

RRA-EMIESS24A523TEX-03Av0

## Certification Radio test report

**According to the standard:**

CFR 47 FCC PART 15

RSS GEN – Issue 5

RSS 210 - Issue 10

**Equipment under test:**

***TPMS-WR21***

**FCC ID: *2BCPN-WR21***

**Company:**

**TEXYS INTERNATIONAL**

**Distribution:** Mr DAGNET Thibault

**(Company: TEXYS INTERNATIONAL)**

**Number of pages:** 19 with 2 annexes

| Ed. | Date     | Modified<br>Page(s) | Technical Verification and<br>Quality Approval |                                                                                      |
|-----|----------|---------------------|------------------------------------------------|--------------------------------------------------------------------------------------|
|     |          |                     | Name and Function                              | Visa                                                                                 |
| 0   | 7-Jun-24 | Creation            | JC. BOGA, Laboratory Manager                   |  |

Duplication of this document is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above.

This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample.

Information in italics are declared by the manufacturer/customer and are under his responsibility

**DESIGNATION OF PRODUCT:** *TPMS-WR21*

**Serial number (S/N):** *U23052724*

**Reference / model (P/N):** *TPMS-WR21*

**Software version:** *V1.04*

**MANUFACTURER:** Texys International

**COMPANY SUBMITTING THE PRODUCT:**

**Company:** Texys International

**Address:** ZA des Chamonds 16 rue Edouard Branly  
58640 Varennes-Vauzelles  
FRANCE

**Responsible:** Mr DAGNET Thibault

**DATE(S) OF TEST:** From 8-Apr-24 to 26-Apr-24

**TESTING LOCATION:** EMITECH LYON laboratory at CHASSIEU (69) FRANCE

FCC Accredited under US-EU MRA Designation Number: FR0013  
Test Firm Registration Number: 807590

ISED Accredited under CANADA-EU MRA Designation Number: FR0007  
Industry Canada Registration Number: 4379D

**TESTED BY:** T. LEDRESSEUR

**VISA:**

A handwritten signature in black ink, appearing to be "T. Ledresseur", written over a horizontal line.

**WRITTEN BY:** T. LEDRESSEUR

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## REVISIONS HISTORY

| Revision | Date      | Modified pages | Modifications |
|----------|-----------|----------------|---------------|
| 0        | 31-May-24 | /              | Creation      |

## 1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: **TPMS-WR21**, in accordance with normative reference.

The equipment under test integrates:

- SRD receiver (433.98MHz).
- RFID transceiver (125 kHz)

This report concerns only the RFID part.

## 2. PRODUCT DESCRIPTION

Category of equipment (ISED): I

Class: B

Utilization: TPMS Sensor system

Antenna type and gain: Integral antenna (unknown gain)

Operating frequency range: 125 kHz

Number of channels: 1

Channel spacing: Not concerned

Modulation: ASK

Power source: 6-16 Vdc by external power source

Power level, frequency range and channels characteristics are not user adjustable.  
The details pictures of the product and the circuit boards are joined with this file.

### 3. NORMATIVE REFERENCE

The standards and testing methods related throughout this report are those listed below. They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 FCC Part 15 (2024)      Radio Frequency Devices

ANSI C63.10                      2013  
Procedures for Compliance Testing of Unlicensed Wireless Devices.

RSP-100                          Issue 12, August 2019  
Certification of Radio Apparatus and Broadcasting equipment

RSS-Gen                          Issue 5, April 2018  
General Requirements for Compliance of Radio Apparatus

RSS-210                          Issue 10, December 2019  
Licence-Exempt Radio Apparatus:  
Category I equipment.

### 4. TEST METHODOLOGY

Radio performance tests procedures given in CFR 47 part 15:

Subpart C – Intentional Radiators

- Paragraph 203: Antenna requirement
- Paragraph 205: Restricted bands of operation
- Paragraph 207: Conducted limits
- Paragraph 209: Radiated emission limits; general requirements

Radio performance tests procedures given in RSS-Gen:

- Paragraph 2 - General
- Paragraph 3 - Normative publications and related documents
- Paragraph 4 - Labelling requirements
- Paragraph 6 - General administrative and technical requirements
- Paragraph 8 - Licence-exempt Radio Apparatus

Radio performance tests procedures given in RSS-210:

- Paragraph 5 – RSS-Gen compliance
- Paragraph 7 - Technical specifications

## 5. TEST EQUIPMENT CALIBRATION DATES

| Emitech Number | Model                        | Type                    | Last calibration | Calibration interval (years) | Next calibration due |
|----------------|------------------------------|-------------------------|------------------|------------------------------|----------------------|
| 0              | BAT-EMC V3.18.0.26           | Software                | /                | /                            | /                    |
| 5609           | EMCO 3146A                   | Log periodic antenna    | 14/12/2021       | 3                            | 14/12/2024           |
| 5625           | EMCO 3104                    | Biconical antenna       | 06/02/2023       | 3                            | 06/02/2026           |
| 6155           | EMCO 6502                    | Loop antenna            | 17/05/2023       | 2                            | 17/05/2025           |
| 6217           | Rohde & Schwarz ESH3-Z5      | LISN                    | 27/07/2023       | 1                            | 27/07/2024           |
| 6290           | HAEFELY PHF555               | Power source            | (1)              | (1)                          | (1)                  |
| 7651           | SIDT Cage                    | Anechoic chamber        | /                | /                            | /                    |
| 10952          | Agilent 34401A               | Multimeter              | 21/07/2023       | 2                            | 21/07/2025           |
| 11316          | Agilent N9010A               | Receiver                | 05/09/2023       | 1                            | 05/09/2024           |
| 11855          | EMITECH                      | Outside room            | /                | /                            | /                    |
| 15775          | RFPA INT-BA011000-25         | Low-noise amplifier     | 29/02/2024       | 1                            | 29/02/2025           |
| 15776          | Rohde & Schwarz FSV40        | Spectrum Analyzer       | 22/02/2024       | 1                            | 22/02/2025           |
| 15790          | Testo 608-H1                 | Meteo station           | 20/11/2023       | 1                            | 20/11/2024           |
| 15892          | HUBER et SUHNER N 18GHz 3m   | Cable                   | 31/05/2023       | 2                            | 31/05/2025           |
| 15905          | HUBER et SUHNER N 18GHz 4.5m | Cable                   | 31/05/2023       | 2                            | 31/05/2025           |
| 15907          | HUBER et SUHNER N 18GHz 3.5m | Cable                   | 31/05/2023       | 2                            | 31/05/2025           |
| 15934          | HUBER et SUHNER N 18GHz 2.5m | Cable                   | 31/05/2023       | 2                            | 31/05/2025           |
| 17207          | COM-POWER LIT-930A           | Transient limiter       | 02/09/2021       | 3                            | 02/09/2024           |
| 17829          | Emitech                      | Absorber sheath current | 01/06/2023       | 2                            | 01/06/2025           |
| /              | EMITECH                      | Open test site          | /                | /                            | /                    |

(1) The equipment is not verified; instead, the output voltage is checked before each measurement with the calibrated multimeter.

## 6. TESTS RESULTS SUMMARY

### 6.1 CFR 47 part 15 requirements (subpart C)

| Test procedure  | Description of test                            | Criteria respected? |    |     |     | Comment |
|-----------------|------------------------------------------------|---------------------|----|-----|-----|---------|
|                 |                                                | Yes                 | No | NAp | NAs |         |
| FCC Part 15.203 | ANTENNA REQUIREMENT                            | X                   |    |     |     | Note 1  |
| FCC Part 15.205 | RESTRICTED BANDS OF OPERATION                  | X                   |    |     |     |         |
| FCC Part 15.207 | CONDUCTED LIMITS                               | X                   |    |     |     |         |
| FCC Part 15.209 | RADIATED EMISSION LIMITS; GENERAL REQUIREMENTS | X                   |    |     |     |         |

NAp: Not Applicable

NAs: Not Asked

Note 1: Integral antenna without standard connector

## 6.2 RSS-Gen requirements

| Test<br>procedure | Description of test                                               | Criteria respected ? |    |     |     | Comment                         |
|-------------------|-------------------------------------------------------------------|----------------------|----|-----|-----|---------------------------------|
|                   |                                                                   | Yes                  | No | NAp | NAs |                                 |
| Paragraph 2       | General                                                           | X                    |    |     |     |                                 |
| Paragraph 3       | Normative publications and related documents                      | X                    |    |     |     |                                 |
| Paragraph 4       | Labelling requirements                                            | X                    |    |     |     |                                 |
| Paragraph 6       | General administrative and technical requirements                 | X                    |    |     |     |                                 |
| § 6.7             | Occupied bandwidth (or 99% emission bandwidth) and x dB bandwidth | X                    |    |     |     |                                 |
| Paragraph 8       | Licence-exempt radio apparatus                                    |                      |    |     |     |                                 |
| § 8.1             | Measurement Bandwidths and Detector Functions                     | X                    |    |     |     |                                 |
| § 8.2             | Pulsed operation                                                  | X                    |    |     |     |                                 |
| § 8.3             | Prohibition of amplifiers                                         | X                    |    |     |     |                                 |
| § 8.4             | User manual notice                                                | X                    |    |     |     | see certification documents     |
| § 8.5             | Measurement of licence-exempt devices on-site (in-situ)           |                      |    | X   |     |                                 |
| § 8.6             | Operating frequency range of devices in master/slave networks     |                      |    | X   |     |                                 |
| § 8.7             | Radio frequency identification (RFID) devices                     | X                    |    |     |     |                                 |
| § 8.8             | AC power line conducted emissions limits                          | X                    |    |     |     | Permissive change report Note 1 |
| § 8.9             | Transmitter emission limits                                       | X                    |    |     |     | Permissive change report        |
| § 8.10            | Restricted frequency bands                                        | X                    |    |     |     |                                 |
| § 8.11            | Frequency stability                                               |                      |    | X   |     |                                 |

NAP: Not Applicable

NAs: Not Asked

## 6.3 RSS-210 requirements

| Test<br>Procedure RSS-210 | Description of test                                                                               | Criteria respected ? |    |     |     | Comment |
|---------------------------|---------------------------------------------------------------------------------------------------|----------------------|----|-----|-----|---------|
|                           |                                                                                                   | Yes                  | No | NAp | NAs |         |
| Paragraph 5               | RSS-Gen compliance                                                                                | X                    |    |     |     |         |
| Paragraph 7               | Technical Specifications                                                                          |                      |    |     |     |         |
| 7.1                       | Emission Falling Within Restricted Frequency Bands                                                | X                    |    |     |     |         |
| 7.2                       | General Field Strength Limits                                                                     | X                    |    |     |     |         |
| 7.3                       | Transmitters with wanted and unwanted emissions that are within the general field strength limits | X                    |    |     |     |         |
| 7.4                       | Cordless Telephones                                                                               |                      |    | X   |     |         |



**7. MEASUREMENT UNCERTAINTY**

To declare, or not, the compliance with the specifications, it was not explicitly taken into account of uncertainty associated with the result(s)

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for normal distribution corresponds to a coverage probability of approximately 95%.

| Parameter                                                                         | Emitech<br>Uncertainty                                                |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| RF power, conducted                                                               | $\pm 0.8\text{dB}$                                                    |
| Radiated emission valid to 26 GHz<br>9kHz – 30MHz<br>30MHz – 1GHz<br>1GHz – 18GHz | $\pm 2.7. \text{ dB}$<br>$\pm 5.0 \text{ dB}$<br>$\pm 5.3 \text{ dB}$ |
| AC Power Lines conducted emissions                                                | $\pm 3.4 \text{ dB}$                                                  |
| Temperature                                                                       | $\pm 1 \text{ }^{\circ}\text{C}$                                      |
| Humidity                                                                          | $\pm 5 \%$                                                            |

## 8. AC CONDUCTED EMISSION

Temperature (°C) : 21

Humidity (%HR): 42

Date : April 10, 2024

Technician : T. LEDRESSEUR

**Standard:** FCC Part 15  
RSS-GEN

### Test procedure:

For FCC Part 15: Paragraph 15.207

For RSS-Gen: Paragraph 8.8

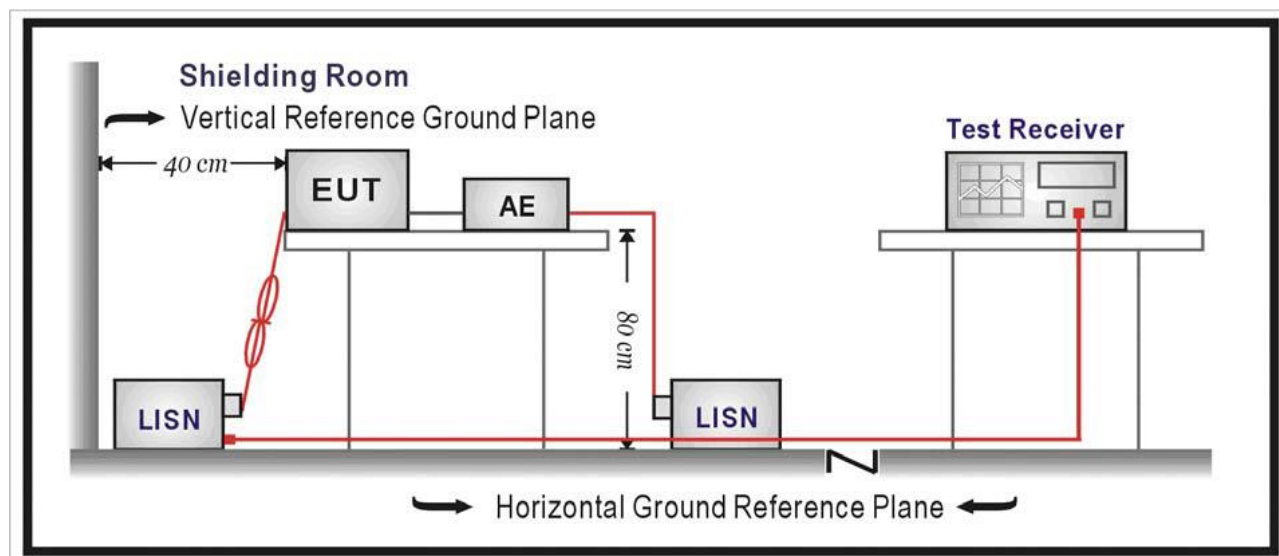
Method of paragraph 6.2 of ANSI C63.10

**Limits:** Class B

**Software used:** BAT-EMC V3.18.0.26

### Test set up:

The EUT is isolated and placed on a wooden table, 0.8 m over an horizontal reference plane and 0.4 m from a vertical reference plane. It is powered by an artificial main network placed on the ground reference plane. The equipment is powered with the AC power operating voltage of 120 V / 60 Hz.



**Frequency range:** 150 kHz - 30 MHz

**Detection mode:** Peak / Quasi-peak / Average

**Bandwidth:** 10 kHz / 9 kHz

### Equipment under test operating condition:

The equipment under test is blocked in continuous modulated transmission mode, at the highest output power level at which the transmitter is intended to operate.

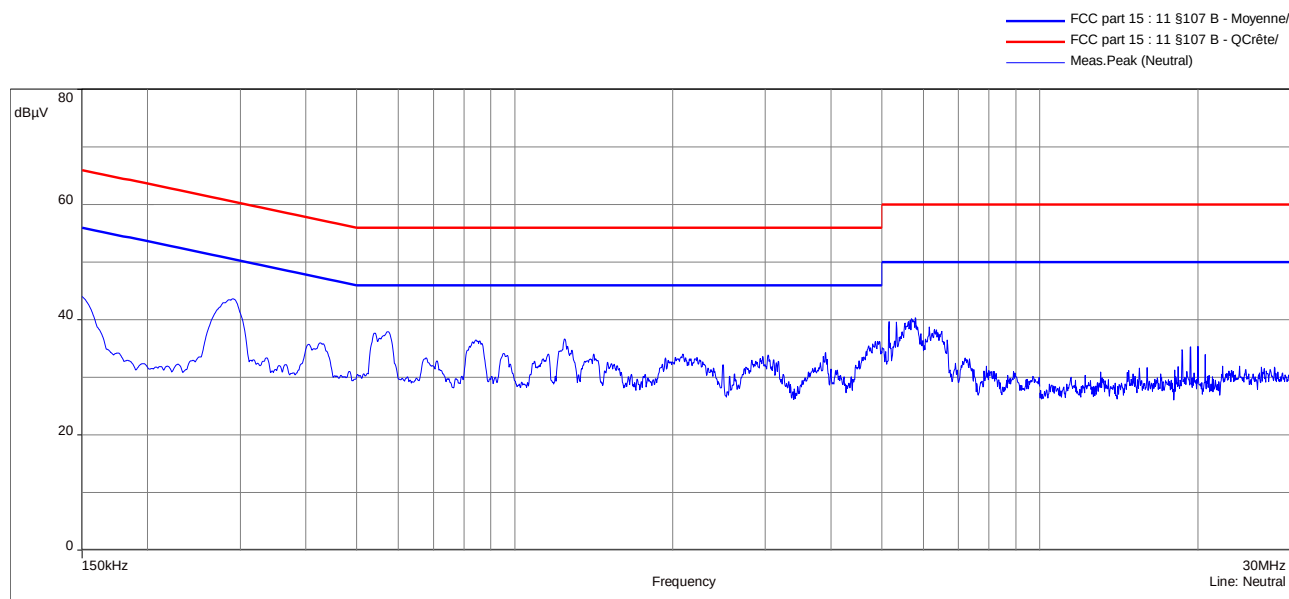
## Results:

### Sample N° 1

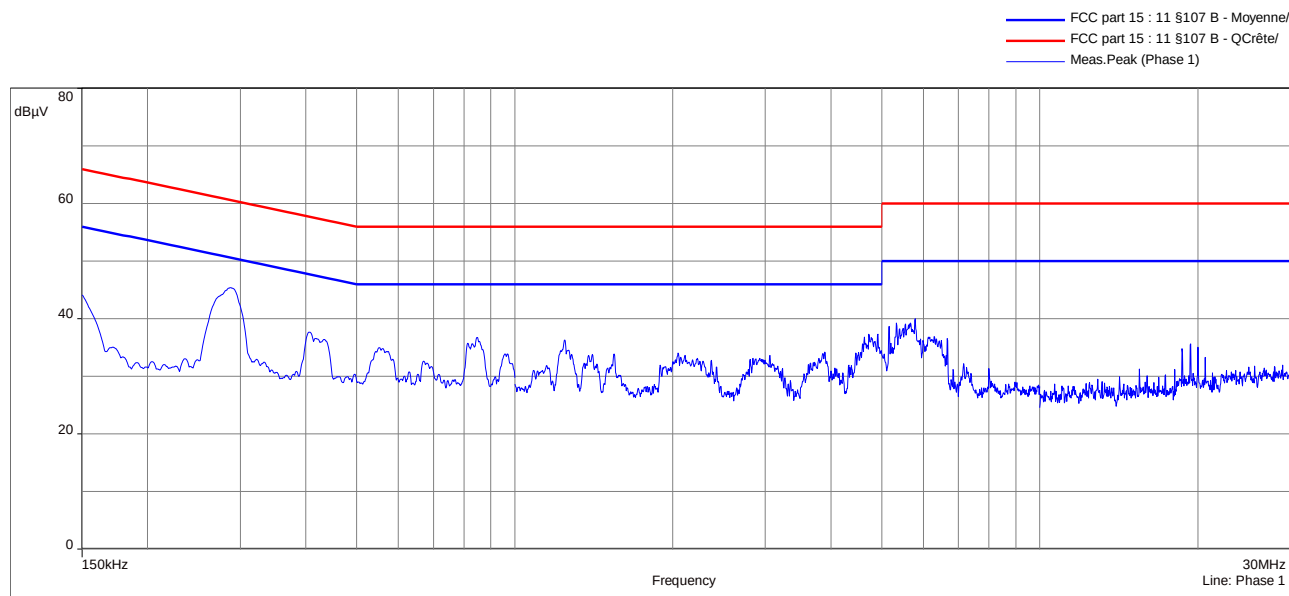
#### Measurement on the mains power supply:

The measurement is first realized with Peak detector.

Curve N° 1: measurement on the Neutral with peak detector



Curve N° 2: measurement on the Line with peak detector



The highest frequencies are then analyzed with Quasi-peak detector and Average detector

Table N° 1: measurement on the Neutral, for the frequency range:

| Frequency | Quasi-peak | QP Limit | QP margin | Frequency | Average | Average Limit | Average margin |
|-----------|------------|----------|-----------|-----------|---------|---------------|----------------|
| (MHz)     | (dBμV)     | (dBμV)   | (dB)      | (MHz)     | (dBμV)  | (dBμV)        | (dB)           |
| 0.150     | 22.52      | 66.0     | 43.48     | 0.150     | 12.82   | 56.0          | 43.18          |
| 0.291     | 35.98      | 60.5     | 24.51     | 0.291     | 12.82   | 50.5          | 37.67          |
| 0.574     | 23.92      | 56.0     | 32.08     | 0.574     | 12.84   | 46.0          | 33.16          |
| 0.843     | 26.08      | 56.0     | 29.92     | 0.843     | 12.85   | 46.0          | 33.15          |
| 1.245     | 24.08      | 56.0     | 31.92     | 1.245     | 12.87   | 46.0          | 33.13          |
| 5.795     | 25.63      | 60.0     | 34.37     | 5.795     | 13.13   | 50.0          | 36.87          |

Table N° 2: measurement on the Line, for the frequency range:

| Frequency | Quasi-peak | QP Limit | QP margin | Frequency | Average | Average Limit | Average margin |
|-----------|------------|----------|-----------|-----------|---------|---------------|----------------|
| (MHz)     | (dBμV)     | (dBμV)   | (dB)      | (MHz)     | (dBμV)  | (dBμV)        | (dB)           |
| 0.150     | 21.06      | 66.0     | 44.94     | 0.150     | 12.82   | 56.0          | 43.18          |
| 0.288     | 20.7       | 60.6     | 39.89     | 0.288     | 12.82   | 50.6          | 37.77          |
| 0.406     | 18.63      | 57.7     | 39.10     | 0.406     | 12.83   | 47.7          | 34.90          |
| 0.848     | 15.59      | 56.0     | 40.41     | 0.848     | 12.85   | 46.0          | 33.15          |
| 1.244     | 14.91      | 56.0     | 41.09     | 1.244     | 12.87   | 46.0          | 33.13          |
| 1.798     | 38.32      | 56.0     | 17.68     | 1.798     | 26.78   | 46.0          | 19.22          |
| 1.906     | 38.77      | 56.000   | 17.230    | 1.906     | 27.58   | 46.000        | 18.420         |
| 2.305     | 39.4       | 56.000   | 16.600    | 2.305     | 27.51   | 46.000        | 18.490         |
| 2.845     | 37.64      | 56.000   | 18.360    | 2.845     | 26.24   | 46.000        | 19.760         |

**Test conclusion:**

RESPECTED STANDARD

## 9. OCCUPIED BANDWIDTH

Temperature (°C) : 22

Humidity (%HR): 45

Date : April 16, 2024

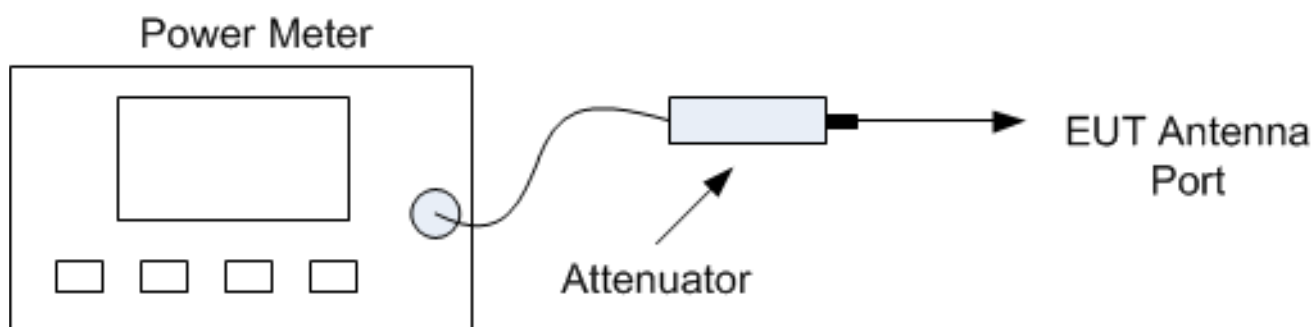
Technician : T. LEDRESSEUR

Standard: FCC Part 15  
RSS-GEN

### Test procedure:

Method of paragraphs 6.9.3 of ANSI C63.10 (99% Measurement)

### Test set up:



### Radiated test

Test realized in near field.

### Setting:

| Measure          | 99%                                            |
|------------------|------------------------------------------------|
| Center frequency | The centre frequency of the channel under test |
| Detector         | Peak                                           |
| Span             | 1.5 to 5 times the OBW                         |
| RBW              | 1% to 5% of the OBW                            |
| VBW              | 3 x RBW                                        |
| Trace            | Max hold                                       |
| Sweep            | Auto                                           |

### Test operating condition of the equipment:

The equipment under test is blocked in continuous modulated transmission mode, at the highest output power level at which the transmitter is intended to operate.

Power source: 120 Vac by an external power supply

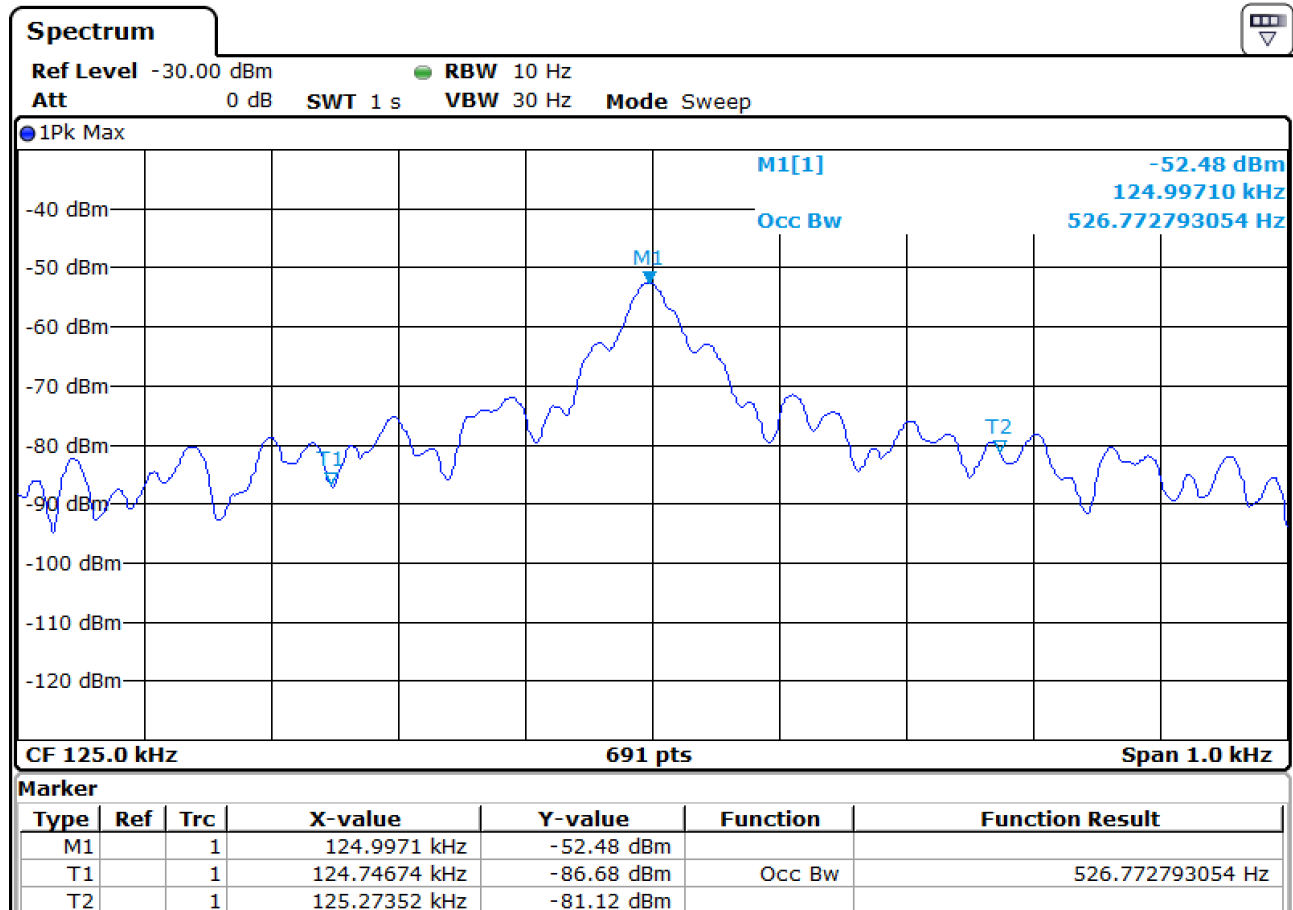
Percentage of voltage variation during the test (%):

 $\pm 1$

## Results:

Sample N° 1

99% bandwidth



## Limit:

Measure realized for reporting only

## Test conclusion:

RESPECTED STANDARD

**10. RADIATED EMISSION LIMITS; GENERAL REQUIREMENTS****Temperature (°C) :** 20 to 23**Humidity (%HR):** 39 to 45**Date :** April 8, 2024 to  
April 16, 2024**Technician :** T. LEDRESSEUR**Standard:** FCC Part 15  
RSS-GEN  
RSS-210**Test procedure:** For FCC Part 15: paragraph 209  
For RSS-GEN: paragraph 8.9  
For RSS-210: paragraph 7.2  
Method of § 6.4 of ANSI C63.10  
Method of § 6.5 of ANSI C63.10**Test set up:** (Refer Appendix 2)

First an exploratory radiated measurement was performed. During this phase the product is oriented in three orthogonal planes.

Then the final measurement is realized with the product on the most critical orientation.

The measure is realized on open area test site under 30 MHz and in anechoic chamber above .

The EUT is placed on a rotating table, 0.8m from a ground plane.

Zero degree azimuths correspond to the front of the device under test.

**Frequency range:** From 9 kHz to 1 GHz**Detection mode:** Quasi-peak ( $F < 1$  GHz)

Except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000MHz. Radiated emission limits in these bands are based on measurements employing an average detector

**Bandwidth:** 200Hz ( $9 \text{ kHz} < F < 150\text{kHz}$ )  
9 kHz ( $150 \text{ kHz} < F < 30\text{MHz}$ )  
120 kHz ( $30 \text{ MHz} < F < 1 \text{ GHz}$ )**Distance of antenna:** 10 meters (in open area test site) / 3 meters (in anechoic room)**Antenna height:** 1 meter (below 30 MHz), 1 to 4 meters (above 30 MHz)**Antenna polarization:** vertical and horizontal (only the highest level is recorded)

### Equipment under test operating condition:

The equipment under test is blocked in continuous modulated transmission mode, at the highest output power level at which the transmitter is intended to operate.

Power source: 120 Vac by an external power supply

Percentage of voltage variation during the test (%):  $\pm 1$

### Results:

Sample N° 1:

**Sample N° 1: Carrier** = 125 kHz

| Frequencies (kHz) | Detector<br>P: Peak<br>Av: Average | Field strength at 10 meters<br>dB $\mu$ V/m <sup>(1)</sup> | Field strength at 300 meters<br>dB $\mu$ V/m <sup>(2)</sup> | Limits 300m<br>dB $\mu$ V/m | Margin (dB) |
|-------------------|------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|-----------------------------|-------------|
| 125               | P                                  | 59.38                                                      | 0.30                                                        | 45.67                       | 45.37       |
| 125               | Av                                 | 49.55                                                      | -9.53                                                       | 25.67                       | 35.20       |

With antenna height: 100 cm; Azimuth: 0°; Polarization antenna: Parallel° - Position 2

(1) Field strength measured at 10 meters

(2) Field strength extrapolated at 300 meters using 40dB/decade fall off

### **Sample 1: Harmonics and spurious:**

| Frequencies (kHz) | Detector<br>P: Peak<br>Av: Average | Field strength at 10 meters<br>dB $\mu$ V/m <sup>(3)</sup> | Field strength at 300 meters<br>dB $\mu$ V/m <sup>(4)</sup> | Limits 300m<br>dB $\mu$ V/m | Margin (dB) |
|-------------------|------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|-----------------------------|-------------|
| 250               | P                                  | 41.04                                                      | -18.05                                                      | 39.65                       | 57.70       |
| 250               | Av                                 | 33.07                                                      | -26.01                                                      | 19.65                       | 45.66       |
| 375               | P                                  | 51.24                                                      | -7.85                                                       | 36.12                       | 43.97       |
| 375               | Av                                 | 41.16                                                      | -17.92                                                      | 16.12                       | 34.04       |

(3) Noise Floor measured at 10 meters

(4) Noise Floor extrapolated at 300 meters using 40dB/decade fall off

| Frequencies (kHz) | Detector<br>QP: Quasi-Peak | Field strength at 10 meters<br>dB $\mu$ V/m <sup>(5)</sup> | Field strength at 30 meters<br>dB $\mu$ V/m <sup>(6)</sup> | Limits 30m<br>dB $\mu$ V/m | Margin (dB) |
|-------------------|----------------------------|------------------------------------------------------------|------------------------------------------------------------|----------------------------|-------------|
| 500               | QP                         | 43.59                                                      | 24.50                                                      | 33.62                      | 9.12        |
| 625               | QP                         | 42.09                                                      | 23.00                                                      | 31.69                      | 8.69        |
| 750               | QP                         | 40.52                                                      | 21.43                                                      | 30.10                      | 8.67        |
| 875               | QP                         | 40.15                                                      | 21.07                                                      | 28.76                      | 7.69        |

(5) Noise Floor measured at 10 meters

(6) Noise Floor extrapolated at 30 meters using 40dB/decade fall off



|                    |                                                    |                                             |
|--------------------|----------------------------------------------------|---------------------------------------------|
| Applicable limits: | for $9 \text{ kHz} \leq F \leq 490 \text{ kHz}$ :  | $2400/F(\text{kHz})$ at 300 meters          |
|                    | for $490 \text{ kHz} < F \leq 1.705 \text{ MHz}$ : | $24000/F(\text{kHz})$ at 30 meters          |
|                    | for $1.705 \text{ MHz} < F \leq 30 \text{ MHz}$ :  | $29.5 \text{ dB}\mu\text{V/m}$ at 30 meters |
|                    | for $30 \text{ MHz} < F \leq 88 \text{ MHz}$ :     | $40 \text{ dB}\mu\text{V/m}$ at 3 meters    |
|                    | for $88 \text{ MHz} < F \leq 216 \text{ MHz}$ :    | $43.5 \text{ dB}\mu\text{V/m}$ at 3 meters  |
|                    | for $216 \text{ MHz} < F \leq 960 \text{ MHz}$ :   | $46 \text{ dB}\mu\text{V/m}$ at 3 meters    |
|                    | Above 960 MHz :                                    | $54 \text{ dB}\mu\text{V/m}$ at 3 meters    |

**Test conclusion:**

RESPECTED STANDARD

□□□ End of report, (2) appendixes to be forwarded □□□

## APPENDIX 1: Test equipment list

### AC conducted emissions

| TYPE                       | MANUFACTURER       | EMITECH NUMBER |
|----------------------------|--------------------|----------------|
| Outside room               | Emitech            | 11855          |
| Test receiver N9010A       | Agilent            | 11316          |
| Transient limiter LIT-930A | COM-POWER          | 17207          |
| LISN ESH3-Z5               | Rohde & Schwarz    | 6217           |
| Absorber sheath current    | Emitech            | 17829          |
| N-3M Cable                 | Huber + Suhner     | 15892          |
| Power source PHF555        | HAEFELY            | 6290           |
| Multimeter 34401A          | Agilent            | 10952          |
| Meteo station 608-H1       | Testo              | 15790          |
| Software                   | BAT-EMC V3.18.0.26 | 0000           |

### Occupied bandwidth

| TYPE                    | MANUFACTURER    | EMITECH NUMBER |
|-------------------------|-----------------|----------------|
| Spectrum Analyzer FSV40 | Rohde & Schwarz | 15776          |
| Power source PHF555     | HAEFELY         | 6290           |
| N-3M Cable              | Huber + Suhner  | 15892          |
| Multimeter 34401A       | Agilent         | 10952          |
| Meteo station 608-H1    | Testo           | 15790          |

### Radiated emission limits; general requirements

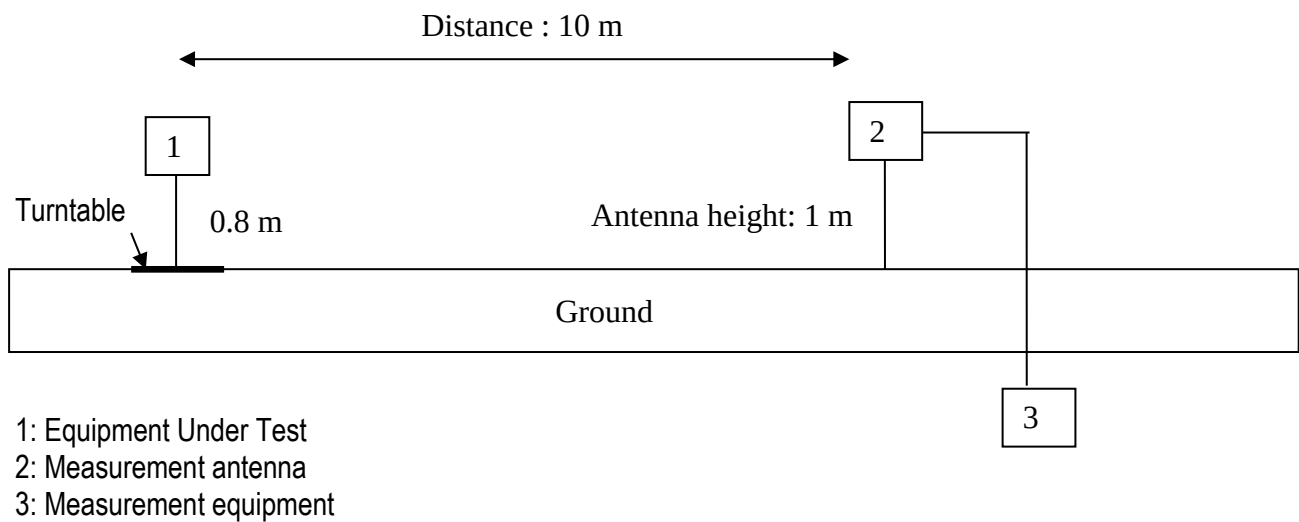
| TYPE                                | MANUFACTURER       | EMITECH NUMBER |
|-------------------------------------|--------------------|----------------|
| Open test site                      | EMITECH            | /              |
| Anechoic Chamber                    | Siepel             | 7651           |
| Test receiver N9010A                | Agilent            | 11316          |
| Spectrum Analyzer FSV40             | Rohde & Schwarz    | 15776          |
| Active loop antenna 6502            | Emco               | 6155           |
| Biconical antenna 3104              | EMCO               | 5625           |
| Log periodic antenna 3146A          | EMCO               | 5609           |
| Low-noise amplifier INT-BA011000-25 | RFPA               | 15775          |
| N-3M Cable                          | Huber + Suhner     | 15892          |
| N-4.5M Cable                        | Huber + Suhner     | 15905          |
| N-3.5M Cable                        | Huber + Suhner     | 15907          |
| N-2.5M Cable                        | Huber + Suhner     | 15934          |
| Power source PHF555                 | HAEFELY            | 6290           |
| Multimeter 34401A                   | Agilent            | 10952          |
| Meteo station 608-H1                | Testo              | 15790          |
| Software                            | BAT-EMC V3.18.0.26 | 0000           |

## APPENDIX 2: Radiated Test Setup

Anechoic chamber setup

Open area setup

Below 30 MHz



Between 30 MHz and 1 GHz

