

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: P555174

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-93-87-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: P555174  
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-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

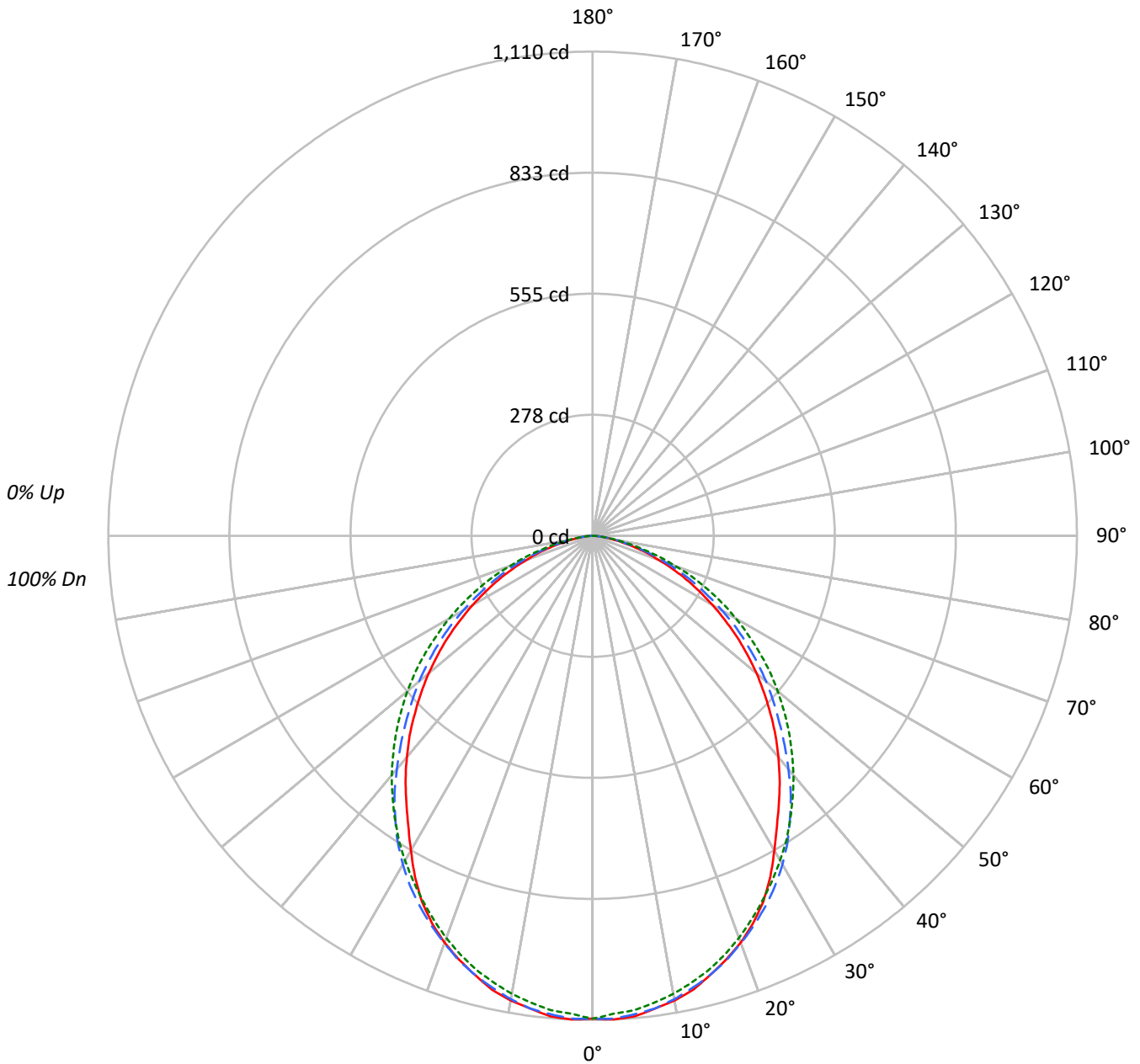
Lumens per Lamp: N/A  
Luminaire Lumens: 2560.0 lumens  
Efficiency: N/A  
Efficacy: 76.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5958	5958	5958
5°	5975	5949	5898
10°	5911	5895	5827
15°	5806	5806	5740
20°	5683	5691	5617
25°	5496	5564	5476
30°	5175	5408	5342
35°	4890	5184	5192
40°	4652	4904	5032
45°	4386	4606	4843
50°	4106	4341	4637
55°	3787	4039	4386
60°	3411	3686	4080
65°	3012	3277	3711
70°	2510	2792	3152
75°	1971	2229	2468
80°	1410	1568	1739
85°	920	920	865



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	4.1
10°-20°	292.8	11.4
20°-30°	427.9	16.7
30°-40°	485.7	19.0
40°-50°	468.9	18.3
50°-60°	386.8	15.1
60°-70°	257.6	10.1
70°-80°	115.3	4.5
80°-90°	20.6	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°	825.0	32.2
0°-40°	1310.8	51.2
0°-60°	2166.5	84.6
0°-90°	2560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2560.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1106	1105	1101	1095	1092	105
15°	1042	1045	1042	1037	1030	294
25°	926	933	937	930	922	424
35°	744	754	789	793	790	466
45°	576	586	605	633	636	445
55°	404	410	430	454	467	360
65°	236	243	257	276	291	234
75°	95	100	107	112	119	104
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°	1107.1	1107.1	1107.1	1107.1	1107.1
2.5°	1110.1	1110.5	1108.0	1101.2	1096.9
5°	1105.9	1105.4	1101.2	1095.2	1091.8
7.5°	1093.5	1094.4	1093.1	1084.6	1079.9
10°	1081.6	1082.0	1078.6	1071.8	1066.3
12.5°	1066.3	1065.9	1061.2	1057.8	1048.9
15°	1042.1	1044.6	1042.1	1037.4	1030.1
17.5°	1018.7	1018.7	1020.4	1012.3	1006.8
20°	992.3	993.6	993.6	987.2	980.8
22.5°	961.7	965.5	966.8	960.0	952.3
25°	925.5	932.7	937.0	930.2	922.1
27.5°	881.7	892.8	905.5	900.4	891.5
30°	832.8	849.0	870.2	866.0	859.6
32.5°	786.4	802.6	831.9	830.2	826.8
35°	744.3	754.5	789.0	793.2	790.3
37.5°	704.3	713.7	746.0	755.8	753.3
40°	662.2	672.4	698.0	715.4	716.3
42.5°	620.6	630.3	651.2	676.3	676.3
45°	576.3	586.1	605.2	632.9	636.3
47.5°	532.9	543.1	561.9	589.5	595.0
50°	490.4	499.8	518.5	545.3	553.8
52.5°	446.2	456.4	474.7	499.3	511.7
55°	403.6	410.4	430.4	454.3	467.4
57.5°	359.4	365.8	388.3	408.7	422.4
60°	316.9	325.0	342.4	363.2	379.0
62.5°	276.0	284.5	299.4	317.7	335.6
65°	236.5	242.9	257.3	275.6	291.4
67.5°	198.2	203.7	218.2	231.0	247.5
70°	159.5	166.7	177.4	189.7	200.3
72.5°	128.4	131.4	140.4	149.3	160.3
75°	94.8	100.0	107.2	112.3	118.7
77.5°	68.1	71.0	75.3	79.5	85.5
80°	45.5	46.8	50.6	51.5	56.1
82.5°	27.6	28.5	29.3	29.8	31.5
85°	14.9	14.9	14.9	14.0	14.0
87.5°	8.5	8.5	7.2	6.0	4.3
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)