

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: P554874

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-80-94-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: P554874  
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-80-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

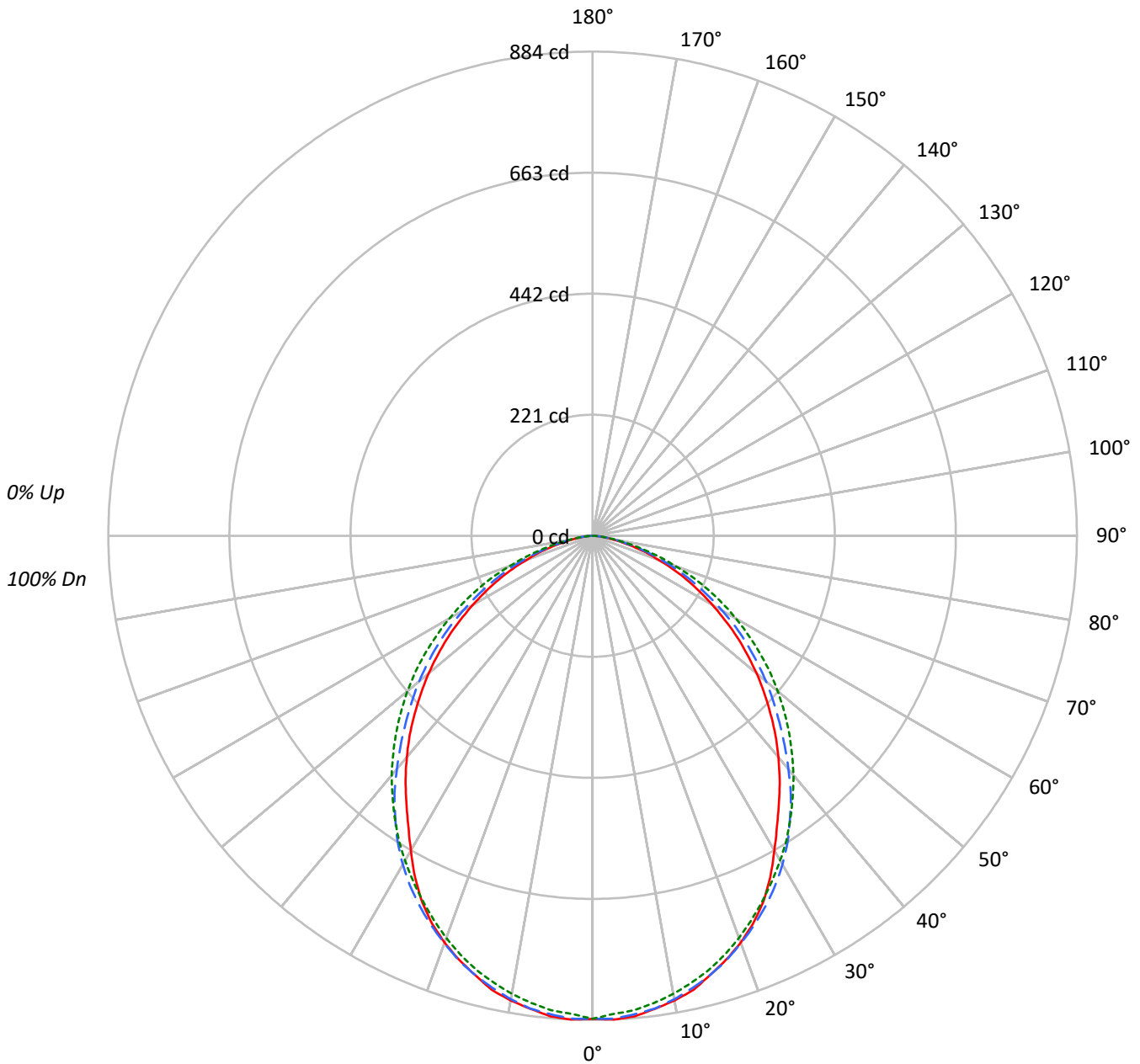
Lumens per Lamp: N/A  
Luminaire Lumens: 2039.0 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4746	4746	4746
5°	4759	4739	4698
10°	4708	4695	4641
15°	4625	4625	4572
20°	4526	4533	4474
25°	4378	4432	4362
30°	4122	4307	4255
35°	3895	4129	4135
40°	3706	3906	4008
45°	3494	3669	3857
50°	3270	3458	3693
55°	3017	3217	3493
60°	2717	2935	3249
65°	2399	2611	2956
70°	1998	2223	2511
75°	1570	1776	1965
80°	1122	1249	1385
85°	735	735	692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.0	4.1
10°-20°	233.2	11.4
20°-30°	340.8	16.7
30°-40°	386.9	19.0
40°-50°	373.5	18.3
50°-60°	308.1	15.1
60°-70°	205.2	10.1
70°-80°	91.8	4.5
80°-90°	16.4	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°	657.1	32.2
0°-40°	1044.0	51.2
0°-60°	1725.6	84.6
0°-90°	2039.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2039.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	881	880	877	872	870	83
15°	830	832	830	826	820	234
25°	737	743	746	741	734	338
35°	593	601	628	632	629	371
45°	459	467	482	504	507	354
55°	322	327	343	362	372	287
65°	188	193	205	220	232	187
75°	76	80	85	89	94	83
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°	881.8	881.8	881.8	881.8	881.8
2.5°	884.2	884.5	882.5	877.1	873.7
5°	880.8	880.5	877.1	872.3	869.6
7.5°	871.0	871.7	870.6	863.9	860.1
10°	861.5	861.8	859.1	853.7	849.3
12.5°	849.3	849.0	845.2	842.5	835.4
15°	830.0	832.0	830.0	826.3	820.5
17.5°	811.4	811.4	812.7	806.3	801.9
20°	790.3	791.4	791.4	786.3	781.2
22.5°	766.0	769.0	770.0	764.6	758.5
25°	737.2	742.9	746.3	740.9	734.5
27.5°	702.3	711.1	721.2	717.2	710.1
30°	663.3	676.2	693.1	689.7	684.7
32.5°	626.4	639.3	662.6	661.3	658.6
35°	592.8	601.0	628.4	631.8	629.4
37.5°	561.0	568.5	594.2	602.0	600.0
40°	527.5	535.6	555.9	569.8	570.5
42.5°	494.3	502.1	518.7	538.6	538.6
45°	459.0	466.8	482.1	504.1	506.8
47.5°	424.5	432.6	447.5	469.5	473.9
50°	390.6	398.1	413.0	434.3	441.1
52.5°	355.4	363.5	378.1	397.7	407.5
55°	321.5	326.9	342.8	361.8	372.3
57.5°	286.3	291.3	309.3	325.6	336.4
60°	252.4	258.8	272.7	289.3	301.8
62.5°	219.9	226.6	238.5	253.1	267.3
65°	188.4	193.4	205.0	219.5	232.1
67.5°	157.9	162.3	173.8	184.0	197.2
70°	127.0	132.8	141.3	151.1	159.6
72.5°	102.3	104.7	111.8	118.9	127.7
75°	75.5	79.6	85.4	89.4	94.5
77.5°	54.2	56.6	60.0	63.3	68.1
80°	36.2	37.3	40.3	41.0	44.7
82.5°	22.0	22.7	23.4	23.7	25.1
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	4.7	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)