

TEST REPORT

Product Name: 3D Printing-Mate
Trade Mark: N/A
Model No.: AMS Heater
Add. Model No.: N/A
Report Number: 25081919532EMC-2
Test Standards: EN 62233:2008
IEC 62233:2005
Test Result: PASS
Date of Issue: September 10, 2025

Prepared for:

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Version

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V1.0	September 10, 2025	Original



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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Sunlu (Guangdong) Technology Co., Ltd.
Address of Applicant:	No. 162 Tanlong North Road, Tanzhou Town, Zhongshan City Zhongshan, Guangdong,528467,China
Manufacturer:	Sunlu (Guangdong) Technology Co., Ltd.
Address of Manufacturer:	No. 162 Tanlong North Road, Tanzhou Town, Zhongshan City Zhongshan, Guangdong,528467,China

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	3D Printing-Mate
Model No.:	AMS Heater
Add. Model No.:	N/A
Trade Mark:	N/A
DUT Stage:	Production Unit
Power Supply:	220-240V~ 50Hz
Software Version:	N/A
Hardware Version:	N/A
Sample Received Date:	August 19, 2025
Sample Tested Date:	August 27, 2025

1.2.2 Description of Accessories

None.

1.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested independently

1.4 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F, Block A, Building 6th, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, China 518109

Telephone: +86 (0) 755 2823 0888

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1.5 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

Shenzhen UnionTrust Quality and Technology Co., Ltd.

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

1.6 DEVIATION FROM STANDARDS

None.

1.7 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

1.9 MEASUREMENT UNCERTAINTY

No.	Item	Measurement Uncertainty
1	Electromagnetic field	±13 %
Remark: 95% Confidence Levels, K=2.		

2. EQUIPMENT LIST

Electromagnetic field Test						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm dd, yyyy)	Cal. Due date (mm dd, yyyy)
<input checked="" type="checkbox"/>	Exposure Level Tester	Narda	ELT-400	N/A	Feb. 24, 2025	Feb. 23, 2026

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3. TEST CONFIGURATION

3.1 ENVIRONMENTAL CONDITIONS FOR TESTING

3.1.1 Normal or Extreme Test Conditions

Environment Parameter	Selected Values During Tests		
Test Condition	Ambient		
	Temperature (°C)	Voltage	Relative Humidity (%)
NT/NV	+15 to +35	230V~50Hz	20 to 75
Remark: 1) NV: Normal Voltage; NT: Normal Temperature			

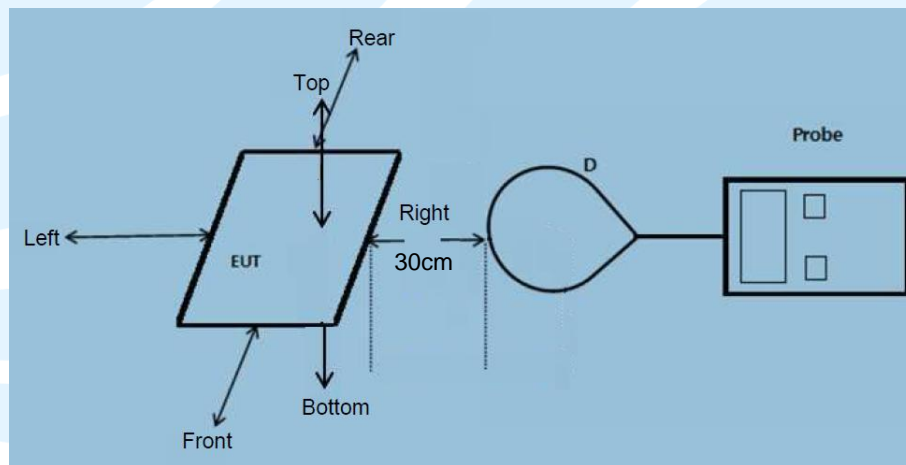
3.1.2 Record of Normal Environment and Test Sample

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (Kpa)	Sample No.
Electromagnetic field	24.5	58.9	100.0	S202508196721-ZJB04/6

3.1.3 Other test conditions

Sample numbers:	1		
Test mode:	Radiation testing worse case		
Background Level:	0.02% of limit		
Coupling Factor:	0.15		
Sensor Locations	<input checked="" type="checkbox"/> Around	<input type="checkbox"/> All surface	<input type="checkbox"/> others

3.2 TEST SETUP



4. EN 62233 REQUIREMENTS SPECIFICATION
4.1 REFERENCE DOCUMENTS FOR TESTING

EN 62233:2008

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

IEC 62233:2005

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

4.2 GENERAL DESCRIPTION OF APPLIED STANDARDS

This International Standard deals with electromagnetic fields up to 300 GHz and defines methods for evaluating the electric field strength and magnetic flux density around household and similar electrical appliances, including the conditions during testing as well as measuring distances and positions.

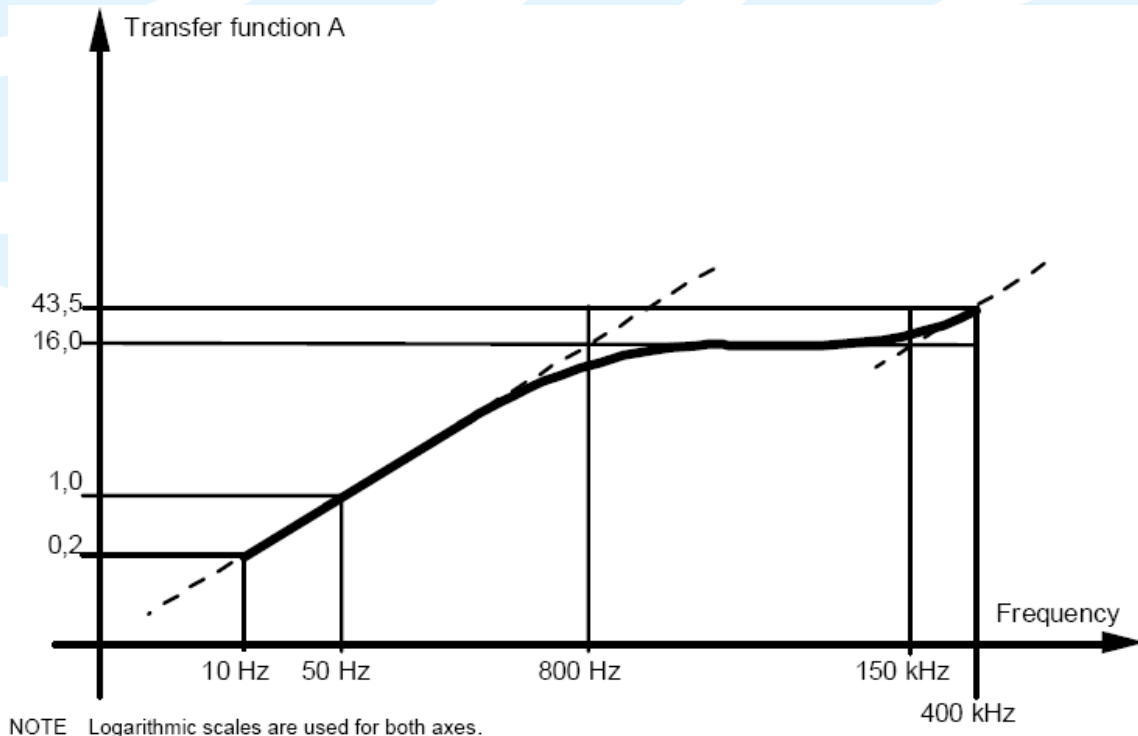
4.3 EXPOSURE EVALUATION

4.3.1 Evaluation Methods and Reference Levels Limit

Time domain evaluation:

Independent of the type of the signal, a time domain measurement of the value of the magnetic flux density can be carried out. For fields with several frequency components, the dependency on frequency of the reference levels is taken into account by implementing a transfer function A which is inverse of the reference level expressed as a function of the frequency.

The transfer function is to be established using a first order filter and shall have the characteristics shown in Figure Z1.



NOTE Logarithmic scales are used for both axes.

Figure Z1 - Transfer function

- The following sequence is used for the measurements:
- perform a separate measurement of each coil signal;
 - apply a weighting to each signal using the transfer function;

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- square the weighted signals;
- add the squared signals;
- average the sum;
- obtain the square root of the average.

The result is the weighted r.m.s. value of the magnetic flux density. This procedure is shown schematically in Figure Z2.

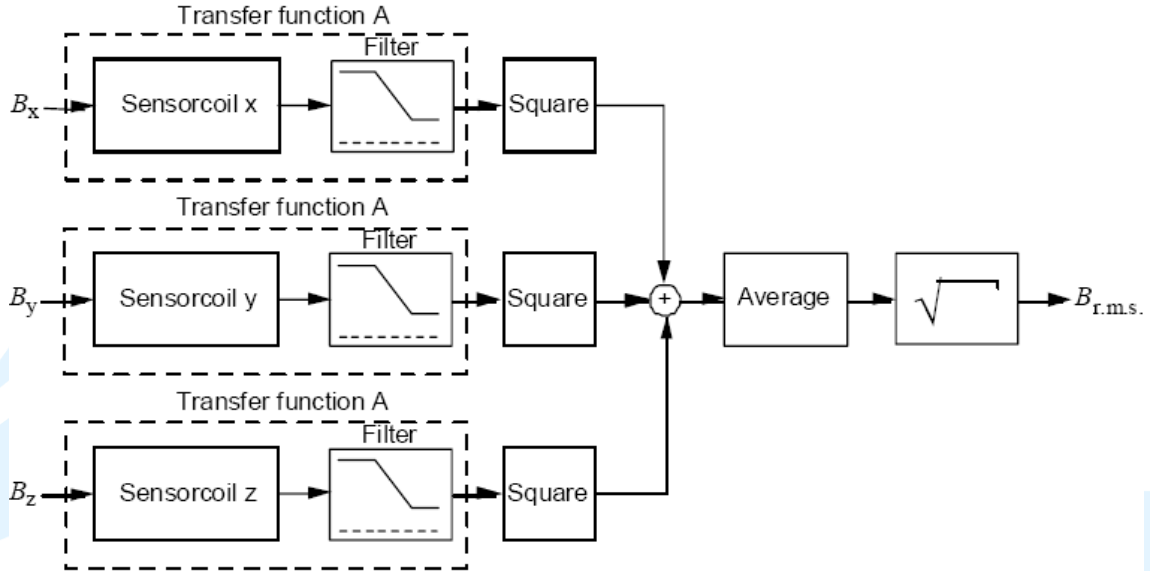


Figure Z2 - Schematic diagram of the reference method

NOTE: Different ways that the transfer function can be applied to a time domain signal include: analog filter in an electronic circuit, pre-programmed DSP chip, a signal analyser, or a digital computer calculation with a spreadsheet package or a custom-written program.

The actual measured value shall be compared directly with the reference level B_{RL} of the flux density at 50 Hz. With appliances with highly localized fields, this has to be performed after taking the coupling factor $a_c(r_1)$ given in Annex C into account. The final weighted result, W , can be derived as follows:

$$W_N = \frac{B_{R.M.S}}{B_{RL}}$$

or applying the coupling factor $a_c(r_1)$

$$W_{nc} = a_c(r_1) \cdot W_n$$

where

- W_n weighted result for one measurement;
- $B_{r.m.s}$ r.m.s. value of the magnetic flux density;
- B_{RL} reference level of the magnetic flux density at f_{C0} ;
- $a_c(r_1)$ coupling factor according to Annex C or Table D.3.
- W_{nc} weighted result for one measurement taking the coupling of the inhomogeneous field into account by applying $a_c(r_1)$.

The determined weighted result W shall not exceed the value 1.

4.4 TEST RESULT

The EMF (Electromagnetic Field) measurement at the highest level component for the 3D Printing-Mate, model: AMS Heater, was shown as below:

Sample 1, SN: S202508196721-ZJB04/6					
Measuring Positions	Measuring Distance	Test Result	Weighted result	Maximum Limit	Pass/Fail
Front	30 cm	0.0172	N/A	1	Pass
Left	30 cm	0.0163	N/A	1	Pass
Right	30 cm	0.0146	N/A	1	Pass
Rear	30 cm	0.0154	N/A	1	Pass
Top	30 cm	0.0164	N/A	1	Pass

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP



APPENDIX 2 PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Refer to 25081919532EMC-1 for EUT external and internal photos.

***** End of Report *****

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