

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: P554870

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-80-87-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: P554870  
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-80-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

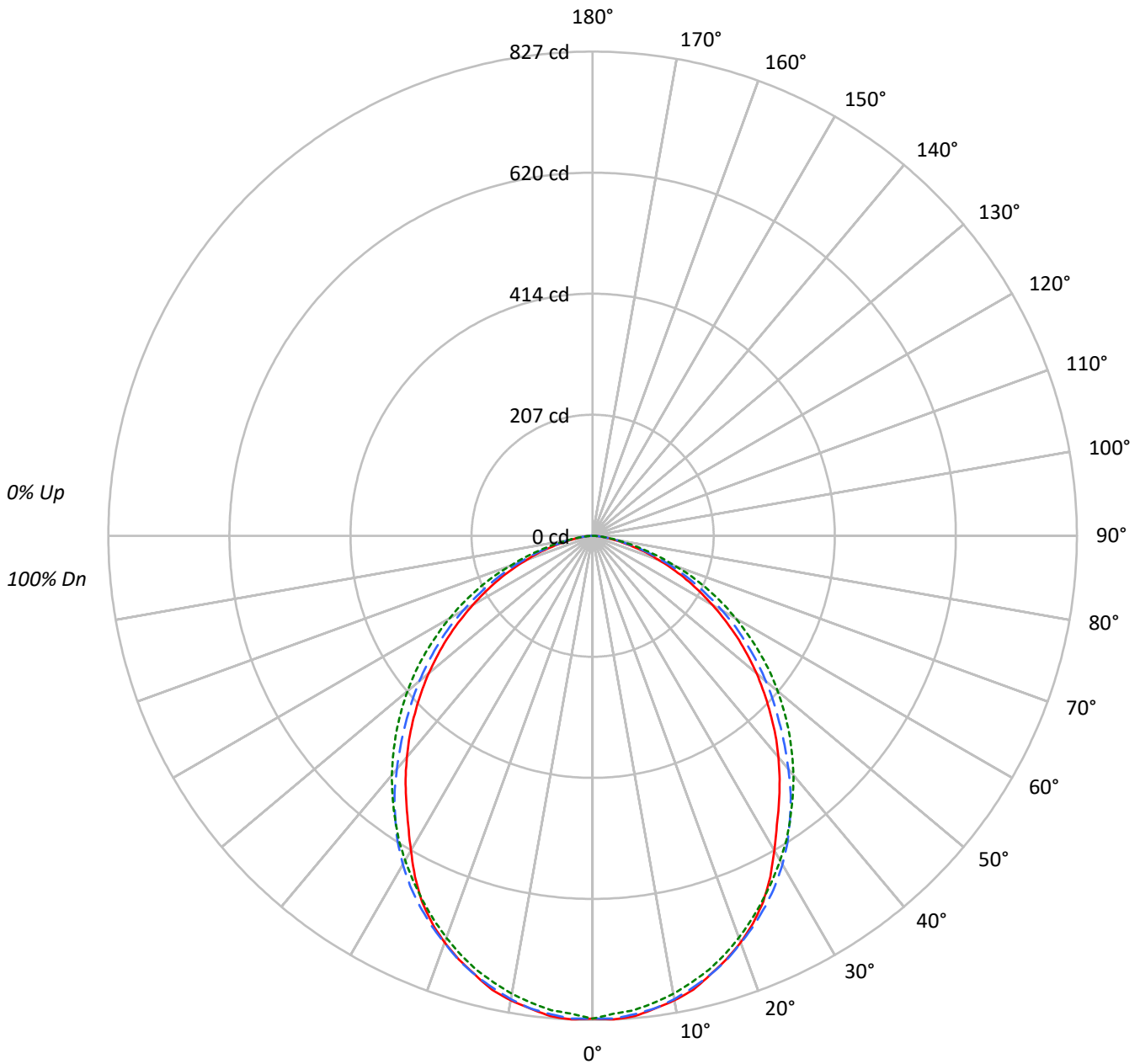
Lumens per Lamp: N/A  
Luminaire Lumens: 1907.0 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (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°	4439	4439	4439
5°	4451	4432	4394
10°	4403	4391	4341
15°	4325	4325	4276
20°	4234	4239	4184
25°	4094	4145	4079
30°	3856	4028	3979
35°	3643	3861	3868
40°	3466	3653	3749
45°	3268	3432	3608
50°	3059	3234	3454
55°	2822	3008	3267
60°	2540	2746	3039
65°	2244	2441	2763
70°	1869	2079	2348
75°	1470	1659	1838
80°	1051	1168	1296
85°	685	685	648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	4.1
10°-20°	218.1	11.4
20°-30°	318.8	16.7
30°-40°	361.8	19.0
40°-50°	349.3	18.3
50°-60°	288.2	15.1
60°-70°	191.9	10.1
70°-80°	85.9	4.5
80°-90°	15.4	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°	614.6	32.2
0°-40°	976.4	51.2
0°-60°	1613.9	84.6
0°-90°	1907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1907.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	824	824	820	816	813	78
15°	776	778	776	773	767	219
25°	689	695	698	693	687	316
35°	554	562	588	591	589	347
45°	429	437	451	472	474	331
55°	301	306	321	338	348	268
65°	176	181	192	205	217	175
75°	71	74	80	84	88	77
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	824.7	824.7	824.7	824.7	824.7
2.5°	826.9	827.3	825.4	820.3	817.1
5°	823.8	823.5	820.3	815.9	813.3
7.5°	814.6	815.2	814.3	807.9	804.5
10°	805.7	806.0	803.5	798.4	794.3
12.5°	794.3	794.0	790.5	788.0	781.3
15°	776.3	778.2	776.3	772.8	767.4
17.5°	758.8	758.8	760.1	754.1	750.0
20°	739.2	740.1	740.1	735.4	730.6
22.5°	716.4	719.2	720.2	715.1	709.4
25°	689.4	694.8	698.0	692.9	686.9
27.5°	656.8	665.0	674.5	670.7	664.1
30°	620.4	632.4	648.2	645.1	640.3
32.5°	585.8	597.9	619.7	618.5	615.9
35°	554.5	562.1	587.7	590.9	588.7
37.5°	524.7	531.7	555.7	563.0	561.1
40°	493.3	500.9	519.9	532.9	533.6
42.5°	462.3	469.6	485.1	503.8	503.8
45°	429.3	436.6	450.9	471.5	474.0
47.5°	397.0	404.6	418.5	439.1	443.3
50°	365.3	372.3	386.2	406.2	412.5
52.5°	332.4	340.0	353.6	372.0	381.2
55°	300.7	305.7	320.6	338.4	348.2
57.5°	267.7	272.5	289.3	304.5	314.6
60°	236.0	242.1	255.1	270.6	282.3
62.5°	205.6	212.0	223.1	236.7	250.0
65°	176.2	180.9	191.7	205.3	217.0
67.5°	147.6	151.8	162.5	172.0	184.4
70°	118.8	124.2	132.1	141.3	149.2
72.5°	95.7	97.9	104.6	111.2	119.4
75°	70.7	74.5	79.8	83.6	88.4
77.5°	50.7	52.9	56.1	59.2	63.7
80°	33.9	34.9	37.7	38.3	41.8
82.5°	20.6	21.2	21.9	22.2	23.4
85°	11.1	11.1	11.1	10.5	10.5
87.5°	6.3	6.3	5.4	4.4	3.2
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)