

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: UVXWR101001

Test report no.: W6M20612-7671-C-2

ETS DR.GENZ TAIWAN PS CO., LTD.
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Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

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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 is 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:**

Jan 20, 2007 Jay Chaing

Date ETS-Lab. Name Signature

### Technical responsibility for area of testing:

Jan 20, 2007 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 : Joybien Technologies Co., Ltd.

Street : 18 F. -1 No.700, Zhong Zheng Rd., Zhonghe City,

Town : Taipei County 235

Country : Taiwan

Telephone : 886-2-8227-3098 Fax : 886-2-8227-3809



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### 1.4 Application details

Date of receipt of application : Dec 14, 2006 Date of receipt of test item : Dec 20, 2006

Date of test : from Dec 21, 2006 to Jan 19, 2007

### 1.5 General information of Test item

Type of test item : Internet Radio Model Number : WR101
Brand Name : Joy La Vie Hardware : VER.A1 : 3.5.2.6110

Serial number / Brand name : Flow FL1 / Luunar

ML1054 / Jensen Scandinavia

Photos : see Appendix

**Technical data** 

Frequency band : 2.4 GHz - 2.4835 GHz

Frequency (ch A) : 2.412 GHz Frequency (ch B) : 2.437 GHZ Frequency (ch C) : 2.462 GHz

Number of Channels : 11

Operation modes : duplex

Modulation Type : DSSS / OFDM

Fixed point-to-point operation:  $\square$  Yes  $/ \boxtimes$  No

Type of Antenna : Dipole Antenna

Antenna gain : 2 dBi

Input : 100-240 VAC 1.0A

Power supply

Output : 9VDC 2A

Emission designator : 16M4W7D



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Host device: none

Classification :

Fixed Device	
Mobile Device (Human Body distance > 20cm)	
Portable Device (Human Body distance < 20cm)	

<u>Transmitter</u> <u>Unom</u>

Power (ch A) : Conducted: 5.17 dBm Power (ch B) : Conducted: 6.79 dBm Power (ch C) : Conducted: 6.68 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: August, 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

Input : 100-240 VAC 1.0A

Power supply

Output : 9VDC 2A

Extreme conditions parameters : --



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### 2.3 **Test Equipment List**

No.	Test equipment	Туре	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		Functi	on Test
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Functi	on 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	МОТЕСН	Functi	on Test
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	МОТЕСН	Functi	on 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 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Functi	on 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 Horm 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	2005/10/17	2007/10/16
ETSTW-RE 042	ANTENNA	HK116	100172	R&S	2007/1/13	2009/1/12



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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	Functi	on 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	26900S2	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	2006/12/28	2007/12/27
ETSTW-GSM 18	AUDIO ANALYZER	UPL16	100173	R&S	2006/10/28	2007/10/27
ETSTW-GSM 23	SPLITTER	4901.19.A	None	SUHNER	Functi	on 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 50μH 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  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ (a)3m}$ 

The EUT 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 (dwell time/T)

T = 100ms 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 Dipole Antenna. (see photos)



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# Test results (enclosure)

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

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).

	Tost oor	udition	Conducted Power			
	Test condition $T_{nom} = 23^{\circ}C \qquad V_{nom} = 120 \text{ V}$			Channel B	Channel C	
				[dBm]	[dBm]	
T <sub>non</sub>				6.79	6.68	
	Measurement uncertainty			< 3 dB		

Test condition $T_{nom}=23$ °C, $V_{nom}=120$ V	Signal Field strength TX highest power mode dB $\mu$ V/m
Frequency [MHz]	
2440	104.30
Measurement uncertainty	< 3 dB

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

### Limits:

Frequency	Power
MHz	dBm
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain > 6 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 A.



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### 3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

EIRP = 6.79 dBm + 2 dBi

= 8.79 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 manufactrer 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	Comments
P	mW	4.77529	Peak value
D	dB		
AG	dBi	2	
G		1.6	Calculated Value
R	cm	20	Assumed value
S	mW/cm <sup>2</sup>	0.001520	Calculated value

### Limits:

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



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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 ≤ 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	Field strength	Field Strength		
(MHz)	(microvolts/meter)	(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 (dwell time/ 100ms)

Note: No duty cycle correction was added to the reading of this EUT.

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

 $104.30 \text{ dB} \mu \text{ V/m} - 20 \text{ dB} = 84.3 \text{ dB} \mu \text{ V/m}$ 

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 (dwell time/100ms)

For frequencies above 1GHz (Peak measurements).

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

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Note: No duty cycle correction was added to the reading of EUT.

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	Frequency	Corrected	Correction		Test	Compliance	Margin	Antenna	Table
Polarization	Marker	Reading	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
Foiarization	(MHz)	(dBuv)	(dB)		(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	125.050	25.52	13.67	QP	39.19	43.50	4.31	305	205
Н	249.699	27.06	13.82	QP	40.88	46.00	5.12	105	170
11	400.400	23.90	17.80	QP	41.70	46.00	4.30	130	100
	2375.952	46.47	2.07	PK	48.54	54.00	5.46	215	200

Antenna Polarization	Marker	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	resur	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	74.969	24.70	11.02	QP	35.72	40.00	4.28	120	300
	125.050	25.46	13.76	QP	39.22	43.50	4.28	125	160
V	249.699	27.24	13.82	QP	41.06	46.00	4.94	325	240
	400.400	23.80	17.80	QP	41.60	46.00	4.40	310	175
	2376.352	45.85	2.07	PK	47.92	54.00	6.08	130	270

### **CH 6**

Antenna Polarization	Marker	Corrected Reading (dBuv)	Correction Factor (dB)	Detector		Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	125.050	25.54	13.76	QP	39.30	43.50	4.20	105	275
	149.919	24.47	15.39	QP	39.86	43.50	3.64	135	245
Н	249.699	27.21	13.82	QP	41.03	46.00	4.97	320	100
	400.400	24.47	17.80	QP	42.27	46.00	3.73	120	165
	2376.754	46.35	2.07	PK	48.42	54.00	5.58	205	305



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Antenna Polarization	Marker	Corrected Reading	Correction Factor	Detector	Test Result	Compliance Limit	Margin (dB)	Antenna Height	Table Azimuth
	(MHz)	(dBuv)	(dB)	ĺ	(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	74.969	24.67	11.02	QP	35.69	40.00	4.31	110	215
V	149.919	23.96	15.39	QP	39.35	43.50	4.15	315	205
V	400.400	24.41	17.80	QP	42.21	46.00	3.79	325	140
	2375.952	45.53	2.07	PK	47.60	54.00	6.40	120	275

### **CH 11**

Antenna	Frequency	Corrected	Correction		Test	Compliance	Margin	Antenna	Table
Polarization	Marker	Reading	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
Foiarization	(MHz)	(dBuv)	(dB)		(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	125.050	25.54	13.76	QP	39.30	43.50	4.20	310	115
Н	249.699	28.38	13.82	QP	42.20	46.00	3.80	110	325
11	400.400	24.78	17.8	QP	42.58	46.00	3.42	120	110
	2483.500	48.96	-1.11	PK	47.85	54.00	6.15	120	320

Antenna Polarization	Marker	Corrected Reading	Correction Factor	Detector	Test Result	Compliance Limit	Margin (dB)	Antenna Height	Table Azimuth
1 Olalization	(MHz)	(dBuv)	(dB)		(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	74.919	24.49	11.02	QP	35.51	40.00	4.49	140	295
V	149.919	23.94	15.39	QP	39.33	43.50	4.17	110	140
v	249.699	25.06	13.82	QP	38.88	43.50	4.62	335	220
	2484.535	49.72	-1.15	PK	48.57	54.00	5.43	110	170

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.

Freq. – Frequency Range:

1: 30 200 MHz 2: 200 1000 MHz 4 GHz 3: 4: 4 8 GHz 5: 12 GHz 8 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 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 c	onditions		6 dB Bandwidth					
			Channel A Channel B Chan		Channel C			
$T_{nom} = 23^{\circ}C$	$V_{nom} =$	120 V	16.442307692 MHz	15.288461538 MHz	15.224358974 MHz			
	Measuren	nent unc	ertainty	< 1	0 Hz			

### **Limits:**

Frequency Range 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.



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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 A	Channel C				
		[dBm]	[dBm] [dBm]				
$T_{nom} = 23$ °C	$V_{nom} = 120 \text{ V}$	-19.26	-14.60	-15.21			
Measuremen	t uncertainty	< 3 Hz					

### **Limits:**

Frequency Range 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.



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# 3.8 Radiated Emission from Digital Part And Receiver L.O.

FCC Rule: 15.109

Summary table with radiated data of the test plots

RX CH 1

Antonno	Frequency	Corrected	Correction		Test	Compliance	Monoin	Antenna	Table
Antenna Polarization	Marker	Reading	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
Polarization	(MHz)	(dBuv)	(dB)		(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	200.000	27.15	12.14	QP	39.29	43.50	4.21	325	210
Н	299.399	25.51	15.24	QP	40.75	46.00	5.25	110	250
	3050.214	47.92	-0.15	PK	47.77	54.00	6.23	115	140

Antenna Polarization	Frequency	Corrected	Correction		Test	Compliance	Morain	Antenna	Table
	Marker	Reading	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
	(MHz)	(dBuv)	(dB)	ı	(dBuV/m)	(dBuV/m)	(ub)	(cm)	(degree)
	175.130	25.64	14.48	PK	40.12	43.50	3.38	120	170
V	275.351	26.48	14.66	PK	41.14	46.00	4.86	310	185
	3808.348	45.98	2.18	PK	48.16	54.00	5.84	115	170

### **CH 6**

Antenna Polarization	Marker	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Result	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	200.000	27.36	12.14	QP	39.50	43.50	4.00	315	275
Н	275.351	26.55	14.66	QP	41.21	46.00	4.79	120	120
	3008.251	48.92	-0.21	PK	48.71	54.00	5.29	115	310

Antenna	Frequency Marker	Corrected Reading	Correction Factor	Detector	Test Result	Compliance Limit	Margin	Antenna Height	Table Azimuth
Polarization	(MHz)	(dBuv)	(dB)		TCSuit	(dBuV/m)	(dB)	(cm)	(degree)
<del> </del>	175.130	24.70	14.48	PK	39.18	43.50	4.32	115	300
	275.351	27.21	14.66	PK	41.87	46.00	4.13	315	150
	3994.392	45.33	3.40	PK	48.73	54.00	5.27	120	105

### **CH 11**

Antenna Polarization	Marker	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Result	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	200.000	27.20	12.14	QP	39.34	43.50	4.16	325	115
Н	275.351	27.37	14.66	QP	42.03	46.00	3.97	110	240
Ţ	3723.370	46.93	1.49	PK	48.42	54.00	5.58	120	260



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Antenna Polarization	Marker	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	ixesuit	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	175.130	24.77	14.48	PK	39.25	43.50	4.25	125	105
	275.351	26.92	14.66	PK	41.58	46.00	4.42	310	170
	3681.625	47.70	1.23	PK	48.93	54.00	5.07	125	295

Digital\_LAN mode

Antenna Polarizati	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	2000001		1	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	74.970	17.17	10.29	PK	27.46	30.00	2.54	320	225
Н	149.919	12.12	14.66	PK	26.78	30.00	3.22	310	140
	575.150	11.90	21.81	QP	33.71	37.00	3.29	115	110

]	Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Result	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
		149.919	10.65	14.66	QP	25.31	30.00	4.69	125	300
	V	175.130	12.33	13.75	QP	26.08	30.00	3.92	110	180
		424.448	14.51	18.50	QP	33.01	37.00	3.99	315	170

Digital\_Wireless mode

Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Result	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	125.050	12.43	13.03	QP	25.46	30.00	4.54	325	205
Н	200.000	14.59	11.56	QP	26.15	30.00	3.85	315	110
	450.100	13.37	19.14	QP	32.51	37.00	4.49	110	120

Antenna Polarization	Frequency Marker (MHz)	Corrected Reading (dBuv)	Correction Factor (dB)	Detector	Result	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	175.130	11.76	13.75	QP	25.51	30.00	4.49	120	310
V	200.000	14.81	11.56	QP	26.37	30.00	3.63	125	180
	299.399	18.91	15.12	PK	34.03	37.00	2.97	310	175

**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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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	Field Strength	Field Strength
(MHz)	(microvolts/meter)	(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: see attached diagrams in Appendix F.



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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.

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

### LAN mode

LISN type	Frequency Marker	Corre Read (dB	ding	Correction Factor	ctor (dBuV		Compliance Limit (dBuV)		(dB	
	MHz	QP	AV	dB	QP	AV	QP	AV	QP	AV
	0.310	30.09	24.41	10.10	40.19	34.51	59.97	49.97	19.78	15.46
N	4.245	27.35	17.20	10.10	37.45	27.30	56.00	46.00	18.55	18.70
	18.245	32.95	25.48	10.10	43.05	35.58	60.00	50.00	16.95	14.42
	23.130	33.51	28.89	10.10	43.61	38.99	60.00	50.00	16.39	11.01

LISN type	Frequency Marker	Corre Read (dB	ding	Correction Factor	Test Result (dBuV)		Compliance Limit (dBuV)		Margin (dB)	
	MHz	QP	AV	dB	QP	AV	QP	AV	QP	AV
T 1	0.310	29.69	22.43	10.10	39.79	32.53	59.97	49.97	20.18	17.44
L1	4.140	30.09	20.62	10.10	40.19	30.72	56.00	46.00	15.81	15.28
	18.245	34.49	25.81	10.10	44.59	35.91	60.00	50.00	15.41	14.09



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### Wireless mode

LISN type	Frequency Marker	Corrected Reading (dBuV)		Correction Factor		Result uV)	11		Margin (dB)	
	MHz	QP	AV	dB	QP	AV	QP	AV	QP	AV
	0.170	36.70	22.13	10.10	46.80	32.23	64.96	54.96	18.16	22.73
N	4.035	23.31	14.04	10.10	33.41	24.14	56.00	46.00	22.59	21.86
	29.490	28.26	22.02	10.10	38.36	32.12	60.00	50.00	21.64	17.88

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
	0.155	37.68	18.83	10.10	47.78	28.93	65.72	55.72	17.94	26.79
	4.260	30.16	18.29	10.10	40.26	28.39	56.00	46.00	15.74	17.61
	19.710	34.42	28.02	10.10	44.52	38.12	60.00	50.00	15.48	11.88

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

### **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

Comment: see attached diagrams in Appendix G



Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

# **Appendix**

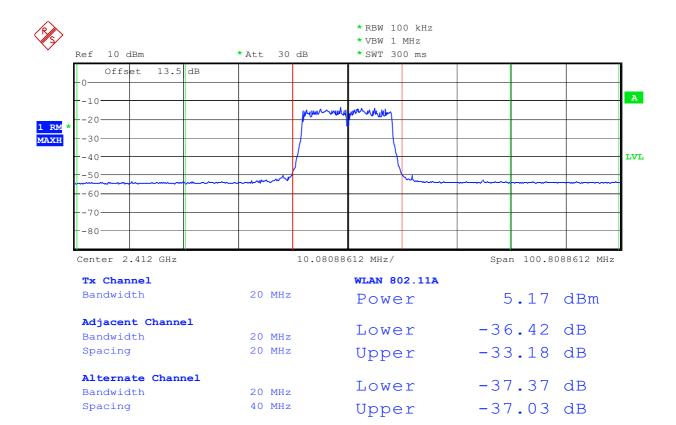
A	Peak Output Power
В	Spurious Emissions radiated
C	Band Edge Measurement
D	Minimum 6dB Bandwidth
E	Peak Power Spectral Density
F	Radiated Emissions from Receiver Section of Transceiver
G	Power Line Conducted Emission



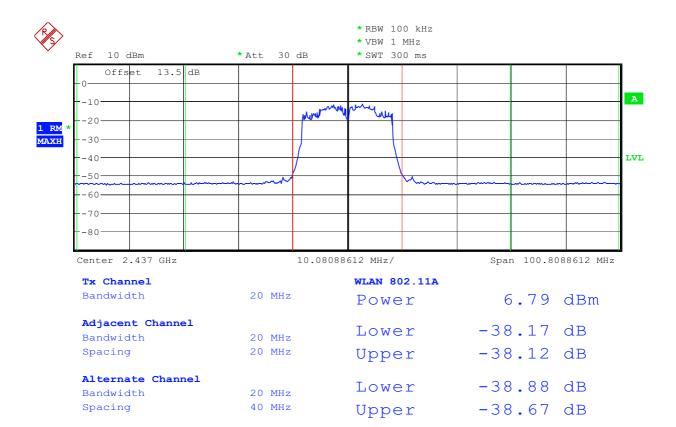
Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

# Appendix A

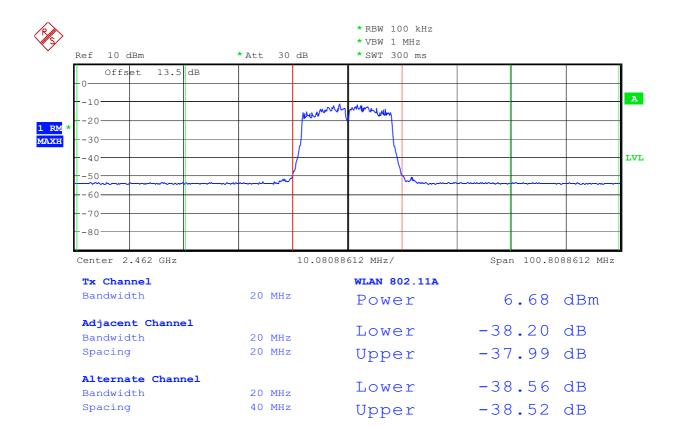
Peak Output Power



OUTPUT POWER 802.11g CH1
Date: 12.JAN.2007 08:59:48



OUTPUT POWER 802.11g CH6
Date: 12.JAN.2007 09:03:46



OUTPUT POWER 802.11g CH11
Date: 12.JAN.2007 09:05:57

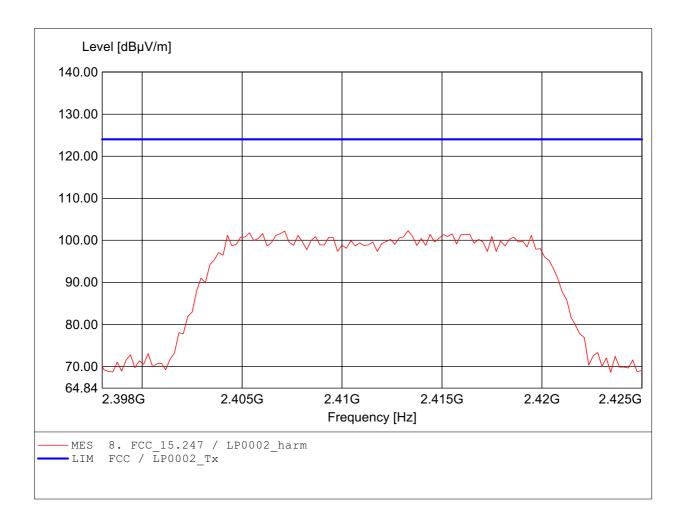
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to §15.247 Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.413GHz, Emax: 102.30dBµV/m, RBW: 1MHz



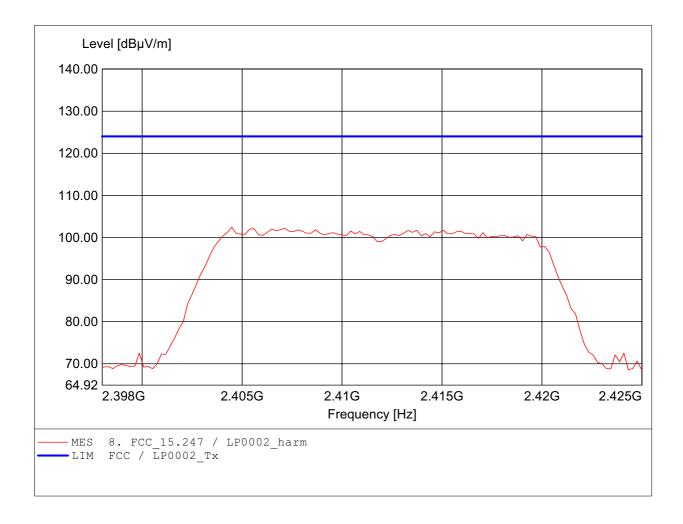
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247 Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.404GHz, Emax: 102.44dBµV/m, RBW: 1MHz



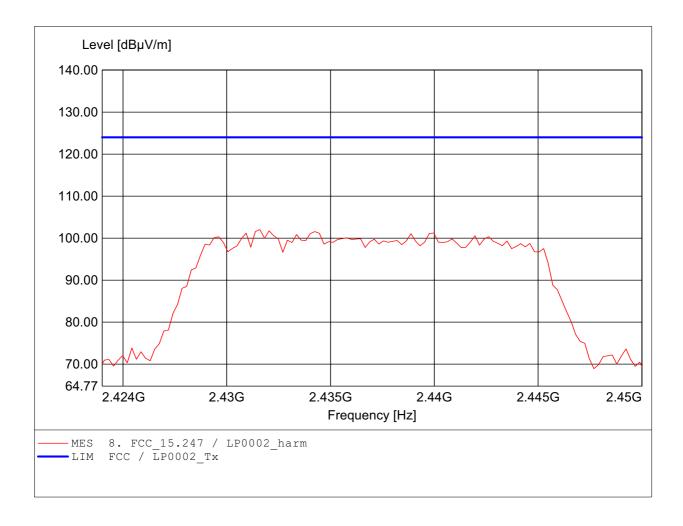
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247
Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.432GHz, Emax: 102.02dBµV/m, RBW: 1MHz



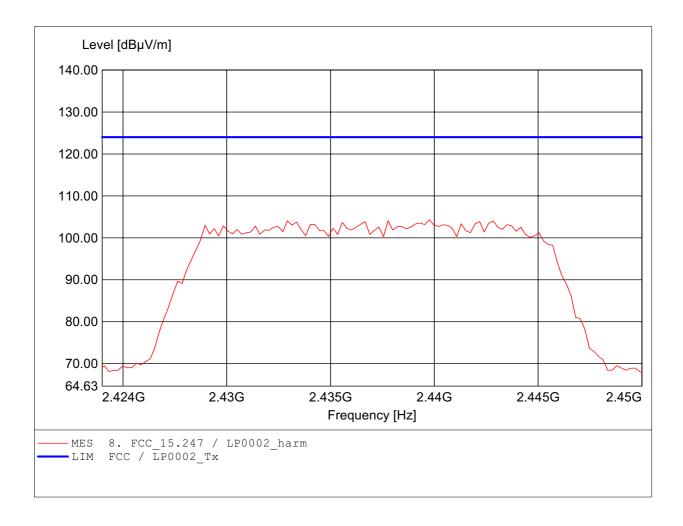
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to §15.247 Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.440GHz, Emax: 104.30dBµV/m, RBW: 1MHz



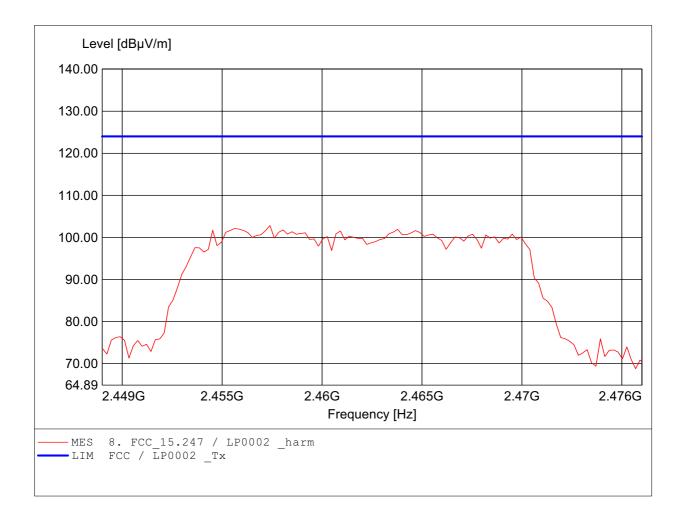
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247 Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.457GHz, Emax: 102.82dBµV/m, RBW: 1MHz



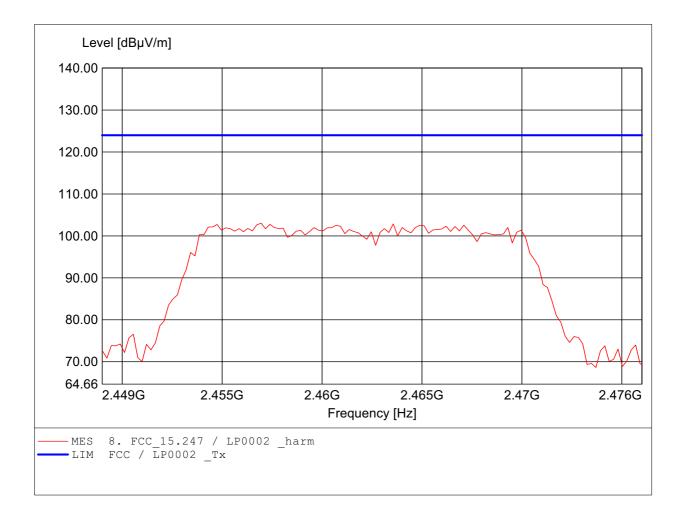
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247 Comment 1: Dist.: 3m, Ant.: HL025

Dist.: 3m, Ant.: HL025 Freq: 2.457GHz, Emax: 103.04dBµV/m, RBW: 1MHz



# ETS DR.GENZ TAIWAN PS CO., LTD.



Registration number: W6M20612-7671-C-2

FCC ID: UVXWR101001

## 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

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

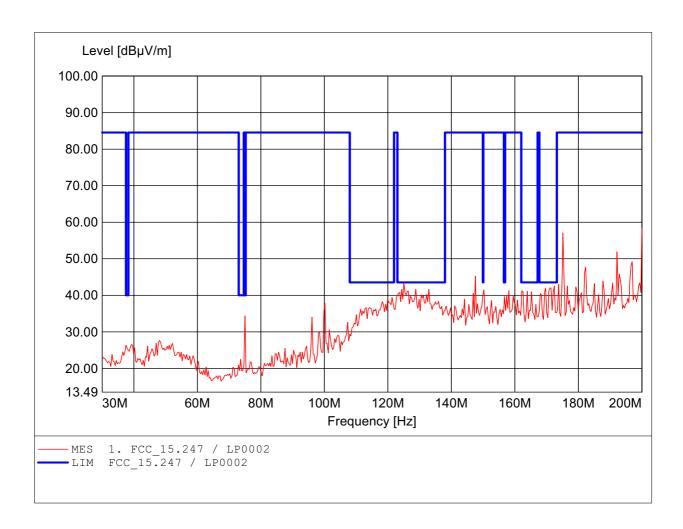
Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247

Comment 1: Dist.: 3m, Ant.: HK 110

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 58.38dBμV/m, RBW: 100kHz



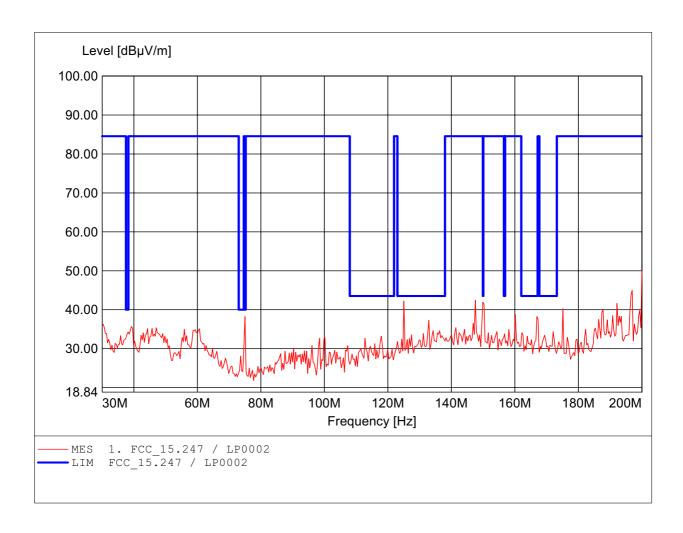
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247 Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 49.96dBµV/m, RBW: 100kHz



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

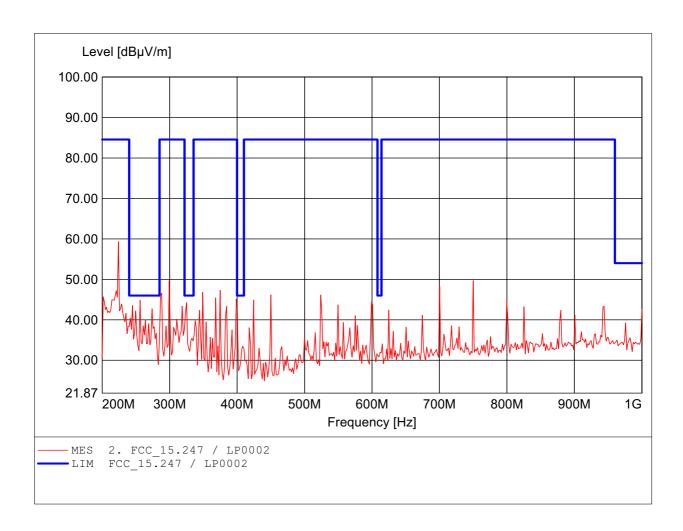
Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 224.048MHz, Emax: 59.29dBµV/m, RBW: 100kHz



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

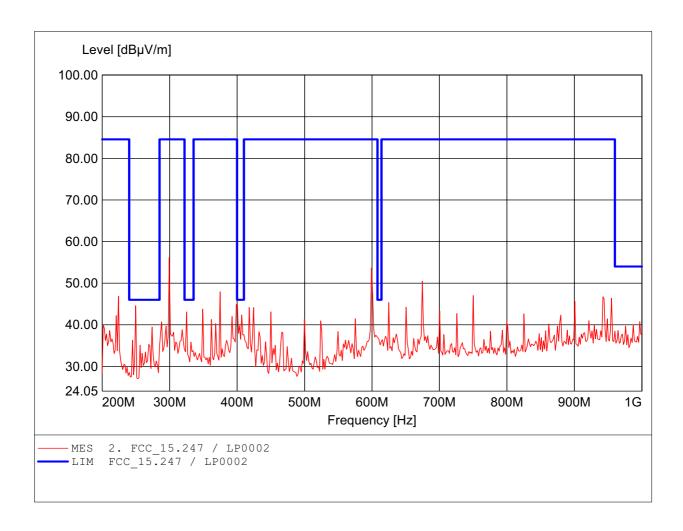
Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 299.399MHz, Emax: 56.11dBµV/m, RBW: 100kHz



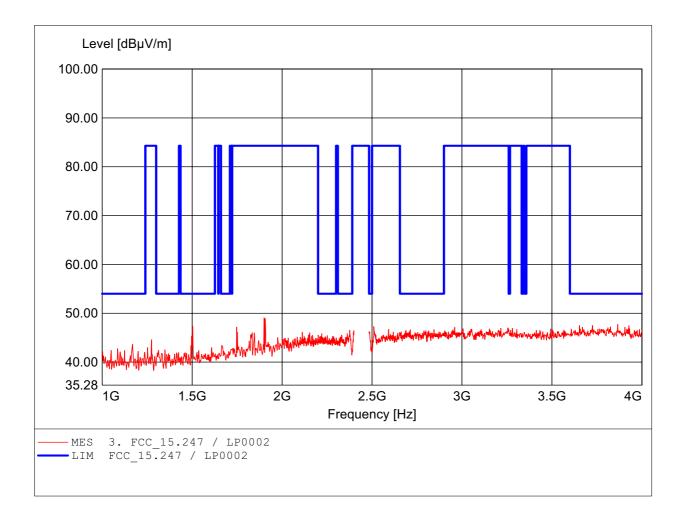
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 1.900GHz, Emax: 49.06dBµV/m, RBW: 1MHz



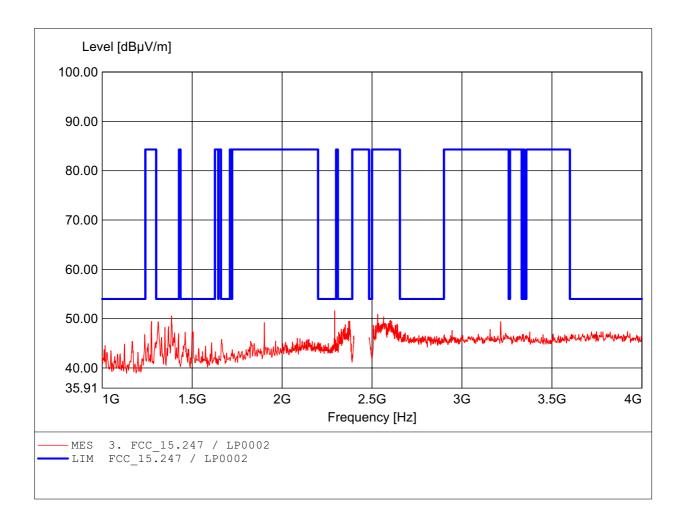
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 2.293GHz, Emax: 51.17dBμV/m, RBW: 1MHz



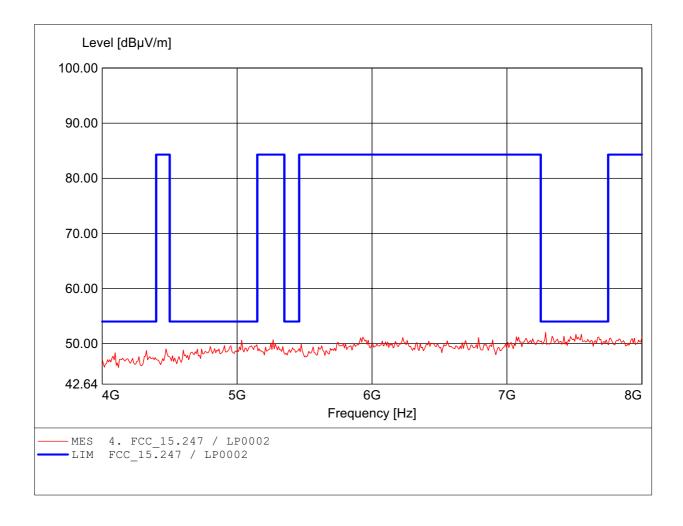
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 7.287GHz, Emax: 52.02dBμV/m, RBW: 1MHz

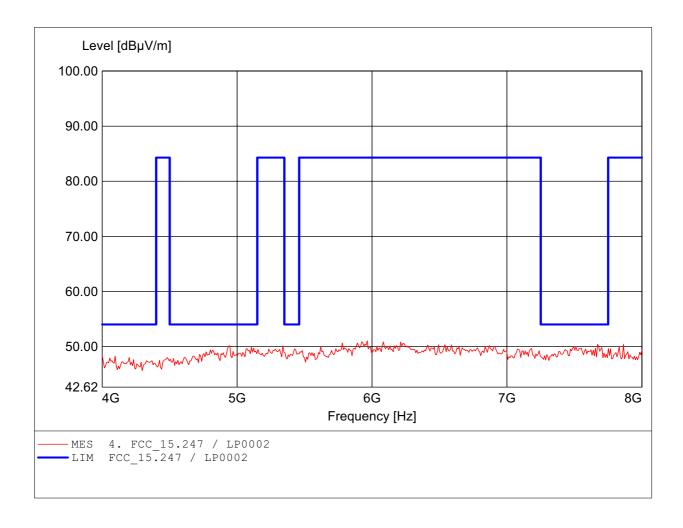


### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to §15.247, peak detector Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 5.964GHz, Emax: 51.03dBµV/m, RBW: 1MHz Comment 1:



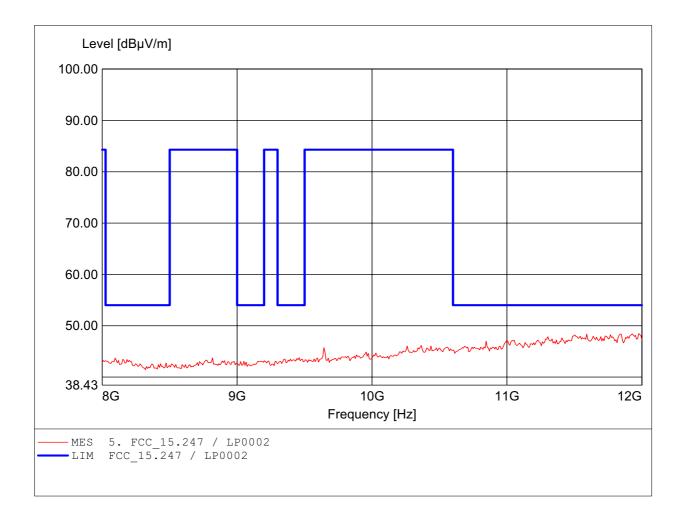
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.976GHz, Emax: 48.47dBµV/m, RBW: 1MHz



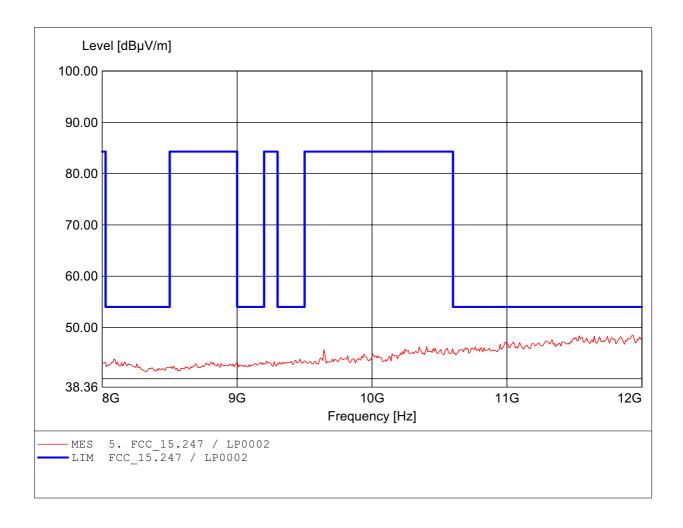
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.928GHz, Emax: 48.49dBµV/m, RBW: 1MHz



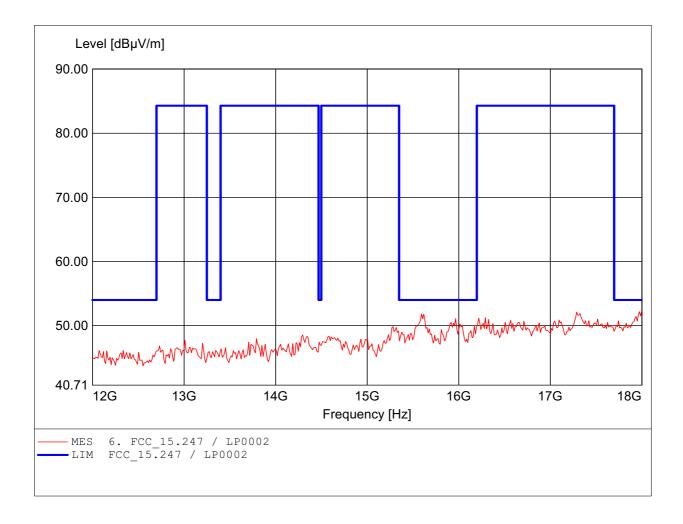
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 18.000GHz, Emax: 52.25dBµV/m, RBW: 1MHz



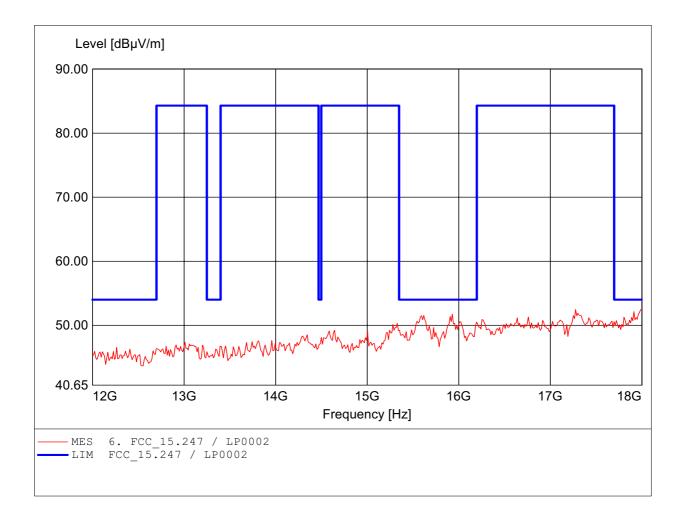
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 18.000GHz, Emax: 52.48dBµV/m, RBW: 1MHz



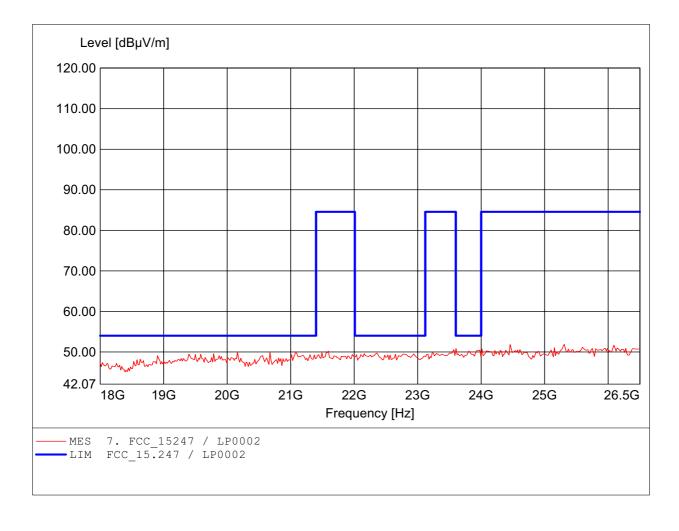
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature:: Temp.: 23.9°C

according to \$15.247, peak detector

Comment 1: Dist.: 3m, Ant.: HL025, amplif. Freq: 25.308GHz, Emax: 51.90dBµV/m, RBW: 1MHz



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

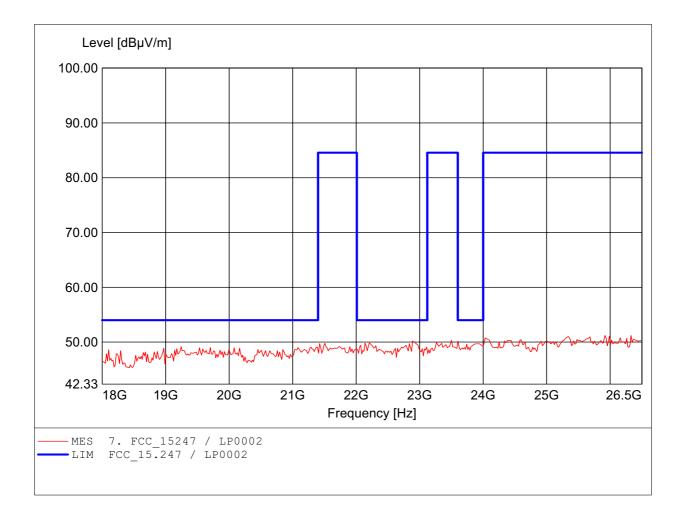
Order Number : W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to \$15.247, peak detector

Comment 1:

Dist.: 3m, Ant.: HL025, amplif. Freq: 25.921GHz, Emax: 51.21dBµV/m, RBW: 1MHz



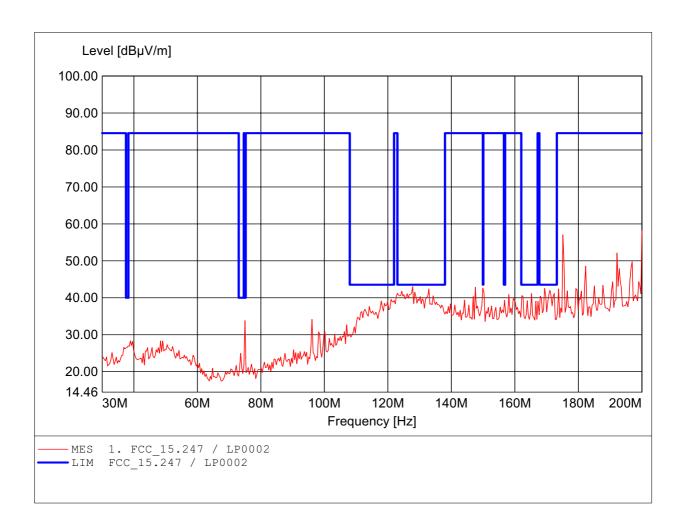
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to §15.247 Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 58.20dBμV/m, RBW: 100kHz



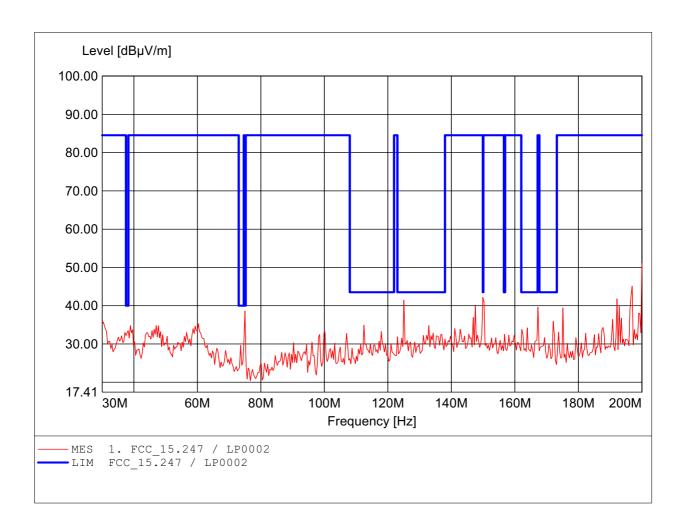
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247
Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 51.08dBμV/m, RBW: 100kHz



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

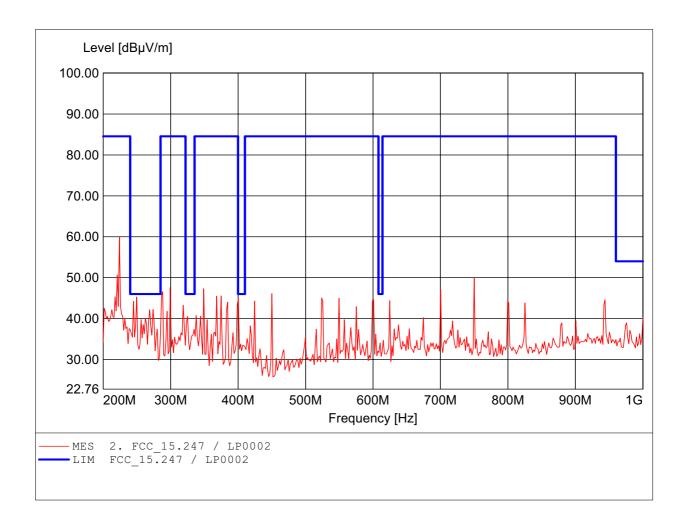
Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 224.048MHz, Emax: 59.93dBµV/m, RBW: 100kHz



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

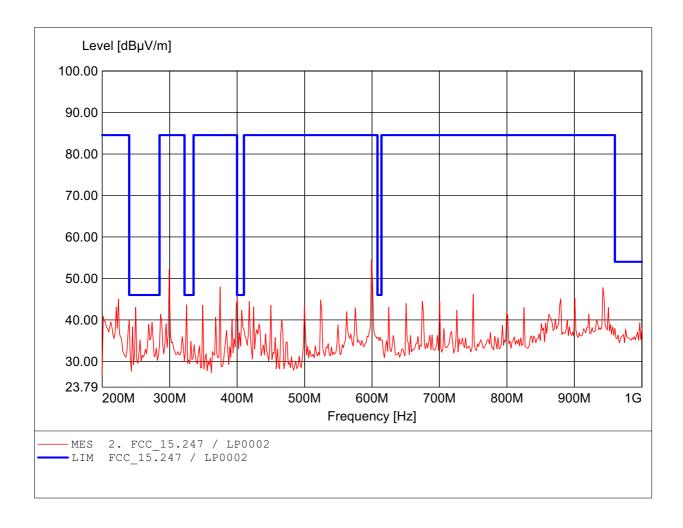
Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 599.198MHz, Emax: 54.53dBµV/m, RBW: 100kHz



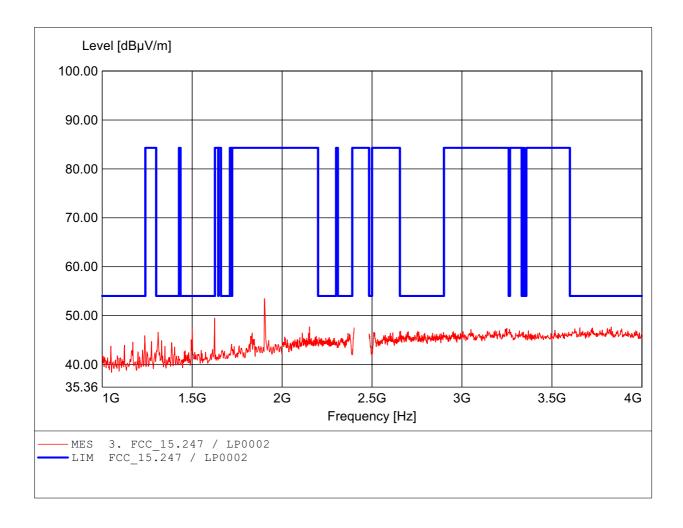
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 1.902GHz, Emax: 53.48dBµV/m, RBW: 1MHz



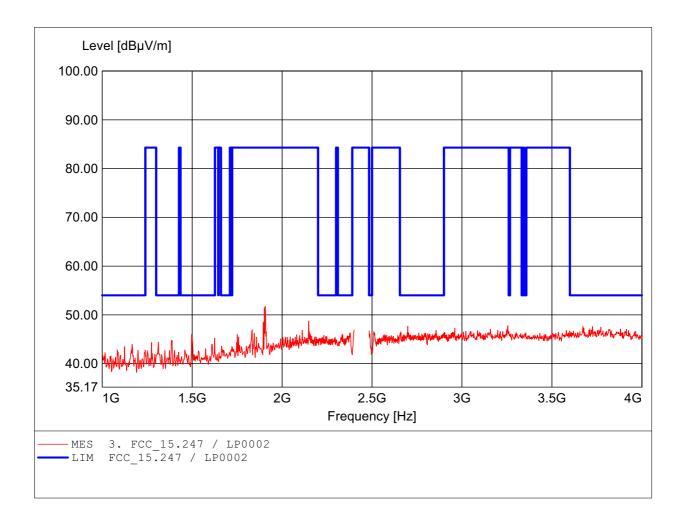
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 02.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 1.906GHz, Emax: 51.74dBµV/m, RBW: 1MHz



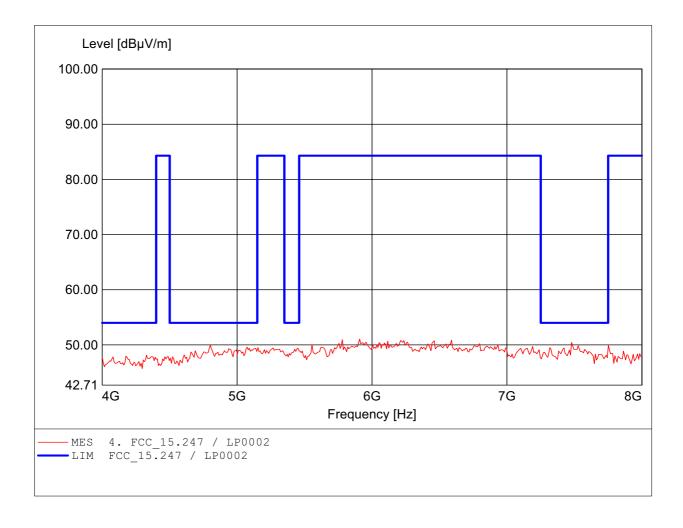
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 5.908GHz, Emax: 51.08dBμV/m, RBW: 1MHz



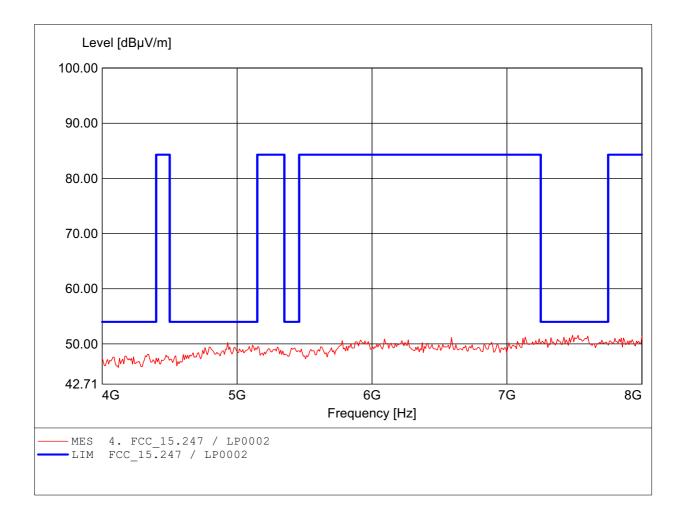
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 02.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 7.527GHz, Emax: 51.57dBμV/m, RBW: 1MHz



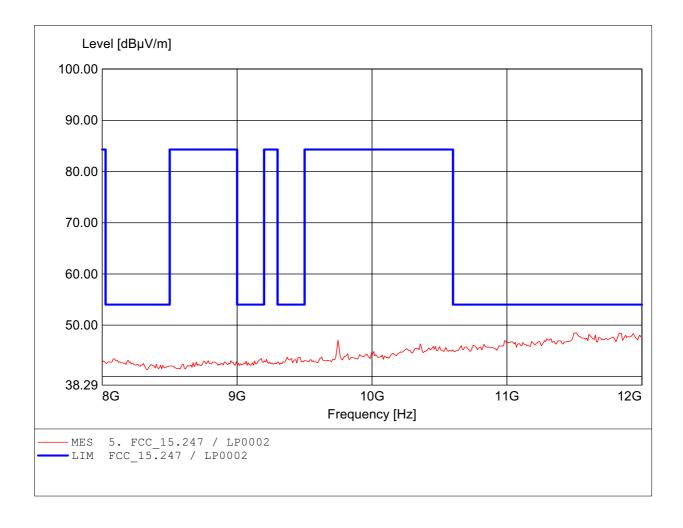
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.511GHz, Emax: 48.55dBµV/m, RBW: 1MHz



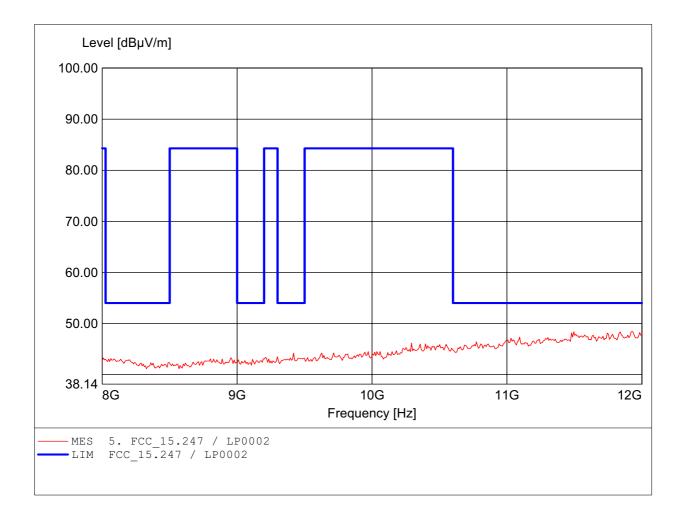
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.928GHz, Emax: 48.47dBµV/m, RBW: 1MHz



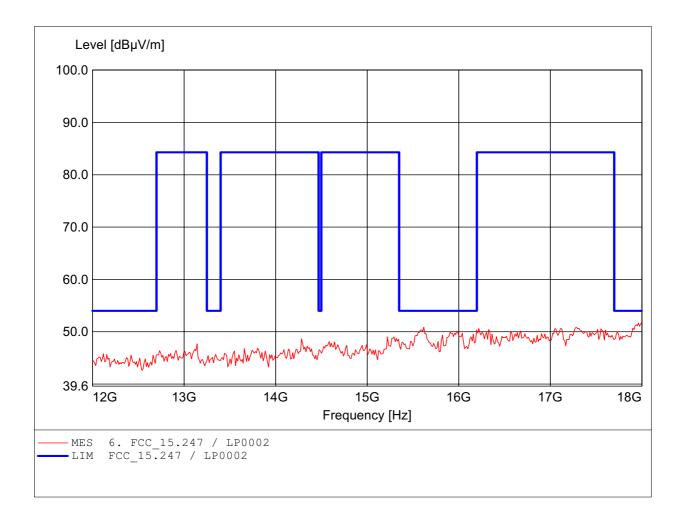
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 18.000GHz, Emax: 51.83dBµV/m, RBW: 1MHz



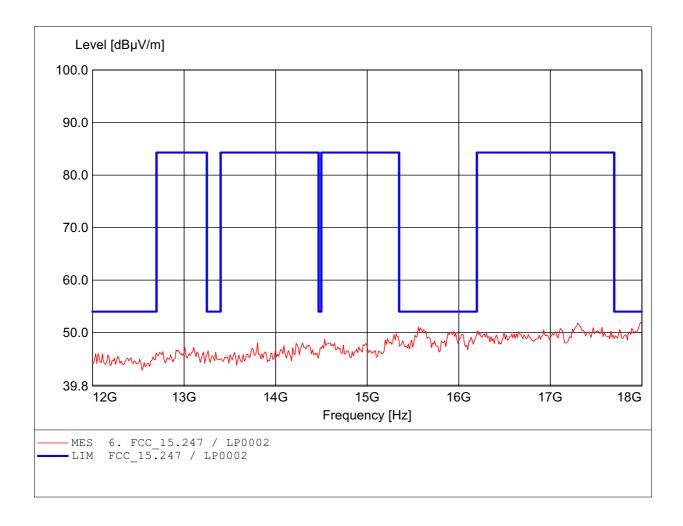
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 17.988GHz, Emax: 51.96dBµV/m, RBW: 1MHz



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

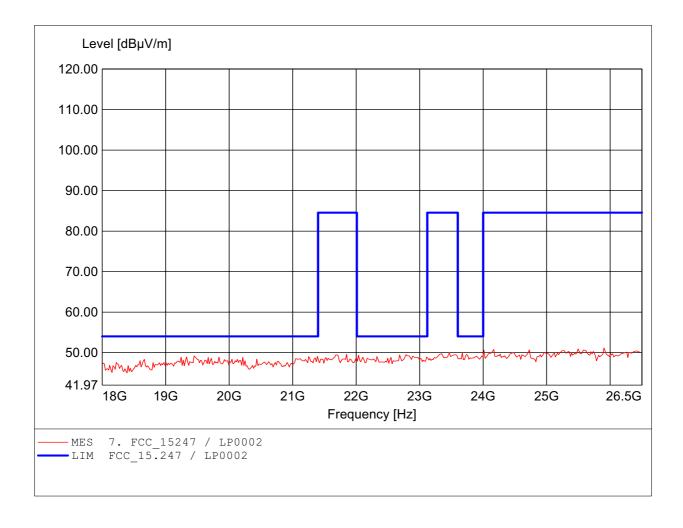
W6M20612-7671 Order Number : 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to \$15.247, peak detector

Comment 1:

Dist.: 3m, Ant.: HL025, amplif. Freq: 25.904GHz, Emax: 51.14dBµV/m, RBW: 1MHz



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

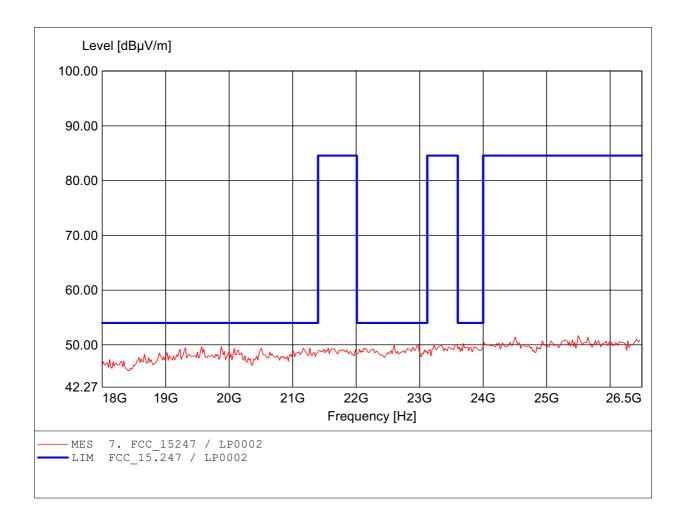
Order Number : W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to \$15.247, peak detector

Comment 1:

Dist.: 3m, Ant.: HL025, amplif. Freq: 25.495GHz, Emax: 51.69dBµV/m, RBW: 1MHz



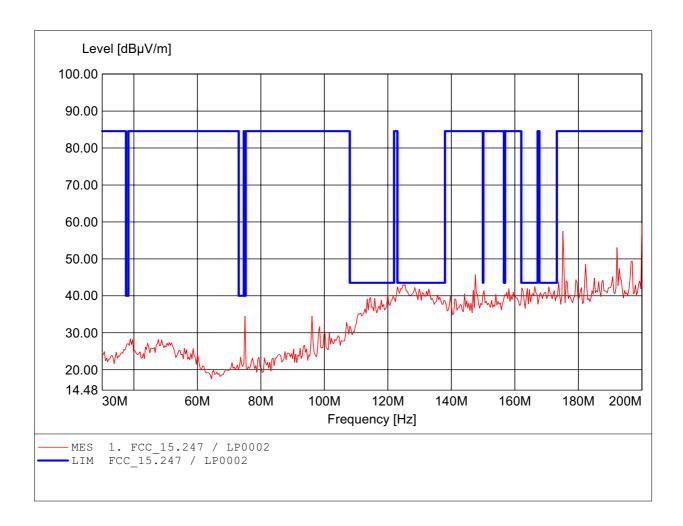
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HK 11

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 59.46dBμV/m, RBW: 100kHz



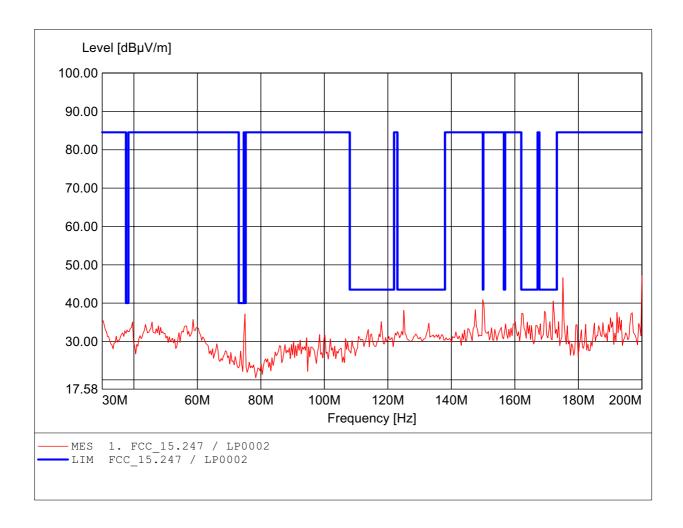
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247 Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq: 200.000MHz, Emax: 47.23dBμV/m, RBW: 100kHz



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

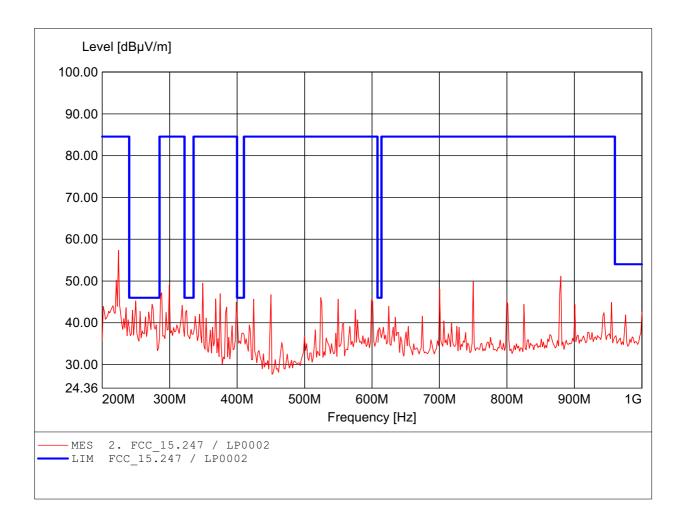
Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 224.048MHz, Emax: 58.90dBµV/m, RBW: 100kHz



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

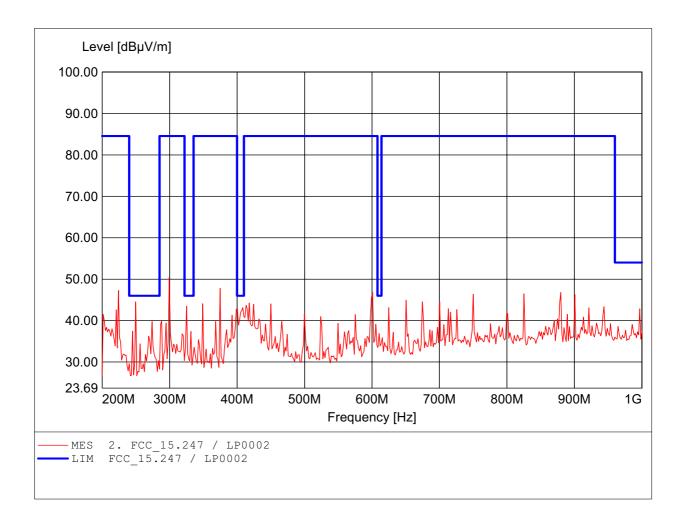
Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to \$15.247

Comment 1:

Dist.: 3m, Ant.: HL 223, amplif. Freq: 299.399MHz, Emax: 50.42dBµV/m, RBW: 100kHz



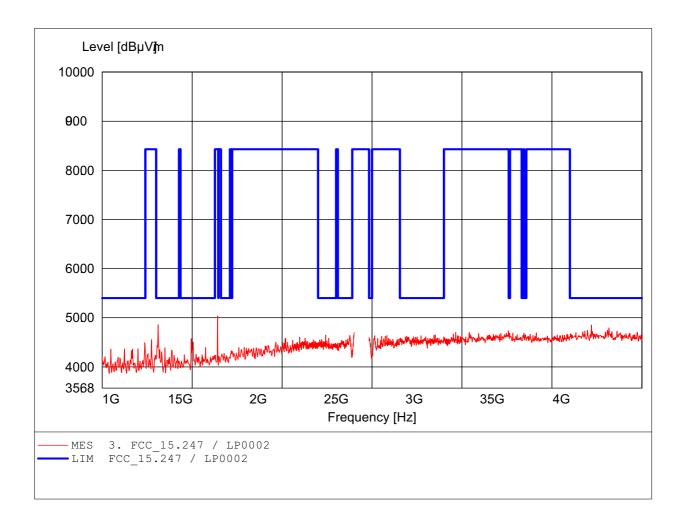
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 02 .11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 1.641GHz, Emax: 50.37dBμV/m, RBW: 1MHz



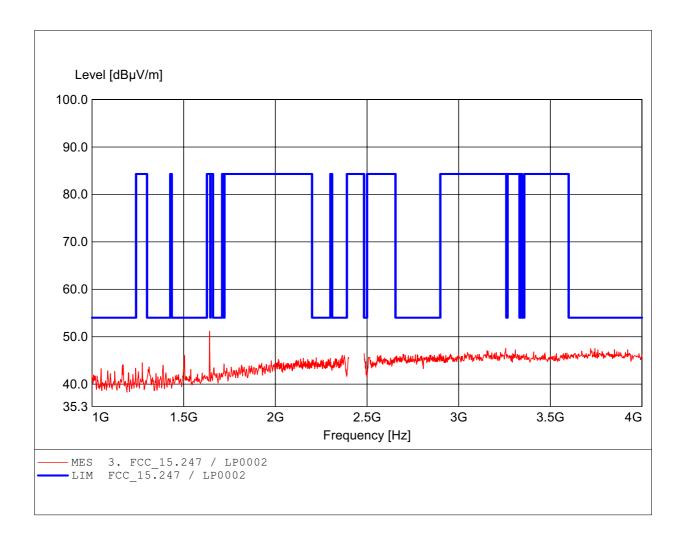
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, amplif.

Dist.: 3m, Ant.: HL025, amplif. Freq: 1.641GHz, Emax: 51.15dBµV/m, RBW: 1MHz

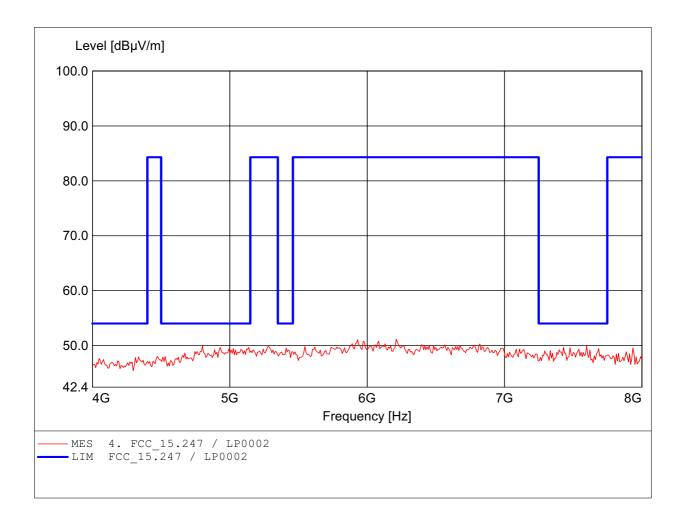


### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 **θ**2 .11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to §15.247, peak detector Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 6.212GHz, Emax: 51.14dBµV/m, RBW: 1MHz Comment 1:

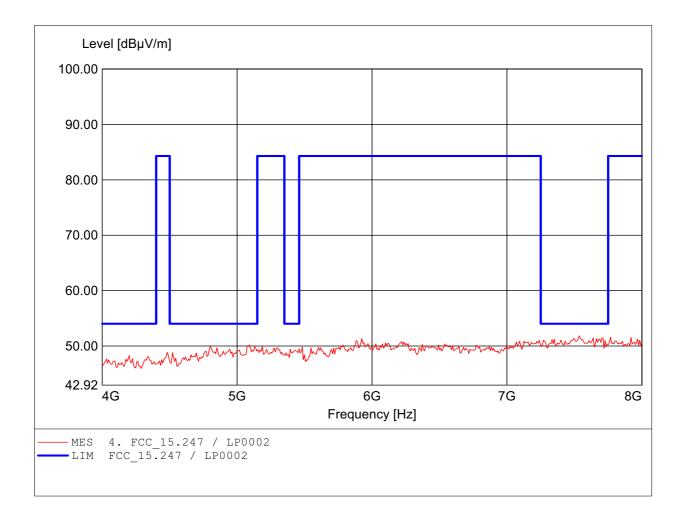


### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to §15.247, peak detector Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 7.535GHz, Emax: 51.83dBμV/m, RBW: 1MHz Comment 1:



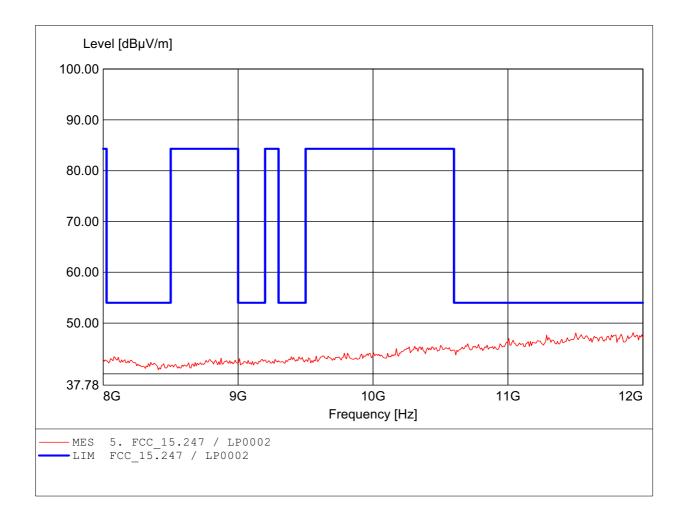
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.928GHz, Emax: 48.13dBµV/m, RBW: 1MHz



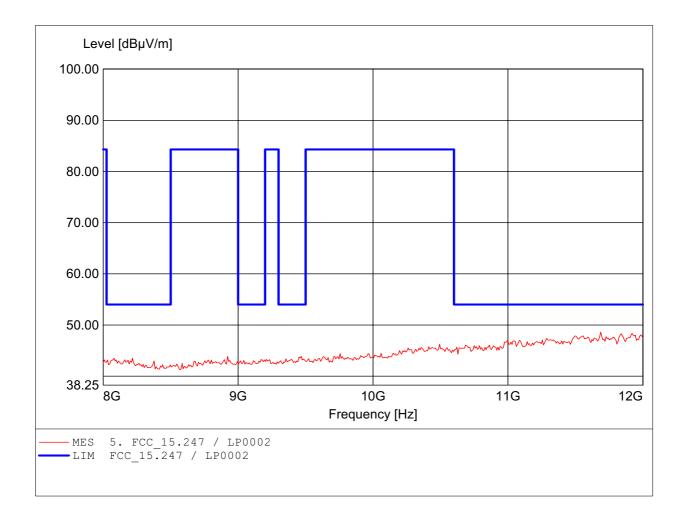
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 11.687GHz, Emax: 48.60dBµV/m, RBW: 1MHz



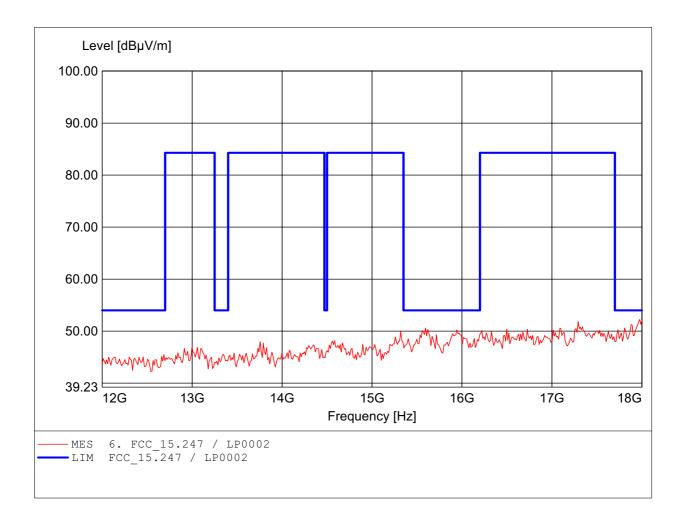
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 82 .11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 17.976GHz, Emax: 52.24dBµV/m, RBW: 1MHz



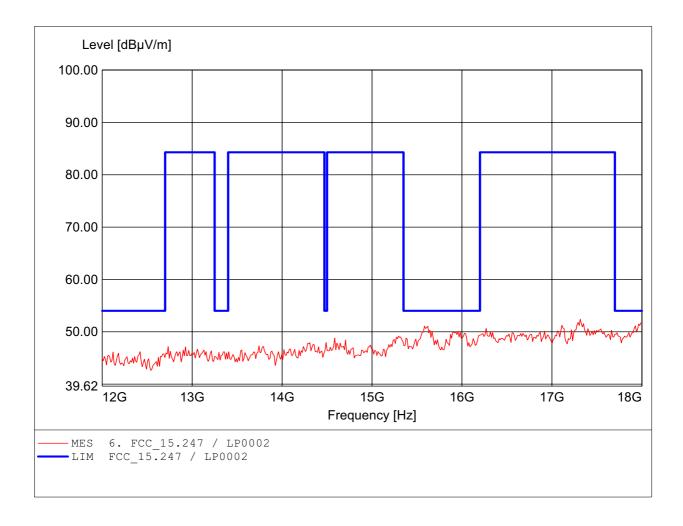
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to \$15.247, peak detector Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.

Dist.: 3m, Ant.: HL025, ampl.+HP. Freq: 17.315GHz, Emax: 52.38dBµV/m, RBW: 1MHz



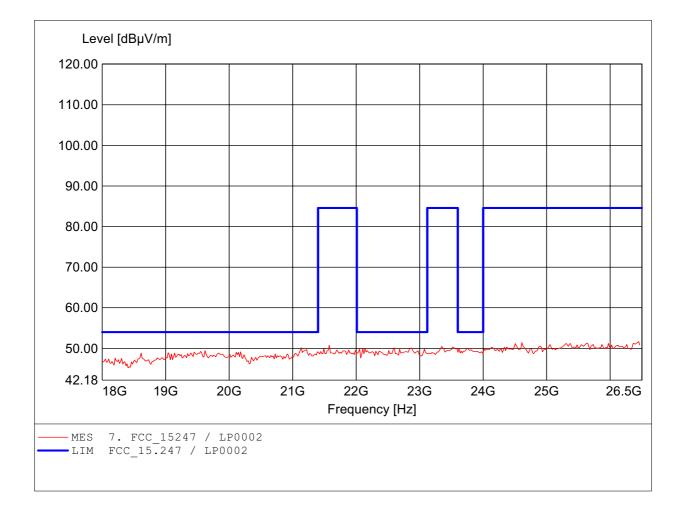
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature:: Temp.: 23.9°C

according to \$15.247, peak detector

Comment 1: Dist.: 3m, Ant.: HL025, amplif. Freq: 26.449GHz, Emax: 51.67dBµV/m, RBW: 1MHz



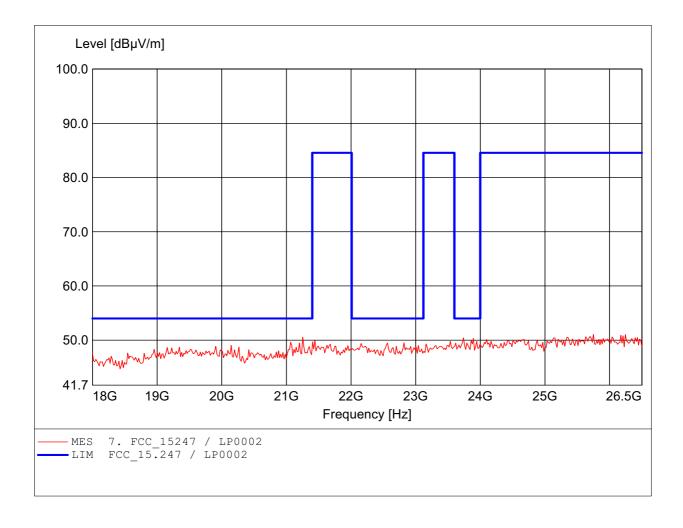
### FCC RULES PART 15, SUBPART C / LP0002

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature:: Temp.: 23.9°C

according to \$15.247, peak detector

Comment 1: Dist.: 3m, Ant.: HL025, amplif. Freq: 25.751GHz, Emax: 51.06dBµV/m, RBW: 1MHz



# ETS DR.GENZ TAIWAN PS CO., LTD.

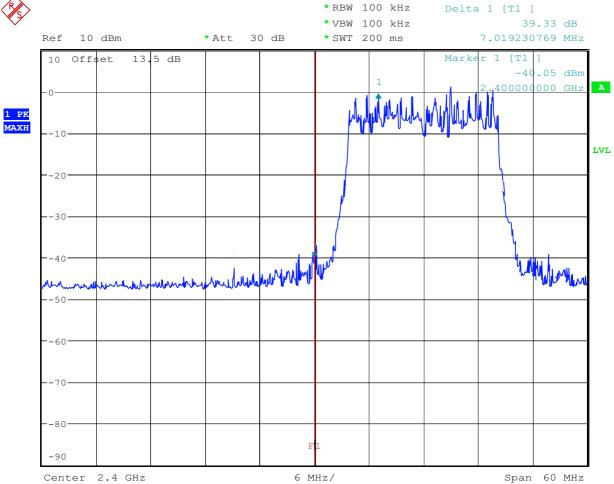


Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

# Appendix C

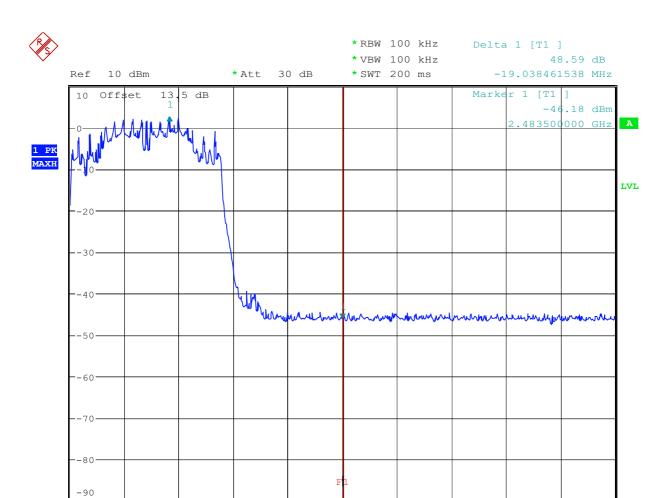
Band Edge Measurement





BANDEAGE 802.11g CH1

Date: 12.JAN.2007 09:49:56



6 MHz/

Span 60 MHz

BANDEAGE 802.11g CH11

Date: 12.JAN.2007 09:47:29

Center 2.4835 GHz

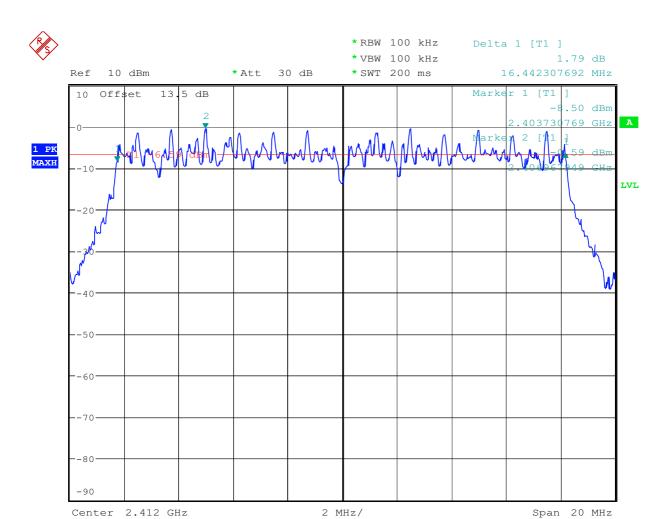
# ETS DR.GENZ TAIWAN PS CO., LTD.



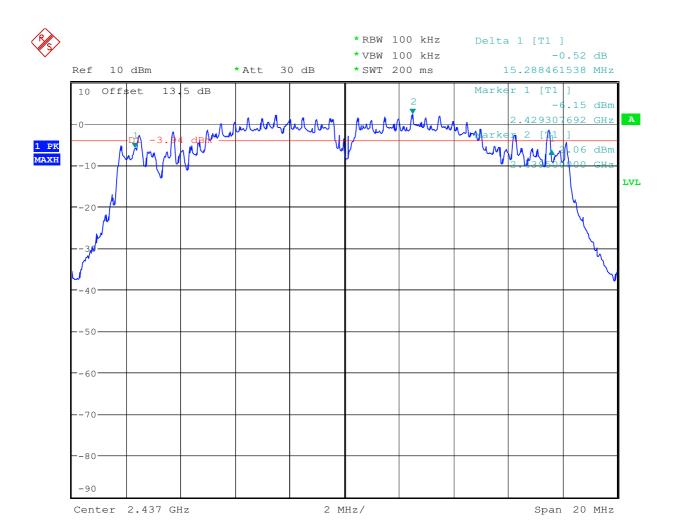
Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

# Appendix D

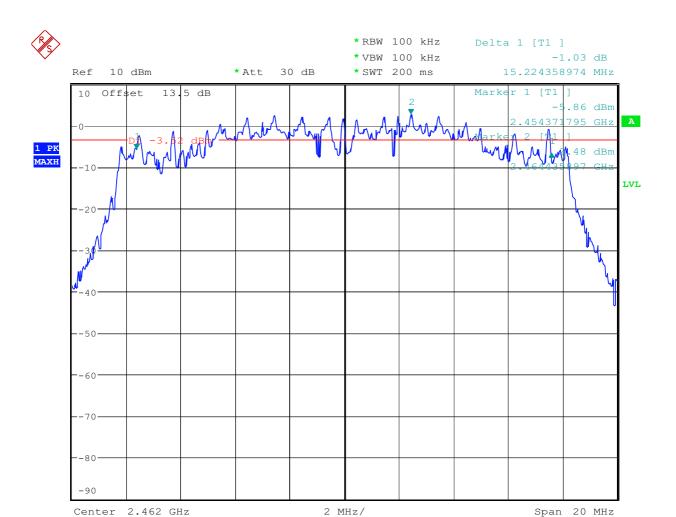
Minimum 6dB Bandwidth



6dB BANDWIDTH 802.11g CH1
Date: 12.JAN.2007 11:29:57



6dB BANDWIDTH 802.11g CH6
Date: 12.JAN.2007 11:34:31



6dB BANDWIDTH 802.11g CH11
Date: 12.JAN.2007 11:38:41

# ETS DR.GENZ TAIWAN PS CO., LTD.

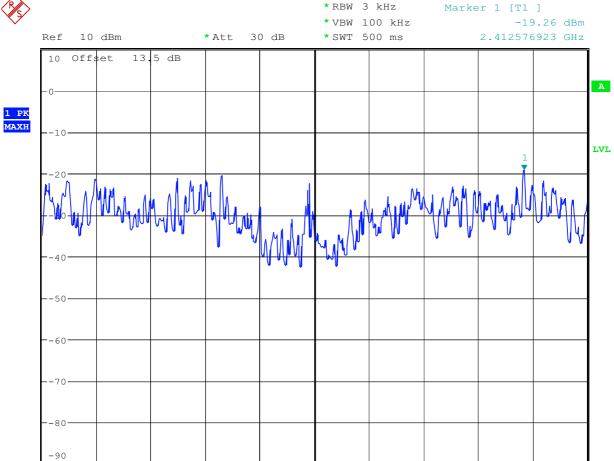


Registration number: W6M20612-7671-C-2 FCC ID: UVXWR101001

# Appendix E

Peak Power Spectral Density





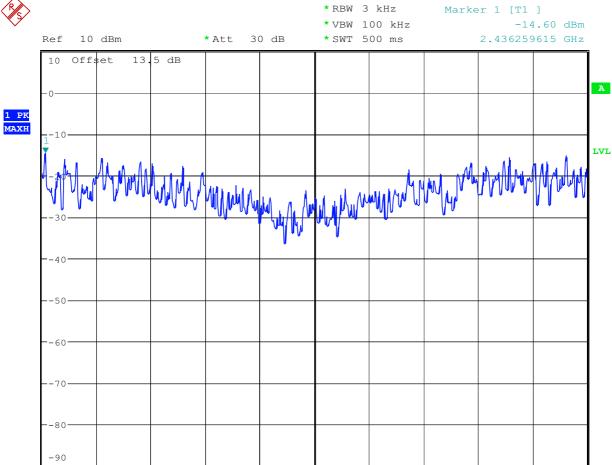
150 kHz/

Span 1.5 MHz

POWER DENSITY 802.11g CH1 Date: 12.JAN.2007 09:31:48

Center 2.412 GHz





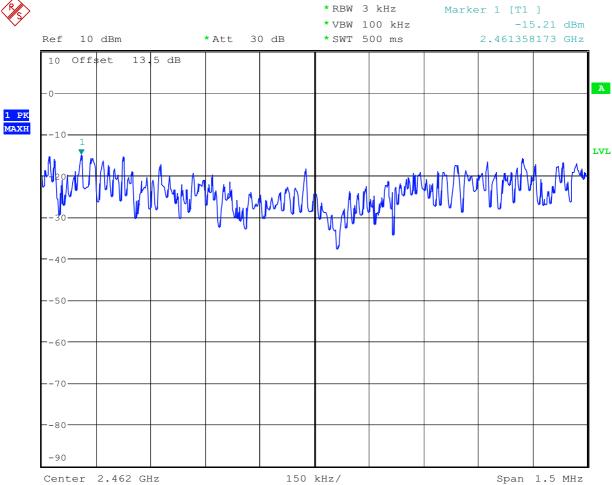
150 kHz/

Span 1.5 MHz

POWER DENSITY 802.11g CH6 Date: 12.JAN.2007 09:35:30

Center 2.437 GHz





POWER DENSITY 802.11g CH11 Date: 12.JAN.2007 09:41:19

# ETS DR.GENZ TAIWAN PS CO., LTD.



Registration number: W6M20612-7671-C-2

FCC ID: UVXWR101001

## Appendix F

Radiated Emissions from Receiver Section of Transceiver

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 3.8

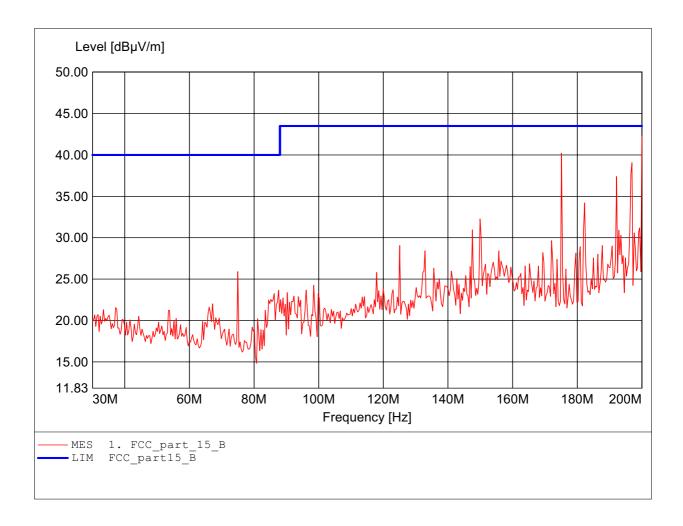
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Freq:200.000MHz Emax:42.30dBuV/m RBW: 100 kHz



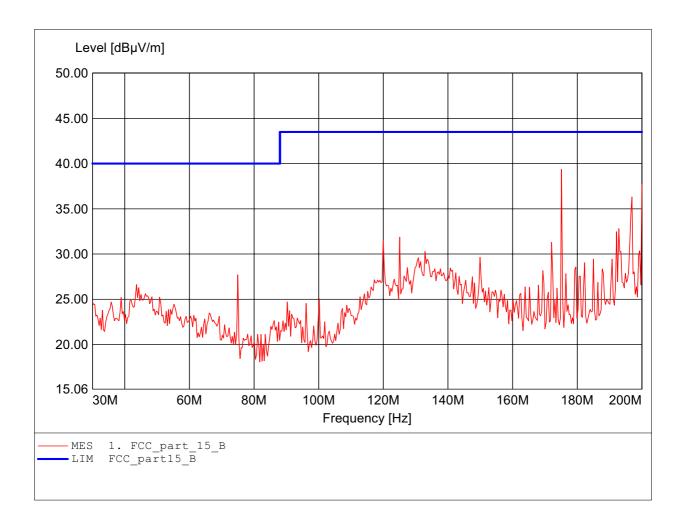
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq:175.130MHz Emax:39.37dBµV/m RBW: 100 kHz



### FCC RULES PART 15, SUBPART B

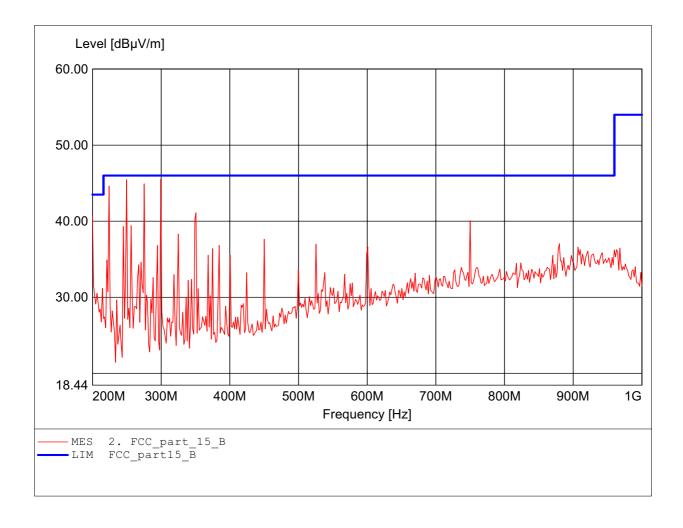
Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:299.399MHz Emax:45.53dBµV/m RBW: 100 kHz



### FCC RULES PART 15, SUBPART B

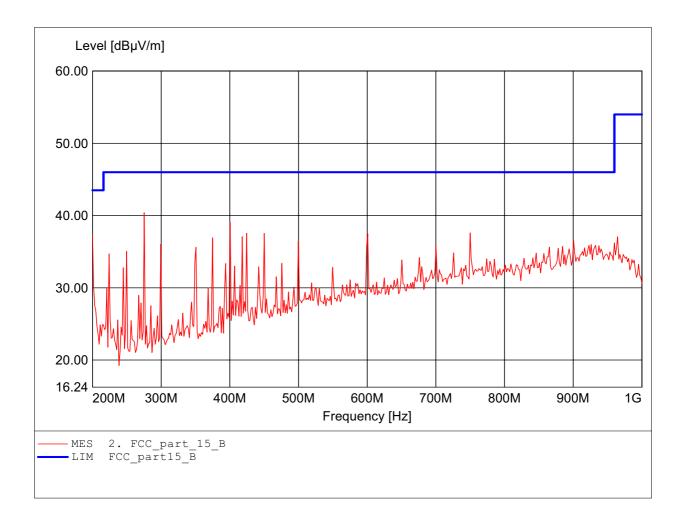
Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:275.351MHz Emax:40.41dBµV/m RBW: 100 kHz



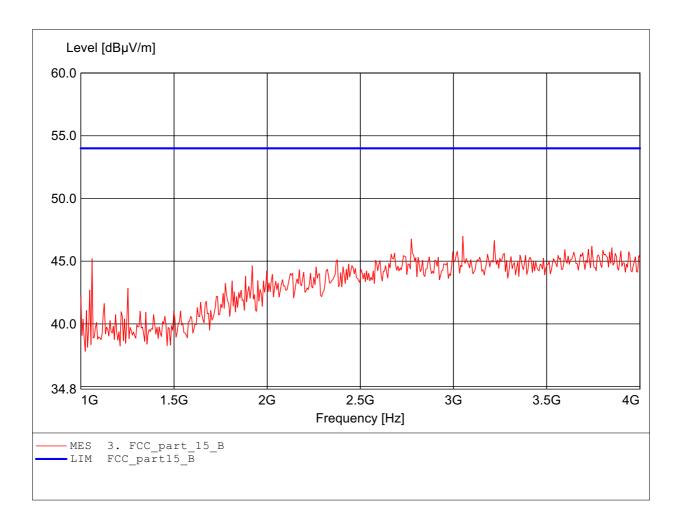
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:3.050GHz Emax:46.99dBµV/m RBW: 1 MHz



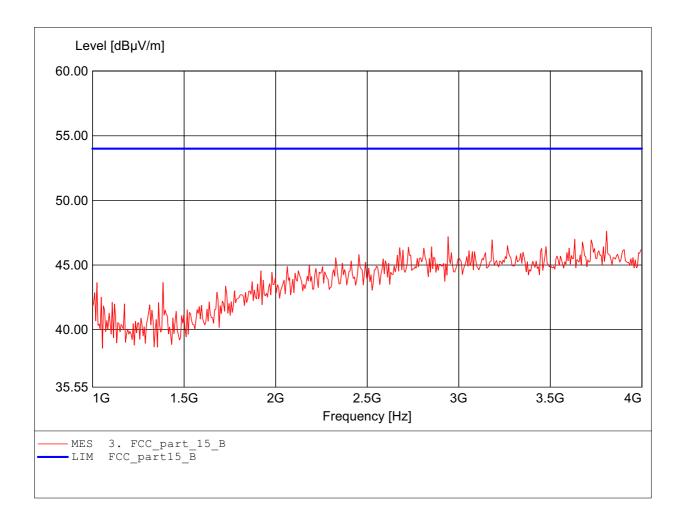
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:3.808GHz Emax:47.61dBuV/m RBW: 1 MHz



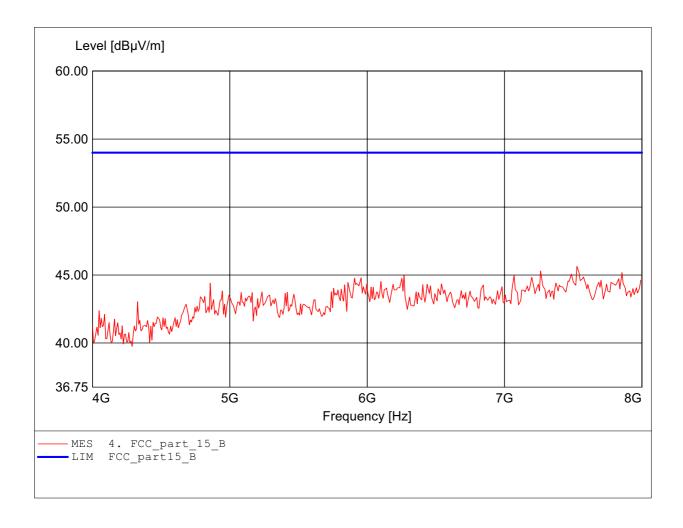
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:7.527GHz Emax:45.64dBµV/m RBW: 1 MHz



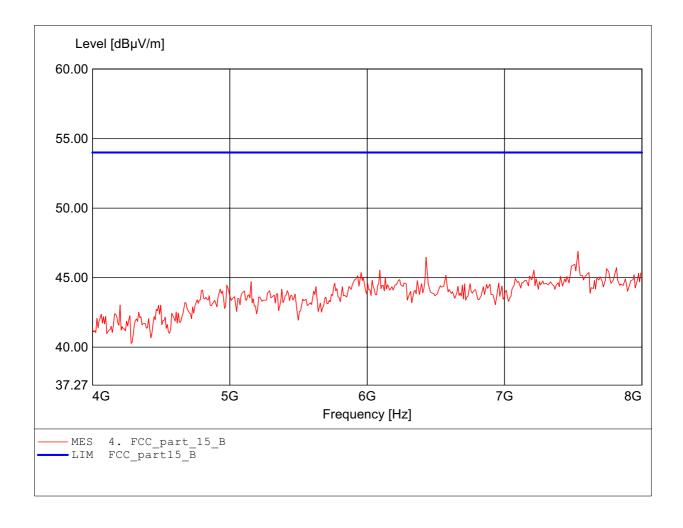
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:7.535GHz Emax:46.90dBµV/m RBW: 1 MHz



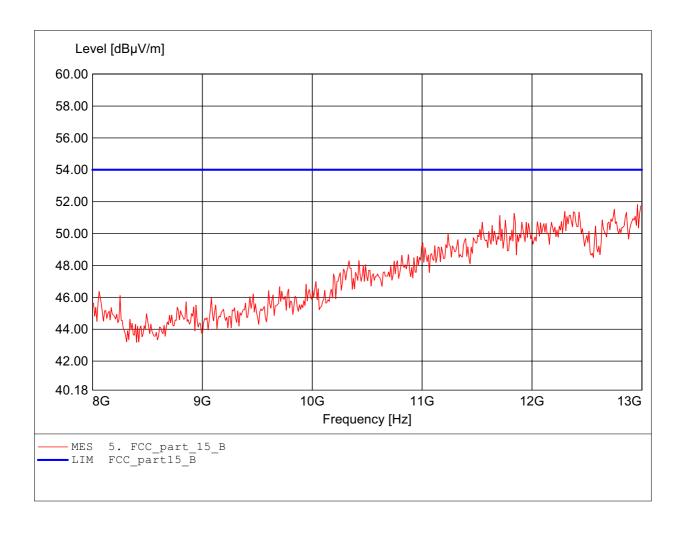
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:12.960GHz Emax:51.81dBµV/m RBW: 1 MHz



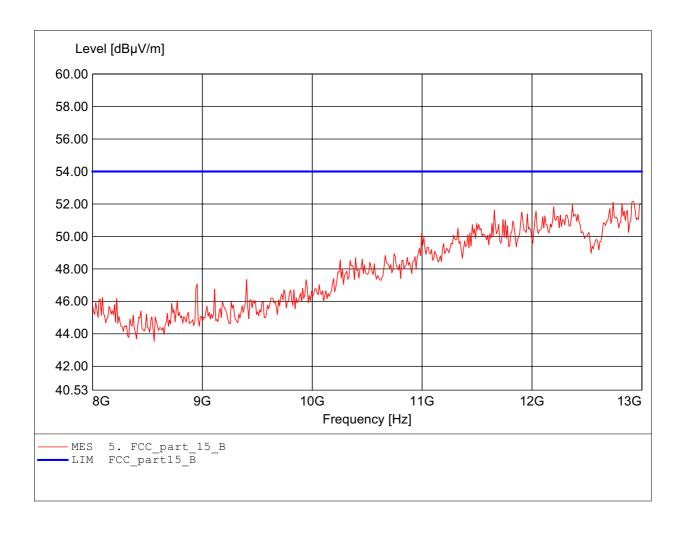
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:12.920GHz Emax:52.17dBµV/m RBW: 1 MHz



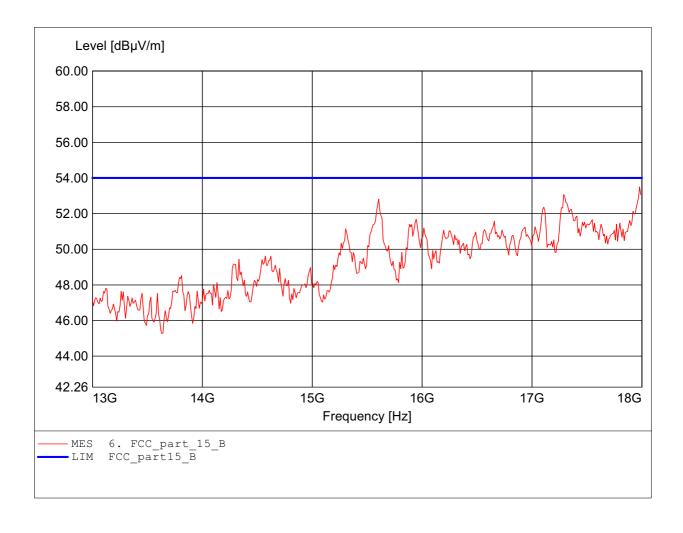
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:17.980GHz Emax:53.50dBµV/m RBW: 1 MHz



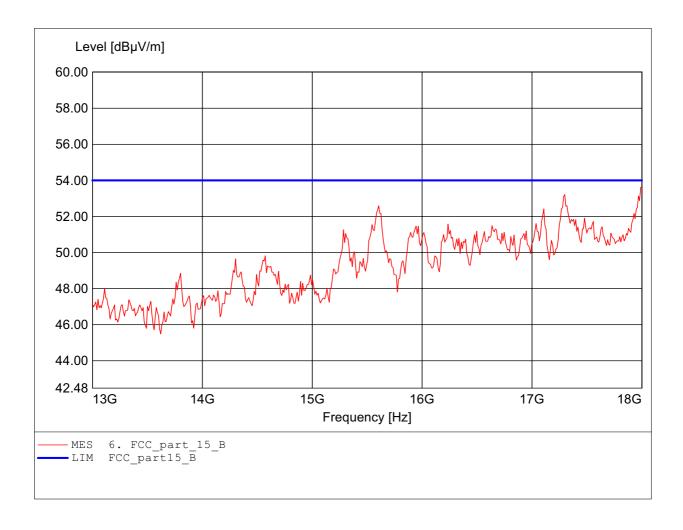
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:17.990GHz Emax:53.62dBµV/m RBW: 1 MHz



### FCC RULES PART 15, SUBPART B

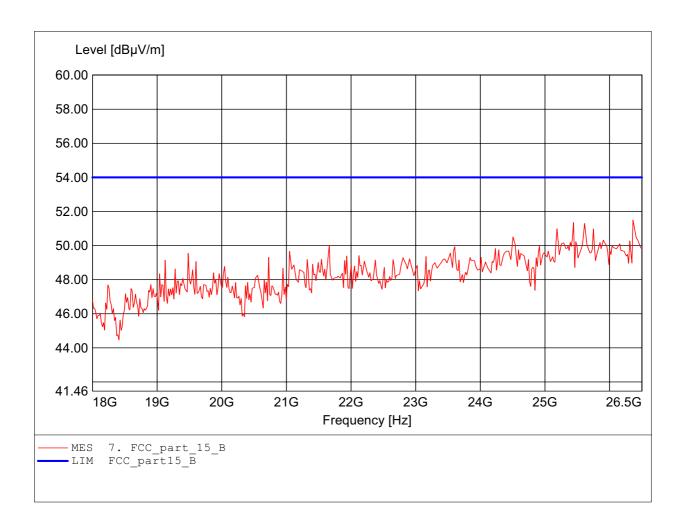
Order Number : W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:26.364GHz Emax:51.50dBµV/m RBW: 1 MHz



### FCC RULES PART 15, SUBPART B

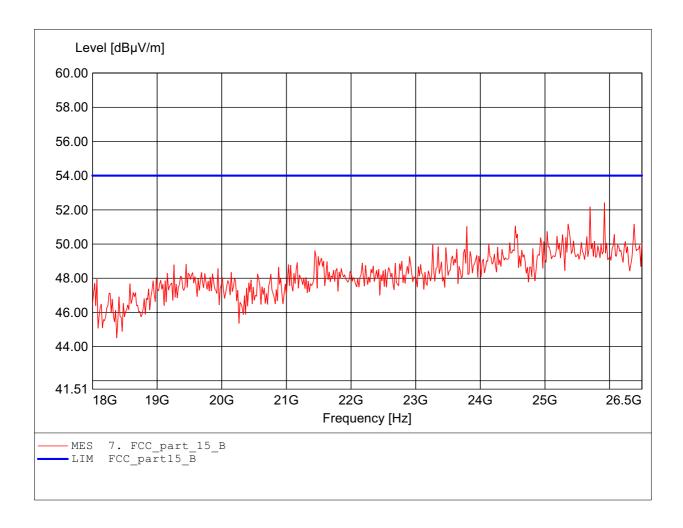
Order Number : W6M20612-7671 802.11g ch1

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:25.921GHz Emax:52.41dBµV/m RBW: 1 MHz



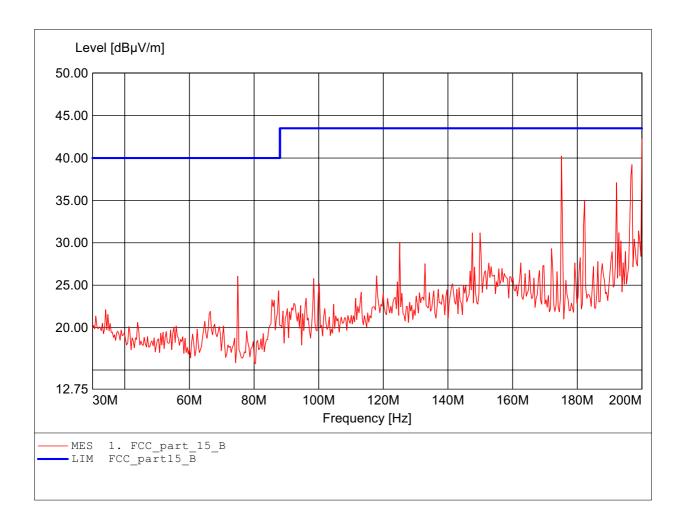
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Freq:200.000MHz Emax:42.26dBµV/m RBW: 100 kHz



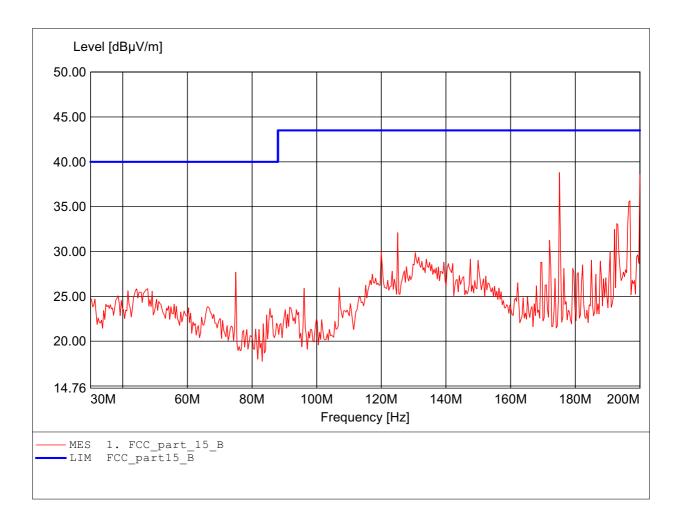
### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Dist.: 3m, Ant.: HK 116 Freq:175.130MHz Emax:38.81dBuV/m RBW: 100 kHz



### FCC RULES PART 15, SUBPART B

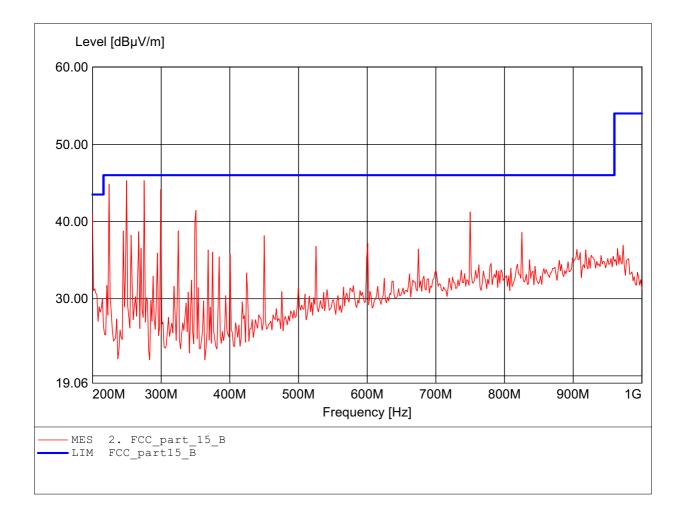
Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:275.351MHz Emax:45.31dBµV/m RBW: 100 kHz



#### FCC RULES PART 15, SUBPART B

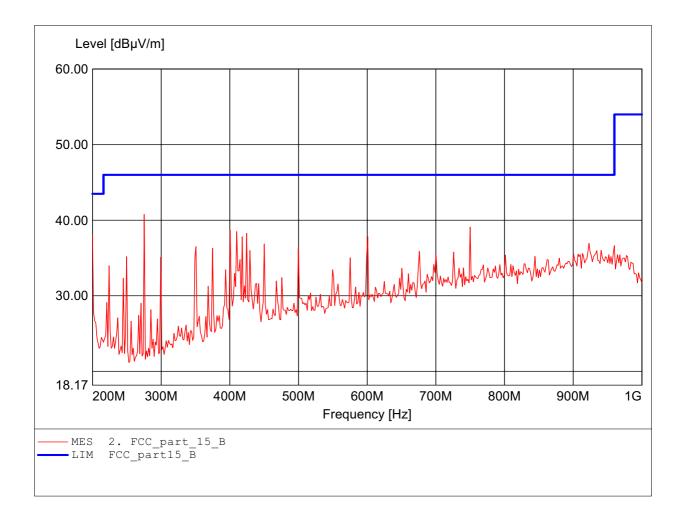
Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:275.351MHz Emax:40.78dBpV/m RBW: 100 kHz



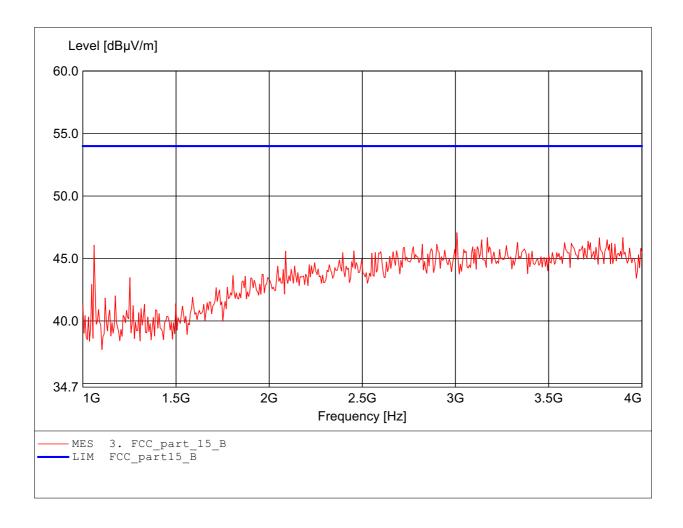
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:3.008GHz Emax:47.07dBuV/m RBW: 1 MHz



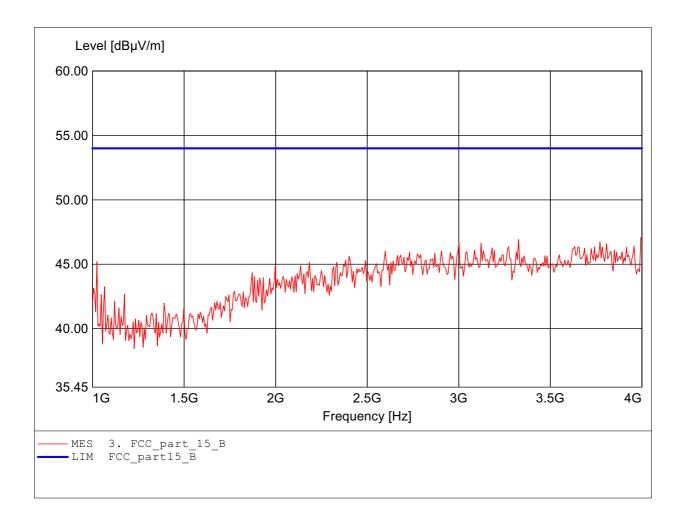
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:3.994GHz Emax:47.07dBuV/m RBW: 1 MHz



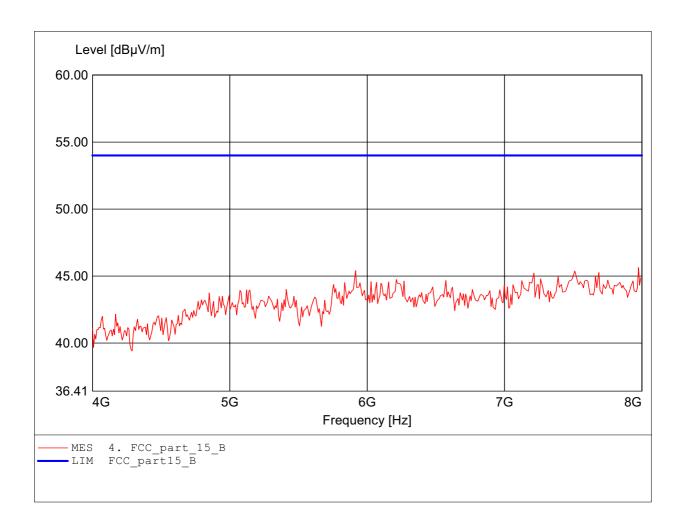
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:7.976GHz Emax:45.63dBµV/m RBW: 1 MHz



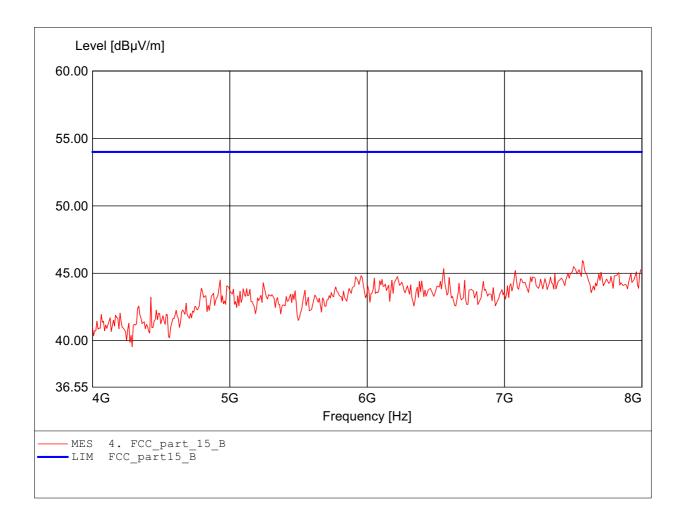
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:7.567GHz Emax:45.93dB $\mu$ V/m RBW: 1 MHz



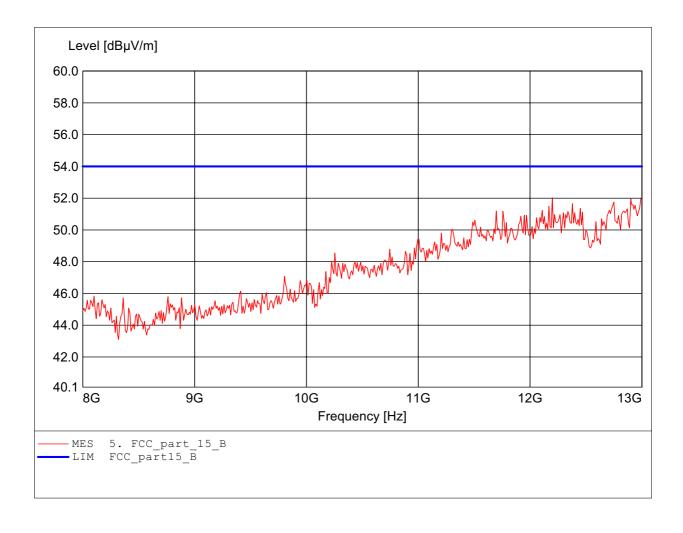
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:12.198GHz Emax:52.03dB $\mu$ V/m RBW: 1 MHz



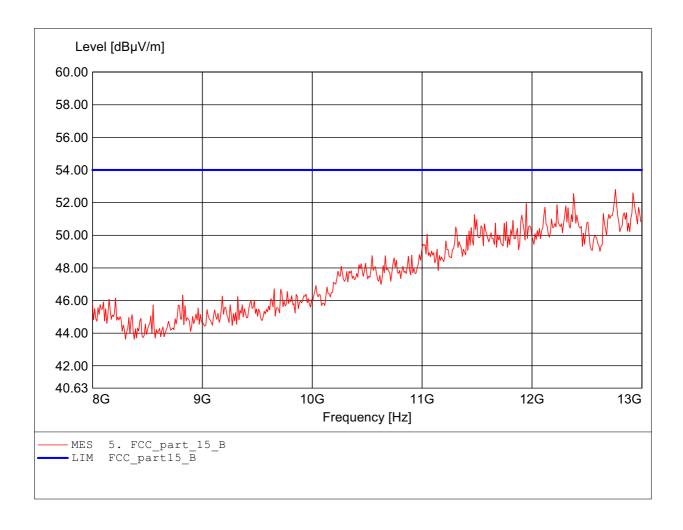
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11 ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl

Dist.: 3m, Ant.: HL25, ampl. Freq:12.760GHz Emax:52.81dBµV/m RBW: 1 MHz



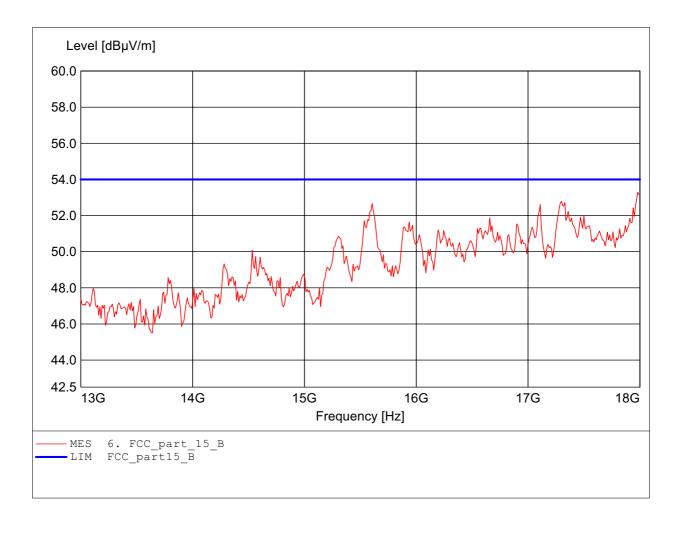
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:17.980GHz Emax:53.30dBµV/m RBW: 1 MHz



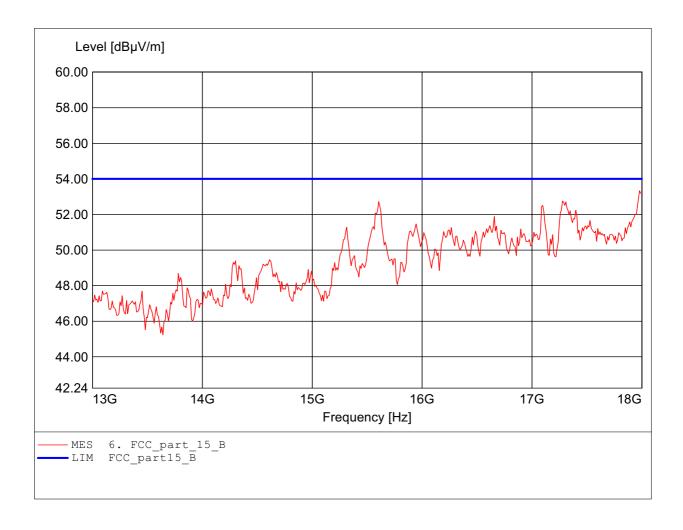
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:17.980GHz Emax:53.33dBµV/m RBW: 1 MHz



#### FCC RULES PART 15, SUBPART B

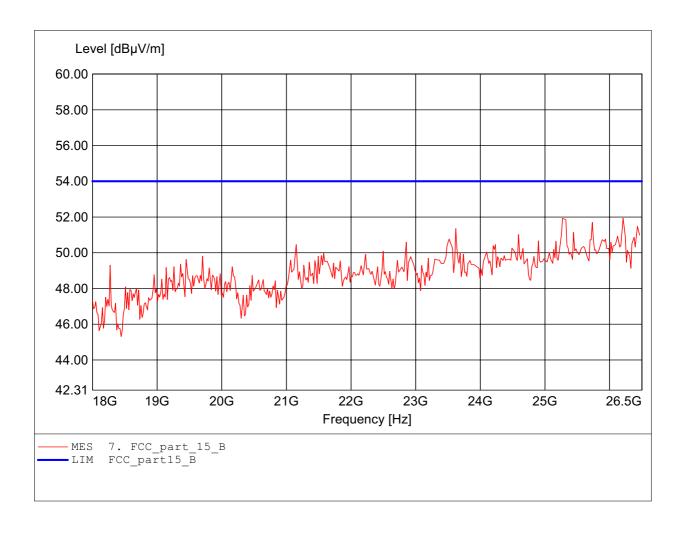
Order Number : W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:26.210GHz Emax:51.94dBµV/m RBW: 1 MHz



#### FCC RULES PART 15, SUBPART B

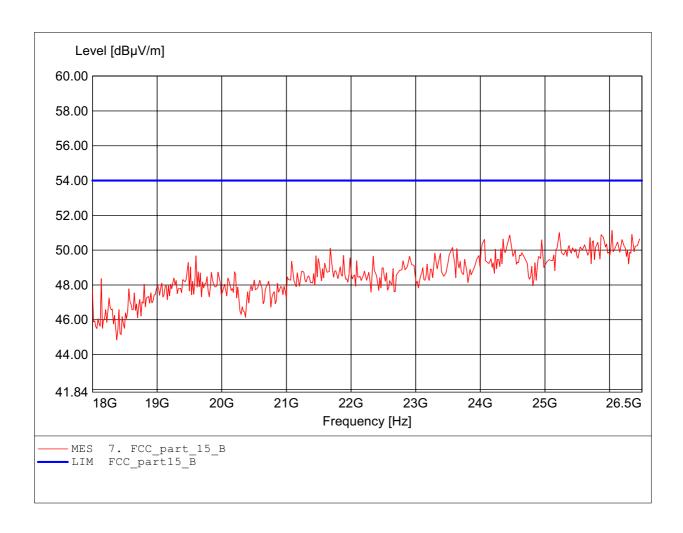
Order Number : W6M20612-7671 802.11g ch6

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:26.040GHz Emax:51.13dBµV/m RBW: 1 MHz



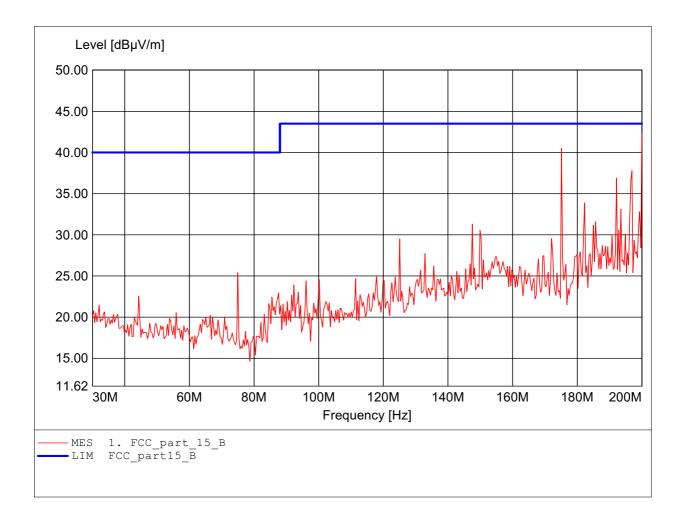
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Freq:200.000MHz Emax:42.32dBuV/m RBW: 100 kHz



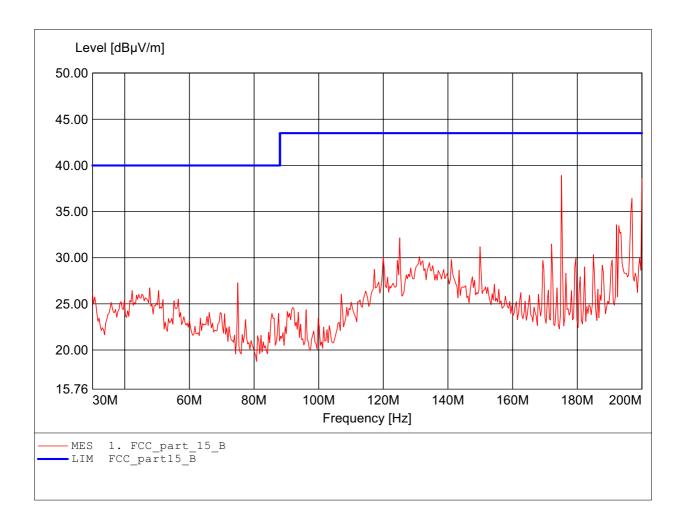
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HK 116

Freq:175.130MHz Emax:38.91dBuV/m RBW: 100 kHz



#### FCC RULES PART 15, SUBPART B

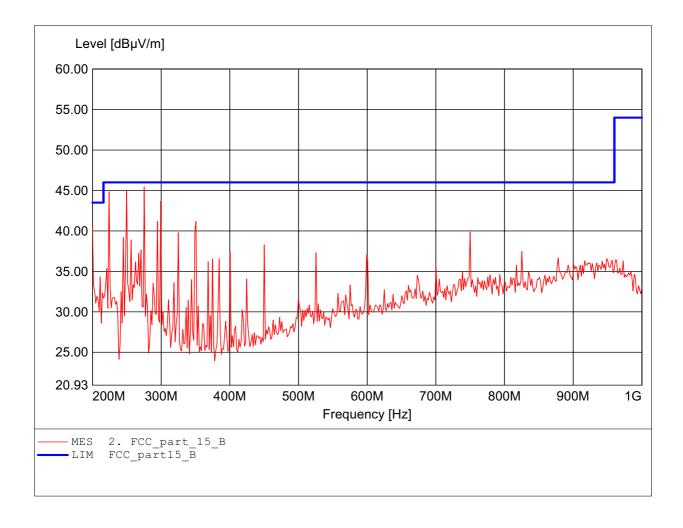
Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:275.351MHz Emax:45.43dBµV/m RBW: 100 kHz



#### FCC RULES PART 15, SUBPART B

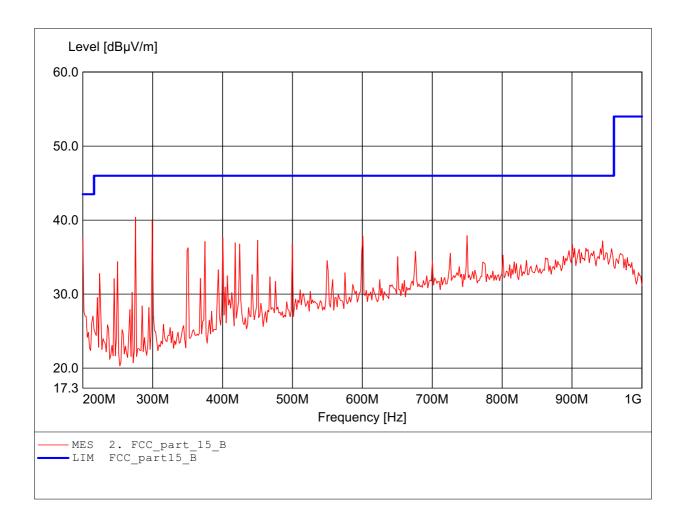
Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL 223, ampl. Freq:275.351MHz Emax:40.41dBµV/m RBW: 100 kHz



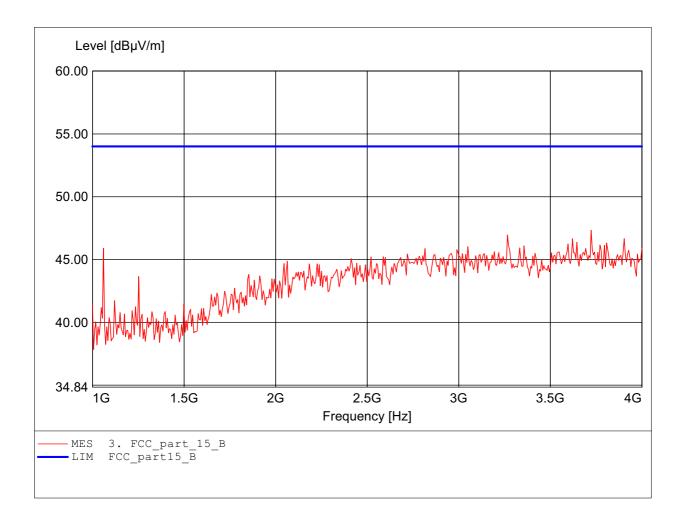
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:3.723GHz Emax:47.33dBµV/m RBW: 1 MHz



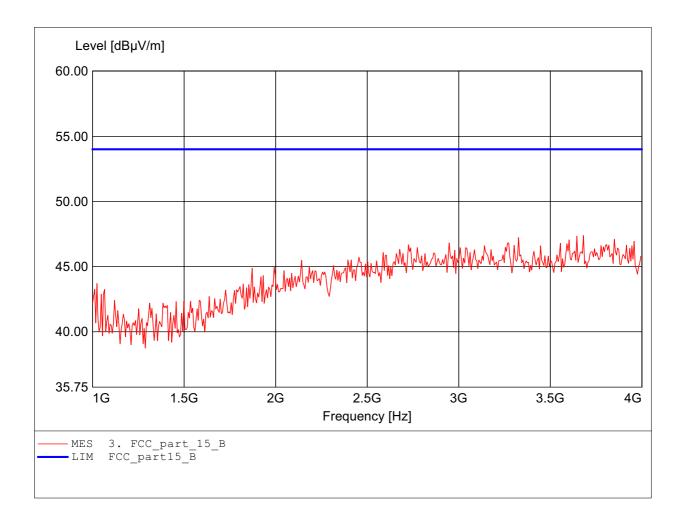
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:3.681GHz Emax:47.39dBuV/m RBW: 1 MHz



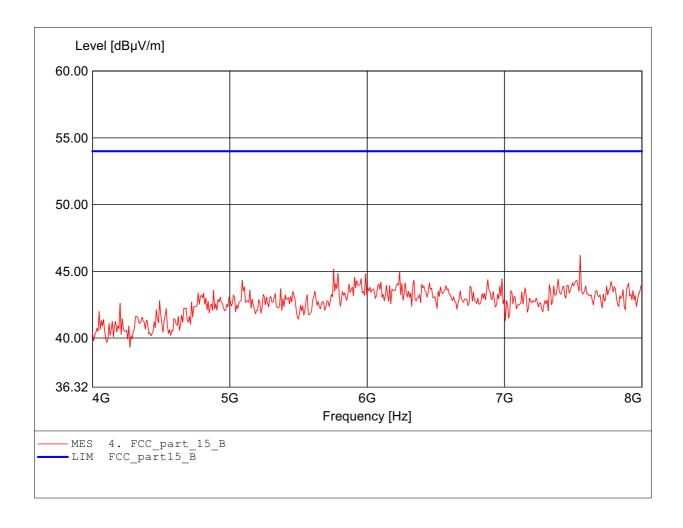
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:7.551GHz Emax:46.20dB $\mu$ V/m RBW: 1 MHz



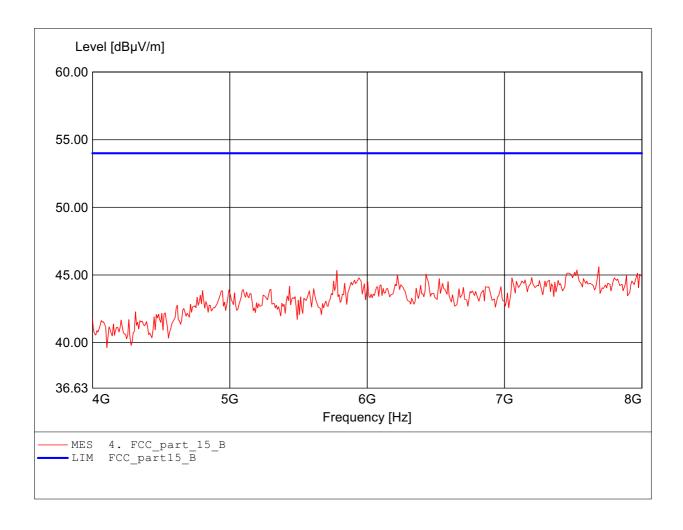
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Freq:7.687GHz Emax:45.60dBµV/m RBW: 1 MHz



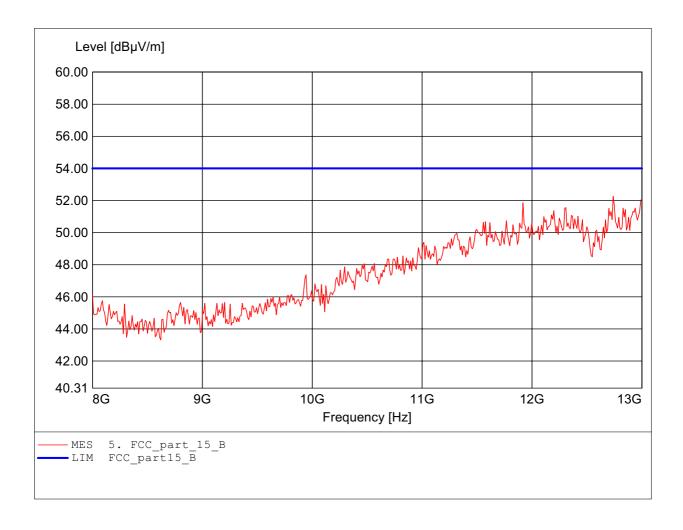
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:12.739GHz Emax:52.26dBµV/m RBW: 1 MHz



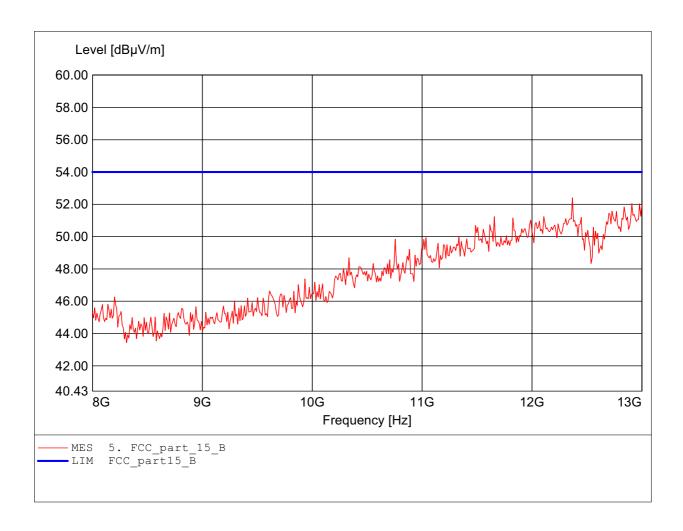
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:12.369GHz Emax:52.39dBµV/m RBW: 1 MHz



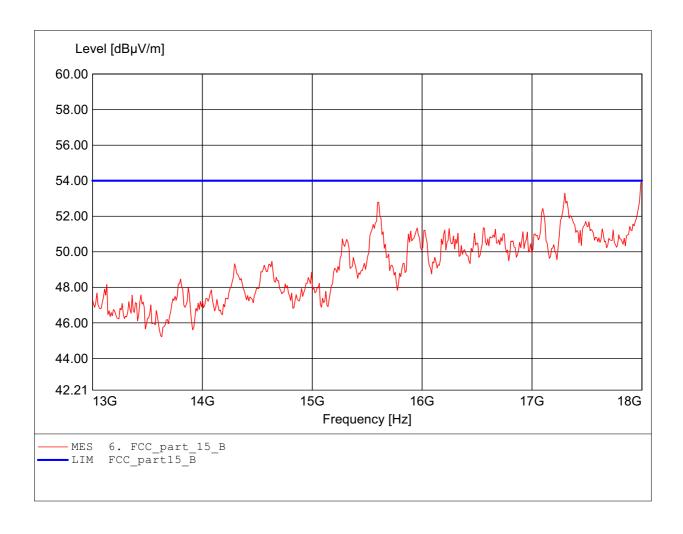
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:17.990GHz Emax:53.90dBµV/m RBW: 1 MHz



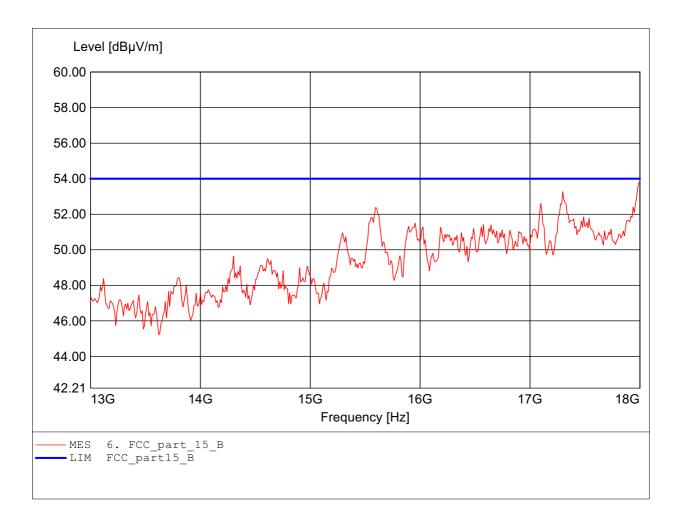
#### FCC RULES PART 15, SUBPART B

Order Number: W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: according to subpart B
Comment 1: Dist.: 3m, Ant.: HL25, ampl.

Dist.: 3m, Ant.: HL25, ampl. Freq:18.000GHz Emax:53.80dBµV/m RBW: 1 MHz



#### FCC RULES PART 15, SUBPART B

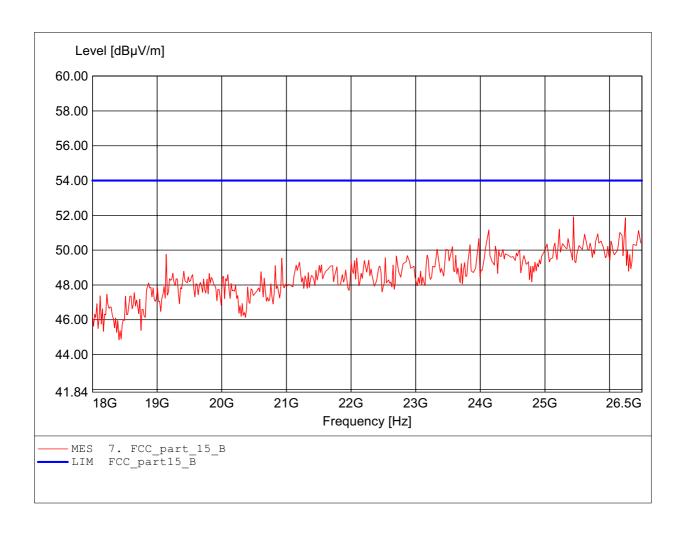
Order Number : W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:25.444GHz Emax:51.91dBµV/m RBW: 1 MHz



#### FCC RULES PART 15, SUBPART B

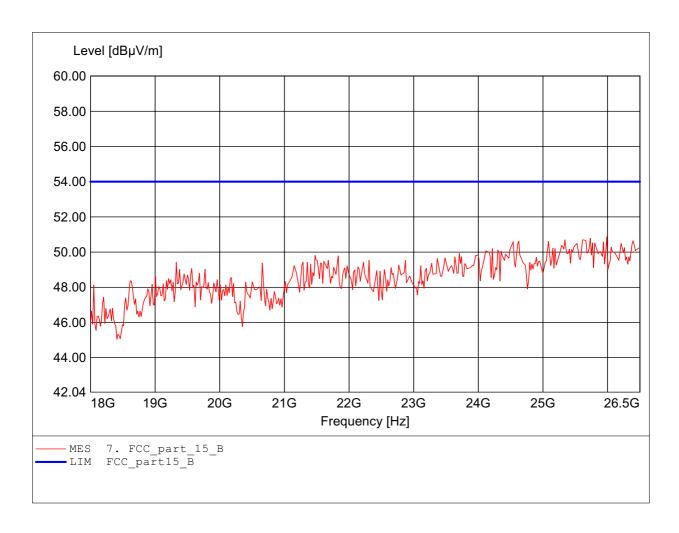
Order Number : W6M20612-7671 802.11g ch11

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature::

according to subpart B

Comment 1:

Dist.: 3m, Ant.: HL025, ampl. Freq:25.989GHz Emax:50.87dBμV/m RBW: 1 MHz



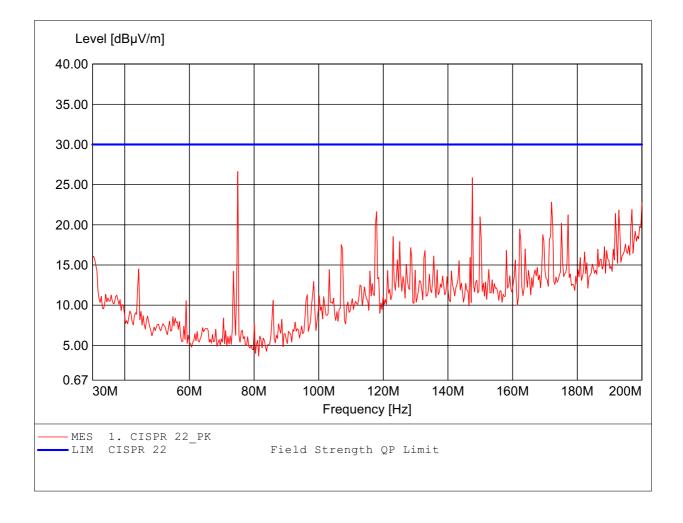
#### in accordance to the CISPR 22

Order Number: W6M20612-7671 Lan Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Dist.: 3m, Ant.: HK 116 , Peak detector Freq:74.970MHz Emax:26.64dBµV/m RBW: 100 kHz Comment 1:



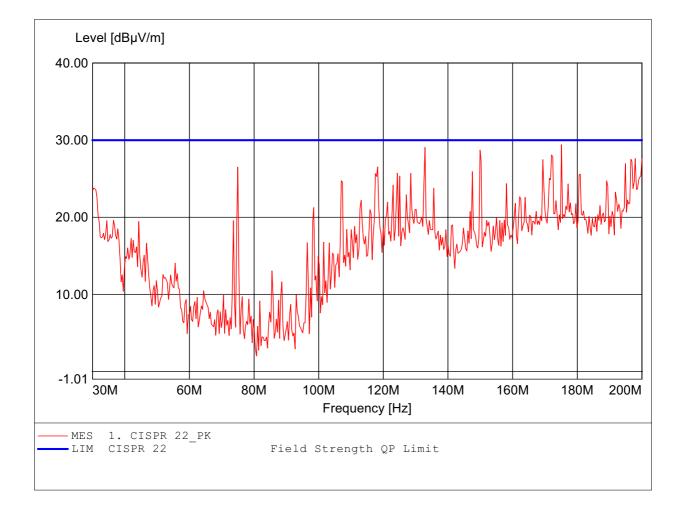
#### in accordance to the CISPR 22

Order Number: W6M20612-7671 Lan Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Dist.: 3m, Ant.: HK 116 , Peak detector Freq:175.130MHz Emax:29.42dBµV/m RBW: 100 kHz Comment 1:



#### in accordance to the CISPR 22

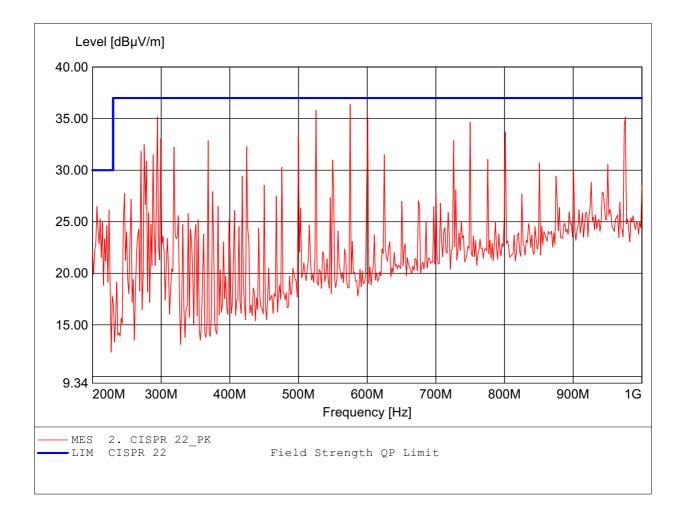
Order Number: W6M20612-7671 Lan Mode

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: Fully Anechoic Chamber

Comment 1: Dist.: 3m, Ant.: HL 223 , Peak detector

Freq:575.150MHz Emax:36.40dBpV/m RBW: 100 kHz



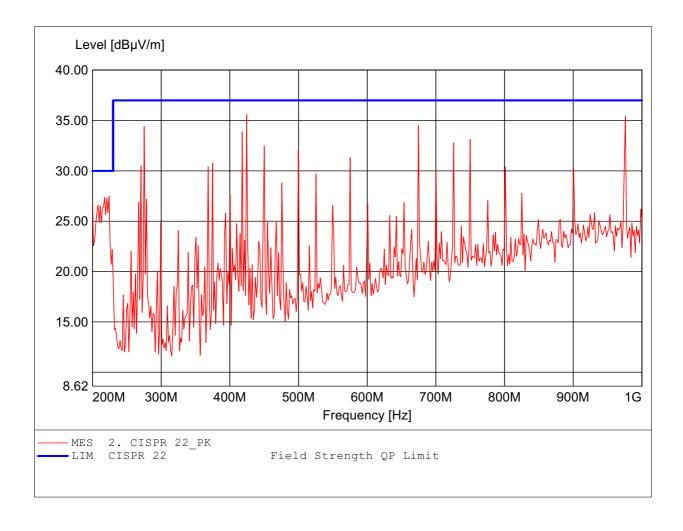
#### in accordance to the CISPR 22

Order Number: W6M20612-7671 Lan Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Dist.: 3m, Ant.: HL 223 , Peak detector Freq:424.449MHz Emax:35.58dBµV/m RBW: 100 kHz Comment 1:



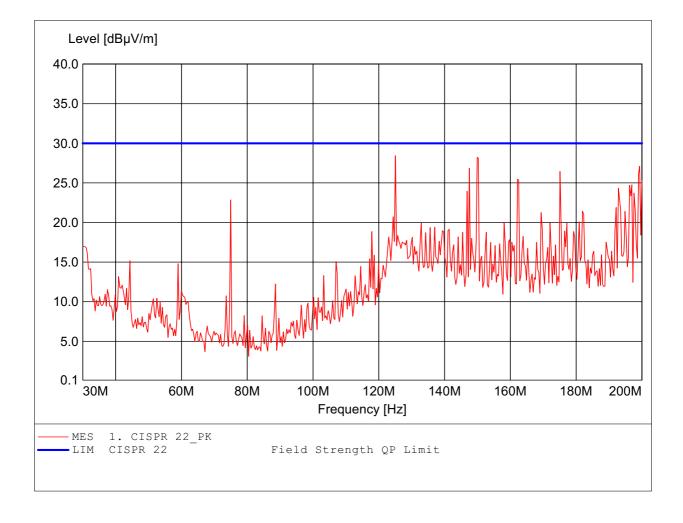
#### in accordance to the CISPR 22

Order Number: W6M20612-7671 Wirless Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Dist.: 3m, Ant.: HK 116 , Peak detector Freq:125.050MHz Emax:28.45dBµV/m RBW: 100 kHz Comment 1:



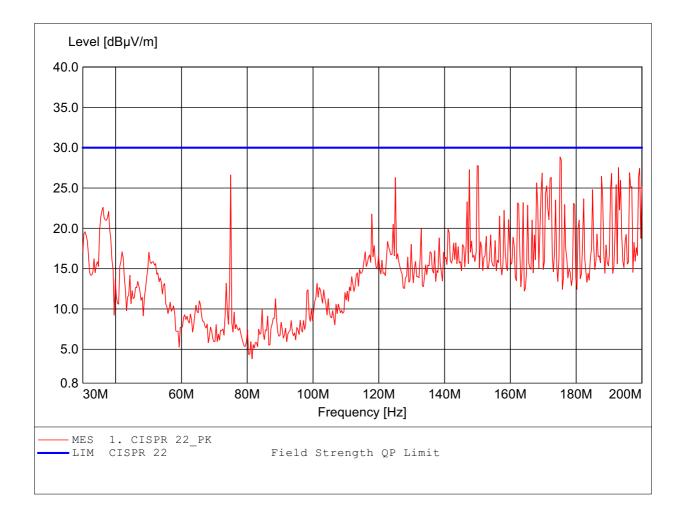
#### in accordance to the CISPR 22

Order Number: W6M20612-7671 Wirless Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Dist.: 3m, Ant.: HK 116 , Peak detector Freq:175.130MHz Emax:28.87dBµV/m RBW: 100 kHz Comment 1:



#### in accordance to the CISPR 22

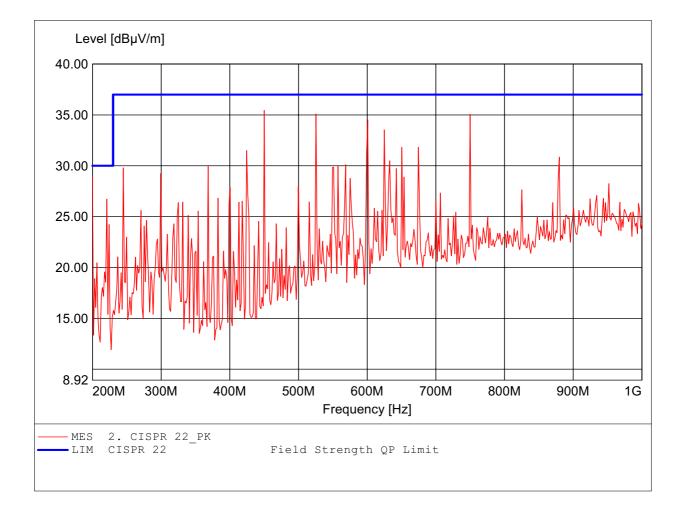
Order Number: W6M20612-7671 Wirless Mode

Test Site / Operator: ETS / Derek
Temperature: Temp.: 23.9°C

Tcest Specification: Fully Anechoic Chamber

Comment 1: Dist.: 3m, Ant.: HL 223 , Peak detector

Freq:450.100MHz Emax:35.45dBpV/m RBW: 100 kHz



#### in accordance to the CISPR 22

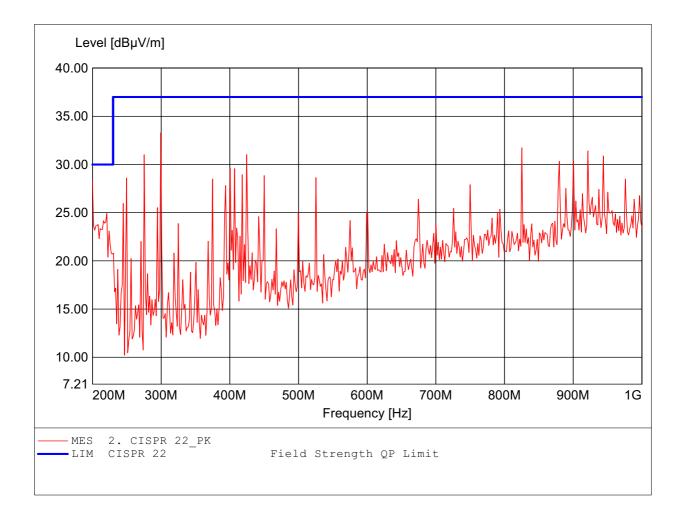
Order Number: W6M20612-7671 Wirless Mode

Test Site / Operator: ETS / Derek Temp.: 23.9°C Temperature:

Tcest Specification: Fully Anechoic Chamber

Comment 1:

Dist.: 3m, Ant.: HL 223 , Peak detector Freq:299.399MHz Emax:33.30dBµV/m RBW: 100 kHz



## ETS DR.GENZ TAIWAN PS CO., LTD.



Registration number: W6M20612-7671-C-2

FCC ID: UVXWR101001

## Appendix G

Power Line Conducted Emission

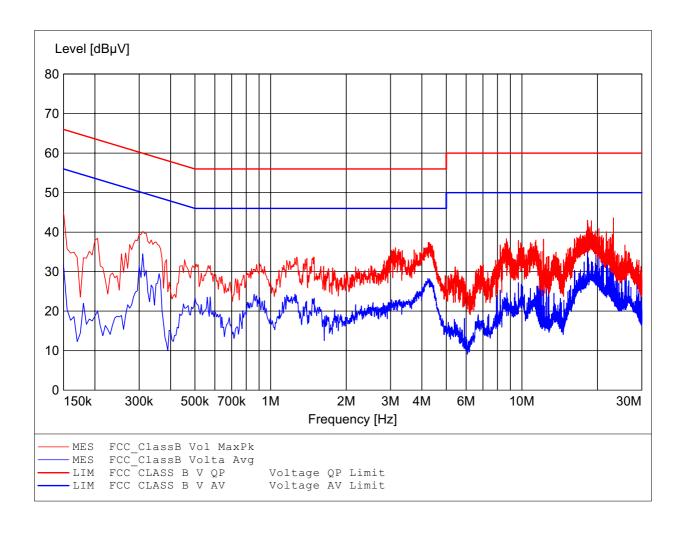
The measurement diagrams plots attached below are preliminary wideband scan with a Quasi peak and average detector for reference only. The final test results are listed on section 3.9

Order Number: W6M20612-7671 LAN mode

Operating Condition: Tnom: 23.9°C

Test Site: ETS Operator: Danny

Test Specification: V-network: ESH3-Z5 N

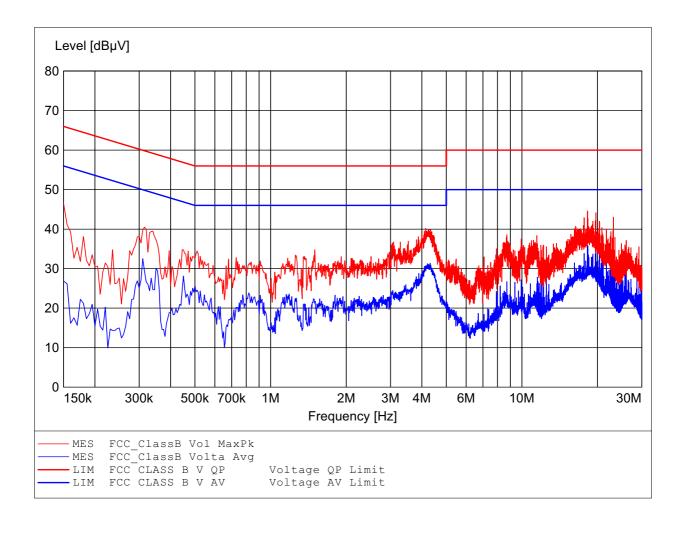


Order Number: W6M20612-7671 LAN mode

Operating Condition: Tnom: 23.9°C

Test Site: ETS Operator: Danny

Test Specification: V-network: ESH3-Z5 L1

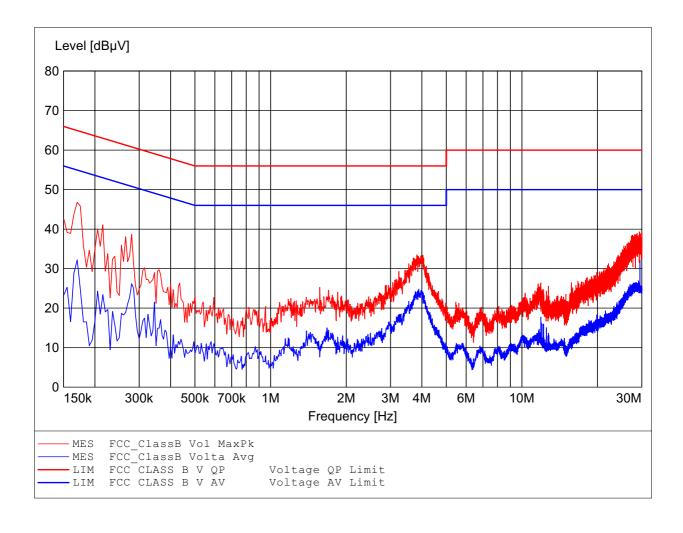


Order Number: W6M20612-7671 Wireless mode

Operating Condition: Tnom: 23.9°C

Test Site: ETS Operator: Danny

Test Specification: V-network: ESH3-Z5 N



Order Number: W6M20612-7671 Wireless mode

Operating Condition: Tnom: 23.9°C

Test Site: ETS Operator: Danny

Test Specification: V-network: ESH3-Z5 L1

