ETS Dr.Genz Taiwan PS Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679

Accredited Testing Laboratory

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: TSTWV100

Test report no.: W6M20511-6291-C-2

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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TABLE OF CONTENTS

1 GENERAL INFORMATION 3

1.1 NOTES 3
1.2 TESTING LABORATORY 4
1.2.1 Location 4
1.2.2 Details of accreditation status 4
1.3 DETAILS OF APPROVAL HOLDER 4
1.4 APPLICATION DETAILS 5
1.5 GENERAL INFORMATION OF TEST ITEM 5
1.6 TEST STANDARDS 6

2 TECHNICAL TEST 7

2.1 SUMMARY OF TEST RESULTS 7
2.2 TEST ENVIRONMENT 7
2.3 TEST EQUIPMENT LIST 8

3 TEST RESULTS (ENCLOSURE) 13

3.1 PEAK OUTPUT POWER (TRANSMITTER) 14
3.2 EQUIVALENT ISOTROPIC RADIATED POWER 15
3.2.1 Transmitter 15
3.3 RF EXPOSURE COMPLIANCE REQUIREMENTS 15
3.4 TRANSMITTER RADIATED EMISSIONS IN RESTRICTED BANDS 16
3.5 SPURIOUS EMISSIONS (TX) 17
3.6 MINIMUM 6 DB BANDWIDTH 21
3.7 PEAK POWER SPECTRAL DENSITY 22
3.8 RADIATED EMISSIONS FROM RECEIVER SECTION OF TRANSCEIVER 23
3.9 POWER LINE CONDUCTED EMISSION 27

APPENDIX 31

APPENDIX A 32
APPENDIX B 33
APPENDIX C 34
APPENDIX D 35
APPENDIX E 36
APPENDIX F 37
APPENDIX G 38
APPENDIX H 39

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

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 a, b, g.
This report is related to FCC Part 15 C (OFDM device, IEEE 802.11g) only do not cover requirements for other parts like FCC Part 15 C (e.g. for IEEE 802.11a & for IEEE 802.11b).

Tester:

Date	ETS-Lab.	Name	Signature
19.12.2005		Jay Chaing	Jay Chaing

Technical responsibility for area of testing:

Date	ETS	Name	Signature
19.12.2005		Steven Chung	Steven Chuang

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	: YUAN High-Tech Development Co., Ltd.
Street	: 18F, No.88, Sec.2, Chung Hsiao E.Rd.
Town	: Taipei
Country	: Taiwan R.O.C.
Telephone	: +886-2-23921233#252
Fax	: +886-2-23921358
Contact	: Mr. Kevin Chang
Telephone	: +886-2-23921233#252

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

1.4 Application details

Date of receipt of application : 08.11.2005
Date of receipt of test item : 08.11.2005
Date of test : from 09.11.2005 to 19.12.2005

1.5 General information of Test item

Type of test item : Wireless Multimedia System
Model Number : WMS 100 RECEIVER
Brand Name : --
Hardware : 1.2
Software : 1.0.36.0
Serial number : without
Photos : see Annex

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 : ☐ Yes / ☒ No
Type of Antenna Transceiver : Flying Lead Swivel Antenna
Antenna gain : 2.0 dBi
Power supply : Input Power : 120 VAC
Output Power : 5V, 1.7 A
Emission designator : 16M4F7D

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

Host device: none

Classification :

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

Transmitter **Unom**

Power (ch A) : Conducted: 24.53 dBm
Power (ch B) : Conducted: 24.44 dBm
Power (ch C) : Conducted: 24.01 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.

This test report is according to customer's request. A "SUNF PU E132276-A (UL) CM 75 °C 4PR 24AWG CSA LL64151-A CMG FTA CAT.5E PATCH CORD", shield cable with two ferrite cores was employed during this test. These two cores information are as followings:
Manufacturer Name: King Core Electronics Inc.
Model Number A: KCF-130-B
Model Number B: KCF-100-B

1.6 Test standards

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

2 Technical test

2.1 Summary of test results

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

or

The deviations as specified in 2.5 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
Details of power supply	: Input Power : 120 VAC Output Power : 5V, 1.7 A
Extreme conditions parameters	: --

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

2.3 Test Equipment List

No.	Test equipment	Type	Serial No.	Manufacturer	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	11/8/2005
ETSTW-CE 002	PREREULATOR MODE DC POWER SUPPLY	S/N	S/N		
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	11/8/2006
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	11/3/2006
ETSTW-CE 006	IMPULS-BEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	11/10/2006
ETSTW-CE 007	SPECTRUM ANALYZER 5GHz	FSB	849670/001	R&S	
ETSTW-CE 008	ABSORBING CLAMP	MDS 21	3469	ABSORPTIONS-MESSWANDLER-ZANGE	11/4/2006
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	5/10/2005
ETSTW-CE 010	Comb Generator-conducted	S/N	S/N	ETS	
ETSTW-CE 011	Power Line Conducted Emission Only	S/N	S/N	ETS	
ETSTW-CE 012	Dual-Phase-V-Network	NNB-2/16Z	03/10201	Telemeter	4/11/2006
ETSTW-CS 001	SIGNAL GENERATOR	SMX	849254/003	R&S	10/31/2005
ETSTW-CS 002	COUPLING AND DECOUPLING NETWORK	CDN S751	19263	SCHAFFNER	11/3/2005
ETSTW-CS 003	COUPLING AND DECOUPLING NETWORK	CDN T400	19820	SCHAFFNER	11/3/2005
ETSTW-CS 004	COUPLING AND DECOUPLING NETWORK	CDN M016	20053	SCHAFFNER	11/3/2005
ETSTW-CS 005	RF Power Amplifier	100A250A	306547	AR	11/3/2005
ETSTW-CS 006	Terminal 50Ω Load	50T-116 M	S/N	JFW	
ETSTW-CS 007	Terminal 50Ω Load	50T-116 F	S/N	JFW	
ETSTW-CS 008	6 dB Attenautor	HFP-5100-3/06 N M/F	2010876106		
ETSTW-RE 001	Controller	CD 1000	C01000/154/867 /004/L	Heinrich Deisel	
ETSTW-RE 002	Function Generator	33220A	MY43004982	Agilent	11/3/2005
ETSTW-RE 003	EMI TEST RECEIVER	ESI	831438/001	R&S	11/16/2005
ETSTW-RE 004	EMI TEST RECEIVER	ESI	831459/012	R&S	11/9/2005
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	11/1/2005
ETSTW-RE 008	Controller	HD100	C0100-L/047/ 6670703/L	Heinrich Deisel	
ETSTW-RE 009	Controller	HD100	100/341	Heinrich Deisel	
ETSTW-RE 010	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070181	MOTECH	
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	MOTECH	
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0036	397	K&L	
ETSTW-RE 014	DUAL TRACKING WITH 5V FIXED	GPC-3030D	S/N	GW	
ETSTW-RE 015	ANTENNA	HK116	841489/003	R&S	
ETSTW-RE 016	ANTENNA	HL223	848953/006	R&S	
ETSTW-RE 017	ANTENNA	HL025	352886/001	R&S	

ETSTW-RE 018	ANTENNA	AT4560	27212	AR	11/7/2006
ETSTW-RE 019	ANTENNA , HORN	22240-25	121074	FM	
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	
ETSTW-RE 021	SWEEP GENERATOR	SWM05	835130/010	R&S	11/10/2005
ETSTW-RE 022	AMPLIFIER	8447D	2944A09837	Agilent	11/1/2005
ETSTW-RE 023	Shielded room	SR 1	S/N	Frankonia	
ETSTW-RE 024	Anechoic Chamber	CHC 1	S/N	Frankonia	
ETSTW-RE 025	Anechoic Chamber	CHC 2	S/N	Frankonia	
ETSTW-RE 026	Open Area Test Site	10m	S/N	ETS	
ETSTW-RE 027	Passive Loop Antenna	6512	34563	EMCO	6/29/2006
ETSTW-RE 028	Log-Periodic DipoleArray Antenna	3148	34429	EMCO	6/14/2006
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	6/16/2006
ETSTW-RE 030	Double-Ridged Waveguide Horm Antenna	3117	35224	EMCO	5/4/2006
ETSTW-RE 031	Comb Generator-radiated	S/N	S/N	ETS	
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	11/17/2005
ETSTW-RE 033	4CH 1GHz 5GS/s DSO	WAVERUNNER 6100A	LCRY0604P14508	LeCory	
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	11/17/2005
ETSTW-RE 035	1.5GHz Active Voltage Probe	HFP1500	2332	LeCory	
ETSTW-RE 036	100MHz High Voltage Diff Probe	ADP305	3305	LeCory	
ETSTW-RE 037	Log-Periodic DipoleArray Antenna	3148	00034546	EMCO	11/17/2006
ETSTW-RE 038	Log-Periodic DipoleArray Antenna	3148	00034547	EMCO	11/17/2006
ETSTW-RE 039	Biconical Antenna	3110B	41760	EMCO	11/17/2006
ETSTW-RE 040	Biconical Antenna	3110B	41761	EMCO	11/17/2006
ETSTW-RE 041	Anechoic Chamber	CHC 3	S/N	Frankonia	
ETSTW-RE 042	ANTENNA	HK116	100172	R&S	1/13/2007
ETSTW-RE 043	ANTENNA	HL223	100166	R&S	4/15/2006
ETSTW-RE 044	ANTENNA	HL050	100094	R&S	
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	3/21/2007
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	5/18/2007
ETSTW-RE 050	Attenuator 10dB	50HF-010	S/N	JFW	
ETSTW-RE 051	Attenuator 6dB	50HF-006	S/N	JFW	
ETSTW-RE 052	Attenuator 3dB	50HF-003	S/N	JFW	
ETSTW-RE 053	Attenuator 3dB	50HF-003	S/N	JFW	
ETSTW-RE 054	Attenuator 3dB	50HF-003	S/N	JFW	
ETSTW-RE 055	SPECTRUM ANALYZER	FSU-26	200074	R&S	9/5/2006
ETSTW-EMI 001	HARMONICS 1000	HAR1000-1P	93	EMC-PARTNER	11/17/2005
ETSTW-EMS 001	Clamp BASELSTRASSE 160 CH-4242 LAUFEN	CN-EFT1000	354	EMC-PARTNER	11/1/2005
ETSTW-EMS 002	Frequency Converter	YF-6020	0308014		
ETSTW-EMS 003	EMC Immunity Test System	TRA2000IN6	579	EMC-PARTNER	11/1/2005
ETSTW-EMS 004	ESD generator minizap	ESD2000	016	EMC-PARTNER	11/1/2005

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

ETSTW-EMS 005	Attenautor (50Ω)	VERI50	051	EMC-PARTNER	8/30/2006
ETSTW-EMS 006	Attenautor (1 KΩ)	VERI1K	019	EMC-PARTNER	10/20/2006
ETSTW-EMS 007	20GΩ Divider	ESD-VERI-V	021	EMC-PARTNER	3/16/2006
ETSTW-EMS 008	Safety Test Solutions	ELT-400	E-0039	Narda	1/3/2006
ETSTW-EMS 009	Magnetic Field Antenna	MF1000-1	104	EMC-PARTNER	12/2/2006
ETSTW-EMS 010	Coupling De-coupling Network	CDN-UTP8	014	EMC-PARTNER	8/31/2006
ETSTW-EMS 011	Calibration Ficture	F-2031-CF-23MM	451	FCC	8/11/2006
ETSTW-EMS 012	EM Injection Clamp	F-2031-23MM	476	FCC	8/11/2006
ETSTW-RS 001	14" COLOR VIDEO MONITOR	TP-1480HR	P009799	TOPICA	
ETSTW-RS 002	14" COLOR VIDEO MONITOR	TP-1480HR	P009814	TOPICA	
ETSTW-RS 003	RF Power Amplifier	30S1G3	306933	AR	
ETSTW-RS 004	RF Power Amplifier	150W1000	307009	AR	11/18/2005
ETSTW-RS 005	Electric Field Probe Type 8.3	EMR-20	BN 2244/20	GW	9/3/2005
ETSTW-RS 006	SIGNAL GENERATOR	SML03	101551	R&S	11/15/2005
ETSTW-RS 007	AUDIO ANALYZER	UPA3	843458/029	R&S	11/15/2005
ETSTW-GSM 01	SIM Simulator	IT3	B2004-50106	ORGA	9/14/2006
ETSTW-GSM 02	Universal Radio Communication Tester	CMU 200	103489	R&S	
ETSTW-GSM 03	Agilent 8960 Test Set 1	E5515C	GB44052675	Agilent	7/13/2006
ETSTW-GSM 04	Agilent 8960 Test Set 2	E5515C	GB44052665	Agilent	7/13/2006
ETSTW-GSM 05	Agilent 8960 Test Set 3	E5515C	GB44052652	Agilent	7/16/2006
ETSTW-GSM 06	Agilent 8960 Test Set 4	E5515C	GB44052684	Agilent	7/15/2006
ETSTW-GSM 07	Agilent 8960 Test Set 5	E5515C	GB44052658	Agilent	7/13/2006
ETSTW-GSM 08	Agilent 8960 Test Set 6	E5515C	GB44052666	Agilent	7/15/2006
ETSTW-GSM 09	Controler PC	Dell GX 270	700F61J	Dell	
ETSTW-GSM 10	Combiner Wessex / Anite	B4605/100	053	Wessex / Anite	7/13/2006
ETSTW-GSM 11	GSM 850,900,1800,1900 Test system	TS8950G		R&S	10/31/2006
ETSTW-GSM 12	Acoustical Calibrator	4231	2463874	Brüel&Kjær	11/17/2005
ETSTW-GSM 13	Conditioning Amplifier	2690--0S2	2437856	Brüel&Kjær	
ETSTW-GSM 14	Telephone Test Head	4602B	2465324	Brüel&Kjær	
ETSTW-GSM 15	Mouth Simulator	4227	2462516	Brüel&Kjær	
ETSTW-GSM 16	TEMP.&HUMIDITY CHAMBER	GTH-120-40-1P-U	MAA0501002	GIANT FORCE	12/29/2005
ETSTW-GSM 17	ANTENNT COPLER	CMU-Z10	100988	R&S	
ETSTW-GSM 18	AUDIO ANALYZER	UPL16	100173	R&S	9/23/2006
ETSTW-GSM 19	Band Reject Filter	WRCTF824/ 849-822/851-40 /12+9SS	3	WI	
ETSTW-GSM 20	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	
ETSTW-GSM 21	Band Reject Filter	WRCD1879.5/ 1880.5-1875.5/ 1884.5-32/5SS	3	WI	
ETSTW-GSM 22	Band Reject Filter	WRCT901.9/903. 1 -904.25-50/8SS	1	WI	
ETSTW-GSM 23	SPLITTER	4901.19.A	S/N	SUHNER	

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 UUT was 23°C with a humidity of 40 %.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBµV) 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 dBµV + 10.36 dB + 6 dB = 36.36 dBµV/m @3m

The UUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2003 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.

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 Flying Lead Swivel Antenna. (see photos)

3 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.

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

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

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

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
		[dBm]	[dBm]	[dBm]
T_{nom}= 23°C	**V_{nom} = 120 V**	24.53	24.44	24.01
Measurement uncertainty		< 3 dB		

Test condition T_{nom}= 23°C, **V_{nom} = 120 V**	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	
2437	107.06
Measurement uncertainty	< 3 dB

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

Frequency MHz	Power 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 012 , ETSTW-RE 017 , ETSTW-RE 024

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain
EIRP = 24.53dBm + 2.0dBi
= 26.53dBm
Limit: EIRP = +36 dBm for Antenna gain <6dBi

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	Remarks
P	mW	283.795	Peak value
D	dB		
AG	dBi	1.6	
G		2	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.09034	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
1500 – 100.000	1,0

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 (MHz)	Field strength (microvolts/meter)	Field Strength (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)

No duty cycle correction was added to the reading.

54.0dB μ V/m + 20 dB= 74 dB μ V/m

Remarks: see attached diagrams

Test equipment used: ETS 0125, ETS 0271

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
107.06dB μ V/m- 20 dB= 87.06dB μ 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).
Limit = max. aver. Reading-20dB+20dB(because Peak detector is used)

87.06dB μ V/m

For frequencies above 1GHz (Average measurements).
Max. reading – 20dB

No duty cycle correction was added to the reading
107.06dB μ V/m- 20 dB= 87.06dB μ V/m

Remarks: see attached diagrams
Test equipment used: ETSTW-RE 003 , ETSTW-RE 012 , ETSTW-RE 015 , ETSTW-RE 016 , ETSTW-RE 017 , ETSTW-RE 024

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

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

Freq	Frequency Marker [MHz]	Polari-zation	Corrected Reading [dBuV/m]	Compliance Limit [dBuV/m]	Detec-tor	BW [MHz]	Margin
1	39.87976	V	33.88	87.06	PK	0.1	53.18
1	131.8637	V	32	43.5	PK	0.1	11.5
1	280.13	V	29.47	46	PK	0.1	16.53
2	385.7174	V	32.99	87.06	PK	0.1	54.07
2	1320.641	V	42.59	54	PK	1	11.41
3	2390	V	73.51	74	PK	1	0.49
3	2390	V	46.31	54	AV	1	7.69
3	2483.5	V	49.72	54	PK	1	4.28
3	2483.5	V	33.45	74	AV	1	20.55
3	119.9399	H	32.20	43.5	PK	0.1	11.3
1	131.8631	H	31.22	43.5	PK	0.1	12.28
1	280.1603	H	33.64	46	PK	0.1	12.36
2	461.3226	H	37.57	87.06	PK	0.1	49.49
2	1056.112	H	40.94	54	PK	1	13.06
3	1124.248	H	40.01	54	PK	1	13.99
3	2390	H	52.07	54	PK	1	1.93
3	2390	H	30.82	54	AV	1	23.18
3	65.77154	V	34.08	87.06	PK	0.1	52.98
1	131.8637	V	31.59	43.5	PK	0.1	11.91
1	262.5251	V	27.88	46	PK	0.1	18.12
2	360.3206	V	32.62	87.06	PK	0.1	54.44
2	1056.112	V	38.45	54	PK	1	15.55
3	1320.641	V	41.05	54	PK	1	12.95

3	2390.381	V	51.58	54	PK	1	2.42
3	2483.5	V	53.55	54	PK	1	0.45
3	4873.747	V	49.13	54	PK	1	4.87
4	119.9399	H	32.73	43.5	PK	0.1	10.77
1	132.2044	H	30.41	43.5	PK	0.1	13.09
1	278.5571	H	32.97	46	PK	0.1	13.03
2	725.8517	H	42.42	87.06	PK	0.1	44.64
2	1054.108	H	40.47	54	PK	1	13.53
3	1124.248	H	39.27	54	PK	1	14.73
3	2390.381	H	41.71	54	PK	1	12.29
3	2488.675	H	45.69	54	PK	1	8.31
3	65.77154	V	33.38	87.06	PK	0.1	53.68
1	131.8637	V	32.14	43.5	PK	0.1	11.36
1	278.5571	V	29.13	46	PK	0.1	16.87
2	306.3206	V	33.40	87.06	PK	0.1	53.66
2	1320.641	V	42.44	54	PK	1	11.56
3	2400	V	53.18	54	PK	1	0.82
3	2400	V	32.06	87.06	AV	1	55
3	2483.5	V	25.85	54	PK	1	28.15
3	2483.5	V	50.65	54	AV	1	3.35
3	4921.844	V	49.54	54	PK	1	4.46
4	119.9399	H	31.60	43.5	PK	0.1	11.9
1	131.8637	H	30.48	43.5	PK	0.1	13.02
1	278.5571	H	33.71	46	PK	0.1	12.29
2	461.3226	H	38.40	87.06	PK	0.1	48.66
2	1054.108	H	41.32	54	PK	1	12.68
3	1124.248	H	39.64	54	PK	1	14.36
3	2483.5	H	53.51	54	PK	1	0.49
3	2849.699	H	48.24	54	PK	1	5.76

Freq. – Frequency Range:

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

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

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

Comment: see attached diagrams
Test equipment used: ETSTW-RE 003, ETSTW-RE 015, ETSTW-RE 016, ETSTW-RE 017, ETSTW-RE 024

3.6 Minimum 6 dB Bandwidth

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

Test conditions		6 dB Bandwidth		
		Channel A	Channel B	Channel C
T_{nom}= 23°C	V_{nom} = 120 V	16.59318637 MHz	13.58717435 MHz	11.98396794 MHz
Measurement uncertainty			< 10 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-CE 003 , ETSTW-RE 003

Comment: see attached diagram

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 [dBm]	Channel B [dBm]	Channel C [dBm]
T_{nom}= 23°C	V_{nom} = 120 V	-14.56	-15.38	-17.21
Measurement uncertainty		< 3 Hz		

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483,5	8
5725-5850	8

Test equipment used: ETSTW-CE 003 , ETSTW-RE 003

Comment: see attached diagram

3.8 Radiated Emissions from Receiver Section of Transceiver

FCC Rule: 15.109

Summary table with radiated data of the test plots

Freq,	Frequency Marker [MHz]	Polari-zation	Corrected Reading [dBuV/m]	Compliance Limit [dBuV/m]	Detec-tor	BW [MHz]	Margin
1	49.759519	V	35.12	40	PK	0.1	4.88
1	65.771543	V	35.37	40	PK	0.1	4.63
2	329.85912	V	32.69	46	PK	0.1	13.31
2	360.32064	V	32.97	46	PK	0.1	13.03
3	1318.6373	V	42.49	54	PK	1	11.51
3	1517.0341	V	41.86	54	PK	1	12.14
7	683761535	V	46.01	54	PK	1	7.99
5	8577.1543	V	48.85	54	PK	1	5.15
6	14164.329	V	51.87	54	PK	1	2.13
1	119.39388	H	33.97	43.5	PK	0.1	9.53
1	132.20441	H	31.0	43.5	PK	0.1	12.5
2	749.8998	H	44.0	46	PK	0.1	2
2	775.5511	H	42.85	46	PK	0.1	3.15
3	1054.1082	H	41.16	54	PK	1	12.84
3	3218.4369	H	41.08	54	PK	1	12.92
4	6909.8196	H	45.45	54	PK	1	8.55
5	8424.8497	H	49.44	54	PK	1	4.56
6	15667.335	H	52.09	54	PK	1	1.91
1	49.759519	V	35.10	40	PK	0.1	4.9
1	65.771543	V	34.64	40	PK	0.1	5.36
2	725.8517	V	40.98	46	PK	0.1	5.02
2	825.2505	V	39.0	46	PK	0.1	7
3	1318.6373	V	40.45	54	PK	1	13.55
3	1517.0341	V	40.03	54	PK	1	13.97
1	119.93988	H	34.08	43.5	PK	0.1	9.42
1	131.86373	H	31.26	43.5	PK	0.1	12.24
2	725.8517	H	42.82	46	PK	0.1	3.18
2	749.8998	H	43.37	46	PK	0.1	2.63
3	1054.1082	H	40.42	54	PK	1	13.58
3	1318.6373	H	36.83	54	PK	1	17.17
1	49.759519	V	35.35	40	PK	0.1	4.65

1	65.771543	V	34.46	40	PK	0.1	5.54
2	329.85972	V	32.42	46	PK	0.1	13.58
2	725.8517	V	38.81	46	PK	0.1	7.19
3	1318.6373	V	40.67	54	PK	1	13.33
3	1517.0341	H	40.29	54	PK	1	13.71
1	119.93988	H	33.54	43.5	PK	0.1	9.96
1	132.20441	H	34.05	43.5	PK	0.1	9.45
2	725.8517	H	43.07	46	PK	0.1	2.93
2	749.8998	H	43.74	46	PK	0.1	2.26
3	1054.1082	H	39.96	54	PK	1	14.04
3	1318.6373	H	37.43	54	PK	1	16.57

Digital

(Wireless Mode)

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
1-V	65.771543	22.43	11.61	PK	34.04	40	5.96	289	143
	172.064128	22.82	12.7	PK	35.52	43.5	7.98	334	205
	198.296593	28.06	9.9	PK	37.96	43.5	5.54	290	138

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
1-H	131.863727	22.91	11.95	PK	34.86	43.5	8.64	353	109
	134.589178	23.9	11.99	PK	35.89	43.5	7.61	351	114
	198.296593	29.21	9.9	PK	39.11	43.5	4.39	281	126

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
2-V	329.859719	22.26	13.8	PK	36.06	46	9.94	270	192
	360.320641	21.23	14.43	PK	35.66	46	10.34	190	172
	499.799599	20.39	17.34	PK	37.73	46	8.27	219	135
	725.851703	17.03	21.09	PK	38.12	46	7.88	185	232

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
2-H	461.322645	23.35	16.74	PK	40.09	46	5.91	249	165
	494.989980	22.96	17.28	PK	40.24	46	5.76	215	148
	725.851703	20.44	21.09	QP	41.53	46	4.47	180	248
	759.519038	19.98	21.89	QP	41.87	46	4.131	168	189

(Line Mode)

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
1-V	165.931864	22.98	12.85	PK	39.83	43.5	3.67	275	106
	180.9218144	23.68	11.71	PK	35.39	43.5	8.11	265	173
	193.867735	26.33	10.10	PK	36.43	43.5	7.07	288	145
	198.296593	27.15	9.8	QP	36.95	43.5	6.55	286	141

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
1-H	119.939880	22.53	11.3	PK	33.83	43.5	9.67	352	118
	131.863727	22.05	11.9	PK	33.95	43.5	9.55	357	131
	146.853707	23.36	12.85	PK	36.21	43.5	7.29	292	107
	198.296593	25.17	9.8	QP	35.37	43.5	8.13	281	114

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
2-V	374.749499	25.56	14.76	PK	40.32	46	5.68	210	149
	461.322645	21.73	16.74	PK	38.47	46	7.53	255	169
	650.501002	21.07	20.03	PK	41.10	46	4.9	259	148
	700.200401	21.96	20.61	QP	42.57	46	3.43	349	126
	749.899800	23.04	21.85	QP	44.89	46	3.43	349	102
	775.551102	21.23	21.93	QP	43.16	46	2.84	320	148

Polarization	Frequency Marker (MHz)	C.R. (dBuv)	C.F. (dB)	Detector AV/QP	T.R. (dBuV/m)	C.L. (dBuV/m)	Margin (dB)	Azimuth (degree)	A.H. (cm)
2-H	374.749499	29.41	14.76	QP	44.17	46	1.83	208	145
	700.200401	23.75	20.61	QP	44.36	46	1.64	355	118
	749.899800	23.17	21.85	QP	45.02	46	0.98	345	108
	775.551102	22.75	21.93	QP	44.68	46	1.32	315	139
	828.250501	21.4	22.47	QP	43.87	46	2.13	295	165
	874.949900	21.49	22.60	QP	44.09	46	1.91	281	207

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

Note
1. **Correction Factor = Antennal factor + Cable loss + Preamplifier gain**
2. **Test Result = Correction reading + Correction Factor**
3. **P = Peak，QP = Qusai Peak。**
4. **C.R.=Corrected Reading; C.F.= Correction Factor; T.R.= Test Result; C.L.=Compliance Limit; A.H.=Antenna Height**

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 (MHz)	Field Strength (microvolts/meter)	Field Strength (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 015, ETSTW-RE 016, ETSTW-RE 017, ETSTW-CS 001, ETSTW-RE 026, ETSTW-RE 003, ETSTW-RE 025

Comment: see attached diagram

3.9 Power Line Conducted Emission

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

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

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

Measurement Result: "_ Fin AV" (Wireless Mode)

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance AVLimit [dBuV]	BW [MHz]	Margin(AV)
0.22	N	31.7	54	0.01	22.30
0.375	N	20.3	49.571428	0.01	29.27
1.515	N	26.3	46	0.01	19.70
3.445	N	21.3	46	0.01	24.70

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance AVLimit [dBuV]	BW [MHz]	Margin(AV)
0.220	L1	31.2	54	0.01	22.80
1.510	L1	22.6	46	0.01	23.40
3.440	L1	20.4	46	0.01	25.60

Measurement Result: "_ Fin QP"

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance QPLimit [dBuV]	BW [MHz]	Margin(QP)
0.22	N	41	64	0.01	23.00
0.375	N	38.1	59.571428	0.01	21.47
1.515	N	41.6	56	0.01	14.40
3.445	N	36.2	56	0.01	19.80

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance QPLimit [dBuV]	BW [MHz]	Margin(QP)
v	L1	41.3	64	0.01	22.70
1.510	L1	42.6	56	0.01	13.40
3.440	L1	34.9	56	0.01	21.10

Measurement Result: "_ Fin AV" (Line Mode)

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance AVLimit [dBuV]	BW [MHz]	Margin(AV)
0.375	N	47.7	49.57143	0.01	1.87
0.525	N	45	46	0.01	1.00
0.53	N	45.3	46	0.01	0.70
0.6	N	45.3	46	0.01	0.70
0.67	N	45.8	46	0.01	0.20
0.755	N	44.2	46	0.01	1.80
1.425	N	43.1	46	0.01	2.90
1.3	N	40.5	46	0.01	5.50
1.370	N	41.6	46	0.01	4.40
1.385	N	39.5	46	0.01	6.50
1.430	N	38.4	46	0.01	7.60
1.480	N	38.8	46	0.01	7.20
1.495	N	37.3	46	0.01	8.70
1.530	N	34.5	46	0.01	11.50
1.780	N	39.7	46	0.01	6.30

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance AVLimit [dBuV]	BW [MHz]	Margin(AV)
0.45	L1	46.1	47.42857	0.01	1.33
0.525	L1	45.8	46	0.01	0.20
0.6	L1	45.7	46	0.01	0.30
0.605	L1	45.7	46	0.01	0.30
0.68	L1	45.2	46	0.01	0.80
1.355	L1	45.1	46	0.01	0.90
1.275	L1	40.6	46	0.01	5.40
1.335	L1	41.8	46	0.01	4.20
1.370	L1	39.4	46	0.01	6.60
1.390	L1	39.8	46	0.01	6.20
1.400	L1	40.6	46	0.01	5.40
1.430	L1	41.1	46	0.01	4.90
1.495	L1	43.2	46	0.01	2.80
1.505	L1	40.8	46	0.01	5.20
1.78	L1	41.6	46	0.01	4.40

Measurement Result: "_ Fin QP"

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance QPLimit [dBuV]	BW [MHz]	Margin(QP)
0.375	N	51.8	59.57143	0.01	7.77
0.525	N	52.5	56	0.01	3.50
0.53	N	53.1	56	0.01	2.90
0.6	N	52.6	56	0.01	3.40
0.67	N	53.5	56	0.01	2.50
0.755	N	52.8	56	0.01	3.20
1.425	N	51.9	56	0.01	4.10
1.3	N	55.4	56	0.01	0.60
1.370	N	55.8	56	0.01	0.20
1.385	N	55.2	56	0.01	0.80
1.430	N	55.6	56	0.01	0.40
1.480	N	55.4	56	0.01	0.60
1.495	N	55.5	56	0.01	0.50
1.530	N	56	56	0.01	0.00
1.780	N	55.1	56	0.01	0.90

Registration number: W6M20511-6291-C-2
FCC ID: TSTWV100

Frequency Marker [MHz]	Type	Corrected Reading [dBuV]	Compliance QPLimit [dBuV]	BW [MHz]	Margin(QP)
0.45	L1	53.6	57.42857	0.01	3.83
0.525	L1	51.8	56	0.01	4.20
0.6	L1	50.6	56	0.01	5.40
0.605	L1	51.4	56	0.01	4.60
0.68	L1	53.9	56	0.01	2.10
1.355	L1	54.8	56	0.01	1.20
1.275	L1	55.4	56	0.01	0.60
1.335	L1	55.5	56	0.01	0.50
1.370	L1	55.4	56	0.01	0.60
1.390	L1	56.0	56	0.01	0.00
1.400	L1	55.7	56	0.01	0.30
1.430	L1	55.1	56	0.01	0.90
1.495	L1	55.5	56	0.01	0.50
1.505	L1	55.5	56	0.01	0.50
1.78	L1	55.3	56	0.01	0.70

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 004, ETSTW-CE 001, ETSTW-RE 023

Comment: see attached diagram

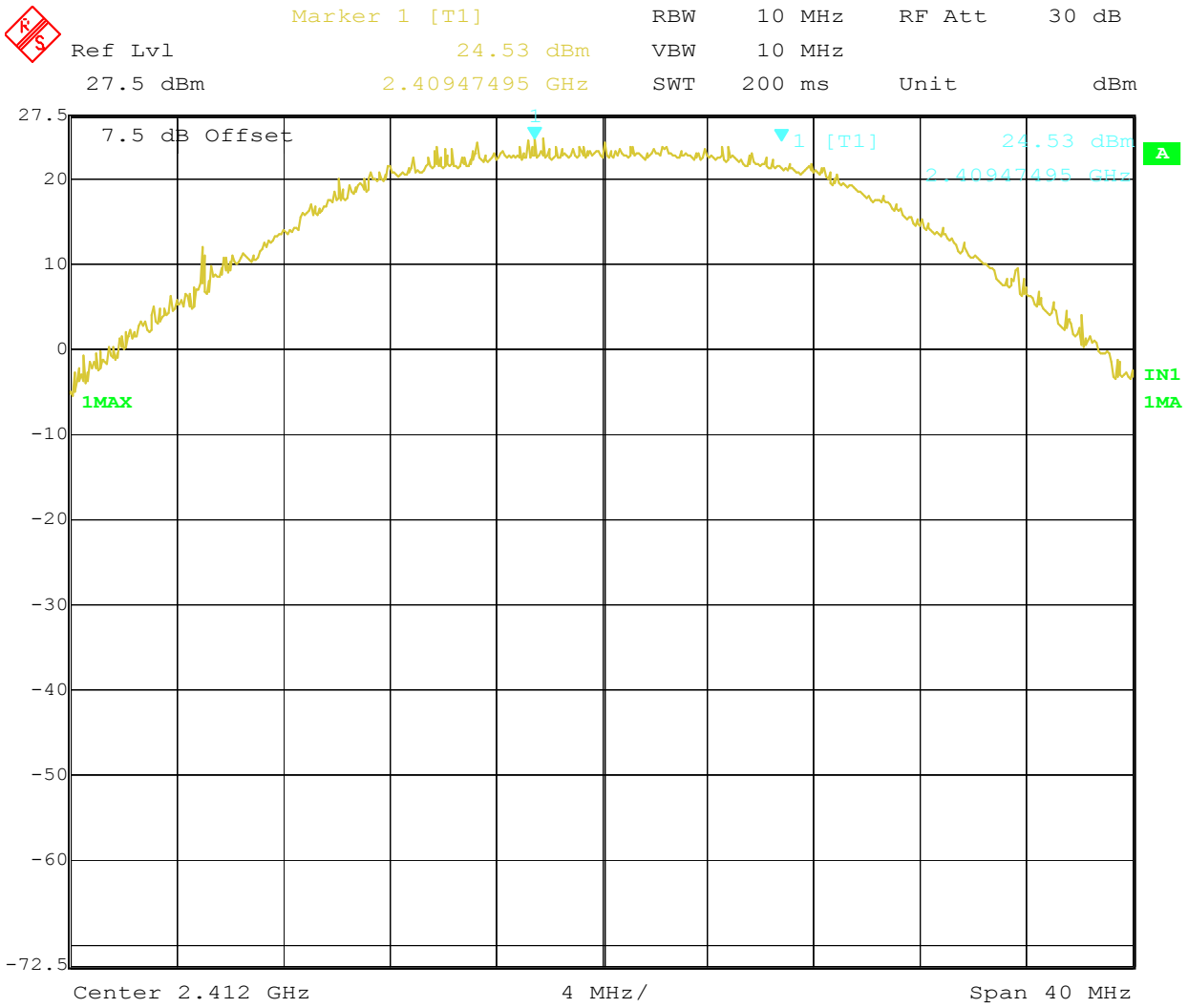
Appendix

A Peak Output Power
B Spurious Emissions radiated – Transmitter operating
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
H Pictures

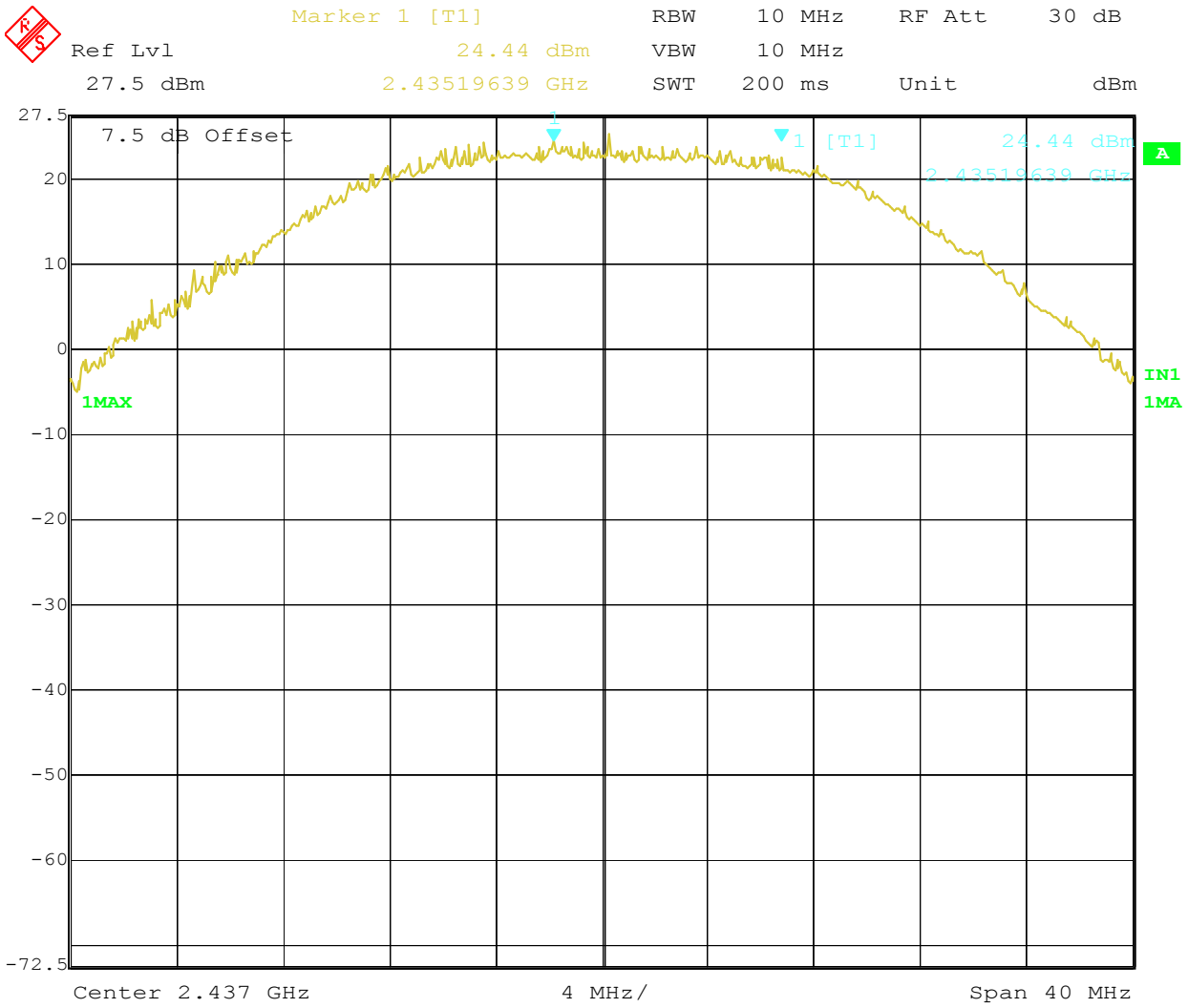
Appendix A

Peak Output Power

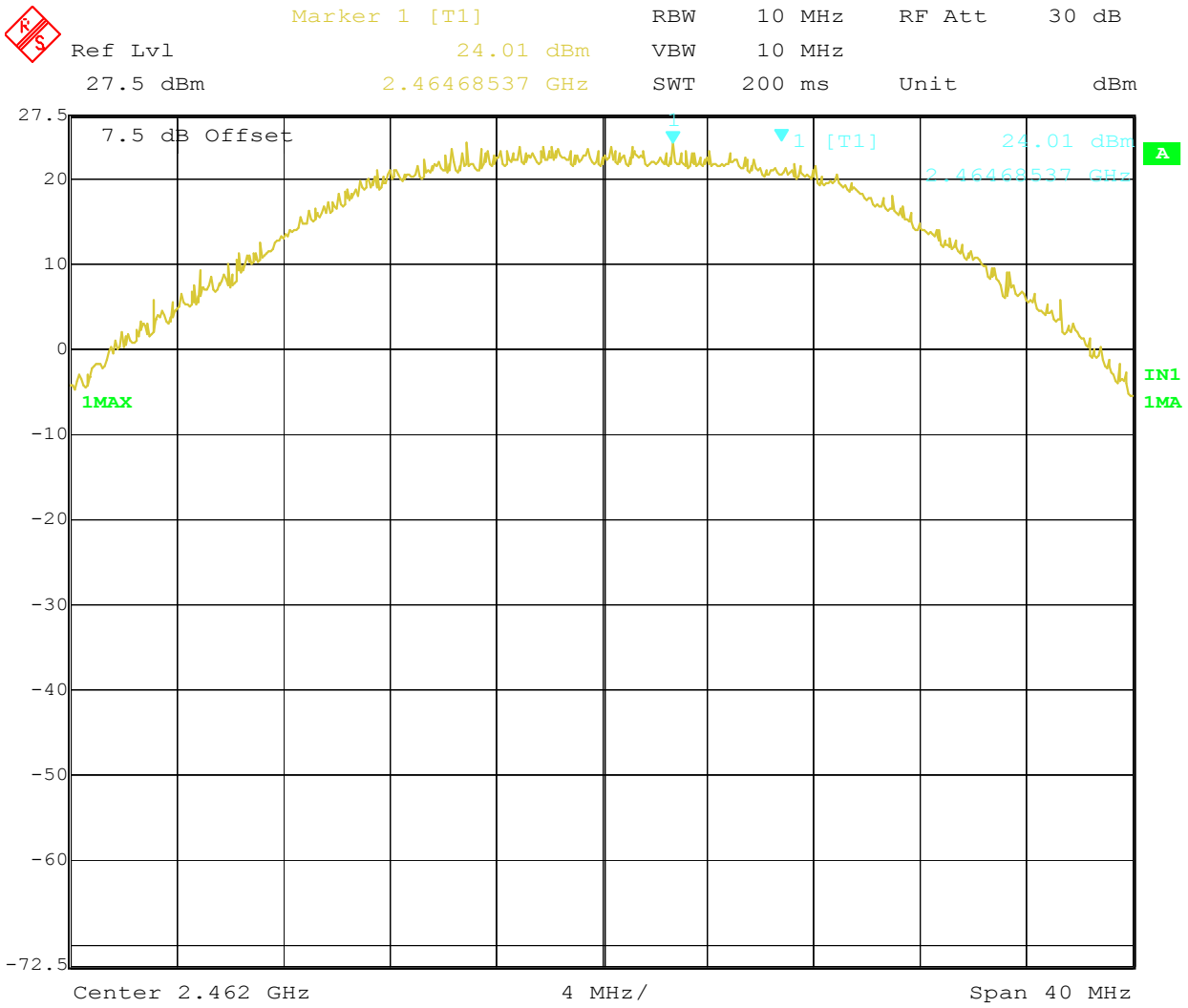
The measurement diagram are wideband pre-scan results; only for reference.



Title: 11G CH1 MAX OUTPUT POWER
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:16:52



Title: 11G CH6 MAX OUTPUT POWER
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:13:38

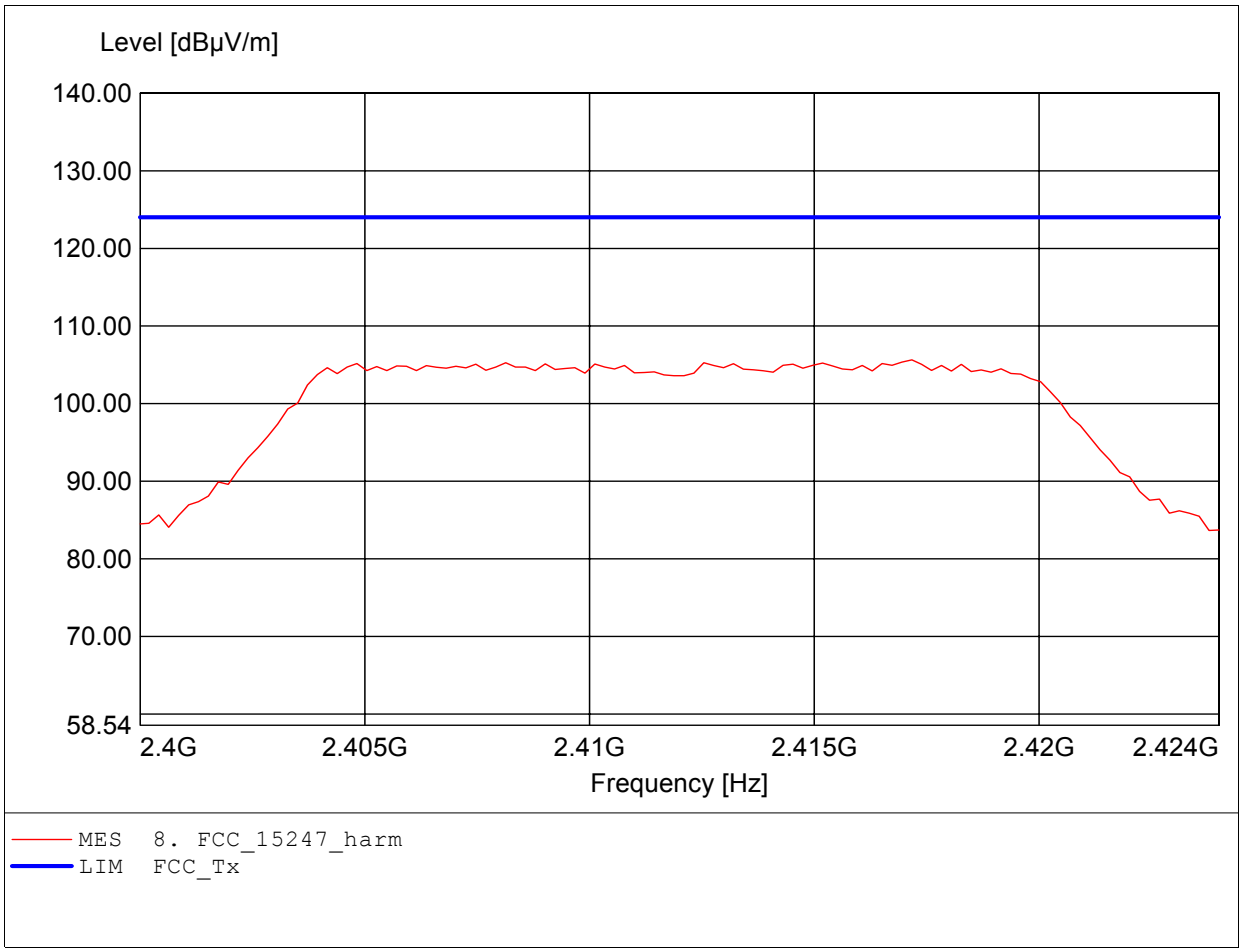


Title: 11G CH11 MAX OUTPUT POWER
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 16:58:43

Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

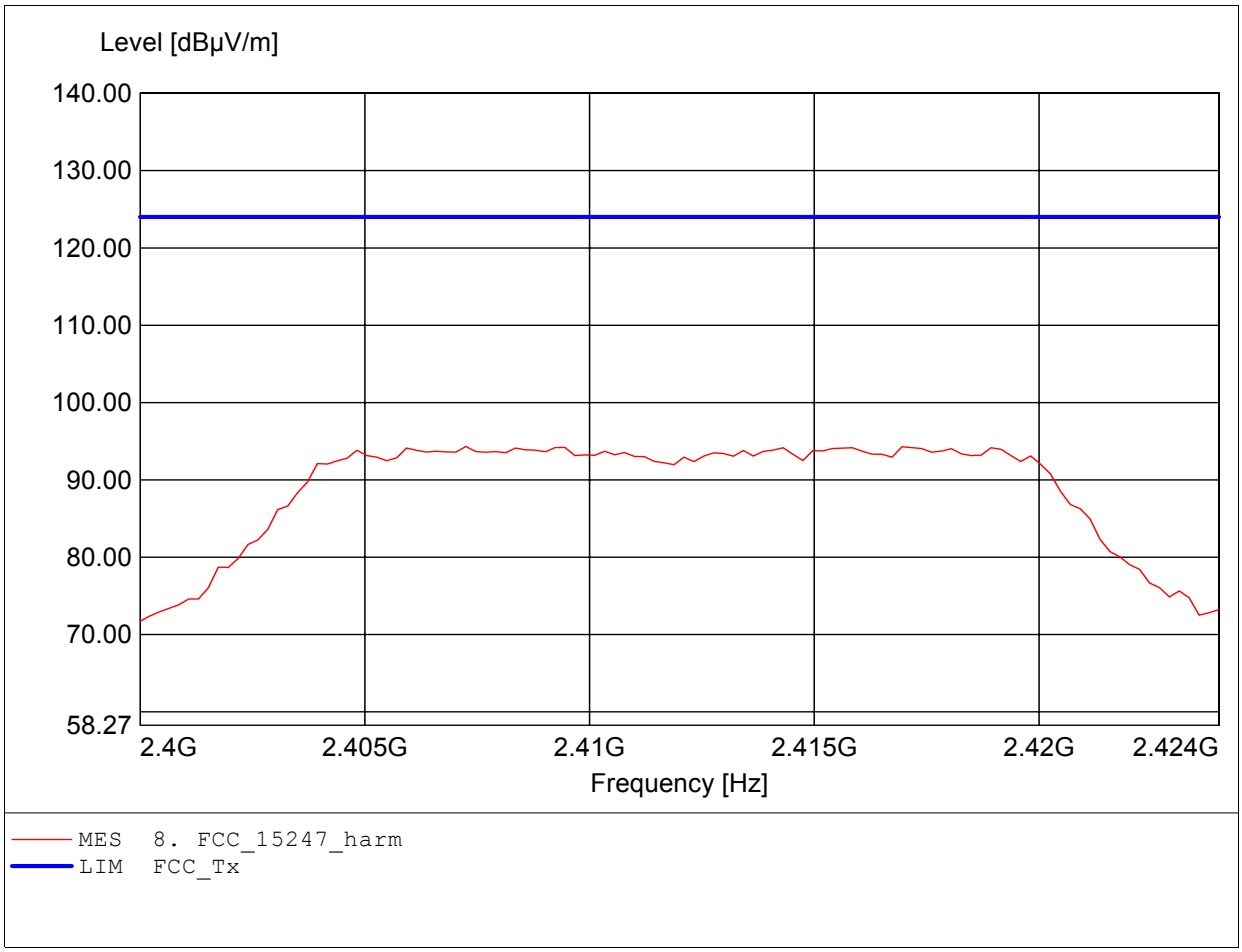
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.417GHz, Emax: 105.64dBµV/m, RBW: 1MHz



Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

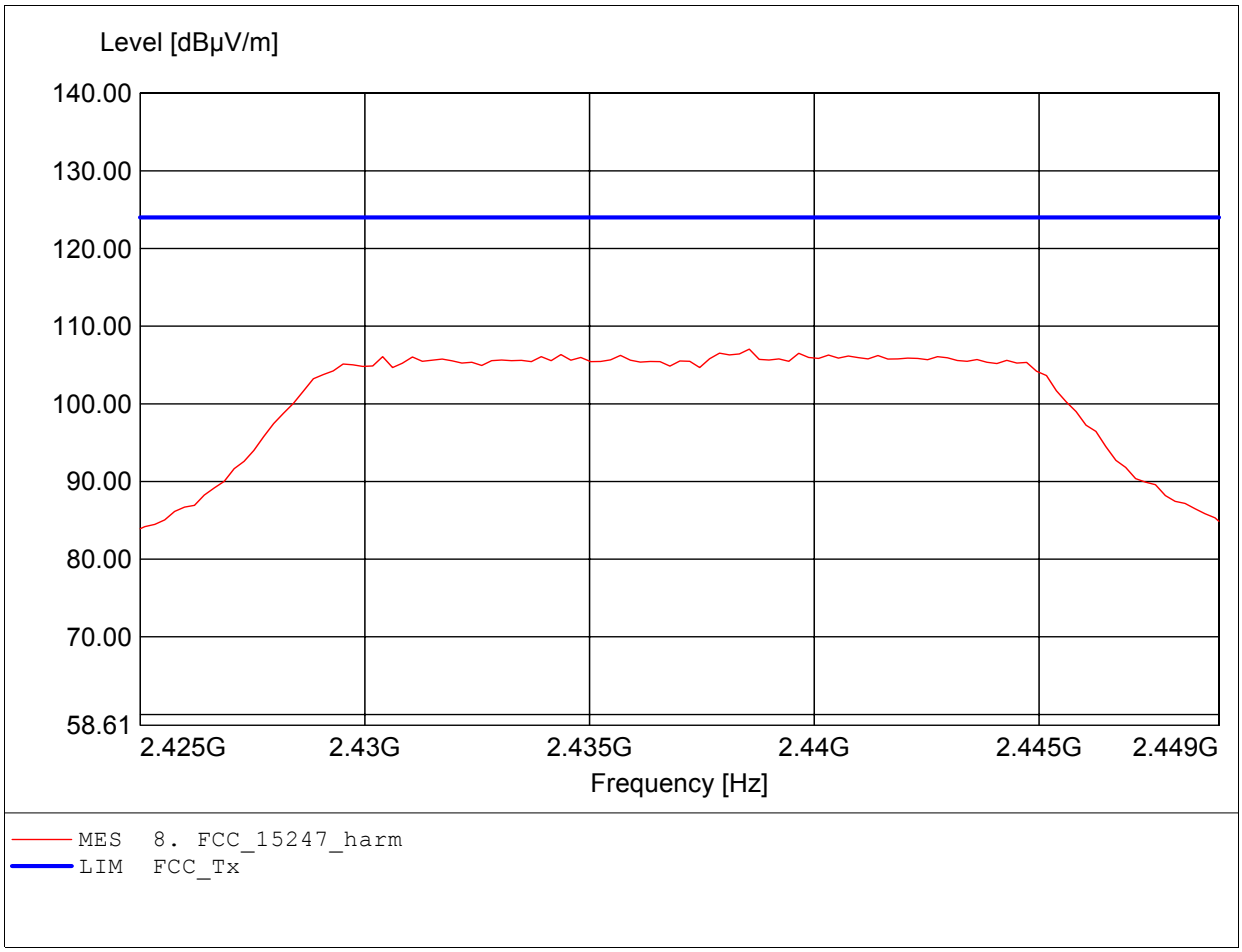
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.407GHz, Emax: 94.32dBµV/m, RBW: 1MHz



Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

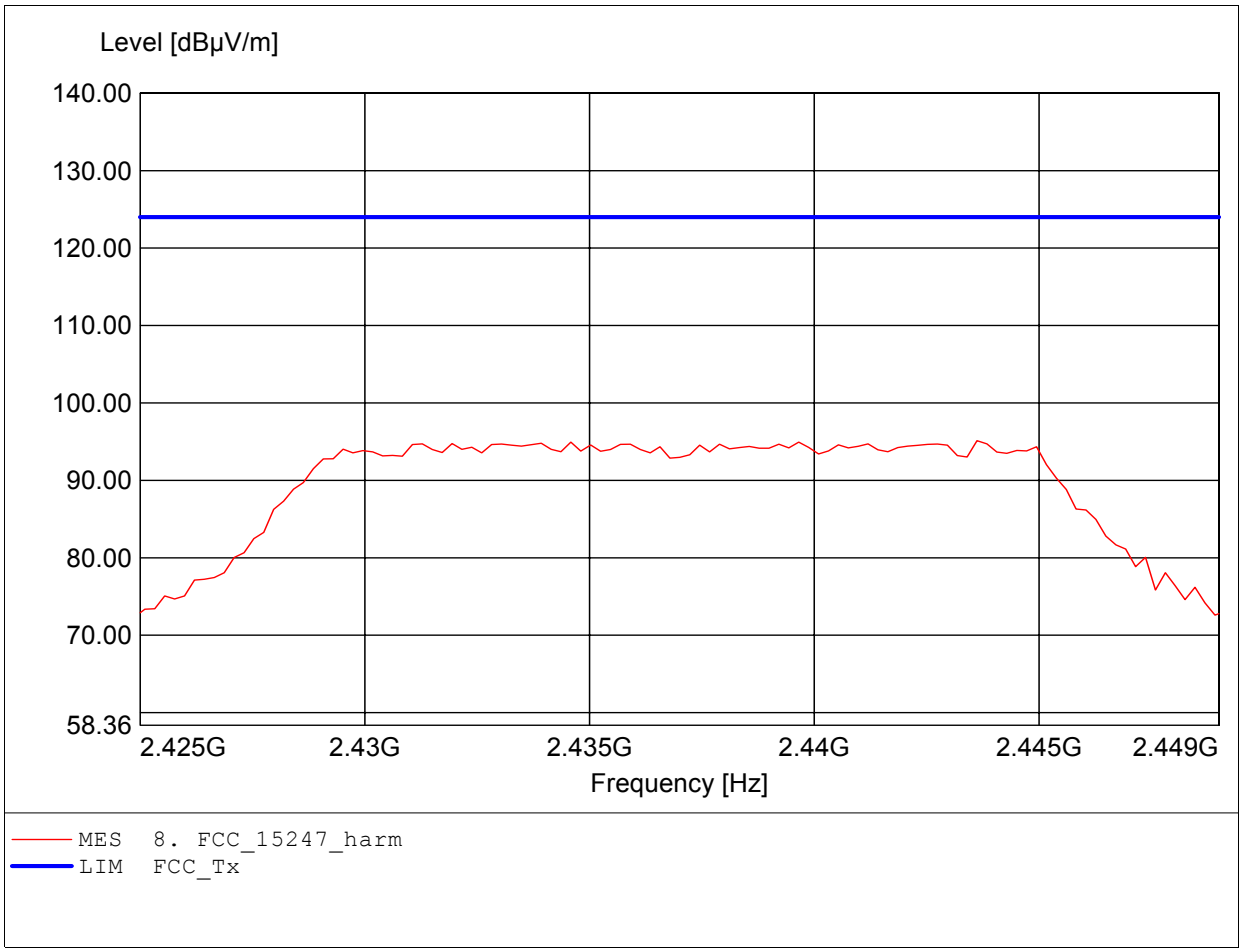
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.439GHz, Emax: 107.06dBµV/m, RBW: 1MHz



Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

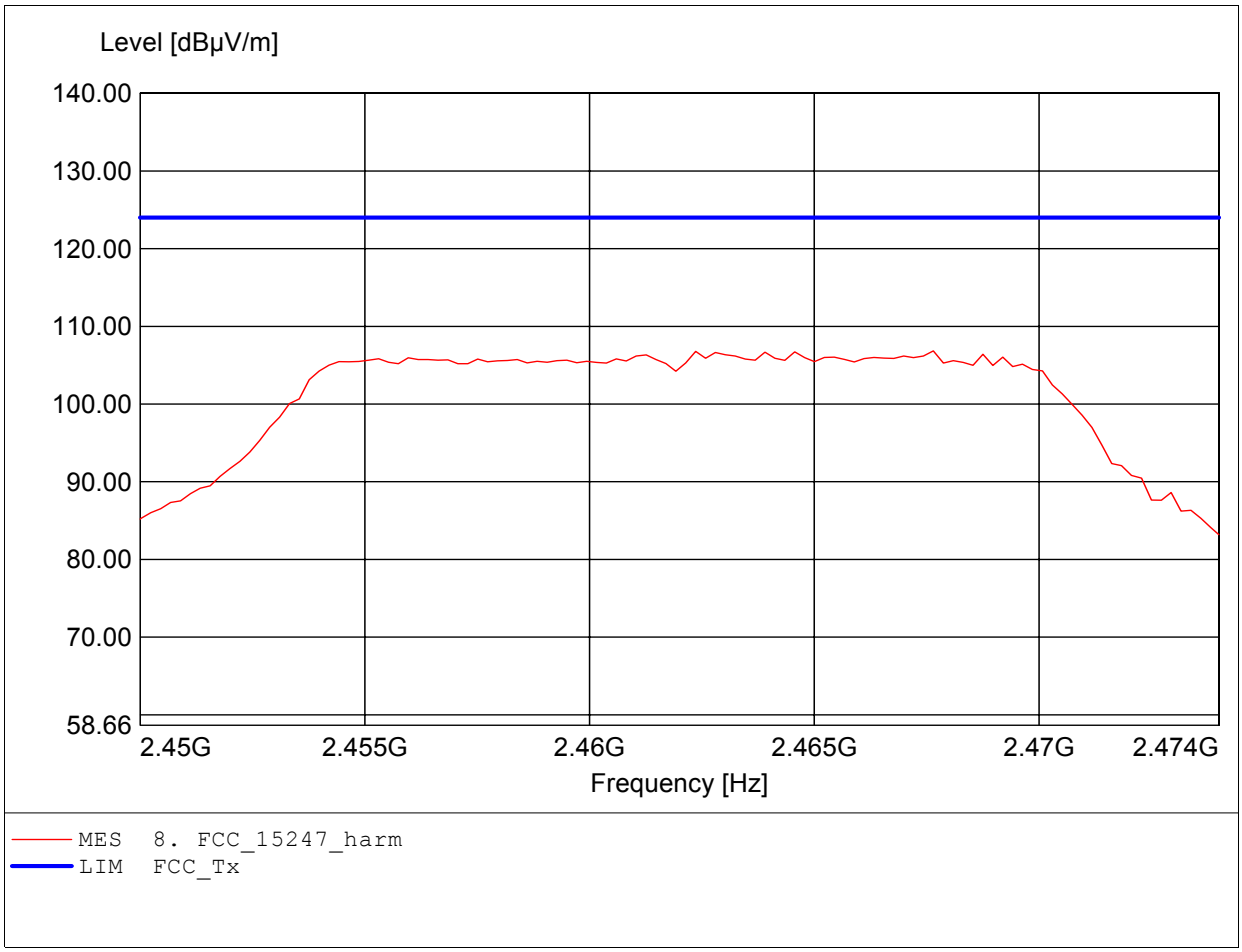
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.444GHz, Emax: 95.11dBµV/m, RBW: 1MHz



Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

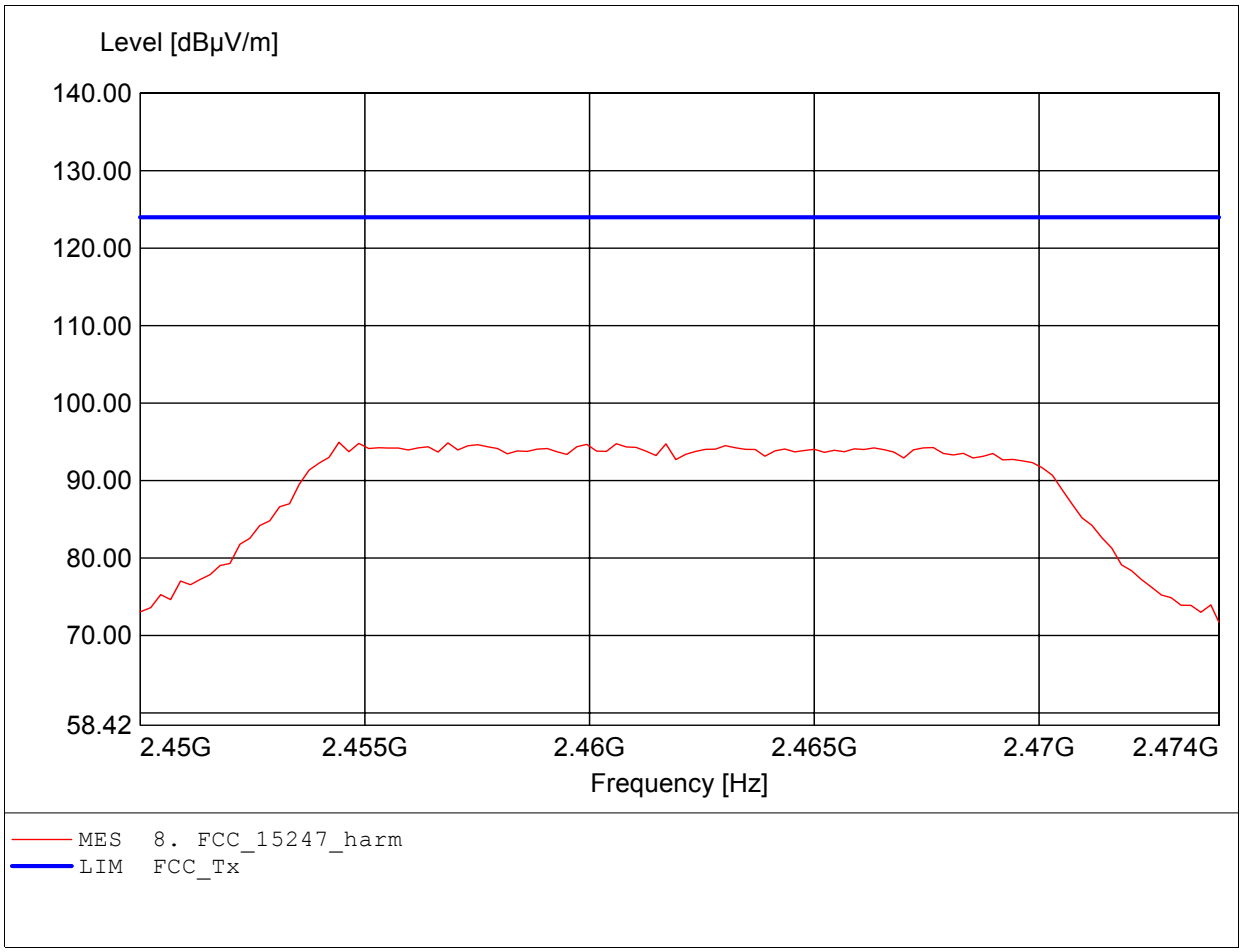
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.468GHz, Emax: 106.84dBµV/m, RBW: 1MHz



Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL025
	Freq: 2.454GHz, Emax: 94.95dBµV/m, RBW: 1MHz



Appendix B

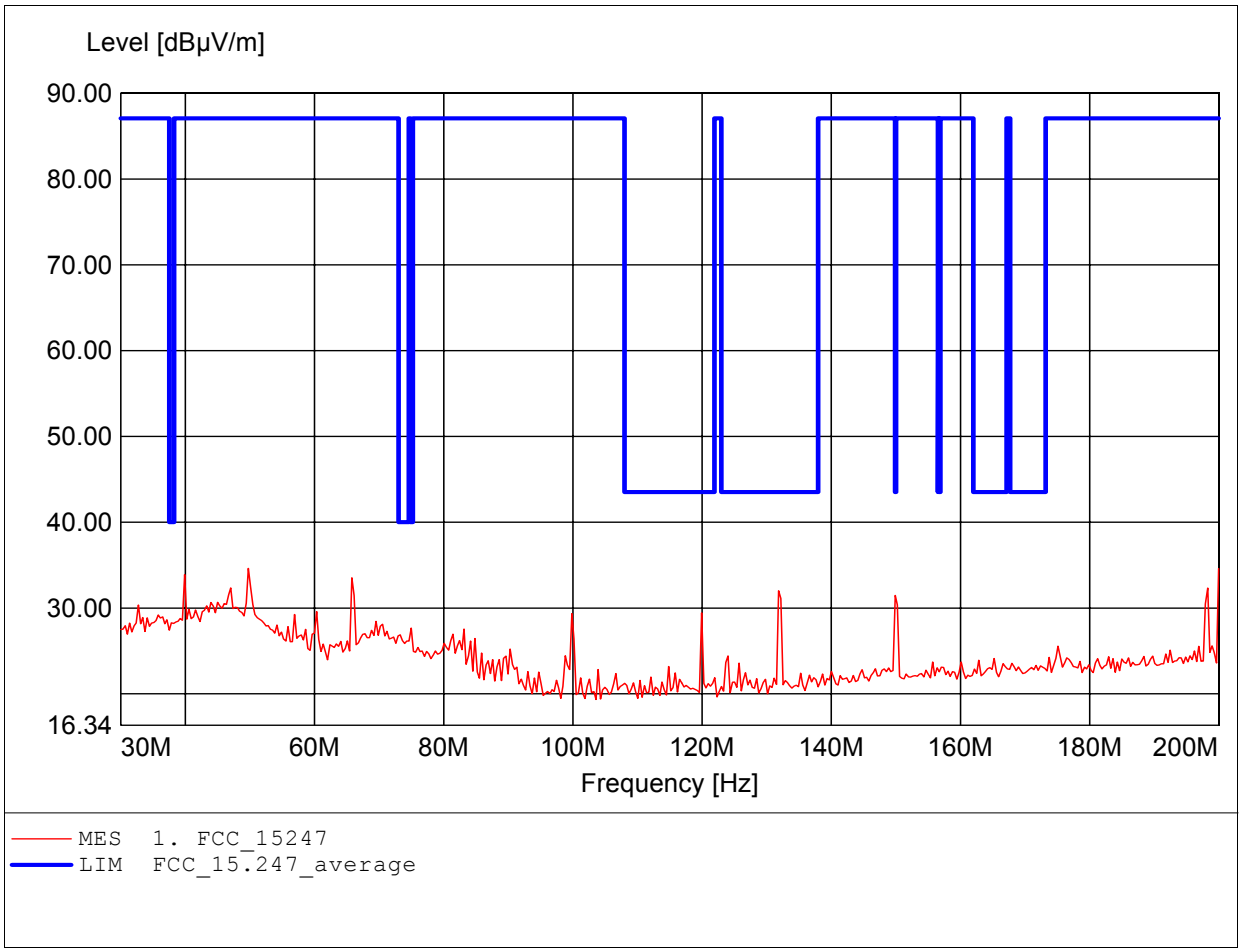
Spurious Emissions radiated – Transmitter operating

The measurement diagram are wideband pre-scan results; only for reference.

Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

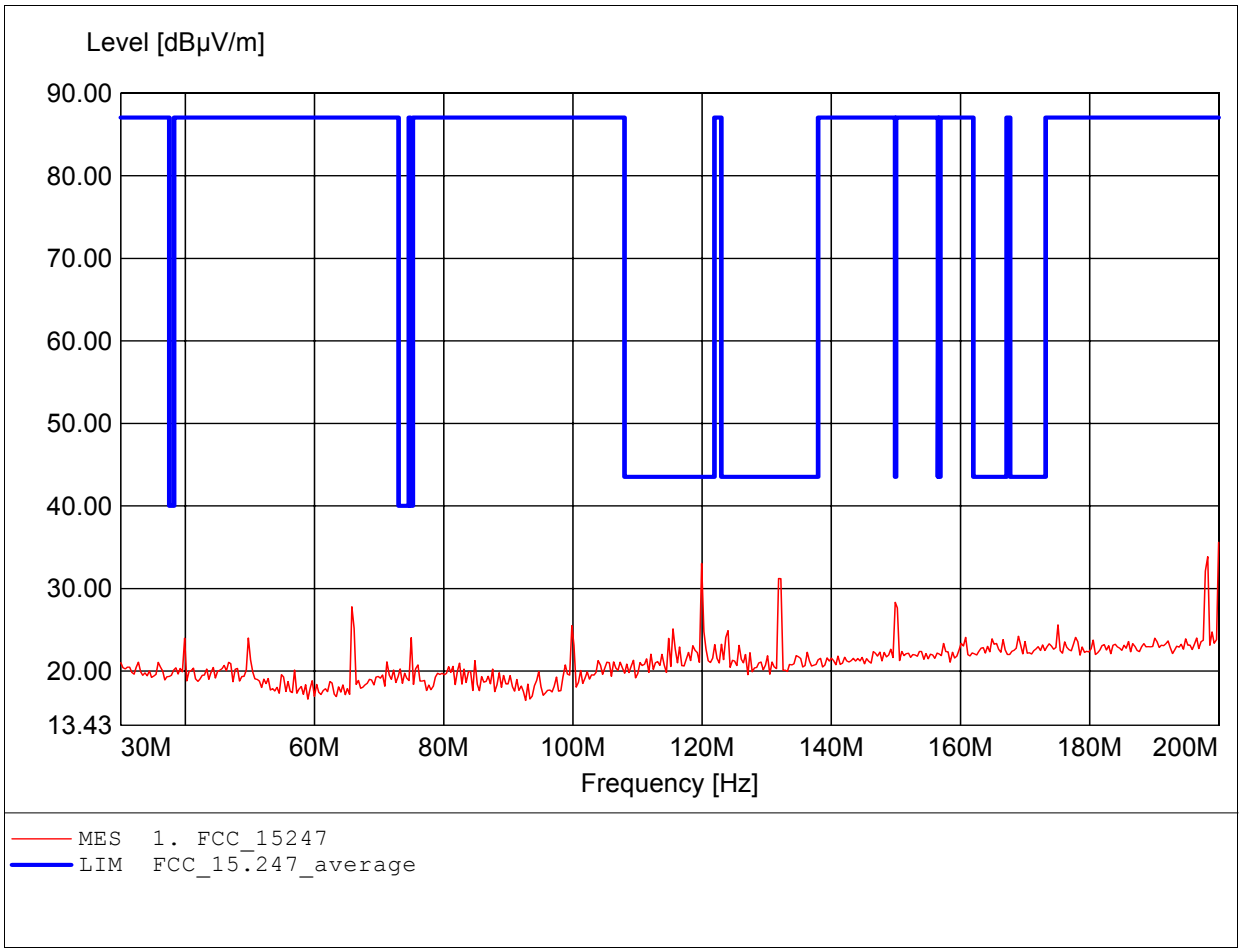
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 49.760MHz, Emax: 34.61dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

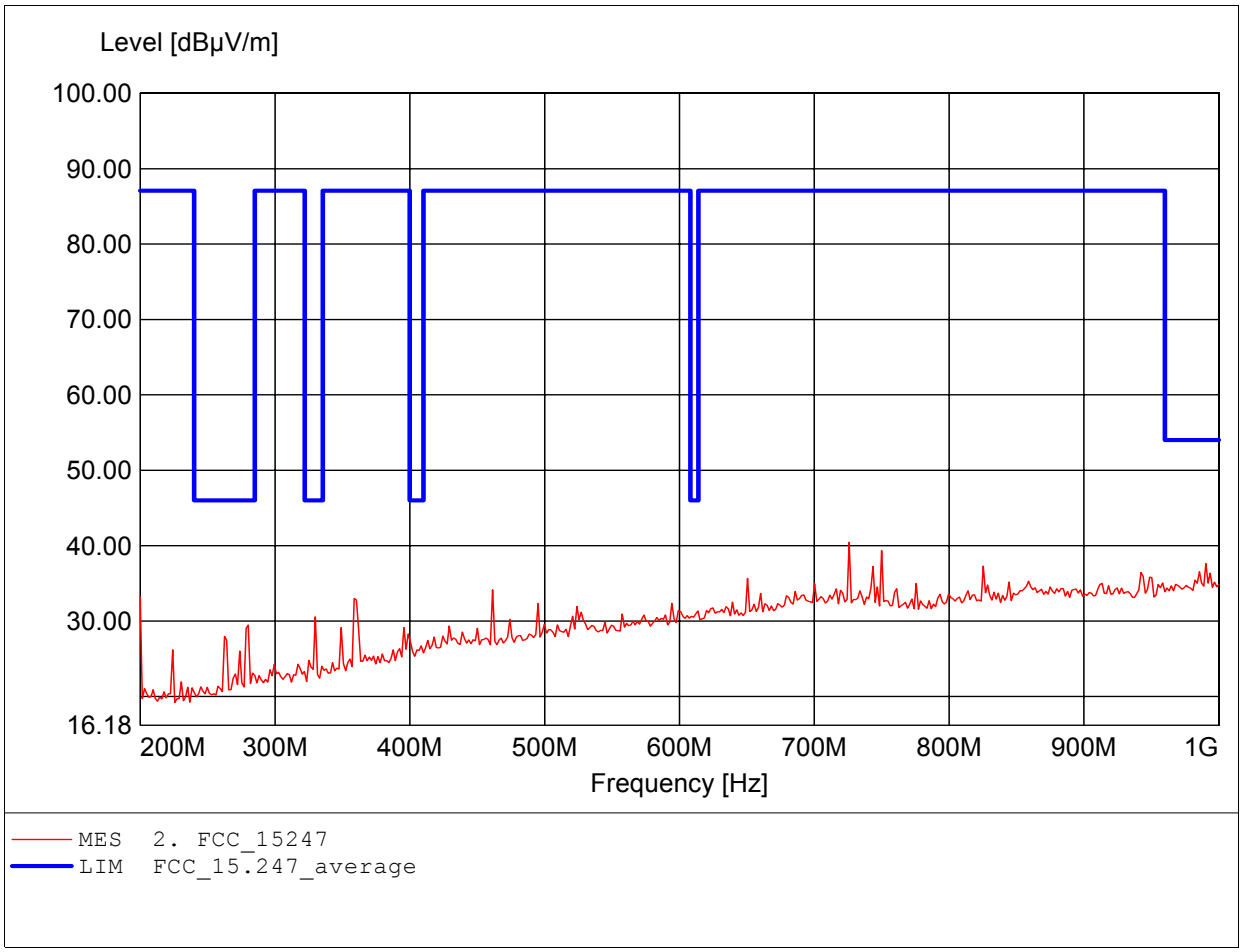
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 200.000MHz, Emax: 35.60dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

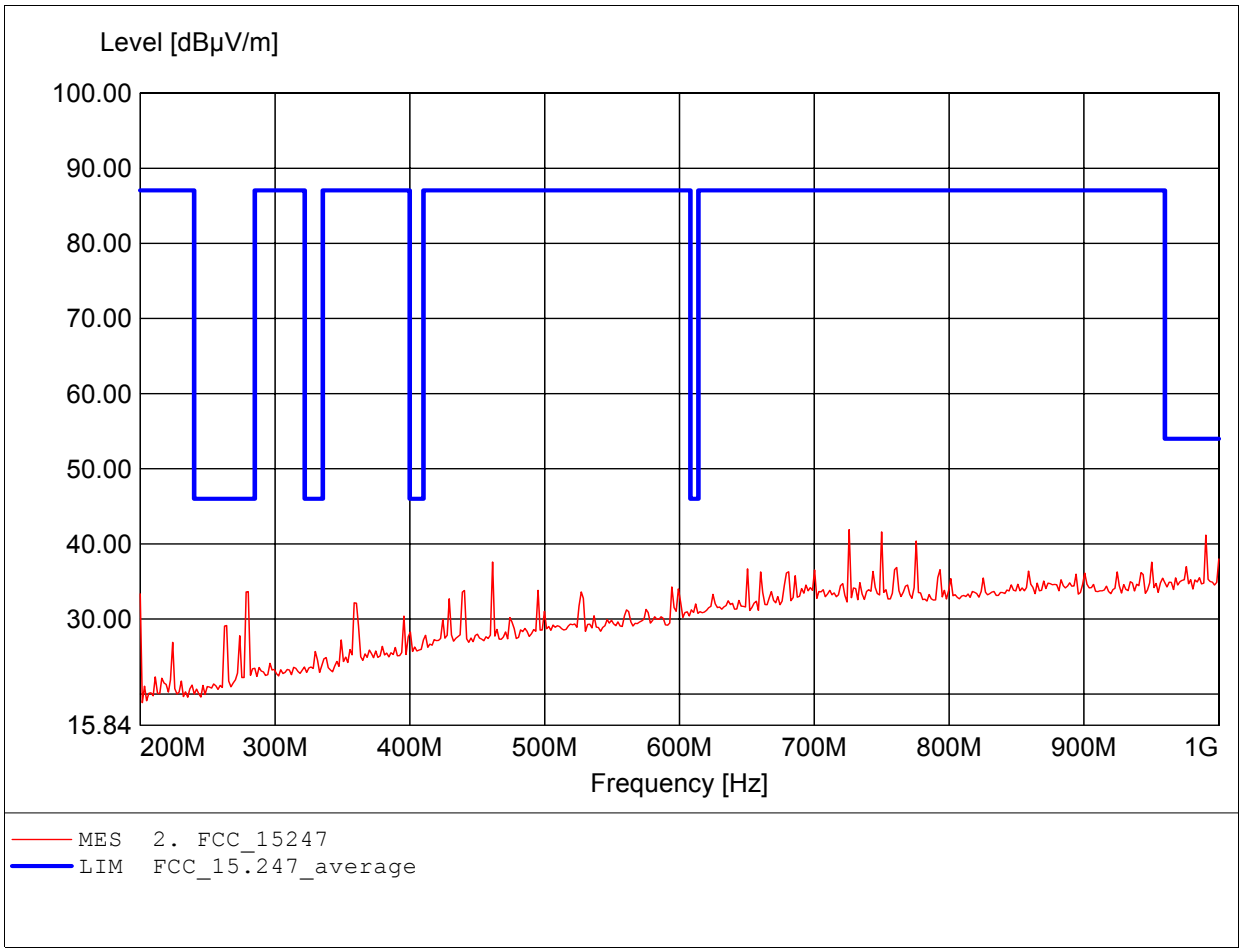
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 40.43dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

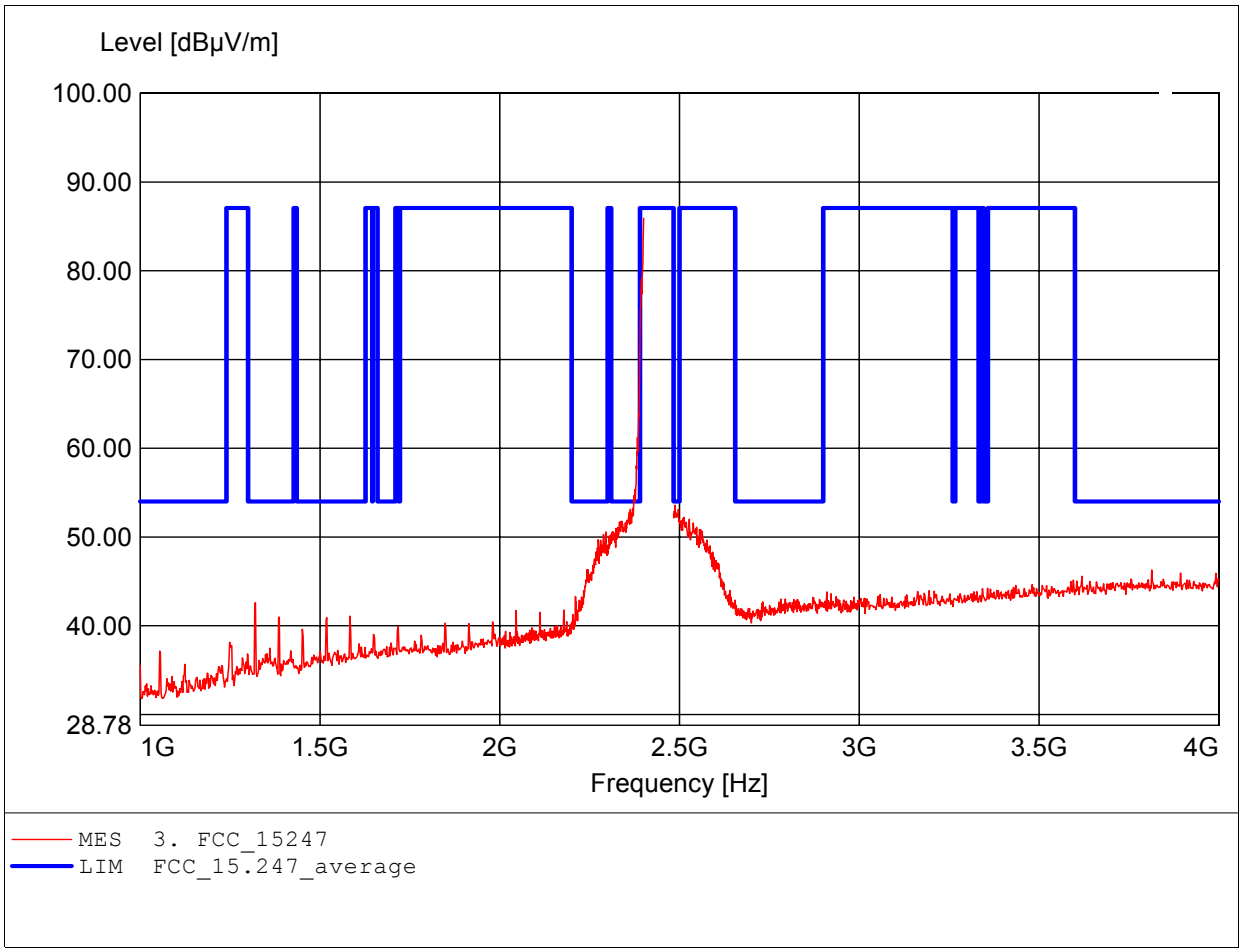
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 41.89dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 2.400GHz, Emax: 85.91dBµV/m, RBW: 1MHz



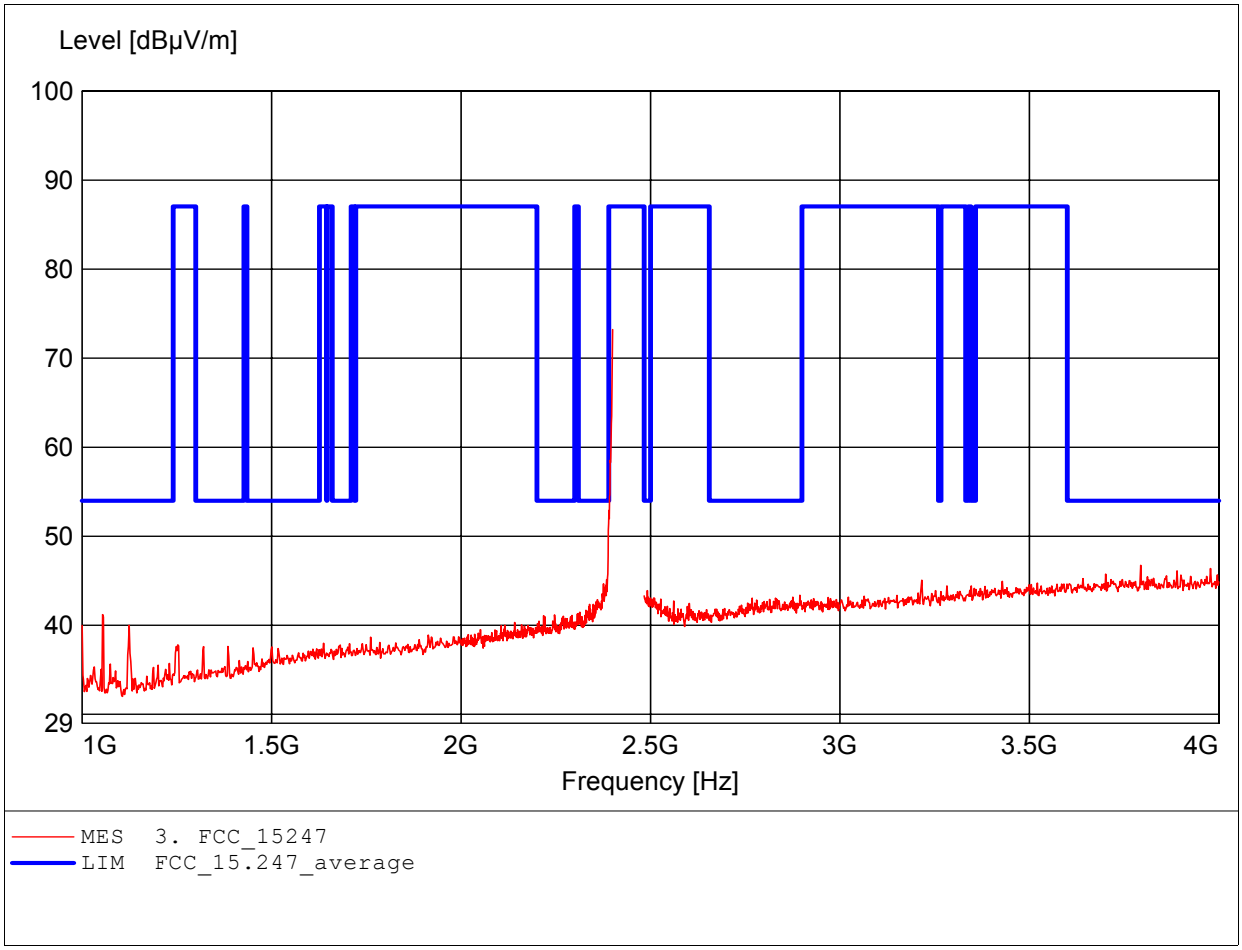
MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Detector
2390.00	46.31	54.00	7.69	AV
2483.50	33.45	54.00	20.55	AV

Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 2.400GHz, Emax: 73.23dBµV/m, RBW: 1MHz



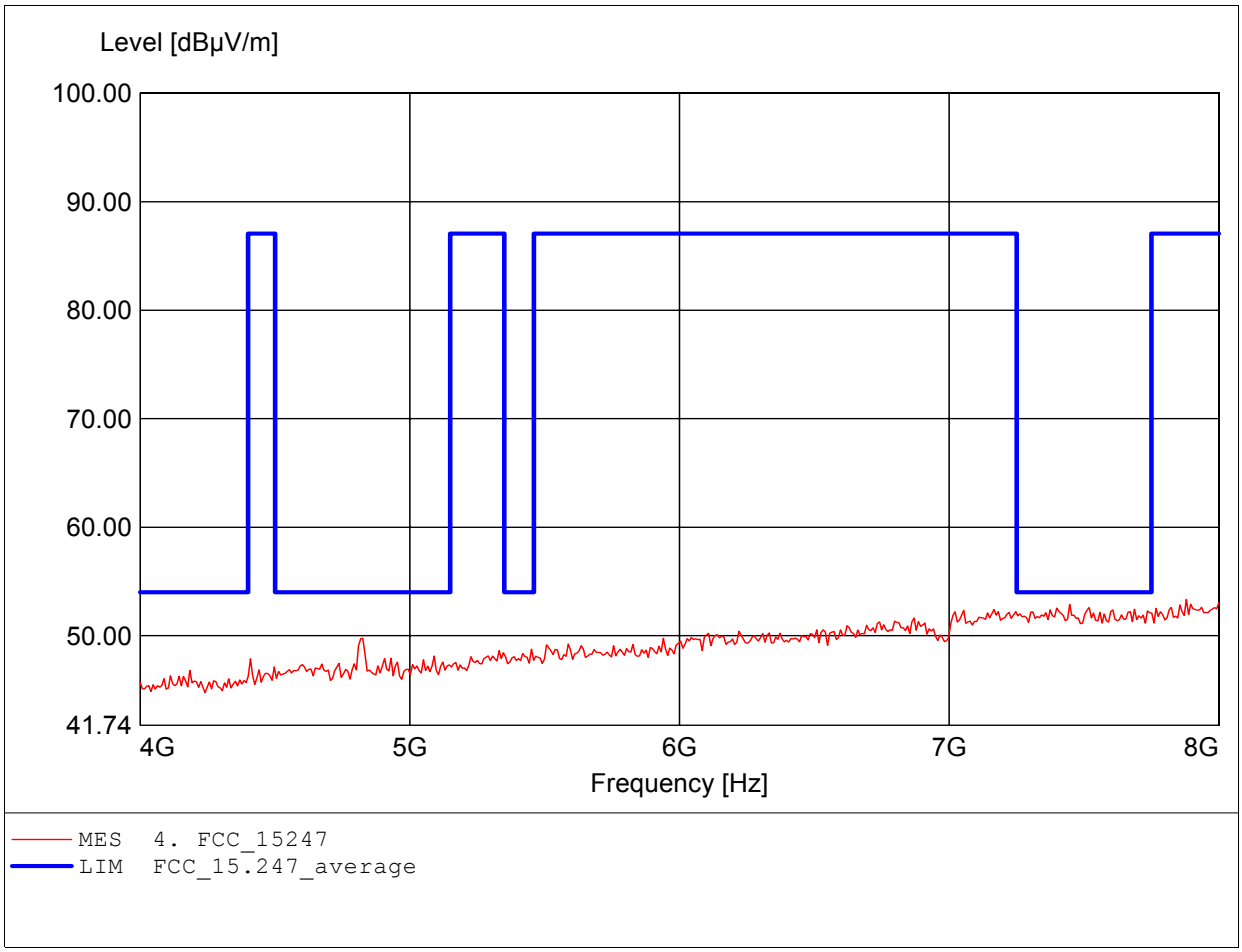
MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Detector
2390.00	30.82	54.00	23.18	AV

Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

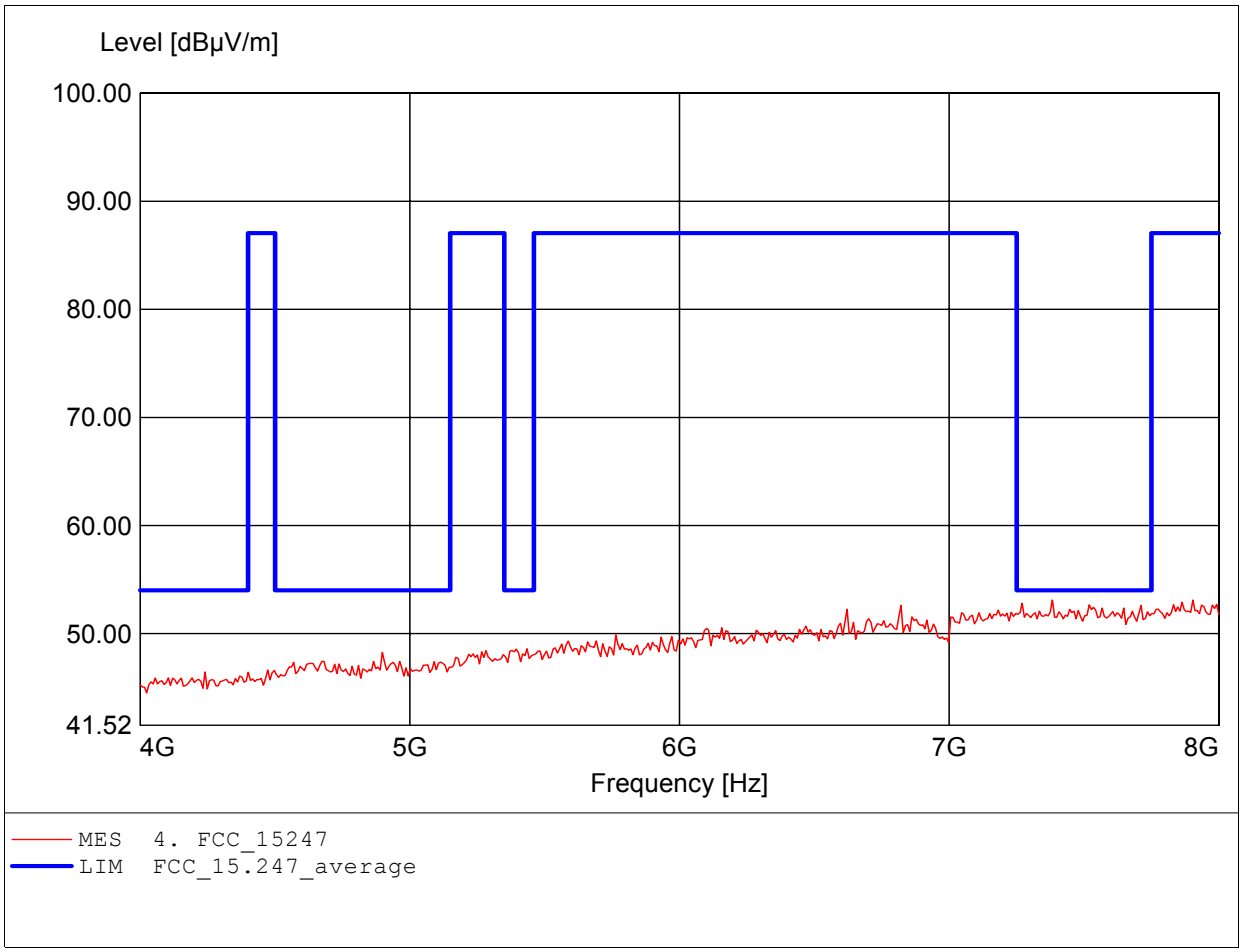
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.880GHz, Emax: 53.33dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

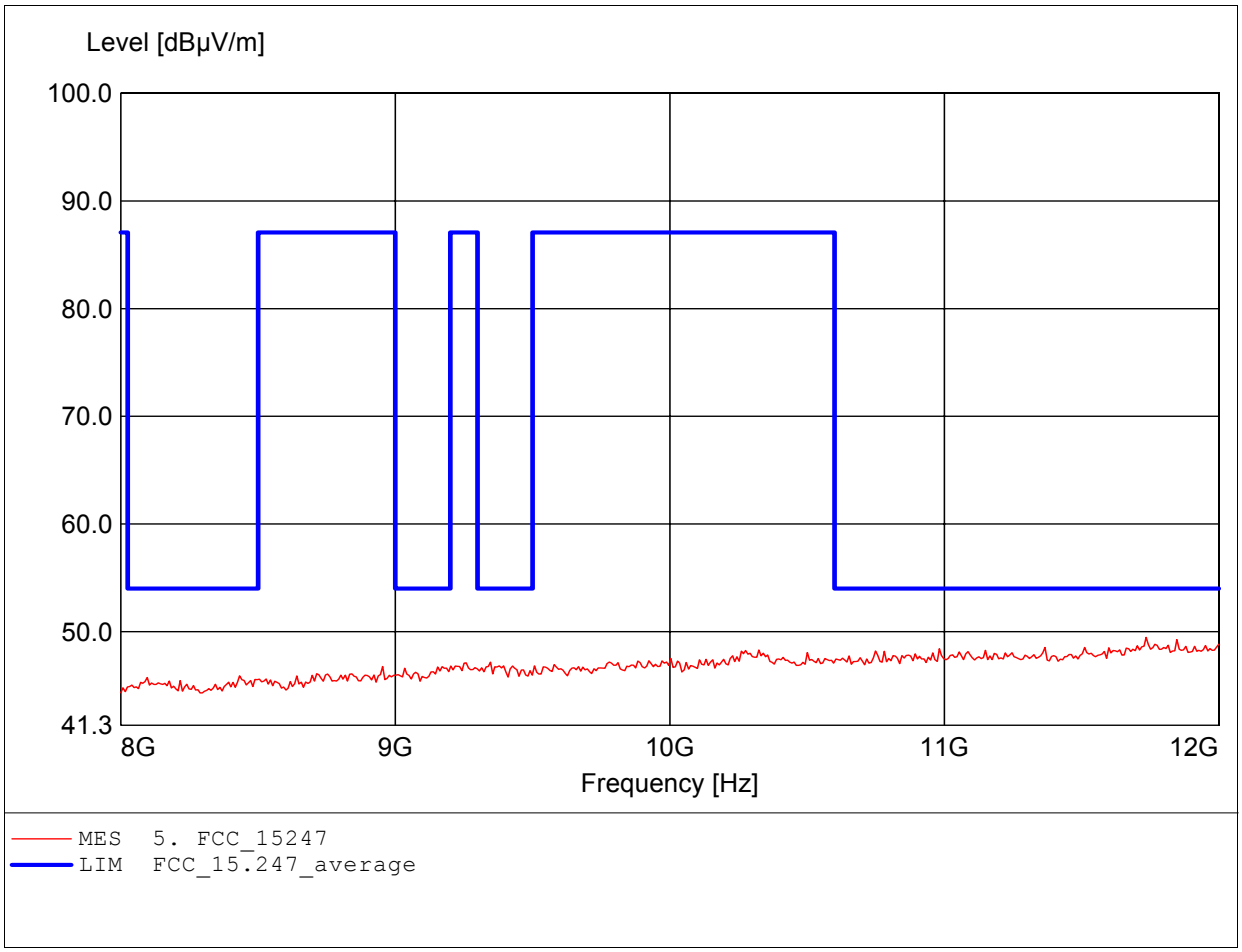
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.383GHz, Emax: 53.11dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

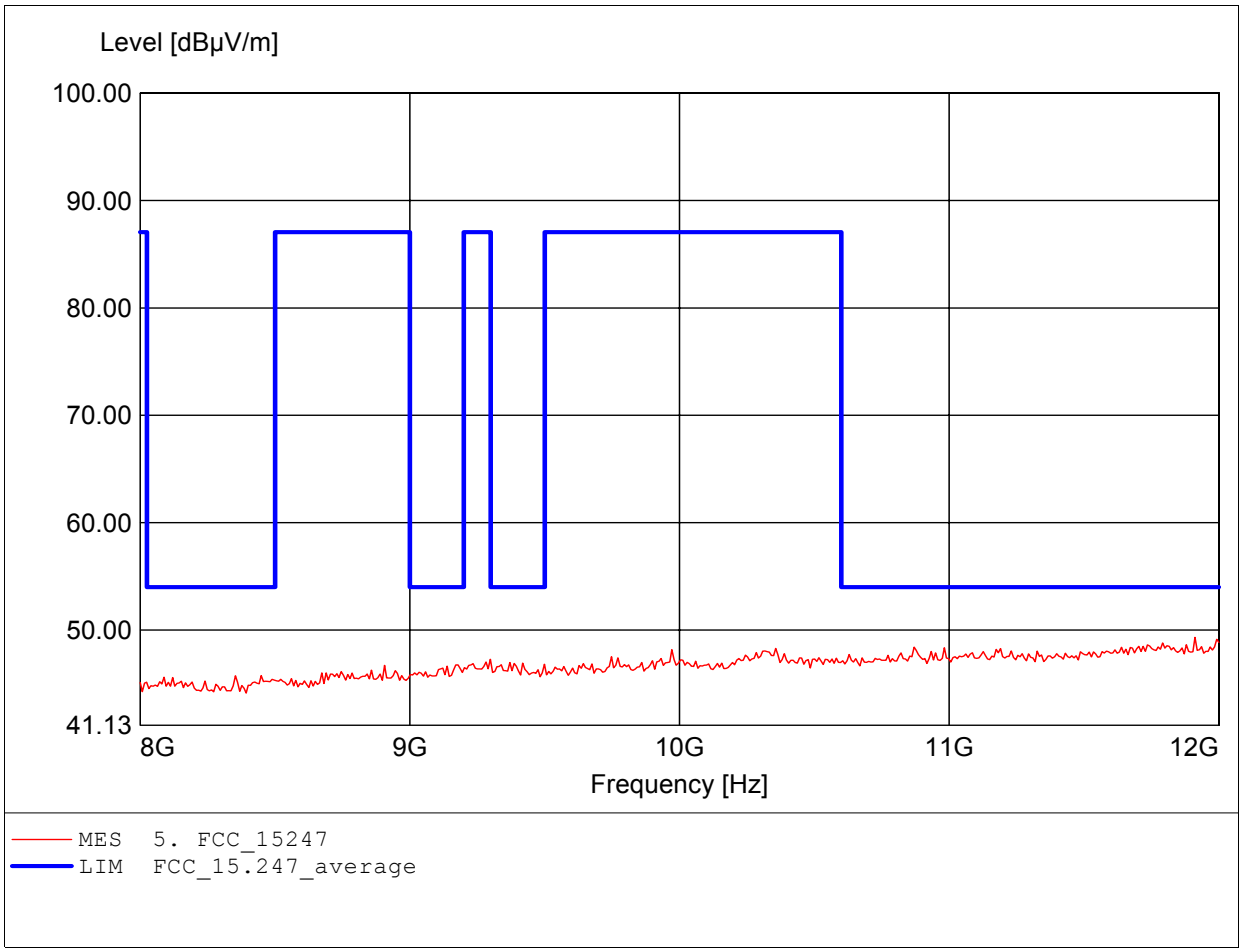
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.735GHz, Emax: 49.46dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

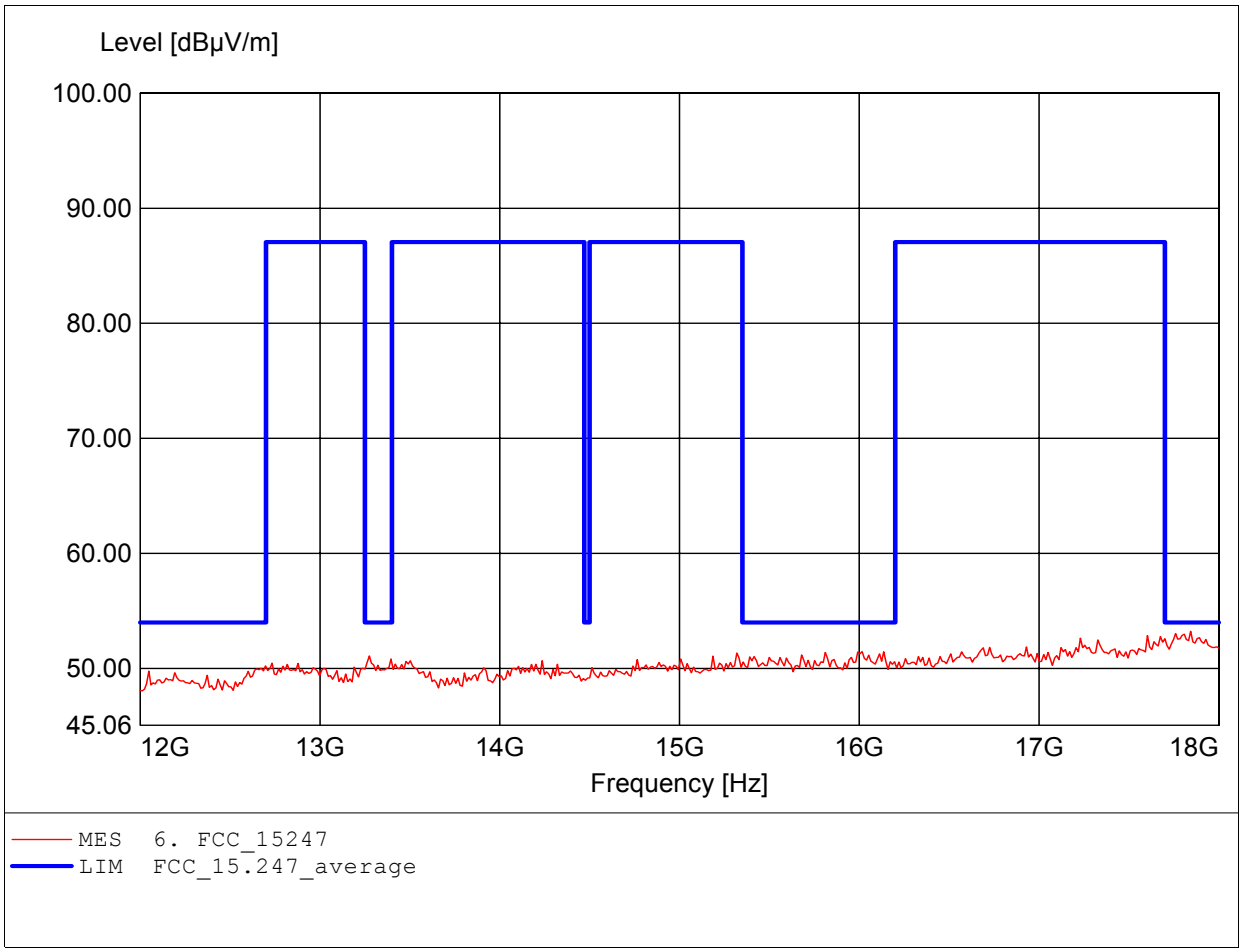
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.912GHz, Emax: 49.31dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

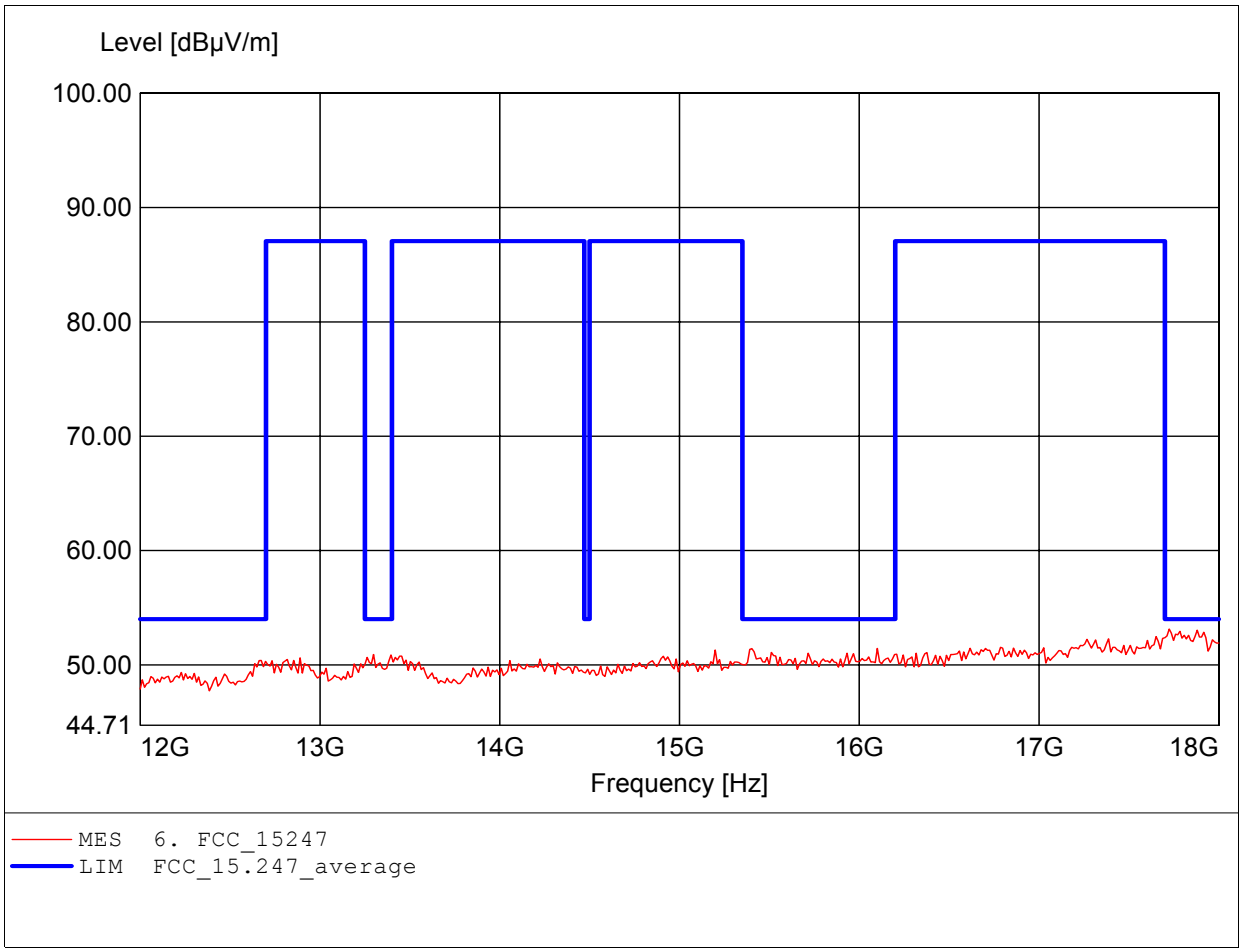
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.844GHz, Emax: 53.22dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

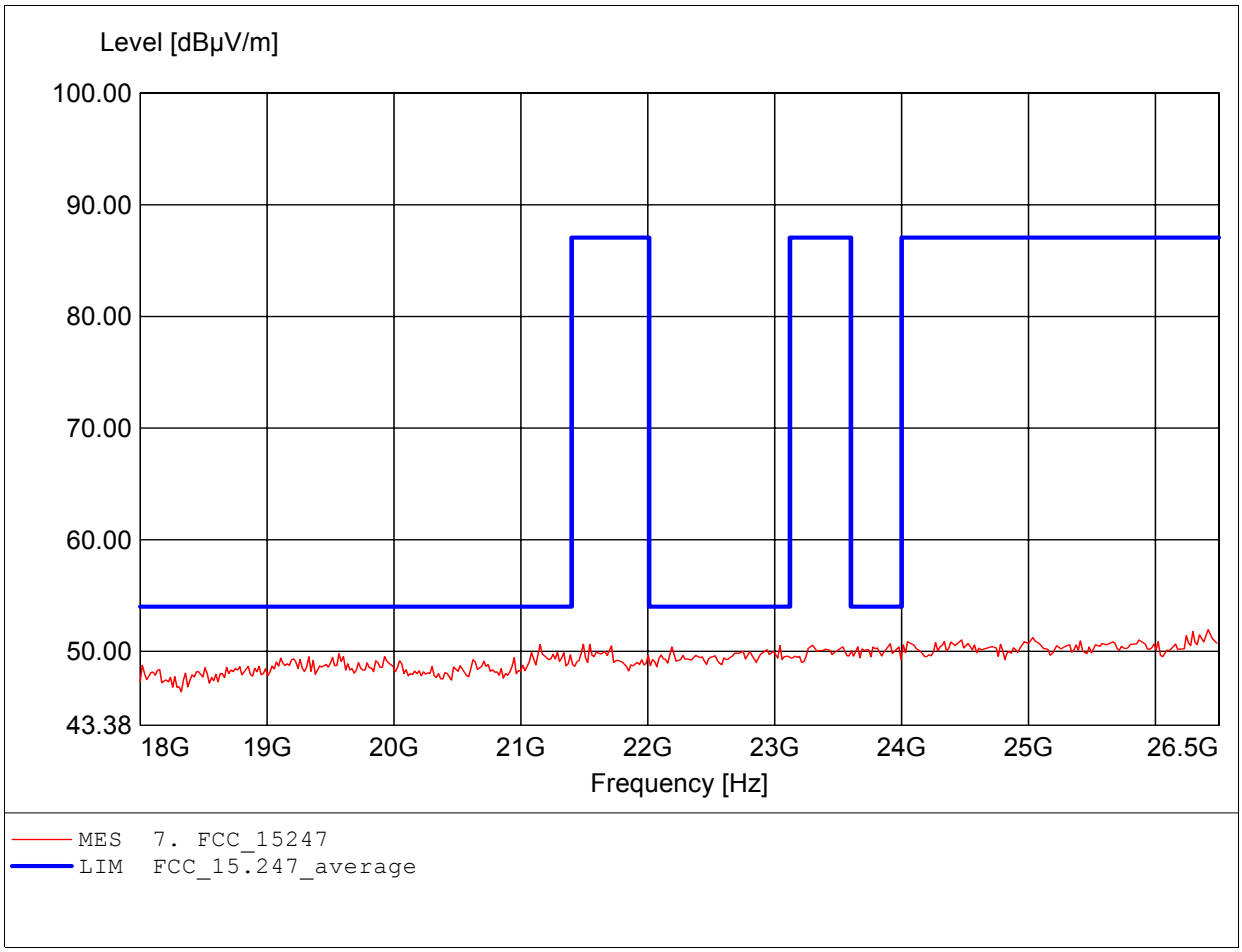
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.723GHz, Emax: 53.12dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

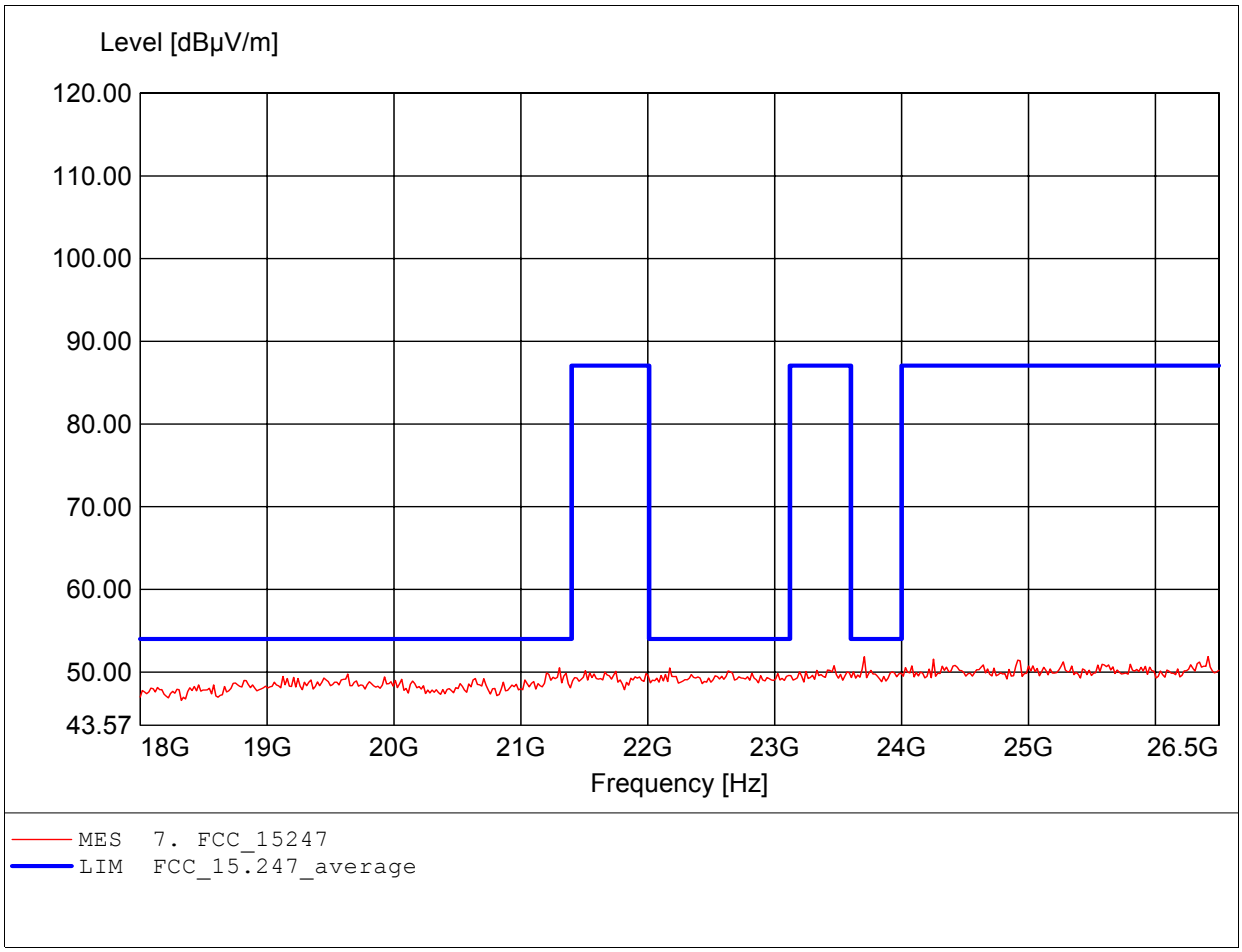
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 26.415GHz, Emax: 51.94dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

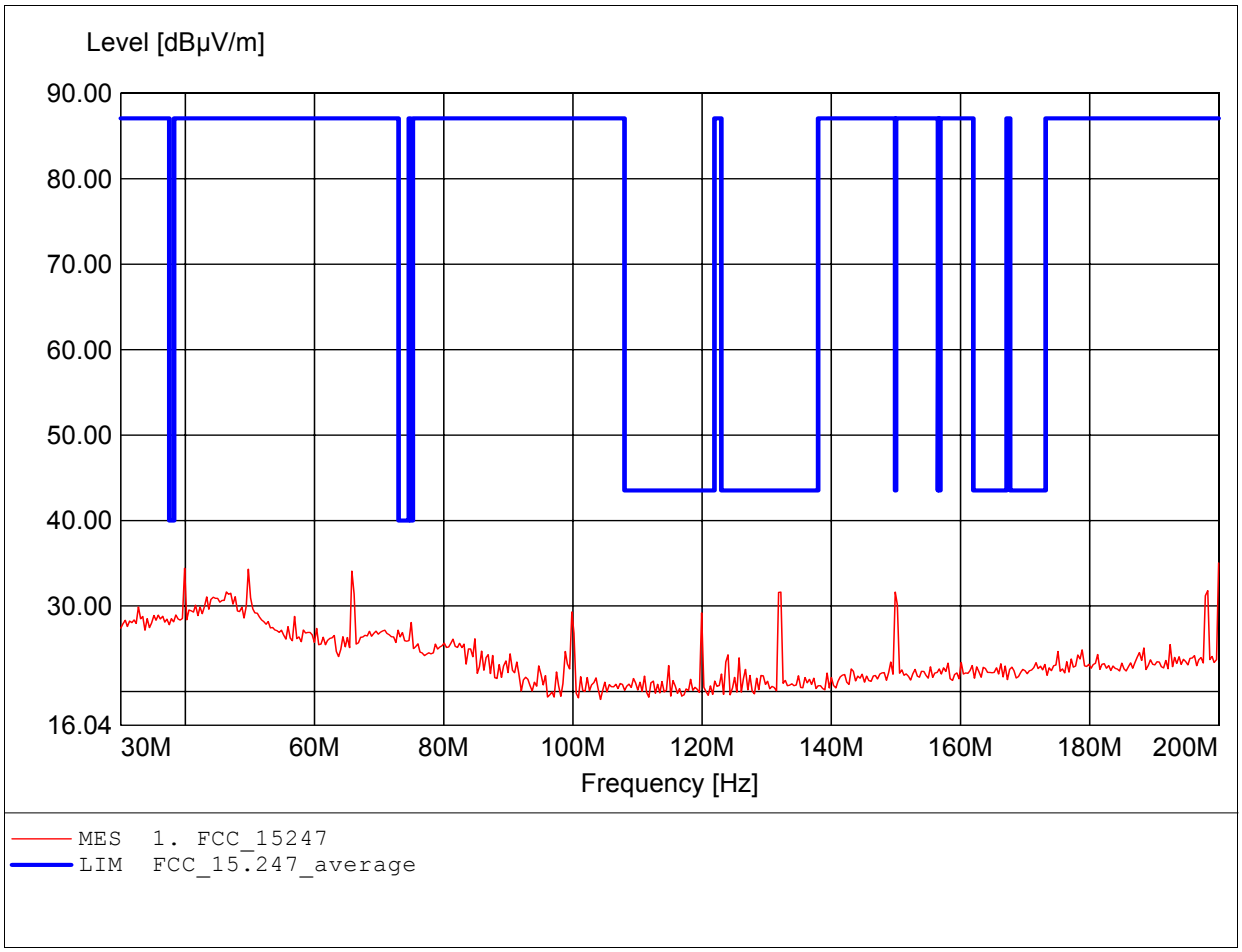
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 26.415GHz, Emax: 51.87dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

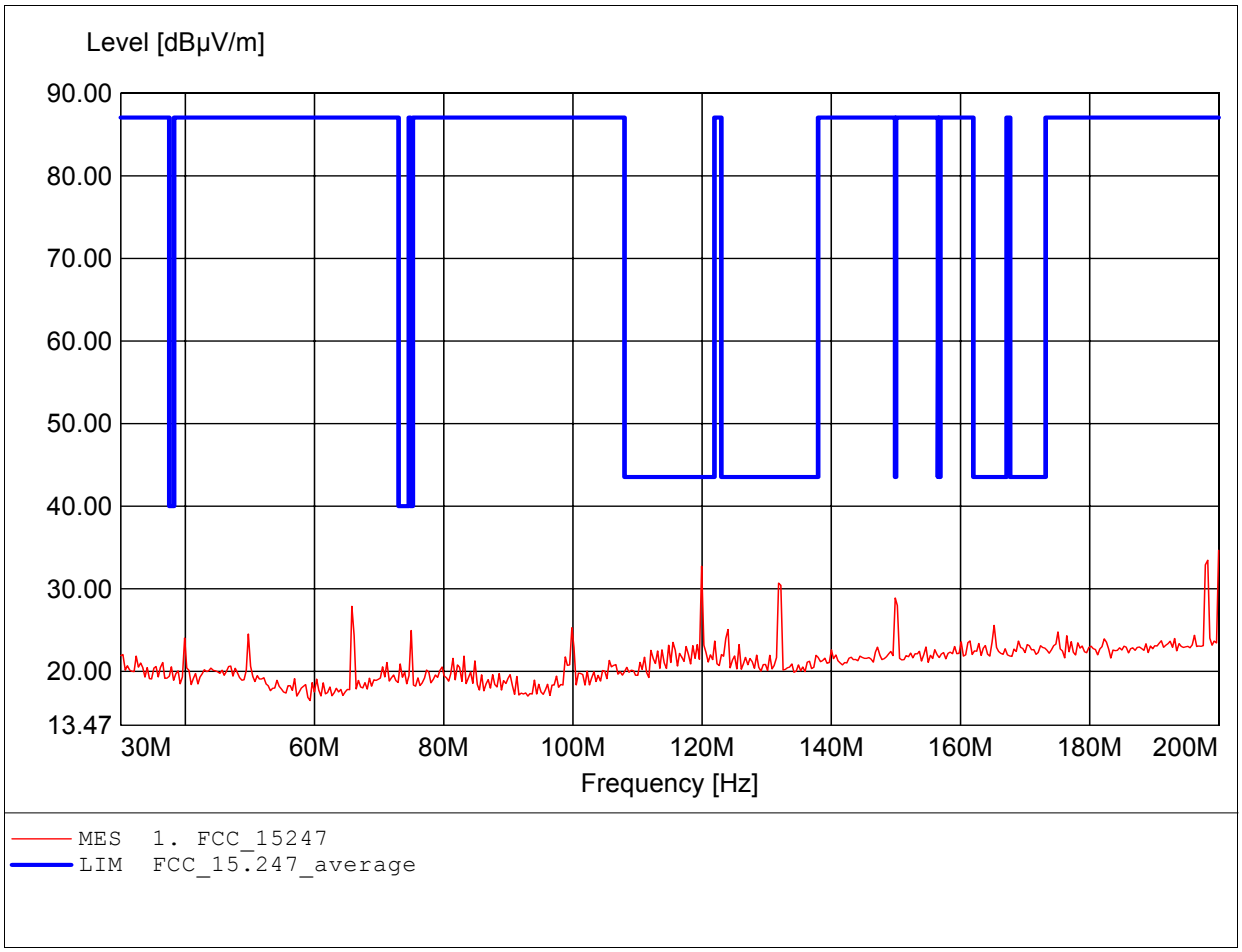
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 200.000MHz, Emax: 35.04dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

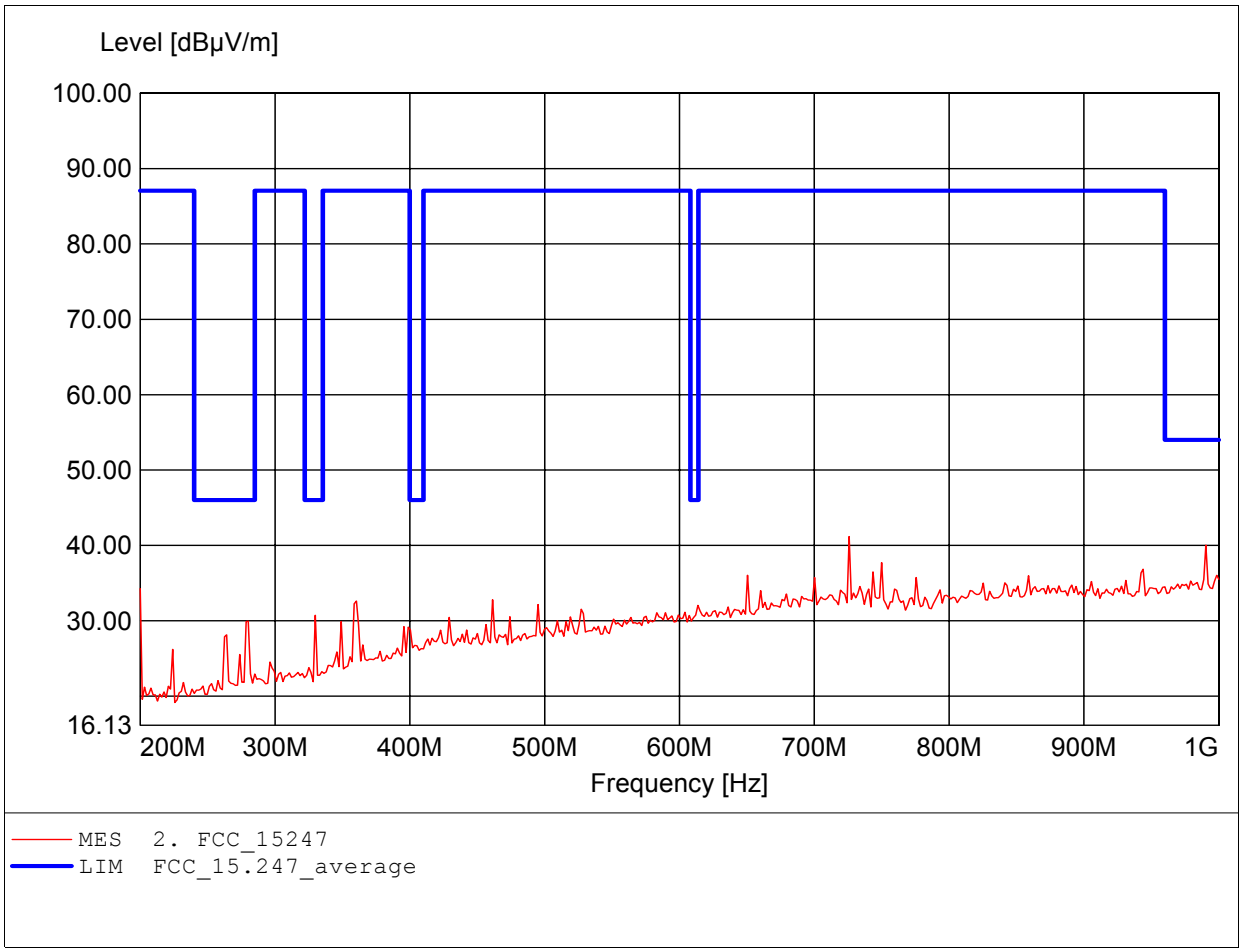
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 200.000MHz, Emax: 34.65dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

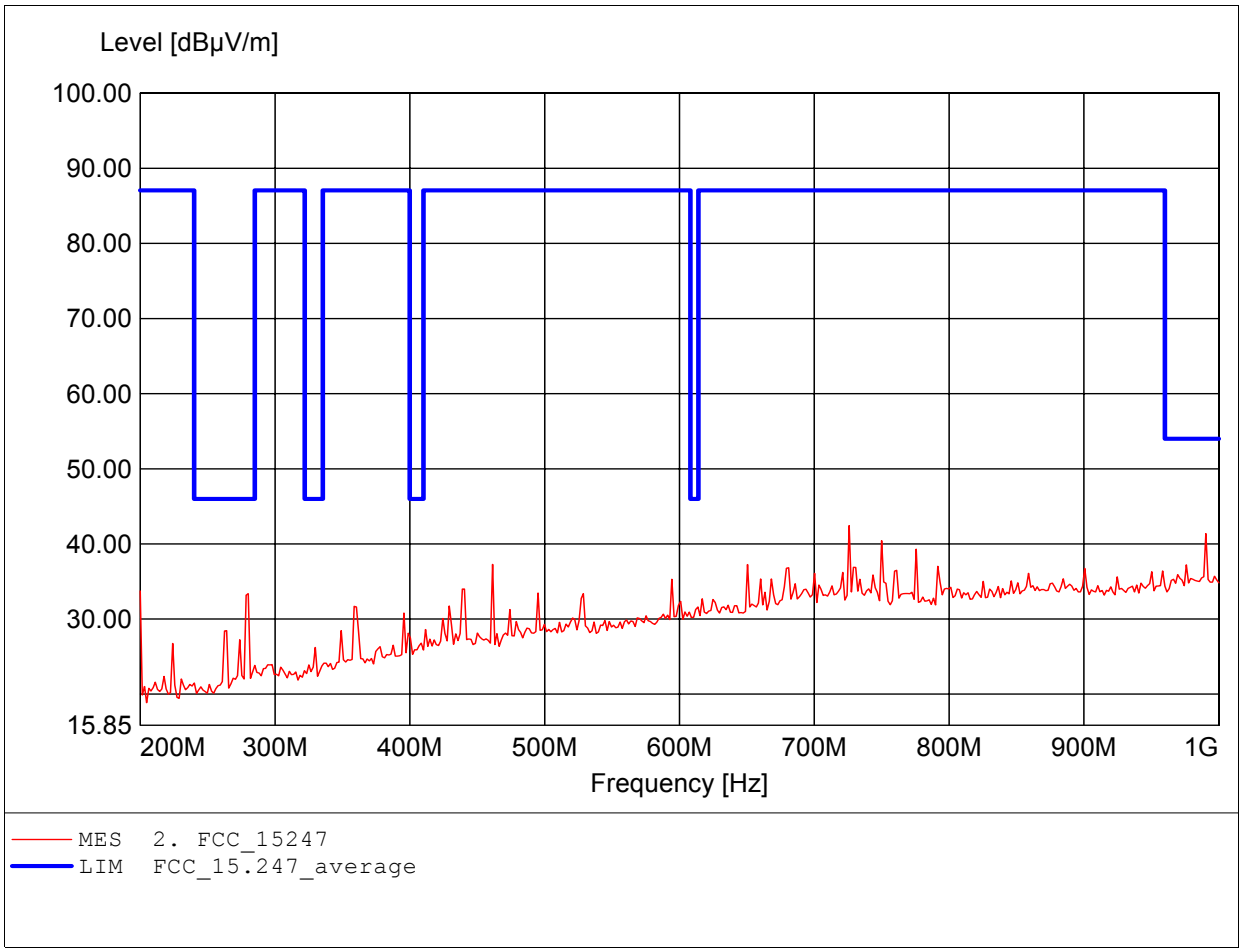
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 41.16dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

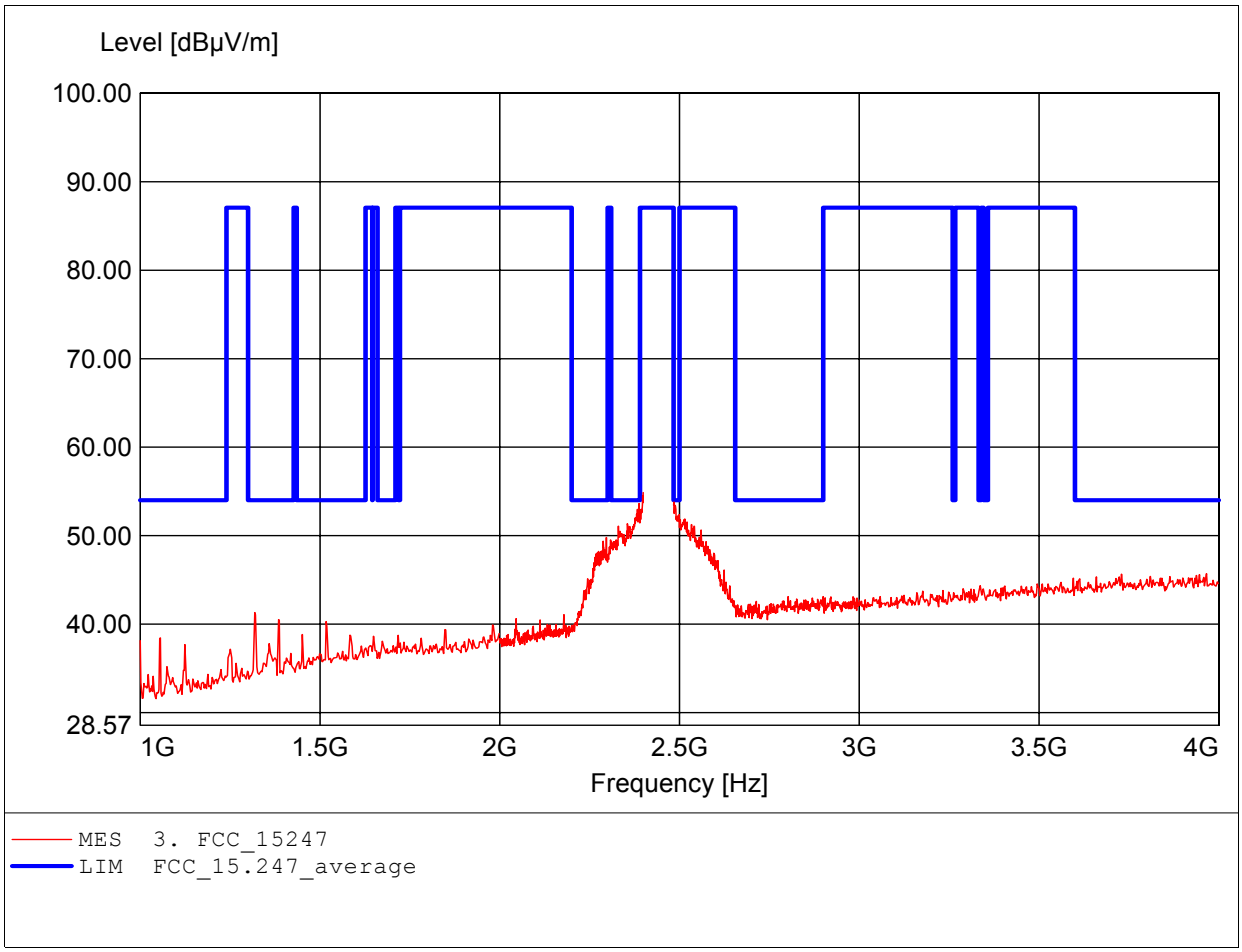
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 42.42dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

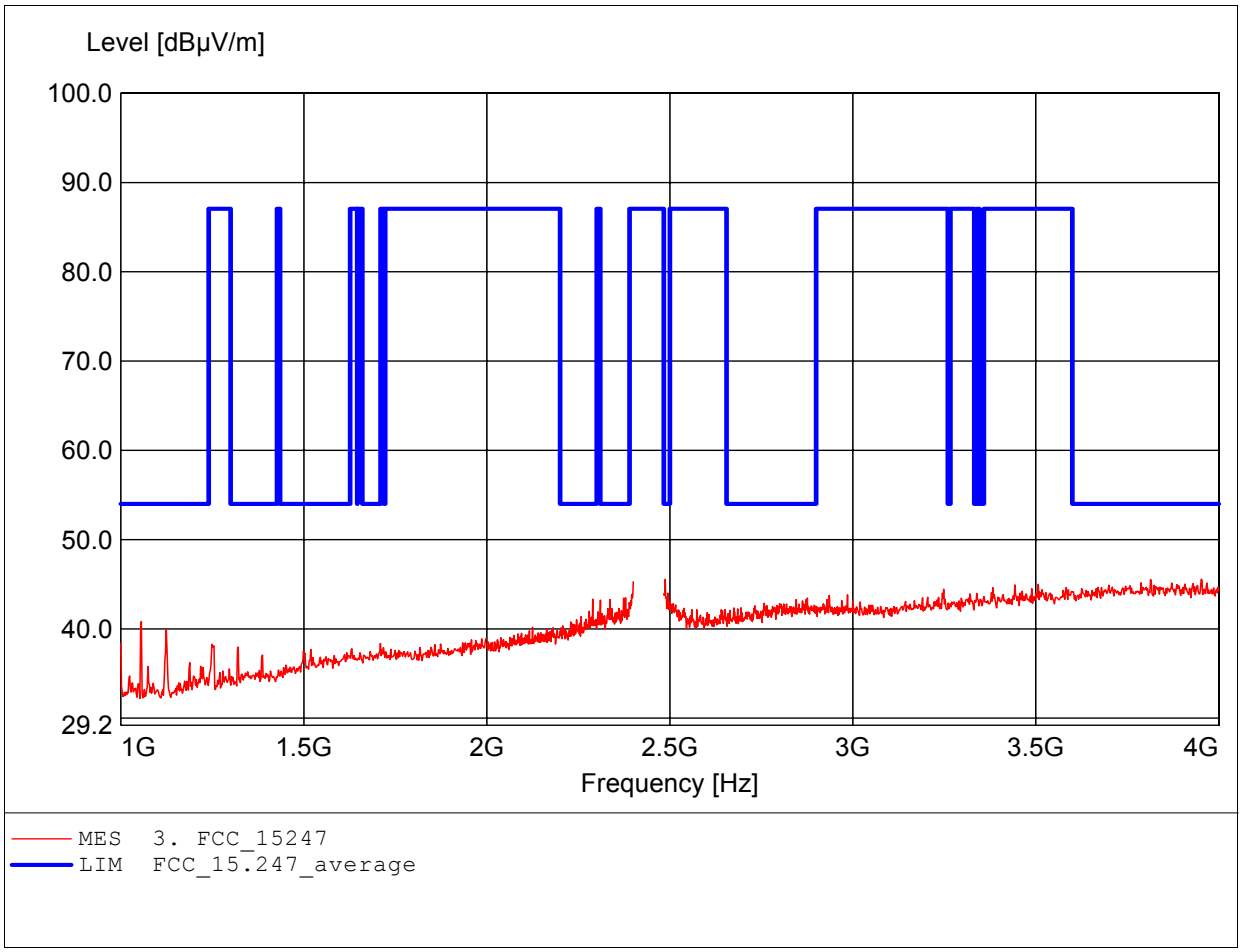
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 2.399GHz, Emax: 54.87dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

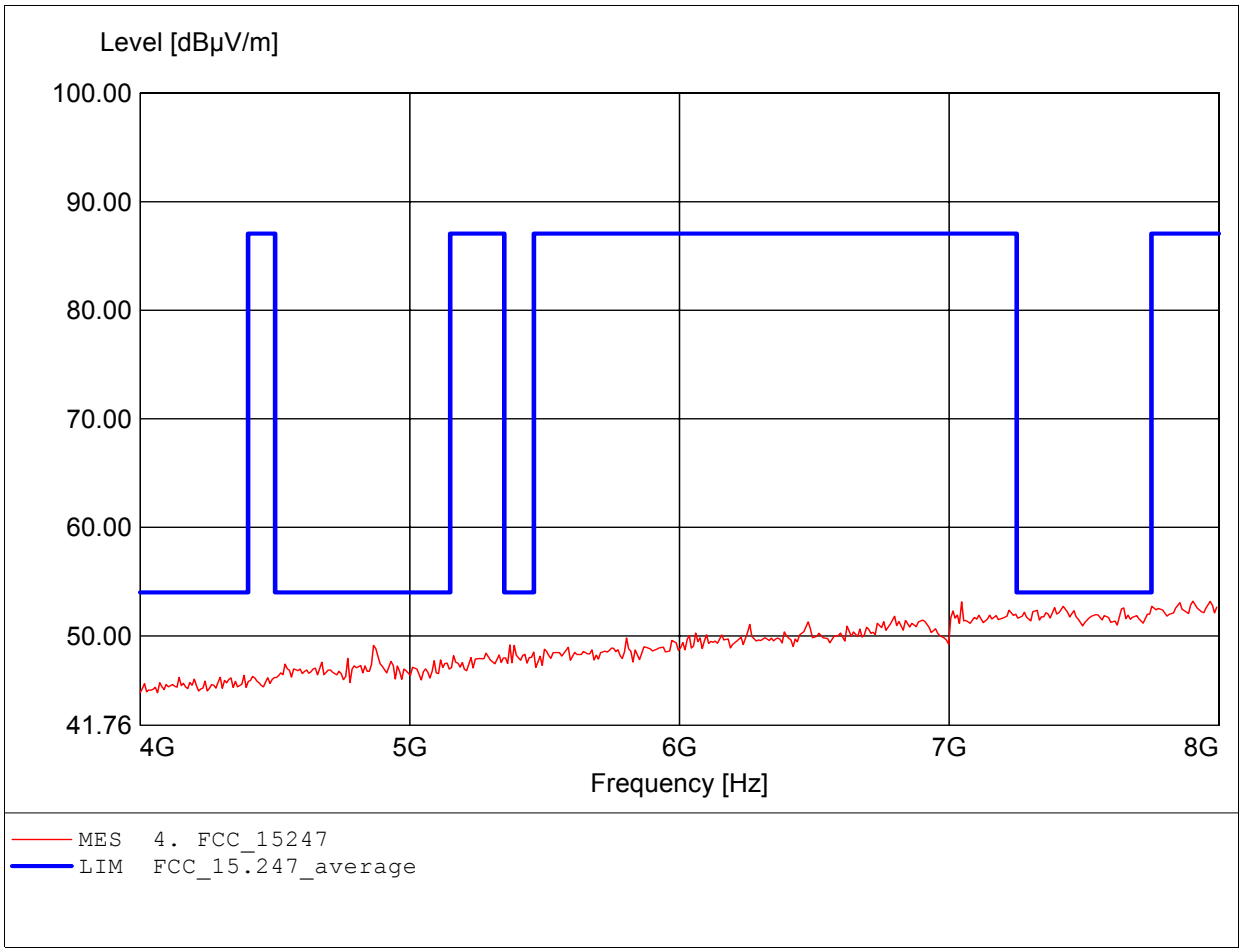
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 3.952GHz, Emax: 45.55dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

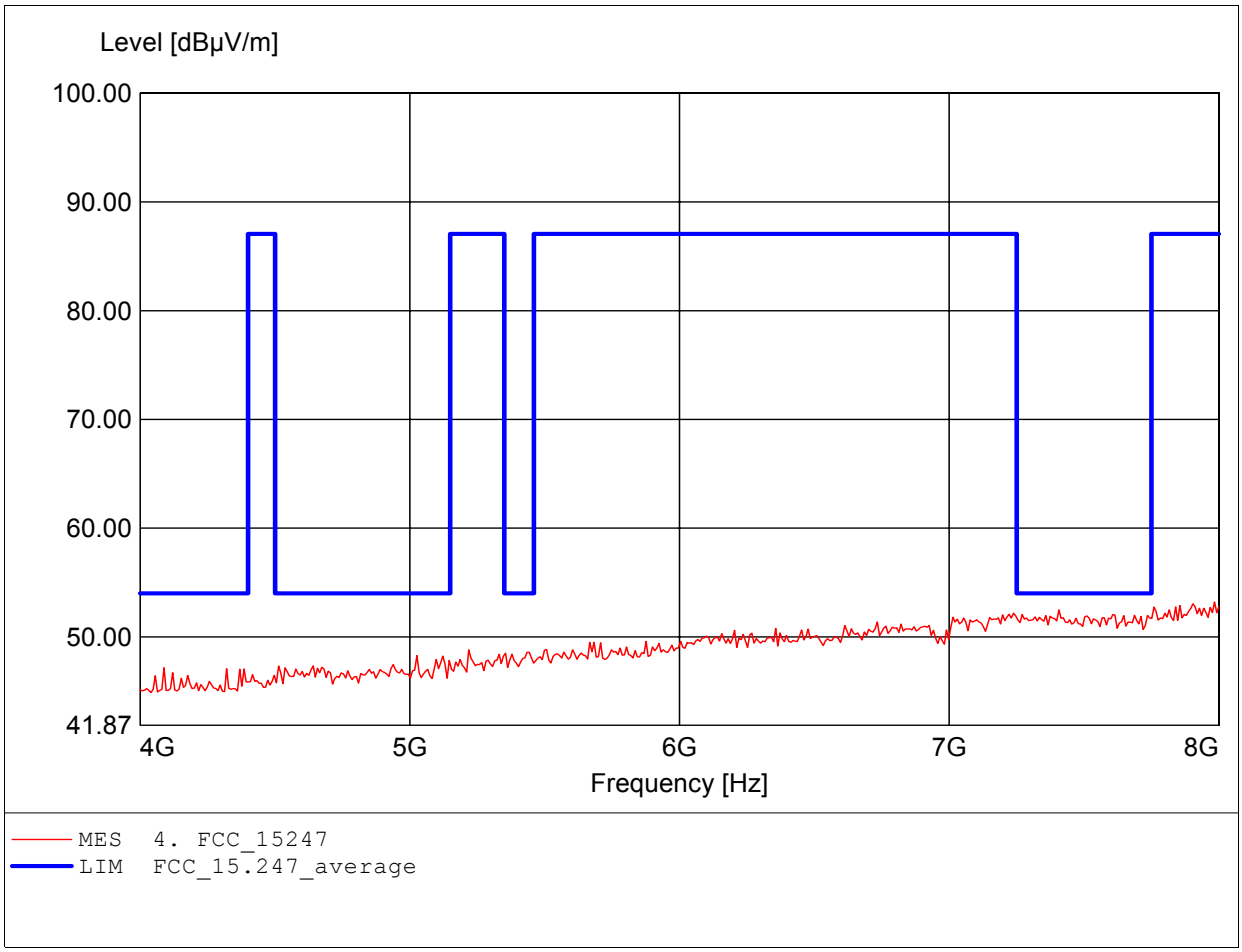
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.904GHz, Emax: 53.19dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

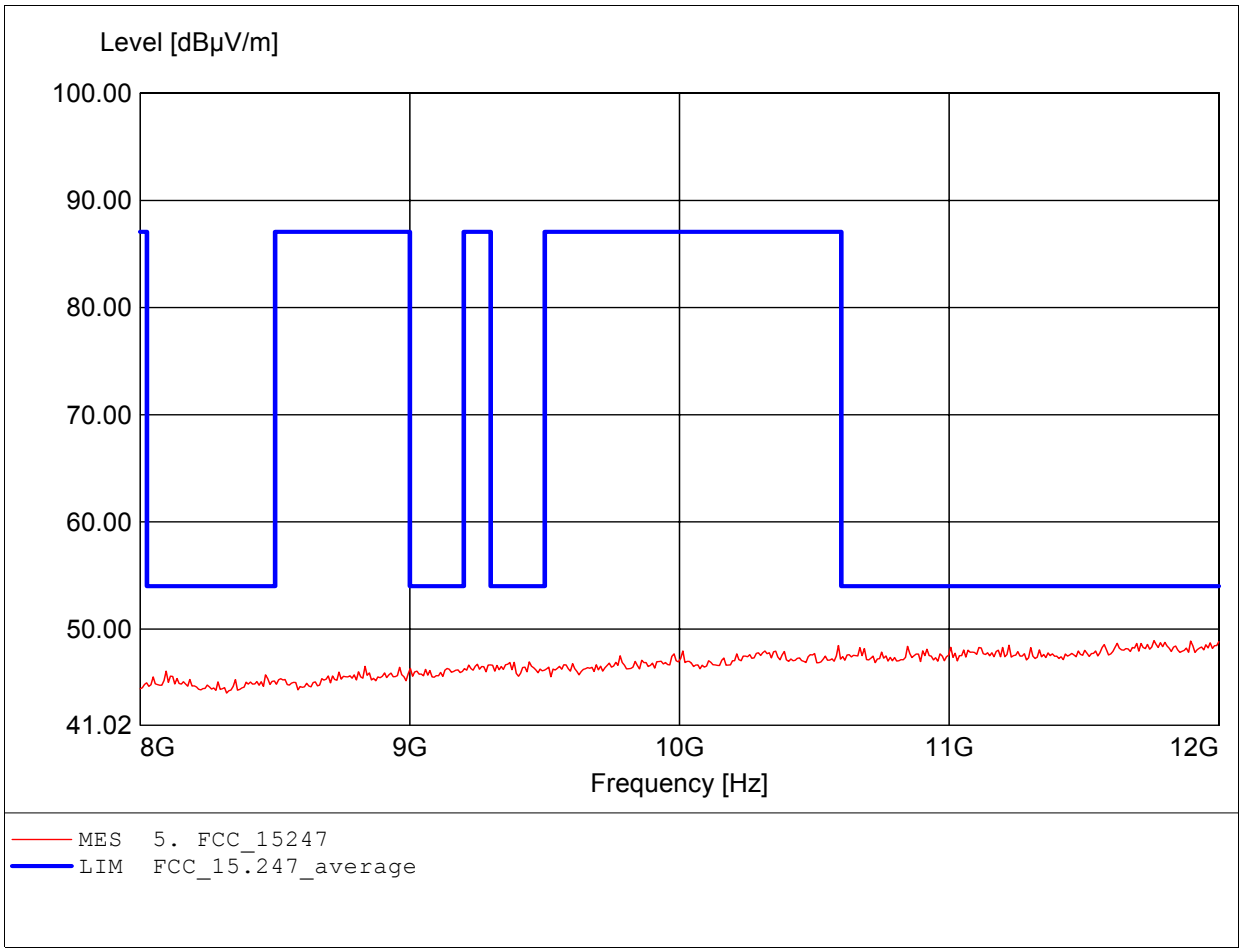
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.984GHz, Emax: 53.21dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

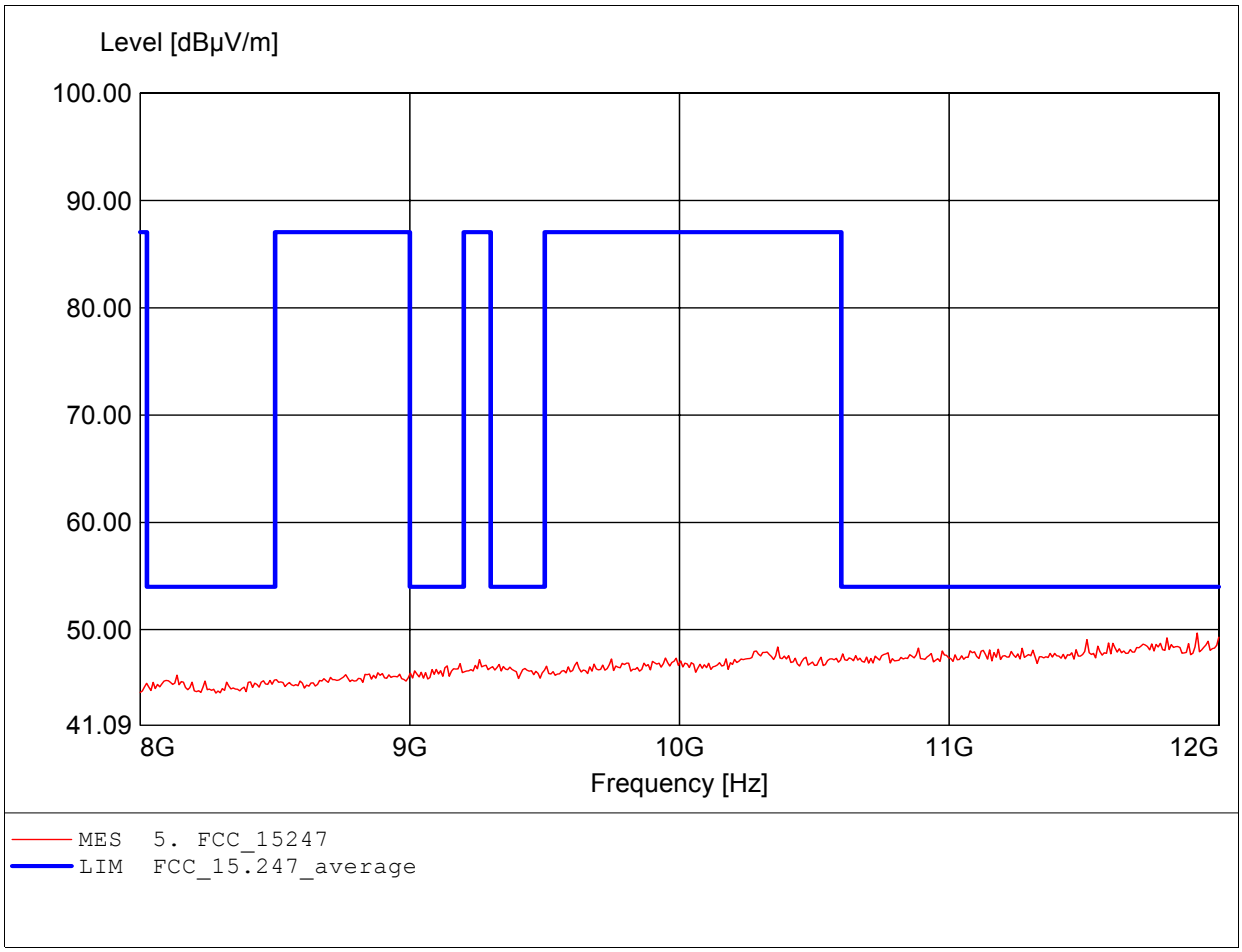
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.760GHz, Emax: 48.93dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

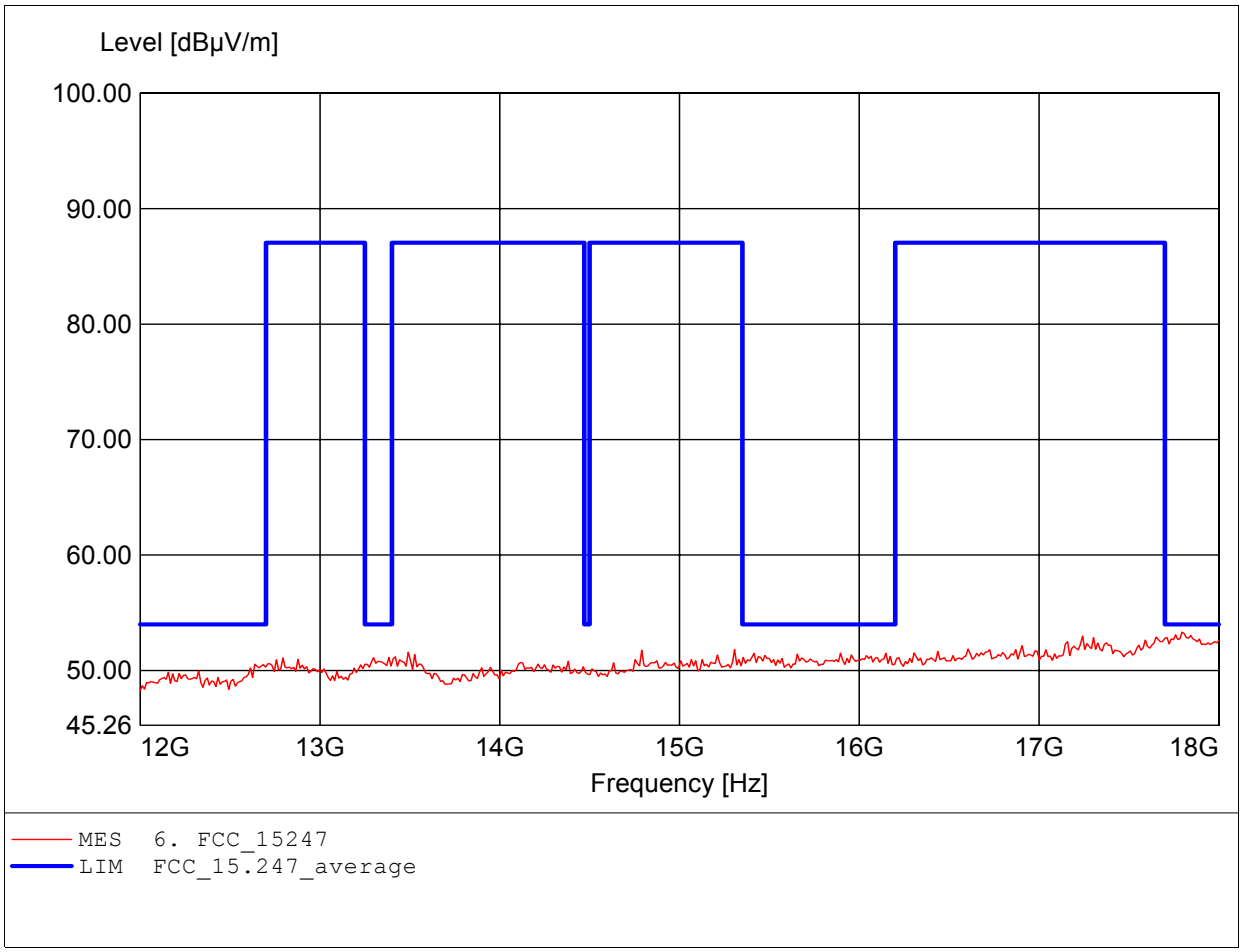
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.920GHz, Emax: 49.68dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

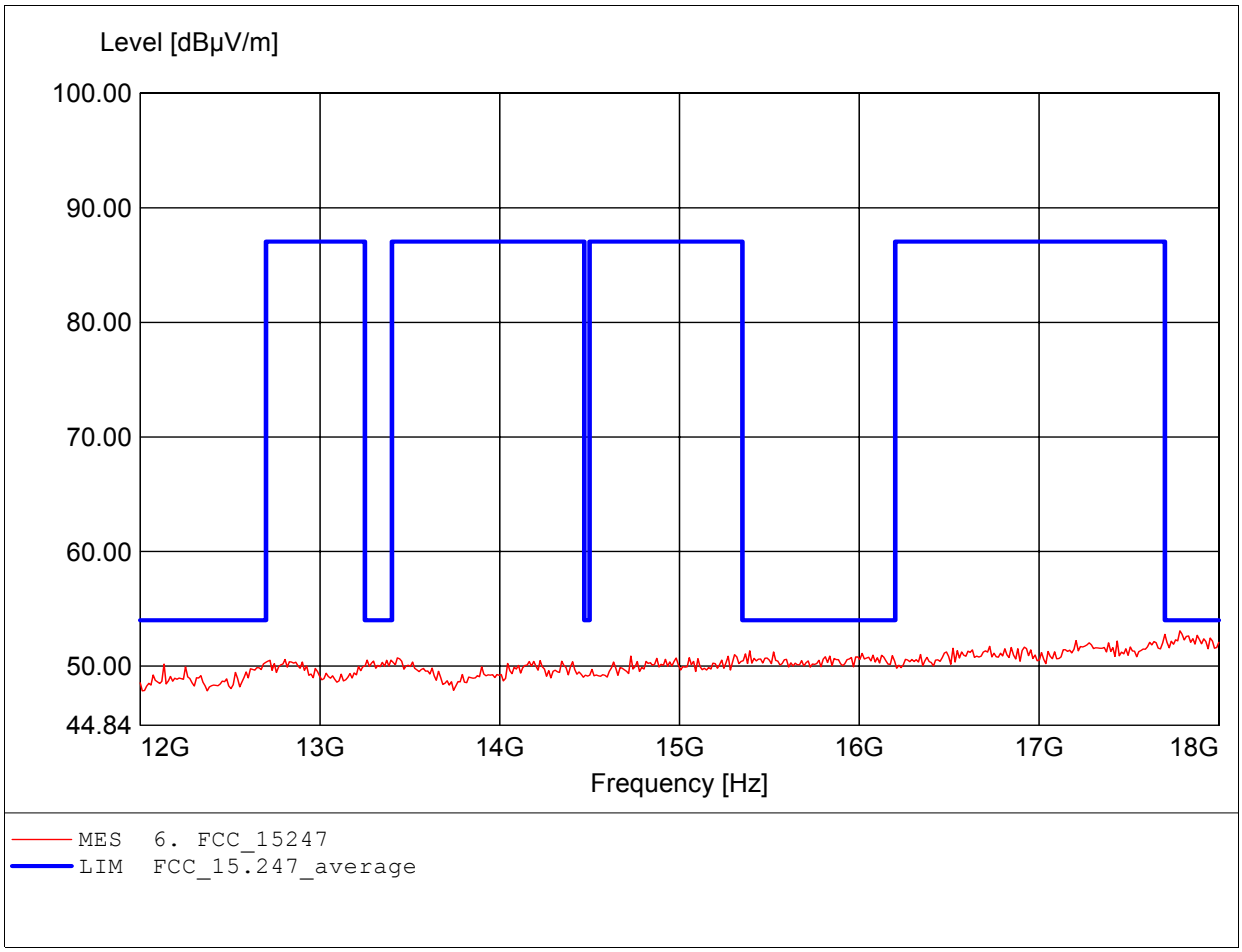
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.796GHz, Emax: 53.32dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

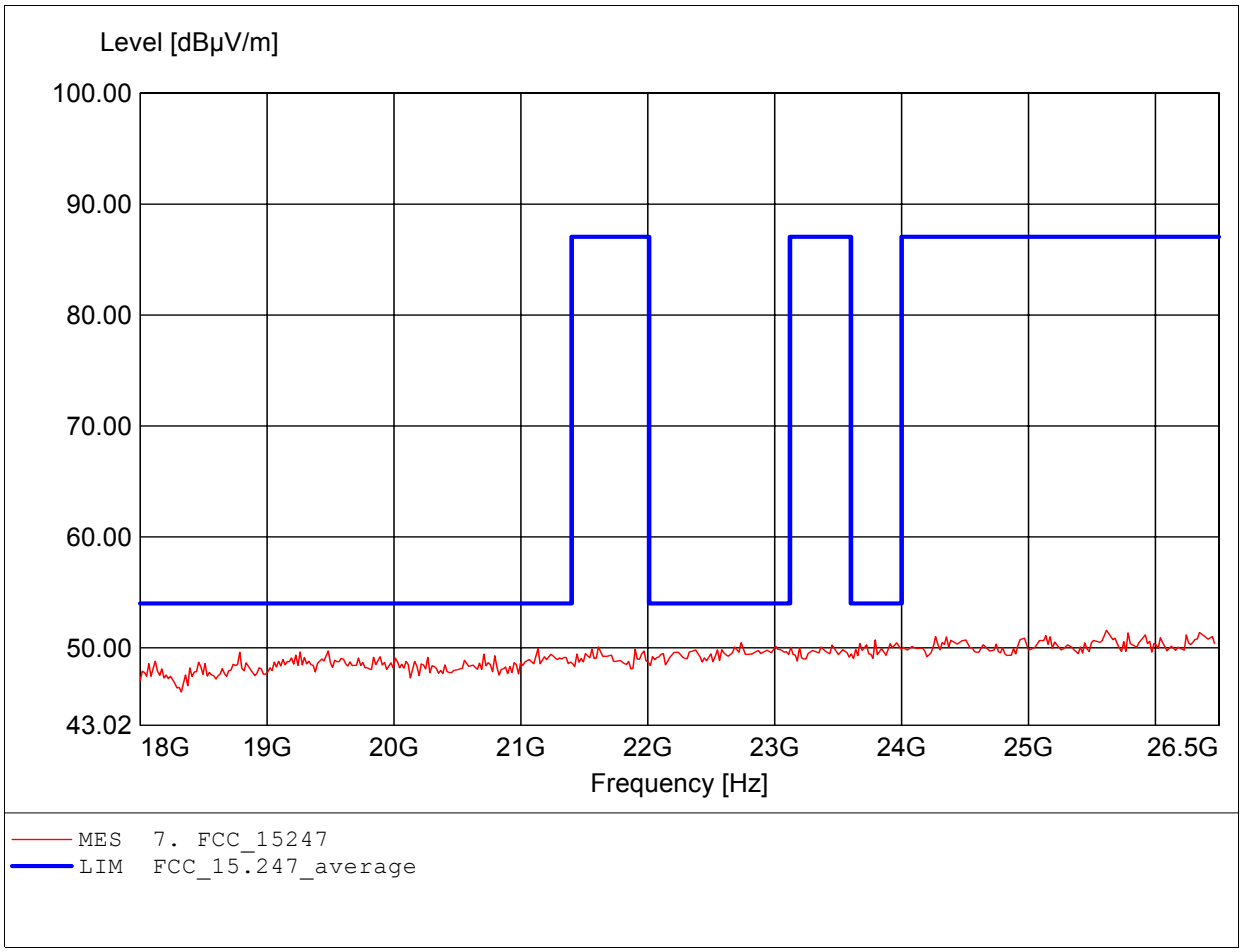
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.784GHz, Emax: 53.08dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

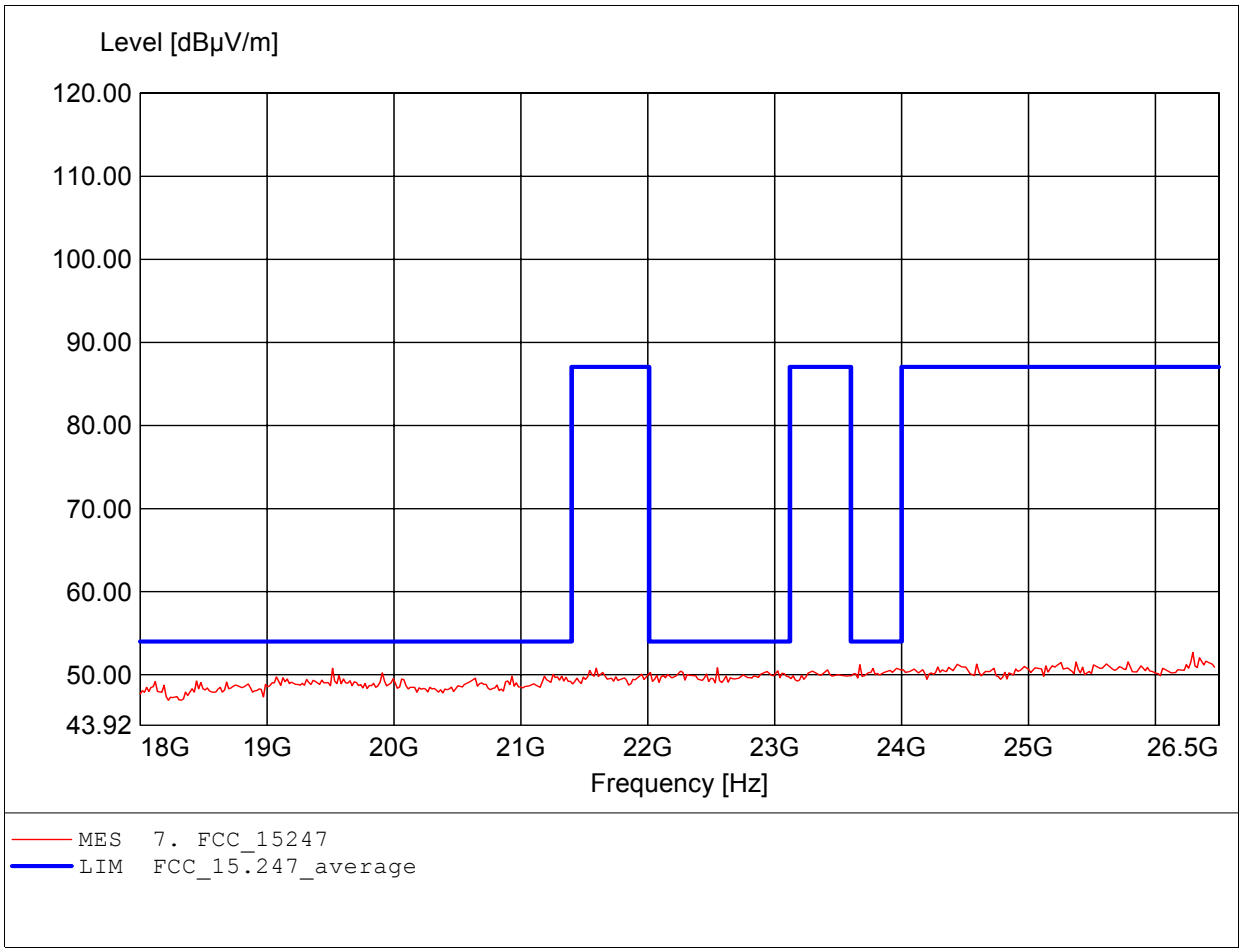
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 25.614GHz, Emax: 51.58dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

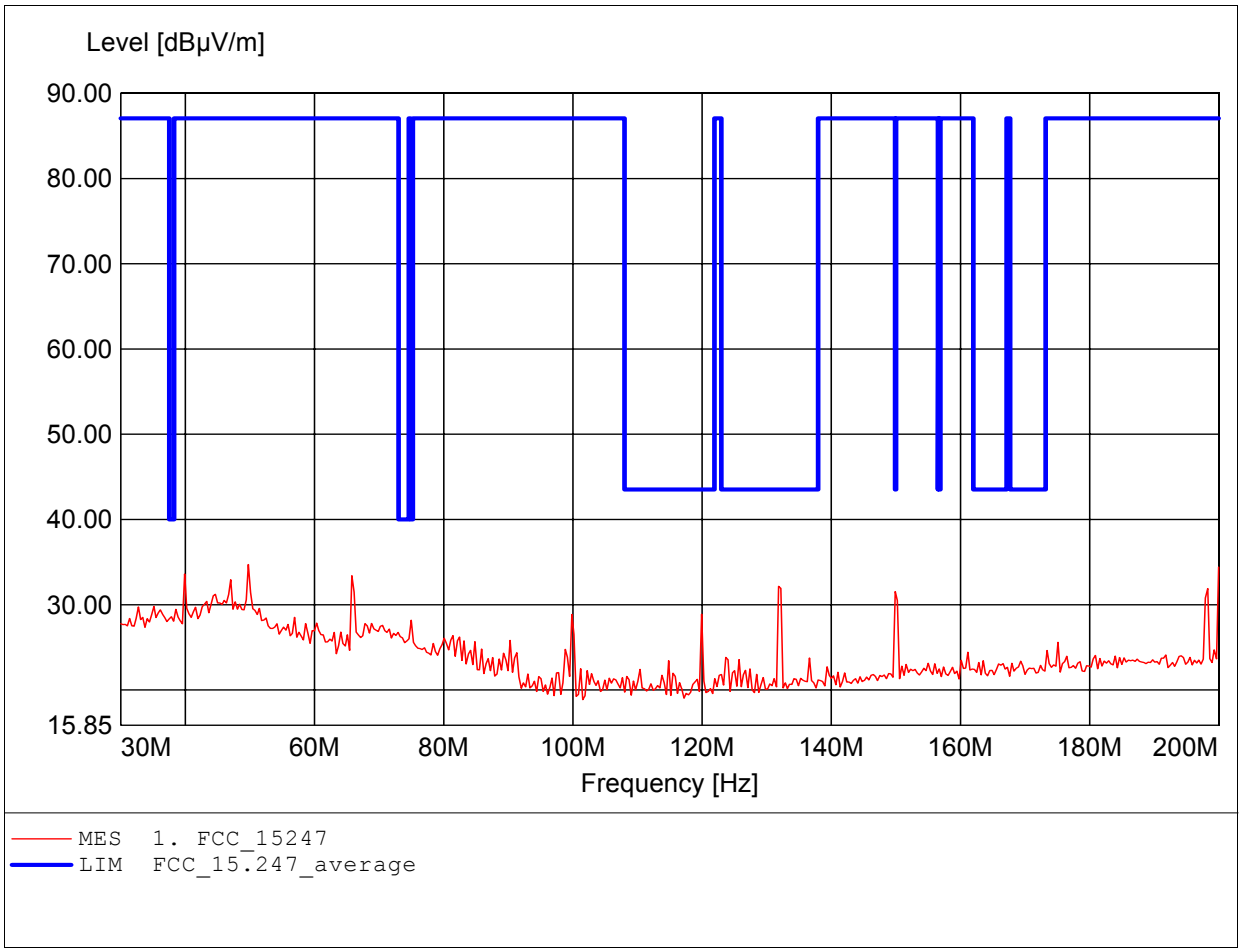
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 26.296GHz, Emax: 52.69dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

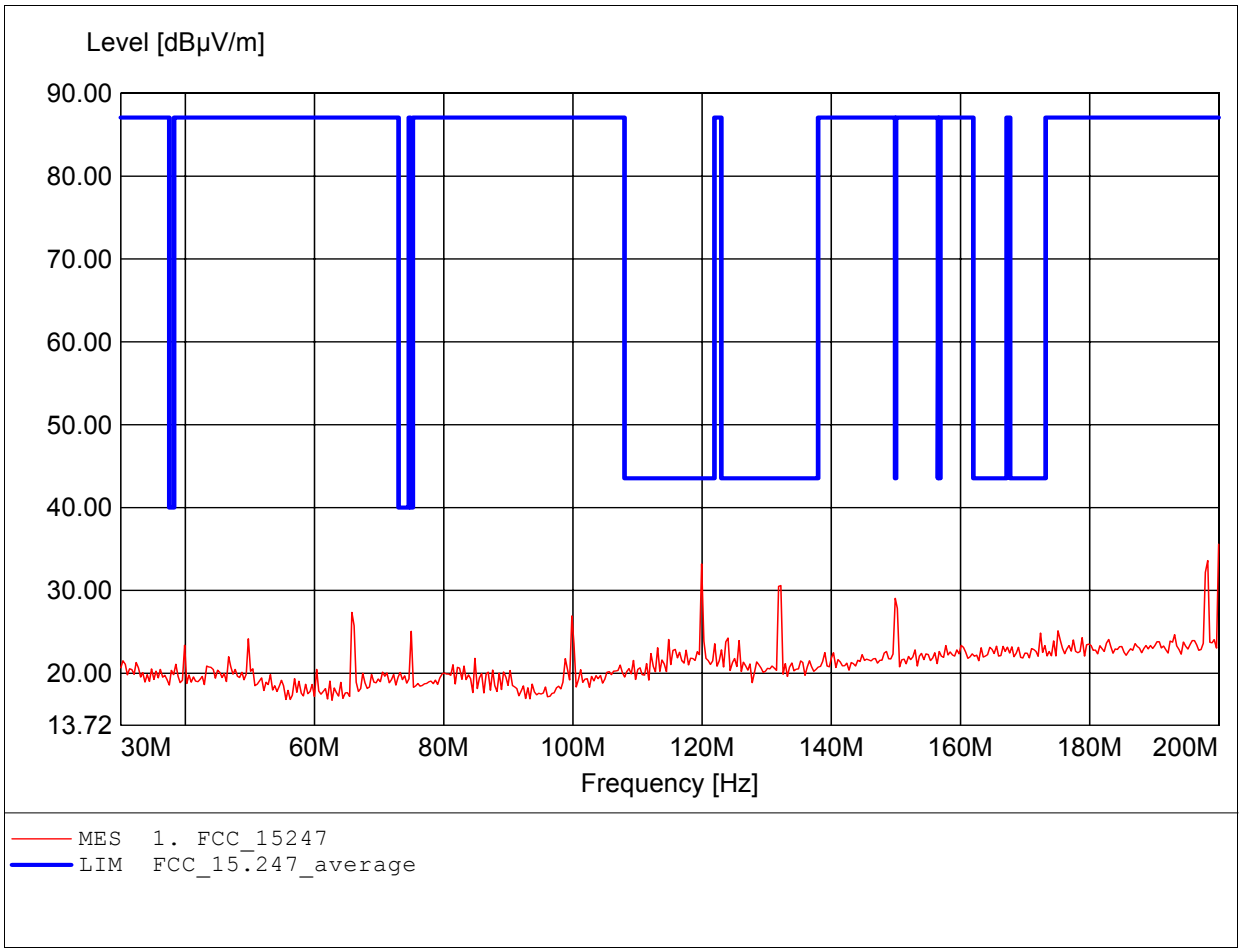
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 49.760MHz, Emax: 34.71dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

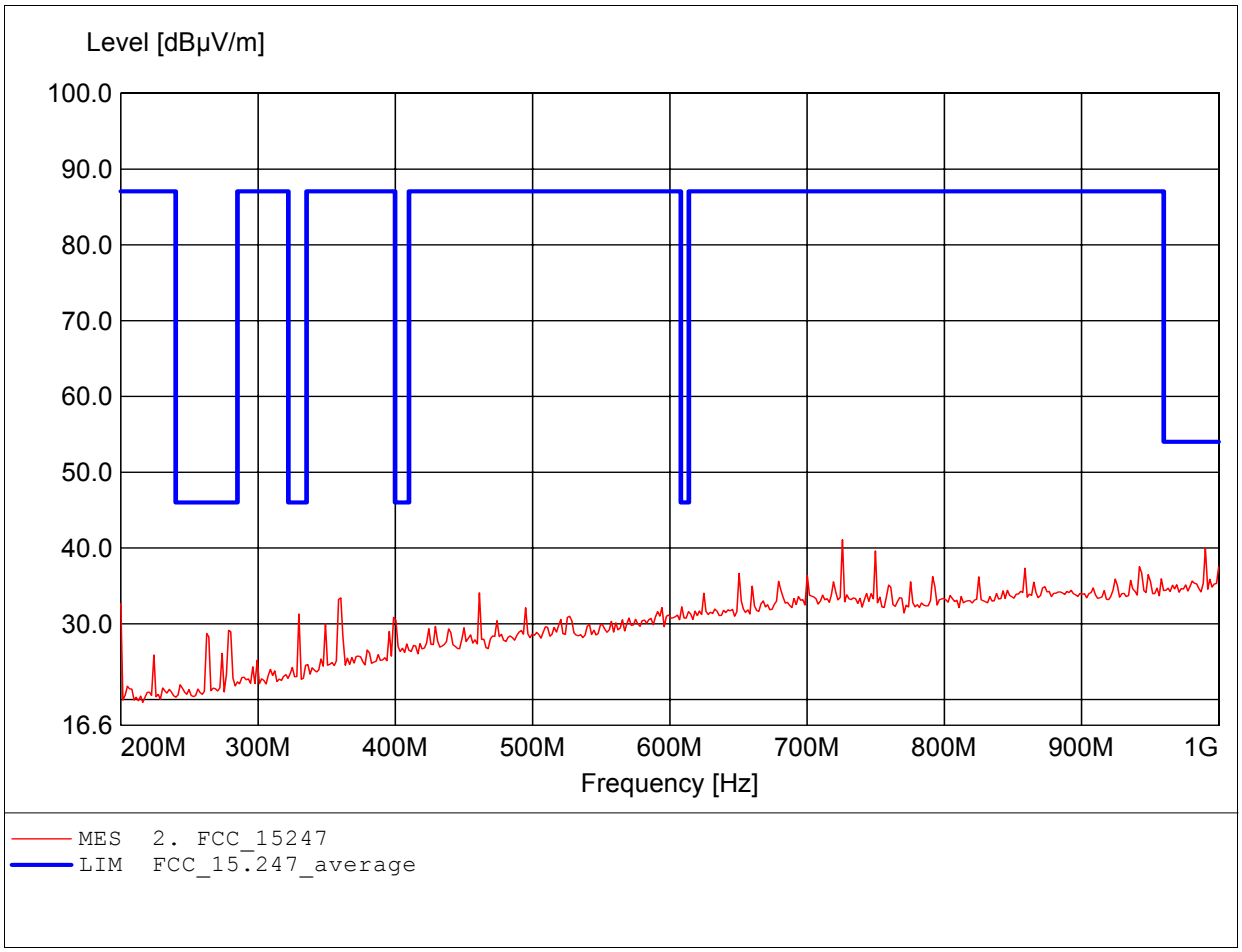
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq: 200.000MHz, Emax: 35.57dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

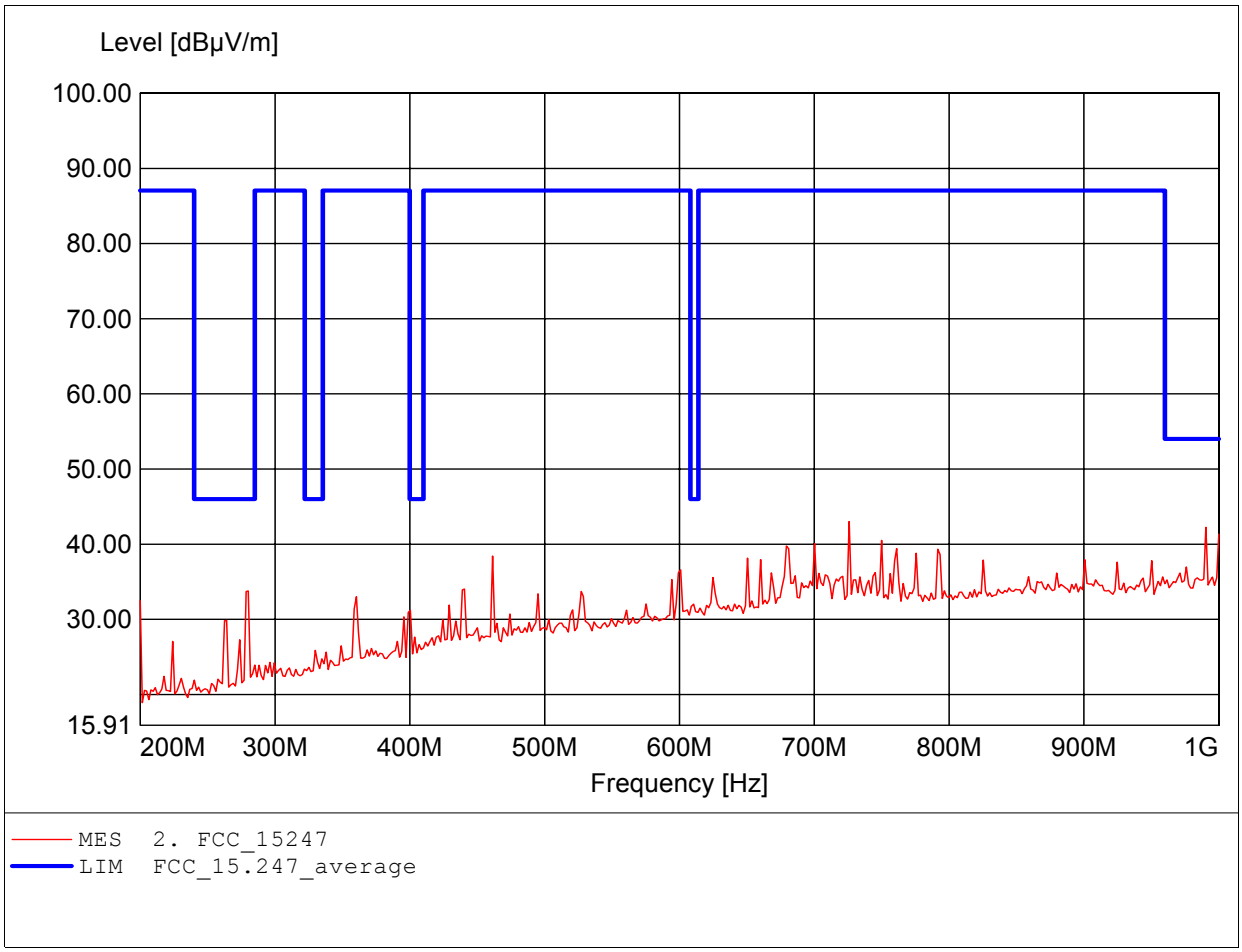
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 41.08dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

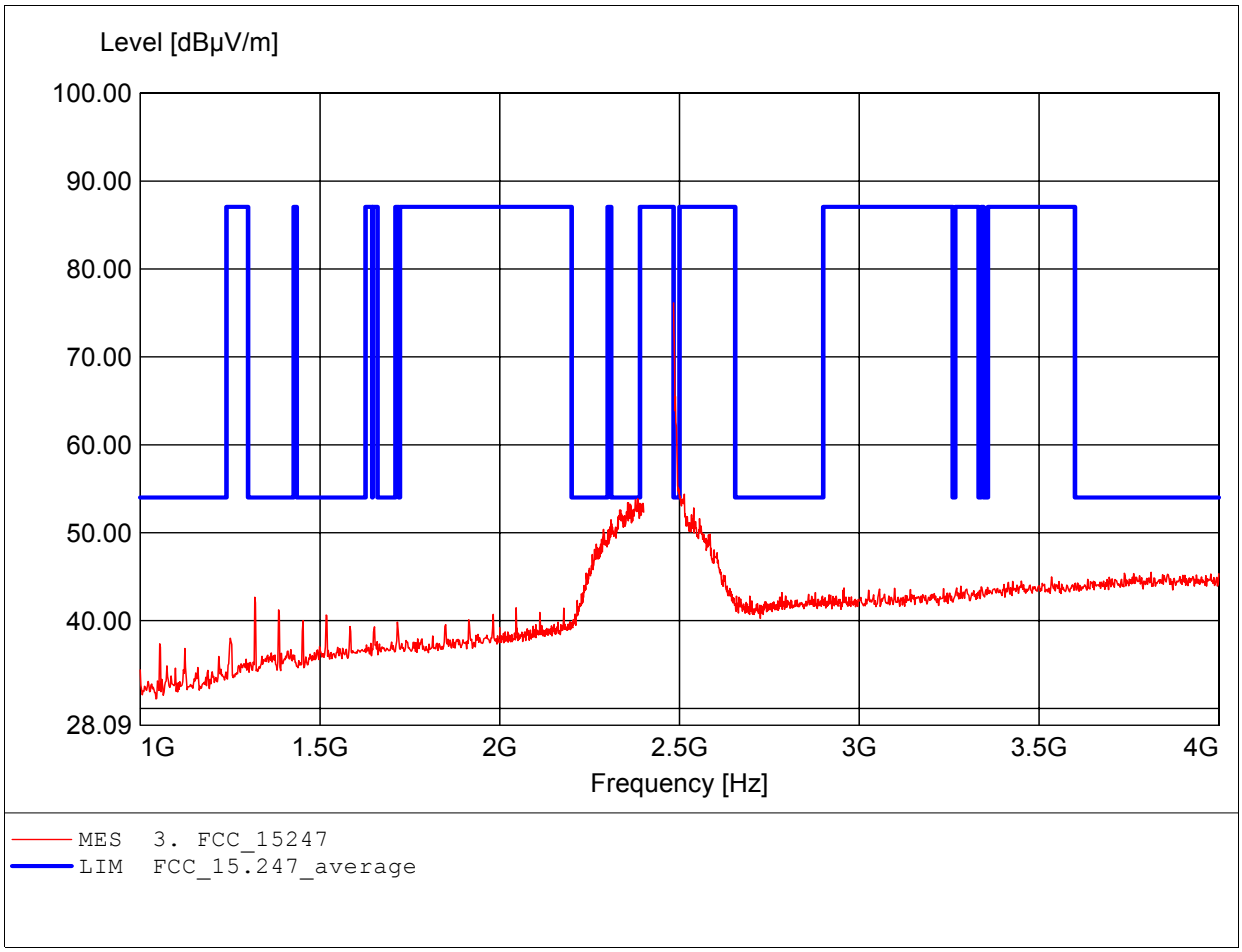
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247
Comment 1:	Dist.: 3m, Ant.: HL 223,
	Freq: 725.852MHz, Emax: 43.02dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 2.484GHz, Emax: 76.16dBµV/m, RBW: 1MHz



MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Detector
2400.00	32.06	54.00	21.94	AV
2483.50	50.65	54.00	3.35	AV

Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

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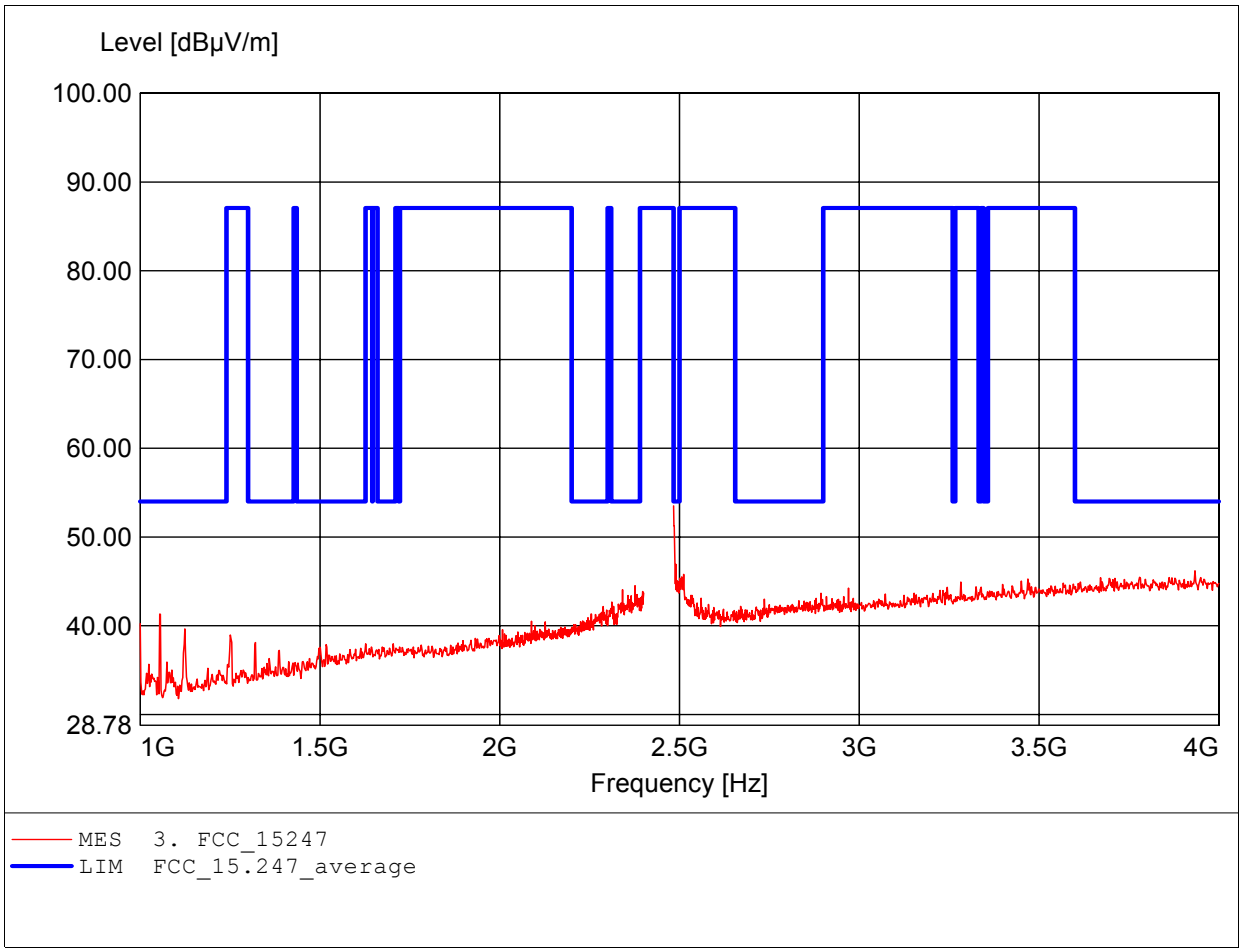
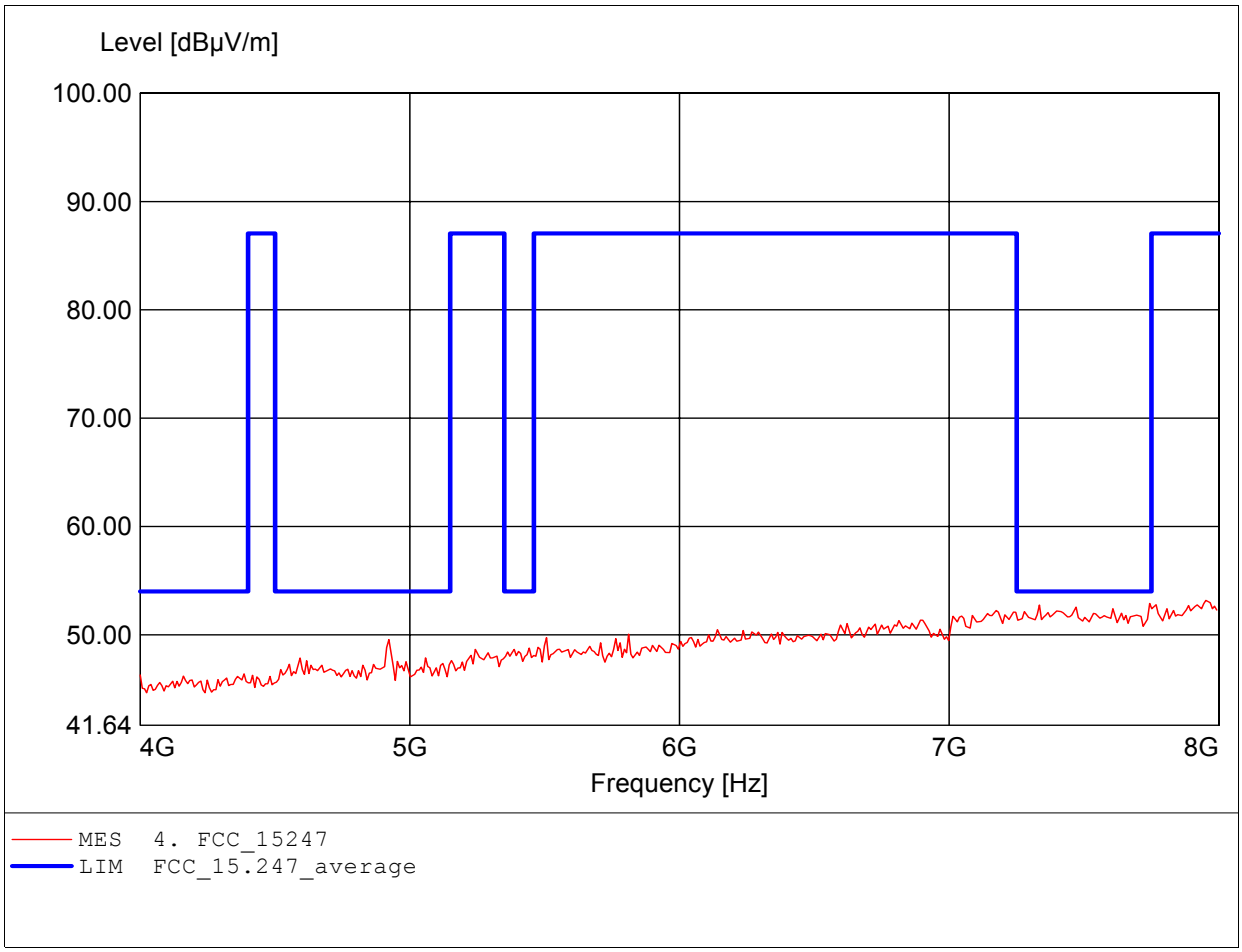
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 2.484GHz, Emax: 53.51dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

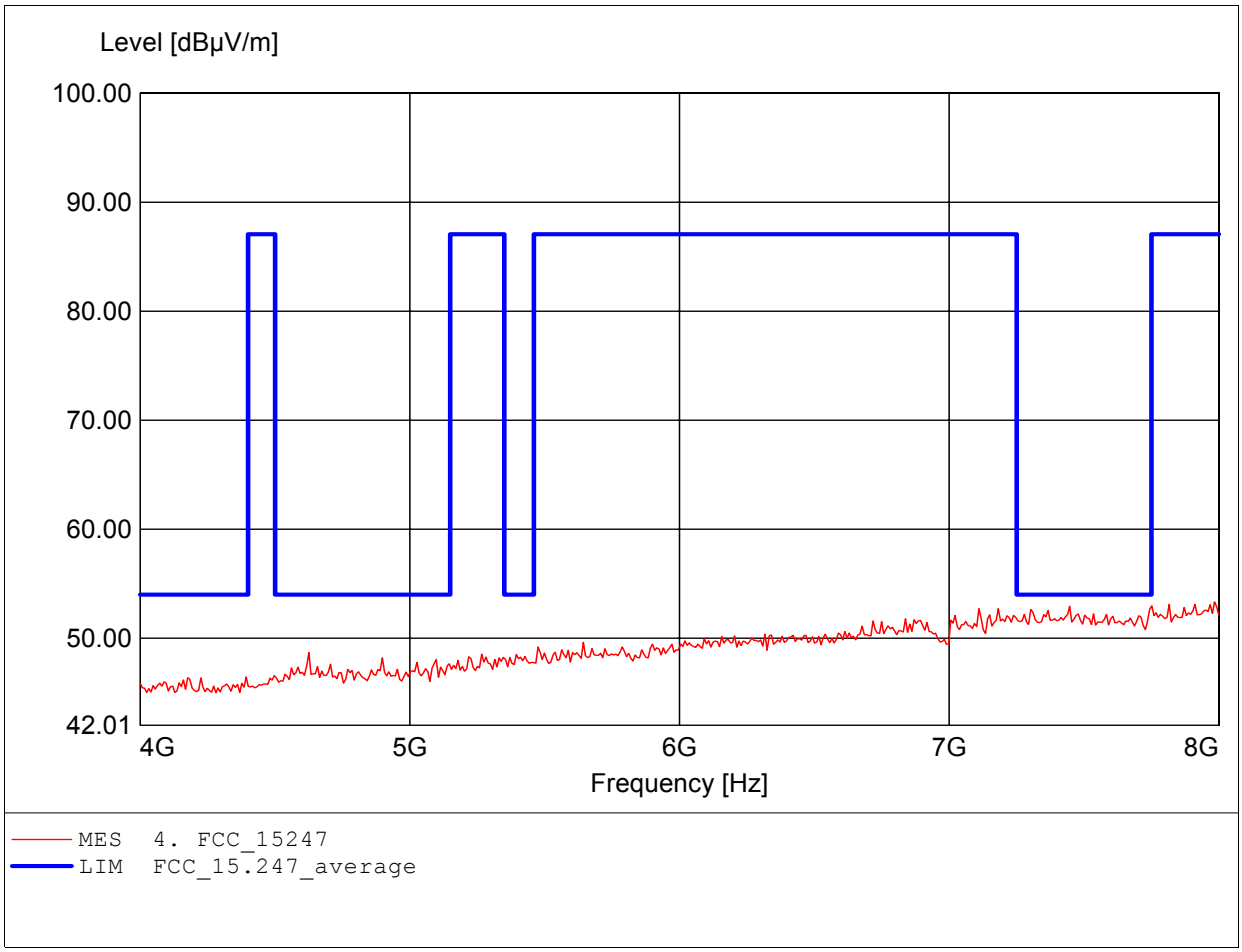
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.952GHz, Emax: 53.17dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

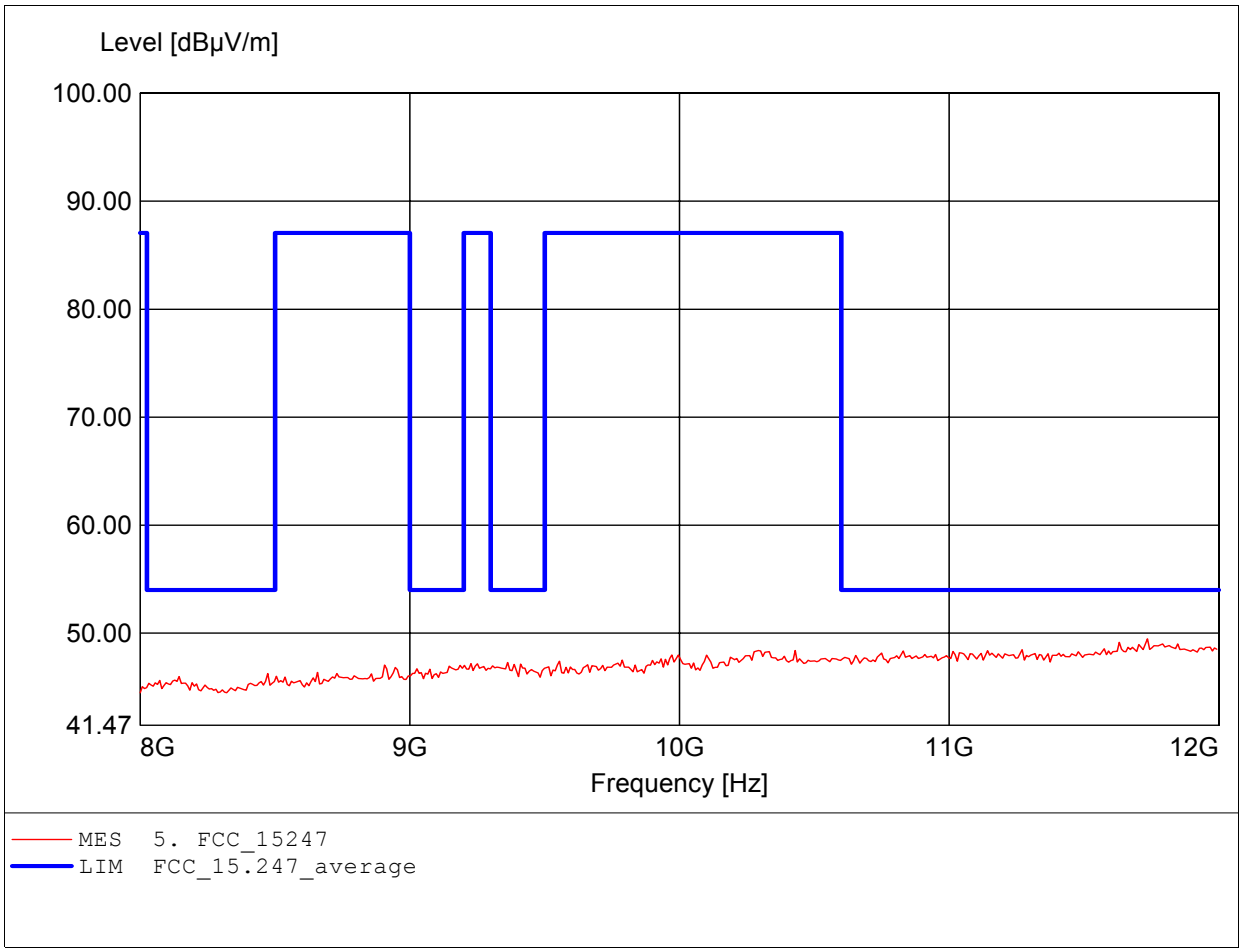
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 7.984GHz, Emax: 53.33dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

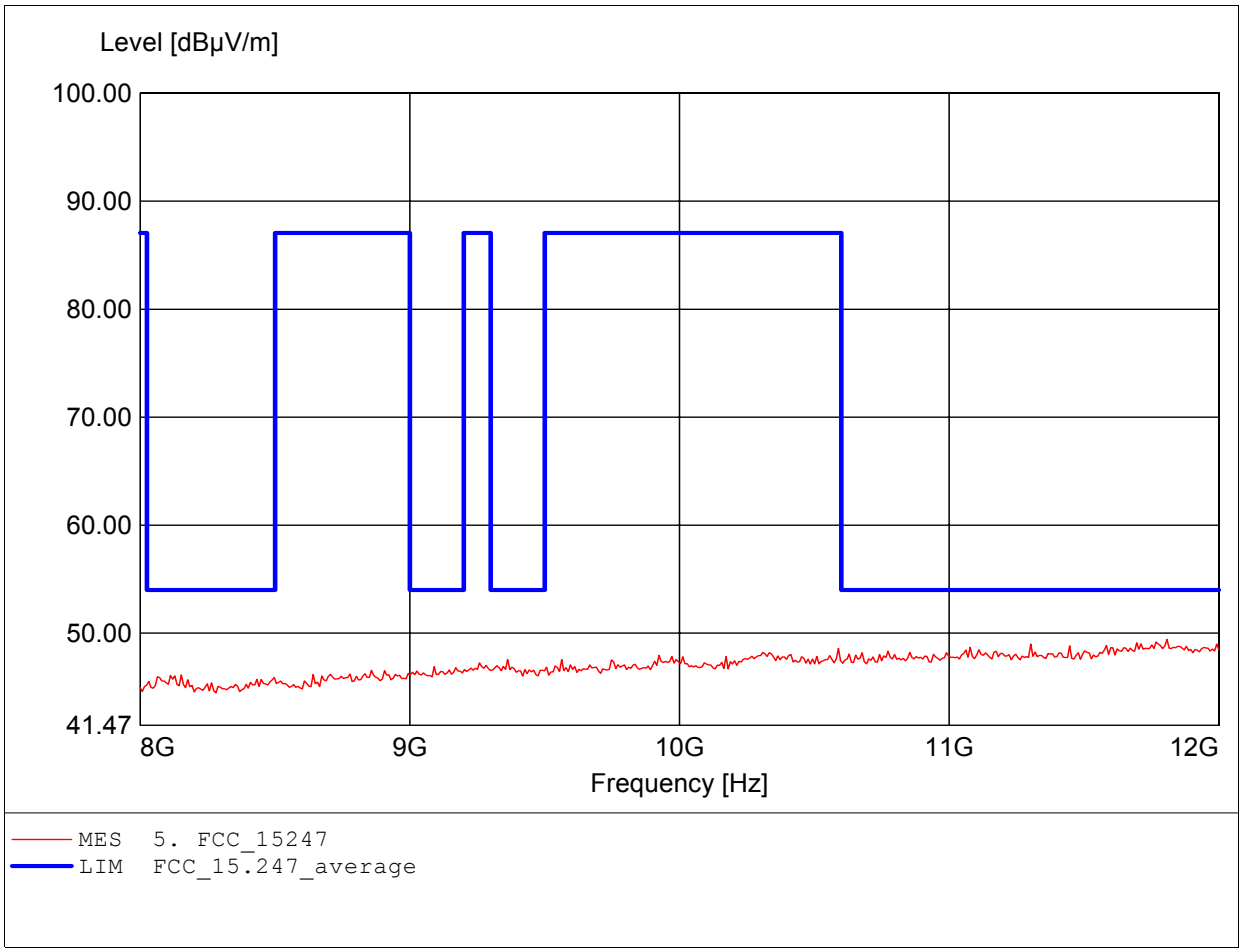
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.735GHz, Emax: 49.48dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

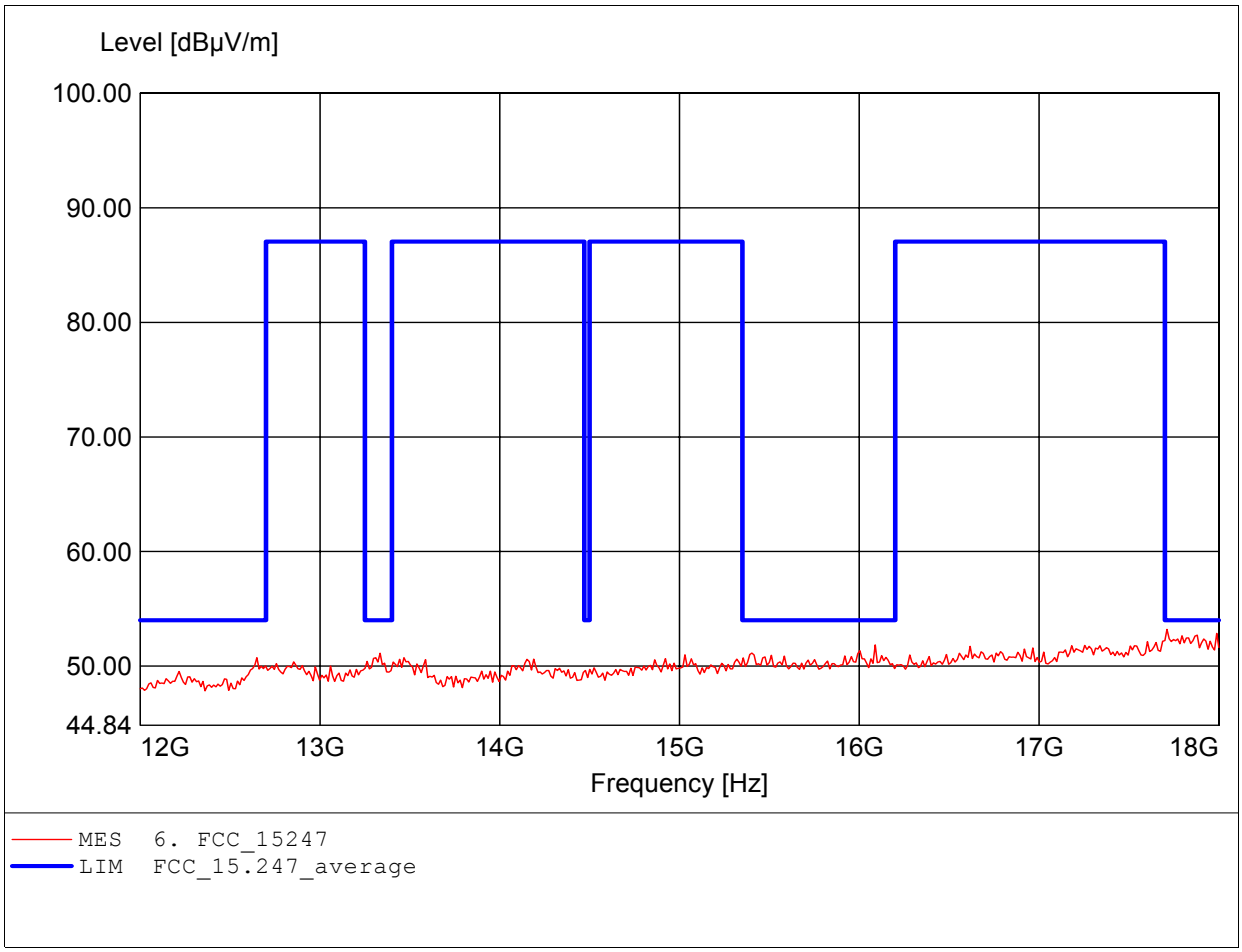
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 11.808GHz, Emax: 49.42dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

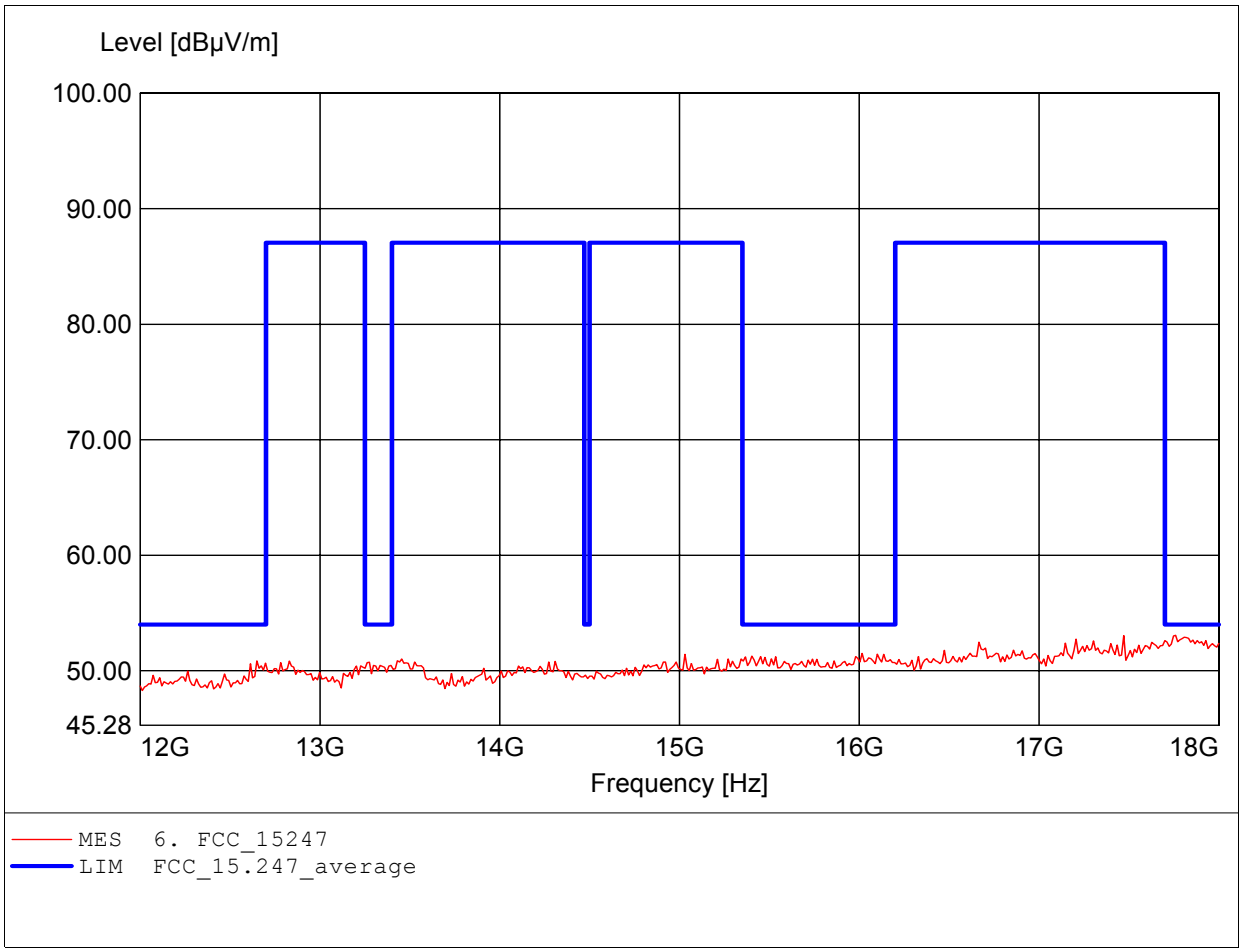
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.711GHz, Emax: 53.21dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

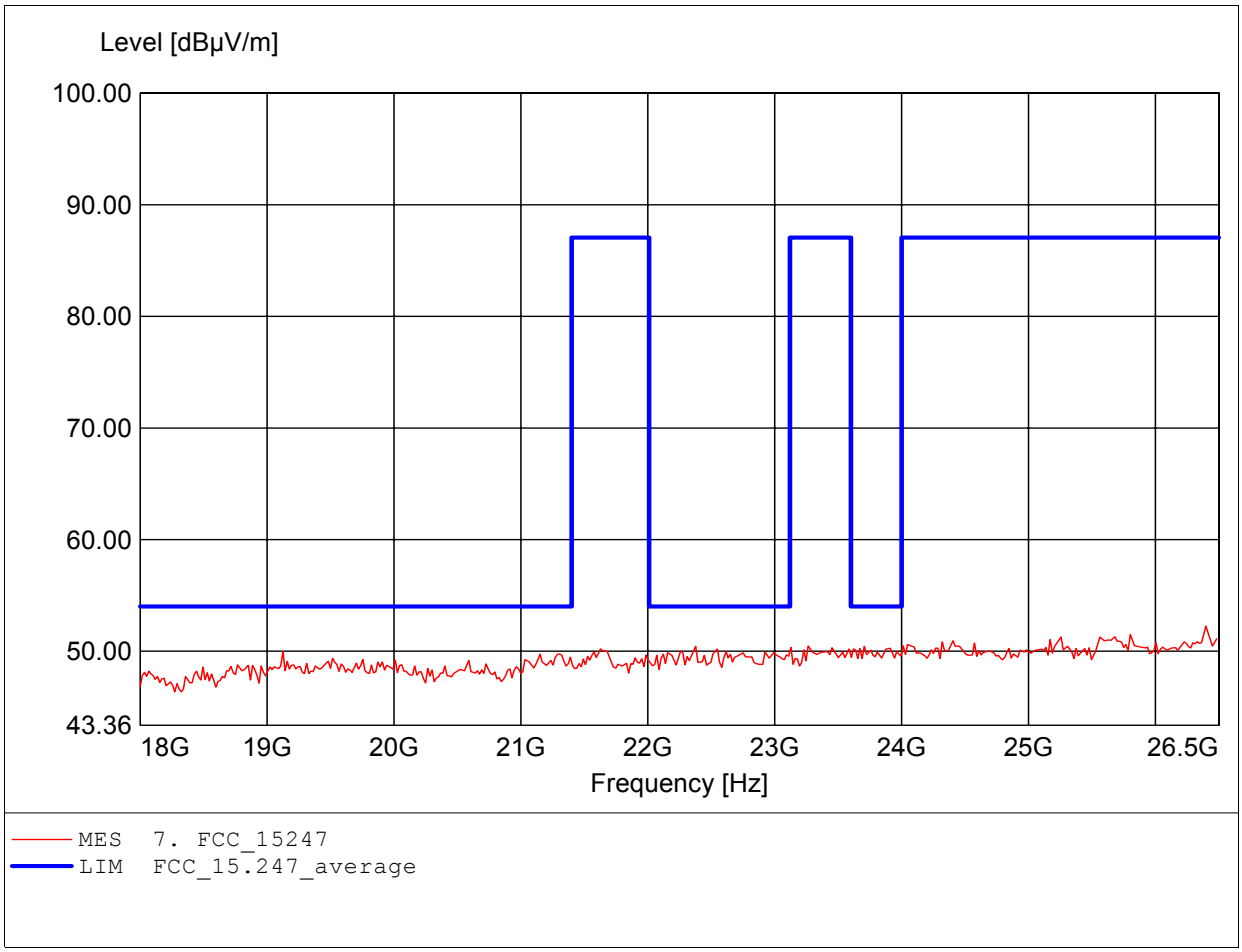
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, ampl.+HP.
	Freq: 17.760GHz, Emax: 53.07dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

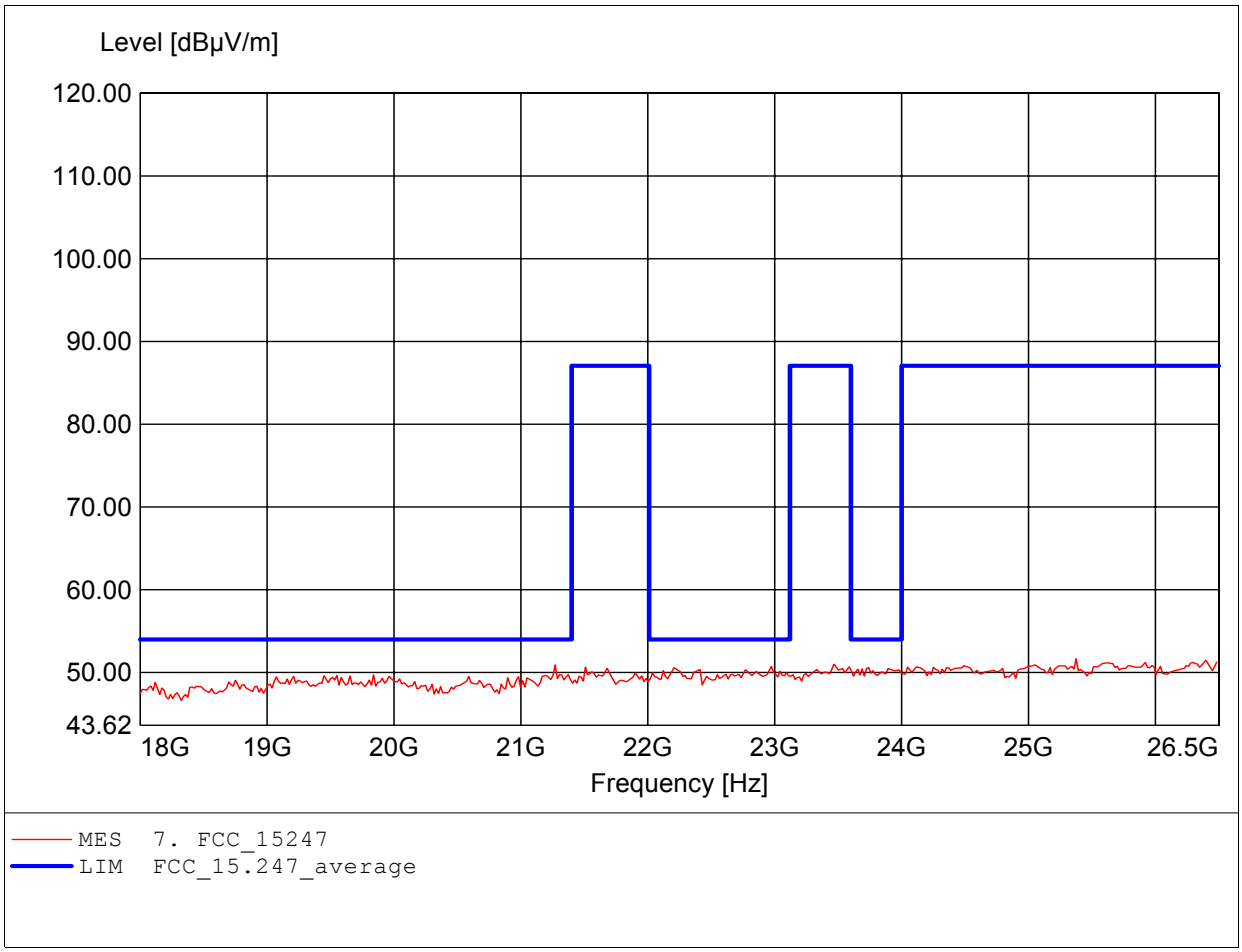
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 26.398GHz, Emax: 52.25dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

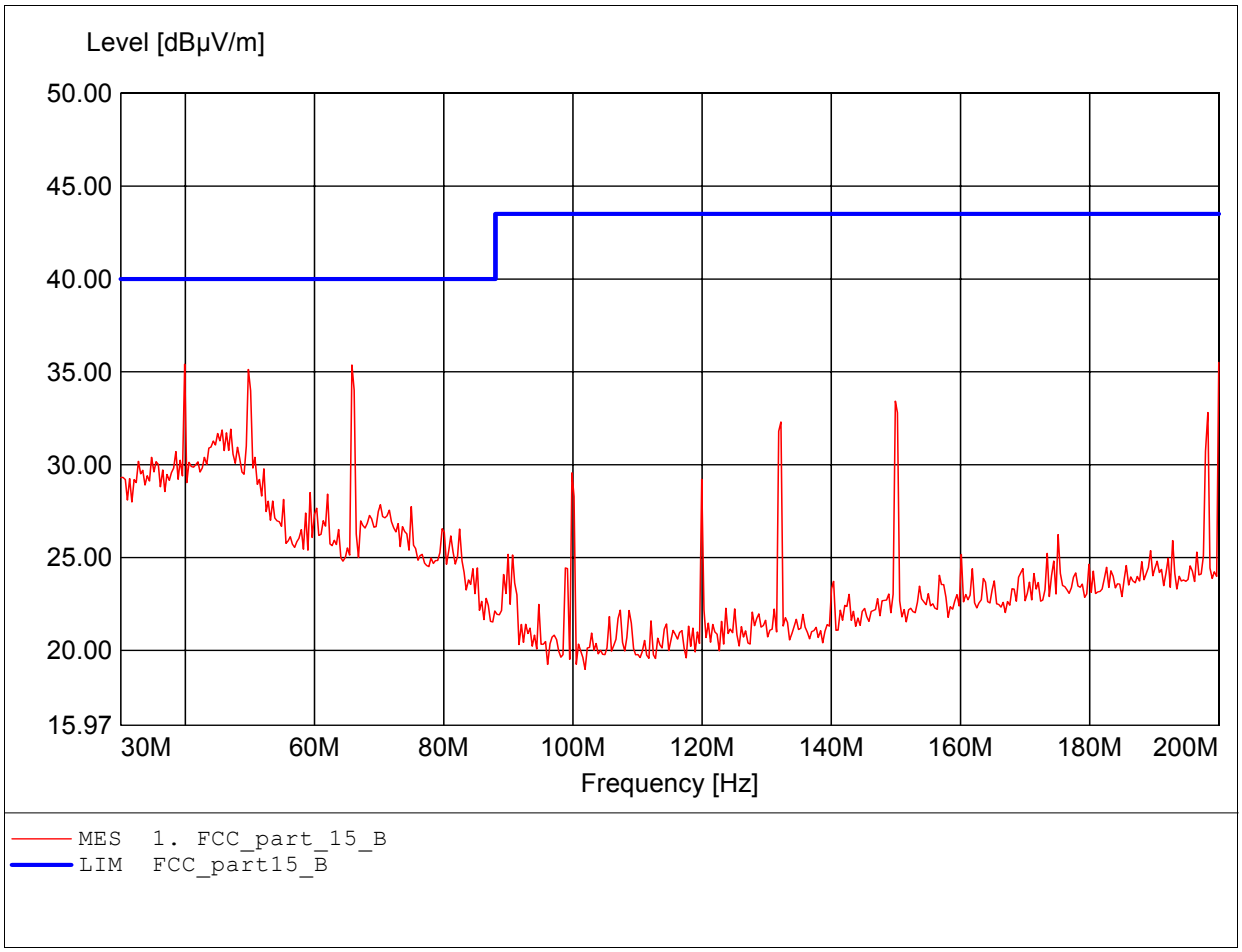
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to §15.247, peak detector
Comment 1:	Dist.: 3m, Ant.: HL025, amplif.
	Freq: 25.376GHz, Emax: 51.65dBµV/m, RBW: 1MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

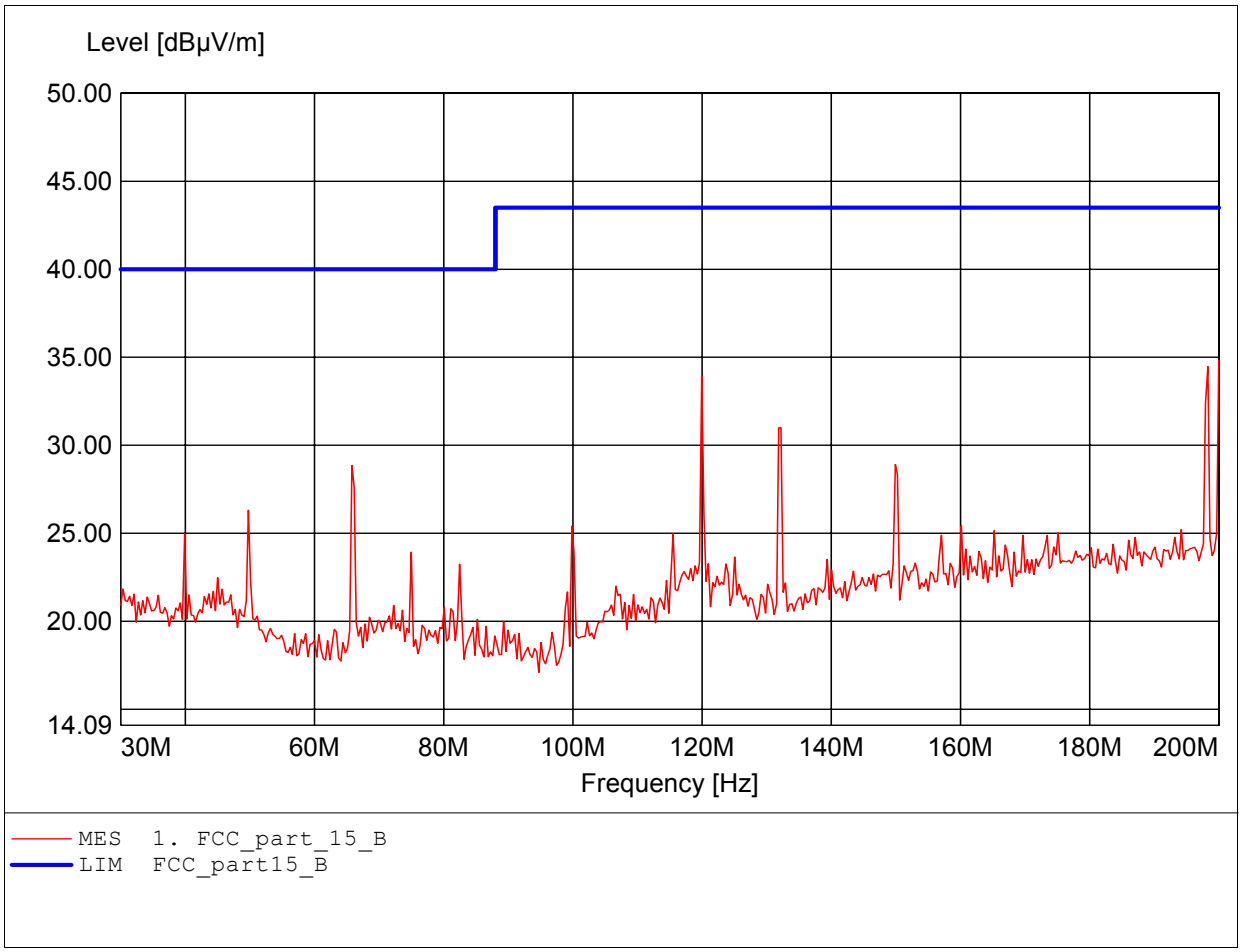
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:200.000MHz Emax:35.50dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

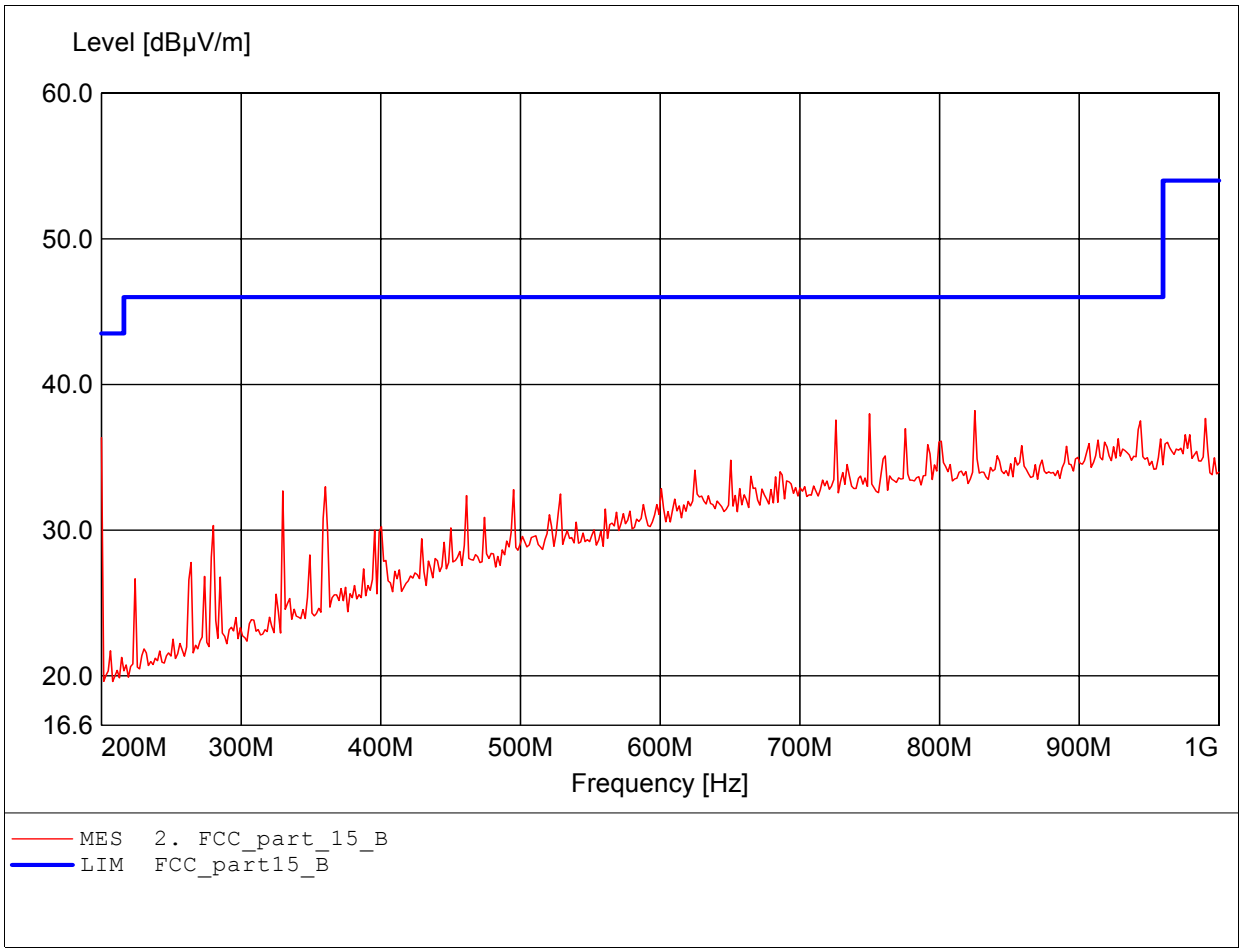
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:200.000MHz Emax:34.83dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

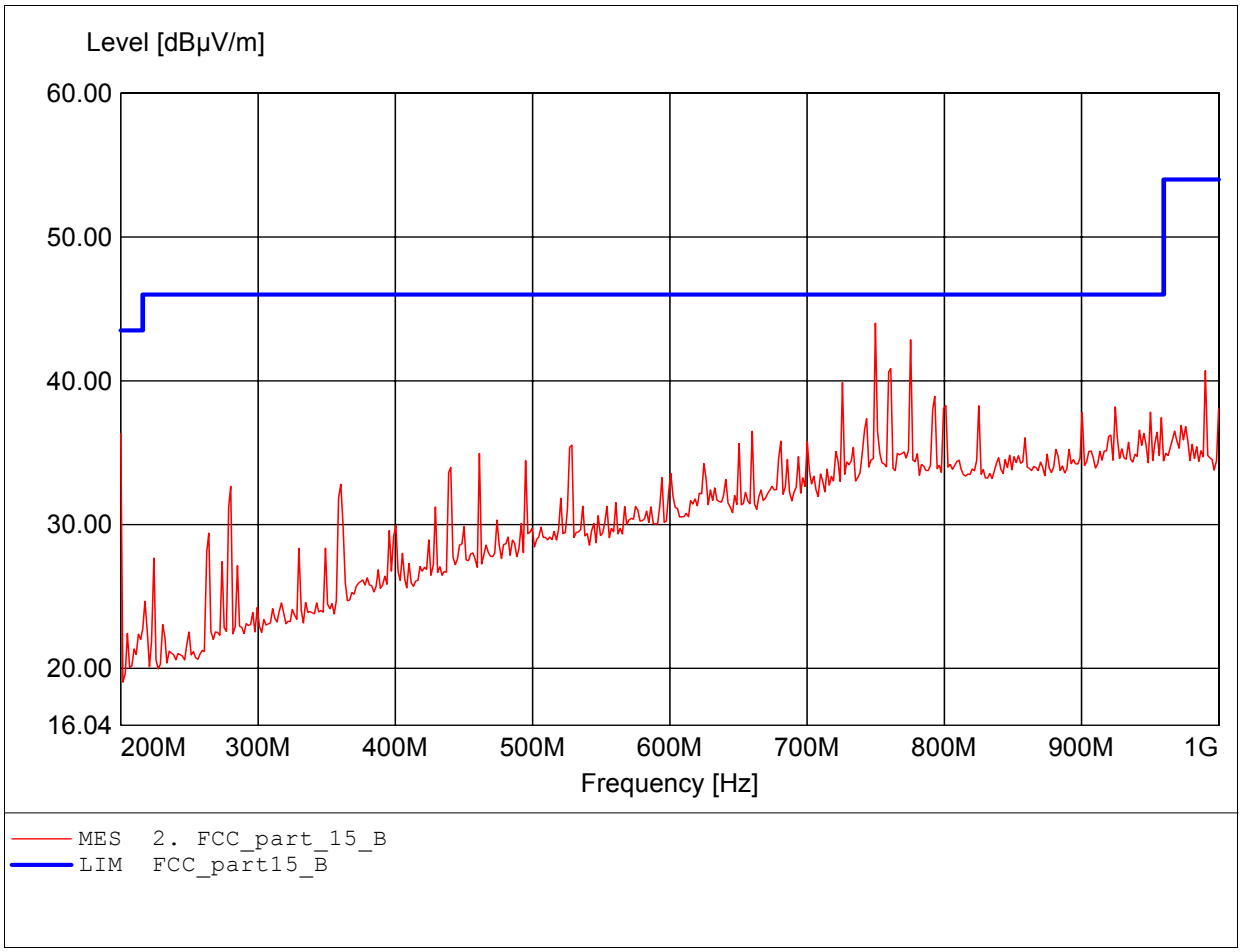
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:825.251MHz Emax:38.20dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

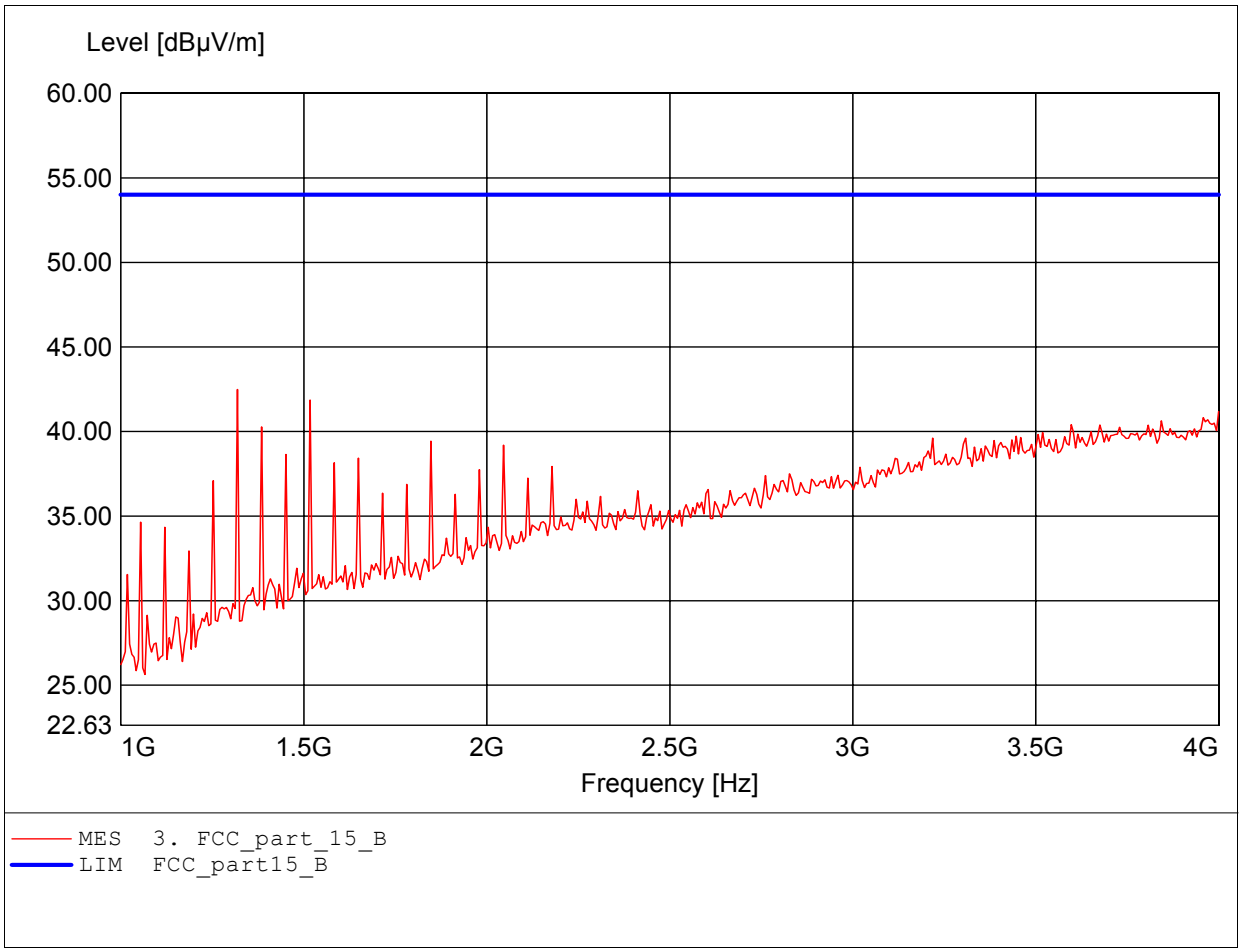
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:749.900MHz Emax:44.00dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

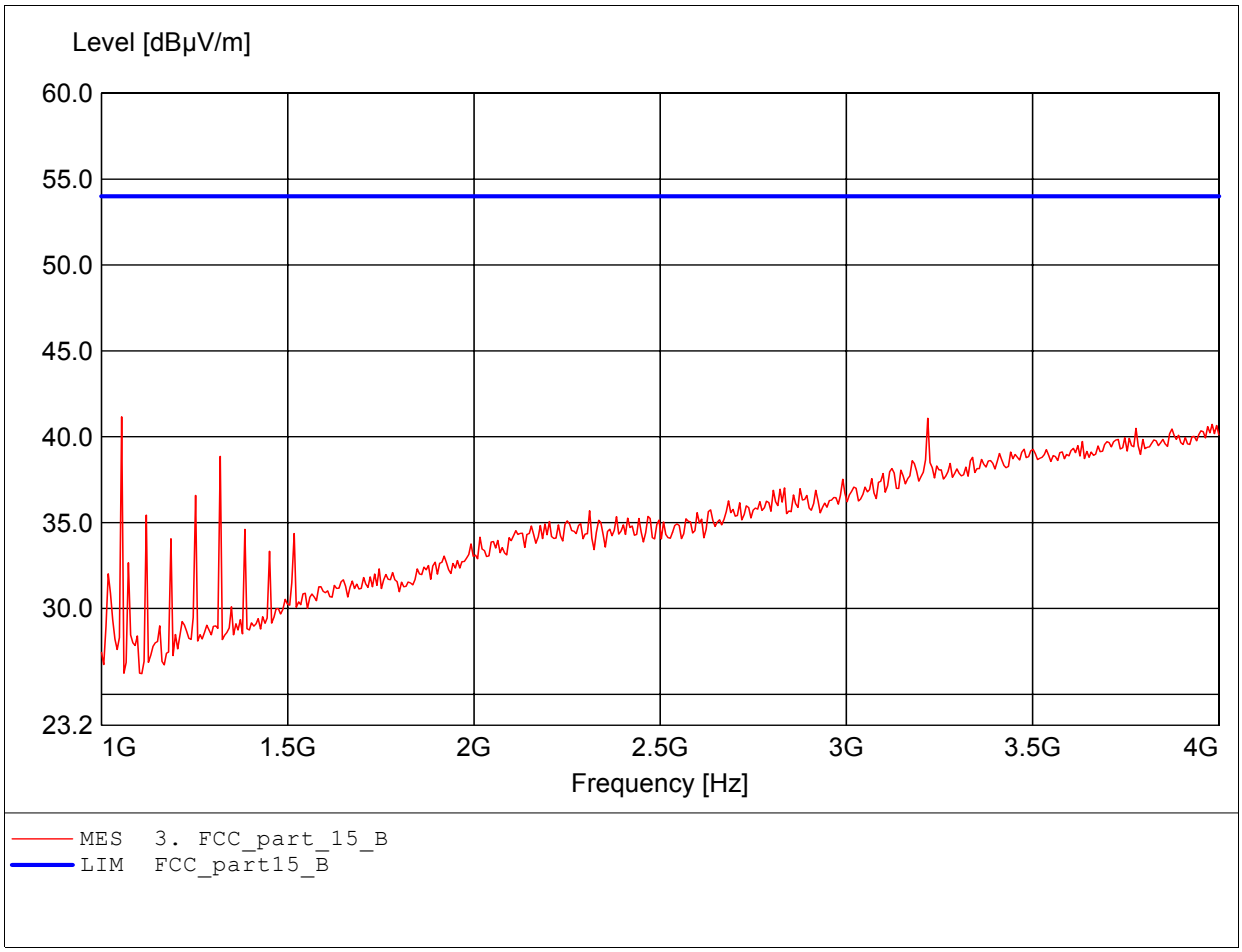
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:1.319GHz Emax:42.49dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

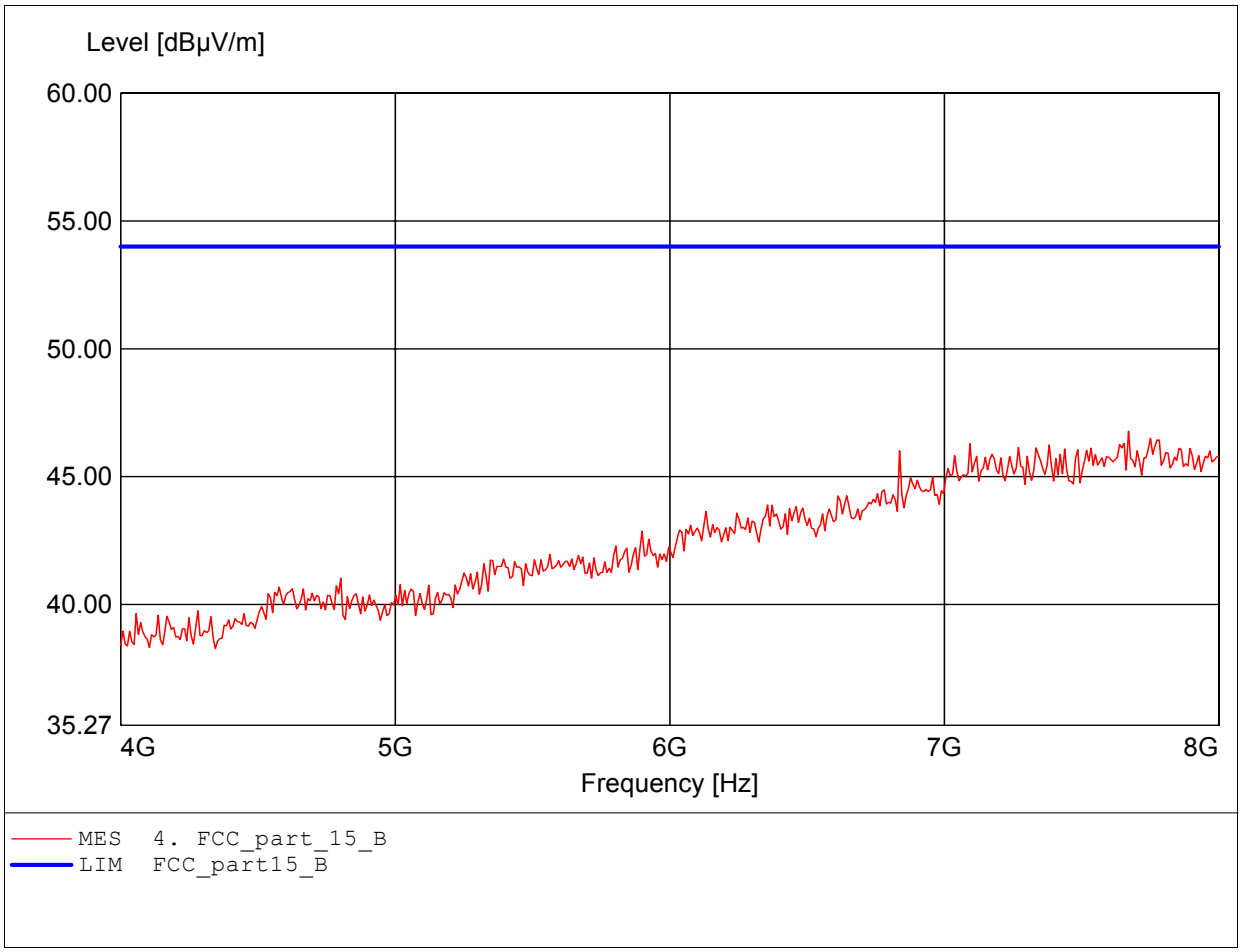
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:1.054GHz Emax:41.16dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

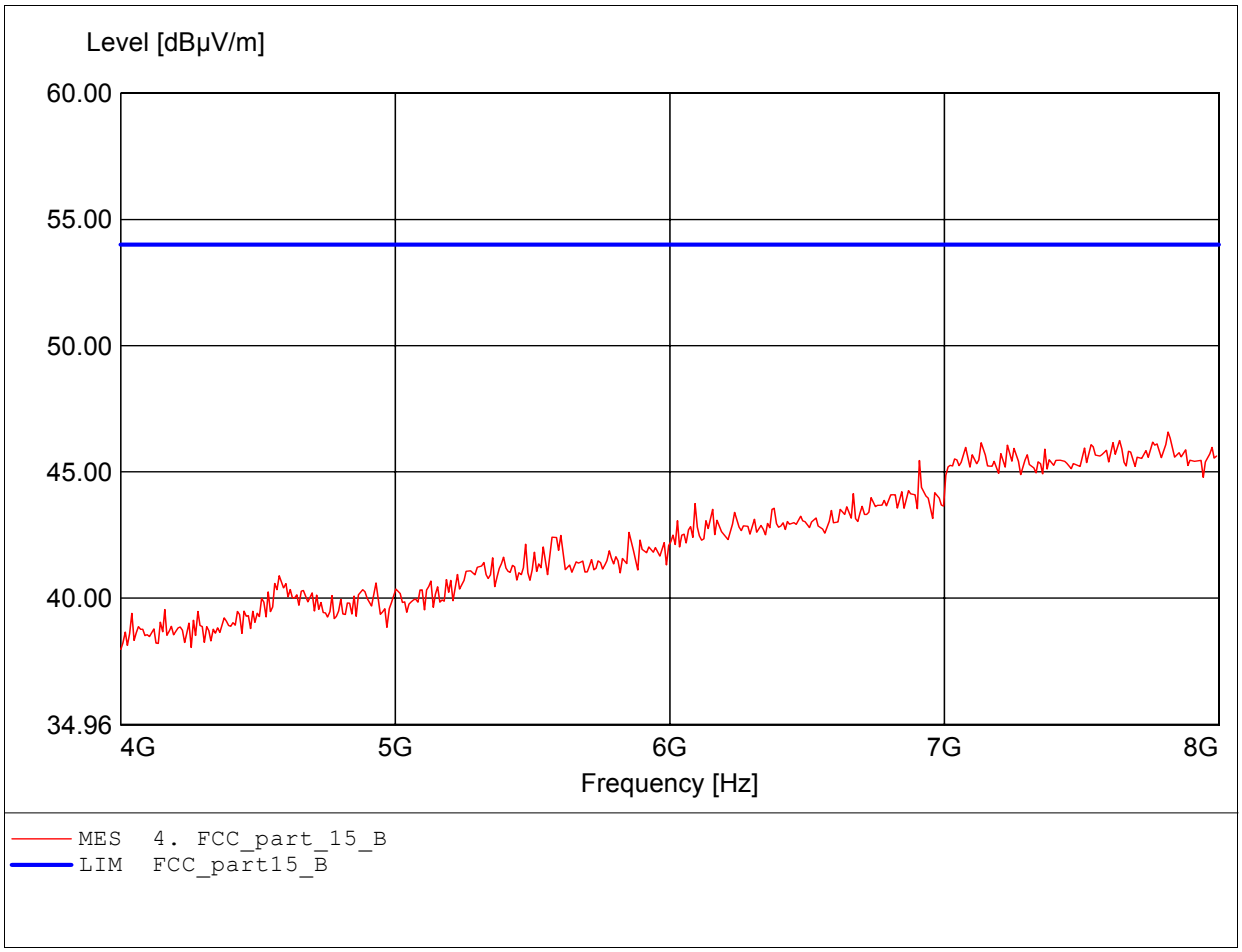
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.671GHz Emax:46.77dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

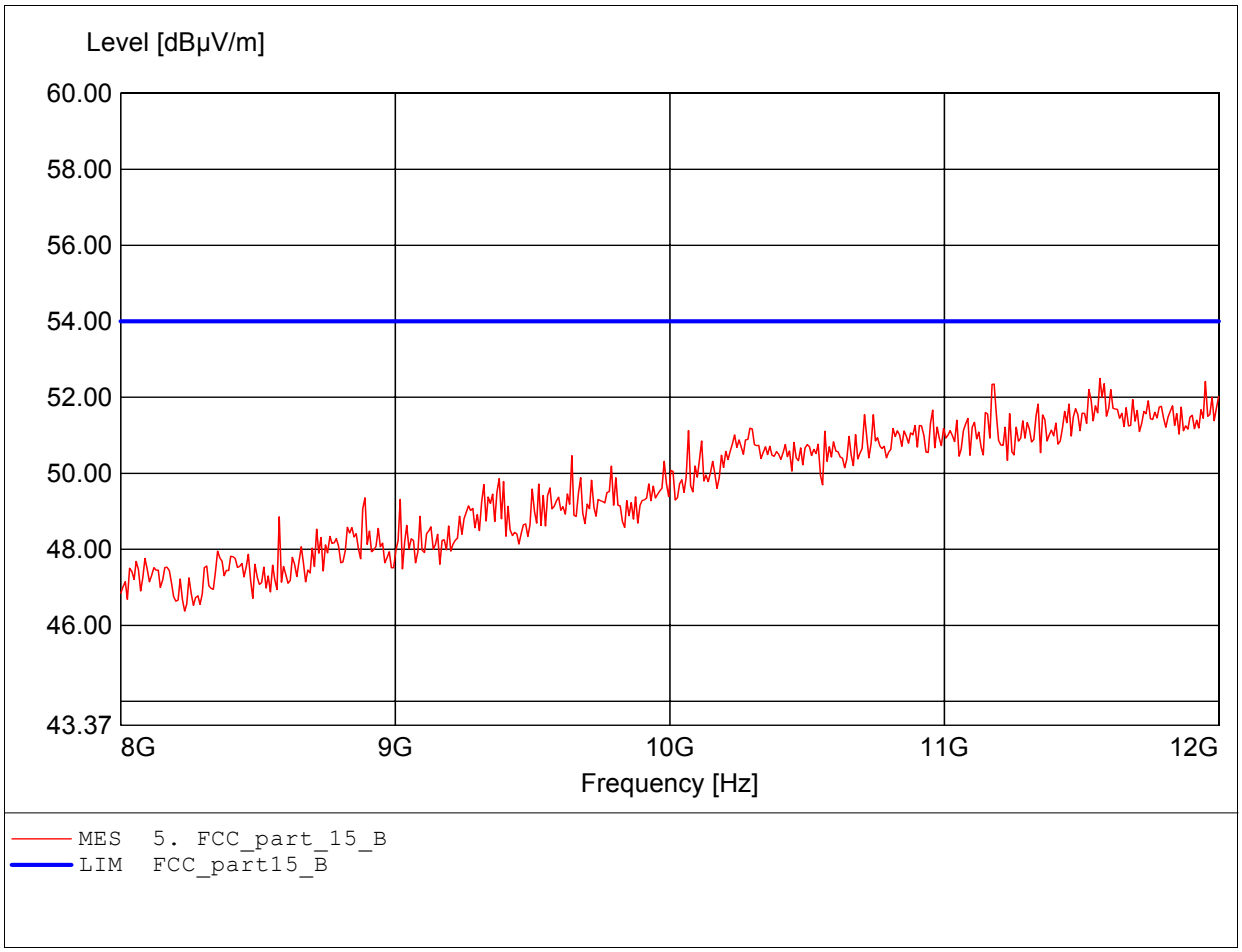
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.816GHz Emax:46.58dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

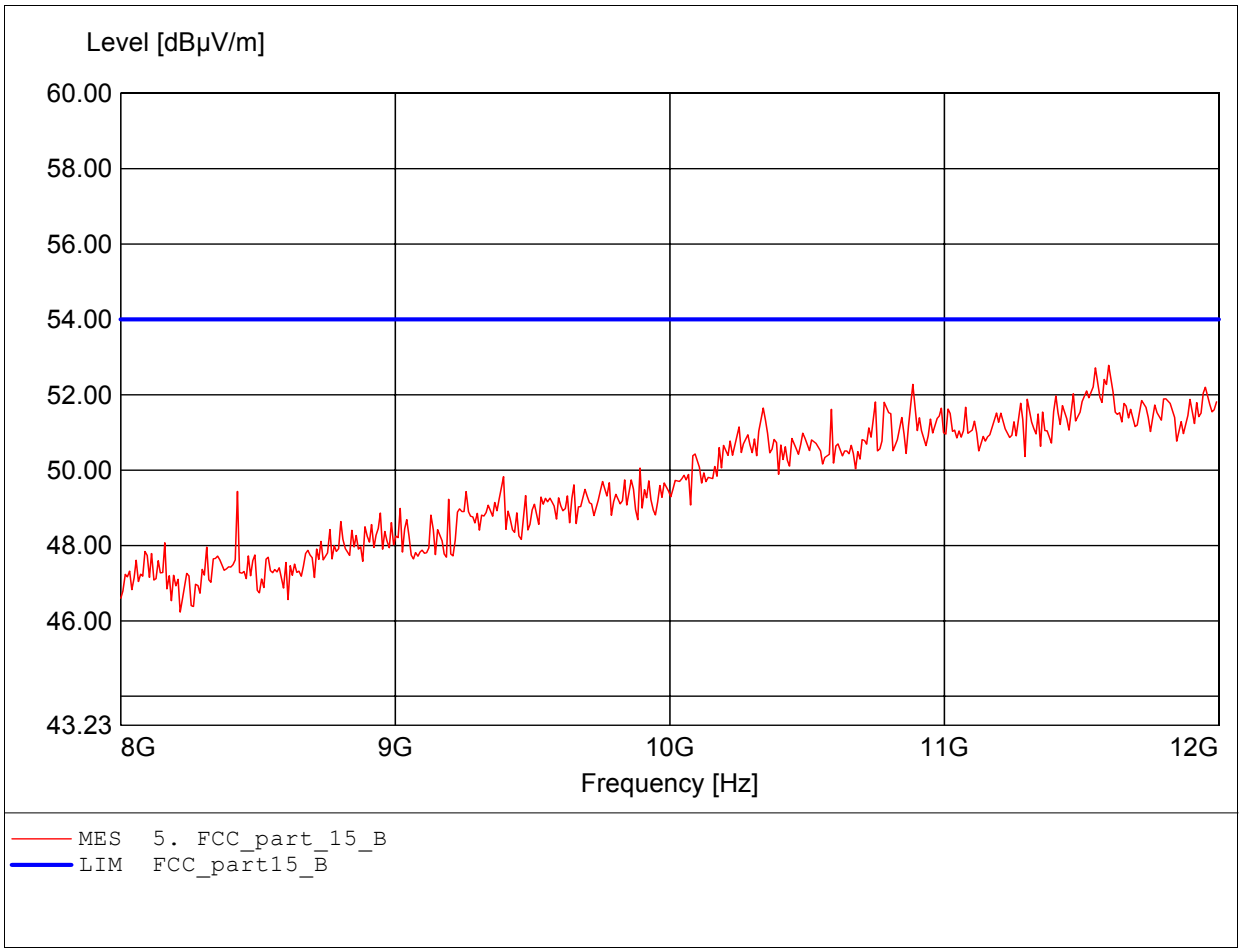
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.567GHz Emax:52.50dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

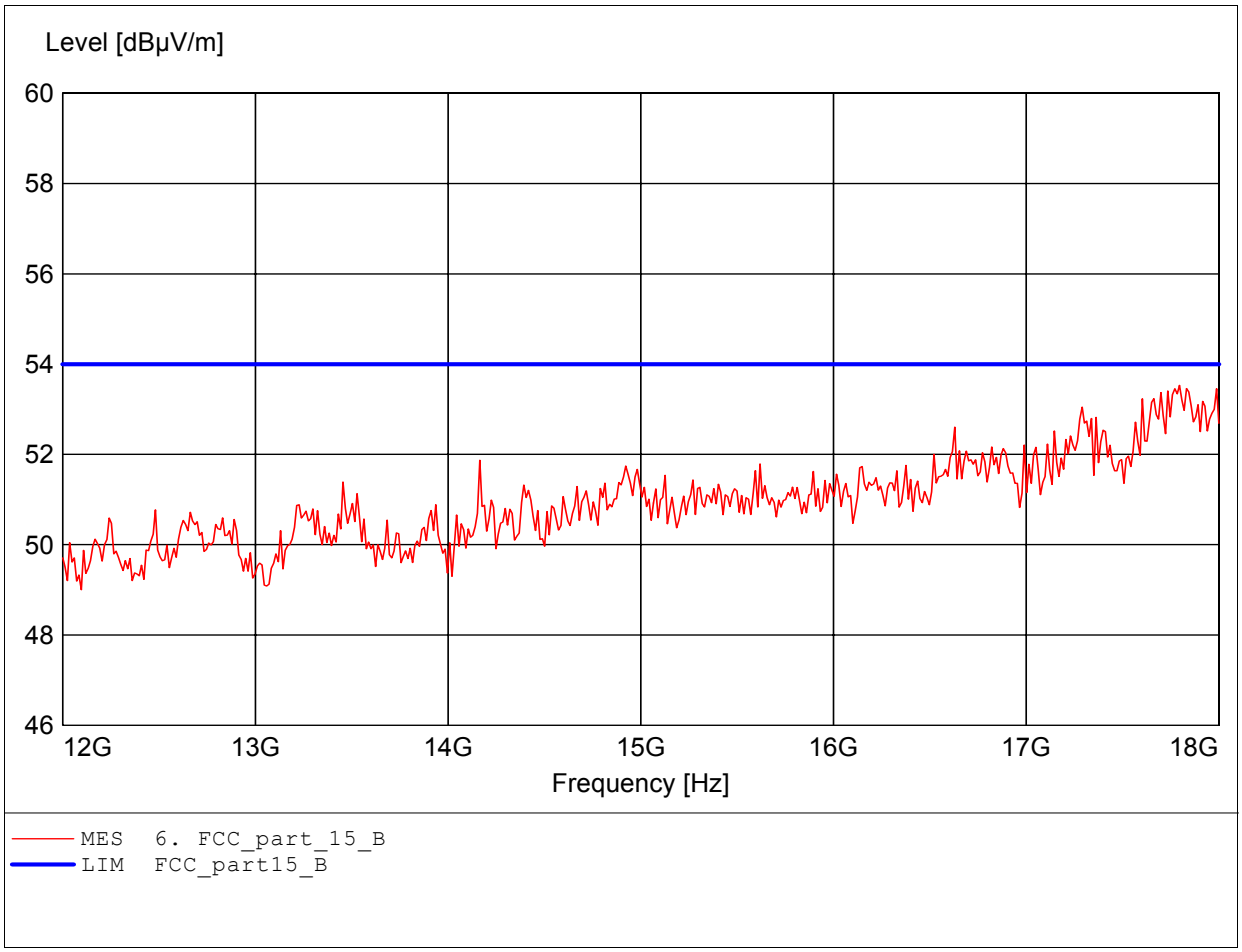
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.599GHz Emax:52.78dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

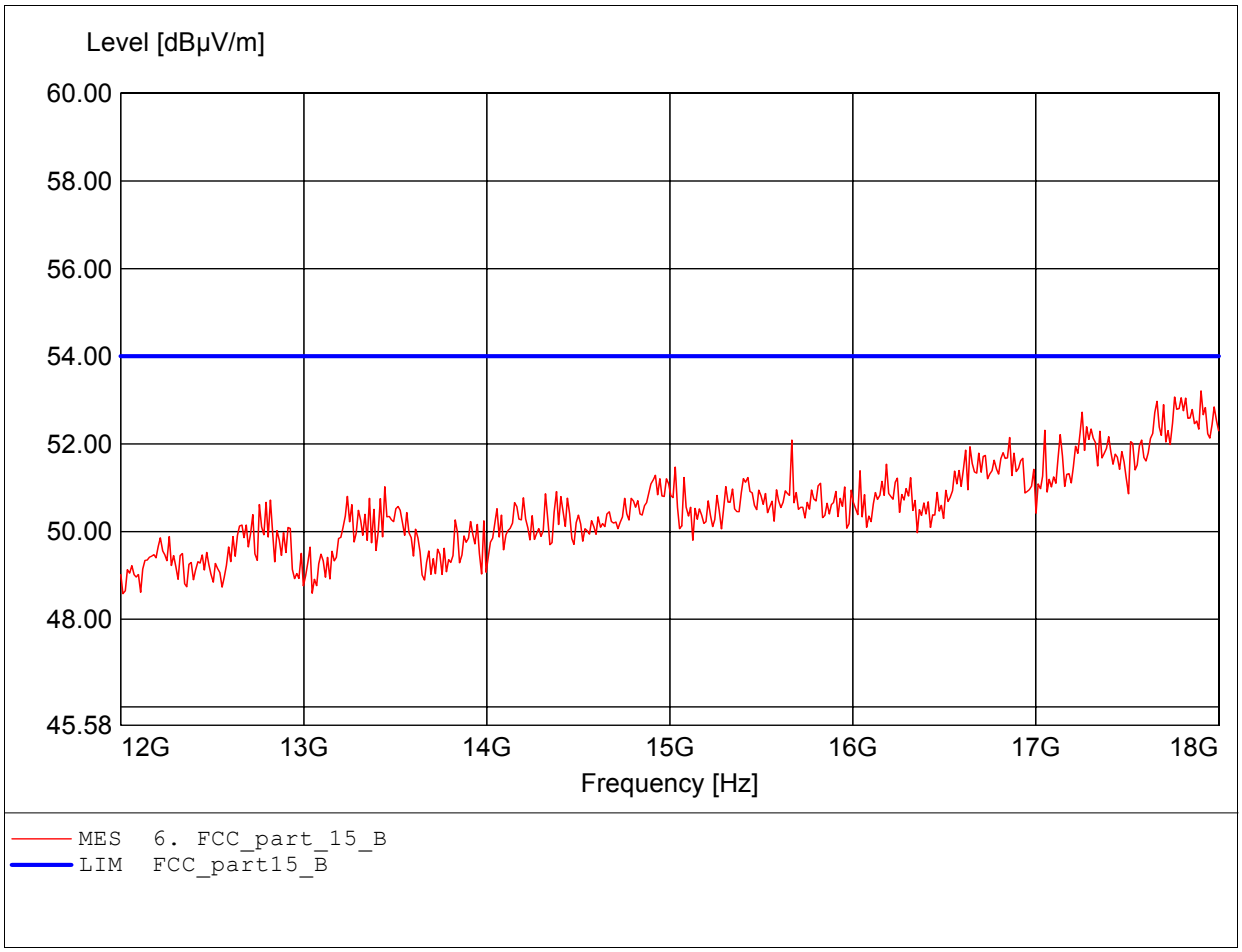
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.796GHz Emax:53.53dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

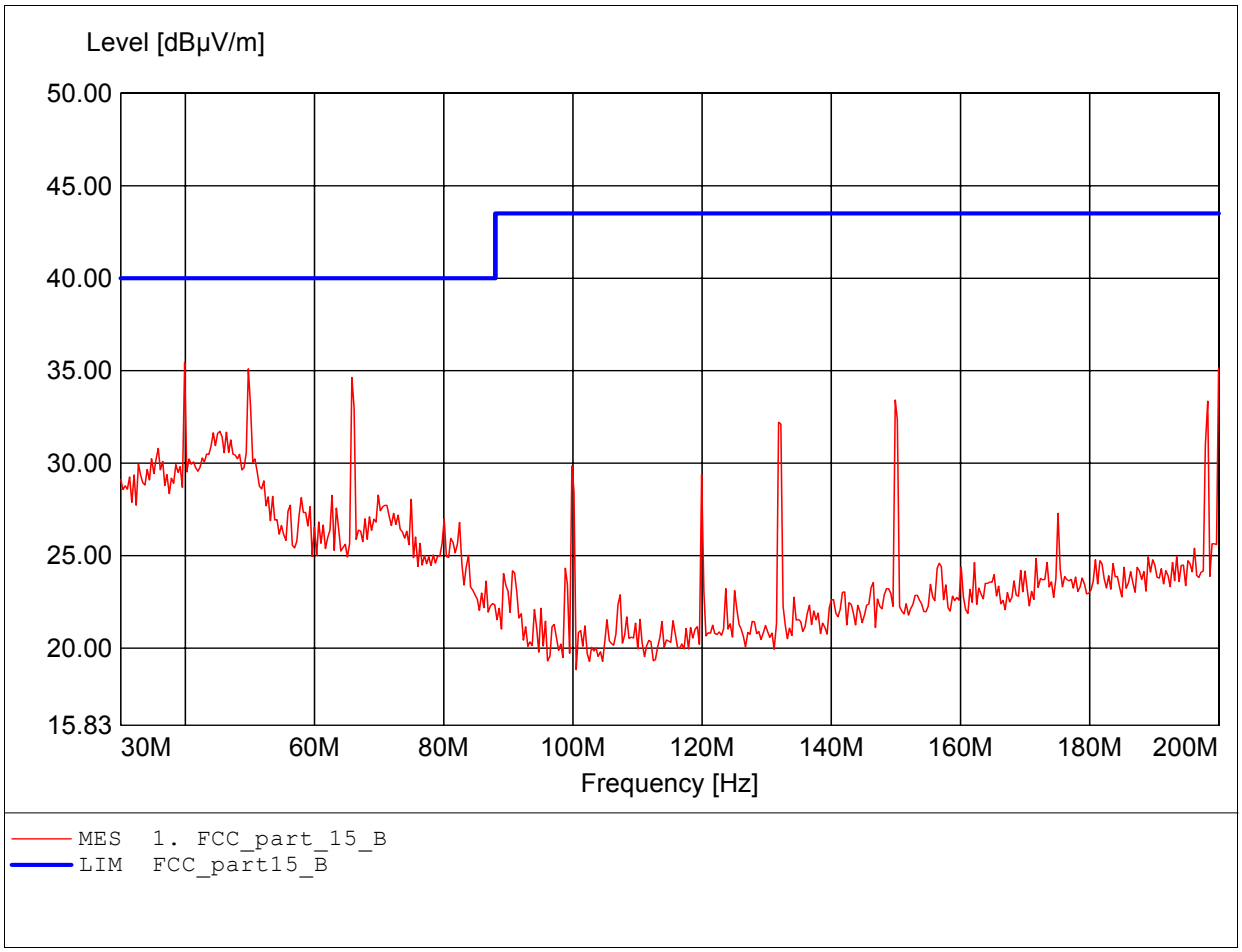
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 1
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.904GHz Emax:53.21dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

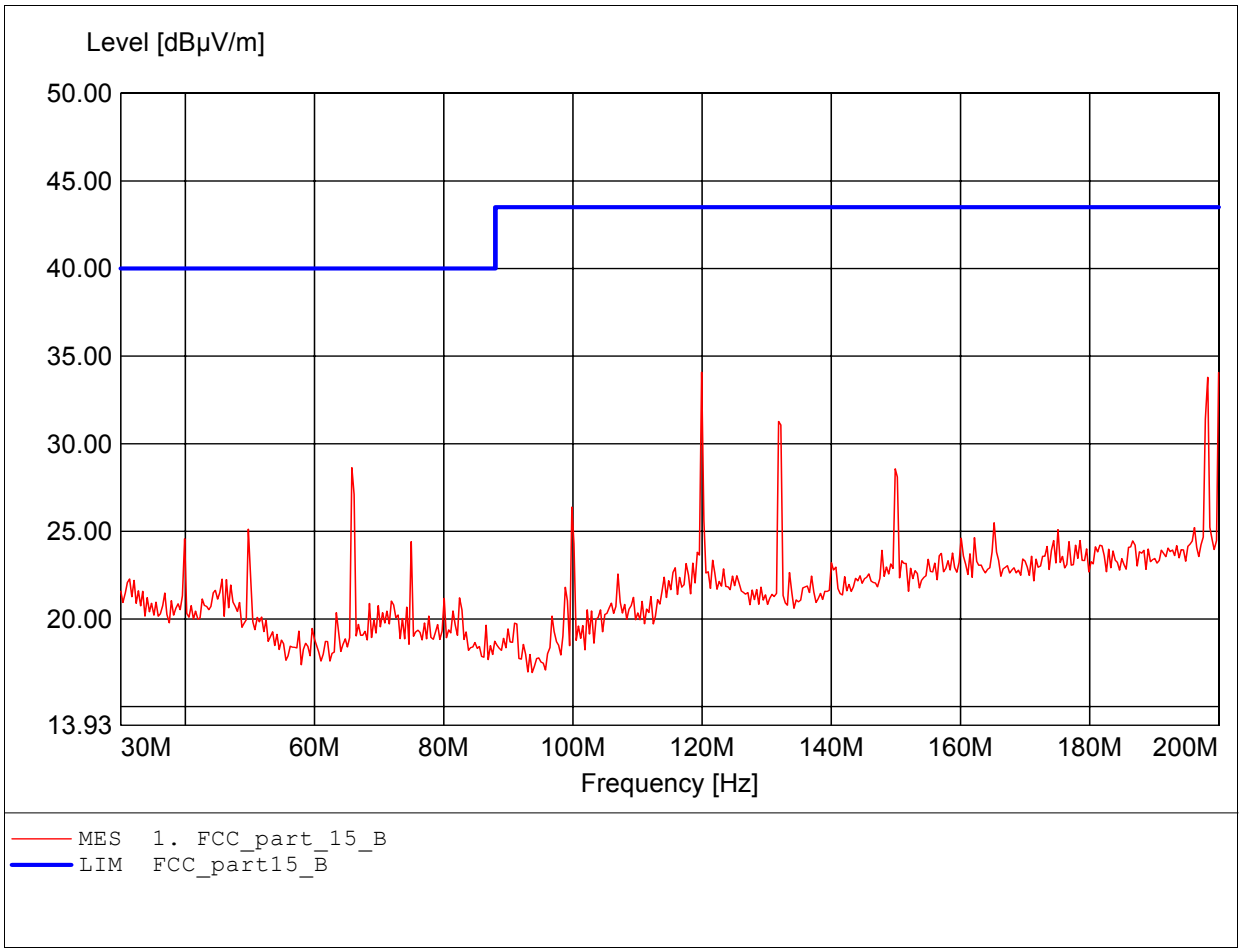
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:39.880MHz Emax:35.44dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

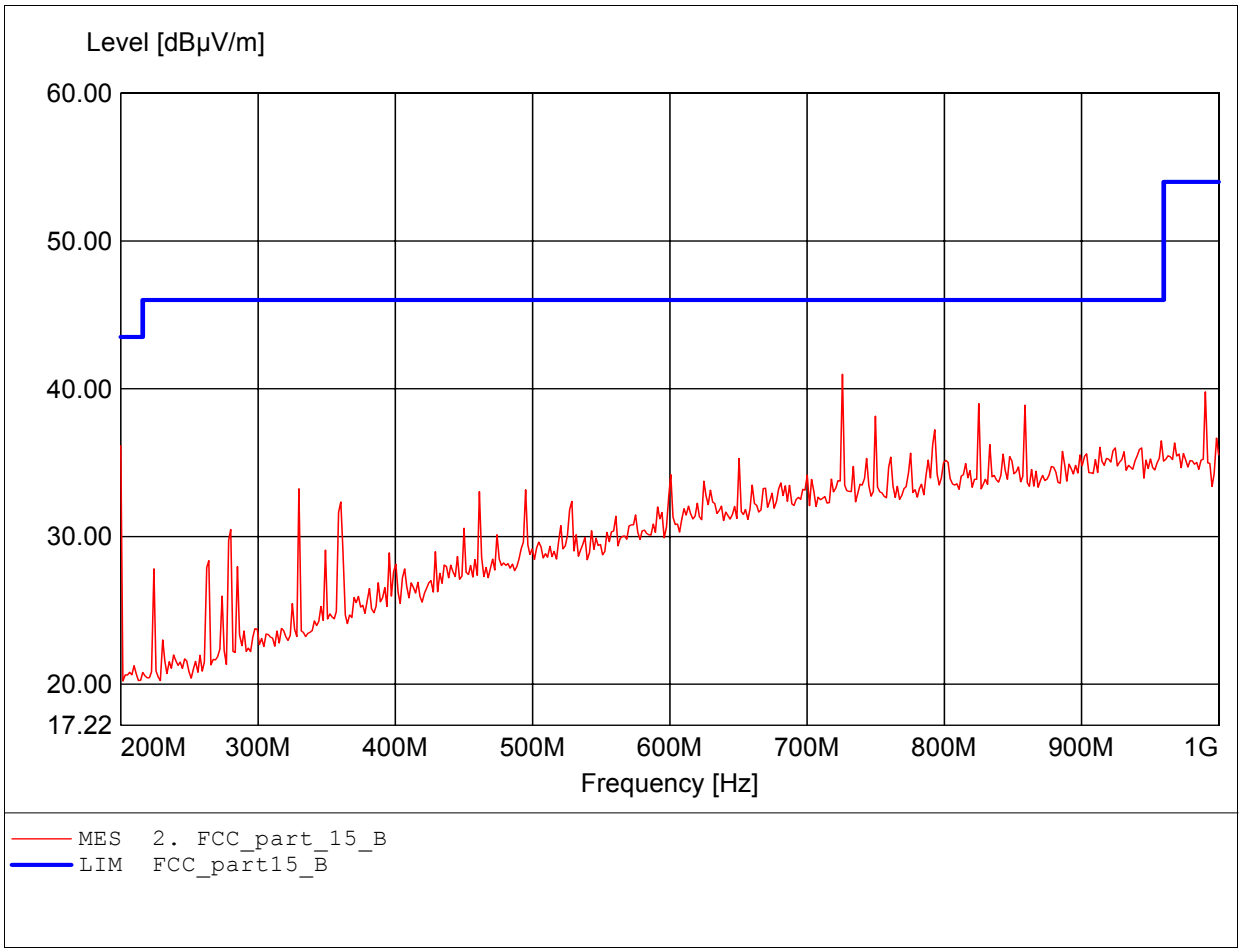
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:119.940MHz Emax:34.08dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

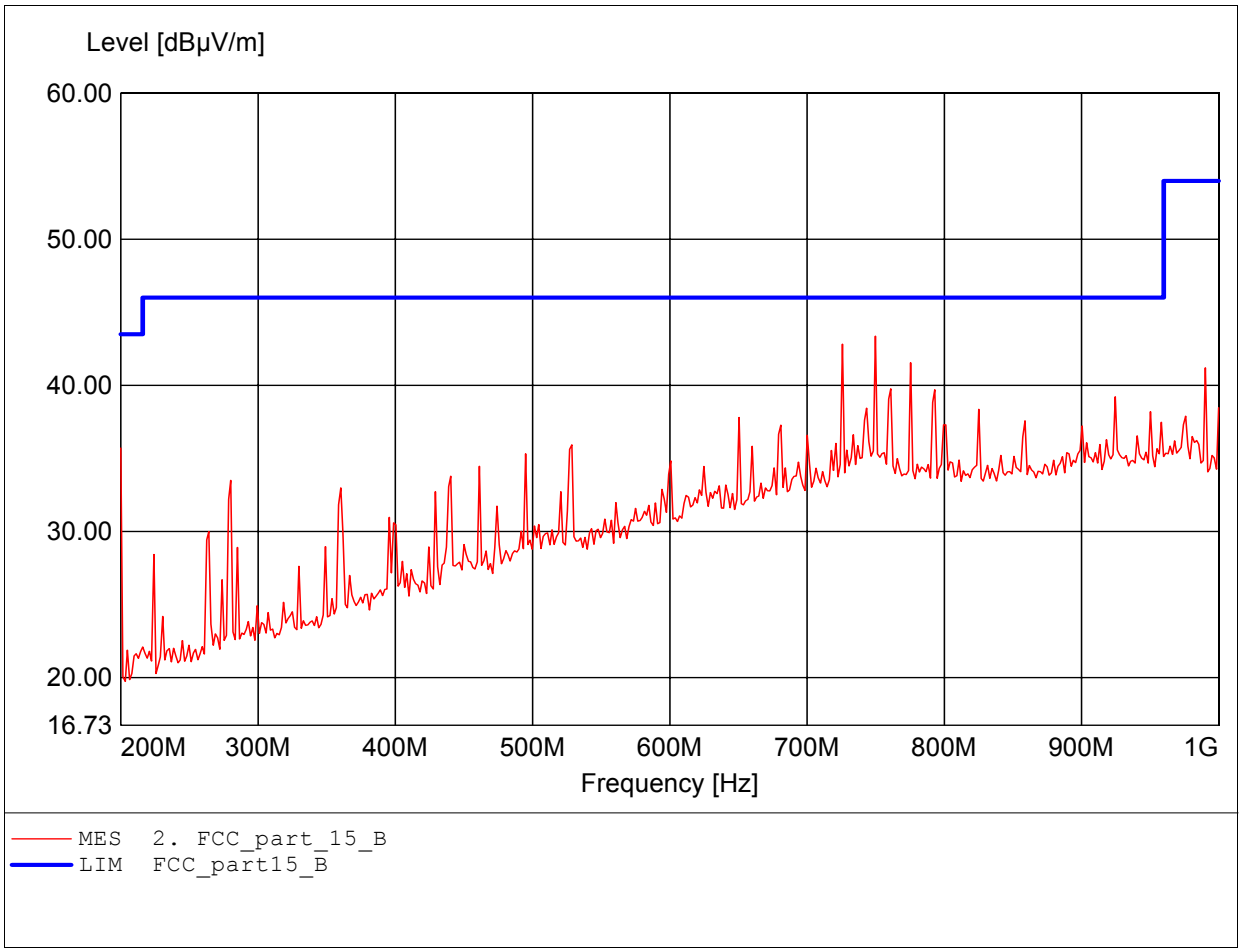
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:725.852MHz Emax:40.98dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

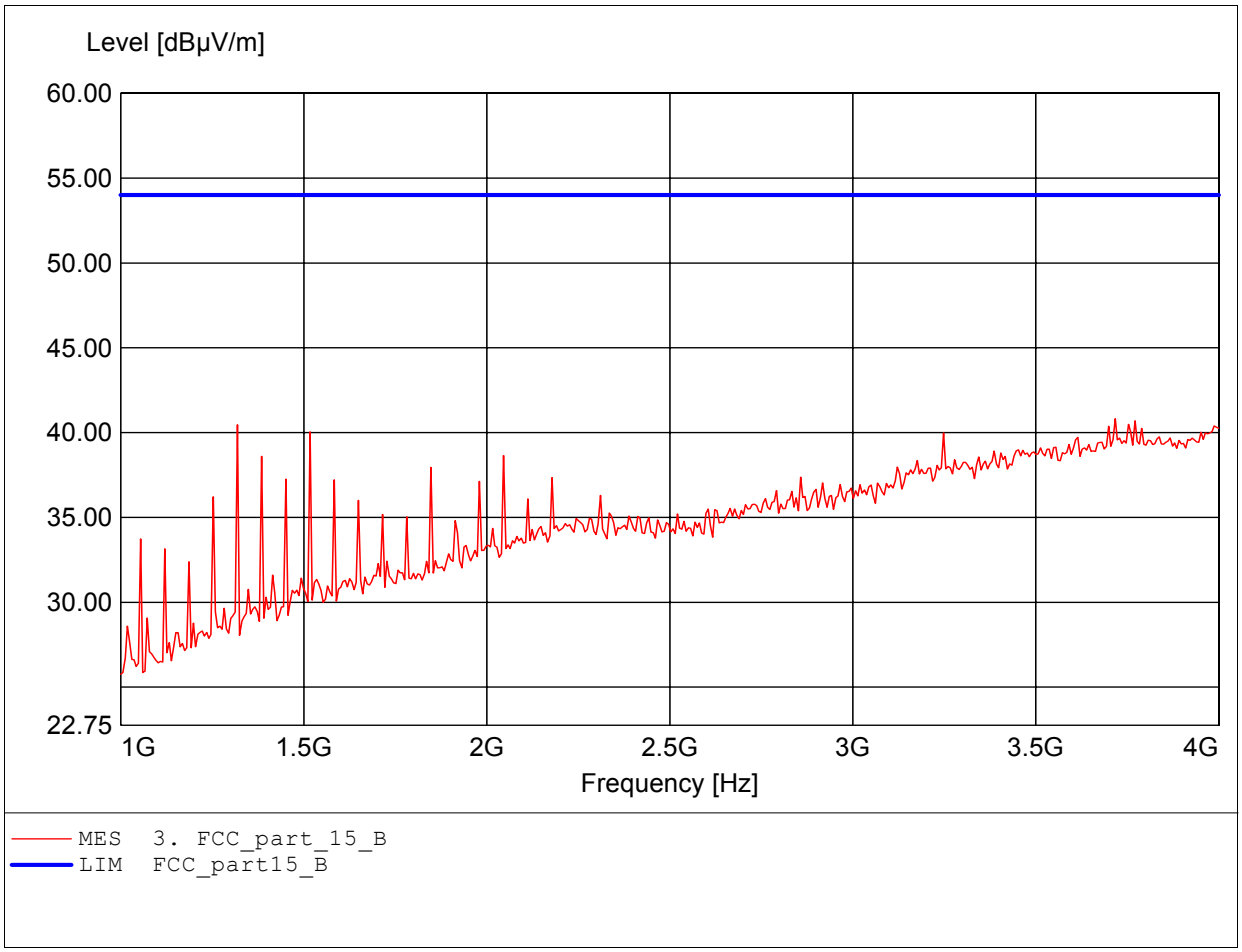
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:749.900MHz Emax:43.37dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

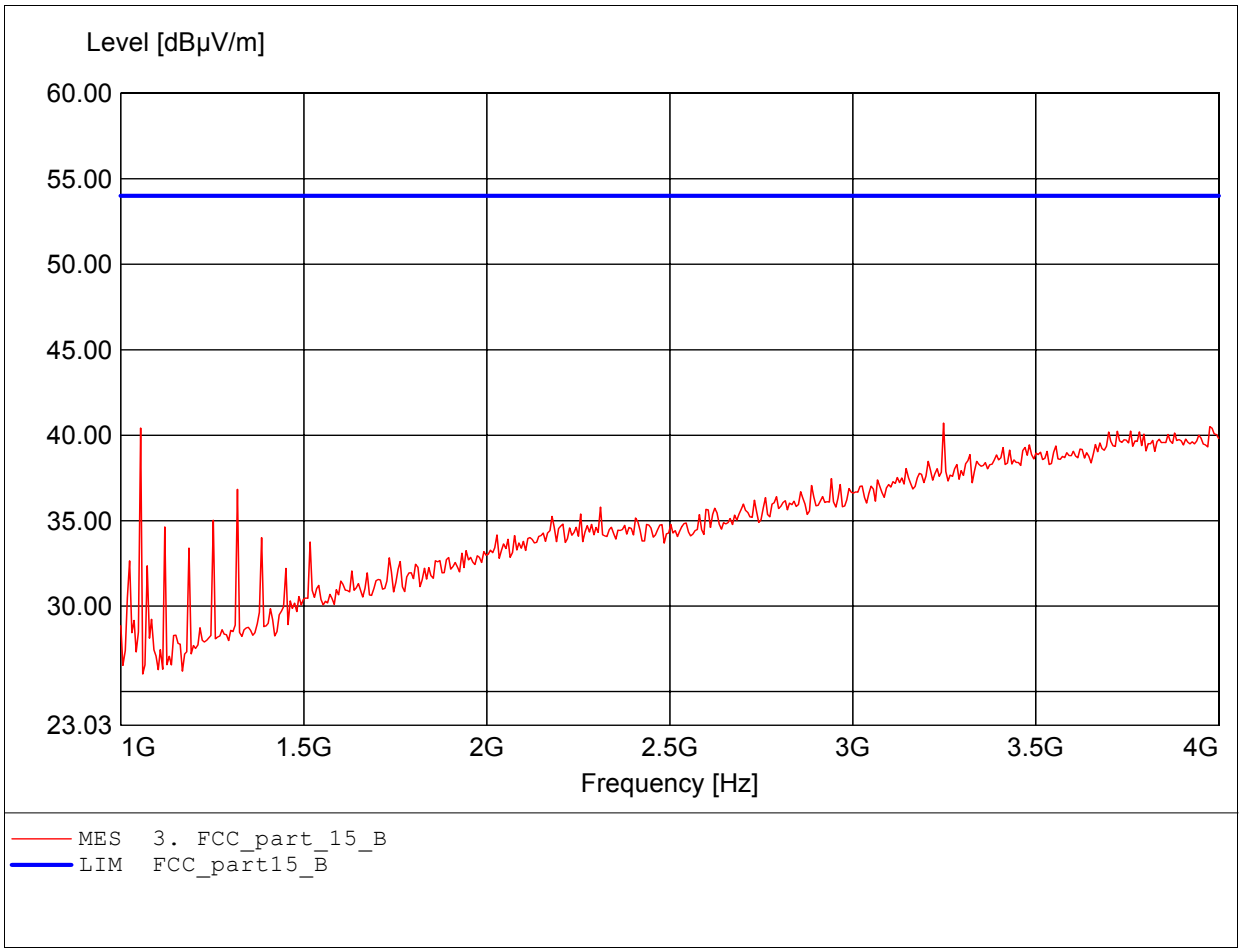
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:3.717GHz Emax:40.81dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

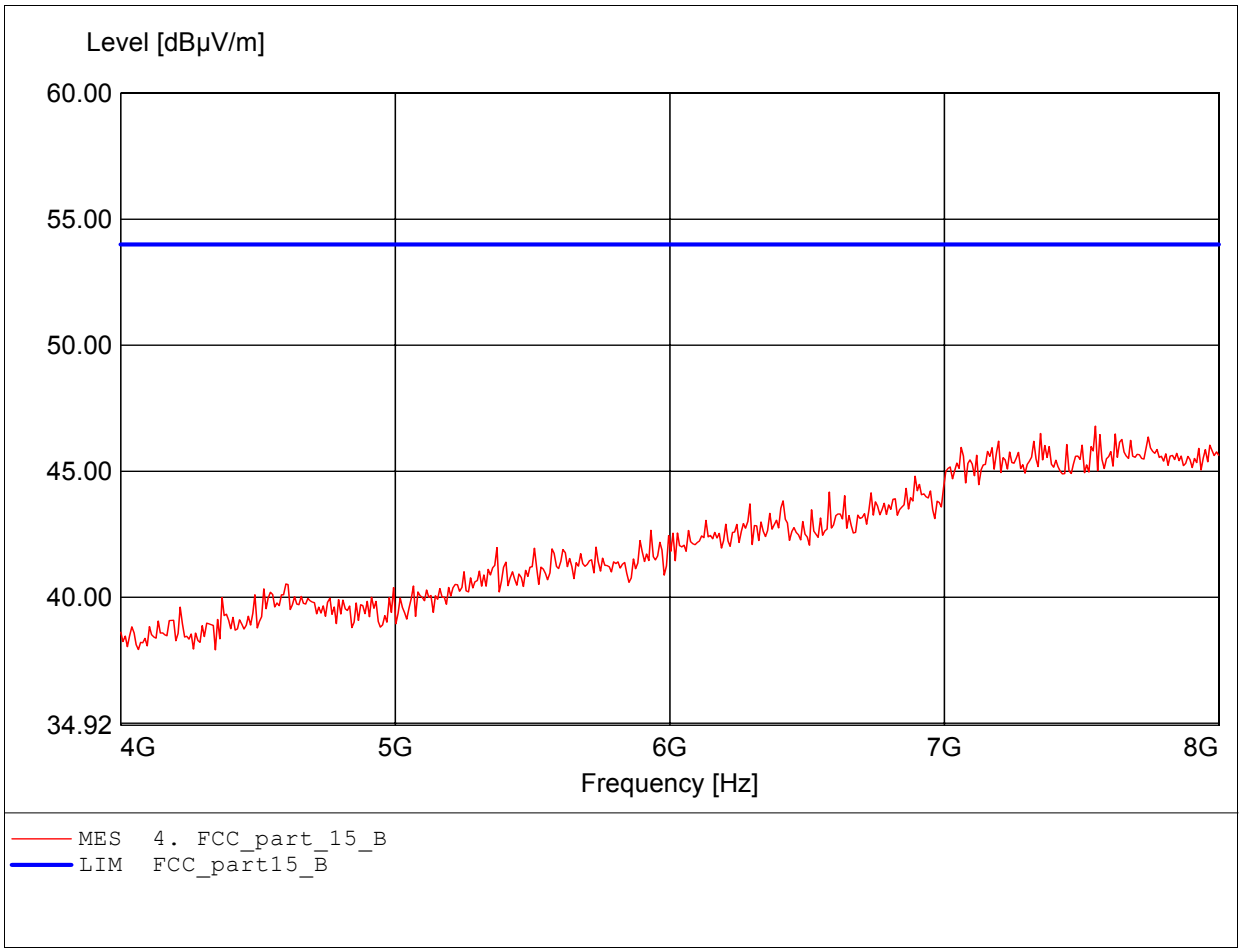
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:3.248GHz Emax:40.71dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

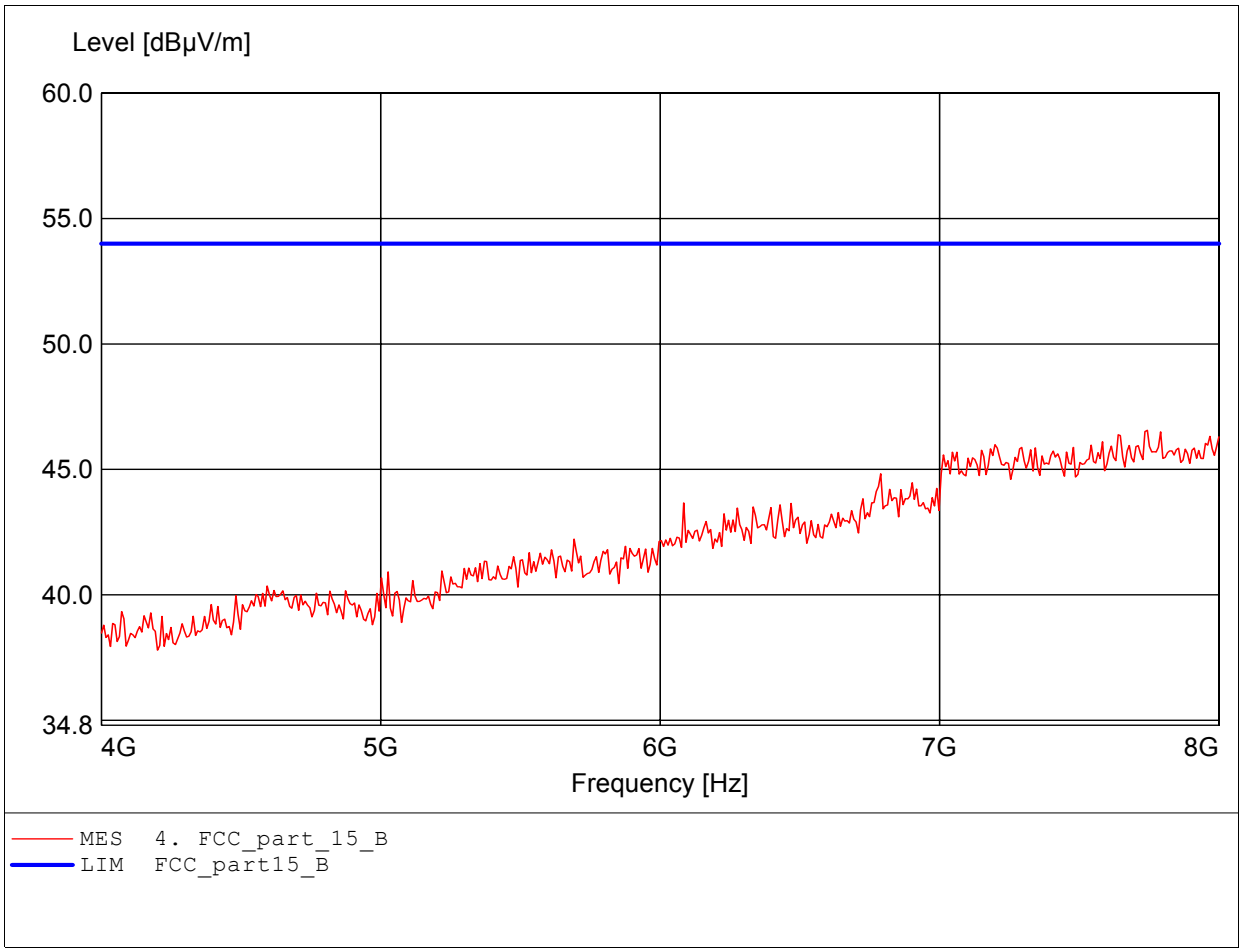
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.551GHz Emax:46.79dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

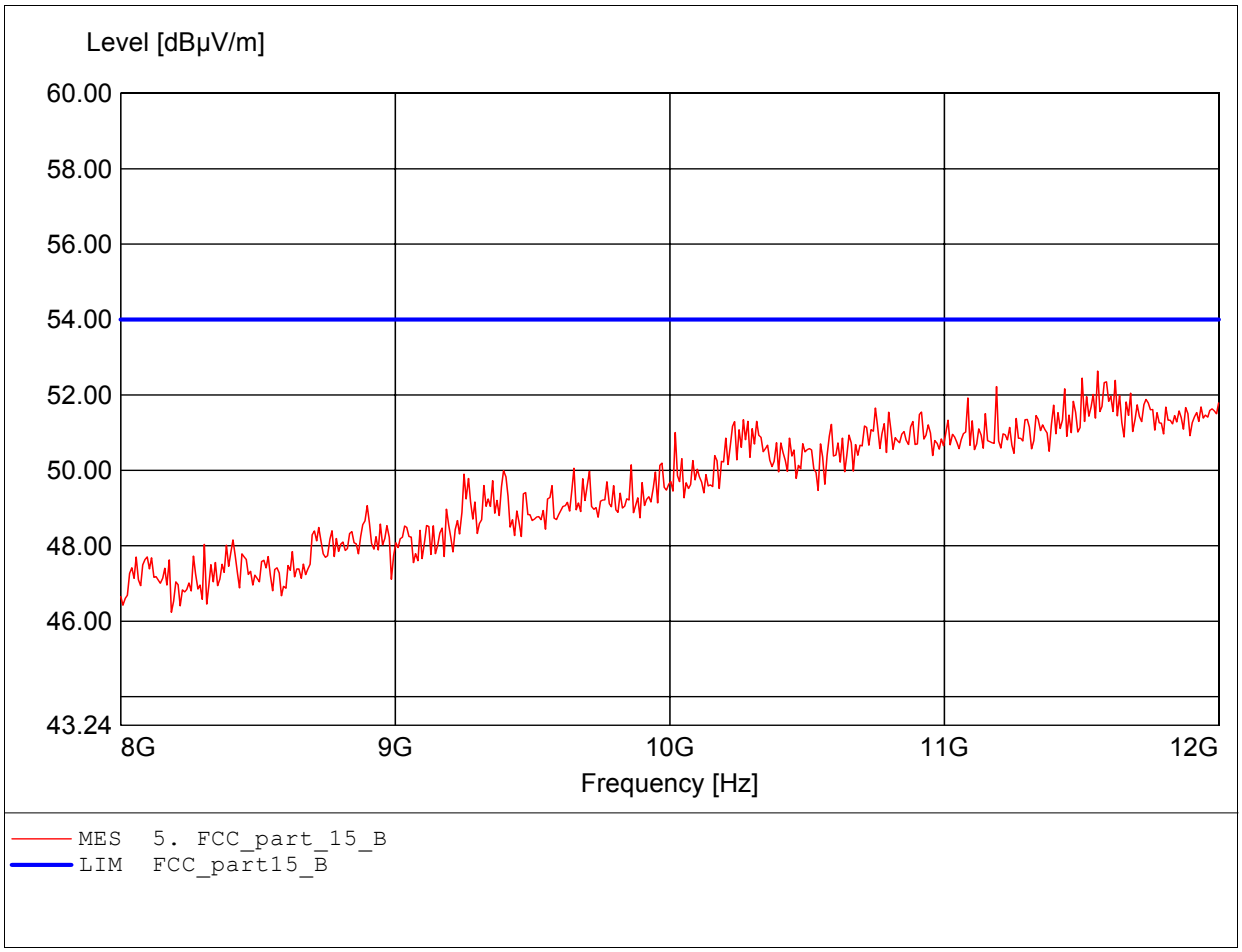
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.743GHz Emax:46.56dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

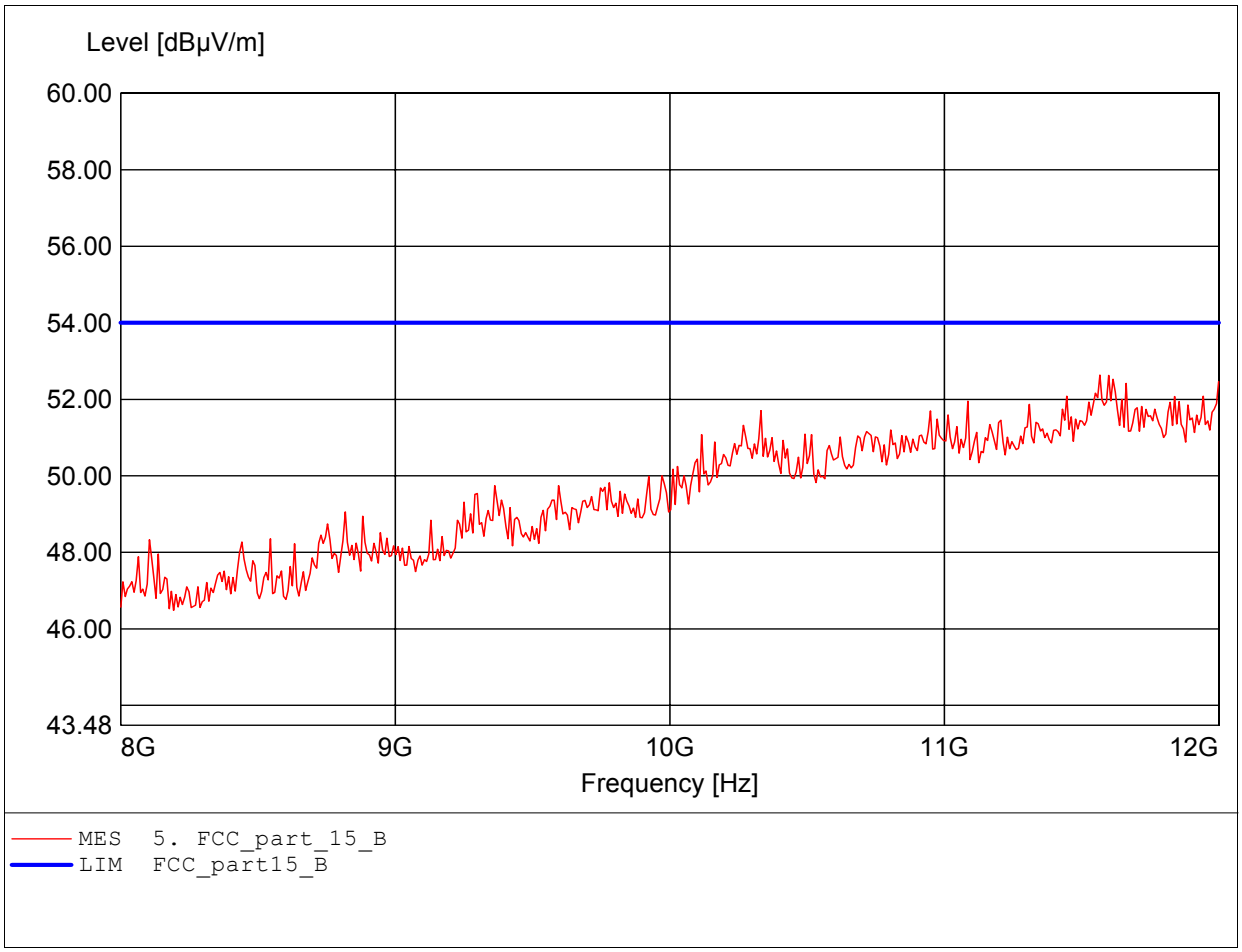
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.559GHz Emax:52.63dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

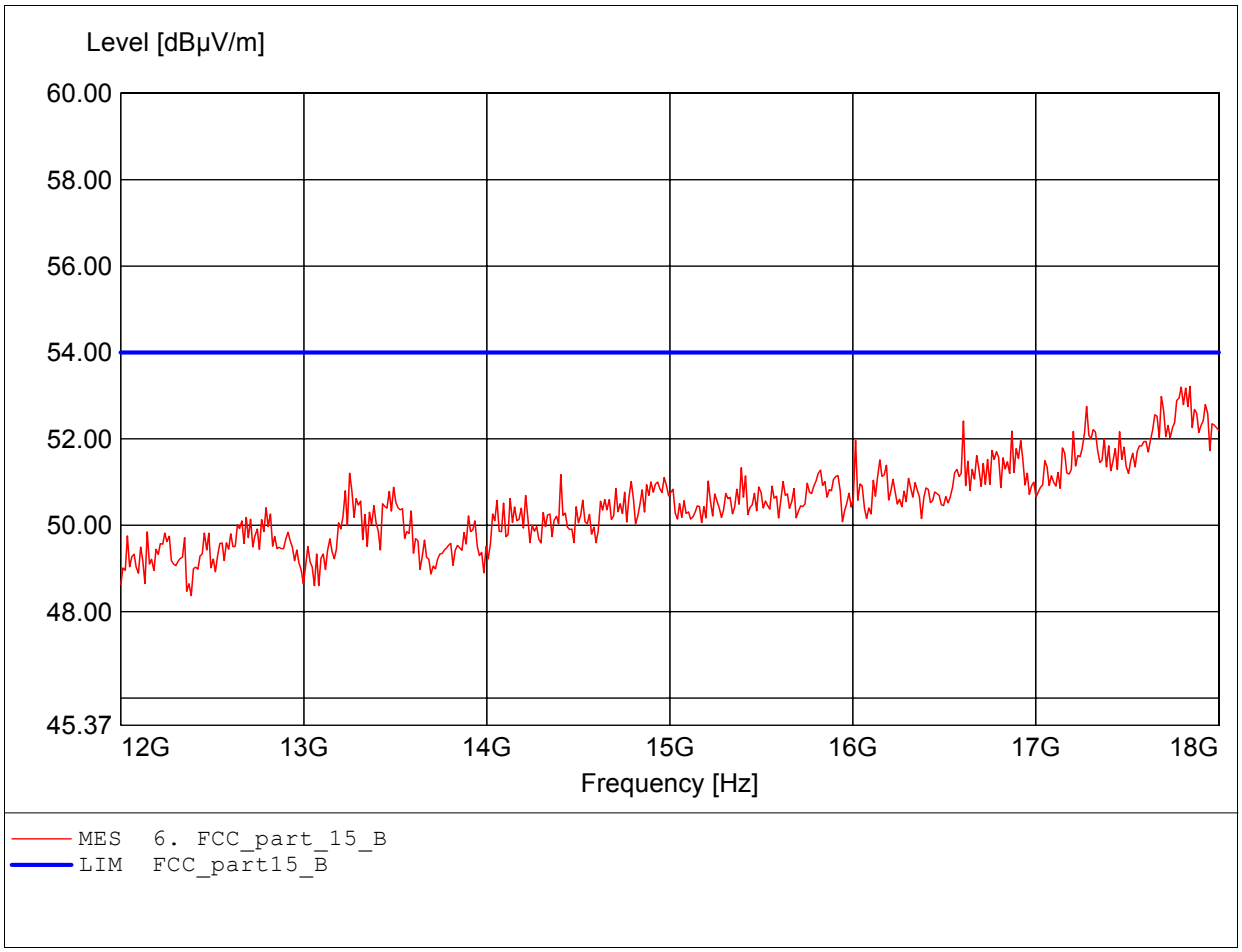
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.567GHz Emax:52.63dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

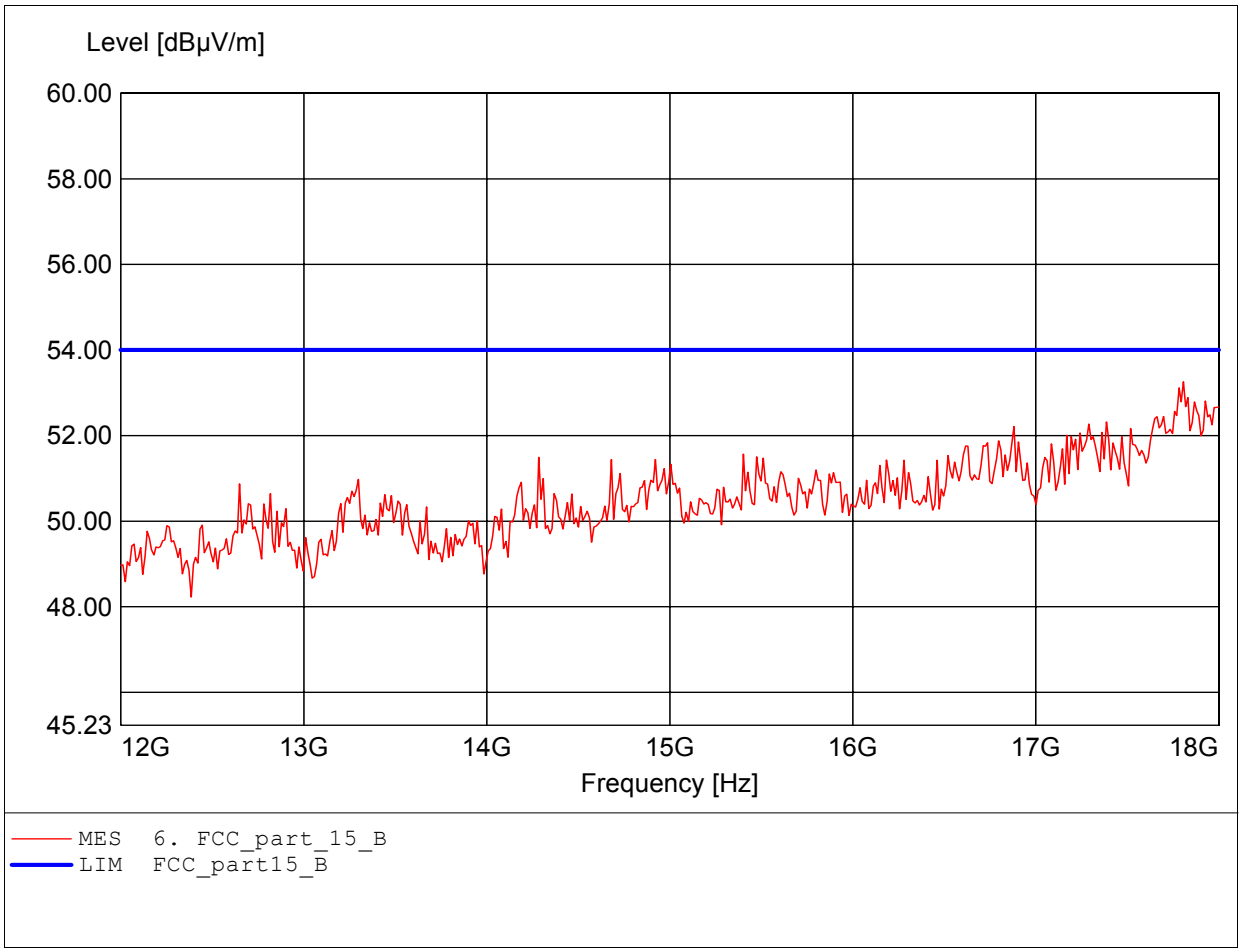
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.844GHz Emax:53.21dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

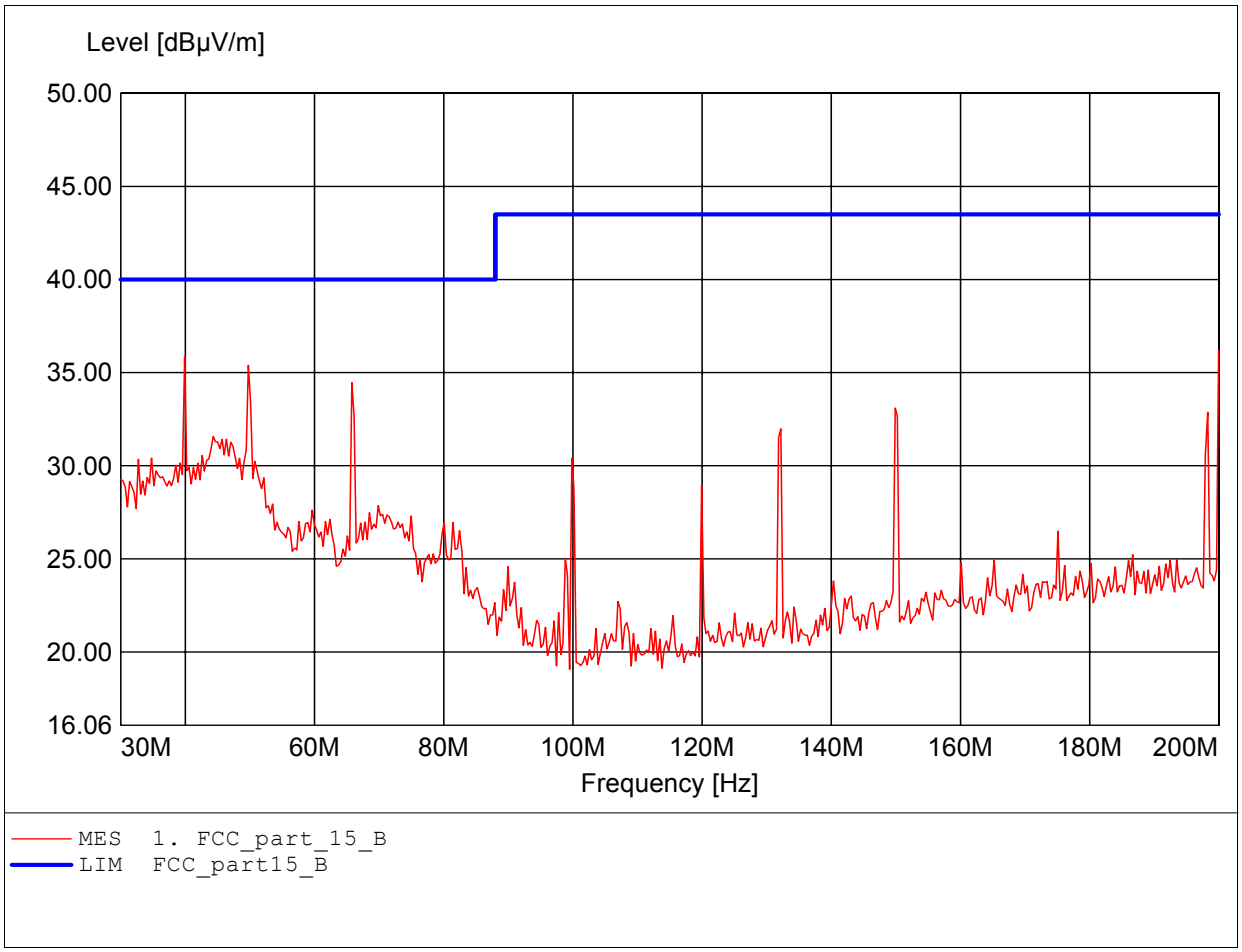
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH 6
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.808GHz Emax:53.26dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

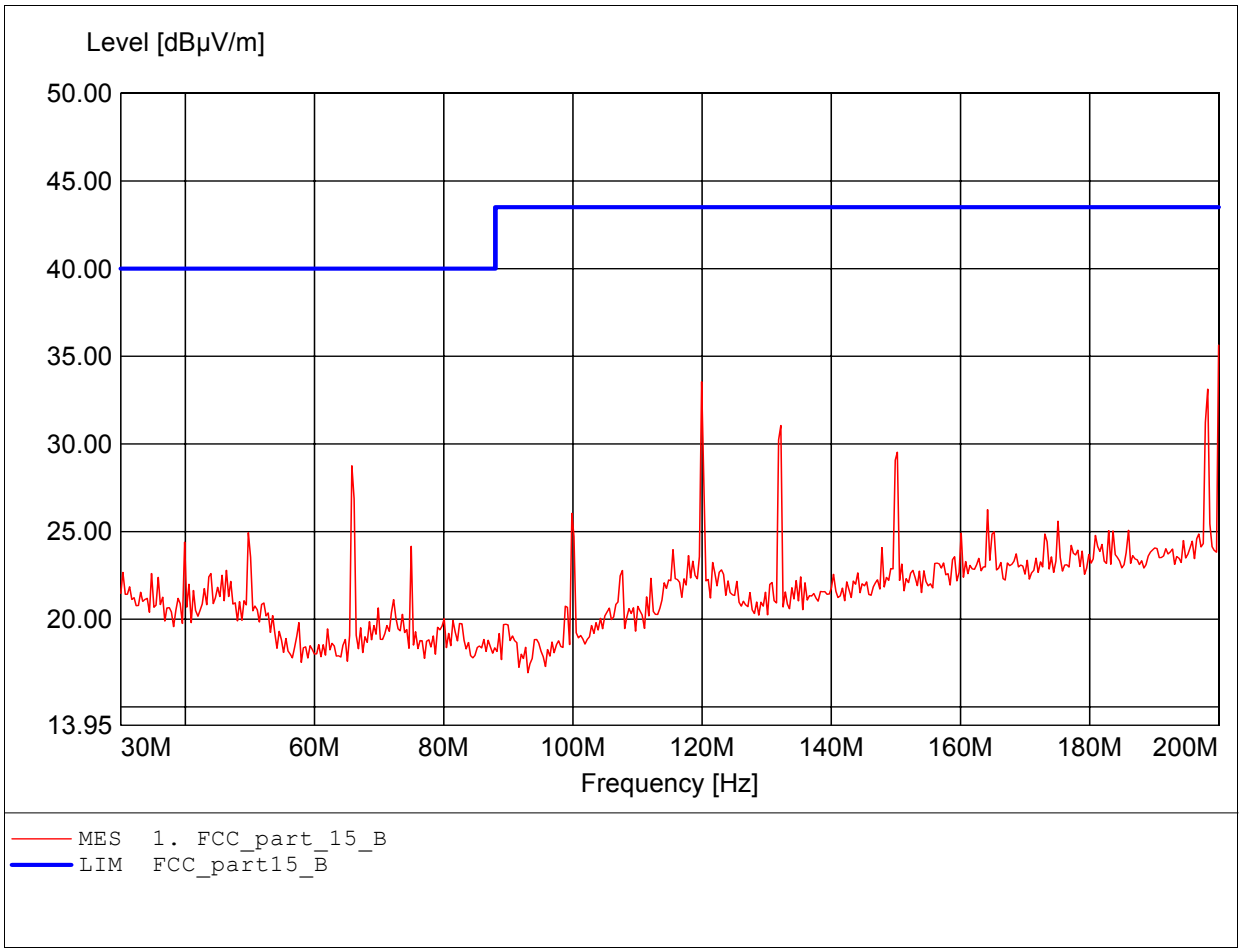
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:200.000MHz Emax:36.20dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

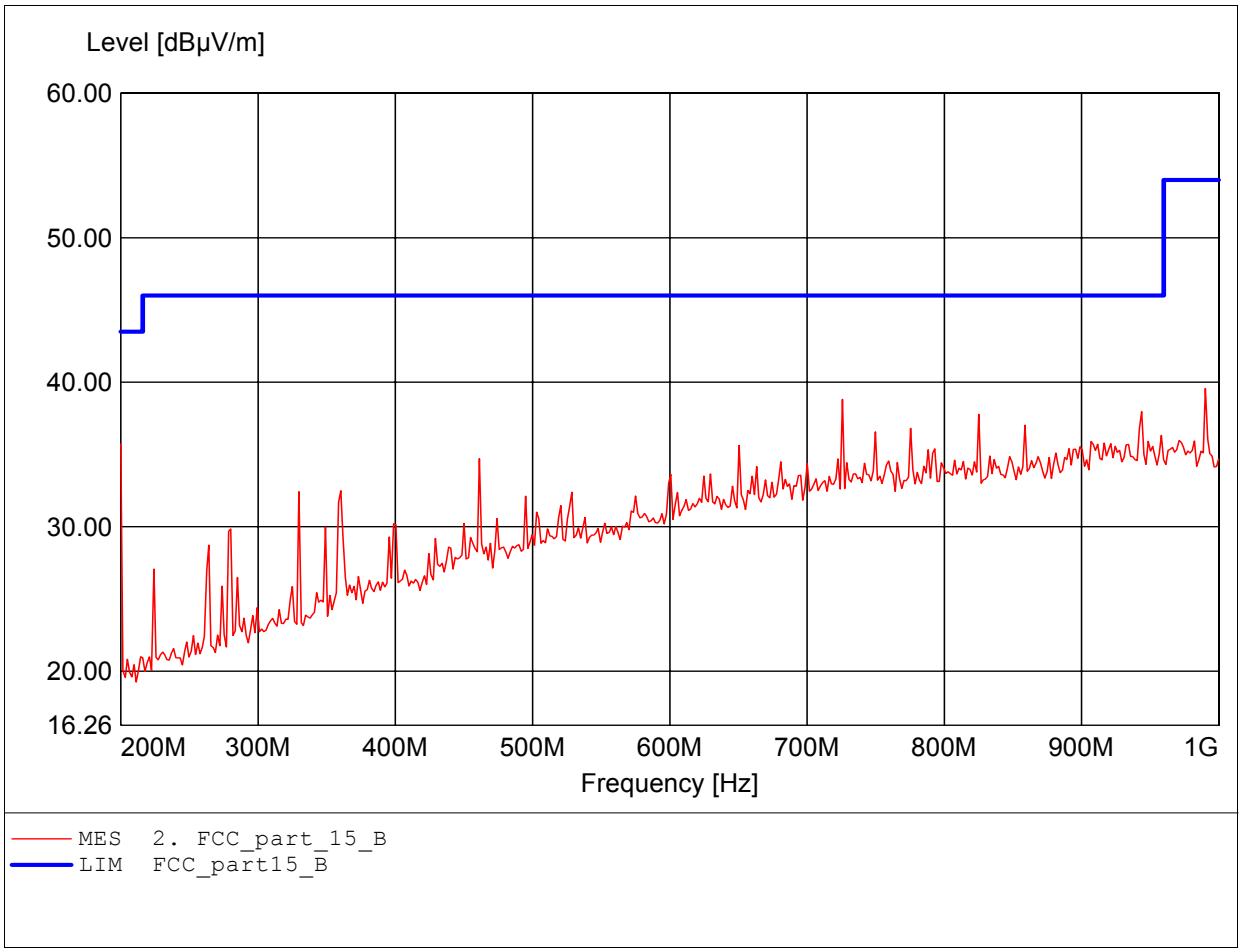
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:200.000MHz Emax:35.63dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

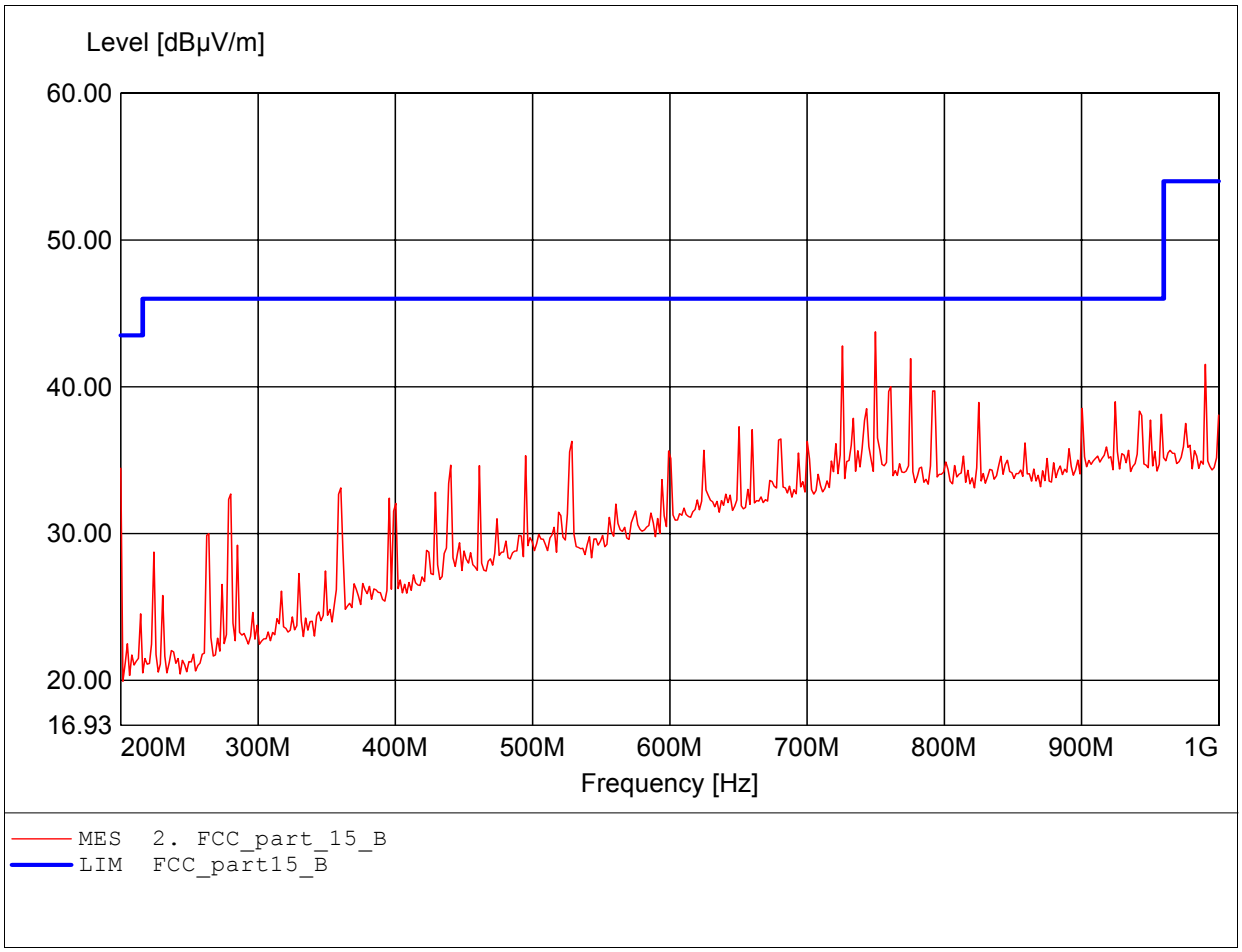
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:990.381MHz Emax:39.57dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

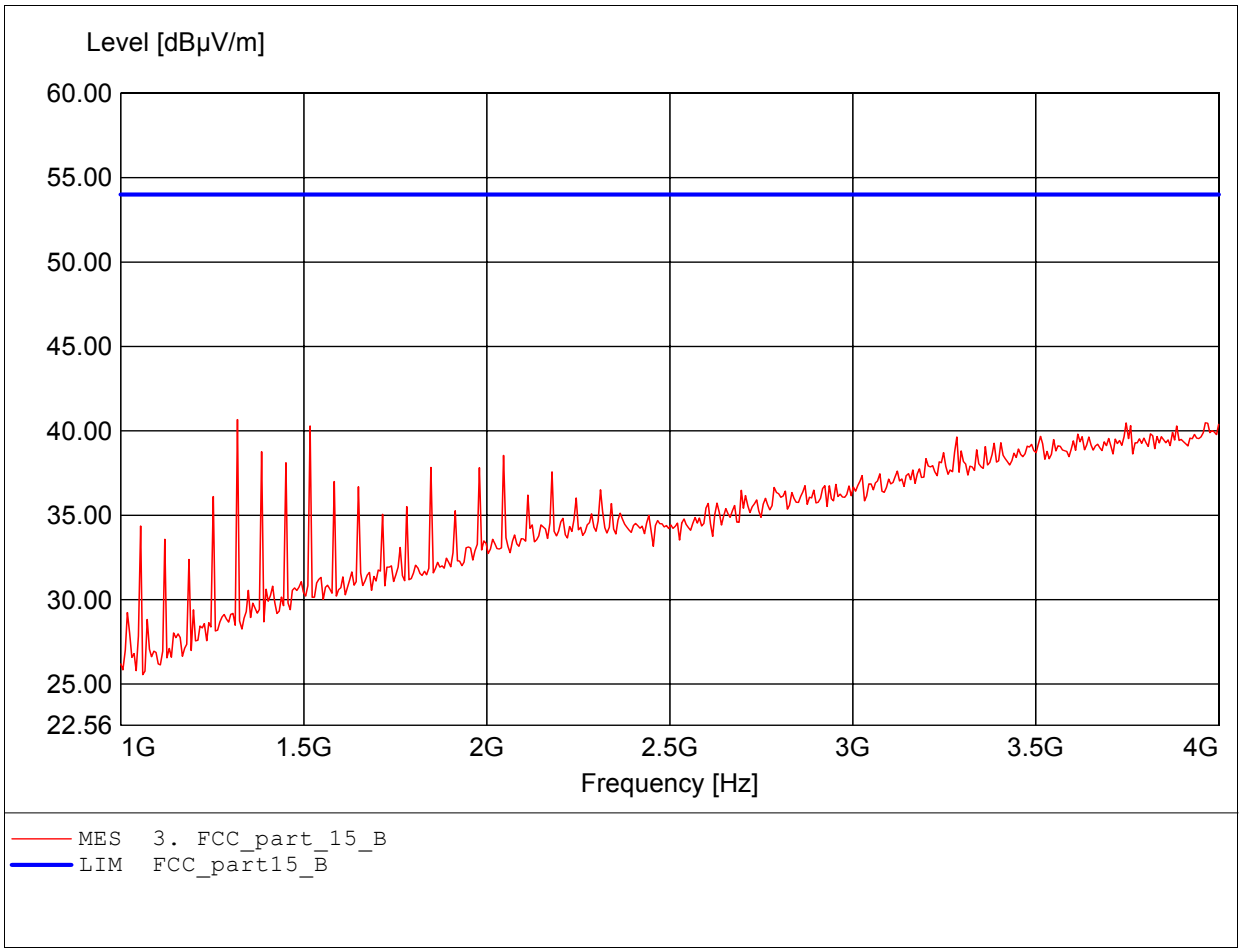
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:749.900MHz Emax:43.74dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

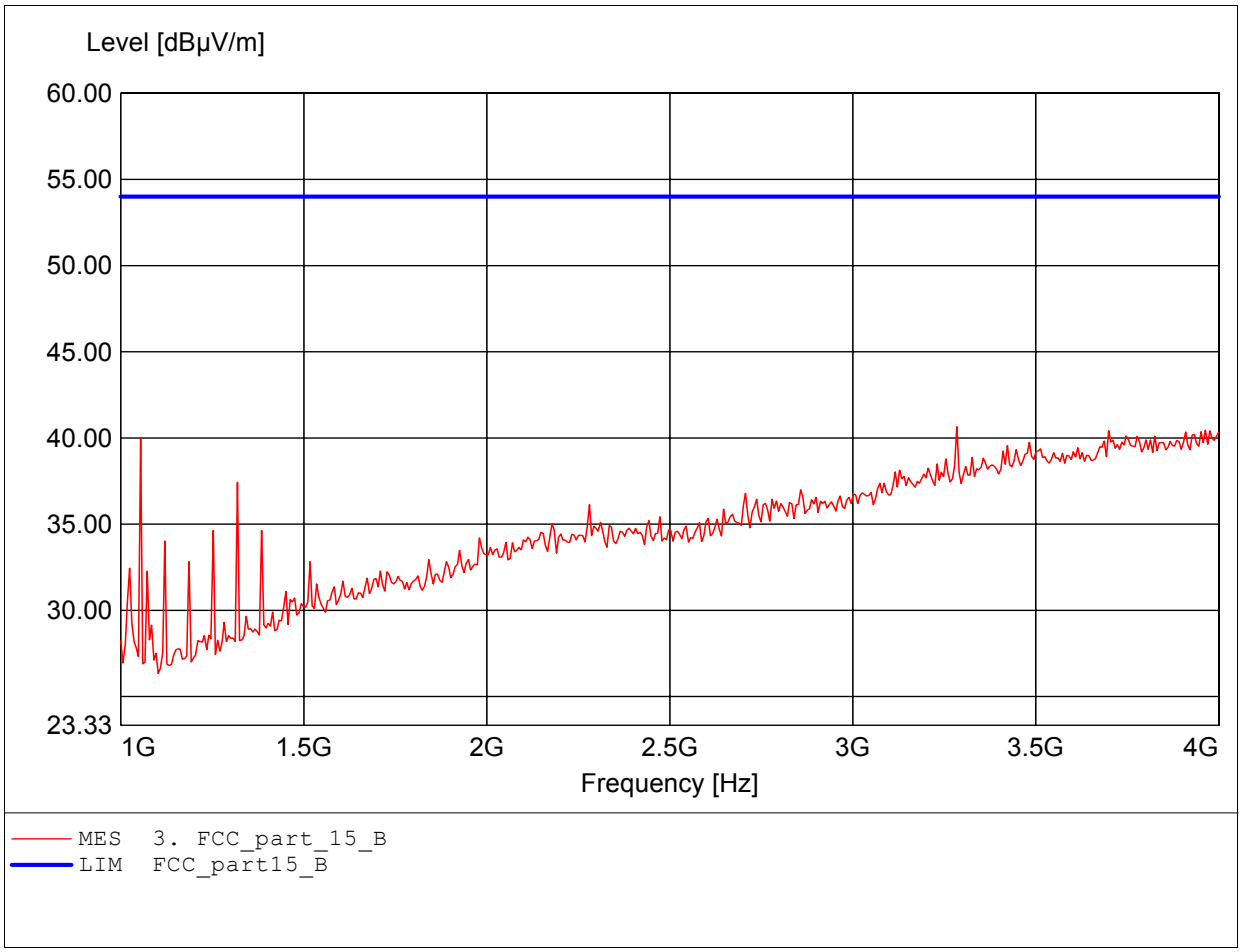
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:1.319GHz Emax:40.67dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

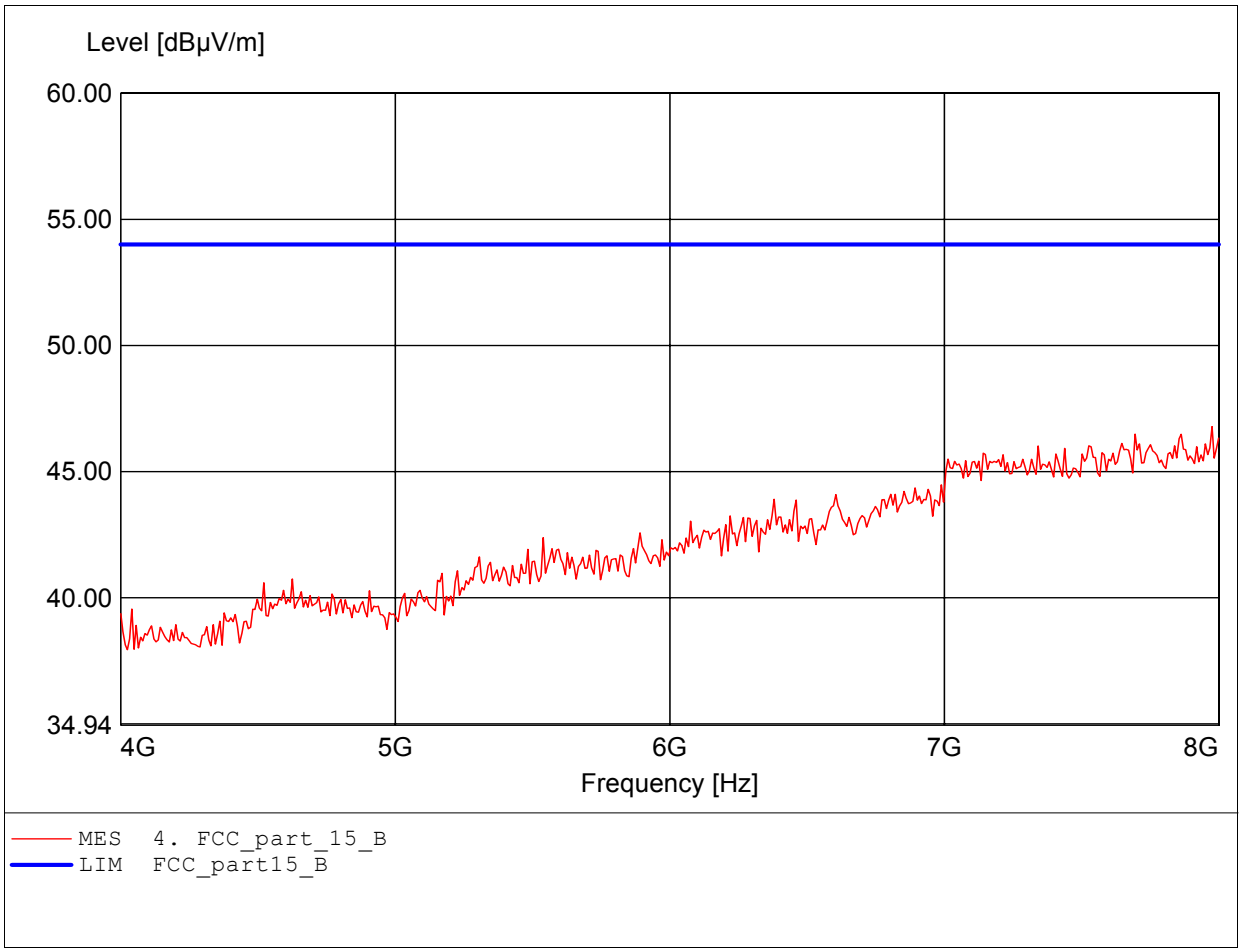
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:3.285GHz Emax:40.65dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

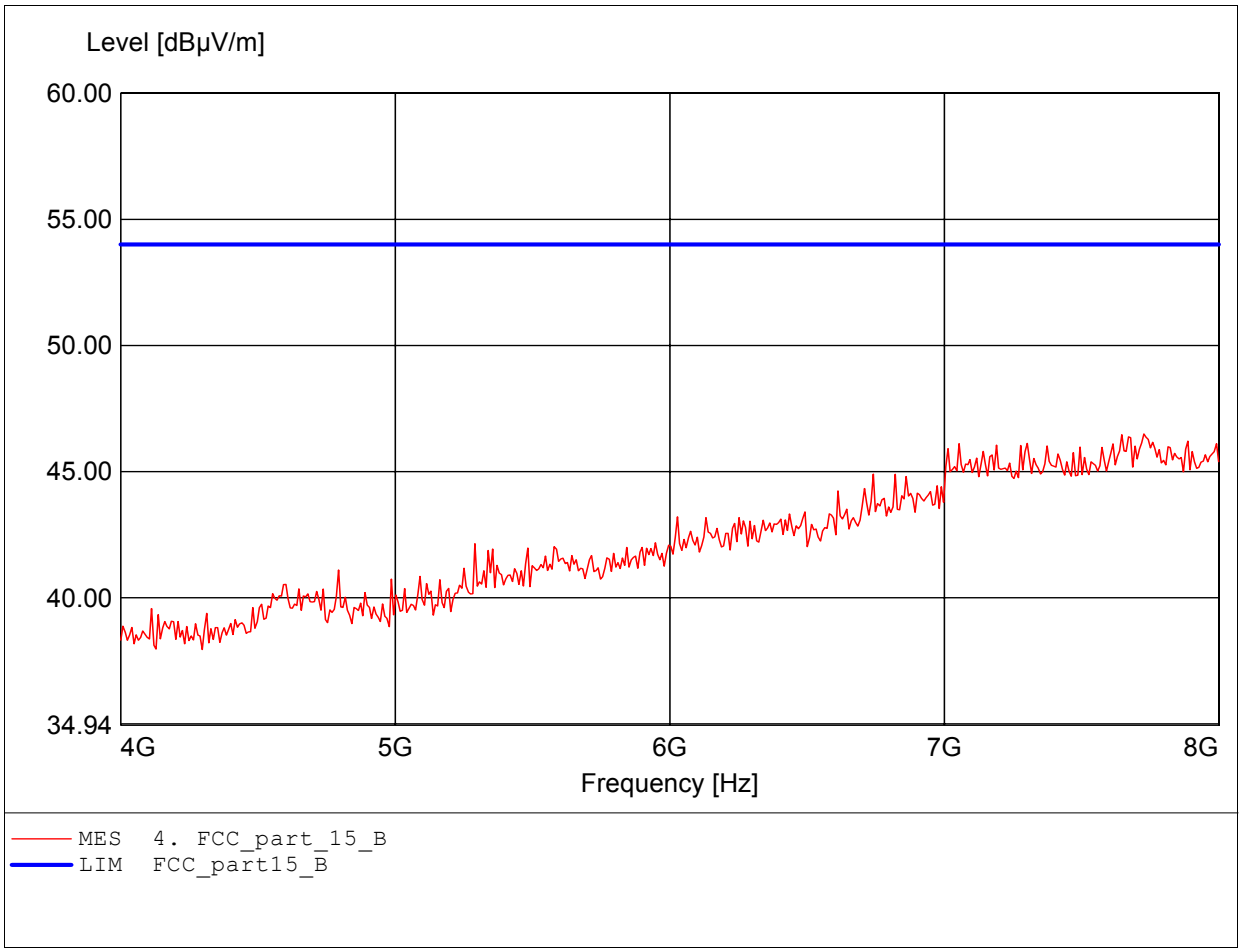
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.976GHz Emax:46.78dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

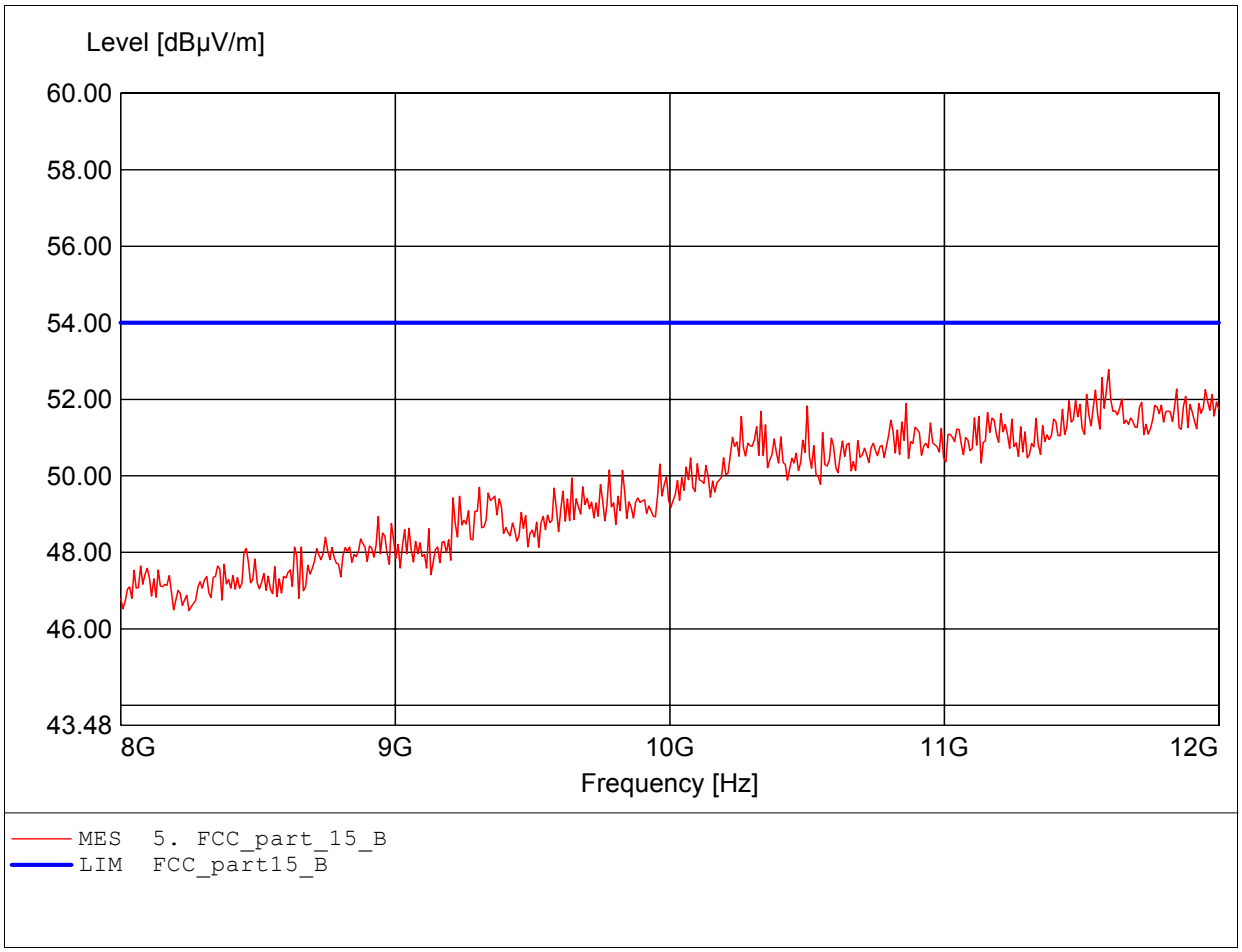
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:7.727GHz Emax:46.49dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

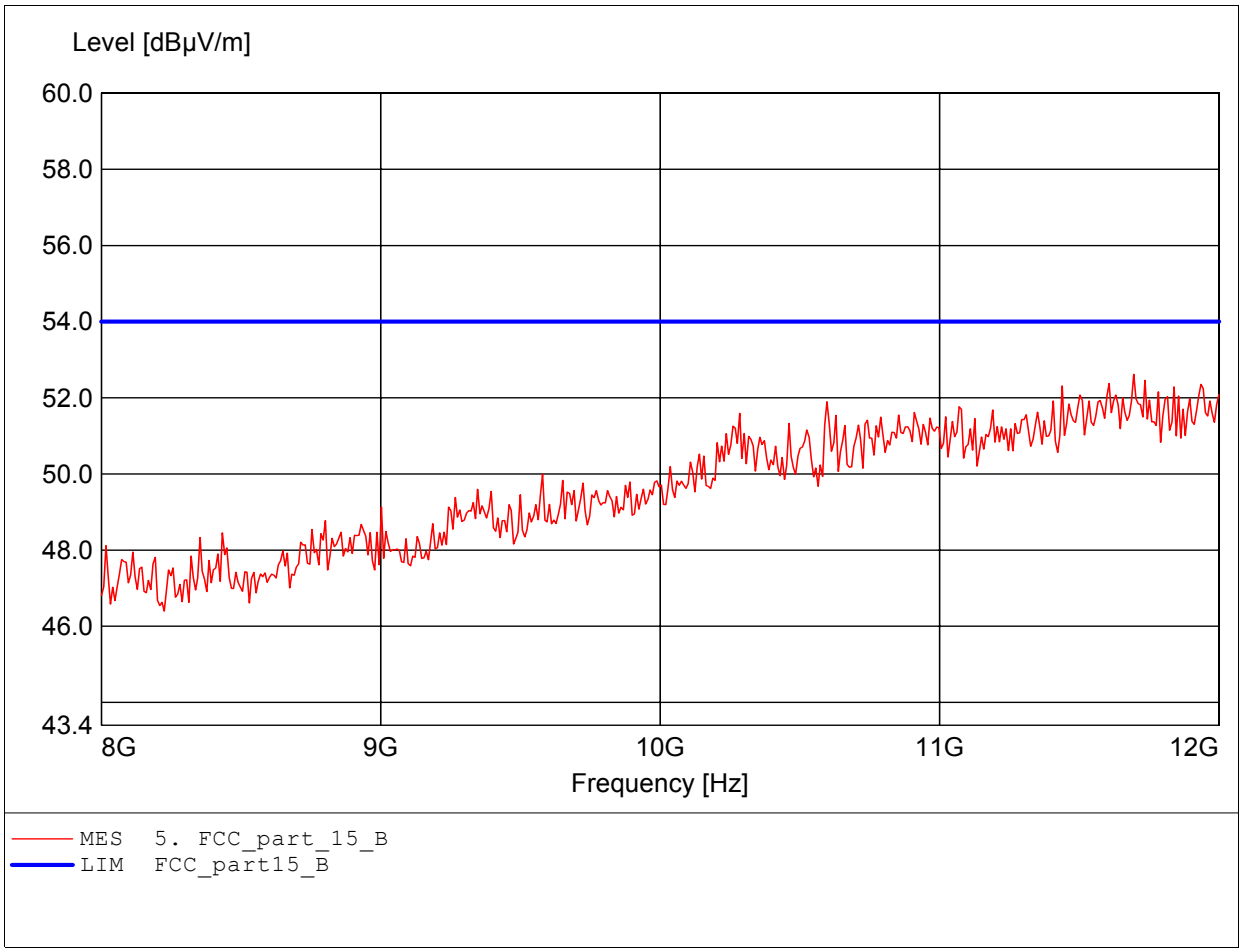
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.599GHz Emax:52.78dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

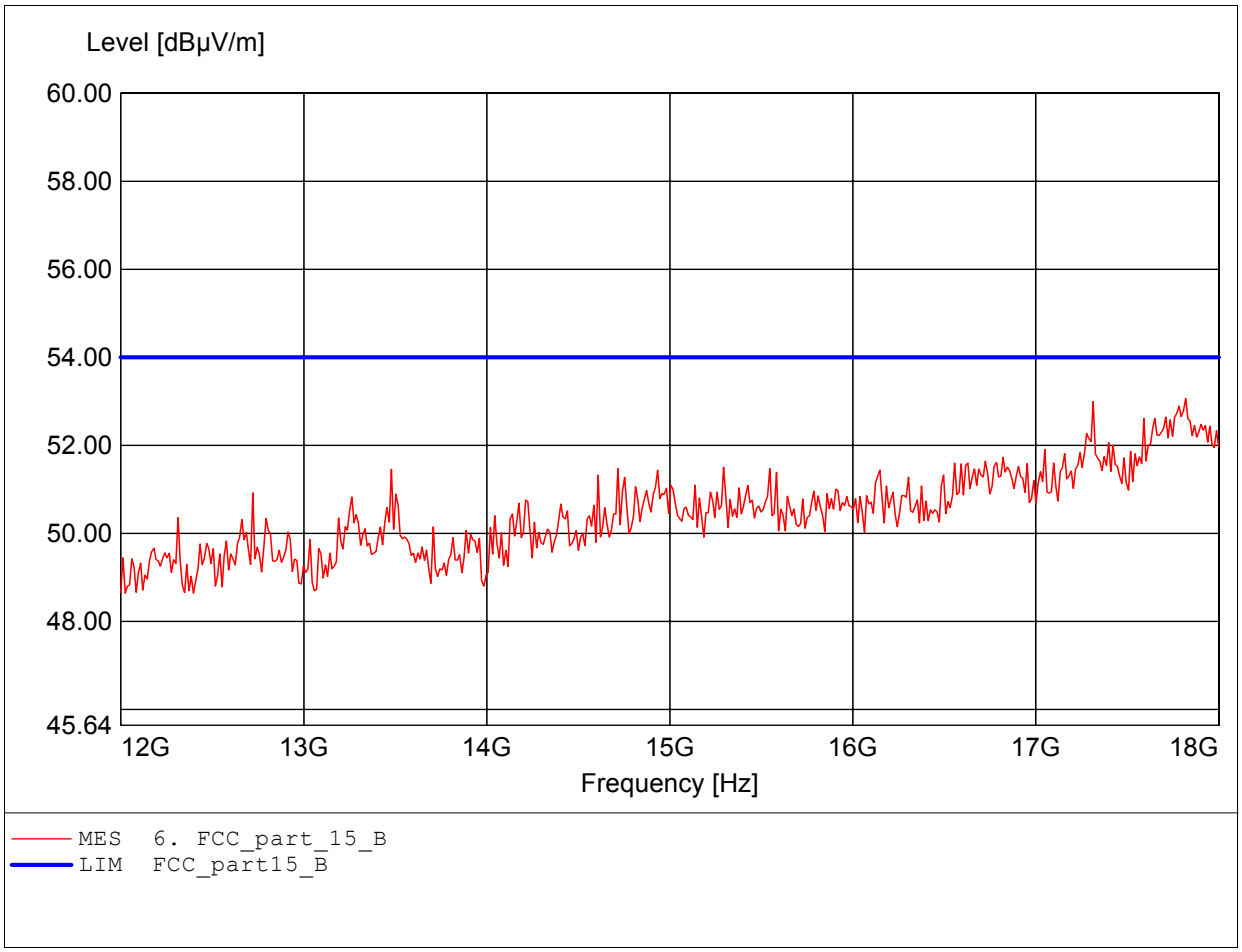
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:11.695GHz Emax:52.62dBµV/m RBW: 1 MHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

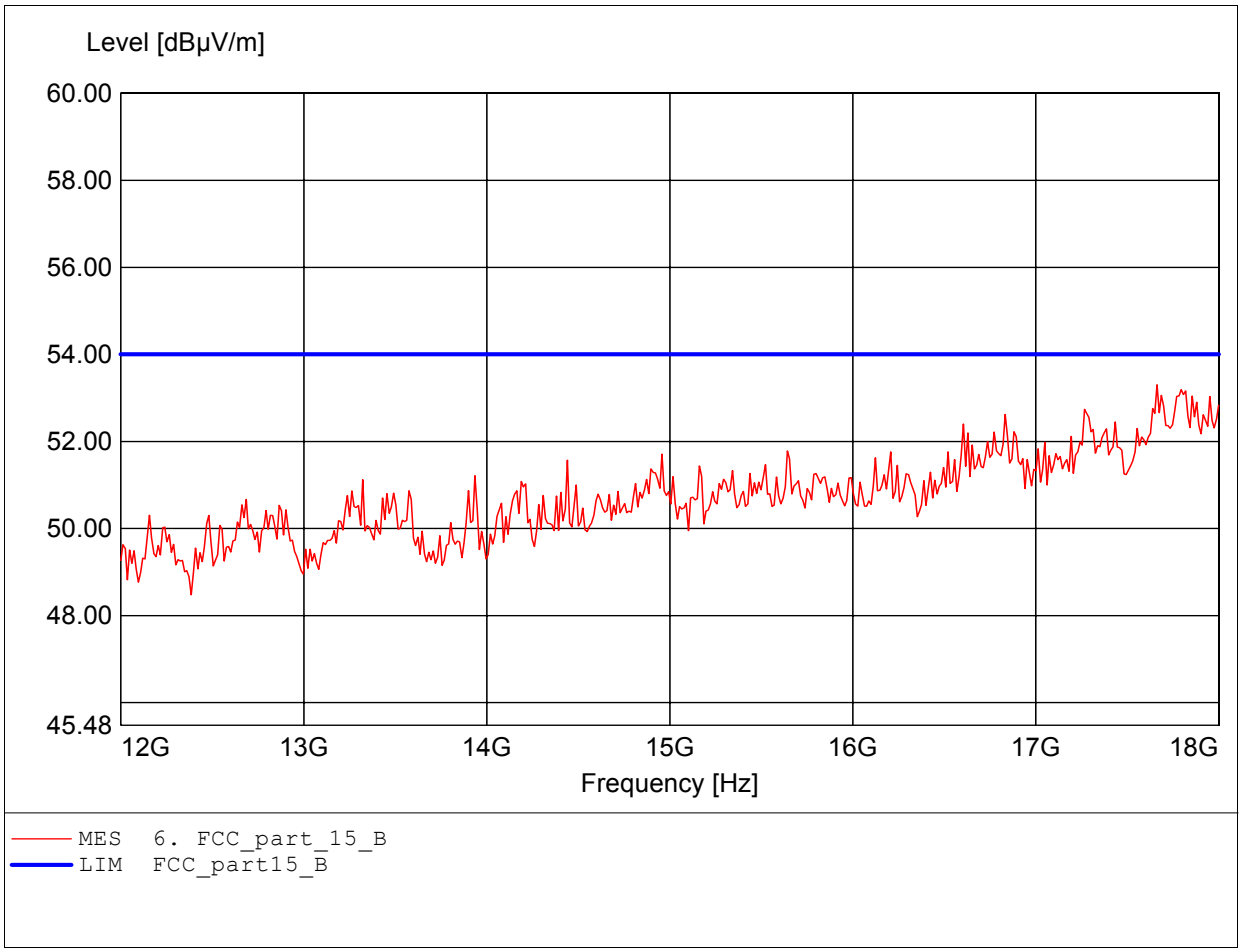
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.820GHz Emax:53.06dBµV/m RBW: 1 MHz



Field Strength under normal conditions

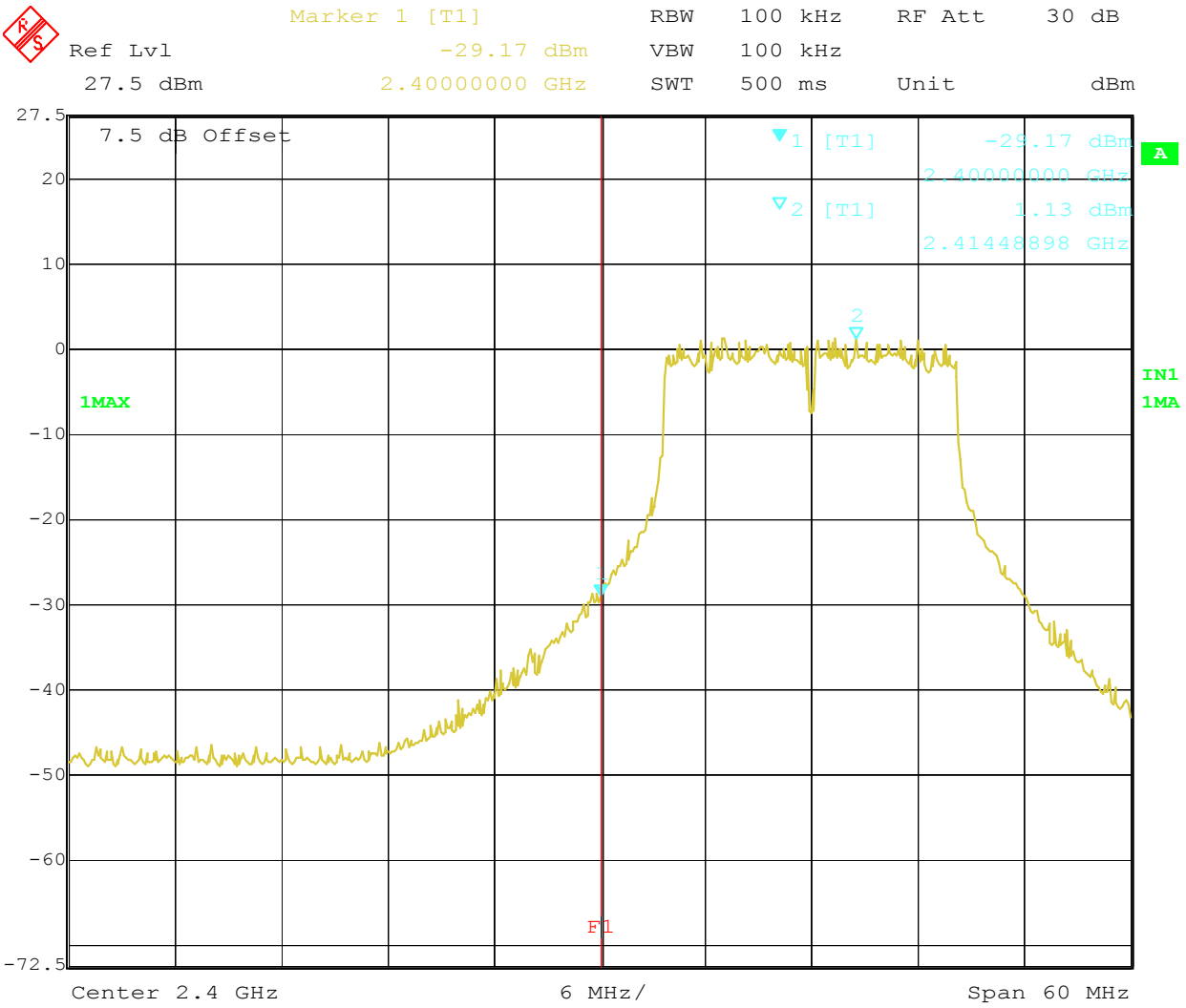
FCC RULES PART 15, SUBPART B

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver 802.11G CH11
Approval Holder:	YUAN High-Tech Development Co.,Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (ac/dc adaptor)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL25, ampl.
	Freq:17.663GHz Emax:53.30dBµV/m RBW: 1 MHz

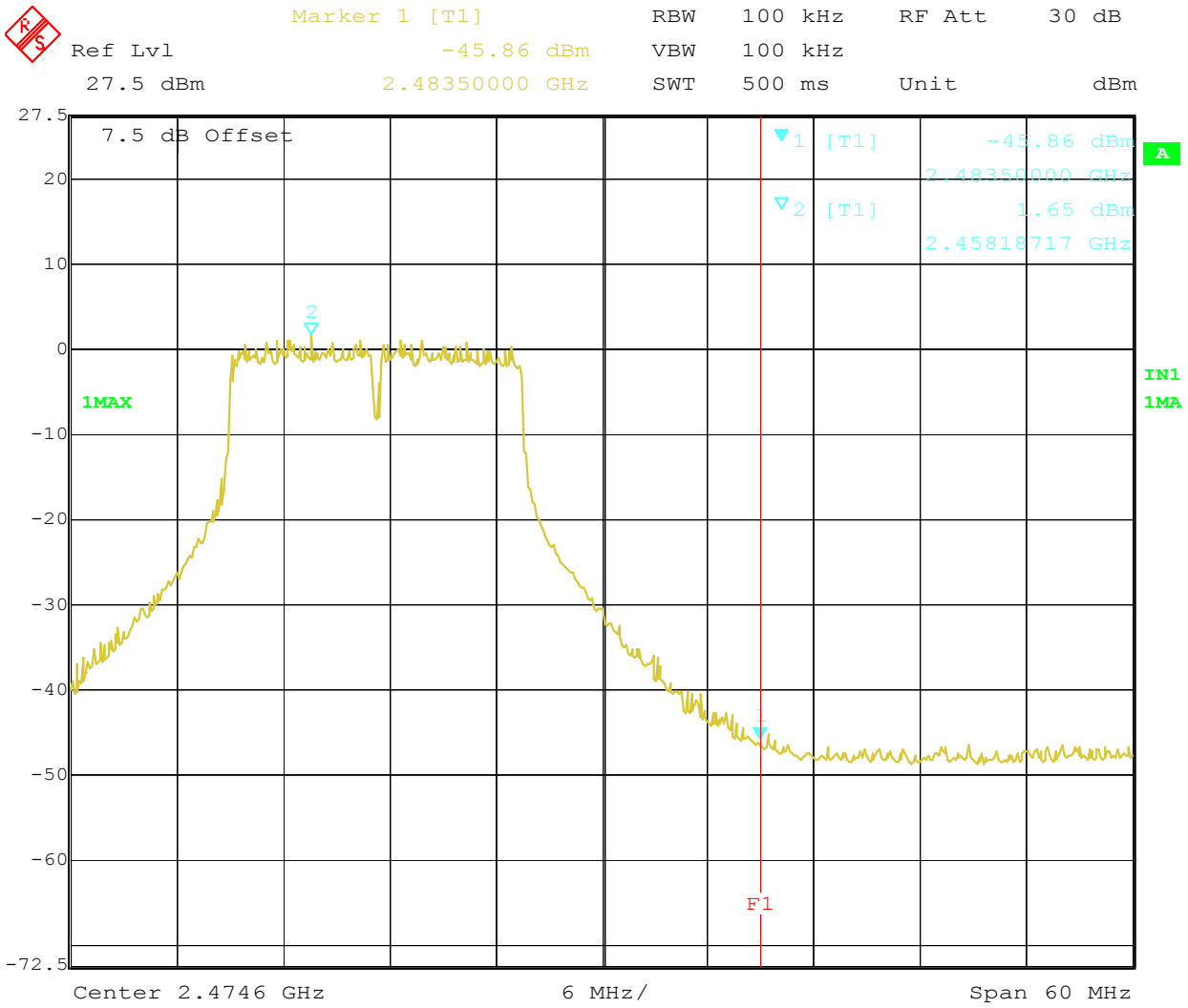


Appendix C

Band Edge Measurement



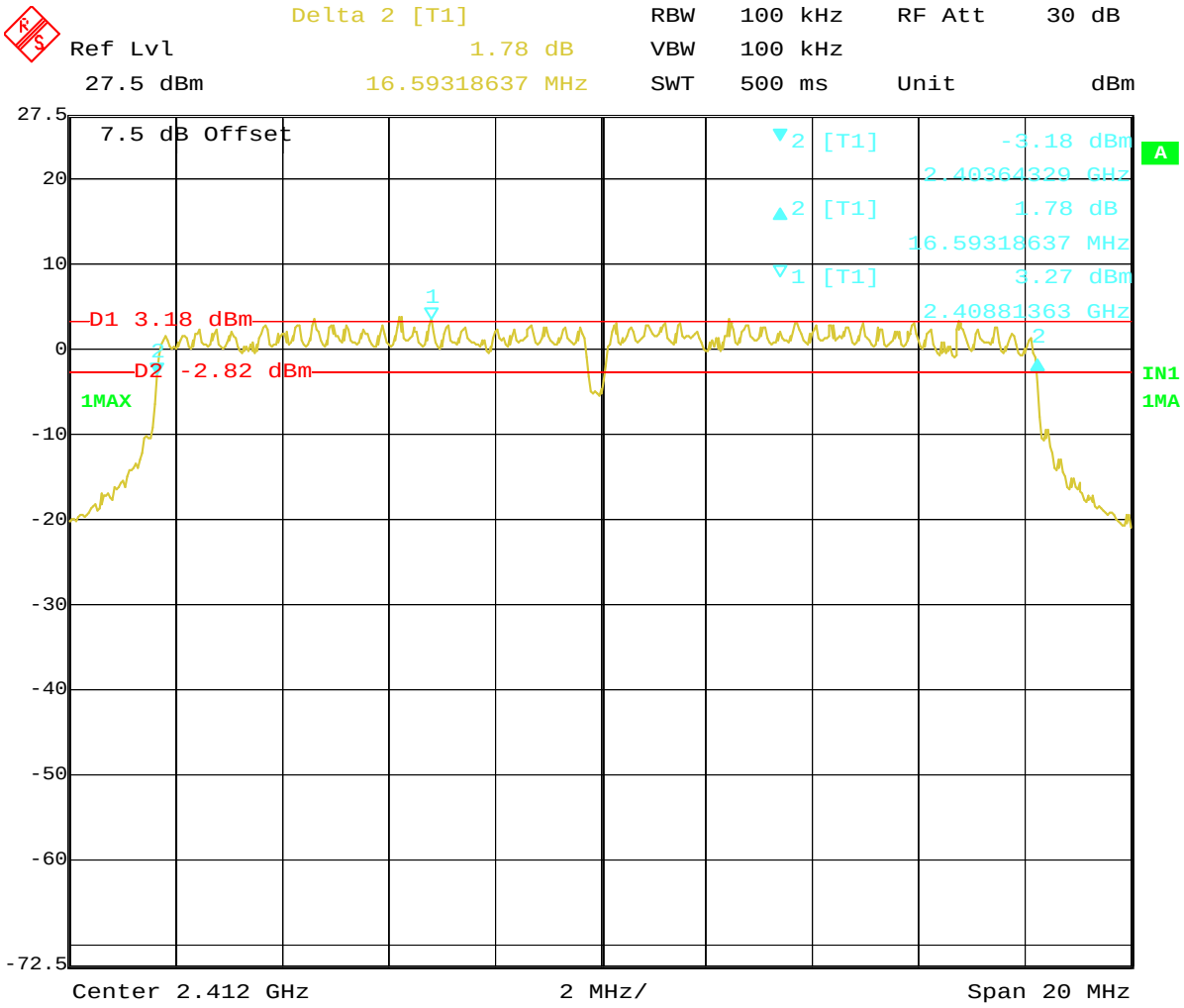
Title: 11G CH1 BANDEDGE
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:18:30



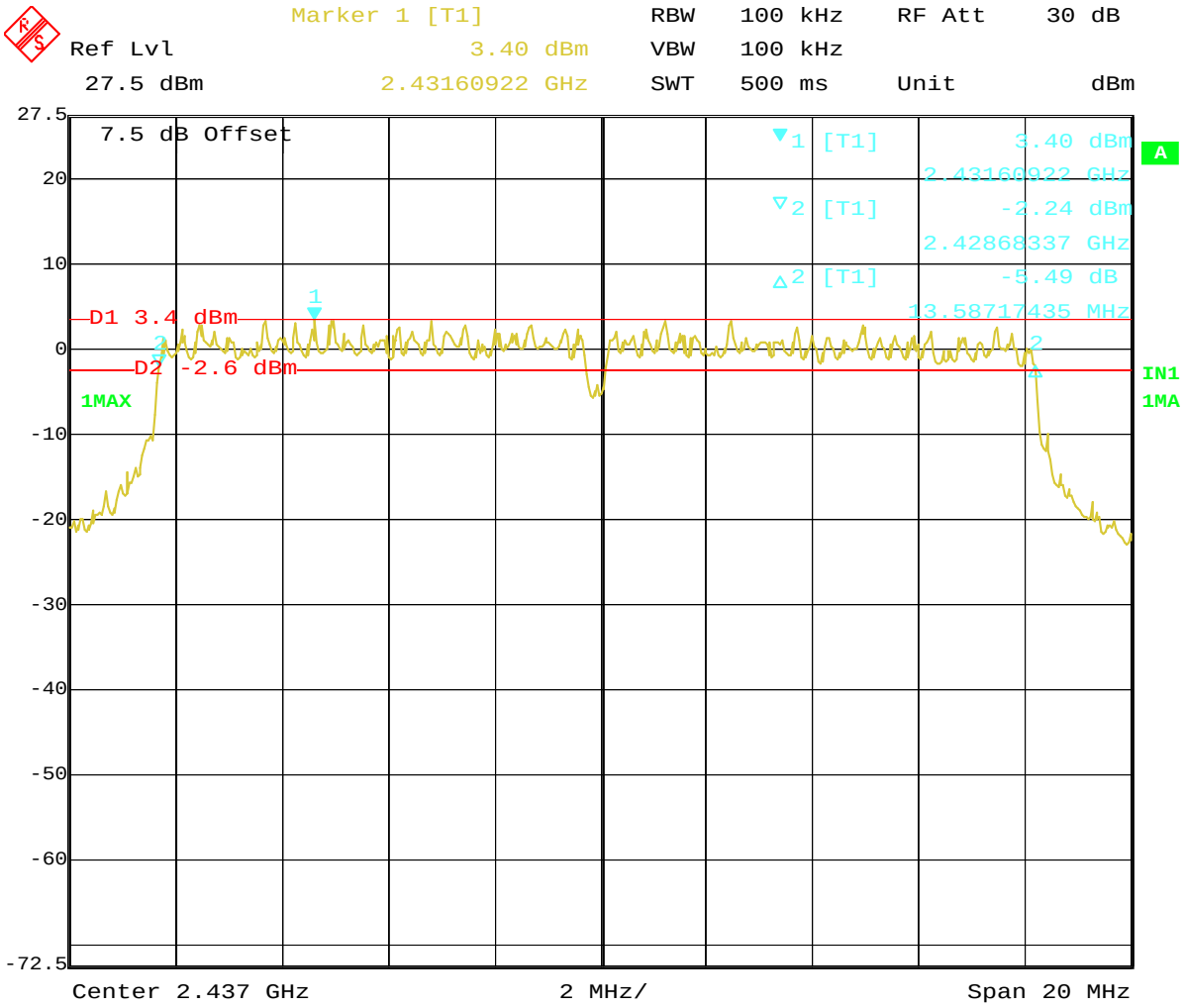
Title: 11G CH11 POWER DENSITY
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:01:58

Appendix D

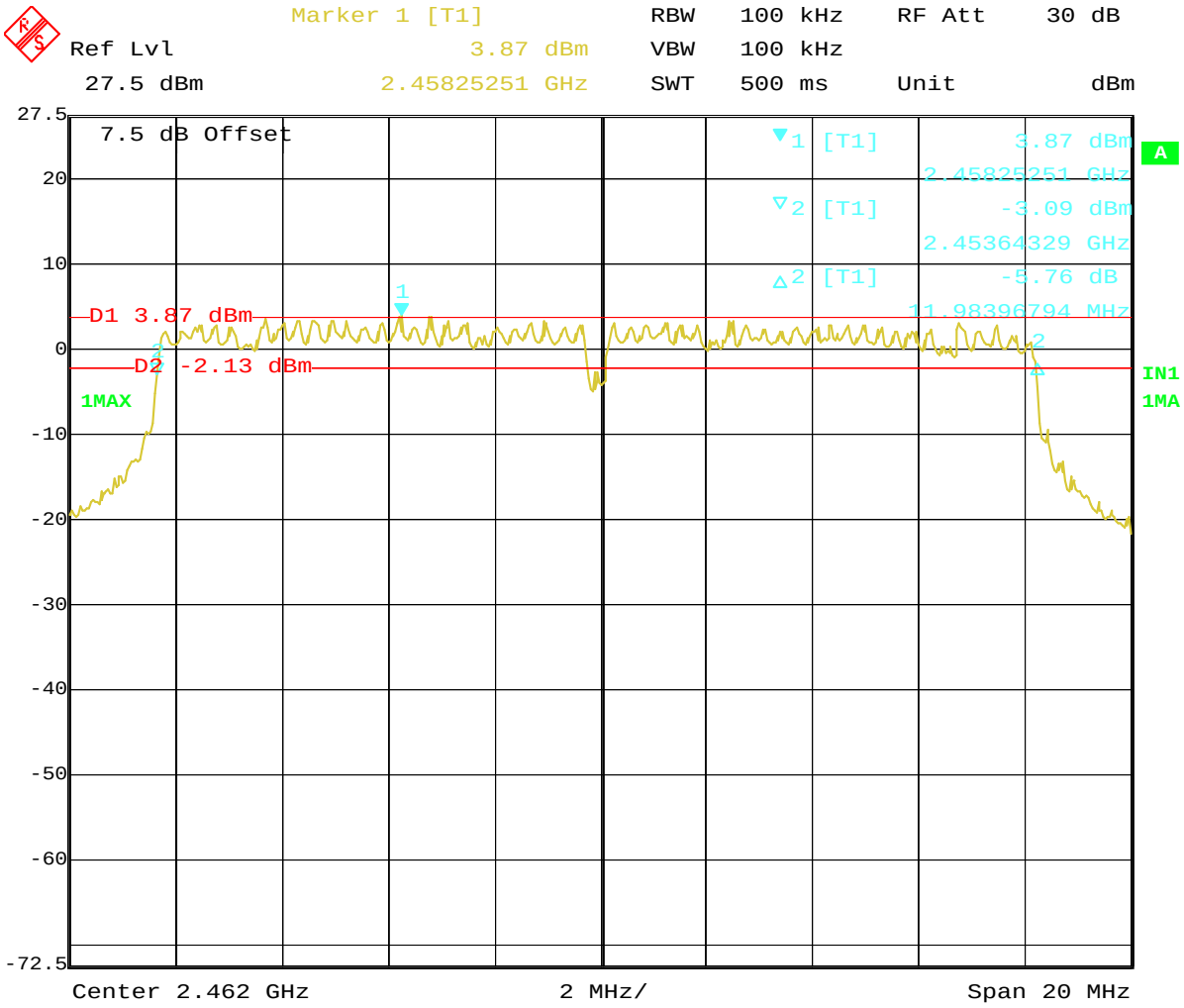
Minimum 6dB Bandwidth



Title: 11G CH1 6dB BANDWIDTH
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 16.NOV.2005 16:58:06



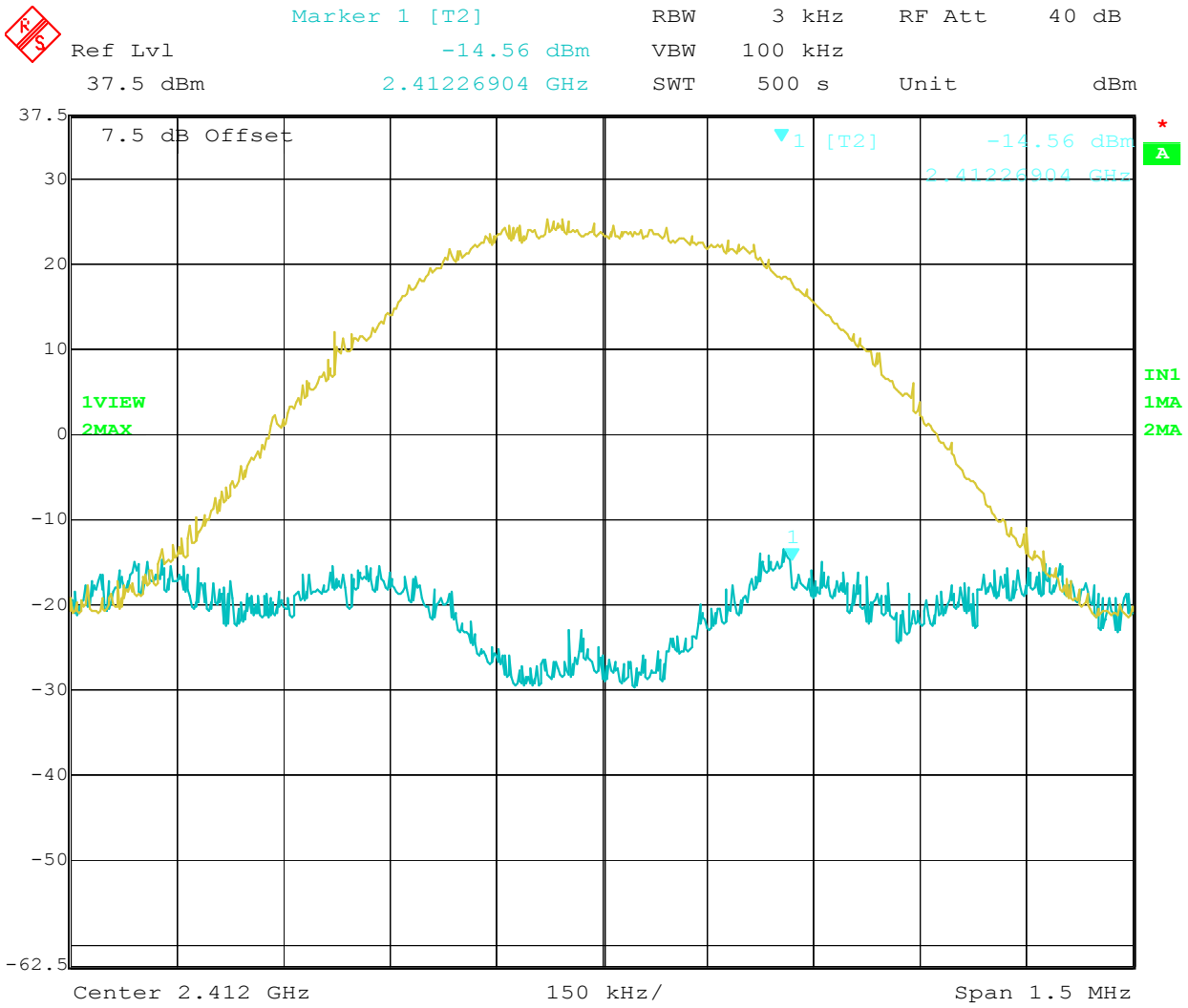
Title: 11G CH6 6dB BANDWIDTH
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 16.NOV.2005 17:29:57



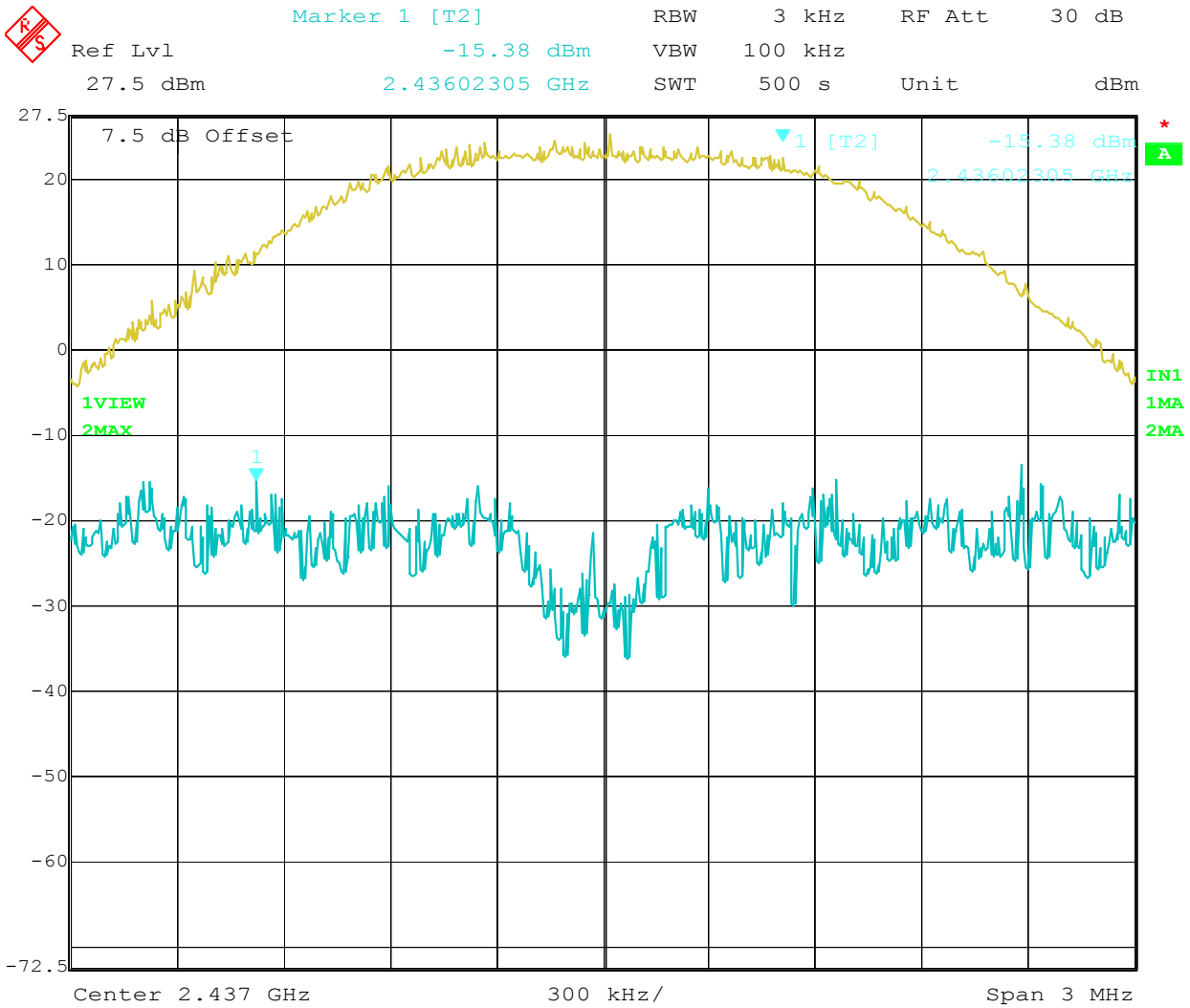
Title: 11G CH11 6dB BANDWIDTH
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 16.NOV.2005 17:45:00

Appendix E

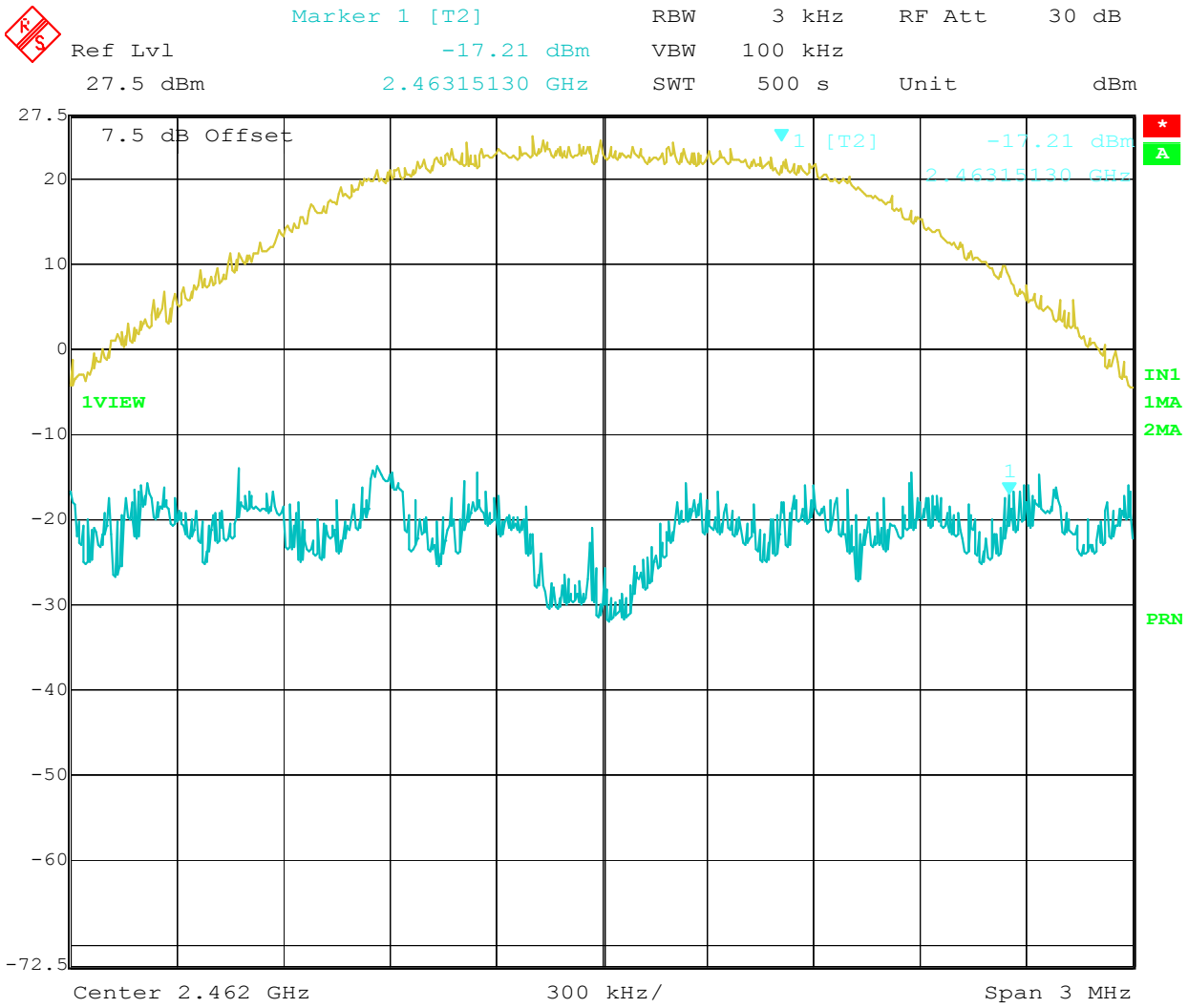
Peak Power Spectral Density



Title: 11G CH1 POWER DENSITY
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 16:36:22



Title: 11G CH6 POWER DENSITY
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:15:14



Title: 11G CH11 POWER DENSITY
Comment A: YUAN High-Tech Development Co.,Ltd.
Date: 20.NOV.2005 17:00:01

Appendix F

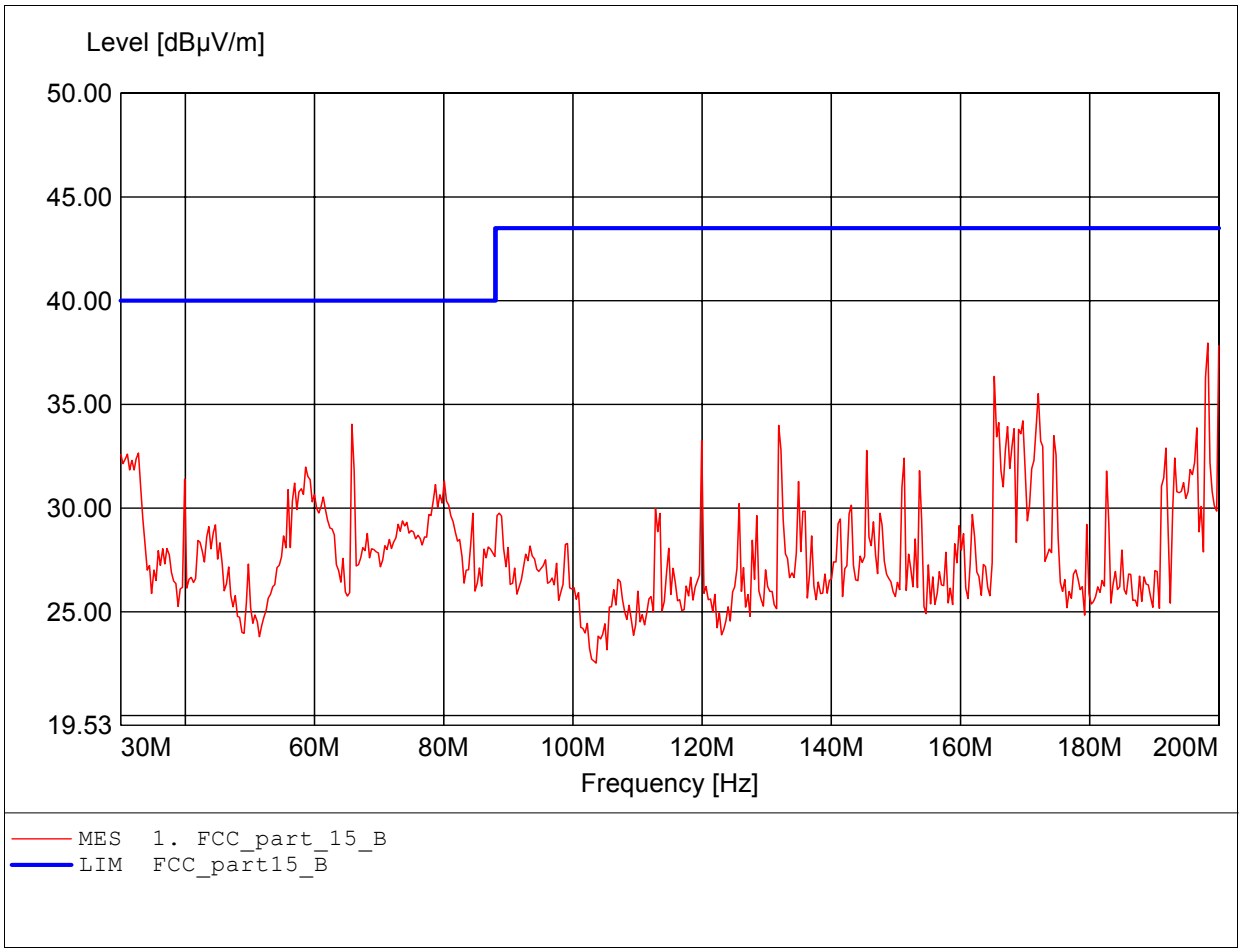
Radiated Emissions from Receiver Section of Transceiver

The measurement diagram are wideband pre-scan results; only for reference.

Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

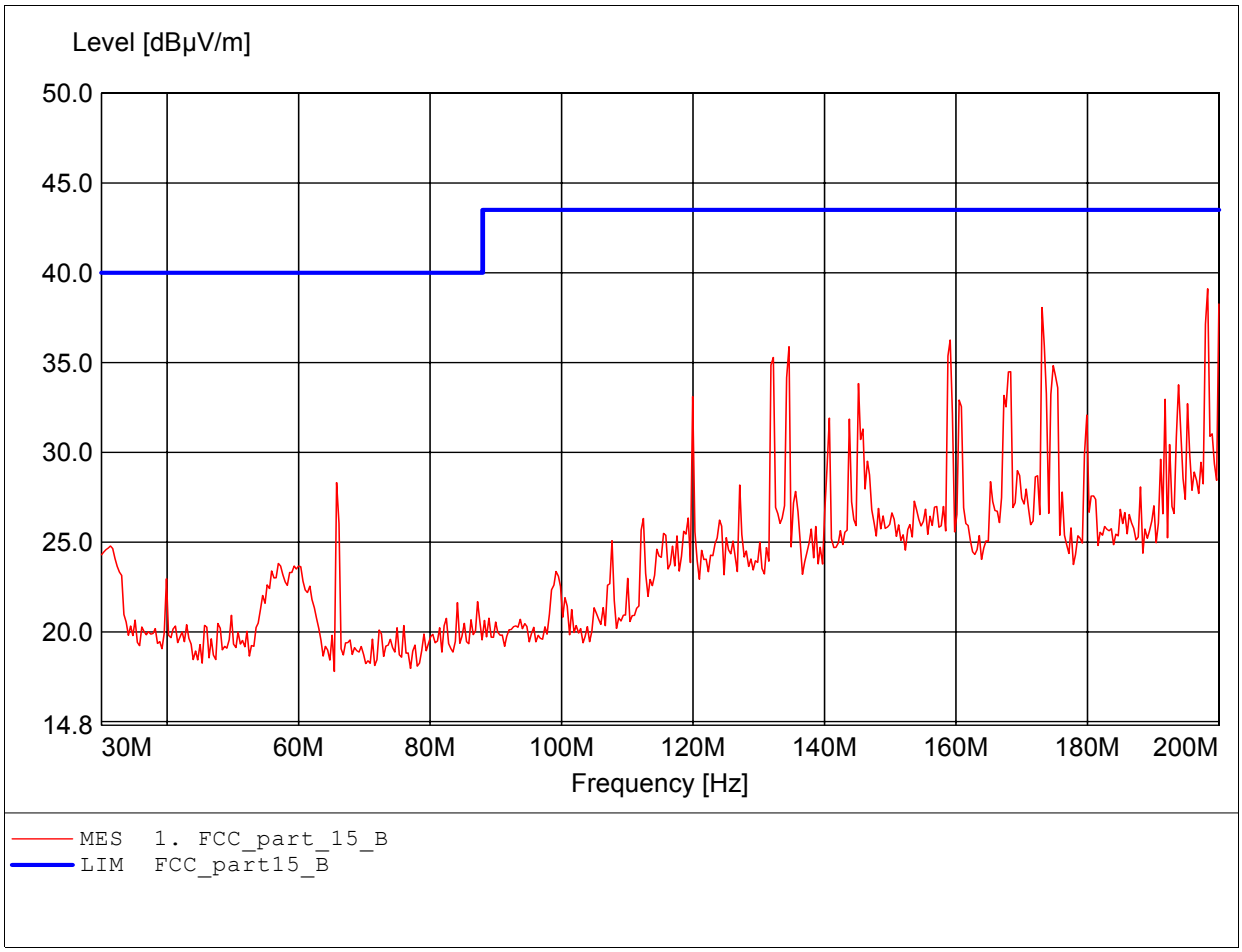
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Wireless)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:198.297MHz Emax:37.96dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

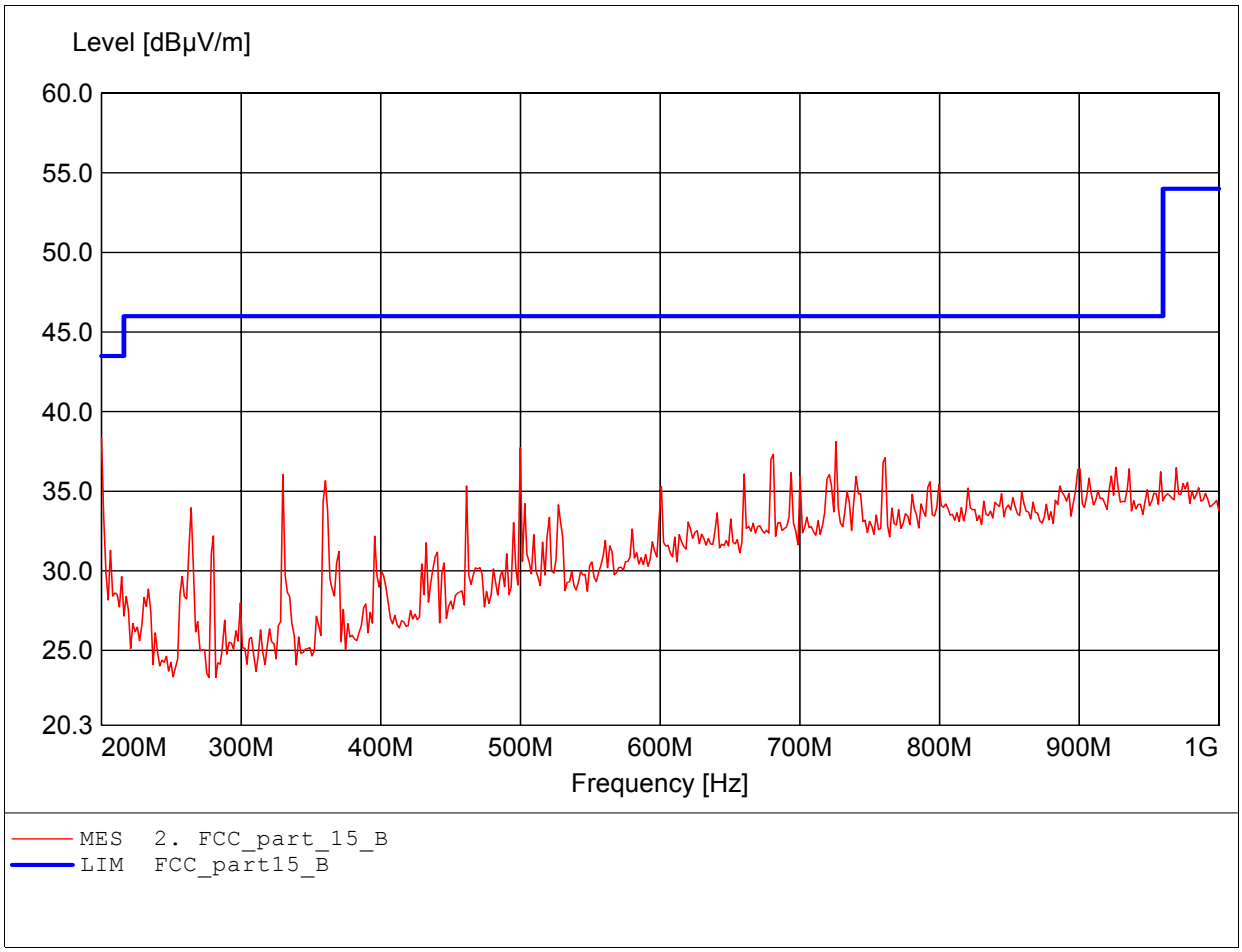
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Wireless)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:198.297MHz Emax:39.11dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

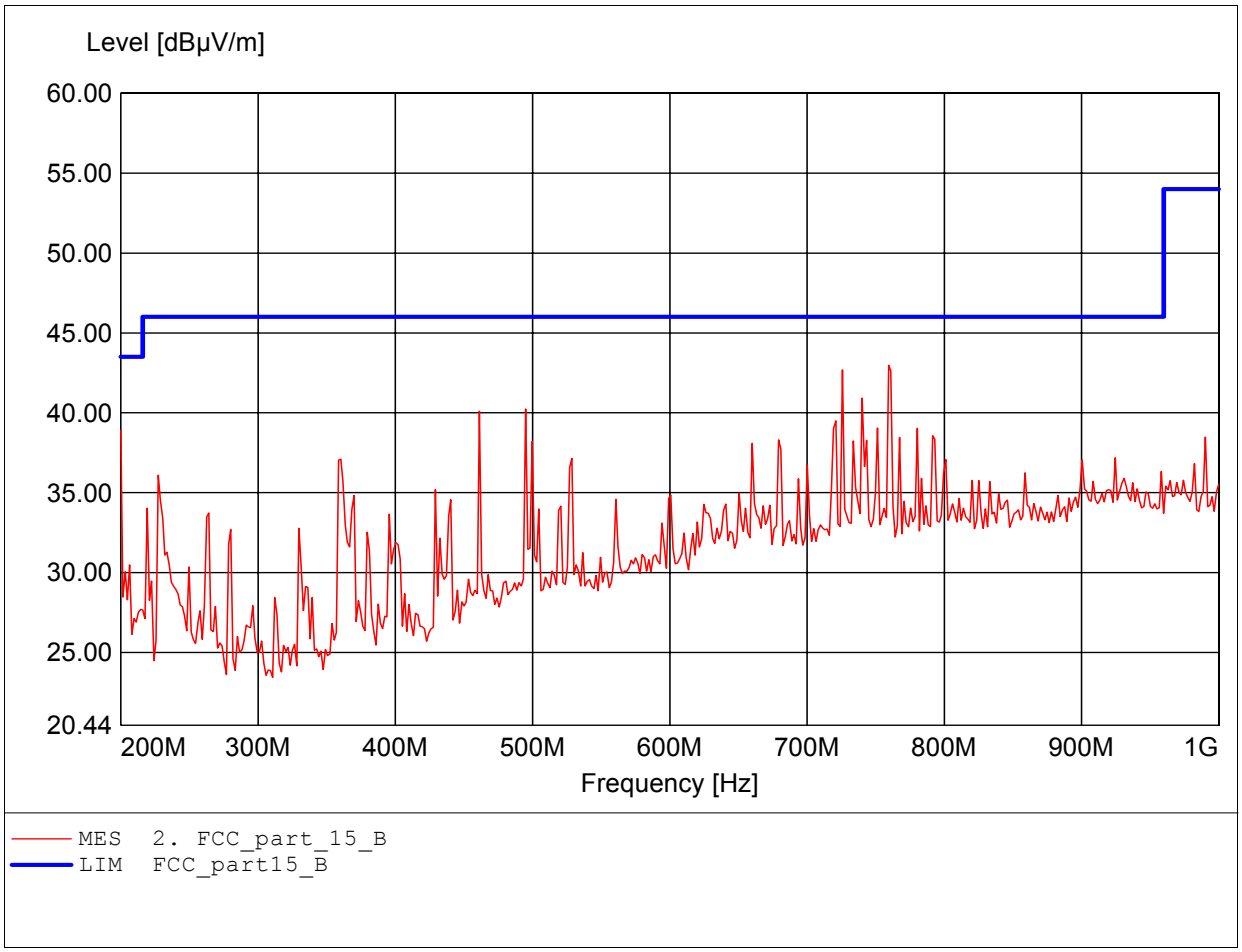
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Wireless)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:200.000MHz Emax:38.33dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

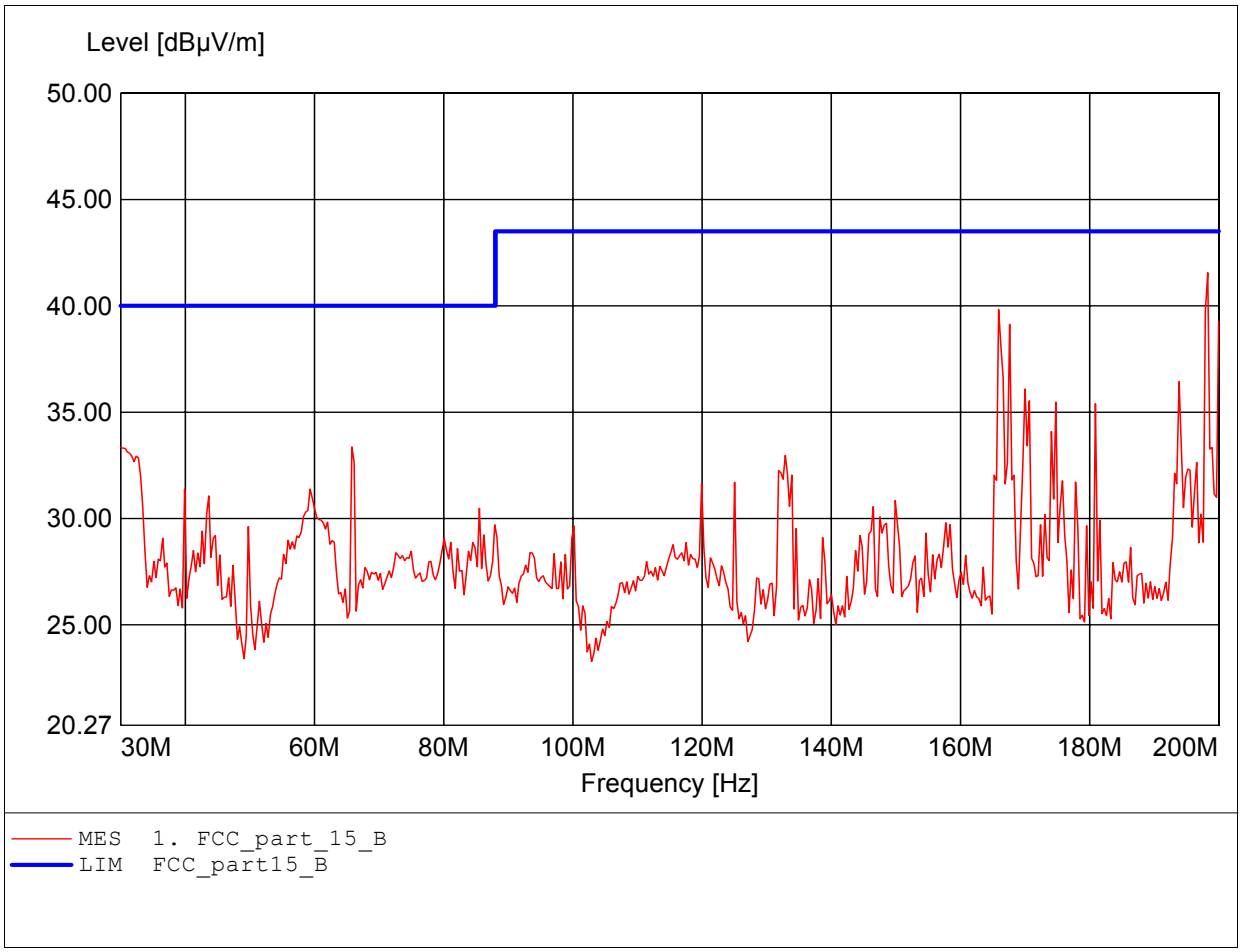
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Wireless)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:759.519MHz Emax:42.97dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

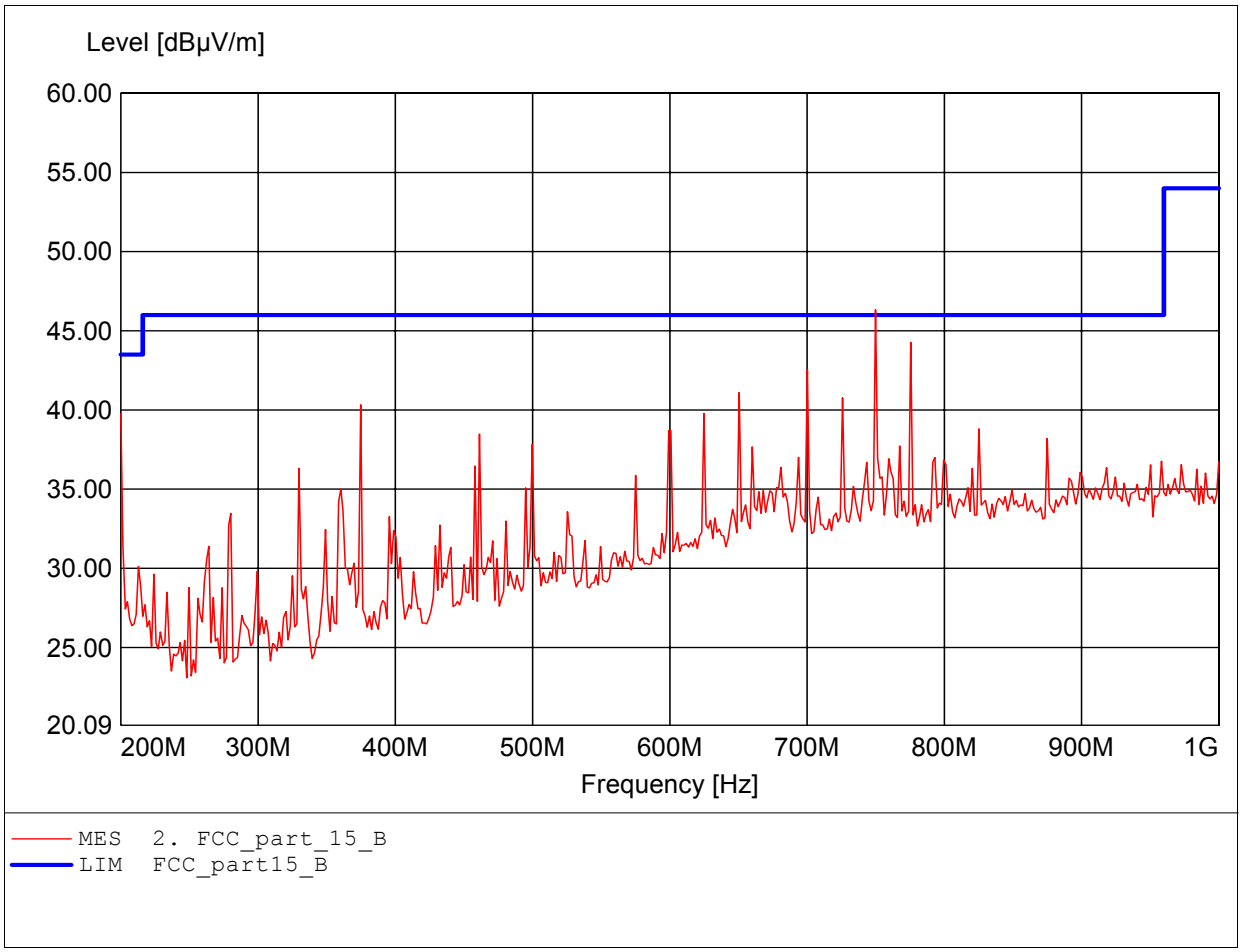
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Line)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:198.297MHz Emax:41.55dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

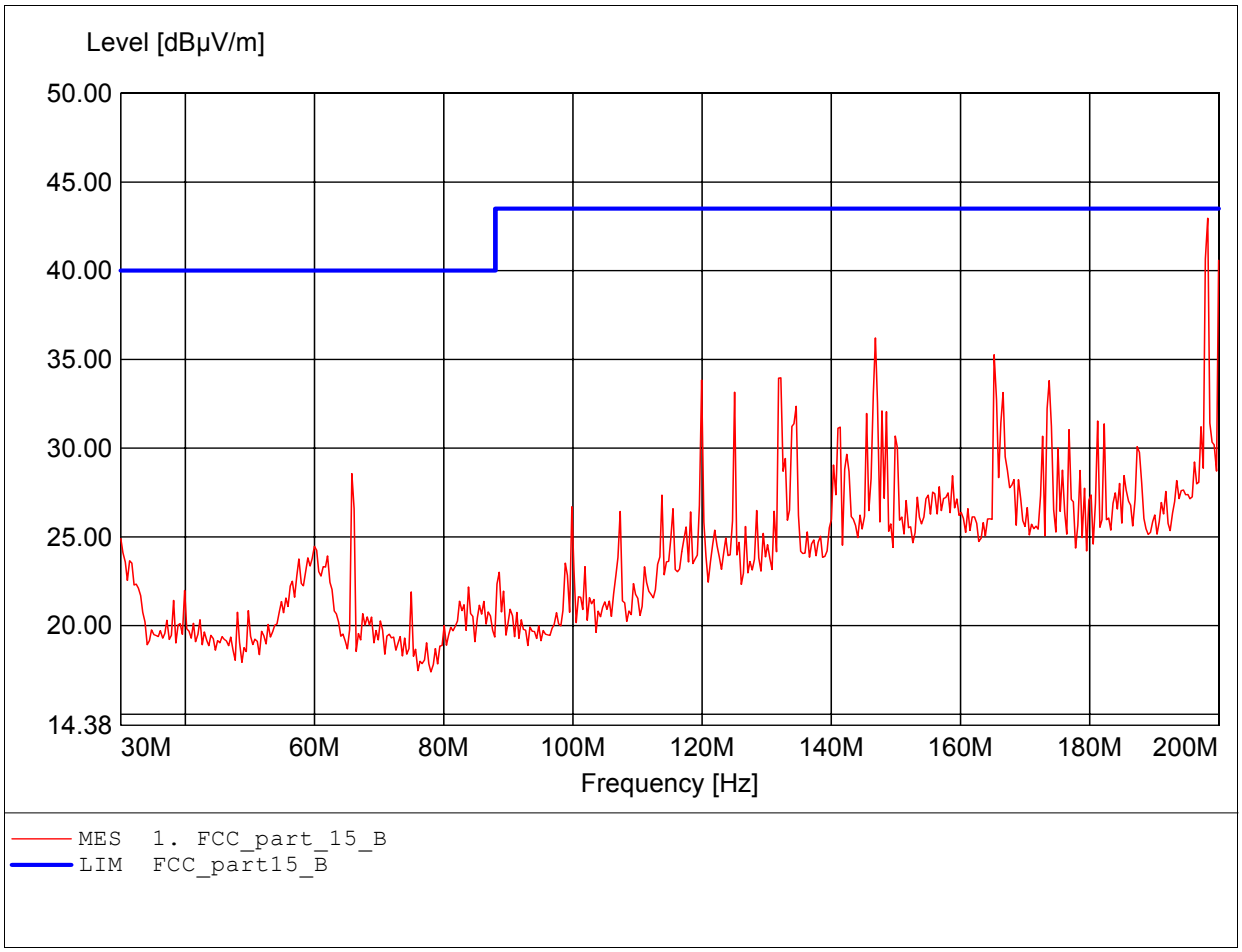
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Line)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:749.900MHz Emax:46.33dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

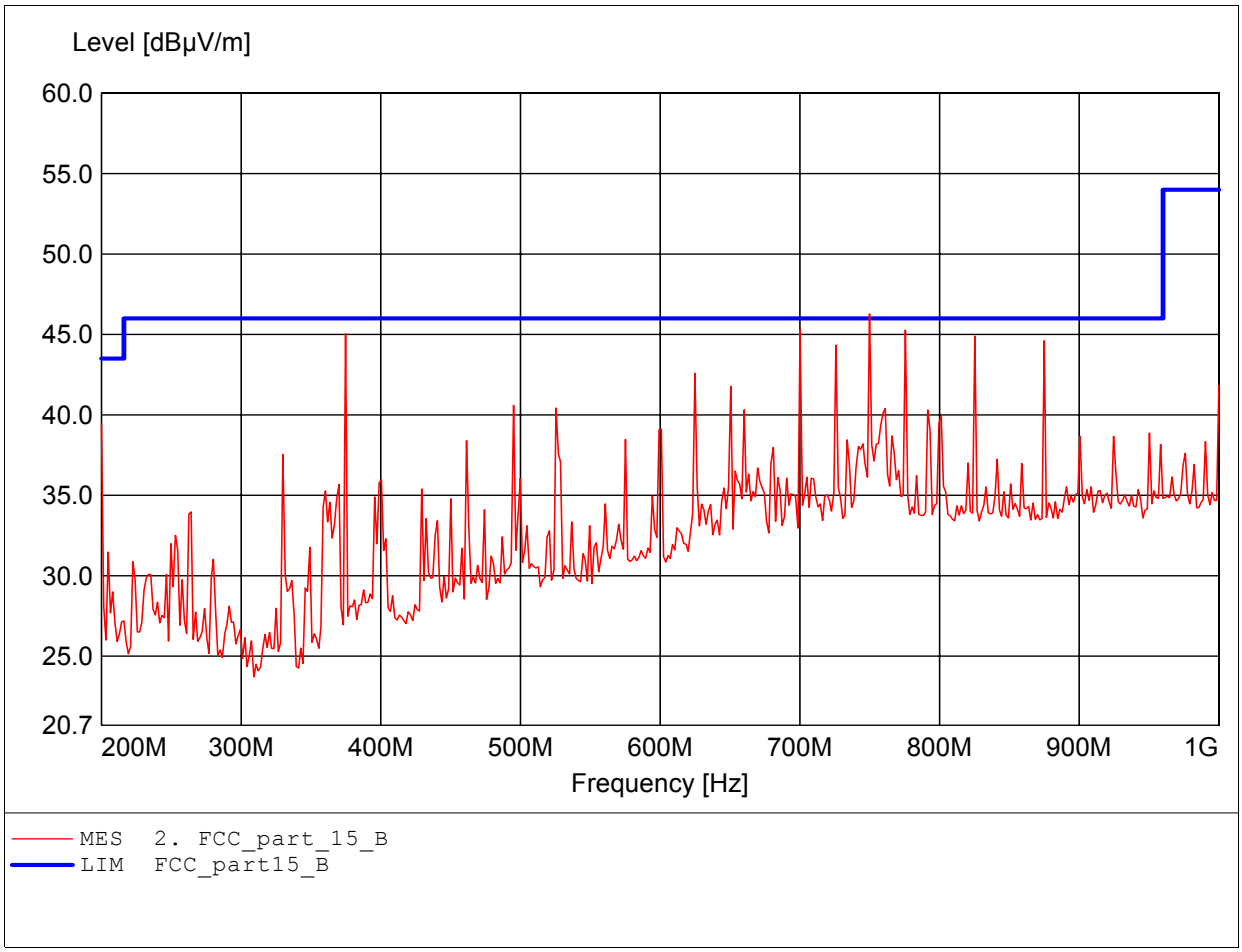
EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Line)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HK 116
	Freq:198.297MHz Emax:42.96dBµV/m RBW: 100 kHz



Field Strength under normal conditions

FCC RULES PART 15, SUBPART B

EUT:	Wireless Multimedia System
MODEL NO.:	WMS 100 Receiver (Line)
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Test Site / Operator:	ETS / Dennis
Temperature/Voltage:	Temp.: 23°C/ Unom.: 120 VAC (AC/DC ADAPTOR)
Test Specification:	according to subpart B
Comment 1:	Dist.: 3m, Ant.: HL 223, ampl.
	Freq:749.900MHz Emax:46.27dBµV/m RBW: 100 kHz



Appendix G

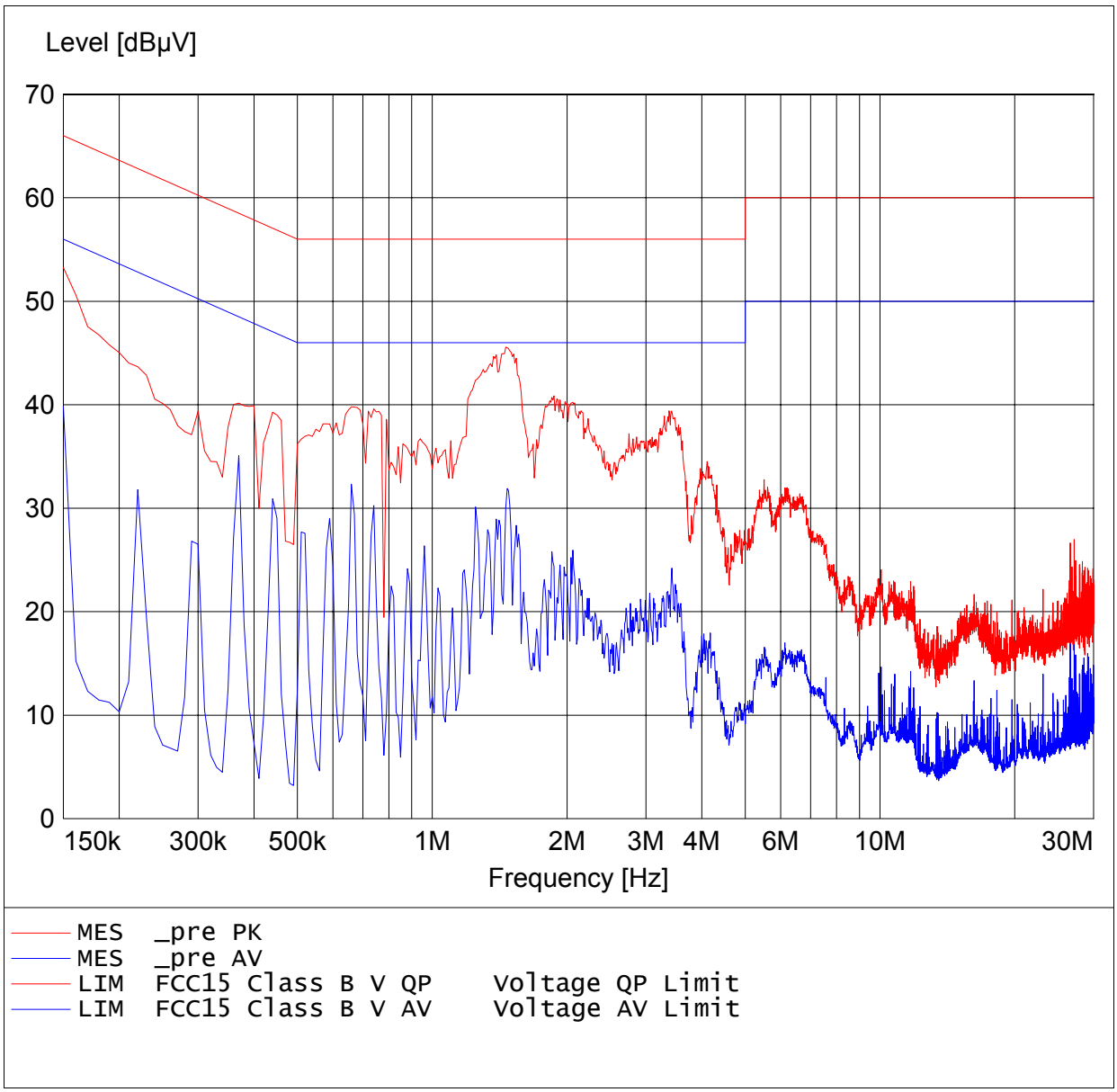
Power Line Conducted Emission

The measurement diagram are wideband pre-scan results; only for reference.

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

Class B

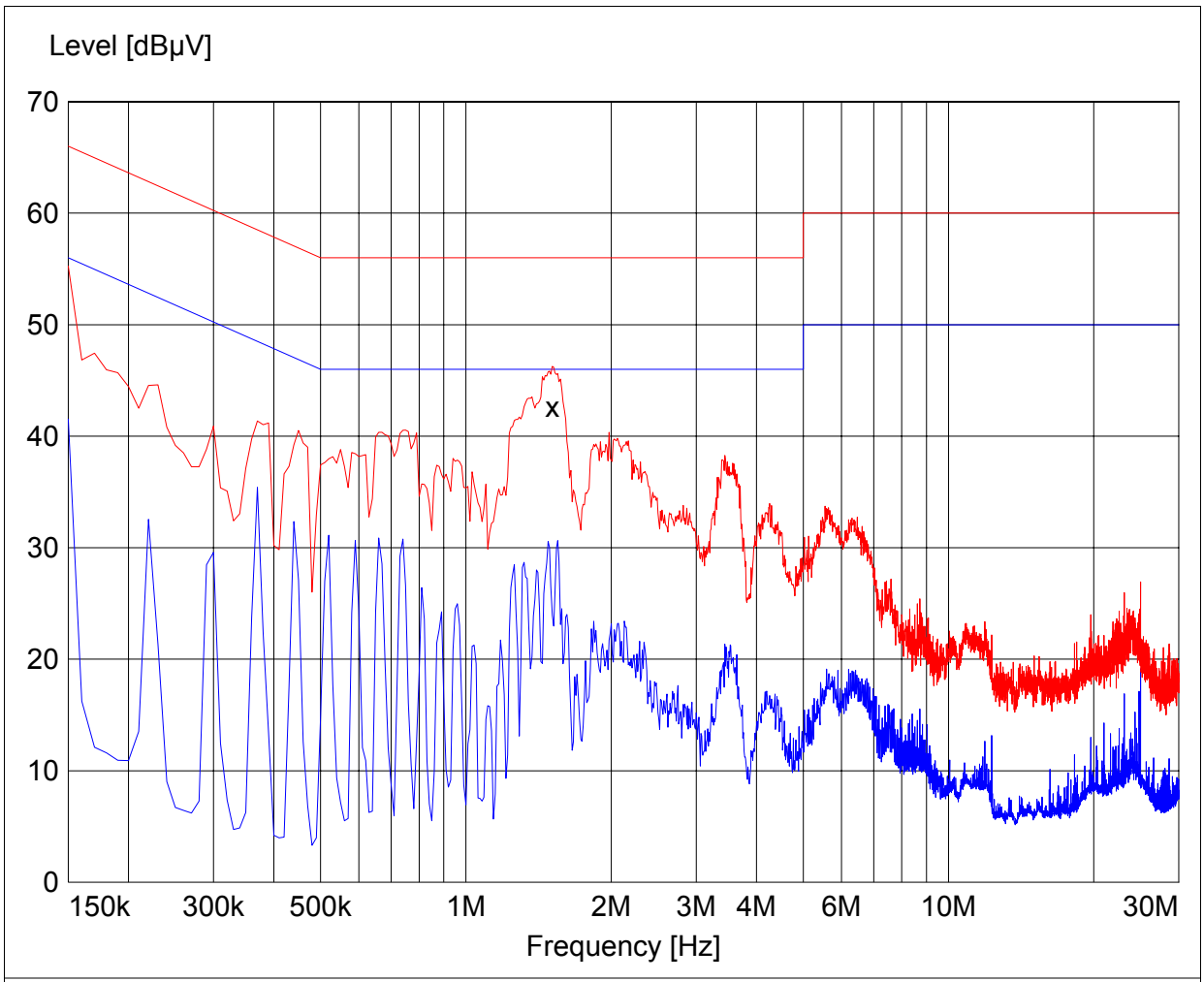
EUT:	Wireless Multimedia System
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Operating Condition:	Unom : 120VAC (ac/dc adaptor) , Tnom : 23 °C
Test Site:	ETS
Operator:	Pann
Test Specification:	V-network: ESH3-Z5 N
Comment:	model: WMS 100 Receiver (Wireless) mode: active



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

Class B

EUT:	Wireless Multimedia System
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Operating Condition:	Unom : 120VAC (ac/dc adaptor) , Tnom : 23 °C
Test Site:	ETS
Operator:	Pann
Test Specification:	V-network: ESH3-Z5 L1
Comment:	model: WMS 100 Receiver (Wireless) mode: active



x x MES _fin QP
MES _pre PK
MES _pre AV
LIM FCC15 Class B V QP Voltage QP Limit
LIM FCC15 Class B V AV Voltage AV Limit

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

Class B

EUT:	Wireless Multimedia System
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Operating Condition:	Unom : 120VAC (ac/dc adaptor) , Tnom : 23 °C
Test Site:	ETS
Operator:	Pann
Test Specification:	V-network: ESH3-Z5 L1
Comment:	model: WMS 100 Receiver (Wireless) mode: active

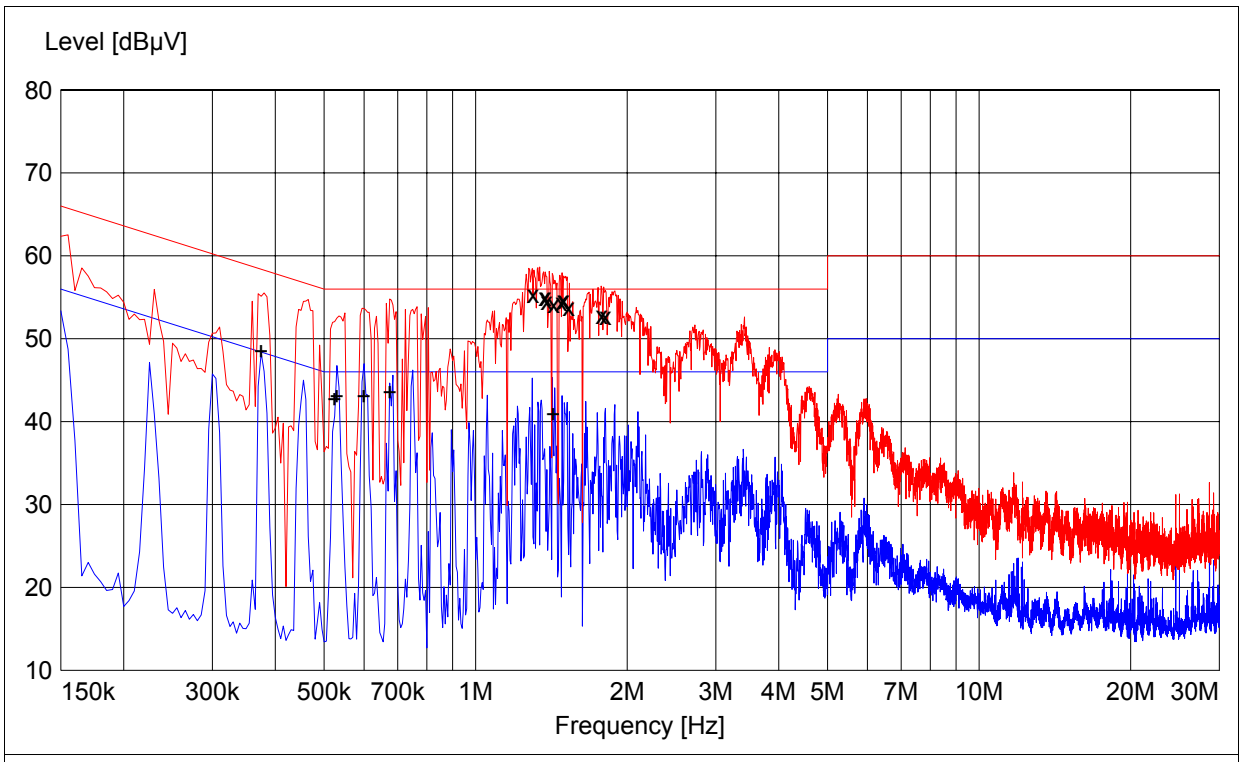
MEASUREMENT RESULT: "_fin QP"

11/25/05 6:27PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
1.510000	42.60	10.1	56	13.4	---	---

EMI voltage test in the ac-mains according to EN 55022

EUT:	Wireless Multimedia System
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Operating Condition:	Unom : 120 VAC (ac/dc adaptor) , Tnom : 23.6°C
Test Site:	ETS
Operator:	Catey
Test Specification:	V-network: ESH3-Z5 N
Comment:	model: WMS 100 Receiver (Line) mode: active



x x MES _fin QP
+ + MES _fin AV
MES _pre PK
MES _pre AV
LIM EN 55022 V QP Voltage QP Limit
LIM EN 55022 V AV Voltage AV Limit

EMI voltage test in the ac-mains according to EN 55022

EUT: Wireless Multimedia System
Approval Holder: YUAN High-Tech Development Co., Ltd.
Operating Condition: Unom : 120 VAC (ac/dc adaptor) , Tnom : 23.6°C
Test Site: ETS
Operator: Catey
Test Specification: V-network: ESH3-Z5 N
Comment: model: WMS 100 Receiver (Line) mode: active

MEASUREMENT RESULT: "_fin AV"

12/19/05 5:27PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.375000	47.70	19.5	48	0.3	---	---
0.525000	45.00	19.5	46	1.0	---	---
0.530000	45.30	19.5	46	0.7	---	---
0.600000	45.30	19.5	46	0.7	---	---
0.675000	45.80	19.5	46	0.2	---	---
0.755000	44.20	19.5	46	1.8	---	---
1.425000	43.10	19.5	46	2.9	---	---

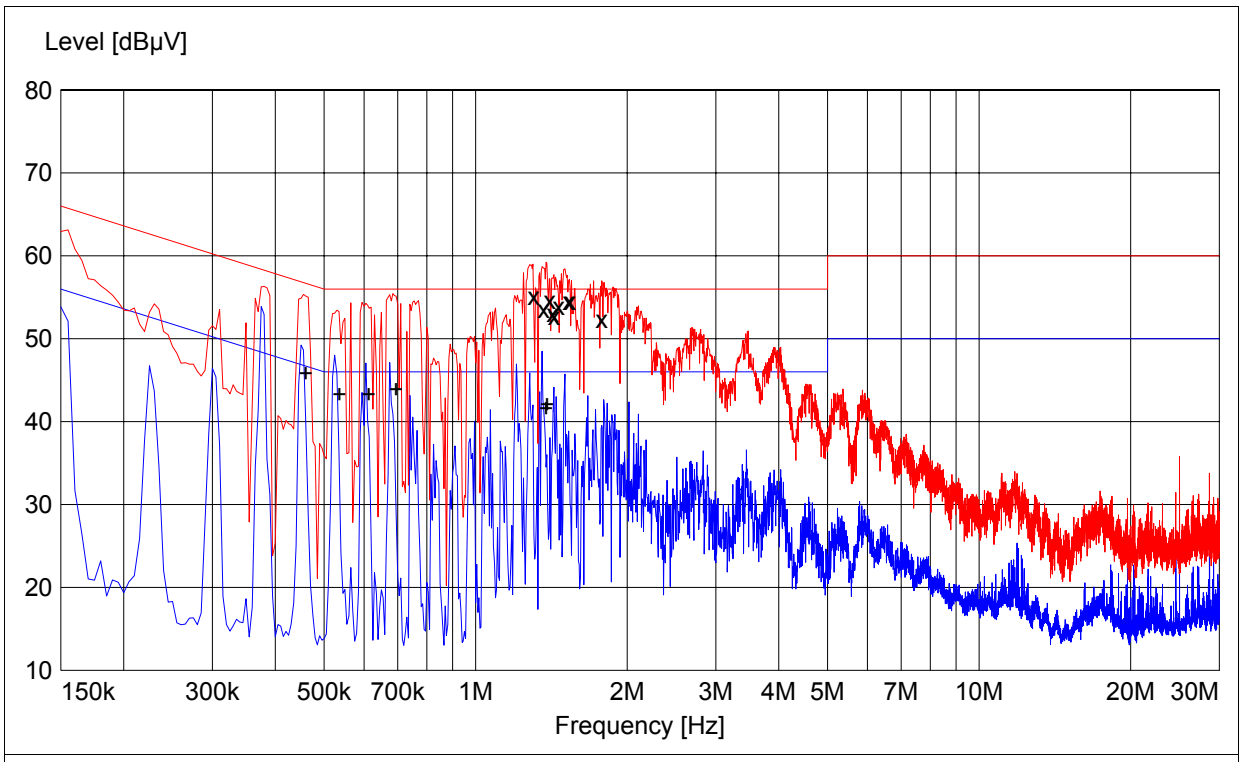
MEASUREMENT RESULT: "_fin QP"

12/19/05 5:27PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
1.300000	55.40	19.5	56	0.6	---	---
1.370000	55.80	19.5	56	0.2	---	---
1.385000	55.20	19.5	56	0.8	---	---
1.430000	55.60	19.5	56	0.4	---	---
1.480000	55.40	19.5	56	0.6	---	---
1.495000	55.50	19.5	56	0.5	---	---
1.530000	56.00	19.5	56	0.0	---	---
1.780000	55.10	19.5	56	0.9	---	---

EMI voltage test in the ac-mains according to EN 55022

EUT:	Wireless Multimedia System
Approval Holder:	YUAN High-Tech Development Co., Ltd.
Operating Condition:	Unom : 120 VAC (ac/dc adaptor) , Tnom : 23.6°C
Test Site:	ETS
Operator:	Catey
Test Specification:	V-network: ESH3-Z5 L1
Comment:	model: WMS 100 Receiver (Line) mode: active



x x MES _fin QP
+ + MES _fin AV
MES _pre PK
MES _pre AV
LIM EN 55022 V QP Voltage QP Limit
LIM EN 55022 V AV Voltage AV Limit

EMI voltage test in the ac-mains according to EN 55022

EUT: Wireless Multimedia System
Approval Holder: YUAN High-Tech Development Co., Ltd.
Operating Condition: Unom : 120 VAC (ac/dc adaptor) , Tnom : 23.6°C
Test Site: ETS
Operator: Catey
Test Specification: V-network: ESH3-Z5 L1
Comment: model: WMS 100 Receiver (Line) mode: active

MEASUREMENT RESULT: "_fin AV"

12/19/05 5:09PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.450000	46.10	19.5	47	0.9	---	---
0.525000	45.80	19.5	46	0.2	---	---
0.600000	45.70	19.5	46	0.3	---	---
0.605000	45.70	19.5	46	0.3	---	---
0.680000	45.20	19.5	46	0.8	---	---
1.355000	45.10	19.5	46	0.9	---	---

MEASUREMENT RESULT: "_fin QP"

12/19/05 5:09PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
1.275000	55.40	19.5	56	0.6	---	---
1.335000	55.50	19.5	56	0.5	---	---
1.370000	55.40	19.5	56	0.6	---	---
1.390000	56.00	19.5	56	0.0	---	---
1.400000	55.70	19.5	56	0.3	---	---
1.430000	55.10	19.5	56	0.9	---	---
1.495000	55.50	19.5	56	0.5	---	---
1.505000	55.50	19.5	56	0.5	---	---
1.780000	55.30	19.5	56	0.7	---	---

Appendix H

Pictures