

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: P553877

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-82-86-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: P553877  
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-30-UNV-82-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

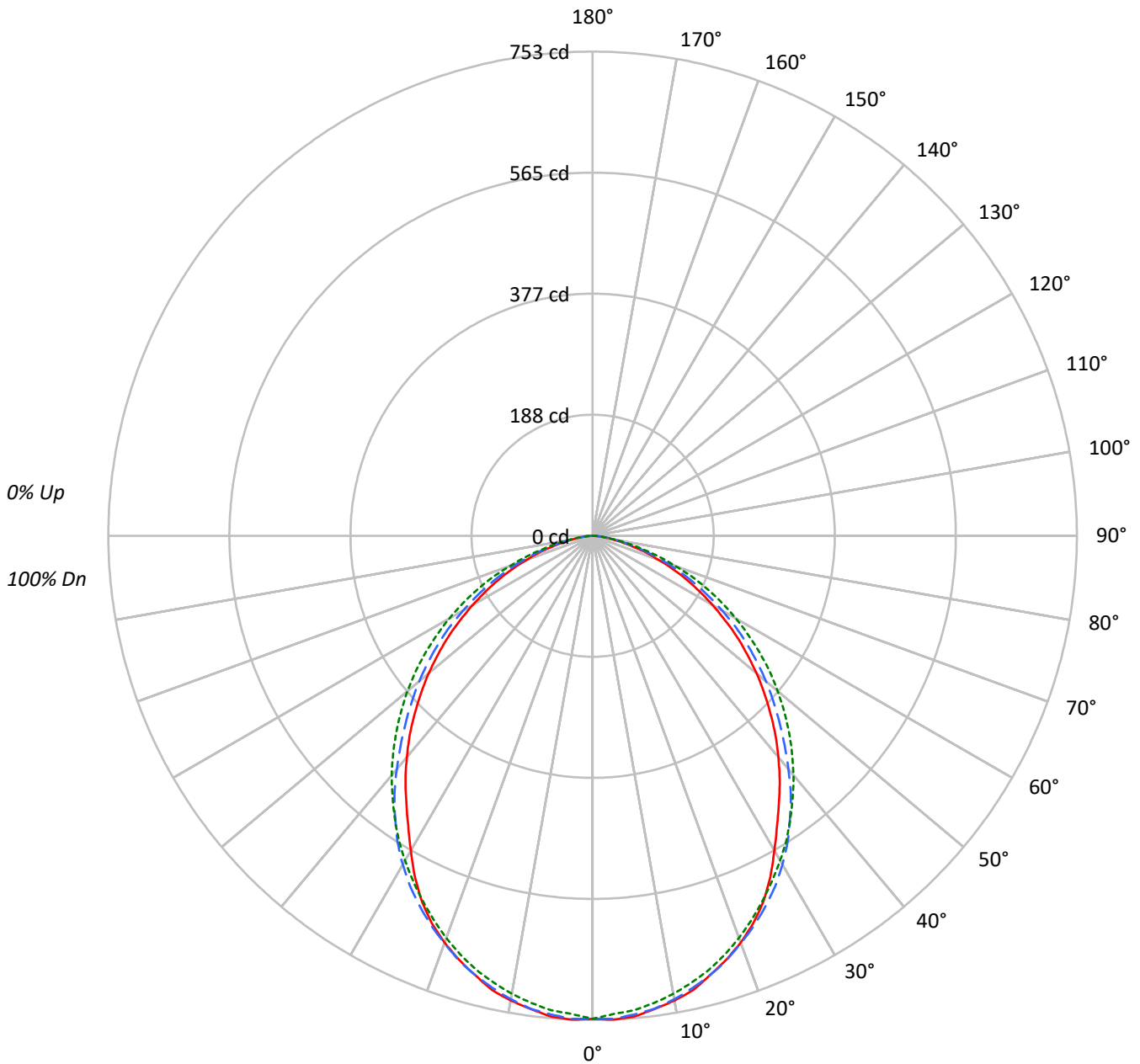
Lumens per Lamp: N/A  
Luminaire Lumens: 1737.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4043	4043	4043
5°	4054	4037	4002
10°	4011	4000	3954
15°	3940	3940	3895
20°	3856	3861	3812
25°	3729	3776	3716
30°	3512	3670	3624
35°	3318	3517	3523
40°	3157	3327	3414
45°	2976	3126	3286
50°	2786	2946	3146
55°	2570	2741	2976
60°	2314	2500	2767
65°	2044	2223	2518
70°	1703	1893	2138
75°	1339	1512	1674
80°	958	1063	1181
85°	624	624	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	4.1
10°-20°	198.7	11.4
20°-30°	290.4	16.7
30°-40°	329.6	19.0
40°-50°	318.2	18.3
50°-60°	262.5	15.1
60°-70°	174.8	10.1
70°-80°	78.2	4.5
80°-90°	14.0	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°	559.8	32.2
0°-40°	889.4	51.2
0°-60°	1470.0	84.6
0°-90°	1737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	751	751	751	751	751	
5°	750	750	747	743	741	71
15°	707	709	707	704	699	199
25°	628	633	636	631	626	288
35°	505	512	535	538	536	316
45°	391	398	411	429	432	302
55°	274	278	292	308	317	244
65°	160	165	175	187	198	159
75°	64	68	73	76	80	70
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	751.2	751.2	751.2	751.2	751.2
2.5°	753.2	753.5	751.8	747.2	744.3
5°	750.3	750.1	747.2	743.1	740.8
7.5°	742.0	742.5	741.7	735.9	732.7
10°	733.9	734.2	731.9	727.3	723.5
12.5°	723.5	723.2	720.0	717.7	711.7
15°	707.1	708.8	707.1	703.9	699.0
17.5°	691.2	691.2	692.3	686.9	683.1
20°	673.3	674.2	674.2	669.8	665.5
22.5°	652.5	655.1	656.0	651.4	646.2
25°	628.0	632.9	635.8	631.2	625.7
27.5°	598.3	605.8	614.4	611.0	604.9
30°	565.1	576.0	590.5	587.6	583.2
32.5°	533.6	544.6	564.5	563.3	561.0
35°	505.0	512.0	535.3	538.2	536.2
37.5°	477.9	484.3	506.2	512.8	511.1
40°	449.3	456.3	473.6	485.4	486.0
42.5°	421.1	427.7	441.8	458.9	458.9
45°	391.0	397.7	410.7	429.4	431.7
47.5°	361.6	368.5	381.2	400.0	403.7
50°	332.7	339.1	351.8	370.0	375.7
52.5°	302.7	309.7	322.1	338.8	347.2
55°	273.9	278.5	292.1	308.2	317.2
57.5°	243.9	248.2	263.5	277.3	286.6
60°	215.0	220.5	232.3	246.5	257.1
62.5°	187.3	193.1	203.2	215.6	227.7
65°	160.5	164.8	174.6	187.0	197.7
67.5°	134.5	138.2	148.0	156.7	168.0
70°	108.2	113.1	120.3	128.7	135.9
72.5°	87.2	89.2	95.2	101.3	108.8
75°	64.4	67.8	72.7	76.2	80.5
77.5°	46.2	48.2	51.1	54.0	58.0
80°	30.9	31.7	34.3	34.9	38.1
82.5°	18.8	19.3	19.9	20.2	21.4
85°	10.1	10.1	10.1	9.5	9.5
87.5°	5.8	5.8	4.9	4.0	2.9
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)