



CFR 47 FCC PART 15 SUBPART E

CERTIFICATION TEST REPORT

For

Milo

MODEL NUMBER: M01

FCC ID: 2A6M9-MV01

REPORT NUMBER: 4790371944-8

ISSUE DATE: May 20, 2022

Prepared for

**Loose Cannon Systems, Inc.
PO Box 1447, Ross, CA. 94957 USA**

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	05/20/2022	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB/26dB Bandwidth	FCC 15.407 (a)&(e)	PASS
2	Conducted Output Power	FCC 15.407 (a)	PASS
3	Power Spectral Density	FCC 15.407 (a)	PASS
4	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205	PASS
5	Conducted Emission Test for AC Power Port	FCC 15.207	PASS
6	Frequency Stability	FCC 15.407 (g)	PASS
7	Dynamic Frequency Selection	FCC 15.407 (h)	PASS
8	Antenna Requirement	FCC 15.203	PASS
Note: 1.This test report is only published to and used by the applicant, and it is not for evidence purpose in China. 2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART E > when <Accuracy Method> decision rule is applied.			



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Loose Cannon Systems, Inc.
Address: PO Box 1447, Ross, CA. 94957 USA

Manufacturer Information

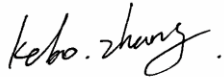
Company Name: Loose Cannon Systems, Inc.
Address: PO Box 1447, Ross, CA. 94957 USA

EUT Information

EUT Name: Milo
Model: M01
Brand: 
Sample Received Date: April 20, 2022
Sample Status: Normal
Sample ID: 4881135
Date of Tested: April 25, 2022~May 20, 2022

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

Prepared By:



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Checked By:



Shawn Wen
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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, CFR 47 FCC Part 2, CFR 47 FCC Part 15, KDB 789033 D02 v02r01, KDB414788 D01 Radiated Test Site v01r01, KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02, KDB 905462 D03 UNII clients without radar detection New Rules v01r02, KDB 905462 D04 Operational Modes for DFS Testing New Rules v01 and KDB 905462 D06 802 11 Channel Plans New Rules v02.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1187) 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 ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) 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
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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 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to 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	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.78 dB (1 GHz-18 GHz)
	5.23dB (18 GHz-26 GHz)
	5.64 dB (26 GHz-40 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Milo
Model	M01
Radio Technology	IEEE802.11a 20 IEEE802.11n HT20/n HT40 IEEE802.11ac VHT20/VHT40/VHT80
Operation frequency	UNII-1: 5150 ~ 5250 MHz UNII-2A: 5250 ~ 5350 MHz UNII-3: 5725 ~ 5850 MHz
Modulation	IEEE 802.11a 20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT20: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT40: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT80: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Power Supply	DC 5 V

Note: The product has 3 power supply modes: battery(DC 3.7 V), USB(DC 5 V), AC adapter, we had pre-scan for all the 3 modes, and only the worst data for DC 5 V supply are recorded in the report.

5.2. MAXIMUM OUTPUT POWER

UNII-1 BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5150 ~ 5250	14.54
n HT20		14.18
n HT40		14.49
ac VHT80		12.02

UNII-2A BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5250 ~ 5350	14.07
n HT20		13.85
n HT40		14.48
ac VHT80		11.69

UNII-3 BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5725 ~ 5850	13.69
n HT20		13.45
n HT40		13.50
ac VHT80		11.20

5.3. CHANNEL LIST

UNII-1 (For Bandwidth=20MHz)		UNII-1 (For Bandwidth=40MHz)		UNII-1 (For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

UNII-2A (For Bandwidth=20MHz)		UNII-2A (For Bandwidth=40MHz)		UNII-2A (For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

5.4. TEST CHANNEL CONFIGURATION

UNII-1 Test Channel Configuration		
IEEE Std.	Test Channel Number	Frequency
802.11a	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz
802.11n HT20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz
802.11n HT40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz
802.11ac VHT20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz
802.11ac VHT40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz
802.11ac VHT80	CH 42(Low Channel)	5210 MHz



UNII-2A Test Channel Configuration		
IEEE Std.	Test Channel Number	Frequency
802.11a	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz
802.11n HT20	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz
802.11n HT40	CH 54(Low Channel), CH 62(High Channel)	5270 MHz, 5310 MHz
802.11ac VHT20	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz
802.11ac VHT40	CH 54(Low Channel), CH 62(High Channel)	5270 MHz, 5310 MHz
802.11ac VHT80	CH 58(Low Channel)	5290 MHz

UNII-3 Test Channel Configuration		
IEEE Std.	Test Channel Number	Frequency
802.11a	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11n HT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11n HT40	CH 151(Low Channel), CH 159(High Channel)	5755MHz, 5795MHz
802.11ac VHT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11ac VHT40	CH 151(Low Channel), CH 159(High Channel)	5755 MHz, 5795 MHz
802.11ac VHT80	CH 155(Low Channel)	5775 MHz



5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5150 ~ 5850 MHz	Inverted F	1.02

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
802.11n HT20	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
802.11n HT40	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
802.11ac VHT20	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
802.11ac VHT40	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
802.11ac VHT80	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

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



5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter			
Test Software	Putty		
Frequency Band	mode	channel	setting
UNII-1	802.11a	5180	default
		5200	default
		5240	default
	802.11n (20M)	5180	default
		5200	default
		5240	default
	802.11ac (20M)	5180	default
		5200	default
		5240	default
	802.11n (40M)	5190	default
		5230	default
	802.11ac (40M)	5190	default
		5230	default
UNII-2A	802.11a	5210	default
		5260	default
		5280	default
	802.11n (20M)	5320	default
		5260	default
		5280	default
	802.11ac (20M)	5320	default
		5260	default
		5280	default
	802.11n (40M)	5320	default
		5270	default
	802.11ac (40M)	5310	default
		5270	default
UNII-3	802.11a	5310	default
		5745	default
		5785	default
	802.11n (20M)	5825	default
		5745	default
		5785	default
	802.11ac (20M)	5825	default
		5745	default
		5785	default
	802.11n (40M)	5825	default
		5755	default
	802.11ac (40M)	5795	default
		5755	default
	802.11ac (80M)	5775	default

5.7. THE WORSE CASE CONFIGURATIONS

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

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

Test channels referring to section 5.4.

Maximum power setting referring to section 5.6.

Worst case Data Rates declared by the customer:

802.11a 20 mode: 6 Mbps

802.11n HT20 mode: MCS0

802.11n HT40 mode: MCS0

802.11ac VHT20 mode: MCS0

802.11ac VHT40 mode: MCS0

802.11ac VHT80 mode: MCS0

802.11ac VHT20 and VHT40 mode are different from 802.11nHT20 and HT40 only in control messages, so for these 4 modes, only 802.11n HT20 and 802.11n HT40 worst case power modes radiated emission test data are recorded in the report.

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



5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N	Remarks
1	PC	Dell	Vostro 3902	8KNDDDB2	/
2	USB TO UART	/	/	/	/
3	AC Adapter	/	HW-100225C00	/	Input: AC 100-240V, 50/60Hz, 0.75A Output: DC 5V, 2A

I/O CABLES

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

ACCESSORIES

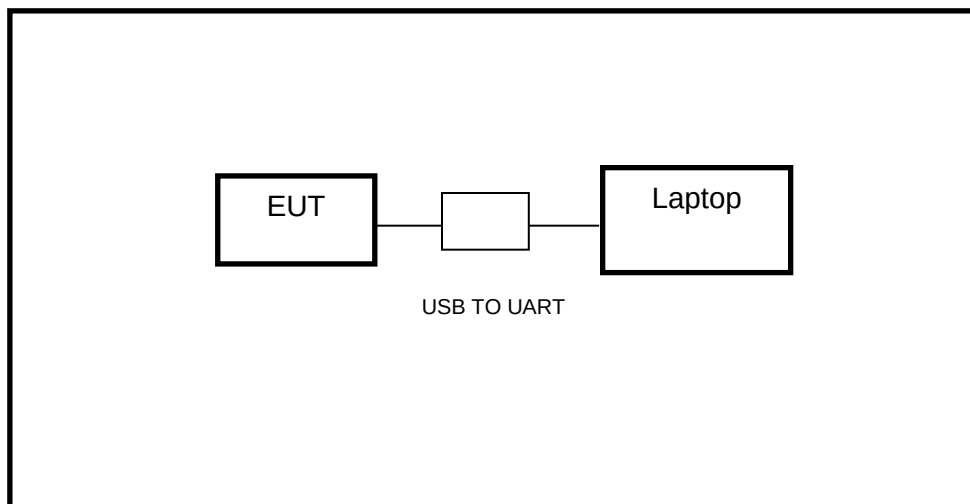
Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

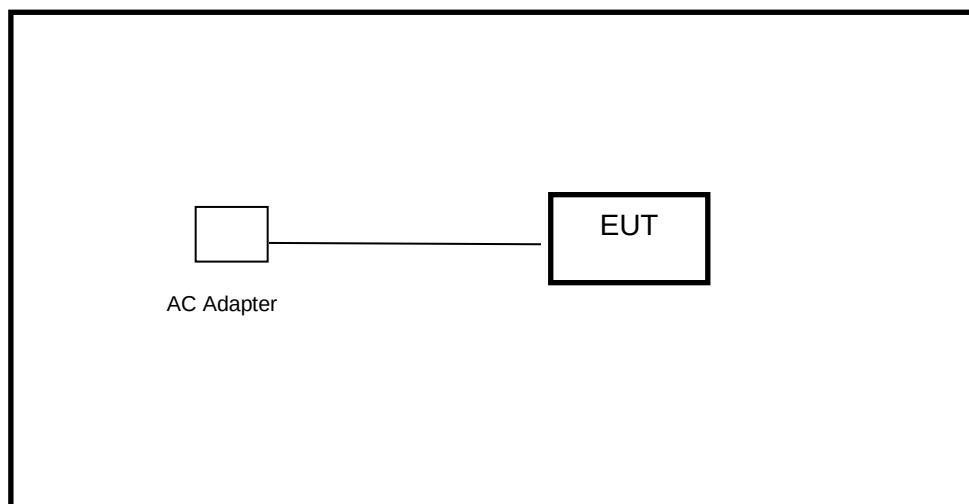
The EUT can work in engineering mode with a software through a Laptop.

SETUP DIAGRAM FOR TESTS

For others:



For AC POWER LINE CONDUCTED EMISSIONS only:





6. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Oct.30, 2021	Oct.29, 2022
Two-Line V-Network	R&S	ENV216	101983	Oct.30, 2021	Oct.29, 2022
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1
Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.30, 2021	Oct.29, 2022
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024
Preamplifier	HP	8447D	2944A09099	Oct.30, 2021	Oct.29, 2022
EMI Measurement Receiver	R&S	ESR26	101377	Oct.30, 2021	Oct.29, 2022
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Oct.30, 2021	Oct.29, 2022
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-2	TRS-307-00003	Oct.31, 2021	Oct.30, 2022
Preamplifier	TDK	PA-02-3	TRS-308-00002	Oct.31, 2021	Oct.30, 2022
Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024
Preamplifier	TDK	PA-02-001-3000	TRS-302-00050	Oct.31, 2021	Oct.30, 2022
Highpass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	4	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV12-5695-5725-5850-5880-40SS	4	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV20-5120-5150-5350-5380-60SS	2	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV20-5440-5470-5725-5755-60SS	1	Oct.31, 2021	Oct.30, 2022
Software					
Description			Manufacturer	Name	Version



Test Software for Radiated Emissions	Farad	EZ-EMC	Ver. UL-3A1
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R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Apr.02,2022	Apr.01,2023
Vector Signal Generator	R&S	SMBV100A	261637	Oct.30, 2021	Oct.29, 2022
Signal Generator	R&S	SMB100A	178553	Oct.30, 2021	Oct.29, 2022
Signal Analyzer	R&S	FSV40	101118	Oct.30, 2021	Oct.29, 2022
Software					
Description	Manufacturer		Name	Version	
For R&S TS 8997 Test System	Rohde & Schwarz		EMC 32	10.60.10	
Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Oct.30, 2021	Oct.29, 2022
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Oct.30, 2021	Oct.29, 2022
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Oct.30, 2021	Oct.29, 2022
Software					
Description	Manufacturer	Name		Version	
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System		2.6.77.0518	

Other Instruments					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Dual Channel Power Meter	Keysight	N1912A	MY55416024	Oct.30, 2021	Oct.29, 2022
Power Sensor	Keysight	USB Wideband Power Sensor	MY5100022	Oct.30, 2021	Oct.29, 2022



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

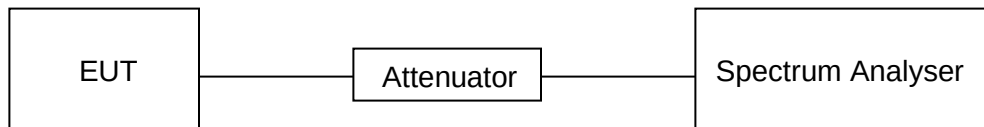
None; for reporting purposes only.

PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set $RBW \geq EBW$ if possible; otherwise, set RBW to the largest available value. Set $VBW \geq RBW$. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to appendix D.

7.2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250
26 dB Emission Bandwidth	For reporting purposes only.	5250 ~ 5350
26 dB Emission Bandwidth	For reporting purposes only.	5470 ~ 5725 (For FCC)
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850
99 % Occupied Bandwidth	For reporting purposes only.	5150 ~ 5825

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 26 dB Emission bandwidth: approximately 1 % of the EBW For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: $\geq 3 \times \text{RBW}$ For 26 dB Bandwidth: $> \text{RBW}$. For 99 % Bandwidth: $> 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

- Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
- Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

**Calculation for 99 % Bandwidth of UNII-2C and UNII-3 Straddle Channel:**

For Example: Fundamental Frequency: 5720 MHz

99 % OBW: 21.00 MHz

Turning Frequency: 5725 MHz

99 % Bandwidth of UNII-2C Band Portion = $(5725 - (5720 - (21.00/2))) = 15.50$ MHz

99 % Bandwidth of UNII-3 Band Portion = $(5720 + (21.00/2) - 5725) = 5.50$ MHz

Calculation for 26 dB Bandwidth of UNII-2C Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

26 dB BW: 20.00 MHz

FL: 5710.16 MHz

FH: 5730.16 MHz

Turning Frequency: 5725 MHz

26 dB Bandwidth of UNII-2C Band Portion = $5725 - 5710.16 = 14.84$ MHz

Calculation for 6dB Bandwidth of UNII-3 Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

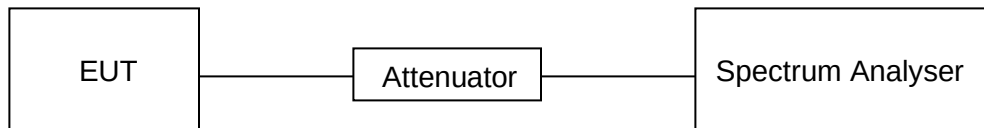
6 dB BW: 16.44 MHz

FL: 5711.76 MHz

FH: 5728.2 MHz

Turning Frequency: 5725 MHz

6 dB Bandwidth of UNII-3 band Portion = $5728.2 - 5725 = 3.2$ MHz

TEST SETUP**TEST ENVIRONMENT**

Temperature	23.4°C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix A1&A2&A3.



7.3. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	☐ Outdoor Access Point: 1 W (30 dBm) ☐ Indoor Access Point: 1 W (30 dBm) ☐ Fixed Point-To-Point Access Points: 1 W (30 dBm) ☒ Client Devices: 250 mW (24 dBm)	5150 ~ 5250
	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1 MHz.
- (iii) Set VBW $\geq$ 3 MHz.
- (iv) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)
- (v) Sweep time = auto.
- (vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
- (vii) If transmit duty cycle $< 98\%$, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle $\geq 98\%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
- (viii) Trace average at least 100 traces in power averaging (rms) mode.
- (ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

Method PM (Measurement using an RF average power meter):

- (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - a. The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - b. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
 - c. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- (ii) If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in II.B.
- (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- (iv) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25 %).

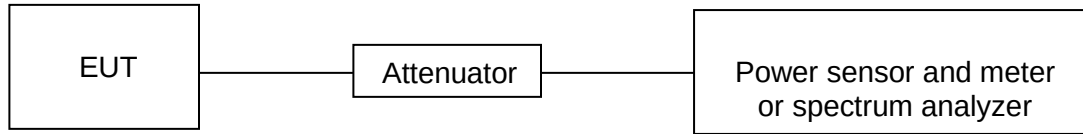
Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Straddle channel power was measured using spectrum analyzer.



TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix B.



7.4. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	☐ Outdoor Access Point: 17 dBm/MHz ☐ Indoor Access Point: 17 dBm/MHz ☐ Fixed Point-To-Point Access Points: 17 dBm/MHz ☒ Client Devices: 11 dBm/MHz	5150 ~ 5250
	11 dBm/MHz	5250 ~ 5350 5470 ~ 5725
	30 dBm/500kHz	5725 ~ 5850

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.



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

For U-NII-1, U-NII-2A and U-NII-2C band:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1 MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	RMS
Sweep time	Auto

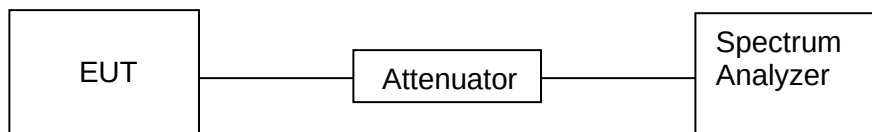
For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	RMS
Sweep time	Auto

Allow trace to fully stabilize and Use the peak search function on the instrument to find the peak of the spectrum and record its value.

Add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix C.



8. RADIATED TEST RESULTS

LIMITS

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

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

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

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

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

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

²Above 38.6c

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b) and ISSED RSS-247 6.2.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)		
Frequency Range (MHz)	EIRP Limit	Field Strength Limit (dBuV/m) at 3 m
5150~5250 MHz	PK: -27 (dBm/MHz)	PK: 68.2(dBμV/m)
5250~5350 MHz		
5470~5725 MHz		
5725~5850 MHz	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4

Note:

*1 beyond 75 MHz or more above of the band edge.

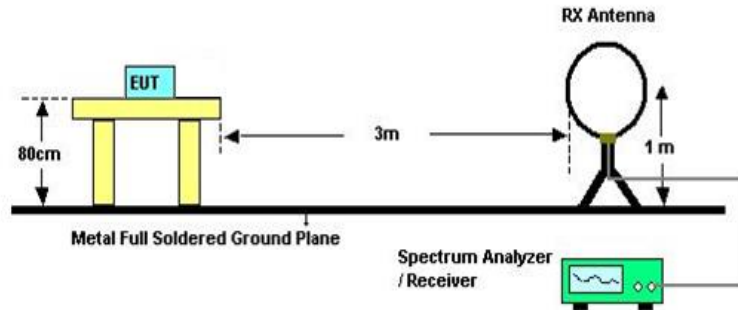
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

TEST SETUP AND PROCEDURE

Below 30 MHz

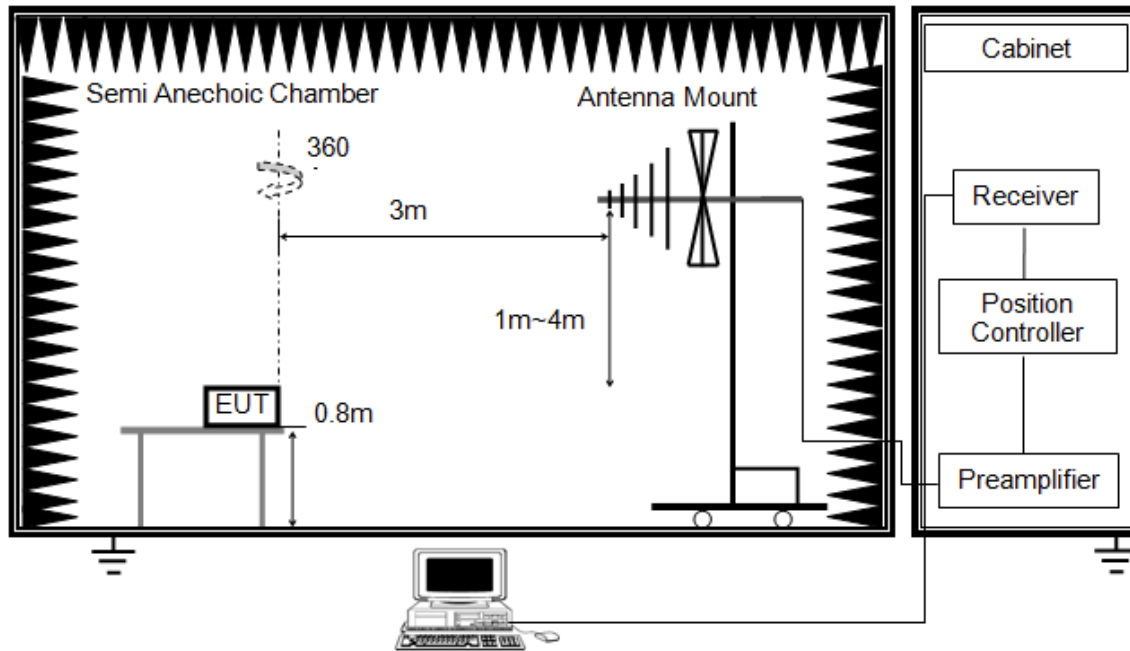


The setting of the spectrum analyzer

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

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.
8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 ohm; For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

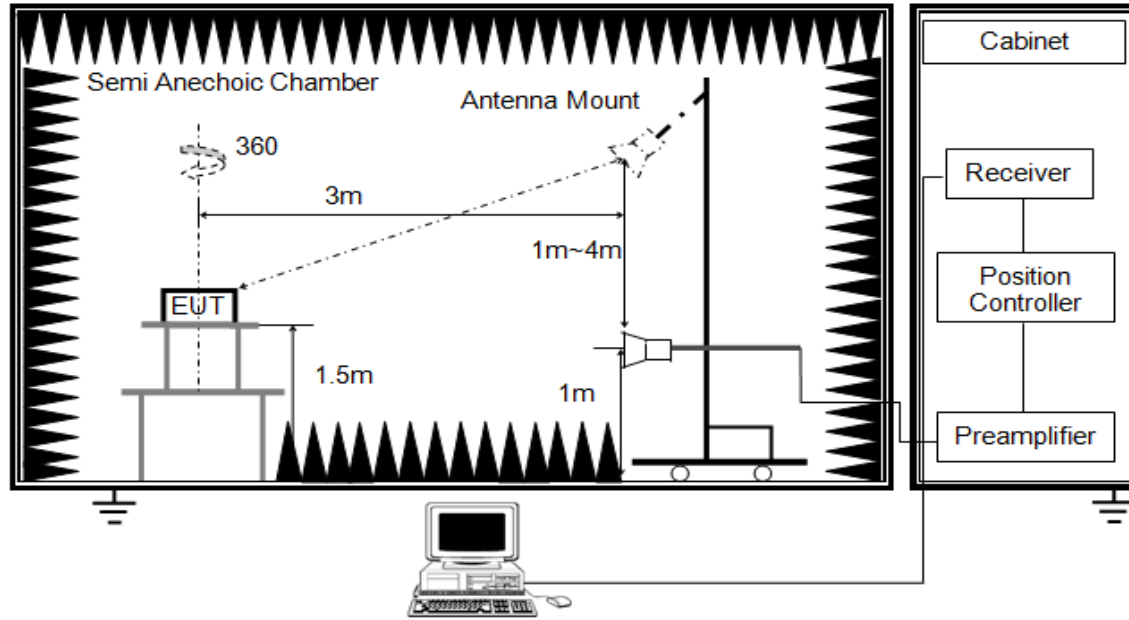


The setting of the spectrum analyser

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

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

Above 1 GHz

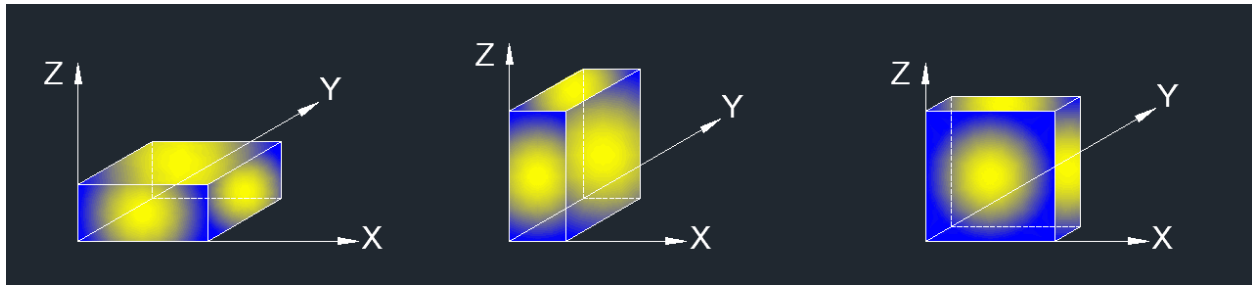


The setting of the spectrum analyser

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

1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5 m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.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.

Note 2: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

TEST ENVIRONMENT

Temperature	23.4 °C	Relative Humidity	58 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

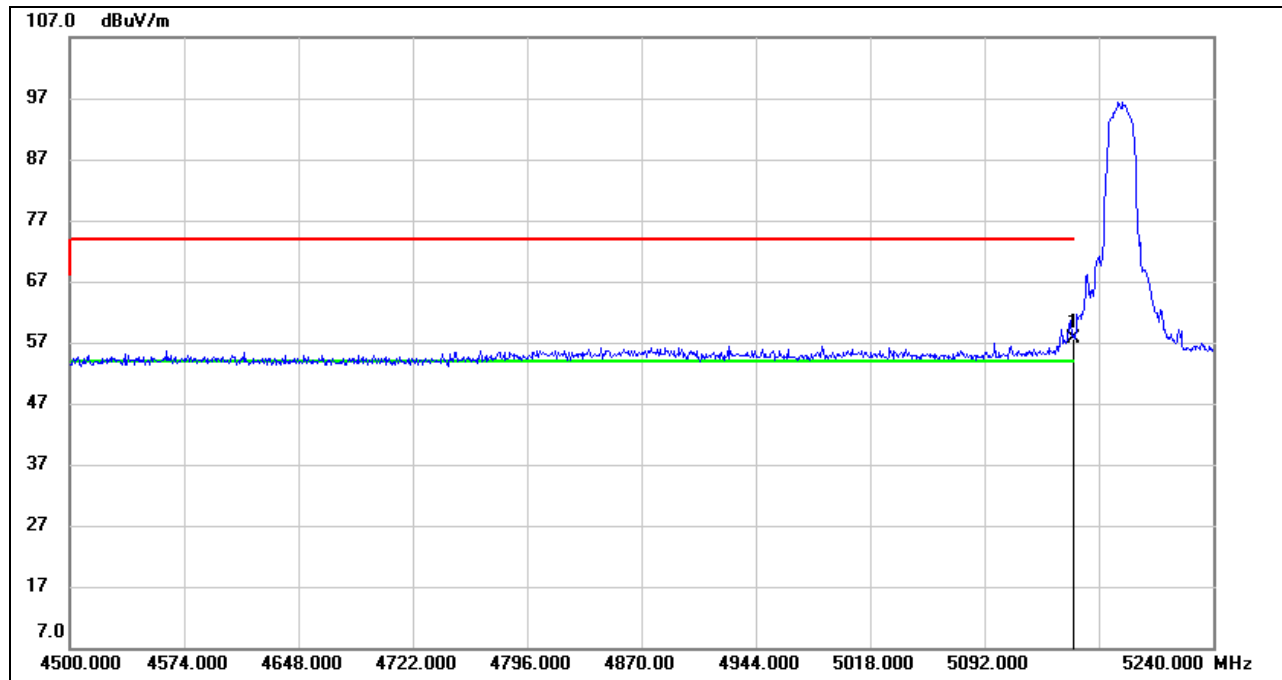
8.1. RESTRICTED BANDEDGE

8.1.1. 802.11a 20 SISO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

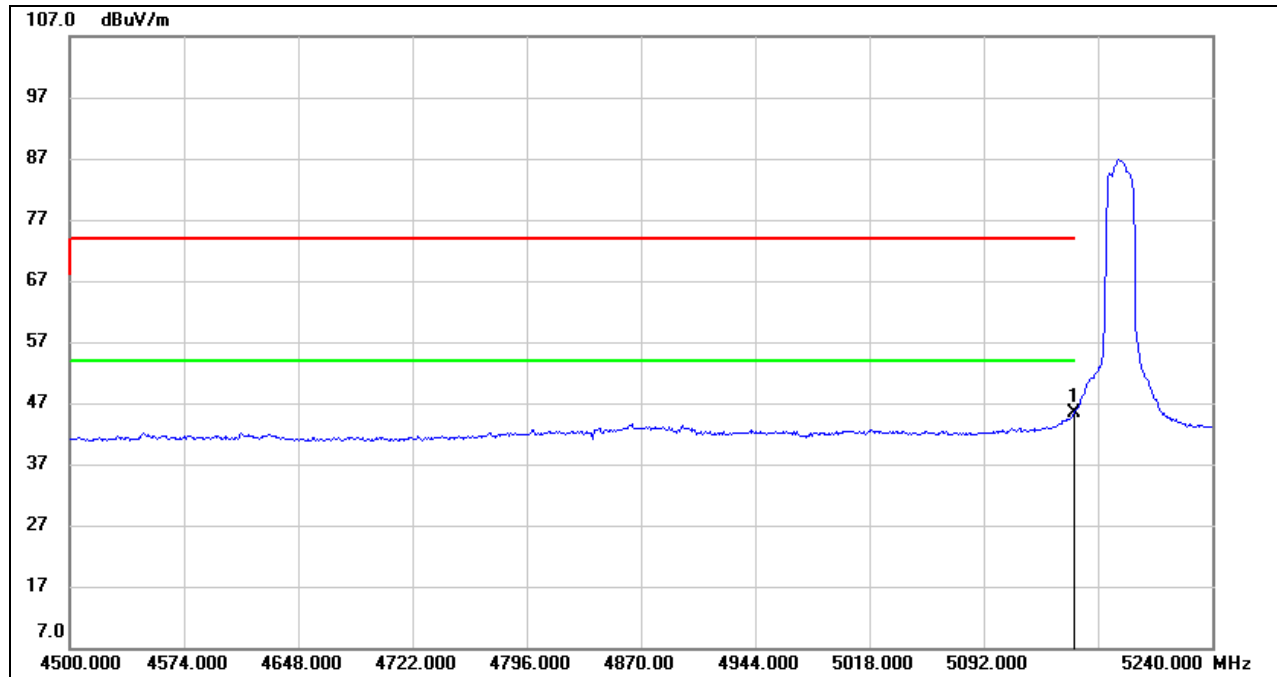
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	17.79	39.91	57.70	74.00	-16.30	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG

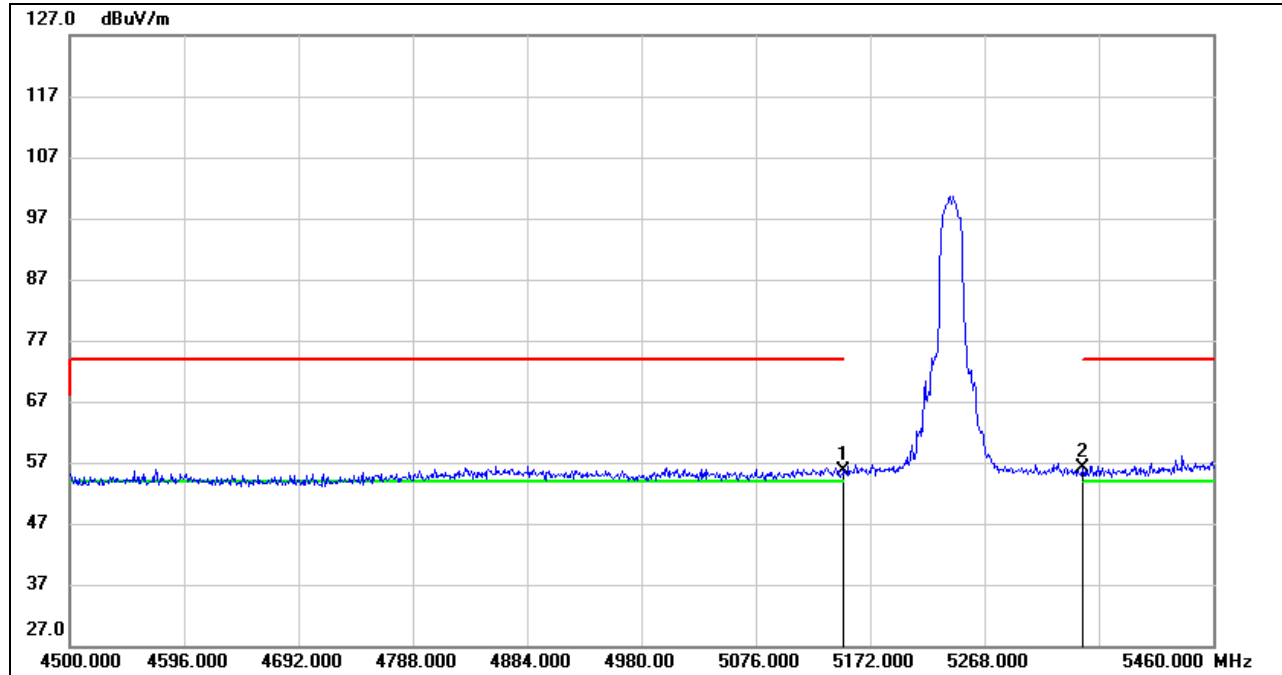


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	5.36	39.91	45.27	54.00	-8.73	AVG

- 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/Ton, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

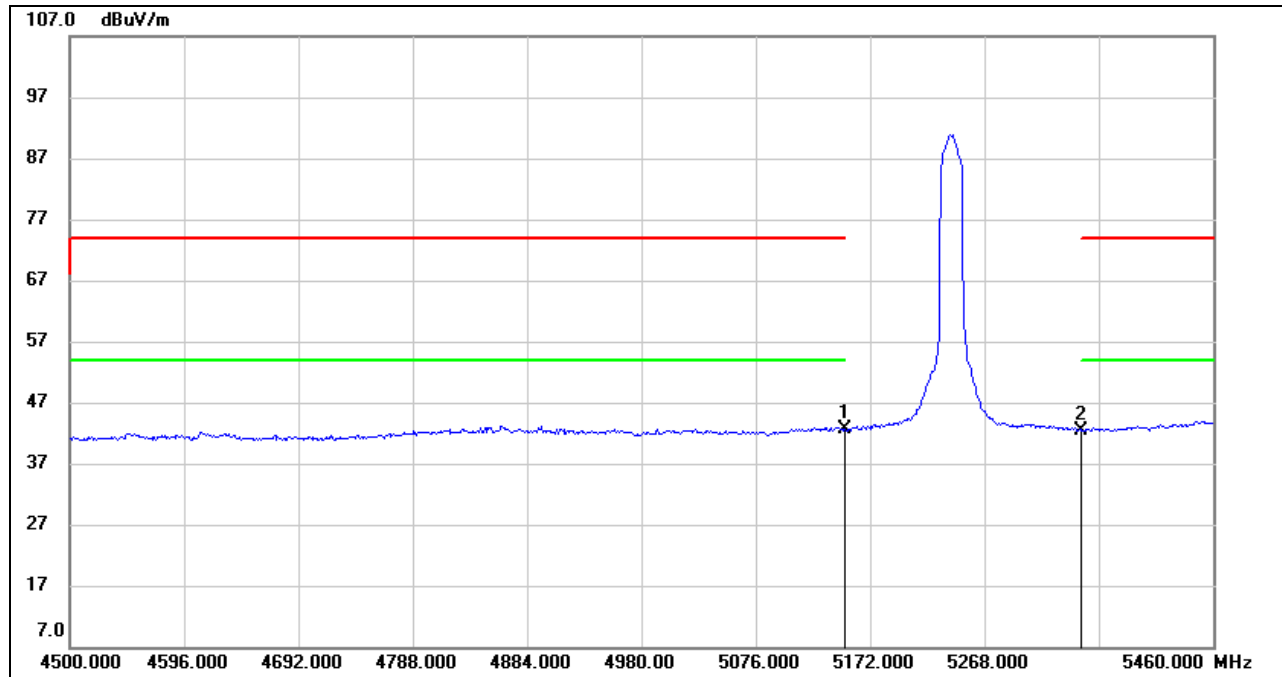
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.64	39.91	55.55	74.00	-18.45	peak
2	5350.000	16.05	40.08	56.13	74.00	-17.87	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



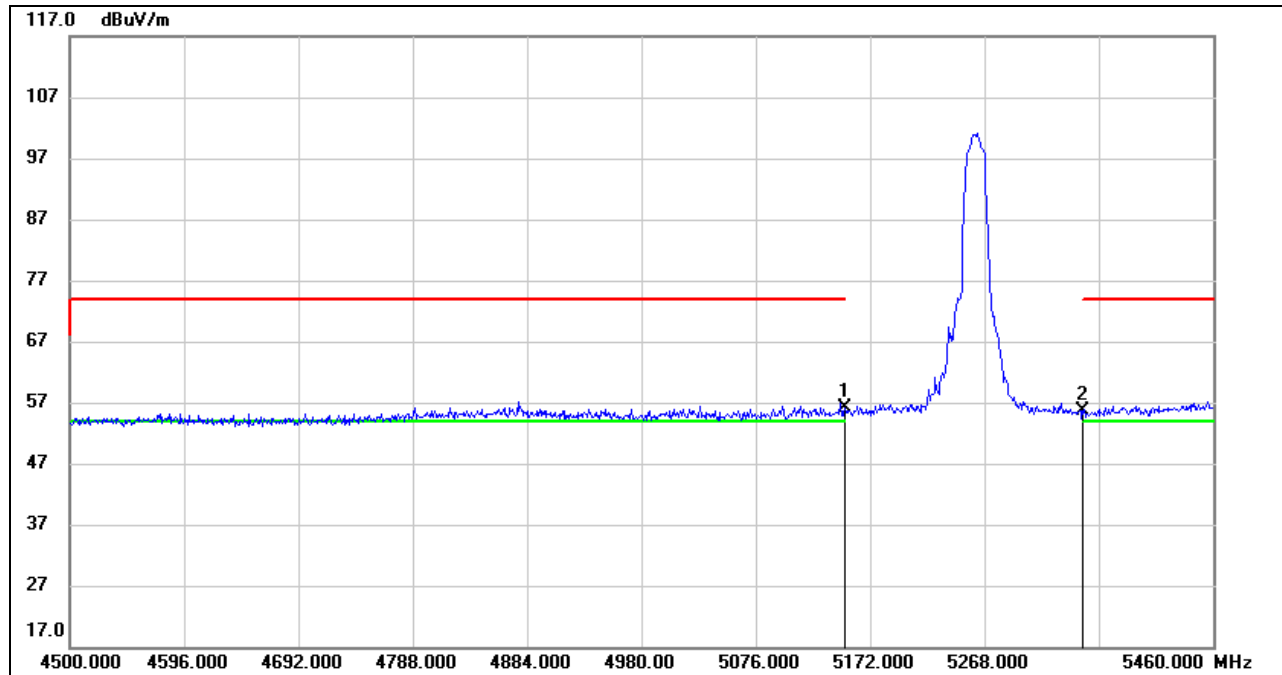
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.63	39.91	42.54	54.00	-11.46	AVG
2	5350.000	2.24	40.08	42.32	54.00	-11.68	AVG

- 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: $VBW=1/Ton$, where: Ton is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	16.34	39.91	56.25	74.00	-17.75	peak
2	5350.000	15.48	40.08	55.56	74.00	-18.44	peak

Note: 1. Measurement = Reading Level + Correct Factor.

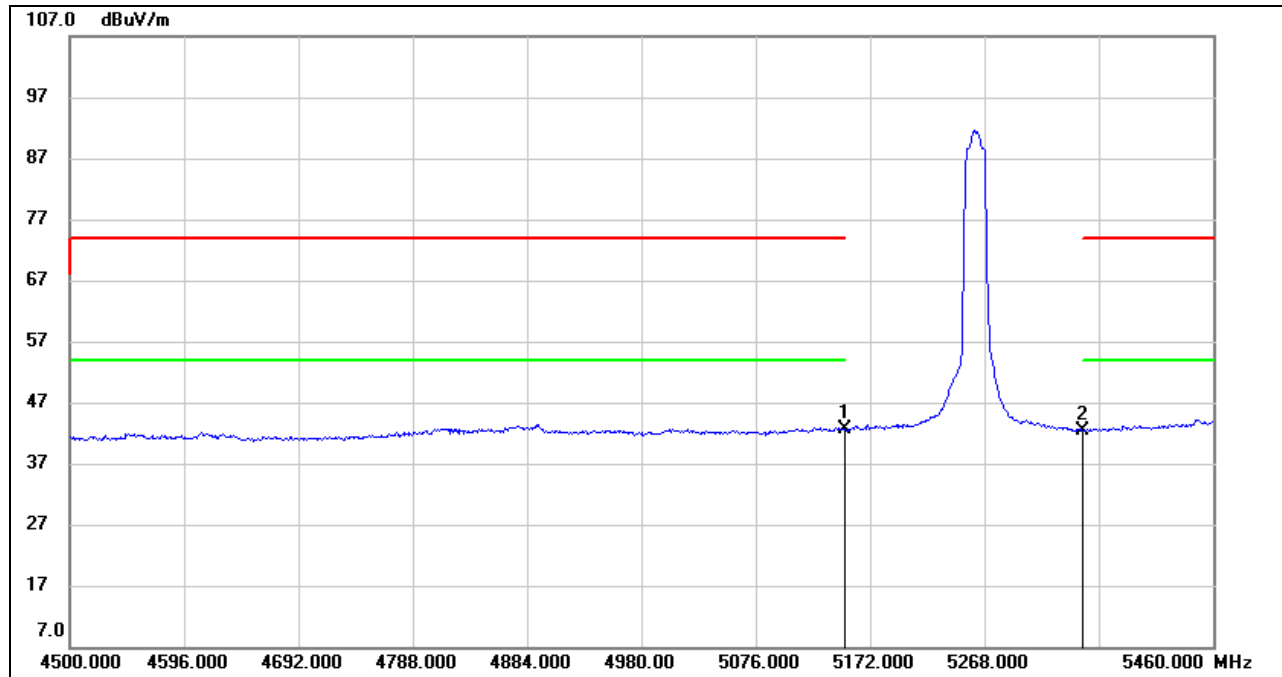
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.75	39.91	42.66	54.00	-11.34	AVG
2	5350.000	2.36	40.08	42.44	54.00	-11.56	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

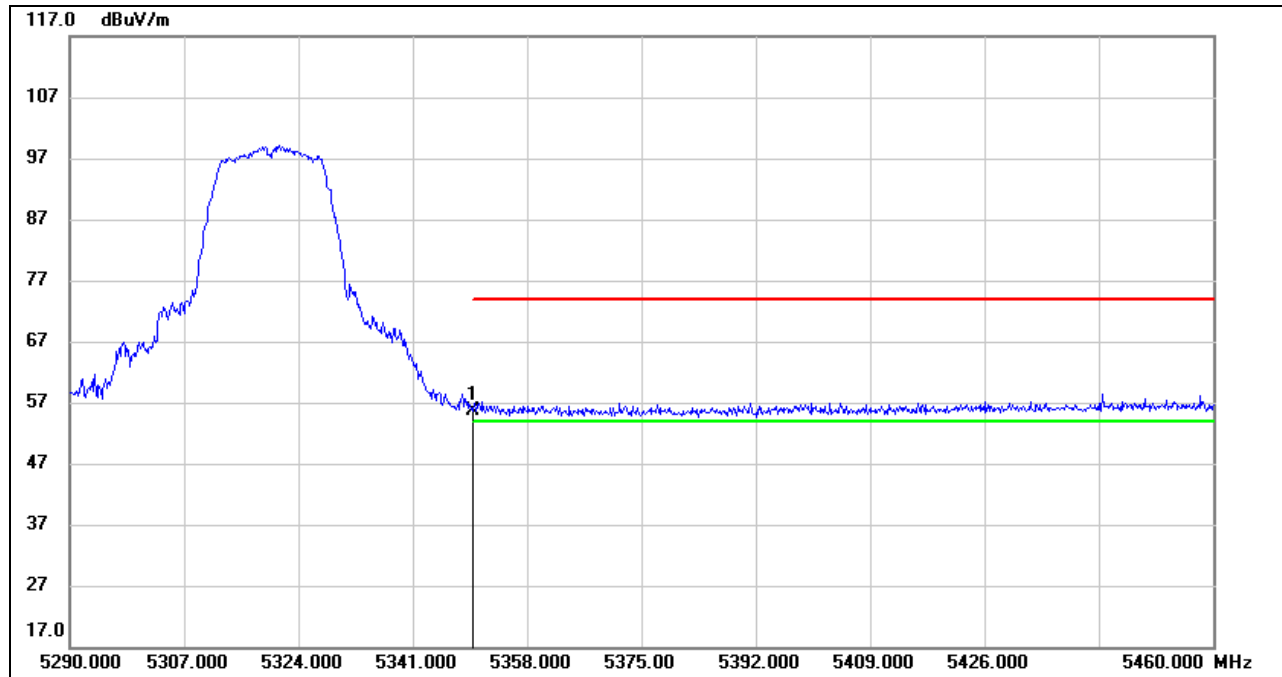
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.

5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

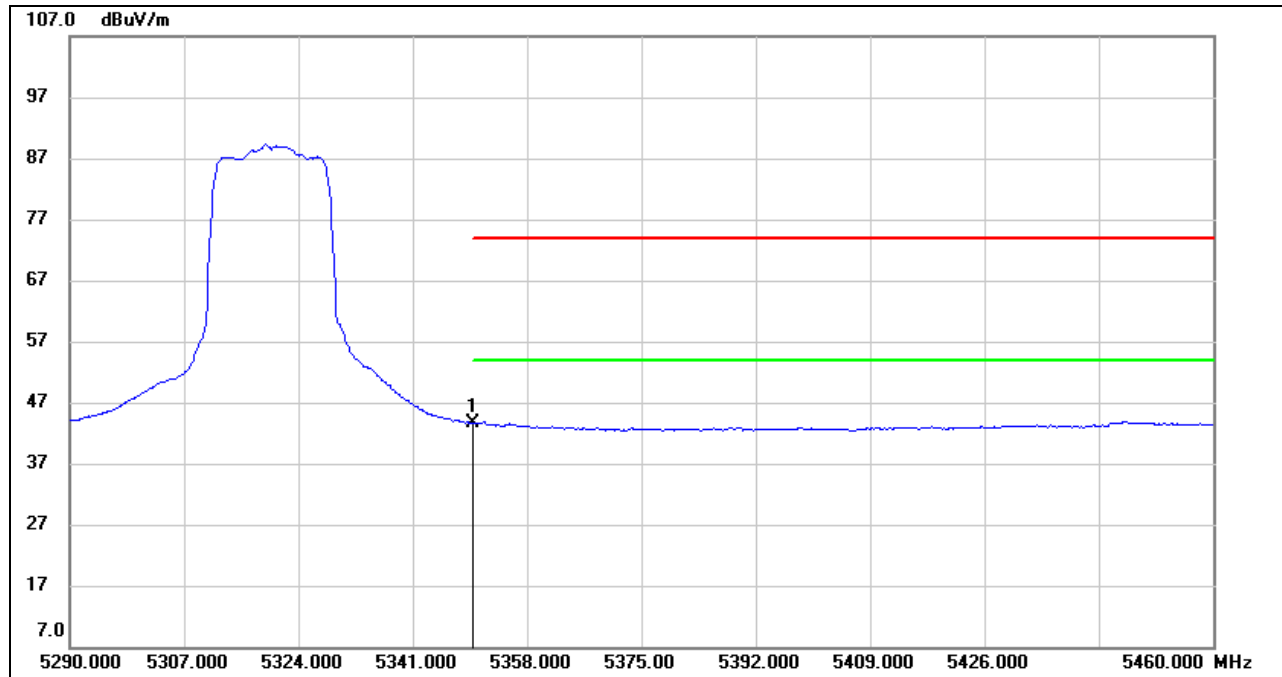
6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	15.57	40.08	55.65	74.00	-18.35	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



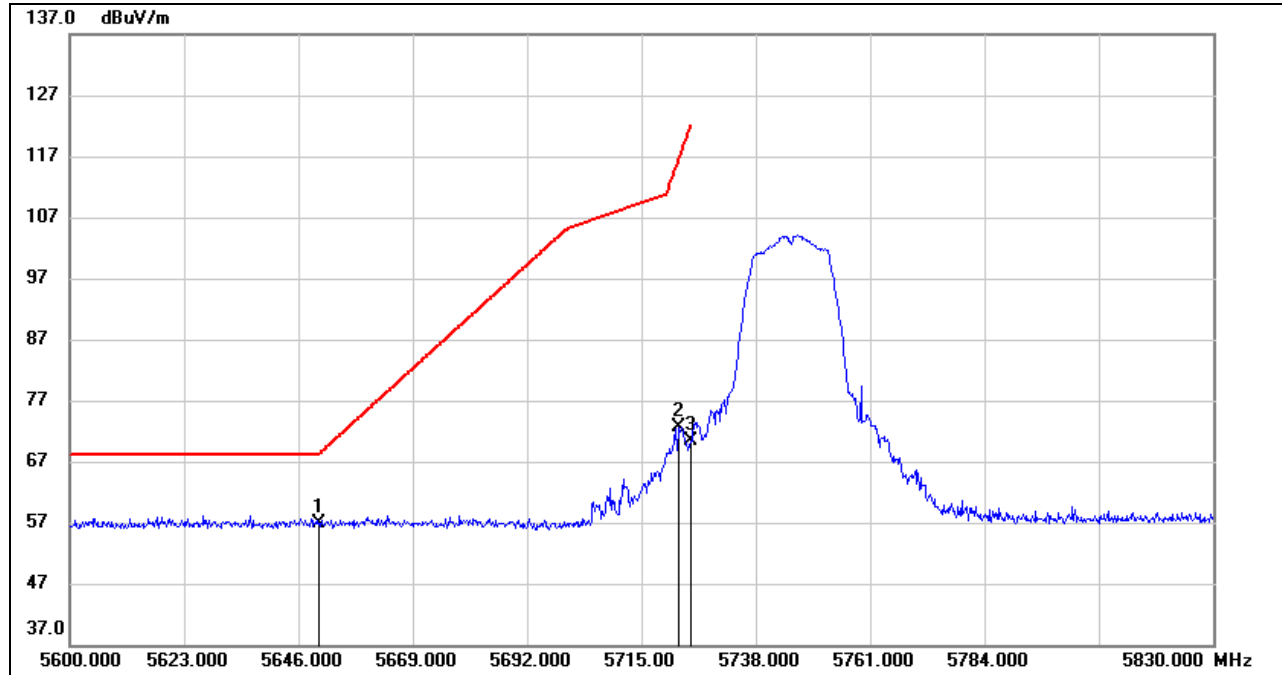
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	3.59	40.08	43.67	54.00	-10.33	AVG

- 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: $VBW=1/Ton$, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

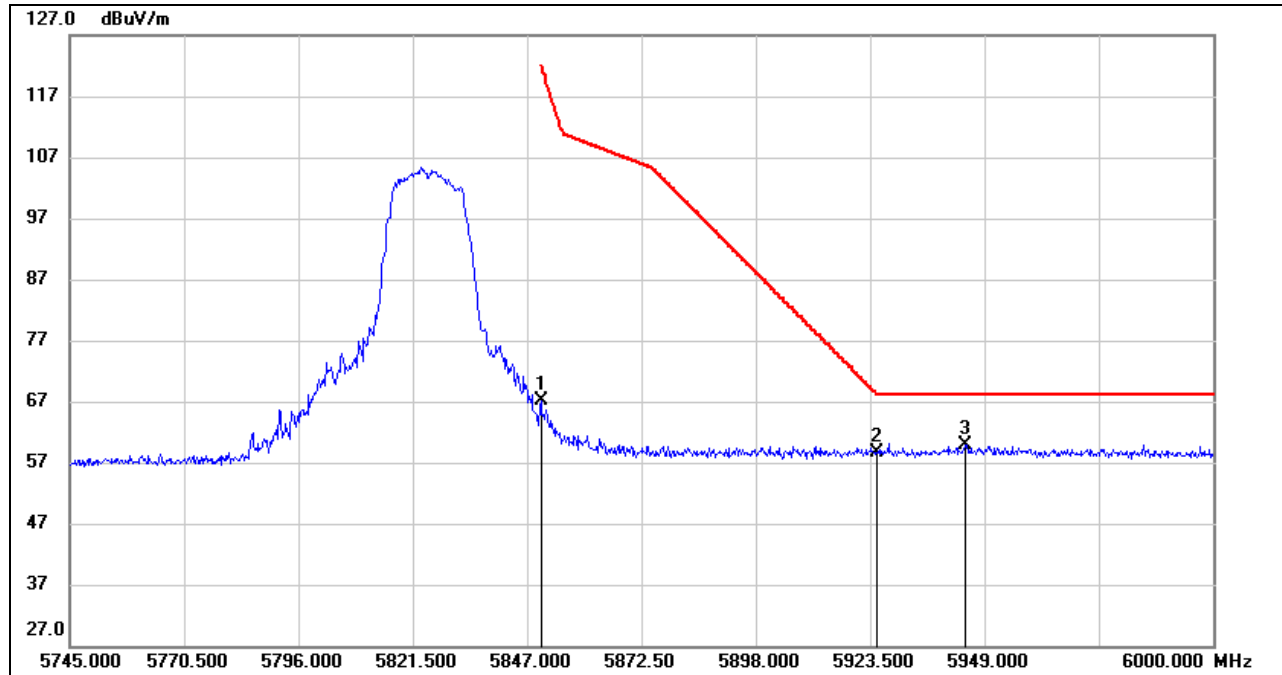


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	16.36	40.61	56.97	68.20	-11.23	peak
2	5722.360	31.96	40.61	72.57	116.18	-43.61	peak
3	5725.000	29.71	40.63	70.34	122.20	-51.86	peak

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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

PEAK



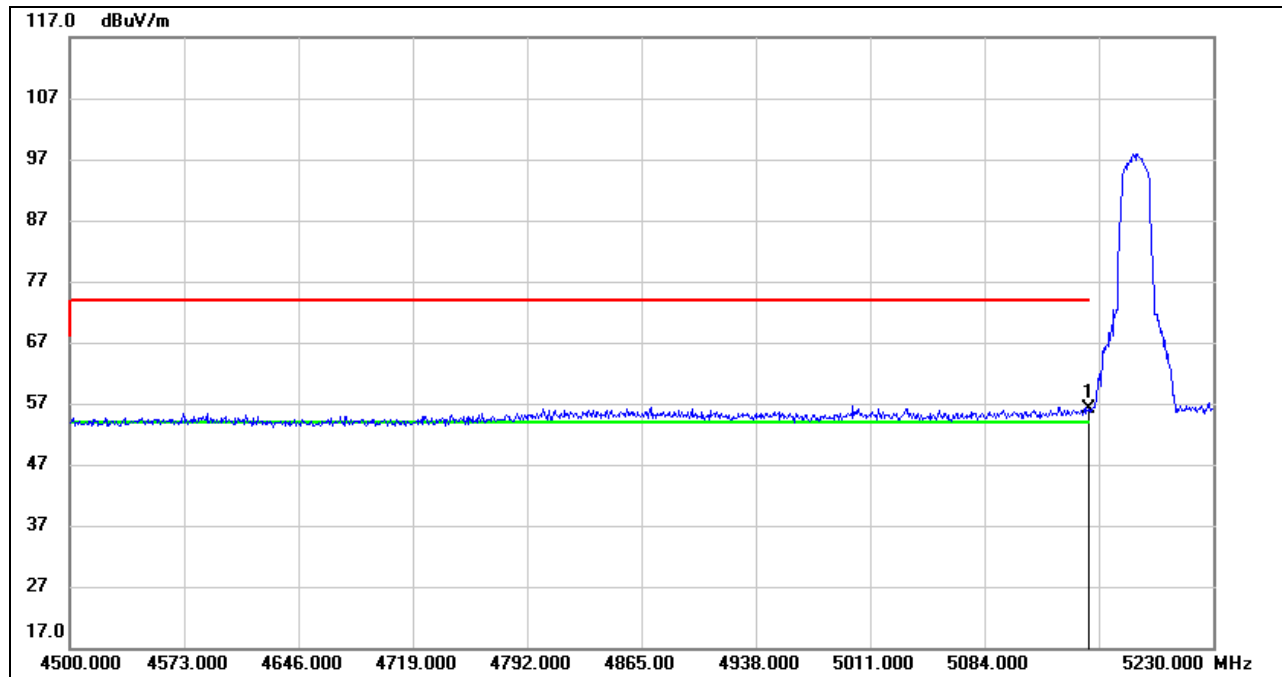
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	25.67	41.45	67.12	122.20	-55.08	peak
2	5925.000	16.77	41.83	58.60	68.20	-9.60	peak
3	5944.665	18.20	41.73	59.93	68.20	-8.27	peak

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

Note: All the polarities (Vertical & Horizontal) and Antennas had been tested, only the worst data was recorded in the report.



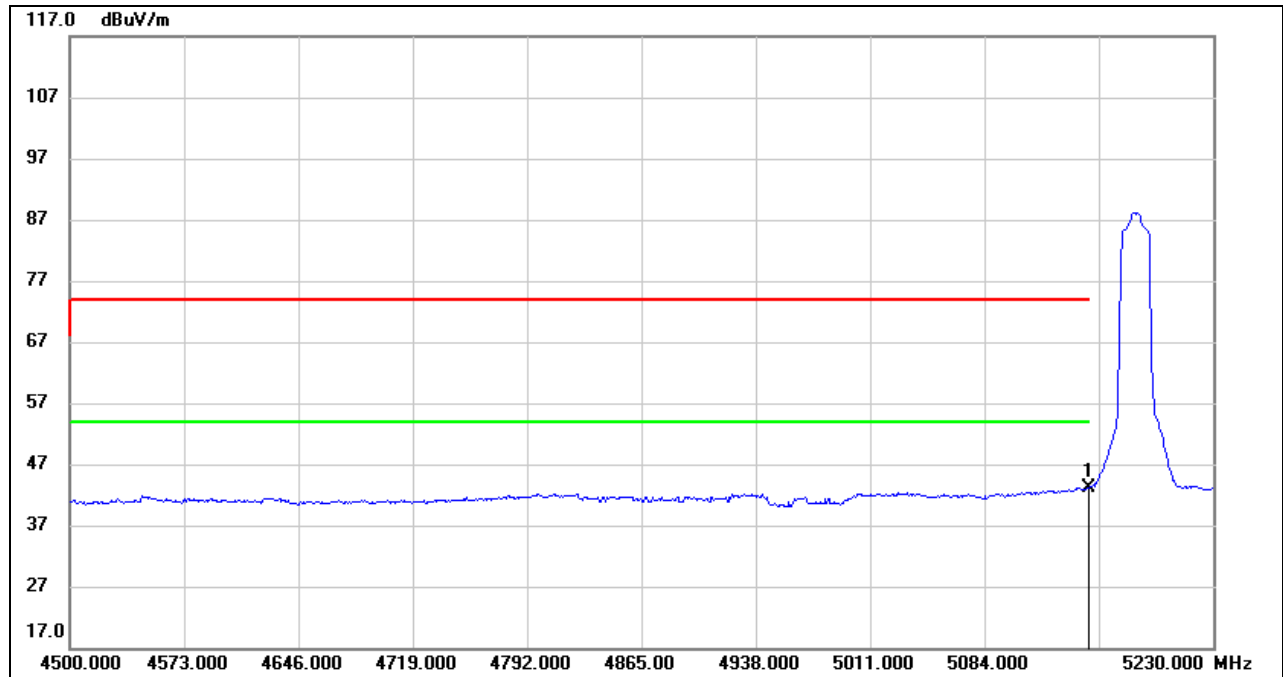
8.1.2. 802.11n HT20 SISO MODE

UNII-1 BANDRESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)PEAK

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	16.23	39.91	56.14	74.00	-17.86	peak

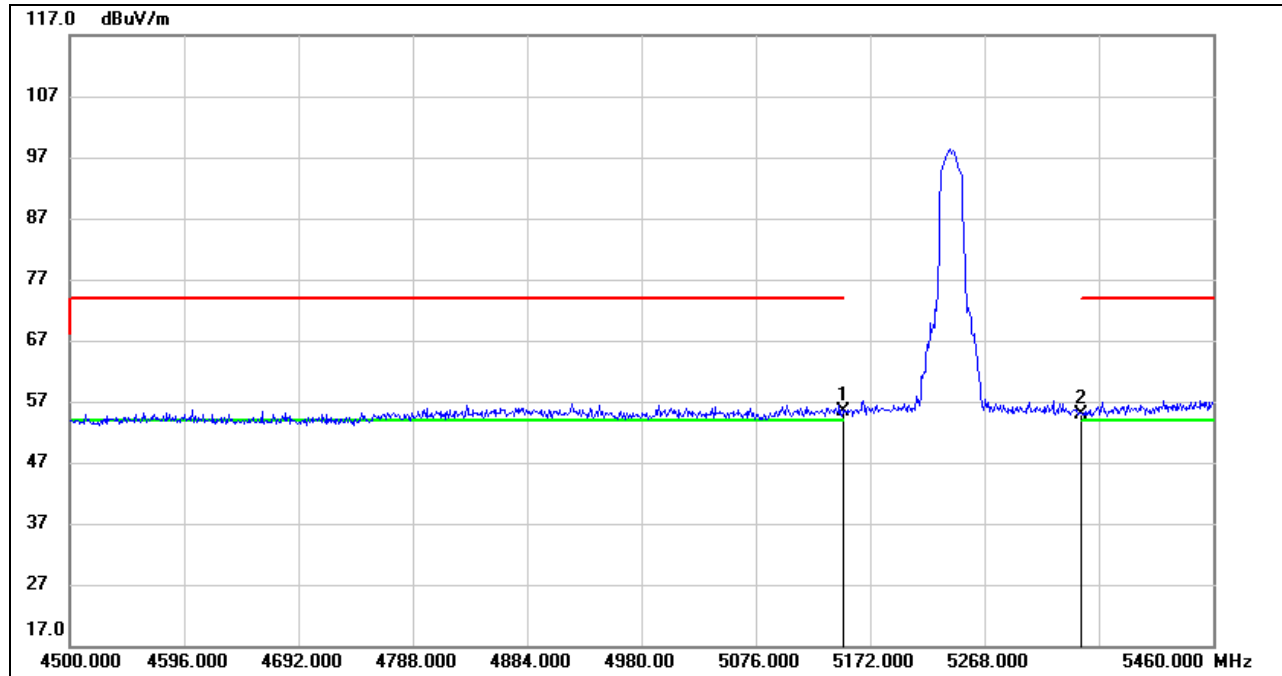
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	3.29	39.91	43.20	54.00	-10.80	AVG

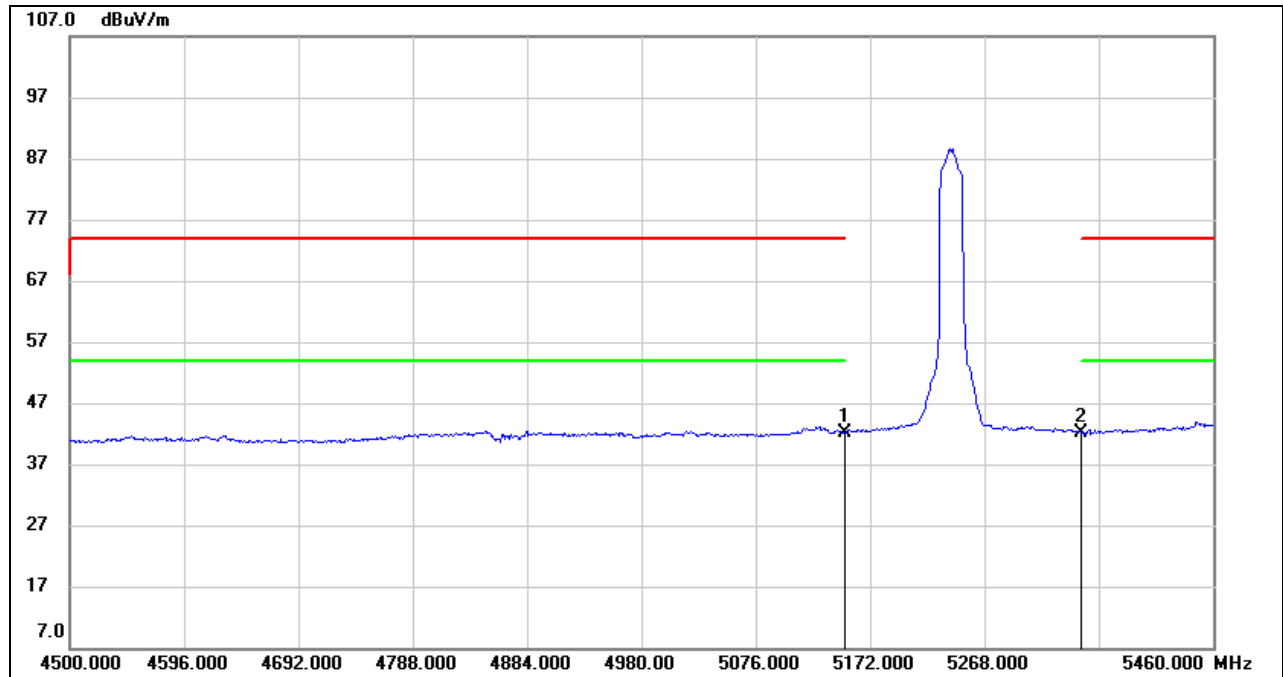
- Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. AVG: $VBW=1/T_{on}$, where: T_{on} is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was 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	5150.000	15.48	39.91	55.39	74.00	-18.61	peak
2	5350.000	14.84	40.08	54.92	74.00	-19.08	peak

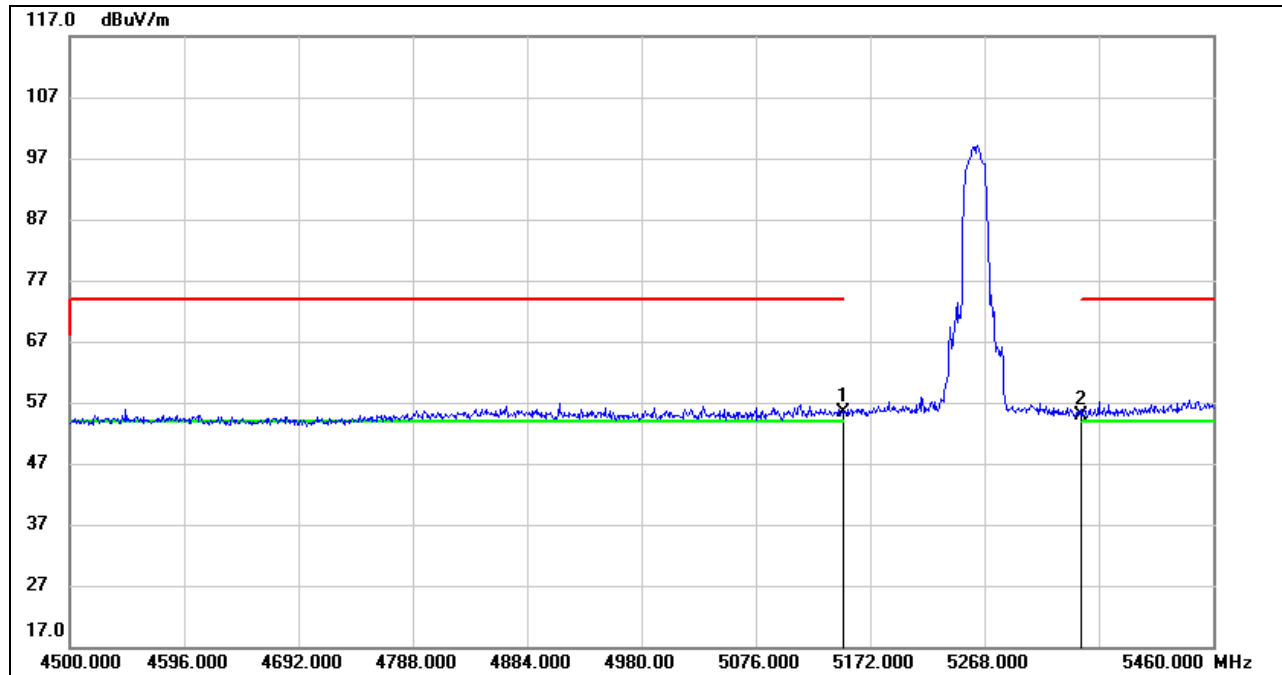
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.30	39.91	42.21	54.00	-11.79	AVG
2	5350.000	2.03	40.08	42.11	54.00	-11.89	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: $VBW=1/Ton$, where: Ton is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

**UNII-2A BAND****RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.54	39.91	55.45	74.00	-18.55	peak
2	5350.000	14.73	40.08	54.81	74.00	-19.19	peak

Note: 1. Measurement = Reading Level + Correct Factor.

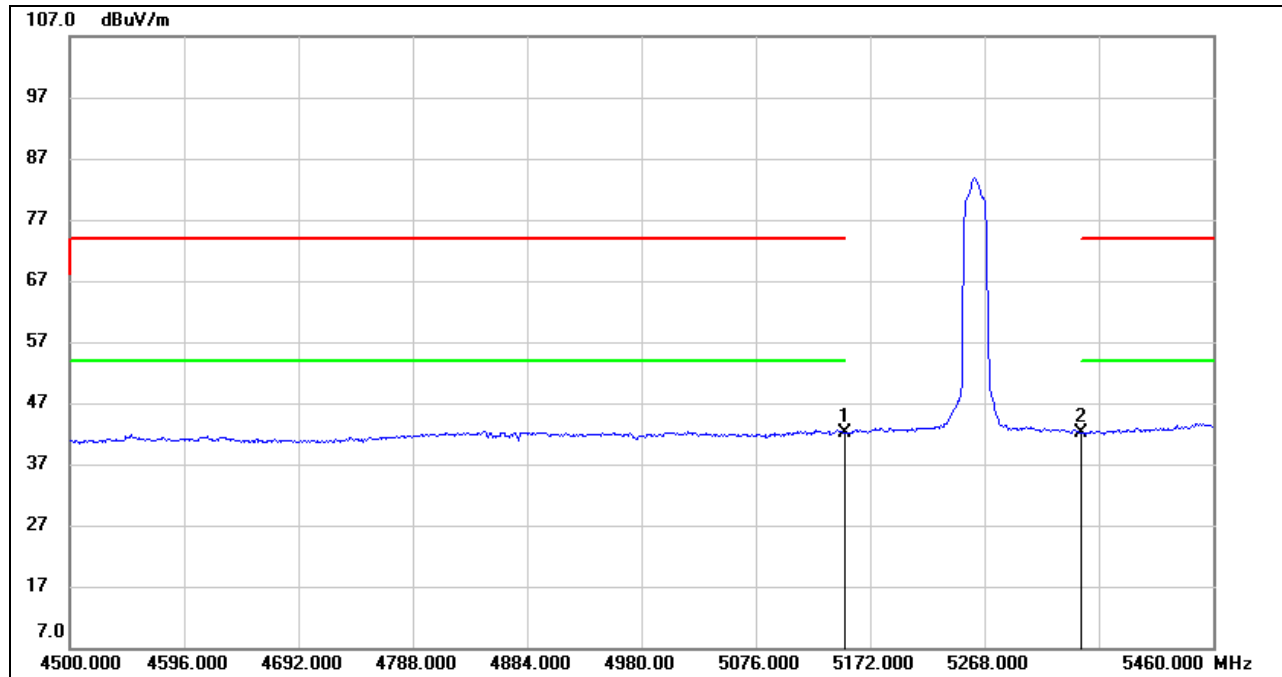
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.12	39.91	42.03	54.00	-11.97	AVG
2	5350.000	2.08	40.08	42.16	54.00	-11.84	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

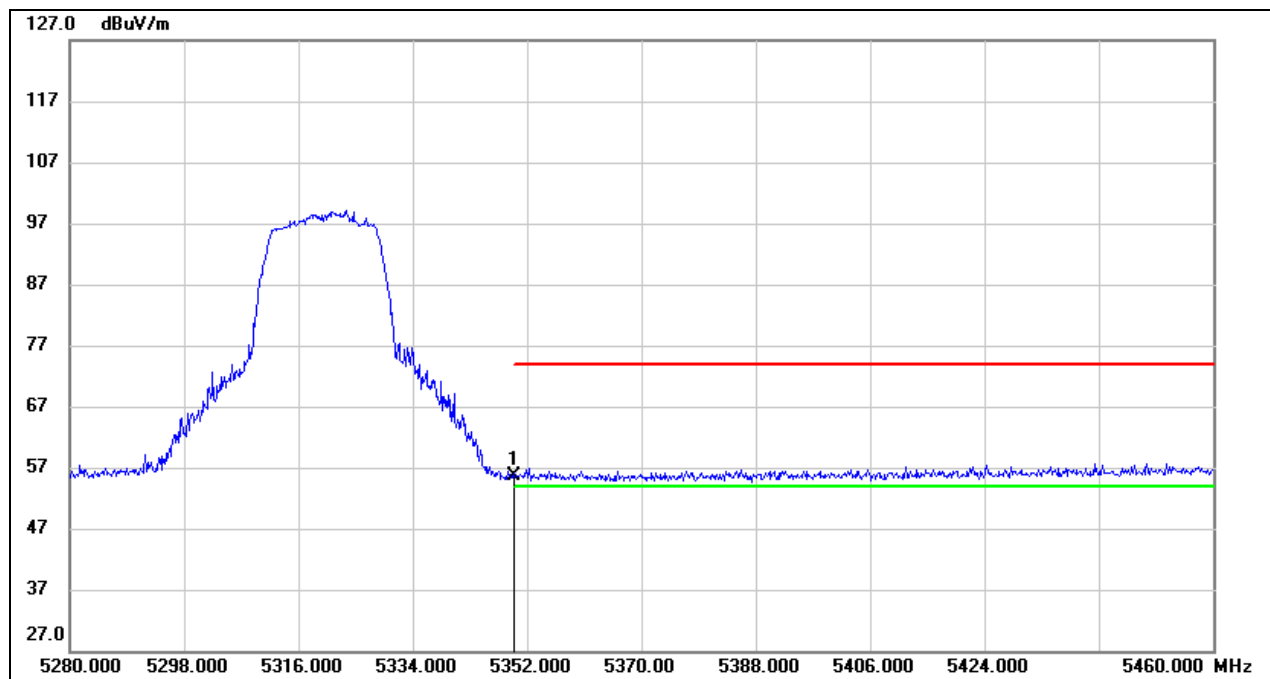
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.

5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

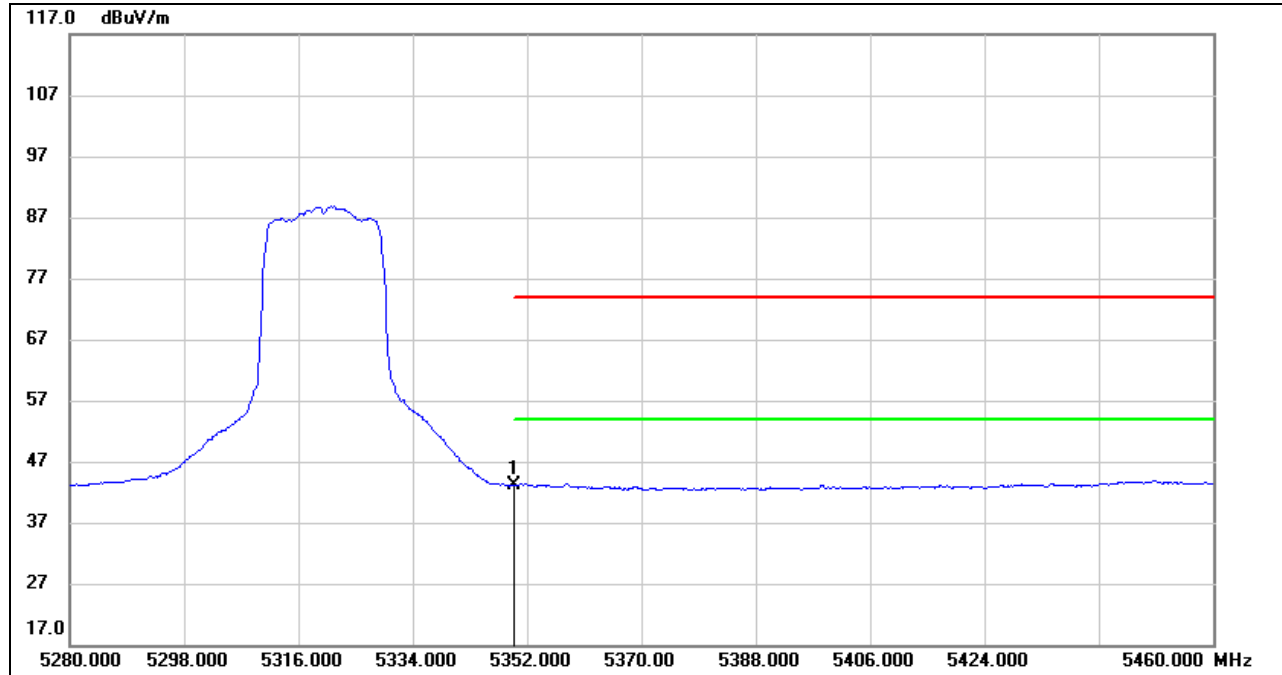
6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	15.48	40.08	55.56	74.00	-18.44	peak

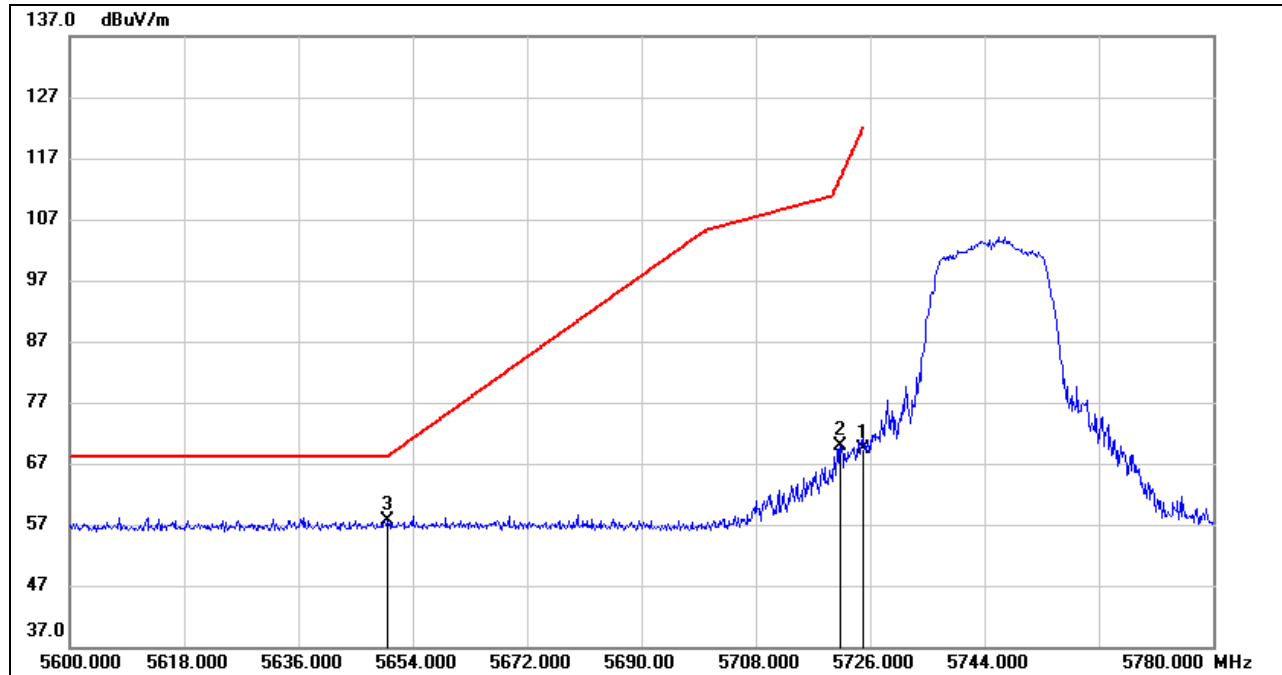
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	3.12	40.08	43.20	54.00	-10.80	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: $VBW=1/Ton$, where: Ton is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

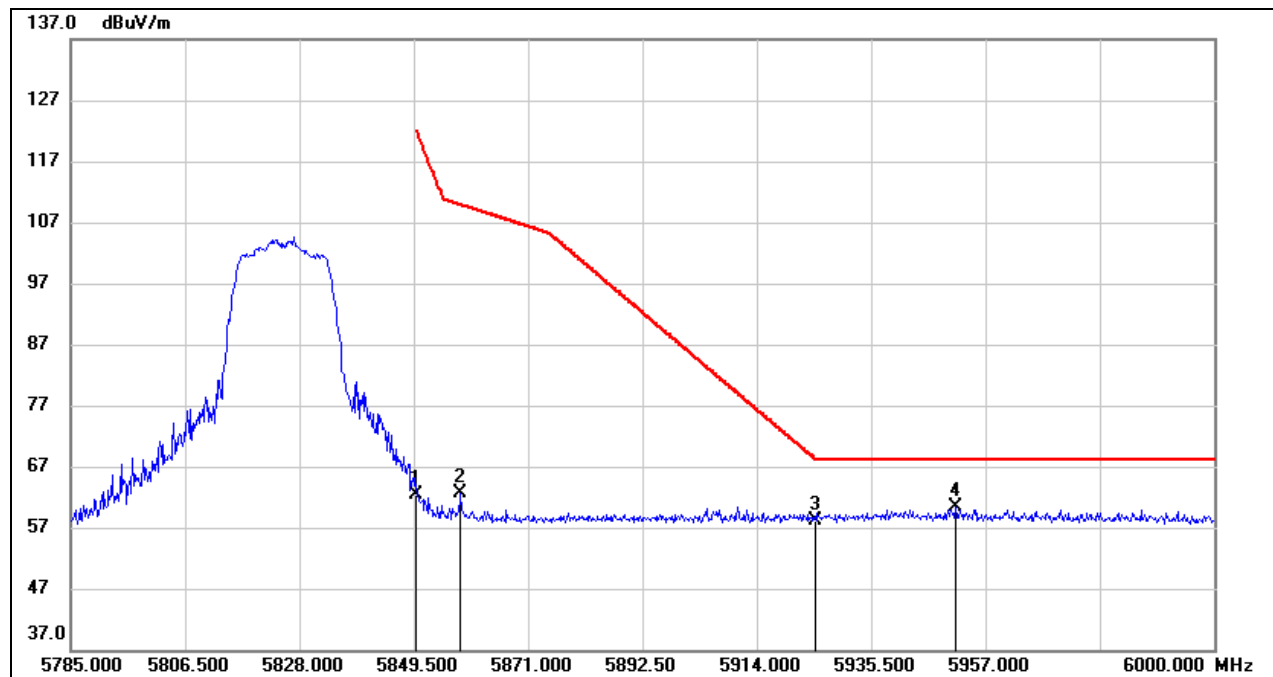
**UNII-3 BAND****RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	28.76	40.63	69.39	122.20	-52.81	peak
2	5721.320	29.31	40.60	69.91	113.81	-43.90	peak
3	5650.000	17.02	40.61	57.63	68.20	-10.57	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

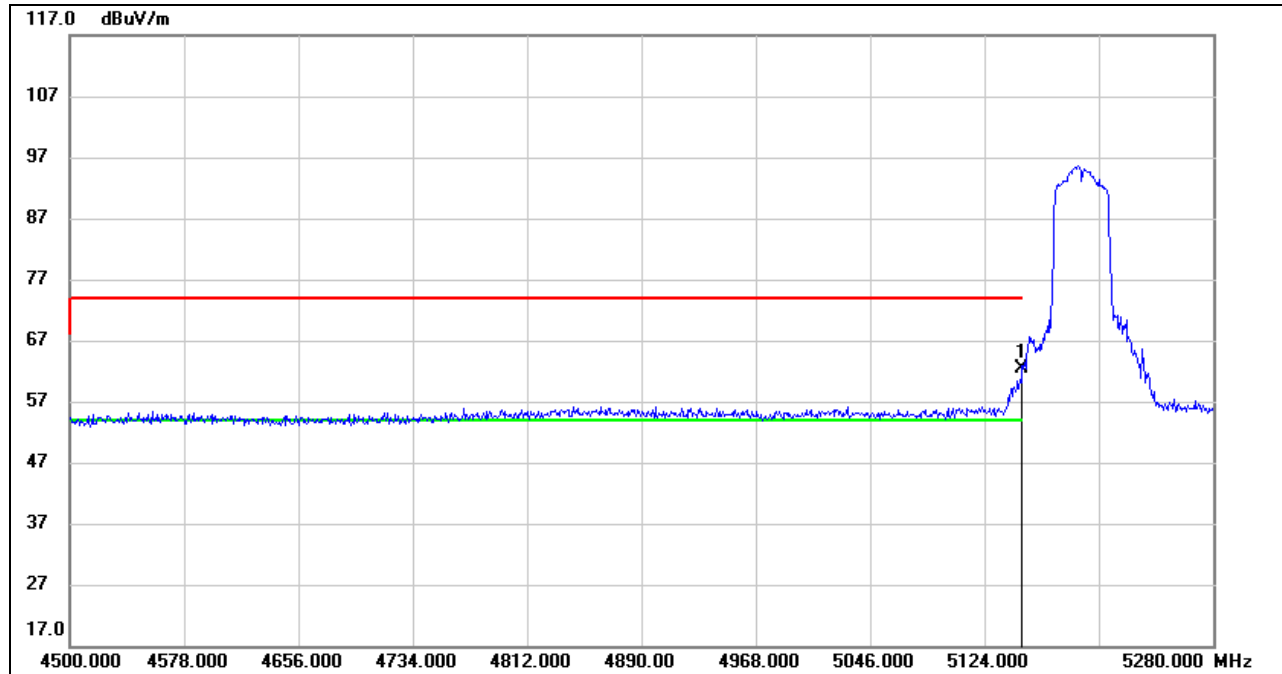
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	20.99	41.45	62.44	122.20	-59.76	peak
2	5858.315	21.20	41.54	62.74	109.87	-47.13	peak
3	5925.000	16.37	41.83	58.20	68.20	-10.00	peak
4	5951.410	18.71	41.70	60.41	68.20	-7.79	peak

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

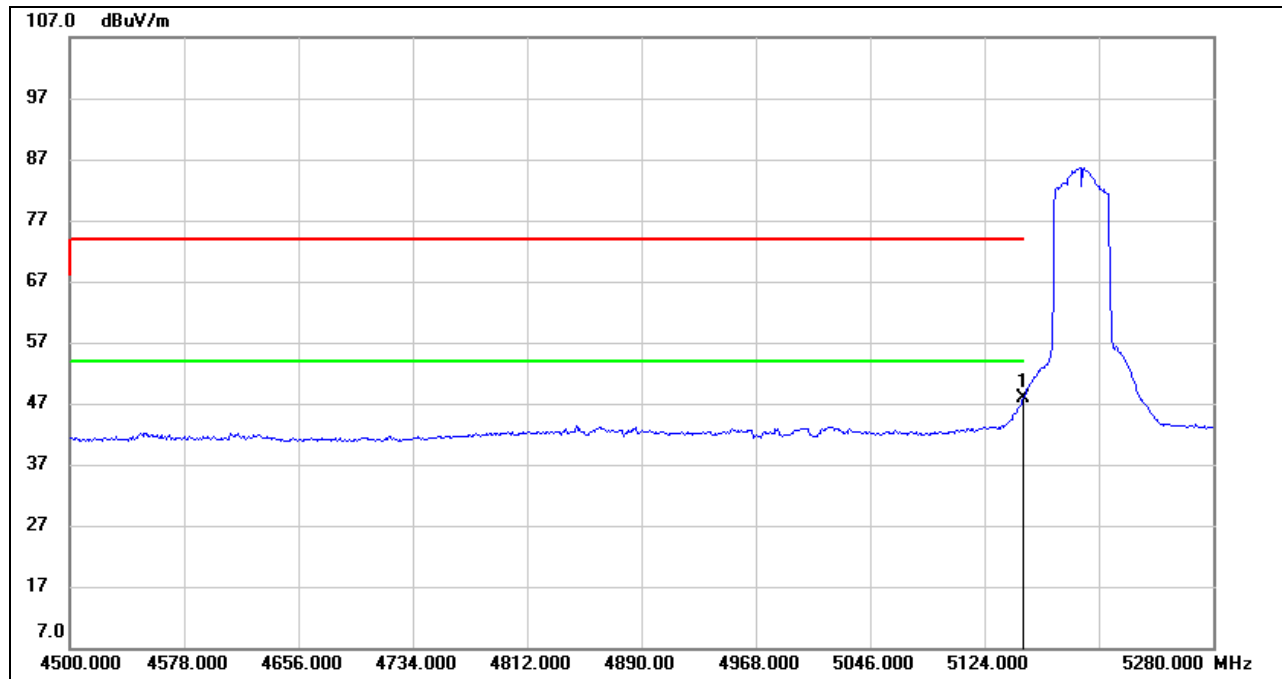
Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.

**8.1.3. 802.11n HT40 SISO MODE****UNII-1 BAND****RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	22.55	39.91	62.46	74.00	-11.54	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG

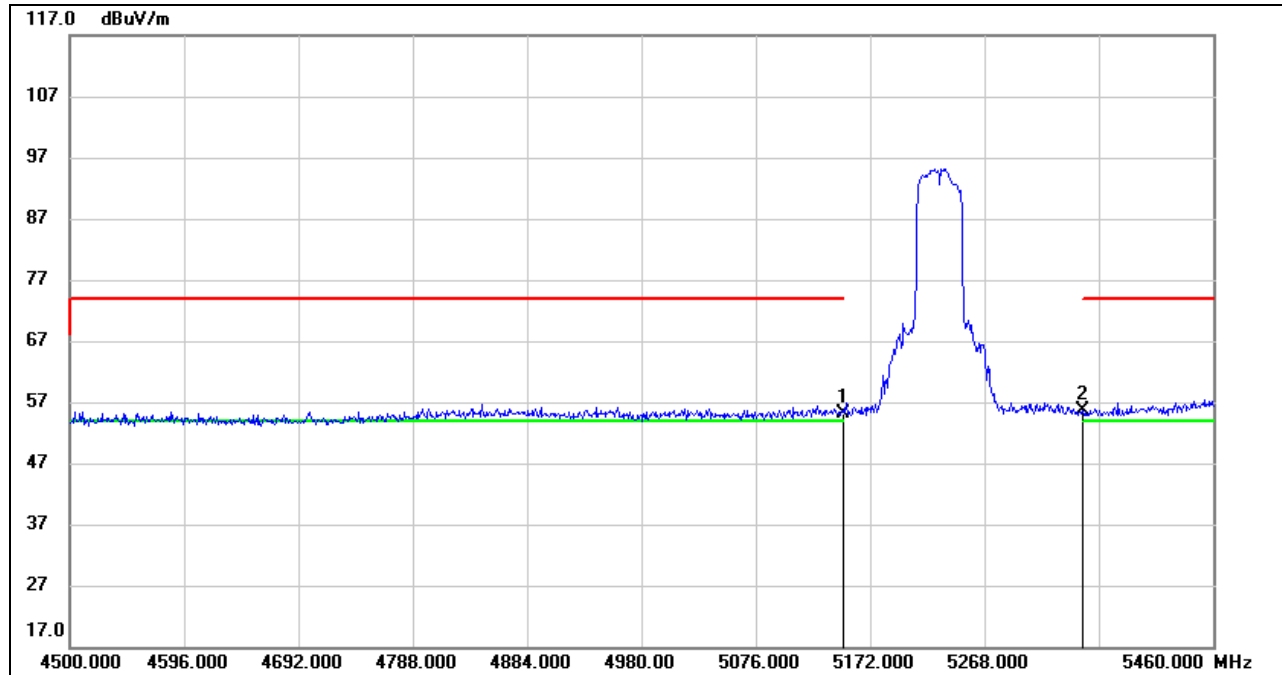


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	8.00	39.91	47.91	54.00	-6.09	AVG

- 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: $VBW=1/Ton$, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

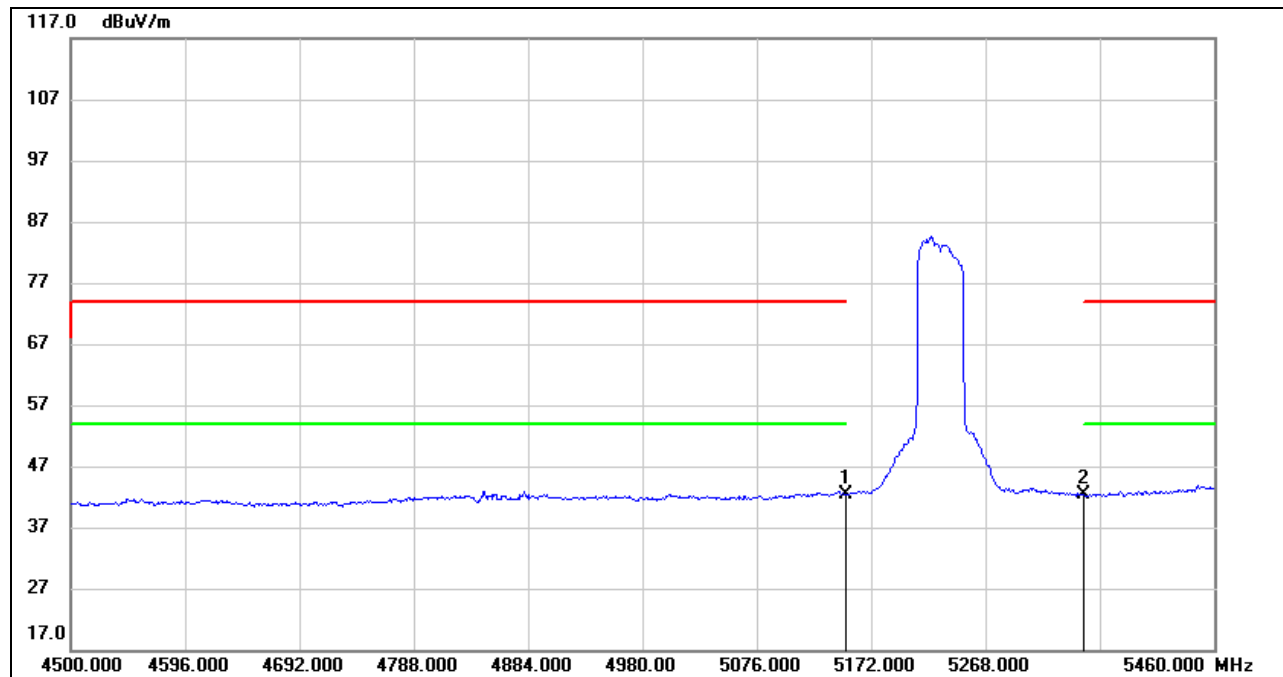
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.34	39.91	55.25	74.00	-18.75	peak
2	5350.000	15.54	40.08	55.62	74.00	-18.38	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



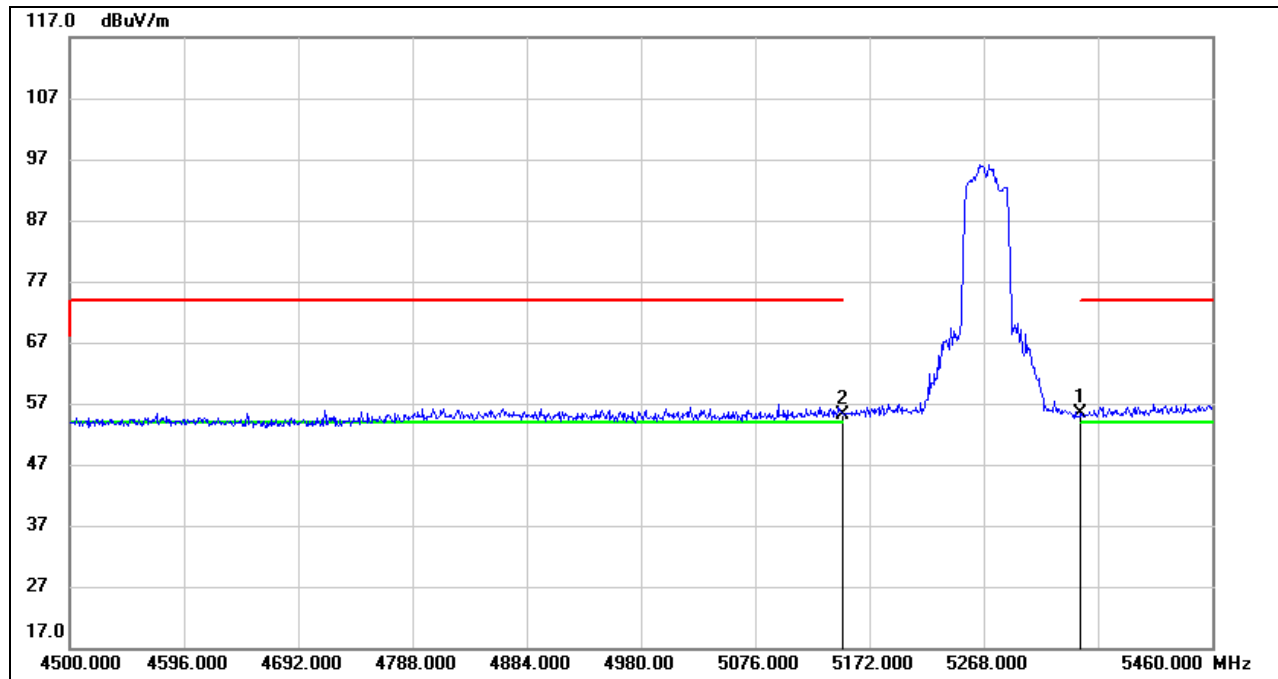
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.53	39.91	42.44	54.00	-11.56	AVG
2	5350.000	2.27	40.08	42.35	54.00	-11.65	AVG

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

UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	15.22	40.08	55.30	74.00	-18.70	peak
2	5150.000	15.33	39.91	55.24	74.00	-18.76	peak

Note: 1. Measurement = Reading Level + Correct Factor.

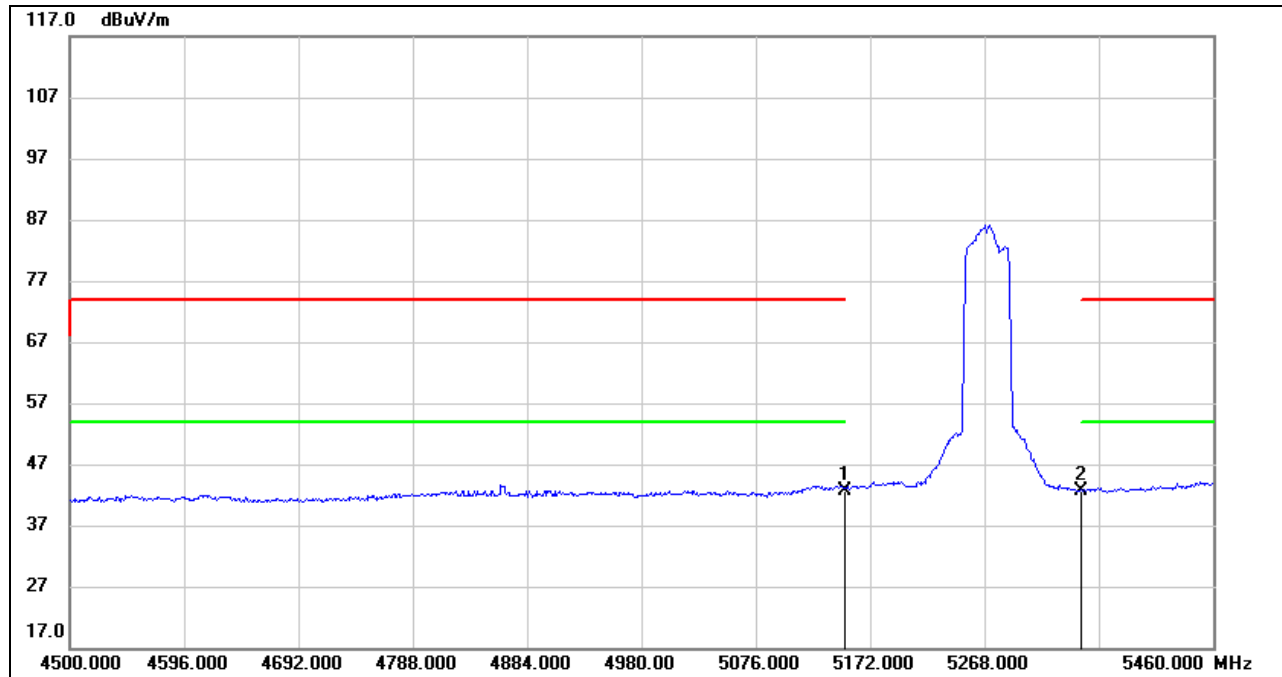
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

AVG

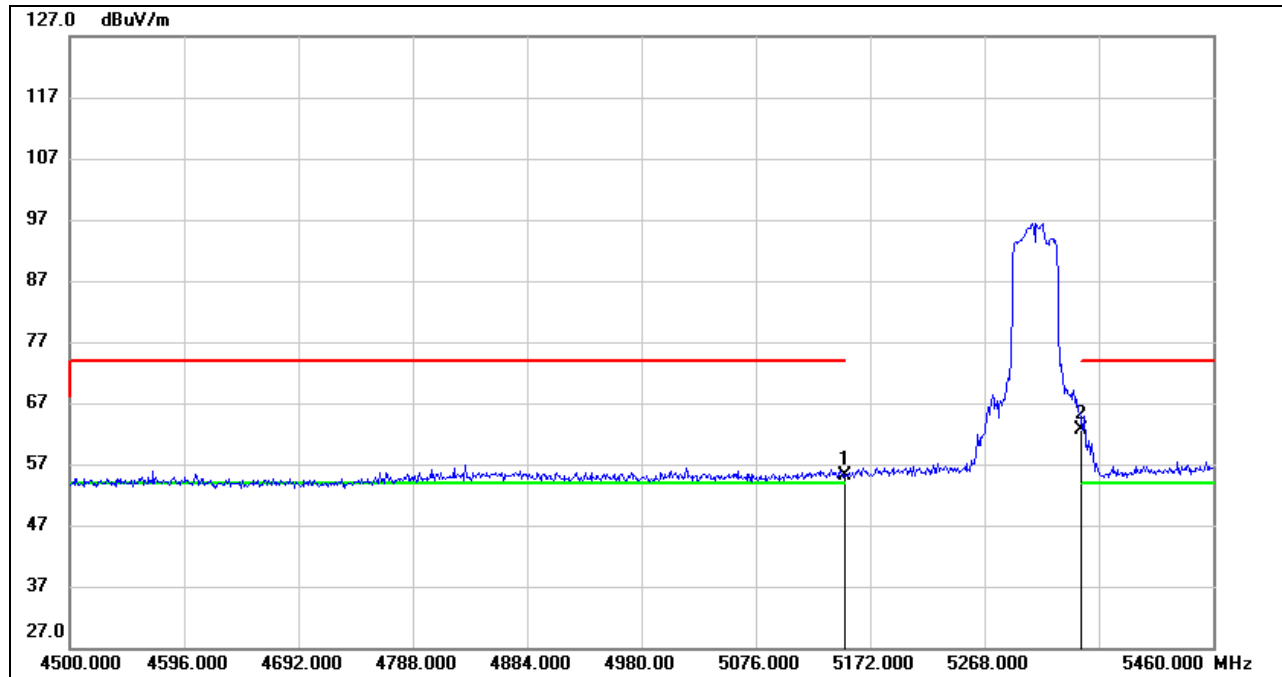


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.83	39.91	42.74	54.00	-11.26	AVG
2	5350.000	2.52	40.08	42.60	54.00	-11.40	AVG

- 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: $VBW=1/Ton$, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

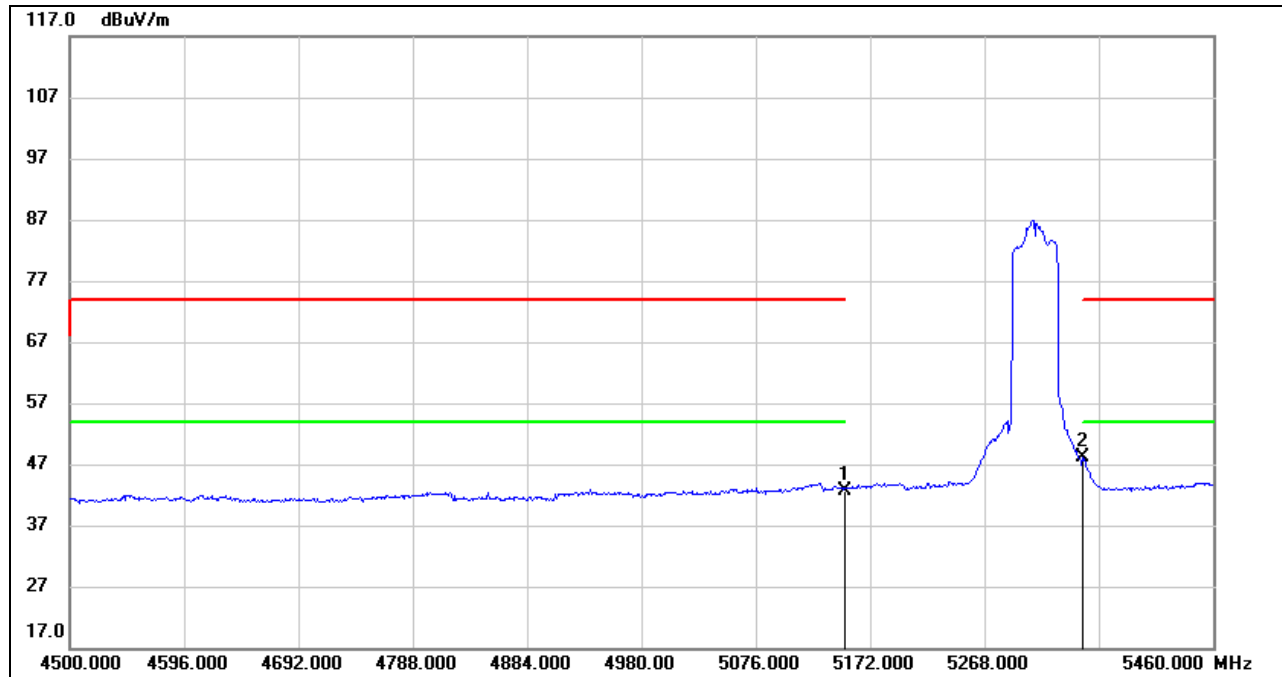
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.34	39.91	55.25	74.00	-18.75	peak
2	5350.000	22.55	40.08	62.63	74.00	-11.37	peak

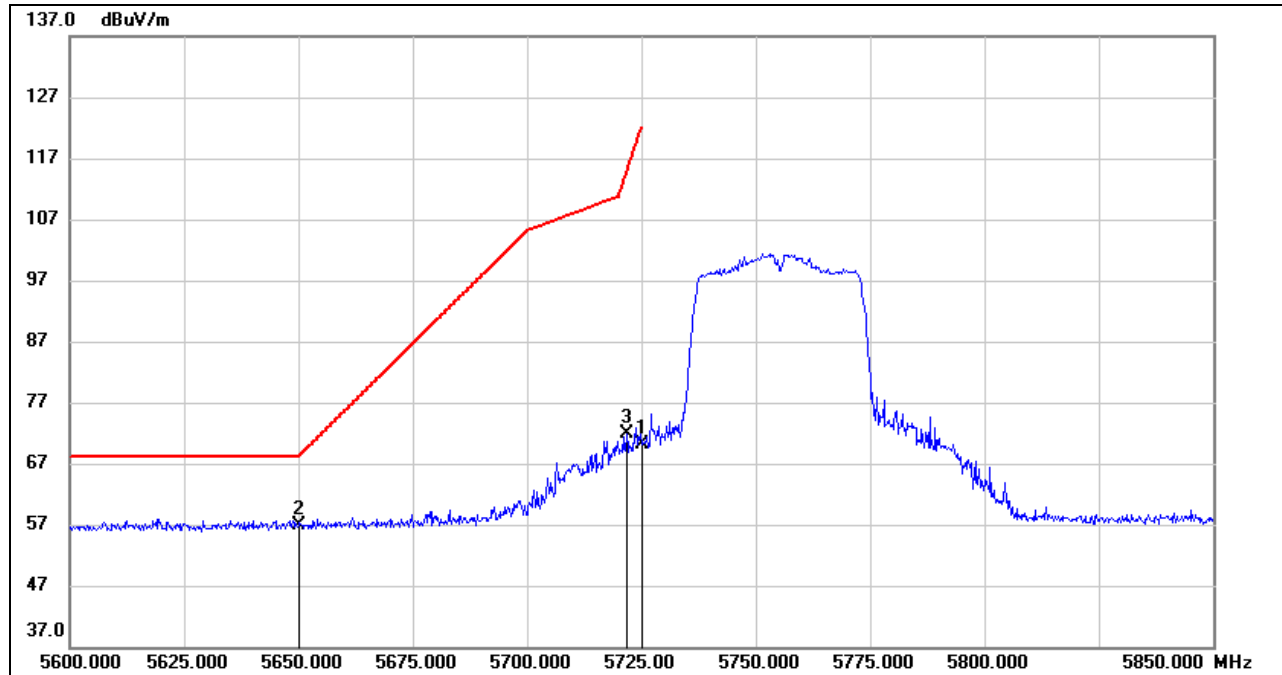
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.78	39.91	42.69	54.00	-11.31	AVG
2	5350.000	7.94	40.08	48.02	54.00	-5.98	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: $VBW=1/Ton$, where: Ton is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

**UNII-3 BAND****RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	29.56	40.63	70.19	122.20	-52.01	peak
2	5650.000	16.24	40.61	56.85	68.20	-11.35	peak
3	5721.750	31.23	40.61	71.84	114.79	-42.95	peak

Note: 1. Measurement = Reading Level + Correct Factor.

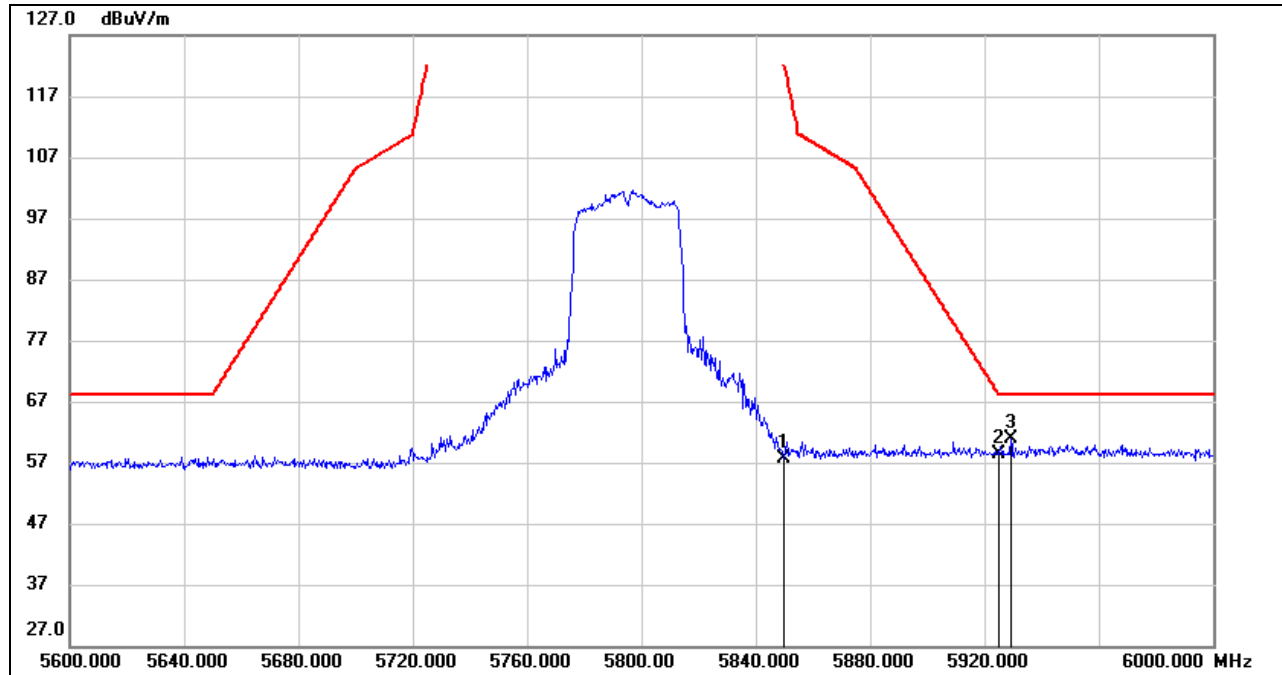
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data 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	5850.000	16.28	41.45	57.73	122.20	-64.47	peak
2	5925.000	16.57	41.83	58.40	68.20	-9.80	peak
3	5929.200	19.05	41.81	60.86	68.20	-7.34	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

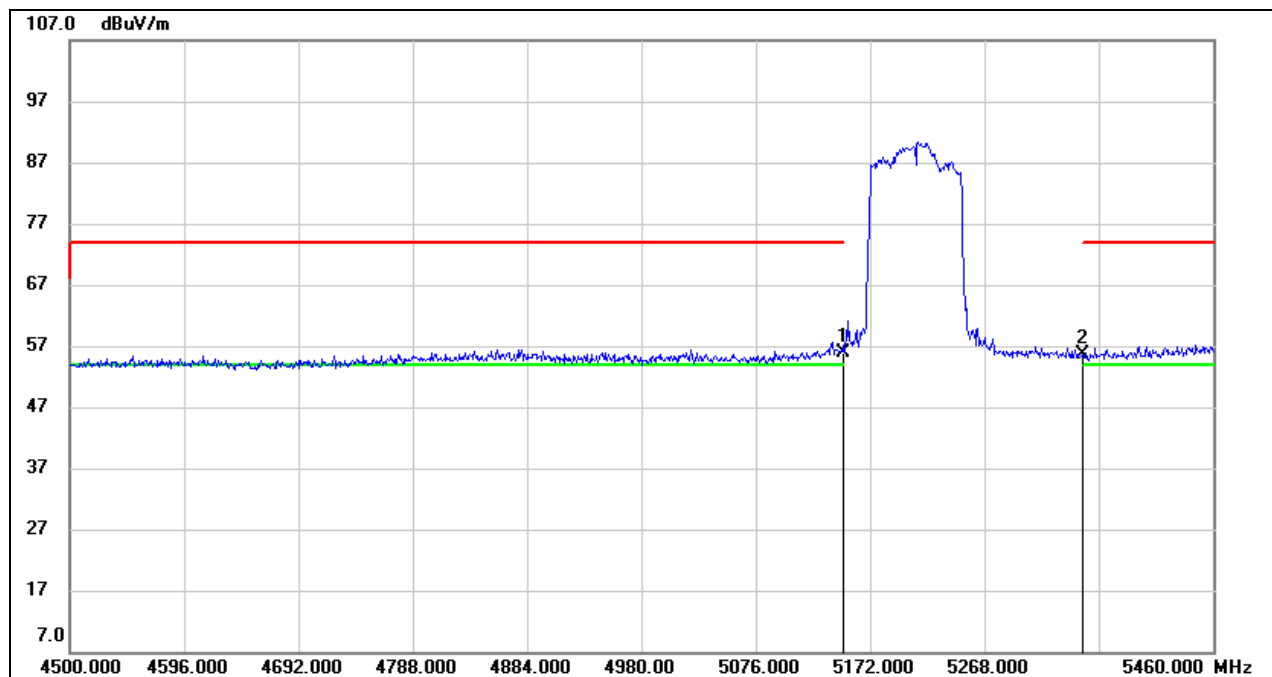
Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.

8.1.4. 802.11ac VHT80 SISO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

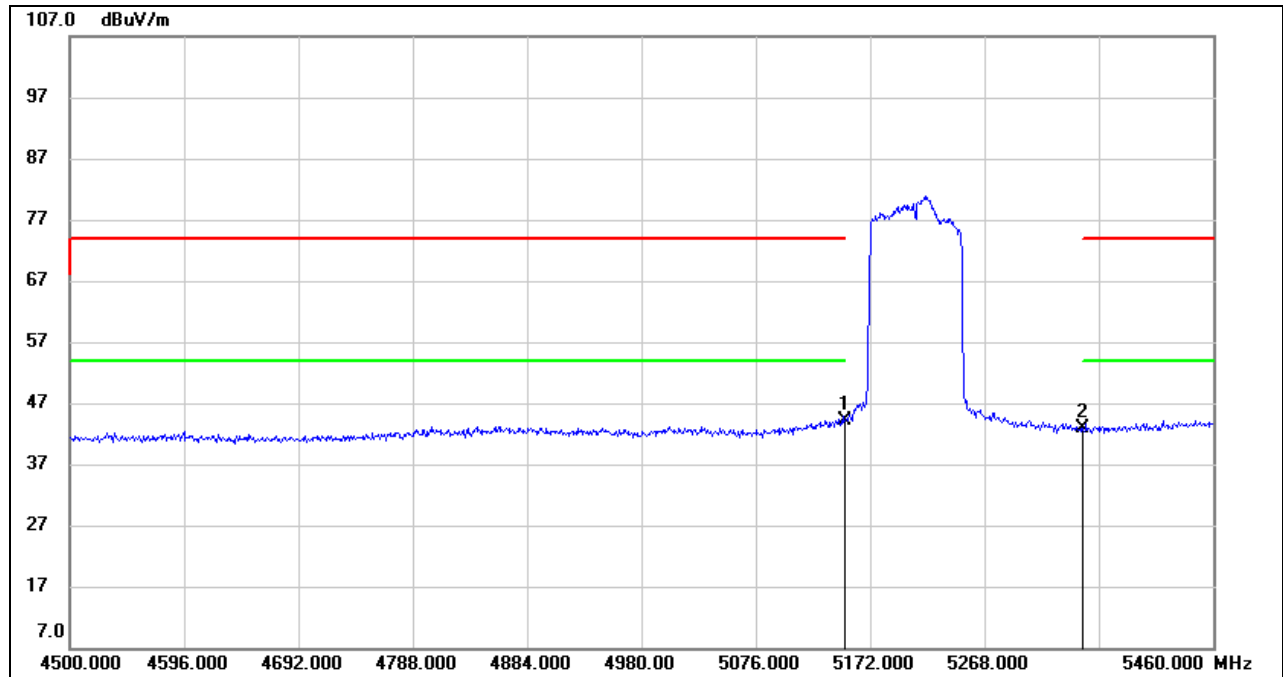
PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.91	39.91	55.82	74.00	-18.18	peak
2	5350.000	15.63	40.08	55.71	74.00	-18.29	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



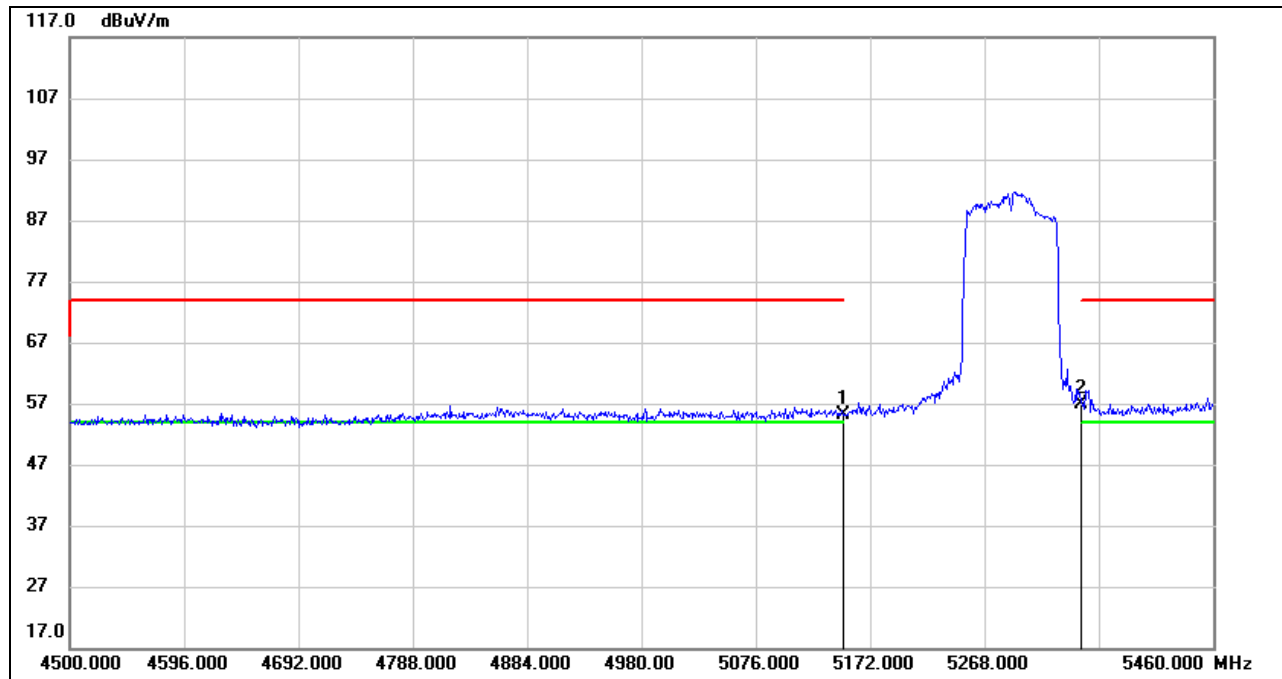
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	4.20	39.91	44.11	54.00	-9.89	AVG
2	5350.000	2.71	40.08	42.79	54.00	-11.21	AVG

- 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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	15.13	39.91	55.04	74.00	-18.96	peak
2	5350.000	16.76	40.08	56.84	74.00	-17.16	peak

Note: 1. Measurement = Reading Level + Correct Factor.

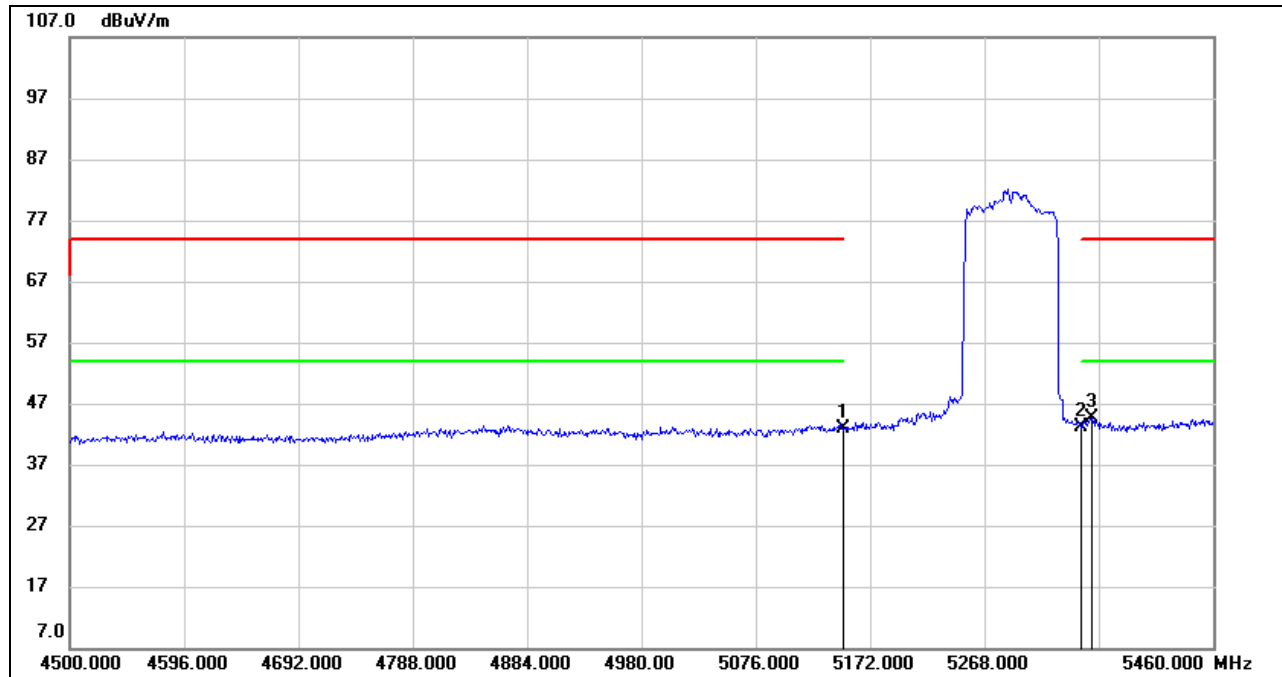
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

AVG



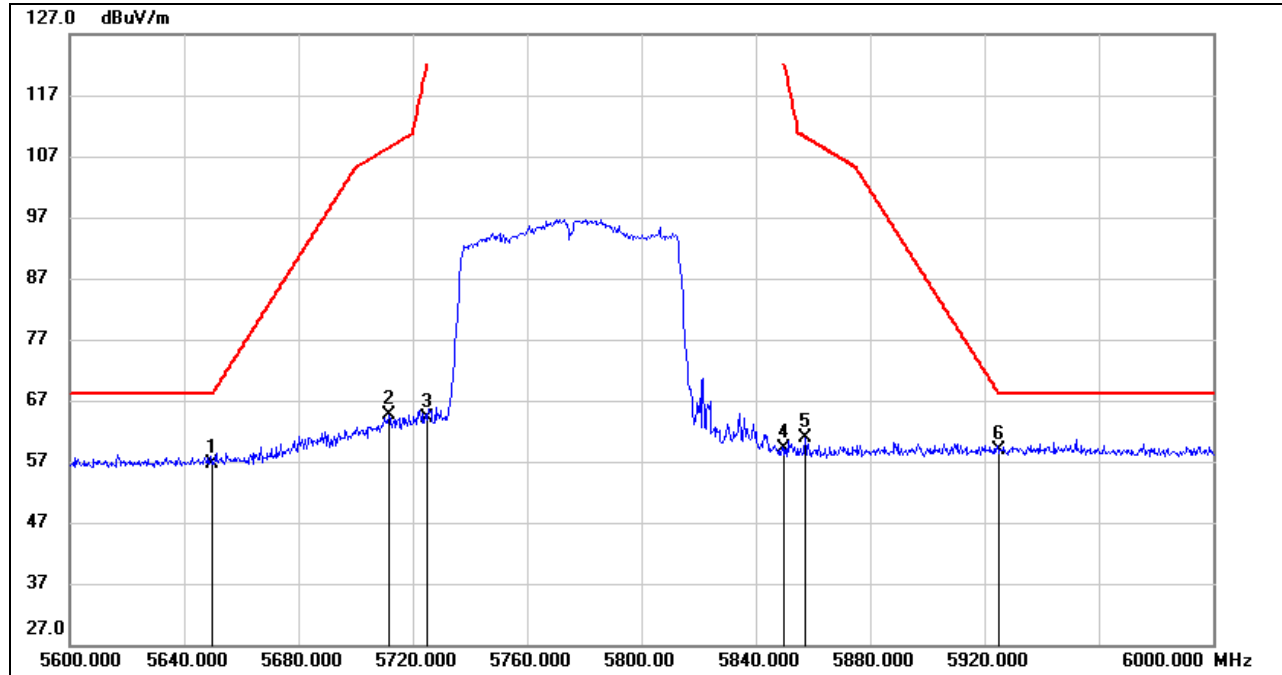
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	2.90	39.91	42.81	54.00	-11.19	AVG
2	5350.000	3.08	40.08	43.16	54.00	-10.84	AVG
3	5358.240	4.37	40.14	44.51	54.00	-9.49	AVG

- 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/Ton, where: Ton is the transmitting duration.
4. For the transmitting duration, please refer to clause 7.1.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	15.94	40.61	56.55	68.20	-11.65	peak
2	5711.600	24.05	40.56	64.61	108.45	-43.84	peak
3	5725.000	23.60	40.63	64.23	122.20	-57.97	peak
4	5850.000	17.78	41.45	59.23	122.20	-62.97	peak
5	5857.200	19.35	41.53	60.88	110.18	-49.30	peak
6	5925.000	17.03	41.83	58.86	68.20	-9.34	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 data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the polarities (Vertical & Horizontal) and Antennas had been tested, only the worst data was recorded in the report.

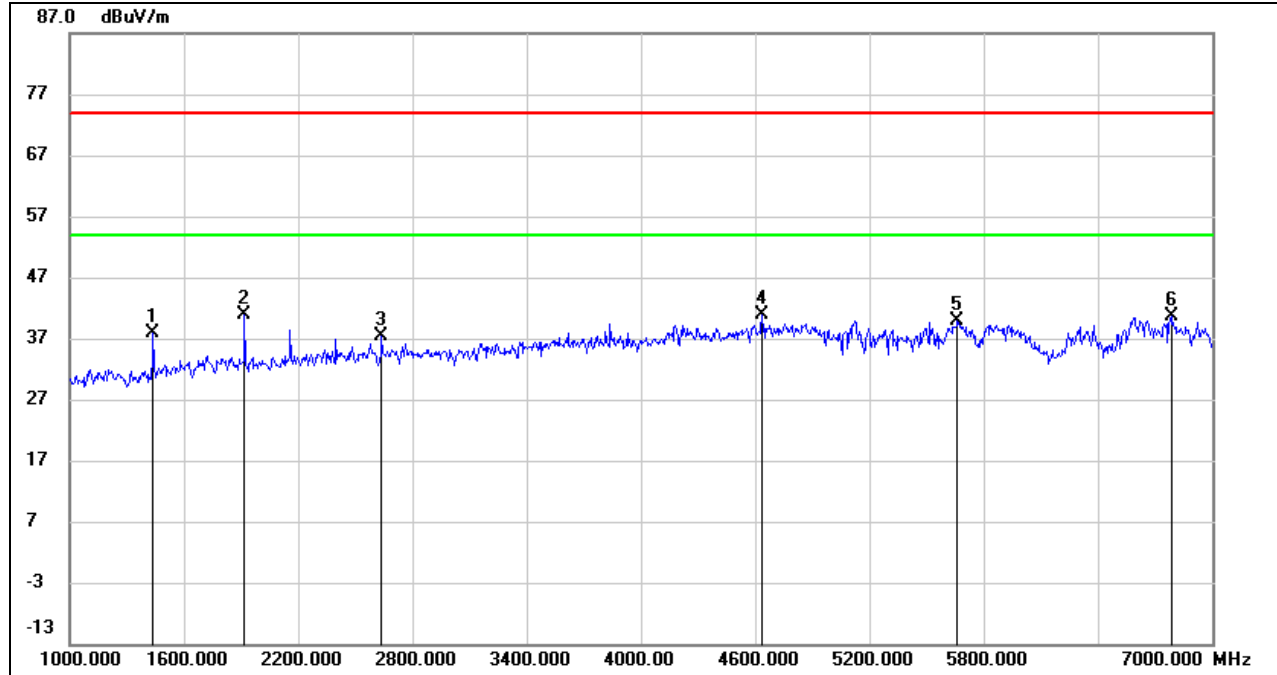


8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

8.2.1. 802.11a 20 SISO MODE

UNII-1 BAND

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	1438.000	50.58	-12.81	37.77	74.00	-36.23	peak
2	1918.000	51.74	-10.81	40.93	74.00	-33.07	peak
3	2638.000	45.76	-8.39	37.37	74.00	-36.63	peak
4	4636.000	42.69	-1.84	40.85	74.00	-33.15	peak
5	5662.000	39.09	0.68	39.77	74.00	-34.23	peak
6	6784.000	36.79	3.75	40.54	74.00	-33.46	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.

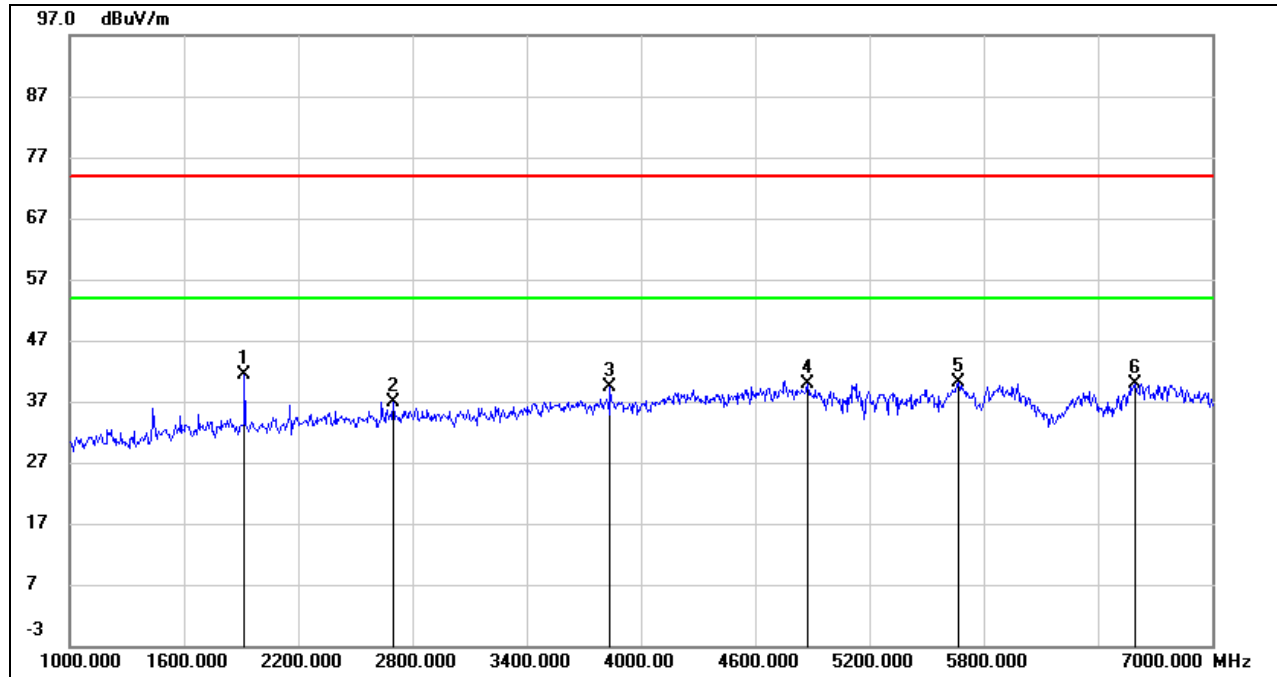
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	52.16	-10.81	41.35	74.00	-32.65	peak
2	2698.000	45.01	-8.12	36.89	74.00	-37.11	peak
3	3838.000	43.87	-4.39	39.48	74.00	-34.52	peak
4	4876.000	41.11	-1.13	39.98	74.00	-34.02	peak
5	5668.000	39.51	0.68	40.19	74.00	-33.81	peak
6	6592.000	36.32	3.64	39.96	74.00	-34.04	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.

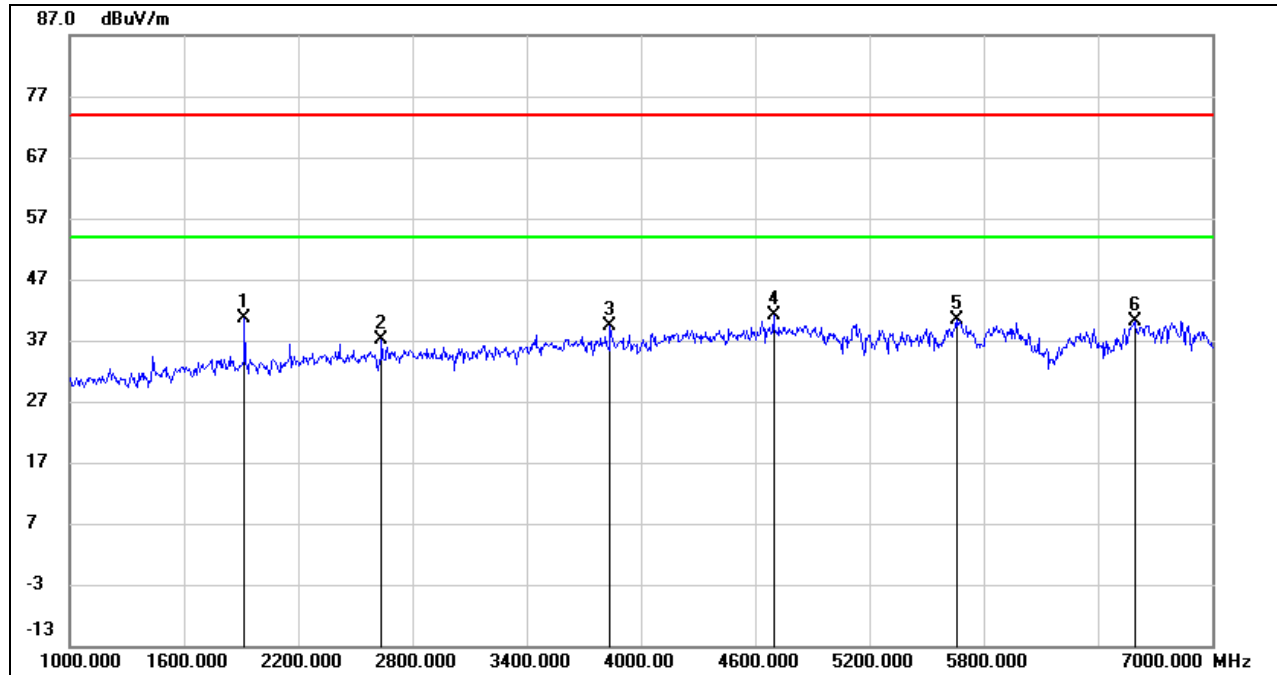
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	51.32	-10.81	40.51	74.00	-33.49	peak
2	2638.000	45.50	-8.39	37.11	74.00	-36.89	peak
3	3838.000	43.73	-4.39	39.34	74.00	-34.66	peak
4	4696.000	42.77	-1.59	41.18	74.00	-32.82	peak
5	5656.000	39.64	0.69	40.33	74.00	-33.67	peak
6	6592.000	36.38	3.64	40.02	74.00	-33.98	peak

Note: 1. Measurement = Reading Level + Correct Factor.

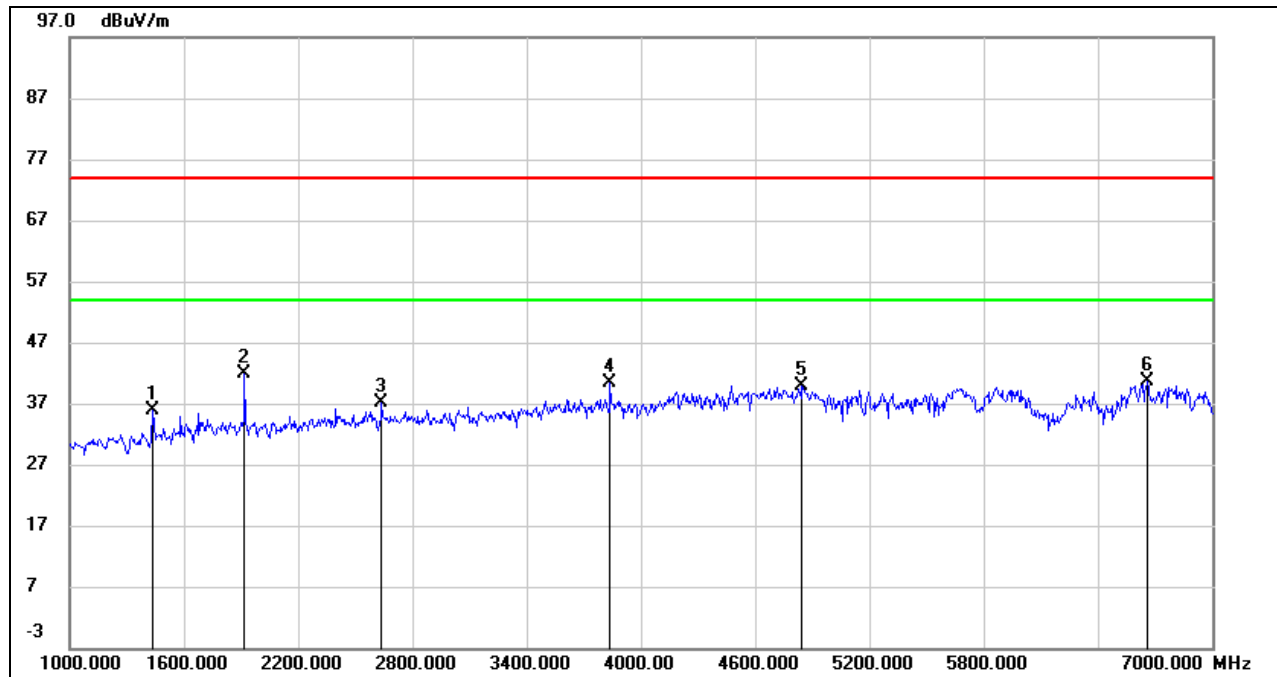
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	1432.000	48.78	-12.85	35.93	74.00	-38.07	peak
2	1918.000	52.68	-10.81	41.87	74.00	-32.13	peak
3	2638.000	45.56	-8.39	37.17	74.00	-36.83	peak
4	3838.000	44.79	-4.39	40.40	74.00	-33.60	peak
5	4846.000	41.07	-1.14	39.93	74.00	-34.07	peak
6	6658.000	36.96	3.69	40.65	74.00	-33.35	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

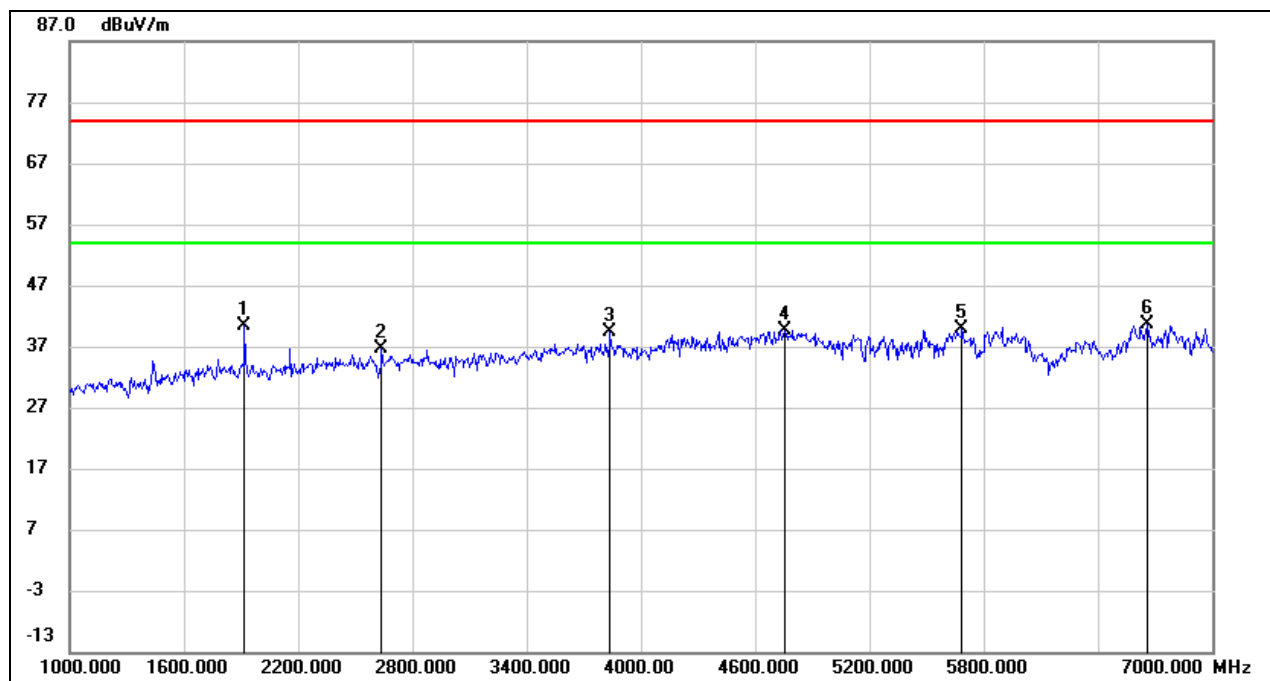
3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	51.09	-10.81	40.28	74.00	-33.72	peak
2	2638.000	44.91	-8.39	36.52	74.00	-37.48	peak
3	3838.000	43.85	-4.39	39.46	74.00	-34.54	peak
4	4756.000	40.97	-1.33	39.64	74.00	-34.36	peak
5	5686.000	39.17	0.68	39.85	74.00	-34.15	peak
6	6658.000	37.05	3.69	40.74	74.00	-33.26	peak

Note: 1. Measurement = Reading Level + Correct Factor.

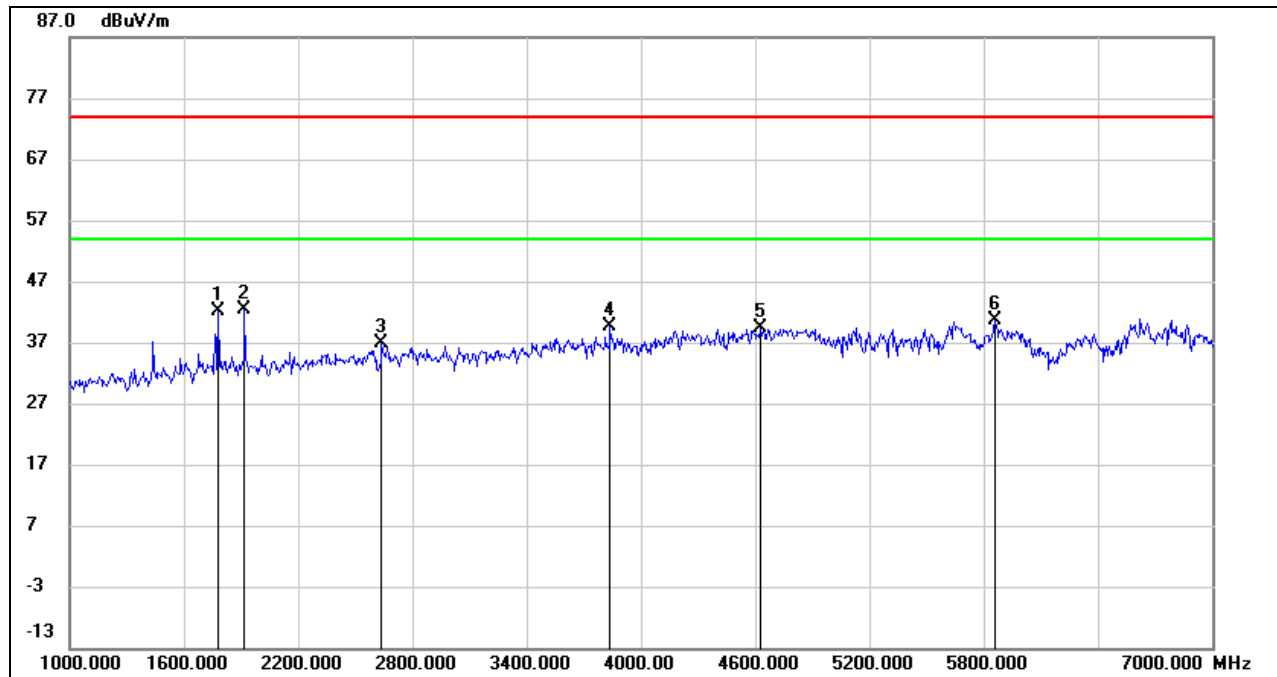
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	1780.000	52.72	-10.71	42.01	74.00	-31.99	peak
2	1918.000	53.29	-10.81	42.48	74.00	-31.52	peak
3	2638.000	45.34	-8.39	36.95	74.00	-37.05	peak
4	3838.000	43.94	-4.39	39.55	74.00	-34.45	peak
5	4630.000	41.27	-1.87	39.40	74.00	-34.60	peak
6	5860.000	39.70	0.88	40.58	74.00	-33.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

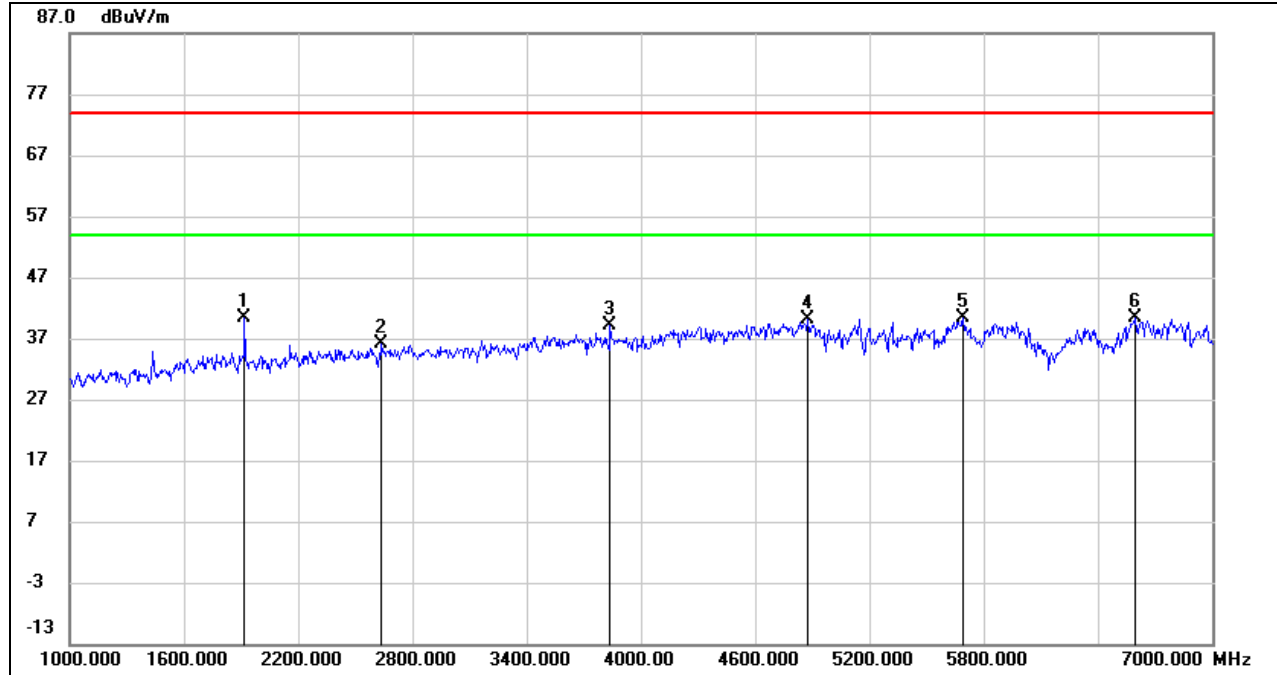
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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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	1918.000	51.31	-10.81	40.50	74.00	-33.50	peak
2	2638.000	44.62	-8.39	36.23	74.00	-37.77	peak
3	3838.000	43.52	-4.39	39.13	74.00	-34.87	peak
4	4876.000	41.14	-1.13	40.01	74.00	-33.99	peak
5	5692.000	39.61	0.67	40.28	74.00	-33.72	peak
6	6592.000	36.82	3.64	40.46	74.00	-33.54	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.

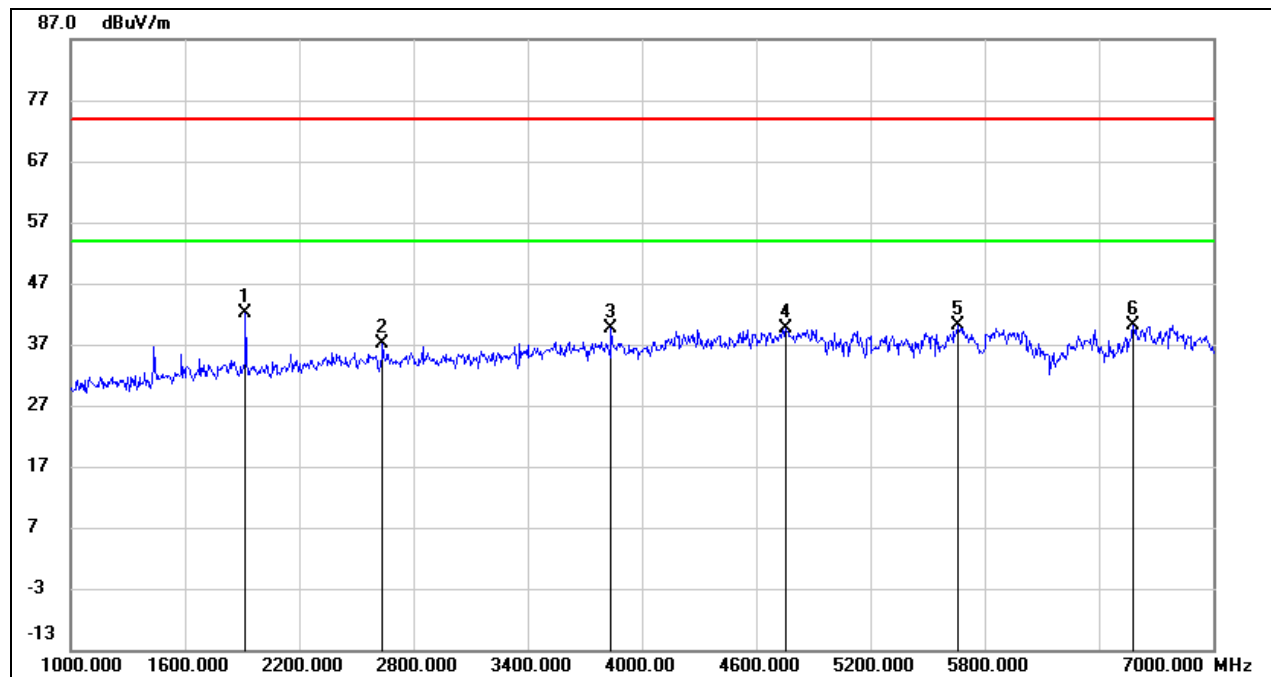
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	52.87	-10.81	42.06	74.00	-31.94	peak
2	2638.000	45.45	-8.39	37.06	74.00	-36.94	peak
3	3838.000	43.97	-4.39	39.58	74.00	-34.42	peak
4	4756.000	40.91	-1.33	39.58	74.00	-34.42	peak
5	5656.000	39.33	0.69	40.02	74.00	-33.98	peak
6	6580.000	36.52	3.56	40.08	74.00	-33.92	peak

Note: 1. Measurement = Reading Level + Correct Factor.

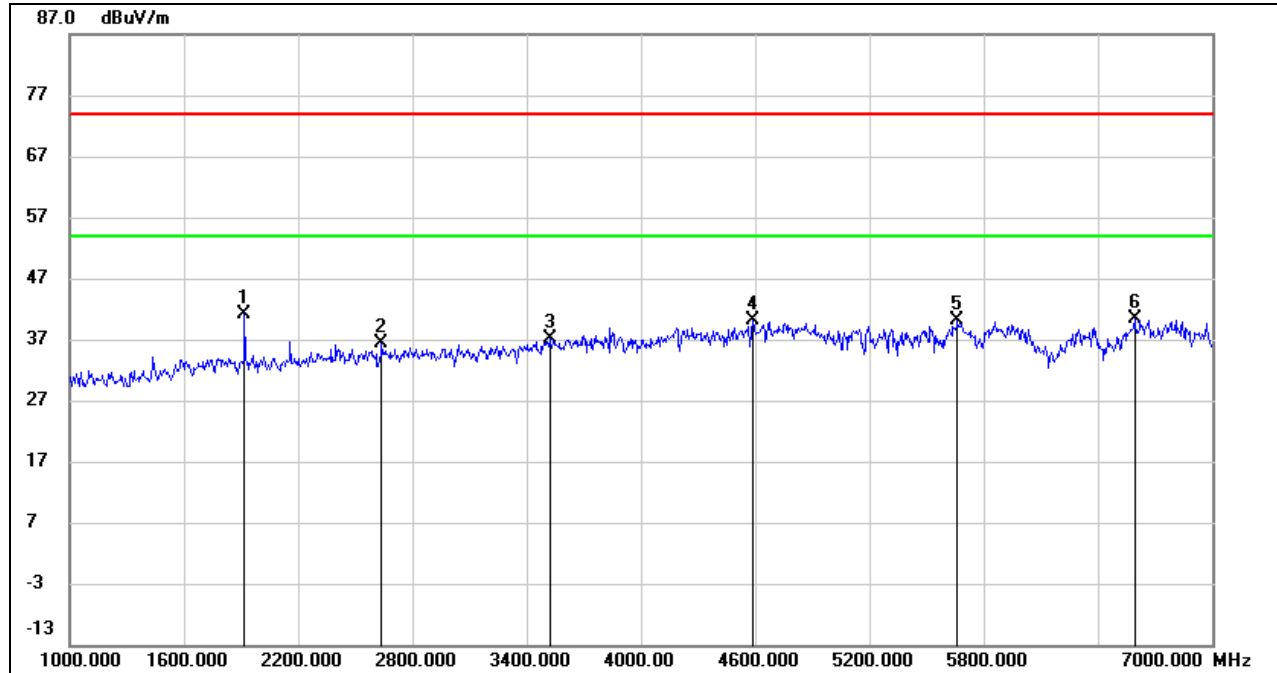
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	1918.000	51.94	-10.81	41.13	74.00	-32.87	peak
2	2638.000	44.77	-8.39	36.38	74.00	-37.62	peak
3	3520.000	42.80	-5.70	37.10	74.00	-36.90	peak
4	4588.000	42.13	-2.07	40.06	74.00	-33.94	peak
5	5662.000	39.51	0.68	40.19	74.00	-33.81	peak
6	6592.000	36.76	3.64	40.40	74.00	-33.60	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

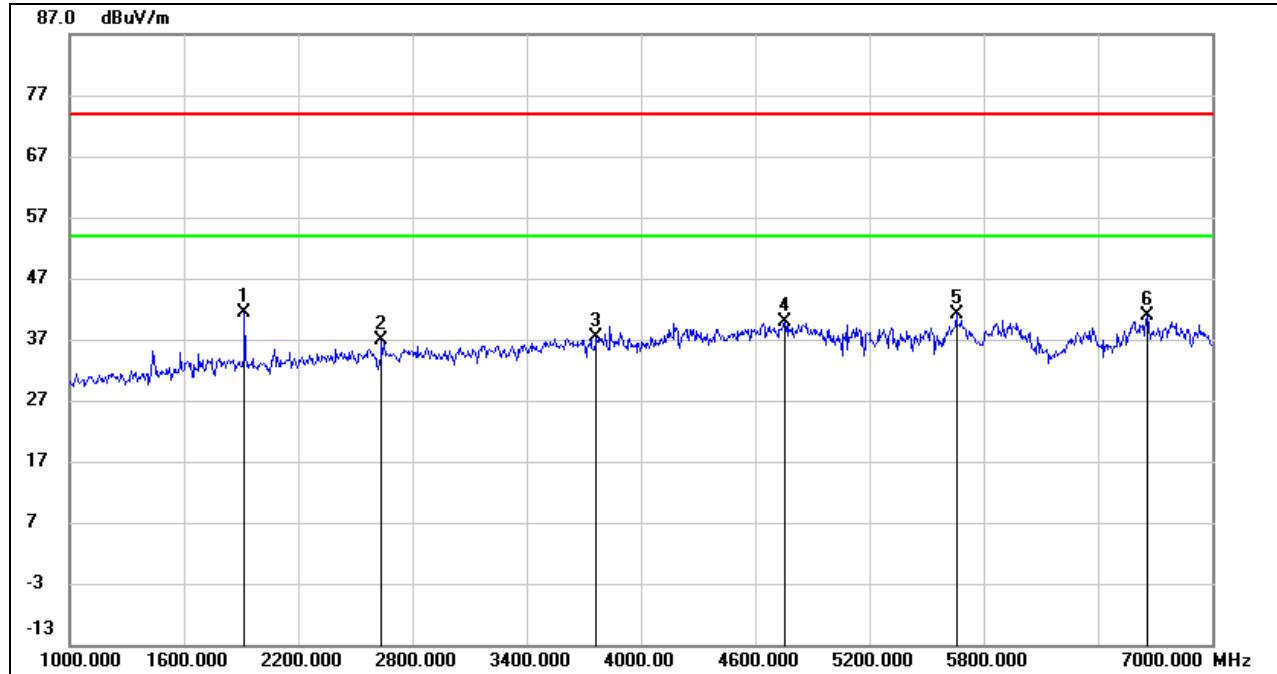
3. Peak: Peak detector.

4. 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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	52.13	-10.81	41.32	74.00	-32.68	peak
2	2638.000	45.23	-8.39	36.84	74.00	-37.16	peak
3	3766.000	41.97	-4.49	37.48	74.00	-36.52	peak
4	4756.000	41.13	-1.33	39.80	74.00	-34.20	peak
5	5656.000	40.33	0.69	41.02	74.00	-32.98	peak
6	6658.000	37.17	3.69	40.86	74.00	-33.14	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.

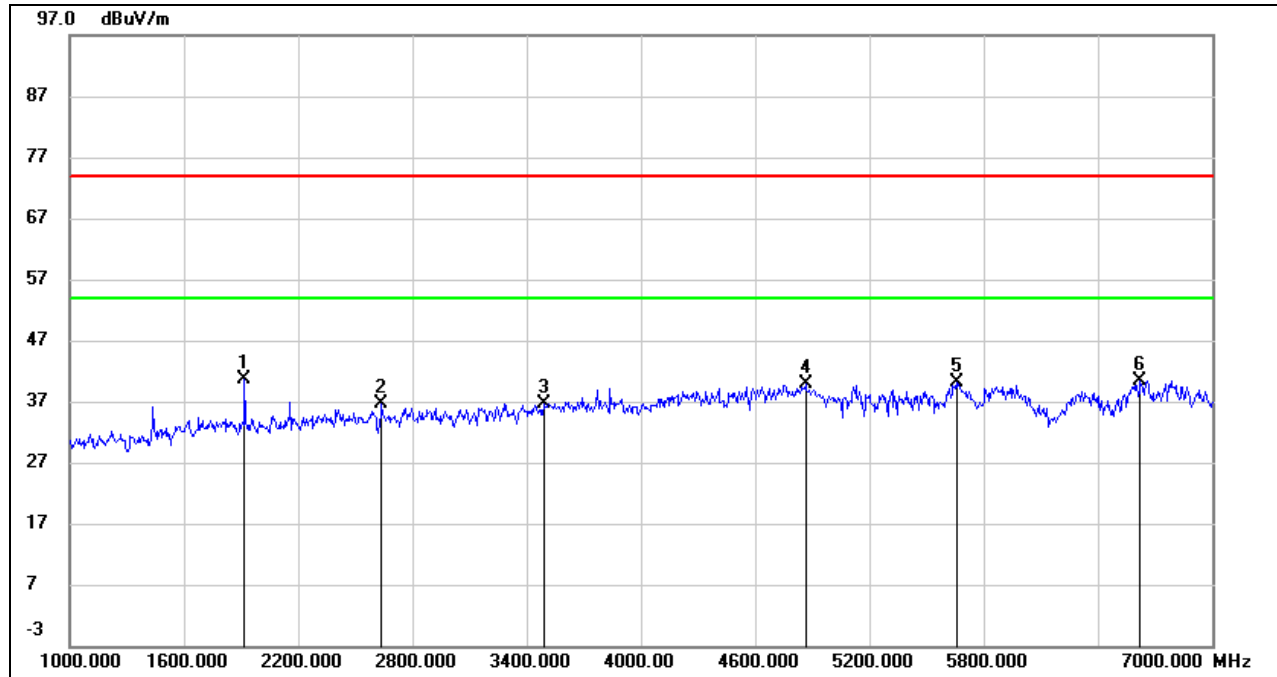
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	51.45	-10.81	40.64	74.00	-33.36	peak
2	2638.000	44.94	-8.39	36.55	74.00	-37.45	peak
3	3490.000	42.54	-5.86	36.68	74.00	-37.32	peak
4	4864.000	40.98	-1.14	39.84	74.00	-34.16	peak
5	5656.000	39.46	0.69	40.15	74.00	-33.85	peak
6	6622.000	36.64	3.69	40.33	74.00	-33.67	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.

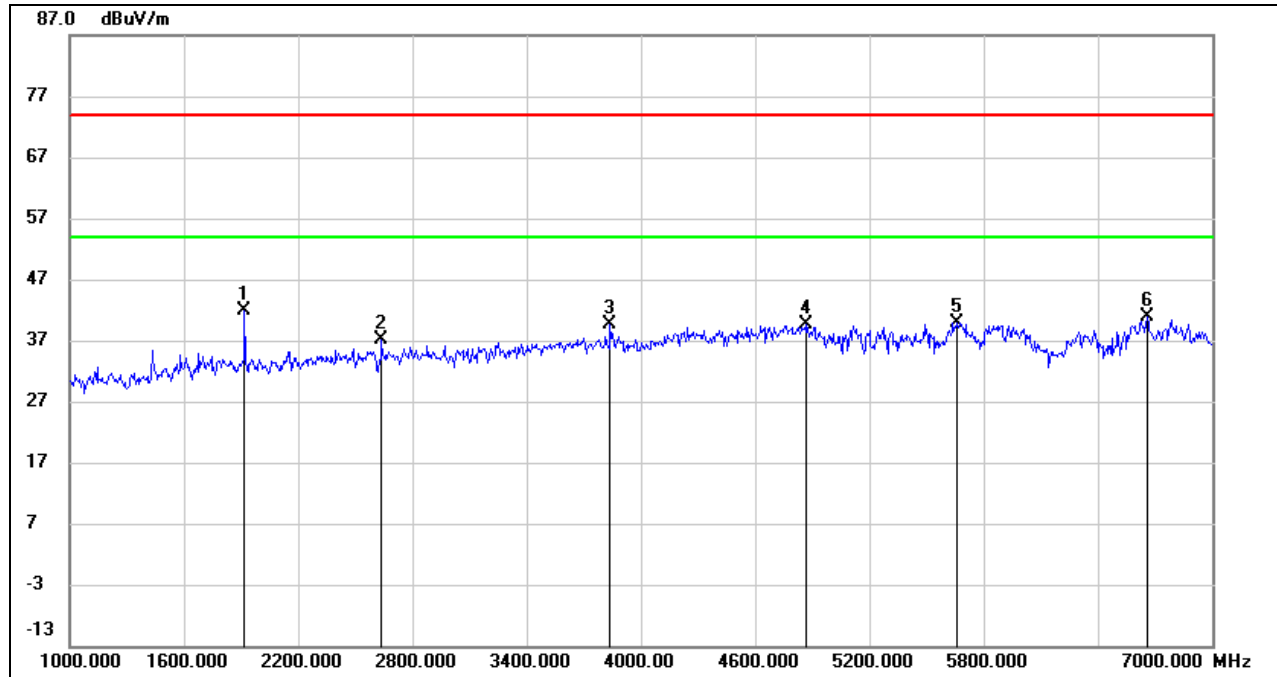
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	52.73	-10.81	41.92	74.00	-32.08	peak
2	2638.000	45.56	-8.39	37.17	74.00	-36.83	peak
3	3838.000	43.90	-4.39	39.51	74.00	-34.49	peak
4	4870.000	40.70	-1.13	39.57	74.00	-34.43	peak
5	5656.000	39.29	0.69	39.98	74.00	-34.02	peak
6	6658.000	37.09	3.69	40.78	74.00	-33.22	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.

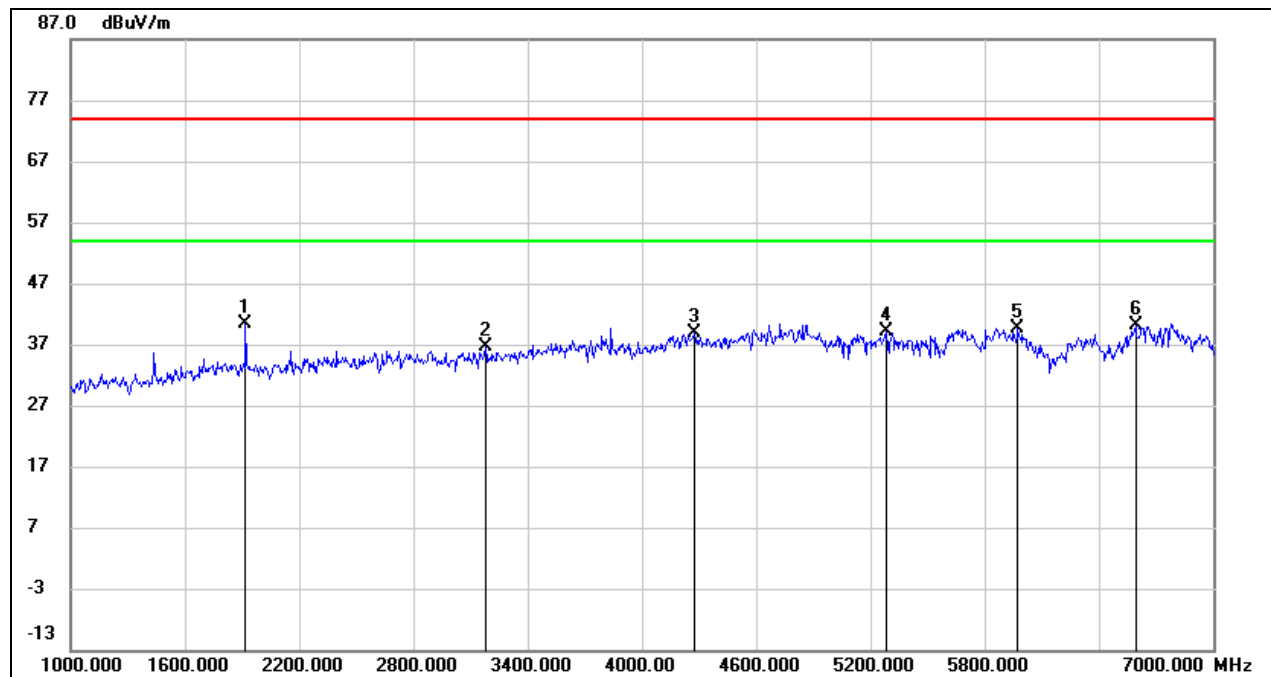
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-3 BAND

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	1918.000	51.16	-10.81	40.35	74.00	-33.65	peak
2	3178.000	43.30	-6.67	36.63	74.00	-37.37	peak
3	4276.000	41.93	-2.94	38.99	74.00	-35.01	peak
4	5284.000	38.85	0.16	39.01	74.00	-34.99	peak
5	5974.000	38.43	1.28	39.71	74.00	-34.29	peak
6	6592.000	36.38	3.64	40.02	74.00	-33.98	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.

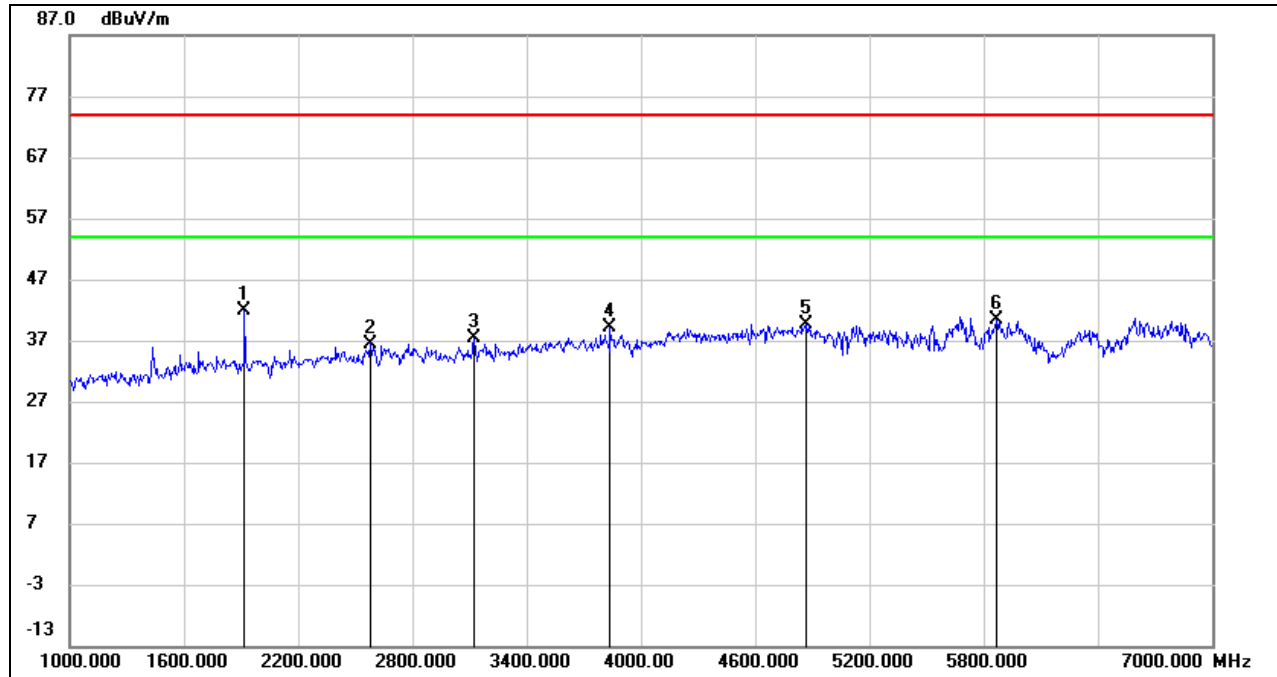
3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

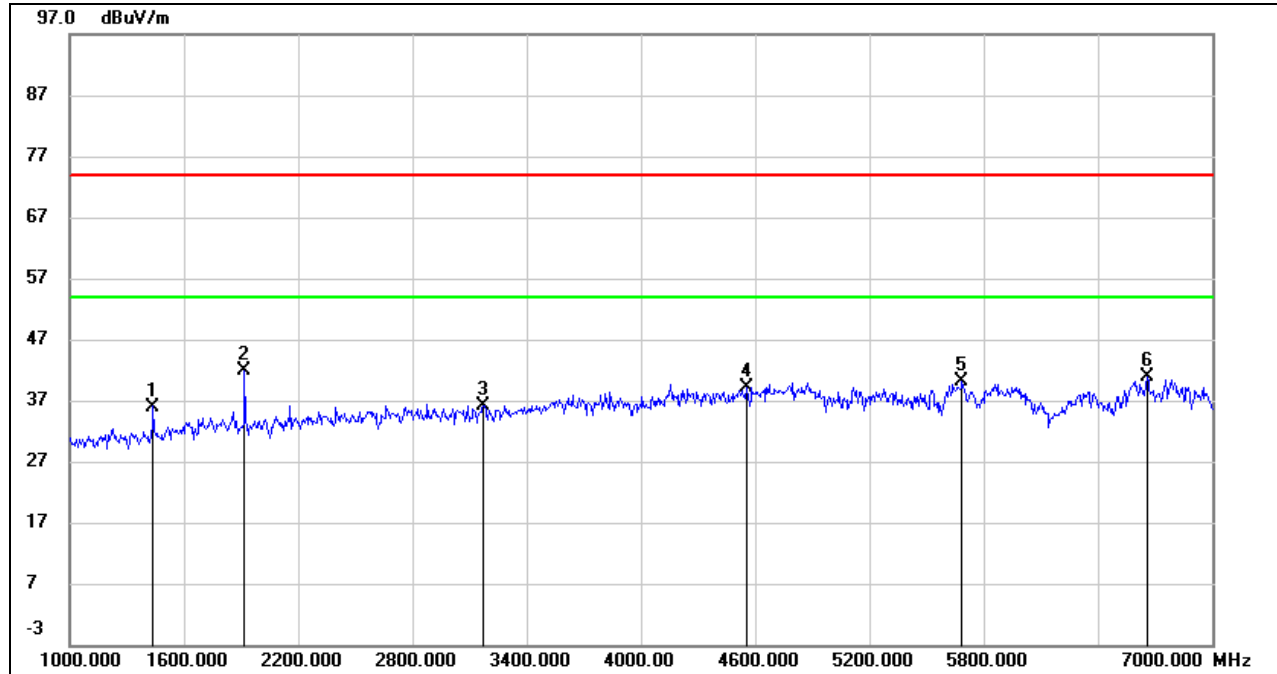
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1918.000	52.64	-10.81	41.83	74.00	-32.17	peak
2	2578.000	45.11	-8.61	36.50	74.00	-37.50	peak
3	3124.000	44.13	-6.80	37.33	74.00	-36.67	peak
4	3838.000	43.44	-4.39	39.05	74.00	-34.95	peak
5	4864.000	40.66	-1.14	39.52	74.00	-34.48	peak
6	5866.000	39.43	0.90	40.33	74.00	-33.67	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.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1438.000	48.81	-12.81	36.00	74.00	-38.00	peak
2	1918.000	52.59	-10.81	41.78	74.00	-32.22	peak
3	3172.000	42.80	-6.68	36.12	74.00	-37.88	peak
4	4552.000	41.45	-2.25	39.20	74.00	-34.80	peak
5	5686.000	39.40	0.68	40.08	74.00	-33.92	peak
6	6658.000	37.08	3.69	40.77	74.00	-33.23	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.

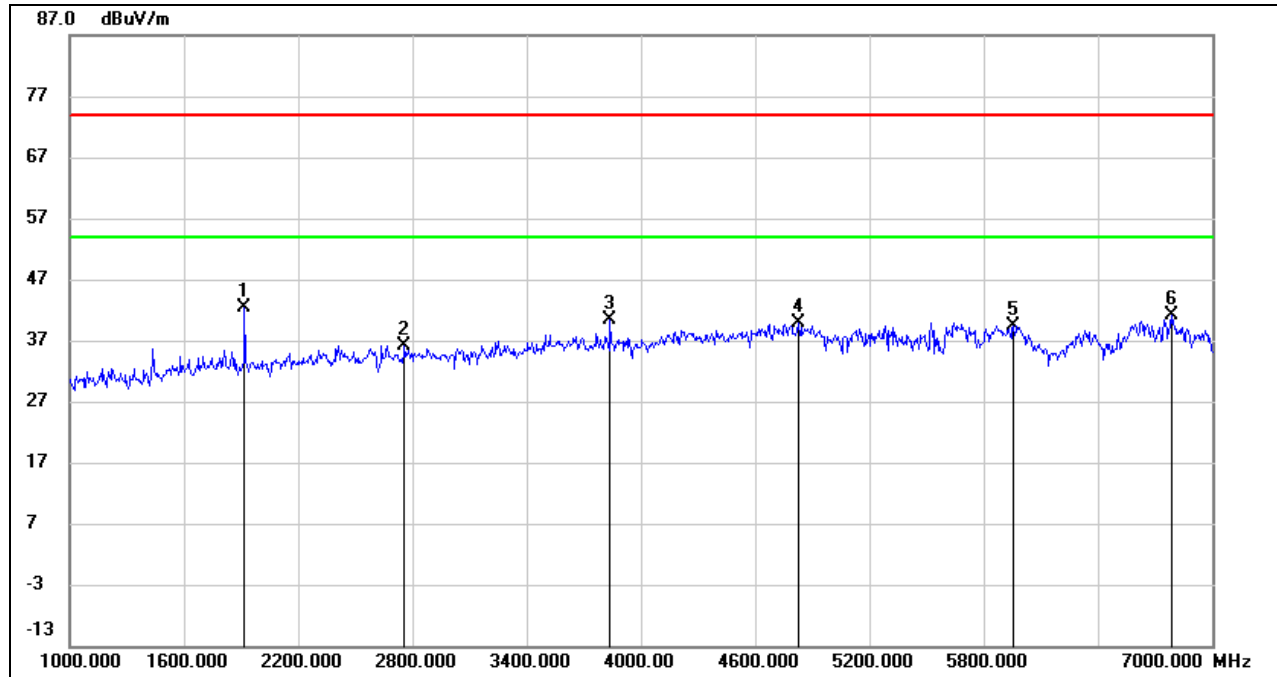
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	53.08	-10.81	42.27	74.00	-31.73	peak
2	2758.000	44.01	-7.86	36.15	74.00	-37.85	peak
3	3838.000	44.71	-4.39	40.32	74.00	-33.68	peak
4	4828.000	41.04	-1.14	39.90	74.00	-34.10	peak
5	5956.000	38.23	1.22	39.45	74.00	-34.55	peak
6	6784.000	37.38	3.75	41.13	74.00	-32.87	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.

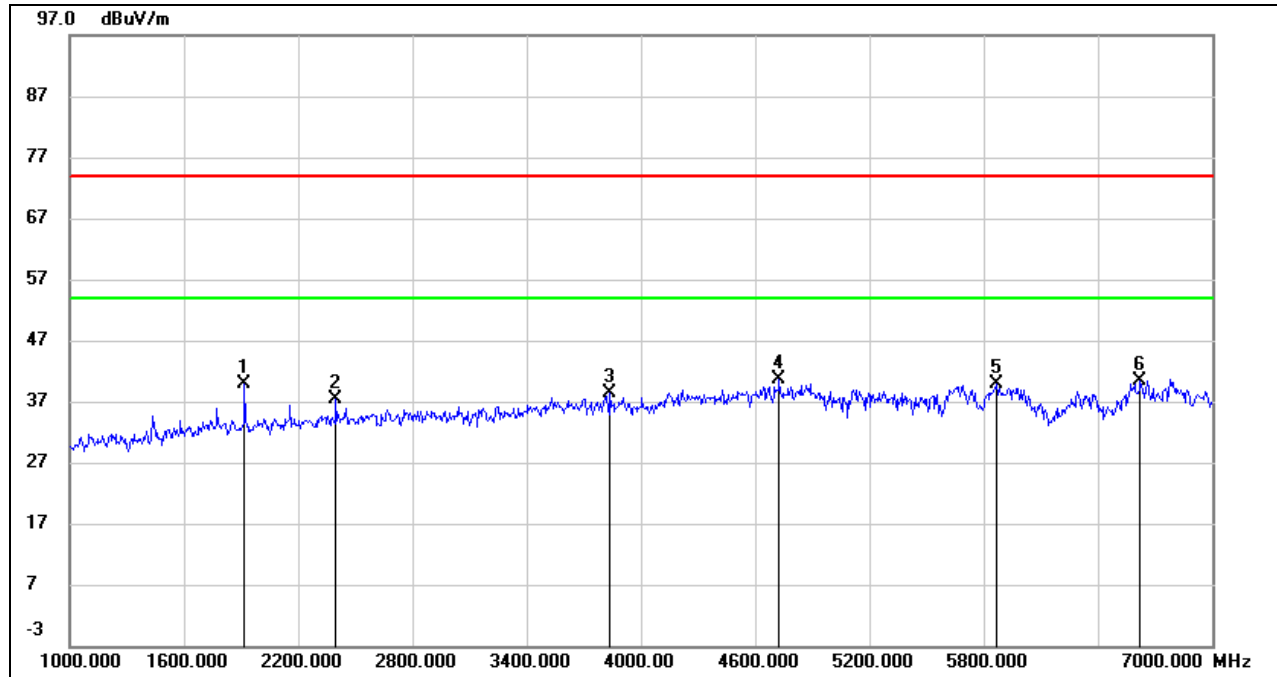
3. Peak: Peak detector.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	50.81	-10.81	40.00	74.00	-34.00	peak
2	2398.000	46.46	-8.96	37.50	74.00	-36.50	peak
3	3838.000	42.89	-4.39	38.50	74.00	-35.50	peak
4	4726.000	42.11	-1.45	40.66	74.00	-33.34	peak
5	5866.000	38.88	0.90	39.78	74.00	-34.22	peak
6	6622.000	36.63	3.69	40.32	74.00	-33.68	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

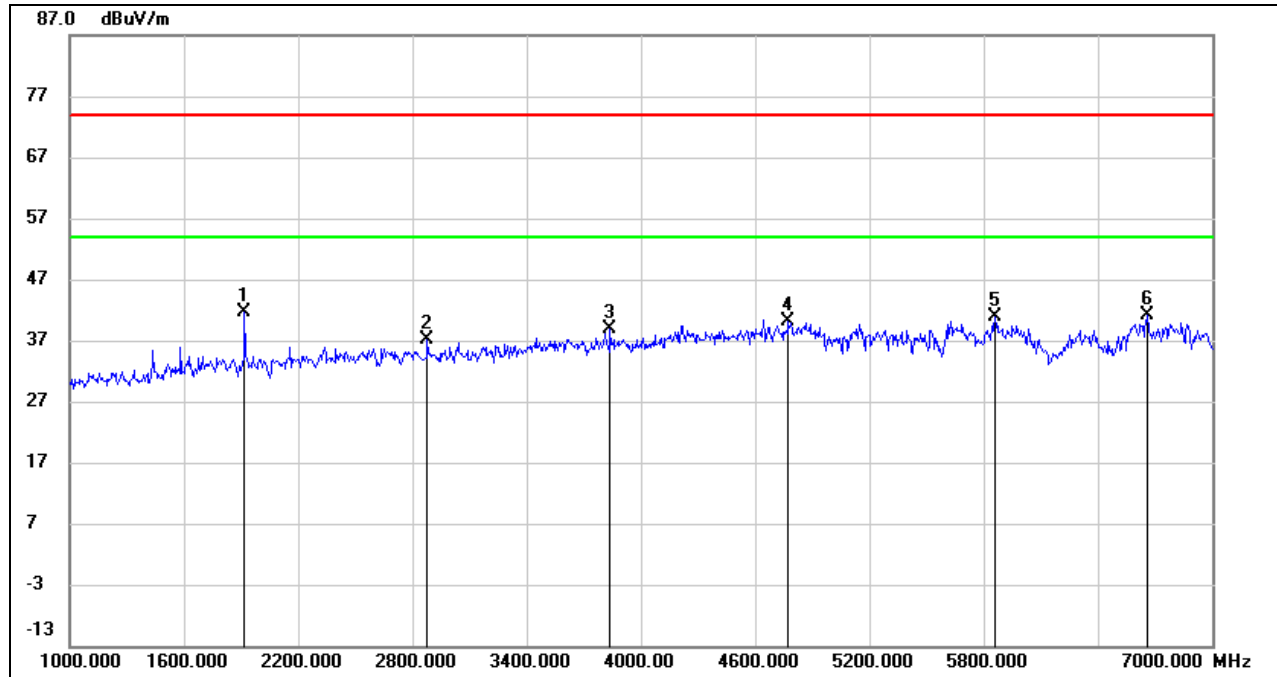
3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	1918.000	52.45	-10.81	41.64	74.00	-32.36	peak
2	2878.000	44.62	-7.46	37.16	74.00	-36.84	peak
3	3838.000	43.30	-4.39	38.91	74.00	-35.09	peak
4	4774.000	41.43	-1.26	40.17	74.00	-33.83	peak
5	5860.000	40.03	0.88	40.91	74.00	-33.09	peak
6	6658.000	37.40	3.69	41.09	74.00	-32.91	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. 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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

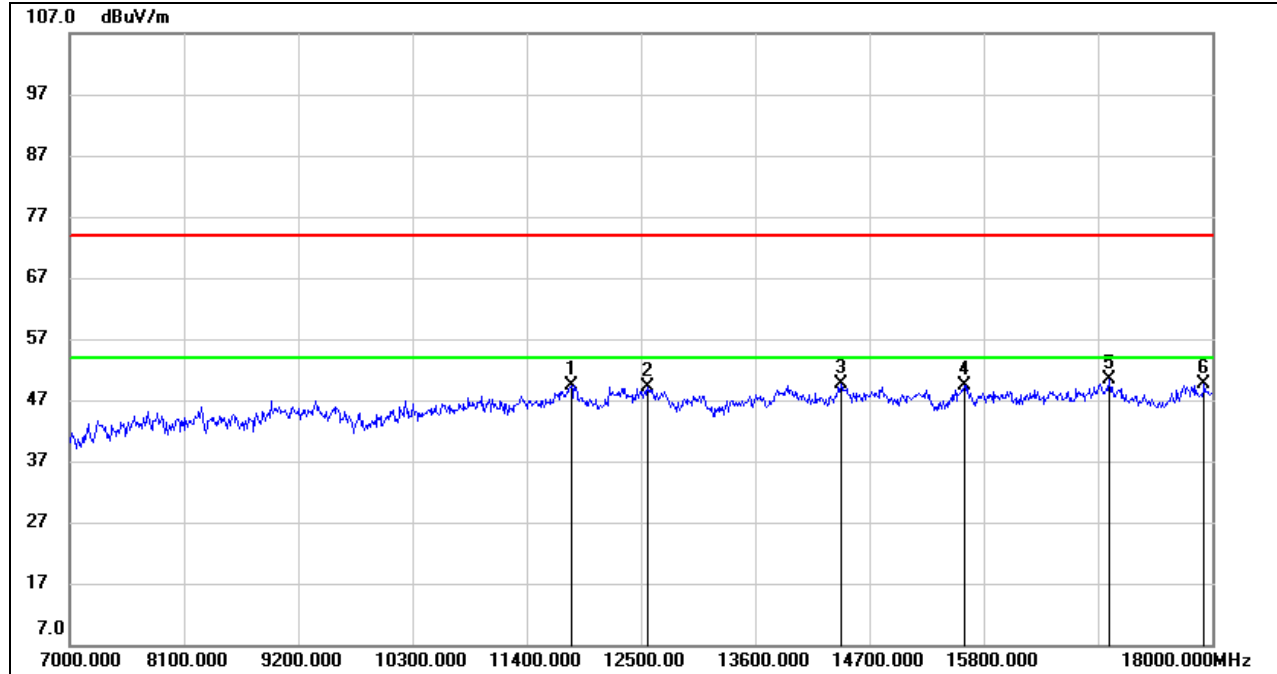
Note: All the modes had been tested, but only the worst data was recorded in the report.

8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 802.11a 20 SISO MODE

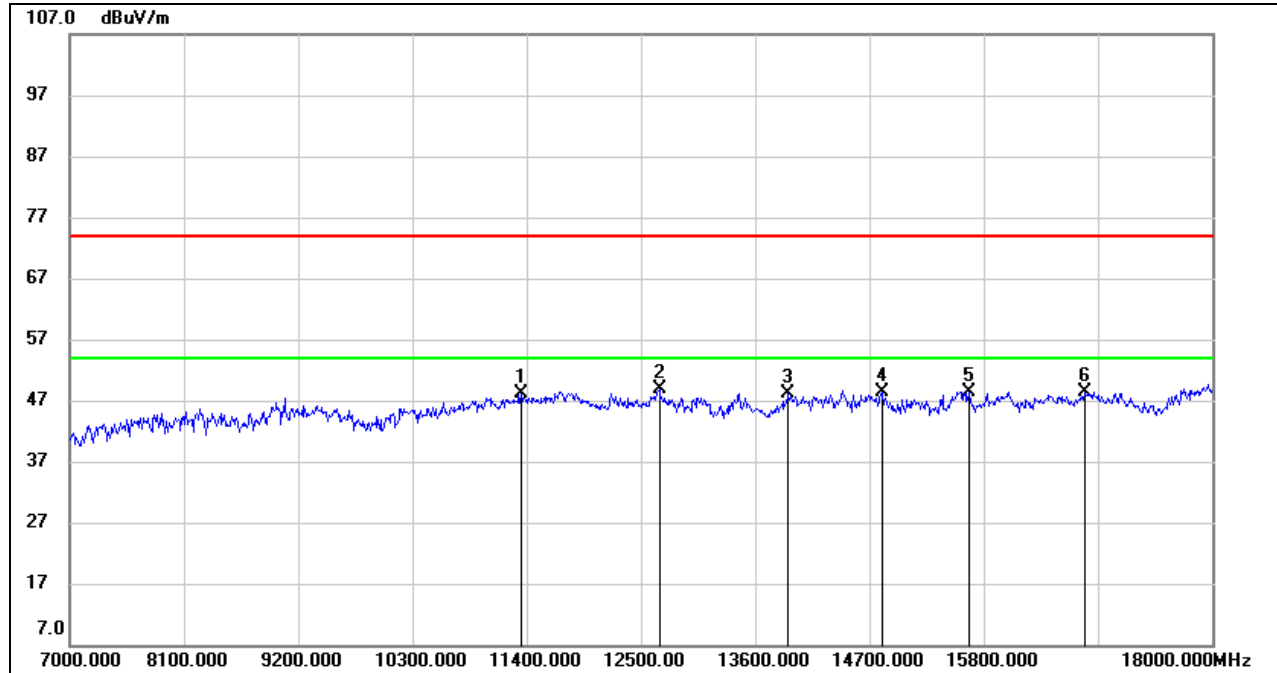
UNII-1 BAND

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	11829.000	34.02	15.47	49.49	74.00	-24.51	peak
2	12566.000	33.55	15.49	49.04	74.00	-24.96	peak
3	14425.000	31.44	18.28	49.72	74.00	-24.28	peak
4	15613.000	31.85	17.49	49.34	74.00	-24.66	peak
5	17010.000	29.57	20.70	50.27	74.00	-23.73	peak
6	17923.000	26.71	23.01	49.72	74.00	-24.28	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	11345.000	34.60	13.45	48.05	74.00	-25.95	peak
2	12676.000	33.14	15.62	48.76	74.00	-25.24	peak
3	13919.000	29.34	18.83	48.17	74.00	-25.83	peak
4	14821.000	30.71	17.73	48.44	74.00	-25.56	peak
5	15657.000	30.89	17.52	48.41	74.00	-25.59	peak
6	16768.000	28.22	20.22	48.44	74.00	-25.56	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

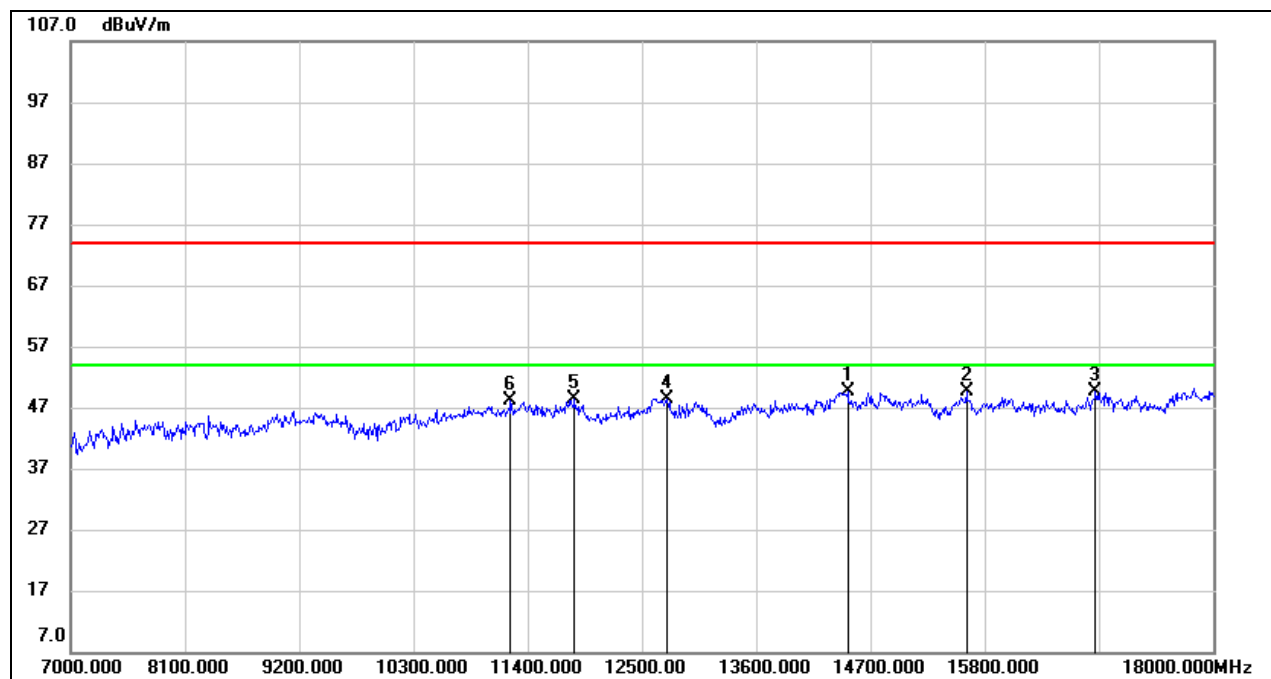
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

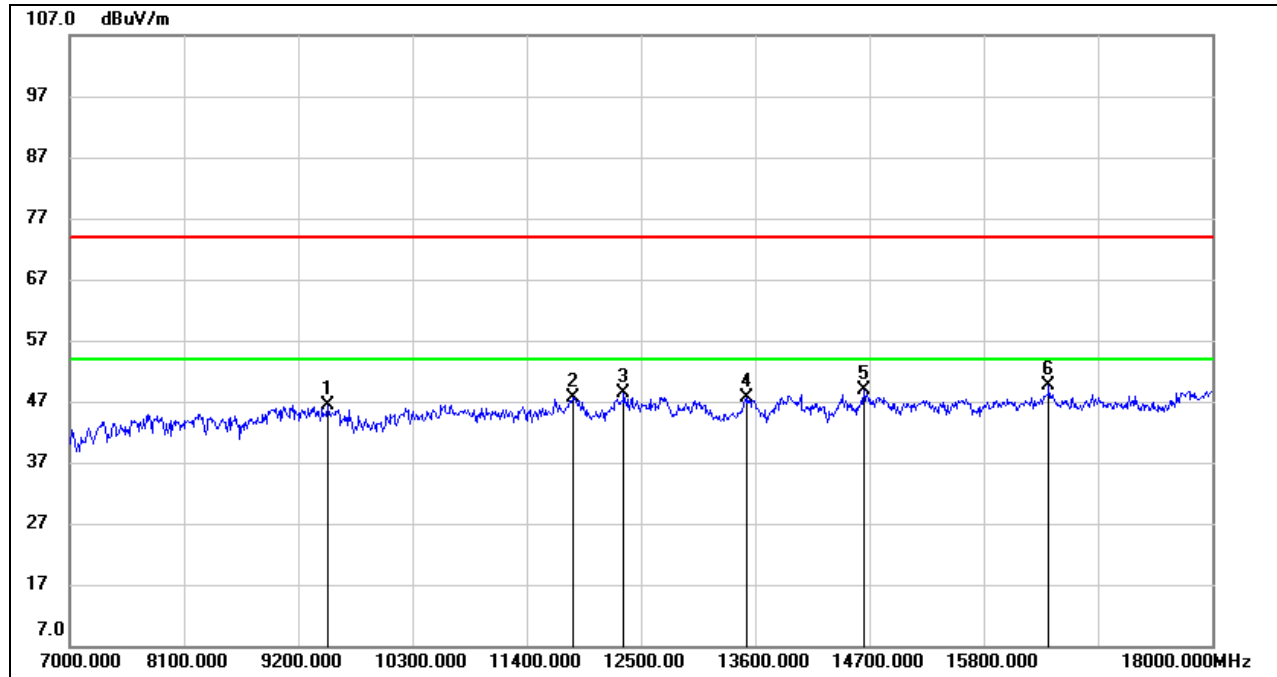
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	14480.000	31.47	18.12	49.59	74.00	-24.41	peak
2	15624.000	32.19	17.49	49.68	74.00	-24.32	peak
3	16867.000	29.28	20.38	49.66	74.00	-24.34	peak
4	12742.000	32.71	15.75	48.46	74.00	-25.54	peak
5	11851.000	32.83	15.46	48.29	74.00	-25.71	peak
6	11235.000	35.11	13.01	48.12	74.00	-25.88	peak

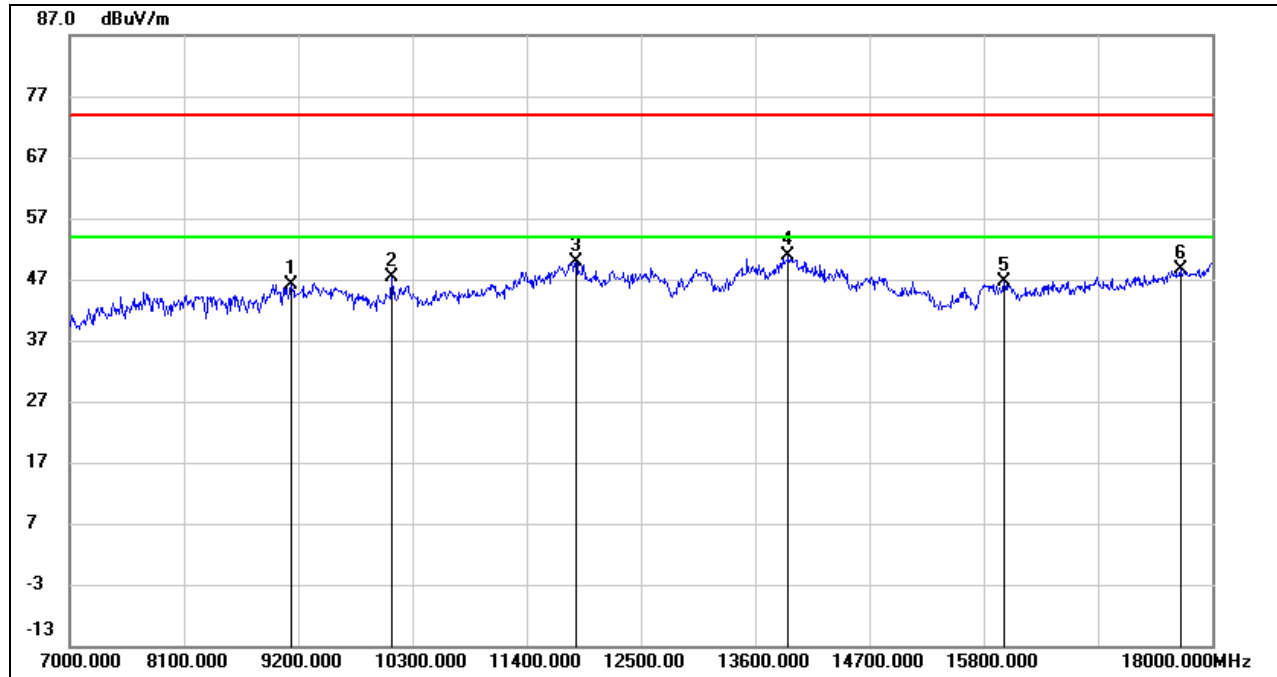
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	9486.000	36.34	10.02	46.36	74.00	-27.64	peak
2	11840.000	32.11	15.47	47.58	74.00	-26.42	peak
3	12335.000	32.92	15.52	48.44	74.00	-25.56	peak
4	13523.000	29.91	17.63	47.54	74.00	-26.46	peak
5	14645.000	31.05	17.72	48.77	74.00	-25.23	peak
6	16427.000	30.10	19.48	49.58	74.00	-24.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	9134.000	37.41	8.78	46.19	74.00	-27.81	peak
2	10102.000	36.53	10.76	47.29	74.00	-26.71	peak
3	11873.000	32.79	17.17	49.96	74.00	-24.04	peak
4	13919.000	30.29	20.58	50.87	74.00	-23.13	peak
5	15998.000	31.34	15.38	46.72	74.00	-27.28	peak
6	17692.000	26.50	22.06	48.56	74.00	-25.44	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

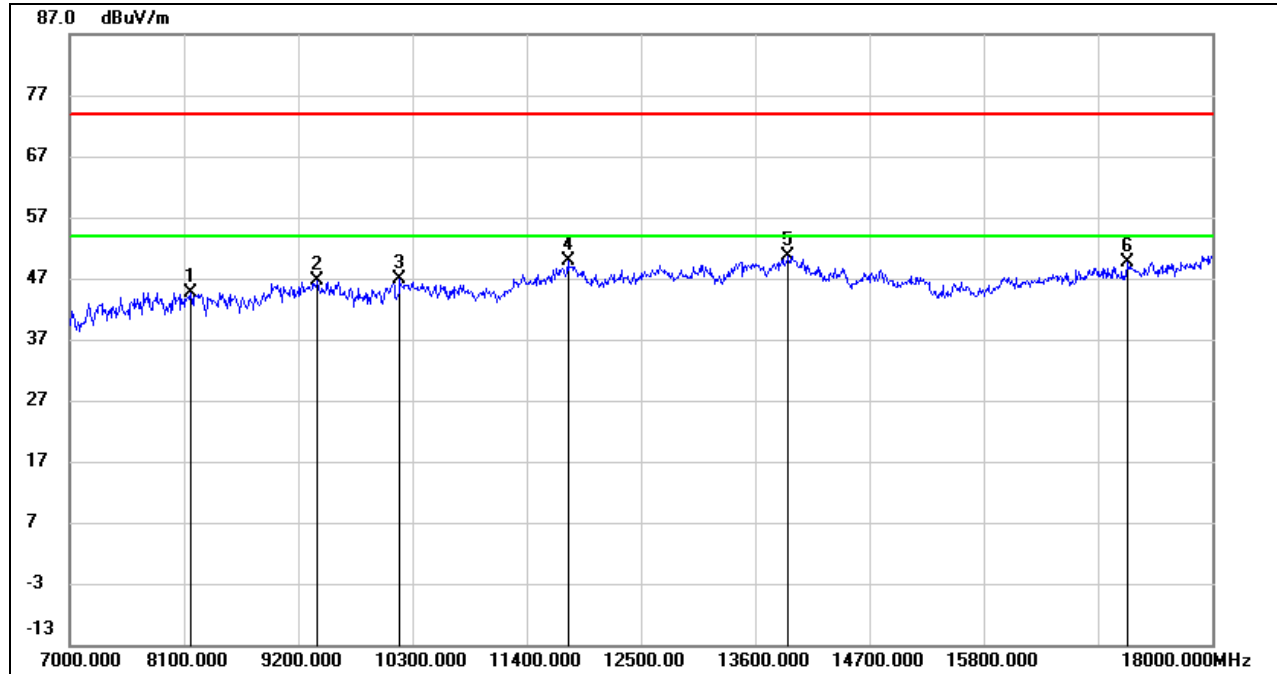
3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8166.000	37.84	6.90	44.74	74.00	-29.26	peak
2	9387.000	37.08	9.60	46.68	74.00	-27.32	peak
3	10179.000	36.10	10.88	46.98	74.00	-27.02	peak
4	11796.000	32.68	17.19	49.87	74.00	-24.13	peak
5	13919.000	30.14	20.58	50.72	74.00	-23.28	peak
6	17186.000	29.55	20.06	49.61	74.00	-24.39	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.

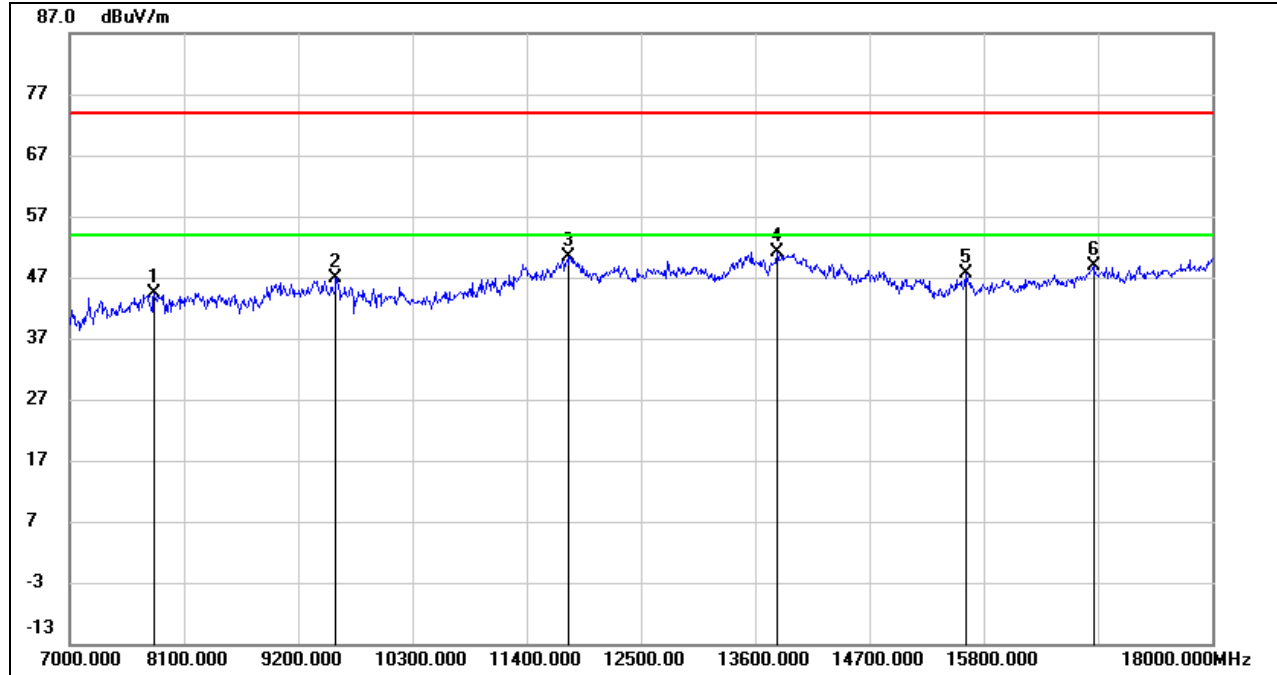
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**UNII-2A BAND****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	7814.000	38.33	6.03	44.36	74.00	-29.64	peak
2	9563.000	36.91	10.05	46.96	74.00	-27.04	peak
3	11807.000	33.23	17.22	50.45	74.00	-23.55	peak
4	13809.000	30.68	20.51	51.19	74.00	-22.81	peak
5	15624.000	32.12	15.40	47.52	74.00	-26.48	peak
6	16856.000	30.49	18.46	48.95	74.00	-25.05	peak

Note: 1. Measurement = Reading Level + Correct Factor.

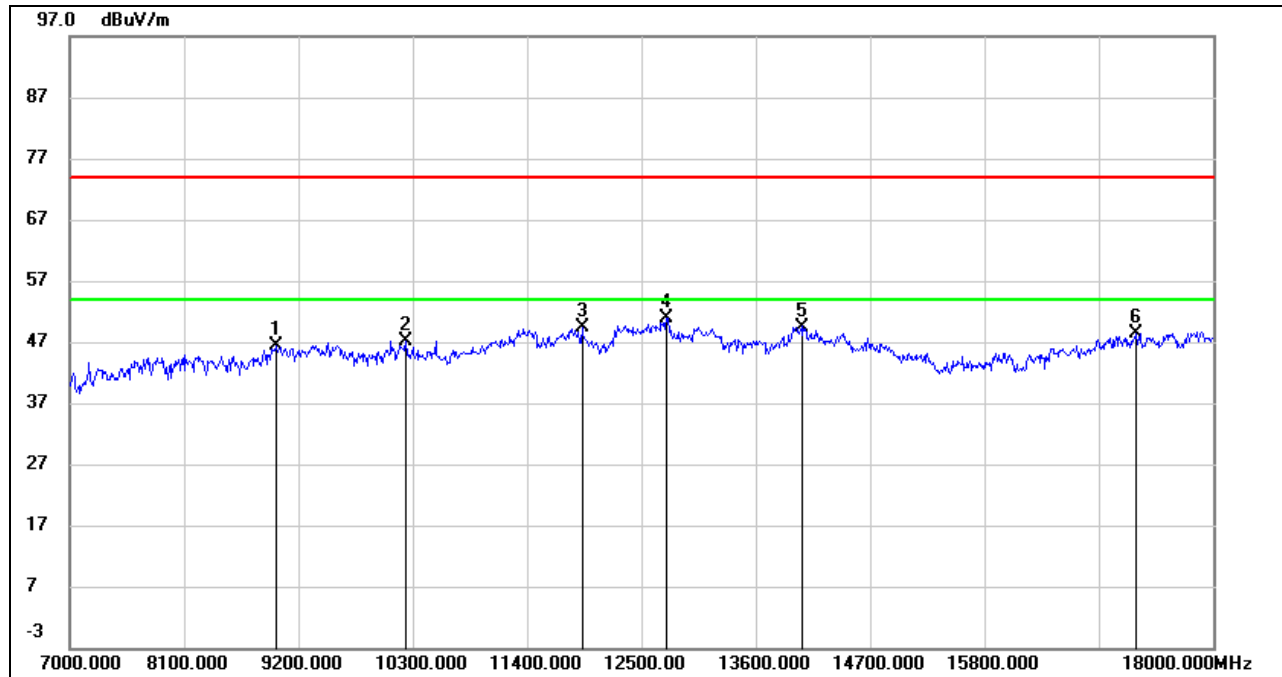
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8991.000	37.00	9.42	46.42	74.00	-27.58	peak
2	10234.000	36.14	11.01	47.15	74.00	-26.85	peak
3	11928.000	32.12	17.14	49.26	74.00	-24.74	peak
4	12742.000	33.66	17.15	50.81	74.00	-23.19	peak
5	14040.000	29.06	20.44	49.50	74.00	-24.50	peak
6	17263.000	28.24	20.17	48.41	74.00	-25.59	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

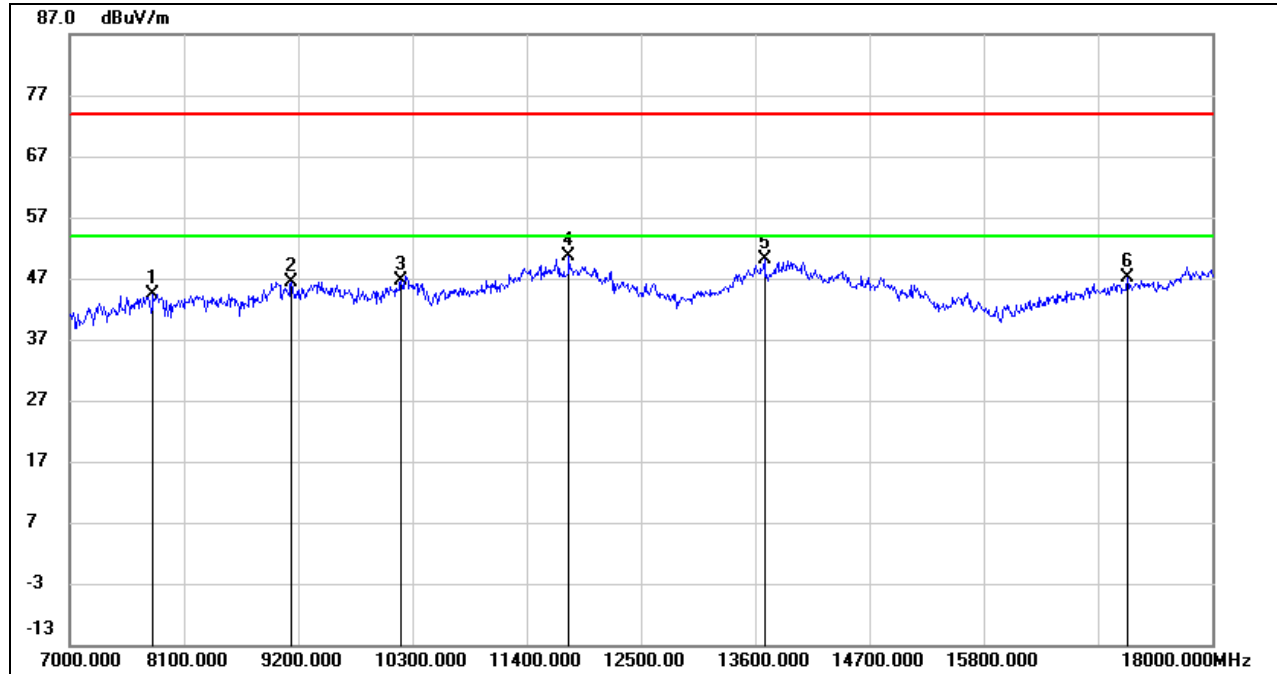
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	7803.000	38.33	6.07	44.40	74.00	-29.60	peak
2	9134.000	37.72	8.78	46.50	74.00	-27.50	peak
3	10190.000	35.82	10.91	46.73	74.00	-27.27	peak
4	11807.000	33.35	17.22	50.57	74.00	-23.43	peak
5	13688.000	29.99	20.05	50.04	74.00	-23.96	peak
6	17186.000	26.99	20.06	47.05	74.00	-26.95	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

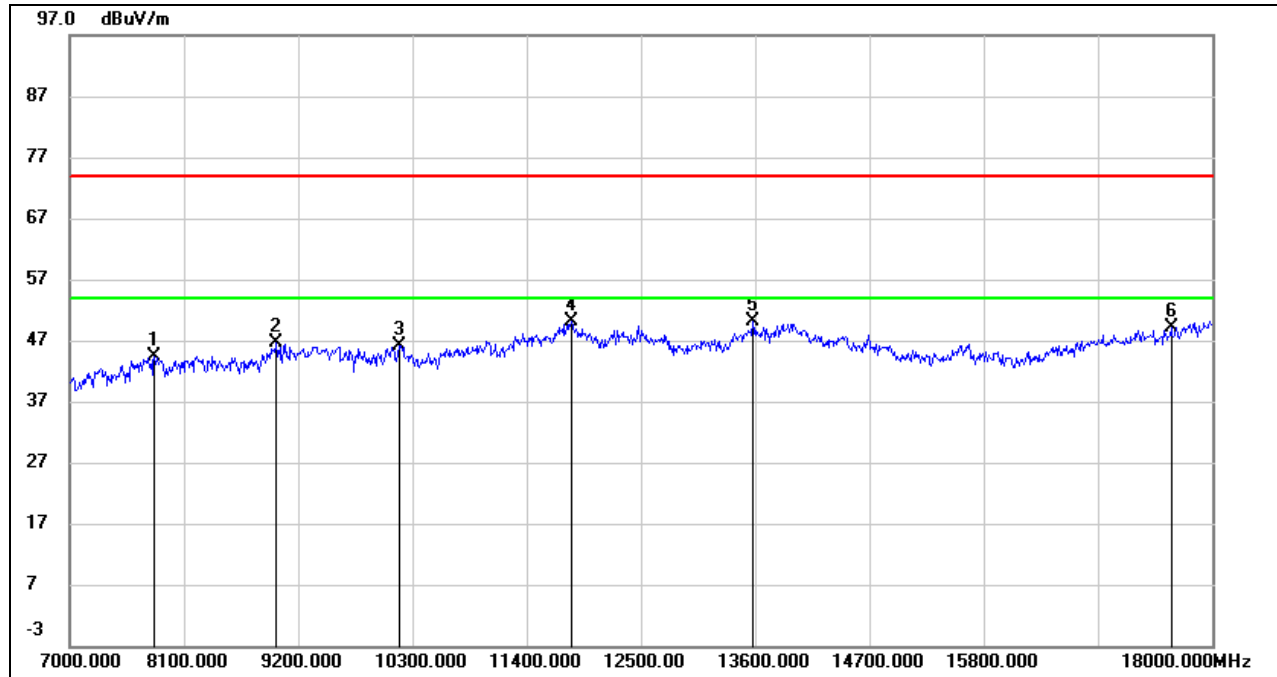
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

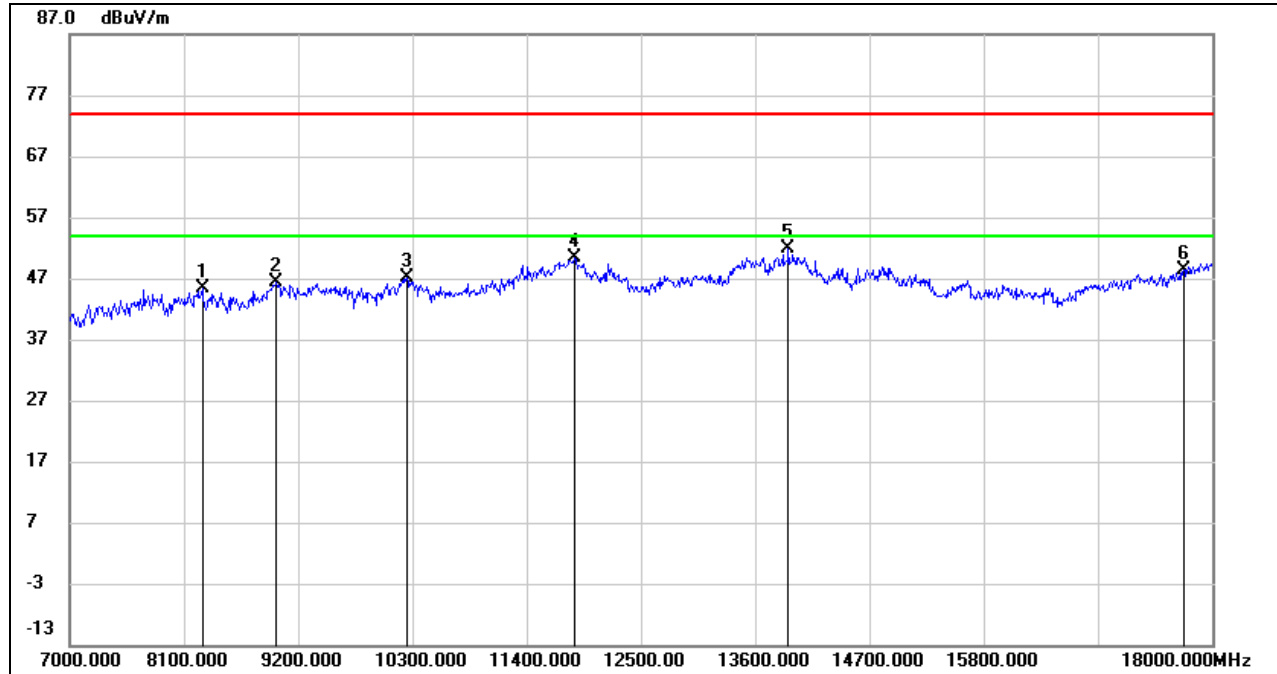
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7814.000	38.44	6.03	44.47	74.00	-29.53	peak
2	8991.000	37.10	9.42	46.52	74.00	-27.48	peak
3	10168.000	35.32	10.87	46.19	74.00	-27.81	peak
4	11829.000	32.95	17.20	50.15	74.00	-23.85	peak
5	13578.000	30.51	19.69	50.20	74.00	-23.80	peak
6	17604.000	28.01	21.15	49.16	74.00	-24.84	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

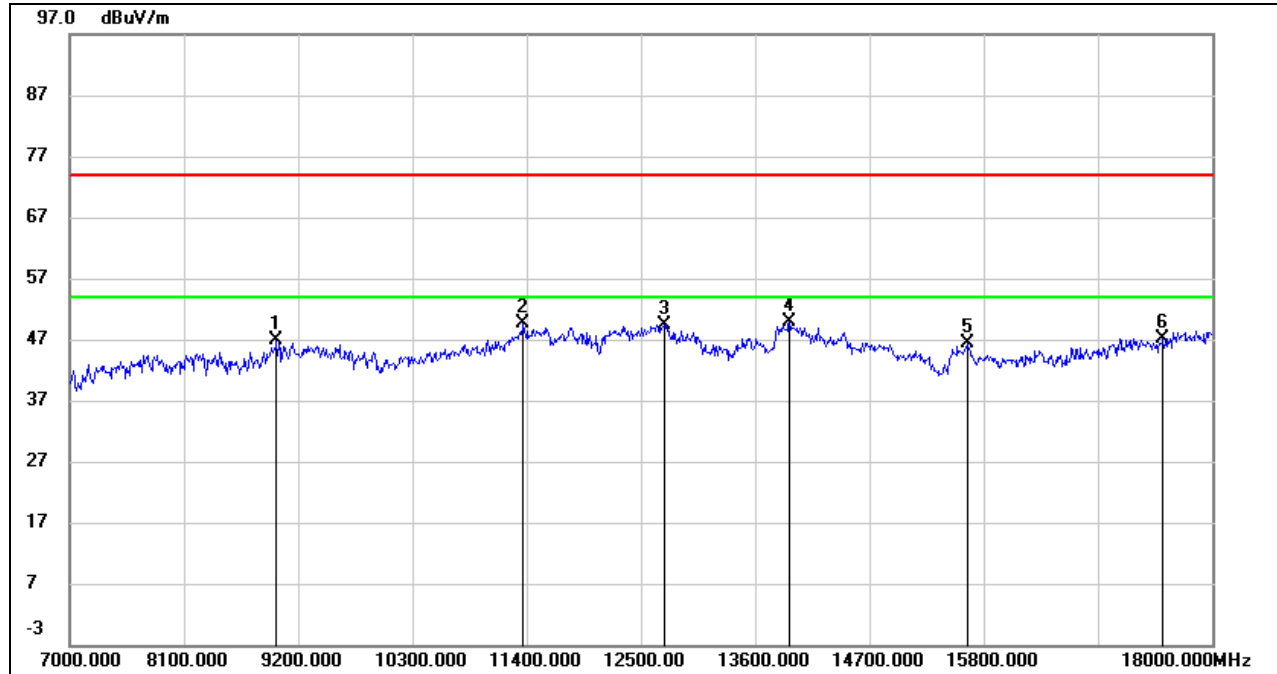
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8276.000	38.47	7.00	45.47	74.00	-28.53	peak
2	8991.000	37.03	9.42	46.45	74.00	-27.55	peak
3	10245.000	36.14	11.03	47.17	74.00	-26.83	peak
4	11862.000	33.28	17.19	50.47	74.00	-23.53	peak
5	13919.000	31.27	20.58	51.85	74.00	-22.15	peak
6	17725.000	26.00	22.41	48.41	74.00	-25.59	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8991.000	37.45	9.42	46.87	74.00	-27.13	peak
2	11367.000	34.48	15.08	49.56	74.00	-24.44	peak
3	12731.000	32.36	17.13	49.49	74.00	-24.51	peak
4	13930.000	29.29	20.59	49.88	74.00	-24.12	peak
5	15646.000	31.12	15.38	46.50	74.00	-27.50	peak
6	17527.000	26.45	20.67	47.12	74.00	-26.88	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

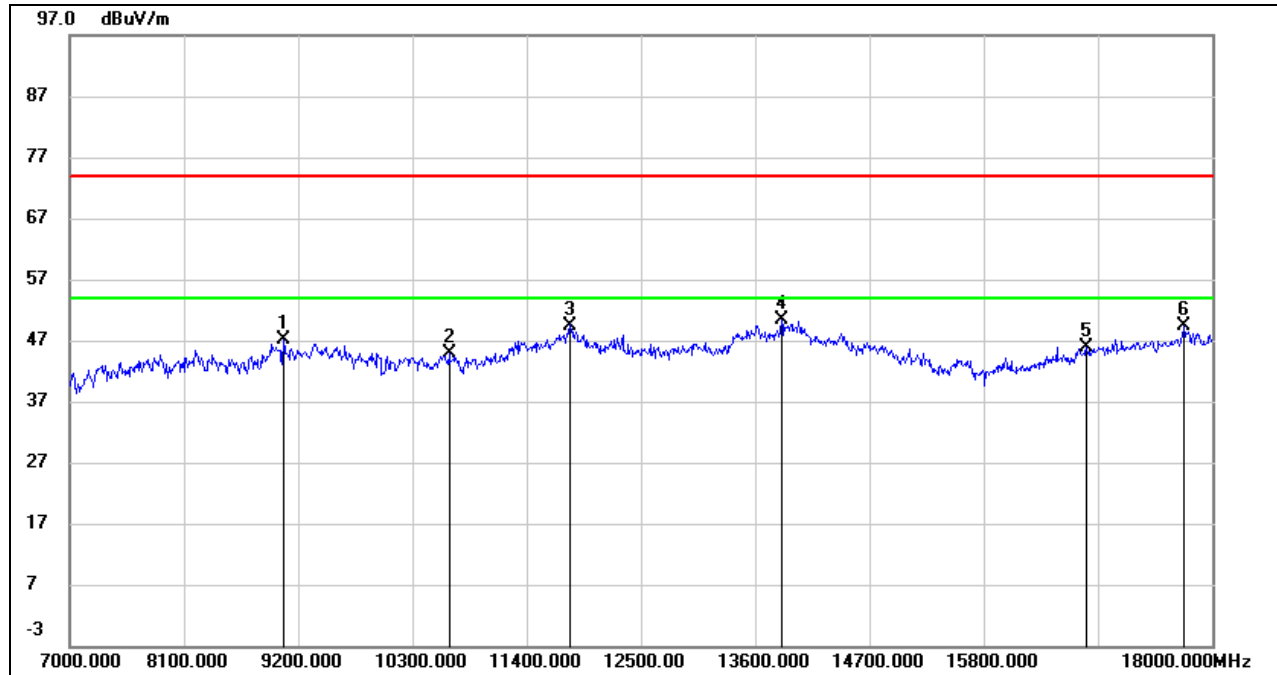
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-3 BAND

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	9057.000	37.97	9.22	47.19	74.00	-26.81	peak
2	10652.000	32.44	12.35	44.79	74.00	-29.21	peak
3	11818.000	32.30	17.20	49.50	74.00	-24.50	peak
4	13853.000	29.83	20.54	50.37	74.00	-23.63	peak
5	16790.000	27.59	18.24	45.83	74.00	-28.17	peak
6	17725.000	26.94	22.41	49.35	74.00	-24.65	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

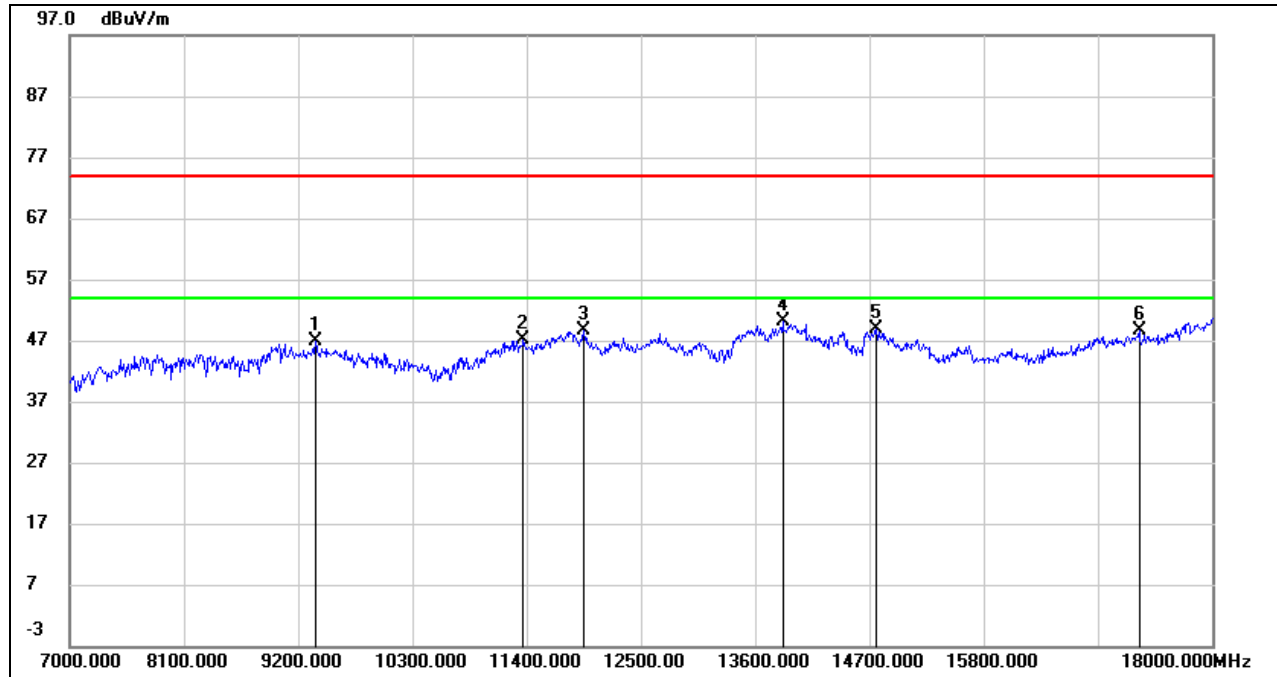
3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	9365.000	37.33	9.46	46.79	74.00	-27.21	peak
2	11367.000	31.95	15.08	47.03	74.00	-26.97	peak
3	11950.000	31.55	17.13	48.68	74.00	-25.32	peak
4	13864.000	29.58	20.54	50.12	74.00	-23.88	peak
5	14766.000	31.58	17.35	48.93	74.00	-25.07	peak
6	17296.000	28.36	20.18	48.54	74.00	-25.46	peak

Note: 1. Measurement = Reading Level + Correct Factor.

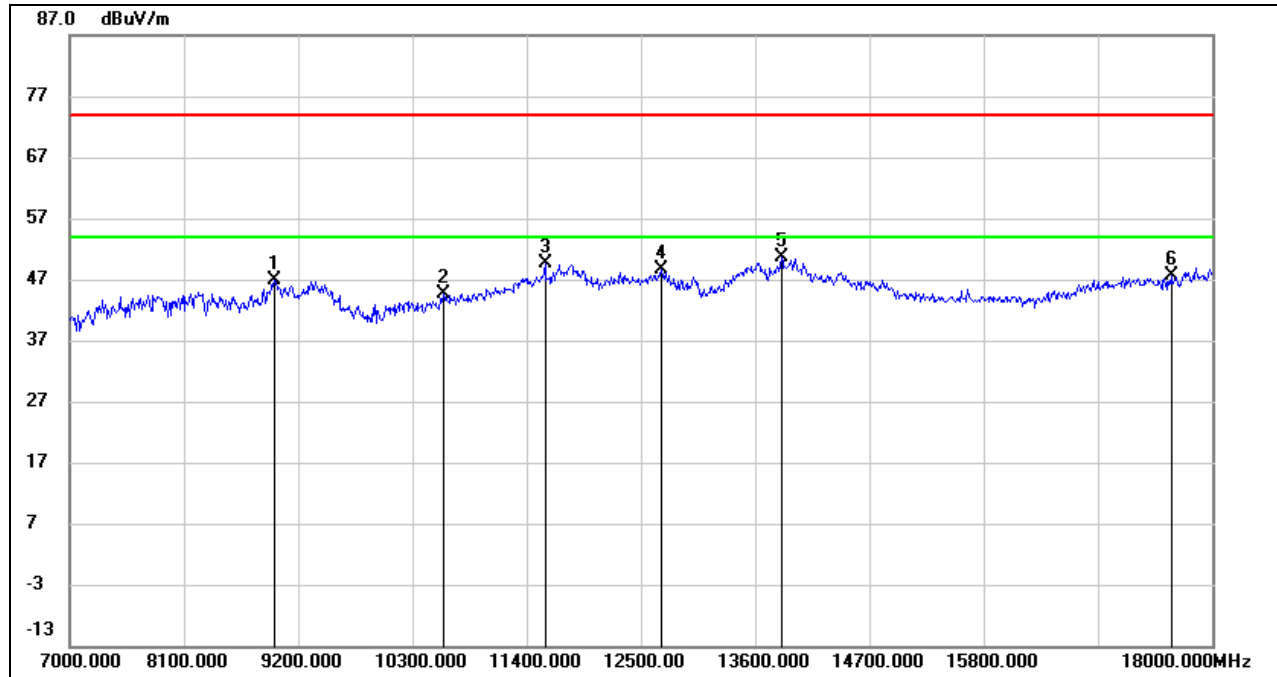
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8969.000	37.63	9.16	46.79	74.00	-27.21	peak
2	10597.000	32.34	12.25	44.59	74.00	-29.41	peak
3	11576.000	33.80	15.89	49.69	74.00	-24.31	peak
4	12698.000	31.51	17.05	48.56	74.00	-25.44	peak
5	13853.000	30.04	20.54	50.58	74.00	-23.42	peak
6	17604.000	26.38	21.15	47.53	74.00	-26.47	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.

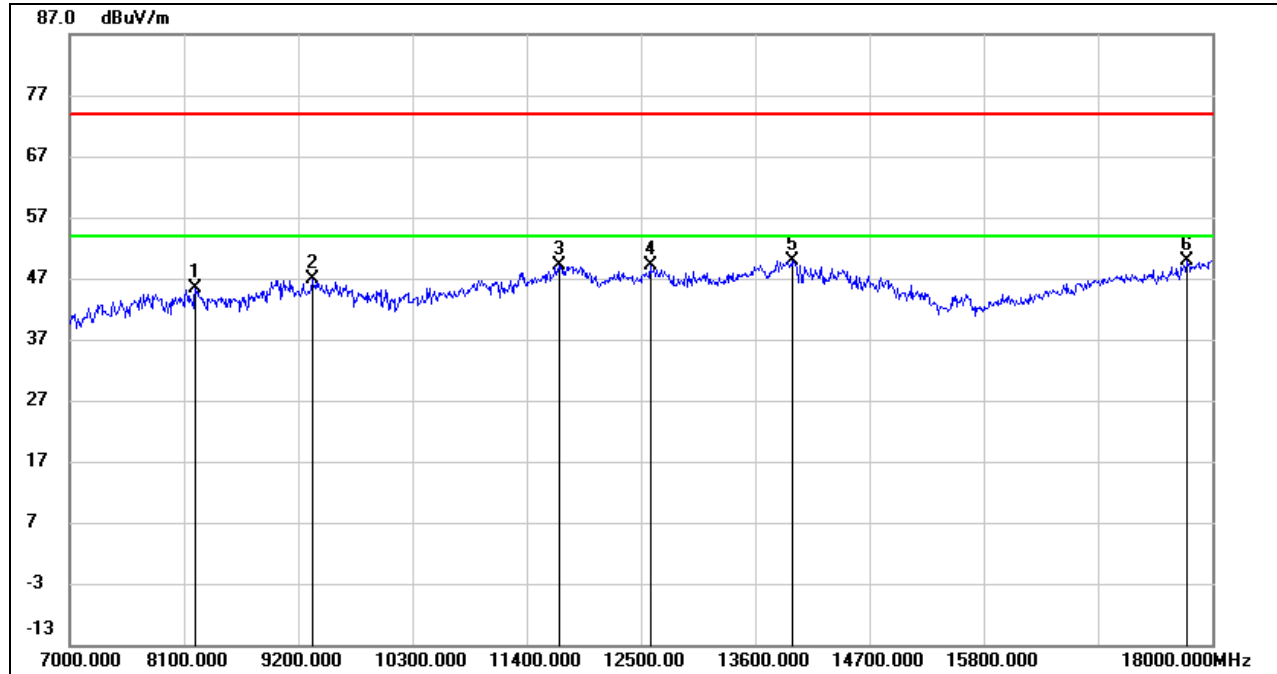
3. Peak: Peak detector.

4. 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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8210.000	38.14	7.20	45.34	74.00	-28.66	peak
2	9332.000	37.70	9.25	46.95	74.00	-27.05	peak
3	11708.000	32.42	16.64	49.06	74.00	-24.94	peak
4	12588.000	32.29	16.81	49.10	74.00	-24.90	peak
5	13952.000	29.23	20.61	49.84	74.00	-24.16	peak
6	17758.000	27.19	22.75	49.94	74.00	-24.06	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

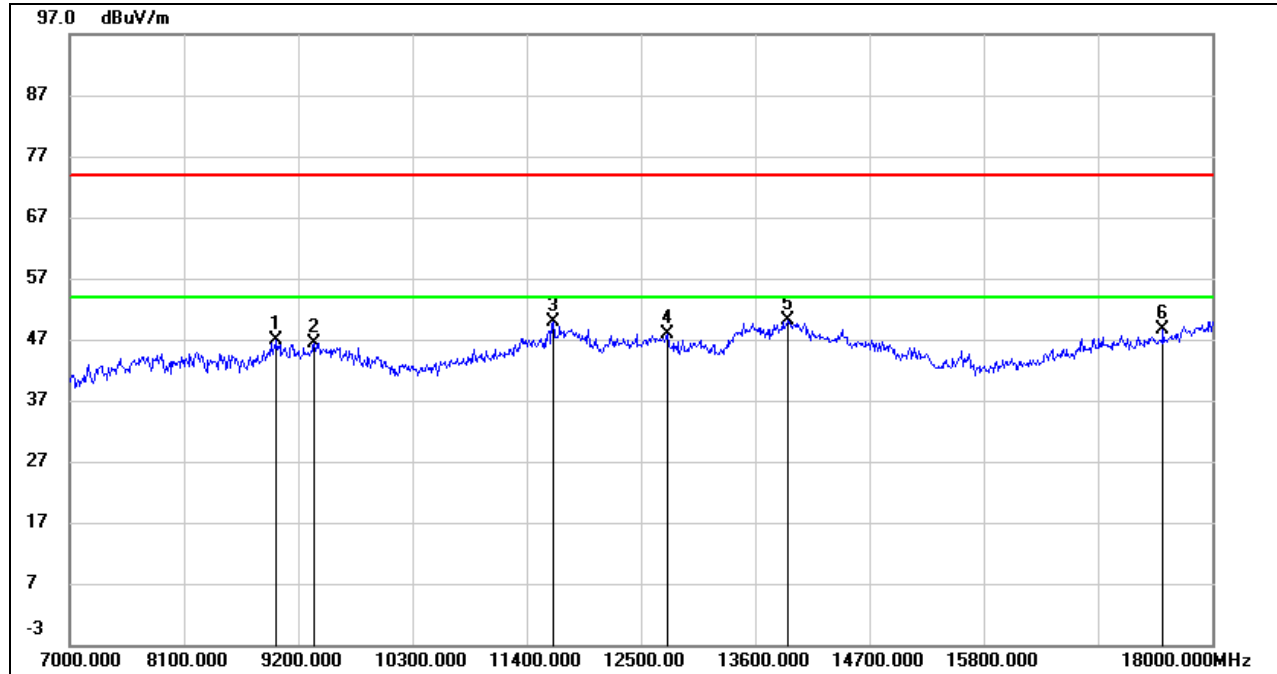
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8991.000	37.52	9.42	46.94	74.00	-27.06	peak
2	9354.000	37.05	9.39	46.44	74.00	-27.56	peak
3	11653.000	33.72	16.28	50.00	74.00	-24.00	peak
4	12753.000	30.73	17.17	47.90	74.00	-26.10	peak
5	13919.000	29.50	20.58	50.08	74.00	-23.92	peak
6	17527.000	27.91	20.67	48.58	74.00	-25.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

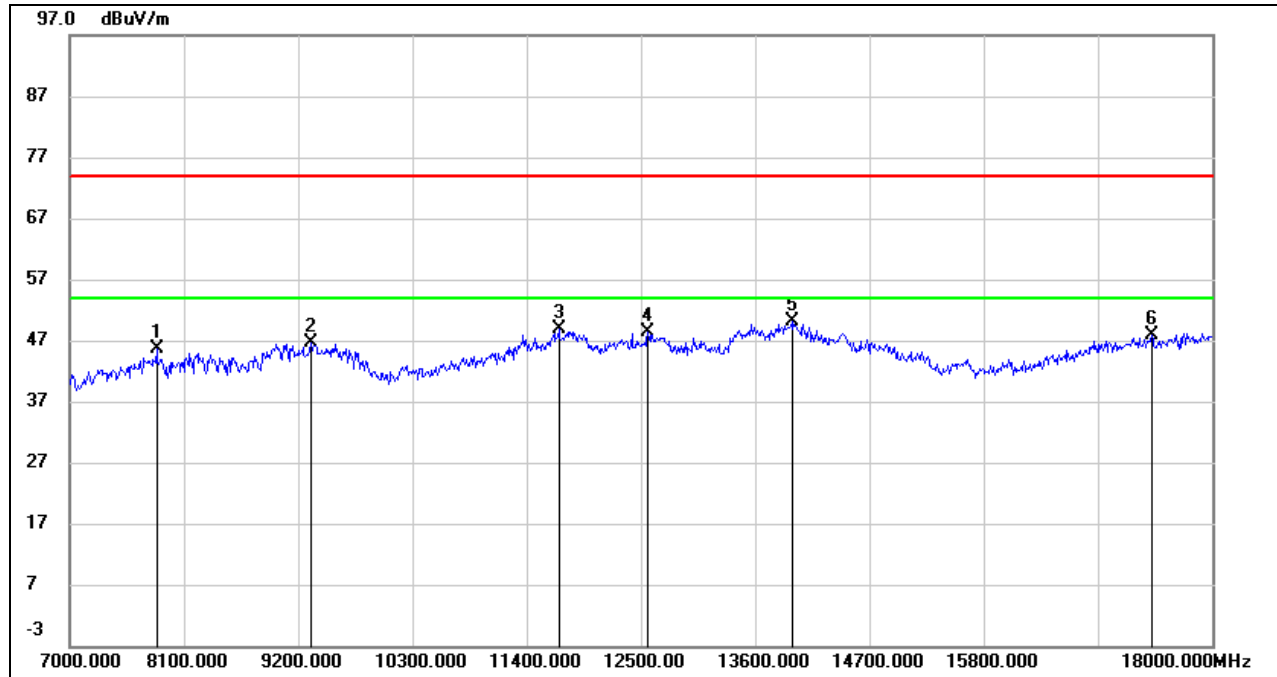
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

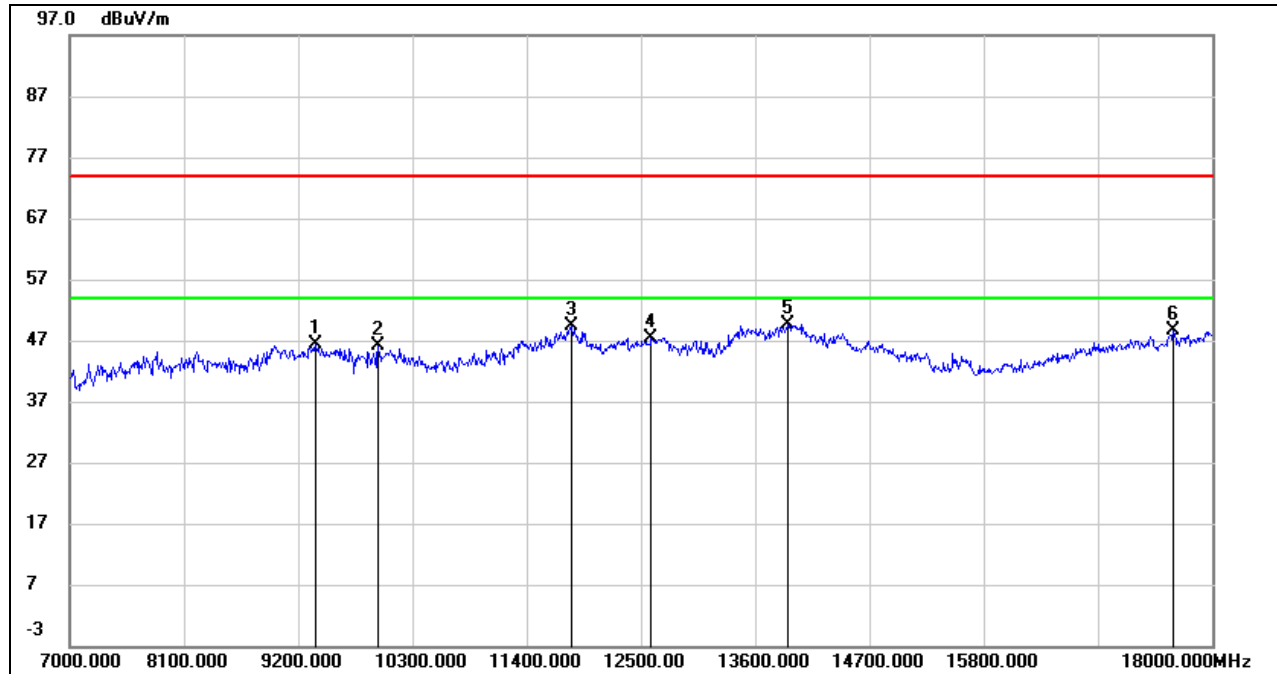
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	7836.000	39.63	5.95	45.58	74.00	-28.42	peak
2	9321.000	37.35	9.18	46.53	74.00	-27.47	peak
3	11708.000	32.26	16.64	48.90	74.00	-25.10	peak
4	12566.000	31.60	16.82	48.42	74.00	-25.58	peak
5	13952.000	29.58	20.61	50.19	74.00	-23.81	peak
6	17417.000	27.58	20.26	47.84	74.00	-26.16	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**8.3.2. 802.11n HT20 SISO MODE****UNII-1 BAND****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	9365.000	36.84	9.46	46.30	74.00	-27.70	peak
2	9970.000	35.50	10.51	46.01	74.00	-27.99	peak
3	11829.000	32.13	17.20	49.33	74.00	-24.67	peak
4	12599.000	30.68	16.81	47.49	74.00	-26.51	peak
5	13908.000	29.14	20.58	49.72	74.00	-24.28	peak
6	17626.000	27.12	21.39	48.51	74.00	-25.49	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.

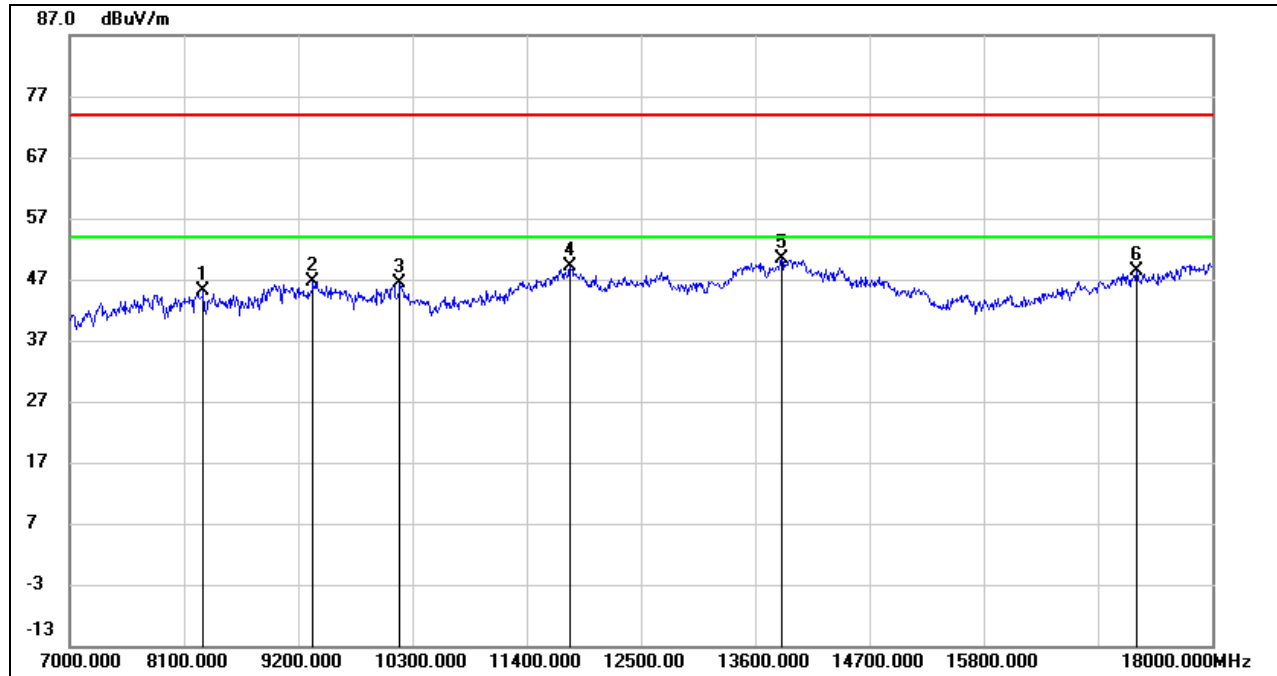
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8287.000	38.19	6.98	45.17	74.00	-28.83	peak
2	9343.000	37.43	9.32	46.75	74.00	-27.25	peak
3	10179.000	35.60	10.88	46.48	74.00	-27.52	peak
4	11818.000	32.01	17.20	49.21	74.00	-24.79	peak
5	13853.000	29.85	20.54	50.39	74.00	-23.61	peak
6	17274.000	28.17	20.17	48.34	74.00	-25.66	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

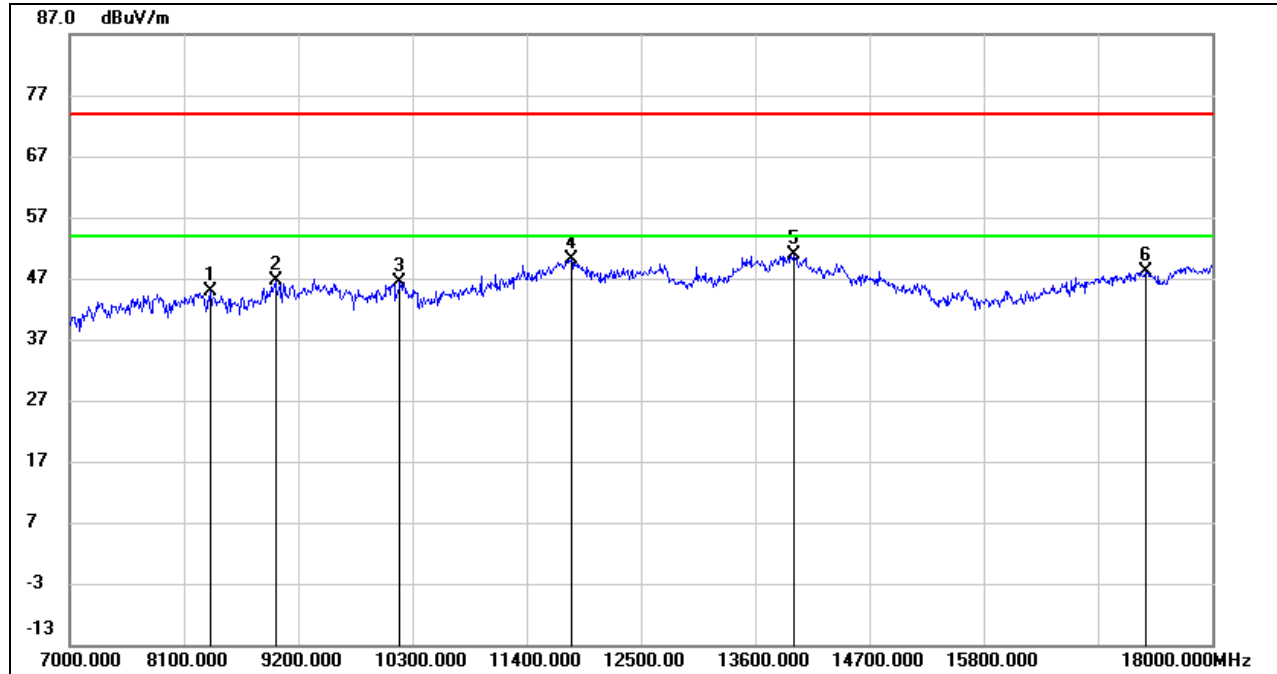
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8353.000	38.09	6.78	44.87	74.00	-29.13	peak
2	8980.000	37.28	9.29	46.57	74.00	-27.43	peak
3	10179.000	35.59	10.88	46.47	74.00	-27.53	peak
4	11829.000	33.01	17.20	50.21	74.00	-23.79	peak
5	13974.000	30.14	20.63	50.77	74.00	-23.23	peak
6	17362.000	27.89	20.19	48.08	74.00	-25.92	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.

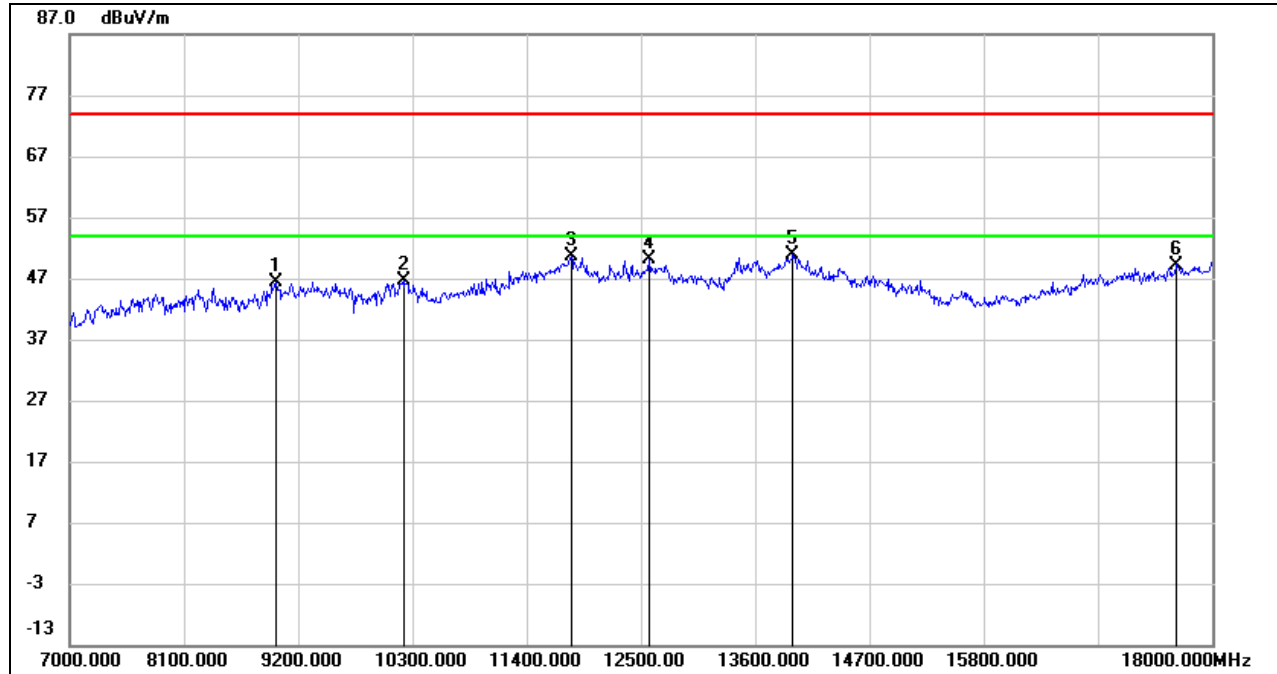
3. Peak: Peak detector.

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.

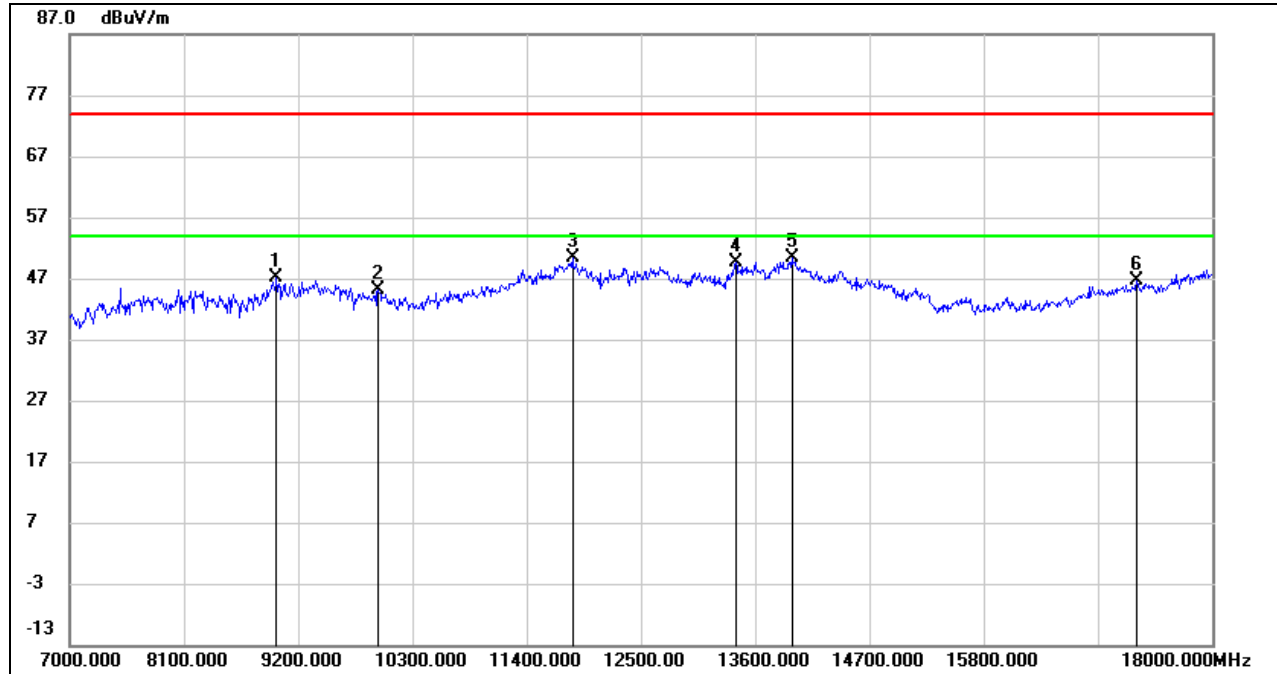
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8991.000	37.08	9.42	46.50	74.00	-27.50	peak
2	10223.000	35.56	10.98	46.54	74.00	-27.46	peak
3	11829.000	33.44	17.20	50.64	74.00	-23.36	peak
4	12577.000	33.23	16.82	50.05	74.00	-23.95	peak
5	13963.000	30.30	20.61	50.91	74.00	-23.09	peak
6	17659.000	27.53	21.72	49.25	74.00	-24.75	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8991.000	37.82	9.42	47.24	74.00	-26.76	peak
2	9970.000	34.50	10.51	45.01	74.00	-28.99	peak
3	11840.000	33.18	17.20	50.38	74.00	-23.62	peak
4	13413.000	30.41	19.25	49.66	74.00	-24.34	peak
5	13952.000	29.81	20.61	50.42	74.00	-23.58	peak
6	17274.000	26.38	20.17	46.55	74.00	-27.45	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

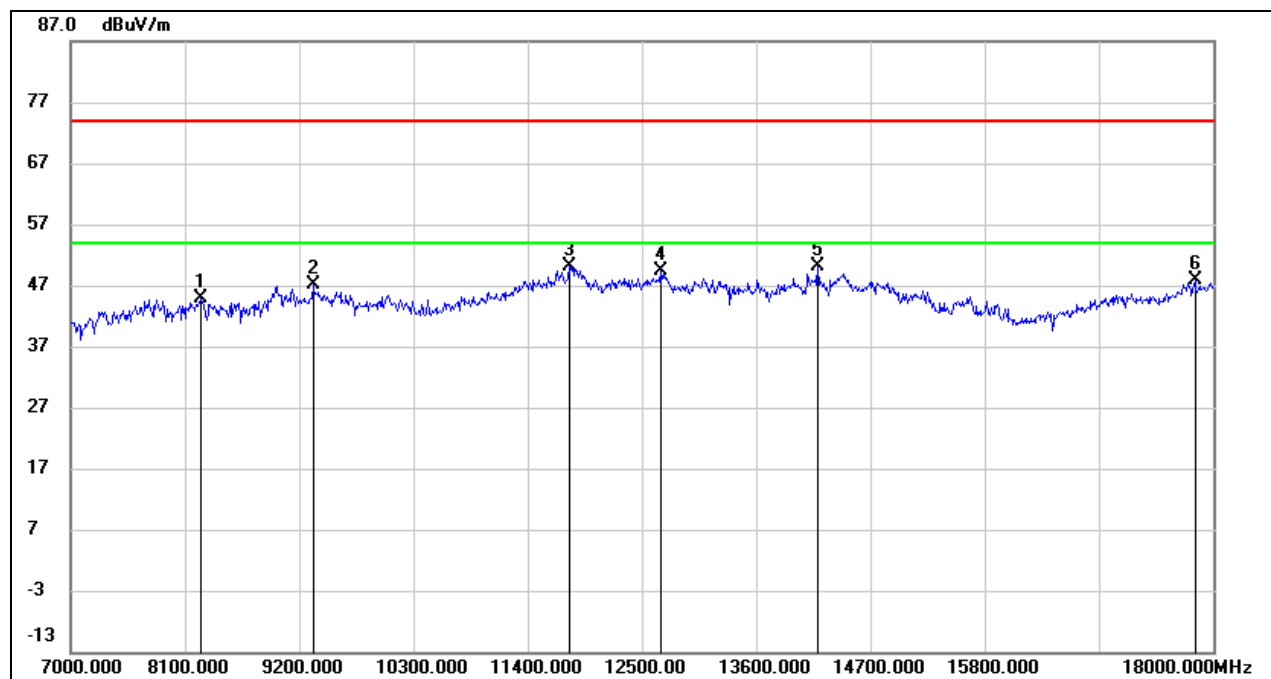
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

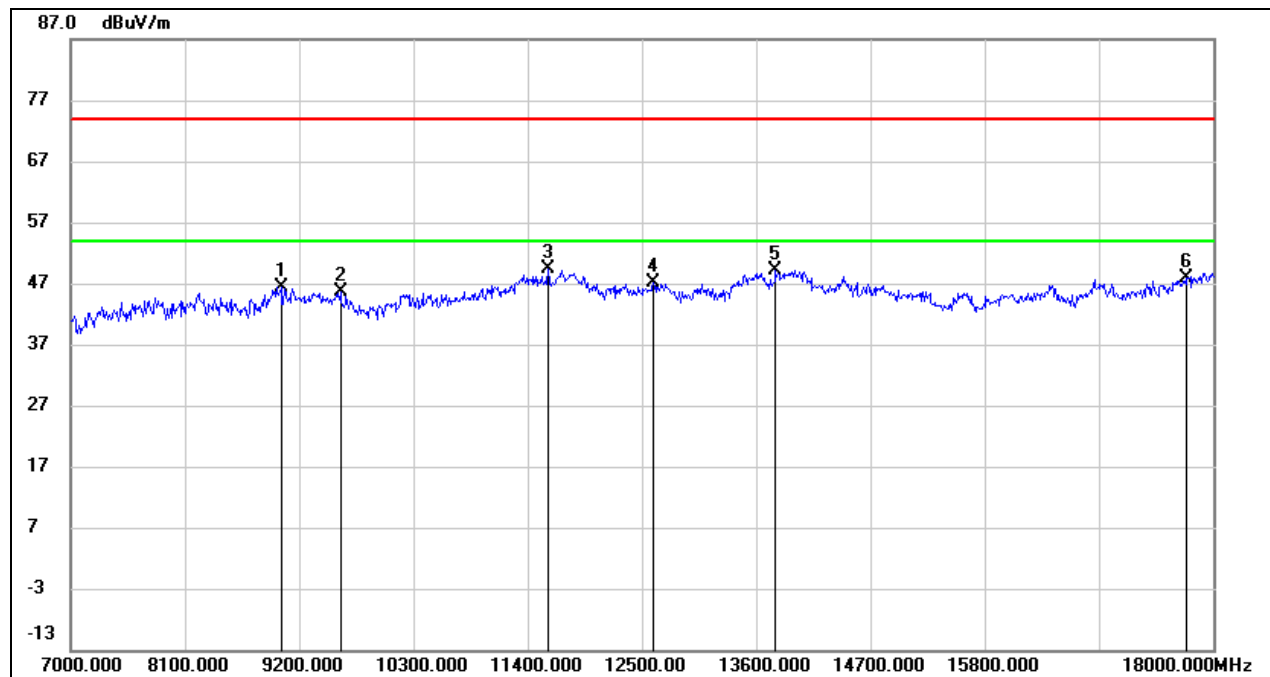


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8254.000	37.76	7.07	44.83	74.00	-29.17	peak
2	9332.000	37.91	9.25	47.16	74.00	-26.84	peak
3	11796.000	32.97	17.19	50.16	74.00	-23.84	peak
4	12676.000	32.28	16.99	49.27	74.00	-24.73	peak
5	14194.000	30.32	19.69	50.01	74.00	-23.99	peak
6	17824.000	24.71	23.25	47.96	74.00	-26.04	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-2A BAND

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	9024.000	37.09	9.39	46.48	74.00	-27.52	peak
2	9596.000	35.39	10.13	45.52	74.00	-28.48	peak
3	11598.000	33.31	15.95	49.26	74.00	-24.74	peak
4	12610.000	30.36	16.83	47.19	74.00	-26.81	peak
5	13787.000	28.60	20.45	49.05	74.00	-24.95	peak
6	17747.000	25.19	22.64	47.83	74.00	-26.17	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.

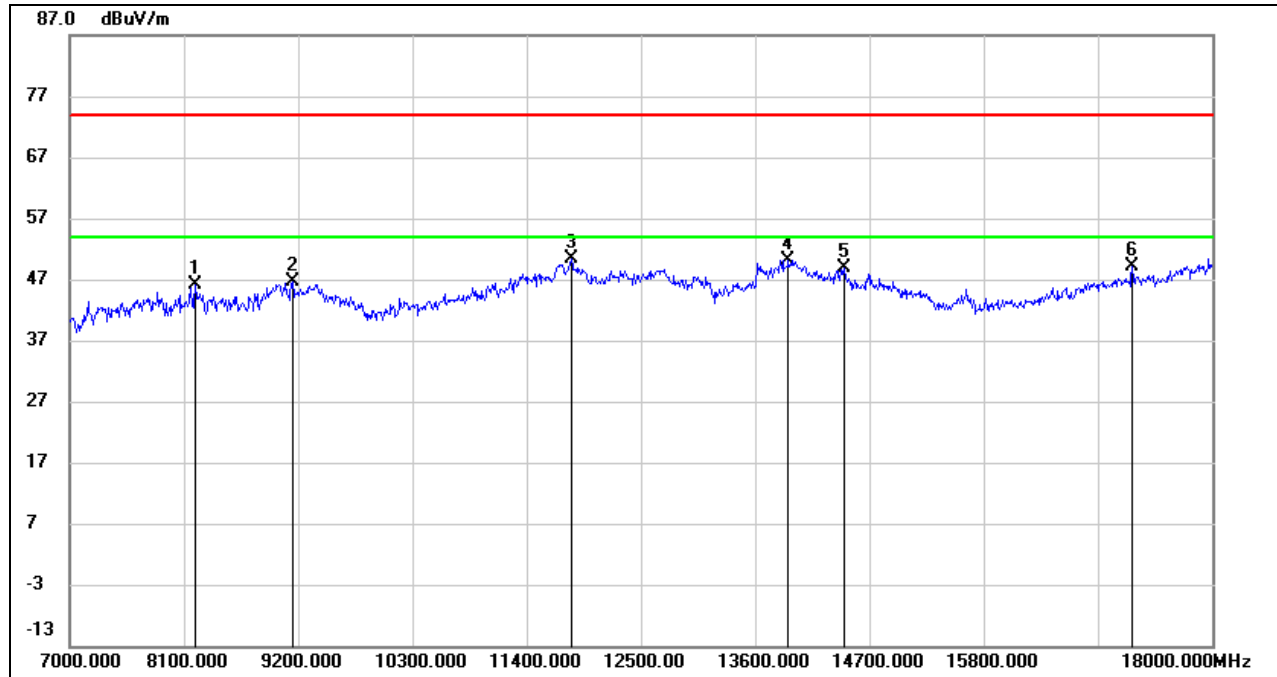
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8210.000	38.81	7.20	46.01	74.00	-27.99	peak
2	9145.000	37.78	8.73	46.51	74.00	-27.49	peak
3	11829.000	33.17	17.20	50.37	74.00	-23.63	peak
4	13919.000	29.55	20.58	50.13	74.00	-23.87	peak
5	14458.000	30.20	18.61	48.81	74.00	-25.19	peak
6	17230.000	28.93	20.16	49.09	74.00	-24.91	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

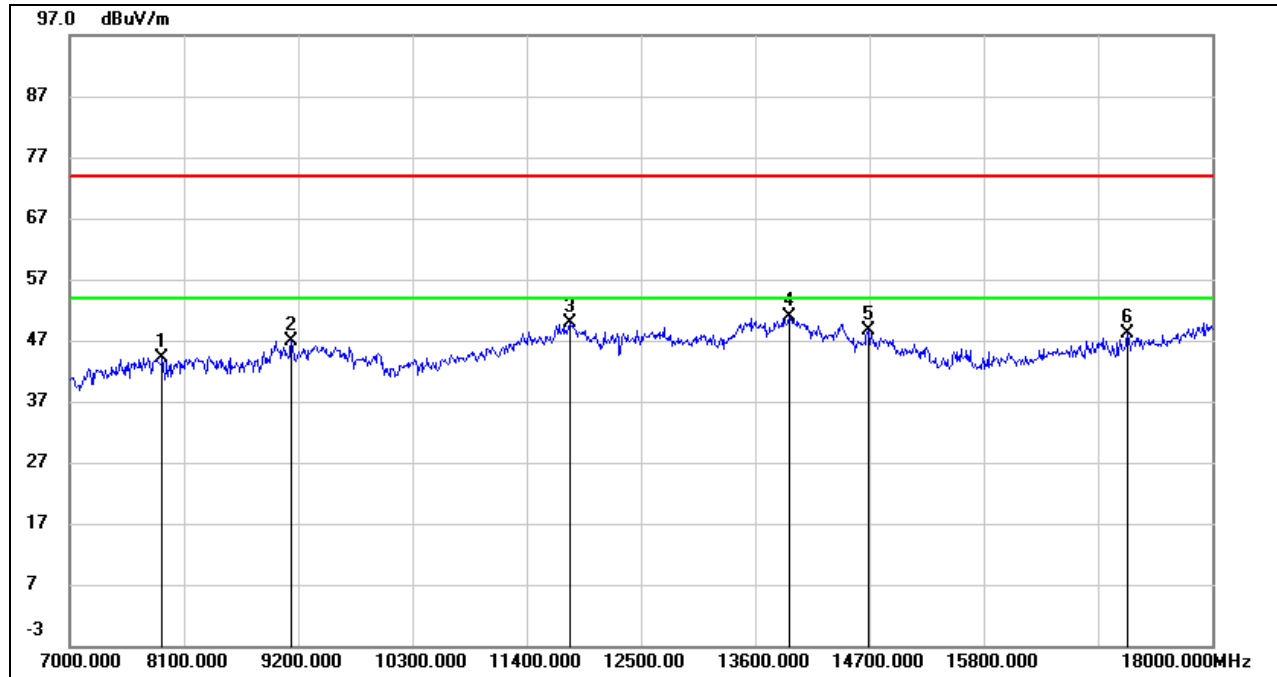
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	7891.000	38.42	5.74	44.16	74.00	-29.84	peak
2	9134.000	38.22	8.78	47.00	74.00	-27.00	peak
3	11818.000	32.73	17.20	49.93	74.00	-24.07	peak
4	13930.000	30.36	20.59	50.95	74.00	-23.05	peak
5	14689.000	31.12	17.54	48.66	74.00	-25.34	peak
6	17186.000	28.11	20.06	48.17	74.00	-25.83	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

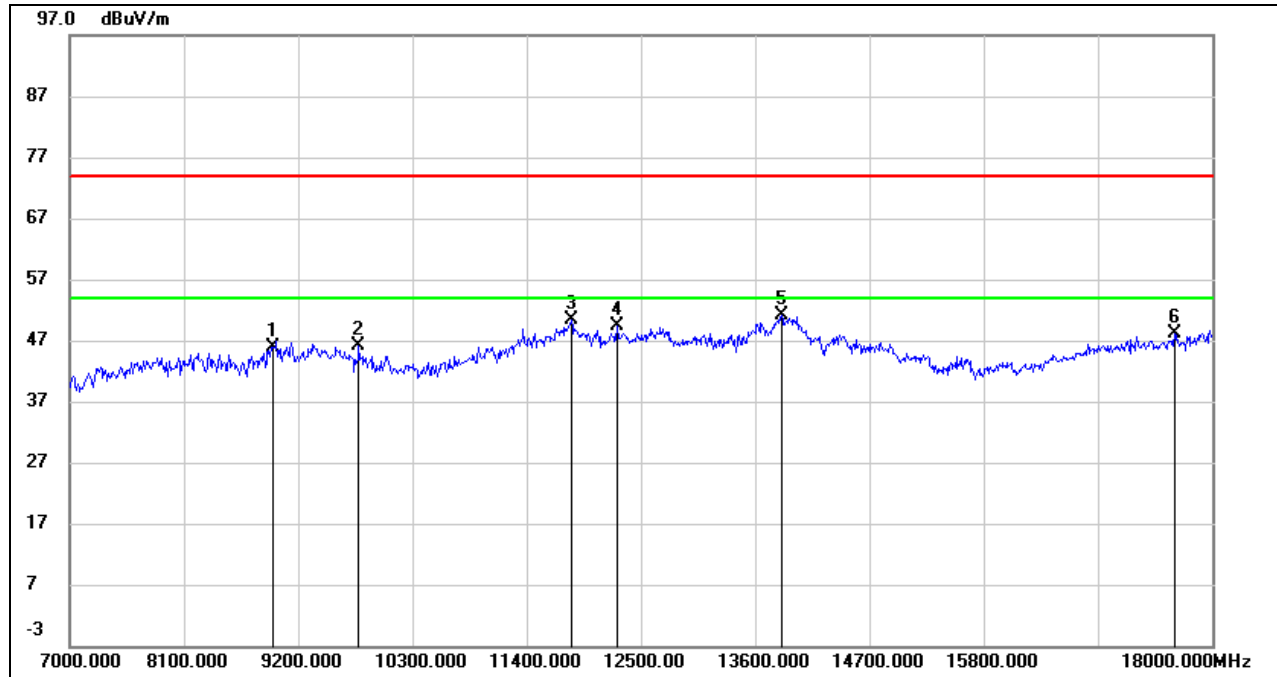
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

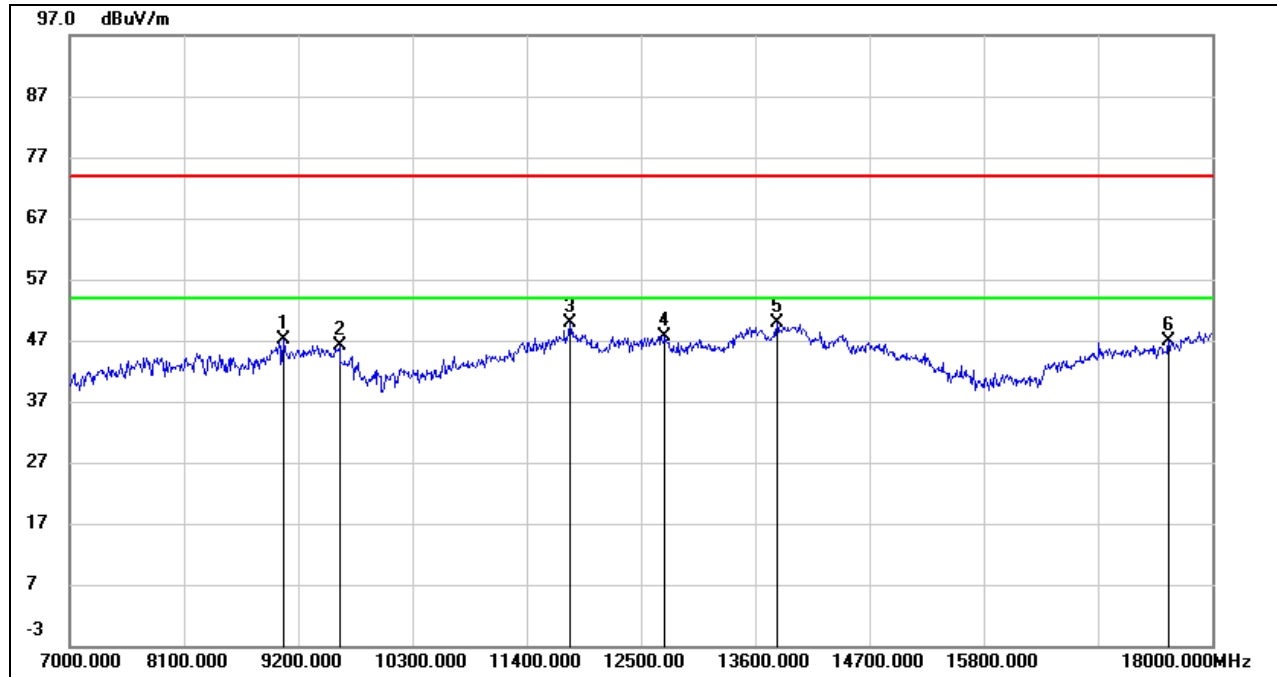
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8958.000	36.84	9.02	45.86	74.00	-28.14	peak
2	9783.000	36.06	9.99	46.05	74.00	-27.95	peak
3	11829.000	33.29	17.20	50.49	74.00	-23.51	peak
4	12269.000	32.59	16.86	49.45	74.00	-24.55	peak
5	13853.000	30.65	20.54	51.19	74.00	-22.81	peak
6	17637.000	26.52	21.50	48.02	74.00	-25.98	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	9057.000	37.85	9.22	47.07	74.00	-26.93	peak
2	9596.000	36.07	10.13	46.20	74.00	-27.80	peak
3	11818.000	32.57	17.20	49.77	74.00	-24.23	peak
4	12731.000	30.53	17.13	47.66	74.00	-26.34	peak
5	13809.000	29.47	20.51	49.98	74.00	-24.02	peak
6	17582.000	25.98	21.00	46.98	74.00	-27.02	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.

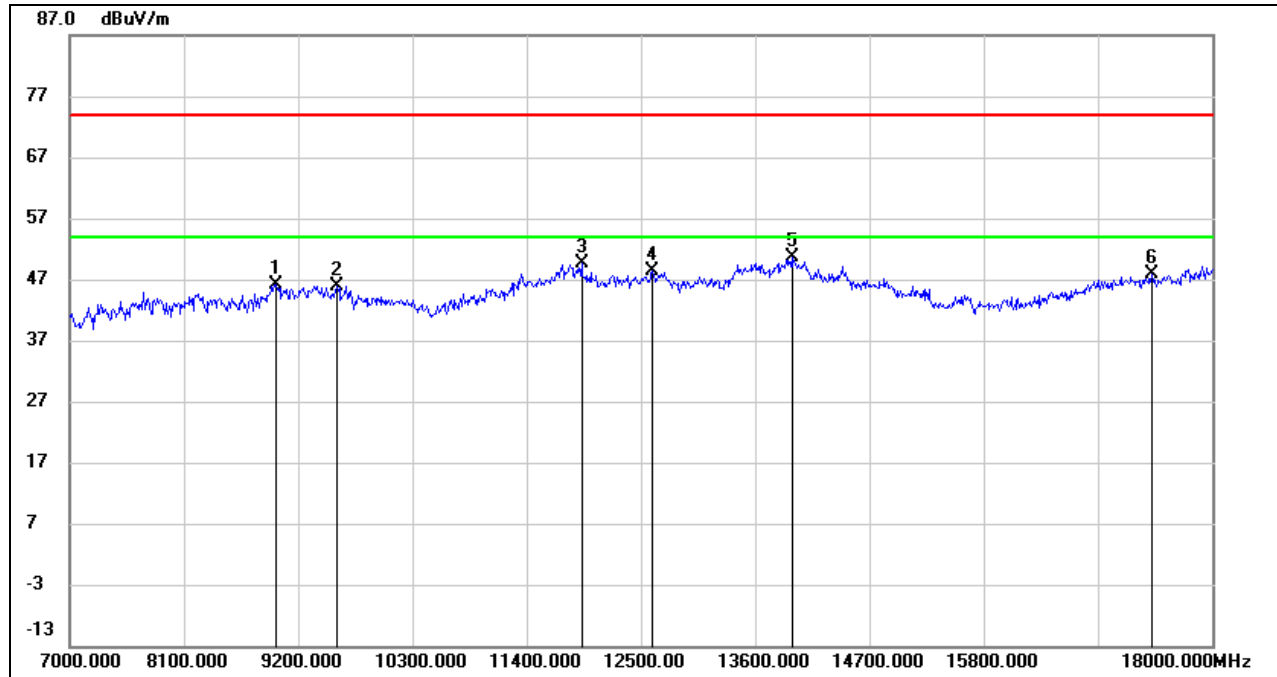
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

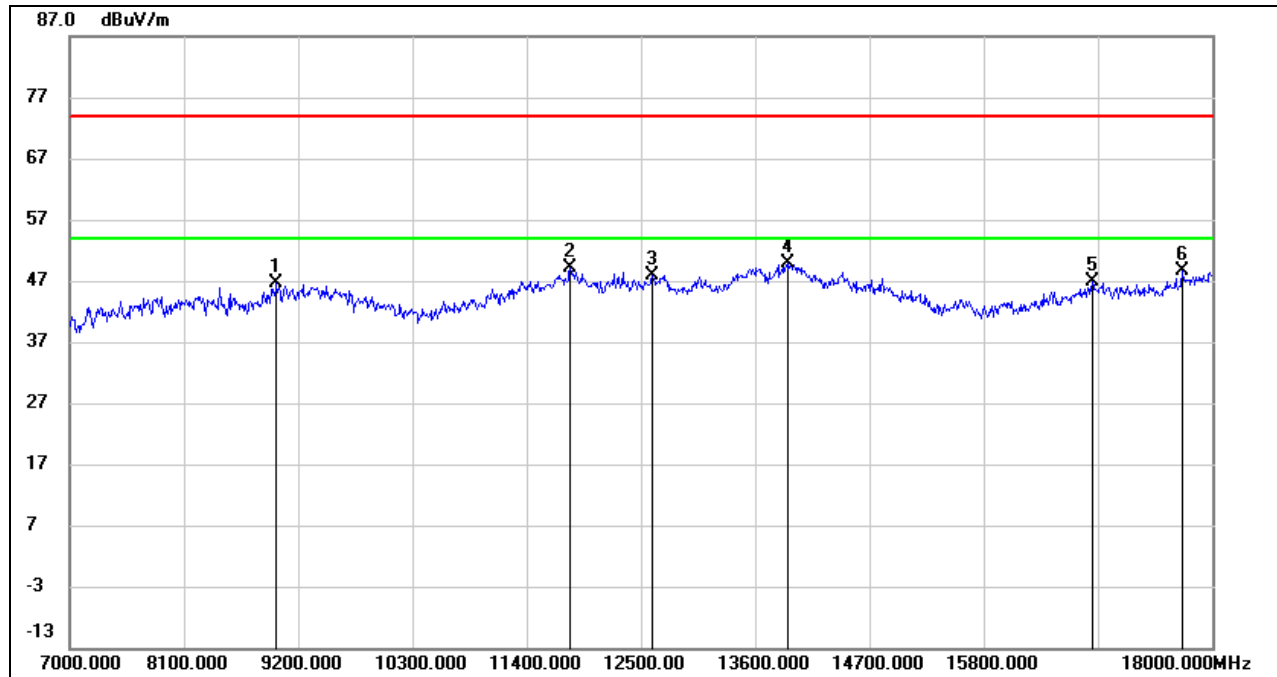
**HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	36.82	9.42	46.24	74.00	-27.76	peak
2	9574.000	35.93	10.07	46.00	74.00	-28.00	peak
3	11928.000	32.56	17.14	49.70	74.00	-24.30	peak
4	12610.000	31.52	16.83	48.35	74.00	-25.65	peak
5	13952.000	29.96	20.61	50.57	74.00	-23.43	peak
6	17417.000	27.54	20.26	47.80	74.00	-26.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-3 BAND

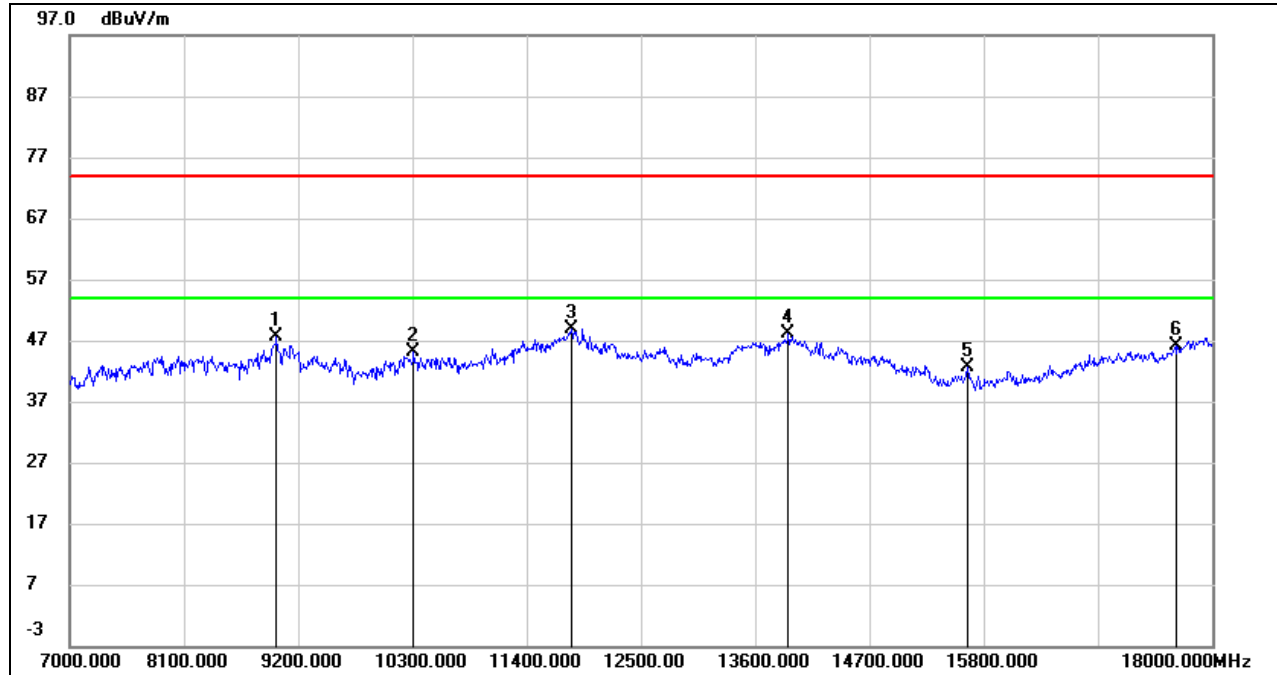
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	37.24	9.42	46.66	74.00	-27.34	peak
2	11818.000	31.98	17.20	49.18	74.00	-24.82	peak
3	12610.000	31.02	16.83	47.85	74.00	-26.15	peak
4	13919.000	29.40	20.58	49.98	74.00	-24.02	peak
5	16845.000	28.55	18.42	46.97	74.00	-27.03	peak
6	17714.000	26.23	22.29	48.52	74.00	-25.48	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

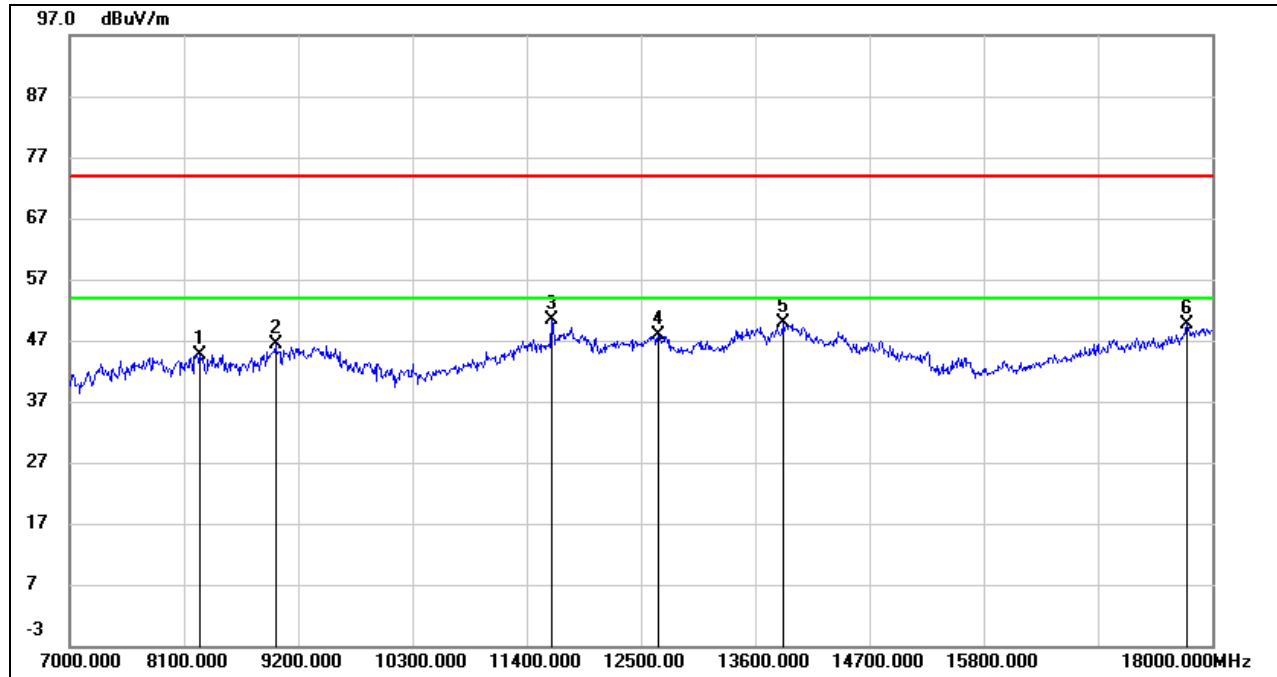
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	38.12	9.42	47.54	74.00	-26.46	peak
2	10311.000	33.98	11.21	45.19	74.00	-28.81	peak
3	11829.000	31.68	17.20	48.88	74.00	-25.12	peak
4	13919.000	27.43	20.58	48.01	74.00	-25.99	peak
5	15646.000	27.24	15.38	42.62	74.00	-31.38	peak
6	17648.000	24.59	21.62	46.21	74.00	-27.79	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

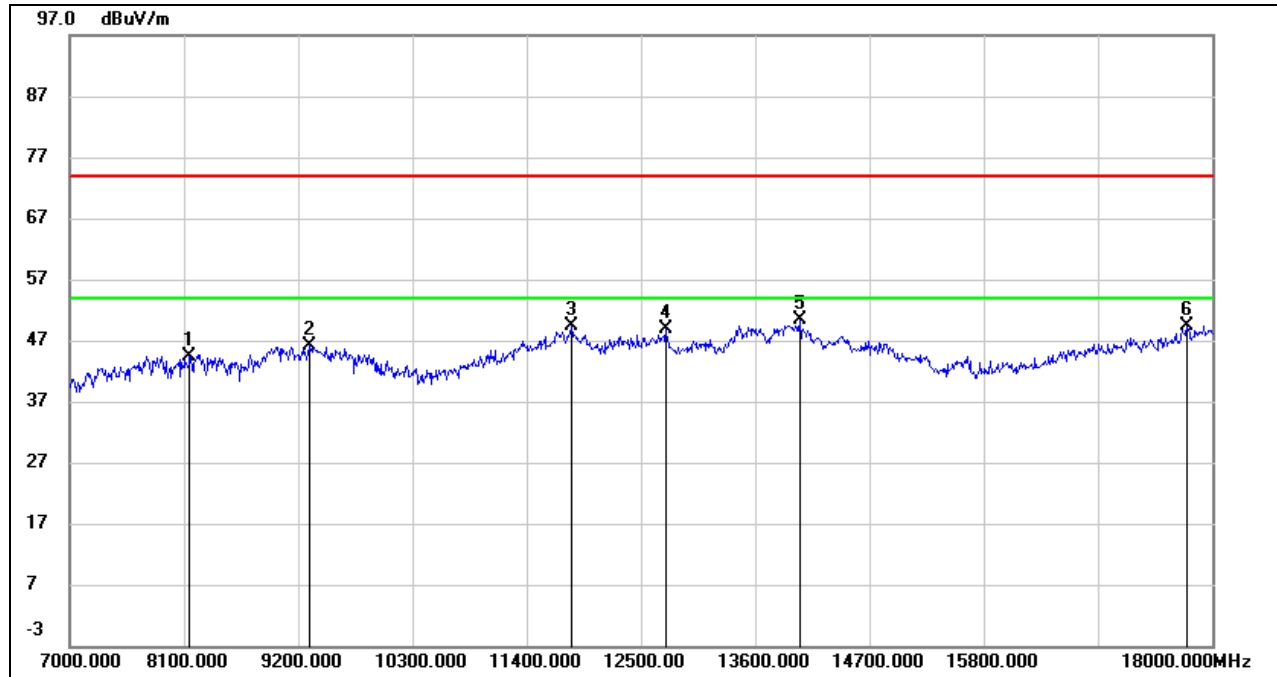
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8254.000	37.56	7.07	44.63	74.00	-29.37	peak
2	8980.000	37.05	9.29	46.34	74.00	-27.66	peak
3	11642.000	34.05	16.21	50.26	74.00	-23.74	peak
4	12665.000	30.85	16.97	47.82	74.00	-26.18	peak
5	13864.000	29.22	20.54	49.76	74.00	-24.24	peak
6	17758.000	27.00	22.75	49.75	74.00	-24.25	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8155.000	37.69	6.81	44.50	74.00	-29.50	peak
2	9310.000	37.13	9.12	46.25	74.00	-27.75	peak
3	11829.000	32.20	17.20	49.40	74.00	-24.60	peak
4	12742.000	31.68	17.15	48.83	74.00	-25.17	peak
5	14029.000	29.79	20.50	50.29	74.00	-23.71	peak
6	17758.000	26.62	22.75	49.37	74.00	-24.63	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

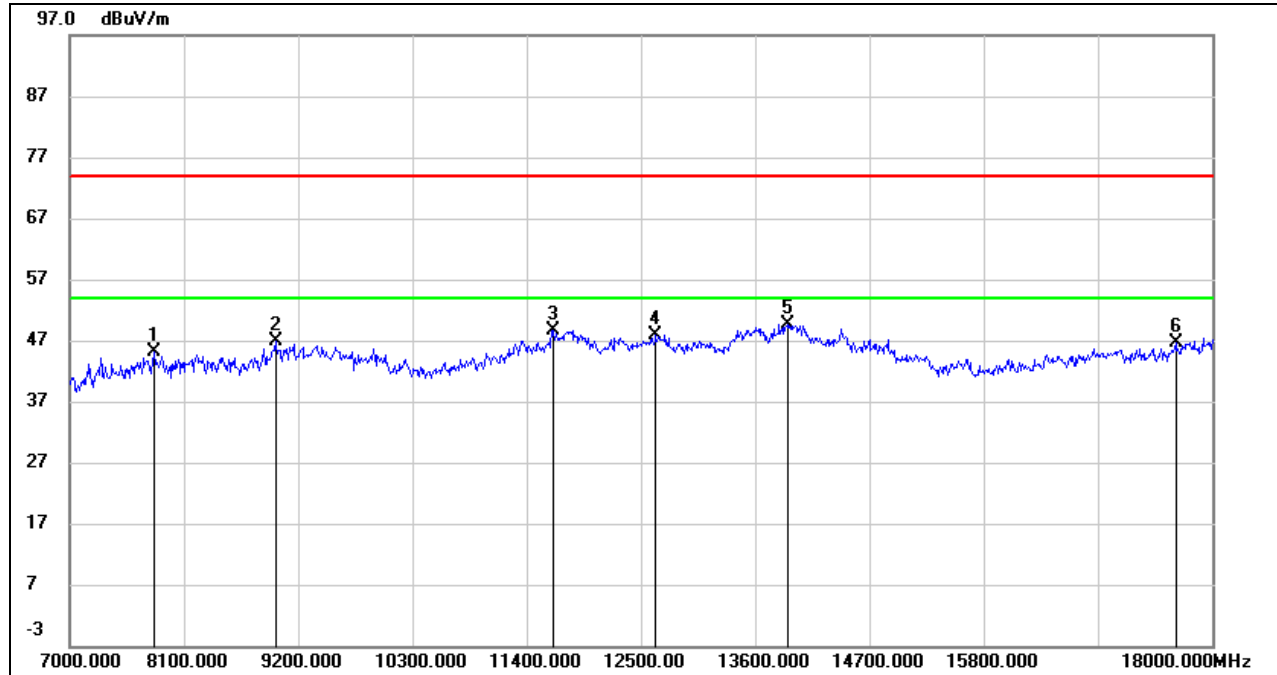
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	7814.000	39.21	6.03	45.24	74.00	-28.76	peak
2	8980.000	37.53	9.29	46.82	74.00	-27.18	peak
3	11653.000	32.32	16.28	48.60	74.00	-25.40	peak
4	12643.000	31.00	16.91	47.91	74.00	-26.09	peak
5	13908.000	28.99	20.58	49.57	74.00	-24.43	peak
6	17648.000	25.02	21.62	46.64	74.00	-27.36	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

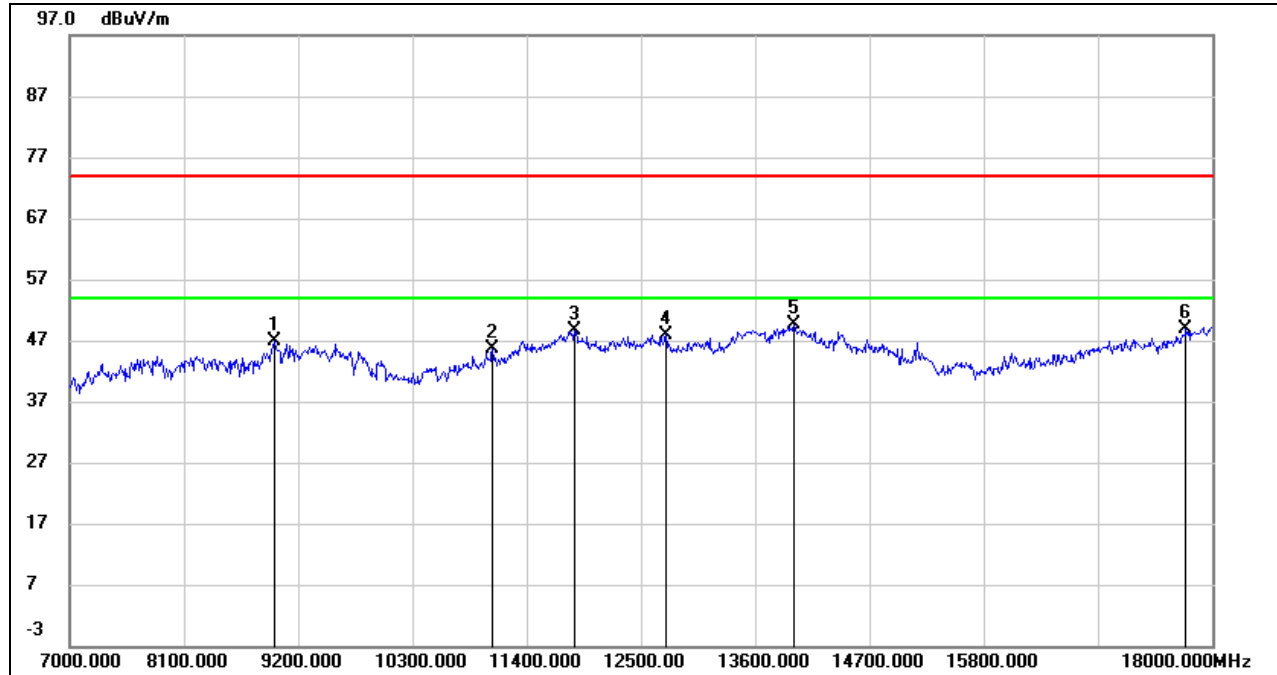
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



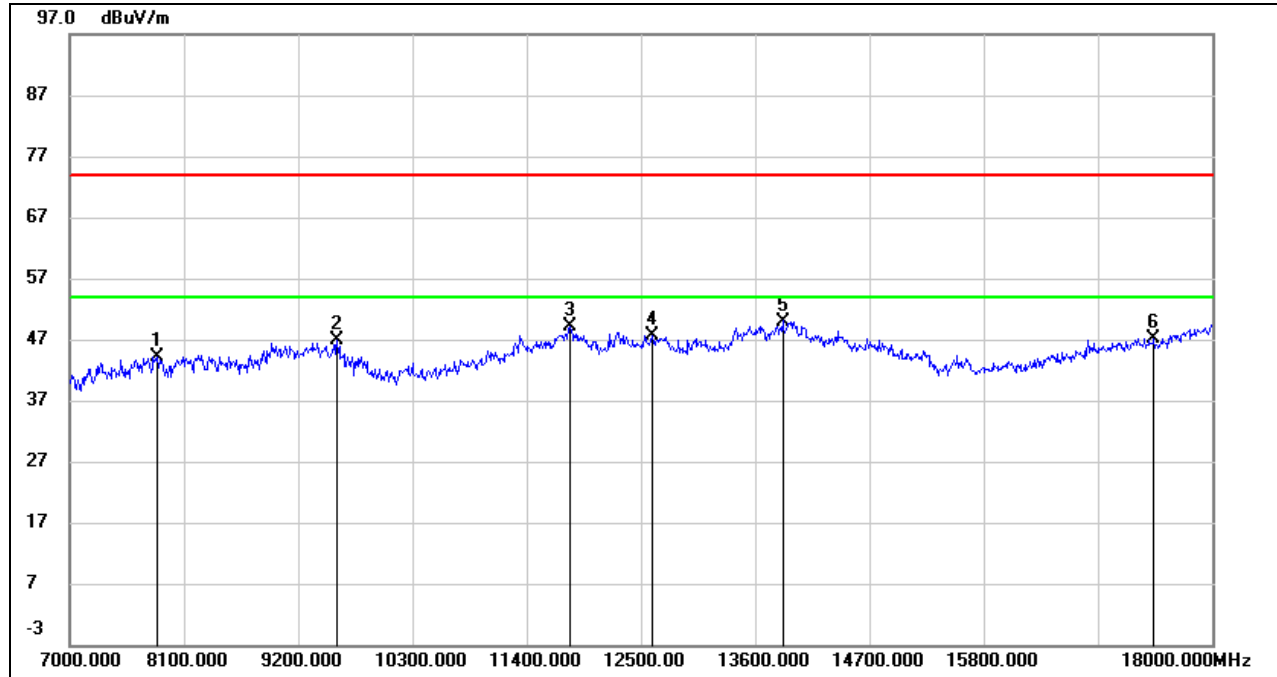
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8969.000	37.70	9.16	46.86	74.00	-27.14	peak
2	11070.000	32.08	13.51	45.59	74.00	-28.41	peak
3	11862.000	31.35	17.19	48.54	74.00	-25.46	peak
4	12742.000	30.85	17.15	48.00	74.00	-26.00	peak
5	13974.000	28.90	20.63	49.53	74.00	-24.47	peak
6	17747.000	26.16	22.64	48.80	74.00	-25.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

8.3.3. 802.11n HT40 SISO MODE

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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	7847.000	38.25	5.91	44.16	74.00	-29.84	peak
2	9574.000	36.77	10.07	46.84	74.00	-27.16	peak
3	11818.000	31.88	17.20	49.08	74.00	-24.92	peak
4	12610.000	30.70	16.83	47.53	74.00	-26.47	peak
5	13864.000	29.46	20.54	50.00	74.00	-24.00	peak
6	17439.000	26.89	20.33	47.22	74.00	-26.78	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.

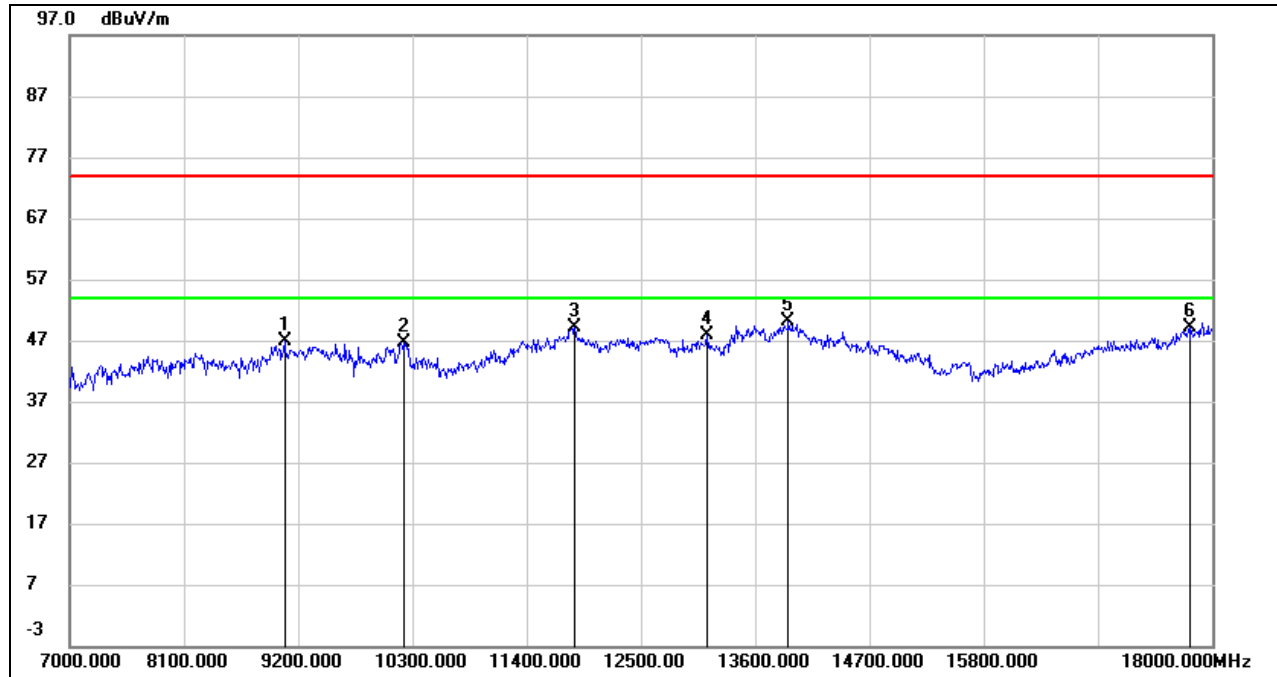
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

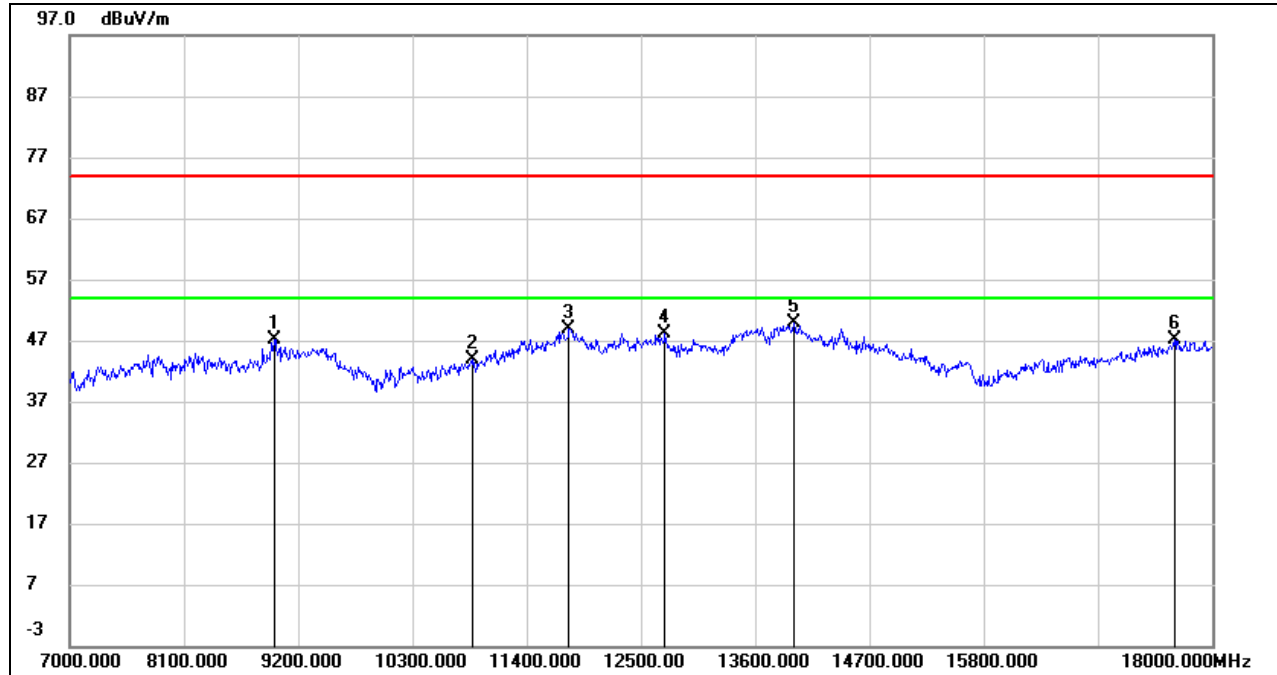
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	9068.000	37.83	9.16	46.99	74.00	-27.01	peak
2	10223.000	35.63	10.98	46.61	74.00	-27.39	peak
3	11862.000	31.84	17.19	49.03	74.00	-24.97	peak
4	13138.000	30.05	17.72	47.77	74.00	-26.23	peak
5	13919.000	29.63	20.58	50.21	74.00	-23.79	peak
6	17780.000	26.09	22.98	49.07	74.00	-24.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

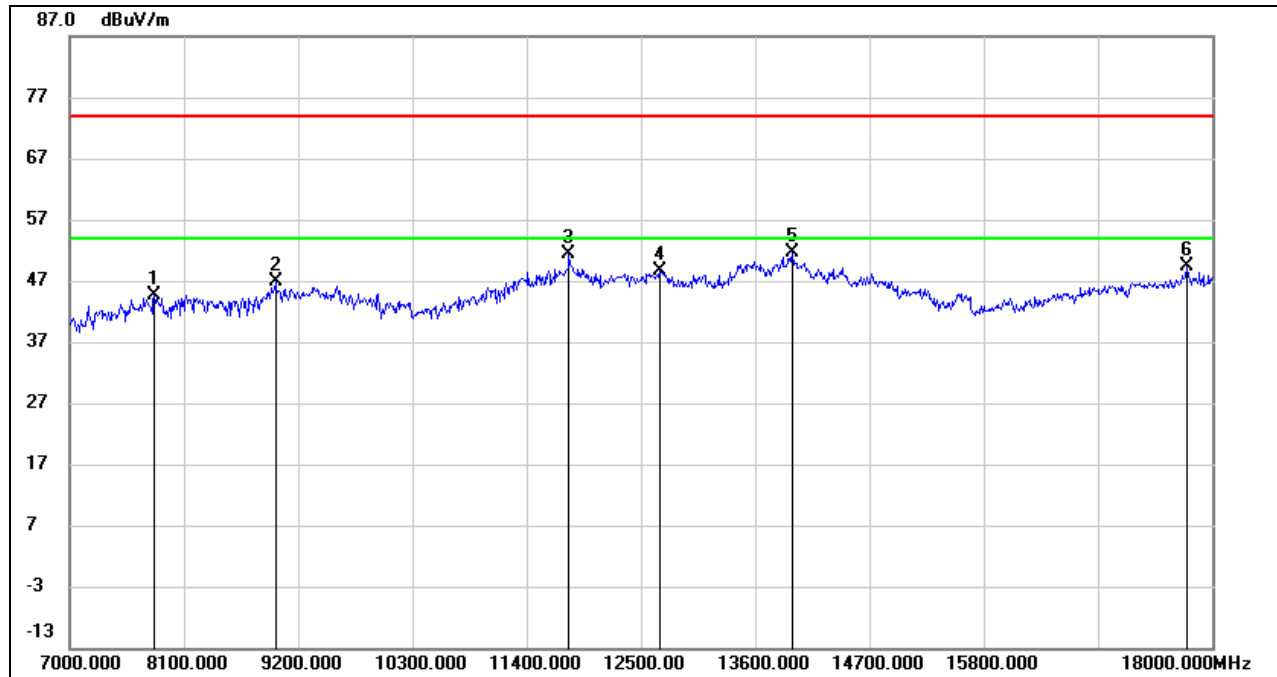
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8969.000	38.07	9.16	47.23	74.00	-26.77	peak
2	10883.000	31.05	12.83	43.88	74.00	-30.12	peak
3	11807.000	31.68	17.22	48.90	74.00	-25.10	peak
4	12731.000	30.93	17.13	48.06	74.00	-25.94	peak
5	13974.000	29.15	20.63	49.78	74.00	-24.22	peak
6	17637.000	25.57	21.50	47.07	74.00	-26.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	7814.000	38.56	6.03	44.59	74.00	-29.41	peak
2	8980.000	37.60	9.29	46.89	74.00	-27.11	peak
3	11807.000	34.27	17.22	51.49	74.00	-22.51	peak
4	12676.000	31.67	16.99	48.66	74.00	-25.34	peak
5	13952.000	31.11	20.61	51.72	74.00	-22.28	peak
6	17758.000	26.74	22.75	49.49	74.00	-24.51	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

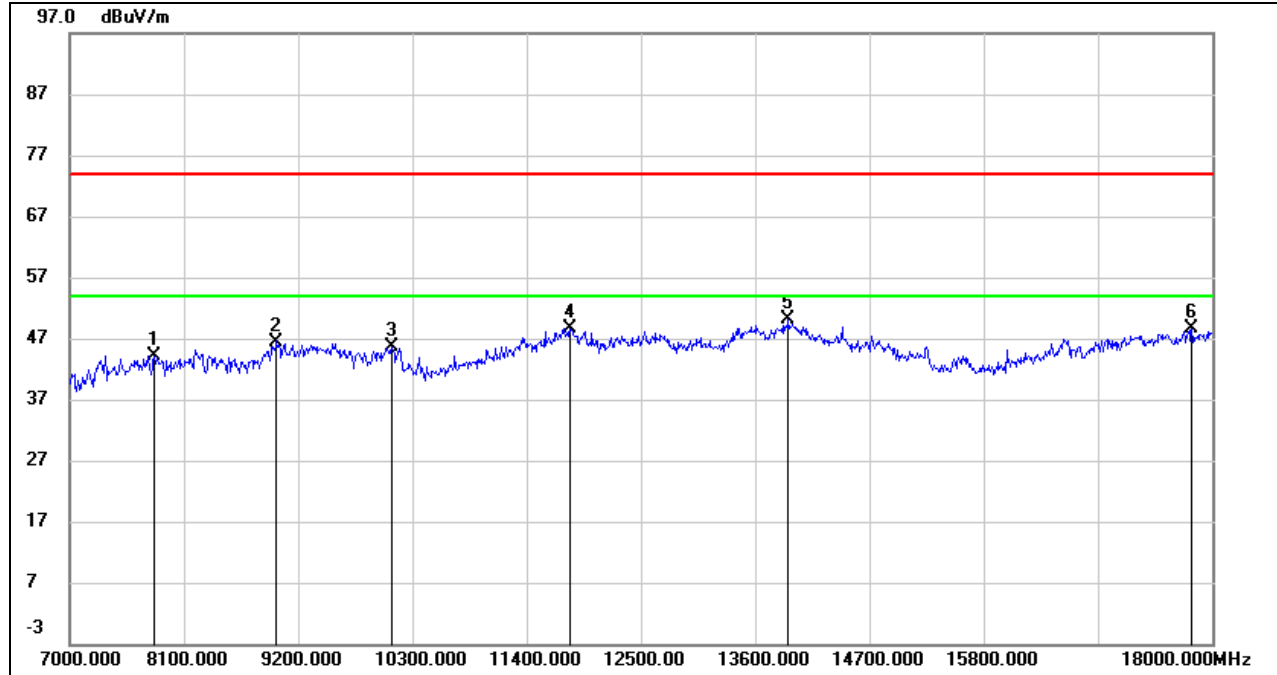
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-2A BAND

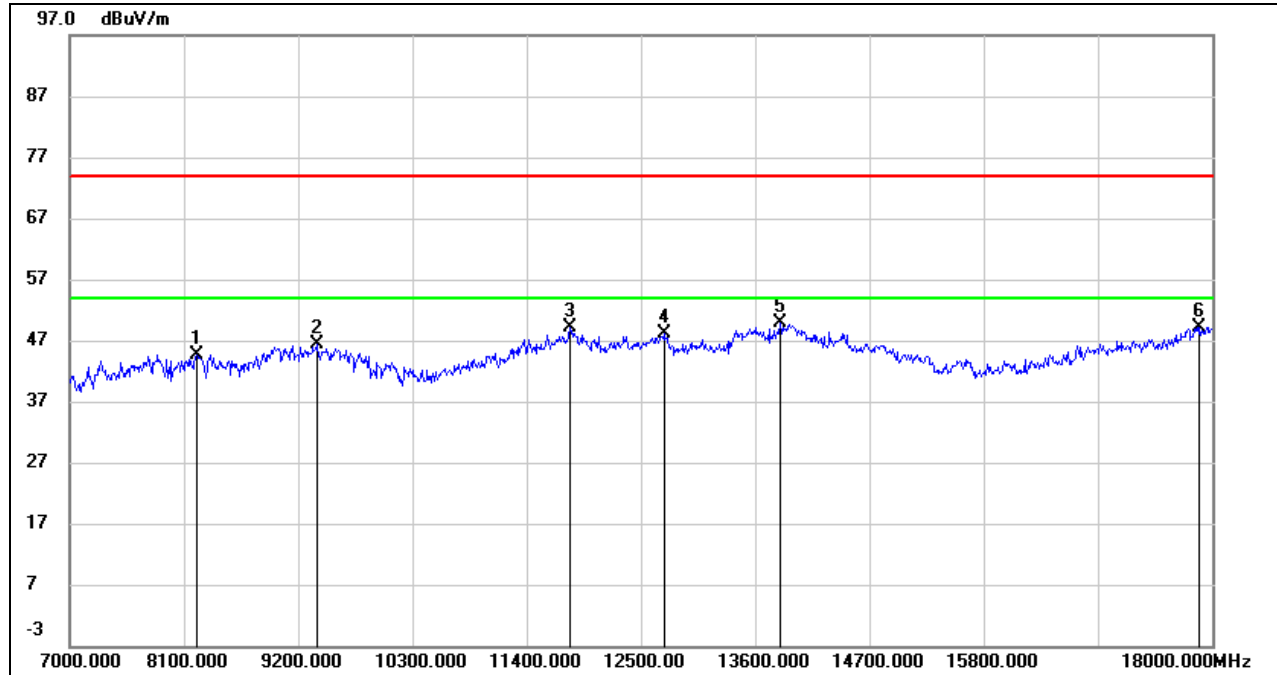
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7814.000	38.18	6.03	44.21	74.00	-29.79	peak
2	8991.000	37.08	9.42	46.50	74.00	-27.50	peak
3	10102.000	34.94	10.76	45.70	74.00	-28.30	peak
4	11818.000	31.43	17.20	48.63	74.00	-25.37	peak
5	13919.000	29.65	20.58	50.23	74.00	-23.77	peak
6	17802.000	25.53	23.19	48.72	74.00	-25.28	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8221.000	37.43	7.16	44.59	74.00	-29.41	peak
2	9376.000	36.90	9.53	46.43	74.00	-27.57	peak
3	11818.000	31.81	17.20	49.01	74.00	-24.99	peak
4	12720.000	31.04	17.09	48.13	74.00	-25.87	peak
5	13842.000	29.40	20.53	49.93	74.00	-24.07	peak
6	17879.000	25.82	23.38	49.20	74.00	-24.80	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.

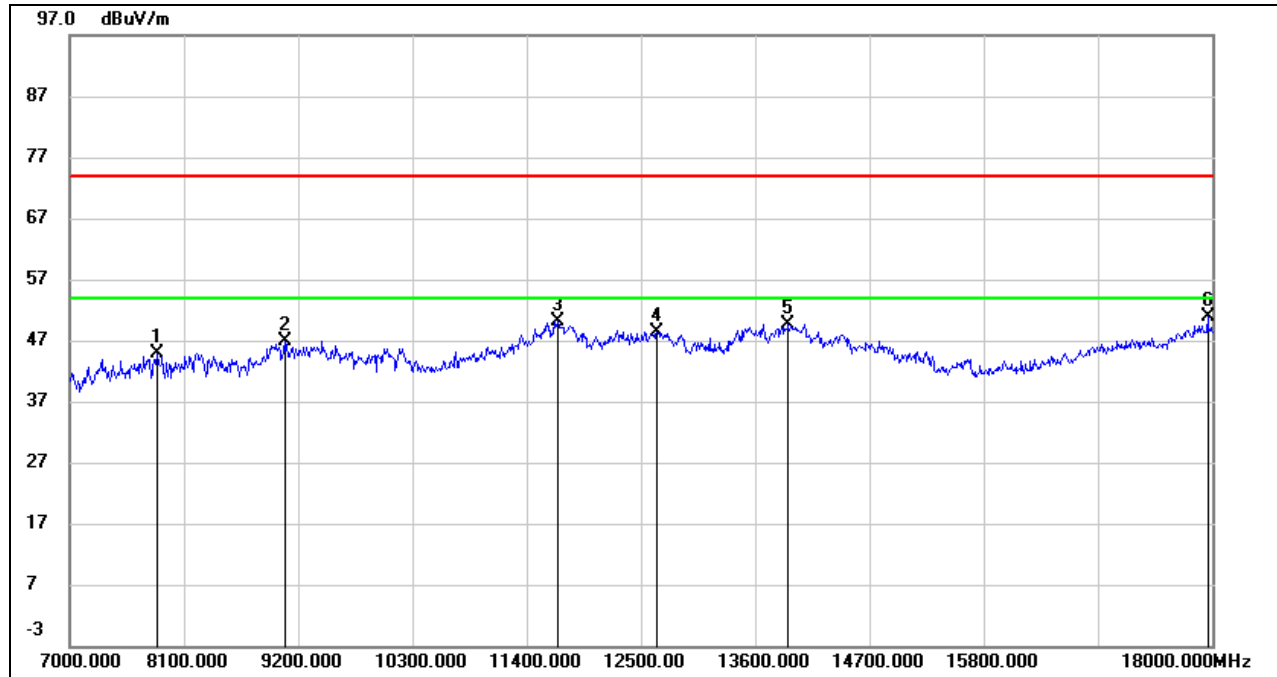
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	7836.000	39.00	5.95	44.95	74.00	-29.05	peak
2	9068.000	37.84	9.16	47.00	74.00	-27.00	peak
3	11697.000	33.58	16.56	50.14	74.00	-23.86	peak
4	12654.000	31.53	16.93	48.46	74.00	-25.54	peak
5	13919.000	29.14	20.58	49.72	74.00	-24.28	peak
6	17956.000	27.29	23.57	50.86	74.00	-23.14	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

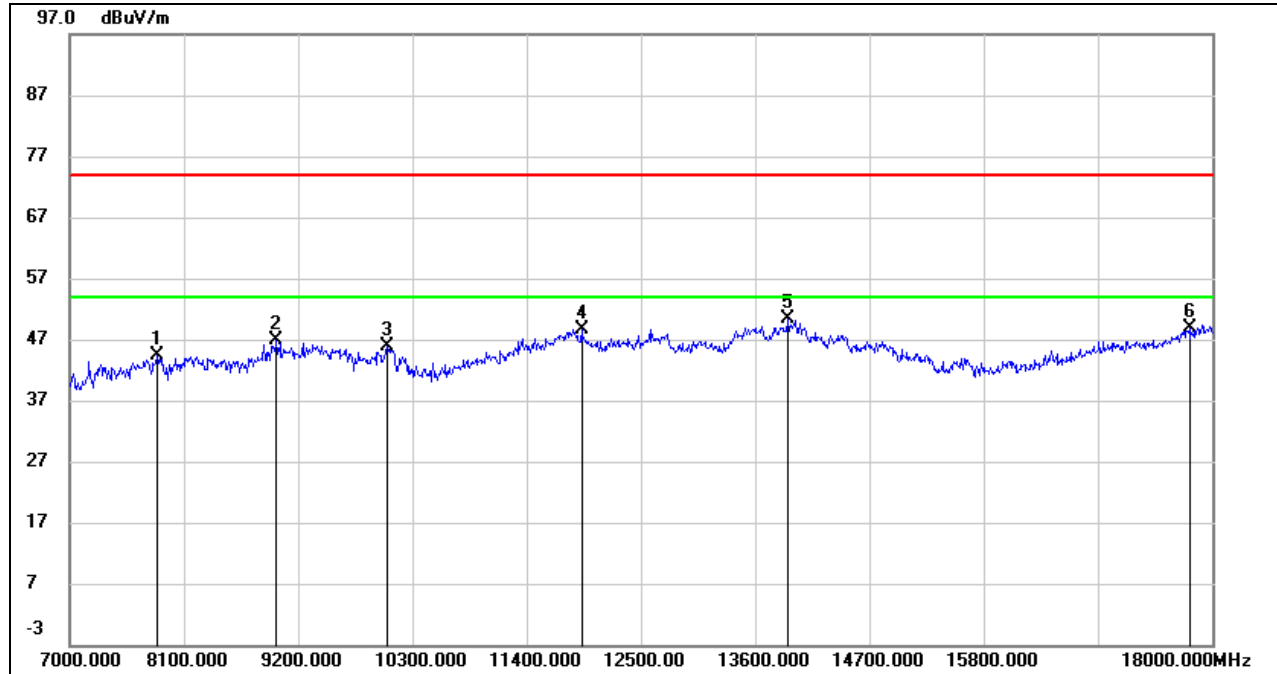
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	7847.000	38.48	5.91	44.39	74.00	-29.61	peak
2	8991.000	37.36	9.42	46.78	74.00	-27.22	peak
3	10058.000	35.26	10.69	45.95	74.00	-28.05	peak
4	11928.000	31.51	17.14	48.65	74.00	-25.35	peak
5	13919.000	29.68	20.58	50.26	74.00	-23.74	peak
6	17780.000	25.79	22.98	48.77	74.00	-25.23	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

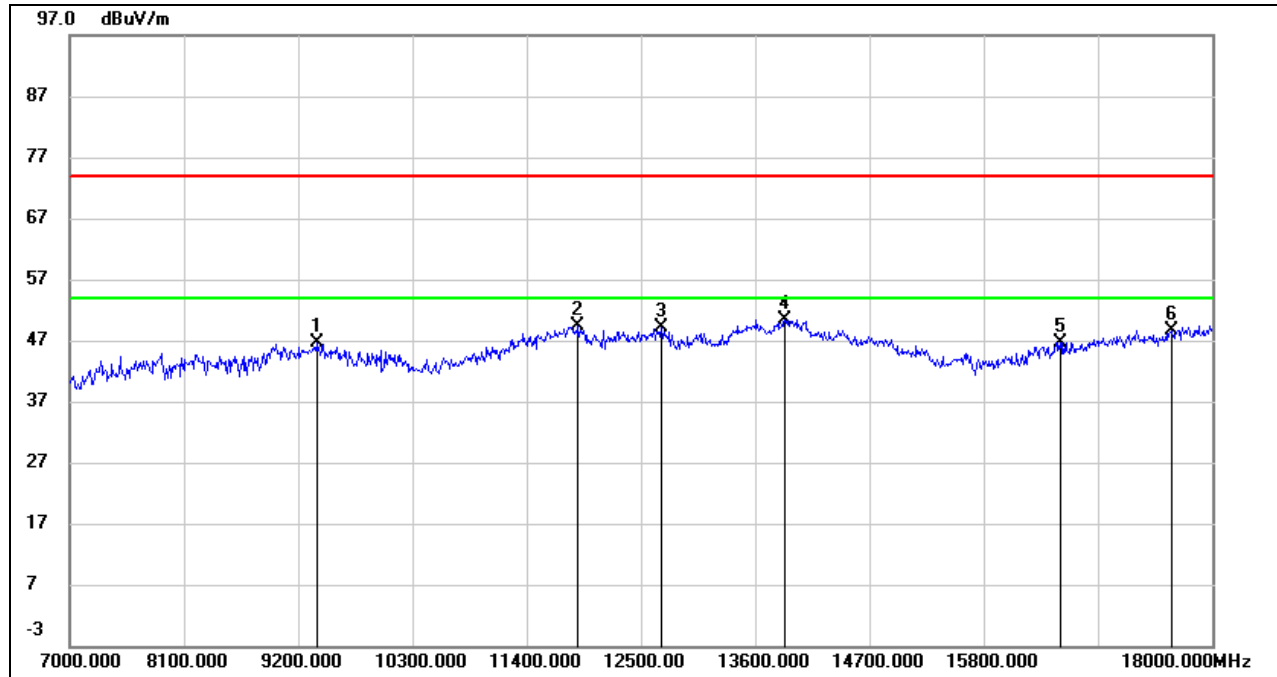
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-3 BAND

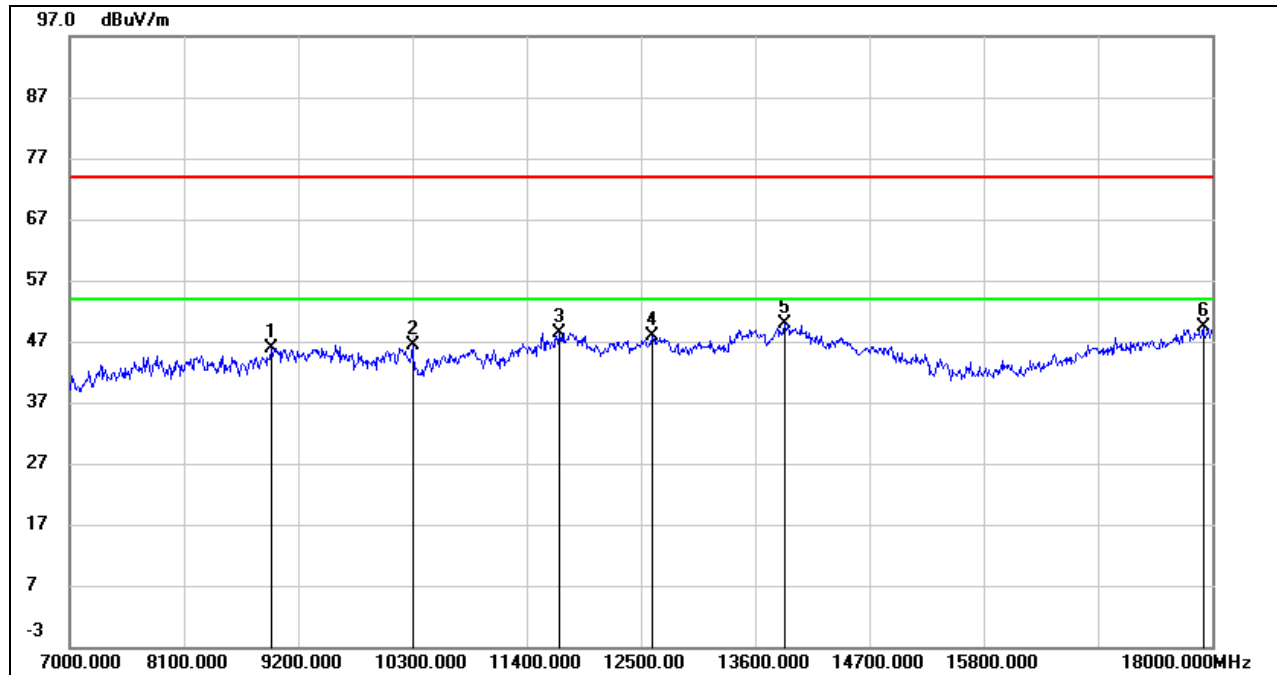
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9376.000	37.16	9.53	46.69	74.00	-27.31	peak
2	11895.000	32.10	17.17	49.27	74.00	-24.73	peak
3	12698.000	31.97	17.05	49.02	74.00	-24.98	peak
4	13886.000	29.79	20.56	50.35	74.00	-23.65	peak
5	16537.000	29.17	17.56	46.73	74.00	-27.27	peak
6	17615.000	27.42	21.27	48.69	74.00	-25.31	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8936.000	37.24	8.76	46.00	74.00	-28.00	peak
2	10300.000	35.10	11.18	46.28	74.00	-27.72	peak
3	11719.000	31.77	16.71	48.48	74.00	-25.52	peak
4	12610.000	31.09	16.83	47.92	74.00	-26.08	peak
5	13886.000	29.30	20.56	49.86	74.00	-24.14	peak
6	17912.000	25.80	23.46	49.26	74.00	-24.74	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

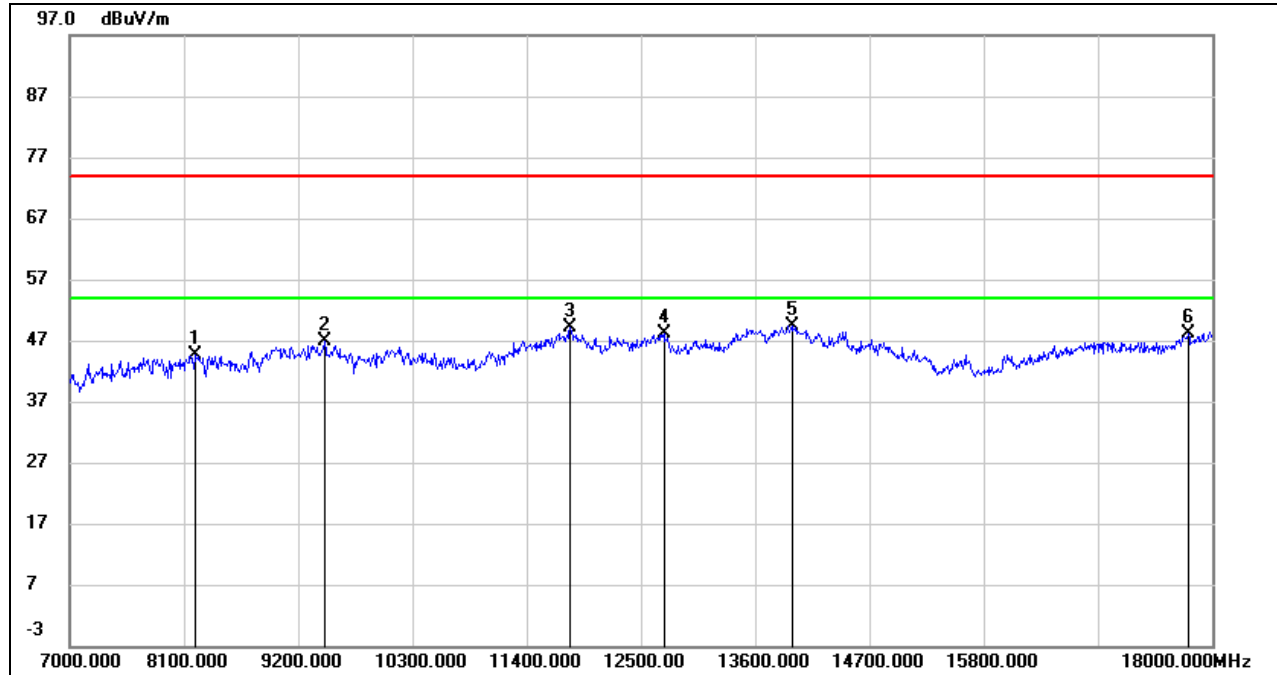
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**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	8210.000	37.39	7.20	44.59	74.00	-29.41	peak
2	9453.000	36.97	9.81	46.78	74.00	-27.22	peak
3	11818.000	31.95	17.20	49.15	74.00	-24.85	peak
4	12720.000	31.03	17.09	48.12	74.00	-25.88	peak
5	13952.000	28.81	20.61	49.42	74.00	-24.58	peak
6	17769.000	25.31	22.86	48.17	74.00	-25.83	peak

Note: 1. Measurement = Reading Level + Correct Factor.

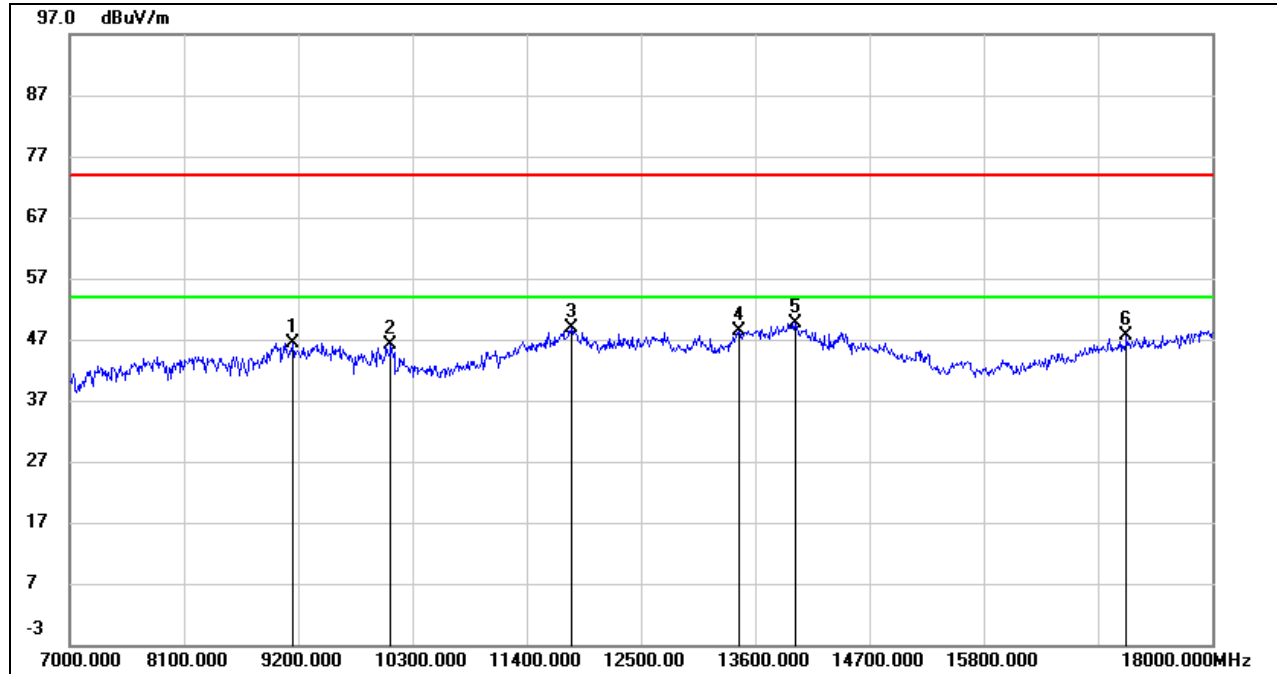
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.

6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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

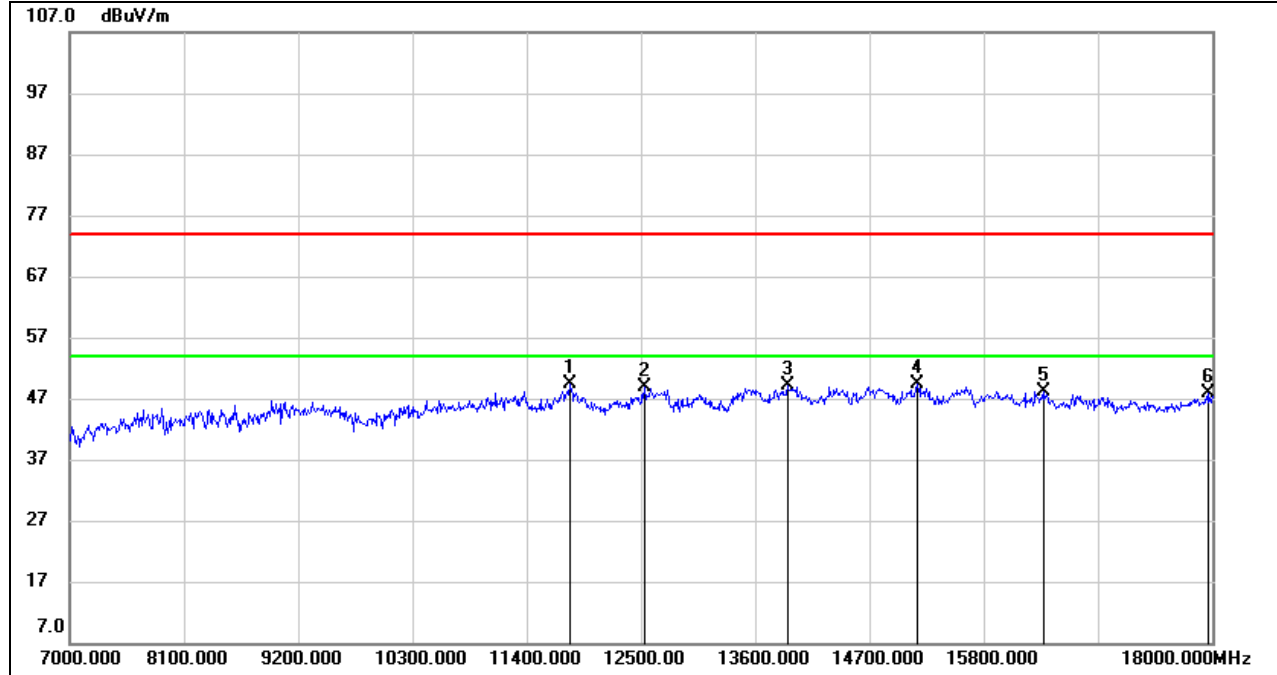
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9145.000	37.60	8.73	46.33	74.00	-27.67	peak
2	10091.000	35.48	10.75	46.23	74.00	-27.77	peak
3	11829.000	31.63	17.20	48.83	74.00	-25.17	peak
4	13446.000	29.01	19.37	48.38	74.00	-25.62	peak
5	13985.000	29.07	20.63	49.70	74.00	-24.30	peak
6	17175.000	27.59	20.00	47.59	74.00	-26.41	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

8.3.1. 802.11ac VHT80 SISO MODE

UNII-1 BAND

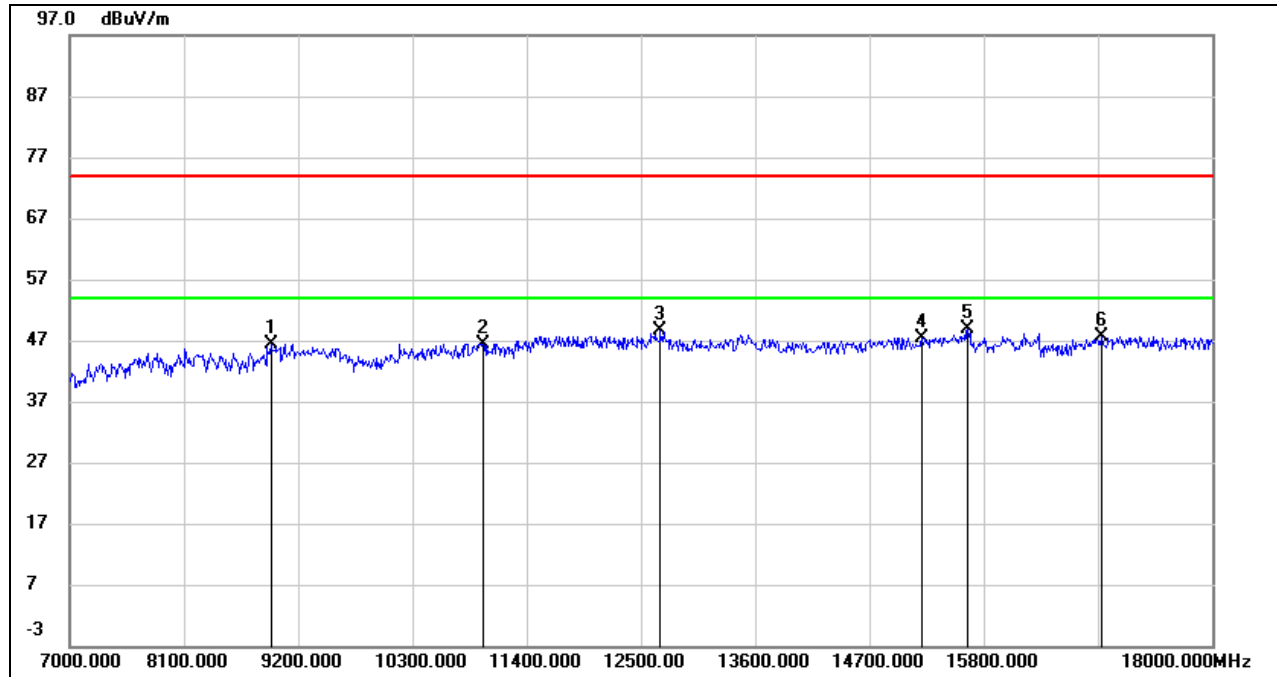
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11818.000	33.86	15.47	49.33	74.00	-24.67	peak
2	12533.000	33.48	15.52	49.00	74.00	-25.00	peak
3	13908.000	30.25	18.82	49.07	74.00	-24.93	peak
4	15162.000	32.36	17.01	49.37	74.00	-24.63	peak
5	16372.000	28.85	19.28	48.13	74.00	-25.87	peak
6	17967.000	24.87	22.98	47.85	74.00	-26.15	peak

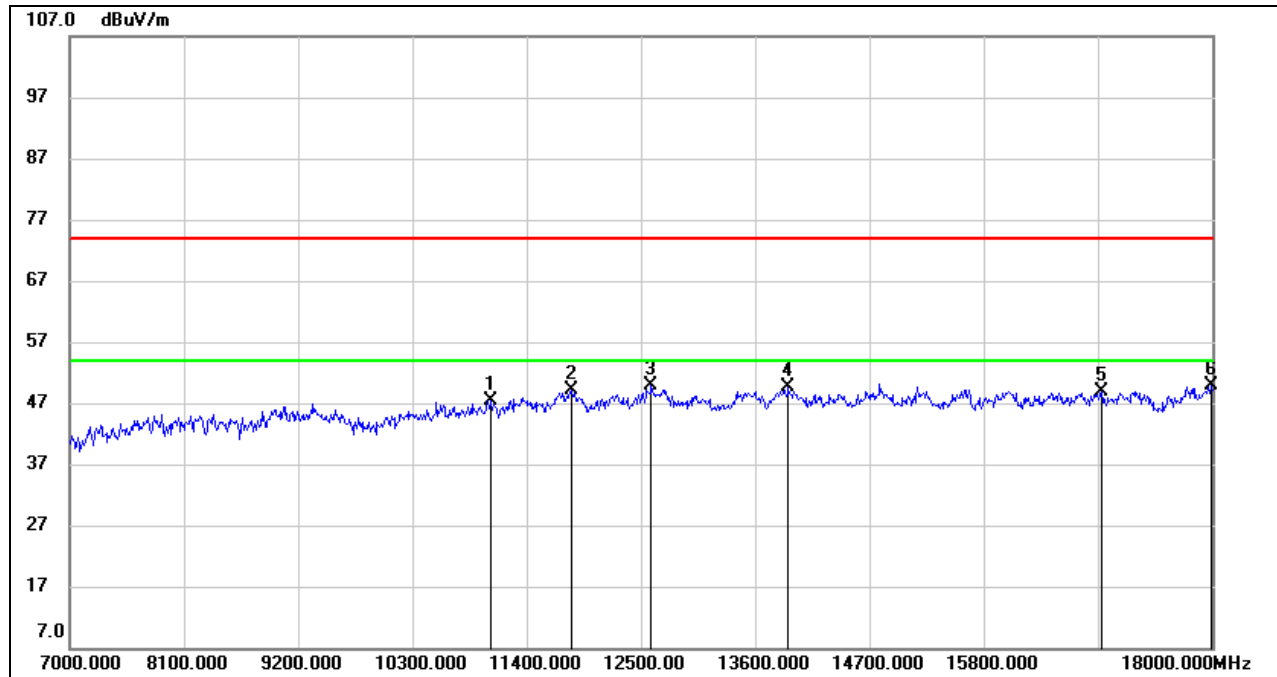
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	8936.000	37.04	9.29	46.33	74.00	-27.67	peak
2	10982.000	34.25	12.24	46.49	74.00	-27.51	peak
3	12687.000	32.91	15.64	48.55	74.00	-25.45	peak
4	15206.000	30.60	16.90	47.50	74.00	-26.50	peak
5	15646.000	31.42	17.51	48.93	74.00	-25.07	peak
6	16933.000	27.19	20.53	47.72	74.00	-26.28	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. AVG: $VBW=1/T_{on}$, where: T_{on} is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**UNII-2A BAND****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	11059.000	34.94	12.46	47.40	74.00	-26.60	peak
2	11829.000	33.57	15.47	49.04	74.00	-24.96	peak
3	12599.000	34.46	15.47	49.93	74.00	-24.07	peak
4	13919.000	30.73	18.83	49.56	74.00	-24.44	peak
5	16933.000	28.33	20.53	48.86	74.00	-25.14	peak
6	17989.000	26.88	22.98	49.86	74.00	-24.14	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

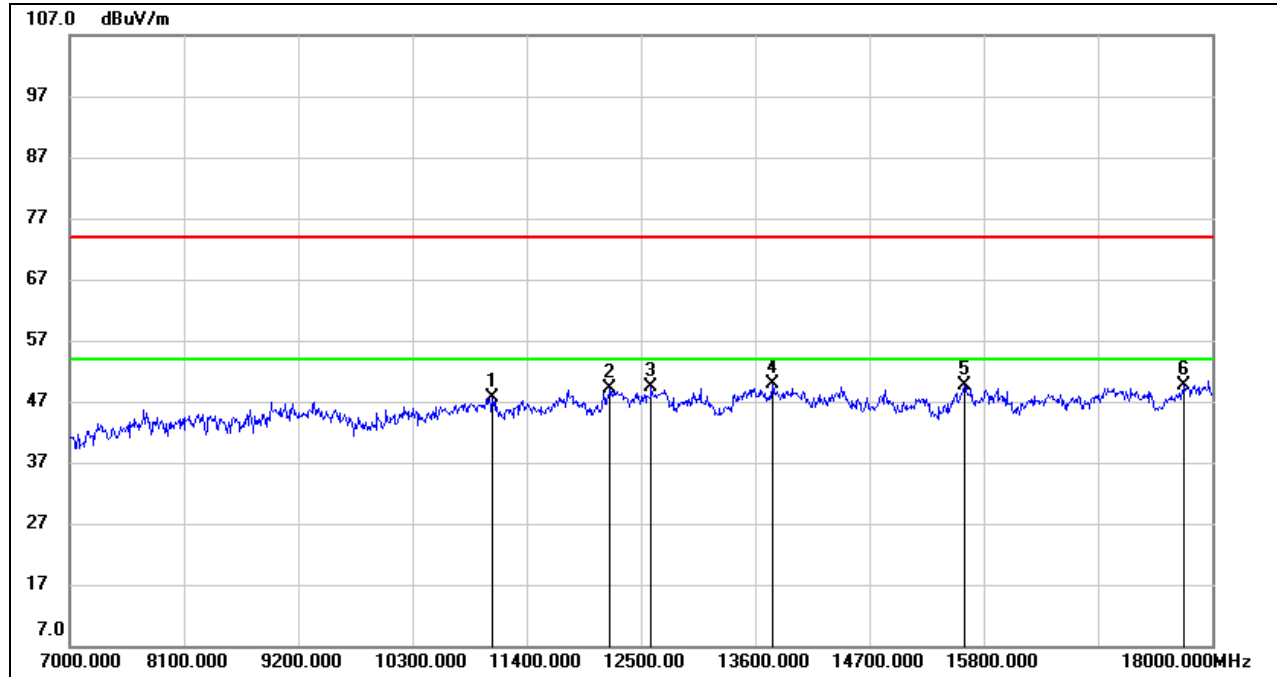
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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	11070.000	35.20	12.49	47.69	74.00	-26.31	peak
2	12203.000	33.83	15.23	49.06	74.00	-24.94	peak
3	12599.000	33.95	15.47	49.42	74.00	-24.58	peak
4	13765.000	31.24	18.52	49.76	74.00	-24.24	peak
5	15613.000	32.26	17.49	49.75	74.00	-24.25	peak
6	17725.000	27.05	22.48	49.53	74.00	-24.47	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

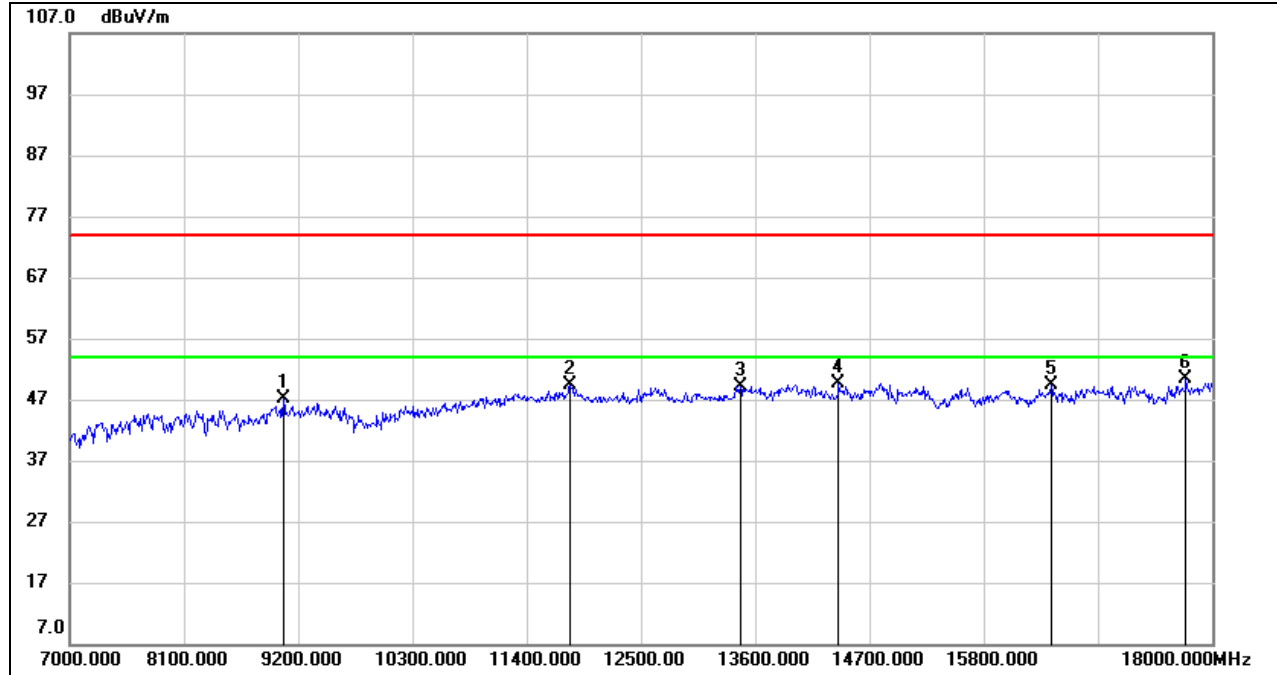
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-3 BAND

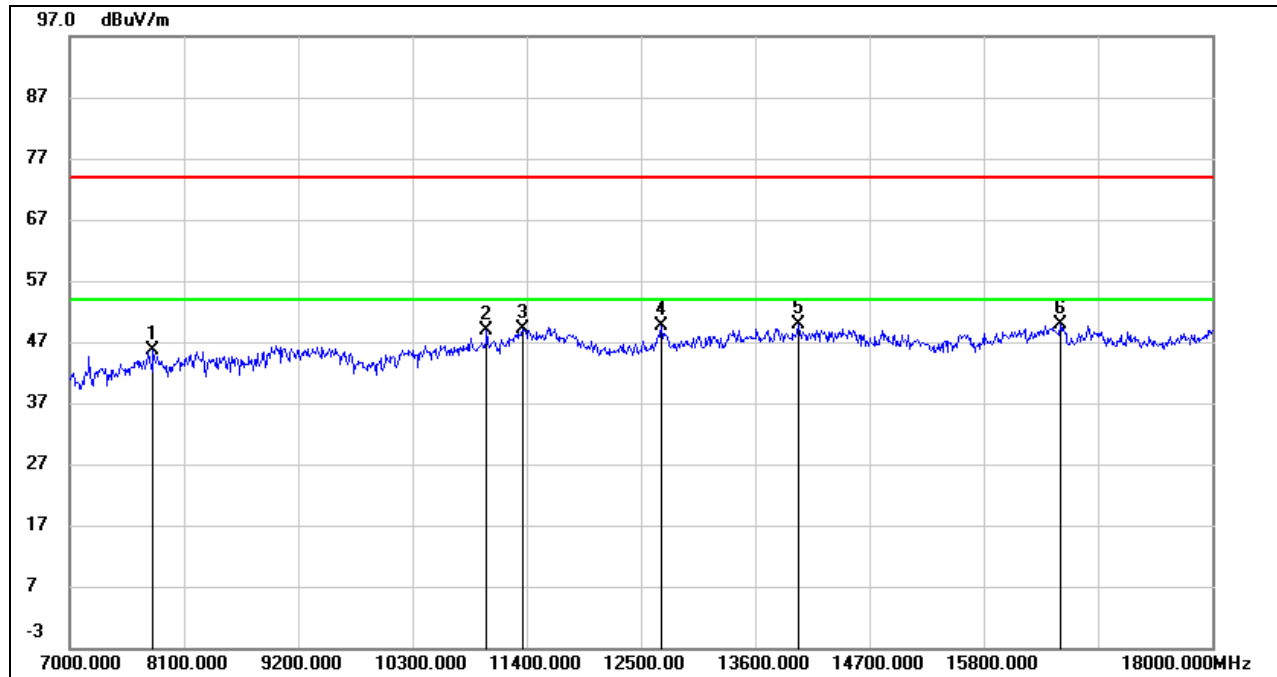
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	37.41	9.68	47.09	74.00	-26.91	peak
2	11818.000	33.87	15.47	49.34	74.00	-24.66	peak
3	13457.000	31.74	17.46	49.20	74.00	-24.80	peak
4	14403.000	31.28	18.37	49.65	74.00	-24.35	peak
5	16449.000	29.81	19.57	49.38	74.00	-24.62	peak
6	17747.000	27.61	22.65	50.26	74.00	-23.74	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



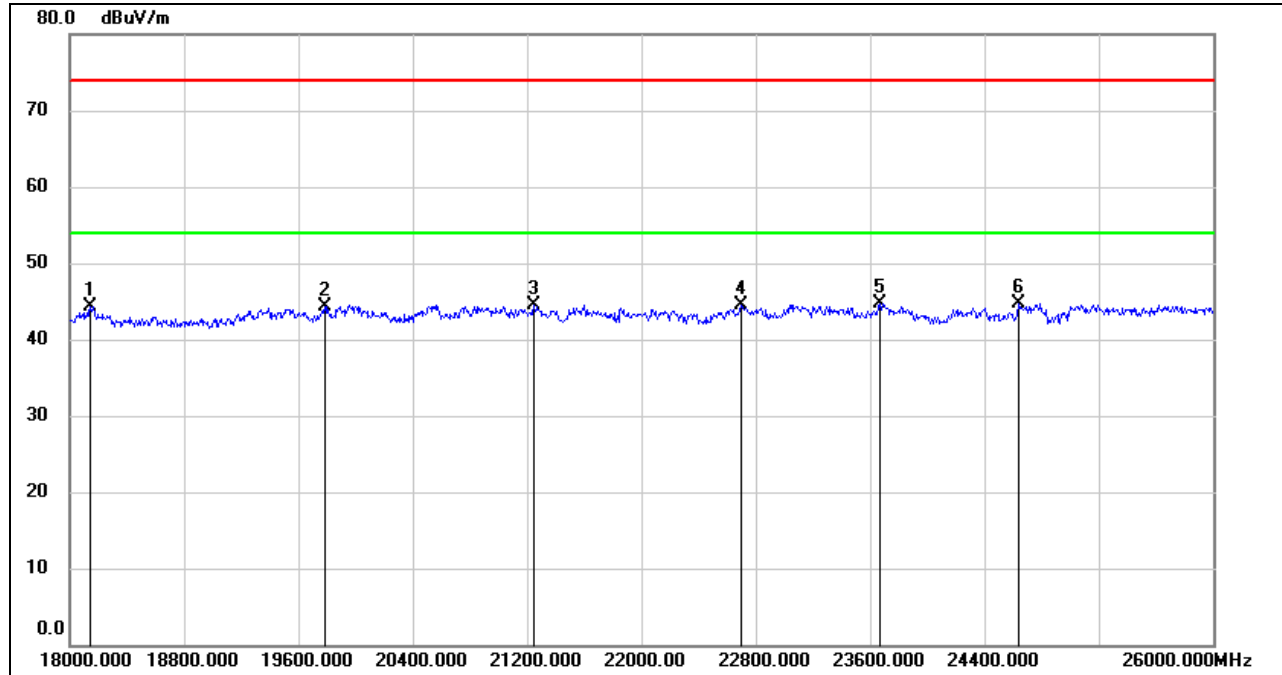
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7803.000	39.01	6.71	45.72	74.00	-28.28	peak
2	11015.000	36.46	12.33	48.79	74.00	-25.21	peak
3	11356.000	35.75	13.49	49.24	74.00	-24.76	peak
4	12698.000	33.92	15.67	49.59	74.00	-24.41	peak
5	14018.000	30.99	18.90	49.89	74.00	-24.11	peak
6	16537.000	30.05	19.91	49.96	74.00	-24.04	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

8.4.1. 802.11n HT40 MODE

SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



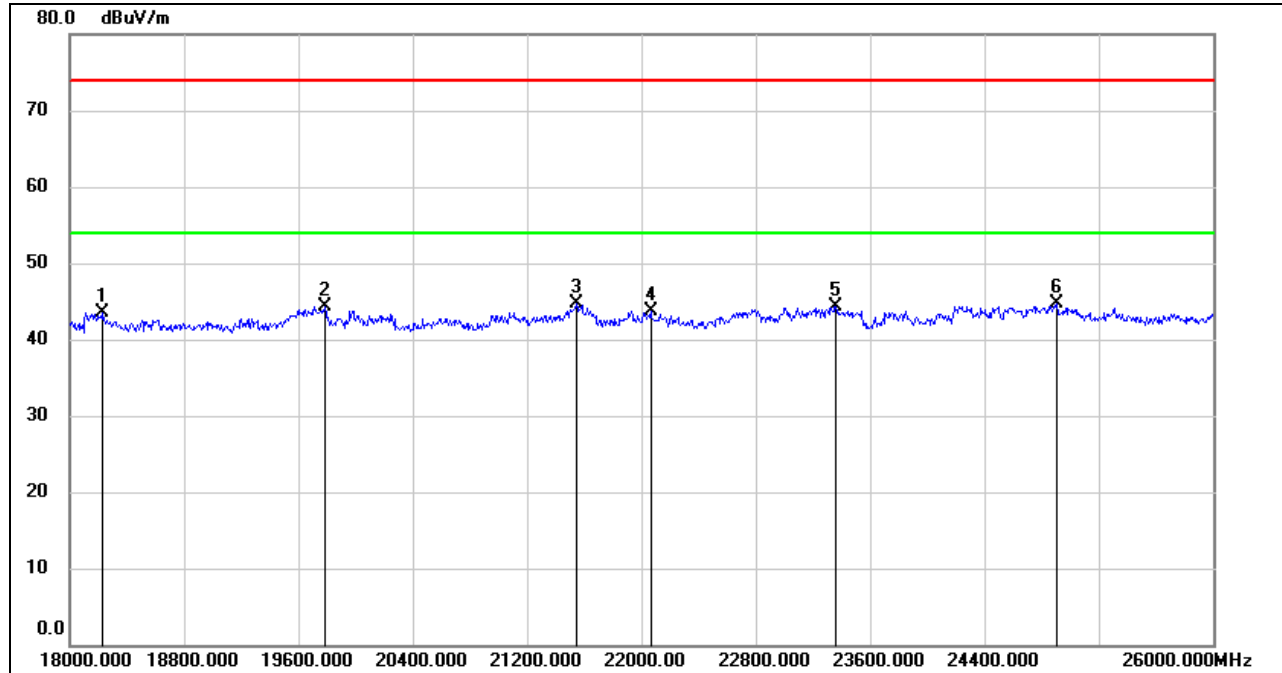
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18144.000	49.77	-5.48	44.29	74.00	-29.71	peak
2	19784.000	49.58	-5.28	44.30	74.00	-29.70	peak
3	21248.000	49.29	-4.77	44.52	74.00	-29.48	peak
4	22696.000	48.28	-3.73	44.55	74.00	-29.45	peak
5	23664.000	47.82	-3.18	44.64	74.00	-29.36	peak
6	24640.000	47.03	-2.32	44.71	74.00	-29.29	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.

SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18224.000	49.08	-5.53	43.55	74.00	-30.45	peak
2	19784.000	49.57	-5.28	44.29	74.00	-29.71	peak
3	21544.000	49.26	-4.63	44.63	74.00	-29.37	peak
4	22064.000	48.07	-4.41	43.66	74.00	-30.34	peak
5	23360.000	47.60	-3.26	44.34	74.00	-29.66	peak
6	24904.000	46.80	-2.19	44.61	74.00	-29.39	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.

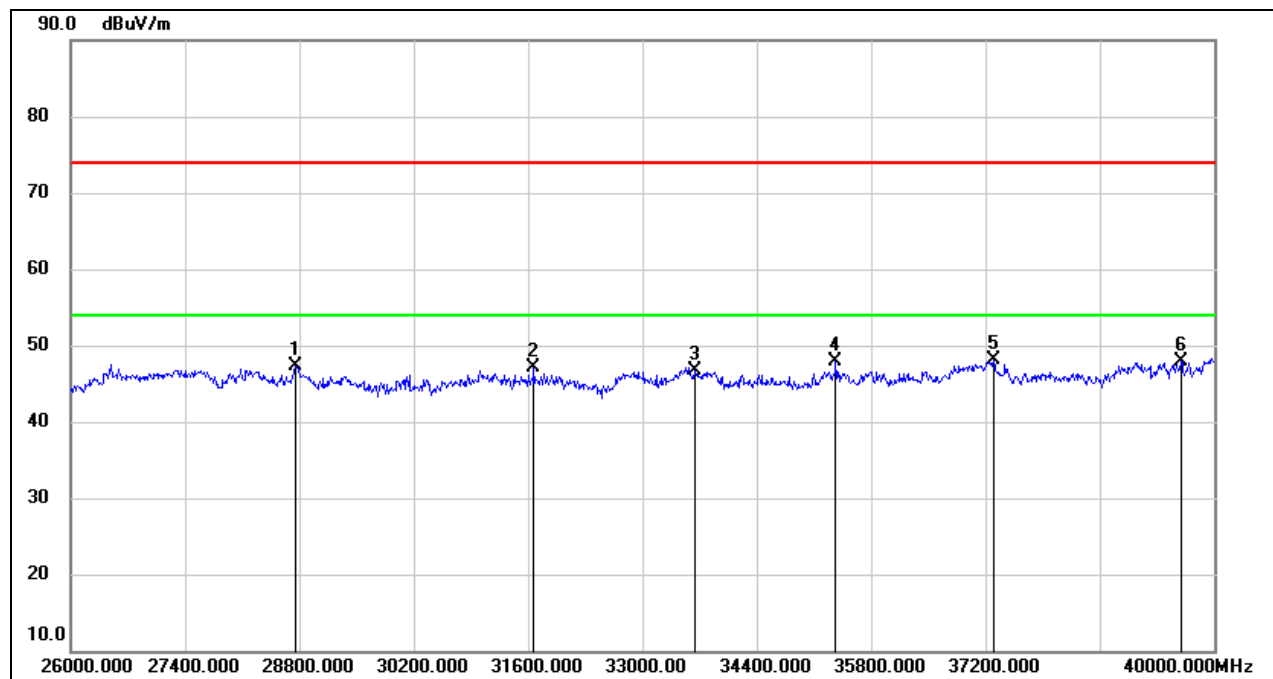
3. Peak: Peak detector.

Note: All the modes had been tested, but only the worst data was recorded in the report.

8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

8.5.1. 802.11n HT40 MODE

SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28744.000	47.86	-0.56	47.30	74.00	-26.70	peak
2	31670.000	48.36	-1.21	47.15	74.00	-26.85	peak
3	33644.000	46.31	0.42	46.73	74.00	-27.27	peak
4	35366.000	45.40	2.59	47.99	74.00	-26.01	peak
5	37298.000	44.92	3.15	48.07	74.00	-25.93	peak
6	39594.000	43.04	4.95	47.99	74.00	-26.01	peak

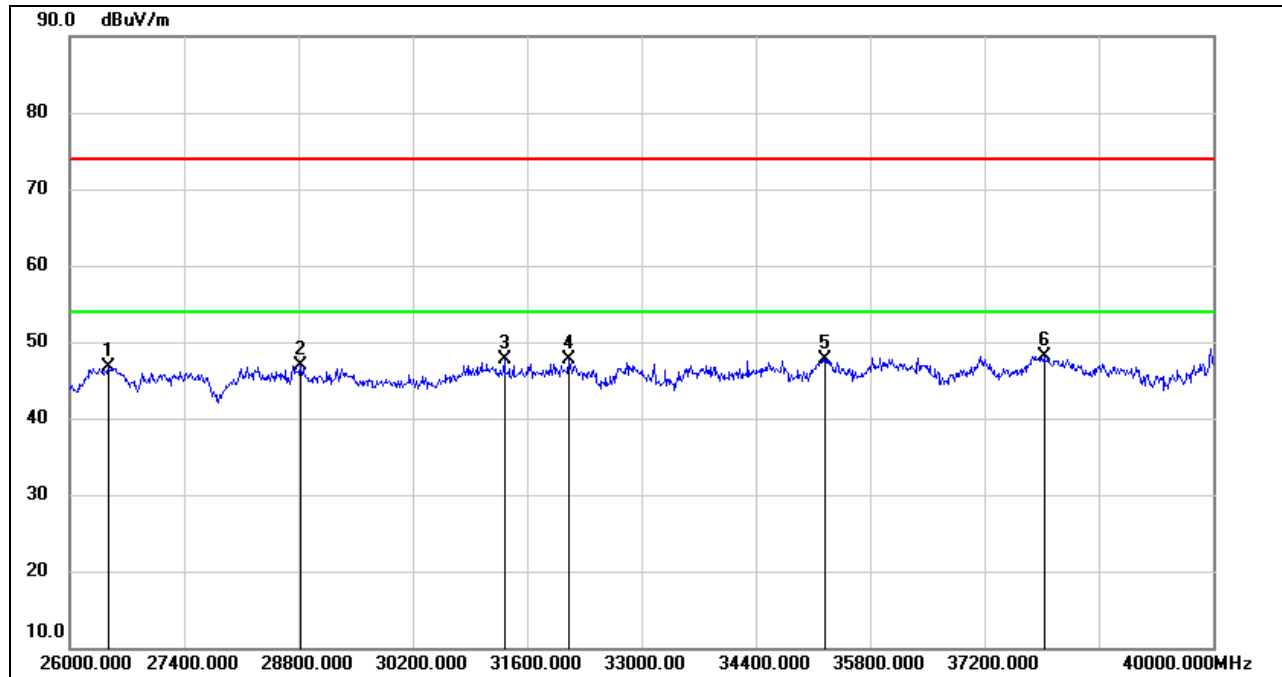
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26476.000	51.53	-4.78	46.75	74.00	-27.25	peak
2	28828.000	47.63	-0.79	46.84	74.00	-27.16	peak
3	31320.000	48.61	-0.93	47.68	74.00	-26.32	peak
4	32104.000	49.49	-1.75	47.74	74.00	-26.26	peak
5	35254.000	45.12	2.65	47.77	74.00	-26.23	peak
6	37928.000	44.76	3.38	48.14	74.00	-25.86	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.

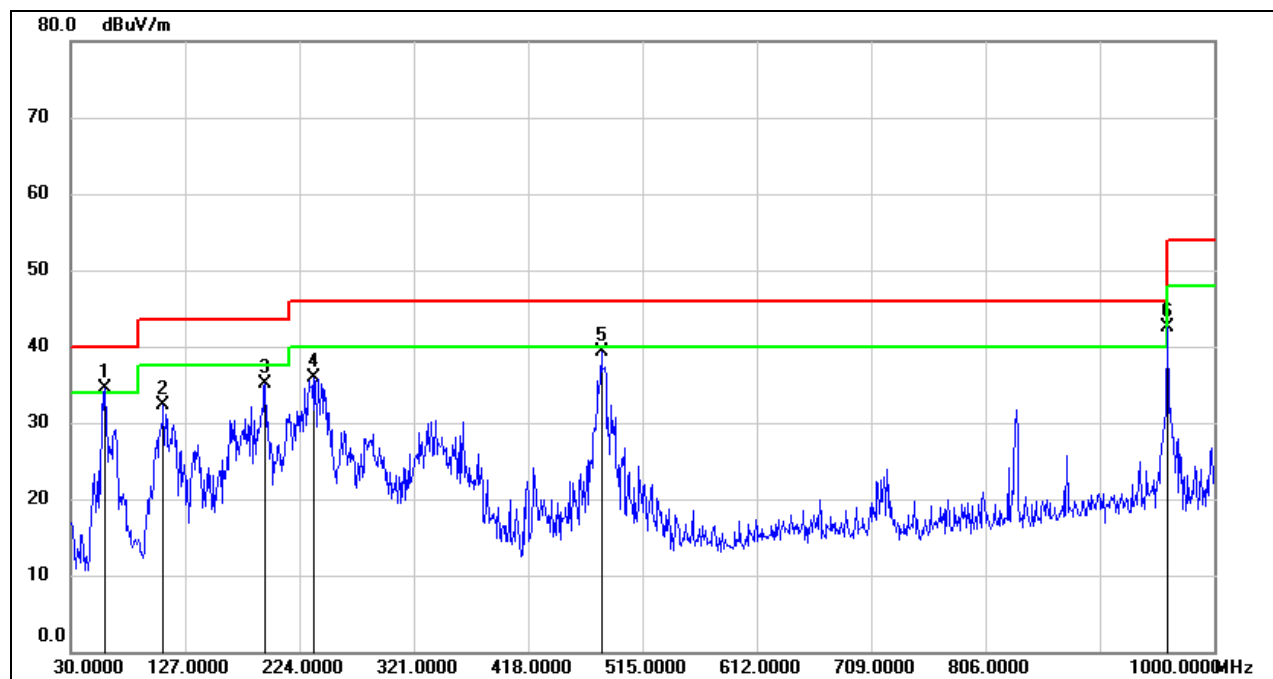
3. Peak: Peak detector.

Note: All the modes had been tested, but only the worst data was recorded in the report.

8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

8.6.1. 802.11n HT40 MODE

SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

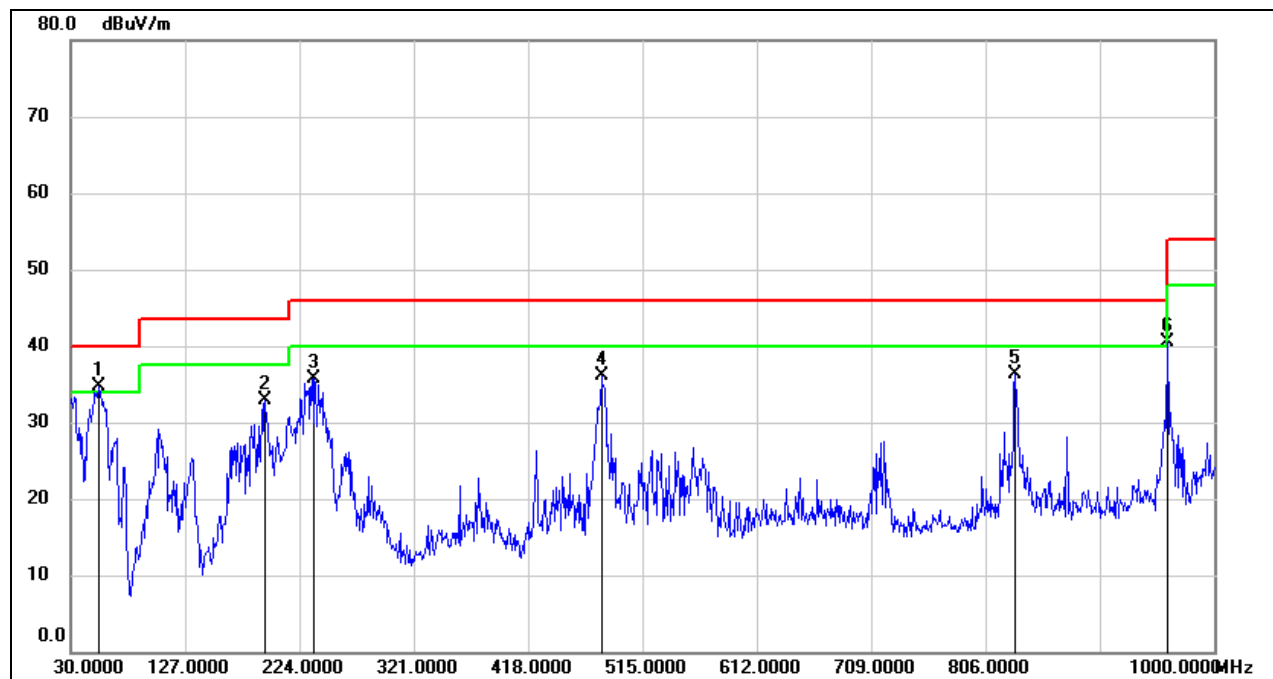


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.1000	55.04	-20.52	34.52	40.00	-5.48	peak
2	108.5700	52.80	-20.53	32.27	43.50	-11.23	peak
3	194.9000	51.62	-16.49	35.13	43.50	-8.37	peak
4	236.6100	54.90	-19.01	35.89	46.00	-10.11	peak
5	480.0800	51.00	-11.79	39.21	46.00	-6.79	peak
6	960.2300	47.13	-4.54	42.59	54.00	-11.41	peak

Note: 1. Result Level = Read Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	53.2800	55.36	-20.66	34.70	40.00	-5.30	peak
2	194.9000	49.48	-16.49	32.99	43.50	-10.51	peak
3	236.6100	54.81	-19.01	35.80	46.00	-10.20	peak
4	480.0800	47.95	-11.79	36.16	46.00	-9.84	peak
5	831.2199	43.03	-6.66	36.37	46.00	-9.63	peak
6	960.2300	45.10	-4.54	40.56	54.00	-13.44	peak

Note: 1. Result Level = Read Level + Correct Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

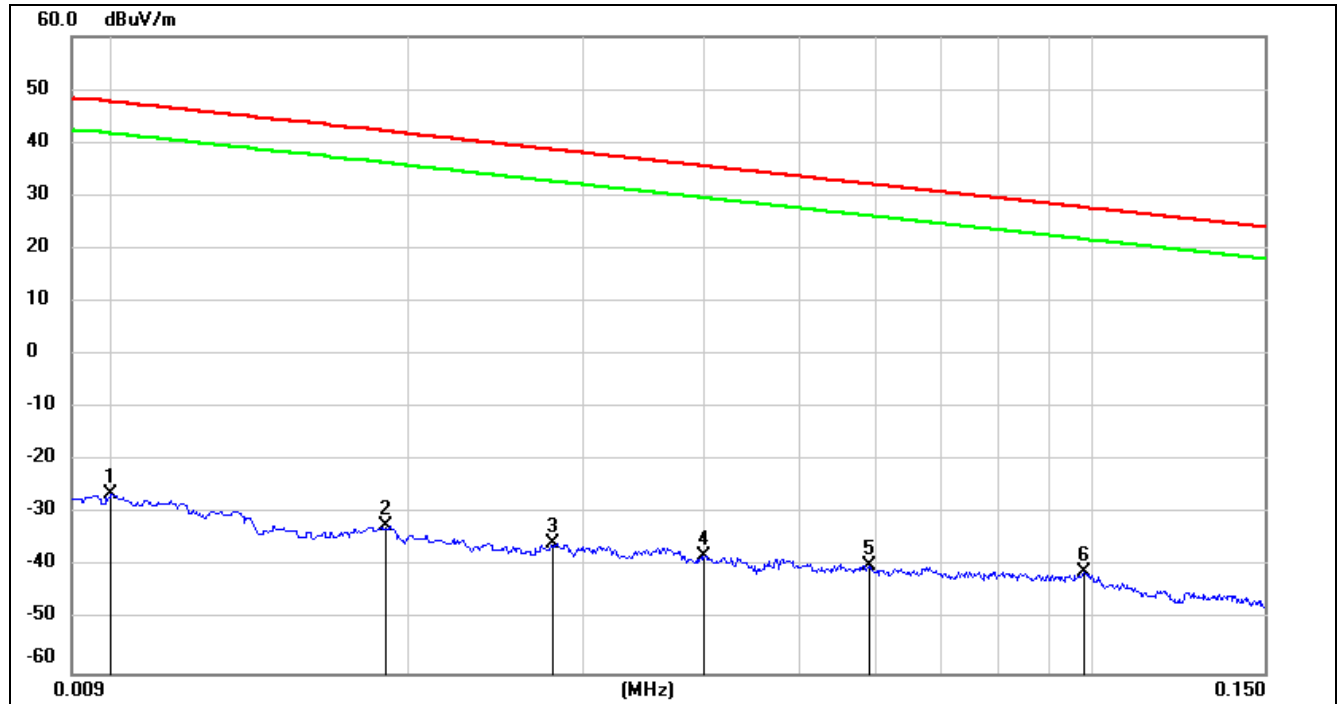
Note: All the modes had been tested, but only the worst data was recorded in the report.

8.7. SPURIOUS EMISSIONS BELOW 30 MHz

8.7.1. 802.11n HT40 MODE

SPURIOUS EMISSIONS (UNII-2A BAND HIGH CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

9 kHz ~ 150 kHz



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	75.22	-101.40	-26.18	47.6	-77.68	-3.90	-73.78	peak
2	0.0189	68.99	-101.35	-32.36	42.07	-83.86	-9.43	-74.43	peak
3	0.0280	65.79	-101.38	-35.59	38.66	-87.09	-12.84	-74.25	peak
4	0.0400	63.48	-101.43	-37.95	35.56	-89.45	-15.94	-73.51	peak
5	0.0589	61.81	-101.52	-39.71	32.2	-91.21	-19.30	-71.91	peak
6	0.0981	60.77	-101.78	-41.01	27.77	-92.51	-23.73	-68.78	peak

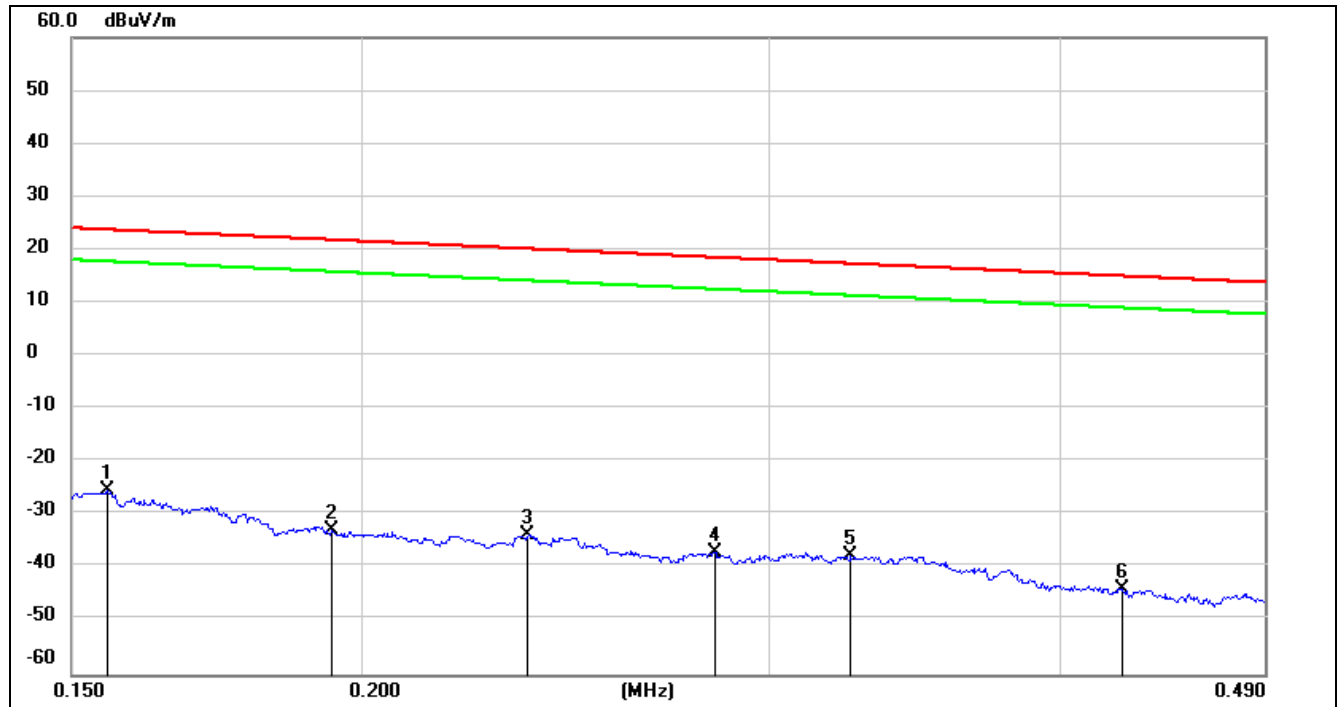
Note: 1. Measurement = Reading Level + Correct Factor.

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.

4. $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}(120\pi) = \text{dBuV/m} - 51.5$.

150 kHz ~ 490 kHz



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	76.27	-101.65	-25.38	23.77	-76.88	-27.73	-49.15	peak
2	0.1942	68.81	-101.70	-32.89	21.84	-84.39	-29.66	-54.73	peak
3	0.2358	67.98	-101.78	-33.8	20.15	-85.30	-31.35	-53.95	peak
4	0.2837	64.72	-101.83	-37.11	18.54	-88.61	-32.96	-55.65	peak
5	0.3251	64.21	-101.88	-37.67	17.36	-89.17	-34.14	-55.03	peak
6	0.4248	58.09	-101.99	-43.9	15.04	-95.40	-36.46	-58.94	peak

Note: 1. Measurement = Reading Level + Correct Factor.

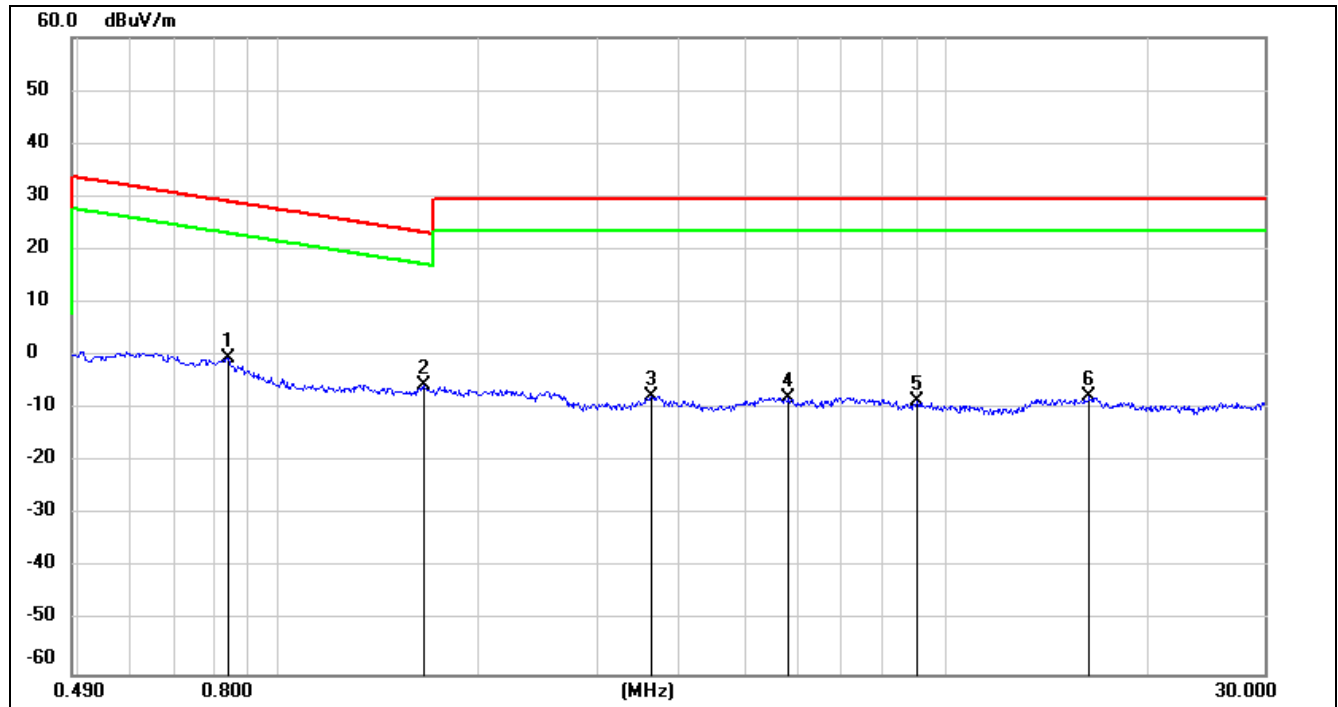
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

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.

4. $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}(120\pi) = \text{dBuV/m} - 51.5$.



490 kHz ~ 30 MHz



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.8400	61.71	-62.17	-0.46	29.12	-51.96	-22.38	-29.58	peak
2	1.6491	56.55	-61.98	-5.43	23.26	-56.93	-28.24	-28.69	peak
3	3.6194	53.78	-61.43	-7.65	29.54	-59.15	-21.96	-37.19	peak
4	5.8311	53.56	-61.37	-7.81	29.54	-59.31	-21.96	-37.35	peak
5	9.0774	52.27	-60.93	-8.66	29.54	-60.16	-21.96	-38.20	peak
6	16.3959	53.17	-60.96	-7.79	29.54	-59.29	-21.96	-37.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

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.

4. $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}(120\pi) = \text{dBuV/m} - 51.5$.

Note: All the modes had been tested, but only the worst data was recorded in the report.

9. AC POWER LINE CONDUCTED EMISSIONS

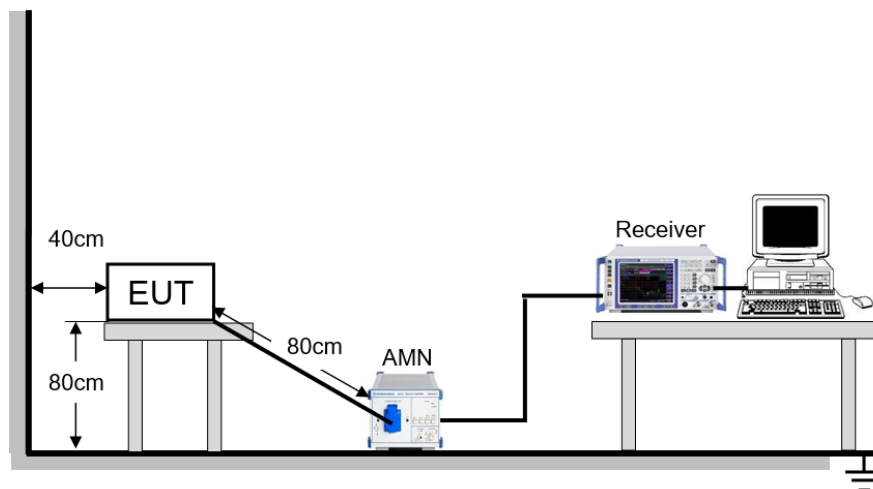
LIMITS

Please refer to CFR 47 FCC §15.207 (a).

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

TEST SETUP AND PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.



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

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

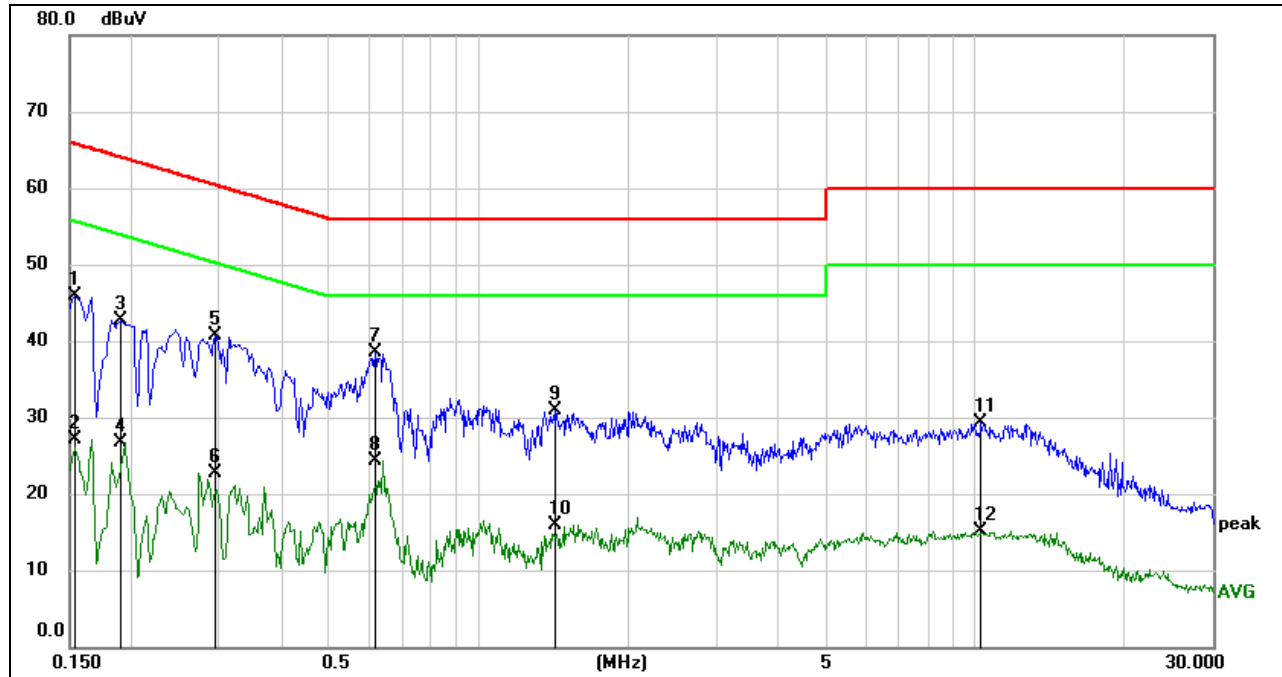
TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	61.2 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/ 60 Hz

RESULTS

9.1.1. 802.11n HT40 MODE

LINE N RESULTS (UNII-2A BAND HIGH CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1539	36.42	9.50	45.92	65.79	-19.87	QP
2	0.1539	17.69	9.50	27.19	55.79	-28.60	AVG
3	0.1900	33.21	9.57	42.78	64.04	-21.26	QP
4	0.1900	17.09	9.57	26.66	54.04	-27.38	AVG
5	0.2938	31.21	9.56	40.77	60.42	-19.65	QP
6	0.2938	13.22	9.56	22.78	50.42	-27.64	AVG
7	0.6179	28.93	9.50	38.43	56.00	-17.57	QP
8	0.6179	14.84	9.50	24.34	46.00	-21.66	AVG
9	1.4258	21.30	9.56	30.86	56.00	-25.14	QP
10	1.4258	6.42	9.56	15.98	46.00	-30.02	AVG
11	10.2659	19.59	9.62	29.21	60.00	-30.79	QP
12	10.2659	5.39	9.62	15.01	50.00	-34.99	AVG

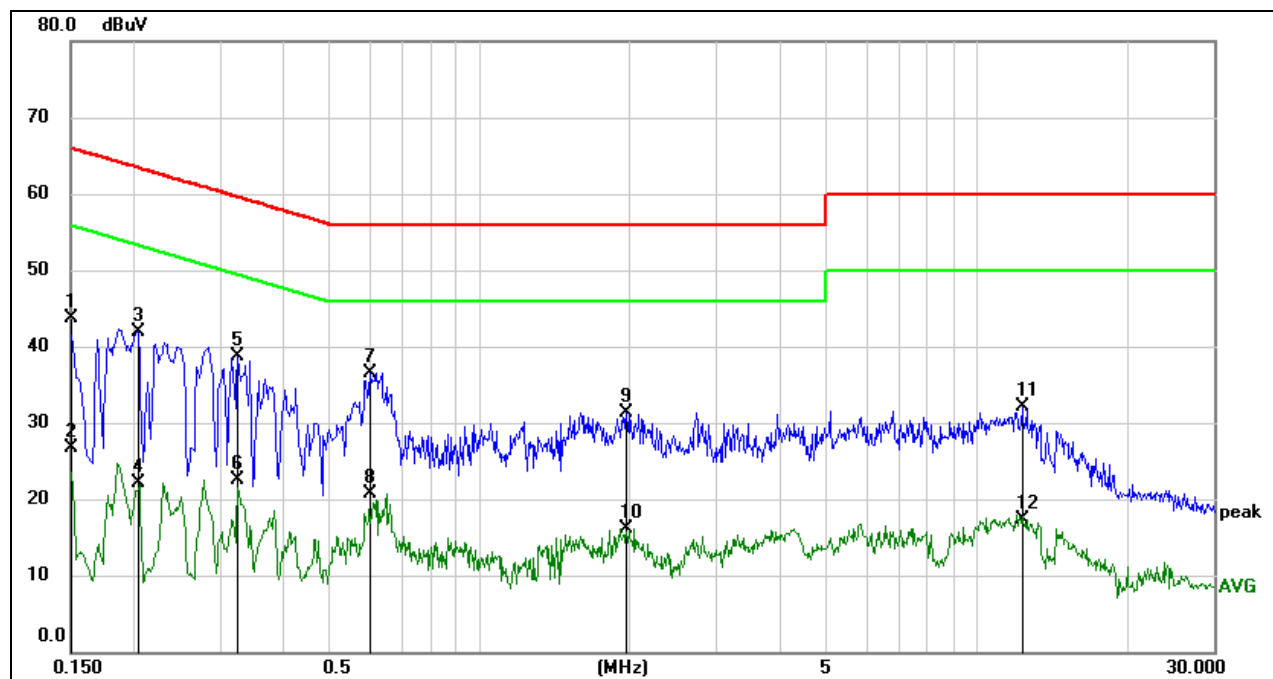
Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

LINE L RESULTS (UNII-2A BAND HIGH CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	34.17	9.49	43.66	66.00	-22.34	QP
2	0.1500	17.26	9.49	26.75	56.00	-29.25	AVG
3	0.2058	32.25	9.59	41.84	63.37	-21.53	QP
4	0.2058	12.60	9.59	22.19	53.37	-31.18	AVG
5	0.3260	29.22	9.55	38.77	59.55	-20.78	QP
6	0.3260	13.01	9.55	22.56	49.55	-26.99	AVG
7	0.6018	26.99	9.50	36.49	56.00	-19.51	QP
8	0.6018	11.29	9.50	20.79	46.00	-25.21	AVG
9	1.9700	21.76	9.63	31.39	56.00	-24.61	QP
10	1.9700	6.51	9.63	16.14	46.00	-29.86	AVG
11	12.3658	22.52	9.66	32.18	60.00	-27.82	QP
12	12.3658	7.57	9.66	17.23	50.00	-32.77	AVG

Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes had been tested, but only the worst data was recorded in the report.

10. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

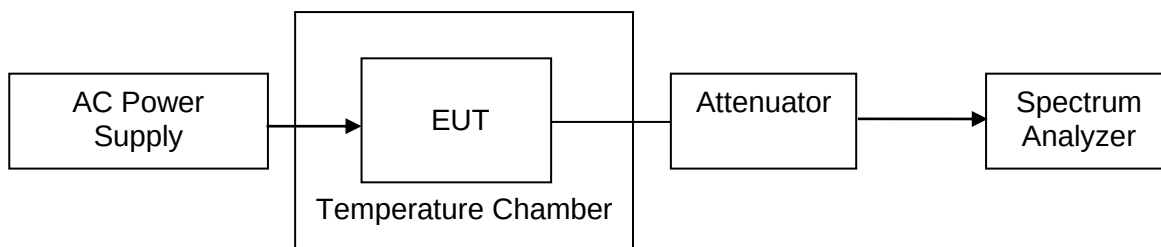
1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -20 °C ~ 55 °C (declared by customer).
2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.
5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST SETUP





TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	/
Atmospheric Pressure	100 kPa ~102 kPa	/
Temperature	T_N (Normal Temperature): 25.1 °C	T_L (Low Temperature): -20 °C
		T_H (High Temperature): 55 °C
Supply Voltage	V_N (Normal Voltage): AC 120 V, 60 Hz	V_L (Low Voltage): AC 102 V
		V_H (High Voltage): AC 138 V

RESULTS

Please refer to Appendix H.

11. DYNAMIC FREQUENCY SELECTION

APPLICABILITY OF DFS REQUIREMENTS

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.

Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	☐ Master	☒ Client Without Radar Detection	☐ Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

LIMITS

(1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

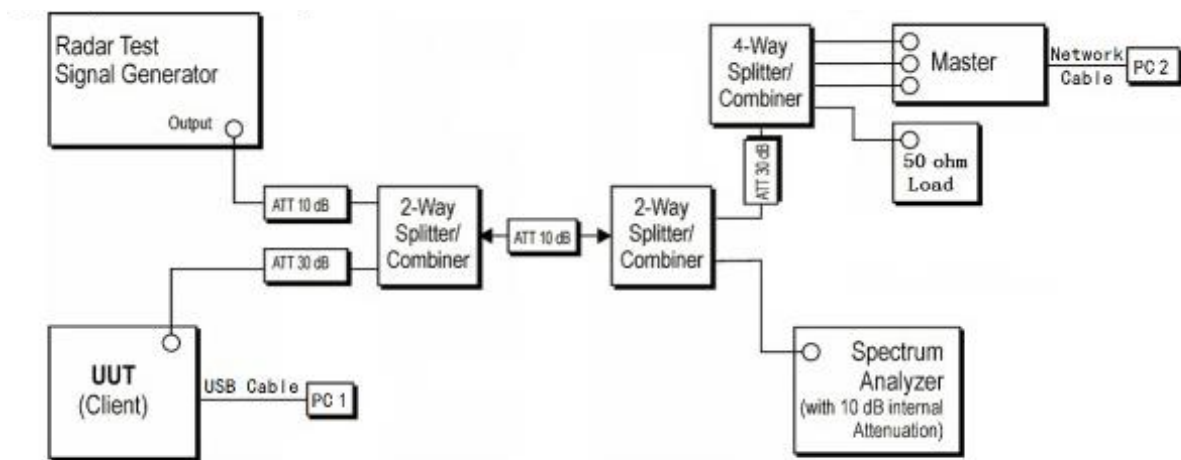
Table 5 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests. Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4.

TEST SETUP

Setup for Client with injection at the Master



TEST ENVIRONMENT

Temperature	25.6 °C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix E & F & G.



12. 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



13. Appendix

13.1. Appendix A1: Emission Bandwidth

13.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	21.52	5169.36	5190.88	PASS
		5200	21.04	5189.52	5210.56	PASS
		5240	21.24	5229.44	5250.68	PASS
		5260	21.44	5249.28	5270.72	PASS
		5280	21.64	5269.28	5290.92	PASS
		5320	21.20	5309.36	5330.56	PASS
		5745	21.40	5734.24	5755.64	PASS
		5785	21.04	5774.36	5795.40	PASS
11N20SISO	Ant1	5825	21.20	5814.32	5835.52	PASS
		5180	21.48	5169.20	5190.68	PASS
		5200	21.44	5189.36	5210.80	PASS
		5240	21.20	5229.52	5250.72	PASS
		5260	21.80	5248.92	5270.72	PASS
		5280	21.48	5269.28	5290.76	PASS
		5320	21.28	5309.36	5330.64	PASS
		5745	21.60	5734.28	5755.88	PASS
11N40SISO	Ant1	5785	21.48	5774.24	5795.72	PASS
		5825	21.52	5814.24	5835.76	PASS
		5190	39.68	5169.84	5214.08	PASS
		5230	39.36	5210.08	5266.32	PASS
		5270	39.76	5247.76	5295.36	PASS
		5310	39.04	5290.00	5334.16	PASS
11AC80SISO	Ant1	5755	39.52	5734.76	5779.16	PASS
		5795	39.44	5774.76	5823.88	PASS
		5210	80.96	5165.36	5251.28	PASS
		5290	82.40	5248.72	5331.12	PASS
		5775	82.88	5733.72	5816.60	PASS

13.1.2. Test Graphs

