

Test Report Number:	FTS25AR-00264E	Total Page(s): 11
Applicant Name:	Sunlu (Guangdong) Technology Co., Ltd.	
Applicant Address:	No. 162 Tanlong North Road, Tanzhou Town, Zhongshan City, China.	
Test item:	3D Printing-Mate	
Model / Type Reference:	FilaDryer E2	
Date of Issue:	2025-03-27	
Testing Laboratory:	Guangdong Future Test Services Co., Ltd. Room A03, No.228, Min' an South Road, Xiaolan, Zhongshan Guangdong, China	
Test Specification:	FCC 47 CFR Part 15:2024	
Test Result:	Passed	
Compiled by:	Reviewed by:	
2025-03-27 Leo Xiao	<i>Leo Xiao</i>	2025-03-27 Gordon Xie <i>Gordon Xie</i>
<i>Date</i> <i>Name</i>	<i>Signature</i>	<i>Date</i> <i>Name</i> <i>Signature</i>
Remark:	N/A	
<p>The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of the examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacture cannot be derived therefore.</p>		

Test Summary

6.1 Conducted Emission

RESULT: Pass

6.2 Radiated Emission

RESULT: Pass

Contents

1. General Remarks	4
1.1 Complementary Materials.....	4
2. Measurement Uncertainty	4
3. Test Sites	4
3.1 Test Facilities.....	4
3.2 List of Test and Measurement Instruments.....	4
4. General Product Information	5
4.1 Ratings and System Details.....	5
4.2 Independent Operation Modes.....	5
4.3 Noise Generating and Noise Suppressing Parts.....	5
4.4 Submitted Documents.....	5
5. Test Set-up and Operation Modes	6
5.1 Principle of Configuration Selection.....	6
5.2 Physical Configuration for Testing.....	6
5.3 Test Operation and Test Software.....	6
5.4 Special Accessories and Auxiliary Equipment.....	6
5.5 Countermeasures to achieve EMC Compliance.....	6
6. Test Results Emission	7
6.1 Conducted Emission.....	7
6.2 Radiated Emission.....	9
7. The photos of test setting	11

1. General Remarks

When applying the basic standards in this test report, please refer to the applied generic or product family standards for edition information:

For dated basic standards, only the edition cited applies. For undated basic standards, the latest edition (including any amendments) applies.

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test result.

Appendix 2: Photo of EUT

Appendix 3: List of Test and Measurement Equipment

2. Measurement Uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	3.12dB
Uncertainty for Disturbance Power test	3.26dB
Uncertainty for Radiation Emission test	3.56 dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

3. Test Sites

3.1 Test Facilities

A. Guangdong Future Test Services Co., Ltd.

Add: Room A03, No.228, Min'an South Road, Xiaolan, Zhongshan Guangdong, China

3.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Refer to attached Appendix 3.

4. General Product Information

Model list:

No.	Model	Input voltage	Power
1.	FilaDryer E2	100-120V~, 50/60Hz	325W

According to the above information, all tests were performed on following models

Model	EMC test item	Model name In appendix 1
FilaDryer E2	DV, RE	FilaDryer E2

4.1 Ratings and System Details

Type designation:	Refer to section 4
Rated input:	Refer to section 4
Max. power:	Refer to section 4
Protection class:	Class I
Ports:	AC mains
Cables:	Unshielded

Refer to the Technical Documentation for further information.

4.2 Independent Operation Modes

The basic operation modes are:

- A. Filament Drying Mode

Refer to the user manual for further information.

4.3 Noise Generating and Noise Suppressing Parts

Refer to the Technical Documentation for further information.

4.4 Submitted Documents

Difference Declaration
 Circuit Diagram
 PCB Layout
 User Manual
 Label

5. Test Set-up and Operation Modes

5.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Immunity: The equipment under test (EUT) was configured to have its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the instructions for use.

5.2 Physical Configuration for Testing

Refer to relative paragraphs of this test report.

5.3 Test Operation and Test Software

Refer to test setup in chapter 6.

5.4 Special Accessories and Auxiliary Equipment

None.

5.5 Countermeasures to achieve EMC Compliance

No additional countermeasures to the submitted test sample(s) were employed to achieve compliance.

6. Test Results Emission

6.1 Conducted Emission

RESULT:

Pass

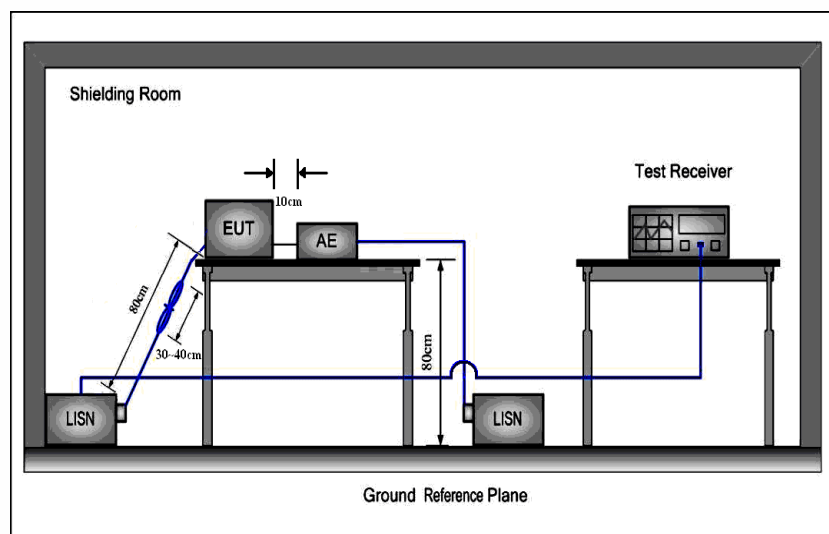
Test Specification

Family standard	: ANSI C63.4:2014
Port	: AC Mains
Frequency range of Mains	: 150kHz-30MHz
Test site	: Shielded Room
Limits	: FCC 47 CFR Part 15 Subpart B, §15.107

Test Setup

Date of testing	: Refer to Appendix 1
Input voltage	: Refer to Appendix 1
Operation mode	: A (Worst mode)
Test Ports	: AC Mains
Test configuration	: Table-top
Temperature	: Refer to Appendix 1
Humidity	: Refer to Appendix 1
Air pressure	: Refer to Appendix 1

Test Connection Diagram



Test Result

Measurement uncertainty: 3.12 dB ($k=2$, $\sigma=95\%$)

If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector will be omitted.

Disturbances other than those mentioned are small or not detectable.

For measurement results, please refer to the attached appendix 1.

6.2 Radiated Emission

RESULT:

Pass

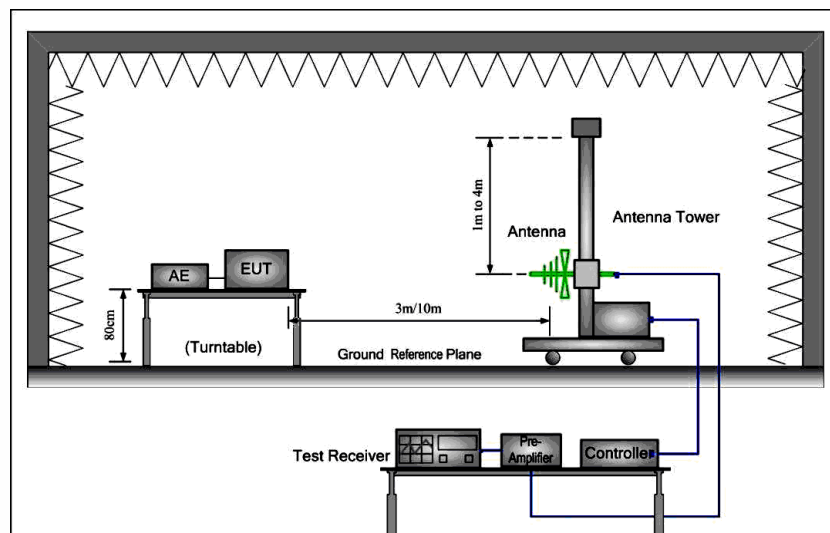
Test Specification

Family standard	: ANSI C63.4:2014
Port	: AC Mains
Frequency range of Mains	: 30MHz-1000MHz
Test site	: Shielded Room
Limits	: FCC 47 CFR Part 15 Subpart B, §15.109

Test Setup

Date of testing	: Refer to Appendix 1
Input voltage	: Refer to Appendix 1
Operation mode	: A (Worst mode)
Test Ports	: AC Mains
Test configuration	: Table-top
Temperature	: Refer to Appendix 1
Humidity	: Refer to Appendix 1
Air pressure	: Refer to Appendix 1

Test Connection Diagram



Test Result

Measurement uncertainty: 3.56dB (k=2, σ = 95%)

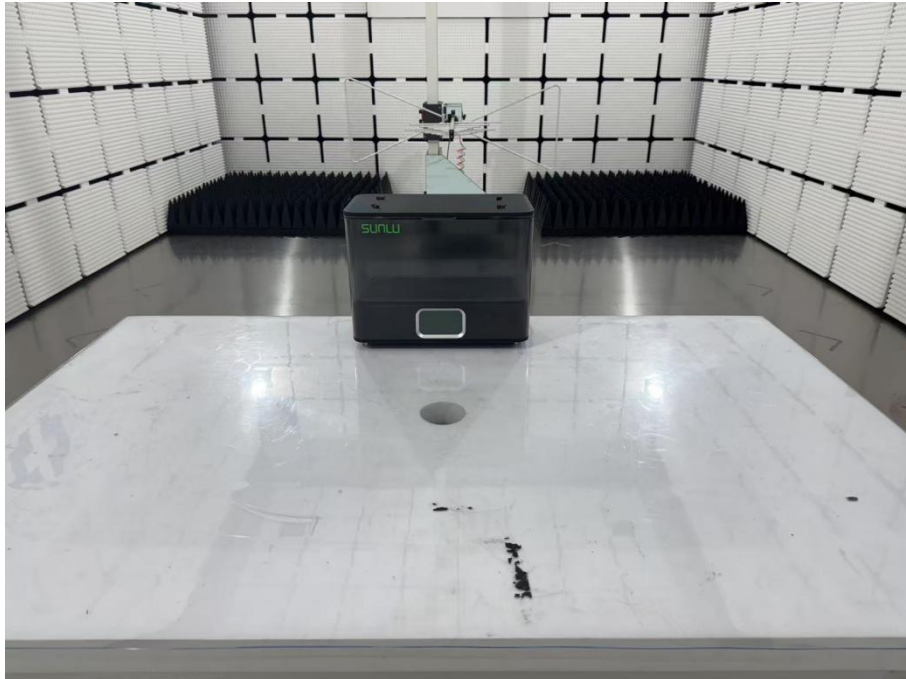
For measurement results, please refer to the attached appendix 1.

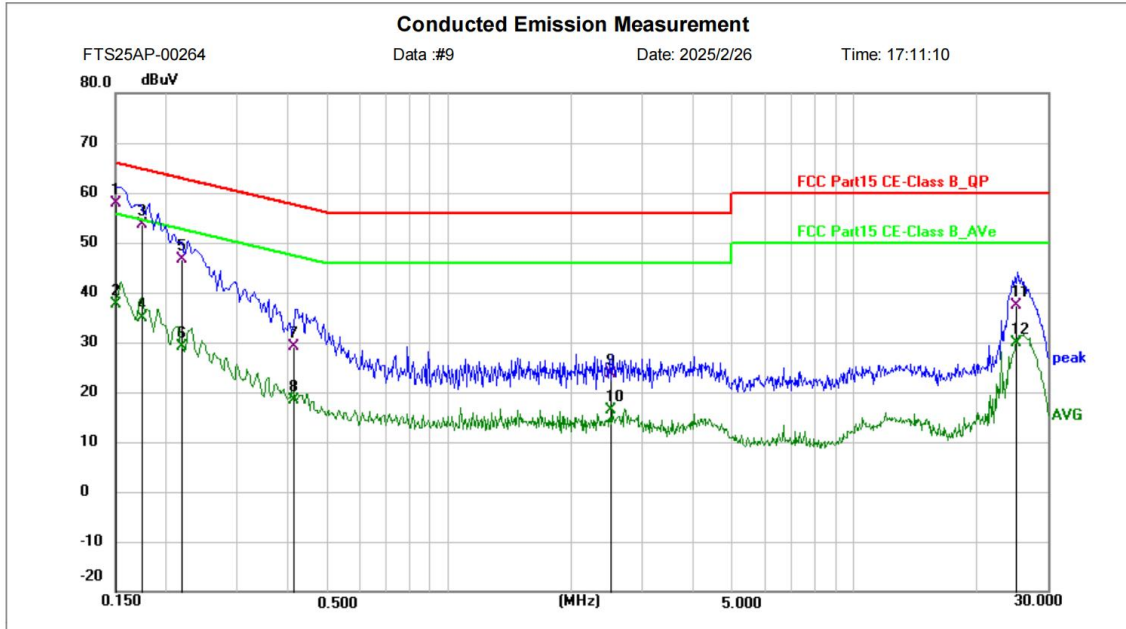
7. The photos of test setting

Terminal Continuous Disturbance Voltage:



Radiated Emission:





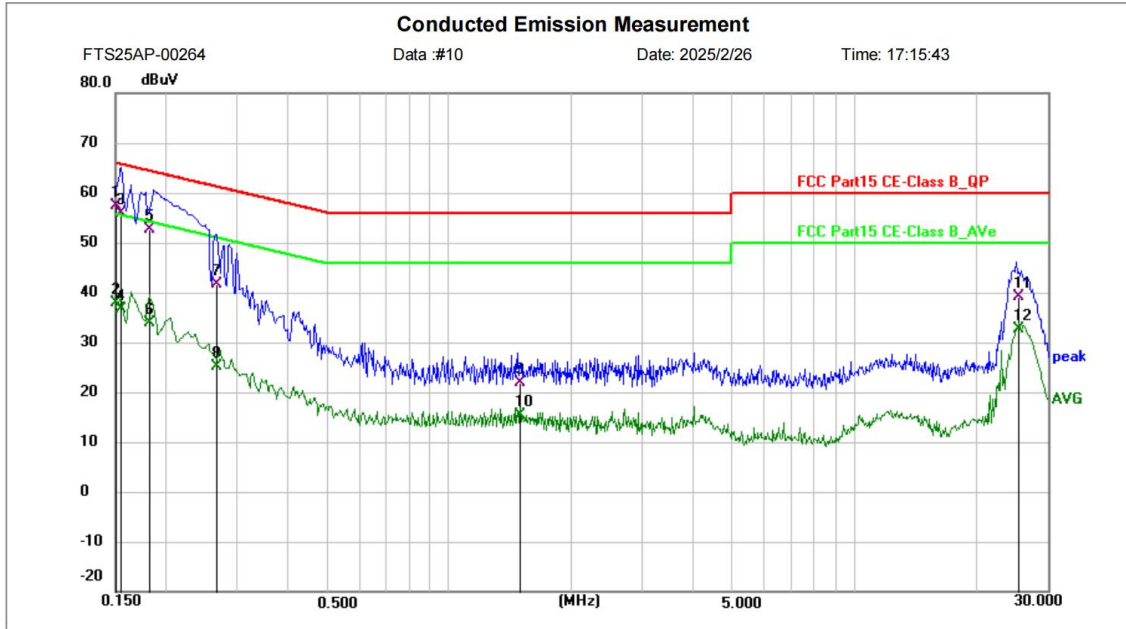
Site LAB
 Limit: FCC Part15 CE-Class B_QP
 EUT: 3D Printing-Mate
 M/N: FilaDryer E2
 Mode: Filament Drying Mode
 Note:
 Samples ID:

Phase: **L1**
 Power: AC120V/60Hz

Temperature: 25(C)
 Humidity: 60 %RH
 Air Pressure: 983 mbar

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1500	46.74	11.21	57.95	66.00	-8.05	QP	P	
2	0.1500	26.37	11.21	37.58	56.00	-18.42	AVG	P	
3	0.1747	42.27	11.30	53.57	64.73	-11.16	QP	P	
4	0.1747	23.51	11.30	34.81	54.73	-19.92	AVG	P	
5	0.2193	35.41	11.34	46.75	62.85	-16.10	QP	P	
6	0.2193	17.78	11.34	29.12	52.85	-23.73	AVG	P	
7	0.4119	18.34	10.76	29.10	57.61	-28.51	QP	P	
8	0.4119	7.68	10.76	18.44	47.61	-29.17	AVG	P	
9	2.5156	12.81	10.74	23.55	56.00	-32.45	QP	P	
10	2.5156	5.57	10.74	16.31	46.00	-29.69	AVG	P	
11	25.2976	26.14	11.34	37.48	60.00	-22.52	QP	P	
12	25.2976	18.42	11.34	29.76	50.00	-20.24	AVG	P	

*:Maximum data x:Over limit !:over margin



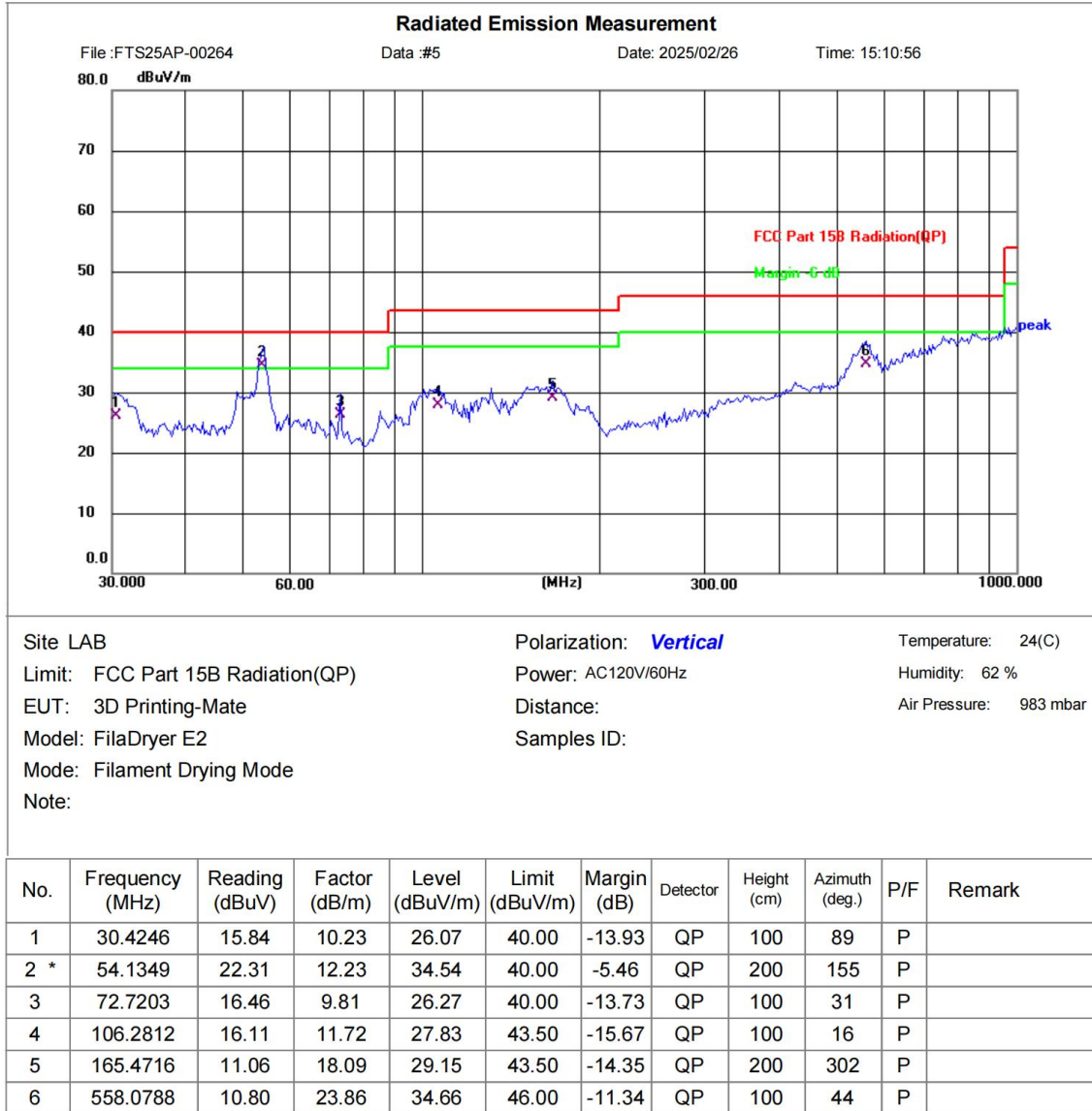
Site LAB
 Limit: FCC Part15 CE-Class B_QP
 EUT: 3D Printing-Mate
 M/N: FilaDryer E2
 Mode: Filament Drying Mode
 Note:
 Samples ID:

Phase: **N**
 Power: AC120V/60Hz

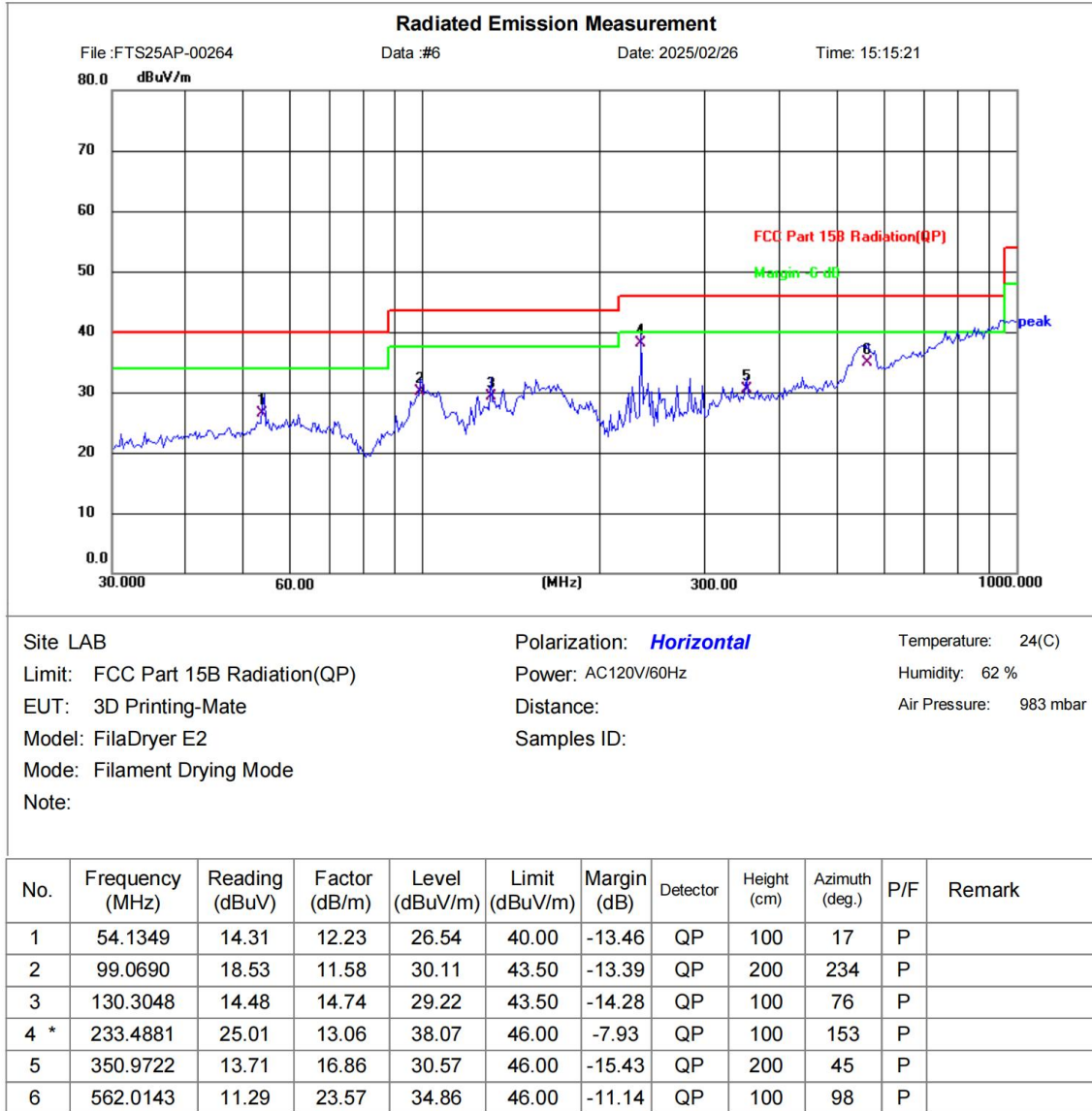
Temperature: 25(C)
 Humidity: 60 %RH
 Air Pressure: 983 mbar

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1500	45.93	11.38	57.31	66.00	-8.69	QP	P	
2	0.1500	26.62	11.38	38.00	56.00	-18.00	AVG	P	
3	0.1545	44.61	11.39	56.00	65.75	-9.75	QP	P	
4	0.1545	25.19	11.39	36.58	55.75	-19.17	AVG	P	
5	0.1815	41.17	11.49	52.66	64.42	-11.76	QP	P	
6	0.1815	22.48	11.49	33.97	54.42	-20.45	AVG	P	
7	0.2670	30.28	11.37	41.65	61.21	-19.56	QP	P	
8	0.2670	13.87	11.37	25.24	51.21	-25.97	AVG	P	
9	1.5000	10.93	10.84	21.77	56.00	-34.23	QP	P	
10	1.5000	4.60	10.84	15.44	46.00	-30.56	AVG	P	
11	25.4310	27.81	11.33	39.14	60.00	-20.86	QP	P	
12	25.4310	21.22	11.33	32.55	50.00	-17.45	AVG	P	

*:Maximum data x:Over limit !:over margin



*:Maximum data x:Over limit !:over margin

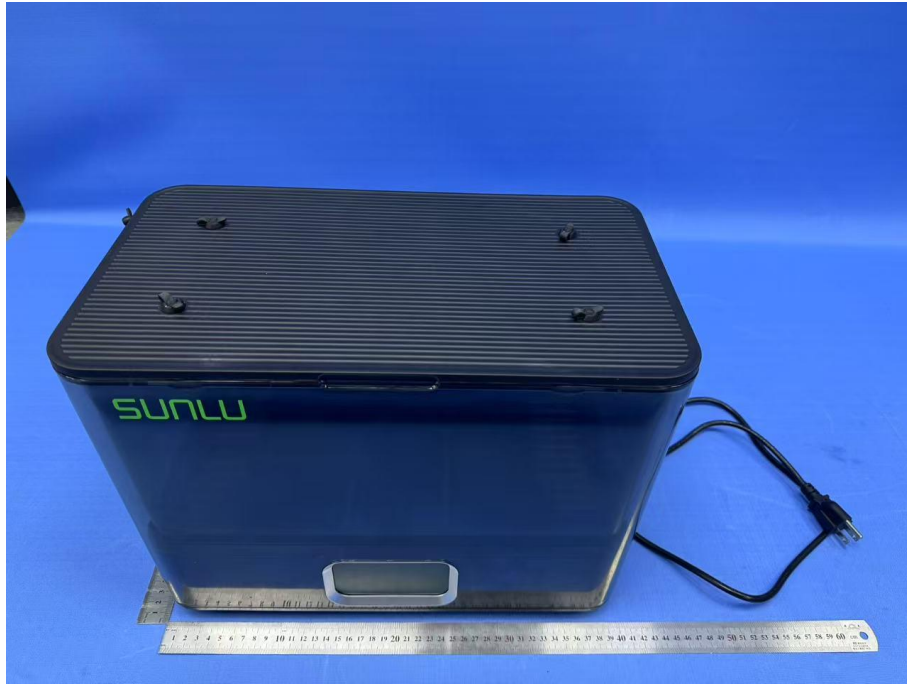


*:Maximum data x:Over limit !:over margin

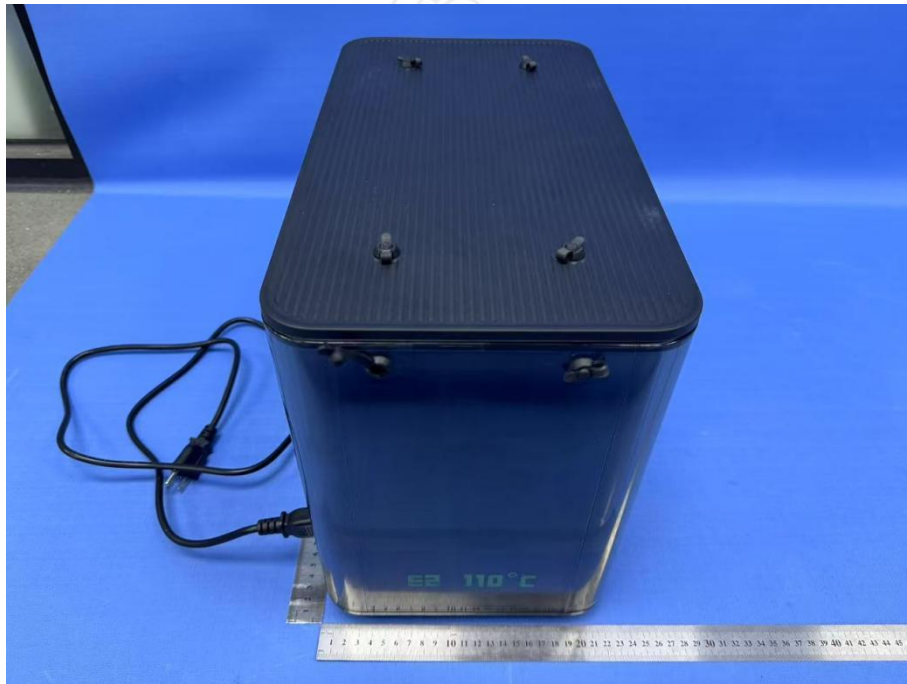
File : FTS25AP-00264\Data :#6

Page: 1

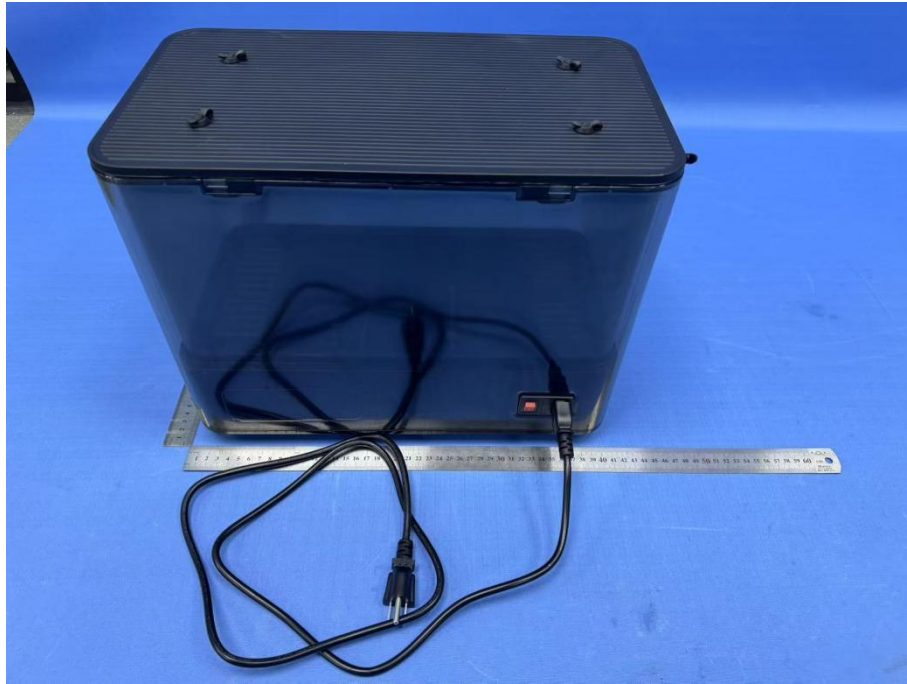
Engineer Signature:



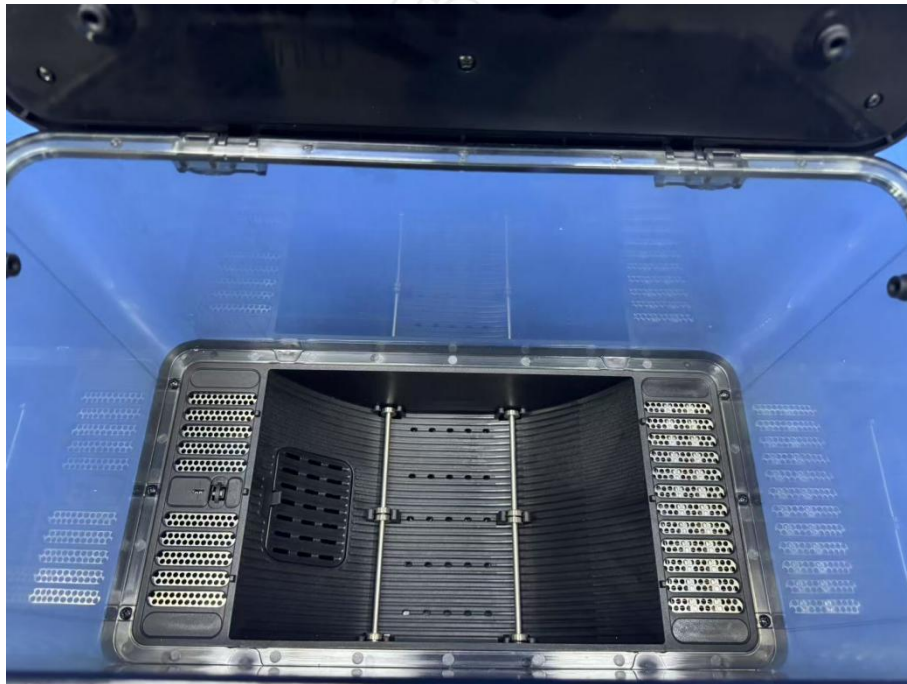
Picture 1



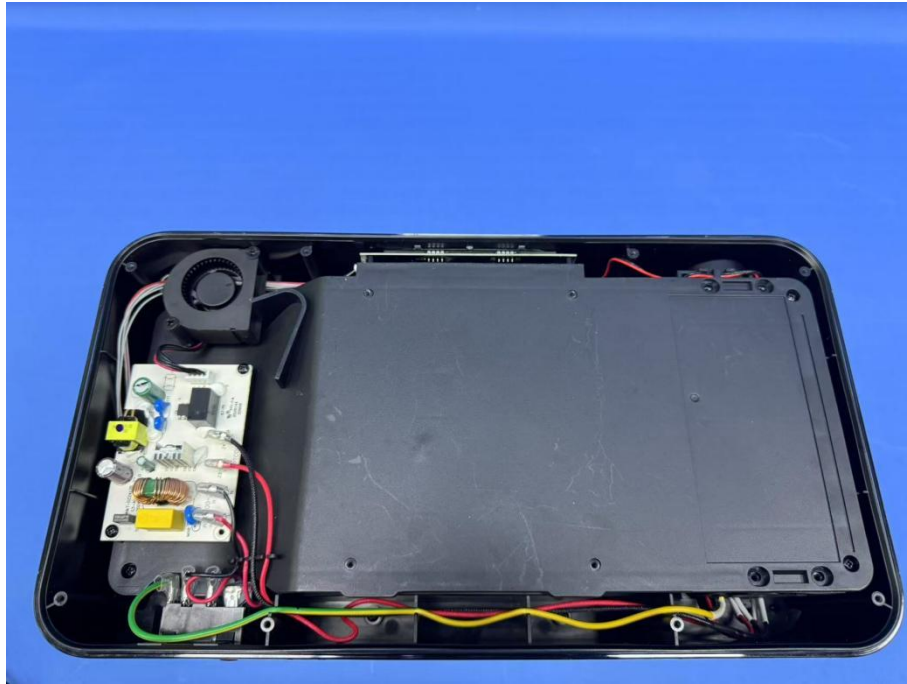
Picture 2



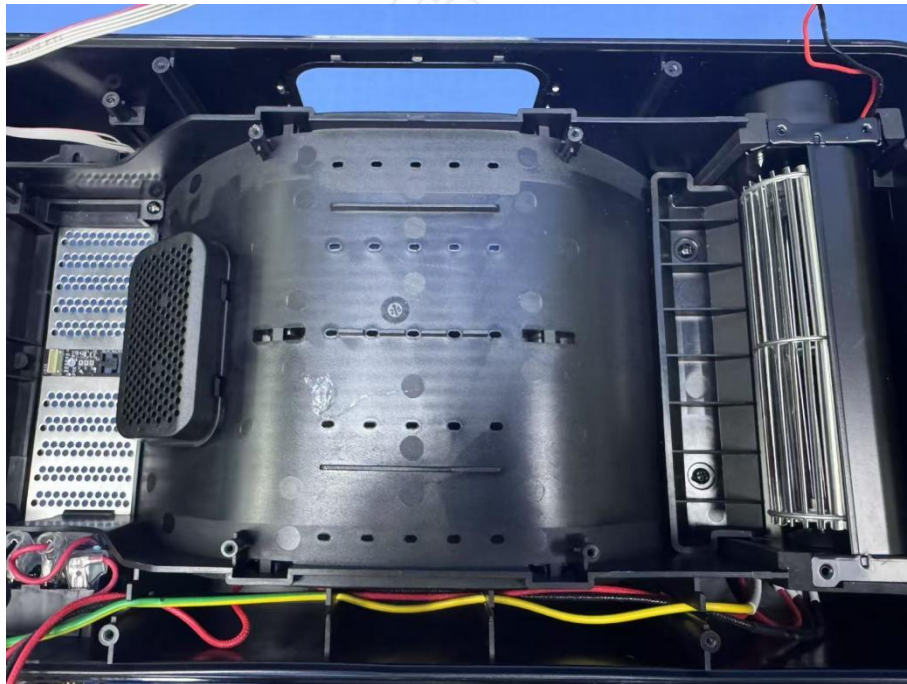
Picture 3



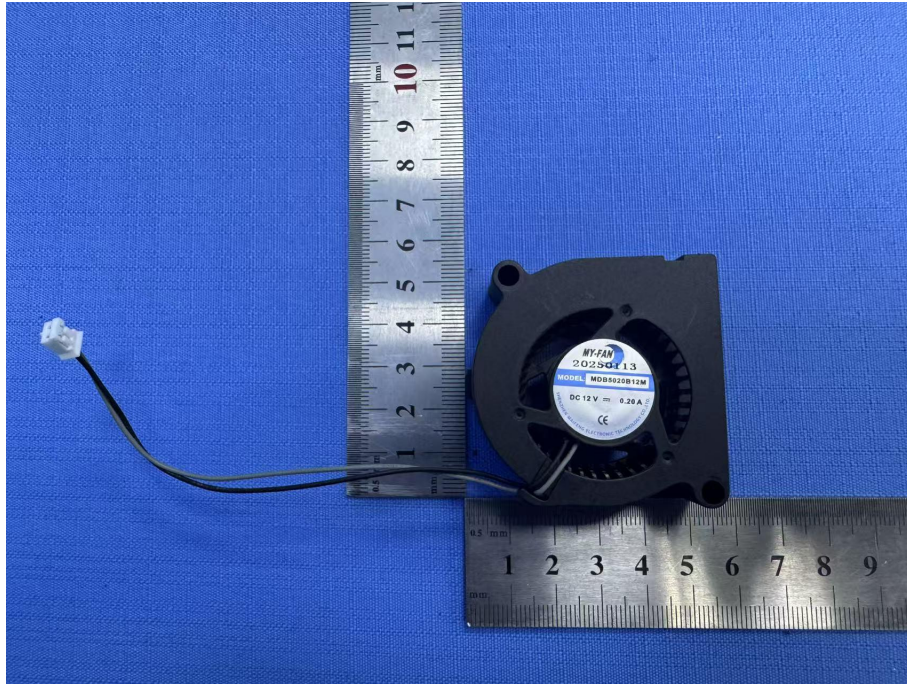
Picture 4



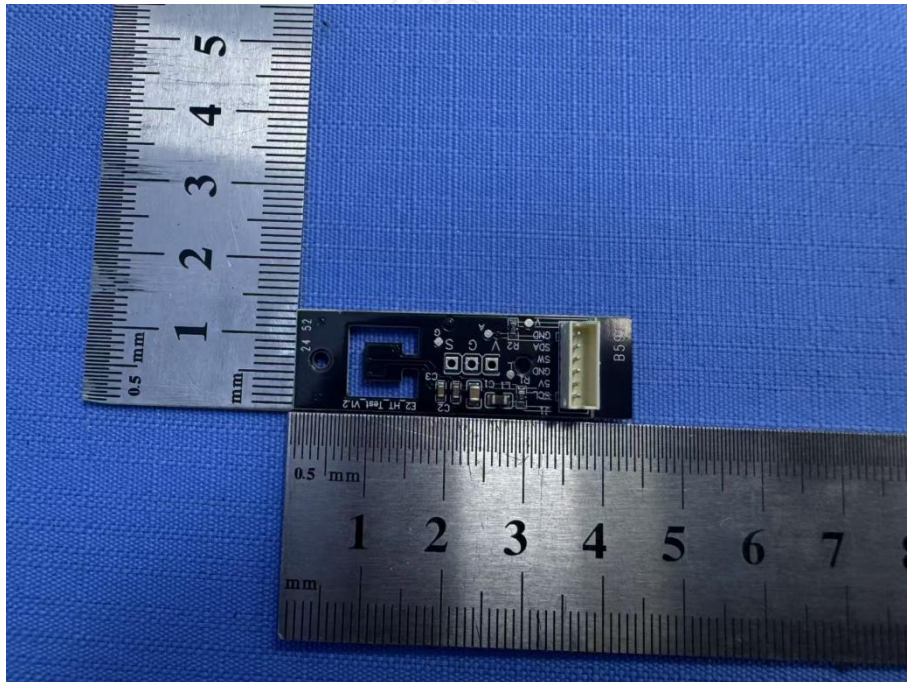
Picture 5



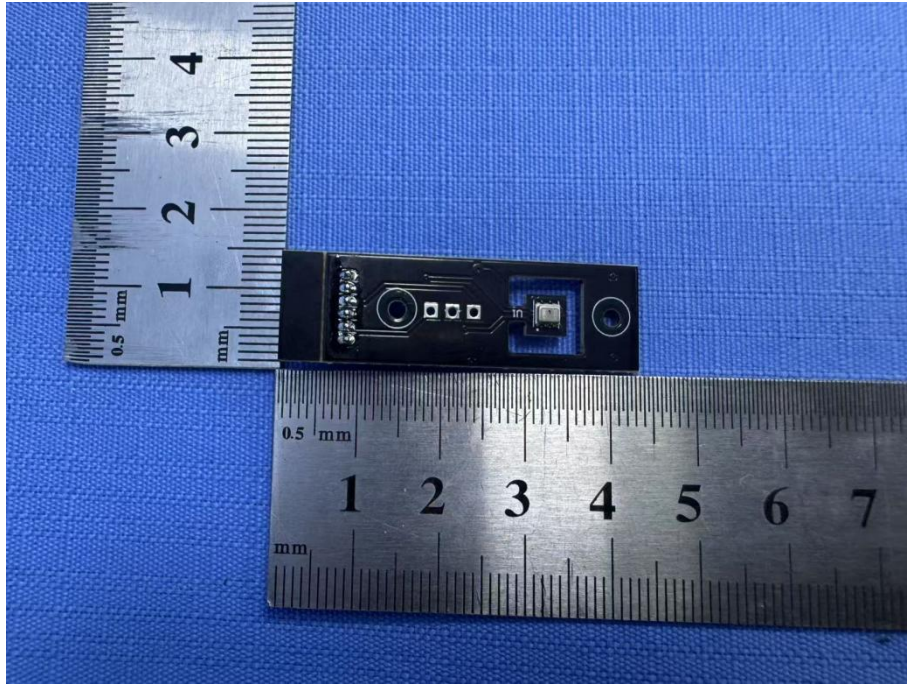
Picture 6



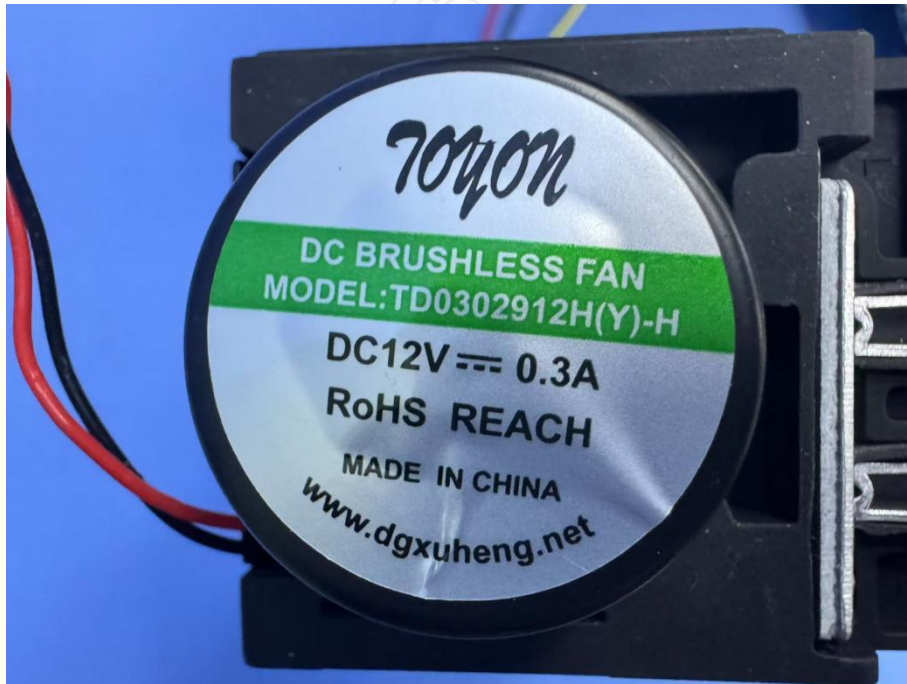
Picture 7



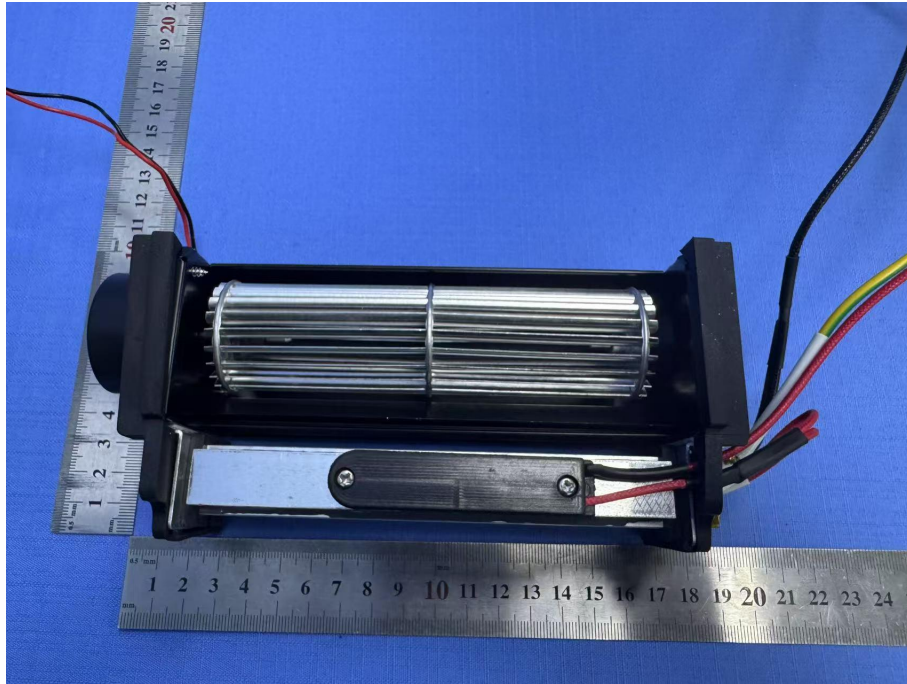
Picture 8



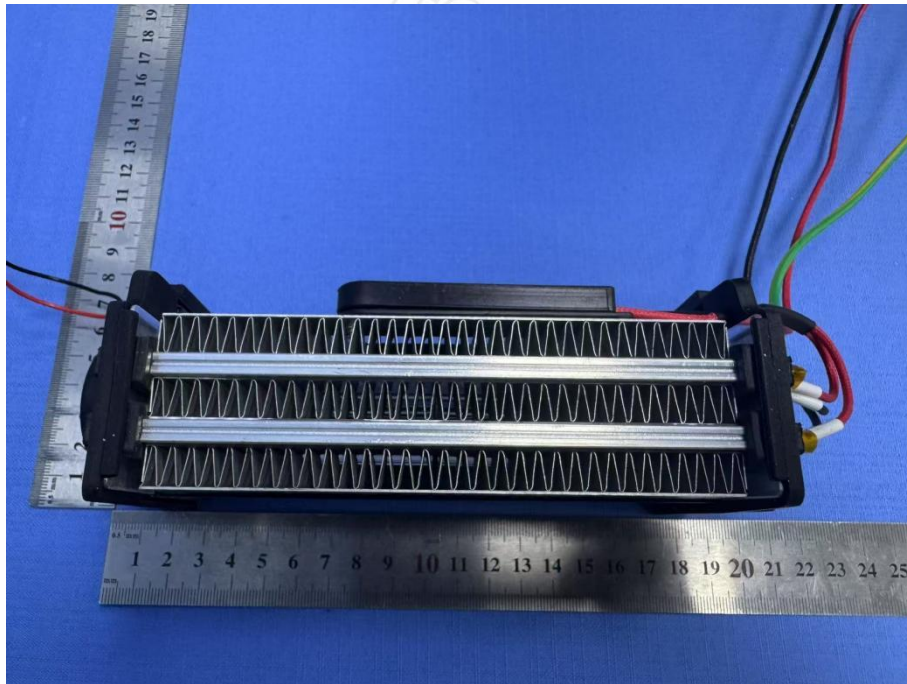
Picture 9



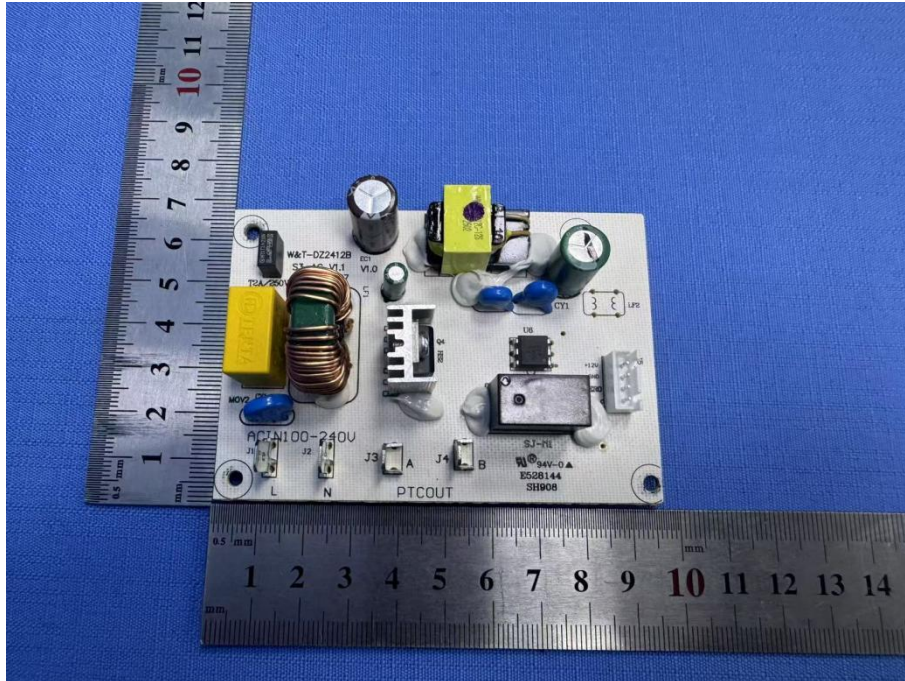
Picture 10



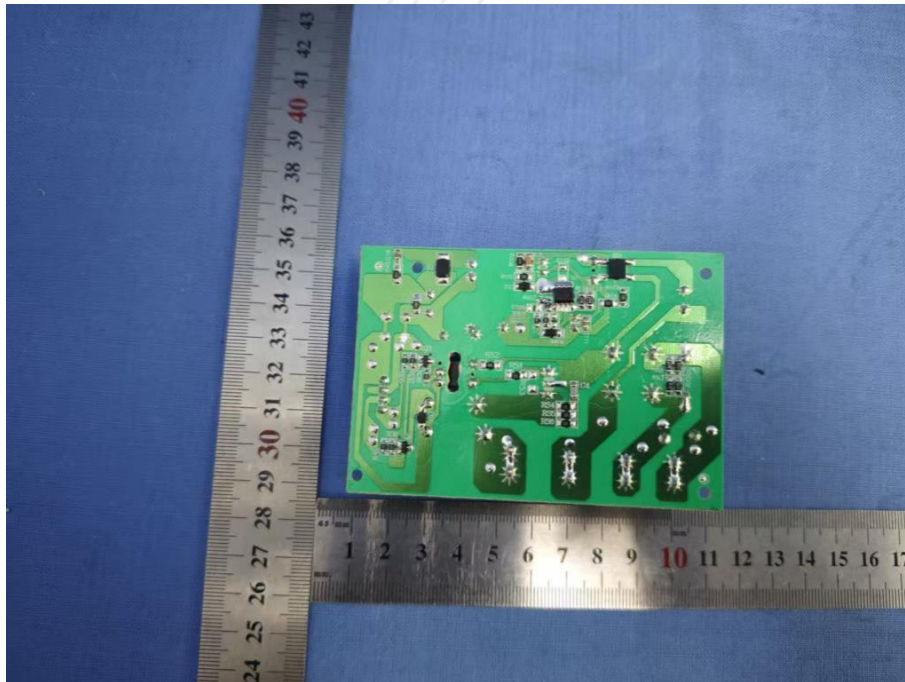
Picture 11



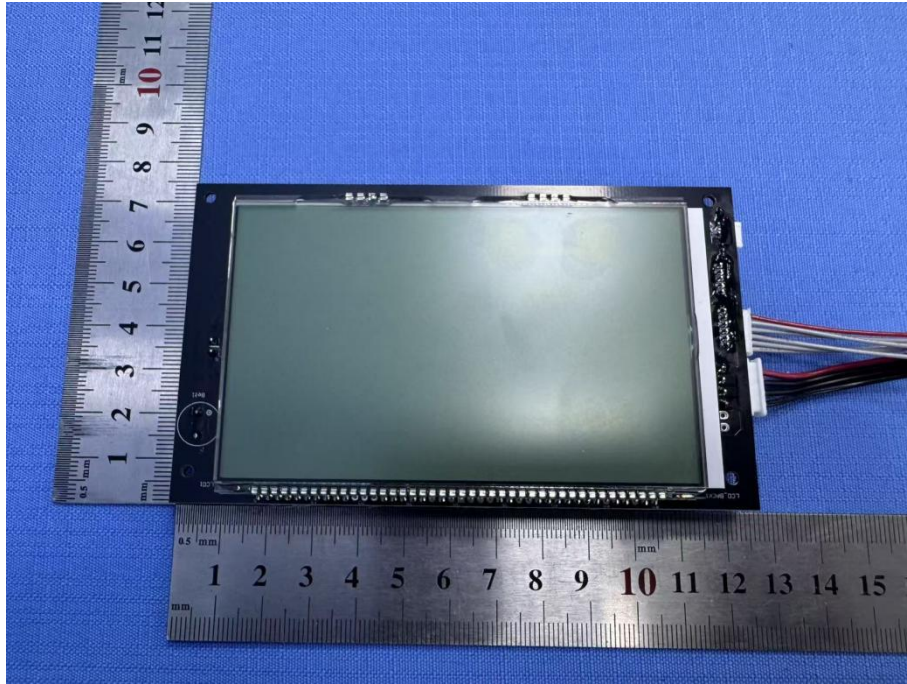
Picture 12



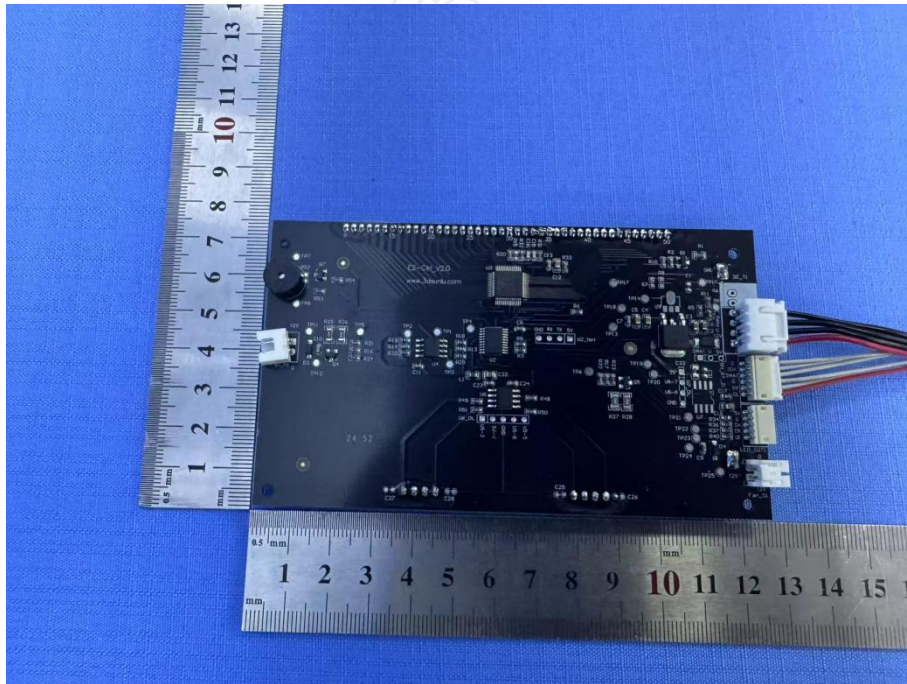
Picture 13



Picture 14



Picture 15



Picture 16

Disturbance Voltage <input checked="" type="checkbox"/>				
Equipment	Manufacturer	Model No.	Serial No.	Cal Until
EMI Test Receiver	R&S	ESCI3	101530	24 Mar, 2025
Shield Room	YiHeng Electronics	8.0mx5.0mx3.0 m	FSF-EM002	24 Mar, 2027
Conducted Emission Software	FALA	EZ-EMC	N/A	N/A
Artificial Mains Network	R&S	ESH-Z5	831886/010	24 Mar, 2025
Radiated Emission (30MHz – 1000MHz) <input checked="" type="checkbox"/>				
Equipment	Manufacturer	Model No.	Serial No.	Cal Until
EMI Test Receiver	R&S	ESR7	101653	24 Mar, 2025
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9161 SE	#4165	24 Mar, 2025
3m Semi-anechoic	YiHeng Electronics	9.0mx6.0mx6.0 m	FSF-EM001	24 Mar, 2027
RF Cable	FTS	FTS	/	24 Mar, 2025

-----End of test report-----