

Test report issued under the responsibility of:  
EMITECH ILE DE FRANCE Laboratory

## RADIO TEST REPORT

FCC 47 CFR PART 15 : 2020 (§15.247)

RSS-247\_Issue 2 : 2017

RSS-Gen\_Issue 5 : 2019

**Company** ..... : **e-TakesCare**  
**Address** ..... : 35 rue des Chantiers  
78000 VERSAILLES FRANCE

**Test item description** ..... : **ARMPIT THERMOMETER**  
**Trade Mark** ..... : e-TakesCare  
**Manufacturer** ..... : e-TakesCare  
**Model/Type reference** ..... : TUCKY-21W  
**Ratings** ..... : 3.7 Vdc (battery)

**Testing Laboratory** ..... : **EMITECH ILE DE France Laboratory**  
**Address** ..... : 30-32, avenue des 3 Peuples  
78180 MONTIGNY LE BRETONNEUX  
FRANCE

**Report Reference No.** ..... : **RCE-100-20-100906-1-A (00)**  
**Test procedure** ..... : FCC and CANADA marking  
**Diffusion** ..... : Mr BOUGEROL  
**Applicant's name** ..... : e-TakesCare  
**Date of issue** ..... : 22/05/2020  
**Total number of pages** ..... : 53  
**Revision** ..... : 1  
**Modified pages** ..... : 5, 6, 7, 13, 25, 26, 29, 32, 35  
**Compiled by** ..... : F. LHEUREUX (Test technician)  
**Approved by (+ signature)** ..... : *B. Pellerin (Radio Technical Managers)*



*Certain services reported in this document are not covered by the accreditation. They are identified by the symbol (\*)*

*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.*

This document submits the results of Radio tests performed on the equipment **ARMPIT THERMOMETER** (denominated hereafter E.U.T.: equipment under test) according to documents listed in §2 of this test report.

## 2. REFERENCE DOCUMENTS

### NORMATIVE REFERENCES:

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

***FCC 47 CFR Part 15 : 2020***

Code of federal regulations

Title 47- Telecommunication Chapter 1- Federal Communication Commission

Part 15- Radio frequency devices Subpart B- Unintentional Radiators

Limits and methods of measurement of radio disturbance

Characteristic of information technology equipment.

***RSS-247 Issue 2 : 2017***

Code of federal regulations

Title 47- Telecommunication Chapter 1- Federal Communication Commission

Part 15- Radio frequency devices Subpart B- Unintentional Radiators

Limits and methods of measurement of radio disturbance

Characteristic of information technology equipment.

***RSS-Gen Issue 5: March 2019***

General Requirements and Information for the Certification of Radio Apparatus

***ANSI C63.4: 2014***

Methods of Measurement of Radio-Noise Emissions from Low Voltage Electrical and Electronics Equipment in the range of 9 kHz to 40 GHz.

***KDB 558074 D01 DTS Meas Guidance V05 r02***

Guidance for performing compliance measurement on Digital Transmission Systems (DTS) operating under § 15.247.

***ANSI C63.10 : 2013***

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

### 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. .... : ARMPIT THERMOMETER

Model/Type reference..... : TUCKY-21W

Trade Mark. .... : e-TakesCare

Serial number (S/N)..... : 1908Z00052 (Board only)  
1927Z00157 (Complete product)

Part number (P/N). .... : N/C

Software version..... : 21400BA\_v2.0.5  
hardware-radio-test v1.0.0 (Test software)

Firmware version. .... : 21420BA\_v2.0.1

Fcc ID ..... : 2AWDL-TUCKY21WAA

N°IC ..... : 26084-TUCKY21WAA

Type of sample. .... : Serial

Other reference family. .... : TUCKY-21  
e-Torm TC1  
TUCKY-21Y  
TUCKY-21O  
TUCKY-21P  
TUCKY-21B  
TUCKY-21N

Functions. .... : BLE thermometer equipped with a patch to place under a patient's armpit.

Manufacturer name. .... : e-TakesCare

Address..... : 35 rue des Chantiers 78000 VERSAILLES FRANCE

**General product information:**  
N/A

### 3.2. EUT Overview



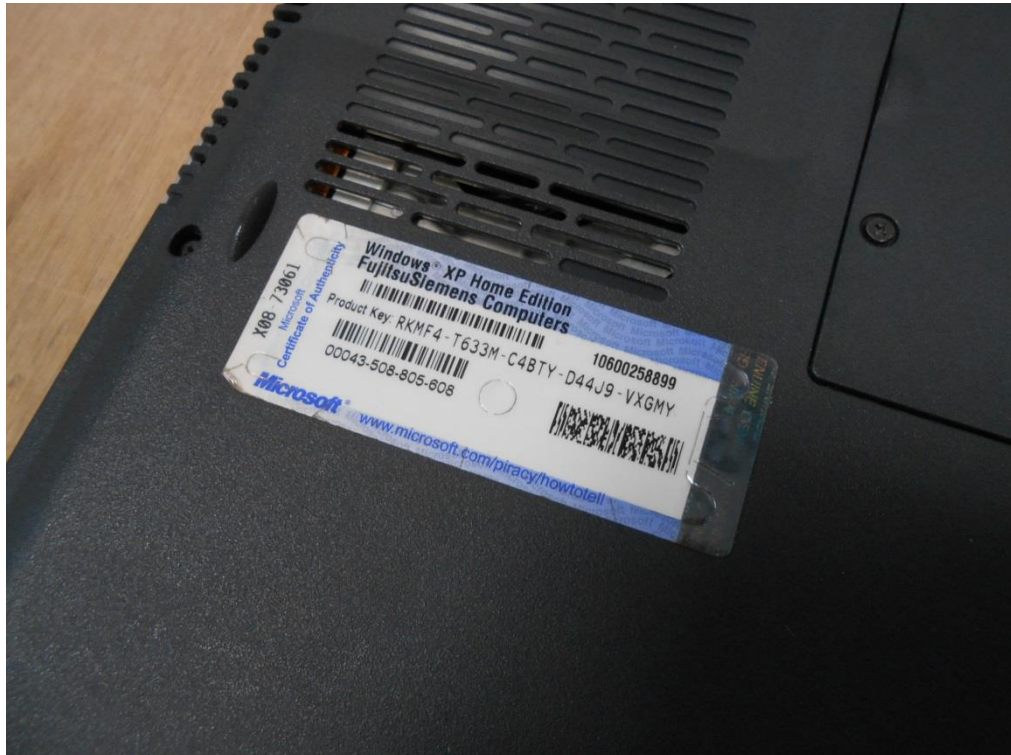
### 3.3. EUT Mechanical and Electrical Design

Power supply. .... : 3.7 Vdc (Internal battery)  
Power supply range. .... : 5 Vdc (USB for charging)  
Power type. .... : Continuous  
Power (W). .... : N/C  
Nominal current (A). .... : N/C  
Dimensions (L x W x H) (m). .... : N/C  
Weight (kg). .... : N/C  
Temperature range (°C). .... : N/C  
Ground bounding strap. .... : No

**Comments:** N/A

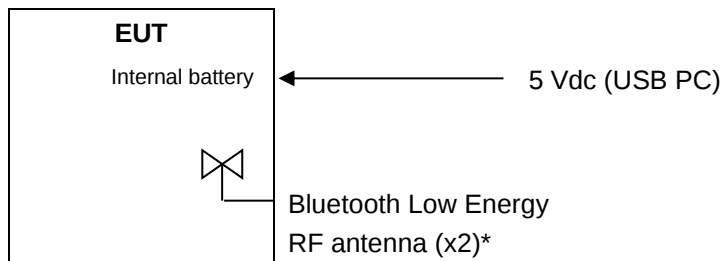
### 3.4. Auxiliary equipment







### 3.5. EUT Input/Output ports



| PORT | NAME                            | TYPE | LENGHT | CABLE TYPE | COMMENTS                  |
|------|---------------------------------|------|--------|------------|---------------------------|
| 0    | Main frame                      | N/E  | N/A    | N/A        |                           |
| 1    | Bluetooth Low Energy RF antenna | RF   | -      | -          |                           |
| 2    | USB PC                          | -    | -      | -          | When charging the product |

AC/DC : AC/DC Converter port

AC .....: Alternative current port

DC .....: Discontinuous current port

I/O .....: Input or Output port

TP .....: Telecommunication port

RF .....: Radio frequency port

N/E .....: Non Electrical port

(\*) : The EUT has two antenna. A main antenna named "Short" and a secondary antenna named "long". They are used alternately. The tests in chapter 6.3 are carried out on the two types of antenna and the other tests only with the main antenna named "short"

### 3.6. EUT Radio Specifications

| a) GENERAL INFORMATIONS                                                             |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| According to manufacturer's declarations :                                          |                                                                                      |
| EUT type.....                                                                       | : Transmitter                                                                        |
| Technology .....                                                                    | : Bluetooth Low Energy (BLE)                                                         |
| Environmental profile.....                                                          | : Indoor                                                                             |
| Temperature range.....                                                              | : Low extremes conditions: N/C<br>High extremes conditions: N/C                      |
| Antenna type .....                                                                  | : Integrated                                                                         |
| Antenna Gain.....                                                                   | : N/C                                                                                |
| <b>Comments:</b> The radio part is deactivated during the tests conducted emission. |                                                                                      |
| b) TRANSMITTER PARAMITERS (Tx)                                                      |                                                                                      |
| Frequency bands.....                                                                | : 2400 - 2483.5 MHz                                                                  |
| RF Power.....                                                                       | : 4 dBm                                                                              |
| Number of channels / Separation.....                                                | : 40 / 2 MHz                                                                         |
| Modulation type .....                                                               | : GFSK                                                                               |
| Duty cycle .....                                                                    | : N/C                                                                                |
| Tested frequency.....                                                               | : Bluetooth low energy – Appairing mode                                              |
|                                                                                     | Lowest channel : 2402 MHz<br>Middle channel : 2440 MHz<br>Highest channel : 2480 MHz |
| c) RECEIVER PARAMETERS (Rx)                                                         |                                                                                      |
| Frequency bands.....                                                                | : 2400 - 2483.5 MHz                                                                  |
| Category/Class .....                                                                | : N/C                                                                                |
| Bandwidth .....                                                                     | : 2 MHz                                                                              |

#### 4. RESULT SUMMARY

Subpart B of the standard FCC part 15 – Unintentional radiators

| TEST DESIGNATION                                           | TEST PROCEDURE | VERDICT     | COMMENTS |
|------------------------------------------------------------|----------------|-------------|----------|
| <b>Measurement of conducted emission on AC mains ports</b> | <b>15.107</b>  | <b>PASS</b> |          |
| - Power supply 120 Vac / 60 Hz                             | -              | -           |          |
| - Power supply 120 Vac / 60 Hz (Average Value)             | -              | <b>PASS</b> |          |
| <b>Radiated emission limits</b>                            | <b>15.109</b>  | <b>PASS</b> |          |

Subpart C of the standard FCC part 15 – Intentional radiators

| TEST DESIGNATION                                                                                                        | TEST PROCEDURE | VERDICT     | COMMENTS |
|-------------------------------------------------------------------------------------------------------------------------|----------------|-------------|----------|
| <b>Restriction bands of operation</b>                                                                                   | <b>15.205</b>  | <b>PASS</b> |          |
| <b>Measurement of conducted emission on AC mains ports</b>                                                              | <b>15.207</b>  |             |          |
| - Power supply 120 Vac / 60 Hz                                                                                          | -              | -           |          |
| - Power supply 120 Vac / 60 Hz (Average Value)                                                                          | -              | <b>PASS</b> |          |
| <b>Radiated emission limits; general requirements</b>                                                                   | <b>15.209</b>  | <b>PASS</b> |          |
| <b>Additional provision to the general radiated emission limitations</b>                                                | <b>15.215</b>  | -           |          |
| -(a) Alternative to general radiated emission limits                                                                    |                | <b>N/A</b>  |          |
| -(b) Unwanted emissions outside of § 15.247 frequency bands                                                             | -              | <b>N/A</b>  |          |
| -(c) 20 dB bandwidth and band-edge compliance                                                                           |                | <b>PASS</b> |          |
| <b>Intentional radiated emissions</b>                                                                                   | <b>15.247</b>  | -           |          |
| - a) frequency hopping and digitally modulated                                                                          | -              | <b>N/A</b>  |          |
| - a) (1) hopping mode                                                                                                   | -              | <b>N/A</b>  |          |
| - a) (1) (i) frequency hopping in the band 902-928 MHz                                                                  | -              | <b>N/A</b>  |          |
| - a) (1) (ii) frequency hopping in the band 5725-5850 MHz                                                               | -              | <b>N/A</b>  |          |
| - a) (1) (iii) frequency hopping in the band 2400-2483.5 MHz                                                            | -              | <b>N/A</b>  |          |
| - a) (2) systems using digital modulation in the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz (6 dB bandwidth) | -              | <b>PASS</b> |          |
| - b) maximum peak conducted                                                                                             | -              | -           |          |
| - b) (1) frequency hopping in the bands 2400-2483.5 MHz or 5725-5850 MHz                                                | -              | <b>N/A</b>  |          |
| - b) (2) frequency hopping in the band 902-928 MHz                                                                      | -              | <b>N/A</b>  |          |
| - b) (3) systems using digital modulation in the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz                  | -              | <b>PASS</b> |          |
| - b) (4) maximum peak conducted > 6 dBi                                                                                 | -              | <b>N/A</b>  |          |
| - b) (4) (i) frequency hopping in the band 2400-2483.5 MHz                                                              | -              | <b>N/A</b>  |          |
| - b) (4) (ii) frequency hopping in the band 5725-5850 MHz                                                               | -              | <b>N/A</b>  |          |
| - b) (4) (iii) fixed, point-to-point                                                                                    | -              | <b>N/A</b>  |          |
| - c) directional antenna > 6 dBi                                                                                        | -              | <b>N/A</b>  |          |

|                                                                 |               |      |            |
|-----------------------------------------------------------------|---------------|------|------------|
| <b>Intentional radiated emissions</b>                           | <b>15.247</b> |      |            |
| - c) (1) fixed, point-to-point operation                        | -             | N/A  |            |
| - c) (1) (i) in the band 2400–2483.5 MHz                        | -             | N/A  |            |
| - c) (1) (ii) in the band 5725–5850 MHz                         | -             | N/A  |            |
| - c) (1) (iii) fixed, point-to-point                            | -             | N/A  |            |
| - c) (2) multiple directional beams in the band 2400–2483.5 MHz | -             | N/A  |            |
| - c) (2) (i) information                                        | -             | N/A  |            |
| - c) (2) (ii) sum of the power supplied to all antennas         | -             | N/A  |            |
| - c) (2) (iii) one antenna for multiple directional beams       | -             | N/A  |            |
| - c) (2) (iv) single directional beam                           | -             | N/A  |            |
| - d) intentional radiator                                       | -             | PASS |            |
| - e) peak power spectral density                                | -             | PASS |            |
| - f) hybrid system                                              | -             | N/A  |            |
| - g) continuous data stream during the test                     | -             | N/A  |            |
| - h) to avoid hopping on occupied channels                      | -             | N/A  |            |
| - i) RF exposure compliance                                     | -             | N/A  | P < 500 mW |

Standard RSS-247 Issue 2 : 2017

| TEST DESIGNATION                                                      | TEST PROCEDURE | VERDICT | COMMENTS |
|-----------------------------------------------------------------------|----------------|---------|----------|
| <b>3. Certification Requirements</b>                                  | -              | -       |          |
| - 3.1 RSS-gen compliance                                              | -              | N/A     |          |
| <b>5.2 Digital Modulation Systems</b>                                 | -              | -       |          |
| - (1) -6 dB bandwidth                                                 | -              | PASS    |          |
| - (2) transmitter power spectral density                              | -              | PASS    |          |
| <b>5.4 Transmitter Output Power and e.i.r.p. Requirement</b>          | -              | -       |          |
| - 1) 902-928 MHz frequency hopping systems output power / e.i.r.p.    | -              | N/A     |          |
| - 2) 2400-2483.5 MHz frequency hopping systems output power / e.i.r.p | -              | N/A     |          |
| - 3) 5725-5850 MHz frequency hopping systems output power / e.i.r.p.  | -              | N/A     |          |
| - 4) Digital modulation systems output power / e.i.r.p.               | -              | PASS    |          |
| - 5) point-to-point systems (2400-2483.5 and 5725-5850 MHz)           | -              | N/A     |          |
| - 6) Multiple directional beams antenna systems (2400-2483.5 MHz)     | -              | N/A     |          |
| <b>5.5 Unwanted emission</b>                                          | -              | PASS    |          |

Standard RSS-Gen Issue 5 : 2019

| TEST DESIGNATION                                                                 | TEST PROCEDURE | VERDICT | COMMENTS |
|----------------------------------------------------------------------------------|----------------|---------|----------|
| <b>6 Technical Requirements</b>                                                  | -              |         |          |
| - 6.6 Occupied Bandwidth                                                         | -              | PASS    |          |
| - 6.9 CISPR Quasi-peak detector                                                  | -              | PASS    |          |
| - 6.12 Transmitter Output Power                                                  | -              | PASS    |          |
| - 6.13 Transmitter unwanted emissions                                            | -              | PASS    |          |
| <b>7.2 Measurement Methods and Standard Specifications</b>                       | -              | -       |          |
| - 7.2.1 Measurement Bandwidths and Detector Functions                            | -              | N/A     |          |
| - 7.2.2 Emissions Falling Within Restricted Frequency Bands                      | -              | N/A     |          |
| - 7.2.3 Devices Employing Pulsed Operation                                       | -              | N/A     |          |
| - 7.2.4 AC Power Line Conducted Emissions Limits                                 | -              | PASS    |          |
| - 7.2.5 Transmitter Spurious Emission Limits                                     | -              | N/A     |          |
| - 7.2.6 Transmitter Frequency Stability                                          | -              | N/A     |          |
| - 7.2.7 Measurement Distance                                                     | -              | N/A     |          |
| <b>8.Licence-Exempt radio Apparatus</b>                                          | -              | -       |          |
| - 8.8 AC Power Line Conducted Emission Limits for licence-Exempt Radio Apparatus | -              | PASS    |          |

Sample subject to the test complies with the requirements of the reference document listed in §2 of this test report and, where applicable, with deviations 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.

Modifications : No

## 5. MEASUREMENT UNCERTAINTY

| PARAMETER                                           | MAXIMAL EMITECH<br>UNCERTAINTY   | MINIMAL STANDARD<br>UNCERTAINTY |
|-----------------------------------------------------|----------------------------------|---------------------------------|
| Radio frequency                                     | $\pm 1 \times 10^{-7}$           | $\pm 1 \times 10^{-7}$          |
| RF power, conducted                                 |                                  |                                 |
| RF power                                            | $\pm 0.8\text{dB}$               | $\pm 1 \text{ dB}$              |
| RF power (EN 300328 / EN 301893)                    | $\pm 1.3\text{dB}$               | $\pm 1.5 \text{ dB}$            |
| Power spectral density                              | $\pm 2.3\text{dB}$               | $\pm 3 \text{ dB}$              |
| Occupied bandwidth                                  |                                  |                                 |
| RF power                                            | $\pm 3.8 \%$                     | $\pm 5 \%$                      |
| RF power (EN 300328 / EN 301893)                    | $\pm 3.8 \%$                     | $\pm 5 \%$                      |
| Maximum frequency deviation                         |                                  |                                 |
| 300 Hz < audio frequency < 6 kHz                    | $\pm 1.2 \%$                     | $\pm 5 \%$                      |
| 6 kHz < audio frequency < 25 kHz                    | $\pm 1.2 \%$                     | $\pm 3 \text{ dB}$              |
| Adjacent channel power                              | $\pm 1.6 \text{ dB}$             | $\pm 3 \text{ dB}$              |
| Sensibility of receiver (conducted)                 | $\pm 2.0 \text{ dB}$             | $\pm 3 \text{ dB}$              |
| Blocking                                            | $\pm 4.0 \text{ dB}$             | $\pm 4 \text{ dB}$              |
| Transitoire                                         |                                  |                                 |
| Amplitude                                           | $\pm 8.5 \%$                     | $\pm 20 \%$                     |
| At the frequency                                    | $\pm 166 \text{ Hz}$             | $\pm 250 \text{ Hz}$            |
| Conducted emission (spurious)                       |                                  |                                 |
| $f \leq 1 \text{ GHz}$                              | $\pm 0.8 \text{ dB}$             | $\pm 3 \text{ dB}$              |
| 1 GHz - 12.75 GHz                                   | $\pm 1.6 \text{ dB}$             |                                 |
| Radiated emission (PAR / PIRE / RNE)                |                                  |                                 |
| $f \leq 62.5 \text{ MHz}$                           | $\pm 5.1 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| 62.5 MHz - 1 GHz                                    | $\pm 5.1 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| 1 GHz - 18 GHz                                      | $\pm 5.2 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| 18 GHz – 26 GHz                                     | $\pm 5.1 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| 26 GHz – 40 GHz                                     | $\pm 5.4 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| RF power (EN 300328 / EN 301893)                    | $\pm 5.3 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| PIRE and power spectral density with diode          | $\pm 5.4 \text{ dB}$             | $\pm 6 \text{ dB}$              |
| Radiated emission (magnetic field)                  |                                  |                                 |
| 9kHz – 30MHz                                        | $\pm 3 \text{ dB}$               | $\pm 6 \text{ dB}$              |
| RF level for a given BER                            | $\pm 0.8 \text{ dB}$             | $\pm 1.5 \text{ dB}$            |
| Supply voltages                                     | $\pm 3 \%$                       | $\pm 3 \%$                      |
| Temperature                                         | $\pm 1 \text{ }^{\circ}\text{C}$ | $\pm 1^{\circ}\text{C}$         |
| Humidity                                            | $\pm 5 \%$                       | $\pm 5 \%$                      |
| Time / Duty cycle                                   | $\pm 4.4 \%$                     | $\pm 5 \%$                      |
| Adaptivity                                          | $\pm 2.9 \text{ dB}$             | /                               |
| Radiated emission (electric field for FCC standard) |                                  |                                 |
| 9kHz – 30MHz                                        | $\pm 2.7 \text{ dB}$             | /                               |
| 30MHz – 1GHz                                        | $\pm 5.0 \text{ dB}$             | /                               |
| 1GHz – 18GHz                                        | $\pm 5.6 \text{ dB}$             | /                               |
| 18GHz – 26GHz                                       | $\pm 5.7 \text{ dB}$             | /                               |
| 26GHz – 40GHz                                       | $\pm 5.7 \text{ dB}$             | /                               |

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

## 6. TEST CONDITIONS AND RESULTS

### 6.1. Measurement of conducted emission on AC mains ports

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FCC 47 CFR PART 15 : 2020<br>RSS-247 Issue 2 : 2017                                          |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | §15.107 § 15.207 of FCC 47 CFR PART 15 : 2020<br>§ 7.2.4 and § 8.8 of RSS-Gen Issue 5 : 2019 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 80 cm above the ground reference plane. All power was connected to the system through Artificial Mains Network (AMN). The AMN is placed at 40 cm from the boundary of the EUT and bonded to a ground reference plane.</p> <p>All tested telecommunications lines (if applicable) were connected to an Asymmetric Artificial Network (AAN) and conducted voltage measurements on telecommunications lines were made at the output of the AAN.</p> <p>Where an AAN was not appropriate or available, measurements were made using a Capacitive Voltage Probe and/or a Current probe.</p> |                                                                                              |

| TESTED CABLE                                    | PARAMETER    | SEVERITY | VERDICT |
|-------------------------------------------------|--------------|----------|---------|
| Power supply 120 Vac / 60 Hz                    | 150kHz-30MHz | Class B  | -       |
| Power supply 120 Vac / 60 Hz<br>(Average value) | 150kHz-30MHz | Class B  | PASS    |

| LABORATORY PARAMETERS:                                                        | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|-------------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                           | 15 to 35 °C                | 22 °C           |
| Relative Humidity                                                             | 30 to 60 %                 | 45 %            |
| Atmospheric pressure                                                          | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No.                                             |                            |                 |
| Supplementary information: The radio part is deactivated during the charging. |                            |                 |

| TEST EQUIPMENT USED |                    |                 |                            |                    |                    |
|---------------------|--------------------|-----------------|----------------------------|--------------------|--------------------|
| Order Nr            | Category           | Manufacturer    | Type                       | Last validity date | Next validity date |
| 10067               | Bobine PE          | Emitech         | CISPR 16-2-1 : 2008        |                    |                    |
| 2820                | Cable              | /               | N-2m                       | 15/04/2020         | 15/06/2022         |
| 16499               | Cable              | C&C             | BNC-0.5m                   | 25/06/2019         | 25/08/2021         |
| 6602                | LISN               | Rohde & Schwarz | ESH3-Z5                    | 03/01/2020         | 03/03/2022         |
| 15614               | Multimeter         | Emitech         | Absorbeur courant de gaine | 23/04/2020         | 23/06/2022         |
| 2102                | Power supply       | SECAS           | CF1000 50/60               |                    |                    |
| 10517               | Receiver           | Rohde & Schwarz | ESRP7                      | 27/08/2018         | 27/10/2020         |
| 14804               | Shielded enclosure | Comtest         | FAR 3m                     |                    |                    |
| 0000                | Software           | Nexio           | BAT EMC                    |                    |                    |
| 0237                | Surges Suppressor  | Hewlett Packard | 11947A                     | 14/11/2018         | 14/01/2022         |

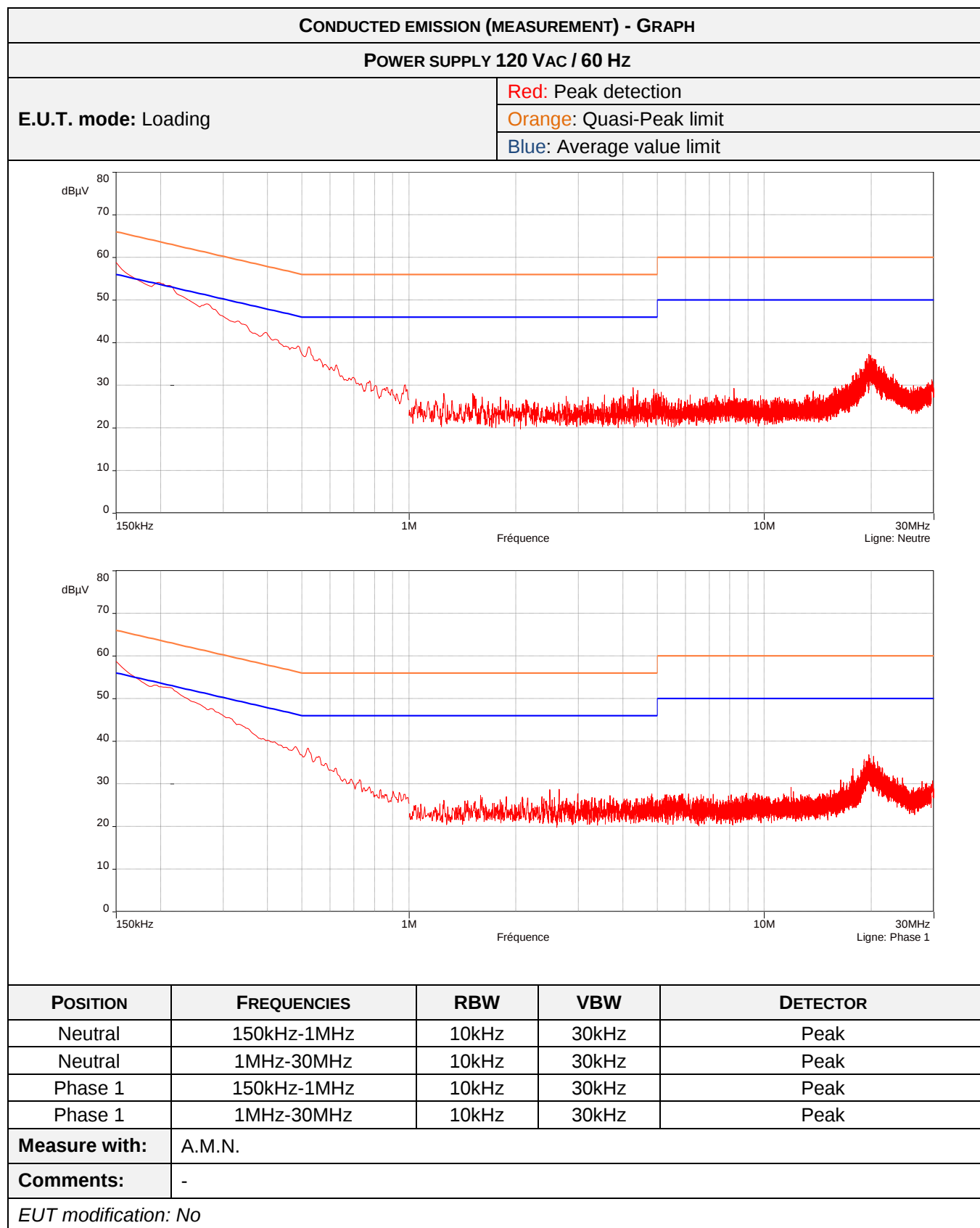
BAT-EMC software version: V3.18.0.19  
Blank cells = Permanent validity

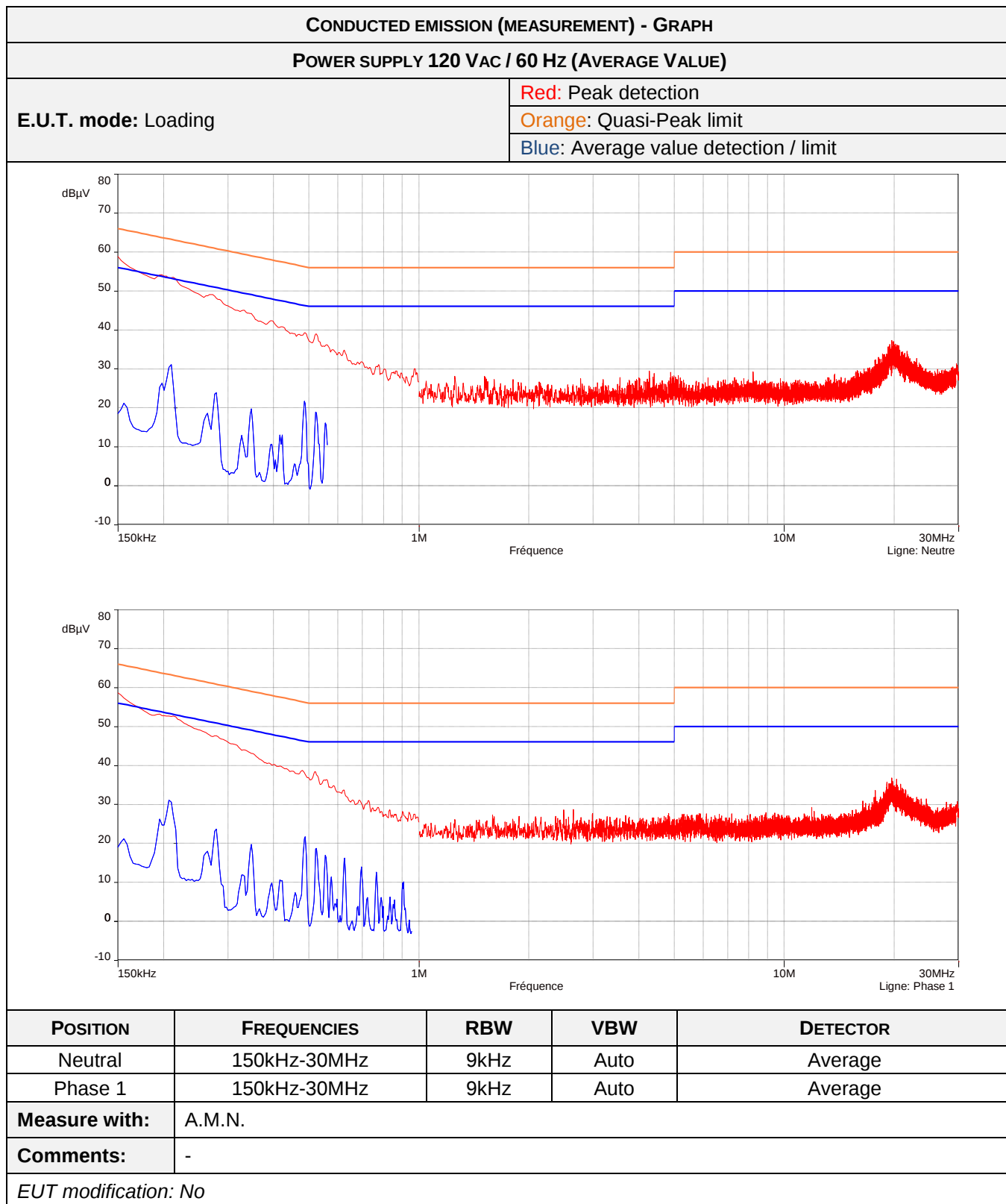
TEST SETUP PHOTOS - POWER SUPPLY 120 VAC / 60 HZ



TEST SETUP PHOTOS - POWER SUPPLY 120 VAC / 60 HZ







## 6.2. Digital modulation systems

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FCC 47 CFR PART 15 : 2020<br>RSS-247 Issue 2 : 2017<br>RSS-Gen Issue 5 : 2019                                         |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | § 15.247 a) (2) of FCC 47 CFR PART 15 : 2020<br>§ 5.2 a) of RSS-247 Issue 2 : 2017<br>§ 6.6 of RSS-Gen Issue 5 : 2019 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 150 cm above the ground reference plane. Measurement are done on a normalized test site by the substitution method.</p> <p>The test antenna is oriented in the two polarizations (vertical and horizontal), and the product is rotated at 360° in the horizontal plane (See photo(s) for initial position of the EUT(0°)). If applicable the test antenna was raised and lowered through the specified range of height until a maximum signal level is detected.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                                                                                                                       |

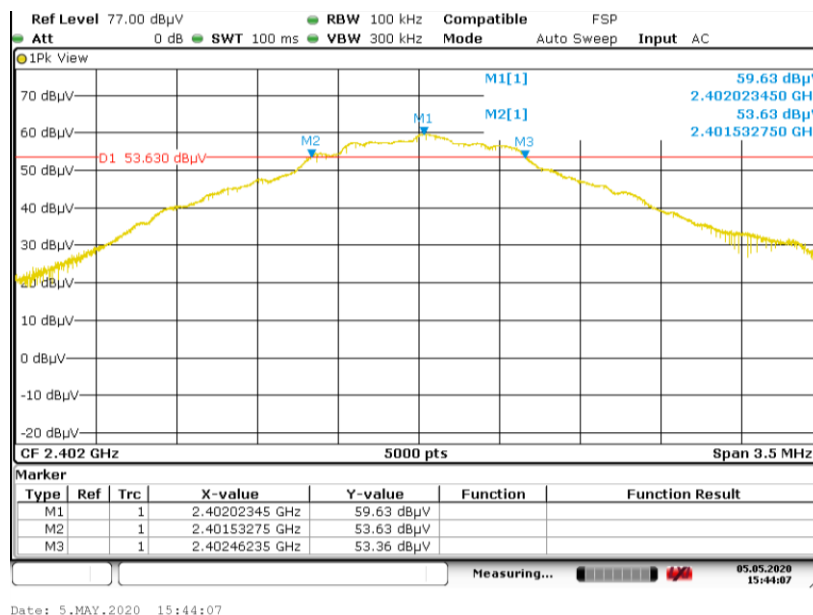
| LABORATORY PARAMETERS:           | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|----------------------------------|----------------------------|-----------------|
| Ambient Temperature              | 10 to 40 °C                | 22°C            |
| Relative Humidity                | 10 to 90 %                 | 45%             |
| Atmospheric pressure             | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No |                            |                 |
| Supplementary information: N/A   |                            |                 |

| TEST EQUIPMENT USED |                    |                 |        |                    |                    |
|---------------------|--------------------|-----------------|--------|--------------------|--------------------|
| Order Nr            | Category           | Manufacturer    | Type   | Last validity date | Next validity date |
| 0941                | Antenna            | Emco            | 3115   | 08/02/2019         | 08/04/2022         |
| 11184               | Cable              | C&C             | N-5m   | 16/04/2020         | 16/06/2022         |
| 14226               | Cable              | C&C             | N-4m   | 12/11/2018         | 12/01/2021         |
| 14223               | Cable              | C&C             | N-6m   | 15/04/2020         | 15/06/2022         |
| 10517               | Receiver           | Rohde & Schwarz | ESRP7  | 27/08/2018         | 27/10/2020         |
| 14622               | Shielded enclosure | Comtest         | SAC 3m | -                  | -                  |

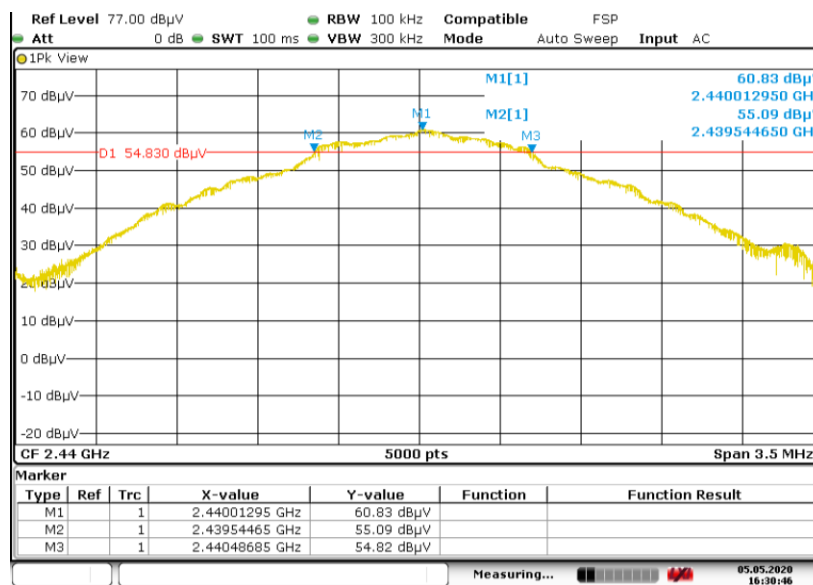
Blank cells = Permanent validity

6 dB Bandwidth

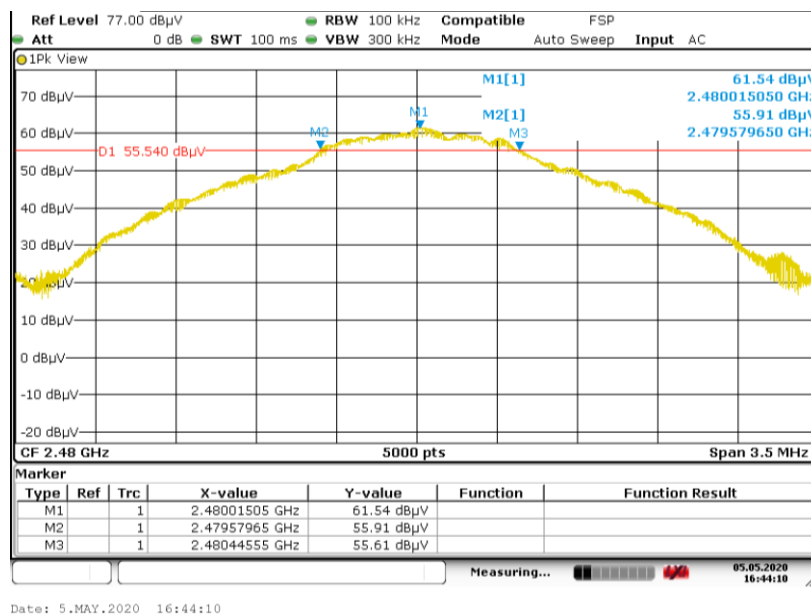
| E.U.T. position | Antenna type    | Frequency | Results (MHz) |
|-----------------|-----------------|-----------|---------------|
| Y               | «short» antenna | 2402 MHz  | 0.930         |
|                 |                 | 2440 MHz  | 0.942         |
|                 |                 | 2480 MHz  | 0.865         |



Date: 5.MAY.2020 15:44:07

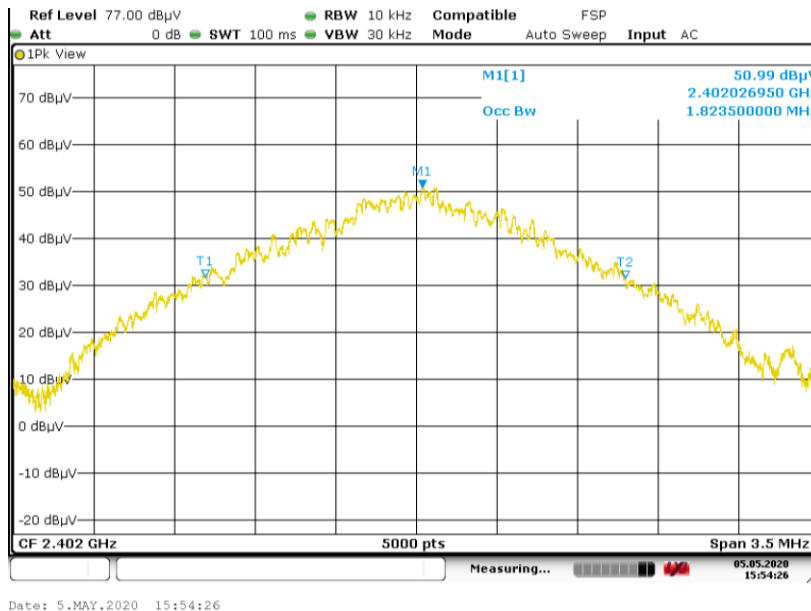


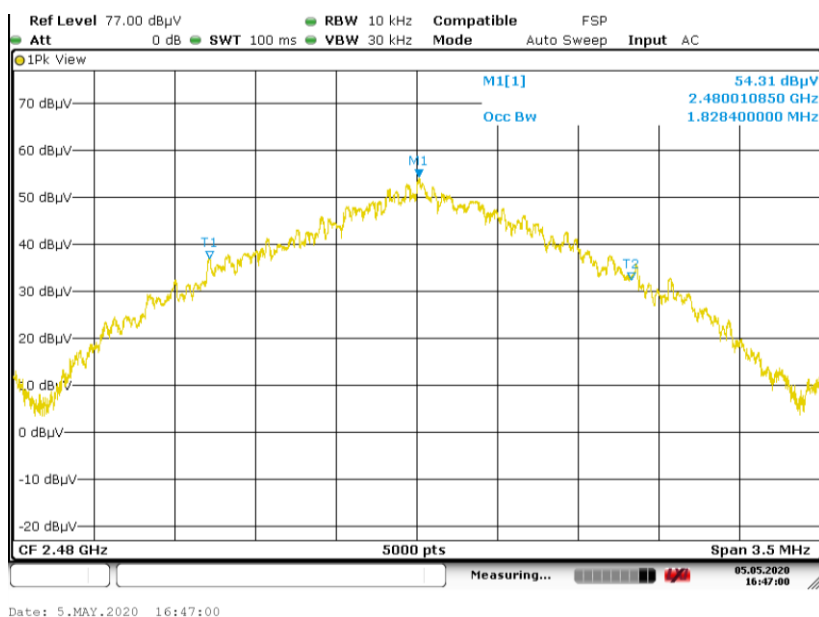
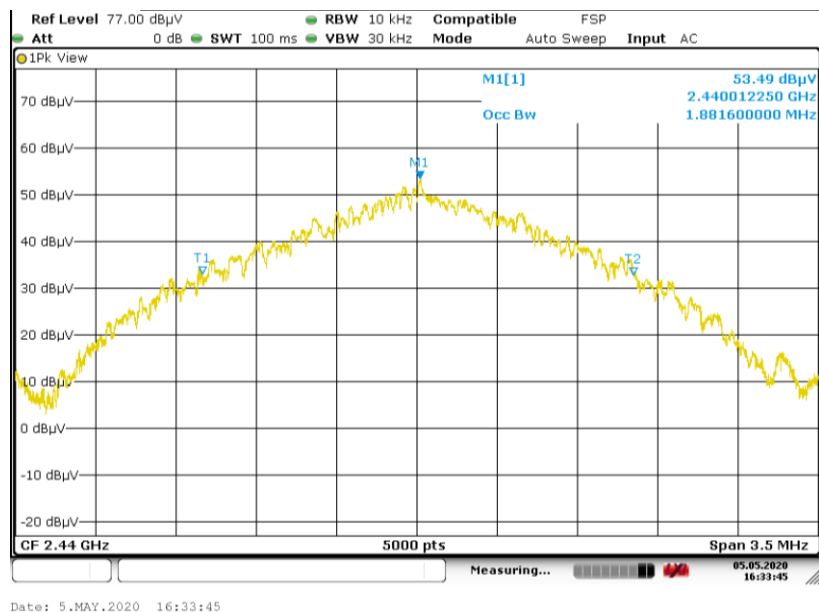
Date: 5.MAY.2020 16:30:46



99% Bandwidth

| E.U.T. position | Antenna type    | Frequency | Results (MHz) |
|-----------------|-----------------|-----------|---------------|
| Y               | «short» antenna | 2402 MHz  | 1.823         |
|                 |                 | 2440 MHz  | 1.882         |
|                 |                 | 2480 MHz  | 1.828         |





### 6.3. Transmitter output power

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FCC 47 CFR PART 15 : 2020<br>RSS-247 Issue 2 : 2017                             |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | § 15.247 b) (3) of FCC 47 CFR PART 15 : 2020<br>§ 5.4 of RSS-247 Issue 2 : 2017 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 150 cm above the ground reference plane. Measurement are done on a normalized test site by the substitution method.</p> <p>The test antenna is oriented in the two polarizations (vertical and horizontal), and the product is rotated at 360° in the horizontal plane (See photo(s) for initial position of the EUT(0°)). If applicable the test antenna was raised and lowered through the specified range of height until a maximum signal level is detected.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                                                                                 |

| LABORATORY PARAMETERS:           | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|----------------------------------|----------------------------|-----------------|
| Ambient Temperature              | 10 to 40 °C                | 22°C            |
| Relative Humidity                | 10 to 90 %                 | 45%             |
| Atmospheric pressure             | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No |                            |                 |
| Supplementary information: N/A   |                            |                 |

| TEST EQUIPMENT USED |                    |                 |        |                    |                    |
|---------------------|--------------------|-----------------|--------|--------------------|--------------------|
| Order Nr            | Category           | Manufacturer    | Type   | Last validity date | Next validity date |
| 0941                | Antenna            | Emco            | 3115   | 08/02/2019         | 08/04/2022         |
| 11184               | Cable              | C&C             | N-5m   | 16/04/2020         | 16/06/2022         |
| 14226               | Cable              | C&C             | N-4m   | 12/11/2018         | 12/01/2021         |
| 14223               | Cable              | C&C             | N-6m   | 15/04/2020         | 15/06/2022         |
| 10517               | Receiver           | Rohde & Schwarz | ESRP7  | 27/08/2018         | 27/10/2020         |
| 14622               | Shielded enclosure | Comtest         | SAC 3m |                    |                    |

Blank cells = Permanent validity

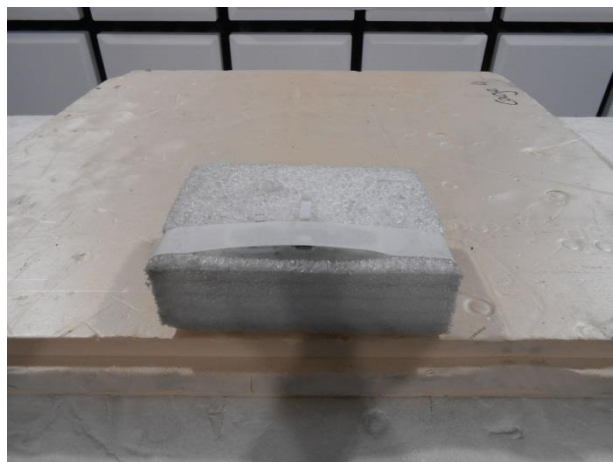
| E.U.T. position | Antenna type    | Frequency | Electro-magnetic field (dBμV/m) | TP* (dBm) | Limit (dBm) |
|-----------------|-----------------|-----------|---------------------------------|-----------|-------------|
| Y               | «short» antenna | 2402 MHz  | 96.77                           | -0.607    | + 30.0      |
|                 |                 | 2440 MHz  | 97.35                           | -0.027    | + 30.0      |
|                 |                 | 2480 MHz  | 98.32                           | 0.943     | + 30.0      |
|                 | «long» antenna  | 2402 MHz  | 94.81                           | -2.567    | + 30.0      |
|                 |                 | 2440 MHz  | 95.34                           | -2.037    | + 30.0      |
|                 |                 | 2480 MHz  | 95.37                           | -2.007    | + 30.0      |

\* TP =  $(E \times d)^2 / (30 \times 1.64)$  for d = 3 m

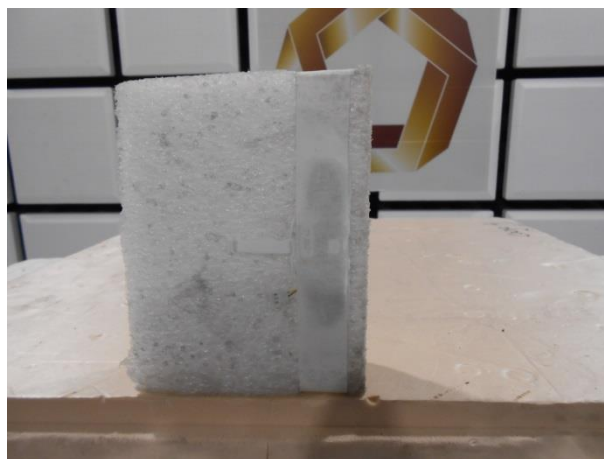
E.U.T. position:



AXIS X



AXIS Y



AXIS Z

## Parameter of the emission

| Parameters:                      | Parameters:                      |
|----------------------------------|----------------------------------|
| Data rate.....: 2 Mbit/s         | Data rate.....: 2 Mbit/s         |
| TX Power.....: +4 dBm            | TX Power.....: +4 dBm            |
| Antenna.....: short              | Antenna.....: long               |
| (Start) Channel.....: 02         | (Start) Channel.....: 02         |
| End Channel.....: 80             | End Channel.....: 80             |
| Time on each channel: 50 ms      | Time on each channel: 50 ms      |
| Time between two channels: 10 ms | Time between two channels: 10 ms |

Channel 2402 MHz

| Parameters:                      | Parameters:                      |
|----------------------------------|----------------------------------|
| Data rate.....: 2 Mbit/s         | Data rate.....: 2 Mbit/s         |
| TX Power.....: +4 dBm            | TX Power.....: +4 dBm            |
| Antenna.....: short              | Antenna.....: long               |
| (Start) Channel.....: 40         | (Start) Channel.....: 40         |
| End Channel.....: 80             | End Channel.....: 80             |
| Time on each channel: 50 ms      | Time on each channel: 50 ms      |
| Time between two channels: 10 ms | Time between two channels: 10 ms |

Channel 2440 MHz

| Parameters:                      | Parameters:                      |
|----------------------------------|----------------------------------|
| Data rate.....: 2 Mbit/s         | Data rate.....: 2 Mbit/s         |
| TX Power.....: +4 dBm            | TX Power.....: +4 dBm            |
| Antenna.....: short              | Antenna.....: long               |
| (Start) Channel.....: 80         | (Start) Channel.....: 80         |
| End Channel.....: 80             | End Channel.....: 80             |
| Time on each channel: 50 ms      | Time on each channel: 50 ms      |
| Time between two channels: 10 ms | Time between two channels: 10 ms |

Channel 2480 MHz

#### 6.4. Peak power spectral density

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FCC 47 CFR PART 15 : 2020<br>RSS-247 Issue 2 : 2017                            |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | § 15.247 e) of FCC 47 CFR PART 15 : 2020<br>§ 5.2 b) of RSS-247 Issue 2 : 2017 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 150 cm above the ground reference plane. Measurement are done on a normalized test site by the substitution method.</p> <p>The test antenna is oriented in the two polarizations (vertical and horizontal), and the product is rotated at 360° in the horizontal plane (See photo(s) for initial position of the EUT(0°)). If applicable the test antenna was raised and lowered through the specified range of height until a maximum signal level is detected.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                                                                                |

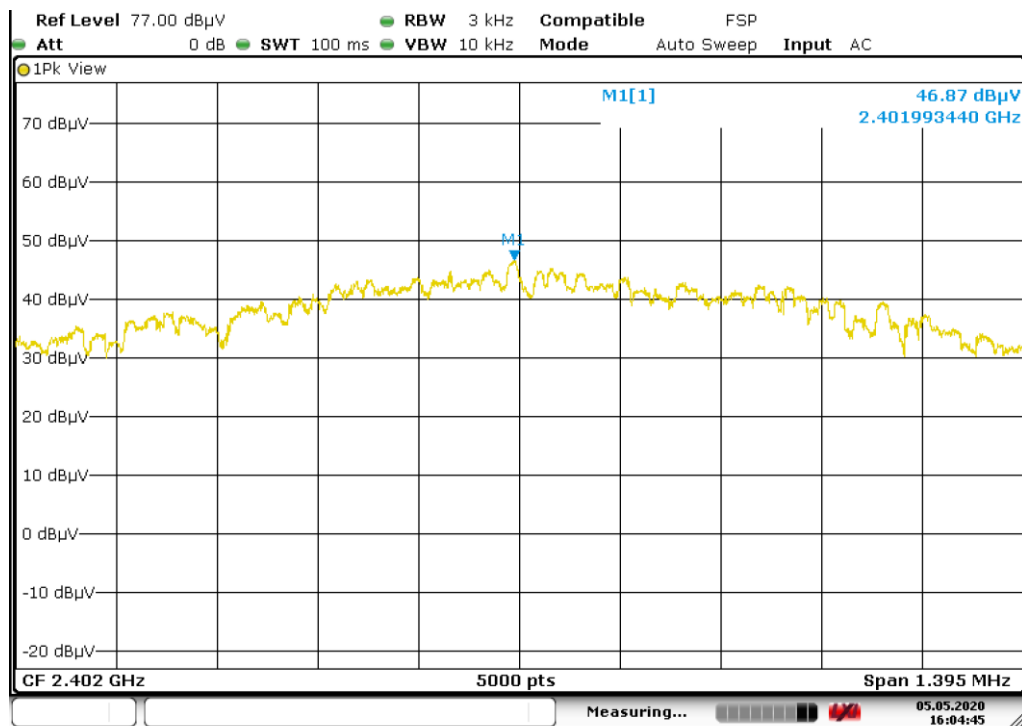
| LABORATORY PARAMETERS:           | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|----------------------------------|----------------------------|-----------------|
| Ambient Temperature              | 10 to 40 °C                | 22°C            |
| Relative Humidity                | 10 to 90 %                 | 45%             |
| Atmospheric pressure             | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No |                            |                 |
| Supplementary information: N/A   |                            |                 |

| TEST EQUIPMENT USED |                    |                 |        |                    |                    |
|---------------------|--------------------|-----------------|--------|--------------------|--------------------|
| Order Nr            | Category           | Manufacturer    | Type   | Last validity date | Next validity date |
| 0941                | Antenna            | Emco            | 3115   | 08/02/2019         | 08/04/2022         |
| 11184               | Cable              | C&C             | N-5m   | 16/04/2020         | 16/06/2022         |
| 14226               | Cable              | C&C             | N-4m   | 12/11/2018         | 12/01/2021         |
| 14223               | Cable              | C&C             | N-6m   | 15/04/2020         | 15/06/2022         |
| 10517               | Receiver           | Rohde & Schwarz | ESRP7  | 27/08/2018         | 27/10/2020         |
| 14622               | Shielded enclosure | Comtest         | SAC 3m |                    |                    |

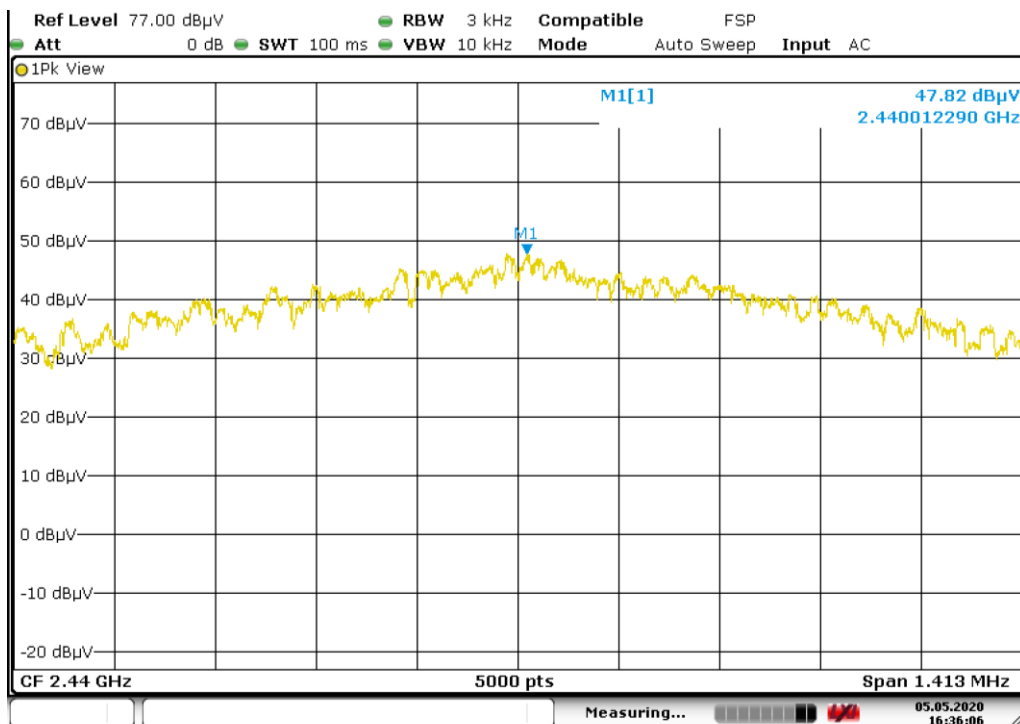
Blank cells = Permanent validity

| E.U.T. position | Antenna type    | Frequency | Electro-magnetic field (dBμV/m) | TP* (dBm) | Limit (dBm) |
|-----------------|-----------------|-----------|---------------------------------|-----------|-------------|
| Y               | «short» antenna | 2402 MHz  | 82.92                           | -14.5     | + 8.0       |
|                 |                 | 2440 MHz  | 84.06                           | -13.3     | + 8.0       |
|                 |                 | 2480 MHz  | 84.41                           | -13.0     | + 8.0       |

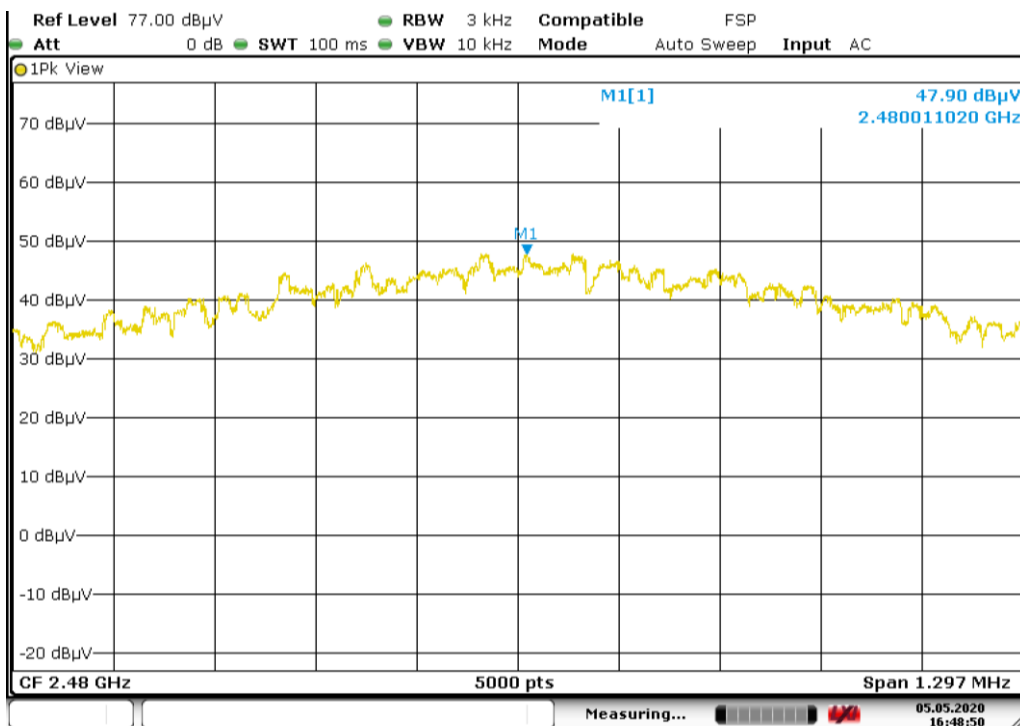
\* TP = (E x d)² / (30 x 1.64) for d = 3 m



Date: 5.MAY.2020 16:04:45



Date: 5.MAY.2020 16:36:06



Date: 5.MAY.2020 16:48:51

## 6.5. Additional provisions to the general radiated emissions limitation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FCC 47 CFR PART 15 : 2020<br>RSS-247 Issue 2 : 2017                                         |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | § 15.215 b) and § 15.247 d) of FCC 47 CFR PART 15 : 2020<br>§ 5.5 of RSS-247 Issue 2 : 2017 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 150 cm above the ground reference plane. Measurement are done on a normalized test site by the substitution method.</p> <p>The test antenna is oriented in the two polarizations (vertical and horizontal), and the product is rotated at 360° in the horizontal plane (See photo(s) for initial position of the EUT(0°)). If applicable the test antenna was raised and lowered through the specified range of height until a maximum signal level is detected.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p> |                                                                                             |

| LABORATORY PARAMETERS:           | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|----------------------------------|----------------------------|-----------------|
| Ambient Temperature              | 10 to 40 °C                | 22°C            |
| Relative Humidity                | 10 to 90 %                 | 45%             |
| Atmospheric pressure             | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No |                            |                 |
| Supplementary information: N/A   |                            |                 |

| TEST EQUIPMENT USED |                    |                 |        |                    |                    |
|---------------------|--------------------|-----------------|--------|--------------------|--------------------|
| Order Nr            | Category           | Manufacturer    | Type   | Last validity date | Next validity date |
| 0941                | Antenna            | Emco            | 3115   | 08/02/2019         | 08/04/2022         |
| 11184               | Cable              | C&C             | N-5m   | 16/04/2020         | 16/06/2022         |
| 14226               | Cable              | C&C             | N-4m   | 12/11/2018         | 12/01/2021         |
| 14223               | Cable              | C&C             | N-6m   | 15/04/2020         | 15/06/2022         |
| 10517               | Receiver           | Rohde & Schwarz | ESRP7  | 27/08/2018         | 27/10/2020         |
| 14622               | Shielded enclosure | Comtest         | SAC 3m |                    |                    |

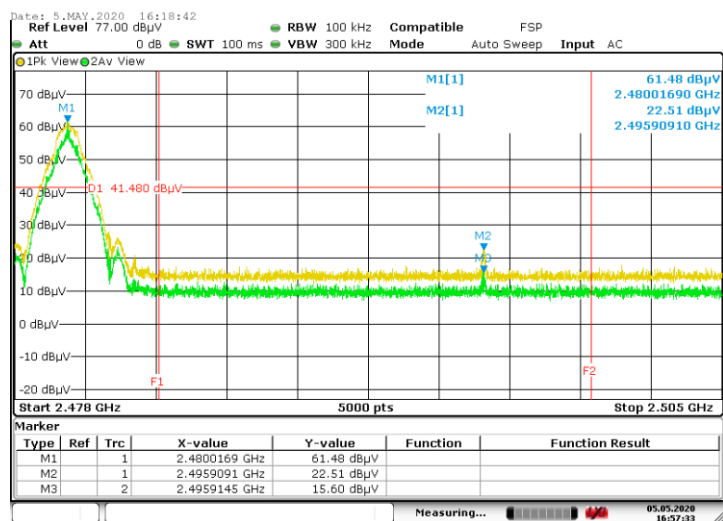
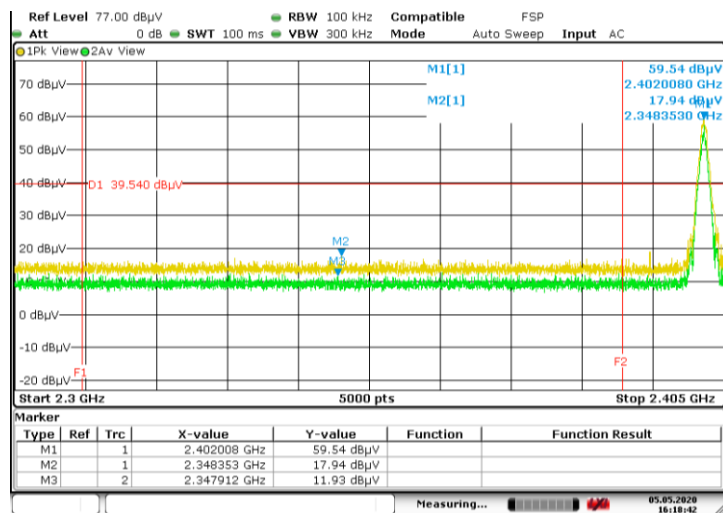
Blank cells = Permanent validity

Lower Band Edge: from 2310 MHz to 2390 MHz  
Upper Band Edge: from 2483.5 MHz to 2500 MHz

Polarization of test antenna: Horizontal (height = 150 cm) } For 2402 MHz  
Position of equipment: azimuth = 25°

Polarization of test antenna: Horizontal (height = 140 cm) } For 2480 MHz  
Position of equipment: azimuth = 40°

| E.U.T. position | Antenna type    | Frequency (MHz) | Field Strength Level of fundamental (dBμV/m) | Detector (Peak or Average) | Frequency of maximum Band-edges Emission (MHz) | Calculated Max Out of Band Emission Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|-----------------|-----------------|----------------------------------------------|----------------------------|------------------------------------------------|----------------------------------------------------|----------------|-------------|
| Y               | «short» antenna | 2402.01         | 95.59                                        | Average                    | 2347.91                                        | 47.98                                              | 54.0           | 6.02        |
|                 |                 | 2480.02         | 97.99                                        | Average                    | 2495.91                                        | 52.11                                              |                | 1.89        |



Date: 5.MAY.2020 16:57:33

## 6.6. Unintentional radiated emissions and transmitter unwanted emission in the band 9 kHz – 25 GHz

|                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                                    | FCC 47 CFR PART 15 : 2020<br>RSS-Gen Issue 5 : 2019                                              |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                                           | § 15.205; § 15.209 and § 15.247 of FCC 47 CFR PART 15 : 2020<br>§ 6.13 of RSS-Gen Issue 5 : 2019 |
| <p><b>General test setup:</b> E.U.T. is set on an insulating support at 0.8 m (&lt;1GHz) and 1.5 m (&gt;1GHz) above the ground reference plane.</p> <p>For maximum meter reading at each frequency, the antenna height is adjusted between 1 m and 4 m above the ground plane for 9 kHz - 25 GHz. A 360 degrees rotation of the EUT is performed in vertical and horizontal polarization.</p> |                                                                                                  |

| TESTED CONFIGURATION                                         | PARAMETER   | VERDICT     |
|--------------------------------------------------------------|-------------|-------------|
| Maxhold 360° - Tx 2402 MHz channel - Parallel antenna        | 9kHz-30MHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - 45° antenna             | 9kHz-30MHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Perpendicular antenna   | 9kHz-30MHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Horizontal polarization | 30MHz-1GHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Vertical polarization   | 30MHz-1GHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Horizontal polarization | 1GHz-18GHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Vertical polarization   | 1GHz-18GHz  | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Horizontal polarization | 18GHz-25GHz | <b>PASS</b> |
| Maxhold 360° - Tx 2402 MHz channel - Vertical polarization   | 18GHz-25GHz | <b>PASS</b> |

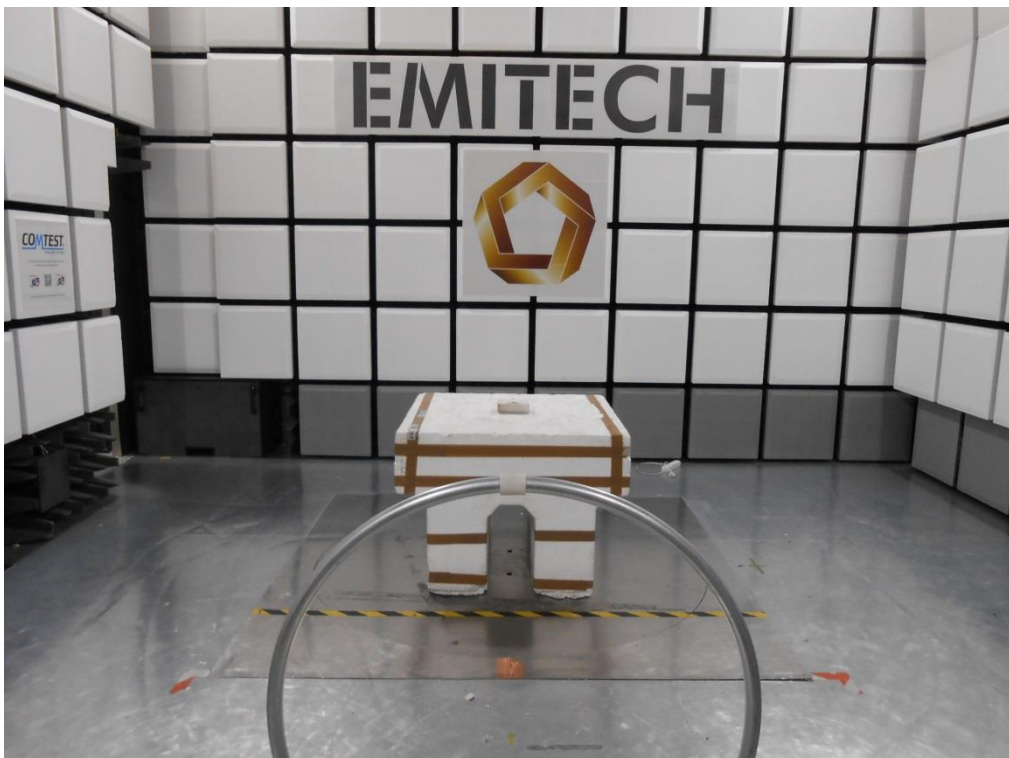
| LABORATORY PARAMETERS:                                                                                                                                 | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                                                                                                    | 10 to 40 °C                | 23°C            |
| Relative Humidity                                                                                                                                      | 10 to 90 %                 | 37%             |
| Atmospheric pressure                                                                                                                                   | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No                                                                                                                       |                            |                 |
| <p>Supplementary information:</p> <p>The measurement are carried out on the three advertising channels, in Y position, and with the small antenna.</p> |                            |                 |

| TEST EQUIPMENT USED |                 |                             |            |            |            |
|---------------------|-----------------|-----------------------------|------------|------------|------------|
| CATEGORY            | BRAND           | TYPE                        | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Amplifier           | HP              | 8447F - 26dB                | 14447      | 25/07/2019 | 25/09/2020 |
| Amplifier           | HP              | 8449B                       | 14524      | 15/04/2020 | 15/06/2021 |
| Antenna             | Emco            | 6502                        | 9579       | 22/10/2019 | 22/12/2021 |
| Antenna             | Emco            | 3115                        | 0941       | 08/02/2019 | 08/04/2022 |
| Antenna             | Oritel          | CM 42/25                    | 1045       | 27/06/2019 | 27/08/2022 |
| Cable               | C&C             | N-5m                        | 11184      | 16/04/2020 | 16/06/2022 |
| Cable               | C&C             | N-4m                        | 14226      | 12/11/2018 | 12/01/2021 |
| Cable               | C&C             | N-6m                        | 14223      | 15/04/2020 | 15/06/2022 |
| Cable               | C&C             | K-2m                        | 11132      | 23/05/2018 | 23/07/2020 |
| Cable               | C&C             | K-2m                        | 11133      | 23/05/2018 | 23/07/2020 |
| Cable               | Sucoflex        | N-3m                        | 12929      | 16/04/2020 | 16/06/2022 |
| Filter              | Micro-Tronics   | HPM 14758                   | 4691       | 21/05/2019 | 21/07/2022 |
| Receiver            | Rohde & Schwarz | ESRP7                       | 10517      | 27/08/2018 | 27/10/2020 |
| Shielded enclosure  | Comtest         | SAC 3m                      | 14622      |            |            |
| Software            | Nexio           | BAT EMC                     | 0000       |            |            |
| Spectrum analyzer   | Rohde & Schwarz | FSP40 (V 4.00SP1-V3.0-10-2) | 5175       | 20/09/2018 | 20/11/2020 |

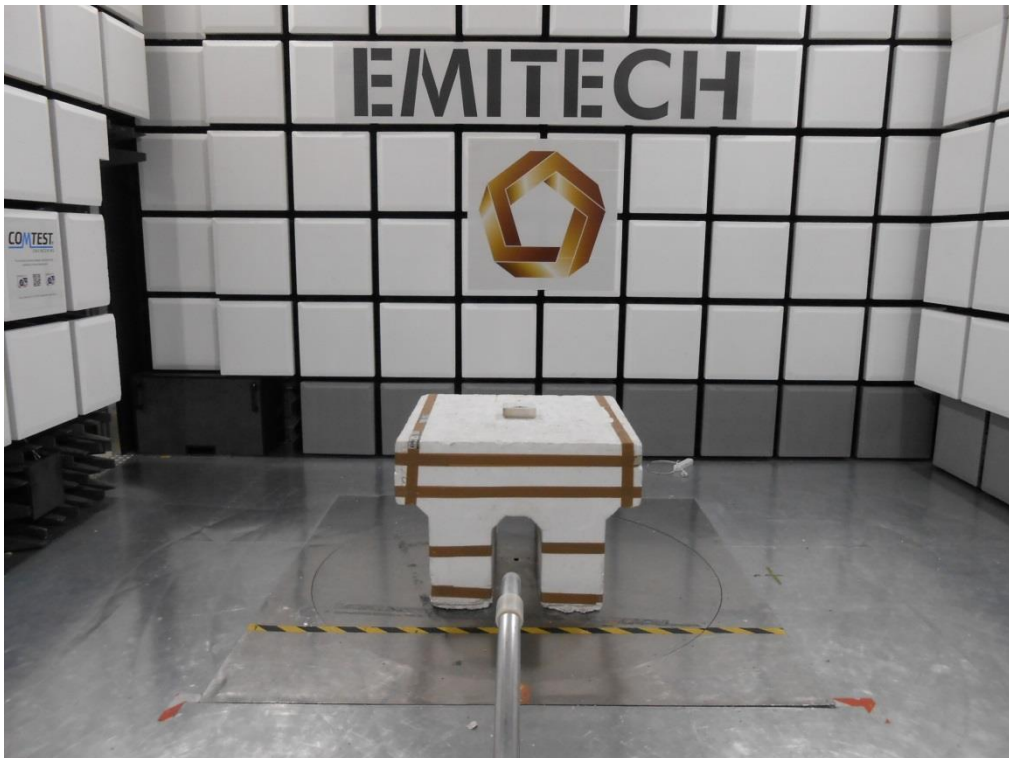
BAT-EMC software version: V3.18.0.19

Blank cells = Permanent validity

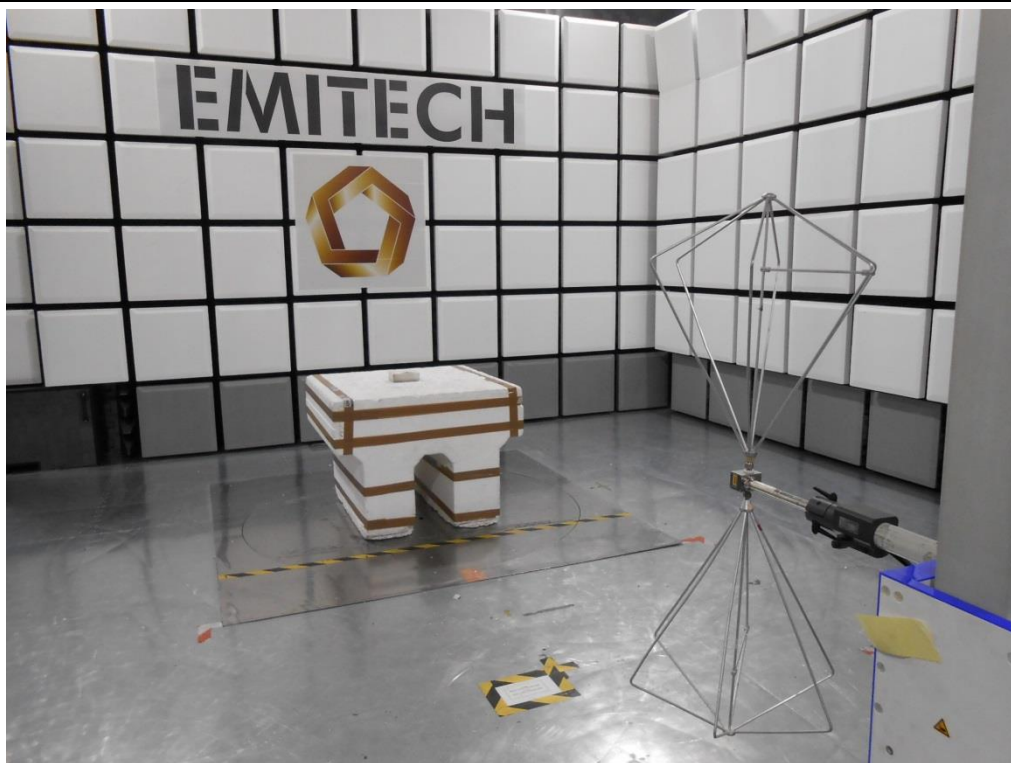
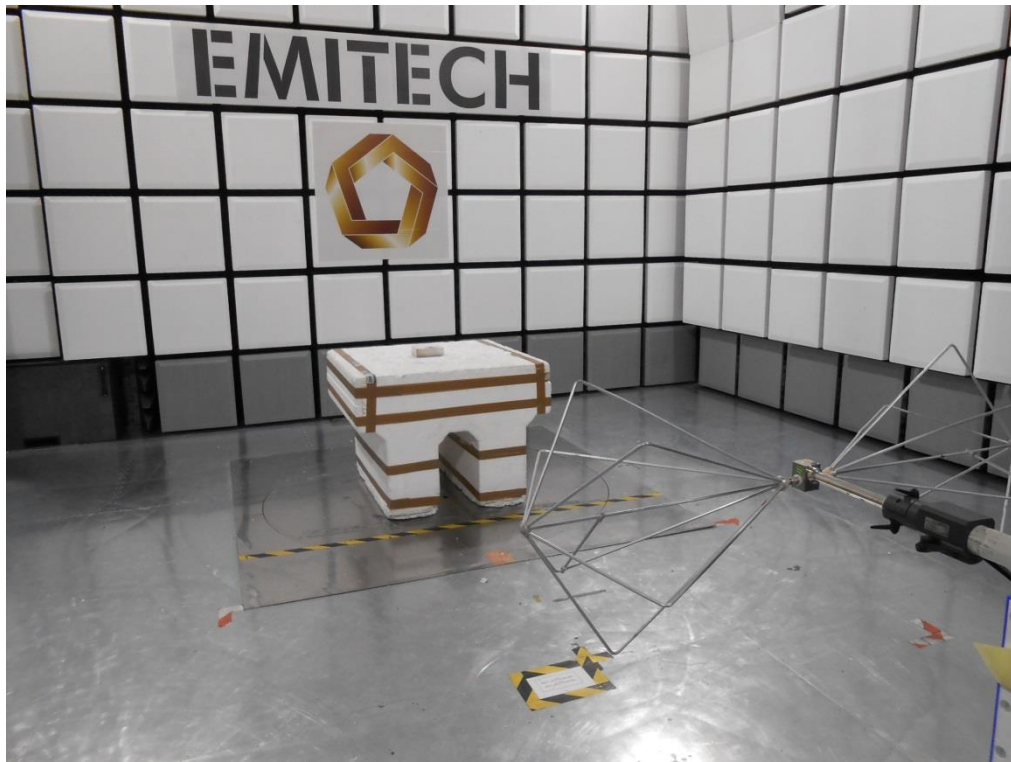
TEST SETUP PHOTOS  
9 kHz – 30 MHz



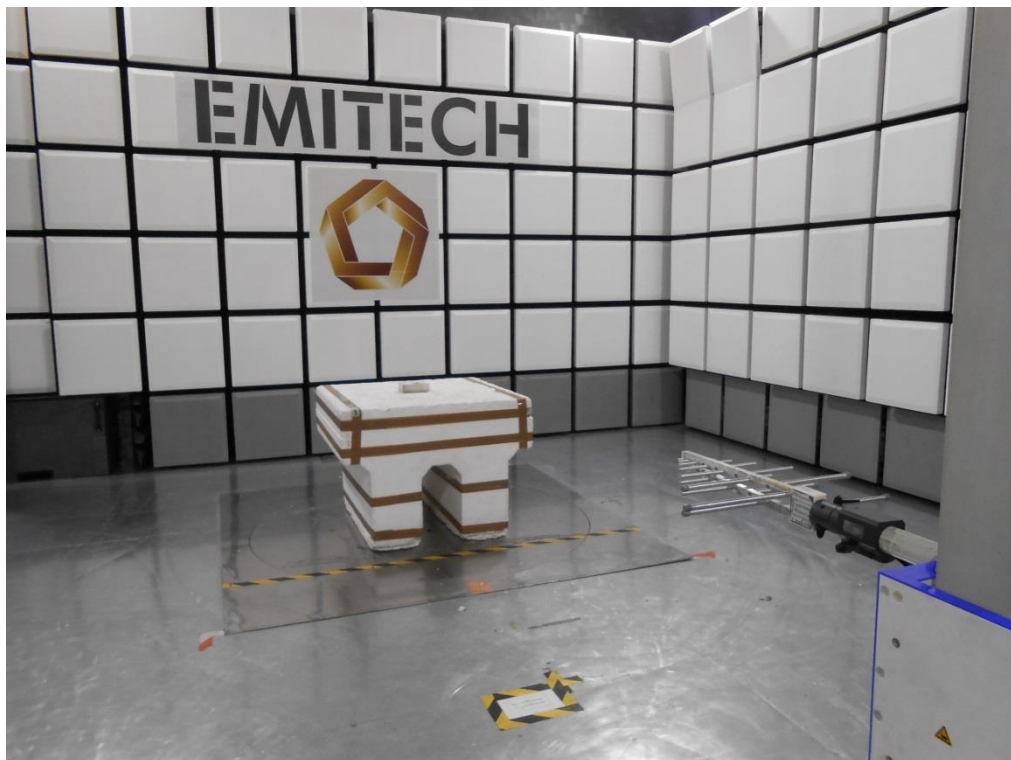
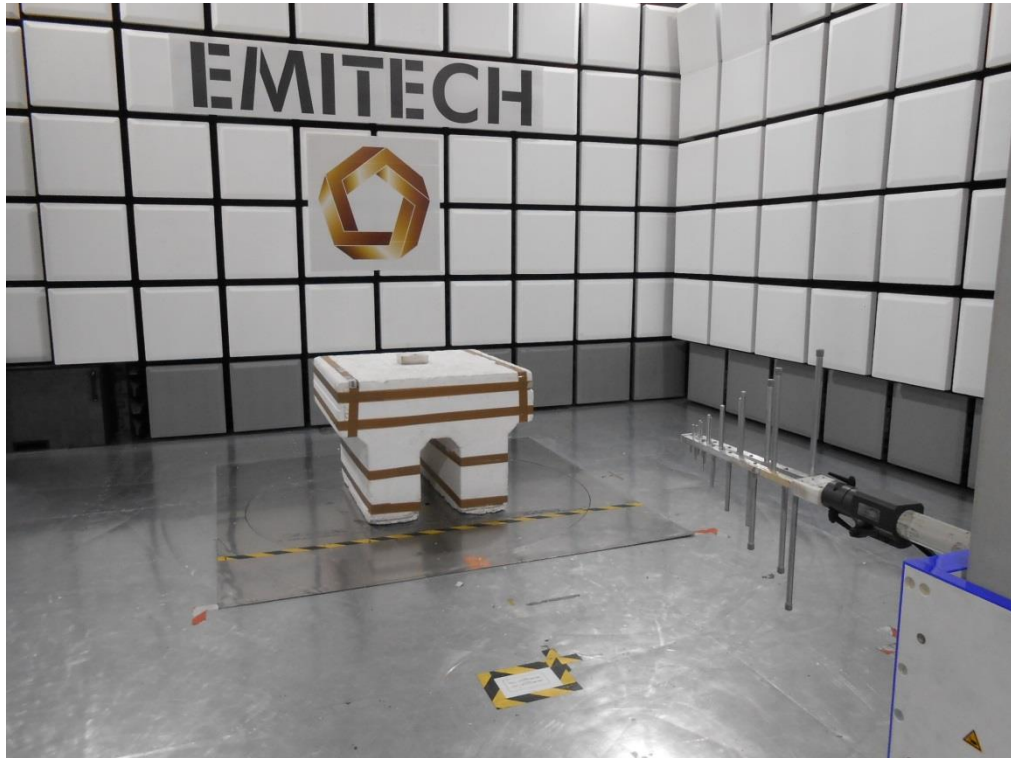
TEST SETUP PHOTOS  
9 KHz – 30 MHz



TEST SETUP PHOTOS  
30 MHz – 1 GHz



TEST SETUP PHOTOS  
30 MHz – 1 GHz

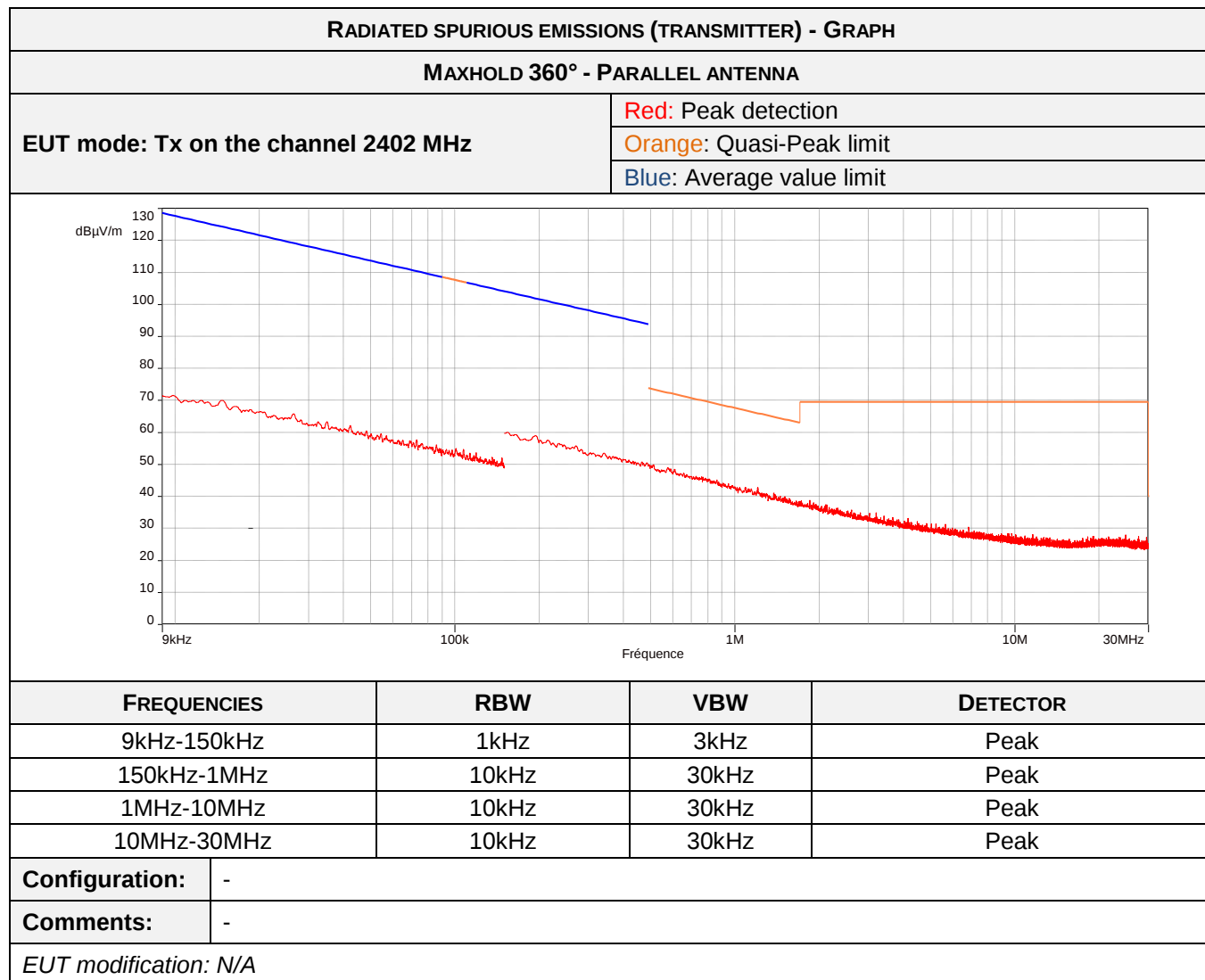


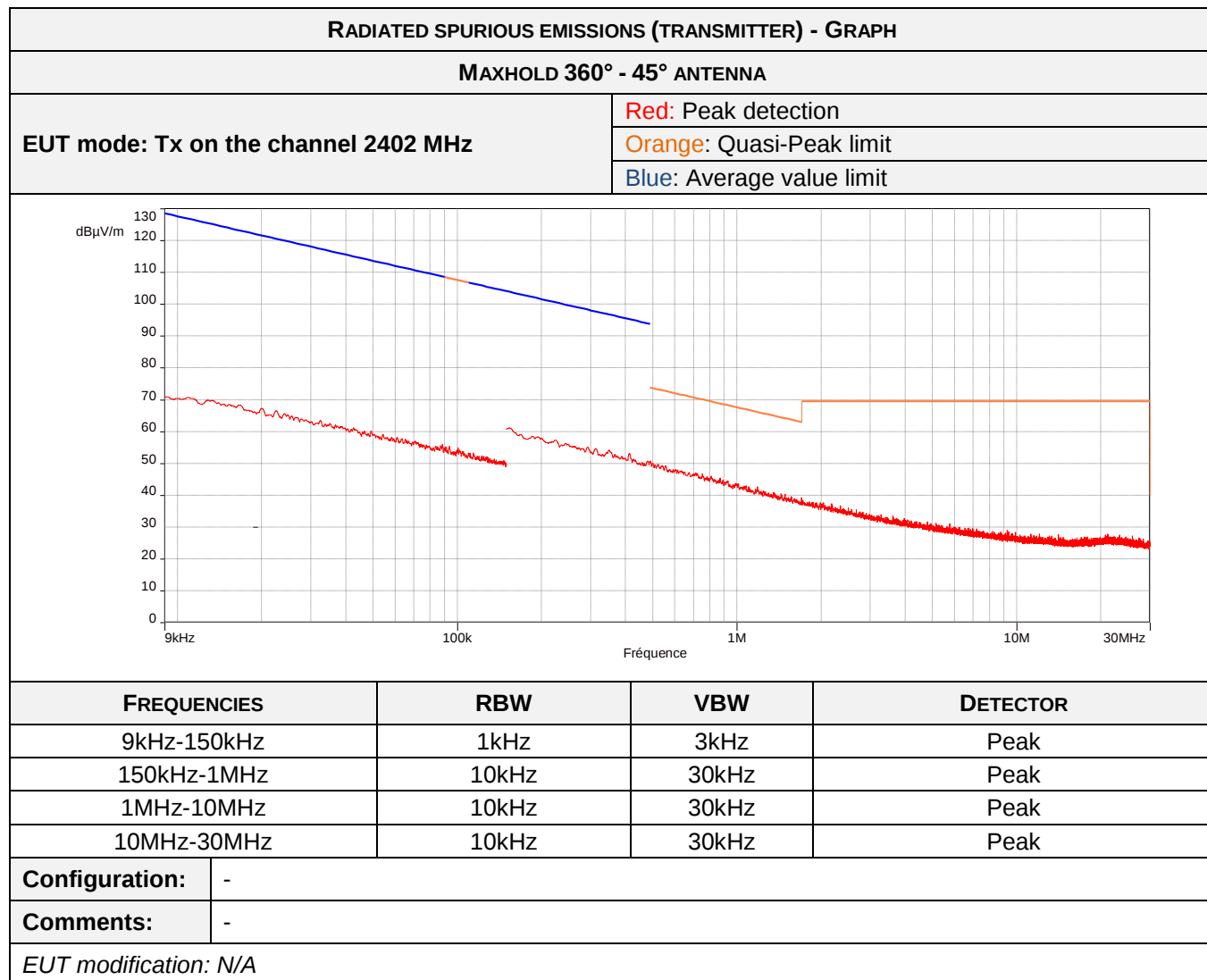
TEST SETUP PHOTOS  
1 GHz – 18 GHz

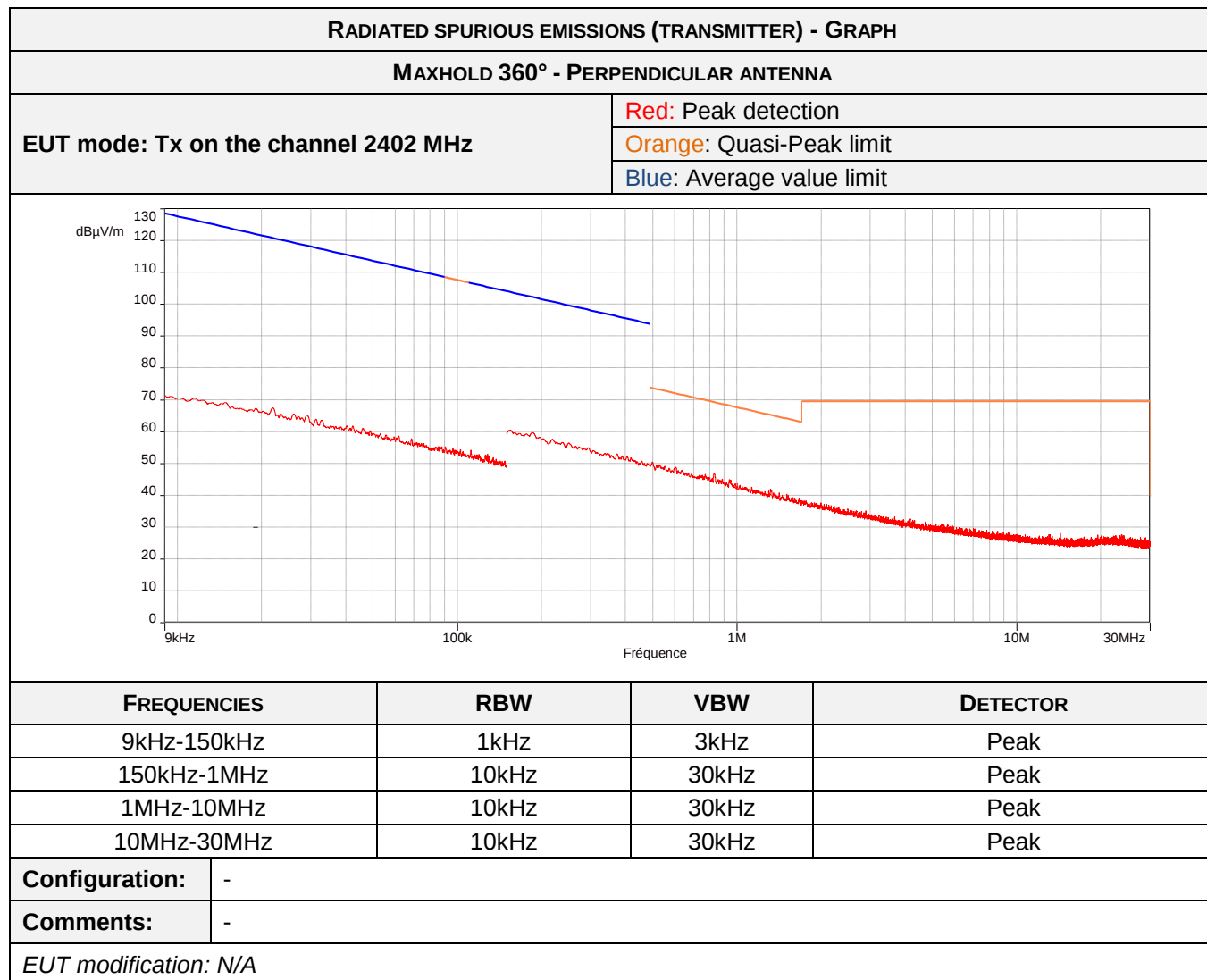


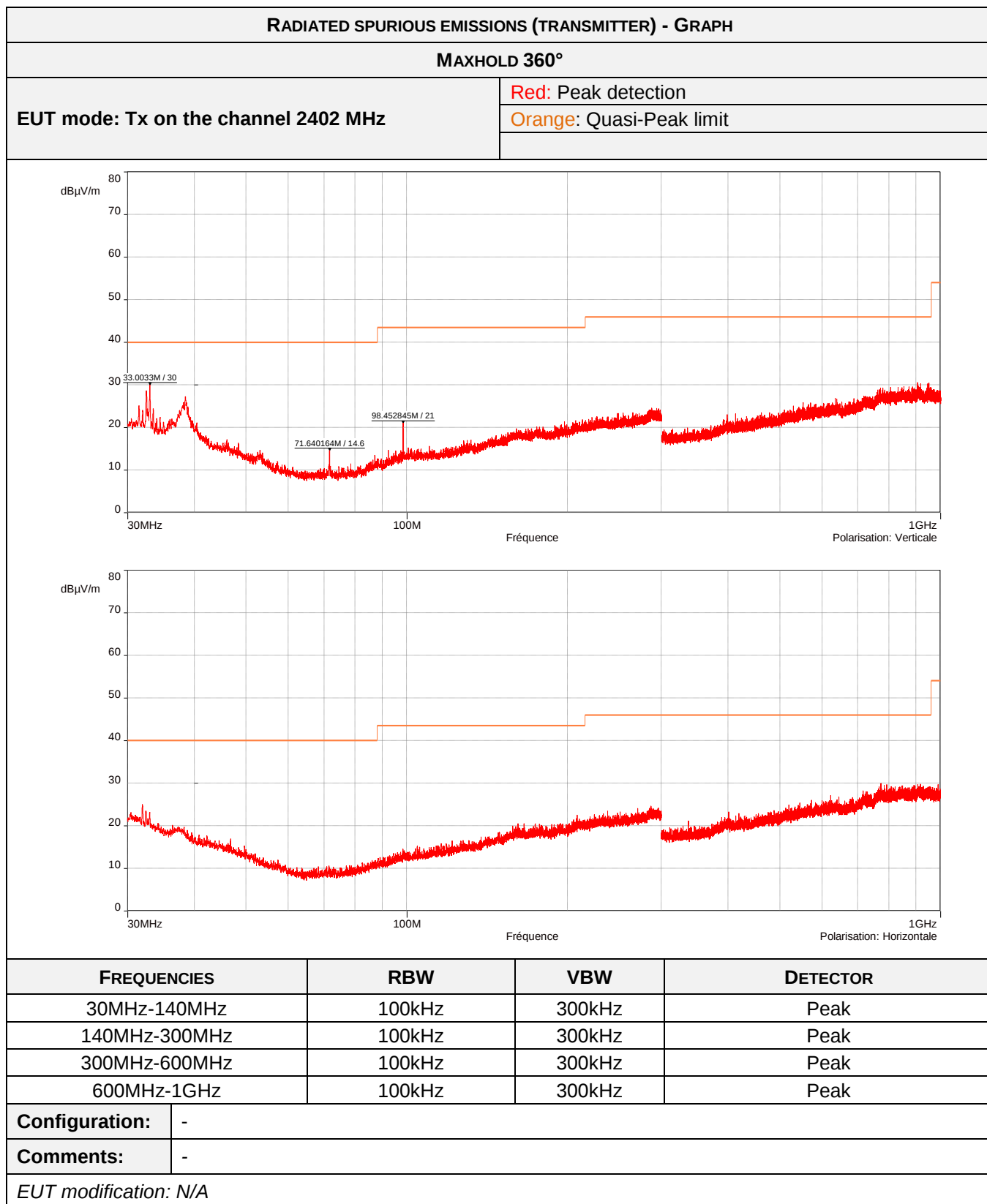
TEST SETUP PHOTOS  
18 GHz – 25 GHz











No curve for the 2440 MHz channel and the 2480 MHz channel. The measurements are carried out manually, between 9 kHz and 1 GHz the result is identical to the 2402 MHz channel. Between 5 GHz and 25 GHz, the result is identical to the 2402 MHz channel.

## Channel 2402 MHz

| Frequency (GHz) | Height (cm) | Polarization (H or V) | Azimuth (°) | Electro-magnetic field (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|-------------|-----------------------|-------------|---------------------------------|----------------|-------------|
| 4803.71         | 157         | V                     | 330         | 39.37                           | 54.0           | 14.63       |
| 4803.71         | 175         | H                     | 220         | 41.77                           | 54.0           | 12.23       |

H : Horizontal – V : Vertical

## Channel 2440 MHz

| Frequency (GHz) | Height (cm) | Polarization (H or V) | Azimuth (°) | Electro-magnetic field (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|-------------|-----------------------|-------------|---------------------------------|----------------|-------------|
| 4879.59         | 195         | V                     | 130         | 41.96                           | 54.0           | 12.04       |
| 4879.59         | 185         | H                     | 230         | 43.00                           | 54.0           | 11.00       |

H : Horizontal – V : Vertical

## Channel 2480 MHz

| Frequency (GHz) | Height (cm) | Polarization (H or V) | Azimuth (°) | Electro-magnetic field (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|-------------|-----------------------|-------------|---------------------------------|----------------|-------------|
| 4959.47         | 200         | V                     | 140         | 42.97                           | 54.0           | 11.03       |
| 4959.47         | 200         | H                     | 250         | 45.80                           | 54.0           | 8.20        |

H : Horizontal – V : Vertical

No significant frequency has been found between 9 kHz and 1 GHz.

No significant frequency has been found between 5 GHz to 25 GHz.

## 6.7. Unintentional radiated emissions in the band 30 MHz – 25 GHz

|                                                                                                                                                                                                                                                                                                                                                                               |                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>Reference standard:</b>                                                                                                                                                                                                                                                                                                                                                    | FCC 47 CFR PART 15 : 2020<br>RSS-Gen Issue 5 : 2019                       |
| <b>Test method:</b>                                                                                                                                                                                                                                                                                                                                                           | § 15.109 of FCC 47 CFR PART 15 : 2020<br>§ 6.13 of RSS-Gen Issue 5 : 2019 |
| <b>General test setup:</b> E.U.T. is set on an insulating support at 0.8 m (<1GHz) and 1.5 m (>1GHz) above the ground reference plane.<br>For maximum meter reading at each frequency, the antenna height is adjusted between 1 m and 4 m above the ground plane for 30 MHz - 25 GHz. A 360 degrees rotation of the EUT is performed in vertical and horizontal polarization. |                                                                           |

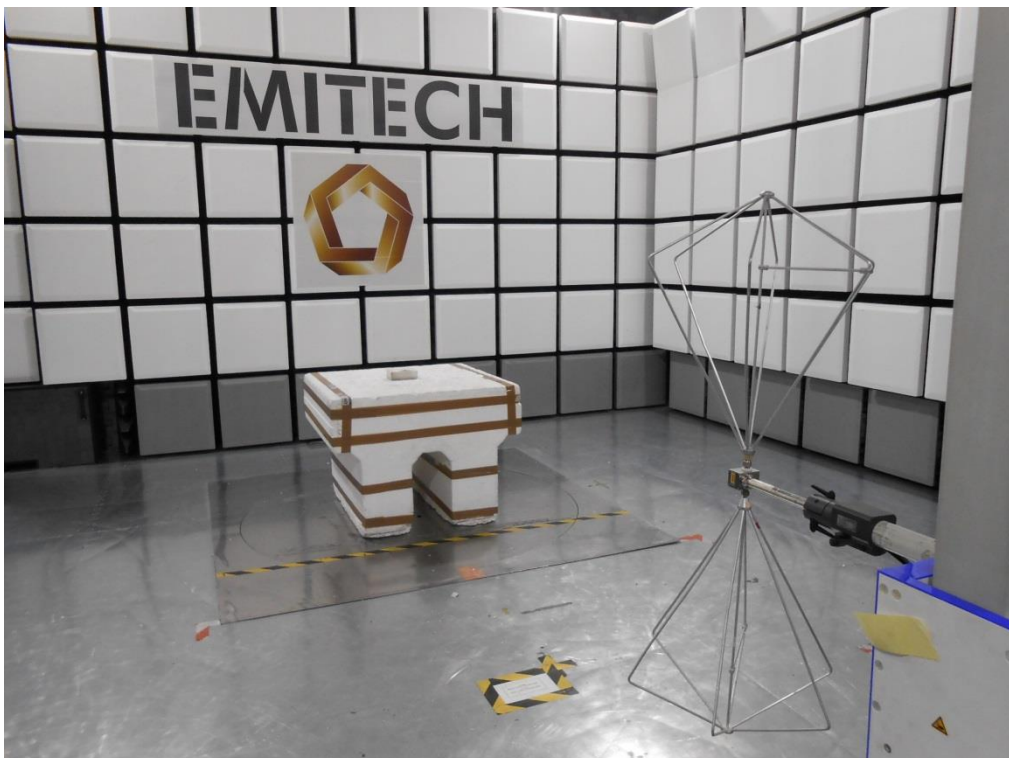
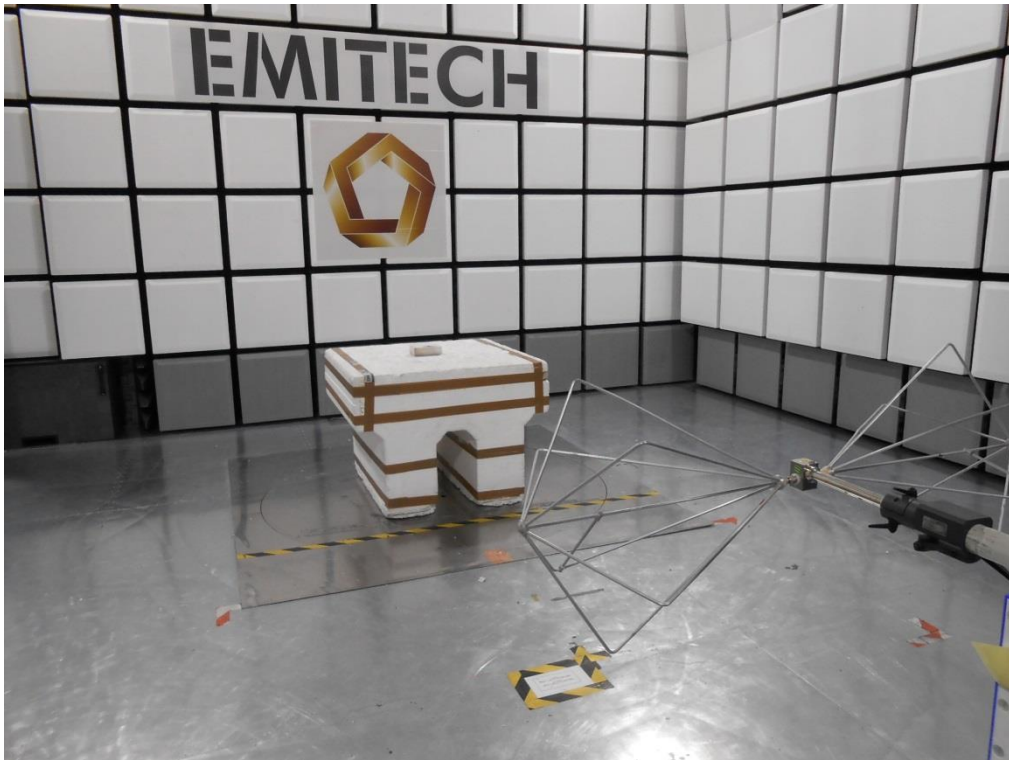
| TESTED CONFIGURATION                        | PARAMETER   | VERDICT     |
|---------------------------------------------|-------------|-------------|
| Maxhold 360° - Rx - Horizontal polarization | 30MHz-1GHz  | <b>PASS</b> |
| Maxhold 360° - Rx - Vertical polarization   | 30MHz-1GHz  | <b>PASS</b> |
| Maxhold 360° - Rx - Horizontal polarization | 1GHz-18GHz  | <b>PASS</b> |
| Maxhold 360° - Rx - Vertical polarization   | 1GHz-18GHz  | <b>PASS</b> |
| Maxhold 360° - Rx - Horizontal polarization | 18GHz-25GHz | <b>PASS</b> |
| Maxhold 360° - Rx - Vertical polarization   | 18GHz-25GHz | <b>PASS</b> |

| LABORATORY PARAMETERS:                                                    | REQUIRED PRIOR TO THE TEST | DURING THE TEST |
|---------------------------------------------------------------------------|----------------------------|-----------------|
| Ambient Temperature                                                       | 10 to 40 °C                | 23°C            |
| Relative Humidity                                                         | 10 to 90 %                 | 37%             |
| Atmospheric pressure                                                      | N/A                        | N/A hPa         |
| <b>Test method deviation:</b> No                                          |                            |                 |
| Supplementary information: The measurement are carried out in Y position. |                            |                 |

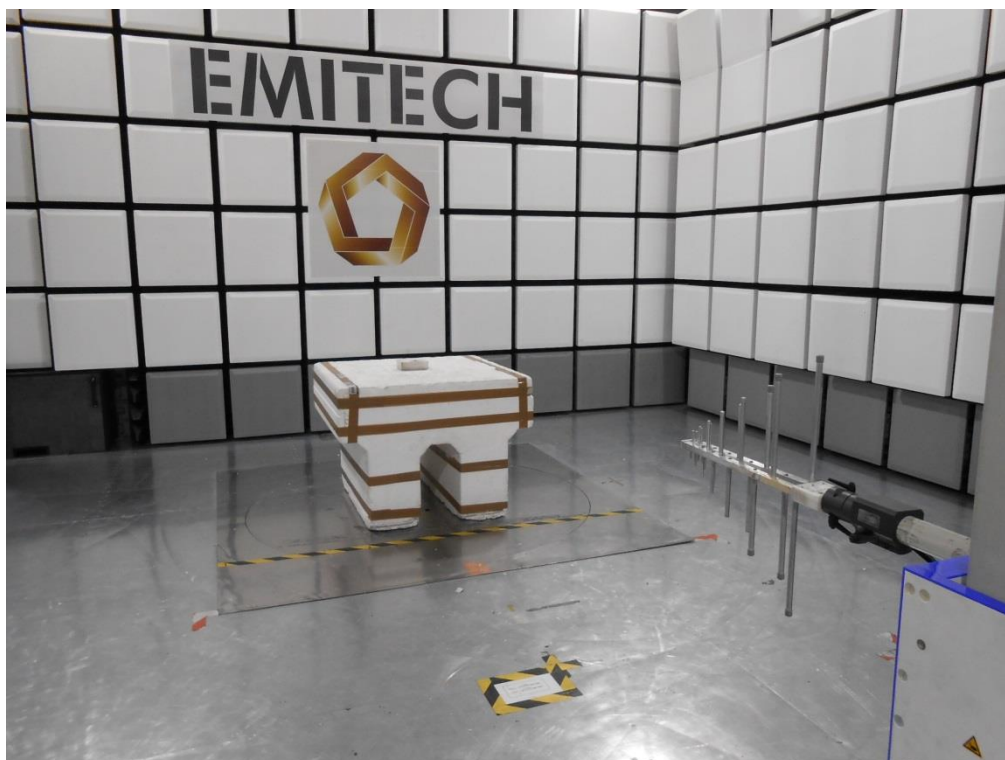
| TEST EQUIPMENT USED |                 |                             |            |            |            |
|---------------------|-----------------|-----------------------------|------------|------------|------------|
| CATEGORY            | BRAND           | TYPE                        | IDENTIFIER | CAL. DATE  | CAL. DUE   |
| Amplifier           | HP              | 8447F - 26dB                | 5175       | 25/07/2019 | 25/09/2020 |
| Amplifier           | HP              | 8449B                       | 1045       | 15/04/2020 | 15/06/2021 |
| Antenna             | Emco            | 6502                        | 12929      | 22/10/2019 | 22/12/2021 |
| Antenna             | Oritel          | CM 42/25                    | 0941       | 27/06/2019 | 27/08/2022 |
| Cable               | C&C             | N-5m                        | 11184      | 16/04/2020 | 16/06/2022 |
| Cable               | C&C             | N-4m                        | 14226      | 12/11/2018 | 12/01/2021 |
| Cable               | C&C             | N-6m                        | 14223      | 15/04/2020 | 15/06/2022 |
| Cable               | Sucoflex        | N-3m                        | 14447      | 16/04/2020 | 16/06/2022 |
| Cable               | C&C             | K-2m                        | 11133      | 23/05/2018 | 23/07/2020 |
| Cable               | C&C             | K-2m                        | 14524      | 23/05/2018 | 23/07/2020 |
| Receiver            | Rohde & Schwarz | ESRP7                       | 10517      | 27/08/2018 | 27/10/2020 |
| Shielded enclosure  | Comtest         | SAC 3m                      | 14622      |            |            |
| Software            | Nexio           | BAT EMC                     | 0000       |            |            |
| Spectrum analyzer   | Rohde & Schwarz | FSP40 (V 4.00SP1-V3.0-10-2) | 11132      | 20/09/2018 | 20/11/2020 |

BAT-EMC software version: V3.18.0.19  
Blank cells = Permanent validity

TEST SETUP PHOTOS  
30 MHz – 1 GHz



TEST SETUP PHOTOS  
30 MHz – 1 GHz

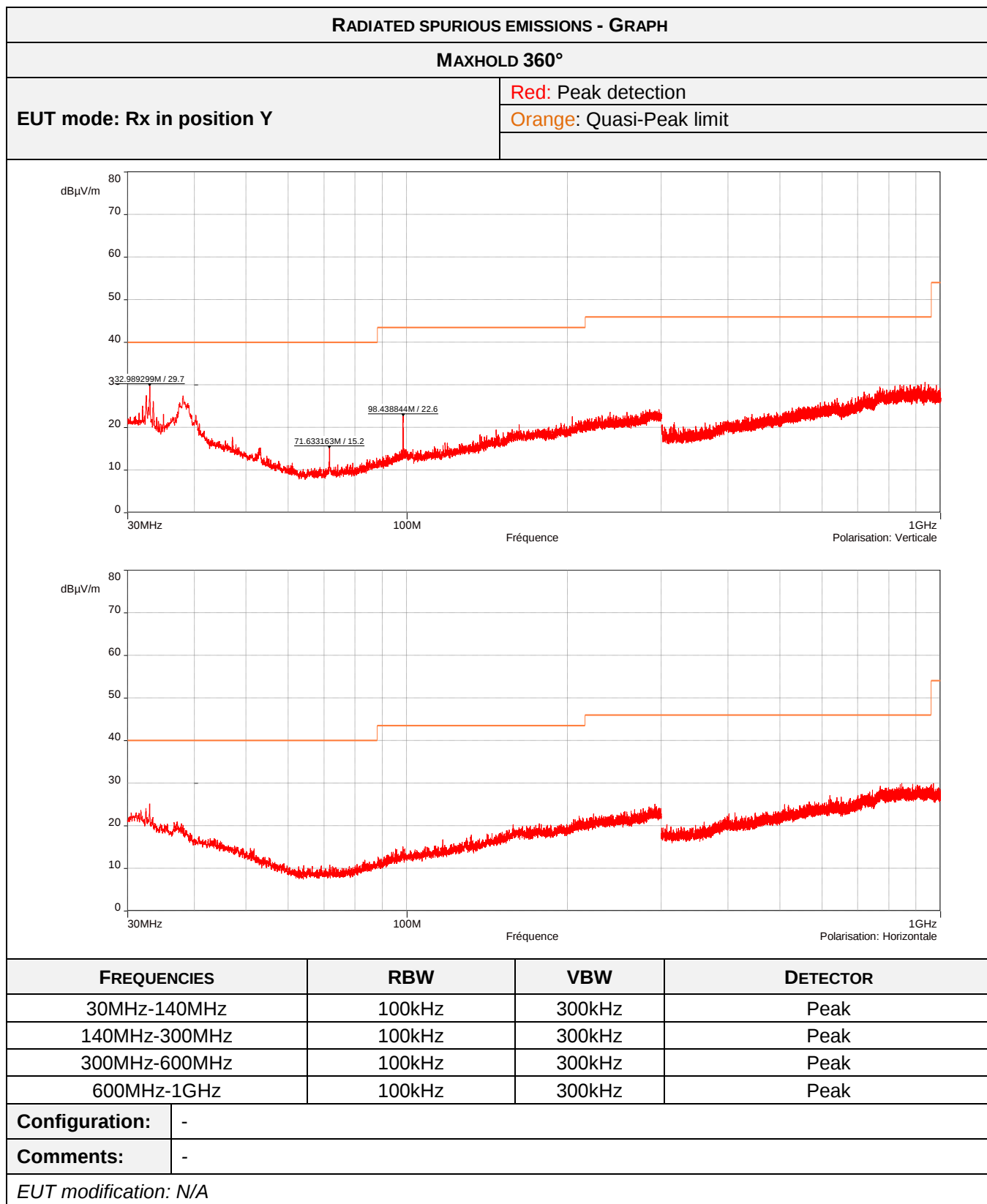


TEST SETUP PHOTOS  
1 GHz – 18 GHz



TEST SETUP PHOTOS  
18 GHz – 25 GHz





No significant frequency has been found between 30 MHz and 25 GHz.

End of test report