

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: P553875

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-82-85-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: P553875  
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-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

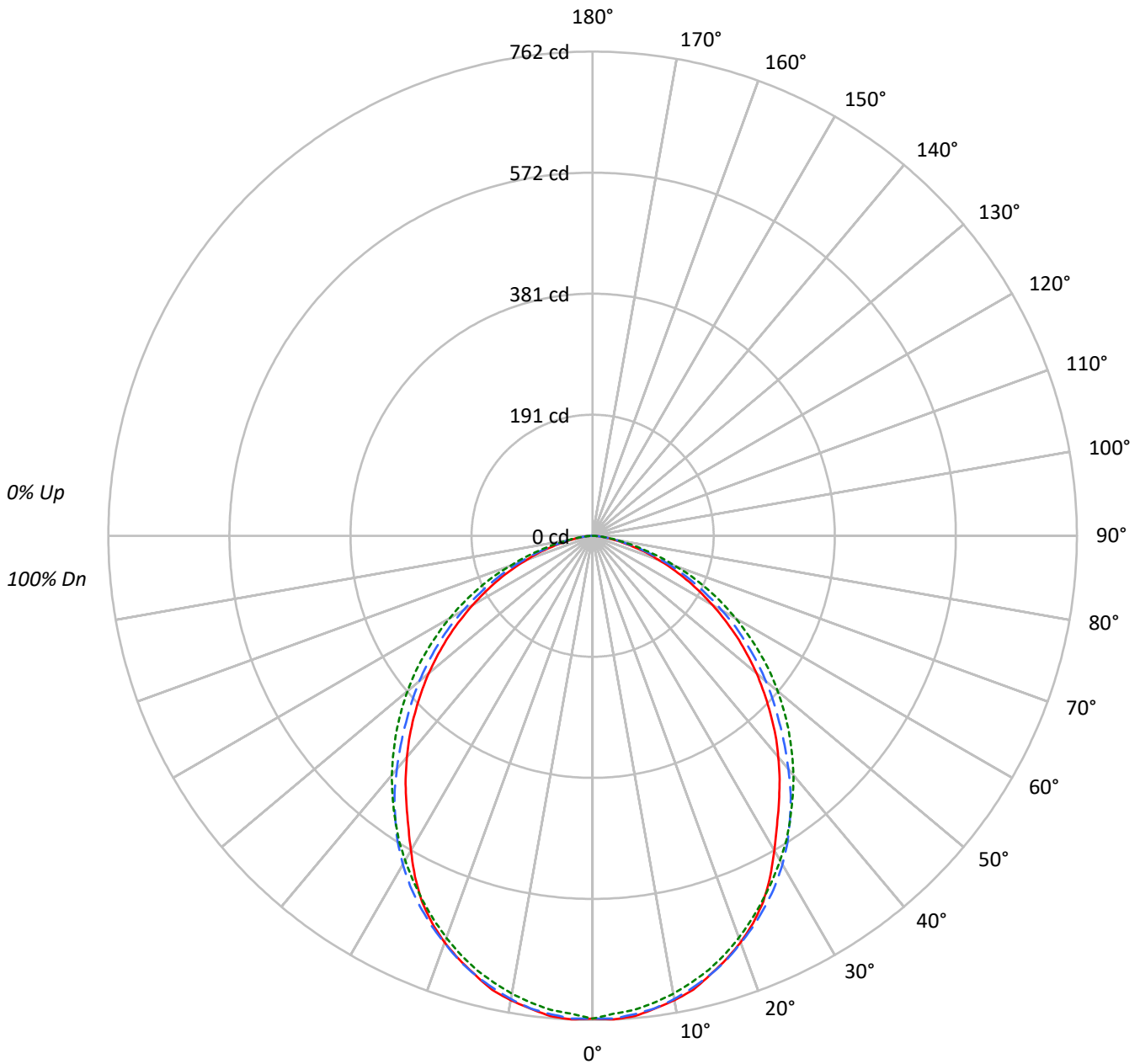
Lumens per Lamp: N/A  
Luminaire Lumens: 1757.0 lumens  
Efficiency: N/A  
Efficacy: 81.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4090	4090	4090
5°	4101	4083	4048
10°	4057	4046	3999
15°	3985	3985	3939
20°	3900	3905	3856
25°	3772	3819	3758
30°	3552	3712	3667
35°	3357	3558	3564
40°	3193	3365	3454
45°	3010	3162	3324
50°	2818	2979	3183
55°	2599	2772	3010
60°	2341	2530	2800
65°	2067	2249	2547
70°	1723	1915	2164
75°	1354	1530	1693
80°	967	1075	1193
85°	630	630	593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	4.1
10°-20°	201.0	11.4
20°-30°	293.7	16.7
30°-40°	333.4	19.0
40°-50°	321.8	18.3
50°-60°	265.5	15.1
60°-70°	176.8	10.1
70°-80°	79.1	4.5
80°-90°	14.1	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°	566.2	32.2
0°-40°	899.6	51.2
0°-60°	1486.9	84.6
0°-90°	1757.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	759	759	756	752	749	72
15°	715	717	715	712	707	202
25°	635	640	643	638	633	291
35°	511	518	542	544	542	320
45°	396	402	415	434	437	305
55°	277	282	295	312	321	247
65°	162	167	177	189	200	161
75°	65	69	74	77	81	71
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°	759.9	759.9	759.9	759.9	759.9
2.5°	761.9	762.2	760.4	755.8	752.9
5°	759.0	758.7	755.8	751.7	749.3
7.5°	750.5	751.1	750.2	744.4	741.2
10°	742.3	742.6	740.3	735.6	731.8
12.5°	731.8	731.5	728.3	726.0	719.9
15°	715.2	716.9	715.2	712.0	707.0
17.5°	699.1	699.1	700.3	694.8	691.0
20°	681.0	681.9	681.9	677.5	673.2
22.5°	660.0	662.6	663.5	658.9	653.6
25°	635.2	640.2	643.1	638.4	632.9
27.5°	605.1	612.7	621.5	618.0	611.9
30°	571.6	582.7	597.3	594.3	590.0
32.5°	539.8	550.8	571.0	569.8	567.5
35°	510.9	517.9	541.5	544.4	542.4
37.5°	483.4	489.8	512.0	518.7	517.0
40°	454.5	461.5	479.0	491.0	491.6
42.5°	425.9	432.6	446.9	464.1	464.1
45°	395.5	402.3	415.4	434.4	436.7
47.5°	365.8	372.8	385.6	404.6	408.4
50°	336.6	343.0	355.8	374.2	380.1
52.5°	306.2	313.2	325.8	342.7	351.2
55°	277.0	281.7	295.4	311.8	320.8
57.5°	246.7	251.0	266.5	280.5	289.9
60°	217.5	223.0	235.0	249.3	260.1
62.5°	189.5	195.3	205.5	218.1	230.3
65°	162.3	166.7	176.6	189.2	200.0
67.5°	136.0	139.8	149.8	158.5	169.9
70°	109.5	114.4	121.7	130.2	137.5
72.5°	88.2	90.2	96.3	102.5	110.1
75°	65.1	68.6	73.6	77.1	81.4
77.5°	46.7	48.7	51.7	54.6	58.7
80°	31.2	32.1	34.7	35.3	38.5
82.5°	19.0	19.6	20.1	20.4	21.6
85°	10.2	10.2	10.2	9.6	9.6
87.5°	5.8	5.8	5.0	4.1	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)