

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: P554928

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-80-84-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: P554928  
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-35-UNV-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

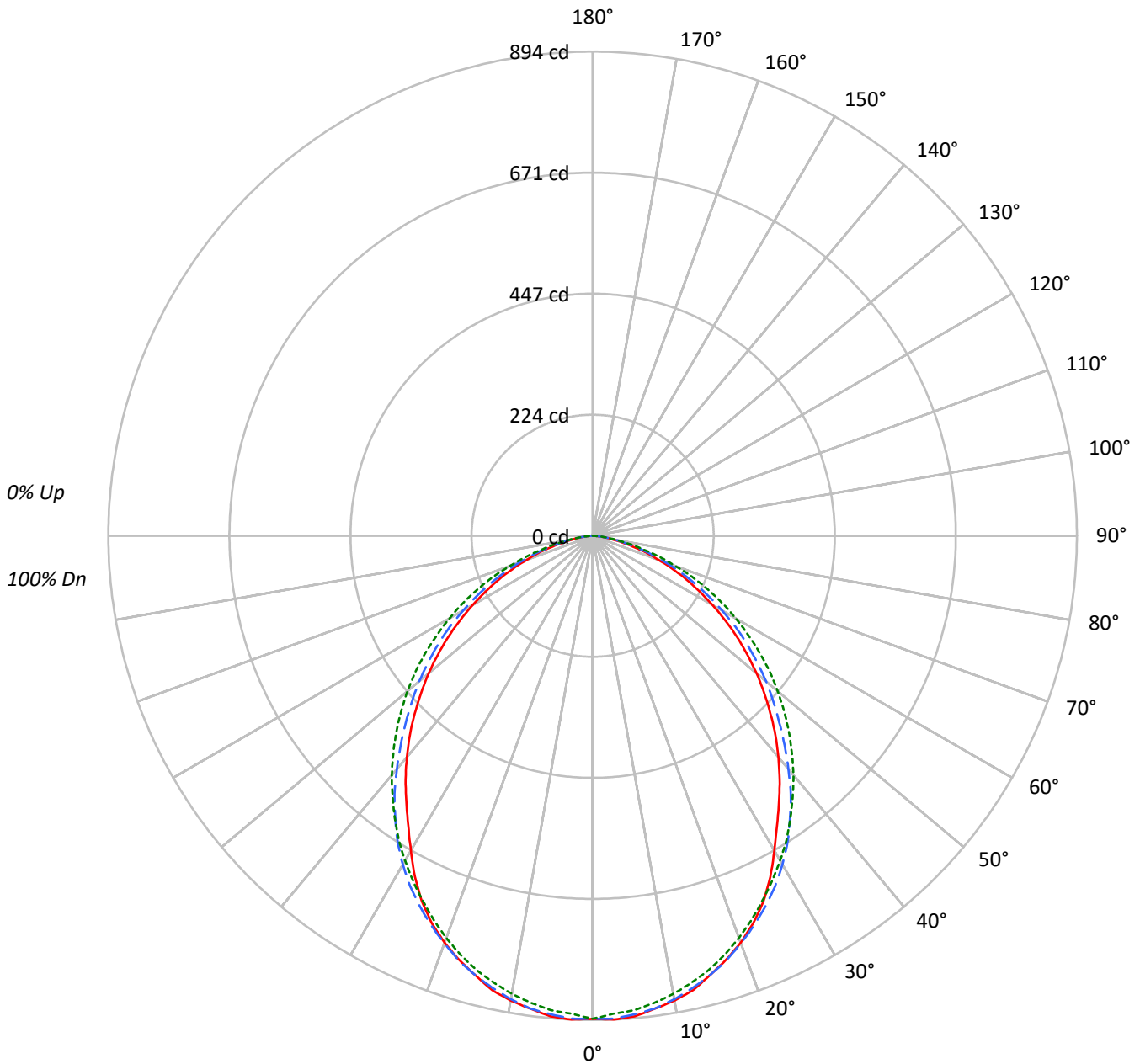
Lumens per Lamp: N/A  
Luminaire Lumens: 2062.0 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4800	4800	4800
5°	4812	4792	4751
10°	4761	4748	4694
15°	4676	4676	4623
20°	4578	4584	4525
25°	4427	4482	4410
30°	4169	4356	4303
35°	3939	4175	4182
40°	3747	3950	4053
45°	3533	3710	3901
50°	3307	3496	3735
55°	3050	3253	3533
60°	2747	2969	3285
65°	2426	2640	2989
70°	2022	2249	2540
75°	1589	1795	1988
80°	1137	1265	1401
85°	741	741	698



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	4.1
10°-20°	235.9	11.4
20°-30°	344.7	16.7
30°-40°	391.3	19.0
40°-50°	377.7	18.3
50°-60°	311.6	15.1
60°-70°	207.5	10.1
70°-80°	92.9	4.5
80°-90°	16.6	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°	664.5	32.2
0°-40°	1055.8	51.2
0°-60°	1745.0	84.6
0°-90°	2062.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2062.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	891	890	887	882	879	84
15°	839	841	839	836	830	237
25°	746	751	755	749	743	341
35°	600	608	636	639	636	376
45°	464	472	488	510	512	358
55°	325	331	347	366	376	290
65°	190	196	207	222	235	189
75°	76	80	86	90	96	84
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	891.8	891.8	891.8	891.8	891.8
2.5°	894.2	894.5	892.4	887.0	883.5
5°	890.7	890.4	887.0	882.2	879.4
7.5°	880.8	881.5	880.5	873.6	869.8
10°	871.2	871.5	868.8	863.3	858.9
12.5°	858.9	858.5	854.8	852.0	844.8
15°	839.3	841.4	839.3	835.6	829.8
17.5°	820.5	820.5	821.9	815.4	810.9
20°	799.3	800.3	800.3	795.2	790.0
22.5°	774.6	777.7	778.7	773.2	767.1
25°	745.5	751.3	754.7	749.2	742.7
27.5°	710.2	719.1	729.4	725.3	718.1
30°	670.8	683.8	700.9	697.5	692.4
32.5°	633.4	646.5	670.1	668.7	666.0
35°	599.5	607.8	635.5	638.9	636.5
37.5°	567.3	574.9	600.9	608.8	606.7
40°	533.4	541.6	562.2	576.2	576.9
42.5°	499.8	507.7	524.5	544.7	544.7
45°	464.2	472.1	487.5	509.8	512.5
47.5°	429.3	437.5	452.6	474.8	479.3
50°	395.0	402.5	417.6	439.2	446.1
52.5°	359.4	367.6	382.3	402.2	412.1
55°	325.1	330.6	346.7	365.9	376.5
57.5°	289.5	294.6	312.8	329.2	340.2
60°	255.2	261.7	275.8	292.6	305.2
62.5°	222.3	229.2	241.2	255.9	270.3
65°	190.5	195.6	207.3	222.0	234.7
67.5°	159.6	164.1	175.7	186.0	199.4
70°	128.5	134.3	142.9	152.8	161.4
72.5°	103.5	105.9	113.1	120.2	129.2
75°	76.4	80.5	86.3	90.4	95.6
77.5°	54.8	57.2	60.6	64.1	68.9
80°	36.7	37.7	40.8	41.5	45.2
82.5°	22.3	23.0	23.6	24.0	25.4
85°	12.0	12.0	12.0	11.3	11.3
87.5°	6.9	6.9	5.8	4.8	3.4
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)