

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: P553844

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-80-86-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: P553844  
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-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

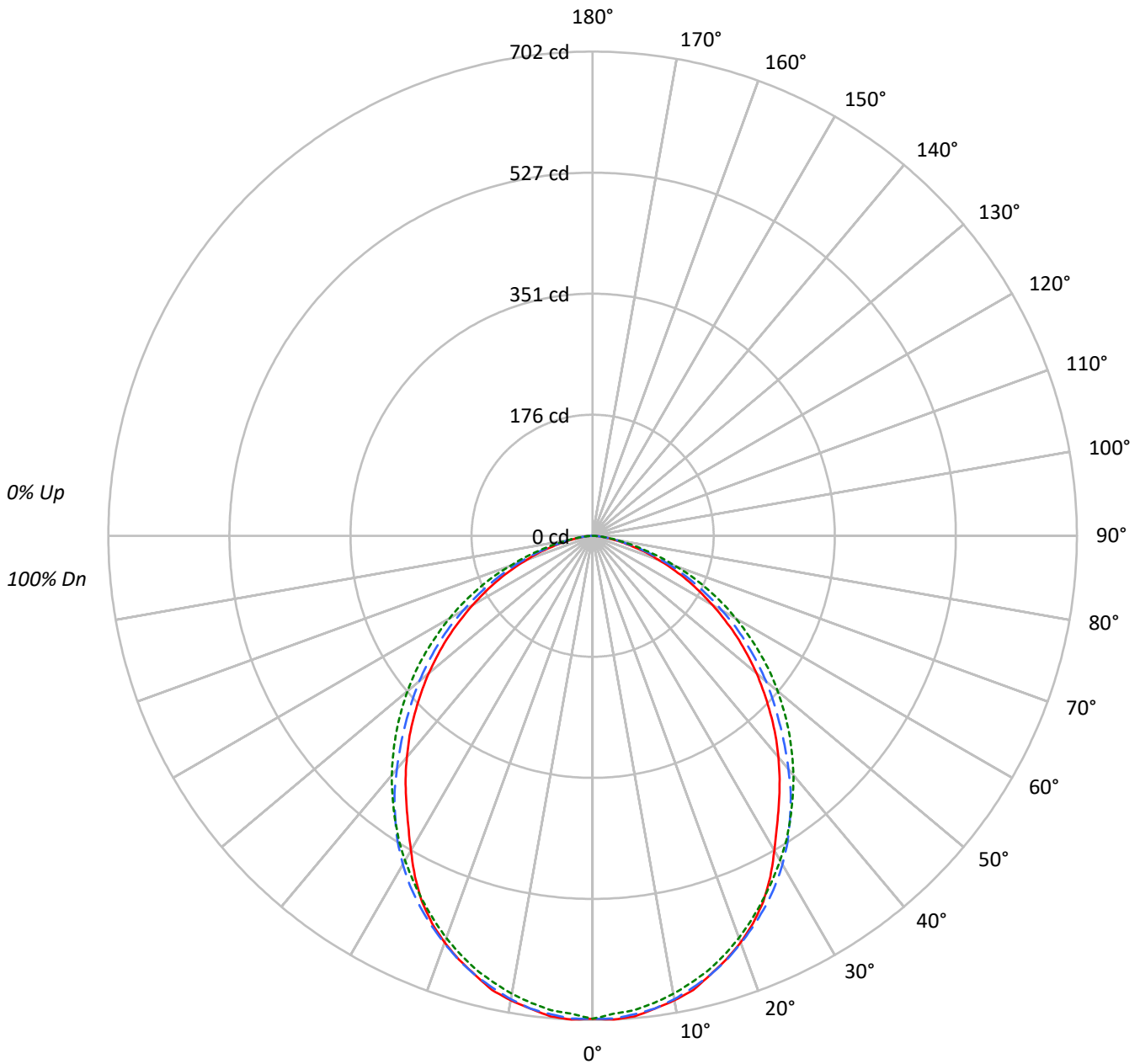
Lumens per Lamp: N/A  
Luminaire Lumens: 1619.0 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3768	3768	3768
5°	3779	3762	3730
10°	3738	3728	3686
15°	3672	3672	3630
20°	3594	3599	3553
25°	3476	3519	3463
30°	3273	3420	3378
35°	3093	3279	3284
40°	2942	3101	3183
45°	2774	2914	3063
50°	2596	2745	2932
55°	2396	2554	2774
60°	2157	2330	2580
65°	1905	2072	2347
70°	1588	1766	1994
75°	1248	1410	1560
80°	893	992	1100
85°	580	580	550



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.9	4.1
10°-20°	185.2	11.4
20°-30°	270.6	16.7
30°-40°	307.2	19.0
40°-50°	296.6	18.3
50°-60°	244.6	15.1
60°-70°	162.9	10.1
70°-80°	72.9	4.5
80°-90°	13.0	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°	521.8	32.2
0°-40°	829.0	51.2
0°-60°	1370.2	84.6
0°-90°	1619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1619.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	699	699	696	693	690	66
15°	659	661	659	656	652	186
25°	585	590	593	588	583	268
35°	471	477	499	502	500	295
45°	364	371	383	400	402	281
55°	255	260	272	287	296	228
65°	150	154	163	174	184	148
75°	60	63	68	71	75	66
85°	9	9	9	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	700.2	700.2	700.2	700.2	700.2
2.5°	702.1	702.3	700.7	696.4	693.7
5°	699.4	699.1	696.4	692.6	690.5
7.5°	691.6	692.1	691.3	685.9	683.0
10°	684.0	684.3	682.2	677.8	674.4
12.5°	674.4	674.1	671.1	669.0	663.3
15°	659.0	660.6	659.0	656.1	651.5
17.5°	644.2	644.2	645.3	640.2	636.7
20°	627.5	628.4	628.4	624.3	620.3
22.5°	608.2	610.6	611.4	607.1	602.3
25°	585.3	589.9	592.6	588.3	583.2
27.5°	557.6	564.6	572.7	569.4	563.8
30°	526.7	536.9	550.3	547.7	543.6
32.5°	497.4	507.6	526.1	525.1	522.9
35°	470.7	477.2	499.0	501.7	499.8
37.5°	445.4	451.4	471.8	478.0	476.4
40°	418.8	425.3	441.4	452.4	453.0
42.5°	392.5	398.6	411.8	427.7	427.7
45°	364.5	370.7	382.8	400.3	402.4
47.5°	337.0	343.5	355.3	372.8	376.3
50°	310.1	316.1	327.9	344.8	350.2
52.5°	282.2	288.6	300.2	315.8	323.6
55°	255.3	259.6	272.2	287.3	295.6
57.5°	227.3	231.3	245.6	258.5	267.1
60°	200.4	205.5	216.5	229.7	239.7
62.5°	174.6	180.0	189.4	200.9	212.2
65°	149.6	153.6	162.7	174.3	184.3
67.5°	125.3	128.8	138.0	146.1	156.6
70°	100.9	105.4	112.2	120.0	126.7
72.5°	81.2	83.1	88.8	94.4	101.4
75°	60.0	63.2	67.8	71.0	75.0
77.5°	43.0	44.9	47.6	50.3	54.1
80°	28.8	29.6	32.0	32.5	35.5
82.5°	17.5	18.0	18.6	18.8	19.9
85°	9.4	9.4	9.4	8.9	8.9
87.5°	5.4	5.4	4.6	3.8	2.7
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)