

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: P555234

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-93-85-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: P555234  
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-35-UNV-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

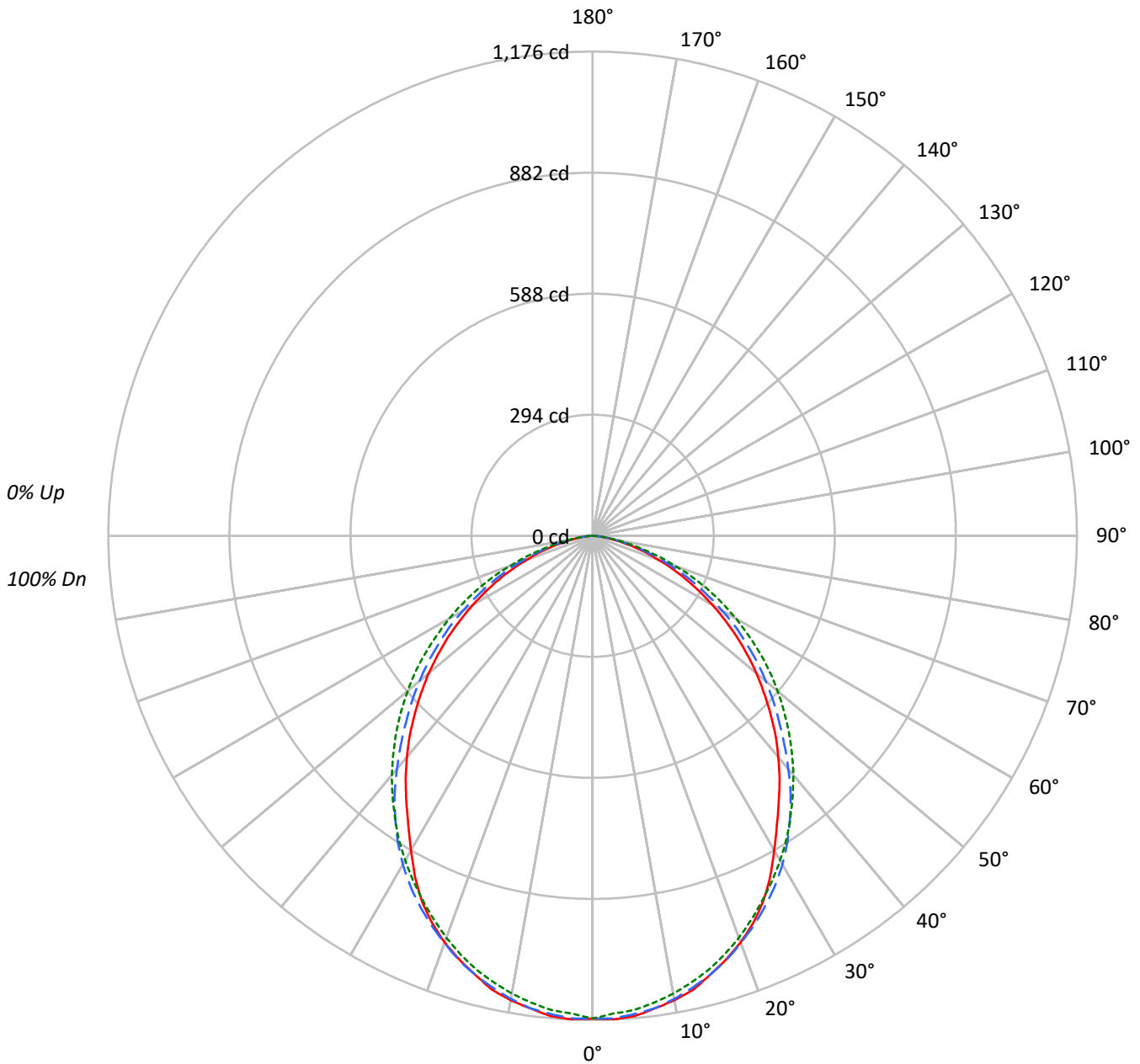
Lumens per Lamp: N/A  
Luminaire Lumens: 2711.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6310	6310	6310
5°	6327	6300	6246
10°	6260	6243	6171
15°	6148	6148	6078
20°	6018	6026	5949
25°	5820	5893	5799
30°	5481	5727	5657
35°	5179	5489	5499
40°	4927	5193	5329
45°	4645	4878	5128
50°	4348	4598	4910
55°	4010	4277	4645
60°	3612	3903	4320
65°	3189	3470	3929
70°	2658	2955	3338
75°	2088	2360	2614
80°	1494	1661	1844
85°	976	976	920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.4	4.1
10°-20°	310.1	11.4
20°-30°	453.2	16.7
30°-40°	514.4	19.0
40°-50°	496.6	18.3
50°-60°	409.6	15.1
60°-70°	272.8	10.1
70°-80°	122.1	4.5
80°-90°	21.8	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°	873.7	32.2
0°-40°	1388.1	51.2
0°-60°	2294.3	84.6
0°-90°	2711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2711.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1171	1171	1166	1160	1156	111
15°	1104	1106	1104	1099	1091	311
25°	980	988	992	985	976	449
35°	788	799	836	840	837	494
45°	610	621	641	670	674	471
55°	427	435	456	481	495	382
65°	250	257	272	292	308	248
75°	100	106	114	119	126	110
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1175.6	1176.0	1173.3	1166.1	1161.6
5°	1171.1	1170.6	1166.1	1159.8	1156.2
7.5°	1158.0	1158.9	1157.6	1148.6	1143.6
10°	1145.4	1145.9	1142.3	1135.1	1129.2
12.5°	1129.2	1128.7	1123.8	1120.2	1110.7
15°	1103.5	1106.2	1103.5	1098.6	1090.9
17.5°	1078.8	1078.8	1080.6	1072.0	1066.1
20°	1050.8	1052.2	1052.2	1045.4	1038.7
22.5°	1018.4	1022.4	1023.8	1016.6	1008.5
25°	980.1	987.8	992.3	985.1	976.5
27.5°	933.7	945.4	958.9	953.5	944.1
30°	881.9	899.0	921.6	917.1	910.3
32.5°	832.8	849.9	881.0	879.2	875.6
35°	788.2	799.0	835.5	840.0	836.9
37.5°	745.9	755.8	790.0	800.4	797.7
40°	701.3	712.1	739.1	757.6	758.5
42.5°	657.2	667.5	689.6	716.2	716.2
45°	610.3	620.7	640.9	670.2	673.8
47.5°	564.4	575.2	595.0	624.3	630.1
50°	519.3	529.2	549.1	577.4	586.4
52.5°	472.5	483.3	502.7	528.8	541.9
55°	427.4	434.7	455.8	481.0	495.0
57.5°	380.6	387.4	411.2	432.9	447.3
60°	335.6	344.1	362.6	384.7	401.3
62.5°	292.3	301.3	317.1	336.5	355.4
65°	250.4	257.2	272.5	291.9	308.5
67.5°	209.9	215.8	231.1	244.6	262.1
70°	168.9	176.6	187.8	200.9	212.1
72.5°	136.0	139.2	148.6	158.1	169.8
75°	100.4	105.8	113.5	118.9	125.7
77.5°	72.1	75.2	79.7	84.2	90.5
80°	48.2	49.5	53.6	54.5	59.5
82.5°	29.3	30.2	31.1	31.5	33.3
85°	15.8	15.8	15.8	14.9	14.9
87.5°	9.0	9.0	7.7	6.3	4.5
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)