

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: P553867

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-81-94-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: P553867  
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-81-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

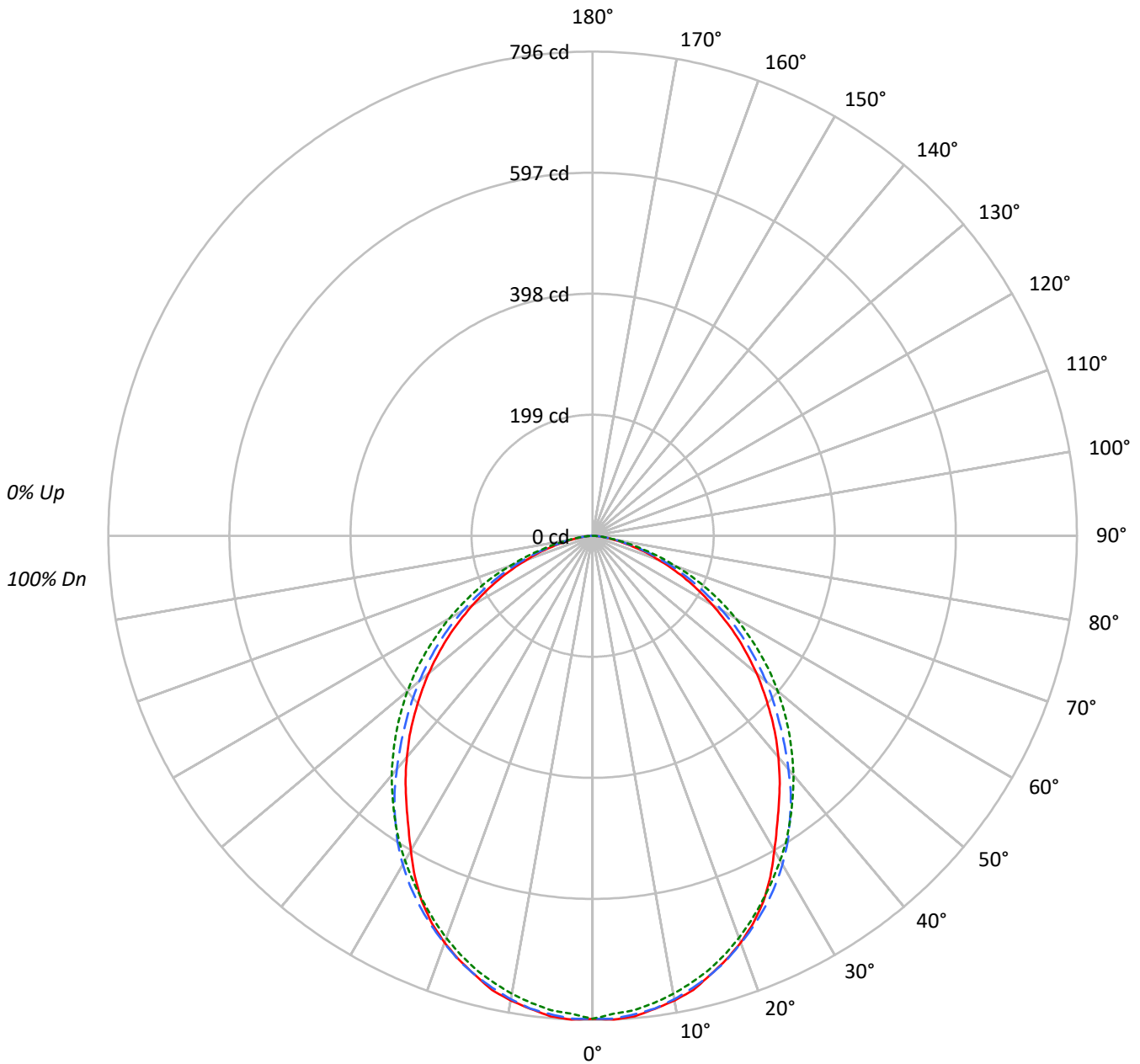
Lumens per Lamp: N/A  
Luminaire Lumens: 1836.0 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (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°	4273	4273	4273
5°	4285	4267	4230
10°	4239	4228	4179
15°	4164	4164	4116
20°	4076	4081	4029
25°	3942	3991	3927
30°	3712	3879	3831
35°	3507	3718	3724
40°	3336	3517	3609
45°	3146	3304	3473
50°	2945	3113	3326
55°	2716	2897	3145
60°	2447	2644	2926
65°	2160	2351	2662
70°	1800	2002	2261
75°	1414	1599	1770
80°	1010	1125	1249
85°	661	661	624



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.8	4.1
10°-20°	210.0	11.4
20°-30°	306.9	16.7
30°-40°	348.4	19.0
40°-50°	336.3	18.3
50°-60°	277.4	15.1
60°-70°	184.8	10.1
70°-80°	82.7	4.5
80°-90°	14.8	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°	591.7	32.2
0°-40°	940.1	51.2
0°-60°	1553.8	84.6
0°-90°	1836.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1836.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	794	794	794	794	794	
5°	793	793	790	786	783	75
15°	747	749	747	744	739	211
25°	664	669	672	667	661	304
35°	534	541	566	569	567	334
45°	413	420	434	454	456	319
55°	290	294	309	326	335	258
65°	170	174	185	198	209	168
75°	68	72	77	80	85	74
85°	11	11	11	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	794.0	794.0	794.0	794.0	794.0
2.5°	796.2	796.5	794.6	789.8	786.7
5°	793.1	792.8	789.8	785.5	783.0
7.5°	784.3	784.9	784.0	777.9	774.5
10°	775.7	776.0	773.6	768.7	764.7
12.5°	764.7	764.4	761.1	758.6	752.2
15°	747.4	749.2	747.4	744.0	738.8
17.5°	730.6	730.6	731.8	726.0	722.0
20°	711.7	712.6	712.6	708.0	703.4
22.5°	689.7	692.4	693.4	688.5	683.0
25°	663.8	669.0	672.0	667.1	661.3
27.5°	632.4	640.3	649.4	645.8	639.4
30°	597.3	608.9	624.1	621.1	616.5
32.5°	564.0	575.6	596.7	595.4	593.0
35°	533.8	541.1	565.9	568.9	566.8
37.5°	505.1	511.9	535.0	542.1	540.2
40°	474.9	482.3	500.6	513.1	513.7
42.5°	445.1	452.1	467.0	485.0	485.0
45°	413.3	420.3	434.1	453.9	456.3
47.5°	382.2	389.5	403.0	422.8	426.8
50°	351.7	358.4	371.8	391.1	397.2
52.5°	320.0	327.3	340.4	358.1	367.0
55°	289.5	294.4	308.7	325.8	335.2
57.5°	257.8	262.3	278.5	293.1	302.9
60°	227.3	233.1	245.6	260.5	271.8
62.5°	198.0	204.1	214.7	227.9	240.7
65°	169.6	174.2	184.6	197.7	209.0
67.5°	142.1	146.1	156.5	165.6	177.5
70°	114.4	119.6	127.2	136.0	143.7
72.5°	92.1	94.3	100.7	107.1	115.0
75°	68.0	71.7	76.9	80.5	85.1
77.5°	48.8	50.9	54.0	57.0	61.3
80°	32.6	33.6	36.3	36.9	40.3
82.5°	19.8	20.4	21.0	21.4	22.6
85°	10.7	10.7	10.7	10.1	10.1
87.5°	6.1	6.1	5.2	4.3	3.1
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)