

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: P554897

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-82-84-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: P554897  
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-30-UNV-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

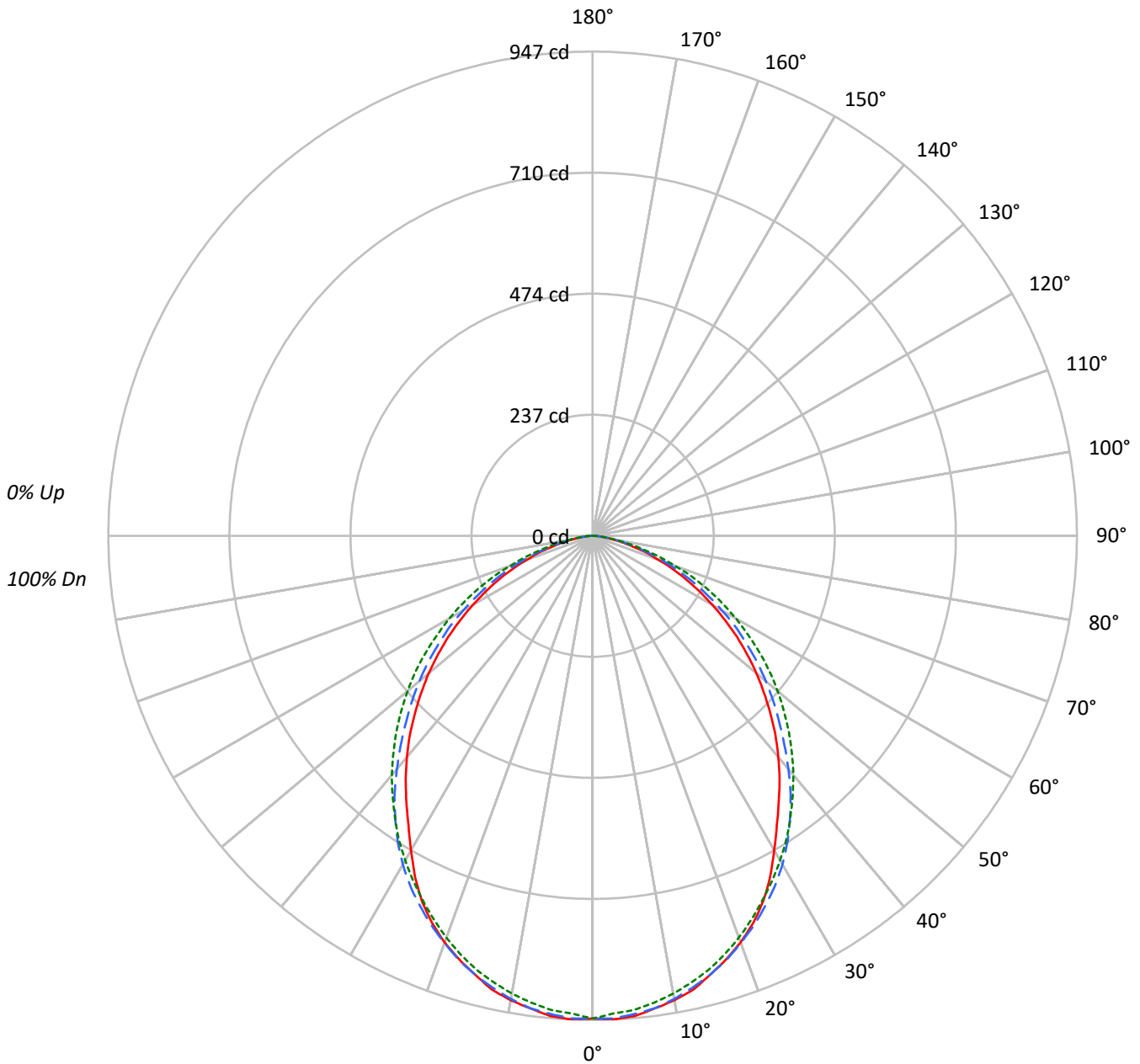
Lumens per Lamp: N/A  
Luminaire Lumens: 2183.0 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (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°	5081	5081	5081
5°	5095	5073	5030
10°	5040	5027	4969
15°	4951	4951	4894
20°	4846	4853	4790
25°	4687	4745	4669
30°	4414	4612	4555
35°	4170	4420	4428
40°	3967	4182	4291
45°	3740	3928	4130
50°	3502	3702	3954
55°	3230	3444	3740
60°	2908	3143	3479
65°	2569	2794	3163
70°	2140	2379	2688
75°	1682	1901	2104
80°	1203	1339	1485
85°	784	784	741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.9	4.1
10°-20°	249.7	11.4
20°-30°	364.9	16.7
30°-40°	414.2	19.0
40°-50°	399.9	18.3
50°-60°	329.9	15.1
60°-70°	219.6	10.1
70°-80°	98.3	4.5
80°-90°	17.6	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°	703.5	32.2
0°-40°	1117.7	51.2
0°-60°	1847.5	84.6
0°-90°	2183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2183.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	944	944	944	944	944	
5°	943	943	939	934	931	89
15°	889	891	889	885	878	251
25°	789	795	799	793	786	361
35°	635	643	673	676	674	398
45°	491	500	516	540	543	379
55°	344	350	367	387	399	307
65°	202	207	219	235	248	200
75°	81	85	91	96	101	88
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	944.1	944.1	944.1	944.1	944.1
2.5°	946.6	947.0	944.8	939.0	935.4
5°	943.0	942.6	939.0	933.9	931.0
7.5°	932.5	933.2	932.1	924.9	920.9
10°	922.3	922.7	919.8	914.0	909.3
12.5°	909.3	908.9	904.9	902.0	894.4
15°	888.6	890.8	888.6	884.6	878.4
17.5°	868.7	868.7	870.1	863.2	858.5
20°	846.2	847.3	847.3	841.8	836.4
22.5°	820.0	823.3	824.4	818.6	812.1
25°	789.2	795.4	799.0	793.2	786.3
27.5°	751.9	761.3	772.2	767.8	760.2
30°	710.2	723.9	742.1	738.4	733.0
32.5°	670.6	684.4	709.4	708.0	705.1
35°	634.7	643.4	672.8	676.4	673.9
37.5°	600.6	608.6	636.2	644.5	642.3
40°	564.7	573.4	595.2	610.1	610.8
42.5°	529.2	537.5	555.3	576.7	576.7
45°	491.4	499.8	516.1	539.7	542.6
47.5°	454.5	463.2	479.1	502.7	507.4
50°	418.2	426.2	442.1	465.0	472.2
52.5°	380.5	389.2	404.8	425.8	436.3
55°	344.2	350.0	367.0	387.4	398.6
57.5°	306.5	311.9	331.1	348.5	360.2
60°	270.2	277.1	292.0	309.7	323.2
62.5°	235.4	242.6	255.3	270.9	286.2
65°	201.7	207.1	219.4	235.0	248.4
67.5°	169.0	173.7	186.1	196.9	211.1
70°	136.0	142.2	151.2	161.8	170.8
72.5°	109.5	112.1	119.7	127.3	136.7
75°	80.9	85.2	91.4	95.8	101.2
77.5°	58.0	60.6	64.2	67.8	72.9
80°	38.8	39.9	43.2	43.9	47.9
82.5°	23.6	24.3	25.0	25.4	26.8
85°	12.7	12.7	12.7	12.0	12.0
87.5°	7.3	7.3	6.2	5.1	3.6
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)