



**ETS Dr.GenZ Taiwan PS Co., Ltd.**

**FCC Registration No.: 930600**

**Industry Canada filed test laboratory Reg. No. IC 5679**

**A2LA Cert.No.: 2300.01**

**PTCRB Accredited Type Certification Test House**

# **FCC**

## **TEST - REPORT**

**FCC Part 15 C for IEEE 802.11 g device**

**FCC ID: UK9SPICA**

**Test report no.: W6M20607-7234-C-2**

ETS DR.GENZ TAIWAN PS CO., LTD.  
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Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

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## **1 General Information**

### **1.1 Notes**

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the ETS DR. GENZ TAIWAN PS CO., LTD.

#### **Specific Conditions:**

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according IEEE 802.11 g.

This report is related to FCC Part 15 C (OFDM device).

#### **Tester:**

December 07, 2006

Jay Chaing



Date

ETS-Lab.

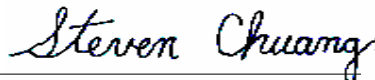
Name

Signature

#### **Technical responsibility for area of testing:**

December 07, 2006

Steven Chuang



Date

ETS

Name

Signature

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## **1.2 Testing laboratory**

### **1.2.1 Location**

OATS  
No.5-1, Shuang Sing Village,  
LiShuei Rd., Wanli Township,  
Taipei County 207, Taiwan (R.O.C.)

Company  
ETS Dr.Genz Taiwan PS Co., Ltd.  
6F, NO. 58, LANE 188, RUEY-KUANG RD.  
NEIHU, TAIPEI 114, TAIWAN R.O.C.  
Tel : 886-2-66068877  
Fax : 886-2-66068879

### **1.2.2 Details of accreditation status**

**Accredited testing laboratory**

**A2LA-registration number: 2300.01**

**FCC filed test laboratory Reg. No. 930600**

**Industry Canada filed test laboratory Reg. No. IC 5679**

**PTCRB Accredited Type Certification Test House**

## **1.3 Details of approval holder**

|           |                            |
|-----------|----------------------------|
| Name      | : Mobinnova Corp.          |
| Street    | : 11F, 845, CHUNG SHAN RD. |
| Town      | : TAOYUAN 33059            |
| Country   | : TAIWAN, R.O.C.           |
| Telephone | : +886-3-3699098           |
| Fax       | : +886-3-3699099           |

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#### **1.4 Application details**

Date of receipt of application : August 30, 2006  
Date of receipt of test item : September 01, 2006  
Date of test : from September 02, 2006 to December 07, 2006

#### **1.5 General information of Test item**

Type of test item : Wireless Pocket PC  
Model Number : GP3000  
Brand Name : Mobinnova  
Hardware : MV  
Software : 1.0.0.91 ( WWE ) 、 1.0.0.92 ( Chinese )  
Serial number : without  
Photos : see Annex

#### **Technical data**

Frequency band : 2.4 GHz – 2.4835 GHz  
Frequency ( ch 1 ) : 2.412 GHz  
Frequency ( ch 6 ) : 2.437 GHz  
Frequency ( ch 11 ) : 2.462 GHz  
Number of Channels : 11  
Operation modes : duplex  
Modulation Type : DSSS / OFDM

Fixed point-to-point operation: ☐ Yes / ☒ No  
Type of Antenna : IFA Antenna  
Antenna gain : 4.32 dBi

Power supply      Input : 100 ~240 VAC, 50 ~ 60Hz  
                         Output : 5 VDC, 1A  
                         Battery : 3.7 ~ 4.2 VDC

Emission designator : 17M8W7D

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Host device: none

Classification :

|                                              |                                     |
|----------------------------------------------|-------------------------------------|
| Fixed Device                                 | <input type="checkbox"/>            |
| Mobile Device (Human Body distance > 20cm)   | <input type="checkbox"/>            |
| Portable Device (Human Body distance < 20cm) | <input checked="" type="checkbox"/> |

### Transmitter

### Unom

**Power ( ch 1)** : Conducted: 9.57 dBm  
**Power ( ch 6)** : Conducted: 9.57 dBm  
**Power ( ch 11)** : Conducted: 9.70 dBm

### **Manufacturer:** (if applicable)

Name : ./.  
 Street : ./.  
 Town : ./.  
 Country : ./.

Additional information: The sample is using WLAN technology according IEEE 802.11 b/g. For this report the function according IEEE 802.11g is considered only. The scheme for frequency generation, spectrum spreading, receiver parameters, synchronization procedure, and other parameters are determined by the mentioned standard above.

## 1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART B / SUBPART C § 15.247: February, 2006

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## **2 Technical test**

### **2.1 Summary of test results**

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



**or**

The deviations as specified in 3 were ascertained in the course of the tests performed.



### **2.2 Test environment**

|                               |                                  |
|-------------------------------|----------------------------------|
| Temperature                   | : 23 °C                          |
| Relative humidity content     | : 20 ... 75 %                    |
| Air pressure                  | : 86 ... 103 kPa                 |
| Power supply adaptor          | Input : 100 ~ 240 VAC, 50 ~ 60Hz |
|                               | Output : 5 VDC, 1 A              |
| Battery                       | : 3.7 ~ 4.2 VDC                  |
| Extreme conditions parameters | : --                             |

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### 2.3 Test Equipment List

| No.          | Test equipment                                  | Type             | Serial No.     | Manufacturer                  | Cal. Date            | Next Cal. Date |
|--------------|-------------------------------------------------|------------------|----------------|-------------------------------|----------------------|----------------|
| ETSTW-CE 001 | EMI TEST RECEIVER                               | ESHS10           | 842121/013     | R&S                           | 2006/10/16           | 2007/10/15     |
| ETSTW-CE 002 | PREREULATOR MODE DC POWER SUPPLY                | None             | None           |                               | Function Test        |                |
| ETSTW-CE 003 | AC POWER SOURCE                                 | APS-9102         | D161137        | GW                            | Function Test        |                |
| ETSTW-CE 004 | ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK | ESH3-Z5          | 840731/011     | R&S                           | 2006/10/16           | 2007/10/15     |
| ETSTW-CE 005 | Line-Impedance Stabilisation Network            | NNBM 8126D       | 137            | Schwarzbeck                   | 2006/10/16           | 2007/10/15     |
| ETSTW-CE 006 | IMPULS-BEGRENZER PULSE LIMITER                  | ESH3-Z2          | 100226         | R&S                           | In House Certificate |                |
| ETSTW-CE 008 | ABSORBING CLAMP                                 | MDS 21           | 3469           | ABSORPTIONS-MESSWANDLER-ZANGE | 2005/10/24           | 2007/10/23     |
| ETSTW-CE 009 | TEMP.&HUMIDITY CHAMBER                          | GTH-225-40-1P-U  | MAA0305-009    | GIANT FORCE                   | 2006/8/17            | 2007/8/16      |
| ETSTW-CE 012 | Dual-Phase-V-Network                            | NNB-2/16Z        | 03/10201       | Telemeter                     | 2006/6/13            | 2007/6/12      |
| ETSTW-RE 002 | Function Generator                              | 33220A           | MY43004982     | Agilent                       | 2005/10/14           | 2007/10/13     |
| ETSTW-RE 003 | EMI TEST RECEIVER                               | ESI 26           | 831438/001     | R&S                           | 2006/10/20           | 2007/10/19     |
| ETSTW-RE 004 | EMI TEST RECEIVER                               | ESI 40           | 832427/004     | R&S                           | 2006/10/30           | 2007/10/29     |
| ETSTW-RE 005 | EMI TEST RECEIVER                               | ESVS10           | 843207/020     | R&S                           | 2006/10/12           | 2007/10/11     |
| ETSTW-RE 010 | PROGRAMMABLE LINEAR POWER SUPPLY                | LPS-305          | 30503070181    | MOTECH                        | Function Test        |                |
| ETSTW-RE 011 | PROGRAMMABLE LINEAR POWER SUPPLY                | LPS-305          | 30503070165    | MOTECH                        | Function Test        |                |
| ETSTW-RE 017 | ANTENNA                                         | HL025            | 352886/001     | R&S                           | 2006/5/4             | 2008/5/3       |
| ETSTW-RE 018 | ANTENNA                                         | AT4560           | 27212          | AR                            | 2004/11/8            | 2007/11/7      |
| ETSTW-RE 021 | SWEEP GENERATOR                                 | SWM05            | 835130/010     | R&S                           | 2006/10/11           | 2007/10/10     |
| ETSTW-RE 027 | Passive Loop Antenna                            | 6512             | 34563          | EMCO                          | 2004/6/30            | 2007/6/29      |
| ETSTW-RE 028 | Log-Periodic DipoleArray Antenna                | 3148             | 34429          | EMCO                          | 2006/5/26            | 2008/5/25      |
| ETSTW-RE 029 | Biconical Antenna                               | 3109             | 33524          | EMCO                          | 2006/5/26            | 2008/5/25      |
| ETSTW-RE 030 | Double-Ridged Waveguide Horn Antenna            | 3117             | 35224          | EMCO                          | 2006/5/3             | 2008/5/2       |
| ETSTW-RE 032 | Millivoltmeter                                  | URV 55           | 849086/013     | R&S                           | 2006/10/11           | 2007/10/10     |
| ETSTW-RE 033 | 4CH 1GHz 5GS/s DSO                              | WAVERUNNER 6100A | LCRY0604P14508 | LeCroy                        | 2006/7/27            | 2007/7/26      |
| ETSTW-RE 034 | Power Sensor                                    | URV5-Z4          | 839313/006     | R&S                           | 2006/10/11           | 2007/10/10     |
| ETSTW-RE 042 | ANTENNA                                         | HK116            | 100172         | R&S                           | 2005/1/14            | 2007/1/13      |
| ETSTW-RE 043 | ANTENNA                                         | HL223            | 100166         | R&S                           | 2006/5/8             | 2008/5/7       |
| ETSTW-RE 044 | ANTENNA                                         | HL050            | 100094         | R&S                           | 2006/5/29            | 2008/5/28      |

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|               |                                                                     |                 |               |                |               |            |
|---------------|---------------------------------------------------------------------|-----------------|---------------|----------------|---------------|------------|
| ETSTW-RE 048  | Triple Loop Antenna                                                 | HXYZ 9170       | HXYZ 9170-134 | Schwarzbeck    | 2005/3/22     | 2008/3/21  |
| ETSTW-RE 049  | TRILOG Super Broadband test Antenna                                 | VULB 9160       | 9160-3185     | Schwarzbeck    | 2005/5/19     | 2007/5/18  |
| ETSTW-RE 055  | SPECTRUM ANALYZER                                                   | FSU-26          | 200074        | R&S            | 2006/7/28     | 2007/7/27  |
| ETSTW-EMS 002 | Frequency Converter                                                 | YF-6020         | 308014        | T-Power        | Function Test |            |
| ETSTW-EMS 013 | CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK | FCC-TLISN-T4-02 | 20242         | FCC            | 2005/12/8     | 2008/12/8  |
| ETSTW-EMS 014 | CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK | FCC-TLISN-T2-02 | 20241         | FCC            | 2005/12/7     | 2007/12/7  |
| ETSTW-GSM 01  | SIM Simulator                                                       | IT3             | B2004-50106   | ORGA           | 2006/7/26     | 2007/7/25  |
| ETSTW-GSM 02  | Universal Radio Communication Tester                                | CMU 200         | 109439        | R&S            | 2006/10/18    | 2007/10/17 |
| ETSTW-GSM 03  | Agilent 8960 Test Set 1                                             | E5515C          | GB44052675    | Agilent        | 2006/6/26     | 2008/6/25  |
| ETSTW-GSM 04  | Agilent 8960 Test Set 2                                             | E5515C          | GB44052665    | Agilent        | 2006/7/13     | 2008/7/12  |
| ETSTW-GSM 05  | Agilent 8960 Test Set 3                                             | E5515C          | GB44052652    | Agilent        | 2006/7/16     | 2008/7/15  |
| ETSTW-GSM 06  | Agilent 8960 Test Set 4                                             | E5515C          | GB44052684    | Agilent        | 2006/7/4      | 2008/4/3   |
| ETSTW-GSM 07  | Agilent 8960 Test Set 5                                             | E5515C          | GB44052658    | Agilent        | 2006/7/12     | 2008/7/11  |
| ETSTW-GSM 08  | Agilent 8960 Test Set 6                                             | E5515C          | GB44052666    | Agilent        | 2006/7/6      | 2008/7/5   |
| ETSTW-GSM 09  | Controller PC                                                       | Dell GX 270     | 700F61J       | Dell           | Function Test |            |
| ETSTW-GSM 10  | Combiner Wessex / Anite                                             | B4605/100       | 0053          | Wessex / Anite | 2006/7/13     | 2008/7/12  |
| ETSTW-GSM 11  | GSM 850,900,1800,1900 Test system                                   | TS8950G         | 101087        | R&S            | 2005/11/1     | 2007/4/30  |
| ETSTW-GSM 12  | Acoustical Calibrator                                               | 4231            | 2463874       | Brüel&Kjær     | 2006/7/26     | 2007/7/25  |
| ETSTW-GSM 13  | Conditioning Amplifier                                              | 2690            | 2437856       | Brüel&Kjær     | 2006/7/26     | 2007/7/25  |
| ETSTW-GSM 15  | Mouth Simulator                                                     | 4227            | 2462516       | Brüel&Kjær     | 2006/7/26     | 2007/7/25  |
| ETSTW-GSM 16  | TEMP.&HUMIDITY CHAMBER                                              | GTH-120-40-1P-U | MAA0501002    | GIANT FORCE    | 2005/12/29    | 2006/12/28 |
| ETSTW-GSM 18  | AUDIO ANALYZER                                                      | UPL16           | 100173        | R&S            | 2006/10/28    | 2007/10/27 |
| ETSTW-GSM 23  | SPLITTER                                                            | 4901.19.A       | None          | SUHNER         | Function Test |            |
| ETSTW-GSM 24  | Vibration Testing System                                            | VS-100V         | 5494          | Vibration      | 2005/12/20    | 2006/12/19 |
| ETSTW-GSM 29  | Microphone                                                          | 4192            | 2458739       | Brüel&Kjær     | 2006/7/26     | 2007/7/25  |
| ETSTW-GSM 30  | Ear Simulator                                                       | 4195            | 2457416       | Brüel&Kjær     | 2006/7/26     | 2007/7/25  |

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## 2.4 General Test Procedure

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.4-2003 using a 50 $\mu$ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

**RADIATION INTERFERENCE:** The test procedure used was according to ANSI STANDARD C63.4-2003 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was 23°C with a humidity of 40 %.

**FORMULA OF CONVERSION FACTORS:** The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB $\mu$ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

|            |                                                          |
|------------|----------------------------------------------------------|
| Freq (MHz) | METER READING + ACF + CABLE LOSS (to the receiver) = FS  |
| 33         | 20 dB $\mu$ V + 10.36 dB + 6 dB = 36.36 dB $\mu$ V/m @3m |

The UUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2000 Section 13.1.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by ETS Dr.Genz Taiwan PS Co., Ltd. at the registered open field test site located at No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.) The Registration Number: 930600.

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When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor =  $20 \log (\text{dwell time}/T)$

$T = 100\text{ms}$  when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANTENNA & GROUND:

**This unit uses IFA Antenna. (see photos)**

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### 3 Test results (enclosure)

| TEST CASE                                             | Para. Number | Required                            | Test passed                         | Test failed              |
|-------------------------------------------------------|--------------|-------------------------------------|-------------------------------------|--------------------------|
| Peak Output Power                                     | 15.247(b)(3) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Equivalent radiated Power                             | 15.247(b)(3) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Spurious Emissions radiated – Transmitter operating   | 15.247(c)    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Band Edge Measurement                                 | 15.247(c)    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Minimum 6 dB Bandwidth                                | 15.247(a)(2) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Peak Power Spectral Density                           | 15.247(d)    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Radiated Emission from Digital Part And Receiver L.O. | 15.109       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Power Line Conducted Emission                         | 15.207       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The follows is intended to leave blank.

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### 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

| Test condition          |                          | Conducted Power |           |            |
|-------------------------|--------------------------|-----------------|-----------|------------|
|                         |                          | Channel 1       | Channel 6 | Channel 11 |
| T <sub>nom</sub> = 23°C | V <sub>nom</sub> = 120 V | [dBm]           | [dBm]     | [dBm]      |
|                         |                          | 9.57            | 9.57      | 9.70       |
| Measurement uncertainty |                          | < 3 dB          |           |            |

|                                                                              |                                                                           |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Test condition<br>$T_{nom} = 23^{\circ}\text{C}$ , $V_{nom} = 120 \text{ V}$ | Signal Field strength TX highest power mode<br>$\text{dB } \mu\text{V/m}$ |
| Frequency [MHz]                                                              |                                                                           |
| 2413                                                                         | 97.03                                                                     |
| Measurement uncertainty                                                      | < 3 dB                                                                    |

Limits:

|                  |              |
|------------------|--------------|
| Frequency<br>MHz | Power<br>dBm |
| 902 - 928        | 30           |
| 2400 – 2483.5    | 30           |
| 5725 – 5850      | 30           |

In case of employing transmitter antennas having antenna gain  $> 6 \text{ dBi}$  and using fixed point-to-point operation consider §15.247 (b)(4)

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Comment: The diagrams for the field strength measurements are included in Appendix.

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### 3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

EIRP = 9.70 dBm + 4.32 dBi  
 = 14.02 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 021  
 ETSTW-RE 028 ETSTW-RE 030 ETSTW-RE 043 ETSTW-RE 044

#### 3.2.1 Transmitter

Integral Antenna:

At the transmitter the measurement was transacted with the modulation declared by the manufacturer and the maximum available output power of the EUT.

In this arrangement the EUT fulfils the requirements of the FCC rules § 15.247, subpart C, section b.

### 3.3 RF Exposure Compliance Requirements

The test sample is a WLAN access point intended for fixed installation.

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

D – Cable Loss

AG – Antenna Gain G = AG-D

| Item | Unit               | Value    | Remarks          |
|------|--------------------|----------|------------------|
| P    | mW                 | 9.34     | Peak value       |
| D    | dB                 |          |                  |
| AG   | dBi                | 4.32     |                  |
| G    |                    | 2.7      | Calculated Value |
| R    | cm                 | 20       | Assumed value    |
| S    | mW/cm <sup>2</sup> | 0.005017 | Calculated value |

Limits:

| Limit for General Population / Uncontrolled Exposure |                                     |
|------------------------------------------------------|-------------------------------------|
| Frequency (MHz)                                      | Power Density (mW/cm <sup>2</sup> ) |
| 1500 – 100.000                                       | 1,0                                 |

Registration number: W6M20607-7234-C-2  
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### 3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 1000 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency  $\leq$  1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency  $>$  1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency  $>$  1 GHz , RBW:1 MHz , VBW: 100Hz (Average measurements)

Limits.

For frequencies below 1GHz:

| Frequency of Emission<br>(MHz) | Field strength<br>(microvolts/meter) | Field Strength<br>(dB microvolts/meter) |
|--------------------------------|--------------------------------------|-----------------------------------------|
| 30 - 88                        | 100                                  | 40.0                                    |
| 88 - 216                       | 150                                  | 43.5                                    |
| 216 - 960                      | 200                                  | 46.0                                    |
| Above                          | 500                                  | 54.0                                    |

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of DSSS Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction =  $20 \log (\text{dwell time} / 100\text{ms})$

No duty cycle correction was added to the reading.

$54.0\text{dB } \mu\text{V/m} + 20 \text{ dB} = 74 \text{ dB } \mu\text{V/m}$

Comment: see attached diagrams in Appendix B.

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### **3.5 Spurious Emissions (tx)**

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies below 1GHz:

Max. reading – 20 dB

97.03 dB  $\mu$  V/m- 20 dB= 77.03 dB  $\mu$  V/m

Guidance on Measurement of DSSS Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction =  $20 \log (\text{dwell time}/100\text{ms})$

For frequencies above 1GHz (Peak measurements).

Limit = max. aver. Reading-20dB+20dB(because Peak detector is used)

77.03 dB  $\mu$  V/m

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

No duty cycle correction was added to the reading

97.03 dB  $\mu$  V/m- 20 dB= 77.03 dB  $\mu$  V/m

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028  
ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043  
ETSTW-RE 044

Comment: see attached diagrams in Appendix B.

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SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Duty-Cycle Correction Factor".

### Summary table with radiated data of the test plots

#### CH 1

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| H                    | 123.208                | 18.19                    | 12.88                  | PK       | 31.07                | 77.03                     | 45.96       | 217                    | 140                 |
|                      | 502.301                | 14.92                    | 20.15                  | PK       | 35.07                | 77.03                     | 41.96       | 286                    | 155                 |
|                      | 4857.217               | 41.58                    | 4.69                   | PK       | 46.27                | 54.0                      | 7.73        | 160                    | 145                 |

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| V                    | 129.642                | 13.73                    | 13.28                  | PK       | 27.01                | 77.03                     | 50.02       | 237                    | 160                 |
|                      | 501.276                | 12.03                    | 19.83                  | PK       | 31.86                | 77.03                     | 45.17       | 210                    | 210                 |
|                      | 4857.217               | 49.69                    | 4.69                   | PK       | 54.38                | 74.0                      | 19.62       | 222                    | 125                 |
|                      | 4857.217               | 36.12                    | 4.69                   | AV       | 40.81                | 54.0                      | 13.19       | 222                    | 125                 |

#### Ch6

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| H                    | 123.216                | 19.87                    | 12.89                  | PK       | 32.76                | 77.03                     | 44.27       | 248                    | 140                 |
|                      | 502.301                | 14.72                    | 20.15                  | PK       | 34.87                | 77.03                     | 42.16       | 196                    | 150                 |
|                      | 1646.278               | 45.53                    | -6.81                  | PK       | 38.72                | 54.00                     | 15.28       | 241                    | 160                 |

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| V                    | 129.345                | 13.61                    | 13.26                  | PK       | 26.87                | 77.03                     | 50.16       | 186                    | 140                 |
|                      | 1646.278               | 44.65                    | -6.81                  | PK       | 37.84                | 54.00                     | 16.16       | 208                    | 175                 |
|                      | 4865.921               | 44.53                    | 4.75                   | PK       | 49.28                | 54.00                     | 4.72        | 211                    | 155                 |

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**Ch11**

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| H                    | 123.215                | 19.24                    | 12.89                  | PK       | 32.13                | 77.03                     | 44.90       | 143                    | 135                 |
|                      | 502.301                | 13.86                    | 20.15                  | PK       | 34.01                | 77.03                     | 43.02       | 167                    | 115                 |
|                      | 1646.278               | 45.28                    | -6.81                  | PK       | 38.47                | 54.0                      | 15.53       | 234                    | 125                 |

| Antenna Polarization | Frequency Marker (MHz) | Corrected Reading (dBuV) | Correction Factor (dB) | Detector | Test Result (dBuV/m) | Compliance Limit (dBuV/m) | Margin (dB) | Table Azimuth (degree) | Antenna Height (cm) |
|----------------------|------------------------|--------------------------|------------------------|----------|----------------------|---------------------------|-------------|------------------------|---------------------|
| V                    | 129.345                | 16.42                    | 12.26                  | PK       | 28.68                | 77.03                     | 48.35       | 217                    | 145                 |
|                      | 1646.278               | 45.33                    | -6.81                  | PK       | 38.52                | 54.0                      | 15.48       | 221                    | 135                 |
|                      | 4914.605               | 41.36                    | 4.82                   | PK       | 46.18                | 54.0                      | 7.82        | 199                    | 165                 |

- Note**
- 1. Correction Factor = Antenna factor + Cable loss - Preamplifier**
  - 2. The formula of measured value as: Test Result = Corrected Reading + Correction Factor**
  - 3. Detector function in the form : P = Peak, QP = Quasi Peak, AV = Average**

Freq. – Frequency Range:

- 1: 30 - 200 MHz
- 2: 200 - 1000 MHz
- 3: 1 - 4 GHz
- 4: 4 - 8 GHz
- 5: 8 - 12 GHz
- 6: 12 - 17 GHz
- 7: 17 - 26.5 GHz

All not in the table noted test results are more than 20 dB below the relevant limits.  
 All other not noted test polts do not contain significant test results in relation to the limits.

**TEST RESULT (Transmitter):** The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028  
 ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043  
 ETSTW-RE 044

Comment: see attached diagrams in Appendix B.

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### 3.6 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission. The 6 dB bandwidth is the frequency difference between the two markers.

| Test conditions                |                           | 6 dB Bandwidth |             |             |
|--------------------------------|---------------------------|----------------|-------------|-------------|
|                                |                           | Channel 1      | Channel 6   | Channel 11  |
| $T_{nom} = 23^{\circ}\text{C}$ | $V_{nom} = 120 \text{ V}$ | 16.6346 MHz    | 16.6346 MHz | 16.6346 MHz |
| Measurement uncertainty        |                           | < 10 Hz        |             |             |

#### Limits:

| Frequency Range<br>MHz | Limits      |
|------------------------|-------------|
| 902-928                | min 500 kHz |
| 2400-2483.5            | min 500 kHz |
| 5725-5850              | min 500 kHz |

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Comment: see attached diagrams in Appendix D.

Registration number: W6M20607-7234-C-2  
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### 3.7 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

| Test conditions                |                           | Peak Power Spectral Density (3 kHz) |                    |                     |
|--------------------------------|---------------------------|-------------------------------------|--------------------|---------------------|
|                                |                           | Channel 1<br>[dBm]                  | Channel 6<br>[dBm] | Channel 11<br>[dBm] |
| $T_{nom} = 23^{\circ}\text{C}$ | $V_{nom} = 120 \text{ V}$ | -17.55                              | -17.72             | -17.61              |
| Measurement uncertainty        |                           | < 3 Hz                              |                    |                     |

#### Limits:

| Frequency Range<br>MHz | dBm |
|------------------------|-----|
| 902-928                | 8   |
| 2400-2483,5            | 8   |
| 5725-5850              | 8   |

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Comment: see attached diagrams in Appendix E.

Registration number: W6M20607-7234-C-2  
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### **3.8 Radiated Emission from Digital Part And Receiver L.O.**

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequency of Emission<br>(MHz) | Field Strength<br>(microvolts/meter) | Field Strength<br>(dBmicrovolts/meter) |
|--------------------------------|--------------------------------------|----------------------------------------|
| 30 – 88                        | 100                                  | 40.0                                   |
| 88 – 216                       | 150                                  | 43.5                                   |
| 216 – 960                      | 200                                  | 46.0                                   |
| Above 960                      | 500                                  | 54.0                                   |

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028  
ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043  
ETSTW-RE 044

Comment: The final test result and referable diagrams are listed on the test report number W6M20607-7234-P-15B.

Registration number: W6M20607-7234-C-2  
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### 3.9 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

| Frequency | Level (dBμV)     |                  |
|-----------|------------------|------------------|
|           | quasi-peak       | average          |
| 150 kHz   | lower limit line | Lower limit line |

#### Adaptor 1 mode

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |       | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|-------|-------------|-------|
|           |                  | QP                       | AV    |                   | QP                 | AV    | QP                      | AV    | QP          | AV    |
| N         | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV    | QP          | AV    |
|           | 0.380            | 26.07                    | 17.89 | 10.10             | 36.17              | 27.99 | 58.28                   | 48.28 | 22.11       | 20.29 |
|           | 1.940            | 32.77                    | 22.64 | 10.10             | 42.87              | 32.74 | 56.00                   | 46.00 | 13.13       | 13.26 |
|           | 23.210           | 29.47                    | 14.79 | 10.10             | 39.57              | 24.89 | 60.00                   | 50.00 | 20.43       | 25.11 |

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |       | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|-------|-------------|-------|
|           |                  | QP                       | AV    |                   | QP                 | AV    | QP                      | AV    | QP          | AV    |
| L1        | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV    | QP          | AV    |
|           | 0.270            | 26.70                    | 17.08 | 10.10             | 36.80              | 27.18 | 61.11                   | 51.11 | 24.31       | 23.93 |
|           | 1.940            | 32.37                    | 22.15 | 10.10             | 42.47              | 32.25 | 56.00                   | 46.00 | 13.53       | 13.75 |
|           | 23.530           | 24.37                    | 13.68 | 10.10             | 34.47              | 23.78 | 60.00                   | 50.00 | 25.53       | 26.22 |

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**Adaptor 2 mode**

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |       | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|-------|-------------|-------|
| N         | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV    | QP          | AV    |
|           | 0.175            | 29.99                    | 11.25 | 10.10             | 40.09              | 21.35 | 65.28                   | 55.28 | 25.19       | 33.93 |
|           | 0.650            | 25.91                    | 8.62  | 10.10             | 36.01              | 18.72 | 56.00                   | 46.00 | 19.99       | 27.28 |
|           | 28.145           | 24.26                    | 8.55  | 10.10             | 34.36              | 18.65 | 60.00                   | 50.00 | 25.64       | 31.35 |

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |       | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|-------|-------------|-------|
| L1        | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV    | QP          | AV    |
|           | 0.175            | 31.12                    | 11.91 | 10.10             | 41.22              | 22.01 | 65.28                   | 55.28 | 24.06       | 33.27 |
|           | 0.585            | 26.21                    | 11.85 | 10.10             | 36.31              | 21.95 | 56.00                   | 46.00 | 19.69       | 24.05 |
|           | 25.325           | 18.75                    | 15.04 | 10.10             | 28.85              | 25.14 | 60.00                   | 50.00 | 31.15       | 24.86 |

**USB mode**

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |      | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|------|-------------|-------|
| N         | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV   | QP          | AV    |
|           | 0.270            | 37.38                    | 31.80 | 10.10             | 47.48              | 41.90 | 61.1                    | 51.1 | 13.62       | 9.20  |
|           | 0.470            | 32.52                    | 28.67 | 10.10             | 42.62              | 38.77 | 56.5                    | 46.5 | 13.88       | 7.73  |
|           | 1.475            | 25.14                    | 21.45 | 10.10             | 35.24              | 31.55 | 56.0                    | 46.0 | 20.76       | 14.45 |
|           | 12.935           | 21.89                    | 19.05 | 10.10             | 31.99              | 29.15 | 60.0                    | 50.0 | 28.01       | 20.85 |

| LISN type | Frequency Marker | Corrected Reading (dBuV) |       | Correction Factor | Test Result (dBuV) |       | Compliance Limit (dBuV) |      | Margin (dB) |       |
|-----------|------------------|--------------------------|-------|-------------------|--------------------|-------|-------------------------|------|-------------|-------|
| L1        | MHz              | QP                       | AV    | dB                | QP                 | AV    | QP                      | AV   | QP          | AV    |
|           | 0.205            | 37.77                    | 28.07 | 10.10             | 47.87              | 38.17 | 63.4                    | 53.4 | 15.53       | 15.23 |
|           | 0.470            | 32.32                    | 27.63 | 10.10             | 42.42              | 37.73 | 56.5                    | 46.5 | 14.08       | 8.77  |
|           | 1.405            | 23.89                    | 20.64 | 10.10             | 33.99              | 30.74 | 56.0                    | 46.0 | 22.01       | 15.26 |
|           | 14.885           | 23.19                    | 13.37 | 10.10             | 33.29              | 23.47 | 60.0                    | 50.0 | 26.71       | 26.53 |

**Note: 1. The formula of measured value as: Test Result = Corrected Reading + Correction Factor**  
**2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss**  
**3. Detector function in the form : P = Peak, QP = Quasi Peak, AV = Average**

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**Limits:**

| Frequency of Emission (MHz) | Conducted Limit (dBuV) |          |
|-----------------------------|------------------------|----------|
|                             | Quasi Peak             | Average  |
| 0.15-0.5                    | 66 to 56               | 56 to 46 |
| 0.5-5                       | 56                     | 46       |
| 5-30                        | 60                     | 50       |

Test equipment used: ETSTW-CE 001 ETSTW-CE 003 ETSTW-CE 004 ETSTW-CE 006  
ETSTW-CE 011 ETSTW-EMS 013 ETSTW-EMS 014

Comment: see attached diagrams in Appendix F.

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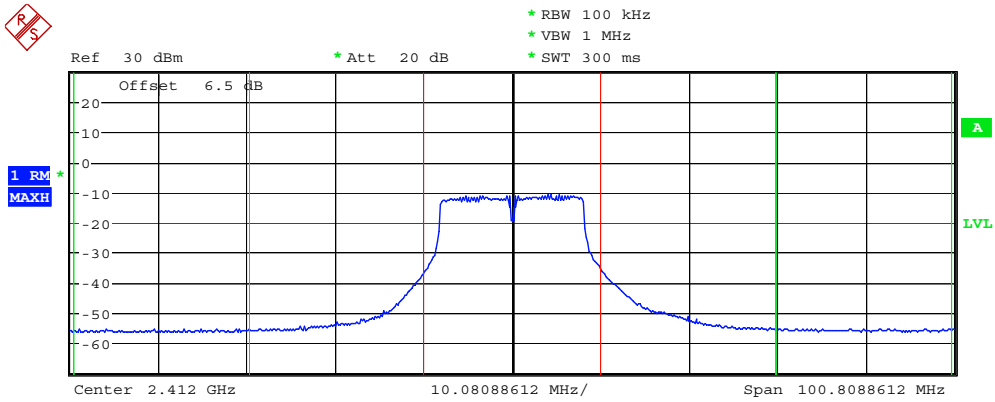
## **Appendix**

- A Peak Output Power
- B Spurious Emissions radiated
- C Band Edge Measurement
- D Minimum 6dB Bandwidth
- E Peak Power Spectral Density
- F Power Line Conducted Emission

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## **Appendix A**

Peak Output Power



**Tx Channel**

|           |        |       |          |
|-----------|--------|-------|----------|
| Bandwidth | 20 MHz | Power | 9.57 dBm |
|-----------|--------|-------|----------|

**Adjacent Channel**

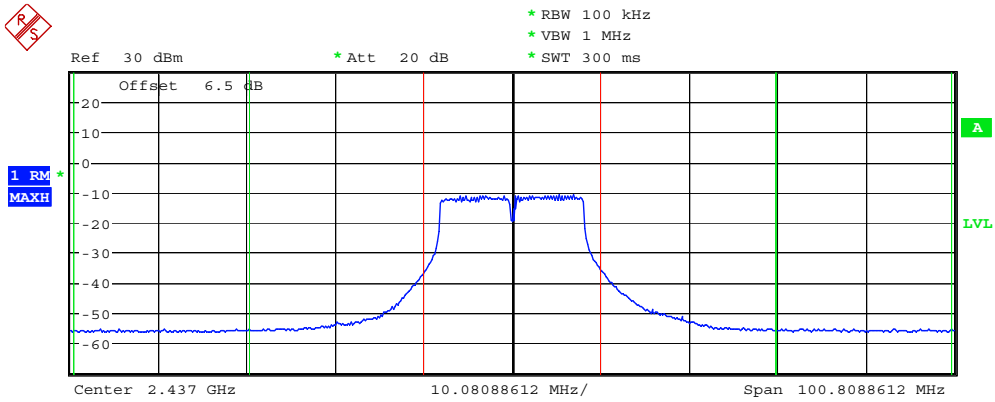
|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -34.88 dB |
| Spacing   | 20 MHz | Upper | -33.23 dB |

**Alternate Channel**

|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -43.19 dB |
| Spacing   | 40 MHz | Upper | -42.88 dB |

MAX OUTPUT POWER 802.11G CH1

Date: 7.SEP.2006 09:54:55



**Tx Channel**

|           |        |       |          |
|-----------|--------|-------|----------|
| Bandwidth | 20 MHz | Power | 9.57 dBm |
|-----------|--------|-------|----------|

**Adjacent Channel**

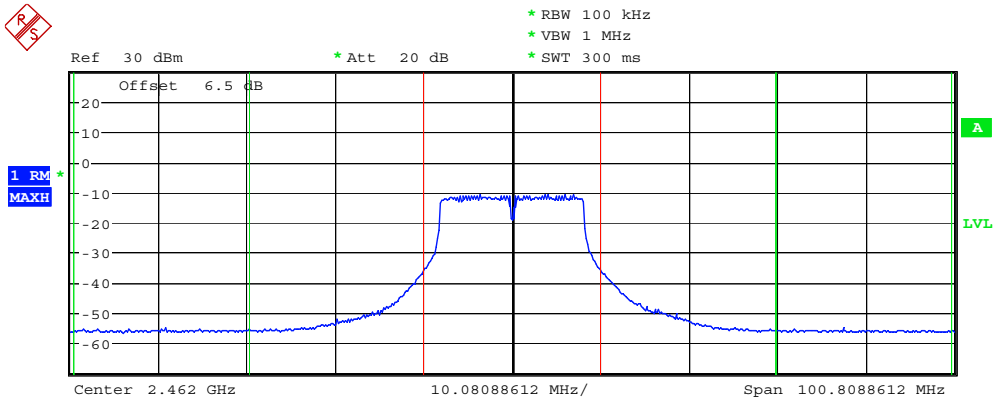
|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -34.81 dB |
| Spacing   | 20 MHz | Upper | -33.55 dB |

**Alternate Channel**

|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -43.15 dB |
| Spacing   | 40 MHz | Upper | -42.96 dB |

MAX OUTPUT POWER 802.11G CH6

Date: 7.SEP.2006 09:55:27



**Tx Channel**

|           |        |       |          |
|-----------|--------|-------|----------|
| Bandwidth | 20 MHz | Power | 9.70 dBm |
|-----------|--------|-------|----------|

**Adjacent Channel**

|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -34.19 dB |
| Spacing   | 20 MHz | Upper | -33.69 dB |

**Alternate Channel**

|           |        |       |           |
|-----------|--------|-------|-----------|
| Bandwidth | 20 MHz | Lower | -43.27 dB |
| Spacing   | 40 MHz | Upper | -43.28 dB |

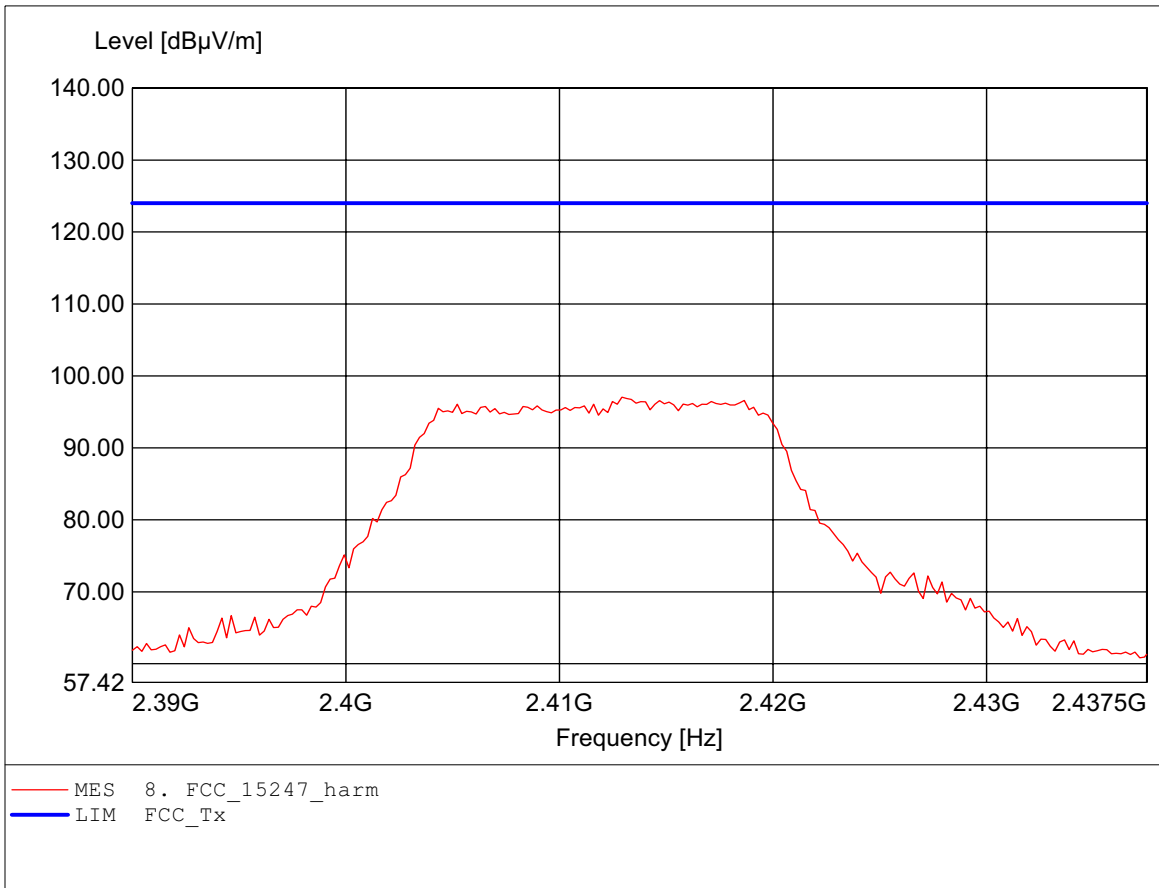
MAX OUTPUT POWER 802.11G CH11

Date: 7.SEP.2006 09:55:45

# Carrier power (Field Strength)

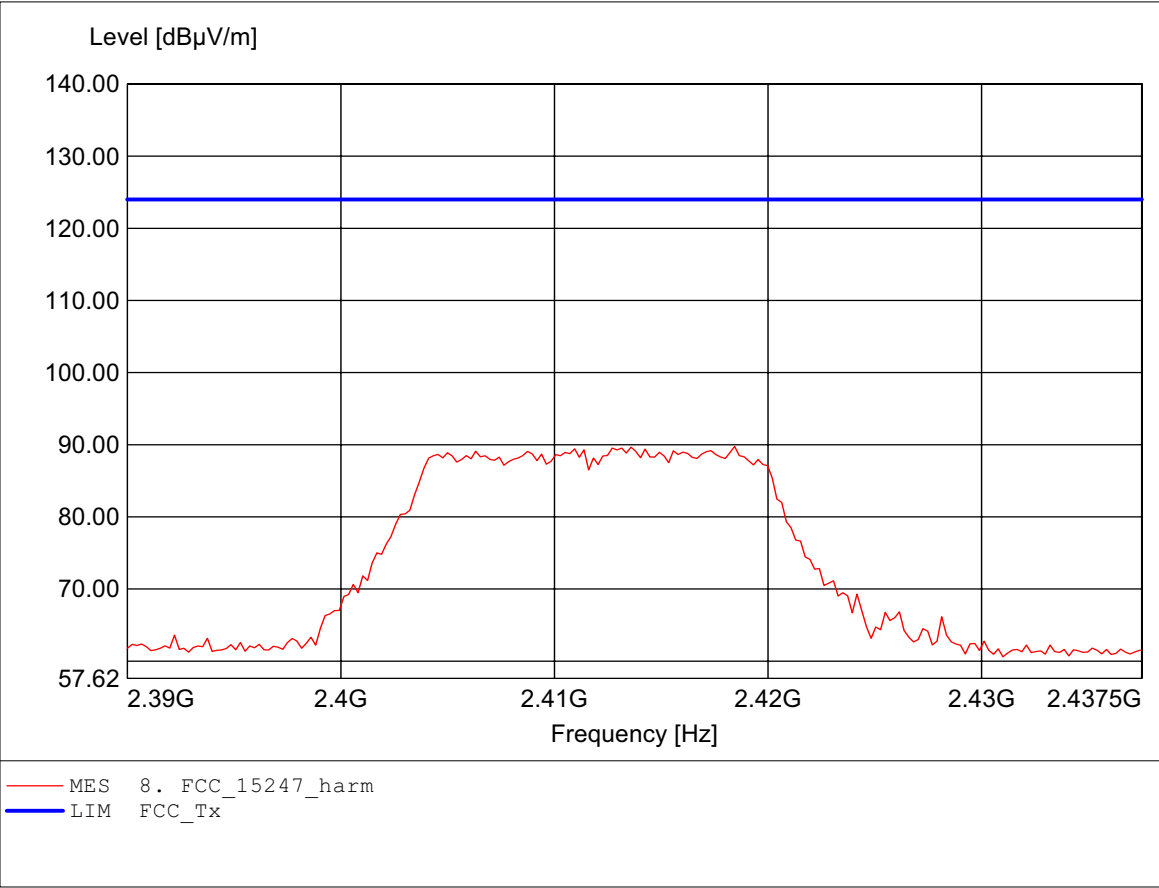
## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.413GHz, Emax: 97.03dBµV/m, RBW: 1MHz



Carrier power (Field Strength)  
FCC RULES PART 15, SUBPART C / LP0002

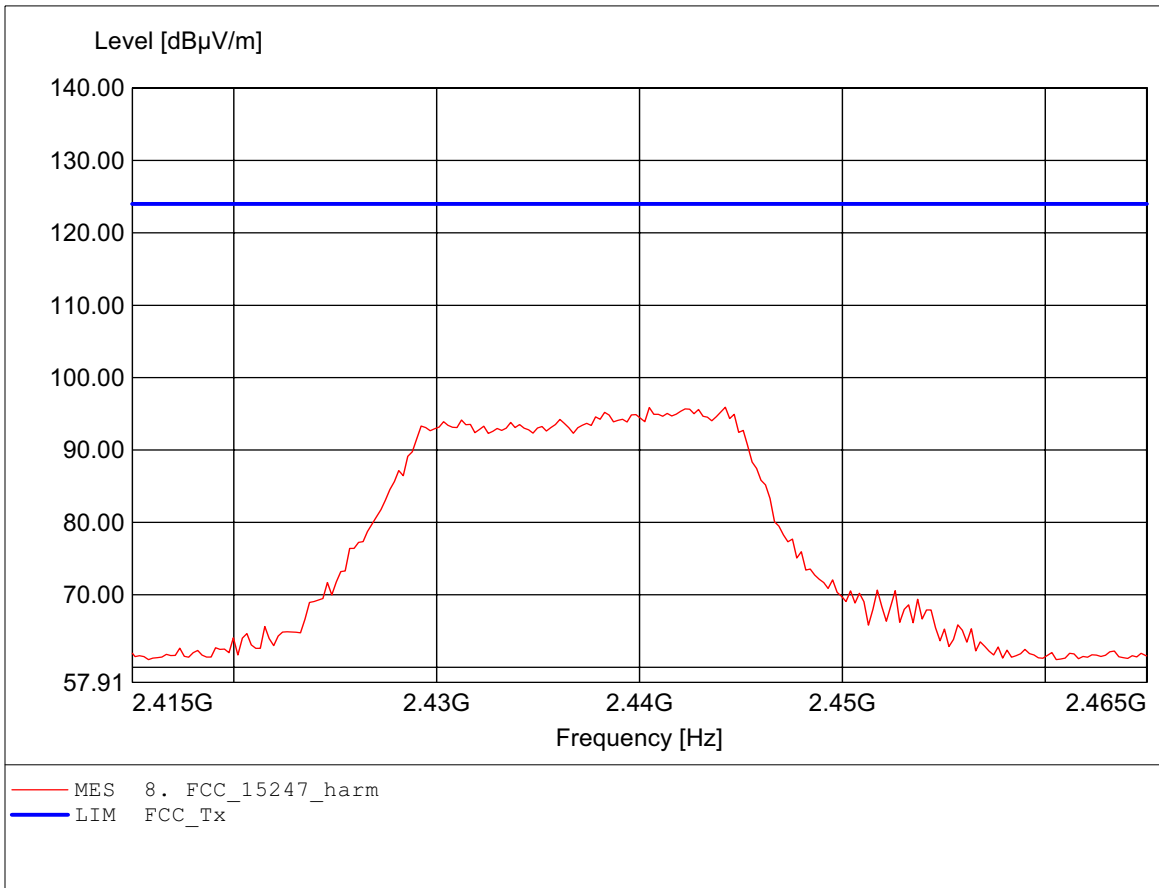
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.418GHz, Emax: 89.77dBµV/m, RBW: 1MHz



# Carrier power (Field Strength)

## FCC RULES PART 15, SUBPART C / LP0002

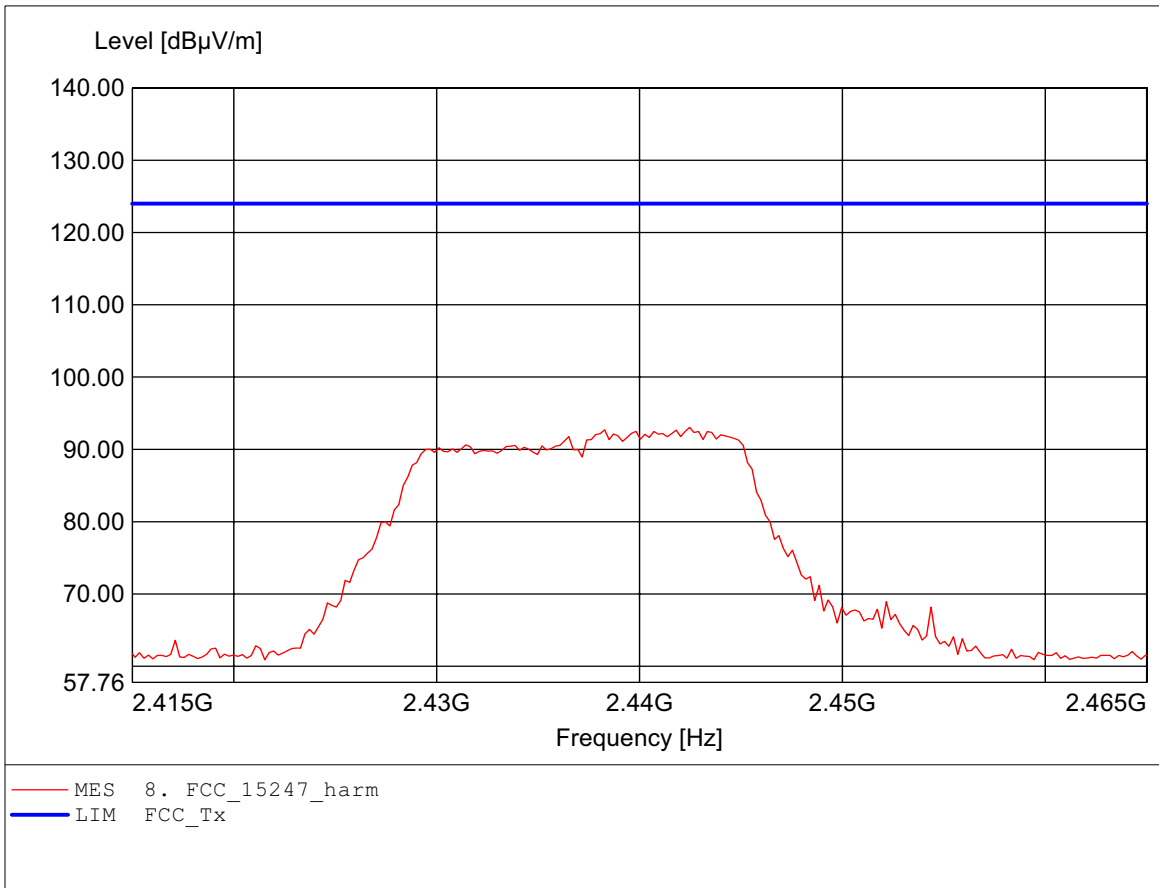
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.444GHz, Emax: 95.91dBµV/m, RBW: 1MHz



# Carrier power (Field Strength)

## FCC RULES PART 15, SUBPART C / LP0002

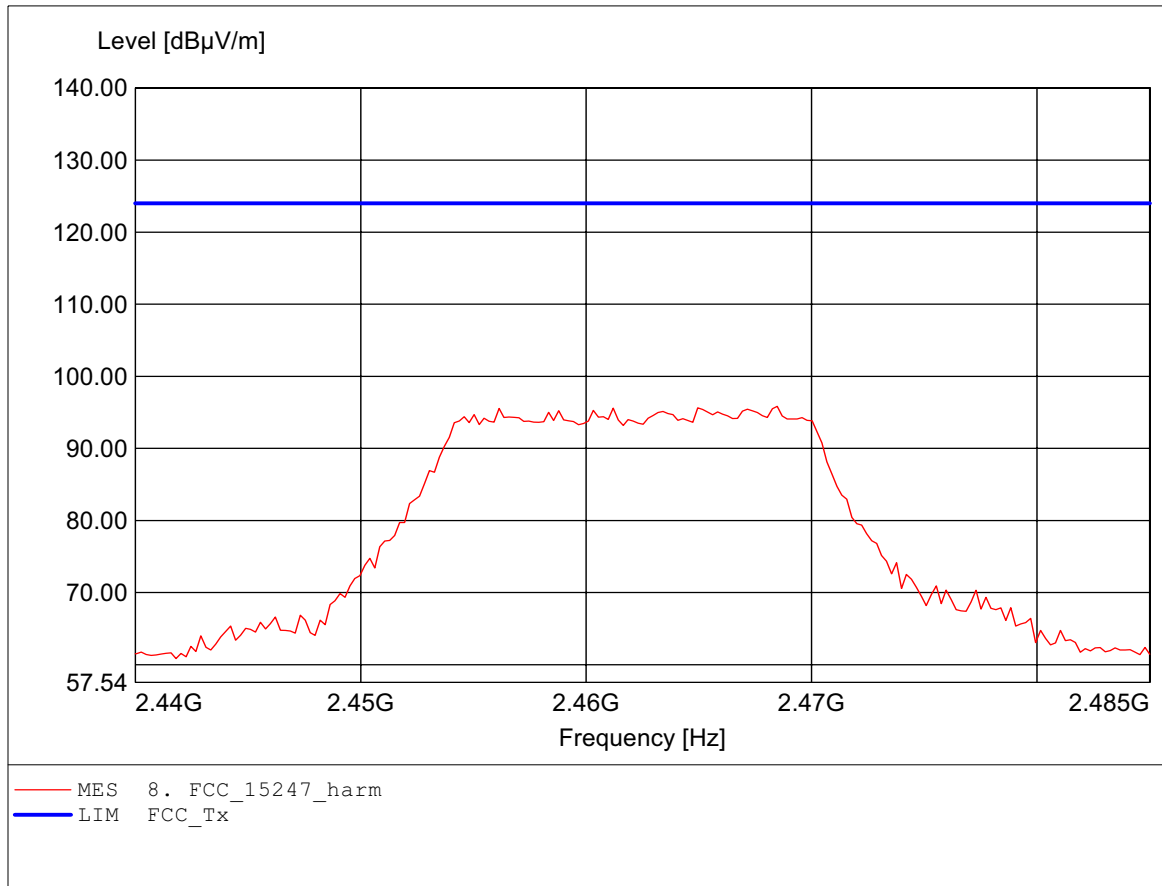
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.442GHz, Emax: 93.03dBµV/m, RBW: 1MHz



# Carrier power (Field Strength)

## FCC RULES PART 15, SUBPART C / LP0002

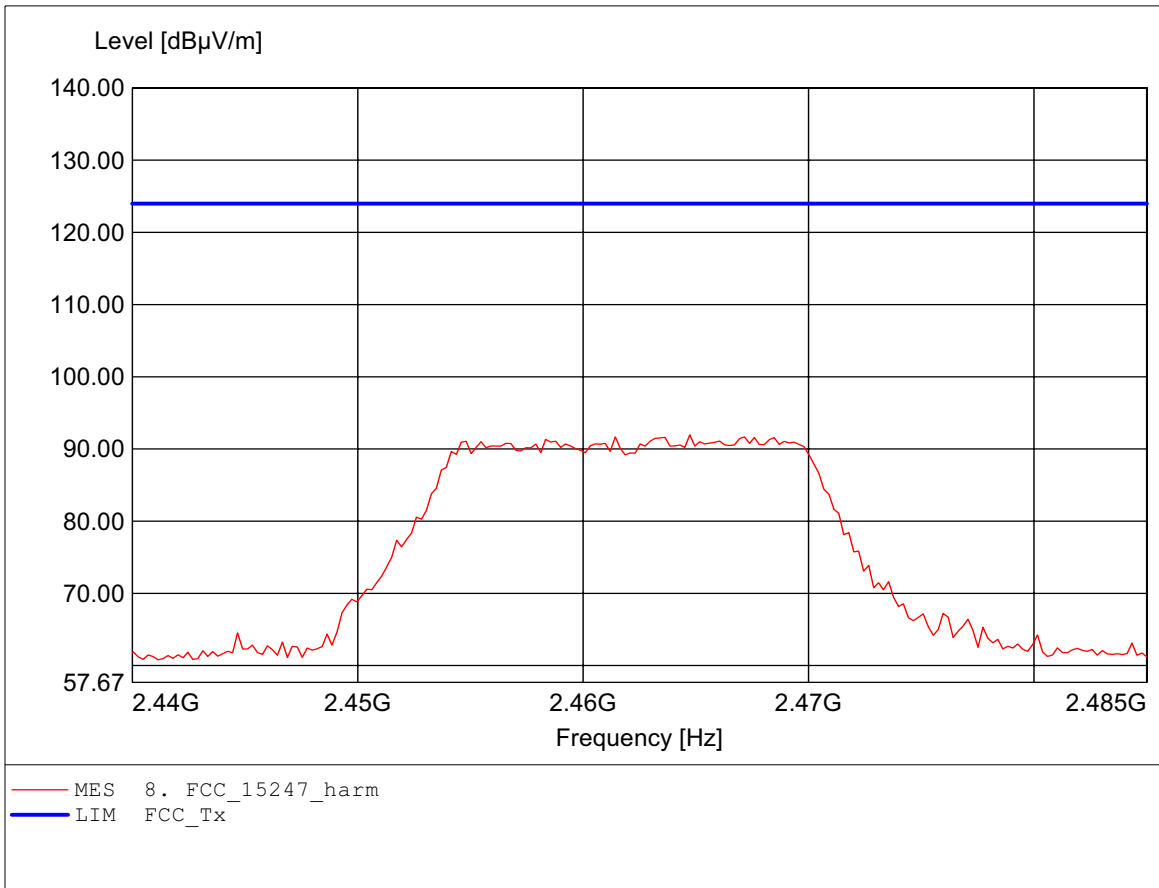
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.468GHz, Emax: 95.85dBμV/m, RBW: 1MHz



# Carrier power (Field Strength)

## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.465GHz, Emax: 91.96dBµV/m, RBW: 1MHz



Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

## **Appendix B**

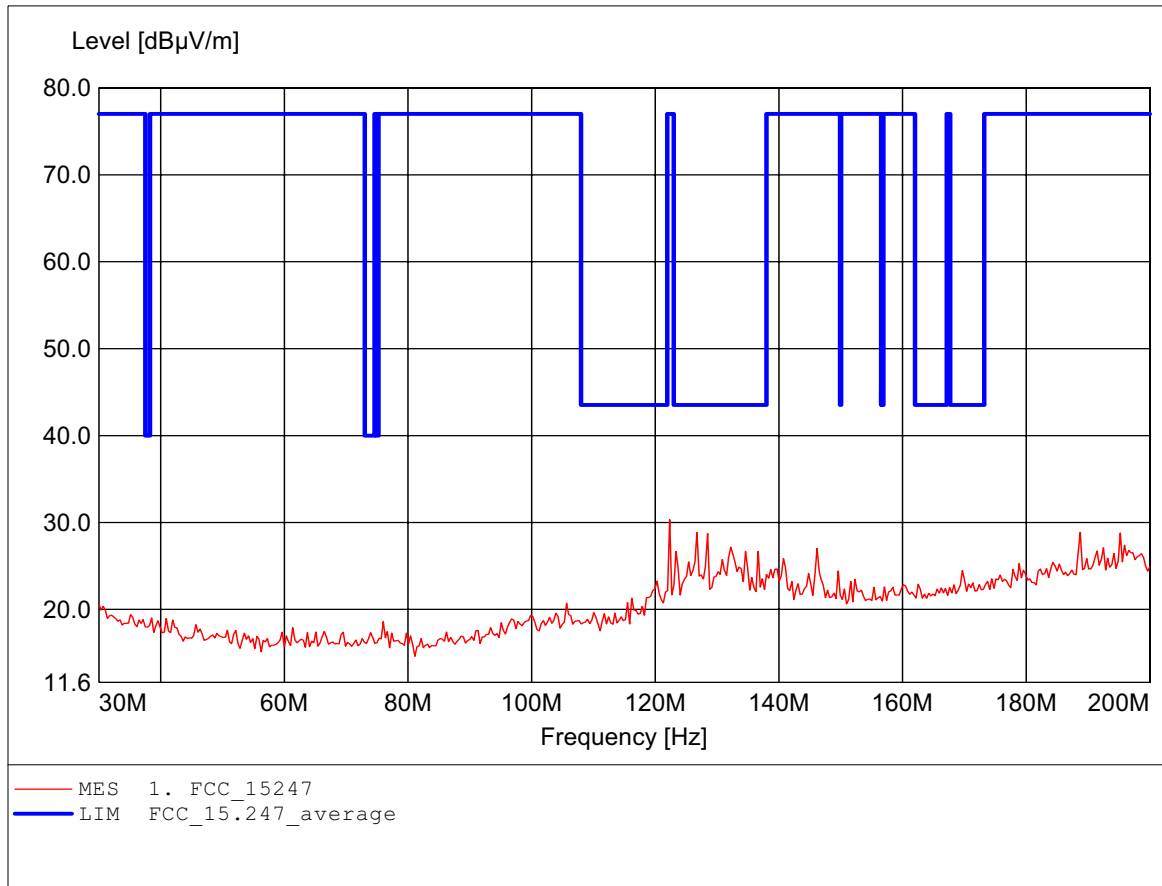
Spurious Emissions radiated

**The measurement diagrams plots attached below are preliminary wideband scan with a peak detector for reference only. The final test results are listed on section 3.5**

# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

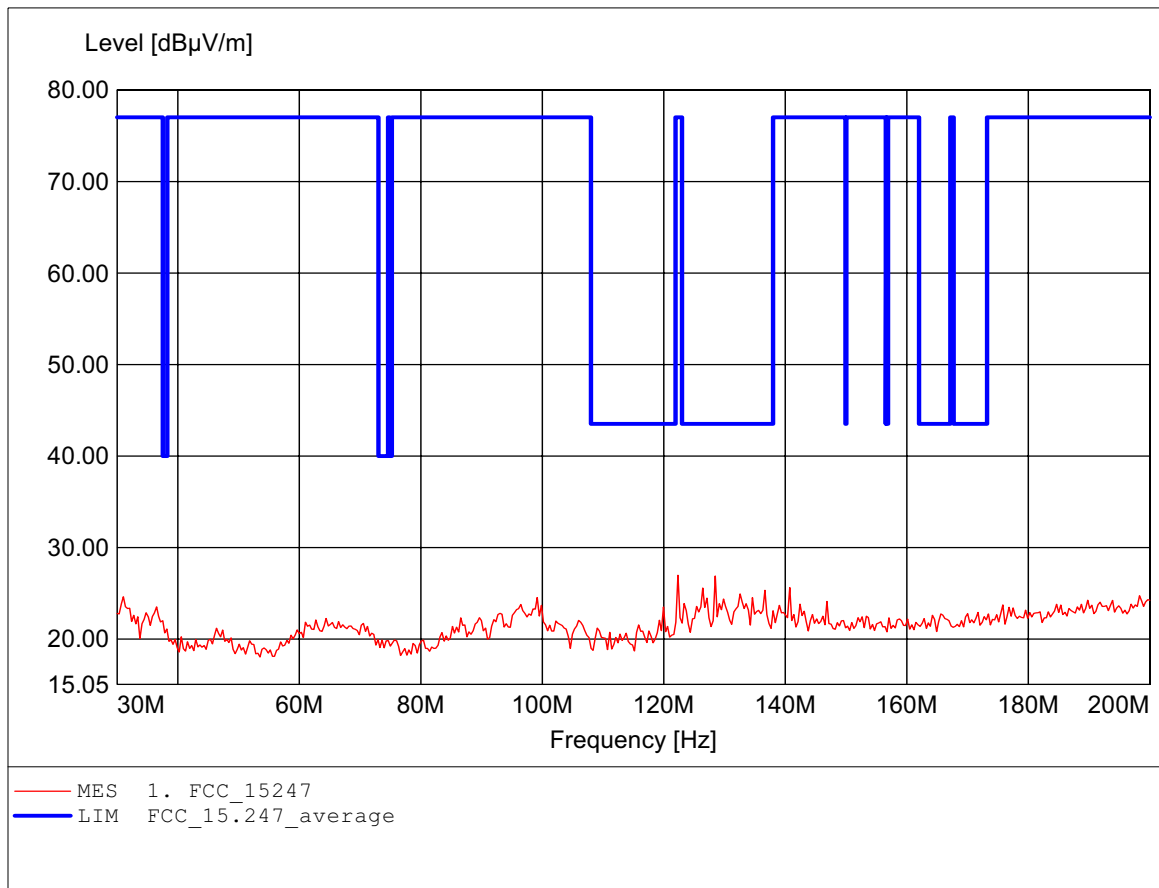
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 122.325MHz, Emax: 30.33dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

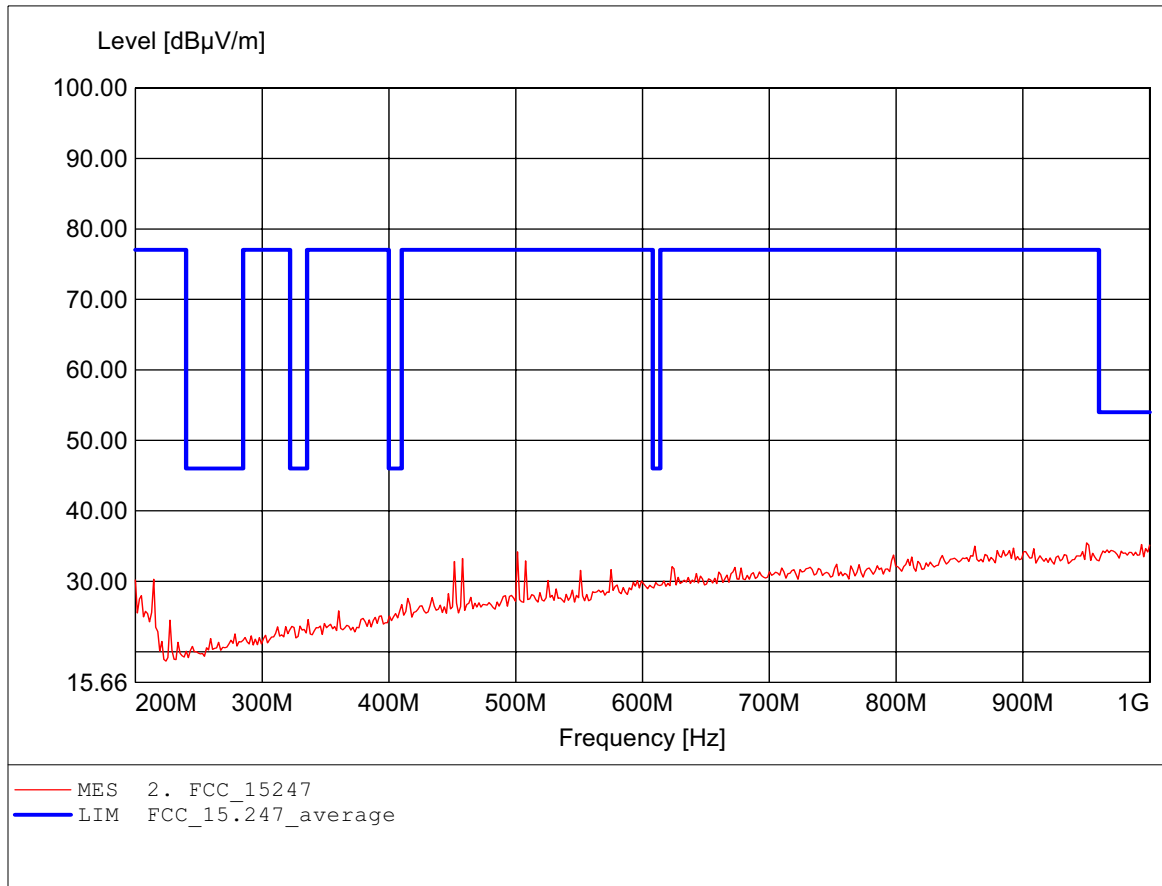
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 122.325MHz, Emax: 26.97dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

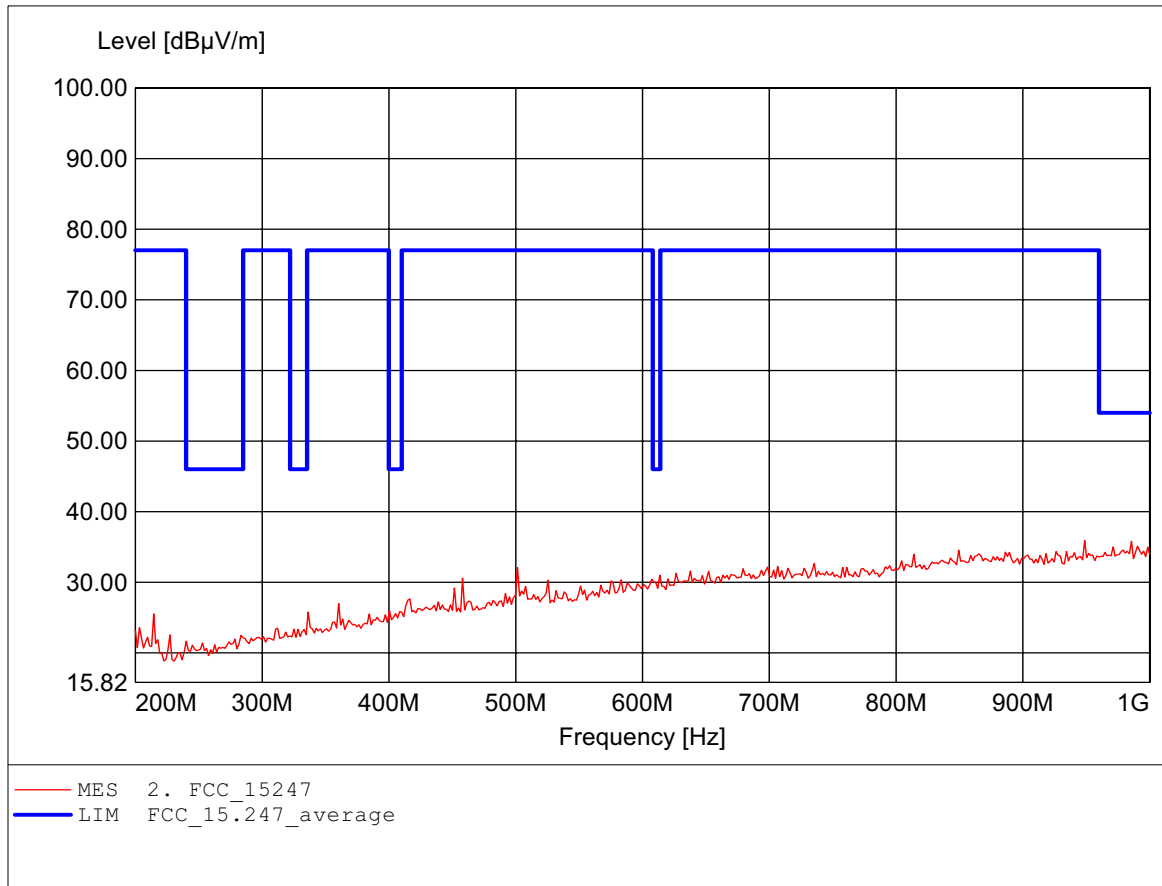
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL 223,  
Freq: 950.301MHz, Emax: 35.45dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

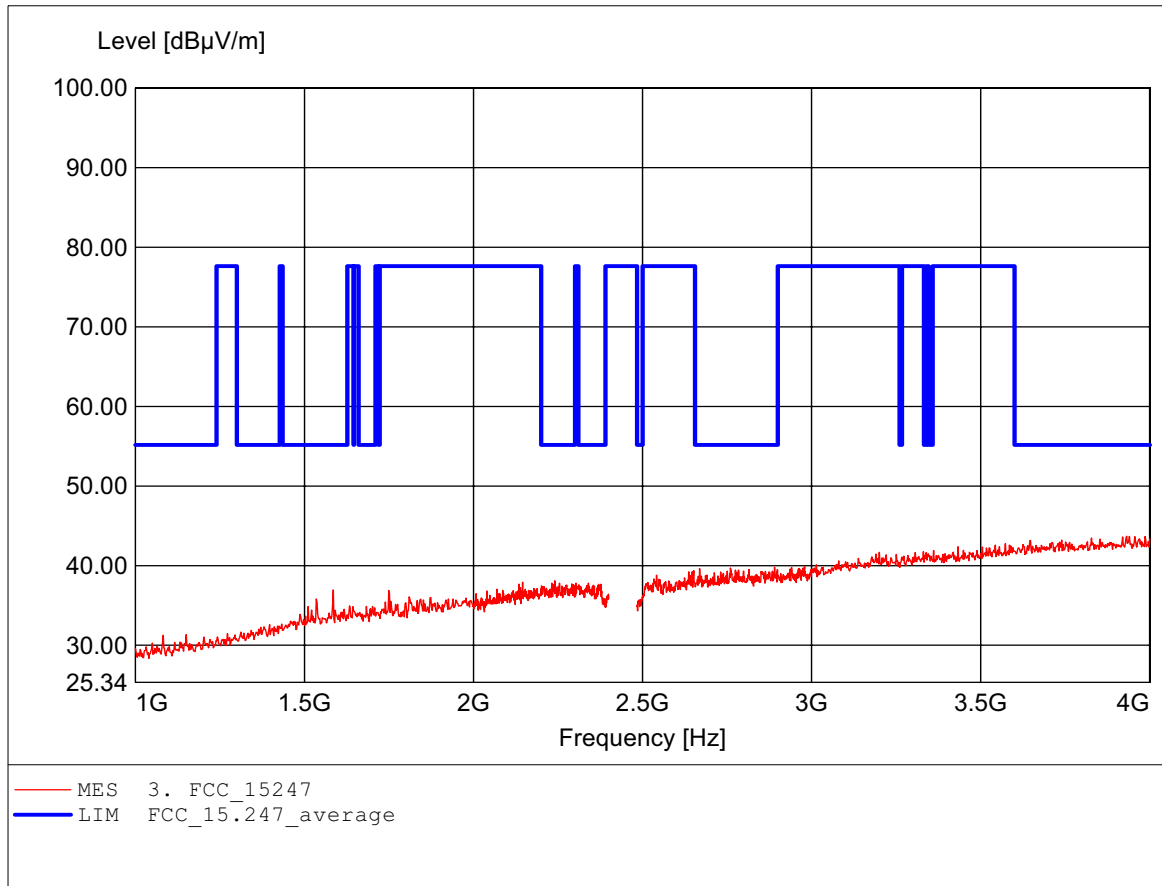
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL 223,  
Freq: 948.697MHz, Emax: 35.91dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

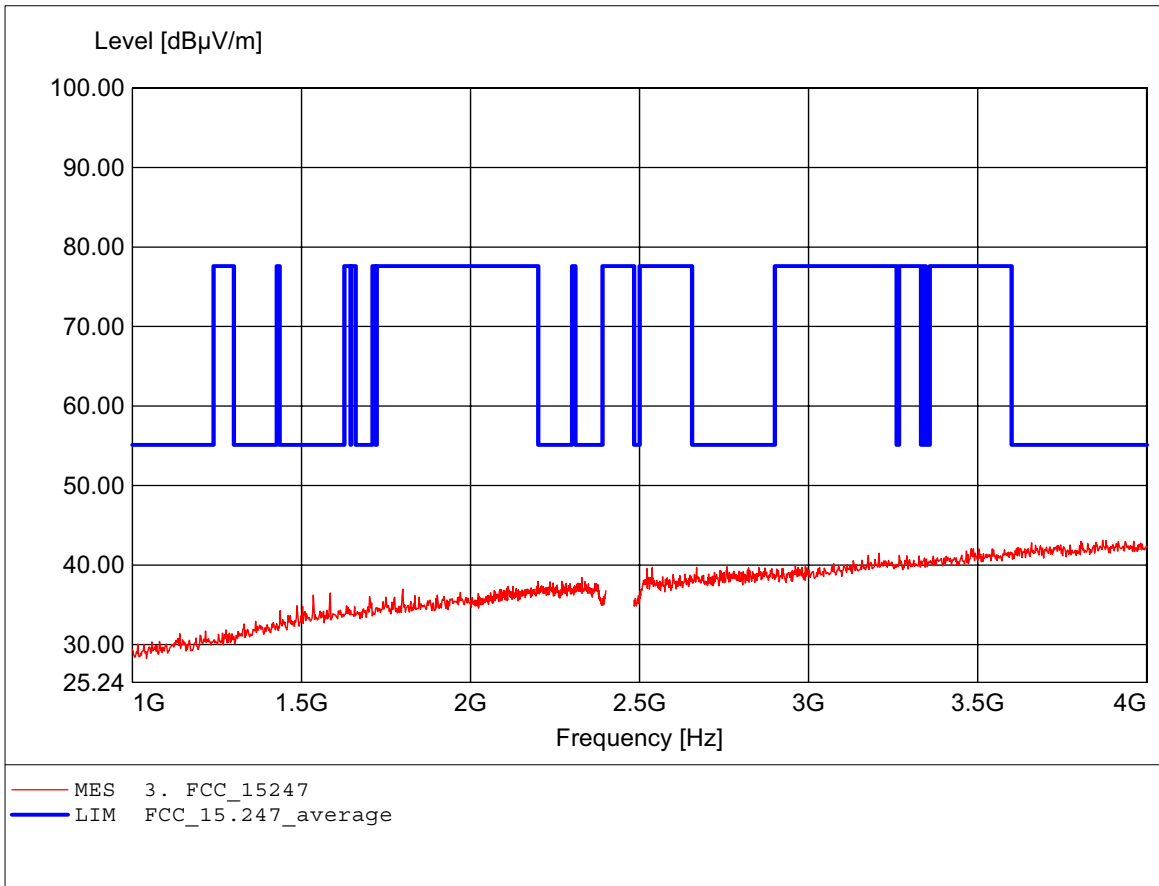
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.932GHz, Emax: 43.70dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

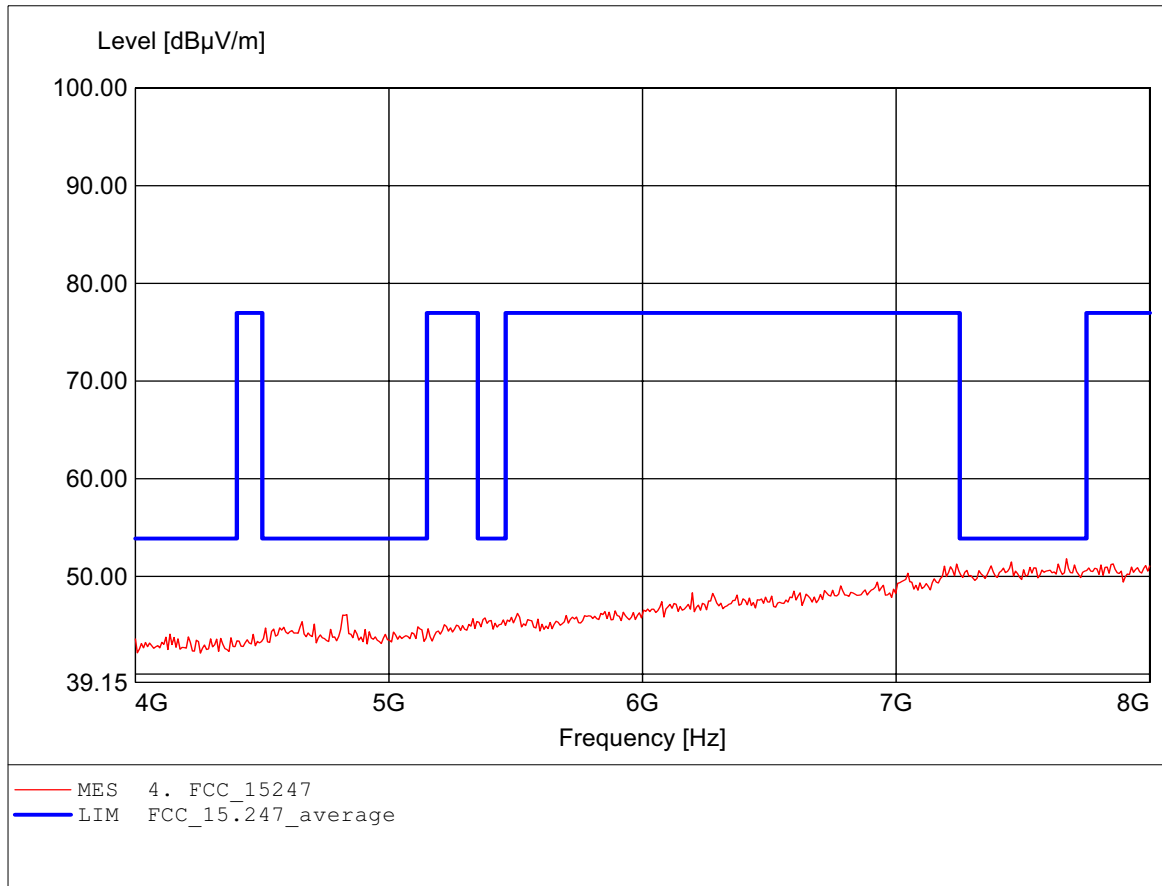
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.870GHz, Emax: 43.14dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

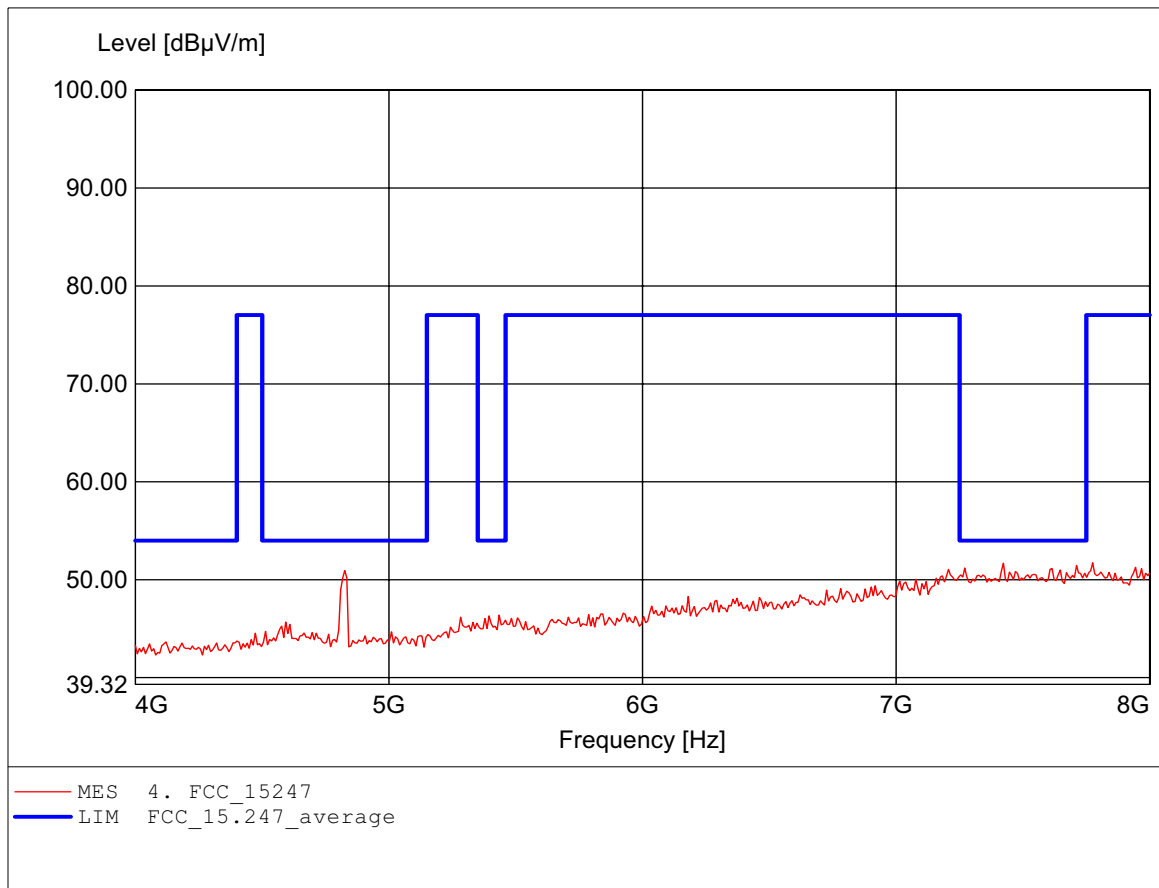
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.671GHz, Emax: 51.80dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

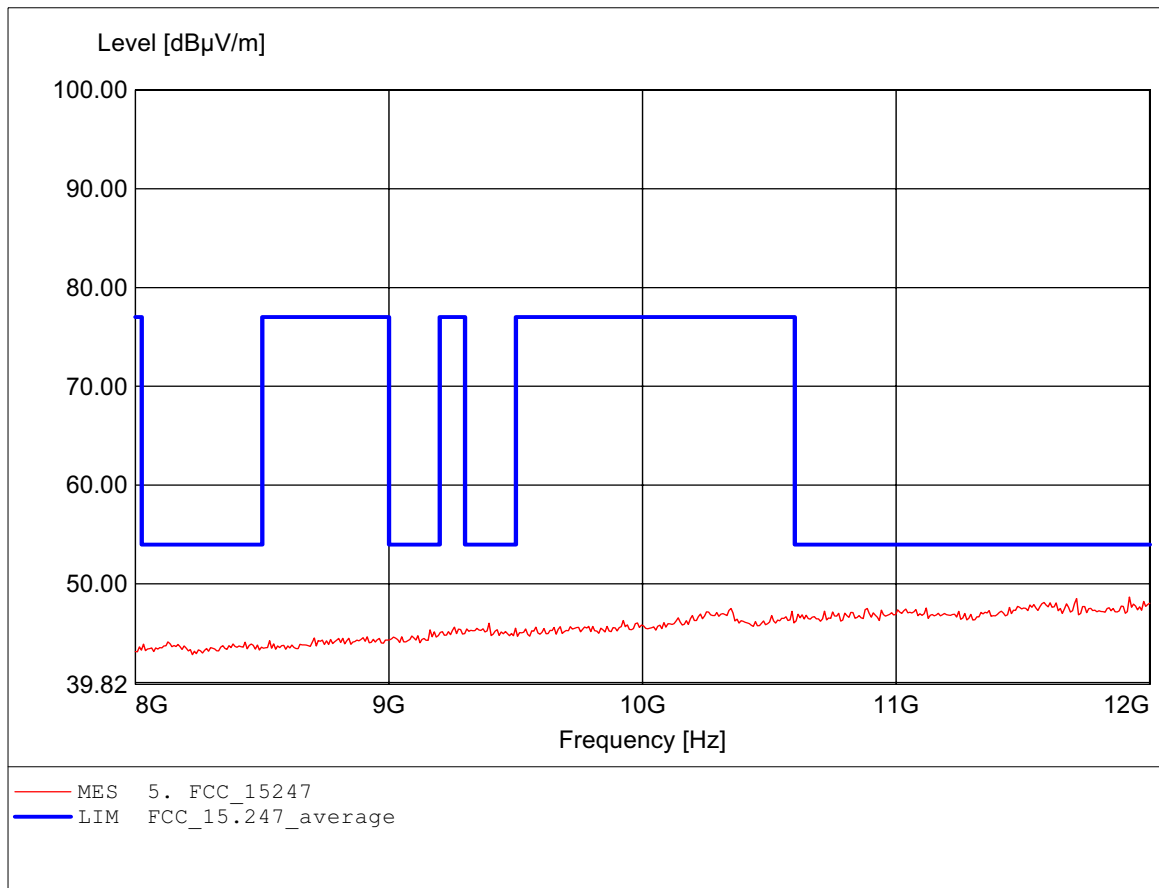
## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.776GHz, Emax: 51.74dBμV/m, RBW: 1MHz



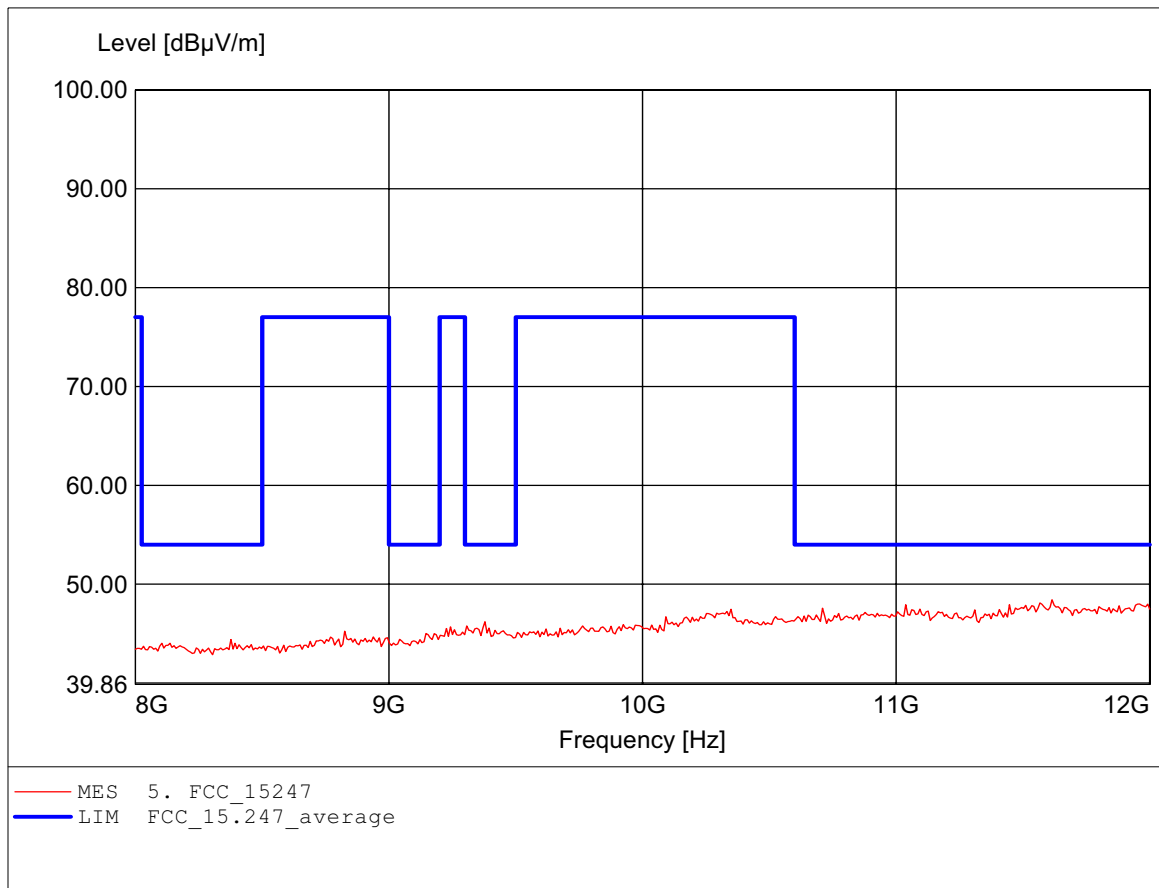
**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.920GHz, Emax: 48.66dBµV/m, RBW: 1MHz



**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

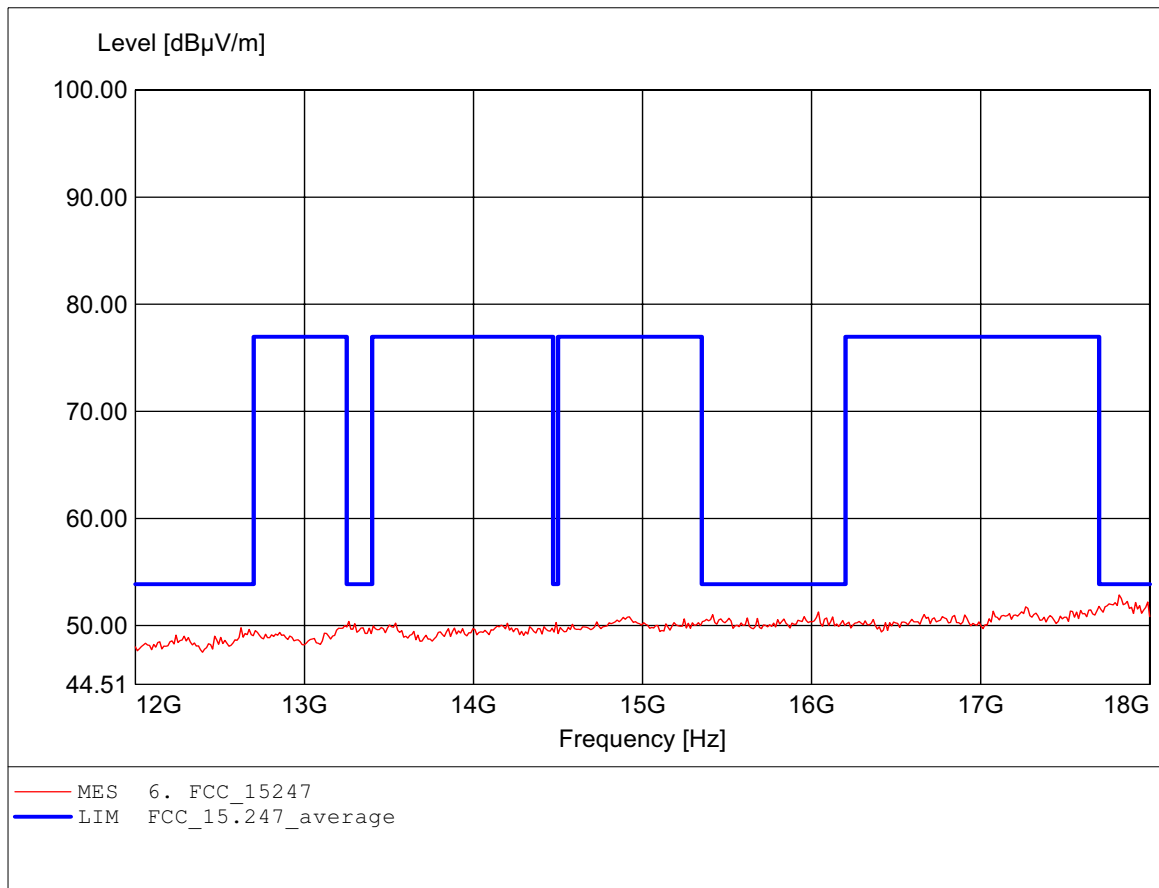
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.615GHz, Emax: 48.43dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

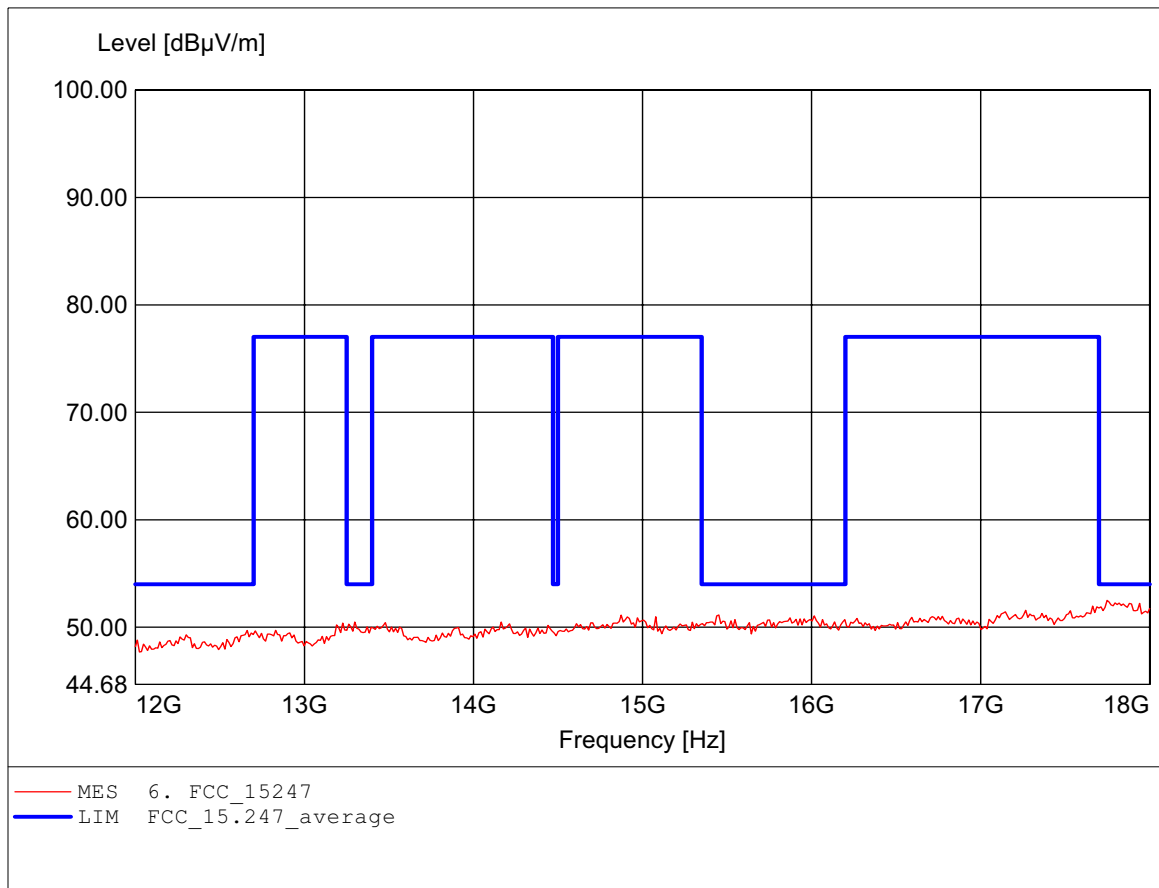
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.820GHz, Emax: 52.85dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

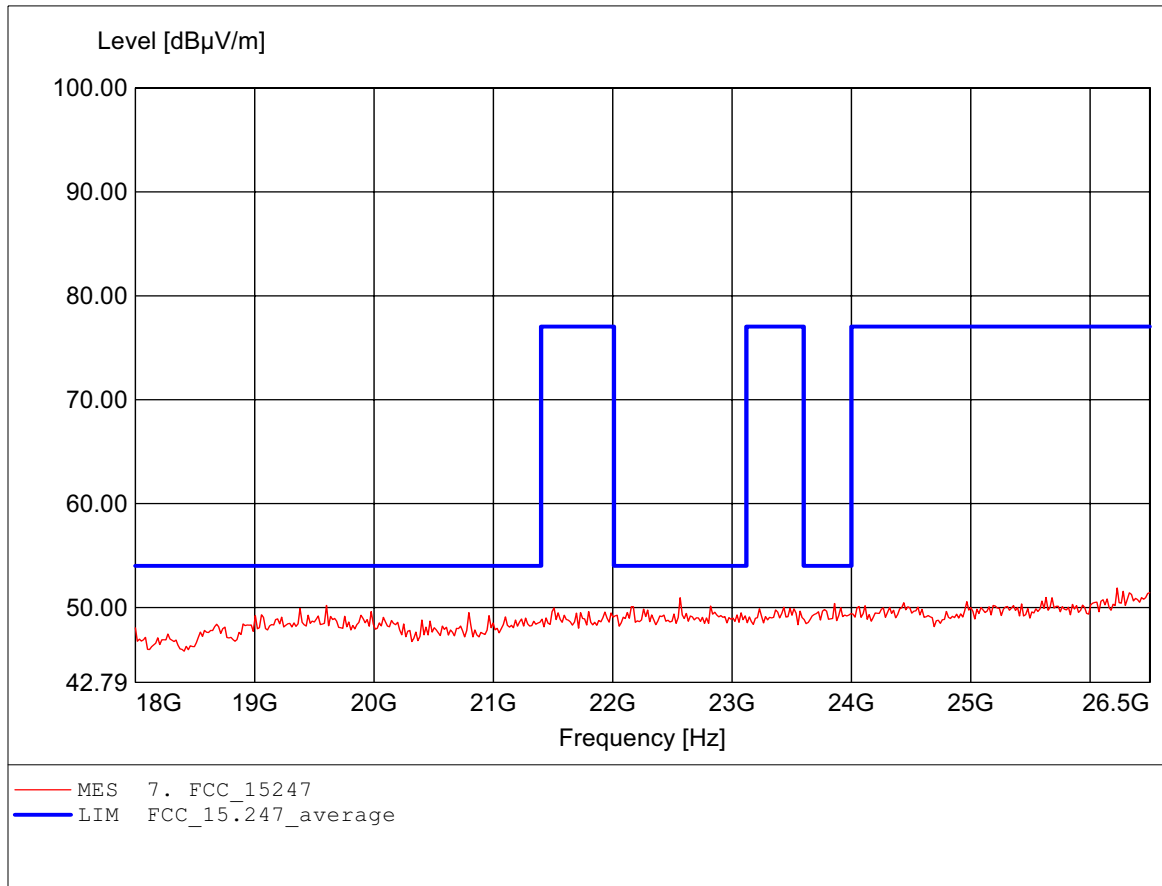
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.747GHz, Emax: 52.50dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

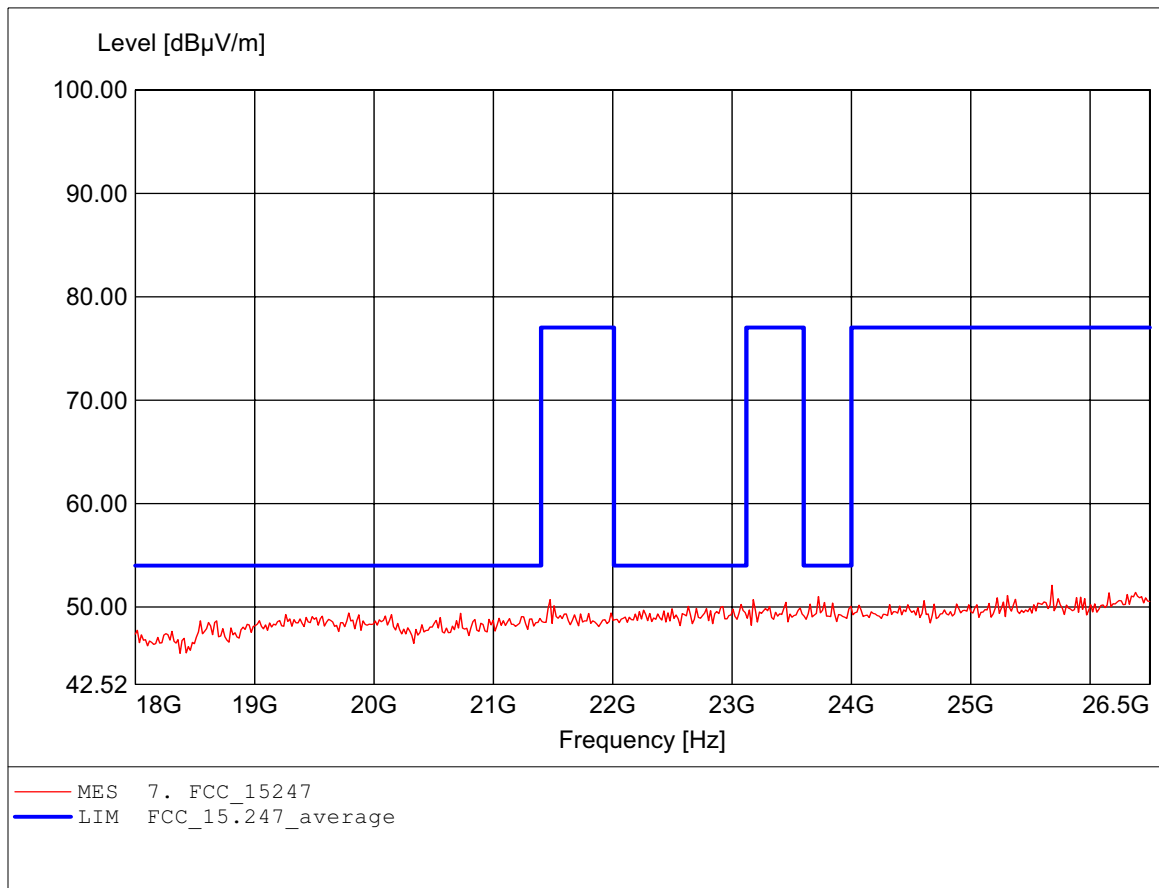
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 26.227GHz, Emax: 51.88dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

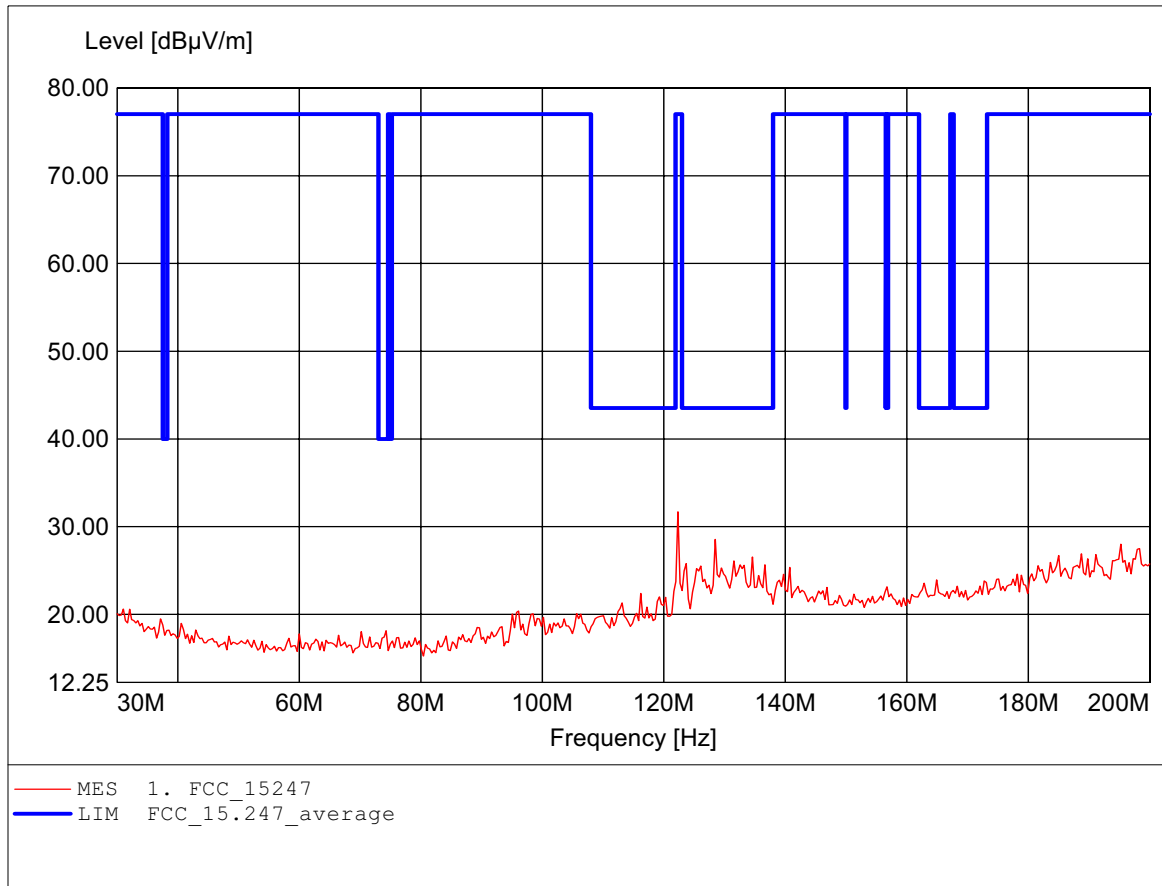
Order Number : W6M20607-7234 802.11g ch1  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 25.682GHz, Emax: 52.10dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

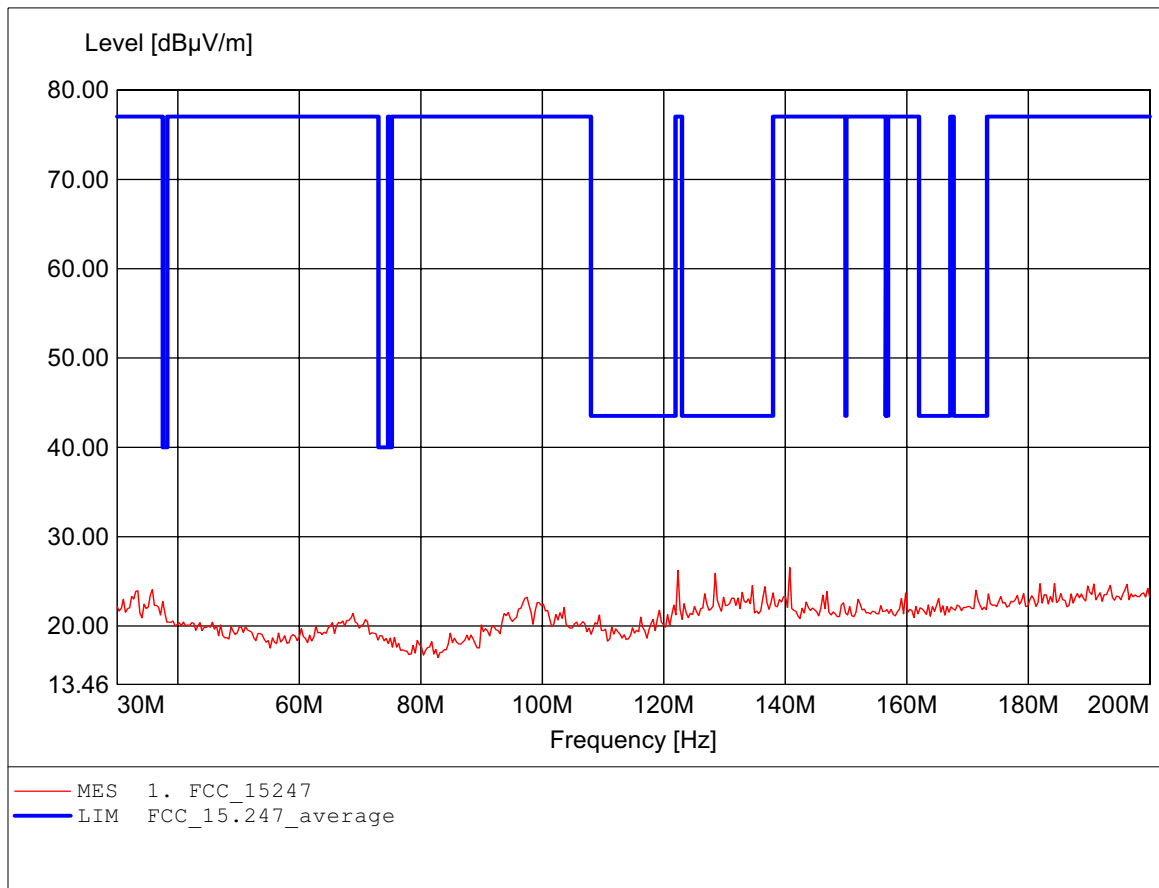
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 122.325MHz, Emax: 31.69dBµV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 140.721MHz, Emax: 26.55dBµV/m, RBW: 100kHz



## FCC RULES PART 15, SUBPART C / LP0002

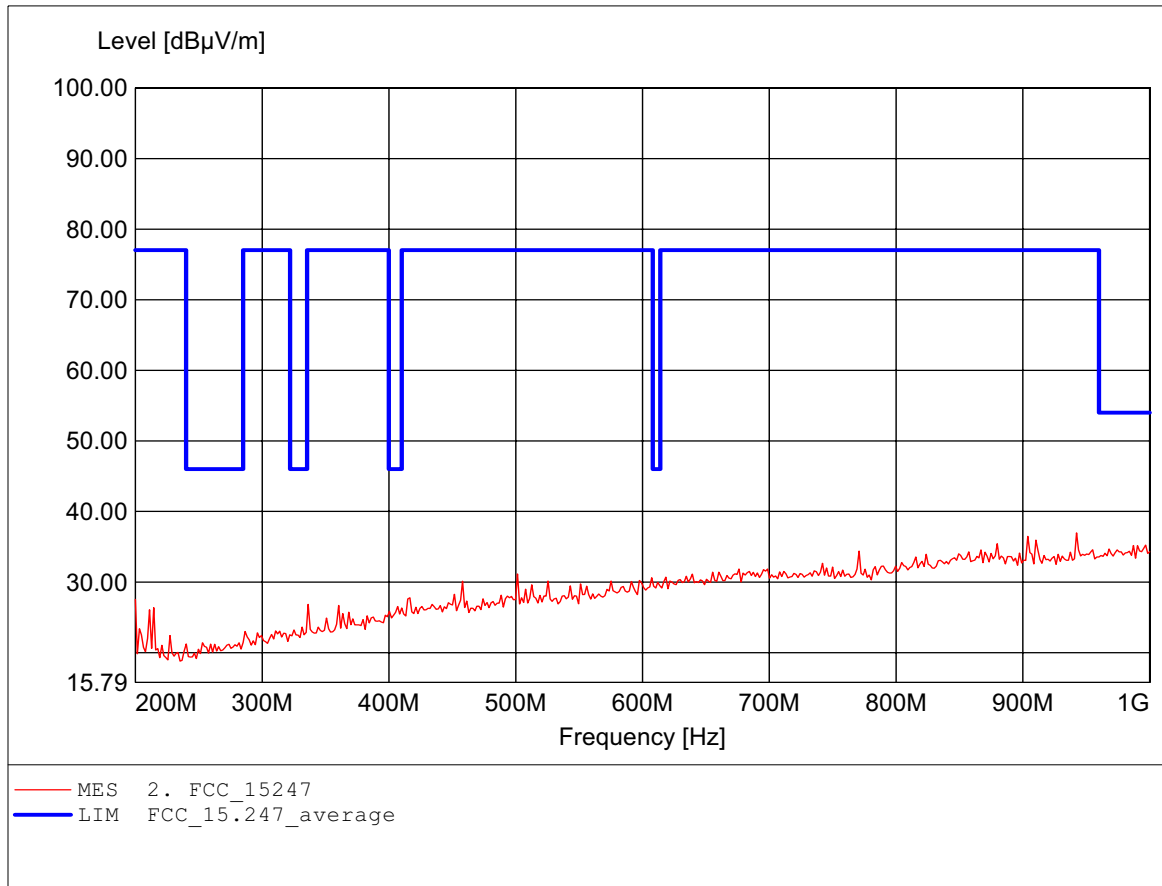
The graph displays two spectral curves: a red line for 'MES 2. FCC\_15247' and a blue line for 'LIM FCC\_15.247\_average'. The y-axis represents 'Level [dBμV/m]' from 15.69 to 100.00, and the x-axis represents 'Frequency [Hz]' from 200M to 1G. The blue LIM curve is a step function, mostly at 77 dBμV/m with several downward steps to 46 dBμV/m. The red MES curve is a noisy line starting around 25 dBμV/m and rising to about 35 dBμV/m at 1 GHz.

| Frequency [Hz] | MES 2. FCC_15247 [dBμV/m] | LIM FCC_15.247_average [dBμV/m] |
|----------------|---------------------------|---------------------------------|
| 200M           | 25.0                      | 77.0                            |
| 300M           | 26.0                      | 77.0                            |
| 400M           | 27.0                      | 77.0                            |
| 500M           | 28.0                      | 77.0                            |
| 600M           | 29.0                      | 77.0                            |
| 700M           | 30.0                      | 77.0                            |
| 800M           | 31.0                      | 77.0                            |
| 900M           | 32.0                      | 77.0                            |
| 1G             | 35.0                      | 54.0                            |

# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

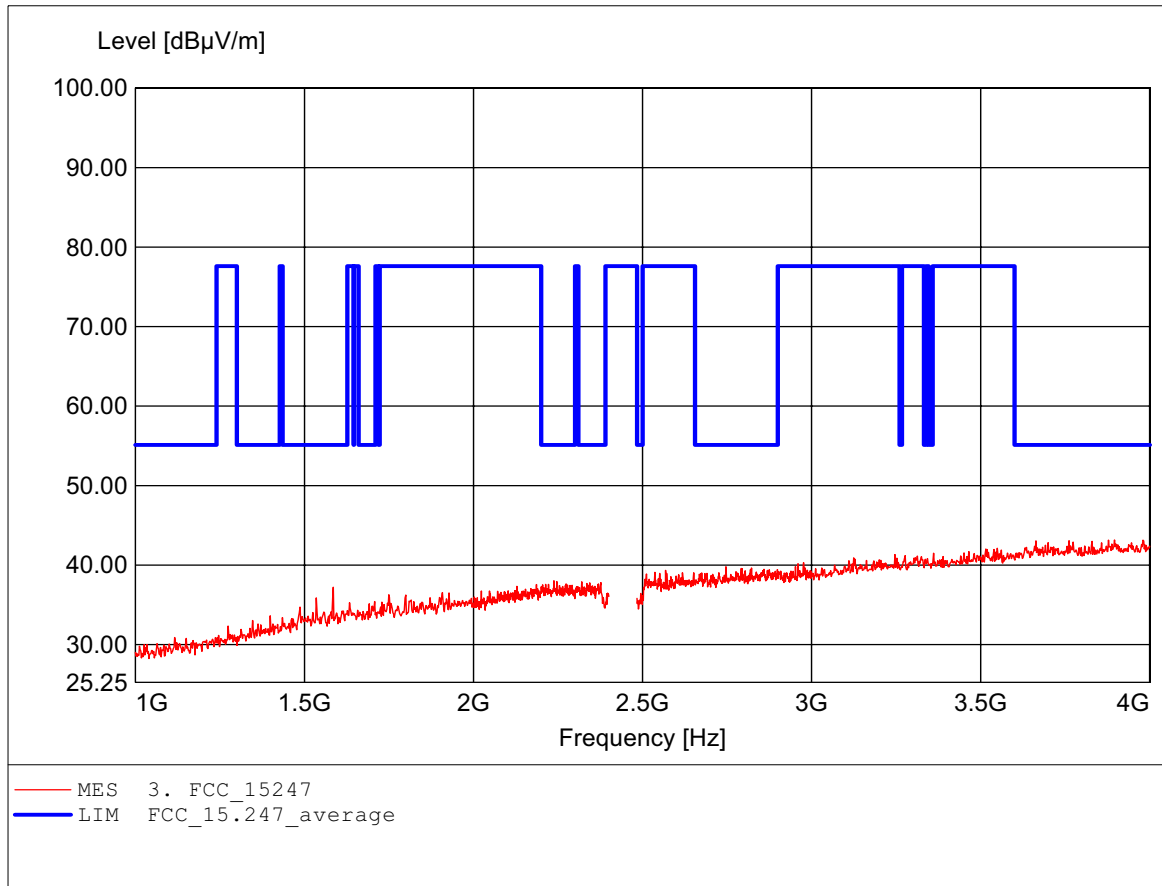
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL 223,  
Freq: 942.285MHz, Emax: 36.97dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

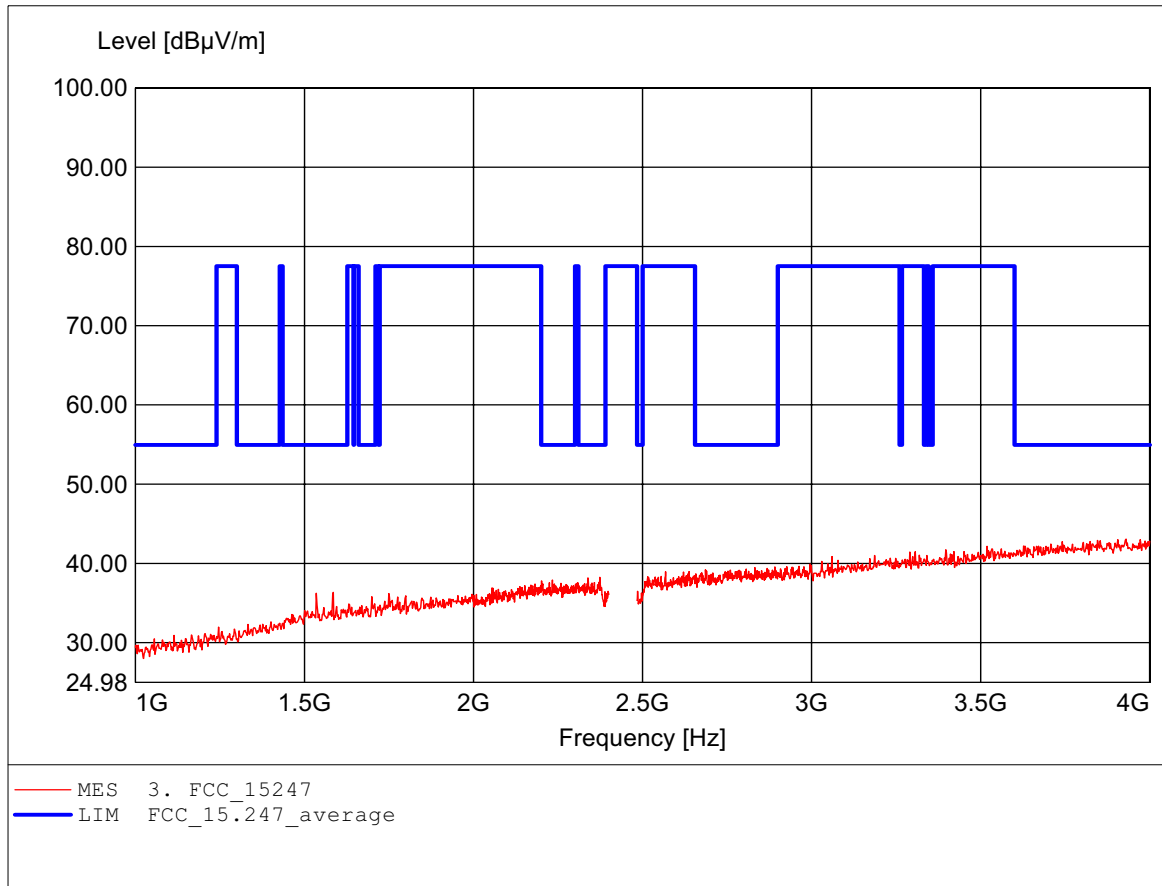
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.896GHz, Emax: 43.16dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

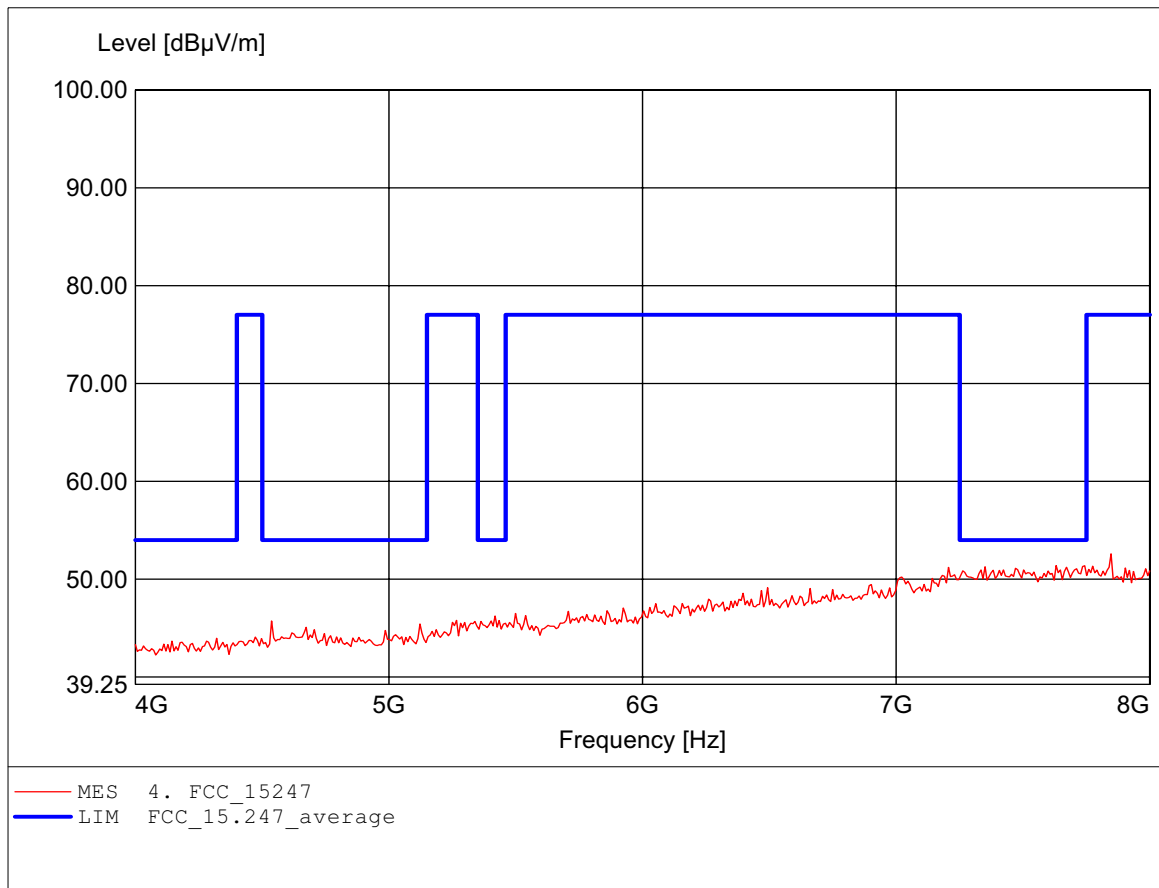
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Charles  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.930GHz, Emax: 43.08dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

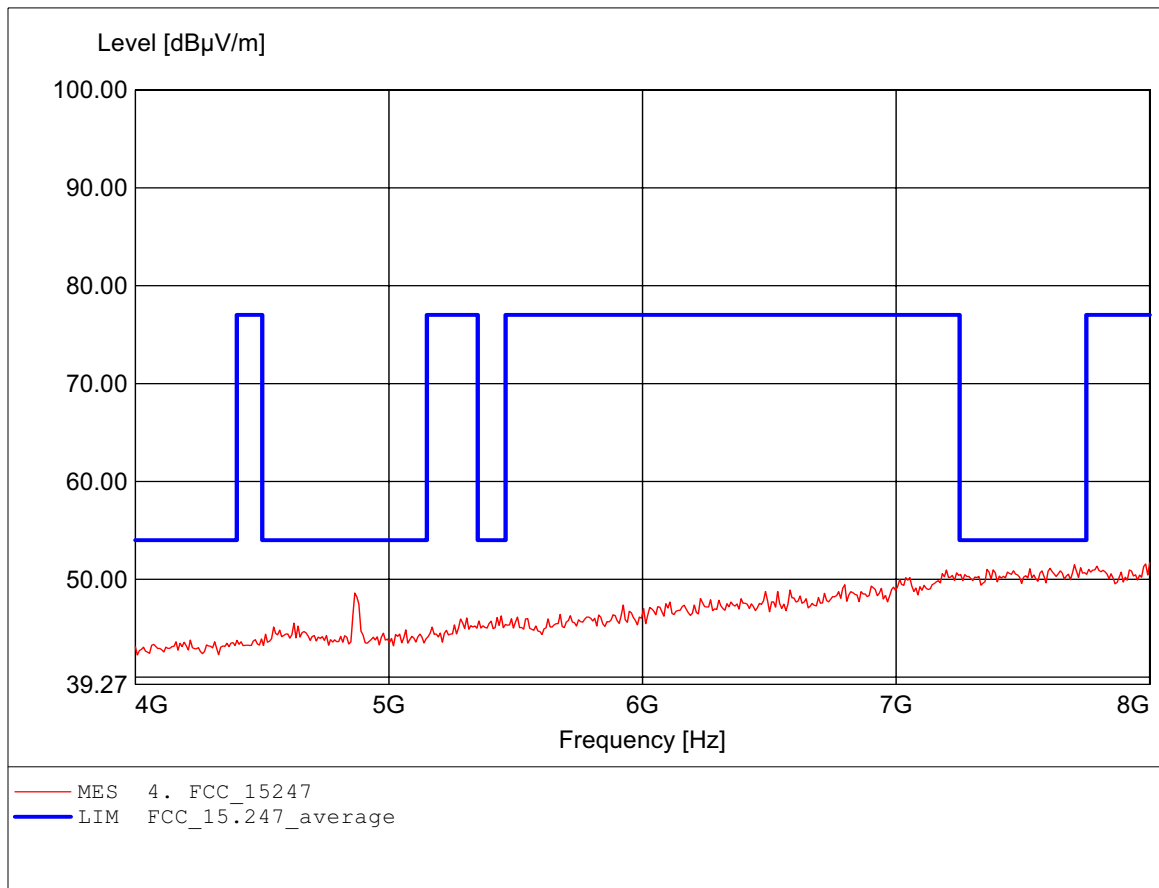
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.848GHz, Emax: 52.59dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

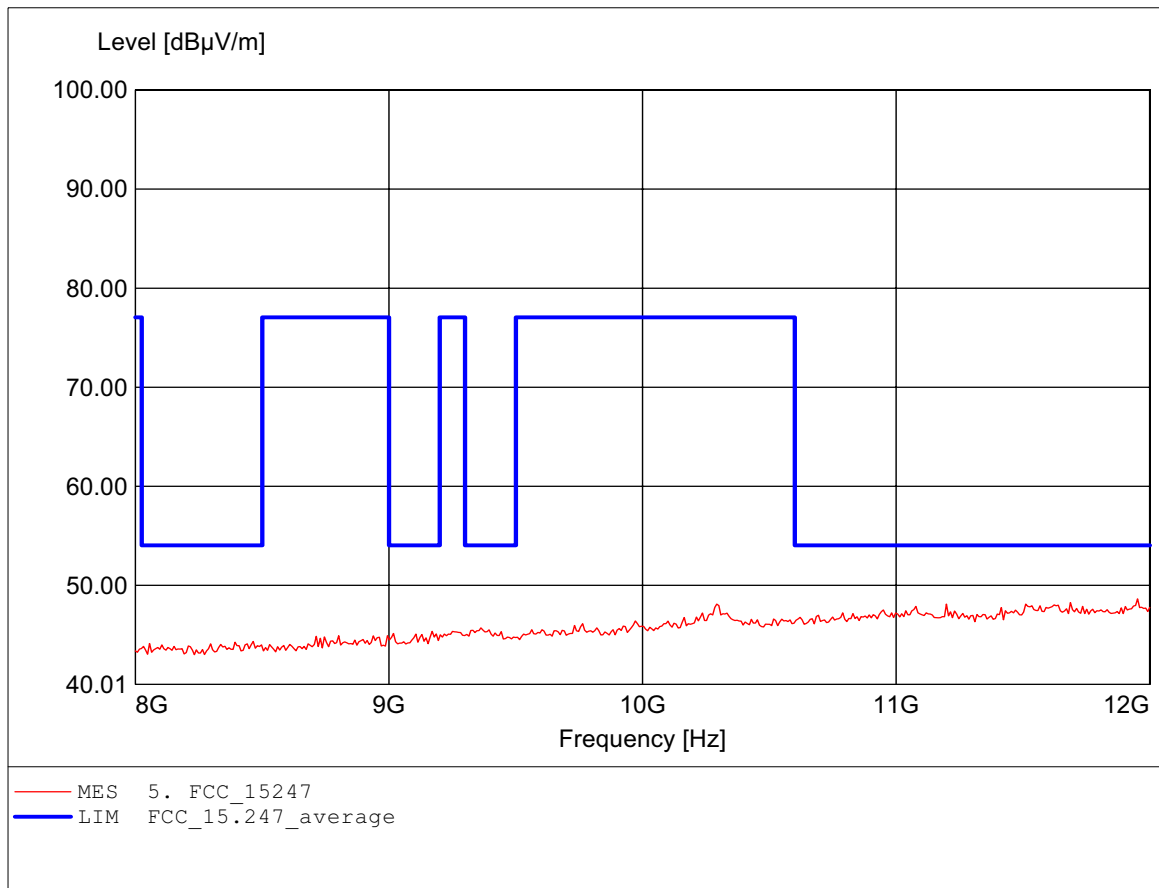
## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 8.000GHz, Emax: 51.70dBμV/m, RBW: 1MHz



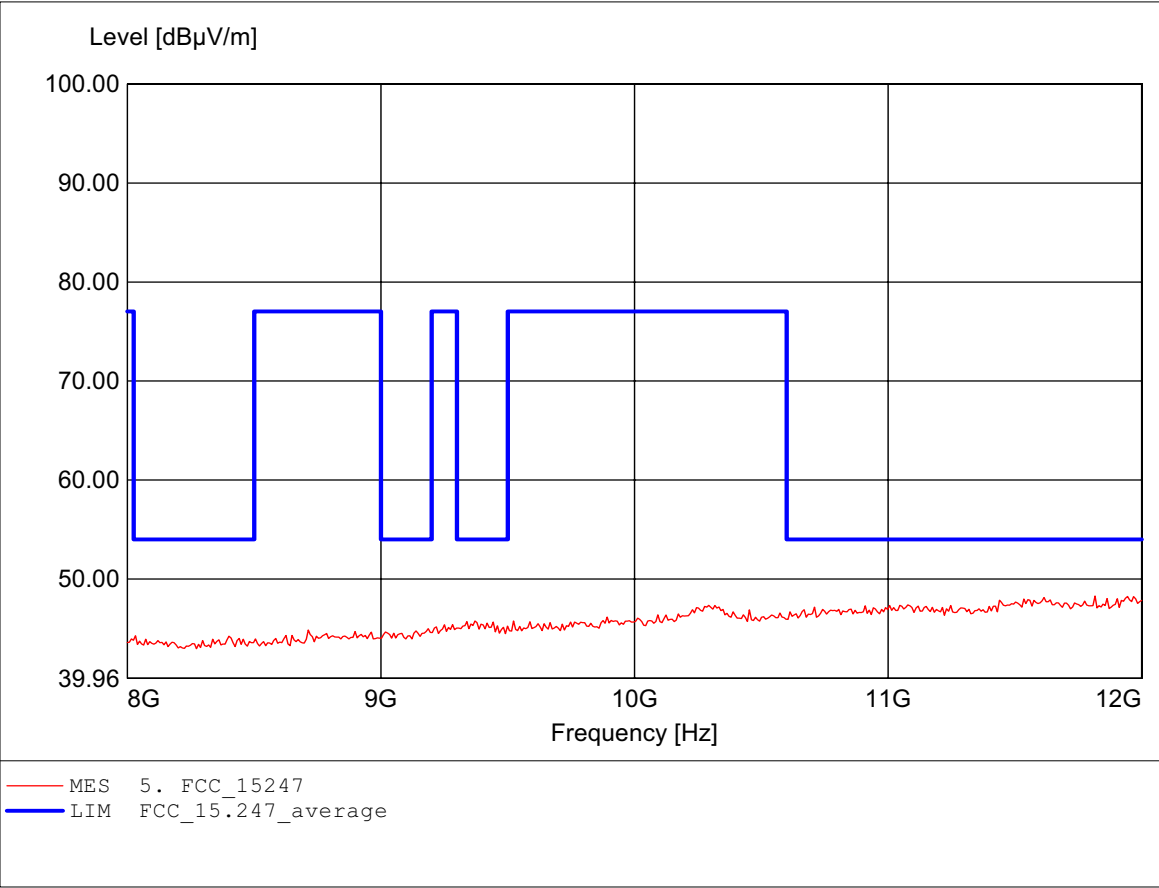
**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.952GHz, Emax: 48.63dBµV/m, RBW: 1MHz



**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

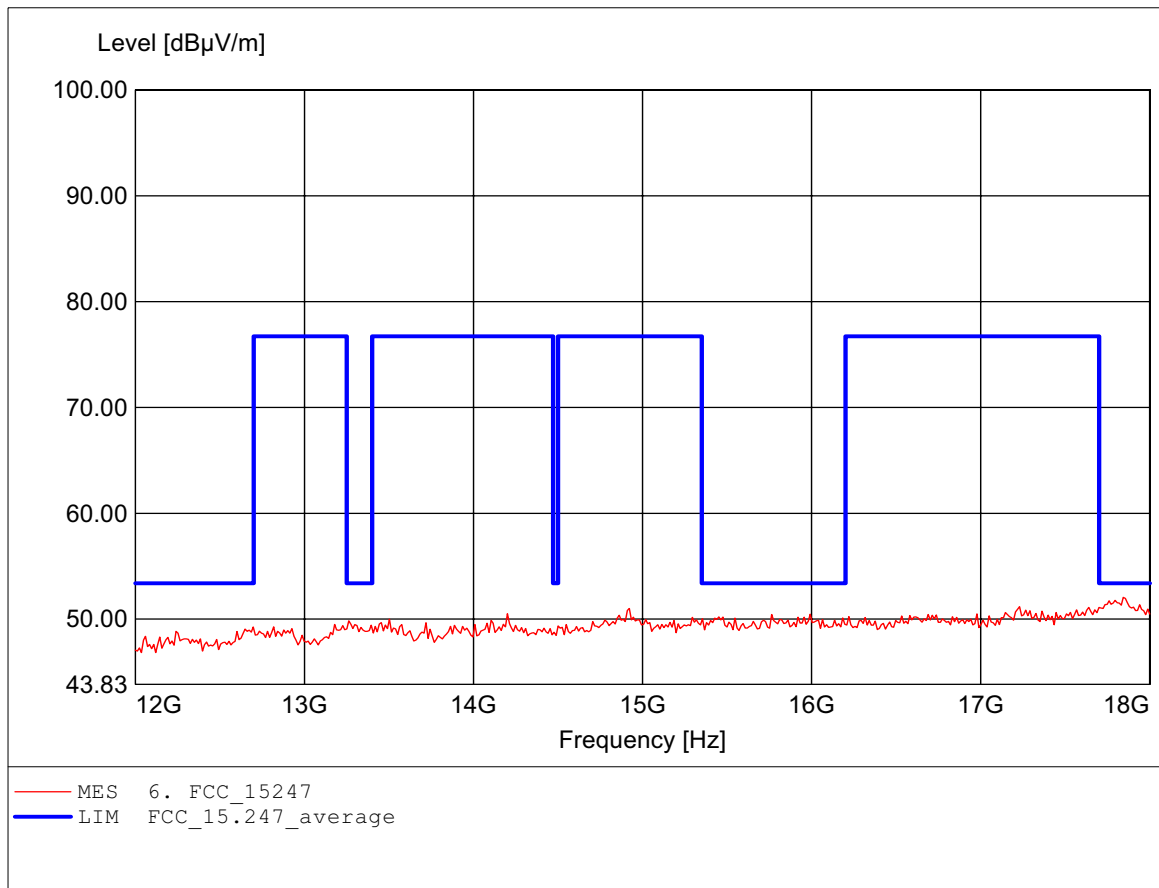
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.816GHz, Emax: 48.28dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

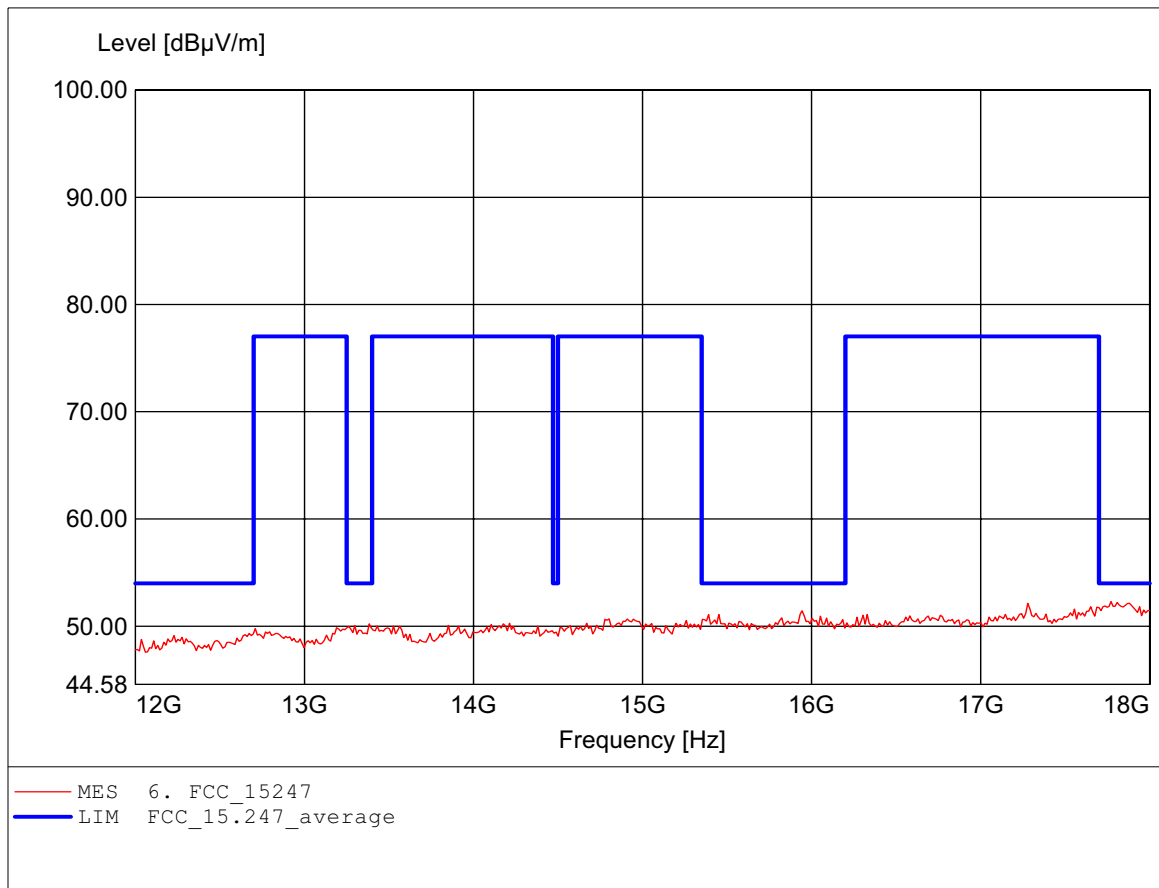
## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.844GHz, Emax: 52.05dBµV/m, RBW: 1MHz



**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

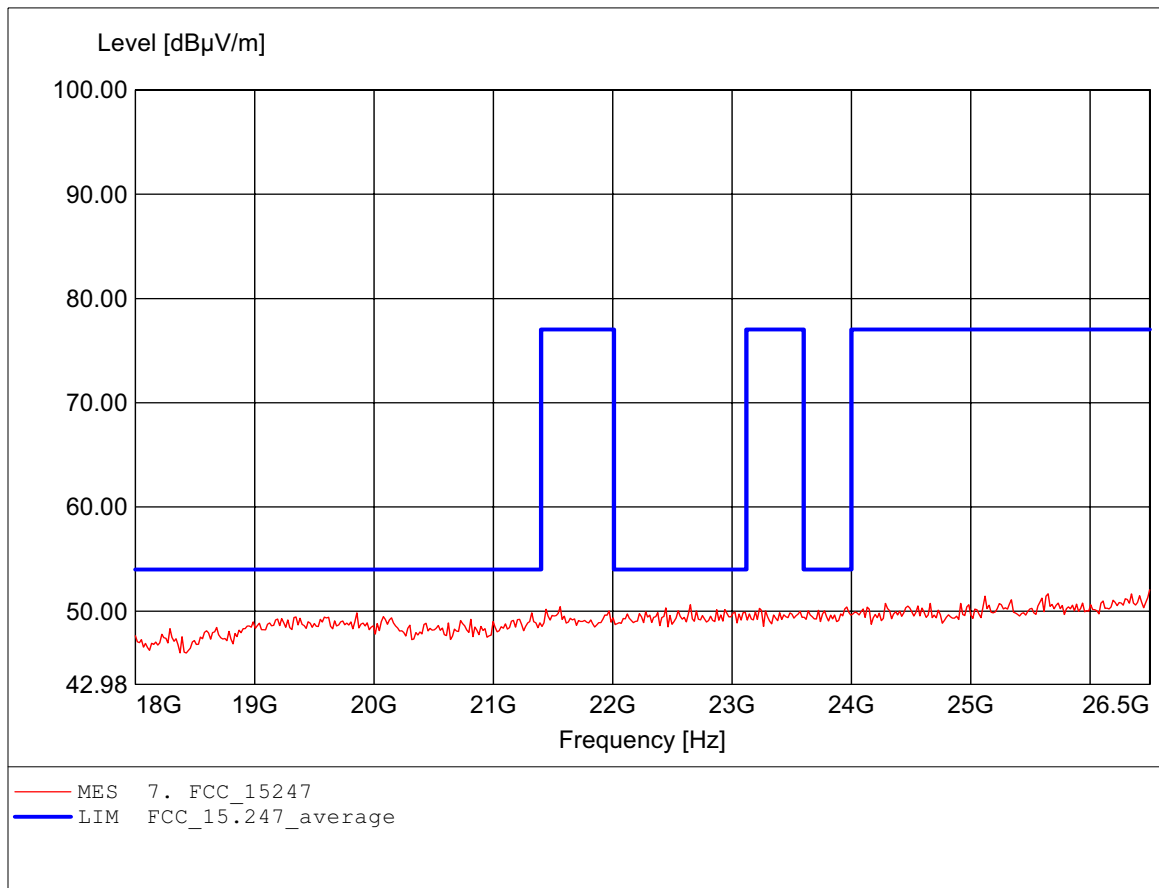
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.772GHz, Emax: 52.29dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

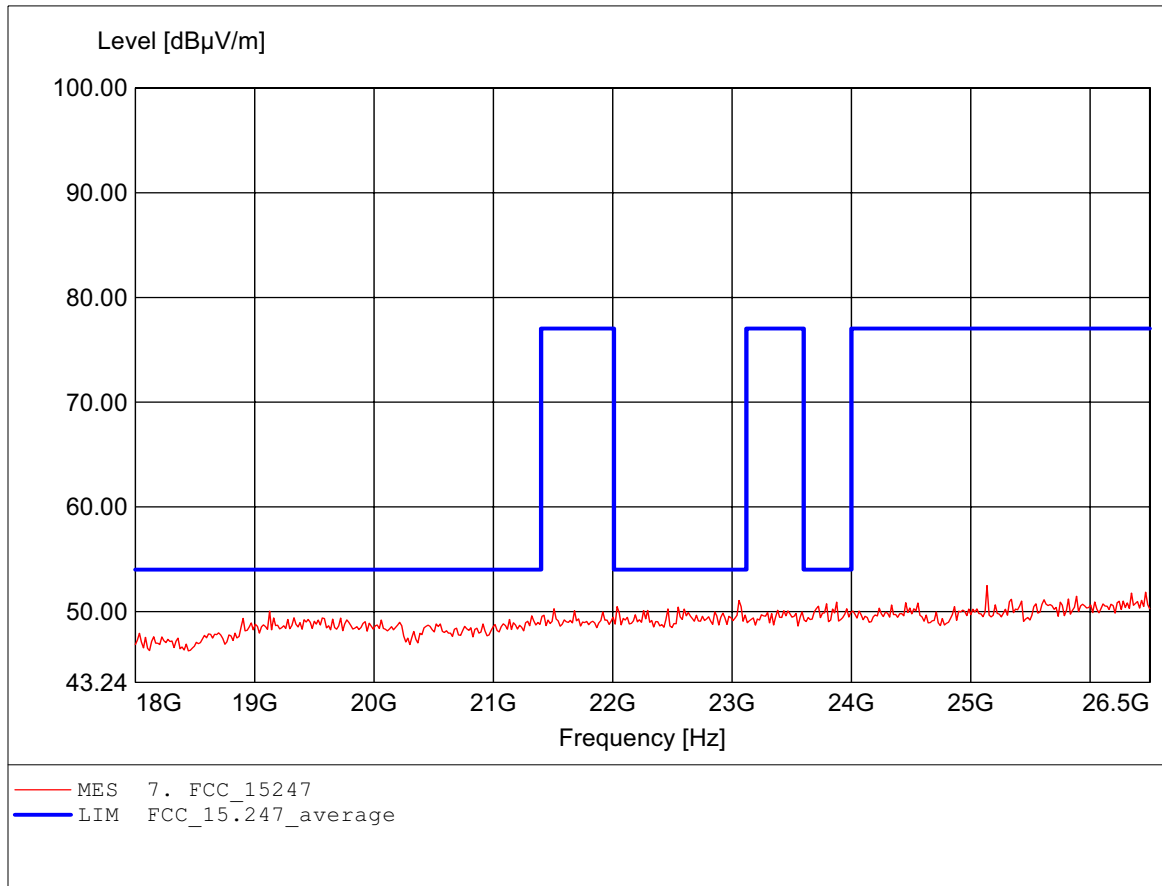
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 26.500GHz, Emax: 52.05dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

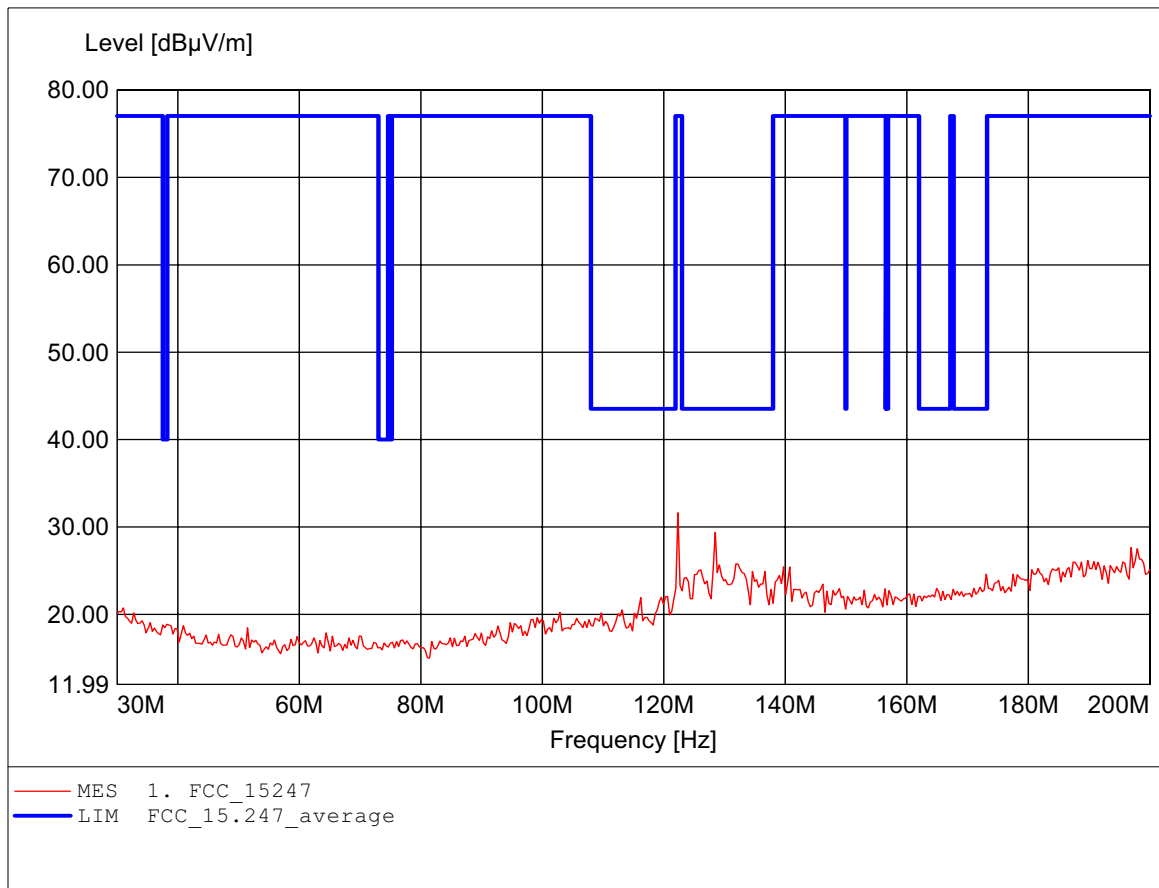
Order Number : W6M20607-7234 802.11g ch6  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 25.137GHz, Emax: 52.48dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

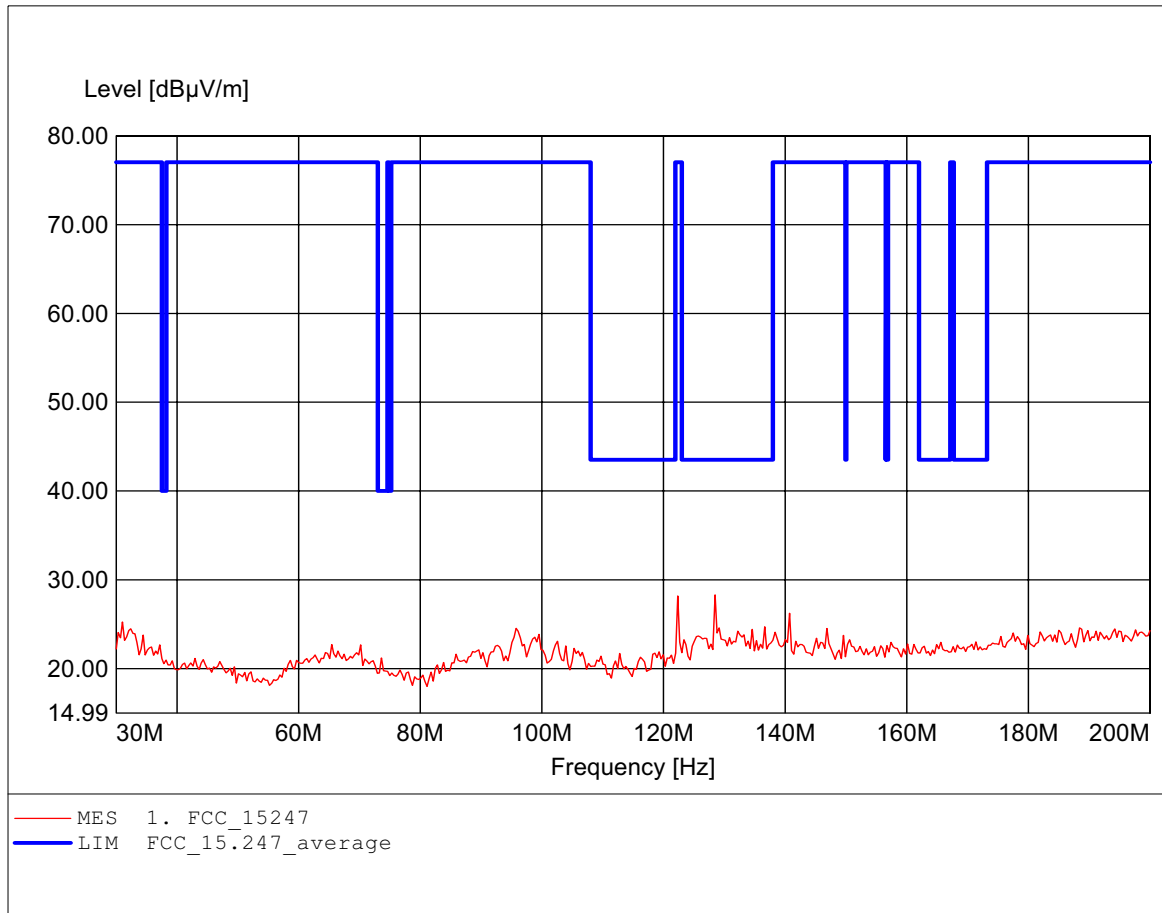
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 122.325MHz, Emax: 31.62dBµV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

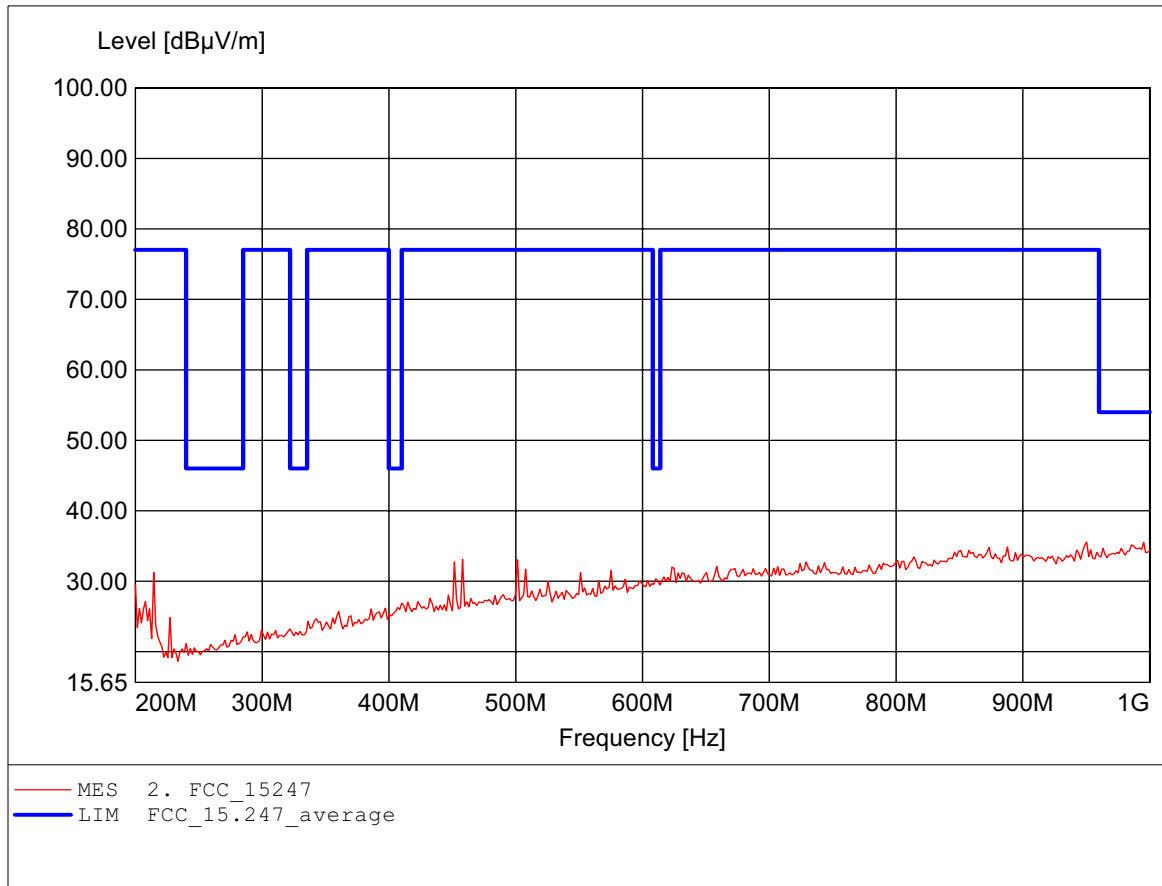
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 128.457MHz, Emax: 28.31dBµV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

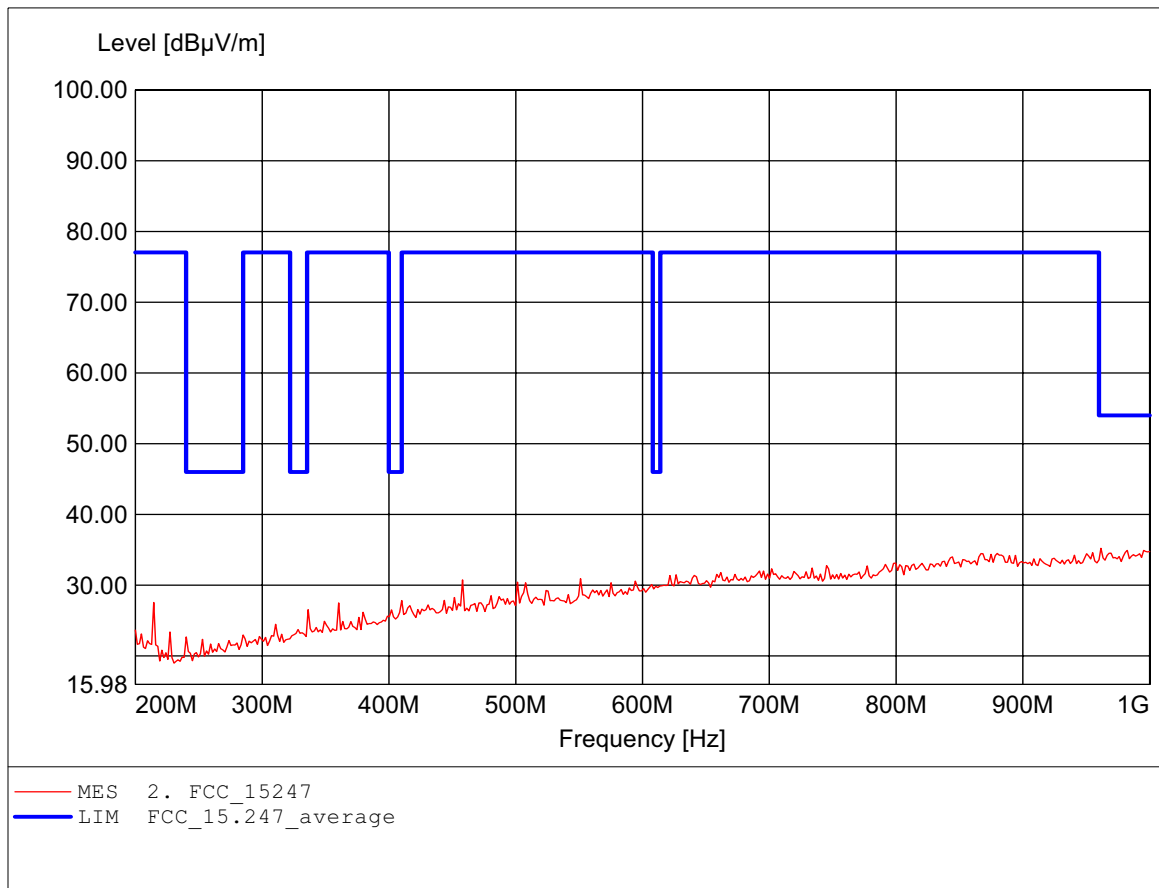
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL 223,  
Freq: 950.301MHz, Emax: 35.57dBμV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

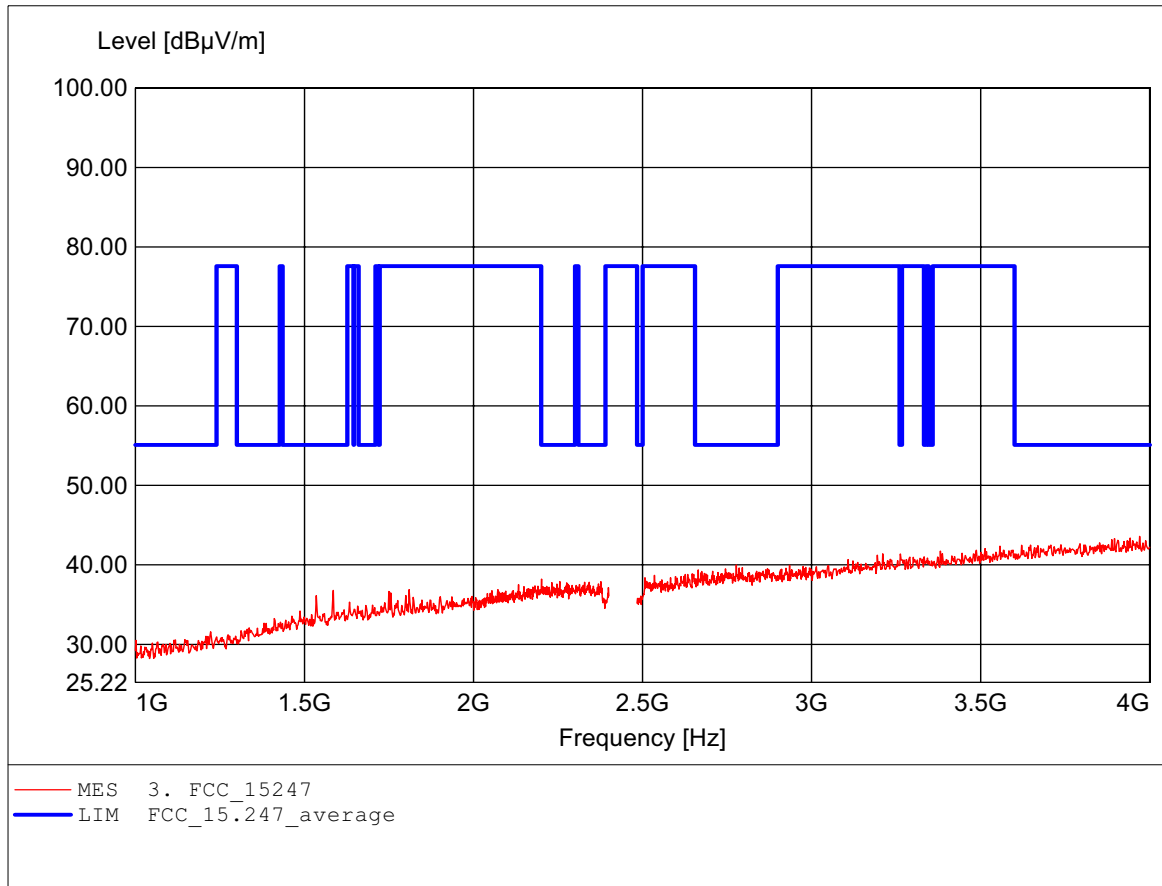
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247  
Comment 1: Dist.: 3m, Ant.: HL 223,  
Freq: 961.523MHz, Emax: 35.21dBµV/m, RBW: 100kHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

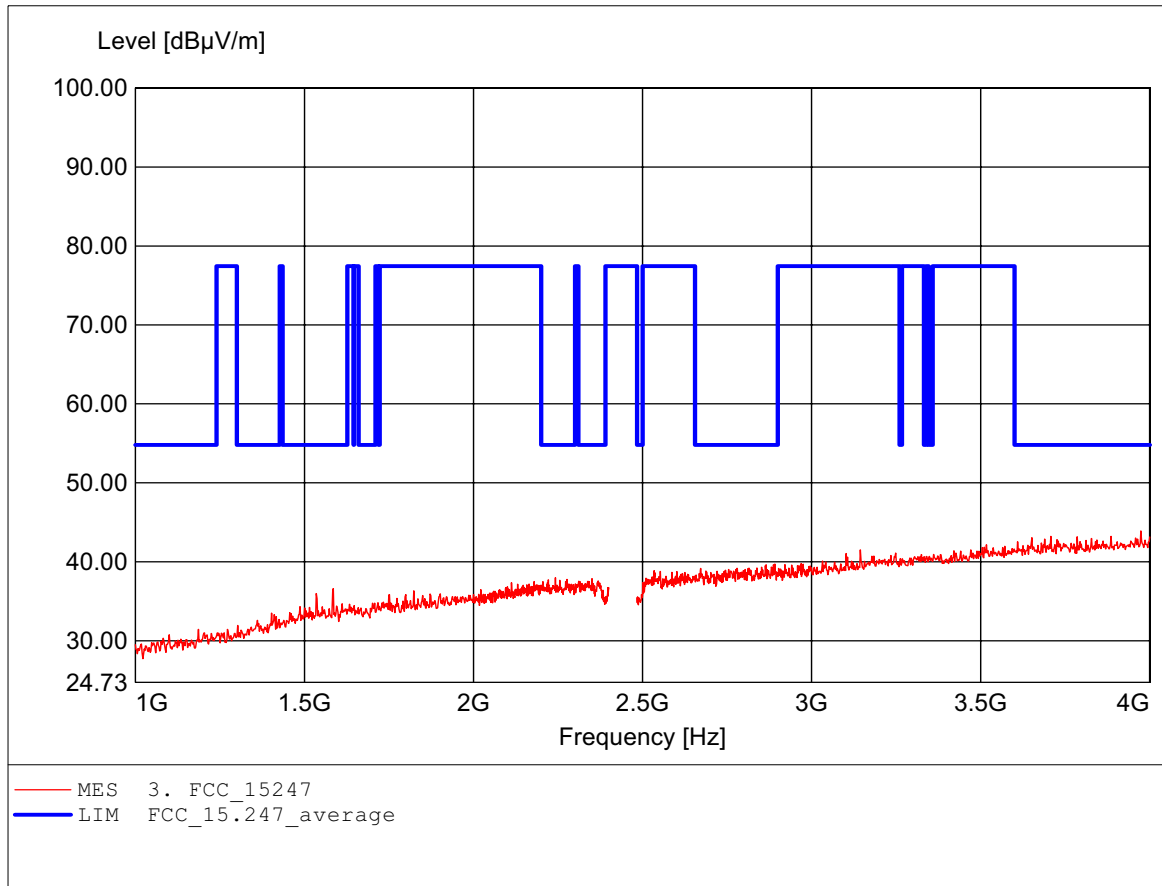
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.970GHz, Emax: 43.59dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

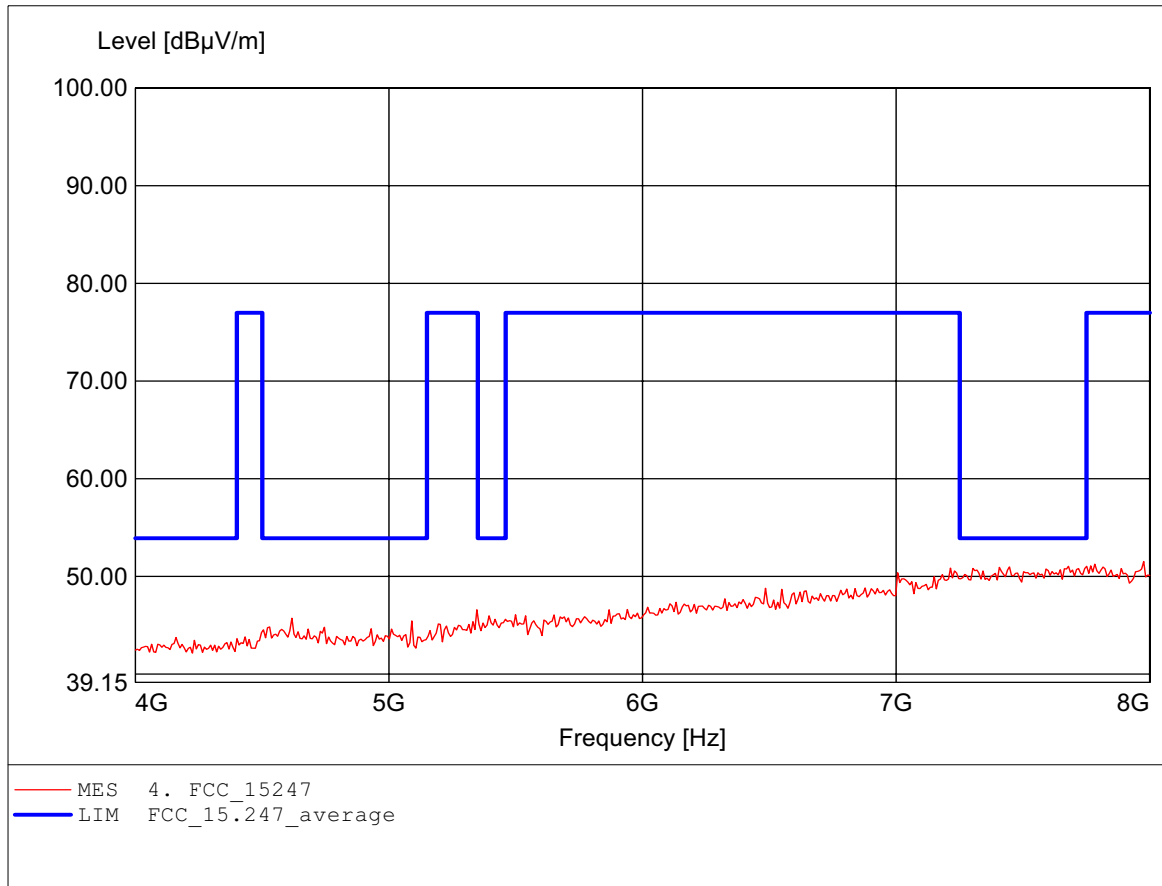
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Charles  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.974GHz, Emax: 43.91dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

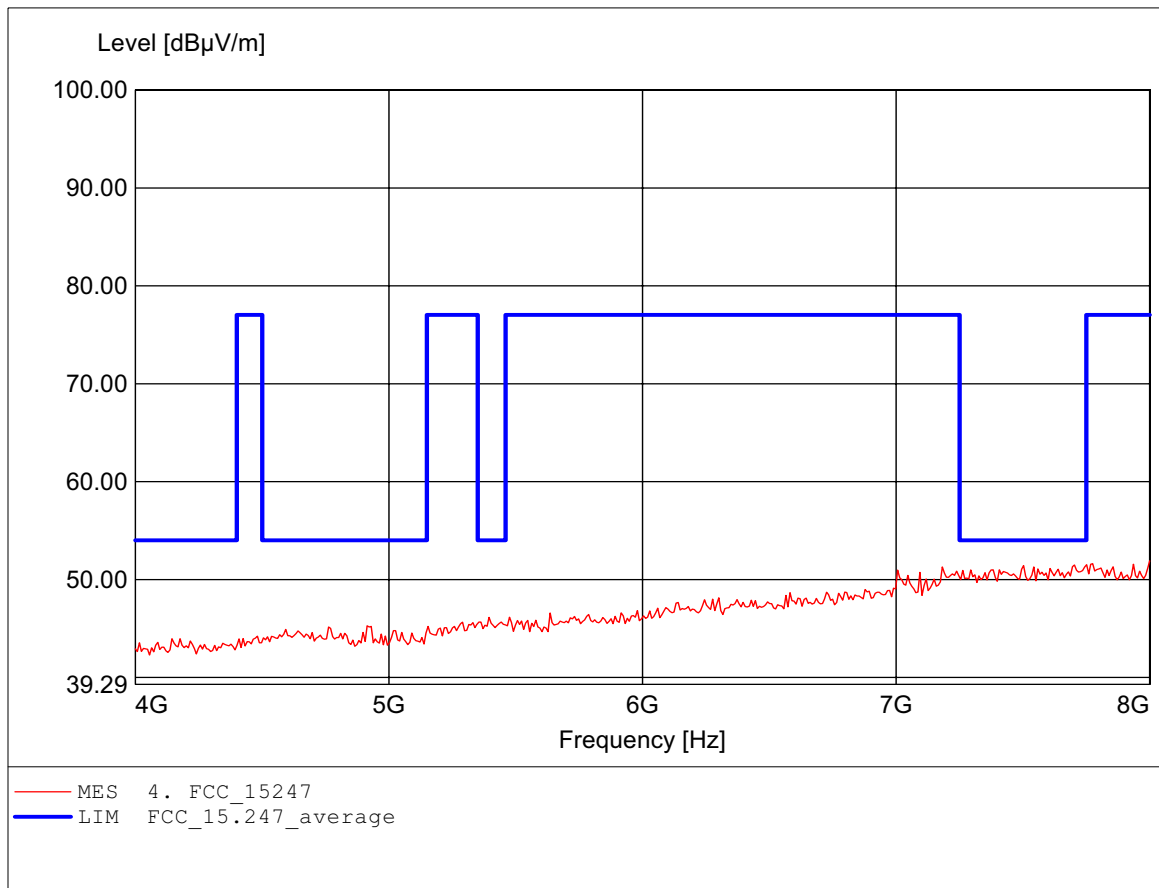
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.976GHz, Emax: 51.52dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

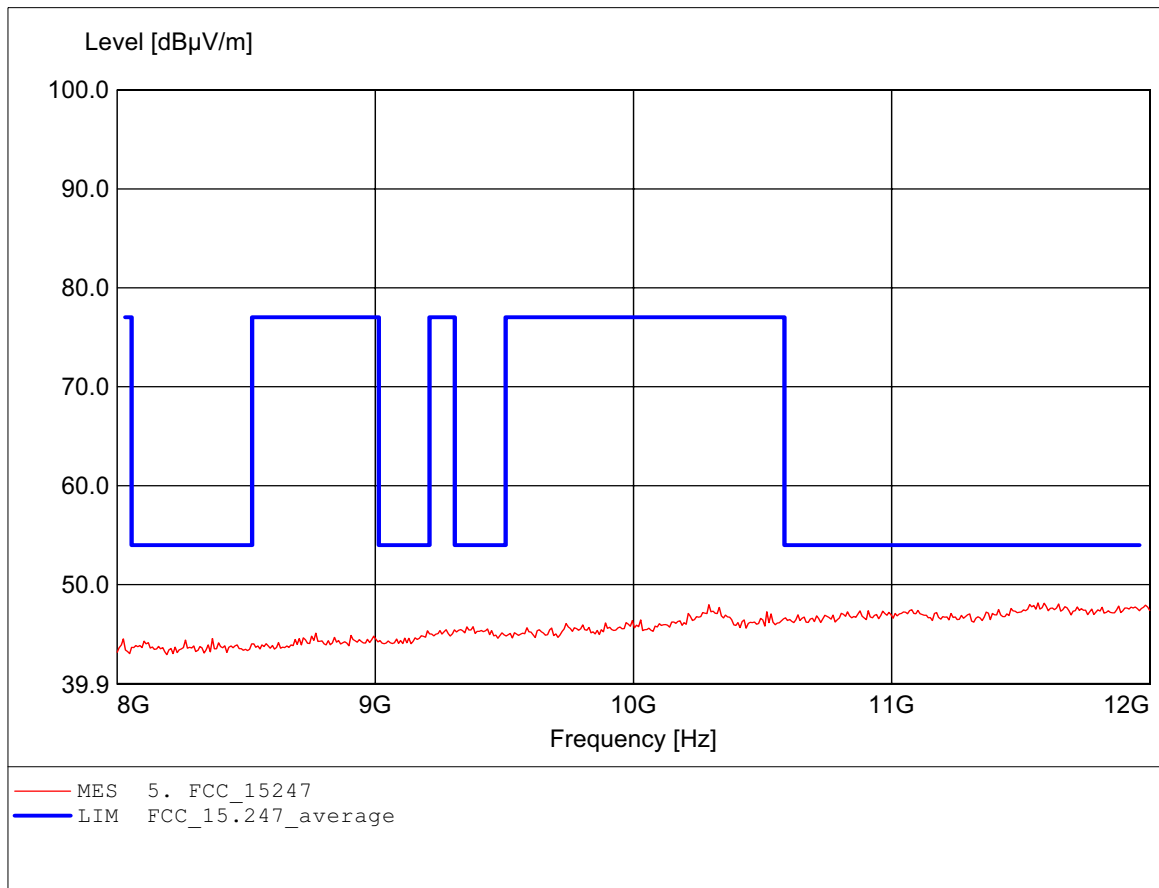
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 8.000GHz, Emax: 51.91dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

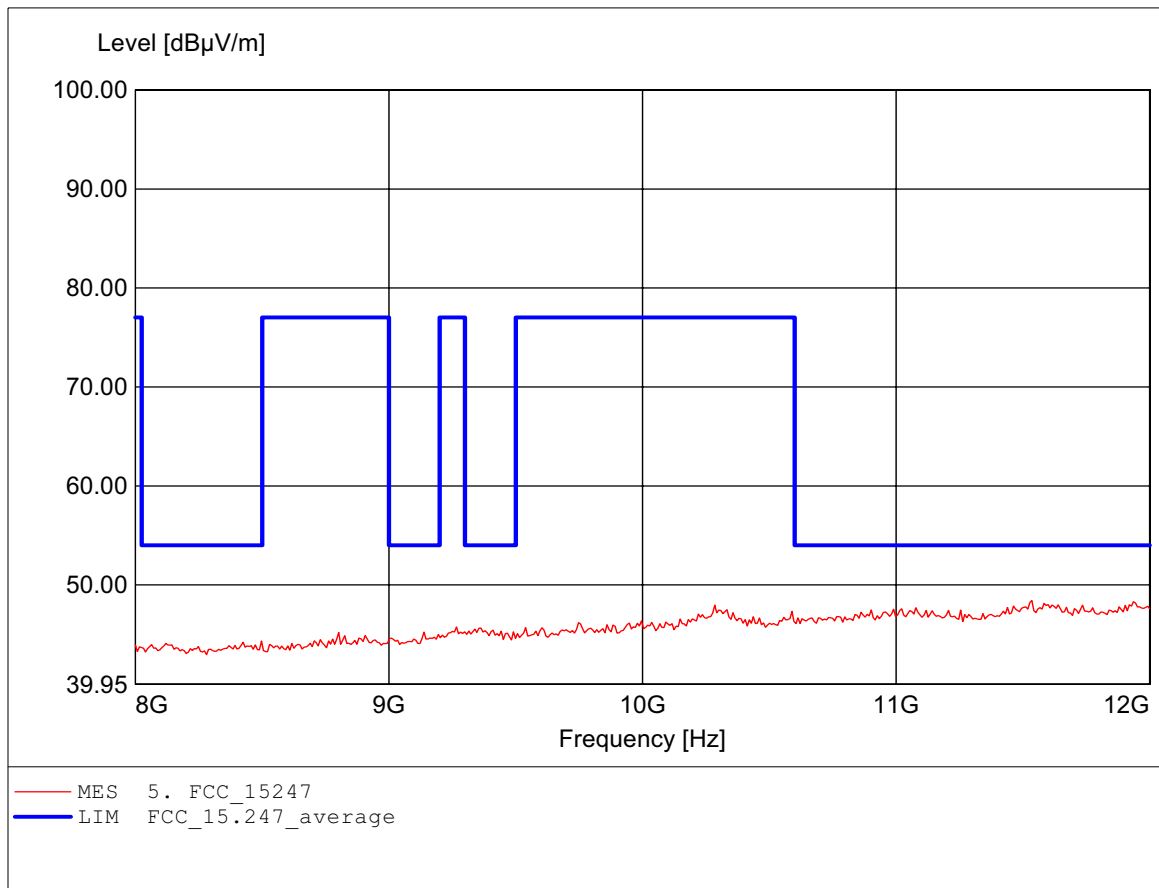
## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.567GHz, Emax: 48.14dBμV/m, RBW: 1MHz



**Spurious emissions Field Strength**  
**FCC RULES PART 15, SUBPART C / LP0002**

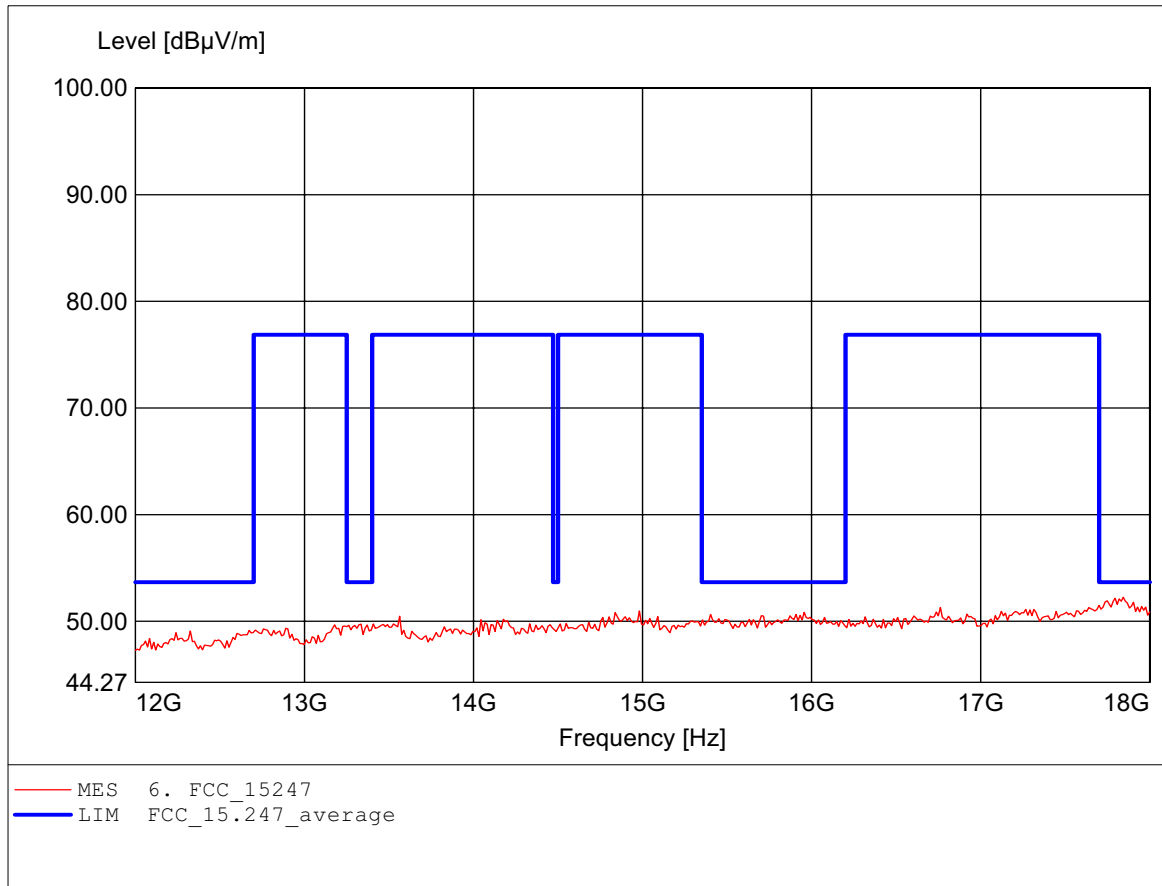
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.535GHz, Emax: 48.42dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

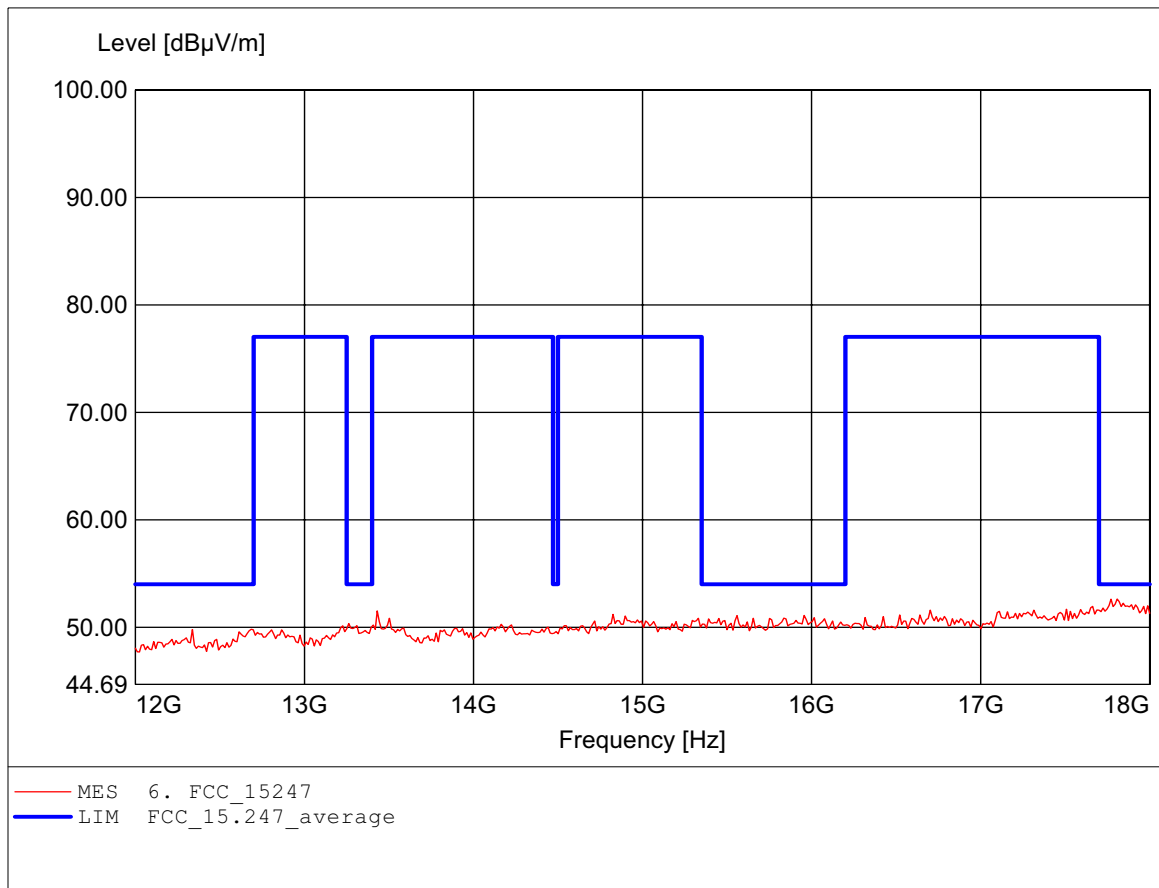
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.844GHz, Emax: 52.24dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

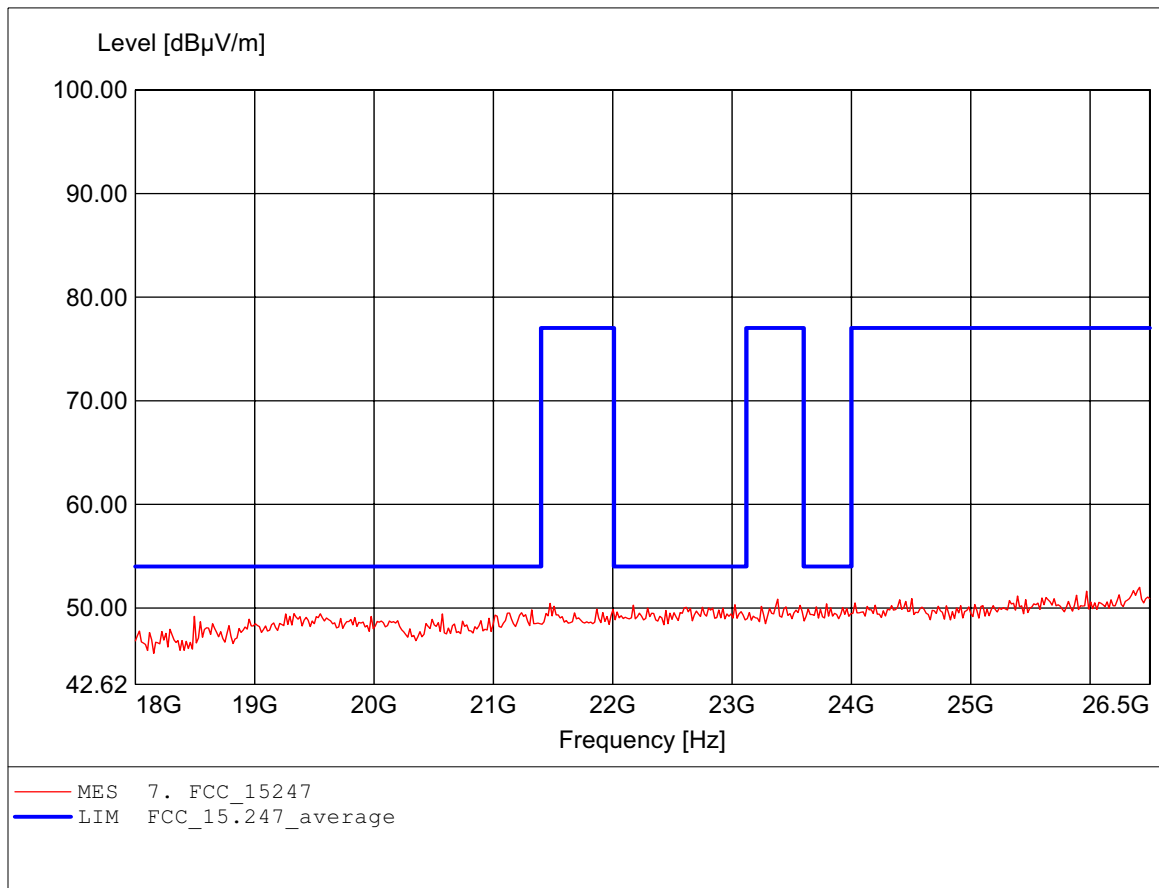
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.808GHz, Emax: 52.63dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

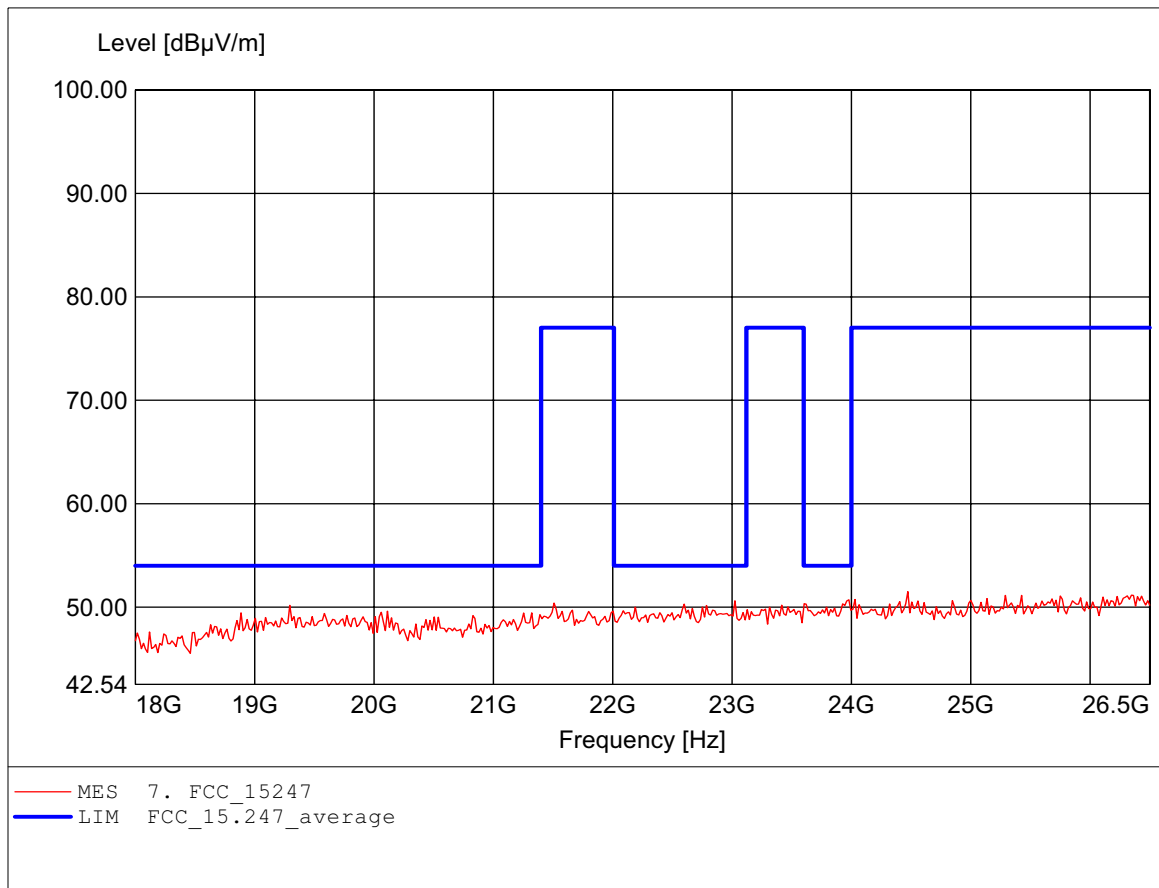
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 26.415GHz, Emax: 52.00dBμV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

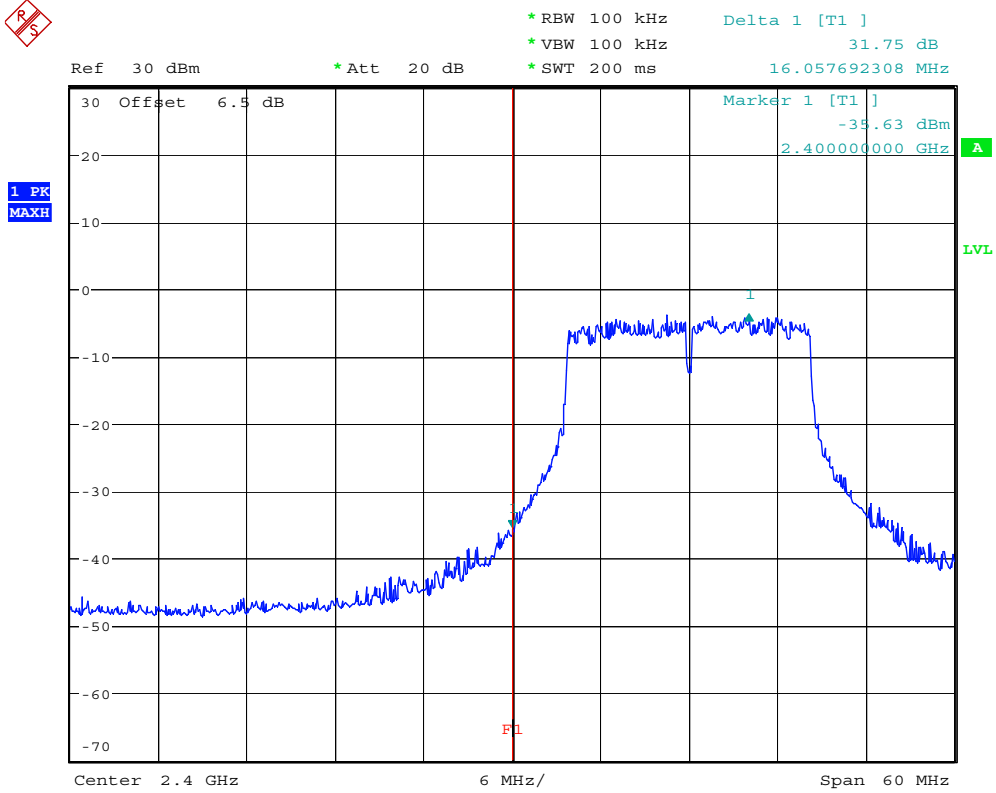
Order Number : W6M20607-7234 802.11g ch11  
Test Site / Operator: ETS / Michael  
Temperature: Temp.: 23.9°C  
Test Specification: according to §15.247, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 24.473GHz, Emax: 51.50dBµV/m, RBW: 1MHz



Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

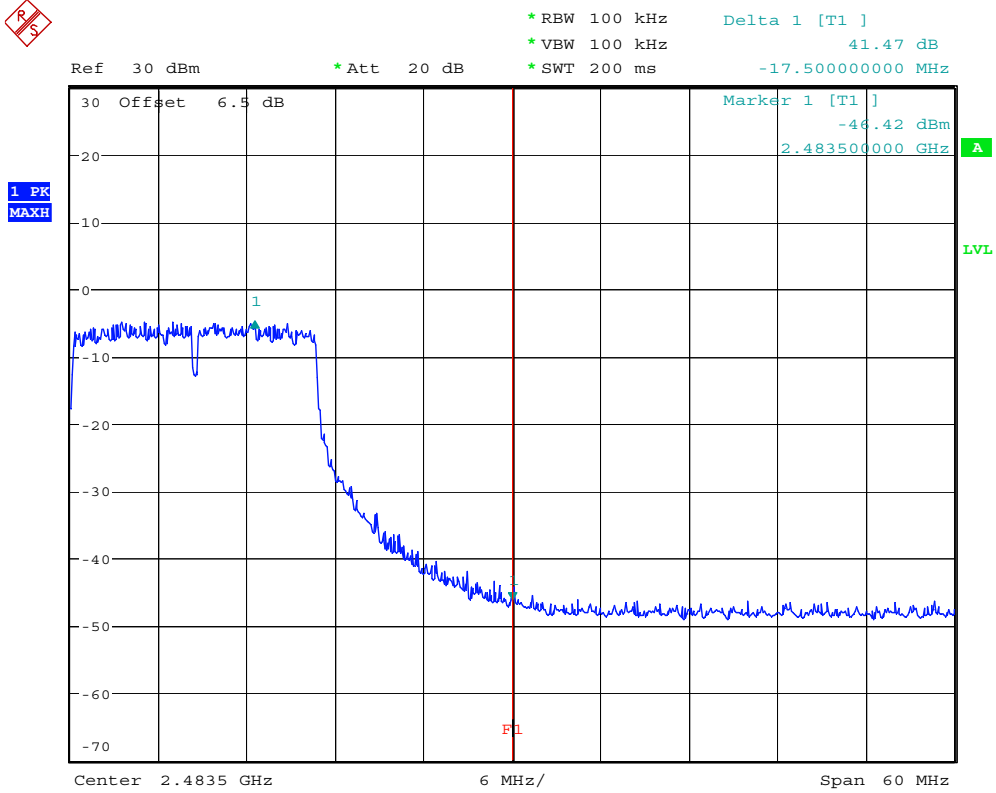
## **Appendix C**

### Band Edge Measurement



BANDEDGE 802.11G CH1

Date: 4.SEP.2006 10:36:58



BANDEDGE 802.11G CH11

Date: 4.SEP.2006 10:35:02

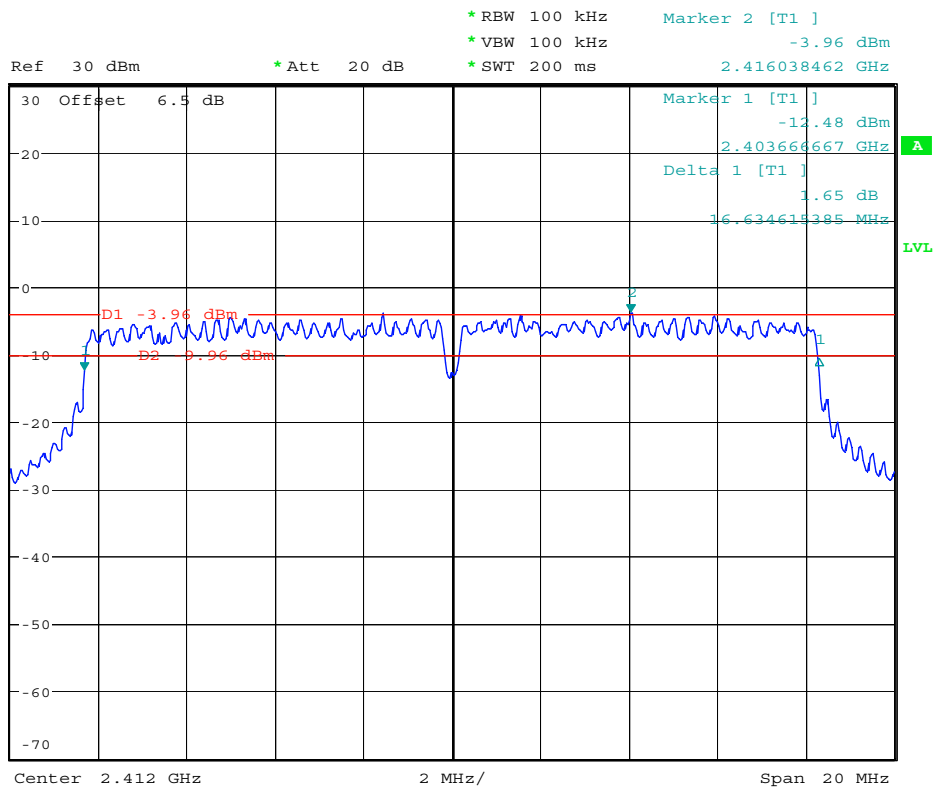
Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

## **Appendix D**

Minimum 6dB Bandwidth



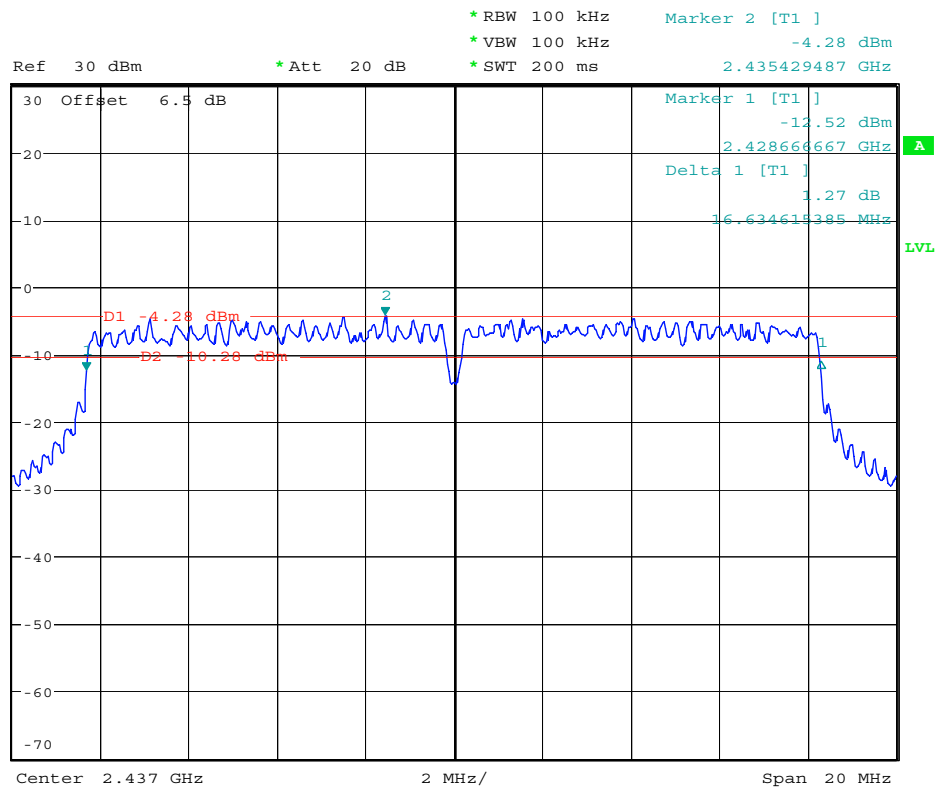
1 PK  
MAXH



6dB BANDWIDTH 802.11G CH1  
Date: 4.SEP.2006 10:41:42



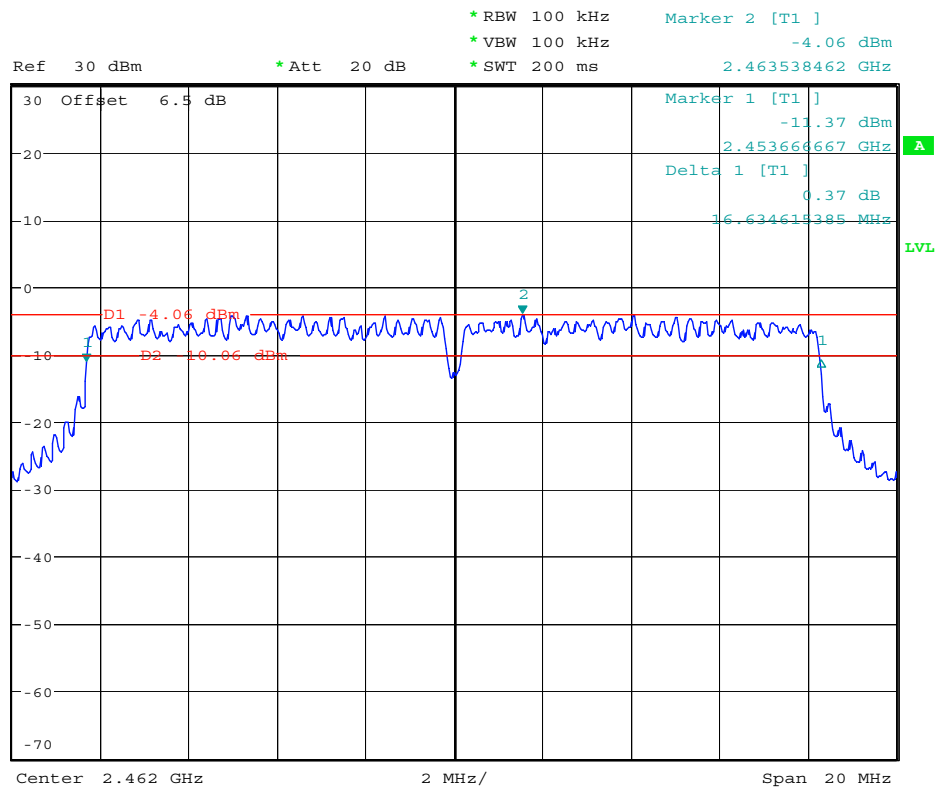
1 PK  
MAXH



6dB BANDWIDTH 802.11G CH6  
Date: 4.SEP.2006 10:44:05



1 PK  
MAXH

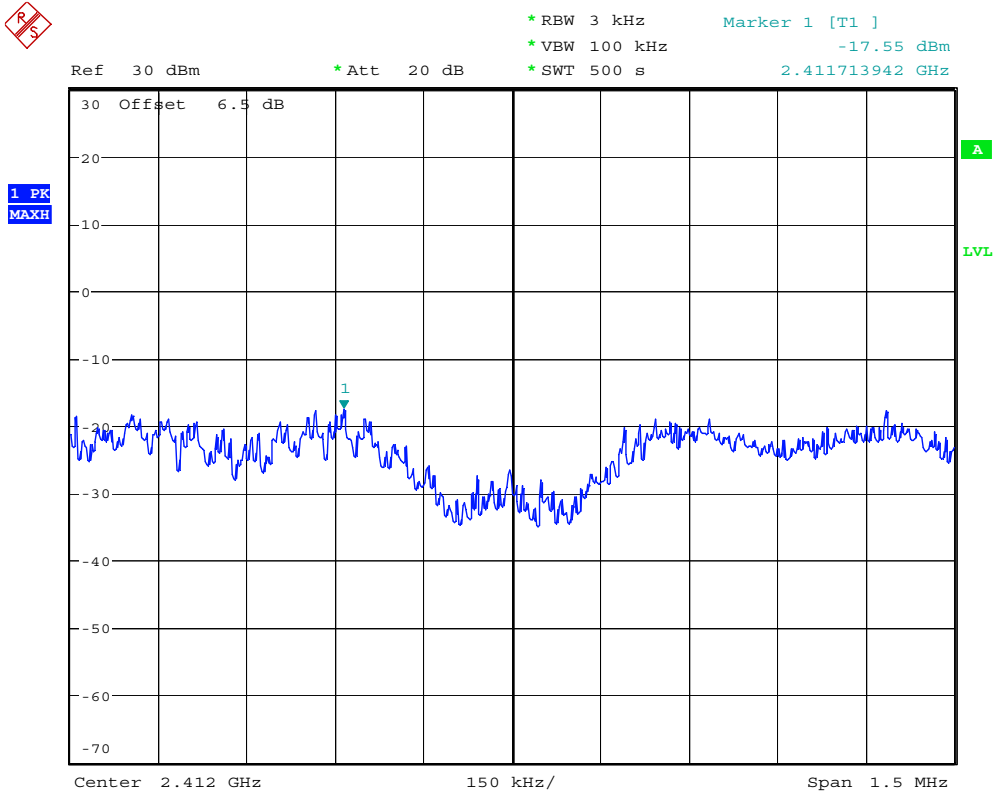


6dB BANDWIDTH 802.11G CH11  
Date: 4.SEP.2006 10:45:54

Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

## **Appendix E**

Peak Power Spectral Density



POWER DENSITY 802.11G CH1  
Date: 4.SEP.2006 10:22:32

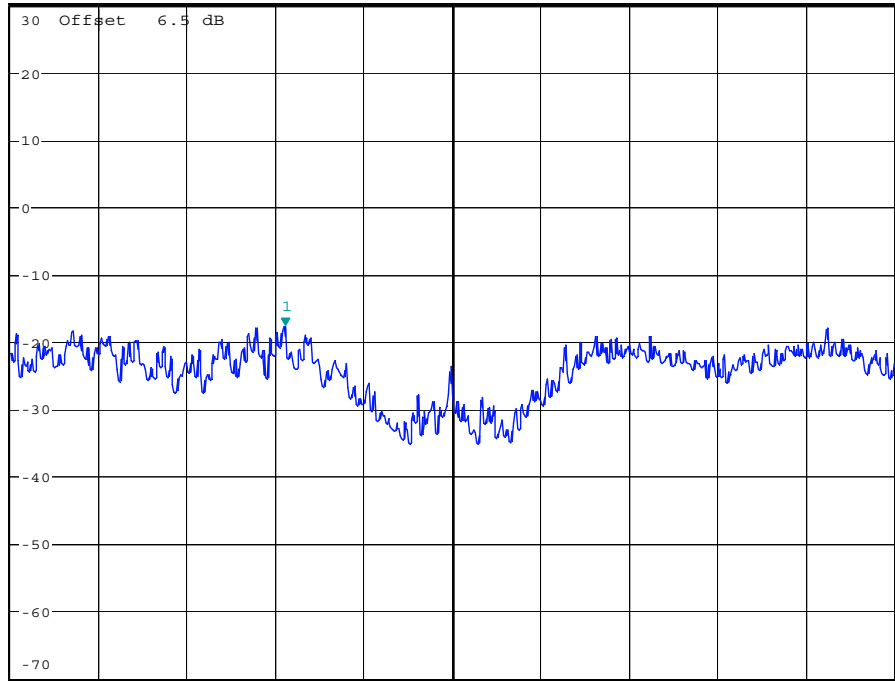


\*RBW 3 kHz      Marker 1 [T1 ]  
\*VBW 100 kHz      -17.72 dBm  
\*SWT 500 s      2.436716346 GHz

Ref 30 dBm

\*Att 20 dB

1 PK  
MAXH



Center 2.437 GHz

150 kHz/

Span 1.5 MHz

POWER DENSITY 802.11G CH6

Date: 4.SEP.2006 10:23:33

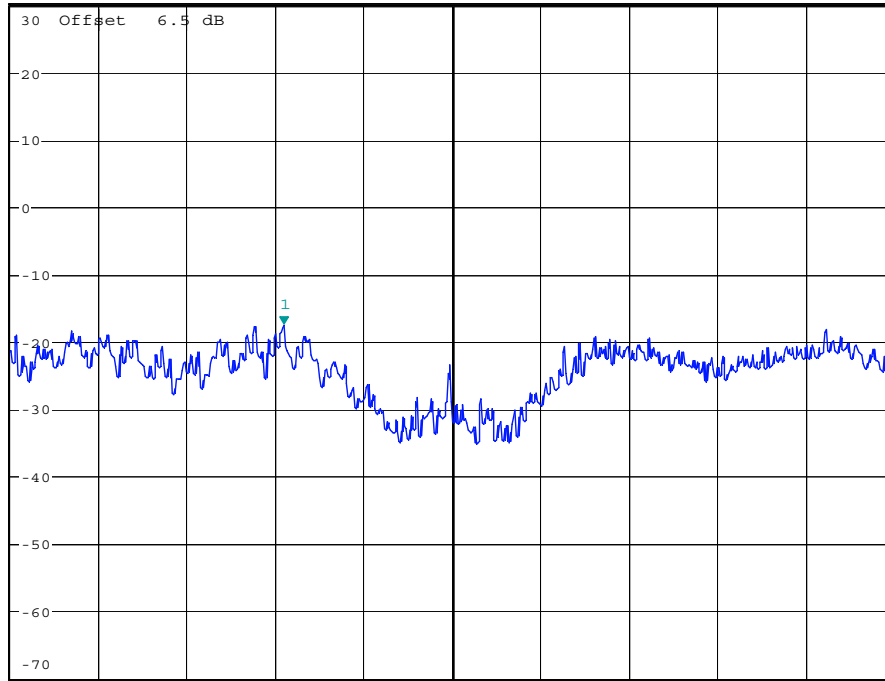


\*RBW 3 kHz      Marker 1 [T1 ]  
\*VBW 100 kHz      -17.61 dBm  
\*SWT 500 s      2.461713942 GHz

Ref 30 dBm

\*Att 20 dB

1 PK  
MAXH



A

LVL

Center 2.462 GHz

150 kHz/

Span 1.5 MHz

POWER DENSITY 802.11G CH11

Date: 4.SEP.2006 10:26:01

Registration number: W6M20607-7234-C-2  
FCC ID: UK9SPICA

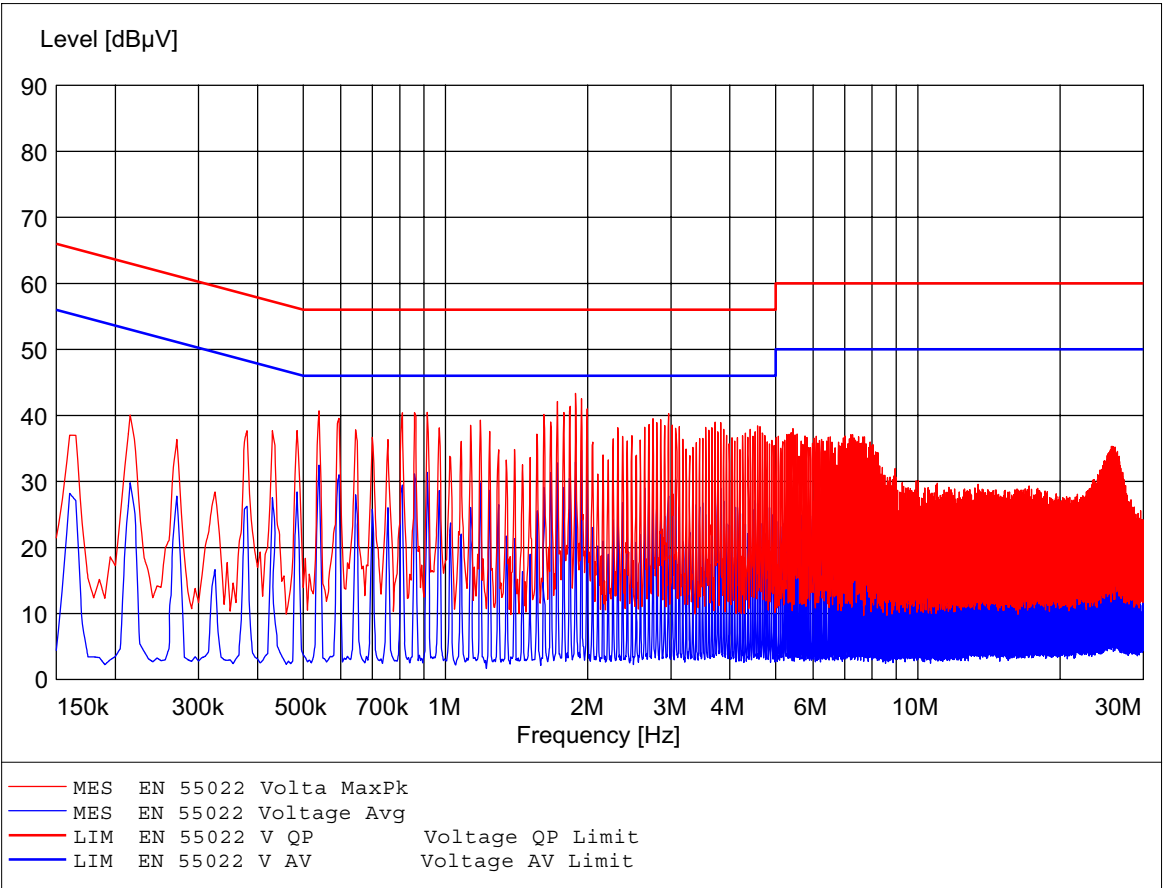
## **Appendix F**

### Power Line Conducted Emission

**The measurement diagrams plots attached below are preliminary wideband scan with a quasi-peak and average detector for reference only. The final test results are listed on section 3.9**

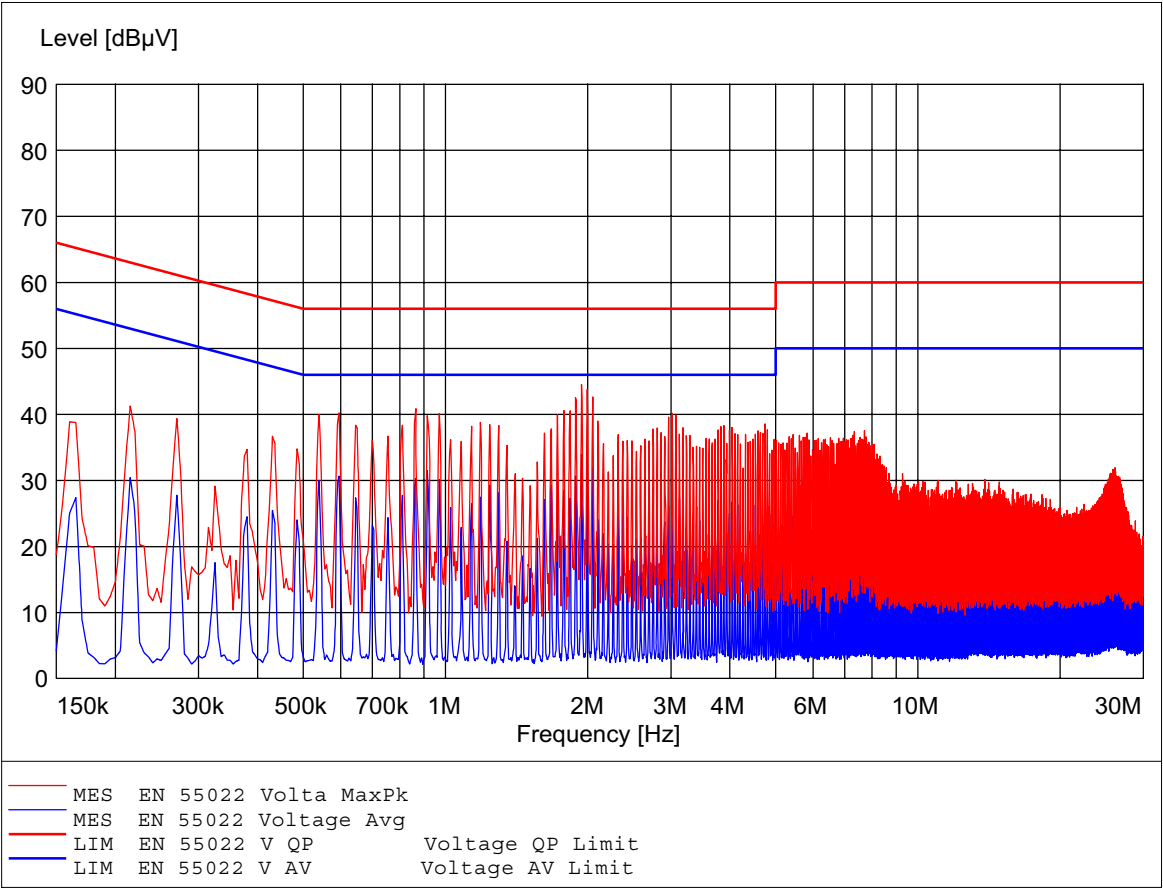
EMI voltage test in the ac-mains according to FCC PART 15  
CLASS B

Order Number: W6M20607-7234 ADAPTOR 1 MODE  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Jason  
Test Specification: V-network: ESH3-Z5 N



EMI voltage test in the ac-mains according to FCC PART 15  
CLASS B

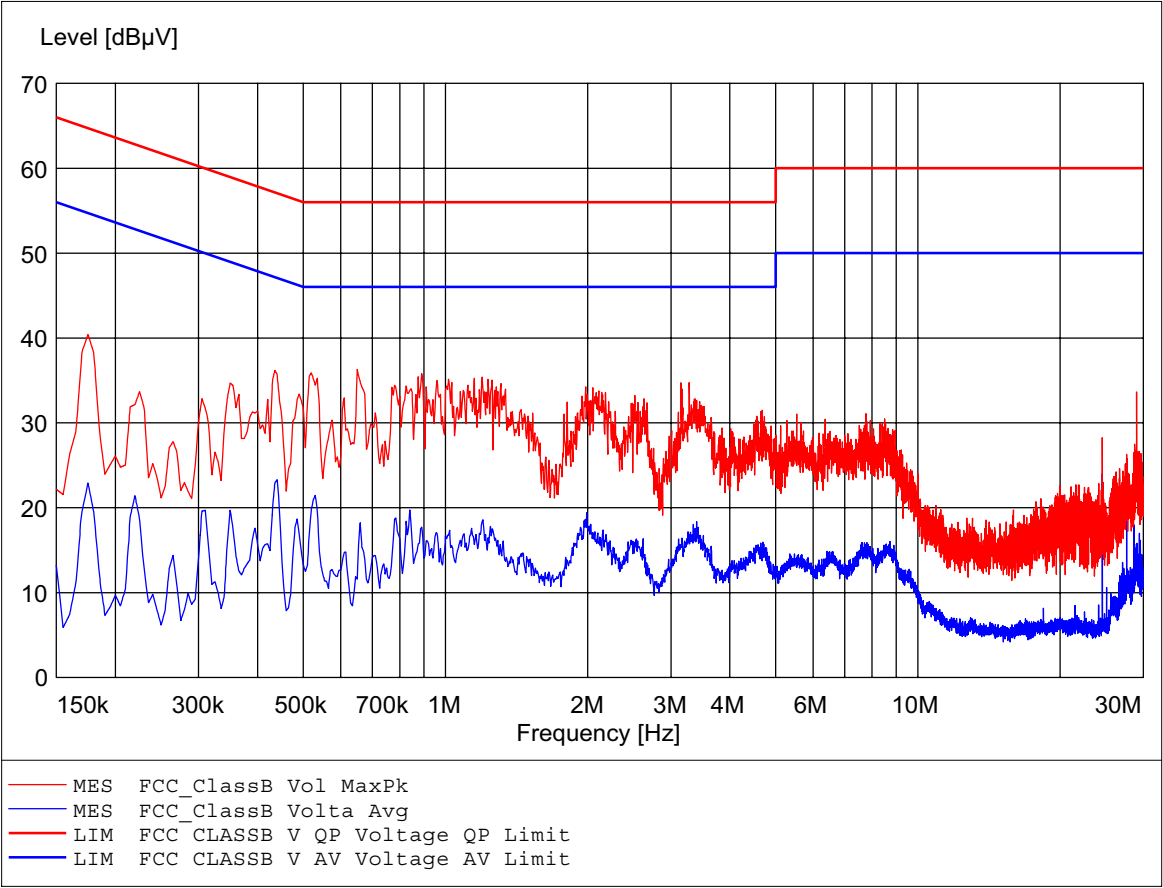
Order Number: W6M20607-7234      ADAPTOR 1 MODE  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Jason  
Test Specification: V-network: ESH3-Z5    L1



EMI voltage test in the ac-mains according to FCC PART 15

CLASS B

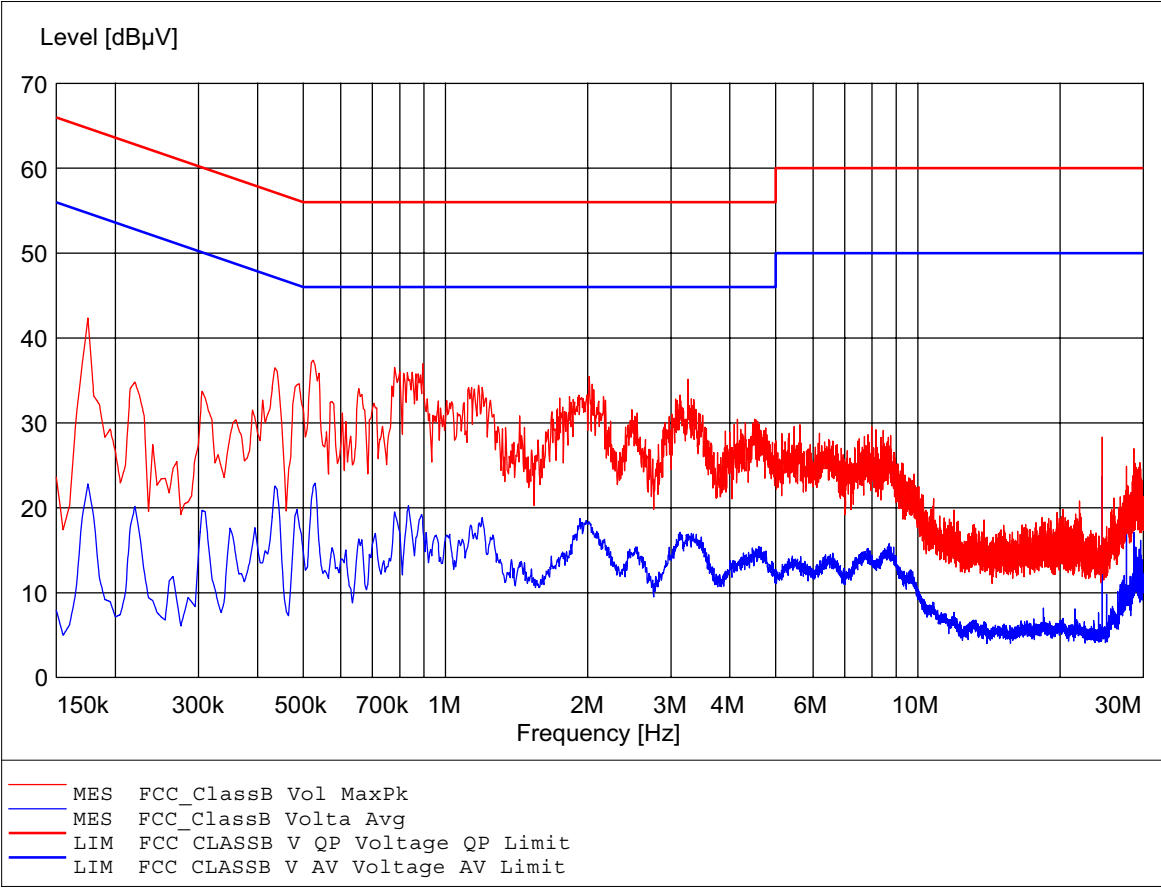
Order Number: W6M20607-7234 ADAPTOR 2 MODE  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Danny  
Test Specification: V-network: ESH3-Z5 N



EMI voltage test in the ac-mains according to FCC PART 15

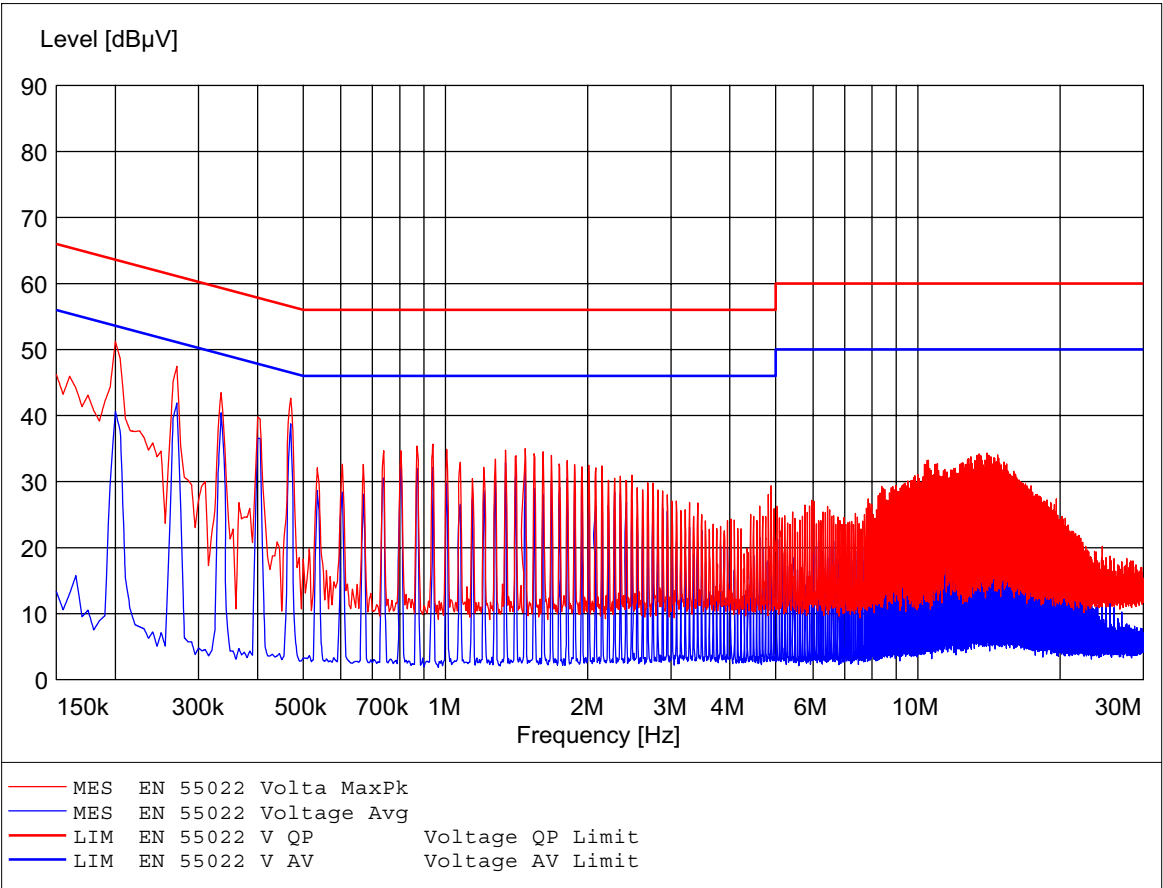
CLASS B

Order Number: W6M20607-7234 ADAPTOR 2 MODE  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Danny  
Test Specification: V-network: ESH3-Z5 L1



EMI voltage test in the ac-mains according to FCC PART 15  
CLASS B

Order Number: W6M20607-7234 USB mode  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Jason  
Test Specification: V-network: ESH3-Z5 N



EMI voltage test in the ac-mains according to FCC PART 15  
CLASS B

Order Number: W6M20607-7234     USB mode  
Operating Condition: Tnom: 23.9°C  
Test Site: ETS  
Operator: Jason  
Test Specification: V-network: ESH3-Z5     L1

