

**CFR 47 FCC PART 15 SUBPART C****TEST REPORT***For***XAG XRTK7 Mobile Station****MODEL NUMBER: M3RTK7AH****REPORT NUMBER: 4791806224-1-RF-4****ISSUE DATE: July 12, 2025****FCC ID: 2A46G-M3RTK7AH***Prepared for*

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**510663 China**

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## Revision History

Rev.	Issue Date	Revisions	Revised By
V0	July 12, 2025	Initial Issue	

## Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2	FCC Part 15.207	
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.2.3.1	FCC Part 15.247 (b)(3)	Pass
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2013, Clause 11.8.1	FCC Part 15.247 (a)(2)	Pass
Power Spectral Density	ANSI C63.10-2013, Clause 11.10.5	FCC Part 15.247 (e)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2013, Clause 11.11	FCC Part 15.247(d)	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2013, Clause 11.12 & Clause 11.13	FCC Part 15.247 (d) FCC Part 15.205/15.209	Pass
Duty Cycle	ANSI C63.10-2013, Clause 11.6	None; for reporting purposes only.	Pass

\*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

\*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C> when <Simple Acceptance> decision rule is applied.

## CONTENTS

<b>1. ATTESTATION OF TEST RESULTS .....</b>	<b>6</b>
<b>2. TEST METHODOLOGY .....</b>	<b>7</b>
<b>3. FACILITIES AND ACCREDITATION .....</b>	<b>7</b>
<b>4. CALIBRATION AND UNCERTAINTY .....</b>	<b>8</b>
4.1. <i>MEASURING INSTRUMENT CALIBRATION .....</i>	<i>8</i>
4.2. <i>MEASUREMENT UNCERTAINTY .....</i>	<i>8</i>
<b>5. EQUIPMENT UNDER TEST .....</b>	<b>9</b>
5.1. <i>DESCRIPTION OF EUT .....</i>	<i>9</i>
5.2. <i>CHANNEL LIST .....</i>	<i>9</i>
5.3. <i>MAXIMUM POWER .....</i>	<i>9</i>
5.4. <i>TEST CHANNEL CONFIGURATION .....</i>	<i>10</i>
5.5. <i>THE WORSE CASE POWER SETTING PARAMETER .....</i>	<i>10</i>
5.6. <i>DESCRIPTION OF AVAILABLE ANTENNAS .....</i>	<i>12</i>
5.7. <i>SUPPORT UNITS FOR SYSTEM TEST .....</i>	<i>13</i>
5.8. <i>SETUP DIAGRAM .....</i>	<i>14</i>
<b>6. MEASURING EQUIPMENT AND SOFTWARE USED .....</b>	<b>15</b>
<b>7. ANTENNA PORT TEST RESULTS .....</b>	<b>18</b>
7.1. <i>CONDUCTED OUTPUT POWER .....</i>	<i>18</i>
7.2. <i>6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH .....</i>	<i>19</i>
7.3. <i>POWER SPECTRAL DENSITY .....</i>	<i>21</i>
7.4. <i>CONDUCTED BAND EDGE AND SPURIOUS EMISSION .....</i>	<i>23</i>
7.5. <i>DUTY CYCLE .....</i>	<i>25</i>
<b>8. RADIATED TEST RESULTS .....</b>	<b>26</b>
8.1. <i>RESTRICTED BANDEDGE OF RTL8733 .....</i>	<i>34</i>
8.1. <i>RESTRICTED BANDEDGE OF XL100 .....</i>	<i>48</i>
8.1. <i>SPURIOUS EMISSIONS OF RTL8733(1 GHZ~3 GHZ) .....</i>	<i>62</i>
8.1. <i>SPURIOUS EMISSIONS OF XL100(1 GHZ~3 GHZ) .....</i>	<i>68</i>
8.1. <i>SPURIOUS EMISSIONS OF RTL8733(3 GHZ~18 GHZ) .....</i>	<i>74</i>
8.1. <i>SPURIOUS EMISSIONS OF XL100(3 GHZ~18 GHZ) .....</i>	<i>92</i>
8.2. <i>SPURIOUS EMISSIONS OF RTL8733 (9 KHZ~30 MHZ) .....</i>	<i>110</i>
8.1. <i>SPURIOUS EMISSIONS OF XL100(9 KHZ~30 MHZ) .....</i>	<i>113</i>
8.2. <i>SPURIOUS EMISSIONS OF RTL8733 (18 GHZ~26 GHZ) .....</i>	<i>116</i>

8.1.	<i>SPURIOUS EMISSIONS OF XL100 (18 GHZ~26 GHZ)</i> .....	118
8.1.	<i>SPURUS EMISSIONS(30 MHZ~1 GHZ)</i> .....	120
<b>9.</b>	<b>ANTENNA REQUIREMENT</b> .....	<b>122</b>
<b>10.</b>	<b>AC POWER LINE CONDUCTED EMISSION</b> .....	<b>123</b>
<b>11.</b>	<b>TEST DATA</b> .....	<b>126</b>
11.1.	<i>APPENDIX A: DTS BANDWIDTH</i> .....	126
11.1.1.	Test Result.....	126
11.1.2.	Test Graphs .....	127
11.2.	<i>APPENDIX B: OCCUPIED CHANNEL BANDWIDTH</i> .....	136
11.2.1.	Test Result.....	136
11.2.2.	Test Graphs .....	137
11.3.	<i>APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER</i> .....	146
11.3.1.	Test Result.....	146
11.4.	<i>APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY</i> .....	147
11.4.1.	Test Result.....	147
11.4.2.	Test Graphs .....	148
11.5.	<i>APPENDIX E: BAND EDGE MEASUREMENTS</i> .....	157
11.5.1.	Test Result.....	157
11.5.2.	Test Graphs .....	158
11.6.	<i>APPENDIX F: CONDUCTED SPURIOUS EMISSION</i> .....	164
11.6.1.	Test Result.....	164
11.6.2.	Test Graphs .....	166
11.7.	<i>APPENDIX G: DUTY CYCLE</i> .....	193
11.7.1.	Test Result.....	193
11.7.2.	Test Graphs .....	194

## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Guangzhou Xaircraft Technology CO.,LTD  
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510663 China

### Manufacturer Information

Company Name: Guangzhou Xaircraft Technology CO.,LTD  
Address: Block C, No.115, Gaopu Road, Tianhe District, GuangzhouCity, Guangdong, P.R.  
510663 China

### EUT Information

EUT Name: XAG XRTK7 Mobile Station  
Model: M3RTK7AH  
Sample Received Date: May 23, 2025  
Sample Status: Normal  
Sample ID: 8526717  
Date of Tested: May 24, 2025 to July 11, 2025

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	Pass

Prepared By:



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Checked By:



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Approved By:



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Operations Manager

## 2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART C, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, CFR 47 FCC Part 2, ANSI C63.10-2013.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b>            UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b>            UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p><b>ISED (Company No.: 21320)</b>            UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: C-20202, G-20240, R-20248 and T-20202)</b>            UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.            Facility Name:            Chamber E, the VCCI registration No. is G-20240 and R-20248            Shielding Room F, the VCCI registration No. is C-20202 and T-20202</p>
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### Note 1:

All tests measurement facilities use to collect the measurement data are located at Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China.

### Note 2:

The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

### Note 3:

For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 26 GHz)	5.78 dB (1 GHz ~ 18 GHz) 5.23 dB (18 GHz ~ 26 GHz)
Duty Cycle	±0.028%
DTS and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.686 dB
Maximum Power Spectral Density Level	±0.743 dB
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted Frequency Bands	±0.746 dB (9 kHz ~ 1 GHz) ±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

EUT Name	XAG XRTK7 Mobile Station
Model	M3RTK7AH
Chip Model	RTL8733/ XL100

Frequency Band:	2400 MHz to 2483.5 MHz
Frequency Range:	2412 MHz to 2472 MHz
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Antenna Type:	PCB antenna
Antenna Gain:	RTL8733: 4.23dBi XL100: Ant1: 4.14dBi; Ant2: 4.06dBi
Battery Rating input:	DC 3.65 V

### 5.2. CHANNEL LIST

Channel List For Bandwidth=20 MHz							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

### 5.3. MAXIMUM POWER

RTL8733:

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	19.82	24.05
g	2412 ~ 2462	1-11[11]	20.16	24.39
n HT20	2412 ~ 2462	1-11[11]	20.07	24.3

XL100:

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	19.66	23.8
g	2412 ~ 2462	1-11[11]	18.09	22.1
n HT20	2412 ~ 2462	1-11[11]	20.14	24.28

## 5.4. TEST CHANNEL CONFIGURATION

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
g	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT20	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz

## 5.5. THE WORSE CASE POWER SETTING PARAMETER

RTL8733

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		MobaXterm_Personal_23.3					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	default	default	default	/		
802.11g	1	default	default	default			
802.11n HT20	1	19	default	19			

XL100

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		MobaXterm_Personal_23.3					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	-5	default	-5	/		
	2	-5	default	-5			
802.11g	1	-5	default	-5	/		
	2	-5	default	-5			
802.11n HT20	1	-5	default	-5	/		
	2	-5	default	-5			

## WORST-CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20 mode: MCS0

RTL8733:

802.11b/g/n HT20 only support SISO mode.

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

XL100:

802.11b/g only support SISO mode.

802.11n HT20 support SISO and MIMO mode.

802.11b/g SISO mode, Antenna 1 and Antenna 2 has the same power setting, both Antenna 1&2 test data were recorded in the report.

802.11n SISO mode and MIMO mode have the same power setting, so only the worst case power mode(MIMO) will be record in the report.

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

Conducted output power, power spectral density tests separately on each port with all supported SISO & MIMO port combinations.

Conducted bandedge and spurious emissions tests were performed with SISO mode, as this port was found to have the worst case in terms of power settings amongst all supported possible SISO & MIMO port combinations.

Radiated emissions tests were performed with the MIMO modes. These were found to be the worst modulation scheme with regards to emissions after preliminary investigations and, as this mode emits the highest conducted output power level, it was deemed to be the worst case.

The EUT support Cyclic Shift Diversity(CDD), Space Time Coding(STBC), Spartial Division Multiplexing(SDM) modes. They use the same conducted power per chain in any given mode, so we only chose the worst case mode CDD for final testing.

## 5.6. DESCRIPTION OF AVAILABLE ANTENNAS

RTL8733:

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	PCB Antenna	4.23

XL100:

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	PCB Antenna	4.14
2	2412-2462	PCB Antenna	4.06

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following method.

For output power measurements:

Directional gain=  $G_{ANT} + \text{Array Gain} = 4.14 \text{ dBi}$

$G_{ANT}$  : equal to the gain of the antenna having the highest gain

Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:

Directional gain=  $G_{ANT} + \text{Array Gain} = 7.15 \text{ dBi}$

Array Gain =  $10 \log(N_{ANT}/N_{ss})$  dB.

$N_{ANT}$  : number of transmit antennas

$N_{ss}$  : number of spatial streams, The worst case directional gain will occur when  $N_{ss} = 1$

RTL8733:

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	<input checked="" type="checkbox"/> 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	<input checked="" type="checkbox"/> 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	<input checked="" type="checkbox"/> 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
Note:		1.BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)

XL100:

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
IEEE 802.11g	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
Note:		1.BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)

## 5.7. SUPPORT UNITS FOR SYSTEM TEST

### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	E42-80	/
2	DC power supply	SophPower	ADC50-10D	50V 10A

### I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
/	/	/	/	/	/

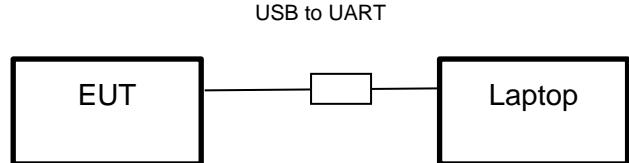
### ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

### TEST SETUP

The EUT has been tested as an independent unit.

## 5.8. SETUP DIAGRAM



## 6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Dec.27,2024	Dec.26,2025
Vector Signal Generator	R&S	SMBV100A	261637	Sep.28, 2024	Sep.27, 2025
Signal Generator	R&S	SMB100A	178553	Sep.28, 2024	Sep.27, 2025
Signal Analyzer	R&S	FSV40	101118	Sep.28, 2024	Sep.27, 2025
Software					
Description	Manufacturer	Name		Version	
For R&S TS 8997 Test System	Rohde & Schwarz	EMC 32		10.60.10	
Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.13, 2024	Sep.12, 2025
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Sep.28, 2024	Sep.27, 2025
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Sep.28, 2024	Sep.27, 2025
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Sep.28, 2024	Sep.27, 2025
DC power supply	Keysight	E3642A	MY55159130	Sep.28, 2024	Sep.27, 2025
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Sep.28, 2024	Sep.27, 2025
Attenuator	Aglient	8495B	2814a12853	Sep.28, 2024	Sep.27, 2025
RF Control Unit	Tonsend	JS0806-2	23B80620666	Dec.27,2024	Dec.26,2025
Software					
Description	Manufacturer	Name		Version	
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System		V3.2.22	

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Sep.28, 2024	Sep.27, 2025
Two-Line V-Network	R&S	ENV216	101983	Sep.28, 2024	Sep.27, 2025
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Sep.28, 2024	Sep.27, 2025
Software					
Description		Manufacturer		Name	Version
Test Software for Conducted Emissions		Farad		EZ-EMC	Ver. UL-3A1

Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Sep.28, 2024	Sep.27, 2025
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	June 28, 2024	June.27 2027
Preamplifier	HP	8447D	2944A09099	Sep.28, 2024	Sep.27, 2025
EMI Measurement Receiver	R&S	ESR26	101377	Sep.28, 2024	Sep.27, 2025
Horn Antenna	TDK	HRN-0118	130940	Dec.10, 2024	Dec.11, 2027
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Sep.28, 2024	Sep.27, 2025
Horn Antenna	Schwarzbeck	BBHA9170	697	Jun 30, 2024	Jun 29, 2027
Preamplifier	TDK	PA-02-2	TRS-307-00003	Sep.28, 2024	Sep.27, 2025
Preamplifier	TDK	PA-02-3	TRS-308-00002	Sep.28, 2024	Sep.27, 2025
Loop antenna	Schwarzbeck	1519B	00008	Dec.09, 2024	Dec.08, 2027
High Pass Filter	Wi	WHKX10-2700-3000-18000-40SS	23	Sep.28, 2024	Sep.27, 2025
Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4	Sep.28, 2024	Sep.27, 2025
Software					
Description		Manufacturer		Name	Version
Test Software for Radiated Emissions		Farad		EZ-EMC	Ver. UL-3A1

Other Instrument					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Oct.8, 2024	Oct.7, 2025
Barometer	Yiyi	Baro	N/A	Oct.10, 2024	Oct.9, 2025
Attenuator	Agilent	8495B	2814a12853	Sep.28, 2024	Sep.27, 2025

## 7. ANTENNA PORT TEST RESULTS

### 7.1. CONDUCTED OUTPUT POWER

#### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	AVG Output Power	1 watt or 30 dBm	2400-2483.5

#### TEST PROCEDURE

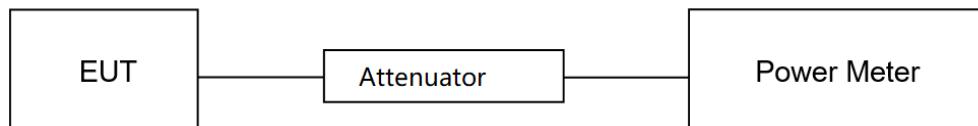
Refer to ANSI C63.10-2013 clause 11.9.2.3.1.

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).

Measure peak emission level, the indicated level is the average output power, after any corrections for external attenuators and cables.

The test result in dBm by adding  $[10 \log (1 / D)]$ , where D is the duty cycle.

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	24.3°C	Relative Humidity	63.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.65 V

#### TEST DATE / ENGINEER

Test Date	June 9, 2025	Test By	Bairong Liu
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#### TEST RESULTS

Please refer to section "Test Data" - Appendix C

## 7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	$\geq 500$ kHz	2400-2483.5

### TEST PROCEDURE

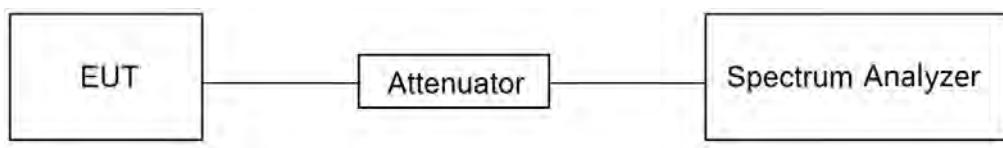
Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Frequency Span	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission For 99 % Occupied Bandwidth: Between 1.5 times and 5.0 times the OBW
Detector	Peak
RBW	For 6 dB Bandwidth: 100 kHz For 99 % Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth: $\geq 3 \times$ RBW For 99 % Occupied Bandwidth: $\geq 3 \times$ RBW
Trace	Max hold
Sweep	Auto couple

- Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
- Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### TEST SETUP



**TEST ENVIRONMENT**

Temperature	24.3°C	Relative Humidity	63.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.65 V

**TEST DATE / ENGINEER**

Test Date	June 9, 2025	Test By	Bairong Liu
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**TEST RESULTS**

Please refer to section "Test Data" - Appendix A&B

### 7.3. POWER SPECTRAL DENSITY

#### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

#### TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.10.5.

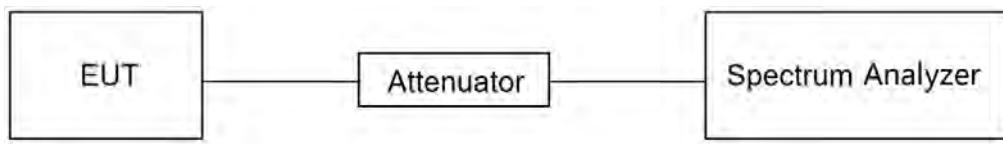
Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	power averaging (rms)
RBW	3 kHz ≤ RBW ≤ 100 kHz
VBW	≥3 × RBW
Span	1.5 x OBW bandwidth
Trace	Employ trace averaging(rms)mode over a minimum of 100 traces
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### TEST SETUP



**TEST ENVIRONMENT**

Temperature	24.3°C	Relative Humidity	63.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.65 V

**TEST DATE / ENGINEER**

Test Date	June 9, 2025	Test By	Bairong Liu
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**TEST RESULTS**

Please refer to section "Test Data" - Appendix D

## 7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

### TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyzer and use the following settings for reference level measurement:

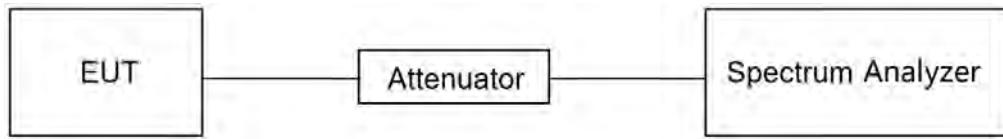
Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times$ RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.

Change the settings for emission level measurement:

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times$ RBW
measurement points	$\geq$ span/RBW
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

**TEST SETUP****TEST ENVIRONMENT**

Temperature	24.3°C	Relative Humidity	63.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.65 V

**TEST DATE / ENGINEER**

Test Date	June 9, 2025	Test By	Bairong Liu
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**TEST RESULTS**

Please refer to section "Test Data" - Appendix E&F

## 7.5. DUTY CYCLE

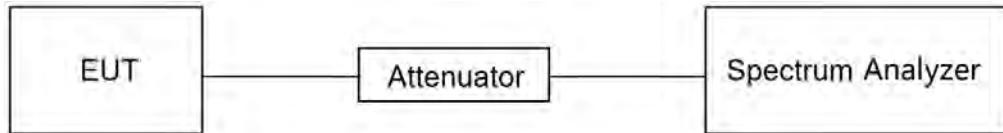
### LIMITS

None; for reporting purposes only.

### TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	24.3°C	Relative Humidity	63.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.65 V

### TEST DATE / ENGINEER

Test Date	June 9, 2025	Test By	Bairong Liu
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### TEST RESULTS

Please refer to section "Test Data" - Appendix G

## 8. RADIATED TEST RESULTS

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

<sup>2</sup>Above 38.6c

## **TEST PROCEDURE**

Below 30 MHz

The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made

to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of  $377\Omega$ . For example, the measurement frequency  $X$  kHz resulted in a level of  $Y$  dB<sub>UV</sub>/m, which is equivalent to  $Y-51.5 = Z$  dB<sub>UA</sub>/m, which has the same margin,  $W$  dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

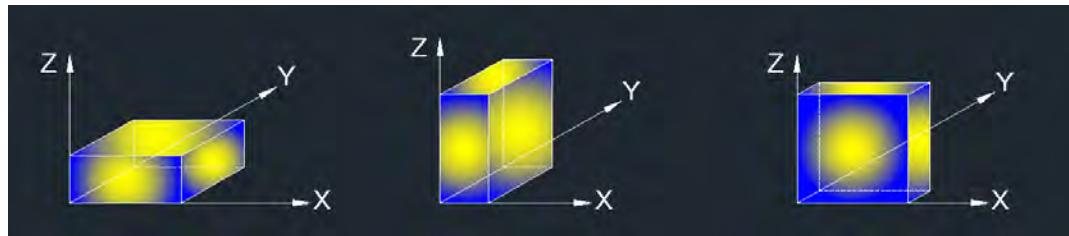
## Above 1 GHz

### The setting of the spectrum analyzer

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5 m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.5. ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For Restricted Bandedge:

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. PK=Peak: Peak detector.
4. AV=Average:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
4. All modes have been tested, but only the worst data was recorded in the report.
5.  $dBuA/m = dBuV/m - 20\log_{10}[120\pi] = dBuV/m - 51.5$

For Radiate Spurious Emission (30 MHz ~ 1 GHz):

Note:

1. Result Level = Read Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (1 GHz ~ 3 GHz):

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (3 GHz ~ 18 GHz):

Note:

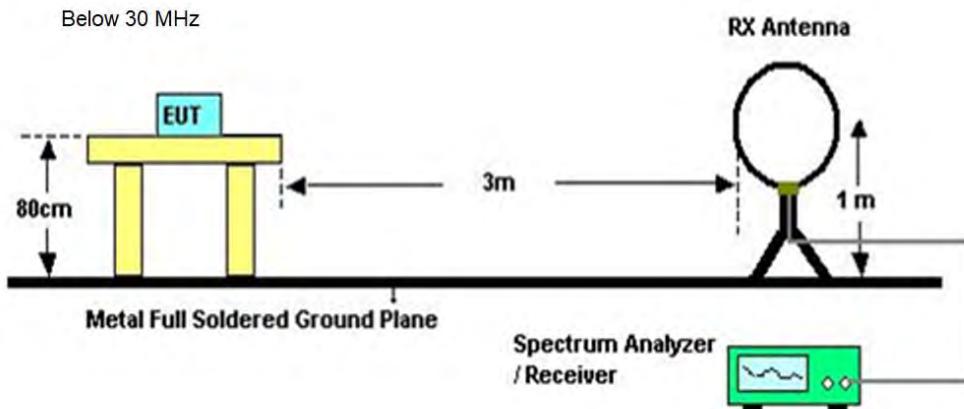
1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (18 GHz ~ 26 GHz):

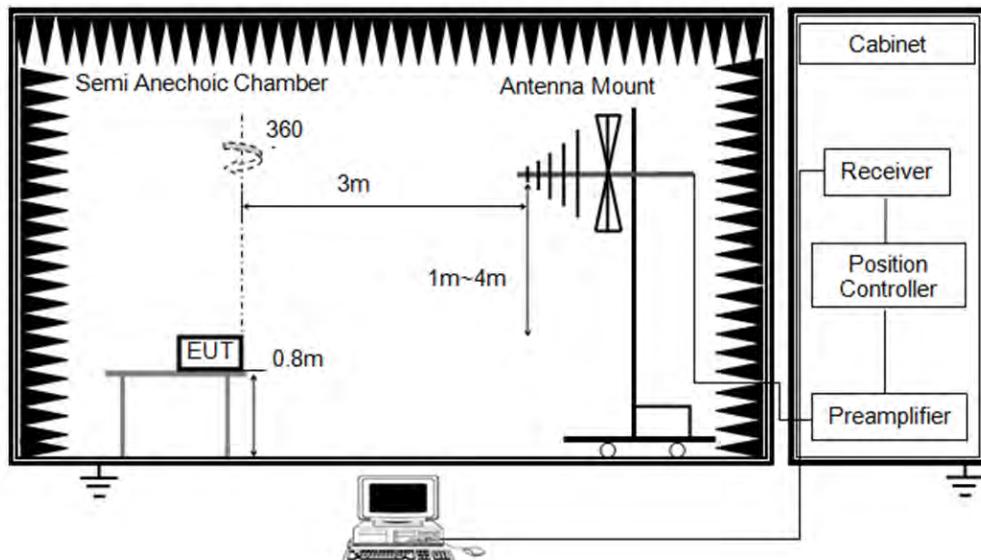
Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

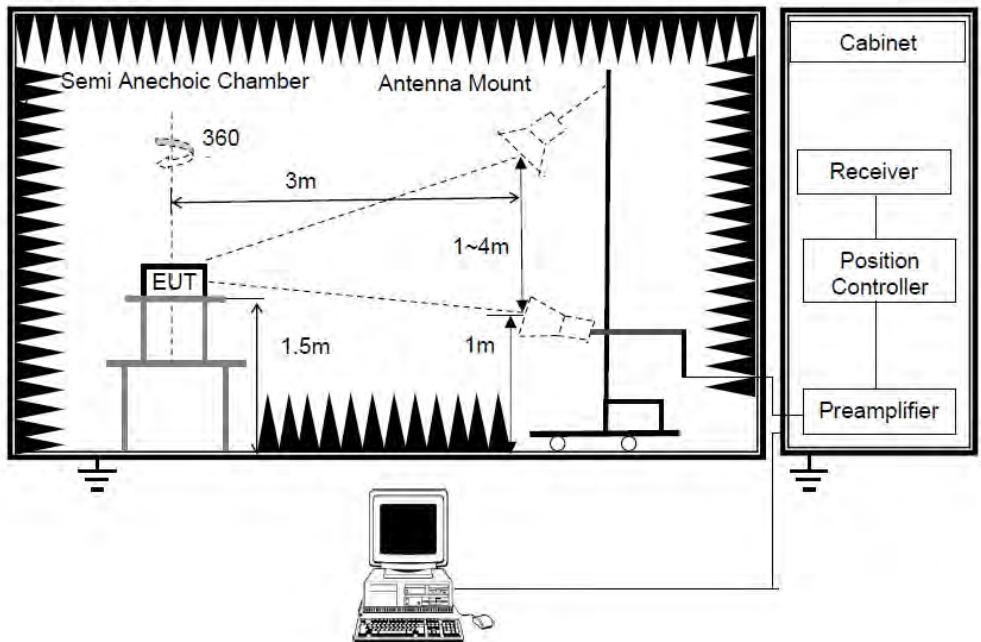
### **TEST SETUP**



Below 1 GHz and above 30 MHz



Above 1GHz



### TEST ENVIRONMENT

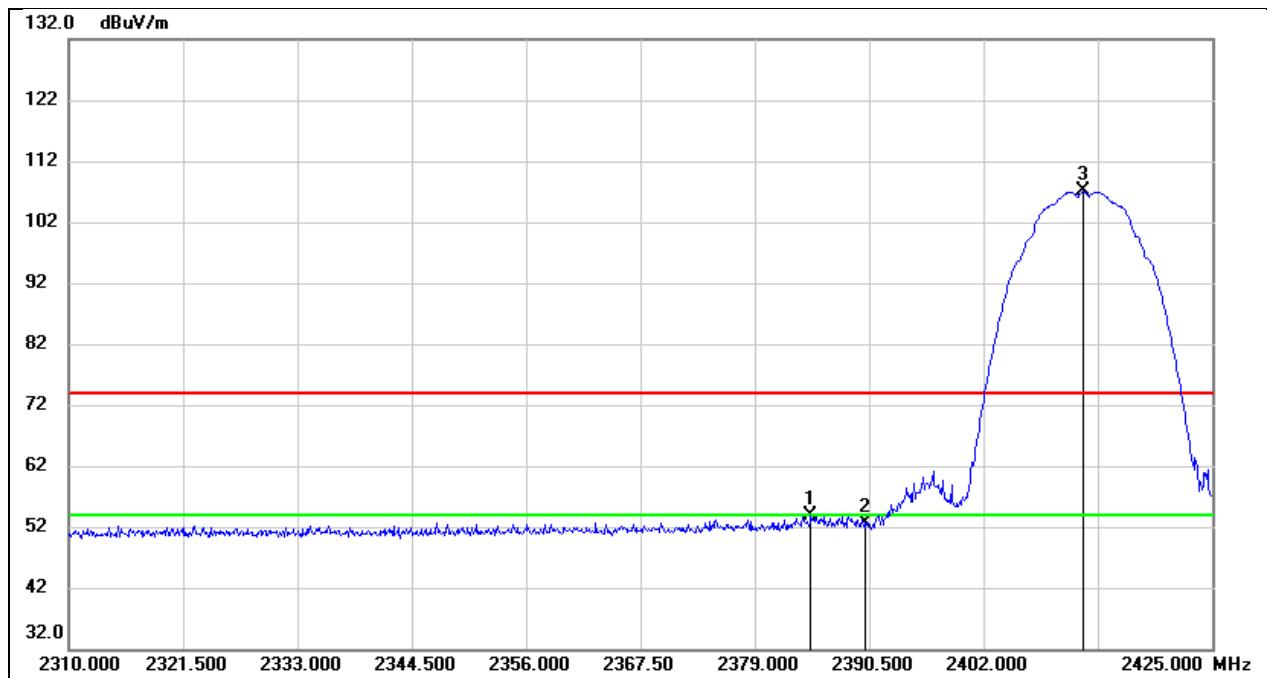
Temperature	22.6°C	Relative Humidity	58.3%
Atmosphere Pressure	101kPa	Test Voltage	

### TEST DATE / ENGINEER

Test Date	July 11, 2025	Test By	Mason Wang
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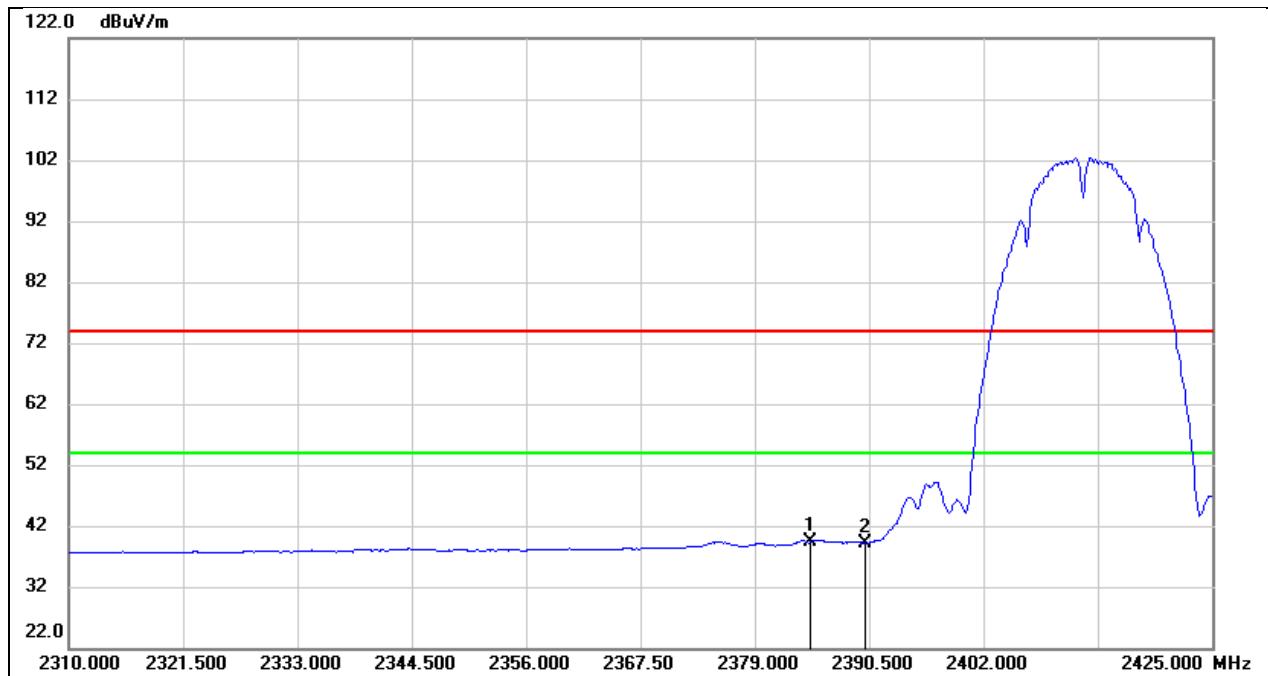
**TEST RESULTS**
**8.1. RESTRICTED BANEDGE OF RTL8733**

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



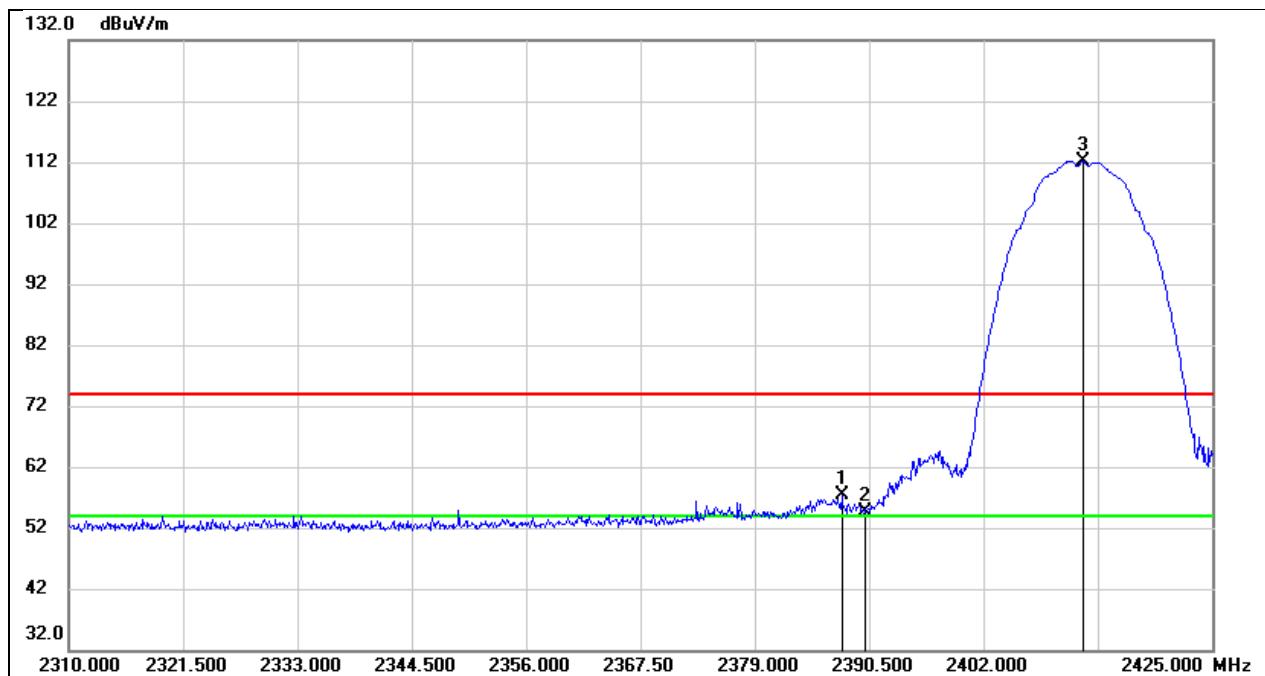
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.635	22.22	31.71	53.93	74.00	-20.07	peak
2	2390.000	20.83	31.73	52.56	74.00	-21.44	peak
3	2412.000	75.25	31.80	107.05	/	/	Fundamental

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



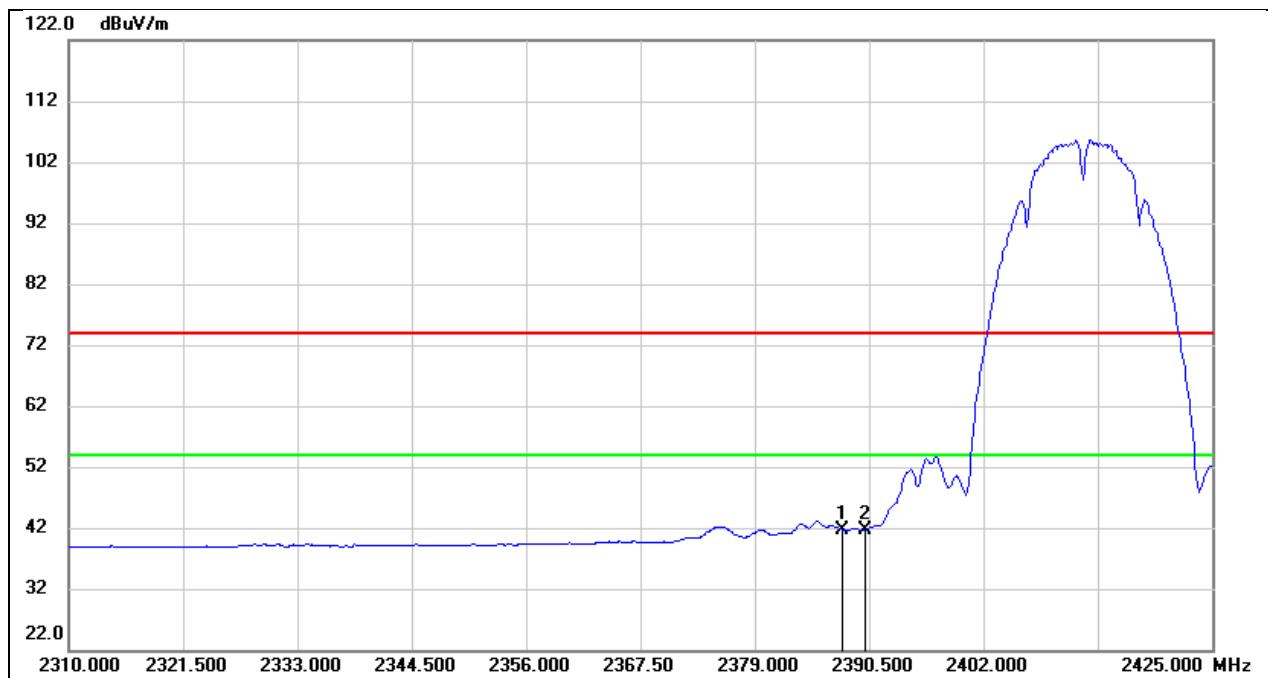
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.635	7.57	31.71	39.28	54.00	-14.72	AVG
2	2390.000	7.44	31.73	39.17	54.00	-14.83	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



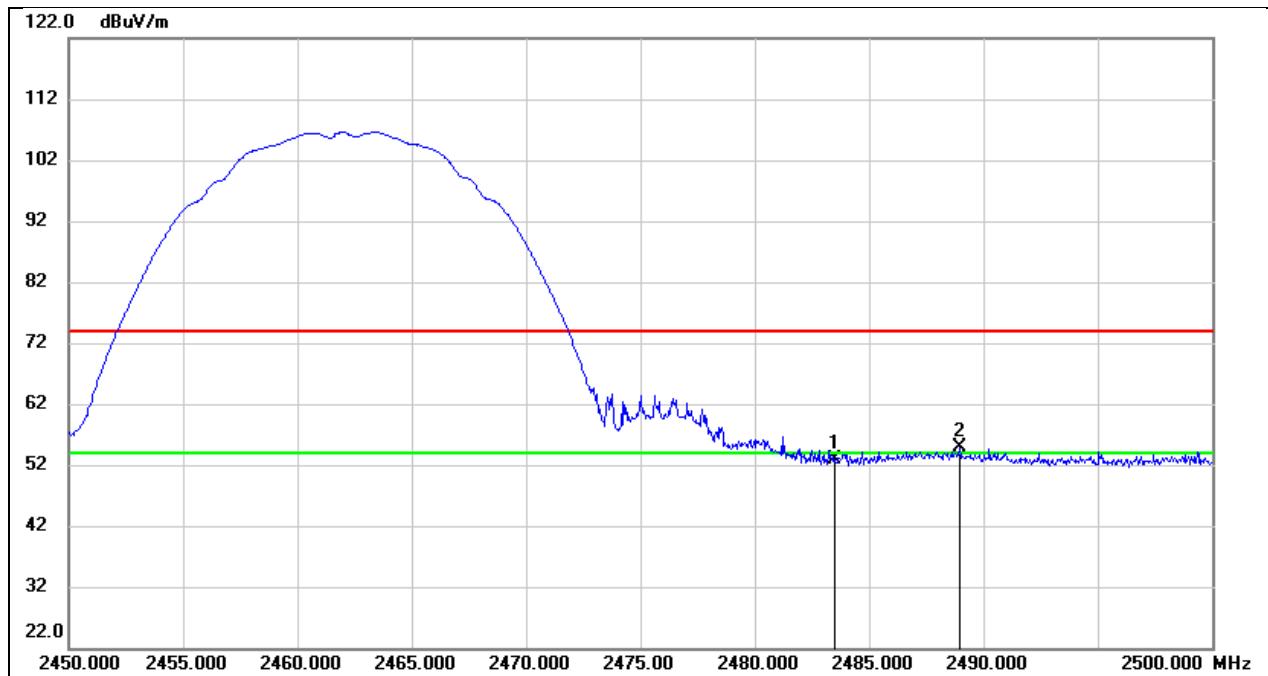
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.740	24.79	32.55	57.34	74.00	-16.66	peak
2	2390.000	22.06	32.55	54.61	74.00	-19.39	peak
3	2412.000	79.61	32.62	112.23	/	/	Fundamental

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



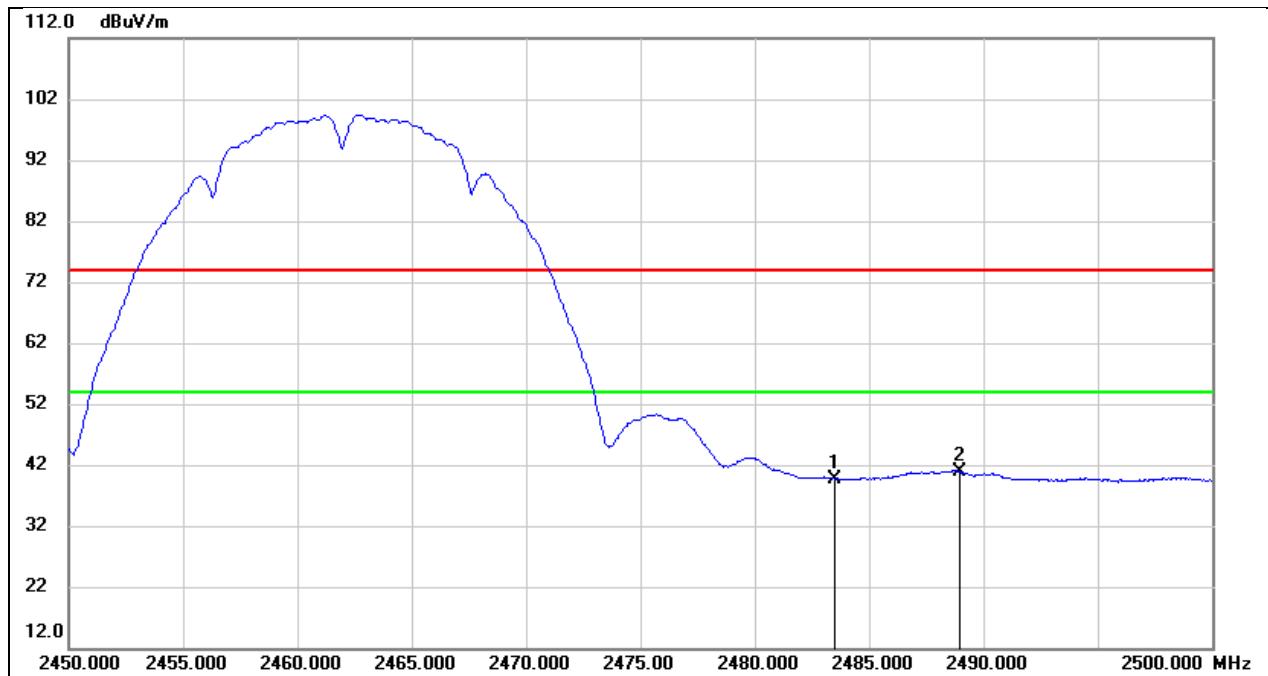
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.740	9.14	32.55	41.69	54.00	-12.31	AVG
2	2390.000	8.98	32.55	41.53	54.00	-12.47	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



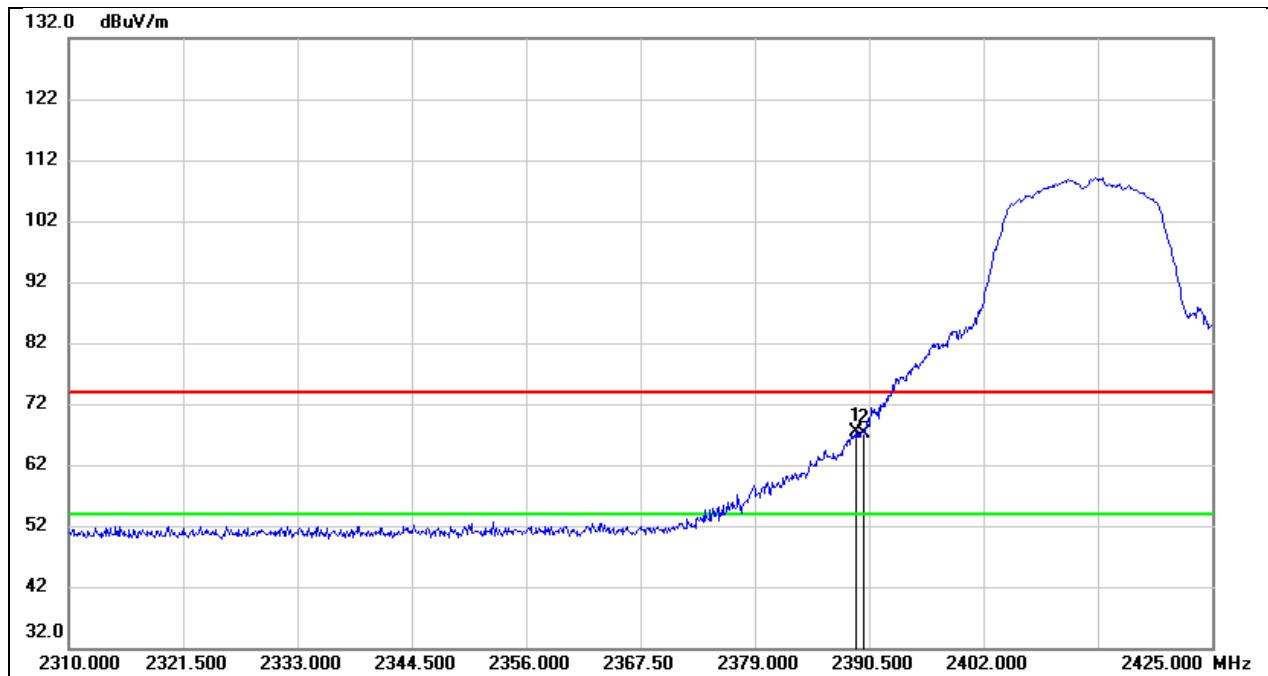
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.87	32.00	52.87	74.00	-21.13	peak
2	2488.950	22.84	32.01	54.85	74.00	-19.15	peak

Test Mode:	802.11b AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



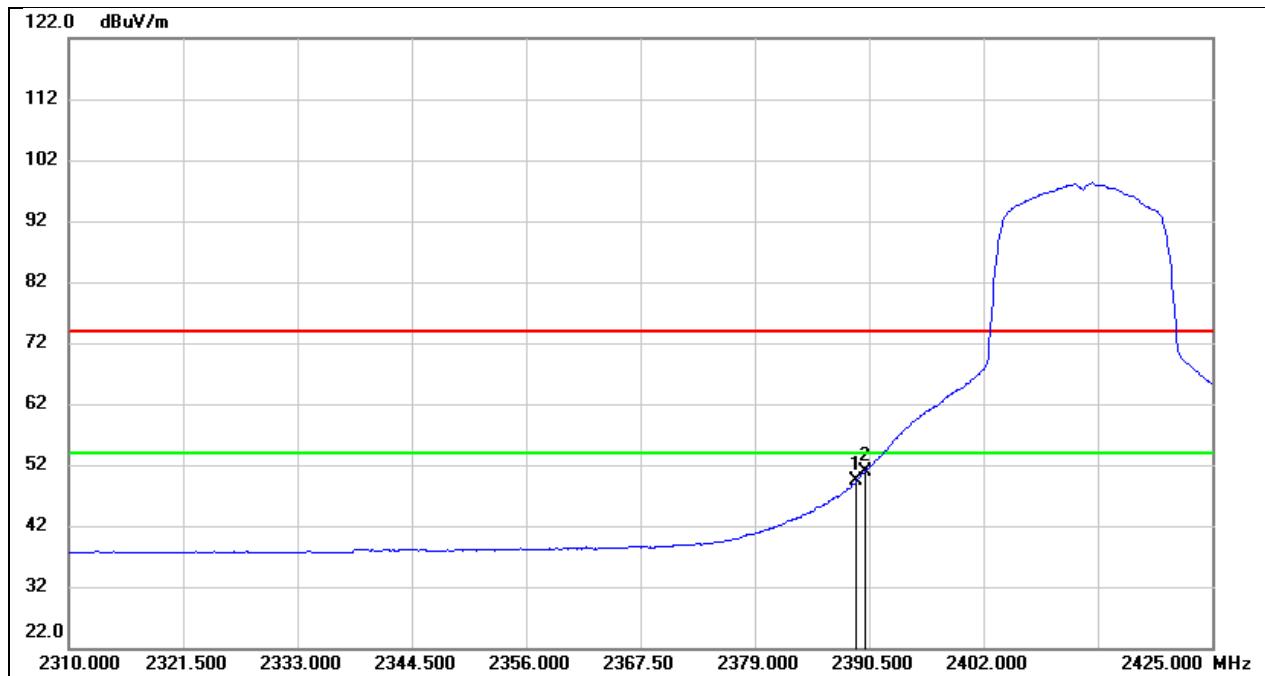
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	7.71	32.00	39.71	54.00	-14.29	AVG
2	2488.950	8.88	32.01	40.89	54.00	-13.11	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



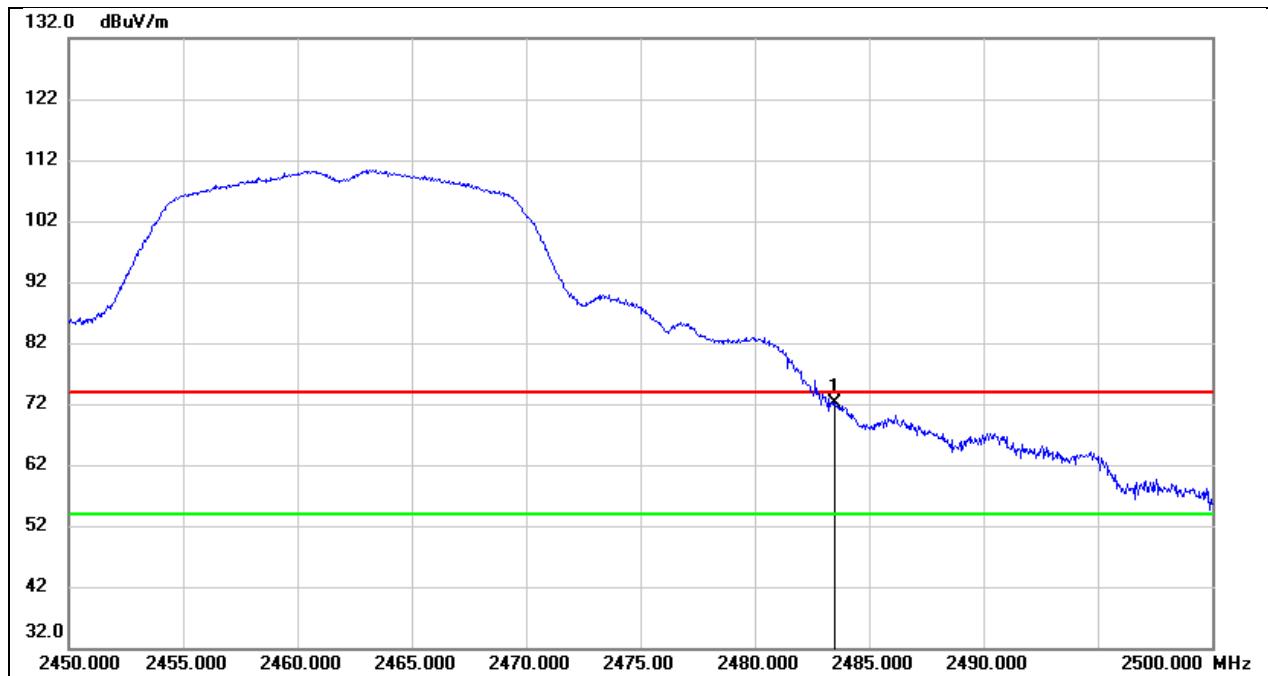
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.235	35.77	31.73	67.50	74.00	-6.50	peak
2	2390.000	35.36	31.73	67.09	74.00	-6.91	peak

Test Mode:	802.11g AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



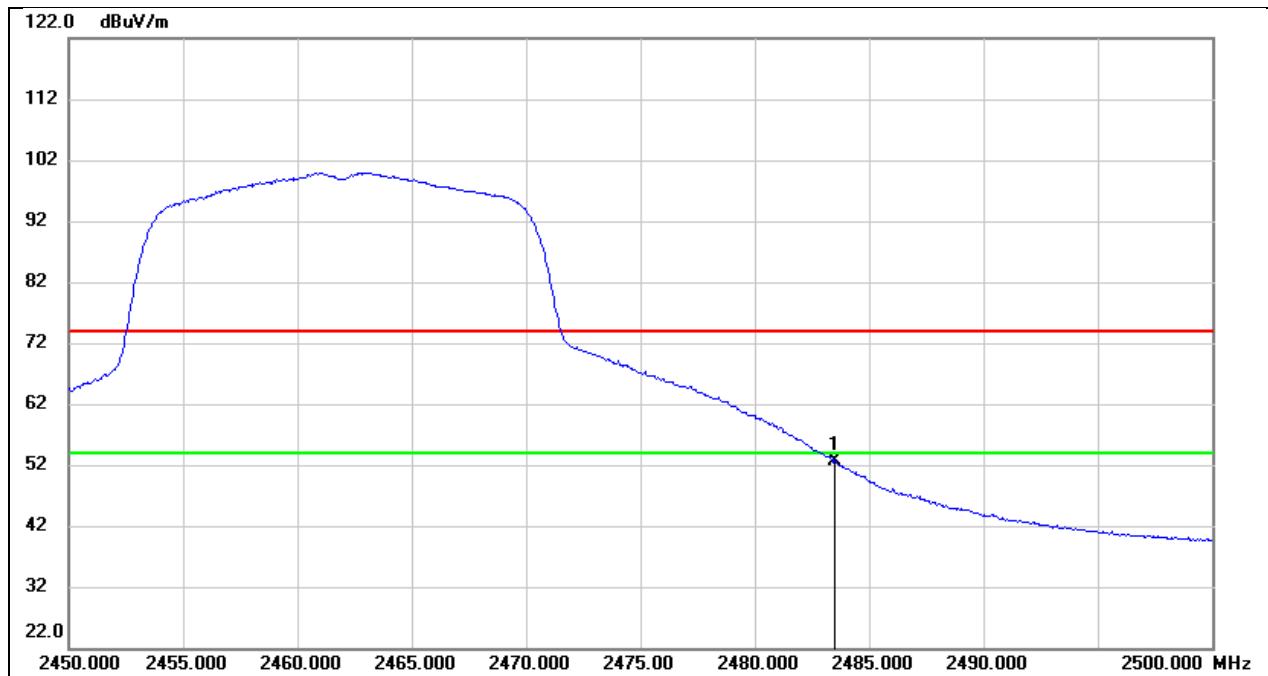
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.235	17.67	31.73	49.40	54.00	-4.60	AVG
2	2390.000	19.20	31.73	50.93	54.00	-3.07	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



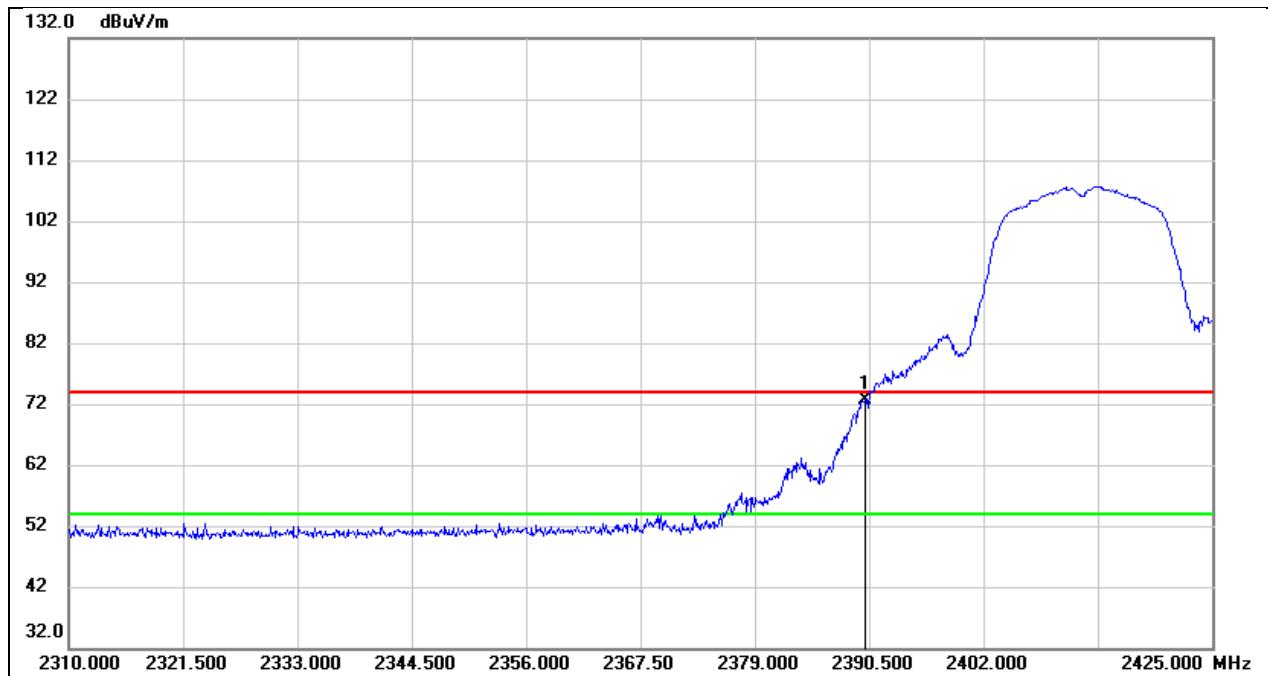
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.09	32.00	72.09	74.00	-1.91	peak

Test Mode:	802.11g AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



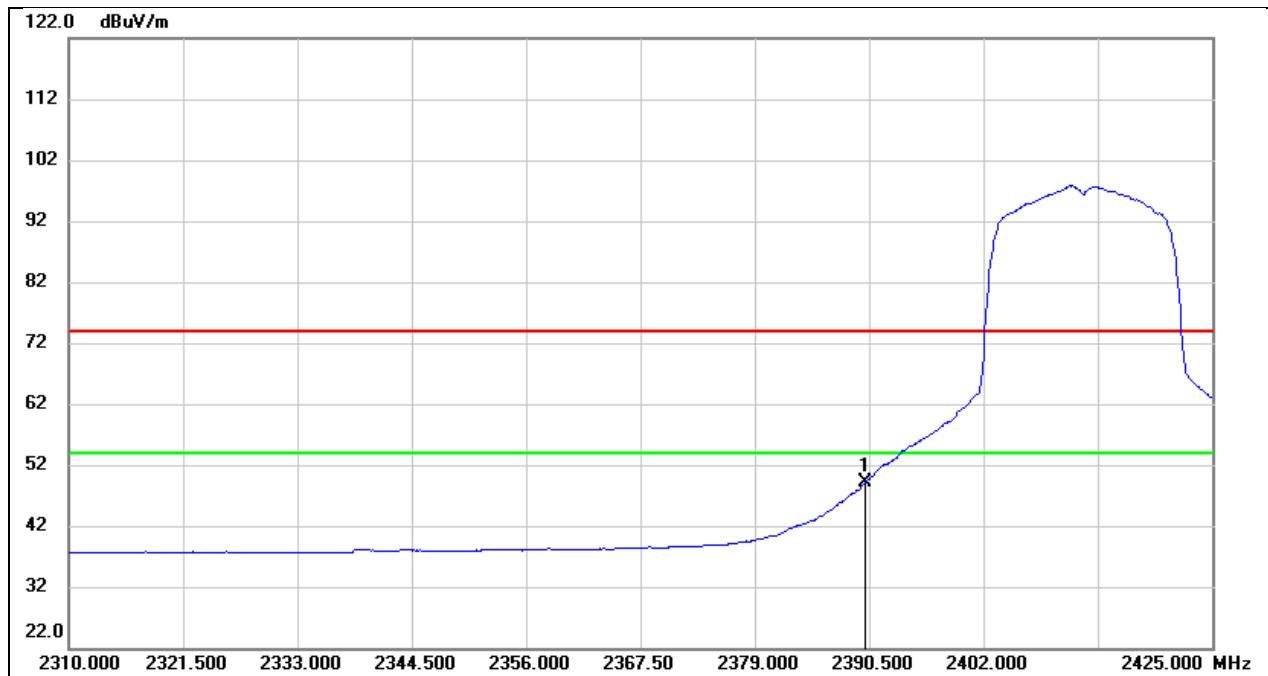
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.58	32.00	52.58	54.00	-1.42	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



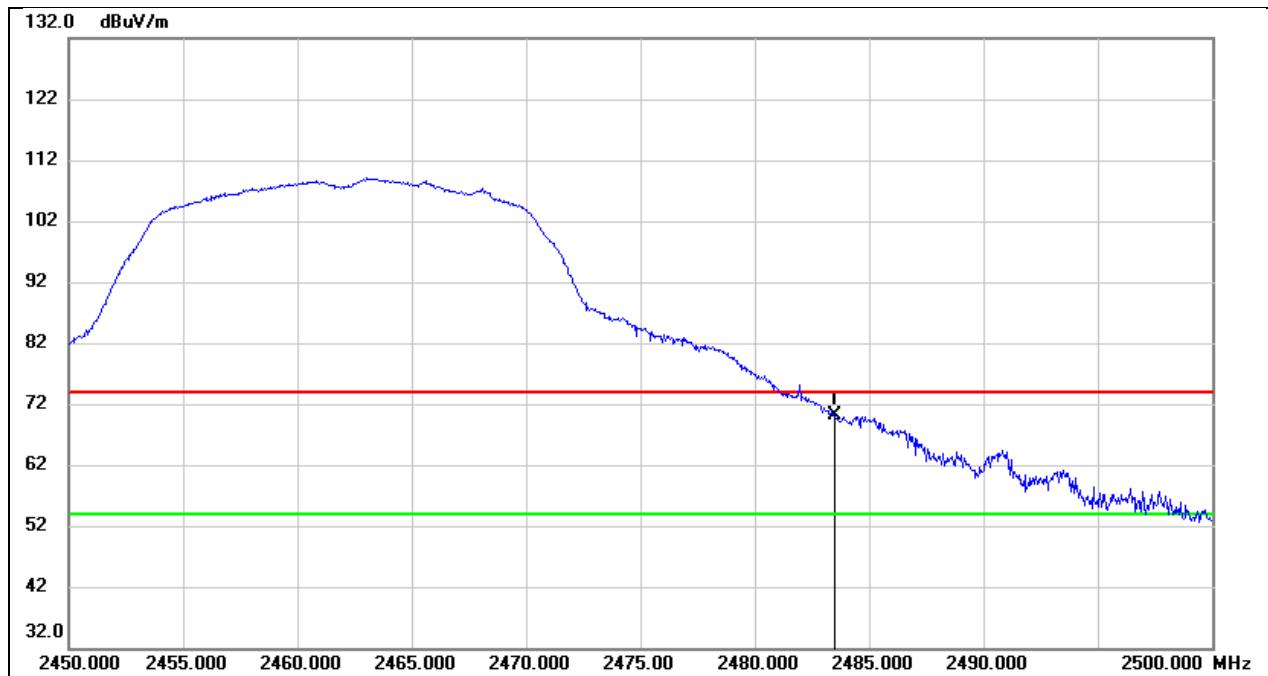
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	40.80	31.73	72.53	74.00	-1.47	peak

Test Mode:	802.11n HT20 AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



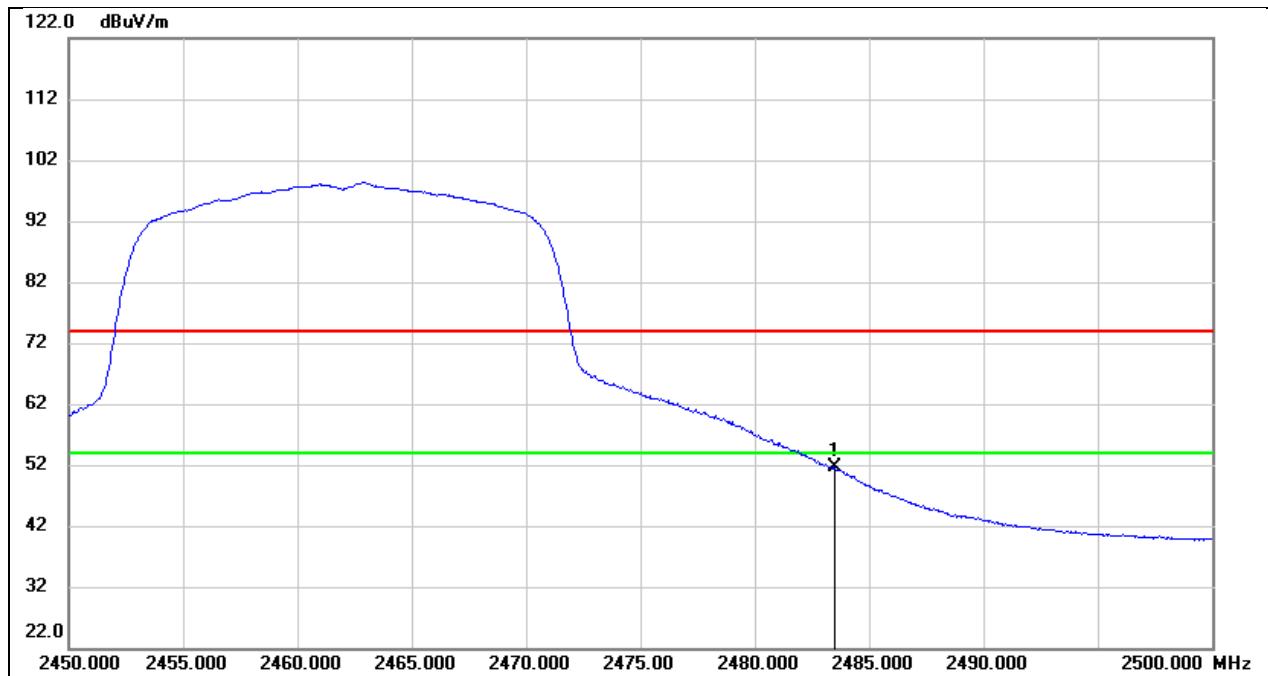
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	17.38	31.73	49.11	54.00	-4.89	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	38.01	32.00	70.01	74.00	-3.99	peak

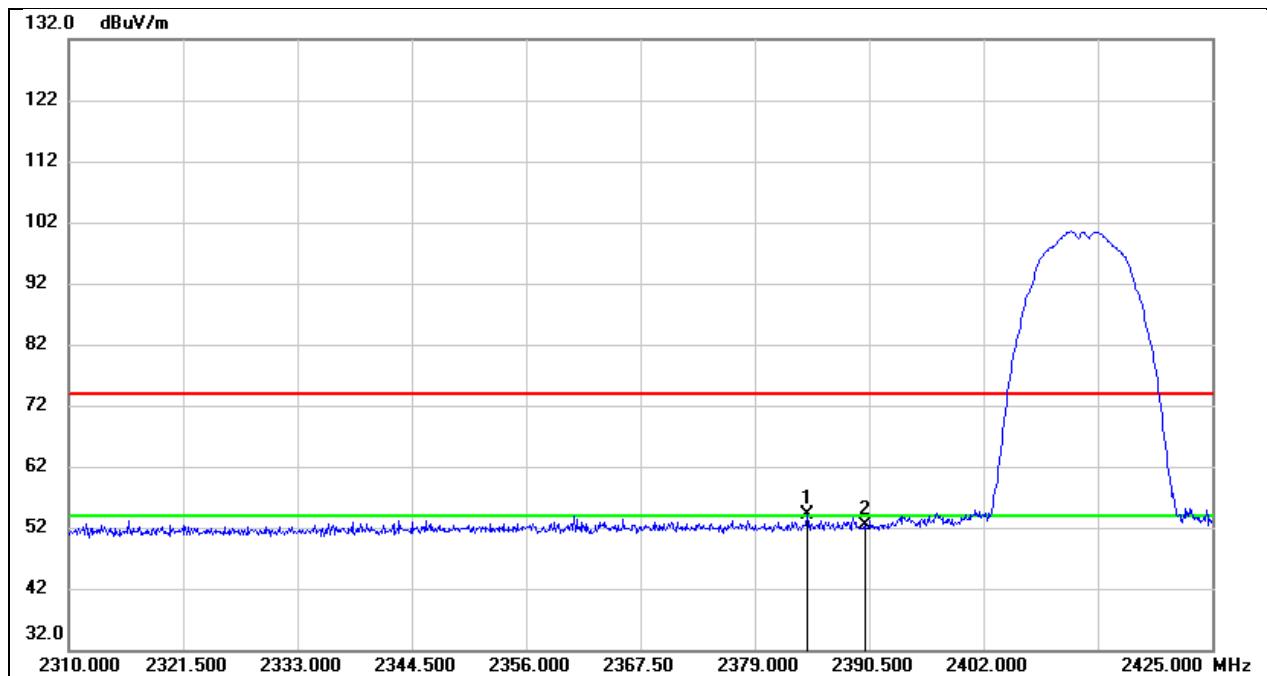
Test Mode:	802.11n HT20 AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	19.61	32.00	51.61	54.00	-2.39	AVG

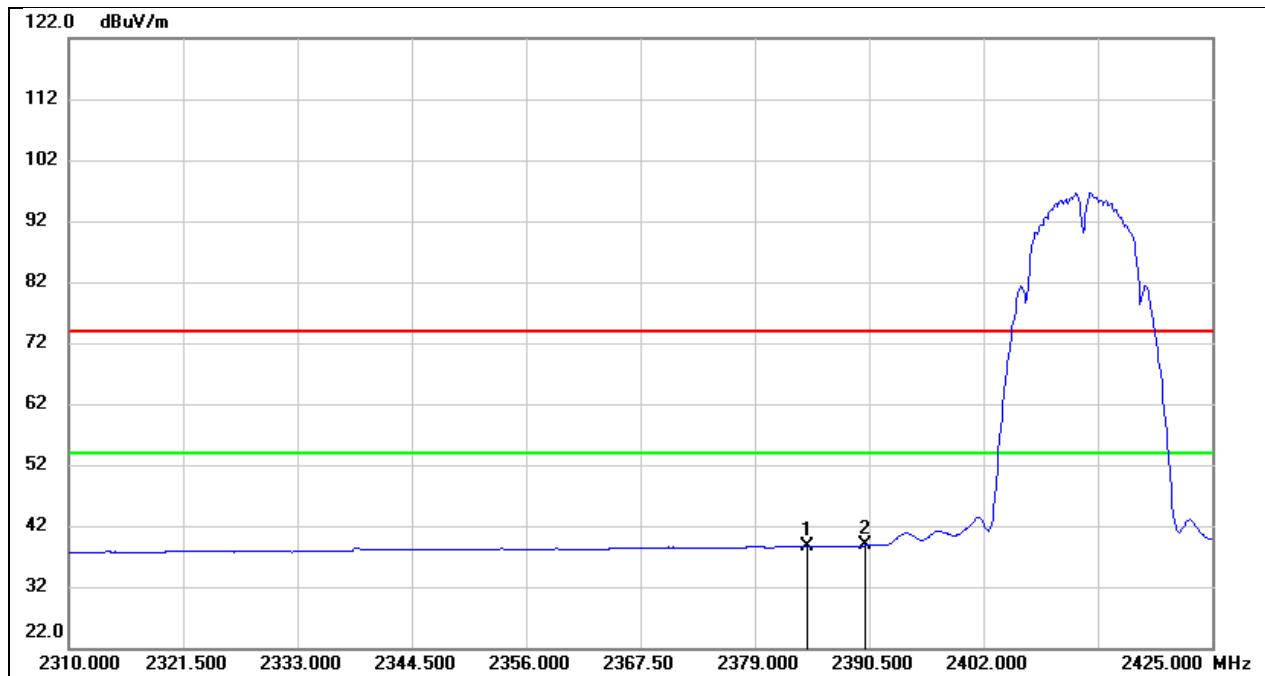
## 8.1. RESTRICTED BANDEDGE OF XL100

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



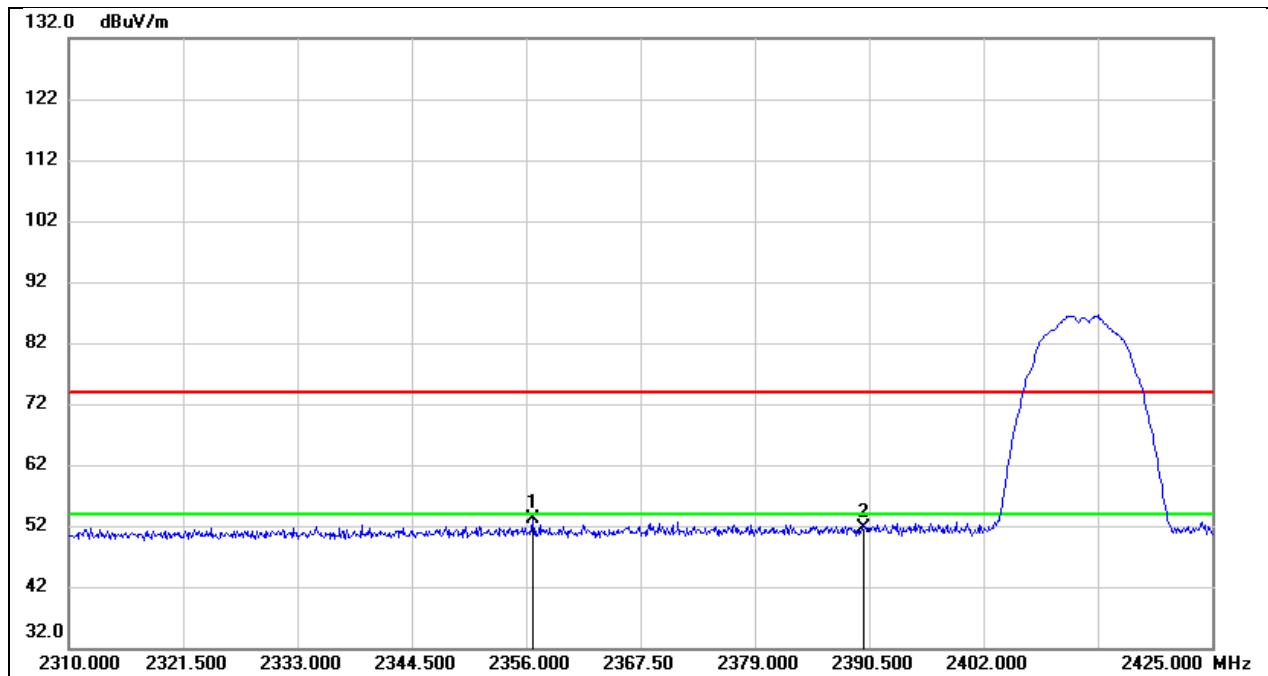
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.290	21.61	32.53	54.14	74.00	-19.86	peak
2	2390.000	19.92	32.55	52.47	74.00	-21.53	peak

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



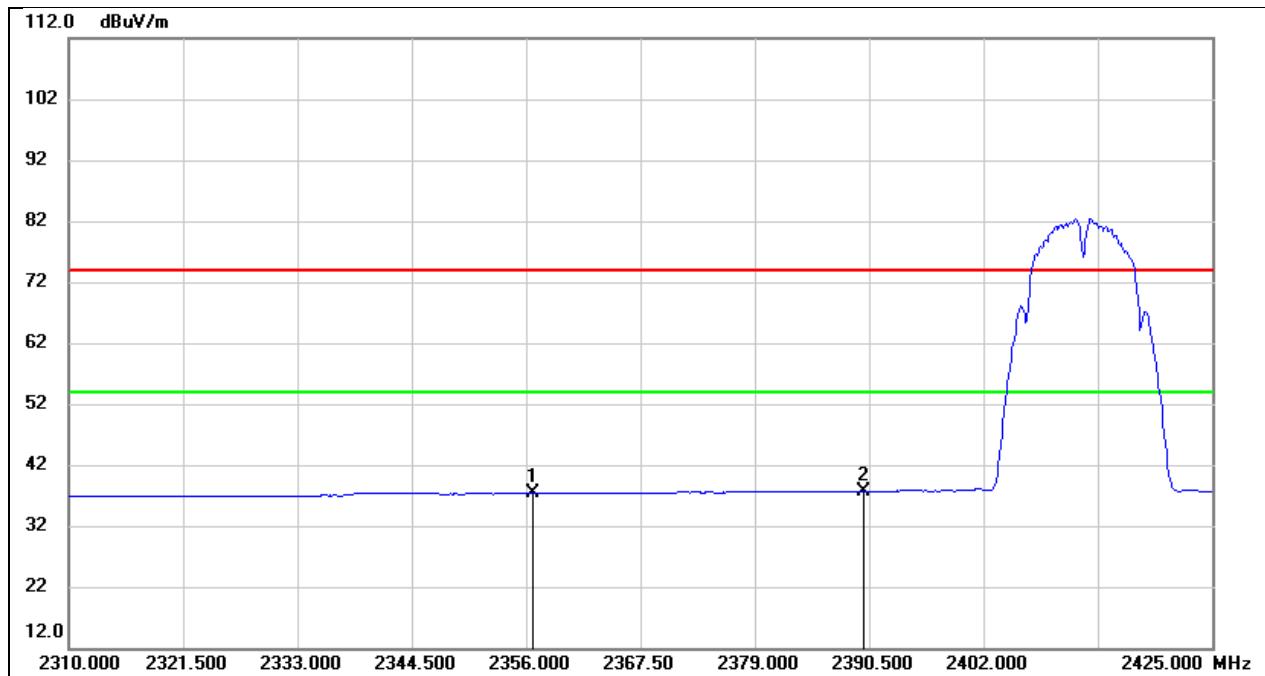
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.290	6.00	32.53	38.53	54.00	-15.47	AVG
2	2390.000	6.22	32.55	38.77	54.00	-15.23	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



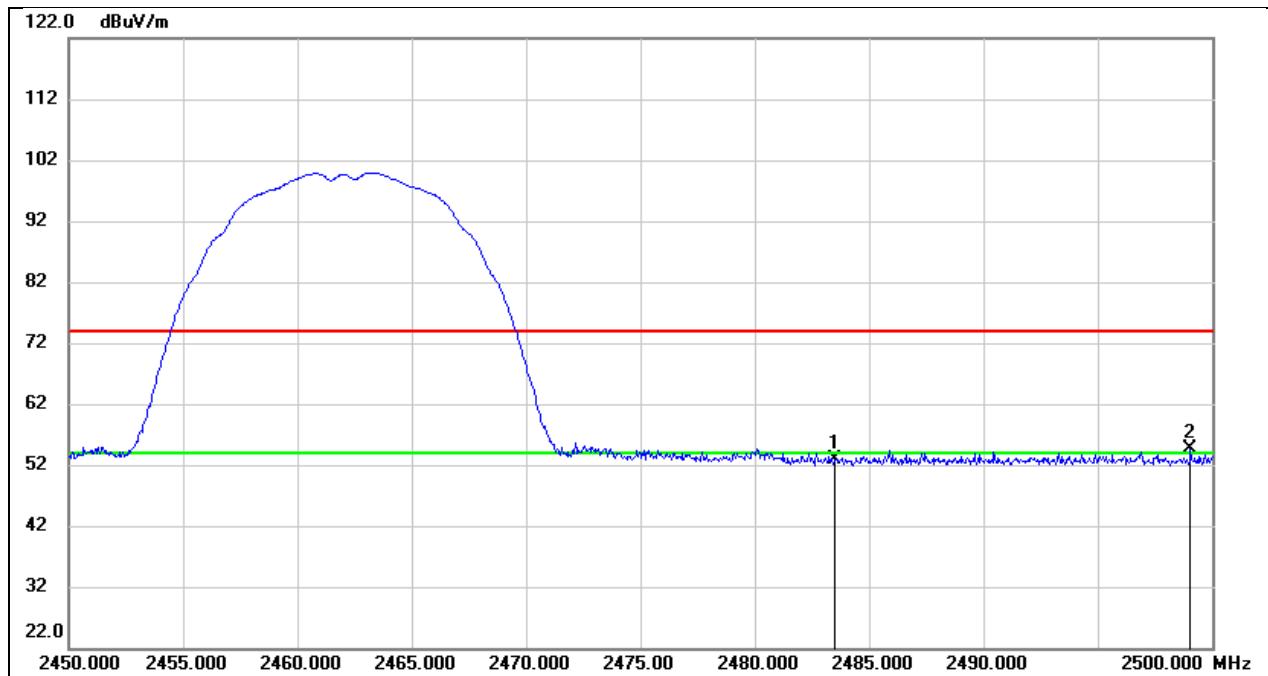
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2356.690	21.44	31.60	53.04	74.00	-20.96	peak
2	2390.000	19.91	31.73	51.64	74.00	-22.36	peak

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



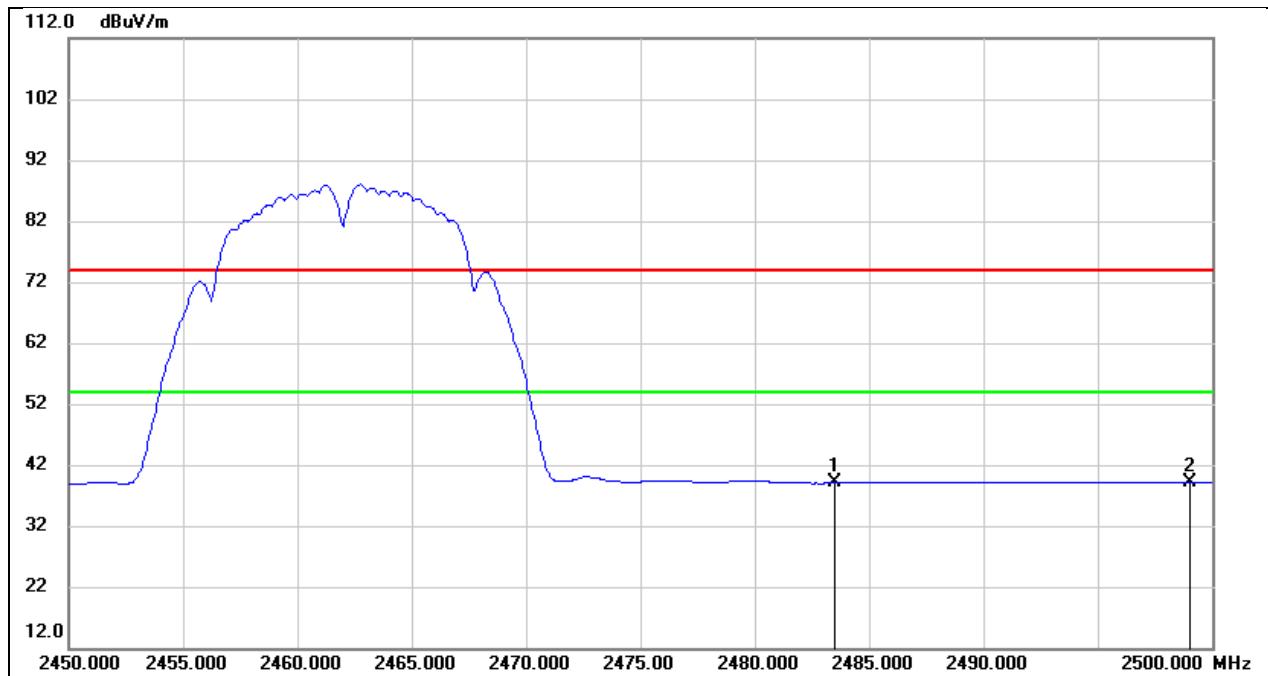
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2356.590	5.71	31.60	37.31	54.00	-16.69	AVG
2	2390.000	5.90	31.73	37.63	54.00	-16.37	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



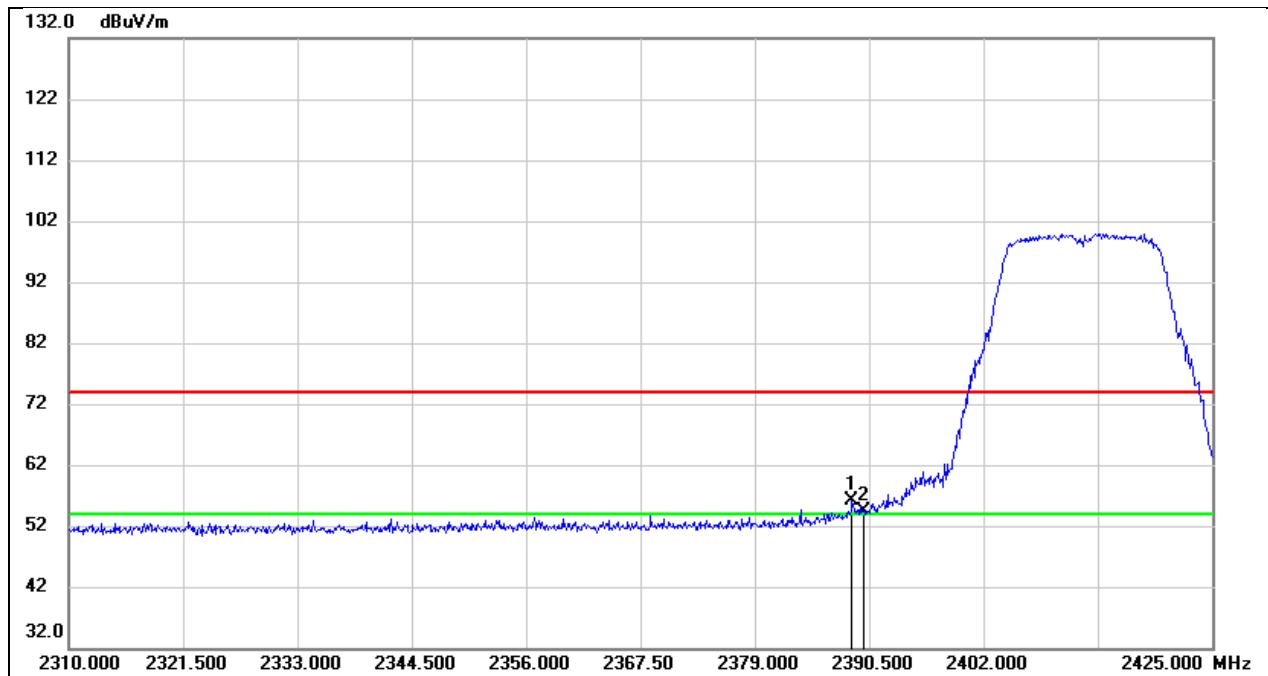
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.14	32.80	52.94	74.00	-21.06	peak
2	2499.050	21.83	32.84	54.67	74.00	-19.33	peak

Test Mode:	802.11b AV	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



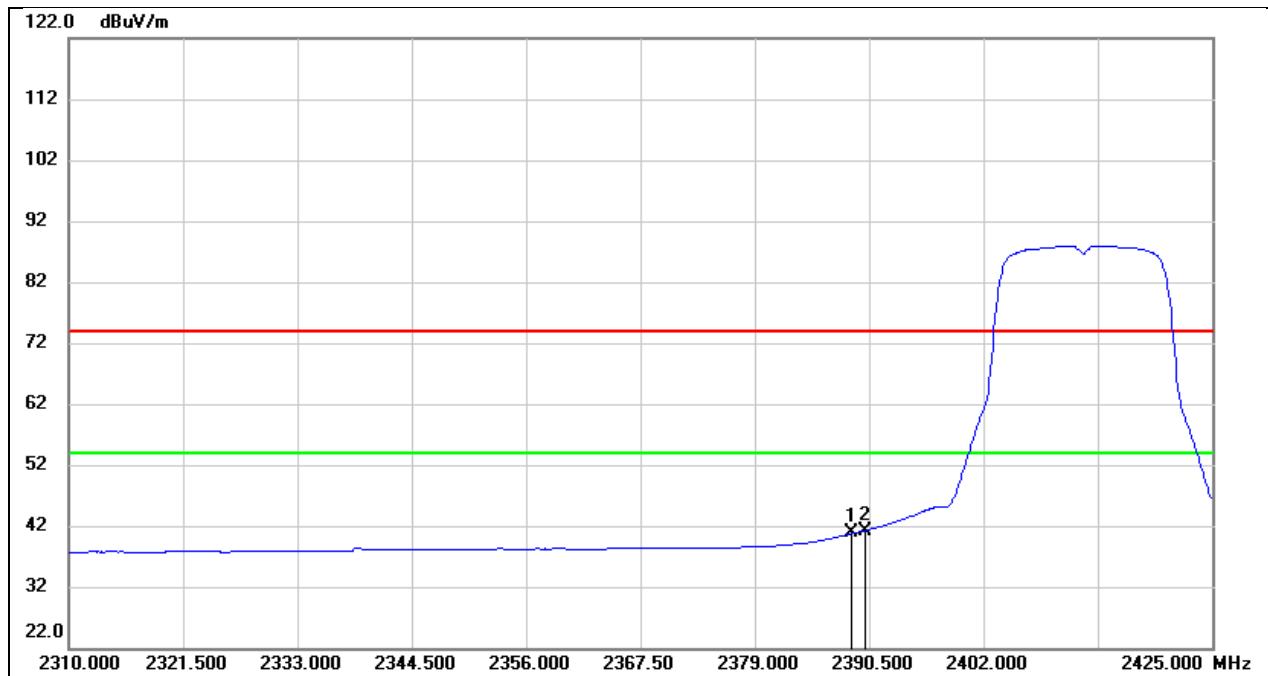
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	6.23	32.80	39.03	54.00	-14.97	AVG
2	2499.050	6.36	32.84	39.20	54.00	-14.80	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



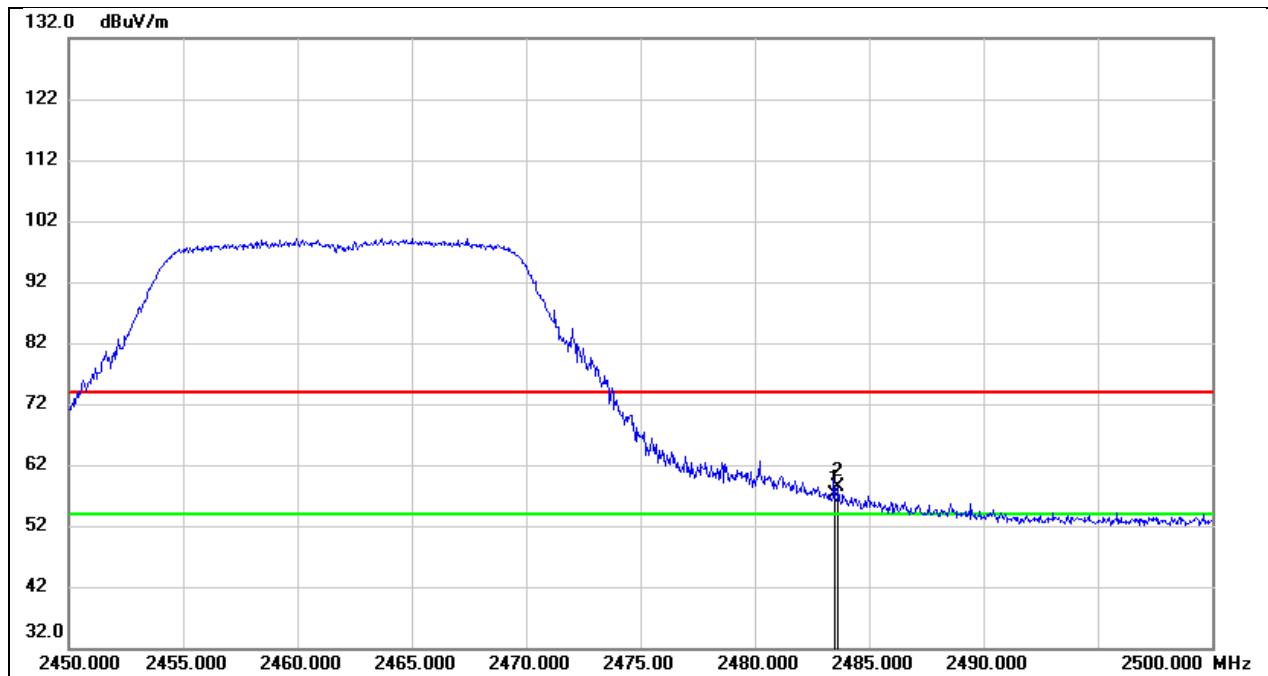
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.775	23.54	32.55	56.09	74.00	-17.91	peak
2	2390.000	21.81	32.55	54.36	74.00	-19.64	peak

Test Mode:	802.11g AV	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



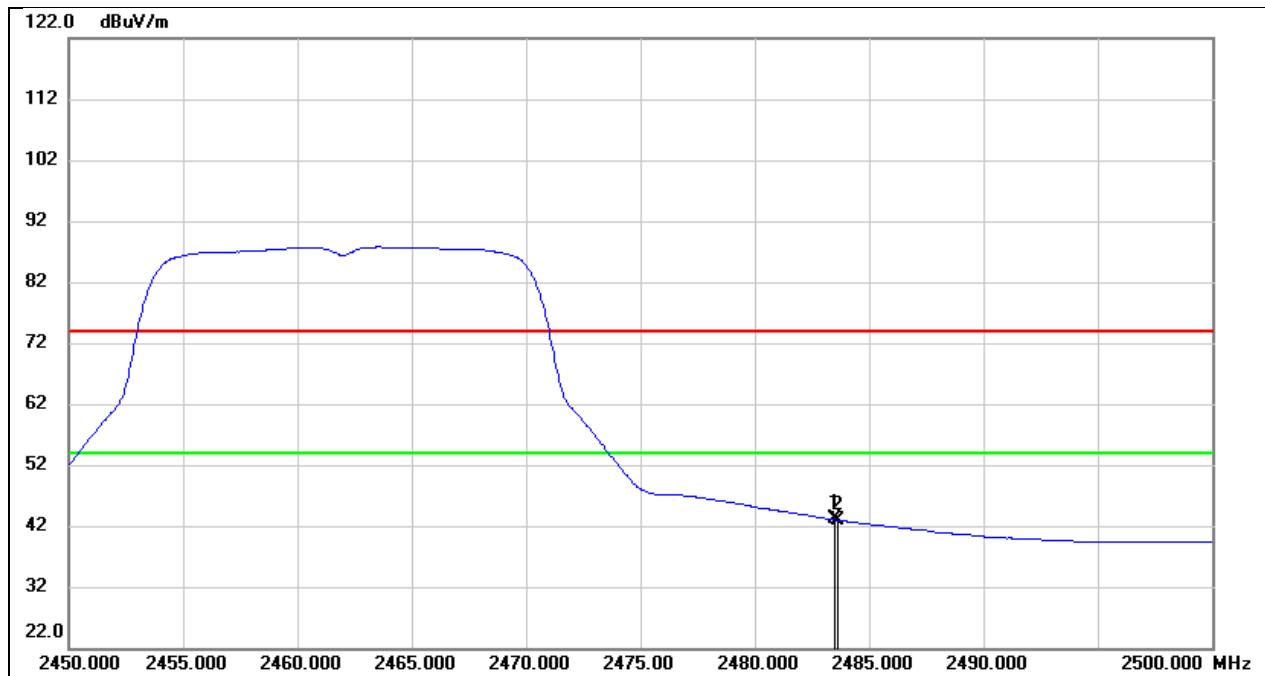
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.775	8.25	32.55	40.80	54.00	-13.20	AVG
2	2390.000	8.67	32.55	41.22	54.00	-12.78	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



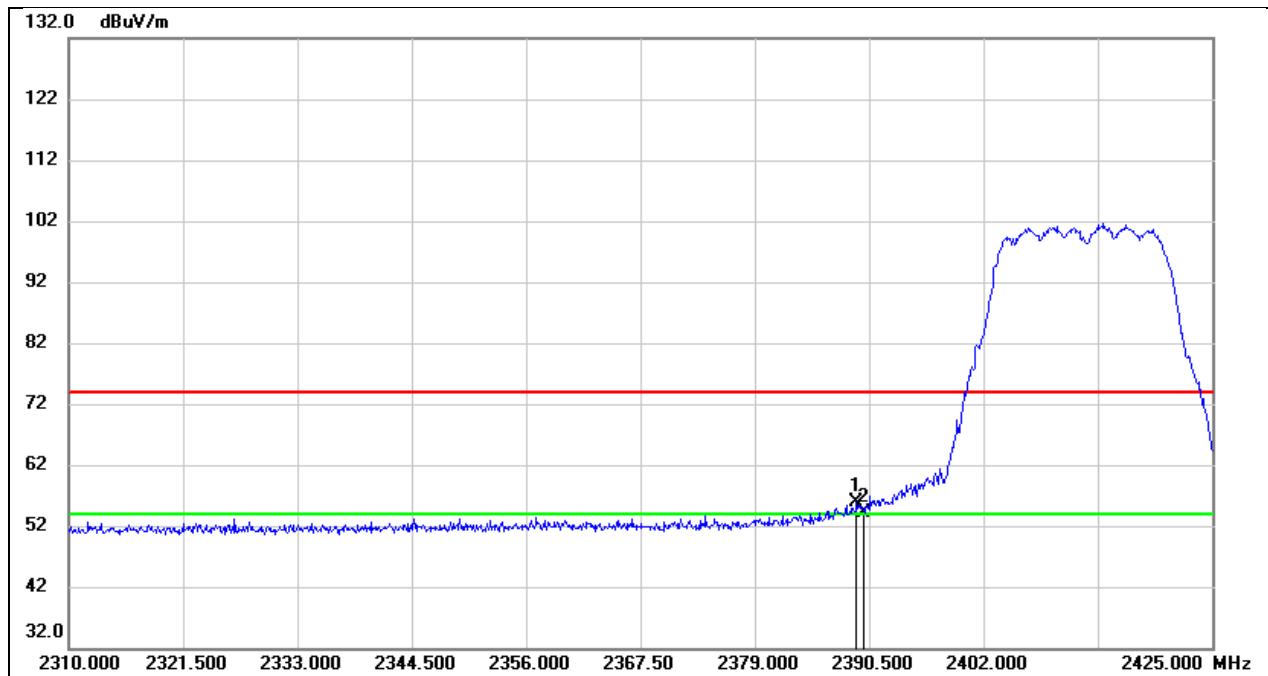
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	24.33	32.80	57.13	74.00	-16.87	peak
2	2483.650	25.55	32.80	58.35	74.00	-15.65	peak

Test Mode:	802.11g AV	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



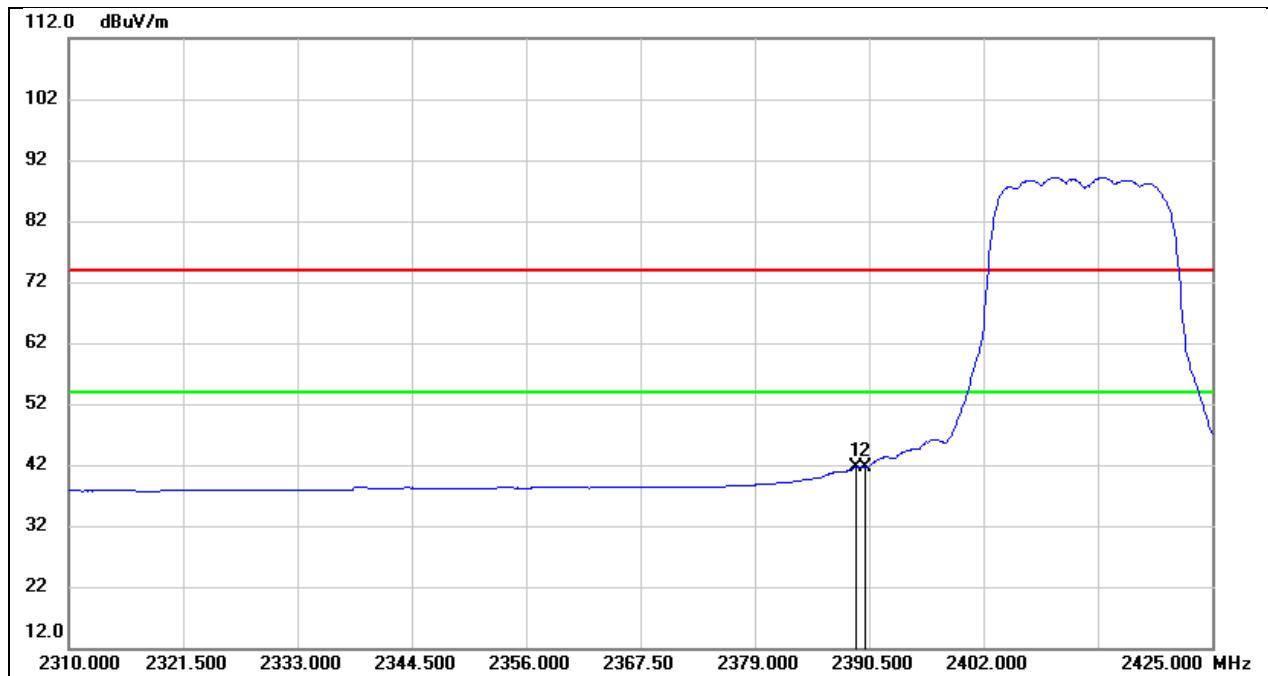
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	10.24	32.80	43.04	54.00	-10.96	AVG
2	2483.650	10.10	32.80	42.90	54.00	-11.10	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



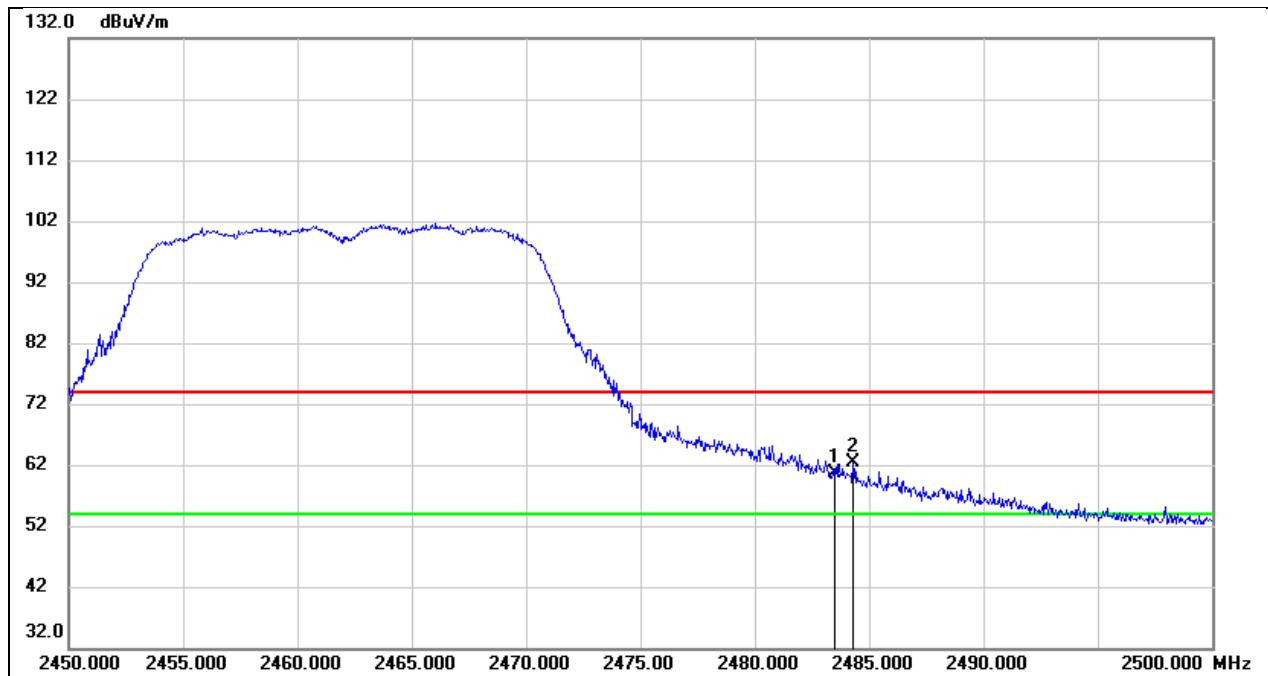
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.235	23.22	32.55	55.77	74.00	-18.23	peak
2	2390.000	21.64	32.55	54.19	74.00	-19.81	peak

Test Mode:	802.11n HT20 AV	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



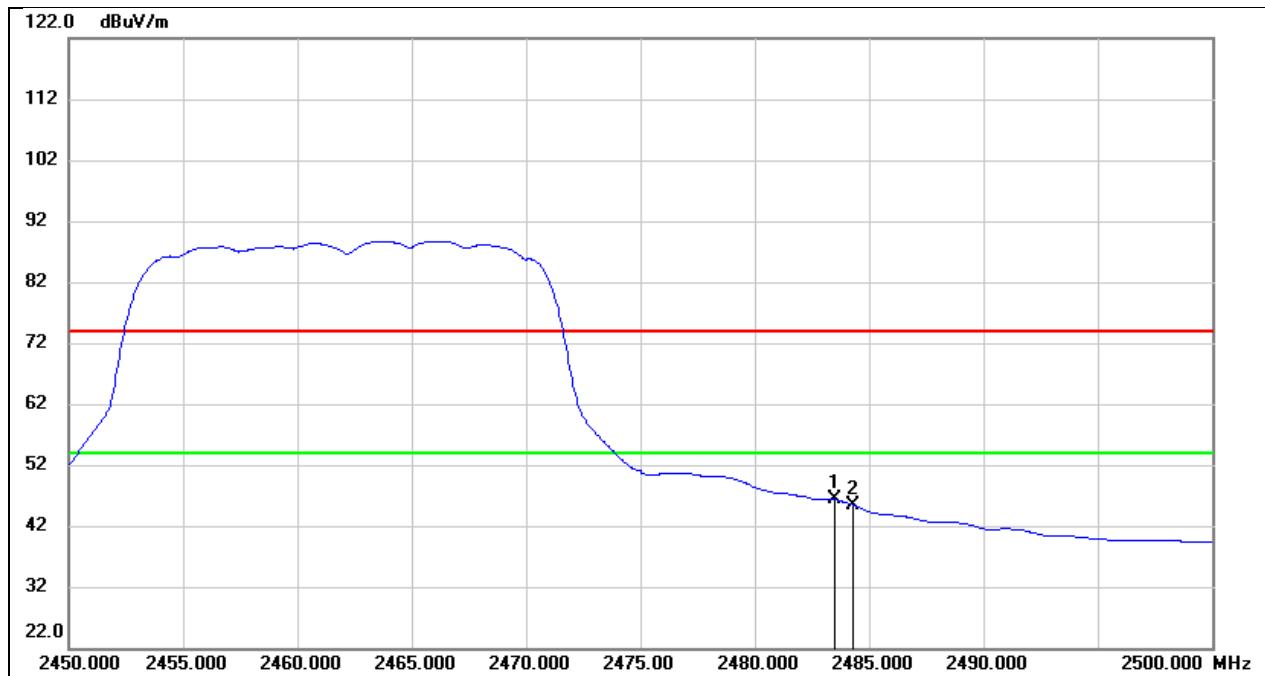
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.235	9.08	32.55	41.63	54.00	-12.37	AVG
2	2390.000	9.19	32.55	41.74	54.00	-12.26	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	27.78	32.80	60.58	74.00	-13.42	peak
2	2484.300	29.66	32.80	62.46	74.00	-11.54	peak

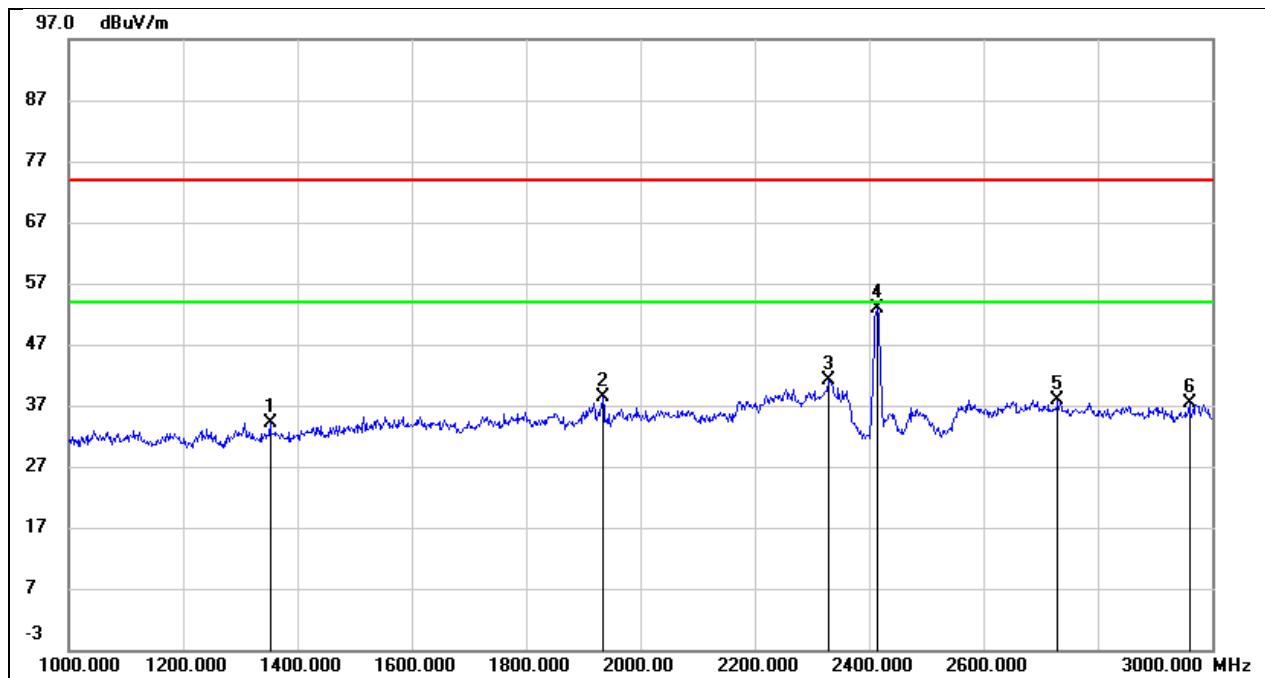
Test Mode:	802.11n HT20 AV	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.50	32.80	46.30	54.00	-7.70	AVG
2	2484.300	12.68	32.80	45.48	54.00	-8.52	AVG

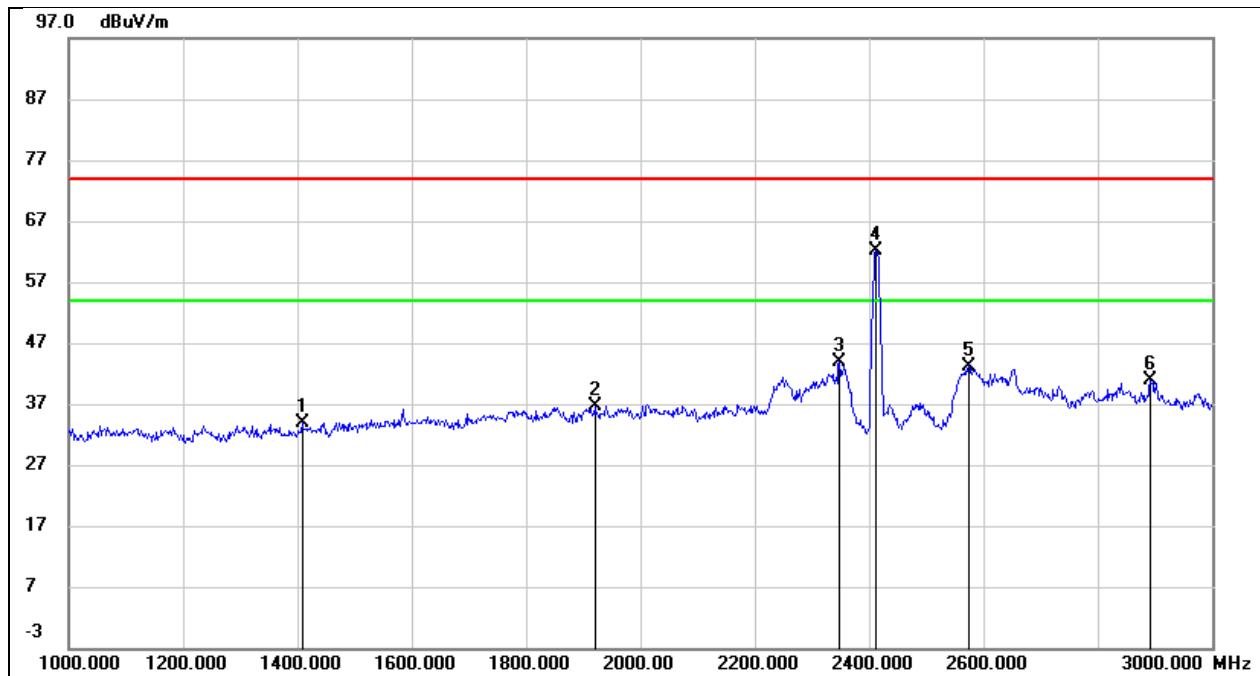
## 8.1. SPURIOUS EMISSIONS OF RTL8733(1 GHZ~3 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



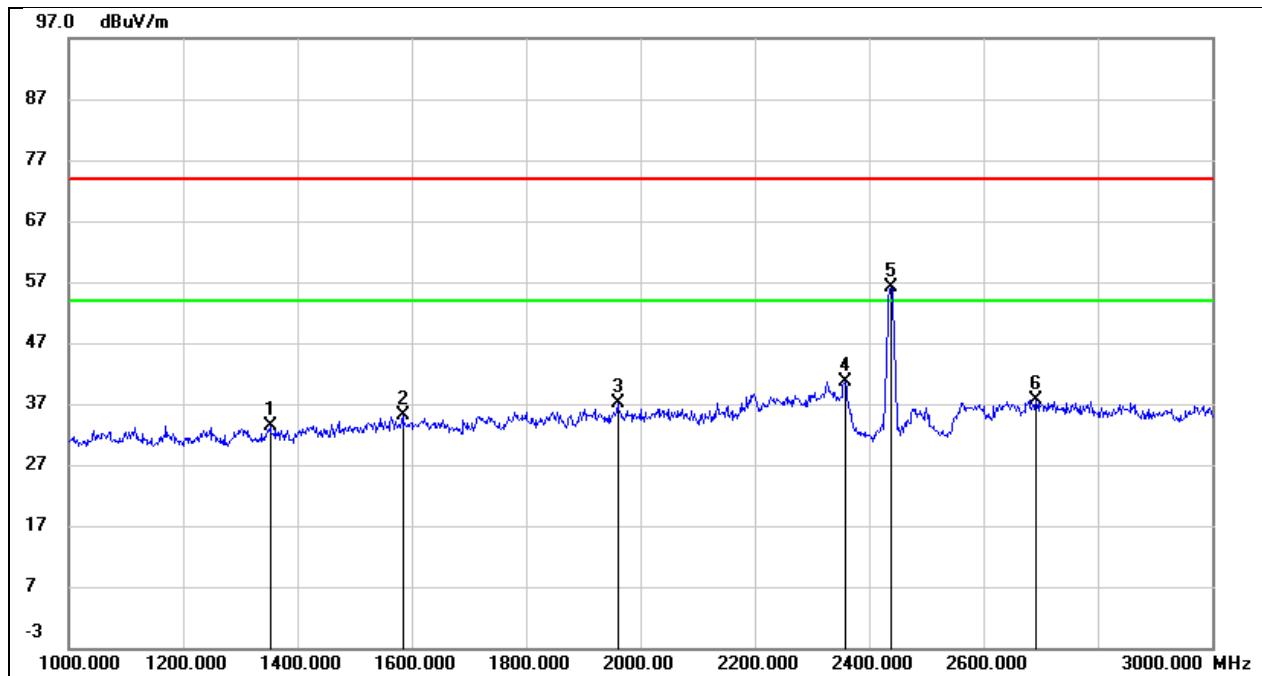
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1352.000	46.85	-12.70	34.15	74.00	-39.85	peak
2	1934.000	48.41	-10.06	38.35	74.00	-35.65	peak
3	2328.000	49.99	-8.85	41.14	74.00	-32.86	peak
4	2412.000	61.40	-8.53	52.87	74.00	-21.13	fundamental
5	2730.000	45.20	-7.21	37.99	74.00	-36.01	peak
6	2960.000	43.44	-6.18	37.26	74.00	-36.74	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



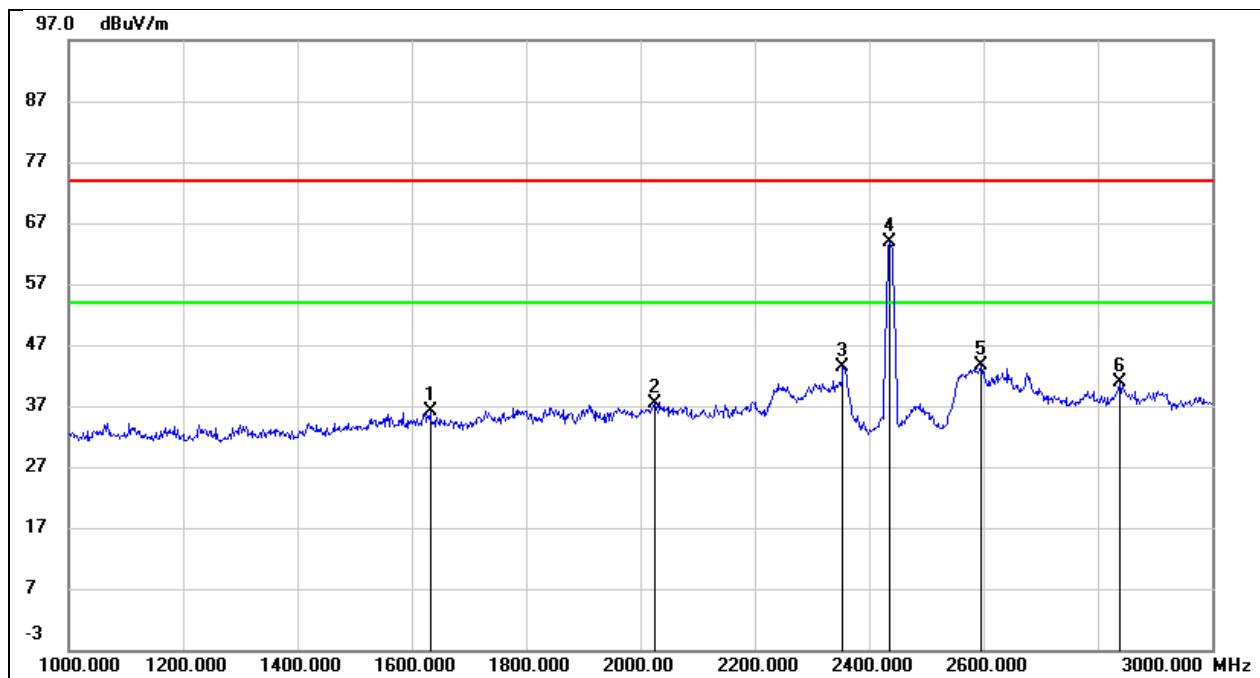
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1408.000	46.08	-12.21	33.87	74.00	-40.13	peak
2	1920.000	45.91	-9.27	36.64	74.00	-37.36	peak
3	2348.000	51.71	-7.95	43.76	74.00	-30.24	peak
4	2412.000	69.86	-7.73	62.13	\	\	fundamental
5	2574.000	50.25	-7.00	43.25	74.00	-30.75	peak
6	2892.000	46.17	-5.31	40.86	74.00	-33.14	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



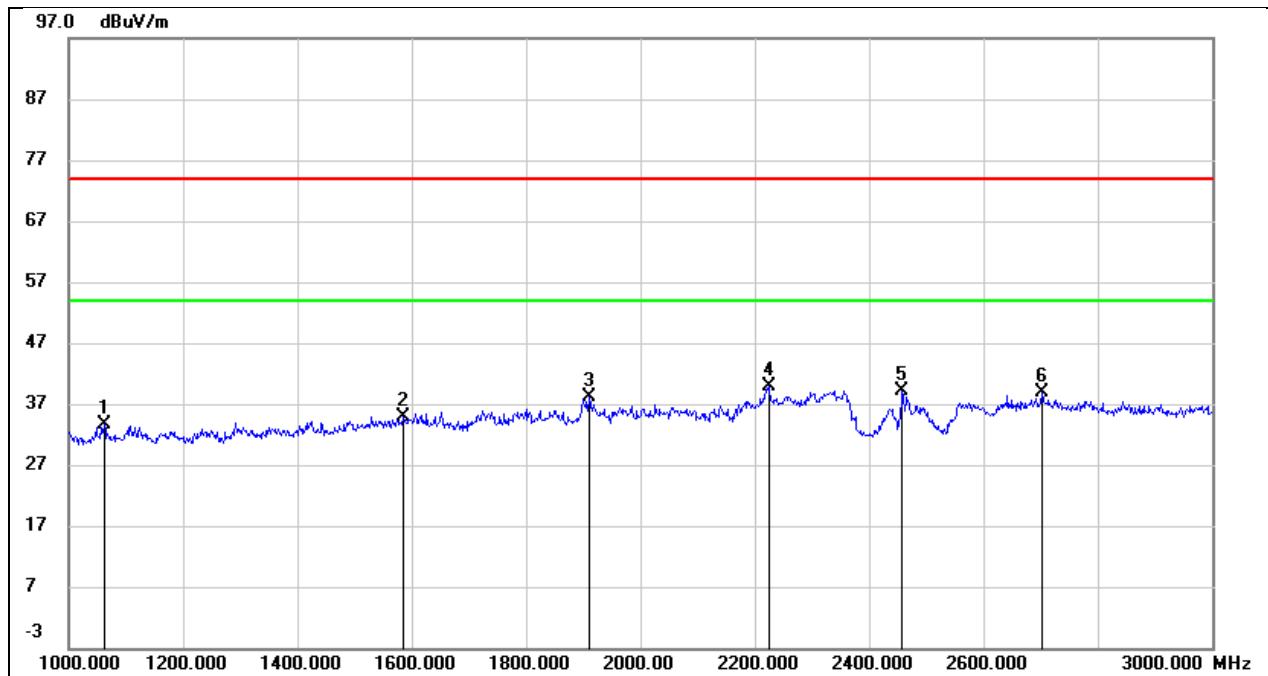
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1352.000	46.14	-12.70	33.44	74.00	-40.56	peak
2	1584.000	46.66	-11.46	35.20	74.00	-38.80	peak
3	1960.000	47.12	-10.08	37.04	74.00	-36.96	peak
4	2358.000	49.31	-8.75	40.56	74.00	-33.44	peak
5	2437.000	64.67	-8.44	56.23	\	\	fundamental
6	2692.000	45.09	-7.37	37.72	74.00	-36.28	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



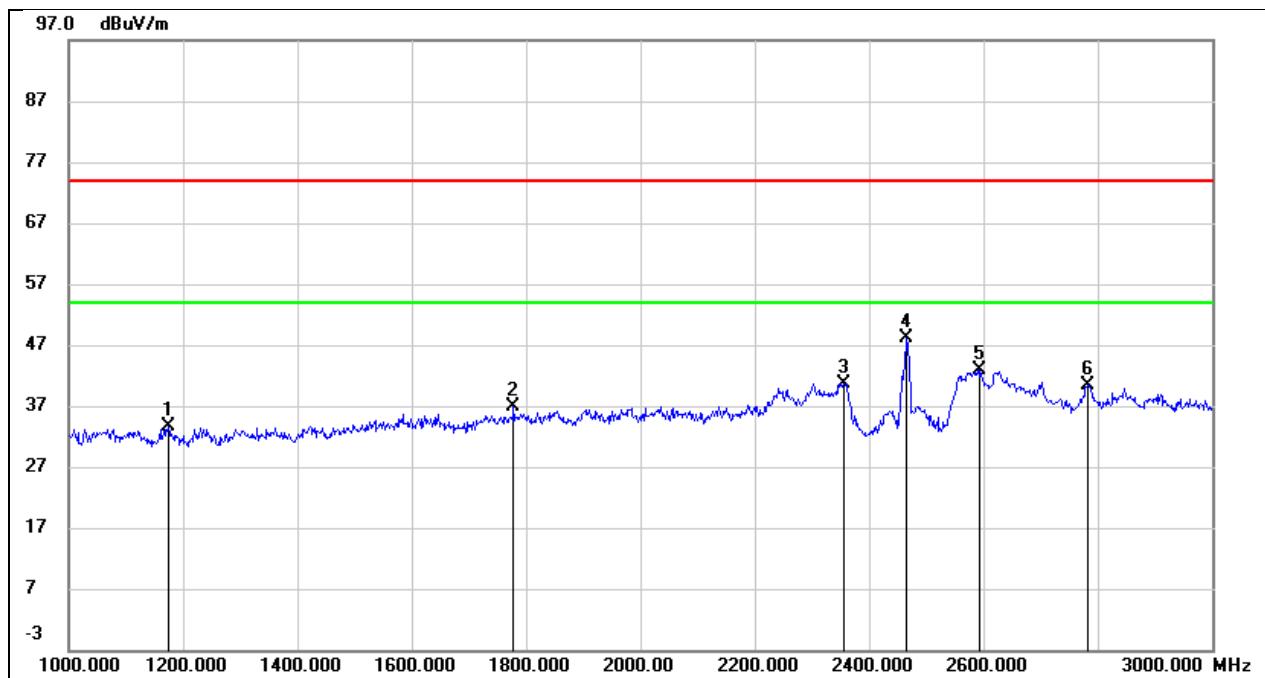
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1632.000	46.89	-10.84	36.05	74.00	-37.95	peak
2	2024.000	46.44	-9.12	37.32	74.00	-36.68	peak
3	2354.000	51.32	-7.93	43.39	74.00	-30.61	peak
4	2437.000	71.58	-7.65	63.93	\	\	fundamental
5	2596.000	50.55	-6.88	43.67	74.00	-30.33	peak
6	2838.000	46.53	-5.61	40.92	74.00	-33.08	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	47.72	-14.14	33.58	74.00	-40.42	peak
2	1584.000	46.30	-11.46	34.84	74.00	-39.16	peak
3	1910.000	48.09	-10.04	38.05	74.00	-35.95	peak
4	2224.000	49.10	-9.25	39.85	74.00	-34.15	peak
5	2462.000	47.52	-8.37	39.15	\	\	fundamental
6	2702.000	46.16	-7.33	38.83	74.00	-35.17	peak

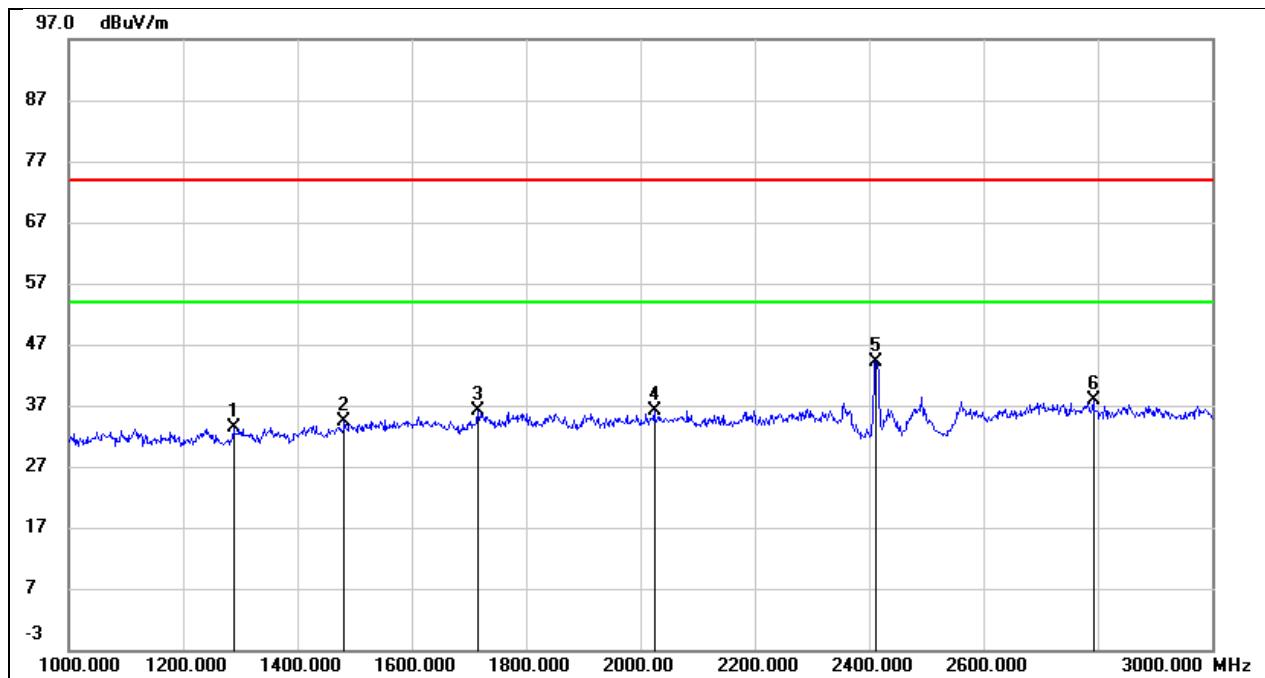
Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1174.000	46.70	-13.11	33.59	74.00	-40.41	peak
2	1778.000	46.40	-9.56	36.84	74.00	-37.16	peak
3	2356.000	48.64	-7.93	40.71	74.00	-33.29	peak
4	2462.000	55.70	-7.53	48.17	\	\	fundamental
5	2594.000	49.81	-6.89	42.92	74.00	-31.08	peak
6	2782.000	46.38	-5.92	40.46	74.00	-33.54	peak

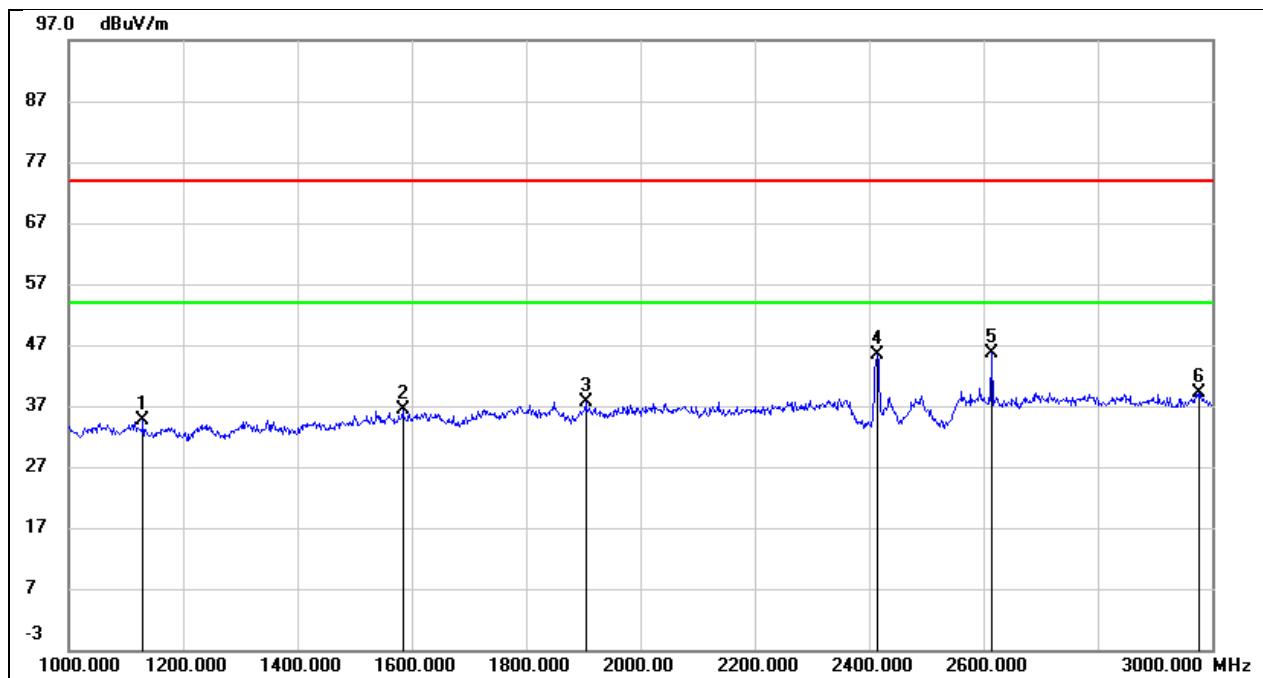
## 8.1. SPURIOUS EMISSIONS OF XL100(1 GHZ~3 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



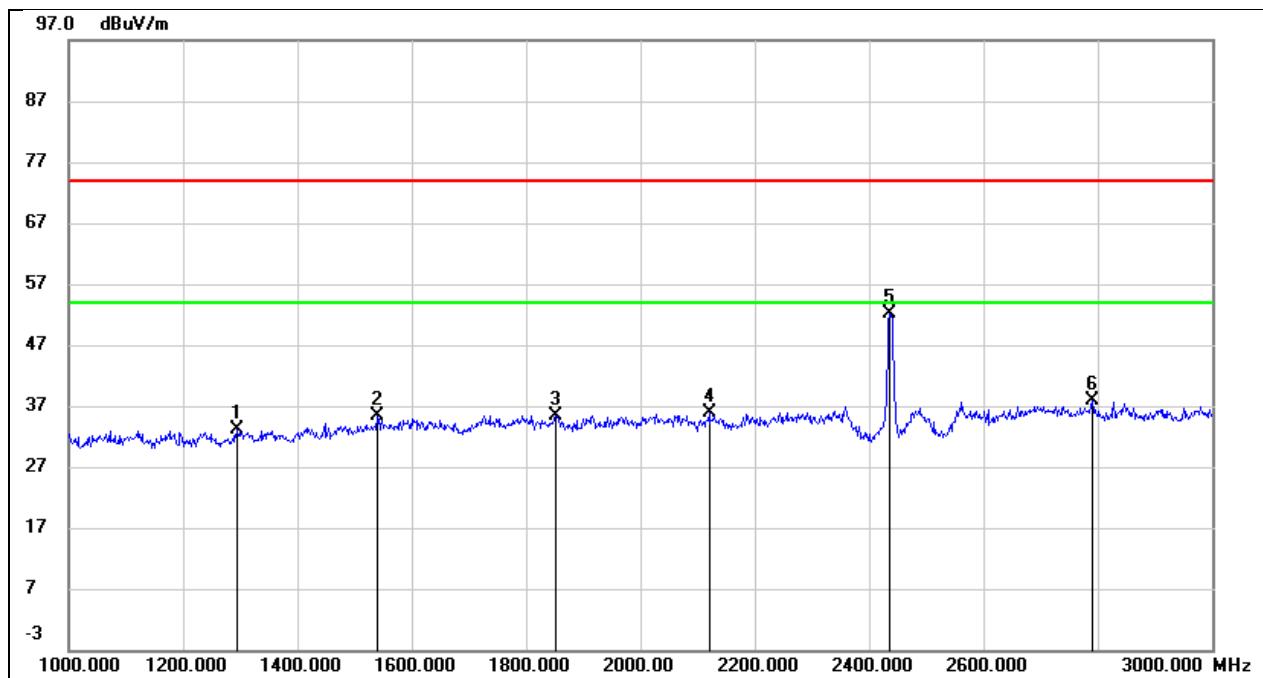
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1288.000	46.48	-13.03	33.45	74.00	-40.55	peak
2	1482.000	46.47	-11.98	34.49	74.00	-39.51	peak
3	1716.000	46.56	-10.55	36.01	74.00	-37.99	peak
4	2024.000	46.20	-10.01	36.19	74.00	-37.81	peak
5	2412.000	52.79	-8.55	44.24	\	\	fundamental
6	2792.000	44.93	-6.95	37.98	74.00	-36.02	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



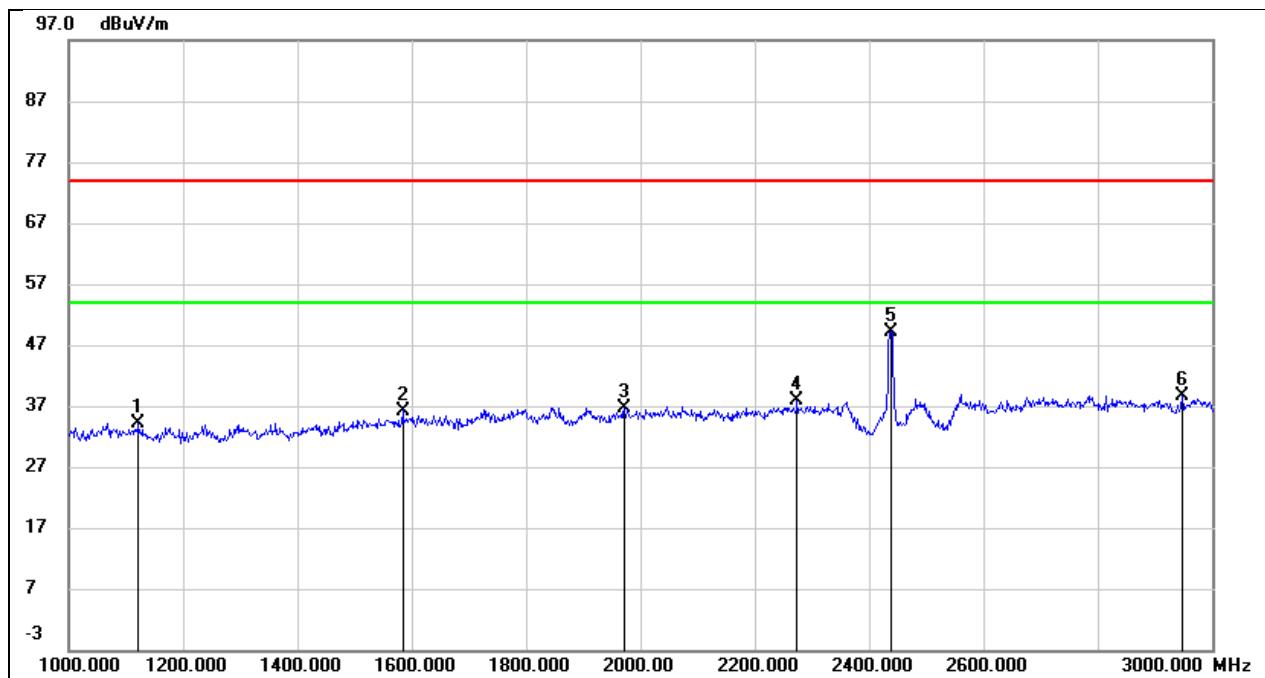
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1130.000	47.82	-13.27	34.55	74.00	-39.45	peak
2	1584.000	47.57	-11.22	36.35	74.00	-37.65	peak
3	1904.000	46.80	-9.28	37.52	74.00	-36.48	peak
4	2412.000	53.02	-7.71	45.31	\	\	fundamental
5	2614.000	52.48	-6.79	45.69	74.00	-28.31	peak
6	2976.000	43.93	-4.84	39.09	74.00	-34.91	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



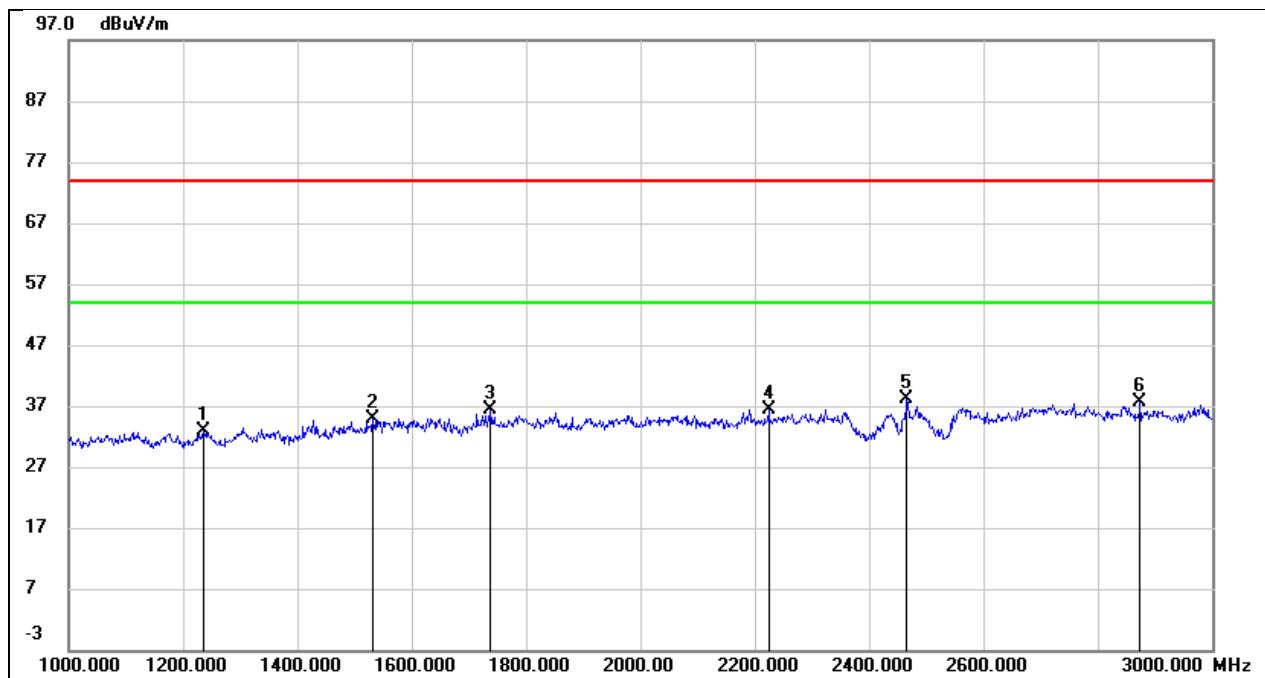
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1294.000	46.22	-13.00	33.22	74.00	-40.78	peak
2	1540.000	46.98	-11.68	35.30	74.00	-38.70	peak
3	1852.000	45.45	-10.00	35.45	74.00	-38.55	peak
4	2120.000	45.47	-9.65	35.82	74.00	-38.18	peak
5	2437.000	60.59	-8.46	52.13	\	\	fundamental
6	2790.000	44.76	-6.97	37.79	74.00	-36.21	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



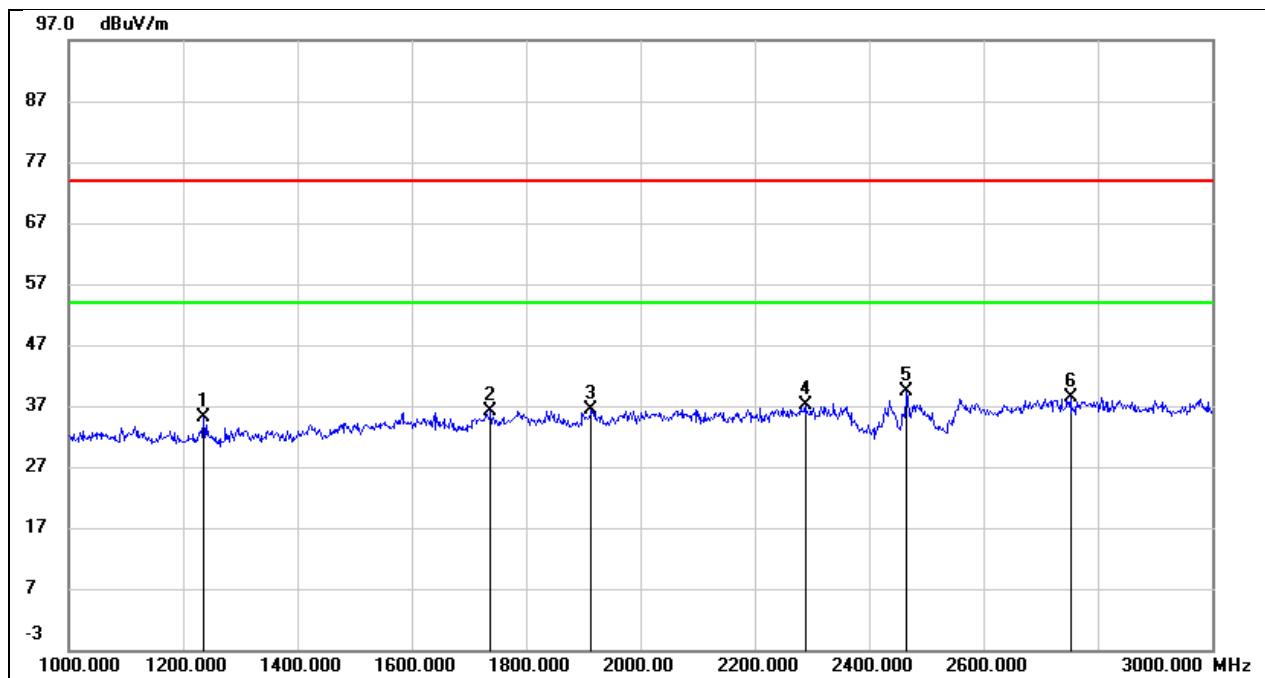
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1122.000	47.40	-13.30	34.10	74.00	-39.90	peak
2	1584.000	47.47	-11.22	36.25	74.00	-37.75	peak
3	1972.000	45.93	-9.23	36.70	74.00	-37.30	peak
4	2274.000	46.05	-8.22	37.83	74.00	-36.17	peak
5	2437.000	56.78	-7.63	49.15	\	\	fundamental
6	2948.000	43.74	-5.00	38.74	74.00	-35.26	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1236.000	46.23	-13.28	32.95	74.00	-41.05	peak
2	1532.000	46.61	-11.72	34.89	74.00	-39.11	peak
3	1738.000	46.81	-10.40	36.41	74.00	-37.59	peak
4	2224.000	45.70	-9.25	36.45	74.00	-37.55	peak
5	2462.000	46.43	-8.34	38.09	\	\	fundamental
6	2874.000	44.24	-6.59	37.65	74.00	-36.35	peak

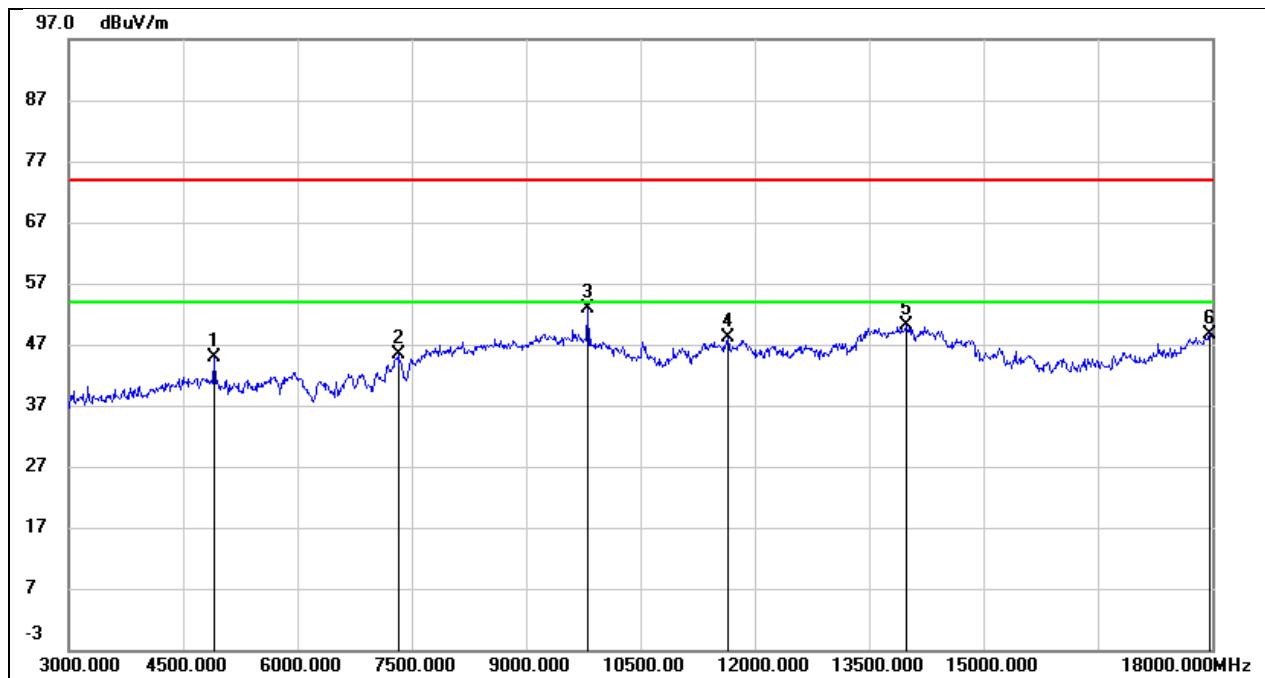
Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1236.000	48.07	-12.87	35.20	74.00	-38.80	peak
2	1738.000	46.03	-9.92	36.11	74.00	-37.89	peak
3	1914.000	45.72	-9.28	36.44	74.00	-37.56	peak
4	2288.000	45.29	-8.17	37.12	74.00	-36.88	peak
5	2462.000	46.95	-7.53	39.42	\	\	fundamental
6	2752.000	44.47	-6.07	38.40	74.00	-35.60	peak

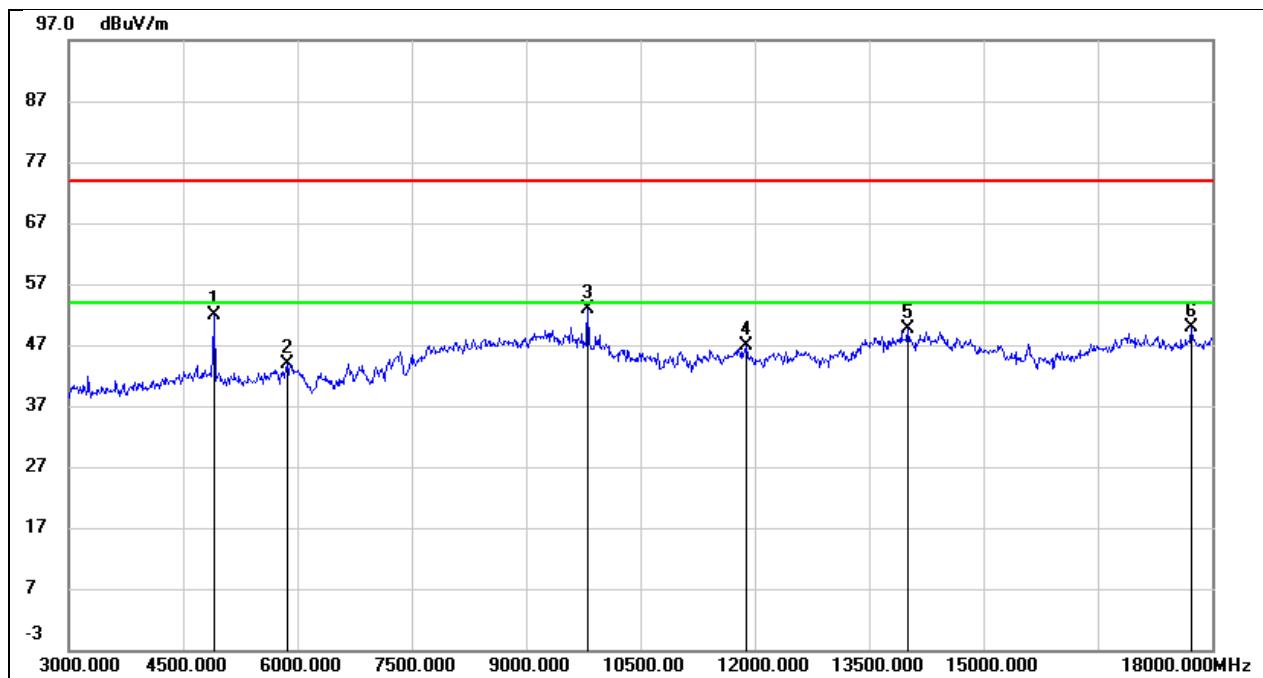
## 8.1. SPURIOUS EMISSIONS OF RTL8733(3 GHZ~18 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



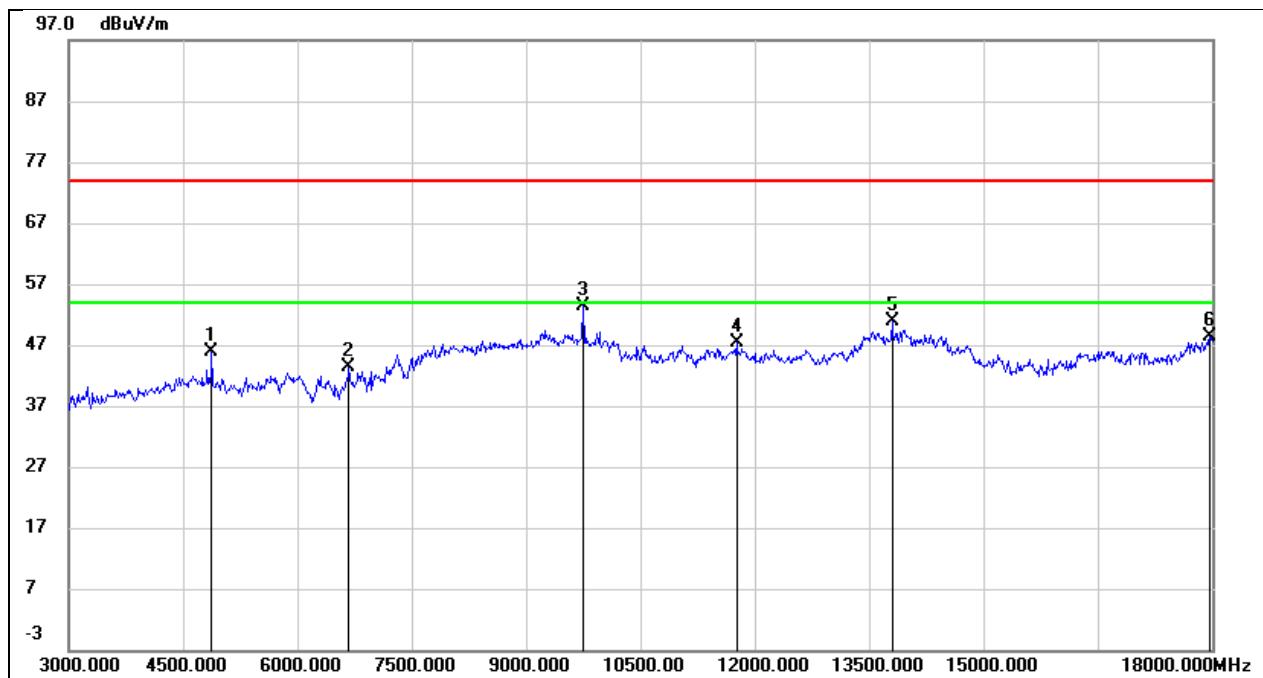
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	44.11	0.72	44.83	74.00	-29.17	peak
2	7320.000	38.42	7.05	45.47	74.00	-28.53	peak
3	9810.000	39.56	13.29	52.85	74.00	-21.15	peak
4	11655.000	29.85	18.25	48.10	74.00	-25.90	peak
5	13980.000	26.42	23.71	50.13	74.00	-23.87	peak
6	17970.000	19.20	29.33	48.53	74.00	-25.47	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



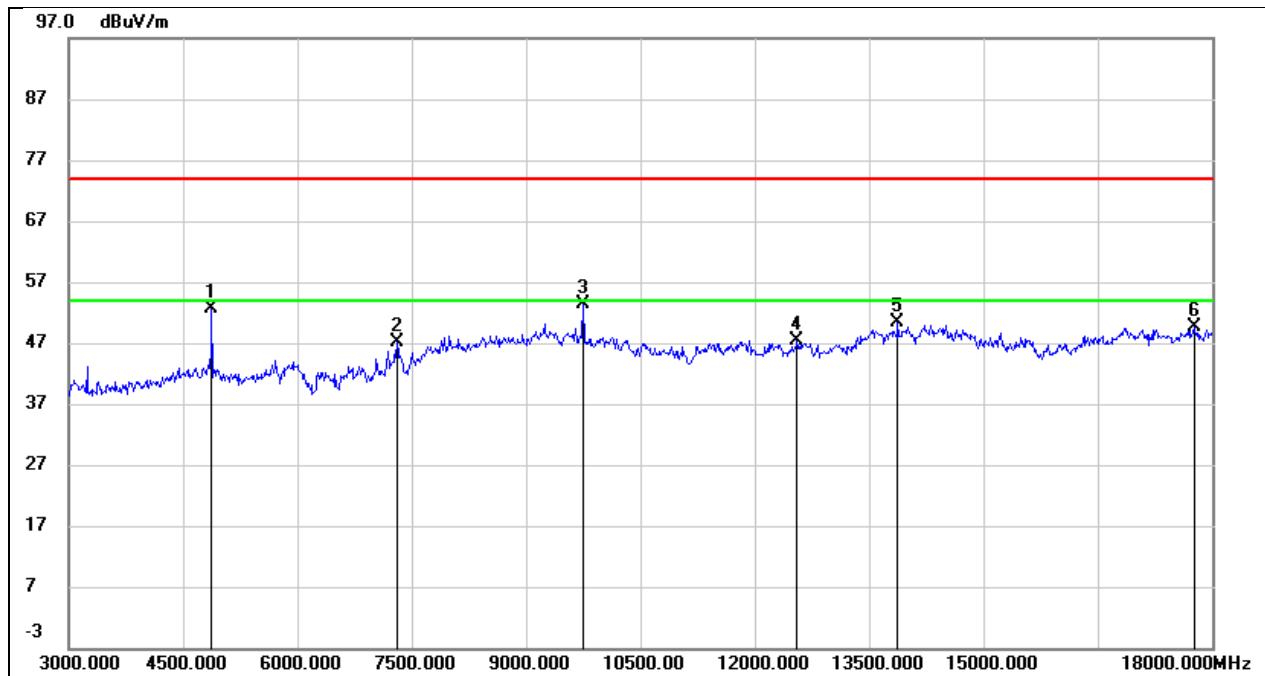
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	50.01	1.86	51.87	74.00	-22.13	peak
2	5865.000	39.91	3.92	43.83	74.00	-30.17	peak
3	9810.000	40.04	12.86	52.90	74.00	-21.10	peak
4	11895.000	29.48	17.43	46.91	74.00	-27.09	peak
5	14010.000	27.32	22.20	49.52	74.00	-24.48	peak
6	17730.000	23.70	26.08	49.78	74.00	-24.22	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



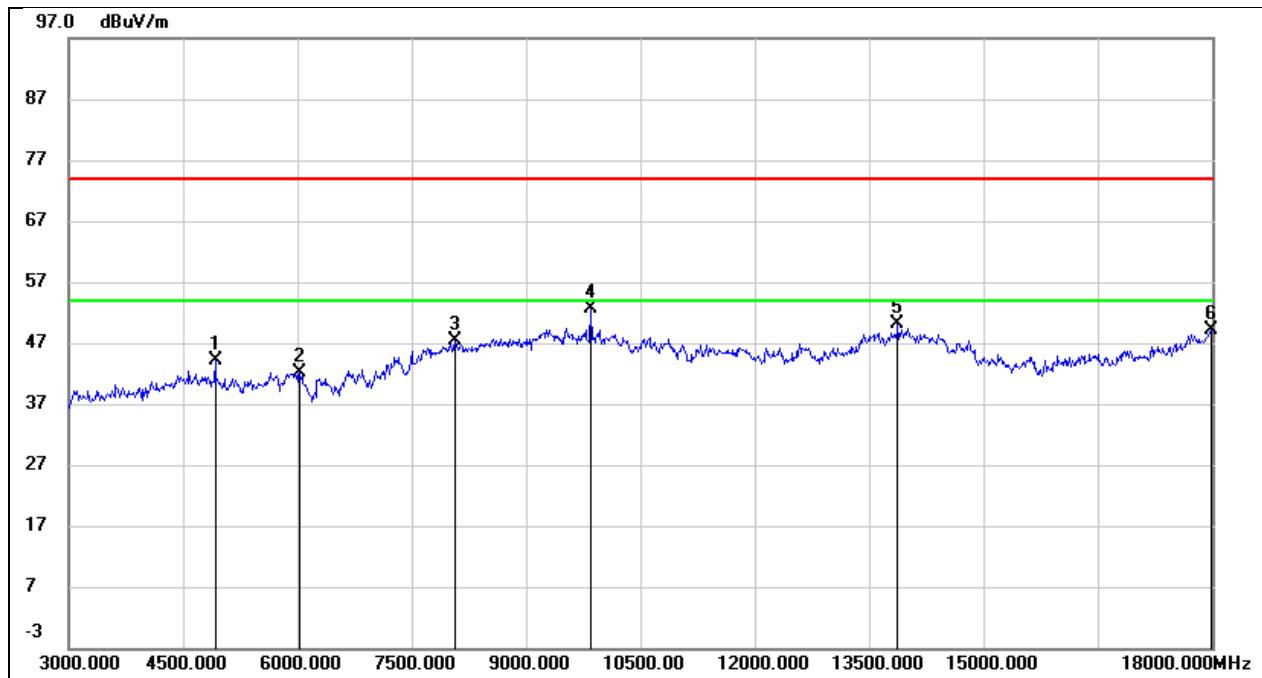
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	45.13	0.65	45.78	74.00	-28.22	peak
2	6675.000	37.95	5.37	43.32	74.00	-30.68	peak
3	9750.000	40.19	13.18	53.37	74.00	-20.63	peak
4	11760.000	28.84	18.42	47.26	74.00	-26.74	peak
5	13800.000	27.83	22.93	50.76	74.00	-23.24	peak
6	17970.000	18.95	29.33	48.28	74.00	-25.72	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



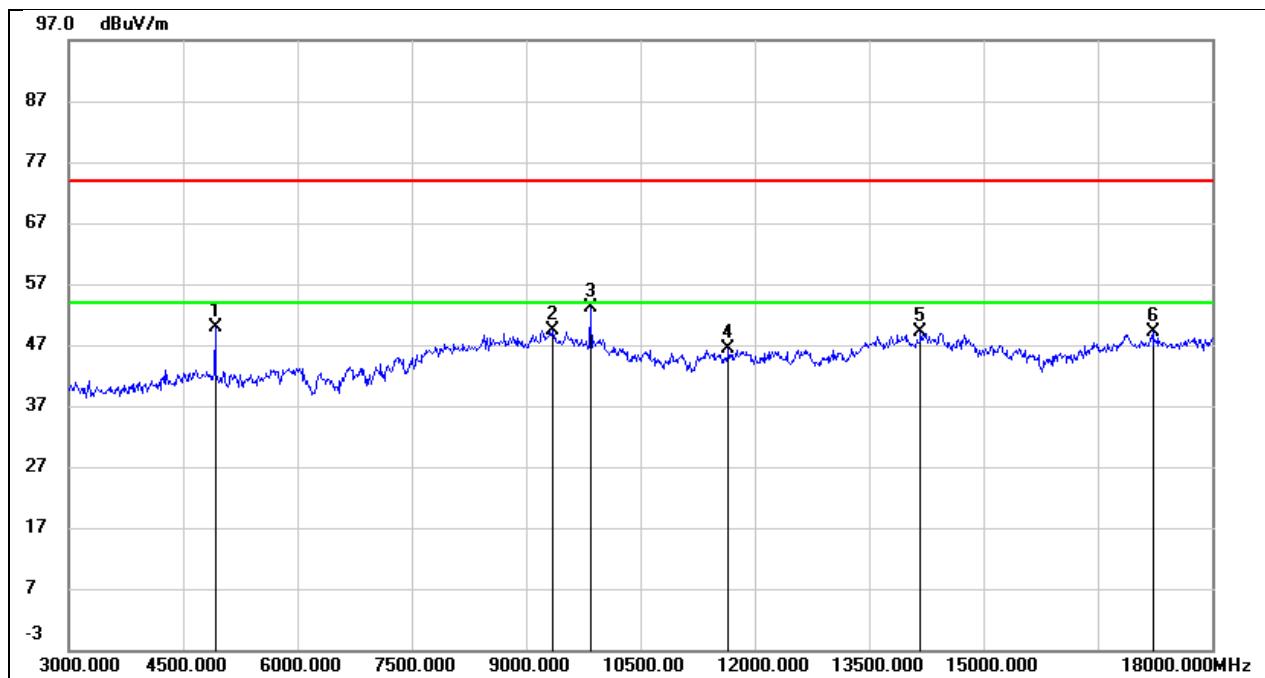
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	50.97	1.78	52.75	74.00	-21.25	peak
2	7305.000	39.35	7.68	47.03	74.00	-26.97	peak
3	9750.000	40.48	12.83	53.31	74.00	-20.69	peak
4	12555.000	29.39	18.00	47.39	74.00	-26.61	peak
5	13875.000	28.79	21.64	50.43	74.00	-23.57	peak
6	17760.000	23.49	26.16	49.65	74.00	-24.35	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



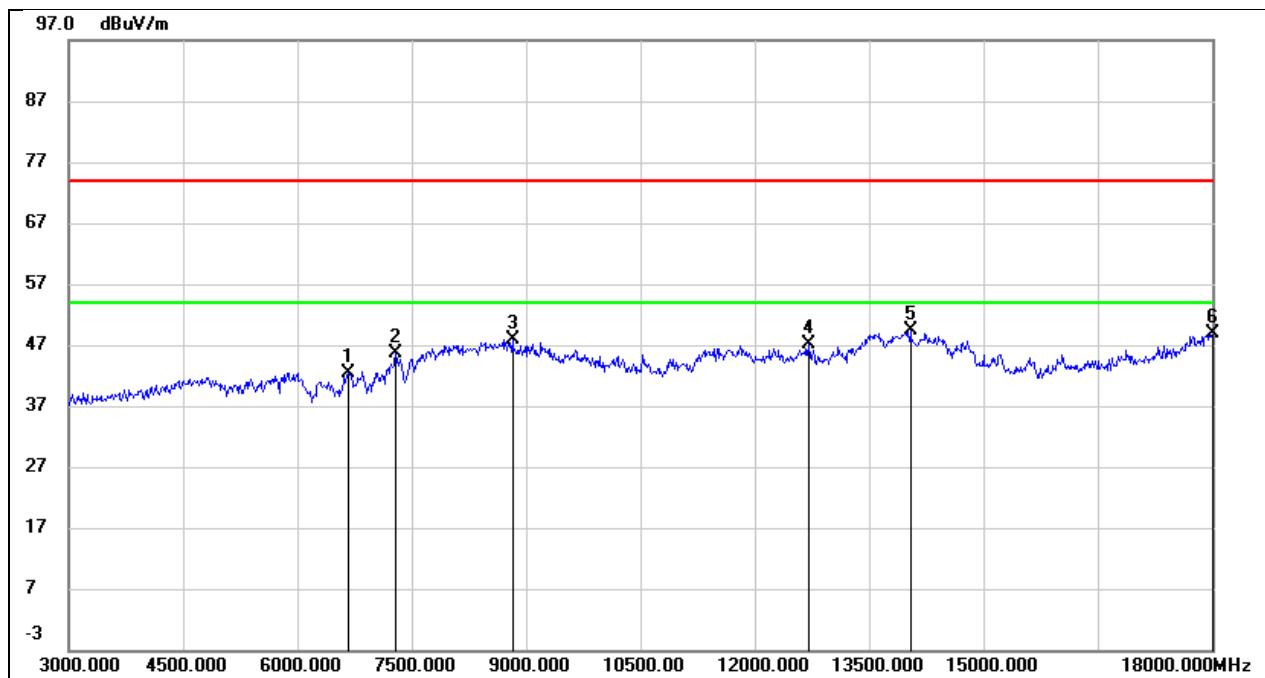
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	43.30	0.76	44.06	74.00	-29.94	peak
2	6030.000	38.78	3.26	42.04	74.00	-31.96	peak
3	8070.000	39.20	8.22	47.42	74.00	-26.58	peak
4	9840.000	39.39	13.30	52.69	74.00	-21.31	peak
5	13875.000	26.94	23.26	50.20	74.00	-23.80	peak
6	17985.000	19.70	29.49	49.19	74.00	-24.81	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



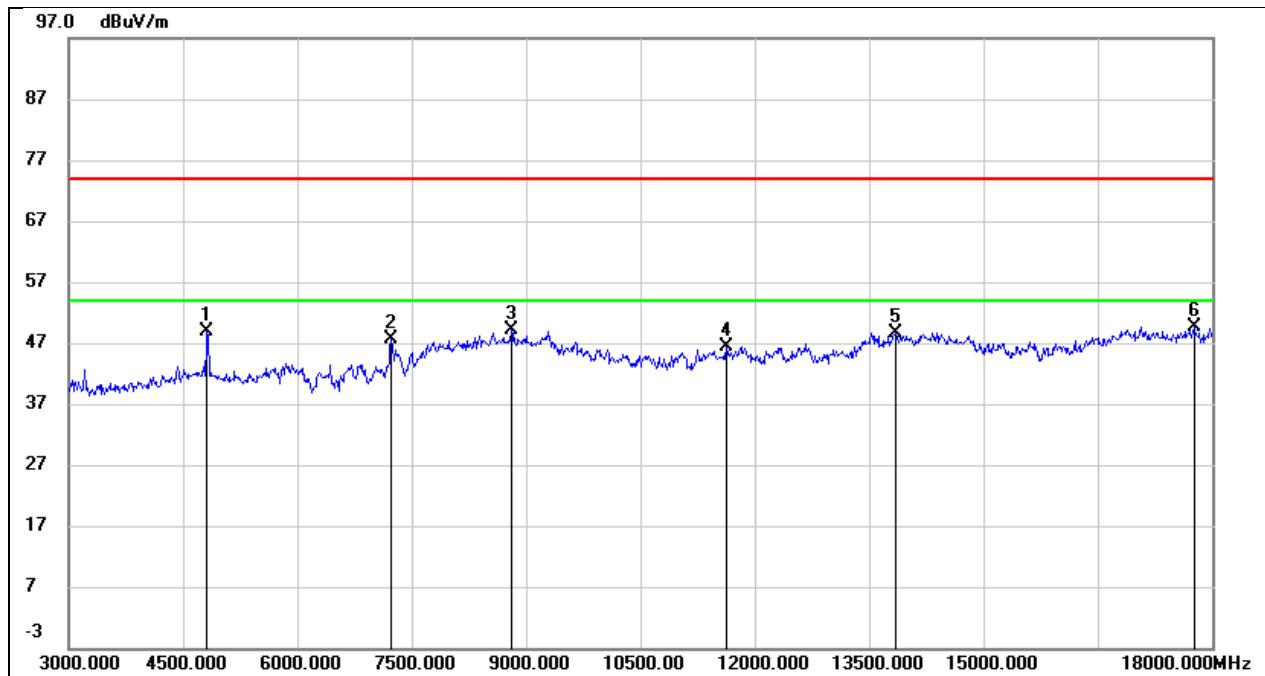
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	47.86	1.91	49.77	74.00	-24.23	peak
2	9345.000	37.51	11.84	49.35	74.00	-24.65	peak
3	9840.000	40.31	12.82	53.13	74.00	-20.87	peak
4	11655.000	29.60	16.88	46.48	74.00	-27.52	peak
5	14175.000	26.96	22.26	49.22	74.00	-24.78	peak
6	17220.000	23.75	25.33	49.08	74.00	-24.92	peak

Test Mode:	802.11g	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



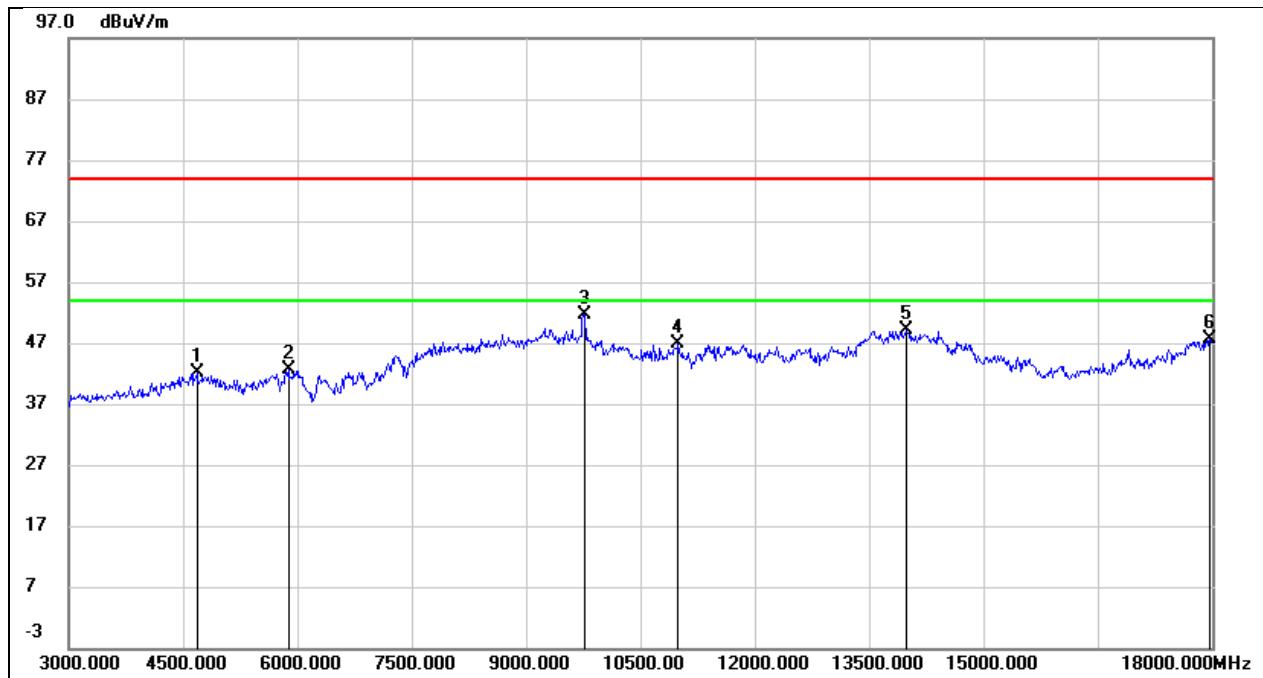
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6660.000	37.19	5.31	42.50	74.00	-31.50	peak
2	7290.000	38.54	7.02	45.56	74.00	-28.44	peak
3	8820.000	38.22	9.62	47.84	74.00	-26.16	peak
4	12705.000	27.84	19.25	47.09	74.00	-26.91	peak
5	14040.000	25.57	23.70	49.27	74.00	-24.73	peak
6	18000.000	19.28	29.64	48.92	74.00	-25.08	peak

Test Mode:	802.11g	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



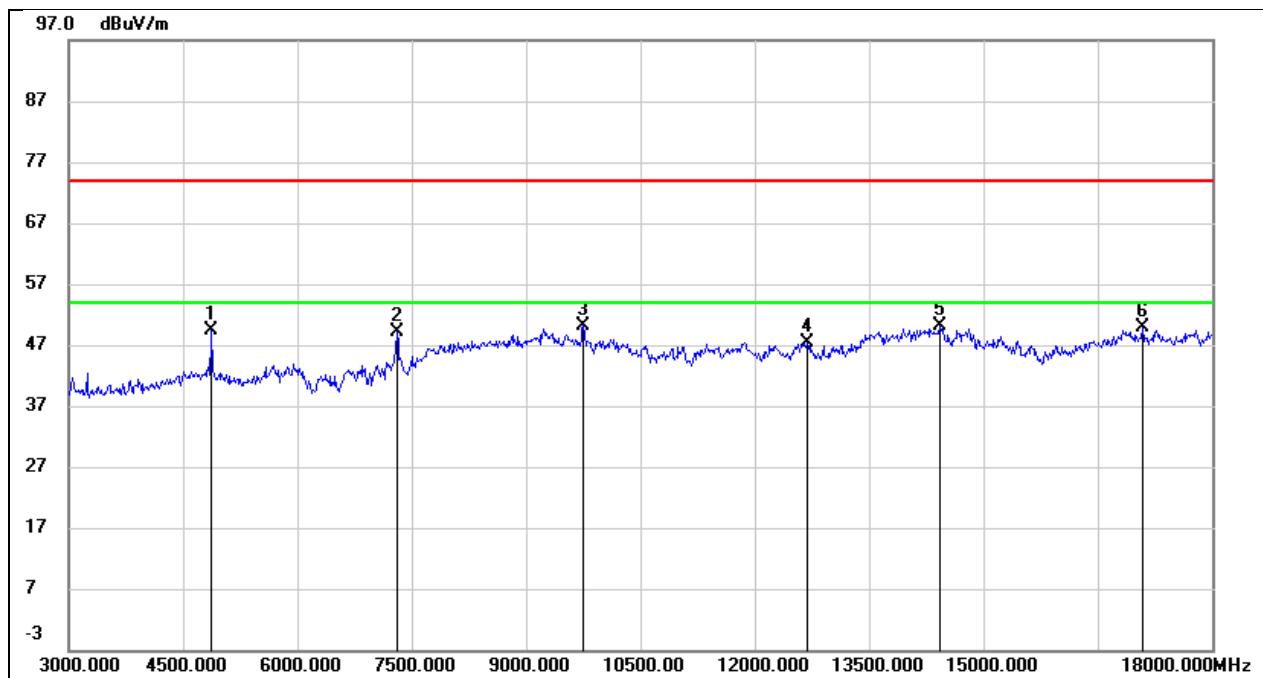
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	47.35	1.59	48.94	74.00	-25.06	peak
2	7230.000	39.86	7.65	47.51	74.00	-26.49	peak
3	8805.000	39.04	10.05	49.09	74.00	-24.91	peak
4	11625.000	29.61	16.81	46.42	74.00	-27.58	peak
5	13845.000	27.26	21.49	48.75	74.00	-25.25	peak
6	17760.000	23.50	26.16	49.66	74.00	-24.34	peak

Test Mode:	802.11g	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



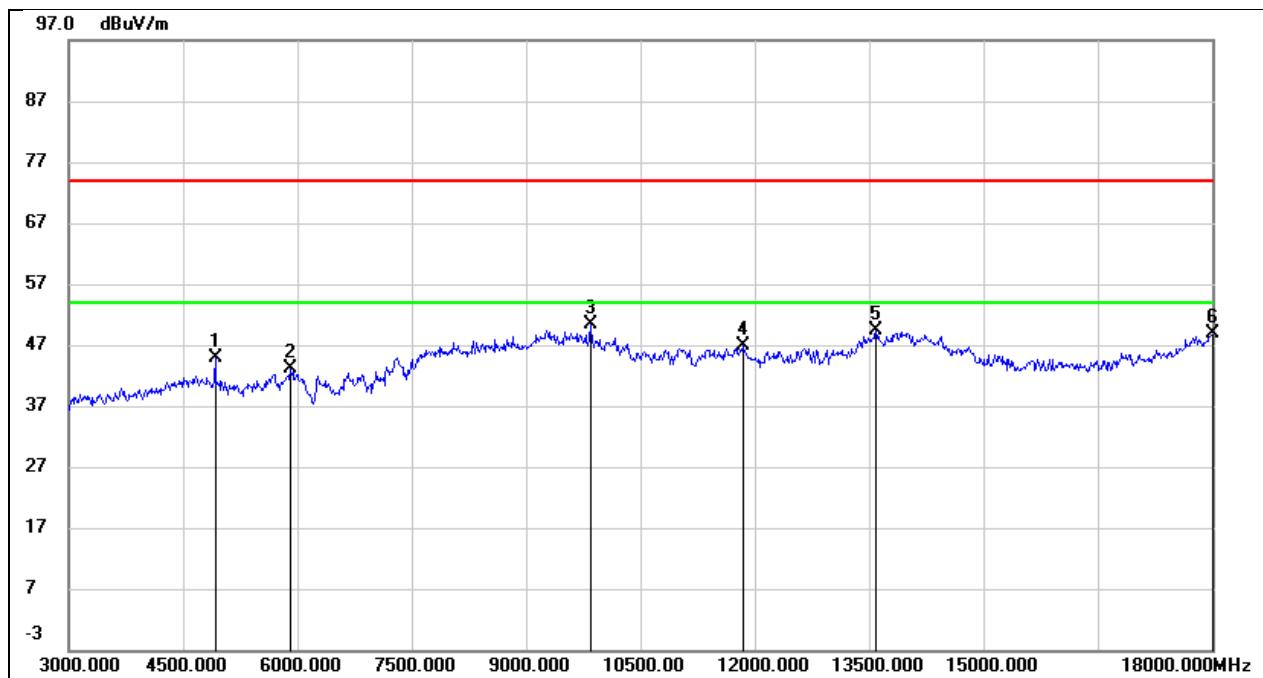
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4680.000	42.00	0.11	42.11	74.00	-31.89	peak
2	5880.000	39.71	2.90	42.61	74.00	-31.39	peak
3	9765.000	38.41	13.21	51.62	74.00	-22.38	peak
4	10995.000	30.98	15.92	46.90	74.00	-27.10	peak
5	13995.000	25.27	23.78	49.05	74.00	-24.95	peak
6	17970.000	18.25	29.33	47.58	74.00	-26.42	peak

Test Mode:	802.11g	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



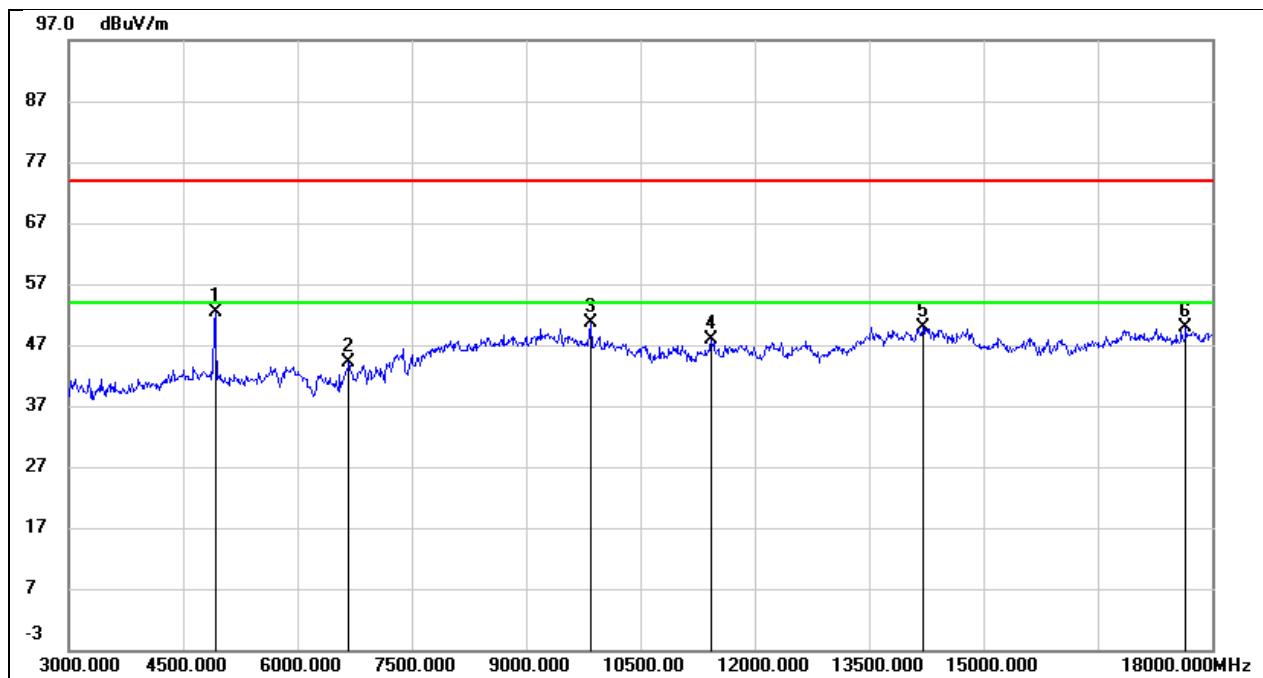
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	47.71	1.78	49.49	74.00	-24.51	peak
2	7305.000	41.51	7.68	49.19	74.00	-24.81	peak
3	9750.000	37.42	12.83	50.25	74.00	-23.75	peak
4	12690.000	29.21	18.19	47.40	74.00	-26.60	peak
5	14430.000	28.50	21.68	50.18	74.00	-23.82	peak
6	17085.000	24.61	25.24	49.85	74.00	-24.15	peak

Test Mode:	802.11g	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



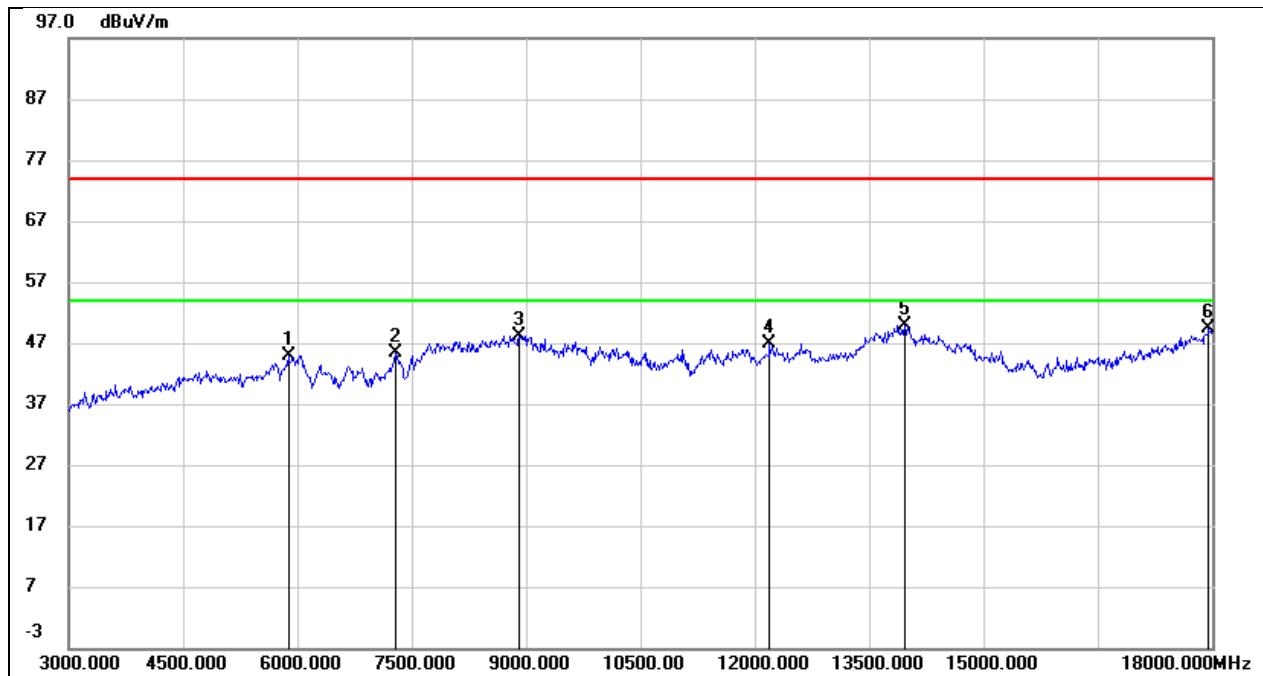
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	44.19	0.76	44.95	74.00	-29.05	peak
2	5910.000	40.23	2.96	43.19	74.00	-30.81	peak
3	9840.000	37.06	13.30	50.36	74.00	-23.64	peak
4	11850.000	28.36	18.55	46.91	74.00	-27.09	peak
5	13590.000	26.78	22.60	49.38	74.00	-24.62	peak
6	18000.000	19.17	29.64	48.81	74.00	-25.19	peak

Test Mode:	802.11g	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



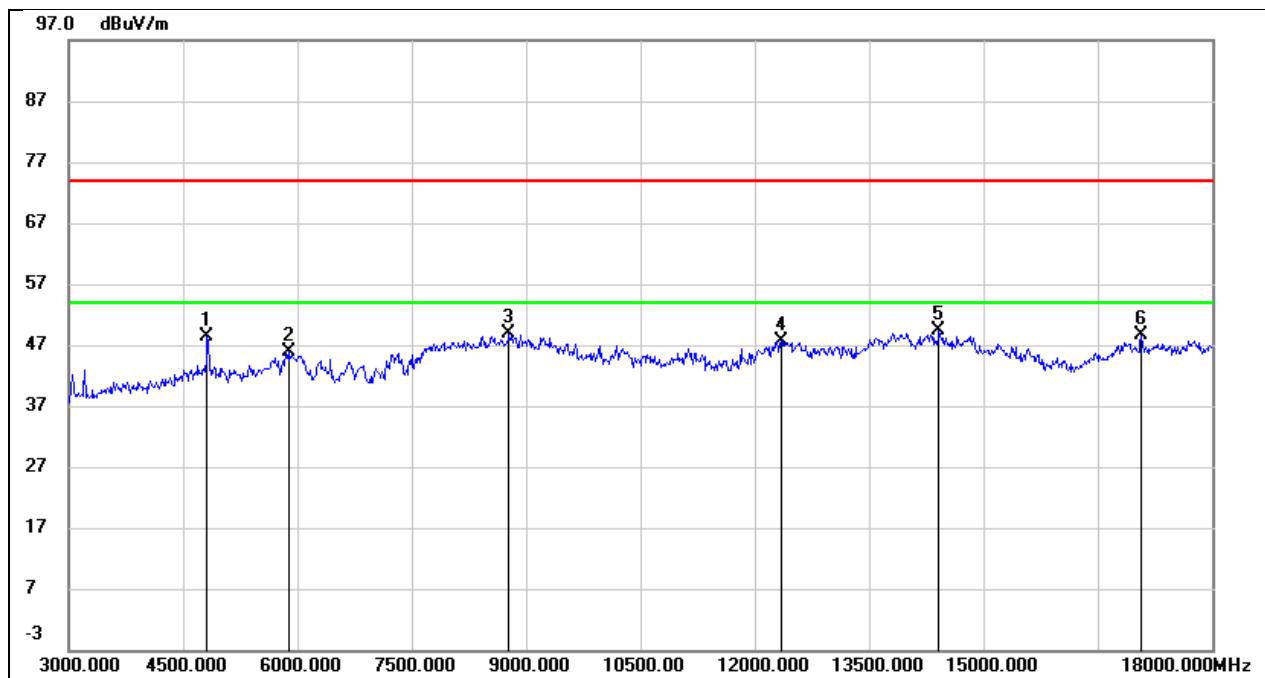
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	50.37	1.91	52.28	74.00	-21.72	peak
2	6675.000	37.87	6.20	44.07	74.00	-29.93	peak
3	9840.000	37.85	12.82	50.67	74.00	-23.33	peak
4	11430.000	31.66	16.31	47.97	74.00	-26.03	peak
5	14205.000	27.66	22.26	49.92	74.00	-24.08	peak
6	17655.000	23.89	25.87	49.76	74.00	-24.24	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



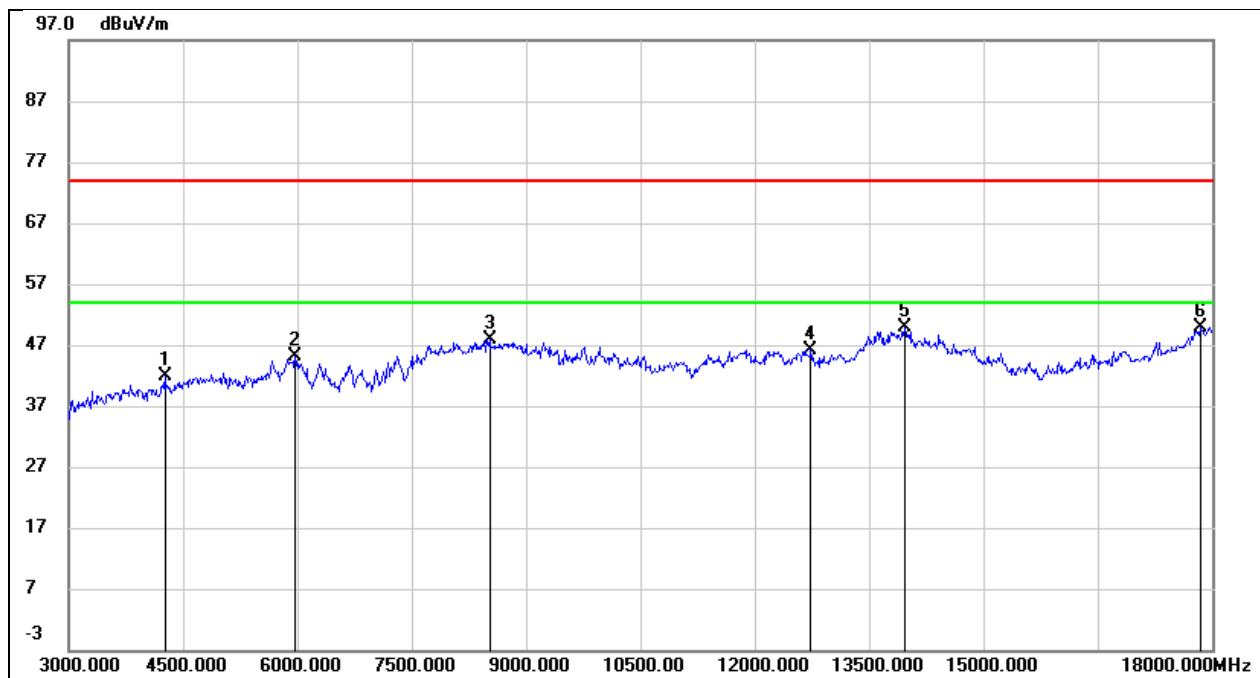
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5880.000	40.03	4.96	44.99	74.00	-29.01	peak
2	7290.000	38.34	6.97	45.31	74.00	-28.69	peak
3	8910.000	38.26	9.91	48.17	74.00	-25.83	peak
4	12195.000	28.37	18.51	46.88	74.00	-27.12	peak
5	13965.000	26.01	23.82	49.83	74.00	-24.17	peak
6	17955.000	20.04	29.25	49.29	74.00	-24.71	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



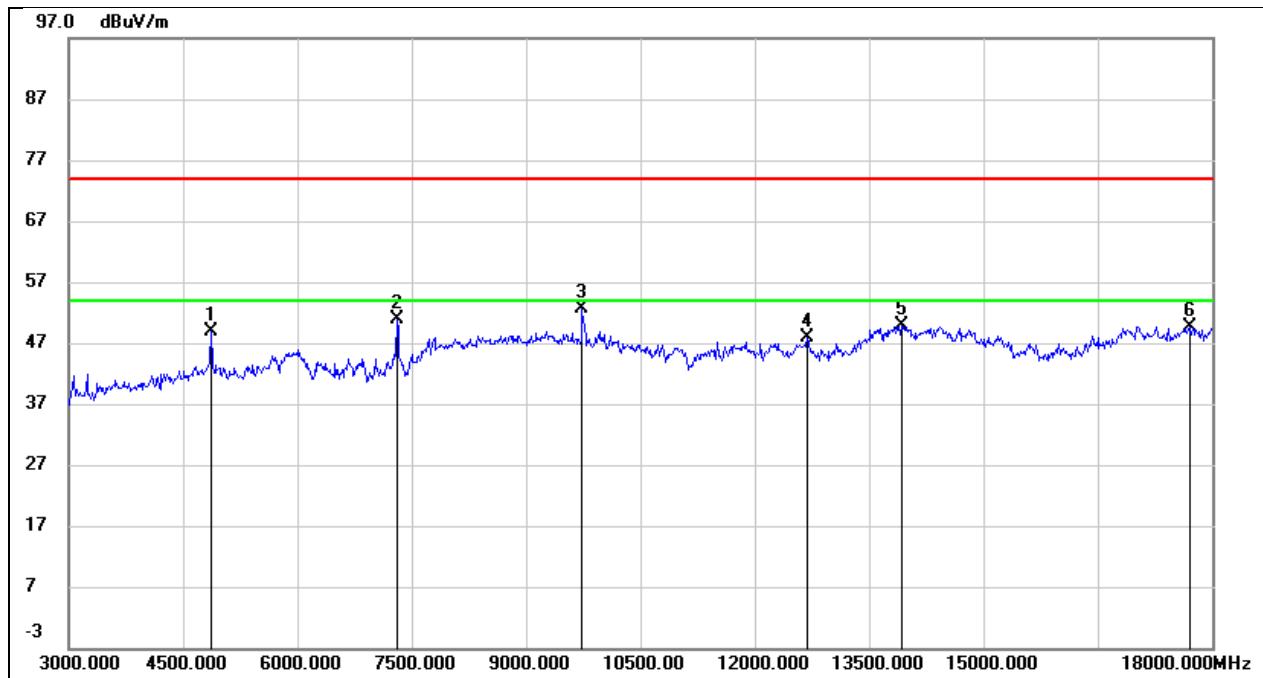
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	46.42	2.03	48.45	74.00	-25.55	peak
2	5880.000	39.90	6.01	45.91	74.00	-28.09	peak
3	8775.000	38.72	10.05	48.77	74.00	-25.23	peak
4	12345.000	30.11	17.62	47.73	74.00	-26.27	peak
5	14415.000	27.56	21.72	49.28	74.00	-24.72	peak
6	17070.000	23.25	25.40	48.65	74.00	-25.35	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



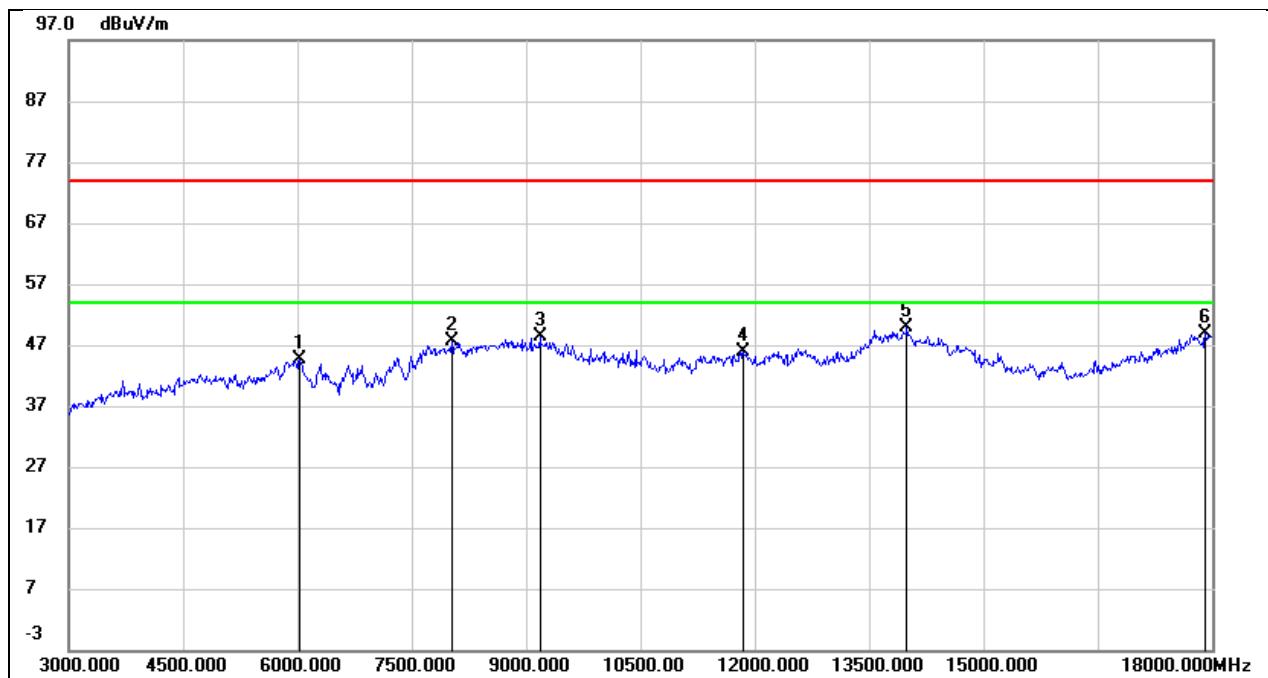
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4260.000	43.33	-1.48	41.85	74.00	-32.15	peak
2	5970.000	39.74	5.46	45.20	74.00	-28.80	peak
3	8520.000	38.90	9.05	47.95	74.00	-26.05	peak
4	12735.000	27.09	19.16	46.25	74.00	-27.75	peak
5	13965.000	25.98	23.82	49.80	74.00	-24.20	peak
6	17850.000	21.47	28.45	49.92	74.00	-24.08	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



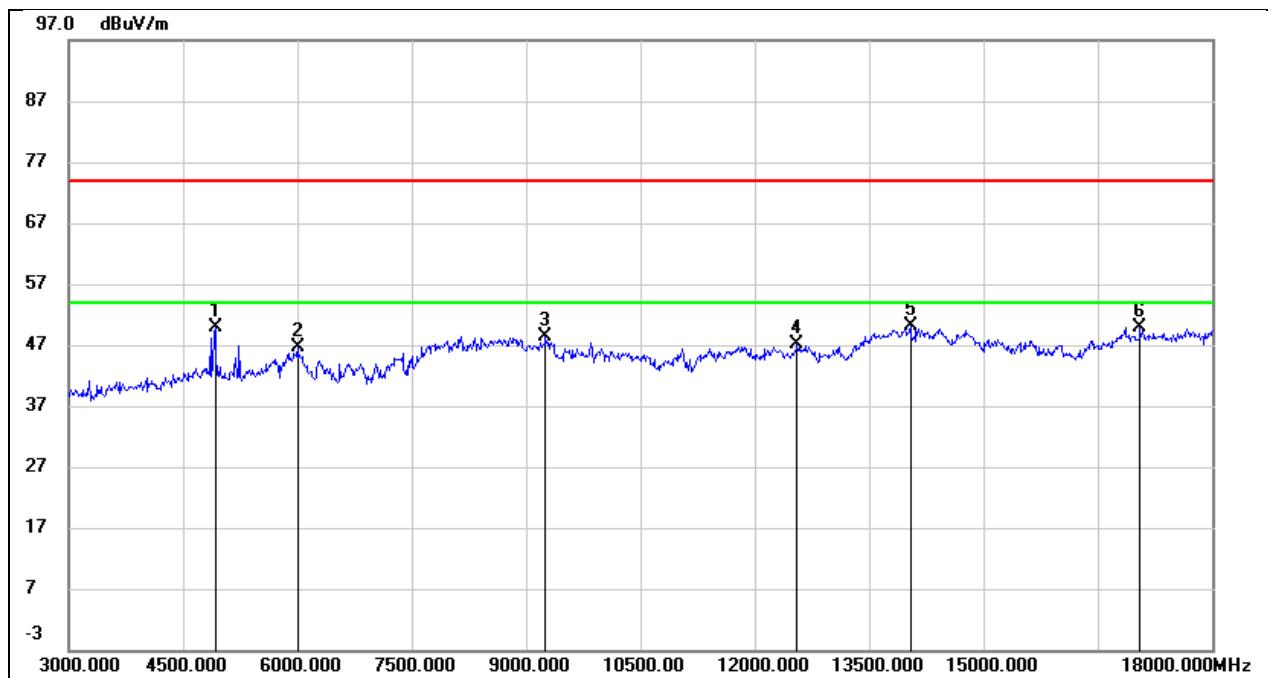
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4860.000	46.60	2.26	48.86	74.00	-25.14	peak
2	7305.000	43.15	7.64	50.79	74.00	-23.21	peak
3	9735.000	40.02	12.68	52.70	74.00	-21.30	peak
4	12690.000	29.81	18.05	47.86	74.00	-26.14	peak
5	13920.000	27.74	22.06	49.80	74.00	-24.20	peak
6	17700.000	23.16	26.42	49.58	74.00	-24.42	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6030.000	38.90	5.74	44.64	74.00	-29.36	peak
2	8025.000	39.24	8.37	47.61	74.00	-26.39	peak
3	9180.000	37.52	10.90	48.42	74.00	-25.58	peak
4	11850.000	27.86	18.09	45.95	74.00	-28.05	peak
5	13995.000	26.07	23.92	49.99	74.00	-24.01	peak
6	17910.000	19.93	28.92	48.85	74.00	-25.15	peak

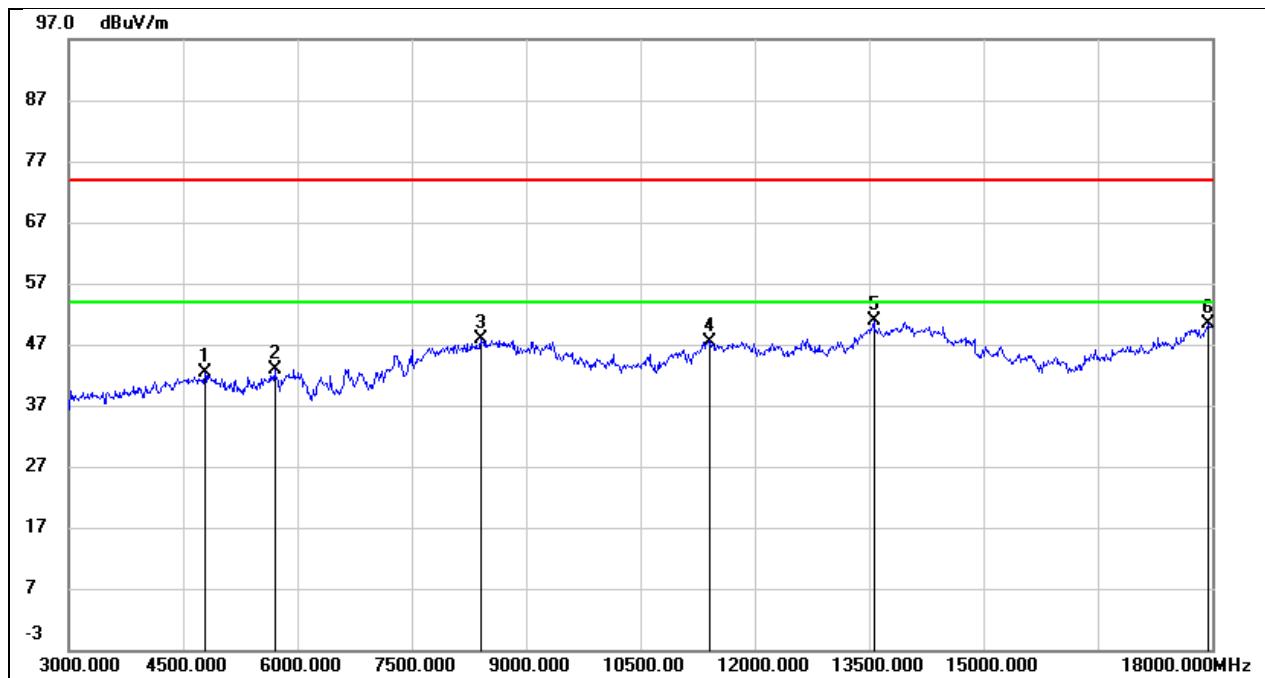
Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	47.19	2.58	49.77	74.00	-24.23	peak
2	6000.000	40.02	6.63	46.65	74.00	-27.35	peak
3	9255.000	37.03	11.39	48.42	74.00	-25.58	peak
4	12555.000	29.27	17.84	47.11	74.00	-26.89	peak
5	14040.000	27.95	22.27	50.22	74.00	-23.78	peak
6	17055.000	24.54	25.37	49.91	74.00	-24.09	peak

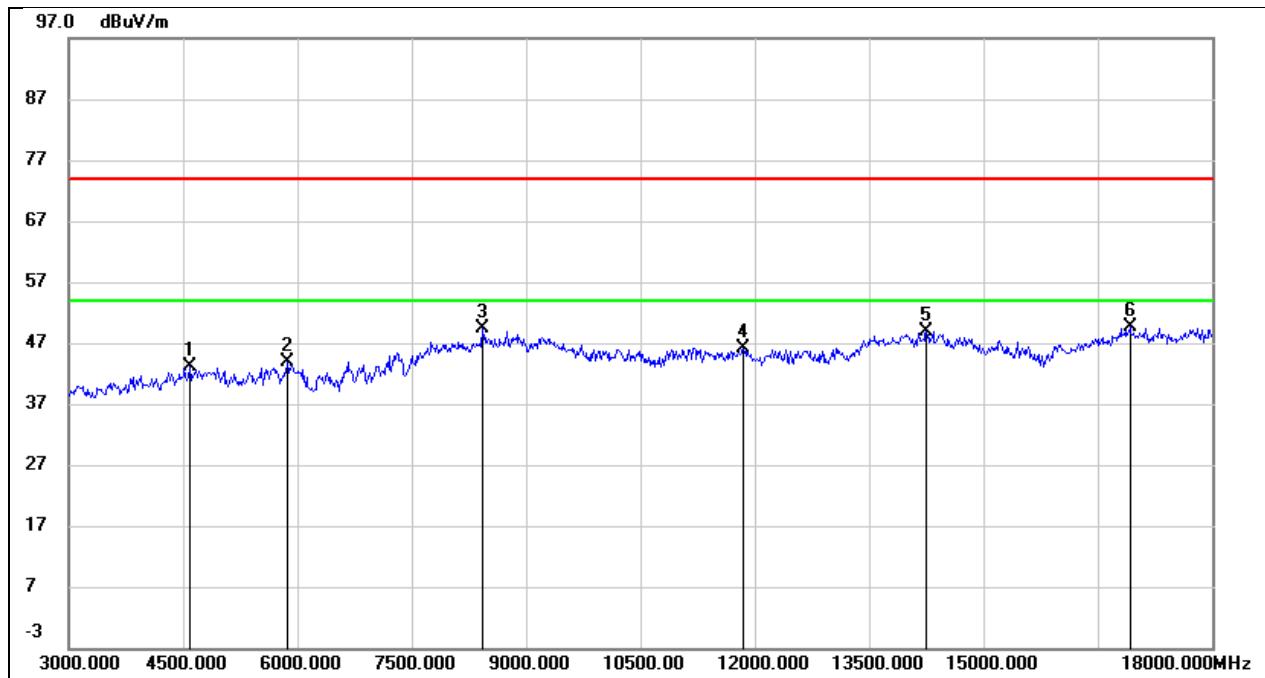
## 8.1. SPURIOUS EMISSIONS OF XL100(3 GHZ~18 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



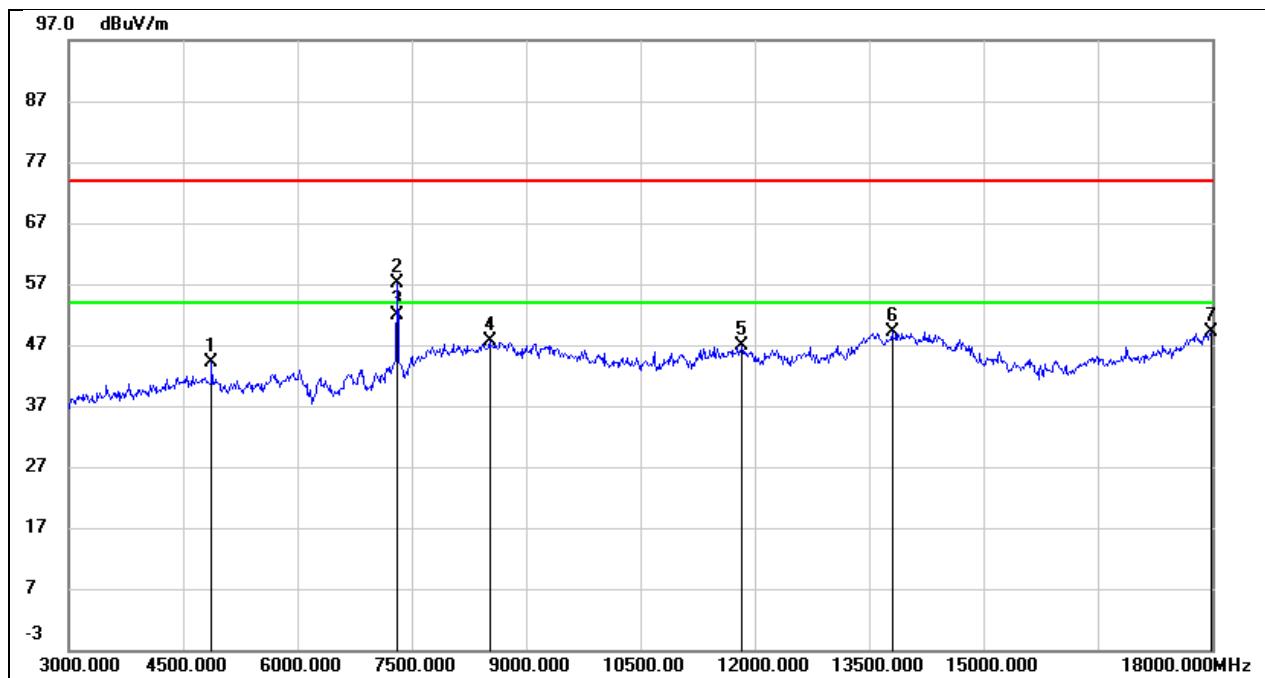
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4785.000	41.83	0.43	42.26	74.00	-31.74	peak
2	5700.000	40.37	2.53	42.90	74.00	-31.10	peak
3	8400.000	38.88	8.89	47.77	74.00	-26.23	peak
4	11400.000	29.90	17.60	47.50	74.00	-26.50	peak
5	13560.000	28.25	22.55	50.80	74.00	-23.20	peak
6	17955.000	21.30	29.18	50.48	74.00	-23.52	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



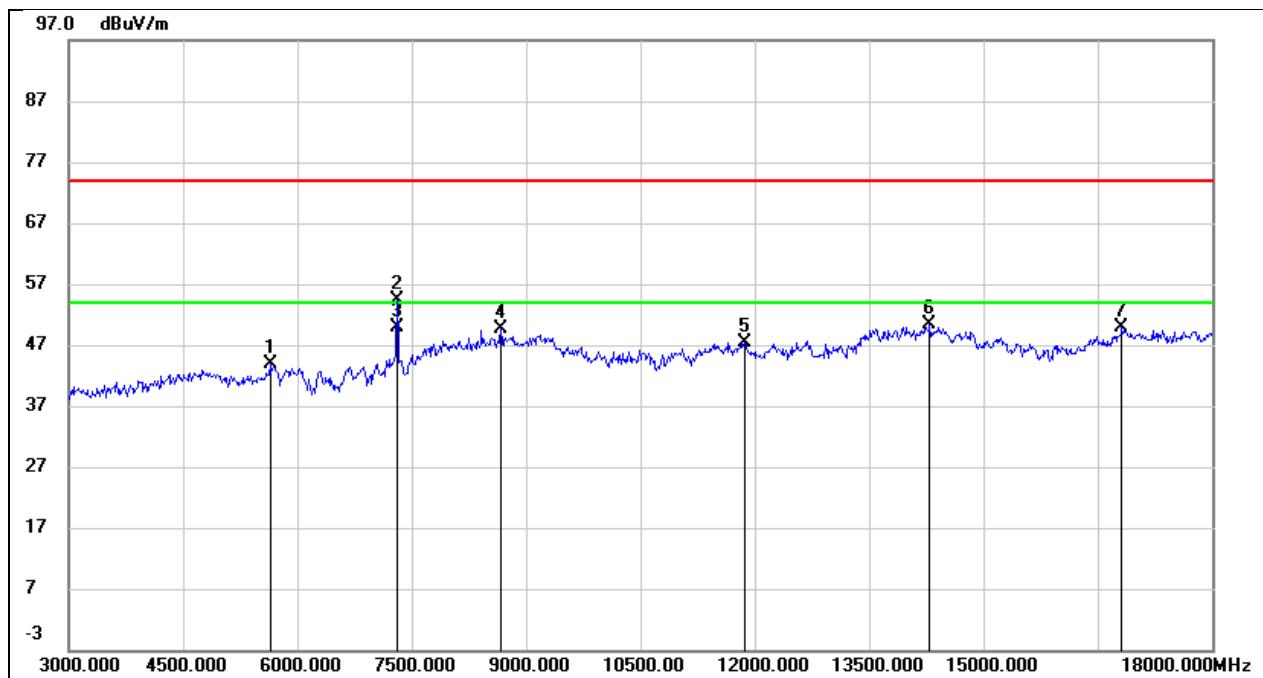
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4590.000	42.21	0.80	43.01	74.00	-30.99	peak
2	5865.000	39.93	3.92	43.85	74.00	-30.15	peak
3	8430.000	39.92	9.51	49.43	74.00	-24.57	peak
4	11850.000	28.75	17.33	46.08	74.00	-27.92	peak
5	14250.000	26.68	22.13	48.81	74.00	-25.19	peak
6	16920.000	24.43	25.08	49.51	74.00	-24.49	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



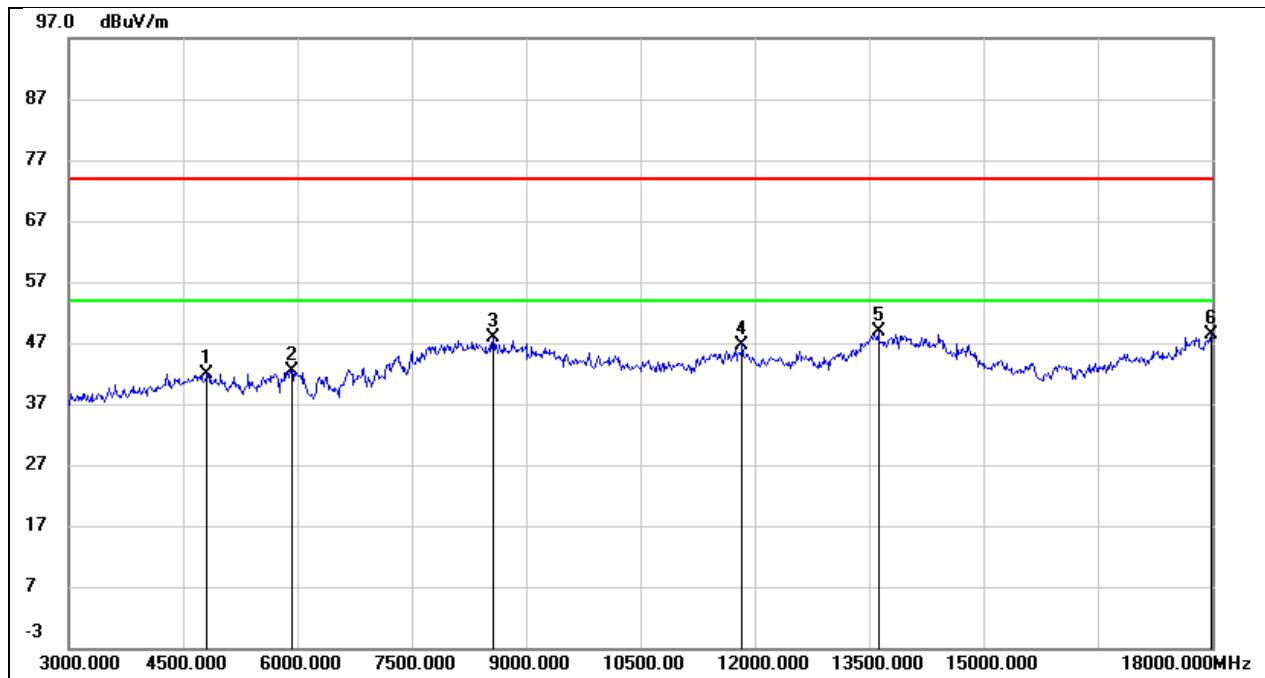
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	43.40	0.65	44.05	74.00	-29.95	peak
2	7305.000	49.99	7.03	57.02	74.00	-16.98	peak
3	7305.000	44.88	7.03	51.91	54.00	-2.09	AVG
4	8520.000	38.55	9.07	47.62	74.00	-26.38	peak
5	11835.000	28.26	18.54	46.80	74.00	-27.20	peak
6	13800.000	26.23	22.93	49.16	74.00	-24.84	peak
7	17985.000	19.53	29.49	49.02	74.00	-24.98	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



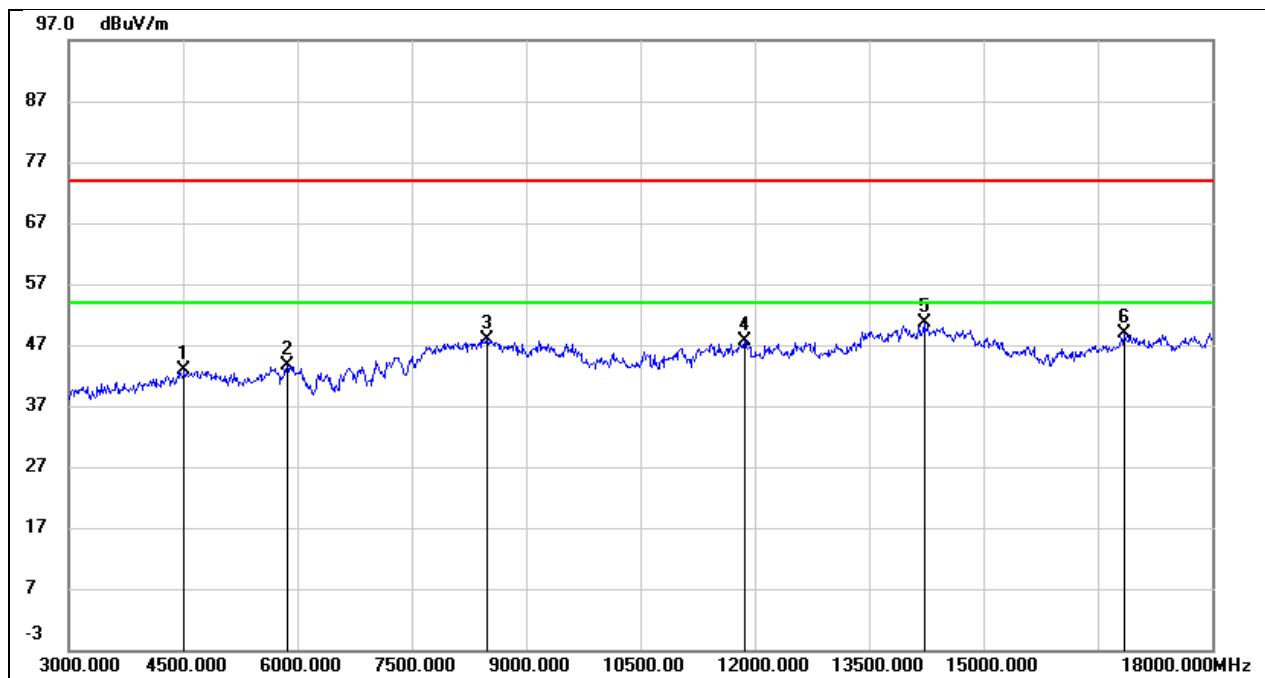
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5640.000	40.38	3.55	43.93	74.00	-30.07	peak
2	7305.000	46.81	7.68	54.49	74.00	-19.51	peak
3	7305.000	42.08	7.68	49.76	54.00	-4.24	AVG
4	8670.000	39.81	9.94	49.75	74.00	-24.25	peak
5	11865.000	30.02	17.37	47.39	74.00	-26.61	peak
6	14295.000	28.44	22.01	50.45	74.00	-23.55	peak
7	16815.000	24.96	24.95	49.91	74.00	-24.09	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



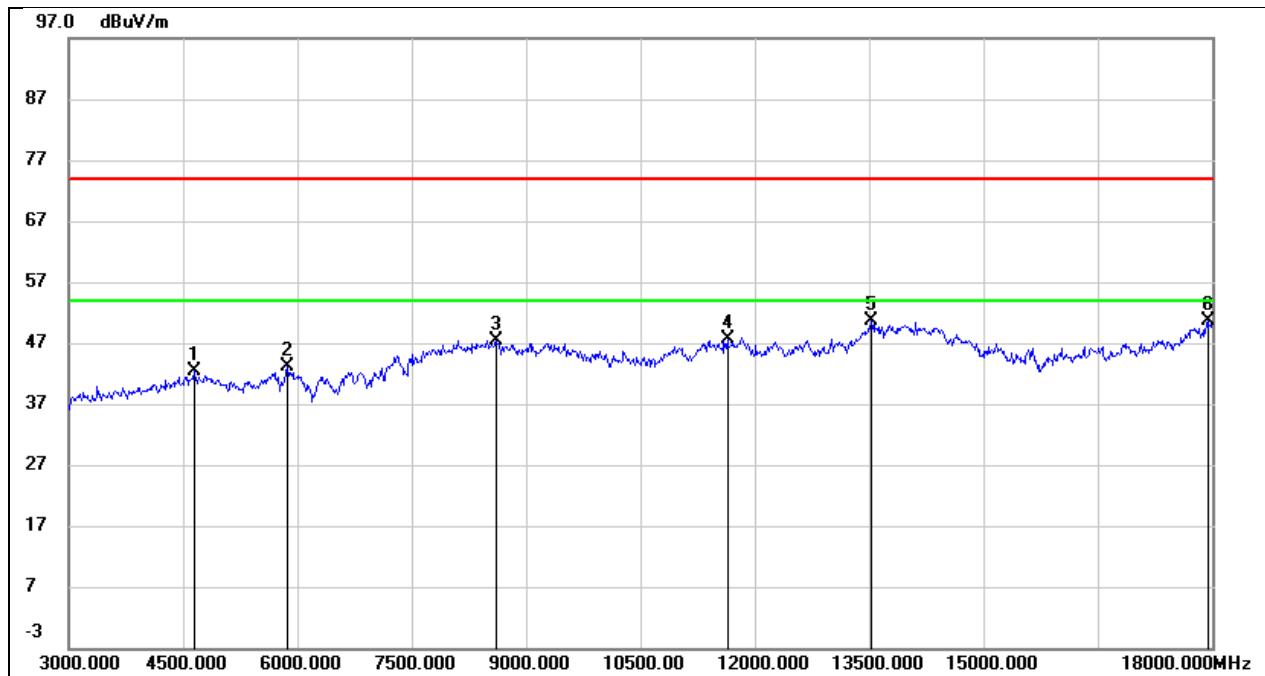
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	41.45	0.50	41.95	74.00	-32.05	peak
2	5925.000	39.44	2.99	42.43	74.00	-31.57	peak
3	8565.000	38.76	9.21	47.97	74.00	-26.03	peak
4	11835.000	28.21	18.54	46.75	74.00	-27.25	peak
5	13620.000	26.17	22.65	48.82	74.00	-25.18	peak
6	17985.000	18.96	29.49	48.45	74.00	-25.55	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



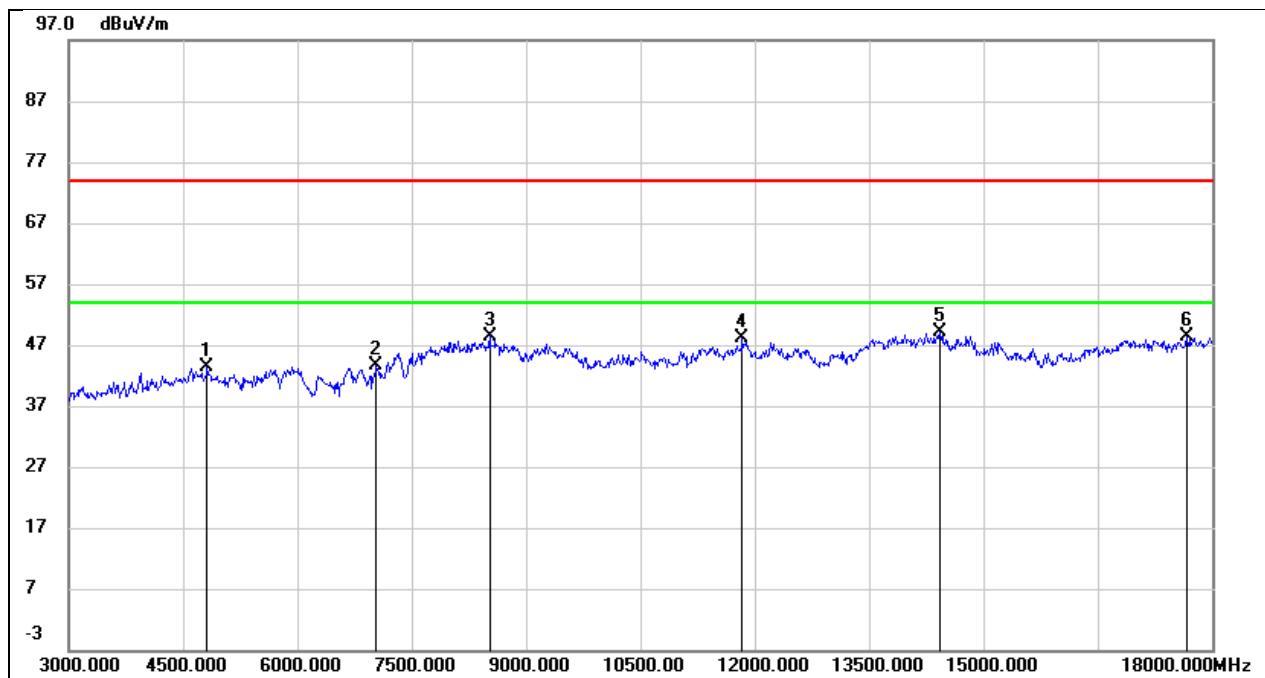
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4515.000	42.33	0.52	42.85	74.00	-31.15	peak
2	5865.000	39.74	3.92	43.66	74.00	-30.34	peak
3	8490.000	38.24	9.60	47.84	74.00	-26.16	peak
4	11865.000	30.21	17.37	47.58	74.00	-26.42	peak
5	14220.000	28.52	22.22	50.74	74.00	-23.26	peak
6	16845.000	23.83	24.99	48.82	74.00	-25.18	peak

Test Mode:	802.11g	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



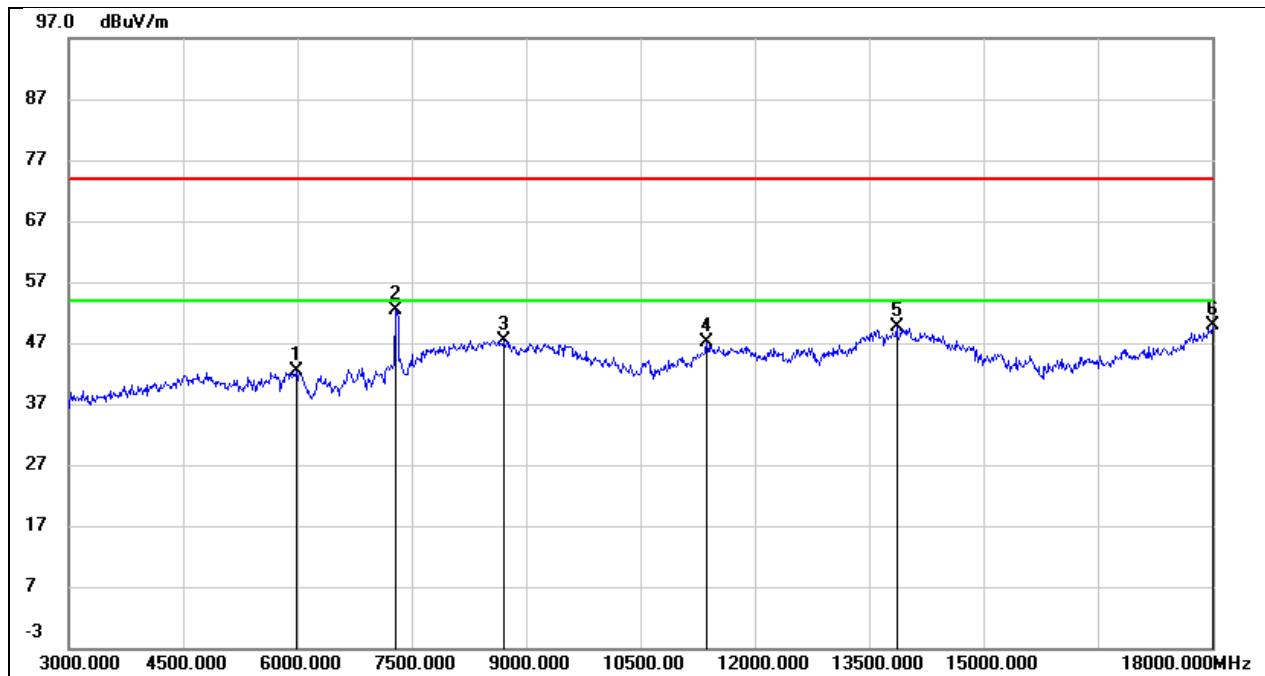
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4650.000	42.36	0.02	42.38	74.00	-31.62	peak
2	5865.000	40.28	2.86	43.14	74.00	-30.86	peak
3	8610.000	38.08	9.32	47.40	74.00	-26.60	peak
4	11640.000	29.36	18.23	47.59	74.00	-26.41	peak
5	13530.000	28.11	22.49	50.60	74.00	-23.40	peak
6	17940.000	21.55	29.03	50.58	74.00	-23.42	peak

Test Mode:	802.11g	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



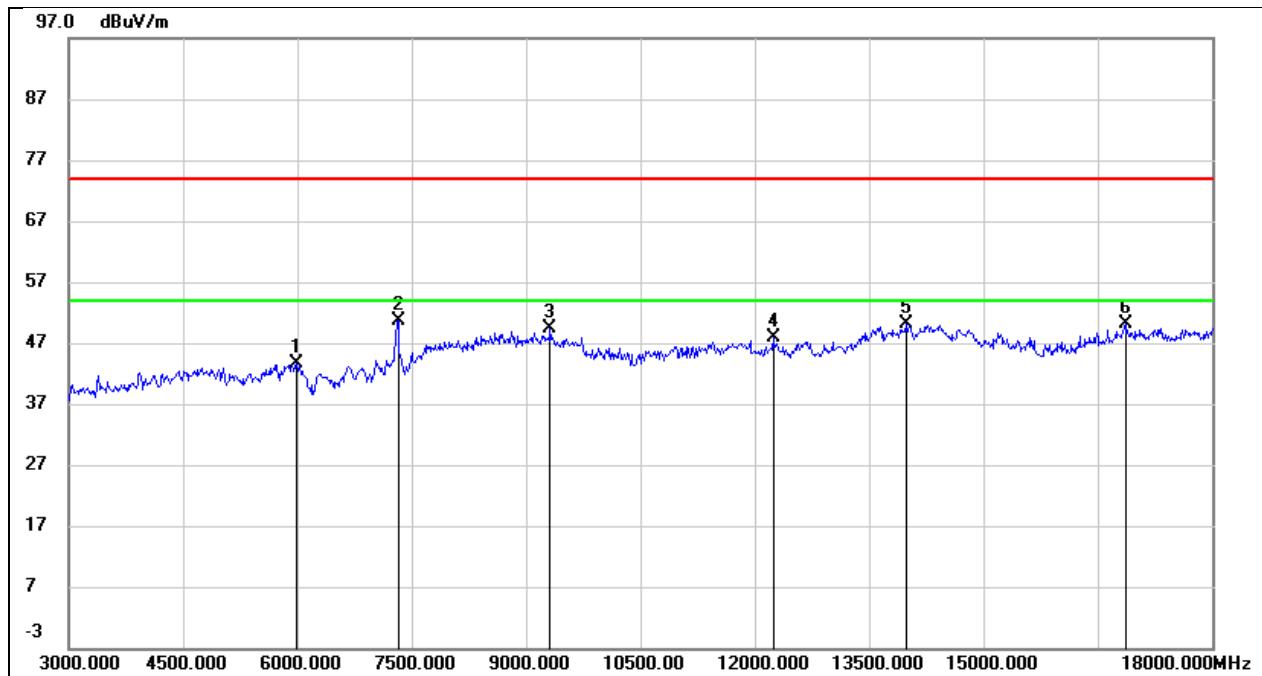
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	41.78	1.59	43.37	74.00	-30.63	peak
2	7035.000	36.35	7.32	43.67	74.00	-30.33	peak
3	8520.000	38.83	9.67	48.50	74.00	-25.50	peak
4	11835.000	30.70	17.31	48.01	74.00	-25.99	peak
5	14430.000	27.46	21.68	49.14	74.00	-24.86	peak
6	17670.000	22.43	25.91	48.34	74.00	-25.66	peak

Test Mode:	802.11g	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



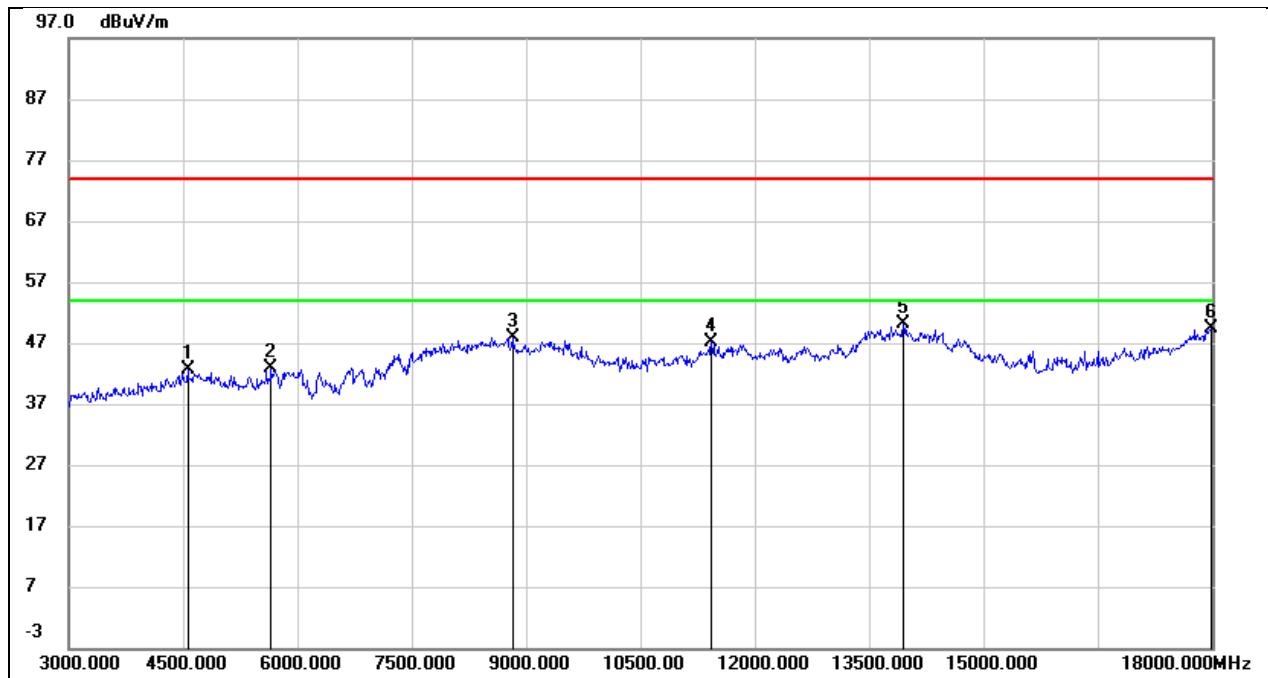
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5985.000	39.24	3.11	42.35	74.00	-31.65	peak
2	7290.000	45.24	7.02	52.26	74.00	-21.74	peak
3	8700.000	38.02	9.43	47.45	74.00	-26.55	peak
4	11370.000	29.63	17.53	47.16	74.00	-26.84	peak
5	13860.000	26.42	23.19	49.61	74.00	-24.39	peak
6	18000.000	20.33	29.64	49.97	74.00	-24.03	peak

Test Mode:	802.11g	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



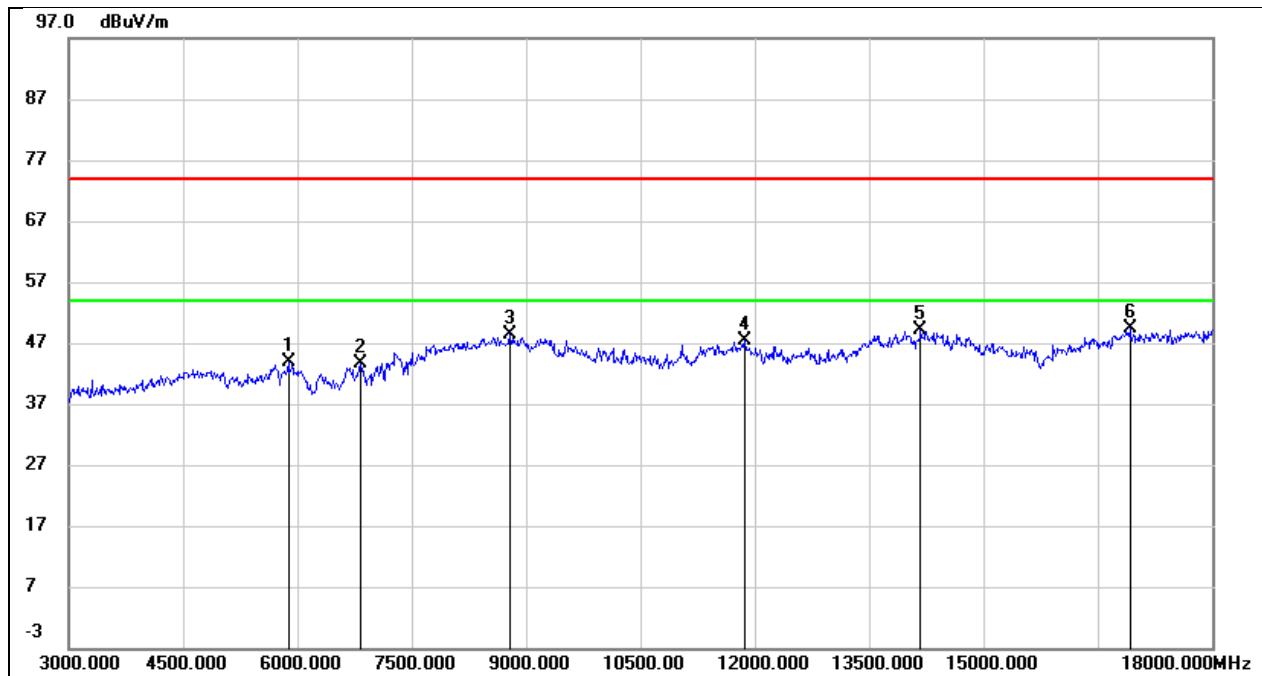
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5985.000	39.58	4.11	43.69	74.00	-30.31	peak
2	7320.000	43.04	7.69	50.73	74.00	-23.27	peak
3	9315.000	37.63	11.73	49.36	74.00	-24.64	peak
4	12240.000	30.04	17.78	47.82	74.00	-26.18	peak
5	13980.000	28.05	22.11	50.16	74.00	-23.84	peak
6	16860.000	25.07	25.00	50.07	74.00	-23.93	peak

Test Mode:	802.11g	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



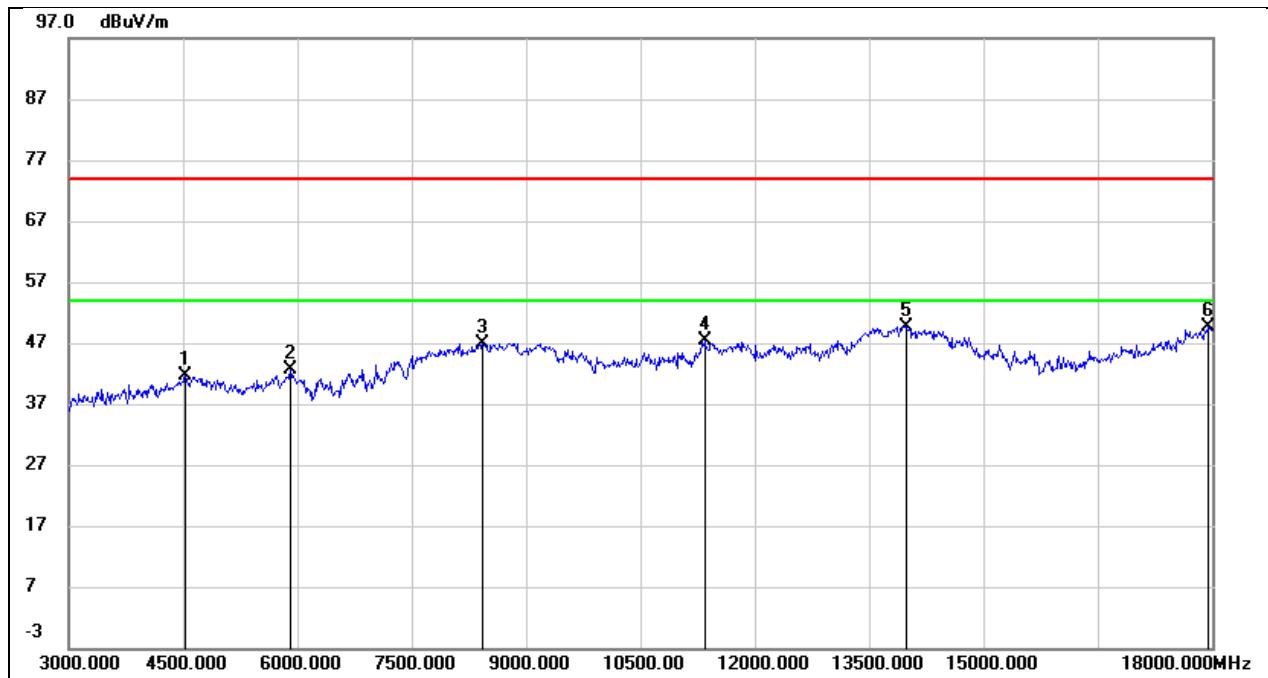
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4560.000	42.84	-0.25	42.59	74.00	-31.41	peak
2	5655.000	40.37	2.44	42.81	74.00	-31.19	peak
3	8820.000	38.30	9.62	47.92	74.00	-26.08	peak
4	11430.000	29.33	17.72	47.05	74.00	-26.95	peak
5	13950.000	26.57	23.58	50.15	74.00	-23.85	peak
6	17985.000	19.98	29.49	49.47	74.00	-24.53	peak

Test Mode:	802.11g	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



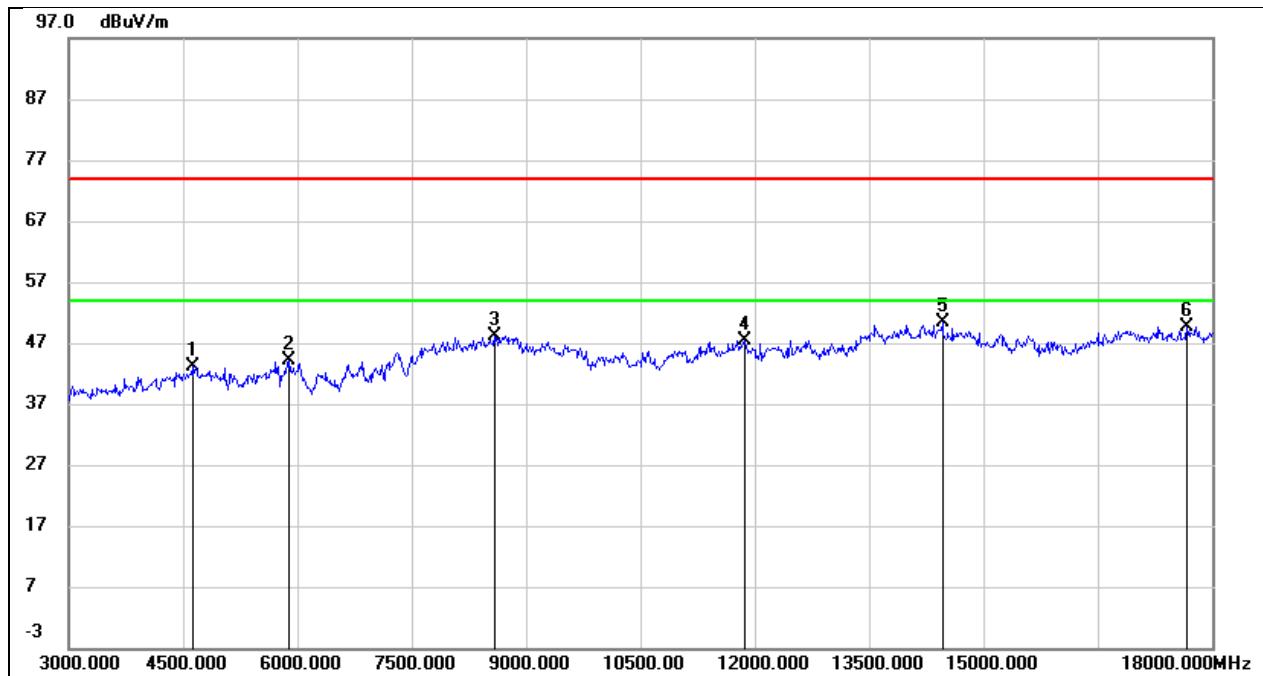
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5880.000	39.98	3.95	43.93	74.00	-30.07	peak
2	6825.000	36.80	6.81	43.61	74.00	-30.39	peak
3	8790.000	38.41	10.03	48.44	74.00	-25.56	peak
4	11865.000	30.02	17.37	47.39	74.00	-26.61	peak
5	14175.000	26.86	22.26	49.12	74.00	-24.88	peak
6	16920.000	24.19	25.08	49.27	74.00	-24.73	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



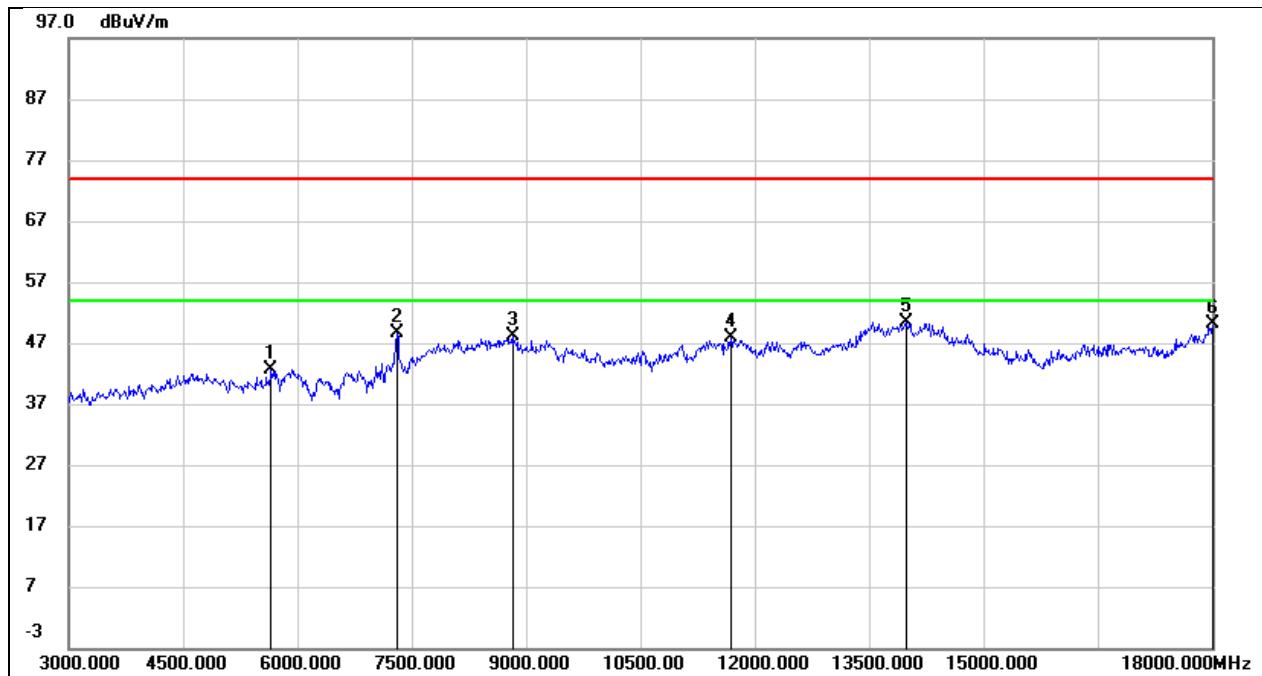
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4530.000	42.09	-0.34	41.75	74.00	-32.25	peak
2	5910.000	39.68	2.96	42.64	74.00	-31.36	peak
3	8430.000	38.06	8.93	46.99	74.00	-27.01	peak
4	11340.000	29.80	17.46	47.26	74.00	-26.74	peak
5	13995.000	25.92	23.78	49.70	74.00	-24.30	peak
6	17940.000	20.53	29.03	49.56	74.00	-24.44	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



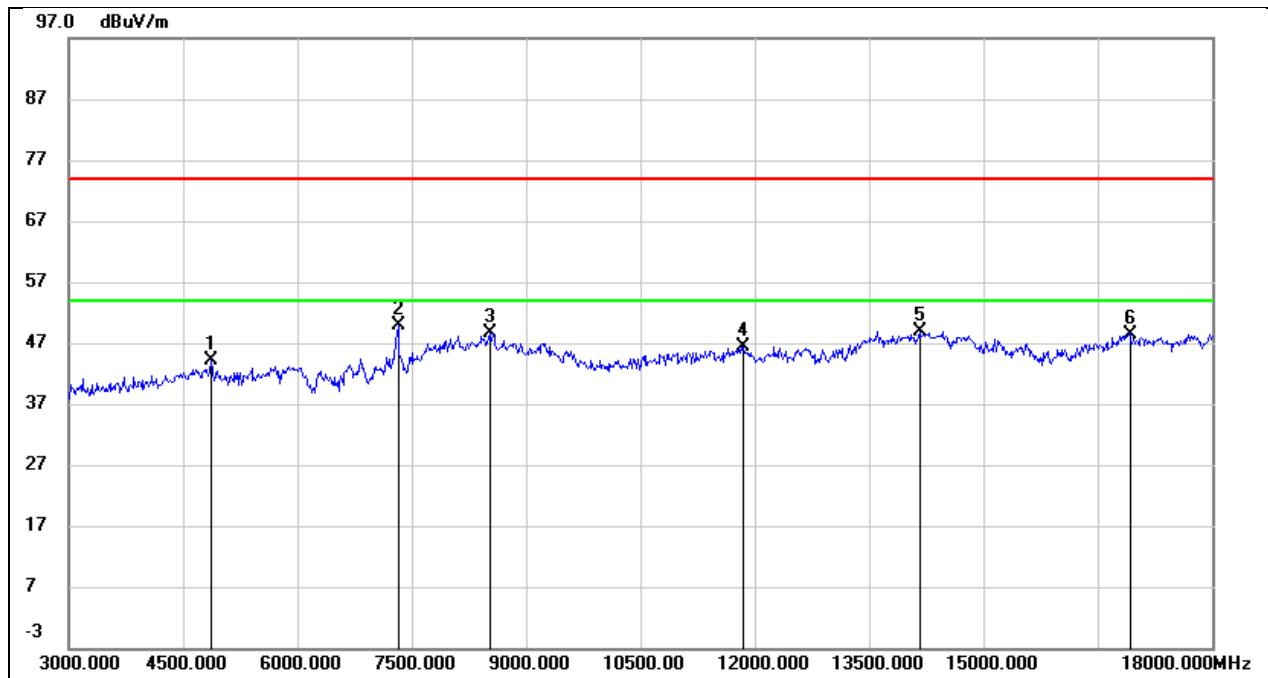
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4620.000	42.21	0.90	43.11	74.00	-30.89	peak
2	5895.000	40.09	3.96	44.05	74.00	-29.95	peak
3	8580.000	38.27	9.82	48.09	74.00	-25.91	peak
4	11865.000	30.07	17.37	47.44	74.00	-26.56	peak
5	14460.000	28.85	21.64	50.49	74.00	-23.51	peak
6	17670.000	23.82	25.91	49.73	74.00	-24.27	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



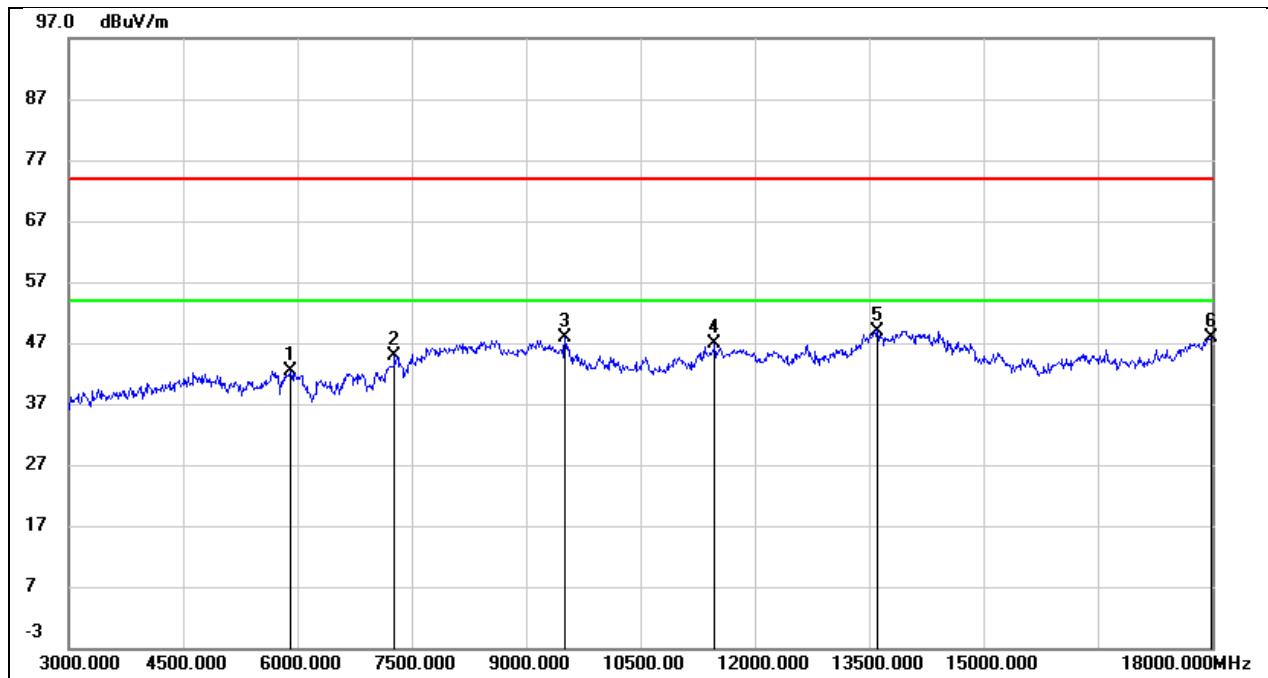
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5655.000	40.18	2.44	42.62	74.00	-31.38	peak
2	7305.000	41.64	7.03	48.67	74.00	-25.33	peak
3	8820.000	38.47	9.62	48.09	74.00	-25.91	peak
4	11685.000	29.53	18.31	47.84	74.00	-26.16	peak
5	13995.000	26.71	23.78	50.49	74.00	-23.51	peak
6	18000.000	20.52	29.64	50.16	74.00	-23.84	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 3.65 V



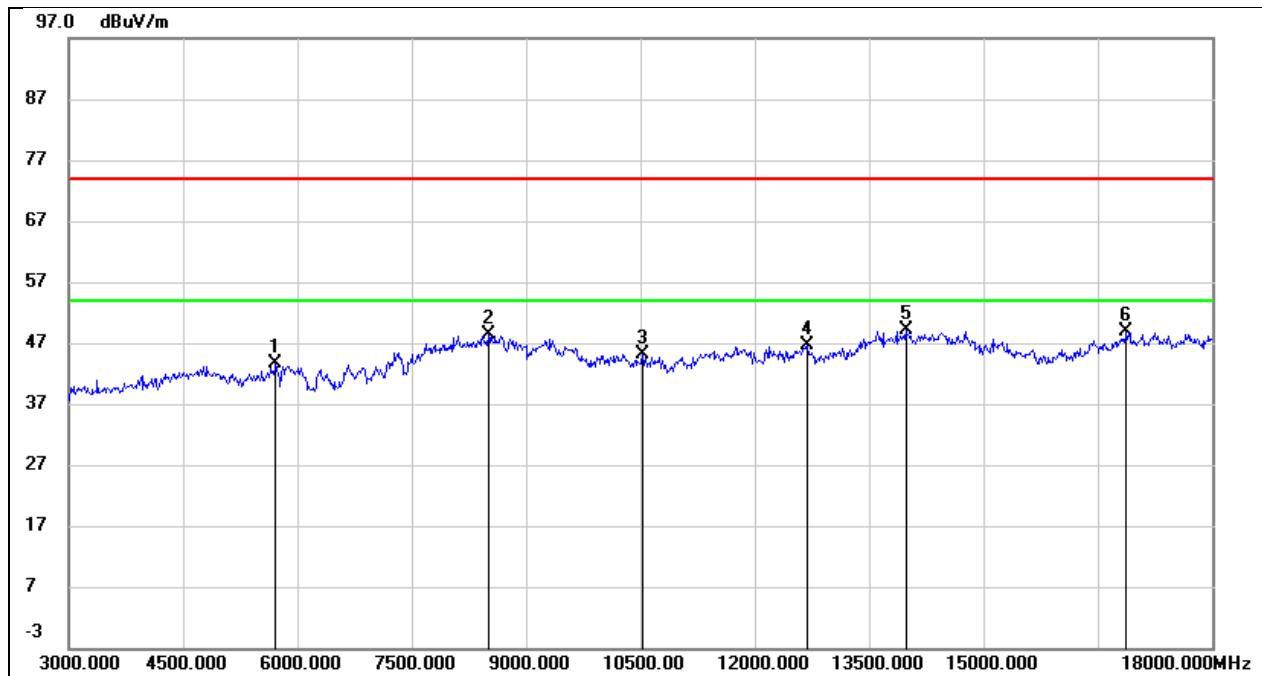
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4860.000	42.34	1.73	44.07	74.00	-29.93	peak
2	7320.000	42.31	7.69	50.00	74.00	-24.00	peak
3	8520.000	39.06	9.67	48.73	74.00	-25.27	peak
4	11850.000	29.14	17.33	46.47	74.00	-27.53	peak
5	14160.000	26.68	22.26	48.94	74.00	-25.06	peak
6	16920.000	23.42	25.08	48.50	74.00	-25.50	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5910.000	39.50	2.96	42.46	74.00	-31.54	peak
2	7275.000	37.95	6.99	44.94	74.00	-29.06	peak
3	9510.000	35.42	12.45	47.87	74.00	-26.13	peak
4	11475.000	28.92	17.88	46.80	74.00	-27.20	peak
5	13605.000	26.37	22.63	49.00	74.00	-25.00	peak
6	17985.000	18.38	29.49	47.87	74.00	-26.13	peak

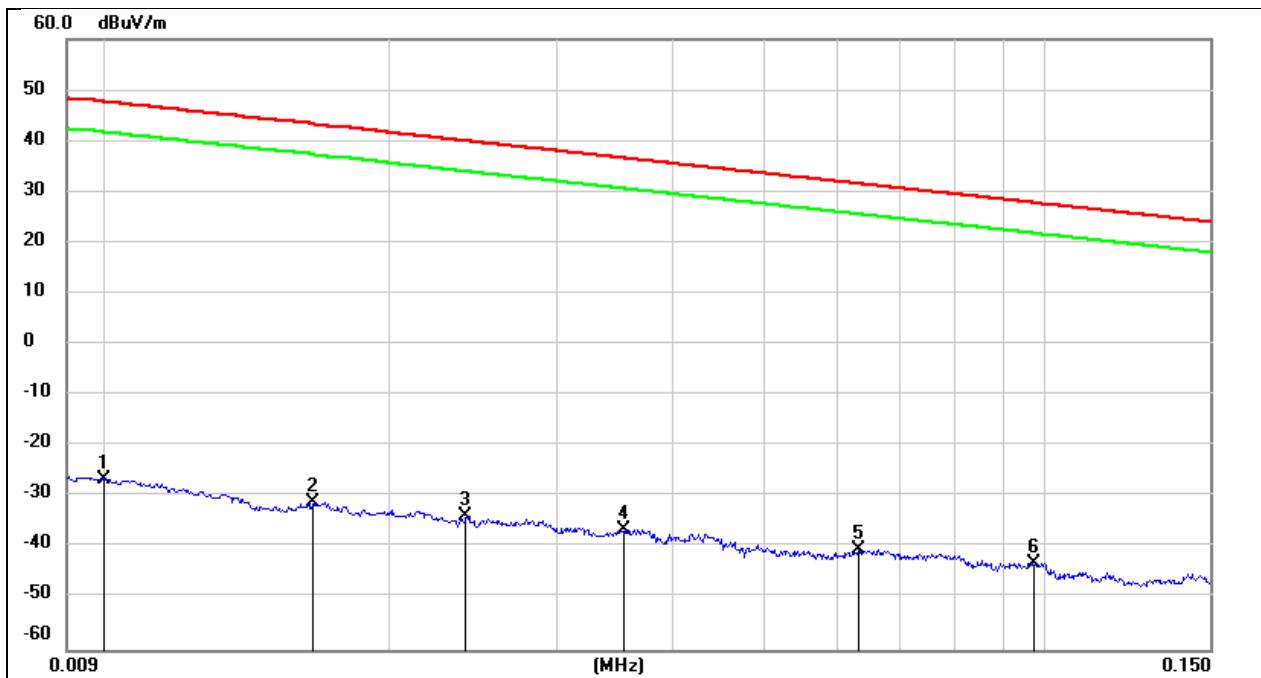
Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5715.000	39.95	3.67	43.62	74.00	-30.38	peak
2	8505.000	38.85	9.63	48.48	74.00	-25.52	peak
3	10530.000	31.60	13.59	45.19	74.00	-28.81	peak
4	12690.000	28.39	18.19	46.58	74.00	-27.42	peak
5	13980.000	27.03	22.11	49.14	74.00	-24.86	peak
6	16875.000	23.83	25.02	48.85	74.00	-25.15	peak

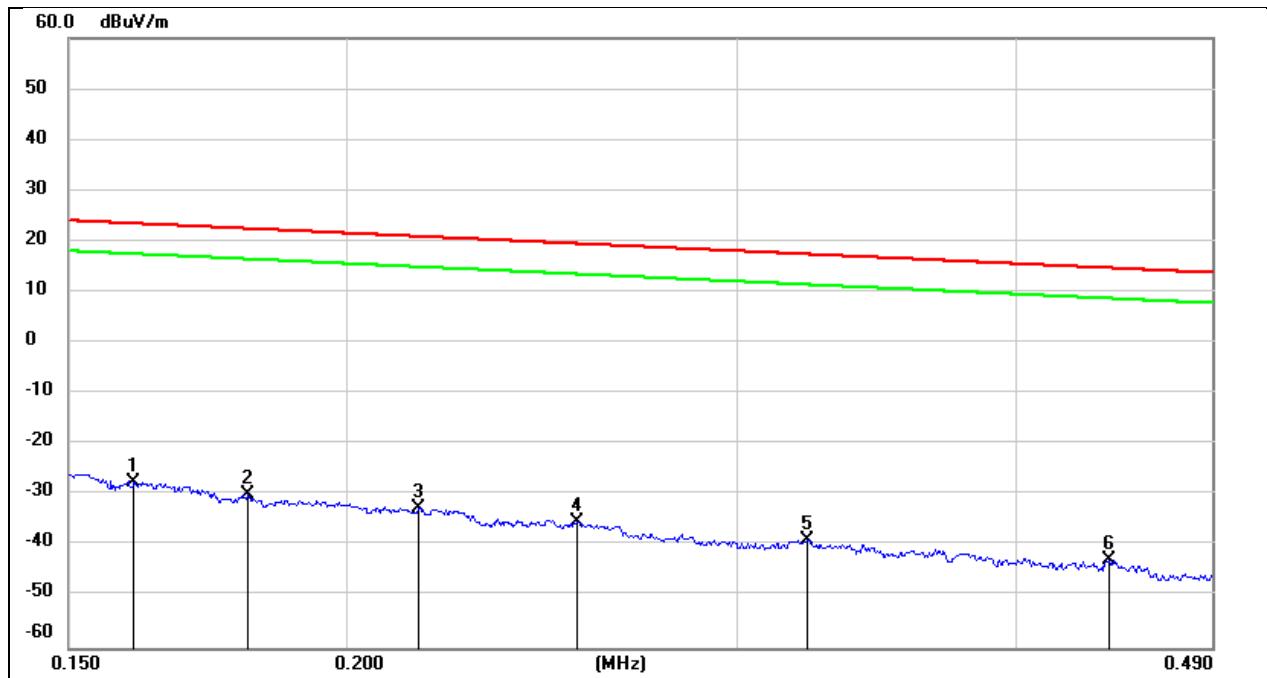
## 8.2. SPURIOUS EMISSIONS OF RTL8733 (9 KHZ~30 MHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



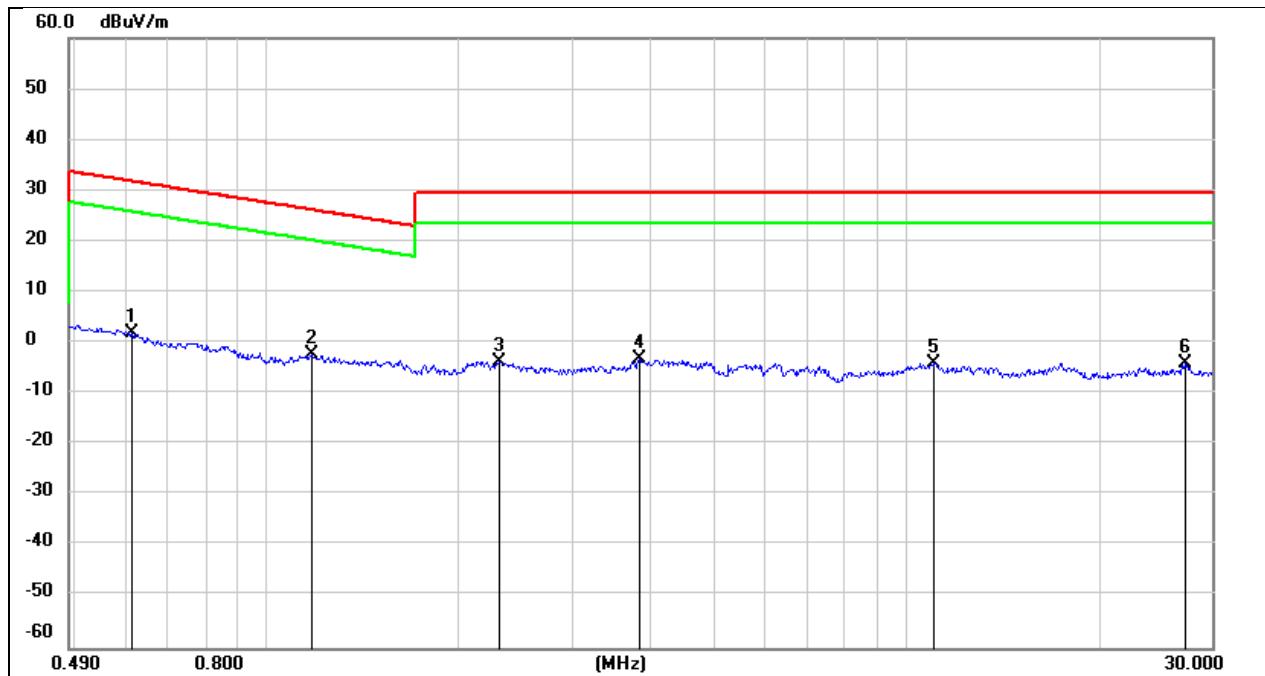
No.	Frequency	Reading	Correct	Result	Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0100	74.72	-101.40	-26.68	47.60	-78.18	-3.9	-74.28	peak
2	0.0165	70.34	-101.37	-31.03	43.25	-82.53	-8.25	-74.28	peak
3	0.0240	67.55	-101.36	-33.81	40.00	-85.31	-11.5	-73.81	peak
4	0.0354	64.97	-101.41	-36.44	36.62	-87.94	-14.88	-73.06	peak
5	0.0631	61.13	-101.54	-40.41	31.60	-91.91	-19.9	-72.01	peak
6	0.0974	58.77	-101.78	-43.01	27.83	-94.51	-23.67	-70.84	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1604	74.18	-101.65	-27.47	23.50	-50.97	peak
2	0.1804	71.93	-101.68	-29.75	22.48	-52.23	peak
3	0.2156	69.15	-101.75	-32.60	20.93	-53.53	peak
4	0.2535	66.64	-101.80	-35.16	19.52	-54.68	peak
5	0.3224	63.05	-101.88	-38.83	17.43	-56.26	peak
6	0.4405	59.18	-102.01	-42.83	14.72	-57.55	peak

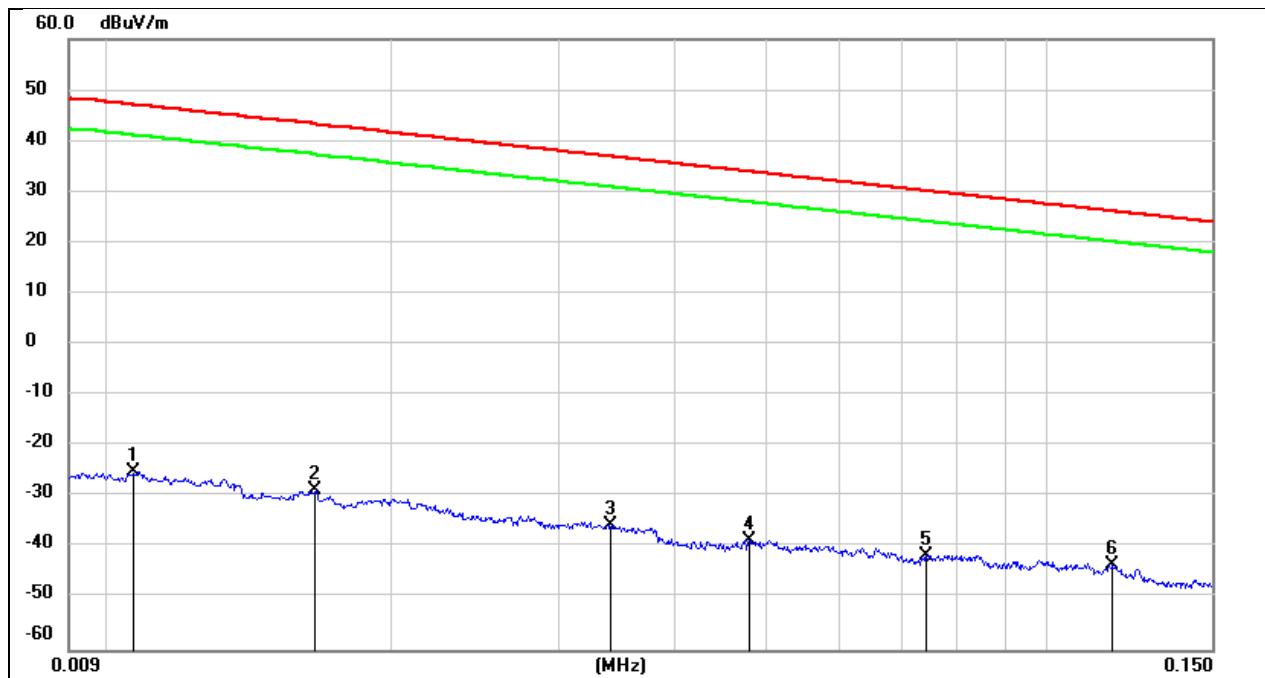
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.6139	64.02	-62.08	1.94	31.84	-29.90	peak
2	1.1771	59.98	-62.19	-2.21	26.19	-28.40	peak
3	2.3195	58.04	-61.75	-3.71	29.54	-33.25	peak
4	3.8246	58.20	-61.38	-3.18	29.54	-32.72	peak
5	10.9954	56.84	-60.84	-4.00	29.54	-33.54	peak
6	27.1966	56.31	-60.24	-3.93	29.54	-33.47	peak

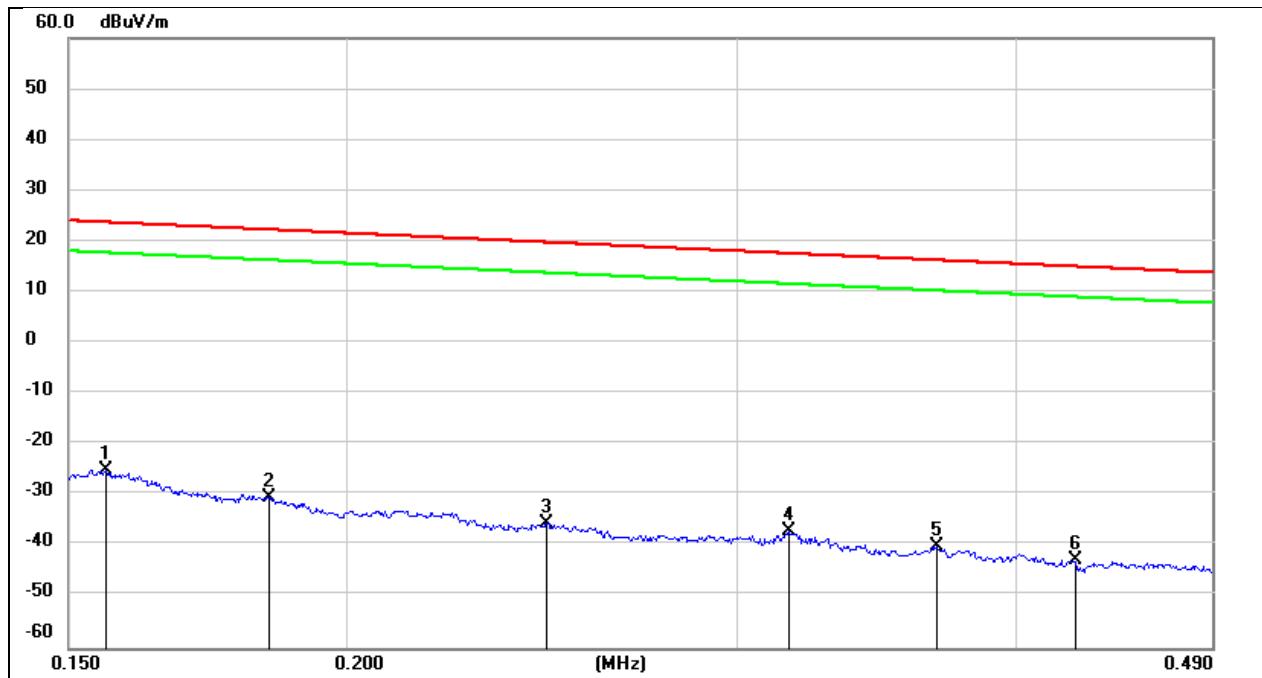
## 8.1. SPURIOUS EMISSIONS OF XL100(9 KHZ~30 MHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



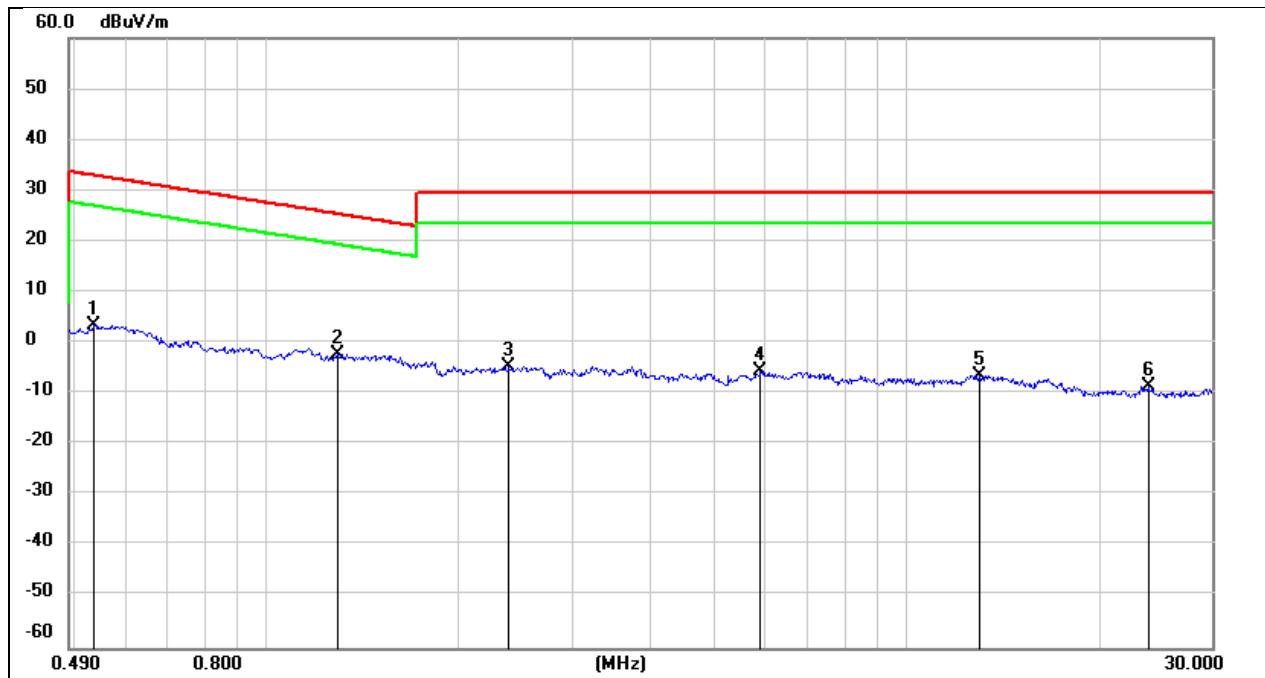
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0106	76.38	-101.39	-25.01	47.09	-72.10	peak
2	0.0165	72.84	-101.37	-28.53	43.25	-71.78	peak
3	0.0342	65.94	-101.41	-35.47	36.92	-72.39	peak
4	0.0480	62.99	-101.47	-38.48	33.97	-72.45	peak
5	0.0743	60.08	-101.59	-41.51	30.18	-71.69	peak
6	0.1174	58.33	-101.74	-43.41	26.21	-69.62	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1559	76.65	-101.65	-25.00	23.74	-48.74	peak
2	0.1844	71.10	-101.69	-30.59	22.29	-52.88	peak
3	0.2462	66.36	-101.80	-35.44	19.78	-55.22	peak
4	0.3163	64.70	-101.87	-37.17	17.60	-54.77	peak
5	0.3684	61.98	-101.93	-39.95	16.27	-56.22	peak
6	0.4248	59.09	-101.99	-42.90	15.04	-57.94	peak

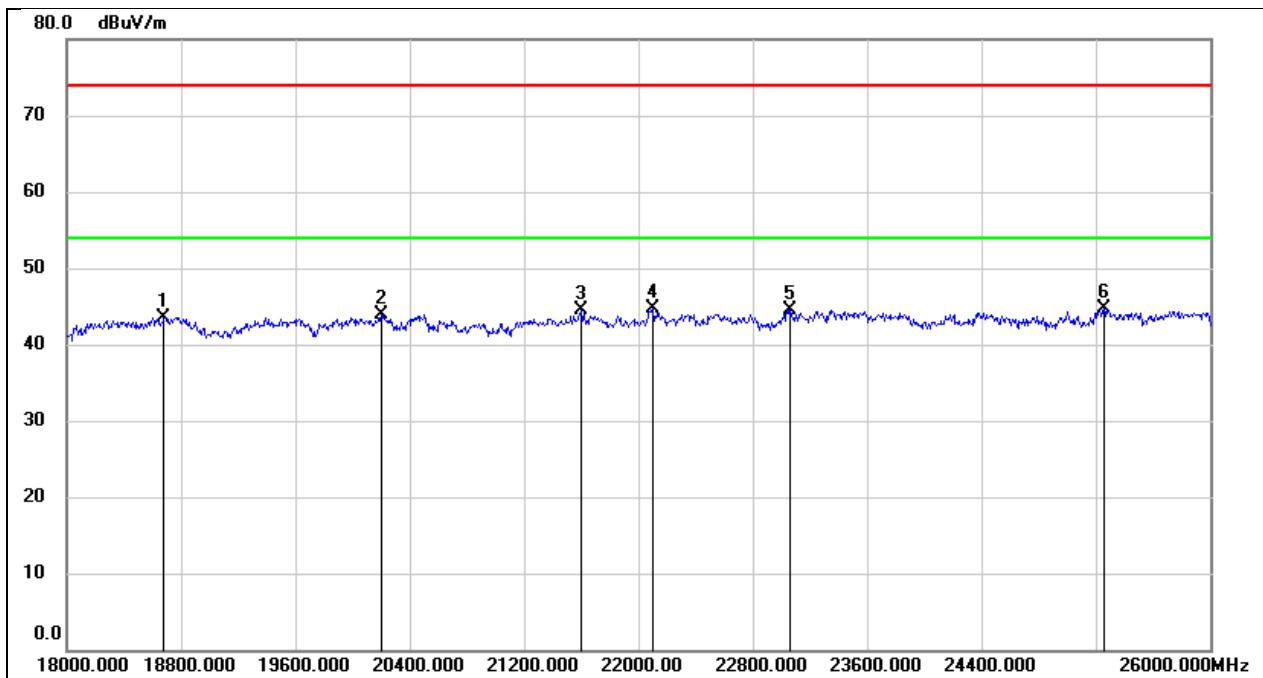
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.5361	65.46	-62.08	3.38	33.02	-29.64	peak
2	1.2882	59.92	-62.14	-2.22	25.41	-27.63	peak
3	2.3887	57.15	-61.72	-4.57	29.54	-34.11	peak
4	5.9198	55.93	-61.36	-5.43	29.54	-34.97	peak
5	12.9725	54.49	-60.93	-6.44	29.54	-35.98	peak
6	23.8323	51.93	-60.54	-8.61	29.54	-38.15	peak

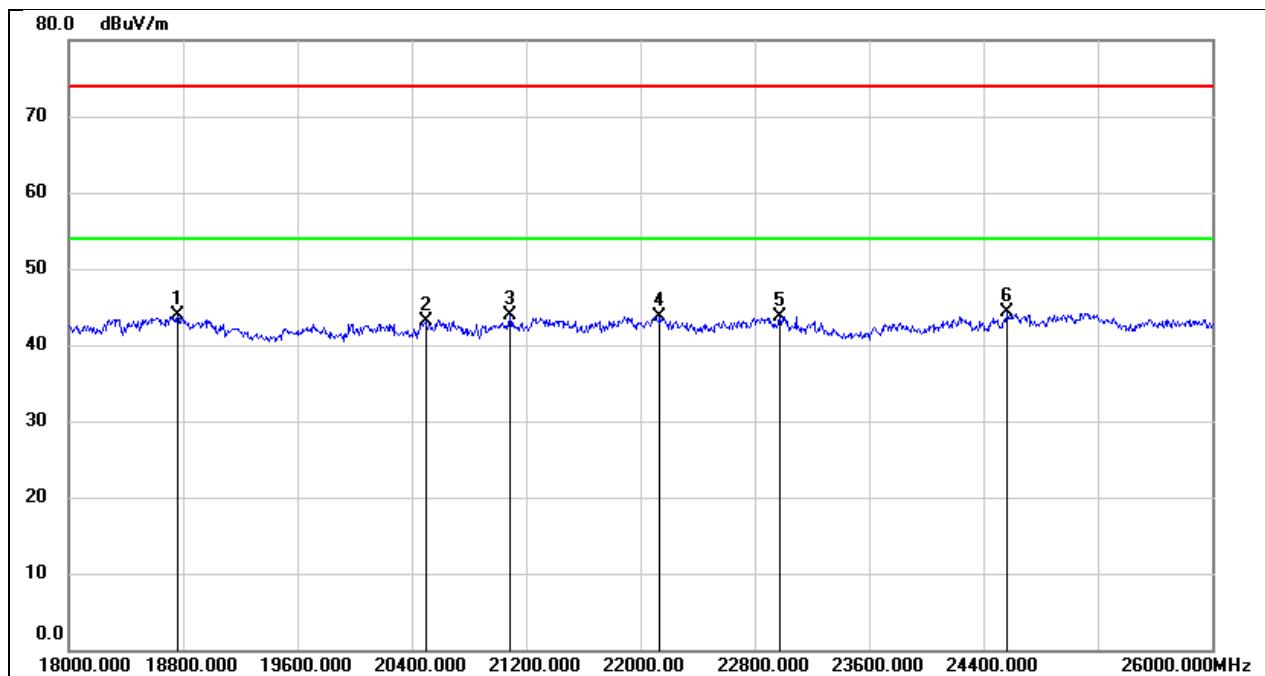
## 8.2. SPURIOUS EMISSIONS OF RTL8733 (18 GHZ~26 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18680.000	48.95	-5.38	43.57	74.00	-30.43	peak
2	20200.000	49.54	-5.58	43.96	74.00	-30.04	peak
3	21600.000	49.02	-4.54	44.48	74.00	-29.52	peak
4	22096.000	49.04	-4.38	44.66	74.00	-29.34	peak
5	23064.000	47.99	-3.42	44.57	74.00	-29.43	peak
6	25256.000	46.29	-1.67	44.62	74.00	-29.38	peak

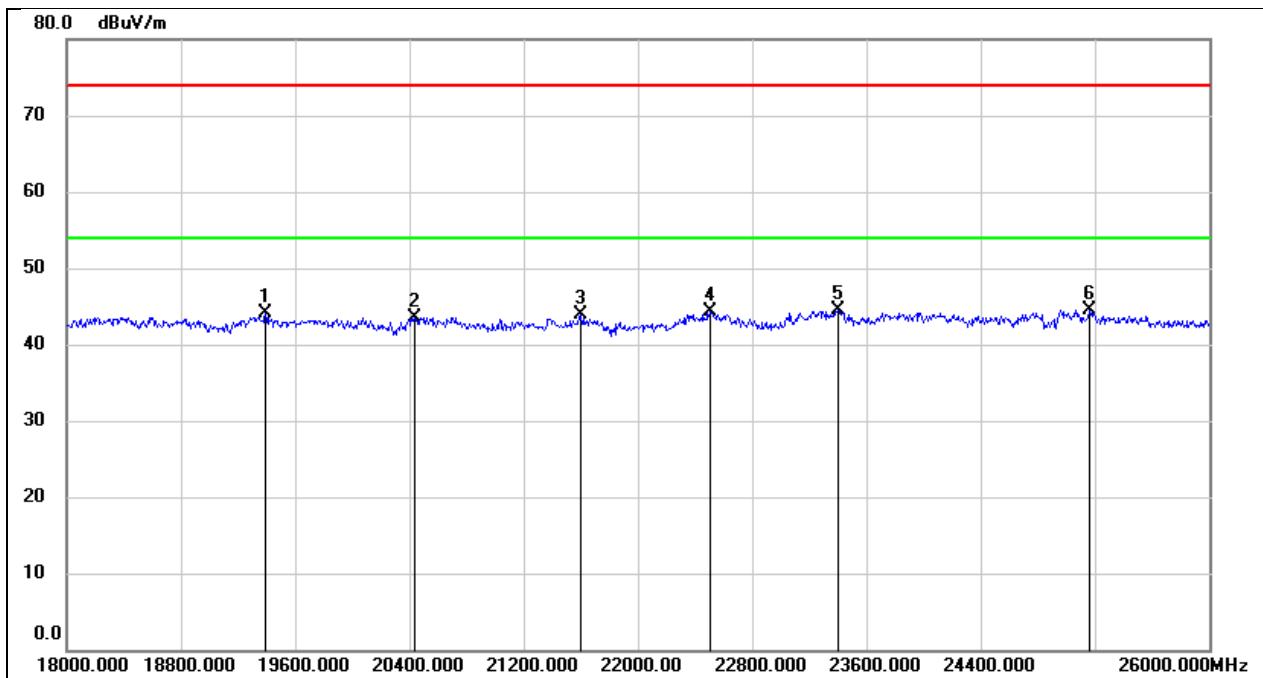
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18760.000	49.29	-5.42	43.87	74.00	-30.13	peak
2	20496.000	48.41	-5.35	43.06	74.00	-30.94	peak
3	21088.000	48.78	-4.84	43.94	74.00	-30.06	peak
4	22136.000	47.96	-4.34	43.62	74.00	-30.38	peak
5	22976.000	47.26	-3.46	43.80	74.00	-30.20	peak
6	24568.000	46.60	-2.33	44.27	74.00	-29.73	peak

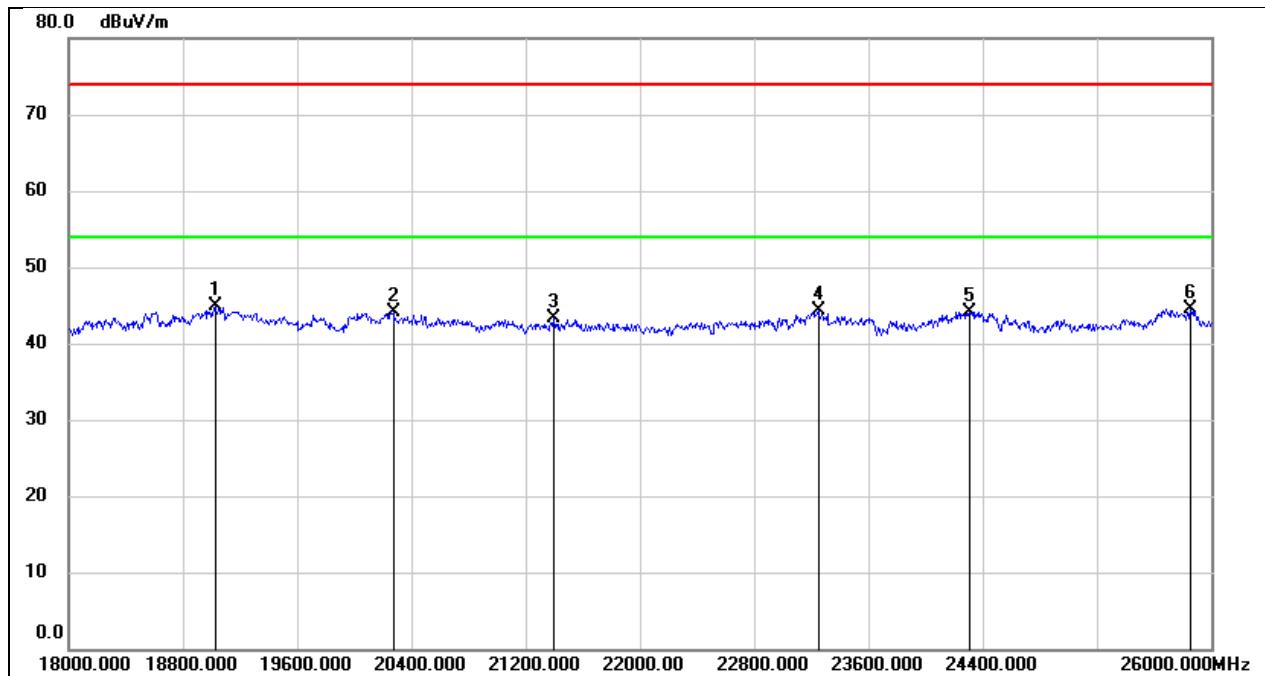
## 8.1. SPURIOUS EMISSIONS OF XL100 (18 GHZ~26 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19392.000	49.62	-5.57	44.05	74.00	-29.95	peak
2	20432.000	48.99	-5.42	43.57	74.00	-30.43	peak
3	21600.000	48.52	-4.54	43.98	74.00	-30.02	peak
4	22504.000	48.15	-3.88	44.27	74.00	-29.73	peak
5	23400.000	47.69	-3.23	44.46	74.00	-29.54	peak
6	25160.000	46.42	-1.83	44.59	74.00	-29.41	peak

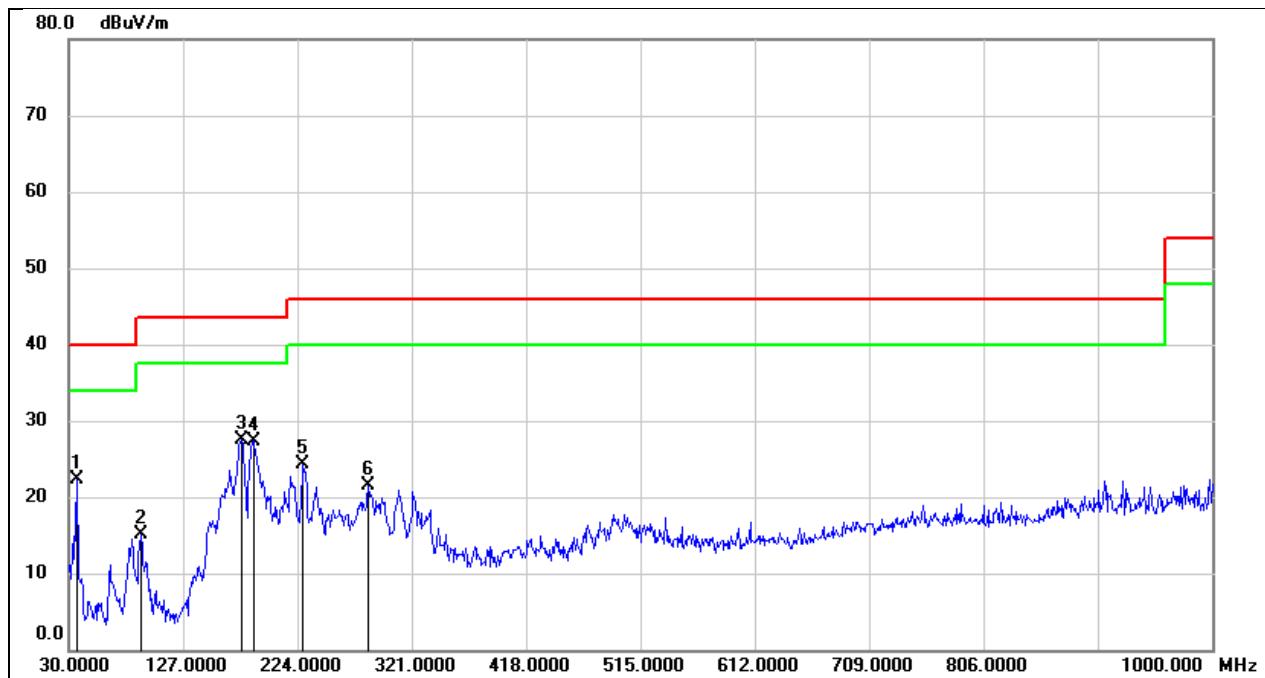
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19024.000	50.20	-5.24	44.96	74.00	-29.04	peak
2	20272.000	49.77	-5.60	44.17	74.00	-29.83	peak
3	21400.000	48.04	-4.72	43.32	74.00	-30.68	peak
4	23248.000	47.65	-3.37	44.28	74.00	-29.72	peak
5	24304.000	46.89	-2.72	44.17	74.00	-29.83	peak
6	25856.000	45.29	-0.80	44.49	74.00	-29.51	peak

## 8.1. SPURUS EMISSIONS(30 MHZ~1 GHZ)

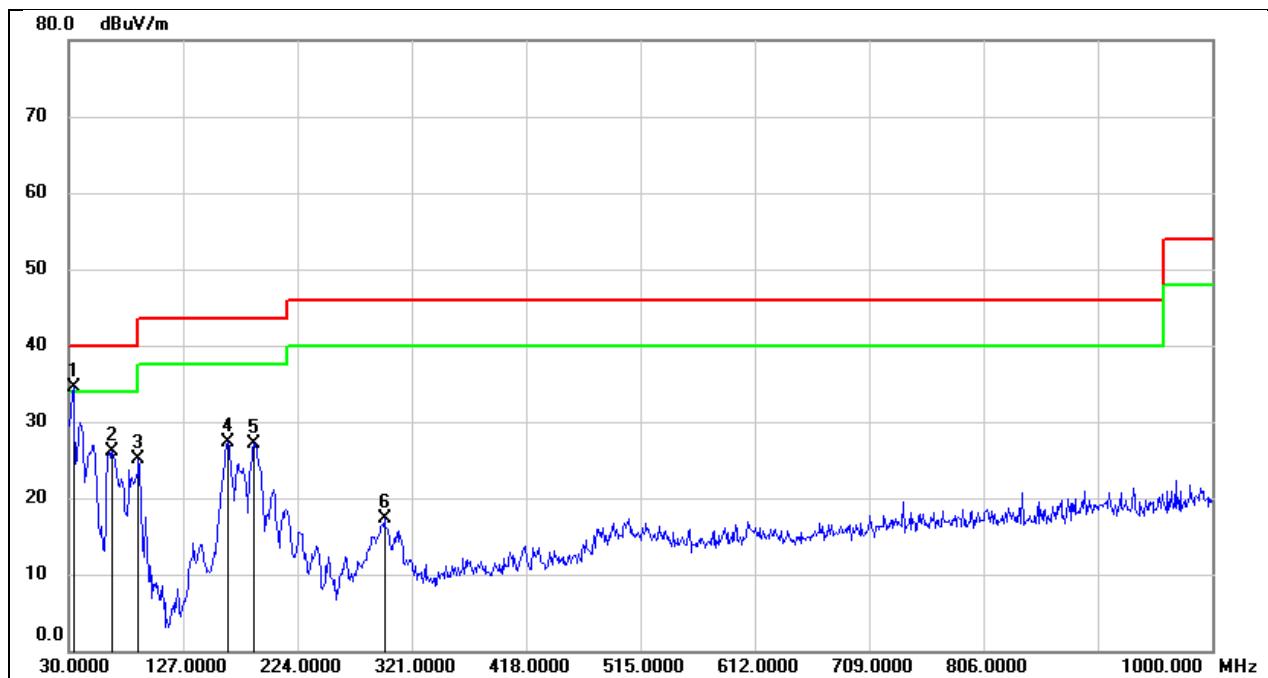
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.7900	41.23	-18.83	22.40	40.00	-17.60	QP
2	91.1100	36.68	-21.64	15.04	43.50	-28.46	QP
3	176.4700	43.50	-16.02	27.48	43.50	-16.02	QP
4	187.1400	43.37	-16.01	27.36	43.50	-16.14	QP
5	228.8500	41.63	-17.25	24.38	46.00	-21.62	QP
6	284.1400	37.49	-15.94	21.55	46.00	-24.45	QP

Note: All the modes of both modules have been tested, only the worst data was recorded in the report.

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.65 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	52.79	-18.37	34.42	40.00	-5.58	QP
2	66.8600	46.24	-20.11	26.13	40.00	-13.87	QP
3	89.1700	46.72	-21.68	25.04	43.50	-18.46	QP
4	164.8300	44.06	-16.68	27.38	43.50	-16.12	QP
5	187.1400	43.13	-16.01	27.12	43.50	-16.38	QP
6	297.7200	32.36	-14.97	17.39	46.00	-28.61	QP

Note: All the modes of both modules have been tested, only the worst data was recorded in the report.

## 9. ANTENNA REQUIREMENT

### REQUIREMENT

Please refer to FCC part 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC part 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### DESCRIPTION

Pass

## 10. AC POWER LINE CONDUCTED EMISSION

### LIMITS

Please refer to CFR 47 FCC §15.207 (a)

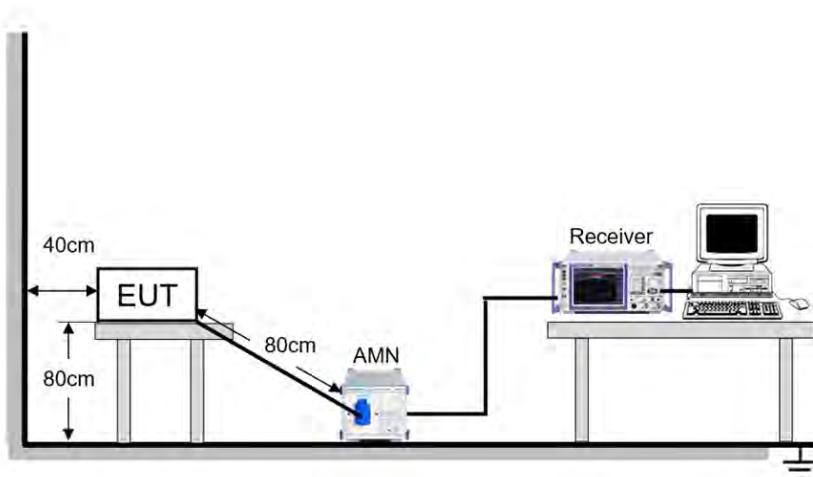
FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

### TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

### TEST SETUP



### TEST ENVIRONMENT

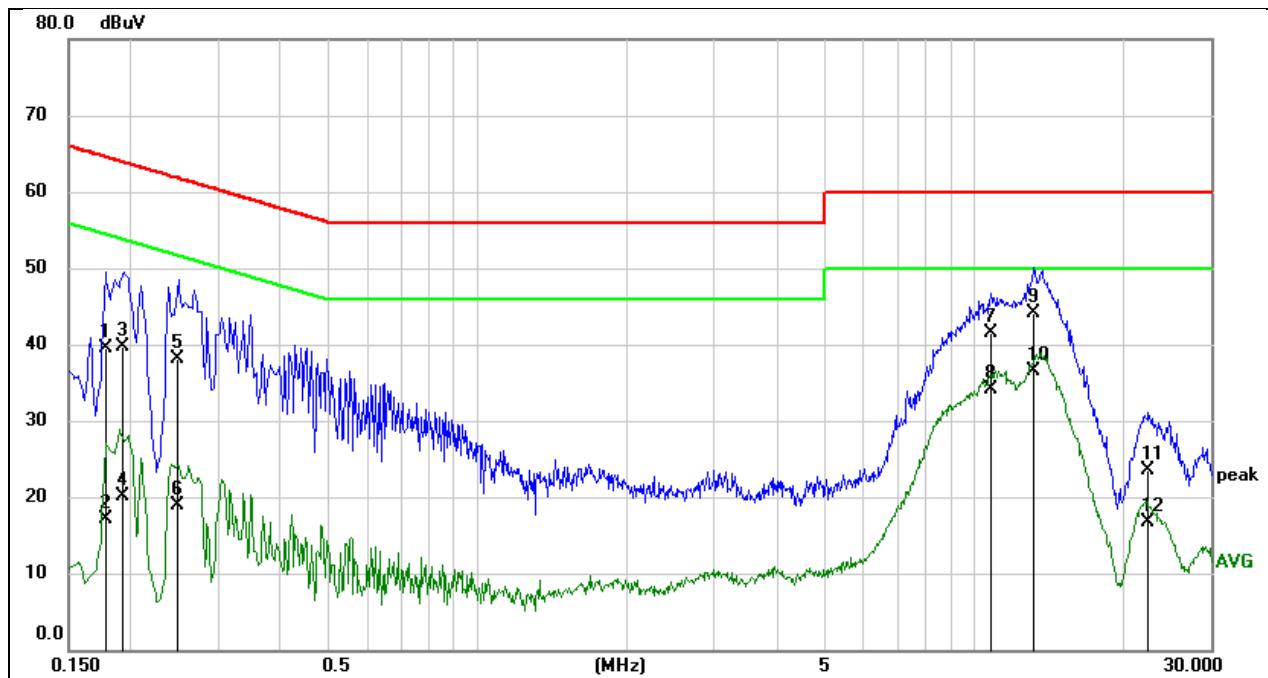
Temperature	23.4°C	Relative Humidity	52%
Atmosphere Pressure	101kPa	Test Voltage	AC 120 V, 60 Hz

**TEST DATE / ENGINEER**

Test Date	June 20, 2025	Test By	Deacon Tan
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**TEST RESULTS**

Test Mode:	802.11b	Frequency(MHz):	2412
Line:	Line		



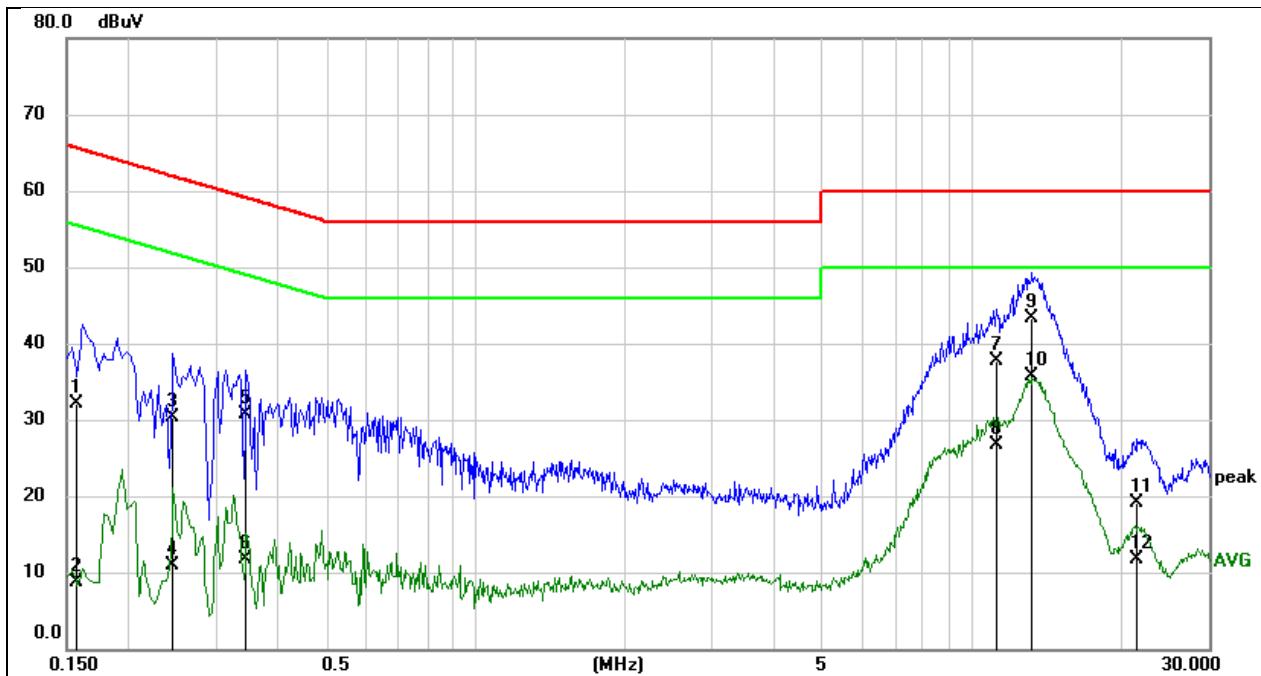
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1787	29.82	9.59	39.41	64.55	-25.14	QP
2	0.1787	7.51	9.59	17.10	54.55	-37.45	AVG
3	0.1917	30.02	9.59	39.61	63.96	-24.35	QP
4	0.1917	10.55	9.59	20.14	53.96	-33.82	AVG
5	0.2469	28.54	9.59	38.13	61.86	-23.73	QP
6	0.2469	9.41	9.59	19.00	51.86	-32.86	AVG
7	10.8466	31.85	9.73	41.58	60.00	-18.42	QP
8	10.8466	24.42	9.73	34.15	50.00	-15.85	AVG
9	13.2547	34.39	9.76	44.15	60.00	-15.85	QP
10	13.2547	26.65	9.76	36.41	50.00	-13.59	AVG
11	22.4408	13.66	9.81	23.47	60.00	-36.53	QP
12	22.4408	6.91	9.81	16.72	50.00	-33.28	AVG

**Note:**

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes of both modules have been tested, only the worst data was recorded in the report.

Test Mode:	802.11b	Frequency(MHz):	2412
Line:	Neutral		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1578	22.54	9.51	32.05	65.58	-33.53	QP
2	0.1578	-0.74	9.51	8.77	55.58	-46.81	AVG
3	0.2457	20.65	9.57	30.22	61.90	-31.68	QP
4	0.2457	1.25	9.57	10.82	51.90	-41.08	AVG
5	0.3458	21.09	9.54	30.63	59.06	-28.43	QP
6	0.3458	2.26	9.54	11.80	49.06	-37.26	AVG
7	11.2159	28.01	9.64	37.65	60.00	-22.35	QP
8	11.2159	17.10	9.64	26.74	50.00	-23.26	AVG
9	13.2702	33.69	9.66	43.35	60.00	-16.65	QP
10	13.2702	26.11	9.66	35.77	50.00	-14.23	AVG
11	21.5190	9.35	9.73	19.08	60.00	-40.92	QP
12	21.5190	1.88	9.73	11.61	50.00	-38.39	AVG

**Note:**

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes of both modules have been tested, only the worst data was recorded in the report.

## 11. TEST DATA

### 11.1. APPENDIX A: DTS BANDWIDTH

#### 11.1.1. Test Result

RTL8733

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.440	2416.520	$\geq 0.5$	PASS
		2437	9.080	2432.440	2441.520	$\geq 0.5$	PASS
		2462	9.080	2456.960	2466.040	$\geq 0.5$	PASS
11G	Ant1	2412	15.440	2404.440	2419.880	$\geq 0.5$	PASS
		2437	15.040	2429.440	2444.480	$\geq 0.5$	PASS
		2462	12.560	2454.440	2467.000	$\geq 0.5$	PASS
11N20SISO	Ant1	2412	13.360	2405.120	2418.480	$\geq 0.5$	PASS
		2437	15.480	2429.240	2444.720	$\geq 0.5$	PASS
		2462	13.800	2455.720	2469.520	$\geq 0.5$	PASS

XL100

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	$\geq 0.5$	PASS
	Ant2	2412	9.520	2407.480	2417.000	$\geq 0.5$	PASS
	Ant1	2437	8.560	2432.480	2441.040	$\geq 0.5$	PASS
	Ant2	2437	8.600	2432.440	2441.040	$\geq 0.5$	PASS
	Ant1	2462	9.040	2457.960	2467.000	$\geq 0.5$	PASS
	Ant2	2462	8.560	2457.480	2466.040	$\geq 0.5$	PASS
11G	Ant1	2412	15.520	2404.240	2419.760	$\geq 0.5$	PASS
	Ant2	2412	15.320	2404.480	2419.800	$\geq 0.5$	PASS
	Ant1	2437	16.320	2428.840	2445.160	$\geq 0.5$	PASS
	Ant2	2437	16.000	2429.120	2445.120	$\geq 0.5$	PASS
	Ant1	2462	15.640	2453.880	2469.520	$\geq 0.5$	PASS
	Ant2	2462	15.720	2453.840	2469.560	$\geq 0.5$	PASS
11N20MIMO	Ant1	2412	15.040	2404.480	2419.520	$\geq 0.5$	PASS
	Ant2	2412	15.280	2404.240	2419.520	$\geq 0.5$	PASS
	Ant1	2437	15.680	2428.880	2444.560	$\geq 0.5$	PASS
	Ant2	2437	15.280	2429.480	2444.760	$\geq 0.5$	PASS
	Ant1	2462	15.080	2454.480	2469.560	$\geq 0.5$	PASS
	Ant2	2462	15.120	2454.440	2469.560	$\geq 0.5$	PASS

## 11.1.2. Test Graphs

RTL8733







**XL100**












## 11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

### 11.2.1. Test Result

RTL8733

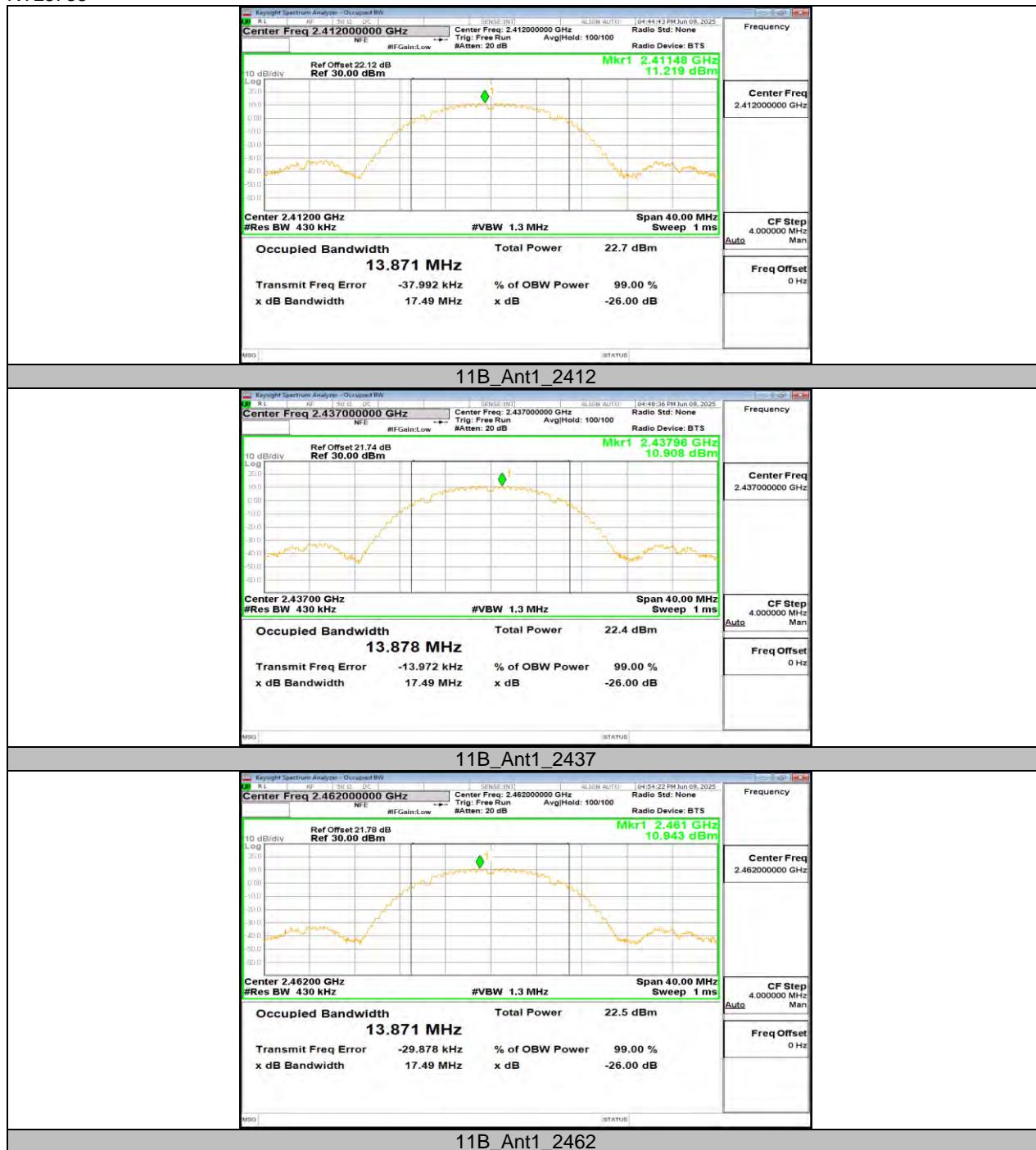
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant1	2412	13.871	2405.0265	2418.8975	PASS
		2437	13.878	2430.0470	2443.9250	PASS
		2462	13.871	2455.0346	2468.9056	PASS
11G	Ant1	2412	16.625	2403.6857	2420.3107	PASS
		2437	16.653	2428.6837	2445.3367	PASS
		2462	16.649	2453.7037	2470.3527	PASS
11N20SISO	Ant1	2412	17.695	2403.1717	2420.8667	PASS
		2437	17.709	2428.1674	2445.8764	PASS
		2462	17.691	2453.1448	2470.8358	PASS

XL100

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant1	2412	12.740	2405.6840	2418.4240	PASS
	Ant2	2412	13.034	2405.5169	2418.5509	PASS
	Ant1	2437	12.705	2430.7128	2443.4178	PASS
	Ant2	2437	13.029	2430.5380	2443.5670	PASS
	Ant1	2462	12.767	2455.6694	2468.4364	PASS
	Ant2	2462	13.020	2455.5335	2468.5535	PASS
11G	Ant1	2412	16.850	2403.5716	2420.4216	PASS
	Ant2	2412	16.870	2403.6247	2420.4947	PASS
	Ant1	2437	16.752	2428.6518	2445.4038	PASS
	Ant2	2437	17.243	2428.5144	2445.7574	PASS
	Ant1	2462	16.809	2453.6046	2470.4136	PASS
	Ant2	2462	17.244	2453.4326	2470.6766	PASS
11N20MIMO	Ant1	2412	17.709	2403.1805	2420.8895	PASS
	Ant2	2412	18.005	2403.0598	2421.0648	PASS
	Ant1	2437	17.746	2428.1484	2445.8944	PASS
	Ant2	2437	18.114	2428.0599	2446.1739	PASS
	Ant1	2462	17.753	2453.1555	2470.9085	PASS
	Ant2	2462	18.028	2453.0419	2471.0699	PASS

## 11.2.2. Test Graphs

RTL8733







XL100













## 11.3. APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER

### 11.3.1. Test Result

RTL8733

Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	19.82	≤30.00	PASS
		2437	19.56	≤30.00	PASS
		2462	19.66	≤30.00	PASS
11G	Ant1	2412	20.16	≤30.00	PASS
		2437	19.46	≤30.00	PASS
		2462	19.37	≤30.00	PASS
11N20SISO	Ant1	2412	20.07	≤30.00	PASS
		2437	19.36	≤30.00	PASS
		2462	19.33	≤30.00	PASS

XL100

Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	19.30	≤30.00	PASS
	Ant2	2412	19.33	≤30.00	PASS
	Ant1	2437	19.30	≤30.00	PASS
	Ant2	2437	19.18	≤30.00	PASS
	Ant1	2462	19.66	≤30.00	PASS
	Ant2	2462	19.52	≤30.00	PASS
11G	Ant1	2412	16.90	≤30.00	PASS
	Ant2	2412	17.64	≤30.00	PASS
	Ant1	2437	17.08	≤30.00	PASS
	Ant2	2437	17.69	≤30.00	PASS
	Ant1	2462	17.58	≤30.00	PASS
	Ant2	2462	18.09	≤30.00	PASS
11N20MIMO	Ant1	2412	16.22	≤30.00	PASS
	Ant2	2412	17.00	≤30.00	PASS
	total	2412	19.64	≤30.00	PASS
	Ant1	2437	16.38	≤30.00	PASS
	Ant2	2437	16.98	≤30.00	PASS
	total	2437	19.70	≤30.00	PASS
	Ant1	2462	16.75	≤30.00	PASS
	Ant2	2462	17.48	≤30.00	PASS
	total	2462	20.14	≤30.00	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

## 11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY

### 11.4.1. Test Result

RTL8733

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.84	≤8.00	PASS
		2437	-12.22	≤8.00	PASS
		2462	-12.29	≤8.00	PASS
11G	Ant1	2412	-9.55	≤8.00	PASS
		2437	-10.64	≤8.00	PASS
		2462	-10.46	≤8.00	PASS
11N20SISO	Ant1	2412	-10.44	≤8.00	PASS
		2437	-10.82	≤8.00	PASS
		2462	-10.72	≤8.00	PASS

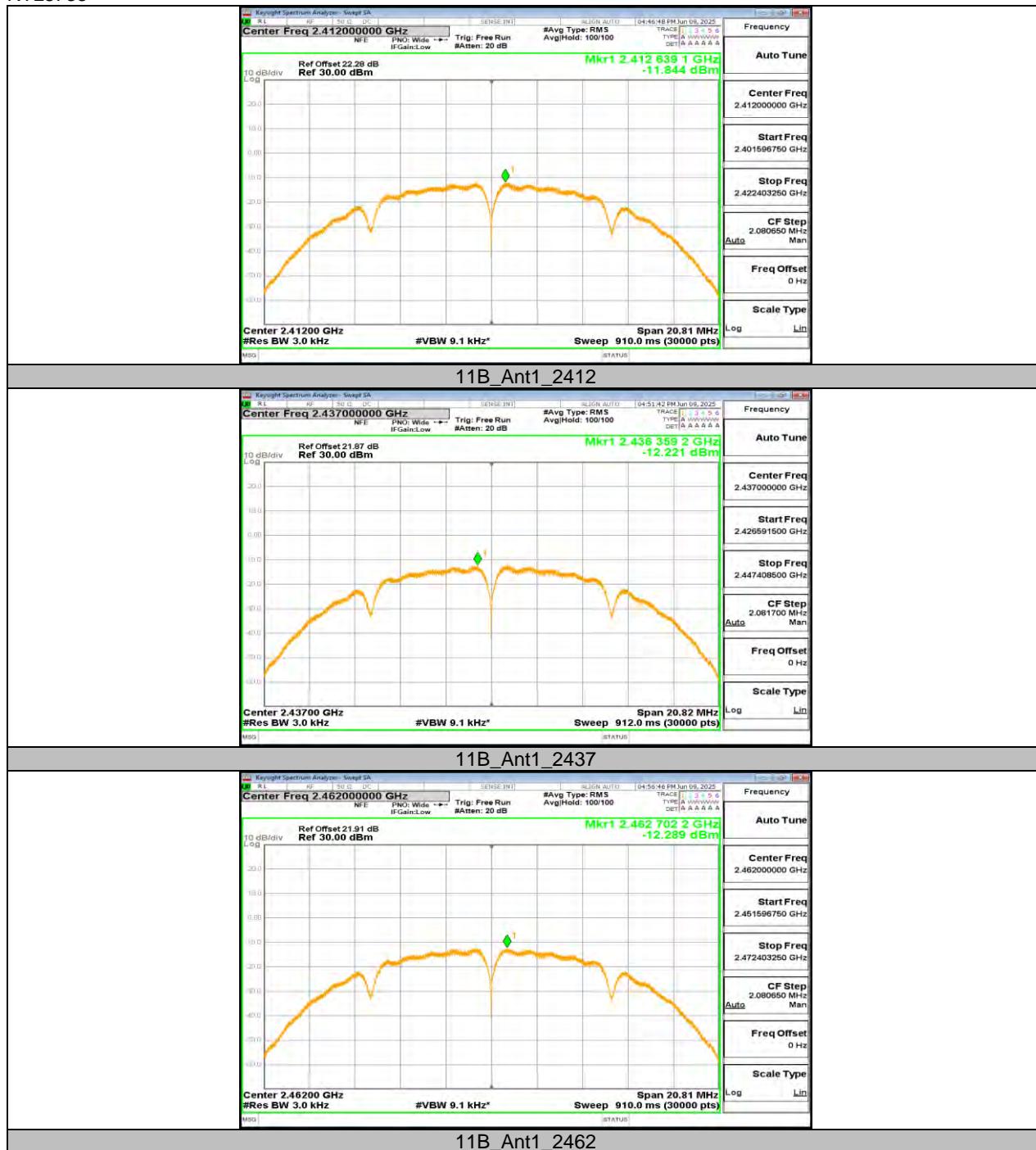
XL100

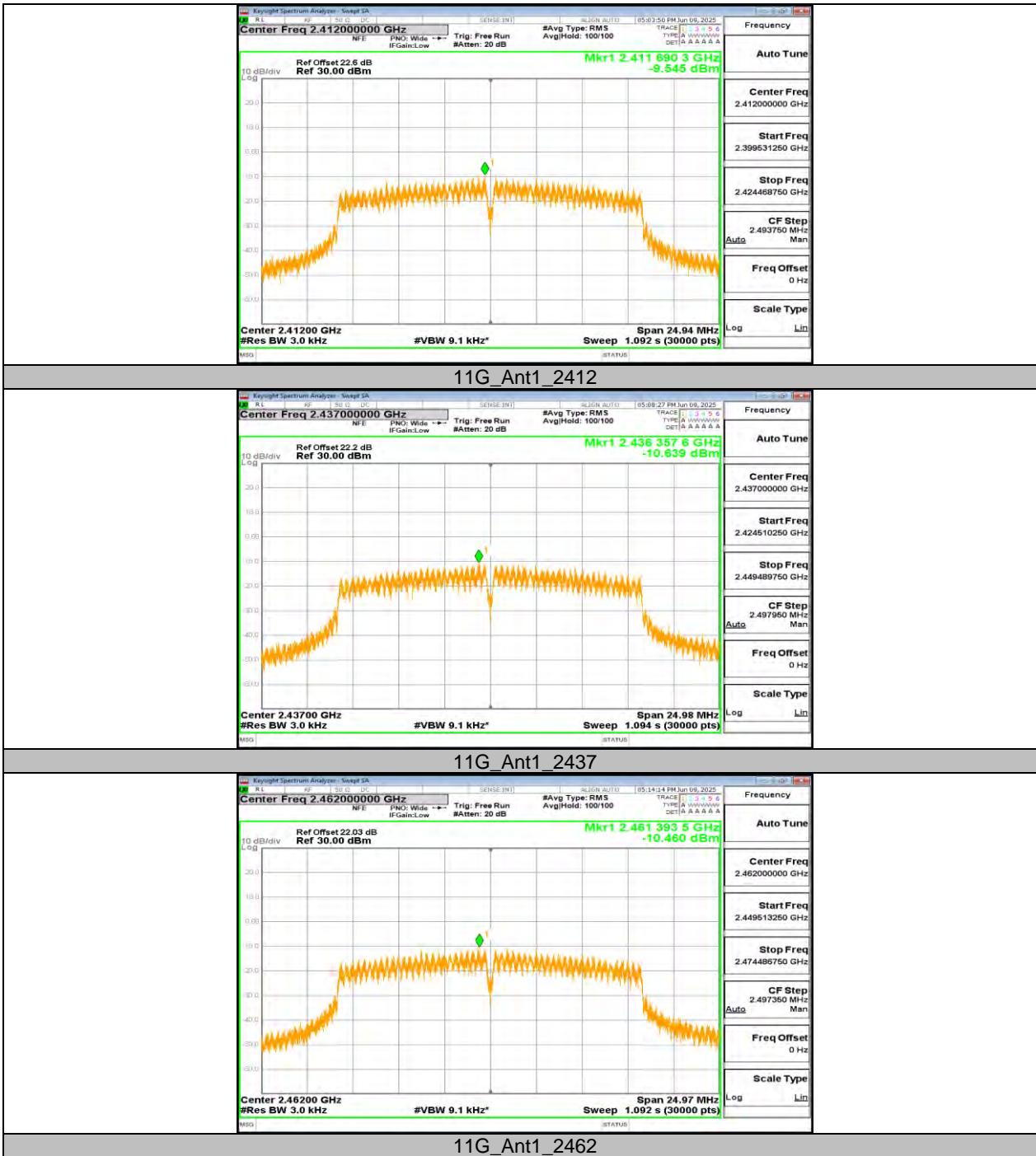
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.43	≤8.00	PASS
	Ant2	2412	-11.86	≤8.00	PASS
	Ant1	2437	-11.86	≤8.00	PASS
	Ant2	2437	-11.90	≤8.00	PASS
	Ant1	2462	-11.35	≤8.00	PASS
	Ant2	2462	-11.46	≤8.00	PASS
11G	Ant1	2412	-16.96	≤8.00	PASS
	Ant2	2412	-16.36	≤8.00	PASS
	Ant1	2437	-16.86	≤8.00	PASS
	Ant2	2437	-16.16	≤8.00	PASS
	Ant1	2462	-16.45	≤8.00	PASS
	Ant2	2462	-15.61	≤8.00	PASS
11N20MIMO	Ant1	2412	-17.76	≤8.00	PASS
	Ant2	2412	-16.93	≤8.00	PASS
	total	2412	-14.31	≤8.00	PASS
	Ant1	2437	-17.67	≤8.00	PASS
	Ant2	2437	-16.84	≤8.00	PASS
	total	2437	-14.22	≤8.00	PASS
	Ant1	2462	-16.94	≤8.00	PASS
	Ant2	2462	-16.54	≤8.00	PASS
	total	2462	-13.73	≤8.00	PASS

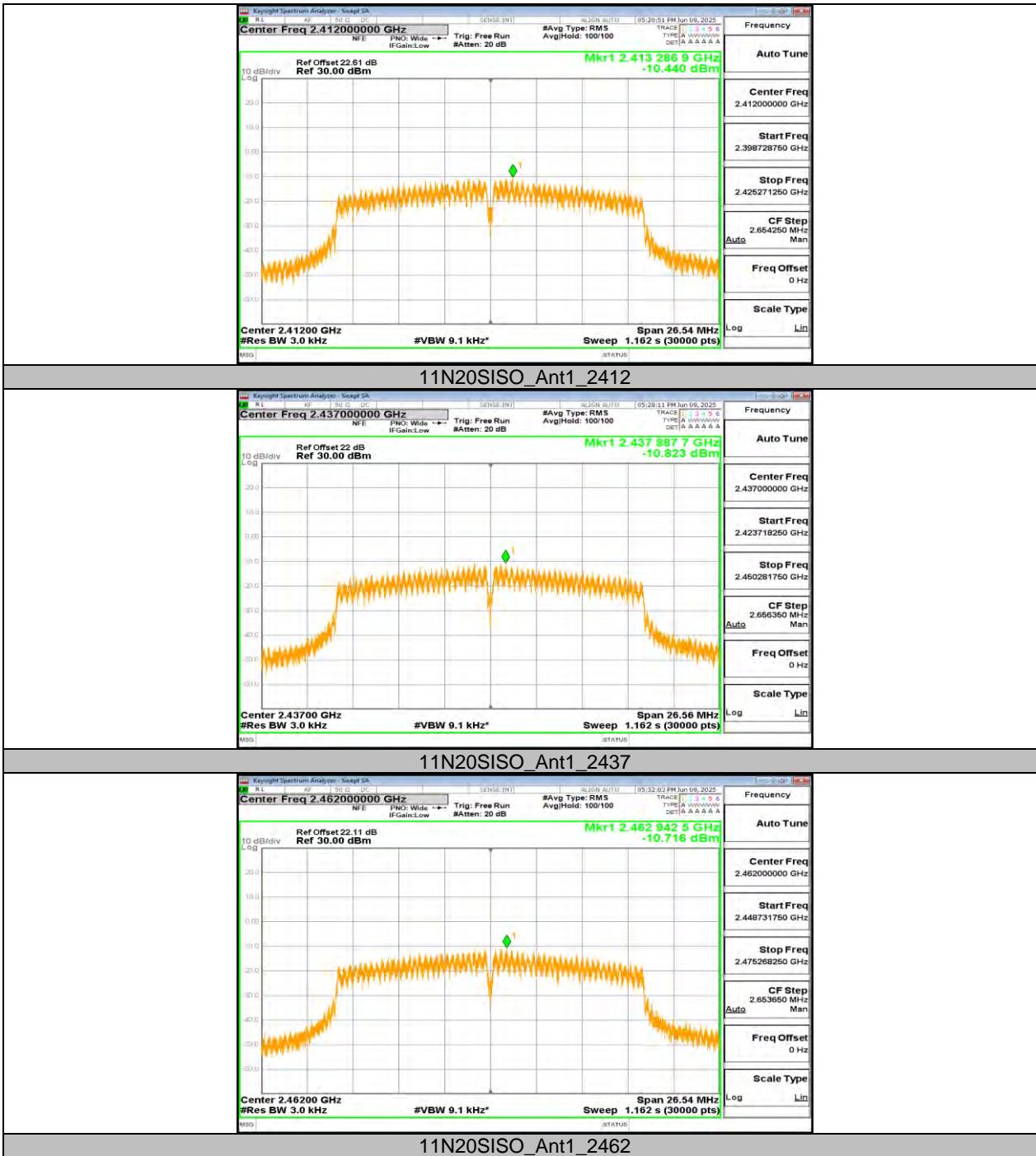
Note: 1. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

## 11.4.2. Test Graphs

RTL8733







**XL100**
