

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: P555166

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-97-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: P555166  
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-LD4-2STD-30-UNV-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

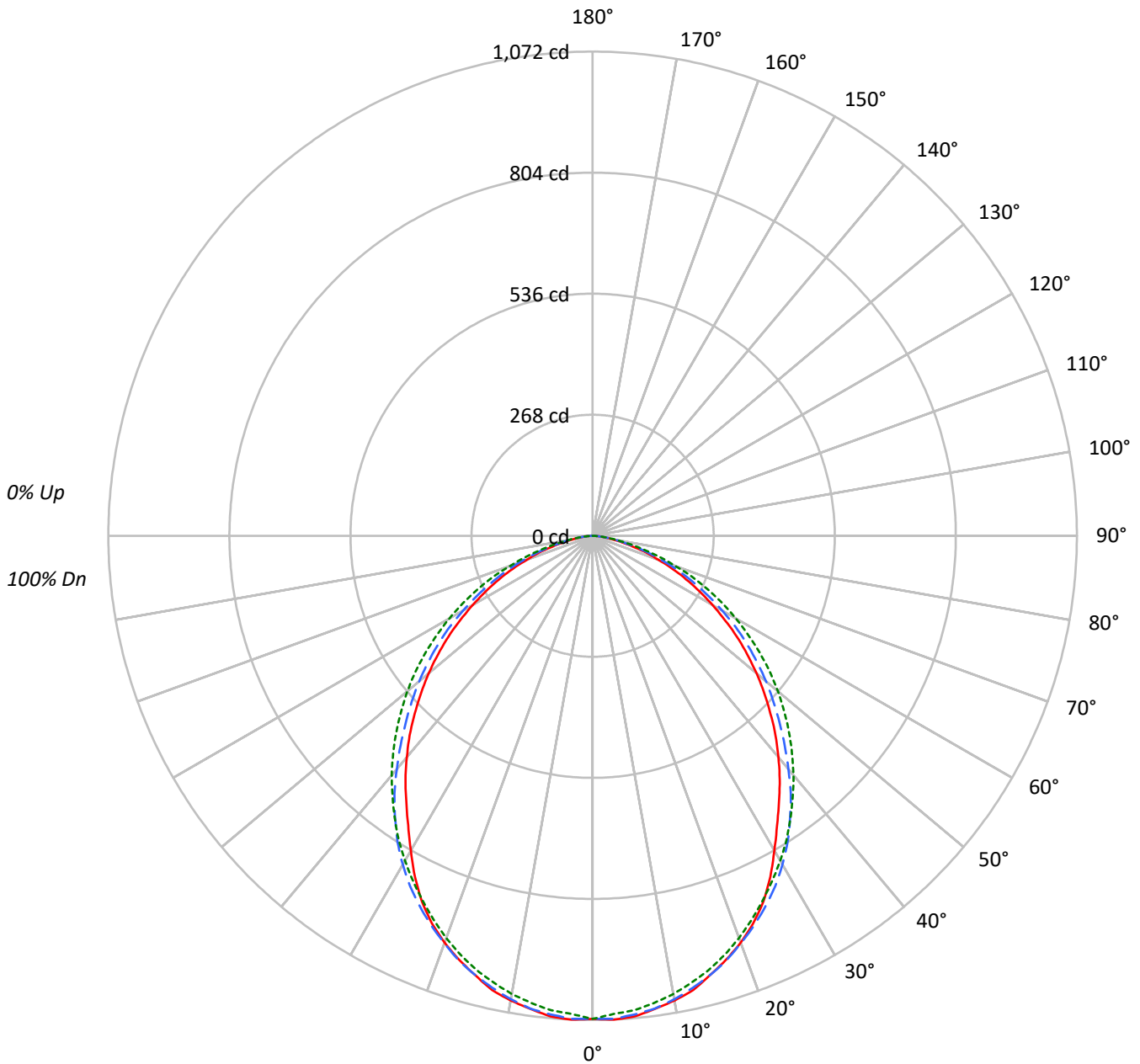
Lumens per Lamp: N/A  
Luminaire Lumens: 2473.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	5756	5756	5756
5°	5772	5747	5698
10°	5710	5695	5629
15°	5609	5609	5545
20°	5490	5497	5427
25°	5309	5375	5290
30°	5000	5225	5161
35°	4724	5008	5016
40°	4494	4737	4861
45°	4237	4450	4679
50°	3966	4194	4479
55°	3658	3902	4237
60°	3295	3561	3941
65°	2909	3166	3584
70°	2425	2696	3045
75°	1905	2152	2383
80°	1364	1516	1680
85°	889	889	840



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	4.1
10°-20°	282.9	11.4
20°-30°	413.4	16.7
30°-40°	469.2	19.0
40°-50°	453.0	18.3
50°-60°	373.7	15.1
60°-70°	248.8	10.1
70°-80°	111.4	4.5
80°-90°	19.9	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°	797.0	32.2
0°-40°	1266.2	51.2
0°-60°	2092.9	84.6
0°-90°	2473.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2473.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1068	1068	1064	1058	1055	101
15°	1007	1009	1007	1002	995	284
25°	894	901	905	899	891	409
35°	719	729	762	766	763	451
45°	557	566	585	611	615	430
55°	390	396	416	439	452	348
65°	228	235	249	266	281	227
75°	92	97	104	108	115	100
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1069.5	1069.5	1069.5	1069.5	1069.5
2.5°	1072.4	1072.8	1070.3	1063.8	1059.6
5°	1068.3	1067.9	1063.8	1058.0	1054.7
7.5°	1056.4	1057.2	1055.9	1047.7	1043.2
10°	1044.9	1045.3	1042.0	1035.4	1030.1
12.5°	1030.1	1029.7	1025.1	1021.8	1013.2
15°	1006.6	1009.1	1006.6	1002.1	995.1
17.5°	984.0	984.0	985.7	977.9	972.5
20°	958.6	959.8	959.8	953.6	947.5
22.5°	929.0	932.7	933.9	927.3	919.9
25°	894.1	901.0	905.2	898.6	890.8
27.5°	851.7	862.4	874.8	869.8	861.2
30°	804.5	820.1	840.7	836.5	830.4
32.5°	759.7	775.3	803.7	802.0	798.7
35°	719.0	728.9	762.2	766.3	763.4
37.5°	680.4	689.4	720.7	730.1	727.7
40°	639.7	649.6	674.2	691.1	691.9
42.5°	599.5	608.9	629.1	653.3	653.3
45°	556.7	566.2	584.7	611.4	614.7
47.5°	514.8	524.7	542.8	569.5	574.8
50°	473.7	482.8	500.9	526.7	535.0
52.5°	431.0	440.9	458.5	482.4	494.3
55°	389.9	396.5	415.8	438.8	451.6
57.5°	347.2	353.4	375.1	394.9	408.0
60°	306.1	313.9	330.8	350.9	366.1
62.5°	266.7	274.9	289.3	306.9	324.2
65°	228.4	234.6	248.6	266.2	281.4
67.5°	191.5	196.8	210.8	223.1	239.1
70°	154.1	161.1	171.3	183.3	193.5
72.5°	124.1	127.0	135.6	144.2	154.9
75°	91.6	96.6	103.5	108.5	114.6
77.5°	65.7	68.6	72.7	76.8	82.6
80°	44.0	45.2	48.9	49.7	54.2
82.5°	26.7	27.5	28.4	28.8	30.4
85°	14.4	14.4	14.4	13.6	13.6
87.5°	8.2	8.2	7.0	5.8	4.1
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)