

FCC and ISED Test Report

Manufacturer: Magicard Ltd
P6000 Laminator Accessory Module



In accordance with FCC 47 CFR Part 15C and
ISED RSS-210 and ISED RSS-GEN
Technology: (RFiD)

Prepared for: Magicard Ltd
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ISED ID: 23549 - P6000LB
FCC ID: XDWP6000LB

COMMERCIAL-IN-CONFIDENCE

Document 75965747-03 Issue 02

SIGNATURE			
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Steve Marshall	Senior Engineer	Authorised Signatory	05 August 2026
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RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Ahmad Javid	05 August 2026	
	Wenceslao Acosta Carrazco	05 August 2026	

FCC Accreditation: 492497/UK2010 Octagon House, Fareham Test Laboratory
ISED Accreditation: 12669A/UK0003 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY / ENGINEERING STATEMENT
The measurements shown in this report were made in accordance with the procedures described on the test pages A sample of this product was tested to demonstrate limited compliance with FCC 47 CFR Part 15C, 2024, ISED RSS-210, Issue 11 (06-2024) and ISED RSS-GEN: Issue 05 (2018-04) + A2 (2021-02) for the tests detailed in section 1.3. The sample tested was found to comply with the requirements defined in the applied rules.

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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
01	First version	15-May-2026
02	Updated FCC and ISED ID, model name, added test setup diagrams and photo of test set up for AC power line conducted emissions	05-Aug-2026

Table 1

1.2 Introduction

Applicant	Magicard Ltd
Manufacturer	Magicard Ltd
Model Number(s)	P6000 Laminator Accessory Module
Serial Number(s)	25112025.002.0_11.Y7054995
Hardware Version Identification number (HVIN)	P6000 Laminator Accessory Module
Firmware Version Identification Number (FVIN)	0.13
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15C, 2024 ISED RSS-210, Issue 11 (06-2024) ISED RSS-GEN: Issue 05 (2018-04) + A2 (2021-02)
Order Number	15526
Date	09-September-2025
Date of Receipt of EUT	01-December-2025
Start of Test	02-December-2025
Finish of Test	11-December-2025
Name of Engineer(s)	Ahmad Javid and Wenceslao Acosta Carrazco
Related Document(s)	ANSI C63.10 (2020)



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15C and ISED RSS-210 and ISED RSS-GEN is shown below.

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15C	RSS-210	RSS-GEN			
Configuration and Mode: NFC						
-	15.203	N/A	N/A	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses an integral antenna.
2.1	15.207	N/A	8.8	AC Power Line Conducted Emissions	Pass	ANSI C63.10 (2020)
2.2	15.215 (c)	N/A	6.7	20 dB Bandwidth & 99% Occupied Bandwidth	Pass	ANSI C63.10 (2020)
2.3	15.225 (a)(b)(c)(d)	B.6	6.13	Field Strength of any Emission	Pass	ANSI C63.10 (2020)
2.4	15.225 (e)	B.6(b)	6.11	Frequency Tolerance Under Temperature Variations	Pass	ANSI C63.10 (2020)

Table 2



The following information is required for RSP-100 Form B:

Requirement	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8
RSS# and Issue #	RSS-210 Issue 11							
Frequency Minimum (MHz)	N/A							
Frequency Maximum (MHz)	N/A							
RF Power Minimum (W) Conducted/EIRP/ERP (Average/Peak)	*							
RF Power Maximum (W) Conducted/EIRP/ERP (Average/Peak)	*							
Field Strength (dBμV/m at 3m)	74.72							
Measured Bandwidth (20 dB, 99%)	484.50 Hz 20dB bandwidth and 655.68 Hz 99% Occupied bandwidth							
Calculated BW as per TRC-43	N/A							
Modulation Type	N/A							
Emissions Classification	N/A							
Spurious Emissions Conducted/Radiated	60 dBuV/m at 3m at 9kHz							

Table 3

* No conducted tests were carried out.



1.4 Customer Supplied Form

Equipment Description

Technical Description: <i>(Please provide a brief description of the intended use of the equipment including the technologies the product supports)</i>	An ID card laminator for use in office environments, light commercial and industrial.		
Manufacturer:	Magicard Ltd.		
Product Marketing Name (PMN) or Host Marketing Name (HMN) <i>(If applicable; HMN is applicable for device integrating pre-approved modules, otherwise use PMN)</i>	P6000-LAM-UK		
Part Number:	5060589239814		
Hardware Version: Identification Number (HVIN)	Rev 5		
Firmware Version Identification Number (FVIN)	0.13		
For definitions of the above terms refer to GSS-GEN Section 9			
Manufacturer Declared Variants	Magicard P6000, Laminator Accessory Module, EU 5060589239784 Magicard P6000, Laminator Accessory Module, UK 5060589239814 Magicard P6000, Laminator Accessory Module, APAC 5060589239845 Magicard P6000, Laminator Accessory Module, BNA 5060589239876 Model P6000-LAM-UK was tested as a representative worst-case scenario for the product family. The results in this test report are for this model specifically. The results from this model have been declared by the manufacturer as representative of the entire product family (manufacturer declared variants). See the model nomenclature and legend for the models in the product family below: Model Nomenclature: P6000-LAM followed by up to three characters Model Legend: P6000-LAM = Laminator Accessory Last three characters = Region it's sold (i.e. EU = Europe, UK = UK, ROW = APAC countries, BNA = Central & South America, Caribbean)		
FCC ID of the product under test – see guidance here	WP5TWN4F3		
IC ID of the product under test – see guidance here	certification number: 7948A-TWN4F3		
Device Category	Mobile ☐	Portable ☐	Fixed ☒
Equipment is fitted with an Audio Low Pass Filter	Yes ☐	No ☒	



Intentional Radiators

Technology	RFID					
Frequency Range (MHz to MHz)	13.56					
Conducted Declared Output Power (dBm)	N/A					
Antenna Gain (dBi)	N/A					
Supported Bandwidth(s) (MHz) (e.g. 1 MHz, 20 MHz, 40 MHz)	N/A					
Modulation Scheme(s) (e.g. GFSK, QPSK etc)	ASK					
ITU Emission Designator (see guidance here) (not mandatory for Part 15 devices)	N/A					
Bottom Frequency (MHz)	N/A					
Middle Frequency (MHz)	13.56					
Top Frequency (MHz)	N/A					

Un-intentional Radiators

Highest frequency generated or used in the device or on which the device operates or tunes	120MHz
Lowest frequency generated or used in the device or on which the device operates or tunes	8MHz
Class A Digital Device (Use in commercial, industrial or business environment) ☒	
Class B Digital Device (Use in residential environment only) ☐	

AC Power Source

AC supply frequency:	60	Hz
Voltage	120	V
Max current:	5	A
Single Phase ☐ Three Phase ☒		

DC Power Source

Nominal voltage:		V
Extreme upper voltage:		V
Extreme lower voltage:		V
Max current:		A

Battery Power Source

Voltage:		V
End-point voltage:		V (Point at which the battery will terminate)
Alkaline ☐ Leclanche ☐ Lithium ☐ Nickel Cadmium ☐ Lead Acid* ☐ *(Vehicle regulated)		
Other ☐ Please detail:		

Charging

Can the EUT transmit whilst being charged	Yes ☐ No ☐
---	--

Temperature

Minimum temperature:	10	°C
Maximum temperature:	30	°C



Cable Loss

Adapter Cable Loss (Conducted sample)		dB
--	--	----

Antenna Characteristics

Antenna connector ☐			State impedance		Ohm
Temporary antenna connector ☐			State impedance		Ohm
Integral antenna ☒	Type:	Spiral loop pcb trace antenna	Gain	N/A	dBi
External antenna ☐	Type:		Gain		dBi

For external antenna only:
Standard Antenna Jack ☐ If yes, describe how user is prohibited from changing antenna (if not professional installed):
Equipment is only ever professionally installed ☐
Non-standard Antenna Jack ☐
All part 15 applications will need to show how the antenna gain was derived either from a manufacturer data sheet or a measurement. Where the gain of the antenna is inherently accounted for as a result of the measurement, such as field strength measurements on a part 15.249 or 15.231 device, so the gain does not necessarily need to be verified. However, enough information regarding the construction of the antenna shall be provided. Such information maybe photographs, length of wire antenna etc.

Ancillaries (if applicable)

Manufacturer:	CWT	Part Number:	KPN100M-VI
Model:	KPN100M-VI	Country of Origin:	China

I hereby declare that the information supplied is correct and complete.

Name: Emile Campbell-Browne

Position held: Electronic Engineer

Date: 17/12/2025

Note: No responsibility will be accepted by TÜV SÜD as to the accuracy of the information declared on this customer supplied form by the manufacturer.



1.5 Product Information

1.5.1 Technical Description

An ID card laminator for use in office environments, light commercial and industrial.

1.6 Deviations from the Standard

No deviations from the applicable test standard were made during testing.

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme.

The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Laminator, Model: EUT6, Serial Number: 25112025.002.0_11.Y7054995			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 4

1.8 Test Location

TÜV SÜD conducted the following tests at our Octagon House Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: NFC		
AC Power Line Conducted Emissions	Ahmad Javid	UKAS
20 dB Bandwidth & 99% Occupied Bandwidth	Wenceslao Acosta Carrazco	UKAS
Field Strength of any Emission	Wenceslao Acosta Carrazco	UKAS
Frequency Tolerance Under Temperature Variations	Wenceslao Acosta Carrazco	UKAS

Table 5

Laboratory Address: TÜV SÜD, Octagon House,
Concorde Way, Fareham, Hampshire,
PO15 5RL, United Kingdom



2 Test Details

2.1 AC Power Line Conducted Emissions

2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.207
ISED RSS-GEN, Clause 8.8

2.1.2 Equipment Under Test and Modification State

EUT6, S/N: 25112025.002.0_11. Y7054995 - Modification State 0

2.1.3 Date of Test

03-December-2025

2.1.4 Test Method

NFC

The test was performed in accordance with ANSI C63.10, clause 6.2.

The EUT was placed on a non-conductive table 0.8m above a reference ground plane and 0.4m away from a vertical coupling plane

All power was connected to the EUT through an Artificial Mains Network (AMN).

Conducted disturbance voltage measurements on mains lines were made at the output of the AMN.

2.1.5 Example Calculation

Quasi-Peak level (dBμV) = Receiver level (dBμV) + Correction Factor (dB)
Margin (dB) = Quasi-Peak level (dBμV) - Limit (dBμV)

CISPR Average level (dBμV) = Receiver level (dBμV) + Correction Factor (dB)
Margin (dB) = CISPR Average level (dBμV) - Limit (dBμV)

2.1.6 Example Test Setup Diagram

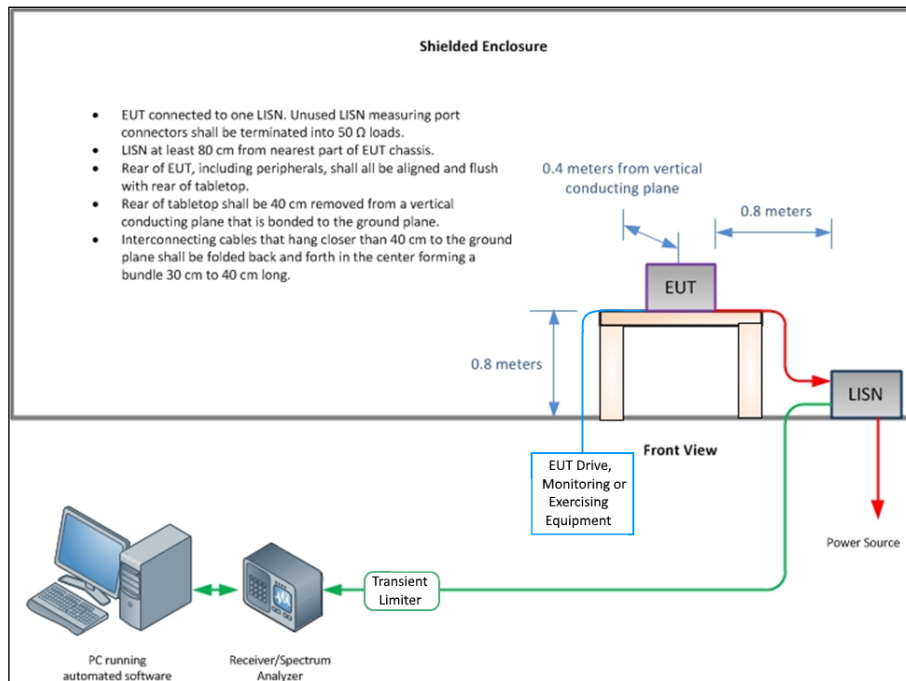


Figure 1 - Conducted Disturbance Example Test Setup

2.1.7 Environmental Conditions

Ambient Temperature	18.4 °C
Relative Humidity	46.5 %

2.1.8 Test Results

Applied supply voltage: 120 V AC

Applied supply frequency: 60 Hz

Frequency (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
0.155	39.55	65.70	-26.15	Q-Peak
0.155	16.72	55.70	-38.98	CISPR Avg
0.574	11.55	46.00	-34.45	CISPR Avg
0.574	27.39	46.00	-28.61	Q-Peak
0.960	10.21	56.00	-35.79	CISPR Avg
0.960	20.56	46.00	-35.44	Q-Peak
2.677	11.94	46.00	-34.06	CISPR Avg
2.677	29.58	46.00	-26.42	Q-Peak
2.960	11.69	56.00	-34.31	CISPR Avg
2.960	28.21	46.00	-27.79	Q-Peak
15.405	11.58	46.00	-38.42	CISPR Avg
15.405	22.19	50.00	-37.81	Q-Peak

Table 6 Live Line Emission Result, 0.15 MHz to 30 MHz

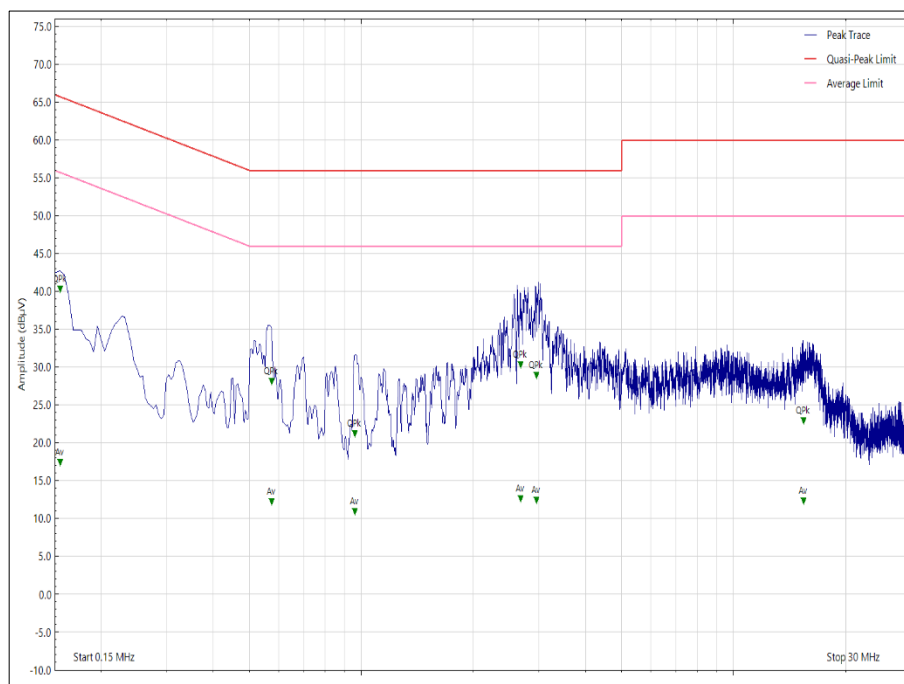


Figure 2 - Live Line, 0.15 MHz to 30 MHz

Frequency (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
0.157	39.15	65.60	-26.45	Q-Peak
0.566	27.93	55.60	-28.07	Q-Peak
0.566	13.35	56.00	-32.65	CISPR Avg
2.362	22.72	56.00	-33.28	Q-Peak
2.362	10.52	56.00	-35.48	CISPR Avg
2.624	26.77	46.00	-29.23	Q-Peak
2.624	11.42	56.00	-34.58	CISPR Avg
3.199	24.09	56.00	-31.91	Q-Peak
3.199	10.93	56.00	-35.07	CISPR Avg
16.303	24.59	60.00	-35.41	Q-Peak
16.303	12.39	60.00	-37.61	CISPR Avg

Table 7 Neutral Line Emission Result, 0.15 MHz to 30 MHz

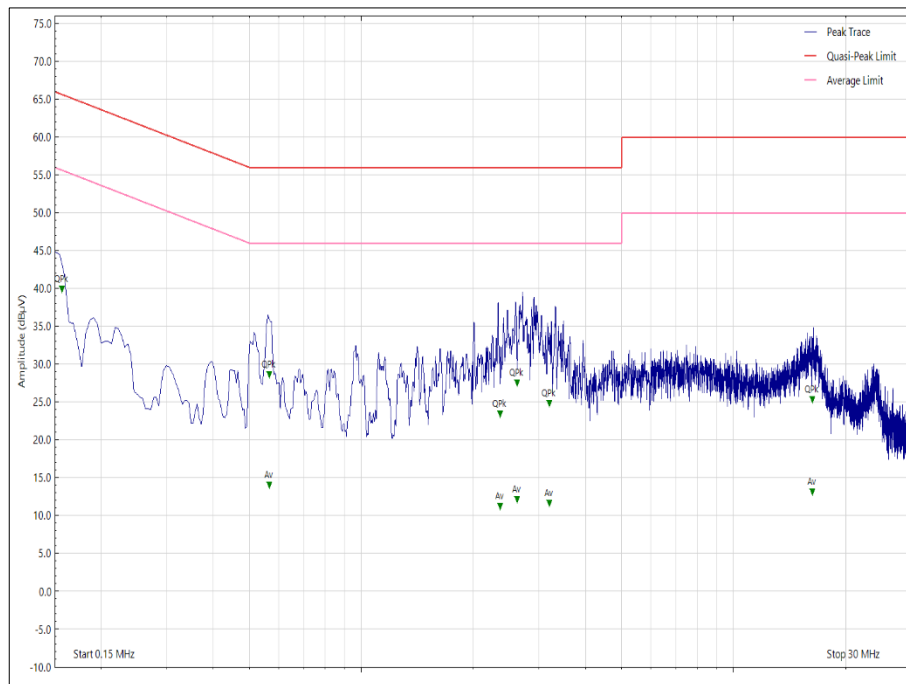


Figure 3 - Live Line, 0.15 MHz to 30 MHz



2.1.9 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Transient Limiter	Hewlett Packard	11947A	15	12	06-Nov-26
LISN (CISPR 16, Single Phase)	Rohde & Schwarz	ESH3-Z5	1390	12	04-Feb-26
3m Semi-Anechoic Chamber	Rainford	RF Chamber 5	1545	36	23-Apr-27
Hygrometer	Rotronic	I-1000	2784	12	04-Nov-26
Emissions Software	TUV SUD	EmX V3.5.1	5125	-	N/A - Software
Cable (2.92 mm(f) to N-Type(m), 2 m)	Junkosha	MWX221-02000AMSAMS/A	5517	12	06-Jun-26
Test Receiver	Rohde & Schwarz	ESW44	5802	12	05-Nov-26
Cable (N-Type to N-Type, 8 m)	Junkosha	MWX221-08000NMSNMS/B	7050	12	03-Oct-26

Table 8

2.2 20 dB Bandwidth & 99% Occupied Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.215 (c)
ISED RSS-GEN, Clause 6.7

2.2.2 Equipment Under Test and Modification State

EUT6, S/N: 25112025.002.0_11.Y7054995 - Modification State 0

2.2.3 Date of Test

03-December-2025

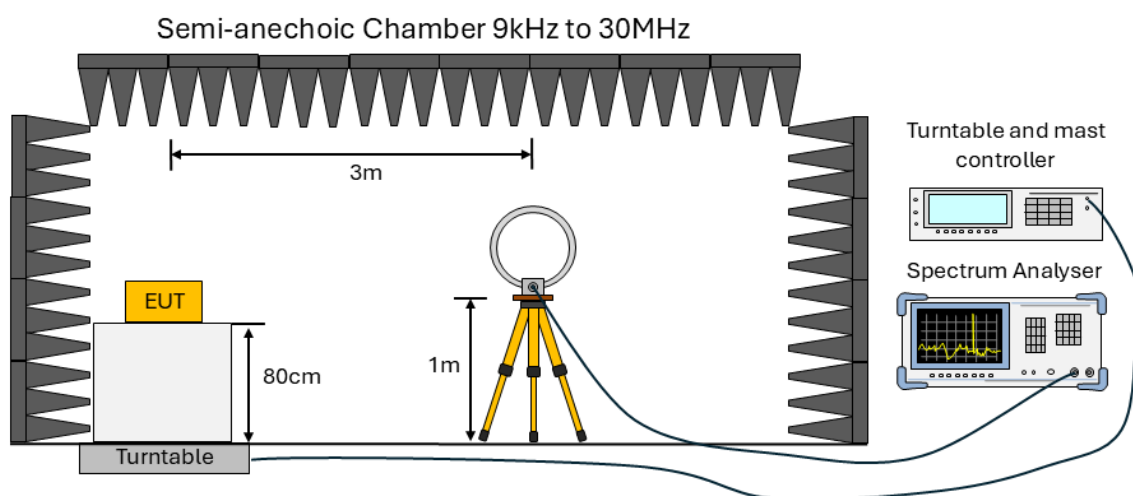
2.2.4 Test Method

NFC

The test was performed in accordance with ANSI C63.10, clause 6.9.2 and 6.9.3.

EUT was powered with 120 VAC 60Hz for the duration of the measurement.

2.2.5 Example Test Setup Diagram



2.2.6 Environmental Conditions

Ambient Temperature	21.0 °C
Relative Humidity	39.2 %



2.2.7 Test Results

Frequency (MHz)	20 dB Bandwidth (Hz)	99% Occupied Bandwidth (Hz)	F _{LOWER} (MHz)	F _{UPPER} (MHz)
13.56	484.50	655.68	13.5595821	13.5600667

Table 9



Figure 4 - 20 dB Bandwidth



Figure 5 - 99% Occupied Bandwidth



FCC 47 CFR Part 15C, Limit Clause 15.215 (c)

The 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

ISED RSS 210 and ISED RSS GEN, Limit Clause

None specified.



2.2.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
True RMS Multimeter	Fluke	79 Series III	411	12	09-Jan-2026
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
Emissions Software	TUV SUD	EmX V3.6	5125	-	Software
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
Antenna (Loop, 9 kHz to 30 MHz)	Teseq	HLA 6121	5616	24	16-Aug-2026
Power Injector	Teseq	PI 6121	5620	24	16-Aug-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 10

TU - Traceability Unscheduled

2.3 Field Strength of any Emission

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.225 (a)(b)(c)(d)
ISED RSS-210, Clause B.6
ISED RSS-GEN, Clause 6.13

2.3.2 Equipment Under Test and Modification State

EUT6, S/N: 25112025.002.0_11.Y7054995 - Modification State 0

2.3.3 Date of Test

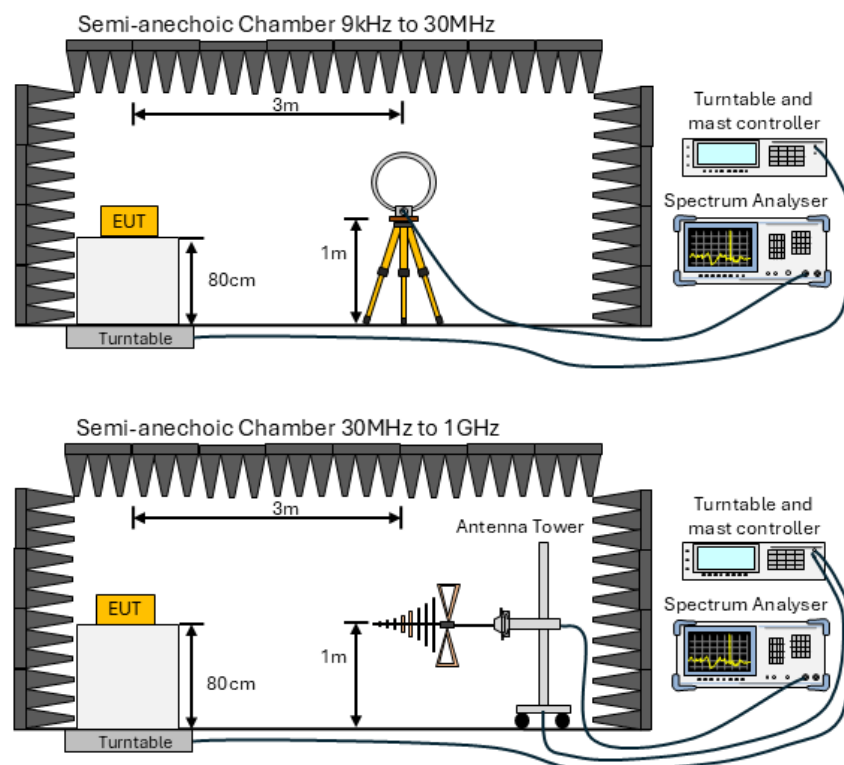
02-December-2025 to 03-December-2025

2.3.4 Test Method

NFC

The test was performed in accordance with ANSI C63.10, clause 6.3, 6.4 and 6.5. Pre-scan measurements were made at a distance of 3 m as shown by the plots below using a peak detector. Final emission measurements were then made using a Quasi-Peak detector and recorded in the tables below. The limit lines shown on the plot were extrapolated from either 300 m or 30 m to the measurement distance of 3 m in accordance with ANSI C63.10 Clause 6.4.4.2.

2.3.5 Example Test Setup Diagram



2.3.6 Environmental Conditions

Ambient Temperature	20.4 - 21.0 °C
Relative Humidity	39.2 - 45.0 %



2.3.7 Test Results

NFC , Carrier Results

Frequency (MHz)	Quasi-Peak Level (dBµV/m) at 3m	Quasi-Peak Level (dBµV/m) at 30m	Quasi-Peak Level (µV/m) at 3m	Quasi-Peak Level (µV/m) at 30m
13.56	74.42	54.47	5290	529

Table 11 - Fundamental Field Strength

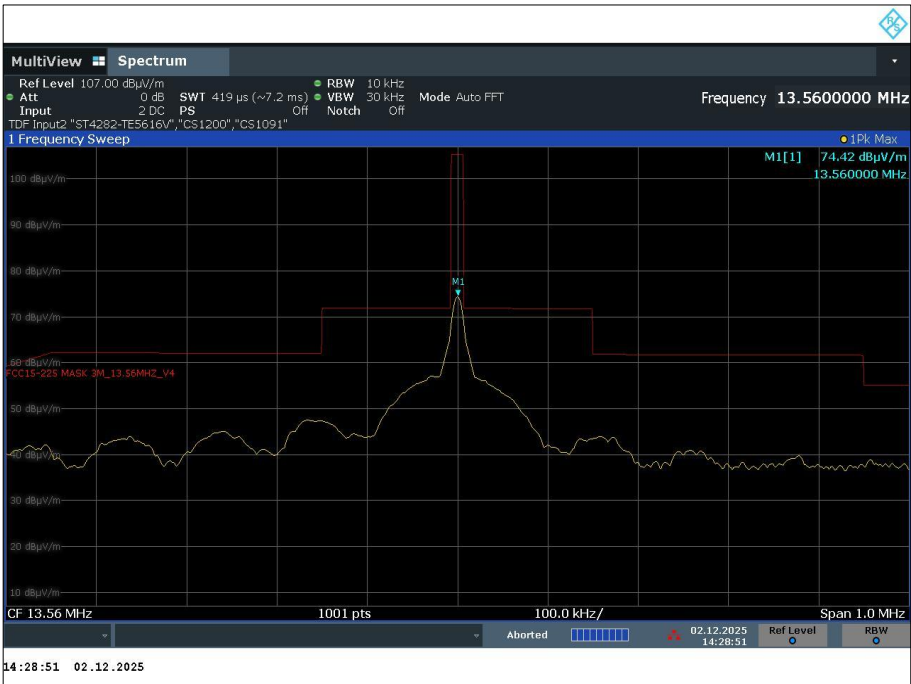


Figure 6 - Plot of the Fundamental - 13.56 MHz



Frequency MHz	Quasi-Peak Level (dBµV/m) at 3 m	Quasi-Peak Level (dBµV/m) at 30 m	Quasi-Peak Level (µV/m) at 3 m	Quasi-Peak Level (µV/m) at 30 m
*				

Table 12 - Emissions Results - 9 kHz to 30 MHz

No emissions were detected within 10 dB of the limit.

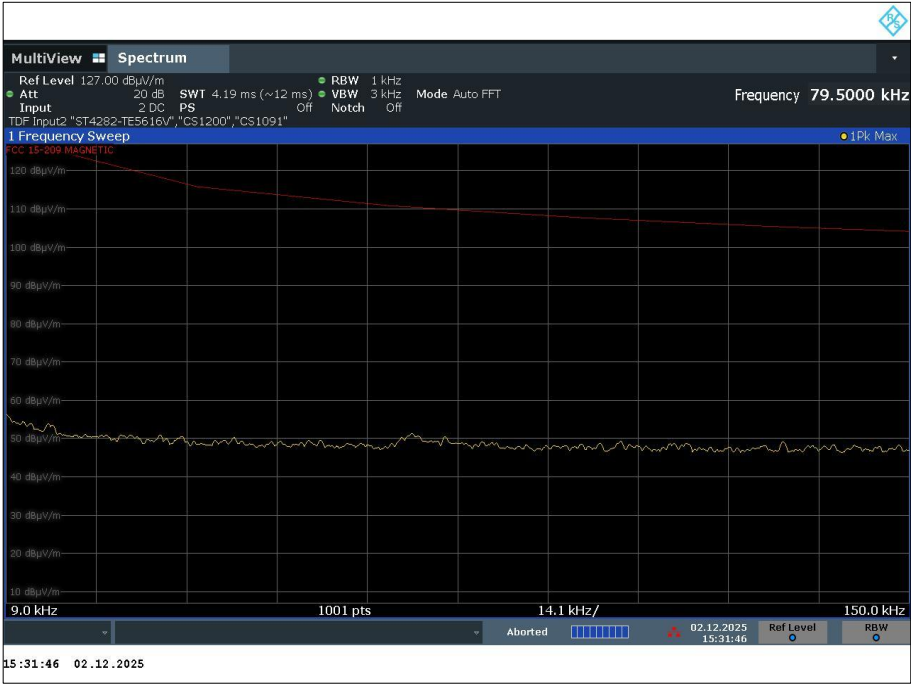


Figure 7 - 9 kHz to 150 kHz - Face On

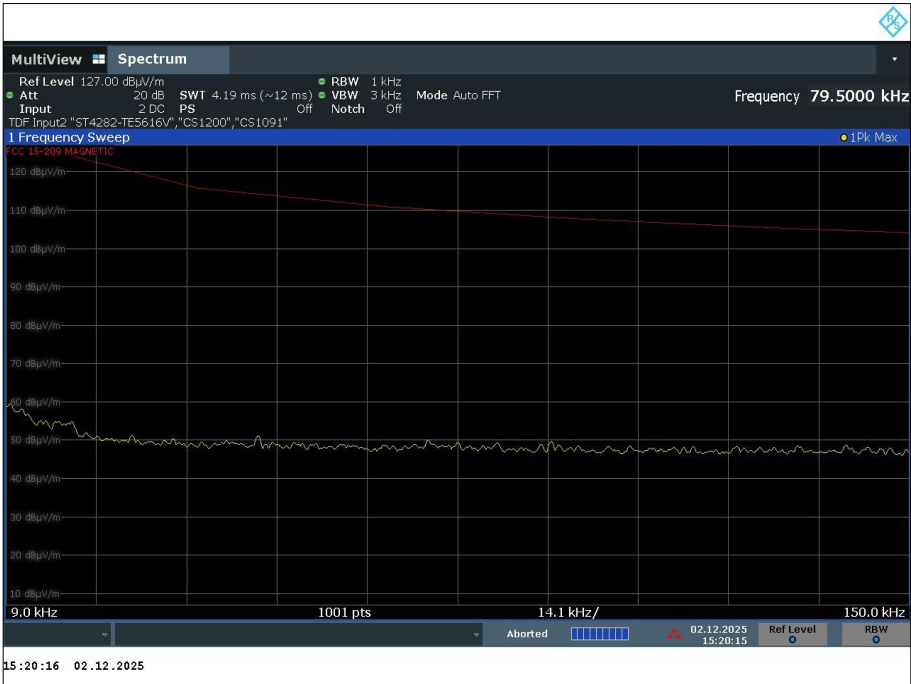


Figure 8 - 9 kHz to 150 kHz - Side On

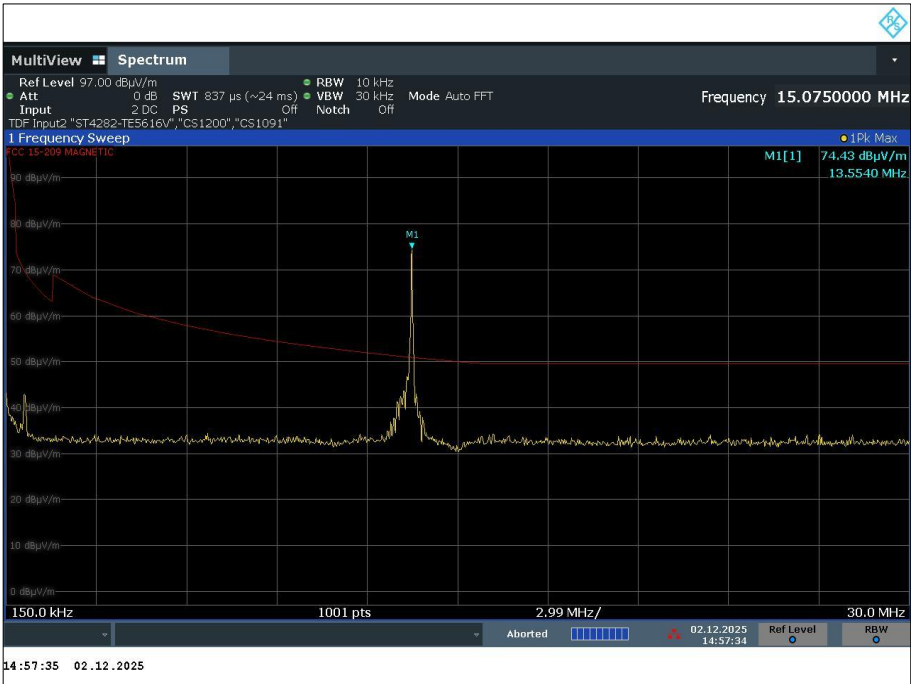


Figure 9 - 150 kHz to 30 MHz - Face On

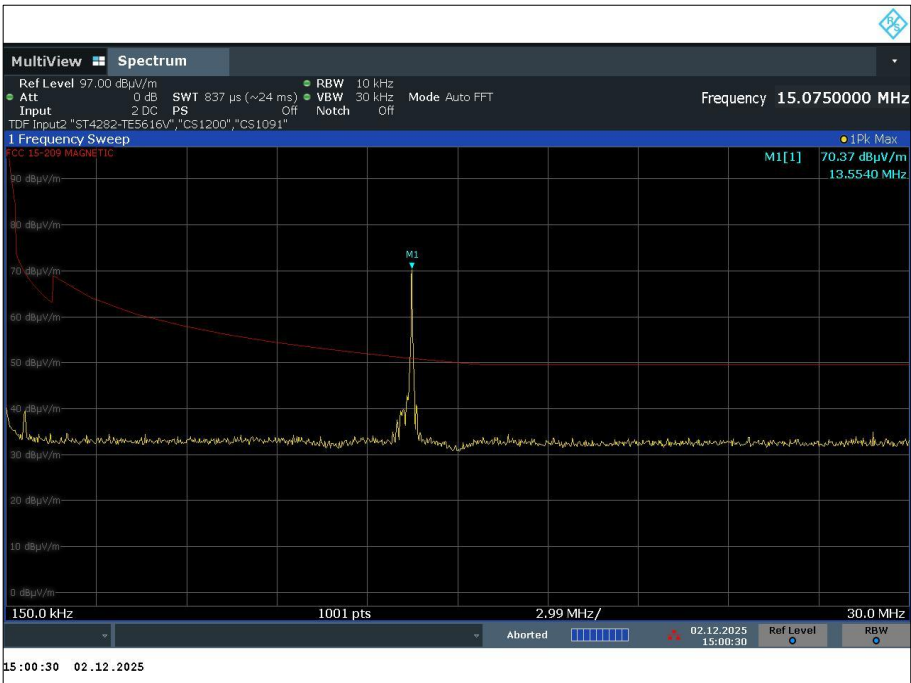


Figure 10 - 150 kHz to 30 MHz - Side On

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.147	24.45	40.00	-15.55	Q-Peak	335	105	Vertical
85.587	26.94	40.00	-13.06	Q-Peak	70	106	Vertical
172.203	32.61	43.50	-10.89	Q-Peak	247	140	Horizontal
173.114	30.79	43.50	-12.71	Q-Peak	325	109	Vertical
177.266	31.58	43.50	-11.92	Q-Peak	323	105	Vertical
247.936	31.83	46.00	-14.17	Q-Peak	180	121	Horizontal
625.031	40.16	46.00	-5.84	Q-Peak	360	165	Vertical
625.045	41.88	46.00	-4.12	Q-Peak	249	101	Horizontal
750.037	34.89	46.00	-11.11	Q-Peak	219	100	Horizontal

Table 13 - NFC 13.56MHz, Emissions Results, 30 MHz to 1 GHz

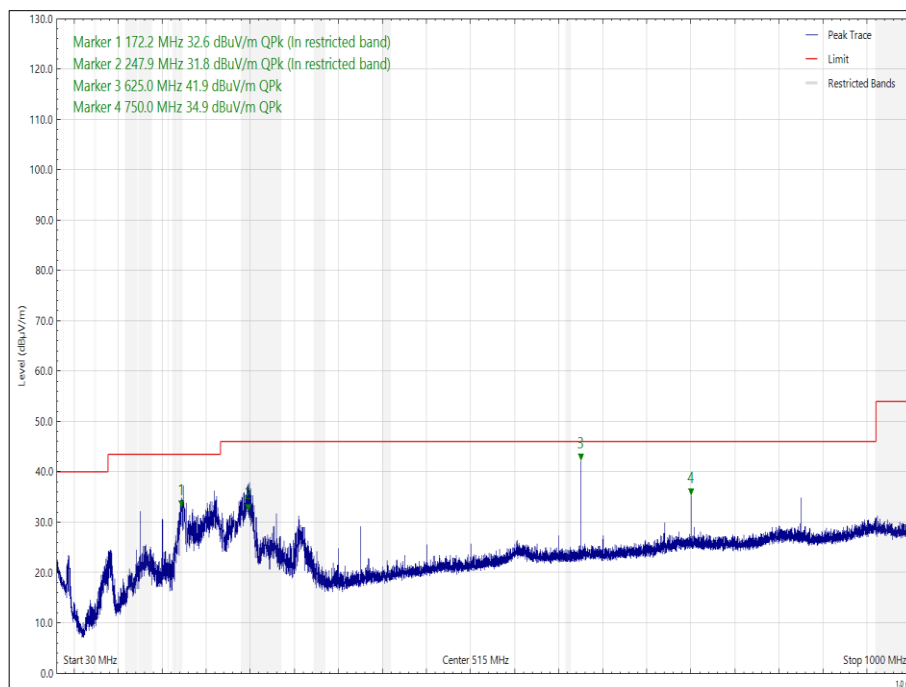


Figure 11 - NFC 13.56MHz, 30 MHz to 1 GHz, Horizontal (Peak)

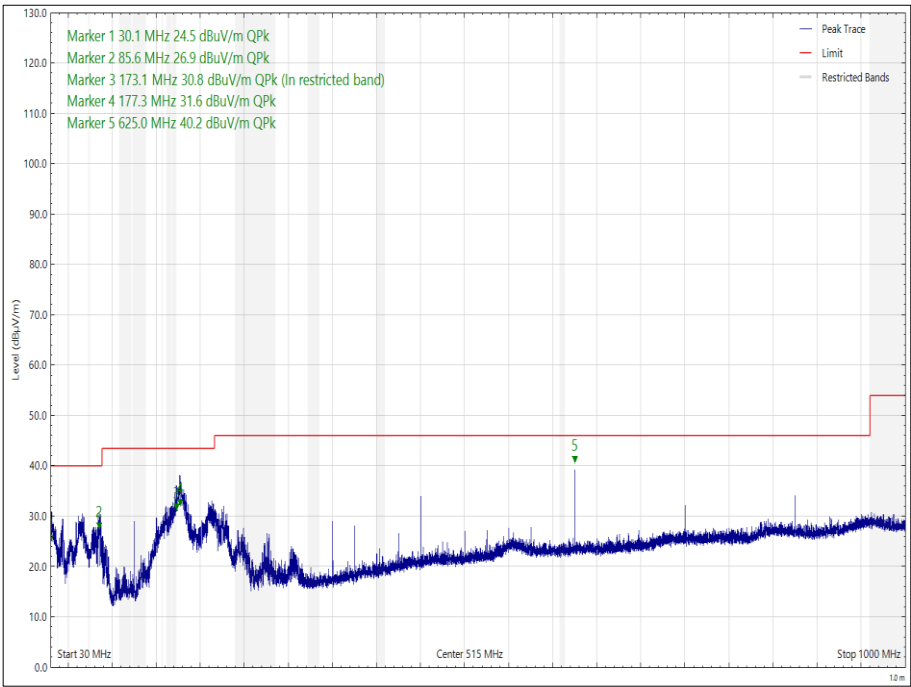


Figure 12 - NFC 13.56MHz, 30 MHz to 1 GHz, Vertical (Peak)



FCC 47 CFR Part 15, Limit Clause 15.225 (a)(b)(c)(d)

(a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 m.

(b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 m.

(c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 m.

(d) The field strength of any emissions appearing outside of the 13.110–14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

FCC 47 CFR Part 15, Limit Clause 15.209

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 to 0.490	2400/F (kHz)	300
0.490 to 1.705	24000/F (kHz)	30
1.705 to 30	30	30
30 to 88	100**	3
88 to 216	150**	3
216 to 960	200**	3
Above 960	500	5

Table 14 - FCC Radiated Emission Limit



ISED RSS-210, Limit Clause B.6

The field strength of any emission shall not exceed the following limits:

- (a) 15.848 mV/m (84 dB μ V/m) at 30 m, within the band 13.553 – 13.567 MHz.
- (b) 334 μ V/m (50.5 dB μ V/m) at 30 m, within the bands 13.410 – 13.553 MHz and 13.567 – 13.710 MHz.
- (c) 106 μ V/m (40.5 dB μ V/m) at 30 m, within the bands 13.110 – 13.410 MHz and 13.710 – 14.010 MHz.
- (d) RSS-GEN general field strength limits for frequencies outside the band 13.110 – 14.010 MHz.

ISED RSS-GEN, Limit Clause

Frequency	Electric Field Strength (μ V/m)	Magnetic Field Strength (H-Field) (μ A/m)	Measurement Distance (m)
9 - 490 kHz	2,400/F (F in kHz)	2,400/377F (F in kHz)	300
490 - 1,705 kHz	24,000/F (F in kHz)	24,000/377F (F in kHz)	30
1,705 kHz - 30 MHz	30	N/A	30

Table 15 - ISED Radiated Emission Limit - Less than 30 MHz

Frequency (MHz)	Field Strength (μ V/m at 3 m)
30 - 88	100
88 - 216	150
216 - 960	200
> 960	500

Table 16 - ISED Radiated Emission Limit - 30 MHz to 1 GHz



2.3.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
True RMS Multimeter	Fluke	79 Series III	411	12	09-Jan-2026
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
Emissions Software	TUV SUD	EmX V3.6	5125	-	Software
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
Antenna (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	24-Apr-2027
Antenna (Loop, 9 kHz to 30 MHz)	Teseq	HLA 6121	5616	24	16-Aug-2026
Power Injector	Teseq	PI 6121	5620	24	16-Aug-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 17

TU - Traceability Unscheduled

2.4 Frequency Tolerance Under Temperature Variations

2.4.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.225 (e)
ISED RSS-210, Clause B.6
ISED RSS-GEN, Clause 6.11

2.4.2 Equipment Under Test and Modification State

EUT6, S/N: 25112025.002.0_11.Y7054995 - Modification State 0

2.4.3 Date of Test

10-December-2025 to 11-December-2025

2.4.4 Test Method

NFC

The test was performed in accordance with ANSI C63.10, clause 6.8.

EUT was powered with a variable AC voltage unit at 60Hz for the duration of the measurements.

2.4.5 Test Set up

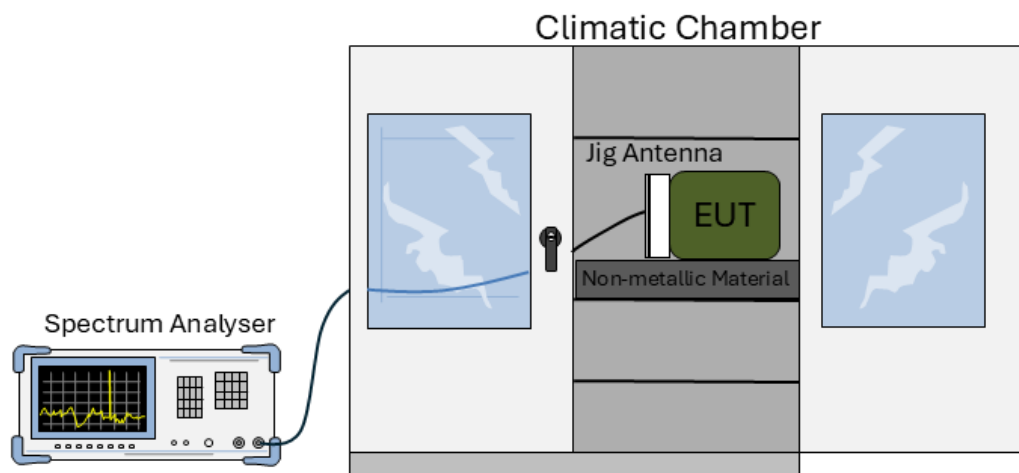


Figure 13 – Set up for Frequency Tolerance Under Temperature Variation Test

2.4.6 Environmental Conditions

Ambient Temperature	19.9 - 20.9 °C
Relative Humidity	43.9 - 52.5 %



2.4.7 Test Results

Temperature	Voltage	Measured Frequency (MHz)	Frequency Deviation (%)	Frequency Error (ppm)
-20.0 °C	120 VAC	13.5597753	0.00165711	16.57107106
-10.0 °C	120 VAC	13.5598232	0.00130385	13.03851808
0.0 °C	120 VAC	13.5598470	0.00112833	11.28331315
+10.0 °C	120 VAC	13.5598477	0.00112317	11.23168957
+20.0 °C	120 VAC	13.5598254	0.00128763	12.87627199
+30.0 °C	120 VAC	13.5598121	0.00138571	13.85712417
+40.0 °C	120 VAC	13.5597926	0.00152952	15.29521919
+50.0 °C	120 VAC	13.5597810	0.00161507	16.15070332

Table 18 - Frequency Tolerance Under Temperature Variation

Temperature	Voltage	Measured Frequency (MHz)	Frequency Deviation (%)	Frequency Error (ppm)
+20.0 °C	102 VAC	13.5598227	0.00130754	13.07539220
+20.0 °C	120 VAC	13.5598254	0.00128763	12.87627199
+20.0 °C	138 VAC	13.5598234	0.00130238	13.02376844

Table 19 - Frequency Tolerance Under Voltage Variation

FCC 47 CFR Part 15, Limit Clause 15.225 (e)

The frequency tolerance of the carrier signal shall be maintained within ± 0.01 % of the operating frequency.

ISED RSS-210, Limit Clause B.6

Carrier frequency stability shall be maintained to $\pm 0.01\%$ (± 100 ppm)



2.4.8 Test Location and Test Equipment Used

This test was carried out in Environmental Climatic Test Laboratory.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
True RMS Multimeter	Fluke	79 Series III	411	12	09-Jan-2026
5kVA AC Power Supply	California Inst	5001iM-400	3707	-	TU
Climatic Chamber	Aralab	Aralab 1, 1000 ECP75	4718	12	10-Mar-2026
EXA Signal Analyser	Keysight Technologies	N9010B	4969	24	07-Feb-2026
1 MHz / 10 MHz reference	Quartzlock	E10-X	4973	12	08-Sep-2026
Cable (SMA to SMA, 2 m)	Junkosha	MWX221-02000AMSAMS/A	5518	12	15-Apr-2026
RFID Test Antenna Jig	TUV SUD	RFID_1	7145	-	O/P Mon

Table 20

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment

3 Photographs

3.1 Test Setup Photographs



Figure 14 - Test Setup – 9 kHz to 30 MHz

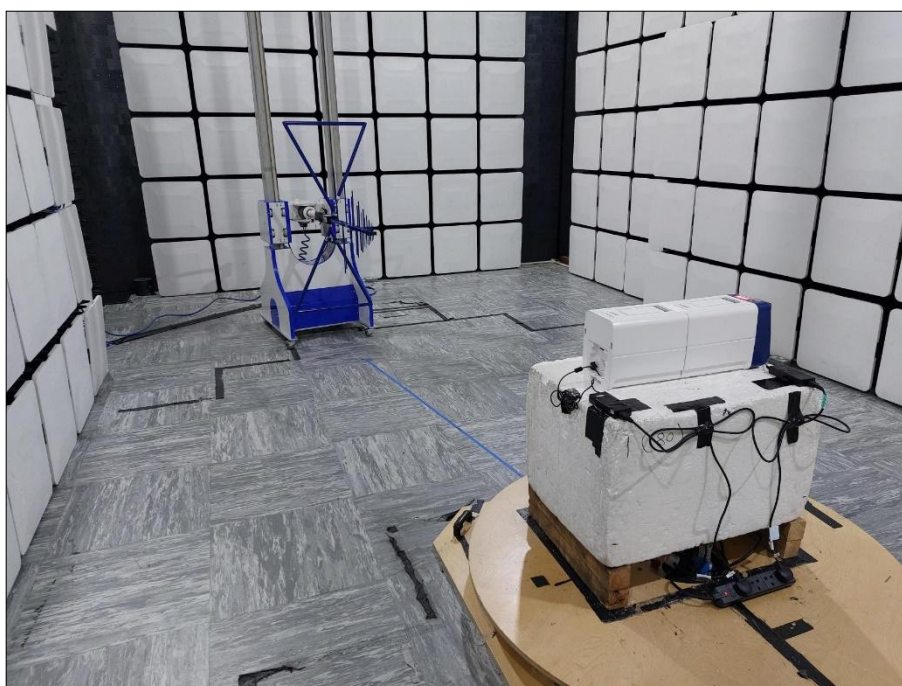


Figure 16 - Test Setup –30 MHz to 1 GHz

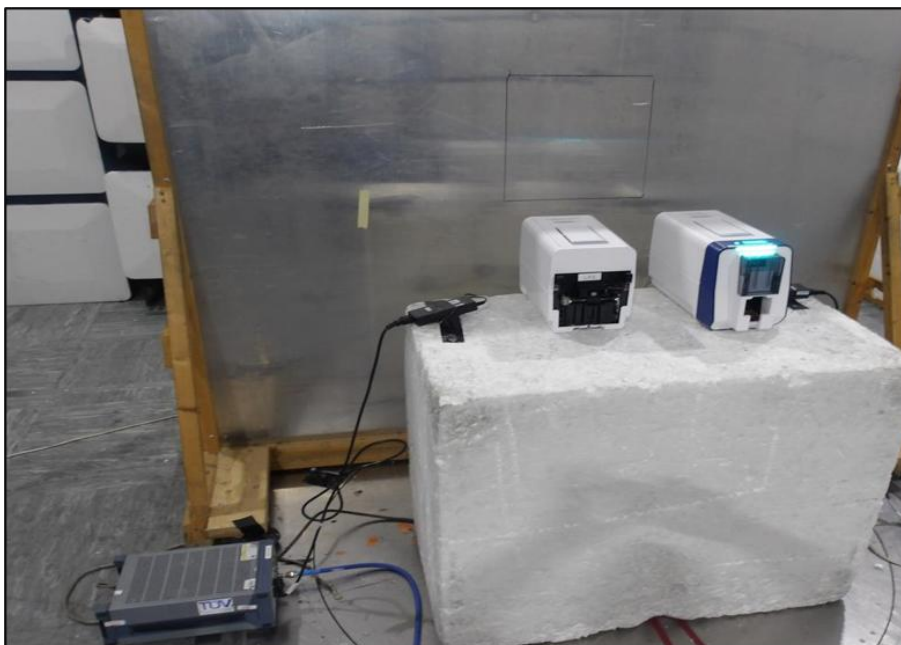


Figure 17 - Conducted Disturbance Test Setup



4 Test Equipment Information

4.1 Customer Support Equipment

The following customer supplied test equipment was used during testing covered by this document.

Item	Serial Number	Test Section	Description
ID Card Printer	5060589239807	2.1, 2.2, 2.3. 2.4	Laminator cannot work without being plugged to the printer.

5 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
AC Power Line Conducted Emissions	150 kHz to 30 MHz, LISN, ± 3.7 dB
20 dB Bandwidth & 99% Occupied Bandwidth	± 25.45 Hz
Field Strength of any Emission	9 kHz to 30 MHz: ± 3.4 dB 30 MHz to 1 GHz: ± 5.2 dB
Frequency Tolerance Under Temperature Variations	± 98.80 Hz

Table 21

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2023, Clause 4.3.4 (Simple Acceptance). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.