



**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 RULES PART 15 / SUBPART C § 15.249**

**FCC ID : ELVATRFD**

**Test report no.:**

**W6M20612-7666-P-15**

ETS DR.GENZ TAIWAN PS CO., LTD.  
6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU, TAIPEI 114, TAIWAN, R.O.C.  
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Registration number: W6M20612-7666-P-15  
 FCC ID: ELVATRFD

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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.

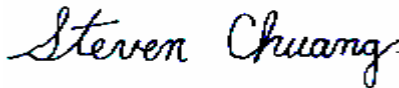
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**Tester:**

December 27, 2006	Jay Chaing	
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Date	ETS-Lab.	Name	Signature
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**Technical responsibility for area of testing:**

December 27, 2006	Steven Chuang	
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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

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### **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:	NUTEK CORPORATION
Street:	5F,NO.3,ALLEY 6, LANE 45 PAO-HSING RD., HSING-TIEN CITY,
Town:	TAIPEI,
Country:	TAIWAN R.O.C.
Telephone:	02-2918-9478
Fax:	02-2917-9069
Teletex:	./.

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#### **1.4 Application details**

Date of receipt of application : December 14, 2006  
Date of receipt of test item : December 21, 2006  
Date of test : From December 21, 2006 to December 26, 2006

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

Type of test item : ALARM DEVICE  
Model Number : NE07  
Serial number : without  
Photos : see Appendix  
Technical data  
Frequency band : 907.17 MHz  
Operation Frequency : 907.17 MHz  
Operation modes : simplex  
Modulation Type : FSK  
Antenna type : spiral antenna  
Power supply : 1.5 VDC ( 1.5 V Battery \*1 )

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**Manufacturer:**

(if different from applicant)

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

Additional information : --

**1.6 Test standards**

Technical standard : FCC RULES PART 15 SUBPART B / SUBPART C § 15.249 : August 2006



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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	PREREGULATOR 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-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2005/12/8	2007/12/7
ETSTW-CE 014	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T2-02	20241	FCC	2005/12/7	2007/12/6
ETSTW-CE 015	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T8-02	20307	FCC	2006/11/7	2008/11/6
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2006/11/21	2007/11/20
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	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
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



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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	2005/10/17	2007/10/16
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	2006/7/28	2007/7/27
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	2006/6/29	2008/6/28
ETSTW-GSM 05	Agilent 8960 Test Set 3	E5515C	GB44052652	Agilent	2006/7/11	2008/7/10
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	2006/9/22	2008/9/21
ETSTW-GSM 11	GSM 850,900,1800,1900 Test system	TS8950G		R&S	2004/12/03	2007/12/2
ETSTW-GSM 12	Acoustical Calibrator	4231	2463874	Brüel&Kjær	2006/7/26	2007/7/25
ETSTW-GSM 13	Conditioning Amplifier	2690--0S2	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	2006/12/19	2007/12/18
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 EUT 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

**ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES:** The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table). The EUT was placed in the center of the table. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to 10<sup>th</sup> harmonic of the fundamental.

Peak readings were taken in three (3) orthogonal planes and the highest readings.

Measurements were made by ETS Dr. Genz GmbH 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.

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.

**ANTENNA & GROUND:**

**This unit uses spiral antenna (see photo).**

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**3 Test results (enclosure)**

<b>TEST CASE</b>	<b>Para. Number</b>	<b>Required</b>	<b>Test passed</b>	<b>Test failed</b>
Peak Output Power	15.249 (b)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spurious Emissions radiated – Transmitter operating	15.249 (e)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spurious Emissions conducted – Transmitter operating	15.249 (e)	<input type="checkbox"/>	<input 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"/>
Out of Band Spurious Emission, Band edge-Transmitter operating	15.249 (e)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power Line Conducted Emission	15.207	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The follows is intended to leave blank.

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**3.1 Peak Output Power (transmitter)**

FCC Rule: 15.249 (b)

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 conditions Frequency 1		Transmitter field strength of fundamental	Transmitter field strength of harmonics
		[dB $\mu$ V/m]	
$T_{nom} = 23.9^{\circ} C$	$V_{nom} = 1.5 V$	92.40	--
Measurement uncertainty		< 3 dB	

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

Comments: The diagrams for the field strength measurements are included in appendix A.

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**3.2 Equivalent isotropic radiated power**

Because using an permanent antenna there are no deviations from the radiated test results according 3.1.

**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 § 15.249, subpart C, This unit uses permanent antenna. There is no provision for an external antenna (see photo).

**3.3 RF Exposure Compliance Requirements**

Not applicable for this **ALARM DEVICE** for the low power level.

**3.4 Out of Band Radiated Emissions**

FCC Rule: 15.249 (d)(e), 15.35(b)

Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in section 15.209, whichever is the lesser attenuation.

For frequency above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

Limits:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.5
Above 960	500	54.0

For frequencies above 1 GHz (Peak measurements).

Limit + 20 dB

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

Or

Must be antenuatted at least 50dB below the level of fundament

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: Please see attached diagram as appendix A.

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**3.5 Spurious emission (tx)**

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

Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in section 15.209, whichever is the lesser attenuation.

For frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

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

The peak and average spurious emission plots was measured with the average limits.  
 The critical peak value listed in the table agree with the above calculated limits.

**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)	Antenna Hight (cm)	Table Azimuth (degree)
H	1811.412	53.84	-4.47	PK	49.37	54	4.63	120	125
	2719.911	41.32	-0.4	PK	40.92	54	13.08	110	140
	3627.312	41.39	1.08	PK	42.47	54	11.53	110	139

Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Hight (cm)	Table Azimuth (degree)
V	1811.412	47.40	-4.47	PK	42.93	54	11.07	125	131
	2719.911	40.98	-0.4	PK	40.58	54	13.42	120	142
	3627.312	41.23	1.08	PK	42.31	54	11.69	115	137

- 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
  4. All not in the table noted test results are more than 20 dB below the relevant limits.

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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

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

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

Comment: Please see attached diagram as appendix B.

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**3.6 Radiated Emissions from Digital Part and Receiver of Transceiver**

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

Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Hight (cm)	Table Azimuth (degree)
H	1324.645	38.45	-8.2	PK	30.25	54	23.75	120	98
	1901.415	37.28	-5.14	PK	32.14	54	21.86	120	80
	2953.911	35.79	-0.37	PK	35.42	54	18.58	120	111

Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Hight (cm)	Table Azimuth (degree)
V	1324.645	38.31	-8.2	PK	30.11	54	23.89	120	90
	1901.415	37.56	-5.14	PK	32.42	54	21.58	110	85
	3110.145	35.23	-0.01	PK	35.22	54	18.78	105	92

- 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
  4. All not in the table noted test results are more than 20 dB below the relevant limits.

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: Please see attached diagram as appendix C.



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**3.7 Radiated Emission on the band edge**

From the following plots, they show that the fundamental emissions are confined in the specified band and hey at least 50 dB below the carrier level at band edge ( 902 and 928 MHz ). It meets the requirement of section 15.249(d).

Test conditions Tnom = 23°C, Vnom = 1.5 V Frequency [MHz]	Transmitter field strength of Radiated Emission (Peak Detector)	Transmitter field strength of Radiated Emission (Average Detector)
	[dBµV/m]	
907.17	--	--

Limit:

Frequency Range (MHz)	Limit (dBµV/m)	
	Peak	Average
902 – 928 2400 – 2483.5 5725 – 5875 24000 - 24250	74	54

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

Comment: The Occupied Bandwidth is only 86.54 kHz therefore this test is not required.  
 Please see attached diagram as appendix D.

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**3.8 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

**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

Comment: This test is not required because there is no AC power line or signal line for this EUT.

Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

## **Appendix**

- A Fundamental Field Strength
- B Spurious Emissions radiated
- C Radiated Emission from Digital Part And Receiver L.O.
- D Occupied Bandwidth
- E Pictures

Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

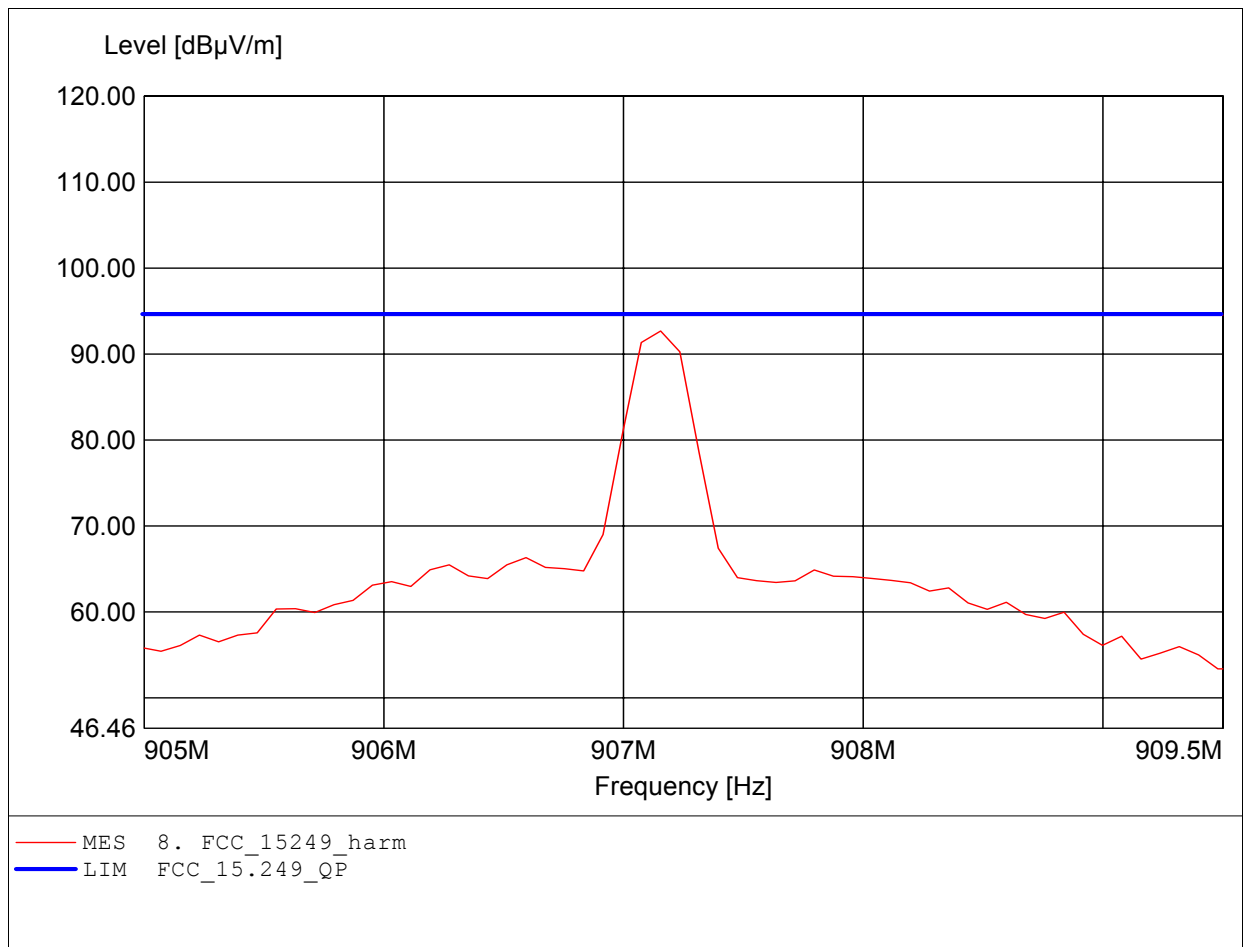
## **Appendix A**

### Fundamental Field Strength

**Carrier power (Field Strength)**

**FCC RULES PART 15, SUBPART C / LP0002**

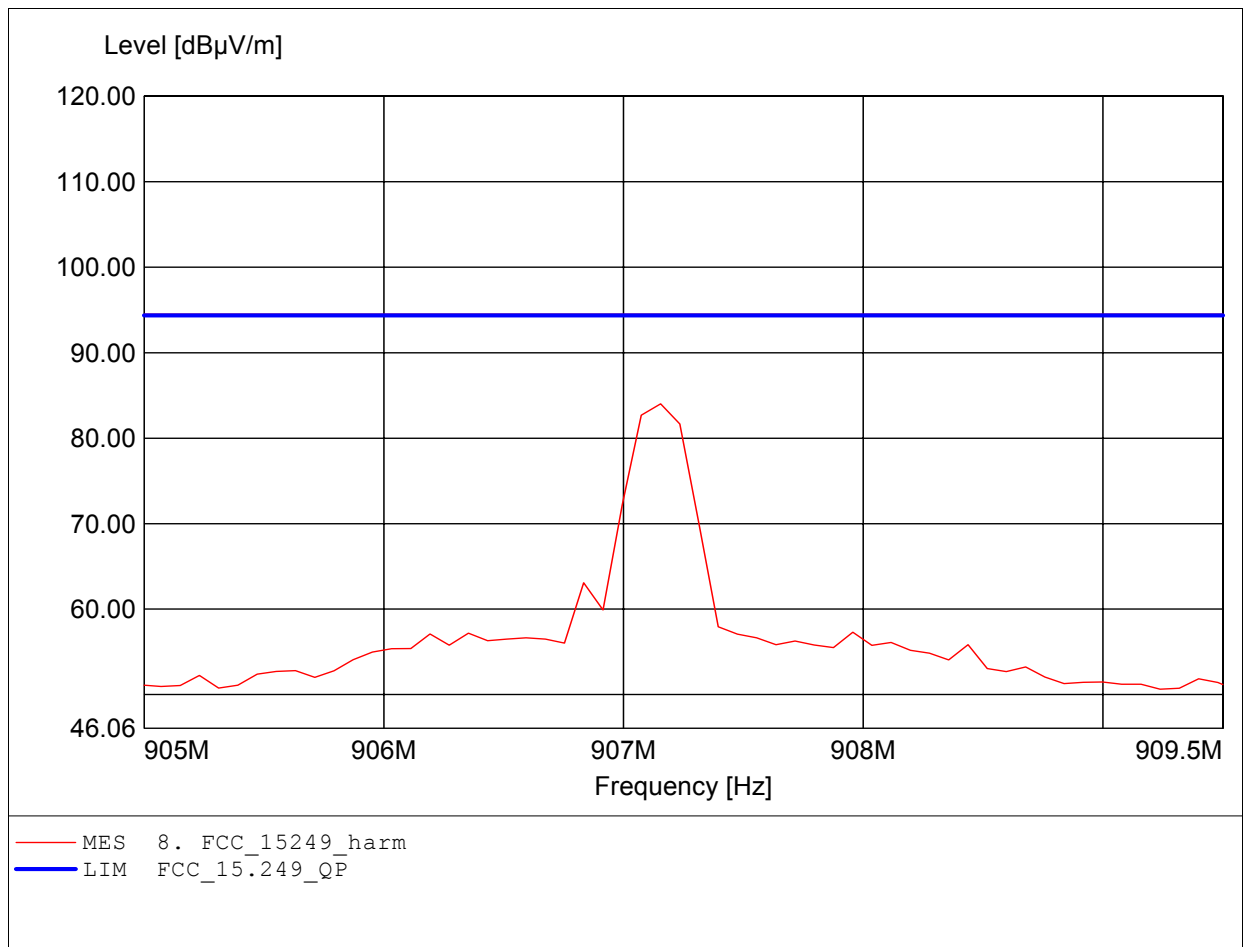
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 907.154MHz, Emax: 92.40dBµV/m, RBW: 1MHz



**Carrier power (Field Strength)**

**FCC RULES PART 15, SUBPART C / LP0002**

Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 907.154MHz, Emax: 84.01dBµV/m, RBW: 1MHz



Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

## **Appendix B**

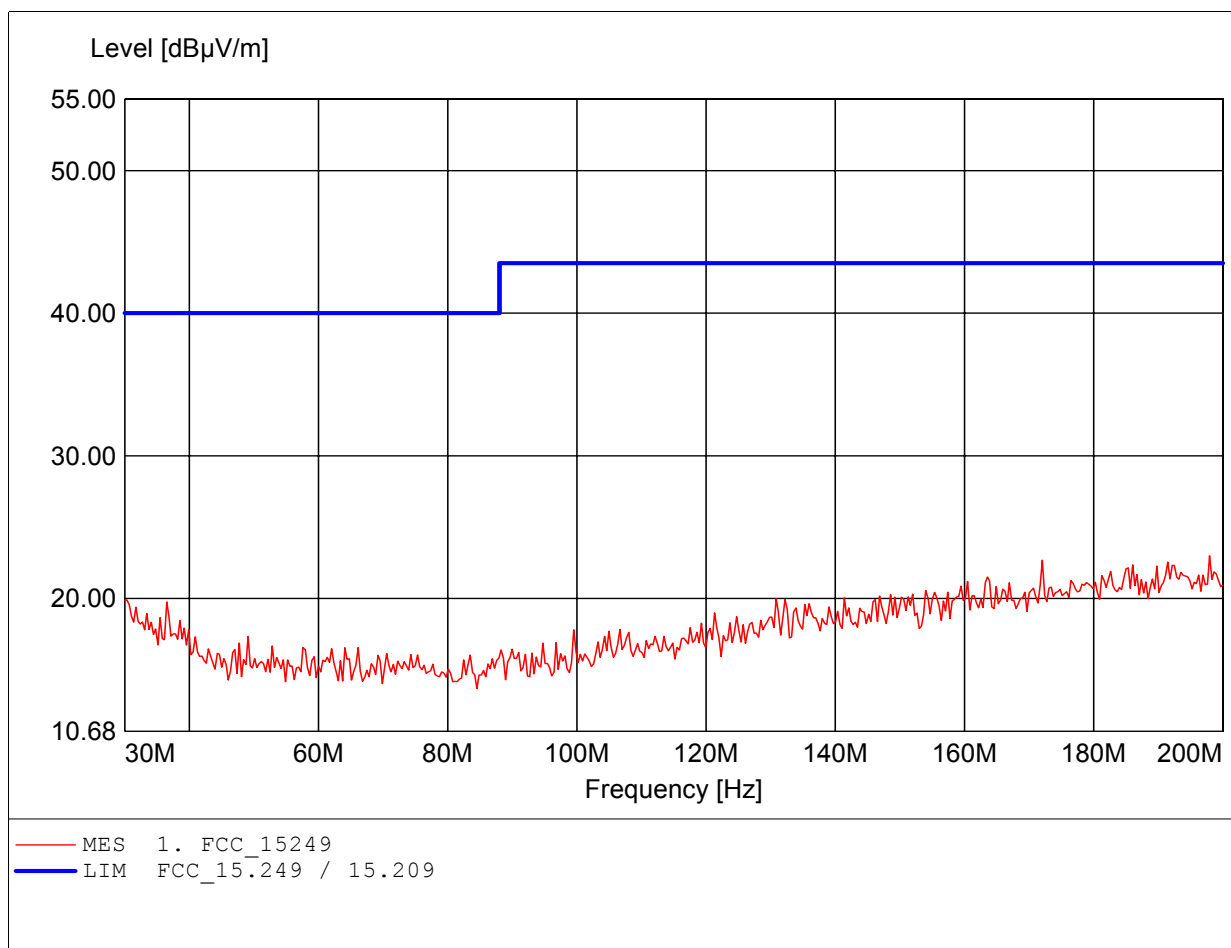
### Spurious Emissions radiated

**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 : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
Comment 1: according to §15.249, peak detector  
Dist.: 3m, Ant.: HK 116  
Freq: 197.956MHz, Emax: 22.99dBµV/m, RBW: 100kHz

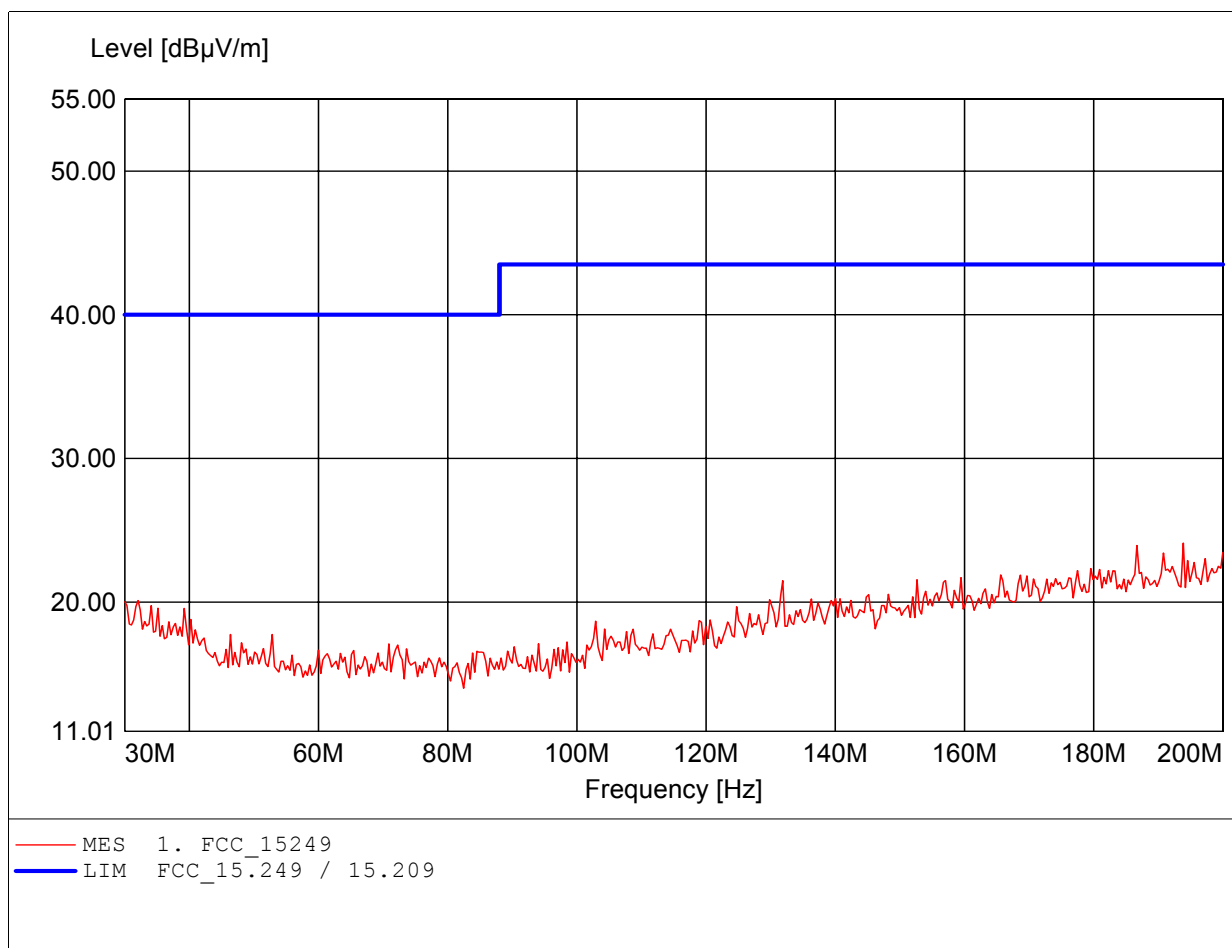




**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

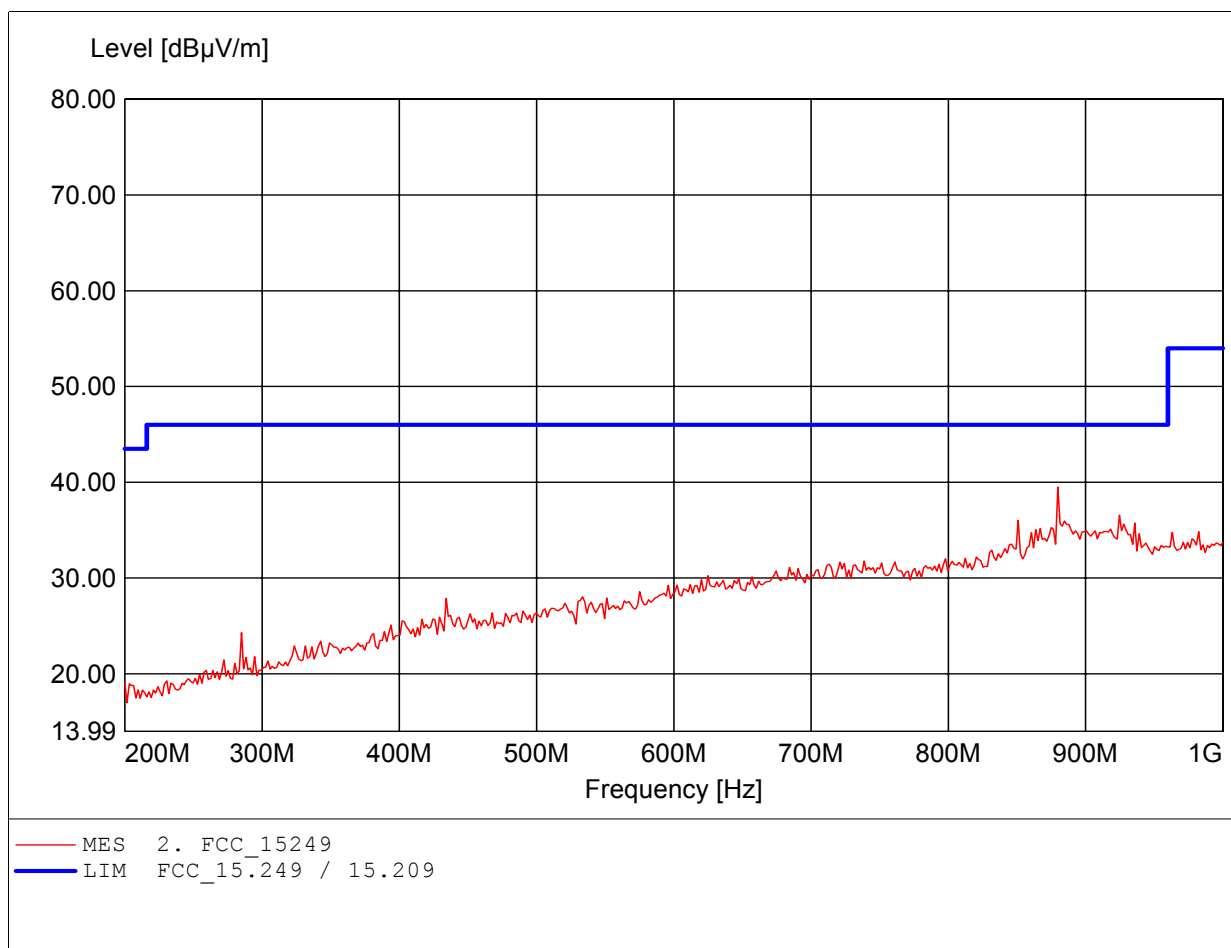
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
Comment 1: according to §15.249, peak detector  
Dist.: 3m, Ant.: HK 116  
Freq: 193.868MHz, Emax: 24.11dBµV/m, RBW: 100kHz



**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

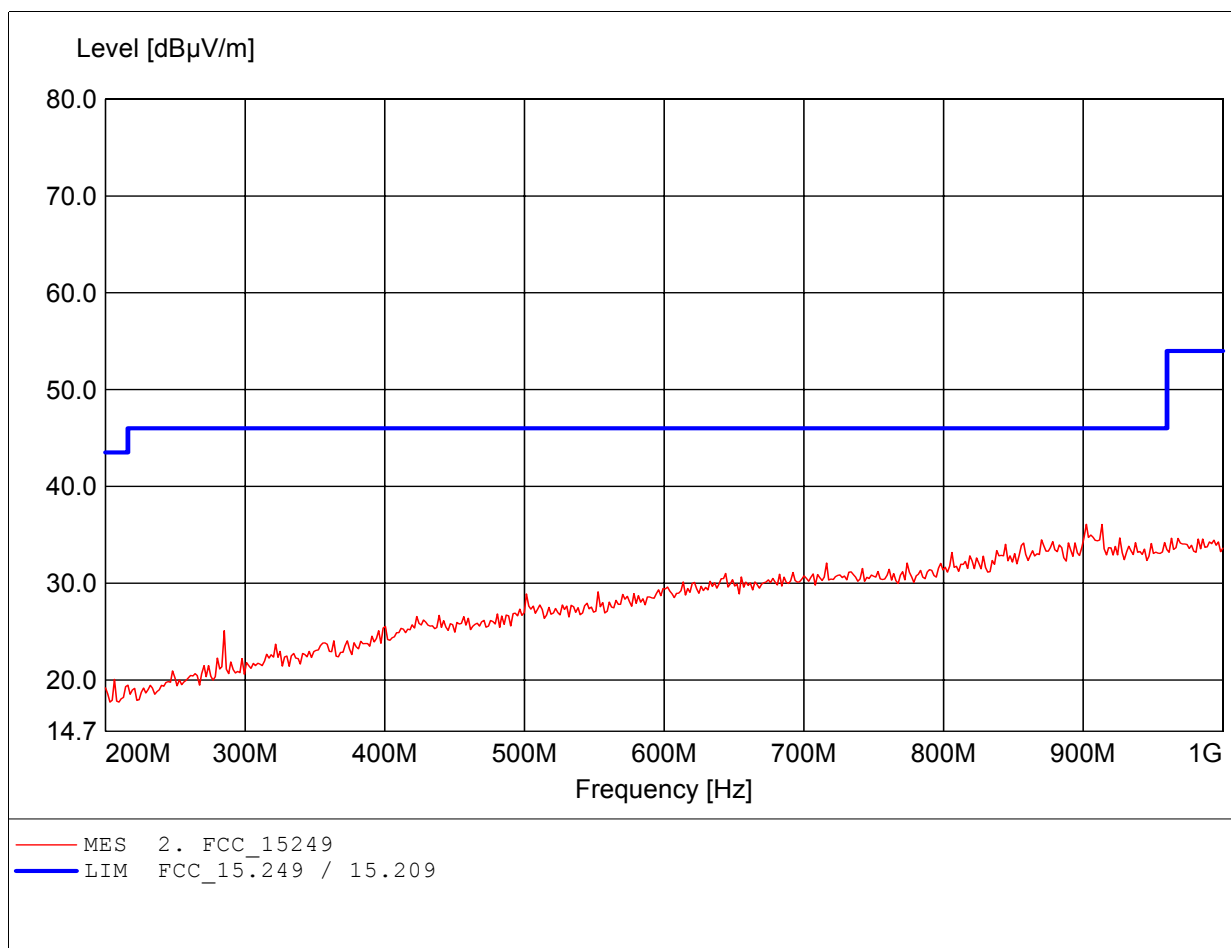
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
Comment 1: according to §15.249, peak detector  
Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 879.760MHz, Emax: 39.50dBµV/m, RBW: 100kHz



**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

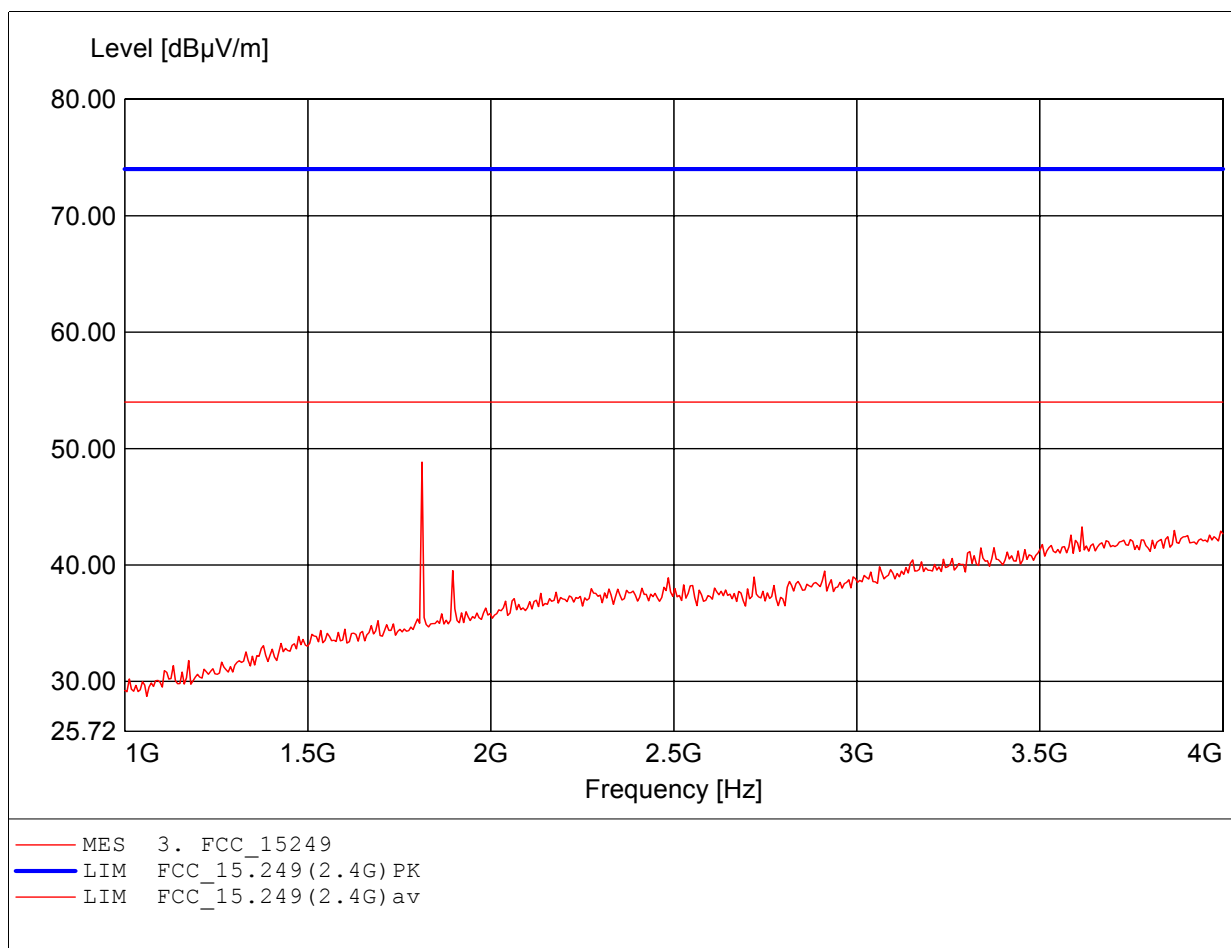
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 902.204MHz, Emax: 36.08dBµV/m, RBW: 100kHz



**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

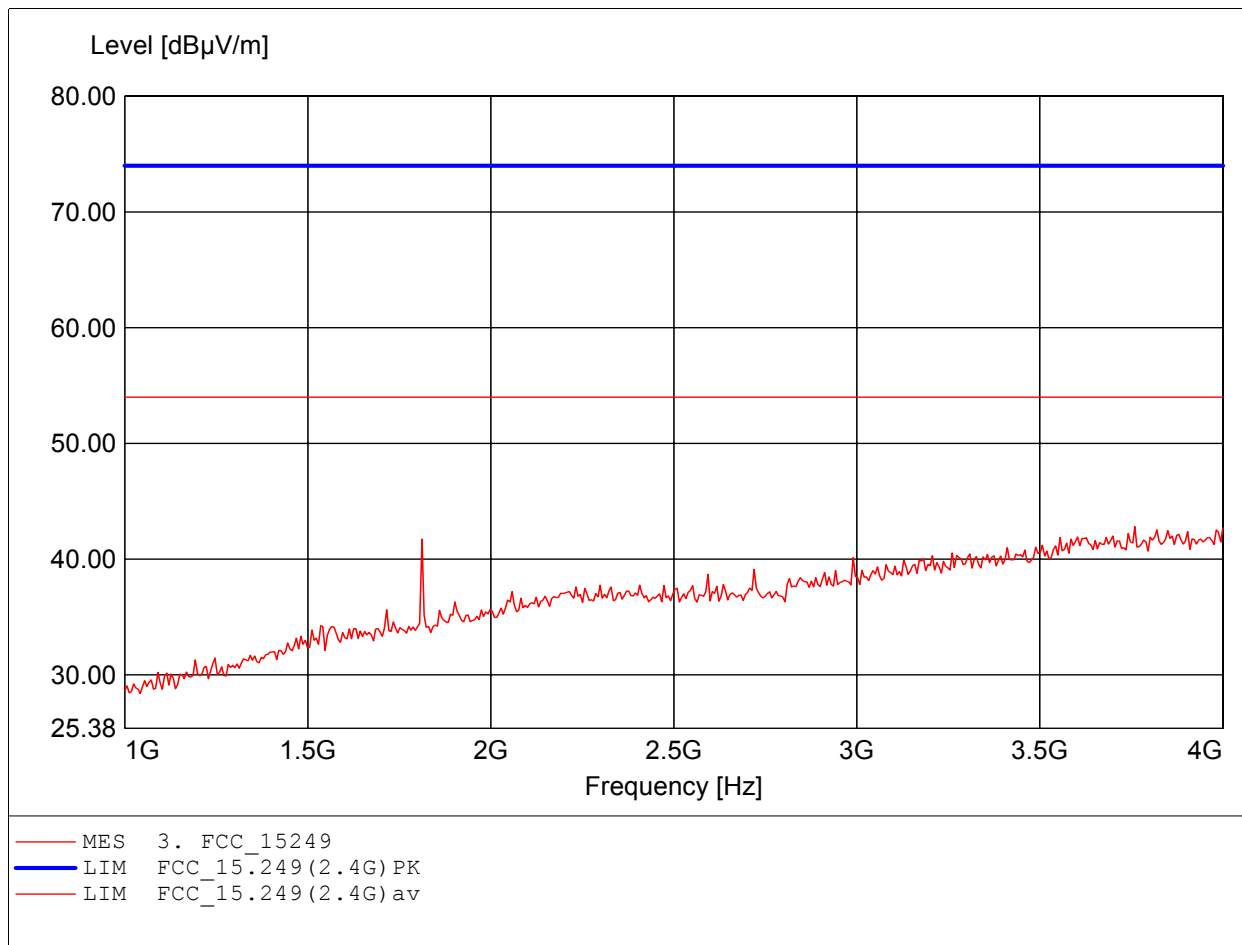
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
Comment 1: according to §15.249, peak detector  
Dist.: 3m, Ant.: HL025, amplif.  
Freq: 1.812GHz, Emax: 48.85dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

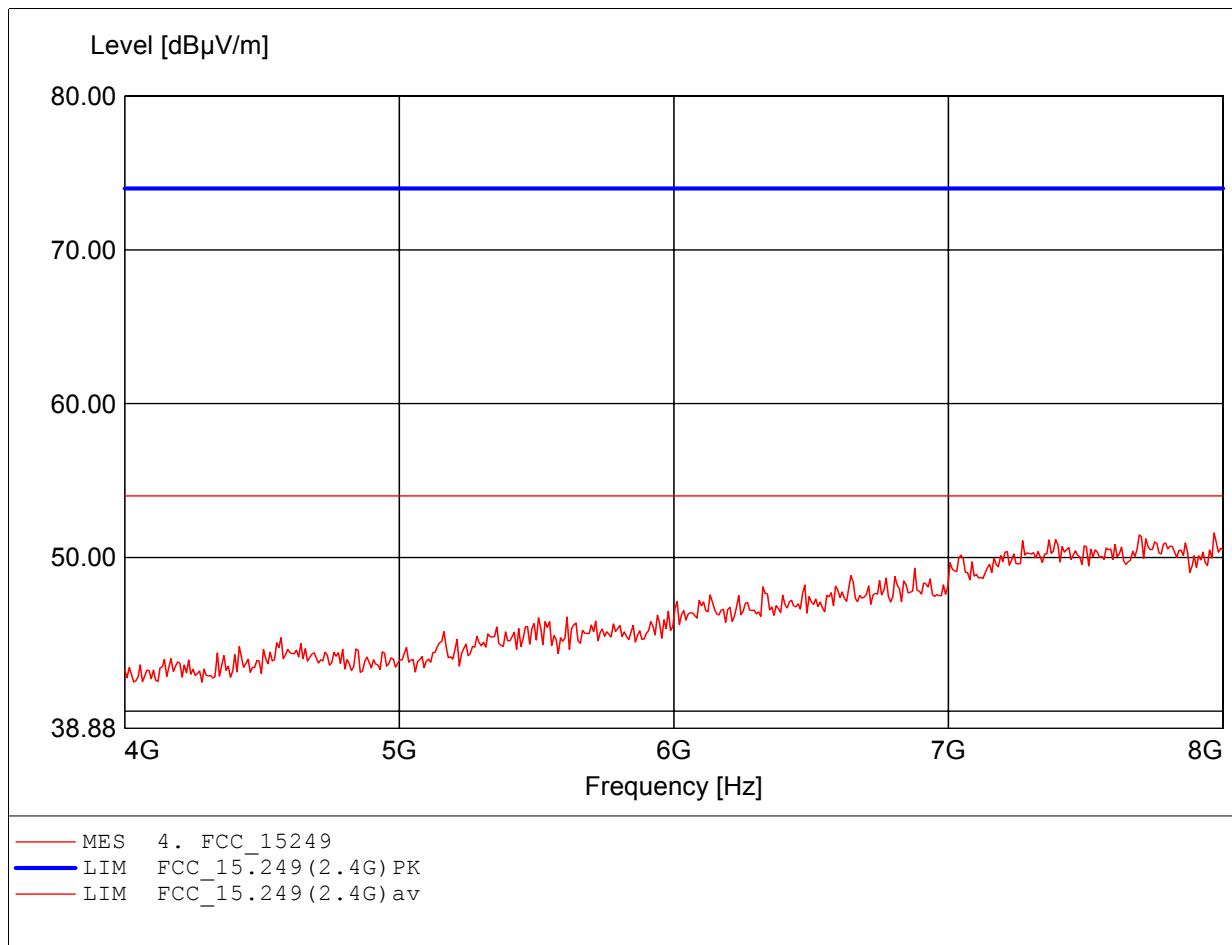
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
Comment 1: according to §15.249, peak detector  
Dist.: 3m, Ant.: HL025, amplif.  
Freq: 3.760GHz, Emax: 42.81dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

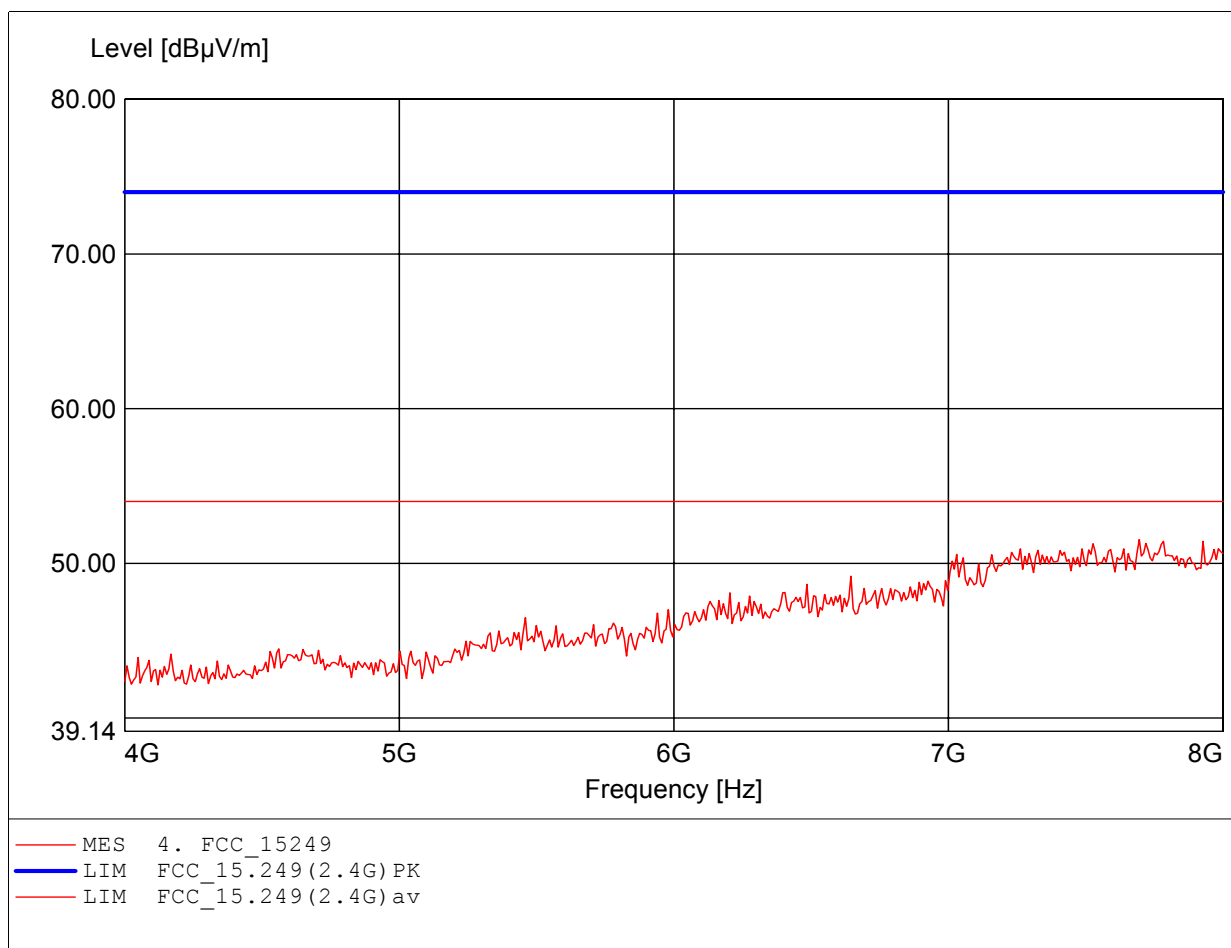
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.968GHz, Emax: 51.59dBμV/m, RBW: 1MHz



**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

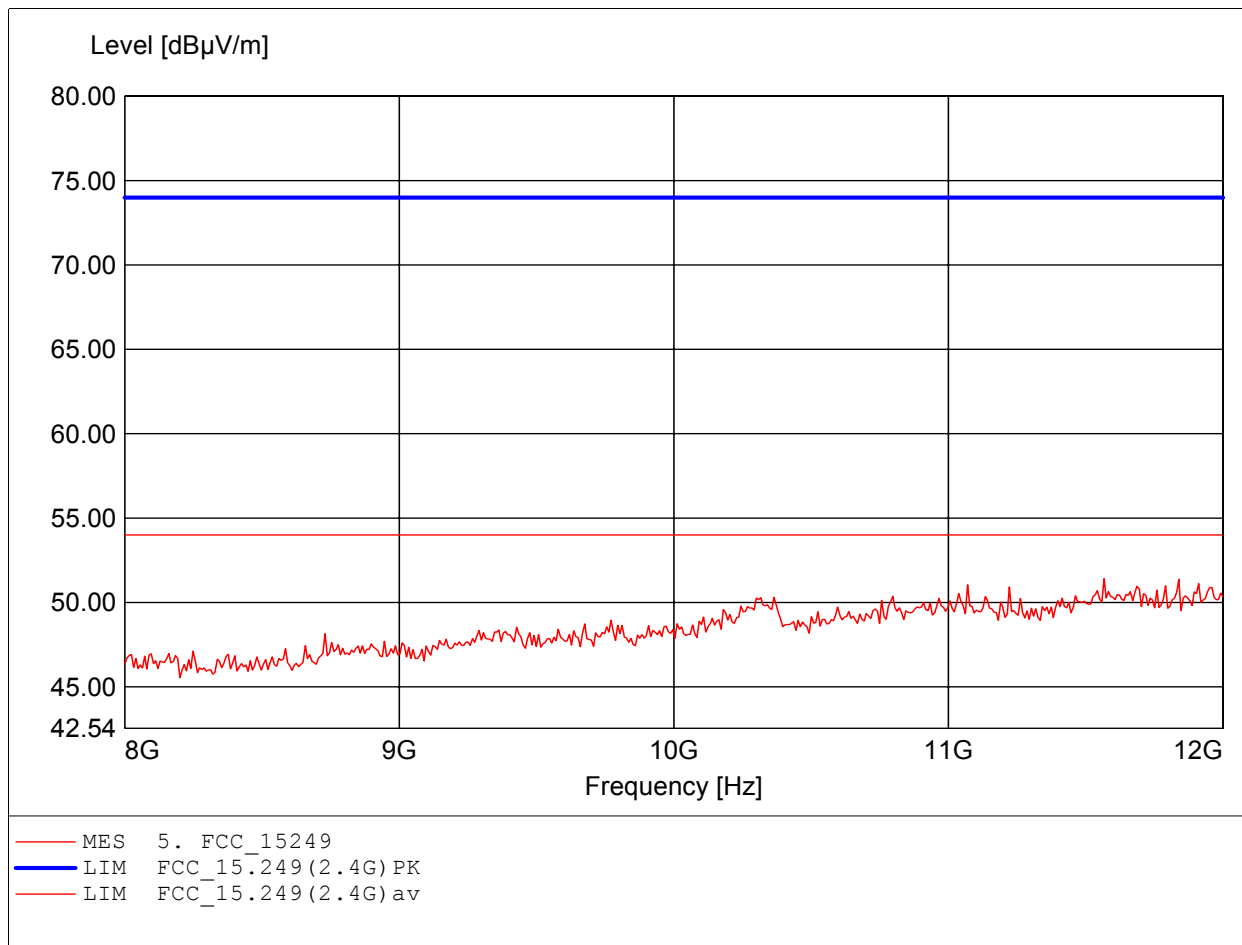
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.695GHz, Emax: 51.54dBµV/m, RBW: 1MHz



# Spurious emissions Field Strength

## FCC RULES PART 15, SUBPART C / LP0002

Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.567GHz, Emax: 51.41dBµV/m, RBW: 1MHz

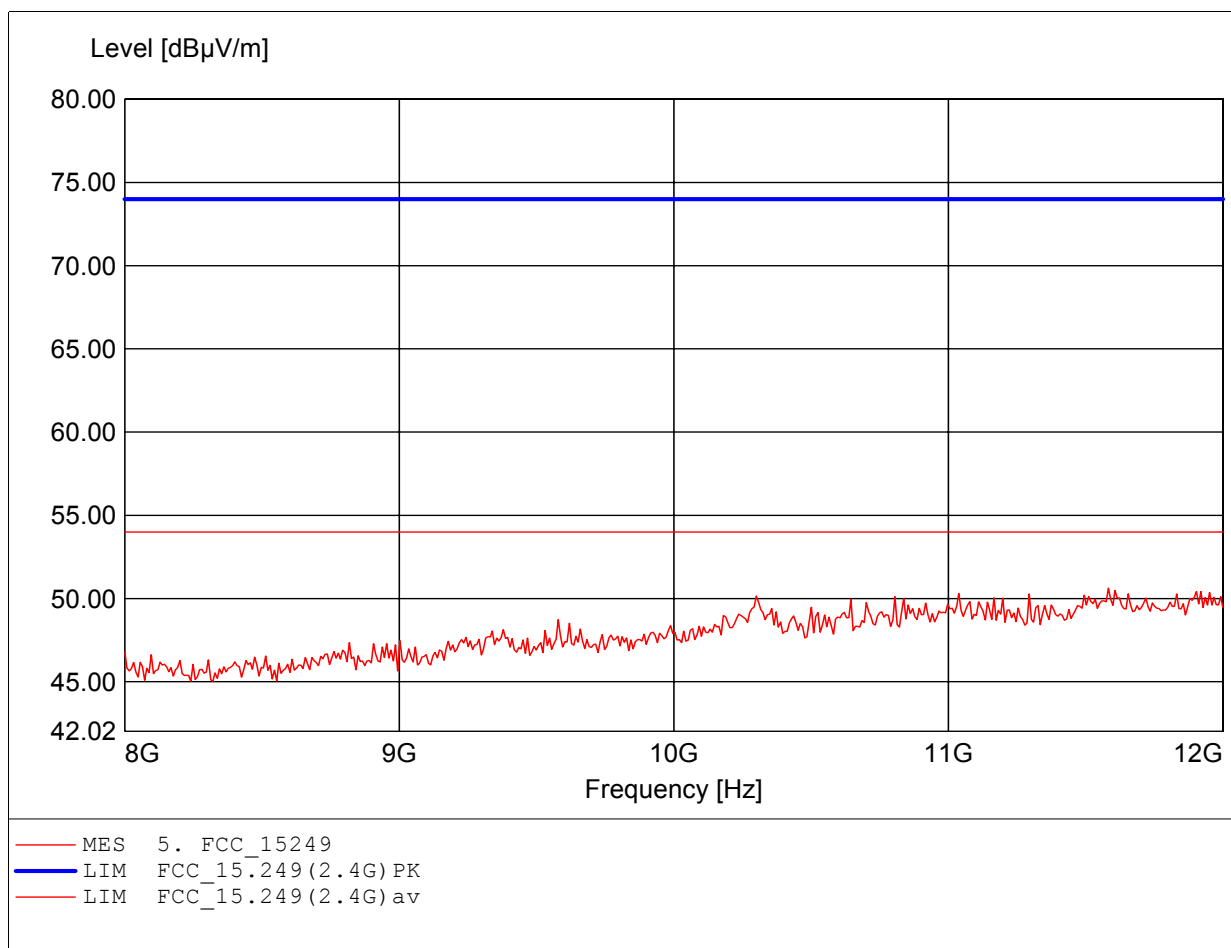




**Spurious emissions Field Strength**

**FCC RULES PART 15, SUBPART C / LP0002**

Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.583GHz, Emax: 50.62dBµV/m, RBW: 1MHz



Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

## **Appendix C**

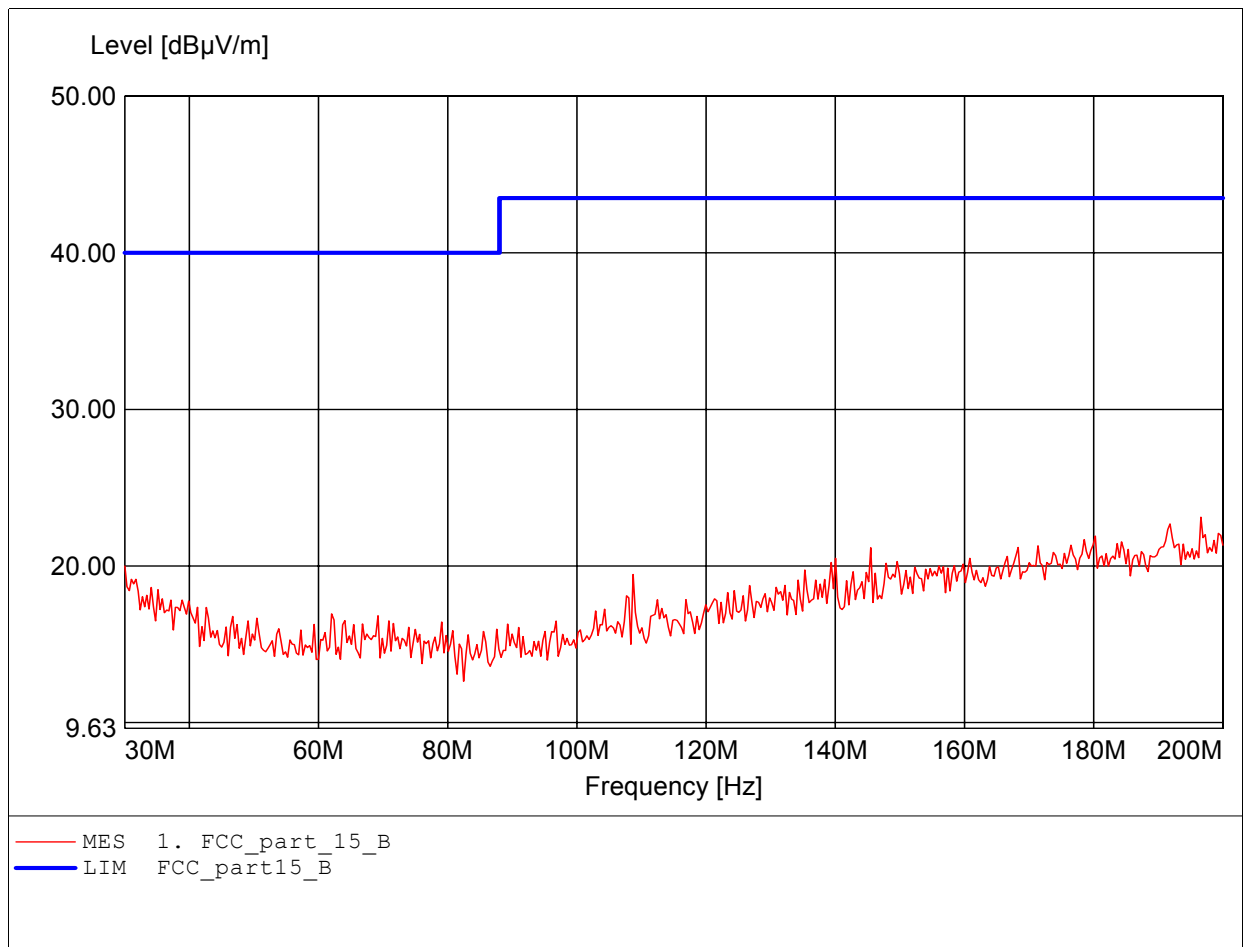
Radiated Emission from Digital Part And Receiver L.O.

**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 3.6**

**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

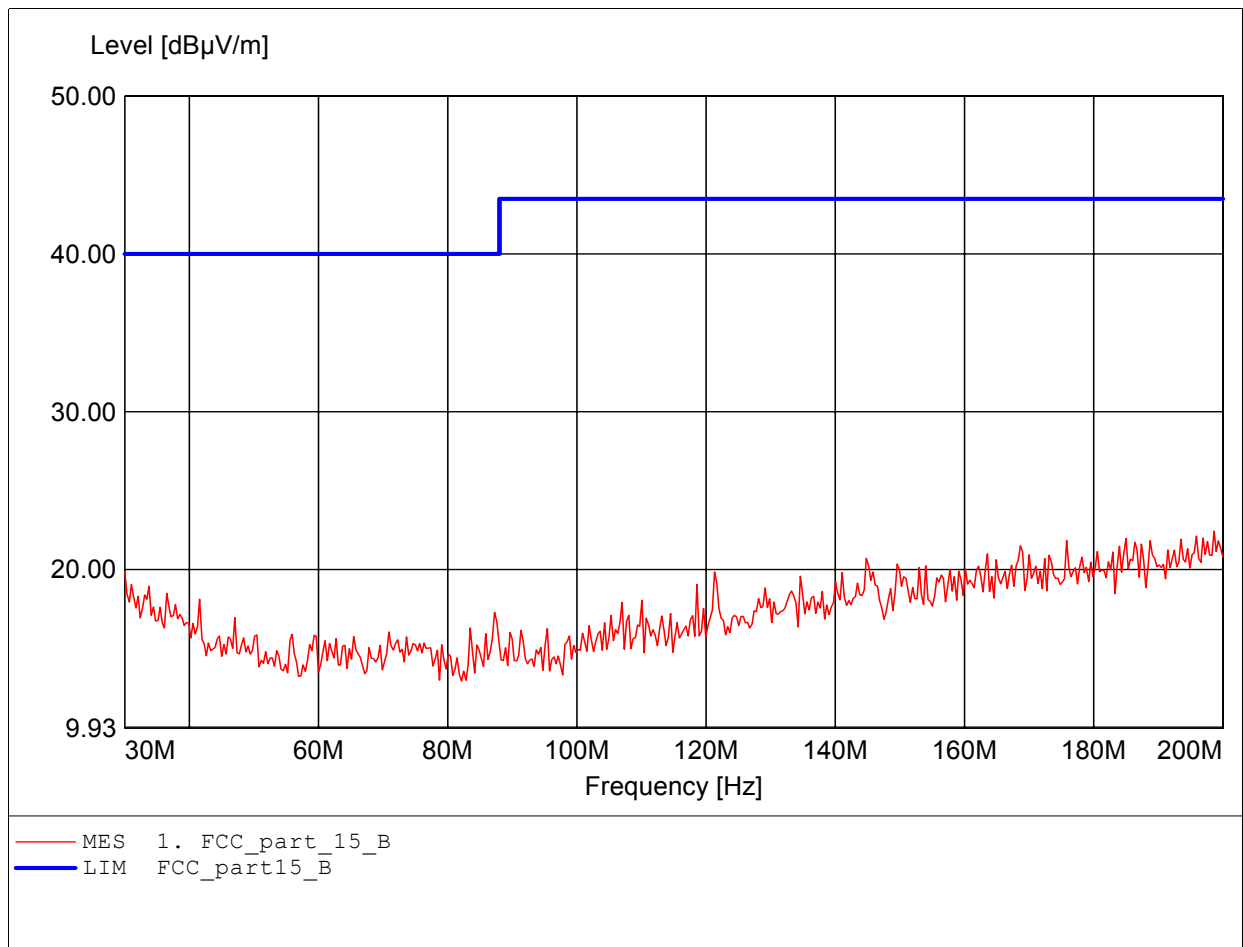
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:196.593MHz Emax:23.12dBµV/m RBW: 100 kHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

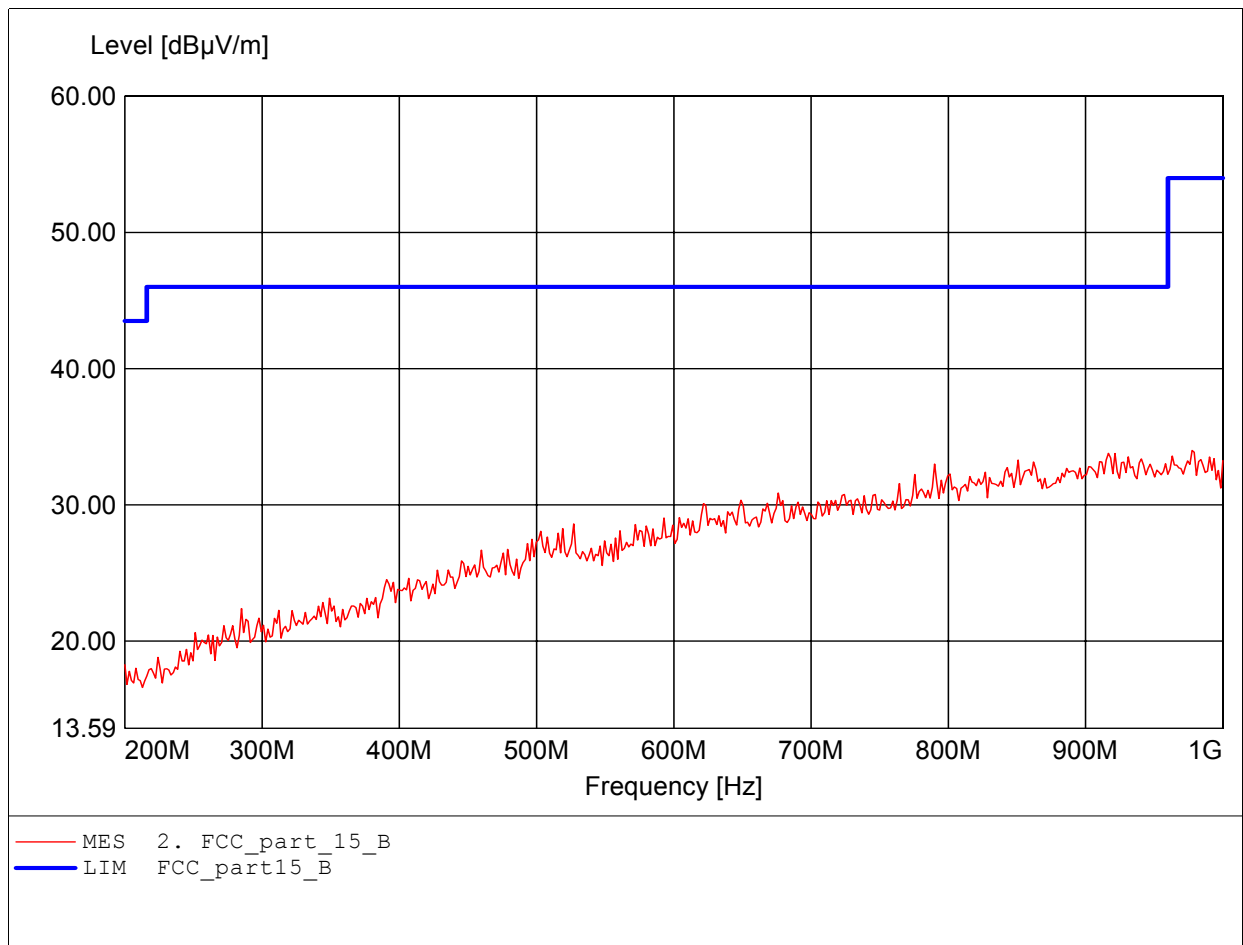
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:198.637MHz Emax:22.43dBμV/m RBW: 100 kHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

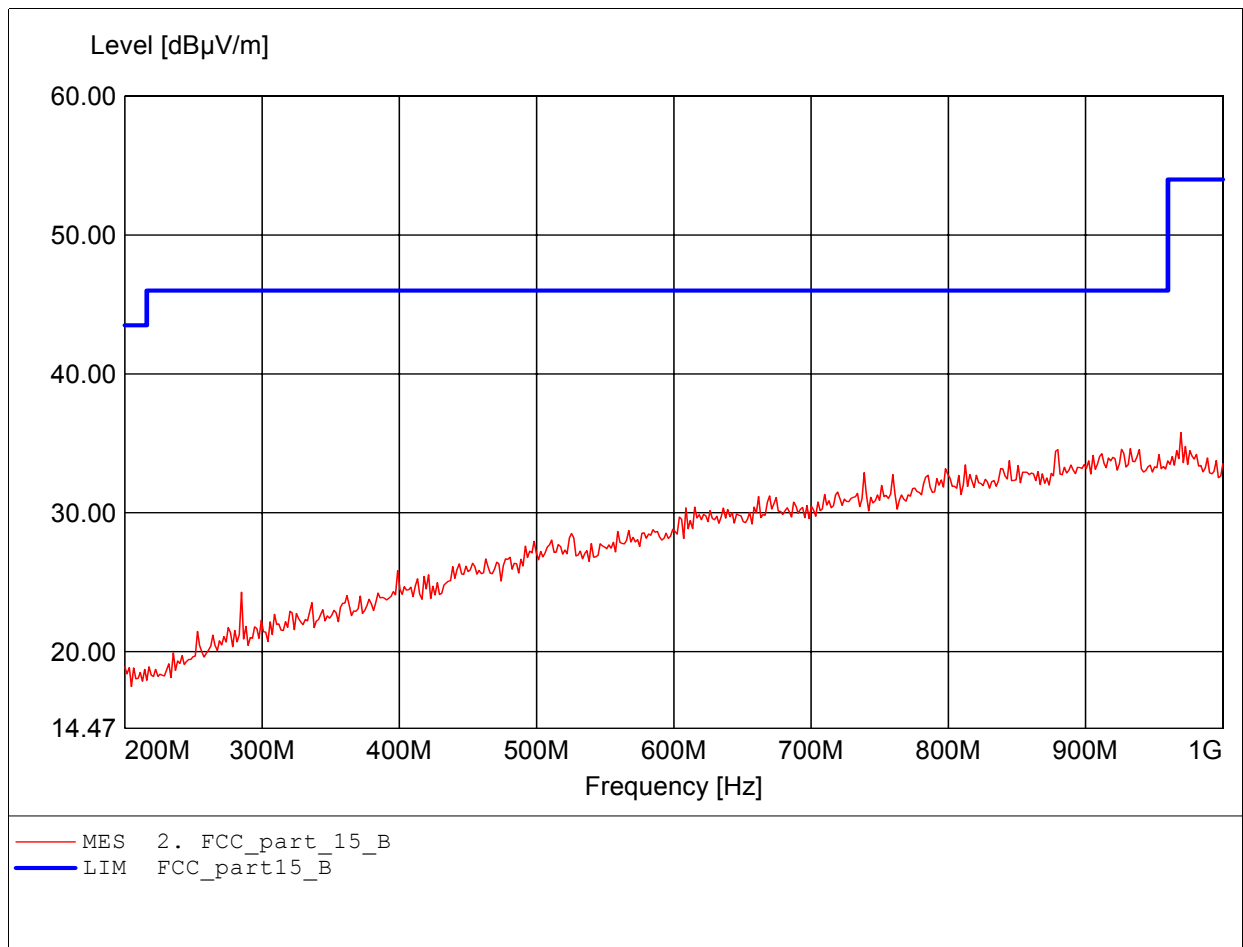
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.  
Freq:977.555MHz Emax:34.00dBμV/m RBW: 100 kHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

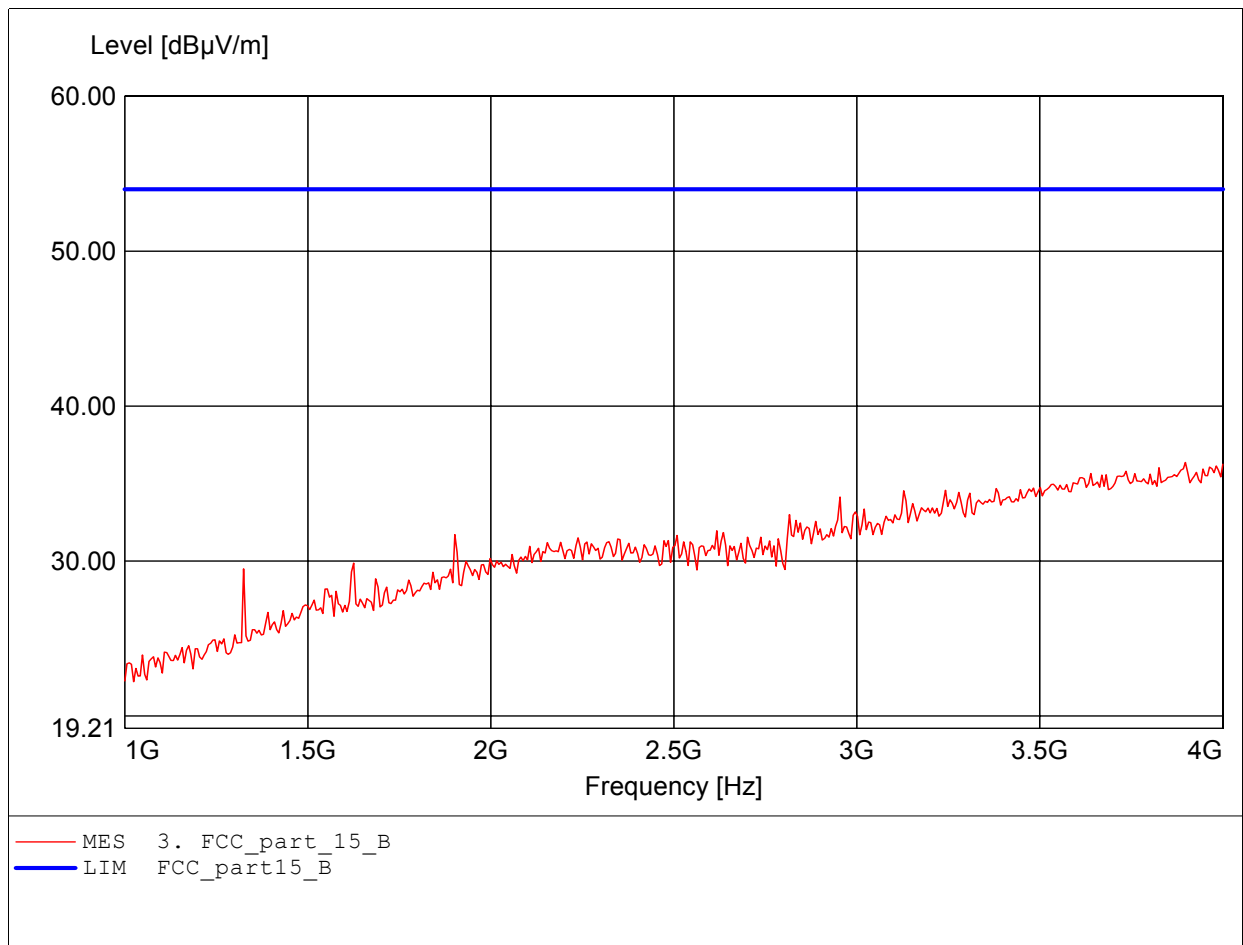
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.  
Freq:969.539MHz Emax:35.78dBμV/m RBW: 100 kHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

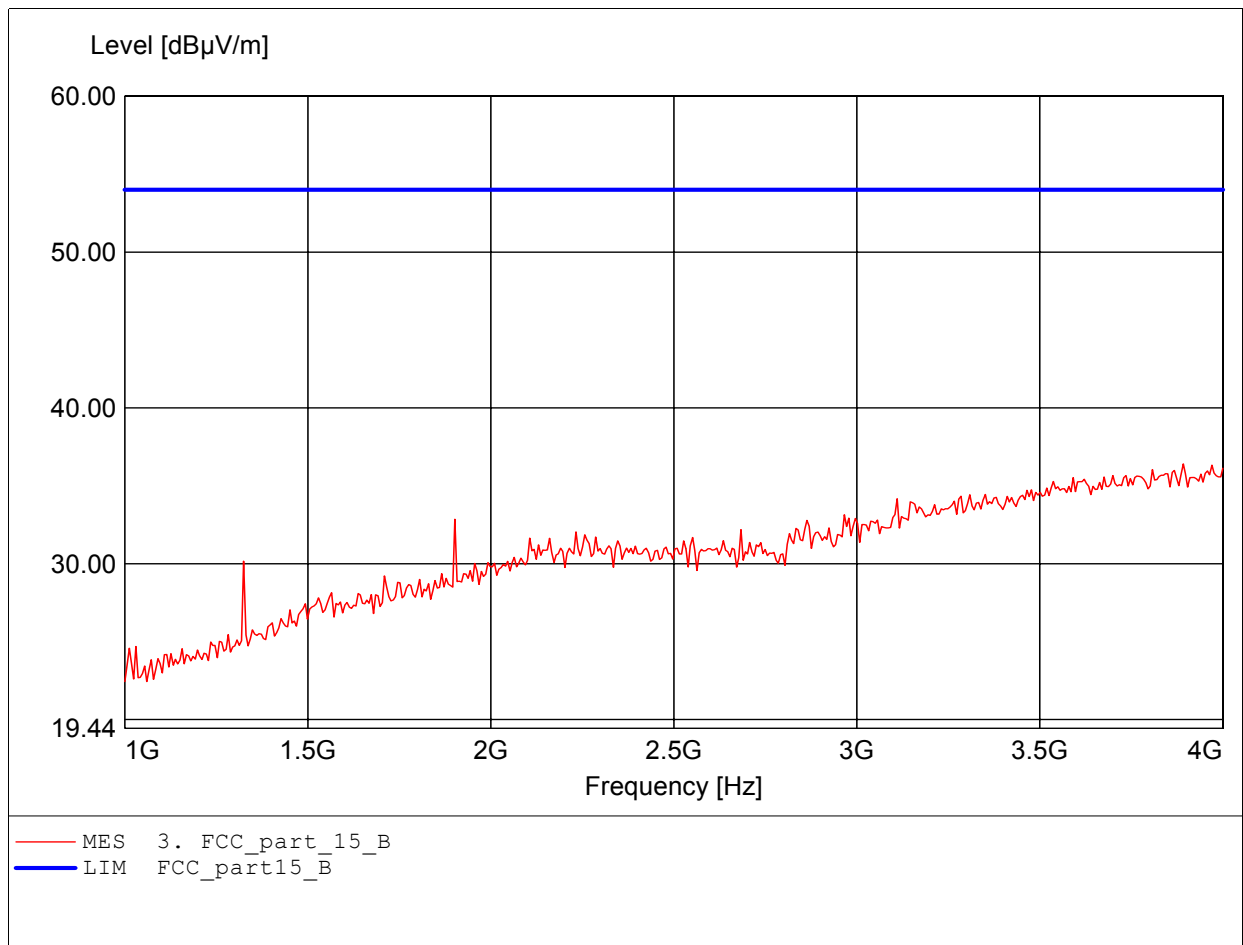
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:3.898GHz Emax:36.37dBμV/m RBW: 1 MHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:3.892GHz Emax:36.40dBμV/m RBW: 1 MHz

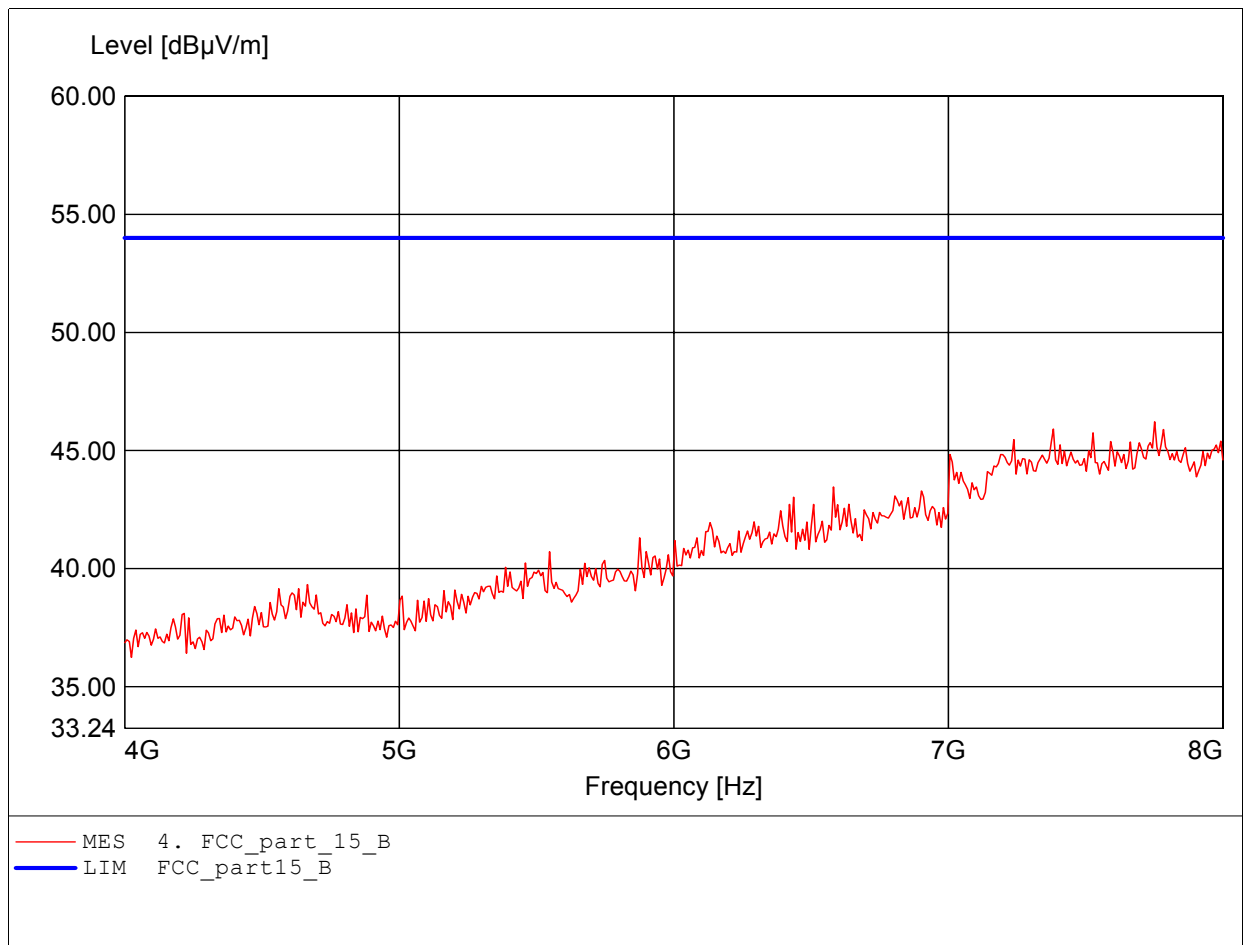




**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

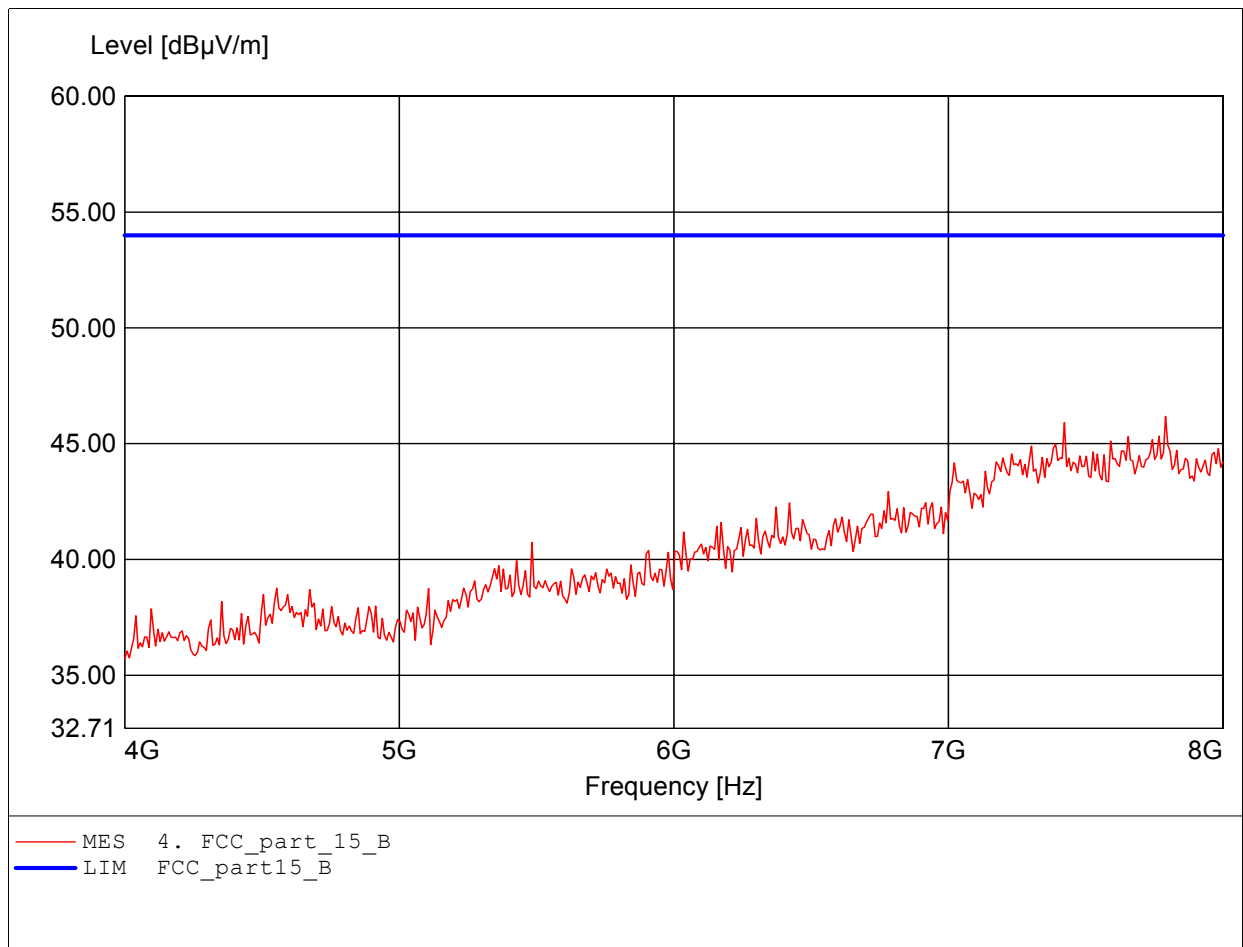
Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:7.752GHz Emax:46.22dBμV/m RBW: 1 MHz



**Field Strength under normal conditions**

**FCC RULES PART 15, SUBPART B**

Order Number : W6M20612-7666  
Test Site / Operator: ETS / Charles  
Temperature:: Temp.: 23.9°C  
according to subpart B  
Comment 1: Dist.: 3m, Ant.: HL25, ampl.  
Freq:7.792GHz Emax:46.18dBμV/m RBW: 1 MHz



Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

## **Appendix D**

Occupied Bandwidth

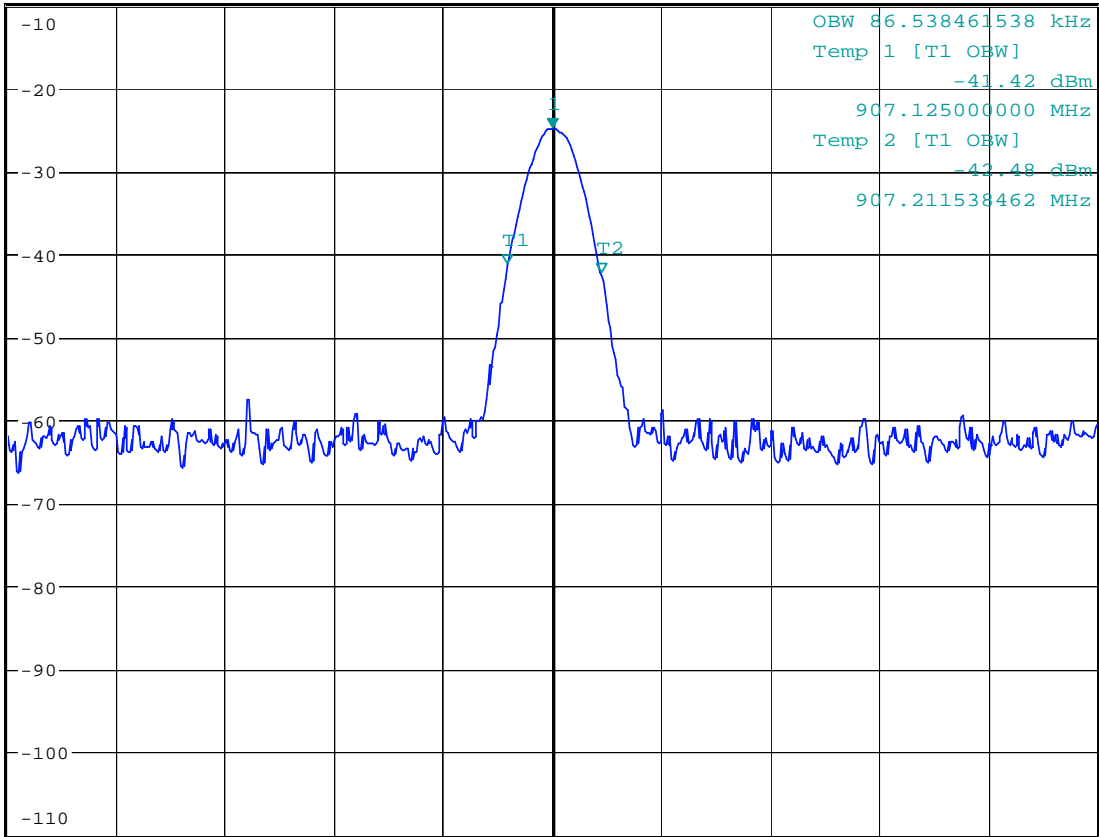


\*RBW 30 kHz      Marker 1 [T1 ]  
\*VBW 30 kHz      -24.92 dBm  
SWT 5 ms      907.16666667 MHz

Ref -10 dBm

Att 5 dB

1 PK  
MAXH



Center 907.1666667 MHz

100 kHz/

Span 1 MHz

Occupied bandwidth

Date: 22.DEC.2006 12:56:18

Registration number: W6M20612-7666-P-15  
FCC ID: ELVATRFD

## **Appendix E**

Pictures