



**CFR 47 FCC PART 15 SUBPART C  
ISED RSS-247 ISSUE 2**

**TEST REPORT**

*For*

**Outdoor Smart Plug**

**MODEL NUMBER: CPLGOD2BLG1**

**FCC ID: PUU-CPLGOD2BLG1  
IC: 10798A-CPLGOD2BLG1**

**REPORT NUMBER: 4789516666-2**

**ISSUE DATE: June 22, 2020**

*Prepared for*

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	06/22/2020	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC/ISED Rules	Test Results
1	6dB Bandwidth and 99% Occupied Bandwidth	FCC Part 15.247 (a) (2) RSS-247 Clause 5.2 (a) ISED RSS-Gen Clause 6.7	Pass
2	Peak Conducted Output Power	FCC Part 15.247 (b) (3) RSS-247 Clause 5.4 (d)	Pass
3	Power Spectral Density	FCC Part 15.247 (e) RSS-247 Clause 5.2 (b)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d) RSS-247 Clause 5.5	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Pass
6	Conducted Emission Test For AC Power Port	FCC Part 15.207 RSS-GEN Clause 8.8	Pass
7	Antenna Requirement	FCC Part 15.203 RSS-GEN Clause 6.8	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 >> ISED RSS-247 > when <Accuracy Method> decision rule is applied.



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# 1. ATTESTATION OF TEST RESULTS

## FCC

### Applicant Information

Company Name: Consumer Lighting (U.S.) LLC dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland, Ohio 44112 United States

## FCC

### Manufacturer Information

Company Name: Consumer Lighting (U.S.) LLC dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland, Ohio 44112 United States

## ISED

### Applicant Information

Company Name: Consumer Lighting Canada Company, dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland OH 44112 United States Of America

## ISED

### Manufacturer Information

Company Name: Consumer Lighting Canada Company, dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland OH 44112 United States Of America

## EUT Information

EUT Name: Outdoor Smart Plug  
Model: CPLGOD2BLG1  
Sample Status: Normal  
Sample ID: 3102161  
Sample Received Date: June 11, 2020  
Date of Tested: June 12~19, 2020

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	PASS
ISED RSS-247 Issue 2	PASS
ISED RSS-GEN Issue 5	PASS



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## 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, ISED RSS-247 Issue 2 and ISED RSS-GEN Issue 5.

## 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
Conduction emission	3.62dB
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.2dB
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.00dB
Radiation Emission test (1GHz to 26GHz)( include Fundamental emission)	5.78dB (1GHz-18GHz)
	5.23dB (18GHz-26GHz)
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	Outdoor Smart Plug
Model Name	CPLGOD2BLG1
Radio Technology	IEEE802.11b/g/n HT20/n HT40
Operation frequency	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz
Modulation	IEEE 802.11b: DSSS(CCK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Rated Input	AC120V,60Hz

### 5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Frequency (MHz)	Channel Number	Max AV Conducted Power (dBm)
1	IEEE 802.11b	2412-2462	1-11[11]	16.89
1	IEEE 802.11g	2412-2462	1-11[11]	15.37
1	IEEE 802.11nHT20	2412-2462	1-11[11]	14.39
1	IEEE 802.11nHT40	2422-2452	3-9[7]	14.47

### 5.3. CHANNEL LIST

Channel List for 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	/	/

Channel List for 802.11n (40 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447	/	/



#### 5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
WiFi TX(802.11b)	CH 1, CH 6, CH 11/ Low, Middle, High	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11g)	CH 1, CH 6, CH 11/ Low, Middle, High	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11n HT20)	CH 1, CH 6, CH 11/ Low, Middle, High	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11n HT40)	CH 3, CH 6, CH 9/ Low, Middle, High	2422MHz, 2437MHz, 2452MHz

#### 5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worst Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		UI _mptool					
Modulation Mode	Transmit Antenna Number	Test Software setting value					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	37	36	36	/		
802.11g	1	41	40	40			
802.11n HT20	1	39	39	39			
802.11n HT40	1	/			39	39	39

#### 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
- 802.11n HT40 mode: MCS0



### 5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	integral antenna	1.65

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.
IEEE 802.11n HT40	<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. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	45 ~ 70%	
Atmospheric Pressure:	1025Pa	
Temperature	TN	22 ~ 28°C
Voltage :	VL	N/A
	VN	AC120V,60Hz
	VH	N/A

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature

## 5.9. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	ThinkPad	X230i	/
2	USB TO UART	/	/	/

### I/O CABLES

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

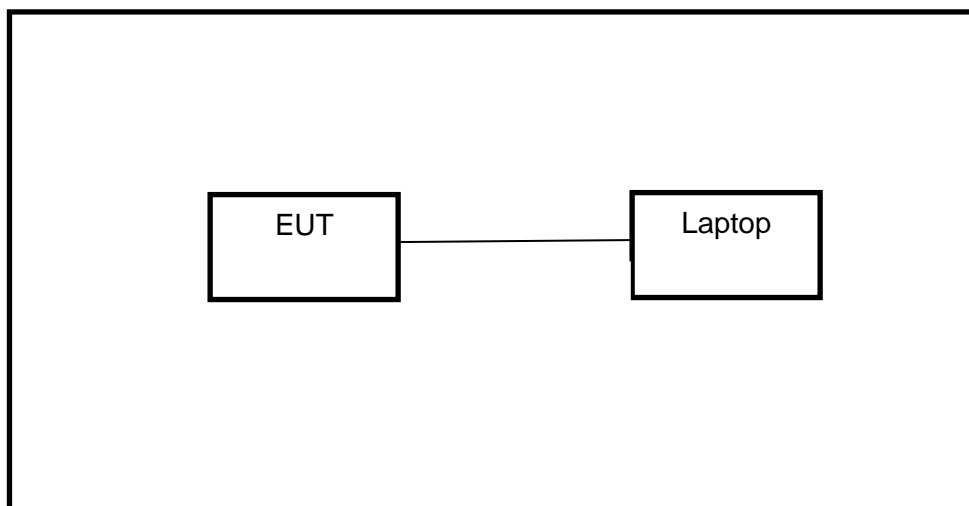
### ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
1	/	/	/	/

### 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

Conducted Emissions						
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						
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
Other instruments						
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 sensor, Power Meter	R&S	OSP120	100921	Dec.06,2019	Dec.06,2020



## 7. ANTENNA PORT TEST RESULTS

### 7.1. ON TIME AND DUTY CYCLE

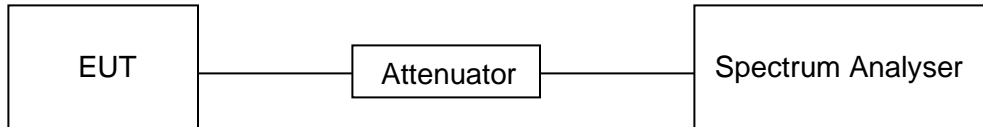
#### LIMITS

None; for reporting purposes only

#### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.5°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

#### 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 ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2) ISED RSS-247 5.2 (a)	6 dB Bandwidth	≥ 500KHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99% Occupied Bandwidth	For reporting purposes only.	2400-2483.5

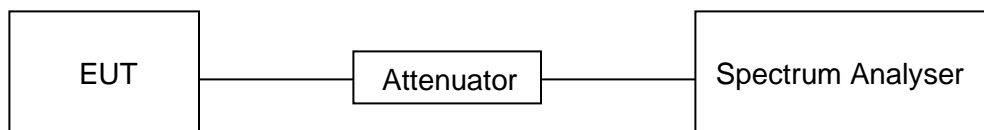
### TEST PROCEDURE

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 : ≥3×RBW
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	25.5°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

**RESULTS**

Please refer to appendix A and B.



### 7.3. CONDUCTED OUTPUT POWER

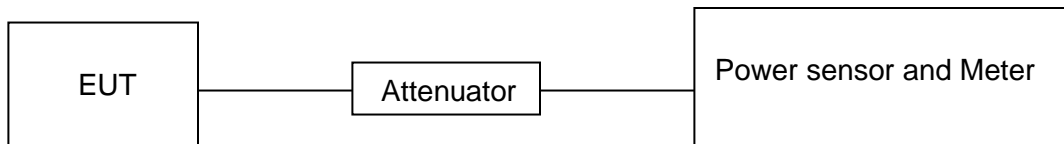
#### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3) ISED RSS-247 5.4 (d)	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	25.5°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz



**RESULTS**

Please refer to appendix C.



## 7.4. POWER SPECTRAL DENSITY

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm/3 kHz	2400-2483.5

### TEST PROCEDURE

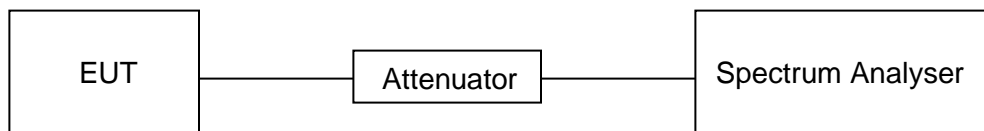
Connect the UUT to the spectrum analyser and use the following settings:

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	25.5°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

### RESULTS



Please refer to appendix C.



## 7.5. CONDUCTED BANDEGE AND SPURIOUS EMISSIONS

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d) ISED RSS-247 5.5	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.

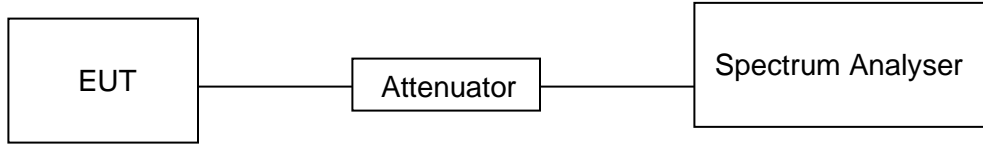
Use the peak marker function to determine the maximum PSD level.

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	25.5°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

**RESULTS**

Please refer to appendix E and F.



## 8. RADIATED TEST RESULTS

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209

Please refer to ISED RSS-GEN Clause 8.9 (Transmitter)

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

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	Magnetic field strength (H-Field) (µA/m)	Measurement distance (m)
9 - 490 kHz <sup>Note 1</sup>	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

**Note 1:** The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.





ISED Restricted bands please refer to ISED RSS-GEN Clause 8.10

Table 7 – Restricted frequency bands <sup>Note 1</sup>		
MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1680 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.09475 - 16.09525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

**Note 1:** Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

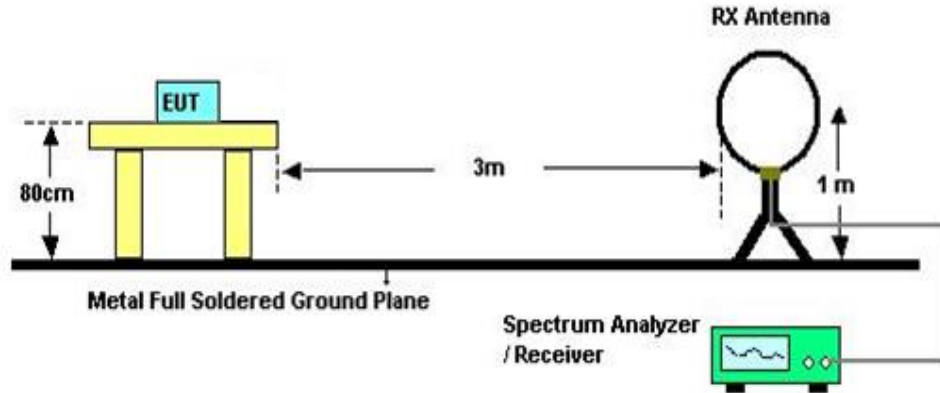
FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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	1680-1710	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

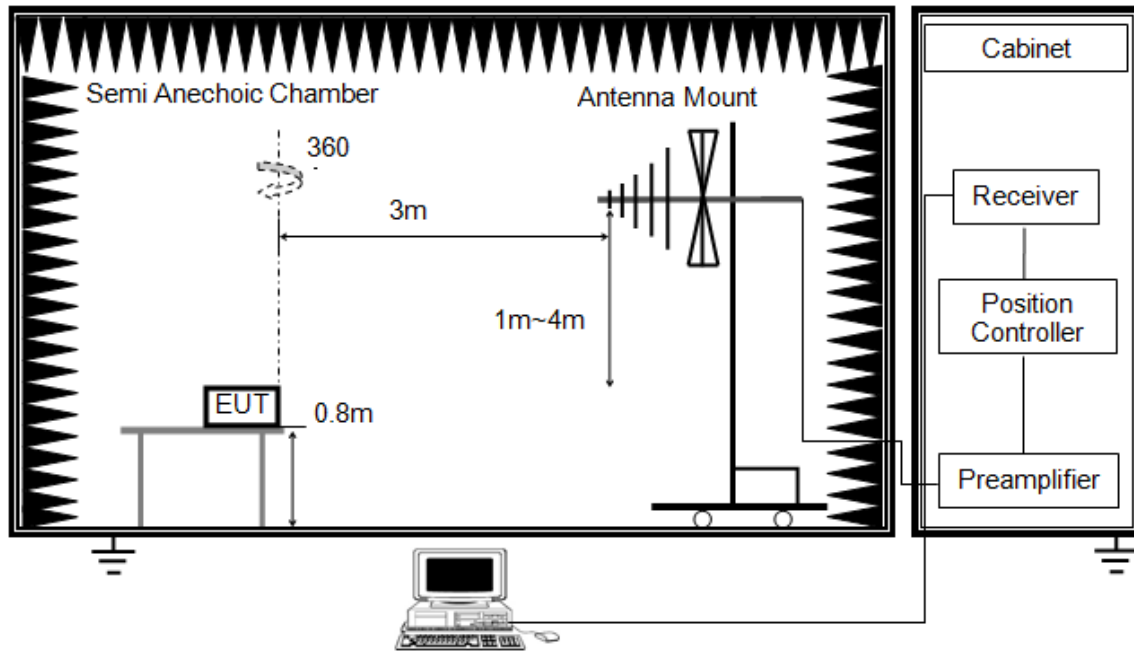


The setting of the spectrum analyser

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 meter 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. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

Below 1G

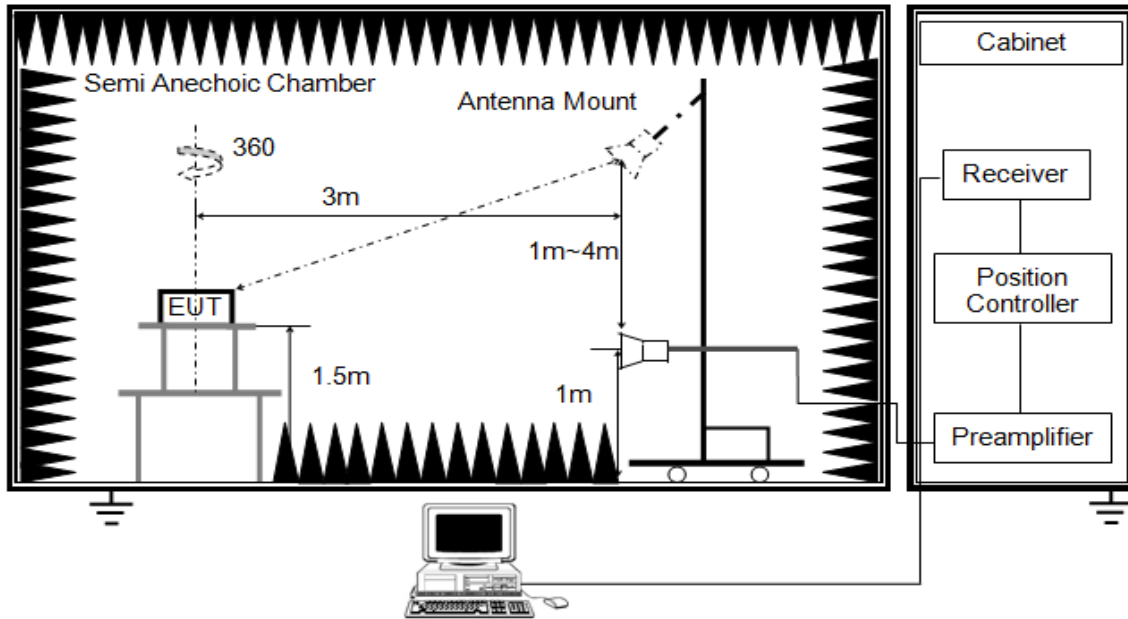


The setting of the spectrum analyser

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 1G

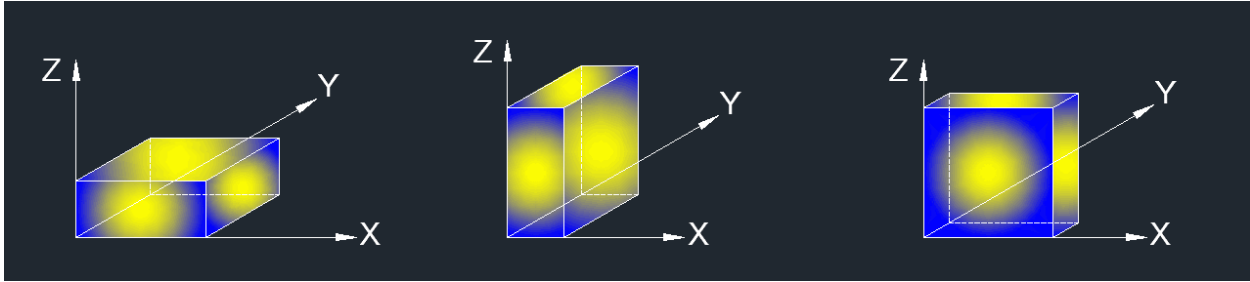


The setting of the spectrum analyser

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

**TEST ENVIRONMENT**

Temperature	23.2°C	Relative Humidity	58%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

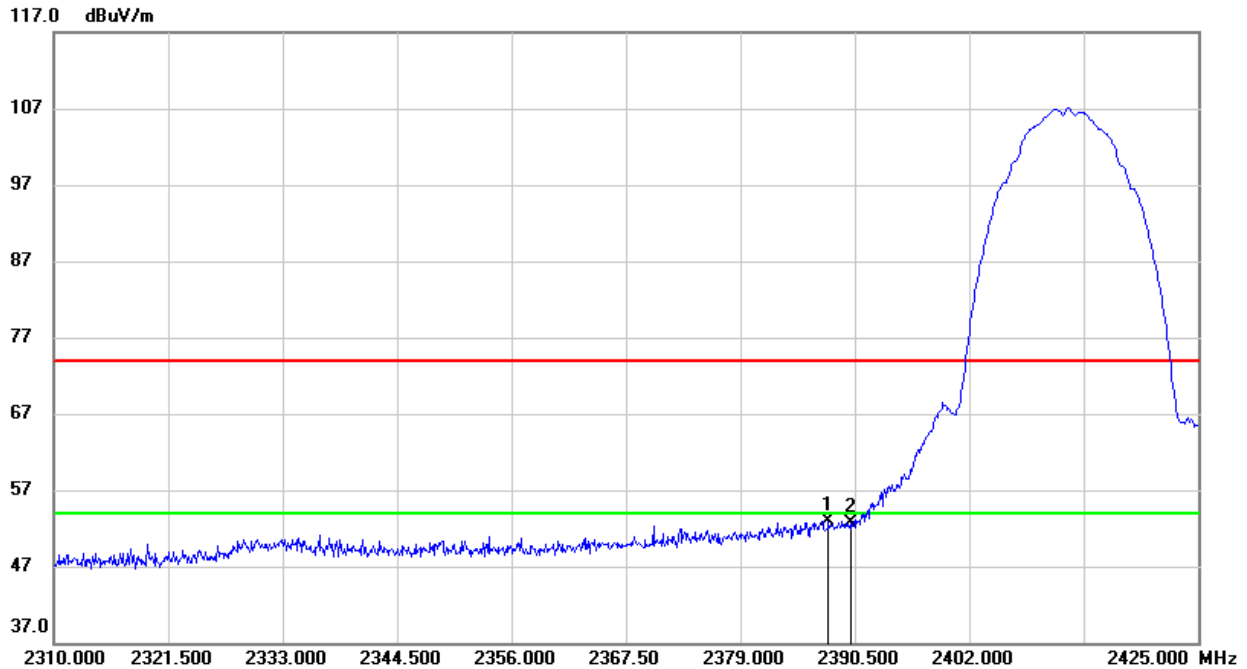


## 8.1. RESTRICTED BANDEDGE

### 8.1.1. 802.11b MODE

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

#### PEAK



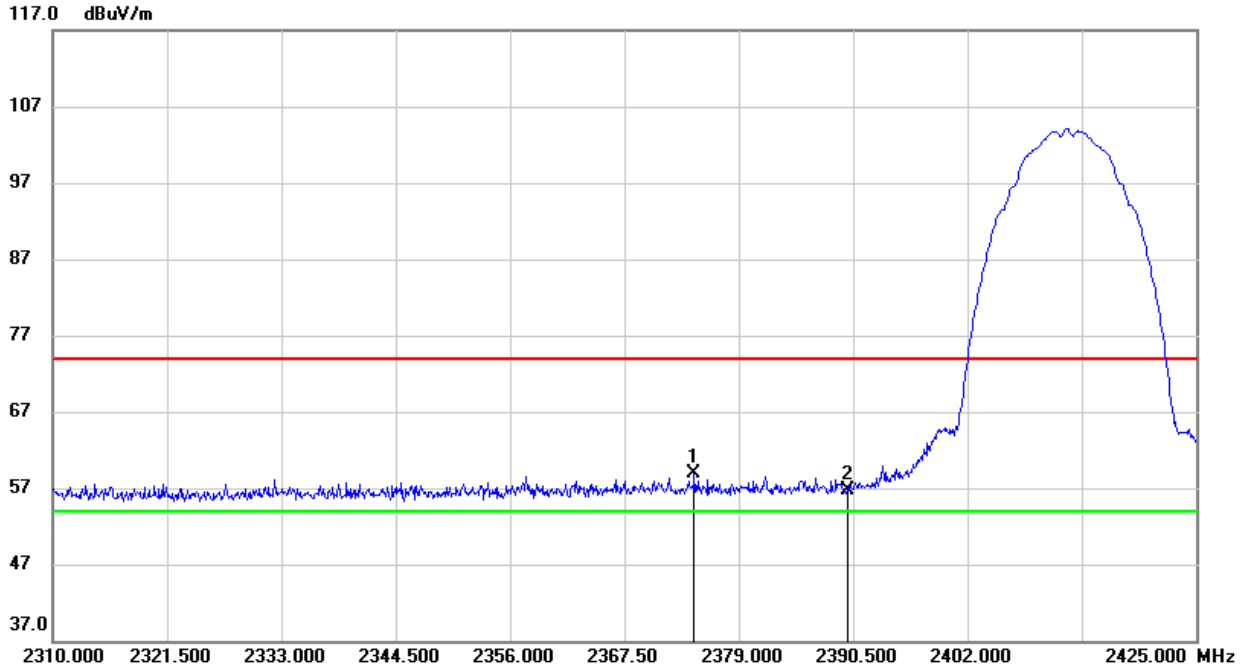
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.855	20.00	32.94	52.94	74.00	-21.06	peak
2	2390.000	19.75	32.94	52.69	74.00	-21.31	peak

- 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.



**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**

**PEAK**

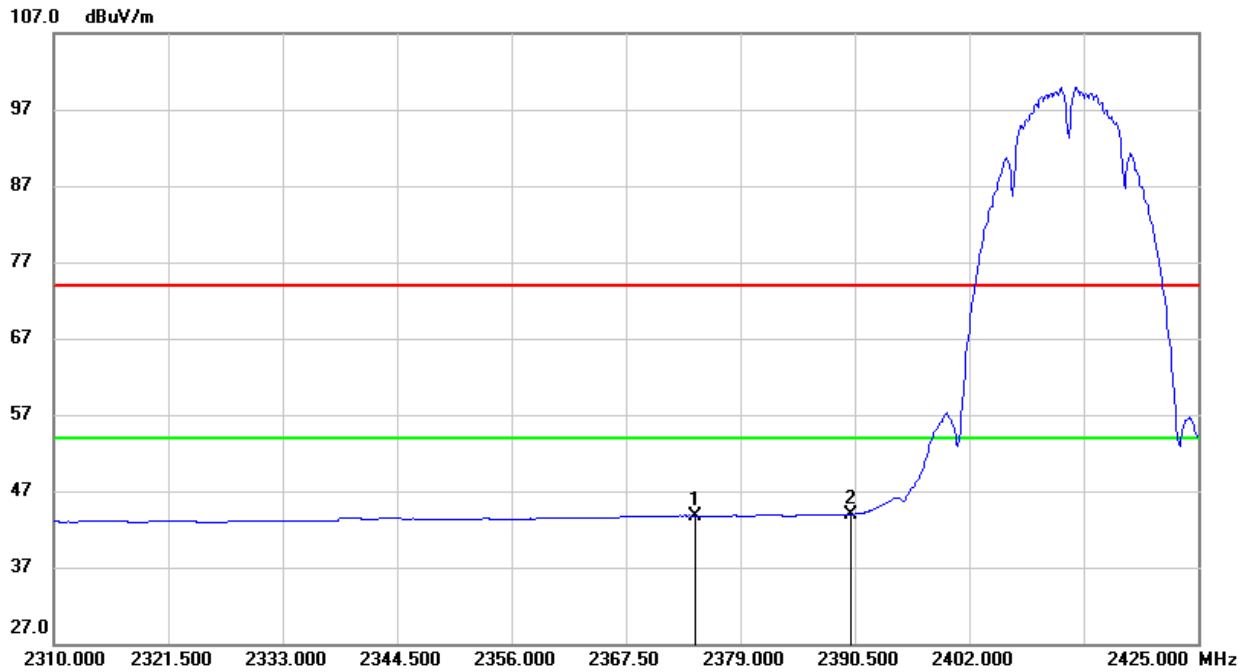


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2374.515	26.09	32.89	58.98	74.00	-15.02	peak
2	2390.000	23.78	32.94	56.72	74.00	-17.28	peak

- 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	2374.515	10.89	32.89	43.78	54.00	-10.22	AVG
2	2390.000	11.04	32.94	43.98	54.00	-10.02	AVG

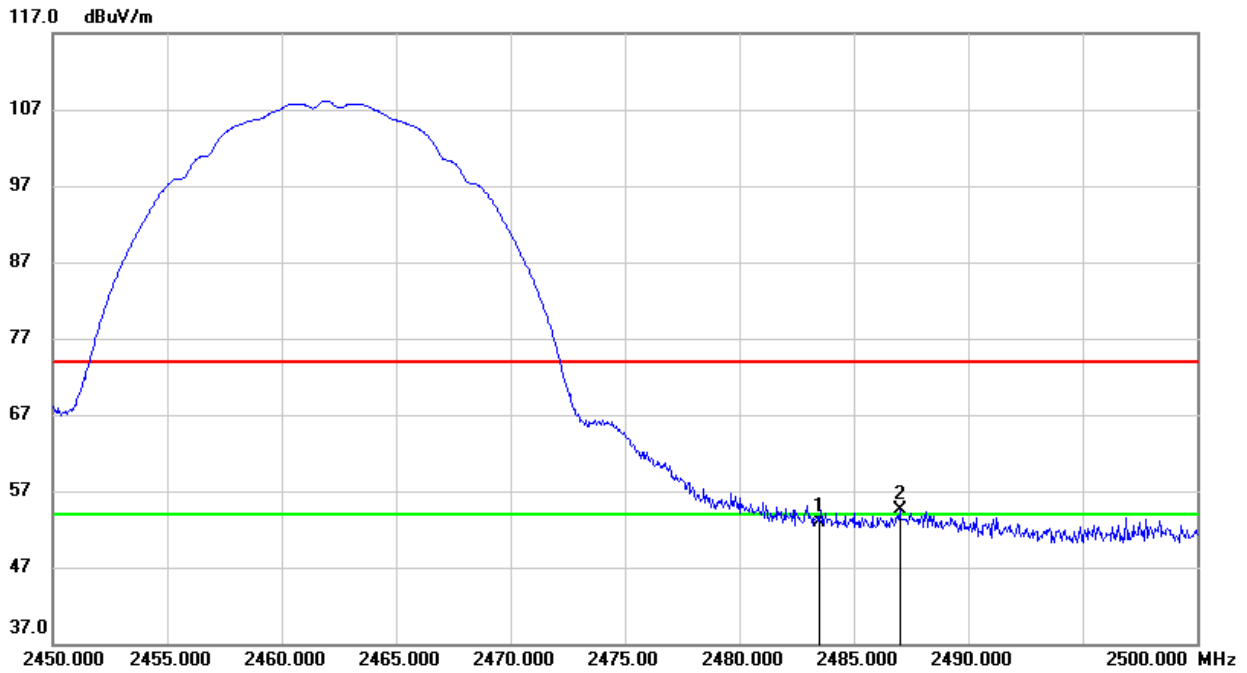
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (HIGH CHANNEL, HORIZONTAL)**

**PEAK**

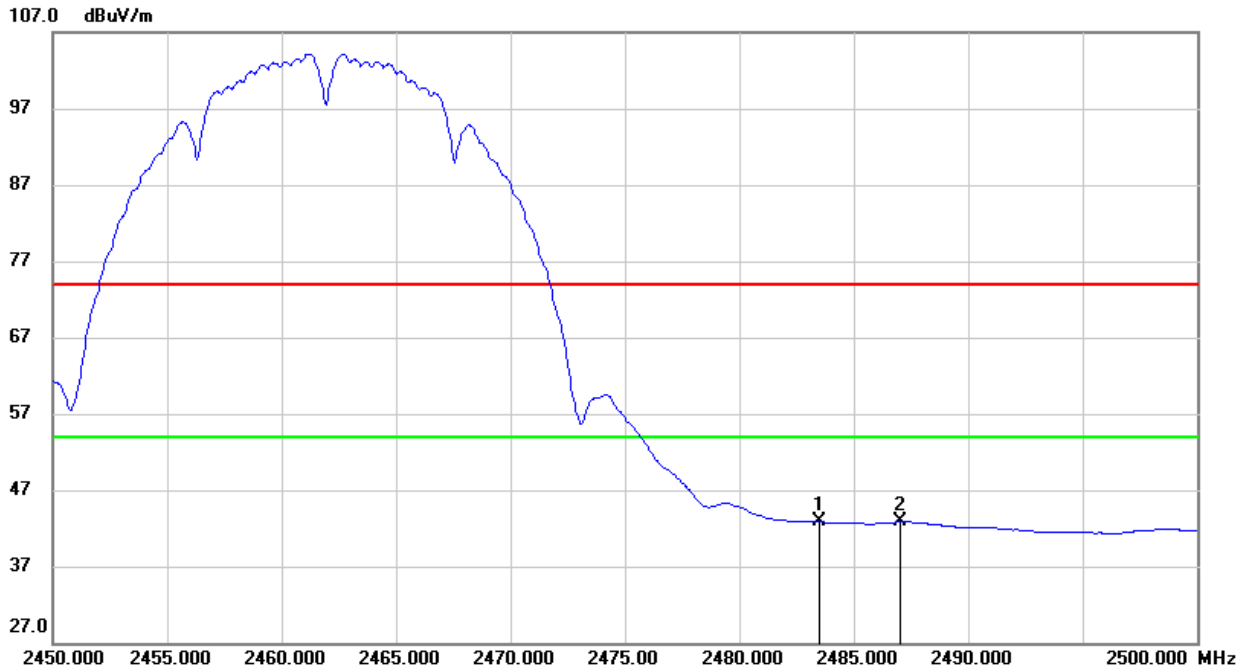


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	19.41	33.58	52.99	74.00	-21.01	peak
2	2487.000	20.88	33.61	54.49	74.00	-19.51	peak

- 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. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



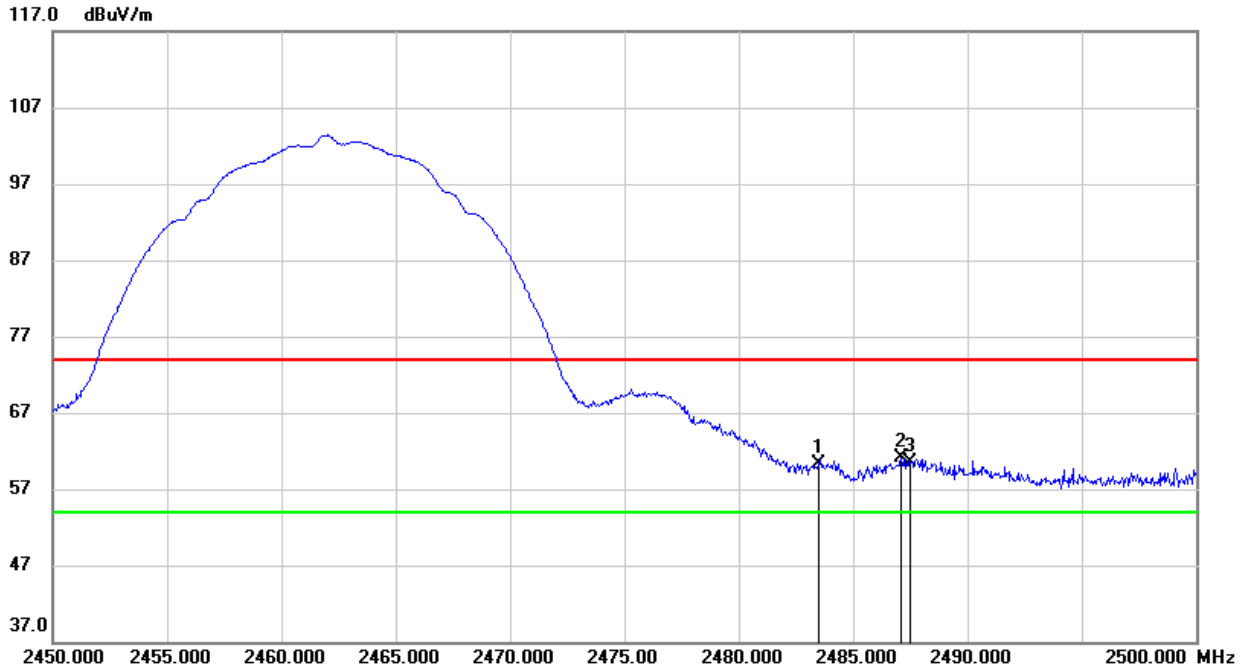
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	9.30	33.58	42.88	54.00	-11.12	AVG
2	2487.000	9.25	33.61	42.86	54.00	-11.14	AVG

- 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.



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**

**PEAK**

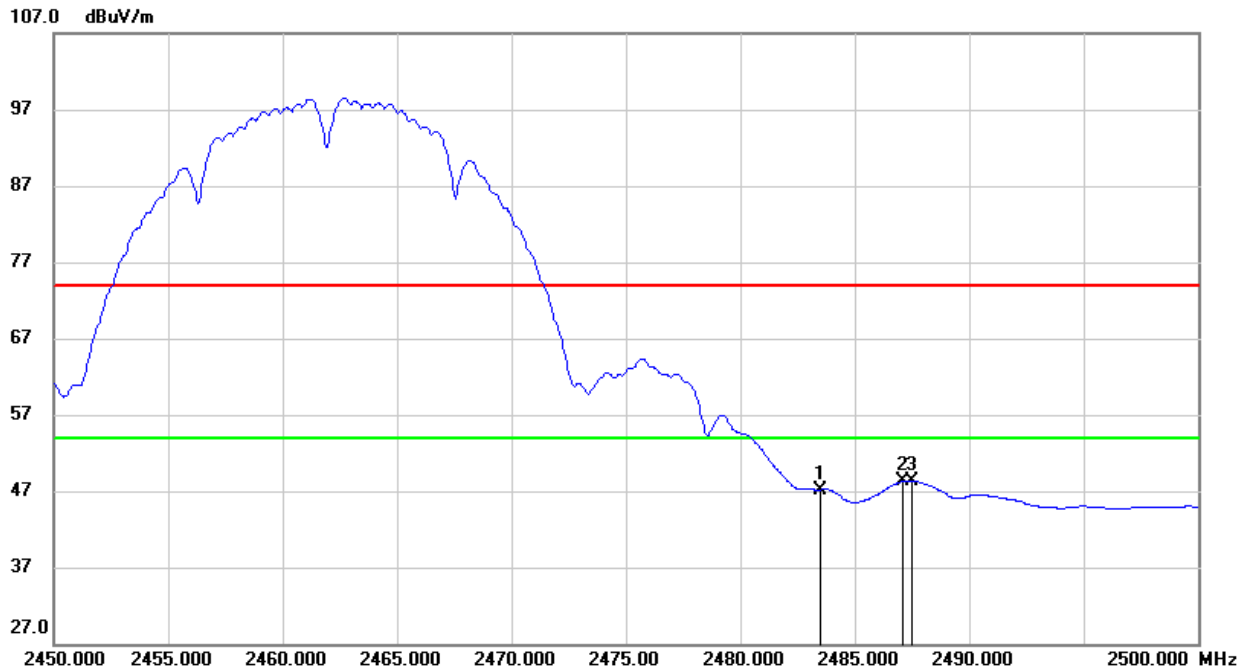


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	26.64	33.58	60.22	74.00	-13.78	peak
2	2487.100	27.54	33.61	61.15	74.00	-12.85	peak
3	2487.500	26.83	33.61	60.44	74.00	-13.56	peak

- 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. 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	13.61	33.58	47.19	54.00	-6.81	AVG
2	2487.100	14.61	33.61	48.22	54.00	-5.78	AVG
3	2487.500	14.75	33.61	48.36	54.00	-5.64	AVG

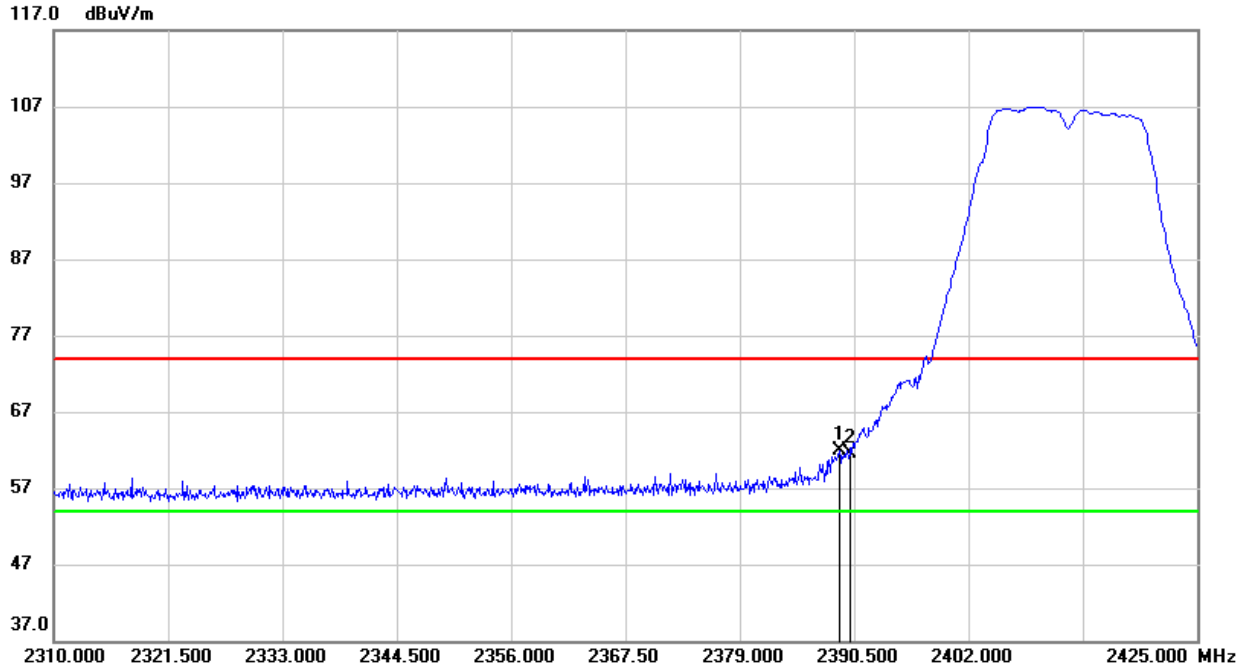
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (LOW CHANNEL, HORIZONTAL)

#### PEAK

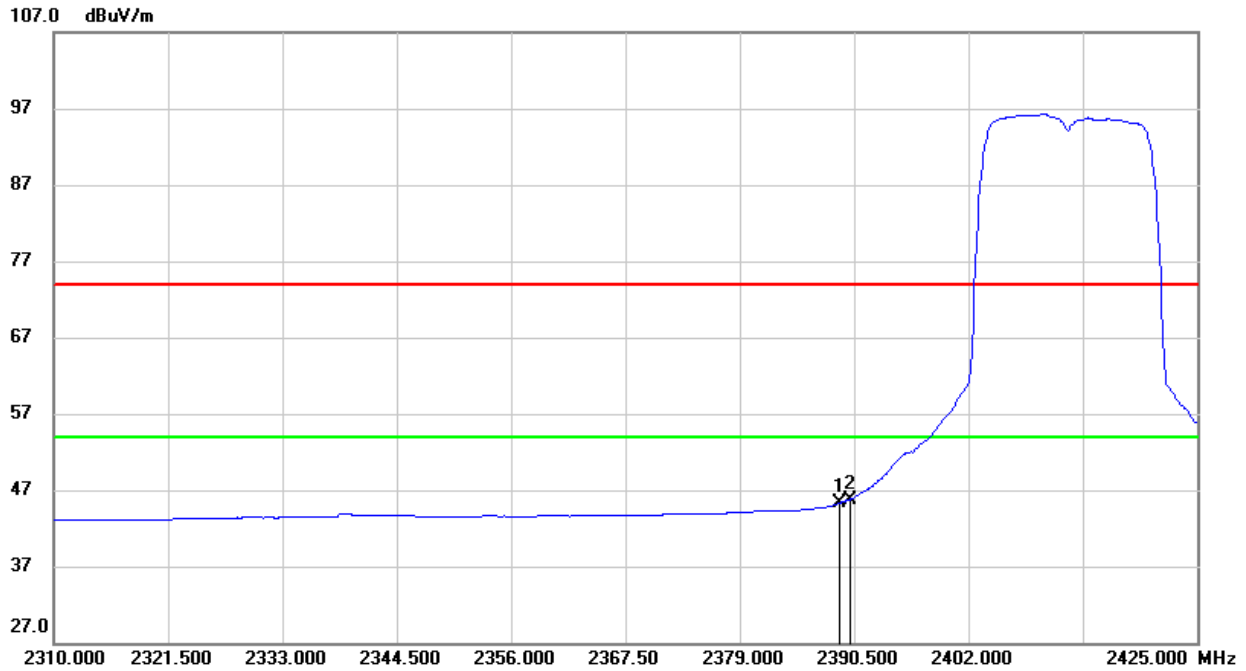


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.005	28.90	32.94	61.84	74.00	-12.16	peak
2	2390.000	28.63	32.94	61.57	74.00	-12.43	peak

- 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**



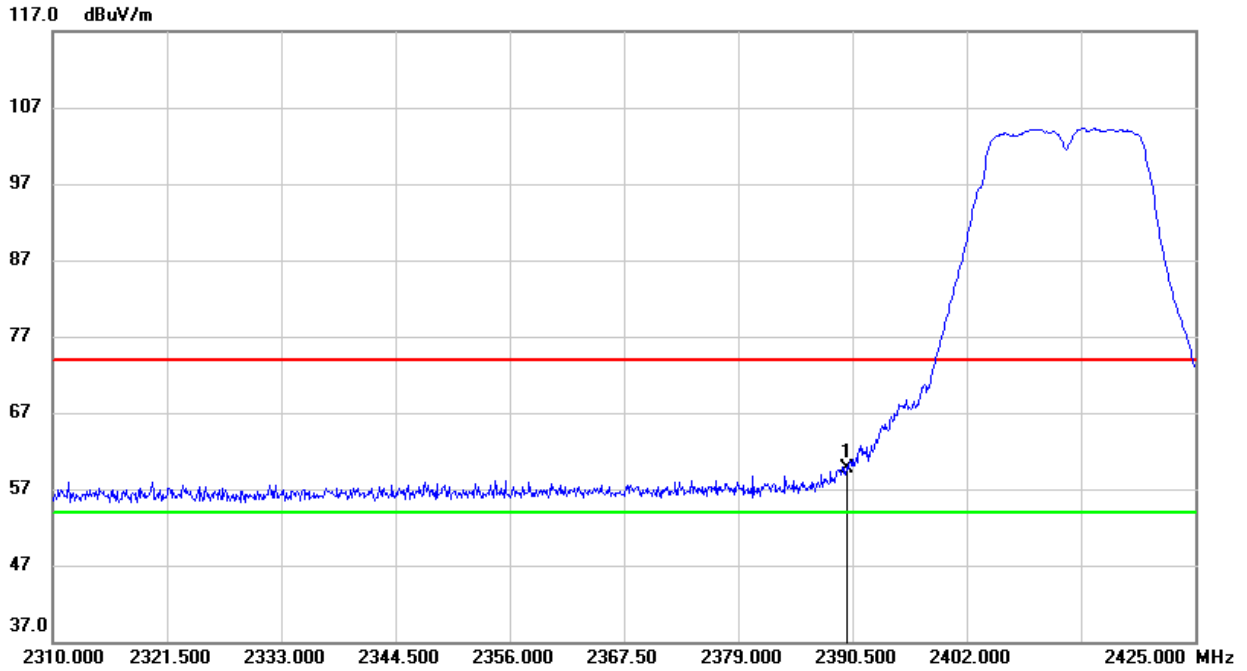
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.005	12.34	32.94	45.28	54.00	-8.72	AVG
2	2390.000	12.85	32.94	45.79	54.00	-8.21	AVG

- 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 (LOW CHANNEL, VERTICAL)**

**PEAK**

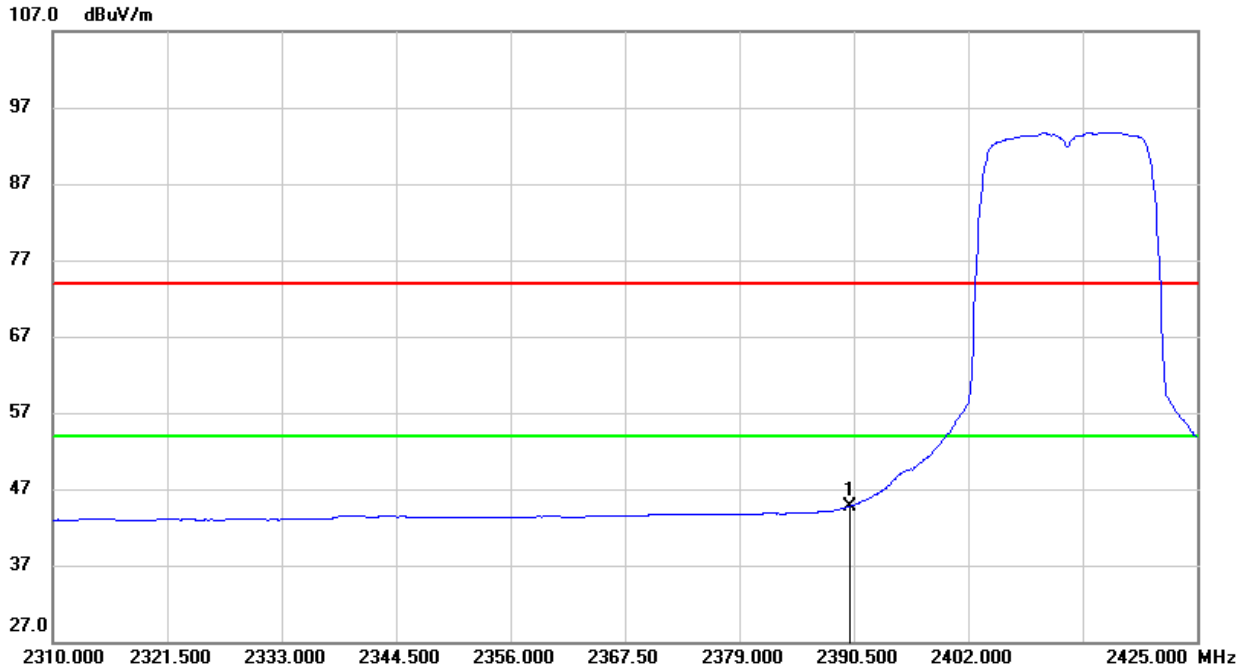


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	26.78	32.94	59.72	74.00	-14.28	peak

- 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	11.76	32.94	44.70	54.00	-9.30	AVG

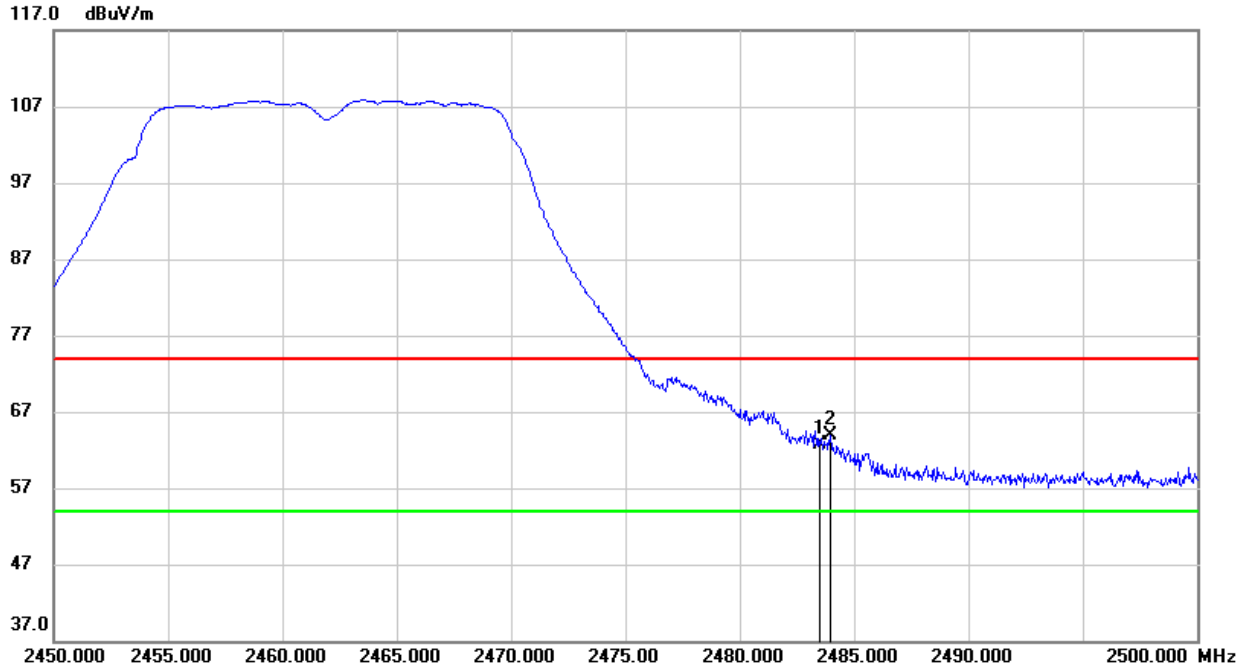
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (HIGH CHANNEL, HORIZONTAL)**

**PEAK**

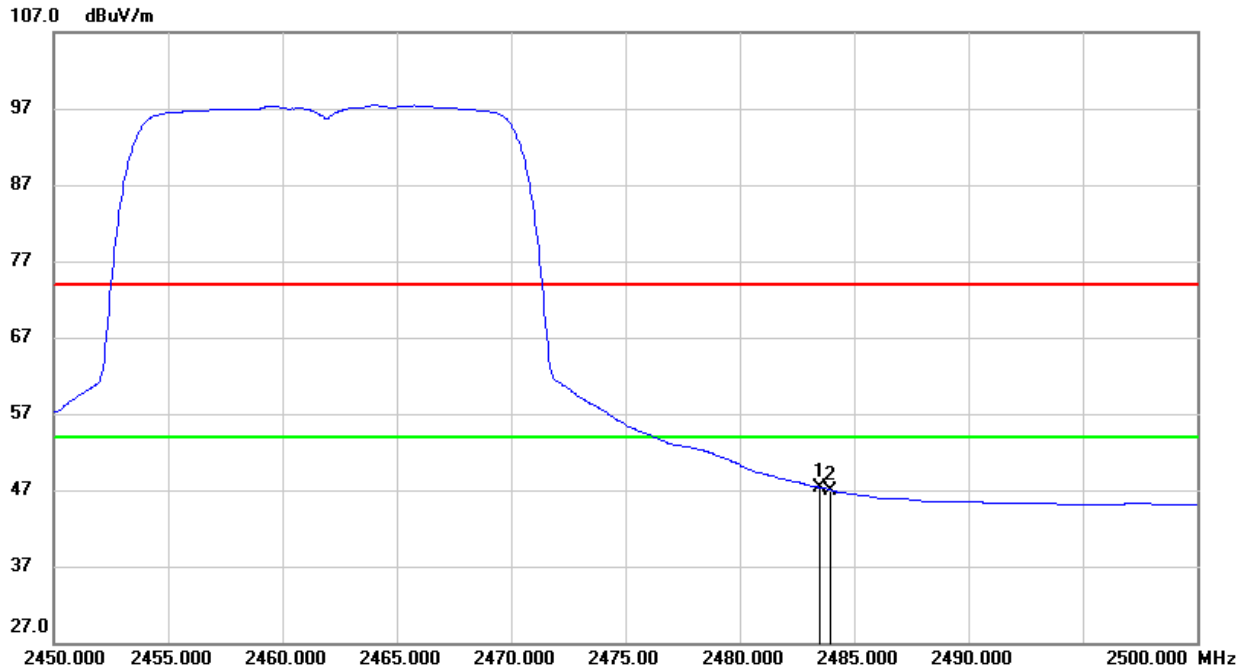


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	29.17	33.58	62.75	74.00	-11.25	peak
2	2483.950	30.40	33.58	63.98	74.00	-10.02	peak

- 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. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG**



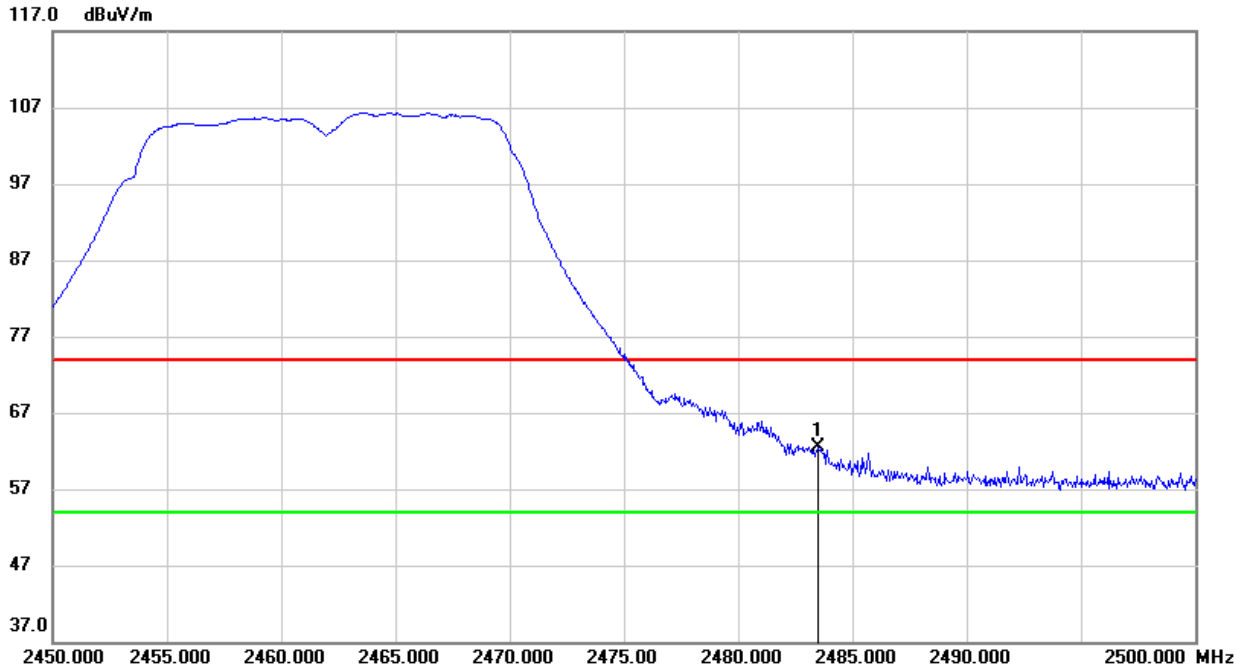
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.72	33.58	47.30	54.00	-6.70	AVG
2	2483.950	13.42	33.58	47.00	54.00	-7.00	AVG

- 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 (HIGH CHANNEL, VERTICAL)**

**PEAK**

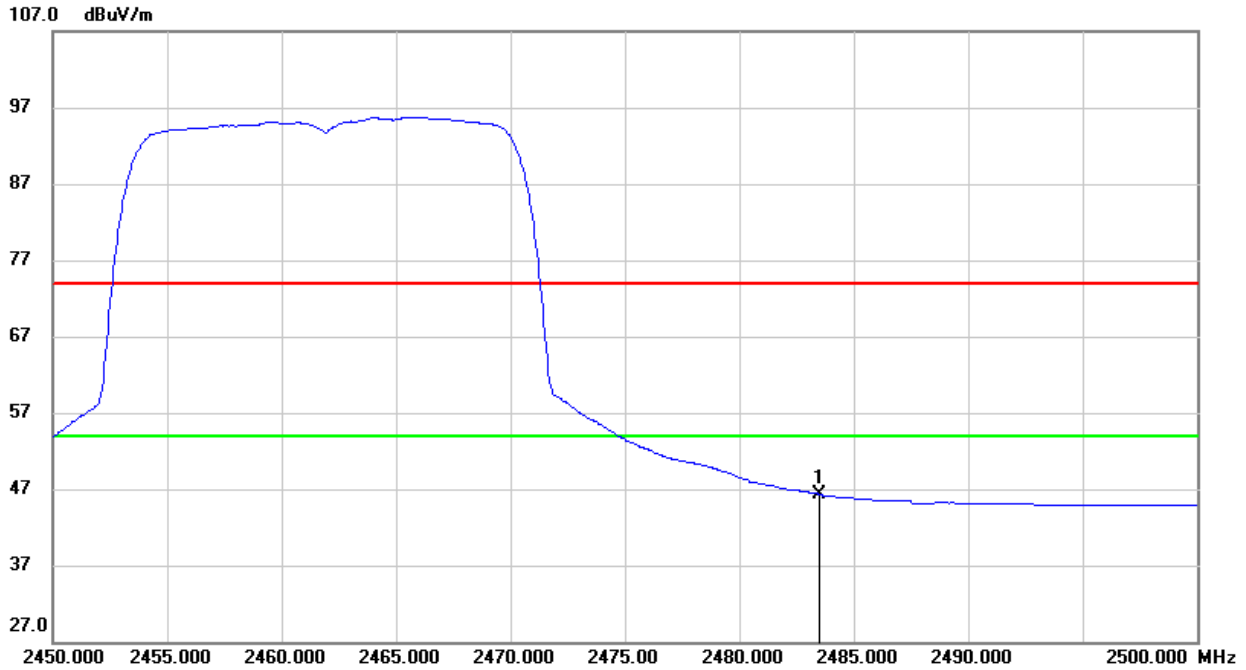


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	28.97	33.58	62.55	74.00	-11.45	peak

- 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	12.76	33.58	46.34	54.00	-7.66	AVG

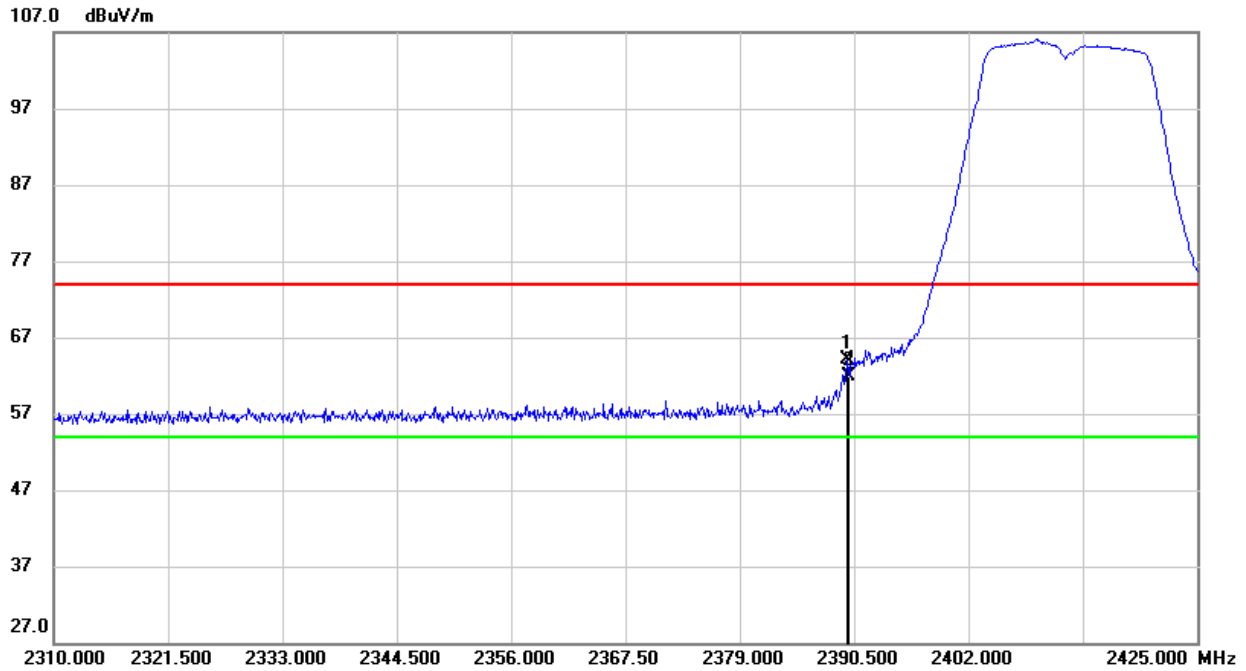
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (LOW CHANNEL, HORIZONTAL)

#### PEAK

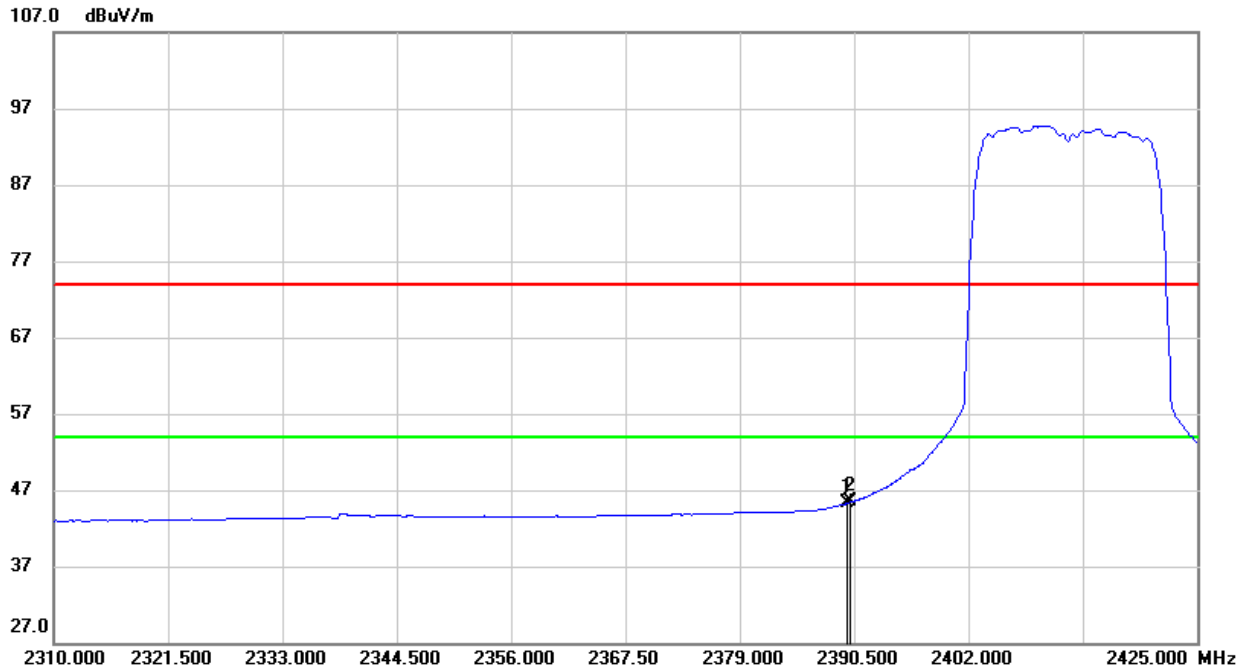


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.810	31.18	32.94	64.12	74.00	-9.88	peak
2	2390.000	28.93	32.94	61.87	74.00	-12.13	peak

- 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**



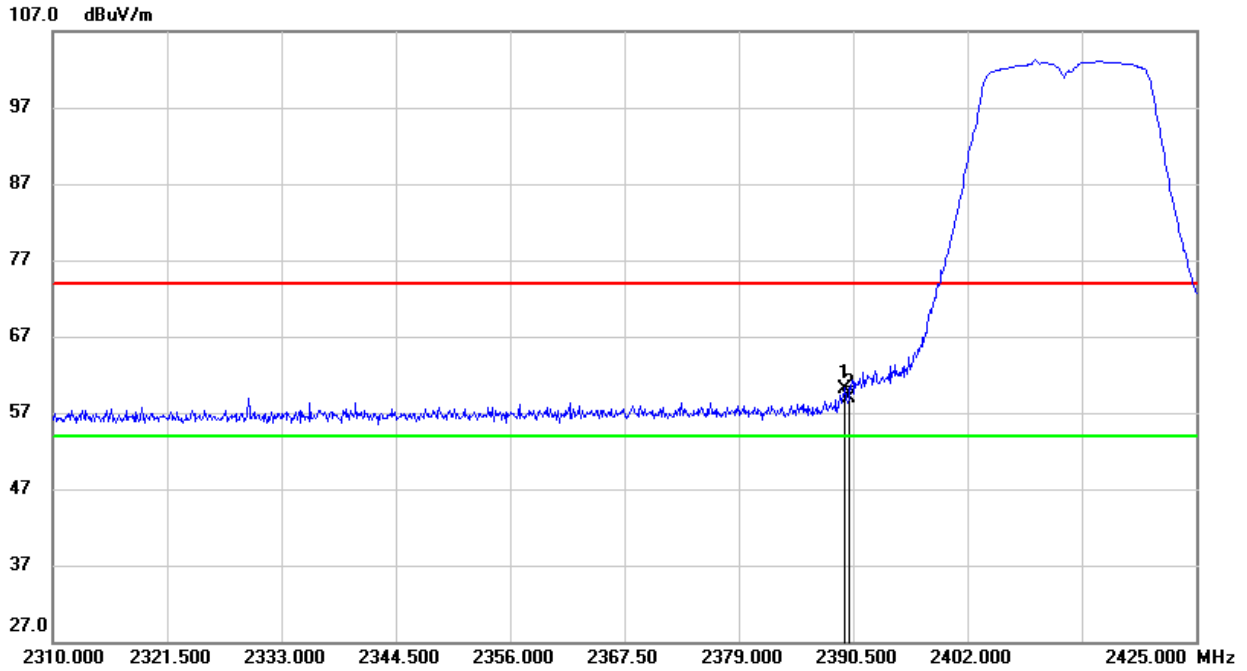
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.810	12.37	32.94	45.31	54.00	-8.69	AVG
2	2390.000	12.49	32.94	45.43	54.00	-8.57	AVG

- 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 (LOW CHANNEL, VERTICAL)**

**PEAK**

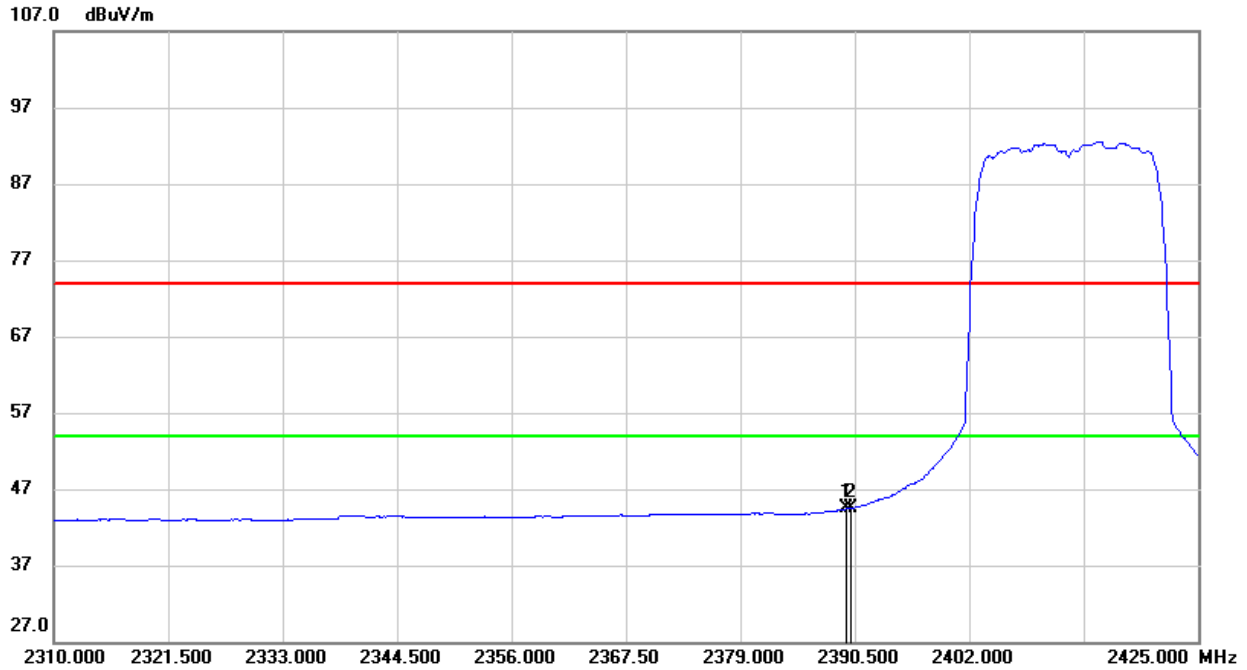


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.695	27.26	32.94	60.20	74.00	-13.80	peak
2	2390.000	25.89	32.94	58.83	74.00	-15.17	peak

- 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	2389.695	11.51	32.94	44.45	54.00	-9.55	AVG
2	2390.000	11.62	32.94	44.56	54.00	-9.44	AVG

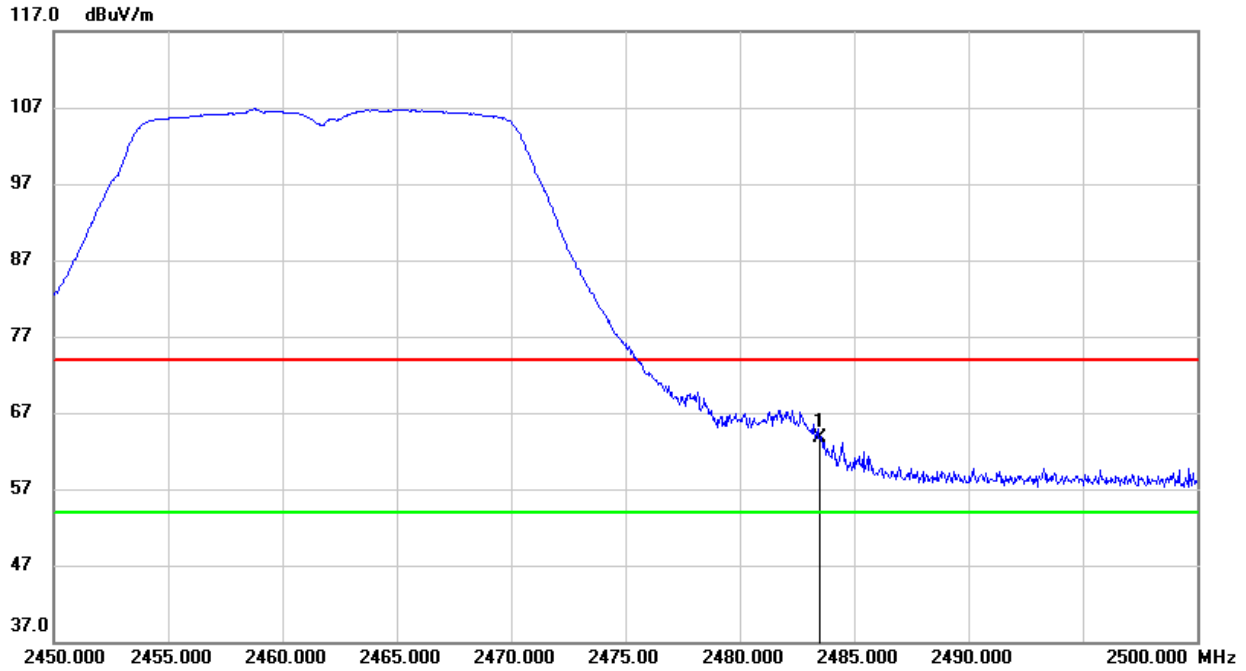
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (HIGH CHANNEL, HORIZONTAL)**

**PEAK**

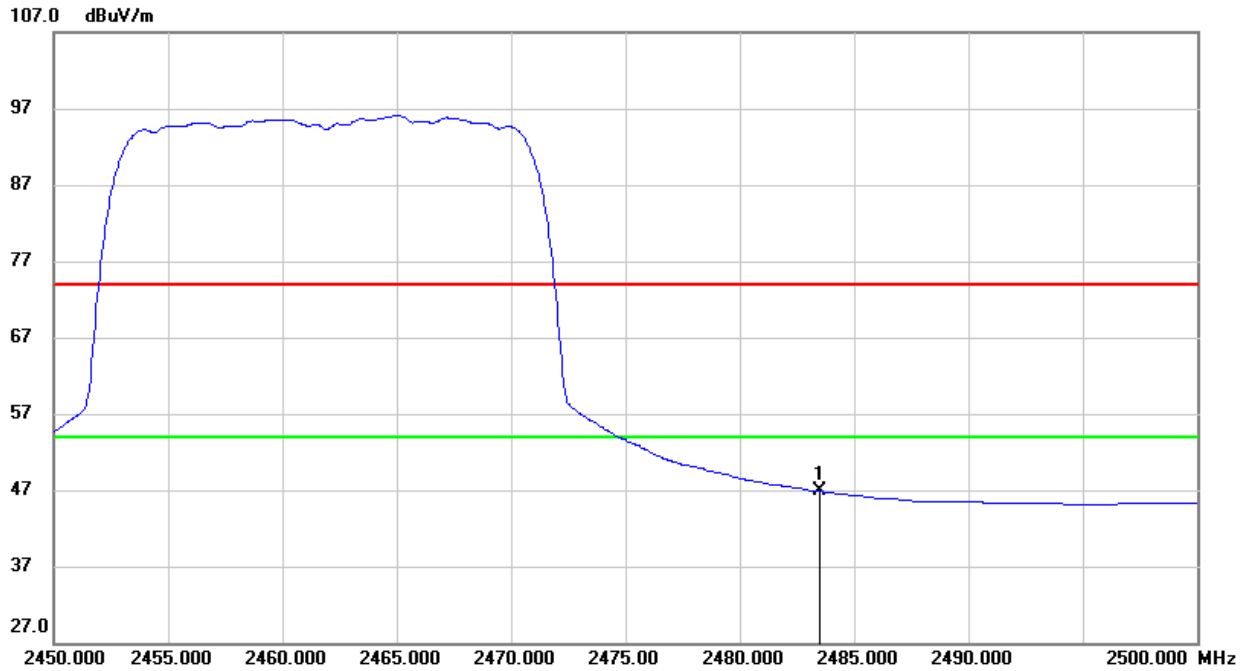


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	30.07	33.58	63.65	74.00	-10.35	peak

- 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**



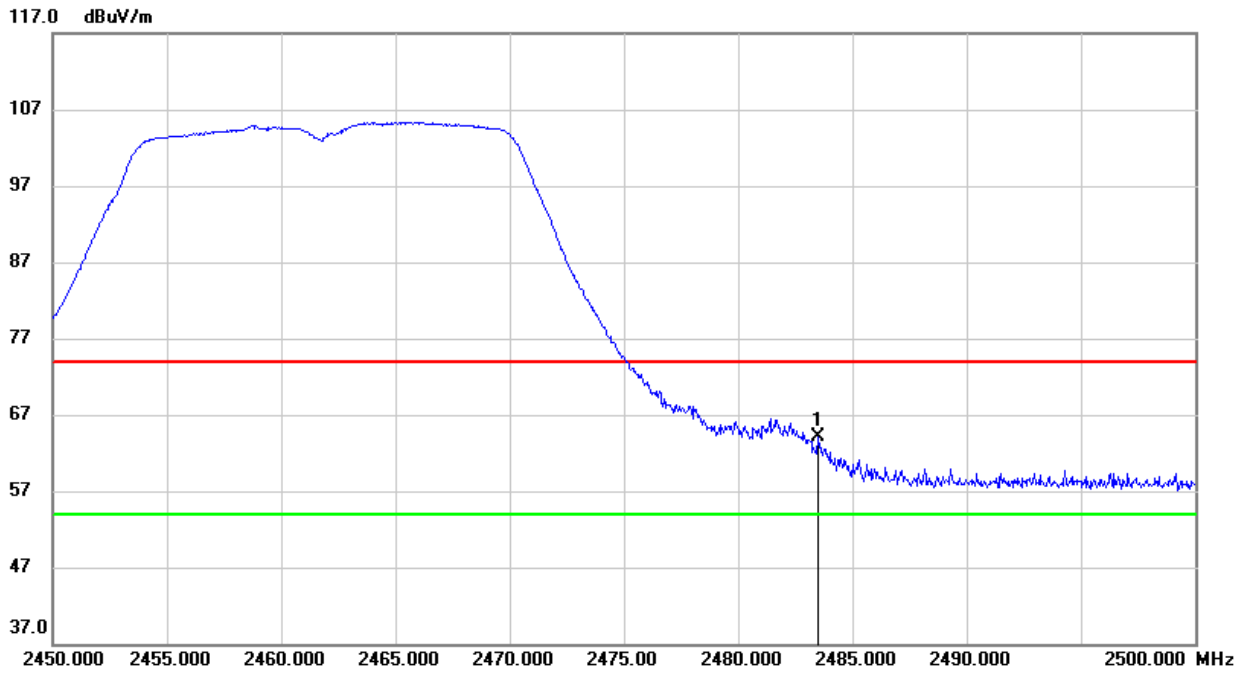
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.31	33.58	46.89	54.00	-7.11	AVG

- 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 (HIGH CHANNEL, VERTICAL)**

**PEAK**

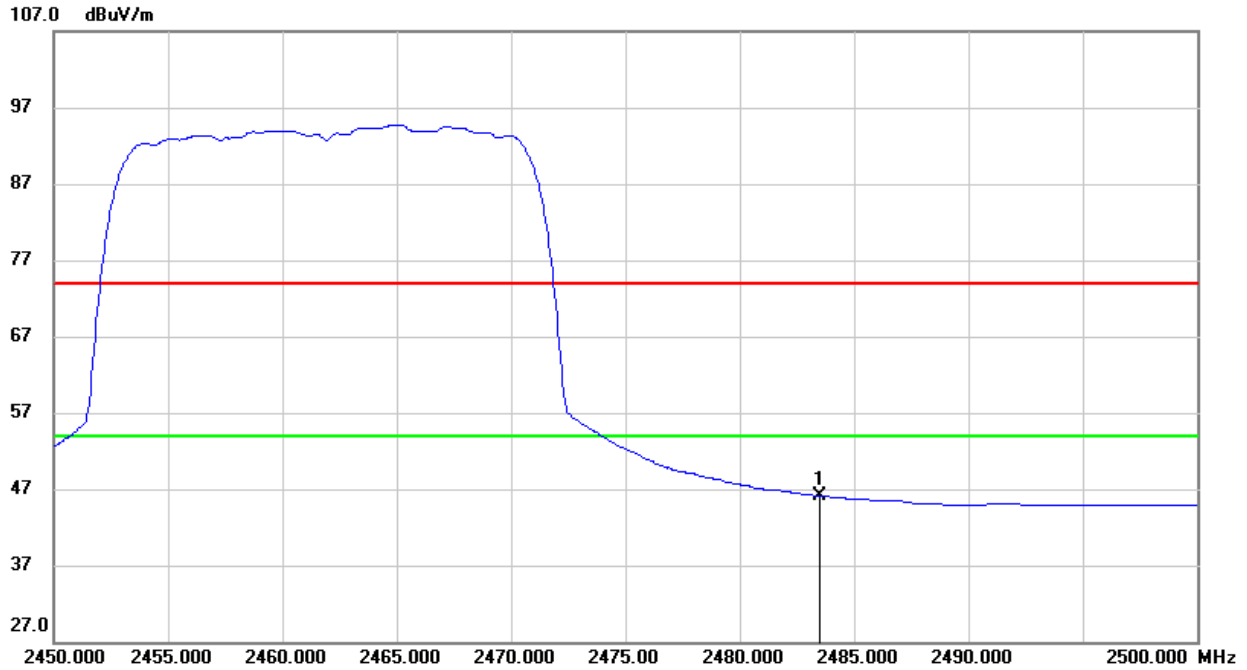


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	30.46	33.58	64.04	74.00	-9.96	peak

- 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	12.56	33.58	46.14	54.00	-7.86	AVG

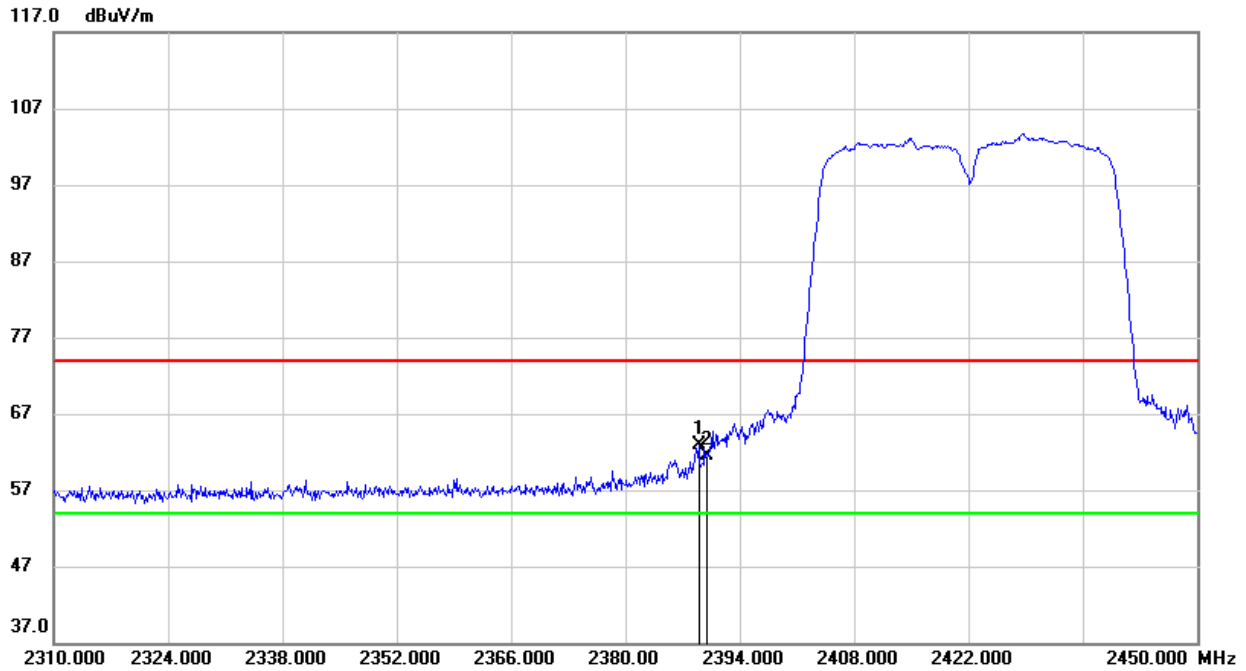
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.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



8.1.4. 802.11n HT40 MODE

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

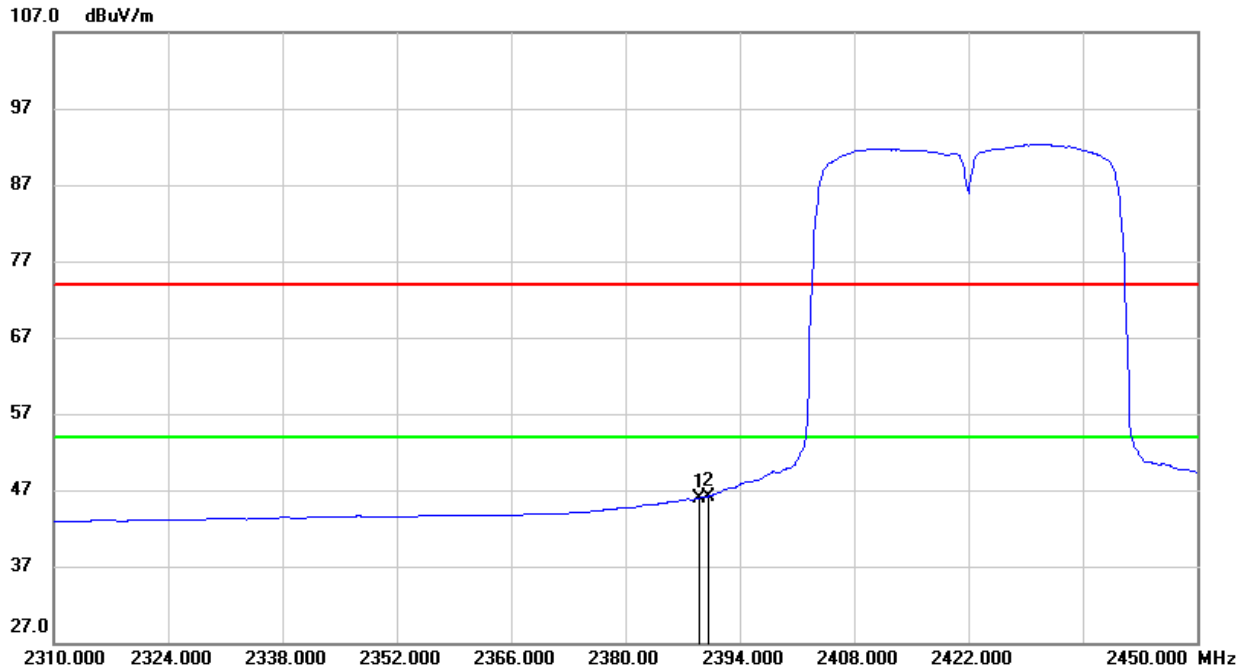


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.960	29.97	32.94	62.91	74.00	-11.09	peak
2	2390.000	28.59	32.94	61.53	74.00	-12.47	peak

- 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**



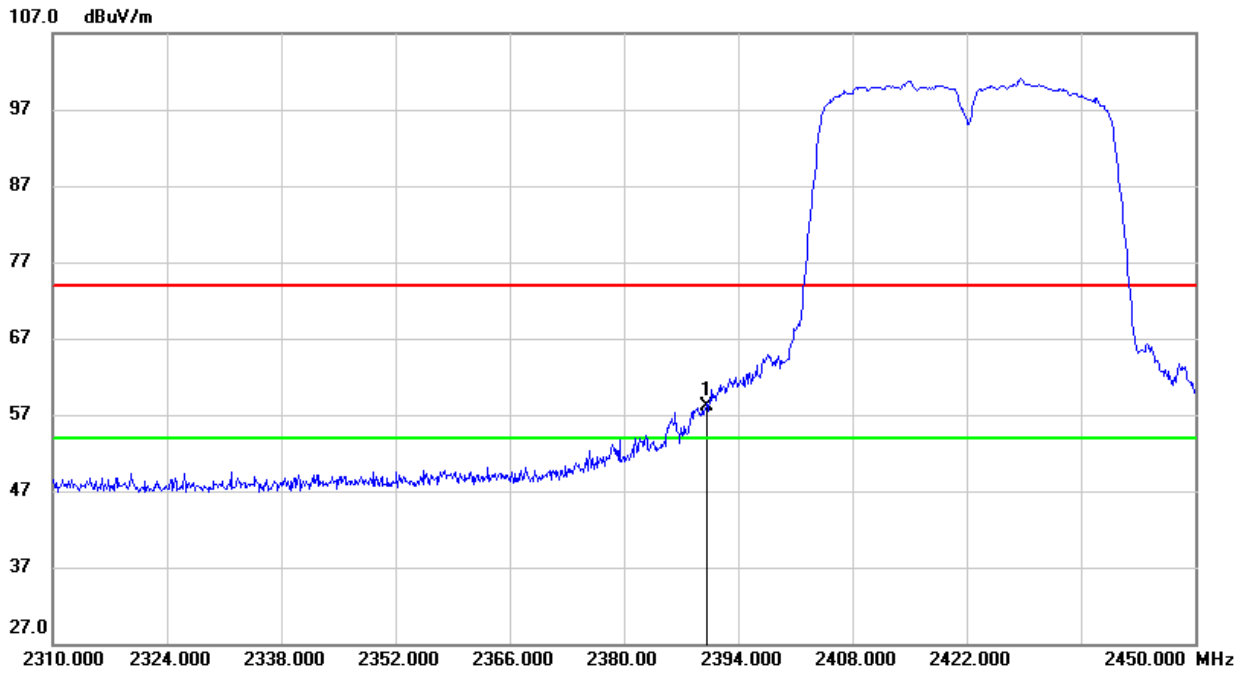
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.960	13.04	32.94	45.98	54.00	-8.02	AVG
2	2390.000	13.24	32.94	46.18	54.00	-7.82	AVG

- 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 (LOW CHANNEL, VERTICAL)**

**PEAK**

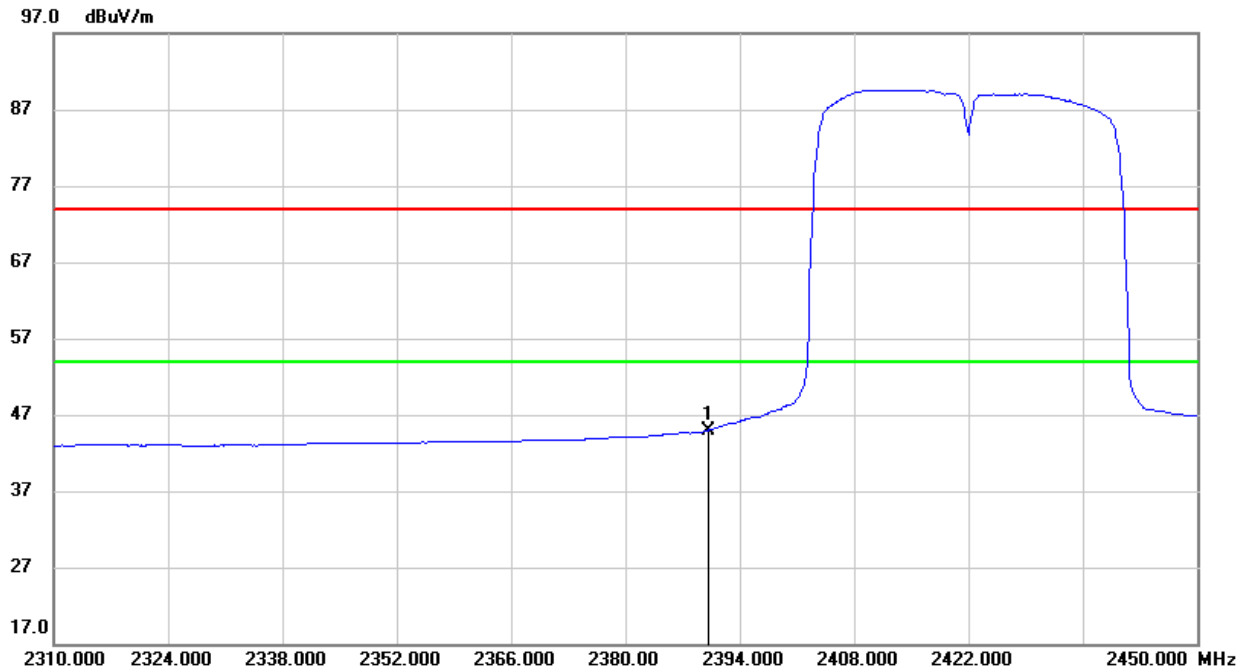


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	25.18	32.94	58.12	74.00	-15.88	peak

- 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. 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	12.03	32.94	44.97	54.00	-9.03	AVG

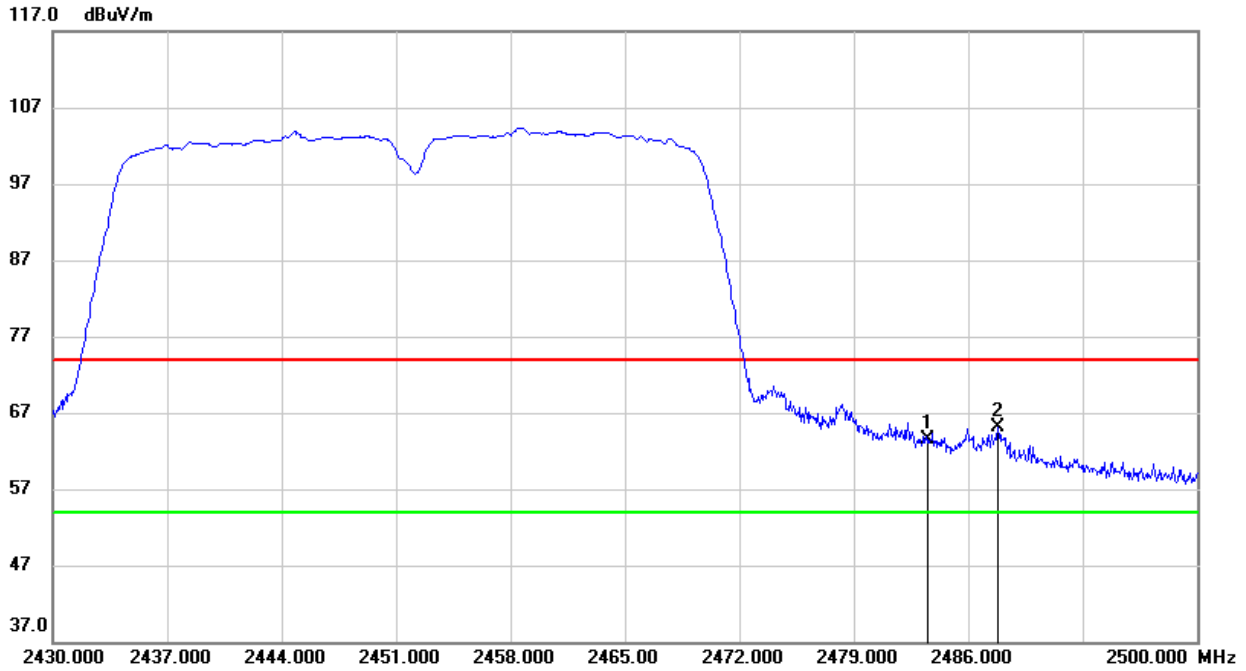
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (HIGH CHANNEL, HORIZONTAL)**

**PEAK**

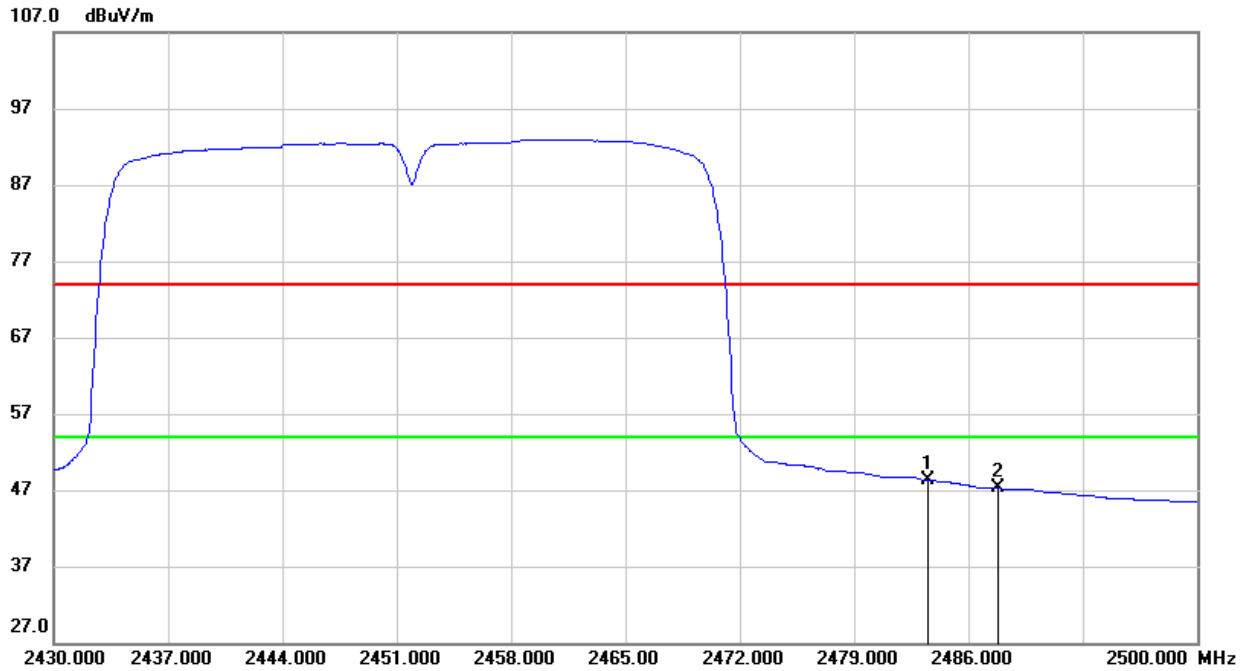


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	29.85	33.58	63.43	74.00	-10.57	peak
2	2487.820	31.41	33.61	65.02	74.00	-8.98	peak

- 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**



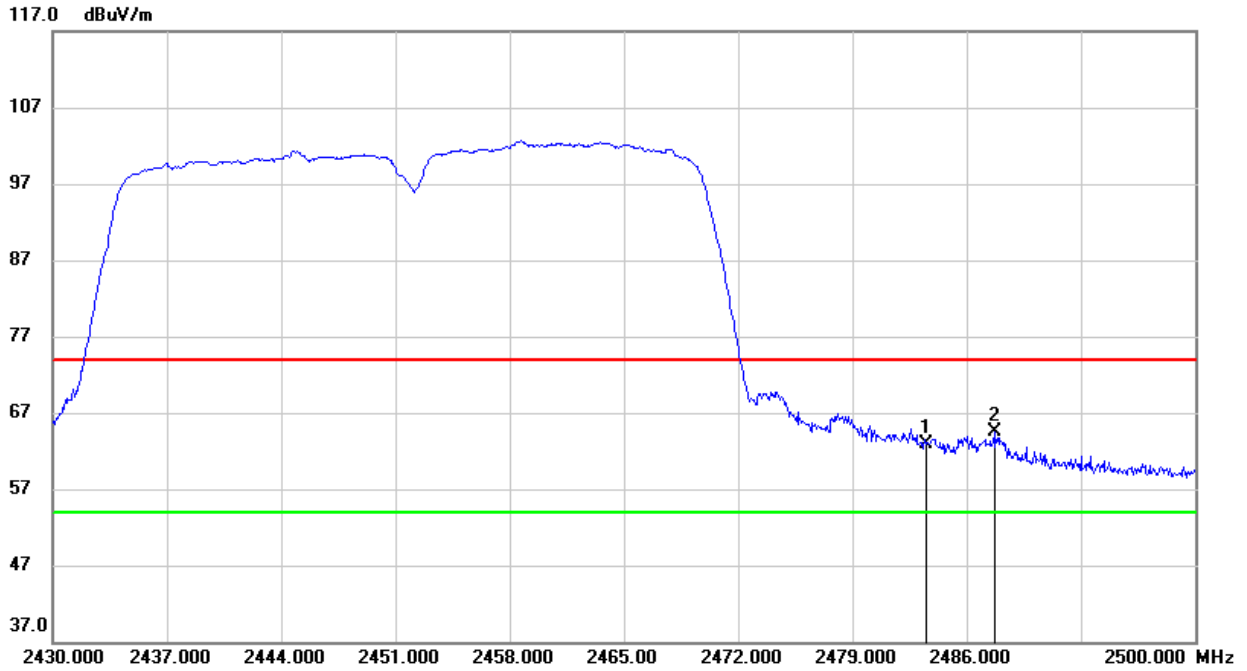
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	14.78	33.58	48.36	54.00	-5.64	AVG
2	2487.820	13.64	33.61	47.25	54.00	-6.75	AVG

- 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 (HIGH CHANNEL, VERTICAL)**

**PEAK**

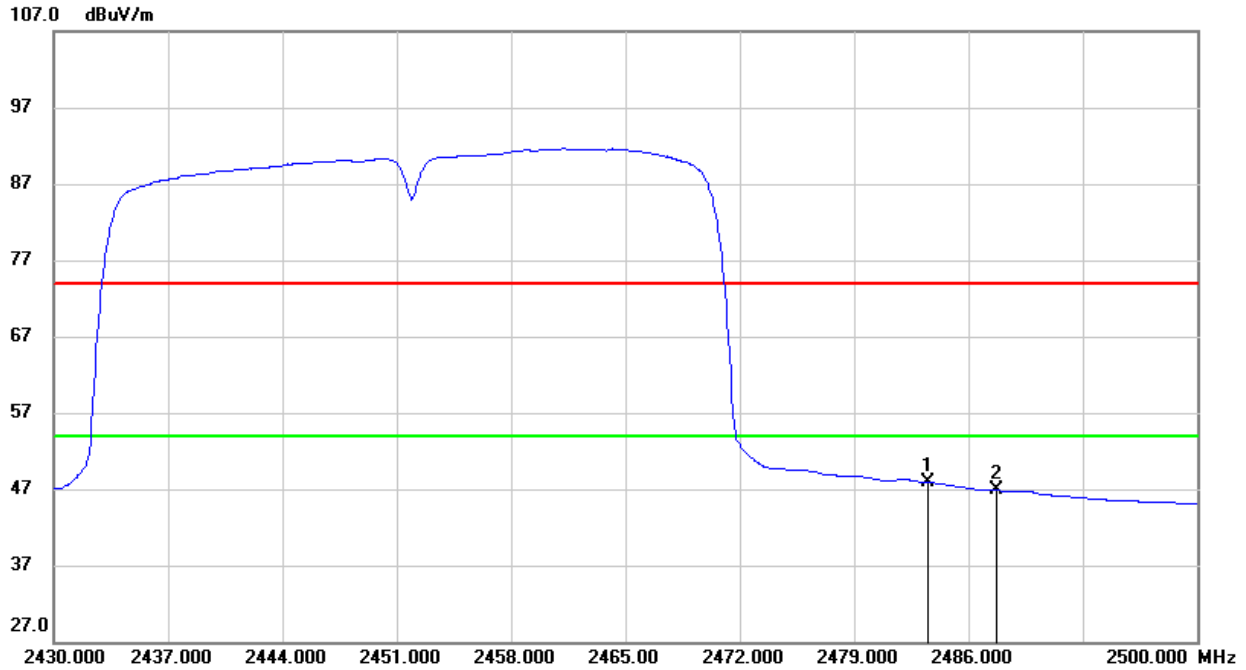


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	29.27	33.58	62.85	74.00	-11.15	peak
2	2487.680	30.89	33.61	64.50	74.00	-9.50	peak

- 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	14.23	33.58	47.81	54.00	-6.19	AVG
2	2487.680	13.23	33.61	46.84	54.00	-7.16	AVG

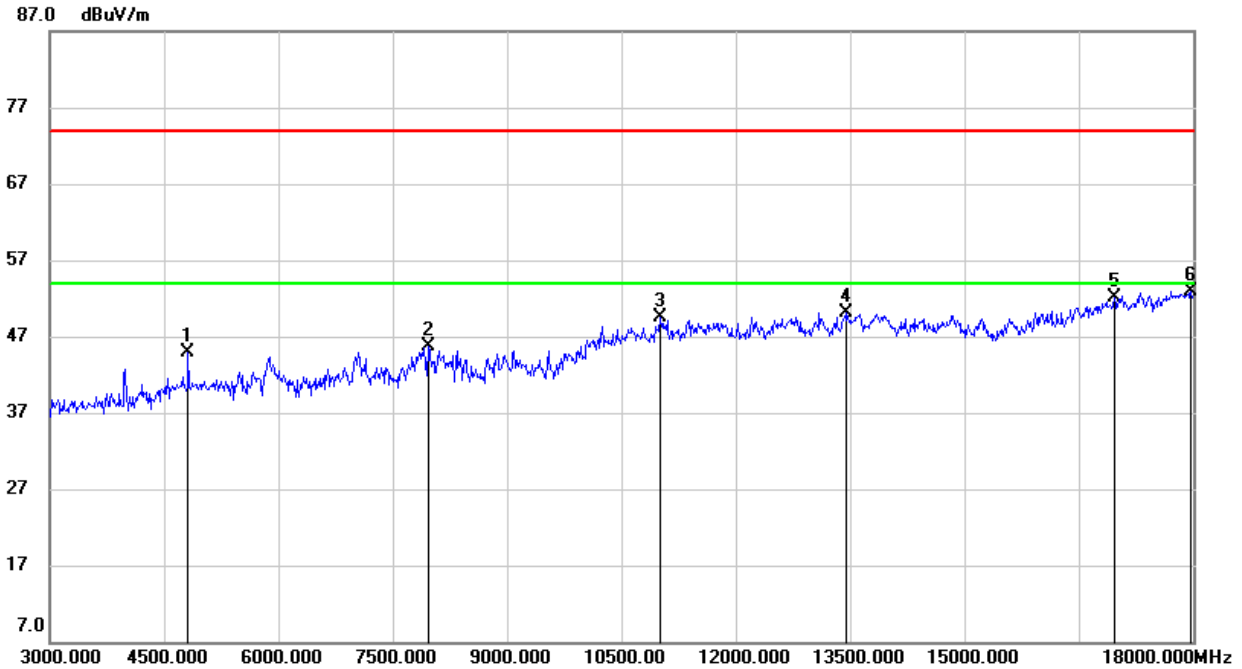
- Note:
1. Measurement = Reading Level + Correct Factor.
  2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
  3. Peak: Peak detector.
  4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
  5. For the transmitting duration, please refer to clause 7.1.
  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 (LOW CHANNEL, HORIZONTAL)

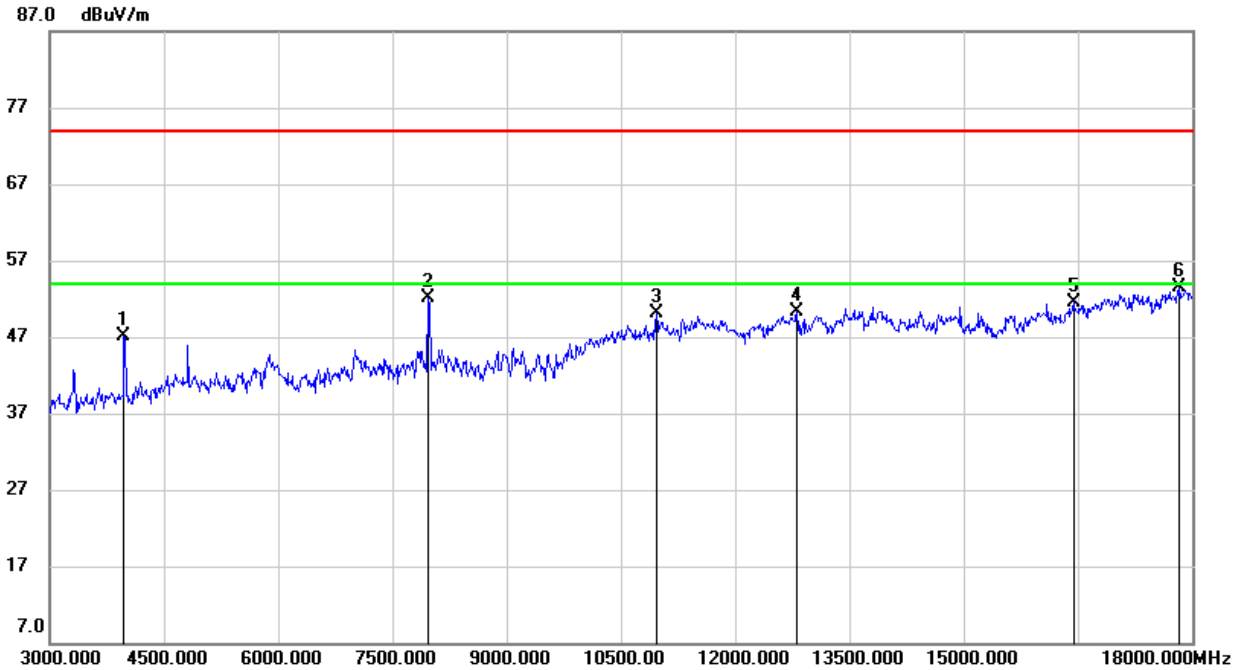


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	44.39	0.51	44.90	74.00	-29.10	peak
2	7965.000	38.77	7.00	45.77	74.00	-28.23	peak
3	11010.000	36.84	12.63	49.47	74.00	-24.53	peak
4	13455.000	34.16	15.93	50.09	74.00	-23.91	peak
5	16965.000	31.81	20.25	52.06	74.00	-21.94	peak
6	17970.000	29.51	23.42	52.93	74.00	-21.07	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 (LOW CHANNEL, VERTICAL)**

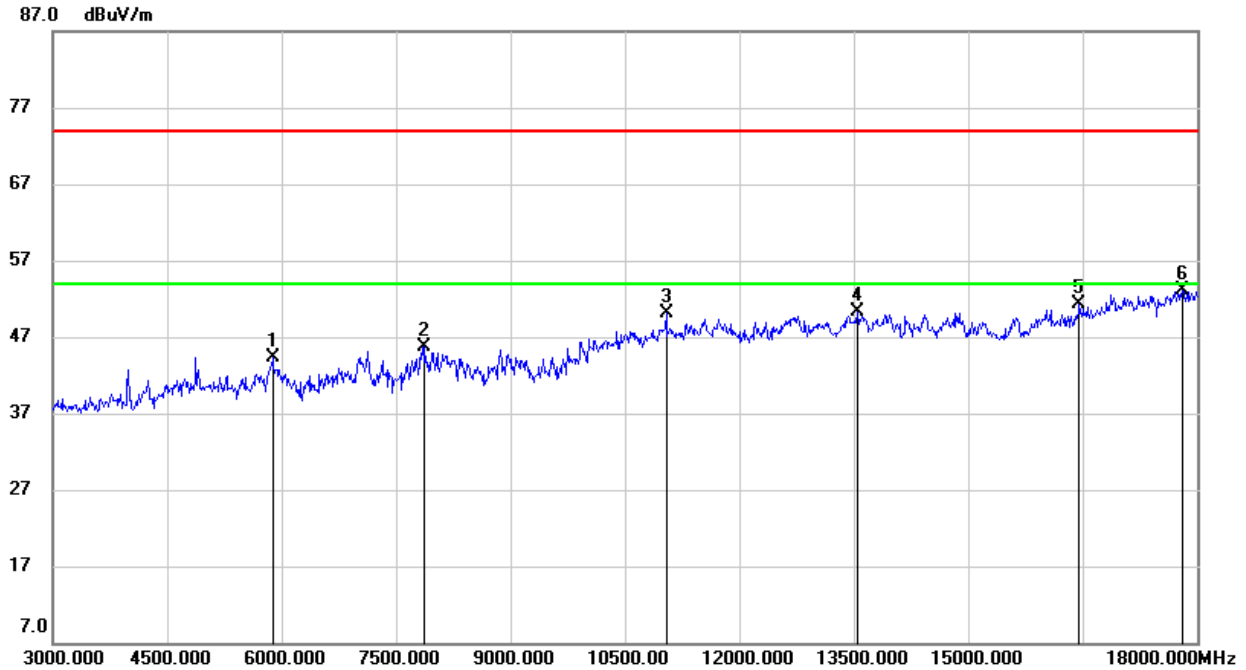


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	49.97	-2.90	47.07	74.00	-26.93	peak
2	7965.000	45.12	7.00	52.12	74.00	-21.88	peak
3	10965.000	37.72	12.32	50.04	74.00	-23.96	peak
4	12810.000	34.73	15.59	50.32	74.00	-23.68	peak
5	16440.000	32.66	18.94	51.60	74.00	-22.40	peak
6	17835.000	30.13	23.31	53.44	74.00	-20.56	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

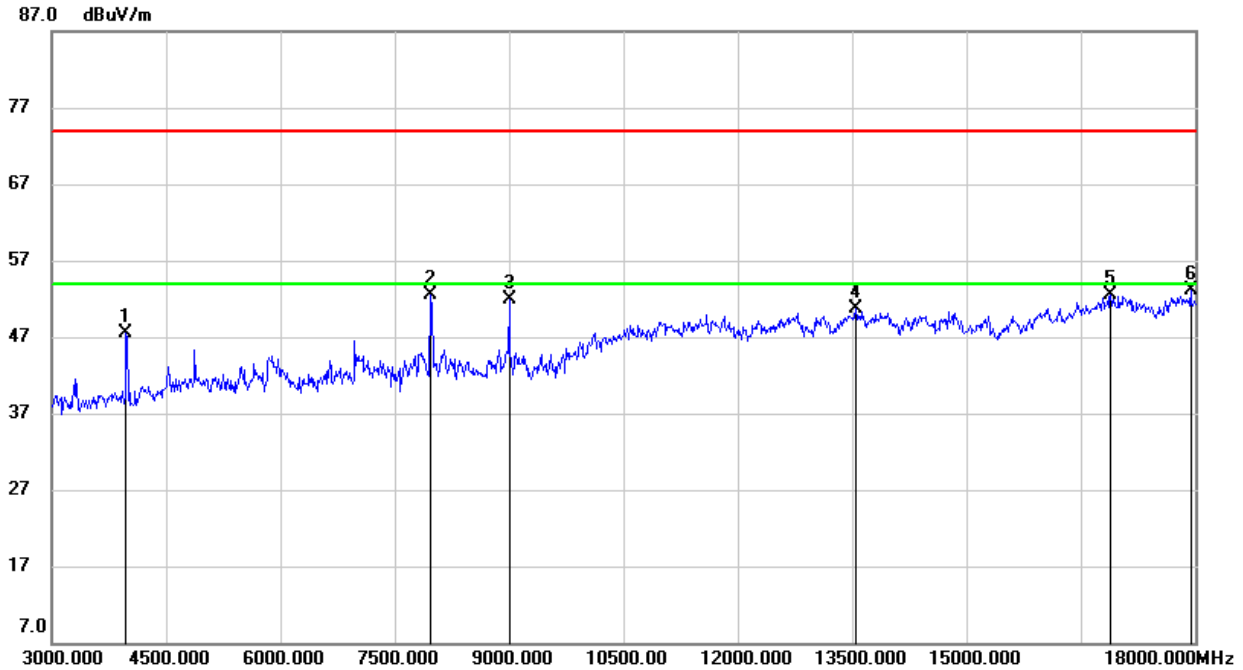


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5880.000	39.77	4.59	44.36	74.00	-29.64	peak
2	7875.000	38.30	7.40	45.70	74.00	-28.30	peak
3	11040.000	37.47	12.61	50.08	74.00	-23.92	peak
4	13545.000	34.39	15.89	50.28	74.00	-23.72	peak
5	16455.000	32.36	19.00	51.36	74.00	-22.64	peak
6	17805.000	29.87	23.31	53.18	74.00	-20.82	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 (MID CHANNEL, VERTICAL)**



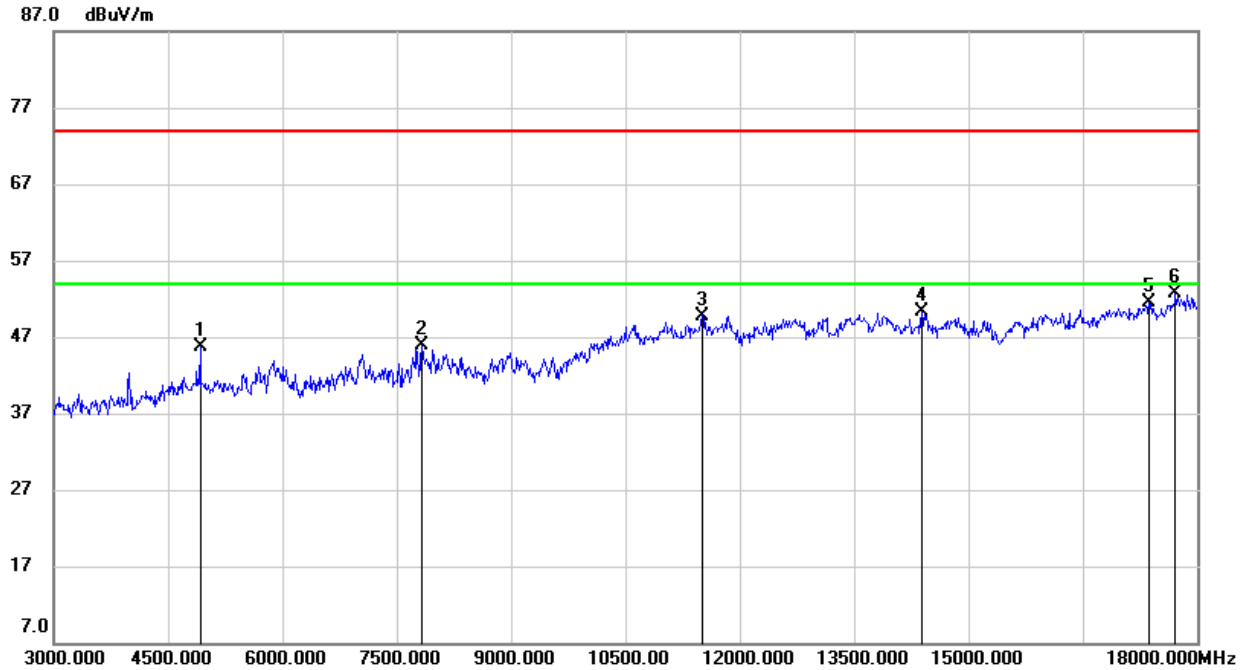
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	50.42	-2.90	47.52	74.00	-26.48	peak
2	7965.000	45.59	7.00	52.59	74.00	-21.41	peak
3	9000.000	42.67	9.28	51.95	74.00	-22.05	peak
4	13545.000	34.90	15.89	50.79	74.00	-23.21	peak
5	16890.000	32.46	19.97	52.43	74.00	-21.57	peak
6	17940.000	29.66	23.39	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 (HIGH CHANNEL, HORIZONTAL)**

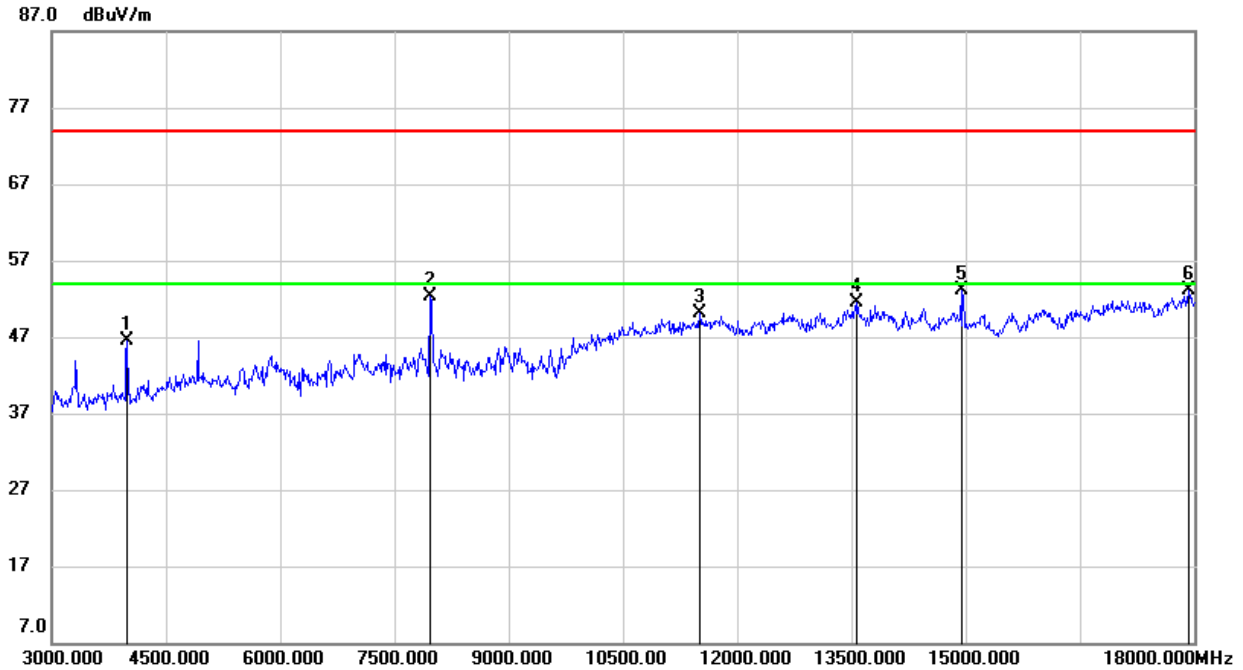


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	44.71	0.96	45.67	74.00	-28.33	peak
2	7830.000	38.10	7.72	45.82	74.00	-28.18	peak
3	11505.000	36.38	13.42	49.80	74.00	-24.20	peak
4	14385.000	33.98	16.33	50.31	74.00	-23.69	peak
5	17370.000	30.04	21.52	51.56	74.00	-22.44	peak
6	17715.000	30.12	22.56	52.68	74.00	-21.32	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. 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 (HIGH CHANNEL, VERTICAL)**



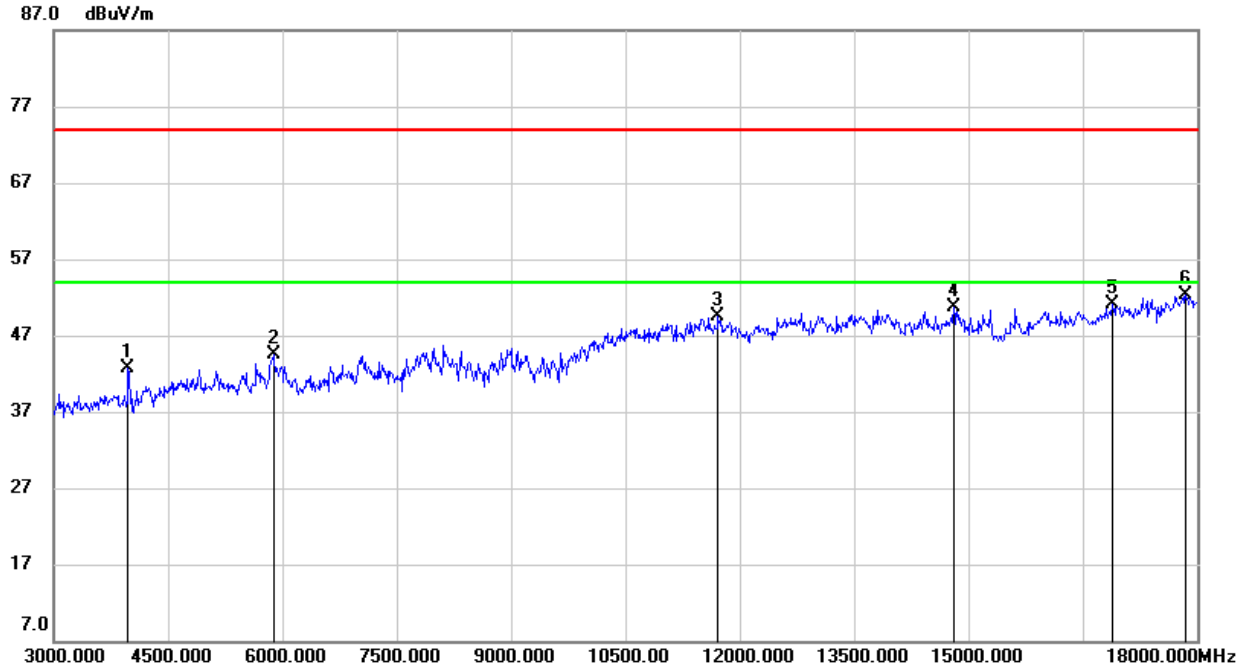
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	49.38	-2.89	46.49	74.00	-27.51	peak
2	7965.000	45.35	7.00	52.35	74.00	-21.65	peak
3	11505.000	36.64	13.42	50.06	74.00	-23.94	peak
4	13575.000	35.48	15.97	51.45	74.00	-22.55	peak
5	14940.000	37.03	16.00	53.03	74.00	-20.97	peak
6	17925.000	29.69	23.37	53.06	74.00	-20.94	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 (LOW CHANNEL, HORIZONTAL)

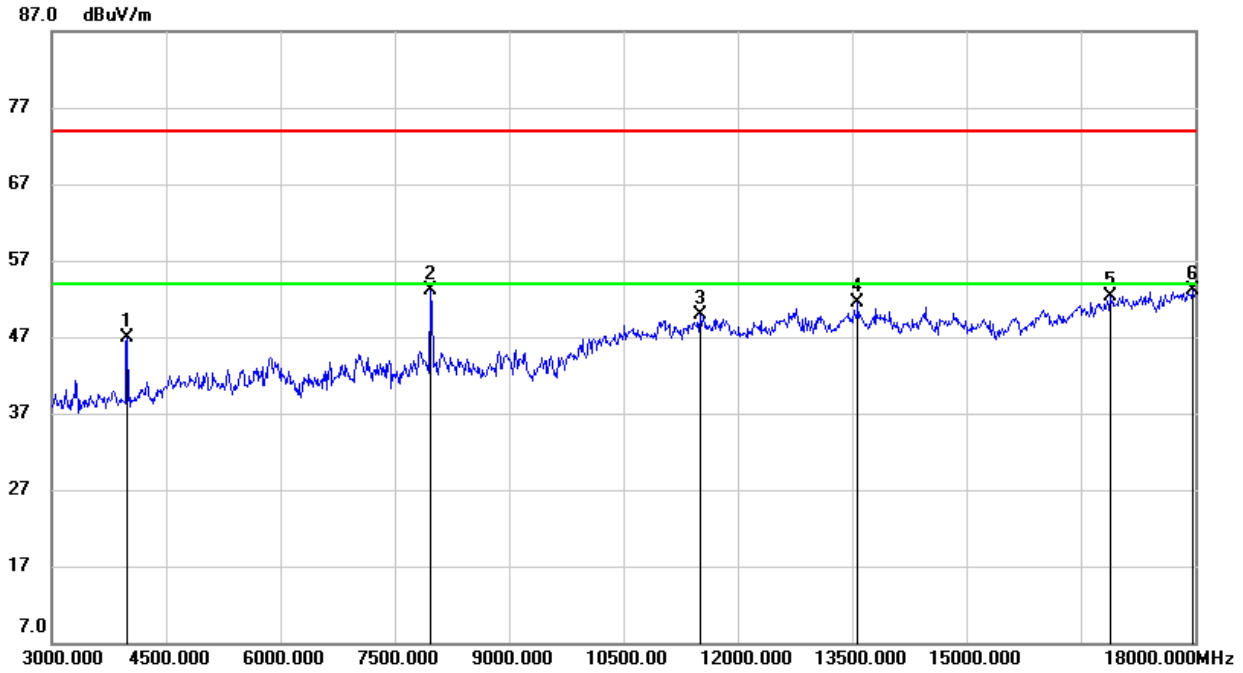


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	45.51	-2.90	42.61	74.00	-31.39	peak
2	5880.000	39.88	4.59	44.47	74.00	-29.53	peak
3	11715.000	36.42	12.99	49.41	74.00	-24.59	peak
4	14805.000	34.72	15.92	50.64	74.00	-23.36	peak
5	16890.000	31.12	19.97	51.09	74.00	-22.91	peak
6	17850.000	28.97	23.32	52.29	74.00	-21.71	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 (LOW CHANNEL, VERTICAL)**

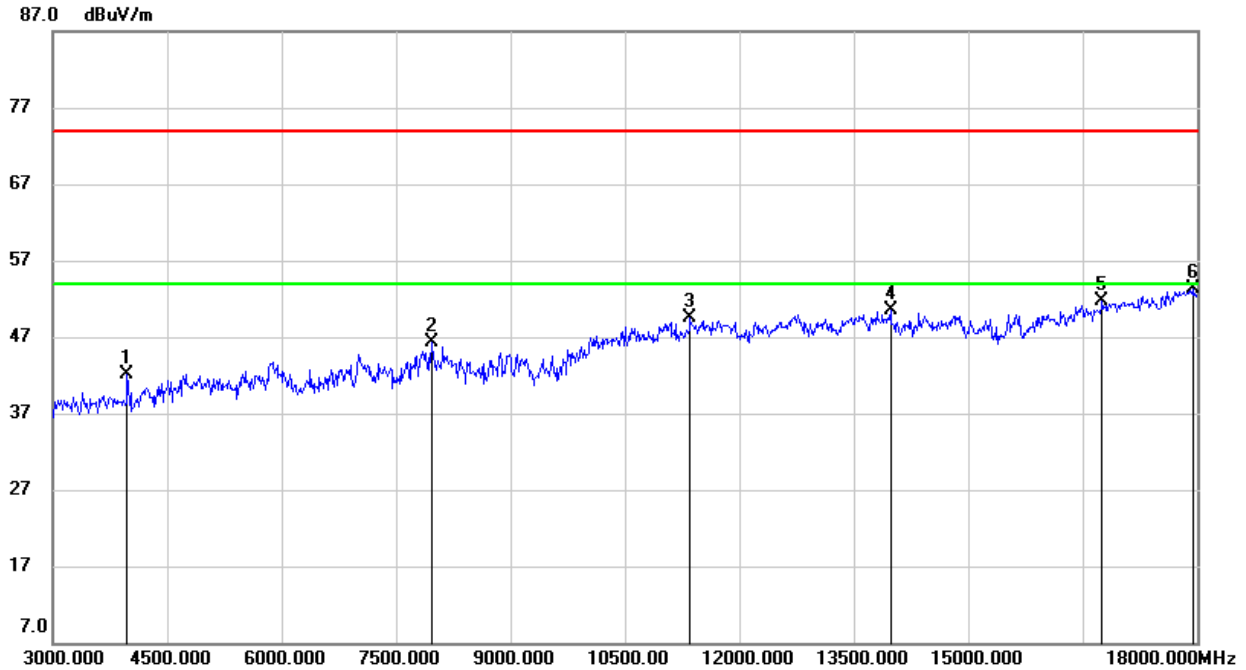


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	49.73	-2.89	46.84	74.00	-27.16	peak
2	7965.000	46.08	7.00	53.08	74.00	-20.92	peak
3	11505.000	36.52	13.42	49.94	74.00	-24.06	peak
4	13575.000	35.58	15.97	51.55	74.00	-22.45	peak
5	16890.000	32.37	19.97	52.34	74.00	-21.66	peak
6	17970.000	29.75	23.42	53.17	74.00	-20.83	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 (MID CHANNEL, HORIZONTAL)**

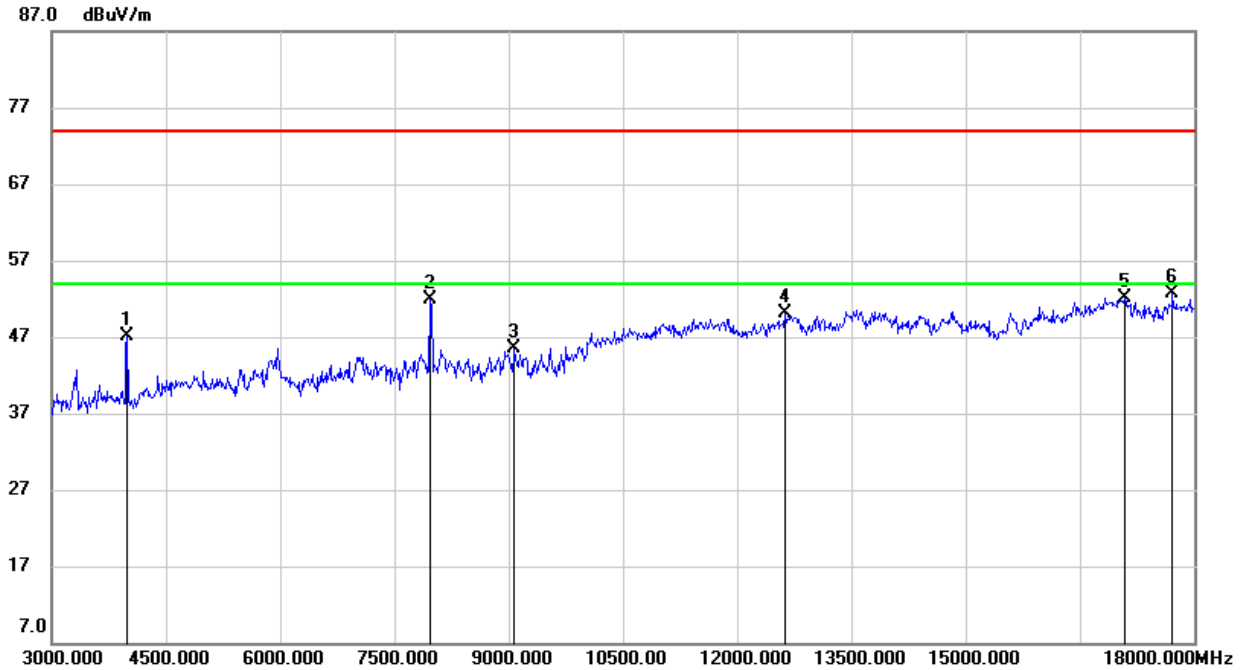


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	44.96	-2.90	42.06	74.00	-31.94	peak
2	7965.000	39.31	7.00	46.31	74.00	-27.69	peak
3	11355.000	37.01	12.48	49.49	74.00	-24.51	peak
4	13980.000	34.46	16.07	50.53	74.00	-23.47	peak
5	16755.000	31.78	19.94	51.72	74.00	-22.28	peak
6	17940.000	29.84	23.39	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.



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

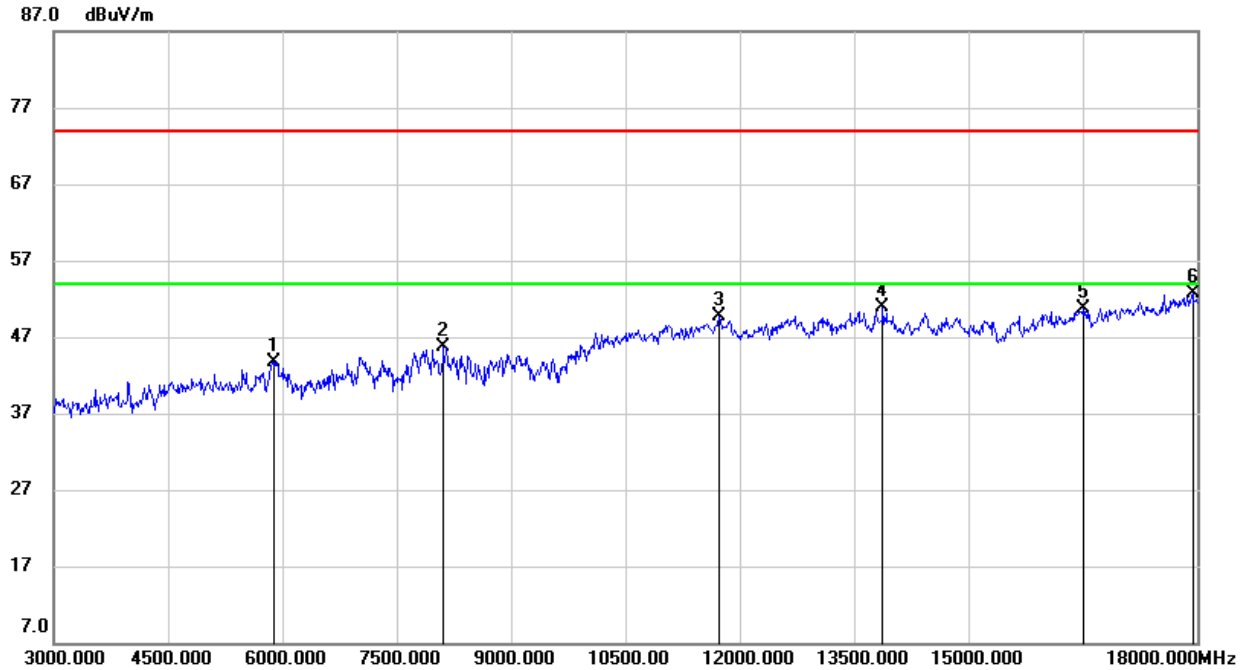


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	50.08	-2.89	47.19	74.00	-26.81	peak
2	7965.000	44.84	7.00	51.84	74.00	-22.16	peak
3	9075.000	36.25	9.28	45.53	74.00	-28.47	peak
4	12630.000	35.95	14.08	50.03	74.00	-23.97	peak
5	17085.000	31.59	20.60	52.19	74.00	-21.81	peak
6	17715.000	30.13	22.56	52.69	74.00	-21.31	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 (HIGH CHANNEL, HORIZONTAL)**

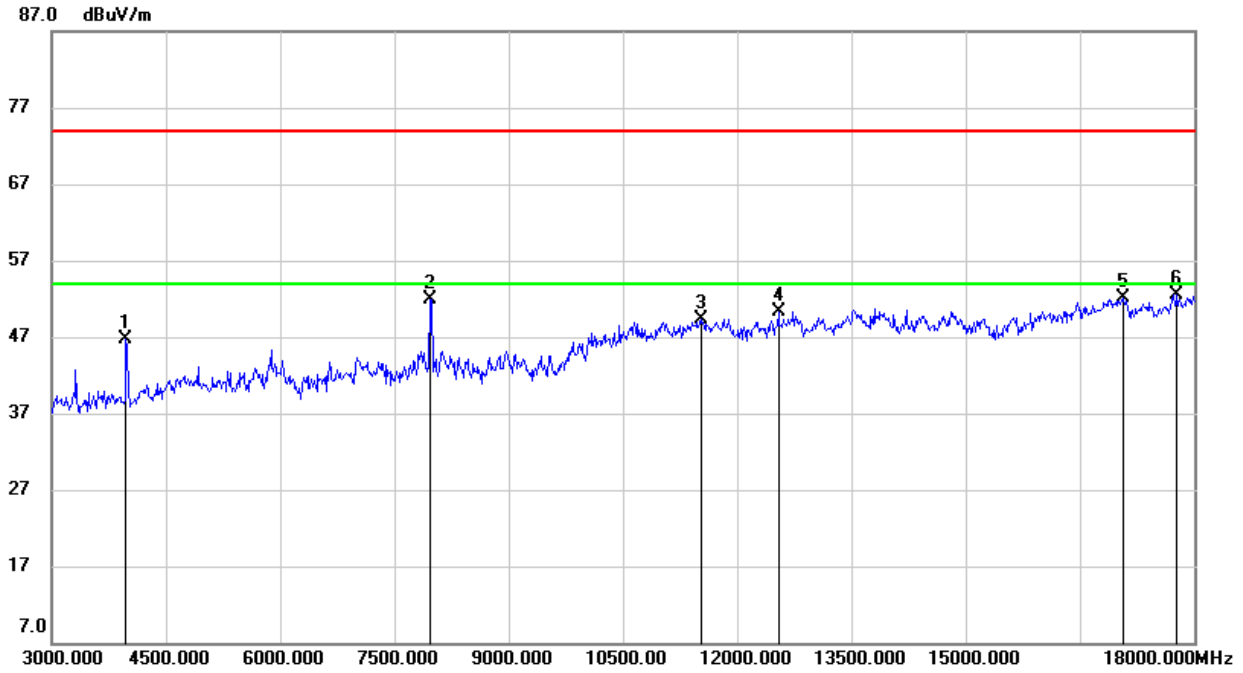


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5880.000	39.20	4.59	43.79	74.00	-30.21	peak
2	8115.000	37.75	7.90	45.65	74.00	-28.35	peak
3	11730.000	36.59	13.02	49.61	74.00	-24.39	peak
4	13875.000	34.46	16.44	50.90	74.00	-23.10	peak
5	16500.000	31.53	19.19	50.72	74.00	-23.28	peak
6	17940.000	29.35	23.39	52.74	74.00	-21.26	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 (HIGH CHANNEL, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	49.63	-2.90	46.73	74.00	-27.27	peak
2	7965.000	44.96	7.00	51.96	74.00	-22.04	peak
3	11520.000	35.83	13.38	49.21	74.00	-24.79	peak
4	12540.000	35.96	14.33	50.29	74.00	-23.71	peak
5	17070.000	31.50	20.57	52.07	74.00	-21.93	peak
6	17775.000	29.34	23.09	52.43	74.00	-21.57	peak

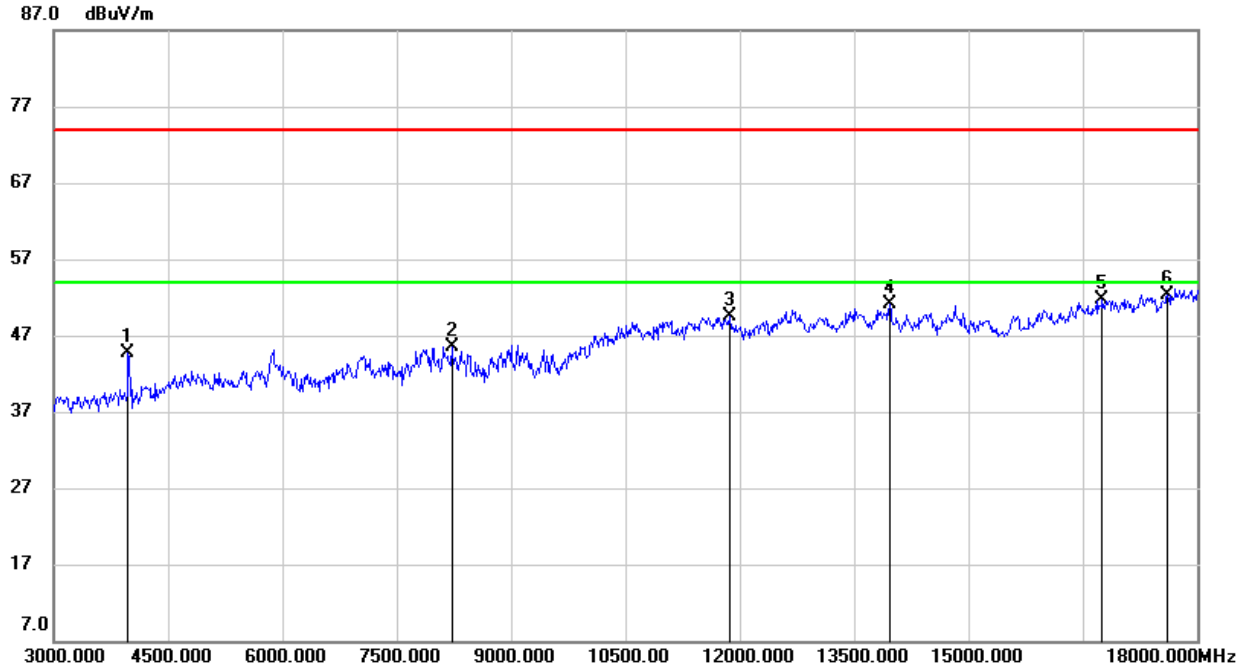
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass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





### 8.2.3. 802.11n HT20 MODE

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

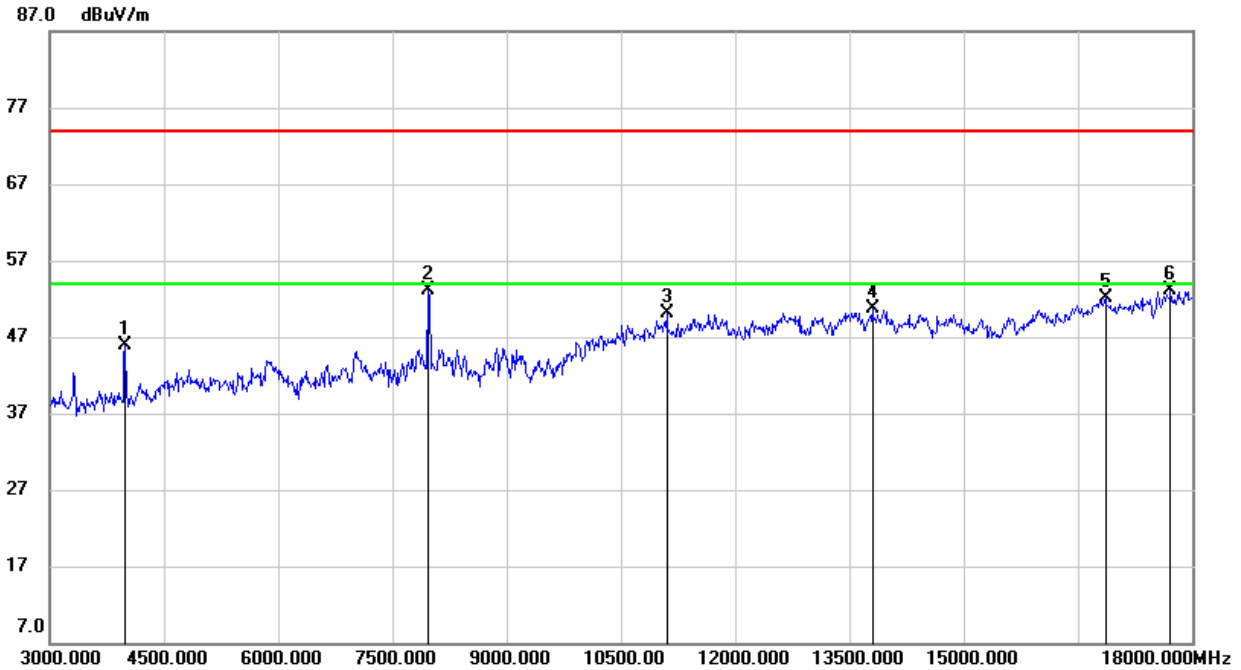


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	47.53	-2.90	44.63	74.00	-29.37	peak
2	8220.000	37.25	8.22	45.47	74.00	-28.53	peak
3	11865.000	36.24	13.21	49.45	74.00	-24.55	peak
4	13965.000	35.10	16.09	51.19	74.00	-22.81	peak
5	16755.000	31.82	19.94	51.76	74.00	-22.24	peak
6	17610.000	30.53	21.86	52.39	74.00	-21.61	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

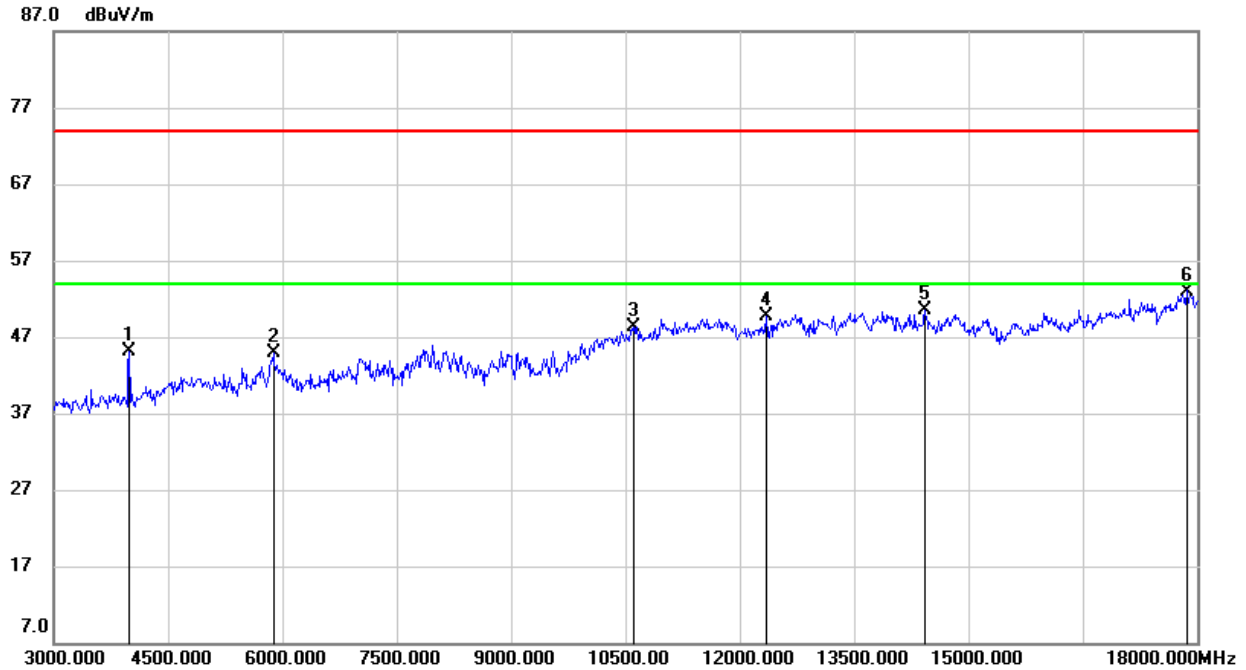


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	48.84	-2.89	45.95	74.00	-28.05	peak
2	7965.000	46.18	7.00	53.18	74.00	-20.82	peak
3	11100.000	37.48	12.56	50.04	74.00	-23.96	peak
4	13800.000	33.53	17.10	50.63	74.00	-23.37	peak
5	16860.000	32.25	19.95	52.20	74.00	-21.80	peak
6	17715.000	30.52	22.56	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 (MID CHANNEL, HORIZONTAL)**

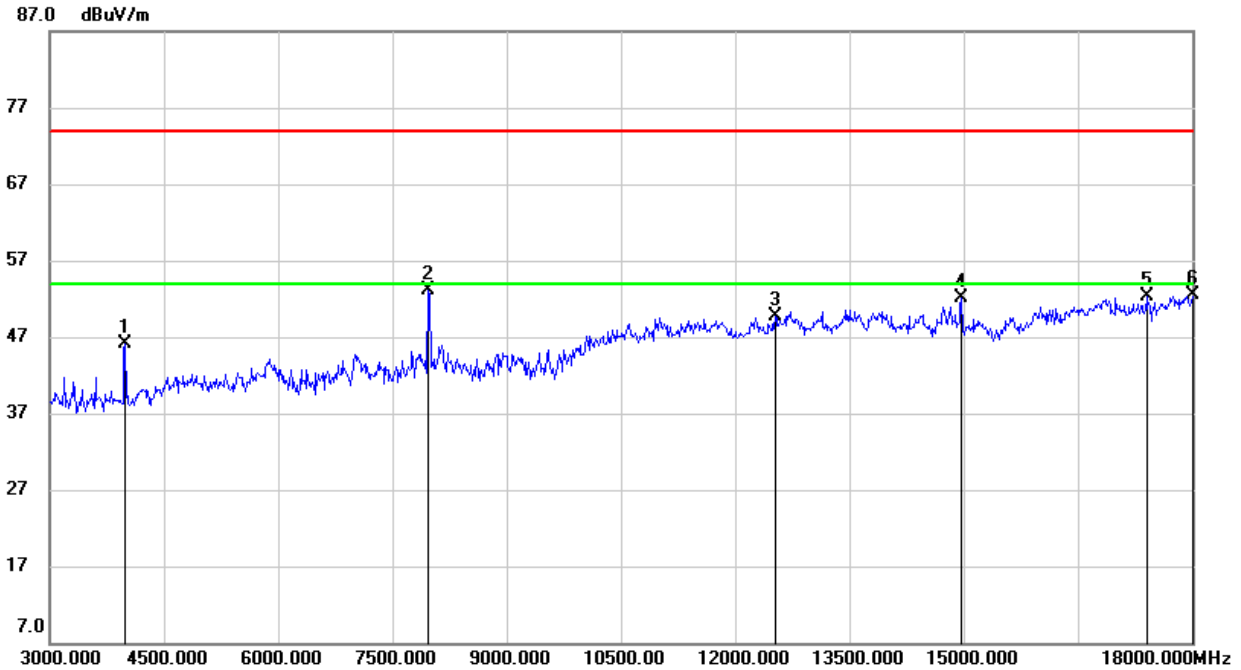


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	48.05	-2.89	45.16	74.00	-28.84	peak
2	5880.000	40.31	4.59	44.90	74.00	-29.10	peak
3	10605.000	36.38	11.93	48.31	74.00	-25.69	peak
4	12345.000	35.69	14.05	49.74	74.00	-24.26	peak
5	14430.000	34.12	16.35	50.47	74.00	-23.53	peak
6	17865.000	29.67	23.33	53.00	74.00	-21.00	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

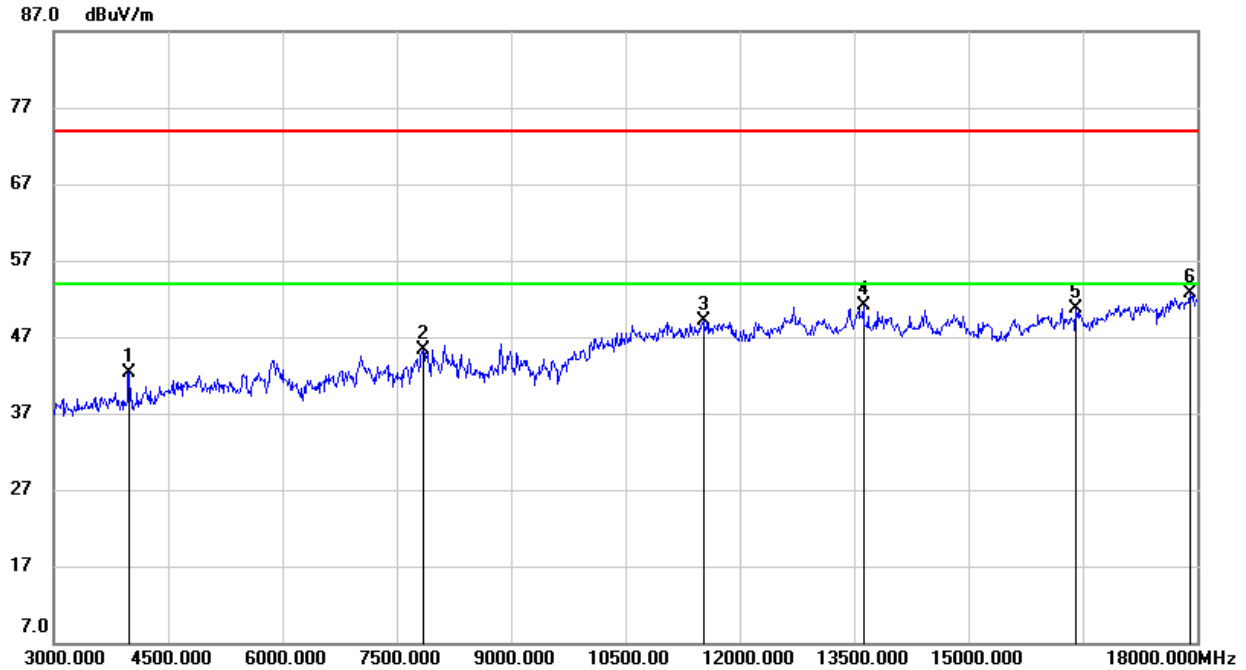


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	48.98	-2.89	46.09	74.00	-27.91	peak
2	7965.000	46.04	7.00	53.04	74.00	-20.96	peak
3	12525.000	35.30	14.41	49.71	74.00	-24.29	peak
4	14970.000	36.18	15.98	52.16	74.00	-21.84	peak
5	17400.000	30.86	21.41	52.27	74.00	-21.73	peak
6	18000.000	29.14	23.46	52.60	74.00	-21.40	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

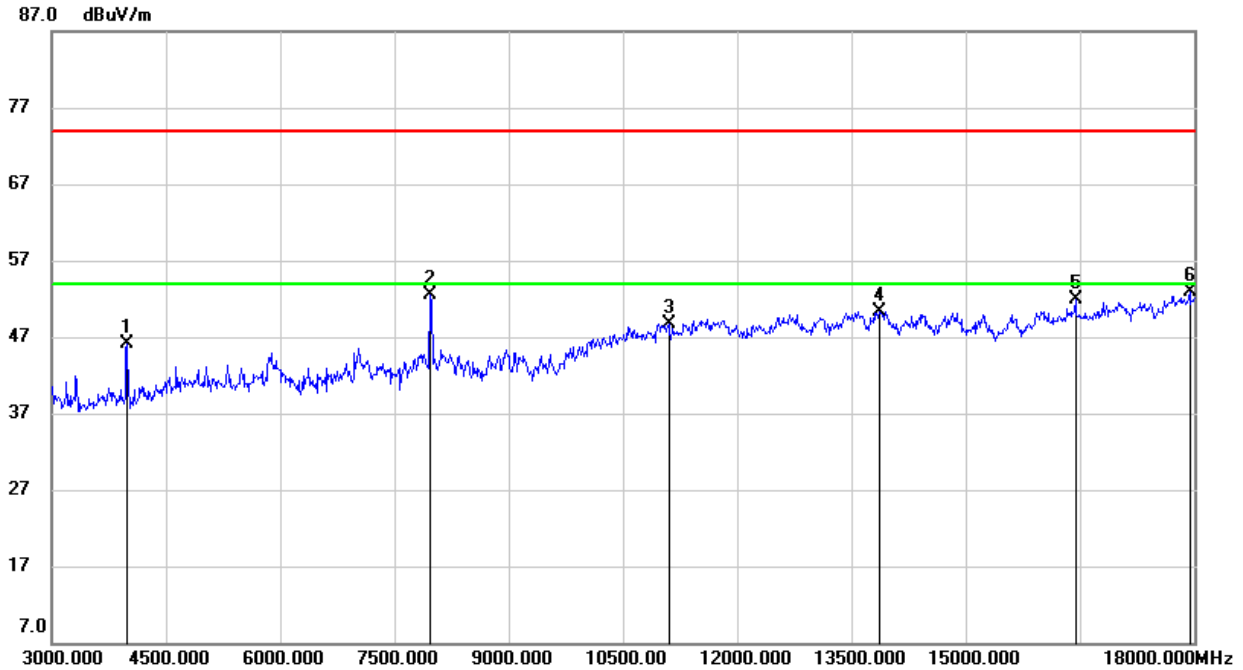


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	45.23	-2.89	42.34	74.00	-31.66	peak
2	7845.000	37.75	7.62	45.37	74.00	-28.63	peak
3	11520.000	35.67	13.38	49.05	74.00	-24.95	peak
4	13620.000	35.04	15.99	51.03	74.00	-22.97	peak
5	16410.000	31.84	18.82	50.66	74.00	-23.34	peak
6	17910.000	29.37	23.35	52.72	74.00	-21.28	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 (HIGH CHANNEL, VERTICAL)**



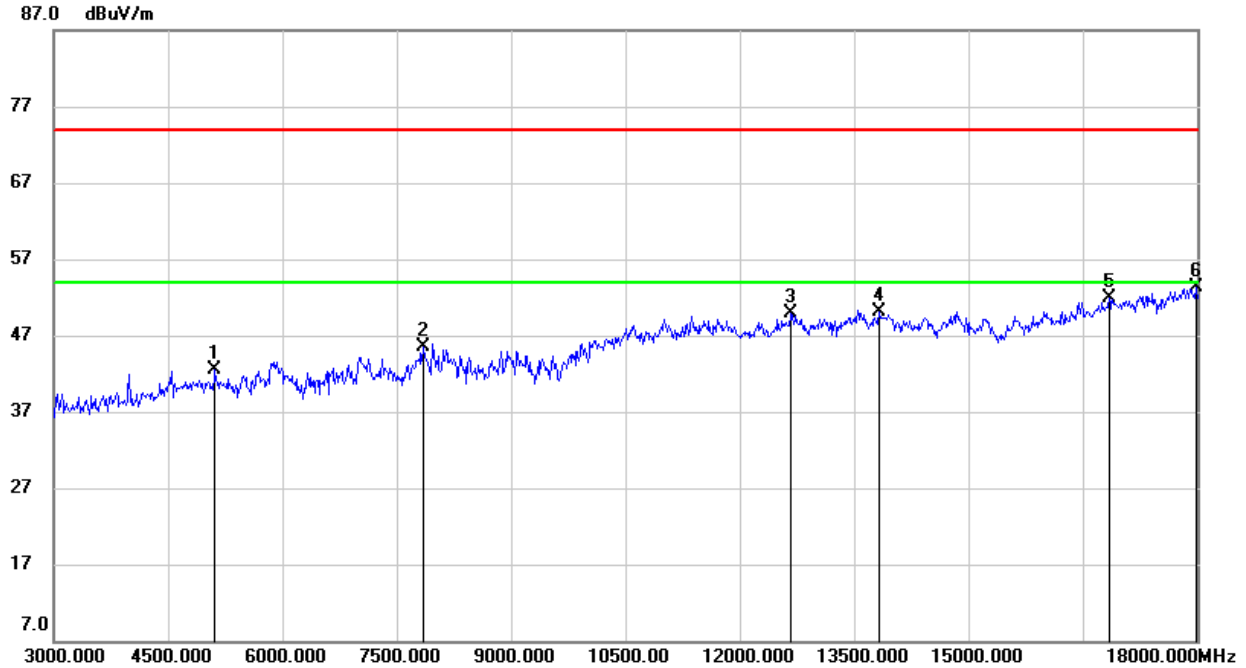
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	49.02	-2.89	46.13	74.00	-27.87	peak
2	7965.000	45.54	7.00	52.54	74.00	-21.46	peak
3	11100.000	36.10	12.56	48.66	74.00	-25.34	peak
4	13875.000	33.91	16.44	50.35	74.00	-23.65	peak
5	16440.000	32.96	18.94	51.90	74.00	-22.10	peak
6	17940.000	29.50	23.39	52.89	74.00	-21.11	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. 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.



### 8.2.4. 802.11n HT40 MODE

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

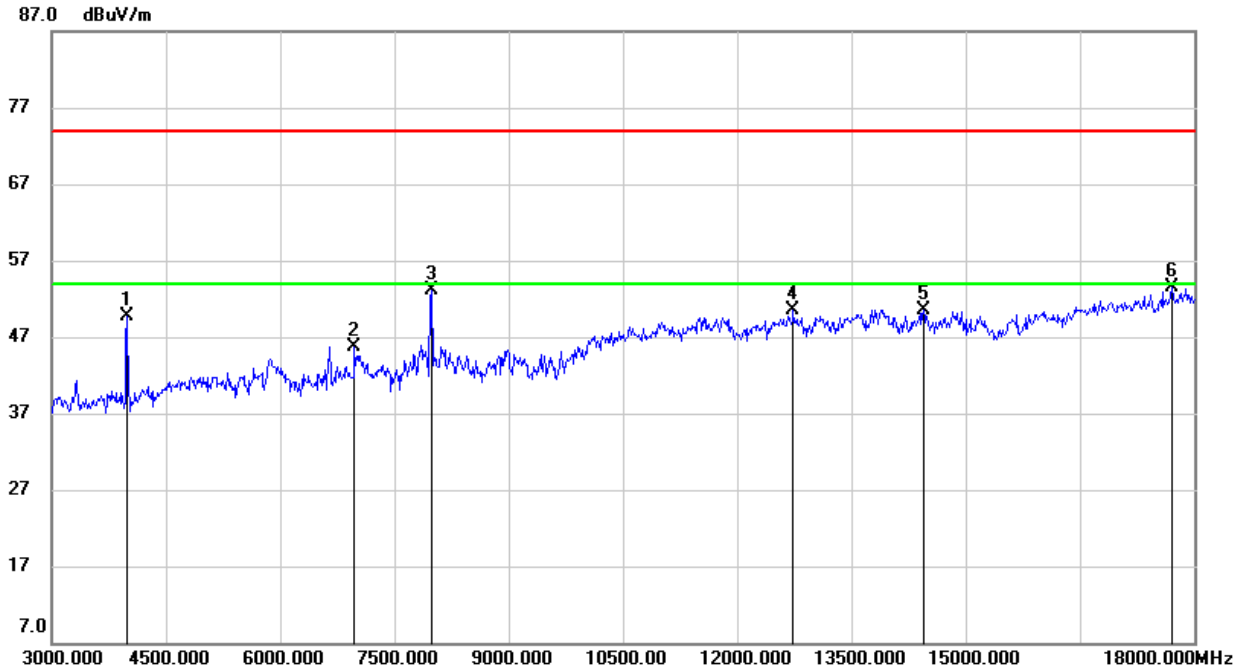


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5115.000	40.77	1.66	42.43	74.00	-31.57	peak
2	7845.000	37.81	7.62	45.43	74.00	-28.57	peak
3	12675.000	35.78	14.21	49.99	74.00	-24.01	peak
4	13830.000	33.21	16.84	50.05	74.00	-23.95	peak
5	16845.000	31.88	19.96	51.84	74.00	-22.16	peak
6	17985.000	29.90	23.44	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 (LOW CHANNEL, VERTICAL)**



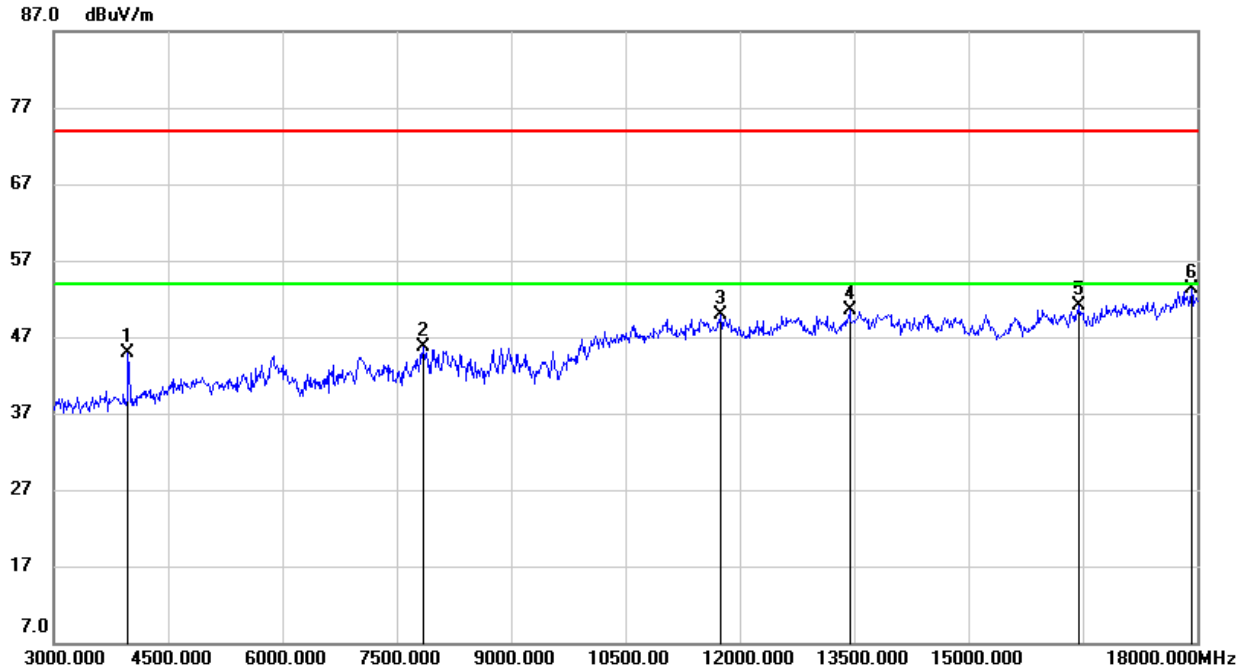
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	52.64	-2.89	49.75	74.00	-24.25	peak
2	6975.000	39.97	5.79	45.76	74.00	-28.24	peak
3	7995.000	46.23	6.89	53.12	74.00	-20.88	peak
4	12735.000	35.79	14.77	50.56	74.00	-23.44	peak
5	14445.000	34.11	16.36	50.47	74.00	-23.53	peak
6	17700.000	31.01	22.43	53.44	74.00	-20.56	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.





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

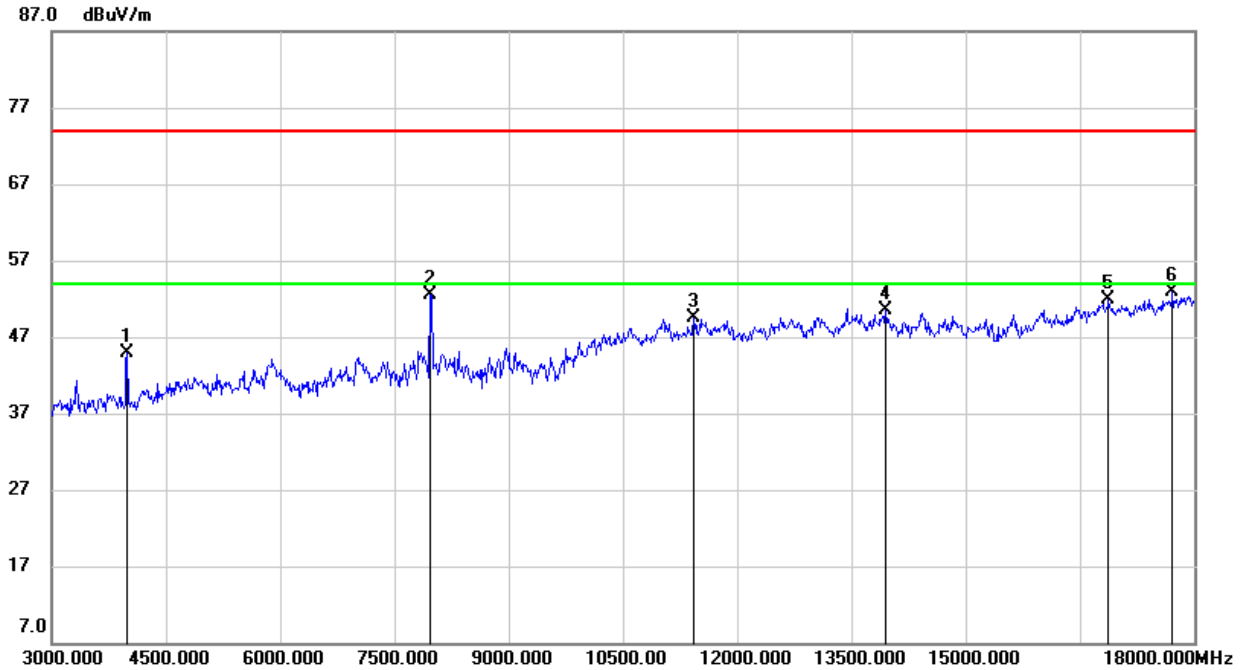


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3975.000	47.88	-2.90	44.98	74.00	-29.02	peak
2	7845.000	38.04	7.62	45.66	74.00	-28.34	peak
3	11745.000	36.77	13.05	49.82	74.00	-24.18	peak
4	13440.000	34.55	15.98	50.53	74.00	-23.47	peak
5	16455.000	32.03	19.00	51.03	74.00	-22.97	peak
6	17925.000	29.97	23.37	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 (MID CHANNEL, VERTICAL)**

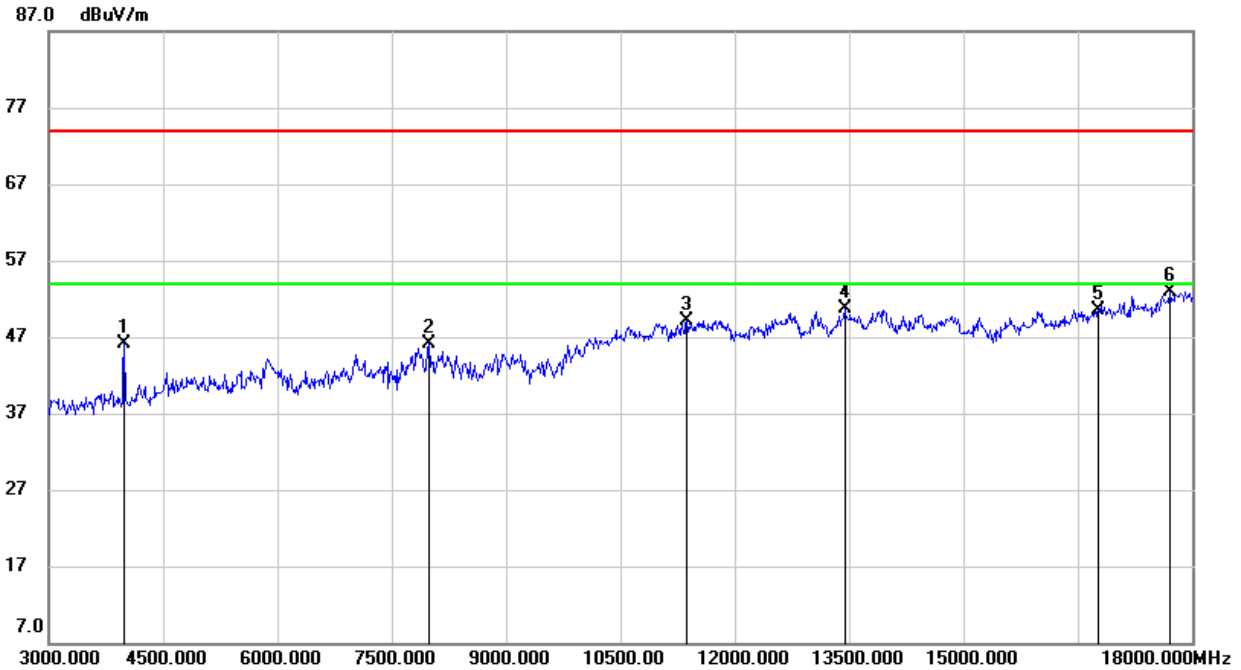


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	47.87	-2.89	44.98	74.00	-29.02	peak
2	7965.000	45.53	7.00	52.53	74.00	-21.47	peak
3	11430.000	36.68	12.85	49.53	74.00	-24.47	peak
4	13950.000	34.41	16.11	50.52	74.00	-23.48	peak
5	16875.000	31.93	19.96	51.89	74.00	-22.11	peak
6	17715.000	30.40	22.56	52.96	74.00	-21.04	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

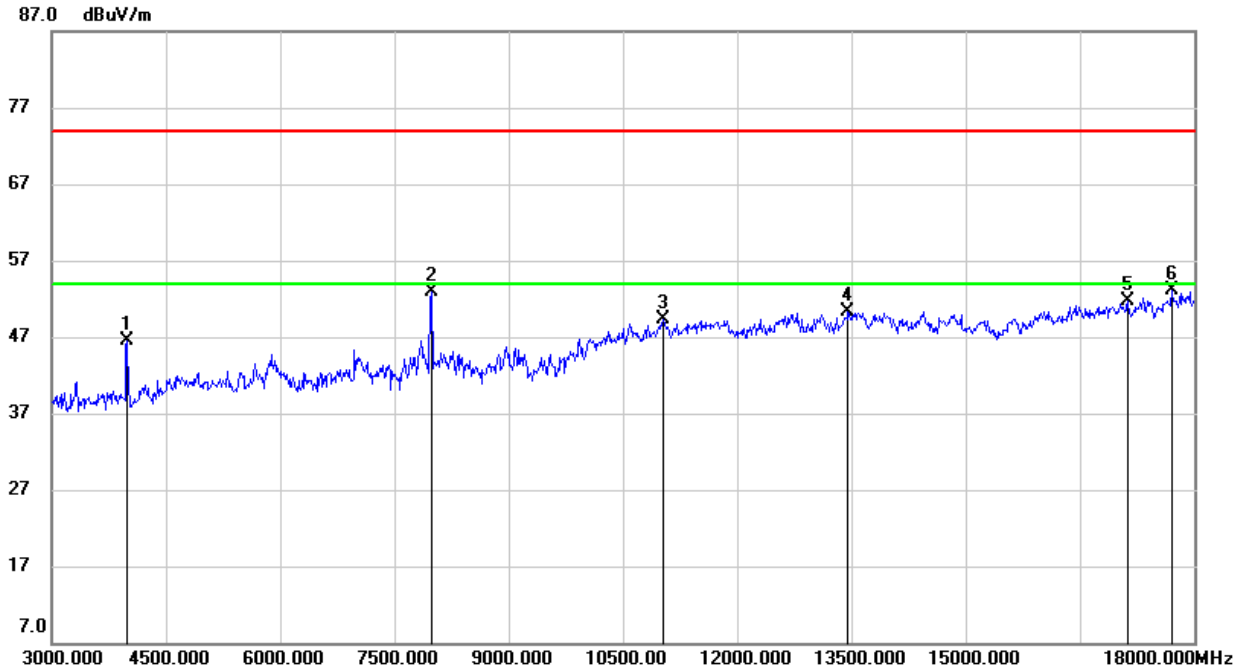


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	48.94	-2.89	46.05	74.00	-27.95	peak
2	7995.000	39.14	6.89	46.03	74.00	-27.97	peak
3	11370.000	36.50	12.54	49.04	74.00	-24.96	peak
4	13440.000	34.66	15.98	50.64	74.00	-23.36	peak
5	16770.000	30.64	19.95	50.59	74.00	-23.41	peak
6	17700.000	30.40	22.43	52.83	74.00	-21.17	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 High Pass Filter losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	49.34	-2.89	46.45	74.00	-27.55	peak
2	7995.000	46.02	6.89	52.91	74.00	-21.09	peak
3	11025.000	36.68	12.61	49.29	74.00	-24.71	peak
4	13455.000	34.41	15.93	50.34	74.00	-23.66	peak
5	17130.000	30.98	20.72	51.70	74.00	-22.30	peak
6	17700.000	30.59	22.43	53.02	74.00	-20.98	peak

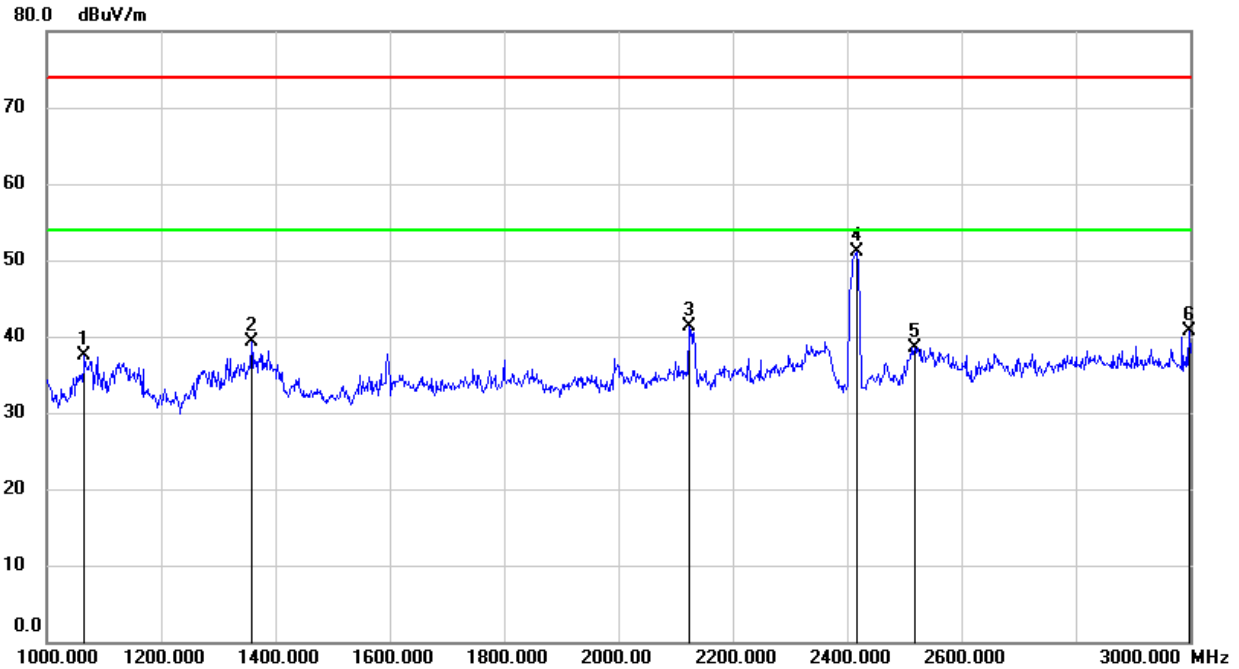
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass 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 (LOW CHANNEL, HORIZONTAL)

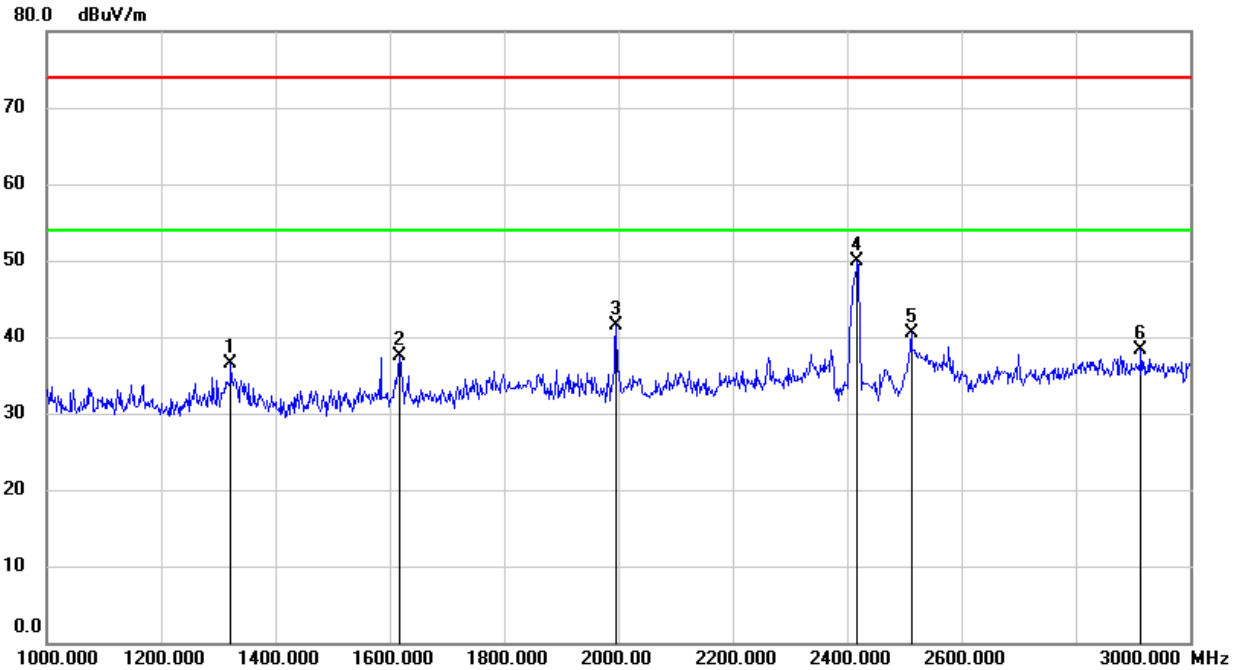


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1066.000	50.98	-13.54	37.44	74.00	-36.56	peak
2	1358.000	51.71	-12.37	39.34	74.00	-34.66	peak
3	2124.000	50.42	-9.04	41.38	74.00	-32.62	peak
4	2412.000	58.85	-7.75	51.10	/	/	fundamental
5	2518.000	45.84	-7.27	38.57	74.00	-35.43	peak
6	2998.000	46.04	-5.31	40.73	74.00	-33.27	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 (LOW CHANNEL, VERTICAL)**

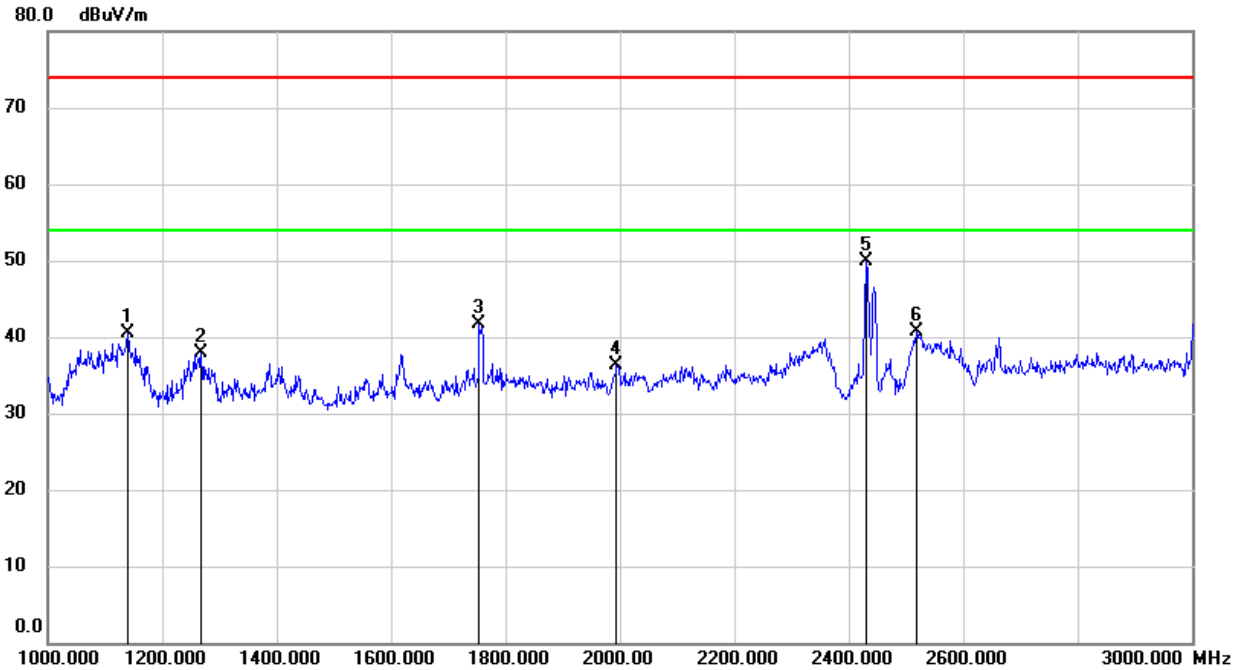


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1322.000	48.80	-12.35	36.45	74.00	-37.55	peak
2	1616.000	48.85	-11.32	37.53	74.00	-36.47	peak
3	1996.000	51.27	-9.83	41.44	74.00	-32.56	peak
4	2412.000	57.66	-7.74	49.92	/	/	fundamental
5	2512.000	47.81	-7.23	40.58	74.00	-33.42	peak
6	2914.000	43.72	-5.50	38.22	74.00	-35.78	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. 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 (MID CHANNEL, HORIZONTAL)**

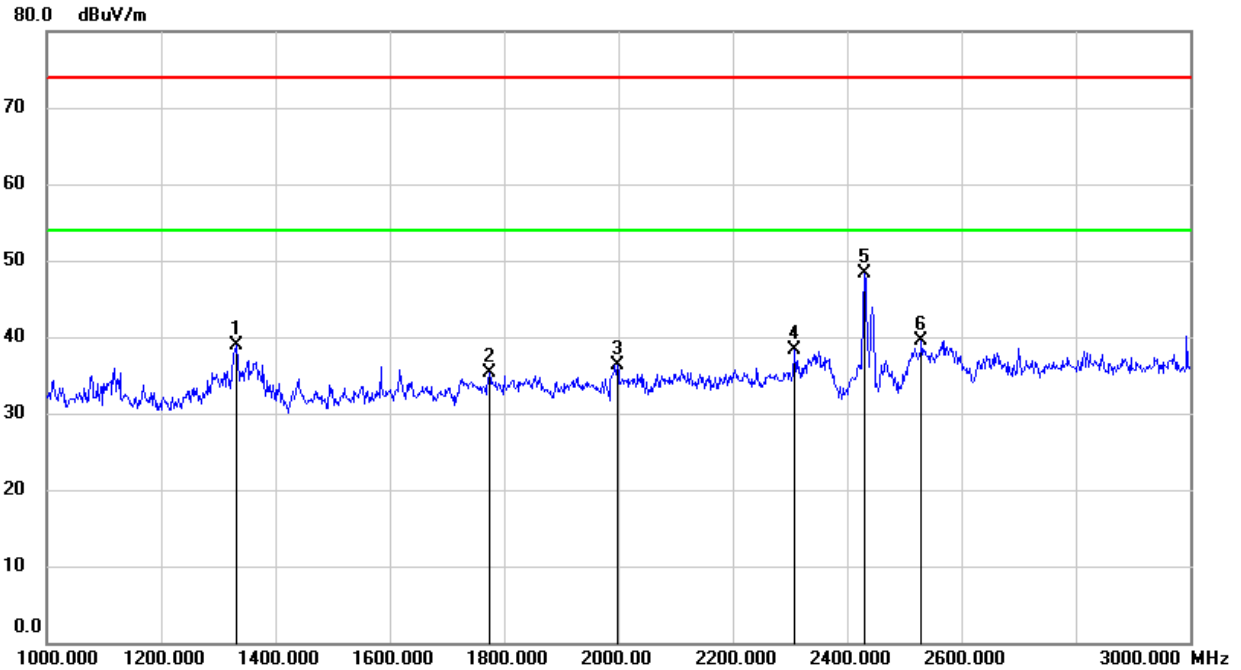


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1140.000	53.63	-13.19	40.44	74.00	-33.56	peak
2	1268.000	50.38	-12.45	37.93	74.00	-36.07	peak
3	1754.000	52.12	-10.37	41.75	74.00	-32.25	peak
4	1994.000	46.15	-9.83	36.32	74.00	-37.68	peak
5	2437.000	57.54	-7.65	49.89	/	/	fundamental
6	2518.000	47.94	-7.27	40.67	74.00	-33.33	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 (MID CHANNEL, VERTICAL)**



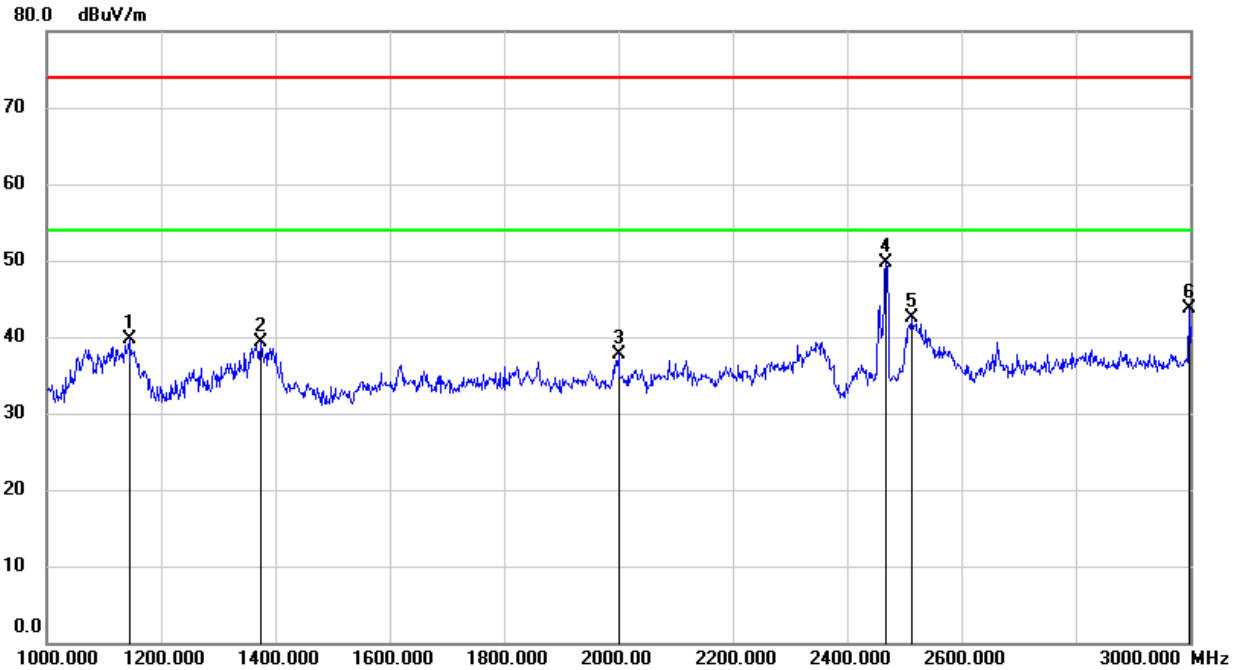
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1332.000	51.34	-12.35	38.99	74.00	-35.01	peak
2	1774.000	45.38	-10.17	35.21	74.00	-38.79	peak
3	1998.000	46.19	-9.83	36.36	74.00	-37.64	peak
4	2308.000	46.39	-8.17	38.22	74.00	-35.78	peak
5	2437.000	55.96	-7.65	48.31	/	/	fundamental
6	2530.000	46.87	-7.32	39.55	74.00	-34.45	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 (HIGH CHANNEL, HORIZONTAL)**

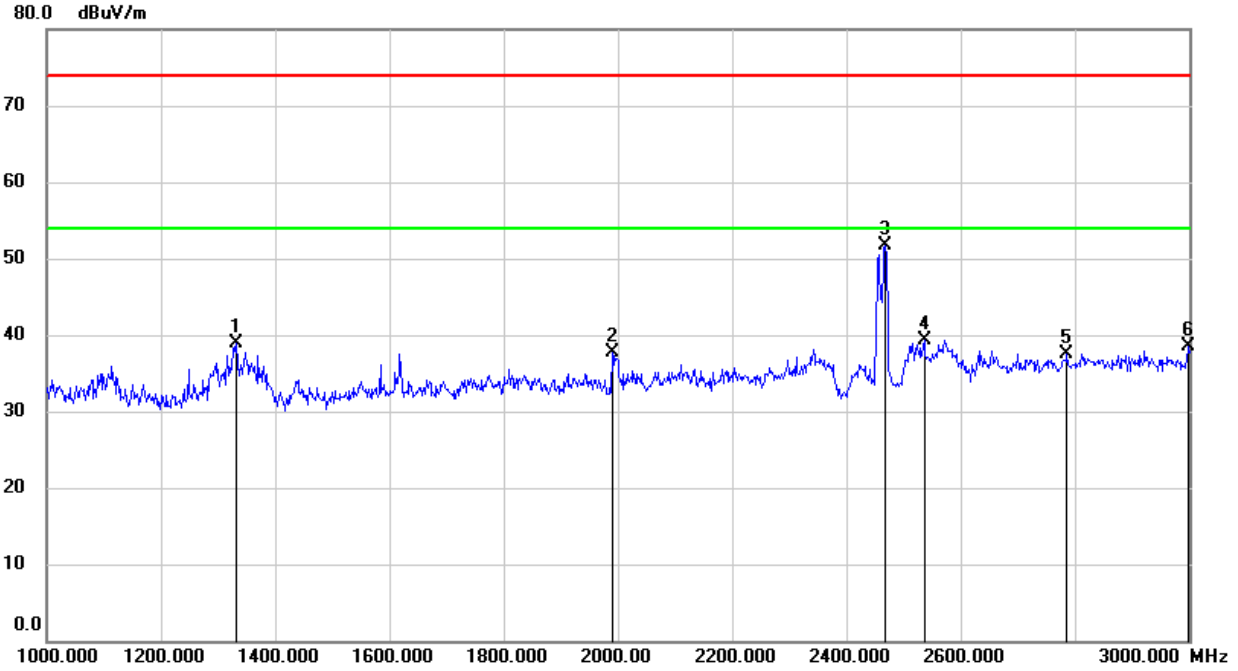


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1144.000	52.90	-13.15	39.75	74.00	-34.25	peak
2	1374.000	51.64	-12.38	39.26	74.00	-34.74	peak
3	2000.000	47.62	-9.82	37.80	74.00	-36.20	peak
4	2462.000	57.06	-7.39	49.67	/	/	fundamental
5	2512.000	49.66	-7.23	42.43	74.00	-31.57	peak
6	2998.000	49.04	-5.31	43.73	74.00	-30.27	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 (HIGH CHANNEL, VERTICAL)**



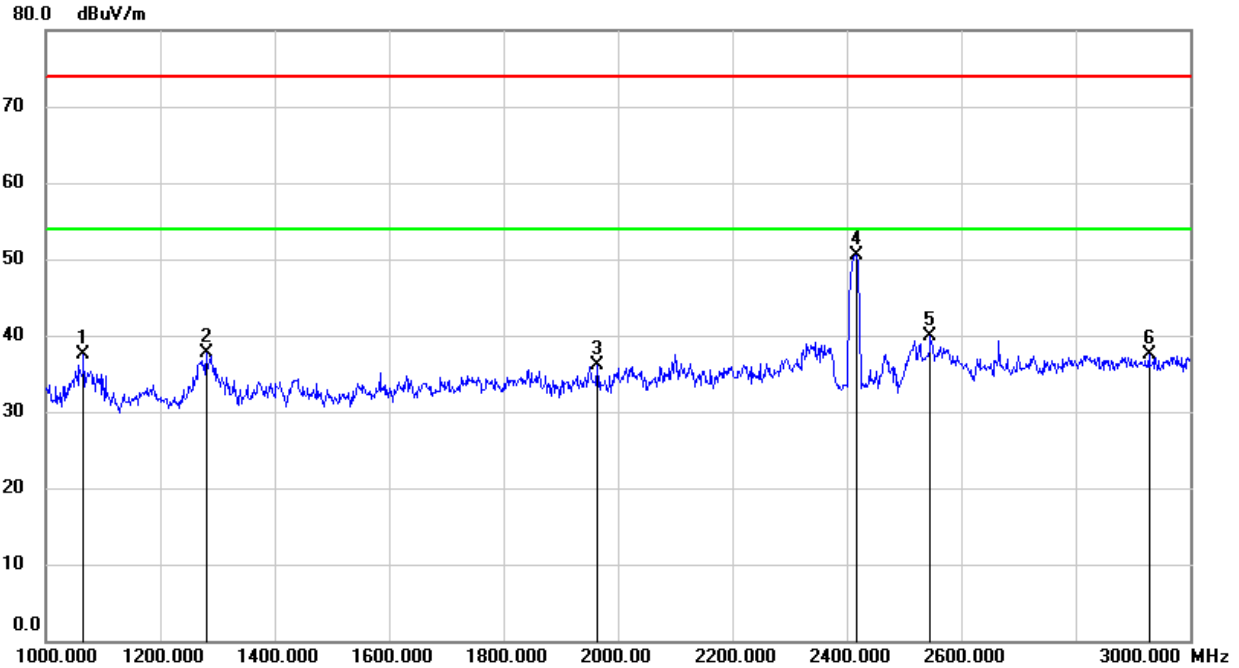
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1332.000	51.21	-12.35	38.86	74.00	-35.14	peak
2	1990.000	47.58	-9.84	37.74	74.00	-36.26	peak
3	2462.000	59.10	-7.39	51.71	/	/	fundamental
4	2536.000	46.73	-7.36	39.37	74.00	-34.63	peak
5	2786.000	43.79	-6.20	37.59	74.00	-36.41	peak
6	2998.000	43.88	-5.31	38.57	74.00	-35.43	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

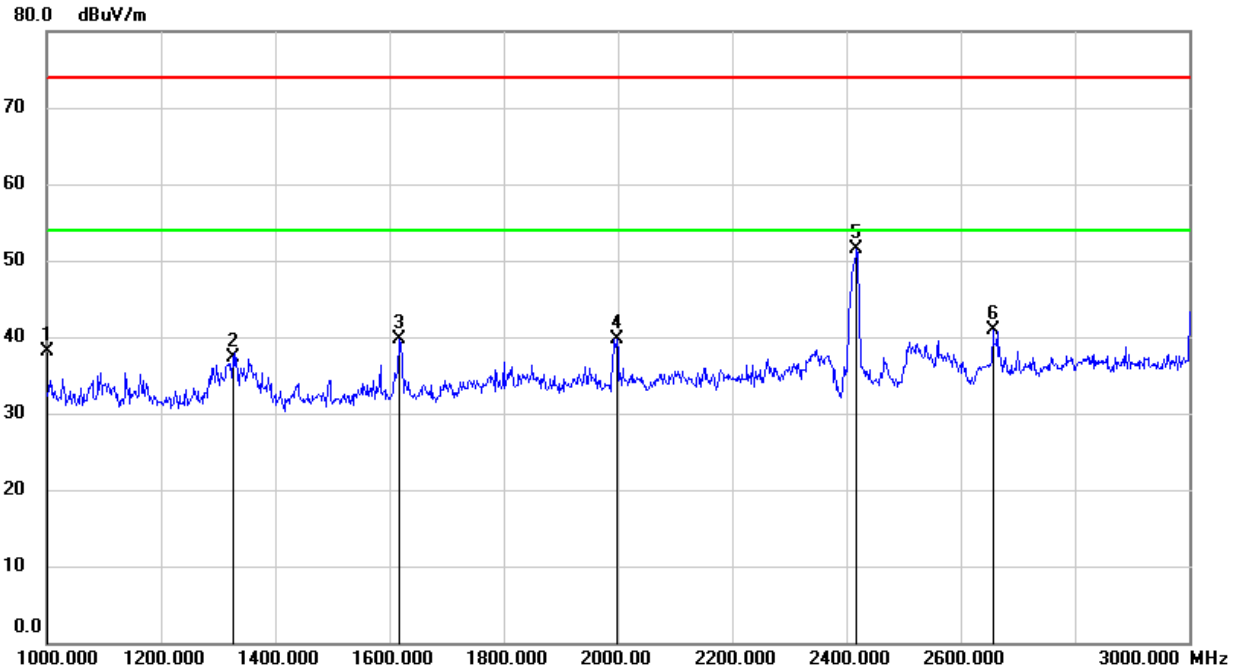
#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1066.000	51.11	-13.54	37.57	74.00	-36.43	peak
2	1280.000	50.06	-12.41	37.65	74.00	-36.35	peak
3	1964.000	46.01	-9.87	36.14	74.00	-37.86	peak
4	2412.000	58.30	-7.75	50.55	/	/	fundamental
5	2546.000	47.38	-7.41	39.97	74.00	-34.03	peak
6	2928.000	42.87	-5.46	37.41	74.00	-36.59	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 (LOW CHANNEL, VERTICAL)**

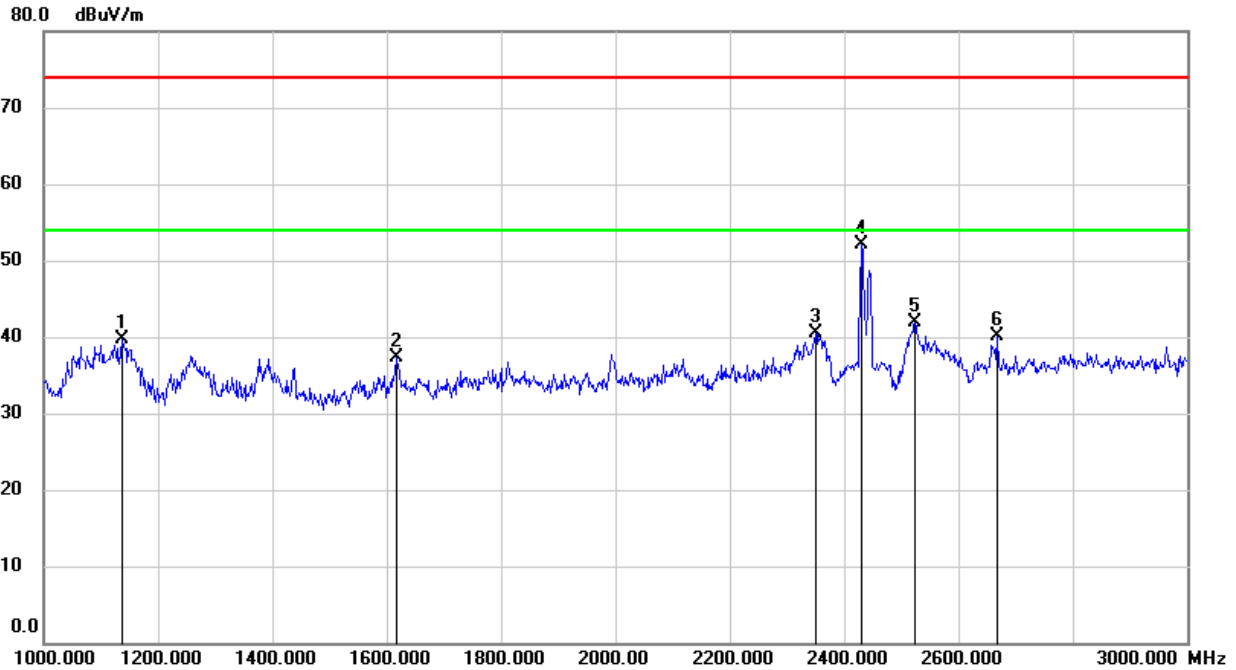


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1000.0000	51.63	-13.59	38.04	74.00	-35.96	peak
2	1326.000	49.69	-12.35	37.34	74.00	-36.66	peak
3	1616.000	50.98	-11.32	39.66	74.00	-34.34	peak
4	1998.000	49.57	-9.83	39.74	74.00	-34.26	peak
5	2412.000	59.19	-7.74	51.45	/	/	fundamental
6	2656.000	48.34	-7.38	40.96	74.00	-33.04	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 (MID CHANNEL, HORIZONTAL)**

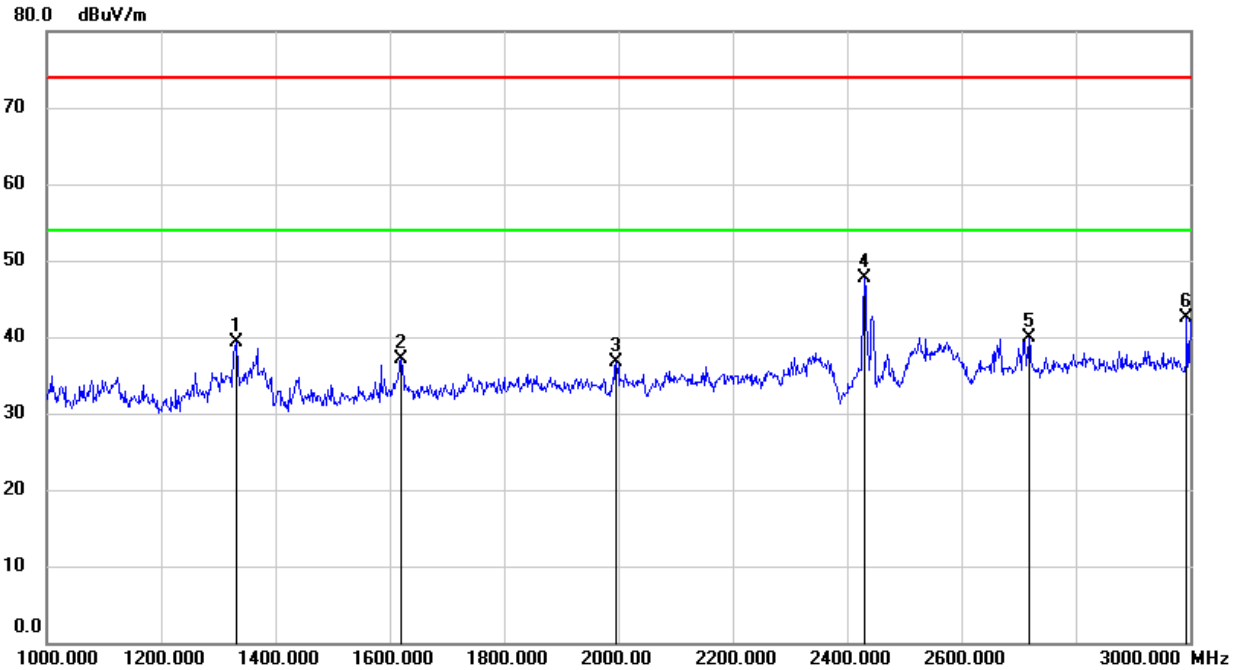


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1136.000	52.95	-13.22	39.73	74.00	-34.27	peak
2	1616.000	48.64	-11.32	37.32	74.00	-36.68	peak
3	2350.000	48.45	-8.02	40.43	74.00	-33.57	peak
4	2437.000	59.73	-7.65	52.08	/	/	fundamental
5	2524.000	49.15	-7.29	41.86	74.00	-32.14	peak
6	2668.000	47.43	-7.32	40.11	74.00	-33.89	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 (MID CHANNEL, VERTICAL)**

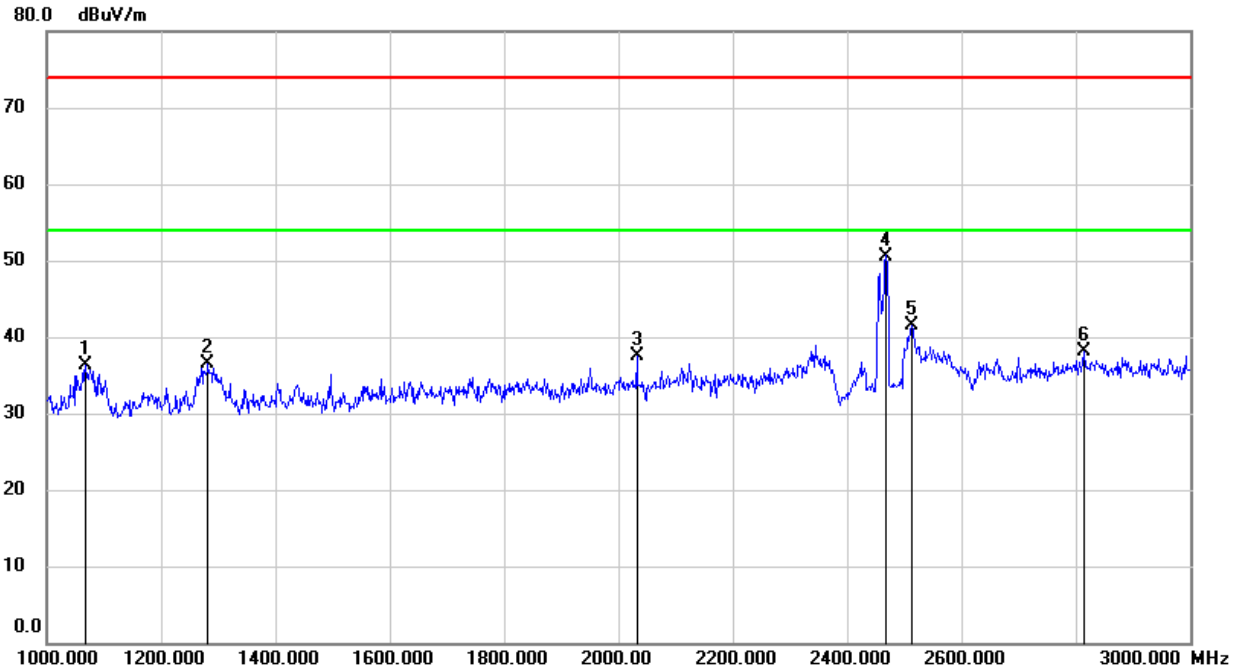


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1332.000	51.59	-12.35	39.24	74.00	-34.76	peak
2	1620.000	48.31	-11.29	37.02	74.00	-36.98	peak
3	1996.000	46.49	-9.83	36.66	74.00	-37.34	peak
4	2437.000	55.36	-7.65	47.71	/	/	fundamental
5	2718.000	46.90	-6.94	39.96	74.00	-34.04	peak
6	2994.000	47.76	-5.31	42.45	74.00	-31.55	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 (HIGH CHANNEL, HORIZONTAL)**

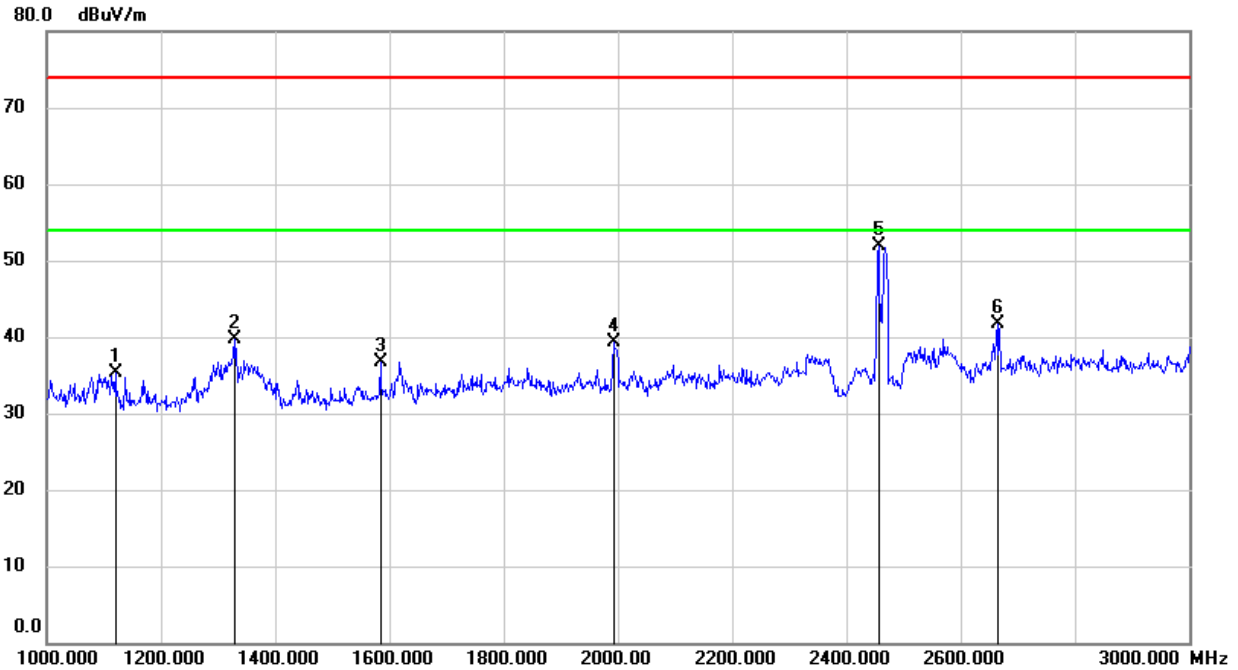


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1068.000	49.77	-13.54	36.23	74.00	-37.77	peak
2	1282.000	48.91	-12.40	36.51	74.00	-37.49	peak
3	2032.000	47.09	-9.60	37.49	74.00	-36.51	peak
4	2462.000	57.99	-7.39	50.60	/	/	fundamental
5	2514.000	48.76	-7.24	41.52	74.00	-32.48	peak
6	2814.000	44.11	-5.98	38.13	74.00	-35.87	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 (HIGH CHANNEL, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1120.000	48.58	-13.34	35.24	74.00	-38.76	peak
2	1328.000	51.98	-12.36	39.62	74.00	-34.38	peak
3	1584.000	48.20	-11.53	36.67	74.00	-37.33	peak
4	1992.000	49.11	-9.83	39.28	74.00	-34.72	peak
5	2462.000	59.46	-7.47	51.99	/	/	fundamental
6	2664.000	49.02	-7.34	41.68	74.00	-32.32	peak

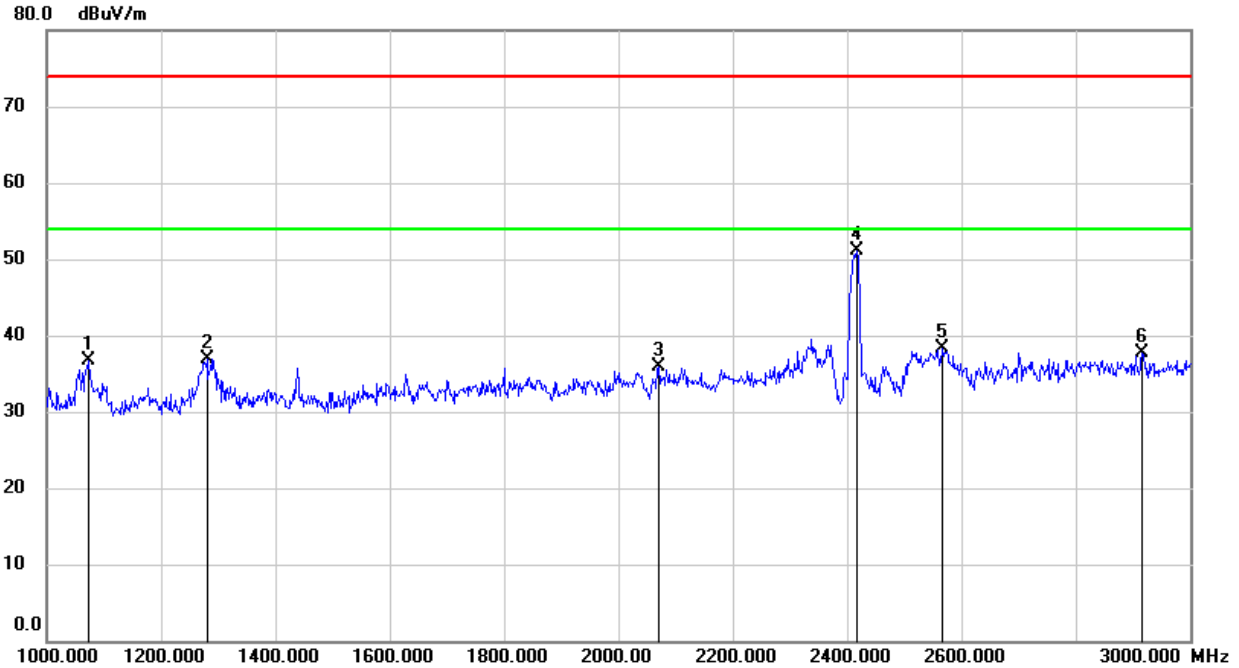
- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject 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 (LOW CHANNEL, HORIZONTAL)

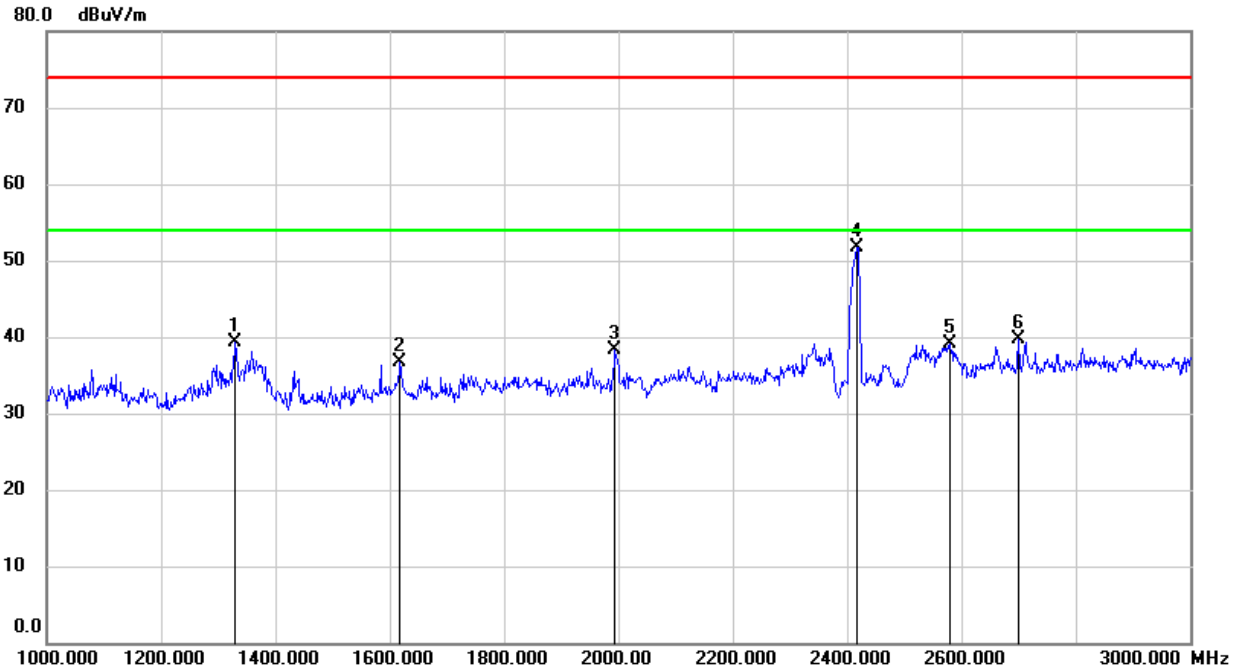


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1074.000	50.27	-13.54	36.73	74.00	-37.27	peak
2	1280.000	49.36	-12.41	36.95	74.00	-37.05	peak
3	2070.000	45.22	-9.35	35.87	74.00	-38.13	peak
4	2412.000	58.76	-7.75	51.01	/	/	fundamental
5	2566.000	45.91	-7.52	38.39	74.00	-35.61	peak
6	2916.000	43.27	-5.48	37.79	74.00	-36.21	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 (LOW CHANNEL, VERTICAL)**

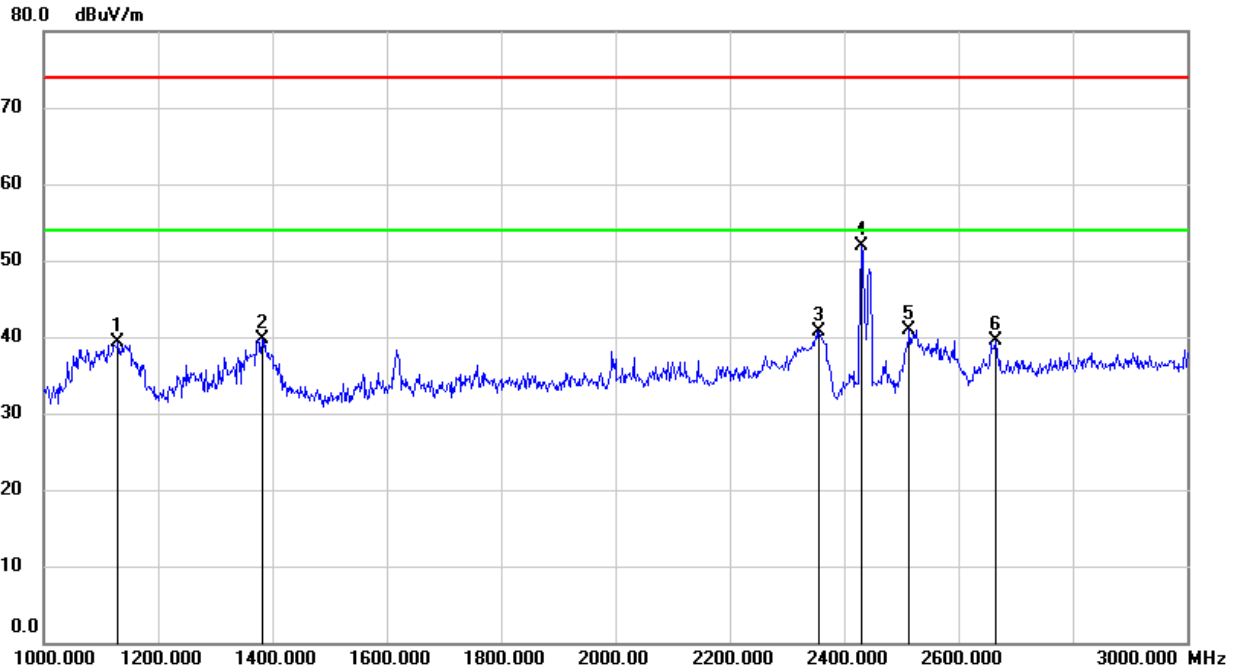


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1330.000	51.65	-12.36	39.29	74.00	-34.71	peak
2	1618.000	48.04	-11.31	36.73	74.00	-37.27	peak
3	1994.000	48.11	-9.83	38.28	74.00	-35.72	peak
4	2412.000	59.39	-7.74	51.65	/	/	fundamental
5	2580.000	46.60	-7.59	39.01	74.00	-34.99	peak
6	2700.000	46.92	-7.13	39.79	74.00	-34.21	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 (MID CHANNEL, HORIZONTAL)**

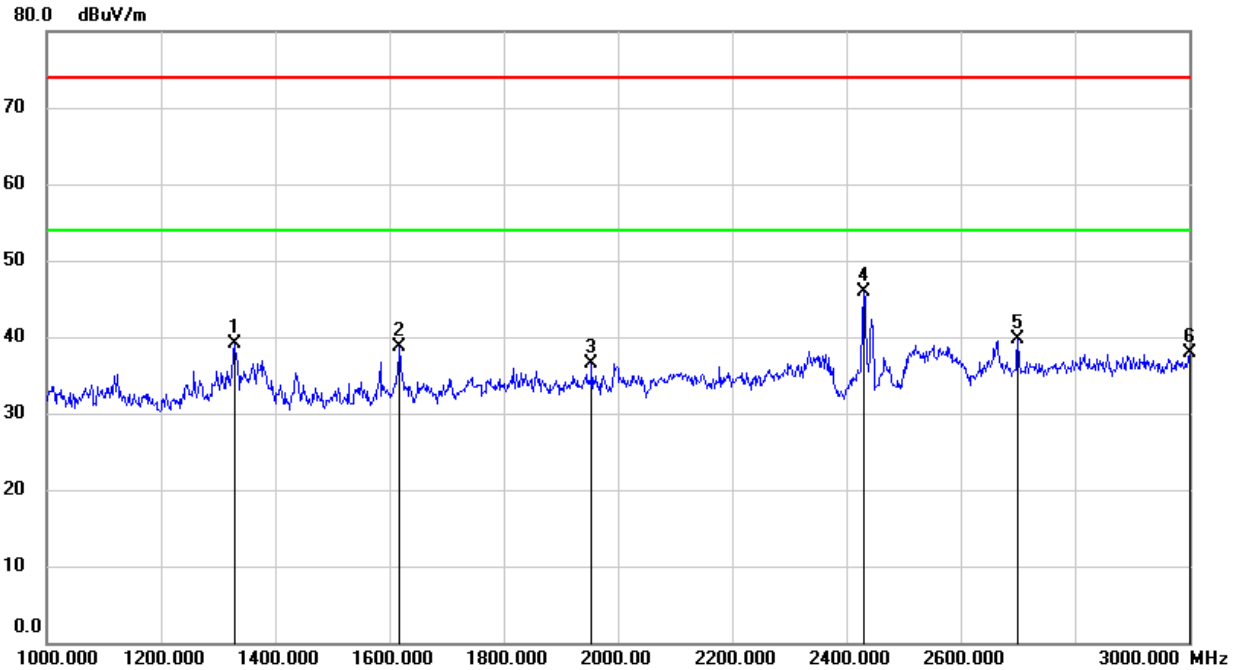


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1130.000	52.53	-13.27	39.26	74.00	-34.74	peak
2	1382.000	52.13	-12.37	39.76	74.00	-34.24	peak
3	2356.000	48.76	-8.00	40.76	74.00	-33.24	peak
4	2437.000	59.48	-7.65	51.83	/	/	fundamental
5	2514.000	48.24	-7.24	41.00	74.00	-33.00	peak
6	2664.000	46.84	-7.34	39.50	74.00	-34.50	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 (MID CHANNEL, VERTICAL)**

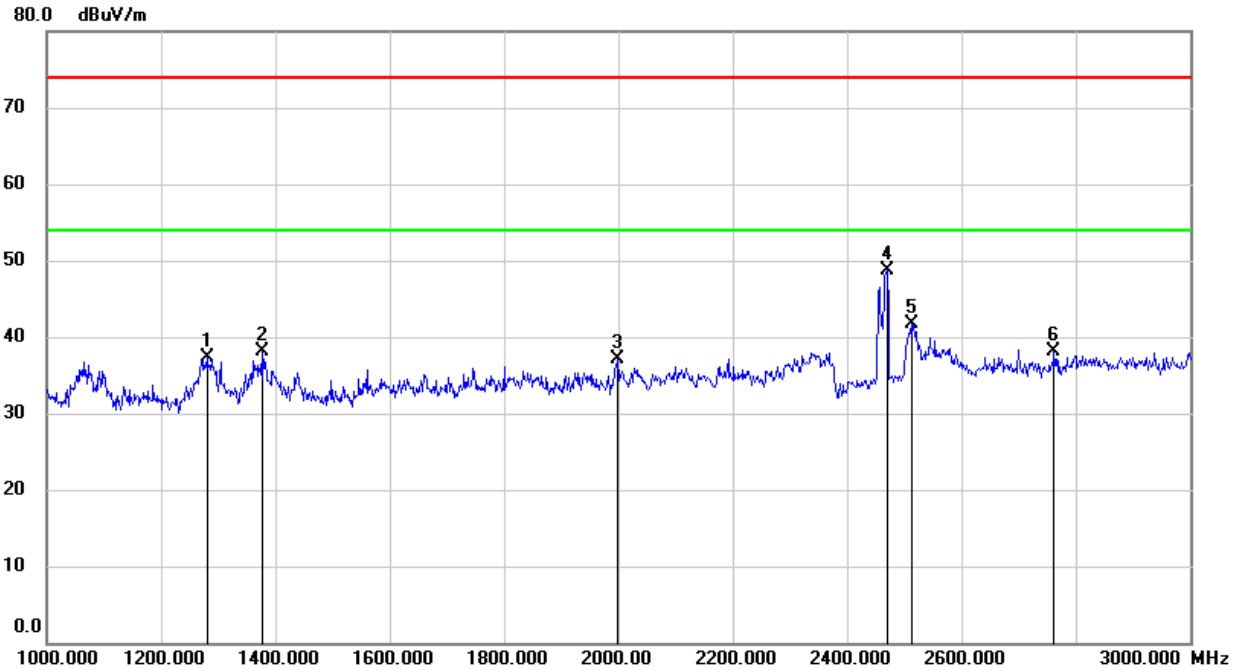


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1328.000	51.46	-12.36	39.10	74.00	-34.90	peak
2	1618.000	50.06	-11.31	38.75	74.00	-35.25	peak
3	1954.000	46.47	-9.87	36.60	74.00	-37.40	peak
4	2437.000	53.63	-7.65	45.98	/	/	fundamental
5	2700.000	46.91	-7.13	39.78	74.00	-34.22	peak
6	3000.000	43.16	-5.30	37.86	74.00	-36.14	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 (HIGH CHANNEL, HORIZONTAL)**

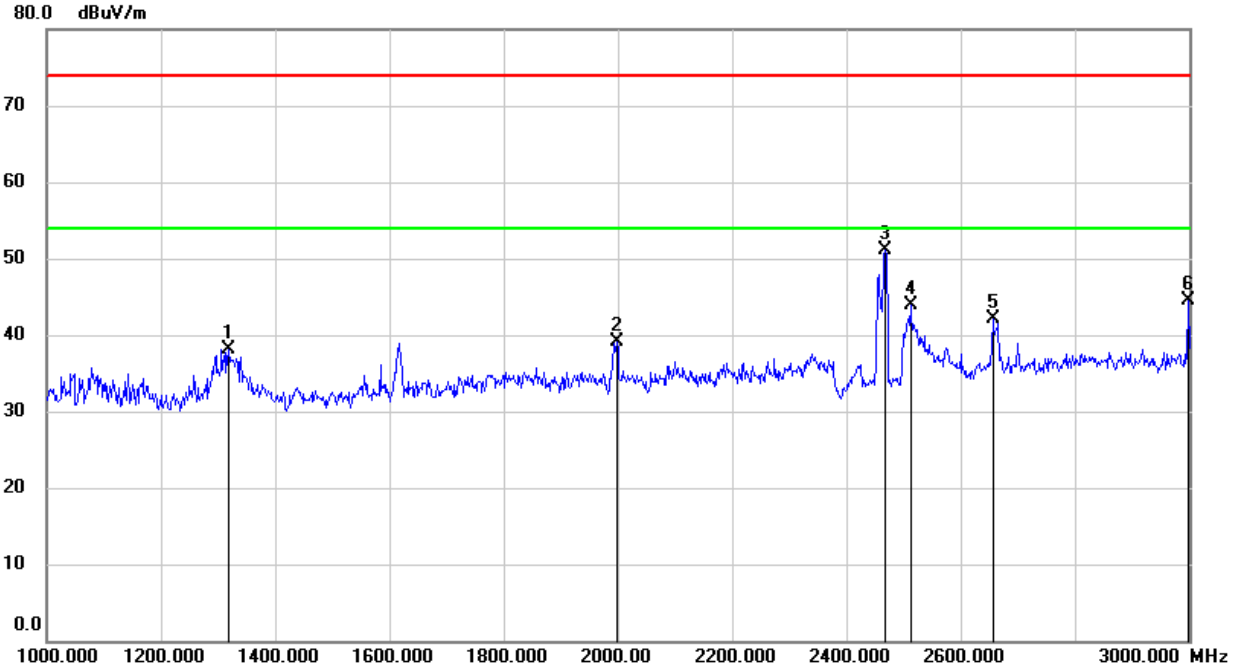


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1280.000	49.65	-12.41	37.24	74.00	-36.76	peak
2	1376.000	50.47	-12.37	38.10	74.00	-35.90	peak
3	1998.000	46.87	-9.83	37.04	74.00	-36.96	peak
4	2462.000	55.99	-7.37	48.62	/	/	fundamental
5	2512.000	49.00	-7.23	41.77	74.00	-32.23	peak
6	2762.000	44.63	-6.47	38.16	74.00	-35.84	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 (HIGH CHANNEL, VERTICAL)**



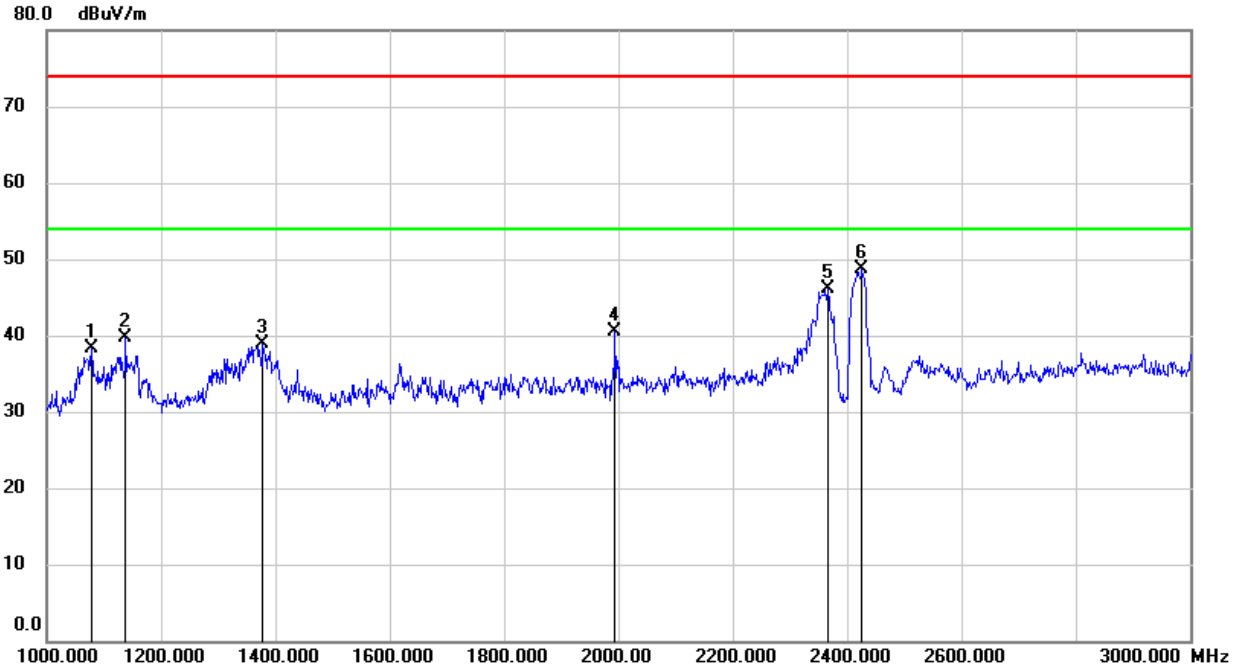
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1318.000	50.55	-12.36	38.19	74.00	-35.81	peak
2	1998.000	48.84	-9.83	39.01	74.00	-34.99	peak
3	2462.000	58.52	-7.39	51.13	/	/	fundamental
4	2512.000	51.16	-7.23	43.93	74.00	-30.07	peak
5	2656.000	49.54	-7.38	42.16	74.00	-31.84	peak
6	2998.000	49.73	-5.31	44.42	74.00	-29.58	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. 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.



### 8.3.4. 802.11n HT40 MODE

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

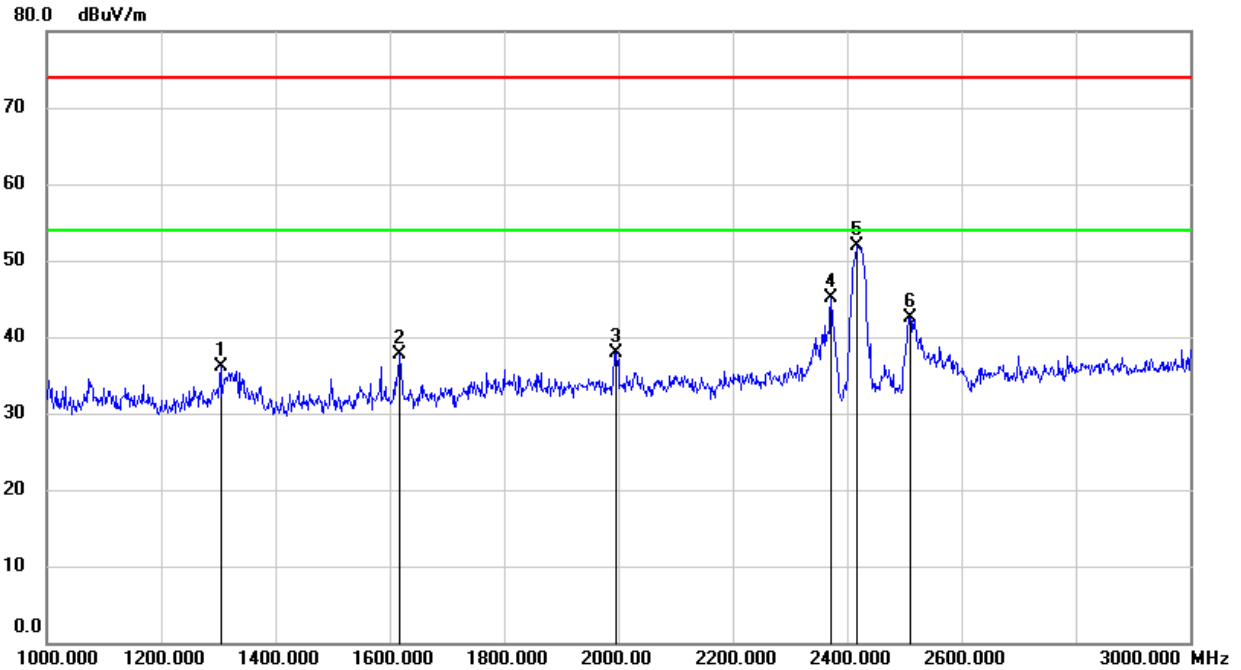


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1078.000	51.78	-13.53	38.25	74.00	-35.75	peak
2	1138.000	52.90	-13.19	39.71	74.00	-34.29	peak
3	1378.000	51.20	-12.38	38.82	74.00	-35.18	peak
4	1994.000	50.39	-9.83	40.56	74.00	-33.44	peak
5	2366.000	54.00	-7.97	46.03	74.00	-27.97	peak
6	2422.000	56.31	-7.67	48.64	/	/	fundamental

- 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 (LOW CHANNEL, VERTICAL)**



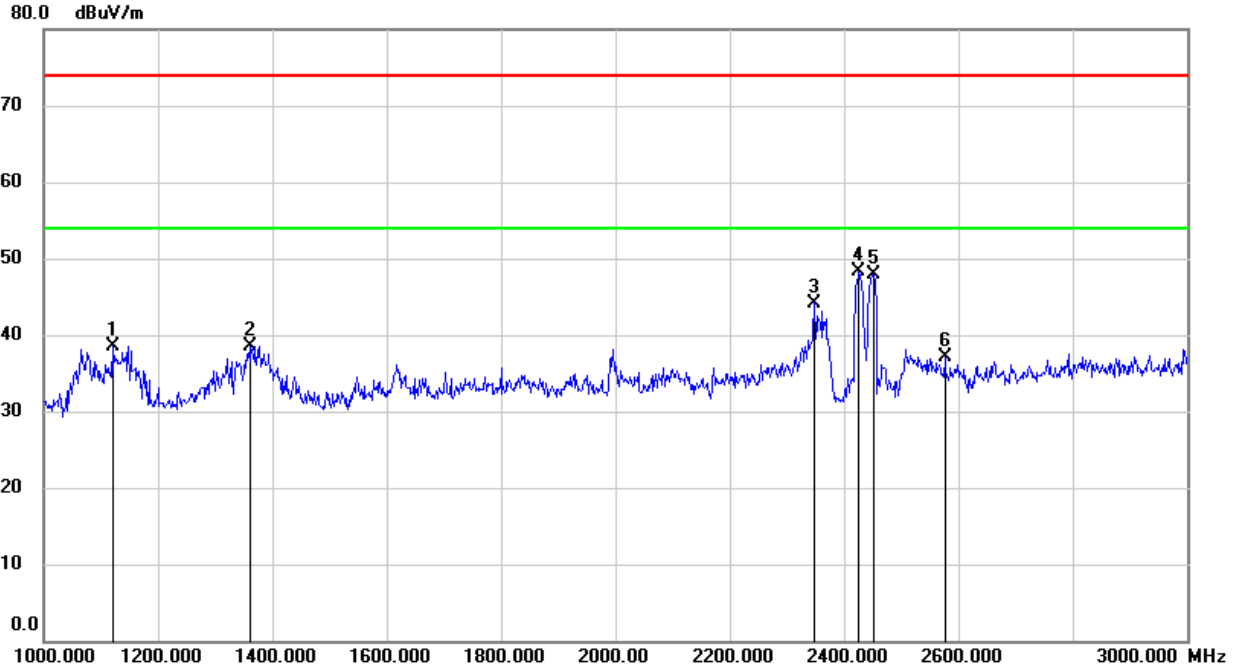
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1304.000	48.37	-12.34	36.03	74.00	-37.97	peak
2	1616.000	49.09	-11.32	37.77	74.00	-36.23	peak
3	1996.000	47.81	-9.83	37.98	74.00	-36.02	peak
4	2372.000	52.98	-7.95	45.03	74.00	-28.97	peak
5	2422.000	59.64	-7.74	51.90	/	/	fundamental
6	2510.000	49.75	-7.21	42.54	74.00	-31.46	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 (MID CHANNEL, HORIZONTAL)**

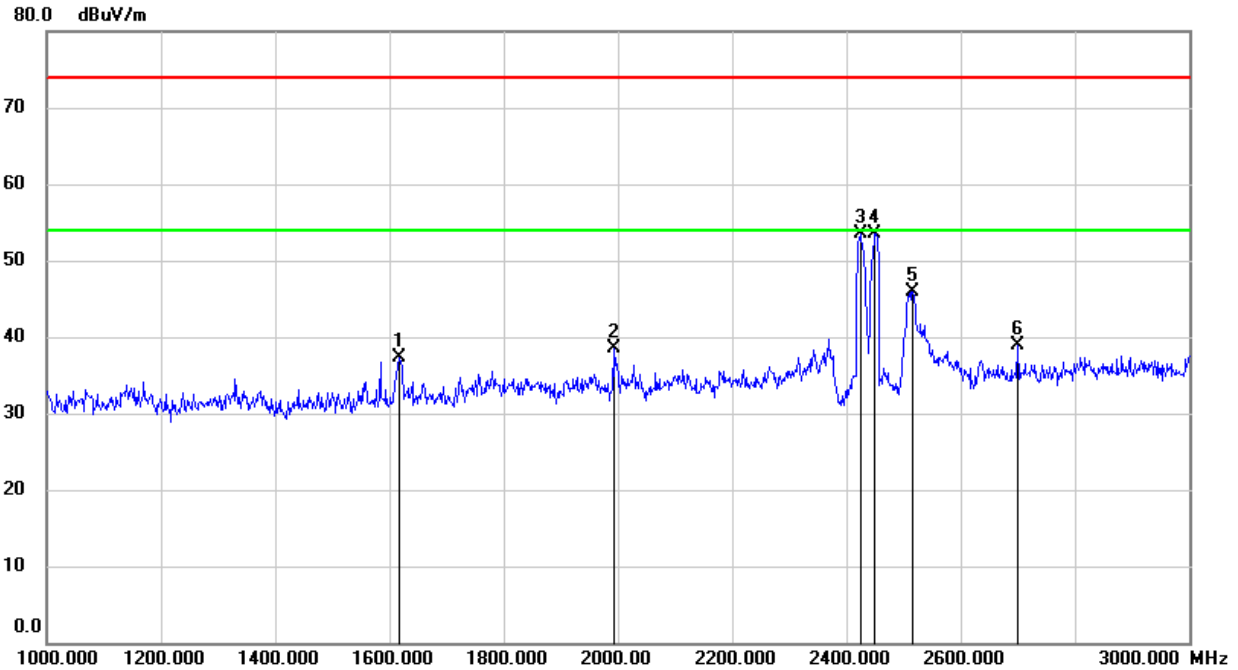


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1120.000	51.79	-13.34	38.45	74.00	-35.55	peak
2	1362.000	50.95	-12.37	38.58	74.00	-35.42	peak
3	2348.000	52.23	-8.03	44.20	74.00	-29.80	peak
4	2437.000	55.99	-7.67	48.32	/	/	fundamental
5	2456.210	55.47	-7.50	47.97	74.00	-26.03	peak
6	2576.000	44.75	-7.57	37.18	74.00	-36.82	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 (MID CHANNEL, VERTICAL)**

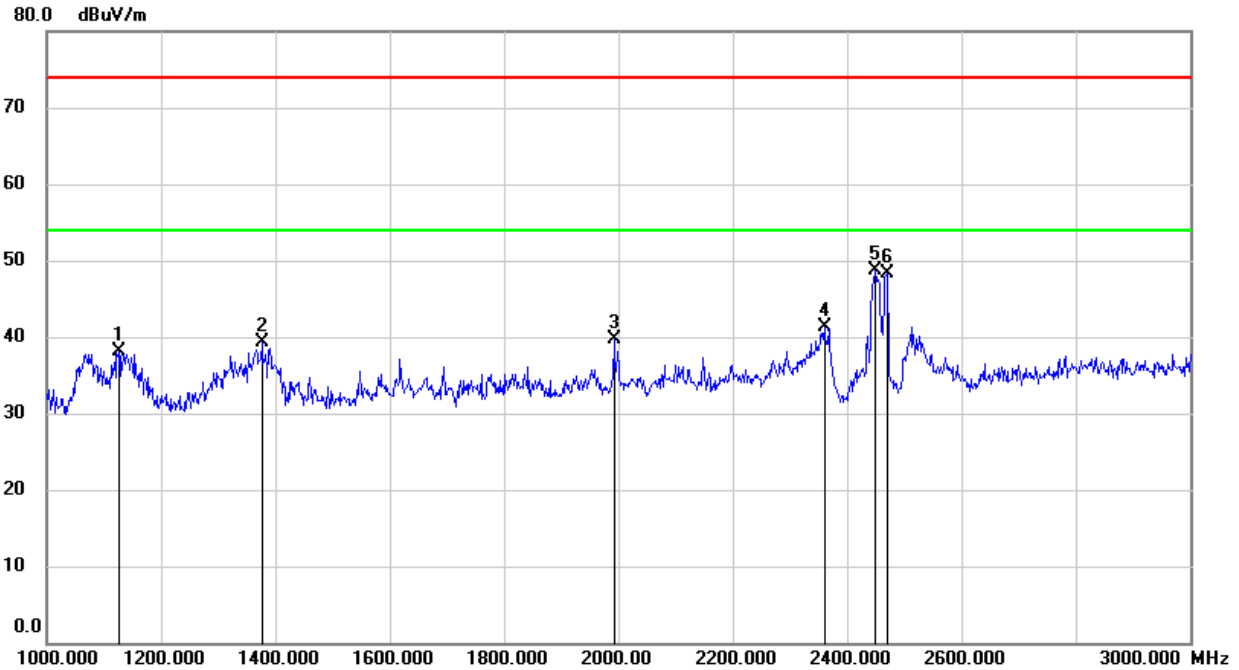


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1616.000	48.71	-11.32	37.39	74.00	-36.61	peak
2	1992.000	48.31	-9.83	38.48	74.00	-35.52	peak
3	2437.000	61.16	-7.70	53.46	/	/	fundamental
4	2456.145	60.98	-7.51	53.47	74.00	-20.53	peak
5	2516.000	53.10	-7.25	45.85	74.00	-28.15	peak
6	2700.000	45.96	-7.13	38.83	74.00	-35.17	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 (HIGH CHANNEL, HORIZONTAL)**

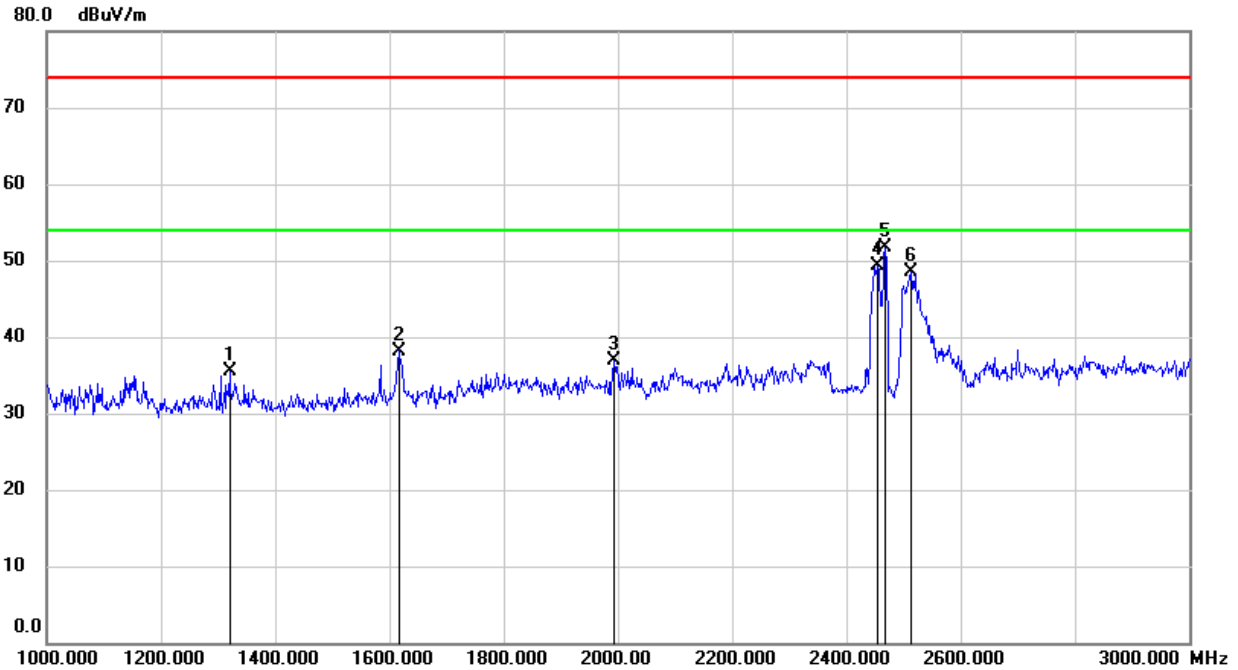


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1126.000	51.37	-13.29	38.08	74.00	-35.92	peak
2	1376.000	51.66	-12.37	39.29	74.00	-34.71	peak
3	1992.000	49.50	-9.83	39.67	74.00	-34.33	peak
4	2360.000	49.21	-7.99	41.22	74.00	-32.78	peak
5	2452.000	56.28	-7.52	48.76	/	/	fundamental
6	2470.000	55.61	-7.37	48.24	74.00	-25.76	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 (HIGH CHANNEL, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1320.000	47.86	-12.35	35.51	74.00	-38.49	peak
2	1616.000	49.52	-11.32	38.20	74.00	-35.80	peak
3	1994.000	46.64	-9.83	36.81	74.00	-37.19	peak
4	2452.000	56.86	-7.48	49.38	/	/	fundamental
5	2468.000	59.04	-7.39	51.65	74.00	-22.35	peak
6	2512.000	55.69	-7.23	48.46	74.00	-25.54	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.

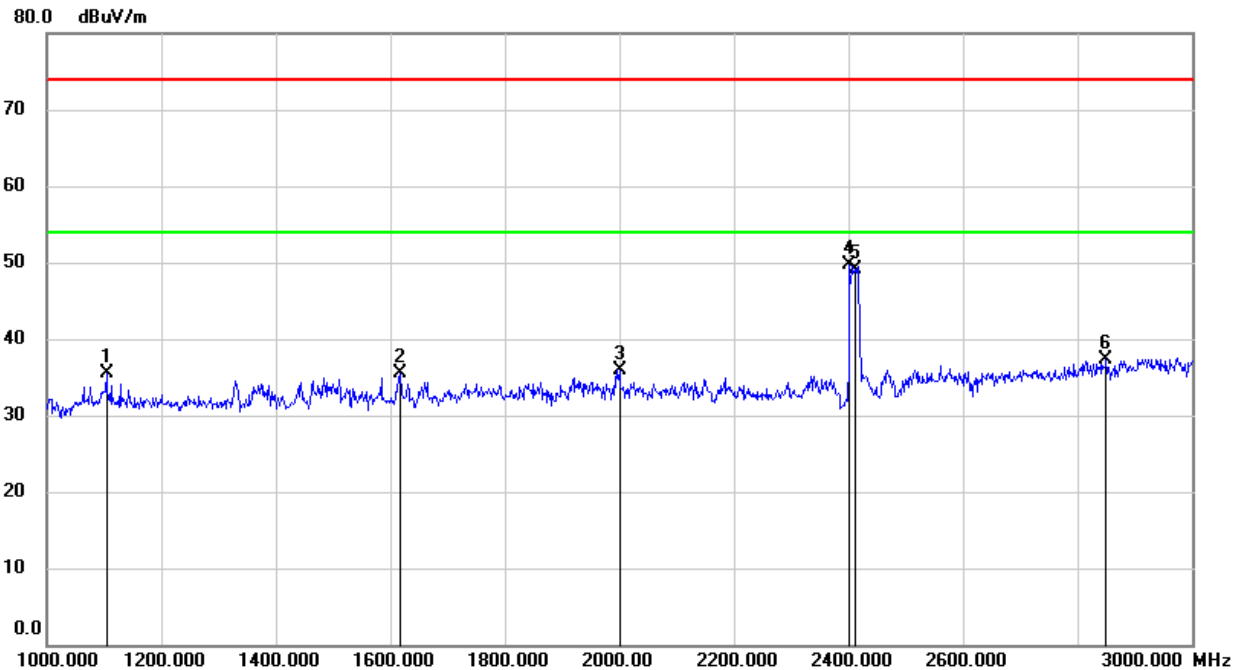


## 8.4. WORST-CASE CO-LOCATION

### 8.4.1. BLE MODE AND 802.11n HT20 MODE (TRANSMIT SIMULTANEOUSLY)

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

#### 1-3GHz



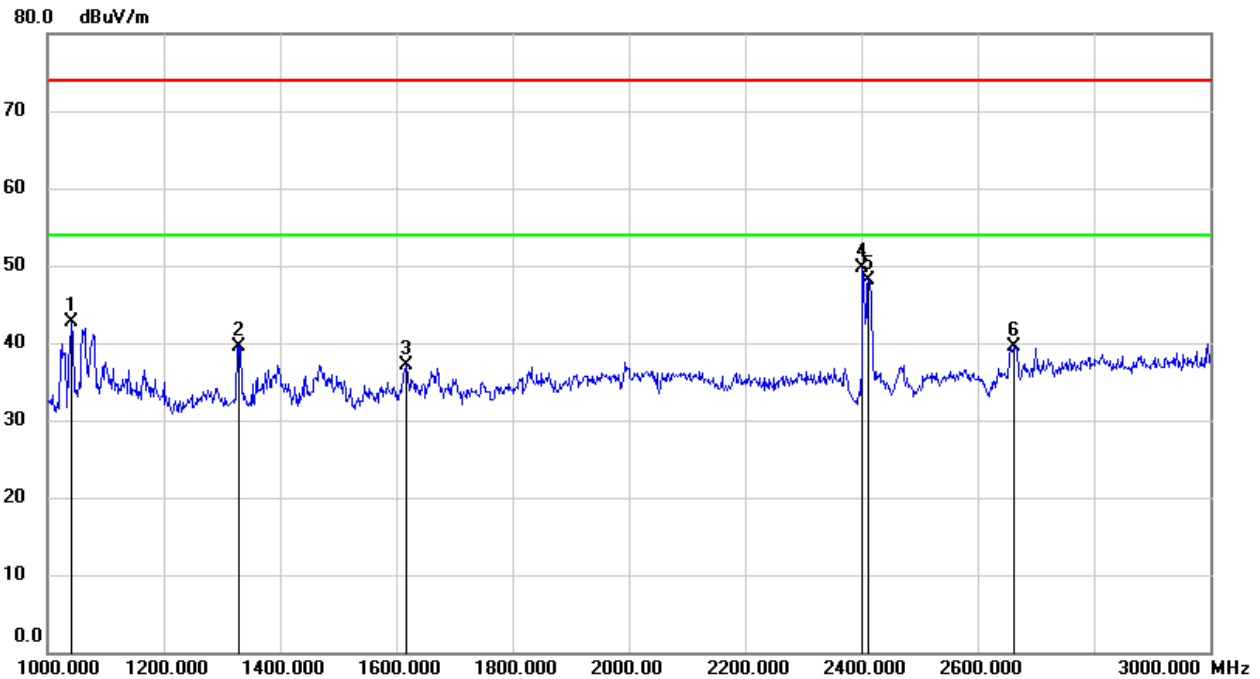
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1104.000	48.90	-13.48	35.42	74.00	-38.58	peak
2	1618.000	46.77	-11.31	35.46	74.00	-38.54	peak
3	2000.000	45.82	-9.82	36.00	74.00	-38.00	peak
4	2402.000	57.53	-7.85	49.68	/	/	fundamental
5	2412.000	56.91	-7.77	49.14	/	/	fundamental
6	2850.000	43.19	-5.79	37.40	74.00	-36.60	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. 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.



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

**1-3GHz**



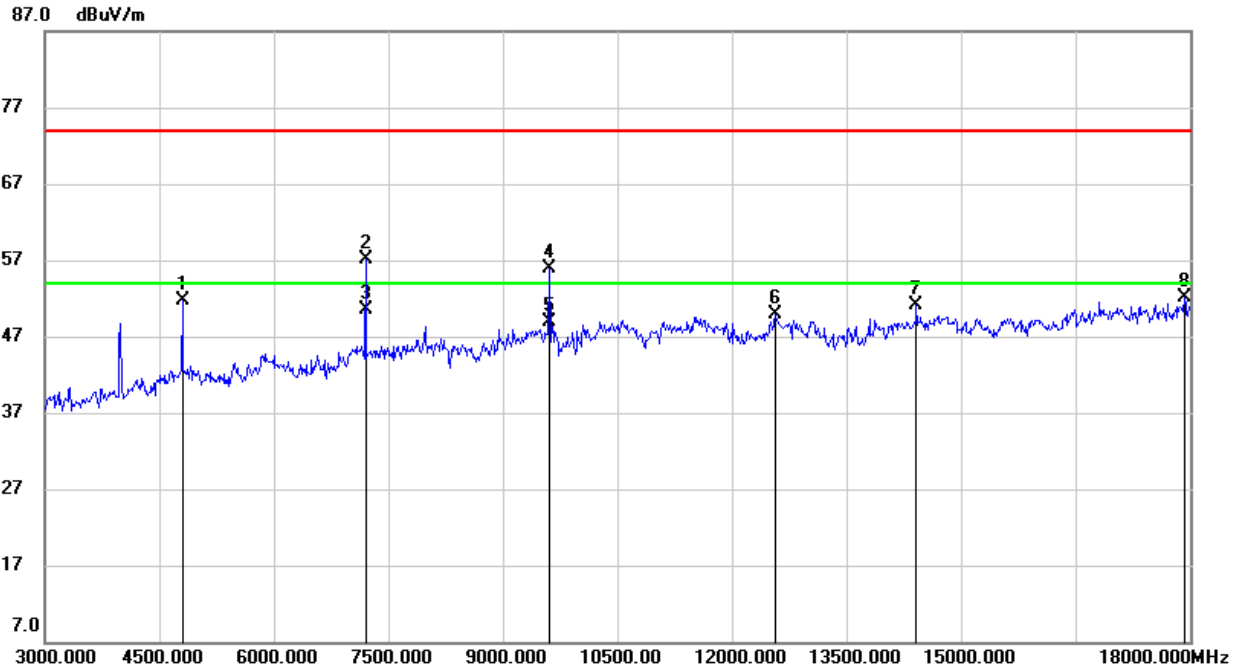
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1042.000	56.23	-13.56	42.67	74.00	-31.33	peak
2	1330.000	51.86	-12.36	39.50	74.00	-34.50	peak
3	1618.000	48.37	-11.31	37.06	74.00	-36.94	peak
4	2402.000	57.62	-7.85	49.77	/	/	fundamental
5	2412.000	55.83	-7.77	48.06	/	/	fundamental
6	2662.000	46.86	-7.35	39.51	74.00	-34.49	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. 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.



**SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)**

**3-18GHz**



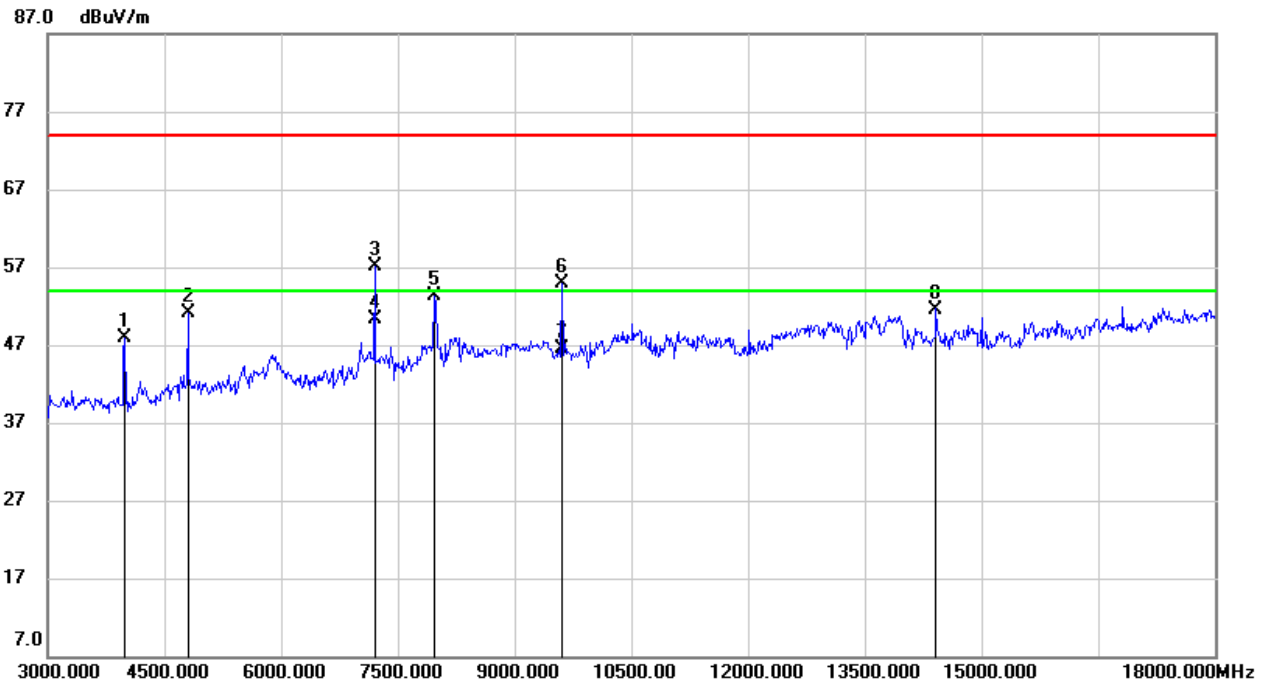
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.000	51.20	0.46	51.66	74.00	-22.34	peak
2	7205.954	51.28	5.82	57.10	74.00	-16.90	peak
3	7205.954	44.75	5.82	50.57	54.00	-3.43	AVG
4	9607.932	46.26	9.69	55.95	74.00	-18.05	peak
5	9607.932	39.17	9.69	48.86	54.00	-5.14	AVG
6	12570.000	35.68	14.17	49.85	74.00	-24.15	peak
7	14415.000	34.84	16.35	51.19	74.00	-22.81	peak
8	17925.000	28.73	23.37	52.10	74.00	-21.90	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. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.  
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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

**3-18GHz**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	50.88	-2.89	47.99	74.00	-26.01	peak
2	4800.000	50.59	0.46	51.05	74.00	-22.95	peak
3	7205.594	51.19	5.82	57.01	74.00	-16.99	peak
4	7205.954	44.51	5.82	50.33	54.00	-3.67	AVG
5	7965.000	46.31	7.00	53.31	74.00	-20.69	peak
6	9607.947	45.25	9.69	54.94	74.00	-19.06	peak
7	9607.947	36.90	9.69	46.59	54.00	-7.41	AVG
8	14415.000	35.25	16.35	51.60	74.00	-22.40	peak

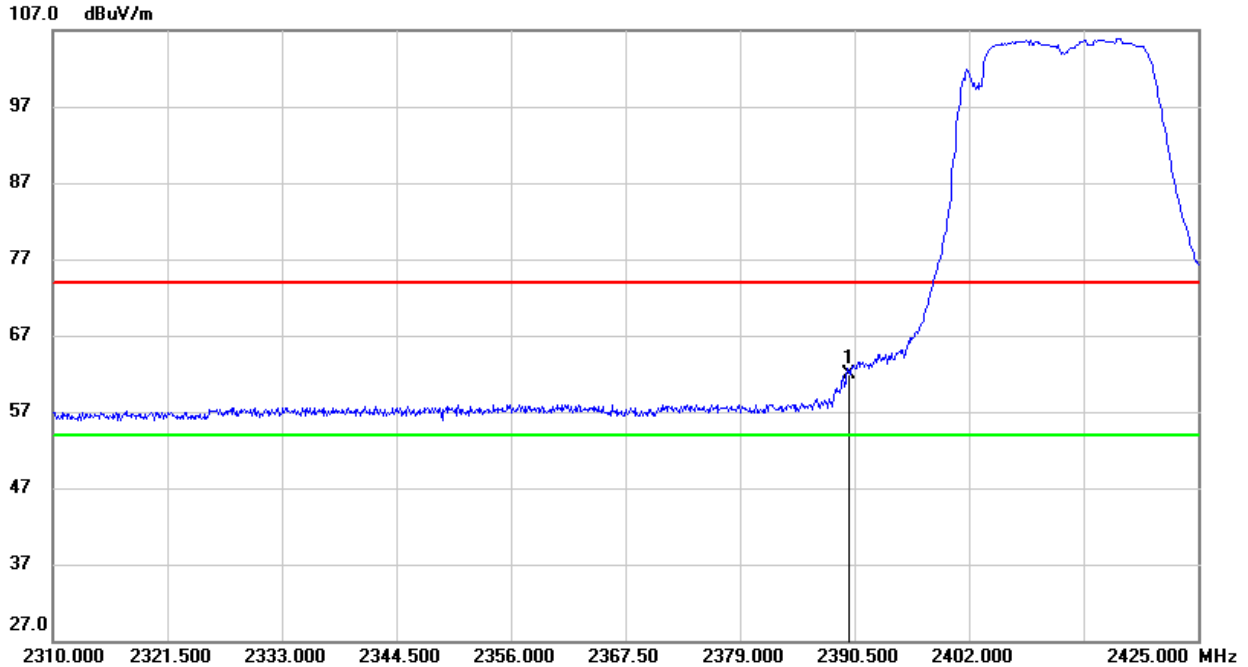
- Note: 1. Peak Result = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.  
 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.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





**RESTRICTED BANDEDGE (LOW CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)**

**PEAK**

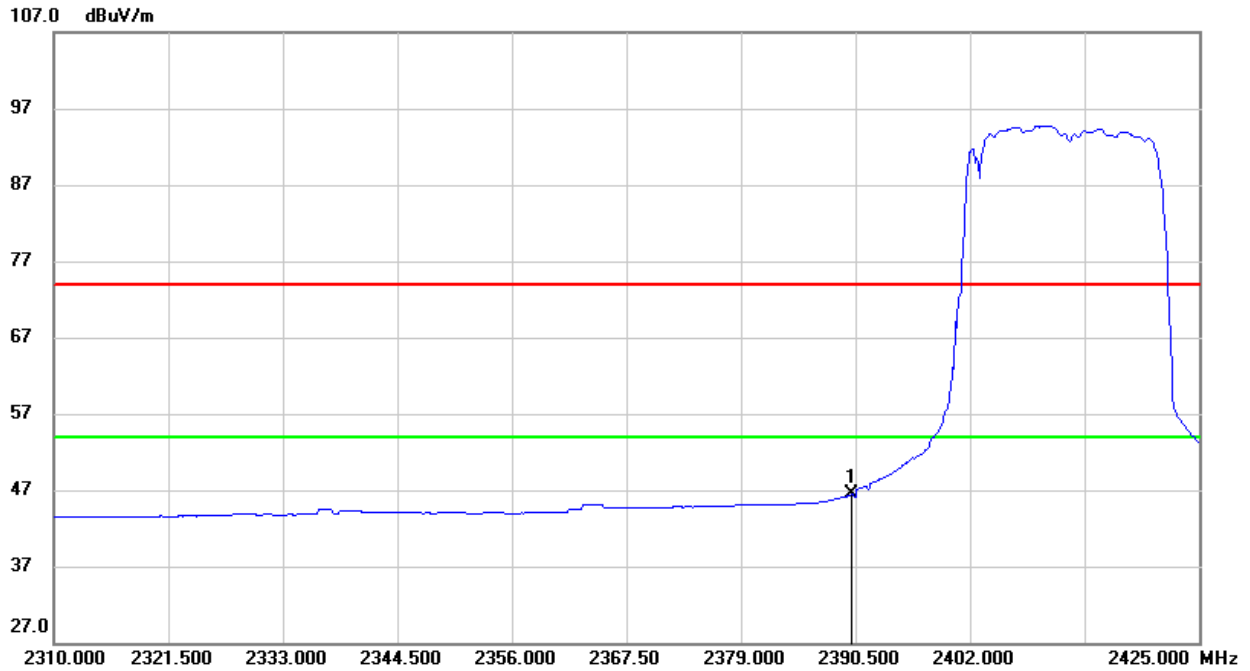


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.93	32.94	61.87	74.00	-12.13	peak

- 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**



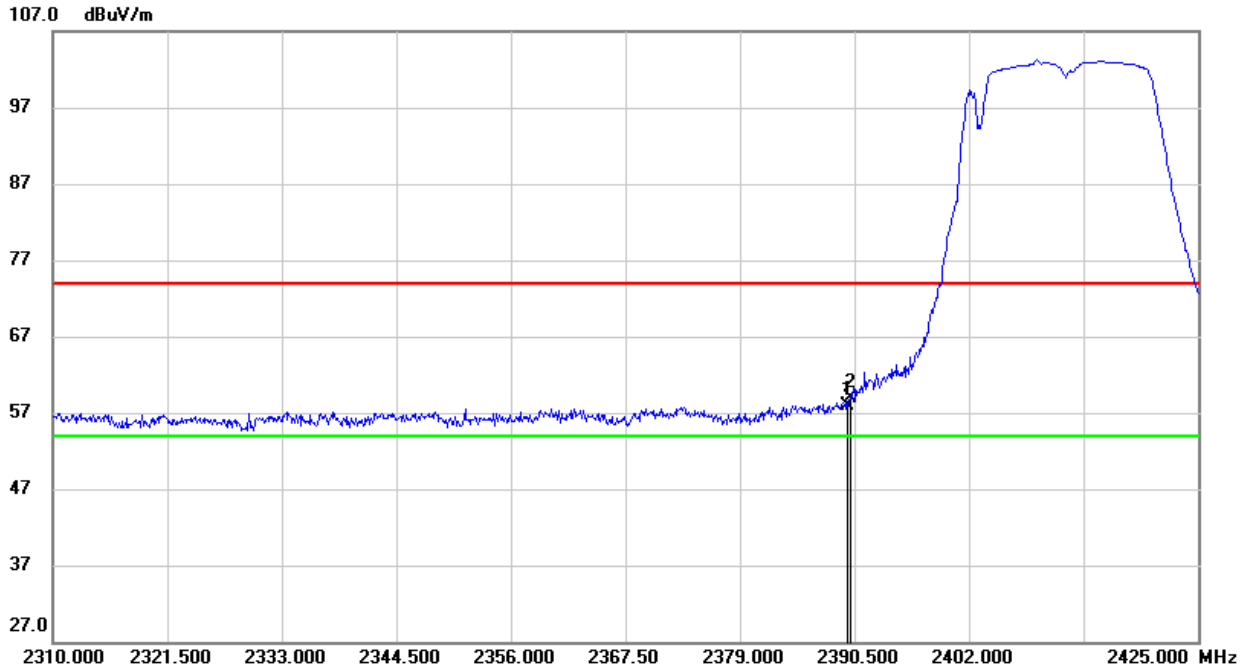
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	13.49	32.94	46.43	54.00	-7.57	AVG

- 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. AVG:  $VBW=1/T_{on}$  where:  $t_{on}$  is transmit duration.
  4. For transmit duration, please refer to clause 7.1.
  5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**

**PEAK**

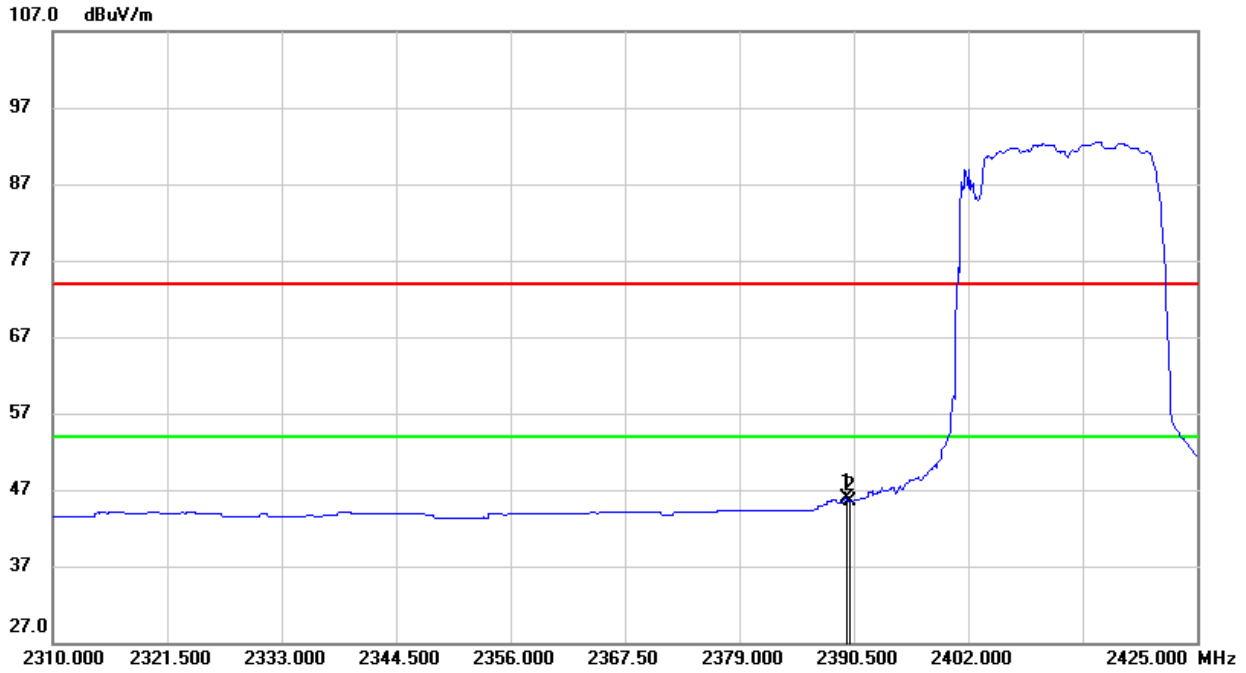


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.810	24.98	32.94	57.92	74.00	-16.08	peak
2	2390.000	25.89	32.94	58.83	74.00	-15.17	peak

- 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	2389.810	13.05	32.94	45.99	54.00	-8.01	AVG
2	2390.000	12.62	32.94	45.56	54.00	-8.44	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. AVG:  $VBW=1/T_{on}$  where:  $t_{on}$  is transmit duration.  
 4. For transmit duration, please refer to clause 7.1.  
 5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

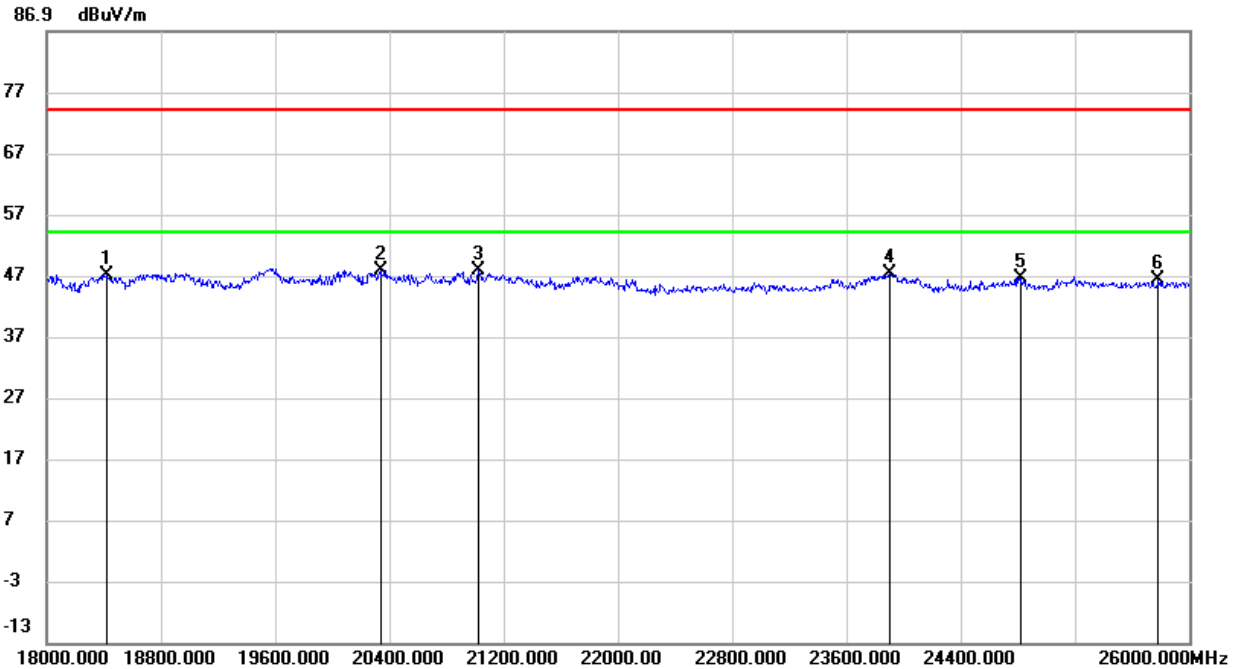
Note: All the test modes and combination have been considered. Only the worst data record in the report.



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

### 8.5.1. 802.11b MODE

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

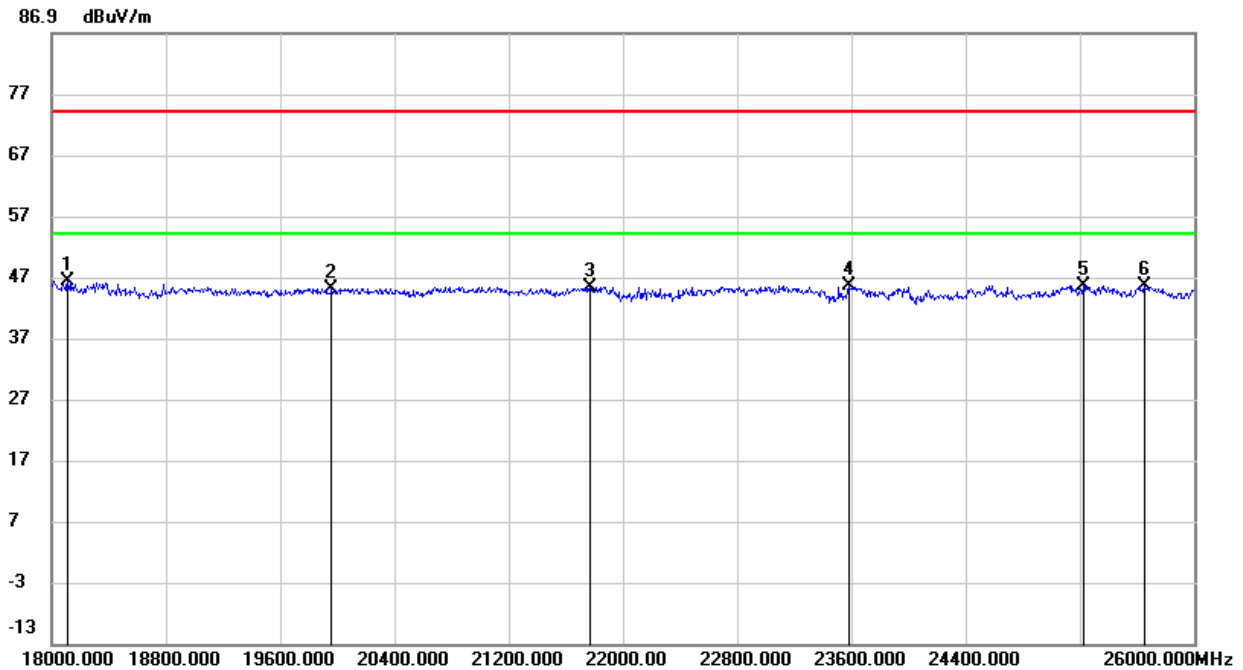


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18424.000	51.41	-4.38	47.03	74.00	-26.97	peak
2	20336.000	52.78	-4.91	47.87	74.00	-26.13	peak
3	21024.000	53.12	-5.30	47.82	74.00	-26.18	peak
4	23904.000	51.54	-4.25	47.29	74.00	-26.71	peak
5	24824.000	48.27	-1.69	46.58	74.00	-27.42	peak
6	25784.000	47.73	-1.49	46.24	74.00	-27.76	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 (LOW CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18112.000	50.35	-4.10	46.25	74.00	-27.75	peak
2	19960.000	49.52	-4.37	45.15	74.00	-28.85	peak
3	21768.000	51.17	-5.79	45.38	74.00	-28.62	peak
4	23584.000	50.15	-4.71	45.44	74.00	-28.56	peak
5	25224.000	46.65	-1.17	45.48	74.00	-28.52	peak
6	25648.000	47.12	-1.53	45.59	74.00	-28.41	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.

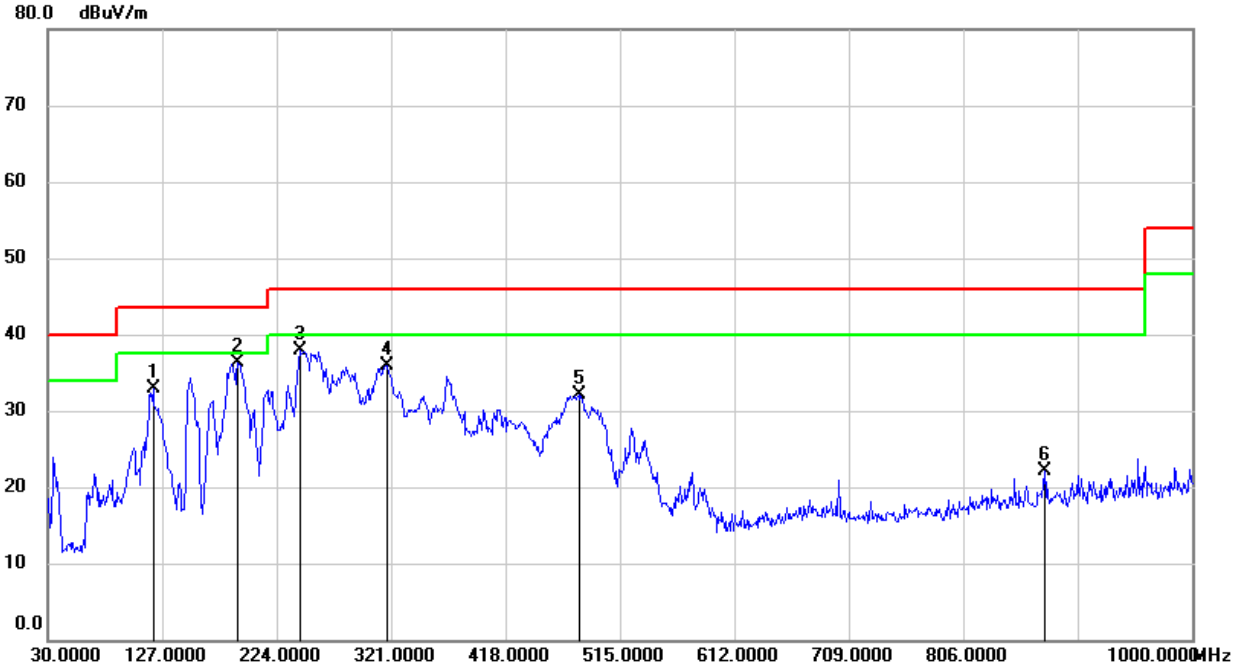
Note: All the test modes have been tested, only the worst data record in the report.



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

### 8.6.1. 802.11b MODE

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

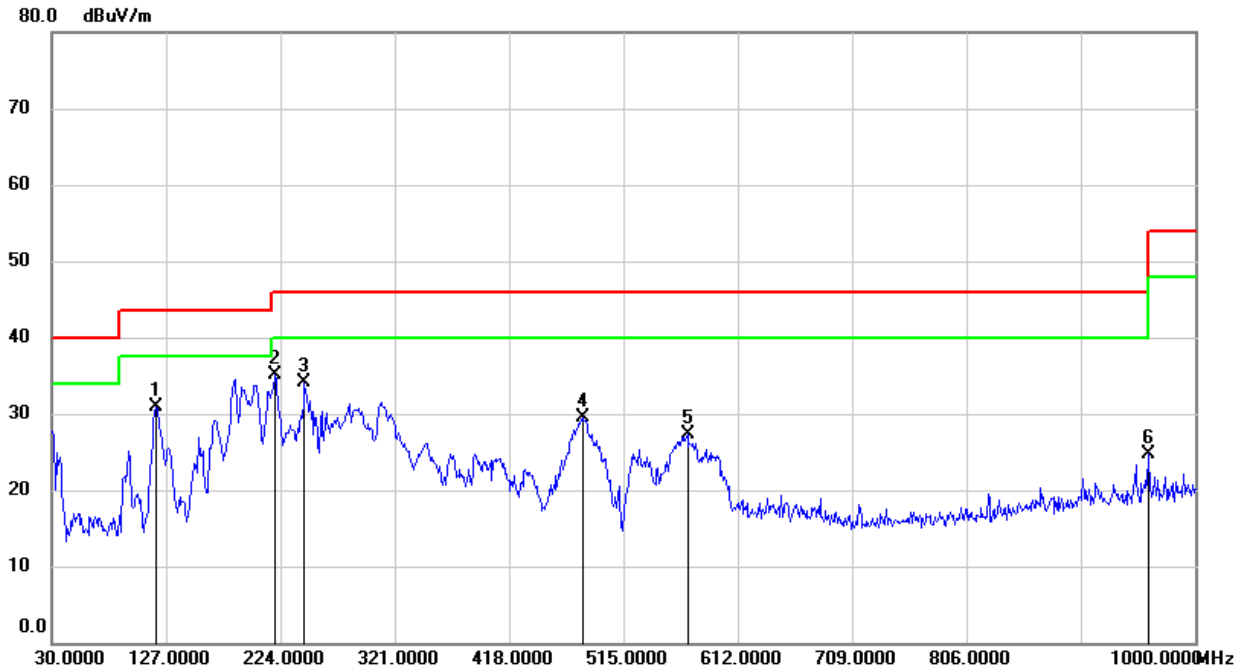


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	119.2400	53.08	-20.10	32.98	43.50	-10.52	QP
2	191.0200	53.14	-16.75	36.39	43.50	-7.11	QP
3	243.4000	57.20	-19.38	37.82	46.00	-8.18	QP
4	318.0900	51.03	-15.16	35.87	46.00	-10.13	QP
5	480.0800	44.05	-11.98	32.07	46.00	-13.93	QP
6	874.8700	28.34	-6.17	22.17	46.00	-23.83	QP

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



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



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	118.2700	51.04	-20.15	30.89	43.50	-12.61	QP
2	219.1500	53.34	-18.32	35.02	46.00	-10.98	QP
3	244.3700	53.41	-19.39	34.02	46.00	-11.98	QP
4	480.0800	41.42	-11.98	29.44	46.00	-16.56	QP
5	569.3200	37.75	-10.39	27.36	46.00	-18.64	QP
6	960.2300	29.68	-5.02	24.66	54.00	-29.34	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.

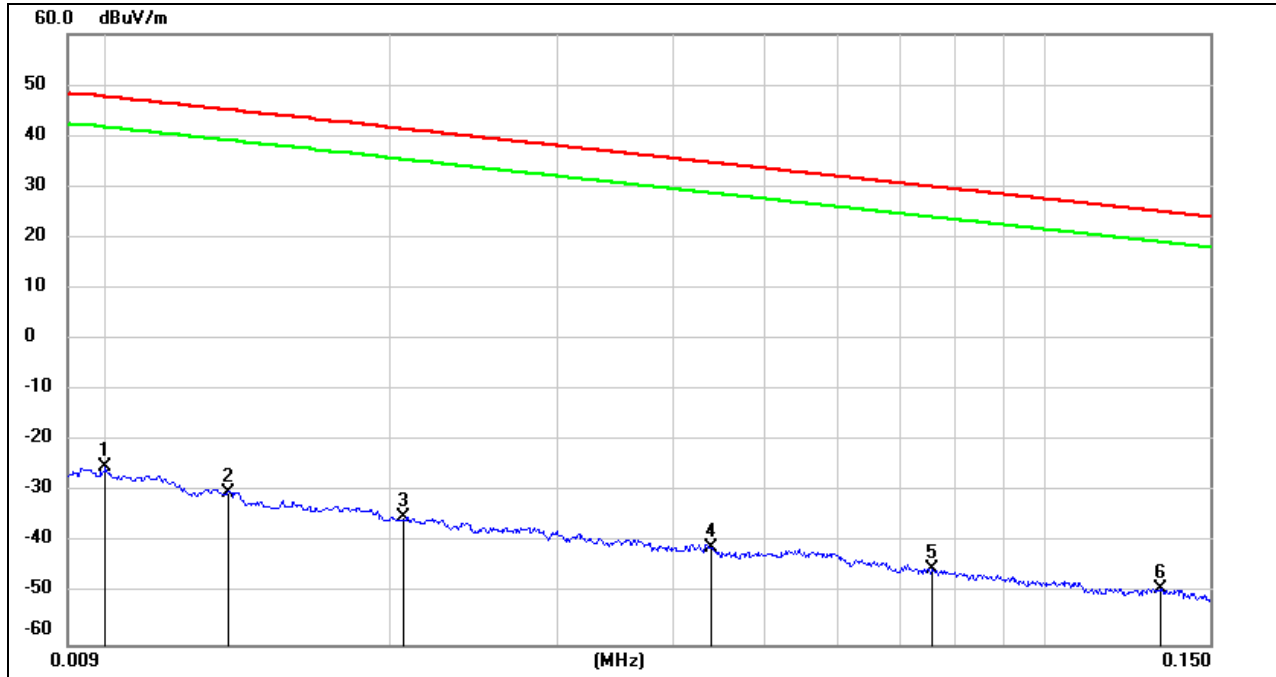


## 8.7. SPURIOUS EMISSIONS BELOW 30M

### 8.7.1. 802.11b MODE

#### SPURIOUS EMISSIONS (LOW CHANNEL, 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)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.0100	76.22	-101.40	-25.18	47.60	-76.68	-3.9	-72.78	peak
2	0.0134	71.23	-101.39	-30.16	45.06	-81.66	-6.44	-75.22	peak
3	0.0206	66.42	-101.35	-34.93	41.32	-86.43	-10.18	-76.25	peak
4	0.0439	60.39	-101.45	-41.06	34.75	-92.56	-16.75	-75.81	peak
5	0.0757	56.45	-101.59	-45.14	30.02	-96.64	-21.48	-75.16	peak
6	0.1324	52.67	-101.69	-49.02	25.17	-100.52	-26.33	-74.19	peak

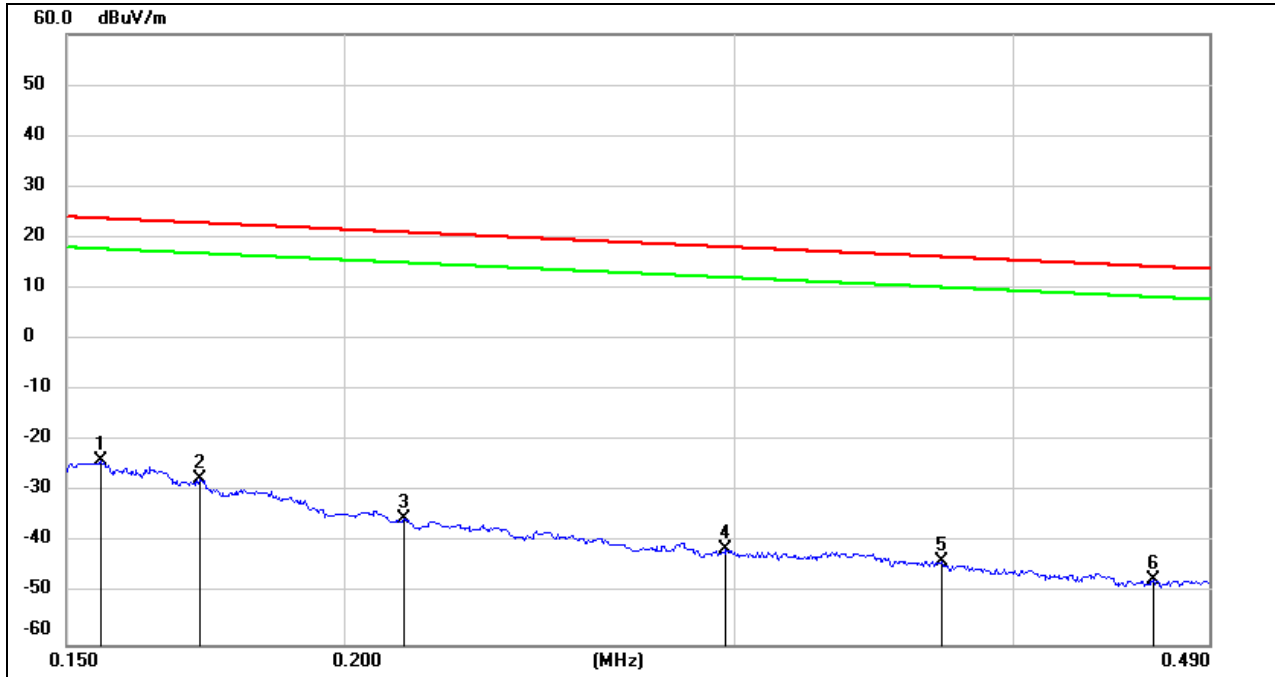
Note: 1. Measurement = Reading Level + Correct Factor (dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).

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)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.1554	77.77	-101.65	-23.88	23.77	-75.38	-27.73	-47.65	peak
2	0.1720	74.19	-101.67	-27.48	22.90	-78.98	-28.6	-50.38	peak
3	0.2127	66.45	-101.74	-35.29	21.04	-86.79	-30.46	-56.33	peak
4	0.2972	60.66	-101.85	-41.19	18.14	-92.69	-33.36	-59.33	peak
5	0.3714	58.28	-101.93	-43.65	16.20	-95.15	-35.3	-59.85	peak
6	0.4627	54.72	-102.03	-47.31	14.30	-98.81	-37.2	-61.61	peak

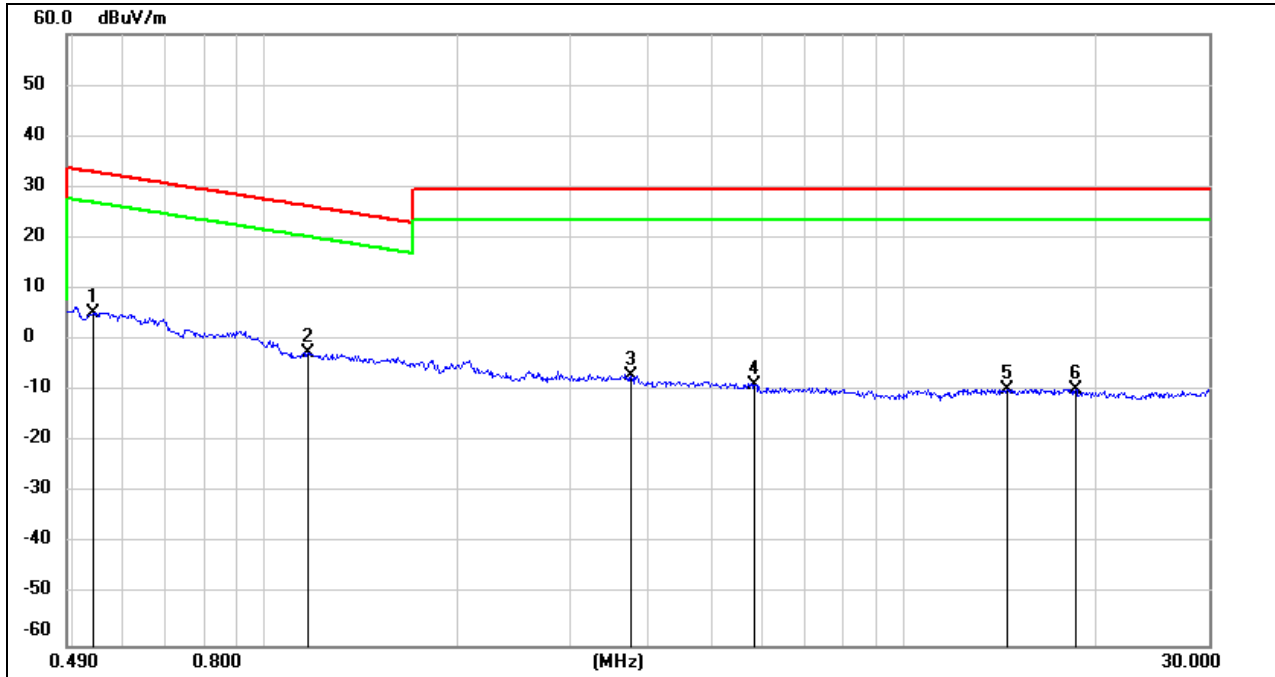
Note: 1. Measurement = Reading Level + Correct Factor (dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5).

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)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.5383	67.44	-62.08	5.36	32.98	-46.14	-18.52	-27.62	peak
2	1.1687	59.72	-62.19	-2.47	26.25	-53.97	-25.25	-28.72	peak
3	3.7406	54.30	-61.40	-7.10	29.54	-58.6	-21.96	-36.64	peak
4	5.8334	52.63	-61.37	-8.74	29.54	-60.24	-21.96	-38.28	peak
5	14.5073	51.28	-60.99	-9.71	29.54	-61.21	-21.96	-39.25	peak
6	18.6091	51.14	-60.89	-9.75	29.54	-61.25	-21.96	-39.29	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.

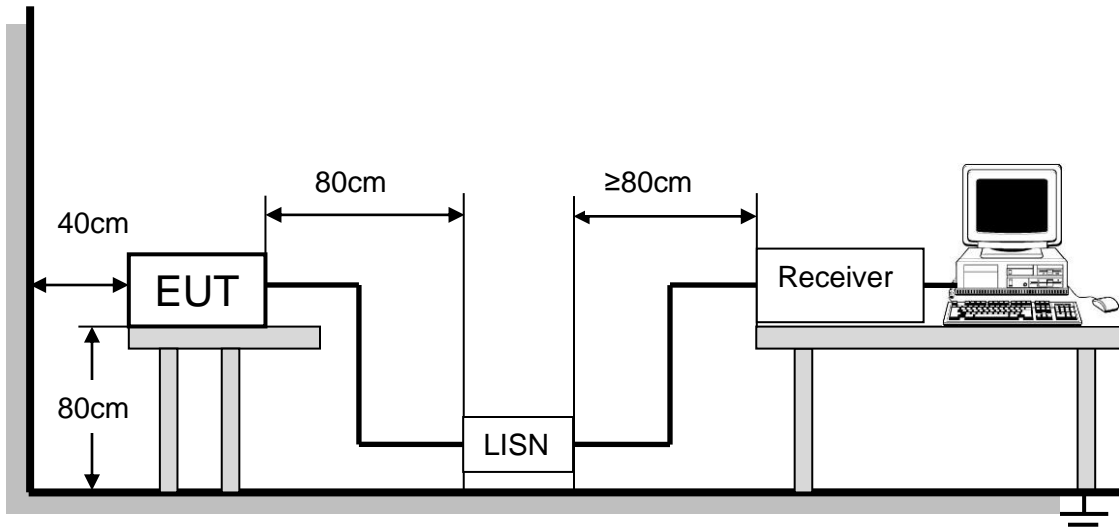
## 9. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

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

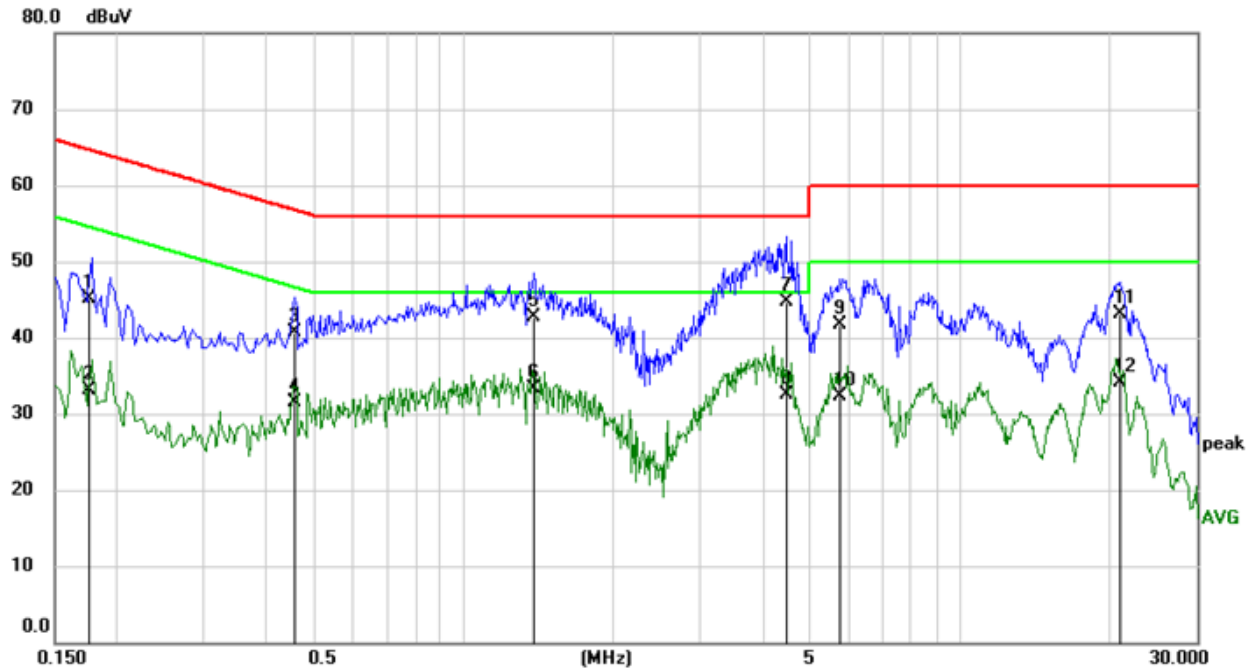
Temperature	24.1°C	Relative Humidity	50%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz



**TEST RESULTS**

**9.1. 802.11b MODE**

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

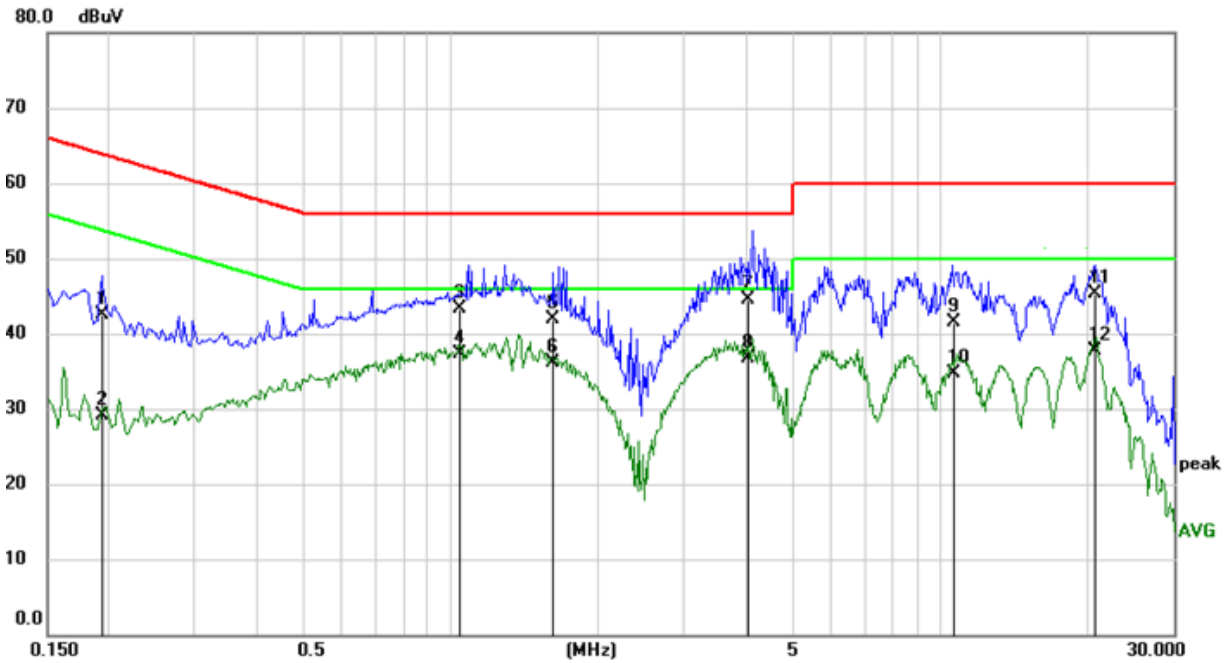


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1757	35.44	9.60	45.04	64.69	-19.65	QP
2	0.1757	23.41	9.60	33.01	54.69	-21.68	AVG
3	0.4573	31.10	9.60	40.70	56.74	-16.04	QP
4	0.4573	21.86	9.60	31.46	46.74	-15.28	AVG
5	1.3767	33.19	9.61	42.80	56.00	-13.20	QP
6	1.3767	23.71	9.61	33.32	46.00	-12.68	AVG
7	4.4341	35.11	9.66	44.77	56.00	-11.23	QP
8	4.4341	22.79	9.66	32.45	46.00	-13.55	AVG
9	5.7318	32.04	9.69	41.73	60.00	-18.27	QP
10	5.7318	22.67	9.69	32.36	50.00	-17.64	AVG
11	21.0306	32.94	10.21	43.15	60.00	-16.85	QP
12	21.0306	23.85	10.21	34.06	50.00	-15.94	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 (LOW CHANNEL, WORST-CASE CONFIGURATION)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1924	32.90	9.60	42.50	63.93	-21.43	QP
2	0.1924	19.60	9.60	29.20	53.93	-24.73	AVG
3	1.0443	33.60	9.61	43.21	56.00	-12.79	QP
4	1.0443	27.70	9.61	37.31	46.00	-8.69	AVG
5	1.6226	32.29	9.62	41.91	56.00	-14.09	QP
6	1.6226	26.54	9.62	36.16	46.00	-9.84	AVG
7	4.0473	34.87	9.66	44.53	56.00	-11.47	QP
8	4.0473	27.07	9.66	36.73	46.00	-9.27	AVG
9	10.6359	31.68	9.75	41.43	60.00	-18.57	QP
10	10.6359	24.86	9.75	34.61	50.00	-15.39	AVG
11	20.8013	35.25	10.09	45.34	60.00	-14.66	QP
12	20.8013	27.70	10.09	37.79	50.00	-12.21	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



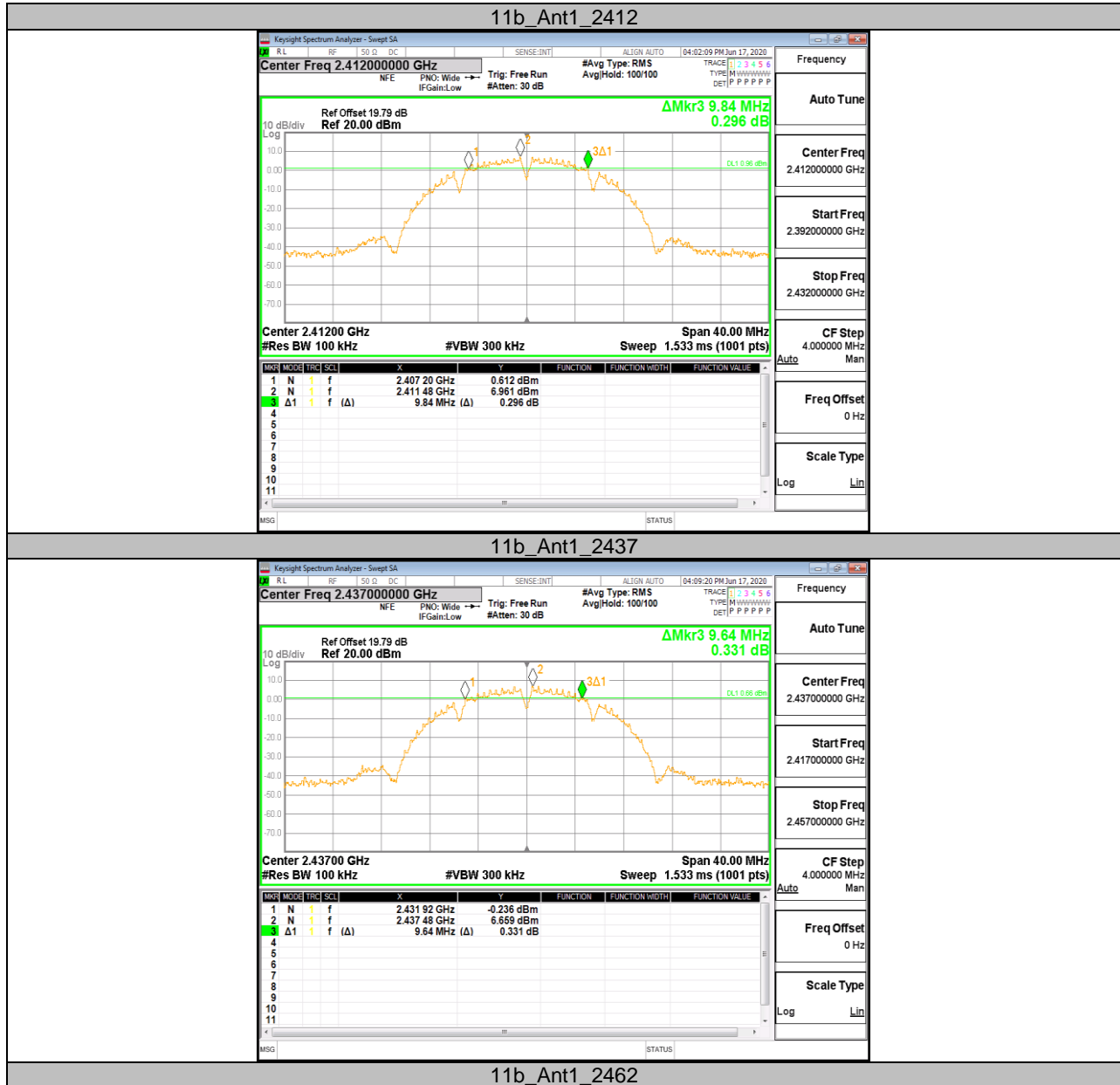
**10.1. Appendix A: DTS Bandwidth**  
**10.1.1. Test Result**

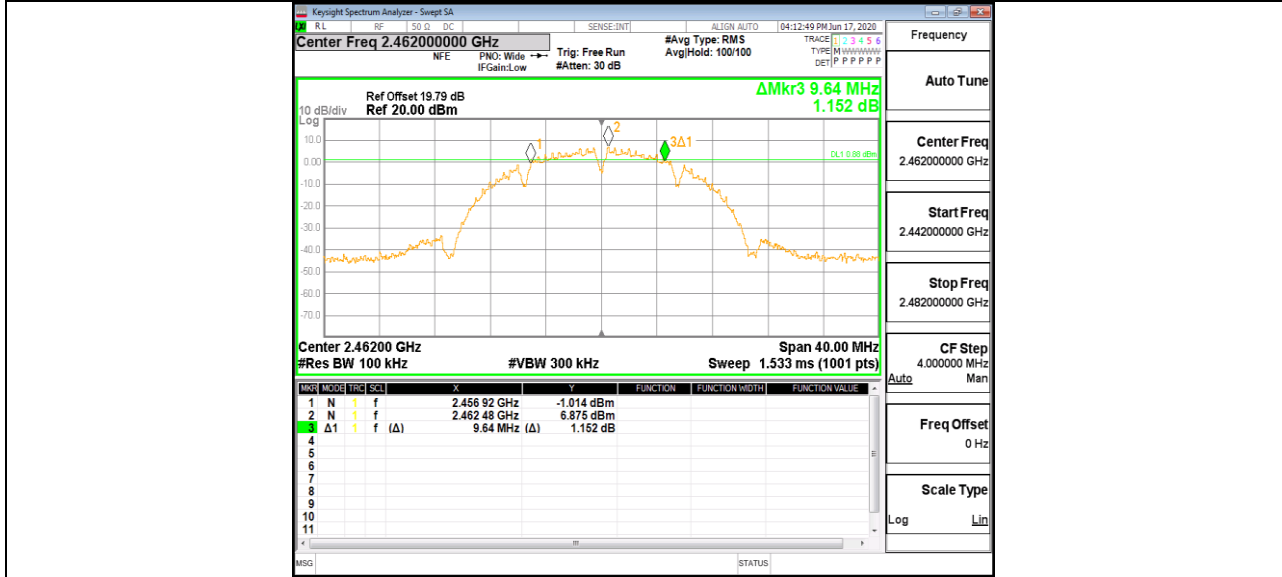
Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11b	Ant1	2412	9.840	2407.200	2417.040	0.5	PASS
		2437	9.640	2431.920	2441.560	0.5	PASS
		2462	9.640	2456.920	2466.560	0.5	PASS
11g	Ant1	2412	16.440	2403.760	2420.200	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11n20SISO	Ant1	2412	17.360	2403.200	2420.560	0.5	PASS
		2437	17.640	2428.160	2445.800	0.5	PASS
		2462	17.600	2453.160	2470.760	0.5	PASS
11n40SISO	Ant1	2422	35.200	2404.320	2439.520	0.5	PASS
		2437	35.280	2419.320	2454.600	0.5	PASS
		2452	34.720	2434.400	2469.120	0.5	PASS



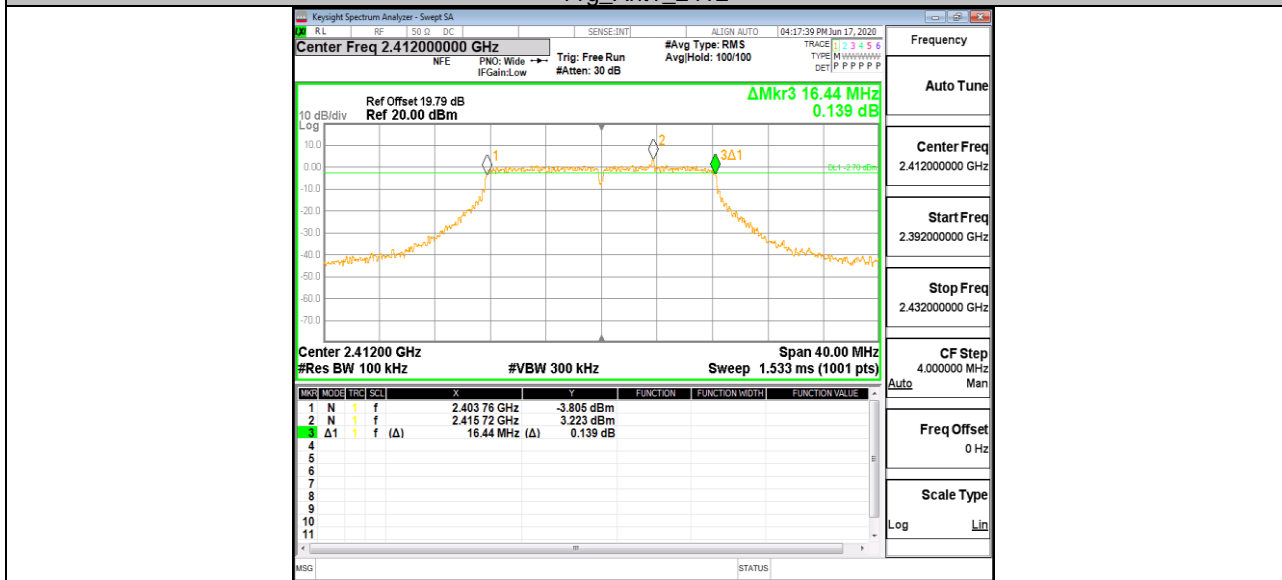


### 10.1.2. Test Graphs

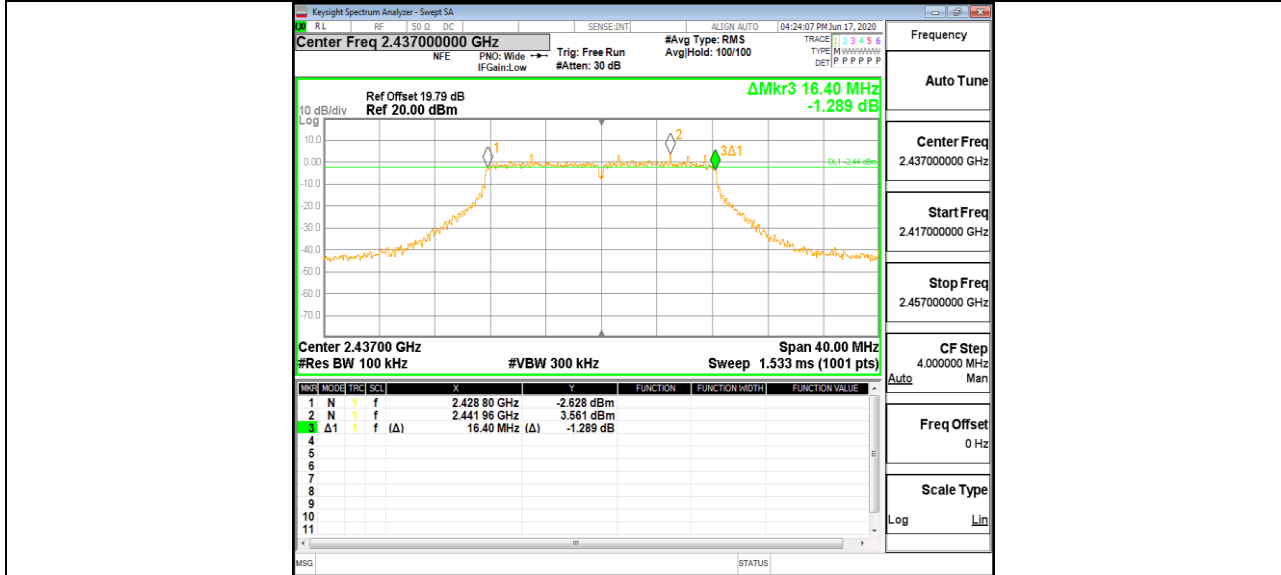




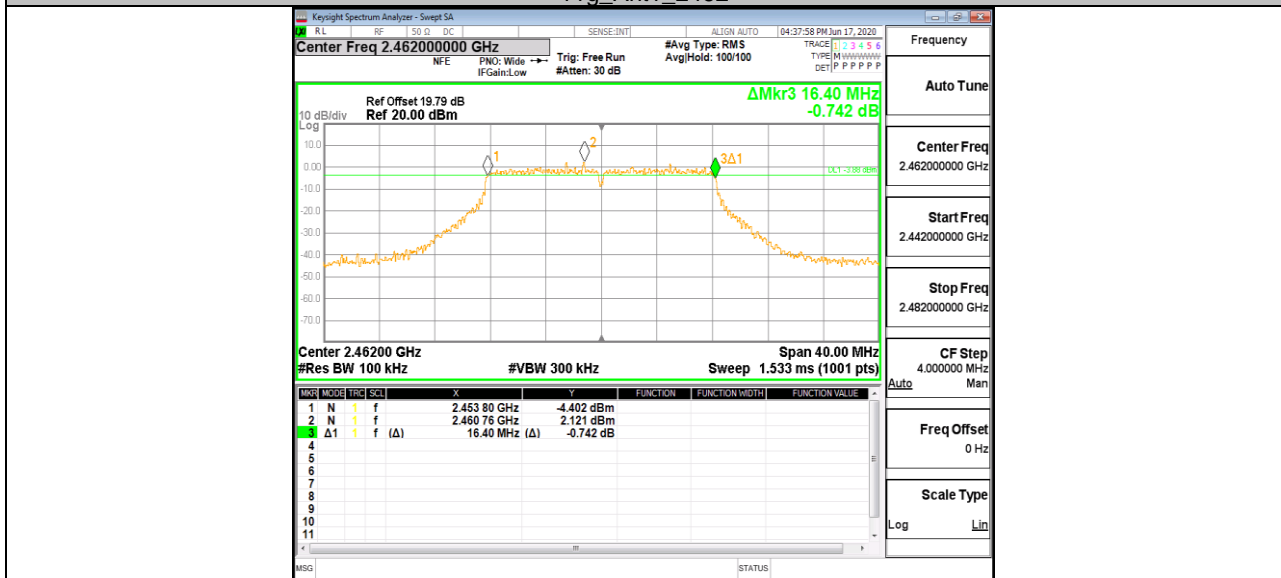
11g\_Ant1\_2412



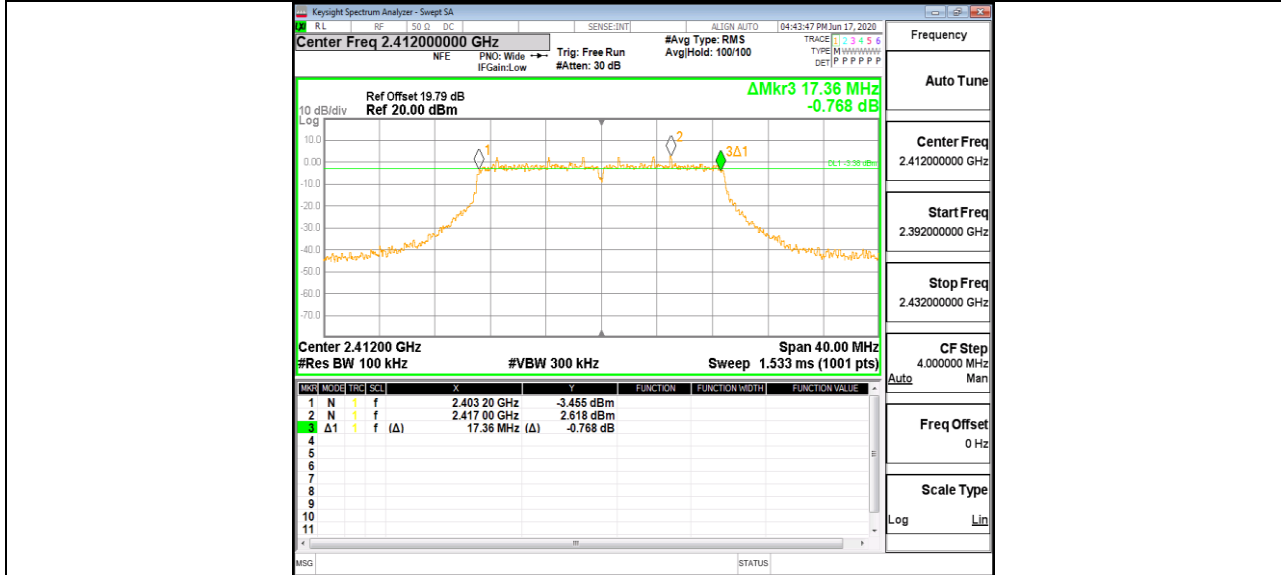
11g\_Ant1\_2437



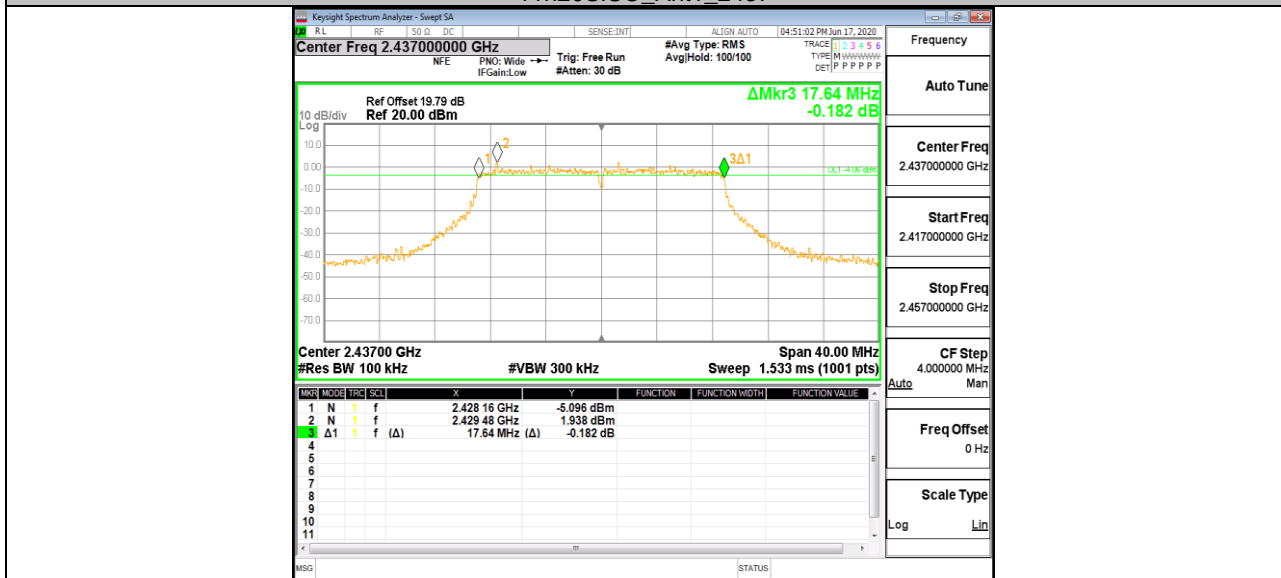
11g\_Ant1\_2462



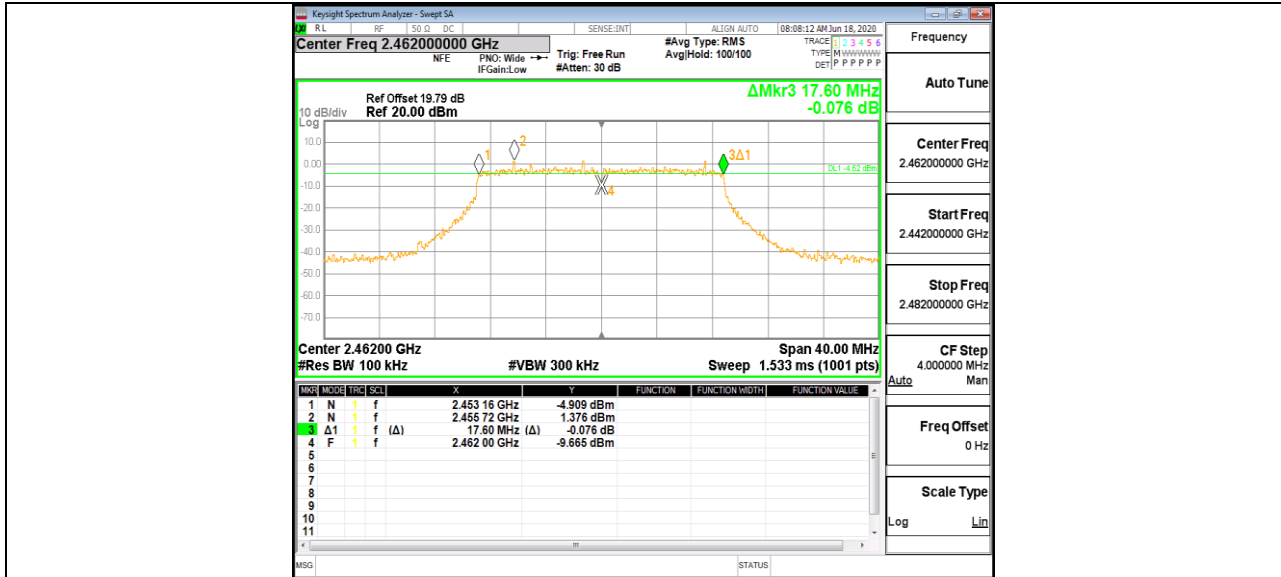
11n20SISO\_Ant1\_2412



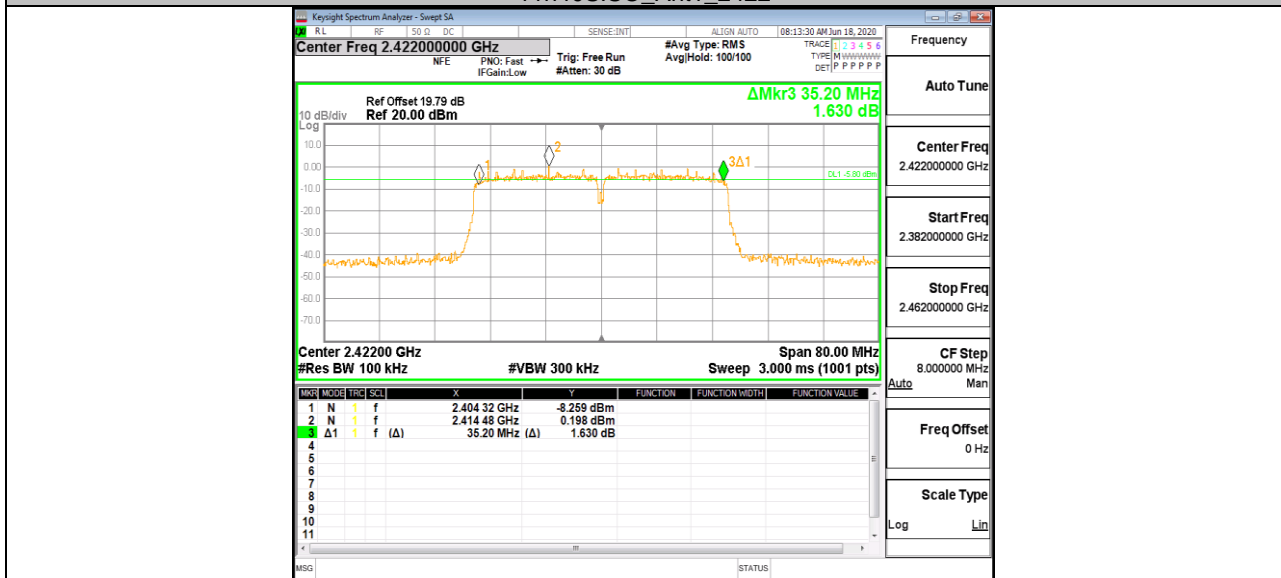
11n20SISO\_Ant1\_2437



11n20SISO\_Ant1\_2462



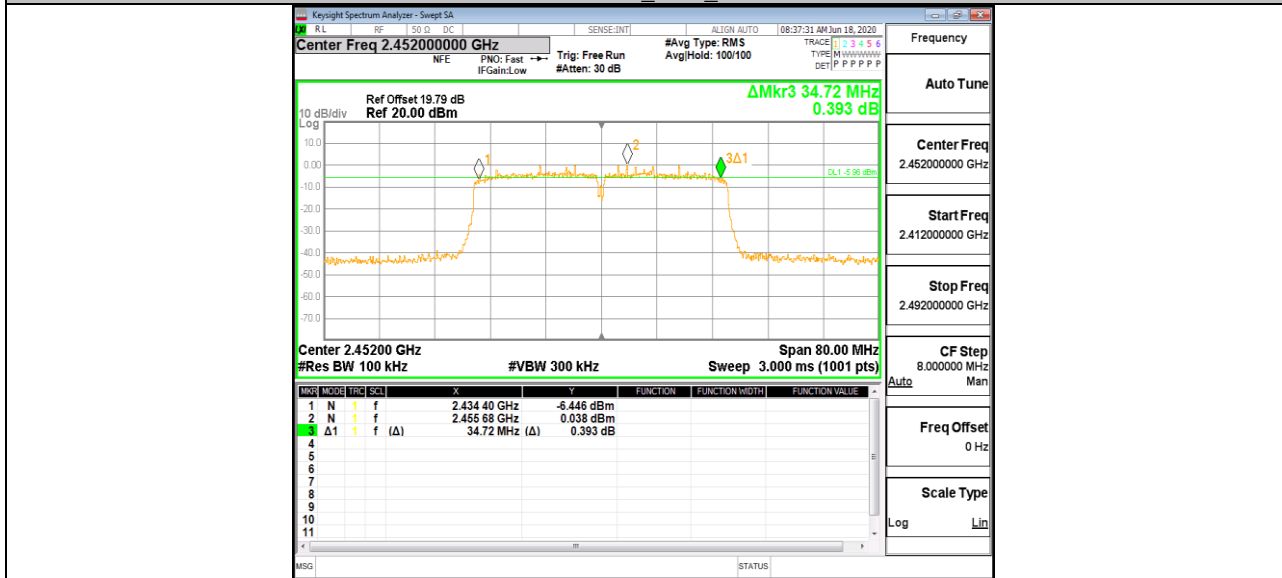
11n40SISO\_Ant1\_2422



11n40SISO\_Ant1\_2437



11n40SISO\_Ant1\_2452





**10.2. Appendix B: Occupied Channel Bandwidth**  
**10.2.1. Test Result**

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11b	Ant1	2412	14.880	2404.559	2419.439	---	PASS
		2437	14.888	2429.546	2444.434	---	PASS
		2462	14.875	2454.540	2469.415	---	PASS
11g	Ant1	2412	17.311	2403.321	2420.632	---	PASS
		2437	17.168	2428.408	2445.576	---	PASS
		2462	17.269	2453.266	2470.535	---	PASS
11n20SISO	Ant1	2412	18.129	2402.971	2421.100	---	PASS
		2437	18.116	2427.944	2446.060	---	PASS
		2462	18.129	2452.886	2471.015	---	PASS
11n40SISO	Ant1	2422	35.787	2404.046	2439.833	---	PASS
		2437	35.824	2419.019	2454.843	---	PASS
		2452	35.804	2434.041	2469.845	---	PASS