

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: P555164

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-96-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: P555164  
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-82-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

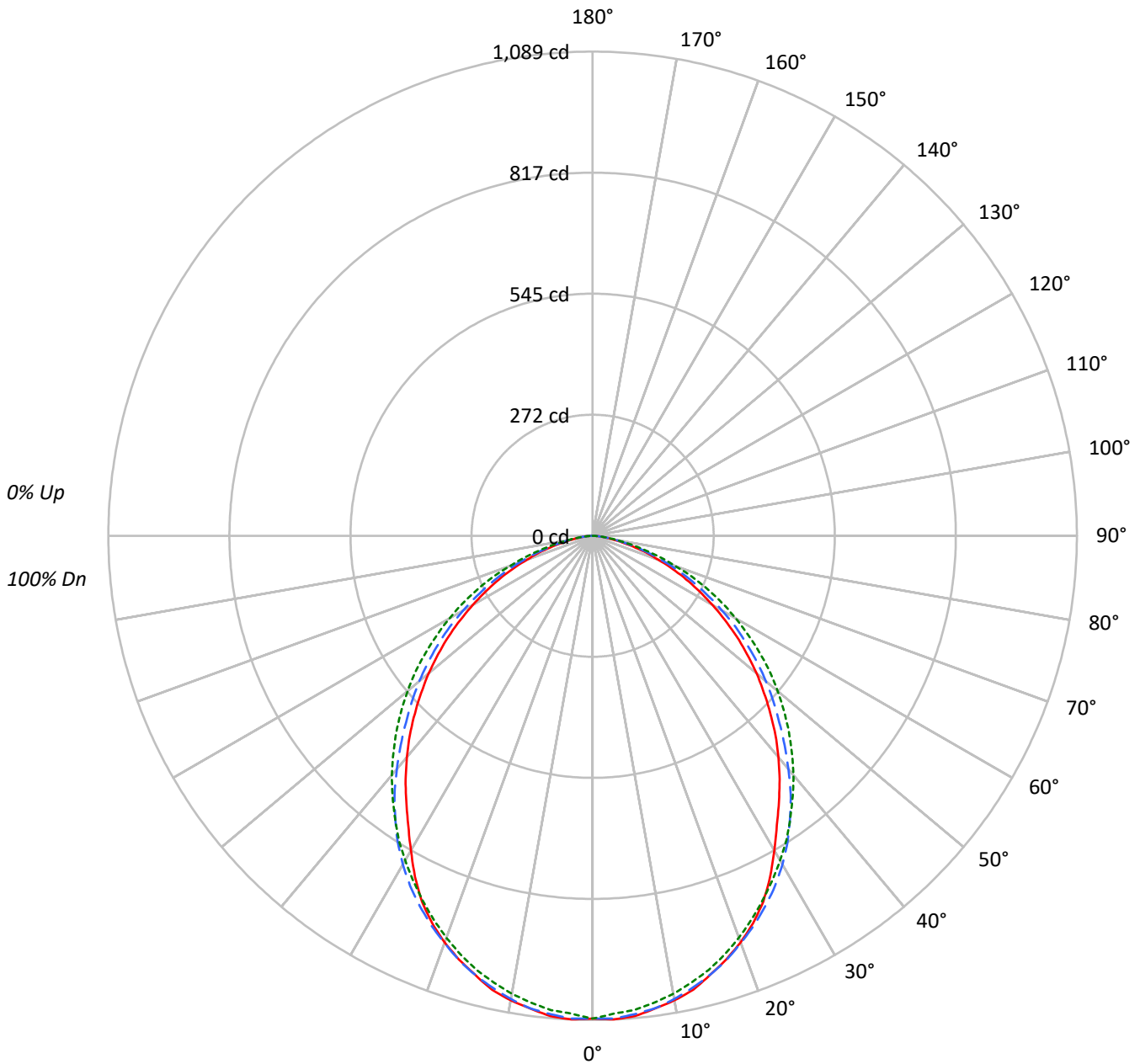
Lumens per Lamp: N/A  
Luminaire Lumens: 2511.0 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5844	5844	5844
5°	5860	5835	5786
10°	5798	5782	5716
15°	5695	5695	5630
20°	5574	5582	5510
25°	5391	5458	5371
30°	5077	5305	5239
35°	4797	5085	5093
40°	4564	4810	4936
45°	4303	4519	4750
50°	4027	4258	4548
55°	3715	3962	4302
60°	3345	3615	4001
65°	2954	3214	3640
70°	2461	2738	3092
75°	1934	2185	2420
80°	1382	1537	1708
85°	902	902	852



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.2	4.1
10°-20°	287.2	11.4
20°-30°	419.7	16.7
30°-40°	476.5	19.0
40°-50°	459.9	18.3
50°-60°	379.4	15.1
60°-70°	252.7	10.1
70°-80°	113.1	4.5
80°-90°	20.2	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°	809.2	32.2
0°-40°	1285.7	51.2
0°-60°	2125.0	84.6
0°-90°	2511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1085	1084	1080	1074	1071	103
15°	1022	1025	1022	1018	1010	288
25°	908	915	919	912	904	416
35°	730	740	774	778	775	457
45°	565	575	594	621	624	436
55°	396	403	422	446	458	353
65°	232	238	252	270	286	230
75°	93	98	105	110	116	102
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1085.9	1085.9	1085.9	1085.9	1085.9
2.5°	1088.9	1089.3	1086.8	1080.1	1075.9
5°	1084.7	1084.3	1080.1	1074.3	1070.9
7.5°	1072.6	1073.4	1072.2	1063.8	1059.2
10°	1060.9	1061.3	1058.0	1051.3	1045.9
12.5°	1045.9	1045.5	1040.9	1037.5	1028.8
15°	1022.1	1024.6	1022.1	1017.5	1010.4
17.5°	999.2	999.2	1000.8	992.9	987.5
20°	973.3	974.6	974.6	968.3	962.0
22.5°	943.3	947.0	948.3	941.6	934.1
25°	907.8	914.9	919.1	912.4	904.5
27.5°	864.8	875.7	888.2	883.2	874.4
30°	816.9	832.7	853.6	849.4	843.1
32.5°	771.4	787.2	816.0	814.4	811.0
35°	730.1	740.1	773.9	778.1	775.1
37.5°	690.9	700.0	731.7	741.3	738.8
40°	649.6	659.6	684.6	701.7	702.5
42.5°	608.7	618.3	638.7	663.3	663.3
45°	565.3	574.9	593.7	620.8	624.1
47.5°	522.7	532.8	551.1	578.2	583.6
50°	481.0	490.2	508.6	534.8	543.2
52.5°	437.6	447.6	465.6	489.8	501.9
55°	395.9	402.6	422.2	445.6	458.5
57.5°	352.5	358.8	380.9	400.9	414.3
60°	310.8	318.7	335.8	356.3	371.7
62.5°	270.8	279.1	293.7	311.6	329.2
65°	232.0	238.2	252.4	270.3	285.8
67.5°	194.4	199.8	214.0	226.5	242.8
70°	156.4	163.5	174.0	186.1	196.5
72.5°	126.0	128.9	137.7	146.4	157.3
75°	93.0	98.0	105.1	110.1	116.4
77.5°	66.8	69.7	73.8	78.0	83.9
80°	44.6	45.9	49.6	50.5	55.1
82.5°	27.1	28.0	28.8	29.2	30.9
85°	14.6	14.6	14.6	13.8	13.8
87.5°	8.3	8.3	7.1	5.8	4.2
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)