



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

**FCC Registration No.: 930600**

**Industry Canada Reg. No. IC 5679**

**Accredited Testing Laboratory**



**A2LA Cert.No.: 2300.01**

**PTCRB Accredited Type Certification Test House**

# **TEST - REPORT**

**FCC RULES PART 15 / SUBPART B**

**Test report no.:**

**W6M20608-7247-P-15B**

# **FCC**

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## Annex : Pictures and diagrams

## **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 tests were carried out and passed in accordance to the standards:

**FCC part 15 : September 2005**

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 (only telecommunication products).

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 1.6.

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.Geniz Taiwan PS Co., Ltd.

**Important Notes:**

Proper labeling is required for each device. Devices shall be labeled in accordance with labeling requirements pursuant to section 15.19 and section 2.1074 of the FCC rules.

Devices subject to a Declaration of Conformity shall be uniquely identified by the responsible party.

This identification shall not be of a format which could be confused with the FCC Identifier required on certified, notified type accepted or type approved equipment.

The responsible party shall maintain adequate identification records to facilitate positive identification for each device.

The user manual or instruction manual shall included also a warning statement that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Reference Section 15.21

Furthermore an information to the user regarding to the interference potential of the device and about simple measures that can be taken to correct interference is required.

Reference Section 15.105

The responsible party must warrant that each unit of equipment marketed under a Declaration of Conformity is identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced under the Declaration of Conformity within the variation that can be expected due to quantity production and testing on a statistical basis.



Registration number: W6M20608-7247-P-15B

## 1.2 Tester

Aug 07, 2006

Jay Chaing

*Jay Chaing*

Date

ETS-Lab.

Test Engineer

Signature

Technical responsibility for area of testing:

Aug 07, 2006

Steven Chuang

*Steven Chuang*

Date

ETS

Name

Signature

### **1.3 Testing laboratory**

#### **1.3.1 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 : 886-2-66068875

#### **1.3.2 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

#### **1.3.3 Test location, where different from ETS Dr.Genz Taiwan PS Co., Ltd.**

|            |     |
|------------|-----|
| Name:      | ./. |
| Street:    | ./. |
| Town:      | ./. |
| Country:   | ./. |
| Telephone: | ./. |
| Fax:       | ./. |
| Teletex:   | ./. |

## **1.4 Details of applicant**

|           |   |                                        |
|-----------|---|----------------------------------------|
| Name      | : | CLIMAX TECHNOLOGY CO., LTD.            |
| Street    | : | No. 258, Sinhu 2nd Rd., Neihu District |
| Town      | : | Taipei City 114                        |
| Country   | : | Taiwan ( R.O.C.)                       |
| Telephone | : | +886-2-2794-0001                       |
| Fax       | : | +886-2-2794-5512                       |
| Teletex   | : | ./.                                    |

## **1.5 Application details**

|                                |   |                                   |
|--------------------------------|---|-----------------------------------|
| Date of receipt of application | : | Aug 01, 2006                      |
| Date of receipt of test item   | : | Aug 01, 2006                      |
| Date of test                   | : | from Aug 02, 2006 to Aug 04, 2006 |

## **1.6 Test item**

### **1.6.1 Description of test item**

|                     |   |                          |
|---------------------|---|--------------------------|
| Type of product     | : | Valve Control Machine    |
| Type identification | : | VCM                      |
| Serial No.          | : | ./.                      |
| Brand Name          | : | ./.                      |
| Photos              | : | Please find in Appendix. |

**1.6.2 Manufacturer (if different from applicant in point 1.4)**

Name : ./.  
Street : ./.  
Town : ./.  
Country : ./.  
Contact : ./.  
Phone : ./.

**1.6.3 Frequency behavior**

|                         |          |
|-------------------------|----------|
| Highest clock Frequency | <434 MHz |
|-------------------------|----------|

**1.7 Test standards**

**FCC part 15 : September 2005**

## 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 2.4 were ascertained in the course of the tests performed.



### 2.2 Test environment

Temperature: 18 ... 25 °C

Relative humidity content 20 ... 75 %

Air pressure: 860 ... 1030 hPa

Details of power supply battery: 6VDC ( 1.5V x 4 battery )

Input: 120 VAC / 60 Hz

Details of power supply adaptor

Output: 6 VDC, 2A

Other parameters: without

### 2.3 Test equipment utilized

| No.          | Test equipment                                     | Type                | Serial No.     | Manufacturer                          | Cal. Date     | Next Cal. Date |
|--------------|----------------------------------------------------|---------------------|----------------|---------------------------------------|---------------|----------------|
| ETSTW-CE 001 | EMI TEST RECEIVER                                  | ESHS10              | 842121/013     | R&S                                   | 2005/10/27    | 2006/10/26     |
| ETSTW-CE 003 | AC POWER SOURCE                                    | APS-9102            | D161137        | GW                                    | Function Test |                |
| ETSTW-CE 004 | ZWEILEITER-V-NETZNACHBILDUNG<br>TWO-LINE V-NETWORK | ESH3-Z5             | 840731/011     | R&S                                   | 2005/10/25    | 2006/10/24     |
| ETSTW-CE 005 | Line-Impedance Stabilisation<br>Network            | NNBM 8126D          | 137            | Schwarzbeck                           | 2005/10/21    | 2006/10/20     |
| ETSTW-CE 006 | IMPULS-BEGRENZER<br>PULSE LIMITER                  | ESH3-Z2             | 100226         | R&S                                   | 2004/11/11    | 2006/11/10     |
| ETSTW-CE 008 | ABSORBING CLAMP                                    | MDS 21              | 3469           | ABSORPTIONS-<br>MESSWANDLER-<br>ZANGE | 2005/10/24    | 2007/10/23     |
| ETSTW-CE 009 | TEMP.&HUMIDITY<br>CHAMBER                          | GTH-225-40-1P-U     | MAA0305-009    | GIANT FORCE                           | 2005/8/18     | 2006/8/17      |
| ETSTW-CE 011 | Power Line Conducted<br>Emission Only              | None                | None           | ETS                                   | 2005/10/25    | 2006/10/24     |
| 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                                   | 2005/10/24    | 2006/10/23     |
| ETSTW-RE 004 | EMI TEST RECEIVER                                  | ESI 40              | 832427/004     | R&S                                   | 2005/10/29    | 2006/10/30     |
| ETSTW-RE 005 | EMI TEST RECEIVER                                  | ESVS10              | 843207/020     | R&S                                   | 2005/10/16    | 2006/10/15     |
| ETSTW-RE 010 | PROGRAMMABLE LINEAR<br>POWER SUPPLY                | LPS-305             | 30503070181    | MOTECH                                | Function Test |                |
| ETSTW-RE 011 | PROGRAMMABLE LINEAR<br>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                                   | 2005/10/14    | 2006/10/13     |
| ETSTW-RE 022 | AMPLIFIER                                          | 8447D               | 2944A09837     | Agilent                               | 2005/10/14    | 2006/10/13     |
| ETSTW-RE 027 | Passive Loop Antenna                               | 6512                | 34563          | EMCO                                  | 2004/6/30     | 2007/6/29      |
| ETSTW-RE 028 | Log-Periodic DipoleArray<br>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<br>Horn Antenna            | 3117                | 35224          | EMCO                                  | 2006/5/3      | 2008/5/2       |
| ETSTW-RE 032 | Millivoltmeter                                     | URV 55              | 849086/013     | R&S                                   | 2005/10/17    | 2006/10/16     |
| ETSTW-RE 033 | 4CH 1GHz 5GS/s DSO                                 | WAVERUNNER<br>6100A | LCRY0604P14508 | LeCory                                | 2005/8/11     | 2006/8/10      |
| ETSTW-RE 034 | Power Sensor                                       | URV5-Z4             | 839313/006     | R&S                                   | 2005/10/17    | 2006/10/16     |
| ETSTW-RE 037 | Log-Periodic DipoleArray<br>Antenna                | 3148                | 00034546       | EMCO                                  | 2004/11/18    | 2006/11/17     |
| ETSTW-RE 038 | Log-Periodic DipoleArray<br>Antenna                | 3148                | 00034547       | EMCO                                  | 2004/11/18    | 2006/11/17     |
| ETSTW-RE 039 | Biconical Antenna                                  | 3110B               | 41760          | EMCO                                  | 2004/11/18    | 2006/11/17     |
| ETSTW-RE 040 | Biconical Antenna                                  | 3110B               | 41761          | EMCO                                  | 2004/11/18    | 2006/11/17     |
| 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  |
| 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            | 2005/9/6      | 2006/9/5   |
| ETSTW-EMI 001 | HARMONICS 1000                       | HAR1000-1P      | 93            | EMC-PARTNER    | 2005/9/12     | 2006/9/11  |
| ETSTW-EMS 002 | Frequency Converter                  | YF-6020         | 0308014       | T-Power        | Function Test |            |
| ETSTW-GSM 01  | SIM Simulator                        | IT3             | B2004-50106   | ORGA           | 2005/9/15     | 2006/9/14  |
| ETSTW-GSM 02  | Universal Radio Communication Tester | CMU 200         | 103489        | R&S            | 2005/11/15    | 2006/11/14 |
| ETSTW-GSM 03  | Agilent 8960 Test Set 1              | E5515C          | GB44052675    | Agilent        | 2006/7/13     | 2008/7/12  |
| 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        | 2006/7/16     | 2008/7/15  |
| ETSTW-GSM 07  | Agilent 8960 Test Set 5              | E5515C          | GB44052658    | Agilent        | 2006/7/13     | 2008/7/12  |
| ETSTW-GSM 08  | Agilent 8960 Test Set 6              | E5515C          | GB44052666    | Agilent        | 2006/7/16     | 2008/7/15  |
| ETSTW-GSM 10  | Combiner Wessex / Anite              | B4605/100       | 053           | Wessex / Anite | 2006/7/13     | 2008/7/12  |
| ETSTW-GSM 11  | GSM 850,900,1800,1900 Test system    | TS8950G         |               | R&S            | 2005/11/1     | 2006/10/31 |
| ETSTW-GSM 12  | Acoustical Calibrator                | 4231            | 2463874       | Brüel&Kjær     | 2005/10/31    | 2006/10/30 |
| 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            | 2005/10/29    | 2006/10/28 |
| ETSTW-GSM 24  | Vibration Testing System             | VS-100V         | 5494          | Vibration      | 2005/12/20    | 2006/12/19 |

## 2.4 Test results

☒ 1<sup>st</sup> test☐ test after modification☐ production test

| Test<br>Emission / Immunity |                    |                 | Done                                | Test<br>passed                      | Test<br>failed           |
|-----------------------------|--------------------|-----------------|-------------------------------------|-------------------------------------|--------------------------|
| Emission                    | Radiated Emission  | FCC part 15.109 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Emission                    | Conducted Emission | FCC part 15.107 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

## **2.4.1 Radiated Emission**

### **2.4.1.1 Test Equipment**

a) Antenna (HK116)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 015

b) Antenna (HL223)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 016

c) Antenna (HL025)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 017

d) Generator SMX (R&S)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CS 001

e) Semi Anechoic (OATS 10m)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 026

f) ESI-26

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 003

g) Anechoic Chamber

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 025

### **2.4.2.2 Test Procedures**

- Test configuration

The test configuration corresponds to the standard CISPR 22. The equipment under test is placed on a non metallic table with 0,8m height. The power supply and the RF connection points are close to the equipment under test at the floor inside a connection box. The cables to this connection box are shielded and below the double floor. The receiving antenna is placed in a height at 1,0 to 4,0m, in a distance of 10m. The measurement receiver are placed in a special room. The observation of the equipment under test is realized by 3 video cameras and by a microphone.

- Test parameters and marginal conditions

The test are carried out with horizontal and vertical polarization of the antenna in a frequency range of 30 MHz to 5000 MHz . Further information please find in the test protocol.

## **2.4.2 Conducted Emission**

### **2.4.1.1 Test Equipment**

a) Artificial mains (ESH3-Z5)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CE 004

b) Artificial mains (ESH3-Z2)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CE 006

c) Test receiver (ESHS10)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CE 001

d) Shielded room

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 023

e) AC Power Source (APS-9102)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CE 003

f) Universal Radio Communication Tester (CMU200)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-GSM 02

- Test configuration

The test configuration is contained inside of a shielded chamber and corresponds to the standard CISPR 22 . The equipment under test is placed in the facility on a wooden table 0.8m high. The equipment under test is connected with the artificial mains network (AMN) in a distance of 0,8m and also 0,8m from other subassembly and metallic area. The measurement receiver are placed in a special room adjacent to the chamber. The observation of the equipment under test is realized by 3 video cameras and by a microphone.

- Test parameters and marginal conditions

The test are carried out with a nominal impedance by  $50\Omega$  /  $50\mu\text{H}$  of the AMN in a frequency range 150 kHz to 30 MHz. 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,  
Further information please find in test report.

## 2.5 Test protocols

### 2.5.1 Radiated Emission

#### Radio Noise Field Strength

# Emission

Standard : FCC part 15B

Reg.-no. : W6M20608-7247-P-15B

Device : VCM

Date : Aug 02, 2006

Class : B

Temperature : 23.9 °C  
Pressure : 939 hPa  
Rel. humidity: 52 %

| Frequency Range Polarization | Limit<br>μV/m | Passed                              | Failed                   | Number of<br>rechecks |
|------------------------------|---------------|-------------------------------------|--------------------------|-----------------------|
| 30 MHz – 88 MHz              | 100           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |
| 88 MHz – 216 MHz             | 150           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |
| 216 MHz – 960 MHz            | 200           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |
| 960 MHz – 1000 MHz           | 500           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |

Comment: See attached diagrams as appendix A

Standard : FCC part 15BReg.-no. : W6M20608-7247-P-15BDevice : VCMDate : Aug 02, 2006Class : B

Temperature : 23.9 °C  
 Pressure : 939 hPa  
 Rel. humidity: 52 %

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

| 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                    | 32.172                 | 13.69                    | 13.04                  | PK       | 26.73                | 40.0                      | 13.27       | 131                    | 127                 |
|                      | 160.976                | 8.90                     | 15.47                  | PK       | 24.37                | 43.5                      | 19.13       | 179                    | 184                 |
|                      | 433.478                | 15.14                    | 18.47                  | PK       | 33.61                | 46.0                      | 12.39       | 102                    | 172                 |
|                      | 1896.217               | 44.83                    | -5.12                  | PK       | 39.71                | 54.0                      | 14.29       | 89                     | 213                 |

| 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                    | 114.213                | 8.79                     | 12.53                  | PK       | 21.32                | 43.5                      | 22.18       | 140                    | 131                 |
|                      | 178.372                | 11.75                    | 14.18                  | PK       | 25.93                | 43.5                      | 17.57       | 184                    | 179                 |
|                      | 432.317                | 12.90                    | 18.47                  | PK       | 31.37                | 46.0                      | 14.63       | 113                    | 170                 |
|                      | 912.178                | 10.68                    | 26.53                  | PK       | 37.21                | 46.0                      | 8.79        | 90                     | 202                 |
|                      | 1842.721               | 38.06                    | -4.81                  | PK       | 33.25                | 54.0                      | 20.75       | 84                     | 215                 |
|                      | 1896.819               | 43.24                    | -5.12                  | PK       | 38.12                | 54.0                      | 15.88       | 73                     | 221                 |

- 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

**2.5.2 Conducted Emission****Conducted Emission****Emission**Standard : FCC part 15BReg.-no. : W6M20608-7247-P-15BDevice : VCMDate : Aug 03, 2006Class : B

Temperature : 23.9 °C  
 Pressure : 939 hPa  
 Rel. humidity: 51 %

| Frequency Range      | Limit<br>DbμV  |           | Passed                              | Failed                   | Number of<br>rechecks |
|----------------------|----------------|-----------|-------------------------------------|--------------------------|-----------------------|
|                      | Quasi-<br>peak | Average   |                                     |                          |                       |
| 150 kHz – 500 kHz AC | 66 to 56*      | 56 to 46* | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |
| 500 kHz – 5 MHz AC   | 56             | 46        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |
| 5 MHz – 30 MHz AC    | 60             | 50        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0                     |

\*Decreases with logarithm of the frequency

Comment: See attached diagrams as appendix B

Standard : FCC part 15BReg.-no. : W6M20608-7247-P-15BDevice : VCMDate : Aug 03, 2006Class : B

Temperature : 23.9 °C  
 Pressure : 939 hPa  
 Rel. humidity: 51 %

| 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              |                          |      | dB                |                    |       |                         |      |             |       |
|           | 0.190            | 24.82                    | 2.30 | 10.10             | 34.92              | 12.40 | 64.0                    | 54.0 | 29.11       | 41.60 |
|           | 0.340            | 18.53                    | 1.50 | 10.10             | 28.63              | 11.60 | 59.2                    | 49.2 | 30.57       | 37.60 |
|           | 1.150            | 8.14                     | 1.80 | 10.10             | 18.24              | 11.90 | 56.0                    | 46.0 | 37.76       | 34.10 |

| 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              |                          |      | dB                |                    |       |                         |      |             |       |
|           | 0.170            | 27.05                    | 2.10 | 10.10             | 37.15              | 12.20 | 64.9                    | 54.9 | 27.75       | 42.70 |
|           | 0.240            | 23.68                    | 1.20 | 10.10             | 33.78              | 11.30 | 62.0                    | 52.0 | 28.22       | 40.70 |
|           | 1.080            | 8.00                     | 1.40 | 10.10             | 18.10              | 11.50 | 56.0                    | 46.0 | 37.90       | 34.50 |

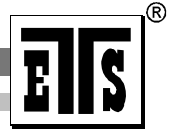
**Note: 1. The formula of measured value as: Test Result = Corrected Reading + Correction Factor****2. The Correction Factor = Cable Loss + LISN Insertion Loss – Pulse Limit Loss****3. Detector function in the form : P = Peak, QP = Quasi Peak, AV = Average**

## **2.6 Equipment Modification**

No modification was made to pass all tests.

### **3 Normative references**

- /1/     FCC part 15  
         Radio Frequency Devices
  
- /2/     CISPR 22  
         Limits and Methods of Measurement of Radio Interference Characteristics of Information  
         Technology Equipment



## **Appendix**

- A Radiated Emission
- B Conducted Emission
- C Pictures

## **Appendix A**

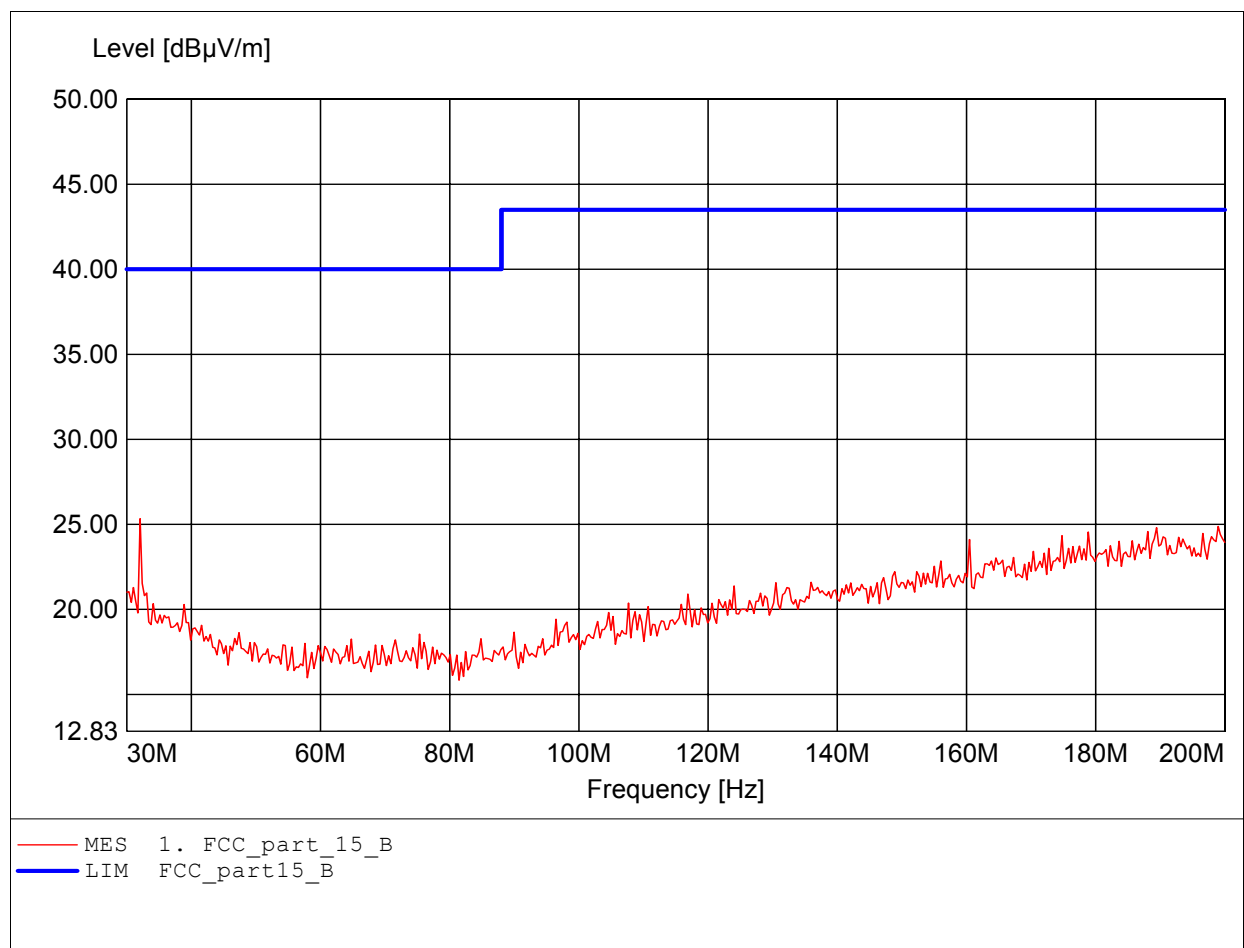
### Radiated Emission

The measurement diagrams plots attached below are preliminary wideband scan with a peak and average detector for reference only. The test results are listed on section 2.5.1

## Field Strength under normal conditions

### FCC RULES PART 15, SUBPART B

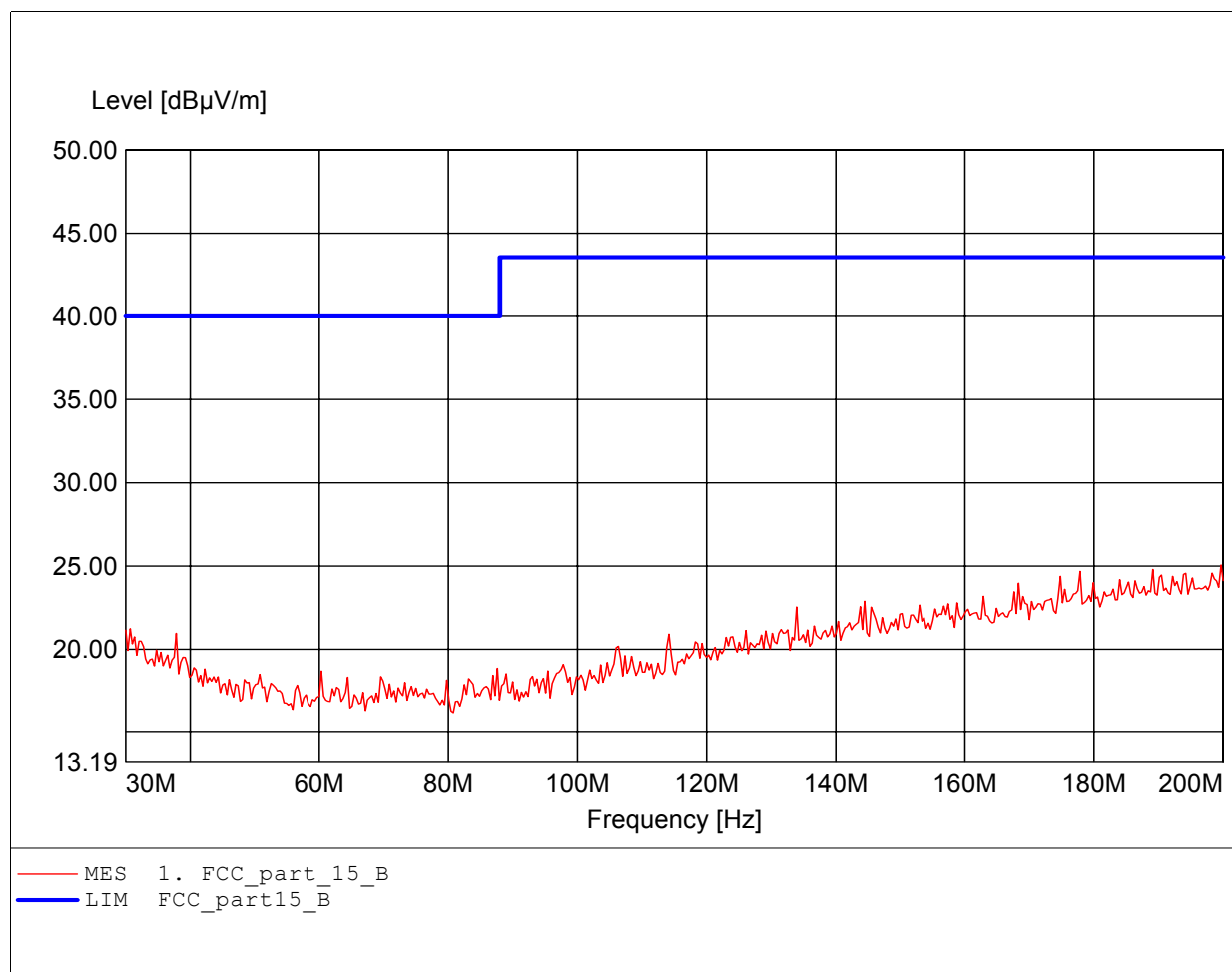
Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:32.044MHz Emax:25.32dBμV/m RBW: 100 kHz



# Field Strength under normal conditions

## FCC RULES PART 15, SUBPART B

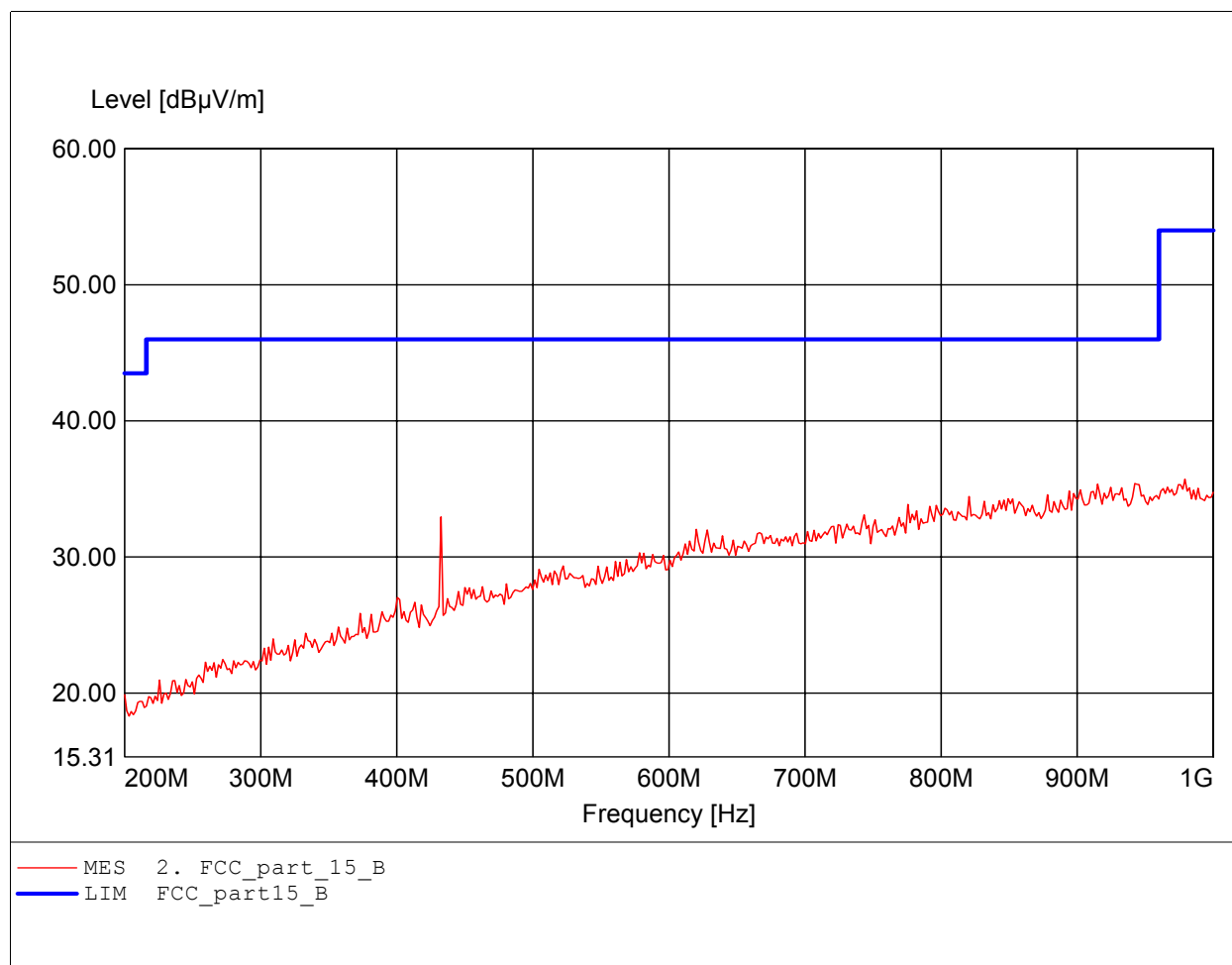
Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:199.659MHz Emax:25.07dBμV/m RBW: 100 kHz



## Field Strength under normal conditions

### FCC RULES PART 15, SUBPART B

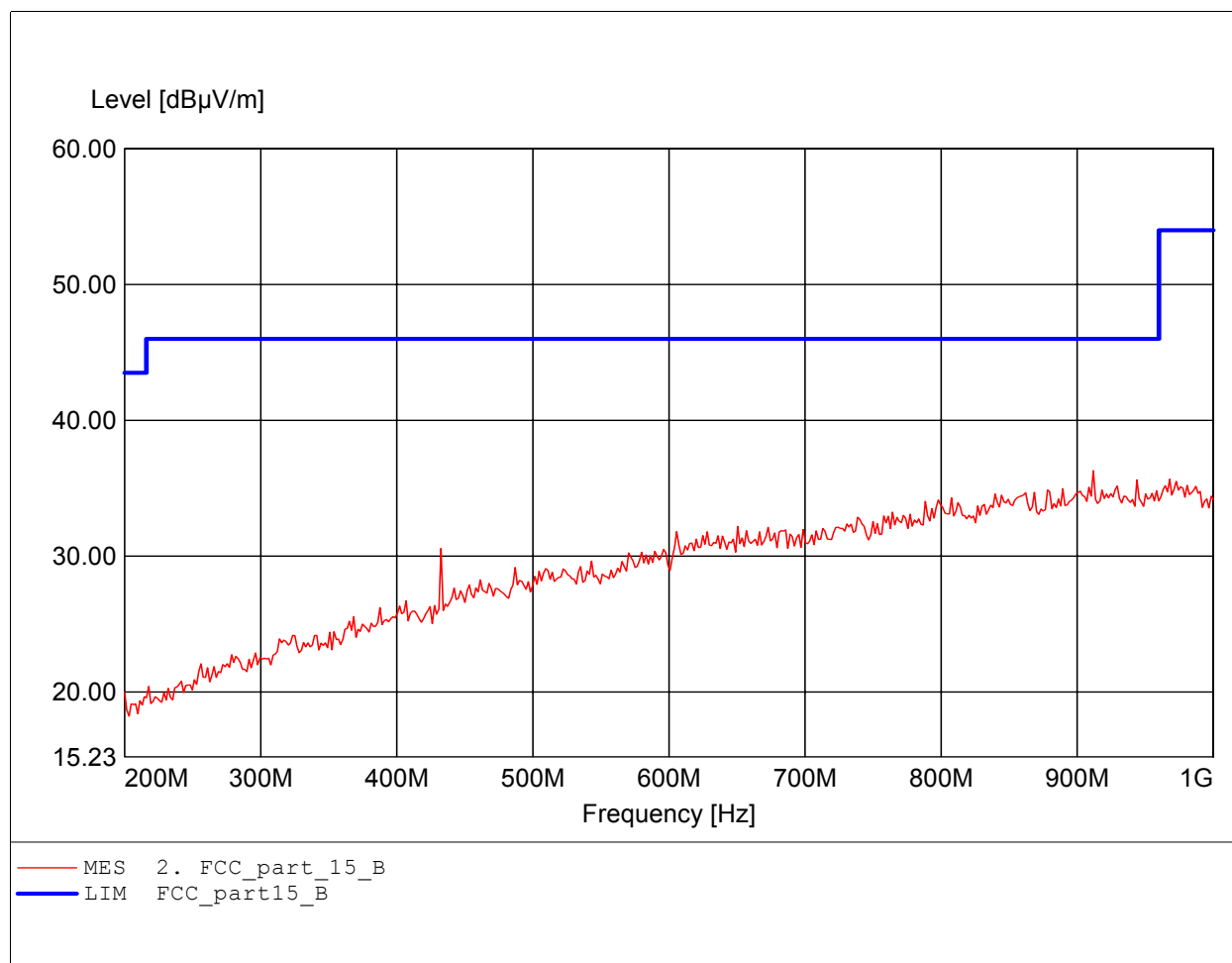
Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.  
Freq:979.158MHz Emax:35.72dBμV/m RBW: 100 kHz



## Field Strength under normal conditions

### FCC RULES PART 15, SUBPART B

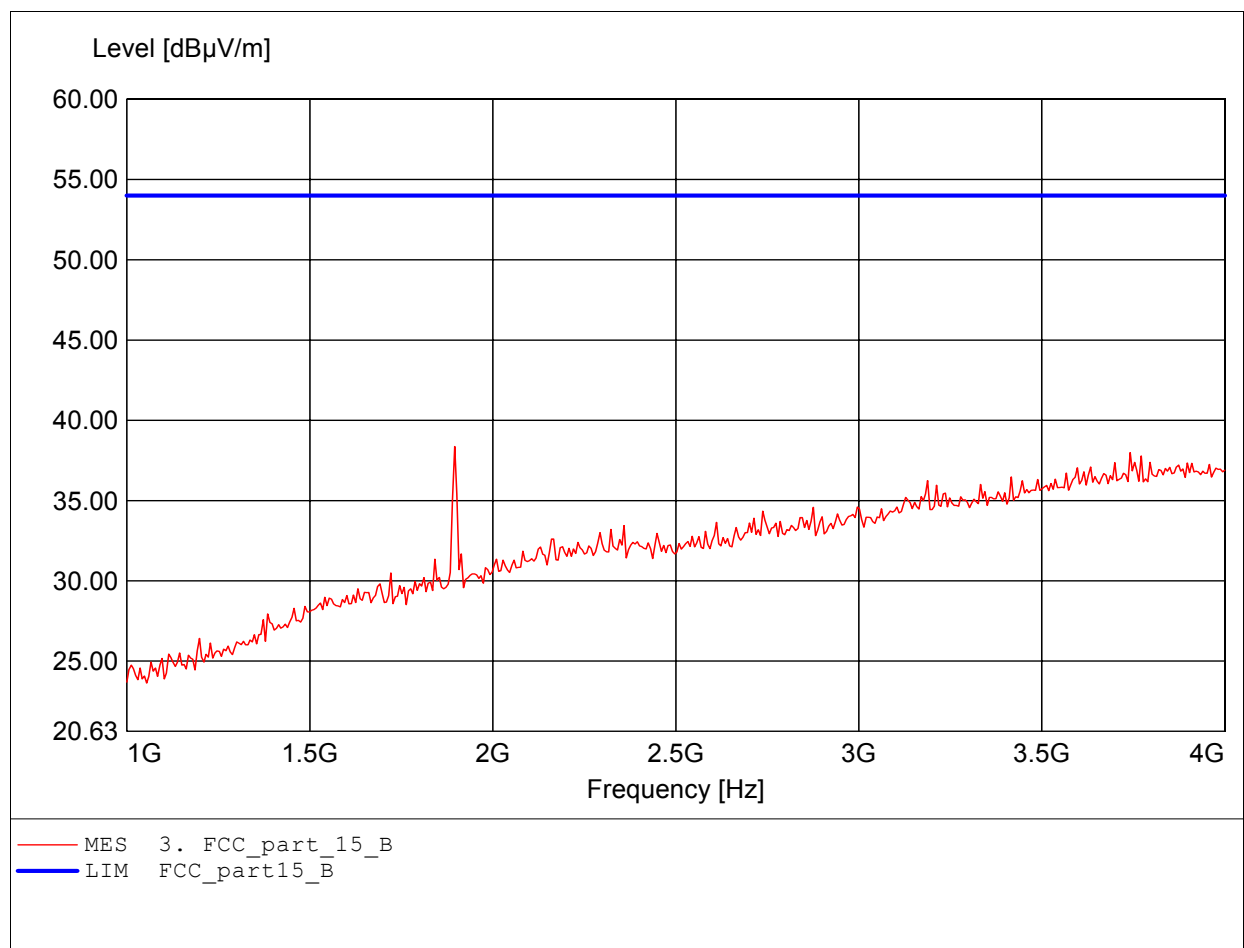
Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.  
Freq:911.824MHz Emax:36.30dBμV/m RBW: 100 kHz



## Field Strength under normal conditions

### FCC RULES PART 15, SUBPART B

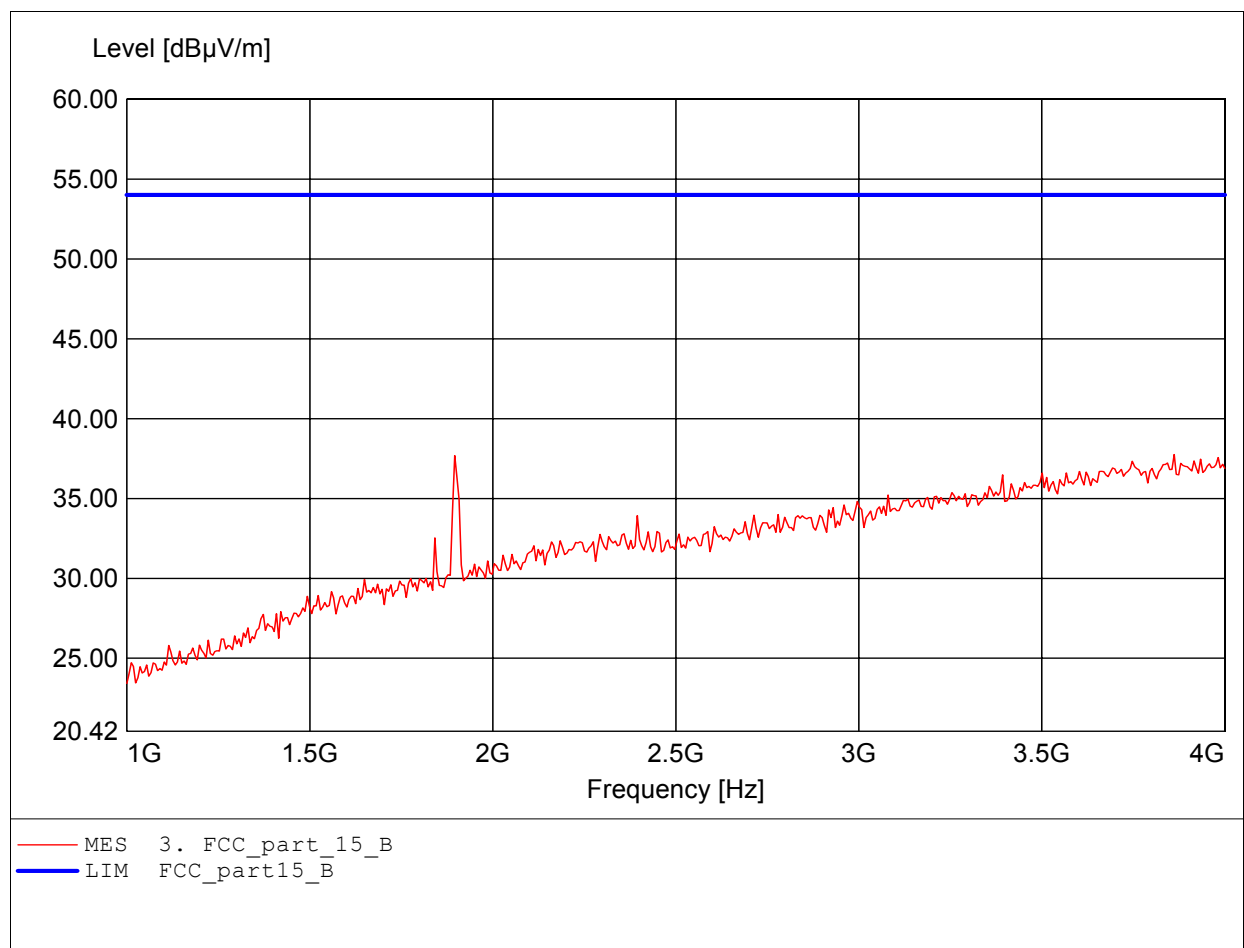
Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:1.896GHz Emax:38.37dBμV/m RBW: 1 MHz



## Field Strength under normal conditions

### FCC RULES PART 15, SUBPART B

Order Number : W6M20608-7247 ( stand by )  
Test Site / Operator: ETS /Charles  
Temperature/Voltage: Temp.: 23.9°C/ Unom.: 6VDC ( 1.5V x 4 battery )  
Test Specification: according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:3.862GHz Emax:37.76dBμV/m RBW: 1 MHz



## **Appendix B**

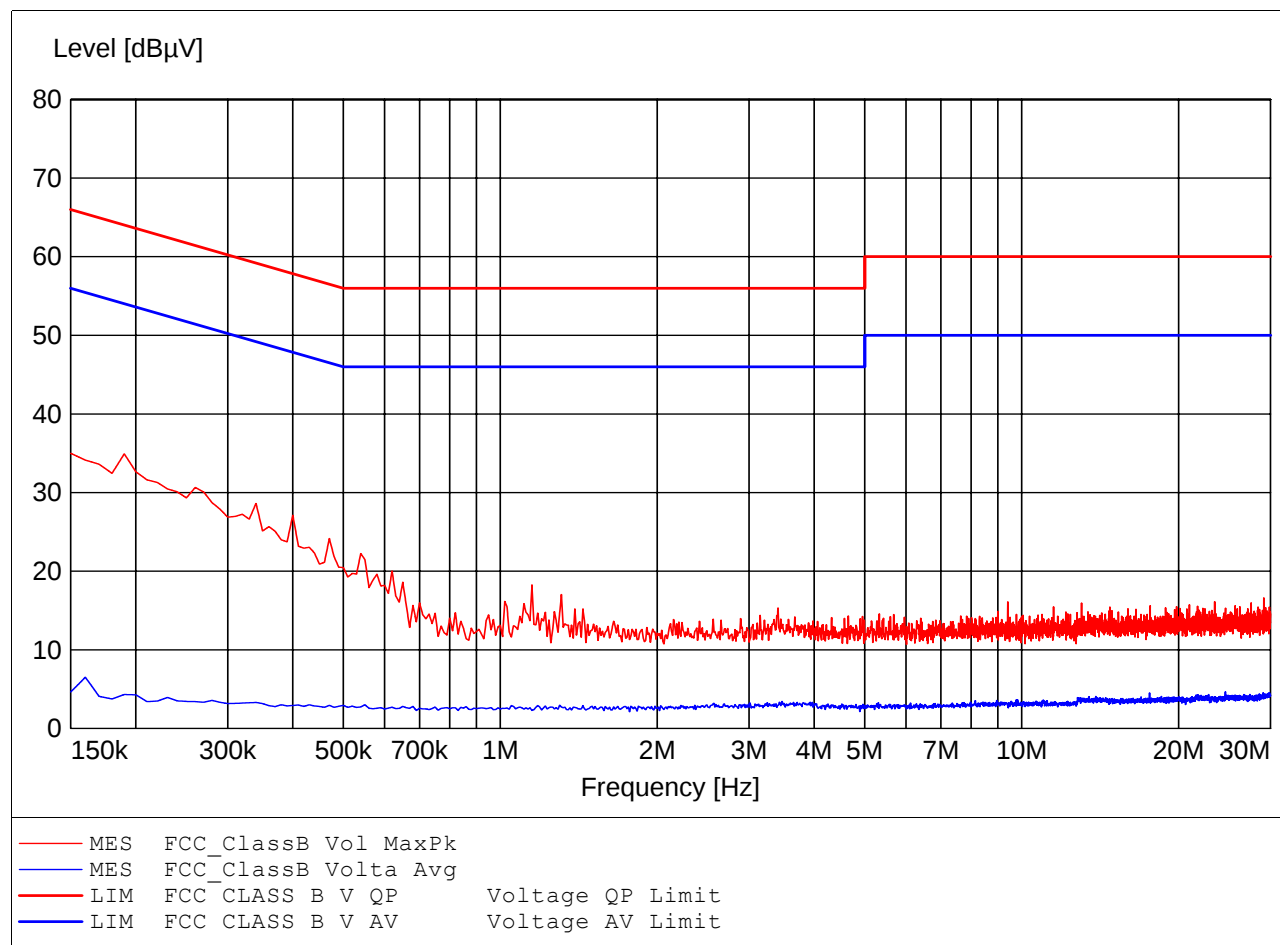
### Conducted Emission

**The measurement diagrams plots attached below are preliminary wideband scan with a peak detector and for reference only. The test results are listed on section 2.5.2**

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

## CLASS B

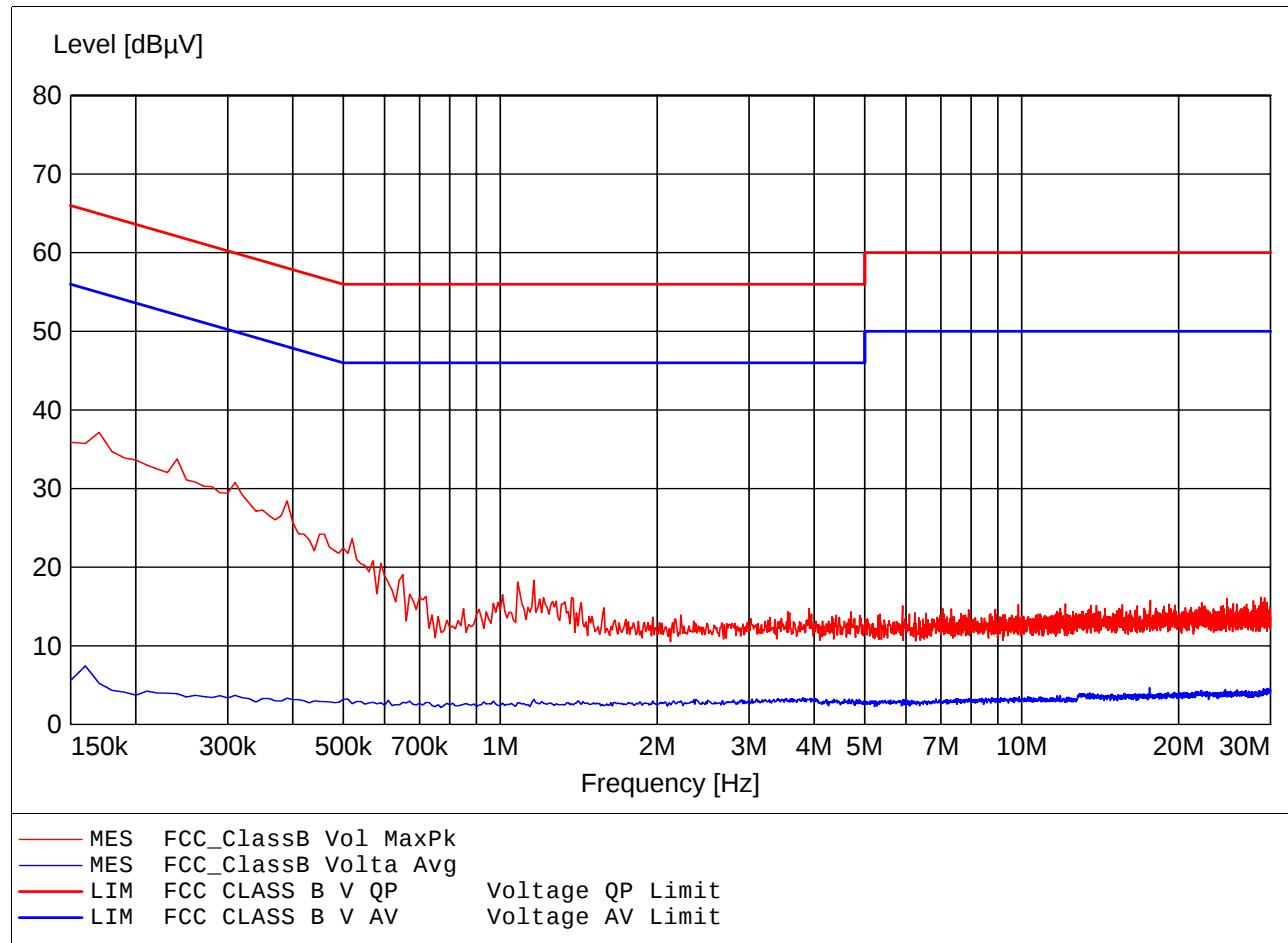
Order Number: W6M20608-7247  
Operating Condition: Unom: 120 VAC (ac/dc adaptor) , Tnom: 23.9°C  
Test Site: ETS  
Operator: Dicky  
Test Specification: V-network: ESH3-Z5 N



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

## CLASS B

Order Number: W6M20608-7247  
Operating Condition: Unom: 120 VAC (ac/dc adaptor) , Tnom: 23.9°C  
Test Site: ETS  
Operator: Dicky  
Test Specification: V-network: ESH3-Z5 L1





## **Appendix C**

Pictures