



**CFR 47 FCC PART 15 SUBPART C**

**TEST REPORT**

*For*

**Kasa Smart Doorbell**

**MODEL NUMBER: KD110**

**FCC ID: 2AXJ4KD110**

**REPORT NUMBER: 4789567348-2**

**ISSUE DATE: September 21, 2020**

*Prepared for*

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	09/21/2020	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB Bandwidth and 99% Occupied Bandwidth	FCC Part 15.247 (a) (2)	Pass
2	Peak Conducted Output Power	FCC Part 15.247 (b) (3)	Pass
3	Power Spectral Density	FCC Part 15.247 (e)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d)	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205	Pass
6	Conducted Emission Test For AC Power Port	FCC Part 15.207	Pass
7	Antenna Requirement	FCC Part 15.203	Pass

Note:  
1. This test report is only published to and used by the applicant, and it is not for evidence purpose in China.  
2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C > when <Accuracy Method> decision rule is applied.



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# 1. ATTESTATION OF TEST RESULTS

## Applicant Information

Company Name: TP-Link Corporation Limited  
Address: Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

## Manufacturer Information

Company Name: TP-Link Corporation Limited  
Address: Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

## EUT Information

EUT Name: Kasa Smart Doorbell  
Model: KD110  
Brand Name: tp-link  
Sample Status: Normal  
Sample ID: 3274254  
Sample Received Date: August 24, 2020  
Date of Tested: August 25, 2020~September 11, 2020

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

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Project Engineer

Checked By:

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Laboratory Leader

Approved By:

Stephen Guo  
Laboratory Manager



## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 558074 D01 15.247 Meas Guidance v05r02, 414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, 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.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</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 D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, 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 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz 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 recognize 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
AC Power Port 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)
DTS Bandwidth and 99% Occupied Bandwidth	±0.0196 %
Conducted Output Power	±0.686 dB
Conducted Power Spectral Density	±0.743 dB
Conducted Band Edge Measurements	±1.328 dB
Conducted Spurious Emissions	±0.746 dB (9 kHz ~ 1 GHz)
	±1.328 dB (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

Equipment	Kasa Smart Doorbell
Model Name	KD110
Radio Technology	IEEE802.11b/g/n HT20
Operation frequency	IEEE 802.11b: 2412MHz ~ 2462MHz IEEE 802.11g: 2412MHz ~ 2462MHz IEEE 802.11n HT20: 2412MHz ~ 2462MHz
Modulation	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK)
Software version	ver2-3-1-P1[20200729-rel80015]
Firmware version	1.0sp1
Test Input	DC 5V
Rated input	16-24VAC,0.5A,50/60Hz

### 5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Frequency (MHz)	Channel Number	Max Peak Conducted Power (dBm)
1	IEEE 802.11b	2412-2462	1-11[11]	24.08
1	IEEE 802.11g	2412-2462	1-11[11]	26.67
1	IEEE 802.11nHT20	2412-2462	1-11[11]	26.54

### 5.3. CHANNEL LIST

Channel List for IEEE 802.11b/g/n (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	/	/

### 5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency (MHz)
802.11b	CH 1, CH2, CH 6, CH10, CH 11	2412, 2417, 2437, 2457, 2462
802.11g	CH 1, CH2, CH 6, CH10, CH 11	2412, 2417, 2437, 2457, 2462
802.11n HT20	CH 1, CH2, CH 6, CH10, CH 11	2412, 2417, 2437, 2457, 2462



### 5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band											
Test Software		Realtek									
Modulation Mode	Transmit Antenna Number	Test Software Setting Value									
		NCB: 20MHz					NCB: 40MHz				
		CH1	CH2	CH6	CH10	CH11	CH3	CH4	CH7	CH8	CH11
802.11b	1	36	34	34	36	33	NA				
802.11g	1	41	47	55	46	53					
802.11n HT20	1	51	46	53	46	47					

Note: For 802.11g and 802.11n HT20, the CH11 is not open temperature compensation in test software. Other test channels are open temperature compensation.

### 5.6. THE WORSE CASE CONFIGURATIONS

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

802.11b mode: 1 Mbps  
802.11b mode: 6 Mbps  
802.11n HT20 mode: MCS0

### 5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	Omni Antenna	2.69

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.

Note: The value of the antenna gain was declared by customer.

## 5.8. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	PC	Dell	Vostro 3902	8KNDDDB2
2	USB TO UART	/	/	/

### I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

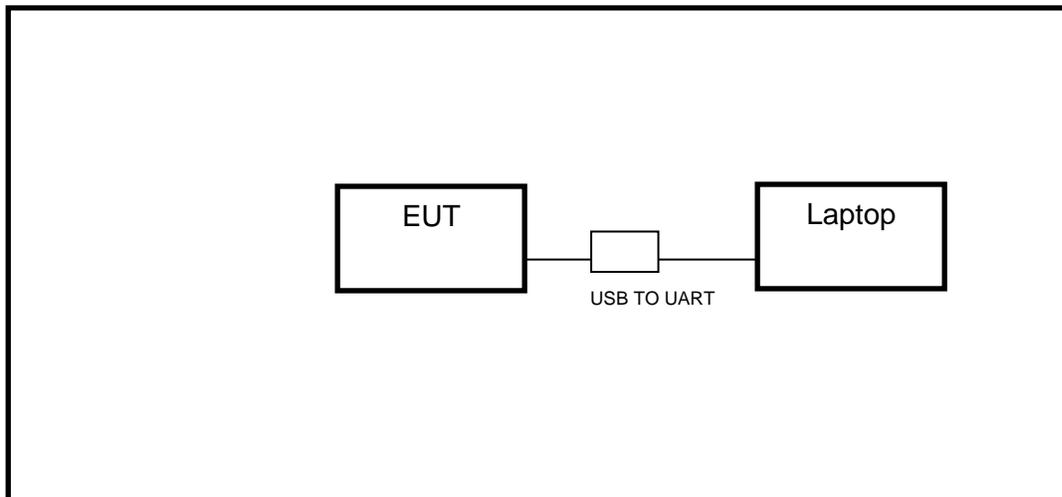
### ACCESSORIES

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

### TEST SETUP

The EUT can work in engineering mode with a software through a Laptop.

### SETUP DIAGRAM FOR TESTS





## 6. MEASURING INSTRUMENT AND SOFTWARE USED

AC Power Line Conducted Emissions (Shielding Room B)						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESR3	101961	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Two-Line V- Network	R&S	ENV216	101983	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Dec.05,2019	Dec.05,2020
Software						
Used	Description			Manufacturer	Name	Version
<input checked="" type="checkbox"/>	Test Software for Conducted disturbance			Farad	EZ-EMC	Ver. UL-3A1
Radiated Emissions (Chamber C)						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Dec.06,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Sep.17,2018	Sep.17,2021
<input checked="" type="checkbox"/>	Preamplifier	HP	8447D	2944A09099	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	EMI Measurement Receiver	R&S	ESR26	101377	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Horn Antenna	TDK	HRN-0118	130939	Sep.17,2018	Sep.17,2021
<input checked="" type="checkbox"/>	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Aug.11,2018	Aug.11,2021
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-2	TRS-307- 00003	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Loop antenna	Schwarzbeck	1519B	00008	Jan.07,2019	Jan.07,2022
<input checked="" type="checkbox"/>	Band Reject Filter	Wainwright	WRCJV8-2350-2400- 2483.5-2533.5-40SS	4	Dec.05,2019	Dec.05,2020
<input checked="" type="checkbox"/>	High Pass Filter	Wi	WHKX10-2700-3000- 18000-40SS	23	Dec.05,2019	Dec.05,2020
Software						
Used	Description			Manufacturer	Name	Version
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance			Farad	EZ-EMC	Ver. UL-3A1



RF Conducted (Shielding Room D)						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9030A	MY55410512	Dec.06,2019	Dec.05,2020
<input checked="" type="checkbox"/>	Power Meter	Keysight	N1911A	MY55416024	Dec.06,2019	Dec.06,2020
<input checked="" type="checkbox"/>	Power Sensor	Keysight	U2021XA	MY5100022	Dec.06,2019	Dec.06,2020
<input checked="" type="checkbox"/>	Attenuator	Agilent	8496B	US00431137	Dec.05,2019	Dec.05,2020



## 7. ANTENNA PORT TEST RESULTS

### 7.1. ON TIME AND DUTY CYCLE

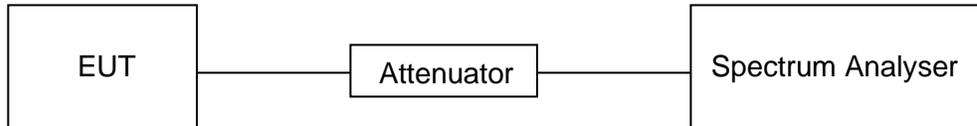
#### LIMITS

None; for reporting purposes only

#### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.4 °C	Relative Humidity	63.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

#### RESULTS

Please refer to appendix G.

## 7.2. 6 dB DTS 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	≥ 500KHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99% Occupied Bandwidth	For reporting purposes only.	2400-2483.5

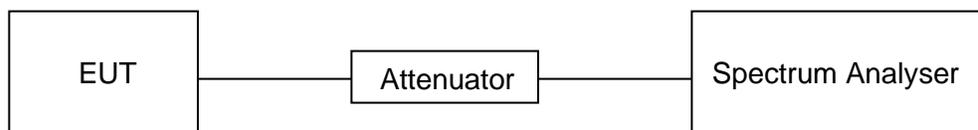
### TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6dB Bandwidth :100kHz For 99% Occupied Bandwidth :1% to 5% of the occupied bandwidth
VBW	For 6dB Bandwidth : ≥3 × RBW For 99% Occupied Bandwidth : ≥3xRBW
Trace	Max hold
Sweep	Auto couple

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 and 99% relative to the maximum level measured in the fundamental emission.

### TEST SETUP





**TEST ENVIRONMENT**

Temperature	25.4 °C	Relative Humidity	63.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

**RESULTS**

Please refer to appendix A and B.



### 7.3. CONDUCTED OUTPUT POWER

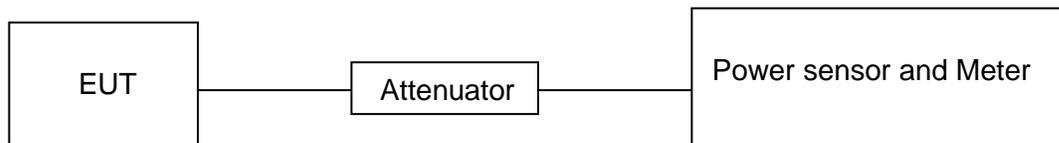
#### LIMITS

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

#### TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.  
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.  
Measure peak power each channel.  
Peak Detector use for Peak result.  
AVG Detector use for AVG result.

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.4 °C	Relative Humidity	63.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

#### RESULTS

Please refer to appendix C.



## 7.4. 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/3 kHz	2400-2483.5

### TEST PROCEDURE

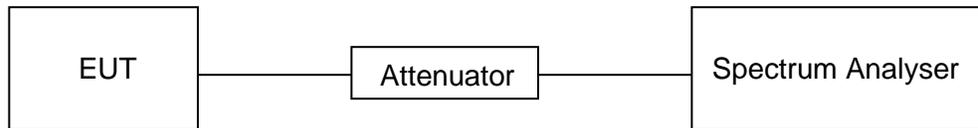
Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
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 amplitude level within the RBW.

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

### TEST SETUP



### TEST ENVIRONMENT

Temperature	25.4 °C	Relative Humidity	63.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

### RESULTS

Please refer to appendix D.



## 7.5. CONDUCTED BANDEGE AND SPURIOUS EMISSIONS

### 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

### TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

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

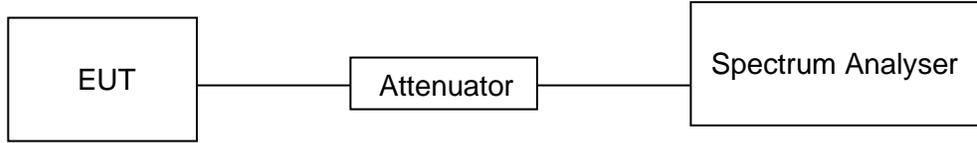
Use the peak marker function to determine the maximum PSD level.

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

Use the peak marker function to determine the maximum amplitude level.



**TEST SETUP**



**TEST ENVIRONMENT**

Temperature	25.4 °C	Relative Humidity	63.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

**RESULTS**

Please refer to appendix E and F.



## 8. RADIATED TEST RESULTS

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209

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

Emissions radiated outside of the specified frequency bands above 30MHz			
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 30MHz		
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):

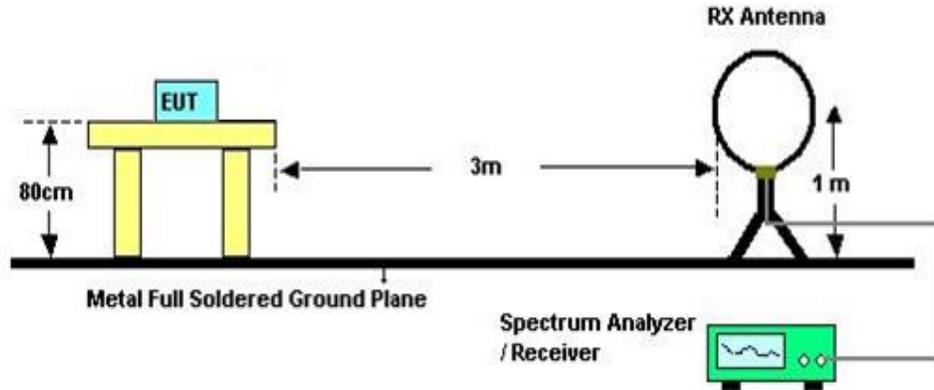
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
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 SETUP AND PROCEDURE**

Below 30MHz

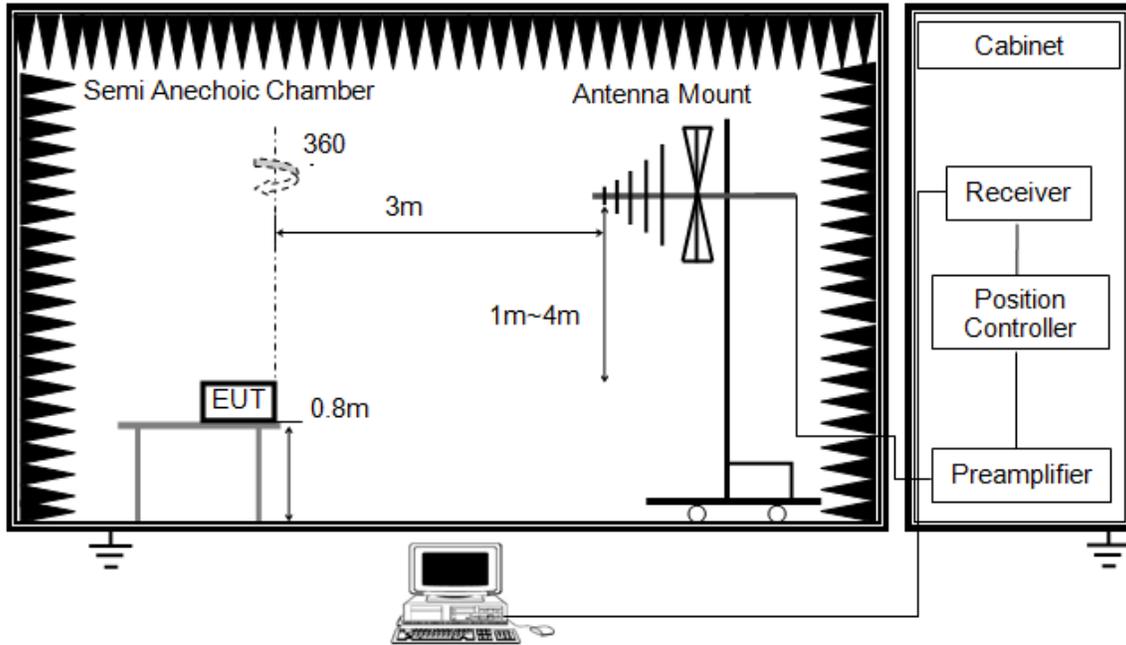


The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
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 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of 1 m height antenna tower.
5. For measurement below 1GHz, 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.
6. 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.

Below 1GHz and Above 30MHz

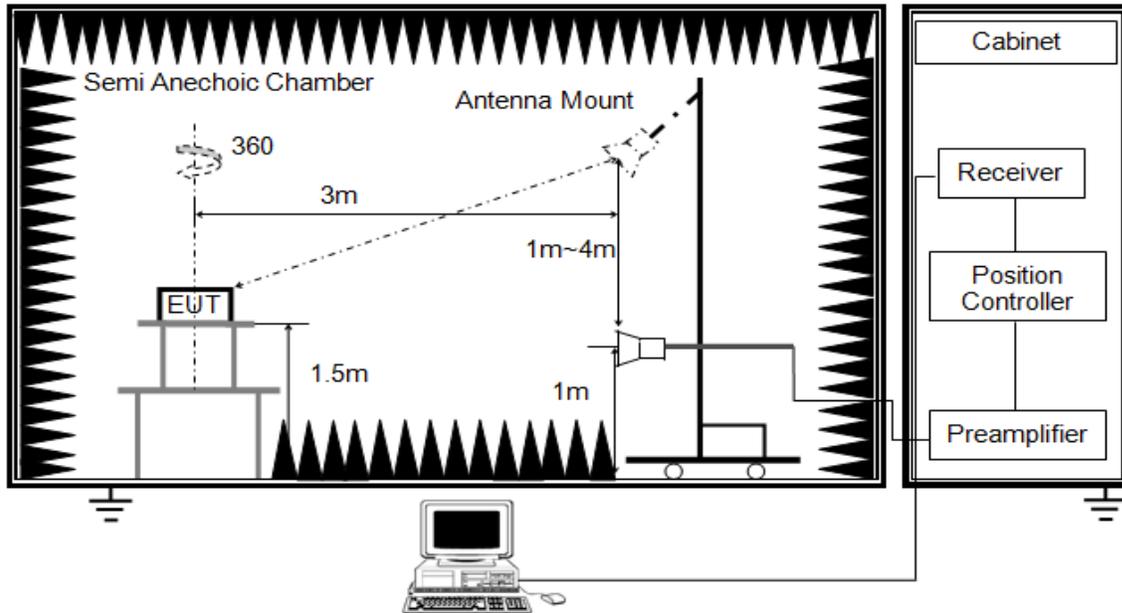


The setting of the spectrum analyser

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

1. The testing follows the guidelines in ANSI C63.10-2013.
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 0.8 meter 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 1GHz, 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 1GHz

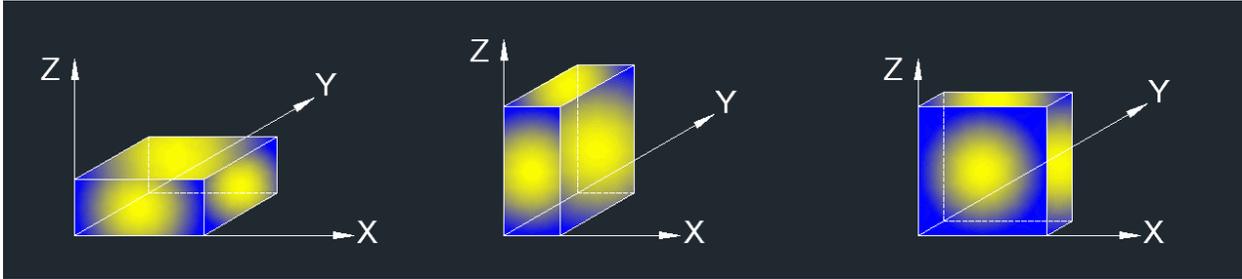


The setting of the spectrum analyser

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

1. The testing follows the guidelines in ANSI C63.10-2013.
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 1.5m 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 1GHz, 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 7.1.ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note: 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.

### **TEST ENVIRONMENT**

Temperature	23.5 °C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

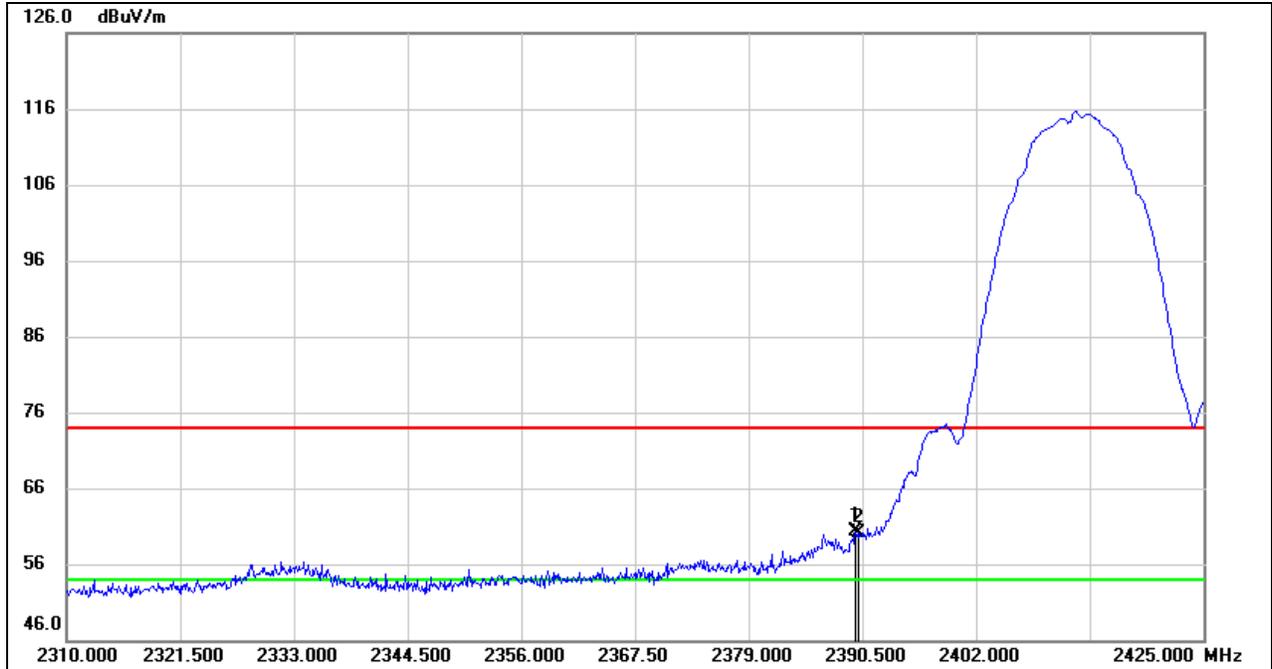


## 8.1. RESTRICTED BANDEDGE

### 8.1.1. 802.11b MODE

#### RESTRICTED BANDEDGE (CHANNEL 1, HORIZONTAL)

#### PEAK

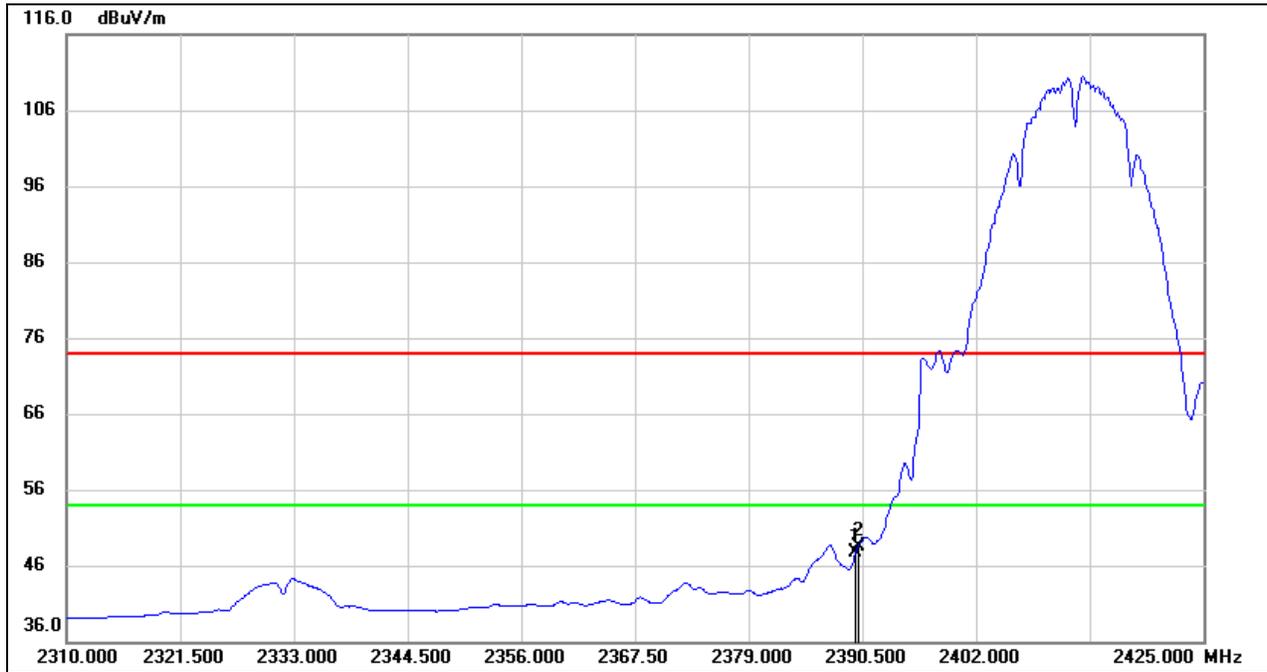


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.810	48.37	11.96	60.33	74.00	-13.67	peak
2	2390.000	48.13	11.96	60.09	74.00	-13.91	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



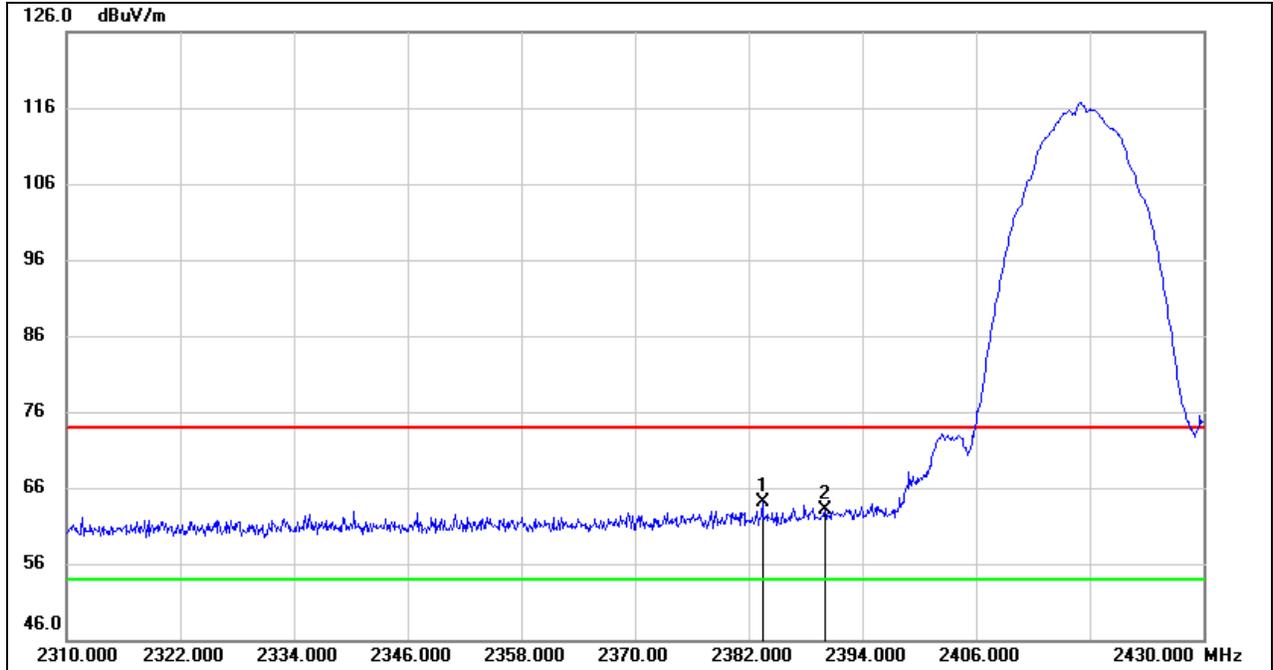
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.810	35.77	11.96	47.73	54.00	-6.27	AVG
2	2390.000	36.54	11.96	48.50	54.00	-5.50	AVG

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 2, HORIZONTAL)**

**PEAK**

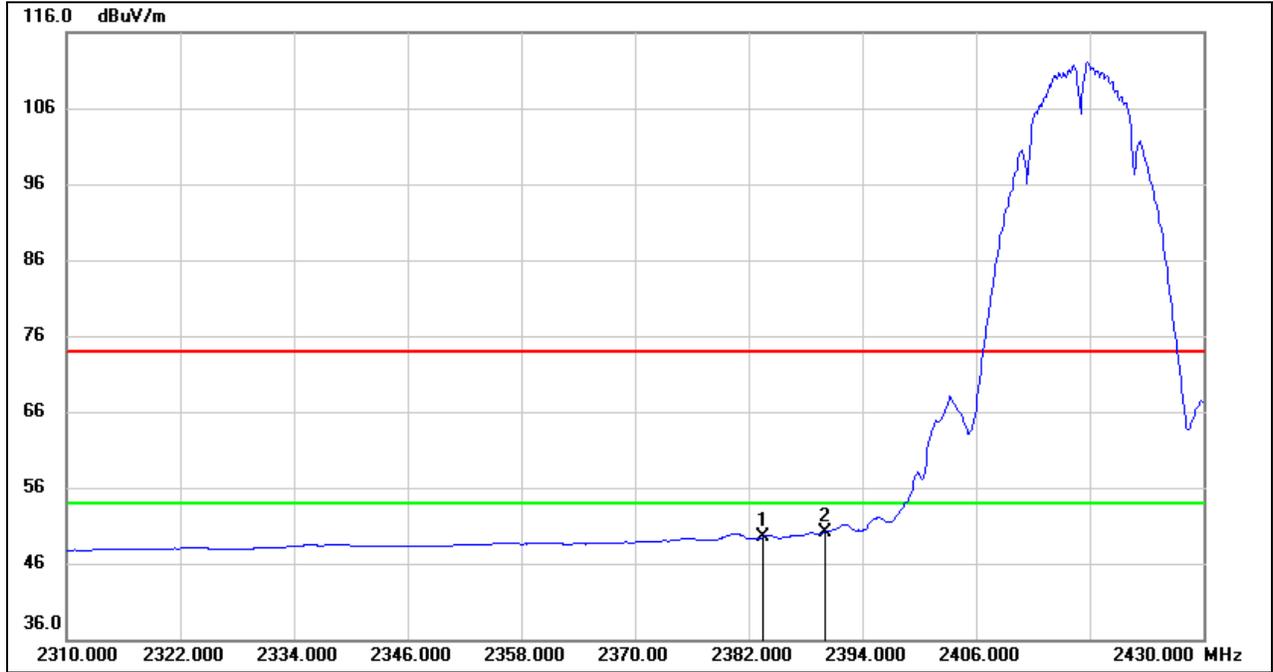


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.440	52.13	11.91	64.04	74.00	-9.96	peak
2	2390.000	51.06	11.96	63.02	74.00	-10.98	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



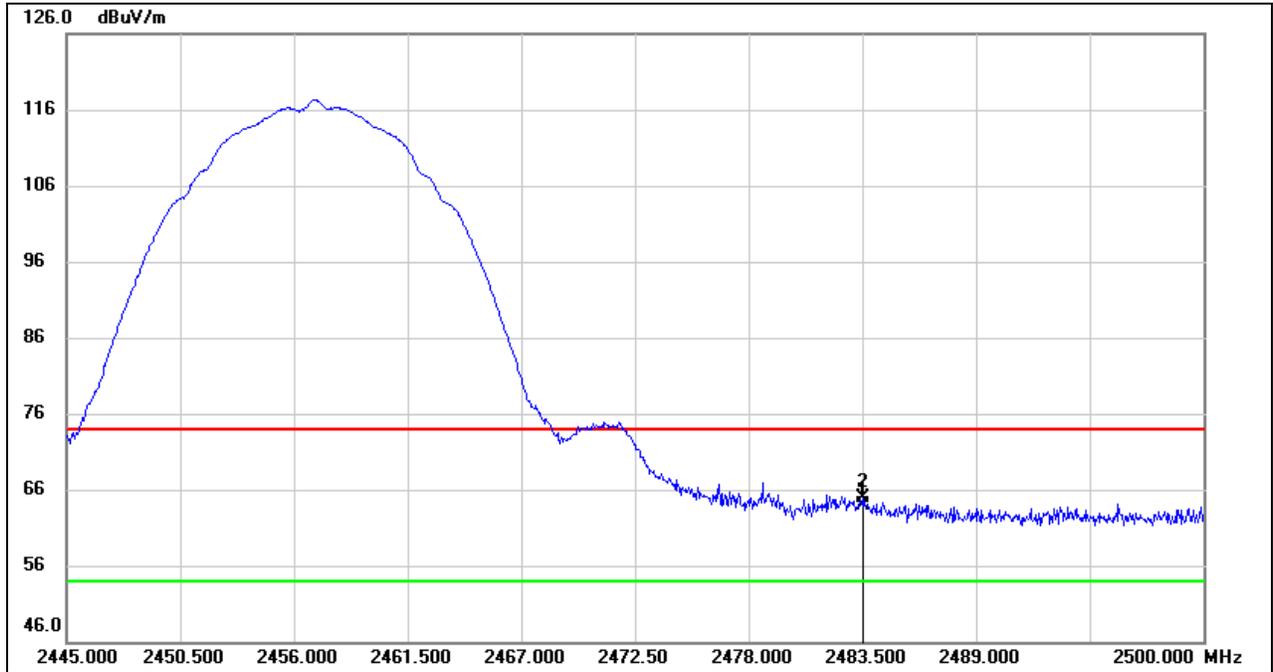
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.440	37.55	11.91	49.46	54.00	-4.54	AVG
2	2390.000	38.16	11.96	50.12	54.00	-3.88	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/T_{on}$ , where:  $T_{on}$  is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 10, HORIZONTAL)**

**PEAK**

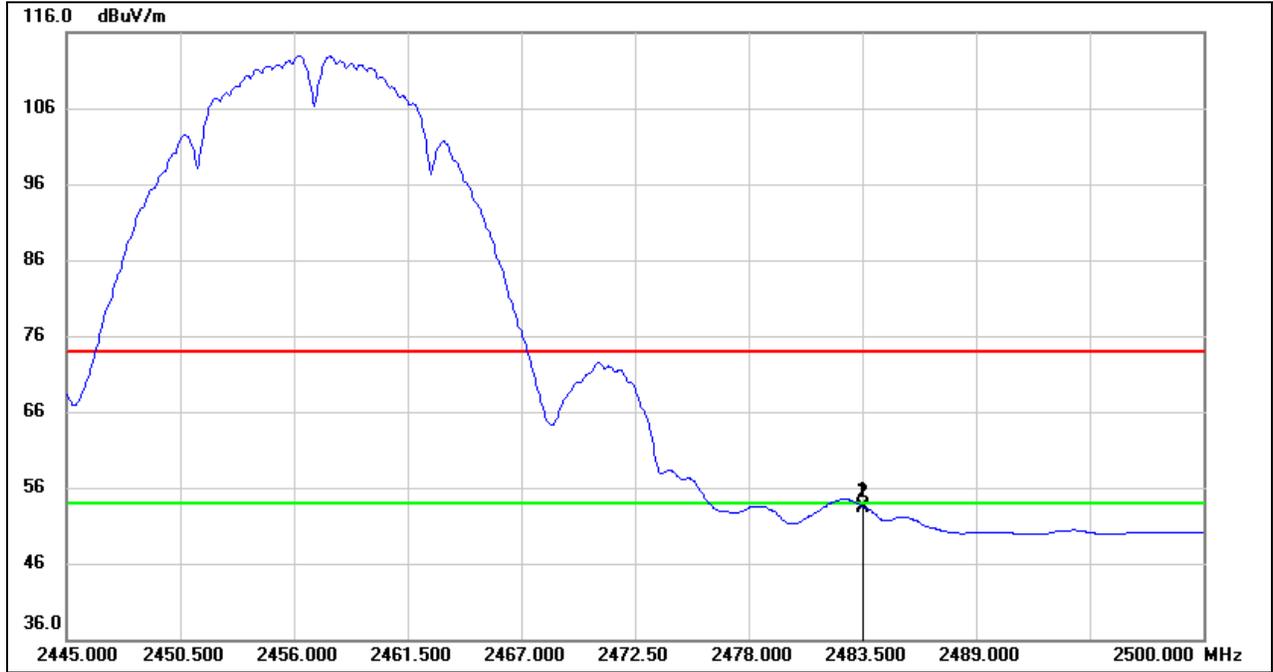


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	51.52	12.38	63.90	74.00	-10.10	peak
2	2483.555	52.51	12.38	64.89	74.00	-9.11	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



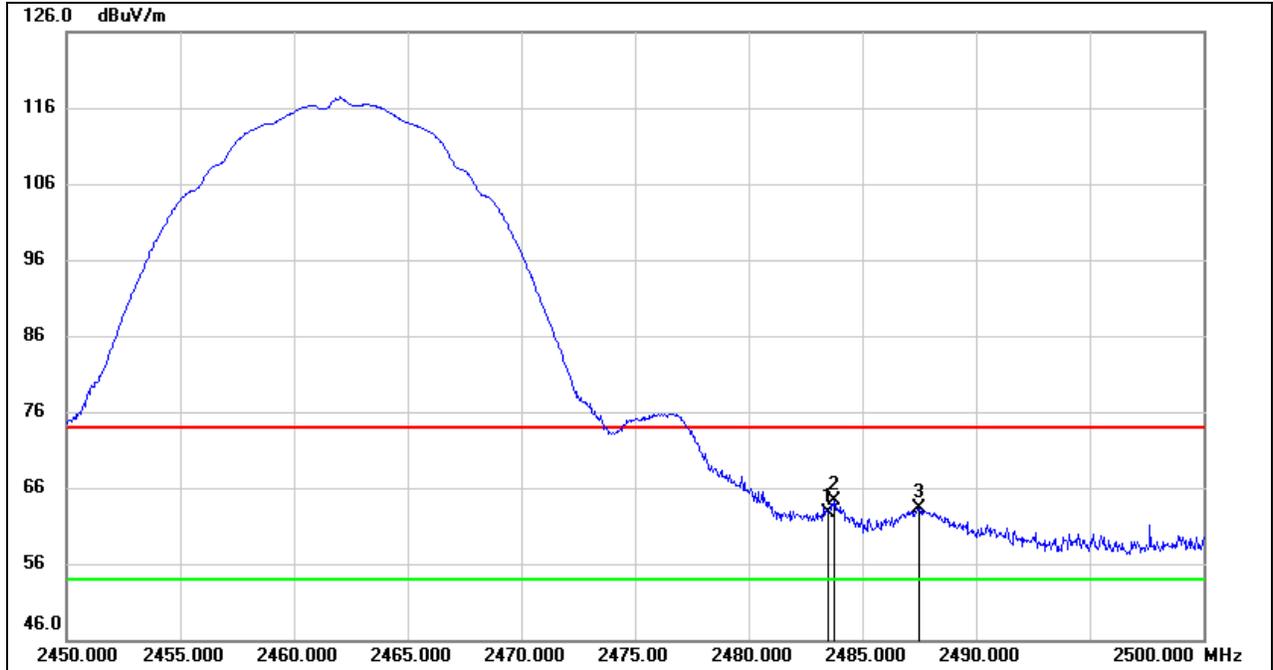
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.20	12.38	53.58	54.00	-0.42	AVG
2	2483.555	40.97	12.38	53.35	54.00	-0.65	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 11, HORIZONTAL)**

**PEAK**

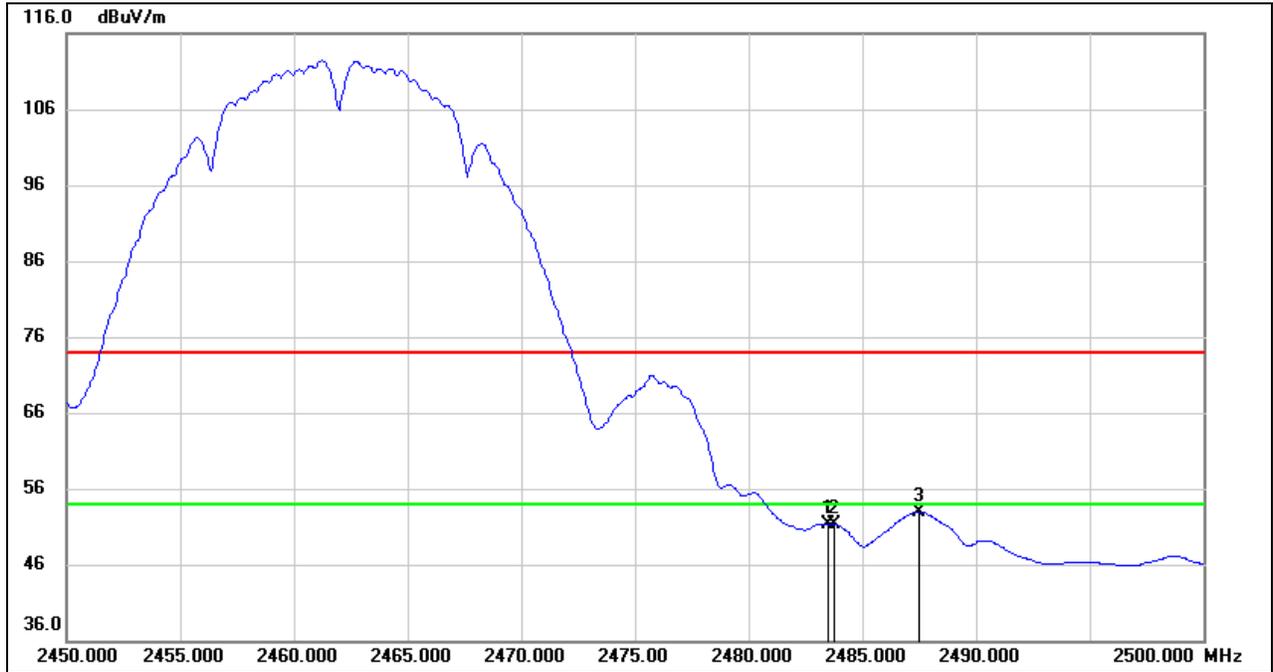


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	50.35	12.38	62.73	74.00	-11.27	peak
2	2483.750	51.87	12.38	64.25	74.00	-9.75	peak
3	2487.500	50.83	12.39	63.22	74.00	-10.78	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	38.96	12.38	51.34	54.00	-2.66	AVG
2	2483.750	38.96	12.38	51.34	54.00	-2.66	AVG
3	2487.500	40.47	12.39	52.86	54.00	-1.14	AVG

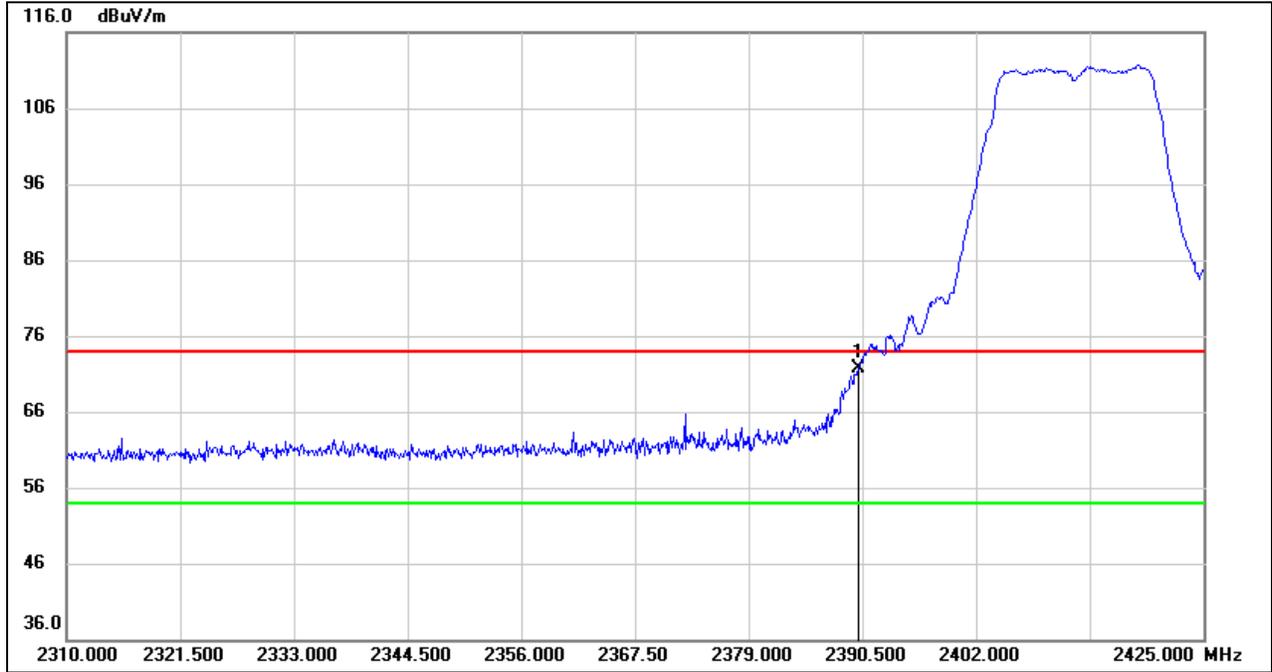
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.  
 5. For the transmitting duration, please refer to clause 7.1.  
 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### 8.1.2. 802.11g MODE

#### RESTRICTED BANDEDGE (CHANNEL 1, HORIZONTAL)

#### PEAK

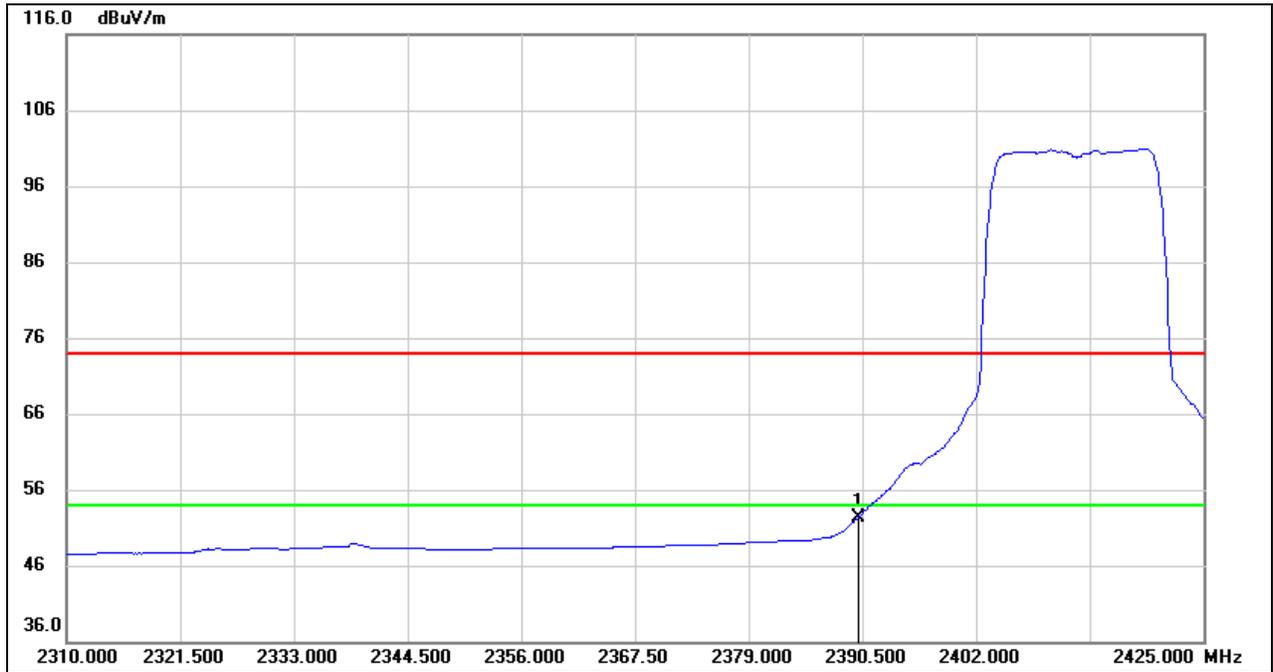


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	59.84	11.96	71.80	74.00	-2.20	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



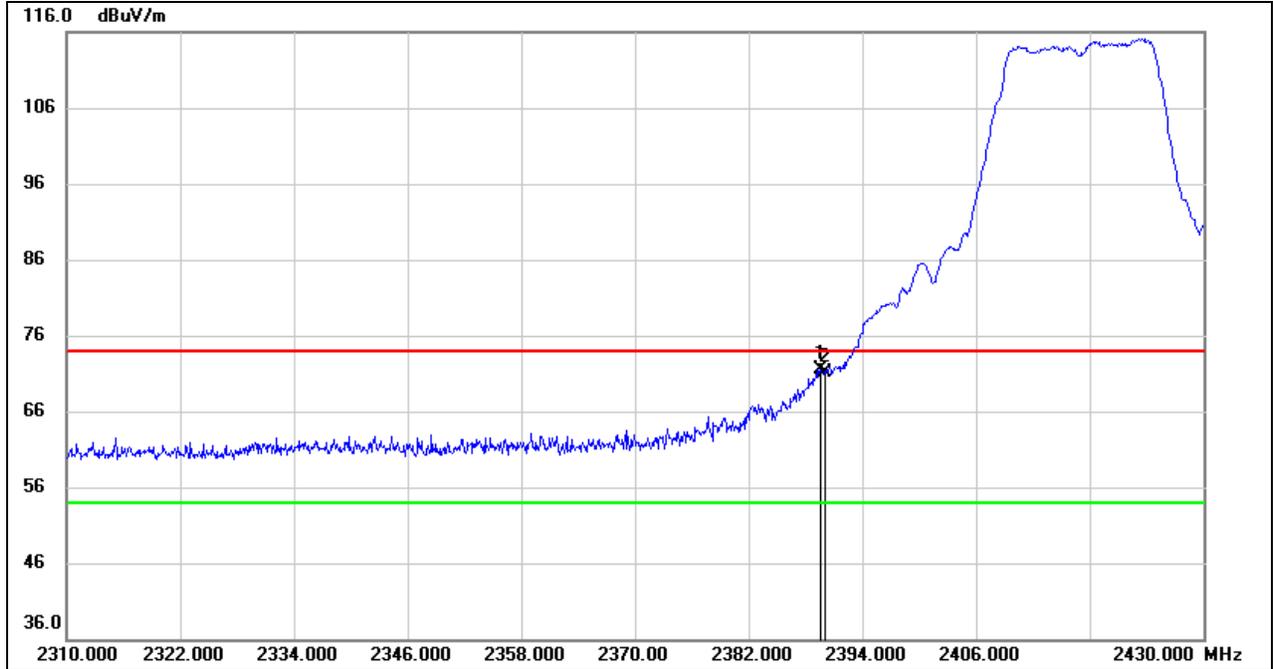
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	40.33	11.96	52.29	54.00	-1.71	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE ( CHANNEL 2, HORIZONTAL)**

**PEAK**

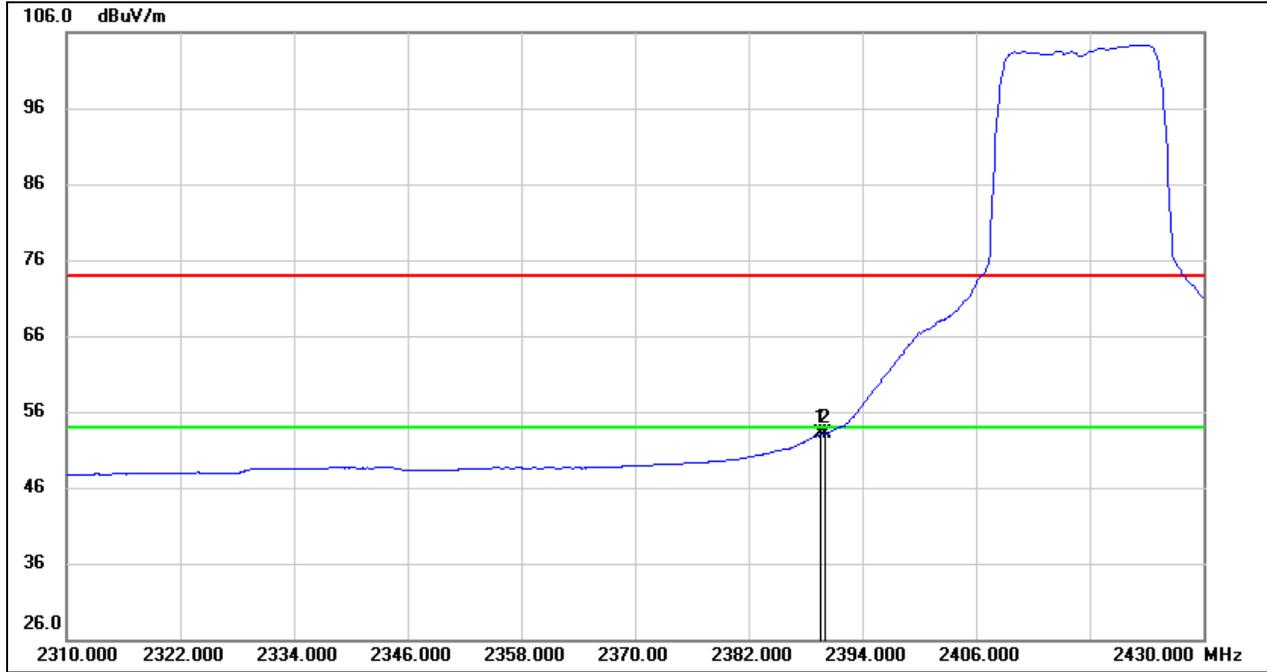


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.560	59.57	11.96	71.53	74.00	-2.47	peak
2	2390.000	59.11	11.96	71.07	74.00	-2.93	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



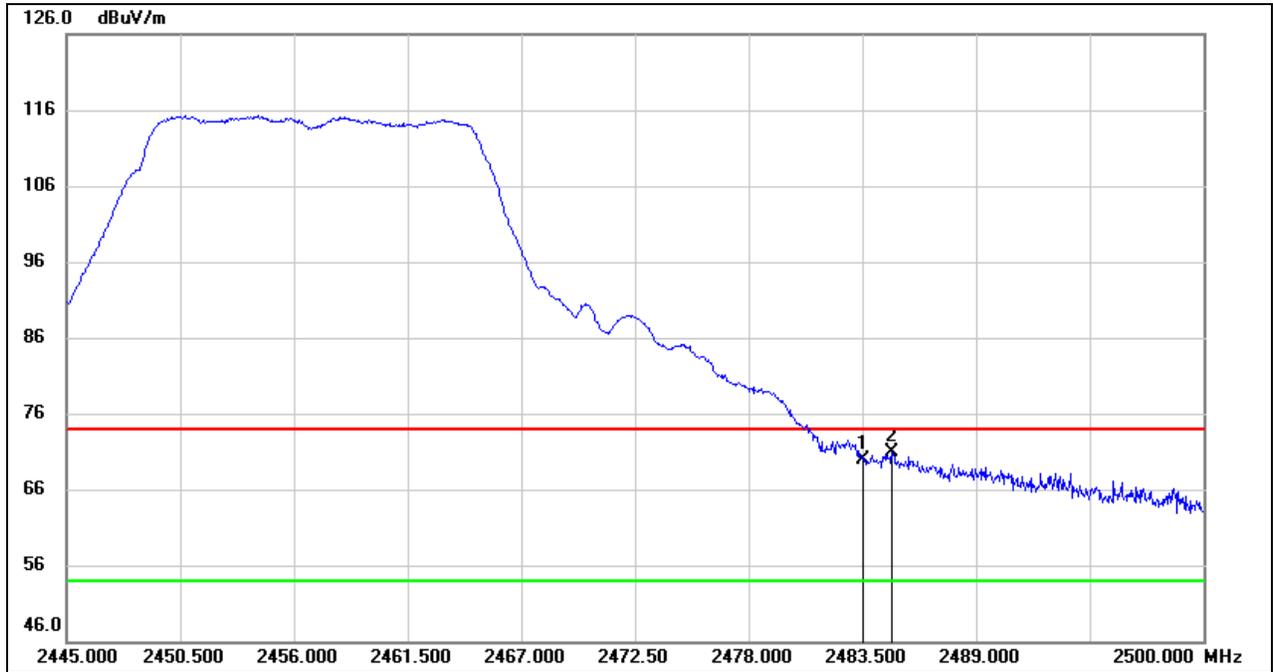
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.560	41.06	11.96	53.02	54.00	-0.98	AVG
2	2390.000	41.20	11.96	53.16	54.00	-0.84	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 10, HORIZONTAL)**

**PEAK**

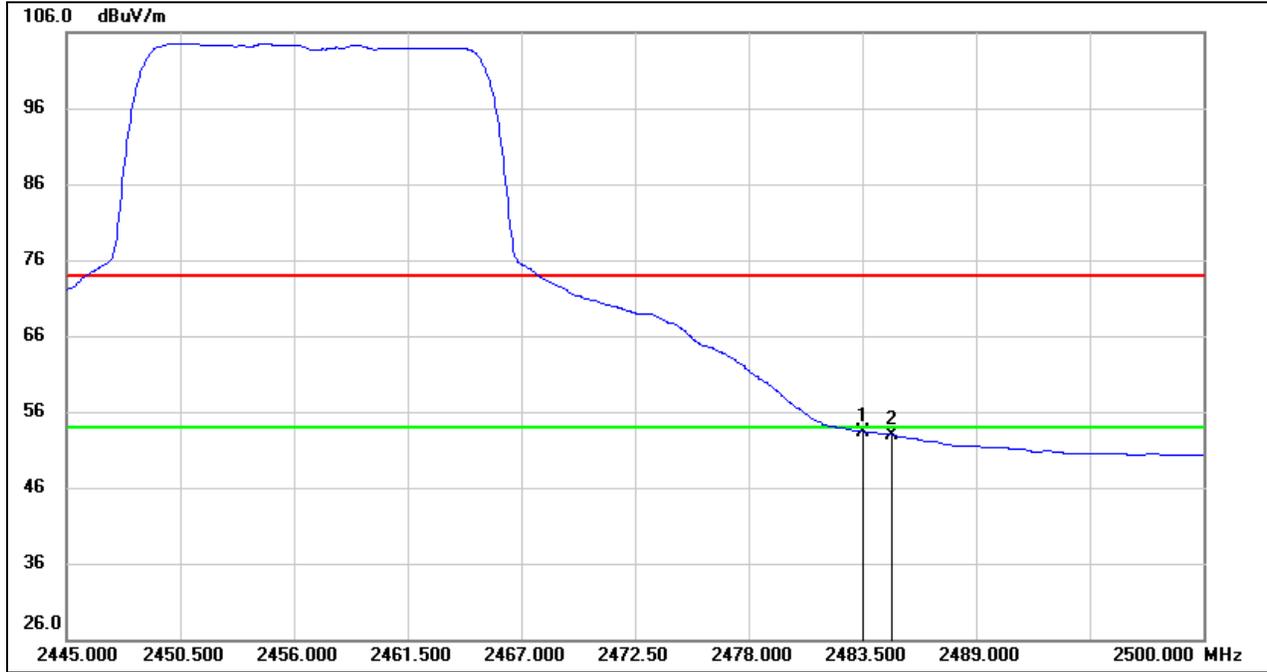


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	57.56	12.38	69.94	74.00	-4.06	peak
2	2484.930	58.45	12.38	70.83	74.00	-3.17	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



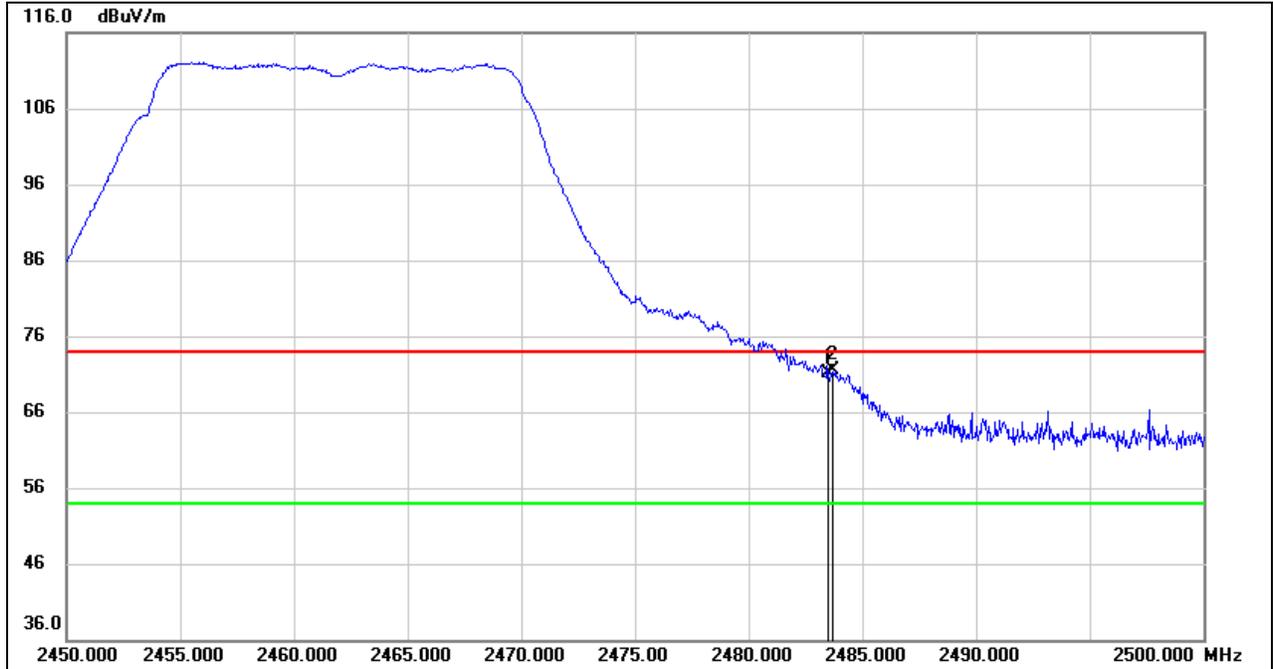
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.00	12.38	53.38	54.00	-0.62	AVG
2	2484.930	40.58	12.38	52.96	54.00	-1.04	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 11, HORIZONTAL)**

**PEAK**

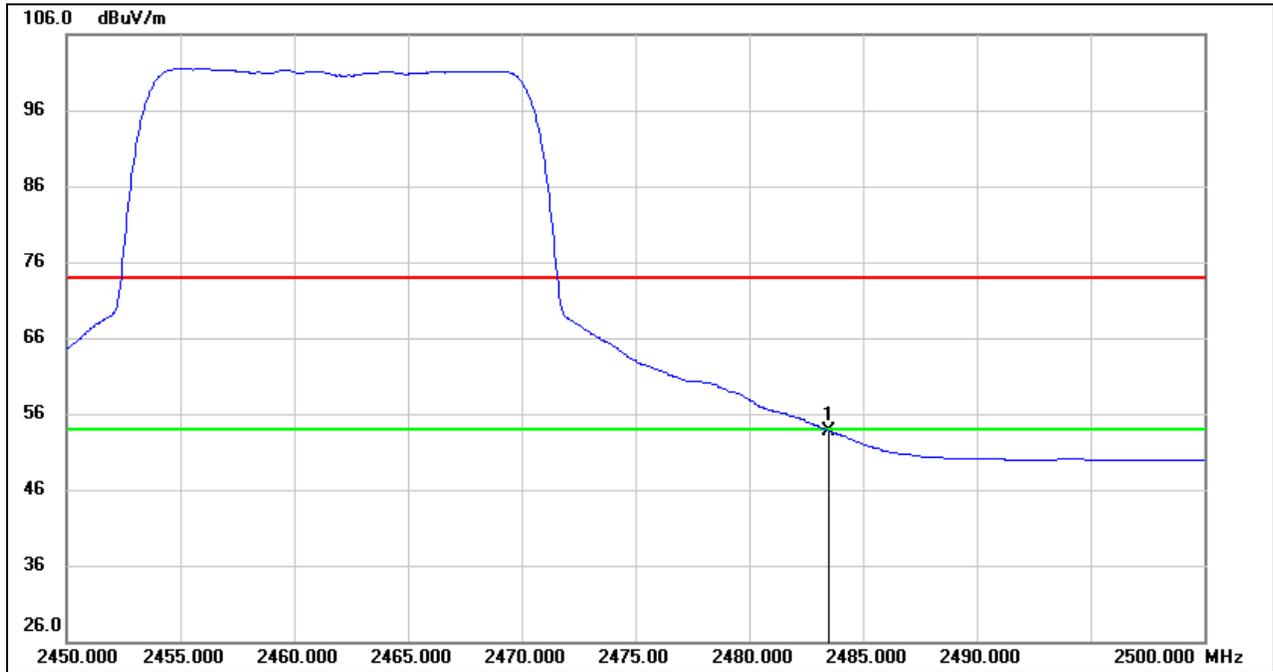


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	58.80	12.38	71.18	74.00	-2.82	peak
2	2483.700	59.02	12.38	71.40	74.00	-2.60	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.42	12.38	53.80	54.00	-0.20	AVG

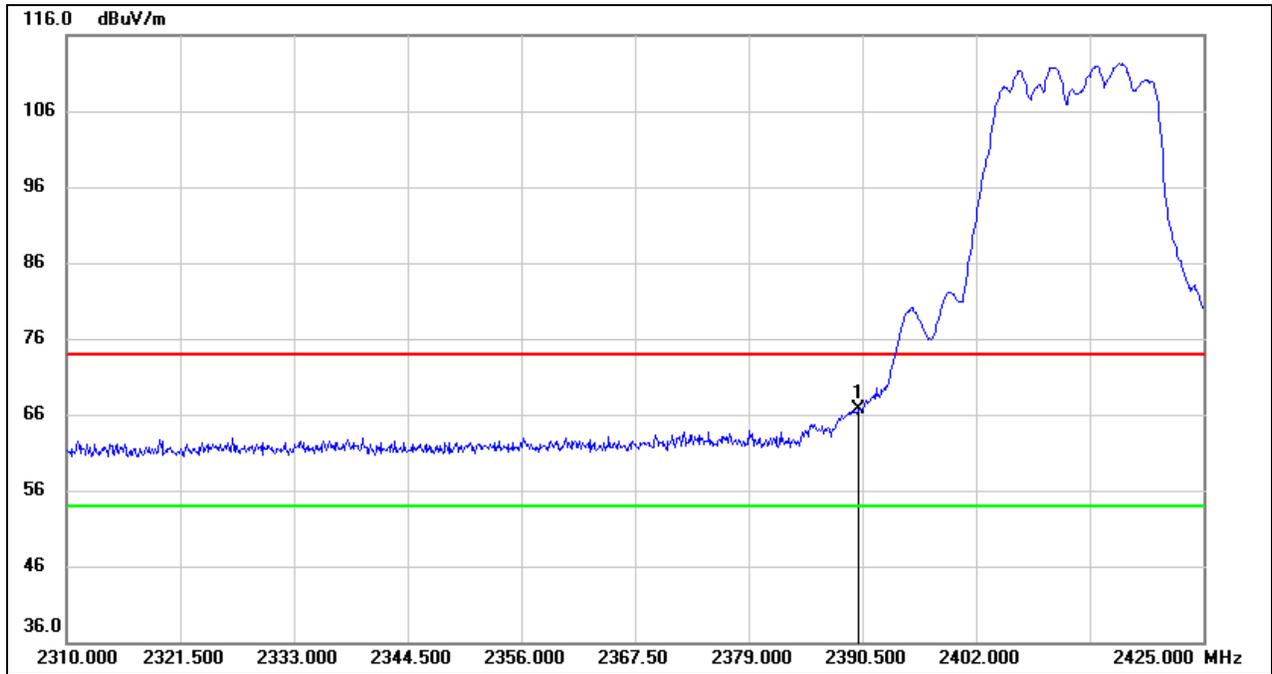
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### 8.1.3. 802.11n HT20 MODE

#### RESTRICTED BANDEDGE (CHANNEL 1, HORIZONTAL)

#### PEAK

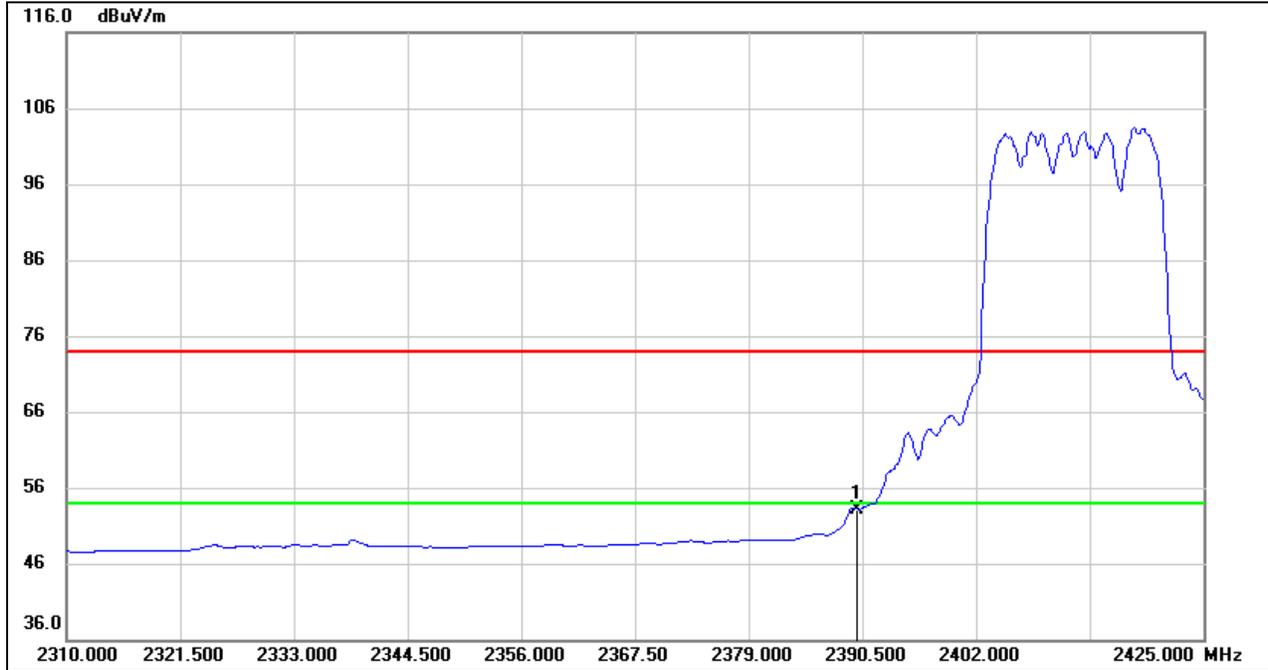


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	54.72	11.96	66.68	74.00	-7.32	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



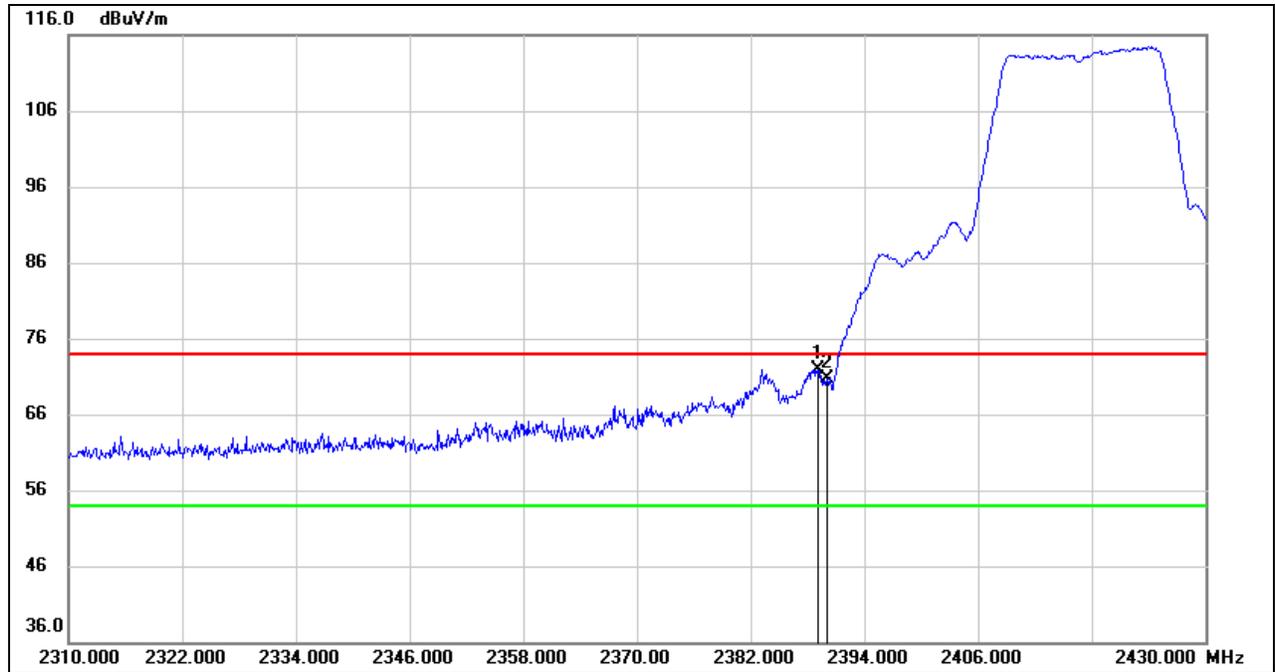
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	41.19	11.96	53.15	54.00	-0.85	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 2, HORIZONTAL)**

**PEAK**

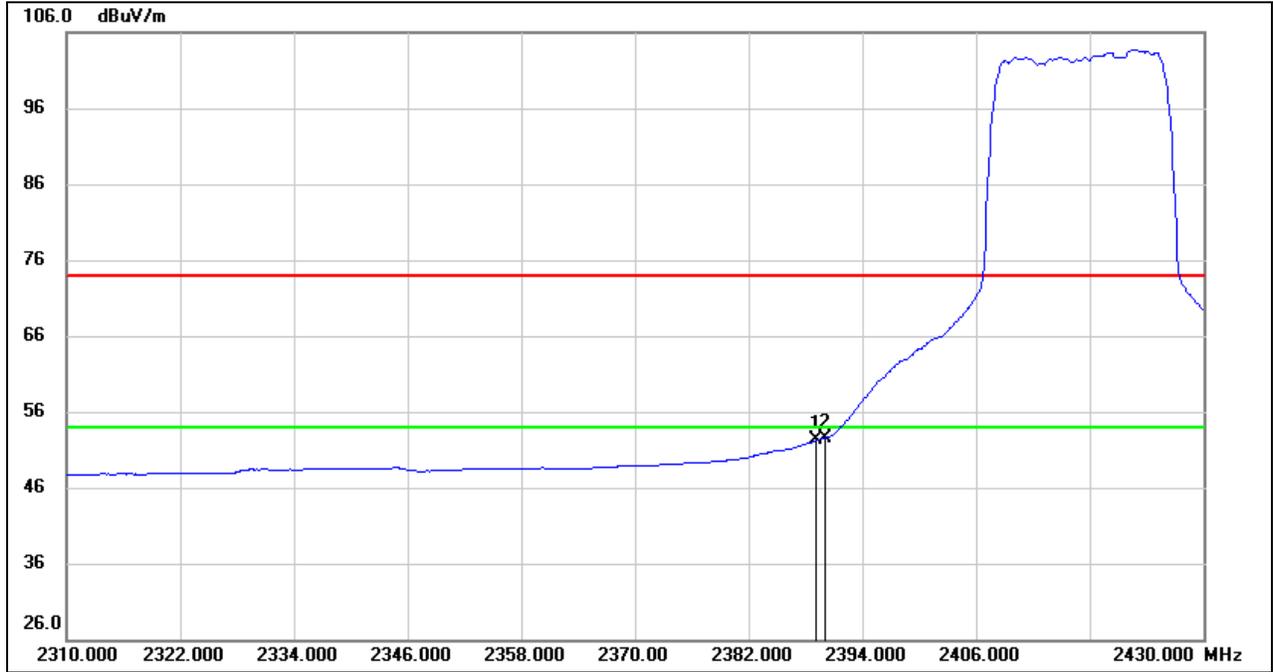


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.080	59.95	11.95	71.90	74.00	-2.10	peak
2	2390.000	58.69	11.96	70.65	74.00	-3.35	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



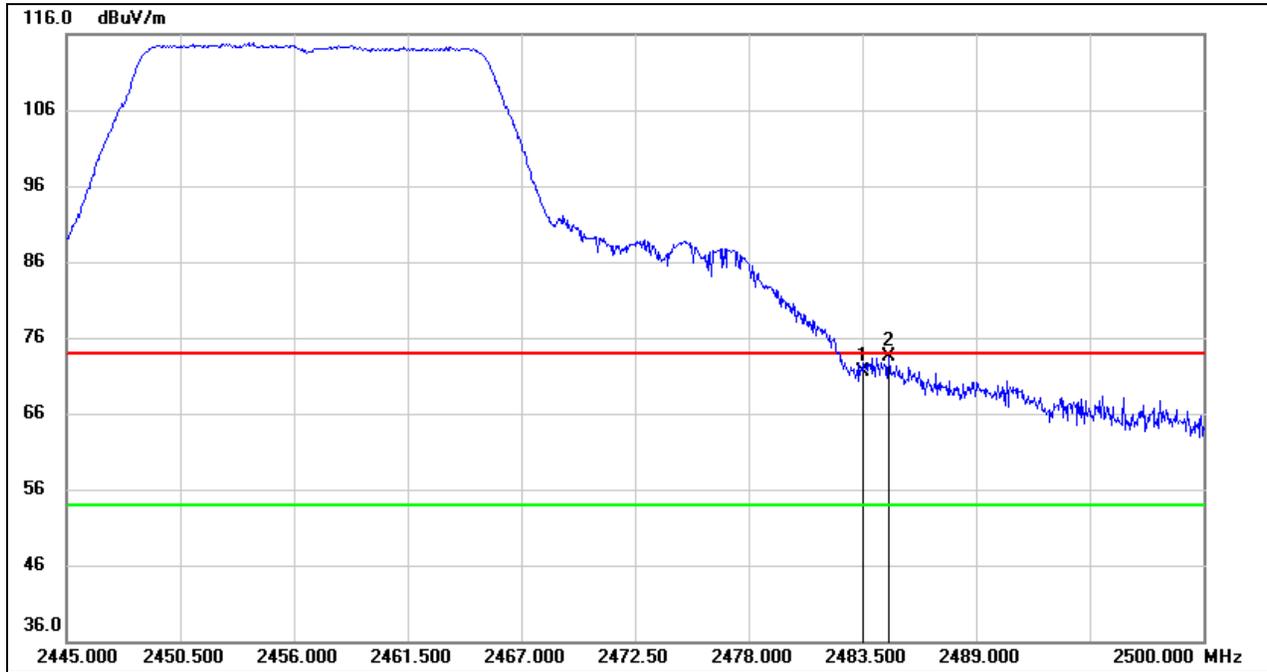
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.080	40.29	11.95	52.24	54.00	-1.76	AVG
2	2390.000	40.60	11.96	52.56	54.00	-1.44	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 10, HORIZONTAL)**

**PEAK**

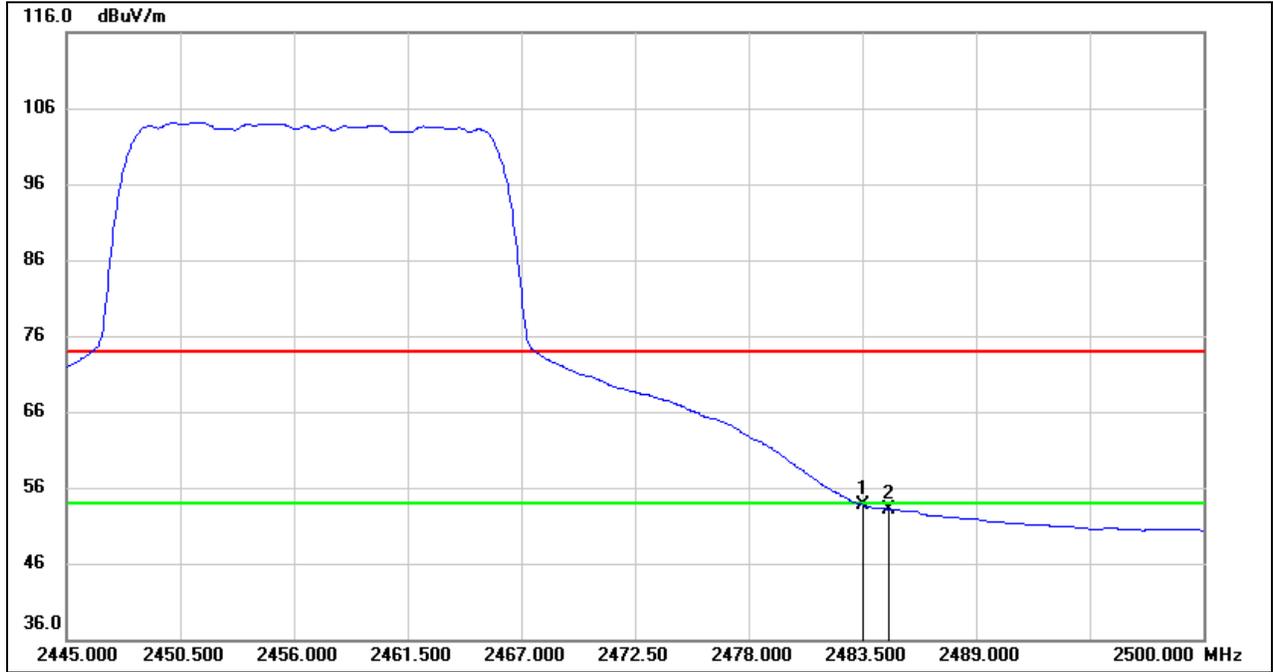


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	59.06	12.38	71.44	74.00	-2.56	peak
2	2484.765	61.04	12.38	73.42	74.00	-0.58	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



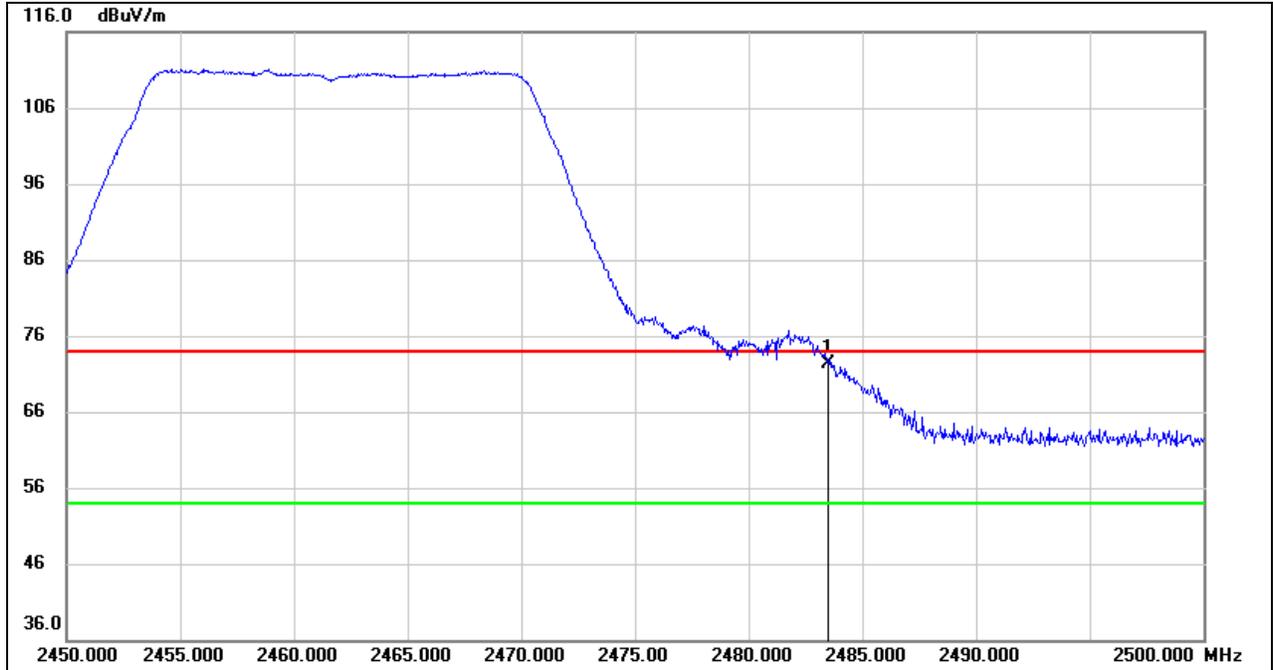
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.31	12.38	53.69	54.00	-0.31	AVG
2	2484.765	40.75	12.38	53.13	54.00	-0.87	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.
  6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (CHANNEL 11, HORIZONTAL)**

**PEAK**

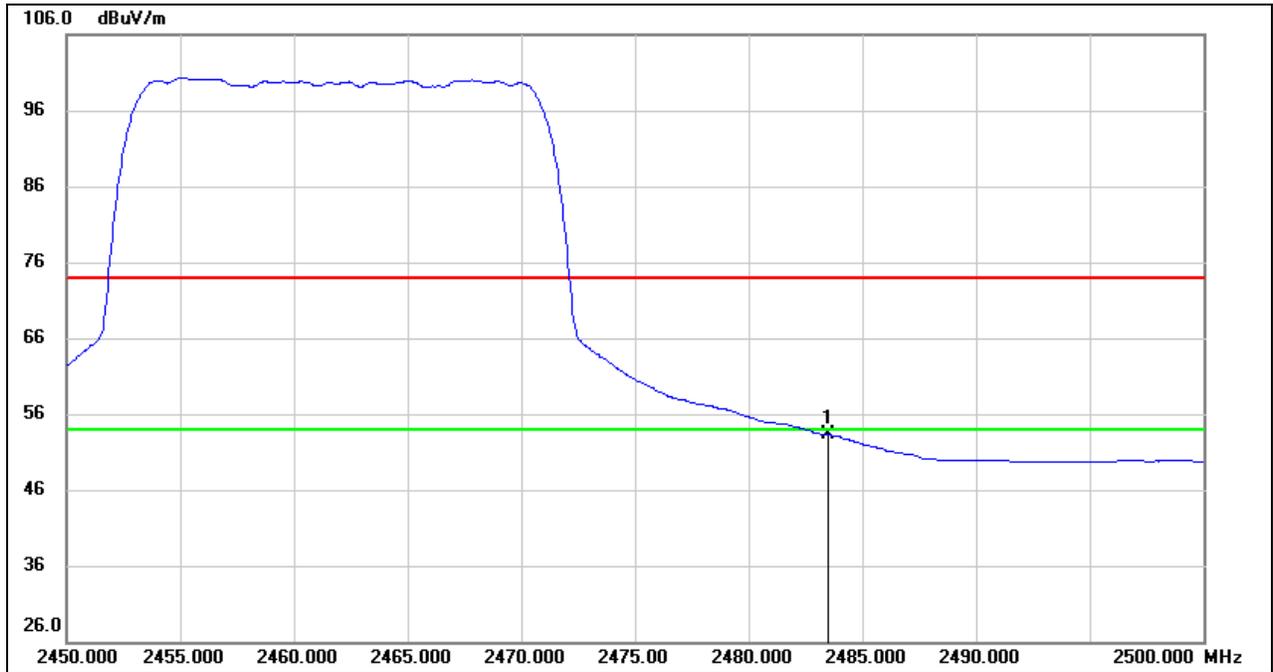


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	59.97	12.38	72.35	74.00	-1.65	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.91	12.38	53.29	54.00	-0.71	AVG

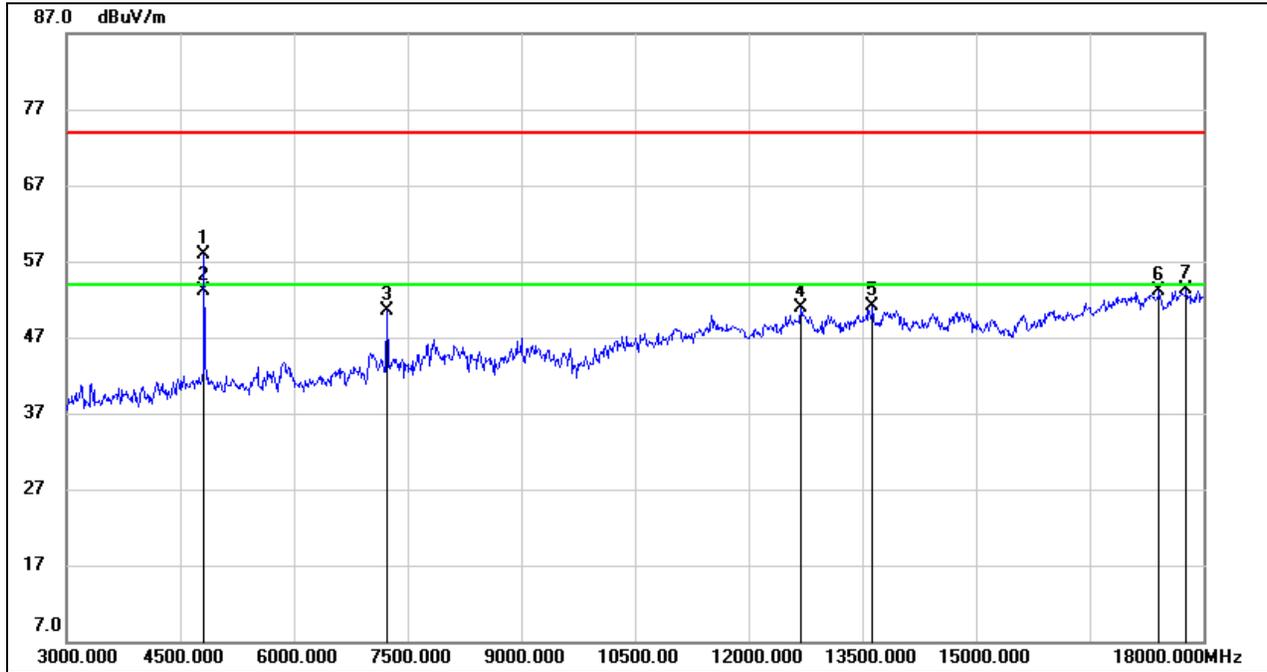
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.  
 5. For the transmitting duration, please refer to clause 7.1.  
 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## 8.2. SPURIOUS EMISSIONS (3~18GHz)

### 8.2.1. 802.11b MODE

#### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

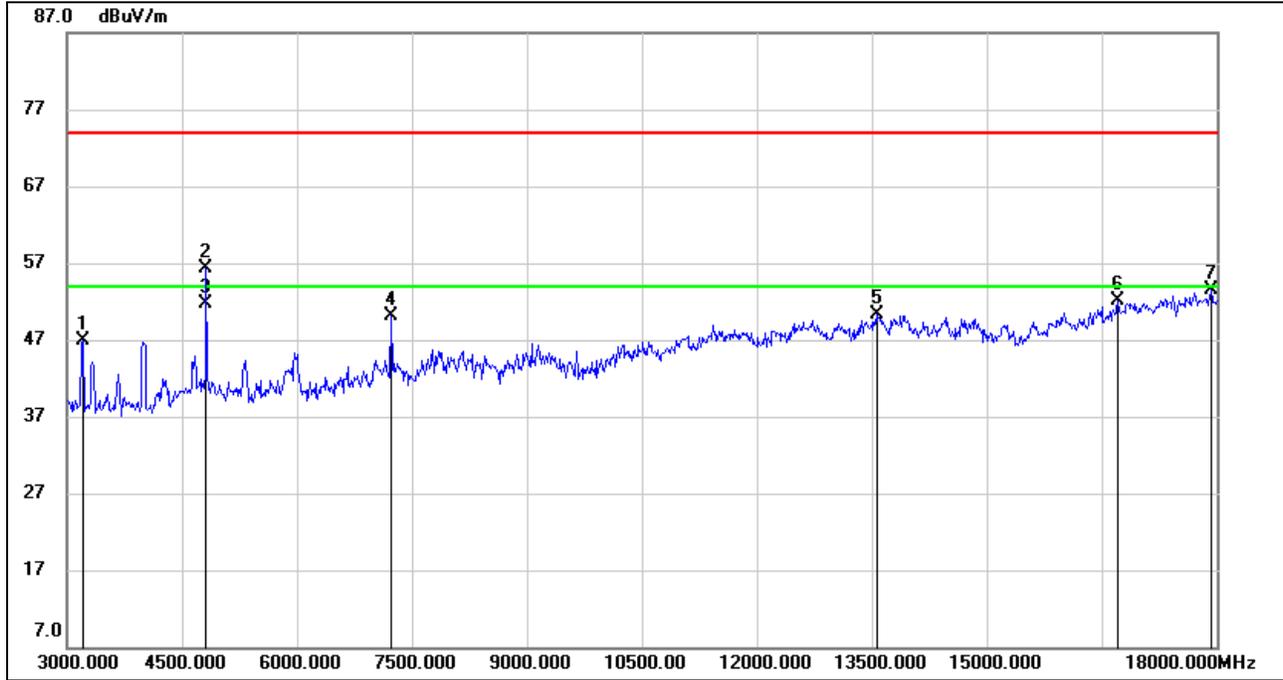


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	57.43	0.51	57.94	74.00	-16.06	peak
2	4815.000	52.67	0.51	53.18	54.00	-0.82	AVG
3	7230.000	44.55	5.89	50.44	74.00	-23.56	peak
4	12690.000	36.59	14.25	50.84	74.00	-23.16	peak
5	13635.000	35.17	15.97	51.14	74.00	-22.86	peak
6	17415.000	31.73	21.39	53.12	74.00	-20.88	peak
7	17775.000	30.15	23.09	53.24	74.00	-20.76	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

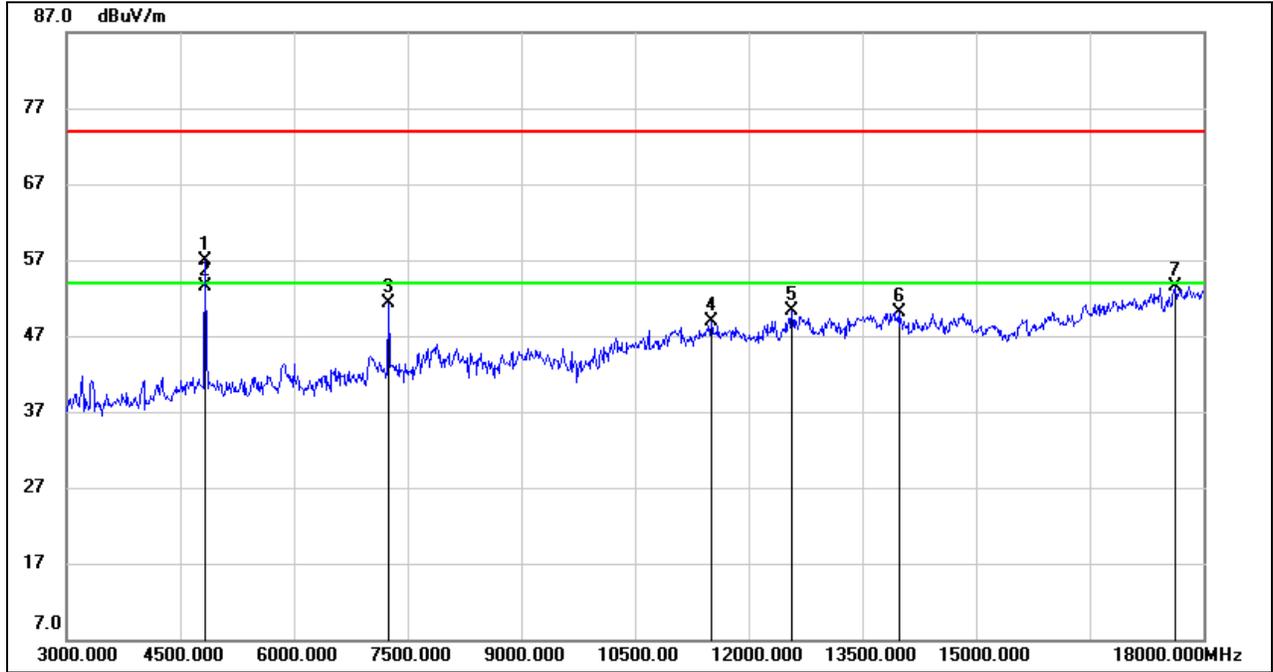


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210.000	51.35	-4.43	46.92	74.00	-27.08	peak
2	4815.000	55.71	0.51	56.22	74.00	-17.78	peak
3	4815.000	51.29	0.51	51.80	54.00	-2.20	AVG
4	7230.000	44.20	5.89	50.09	74.00	-23.91	peak
5	13560.000	34.32	15.93	50.25	74.00	-23.75	peak
6	16710.000	32.09	19.94	52.03	74.00	-21.97	peak
7	17925.000	30.04	23.37	53.41	74.00	-20.59	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

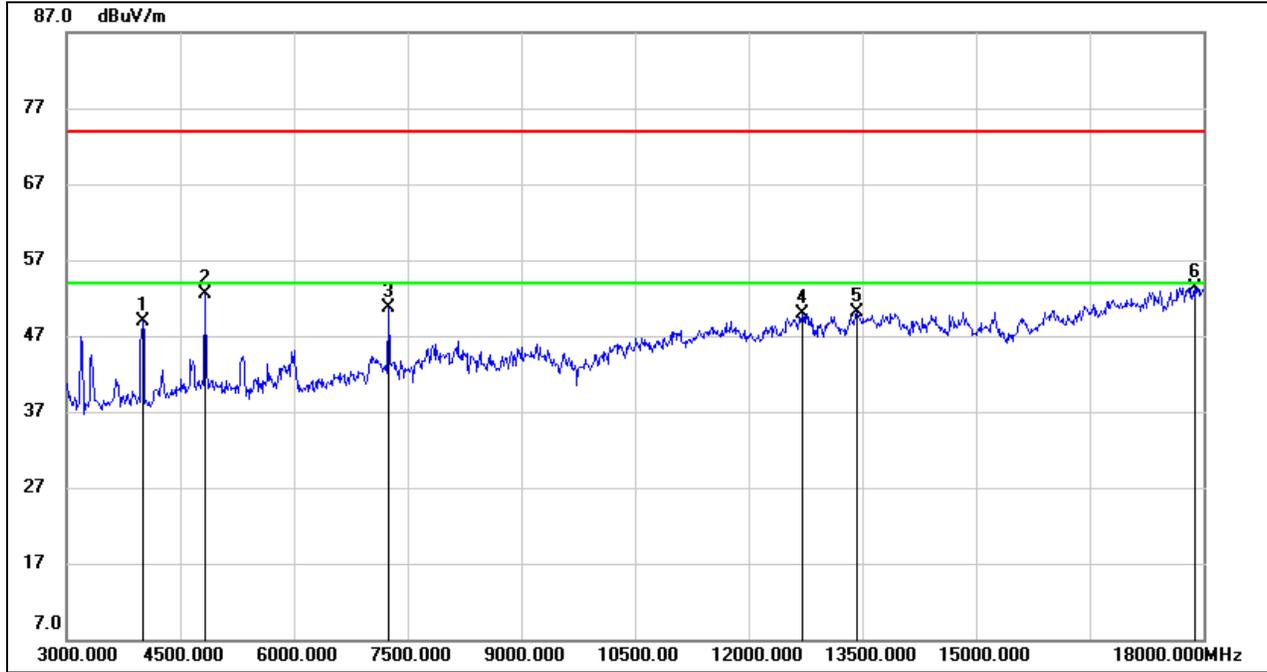


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.000	56.29	0.59	56.88	74.00	-17.12	peak
2	4830.000	53.00	0.59	53.59	54.00	-0.41	AVG
3	7245.000	45.33	5.92	51.25	74.00	-22.75	peak
4	11505.000	35.54	13.42	48.96	74.00	-25.04	peak
5	12570.000	36.19	14.17	50.36	74.00	-23.64	peak
6	13980.000	34.12	16.07	50.19	74.00	-23.81	peak
7	17625.000	31.52	21.95	53.47	74.00	-20.53	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

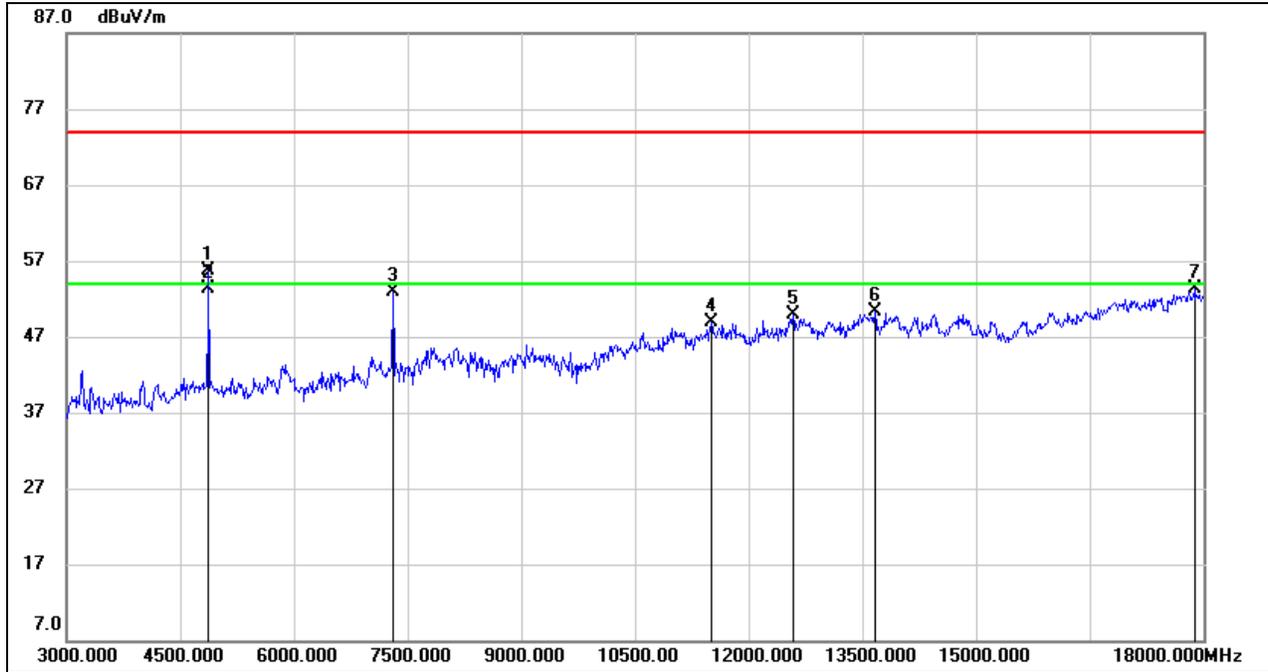


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.81	-2.89	48.92	74.00	-25.08	peak
2	4830.000	51.98	0.59	52.57	74.00	-21.43	peak
3	7245.000	44.81	5.92	50.73	74.00	-23.27	peak
4	12705.000	35.53	14.35	49.88	74.00	-24.12	peak
5	13425.000	34.02	16.02	50.04	74.00	-23.96	peak
6	17880.000	30.00	23.34	53.34	74.00	-20.66	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, HORIZONTAL)**

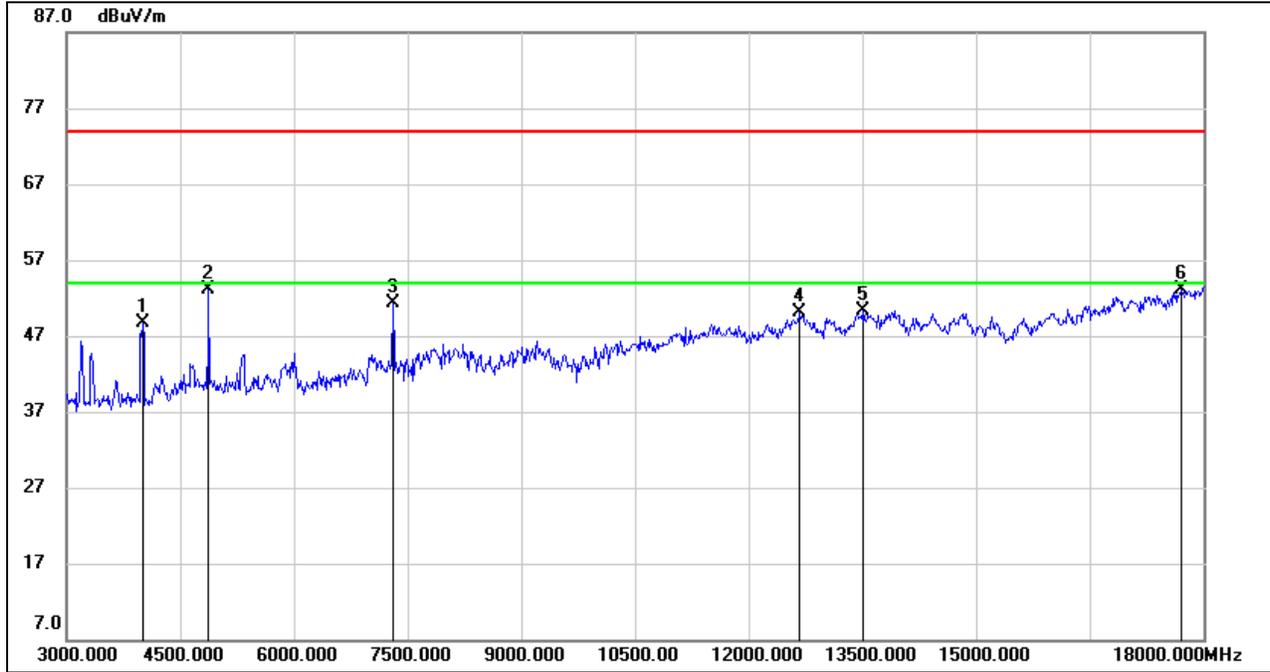


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	54.92	0.76	55.68	74.00	-18.32	peak
2	4875.000	52.63	0.76	53.39	54.00	-0.61	AVG
3	7305.000	46.79	6.08	52.87	74.00	-21.13	peak
4	11505.000	35.46	13.42	48.88	74.00	-25.12	peak
5	12585.000	35.77	14.08	49.85	74.00	-24.15	peak
6	13665.000	34.45	15.91	50.36	74.00	-23.64	peak
7	17880.000	29.94	23.34	53.28	74.00	-20.72	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, VERTICAL)**

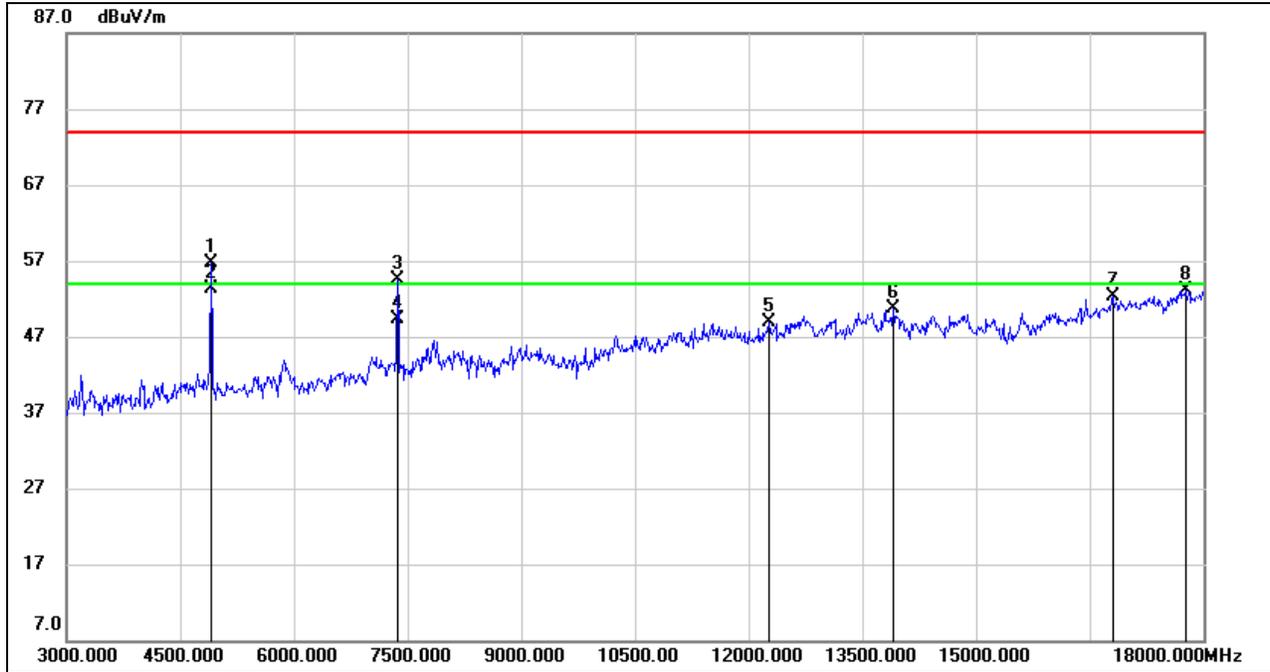


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.55	-2.89	48.66	74.00	-25.34	peak
2	4875.000	52.27	0.76	53.03	74.00	-20.97	peak
3	7305.000	45.23	6.08	51.31	74.00	-22.69	peak
4	12675.000	35.82	14.21	50.03	74.00	-23.97	peak
5	13515.000	34.57	15.81	50.38	74.00	-23.62	peak
6	17700.000	30.65	22.43	53.08	74.00	-20.92	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

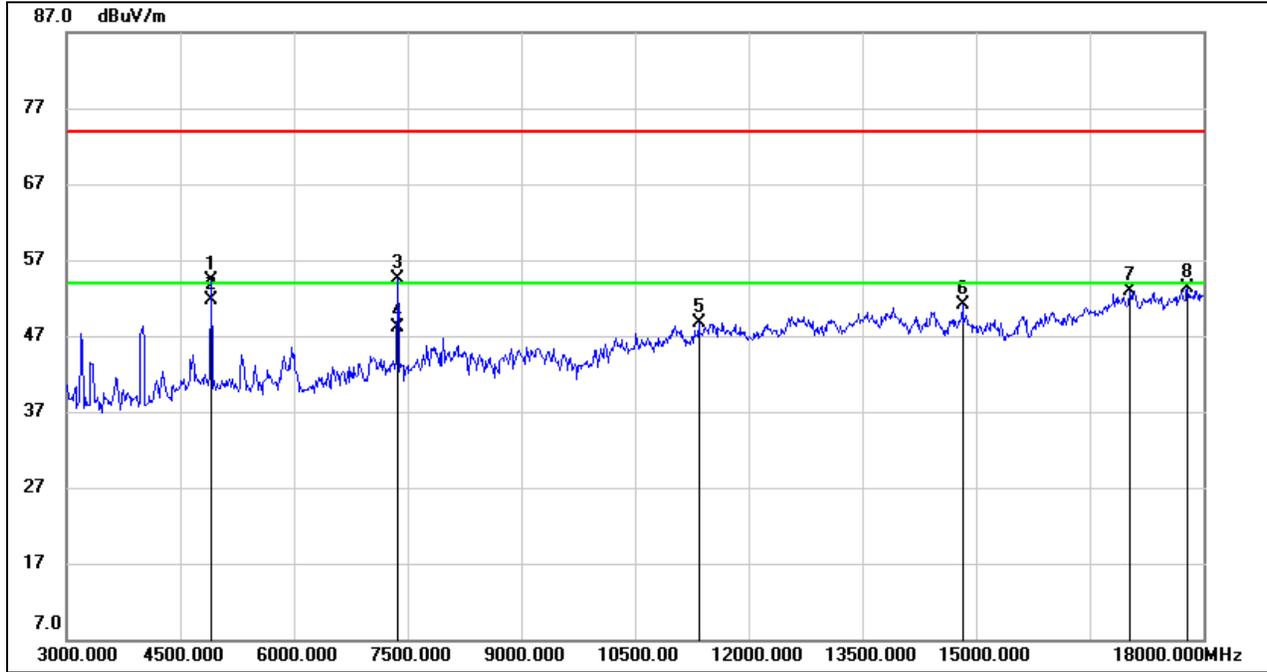


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	55.78	0.88	56.66	74.00	-17.34	peak
2	4905.000	52.44	0.88	53.32	54.00	-0.68	AVG
3	7365.000	48.09	6.34	54.43	74.00	-19.57	peak
4	7365.000	42.93	6.34	49.27	54.00	-4.73	AVG
5	12270.000	35.01	13.96	48.97	74.00	-25.03	peak
6	13905.000	34.59	16.20	50.79	74.00	-23.21	peak
7	16800.000	32.33	19.95	52.28	74.00	-21.72	peak
8	17775.000	30.10	23.09	53.19	74.00	-20.81	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

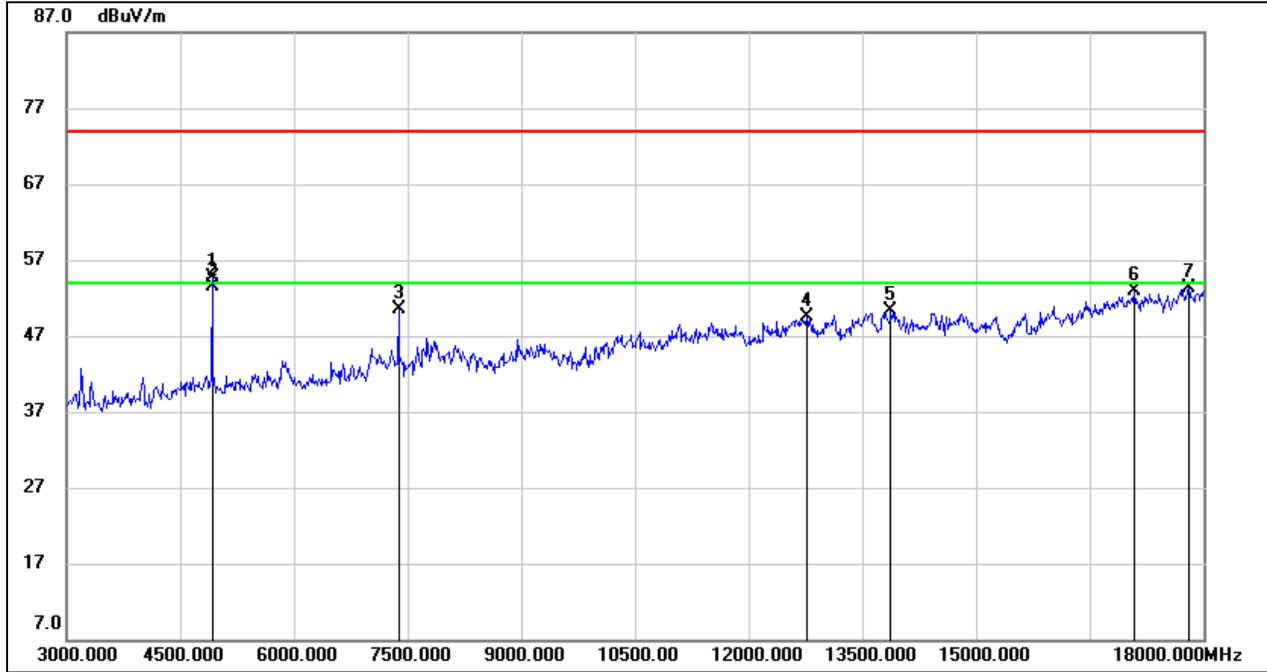


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	53.49	0.88	54.37	74.00	-19.63	peak
2	4905.000	50.84	0.88	51.72	54.00	-2.28	AVG
3	7365.000	48.12	6.34	54.46	74.00	-19.54	peak
4	7365.000	41.82	6.34	48.16	54.00	-5.84	AVG
5	11340.000	36.19	12.45	48.64	74.00	-25.36	peak
6	14820.000	35.20	15.94	51.14	74.00	-22.86	peak
7	17025.000	32.50	20.46	52.96	74.00	-21.04	peak
8	17790.000	30.05	23.22	53.27	74.00	-20.73	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

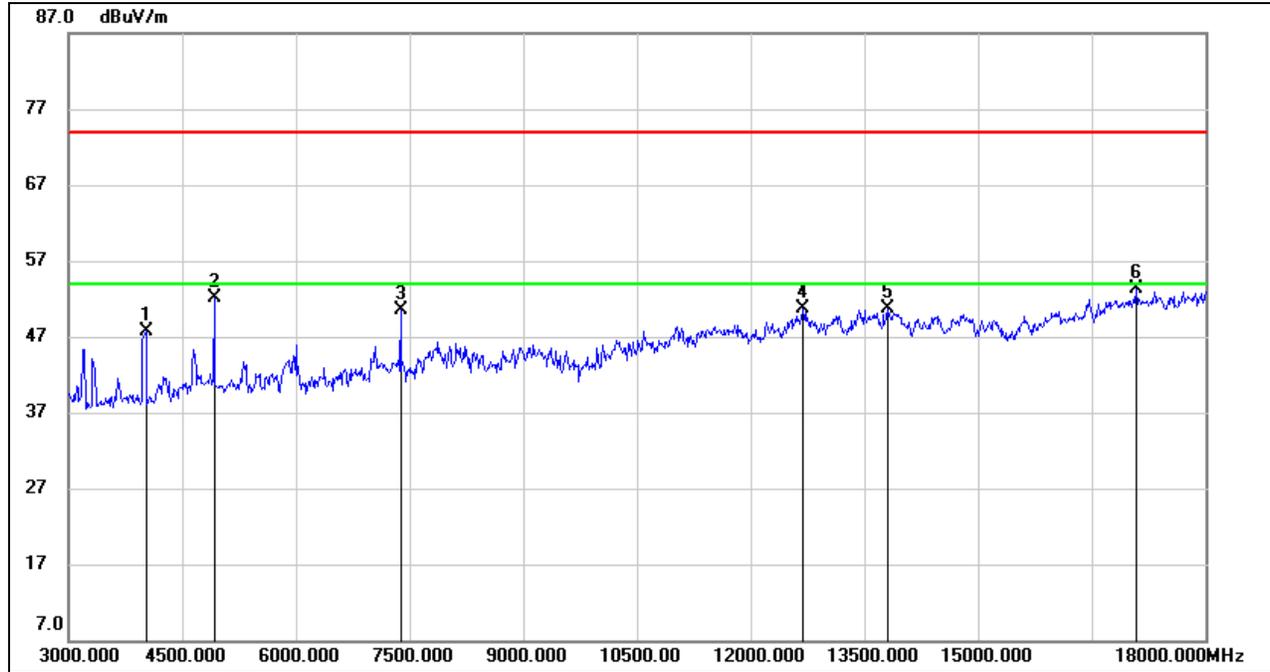


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	53.83	0.96	54.79	74.00	-19.21	peak
2	4920.000	52.52	0.96	53.48	54.00	-0.52	AVG
3	7380.000	44.18	6.41	50.59	74.00	-23.41	peak
4	12765.000	34.31	15.18	49.49	74.00	-24.51	peak
5	13875.000	33.91	16.44	50.35	74.00	-23.65	peak
6	17085.000	32.31	20.60	52.91	74.00	-21.09	peak
7	17805.000	29.97	23.31	53.28	74.00	-20.72	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



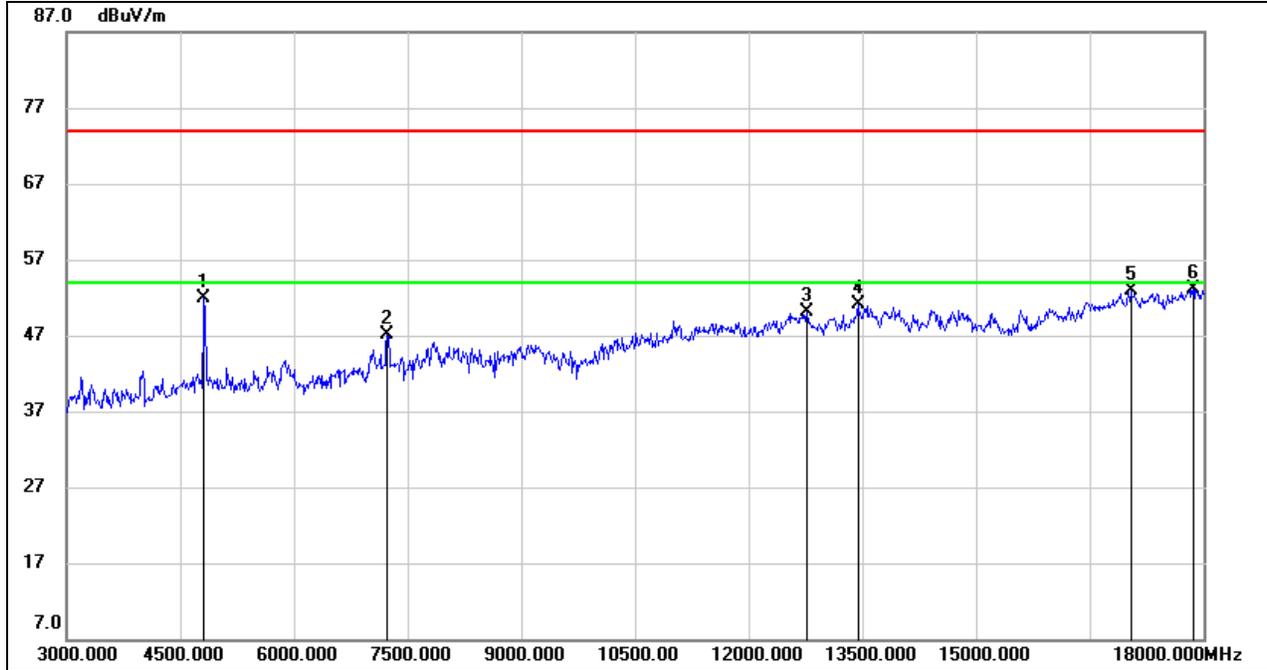
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4020.000	50.55	-2.88	47.67	74.00	-26.33	peak
2	4920.000	51.23	0.96	52.19	74.00	-21.81	peak
3	7380.000	44.16	6.41	50.57	74.00	-23.43	peak
4	12690.000	36.47	14.25	50.72	74.00	-23.28	peak
5	13800.000	33.62	17.10	50.72	74.00	-23.28	peak
6	17085.000	32.72	20.60	53.32	74.00	-20.68	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### 8.2.2. 802.11g MODE

#### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

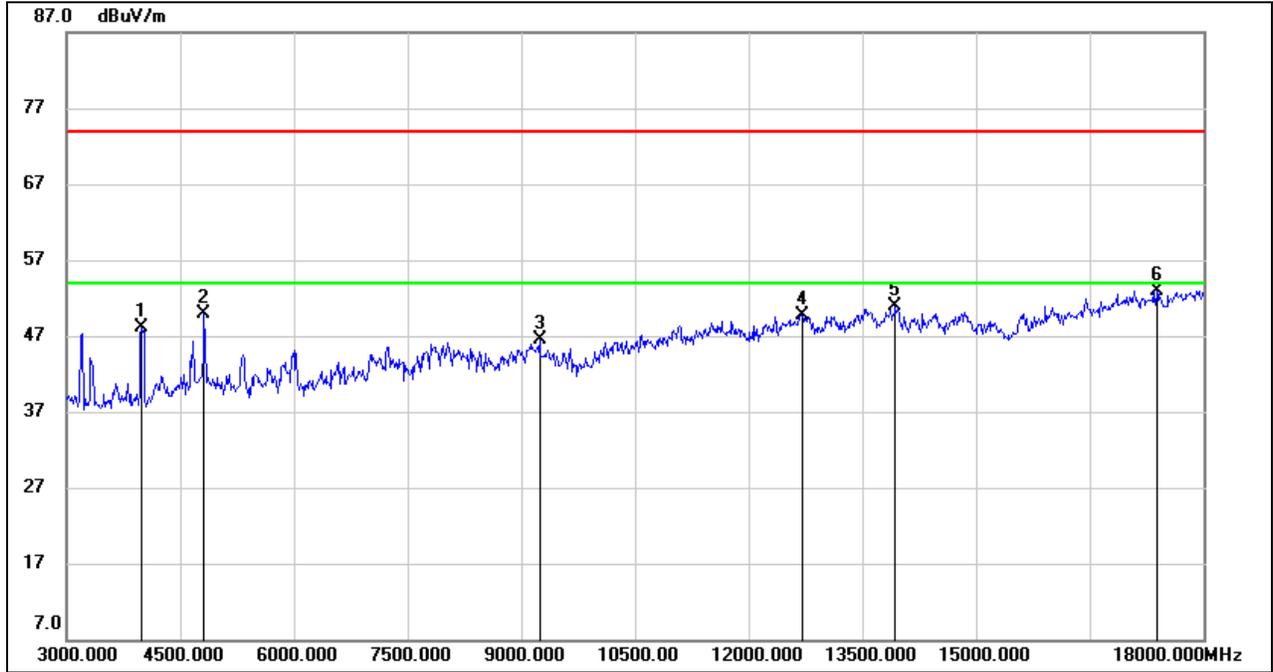


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	51.31	0.51	51.82	74.00	-22.18	peak
2	7230.000	41.18	5.89	47.07	74.00	-26.93	peak
3	12765.000	34.85	15.18	50.03	74.00	-23.97	peak
4	13440.000	35.16	15.98	51.14	74.00	-22.86	peak
5	17040.000	32.42	20.49	52.91	74.00	-21.09	peak
6	17865.000	29.72	23.33	53.05	74.00	-20.95	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

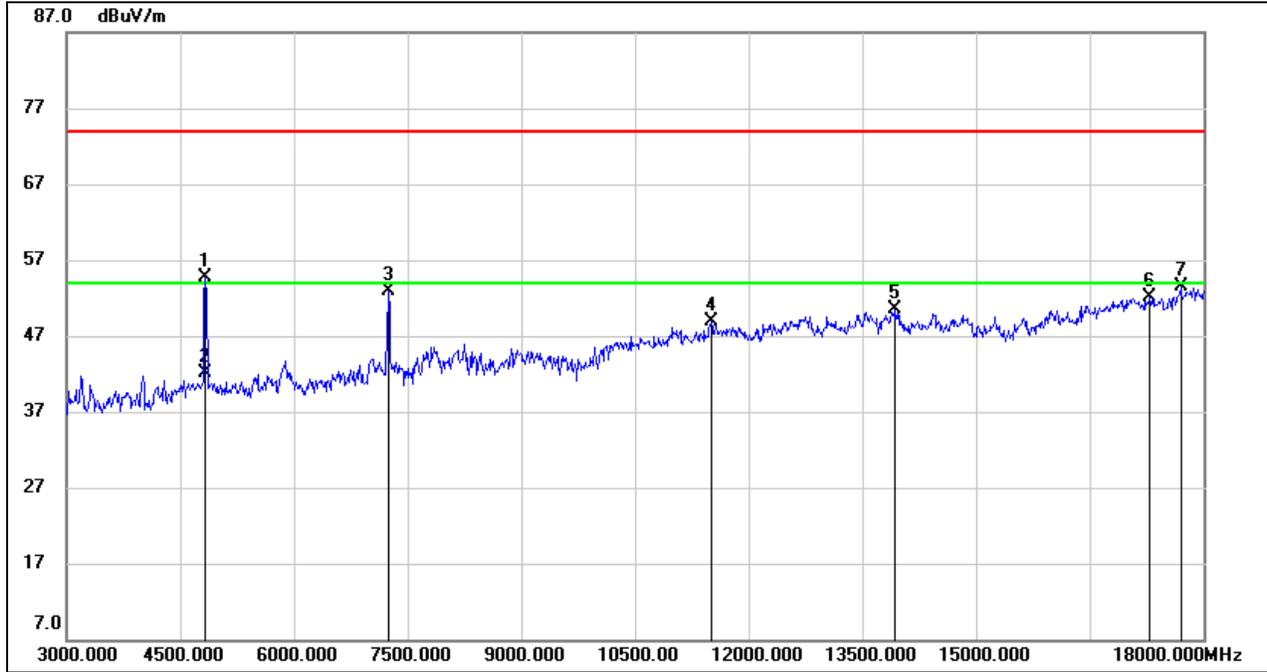


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	51.08	-2.89	48.19	74.00	-25.81	peak
2	4815.000	49.39	0.51	49.90	74.00	-24.10	peak
3	9240.000	37.69	8.79	46.48	74.00	-27.52	peak
4	12705.000	35.29	14.35	49.64	74.00	-24.36	peak
5	13935.000	34.82	16.15	50.97	74.00	-23.03	peak
6	17385.000	31.49	21.46	52.95	74.00	-21.05	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

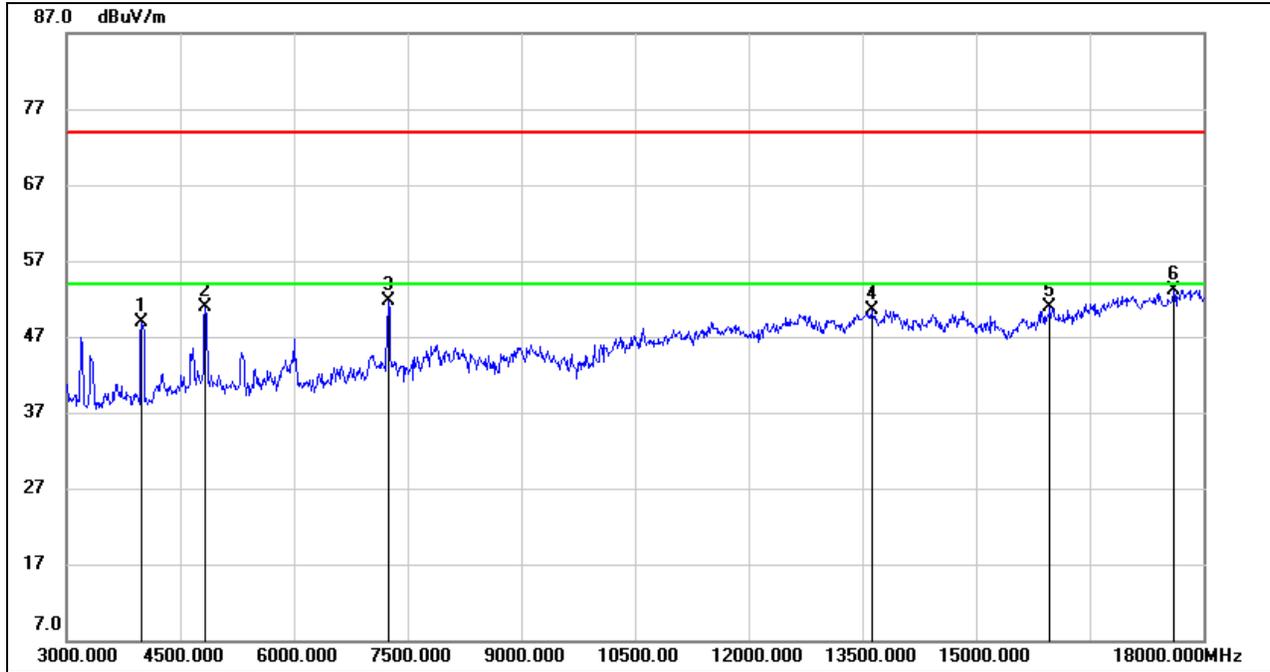


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.000	54.17	0.59	54.76	74.00	-19.24	peak
2	4830.000	41.50	0.59	42.09	54.00	-11.91	AVG
3	7245.000	47.00	5.92	52.92	74.00	-21.08	peak
4	11505.000	35.53	13.42	48.95	74.00	-25.05	peak
5	13935.000	34.42	16.15	50.57	74.00	-23.43	peak
6	17295.000	30.34	21.71	52.05	74.00	-21.95	peak
7	17700.000	31.07	22.43	53.50	74.00	-20.50	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

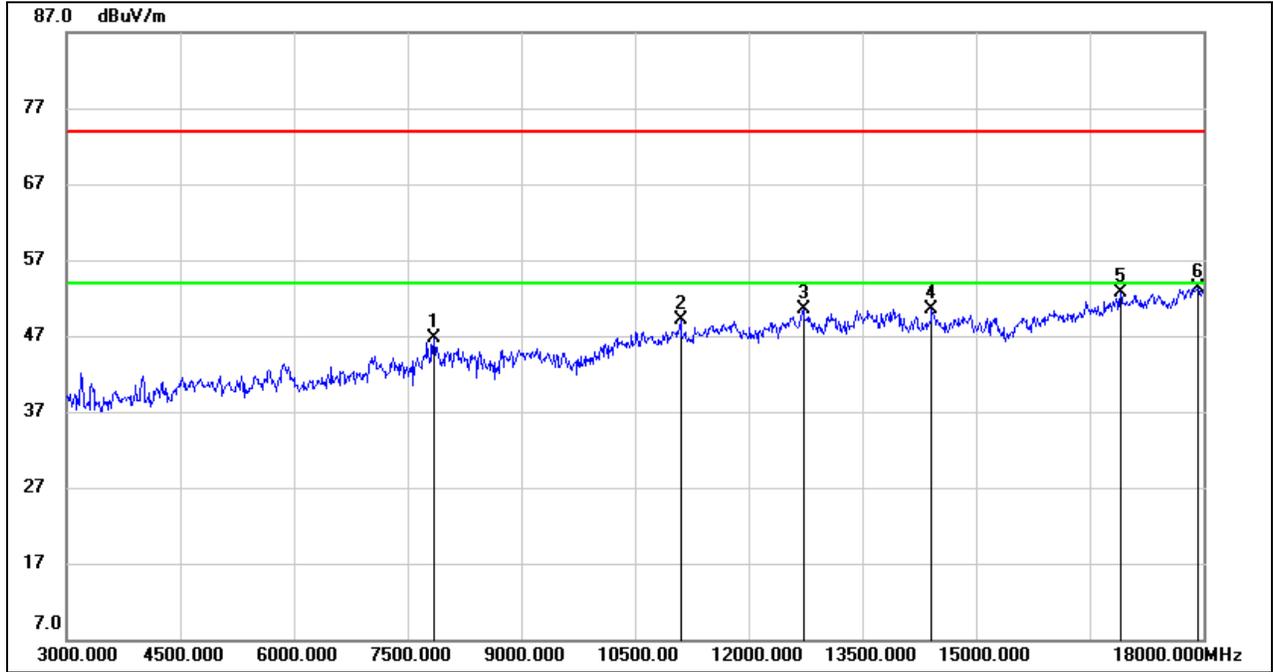


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	51.70	-2.89	48.81	74.00	-25.19	peak
2	4830.000	50.41	0.59	51.00	74.00	-23.00	peak
3	7245.000	45.69	5.92	51.61	74.00	-22.39	peak
4	13620.000	34.60	15.99	50.59	74.00	-23.41	peak
5	15975.000	33.22	17.65	50.87	74.00	-23.13	peak
6	17610.000	31.29	21.86	53.15	74.00	-20.85	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, HORIZONTAL)**

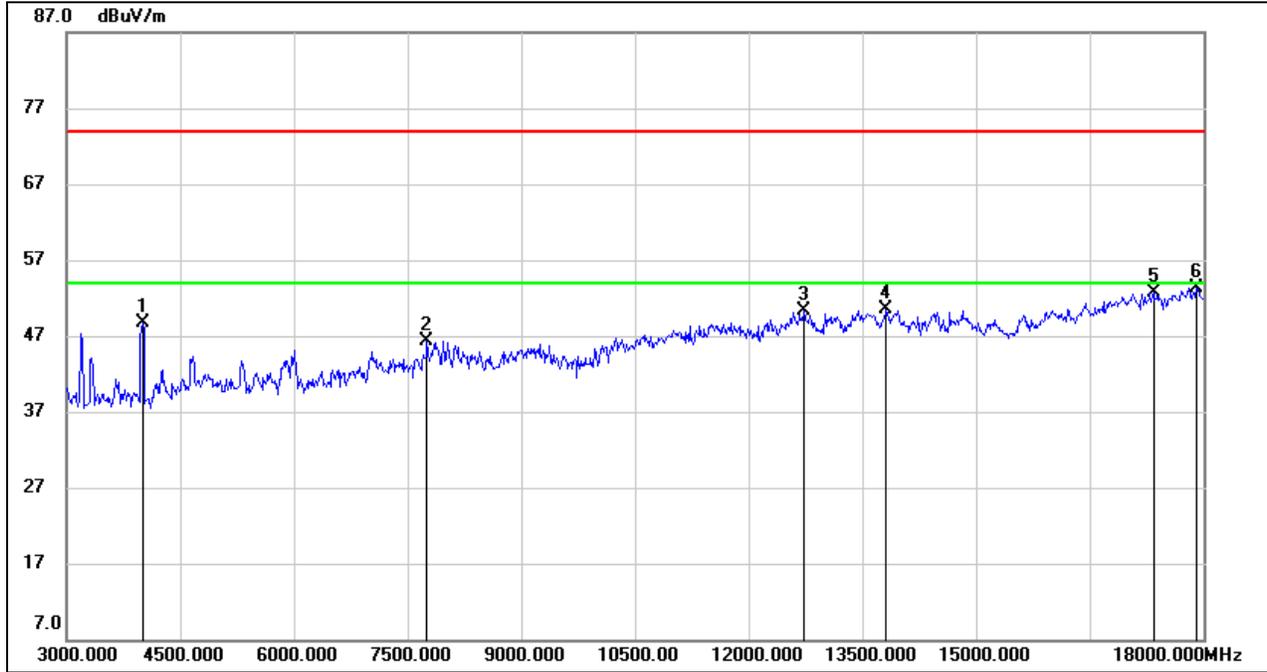


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7845.000	39.15	7.62	46.77	74.00	-27.23	peak
2	11100.000	36.52	12.56	49.08	74.00	-24.92	peak
3	12720.000	35.91	14.57	50.48	74.00	-23.52	peak
4	14415.000	34.20	16.35	50.55	74.00	-23.45	peak
5	16905.000	32.67	19.99	52.66	74.00	-21.34	peak
6	17925.000	30.01	23.37	53.38	74.00	-20.62	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, VERTICAL)**

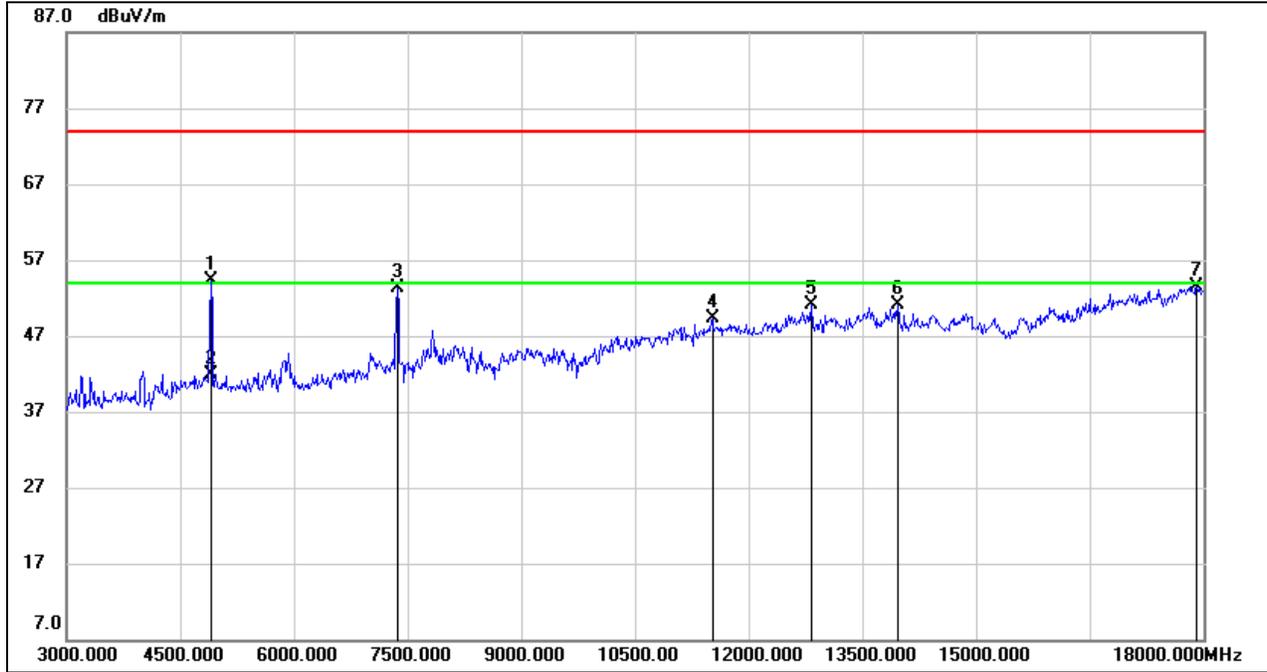


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.50	-2.89	48.61	74.00	-25.39	peak
2	7755.000	39.08	7.29	46.37	74.00	-27.63	peak
3	12735.000	35.54	14.77	50.31	74.00	-23.69	peak
4	13815.000	33.45	16.97	50.42	74.00	-23.58	peak
5	17340.000	31.18	21.61	52.79	74.00	-21.21	peak
6	17910.000	29.99	23.35	53.34	74.00	-20.66	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

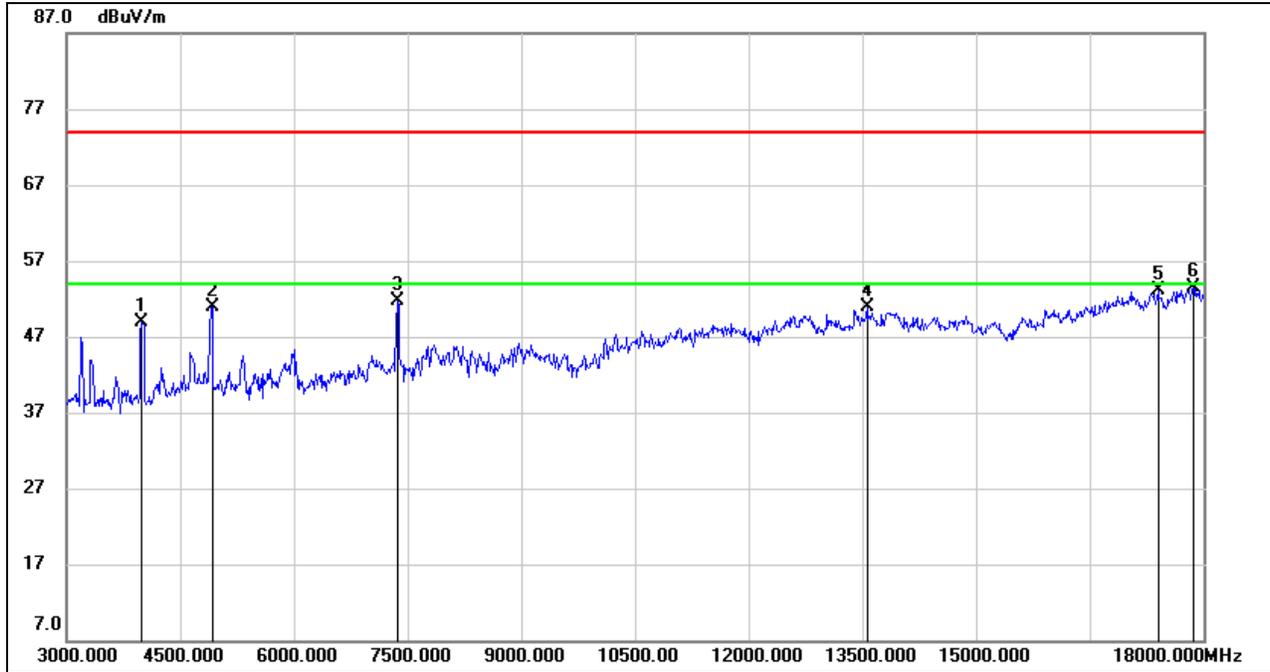


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	53.50	0.88	54.38	74.00	-19.62	peak
2	4905.000	41.00	0.88	41.88	54.00	-12.12	AVG
3	7365.000	46.88	6.34	53.22	74.00	-20.78	peak
4	11520.000	35.87	13.38	49.25	74.00	-24.75	peak
5	12825.000	35.71	15.48	51.19	74.00	-22.81	peak
6	13965.000	34.93	16.09	51.02	74.00	-22.98	peak
7	17910.000	30.18	23.35	53.53	74.00	-20.47	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

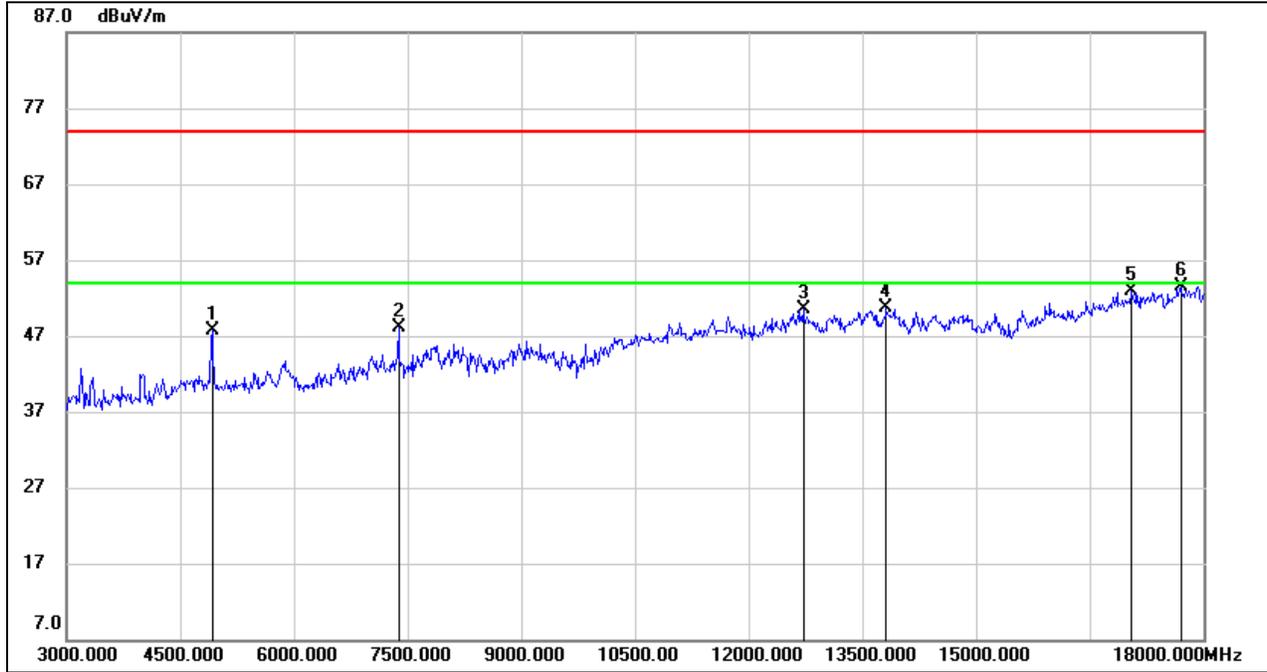


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	51.79	-2.89	48.90	74.00	-25.10	peak
2	4920.000	49.96	0.96	50.92	74.00	-23.08	peak
3	7365.000	45.31	6.34	51.65	74.00	-22.35	peak
4	13560.000	34.88	15.93	50.81	74.00	-23.19	peak
5	17400.000	31.74	21.41	53.15	74.00	-20.85	peak
6	17865.000	30.23	23.33	53.56	74.00	-20.44	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

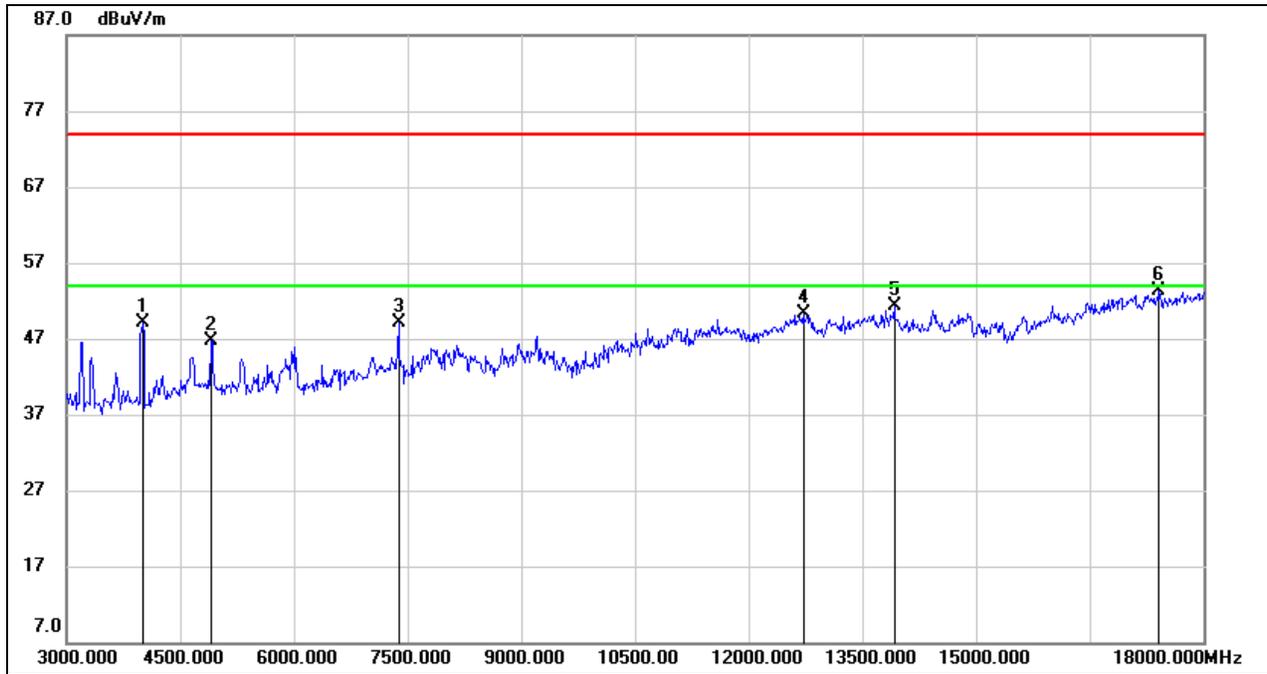


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	46.68	0.96	47.64	74.00	-26.36	peak
2	7380.000	41.72	6.41	48.13	74.00	-25.87	peak
3	12720.000	35.92	14.57	50.49	74.00	-23.51	peak
4	13815.000	33.82	16.97	50.79	74.00	-23.21	peak
5	17055.000	32.43	20.53	52.96	74.00	-21.04	peak
6	17700.000	31.15	22.43	53.58	74.00	-20.42	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



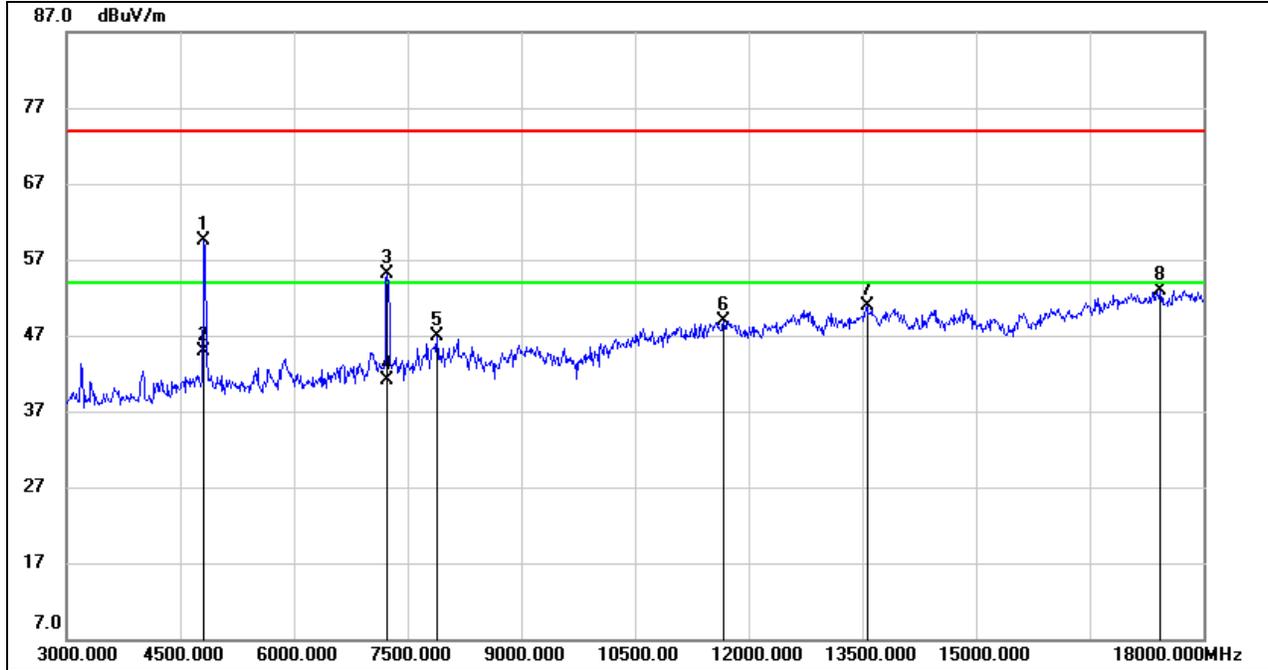
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.99	-2.89	49.10	74.00	-24.90	peak
2	4905.000	45.76	0.88	46.64	74.00	-27.36	peak
3	7380.000	42.75	6.41	49.16	74.00	-24.84	peak
4	12720.000	35.77	14.57	50.34	74.00	-23.66	peak
5	13920.000	35.05	16.17	51.22	74.00	-22.78	peak
6	17415.000	31.84	21.39	53.23	74.00	-20.77	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### 8.2.3. 802.11n HT20 MODE

#### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

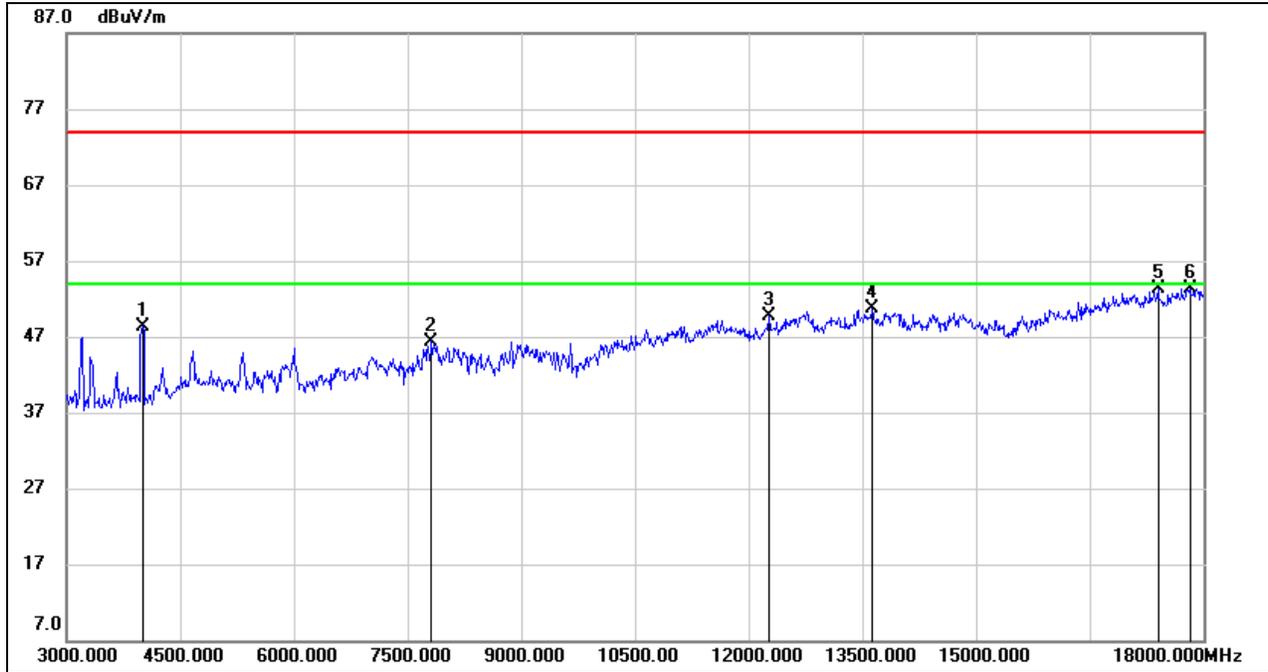


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	58.92	0.51	59.43	74.00	-14.57	peak
2	4815.000	44.33	0.51	44.84	54.00	-9.16	AVG
3	7230.000	49.29	5.89	55.18	74.00	-18.82	peak
4	7230.000	35.30	5.89	41.19	54.00	-12.81	AVG
5	7890.000	39.61	7.30	46.91	74.00	-27.09	peak
6	11670.000	35.98	13.01	48.99	74.00	-25.01	peak
7	13560.000	34.99	15.93	50.92	74.00	-23.08	peak
8	17430.000	31.57	21.38	52.95	74.00	-21.05	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

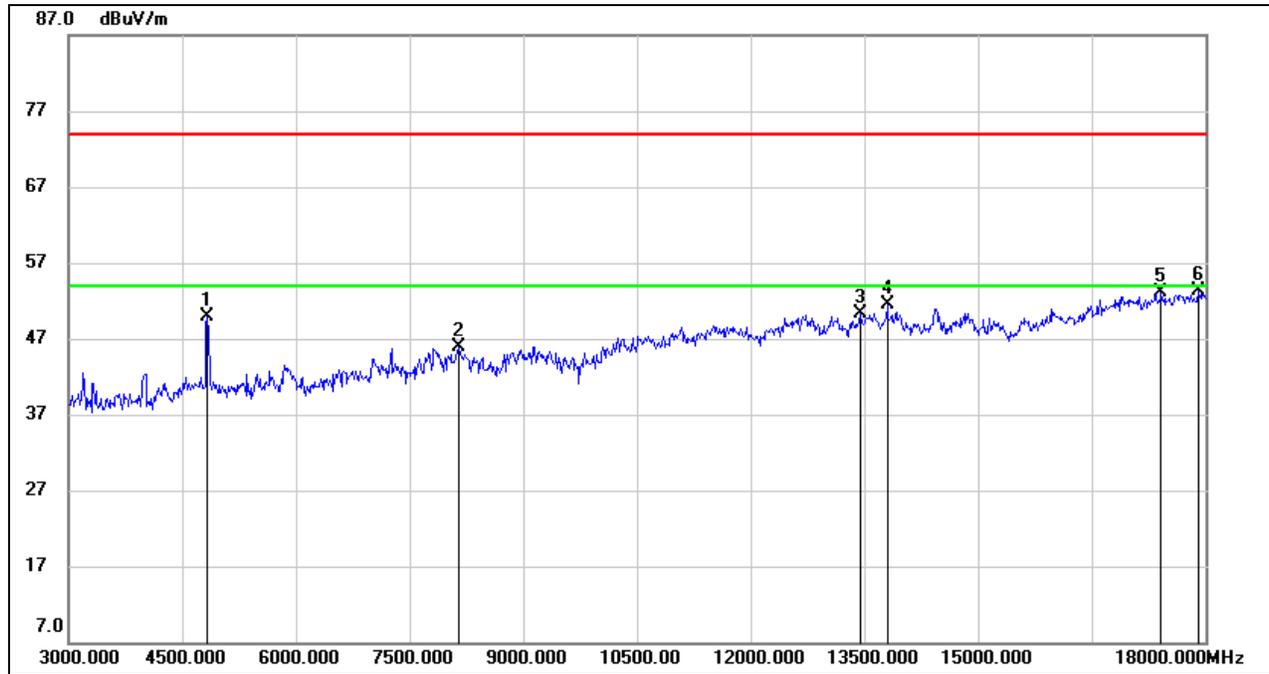


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.26	-2.89	48.37	74.00	-25.63	peak
2	7815.000	38.57	7.83	46.40	74.00	-27.60	peak
3	12270.000	35.70	13.96	49.66	74.00	-24.34	peak
4	13635.000	34.67	15.97	50.64	74.00	-23.36	peak
5	17400.000	31.80	21.41	53.21	74.00	-20.79	peak
6	17820.000	29.96	23.30	53.26	74.00	-20.74	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

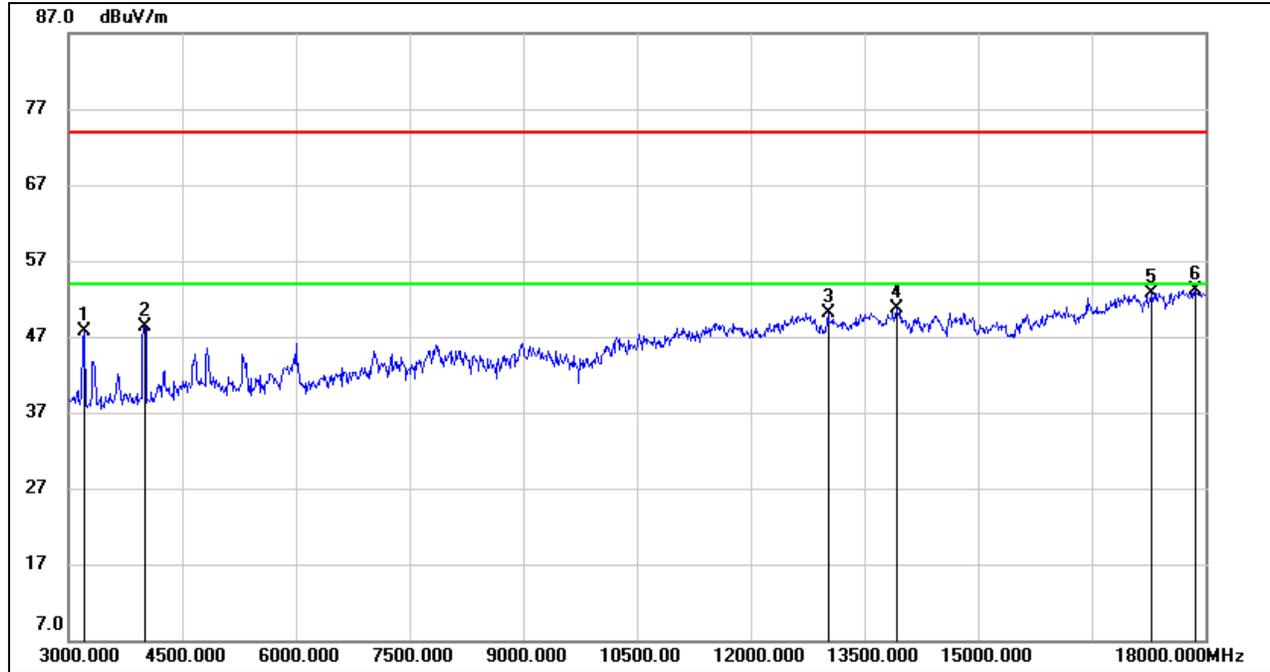


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.000	49.39	0.59	49.98	74.00	-24.02	peak
2	8145.000	37.73	8.08	45.81	74.00	-28.19	peak
3	13440.000	34.25	15.98	50.23	74.00	-23.77	peak
4	13800.000	34.31	17.10	51.41	74.00	-22.59	peak
5	17415.000	31.77	21.39	53.16	74.00	-20.84	peak
6	17910.000	29.94	23.35	53.29	74.00	-20.71	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

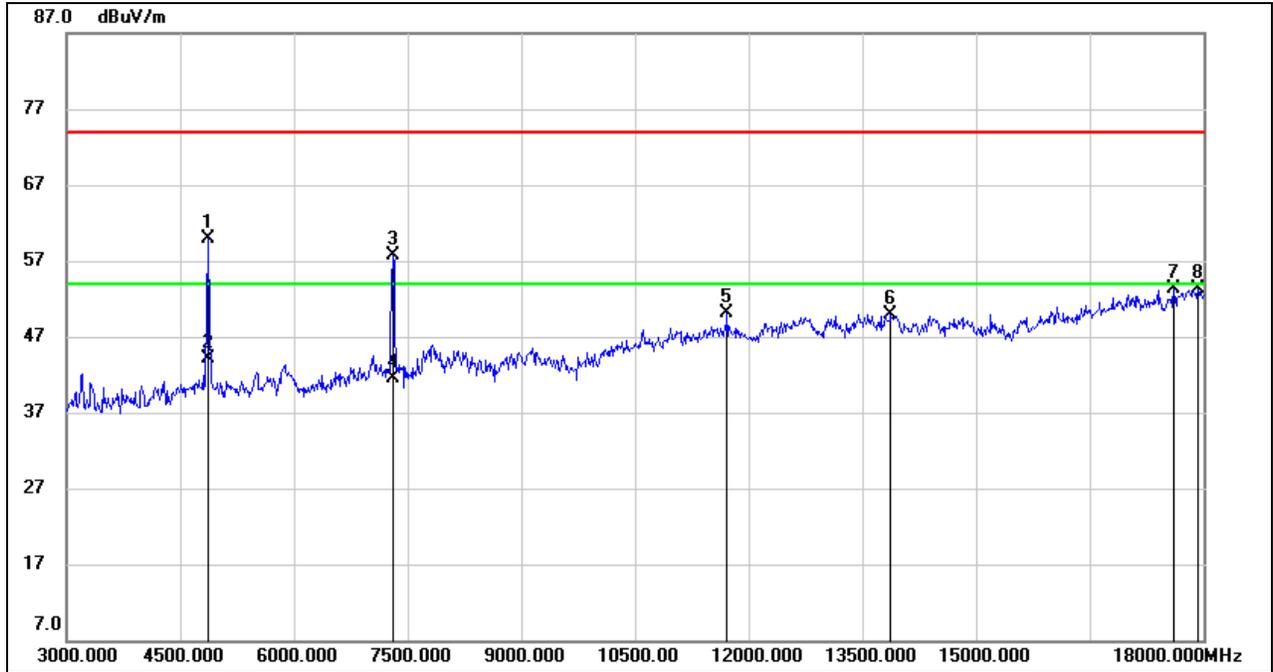


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210.000	52.06	-4.43	47.63	74.00	-26.37	peak
2	4005.000	51.27	-2.89	48.38	74.00	-25.62	peak
3	13020.000	35.12	14.98	50.10	74.00	-23.90	peak
4	13935.000	34.60	16.15	50.75	74.00	-23.25	peak
5	17295.000	31.03	21.71	52.74	74.00	-21.26	peak
6	17865.000	29.80	23.33	53.13	74.00	-20.87	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, HORIZONTAL)**

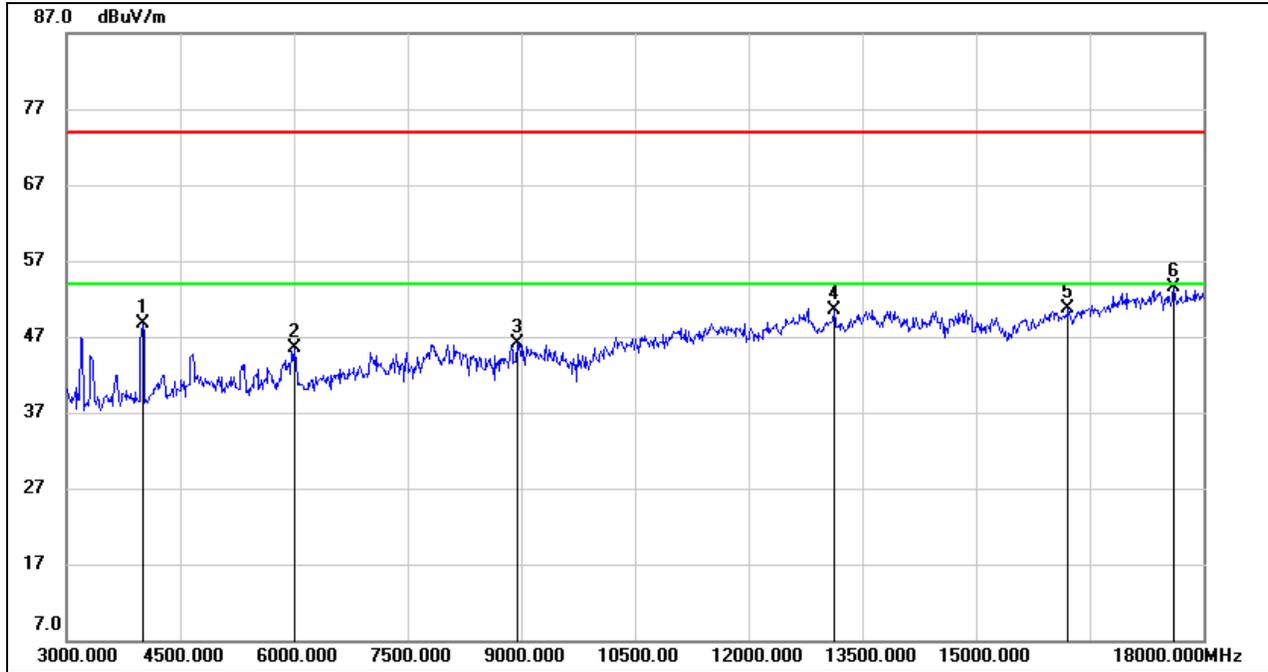


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	59.18	0.76	59.94	74.00	-14.06	peak
2	4875.000	43.42	0.76	44.18	54.00	-9.82	AVG
3	7305.000	51.57	6.08	57.65	74.00	-16.35	peak
4	7305.000	35.41	6.08	41.49	54.00	-12.51	AVG
5	11715.000	37.02	12.99	50.01	74.00	-23.99	peak
6	13875.000	33.44	16.44	49.88	74.00	-24.12	peak
7	17610.000	31.39	21.86	53.25	74.00	-20.75	peak
8	17925.000	30.02	23.37	53.39	74.00	-20.61	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, VERTICAL)**

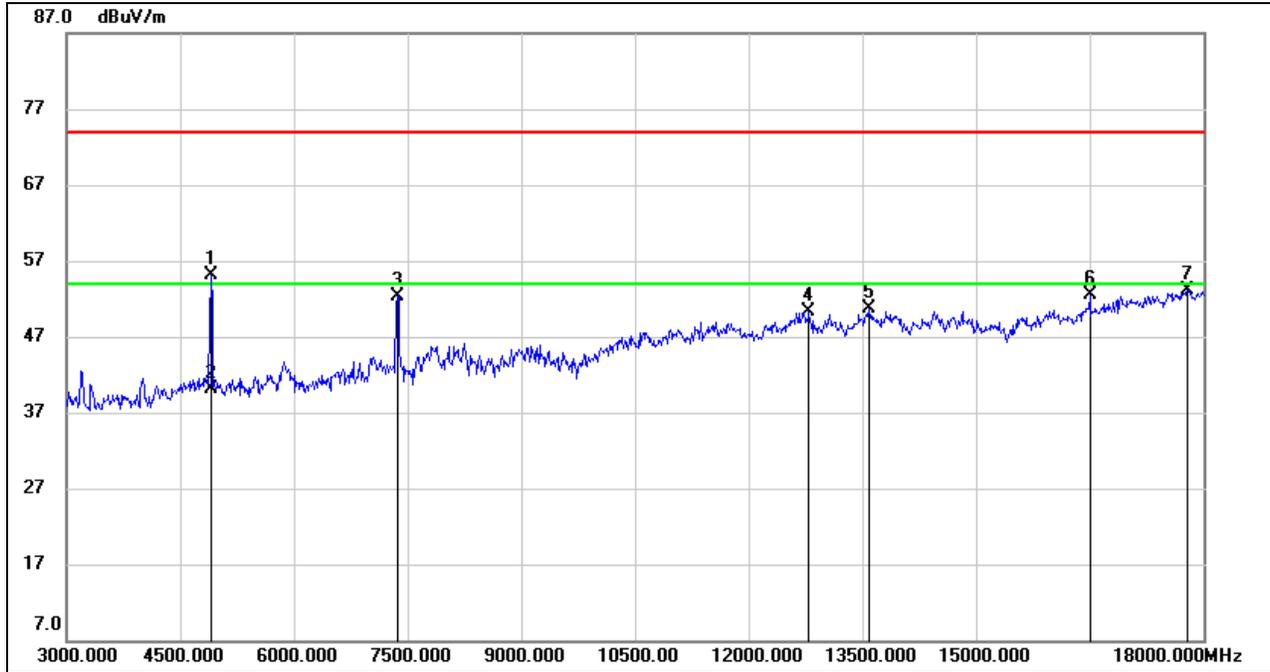


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	51.60	-2.89	48.71	74.00	-25.29	peak
2	6000.000	42.26	3.29	45.55	74.00	-28.45	peak
3	8940.000	37.39	8.71	46.10	74.00	-27.90	peak
4	13125.000	35.33	15.17	50.50	74.00	-23.50	peak
5	16215.000	32.16	18.48	50.64	74.00	-23.36	peak
6	17610.000	31.57	21.86	53.43	74.00	-20.57	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

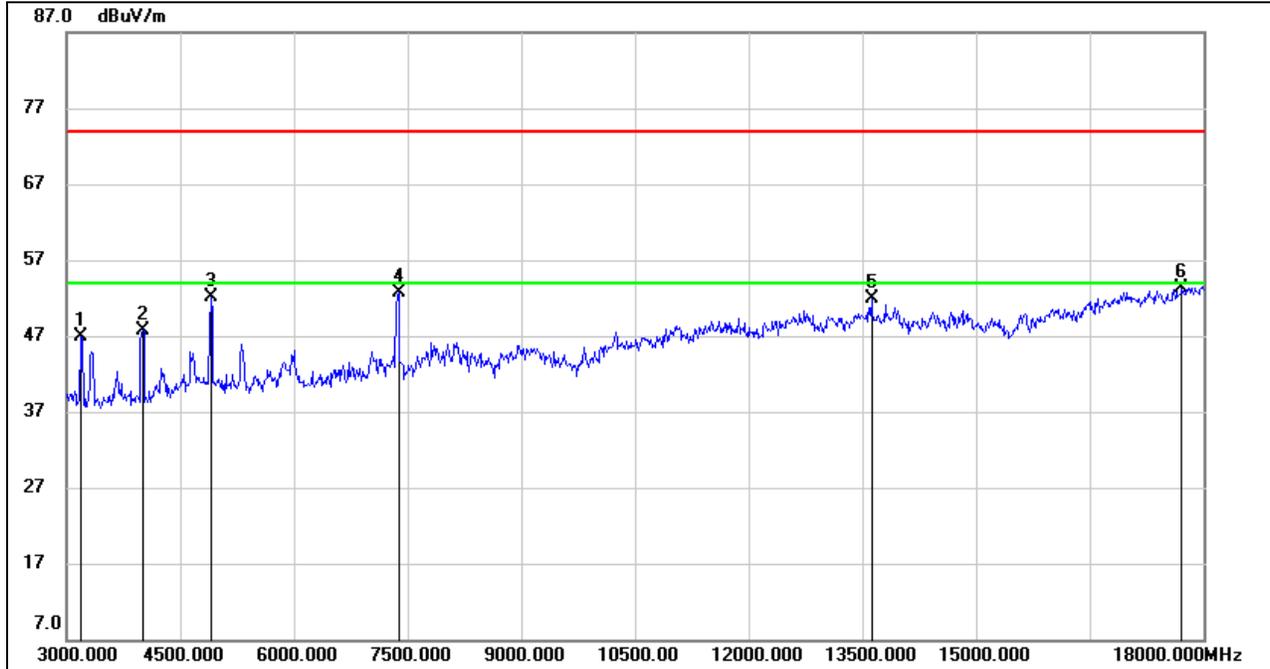


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	54.27	0.88	55.15	74.00	-18.85	peak
2	4905.000	39.25	0.88	40.13	54.00	-13.87	AVG
3	7365.000	46.02	6.34	52.36	74.00	-21.64	peak
4	12795.000	34.74	15.60	50.34	74.00	-23.66	peak
5	13590.000	34.78	16.00	50.78	74.00	-23.22	peak
6	16500.000	33.35	19.19	52.54	74.00	-21.46	peak
7	17790.000	29.90	23.22	53.12	74.00	-20.88	peak

- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV 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 7.1.  
 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.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

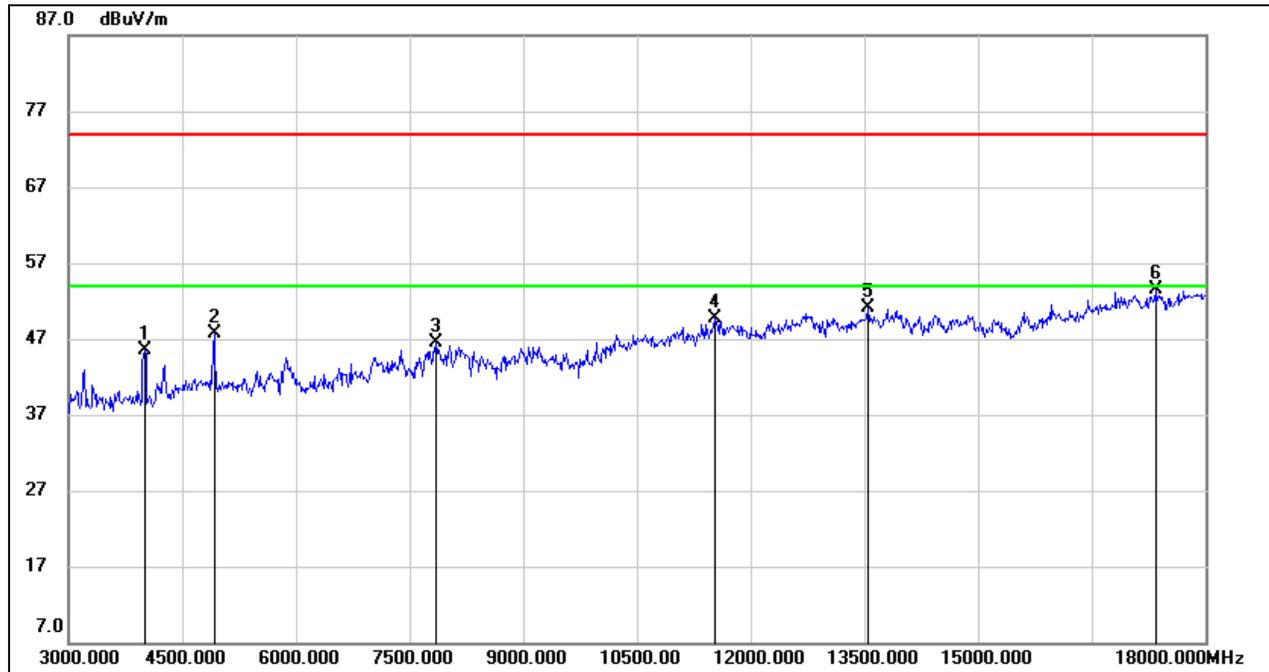


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3195.000	51.30	-4.42	46.88	74.00	-27.12	peak
2	4005.000	50.67	-2.89	47.78	74.00	-26.22	peak
3	4905.000	51.20	0.88	52.08	74.00	-21.92	peak
4	7380.000	46.29	6.41	52.70	74.00	-21.30	peak
5	13620.000	35.83	15.99	51.82	74.00	-22.18	peak
6	17715.000	30.82	22.56	53.38	74.00	-20.62	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

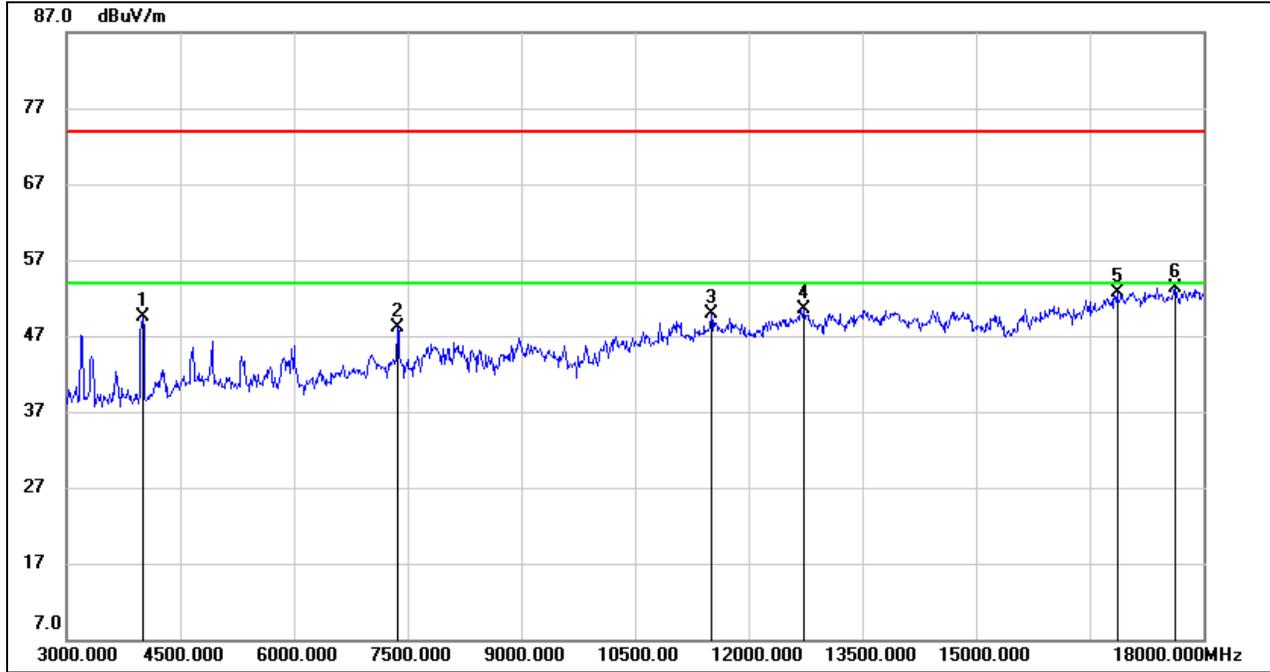


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	48.34	-2.89	45.45	74.00	-28.55	peak
2	4920.000	46.66	0.96	47.62	74.00	-26.38	peak
3	7845.000	38.82	7.62	46.44	74.00	-27.56	peak
4	11535.000	36.37	13.33	49.70	74.00	-24.30	peak
5	13545.000	35.15	15.89	51.04	74.00	-22.96	peak
6	17340.000	31.87	21.61	53.48	74.00	-20.52	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	52.44	-2.89	49.55	74.00	-24.45	peak
2	7365.000	41.68	6.34	48.02	74.00	-25.98	peak
3	11505.000	36.41	13.42	49.83	74.00	-24.17	peak
4	12735.000	35.70	14.77	50.47	74.00	-23.53	peak
5	16860.000	32.70	19.95	52.65	74.00	-21.35	peak
6	17625.000	31.35	21.95	53.30	74.00	-20.70	peak

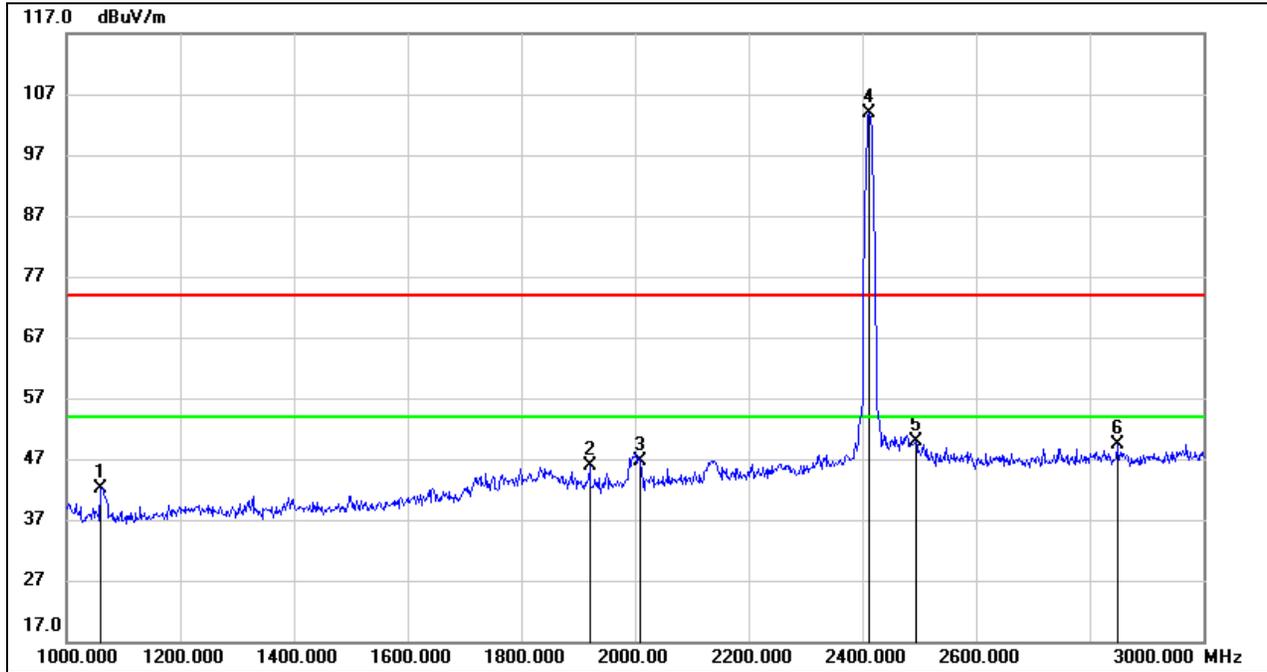
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### 8.3. SPURIOUS EMISSIONS (1~3GHz)

#### 8.3.1. 802.11b MODE

##### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

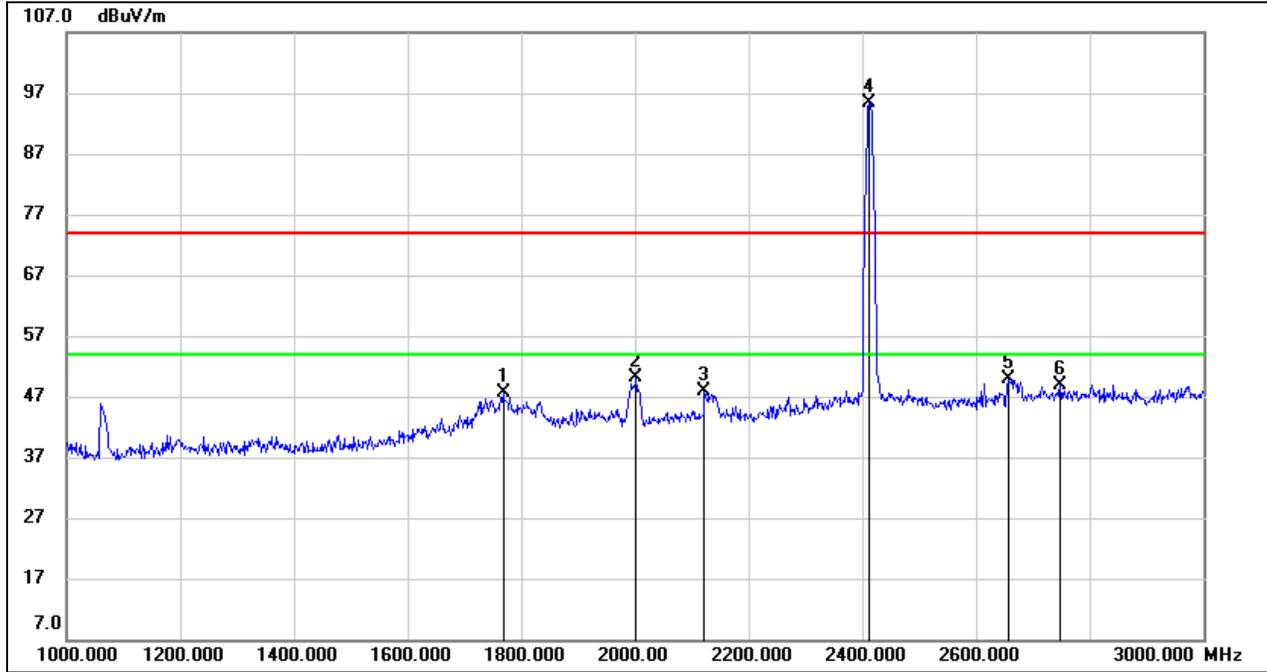


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	37.04	5.14	42.18	74.00	-31.82	peak
2	1920.000	35.77	10.03	45.80	74.00	-28.20	peak
3	2010.000	36.32	10.33	46.65	74.00	-27.35	peak
4	2412.000	91.83	12.08	103.91	/	/	fundamental
5	2494.000	37.39	12.42	49.81	74.00	-24.19	peak
6	2848.000	35.41	13.89	49.30	74.00	-24.70	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

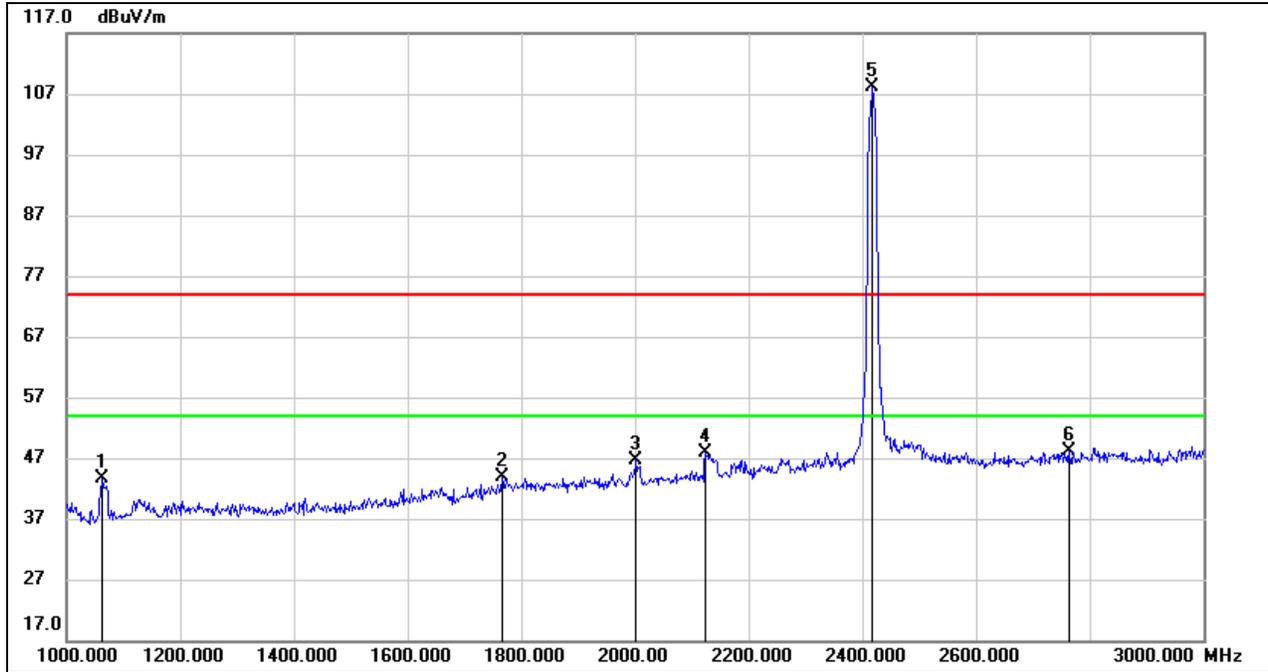


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1768.000	38.40	9.28	47.68	74.00	-26.32	peak
2	2002.000	39.99	10.26	50.25	74.00	-23.75	peak
3	2122.000	36.67	11.10	47.77	74.00	-26.23	peak
4	2412.000	83.35	12.08	95.43	/	/	fundamental
5	2658.000	37.08	12.75	49.83	74.00	-24.17	peak
6	2748.000	35.64	13.36	49.00	74.00	-25.00	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

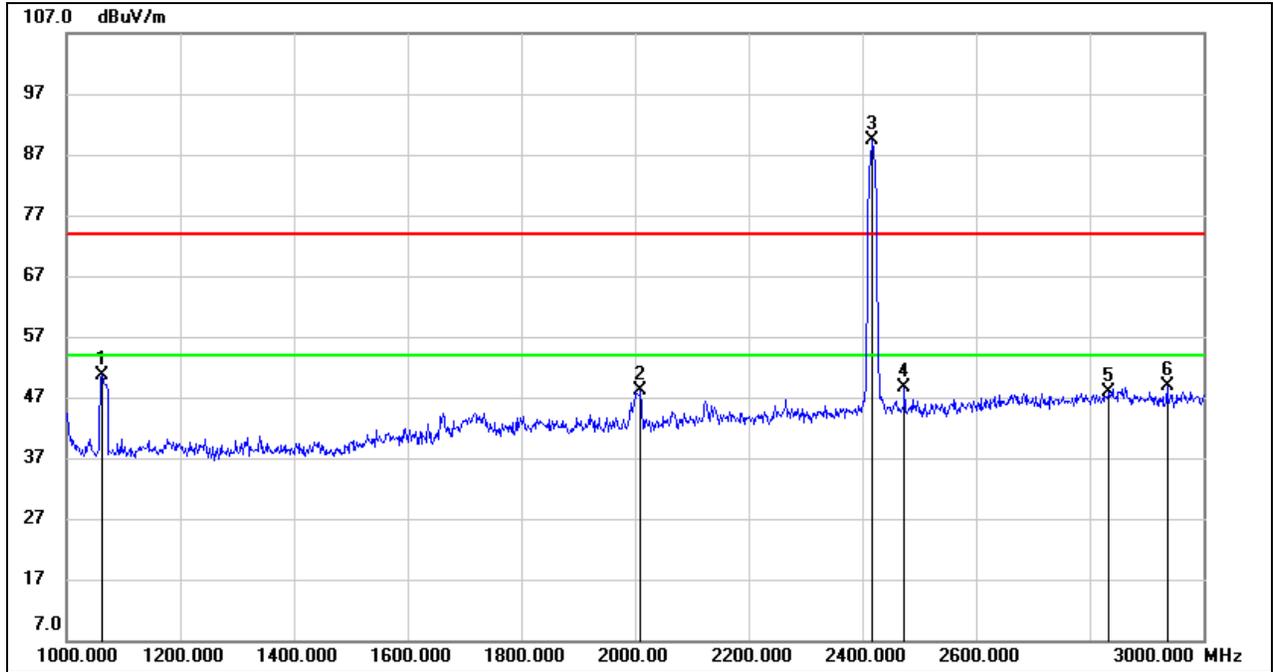


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	38.48	5.14	43.62	74.00	-30.38	peak
2	1766.000	34.67	9.25	43.92	74.00	-30.08	peak
3	2002.000	36.31	10.26	46.57	74.00	-27.43	peak
4	2124.000	36.69	11.10	47.79	74.00	-26.21	peak
5	2417.000	95.94	12.10	108.04	/	/	fundamental
6	2764.000	34.68	13.48	48.16	74.00	-25.84	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

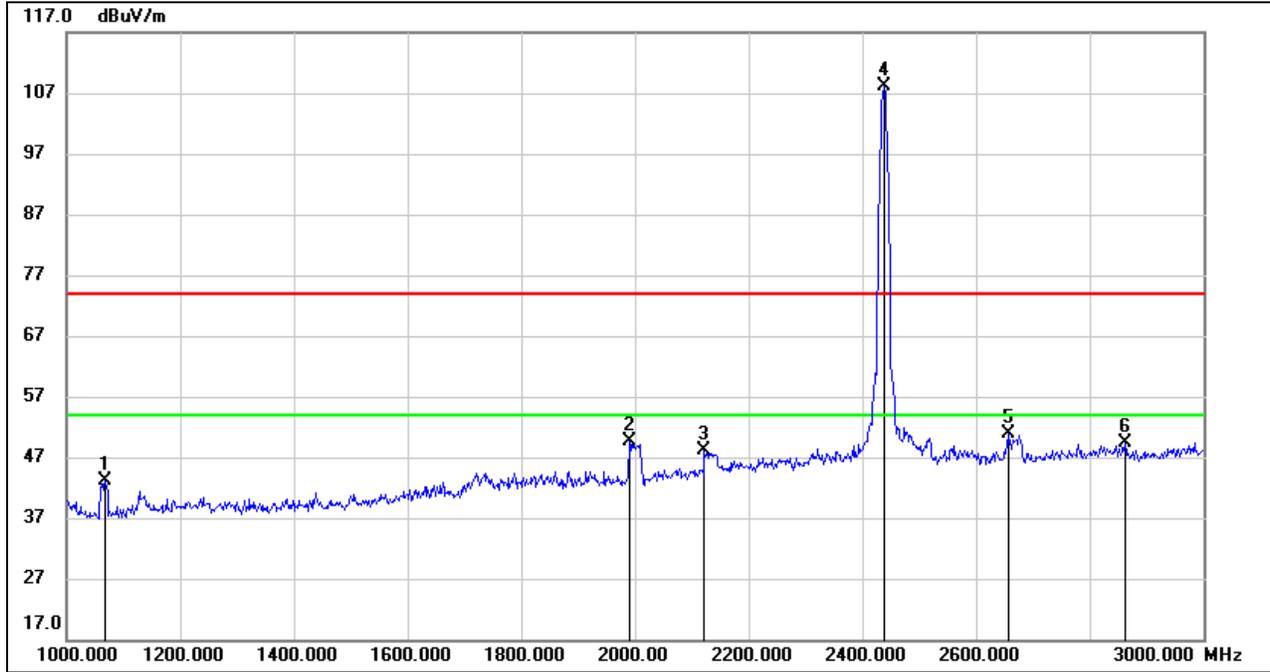


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	45.59	5.14	50.73	74.00	-23.27	peak
2	2010.000	37.69	10.33	48.02	74.00	-25.98	peak
3	2417.000	77.21	12.10	89.31	/	/	fundamental
4	2474.000	36.22	12.34	48.56	74.00	-25.44	peak
5	2834.000	33.95	13.86	47.81	74.00	-26.19	peak
6	2936.000	34.72	14.27	48.99	74.00	-25.01	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, HORIZONTAL)**

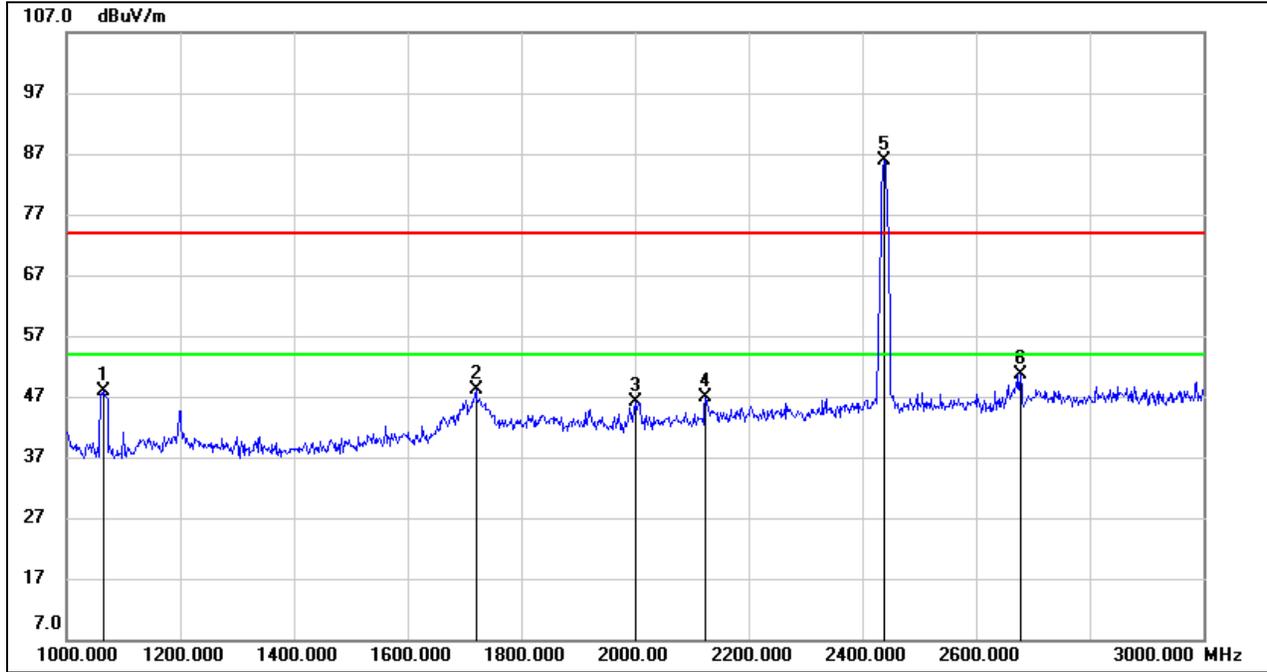


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1068.000	38.00	5.16	43.16	74.00	-30.84	peak
2	1990.000	39.44	10.22	49.66	74.00	-24.34	peak
3	2122.000	36.99	11.10	48.09	74.00	-25.91	peak
4	2437.000	95.99	12.19	108.18	/	/	fundamental
5	2656.000	38.04	12.74	50.78	74.00	-23.22	peak
6	2862.000	35.37	13.93	49.30	74.00	-24.70	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, VERTICAL)**

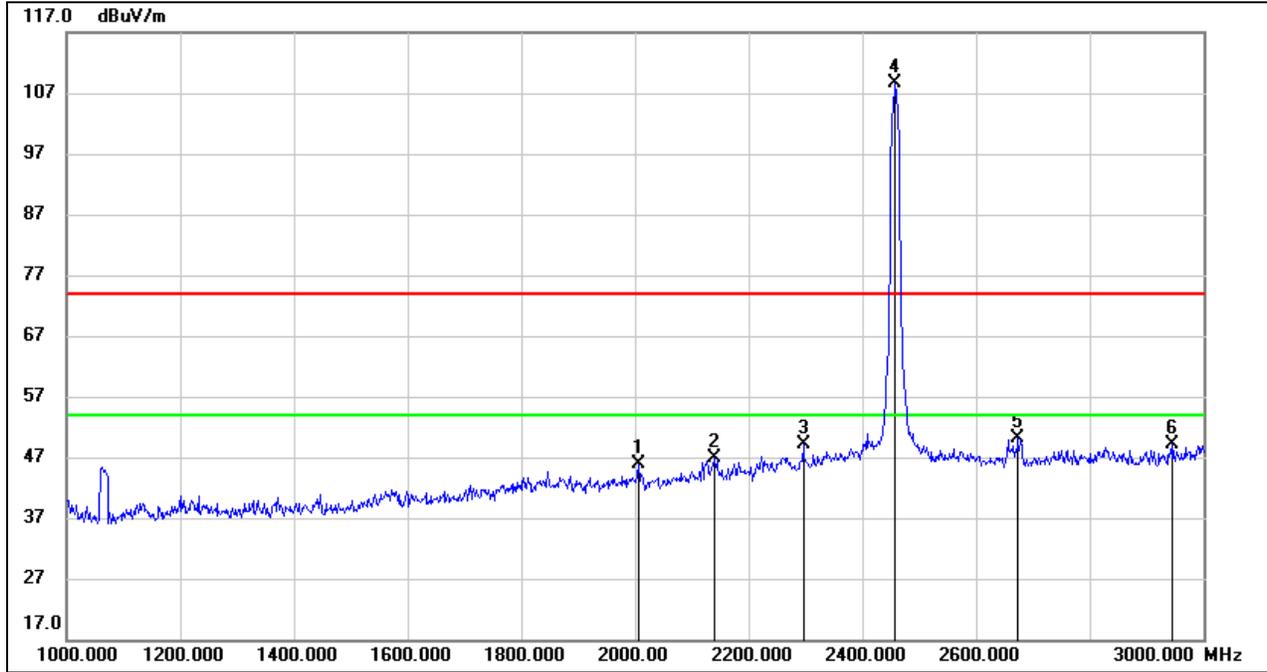


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1064.000	42.64	5.15	47.79	74.00	-26.21	peak
2	1720.000	39.54	8.52	48.06	74.00	-25.94	peak
3	2000.000	35.82	10.25	46.07	74.00	-27.93	peak
4	2124.000	35.85	11.10	46.95	74.00	-27.05	peak
5	2437.000	73.63	12.19	85.82	/	/	fundamental
6	2678.000	37.77	12.86	50.63	74.00	-23.37	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

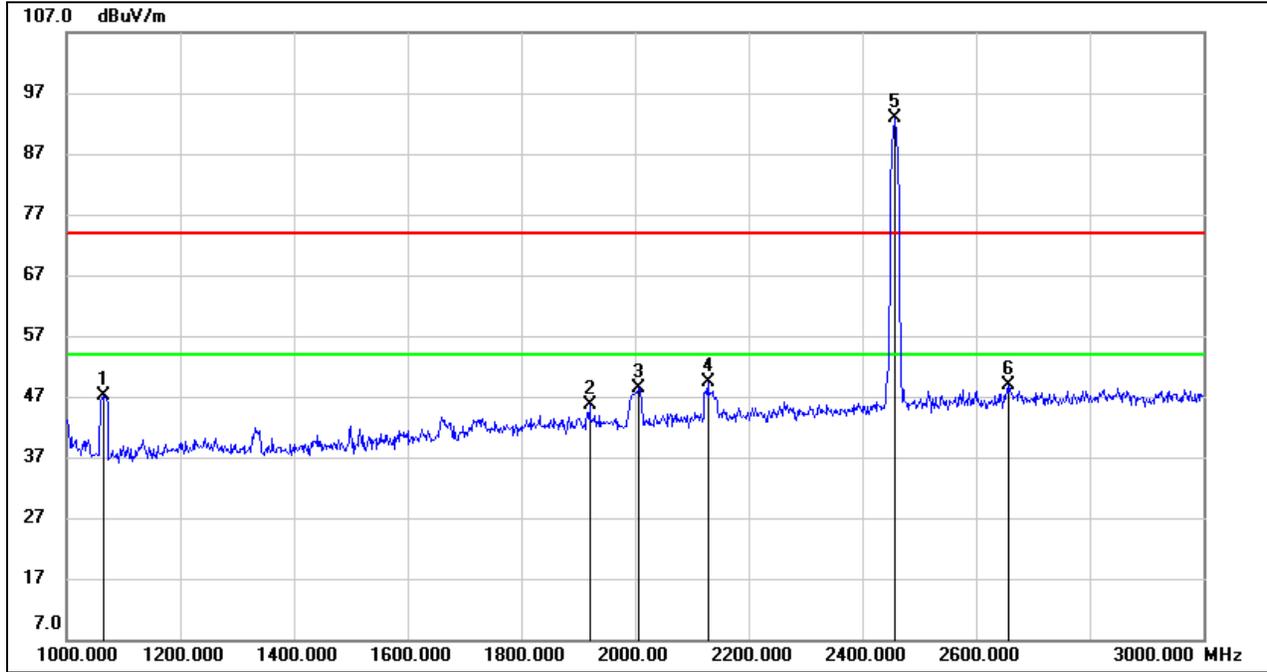


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2006.000	35.50	10.30	45.80	74.00	-28.20	peak
2	2140.000	35.81	11.15	46.96	74.00	-27.04	peak
3	2296.000	37.69	11.32	49.01	74.00	-24.99	peak
4	2457.000	96.29	12.26	108.55	/	/	fundamental
5	2674.000	37.17	12.85	50.02	74.00	-23.98	peak
6	2946.000	34.78	14.34	49.12	74.00	-24.88	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
  5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

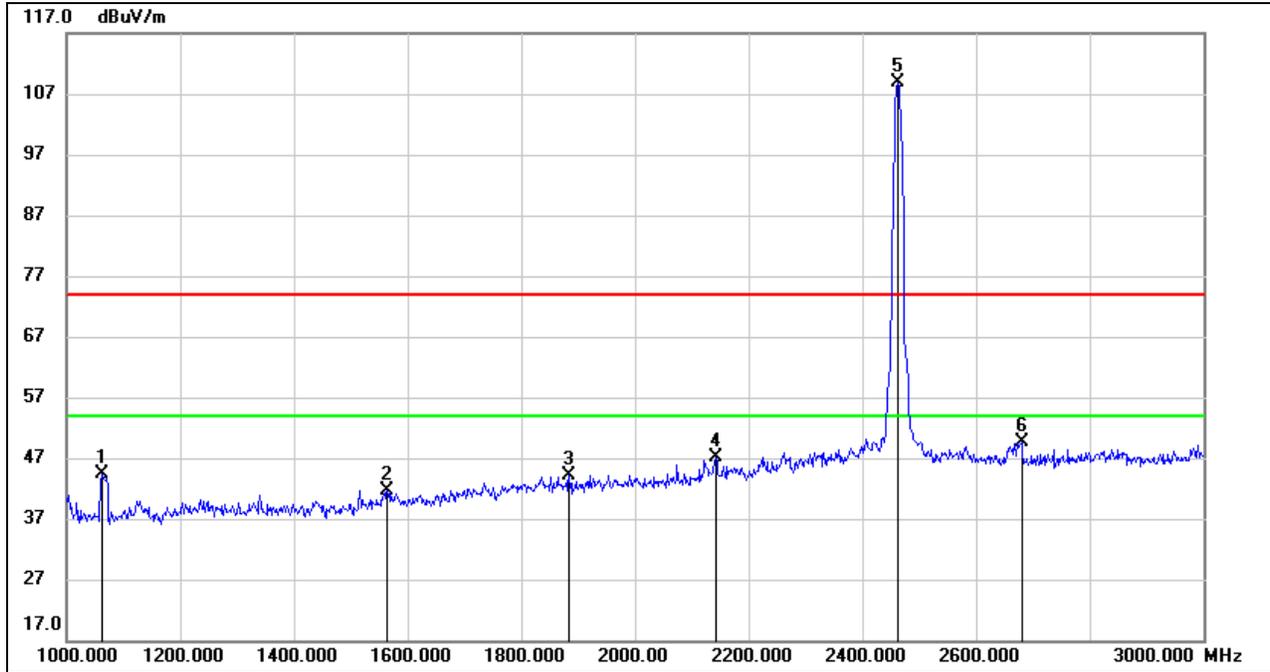


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1064.000	41.86	5.15	47.01	74.00	-26.99	peak
2	1920.000	35.61	10.03	45.64	74.00	-28.36	peak
3	2006.000	38.10	10.30	48.40	74.00	-25.60	peak
4	2128.000	38.38	11.11	49.49	74.00	-24.51	peak
5	2457.000	80.72	12.26	92.98	/	/	fundamental
6	2656.000	36.09	12.74	48.83	74.00	-25.17	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

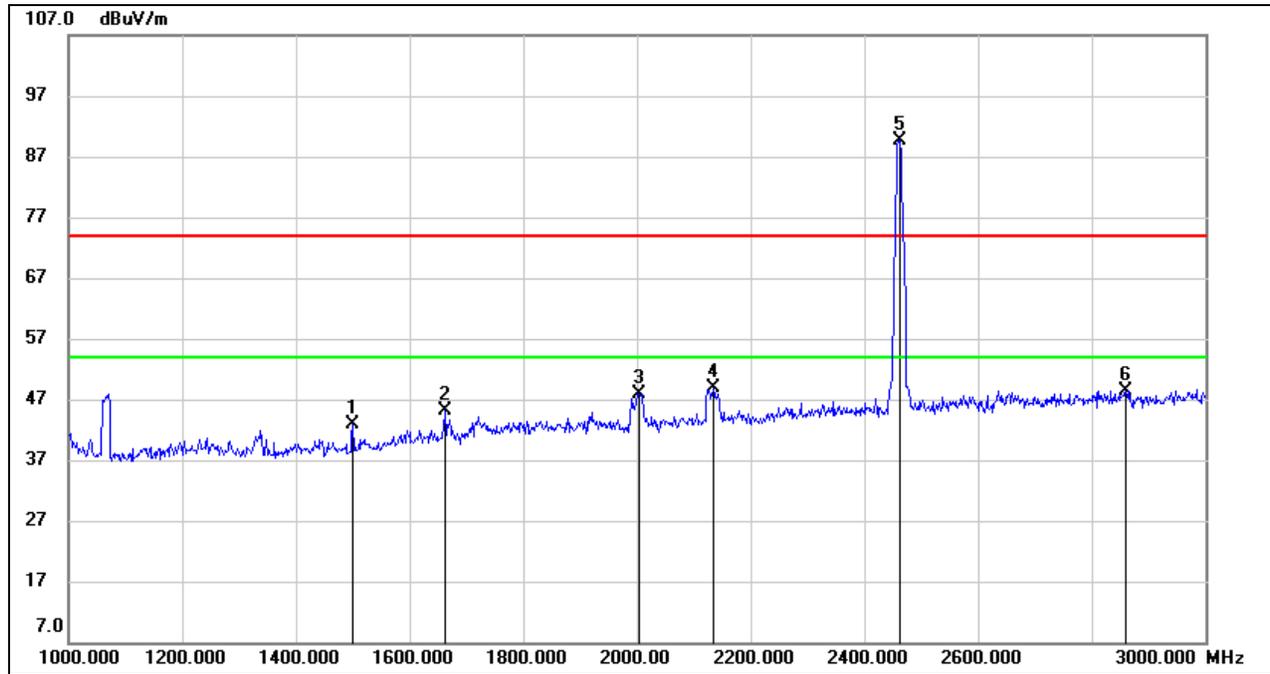


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	39.19	5.14	44.33	74.00	-29.67	peak
2	1564.000	34.12	7.61	41.73	74.00	-32.27	peak
3	1884.000	34.11	9.94	44.05	74.00	-29.95	peak
4	2142.000	36.04	11.16	47.20	74.00	-26.80	peak
5	2462.000	96.69	12.29	108.98	/	/	fundamental
6	2680.000	36.76	12.88	49.64	74.00	-24.36	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



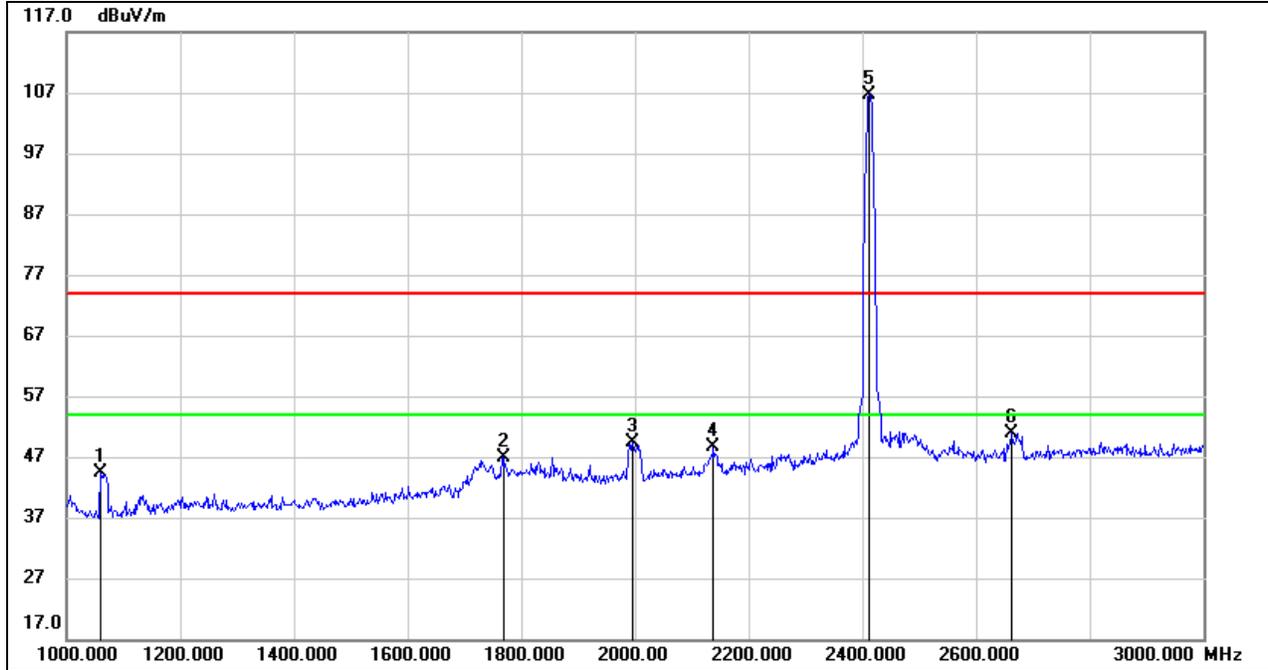
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1500.000	35.94	6.97	42.91	74.00	-31.09	peak
2	1662.000	37.06	8.13	45.19	74.00	-28.81	peak
3	2004.000	37.68	10.28	47.96	74.00	-26.04	peak
4	2134.000	37.66	11.13	48.79	74.00	-25.21	peak
5	2462.000	77.39	12.29	89.68	/	/	fundamental
6	2860.000	34.56	13.93	48.49	74.00	-25.51	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### 8.3.2. 802.11g MODE

#### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

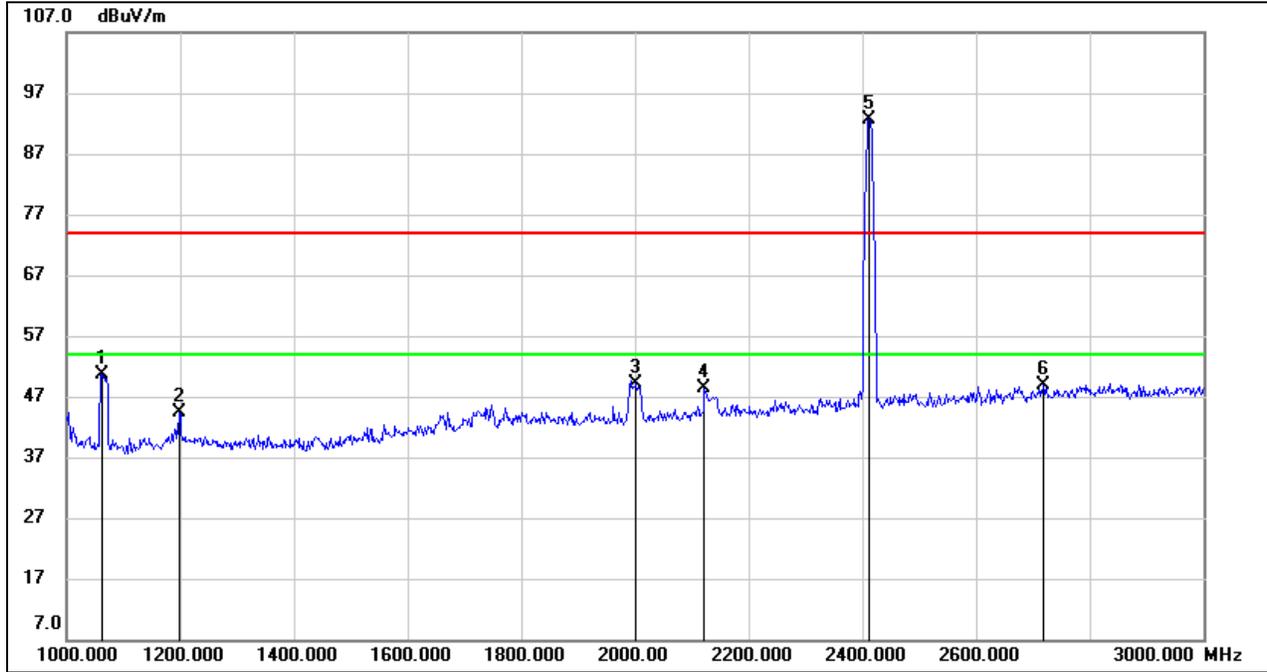


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	39.13	5.14	44.27	74.00	-29.73	peak
2	1770.000	37.68	9.31	46.99	74.00	-27.01	peak
3	1996.000	39.24	10.24	49.48	74.00	-24.52	peak
4	2138.000	37.56	11.14	48.70	74.00	-25.30	peak
5	2412.000	94.53	12.08	106.61	/	/	fundamental
6	2662.000	38.08	12.77	50.85	74.00	-23.15	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

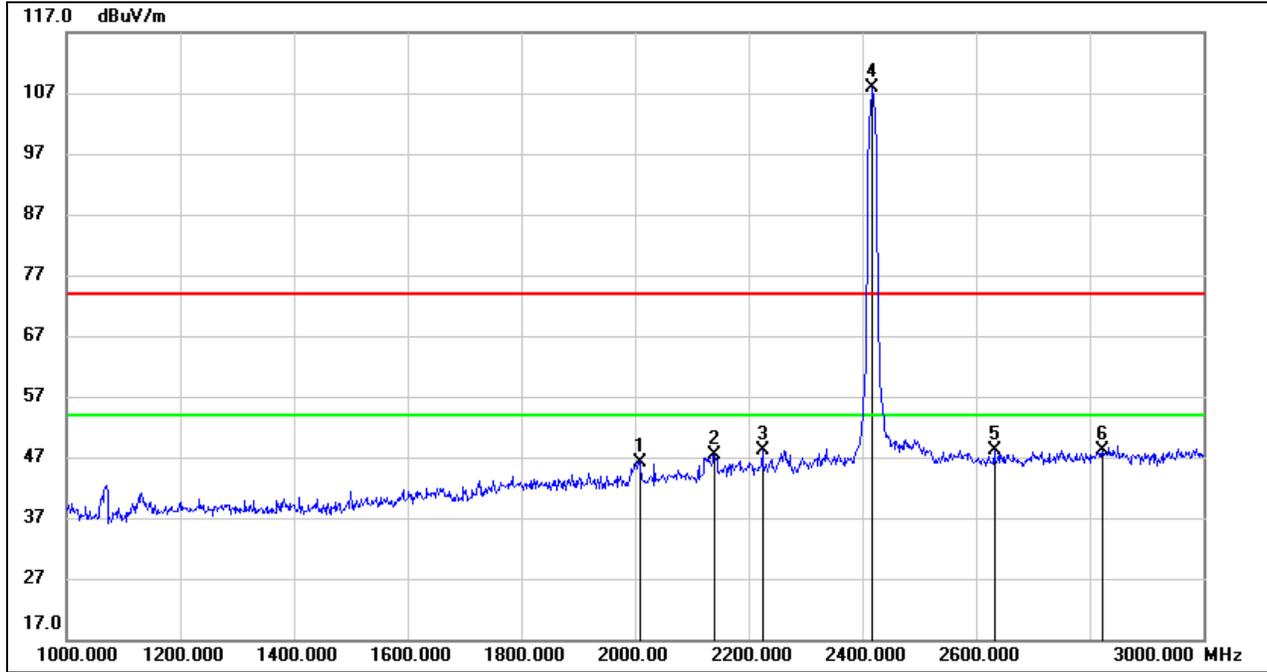


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	45.56	5.14	50.70	74.00	-23.30	peak
2	1198.000	38.05	6.39	44.44	74.00	-29.56	peak
3	2002.000	38.80	10.26	49.06	74.00	-24.94	peak
4	2122.000	37.38	11.10	48.48	74.00	-25.52	peak
5	2412.000	80.65	12.08	92.73	/	/	fundamental
6	2718.000	35.86	13.12	48.98	74.00	-25.02	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

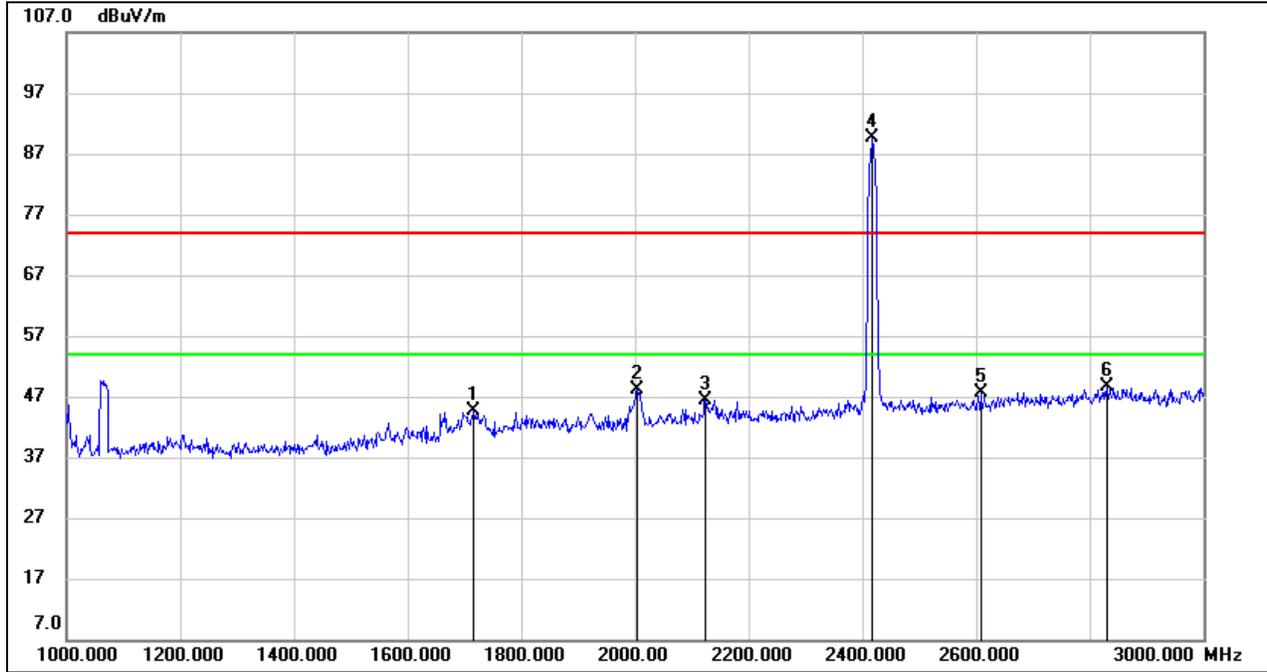


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2008.000	35.94	10.31	46.25	74.00	-27.75	peak
2	2140.000	36.26	11.15	47.41	74.00	-26.59	peak
3	2224.000	36.87	11.32	48.19	74.00	-25.81	peak
4	2417.000	95.84	12.10	107.94	/	/	fundamental
5	2632.000	35.49	12.60	48.09	74.00	-25.91	peak
6	2822.000	34.31	13.82	48.13	74.00	-25.87	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

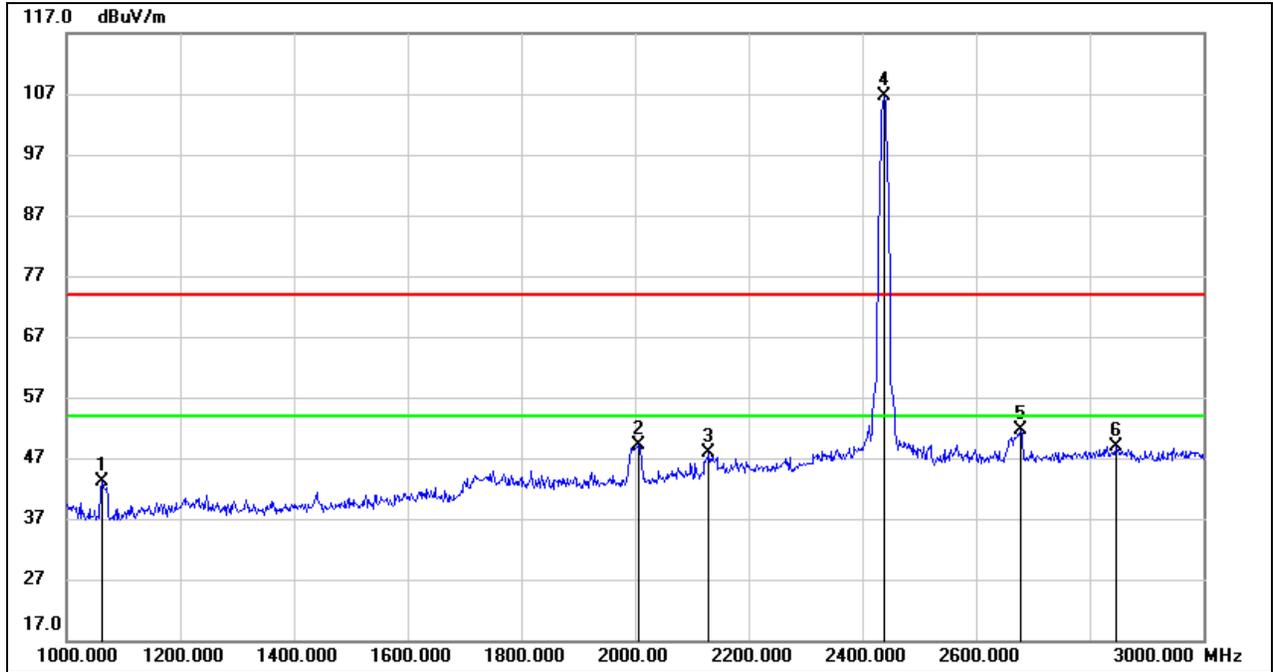


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1716.000	36.10	8.46	44.56	74.00	-29.44	peak
2	2004.000	37.75	10.28	48.03	74.00	-25.97	peak
3	2124.000	35.38	11.10	46.48	74.00	-27.52	peak
4	2417.000	77.55	12.10	89.65	/	/	fundamental
5	2608.000	35.24	12.46	47.70	74.00	-26.30	peak
6	2830.000	34.74	13.84	48.58	74.00	-25.42	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6 ,HORIZONTAL)**

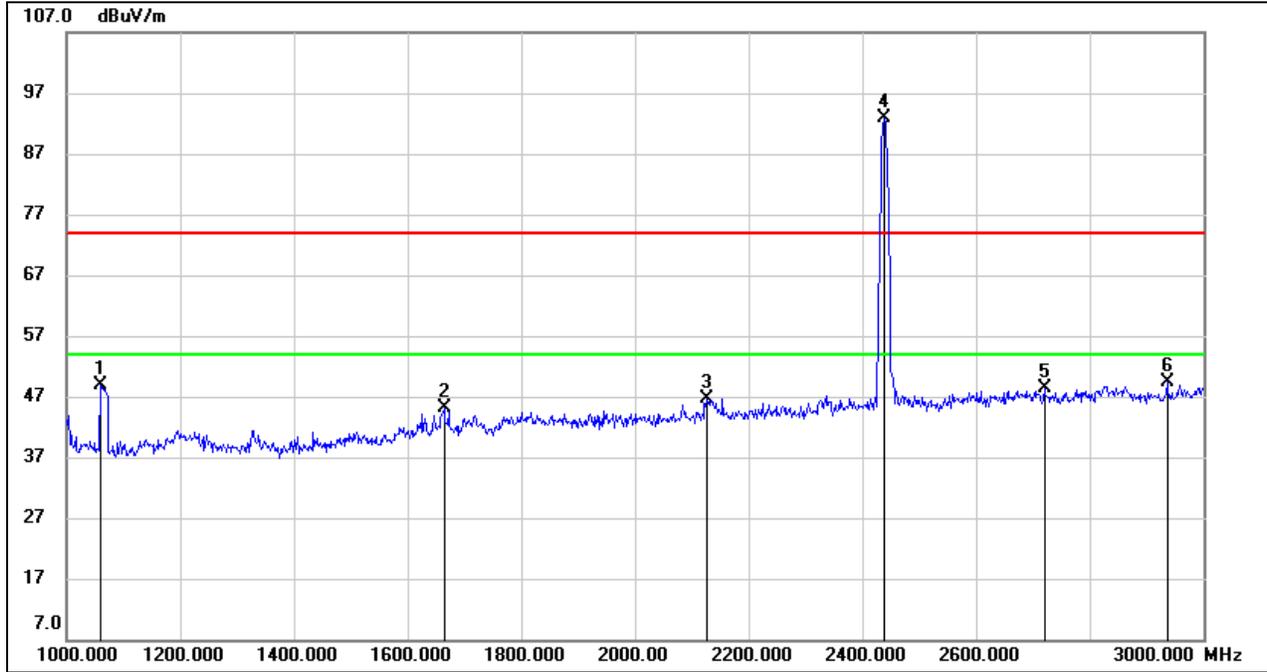


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	38.06	5.14	43.20	74.00	-30.80	peak
2	2006.000	38.81	10.30	49.11	74.00	-24.89	peak
3	2130.000	36.77	11.12	47.89	74.00	-26.11	peak
4	2437.000	94.36	12.19	106.55	/	/	fundamental
5	2678.000	38.80	12.86	51.66	74.00	-22.34	peak
6	2846.000	34.96	13.89	48.85	74.00	-25.15	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CH6 CHANNEL, VERTICAL)**

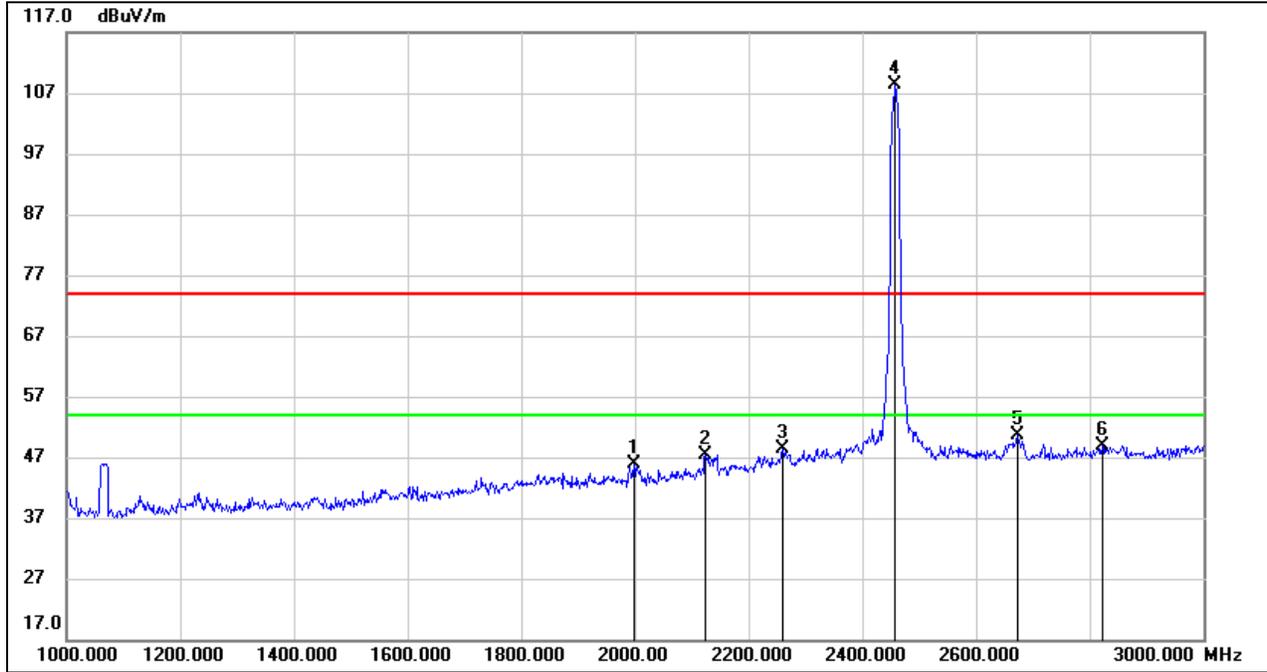


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	43.78	5.14	48.92	74.00	-25.08	peak
2	1664.000	36.97	8.12	45.09	74.00	-28.91	peak
3	2126.000	35.63	11.11	46.74	74.00	-27.26	peak
4	2437.000	80.60	12.19	92.79	/	/	fundamental
5	2720.000	35.21	13.15	48.36	74.00	-25.64	peak
6	2936.000	35.05	14.27	49.32	74.00	-24.68	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

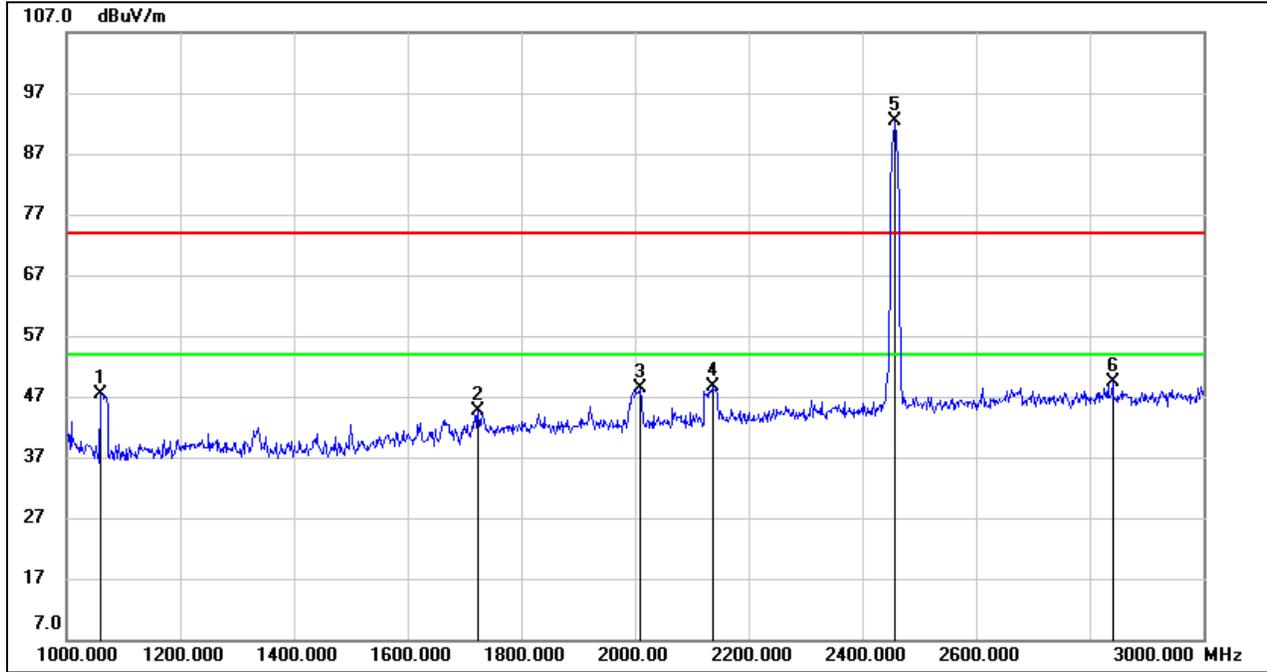


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1998.000	35.58	10.24	45.82	74.00	-28.18	peak
2	2124.000	36.31	11.10	47.41	74.00	-26.59	peak
3	2260.000	37.09	11.32	48.41	74.00	-25.59	peak
4	2457.000	96.21	12.26	108.47	/	/	fundamental
5	2672.000	37.79	12.84	50.63	74.00	-23.37	peak
6	2822.000	35.09	13.82	48.91	74.00	-25.09	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

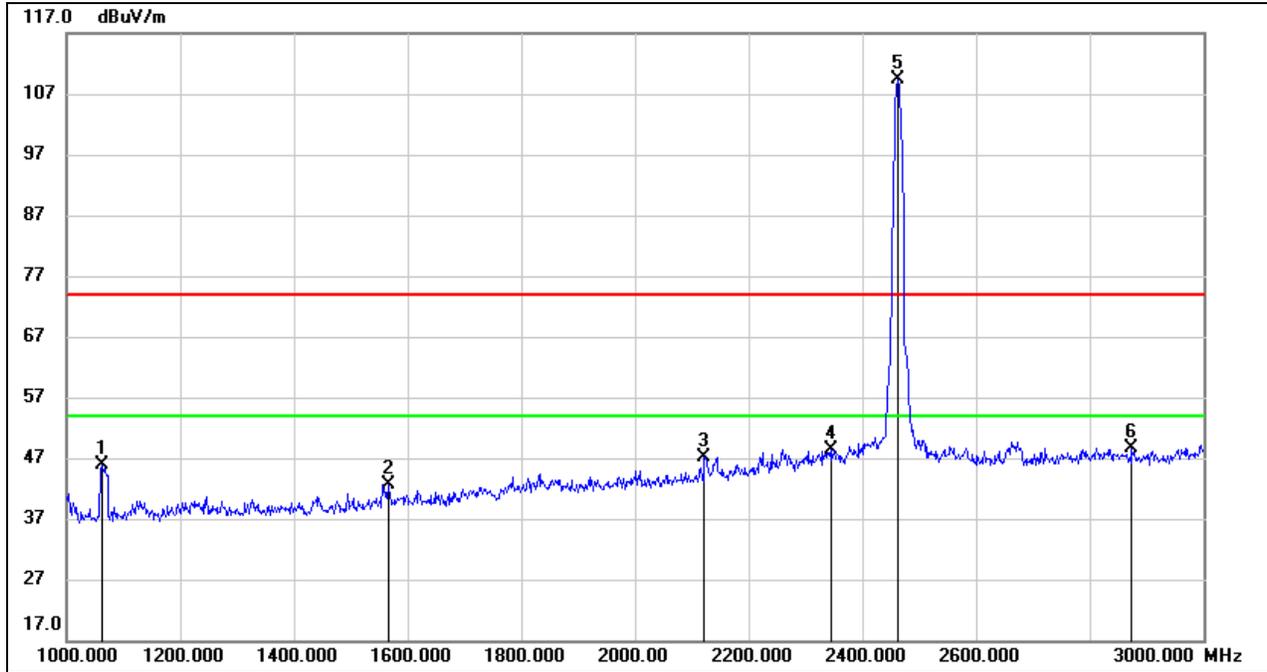


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	42.36	5.14	47.50	74.00	-26.50	peak
2	1724.000	36.11	8.59	44.70	74.00	-29.30	peak
3	2010.000	38.00	10.33	48.33	74.00	-25.67	peak
4	2136.000	37.50	11.13	48.63	74.00	-25.37	peak
5	2457.000	80.20	12.26	92.46	/	/	fundamental
6	2840.000	35.45	13.86	49.31	74.00	-24.69	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

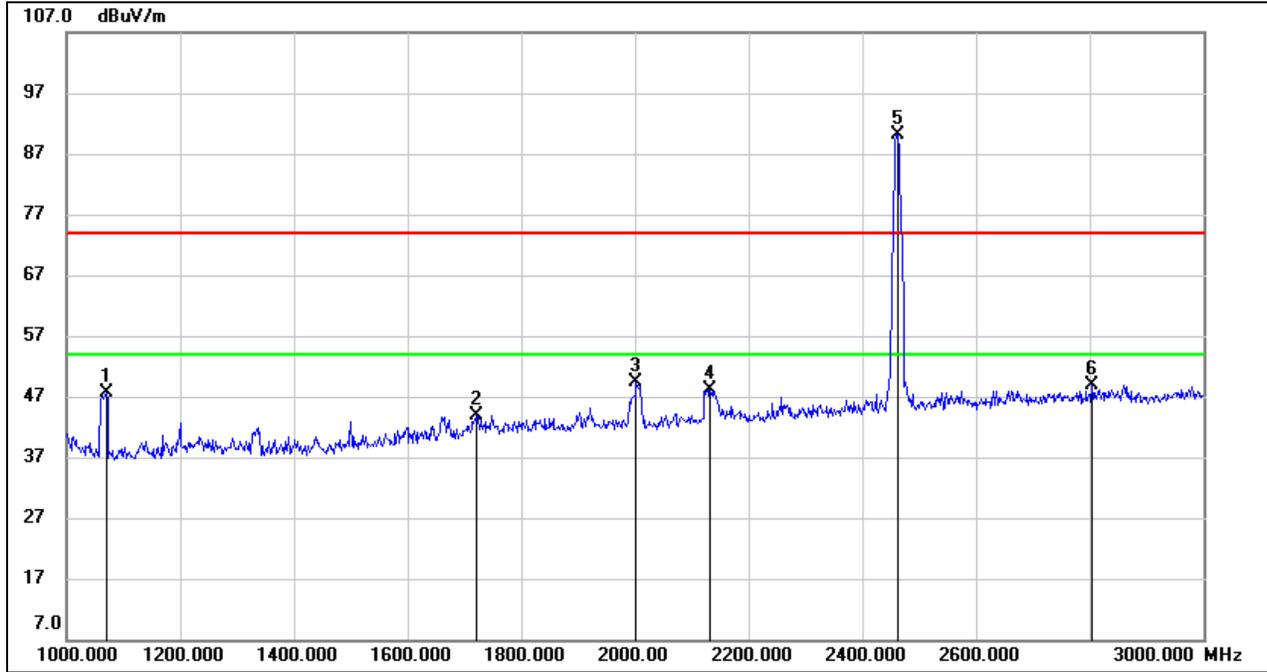


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	40.78	5.14	45.92	74.00	-28.08	peak
2	1566.000	35.03	7.63	42.66	74.00	-31.34	peak
3	2122.000	36.07	11.10	47.17	74.00	-26.83	peak
4	2344.000	36.72	11.63	48.35	74.00	-25.65	peak
5	2462.000	96.98	12.29	109.27	/	/	fundamental
6	2874.000	34.66	13.97	48.63	74.00	-25.37	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



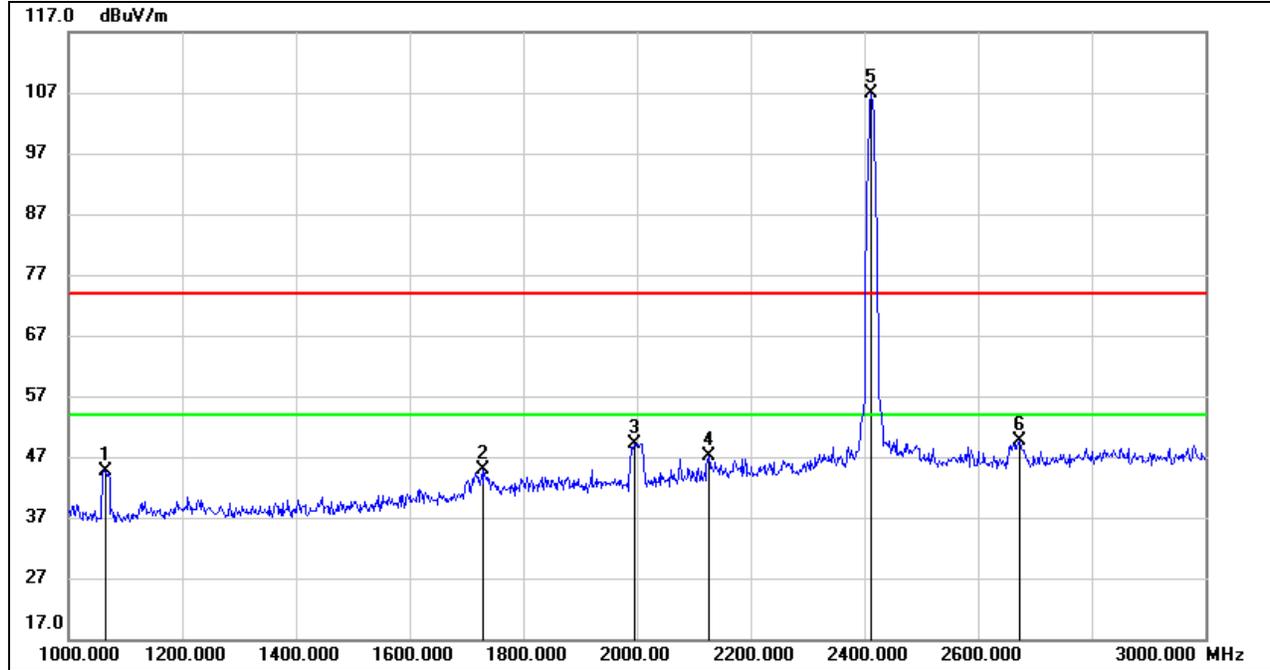
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1070.000	42.35	5.16	47.51	74.00	-26.49	peak
2	1720.000	35.40	8.52	43.92	74.00	-30.08	peak
3	2002.000	39.23	10.26	49.49	74.00	-24.51	peak
4	2132.000	36.98	11.13	48.11	74.00	-25.89	peak
5	2462.000	77.79	12.29	90.08	/	/	fundamental
6	2804.000	35.21	13.76	48.97	74.00	-25.03	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### 8.3.3. 802.11n HT20 MODE

#### HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, HORIZONTAL)

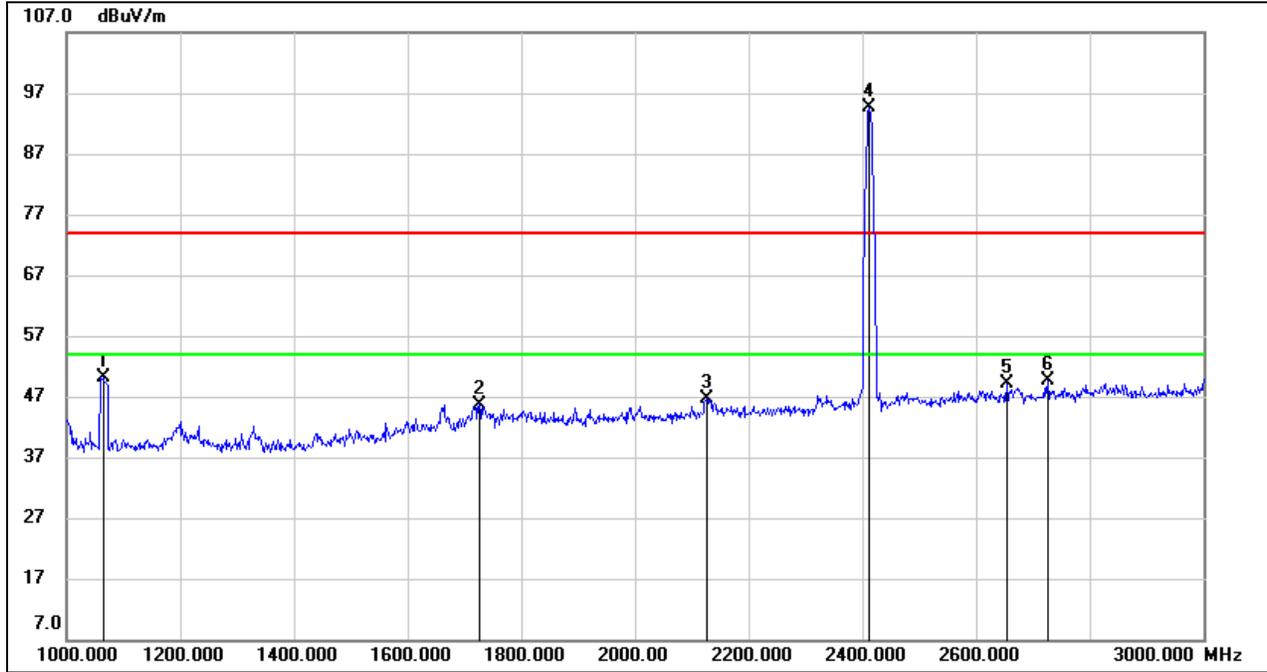


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1066.000	39.50	5.15	44.65	74.00	-29.35	peak
2	1730.000	36.09	8.68	44.77	74.00	-29.23	peak
3	1996.000	38.89	10.24	49.13	74.00	-24.87	peak
4	2126.000	36.10	11.11	47.21	74.00	-26.79	peak
5	2412.000	94.73	12.08	106.81	/	/	fundamental
6	2674.000	36.80	12.85	49.65	74.00	-24.35	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 1, VERTICAL)**

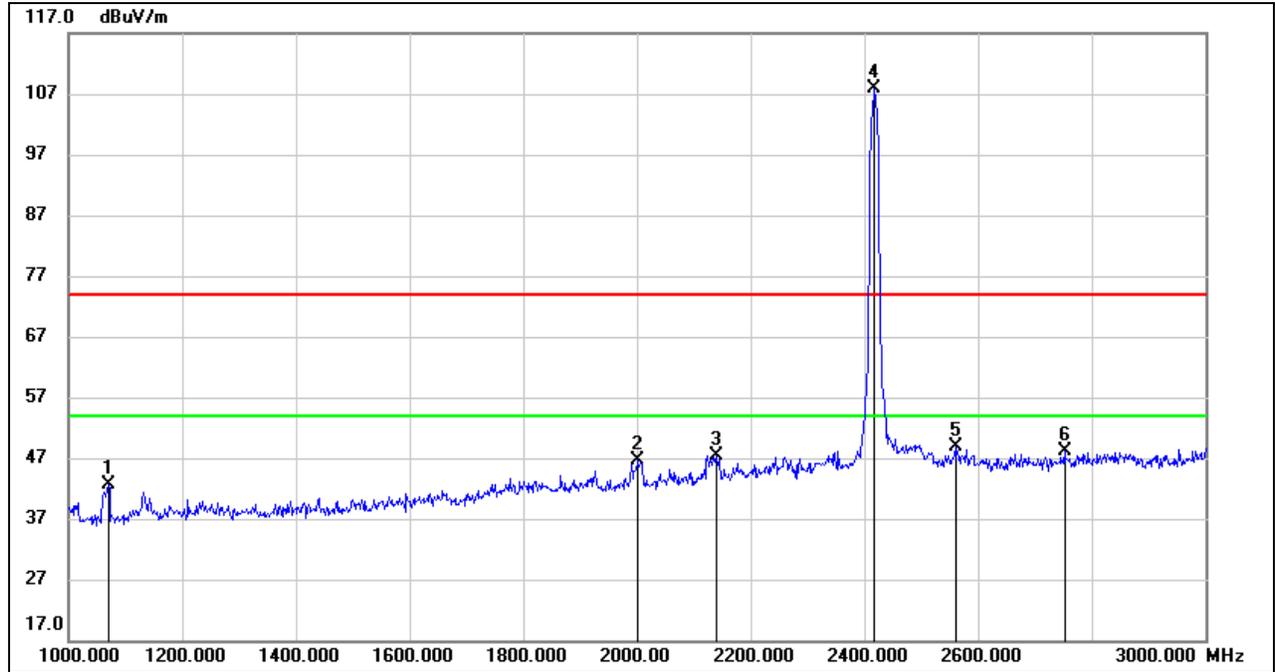


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1064.000	45.08	5.15	50.23	74.00	-23.77	peak
2	1726.000	37.13	8.62	45.75	74.00	-28.25	peak
3	2126.000	35.40	11.11	46.51	74.00	-27.49	peak
4	2412.000	82.50	12.08	94.58	/	/	fundamental
5	2654.000	36.29	12.72	49.01	74.00	-24.99	peak
6	2726.000	36.33	13.19	49.52	74.00	-24.48	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, HORIZONTAL)**

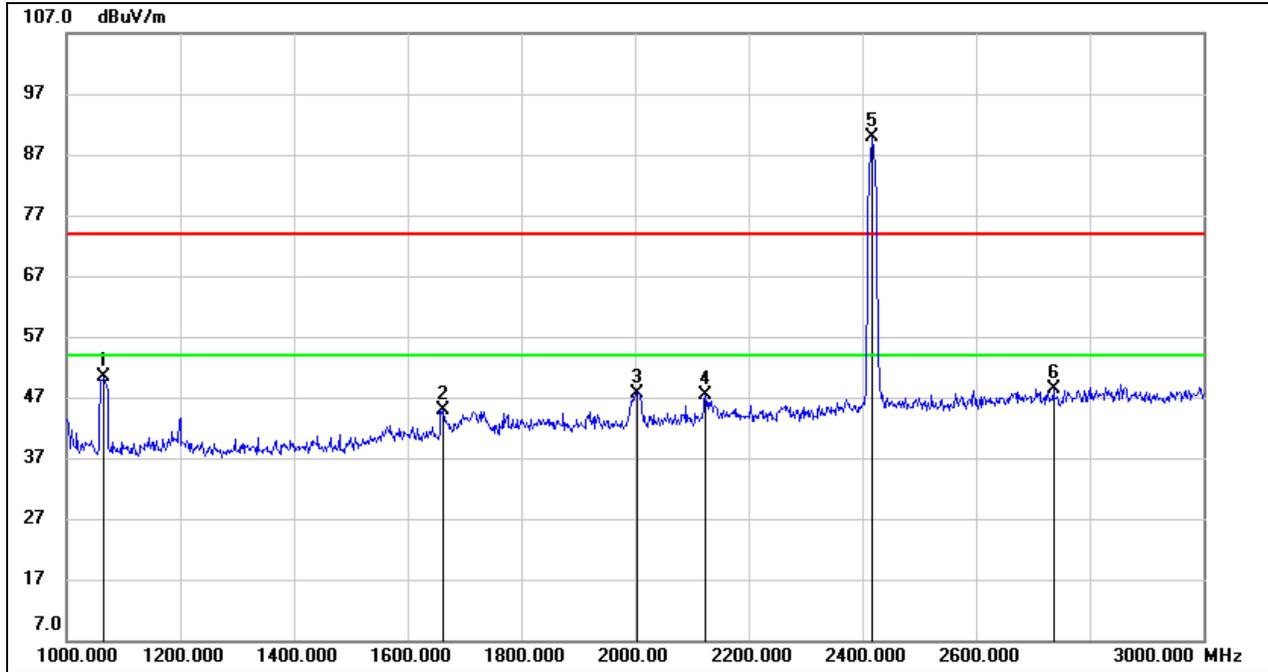


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1070.000	37.47	5.16	42.63	74.00	-31.37	peak
2	2002.000	36.47	10.26	46.73	74.00	-27.27	peak
3	2140.000	36.34	11.15	47.49	74.00	-26.51	peak
4	2417.000	95.82	12.10	107.92	/	/	fundamental
5	2560.000	36.34	12.43	48.77	74.00	-25.23	peak
6	2752.000	34.61	13.40	48.01	74.00	-25.99	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 2, VERTICAL)**

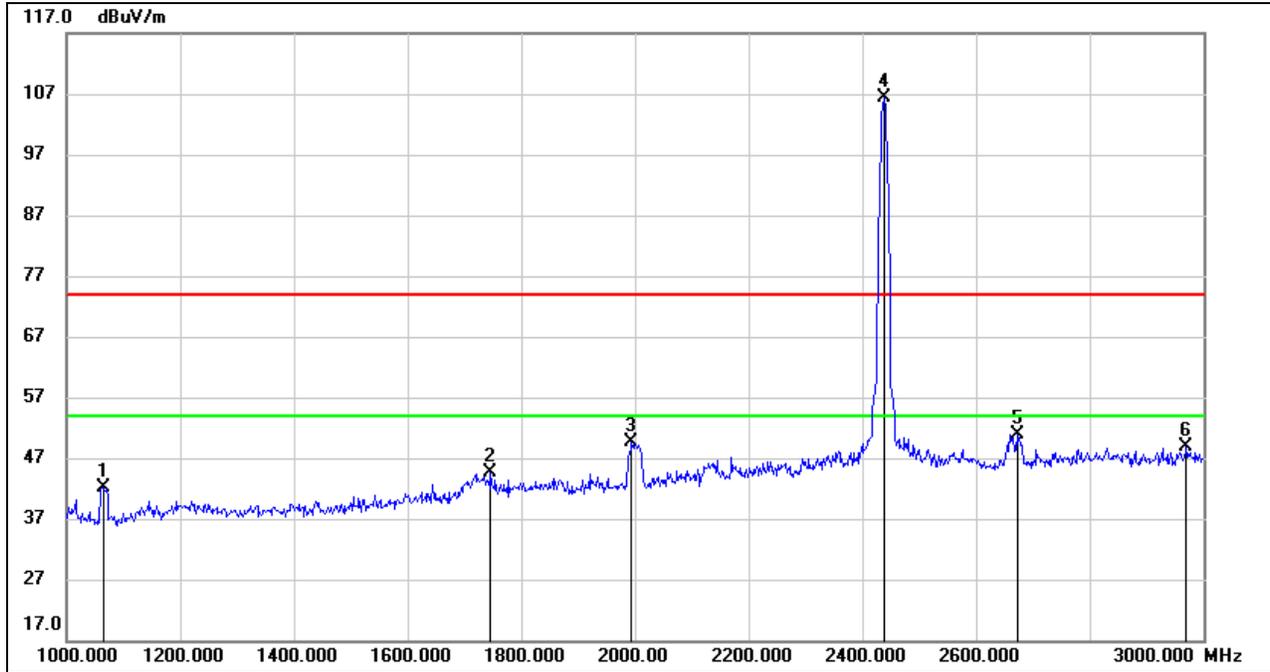


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1066.000	45.28	5.15	50.43	74.00	-23.57	peak
2	1662.000	36.84	8.13	44.97	74.00	-29.03	peak
3	2004.000	37.45	10.28	47.73	74.00	-26.27	peak
4	2124.000	36.20	11.10	47.30	74.00	-26.70	peak
5	2417.000	77.83	12.10	89.93	/	/	fundamental
6	2736.000	35.17	13.27	48.44	74.00	-25.56	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, HORIZONTAL)**

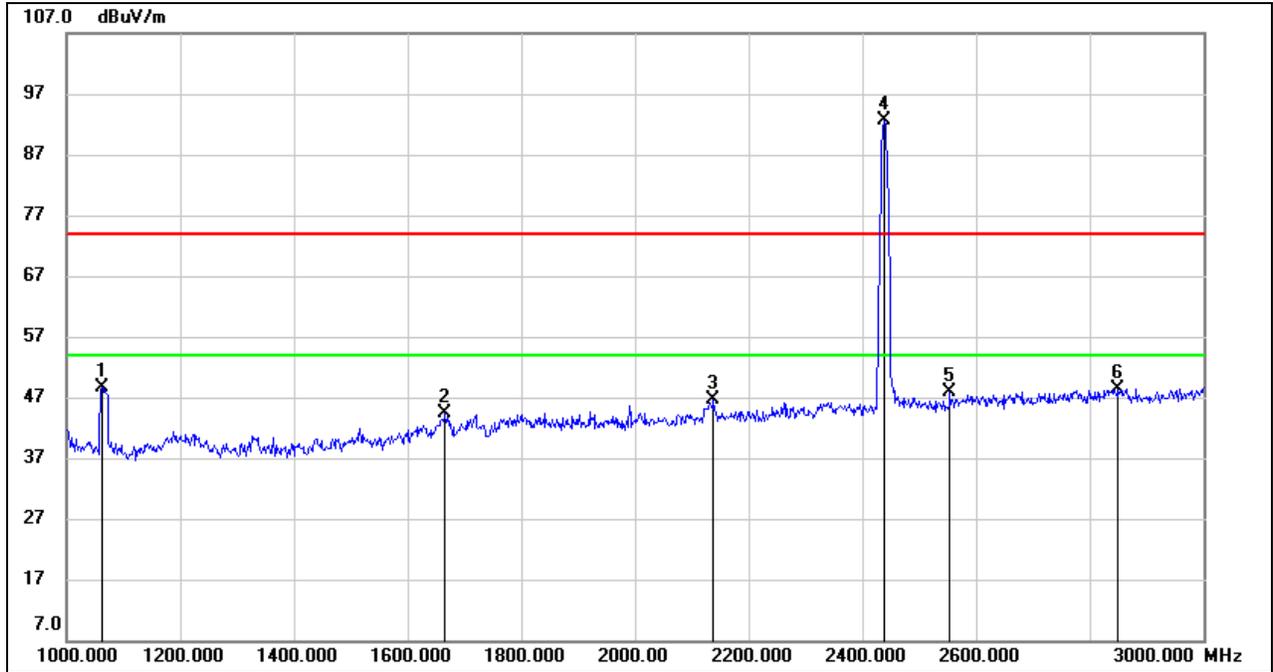


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1064.000	37.02	5.15	42.17	74.00	-31.83	peak
2	1746.000	35.77	8.93	44.70	74.00	-29.30	peak
3	1994.000	39.49	10.24	49.73	74.00	-24.27	peak
4	2437.000	94.09	12.19	106.28	/	/	fundamental
5	2672.000	38.03	12.84	50.87	74.00	-23.13	peak
6	2970.000	34.47	14.49	48.96	74.00	-25.04	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 6, VERTICAL)**

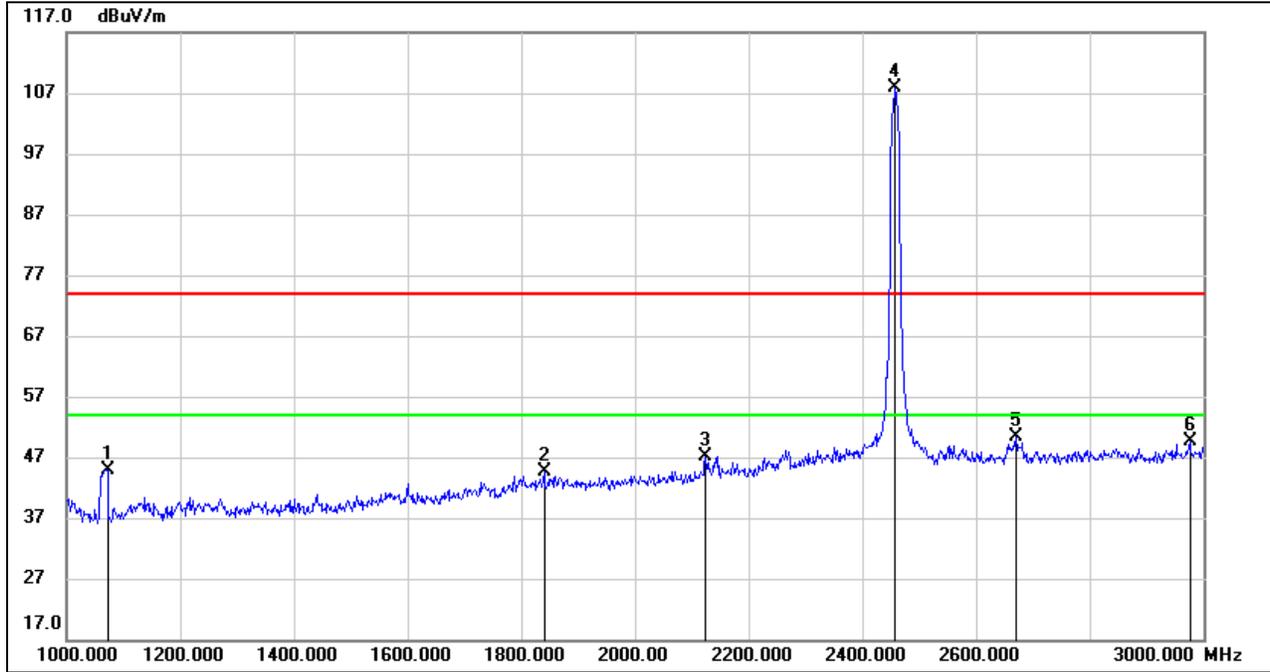


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	43.49	5.14	48.63	74.00	-25.37	peak
2	1666.000	36.15	8.13	44.28	74.00	-29.72	peak
3	2138.000	35.51	11.14	46.65	74.00	-27.35	peak
4	2437.000	80.47	12.19	92.66	/	/	fundamental
5	2554.000	35.55	12.42	47.97	74.00	-26.03	peak
6	2850.000	34.50	13.89	48.39	74.00	-25.61	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, HORIZONTAL)**

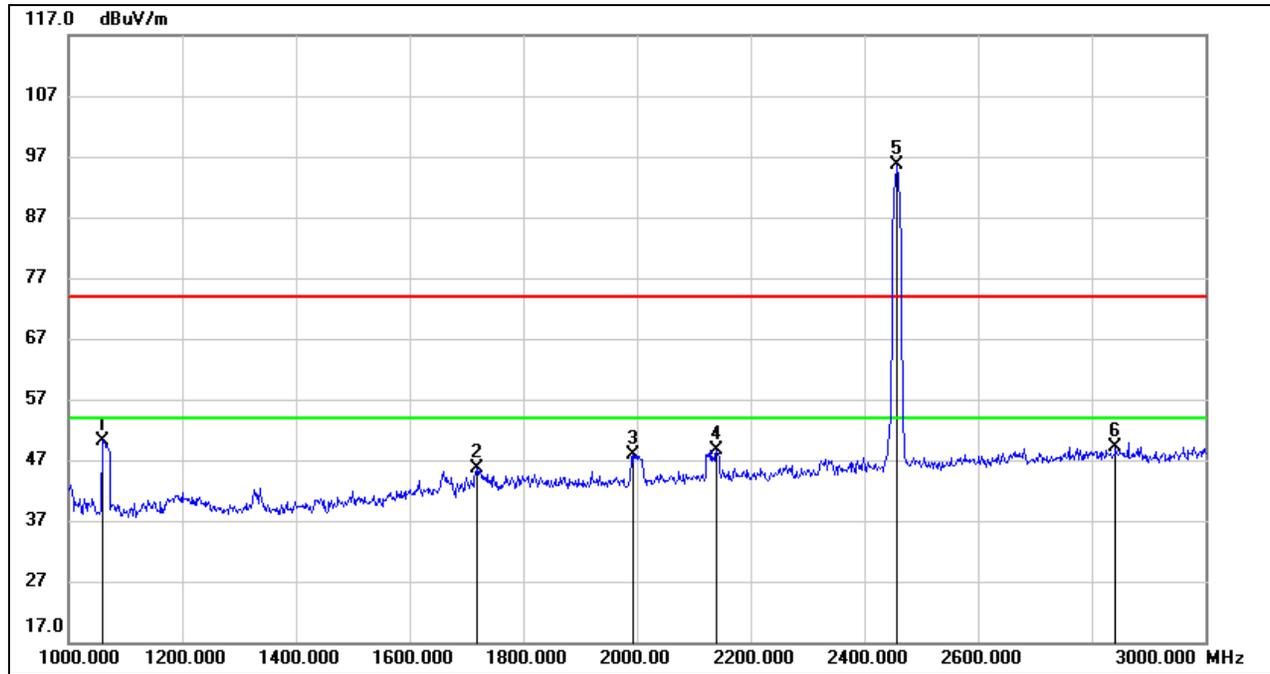


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1072.000	39.79	5.16	44.95	74.00	-29.05	peak
2	1840.000	34.70	9.86	44.56	74.00	-29.44	peak
3	2124.000	36.13	11.10	47.23	74.00	-26.77	peak
4	2457.000	95.71	12.26	107.97	/	/	fundamental
5	2670.000	37.59	12.81	50.40	74.00	-23.60	peak
6	2976.000	35.04	14.52	49.56	74.00	-24.44	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 10, VERTICAL)**

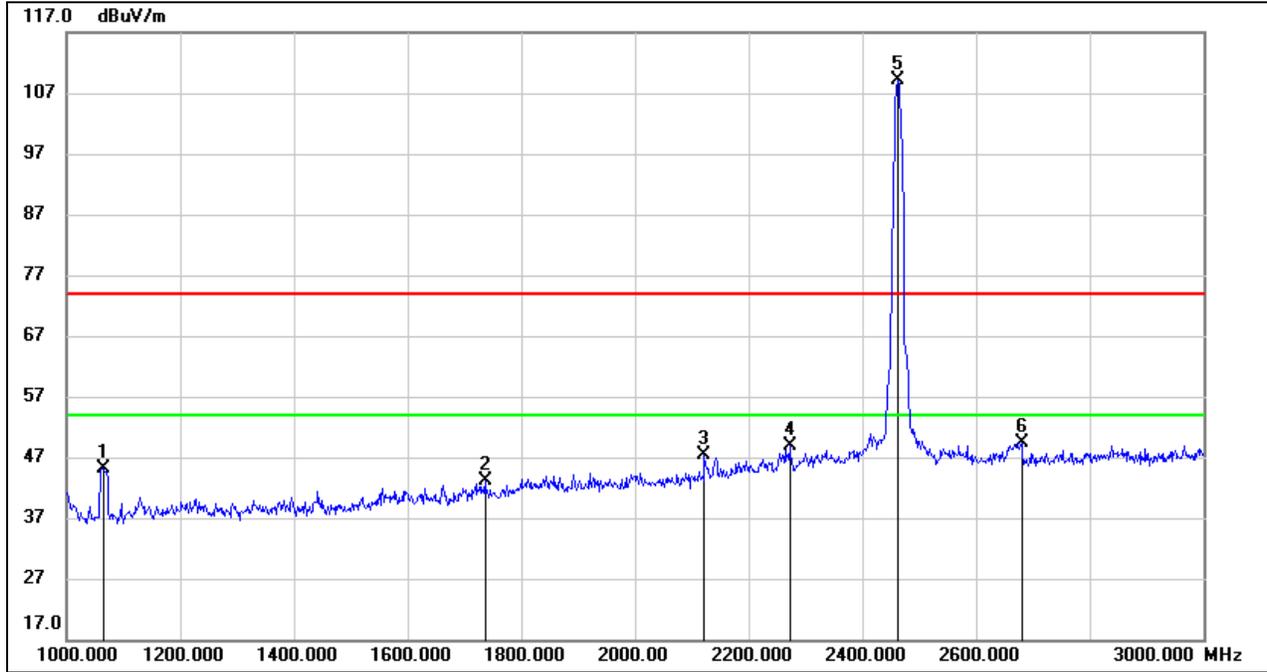


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	45.07	5.14	50.21	74.00	-23.79	peak
2	1718.000	37.19	8.49	45.68	74.00	-28.32	peak
3	1992.000	37.72	10.22	47.94	74.00	-26.06	peak
4	2140.000	37.58	11.15	48.73	74.00	-25.27	peak
5	2457.000	83.49	12.26	95.75	/	/	fundamental
6	2842.000	35.18	13.87	49.05	74.00	-24.95	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, HORIZONTAL)**

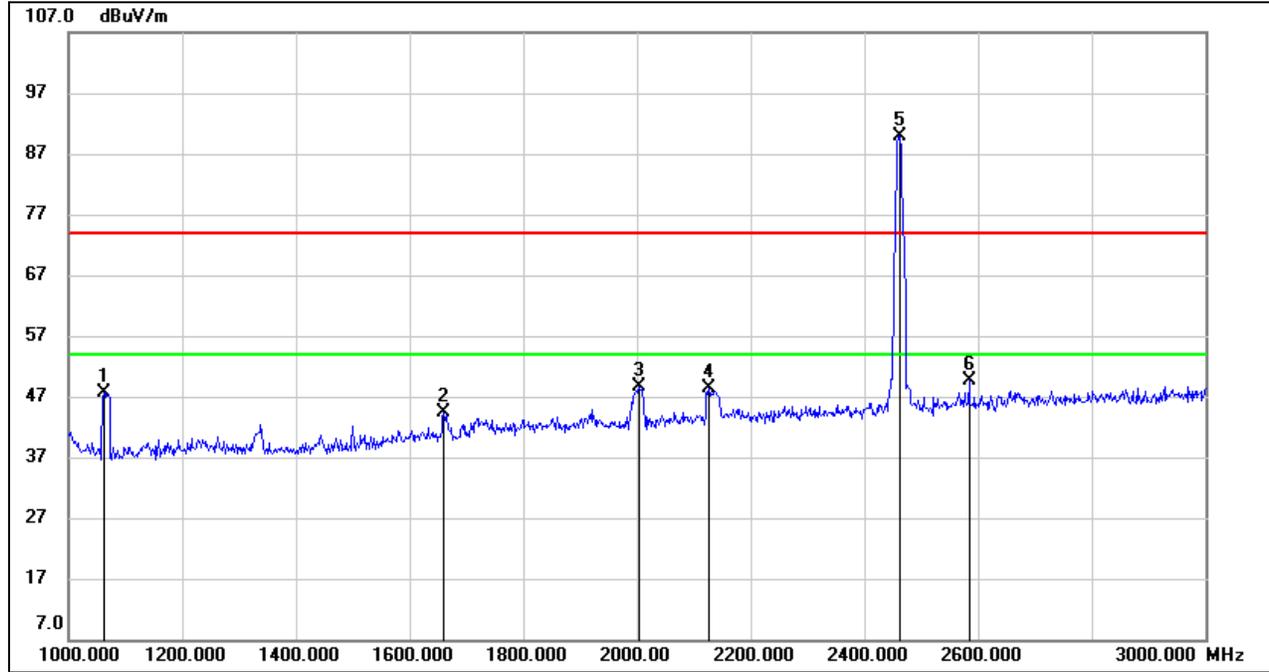


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1064.000	40.10	5.15	45.25	74.00	-28.75	peak
2	1736.000	34.26	8.78	43.04	74.00	-30.96	peak
3	2122.000	36.38	11.10	47.48	74.00	-26.52	peak
4	2272.000	37.61	11.33	48.94	74.00	-25.06	peak
5	2462.000	96.81	12.29	109.10	/	/	fundamental
6	2680.000	36.47	12.88	49.35	74.00	-24.65	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



**HARMONICS AND SPURIOUS EMISSIONS (CHANNEL 11, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	42.50	5.14	47.64	74.00	-26.36	peak
2	1660.000	36.25	8.11	44.36	74.00	-29.64	peak
3	2004.000	38.36	10.28	48.64	74.00	-25.36	peak
4	2126.000	37.15	11.11	48.26	74.00	-25.74	peak
5	2462.000	77.58	12.29	89.87	/	/	fundamental
6	2584.000	37.19	12.41	49.60	74.00	-24.40	peak

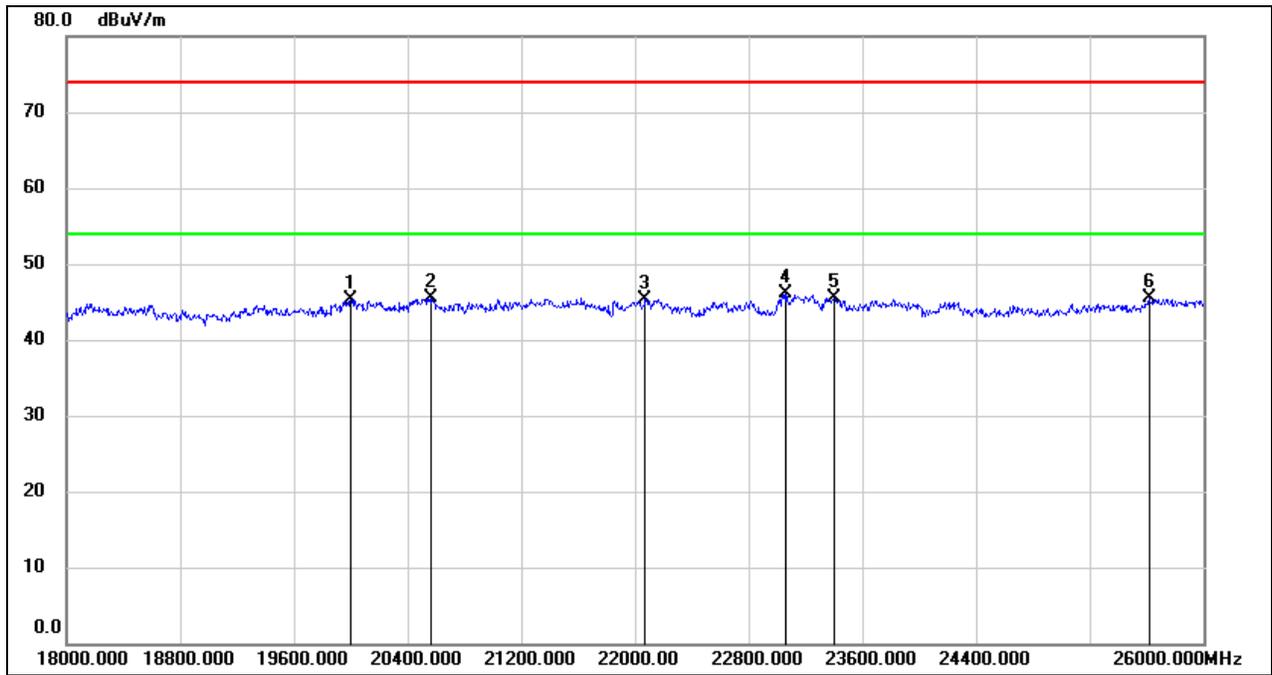
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



## 8.4. SPURIOUS EMISSIONS (18~26GHz)

### 8.4.1. 802.11n HT20 MODE

#### SPURIOUS EMISSIONS (CHANNEL 6, WORST-CASE CONFIGURATION, HORIZONTAL)

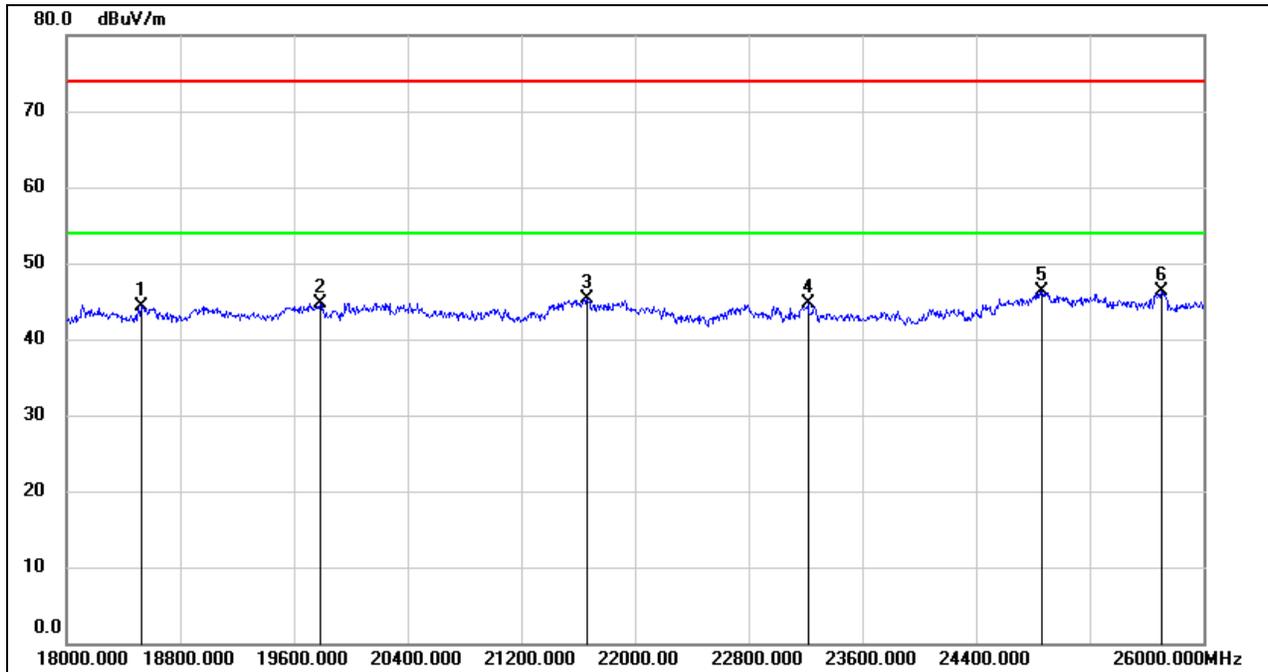


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
2	20560.000	50.73	-5.30	45.43	74.00	-28.57	peak
3	22072.000	49.77	-4.41	45.36	74.00	-28.64	peak
4	23064.000	49.49	-3.42	46.07	74.00	-27.93	peak
5	23400.000	48.69	-3.23	45.46	74.00	-28.54	peak
6	25616.000	46.68	-1.24	45.44	74.00	-28.56	peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.



**SPURIOUS EMISSIONS (CHANNEL 6, WORST-CASE CONFIGURATION, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18528.000	49.61	-5.26	44.35	74.00	-29.65	peak
2	19784.000	50.07	-5.28	44.79	74.00	-29.21	peak
3	21664.000	49.73	-4.45	45.28	74.00	-28.72	peak
4	23216.000	48.01	-3.38	44.63	74.00	-29.37	peak
5	24864.000	48.53	-2.23	46.30	74.00	-27.70	peak
6	25704.000	47.04	-0.83	46.21	74.00	-27.79	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.

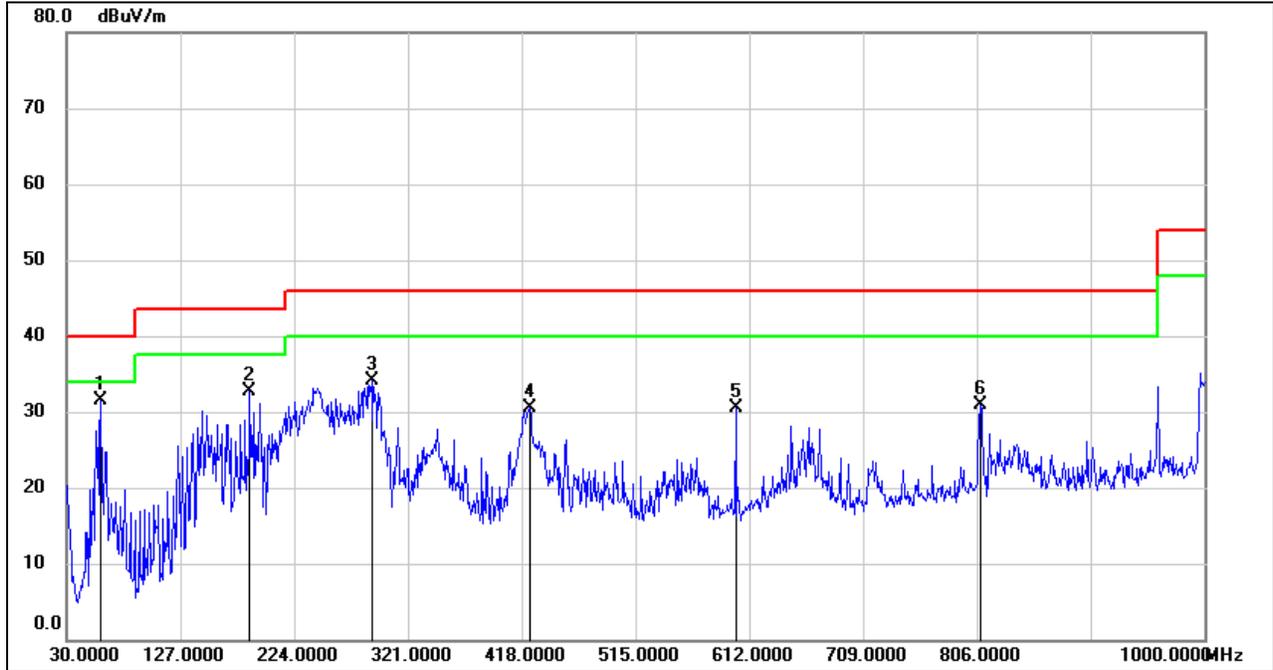
Note: All the test modes have been tested, only the worst data record in the report.



## 8.5. SPURIOUS EMISSIONS (0.03 ~ 1 GHz)

### 8.5.1. 802.11n HT20 MODE

#### SPURIOUS EMISSIONS (CHANNEL 6, WORST-CASE CONFIGURATION, HORIZONTAL)

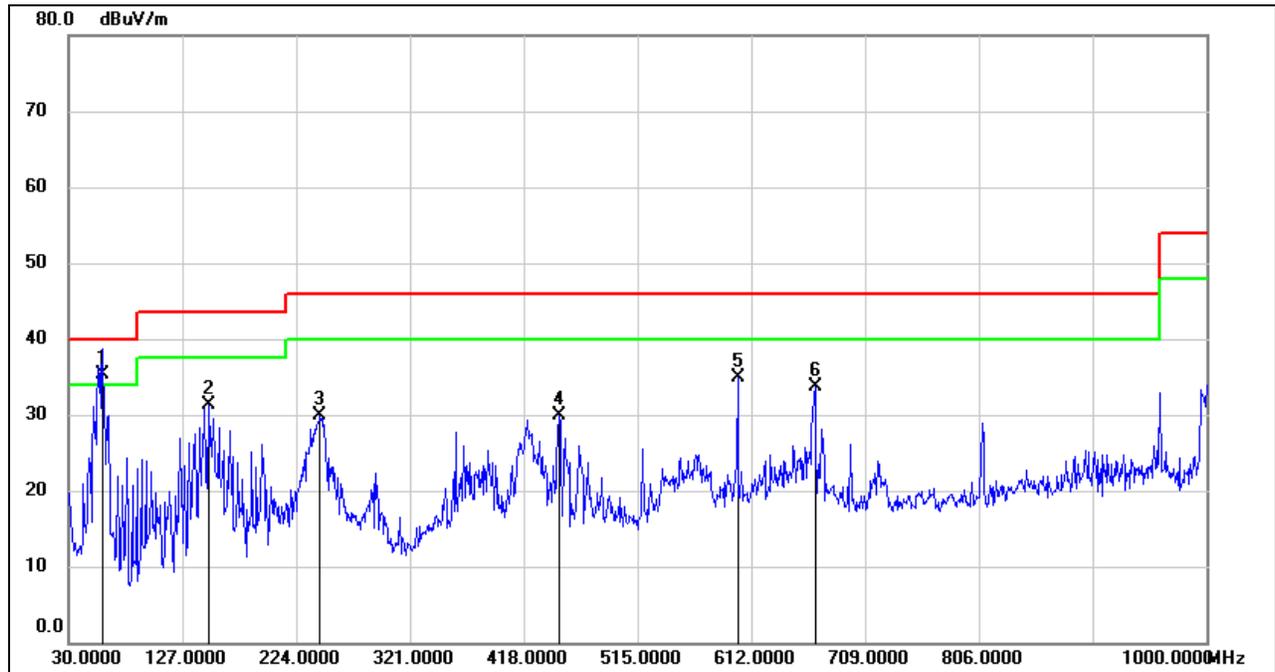


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.1000	50.76	-19.24	31.52	40.00	-8.48	QP
2	186.1700	48.92	-16.24	32.68	43.50	-10.82	QP
3	289.9600	48.83	-14.78	34.05	46.00	-11.95	QP
4	424.7900	42.67	-12.25	30.42	46.00	-15.58	QP
5	600.3600	39.29	-8.80	30.49	46.00	-15.51	QP
6	808.9099	36.40	-5.53	30.87	46.00	-15.13	QP

Note: 1. Result Level = Read Level + Correct Factor.  
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



**SPURIOUS EMISSIONS (CHANNEL 6, WORST-CASE CONFIGURATION, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.1000	54.51	-19.24	35.27	40.00	-4.73	QP
2	149.3100	49.74	-18.43	31.31	43.50	-12.19	QP
3	244.3700	46.67	-16.84	29.83	46.00	-16.17	QP
4	448.0700	41.80	-11.85	29.95	46.00	-16.05	QP
5	600.3600	43.63	-8.80	34.83	46.00	-11.17	QP
6	666.3200	41.34	-7.65	33.69	46.00	-12.31	QP

Note: 1. Result Level = Read Level + Correct Factor.  
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Note: All the test modes have been tested, only the worst data record in the report.

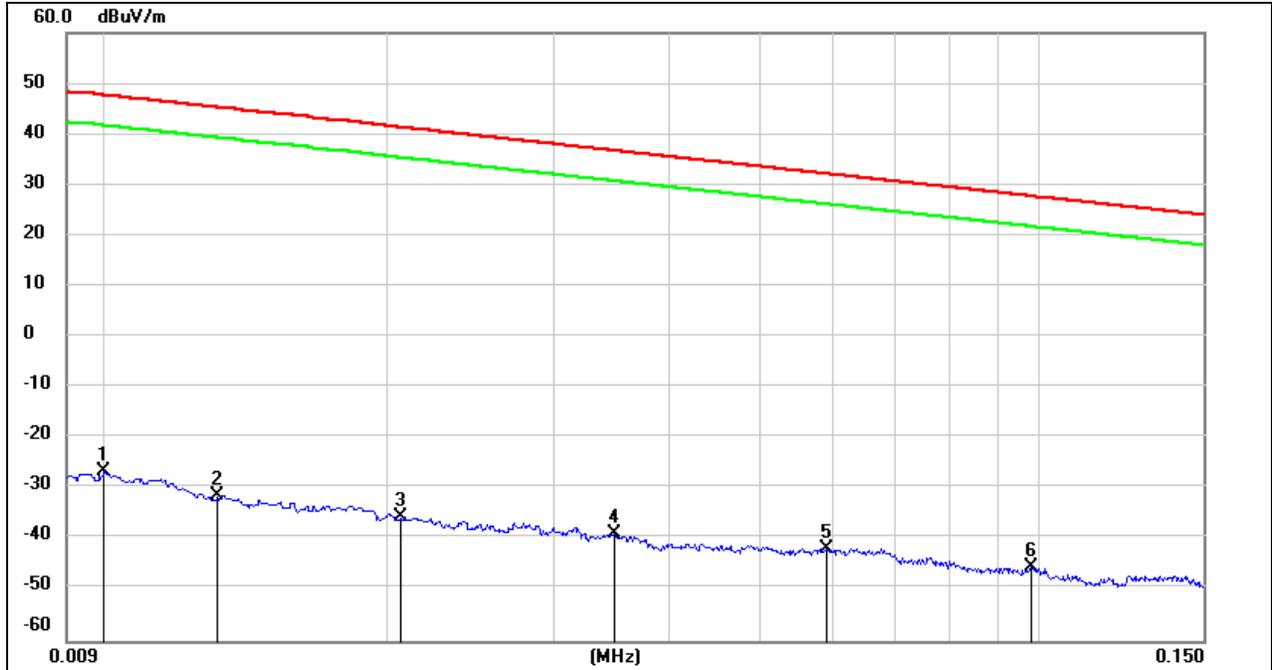


## 8.6. SPURIOUS EMISSIONS BELOW 30M

### 8.6.1. 802.11n HT20 MODE

#### SPURIOUS EMISSIONS (CHANNEL 6, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

9kHz~ 150kHz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	Margin (dB)	Remark
1	0.0100	74.72	-101.40	-26.68	47.60	-74.28	peak
2	0.0131	69.97	-101.38	-31.41	45.25	-76.66	peak
3	0.0206	65.92	-101.35	-35.43	41.32	-76.75	peak
4	0.0349	62.53	-101.41	-38.88	36.75	-75.63	peak
5	0.0589	59.81	-101.52	-41.71	32.20	-73.91	peak
6	0.0981	56.27	-101.78	-45.51	27.77	-73.28	peak

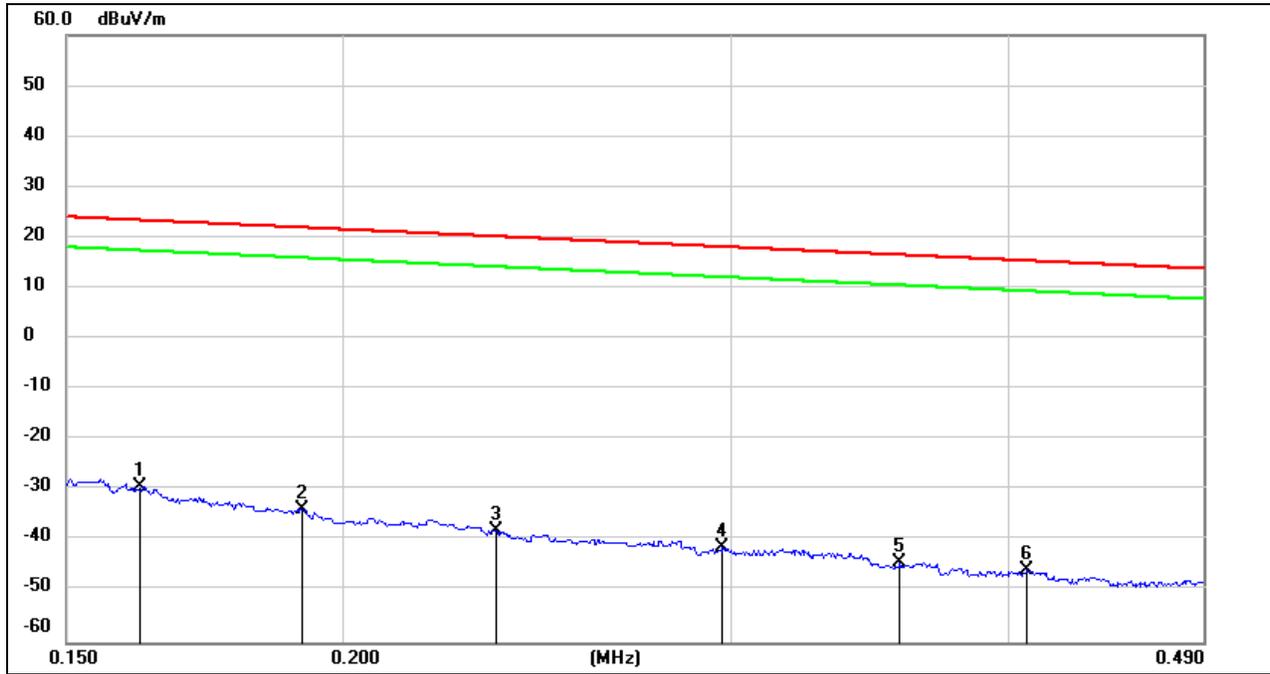
Note: 1. Measurement = Reading Level + Correct Factor (dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV 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.



**150kHz ~ 490kHz**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	Margin (dB)	Remark
1	0.1621	72.42	-101.65	-29.23	23.41	-52.64	peak
2	0.1917	68.04	-101.70	-33.66	21.95	-55.61	peak
3	0.2346	63.85	-101.77	-37.92	20.19	-58.11	peak
4	0.2972	60.66	-101.85	-41.19	18.14	-59.33	peak
5	0.3573	57.58	-101.91	-44.33	16.54	-60.87	peak
6	0.4081	56.08	-101.97	-45.89	15.39	-61.28	peak

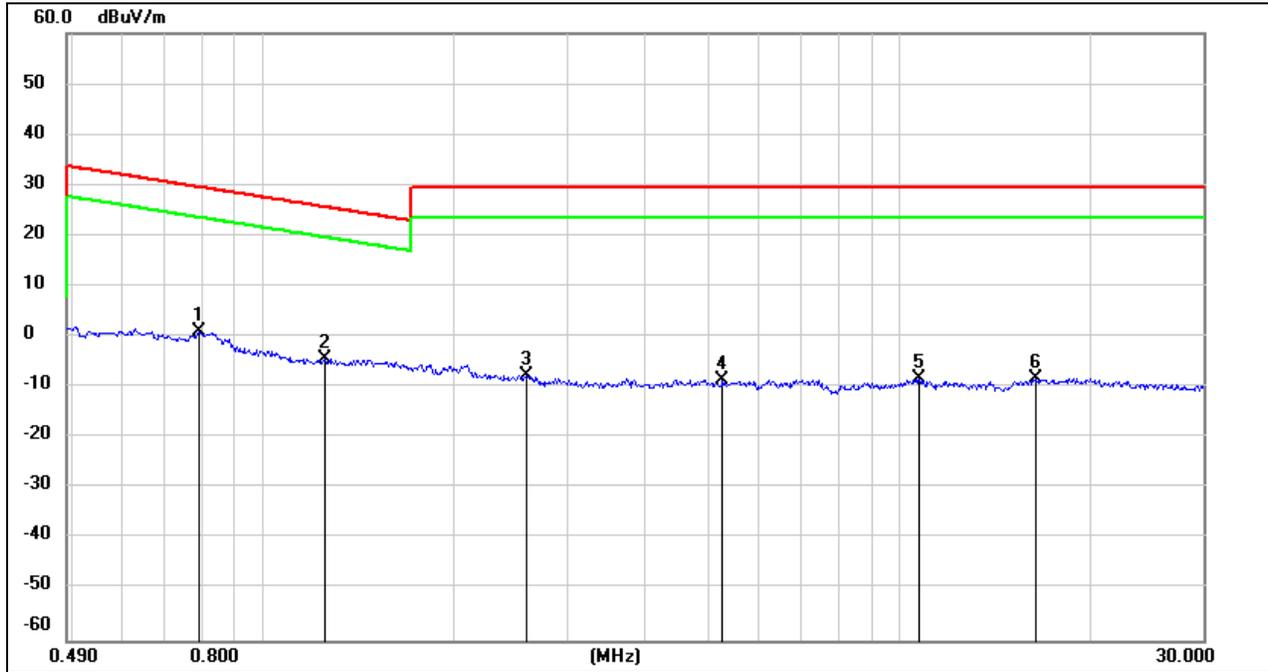
Note: 1. Measurement = Reading Level + Correct Factor (dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV 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.



**490kHz ~ 30MHz**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	Margin (dB)	Remark
1	0.7893	63.18	-62.14	1.04	29.66	-28.62	peak
2	1.2460	57.75	-62.16	-4.41	25.70	-30.11	peak
3	2.5935	54.11	-61.68	-7.57	29.54	-37.11	peak
4	5.2705	53.04	-61.45	-8.41	29.54	-37.95	peak
5	10.7299	52.48	-60.83	-8.35	29.54	-37.89	peak
6	16.3959	52.67	-60.96	-8.29	29.54	-37.83	peak

Note: 1. Measurement = Reading Level + Correct Factor (dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV 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.

Note: All the test modes have been tested, only the worst data record in the report.

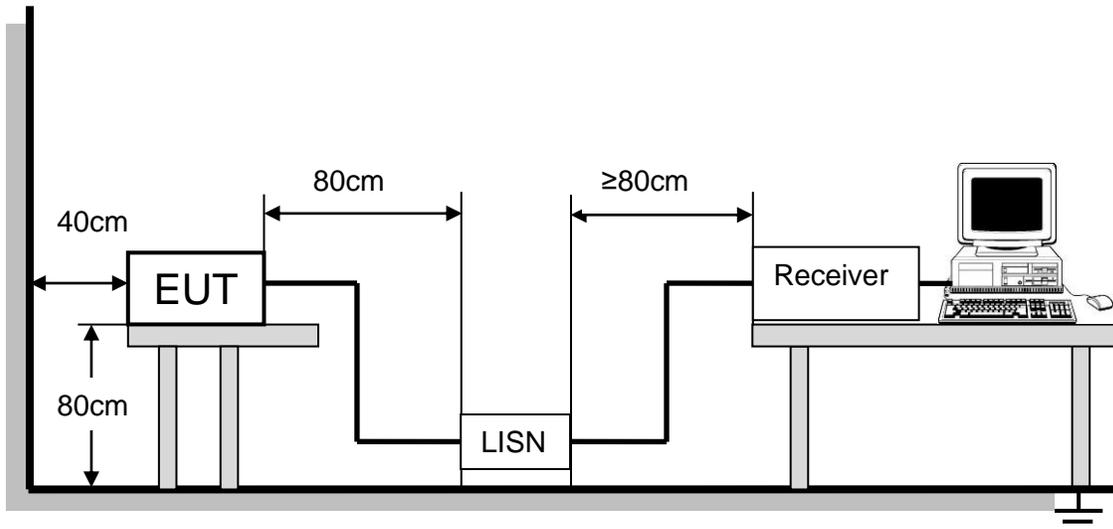
## 9. AC POWER LINE CONDUCTED EMISSIONS

### 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 SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm 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 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

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 ENVIRONMENT

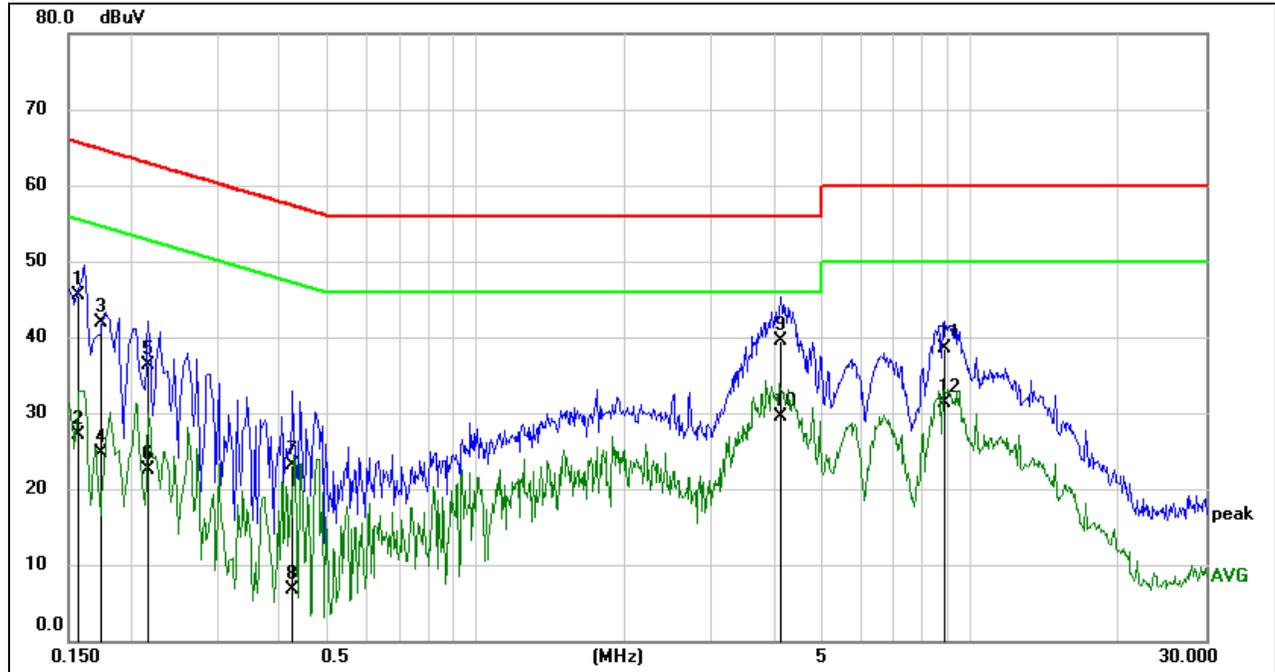
Temperature	24.3°C	Relative Humidity	67.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5 V



**TEST RESULTS**

**9.1. 802.11n HT20 MODE**

**LINE N RESULTS (CHANNEL 6, WORST-CASE CONFIGURATION)**

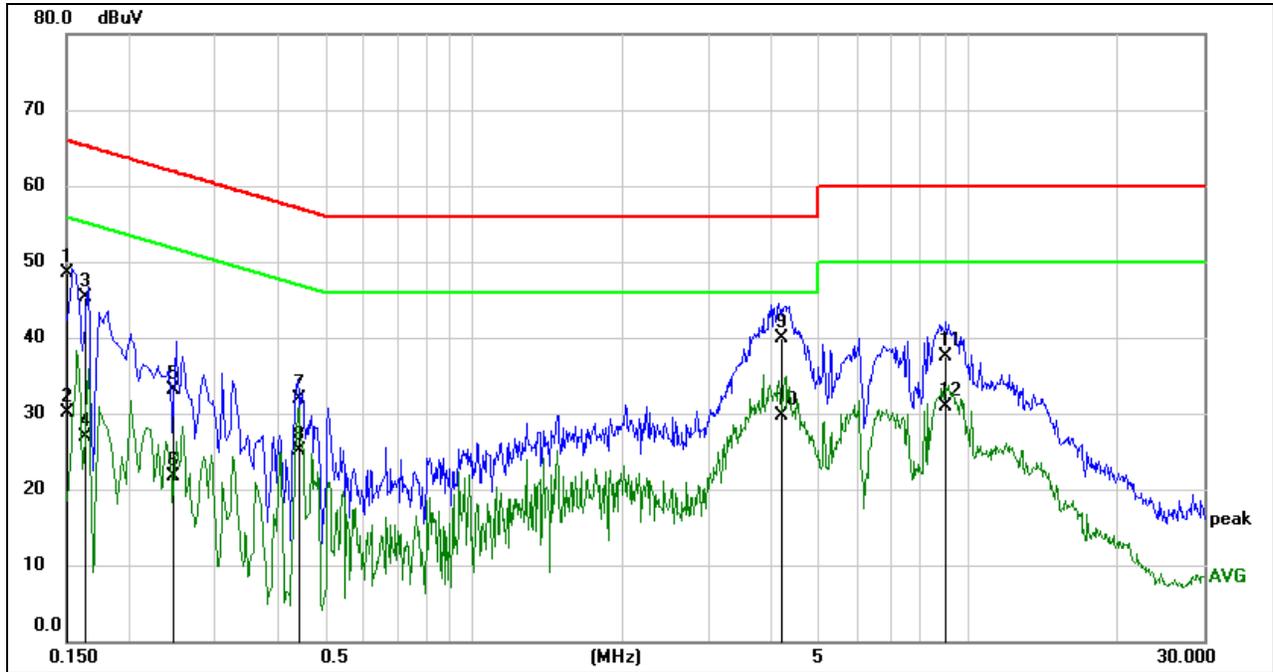


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1579	35.93	9.60	45.53	65.57	-20.04	QP
2	0.1579	17.42	9.60	27.02	55.57	-28.55	AVG
3	0.1740	32.29	9.60	41.89	64.77	-22.88	QP
4	0.1740	15.05	9.60	24.65	54.77	-30.12	AVG
5	0.2169	26.70	9.60	36.30	62.94	-26.64	QP
6	0.2169	12.88	9.60	22.48	52.94	-30.46	AVG
7	0.4262	13.57	9.60	23.17	57.33	-34.16	QP
8	0.4262	-2.95	9.60	6.65	47.33	-40.68	AVG
9	4.1599	29.88	9.66	39.54	56.00	-16.46	QP
10	4.1599	19.76	9.66	29.42	46.00	-16.58	AVG
11	8.8430	28.79	9.74	38.53	60.00	-21.47	QP
12	8.8430	21.57	9.74	31.31	50.00	-18.69	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: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



**LINE L RESULTS (CHANNEL 6, WORST-CASE CONFIGURATION)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1507	38.83	9.61	48.44	65.96	-17.52	QP
2	0.1507	20.45	9.61	30.06	55.96	-25.90	AVG
3	0.1631	35.60	9.61	45.21	65.30	-20.09	QP
4	0.1631	17.29	9.61	26.90	55.30	-28.40	AVG
5	0.2460	23.57	9.60	33.17	61.89	-28.72	QP
6	0.2460	12.09	9.60	21.69	51.89	-30.20	AVG
7	0.4455	22.34	9.60	31.94	56.96	-25.02	QP
8	0.4455	15.52	9.60	25.12	46.96	-21.84	AVG
9	4.1923	30.17	9.66	39.83	56.00	-16.17	QP
10	4.1923	20.08	9.66	29.74	46.00	-16.26	AVG
11	8.9940	27.72	9.73	37.45	60.00	-22.55	QP
12	8.9940	21.20	9.73	30.93	50.00	-19.07	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: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

Note: All the test modes have been tested, only the worst data record in the report.



## 10. ANTENNA REQUIREMENTS

### APPLICABLE REQUIREMENTS

Please refer to FCC §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 §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.

### RESULTS

Complies



## 11. 11.Appendix

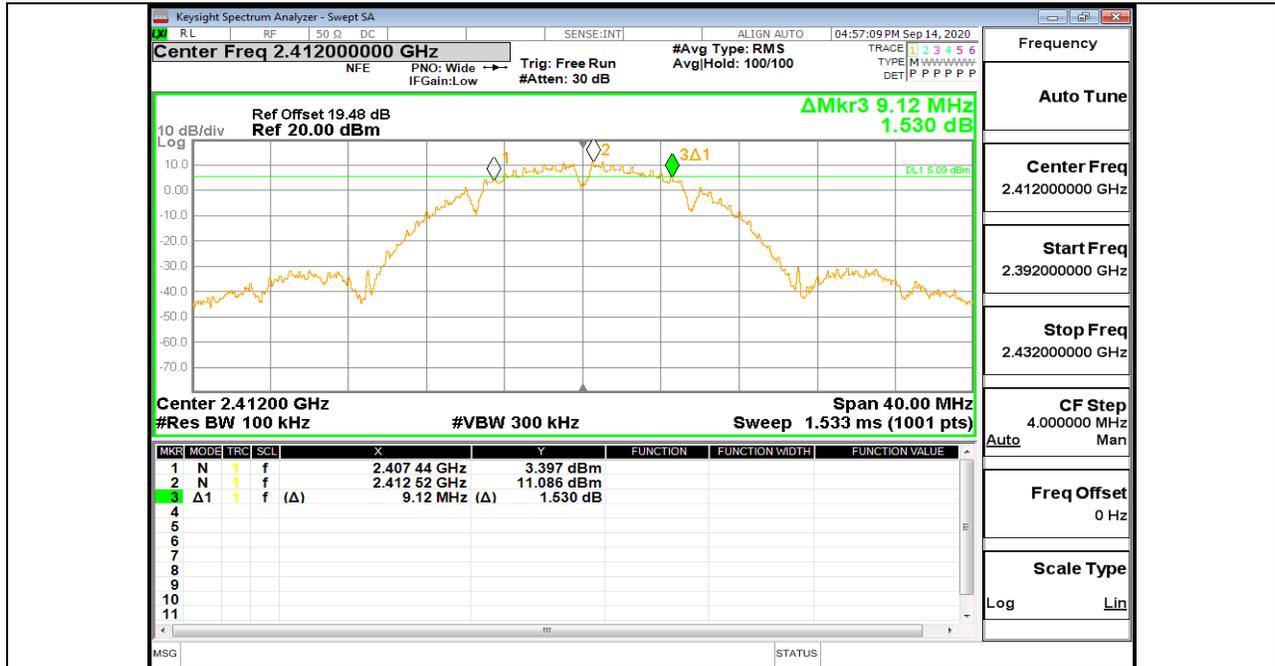
### 11.1. Appendix A: DTS Bandwidth

#### 11.1.1. Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.120	2407.440	2416.560	0.5	PASS
		2417	9.160	2412.440	2421.600	0.5	PASS
		2437	9.160	2432.440	2441.600	0.5	PASS
		2457	9.160	2452.440	2461.600	0.5	PASS
		2462	9.160	2457.440	2466.600	0.5	PASS
11G	Ant1	2412	16.600	2403.720	2420.320	0.5	PASS
		2417	16.600	2408.720	2425.320	0.5	PASS
		2437	16.560	2428.720	2445.280	0.5	PASS
		2457	16.600	2448.720	2465.320	0.5	PASS
		2462	16.600	2453.720	2470.320	0.5	PASS
11N20SISO	Ant1	2412	17.840	2403.120	2420.960	0.5	PASS
		2417	17.840	2408.120	2425.960	0.5	PASS
		2437	17.880	2428.080	2445.960	0.5	PASS
		2457	17.760	2448.120	2465.880	0.5	PASS
		2462	17.840	2453.120	2470.960	0.5	PASS



### 11.1.2. Test Graphs



11B\_Ant1\_2412



11B\_Ant1\_2417



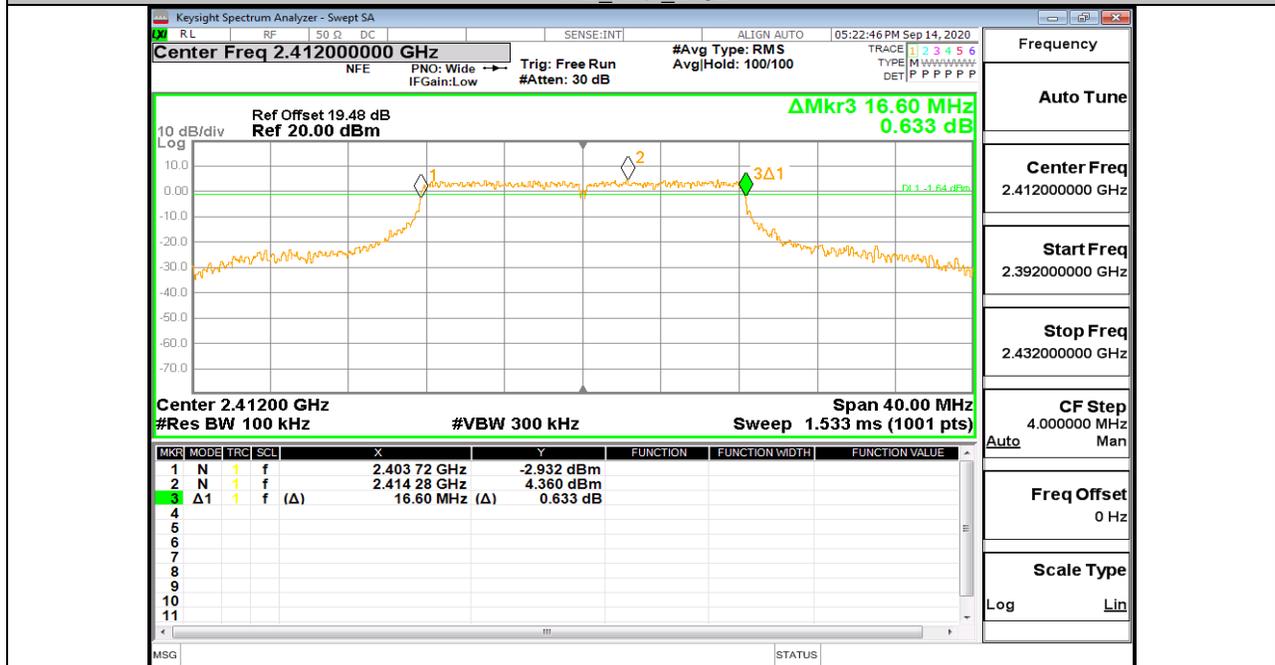
11B\_Ant1\_2437



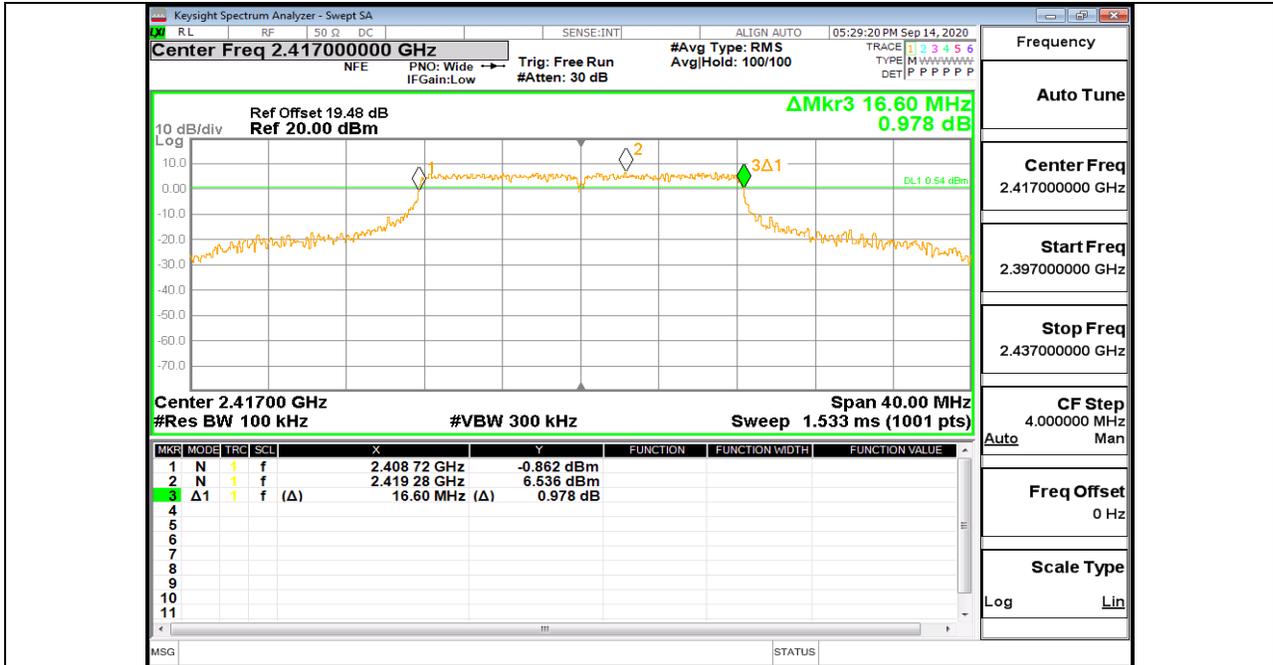
11B\_Ant1\_2457



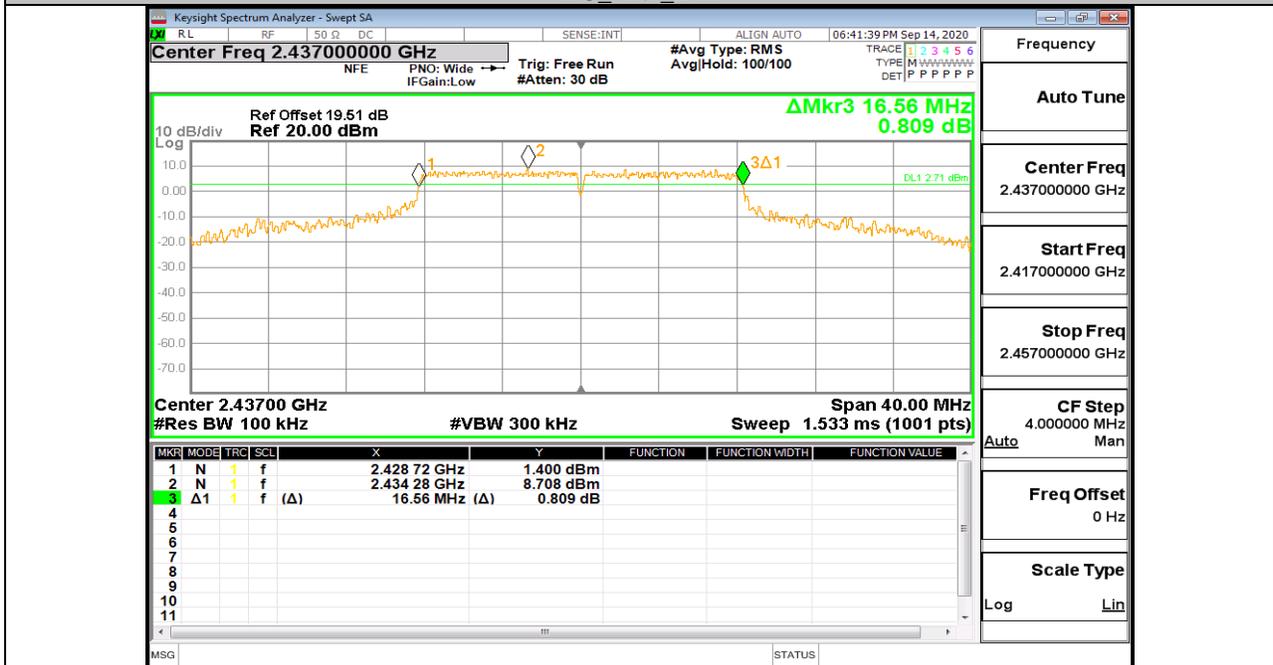
11B\_Ant1\_2462



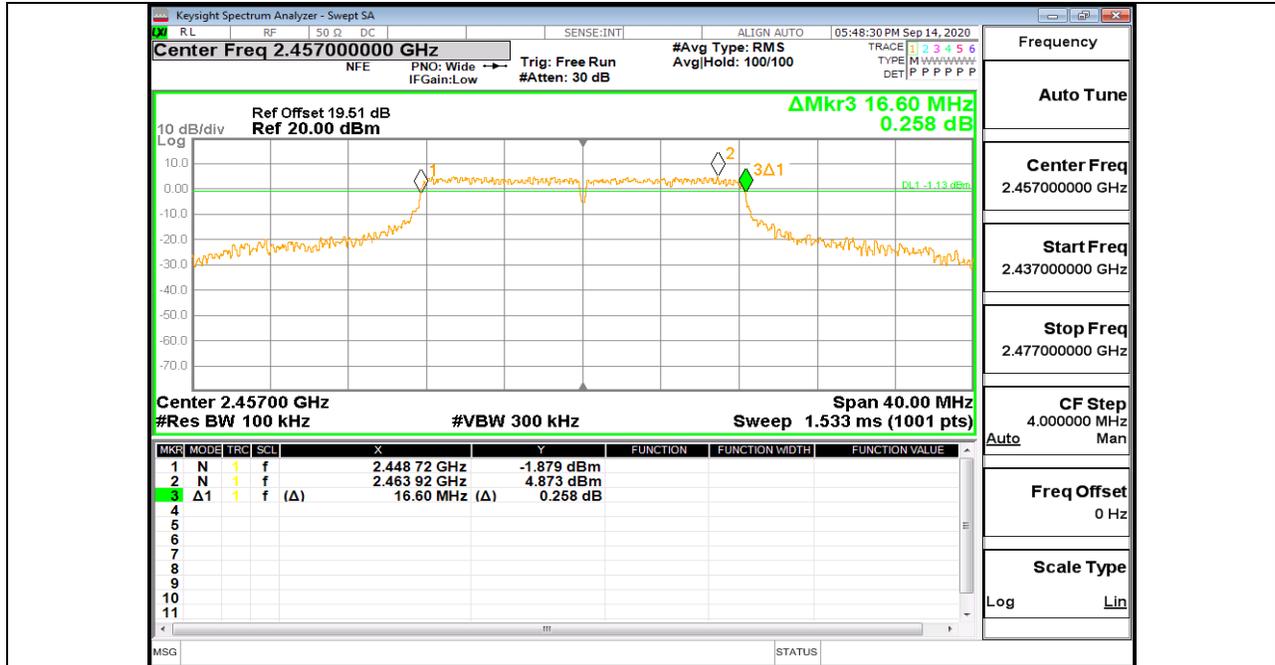
11G\_Ant1\_2412



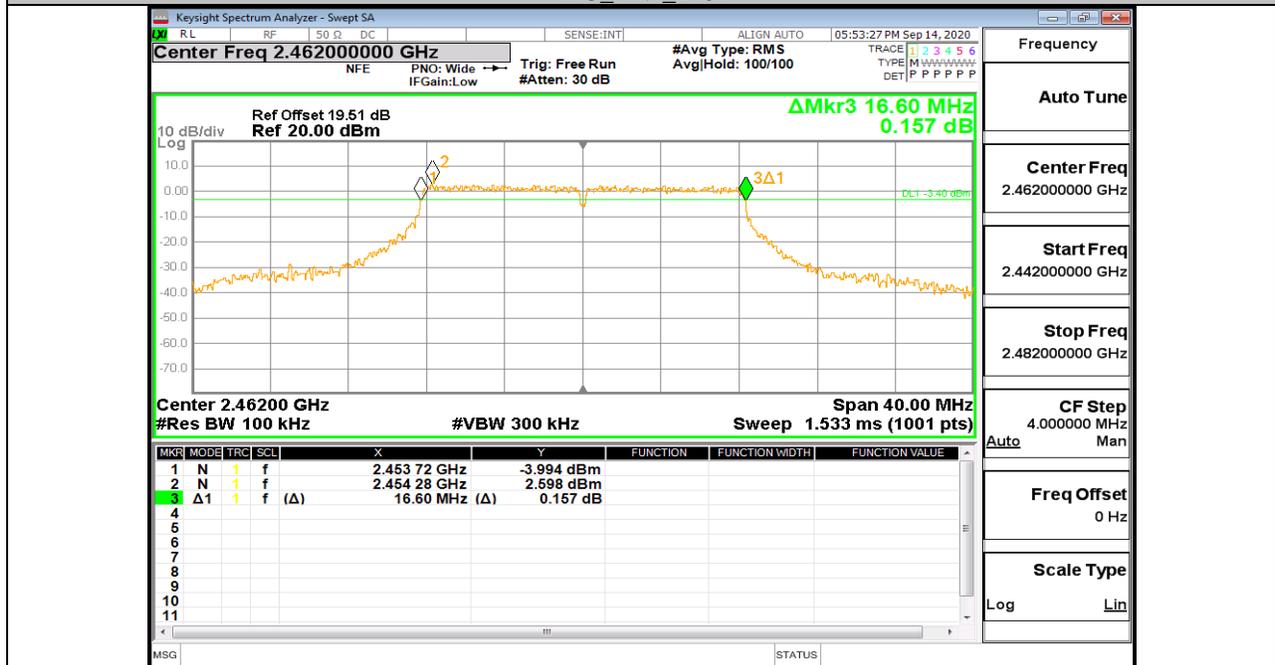
11G\_Ant1\_2417



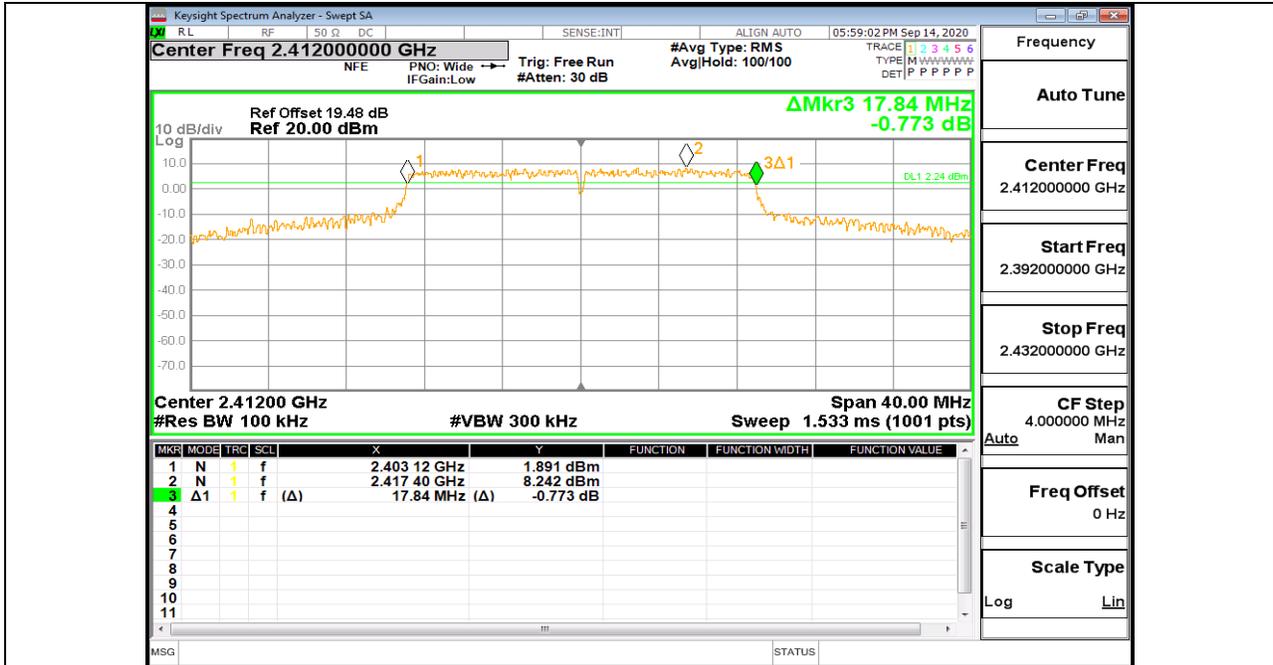
11G\_Ant1\_2437



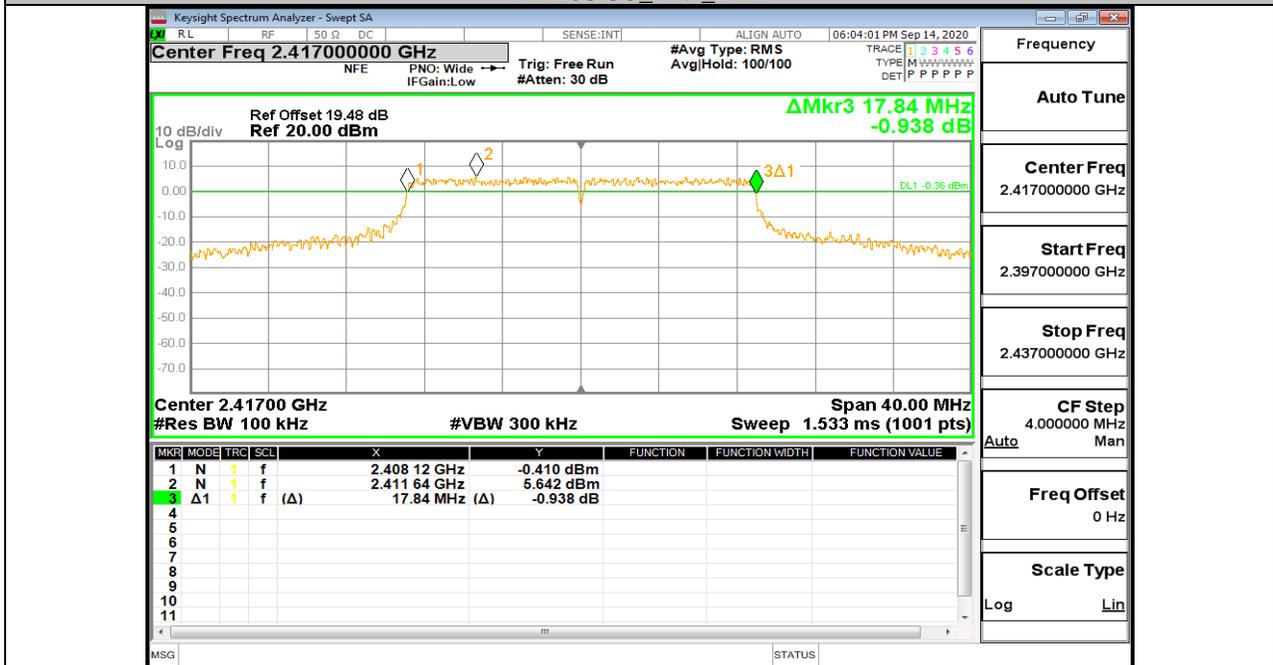
11G\_Ant1\_2457



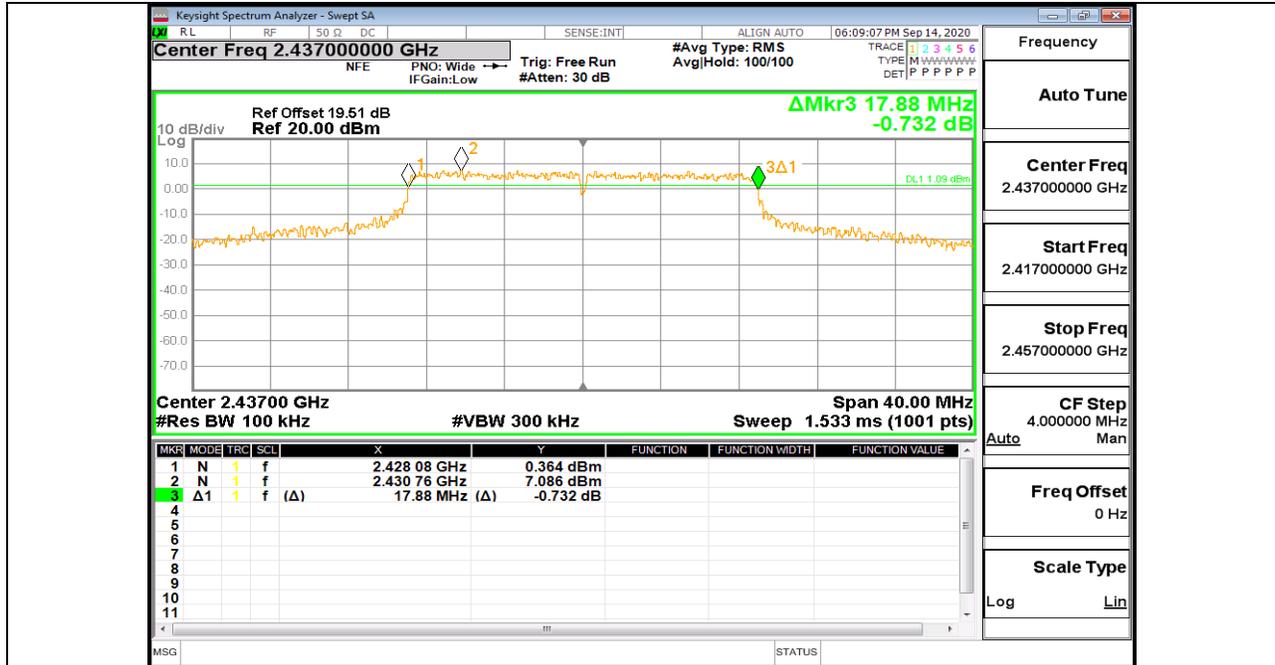
11G\_Ant1\_2462



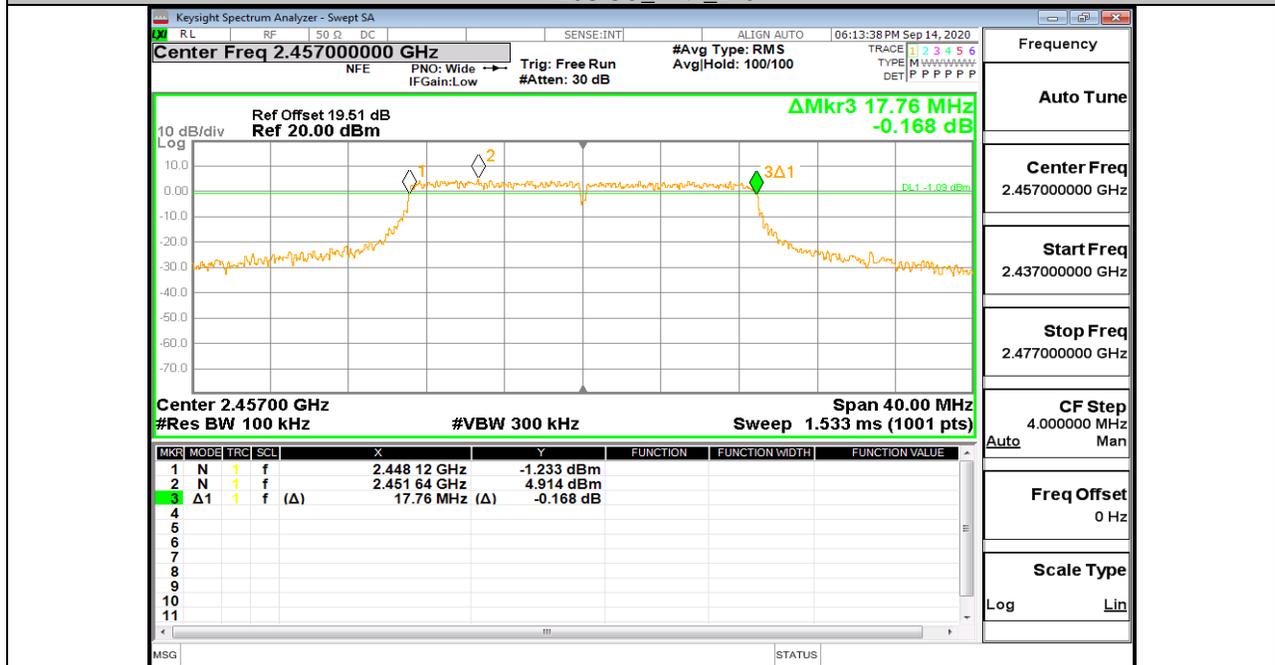
11N20SISO\_Ant1\_2412



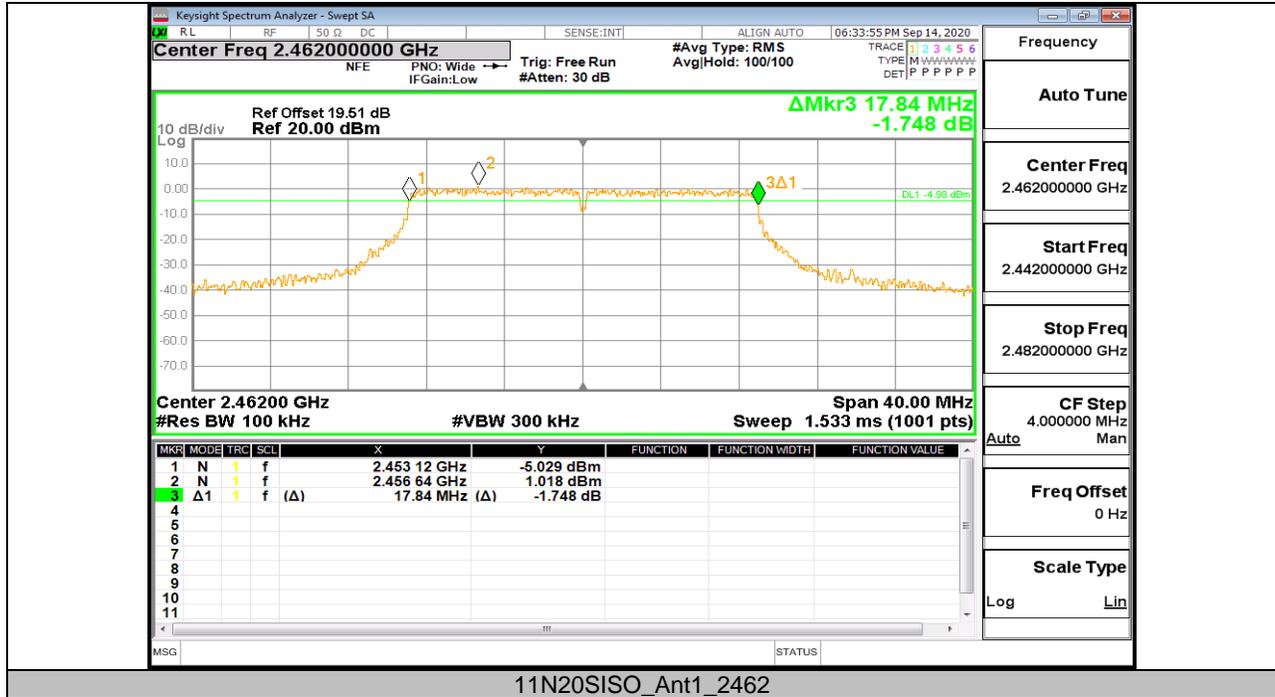
11N20SISO\_Ant1\_2417



11N20SISO\_Ant1\_2437



11N20SISO\_Ant1\_2457



11N20SISO\_Ant1\_2462



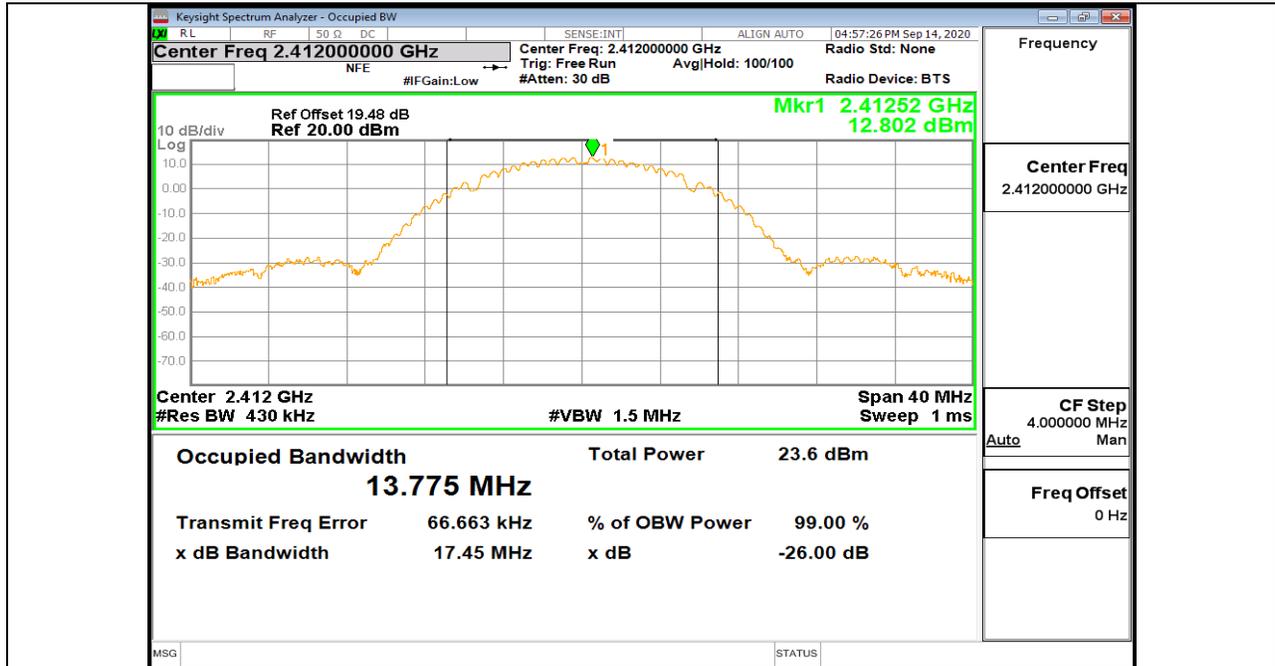
## 11.2. Appendix B: Occupied Channel Bandwidth

### 11.2.1. Test Result

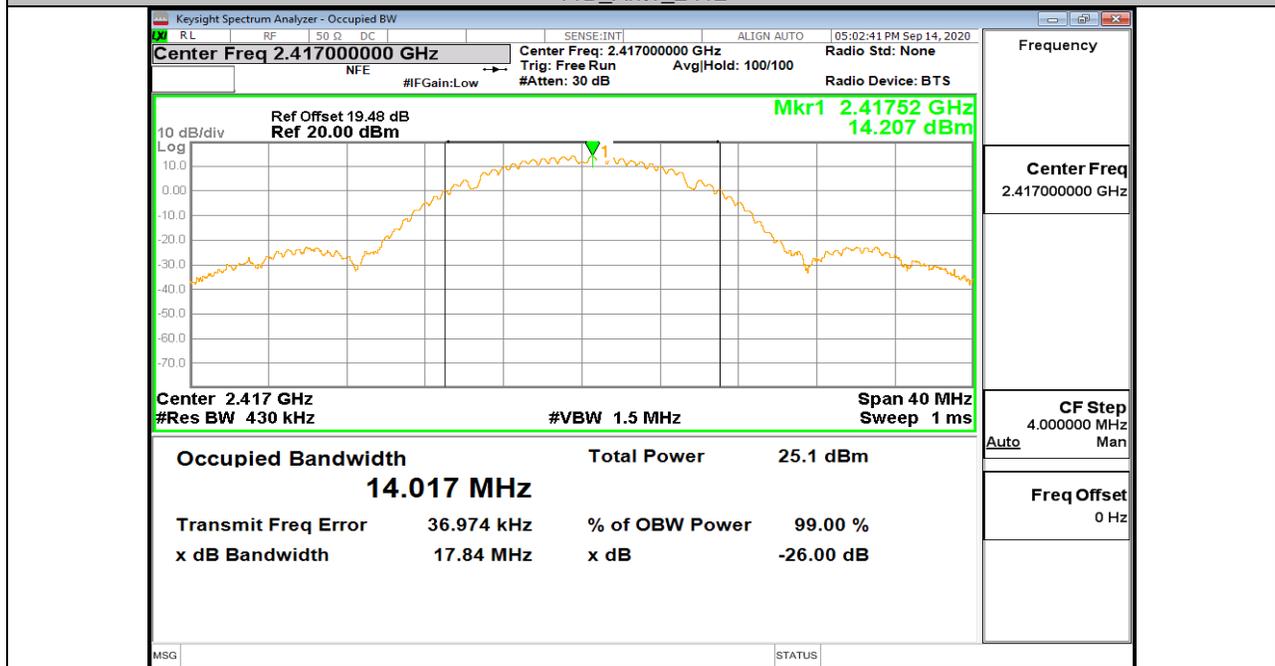
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant1	2412	13.775	2405.179	2418.954	PASS
		2417	14.017	2410.028	2424.045	PASS
		2437	13.822	2430.049	2443.871	PASS
		2457	13.853	2450.014	2463.867	PASS
		2462	13.675	2455.100	2468.775	PASS
11G	Ant1	2412	17.297	2403.356	2420.653	PASS
		2417	17.485	2408.223	2425.708	PASS
		2437	21.440	2425.819	2447.259	PASS
		2457	17.267	2448.286	2465.553	PASS
		2462	17.061	2453.405	2470.466	PASS
11N20SISO	Ant1	2412	23.317	2400.644	2423.961	PASS
		2417	18.562	2407.742	2426.304	PASS
		2437	21.557	2425.879	2447.436	PASS
		2457	18.290	2447.833	2466.123	PASS
		2462	18.040	2452.976	2471.016	PASS



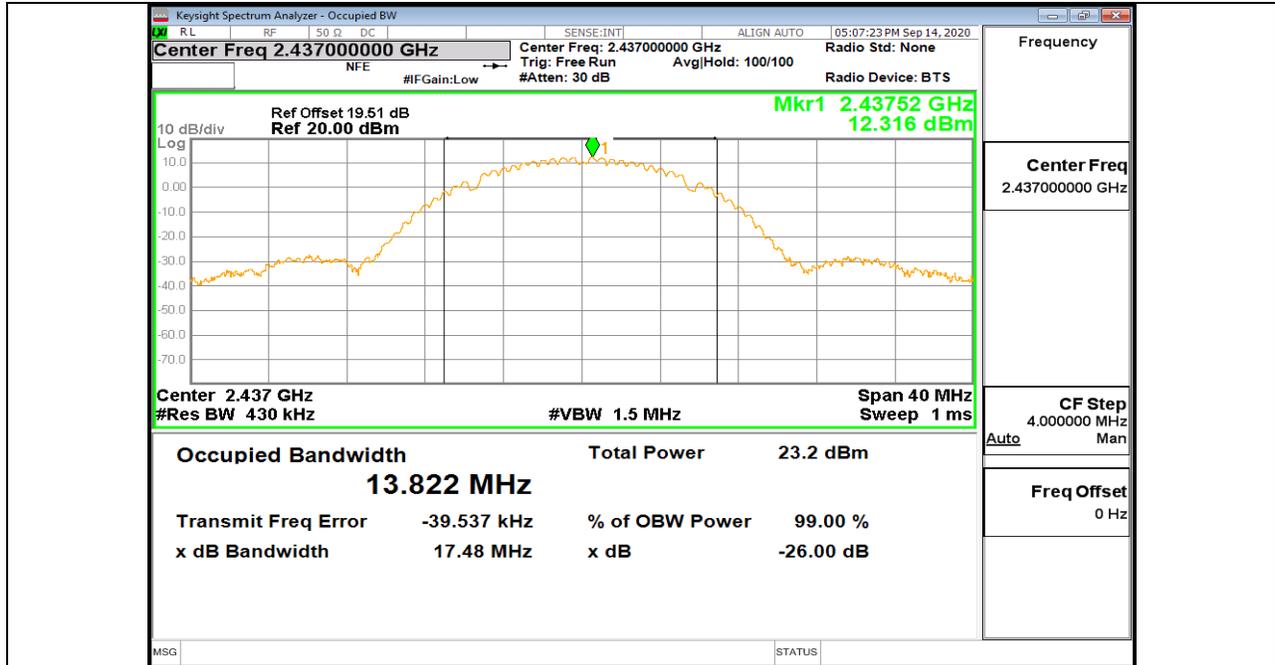
### 11.2.2. Test Graphs



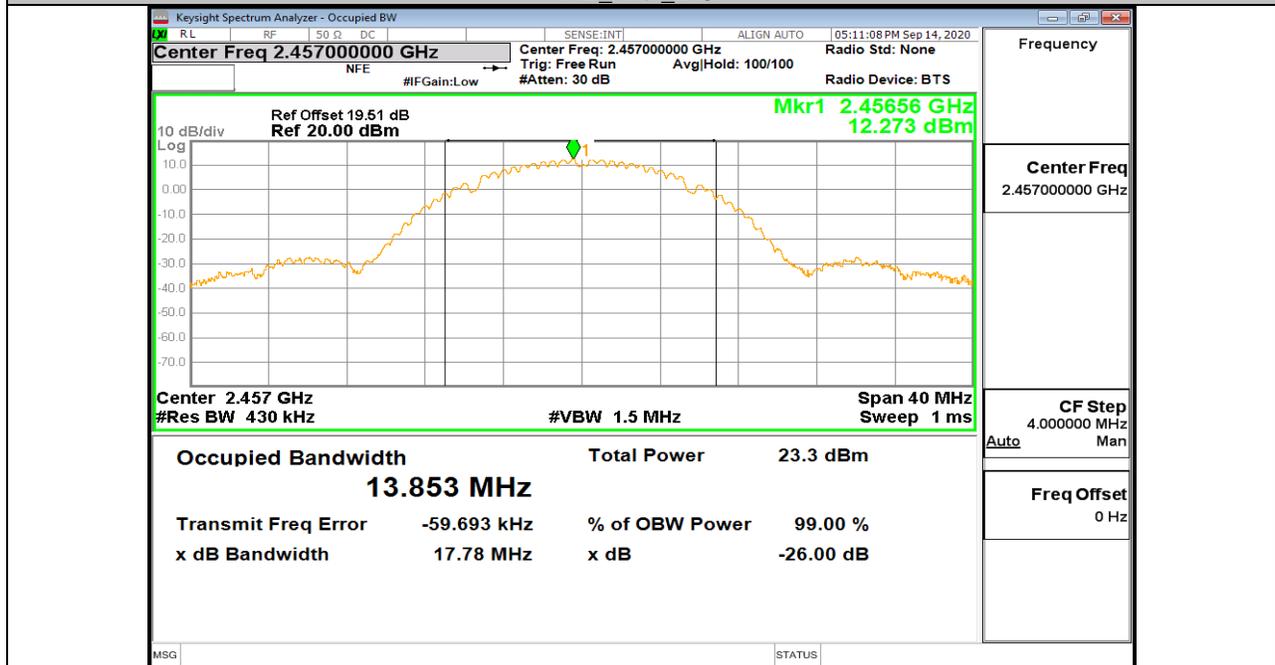
11B\_Ant1\_2412



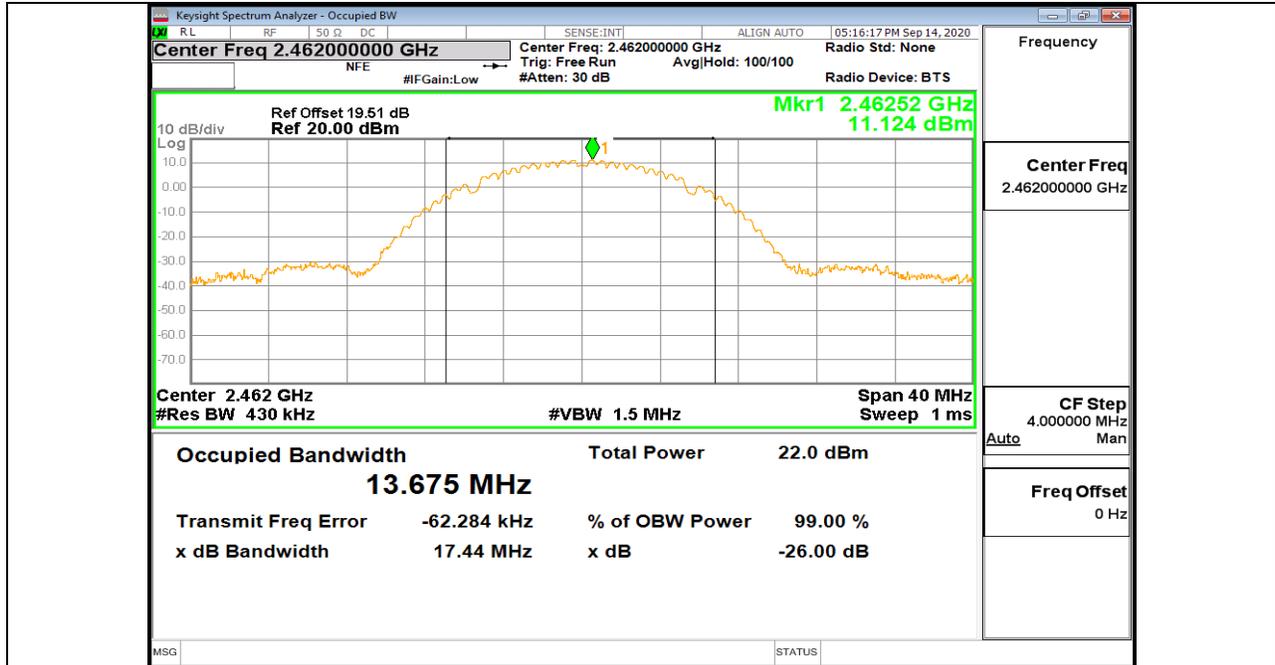
11B\_Ant1\_2417



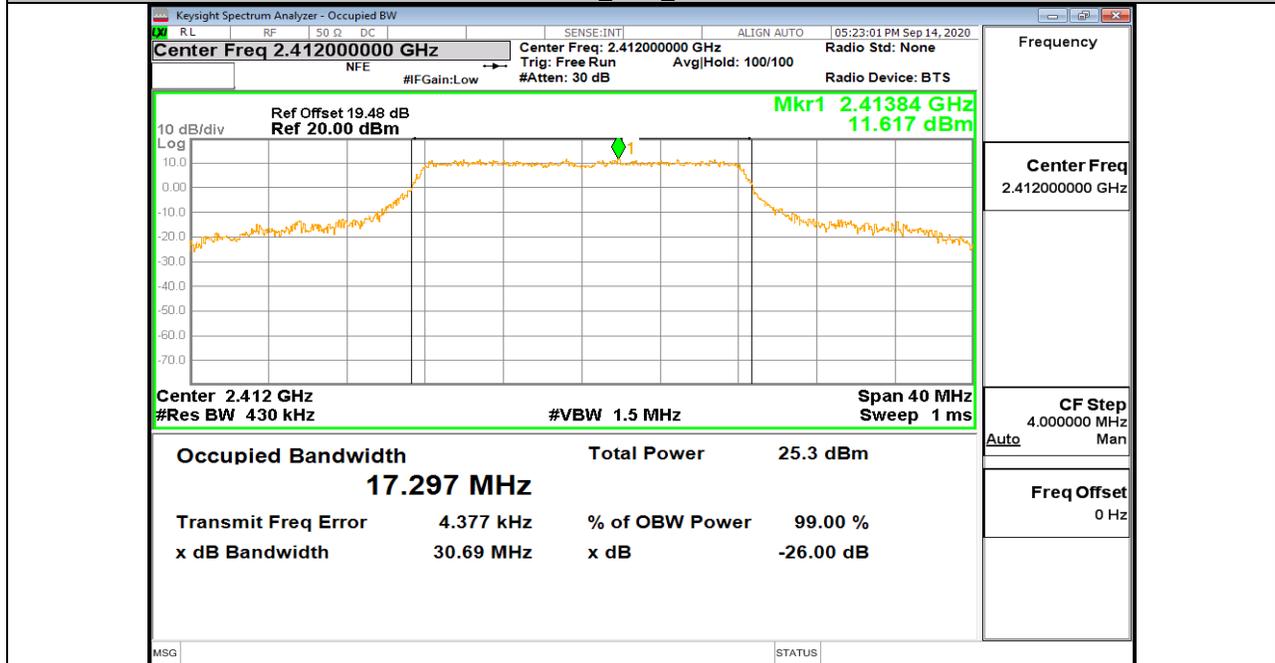
11B\_Ant1\_2437



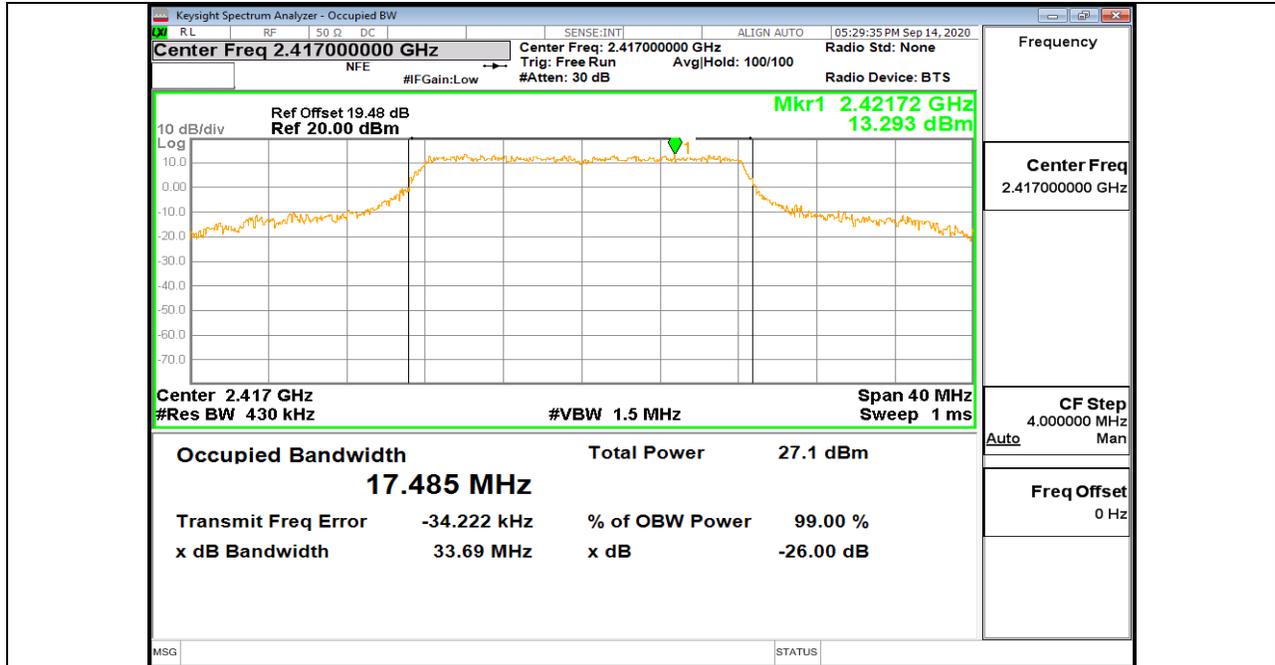
11B\_Ant1\_2457



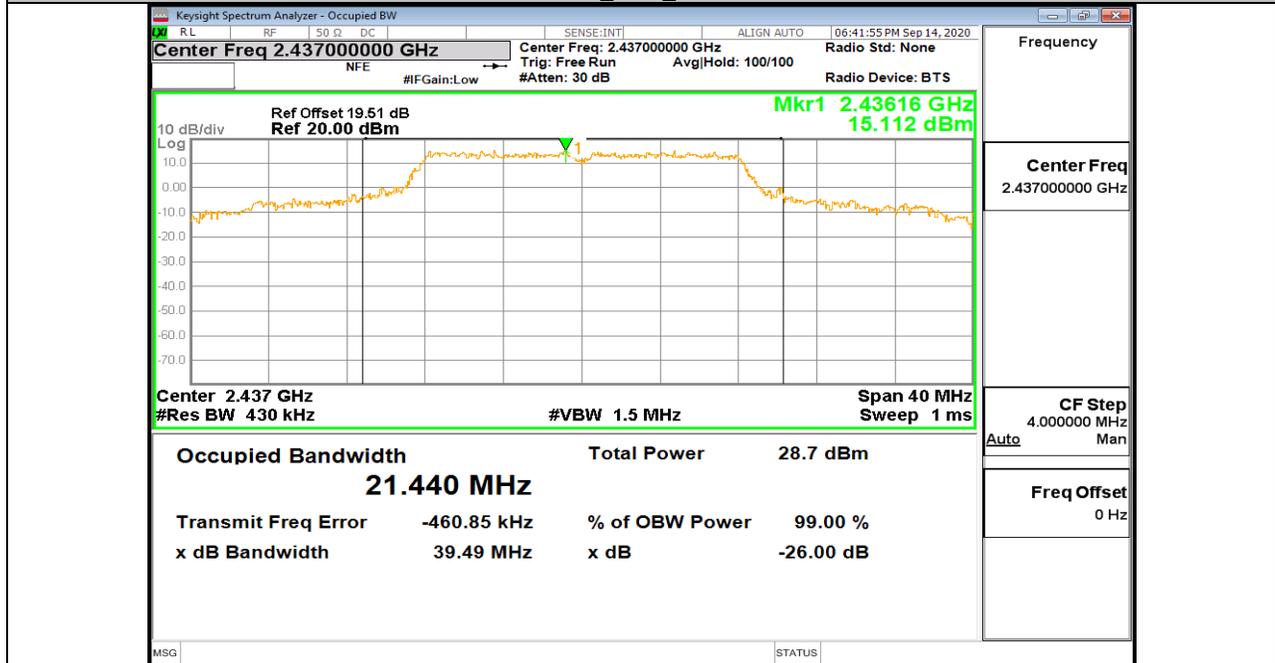
11B\_Ant1\_2462



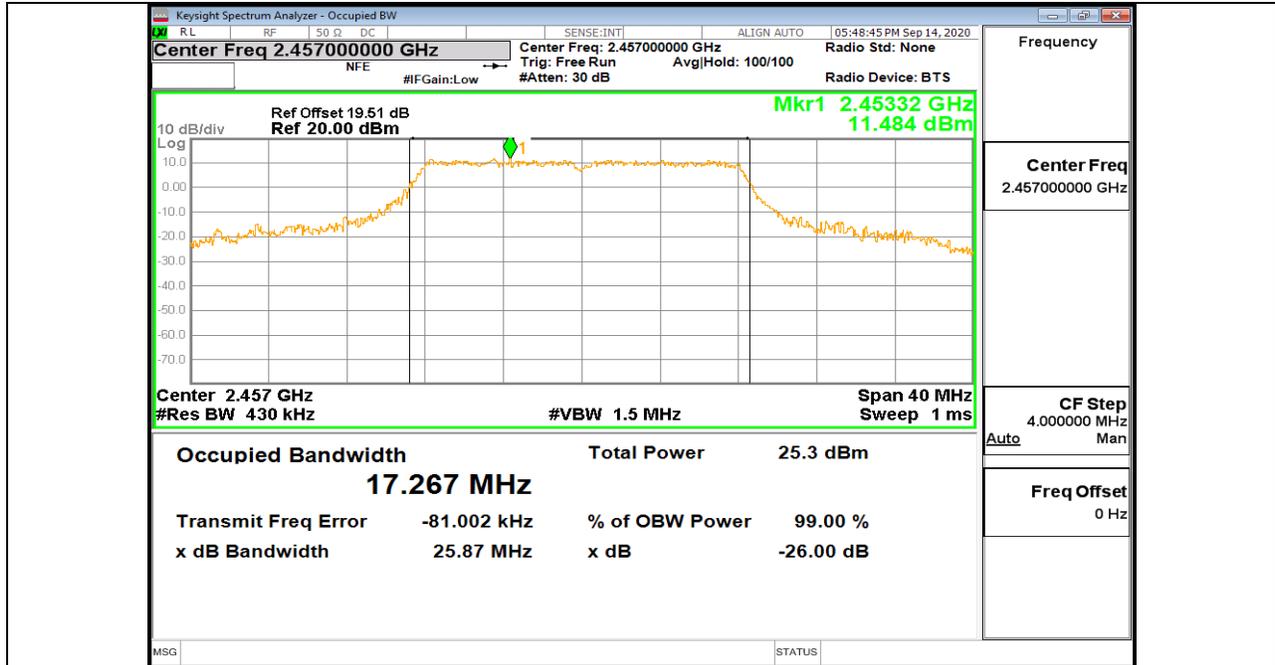
11G\_Ant1\_2412



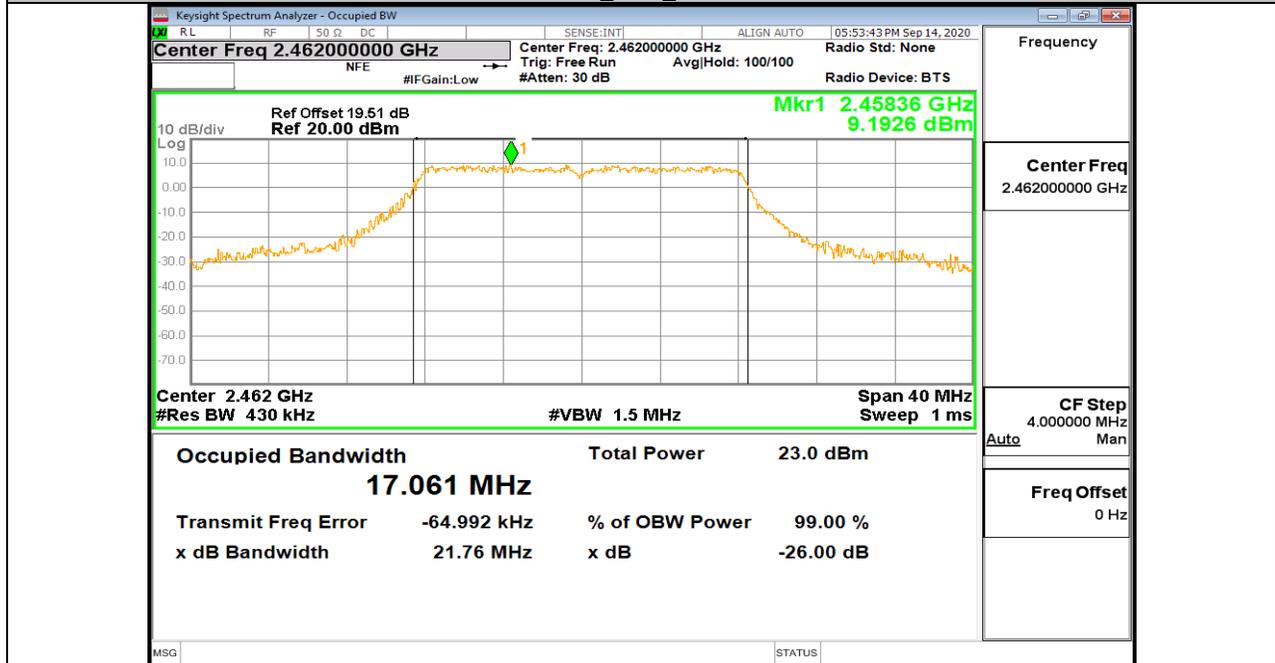
11G\_Ant1\_2417



11G\_Ant1\_2437



11G\_Ant1\_2457



11G\_Ant1\_2462