

FCC Test Firm Designation Number: FR0014
SED Wireless Device Testing Laboratory CAB Number: FR0004

Matériel testé :
Equipment under test:

LIVING PACKETS / THE BOX-THE BOX PRO-THE TABLET
(Trademark / Marketing name or product reference)

Client / Demandeur:
Customer / Applicant :

LivingPackets SA
Avenue C-F. Ramuz 80 - 1009 Pully – Switzerland

Rapport délivré à :
Issued to:

SGS FRANCE
135. rue René Descartes – 13857 Aix en Provence – France

Référence de la proposition :
Proposal number:

062022-25510-1

Numéro d'affaire :
Work number :

15417

Date de l'essai :
Date of test:

Le 24 novembre 2023 / 17 au 19 janvier 2024
November 24th, 2023 / January 17th to 19th, 2024

Objectif des essais :
Test purpose:

EMC qualification according to following standards:
- CFR 47, FCC Part 15, Subpart C
(Chapter 15.225 - Operation within the band 13.110-14.010 MHz)
- Industry Canada, RSS-Gen Issue 5 & RSS-210 Issue 10, section B.6
(Band 13.110-14.010 MHz)
Measurement standards:
ANSI C63.10 (2013)

Lieu du test:
Test location:

SMEE, 385 Rue René Rambaud
38500 VOIRON - France

Test réalisé par :
Test realized by:

Laurent CHAPUS

Conclusion :
Conclusion:

L'équipement satisfait aux prescriptions et essais des normes citées en référence.
The appliance complies with requirements and tests of above mentioned standards.

Ed.	Date	Modifications Pages	Written by : Visa	Approved by: Visa
1	May 21 st , 2024	Initial Edition	Laurent CHAPUS Test operator	Géraldine Guyennot Technical reviewer

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13. 99% OCCUPIED BANDWIDTH	ERREUR ! SIGNET NON DEFINI.

1. Normatives References

FCC qualification according to:		
Standards	Applied	Title
ANSI C63.10 (2013)	X	American National Standard for Testing Unlicensed Wireless Devices
CFR47, Part 15 (January 2024)	X	Telecommunication – Federal Communication Commission – Radio frequency devices, Sections 15.207 / 15.209 / 15.225

ISED qualification according to:		
Standards	Applied	Title
RSS-Gen (Issue 5/2018, amendments 2019 and 2021)	X	General Requirements and Information for the Certification of Radio Apparatus
RSS-210 (Issue10/2019+Amd 2020)	X	Licence-exempt Radio Apparatus: Category I Equipment, Section B.6: Band 13.110-14.010MHz

Deviation from standard:

None

Glossaire / Glossary

EUT: Equipment Under Test
 EMC: Electromagnetic Compatibility
 FS OATS: Free Space Open Area Test Site
 SAR: Semi Anechoic Chamber
 FAR: Full Anechoic Chamber
 C-AV: CISPR-Average (Detector)
 QP: Quasi-Peak (Detector)

2. Test synthesis

TEST	Paragraph number FCC Part 15 IC RSS-210	Spec. FCC Part 15 IC RSS-210	RESULTS (comments)
Conducted emissions test	15.207 (a) RSS-Gen: Issue 5, §8.8	15.207 (a) Table 4, §8.8	PASS
Field Strength of fundamental	15.225 (a) (b) (c) RSS-210: §B.6 (a) (b) (c)	Measure at 30m 13.110-13.410 MHz: 40.5dBµV/m 13.410-13.553 MHz: 50.5dBµV/m 13.553-13.567 MHz: 84.0dBµV/m 13.567-13.710 MHz: 50.5dBµV/m 13.710-14.010 MHz: 40.5dBµV/m	PASS
Fundamental frequency tolerance	15.225 (e) RSS-210: §B.6	shall be maintained to ±0.01% (±100 ppm)	PASS
Unwanted emissions outside the specified frequency band	15.109 / 15.209 / 15.225 (d) RSS-210: §B.6 (d) / RSS-Gen: Issue 4, §8.9	Measure at 300m 9-490kHz: 2400µV/m/F(kHz) Measure at 30m 0.490-1.705: 24000µV/m/F(kHz) 1.705-30MHz: 30µV/m Measure at 3m 30MHz-88MHz : 40 dBµV/m 88MHz-216MHz : 43.5 dBµV/m 216MHz-960MHz : 46.0 dBµV/m Above 960MHz : 54.0 dBµV/m	PASS
Occupied Bandwidth	15.215 (c) RSS-Gen: Issue 5, §6.7	BW at -20dB BW at 99%	PASS

- General conclusion:**

Measures and tests performed on the sample of the product *LIVING PACKETS / THE BOX-THE BOX PRO-THE TABLET*, in configuration and description presented in this test report, show compliance with standards FCC CFR 47, PART 15, Subpart C and ISSED-Canada RSS-Gen & RSS-210.

3. Equipment Under Test (EUT)

Nom /
Identification

LIVING PACKETS / THE BOX-THE BOX PRO-THE TABLET

(Trademark / Marketing name or product reference)

FCC ID: 2BDUMTHEBOX
IC: 31698-THEBOX
Model / HVIN: THE BOX-THE BOX PRO-THE TABLET
Product name / PMN: THE BOX-THE BOX PRO-THE TABLET
FVIN: 3.7
Modular approval: No

**Différence des modèles /
Model difference** All models contain the same electronic tablet. (THE TABLET)
Difference is from the size of the box in which the tablet is integrated.
All tests are performed with the model THE BOX PRO (395mmx400x300)

**Alimentation /
Power supply** 5V DC for battery charging from USB C connector

**Auxiliaires /
Auxiliaries** AC adapter
Laptop ASUS, model HP G6-2317sl for programming only (Sn: 5CD3124BOM)
AC/DC power adapter: UGREEN Group Limited, Model CD122 (5V/3.0A)

**Entrées-Sorties /
Input / Output**

	Câbles pour essai / Cables for test	Blindé / Shielded	Prévu pour >3m / Intended for >3m
USB-Type C Connector (Power only)	2.0m	Yes	No

**Mode de fonctionnement /
Running mode** The tested sample is able to:
- Transmit a carrier frequency on the NFC channel (13.56MHz)
The device is powered by 5V DC for battery charging.

**Programme de test /
Test program /** LP-Tool 7.3.1

**Fréquence max interne EST /
Max internal EUT frequency** 2.480GHz for BLE RF data transmission.

**Information sur l'équipement /
Equipment information** Declaration of the applicant:
- Type of technology: NFC
- Emission bands: 13.110-14.010 MHz
- Equipment intended for use as a fixed station
- Equipment designed for continuous operation
- Antenna type: Integrated PCB 13.56MHz coil (read/write)

**Dimensions de l'EST /
Dimensions of EUT** Tested sample 395mmx400x300
Sn : none

All Information above is declared by the applicant and are under his responsibility.

4. Test conditions

Power supply voltage:
Equipment under test: 5V DC from power adapter
Auxiliaries: 120V/60Hz

5. Modifications of the EUT

None.

6. Special accessories

None required for compliance with emission limits.

7. Measurement Uncertainty

Test Description	Expanded uncertainty
Conducted emissions test (150k-30MHz, AC mains)	± 3.5dB
Radiated emission test (9kHz-30MHz, electric field)	± 4.0dB
Radiated emission test (30-300MHz, SAC 3m)	± 5.6dB
Radiated emission test (300-1000MHz, FAC 3m)	± 5.3dB
Radiated emission test (1-40GHz, FAC 3m)	± 5.6dB
Conducted RF output power at antenna port	± 1.6dB
Radiated RF output power (Peak, Power density)	± 5.6dB
DTS Bandwidth, 99% OBW	±4%
Temperature	± 1°C
Time and duty cycle calculation	±1%
AC and DC voltage	±1%

Note: Expanded uncertainty at 95% confidence (k=2)

8. Field Strength Calculation

The field strength (level) is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation is as follow:

$$FS = RA + AF + CF - AG$$

Where FS = Field Strength (Level)

RA = Receiver Amplitude (Meter Reading)

AF = Antenna Factor

CF = Cable Factor

AG = Amplifier Gain

Total factor = AF+CF-AG

Margin value = Emission level – Limit value

Example:

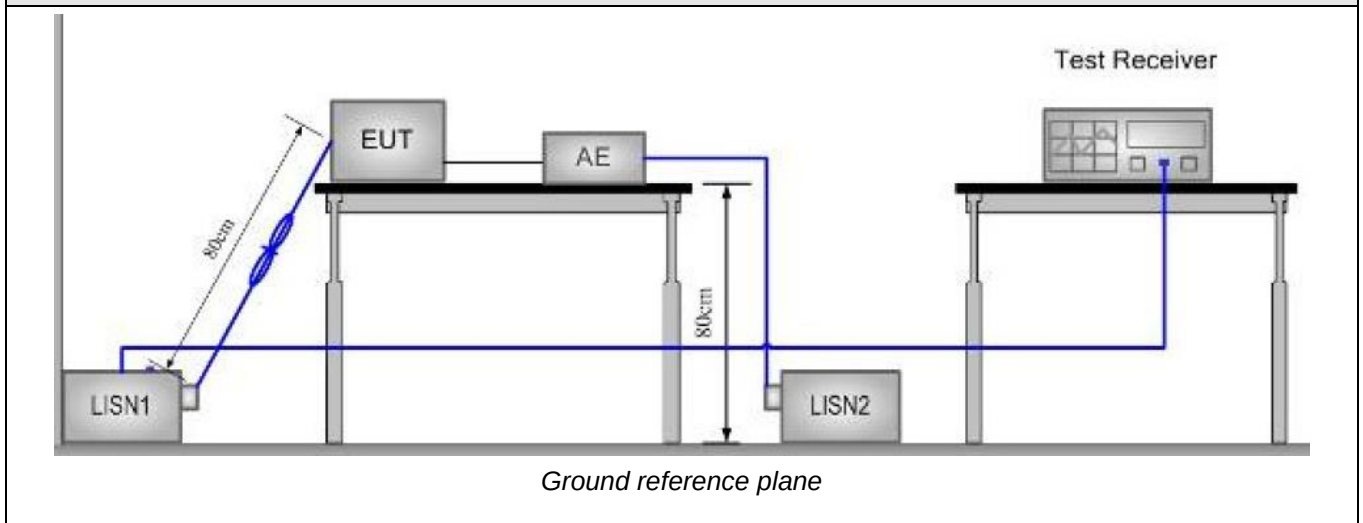
RA: 14.0dBμV / AF: 16.5 dBm⁻¹ / CF: 3.5dB / AG: 15dB

→ Total factor: 5dBm⁻¹

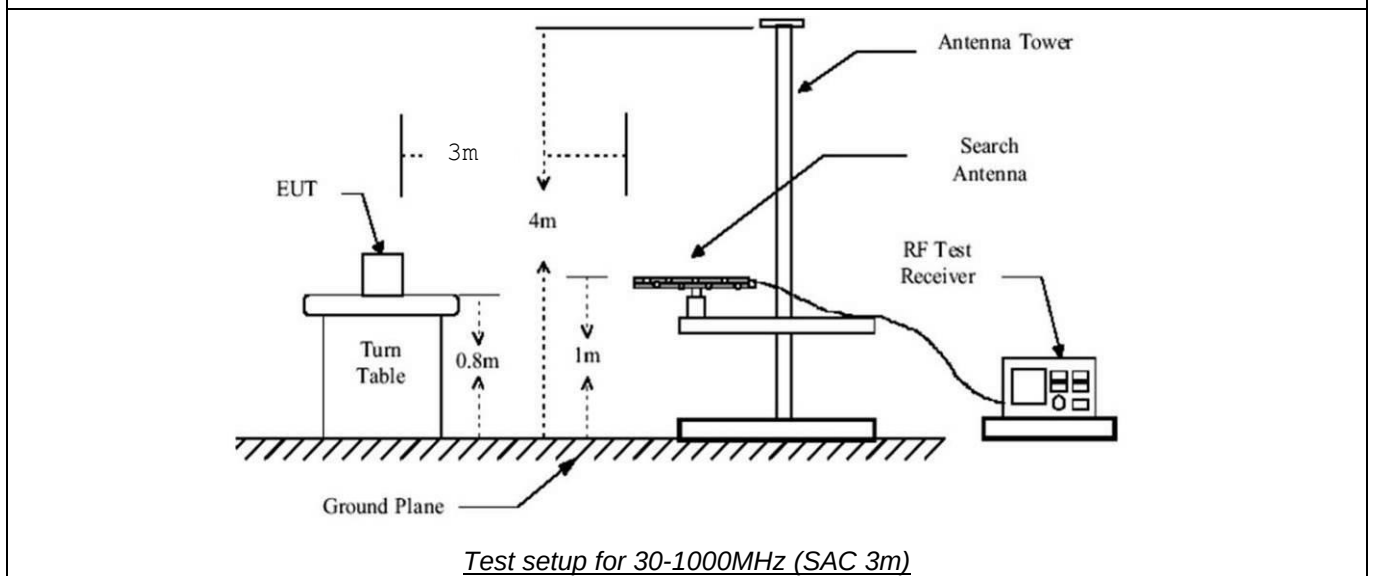
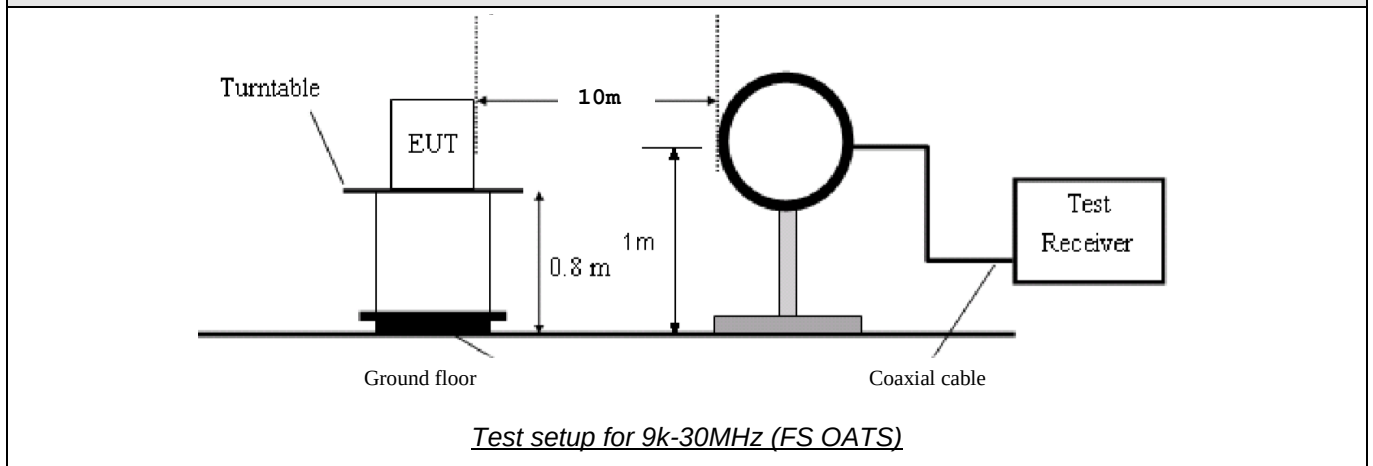
→ Field level: 19.0dBμV/m (-21.0dB for margin if limit is 40dBμV/m)

9. Test Setup Diagram

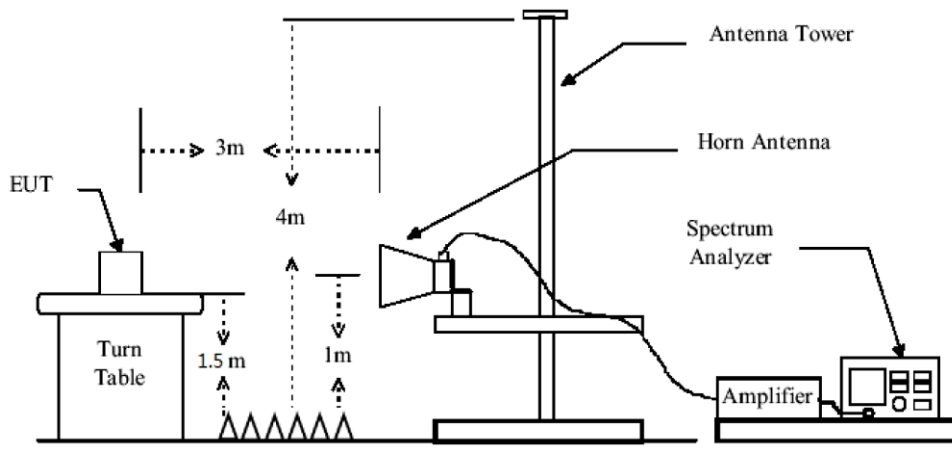
Test Setup for conducted emission



Test Setup for radiated emission

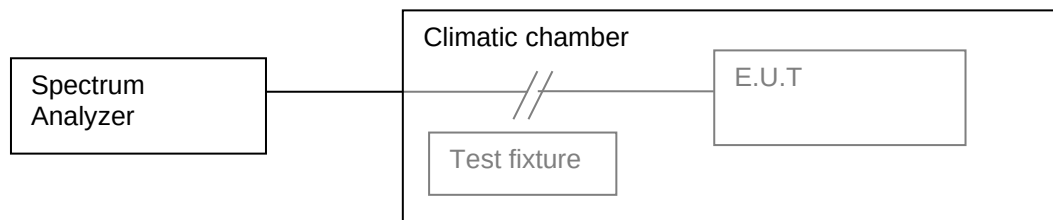


Test Setup for radiated emission



Test setup for 1-25GHz (SAC 3m, tilt antenna mast used)

Test Setup for frequency stability



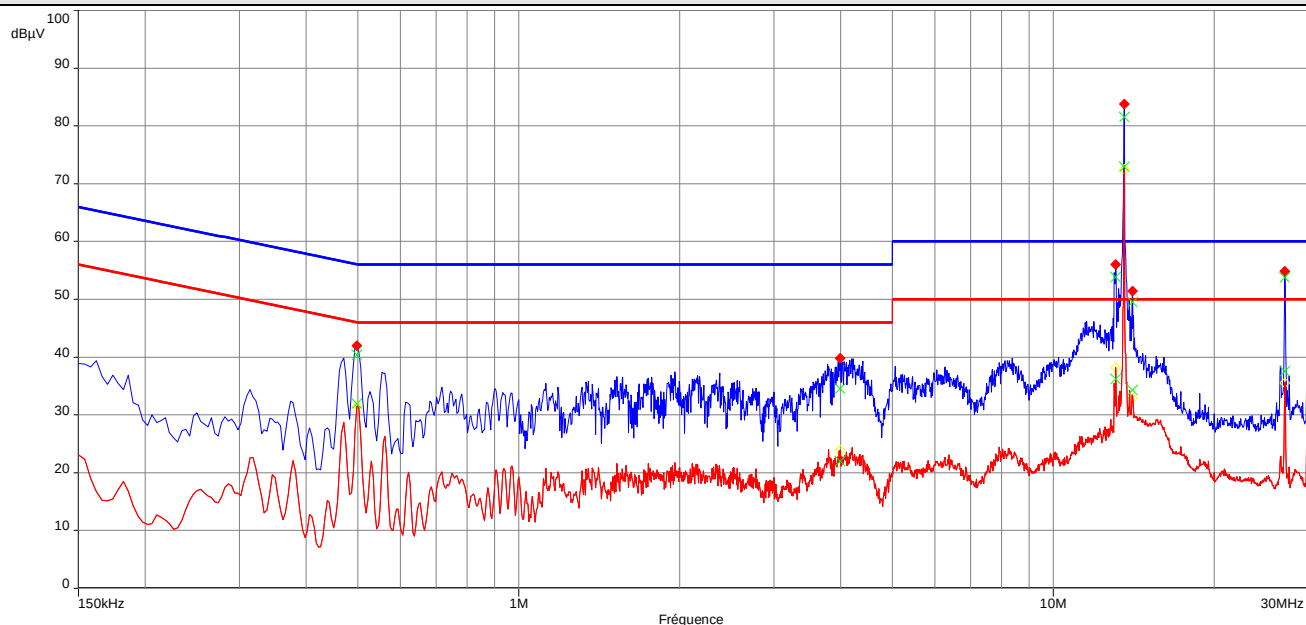
10. Conducted Emission Measurement (150kHz-30MHz)

TEST: Limits for conducted disturbance 150kHz – 30MHz				Verdict
Method: The LISN is placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on lines were made at the output of the LISN. The EUT is 80cm above the ground reference plane and 40cm from the vertical ground plane. The AC power cable is 1m length.				Pass
Laboratory Parameters:		Required prior to the test		During the test
Ambient Temperature		17 - 27 °C		20°C ± 2
Relative Humidity		25 - 65 %		40% ± 5
Fully configured sample scanned over the following frequency range		Frequency range on each side of line		Measurement Point
		150kHz to 30MHz		AC input port (120V/60Hz)
Limits				
Frequency (MHz)	Limit dB (µV)			
	Quasi-Peak	Result	Average	Result
0.15 – 0.50	66 \ 56	PASS	56 \ 46	PASS
0.50 - 5	56	PASS	46	PASS
5 – 30	60	PASS	50	PASS
Supplementary information: Test location: SMEE Test date: January 17 th , 2024 by L. CHAPUS. Power supply voltage: 5V DC from USB adapter. Note: the equipment is charging the battery during testing.				

Tabulated Results for Mains Terminal Disturbance Voltage on AC port

FREQ (MHz)	Meas. PK (dBμV)	Mes. QP (dBμV)	LIMIT QP (dBμV)	Margin QP (dB)	Mes. AV (dBμV)	LIMIT AV (dBμV)	Margin AV (dB)	Line
0.499042	42.09	40.37	56.03	-15.66	31.96	46.03	-14.07	L1
3.98913	40.1	34.57	56	-21.43	22.03	46	-23.97	L1
13.0647	57.1	53.82	60	-6.18	36.23	50	-13.77	L1
13.5594	83.9	81.54	60	21.54	72.9	50	22.9	L1 (1)
13.5594	59.41	56.13	60	-3.87	47.39	50	-2.61	L1 (2)
14.0598	52.84	49.47	60	-10.53	34.29	50	-15.71	L1
27.1206	55.32	53.78	60	-6.22	37.57	50	-12.43	L1
0.496784	42.82	41.1	56.03	-14.94	35.4	46.03	-10.63	N
4.03222	40.23	35.25	56	-20.75	28.19	46	-17.81	N
13.5594	82.89	80.51	60	20.51	71.4	50	21.4	N (1)
13.5594	61.37	58.52	60	-1.48	49.29	50	-0.71	N (2)
27.1233	49.44	45.34	60	-14.66	31.6	50	-18.4	N
Frequency band investigated:			150kHz-30MHz					
RBW:			9kHz					
Voltage:			120V/60Hz					
Limit:			15.207 / RSS-GEN §8.8					
Final measurement detector:			Quasi-Peak and CISPR Average (AV)					
RESULT:			PASS					
Notes:			(1): NFC transmitter's fundamental emission band (2): Measurement with dummy load on NFC antenna					

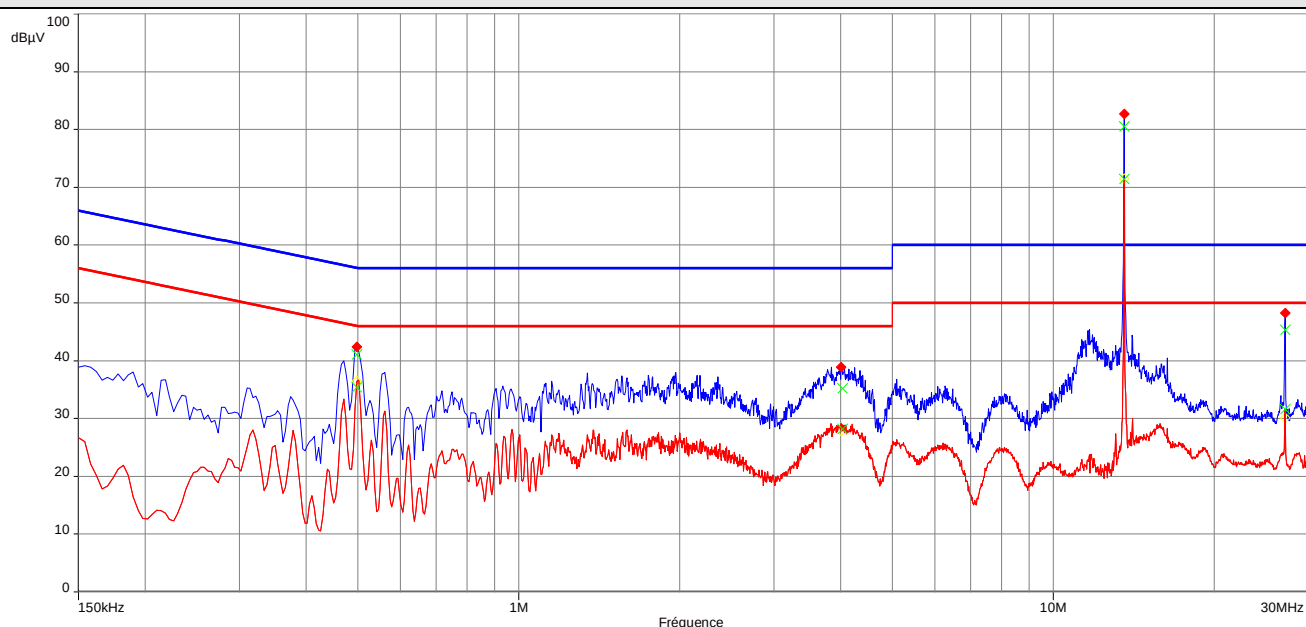
Graphical representation of Conducted Disturbance Measurement (Peak and Average detection) AC port, Line L1



----: Peak

----: Average

Graphical representation of Conducted Disturbance Measurement (Peak and Average detection) AC port, Line Neutral



----: Peak

----: Average

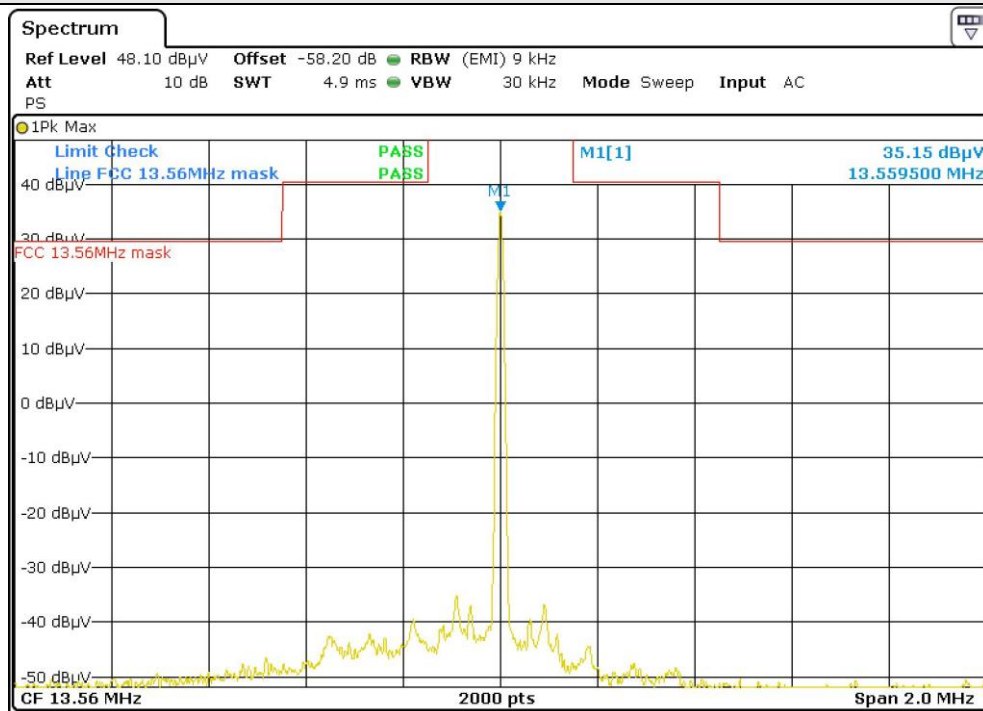
11. Field Strength of fundamental

TEST: Field strength of fundamental / FCC part 15.225 – RSS 210 §B.6		Verdict
<u>Method:</u> Measurements were made in a 10-meter Open Area Test Site (OATS) that complies to ANSI C63.4/C63.10 and RSS-Gen. Measurements were performed with peak detector using a 9kHz RBW. The EUT was rotated 360° about its azimuth with the receive antenna located at 1-meter in horizontal and vertical polarities. Final measurements (Quasi-Peak) were then performed by rotating the EUT 360°. The tested equipment is set to transmit operation with modulation. Three orthogonal axis measurements on EUT are performed to obtain the maximum peak field strength.		Pass
Laboratory Parameters:	Required prior to the test	During the test
Ambient Temperature	10 - 27 °C	12°C ± 2
Relative Humidity	25 - 65 %	40% ± 5
Limits – FCC Part 15.225 (a) (b) (c) / RSS-210 §B.6 (a) (b) (c) Operation within the band 13.110-14.010 MHz		
Frequency (MHz)	Limits (dBμV/m)	
	Level / Distance	Results
13.553-13.567 MHz	84.0dBμV/m / 30m	Pass
13.410-13.553 / 13.567-13.710	50.5dBμV/m / 30m	Pass
13.110-13.410 / 13.710-14.010	40.5dBμV/m / 30m	Pass
Outside 13.110 to 14.010 MHz	29.5dBμV/m / 30m	See chapter 12
Supplementary information: Test location: SMEE Test date: January 17th, 2024 by L. CHAPUS. Power supply voltage: 5V DC from USB adapter. Note: the battery inside equipment is fully charged during testing.		

Tabulated Results for Field Strength of fundamental

FREQ	RF field @ 30m	Limit @ 30m	Margin	Antenna angle	Table angle	Correc. Fact. (CF)
MHz	dBμV/m	dBμV/m	dB	Degree	Degree	dB
13.56	35.1	84.0	-48.9	V / 0°	90	10.5
RBW:		9kHz (150kHz-30MHz)				
Measurement distance:		10m				
Limit:		FCC Part 15.225 (a) (b) (c) / RSS-210 §B.6				
Final measurement detector:		Quasi-Peak				
RESULT:		PASS				
Note:		CF: Correction factor = Antenna factor + Cable loss Measure have been done at 10m distance and corrected according to requirements of 15.209.e) (M@30m = M@10m-19.1dB)				

Graphical representation of Radiated E-field Band Edge compliance within the band 13.110-14010 MHz



Frequency band investigated:	12.5MHz to 14.5MHz
Unit :	dBμV/m
RBW :	9kHz
Voltage:	5V DC
Limit:	FCC Part 15.225 (a) (b) (c) (d)
Measurement detector:	Peak

12. Fundamental frequency tolerance

TEST: Fundamental frequency tolerance / FCC part 15.225 – RSS-210 §B.6		Verdict
Method: The frequency tolerance of the carrier signal shall be maintained within ± 0.01% of the operating frequency when the temperature is varied from -20°C to +50°C at the nominal power voltage and the primary power voltage is varied from 85% to 115% of the rated supply voltage at 20°C. The equipment is placed in a climatic chamber. Carrier level and frequency are measured using a test fixture.		Pass
Fully configured sample scanned over the following frequency range		
Carrier Signal:	13.56MHz	
Normal test temperature:	20°C	
Normal power voltage:	AC 120V/60Hz	
Extreme Temperature variation:	-20°C to +50°C	
Extreme Voltage variation:	AC 102-138V	
Limits – FCC Part 15.225 (e) / RSS-210 §B.6 (e)		
Frequency (MHz)	Limits	Results
13.56MHz	± 0.01% or 100ppm Min. and Max. frequency shall be within 13.553 to 13.567 MHz	Pass
Supplementary information: Test location: SMEE Test date: January 19 th , 2024 by L. CHAPUS. Power supply voltage: 5V DC from USB adapter. AC mains is 120V/60Hz. Note: the battery inside equipment is fully charged during testing.		

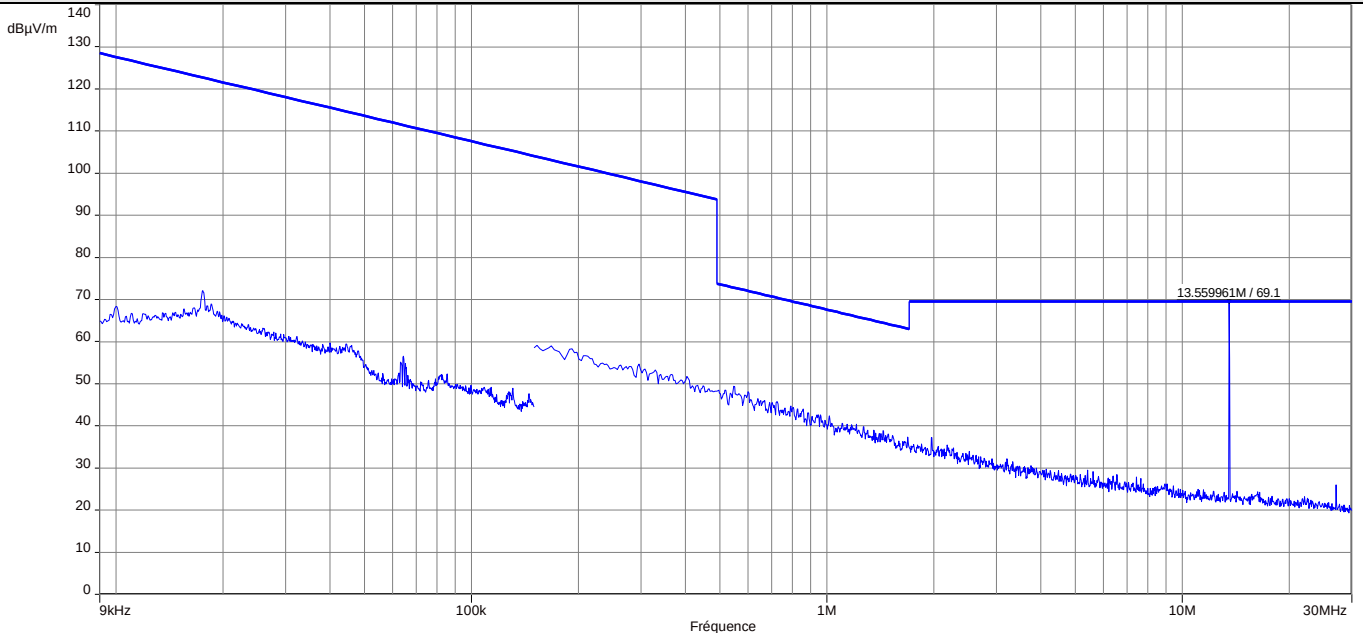
Tabulated Results for fundamental frequency stability

Temperature (°C)	VOLTAGE (V AC)	Frequency after 0s (Startup) (Hz)		Frequency after 2min (Hz)	Frequency after 5min (Hz)	Frequency after 10min (Hz)
50	120V	13560466		13560463	13560460	13559095
40	120V	13560508		13560505	13560503	13559982
30	120V	13560538		13560557	13560557	13559980
20	120V	13560567		13560566	13560565	13560001
20	100	13560567		13560566	13560565	13560001
20	140	13560567		13560566	13560565	13560001
10	120V	13560613		13560612	13560613	13560028
0	120V	13560655		13560653	13560654	13560050
-10	120V	13560674		13560674	13560674	13560064
-20	120V	13560653		13560656	13560656	13560062
Ref Value		13560567	Hz			
MIN Frequency		13560459	Hz			
Limit MIN Frequency		> 13.553	MHz			
MAX frequency		13560674	Hz			
Limit MAX Frequency		< 13.567	MHz			
Overall stability		215	Hz			
Limit for stability		1356.06	Hz			
Result		PASS				

13. Unwanted emissions

TEST: Unwanted emissions outside the specified frequency band / FCC part 15.209, 15.225 - RSS-210 §B.6			Verdict
Method: Measurements were made in a 3-meter Semi Anechoic Room (SAR) up to 1GHz and in a 3-meter Full Anechoic Room (FAR) above 1GHz that complies to CISPR 16-1-4 / ANSI C63.4+A1. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3 meters. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements (Peak, Quasi-peak, Average) were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.			Pass
Laboratory Parameters:	Required prior to the test	During the test	
Ambient Temperature	17 - 27 °C	20°C ± 2	
Relative Humidity	25 - 65 %	40% ± 5	
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point	
	9kHz – 30MHz	10 m measurement distance	
	30MHz – 10GHz	3 m measurement distance	
Limits – FCC Part 15.209, 15.225 (d) / RSS-210 §B.6			
Frequency (MHz)	Limits (dBµV/m)		
	Level / Detector / Distance	Results	
0.009 to 0.090	107.6 – 87.6 / AV / 10m 127.6 – 107.6 / PK / 10m	Pass	
0.090 to 0.110	87.6 – 85.9 / QP / 10m	Pass	
0.110 to 0.490	85.7 – 72.9 / AV / 10m 105.7 – 92.9 / PK / 10m	Pass	
0.490 to 1.705	52.9 – 42.1 / QP / 10m	Pass	
1.705 to 30	48.6 / QP / 10m	Pass	
30 to 88	40.0 / QP / 3m	Pass	
88 to 216	43.5 / QP / 3m	Pass	
216 to 960	46.0 / QP / 3m	Pass	
960-1000	54.0 / QP / 3m	Pass	
Above 1GHz	54.0 / AV / 3m 74.0 / PK / 3m	Pass	
Supplementary information: Test location: SMEE Test date: November 24 th , 2023 by L. CHAPUS. Power supply voltage: 5V DC from USB adapter.			

Graphical representation of Radiated Disturbance Measurement (Peak detection, Anechoic chamber pre-scan, 9kHz-30MHz / 3m / Parallel & Perpendicular antenna position / Transmit mode)



Notes: Pre-scan graph only for identification purpose.

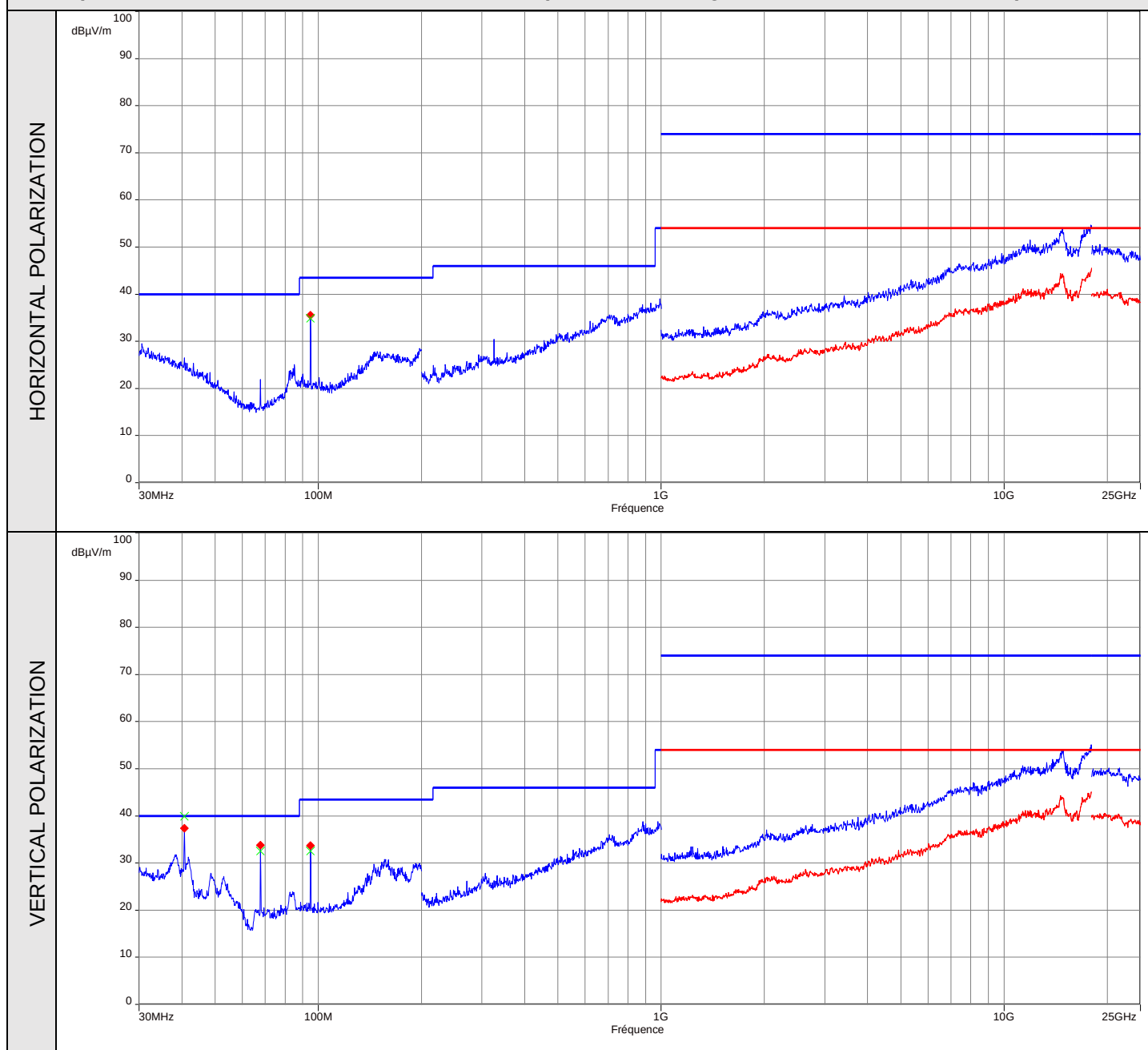
Tabulated Results for Unwanted emissions (9kHz-490kHz)

FREQ	RF field @ 300m	Limit @ 300m	Detector	Margin	Ant. angle	Table angle	Correc. Fact. (CF)
MHz	dBμV/m	dBμV/m	Pk / QP / AV	dB	Degree	Degree	dB
All levels are at least 20dB below applicable limits							
Supplementary information: Frequency list measured has been created with pre-scan results.							
Frequency band investigated:		9kHz-490kHz					
RBW:		200Hz (9kHz-150kHz) 9kHz (150kHz-30MHz)					
Measurement distance:		10m					
Final measurement detector:		Peak / Quasi-Peak / Average					
Limit:		FCC Part 15.209 / RSS-Gen					
Note:		CF: Correction factor = Antenna factor + Cable loss (M@300m = M@10m-59.1dB) Loop antenna used and rotated about its axis to maximize any emission.					

Tabulated Results for Unwanted emissions (490kHz-30MHz)

FREQ	RF field @ 30m	Limit @ 30m	Detector	Margin	Ant. angle	Table angle	Correc. Fact. (CF)
MHz	dBμV/m	dBμV/m	Pk / QP	dB	Degree	Degree	dB
All levels are at least 20dB below applicable limits							
Supplementary information: Frequency list measured has been created with pre-scan results.							
Frequency band investigated:		490kHz-30MHz					
RBW:		9kHz (150kHz-30MHz)					
Measurement distance:		10m					
Final measurement detector:		Quasi-Peak					
Limit:		FCC Part 15.209 / RSS-Gen					
Note:		CF: Correction factor = Antenna factor + Cable loss (M@30m = M@10m-19.1dB) Loop antenna used and rotated about its axis to maximize any emission.					

Graphical of Radiated Disturbance Measurement (Peak and Average Measurement, 30Mz-25GHz) – Tx NFC



FREQ (MHz)	Field Strength 3m PK (dBμV/m)	Field Strength 3m QP or AV (dBμV/m)	Limit Peak (dBμV/m)	Limit QP or AV (dBμV/m)	Margin Peak (dB)	Margin QP or AV (dB)	Total factor (dB)	Result	Pol	Detector & Limit
94.9233	34.9	33.87	N/A	43.5	N/A	-9.63	11.2	Pass	H	QP
40.6837	39.86	37.82	N/A	40	N/A	-2.18	15.92	Pass	H	QP
67.8041	32.56	31.29	N/A	40	N/A	-8.71	7.18	Pass	H	QP
94.9241	32.52	31.86	N/A	43.5	N/A	-11.64	11.2	Pass	H	QP
Frequency and Limit band:			30Mz-25GHz / FCC 15.209 / RSS-GEN							
RBW and Limit detector:			Below 1GHz: RBW= 120kHz, Quasi-Peak Limit / Above 1GHz: RBW= 1MHz, Peak and CISPR-Average Limit							

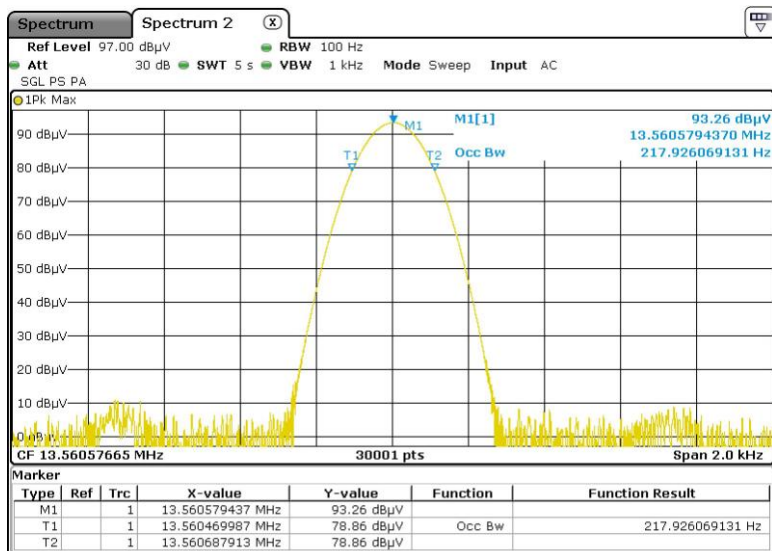
14. Occupied Bandwidth

TEST: Occupied bandwidth / RSS-GEN		Verdict
Method: The setup is in an climatic chamber. The spectrum analyzer is connected to the measuring antenna. A radiated measurement is performed. The RBW is set in the range of 1% to 5% of the occupied bandwidth, with VBW $\geq 3 \times$ RBW. The SPAN is wide enough to capture all products of the modulation process. A Peak detector is used. Measure is performed with OBW 99% and 20dB BW function of the spectrum analyser. The tested equipment is set to transmit operation with modulation.		Pass
Laboratory Parameters:	Required prior to the test	During the test
Ambient Temperature	17 - 27 °C	20°C $\pm$ 2
Relative Humidity	25 - 65 %	40% $\pm$ 5
Supplementary information: Test location: SMEE Test date: January 18th, 2024 by L. CHAPUS. Power supply voltage: 5V DC from USB adapter. Note: the battery inside equipment is fully charged during testing.		

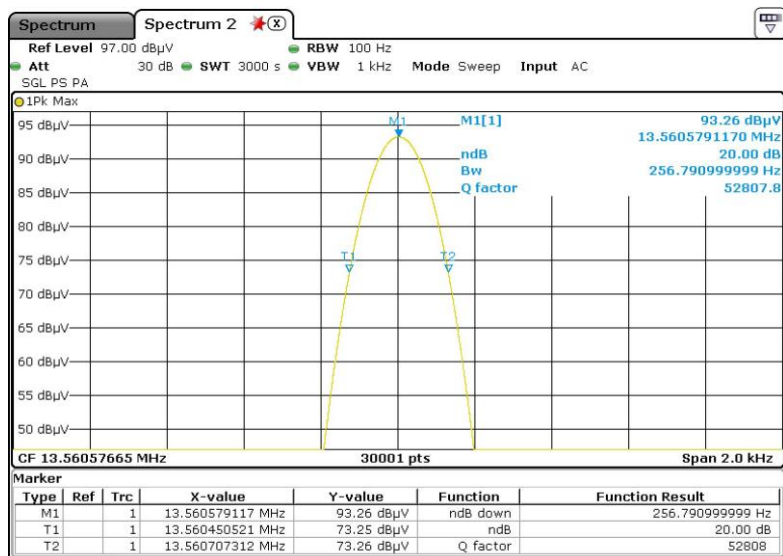
Tabulated Results for Occupied Bandwidth (99%)	
Frequency (MHz)	99% Bandwidth (kHz)
13.56	217.926

Tabulated Results for Occupied Bandwidth (20dB)	
Frequency (MHz)	20dB Bandwidth (kHz)
13.56	256.791

Graphical representation of Occupied Bandwidth



99% Occupied Bandwidth



20dB Occupied Bandwidth

Frequency:	13.56MHz
RBW / VBW:	100Hz/1kHz
Measurement detector:	Peak

15. Test Equipment List

Test Equipment Used for conducted emission					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AC power supply	PACIFIC POWER	AMX-125	ALI-101-002	2023/8	2024/8
Attenuator / limiter	SMEE	ATT#2	ATT-171-010	2023/4	2024/4
RF cable	RADIALL	RG58 / BNC / 5m	CAB-211-042	2023/4	2024/4
Measuring receiver	Rohde&Schwarz	ESRP	REC-151-002	2021/12	2024/6
LISN (50Ω / 50μH)	AFJ	LS16C	RSI-101-001	2023/7	2025/7
EMC Software	NEXIO	BAT EMC	SOF-101-001	-	-

Test Equipment Used for radiated emission					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AC power supply	PACIFIC POWER	AMX-125	ALI-101-002	2023/8	2024/8
Horn antenna	COM-POWER	AH-118	ANT-101-004	2021/7	2024/7
Loop antenna	EMCO	6502	ANT-101-009	2023/9	2025/9
Horn antenna	ETS-LINDGREN	3116	ANT-161-014	2021/7	2024/7
Log-periodic antenna	EMCO	3146	ANT-191-019	2021/07	2024/3
Biconnic antenna	COM-POWER	AB- 900A	ANT-201-021	2023/01	2025/1
Spectrum analyzer	Rohde&Schwarz	FSV40	ASP-171-004	2021/10	2024/4
RF cable	Div	OATS/25m	CAB-101-017	2023/4	2024/4
RF cable	HUBER+SUHNER	SF102 (K/2m)	CAB-171-034	2023/4	2024/4
RF cable	HUBER+SUHNER	SF102 (K/3m)	CAB-171-035	2023/4	2024/4
RF cable	RADIALL	R286301073	CAB-201-036	2023/4	2024/4
RF cable	HUBER+SUHNER	SF126E (NN/2m)	CAB-231-043	2023/4	2024/4
RF cable	HUBER+SUHNER	SF104E (NN/5,3m)	CAB-231-044	2023/4	2024/4
RF cable	HUBER+SUHNER	SF104E (NN/7m)	CAB-231-045	2023/4	2024/4
Semi anechoic room	COMTEST	218292	CAG-201-002	2022/4	2025/4
High-pass filter	RF-Lambda	RHPF23G03G18	FIL-221-011	2023/4	2024/4
Antenna mast SAC	Innco- Systems	MA4640-XP-ET	MAT-201-002	-	-
Turntable SAC	Innco- Systems	DS1500-S-1t	PLA-201-003	-	-
Pre-amplifier	SMEE	18-40GHz	PRE-171-004	2023/4	2024/4
Pre-amplifier	COM-POWER	1-18GHz	PRE-221-005	2023/4	2024/4
Measuring receiver	Rohde&Schwarz	ESRP	REC-151-002	2021/12	2024/6
FS OATS	Div	10m	SIT-201-002	-	-
EMC Software	NEXIO	BAT EMC	SOF-101-001	-	-

Test Equipment Used for frequency stability measurement					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Shielded loop antenna	SMEE	5cm	ANT-171-018	-	-
Climatic chamber	VÖTSCH	VT 3050	CLI-101-001	2022/12	2024/12
Measuring Rec	Rohde&Schwarz	ESRP	REC-151-002	2021/12	2024/6
DC power supply	AGILENT	6654A	ALI-101-003	-	-
Multimeter	FLUKE	287	MUL-131-005	2022/8	2024/8
DATA LOGGER (Temperature)	AGILENT	34970A	DLG-101-001	2022/8	2024/8
DATA LOGGER (Mux board)	AGILENT	34901A	DLG-101-002	2022/8	2024/8

END OF REPORT