

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: P553886

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-82-97-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: P553886  
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-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

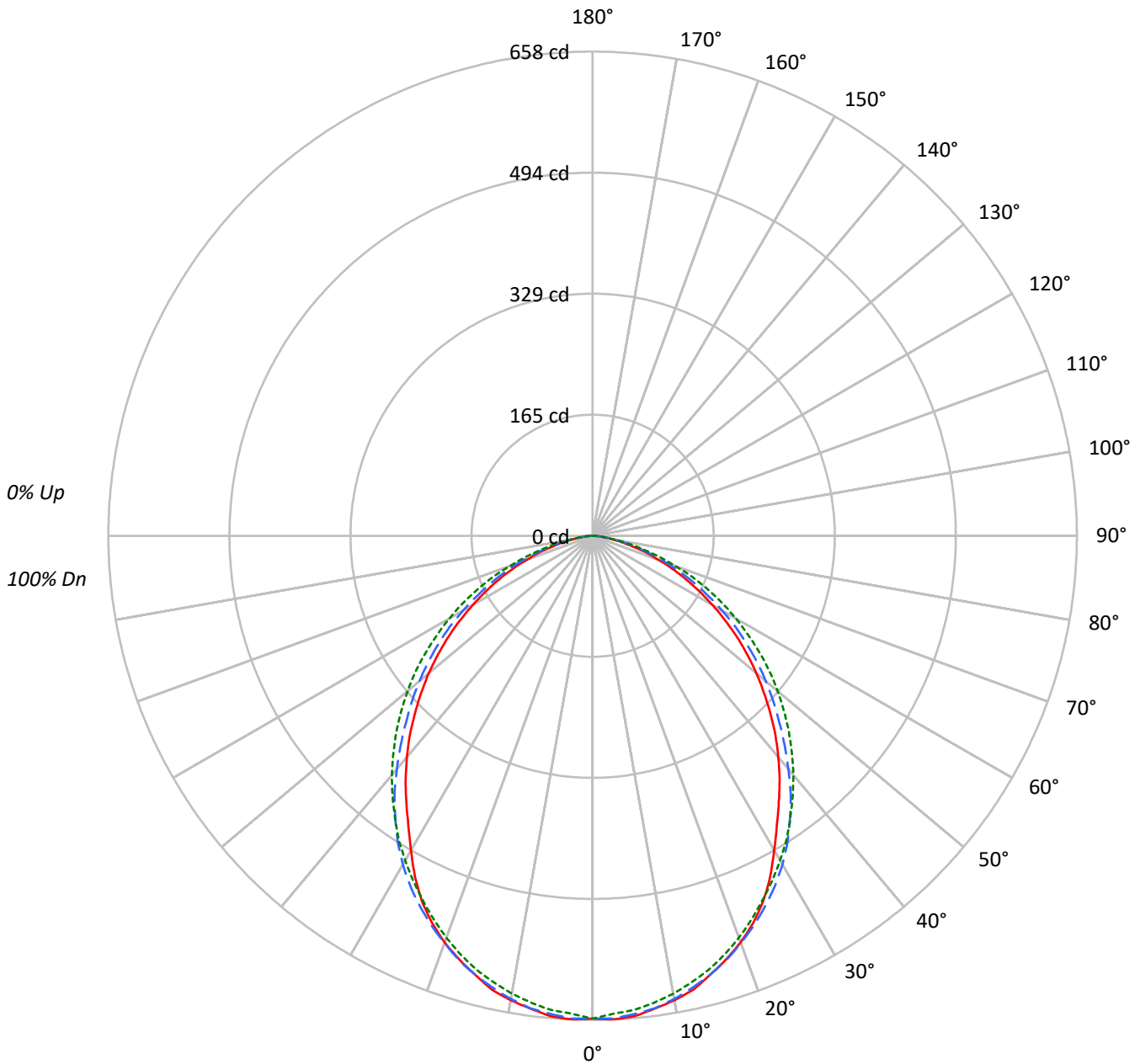
Lumens per Lamp: N/A  
Luminaire Lumens: 1517.0 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3531	3531	3531
5°	3540	3525	3495
10°	3503	3493	3453
15°	3441	3441	3401
20°	3368	3372	3329
25°	3257	3297	3245
30°	3067	3205	3166
35°	2898	3072	3077
40°	2757	2906	2982
45°	2599	2730	2870
50°	2433	2572	2748
55°	2244	2394	2599
60°	2021	2184	2418
65°	1784	1942	2198
70°	1487	1654	1868
75°	1169	1320	1462
80°	837	930	1032
85°	543	543	513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.8	4.1
10°-20°	173.5	11.4
20°-30°	253.6	16.7
30°-40°	287.9	19.0
40°-50°	277.9	18.3
50°-60°	229.2	15.1
60°-70°	152.6	10.1
70°-80°	68.3	4.5
80°-90°	12.2	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°	488.9	32.2
0°-40°	776.7	51.2
0°-60°	1283.8	84.6
0°-90°	1517.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1517.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	655	655	652	649	647	62
15°	618	619	618	615	610	174
25°	548	553	555	551	546	251
35°	441	447	468	470	468	276
45°	342	347	359	375	377	263
55°	239	243	255	269	277	213
65°	140	144	152	163	173	139
75°	56	59	64	66	70	61
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	656.1	656.1	656.1	656.1	656.1
2.5°	657.8	658.1	656.6	652.5	650.0
5°	655.3	655.1	652.5	649.0	647.0
7.5°	648.0	648.5	647.7	642.7	639.9
10°	640.9	641.2	639.2	635.1	631.9
12.5°	631.9	631.6	628.8	626.8	621.5
15°	617.5	619.0	617.5	614.7	610.4
17.5°	603.6	603.6	604.6	599.9	596.6
20°	588.0	588.8	588.8	585.0	581.2
22.5°	569.9	572.1	572.9	568.9	564.3
25°	548.4	552.7	555.2	551.2	546.4
27.5°	522.5	529.0	536.6	533.6	528.3
30°	493.5	503.1	515.7	513.2	509.4
32.5°	466.0	475.6	493.0	492.0	490.0
35°	441.1	447.1	467.5	470.1	468.3
37.5°	417.4	422.9	442.1	447.9	446.4
40°	392.4	398.5	413.6	423.9	424.4
42.5°	367.7	373.5	385.9	400.7	400.7
45°	341.5	347.3	358.7	375.0	377.1
47.5°	315.8	321.9	332.9	349.3	352.6
50°	290.6	296.1	307.2	323.1	328.2
52.5°	264.4	270.4	281.3	295.9	303.2
55°	239.2	243.2	255.1	269.2	277.0
57.5°	213.0	216.8	230.1	242.2	250.3
60°	187.8	192.6	202.9	215.2	224.6
62.5°	163.6	168.6	177.4	188.3	198.9
65°	140.1	143.9	152.5	163.3	172.6
67.5°	117.5	120.7	129.3	136.9	146.7
70°	94.5	98.8	105.1	112.4	118.7
72.5°	76.1	77.9	83.2	88.5	95.0
75°	56.2	59.2	63.5	66.5	70.3
77.5°	40.3	42.1	44.6	47.1	50.7
80°	27.0	27.7	30.0	30.5	33.3
82.5°	16.4	16.9	17.4	17.6	18.7
85°	8.8	8.8	8.8	8.3	8.3
87.5°	5.0	5.0	4.3	3.5	2.5
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)