



Test report issued under the responsibility of:  
EMITECH MONTPELLIER laboratory  
MRA US-EU Designation Number: FR0006  
Canadian CAB Identifier: FR0003

## RADIO TEST REPORT

FCC 47 CFR PART 15: June 2023  
RSS-210 \_ Issue 10, December 2019 / AMD: April 2020

**Company** .....: **STMICROELECTRONICS (Rousset) SAS**  
**Address**.....: 190 AVENUE CELESTIN COQ  
13106 ROUSSET  
FRANCE

**Test item description.** .....: **NFC card reader evaluation board**  
**Trade Mark.** .....: STMICROELECTRONICS  
**Manufacturer**.....: STMICROELECTRONICS  
**Model/Type reference**.....: STEVAL-25R200SA (with Main antenna and NFC tag ST25TN)  
**FCC ID**.....: YCPR200AD1  
**IC.** .....: 8976A-R200AD1  
**Ratings**.....: 5 Vdc

**Testing Laboratory** .....: **EMITECH MONTPELLIER laboratory**  
**Address**.....: 145 rue de Massacan  
34740 VENDARGUES  
FRANCE

**Report Reference No.**.....: **RR-EVE-22P033-12A**  
**Test procedure.** .....: FCC IC Certification  
**Diffusion**.....: Mr. David DAUBOIS  
**Applicant's name.** .....: STMICROELECTRONICS  
**Date of issue**.....: October 29, 2024  
**Total number of pages**.....: 31  
**Revision.** .....: 0  
**Compiled by**.....: Morgan PATEY  
**Approved by (+ signature).** .....: Olivier AELBRECHT (Technical Manager)

*Duplication of this test report 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.*

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## REVISION HISTORY:

| Revision | Date             | Modified pages | Modifications |
|----------|------------------|----------------|---------------|
| 0        | October 29, 2024 | /              | Creation      |

## 1. GENERAL INFORMATIONS

This document submits the results of Radio tests performed on the equipment **NFC card reader evaluation board STEVAL-25R200SA (with Main antenna and NFC tag ST25TN)** (denominated hereafter E.U.T.: equipment under test) according to document(s) listed in §2 of this test report.

| TESTING PROCEDURE AND TESTING LOCATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                                                                           |                         |     |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------|-------------------------|-----|---------------------|
| Testing Location .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       | EMITECH MONTPELLIER laboratory y & Open Area Test Site in SALINELLES (30) |                         |     |                     |
| Address. ....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | 145 rue de Massacan<br>34740 VENDARGUES<br>FRANCE                         |                         |     |                     |
| Test procedure. ....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | FCC IC Certification                                                      |                         |     |                     |
| Tested by .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | Morgan PATEY                                                              |                         |     |                     |
| Test supervisor .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       | None                                                                      |                         |     |                     |
| Date of receipt of test item .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | N/A                                                                       |                         |     |                     |
| Date (s) of performance of tests .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       | From August 28 <sup>th</sup> to September 01 <sup>st</sup> of 2023        |                         |     |                     |
| APPLICANT'S GENERAL INFORMATIONS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                           |                         |     |                     |
| Company name .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | STMICROELECTRONICS (Rousset) SAS                                          |                         |     |                     |
| Company address. ....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       | 190 AVENUE CELESTIN COQ<br>13106 ROUSSET<br>FRANCE                        |                         |     |                     |
| Person(s) present during the tests. ....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       | No representative for company attended the tests.                         |                         |     |                     |
| Responsible .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | Mr. David DAUBOIS                                                         |                         |     |                     |
| GENERAL REMARKS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |                                                                           |                         |     |                     |
| <p><b>The information in <i>italics</i> is declared by the manufacturer and is under his responsibility</b></p> <p><b>The test results presented in this report relate only to the object tested.</b></p> <p><b>The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.</b></p> <p>"(see Enclosure #)" refers to additional information appended to the report.</p> <p>"(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report the decimal separator is point.</p> |                       |                                                                           |                         |     |                     |
| POSSIBLE TEST CASE VERDICTS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |                                                                           |                         |     |                     |
| Test case does not apply to the test object.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | N/A                                                                       |                         |     |                     |
| Test case not performed.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       | N/P                                                                       |                         |     |                     |
| Test object does meet the requirement.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | P (Pass)                                                                  |                         |     |                     |
| Test object does not meet the requirement. ....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | F (Fail)                                                                  |                         |     |                     |
| DEFINITIONS AND ABBREVIATIONS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                                           |                         |     |                     |
| E.U.T.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Equipment Under Test  | AE                                                                        | Ancillary Equipment     | Pk  | Peak detector       |
| RBW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Resolution BandWidth  | VBW                                                                       | Video BandWidth         | QP  | Quasi-peak detector |
| OATS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Open Area Test Site   | FAR                                                                       | Full Anechoic Room      | Av  | Average detector    |
| VP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Vertical Polarization | HP                                                                        | Horizontal Polarization | RMS | Root Mean Square    |
| RF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Radio Frequency       | N.T.R                                                                     | Nothing To Report       | N/C | Not Communicated    |

## 2. REFERENCE DOCUMENT(S)

### NORMATIVE REFERENCES:

The following referenced documents are necessary for the application of the present test report.

**FCC 47 CFR PART 15: June 2023**

Code of federal regulations – Title 47 telecommunication - Part 15 - Radio frequency devices

**FCC Part 15.225**

Operation within the bands 13.553-13.567MHz

**RSS-210, Issue 10, December 2019 / AMD: April 2020**

Licence-Exempt Radio Apparatus: Category I Equipment

**RSS-GEN: Issue 5 April 2018 / AMD 1: 2019 / AMD 2: 2021**

General Requirements for Compliance of Radio Apparatus

**ANSI C 63.10: 2013**

American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

Although the product standard uses obsolete technical standards, the latest versions of standards achievable by the laboratory will be used for testing.

### INFORMATIVE REFERENCES:

The following referenced documents are not necessary for the application of the present test report but they assist the user with regard to a particular subject area.

### 3. EQUIPMENT TECHNICAL DESCRIPTION

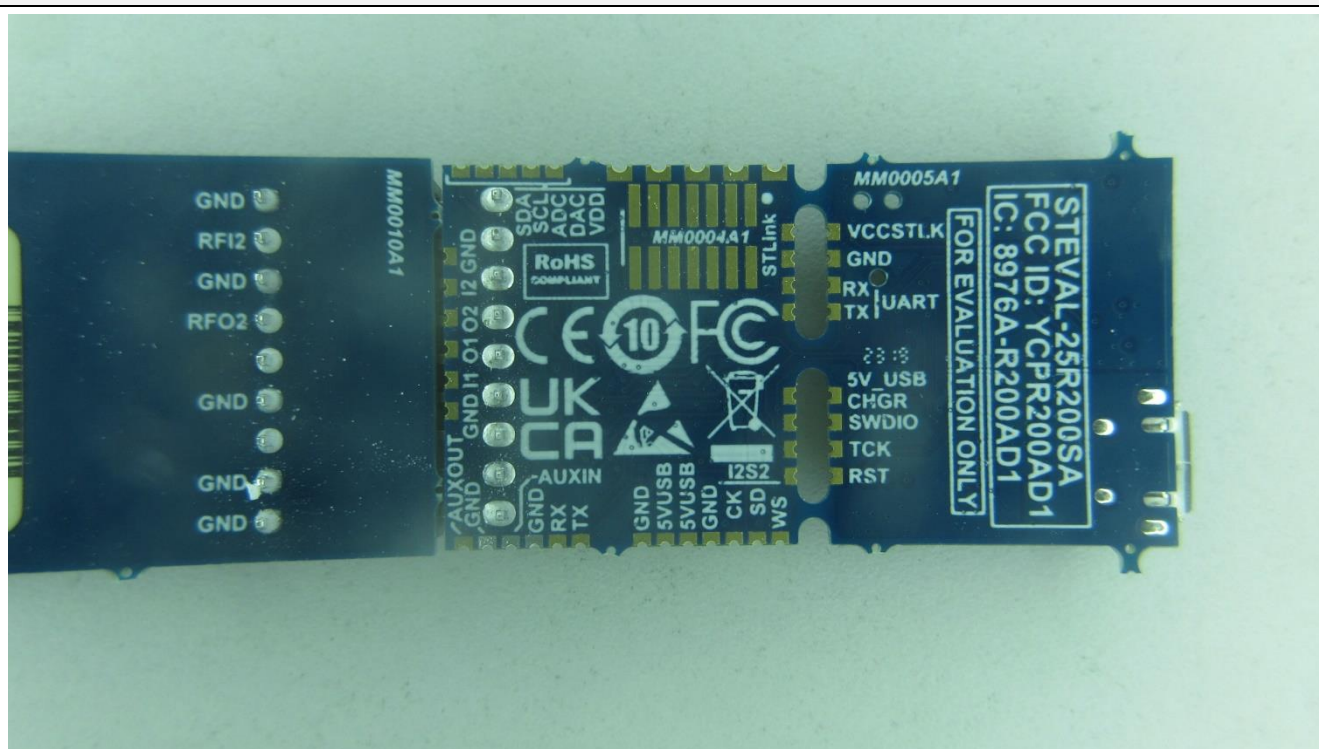
#### 3.1. Test Conditions

Test item description. .... : NFC card reader evaluation board  
Model/Type reference..... : STEVAL-25R200SA (with Main antenna and NFC tag ST25TN)  
Trade Mark. .... : STMICROELECTRONICS  
Serial number (S/N)..... : Not communicated  
Part number (P/N). .... : Not communicated  
Software version..... : *Not communicated*  
Firmware version..... : *Not communicated*  
Type of sample..... : Pre-serial  
Function(s)..... : NFC demo board  
Manufacturer name. .... : STMICROELECTRONICS  
Address. .... : 776 RUE ALBERT CAQUOT  
SKY SOPHIA BAT B  
06410 BIOT  
FRANCE

#### General product information:

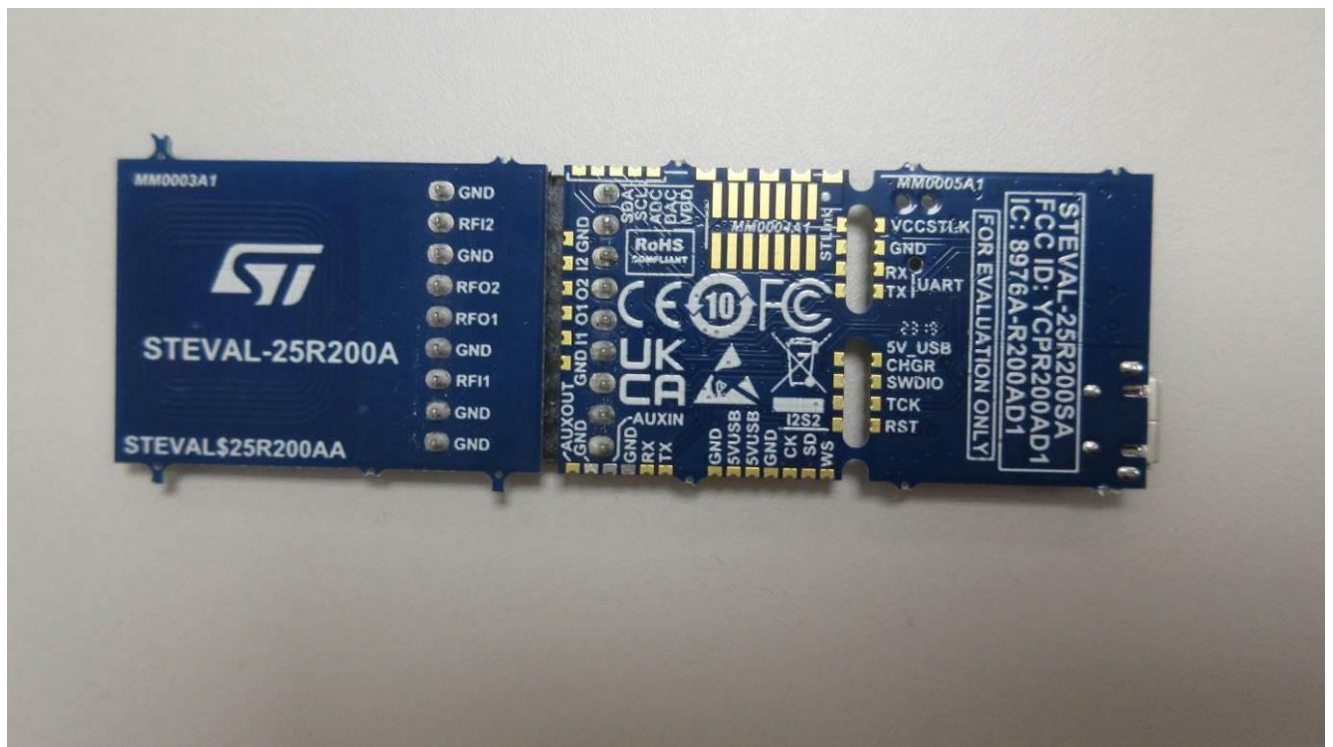
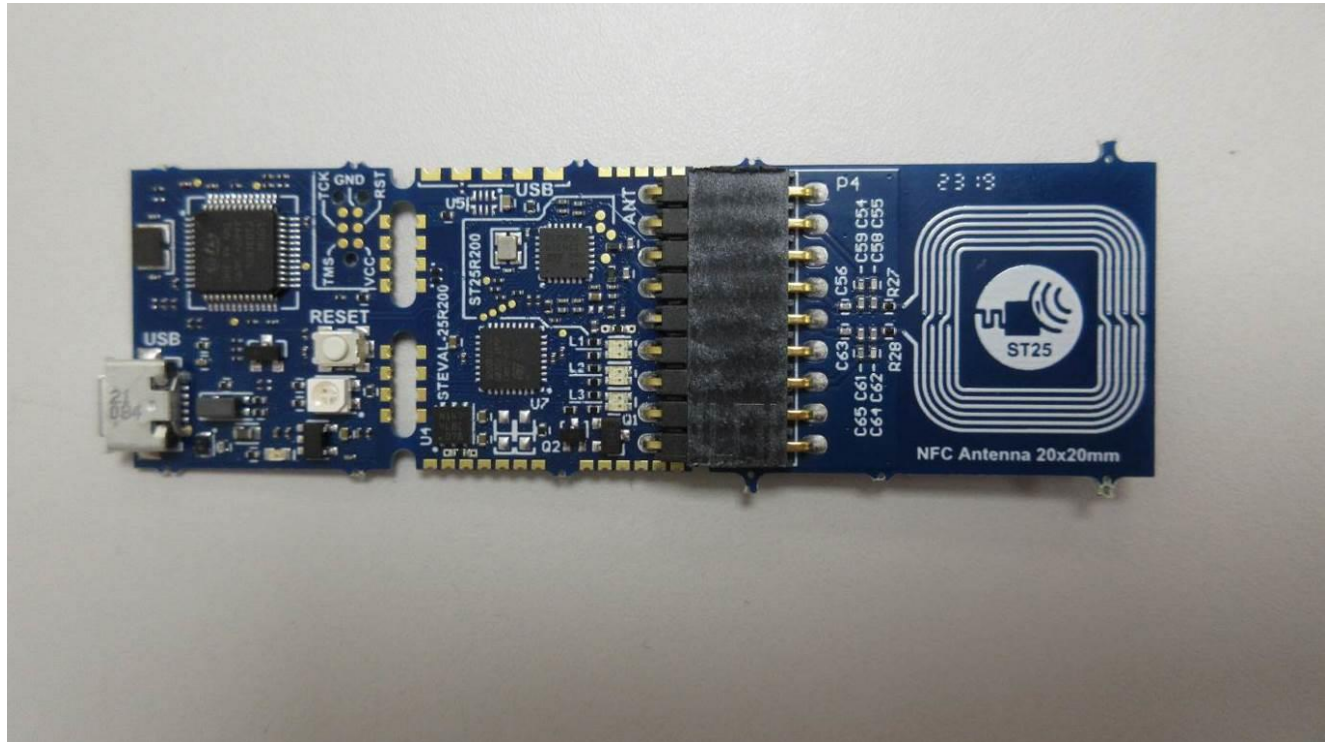
N/A

#### 3.2. EUT Marking plate





### 3.3.EUT General view



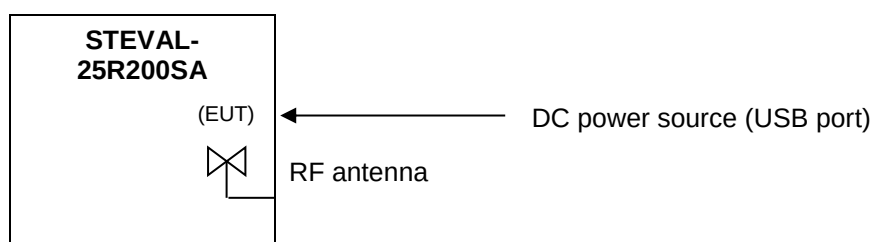
### 3.4.EUT Mechanical and Electrical Design

Power supply. .... : 5 Vdc  
Power supply range..... : 5 Vdc  
Power type..... : USB  
Power (W)..... : Not communicated  
Nominal current (A). .... : Not communicated  
Dimensions (L x W x H) (m). .... : Not communicated  
Weight (kg). .... : Not communicated  
Temperature range (°C). .... : +10 to +40  
Ground bounding strap..... : No

#### Comments:

N/A

### 3.5.E.U.T. Input/Output ports



| PORT | NAME            | TYPE | LENGTH | CABLE TYPE | COMMENTS |
|------|-----------------|------|--------|------------|----------|
| 0    | Main frame      | N/E  | N/A    | PCB        | N/A      |
| 1    | DC power source | USB  | <3m    | +/-        | 5Vdc     |
| 2    | RF antenna      | RF   | N/A    | N/A        | PCB      |

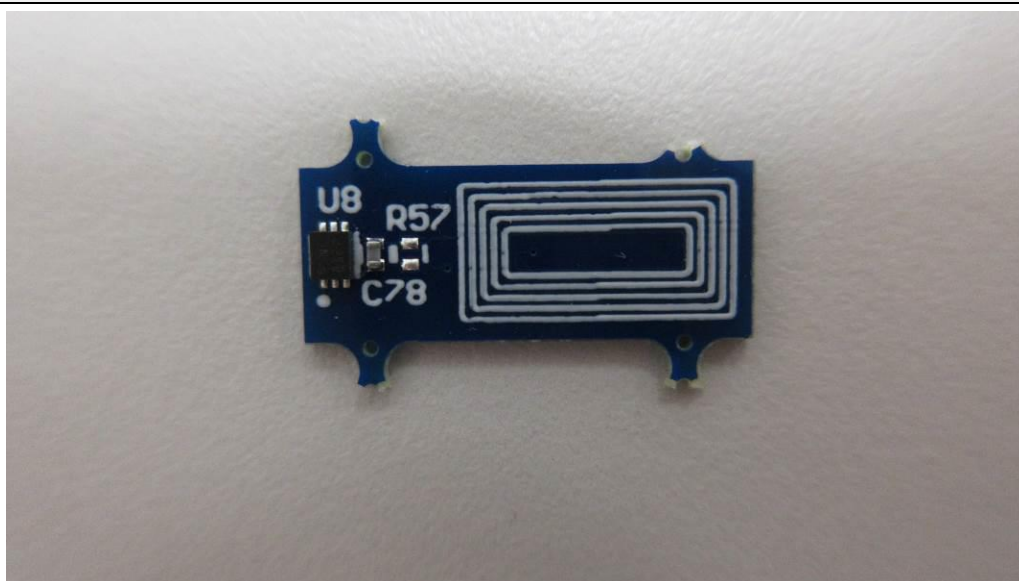
AC/DC : AC/DC Converter port      AC..... : Alternative current port      DC..... : Direct current port  
I/O ..... : Input or Output port      TP ..... : Telecommunication port      RF ..... : Radio frequency port  
N/E ..... : Non Electrical port

### 3.6. Supporting Equipment Used During Test

Sample subject to the tests was tested with following equipment.

| PRODUCT TYPE             | MANUFACTURER       | MODEL   | N°EMITECH / COMMENTS                             |
|--------------------------|--------------------|---------|--------------------------------------------------|
| NFC TAG                  | STMICROELECTRONICS | ST25TN  | Used for NFC communications.                     |
| Power Bank               | Xindao B.V.        | P324.25 | Used as EUT's power supply for OATS measurements |
| AC to 5Vdc USB converter | Pro-Power          | MWUSB3U | Used as EUT's power supply.                      |

#### NFC TAG (AE)

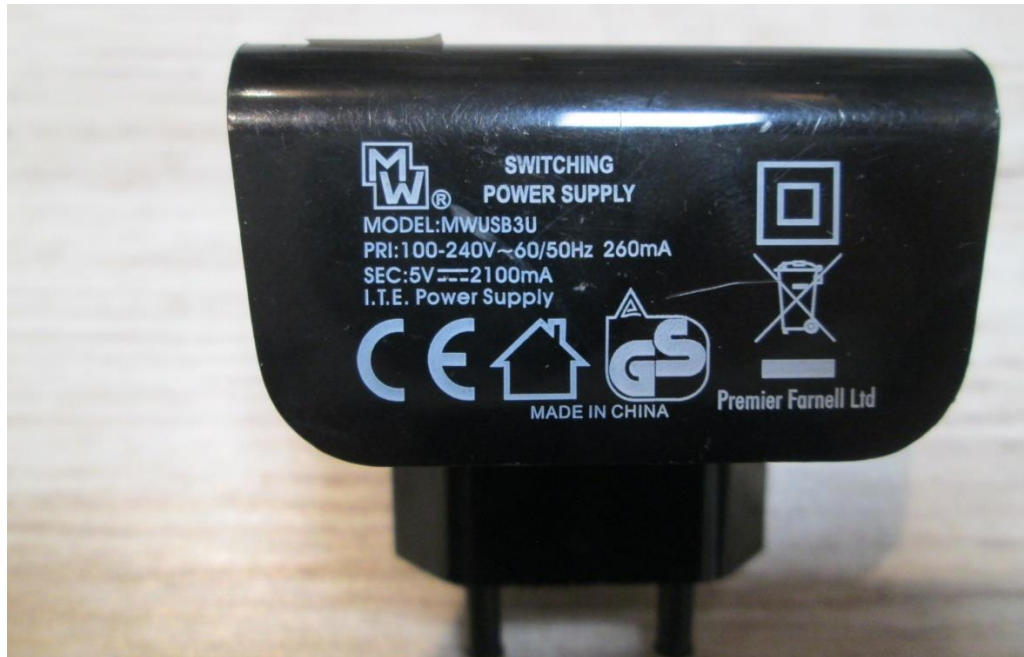


#### POWER BANK (AE)





# AC TO 5Vdc USB CONVERTER (AE)



## 3.7. EUT Radio Specifications

| a) GENERAL INFORMATIONS                    |                          |
|--------------------------------------------|--------------------------|
| According to manufacturer's declarations : |                          |
| EUT type.....                              | Transceiver              |
| Technology .....                           | RFID                     |
| Environmental profile.....                 | Data transmissions       |
| Temperature range.....                     | +10°C to +40°C           |
| Antenna type .....                         | PCB                      |
| Antenna Gain.....                          | Not communicated         |
| <b>Comments:</b>                           |                          |
| N/A                                        |                          |
| b) TRANSMITTER PARAMETERS (Tx)             |                          |
| Frequency bands.....                       | 13.553 MHz to 13.567 MHz |
| RF Power.....                              | Not communicated         |
| Number of channels / Separation.....       | 1                        |
| Modulation type .....                      | AM                       |
| Duty cycle .....                           | 100%                     |
| Tested frequency.....                      | 13.56 MHz                |
| c) RECEIVER PARAMETERS (Rx)                |                          |
| Frequency bands.....                       | 13.553 MHz to 13.567 MHz |

#### 4. RESULT SUMMARY

| TEST DESIGNATION                                                         | SEVERITY | VERDICT | COMMENTS                            |
|--------------------------------------------------------------------------|----------|---------|-------------------------------------|
| <b>GENERAL</b>                                                           |          |         |                                     |
| Labeling requirements                                                    |          | N/P     | 15.19 / See certification documents |
| Information to user                                                      |          | N/P     | 15.21 / See certification documents |
| Home-built devices                                                       |          | N/A     | 15.23                               |
| Kits                                                                     |          | N/A     | 15.25                               |
| Special Accessories                                                      |          | N/P     | 15.27 / See certification documents |
| Inspection by the Commission                                             |          | N/A     | 15.29                               |
| Measurement standards                                                    |          | PASS    | 15.31                               |
| Test procedure for CPU boards and computer power supplies                |          | N/A     | 15.32                               |
| Frequency range of radiated measurements                                 |          | PASS    | 15.33                               |
| Measurement detector functions and bandwidths                            |          | PASS    | 15.35                               |
| Transition provisions for compliance with the rules                      |          | N/P     | 15.37 / See certification documents |
| <b>UNINTENTIONAL RADIATORS</b>                                           |          |         |                                     |
| Equipment authorization                                                  |          |         | 15.101                              |
| - Verification                                                           |          | N/A     |                                     |
| - Declaration of Conformity                                              |          | N/A     |                                     |
| CPU boards and power supplies used in personal computers                 |          | N/A     | 15.102                              |
| Exempted device                                                          |          | N/A     | 15.103                              |
| Information to the user                                                  |          | N/P     | See certification documents         |
| Conducted limits                                                         | Class B  | PASS    | 15.107                              |
| Radiated emission limits                                                 | Class B  | PASS    | 15.109                              |
| Antenna power conduction limits for receivers                            |          | N/A     | 15.111                              |
| Power line carrier systems                                               |          | N/A     | 15.113                              |
| TV interface devices, including cable system terminal devices            |          | N/A     | 15.115                              |
| TV broadcast receivers                                                   |          | N/A     | 15.117                              |
| Cable ready consumer electronics equipment                               |          | N/A     | 15.118                              |
| Program blocking technology requirements for TV receivers                |          | N/A     | 15.120                              |
| Scanning receivers and frequency converters used with scanning receivers |          | N/A     | 15.121                              |
| Labeling of digital cable ready products                                 |          | N/A     | 15.123                              |
| <b>INTENTIONAL RADIATORS</b>                                             |          |         |                                     |

| TEST DESIGNATION                                                     | SEVERITY | VERDICT | COMMENTS                                                        |
|----------------------------------------------------------------------|----------|---------|-----------------------------------------------------------------|
| Equipment authorization requirement                                  |          | PASS    | 15.201 / Transmitter part is subject to Certification procedure |
| Certified operating frequency range                                  |          | N/A     | 15.202                                                          |
| Antenna requirement                                                  |          | PASS    | 15.203 / Dedicated integral antenna                             |
| External radio frequency power amplifiers and antenna modifications  |          | N/A     | 15.204                                                          |
| Restricted bands of operation                                        |          | PASS    | 15.205                                                          |
| Conducted limits                                                     |          | PASS    | 15.207                                                          |
| Radiated emission limits; general requirements                       |          | PASS    | 15.209                                                          |
| Tunnel radio systems                                                 |          | N/A     | 15.211                                                          |
| Modular transmitters                                                 |          | N/A     | 15.212                                                          |
| Cable locating equipment                                             |          | N/A     | 15.213                                                          |
| Cordless telephones                                                  |          | N/A     | 15.214                                                          |
| Additional provisions to the general radiated emission limits        |          | PASS    | 15.215                                                          |
| Operation within the band 13.110-14.010 MHz.                         |          | PASS    | 15.225                                                          |
| - Field strength in the band 13.553-13.567 MHz                       |          | PASS    | (a)                                                             |
| - Field strength in the band 13.410-13.553 MHz and 13.567-13.710 MHz |          | PASS    | (b)                                                             |
| - Field strength in the band 13.110-13.410 MHz and 13.710-14.010 MHz |          | PASS    | (c)                                                             |
| - Field strength outside the band 13.110-14.010 MHz                  |          | PASS    | (d)                                                             |
| - Frequency tolerance of the carrier signal                          |          | PASS    | (e)                                                             |
| - Radio frequency powered tag                                        |          | N/A     | (f) EUT is an RFID reader                                       |

Sample subject to the test complies with the requirements of the reference document(s) listed in §2 of this test report and, where applicable, with deviation(s) specified in this document.

To declare, or not, the compliance with the specifications, it was not explicitly taken account of uncertainty associated with the results.

Opinion(s) and interpretation(s): N/A

## 5. MEASUREMENT UNCERTAINTY

| PARAMETER                                           | MAXIMAL EMITECH<br>UNCERTAINTY | MINIMAL STANDARD<br>UNCERTAINTY |
|-----------------------------------------------------|--------------------------------|---------------------------------|
| Radio frequency                                     | $\pm 1 \times 10^{-7}$         | $\pm 1 \times 10^{-7}$          |
| Occupied bandwidth                                  |                                |                                 |
| RF power                                            | $\pm 3.8 \%$                   | $\pm 5 \%$                      |
| Supply voltages                                     | $\pm 3 \%$                     | $\pm 3 \%$                      |
| Temperature                                         | $\pm 1 ^\circ\text{C}$         | $\pm 1 ^\circ\text{C}$          |
| Humidity                                            | $\pm 5 \%$                     | $\pm 5 \%$                      |
| Conducted emission (FCC)                            |                                |                                 |
| (Artificial Mains Network) 150kHz – 30MHz           | $\pm 3.4 \text{ dB}$           | $\pm 3.4 \text{ dB}$            |
| Radiated emission (electric field for FCC standard) |                                |                                 |
| 9kHz – 30MHz                                        | $\pm 2.7 \text{ dB}$           | /                               |
| 30MHz – 1GHz                                        | $\pm 5.0 \text{ dB}$           | /                               |
| 1GHz – 18GHz                                        | $\pm 5.3 \text{ dB}$           | /                               |
| 18GHz – 40GHz                                       | $\pm 6.1 \text{ dB}$           | /                               |
| 40GHz – 140GHz                                      | $\pm 5.7 \text{ dB}$           | /                               |

For the calculation of expanded uncertainty, the confidence interval is 95 % (k=2).

## 6. TEST CONDITIONS AND RESULTS

### 6.1. AC power-line conducted emissions

|                                                                                                                                                                                                                                                                                                                                                      |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                           | FCC part 15.207<br>RSS-Gen |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                  | ANSI C63.10: 2013          |
| <b>General test setup:</b> EUT is set on an insulating support at 80cm above the horizontal ground reference plane, and at 40cm of the vertical ground reference plane. All power was connected to the system through Artificial Mains Network (AMN). The AMN is placed at 80cm from the boundary of the EUT and bonded to a ground reference plane. |                            |

| TESTED CABLE  | PARAMETER    | SEVERITY | RESULT TAB. | VERDICT |
|---------------|--------------|----------|-------------|---------|
| 120Vac / 60Hz | 150kHz-30MHz | 15.207   | EMI4578     | PASS    |

| LABORATORY PARAMETERS:                                                                                                      | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                                                                         | 15 to 35 °C                | See Graph(es)   |
| Relative Humidity                                                                                                           | 30 to 60 %                 | See Graph(es)   |
| Atmospheric pressure                                                                                                        | N/A                        | See Graph(es)   |
| <b>Test method deviation:</b> N/A                                                                                           |                            |                 |
| Supplementary information: EUT power supply is done through a "standard power supply" which meets FCC and RSS requirements. |                            |                 |

| TEST EQUIPMENT USED |                 |                         |            |            |            |
|---------------------|-----------------|-------------------------|------------|------------|------------|
| CATEGORY            | BRAND           | TYPE                    | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| AC power source     | GW Instek       | APS-1102                | 17782      | 24/06/2023 | 24/08/2024 |
| Cable               | EMITECH         | Current absorber sheath | 18366      | 17/08/2023 | 17/10/2025 |
| Cable               | C&C             | N-3m                    | 14335      | 14/04/2023 | 14/06/2025 |
| LISN                | Rohde & Schwarz | ENV216                  | 17925      | 24/09/2021 | 24/11/2023 |
| Multimeter          | FLUKE           | 8808A                   | 10382      | 17/05/2023 | 17/07/2024 |
| Receiver            | Rohde & Schwarz | ESI                     | 9704       | 18/11/2022 | 18/01/2024 |
| Software            | Nexio           | BAT EMC                 | 0000       |            |            |
| Thermohygrometer    | Testo           | 608-H1                  | 7561       | 19/06/2023 | 19/08/2024 |
| Thermohygrometer    | Testo           | 608-H2                  | 12268      | 24/10/2022 | 24/12/2024 |

Blank cells = Permanent validity

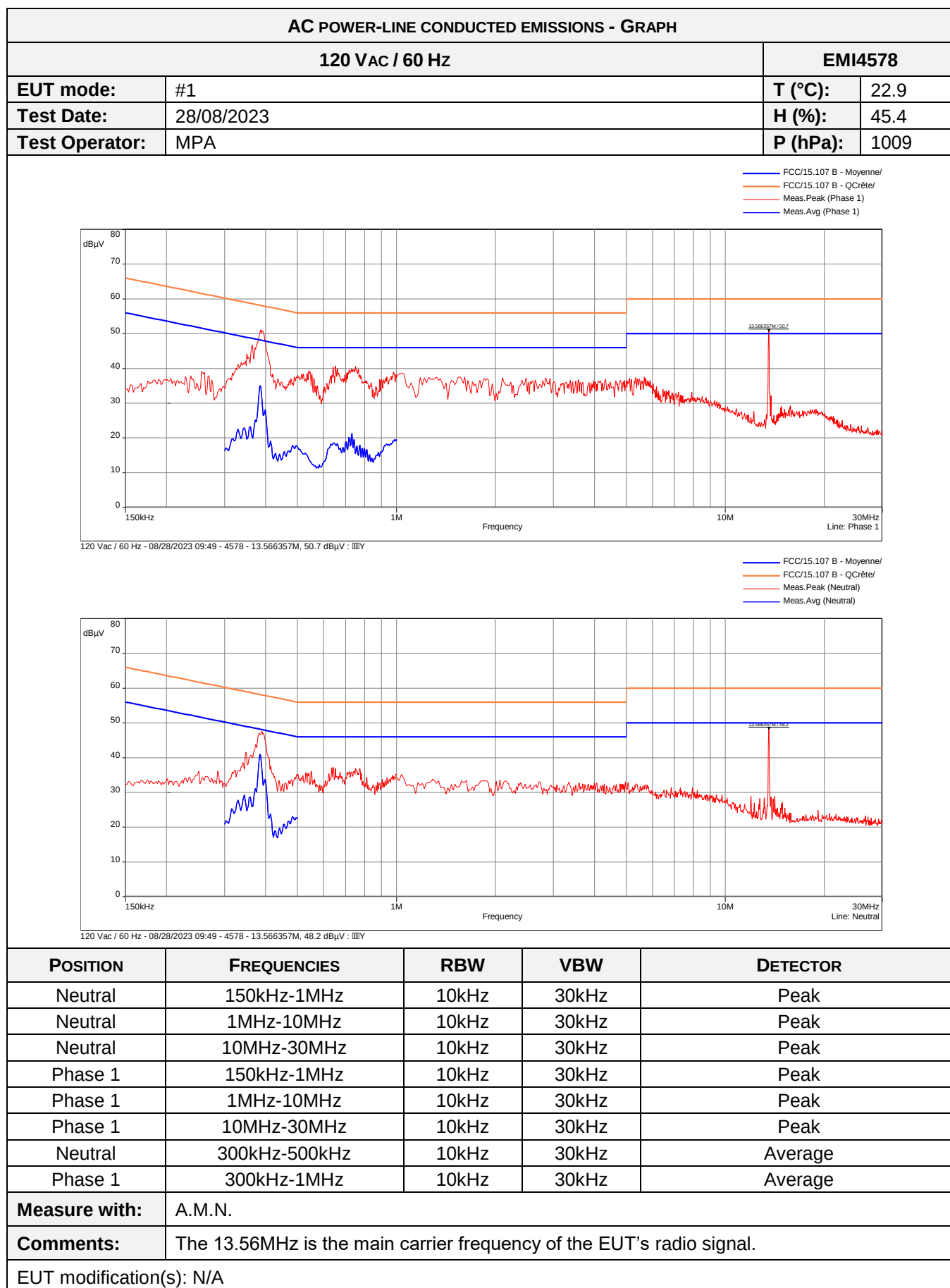
TEST SETUP PHOTO(S) – POWER SUPPLY USED FOR CONDUCTED MEASUREMENT



AC POWER-LINE CONDUCTED EMISSIONS - TABULATED RESULTS

| 120 VAC / 60 Hz                                                                                                                                           |                 |                     |              |              | EMI4578     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------|--------------|--------------|-------------|
| TERMINAL                                                                                                                                                  | FREQUENCY (MHz) | DETECTOR (Pk/QP/Av) | LEVEL (dBμV) | LIMIT (dBμV) | MARGIN (dB) |
| 0.349                                                                                                                                                     | Neutral         | Avg                 | 29.29        | 48.98        | -19.69      |
| 0.390                                                                                                                                                     | Neutral         | Avg                 | 41.05        | 48.06        | -7.01       |
| 0.642                                                                                                                                                     | Neutral         | Peak                | 37.30        | 46.00        | -8.70       |
| 1.036                                                                                                                                                     | Neutral         | Peak                | 35.16        | 46.00        | -10.84      |
| 2.714                                                                                                                                                     | Neutral         | Peak                | 33.09        | 46.00        | -12.91      |
| 0.256                                                                                                                                                     | Line            | Peak                | 39.06        | 51.57        | -12.51      |
| 0.387                                                                                                                                                     | Line            | Avg                 | 35.07        | 48.13        | -13.06      |
| 0.652                                                                                                                                                     | Line            | Avg                 | 18.54        | 46.00        | -27.46      |
| 0.751                                                                                                                                                     | Line            | Avg                 | 21.33        | 46.00        | -24.67      |
| 0.980                                                                                                                                                     | Line            | Peak                | 38.90        | 46.00        | -7.10       |
| 1.036                                                                                                                                                     | Line            | Peak                | 38.54        | 46.00        | -7.46       |
| 5.671                                                                                                                                                     | Line            | Peak                | 37.55        | 50.00        | -12.45      |
| Supplementary information: When margin between peak measurements and Average or Qpeak limit(s) is > 6dB, no Average or Qpeak measurements were performed. |                 |                     |              |              |             |





## 6.2. Occupied Bandwidth

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | FCC part 15 Radio part 15.205<br>RSS-Gen |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ANSI C63.10: 2013                        |
| <b>Test description:</b> The occupied bandwidth (OBW) is the Frequency Range in which 99 % of the total mean power of a given emission falls. The residual part of the total power being denoted as $\beta$ , which, in cases of symmetrical spectra, splits up into $\beta/2$ on each side of the spectrum. Unless otherwise specified, $\beta/2$ is taken as 0,5 %.<br>The maximum occupied bandwidth includes all associated side bands above the appropriate emissions level and the frequency error or drift under extreme test conditions.<br>EUT is connected to the measuring receiver via 50 $\Omega$ attenuator(s). |                                          |

| TESTED CABLE  | OBW        | SEVERITY | RESULT TAB. | VERDICT |
|---------------|------------|----------|-------------|---------|
| 99% Bandwidth | 10.910 kHz | <14kHz   | EMI4470     | PASS    |

| LABORATORY PARAMETERS:            | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|-----------------------------------|----------------------------|-----------------|
| Ambient Temperature               | 15 to 35 °C                | 20.7 °C         |
| Relative Humidity                 | 20 to 75 %                 | 66.6 %          |
| Atmospheric pressure              | N/A                        | 1020 hPa        |
| <b>Test method deviation:</b> N/A |                            |                 |
| Supplementary information: N/A    |                            |                 |

| TEST EQUIPMENT USED |                     |            |            |            |            |
|---------------------|---------------------|------------|------------|------------|------------|
| CATEGORY            | BRAND               | TYPE       | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna             | EMITECH             | 3.5 cm     | 4653       |            |            |
| Attenuator          | Radiall             | R412720124 | 4391       | 30/09/2022 | 30/11/2025 |
| Cable               | MegaPhase           | N-3m       | 14853      | 20/05/2022 | 20/07/2024 |
| Receiver            | Rohde & Schwarz     | FSW43      | 14830      | 10/08/2022 | 10/11/2024 |
| Thermohygrometer    | Testo               | 608-H2     | 12268      | 24/10/2022 | 24/12/2024 |
| Thermohygrometer    | Bioblock Scientific | Météostar  | 0963       | 09/06/2021 | 09/02/2024 |

Blank cells = Permanent validity

| OCCUPIED BANDWIDTH - GRAPH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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### 6.3. Radiated spurious emissions

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FCC Part 15.225, 15.209<br>RSS-210, RSS-Gen |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ANSI C63.10: 2013                           |
| <p><b>General test setup:</b> For <math>f &lt; 30\text{MHz}</math>, EUT is set on an insulating support at 80cm above the ground reference plane.</p> <p>Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter in a semi-anechoic chamber. The EUT was rotated <math>360^\circ</math> in order to maximize radiated levels. Test antenna was oriented in 3 axes (<math>0^\circ</math>, <math>45^\circ</math> and <math>90^\circ</math>).</p> <p>Final measurements (quasi-peak) were then performed in a 10-meter Open Area Test Site that complies to CISPR 16 in the same measurement conditions.</p> <p>For <math>f &gt; 30\text{MHz}</math>, EUT is set on an insulating support at 80cm above the ground reference plane. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter. The EUT was rotated <math>360^\circ</math> about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities.</p> <p>Final measurements (quasi-peak or average) were then performed in a semi-anechoic chamber or Open Area Test Site that complies to CISPR 16. The EUT was rotated <math>360^\circ</math> about its azimuth and adjusting the receive antenna height from 1 to 4 m.</p> <p>All frequencies were investigated, where applicable.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                                             |

| TESTED CONFIGURATION | PARAMETER  | SEVERITY | RESULT TAB. | VERDICT     |
|----------------------|------------|----------|-------------|-------------|
| Tx mode / $0^\circ$  | 9kHz-30MHz | §15.209  | EMI4689     | <b>PASS</b> |
| Tx mode / $45^\circ$ | 9kHz-30MHz | §15.209  | EMI4690     | <b>PASS</b> |
| Tx mode / $90^\circ$ | 9kHz-30MHz | §15.209  | EMI4691     | <b>PASS</b> |
| Radiated measurement | 30MHz-1GHz | §15.209  | EMI4638     | <b>PASS</b> |

| LABORATORY PARAMETERS:                                                                                                                                                                                                                                             | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                                                                                                                                                                                                                | 15 to $35^\circ\text{C}$   | See Graph(es)   |
| Relative Humidity                                                                                                                                                                                                                                                  | 20 to 75 %                 | See Graph(es)   |
| Atmospheric pressure                                                                                                                                                                                                                                               | N/A                        | See Graph(es)   |
| <b>Test method deviation:</b> N/A                                                                                                                                                                                                                                  |                            |                 |
| <p>Supplementary information:</p> <p>From 9 kHz to 30MHz: limit indicated on the curves is calculated with 40 dB/decade extrapolation factor and 51.5 dB conversion factor.</p> <p>From 30MHz to 1GHz Quasi peak limit provided is the limit given in §15.209.</p> |                            |                 |

| TEST EQUIPMENT USED – 9 KHZ TO 30 MHZ |                     |           |            |            |            |
|---------------------------------------|---------------------|-----------|------------|------------|------------|
| CATEGORY                              | BRAND               | TYPE      | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna                               | Rohde & Schwarz     | HFH2-Z2   | 5825       | 16/08/2022 | 16/10/2024 |
| Cable                                 | /                   | N-1m      | 3625       | 02/05/2023 | 02/07/2025 |
| Cable                                 | Techniwave          | N-3.5m    | 18353      | 25/01/2022 | 25/03/2024 |
| Cable                                 | Techniwave          | N-4m      | 18355      | 25/01/2022 | 25/03/2024 |
| Receiver                              | Rohde & Schwarz     | FSW43     | 14830      | 10/08/2022 | 10/10/2024 |
| Shielded enclosure                    | COMTEST             | FAR-3m    | 18014      | 17/08/2021 | 17/10/2024 |
| Software                              | Nexio               | BAT EMC   | 0000       |            |            |
| Thermohygrometer                      | Testo               | 608-H2    | 12269      | 07/06/2022 | 07/08/2024 |
| Thermohygrometer                      | Bioblock Scientific | Météostar | 0963       | 09/06/2021 | 09/02/2024 |

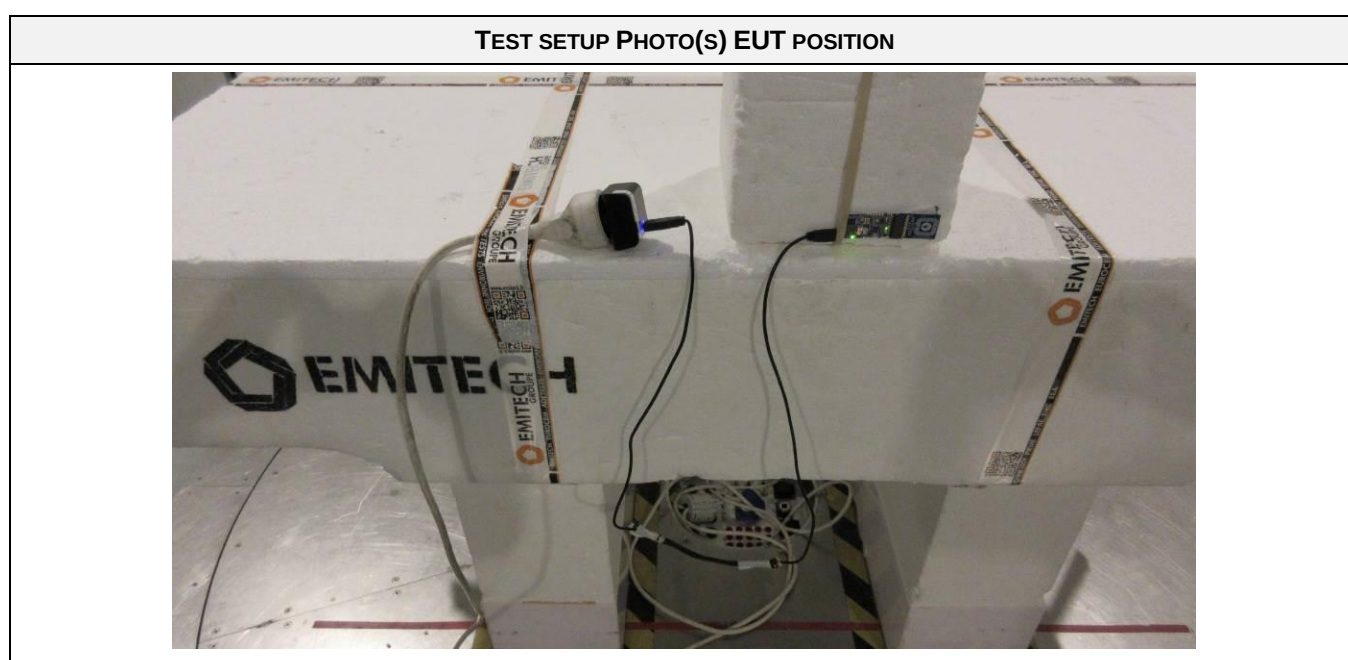
BAT-EMC software version: V3.18.0.26

Blank cells = Permanent validity

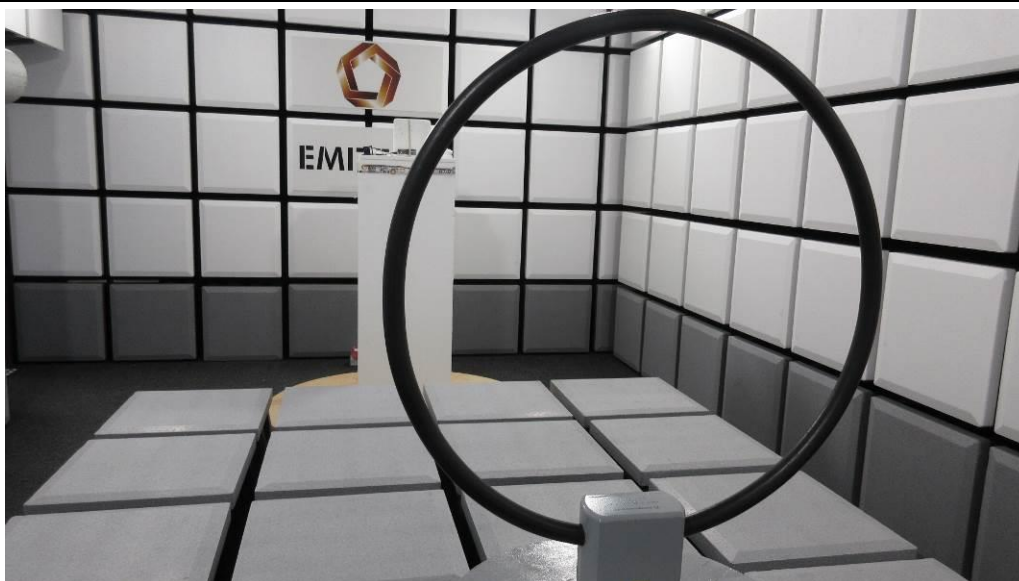
| TEST EQUIPMENT USED – 30 MHZ TO 1 GHZ |                 |         |            |            |            |
|---------------------------------------|-----------------|---------|------------|------------|------------|
| CATEGORY                              | BRAND           | TYPE    | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna                               | ETS lindgren    | 3142E   | 14523      | 27/01/2022 | 27/03/2025 |
| Cable                                 | SUCOFLEX        | N-3m    | 14378      | 17/08/2023 | 17/10/2025 |
| Cable                                 | SUCOFLEX        | N-6,5m  | 14380      | 17/08/2023 | 17/10/2025 |
| Cable                                 | Techniwave      | N-8m    | 18349      | 17/08/2023 | 17/10/2025 |
| Receiver                              | Rohde & Schwarz | ESW26   | 17791      | 08/02/2023 | 08/04/2024 |
| Shielded enclosure                    | COMTEST         | FAR-3m  | 18014      | 17/08/2021 | 17/10/2024 |
| Software                              | Nexio           | BAT EMC | 0000       |            |            |
| Thermohygrometer                      | Testo           | 608-H2  | 12268      | 24/10/2022 | 24/12/2024 |
| Thermohygrometer                      | Testo           | 608-H2  | 12269      | 07/06/2022 | 07/08/2024 |

BAT-EMC software version: V3.18.0.26

Blank cells = Permanent validity



TEST SETUP PHOTO(S) RADIATED EMISSIONS (9kHz TO 30MHz)



TEST SETUP PHOTO(S) RADIATED EMISSIONS (30MHz TO 1GHz)



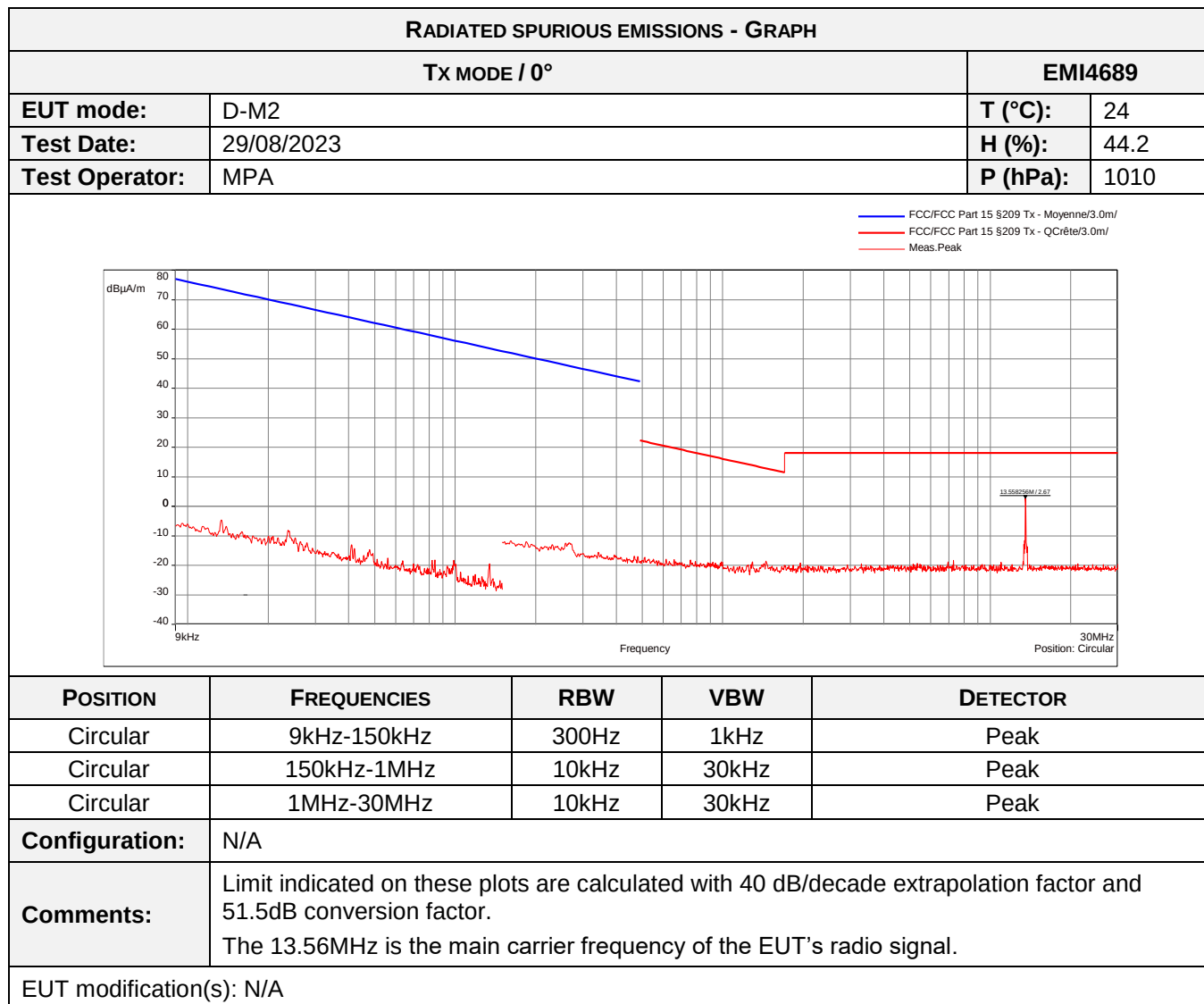
| RADIATED SPURIOUS EMISSIONS – TABULATED RESULTS                 |              |                     |                              |                              |              |
|-----------------------------------------------------------------|--------------|---------------------|------------------------------|------------------------------|--------------|
| TX MODE / 0°                                                    |              |                     |                              |                              | EMI4689      |
| FREQUENCY (MHz)                                                 | POLARIZATION | PEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LIMIT (dBμA/m) | MARGING (dB) |
| N/A                                                             | N/A          | N/A                 | N/A                          | N/A                          | N/A          |
| Supplementary information: No spurious emissions were detected. |              |                     |                              |                              |              |

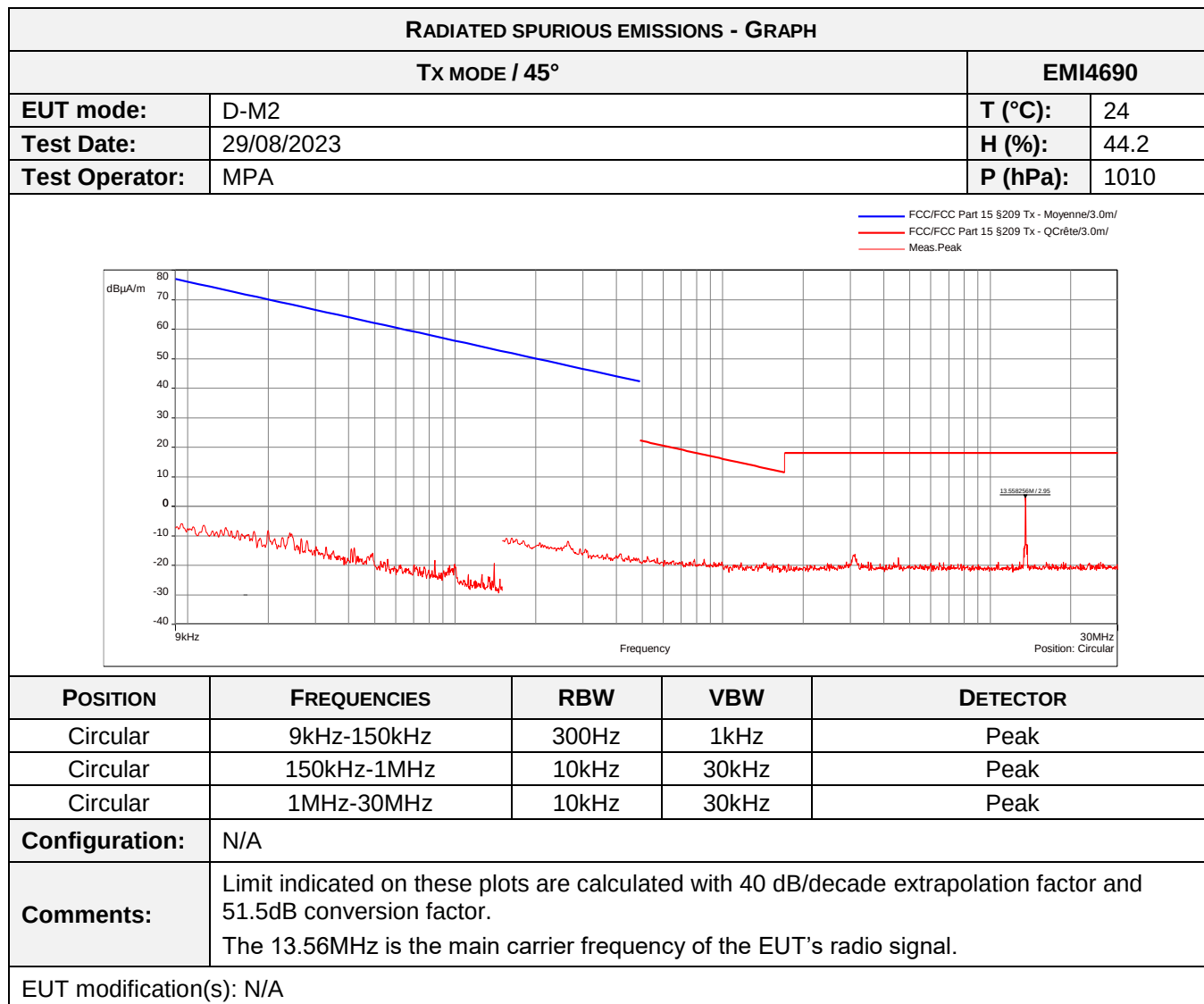
| RADIATED SPURIOUS EMISSIONS – TABULATED RESULTS                 |              |                     |                              |                              |              |
|-----------------------------------------------------------------|--------------|---------------------|------------------------------|------------------------------|--------------|
| TX MODE / 45°                                                   |              |                     |                              |                              | EMI4690      |
| FREQUENCY (MHz)                                                 | POLARIZATION | PEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LIMIT (dBμA/m) | MARGING (dB) |
| N/A                                                             | N/A          | N/A                 | N/A                          | N/A                          | N/A          |
| Supplementary information: No spurious emissions were detected. |              |                     |                              |                              |              |

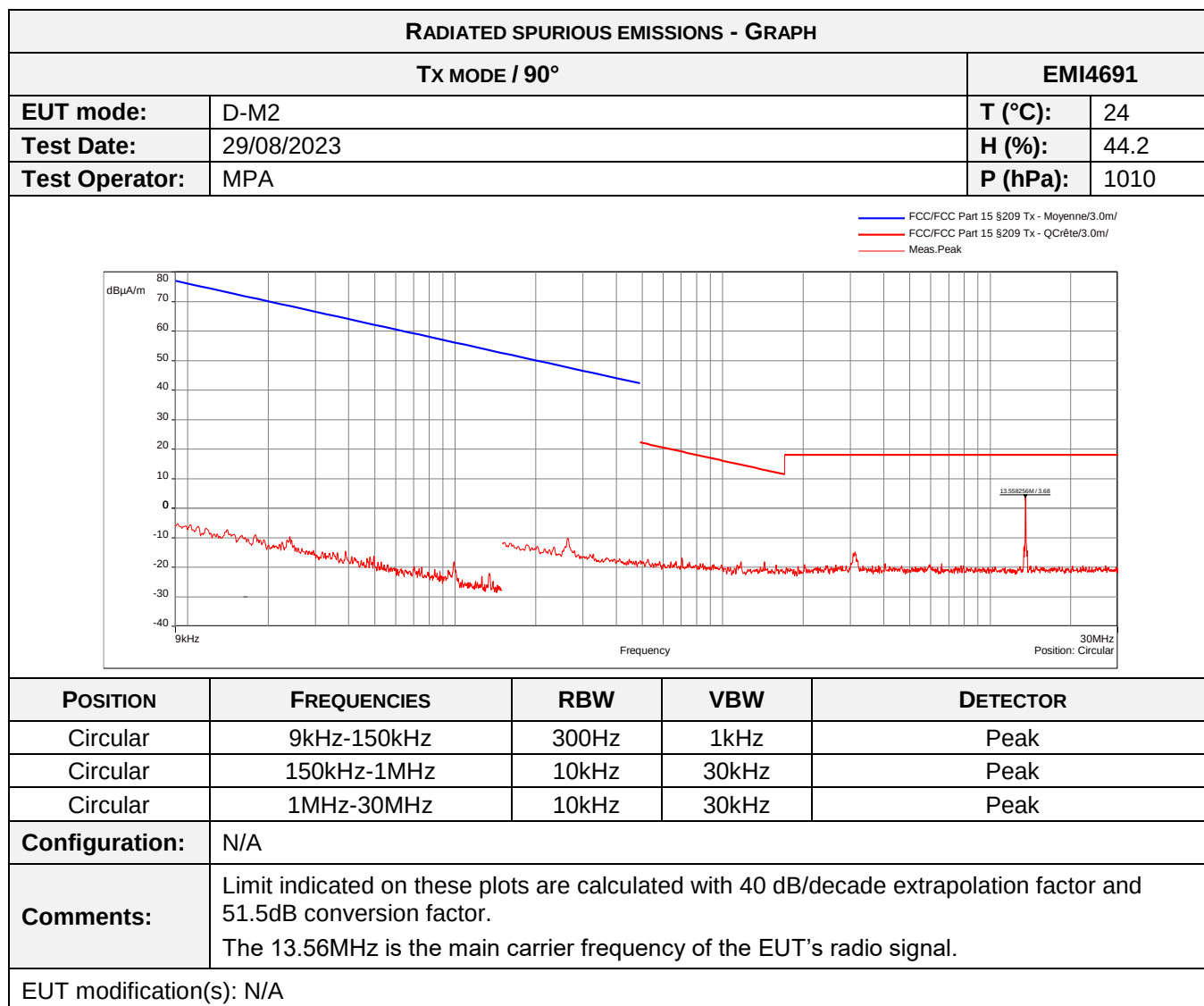
| RADIATED SPURIOUS EMISSIONS – TABULATED RESULTS                 |              |                     |                              |                              |              |
|-----------------------------------------------------------------|--------------|---------------------|------------------------------|------------------------------|--------------|
| TX MODE / 90°                                                   |              |                     |                              |                              | EMI4691      |
| FREQUENCY (MHz)                                                 | POLARIZATION | PEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LEVEL (dBμA/m) | AVERAGE/QPEAK LIMIT (dBμA/m) | MARGING (dB) |
| N/A                                                             | N/A          | N/A                 | N/A                          | N/A                          | N/A          |
| Supplementary information: No spurious emissions were detected. |              |                     |                              |                              |              |

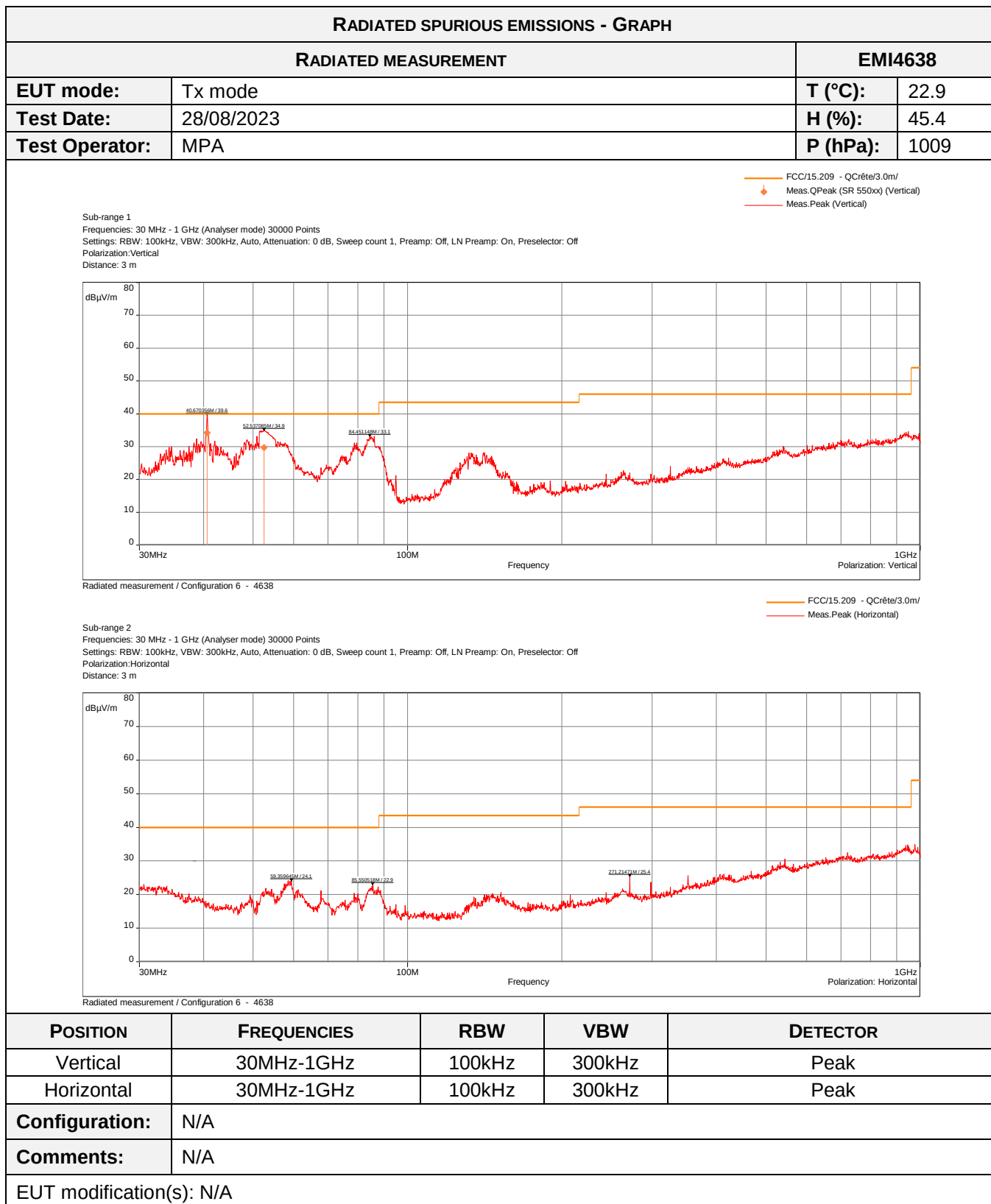
| RADIATED SPURIOUS EMISSIONS – TABULATED RESULTS                                                                                              |              |                     |                      |                      |              |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|----------------------|----------------------|--------------|
| RADIATED MEASUREMENT                                                                                                                         |              |                     |                      |                      | EMI4638      |
| FREQUENCY (MHz)                                                                                                                              | POLARIZATION | PEAK LEVEL (dBμV/m) | QPEAK LEVEL (dBμV/m) | QPEAK LIMIT (dBμV/m) | MARGING (dB) |
| 34.656                                                                                                                                       | Vertical     | 29.99               | N/P                  | 40.00                | -10.01       |
| 37.502                                                                                                                                       | Vertical     | 30.13               | N/P                  | 40.00                | -9.87        |
| 40.670                                                                                                                                       | Vertical     | 39.58               | 34.24                | 40.00                | -5.76        |
| 42.093                                                                                                                                       | Vertical     | 31.72               | N/P                  | 40.00                | -8.28        |
| 52.537                                                                                                                                       | Vertical     | 34.87               | 29.73                | 40.00                | -10.27       |
| 86.133                                                                                                                                       | Vertical     | 33.12               | N/P                  | 40.00                | -6.88        |
| 133.050                                                                                                                                      | Vertical     | 28.06               | N/P                  | 43.50                | -15.44       |
| 141.424                                                                                                                                      | Vertical     | 28.18               | N/P                  | 43.50                | -15.32       |
| 30.614                                                                                                                                       | Horizontal   | 23.02               | N/P                  | 40.00                | -16.98       |
| 58.551                                                                                                                                       | Horizontal   | 24.14               | N/P                  | 40.00                | -15.86       |
| 67.799                                                                                                                                       | Horizontal   | 21.14               | N/P                  | 40.00                | -18.86       |
| 78.696                                                                                                                                       | Horizontal   | 20.44               | N/P                  | 40.00                | -19.56       |
| 85.551                                                                                                                                       | Horizontal   | 22.89               | N/P                  | 40.00                | -17.11       |
| Supplementary information: when margin between peak measurements and quasi-peak limit(s) is > 6dB, no quasi-peak measurements were performed |              |                     |                      |                      |              |











#### 6.4. Field strength in the band 13.553-13.567MHz

|                                                                                                                                                                                                                                                                                                                                                                                                                                   |                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                        | FCC Part 15.225 a)<br>RSS-210 |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                               | ANSI C63.10: 2013             |
| <p><b>General test setup:</b> EUT is set on an insulating support at 80cm. Measurements were then performed in a 10-meter Open Area Test Site that complies to CISPR 16.</p> <p>The EUT was rotated 360° in order to maximize radiated levels. Test antenna was oriented in 3 axes (0°, 45° and 90°).</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                               |

| TEST CASE                 | EUT MODE | SEVERITY         | RESULT TAB. | VERDICT     |
|---------------------------|----------|------------------|-------------|-------------|
| Field strength / 13.56MHz | Tx mode  | 15848µV/m at 30m | EMI4400     | <b>PASS</b> |

| LABORATORY PARAMETERS:                                    | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|-----------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                       | 15 to 35 °C                | 22.6 °C         |
| Relative Humidity                                         | 20 to 75 %                 | 56.6 %          |
| Atmospheric pressure                                      | N/A                        | 1017 hPa        |
| <b>Test method deviation:</b> N/A                         |                            |                 |
| Supplementary information: Only maximum level is recorded |                            |                 |

| TEST EQUIPMENT USED |                     |            |            |            |            |
|---------------------|---------------------|------------|------------|------------|------------|
| CATEGORY            | BRAND               | TYPE       | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna             | Rohde & Schwarz     | HFH2-Z2    | 5825       | 16/08/2022 | 16/10/2024 |
| Cable               | Huber + Suhner      | N-10m      | 8472       | 16/08/2023 | 16/10/2025 |
| Open area test site | EMITECH             | Salinelles | 3482       | 21/08/2021 | 21/10/2024 |
| Receiver            | Rohde & Schwarz     | ESHS10     | 3371       | 04/05/2023 | 04/07/2024 |
| Thermohygrometer    | Testo               | 608-H2     | 12268      | 24/10/2022 | 24/12/2024 |
| Thermohygrometer    | Bioblock Scientific | Météostar  | 0963       | 09/06/2021 | 09/02/2024 |

Blank cells = Permanent validity

TEST SETUP PHOTO(S)



TEST SETUP PHOTO(S)



| FIELD STRENGTH - TABULATED RESULTS |                                                                                                                                                                                                              |                       |                       | EMI4400             |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|---------------------|
| Frequency (MHz)                    | Polarization (°)                                                                                                                                                                                             | Level at 10m (dBμA/m) | Limit at 10m (dBμA/m) | Limit at 30m (μV/m) |
| 13.56                              | 0                                                                                                                                                                                                            | -9.24                 | 51.58                 | 15848               |
| 13.56                              | 45                                                                                                                                                                                                           | -7.44                 | 51.58                 | 15848               |
| 13.56                              | 90                                                                                                                                                                                                           | -4.94                 | 51.58                 | 15848               |
| <b>Comments:</b>                   | Maximun level at 10 m is -4.94 dBμA/m for a limit at 51.58 dBμA/m.<br>Using an extrapolation factor of 40 dB/dec and a conversion factor of -51.5 dB, level at 30m is 27.48 dBμV/m for a limit at 84 dBμV/m. |                       |                       |                     |

| EUT MODIFICATIONS | OPERATOR | TEST DATE  | RESULT TAB. |
|-------------------|----------|------------|-------------|
| N/A               | MPA      | 31/08/2023 | EMI4400     |

## 6.5. Field strength outside the band 13.110-14.010MHz

|                                                                                                                                                                    |                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Reference standard:</b>                                                                                                                                         | FCC Part 15.225 b) c) & d)<br>RSS-210 |
| <b>Test method:</b>                                                                                                                                                | ANSI C63.10: 2013                     |
| <b>General test setup:</b> EUT is set inside the climatic enclosure.<br>Carrier level are correlated with the maximum carrier level measured in normal conditions. |                                       |

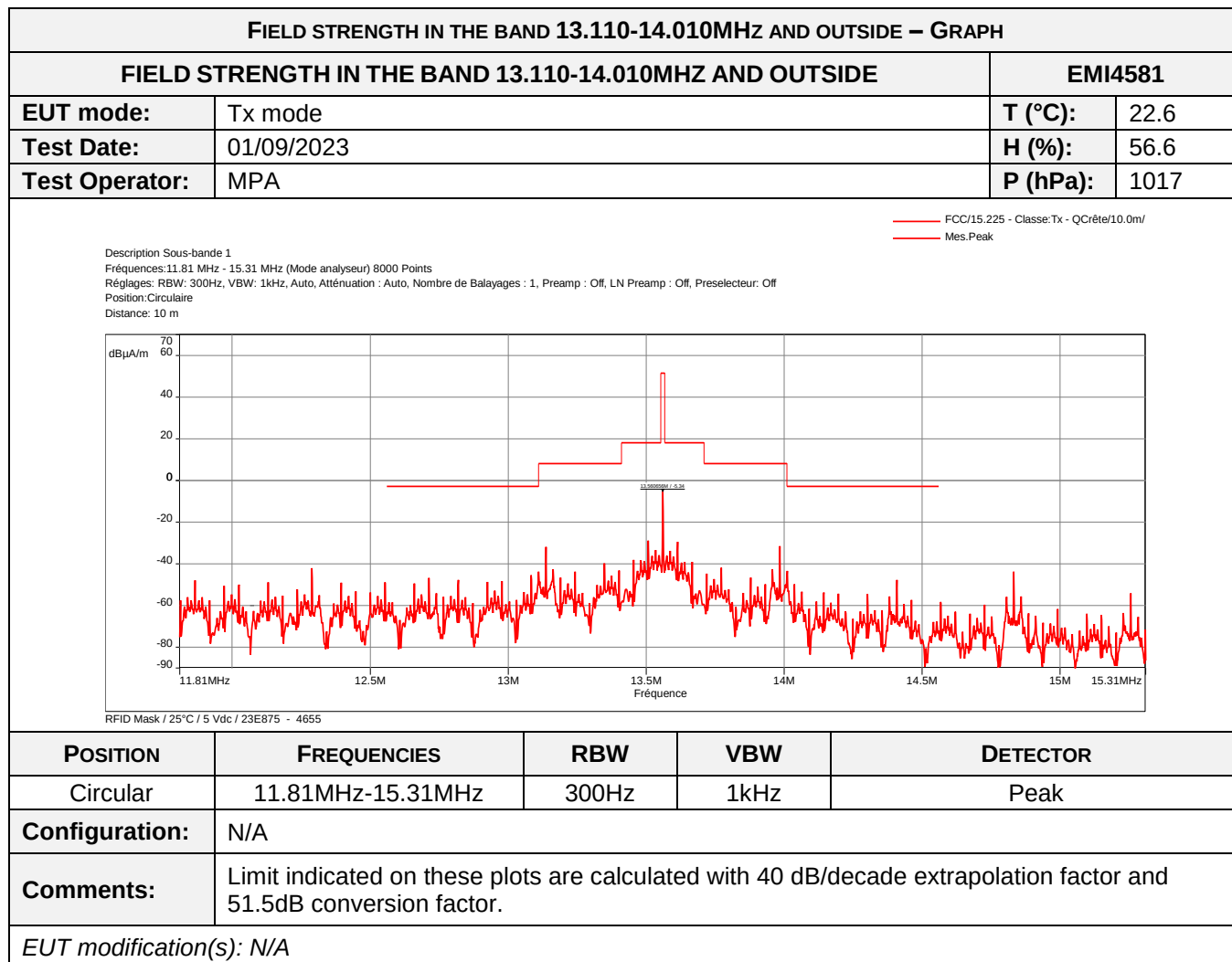
| FREQUENCY BAND   | SEVERITY          | RESULT TAB.                       | VERDICT     |
|------------------|-------------------|-----------------------------------|-------------|
| 13.110-13.410MHz | 106µV/m at 30m    | See graphic                       | <b>PASS</b> |
| 13.410-13.553MHz | 334µV/m at 30m    | See graphic                       | <b>PASS</b> |
| 13.553-13.567MHz | 15,848µV/m at 30m | See graphic & §6.4 of this report | <b>PASS</b> |
| 13.567-13.710MHz | 334µV/m at 30m    | See graphic                       | <b>PASS</b> |
| 13.710-14.010MHz | 106µV/m at 30m    | See graphic                       | <b>PASS</b> |
| Above 14.010MHz  | §15.209           | See graphic & §6.3 of this report | <b>PASS</b> |
| Below 13.110MHz  | §15.209           | See graphic & §6.3 of this report | <b>PASS</b> |

| LABORATORY PARAMETERS:            | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|-----------------------------------|----------------------------|-----------------|
| Ambient Temperature               | 15 to 35 °C                | See Graph(es)   |
| Relative Humidity                 | 20 to 75 %                 | See Graph(es)   |
| Atmospheric pressure              | N/A                        | See Graph(es)   |
| <b>Test method deviation:</b> N/A |                            |                 |
| Supplementary information: N/A    |                            |                 |

| TEST EQUIPMENT USED |                     |            |            |            |            |
|---------------------|---------------------|------------|------------|------------|------------|
| CATEGORY            | BRAND               | TYPE       | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna             | EMITECH             | 3.5 cm     | 4653       |            |            |
| Attenuator          | Radiall             | R412720124 | 4391       | 30/09/2022 | 30/11/2025 |
| Cable               | MegaPhase           | N-3m       | 14853      | 20/05/2022 | 20/07/2024 |
| Receiver            | Rohde & Schwarz     | FPL1007    | 17908      | 02/11/2022 | 02/01/2024 |
| Software            | Nexio               | BAT EMC    | 0000       |            |            |
| Thermohygrometer    | Testo               | 608-H2     | 12268      | 24/10/2022 | 24/12/2024 |
| Thermohygrometer    | Bioblock Scientific | Météostar  | 0963       | 09/06/2021 | 09/02/2024 |

Blank cells = Permanent validity





## 6.6. Measurement of Frequency Stability

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Reference standard:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | FCC 47 CRF Part 15.225 e)<br>RSS-210 |
| Test method :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ANSI C63.10: 2013                    |
| <b>General test setup:</b> The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of $-20$ degrees to $+ 50$ degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.<br>EUT is set inside the climatic enclosure. Carrier level are correlated with the maximum carrier level measured in normal conditions. |                                      |

| TEST CASE           | EUT MODE | SEVERITY | RESULT TAB. | VERDICT |
|---------------------|----------|----------|-------------|---------|
| Frequency stability | Tx mode  | +/-0.01% | EMI4500     | PASS    |

| LABORATORY PARAMETERS:                                                                                                                                 | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                                                                                                    | 15 to 35 °C                | 22.6 °C         |
| Relative Humidity                                                                                                                                      | 20 to 75 %                 | 56.6 %          |
| Atmospheric pressure                                                                                                                                   | N/A                        | 1017 hPa        |
| <b>Test method deviation:</b> Due to EUT's operating temperature range, measurement was performed at $+10^{\circ}\text{C}$ and $+40^{\circ}\text{C}$ . |                            |                 |
| Supplementary information: N/A                                                                                                                         |                            |                 |

| TEST EQUIPMENT USED |                     |               |            |            |            |
|---------------------|---------------------|---------------|------------|------------|------------|
| CATEGORY            | BRAND               | TYPE          | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Antenna             | EMITECH             | 3.5 cm        | 4653       |            |            |
| Attenuator          | Radiall             | R412720124    | 4391       | 30/09/2022 | 30/11/2025 |
| Cable               | MegaPhase           | N-3m          | 14853      | 20/05/2022 | 20/07/2024 |
| Climatic enclosure  | CLIMATS             | EXCAL 7714-HA | 14261      | 01/09/2022 | 01/11/2023 |
| Receiver            | Rohde & Schwarz     | FPL1007       | 17908      | 02/11/2022 | 02/01/2024 |
| Software            | Nexio               | BAT EMC       | 0000       |            |            |
| Thermohygrometer    | Testo               | 608-H2        | 12268      | 24/10/2022 | 24/12/2024 |
| Thermohygrometer    | Bioblock Scientific | Météostar     | 0963       | 09/06/2021 | 09/02/2024 |

Blank cells = Permanent validity

TEST SETUP PHOTO(S)



| FREQUENCY STABILITY / CARD - TABULATED RESULTS |                  |                    |                 |                     | EMI4500   |
|------------------------------------------------|------------------|--------------------|-----------------|---------------------|-----------|
| Test Case                                      | Temperature (°C) | Power supply (Vdc) | Frequency (MHz) | Frequency error (%) | Limit (%) |
| Normal conditions                              | +25              | 5                  | 13.5606154      | -                   | +/- 0.01% |
| Extremes conditions                            | 0                | 5                  | 13.5606454      | +0.00022            |           |
|                                                | +60              | 5                  | 13.5605475      | -0.00050            |           |

| EUT MODIFICATIONS | OPERATOR | TEST DATE  | RESULT TAB. |
|-------------------|----------|------------|-------------|
| N/A               | MPA      | 01/09/2023 | EMI4500     |

End of test report