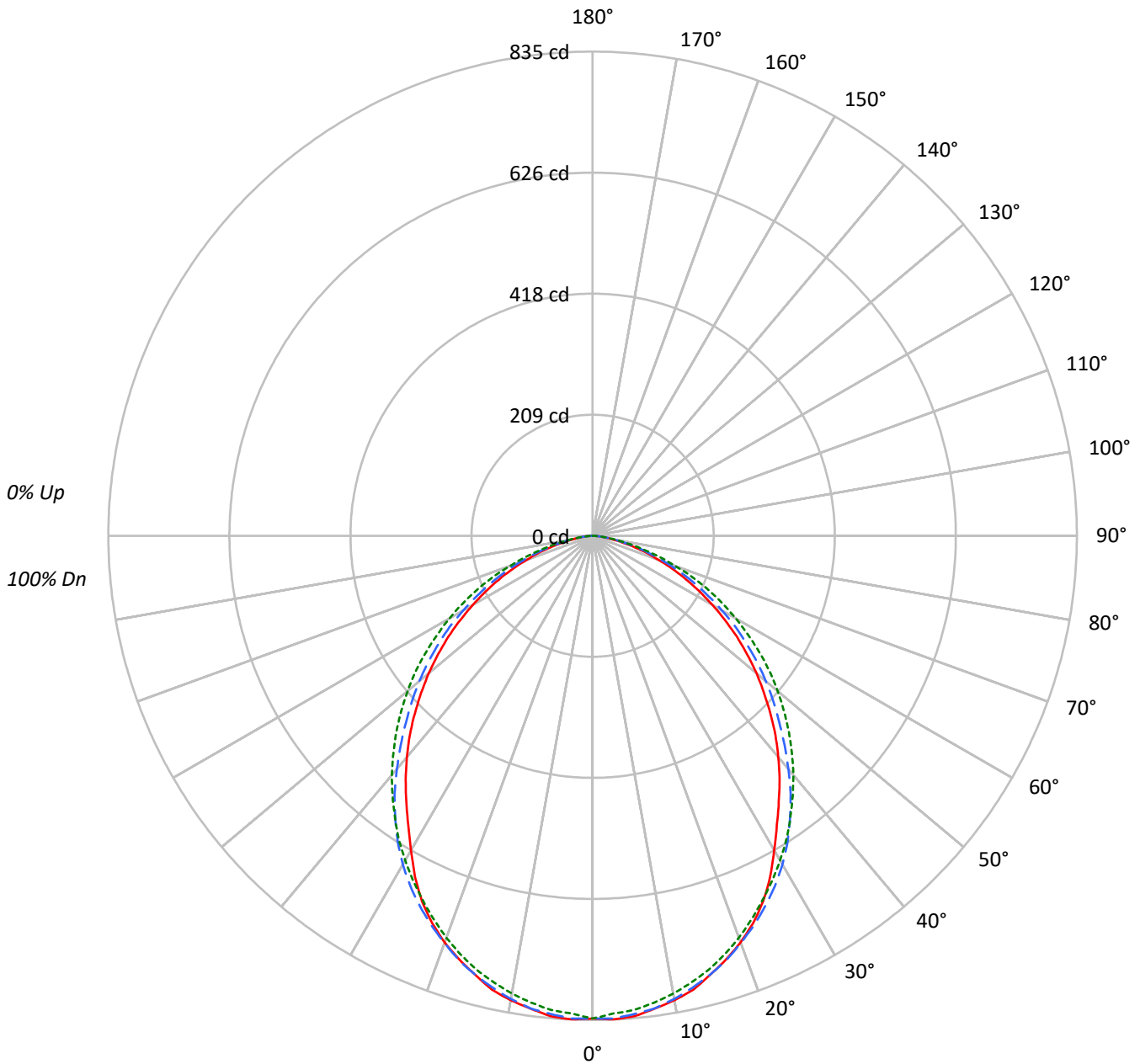
Lumens per Lamp: N/A  
Luminaire Lumens: 1925.0 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4480	4480	4480
5°	4493	4473	4435
10°	4445	4433	4382
15°	4366	4366	4316
20°	4274	4279	4224
25°	4132	4184	4118
30°	3892	4067	4017
35°	3677	3898	3904
40°	3499	3687	3784
45°	3299	3464	3642
50°	3088	3265	3486
55°	2848	3037	3298
60°	2565	2772	3068
65°	2264	2464	2790
70°	1887	2099	2370
75°	1483	1676	1855
80°	1060	1181	1308
85°	692	692	655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.4	4.1
10°-20°	220.2	11.4
20°-30°	321.8	16.7
30°-40°	365.3	19.0
40°-50°	352.6	18.3
50°-60°	290.9	15.1
60°-70°	193.7	10.1
70°-80°	86.7	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°	620.4	32.2
0°-40°	985.6	51.2
0°-60°	1629.1	84.6
0°-90°	1925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	832	831	828	824	821	79
15°	784	786	784	780	775	221
25°	696	701	705	700	693	319
35°	560	567	593	596	594	351
45°	433	441	455	476	478	334
55°	304	309	324	342	352	271
65°	178	183	194	207	219	176
75°	71	75	81	84	89	78
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	832.5	832.5	832.5	832.5	832.5
2.5°	834.8	835.1	833.2	828.0	824.8
5°	831.6	831.2	828.0	823.6	821.0
7.5°	822.3	822.9	822.0	815.6	812.0
10°	813.3	813.6	811.1	806.0	801.8
12.5°	801.8	801.5	798.0	795.4	788.7
15°	783.6	785.5	783.6	780.1	774.6
17.5°	766.0	766.0	767.3	761.2	757.0
20°	746.2	747.1	747.1	742.3	737.5
22.5°	723.1	726.0	727.0	721.9	716.1
25°	695.9	701.4	704.6	699.5	693.4
27.5°	663.0	671.3	680.9	677.1	670.4
30°	626.2	638.4	654.4	651.2	646.4
32.5°	591.4	603.5	625.6	624.3	621.7
35°	559.7	567.4	593.3	596.5	594.2
37.5°	529.6	536.7	561.0	568.3	566.4
40°	498.0	505.6	524.8	538.0	538.6
42.5°	466.6	474.0	489.7	508.5	508.5
45°	433.4	440.7	455.1	475.9	478.5
47.5°	400.7	408.4	422.5	443.3	447.4
50°	368.8	375.8	389.9	410.0	416.4
52.5°	335.5	343.2	356.9	375.5	384.8
55°	303.5	308.6	323.7	341.6	351.5
57.5°	270.3	275.1	292.0	307.4	317.6
60°	238.3	244.3	257.5	273.1	285.0
62.5°	207.6	214.0	225.2	238.9	252.3
65°	177.8	182.6	193.5	207.2	219.1
67.5°	149.0	153.2	164.1	173.7	186.1
70°	119.9	125.4	133.4	142.6	150.6
72.5°	96.6	98.8	105.5	112.3	120.6
75°	71.3	75.2	80.6	84.4	89.2
77.5°	51.2	53.4	56.6	59.8	64.3
80°	34.2	35.2	38.1	38.7	42.2
82.5°	20.8	21.4	22.1	22.4	23.7
85°	11.2	11.2	11.2	10.6	10.6
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)