# RADIO REPORT

**FCC 47 CFR Part 15C**
**ISED Canada RSS-247**

**Digital transmission systems operating within the 2400 – 2483.5 MHz band**

| | |
|---|---|
| **Report Reference No** | G0M-1902-8075-TFC247BL-V01 |
| **Testing Laboratory** | Eurofins Product Service GmbH |
| Address | Storkower Str. 38c<br>15526 Reichenwalde<br>Germany |
| Accreditation | A2LA Accredited Testing Laboratory, Certificate No.: 1983.01<br>FCC Test Firm Designation Number: DE0008<br>ISED Testing Laboratory site: 3470A-2 |
| **Applicant** | Piavita AG |
| **Address** | Technoparkstrasse 1<br>8005 Zurich<br>SWITZERLAND |
| **Test Specification** | According to FCC/ISED rules |
| Standard | 47 CFR Part 15C<br>RSS-247, Issue 2, 2017-02<br>RSS-Gen, Issue 5, 2018-04 |
| Non-Standard Test Method | None |
| **Equipment under Test (EUT):** | |
| Product Description | Equine vital signs wireless monitoring device |
| Model(s) | Piavita Measuring device |
| Additional Model(s) | None |
| Brand Name(s) | None |
| Hardware Version(s) | V04 |
| Software Version(s) | 2 |
| FCC-ID | 2ASL2-PD9 |
| IC | N/A |
| **Test Result** | **PASSED** |

| | | |
|---|---|---|
| **Possible test case verdicts:** | | |
| required by standard but not tested | N/T | |
| not required by standard | N/R | |
| not applicable to EUT | N/A | |
| test object does meet the requirement | P(PASS) | |
| test object does not meet the requirement | F(FAIL) | |
| **Testing:** | | |
| Test Lab Temperature | 20 - 23 °C | |
| Test Lab Humidity | 32 – 38 % | |
| Date of receipt of test item | 2019-03-11 | |
| **Report:** | | |
| Compiled by | Wilfried Treffke | |
| Tested by (+ signature)<br>(Responsible for Test) | Wilfried Treffke | W. Treffke<br>..... |
| Approved by (+ signature)<br>(Deputy Head of Lab) | Toralf Jahn | T. J<br>..... |
| Date of Issue | 2019-03-25 | |
| Total number of pages | 94 | |
| **General Remarks:** | | |
| **The test results presented in this report relate only to the object tested.**<br>**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.**<br>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. | | |
| **Additional Comments:** | | |
| | | |

## VERSION HISTORY

| Version History | | | |
|---|---|---|---|
| Version | Issue Date | Remarks | Revised By |
| 01 | 2019-03-25 | Initial Release | |

## ABBREVIATIONS AND ACRONYMS

| Acronyms | |
|---|---|
| Acronym | Description |
| EUT | Equipment Under Test |
| FCC | Federal Communications Commission |
| ISED | Innovation, Science and Economic Development Canada |
| RBW | Resolution bandwidth |
| RMS | Root mean square |
| VBW | Video bandwidth |
| $V_{NOM}$ | Nominal supply voltage |

## REPORT INDEX

**1 Equipment (Test Item) Under Test ..... 6**
1.1 Photos – Equipment External ..... 7
1.2 Photos – Equipment Internal ..... 10
1.3 Photos – Test Setup ..... 12
1.4 Support Equipment ..... 13
1.5 Test Modes ..... 14
1.6 Test Frequencies ..... 15
1.7 Sample emission level calculation ..... 16
**2 Result Summary ..... 17**
**3 Test Conditions and Results ..... 18**
3.1 Test Conditions and Results - Occupied bandwidth ..... 18
3.2 Test Conditions and Results - 6 dB bandwidth ..... 23
3.3 Test Conditions and Results - Maximum peak conducted output power ..... 28
3.4 Test Conditions and Results - Power spectral density ..... 30
3.5 Test Conditions and Results - AC powerline conducted emissions ..... 35
3.6 Test Conditions and Results - Band-edge compliance ..... 38
3.7 Test Conditions and Results - Conducted spurious emissions ..... 42
3.8 Test Conditions and Results - Transmitter radiated emissions ..... 47
3.9 Test Conditions and Results - Receiver radiated emissions ..... 50

ANNEX A Transmitter spurious emissions ..... 53
ANNEX B Receiver spurious emissions ..... 85

# 1 Equipment (Test Item) Under Test

| | | |
|---|---|---|
| Description | Equine vital signs wireless monitoring device | |
| Model | Piavita Measuring device | |
| Additional Model(s) | None | |
| Brand Name(s) | None | |
| Serial Number(s) | None | |
| Hardware Version(s) | V04 | |
| Software Version(s) | 2 | |
| PMN | None | |
| HVIN | None | |
| FVIN | None | |
| HMN | None | |
| FCC-ID | 2ASL2-PD9 | |
| IC | None | |
| Equipment type | End Product | |
| Radio type | Transceiver | |
| Assigned frequency bands | 2400 - 2483.5 MHz | |
| Radio technology | Bluetooth LE | |
| Modulation | GFSK | |
| Number of antenna ports | 1 | |
| Antenna | Type | Integrated |
| | Model | FXP70.07.0053A |
| | Manufacturer | Taoglas |
| | Gain | 5 dBi (customer declaration) |
| Supply Voltage | $V_{NOM}$ | 3.7 VDC (lithium polymer) |
| Operating Temperature | $T_{NOM}$ | 25 °C |
| AC/DC-Adaptor | Model | K103-0502100US |
| | Vendor | Merryking |
| | Input | 100-240V |
| | Output | 5 VDC |
| Manufacturer | Piavita AG<br>Technoparkstrasse 1<br>8005 Zurich<br>SWITZERLAND | |

## 1.1 Photos – Equipment External

| EUT Overview Top View |
|---|
| |

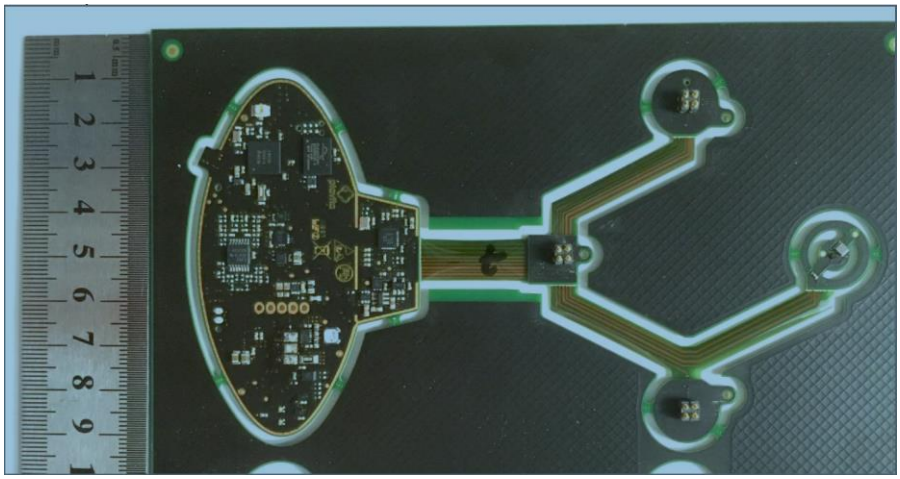
| EUT Overview Bottom View |
|---|
| |

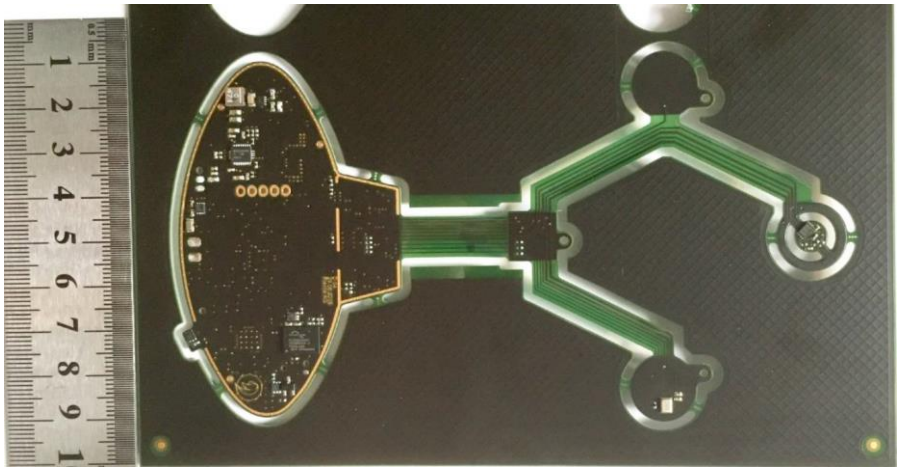
**AE: Piavet Wireless Charger Top**

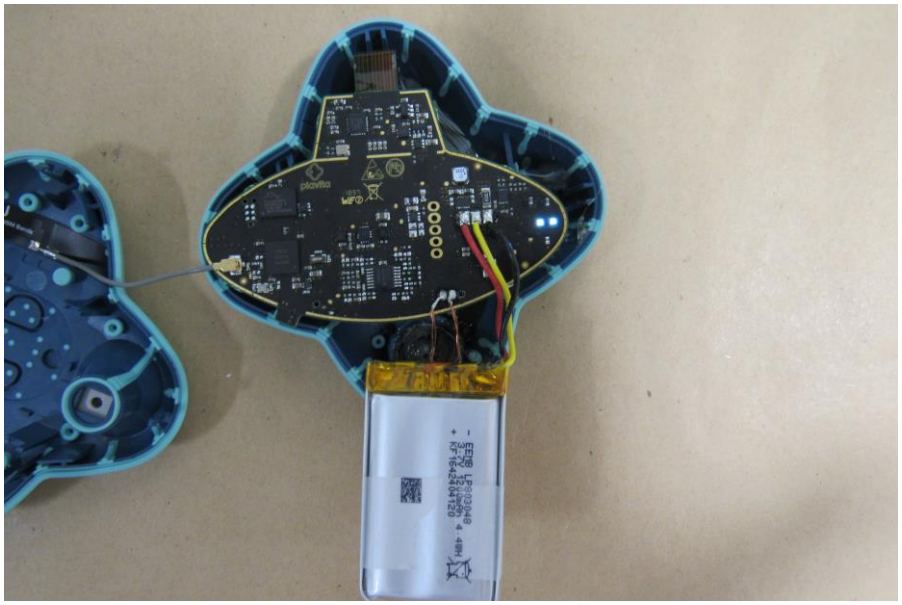
**AE: Piavet Wireless Charger Bottom**

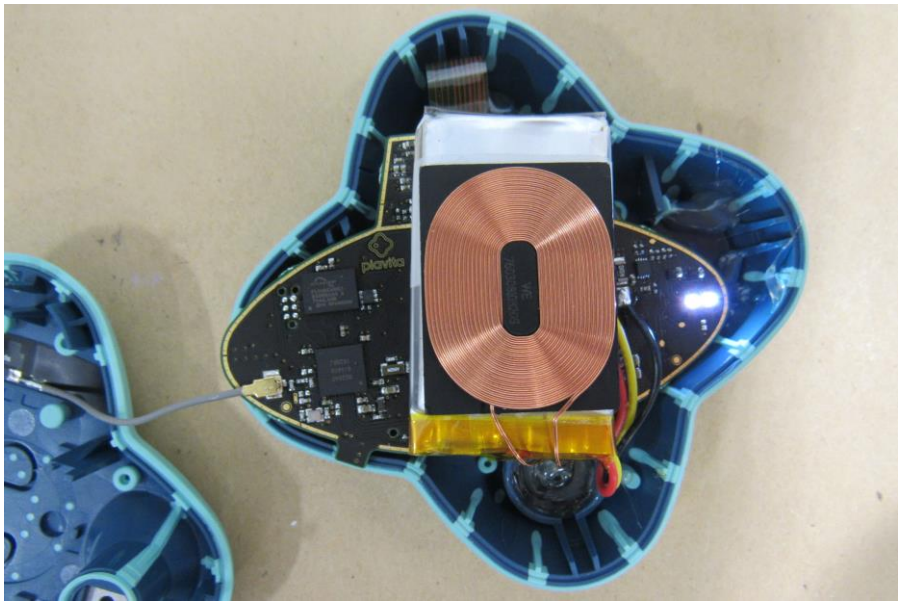
| AE: USB Charger Label |
| --- |
| |

## 1.2 Photos – Equipment Internal

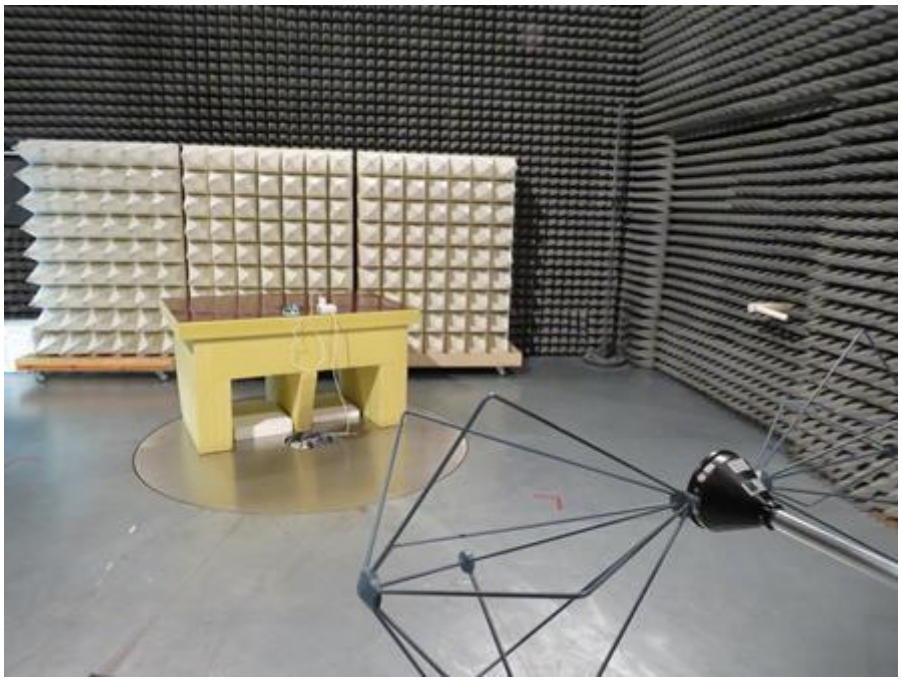
| RF – PCB Top |
|---|
|  |

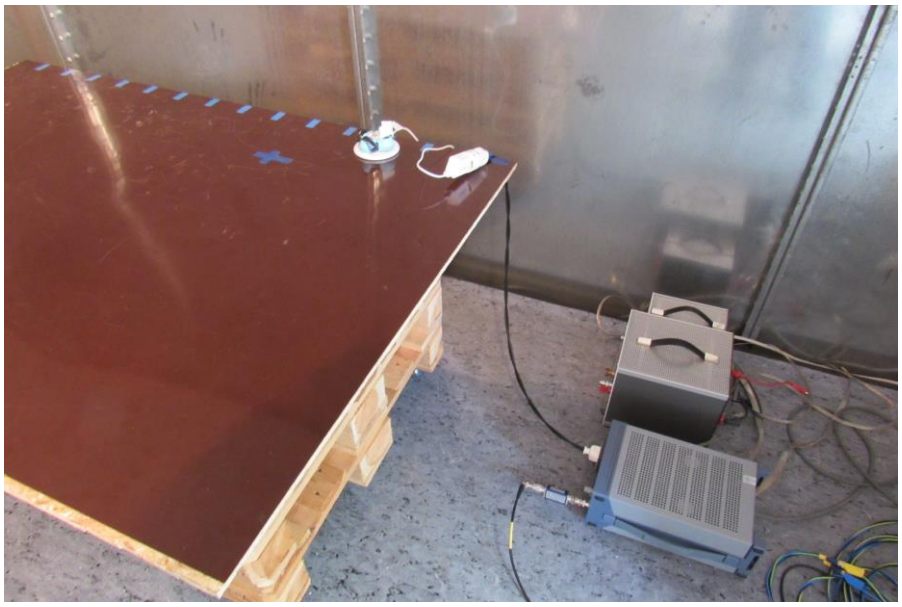
| RF – PCB Bottom |
|---|
|  |

| Battery Charging Top View |
| --- |
|  |

| Battery Charging Bottom View |
| --- |
|  |

## 1.3 Photos – Test Setup

| Radiated Setup |
| --- |
|  |

| Conducted Setup |
| --- |
|  |

## 1.4 Support Equipment

| Product Type | Device | Manufacturer | Model | Comment |
|---|---|---|---|---|
| AE | Charger | Piavita | GY-68 | Piavet Wireless Charger |
| Description: | | | | |
| AE | Auxiliary Equipment | | | |
| SIM | Simulator | | | |
| CBL | Connecting Cable | | | |
| Comment: | | | | |

## 1.5 Test Modes

| Mode | Description |
|---|---|
| GFSK | Mode = Transmit<br>Modulation = GFSK<br>Spreading = None<br>Duty cycle = 64% |
| Receive | Mode = Receive |
| Comment: | |

## 1.6 Test Frequencies

| Designator | Mode | Channel | Frequency [MHz] |
|---|---|---|---|
| F1 | Tx / Rx | 0 | 2402 |
| F2 | Tx / Rx | 19 | 2440 |
| F3 | Tx / Rx | 39 | 2480 |

## 1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBµV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

Reading on Analyzer (dBµV) + A.F. (dB/m) = Net field strength (dBµV/m)

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBµV/m). The FCC limits are given in units of µV/m. The following formula is used to convert the units of µV/m to dBµV/m:

Limit (dBµV/m) = 20*log (µV/m)

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

| | | | | |
|---|---|---|---|---|
| Reading + AF | = Net Reading | : | Net reading - FCC limit | = Margin |
| +21.5 dBµV + 26 dB/m | = 47.5 dBµV/m | : | 47.5 dBµV/m - 57.0 dBµV/m | = -9.5 dB |

## 2 Result Summary

| FCC 47 CFR Part 15C, ISED RSS-247 | | | | |
|---|---|---|---|---|
| **Product Standard Reference** | **Requirement** | **Reference Method** | **Result** | **Remarks** |
| ISED RSS-Gen, Issue 5 (section 6.6) | Occupied Bandwidth | ANSI C63.10-2013 | N/R | Informational only |
| FCC § 15.247(a)(2) ISED RSS-247, Issue 2 (section 5.2) | 6 dB Bandwidth | ANSI C63.10-2013 | PASS | |
| FCC § 15.247(b)(1) ISED RSS-247, Issue 2 (section 5.4) | Maximum peak conducted power | ANSI C63.10-2013 | PASS | |
| FCC § 15.247(e) ISED RSS-247, Issue 2 (section 5.2) | Power spectral density | ANSI C63.10-2013 | PASS | |
| FCC § 15.207 ISED RSS-247, Issue 2 (section 3.1) | AC power line conducted emissions | ANSI C63.10-2013 | PASS | |
| FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5) | Band edge compliance | ANSI C63.10-2013 | PASS | |
| FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5) | Conducted spurious emissions | ANSI C63.10-2013 | PASS | |
| FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 (section 6.13) | Transmitter radiated spurious emissions | ANSI C63.10-2013 | PASS | |
| ISED RSS-247, Issue 2 (section 3.1) | Receiver radiated spurious emissions | ANSI C63.10-2013 | PASS | |
| Comment: | | | | |

| Possible Test Case Verdicts | |
|---|---|
| PASS | Test object does meet the requirements |
| FAIL | Test object does not meet the requirements |
| N/T | Required by standard but not tested |
| N/R | Not required by standard for the test object |

# 3 Test Conditions and Results

## 3.1 Test Conditions and Results - Occupied bandwidth

### 3.1.1 Information

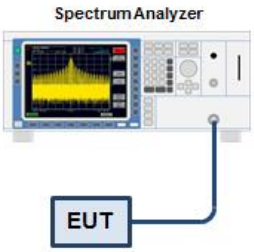
| Test Information | |
|---|---|
| Reference | ISED RSS-Gen, Issue 5 (section 6.6) |
| Measurement Method | ANSI C63.10 6.9.3 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.1.2 Limits

| Limits |
|---|
| None (Informational only) |

### 3.1.3 Setup

**Test Setup**




### 3.1.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.1.5 Procedure

**Test Procedure**

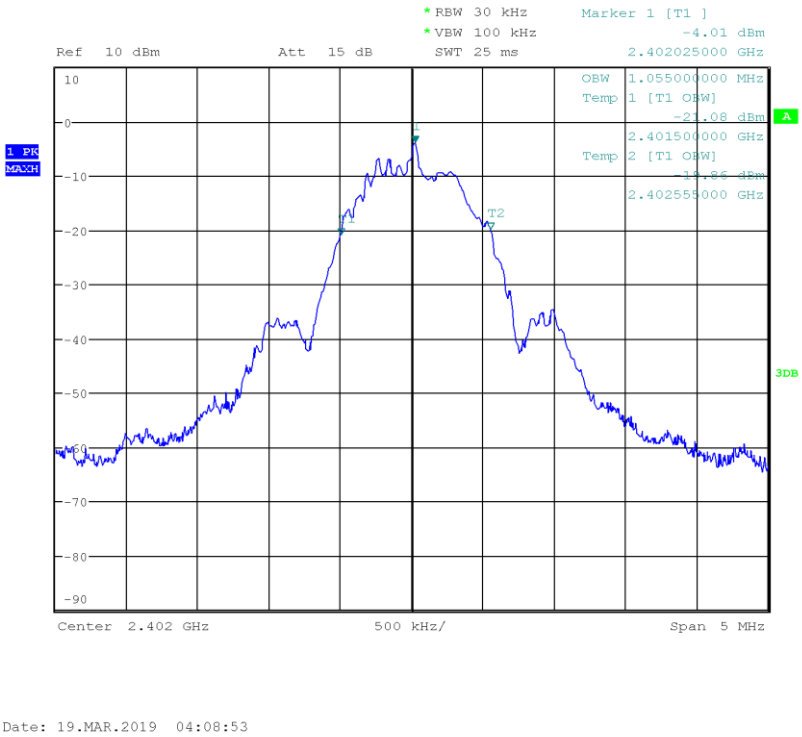
1. EUT transmitter is activated in test mode under normal conditions
2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum
3. The resolution bandwidth is set to the range of 1 % to 5 % of the occupied bandwidth
4. The occupied bandwidth is measured with the build-in analyzer function

### 3.1.6 Results

| Test Results | | |
|---|---|---|
| Mode | Frequency [MHz] | Bandwidth [MHz] |
| GFSK | 2402 | 1.055 |
| GFSK | 2440 | 1.055 |
| GFSK | 2480 | 1.055 |

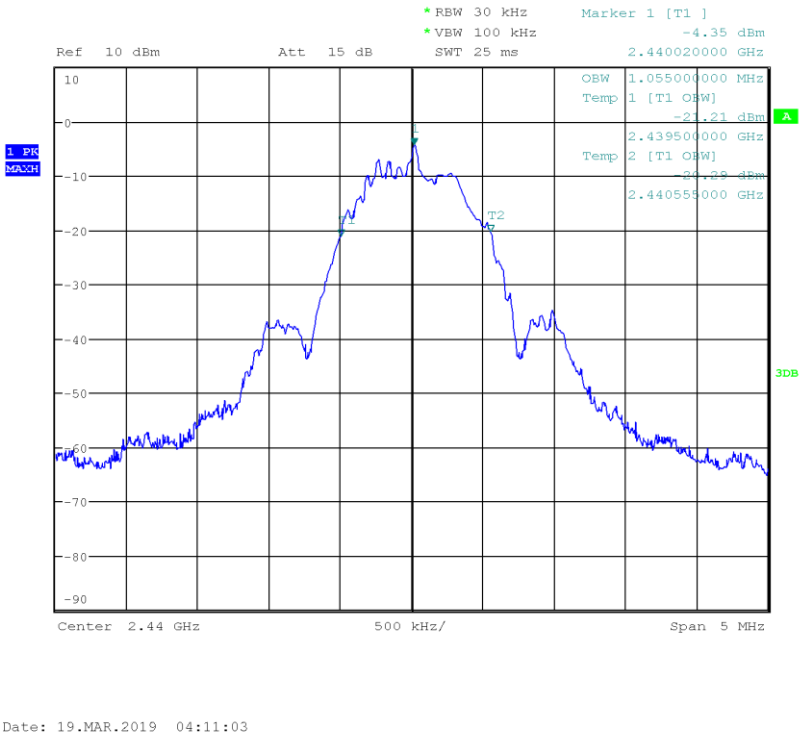
## Occupied Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 6.9.3 |
| Operational Mode: | GFSK, Channel: 0, 2402 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Occupied Bandwidth [MHz]: | 1.055 |



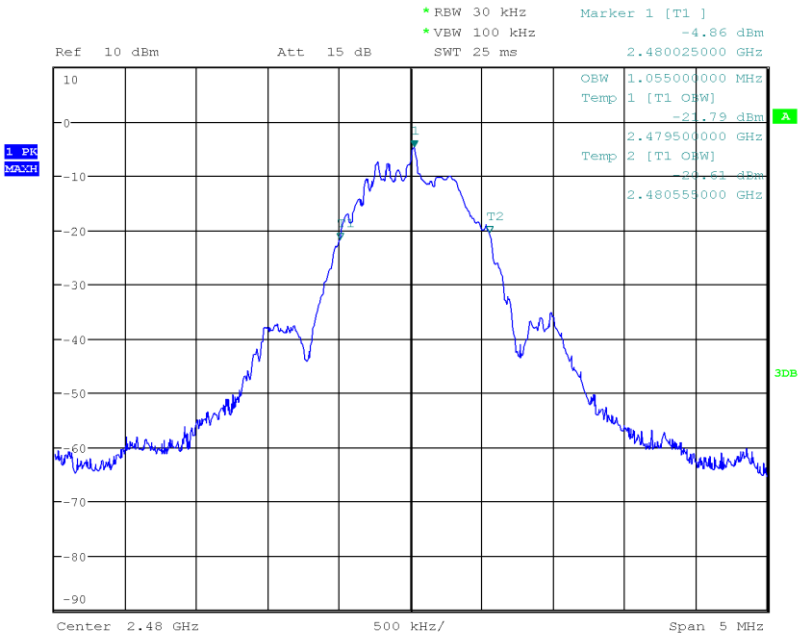
## Occupied Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 6.9.3 |
| Operational Mode: | GFSK, Channel: 19, 2440 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Occupied Bandwidth [MHz]: | 1.055 |



## Occupied Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 6.9.3 |
| Operational Mode: | GFSK, Channel: 39, 2480 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Occupied Bandwidth [MHz]: | 1.055 |

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## 3.2 Test Conditions and Results - 6 dB bandwidth

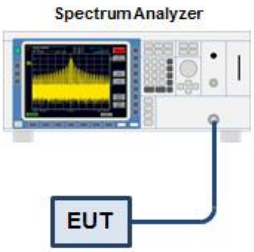
### 3.2.1 Information

| Test Information | |
|---|---|
| Reference | FCC § 15.247(a)(2); ISED RSS-247, Issue 2 (section 5.2) |
| Measurement Method | ANSI C63.10 11.8 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.2.2 Limits

| Limits |
|---|
| ≥ 500kHz |

### 3.2.3 Setup

| Test Setup |
|---|
|  |



### 3.2.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.2.5 Procedure

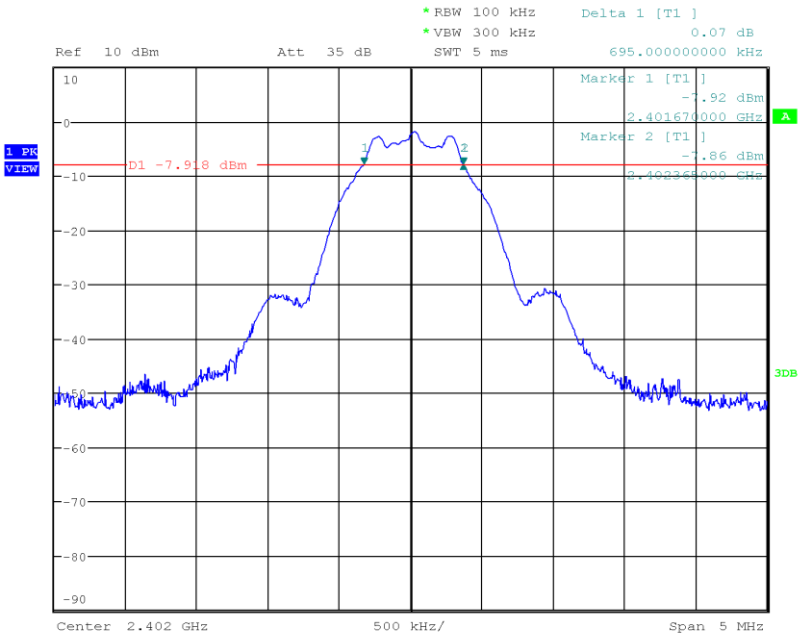
| Test Procedure |
|---|
| 1. EUT set to test mode<br>2. Span set to at least twice the emission spectrum<br>3. Detector set to peak and max hold and RBW is set to 100 kHz<br>4. Envelope peak value of emission spectrum is selected<br>5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak<br>6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak<br>7. 6 dB Bandwidth is determined by marker frequency separation |

### 3.2.6 Results

| Test Results | | | | |
|---|---|---|---|---|
| Mode | Frequency [MHz] | Bandwidth [kHz] | Limit [kHz] | Verdict |
| GFSK | 2402 | 695 | 500 | PASS |
| GFSK | 2440 | 695 | 500 | PASS |
| GFSK | 2480 | 695 | 500 | PASS |

## DTS (6 dB) Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.8.1 Option 1 |
| Operational Mode: | GFSK, Channel: 0, 2402 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Lower Frequency [MHz]: | 2401.670 |
| Upper Frequency [MHz]: | 2402.365 |
| 6 dB Bandwidth [kHz]: | 695 |

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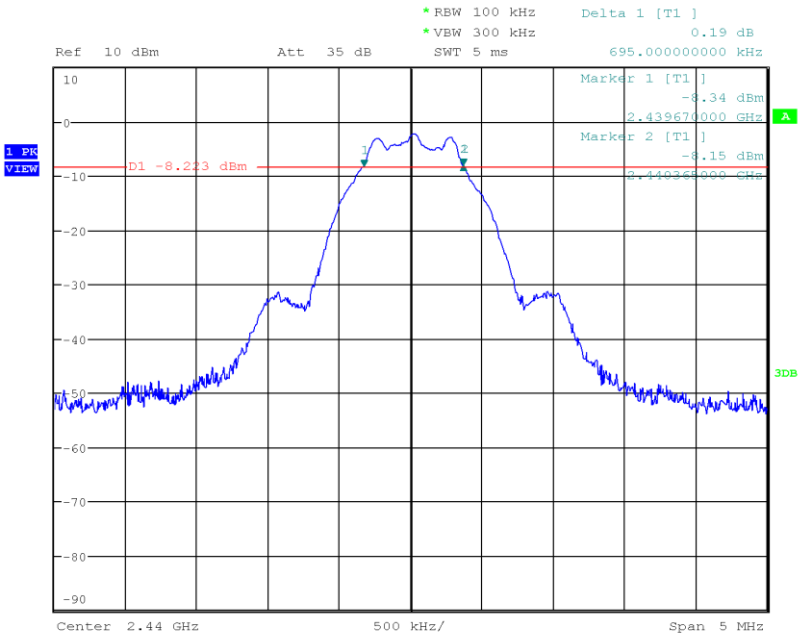
## DTS (6 dB) Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.8.1 Option 1 |
| Operational Mode: | GFSK, Channel: 19, 2440 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Lower Frequency [MHz]: | 2439.670 |
| Upper Frequency [MHz]: | 2440.365 |
| 6 dB Bandwidth [kHz]: | 695 |

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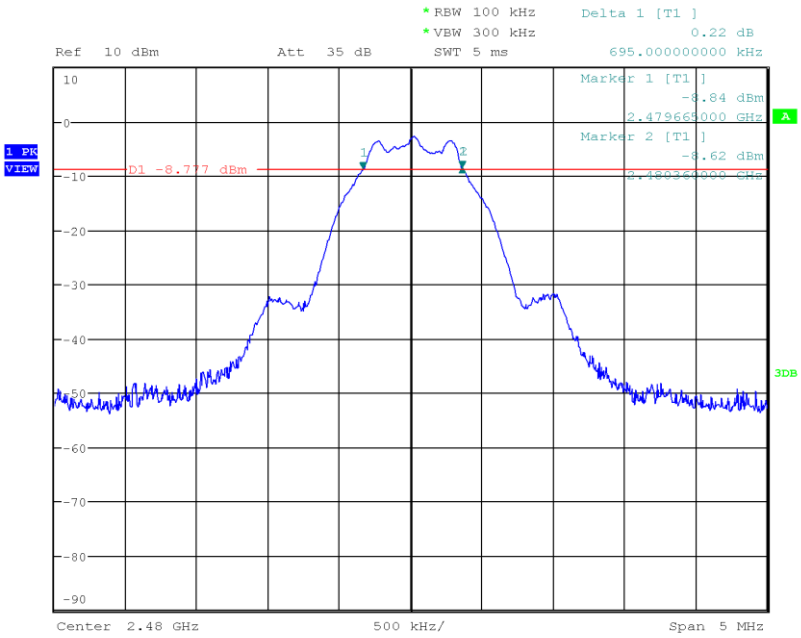
## DTS (6 dB) Bandwidth

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.8.1 Option 1 |
| Operational Mode: | GFSK, Channel: 39, 2480 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Lower Frequency [MHz]: | 2479.665 |
| Upper Frequency [MHz]: | 2480.360 |
| 6 dB Bandwidth [kHz]: | 695 |

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## 3.3 Test Conditions and Results - Maximum peak conducted output power

### 3.3.1 Information

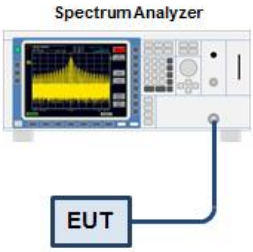
| Test Information | |
|---|---|
| Reference | FCC § 15.247(b)(1); ISED RSS-247, Issue 2 (section 5.4) |
| Measurement Method | ANSI C63.10 11.9.1 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.3.2 Limits

| Limits |
|---|
| 1 W (30 dBm) |
| The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi. |

### 3.3.3 Setup

**Test Setup**




### 3.3.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.3.5 Procedure

**Test Procedure**

1. EUT set to test hopping mode (Communication tester is used if needed)
2. Analyzer resolution bandwidth is set ≥ DTS bandwidth
3. Detector set to peak and max hold
4. Sweep time is set to auto
5. After the trace has stabilized a marker is set to peak of envelope

### 3.3.6 Results

| Test Results | | | | |
|---|---|---|---|---|
| Channel [MHz] | Power [dBm] | Power [W] | Limit [W] | Verdict |
| 2402 | -0.151 | 0.0010 | 1.0 | PASS |
| 2440 | -0.155 | 0.0010 | 1.0 | PASS |
| 2480 | -0.961 | 0.0008 | 1.0 | PASS |

## 3.4 Test Conditions and Results - Power spectral density

### 3.4.1 Information

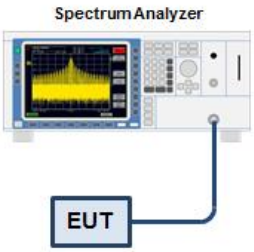
| Test Information | |
|---|---|
| Reference | FCC § 15.247(e); ISED RSS-247, Issue 2 (section 5.2) |
| Measurement Method | ANSI C63.10 11.10.2, 14.3.2 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.4.2 Limits

| Limits |
|---|
| 8 dBm / 3 kHz |

### 3.4.3 Setup

**Test Setup**




### 3.4.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.4.5 Procedure

**Test Procedure**

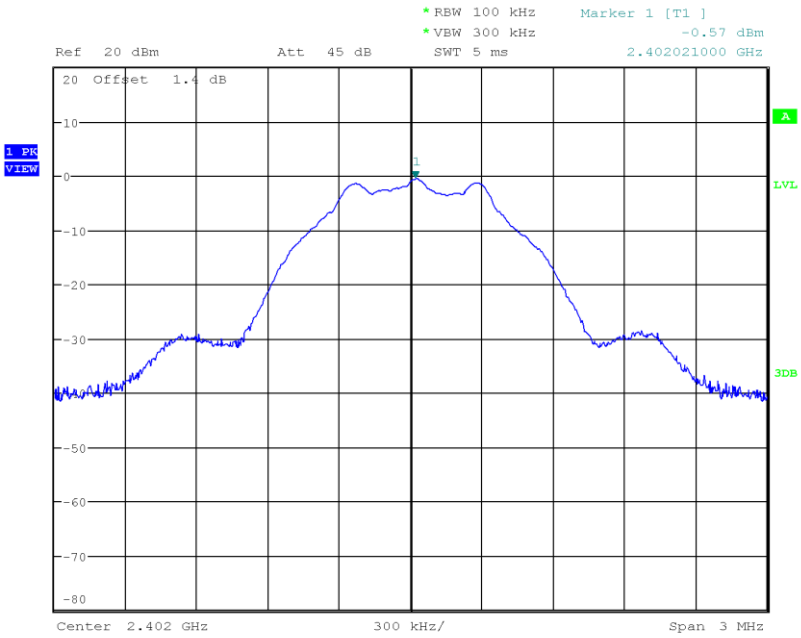
1. EUT set to test mode
2. The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth
3. The RBW is set to 100 kHz with VBW ≥ RBW and the detector is set to peak with max hold
4. After the trace has stabilized a marker is set to the envelope maximum
5. If the power spectral density is above the limit the RBW is reduced (not lower than 3 kHz) and the measurement is repeated
6. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain

### 3.4.6 Results

| Test Results | | | |
|---|---|---|---|
| Channel [MHz] | PSD [dBm/RBW] | Limit [dBm/3kHz] | Verdict |
| 2402 | -0.568 | 8.0 | PASS |
| 2440 | -0.564 | 8.0 | PASS |
| 2480 | -1.282 | 8.0 | PASS |
| RBW = 100 kHz | | | |

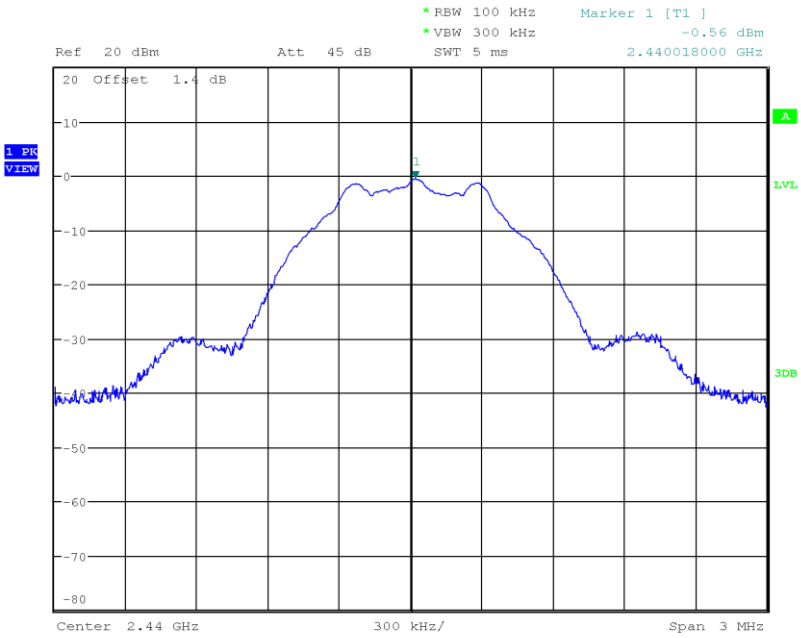
## Peak Power Spectral Density

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.10.2 |
| Operational Mode: | GFSK, Channel: 0, 2402 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Peak Frequency [MHz]: | 2402.021 |
| Spectral Density [dBm/RBW]: | -0.568 |
| Resolution Bandwidth [kHz]: | 100 kHz |



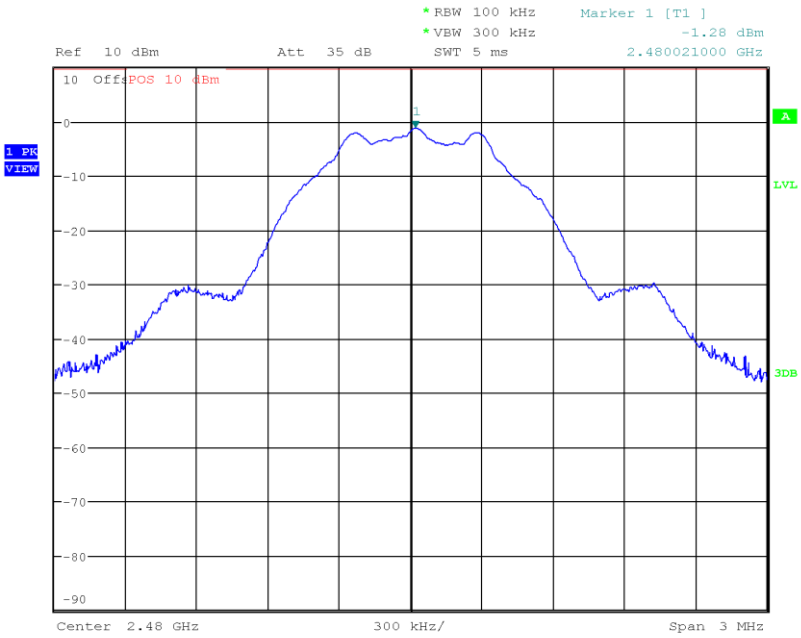
## Peak Power Spectral Density

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.10.2 |
| Operational Mode: | GFSK, Channel: 19, 2440 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Peak Frequency [MHz]: | 2440.018 |
| Spectral Density [dBm/RBW]: | -0.564 |
| Resolution Bandwidth [kHz]: | 100 kHz |



## Peak Power Spectral Density

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.10.2 |
| Operational Mode: | GFSK, Channel: 39, 2480 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Peak Frequency [MHz]: | 2480.021 |
| Spectral Density [dBm/RBW]: | -1.282 |
| Resolution Bandwidth [kHz]: | 100 kHz |



## 3.5 Test Conditions and Results - AC powerline conducted emissions

### 3.5.1 Information

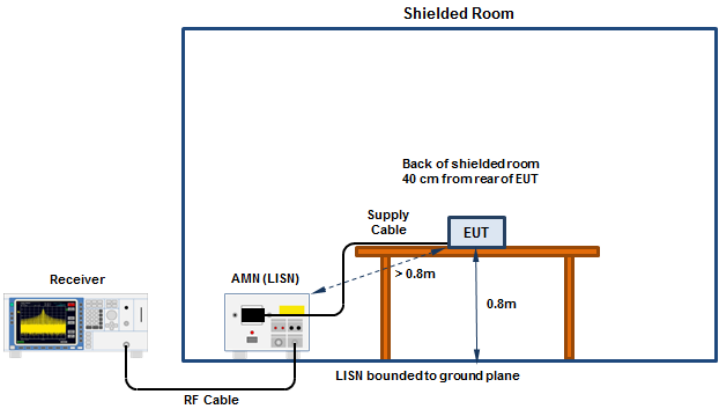
| Test Information | |
|---|---|
| Reference | FCC § 15.207; ISED RSS-247, Issue 2 (section 3.1) |
| Measurement Method | ANSI C63.10 6.2 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.5.2 Limits

| Limits | | |
|---|---|---|
| Frequency [MHz] | Quasi-Peak [dBµV] | Average [dBµV] |
| 0.15 - 0.5 | 66 - 56* | 56 - 46* |
| 0.5 - 5 | 56 | 46 |
| 5 - 30 | 60 | 50 |
| * Limit decreases linearly with the logarithm of the frequency | | |

### 3.5.3 Setup

**Test Setup**




### 3.5.4 Equipment

| Test Software | | | |
|---|---|---|---|
| Description | Manufacturer | Name | Version |
| EMC Software | DARE Instruments | RadiMation | 2016.1.10 |

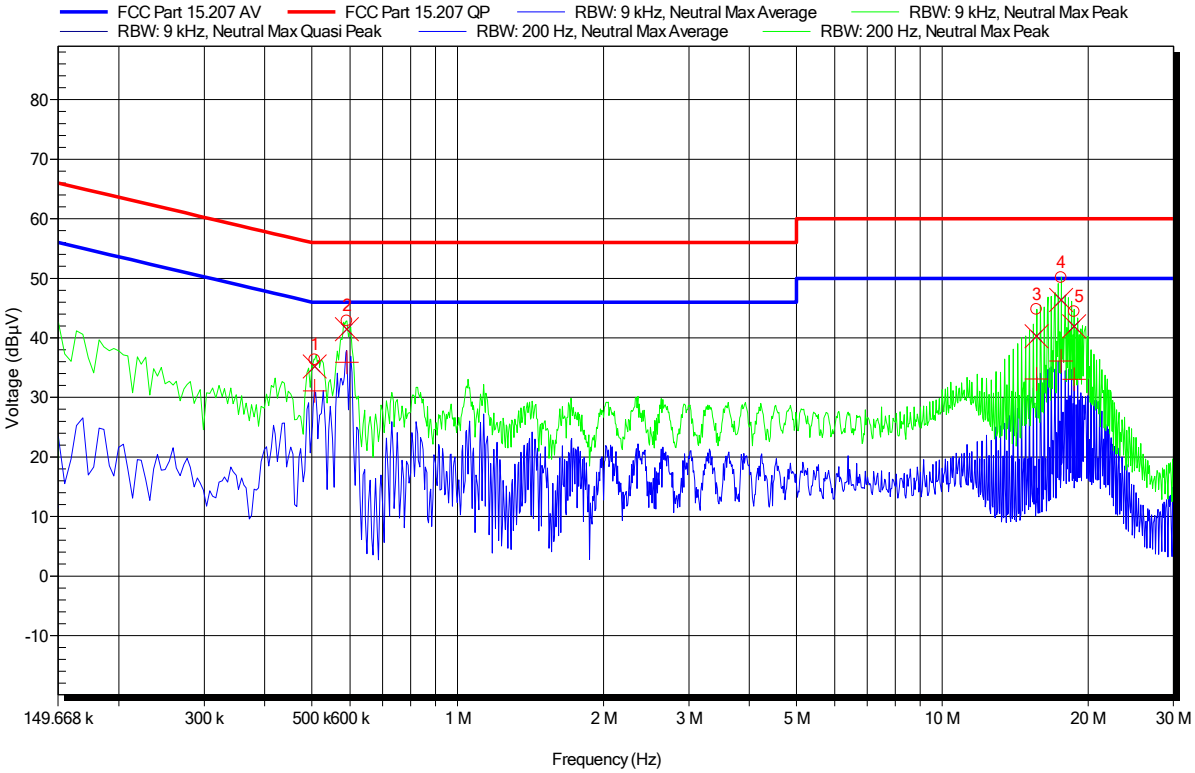
| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| EMI Receiver | R&S | ESR7 | EF00943 | 2018-07 | 2019-07 |
| LISN | R&S | ESH3-Z5 | EF00036 | 2017-01 | 2019-07 |

## EMI voltage test in the ac-mains according to FCC Part 15 C

Project number: G0M-1902-8075

| | |
|---|---|
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Mr. Treffke |
| Test Conditions: | Tnom: 25°C, Unom: 3.7 VDC lithium polymer battery |
| LISN: | ESH3-Z5 (N) |
| Mode: | charging, BLE Tx 2440 MHz |
| Test Date: | 2019-03-19 |
| Note: | |

Index 34




| Peak Number | Frequency | Quasi-Peak | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status |
|---|---|---|---|---|---|
| 1 | 506.85 kHz | 35.22 dBµV | 56 dBµV | -20.78 dB | Pass |
| 2 | 591 kHz | 41.45 dBµV | 56 dBµV | -14.55 dB | Pass |
| 3 | 15.662 MHz | 40.28 dBµV | 60 dBµV | -19.72 dB | Pass |
| 4 | 17.601 MHz | 46.35 dBµV | 60 dBµV | -13.65 dB | Pass |
| 5 | 18.709 MHz | 41.94 dBµV | 60 dBµV | -18.06 dB | Pass |

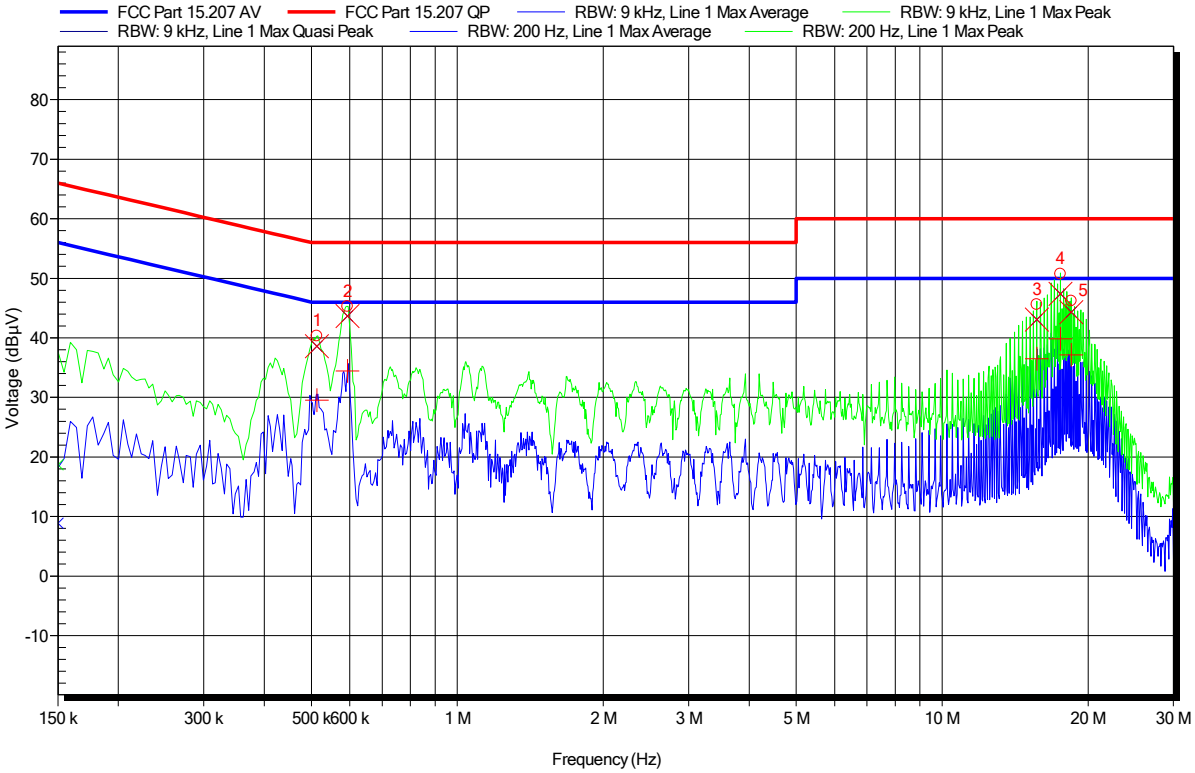
| Peak Number | Frequency | Average | Average Limit | Average Difference | Average Status |
|---|---|---|---|---|---|
| 1 | 506.85 kHz | 31.12 dBµV | 46 dBµV | -14.88 dB | Pass |
| 2 | 591 kHz | 35.92 dBµV | 46 dBµV | -10.08 dB | Pass |
| 3 | 15.662 MHz | 33.11 dBµV | 50 dBµV | -16.89 dB | Pass |
| 4 | 17.601 MHz | 36.14 dBµV | 50 dBµV | -13.86 dB | Pass |
| 5 | 18.709 MHz | 33.03 dBµV | 50 dBµV | -16.97 dB | Pass |

**EMI voltage test in the ac-mains according to FCC Part 15 C**

Project number: G0M-1902-8075

| | |
|---|---|
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Mr. Treffke |
| Test Conditions: | Tnom: 25°C, Unom: 3.7 VDC lithium polymer battery |
| LISN: | ESH3-Z5 (L) |
| Mode: | charging, BLE Tx 2440 MHz |
| Test Date: | 2019-03-19 |
| Note: | |

Index 35




| Peak Number | Frequency | Quasi-Peak | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status |
|---|---|---|---|---|---|
| 1 | 513.15 kHz | 38.61 dBµV | 56 dBµV | -17.39 dB | Pass |
| 2 | 593.7 kHz | 43.66 dBµV | 56 dBµV | -12.34 dB | Pass |
| 3 | 15.67 MHz | 43.09 dBµV | 60 dBµV | -16.91 dB | Pass |
| 4 | 17.536 MHz | 47.41 dBµV | 60 dBµV | -12.59 dB | Pass |
| 5 | 18.463 MHz | 44.32 dBµV | 60 dBµV | -15.68 dB | Pass |

| Peak Number | Frequency | Average | Average Limit | Average Difference | Average Status |
|---|---|---|---|---|---|
| 1 | 513.15 kHz | 29.52 dBµV | 46 dBµV | -16.48 dB | Pass |
| 2 | 593.7 kHz | 34.43 dBµV | 46 dBµV | -11.57 dB | Pass |
| 3 | 15.67 MHz | 36.5 dBµV | 50 dBµV | -13.5 dB | Pass |
| 4 | 17.536 MHz | 39.81 dBµV | 50 dBµV | -10.19 dB | Pass |
| 5 | 18.463 MHz | 37.16 dBµV | 50 dBµV | -12.84 dB | Pass |

## 3.6 Test Conditions and Results - Band-edge compliance

### 3.6.1 Information

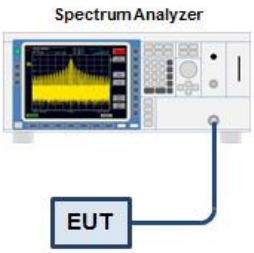
| Test Information | |
|---|---|
| Reference | FCC § 15.247(d); ISED RSS-247, Issue 2 (section 5.5) |
| Measurement Method | ANSI C63.10 11.13 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.6.2 Limits

| Limits | |
|---|---|
| Power Measurement | Out-of-band attenuation [dB] |
| Peak | 20 |
| RMS | 30 |

### 3.6.3 Setup

**Test Setup**




### 3.6.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.6.5 Procedure

**Test Procedure**

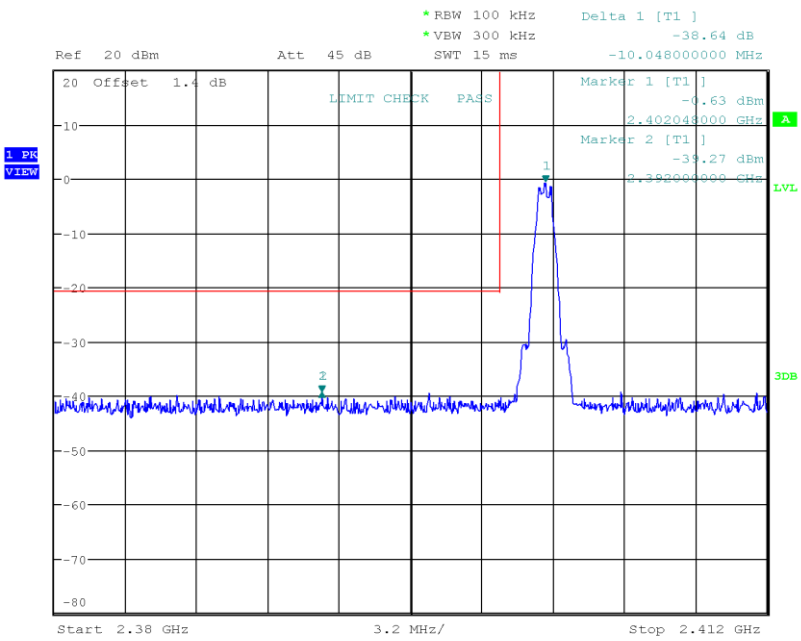
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is determined from level difference

### 3.6.6 Results

| Test Results | | | | |
|---|---|---|---|---|
| Mode | Channel [MHz] | Out-of-band Attenuation [dB] | Limit [dB] | Verdict |
| GFSK | 2402 | -38.64 | -20 | PASS |
| GFSK | 2480 | -47.31 | -20 | PASS |

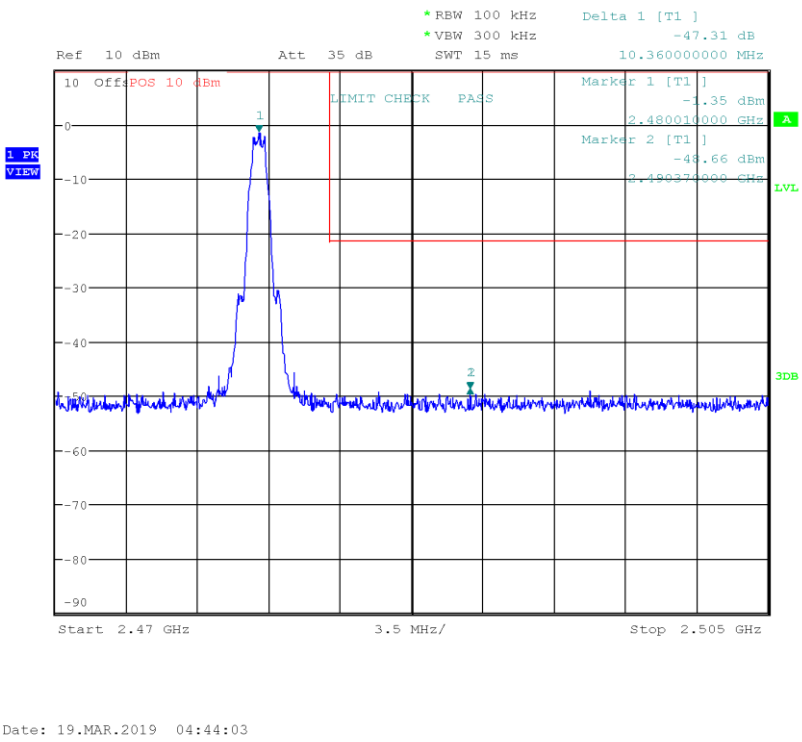
## Band-edge Compliance

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 7.8.6, 6.10.4 |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Band-edge | Lower |
| In-band Frequency [MHz]: | 2402.048 |
| Max. in-band Level [dBm/100 kHz]: | -0.626 |
| Out-of-band Frequency [MHz]: | 2392.0 |
| Max. out-of-band Level [dBm/100 kHz]: | -39.27 |
| Attenuation [dB]: | -38.64 |



## Band-edge Compliance

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 7.8.6, 6.10.4 |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Band-edge | Upper |
| In-band Frequency [MHz]: | 2480.01 |
| Max. in-band Level [dBm/100 kHz]: | -1.352 |
| Out-of-band Frequency [MHz]: | 2490.37 |
| Max. out-of-band Level [dBm/100 kHz]: | -48.663 |
| Attenuation [dB]: | -47.31 |



## 3.7 Test Conditions and Results - Conducted spurious emissions

### 3.7.1 Information

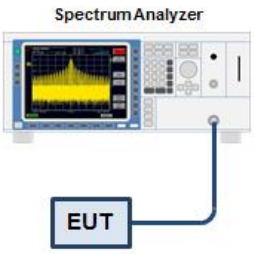
| Test Information | |
|---|---|
| Reference | FCC § 15.247(d); ISED RSS-247, Issue 2 (section 5.5) |
| Measurement Method | ANSI C63.10 11.11 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

### 3.7.2 Limits

| Limits | |
|---|---|
| Power Measurement | Out-of-band attenuation [dB] |
| Peak | 20 |
| RMS | 30 |

### 3.7.3 Setup

**Test Setup**




### 3.7.4 Equipment

| Test Equipment | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S | FSU 26 | EF01407 | 2018-12 | 2019-12 |

### 3.7.5 Procedure

**Test Procedure**

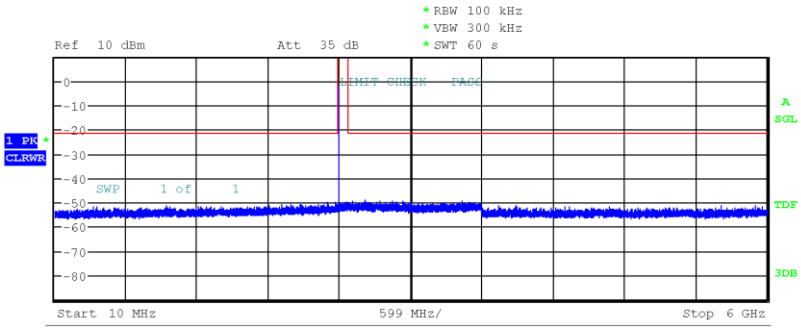
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is determined from level difference

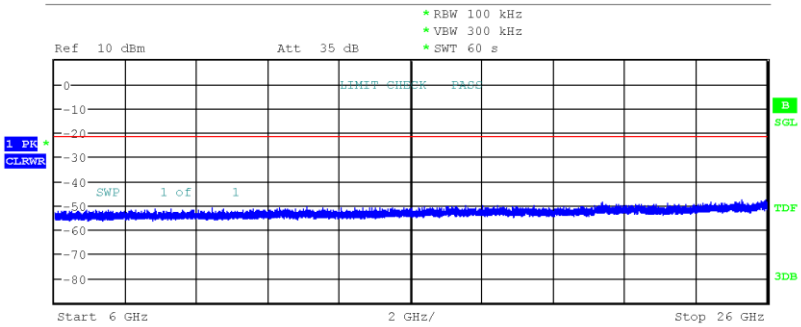
### 3.7.6 Results

| Test Results | | |
|---|---|---|
| Mode | Channel [MHz] | Verdict |
| GFSK | 2402 | PASS |
| GFSK | 2440 | PASS |
| GFSK | 2480 | PASS |

## Conducted Spurious Emissions

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.11 |
| Operational Mode: | GFSK, Channel: 0, 2402 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Max. in-band Frequency [MHz]: | 2402.0 |
| Max. in-band Level [dBm/100 kHz]: | -1.1 |
| Out-of-band Limit [dBm/100 kHz]: | -21.1 |

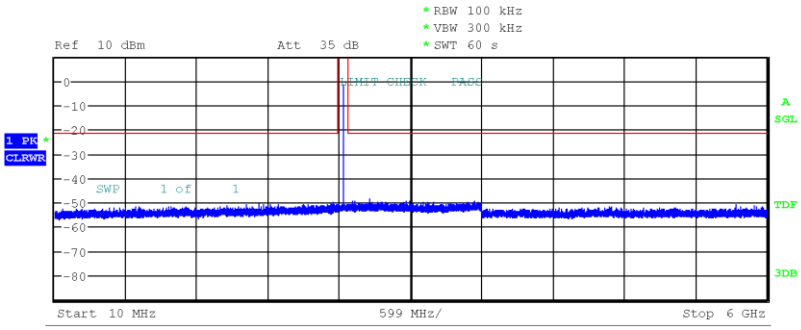


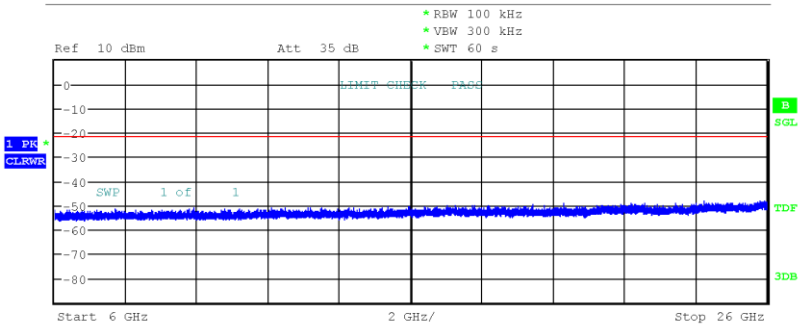




Date: 19.MAR.2019 05:00:45

## Conducted Spurious Emissions

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.11 |
| Operational Mode: | GFSK, Channel: 19, 2440 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Max. in-band Frequency [MHz]: | 2440.0 |
| Max. in-band Level [dBm/100 kHz]: | -1.4 |
| Out-of-band Limit [dBm/100 kHz]: | -21.4 |

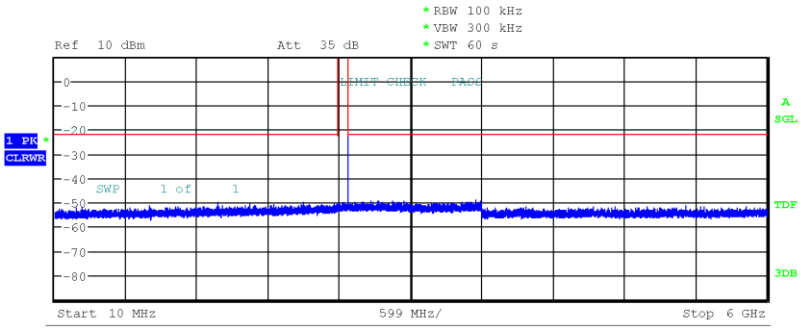


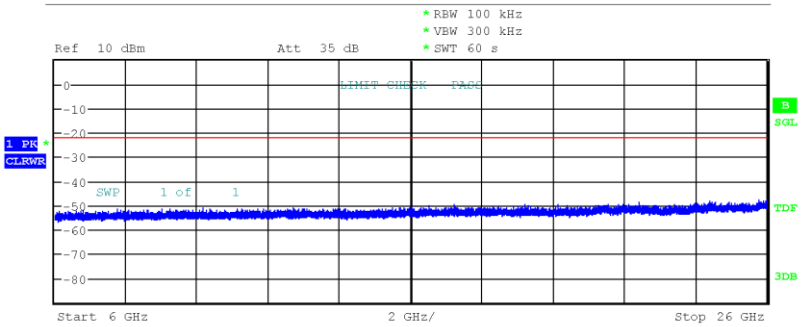




Date: 19.MAR.2019 04:53:23

## Conducted Spurious Emissions

| | |
|---|---|
| Project Number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| Model Description: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Sample ID: | 23344 |
| Reference Standards: | FCC 15.247, RSS-247 |
| Reference Method: | ANSI C63.10:2013, Section 11.11 |
| Operational Mode: | GFSK, Channel: 39, 2480 MHz |
| Operating Conditions: | Tnom/Vnom |
| Operator: | Wilfried Treffke |
| Test Site: | Eurofins Product Service GmbH |
| Test Date: | 2019-03-19 |
| Max. in-band Frequency [MHz]: | 2480.0 |
| Max. in-band Level [dBm/100 kHz]: | -1.9 |
| Out-of-band Limit [dBm/100 kHz]: | -21.9 |




Date: 19.MAR.2019 04:48:48

## 3.8 Test Conditions and Results - Transmitter radiated emissions

### 3.8.1 Information

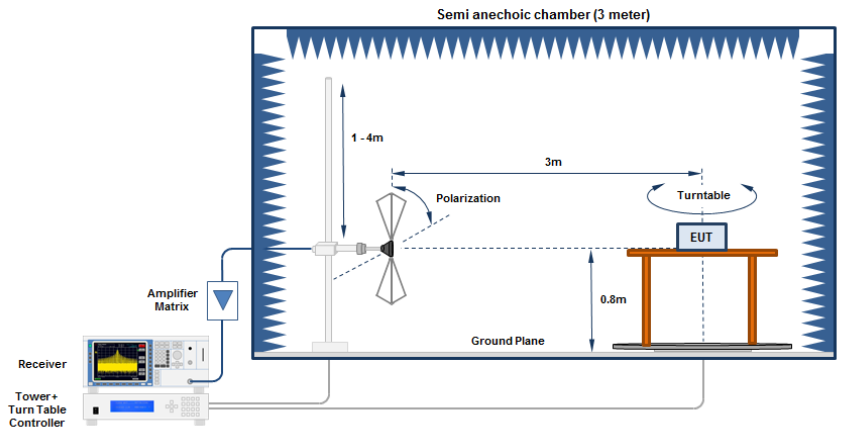
| Test Information | |
|---|---|
| Reference | FCC § 15.247(d); FCC § 15.209; ISED RSS-Gen, Issue 5 (section 6.13) |
| Measurement Method | ANSI C63.10 6.4, 6.5, 6.6, 11.12 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

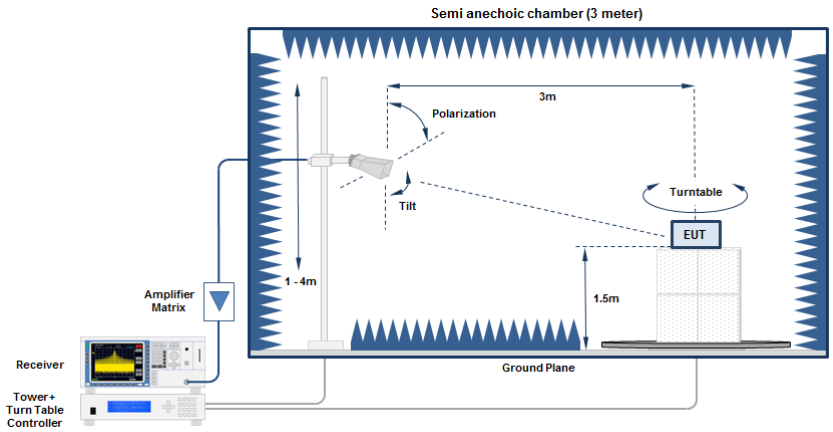
### 3.8.2 Limits

| Limits | | | |
|---|---|---|---|
| Frequency [MHz] | Detector | Field strength [µV/m] | Measurement distance [m] |
| 0.009 - 0.09 | Average | 2400/F[kHz] | 300 |
| 0.09 - 0.110 | Quasi-Peak | 2400/F[kHz] | 300 |
| 0.110 - 0.490 | Average | 2400/F[kHz] | 300 |
| 0.490 - 1.705 | Quasi-Peak | 24000/F[kHz] | 30 |
| 1.705 - 30.0 | Quasi-Peak | 30 | 30 |
| 30 - 88 | Quasi-Peak | 100 | 3 |
| 88 - 216 | Quasi-Peak | 150 | 3 |
| 216 - 960 | Quasi-Peak | 200 | 3 |
| 960 - 1000 | Quasi-Peak | 500 | 3 |
| >1000 | Average | 500 | 3 |

### 3.8.3 Setup

**Test Setup 30 - 1000 MHz**



| Test Setup > 1 GHz |
|---|
|  |



3.8.4 Equipment

| Test Software | | | |
|---|---|---|---|
| Description | Manufacturer | Name | Version |
| EMC Software | DARE Instruments | RadiMation | 2015.2.4 |

| Test Equipment 30 - 1000 MHz | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Anechoic Chamber | Frankonia | AC1 | EF00062 | 2018-07 | 2021-07 |
| Measurement Receiver | Agilent | N9038A-526/WXP | EF01070 | 2018-08 | 2019-08 |
| Antenna | R&S | HK 116 | EF00030 | 2016-04 | 2019-04 |
| Antenna | R&S | HL 223 | EF00187 | 2016-05 | 2019-05 |

| Test Equipment > 1 GHz | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Anechoic Chamber | Frankonia | AC1 | EF00062 | 2018-07 | 2021-07 |
| Measurement Receiver | Agilent | N9038A-526/WXP | EF01070 | 2018-08 | 2019-08 |
| Antenna | Schwarzbeck | BBHA 9120D | EF01153 | 2018-09 | 2019-09 |
| Antenna | Amplifier Research | AT4560 | EF01152 | 2018-10 | 2019-10 |

3.8.5 Procedure

| Test Procedure < 30 MHz |
|---|
| 1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground<br>2. EUT set to test mode<br>3. The EUT is rotated through 360°<br>4. The emissions are measured with peak detector and max hold<br>5. All significant emissions are measured again using the corresponding final detector |

| Test Procedure 30 - 1000 MHz |
|---|
| 1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground<br>2. EUT set to test mode<br>3. The receiver is set to peak detection with max hold<br>4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m<br>5. All significant emissions are measured again using the corresponding final detector |

| Test Procedure > 1 GHz |
|---|
| 1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground<br>2. EUT set to test mode<br>3. The receiver is set to peak detection with max hold<br>4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m<br>5. All significant emissions are measured again using the corresponding final detector |

### 3.8.6 Results

| Test Results | | | | | | |
|---|---|---|---|---|---|---|
| Channel [MHz] | Emission [MHz] | Level [dBµV/m] | Det. | Pol. | Limit [dBµV/m] | Margin [dB] |
| 2402 | 4800 | 37.26 | pk | hor | 74.00 | -36.74 |
| 2440 | 7315 | 42.21 | pk | ver | 74.00 | -31.79 |
| 2480 | Comment: Emission level corresponds to ambient noise floor | | | | | |

## 3.9 Test Conditions and Results - Receiver radiated emissions

### 3.9.1 Information

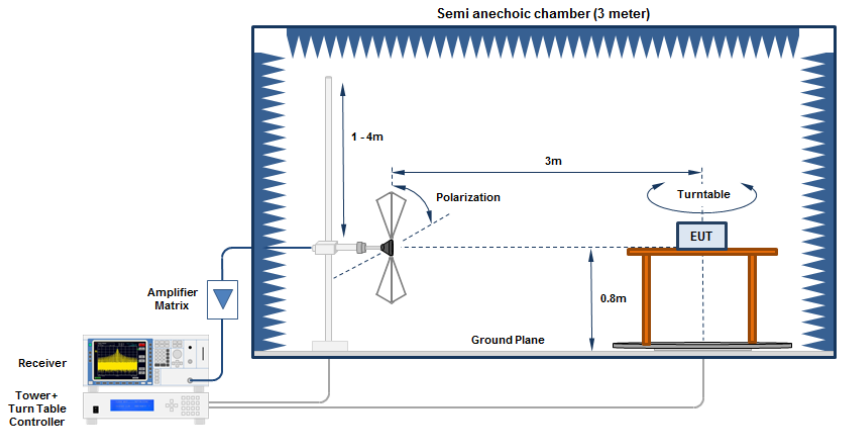
| Test Information | |
|---|---|
| Reference | ISED RSS-247, Issue 2 (section 3.1) |
| Measurement Method | ANSI C63.10 6.5, 6.6, 11.12 |
| Operator | Wilfried Treffke |
| Date | 2019-03-19 |

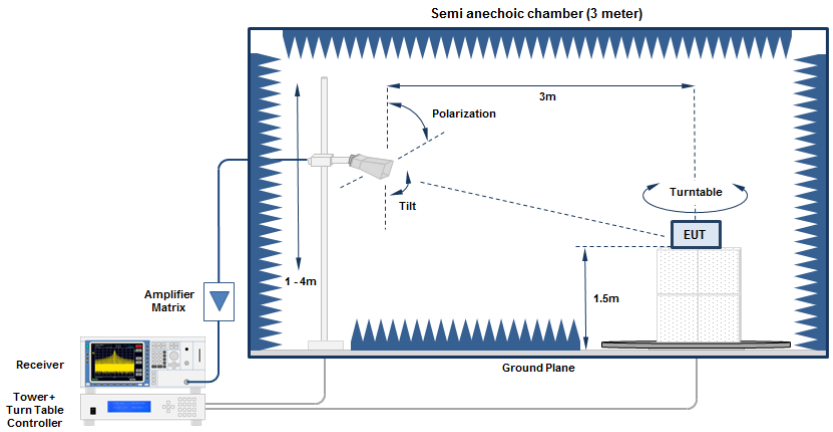
### 3.9.2 Limits

| Limits | | | |
|---|---|---|---|
| Frequency [MHz] | Detector | Field strength [dBµV/m] | Measurement distance [m] |
| 30 - 88 | Quasi-Peak | 100 | 3 |
| 88 - 216 | Quasi-Peak | 150 | 3 |
| 216 - 960 | Quasi-Peak | 200 | 3 |
| 960 - 1000 | Quasi-Peak | 500 | 3 |
| >1000 | Average | 500 | 3 |

### 3.9.3 Setup

**Test Setup 30 - 1000 MHz**



| Test Setup > 1 GHz |
|---|
|  |



3.9.4 Equipment

| Test Software | | | |
|---|---|---|---|
| Description | Manufacturer | Name | Version |
| EMC Software | DARE Instruments | RadiMation | 2015.2.4 |

| Test Equipment 30 - 1000 MHz | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Anechoic Chamber | Frankonia | AC1 | EF00062 | 2018-07 | 2021-07 |
| Measurement Receiver | Agilent | N9038A-526/WXP | EF01070 | 2018-08 | 2019-08 |
| Antenna | R&S | HK 116 | EF00030 | 2016-04 | 2019-04 |
| Antenna | R&S | HL 223 | EF00187 | 2016-05 | 2019-05 |

| Test Equipment > 1 GHz | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Anechoic Chamber | Frankonia | AC1 | EF00062 | 2018-07 | 2021-07 |
| Measurement Receiver | Agilent | N9038A-526/WXP | EF01070 | 2018-08 | 2019-08 |
| Antenna | Schwarzbeck | BBHA 9120D | EF01153 | 2018-09 | 2019-09 |

3.9.5 Procedure

| Test Procedure 30 - 1000 MHz |
|---|
| 1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground<br>2. EUT set to test mode<br>3. The receiver is set to peak detection with max hold<br>4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m<br>5. All significant emissions are measured again using the corresponding final detector |

| Test Procedure > 1 GHz |
|---|
| 1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground<br>2. EUT set to test mode<br>3. The receiver is set to peak detection with max hold<br>4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m<br>5. All significant emissions are measured again using the corresponding final detector |

### 3.9.6 Results

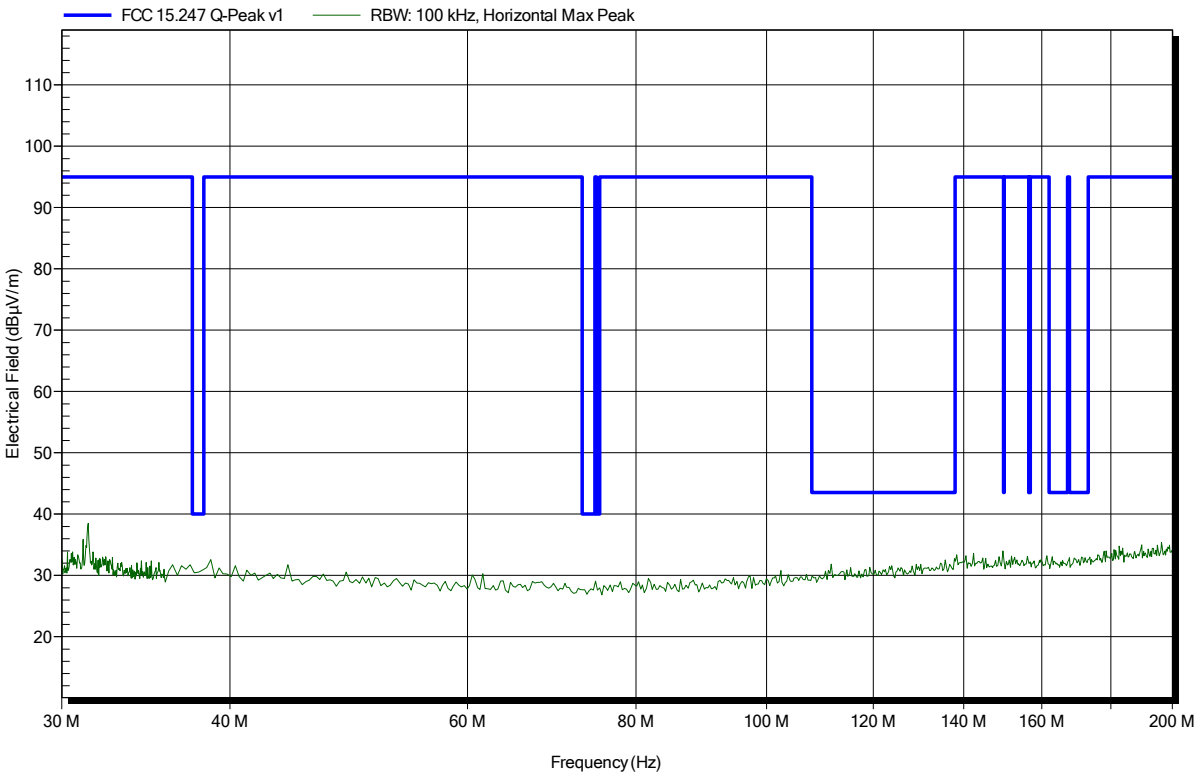
| Test Results | | | | | | |
|---|---|---|---|---|---|---|
| Channel [MHz] | Emission [MHz] | Level [dBµV/m] | Det. | Pol. | Limit [dBµV/m] | Margin [dB] |
| 2440 | 31.353 | 34.06 | qpk | hor | 40.00 | -05.94 |
| 2440 | 31.372 | 32.26 | qpk | ver | 40.00 | -07.74 |
| 2440 | 10981 | 43.74 | pk | ver | 53.98 | -10.24 |
| 2440 | 11017 | 44.09 | pk | hor | 53.98 | -09.89 |

# ANNEX A Transmitter spurious emissions

**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HK 116, Horizontal |
| Measurement distance: | 3 m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

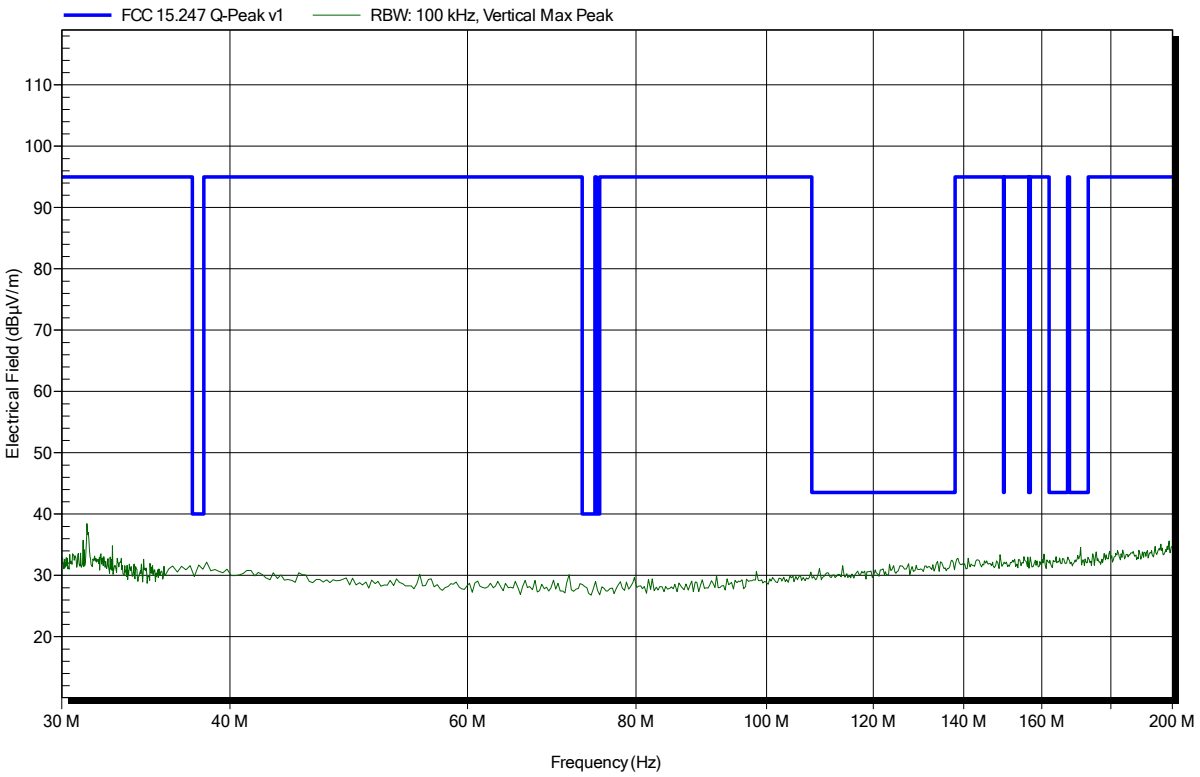
Index 30



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HK 116, Vertical |
| Measurement distance: | 3 m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

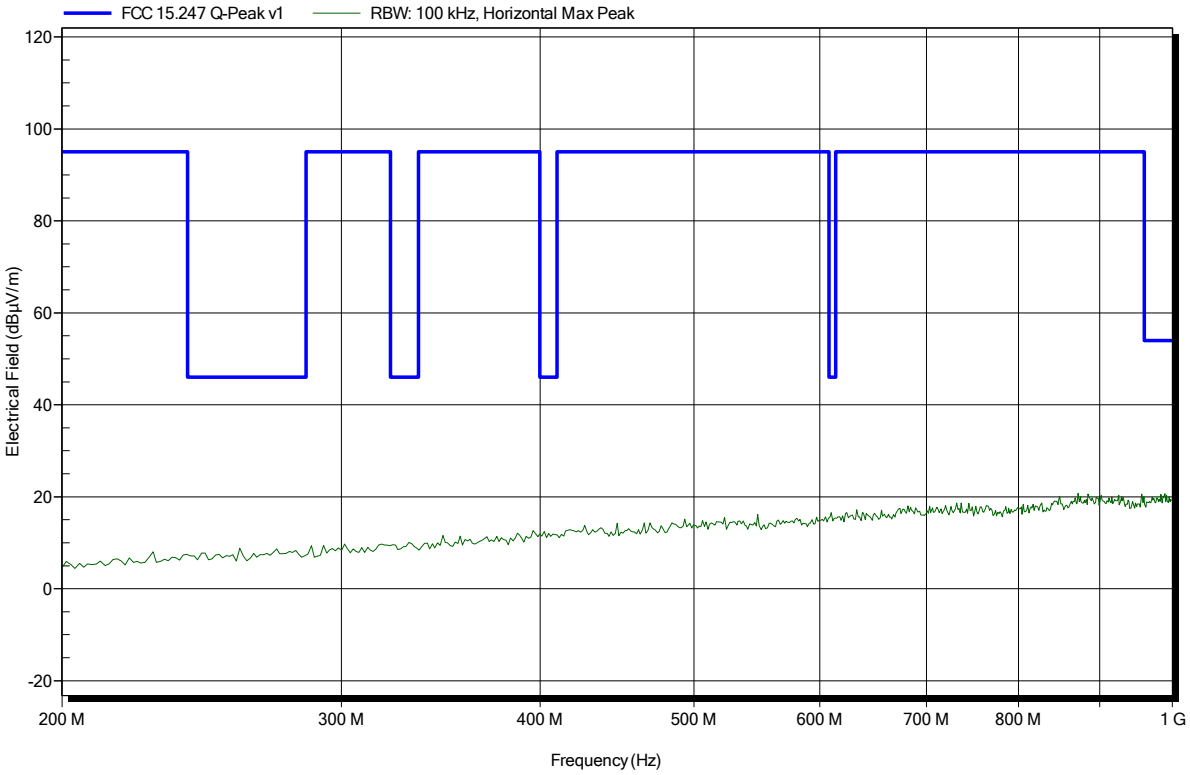
Index 29



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HL 223, Horizontal |
| Measurement distance: | 3 m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

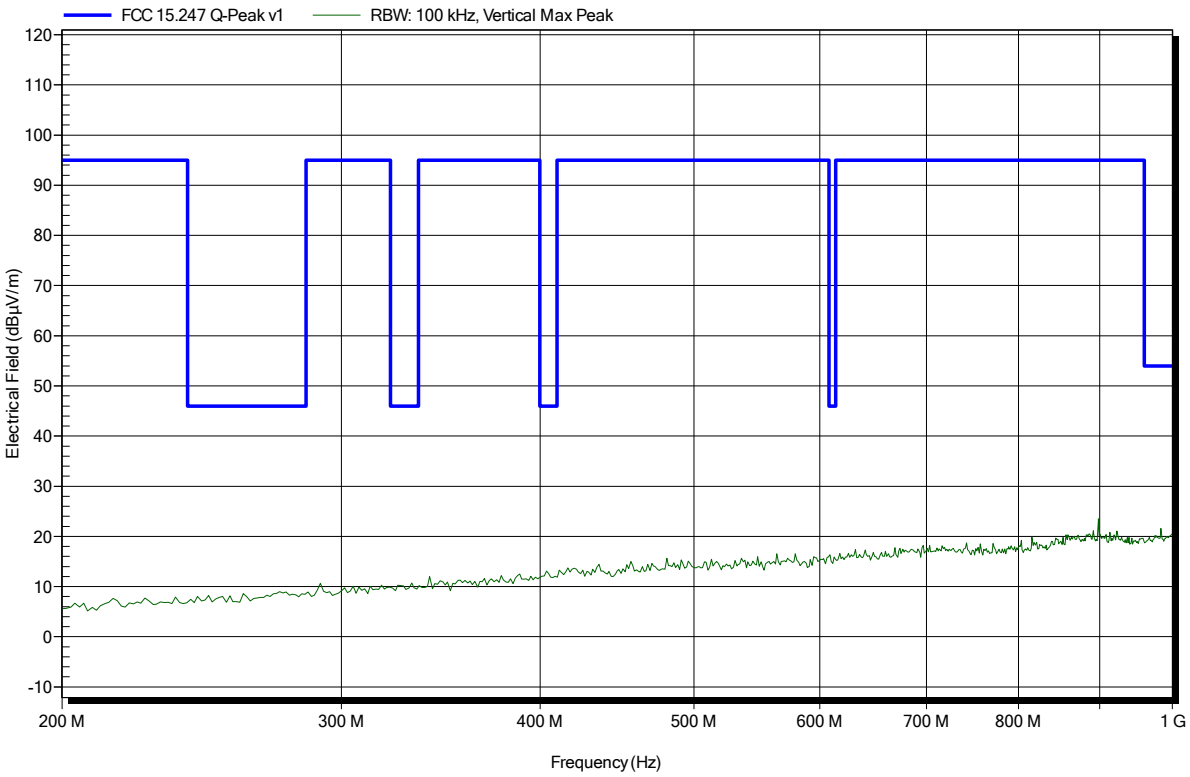
Index 31



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HL 223, Vertical |
| Measurement distance: | 3 m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

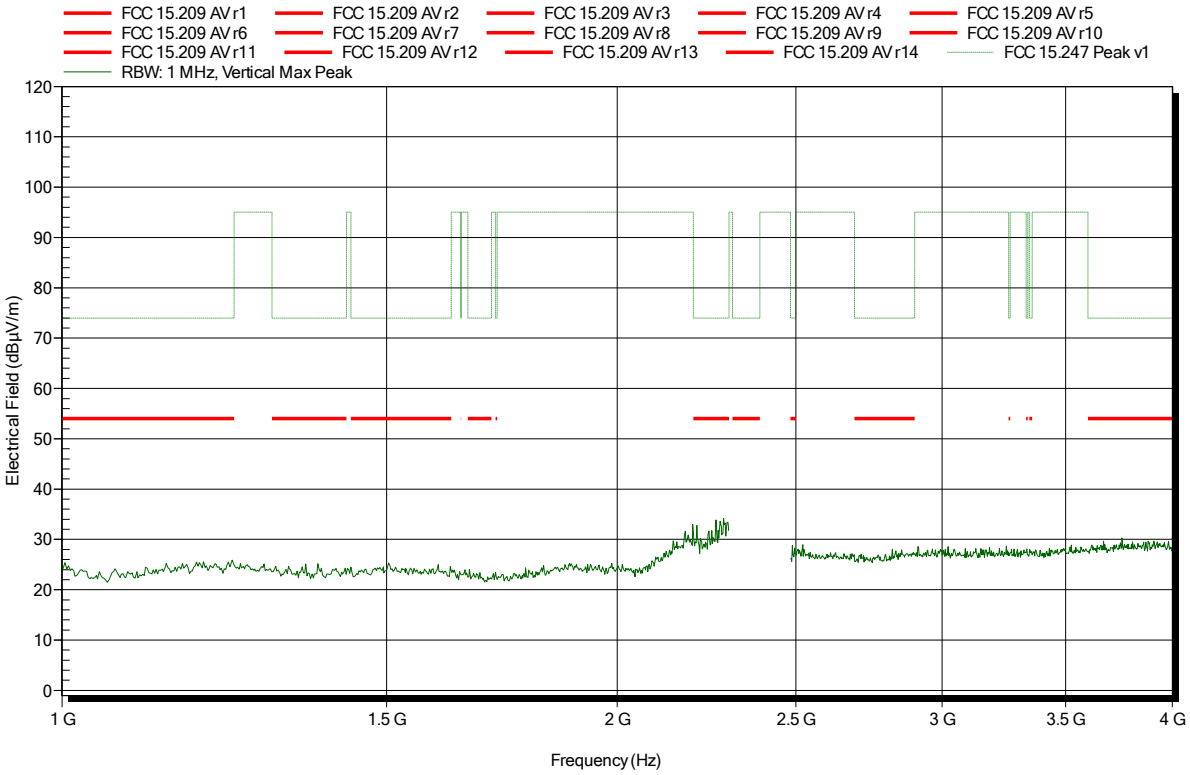
Index 32



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

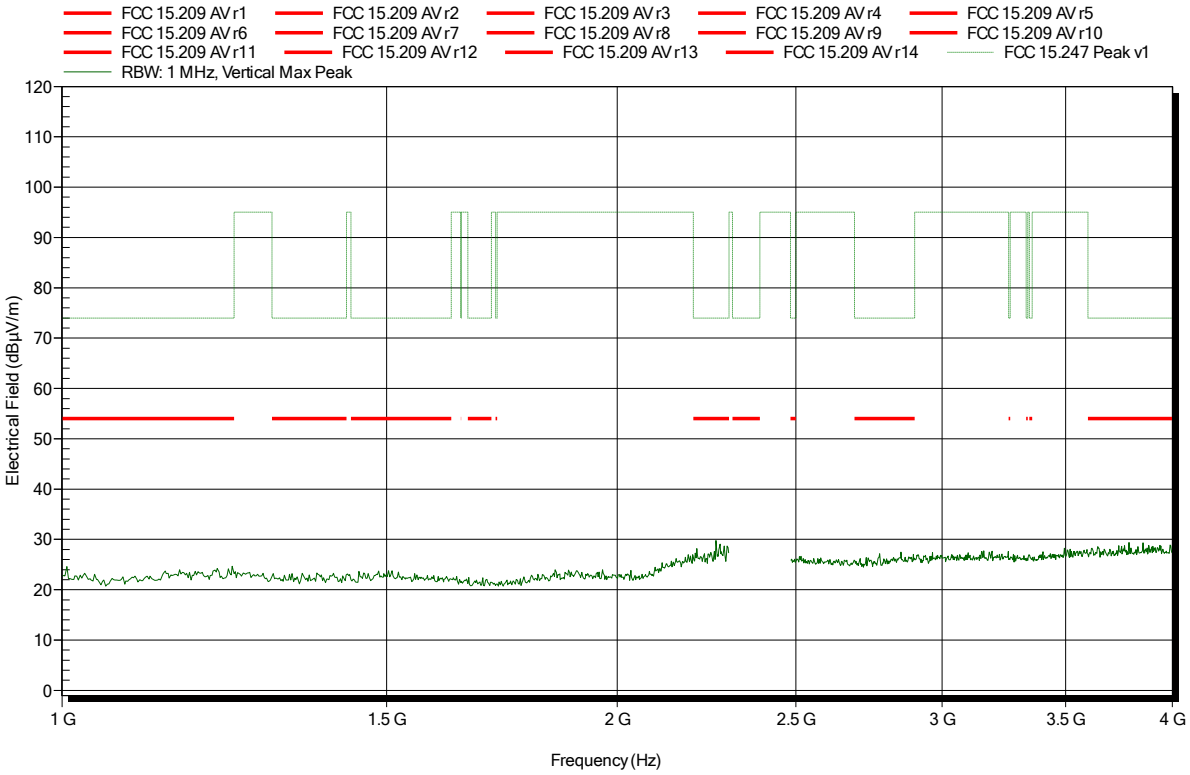
Index 1



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

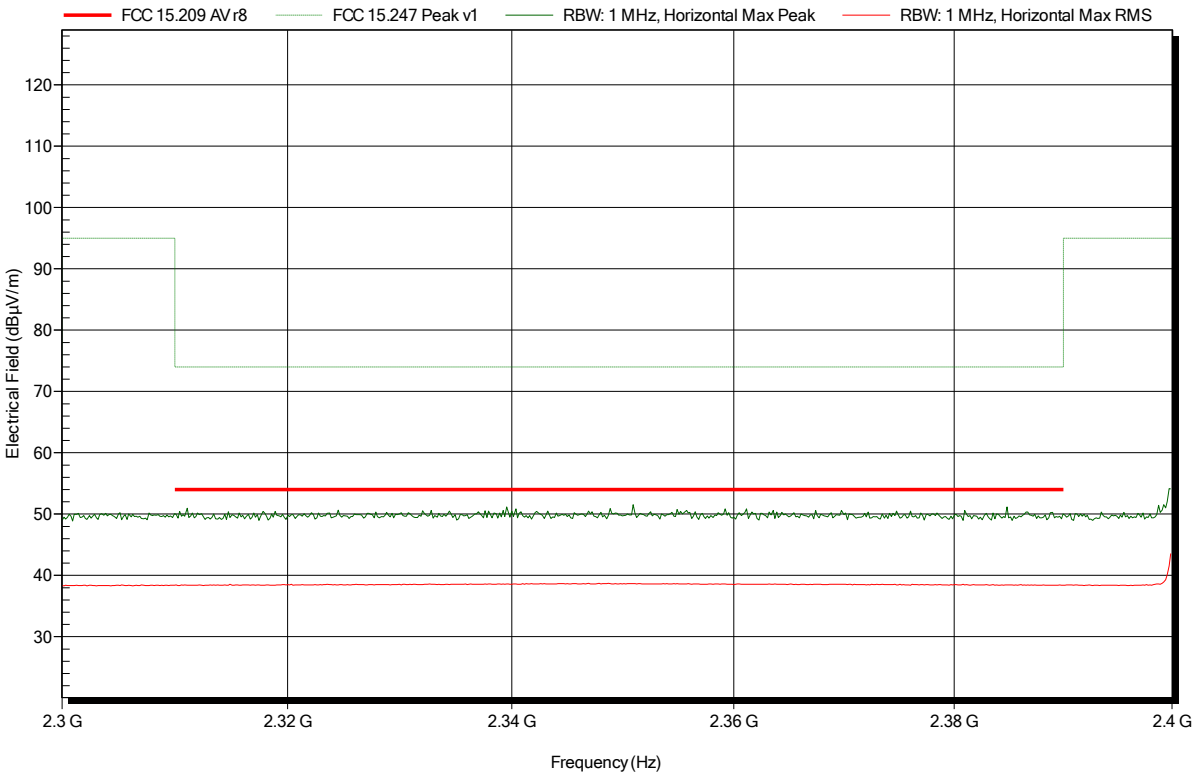
Index 6



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | lower bandedge |

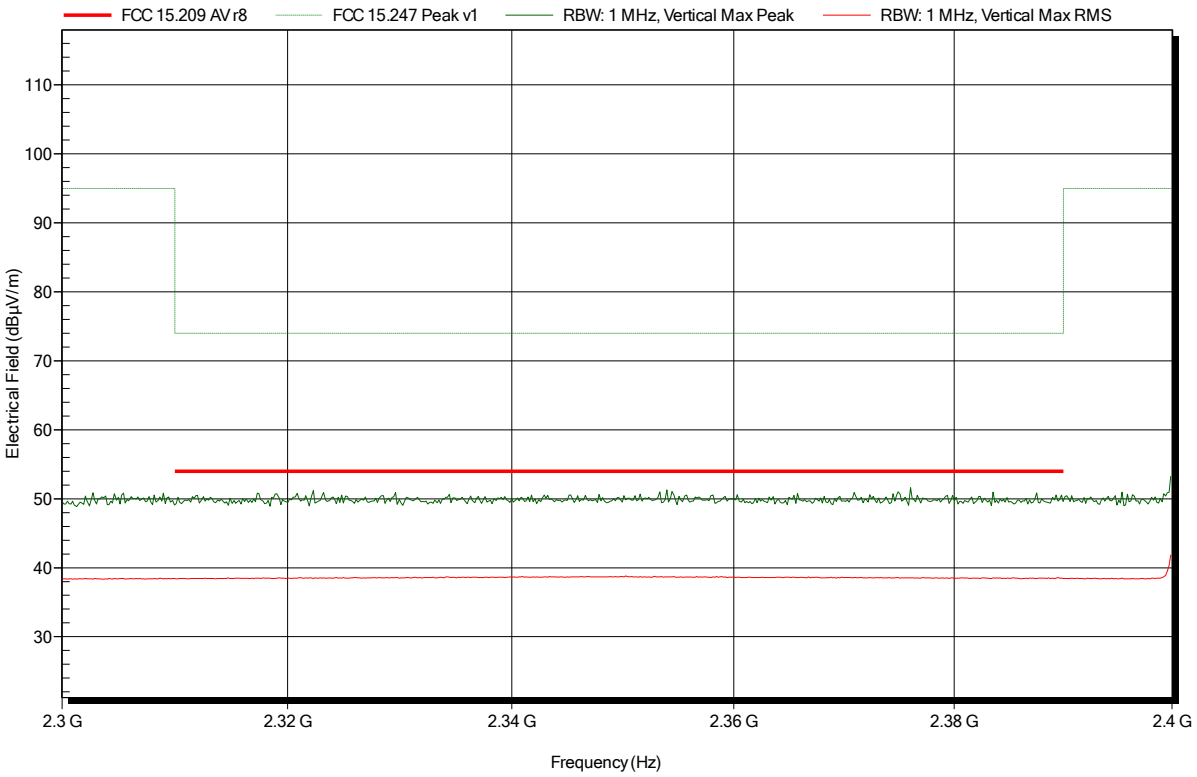
Index 2



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | lower bandedge |

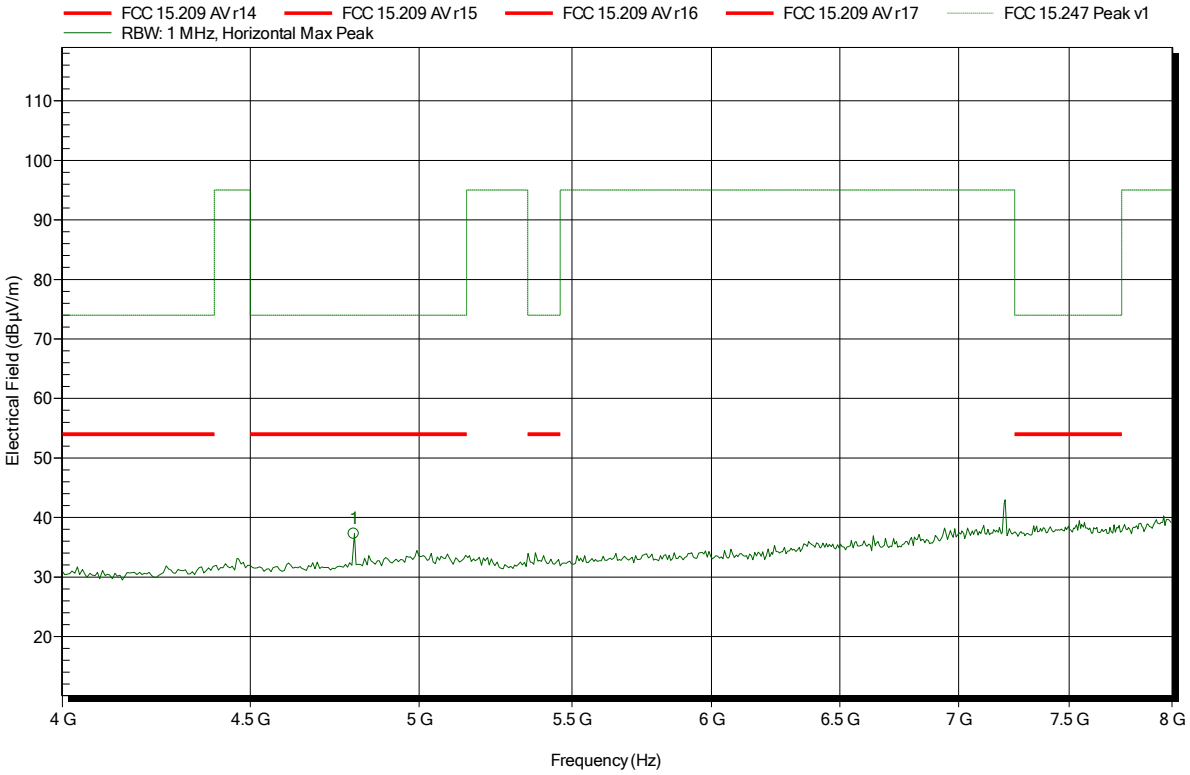
Index 7



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 3

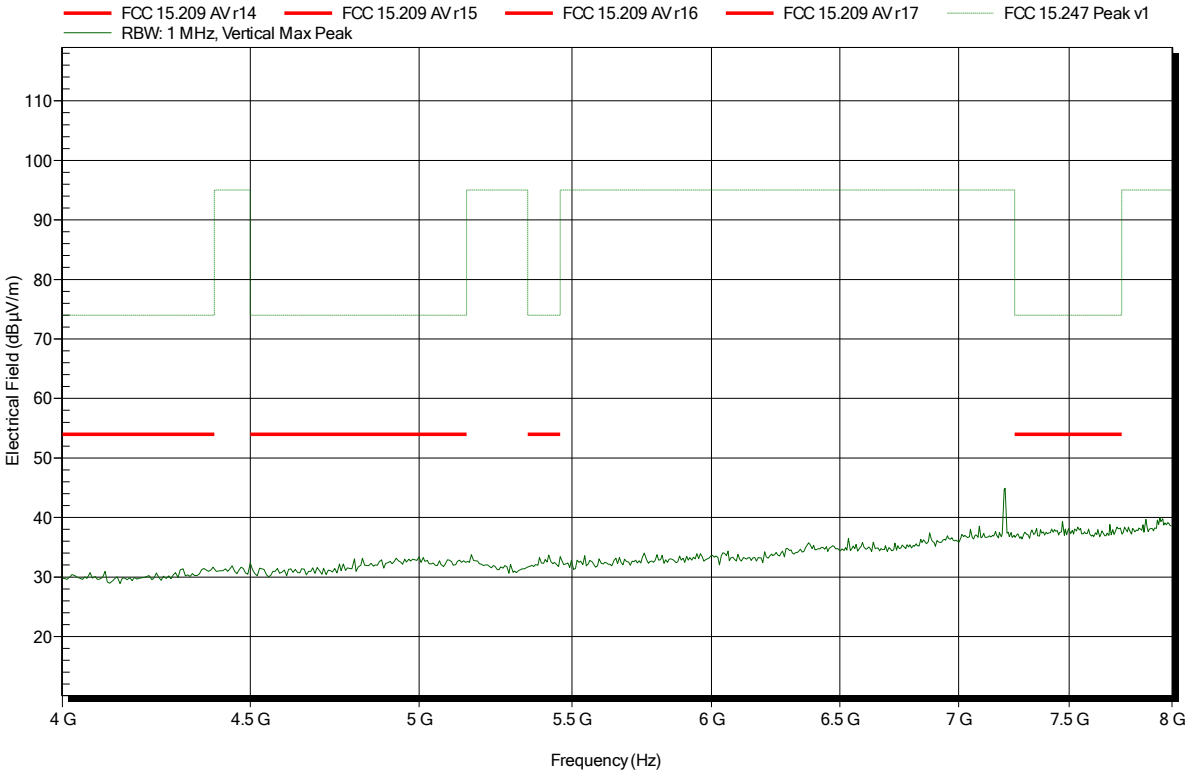



| Frequency | Peak | Peak Limit | Peak Difference | Peak Status |
|---|---|---|---|---|
| 4.8 GHz | 37.26 dBµV/m | 74 dBµV/m | -36.74 dB | Pass |

**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

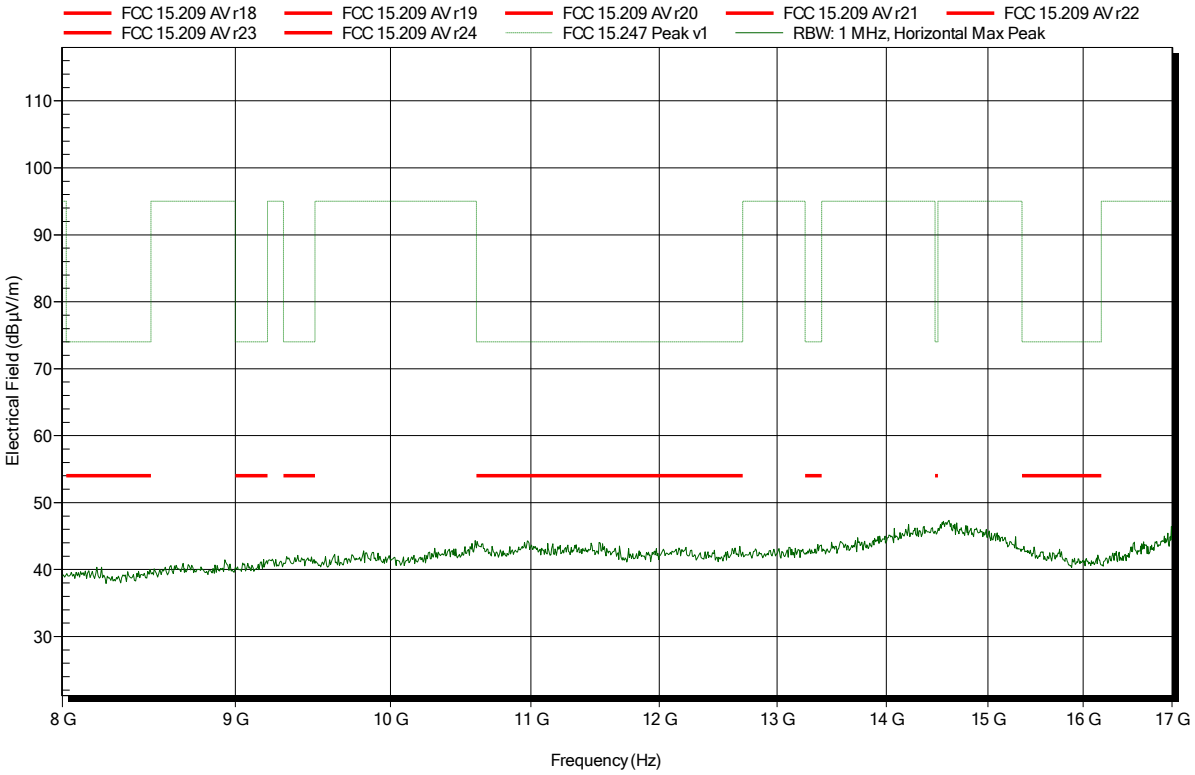
Index 8



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

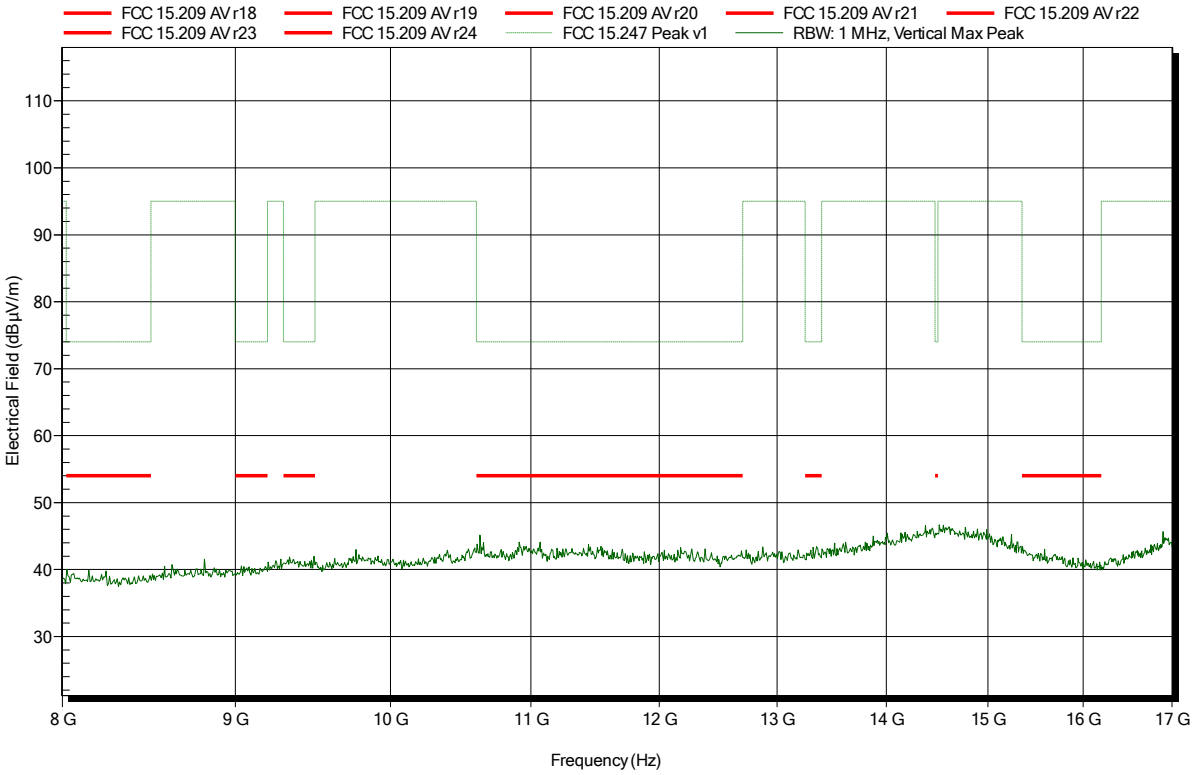
Index 4



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

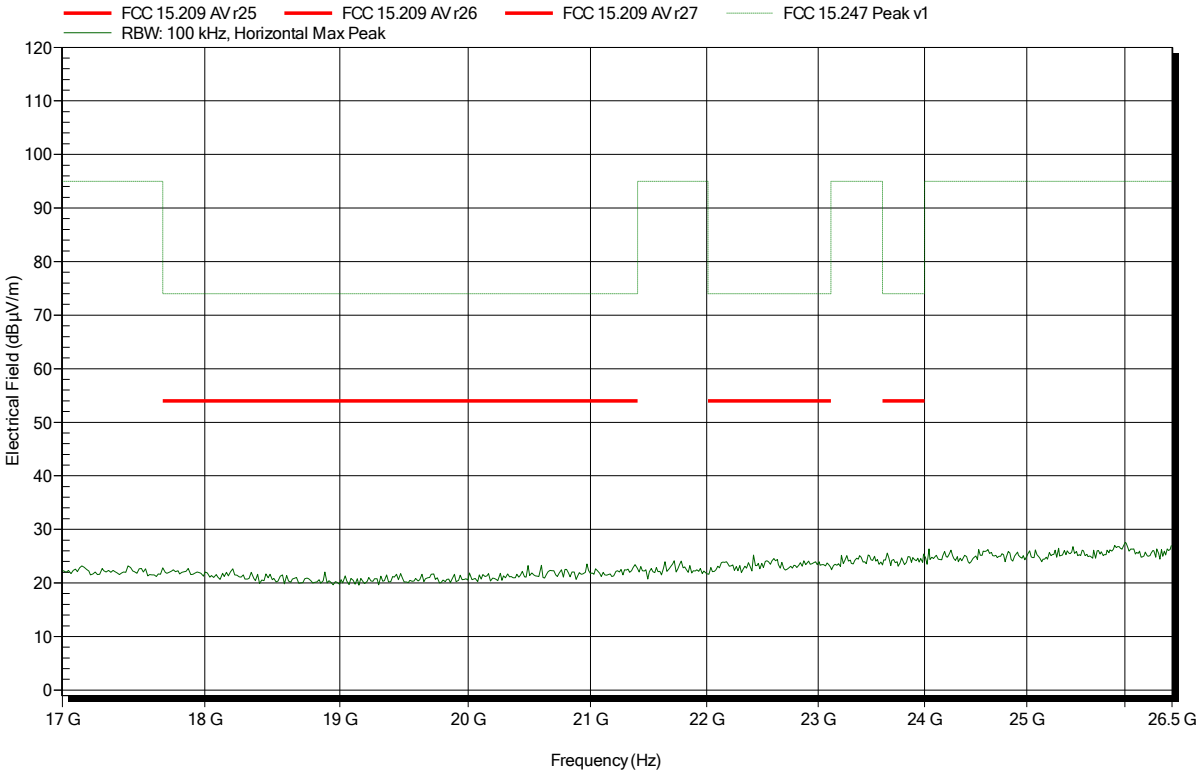
Index 9



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

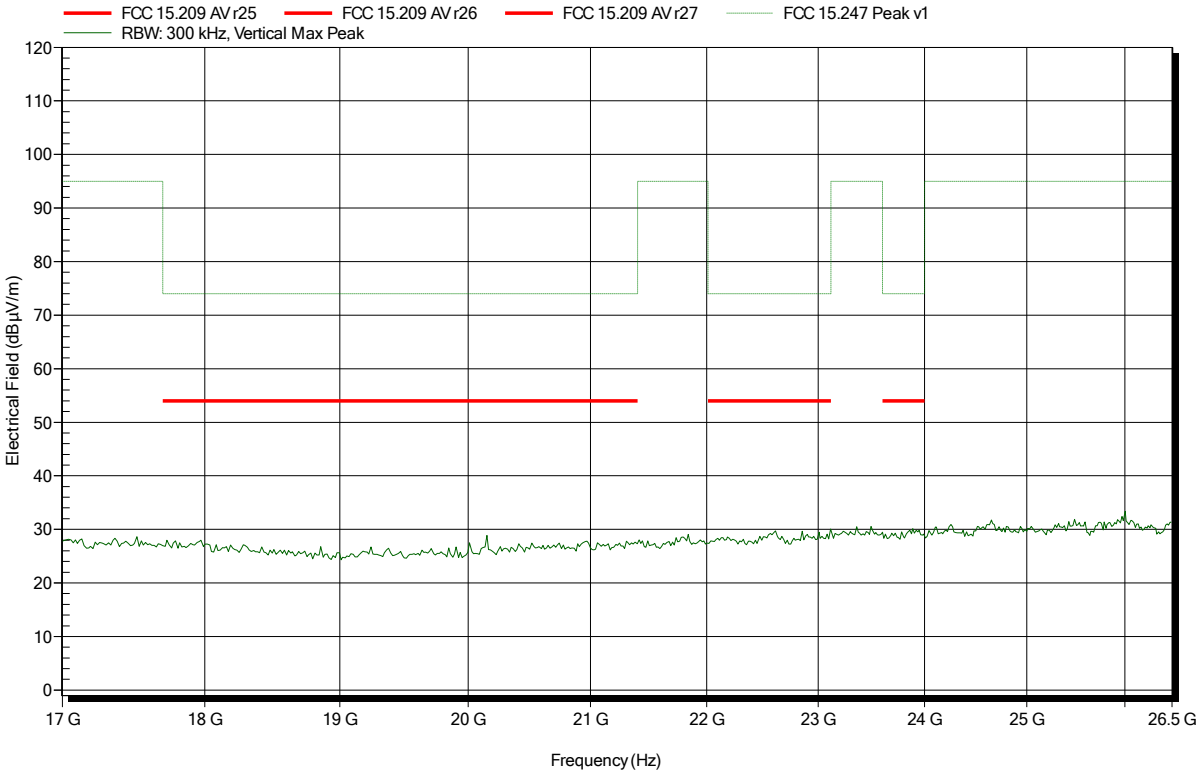
Index 5



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2402 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

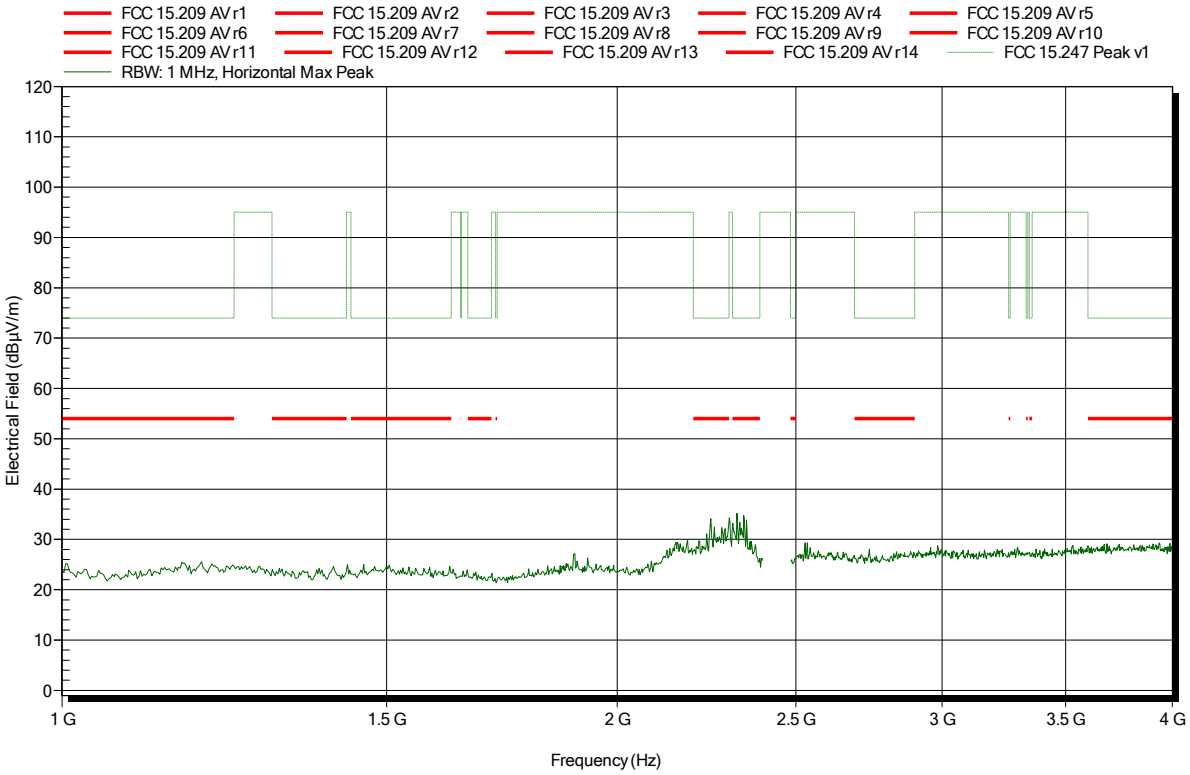
Index 10



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

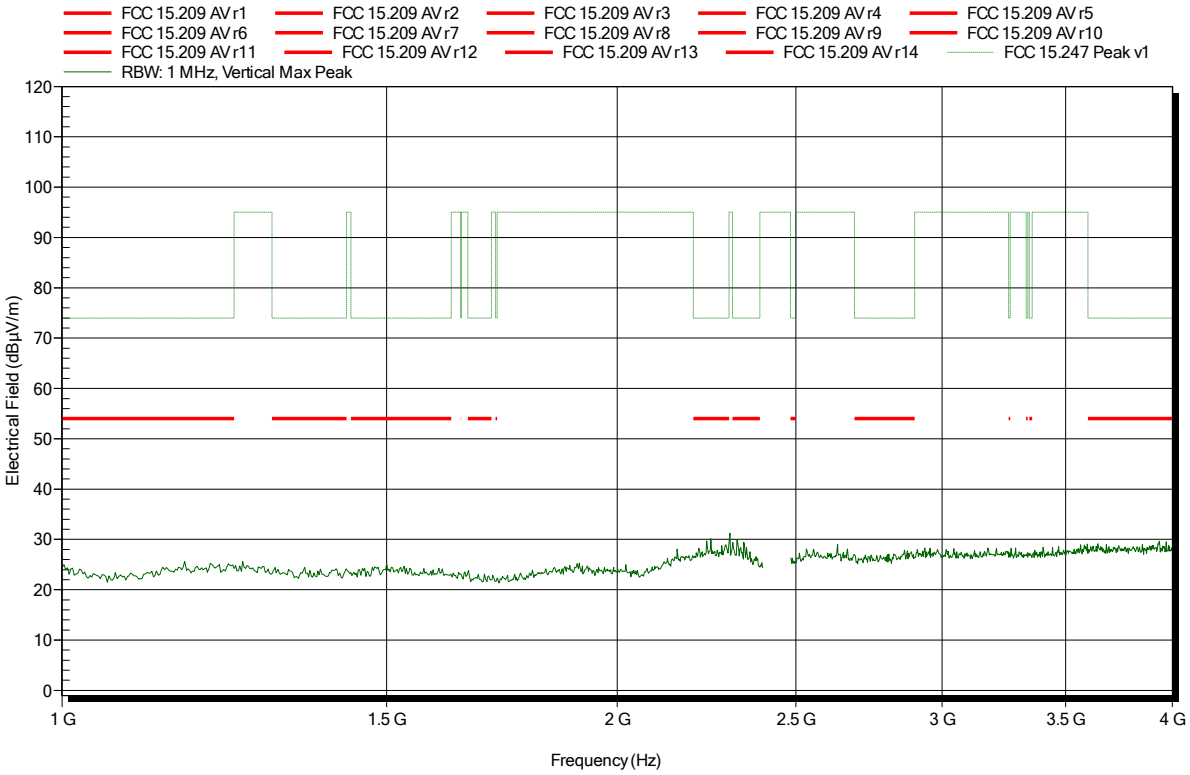
Index 11



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

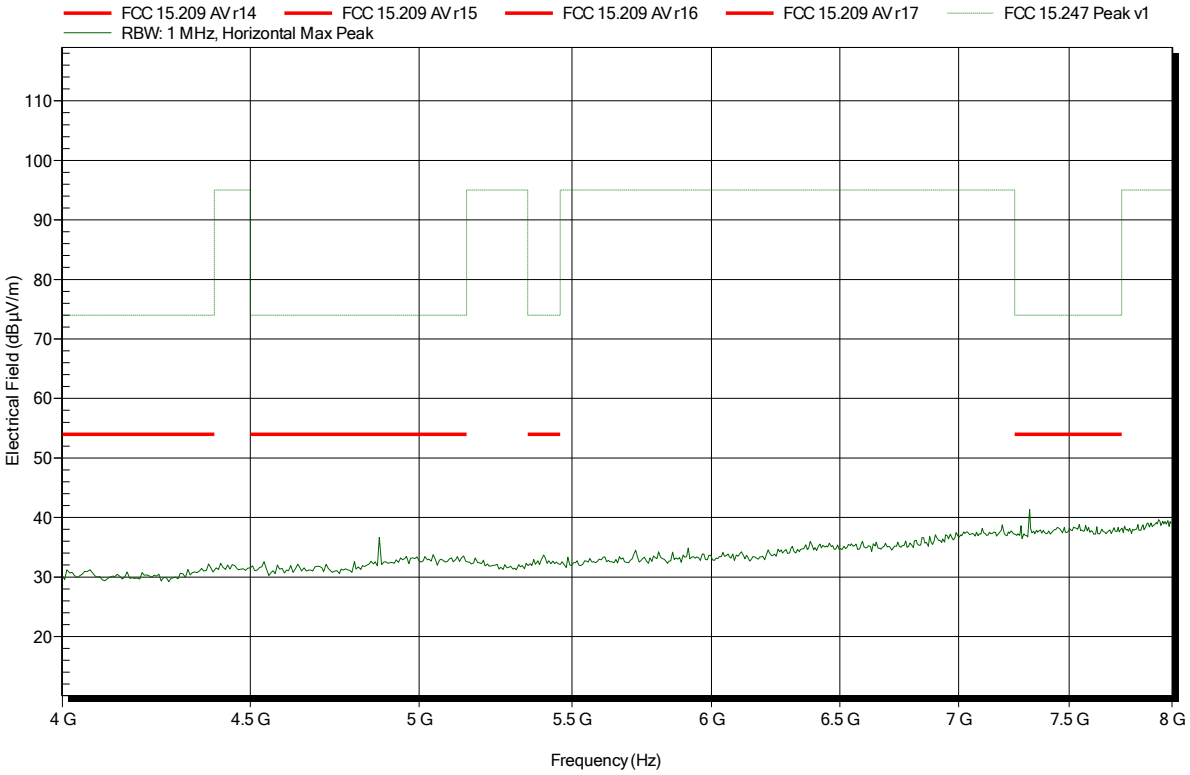
Index 15



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

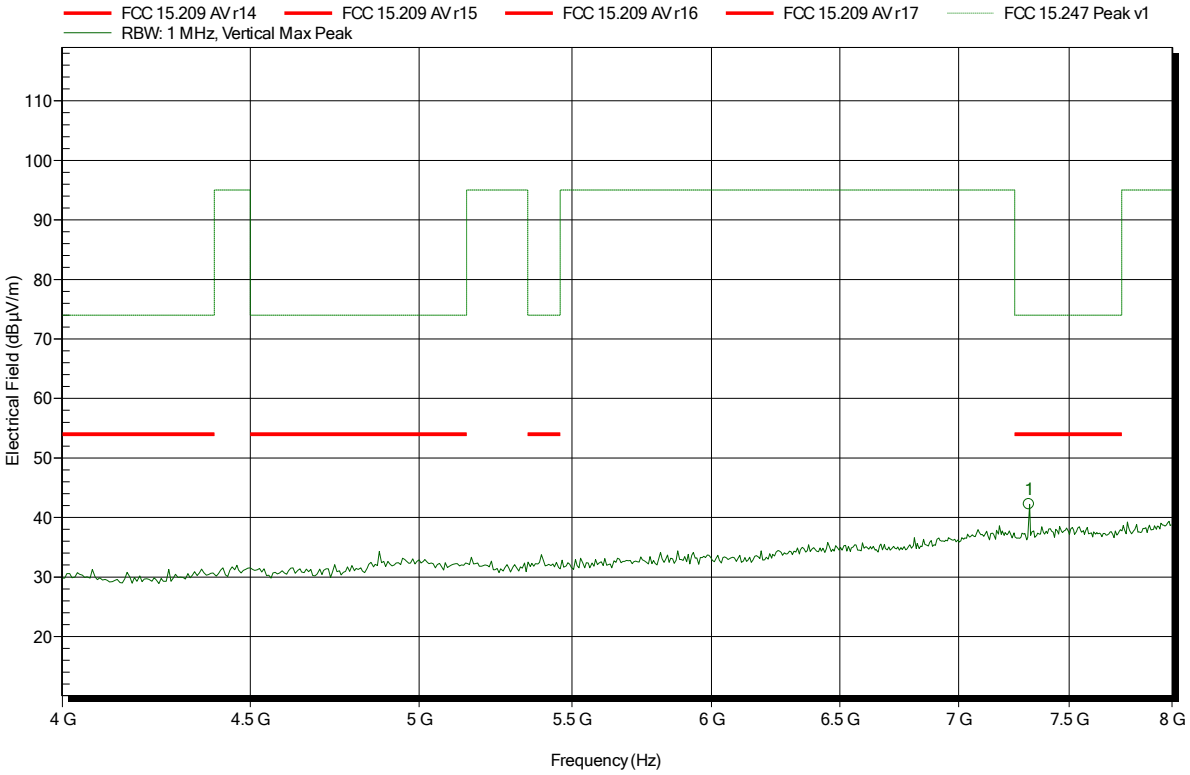
Index 12



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 16

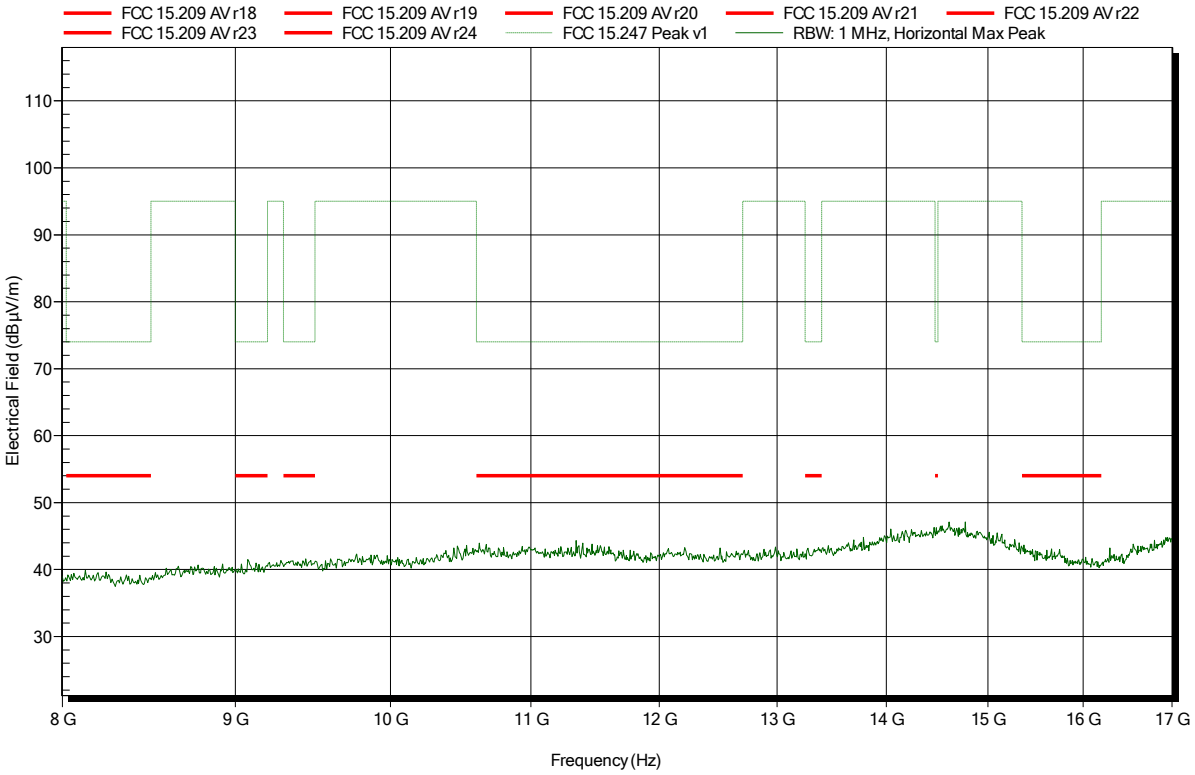



| Frequency | Peak | Peak Limit | Peak Difference | Peak Status |
|---|---|---|---|---|
| 7.315 GHz | 42.21 dBµV/m | 74 dBµV/m | -31.79 dB | Pass |

**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

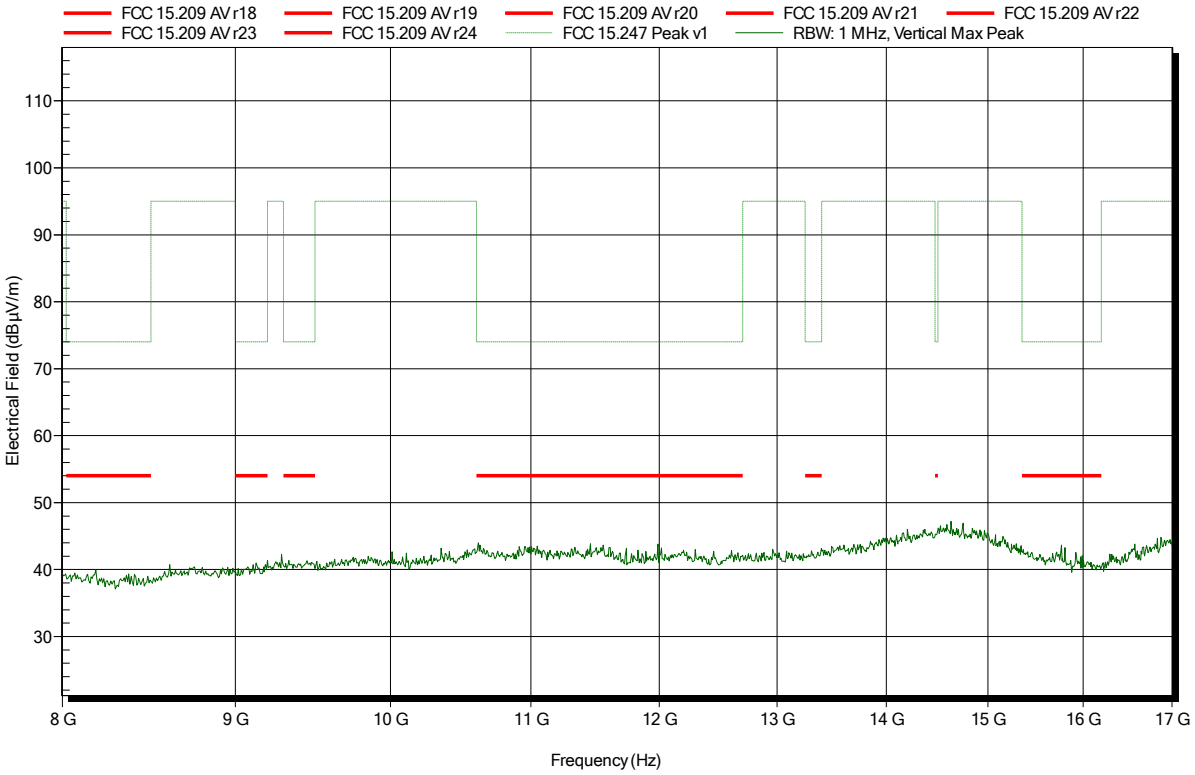
Index 13



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

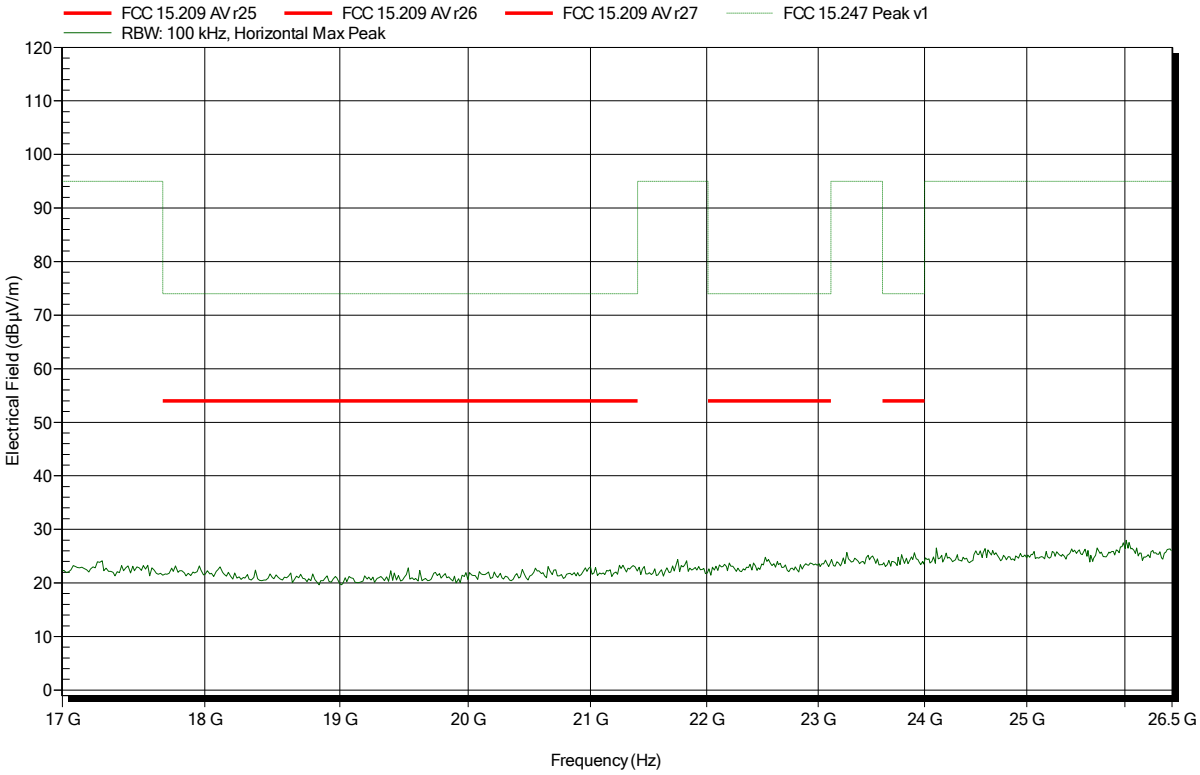
Index 17



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

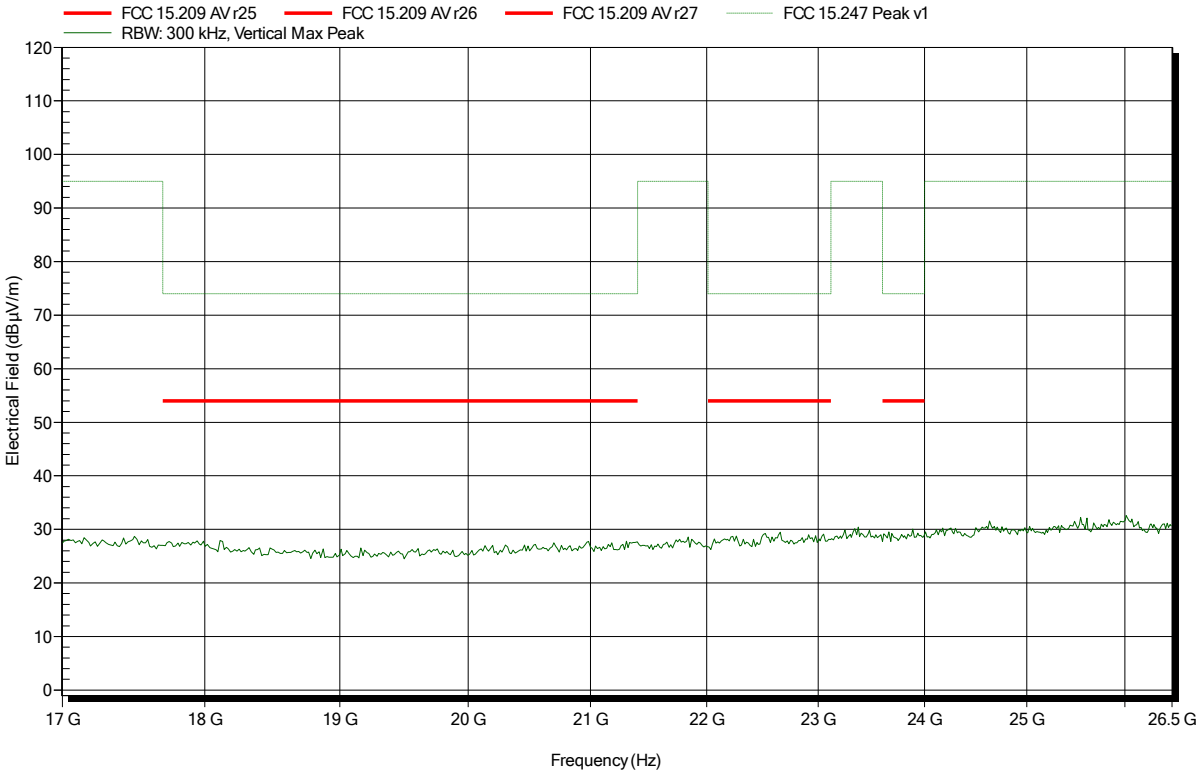
Index 14



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

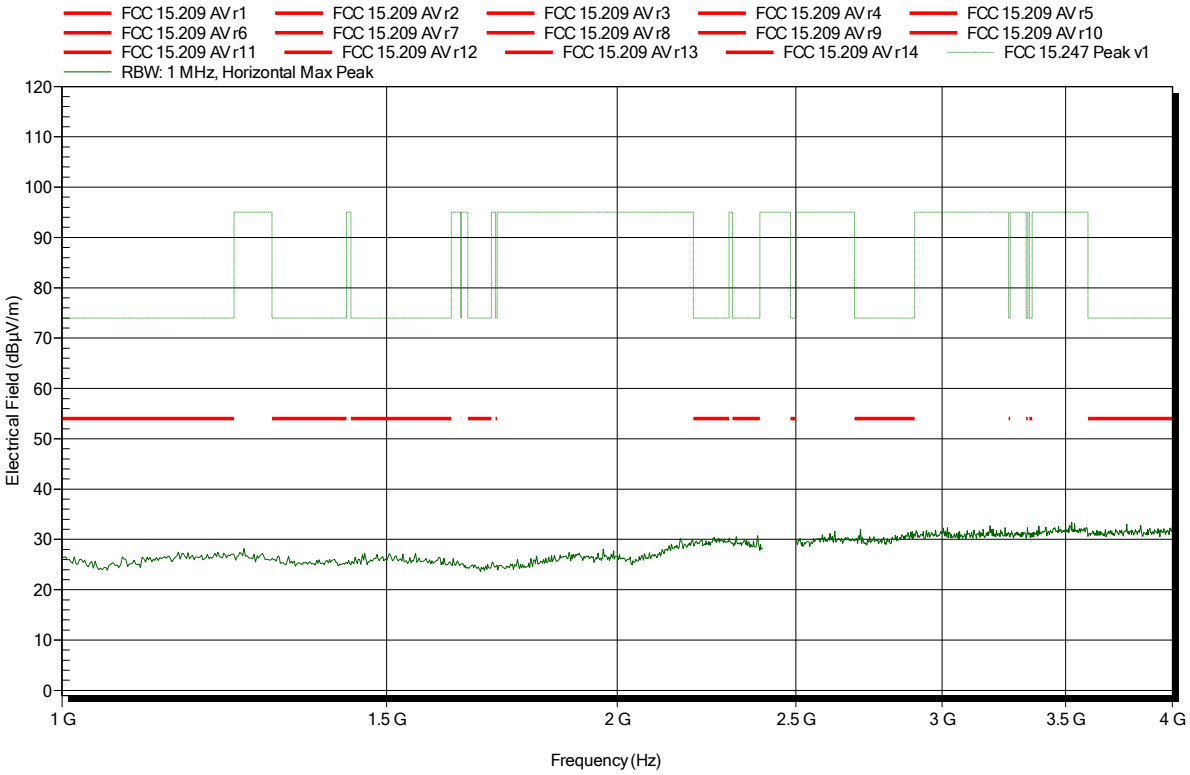
Index 18



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

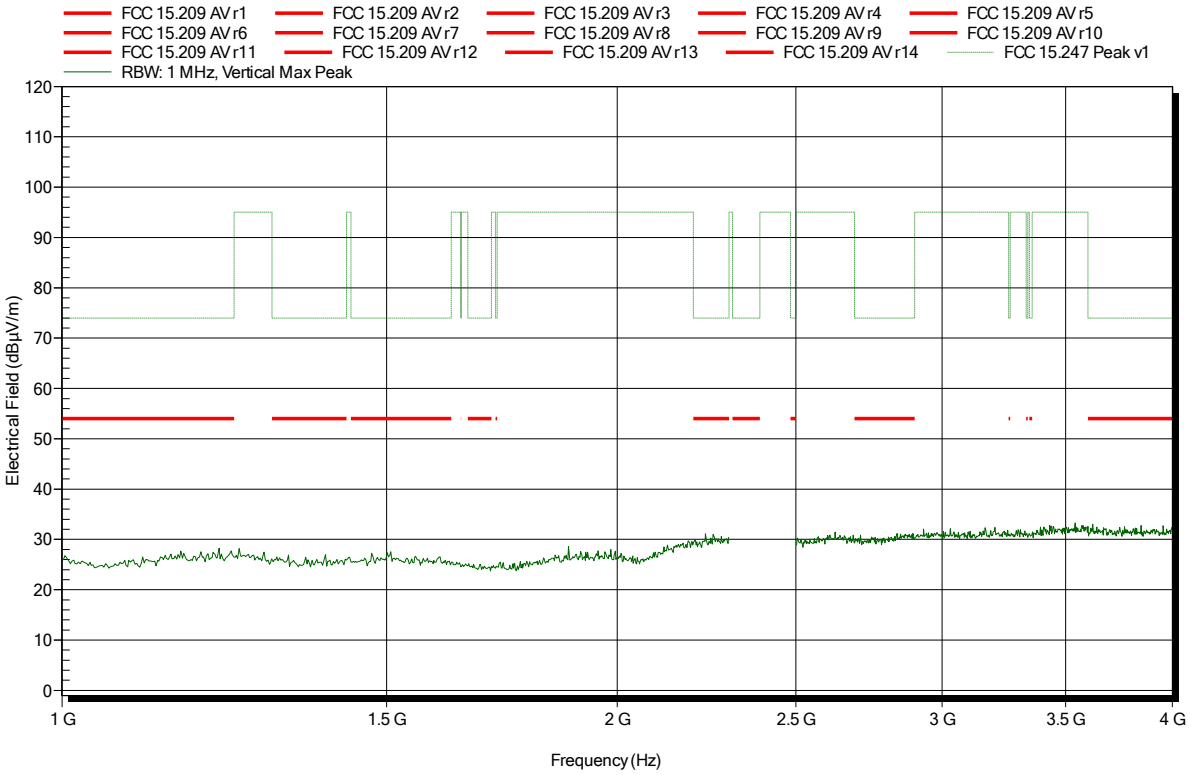
Index 19



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

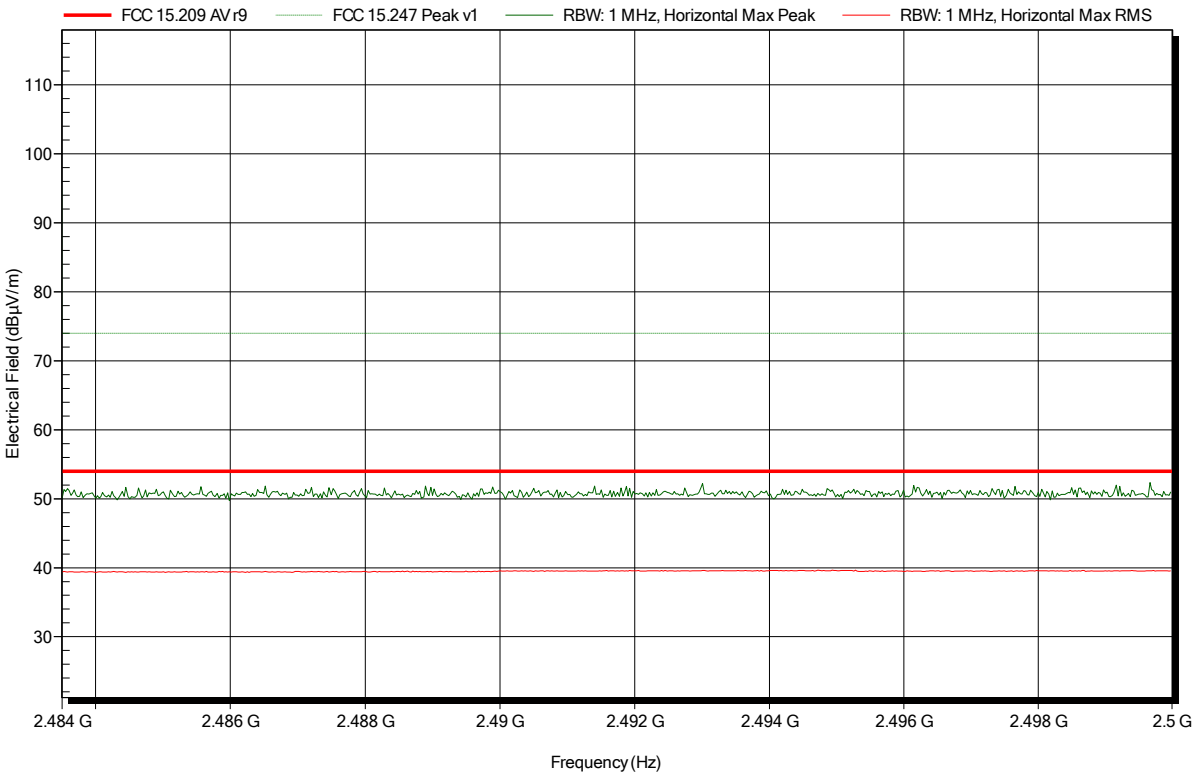
Index 24



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | upper bandedge |

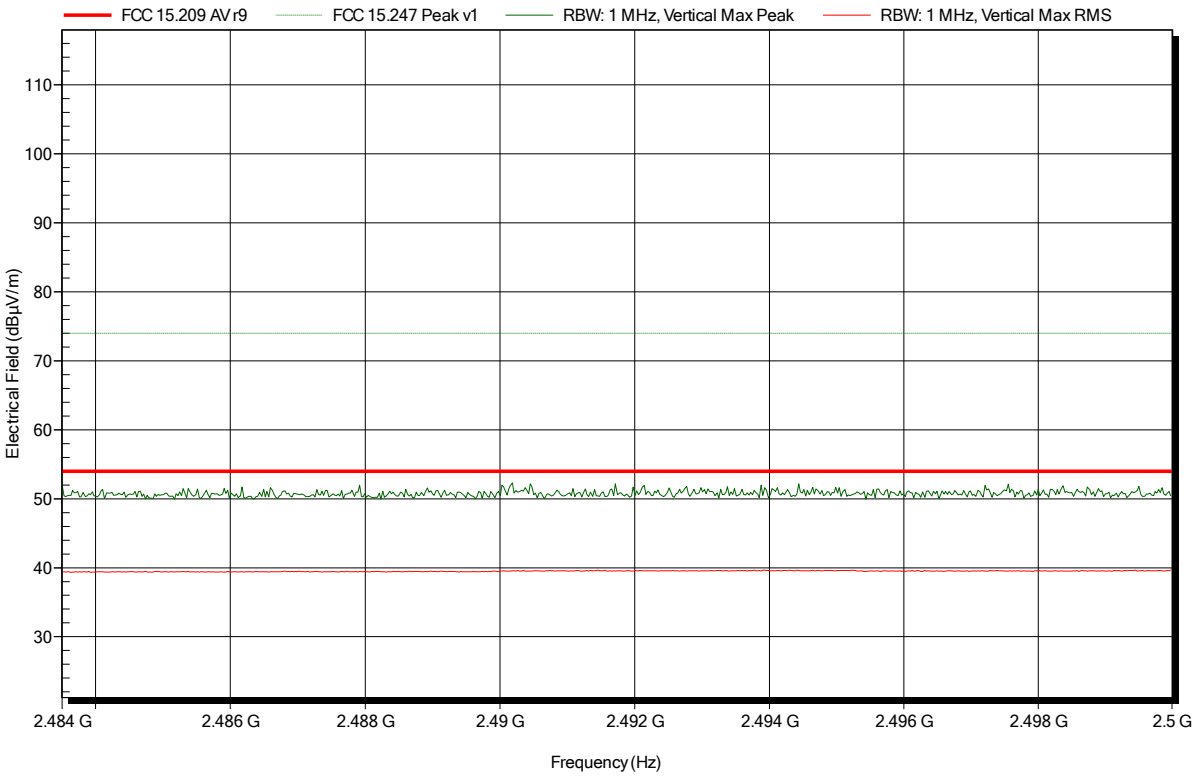
Index 20



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | upper bandedge |

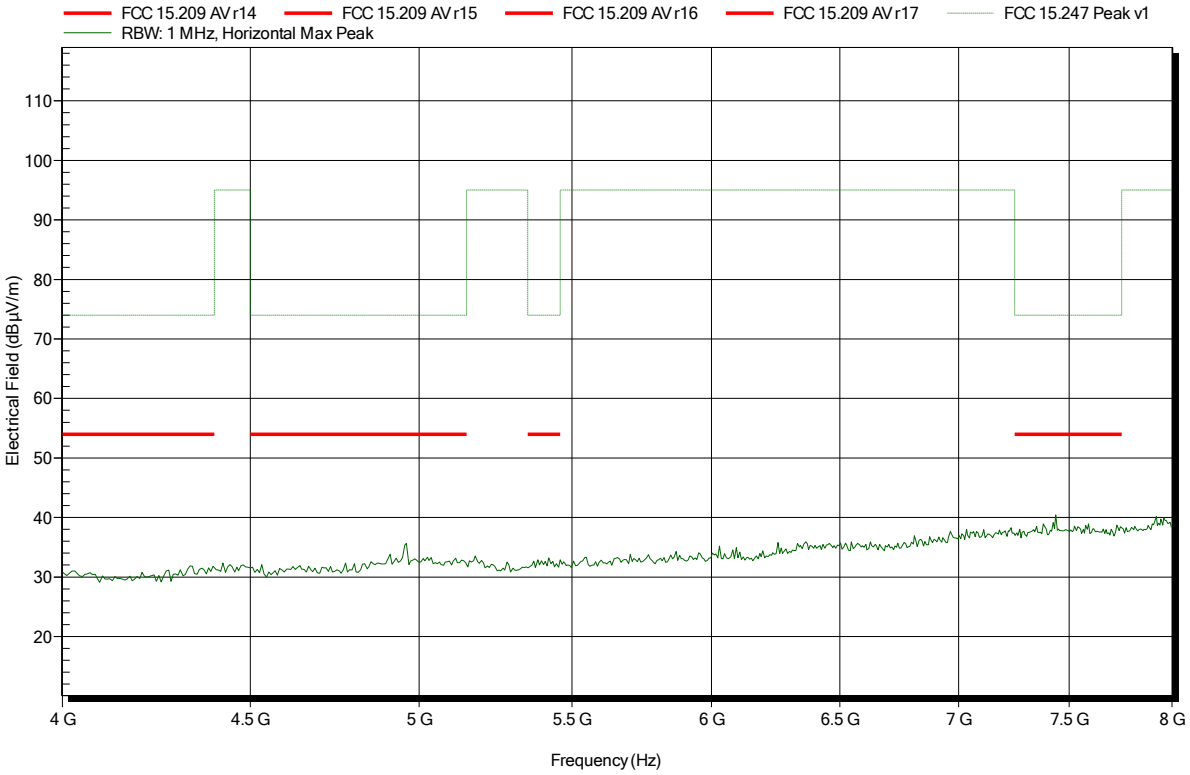
Index 25



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

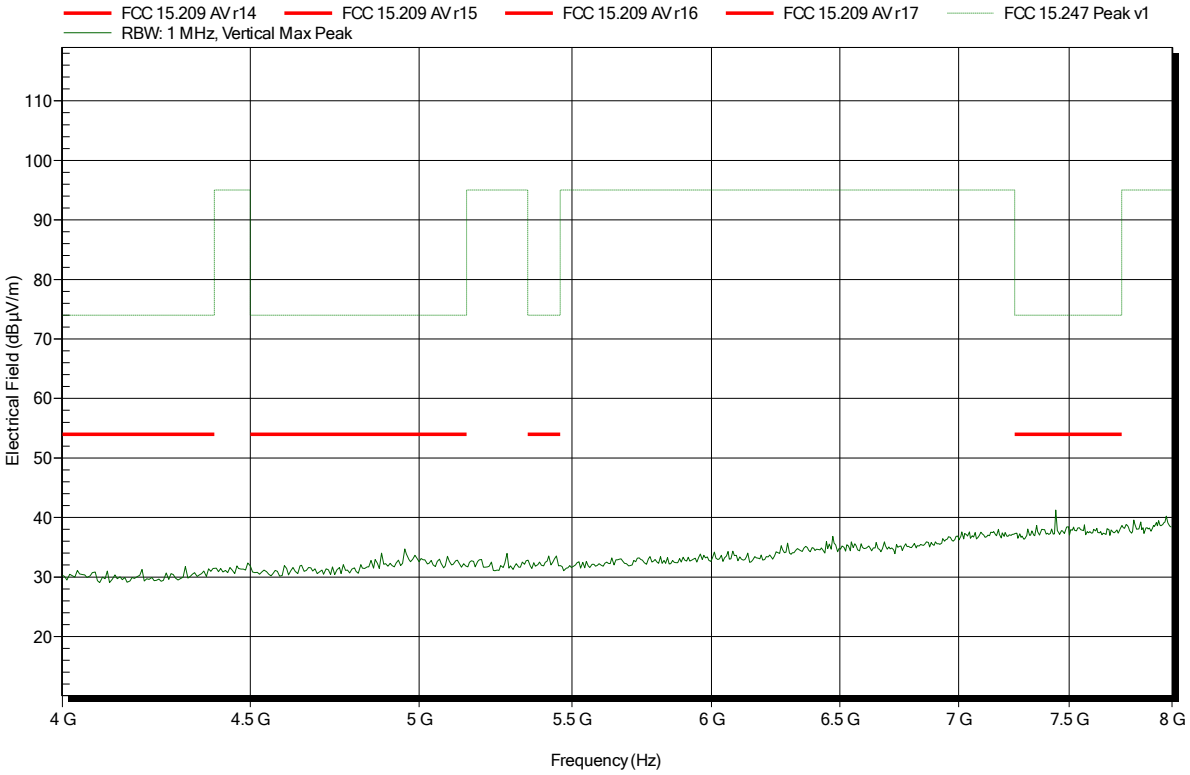
Index 21



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

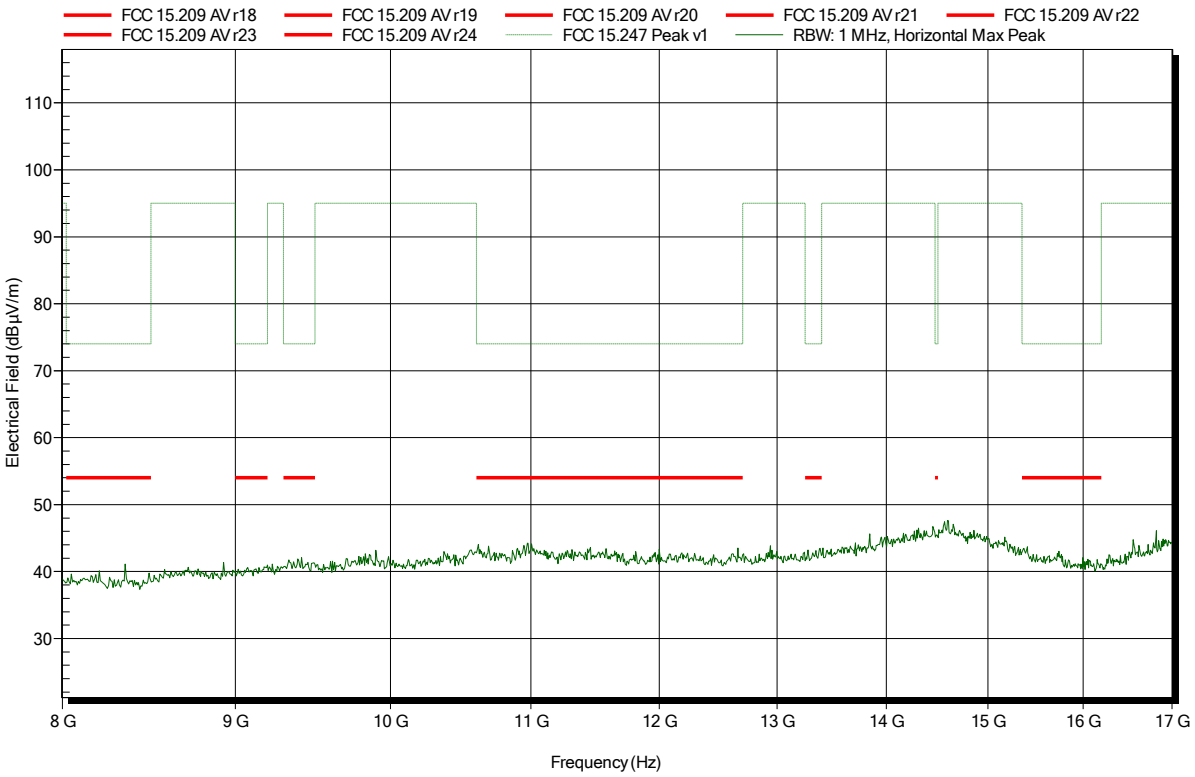
Index 26



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

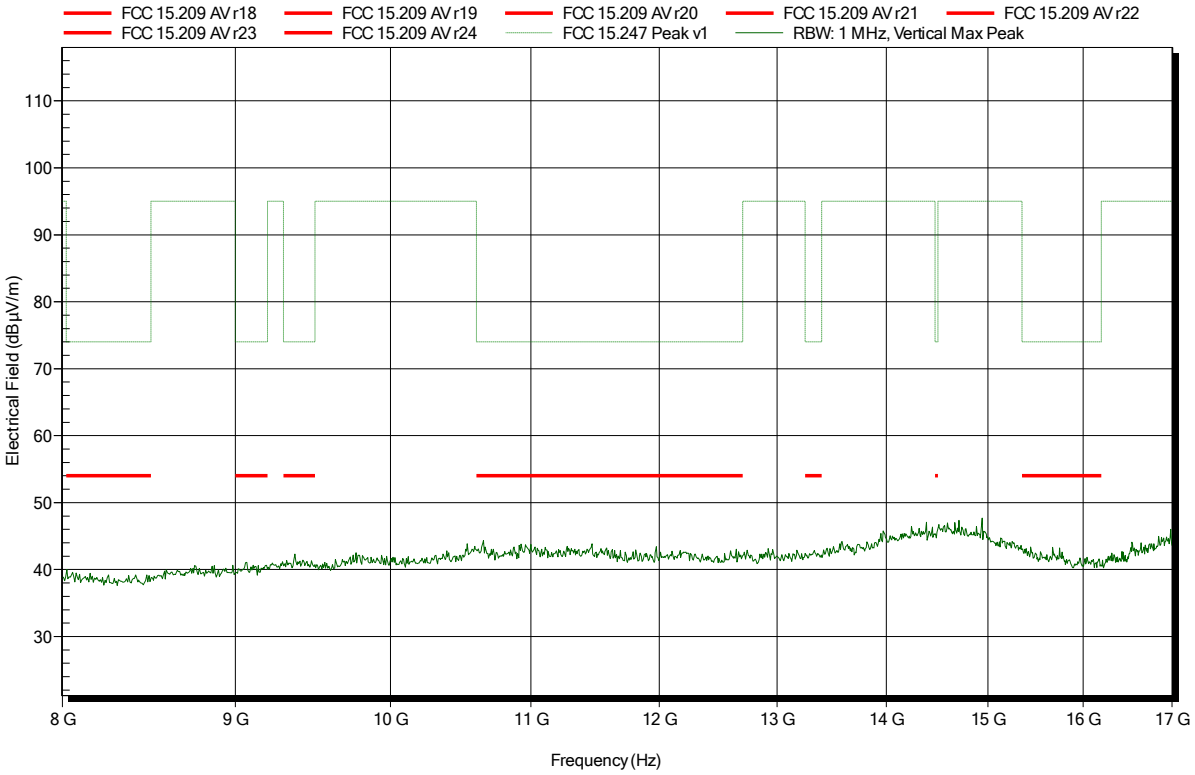
Index 22



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

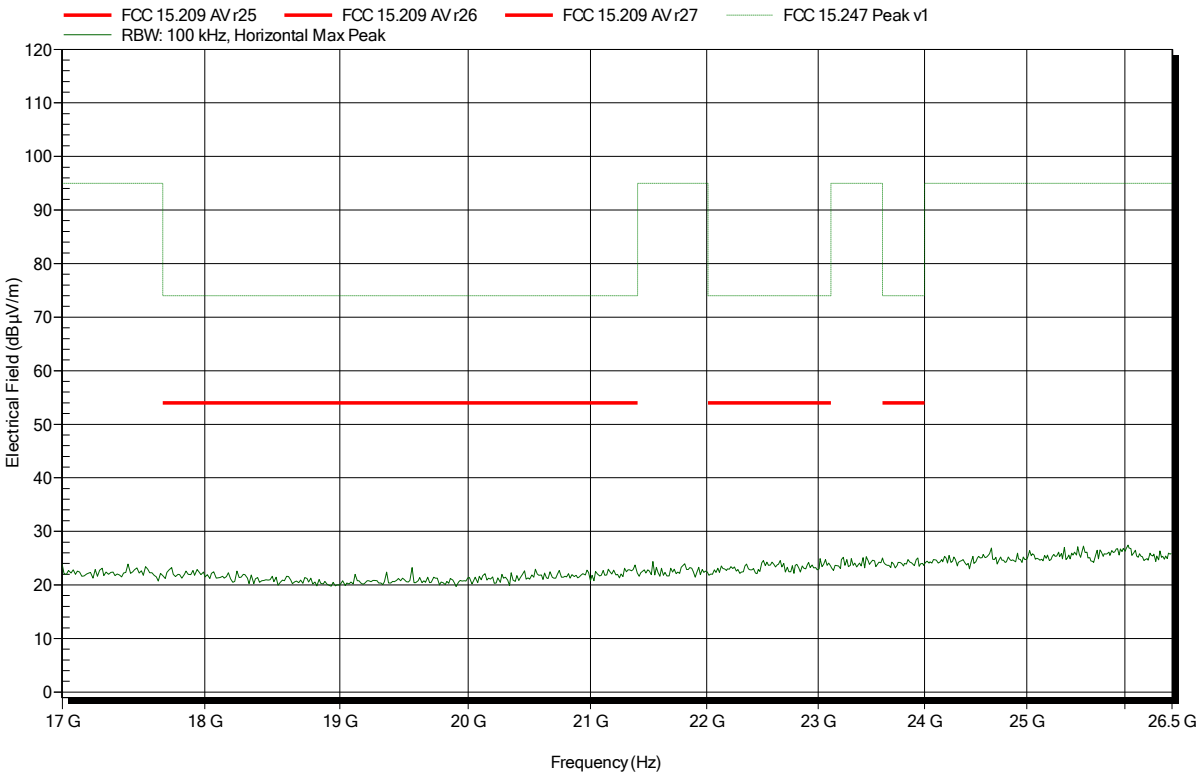
Index 27



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

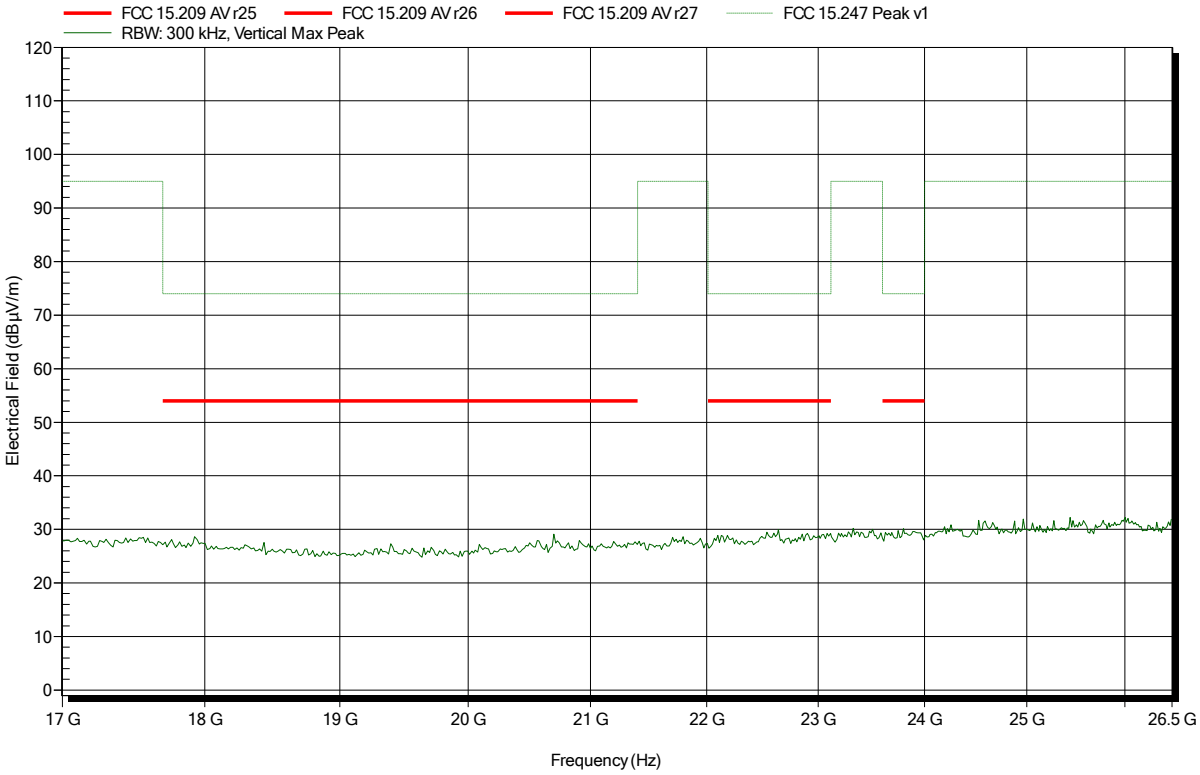
Index 23



**Spurious emissions according to FCC 47 e-CFR §15.247**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Amplifier Research AT4560, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | TX; BLE; GFSK; 2480 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 28

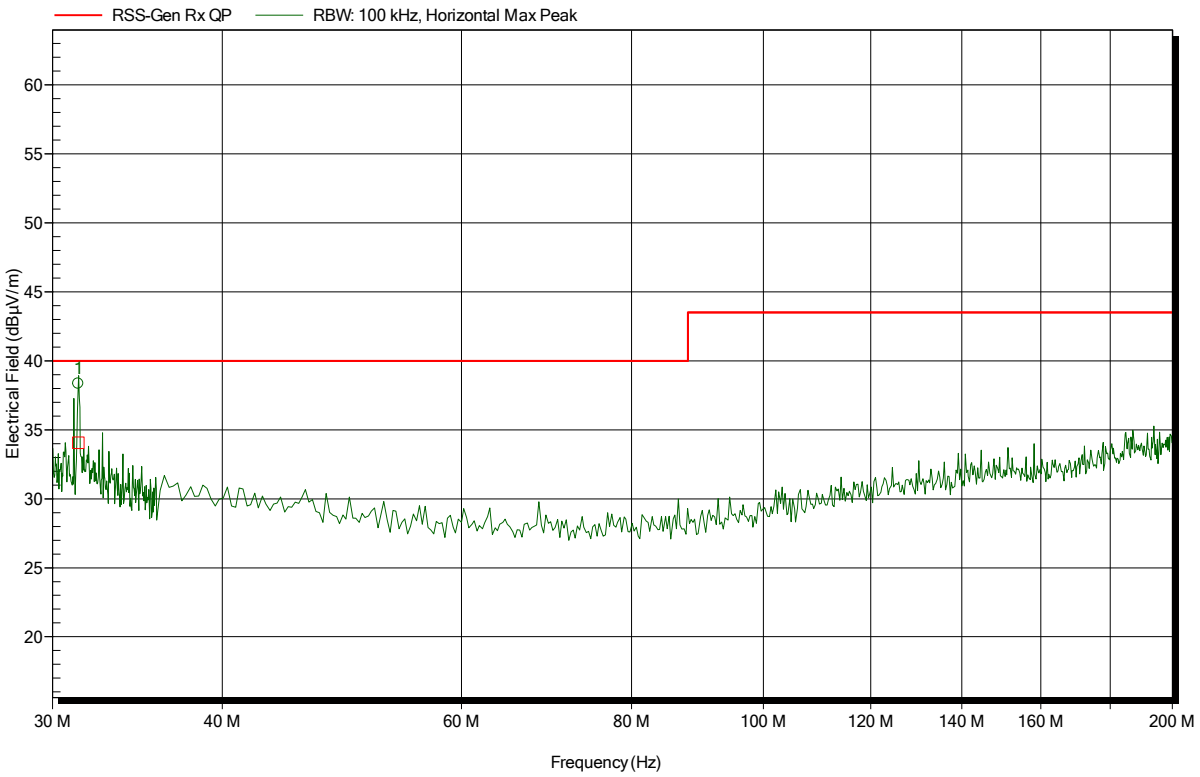


# ANNEX B Receiver spurious emissions

**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HK 116, Horizontal |
| Measurement distance: | 3 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 37



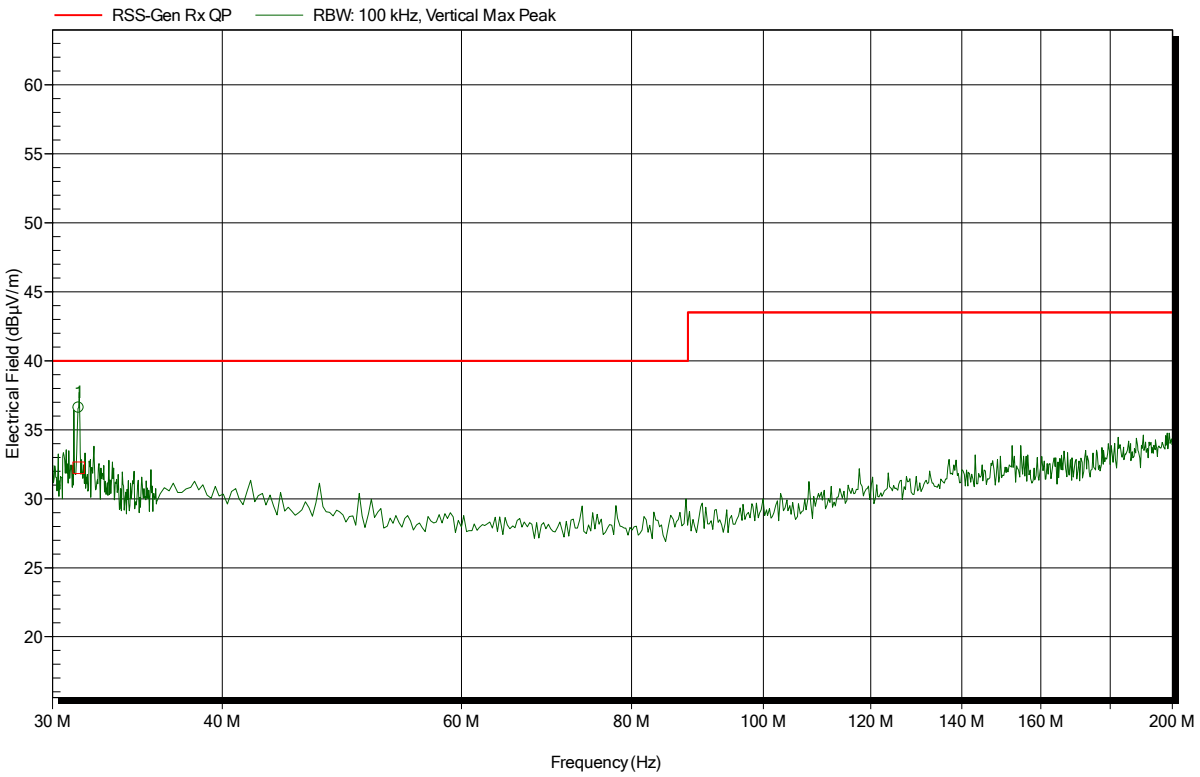

| Frequency | Peak | Peak Limit | Peak Difference | Status | Angle | Height |
|---|---|---|---|---|---|---|
| 31.353 MHz | 38.33 dBµV/m | --- | ---- | Pass | 264 Degree | 1.2 m |

| Frequency | Quasi-Peak | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | Angle | Height |
|---|---|---|---|---|---|---|
| 31.353 MHz | 34.06 dBµV/m | 40 dBµV/m | -5.94 dB | Pass | 264 Degree | 1.2 m |

**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HK 116, Vertical |
| Measurement distance: | 3 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 38



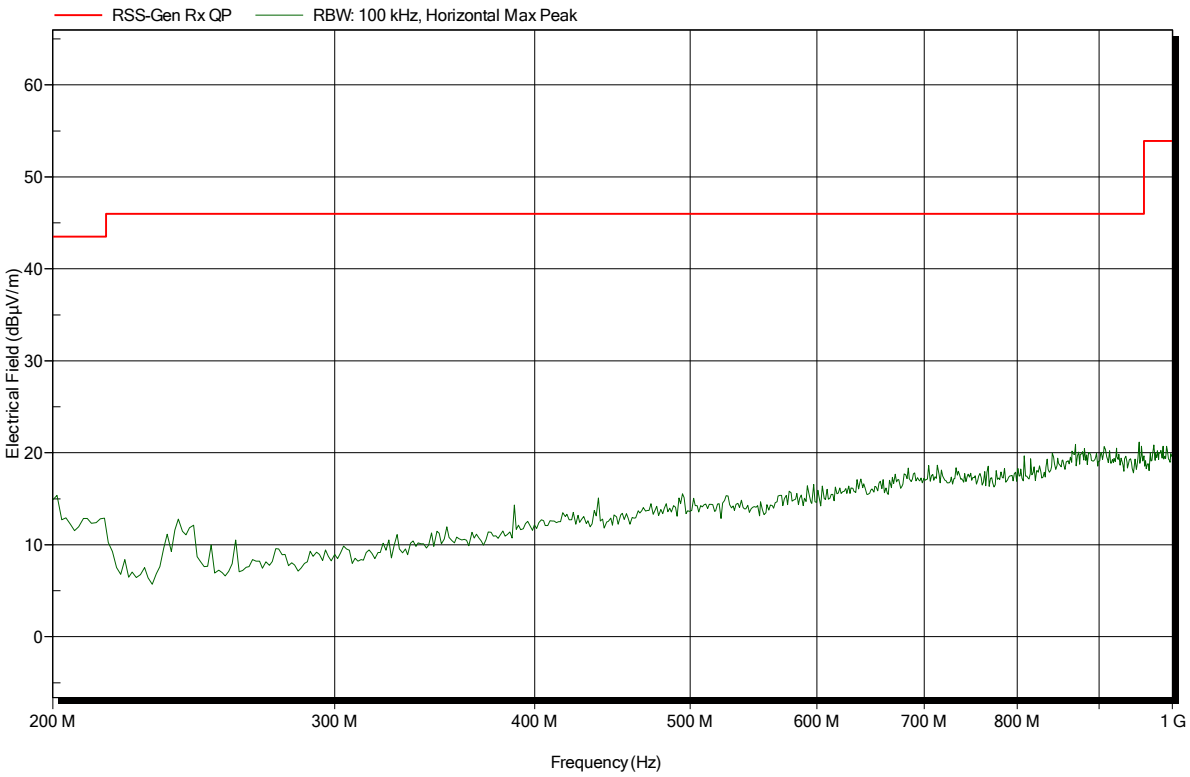

| Frequency | Peak | Peak Limit | Peak Difference | Status | Angle | Height |
|---|---|---|---|---|---|---|
| 31.372 MHz | 36.61 dBµV/m | --- | --- | Pass | 31 Degree | 1.2 m |

| Frequency | Quasi-Peak | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | Angle | Height |
|---|---|---|---|---|---|---|
| 31.372 MHz | 32.26 dBµV/m | 40 dBµV/m | -7.74 dB | Pass | 31 Degree | 1.2 m |

**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HL 223, Horizontal |
| Measurement distance: | 3 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

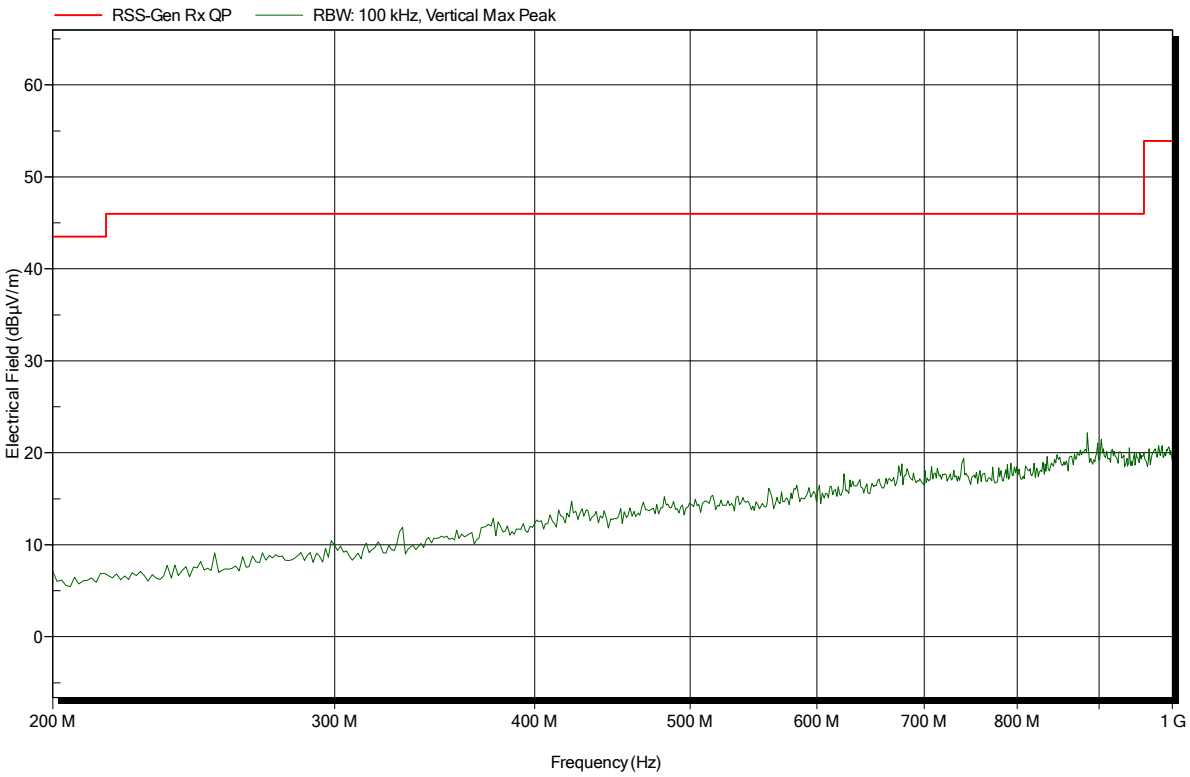
Index 35



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Rohde & Schwarz HL 223, Vertical |
| Measurement distance: | 3 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

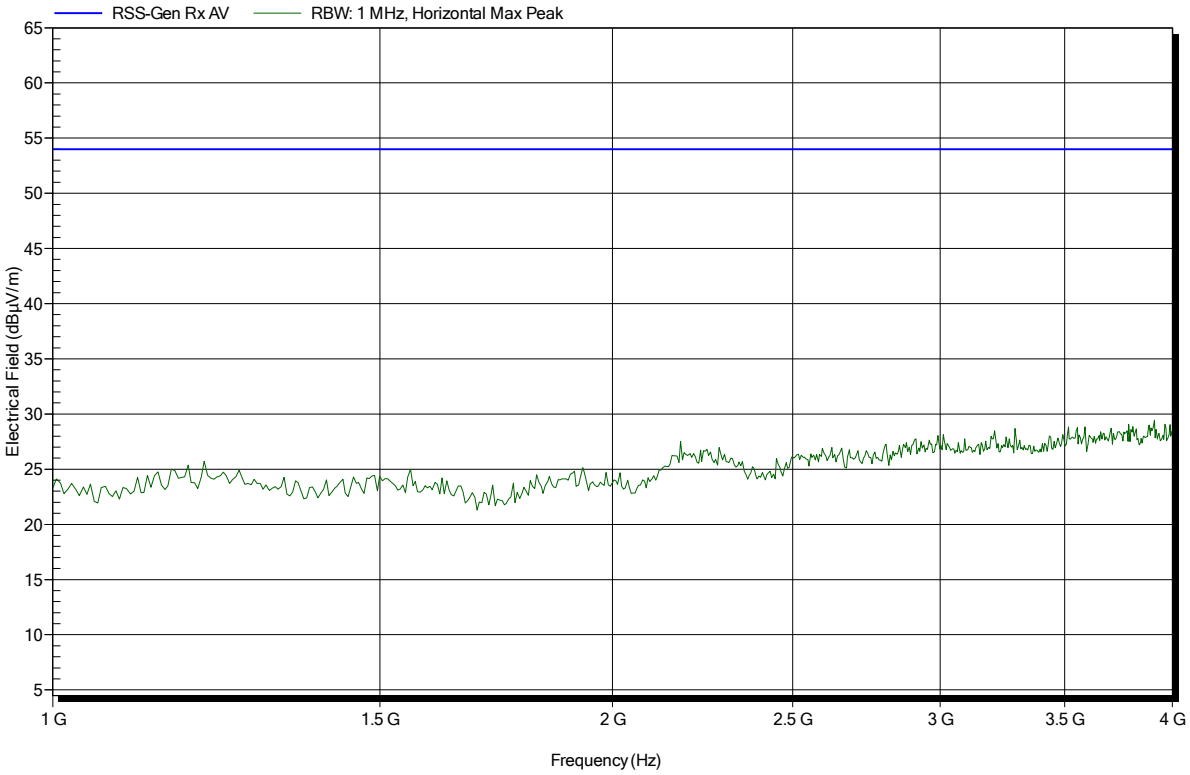
Index 36



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

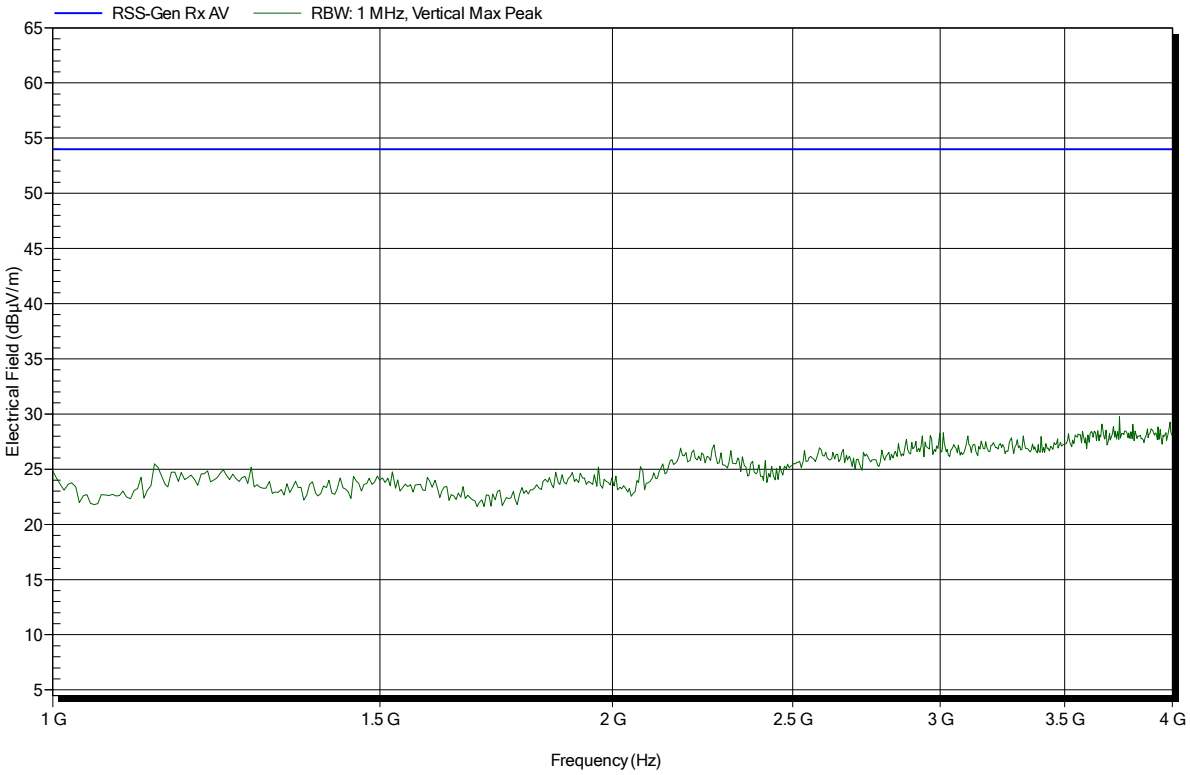
Index 29



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

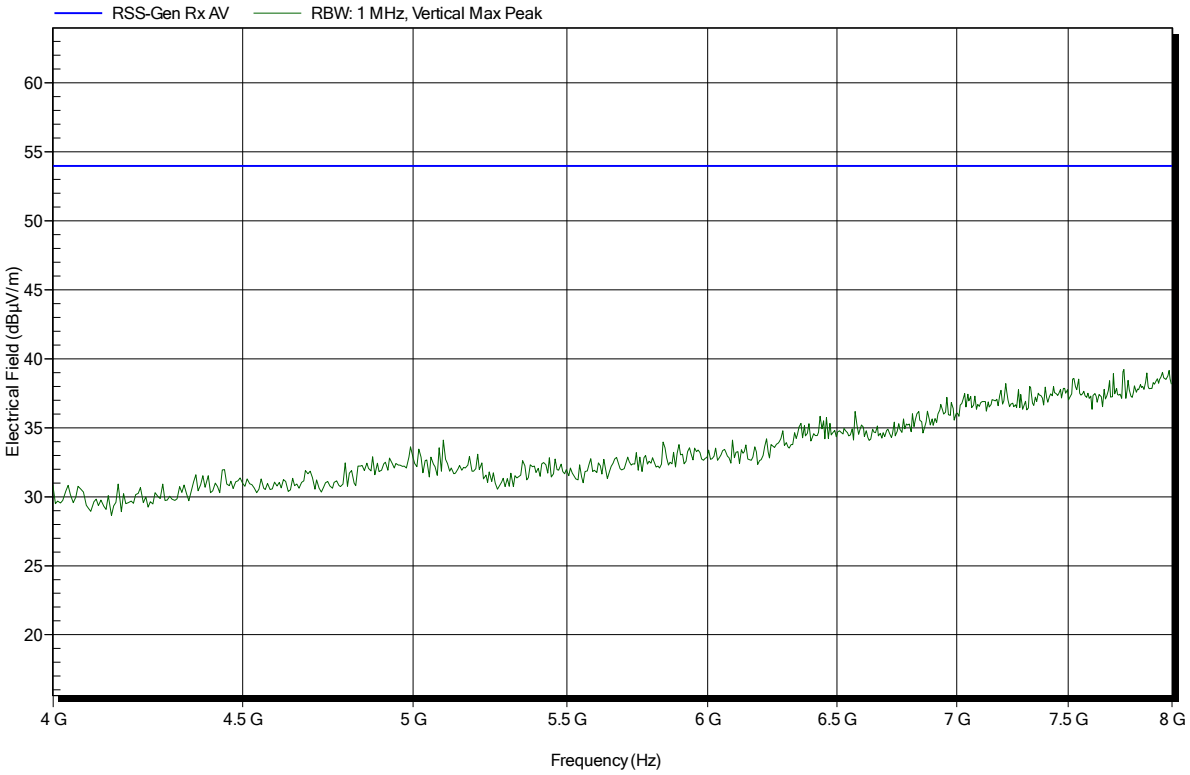
Index 32



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

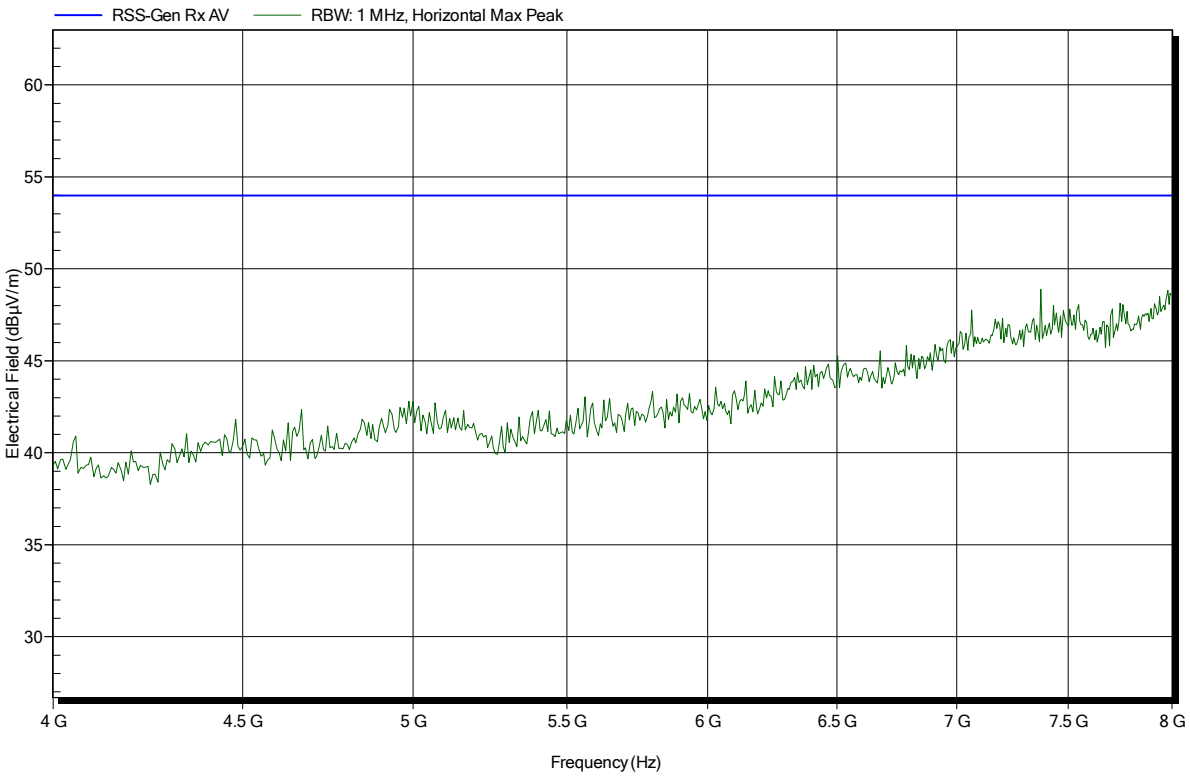
Index 33



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 3 m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

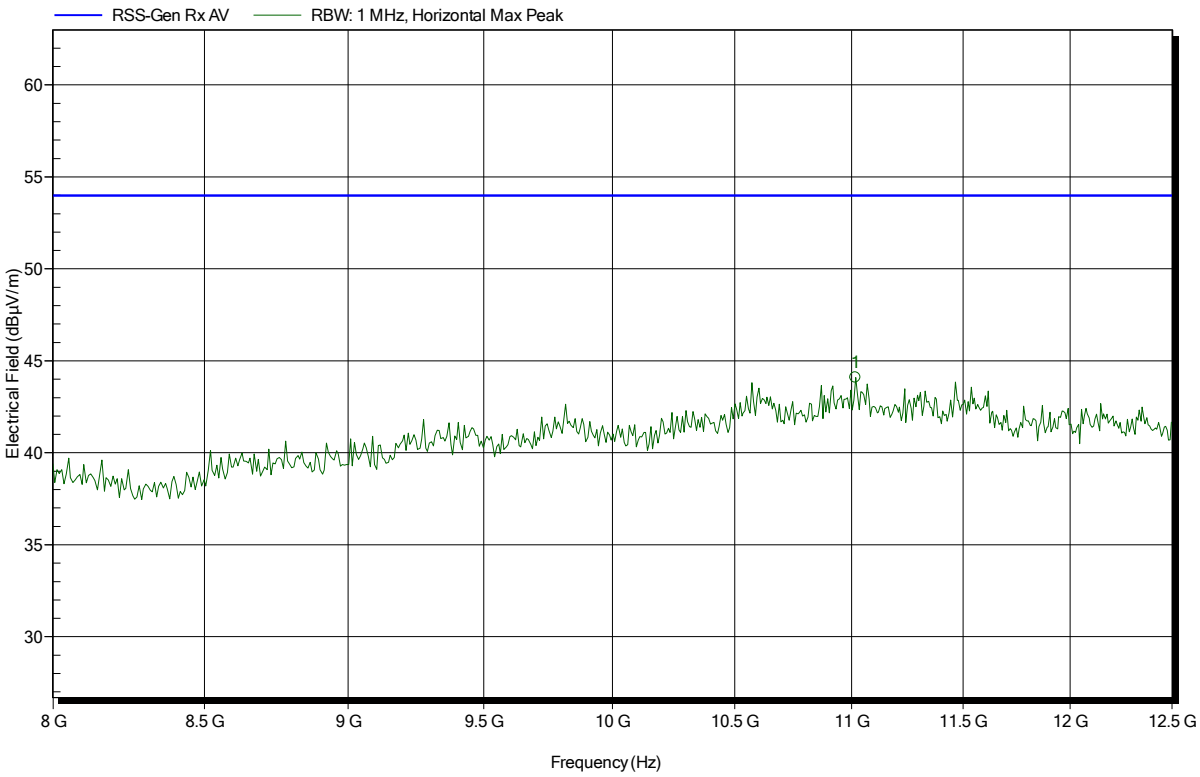
Index 30



**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Horizontal |
| Measurement distance: | 1 m converted to 3m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 31

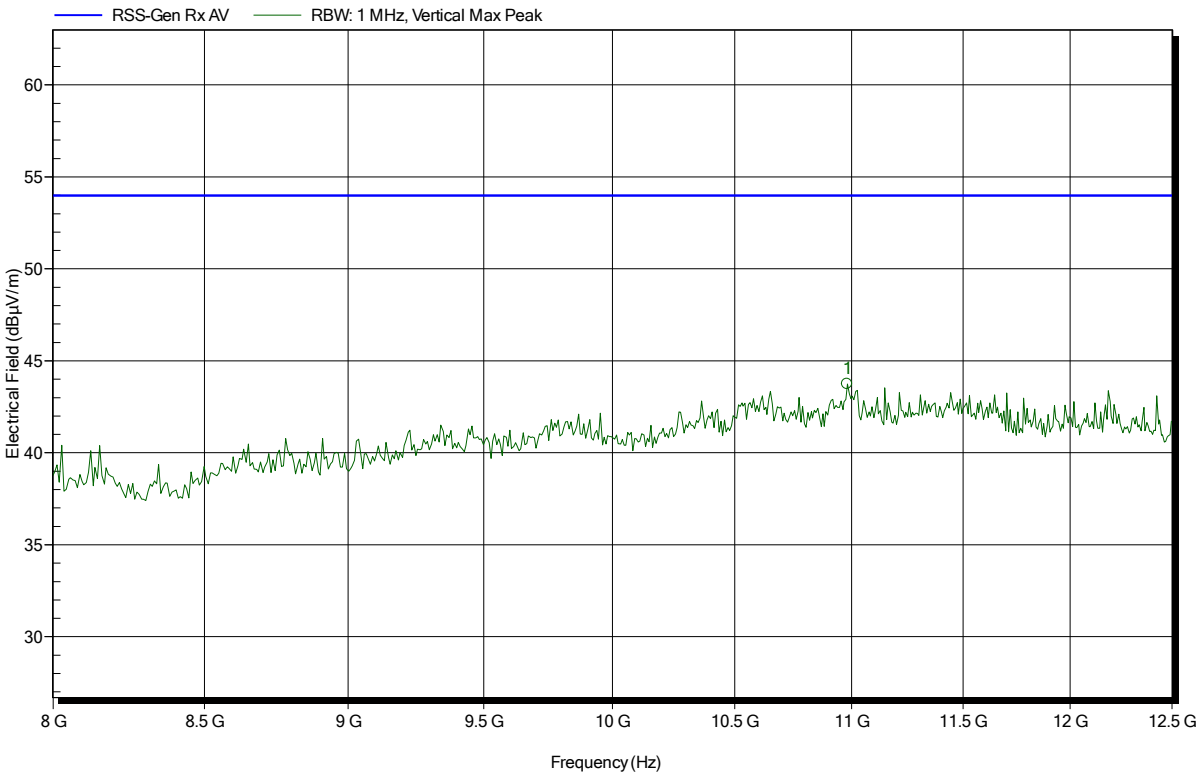



| Frequency | Peak | Peak Limit | Peak Difference | Status |
|---|---|---|---|---|
| 11.017 GHz | 44.09 dBµV/m | 53.98 dBµV/m | -9.89 dB | Pass |

**Spurious emissions according to RSS-247 Issue 2**

| | |
|---|---|
| Project number: | G0M-1902-8075 |
| Applicant: | Piavita AG |
| EUT Name: | Equine vital signs wireless monitoring device |
| Model: | Piavita Measuring device |
| Test Site: | Eurofins Product Service GmbH |
| Operator: | Wilfried Treffke |
| Test Conditions: | Tnom: 21°C, Vnom: 3.7 VDC lithium polymer battery |
| Antenna: | Schwarzbeck BBHA 9120D, Vertical |
| Measurement distance: | 1 m converted to 3m |
| Mode: | RX; BLE; GFSK; 2440 MHz |
| Test Date: | 2019-03-18 |
| Note: | |

Index 34




| Frequency | Peak | Peak Limit | Peak Difference | Status |
|---|---|---|---|---|
| 10.981 GHz | 43.74 dBµV/m | 53.98 dBµV/m | -10.24 dB | Pass |