

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: P553921

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-81-84-EDD**

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: P553921  
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-LD4-1HI-35-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

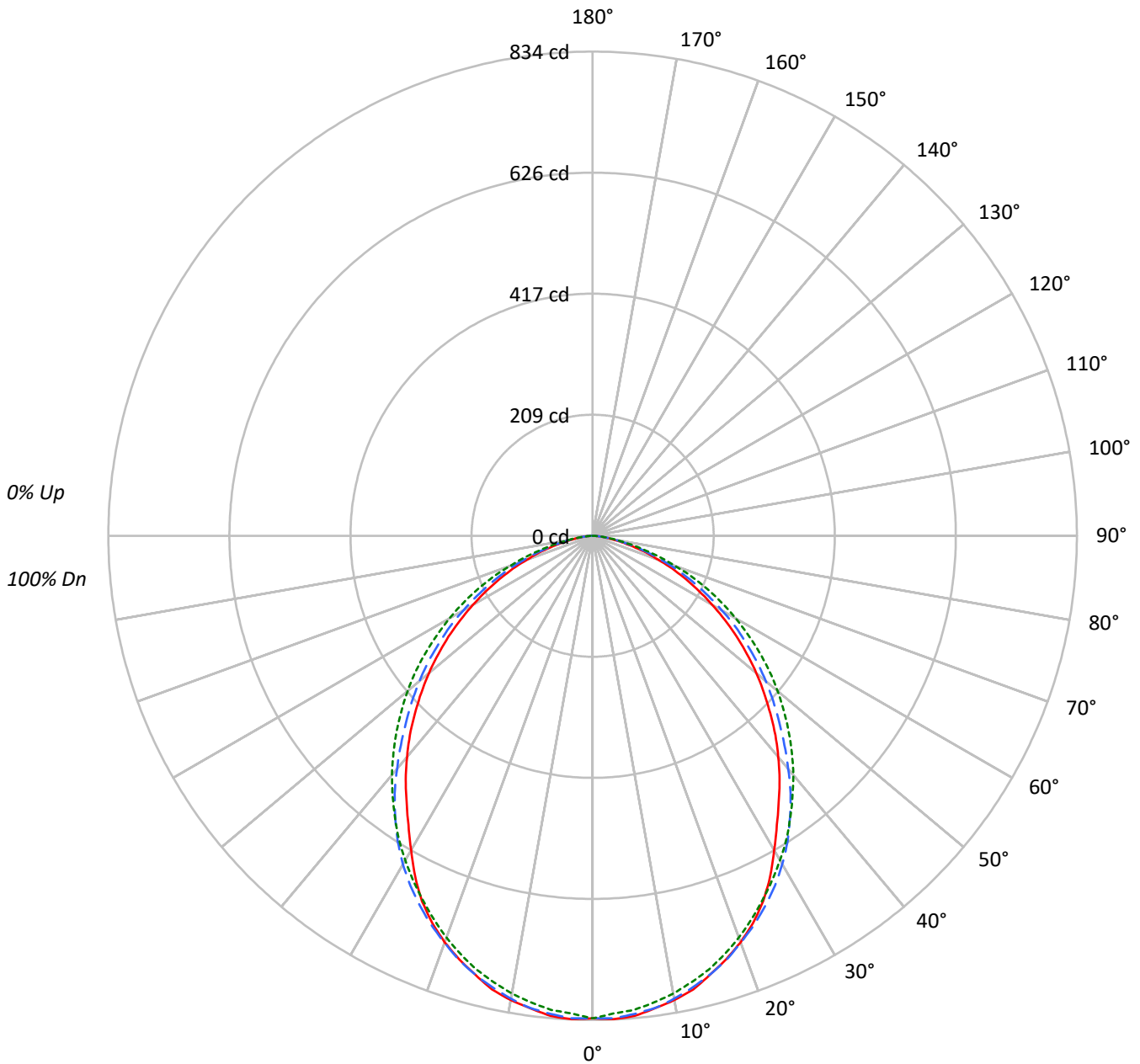
Lumens per Lamp: N/A  
Luminaire Lumens: 1922.0 lumens  
Efficiency: N/A  
Efficacy: 89.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4473	4473	4473
5°	4486	4466	4428
10°	4438	4426	4375
15°	4359	4359	4309
20°	4267	4273	4218
25°	4127	4178	4111
30°	3885	4060	4011
35°	3671	3892	3898
40°	3493	3681	3778
45°	3293	3459	3636
50°	3083	3260	3481
55°	2843	3033	3293
60°	2561	2767	3062
65°	2260	2460	2785
70°	1884	2096	2367
75°	1481	1674	1853
80°	1060	1178	1308
85°	692	692	648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	4.1
10°-20°	219.9	11.4
20°-30°	321.3	16.7
30°-40°	364.7	19.0
40°-50°	352.1	18.3
50°-60°	290.4	15.1
60°-70°	193.4	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°	619.4	32.2
0°-40°	984.1	51.2
0°-60°	1626.6	84.6
0°-90°	1922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1922.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	830	830	827	822	820	79
15°	782	784	782	779	773	221
25°	695	700	704	698	692	318
35°	559	566	592	596	593	350
45°	433	440	454	475	478	334
55°	303	308	323	341	351	270
65°	178	182	193	207	219	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°	831.2	831.2	831.2	831.2	831.2
2.5°	833.5	833.8	831.9	826.7	823.6
5°	830.3	829.9	826.7	822.3	819.7
7.5°	821.0	821.6	820.7	814.3	810.8
10°	812.1	812.4	809.8	804.7	800.6
12.5°	800.6	800.2	796.7	794.2	787.5
15°	782.4	784.3	782.4	778.8	773.4
17.5°	764.8	764.8	766.1	760.0	755.9
20°	745.0	746.0	746.0	741.2	736.4
22.5°	722.0	724.9	725.8	720.7	715.0
25°	694.9	700.3	703.5	698.4	692.3
27.5°	662.0	670.3	679.9	676.0	669.3
30°	625.2	637.4	653.3	650.2	645.4
32.5°	590.4	602.6	624.6	623.3	620.8
35°	558.8	566.5	592.4	595.6	593.3
37.5°	528.8	535.8	560.1	567.4	565.5
40°	497.2	504.9	524.0	537.1	537.8
42.5°	465.9	473.2	488.9	507.7	507.7
45°	432.7	440.0	454.4	475.2	477.7
47.5°	400.1	407.8	421.8	442.6	446.7
50°	368.2	375.2	389.3	409.4	415.8
52.5°	335.0	342.6	356.4	374.9	384.2
55°	303.0	308.2	323.2	341.0	350.9
57.5°	269.8	274.6	291.5	306.9	317.1
60°	237.9	244.0	257.1	272.7	284.5
62.5°	207.2	213.6	224.8	238.5	252.0
65°	177.5	182.3	193.2	206.9	218.7
67.5°	148.8	153.0	163.8	173.4	185.8
70°	119.7	125.2	133.2	142.4	150.4
72.5°	96.4	98.7	105.4	112.1	120.4
75°	71.2	75.0	80.5	84.3	89.1
77.5°	51.1	53.3	56.5	59.7	64.2
80°	34.2	35.1	38.0	38.6	42.2
82.5°	20.8	21.4	22.0	22.4	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)