



**CFR 47 FCC PART 15 SUBPART E
CERTIFICATION TEST REPORT**

For

Tablet

MODEL NUMBER: VT-TABLET-5082G

FCC ID: 2AAGE5081GB486

REPORT NUMBER: 4789999654.1-4

ISSUE DATE: September 15, 2021

Prepared for

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Prepared by

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	09/15/2021	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB/26dB Bandwidth	FCC 15.407 (a)&(e)	PASS
2	99% Occupied Bandwidth	RSS-Gen Clause 6.7	PASS
3	Conducted Output Power	FCC 15.407 (a)	PASS
4	Power Spectral Density	FCC 15.407 (a)	PASS
5	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207	PASS
7	Frequency Stability	FCC 15.407 (g)	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 C >when <Accuracy Method> decision rule is applied.			



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

Manufacturer Information

Company Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

EUT Information

EUT Name: Tablet
Model: VT-TABLET-5082G
Brand: VANTRON
Sample Received Date: June 23, 2021
Sample Status: Normal
Sample ID: 4030518
Date of Tested: June 23, 2021~ July 02,2021

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

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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.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>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.</p> <p>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</p> <p>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.</p> <p>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</p>
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 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 26 GHz)	5.78 dB (1 GHz ~ 18 GHz)
	5.23 dB (18 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Tablet
Model	VT-TABLET-5082G
Radio Technology	WLAN (IEEE 802.11a20/n HT20/n HT40/ac VHT20/VHT 40/VHT 80)
Operation frequency	UNII-1: 5150 ~ 5250 MHz UNII-3: 5725 ~ 5850 MHz
Modulation	IEEE 802.11a20: 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)
Rated Input	DC 5 V
Li-ion Battery	3.8 V, 8000 mAh, 30.4Wh



5.2. MAXIMUM OUTPUT POWER

UNII-1 BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)	Max Average EIRP (dBm)
a 20	5150 ~ 5250	16.43	18.83
n HT20		18.09	20.49
n HT40		15.97	18.33
ac VHT20		16.39	18.79
ac VHT40		16.06	18.46
ac VHT80		14.93	17.33

UNII-3 BAND

IEEE Std. 802.11	Frequency (MHz)	Max Power (dBm)
a 20	5725 ~ 5850	14.75
n HT20		17.87
n HT40		13.92
ac VHT20		14.61
ac VHT40		13.97
ac VHT80		12.83

5.3. CHANNEL LIST

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

UNII-3 (For Bandwidth = 20 MHz)		UNII-3 (For Bandwidth = 40 MHz)		UNII-3 (For Bandwidth = 80 MHz)	
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-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	UNII1& UNII3	Integral antenna	1.4
2	UNII1& UNII3	Integral antenna	2.4

Note: Directional gain= $10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$ dBi=4.92 dBi.

N_{ANT} : Antenna numbers

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

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 or ANT 2 can be used as transmitting/receiving antenna.
802.11n HT20	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11n HT40	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT20	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT40	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT80	<input checked="" type="checkbox"/> 2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.

Note: 1.For transmit simultaneously, all the modes had been tested, only the worst data for LTE & 2.4G WIFI was recorded in the LTE report.

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

5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worst Case Power Setting Parameter	
Test Software	RFTestTool

UNII-1

Mode	Rate	Channel	Soft set value
			ANT1
11a	6M	36	default
		40	default
		48	default
11n HT20	MCS0	36	default
		40	default
		48	default
11n HT40	MCS0	38	default
		46	default
11ac VHT20	MCS0	36	default
		40	default
		48	default
11ac VHT40	MCS0	38	default
		46	default
11ac VHT80	MCS0	42	default

UNII-3

Mode	Rate	Channel	Soft set value
			ANT1
11a	6M	149	default
		157	default
		165	default
11n HT20	MCS0	149	default
		157	default
		165	default
11n HT20	MCS0	151	default
		159	default
11ac VHT20	MCS0	149	default
		157	default
		165	default
11ac VHT40	MCS0	151	default
		159	default
11ac VHT80	MCS0	155	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:

- IEEE 802.11a / SISO – BPSK / 6 Mbps
- IEEE 802.11n HT20 / MIMO – BPSK / MCS0
- IEEE 802.11n HT40 / MIMO – BPSK / MCS0
- IEEE 802.11ac VHT20 / MIMO – BPSK / MCS0
- IEEE 802.11ac VHT40 / MIMO – BPSK / MCS0
- IEEE 802.11ac VHT80 / MIMO – BPSK / MCS0

For Radiated test of 802.11a the antenna with higher output power was selected to be test.

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

Since 802.11ac VHT20/VHT40 mode are different from 802.11n HT20/HT40 only in control messages, so all the tests (except conducted output power and power spectral density) were performed on the worst case (802.11ac VHT20/802.11ac VHT40) mode between these 4 modes and only the worst data was recorded in this report.

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

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
/	/	/	/	/

I/O CABLES

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

ACCESSORIES

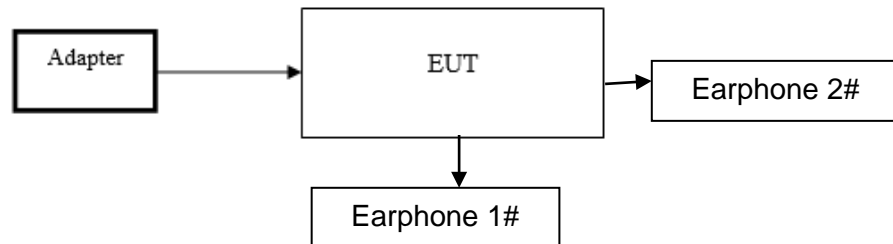
Item	Accessory	Brand Name	Model Name	Description
1	Power adapter	HUAWEI	HW-100225C00	5V2A
2	Earphone 1#	/	/	/
3	Earphone 2#	/	/	/
4	TF Card	/	/	/

TEST SETUP

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

SETUP DIAGRAM FOR TESTS

For Conducted Emission Test for AC Power Port test:



**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	Nov. 12, 2020	Nov. 11, 2021
Two-Line V-Network	R&S	ENV216	101983	Nov. 12, 2020	Nov. 11, 2021
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	Nov. 12, 2020	Nov. 11, 2021
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Aug. 11, 2018	Aug. 10, 2021
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021
Horn Antenna	TDK	HRN-0118	130939	Sept. 17, 2018	Sept. 17, 2021
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Nov. 20, 2020	Nov. 19, 2021
Horn Antenna	Schwarzbeck	BBHA9170	#691	Aug. 11, 2018	Aug. 11, 2021
Preamplifier	TDK	PA-02-2	TRS-307-00003	Nov. 12, 2020	Nov. 11, 2021
Preamplifier	TDK	PA-02-3	TRS-308-00002	Nov. 12, 2020	Nov. 11, 2021
Loop antenna	Schwarzbeck	1519B	00008	Jan.17, 2019	Jan.17,2022
Preamplifier	TDK	PA-02-001-3000	TRS-302-00050	Nov. 12, 2020	Nov. 11, 2021
Preamplifier	Mini-Circuits	ZX60-83LN-S+	SUP01201941	Nov. 20, 2020	Nov. 19, 2021
Highpass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	4	Nov. 12, 2020	Nov. 11, 2021
Band Reject Filter	Wainwright	WRCJV12-5695-5725-5850-5880-40SS	4	Nov. 12, 2020	Nov. 11, 2021
Band Reject Filter	Wainwright	WRCJV20-5120-5150-5350-5380-60SS	2	Nov. 12, 2020	Nov. 11, 2021



Band Reject Filter	Wainwright	WRCJV20-5440-5470-5725-5755-60SS	1	Nov. 12, 2020	Nov. 11, 2021
Software					
Description		Manufacturer		Name	Version
Test Software for Radiated Emissions		Farad		EZ-EMC	Ver. UL-3A1
Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wideband Radio Communication Tester	R&S	CMW500	155523	Nov.20,2020	Nov.19,2021
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Nov.20,2020	Nov.19,2021
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Nov.20,2020	Nov.19,2021
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Nov.20,2020	Nov.19,2021
DC power supply	Keysight	E3642A	MY55159130	Nov.24,2020	Nov.23,2021
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Nov.20,2020	Nov.19,2021
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	Nov. 20, 2020	Nov. 19, 2021
Power Sensor	Keysight	USB Wideband Power Sensor	MY5100022	Nov. 20, 2020	Nov. 19, 2021

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

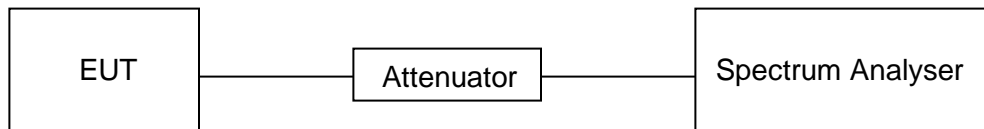
None; for reporting purposes only.

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	24.5 °C	Relative Humidity	69.5 %
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) 5470 ~ 5600 (For ISED) 5650 ~ 5725 (For ISED)
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 (For ISED)

TEST PROCEDURE

ISED RSS-247 6.2.1.2 clause unwanted emission limits

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. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz.

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.

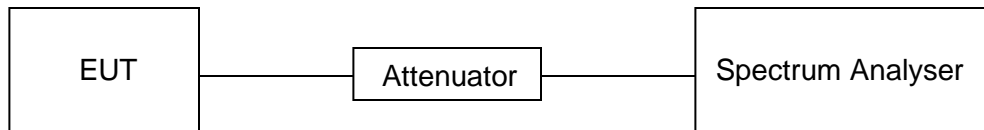
Connect the EUT to the spectrum analyser and use the following settings:

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: $> 3 \times \text{RBW}$ For 99 % Bandwidth: $> 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) 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.

TEST SETUP



TEST ENVIRONMENT

Temperature	24.5 °C	Relative Humidity	69.5 %
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	<input type="checkbox"/> Outdoor Access Point: 1 W (30 dBm) <input type="checkbox"/> Indoor Access Point: 1 W (30 dBm) <input type="checkbox"/> Fixed Point-To-Point Access Points: 1 W (30 dBm) <input checked="" type="checkbox"/> 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 $\geq 2 \times$ span / RBW. (This ensures that bin-to-bin spacing is \leq 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):

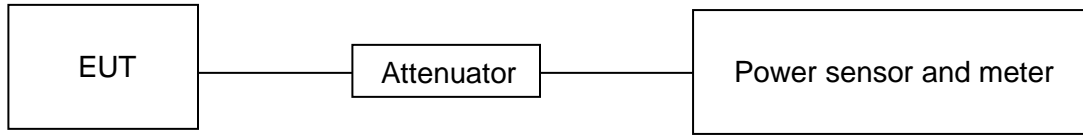
- (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - a. The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - b. At all times when the EUT is transmitting, 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.



TEST SETUP



TEST ENVIRONMENT

Temperature	24.5 °C	Relative Humidity	69.5 %
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	<input type="checkbox"/> Outdoor Access Point: 17 dBm/MHz <input type="checkbox"/> Indoor Access Point: 17 dBm/MHz <input type="checkbox"/> Fixed Point-To-Point Access Points: 17 dBm/MHz <input checked="" type="checkbox"/> 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	Max hold
Sweep time	Auto

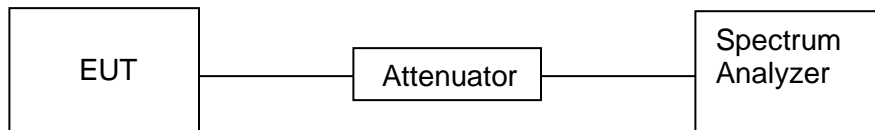
For U-NII-3:

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	Max hold
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	24.5 °C	Relative Humidity	69.5 %
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
1.705-30.0	30	30



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

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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.

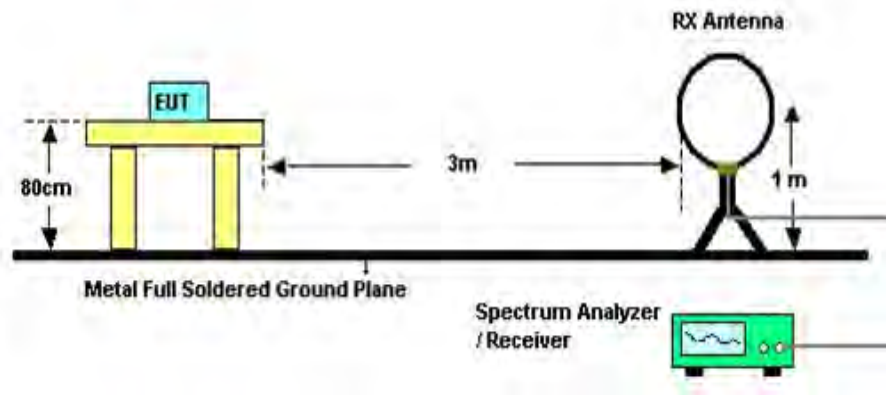
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*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

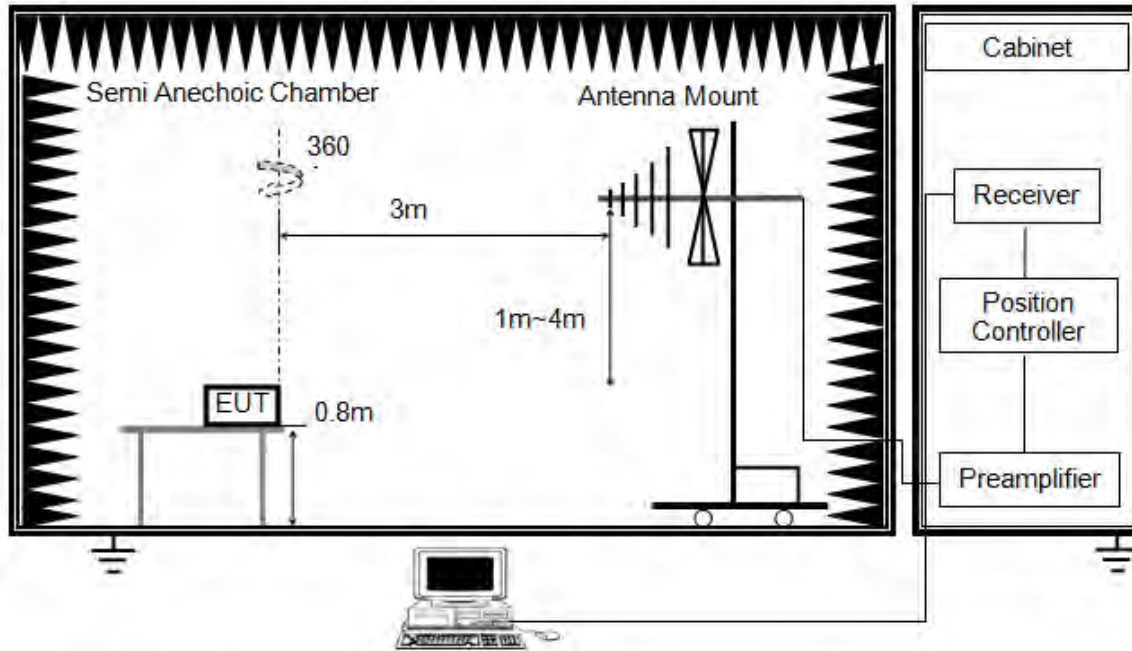


The setting of the spectrum analyser

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

Below 1 GHz and above 30 MHz

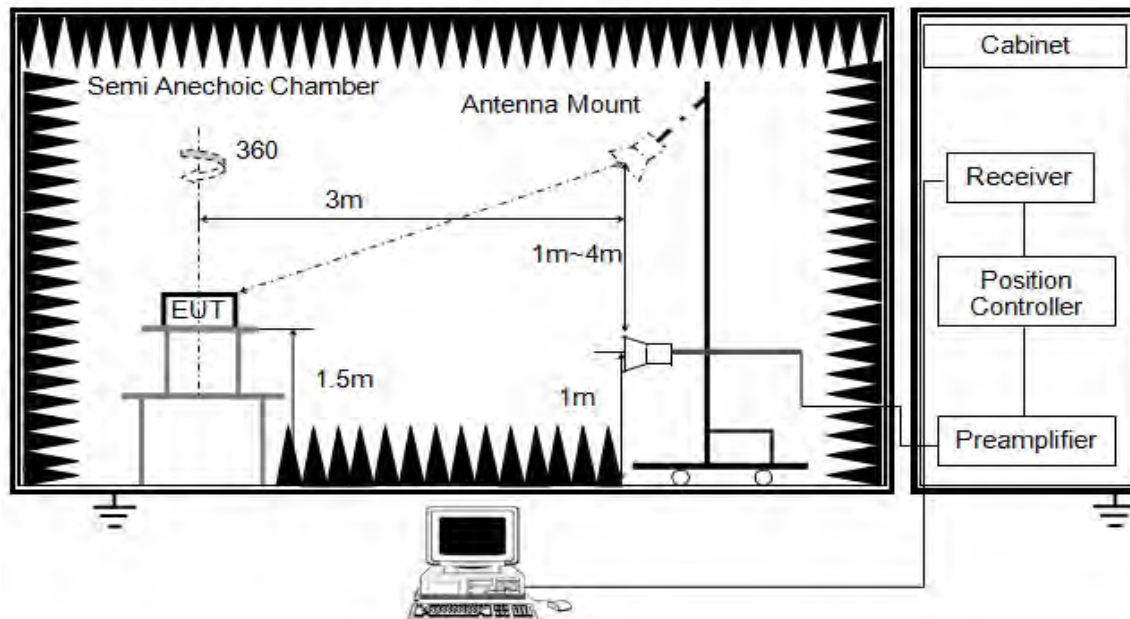


The setting of the spectrum analyser

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

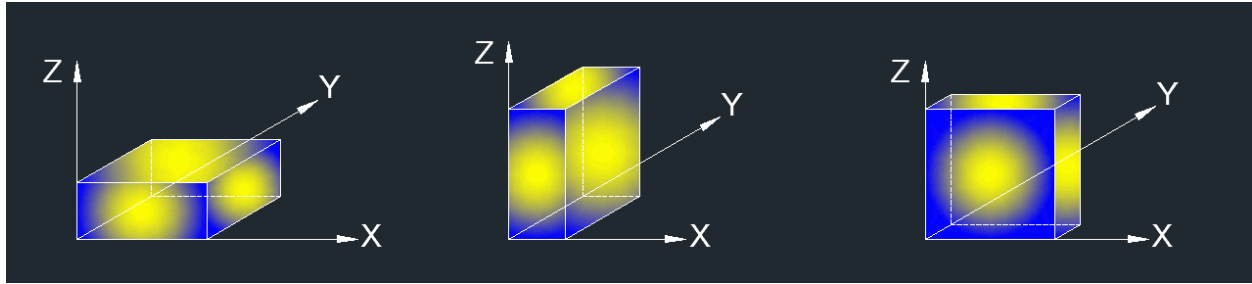


The setting of the spectrum analyser

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 (1-4 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.

Note 3: 1.For transmit simultaneously, all the modes had been tested, only the worst data for LTE & 2.4G WIFI was recorded in the LTE report.

TEST ENVIRONMENT

Temperature	24.4 °C	Relative Humidity	49.2 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS



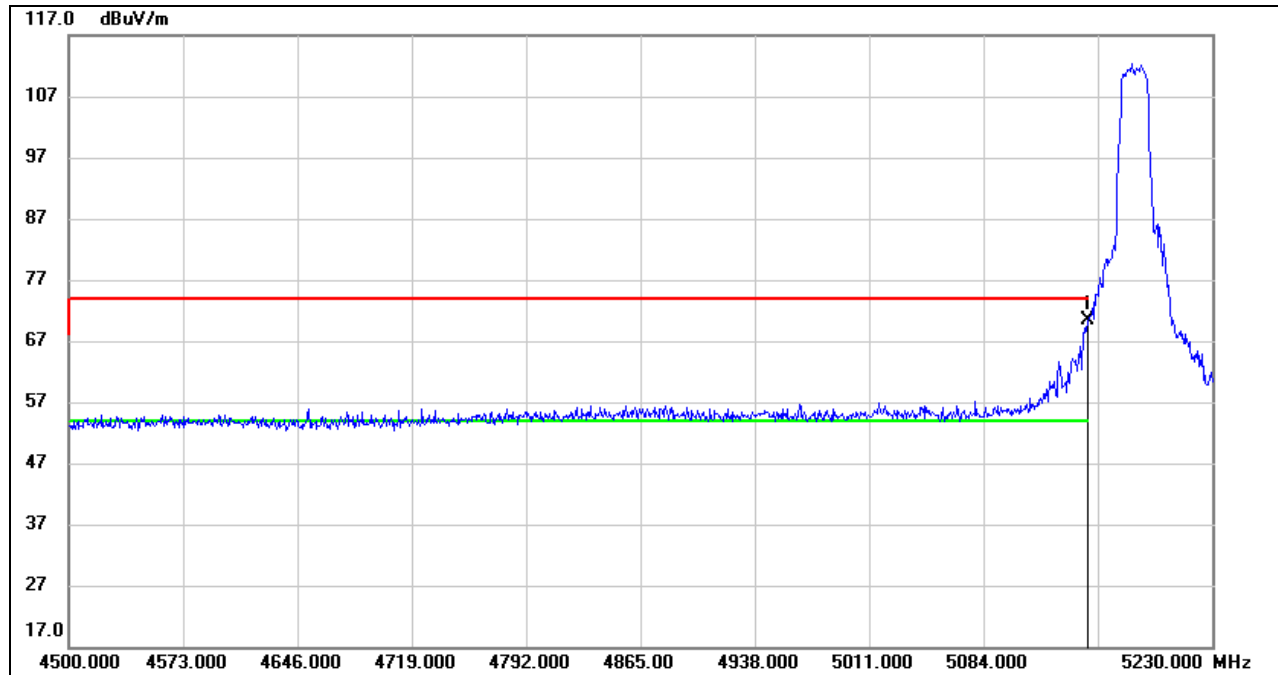
8.1. RESTRICTED BANDEDGE

8.1.1. 802.11a SISO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

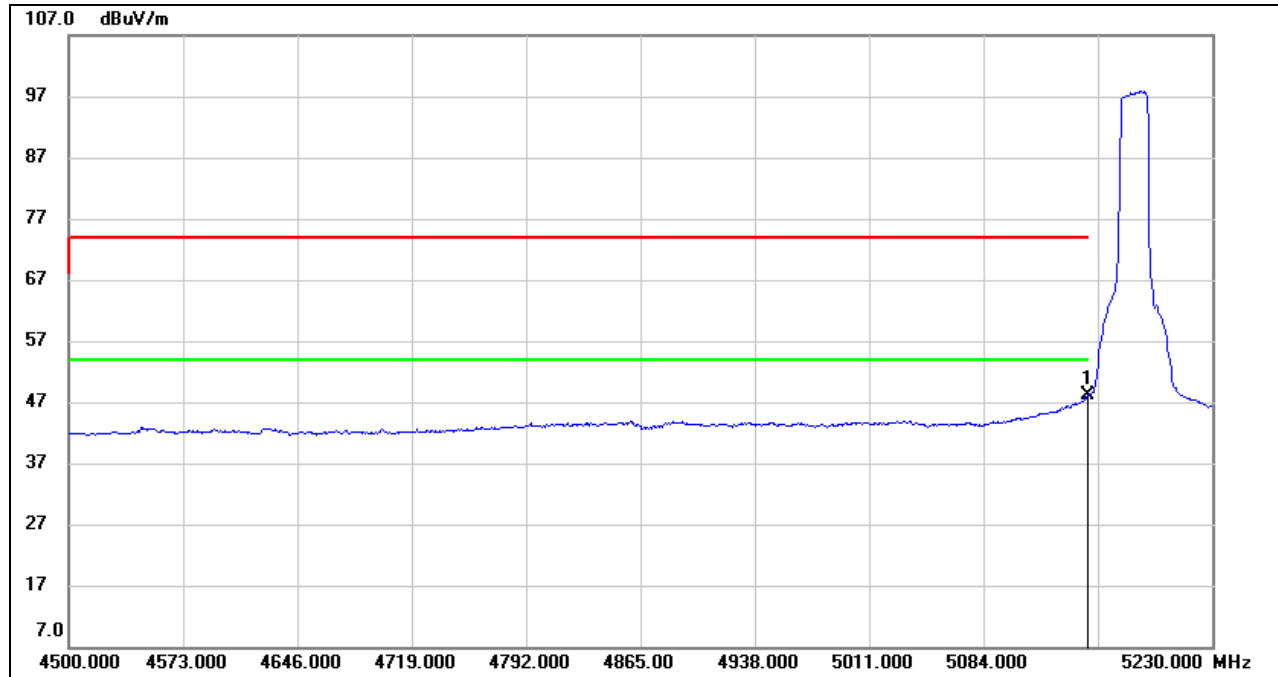


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	29.19	41.19	70.38	74.00	-3.62	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.



AVG

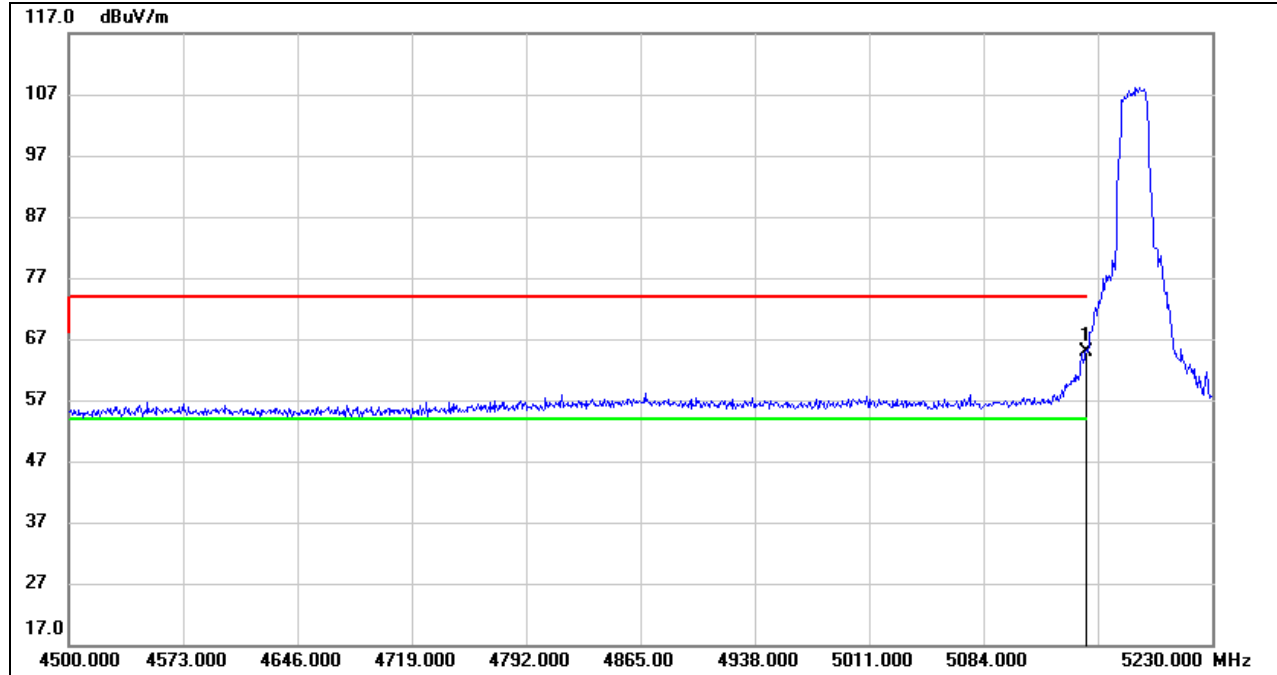


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	6.98	41.19	48.17	54.00	-5.83	AVG

- 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.

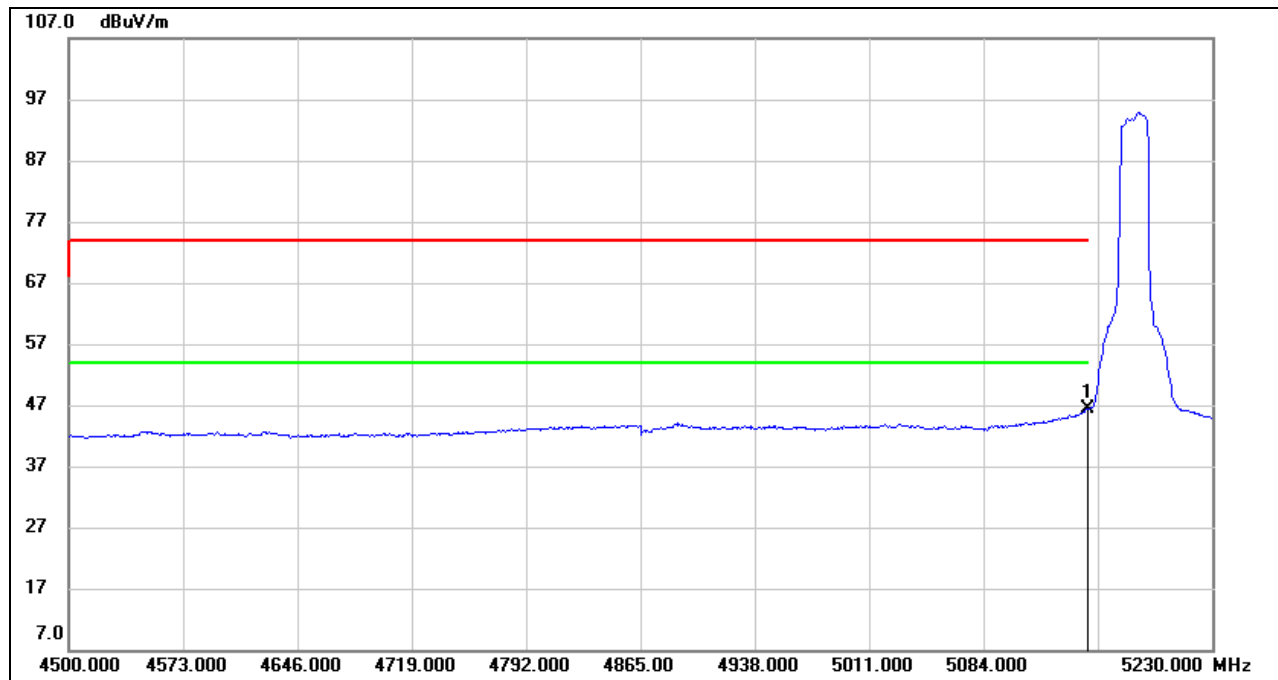
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK



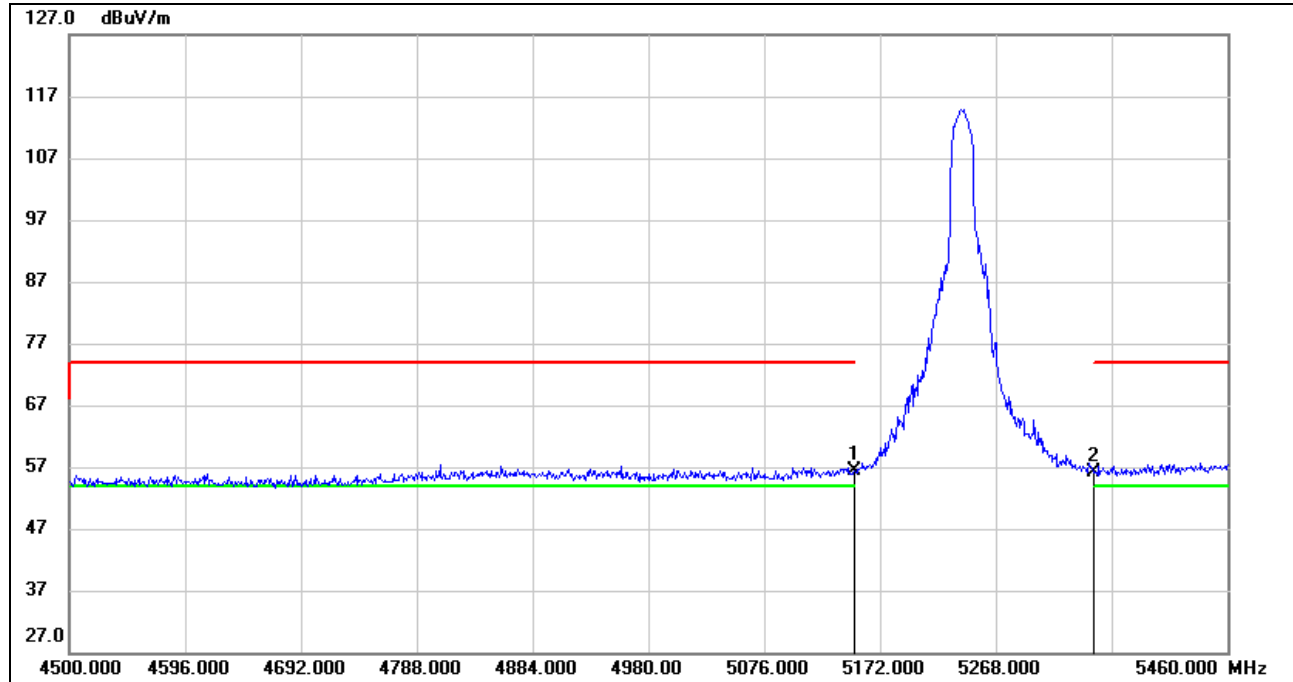
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	23.69	41.19	64.88	74.00	-9.12	peak

- 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. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

**AVG**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	5.09	41.19	46.28	54.00	-7.72	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	16.57	39.91	56.48	74.00	-17.52	peak
2	5350.000	15.93	40.08	56.01	74.00	-17.99	peak

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

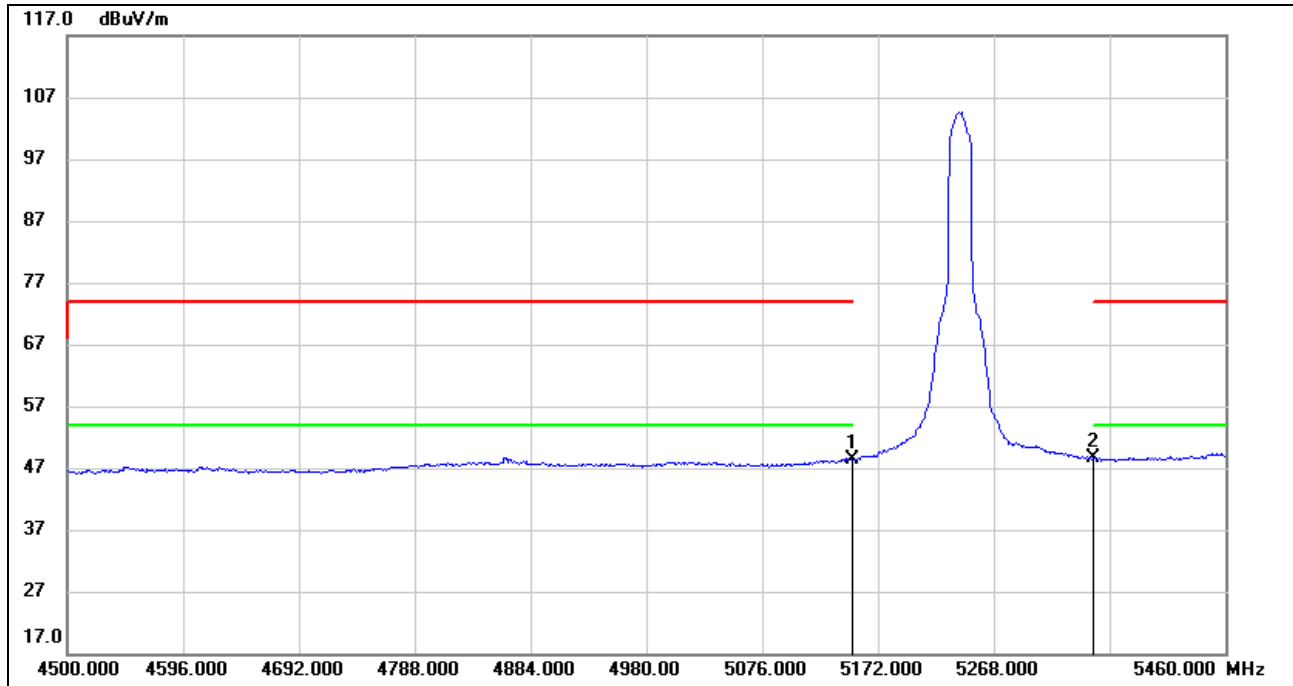
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

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

5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	8.57	39.91	48.48	54.00	-5.52	AVG
2	5350.000	8.64	40.08	48.72	54.00	-5.28	AVG

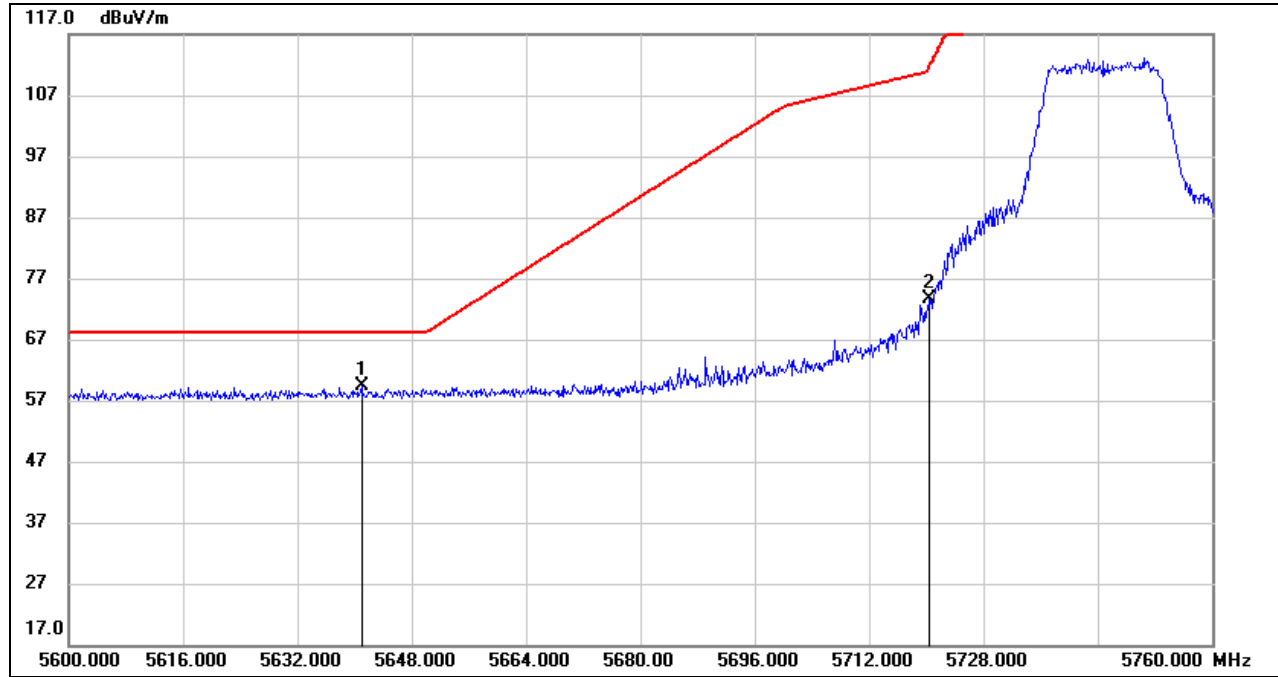
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 4. For the transmitting duration, please refer to clause 7.1.
 5. Only the worst data was recorded,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

Note: All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

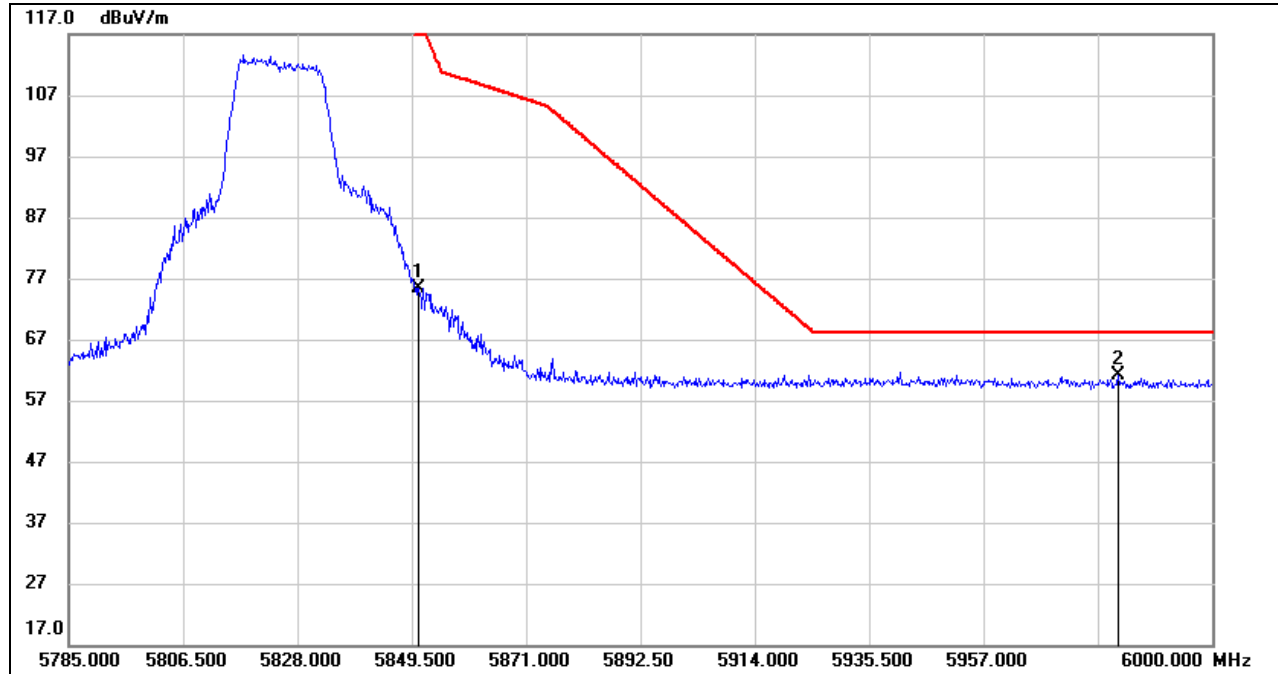


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5640.960	17.78	41.66	59.44	68.20	-8.76	peak
2	5720.480	32.01	41.64	73.65	111.89	-38.24	peak

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. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

PEAK

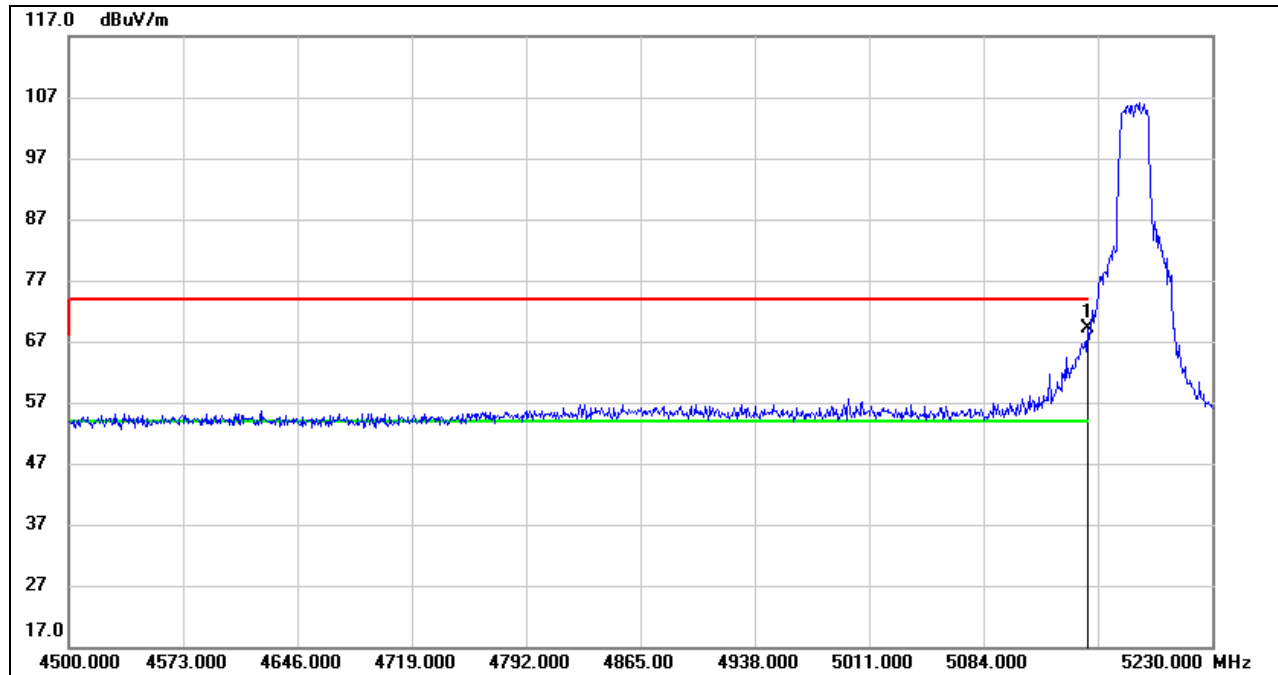


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.790	32.96	42.53	75.49	120.40	-44.91	peak
2	5982.370	18.58	42.64	61.22	68.20	-6.98	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.



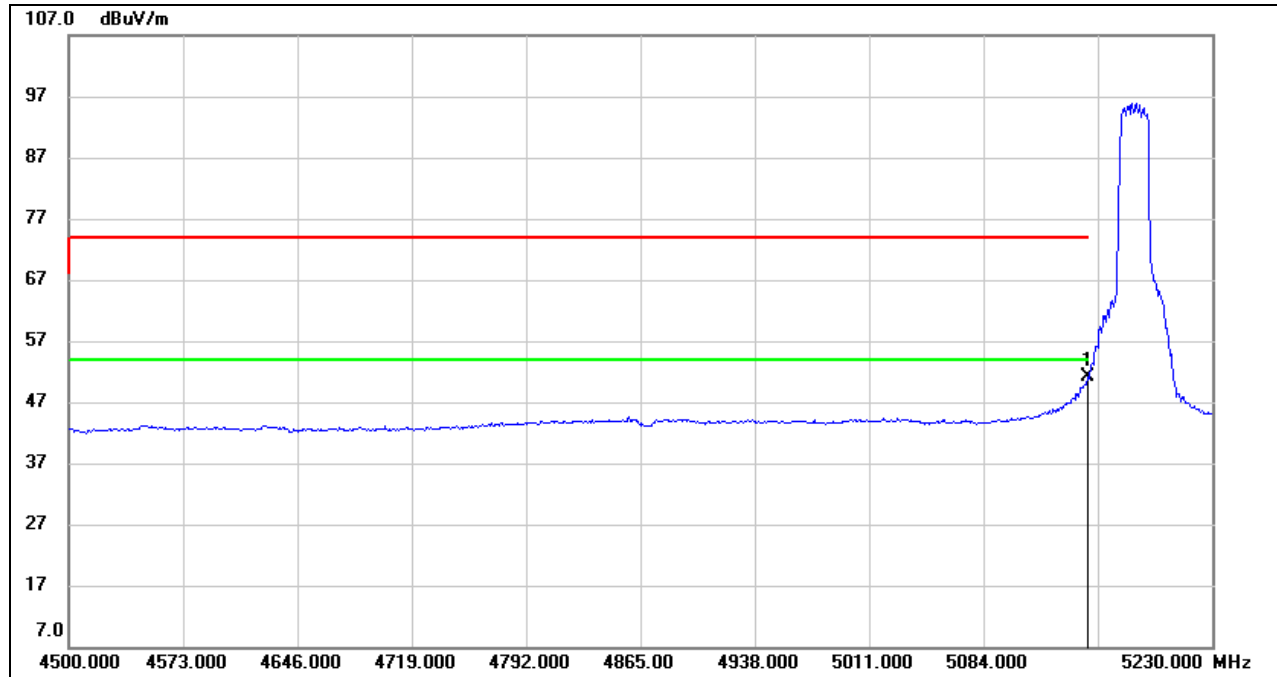
8.1.2. 802.11n HT20 MIMO MODE

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	27.87	41.19	69.06	74.00	-4.94	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

AVG



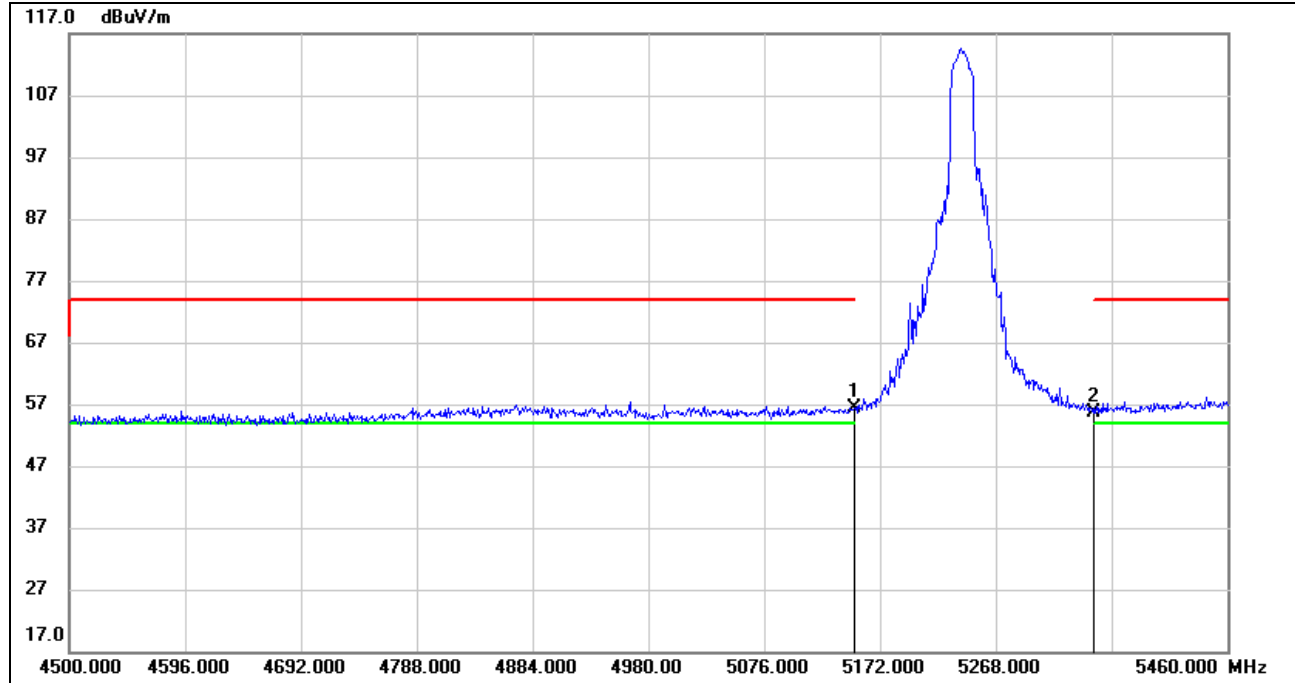
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	9.93	41.19	51.12	54.00	-2.88	AVG

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. 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

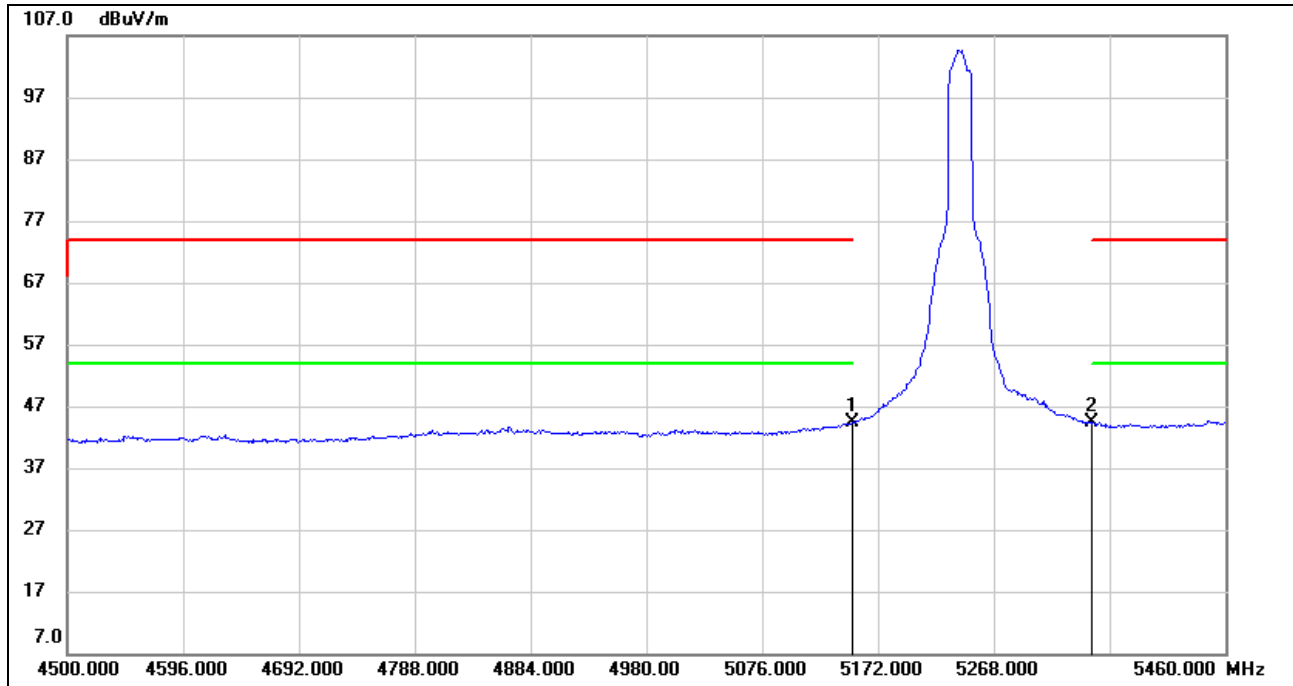


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	16.38	39.91	56.29	74.00	-17.71	peak
2	5350.000	15.52	40.08	55.60	74.00	-18.40	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	4.38	39.91	44.29	54.00	-9.71	AVG
2	5350.000	4.19	40.08	44.27	54.00	-9.73	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.

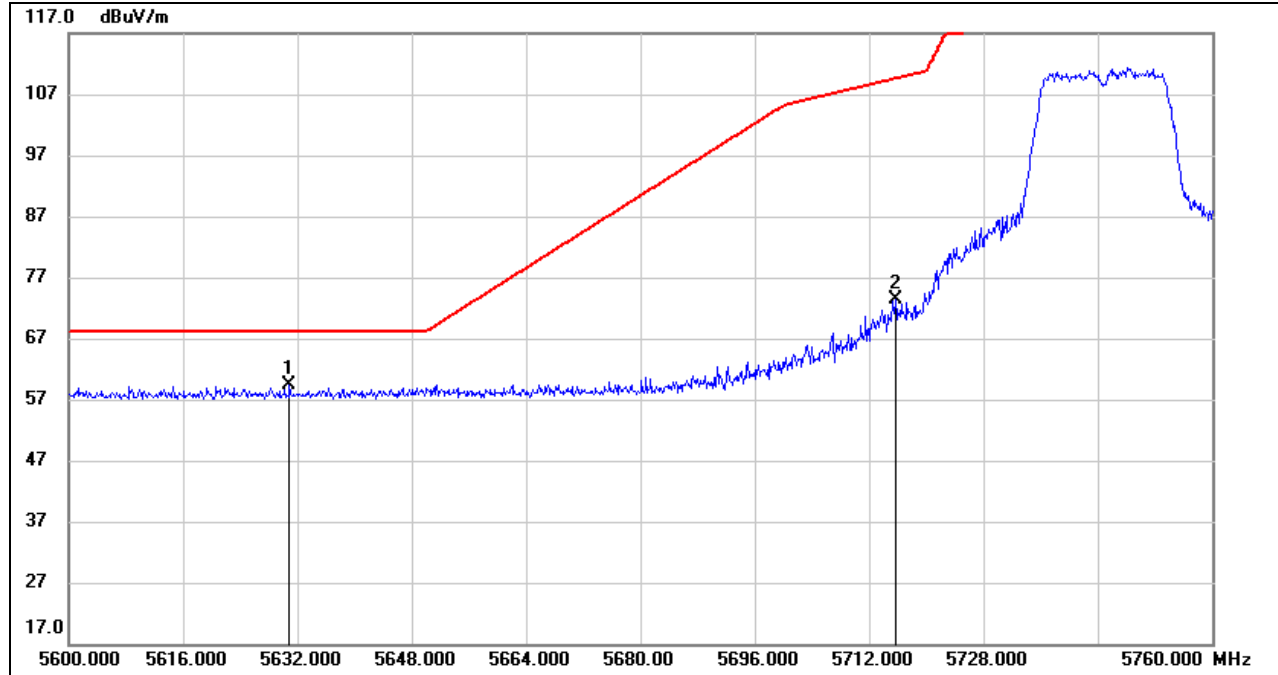
Note: All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.



UNII-3 BAND

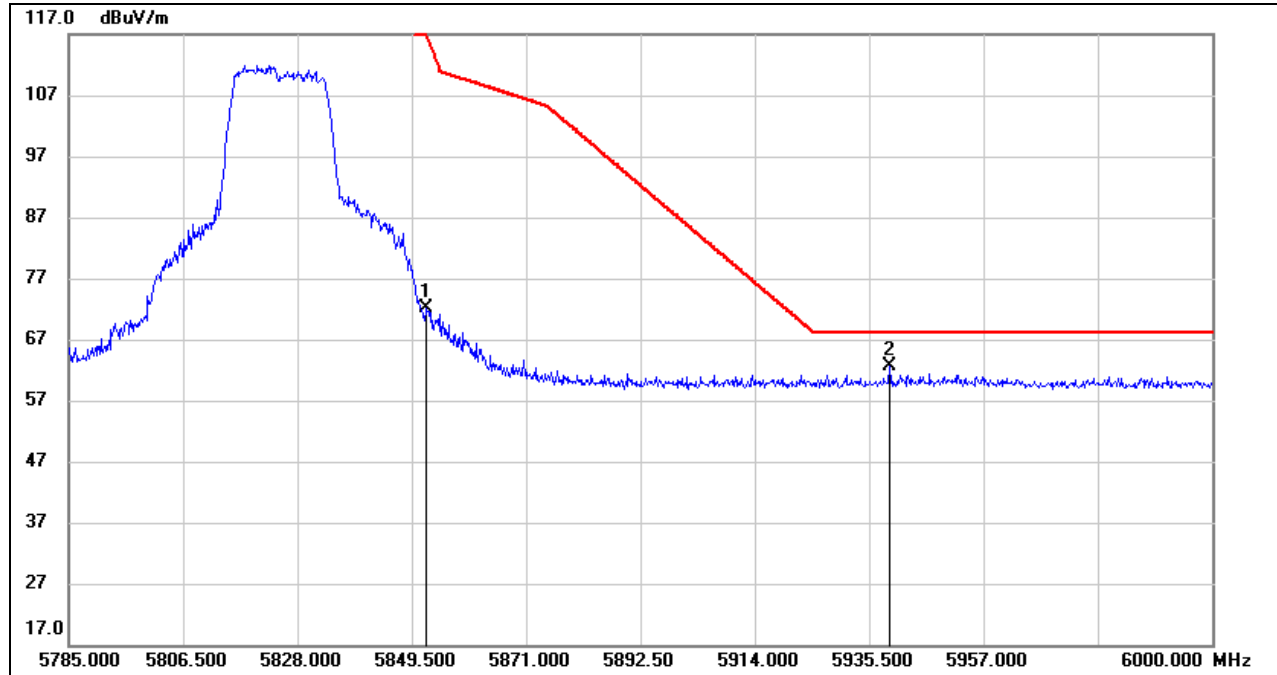
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5630.880	17.74	41.68	59.42	68.20	-8.78	peak
2	5715.680	31.77	41.62	73.39	109.59	-36.20	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

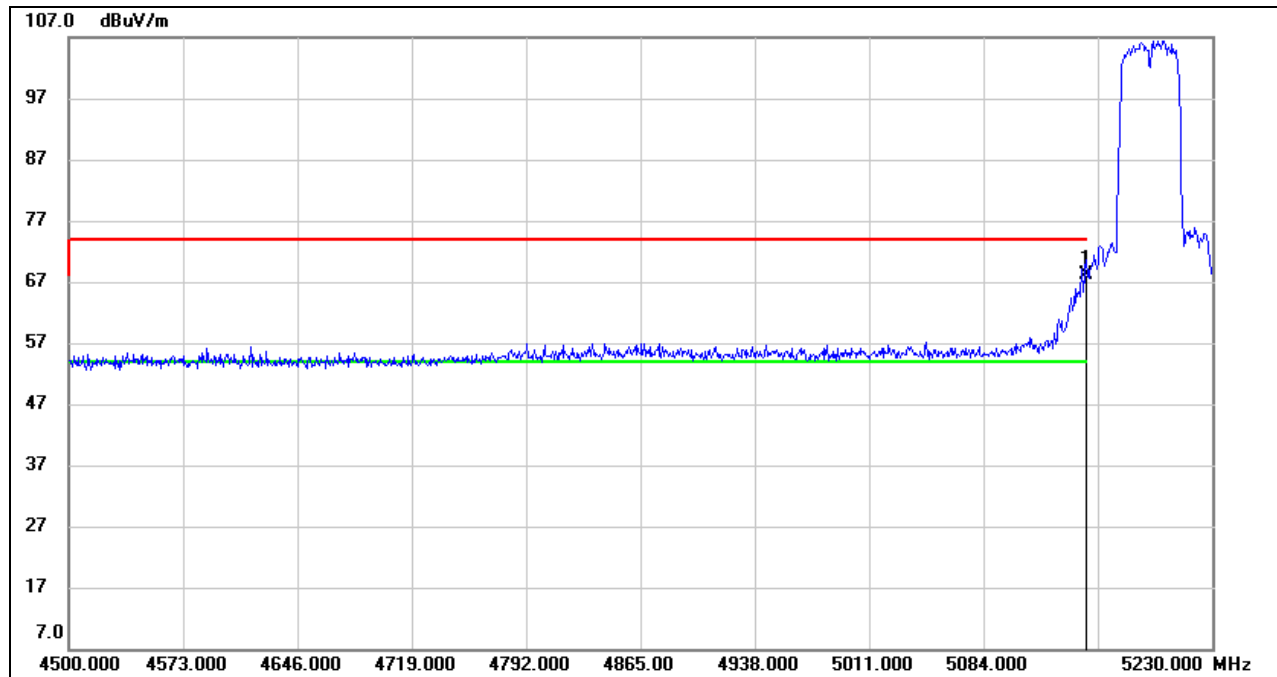
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)****PEAK**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5852.295	29.65	42.55	72.20	116.97	-44.77	peak
2	5939.370	19.84	42.85	62.69	68.20	-5.51	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.



8.1.3. 802.11n HT40 MIMO MODE

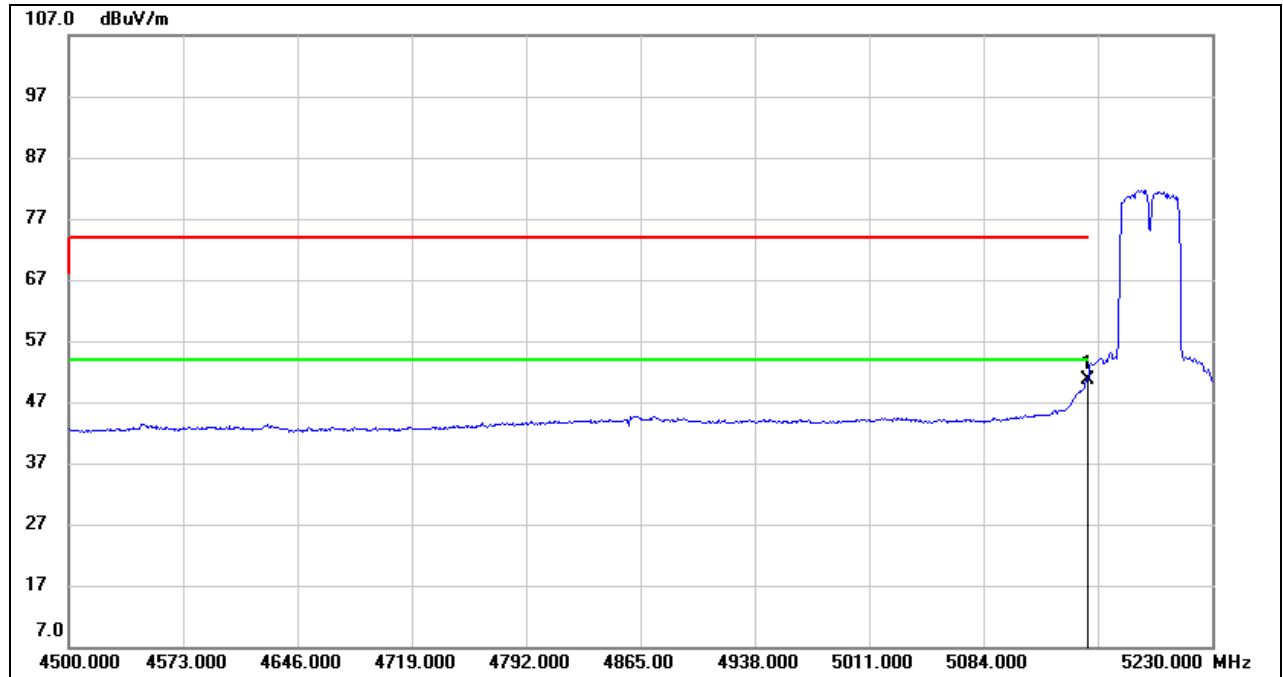
UNII-1 BANDRESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)PEAK

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	26.83	41.19	68.02	74.00	-5.98	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

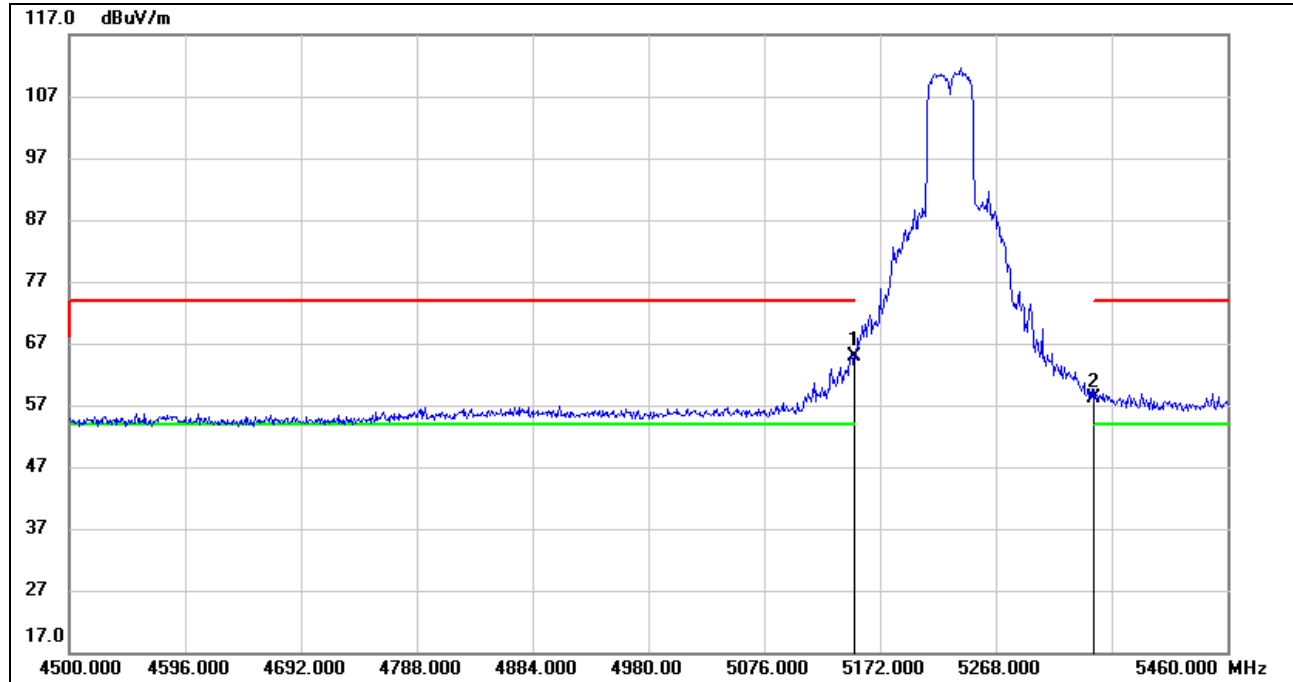


AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	9.50	41.19	50.69	54.00	-3.31	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	25.06	39.91	64.97	74.00	-9.03	peak
2	5350.000	18.06	40.08	58.14	74.00	-15.86	peak

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

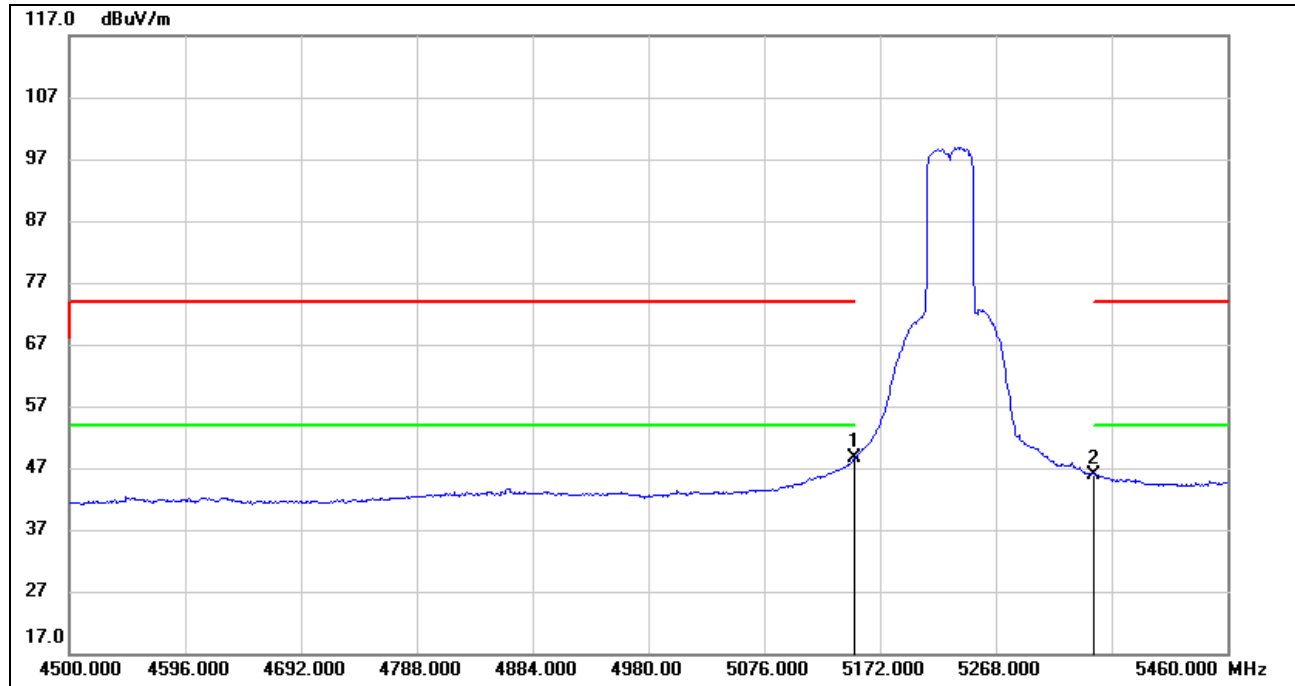
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.

5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

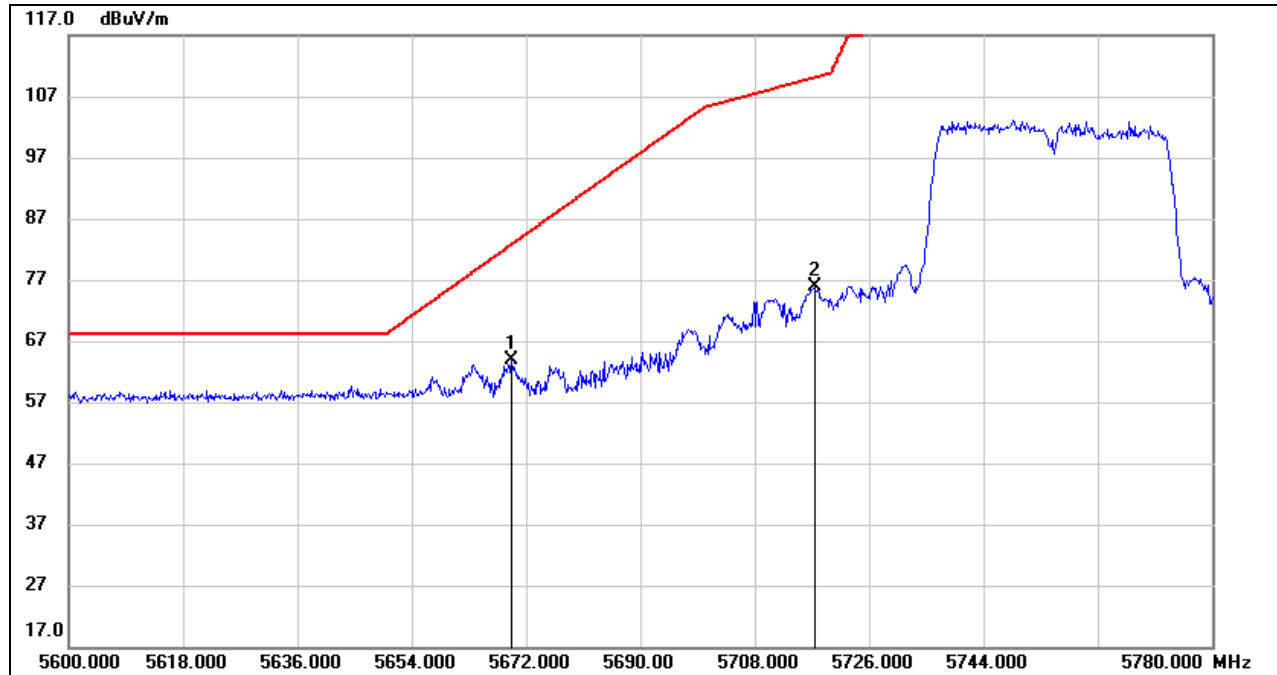
AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	8.61	39.91	48.52	54.00	-5.48	AVG
2	5350.000	5.86	40.08	45.94	54.00	-8.06	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.

Note: All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

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	5669.660	22.16	41.60	63.76	82.79	-19.03	peak
2	5717.360	34.19	41.63	75.82	110.06	-34.24	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.

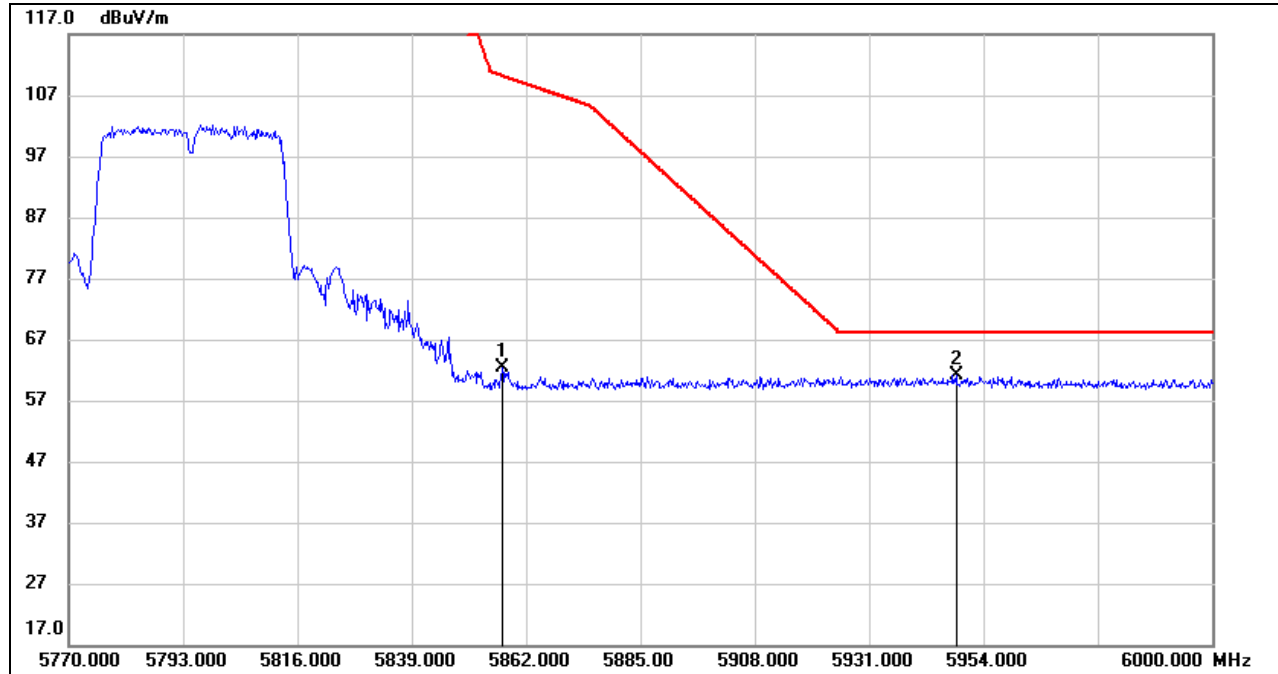
3. Peak: Peak detector.

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

5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5857.170	19.74	42.60	62.34	110.19	-47.85	peak
2	5948.480	18.44	42.80	61.24	68.20	-6.96	peak

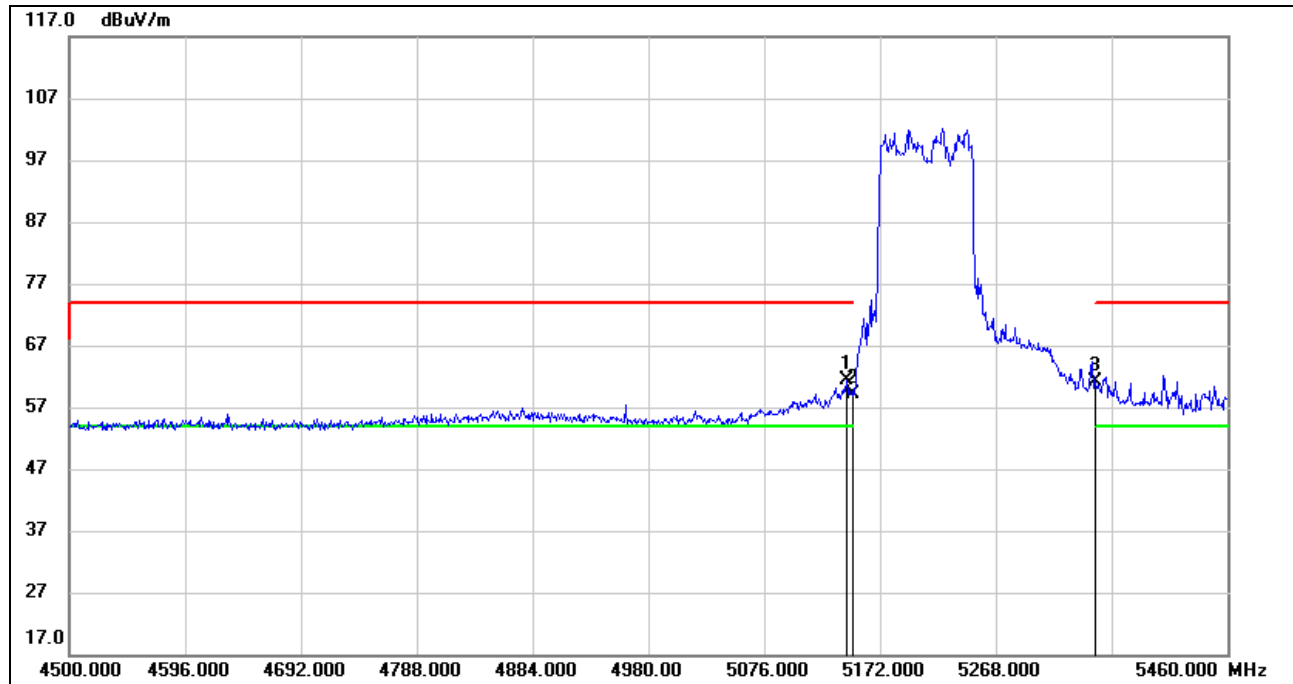
- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

8.1.4. 802.11ac VHT80 MIMO 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	5144.160	21.55	39.85	61.40	74.00	-12.60	peak
2	5150.000	19.19	39.91	59.10	74.00	-14.90	peak
3	5350.000	21.06	40.08	61.14	74.00	-12.86	peak

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

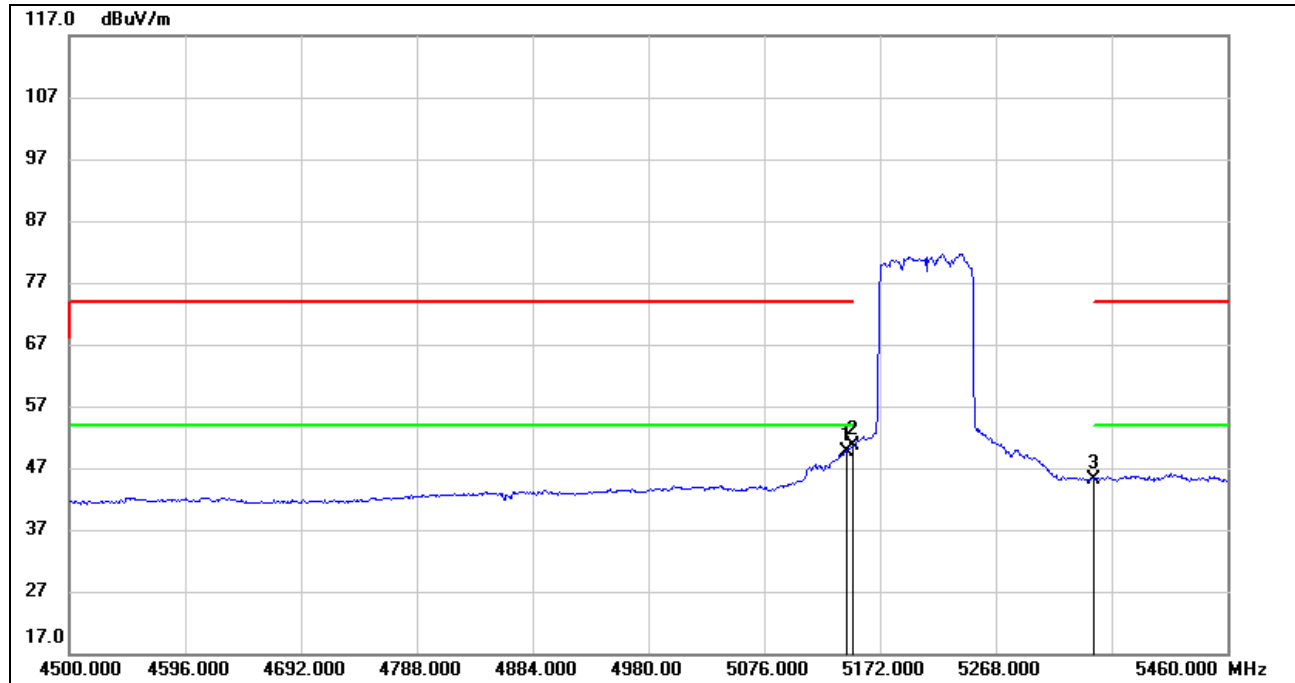
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.

5. All the polarities (vertical and horizontal) had been tested, only the worst data was recorded in the report.

AVG

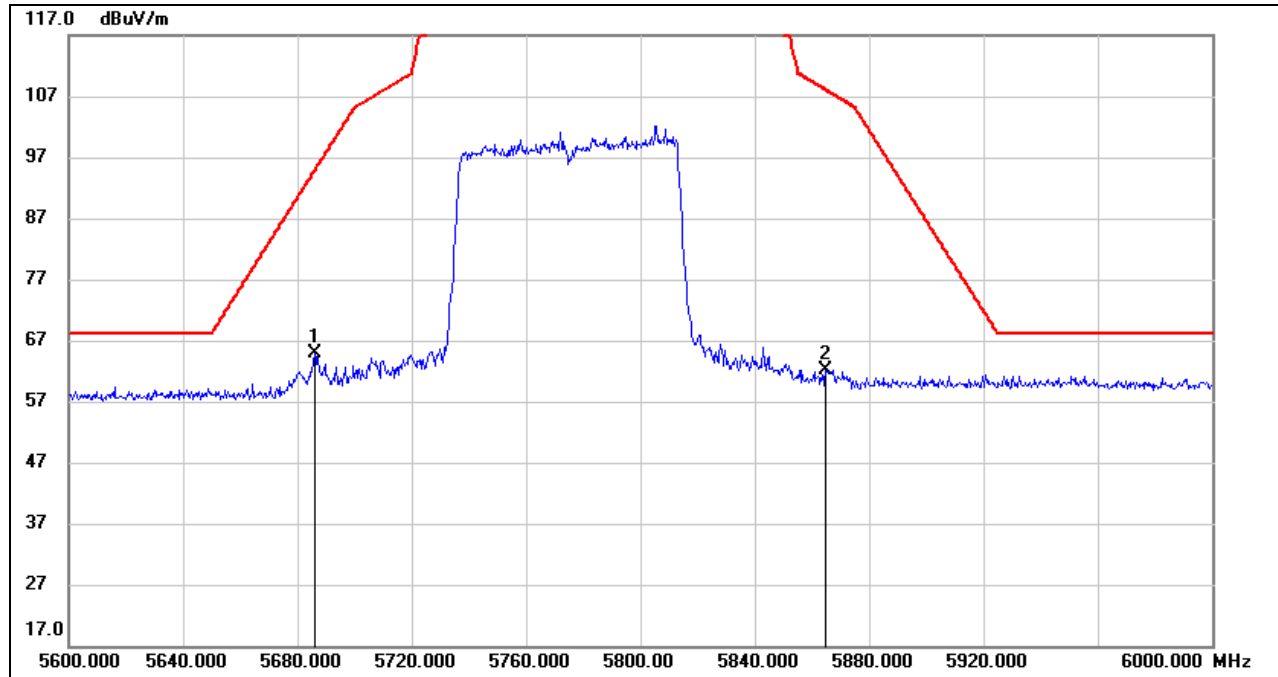


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5144.160	9.90	39.85	49.75	54.00	-4.25	AVG
2	5150.000	10.63	39.91	50.54	54.00	-3.46	AVG
3	5350.000	4.99	40.08	45.07	54.00	-8.93	AVG

- 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)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5686.000	23.29	41.57	64.86	94.87	-30.01	peak
2	5864.800	19.52	42.68	62.20	108.05	-45.85	peak

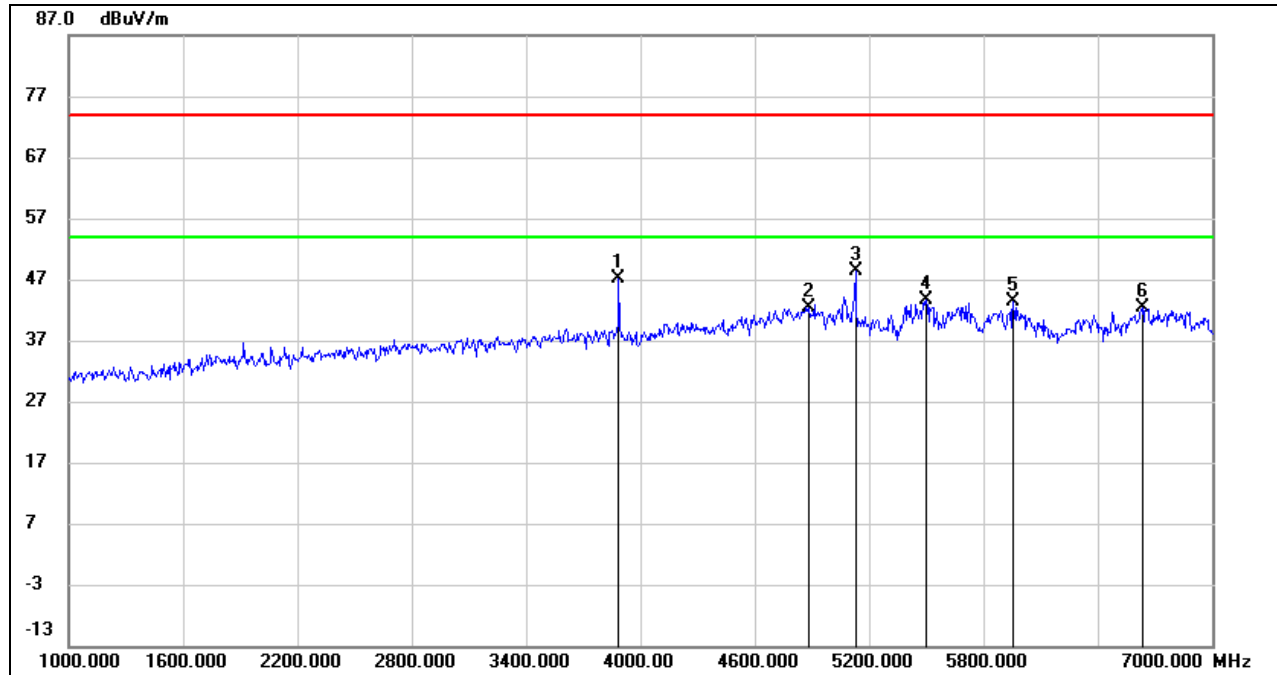
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
 5. All the polarities (vertical and horizontal) 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 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	3886.000	50.46	-3.41	47.05	74.00	-26.95	peak
2	4882.000	41.73	0.72	42.45	74.00	-31.55	peak
3	5128.000	46.81	1.67	48.48	74.00	-25.52	peak
4	5500.000	41.44	2.17	43.61	74.00	-30.39	peak
5	5956.000	40.28	3.13	43.41	74.00	-30.59	peak
6	6634.000	36.97	5.51	42.48	74.00	-31.52	peak

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

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

3. Peak: Peak detector.

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

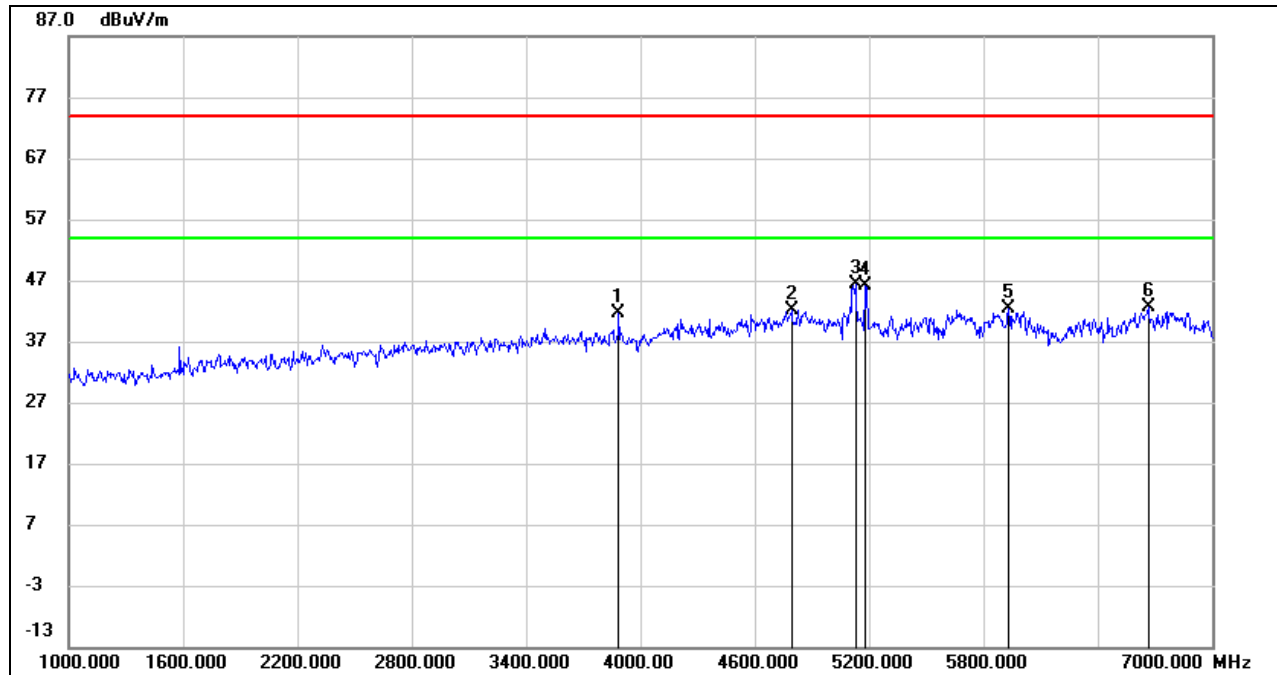
5. For the transmitting duration, please refer to clause 7.1.

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

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	3886.000	45.02	-3.41	41.61	74.00	-32.39	peak
2	4792.000	41.61	0.54	42.15	74.00	-31.85	peak
3	5128.000	44.65	1.67	46.32	74.00	-27.68	peak
4	5182.000	44.23	2.00	46.23	74.00	-27.77	peak
5	5932.000	39.38	3.03	42.41	74.00	-31.59	peak
6	6664.000	36.98	5.53	42.51	74.00	-31.49	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.

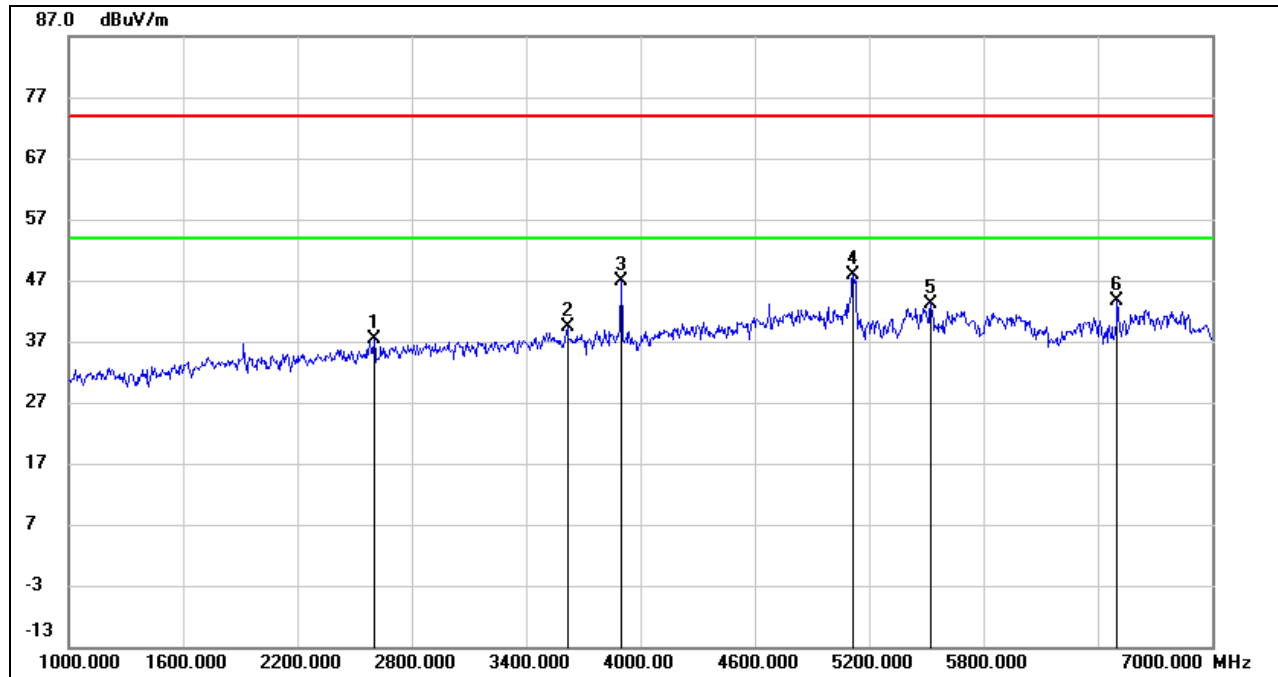
5. For the transmitting duration, please refer to clause 7.1.

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

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

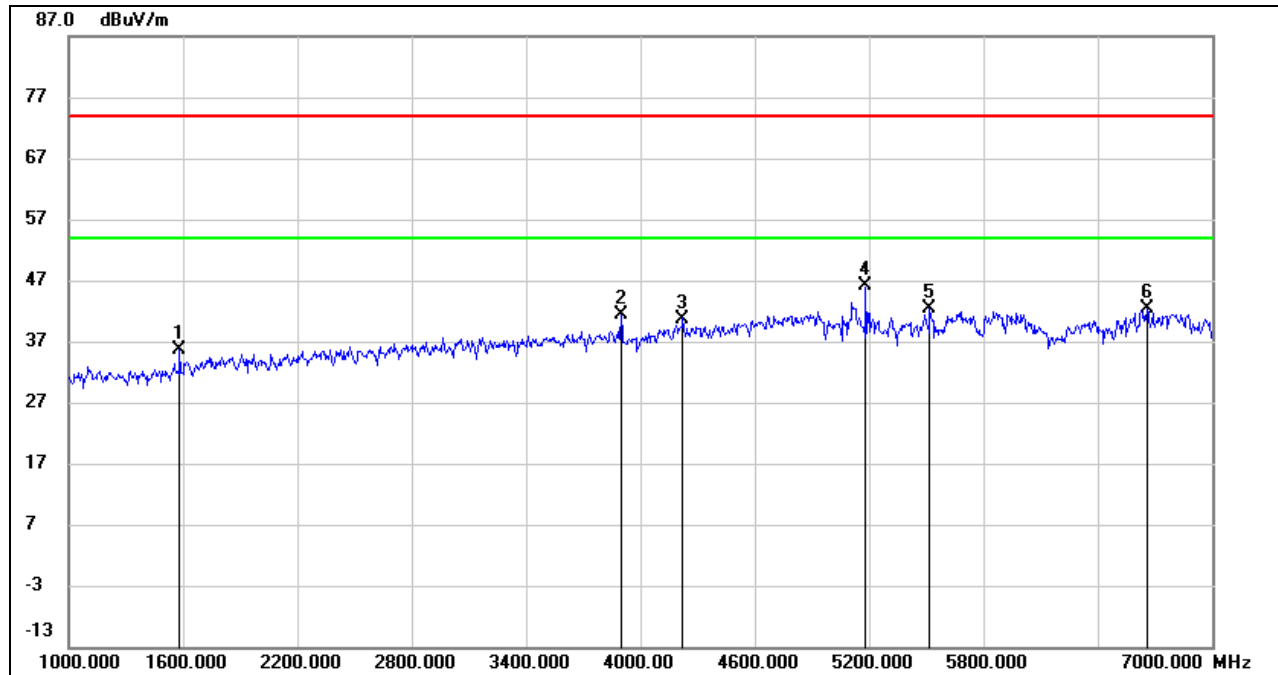
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2602.000	45.12	-7.85	37.27	74.00	-36.73	peak
2	3616.000	43.52	-4.12	39.40	74.00	-34.60	peak
3	3898.000	50.27	-3.42	46.85	74.00	-27.15	peak
4	5116.000	46.32	1.60	47.92	74.00	-26.08	peak
5	5524.000	41.02	2.23	43.25	74.00	-30.75	peak
6	6502.000	38.71	4.93	43.64	74.00	-30.36	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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	1582.000	47.30	-11.68	35.62	74.00	-38.38	peak
2	3898.000	44.74	-3.42	41.32	74.00	-32.68	peak
3	4222.000	42.44	-1.69	40.75	74.00	-33.25	peak
4	5180.000	44.13	1.99	46.12	74.00	-27.88	peak
5	5518.000	40.19	2.22	42.41	74.00	-31.59	peak
6	6658.000	36.78	5.51	42.29	74.00	-31.71	peak

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

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

3. Peak: Peak detector.

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

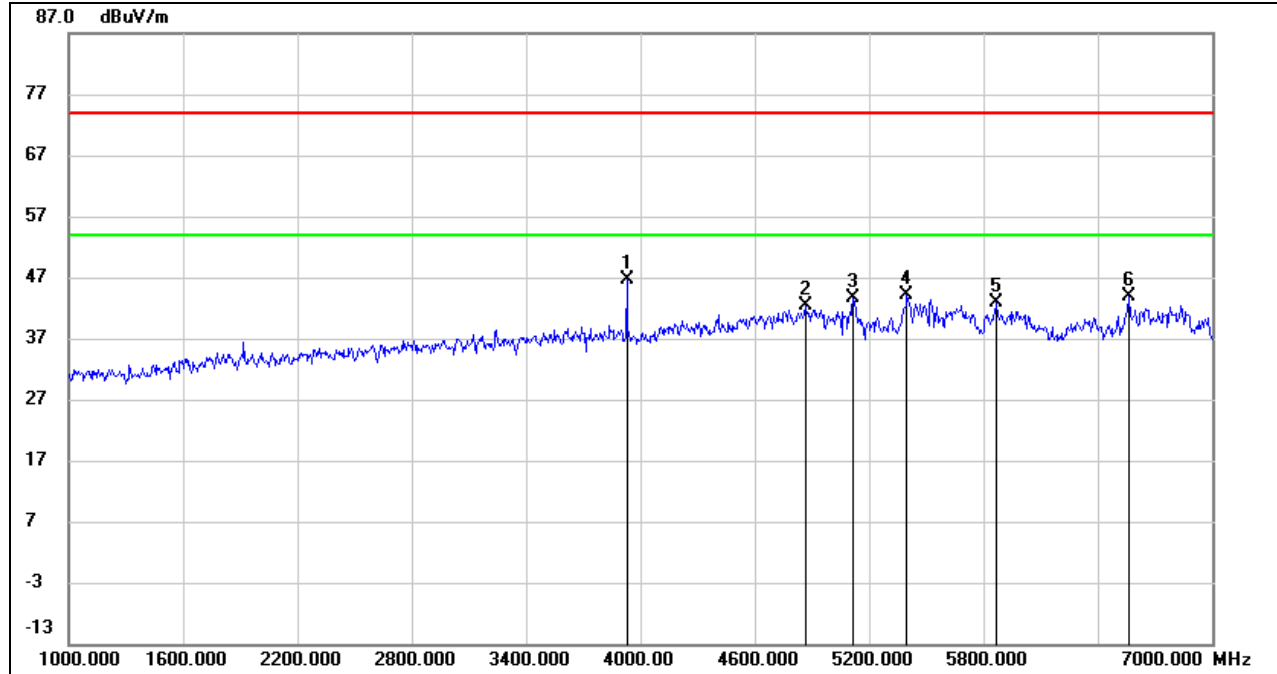
5. For the transmitting duration, please refer to clause 7.1.

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

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

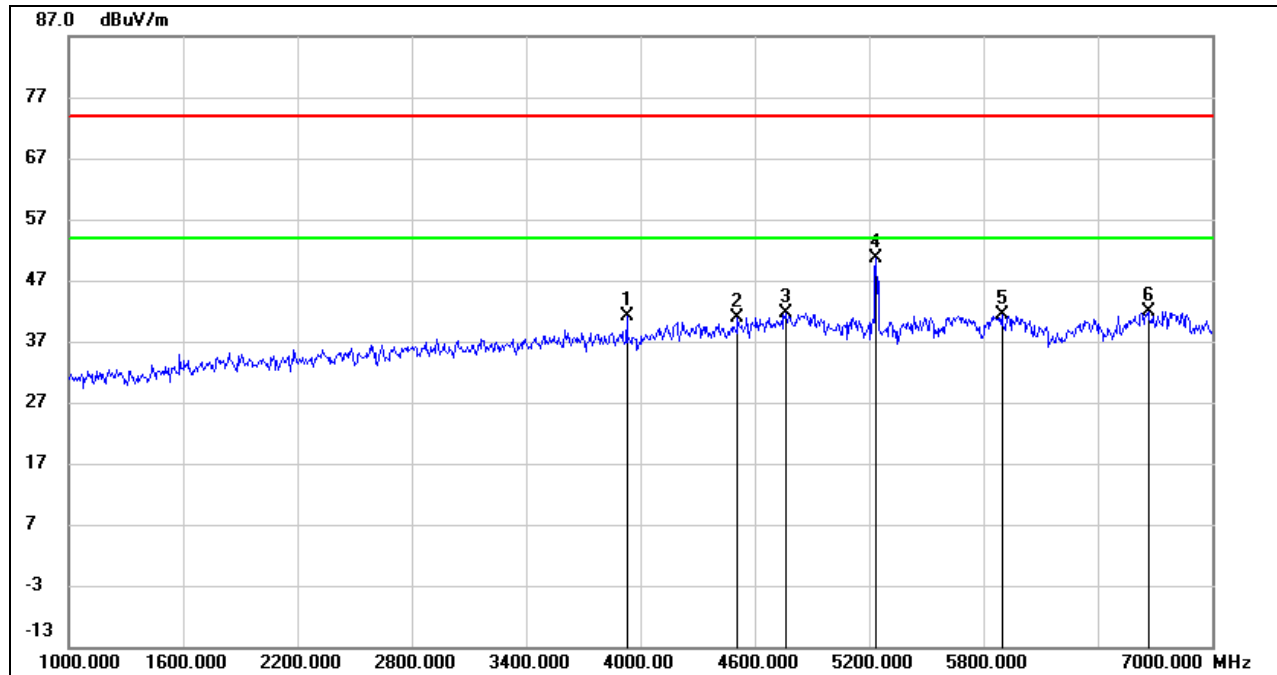
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3928.000	50.16	-3.47	46.69	74.00	-27.31	peak
2	4864.000	41.62	0.69	42.31	74.00	-31.69	peak
3	5116.000	41.97	1.60	43.57	74.00	-30.43	peak
4	5398.000	42.28	1.88	44.16	74.00	-29.84	peak
5	5866.000	40.06	2.77	42.83	74.00	-31.17	peak
6	6562.000	38.49	5.28	43.77	74.00	-30.23	peak

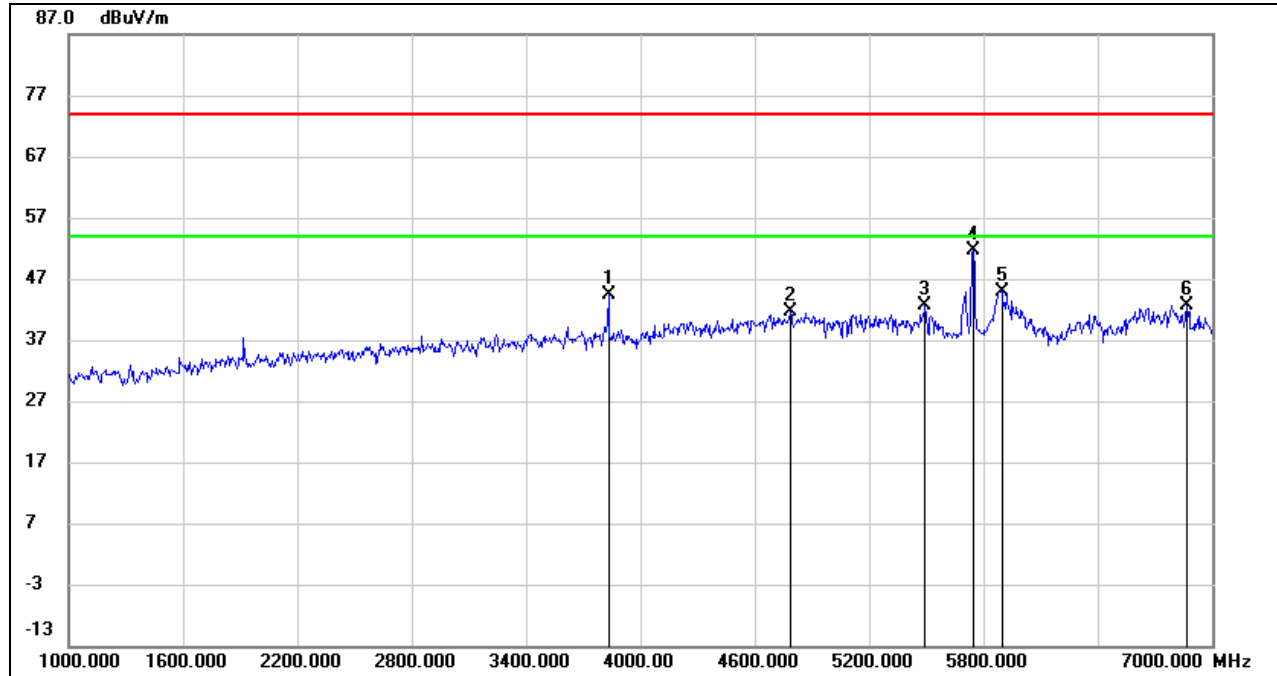
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



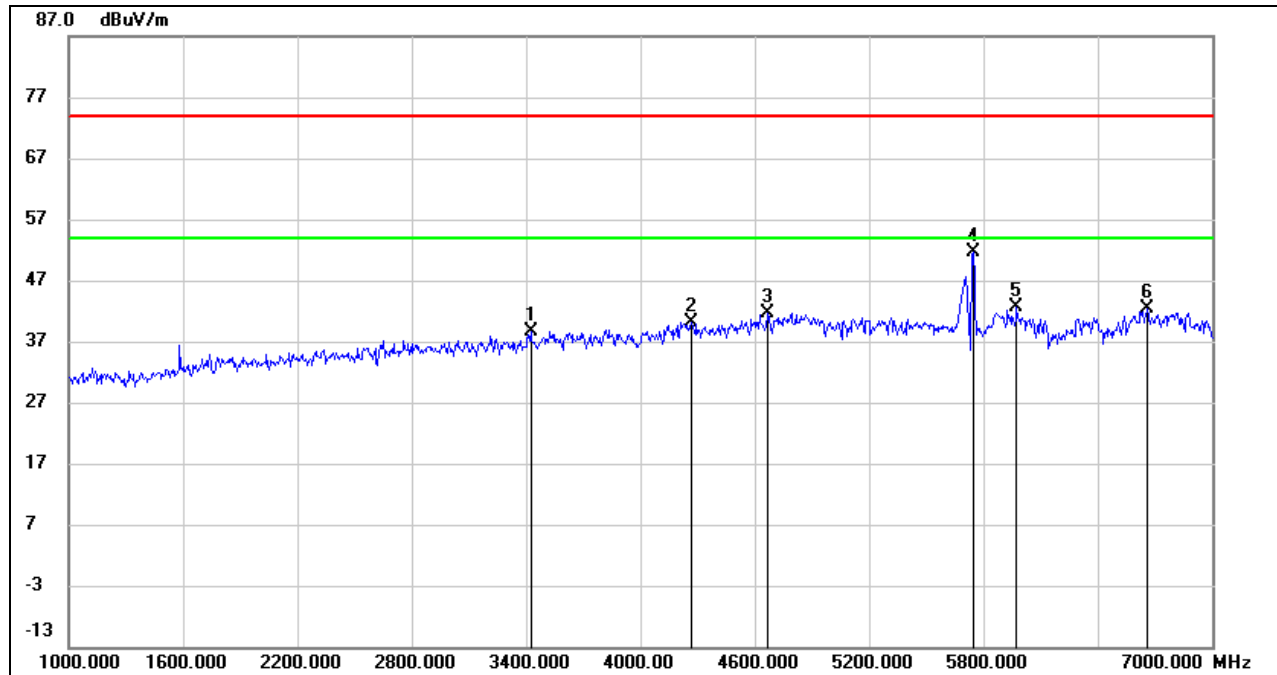
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3928.000	44.59	-3.47	41.12	74.00	-32.88	peak
2	4510.000	42.08	-1.17	40.91	74.00	-33.09	peak
3	4762.000	41.30	0.38	41.68	74.00	-32.32	peak
4	5240.000	48.52	2.05	50.57	74.00	-23.43	peak
5	5896.000	38.39	2.90	41.29	74.00	-32.71	peak
6	6664.000	36.32	5.53	41.85	74.00	-32.15	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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	3832.000	47.77	-3.32	44.45	74.00	-29.55	peak
2	4786.000	41.10	0.51	41.61	74.00	-32.39	peak
3	5494.000	40.41	2.14	42.55	74.00	-31.45	peak
4	5745.000	49.04	2.49	51.53	74.00	-22.47	peak
5	5896.000	42.07	2.90	44.97	74.00	-29.03	peak
6	6868.000	36.95	5.76	42.71	74.00	-31.29	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. 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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	3424.000	43.61	-5.01	38.60	74.00	-35.40	peak
2	4264.000	41.78	-1.73	40.05	74.00	-33.95	peak
3	4666.000	41.75	-0.17	41.58	74.00	-32.42	peak
4	5745.000	49.06	2.49	51.55	74.00	-22.45	peak
5	5974.000	39.32	3.20	42.52	74.00	-31.48	peak
6	6658.000	36.79	5.51	42.30	74.00	-31.70	peak

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

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

3. Peak: Peak detector.

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

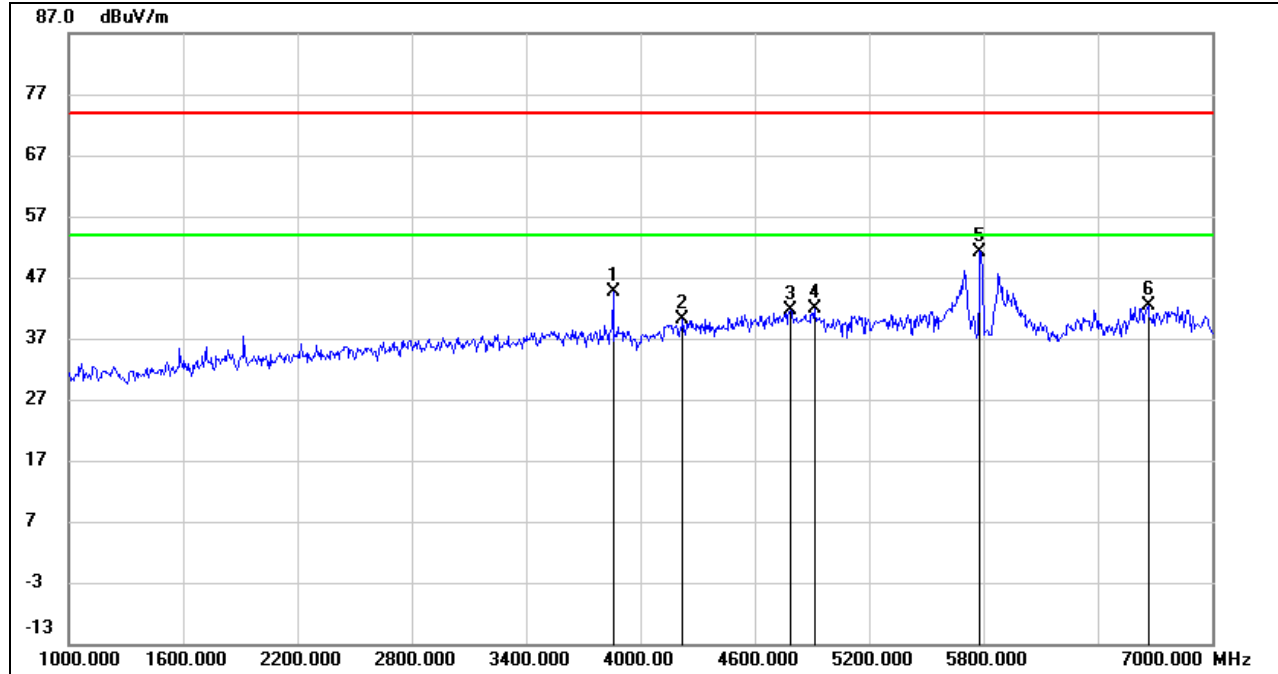
5. For the transmitting duration, please refer to clause 7.1.

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

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

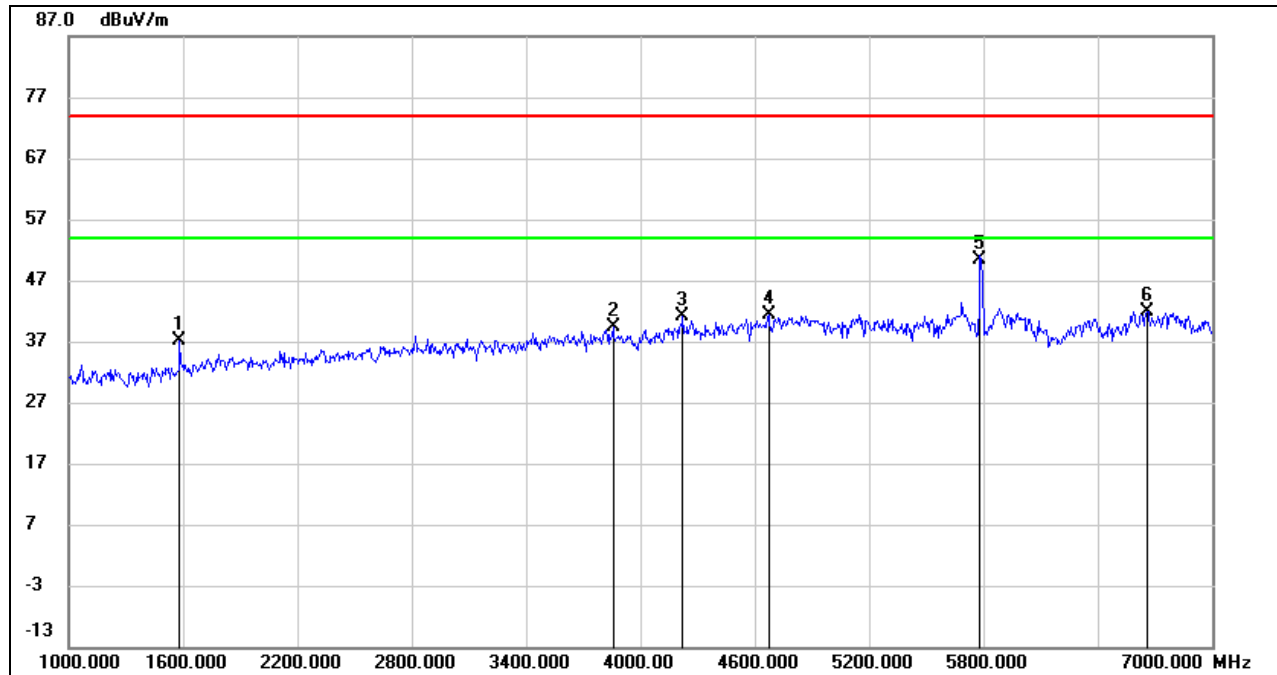
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3856.000	47.88	-3.36	44.52	74.00	-29.48	peak
2	4222.000	41.89	-1.69	40.20	74.00	-33.80	peak
3	4786.000	41.09	0.51	41.60	74.00	-32.40	peak
4	4912.000	41.03	0.77	41.80	74.00	-32.20	peak
5	5785.000	48.57	2.50	51.07	74.00	-22.93	peak
6	6664.000	36.95	5.53	42.48	74.00	-31.52	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. 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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	1582.000	48.79	-11.68	37.11	74.00	-36.89	peak
2	3856.000	42.84	-3.36	39.48	74.00	-34.52	peak
3	4222.000	42.92	-1.69	41.23	74.00	-32.77	peak
4	4672.000	41.50	-0.15	41.35	74.00	-32.65	peak
5	5785.000	47.93	2.50	50.43	74.00	-23.57	peak
6	6658.000	36.44	5.51	41.95	74.00	-32.05	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. AVG: $VBW=1/T_{on}$, where: T_{on} is the transmitting duration.

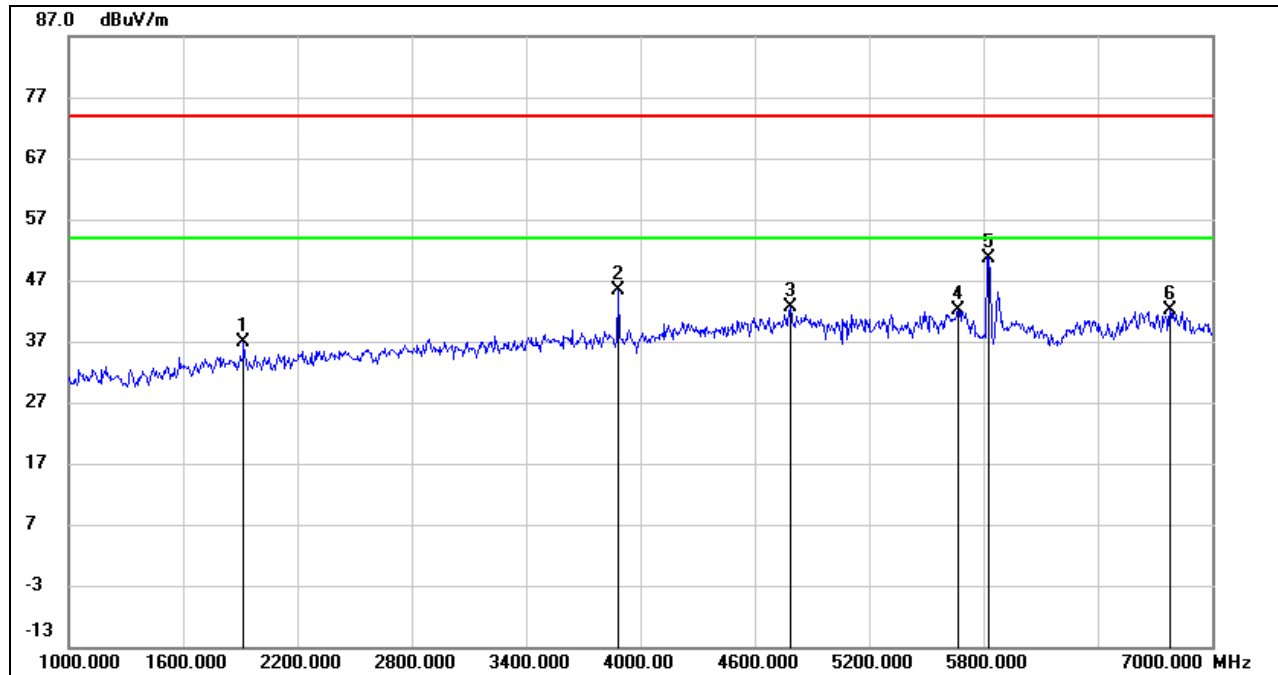
5. For the transmitting duration, please refer to clause 7.1.

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

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

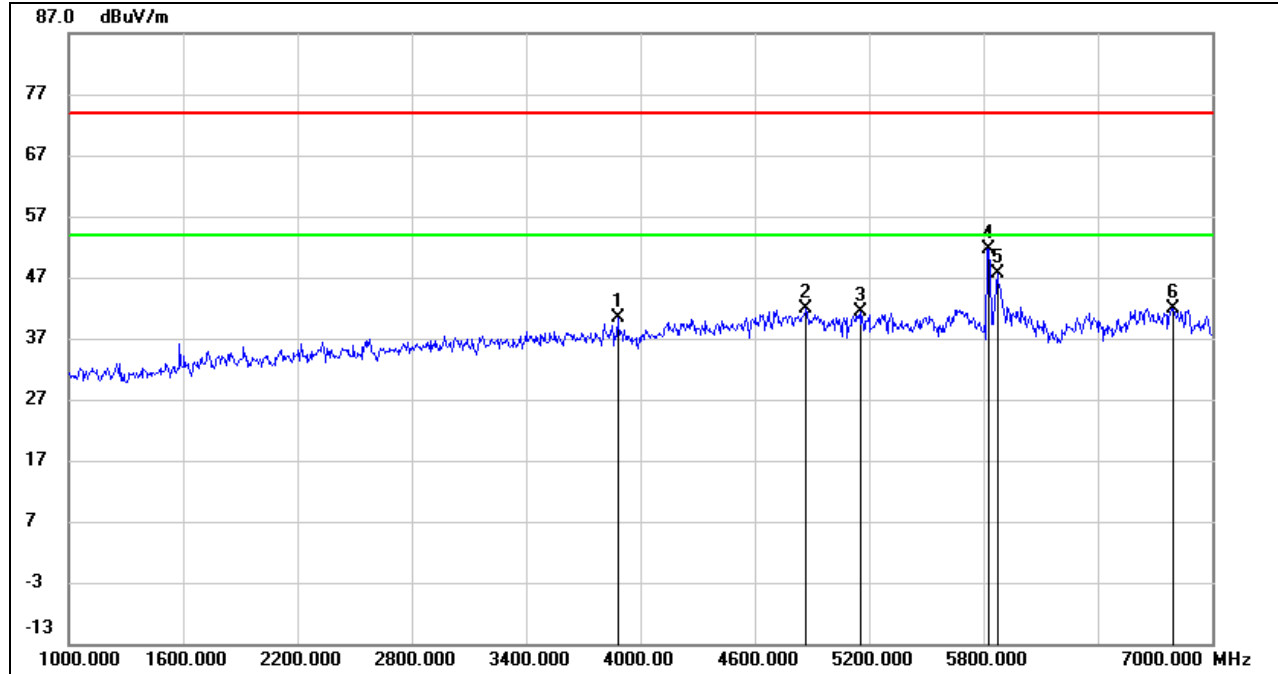
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1918.000	47.07	-10.13	36.94	74.00	-37.06	peak
2	3886.000	48.67	-3.41	45.26	74.00	-28.74	peak
3	4786.000	42.20	0.51	42.71	74.00	-31.29	peak
4	5668.000	39.57	2.47	42.04	74.00	-31.96	peak
5	5825.000	48.13	2.61	50.74	74.00	-23.26	peak
6	6778.000	36.61	5.56	42.17	74.00	-31.83	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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	3880.000	43.82	-3.40	40.42	74.00	-33.58	peak
2	4870.000	41.22	0.69	41.91	74.00	-32.09	peak
3	5152.000	39.46	1.81	41.27	74.00	-32.73	peak
4	5825.000	49.09	2.61	51.70	74.00	-22.30	peak
5	5872.000	44.92	2.80	47.72	74.00	-26.28	peak
6	6796.000	36.27	5.57	41.84	74.00	-32.16	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: $VBW=1/T_{on}$, 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 Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

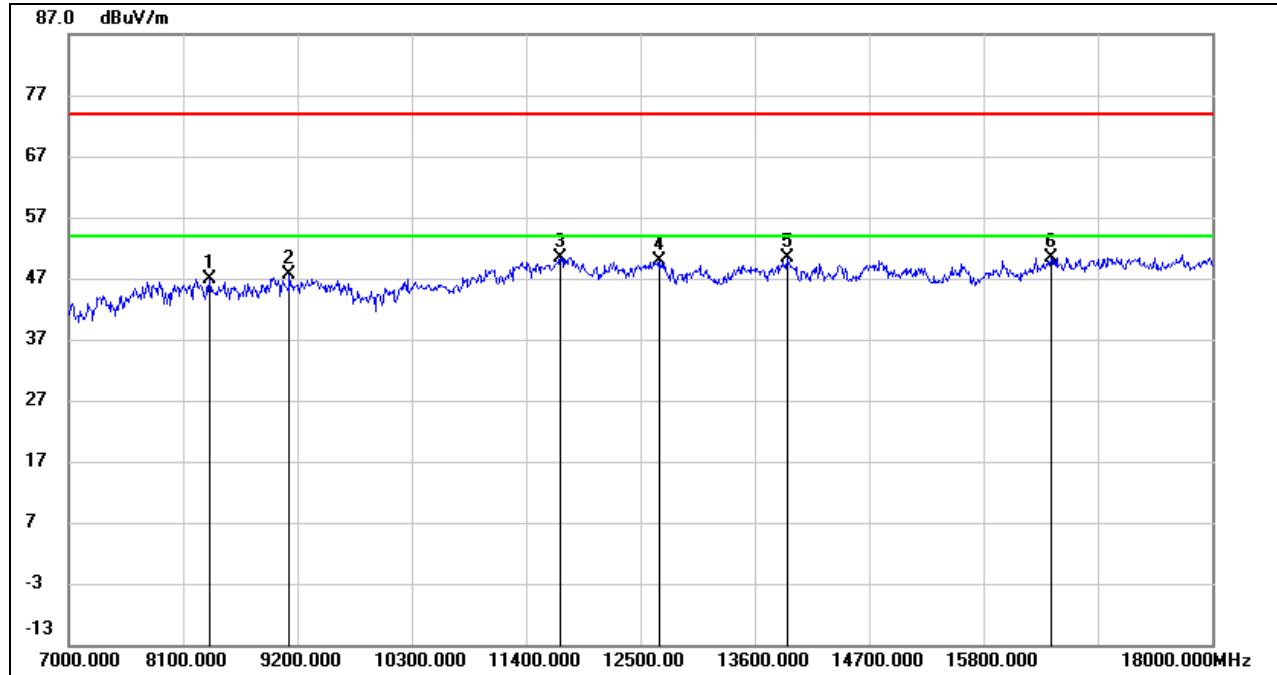
Note: All the channels and modes had been tested, but only the worst data was recorded in the report.

8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 802.11a 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	8353.000	38.09	8.77	46.86	74.00	-27.14	peak
2	9123.000	37.72	9.81	47.53	74.00	-26.47	peak
3	11730.000	35.21	15.23	50.44	74.00	-23.56	peak
4	12687.000	34.49	15.45	49.94	74.00	-24.06	peak
5	13908.000	33.47	16.90	50.37	74.00	-23.63	peak
6	16449.000	31.56	18.91	50.47	74.00	-23.53	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.

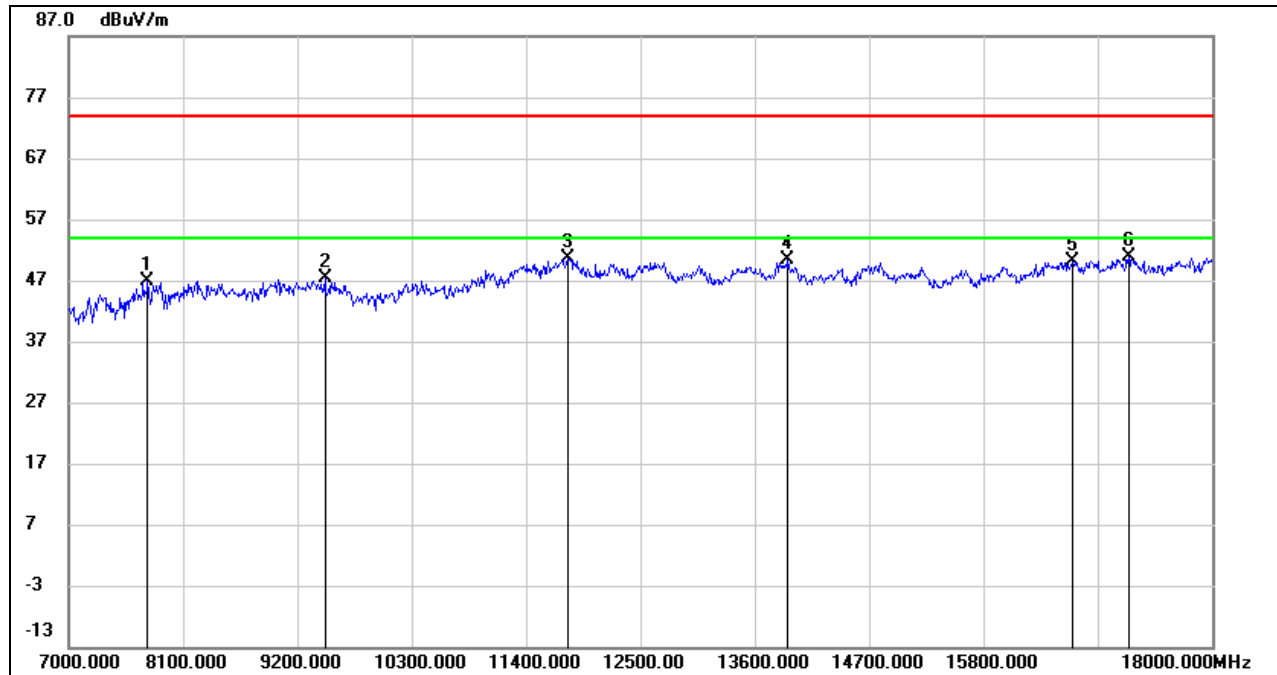
5. For the transmitting duration, please refer to clause 7.1.

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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

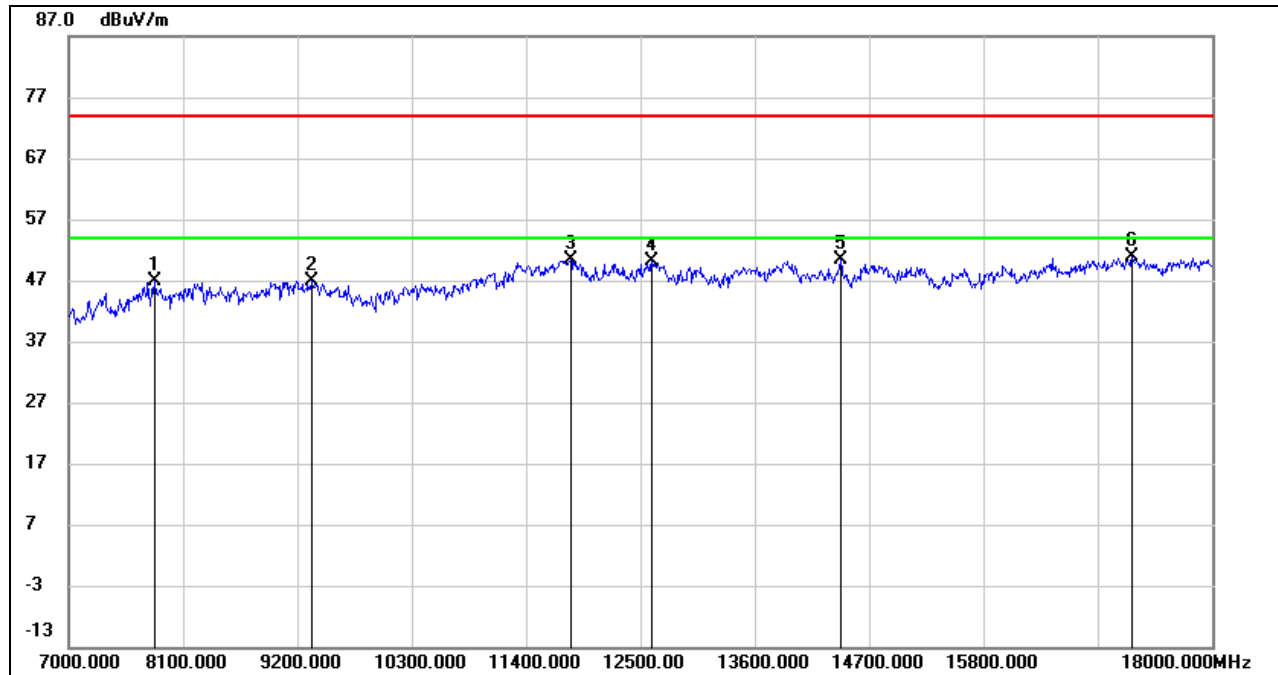
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7759.000	38.86	8.09	46.95	74.00	-27.05	peak
2	9464.000	36.86	10.40	47.26	74.00	-26.74	peak
3	11796.000	35.05	15.59	50.64	74.00	-23.36	peak
4	13919.000	33.60	16.89	50.49	74.00	-23.51	peak
5	16658.000	30.54	19.59	50.13	74.00	-23.87	peak
6	17197.000	29.92	21.03	50.95	74.00	-23.05	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7825.000	38.77	8.18	46.95	74.00	-27.05	peak
2	9343.000	36.85	10.02	46.87	74.00	-27.13	peak
3	11829.000	34.84	15.57	50.41	74.00	-23.59	peak
4	12610.000	34.86	15.30	50.16	74.00	-23.84	peak
5	14425.000	33.49	16.80	50.29	74.00	-23.71	peak
6	17230.000	29.80	20.99	50.79	74.00	-23.21	peak

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

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

3. Peak: Peak detector.

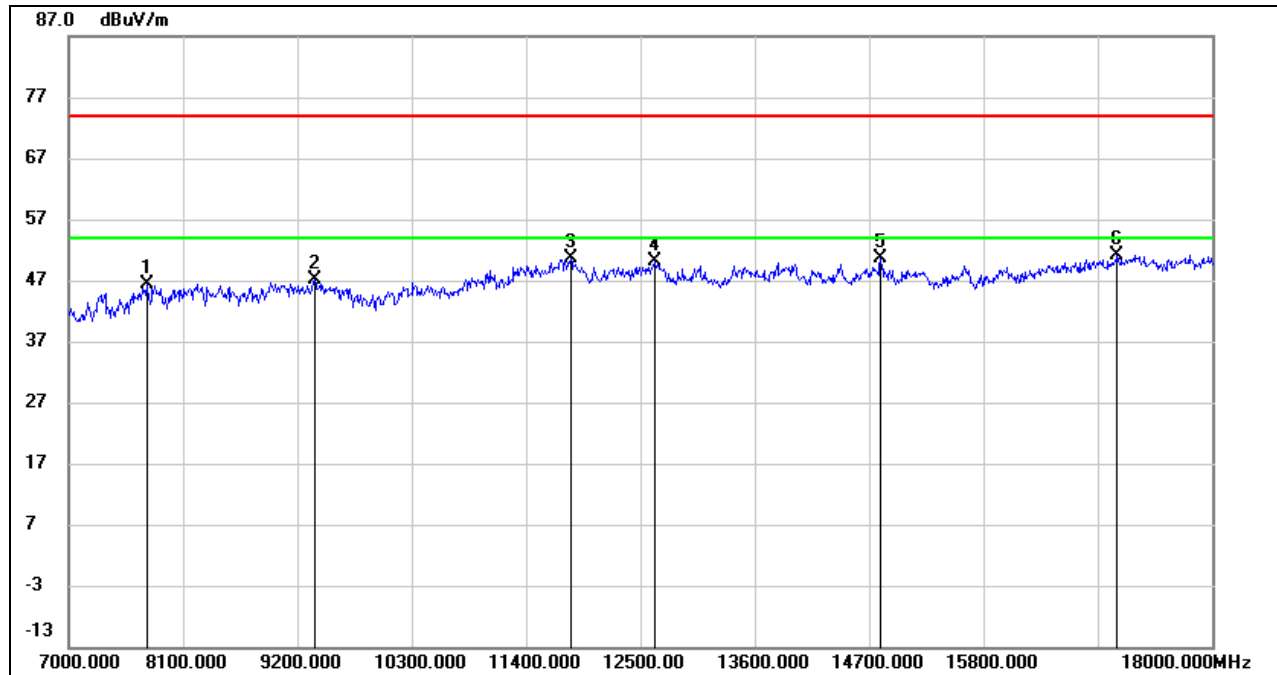
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

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.

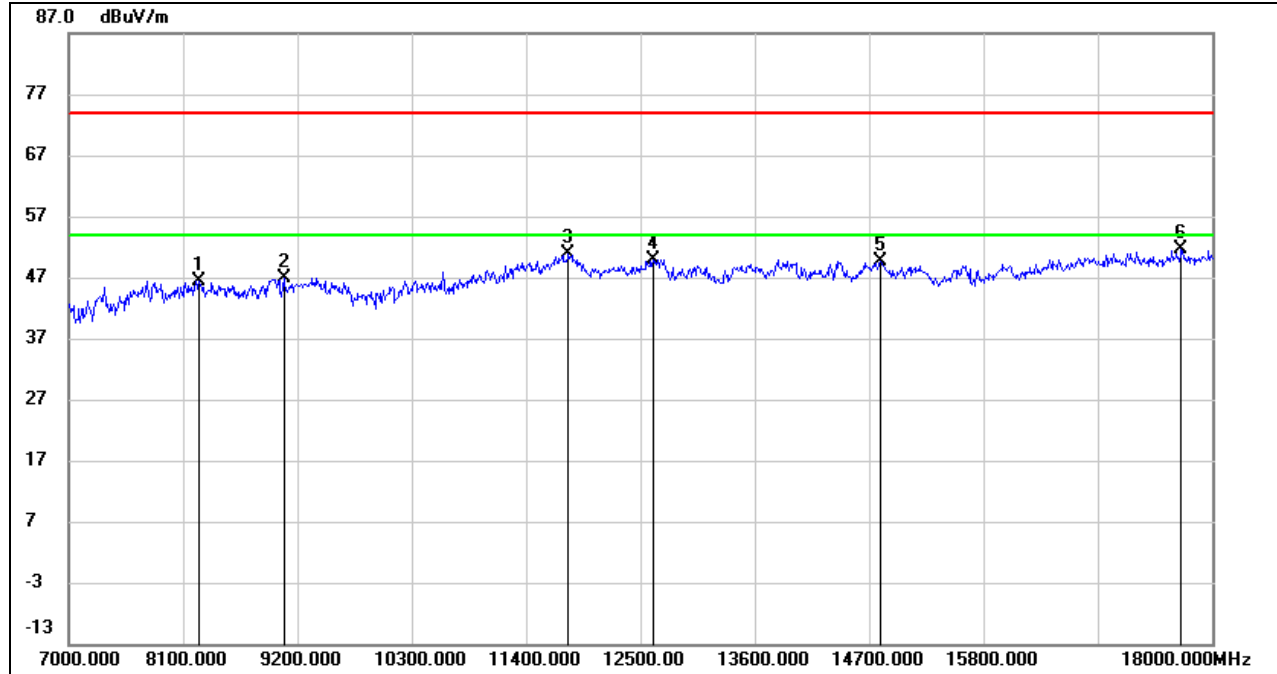
8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	7748.000	38.38	8.05	46.43	74.00	-27.57	peak
2	9365.000	37.07	10.13	47.20	74.00	-26.80	peak
3	11829.000	34.96	15.57	50.53	74.00	-23.47	peak
4	12632.000	34.74	15.35	50.09	74.00	-23.91	peak
5	14810.000	33.95	16.80	50.75	74.00	-23.25	peak
6	17087.000	30.46	20.58	51.04	74.00	-22.96	peak

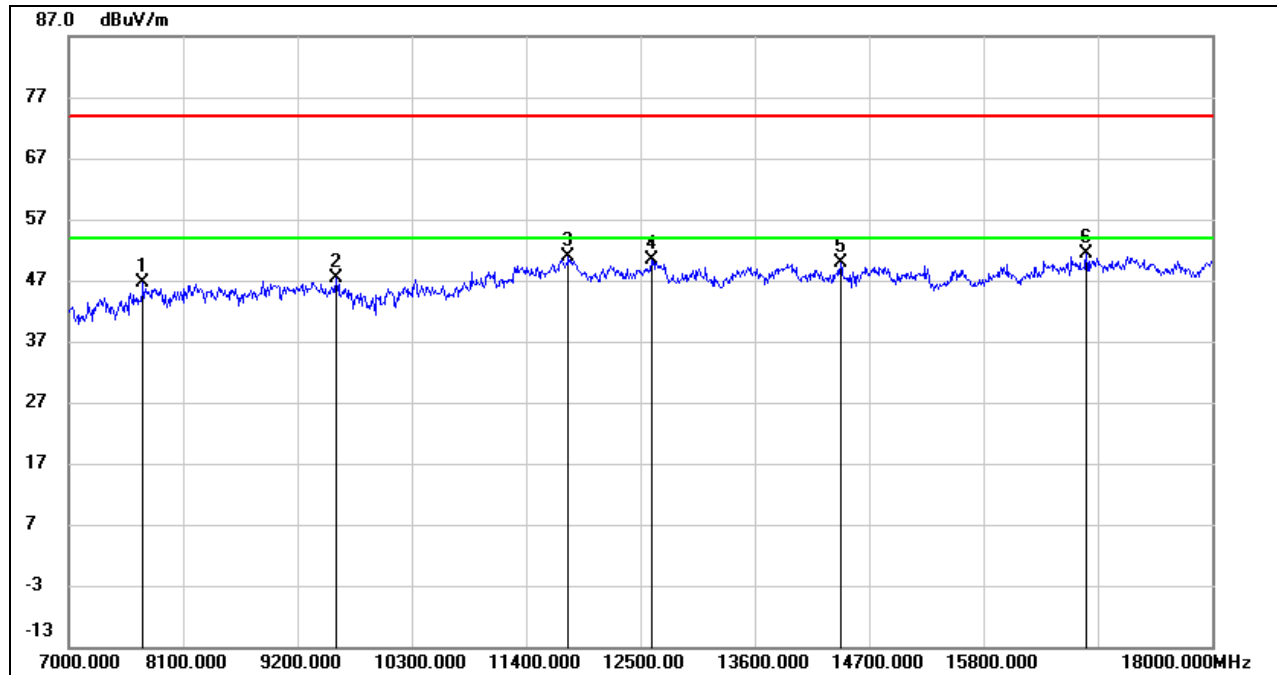
- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	8254.000	37.25	9.15	46.40	74.00	-27.60	peak
2	9068.000	36.67	10.17	46.84	74.00	-27.16	peak
3	11807.000	35.36	15.61	50.97	74.00	-23.03	peak
4	12621.000	34.65	15.33	49.98	74.00	-24.02	peak
5	14810.000	32.94	16.80	49.74	74.00	-24.26	peak
6	17703.000	29.69	21.96	51.65	74.00	-22.35	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

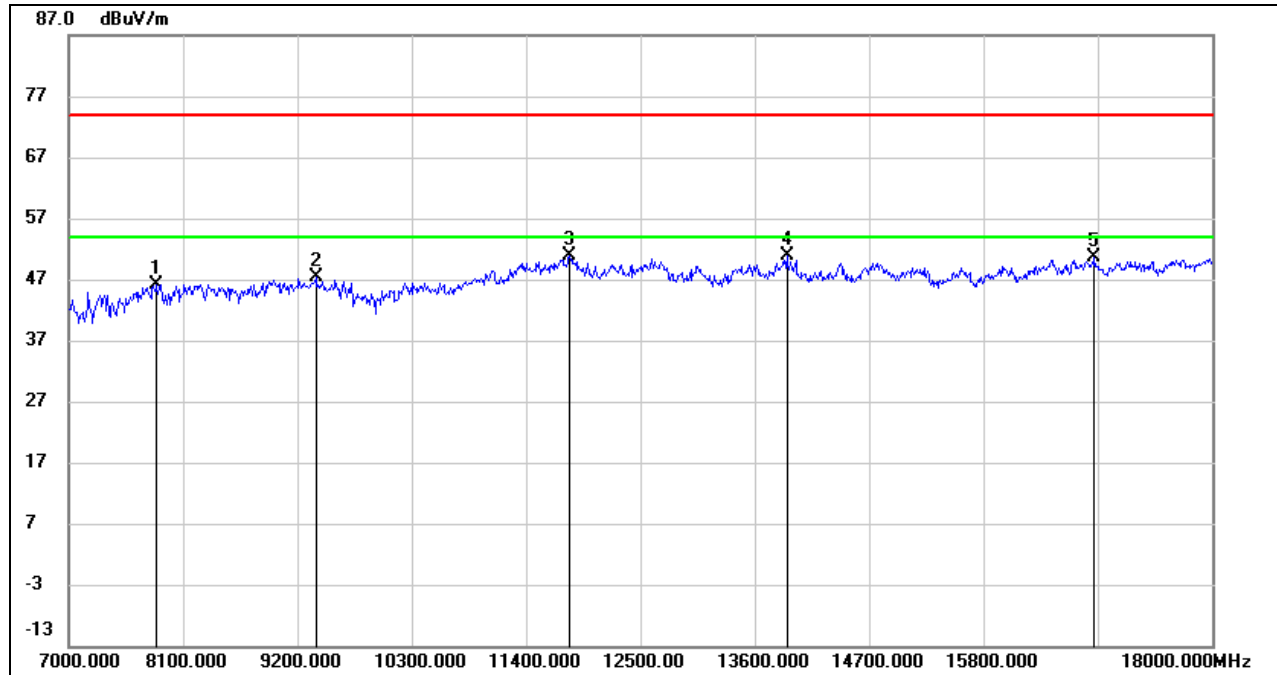
**HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7715.000	38.63	7.92	46.55	74.00	-27.45	peak
2	9574.000	36.93	10.46	47.39	74.00	-26.61	peak
3	11807.000	35.18	15.61	50.79	74.00	-23.21	peak
4	12610.000	34.99	15.30	50.29	74.00	-23.71	peak
5	14425.000	33.01	16.80	49.81	74.00	-24.19	peak
6	16790.000	31.54	19.73	51.27	74.00	-22.73	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

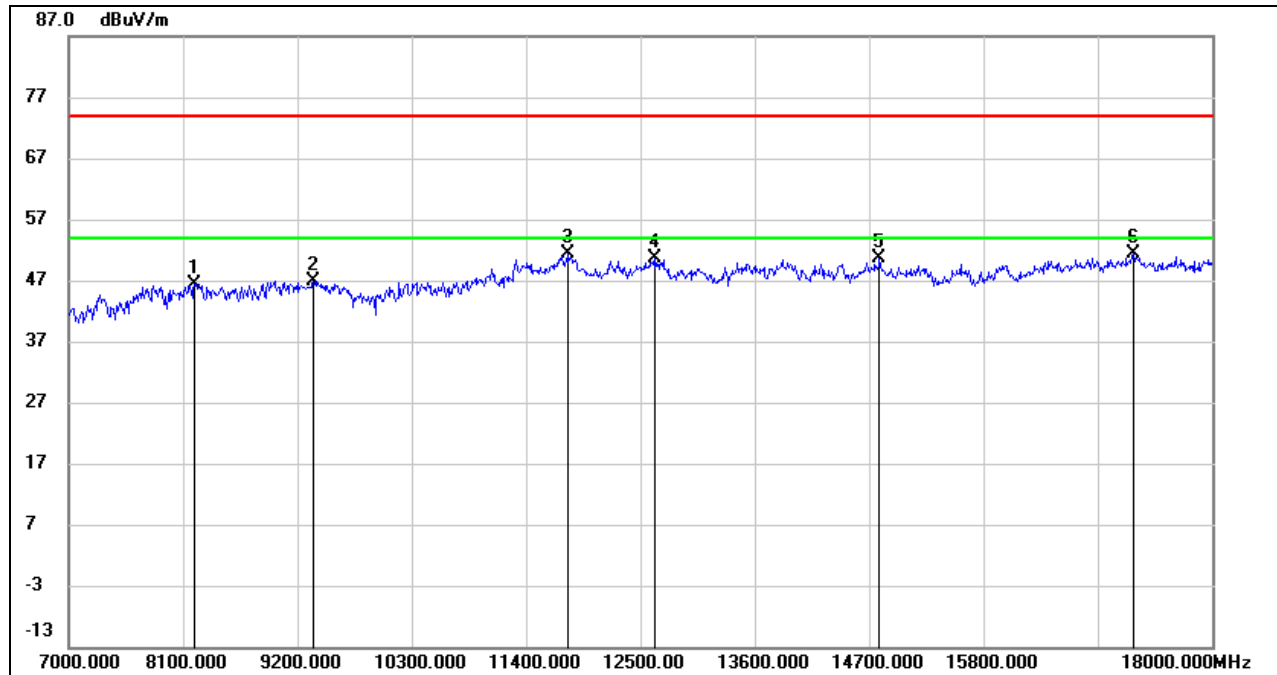
UNII-3 BAND

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	7847.000	38.13	8.11	46.24	74.00	-27.76	peak
2	9376.000	37.08	10.19	47.27	74.00	-26.73	peak
3	11818.000	35.24	15.58	50.82	74.00	-23.18	peak
4	13908.000	33.99	16.90	50.89	74.00	-23.11	peak
5	16867.000	30.75	19.90	50.65	74.00	-23.35	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	36.99	9.32	46.31	74.00	-27.69	peak
2	9354.000	36.89	10.07	46.96	74.00	-27.04	peak
3	11807.000	35.79	15.61	51.40	74.00	-22.60	peak
4	12643.000	35.15	15.36	50.51	74.00	-23.49	peak
5	14799.000	33.94	16.80	50.74	74.00	-23.26	peak
6	17241.000	30.33	20.97	51.30	74.00	-22.70	peak

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

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

3. Peak: Peak detector.

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

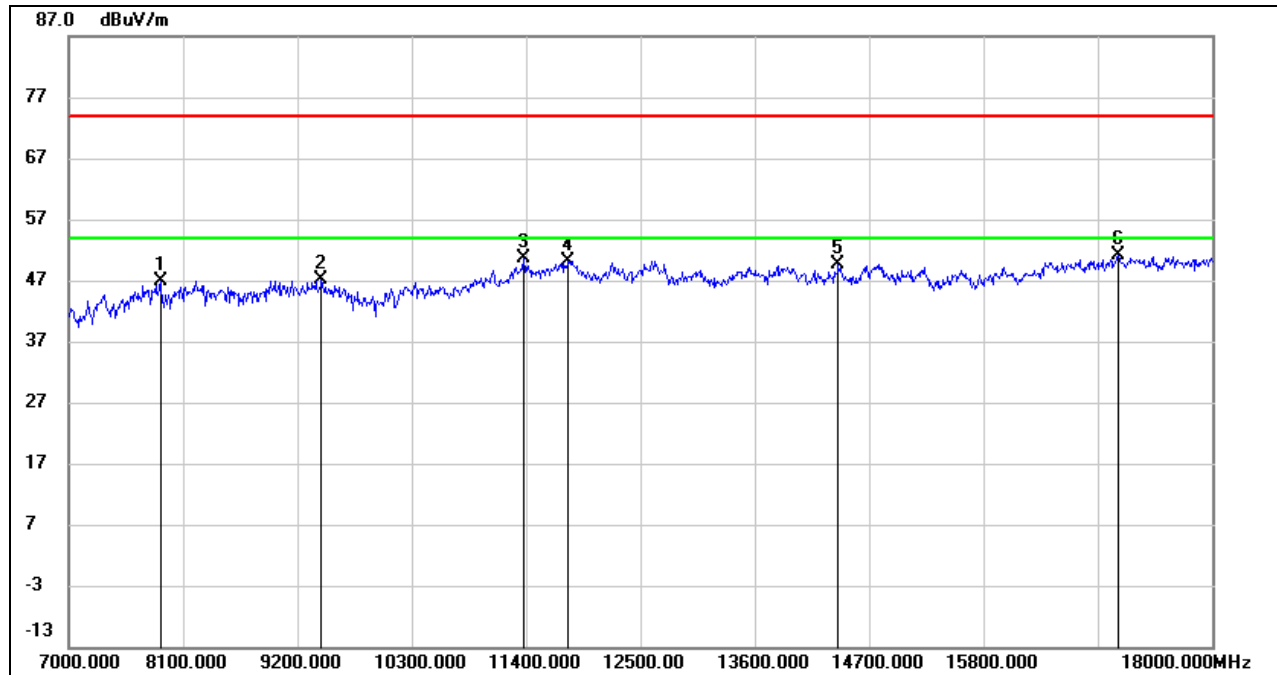
5. For the transmitting duration, please refer to clause 7.1.

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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

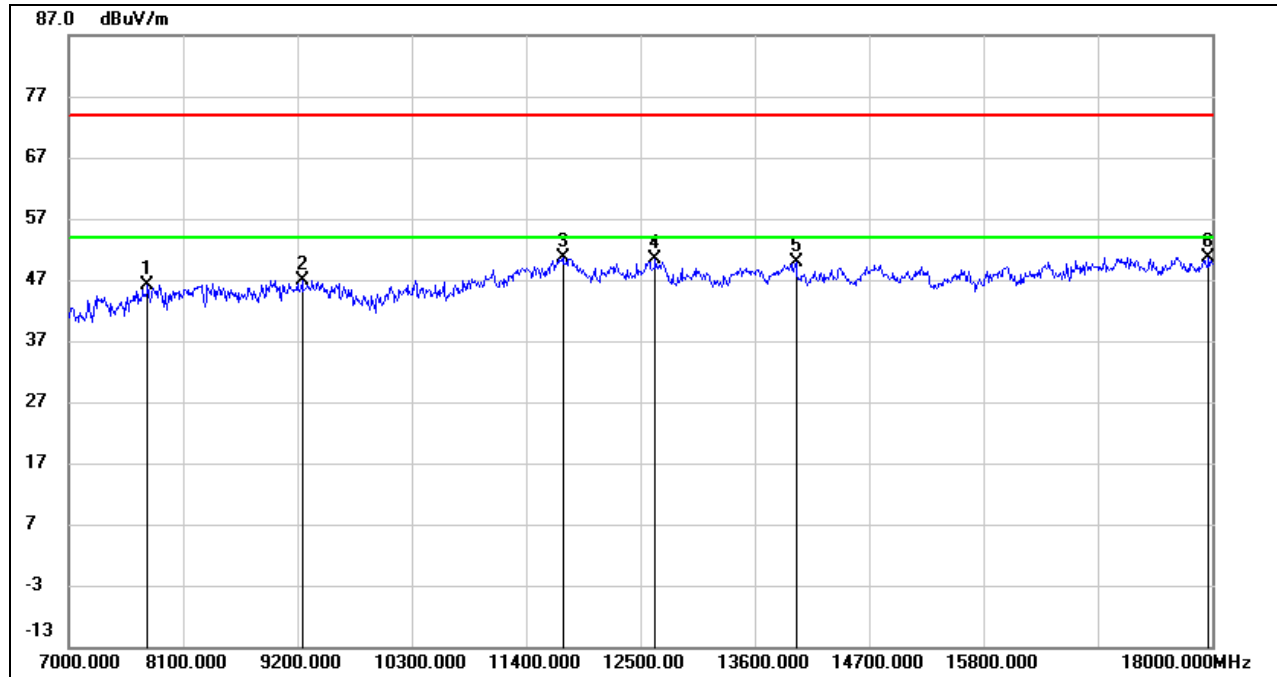
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7880.000	38.92	8.01	46.93	74.00	-27.07	peak
2	9431.000	36.80	10.35	47.15	74.00	-26.85	peak
3	11378.000	36.38	14.15	50.53	74.00	-23.47	peak
4	11807.000	34.59	15.61	50.20	74.00	-23.80	peak
5	14403.000	32.67	16.85	49.52	74.00	-24.48	peak
6	17098.000	30.46	20.63	51.09	74.00	-22.91	peak

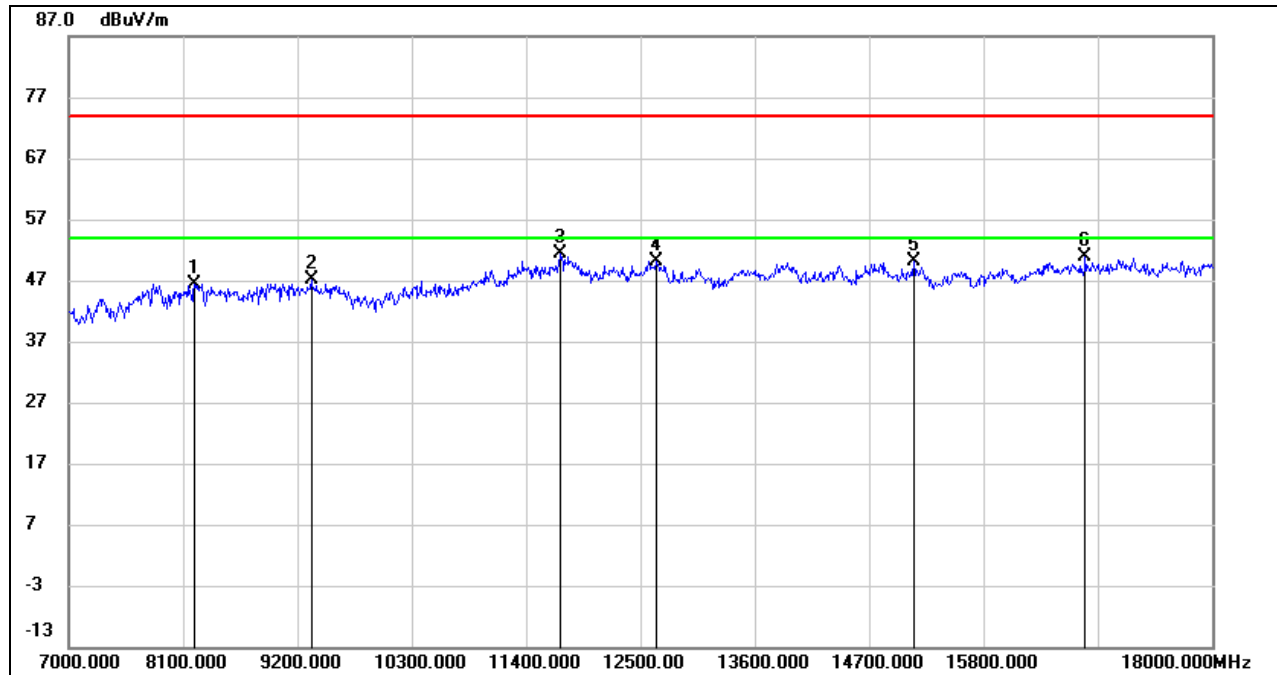
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7759.000	38.06	8.09	46.15	74.00	-27.85	peak
2	9244.000	37.49	9.51	47.00	74.00	-27.00	peak
3	11752.000	35.18	15.35	50.53	74.00	-23.47	peak
4	12643.000	34.94	15.36	50.30	74.00	-23.70	peak
5	13996.000	33.00	16.85	49.85	74.00	-24.15	peak
6	17967.000	28.07	22.67	50.74	74.00	-23.26	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	37.13	9.32	46.45	74.00	-27.55	peak
2	9332.000	37.23	9.97	47.20	74.00	-26.80	peak
3	11730.000	36.24	15.23	51.47	74.00	-22.53	peak
4	12654.000	34.77	15.38	50.15	74.00	-23.85	peak
5	15129.000	33.69	16.43	50.12	74.00	-23.88	peak
6	16779.000	31.18	19.72	50.90	74.00	-23.10	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.

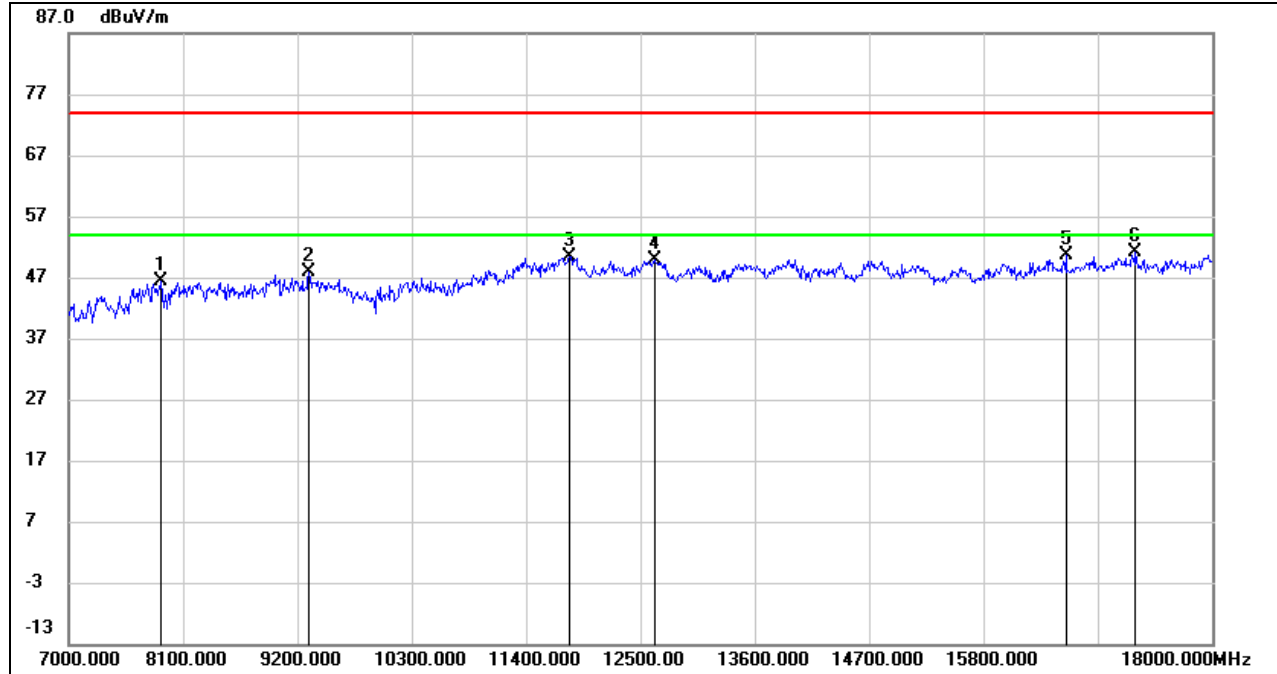
5. For the transmitting duration, please refer to clause 7.1.

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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



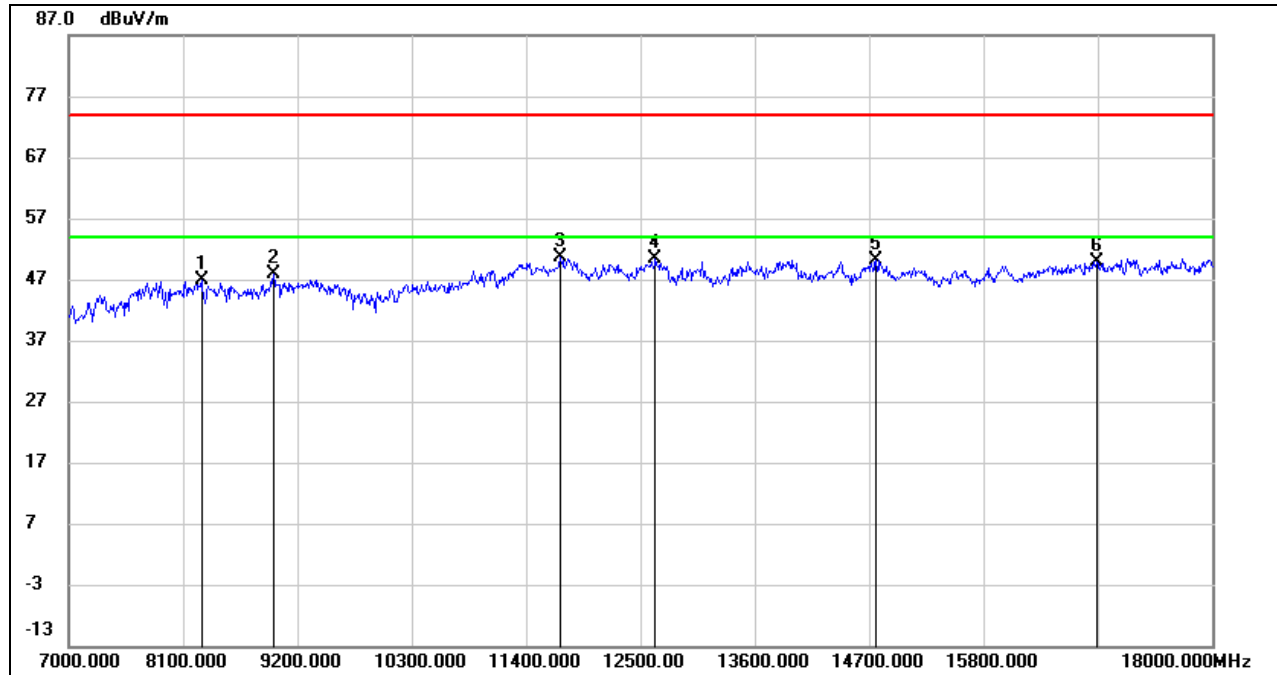
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7891.000	38.35	7.98	46.33	74.00	-27.67	peak
2	9310.000	37.98	9.86	47.84	74.00	-26.16	peak
3	11818.000	34.72	15.58	50.30	74.00	-23.70	peak
4	12632.000	34.49	15.35	49.84	74.00	-24.16	peak
5	16592.000	31.16	19.50	50.66	74.00	-23.34	peak
6	17263.000	30.26	20.95	51.21	74.00	-22.79	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

8.3.2. 802.11n HT20 MIMO 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	8276.000	37.81	9.06	46.87	74.00	-27.13	peak
2	8969.000	37.50	10.31	47.81	74.00	-26.19	peak
3	11730.000	35.50	15.23	50.73	74.00	-23.27	peak
4	12643.000	35.03	15.36	50.39	74.00	-23.61	peak
5	14766.000	33.46	16.74	50.20	74.00	-23.80	peak
6	16889.000	30.00	19.95	49.95	74.00	-24.05	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

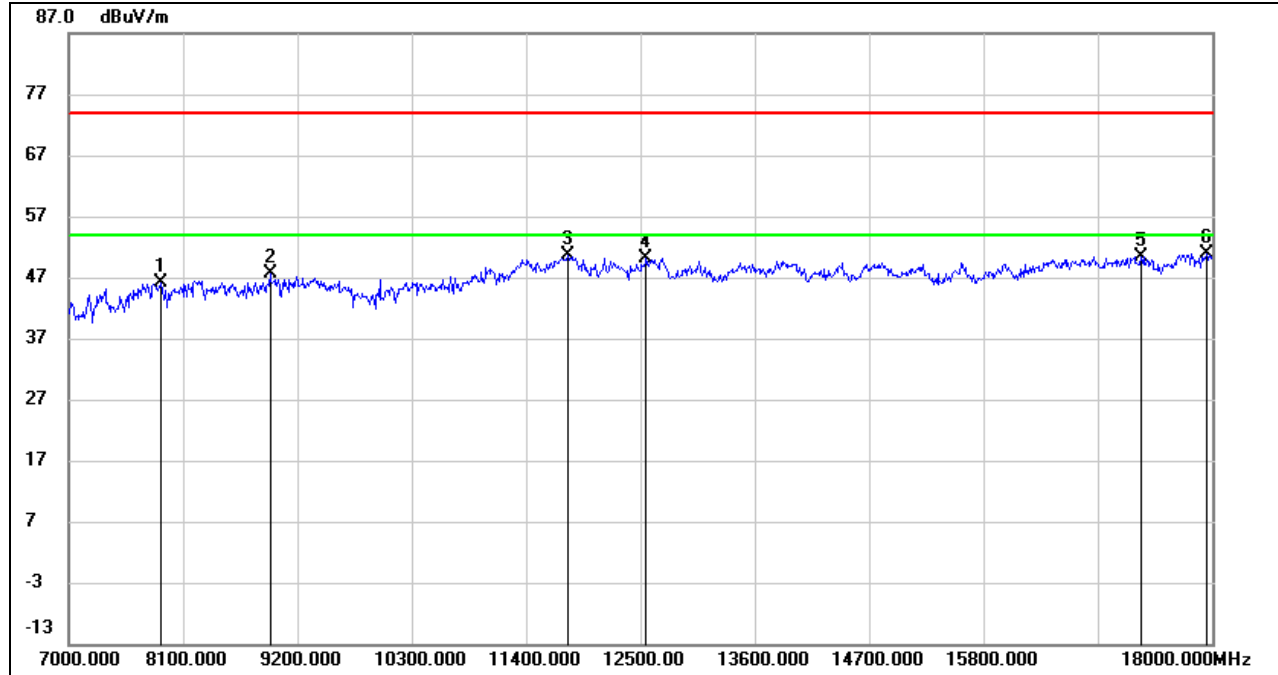
5. For the transmitting duration, please refer to clause 7.1.

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.

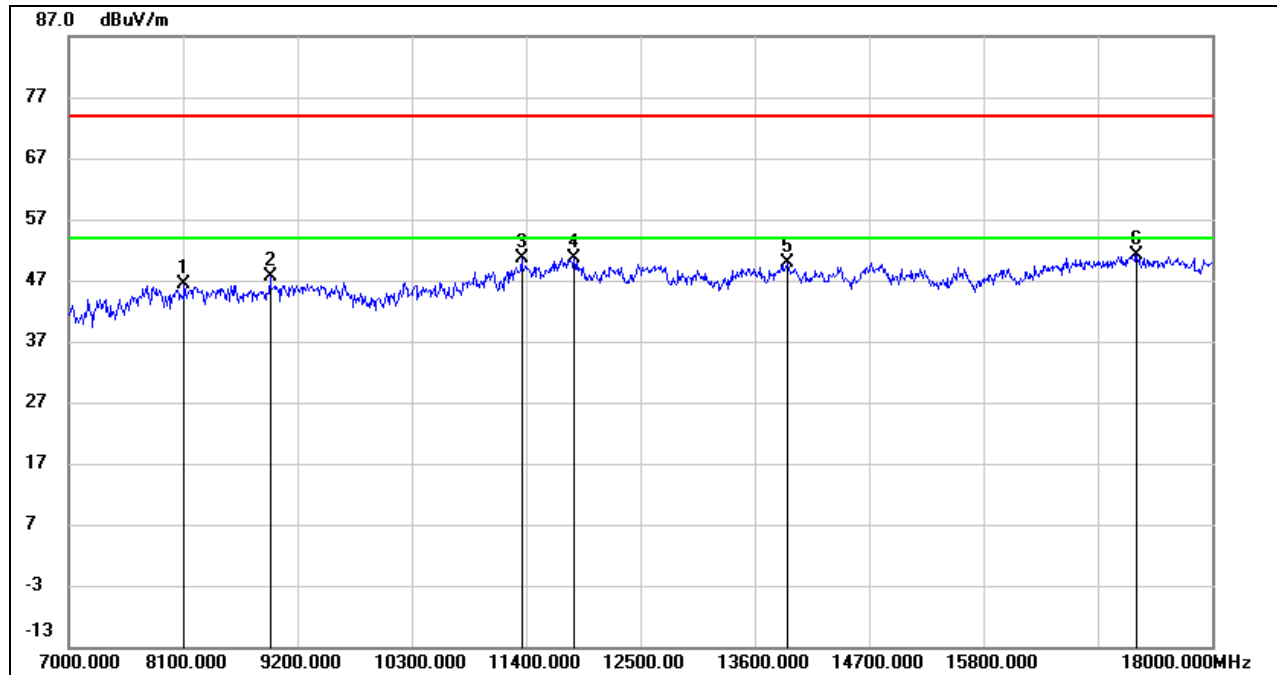
8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7891.000	38.18	7.98	46.16	74.00	-27.84	peak
2	8936.000	37.63	9.96	47.59	74.00	-26.41	peak
3	11807.000	35.12	15.61	50.73	74.00	-23.27	peak
4	12555.000	34.86	15.32	50.18	74.00	-23.82	peak
5	17318.000	29.64	20.86	50.50	74.00	-23.50	peak
6	17945.000	28.21	22.68	50.89	74.00	-23.11	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	8111.000	37.69	8.61	46.30	74.00	-27.70	peak
2	8936.000	37.65	9.96	47.61	74.00	-26.39	peak
3	11356.000	36.49	14.09	50.58	74.00	-23.42	peak
4	11862.000	35.03	15.52	50.55	74.00	-23.45	peak
5	13919.000	32.90	16.89	49.79	74.00	-24.21	peak
6	17274.000	30.24	20.93	51.17	74.00	-22.83	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.

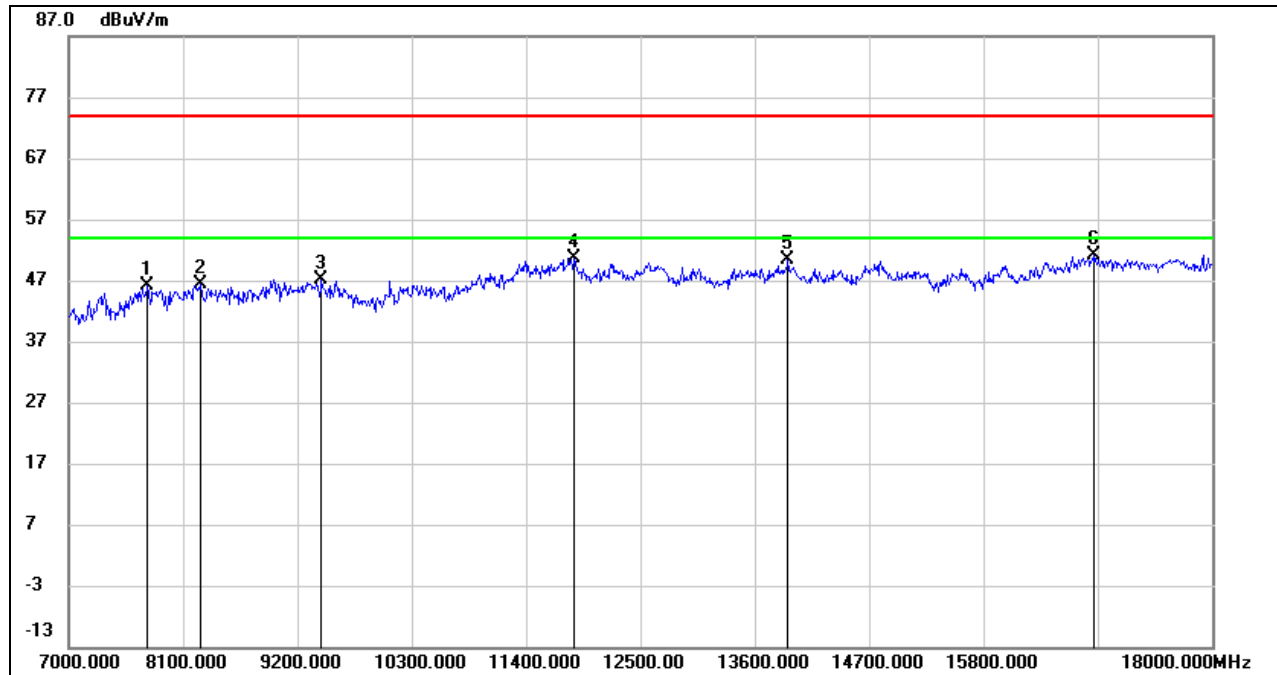
5. For the transmitting duration, please refer to clause 7.1.

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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7759.000	37.92	8.09	46.01	74.00	-27.99	peak
2	8265.000	37.32	9.11	46.43	74.00	-27.57	peak
3	9431.000	36.87	10.35	47.22	74.00	-26.78	peak
4	11862.000	35.11	15.52	50.63	74.00	-23.37	peak
5	13919.000	33.47	16.89	50.36	74.00	-23.64	peak
6	16867.000	31.12	19.90	51.02	74.00	-22.98	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.

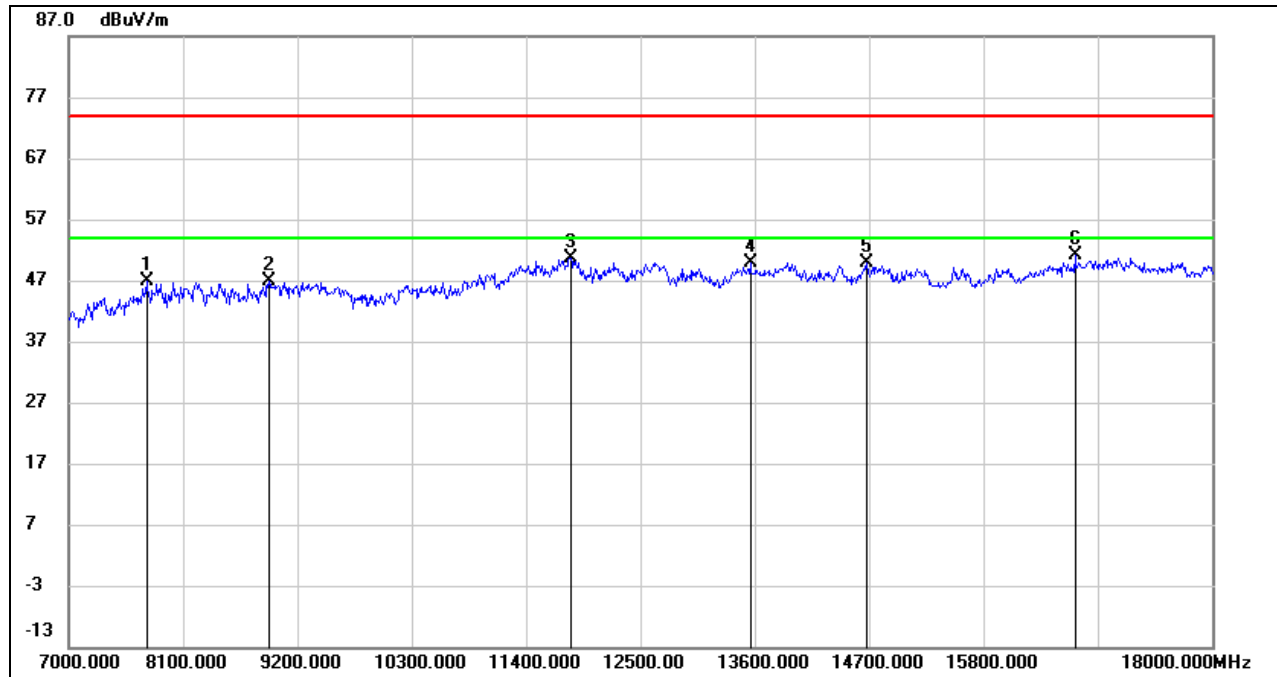
5. For the transmitting duration, please refer to clause 7.1.

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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7748.000	38.82	8.05	46.87	74.00	-27.13	peak
2	8925.000	36.92	9.84	46.76	74.00	-27.24	peak
3	11829.000	35.11	15.57	50.68	74.00	-23.32	peak
4	13556.000	33.44	16.42	49.86	74.00	-24.14	peak
5	14678.000	33.34	16.59	49.93	74.00	-24.07	peak
6	16680.000	31.47	19.61	51.08	74.00	-22.92	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.

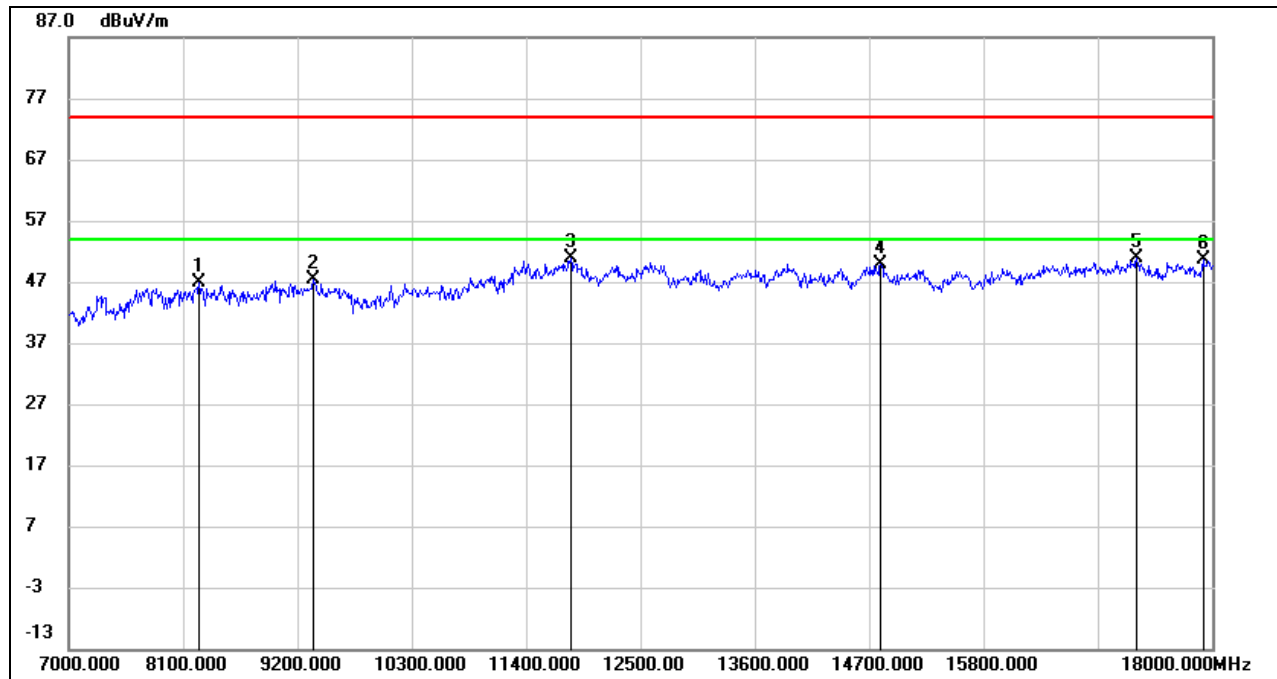
4. AVG: $VBW=1/T_{on}$, where: T_{on} is the transmitting duration.

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.

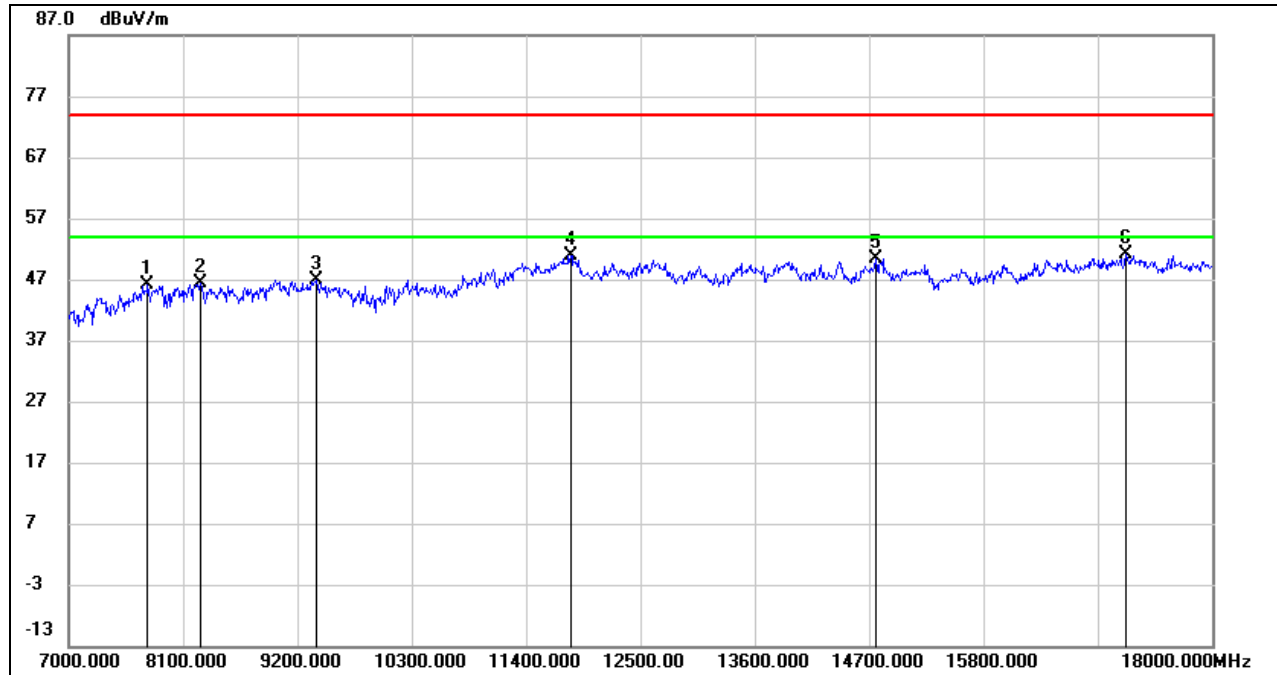
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	37.80	9.15	46.95	74.00	-27.05	peak
2	9354.000	37.26	10.07	47.33	74.00	-26.67	peak
3	11829.000	35.22	15.57	50.79	74.00	-23.21	peak
4	14810.000	33.09	16.80	49.89	74.00	-24.11	peak
5	17274.000	29.84	20.93	50.77	74.00	-23.23	peak
6	17912.000	27.83	22.69	50.52	74.00	-23.48	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7759.000	38.09	8.09	46.18	74.00	-27.82	peak
2	8265.000	37.22	9.11	46.33	74.00	-27.67	peak
3	9387.000	36.68	10.24	46.92	74.00	-27.08	peak
4	11829.000	35.33	15.57	50.90	74.00	-23.10	peak
5	14766.000	33.74	16.74	50.48	74.00	-23.52	peak
6	17175.000	30.26	20.94	51.20	74.00	-22.80	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.

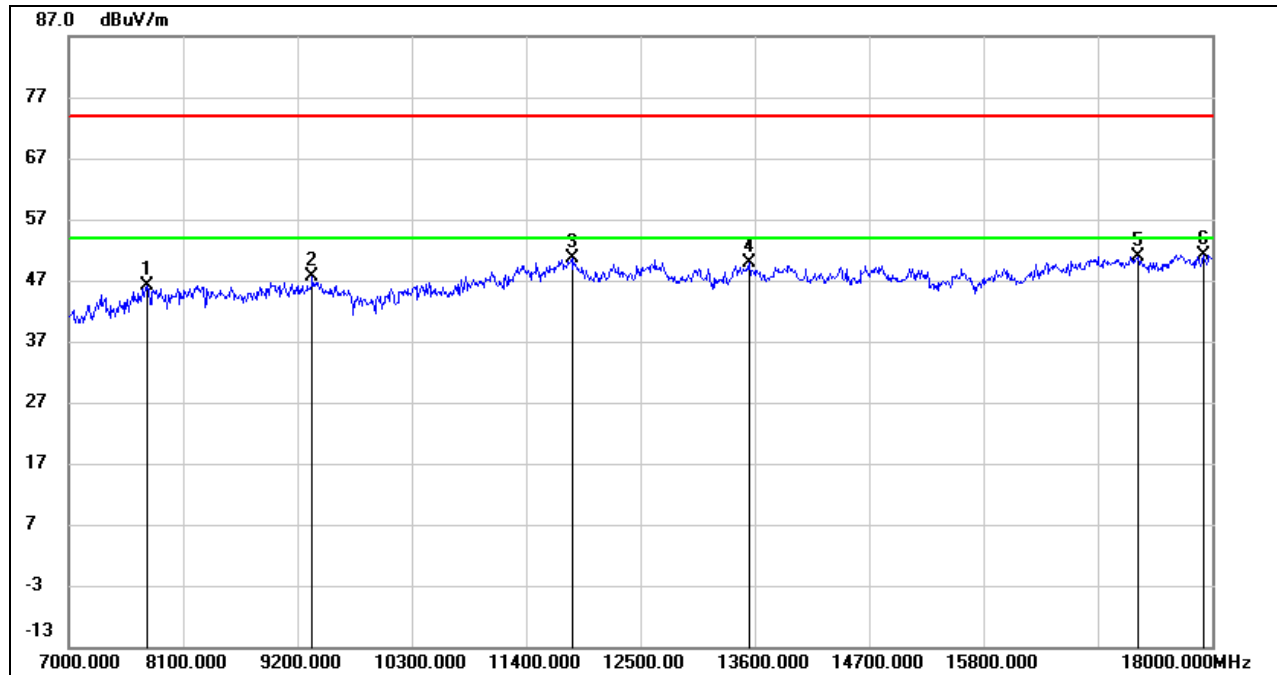
5. For the transmitting duration, please refer to clause 7.1.

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.

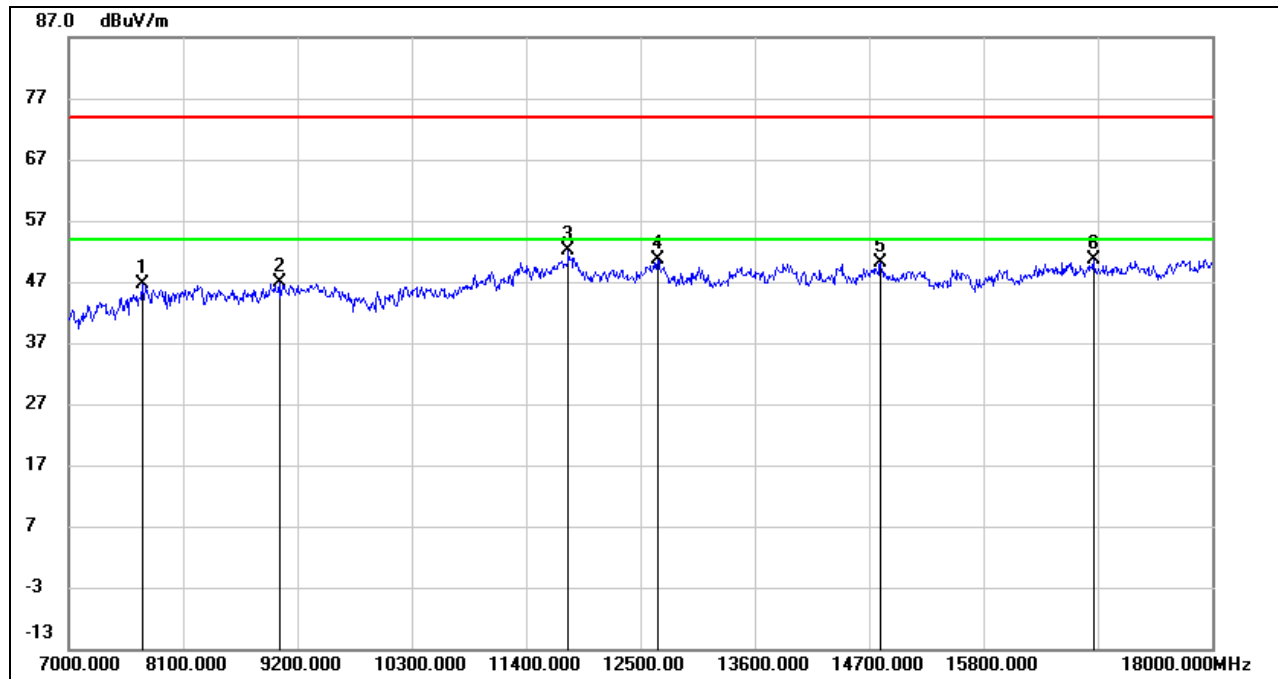
8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7748.000	38.17	8.05	46.22	74.00	-27.78	peak
2	9343.000	37.59	10.02	47.61	74.00	-26.39	peak
3	11840.000	35.00	15.56	50.56	74.00	-23.44	peak
4	13545.000	33.56	16.42	49.98	74.00	-24.02	peak
5	17285.000	30.06	20.92	50.98	74.00	-23.02	peak
6	17912.000	28.50	22.69	51.19	74.00	-22.81	peak

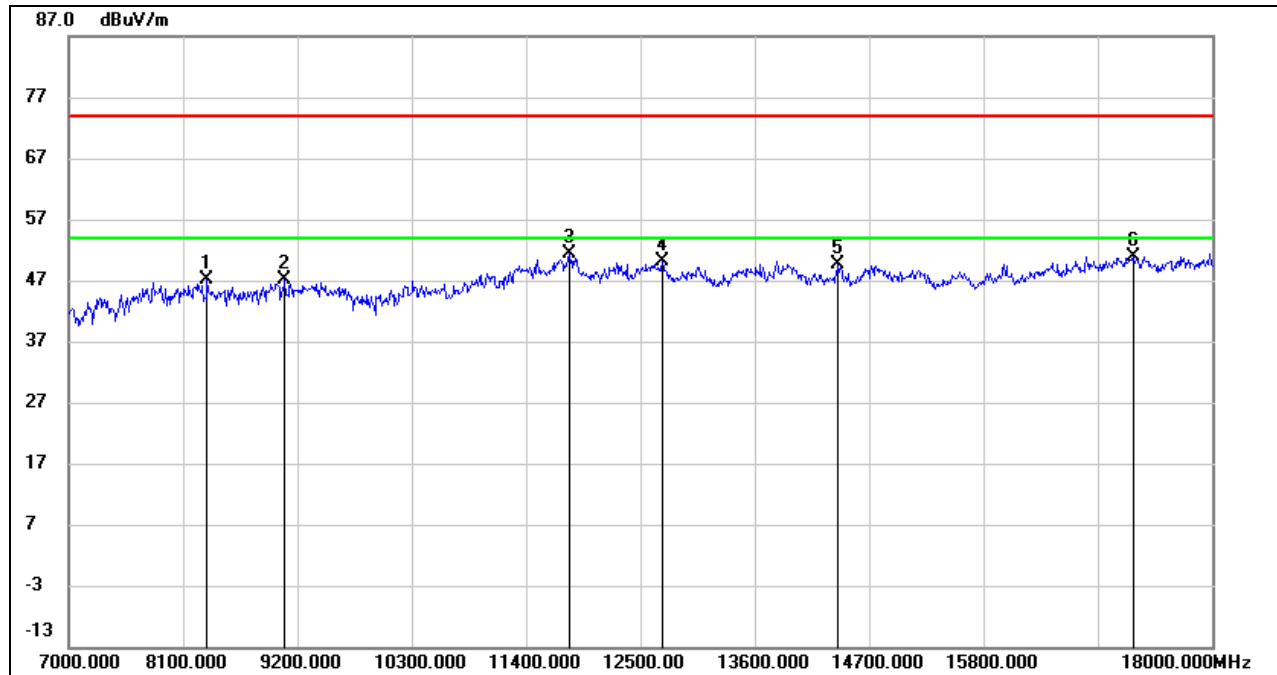
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	7704.000	38.65	7.87	46.52	74.00	-27.48	peak
2	9024.000	36.34	10.47	46.81	74.00	-27.19	peak
3	11807.000	36.51	15.61	52.12	74.00	-21.88	peak
4	12665.000	35.29	15.41	50.70	74.00	-23.30	peak
5	14810.000	33.22	16.80	50.02	74.00	-23.98	peak
6	16856.000	30.73	19.87	50.60	74.00	-23.40	peak

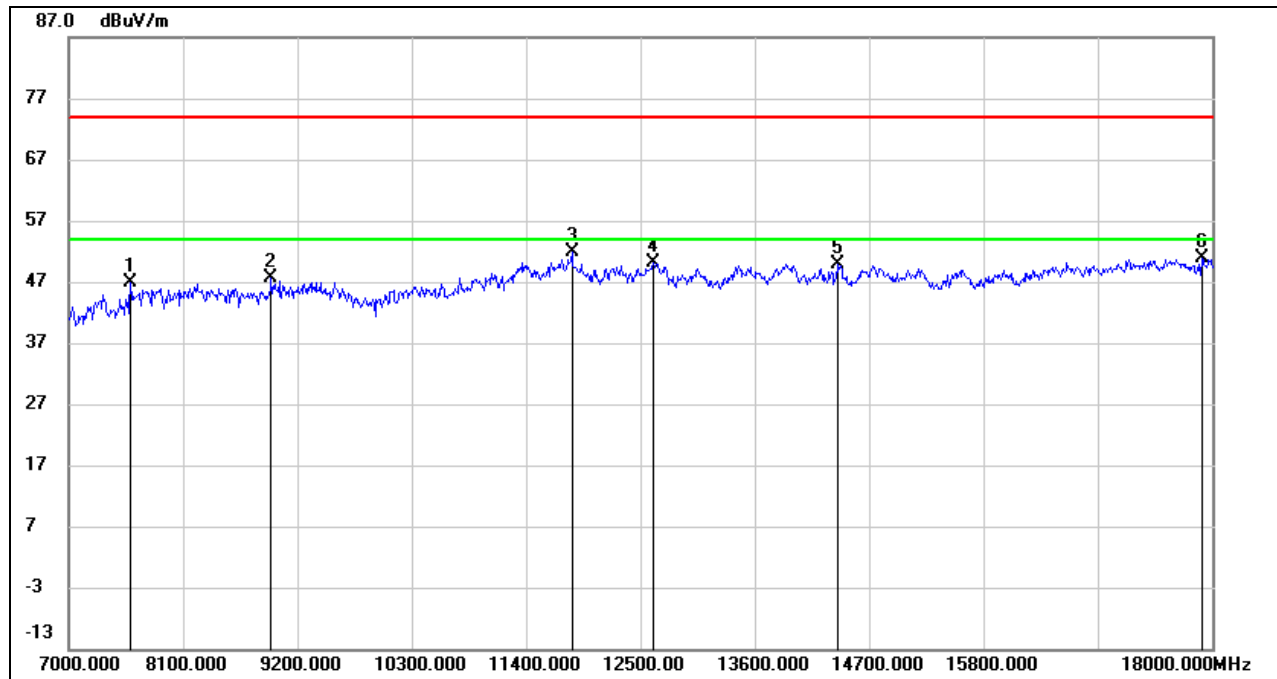
Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	8331.000	38.35	8.85	47.20	74.00	-26.80	peak
2	9079.000	37.02	10.10	47.12	74.00	-26.88	peak
3	11818.000	35.81	15.58	51.39	74.00	-22.61	peak
4	12709.000	34.54	15.49	50.03	74.00	-23.97	peak
5	14403.000	32.72	16.85	49.57	74.00	-24.43	peak
6	17241.000	29.94	20.97	50.91	74.00	-23.09	peak

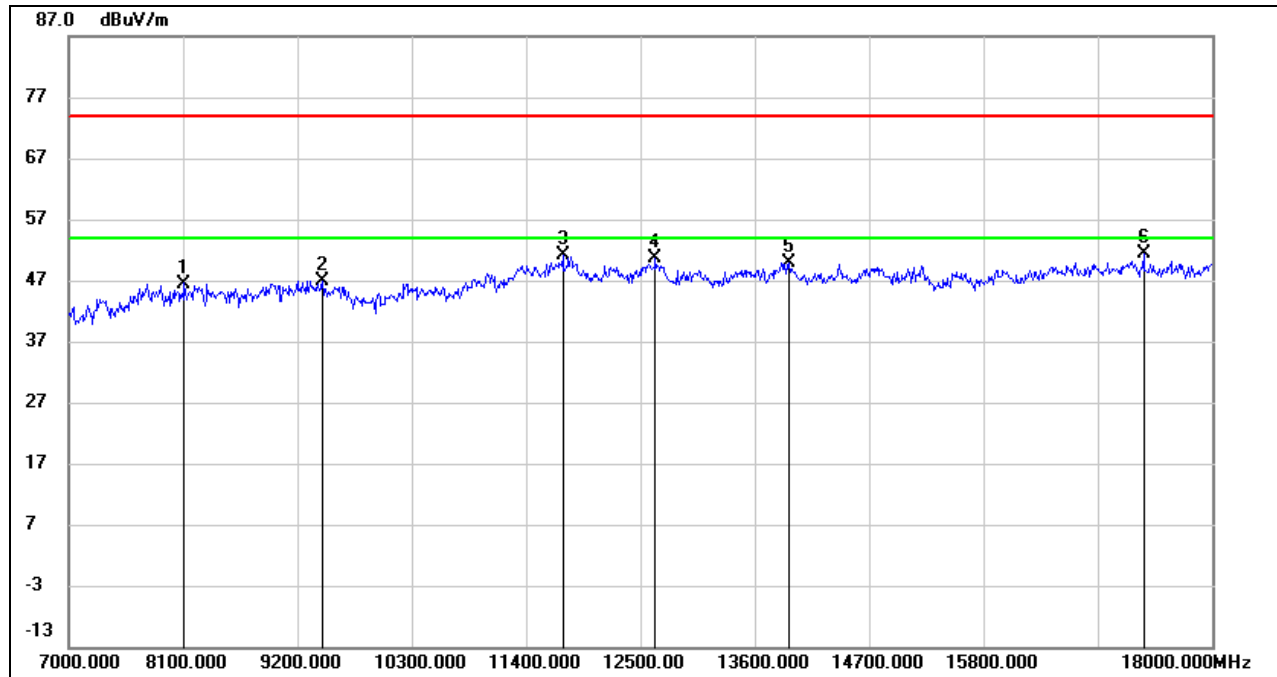
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	7594.000	39.41	7.49	46.90	74.00	-27.10	peak
2	8947.000	37.64	10.07	47.71	74.00	-26.29	peak
3	11840.000	36.44	15.56	52.00	74.00	-22.00	peak
4	12621.000	34.70	15.33	50.03	74.00	-23.97	peak
5	14392.000	33.02	16.84	49.86	74.00	-24.14	peak
6	17901.000	28.18	22.69	50.87	74.00	-23.13	peak

Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	8111.000	37.89	8.61	46.50	74.00	-27.50	peak
2	9442.000	36.47	10.37	46.84	74.00	-27.16	peak
3	11752.000	35.75	15.35	51.10	74.00	-22.90	peak
4	12643.000	35.25	15.36	50.61	74.00	-23.39	peak
5	13930.000	32.93	16.89	49.82	74.00	-24.18	peak
6	17340.000	30.49	20.82	51.31	74.00	-22.69	peak

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

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

3. Peak: Peak detector.

4. 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.

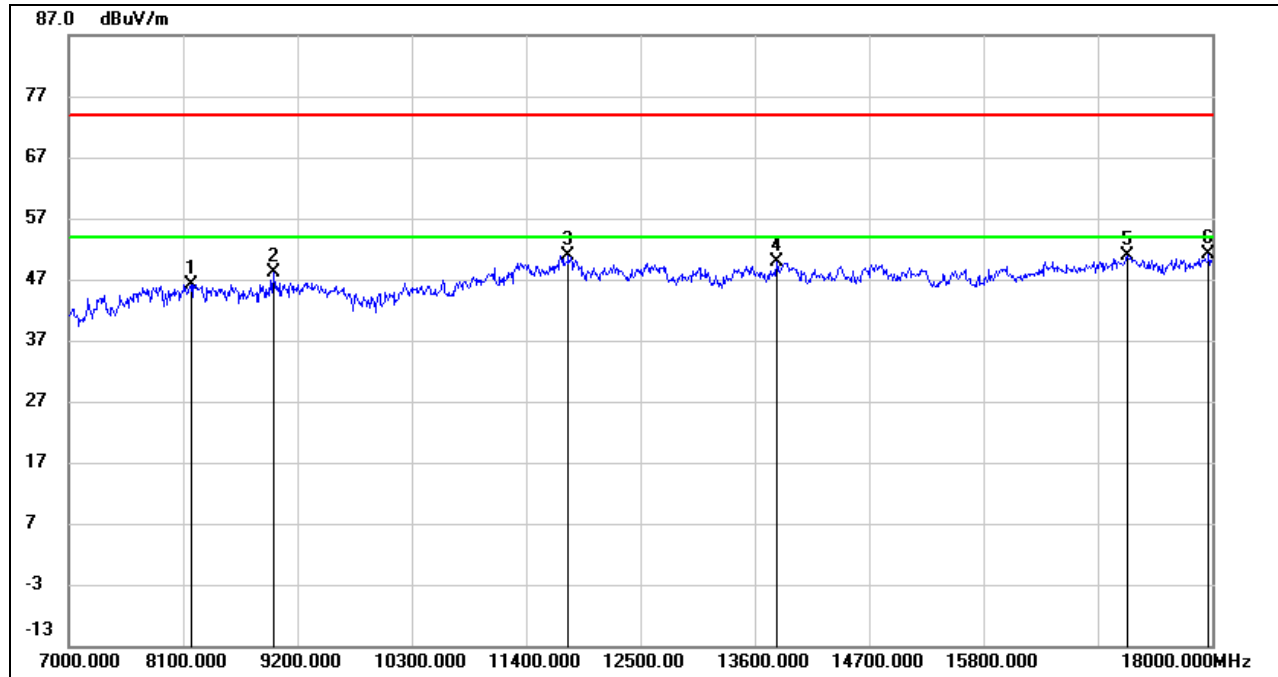
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

8.3.3. 802.11n HT40 MIMO MODE

UNII-1 BAND

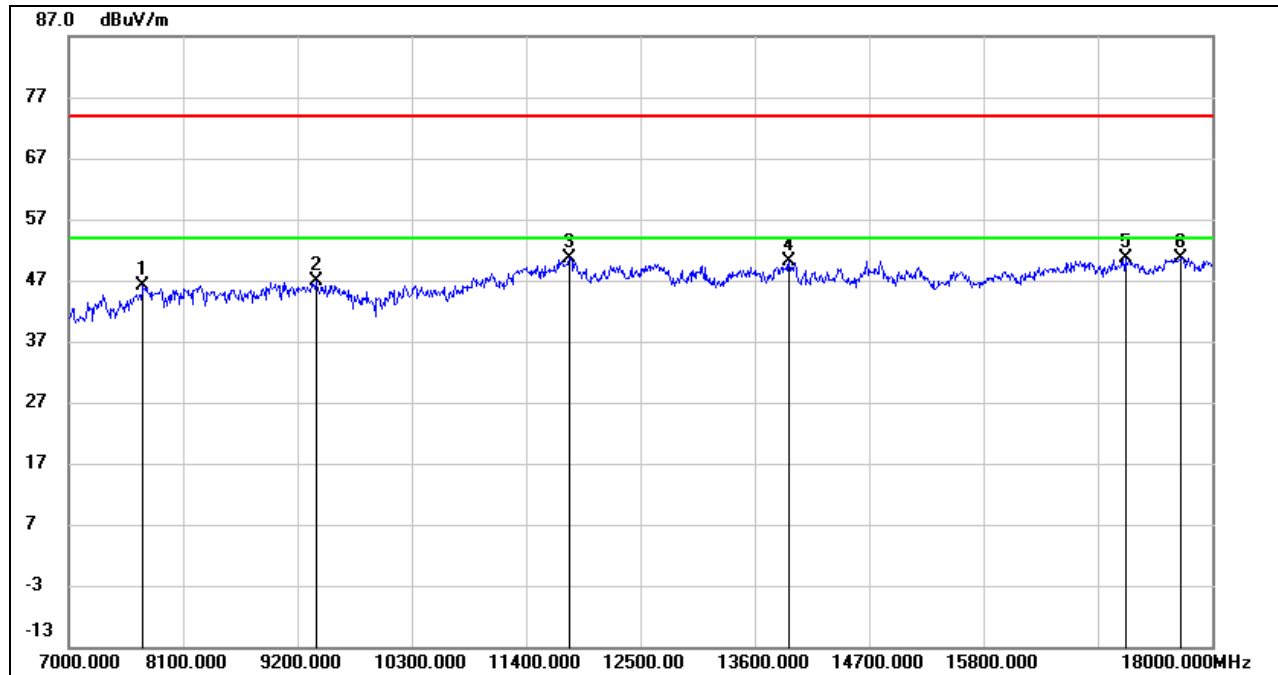
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8177.000	37.08	9.16	46.24	74.00	-27.76	peak
2	8969.000	37.74	10.31	48.05	74.00	-25.95	peak
3	11807.000	35.17	15.61	50.78	74.00	-23.22	peak
4	13809.000	32.84	16.95	49.79	74.00	-24.21	peak
5	17186.000	29.80	20.98	50.78	74.00	-23.22	peak
6	17967.000	28.34	22.67	51.01	74.00	-22.99	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

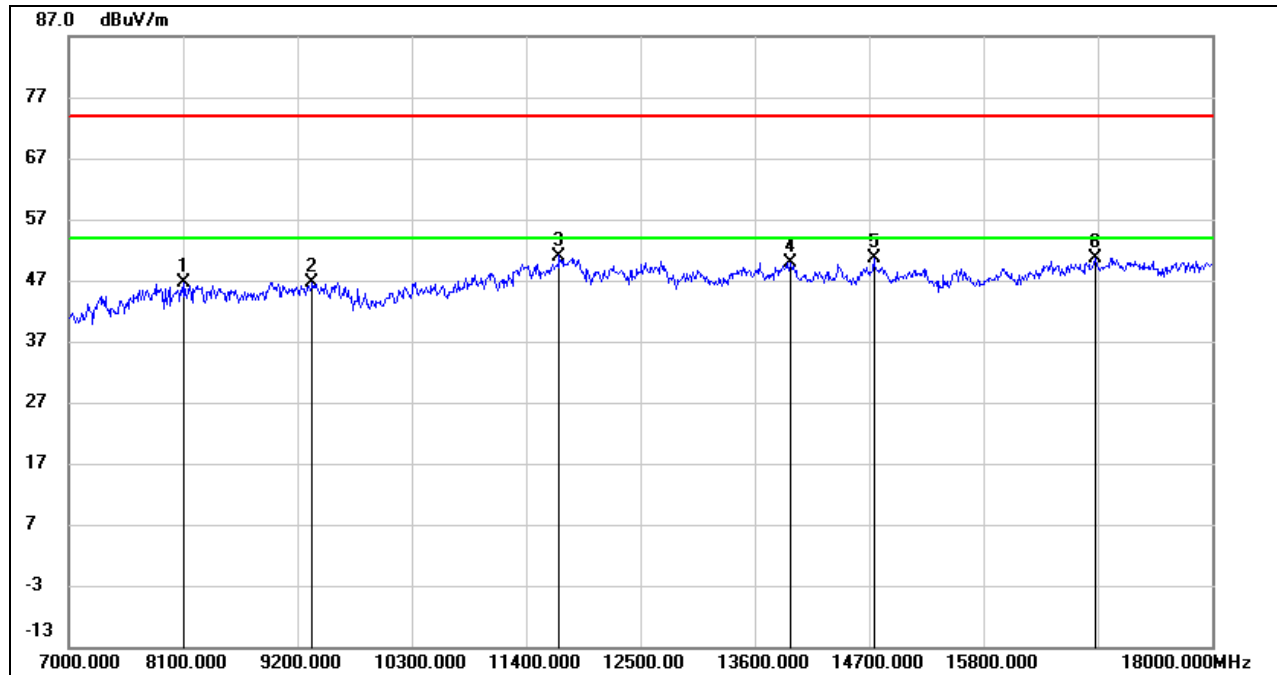
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7715.000	38.23	7.92	46.15	74.00	-27.85	peak
2	9376.000	36.72	10.19	46.91	74.00	-27.09	peak
3	11818.000	35.09	15.58	50.67	74.00	-23.33	peak
4	13930.000	33.33	16.89	50.22	74.00	-23.78	peak
5	17164.000	29.84	20.89	50.73	74.00	-23.27	peak
6	17692.000	28.78	21.87	50.65	74.00	-23.35	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

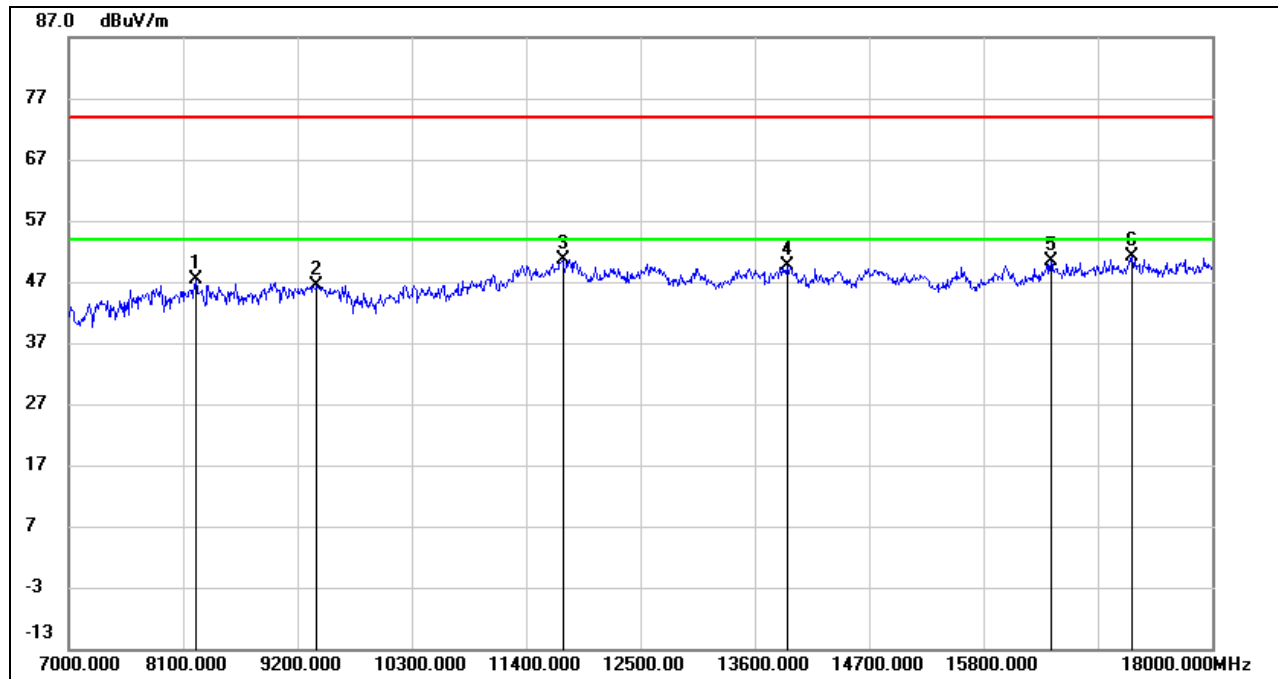
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8111.000	37.91	8.61	46.52	74.00	-27.48	peak
2	9343.000	36.62	10.02	46.64	74.00	-27.36	peak
3	11719.000	35.83	15.17	51.00	74.00	-23.00	peak
4	13941.000	32.98	16.88	49.86	74.00	-24.14	peak
5	14744.000	34.05	16.70	50.75	74.00	-23.25	peak
6	16878.000	30.77	19.93	50.70	74.00	-23.30	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	8221.000	38.12	9.28	47.40	74.00	-26.60	peak
2	9387.000	36.24	10.24	46.48	74.00	-27.52	peak
3	11752.000	35.36	15.35	50.71	74.00	-23.29	peak
4	13908.000	32.70	16.90	49.60	74.00	-24.40	peak
5	16449.000	31.37	18.91	50.28	74.00	-23.72	peak
6	17230.000	30.14	20.99	51.13	74.00	-22.87	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. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.

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

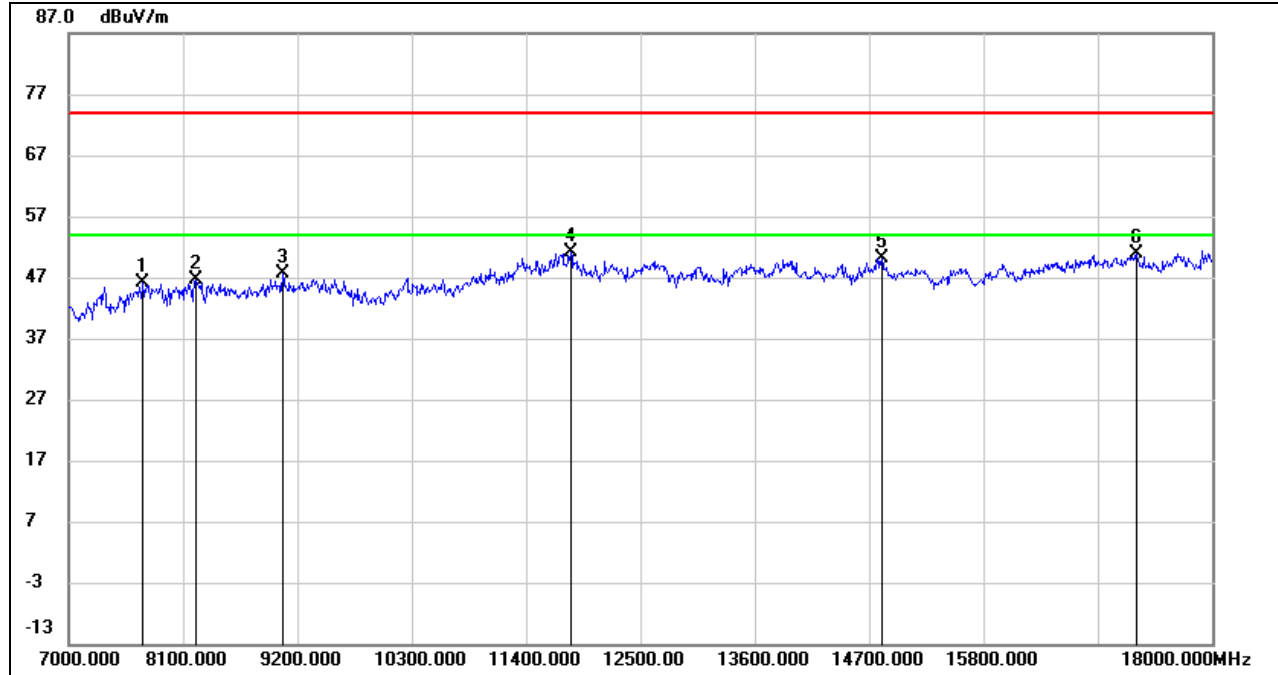
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

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

8. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

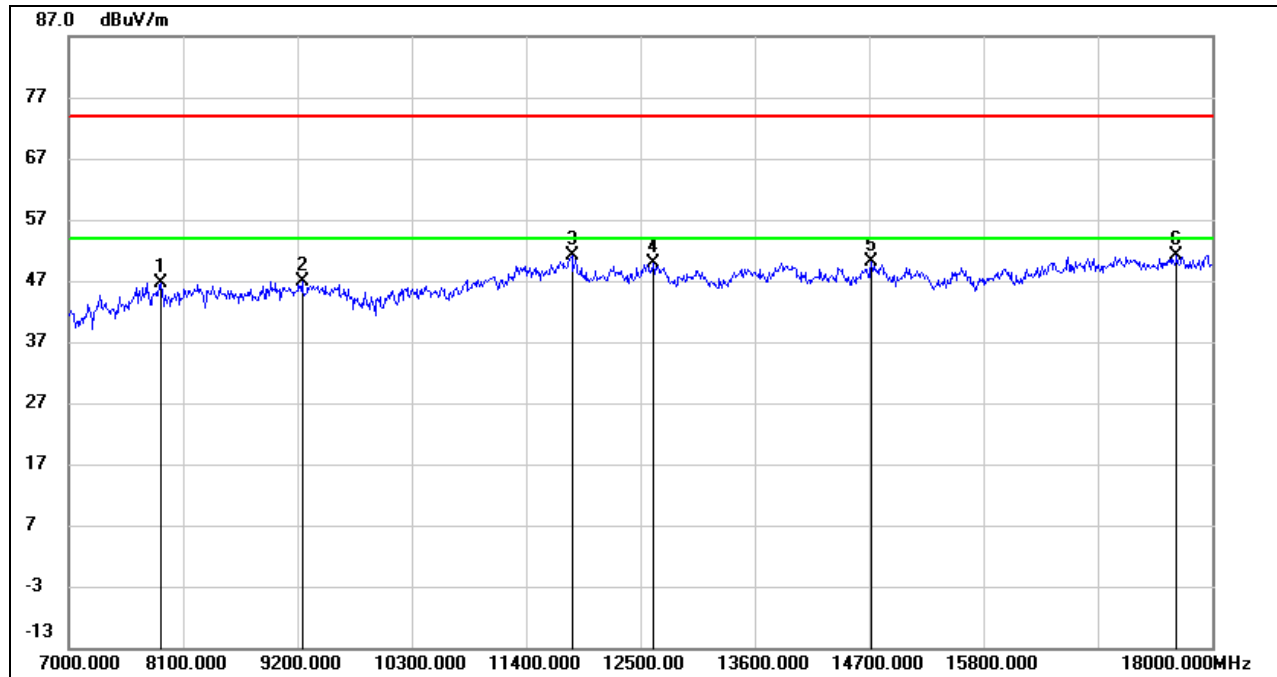
UNII-3 BAND

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	7715.000	38.13	7.92	46.05	74.00	-27.95	peak
2	8221.000	37.32	9.28	46.60	74.00	-27.40	peak
3	9057.000	37.29	10.26	47.55	74.00	-26.45	peak
4	11829.000	35.48	15.57	51.05	74.00	-22.95	peak
5	14821.000	33.21	16.81	50.02	74.00	-23.98	peak
6	17274.000	29.93	20.93	50.86	74.00	-23.14	peak

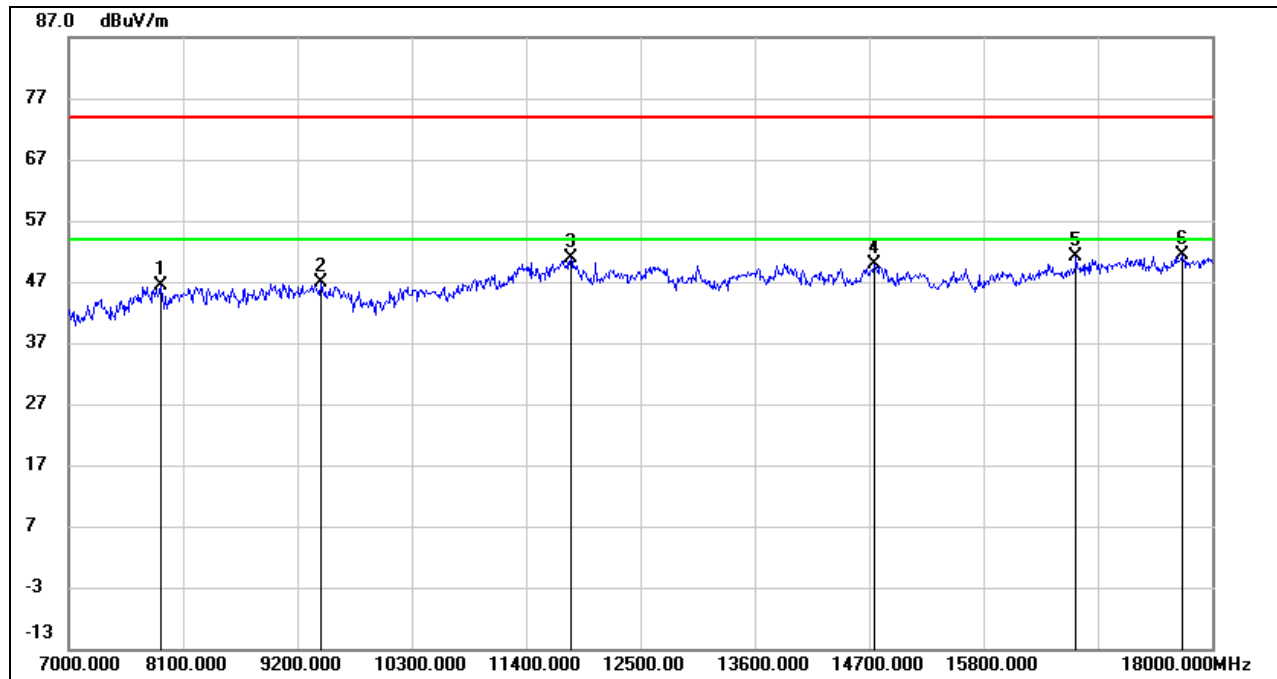
Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

**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	7880.000	38.73	8.01	46.74	74.00	-27.26	peak
2	9244.000	37.44	9.51	46.95	74.00	-27.05	peak
3	11840.000	35.50	15.56	51.06	74.00	-22.94	peak
4	12621.000	34.53	15.33	49.86	74.00	-24.14	peak
5	14722.000	33.46	16.67	50.13	74.00	-23.87	peak
6	17659.000	29.61	21.63	51.24	74.00	-22.76	peak

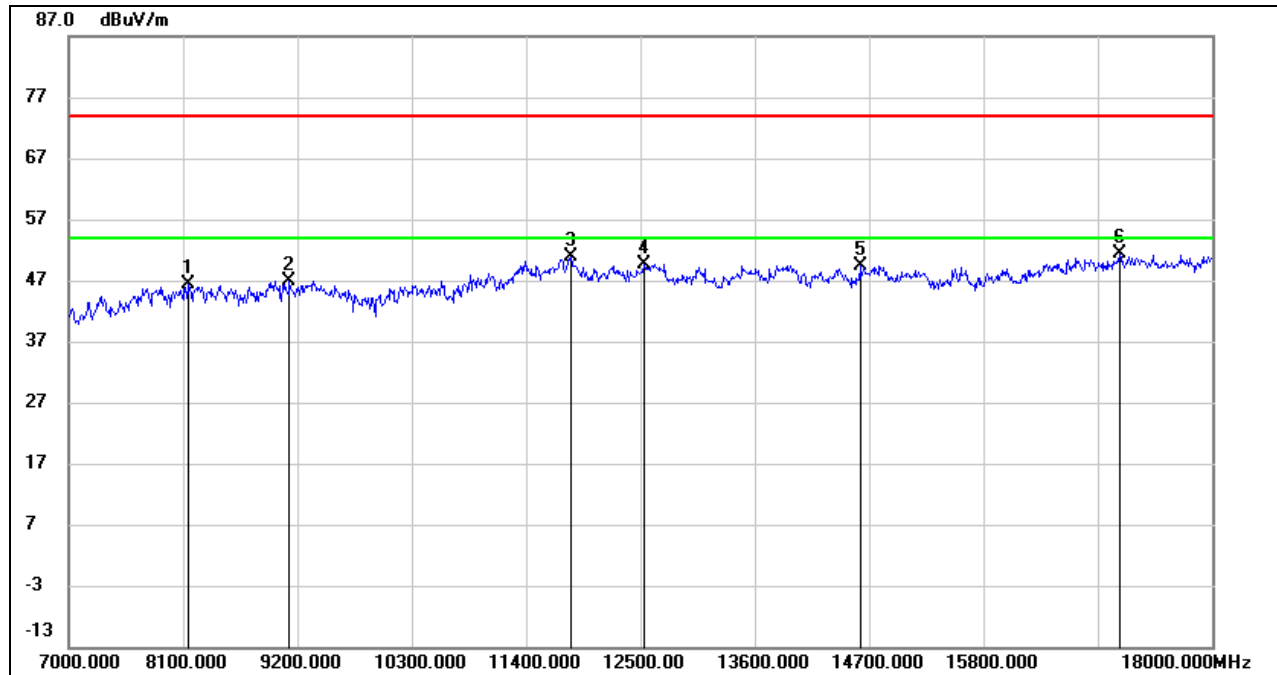
- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.1.
 6. Filter 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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	7880.000	38.26	8.01	46.27	74.00	-27.73	peak
2	9431.000	36.64	10.35	46.99	74.00	-27.01	peak
3	11829.000	35.22	15.57	50.79	74.00	-23.21	peak
4	14744.000	33.25	16.70	49.95	74.00	-24.05	peak
5	16691.000	31.45	19.62	51.07	74.00	-22.93	peak
6	17714.000	29.40	22.04	51.44	74.00	-22.56	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

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

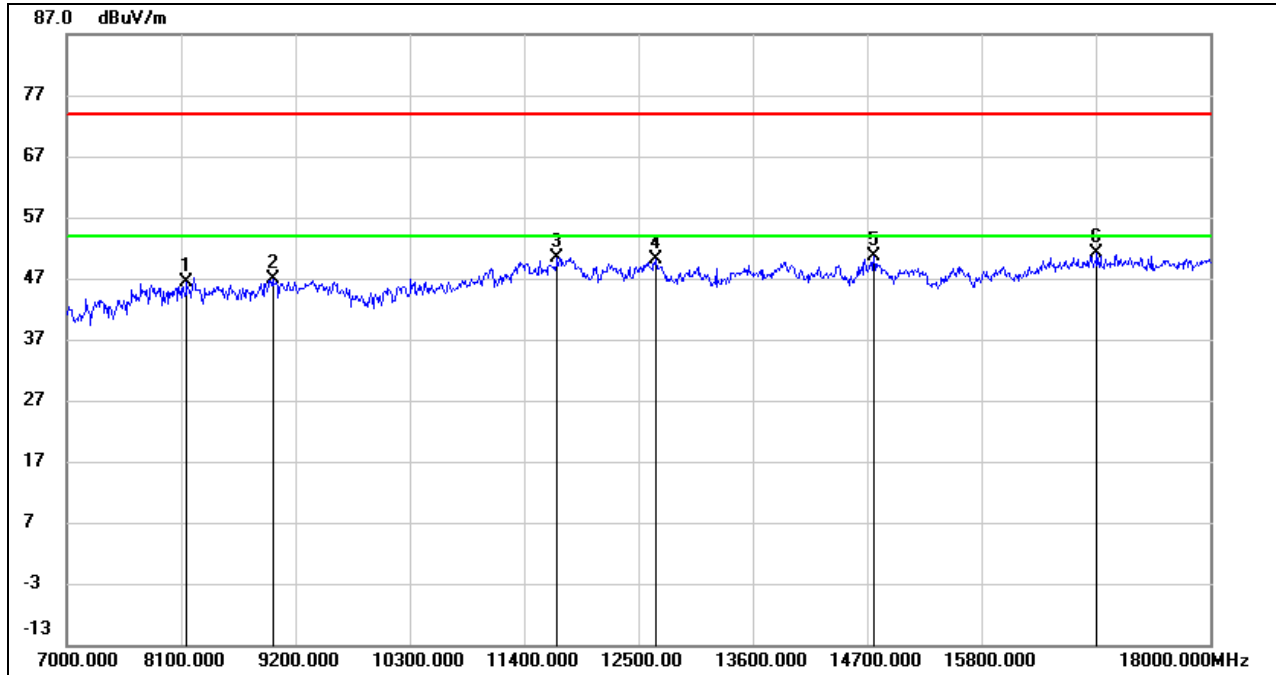
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8144.000	37.59	8.88	46.47	74.00	-27.53	peak
2	9123.000	37.04	9.81	46.85	74.00	-27.15	peak
3	11829.000	35.30	15.57	50.87	74.00	-23.13	peak
4	12533.000	34.32	15.35	49.67	74.00	-24.33	peak
5	14612.000	32.95	16.49	49.44	74.00	-24.56	peak
6	17109.000	30.63	20.67	51.30	74.00	-22.70	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

8.3.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

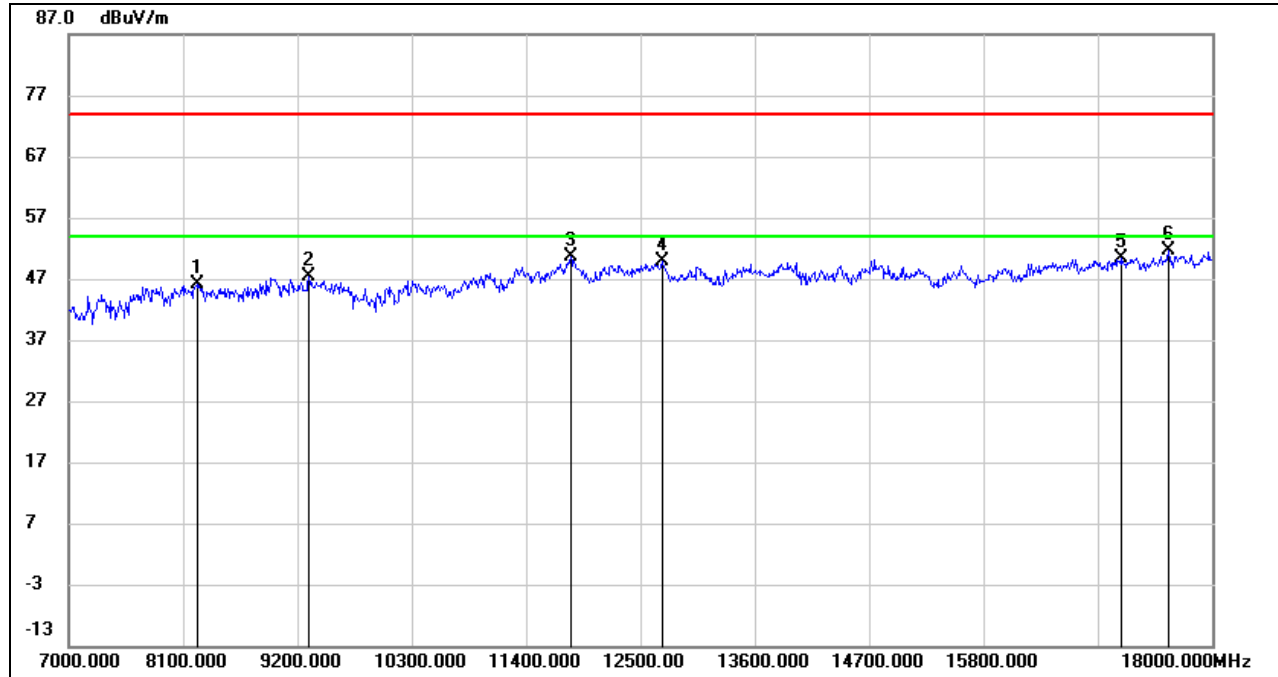
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8155.000	37.45	8.98	46.43	74.00	-27.57	peak
2	8980.000	36.37	10.41	46.78	74.00	-27.22	peak
3	11719.000	35.26	15.17	50.43	74.00	-23.57	peak
4	12665.000	34.70	15.41	50.11	74.00	-23.89	peak
5	14766.000	33.94	16.74	50.68	74.00	-23.32	peak
6	16911.000	31.07	20.02	51.09	74.00	-22.91	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

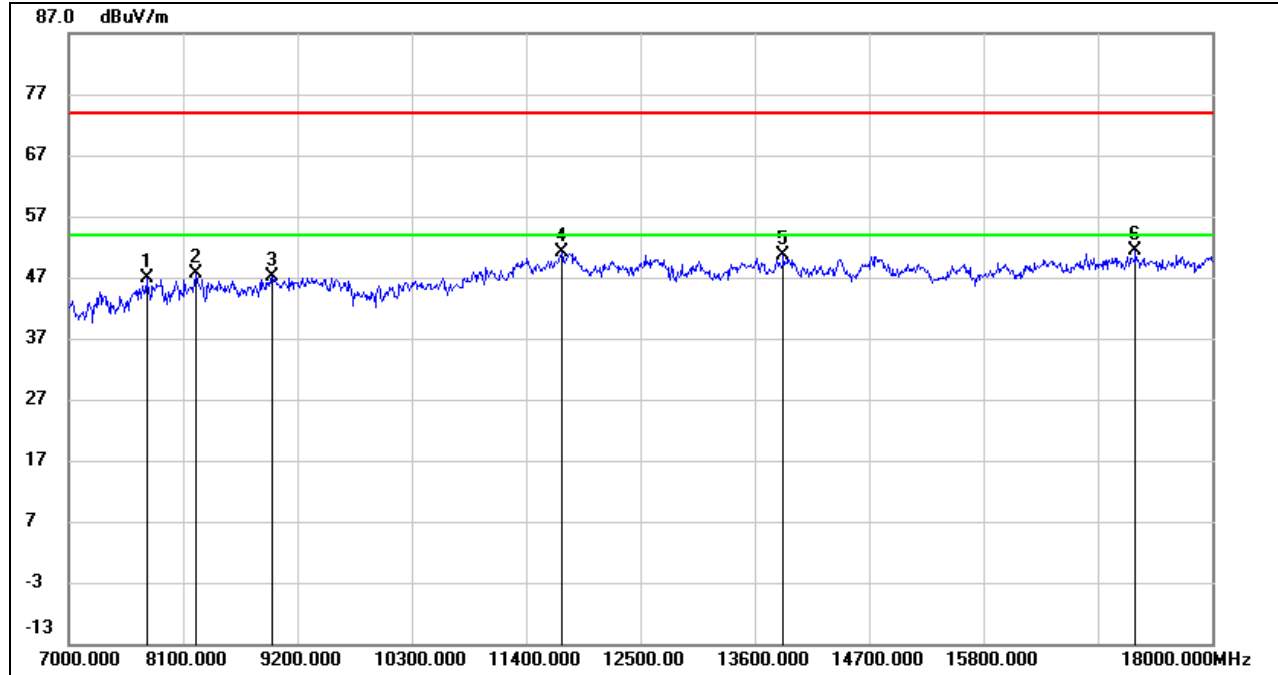


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8243.000	37.05	9.19	46.24	74.00	-27.76	peak
2	9310.000	37.56	9.86	47.42	74.00	-26.58	peak
3	11829.000	34.95	15.57	50.52	74.00	-23.48	peak
4	12709.000	34.34	15.49	49.83	74.00	-24.17	peak
5	17120.000	29.71	20.72	50.43	74.00	-23.57	peak
6	17582.000	30.52	21.11	51.63	74.00	-22.37	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. 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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

UNII-3 BAND

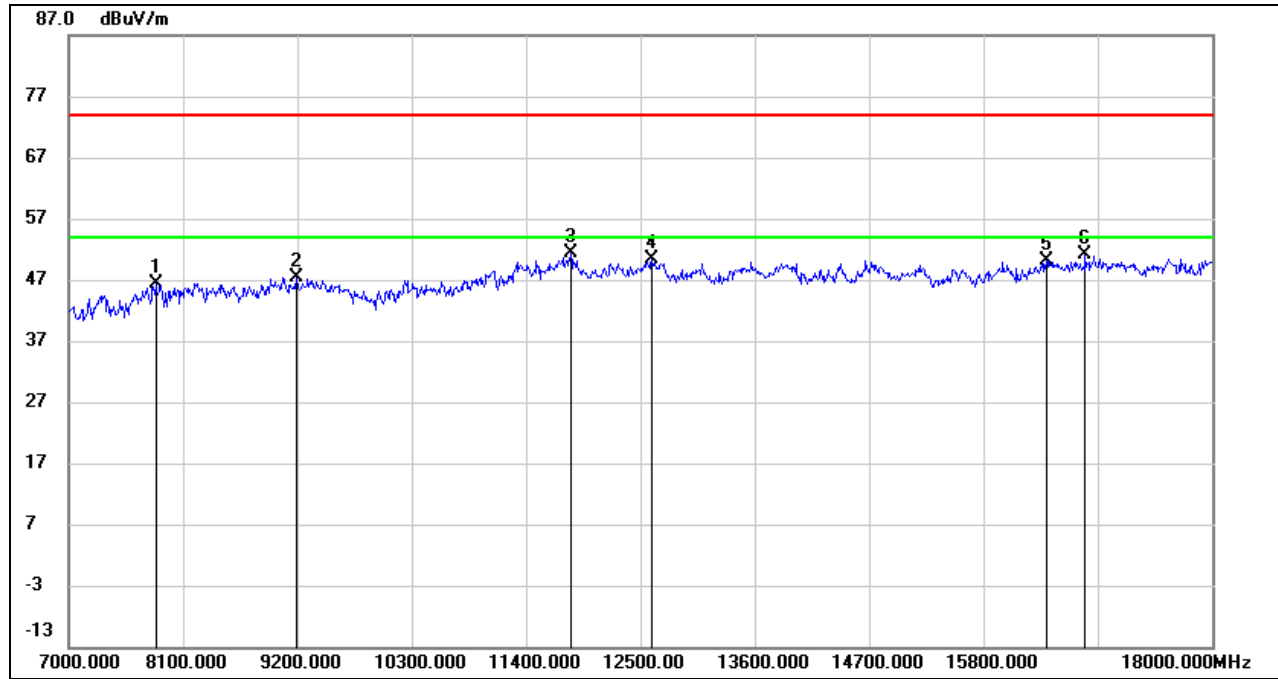
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7748.000	38.93	8.05	46.98	74.00	-27.02	peak
2	8221.000	38.31	9.28	47.59	74.00	-26.41	peak
3	8958.000	36.92	10.19	47.11	74.00	-26.89	peak
4	11741.000	35.81	15.28	51.09	74.00	-22.91	peak
5	13875.000	33.82	16.92	50.74	74.00	-23.26	peak
6	17263.000	30.46	20.95	51.41	74.00	-22.59	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



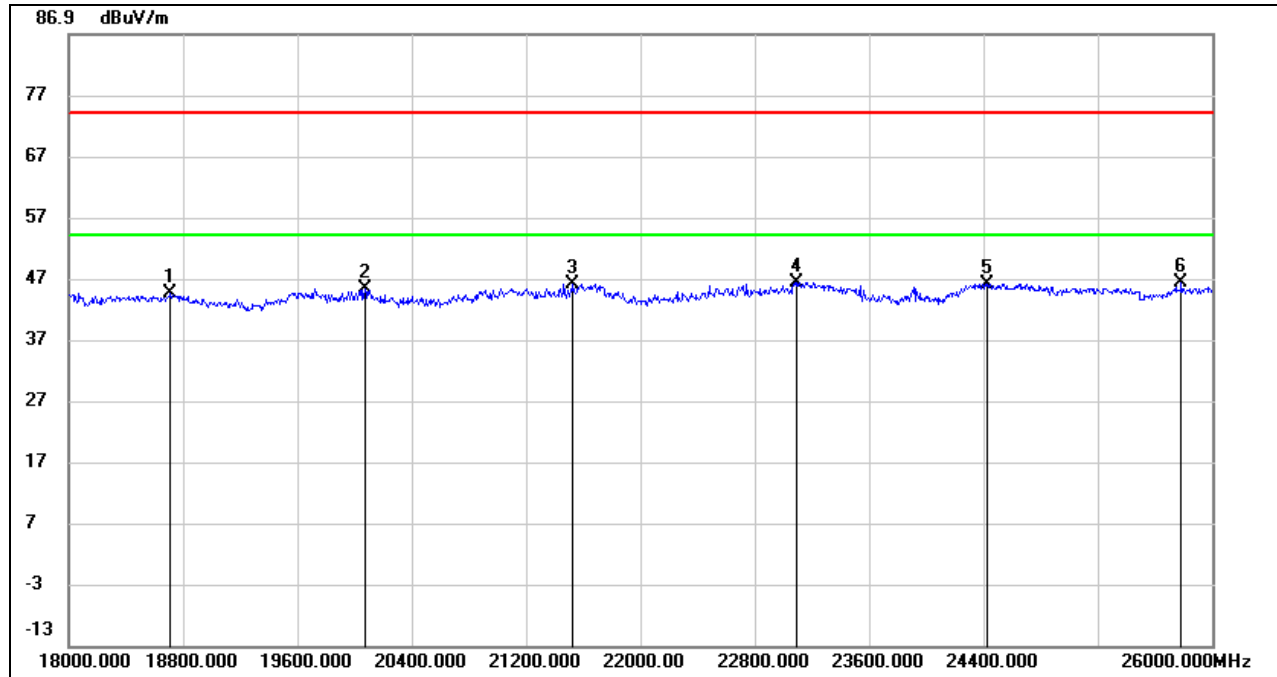
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7836.000	38.18	8.14	46.32	74.00	-27.68	peak
2	9189.000	38.05	9.36	47.41	74.00	-26.59	peak
3	11829.000	35.84	15.57	51.41	74.00	-22.59	peak
4	12610.000	34.99	15.30	50.29	74.00	-23.71	peak
5	16405.000	31.35	18.72	50.07	74.00	-23.93	peak
6	16779.000	31.40	19.72	51.12	74.00	-22.88	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. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point was deemed to comply with the limits list in the standard.

8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

8.4.1. 802.11n HT40 MIMO MODE

SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

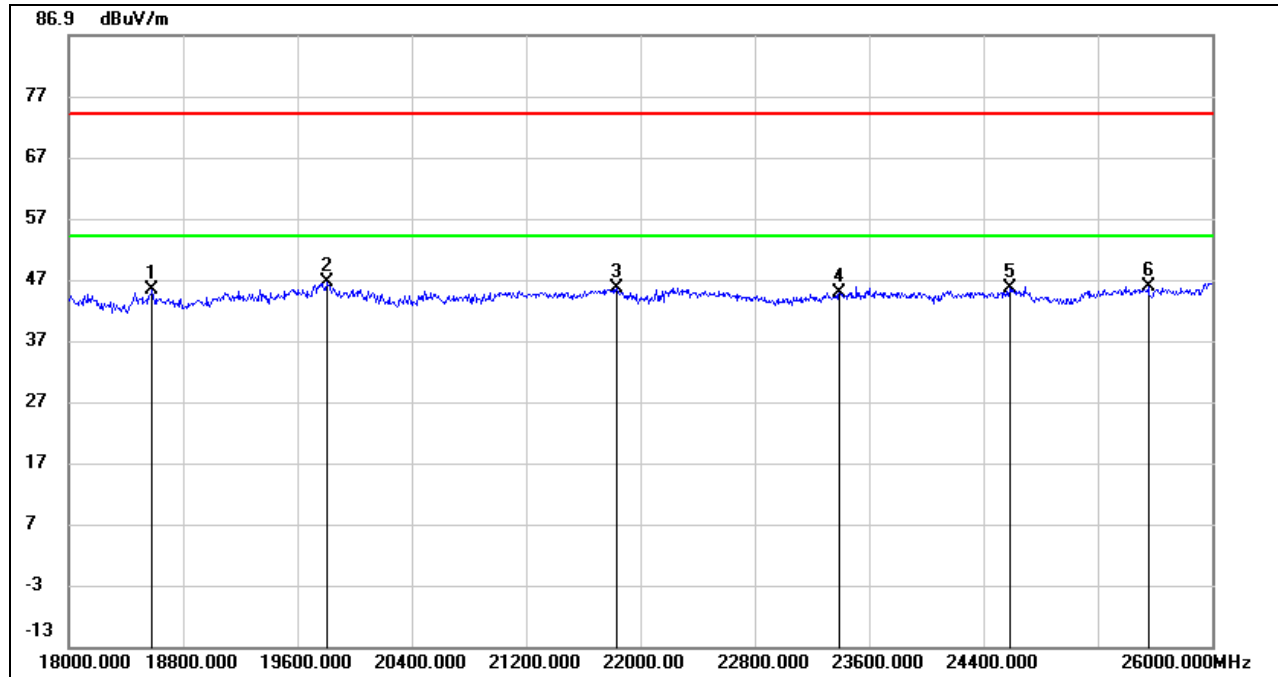


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18712.000	49.23	-4.76	44.47	74.00	-29.53	peak
2	20072.000	49.84	-4.51	45.33	74.00	-28.67	peak
3	21528.000	51.92	-5.78	46.14	74.00	-27.86	peak
4	23096.000	51.80	-5.47	46.33	74.00	-27.67	peak
5	24424.000	49.04	-2.90	46.14	74.00	-27.86	peak
6	25784.000	47.73	-1.49	46.24	74.00	-27.76	peak

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



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



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18584.000	49.69	-4.53	45.16	74.00	-28.84	peak
2	19808.000	50.83	-4.34	46.49	74.00	-27.51	peak
3	21832.000	51.53	-5.92	45.61	74.00	-28.39	peak
4	23392.000	49.78	-4.98	44.80	74.00	-29.20	peak
5	24584.000	47.93	-2.37	45.56	74.00	-28.44	peak
6	25552.000	47.51	-1.72	45.79	74.00	-28.21	peak

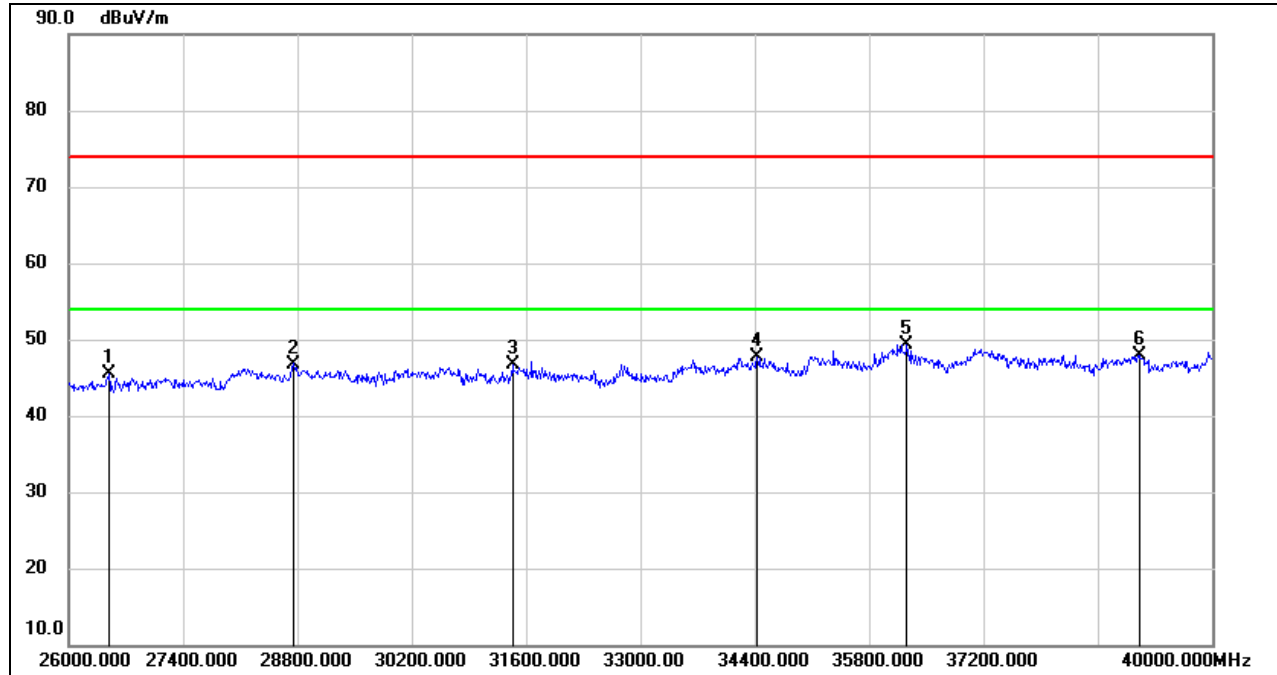
- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.

Note: All the channels and modes antennas 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 MIMO MODE

SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

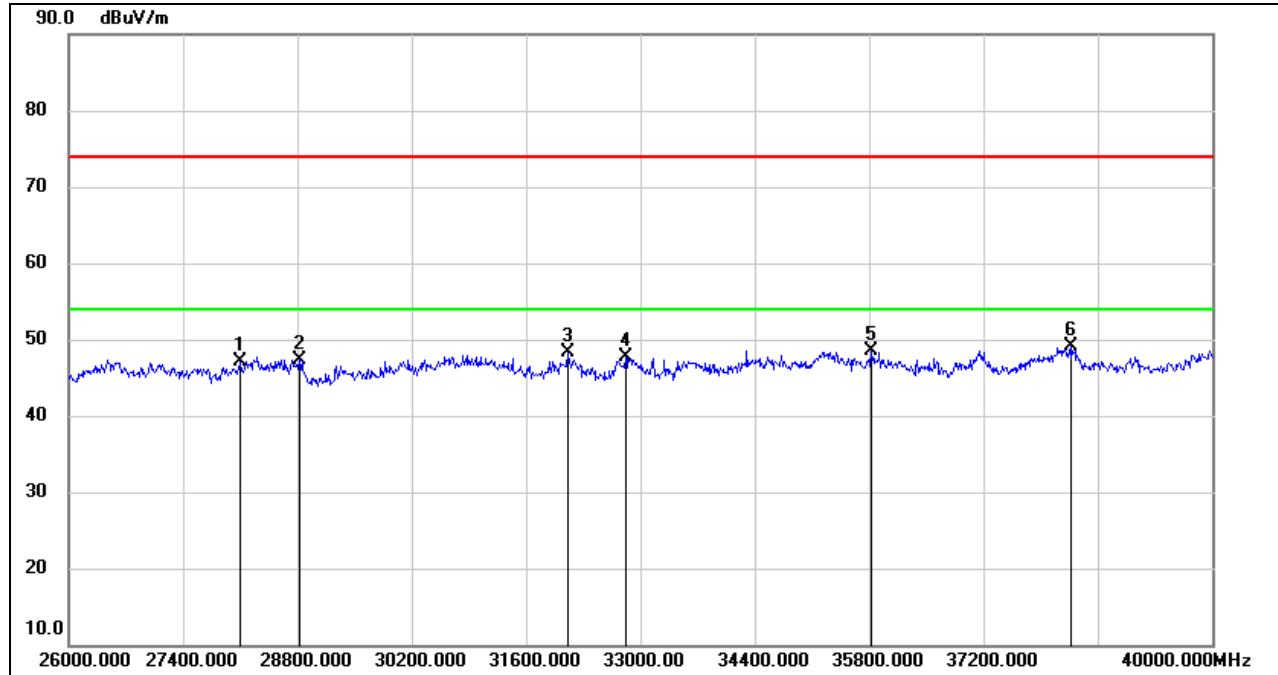


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26490.000	50.29	-4.74	45.55	74.00	-28.45	peak
2	28744.000	47.36	-0.56	46.80	74.00	-27.20	peak
3	31432.000	47.75	-1.10	46.65	74.00	-27.35	peak
4	34428.000	46.70	0.99	47.69	74.00	-26.31	peak
5	36262.000	46.10	3.28	49.38	74.00	-24.62	peak
6	39118.000	43.69	4.24	47.93	74.00	-26.07	peak

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28100.000	50.42	-3.40	47.02	74.00	-26.98	peak
2	28828.000	48.13	-0.79	47.34	74.00	-26.66	peak
3	32104.000	49.99	-1.75	48.24	74.00	-25.76	peak
4	32818.000	48.81	-1.08	47.73	74.00	-26.27	peak
5	35828.000	44.75	3.67	48.42	74.00	-25.58	peak
6	38278.000	45.32	3.82	49.14	74.00	-24.86	peak

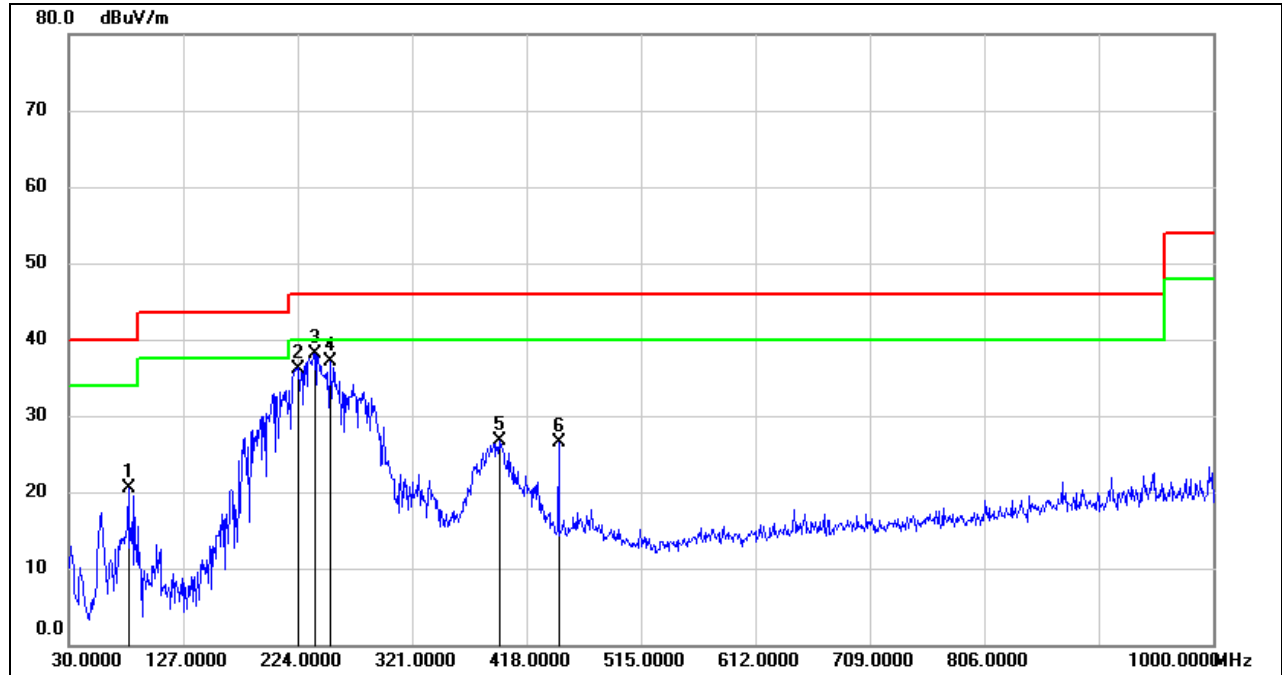
- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Peak: Peak detector.
 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

Note: All the channels and modes antennas 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 MIMO MODE

SPURIOUS EMISSIONS (UNII1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

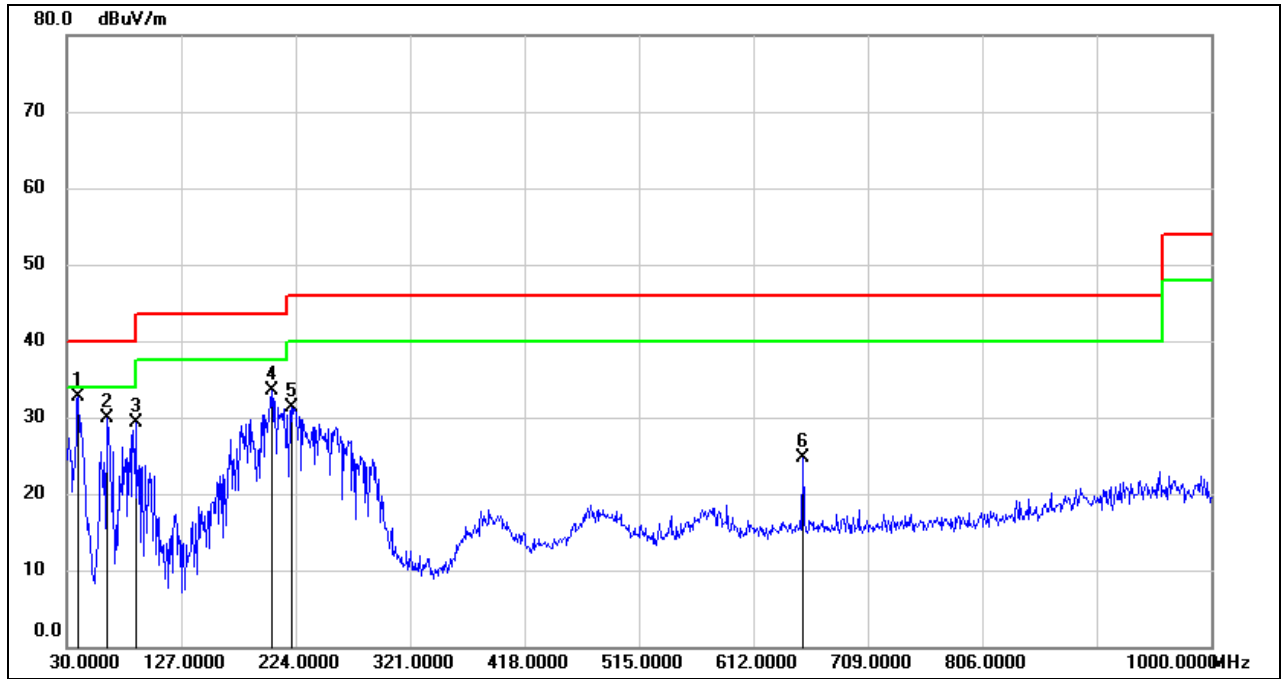


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	80.4400	41.97	-21.38	20.59	40.00	-19.41	QP
2	224.9700	54.62	-18.42	36.20	46.00	-9.80	QP
3	238.5500	57.29	-19.10	38.19	46.00	-7.81	QP
4	252.1300	55.94	-18.84	37.10	46.00	-8.90	QP
5	394.7200	40.16	-13.43	26.73	46.00	-19.27	QP
6	445.1600	39.10	-12.53	26.57	46.00	-19.43	QP

- 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-1 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	39.7000	52.59	-19.96	32.63	40.00	-7.37	QP
2	63.9500	50.48	-20.53	29.95	40.00	-10.05	QP
3	88.2000	51.12	-21.85	29.27	43.50	-14.23	QP
4	203.6300	50.13	-16.70	33.43	43.50	-10.07	QP
5	220.1200	49.43	-18.19	31.24	46.00	-14.76	QP
6	653.7100	33.66	-8.92	24.74	46.00	-21.26	QP

- 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

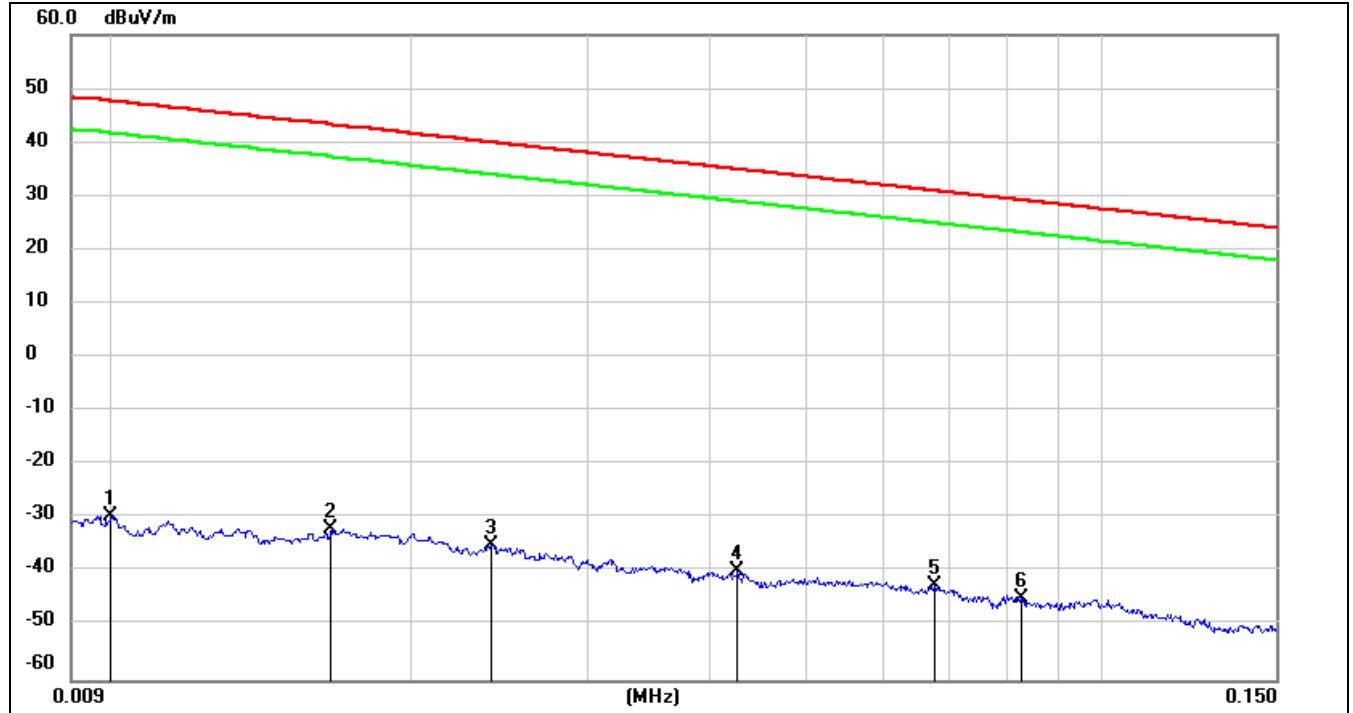
Note: All the channels and modes antennas had been tested, but only the worst data was recorded in the report.

8.7. SPURIOUS EMISSIONS BELOW 30 MHz

8.7.1. 802.11n HT40 MIMO MODE

SPURIOUS EMISSIONS (UNII-1 BAND LOW 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)	Margin (dB)	Remark
1	0.0100	71.72	-101.40	-29.68	47.6	-77.28	peak
2	0.0165	69.34	-101.37	-32.03	43.25	-75.28	peak
3	0.0240	66.32	-101.36	-35.04	40	-75.04	peak
4	0.0427	61.64	-101.45	-39.81	34.99	-74.80	peak
5	0.0675	59.14	-101.56	-42.42	31.02	-73.44	peak
6	0.0826	56.82	-101.65	-44.83	29.26	-74.09	peak

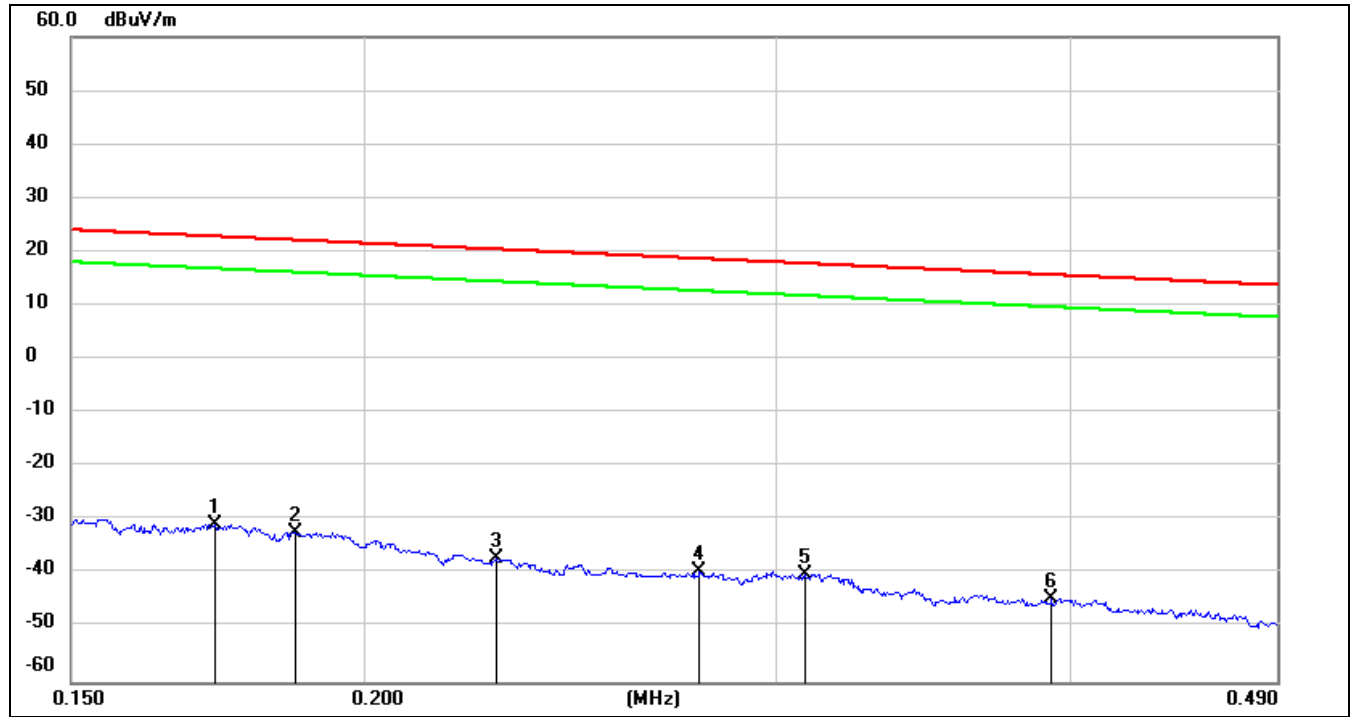
Note: 1. Measurement = Reading Level + Correct Factor.

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.



150 kHz ~ 490 kHz



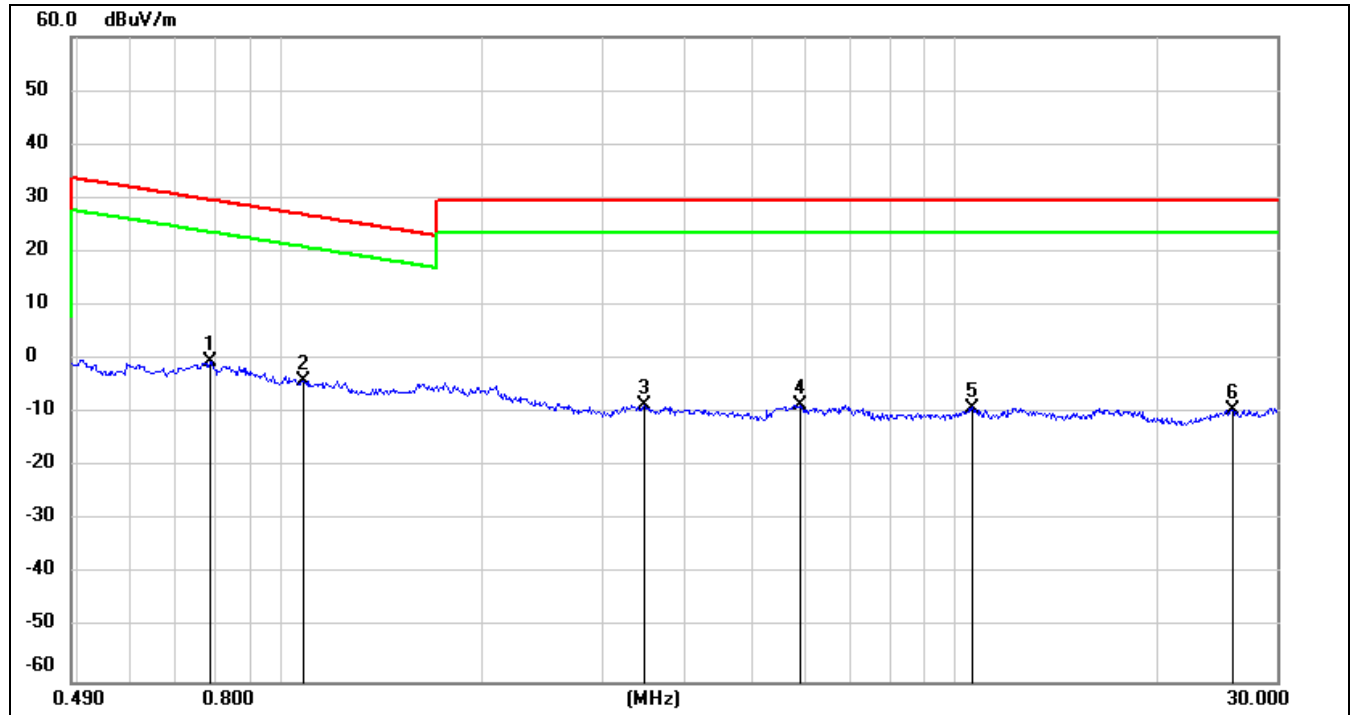
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	Margin (dB)	Remark
1	0.1728	71.00	-101.67	-30.67	22.86	-53.53	peak
2	0.1869	69.54	-101.70	-32.16	22.17	-54.33	peak
3	0.2278	64.58	-101.77	-37.19	20.45	-57.64	peak
4	0.2782	62.29	-101.83	-39.54	18.71	-58.25	peak
5	0.3084	61.95	-101.86	-39.91	17.82	-57.73	peak
6	0.3930	57.55	-101.96	-44.41	15.71	-60.12	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.

490 kHz ~ 30 MHz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	Margin (dB)	Remark
1	0.7861	61.83	-62.14	-0.31	29.69	-30.00	peak
2	1.0802	58.16	-62.23	-4.07	26.94	-31.01	peak
3	3.4704	52.85	-61.46	-8.61	29.54	-38.15	peak
4	5.9198	52.93	-61.36	-8.43	29.54	-37.97	peak
5	10.6119	51.82	-60.82	-9	29.54	-38.54	peak
6	25.8094	50.91	-60.37	-9.46	29.54	-39.00	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.

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

9. AC POWER LINE CONDUCTED EMISSIONS

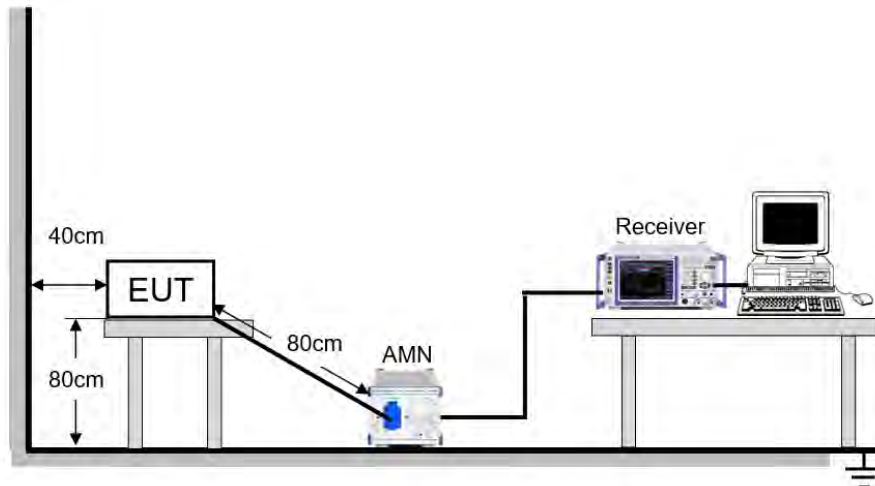
LIMITS

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

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

TEST SETUP AND PROCEDURE

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.

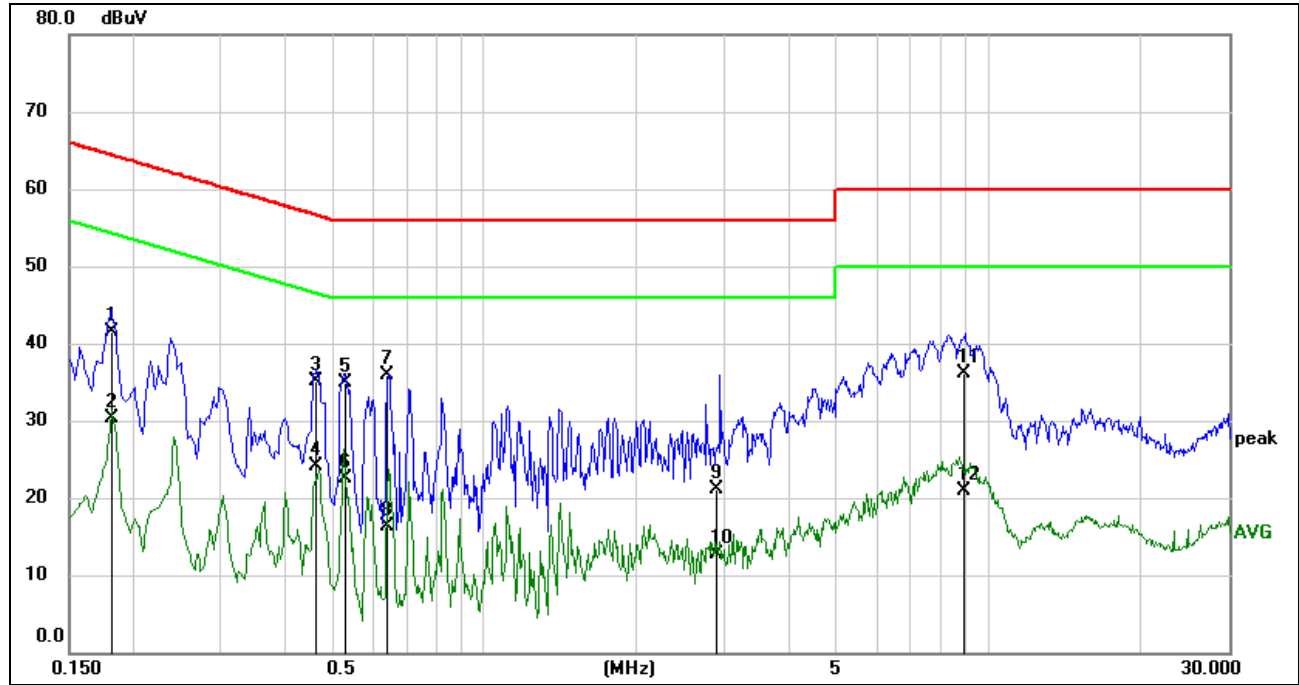
TEST ENVIRONMENT

Temperature	23.3 °C	Relative Humidity	63.2 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120V_60Hz

RESULTS

9.1. 802.11n HT40 MIMO MODE

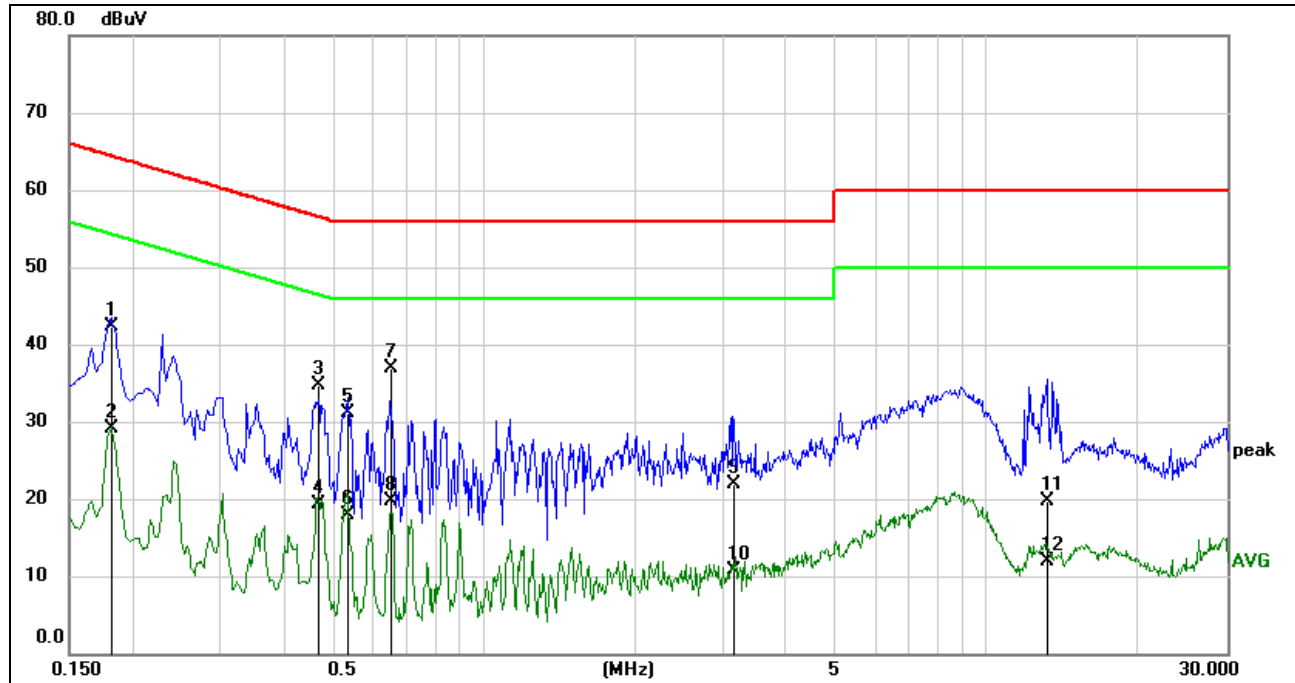
LINE N RESULTS (LOW CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1823	31.91	9.59	41.50	64.38	-22.88	QP
2	0.1823	20.80	9.59	30.39	54.38	-23.99	AVG
3	0.4649	25.53	9.60	35.13	56.60	-21.47	QP
4	0.4649	14.48	9.60	24.08	46.60	-22.52	AVG
5	0.5293	25.26	9.60	34.86	56.00	-21.14	QP
6	0.5293	12.90	9.60	22.50	46.00	-23.50	AVG
7	0.6403	26.29	9.60	35.89	56.00	-20.11	QP
8	0.6403	6.77	9.60	16.37	46.00	-29.63	AVG
9	2.8817	11.58	9.62	21.20	56.00	-34.80	QP
10	2.8817	3.18	9.62	12.80	46.00	-33.20	AVG
11	8.9363	26.53	9.61	36.14	60.00	-23.86	QP
12	8.9363	11.24	9.61	20.85	50.00	-29.15	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 (LOW CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1823	32.64	9.59	42.23	64.38	-22.15	QP
2	0.1823	19.61	9.59	29.20	54.38	-25.18	AVG
3	0.4683	25.17	9.60	34.77	56.54	-21.77	QP
4	0.4683	9.71	9.60	19.31	46.54	-27.23	AVG
5	0.5401	21.60	9.60	31.20	56.00	-24.80	QP
6	0.5401	8.28	9.60	17.88	46.00	-28.12	AVG
7	0.6544	27.22	9.60	36.82	56.00	-19.18	QP
8	0.6544	10.07	9.60	19.67	46.00	-26.33	AVG
9	3.1695	12.27	9.61	21.88	56.00	-34.12	QP
10	3.1695	1.15	9.61	10.76	46.00	-35.24	AVG
11	13.1462	10.10	9.66	19.76	60.00	-40.24	QP
12	13.1462	2.29	9.66	11.95	50.00	-38.05	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

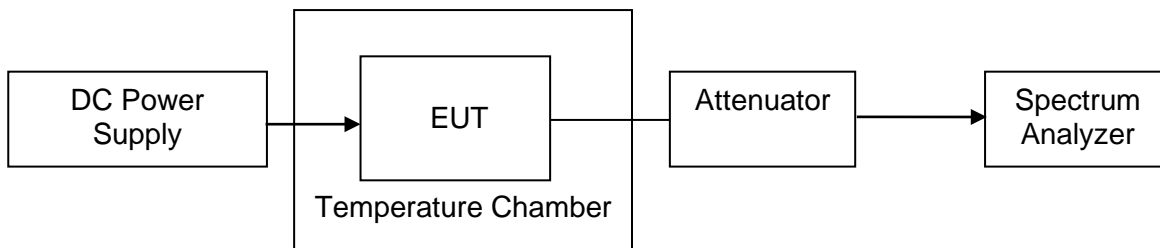
1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 45 °C (declared by customer).
2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of 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): 22 °C – 28 °C	T _L (Low Temperature): 0 °C
		T _H (High Temperature): 45 °C
Supply Voltage	V _N (Normal Voltage): AC 120V_60Hz	V _L (Low Voltage): AC 102V_60Hz
		V _H (High Voltage): AC 138V_60Hz

RESULTS

Please refer to Appendix E.



11. 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



12. Appendix

12.1. Appendix A1: Emission Bandwidth

12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	22.040	5169.400	5191.440	PASS
	Ant2	5180	21.440	5169.520	5190.960	PASS
	Ant1	5200	21.960	5189.240	5211.200	PASS
	Ant2	5200	21.280	5189.520	5210.800	PASS
	Ant1	5240	21.440	5229.680	5251.120	PASS
	Ant2	5240	21.520	5229.240	5250.760	PASS
	Ant1	5745	20.960	5734.440	5755.400	PASS
	Ant2	5745	21.400	5734.200	5755.600	PASS
	Ant1	5785	20.880	5774.280	5795.160	PASS
	Ant2	5785	20.960	5774.480	5795.440	PASS
11N20MIMO	Ant1	5825	20.880	5814.320	5835.200	PASS
	Ant2	5825	21.000	5814.120	5835.120	PASS
	Ant1	5180	20.720	5169.320	5190.040	PASS
	Ant2	5180	21.120	5169.360	5190.480	PASS
	Ant1	5200	21.160	5189.400	5210.560	PASS
	Ant2	5200	22.000	5189.240	5211.240	PASS
	Ant1	5240	21.960	5228.800	5250.760	PASS
	Ant2	5240	21.640	5229.400	5251.040	PASS
	Ant1	5745	20.880	5734.200	5755.080	PASS
	Ant2	5745	21.040	5734.280	5755.320	PASS
11N40MIMO	Ant1	5785	21.040	5774.480	5795.520	PASS
	Ant2	5785	20.800	5774.560	5795.360	PASS
	Ant1	5825	21.080	5814.160	5835.240	PASS
	Ant2	5825	20.920	5814.200	5835.120	PASS
	Ant1	5190	39.440	5170.160	5209.600	PASS
	Ant2	5190	39.440	5170.080	5209.520	PASS
	Ant1	5230	39.920	5209.760	5249.680	PASS
	Ant2	5230	38.800	5210.240	5249.040	PASS
11AC20MIMO	Ant1	5755	39.600	5735.000	5774.600	PASS
	Ant2	5755	39.440	5735.240	5774.680	PASS
	Ant1	5795	40.000	5774.840	5814.840	PASS
	Ant2	5795	38.800	5775.400	5814.200	PASS
	Ant1	5180	20.800	5169.600	5190.400	PASS
	Ant2	5180	20.880	5169.440	5190.320	PASS
	Ant1	5200	21.000	5189.440	5210.440	PASS
	Ant2	5200	21.040	5189.160	5210.200	PASS
	Ant1	5240	20.040	5229.600	5249.640	PASS
	Ant2	5240	21.200	5229.360	5250.560	PASS
11AC40MIMO	Ant1	5745	20.840	5734.560	5755.400	PASS
	Ant2	5745	20.720	5734.440	5755.160	PASS
	Ant1	5785	20.560	5774.480	5795.040	PASS
	Ant2	5785	20.600	5774.600	5795.200	PASS
	Ant1	5825	20.720	5814.680	5835.400	PASS
	Ant2	5825	21.040	5814.200	5835.240	PASS
	Ant1	5190	39.680	5169.920	5209.600	PASS
	Ant2	5190	39.200	5170.320	5209.520	PASS
11AC40MIMO	Ant1	5230	39.360	5210.160	5249.520	PASS
	Ant2	5230	38.960	5210.320	5249.280	PASS
	Ant1	5755	39.520	5735.160	5774.680	PASS
	Ant2	5755	39.120	5735.160	5774.280	PASS
	Ant1	5795	39.520	5774.920	5814.440	PASS
	Ant2	5795	39.280	5775.000	5814.280	PASS



11AC80MIMO	Ant1	5210	81.600	5168.720	5250.320	PASS
	Ant2	5210	80.480	5169.840	5250.320	PASS
	Ant1	5775	80.800	5734.040	5814.840	PASS
	Ant2	5775	80.640	5734.360	5815.000	PASS



12.1.2. Test Graphs



11A_Ant1_5180



11A_Ant2_5180



11A_Ant1_5200



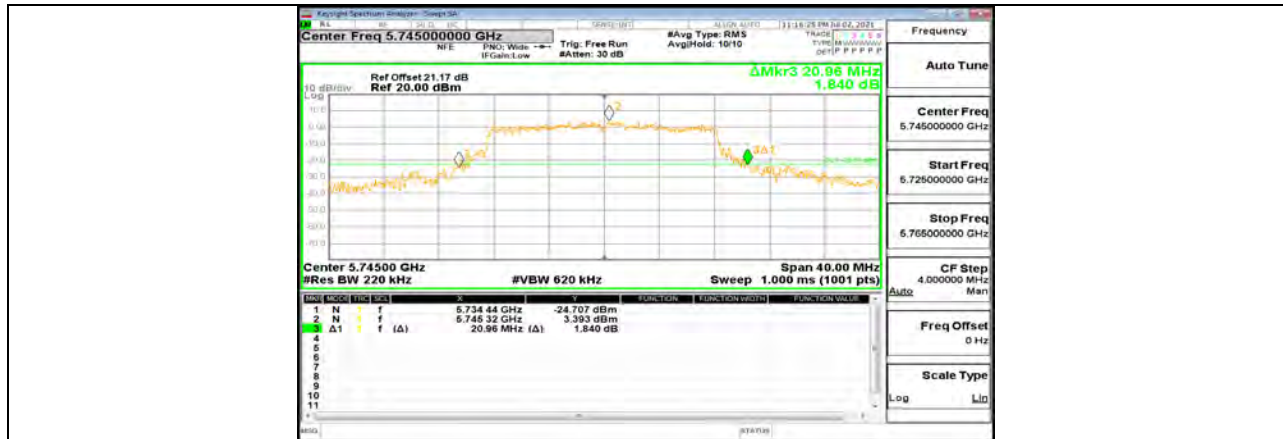
11A_Ant2_5200



11A_Ant1_5240



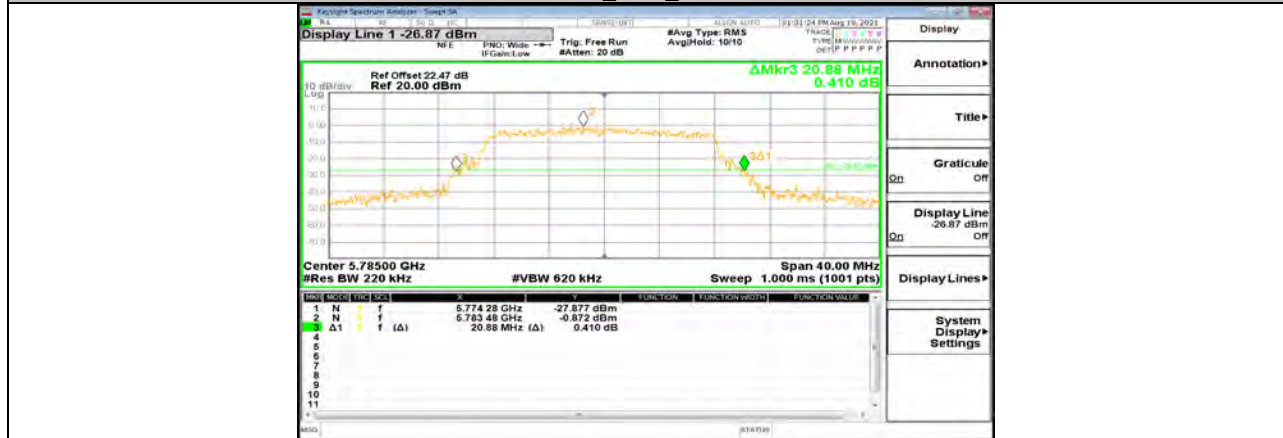
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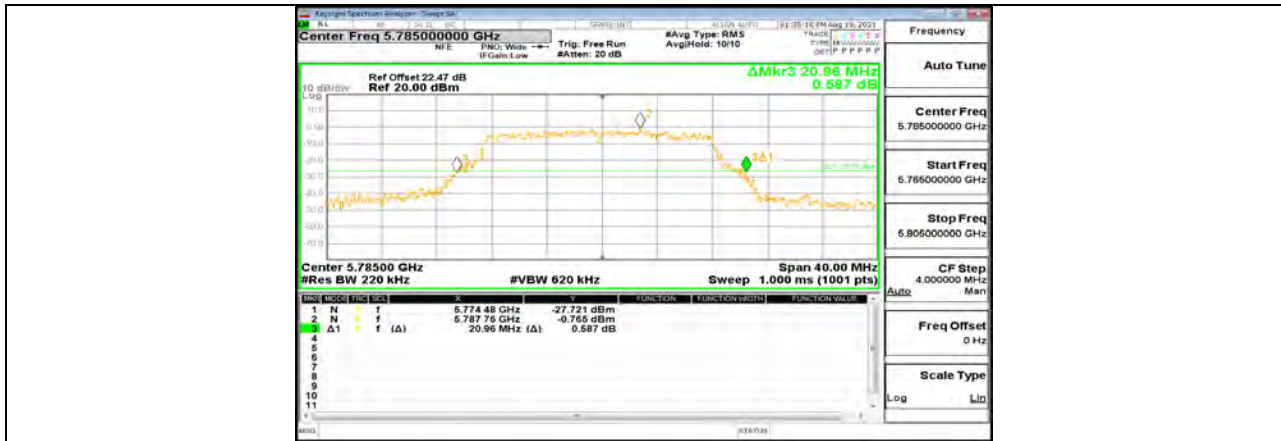
11A_Ant1_5745



11A_Ant2_5745



11A_Ant1_5785



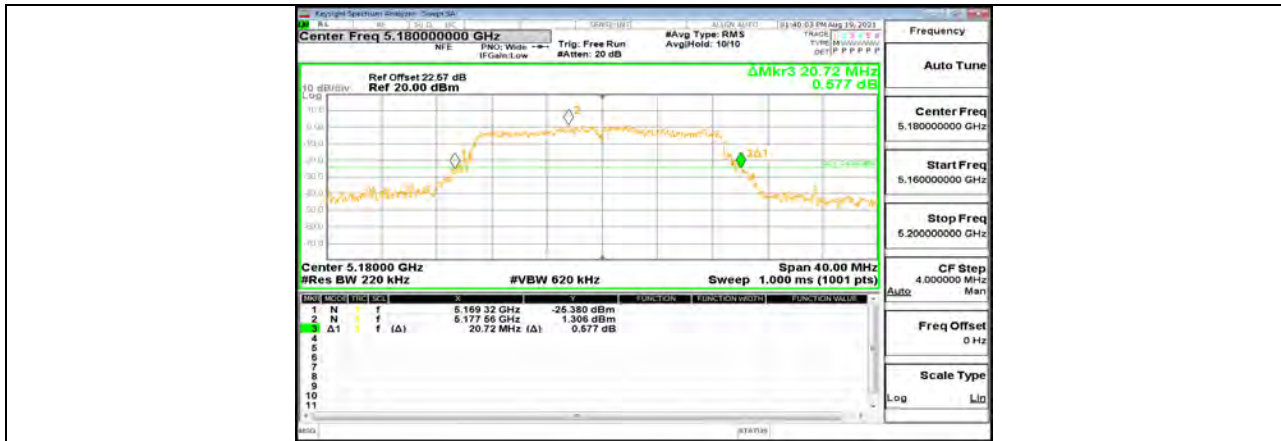
11A_Ant2_5785



11A_Ant1_5825



11A_Ant2_5825



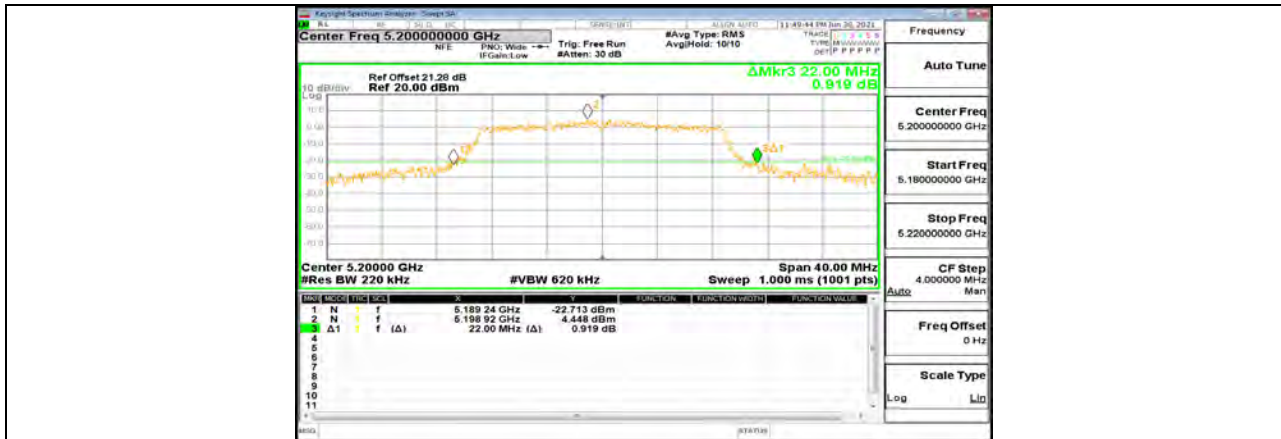
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11N20MIMO_Ant2_5180



11N20MIMO_Ant1_5200



11N20MIMO_Ant2_5200



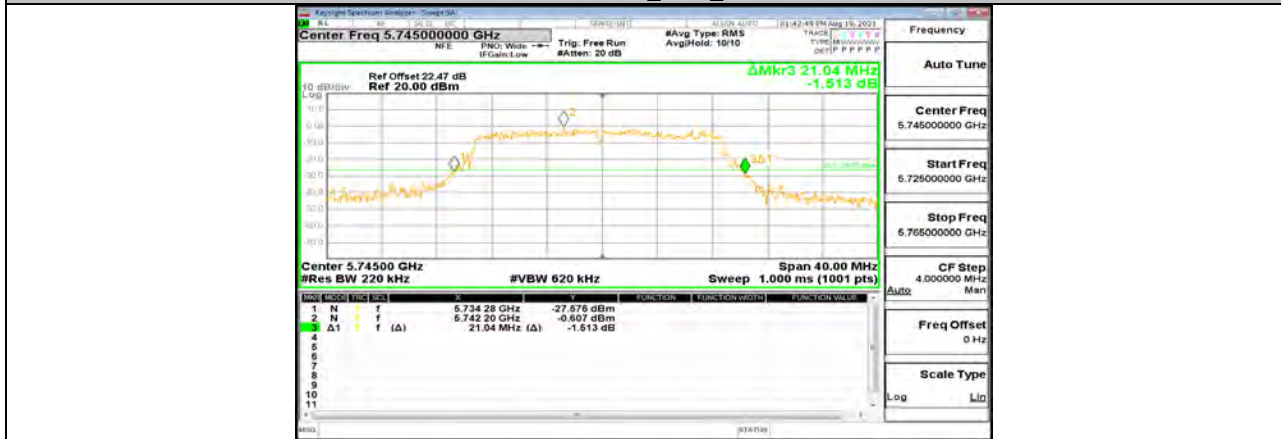
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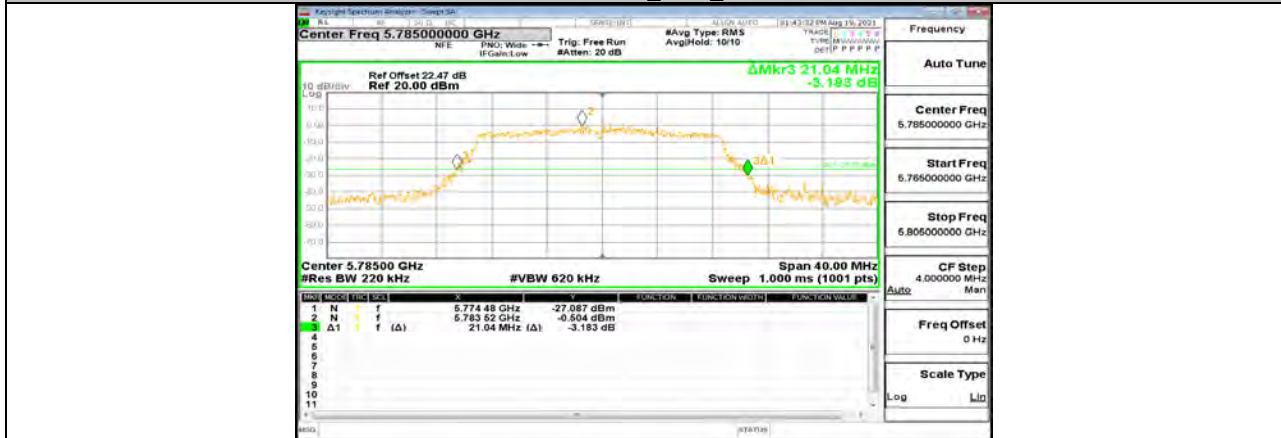
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11N20MIMO_Ant1_5745



11N20MIMO_Ant2_5745



11N20MIMO_Ant1_5785



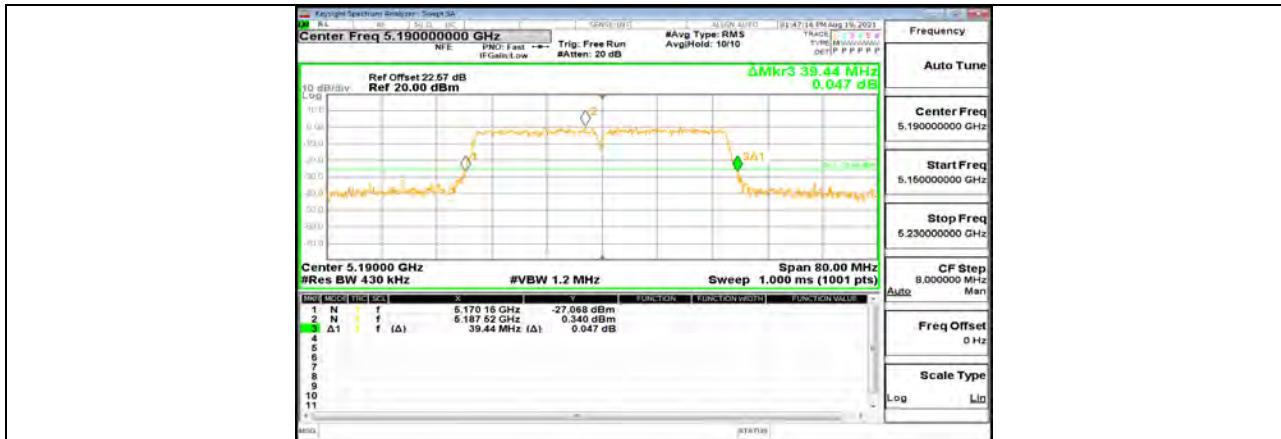
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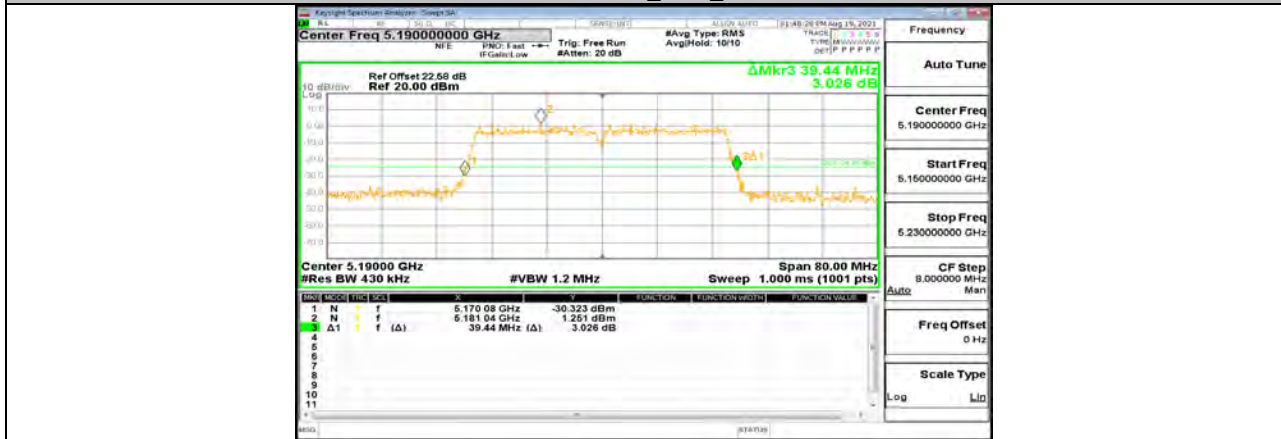
11N20MIMO_Ant1_5825



11N20MIMO_Ant2_5825



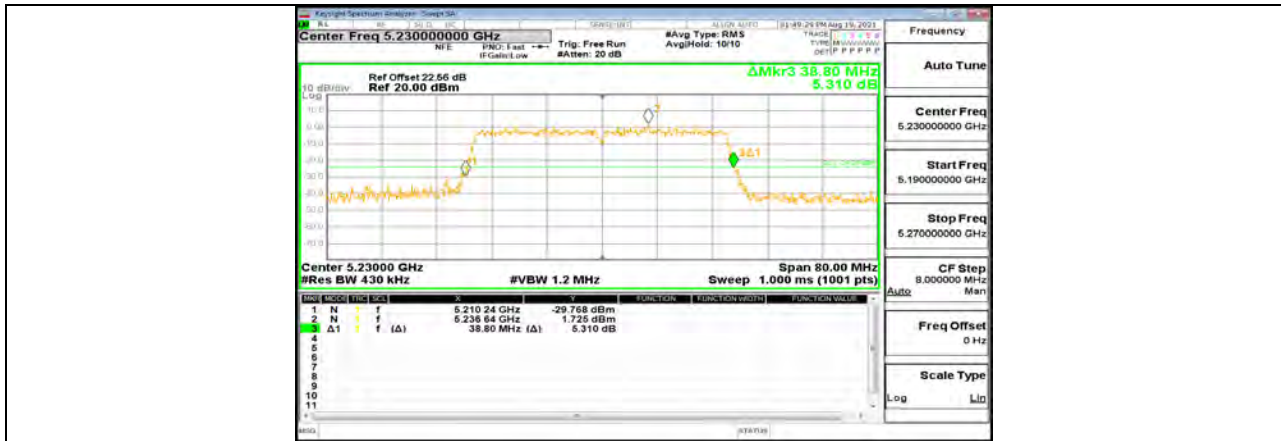
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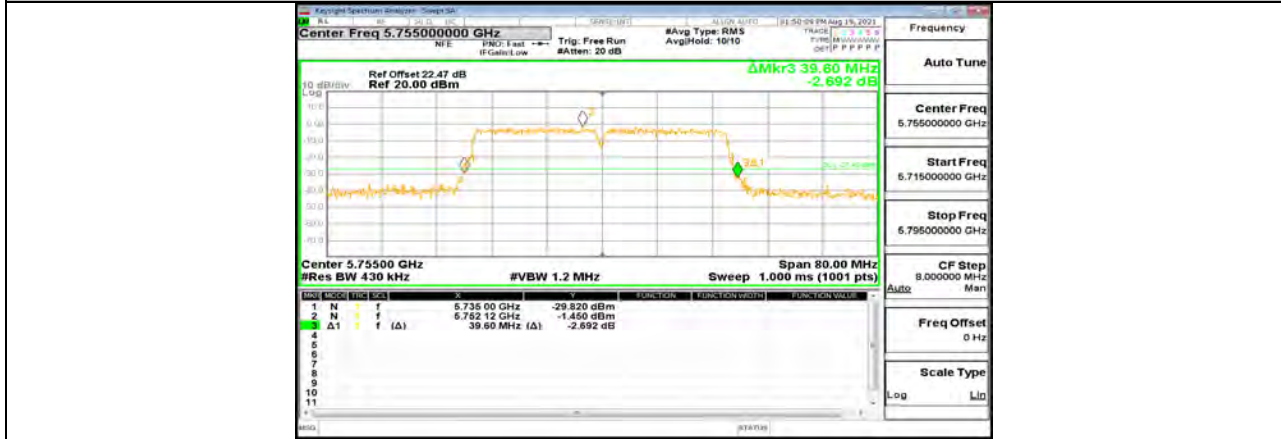
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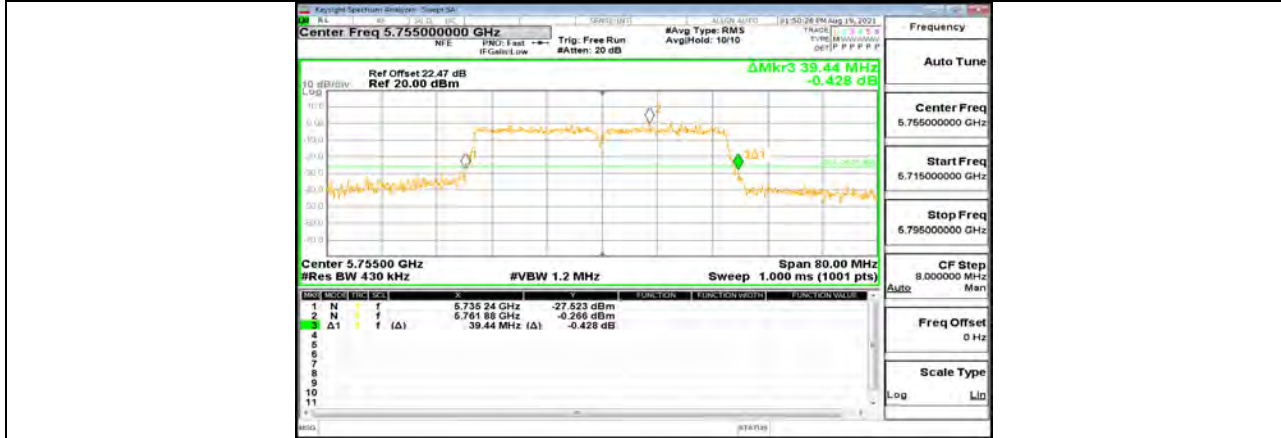
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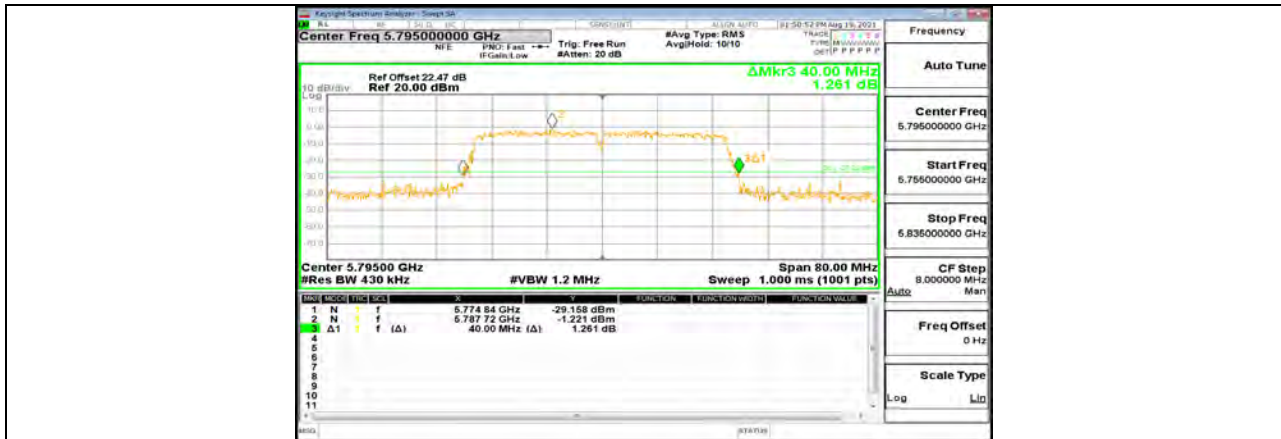
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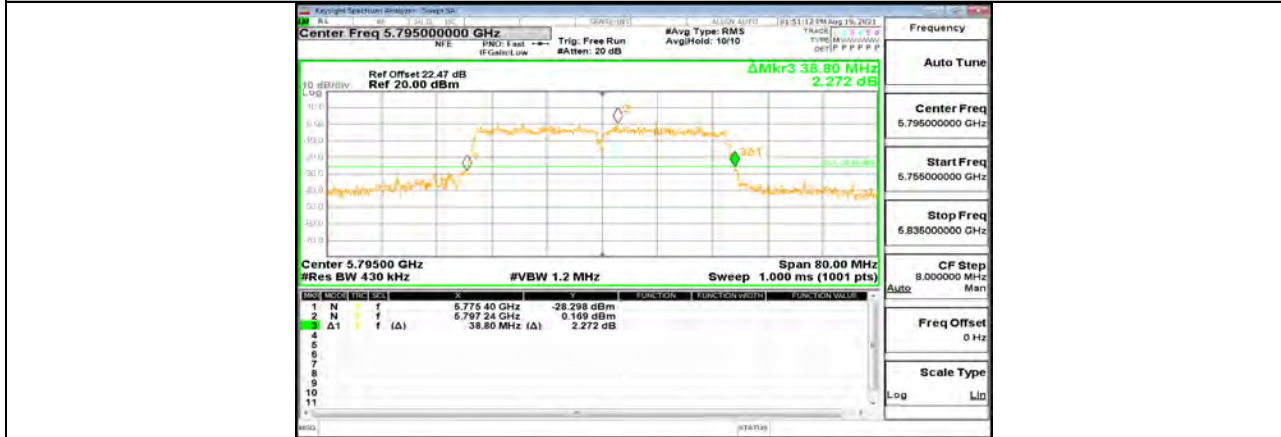
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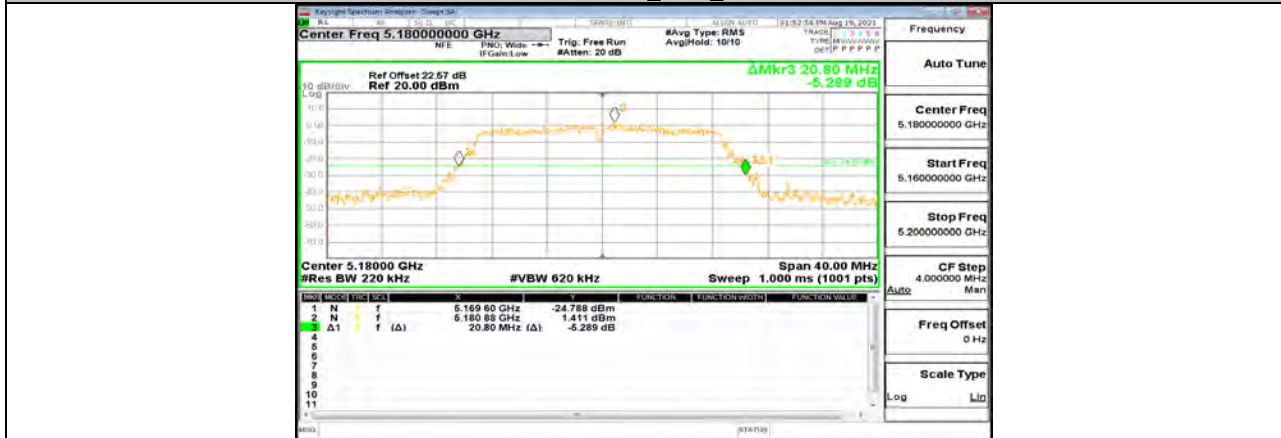
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11N40MIMO_Ant1_5795



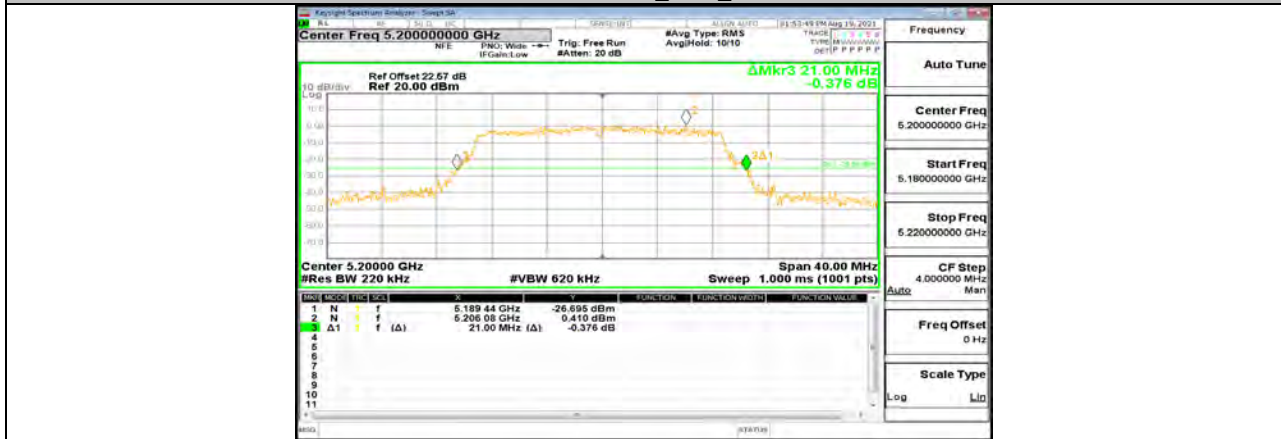
11N40MIMO_Ant2_5795



11AC20MIMO_Ant1_5180



11AC20MIMO_Ant2_5180



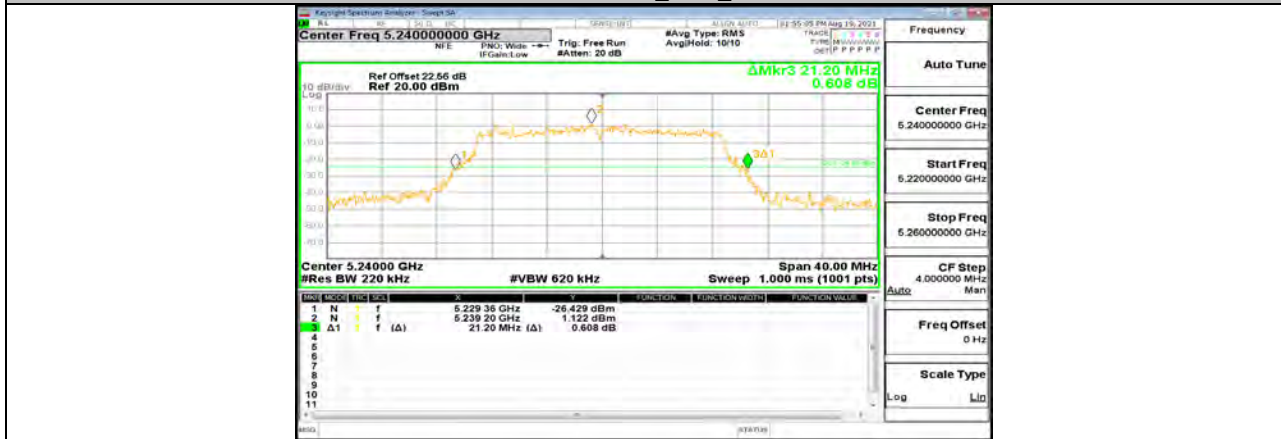
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11AC20MIMO_Ant2_5200



11AC20MIMO_Ant1_5240



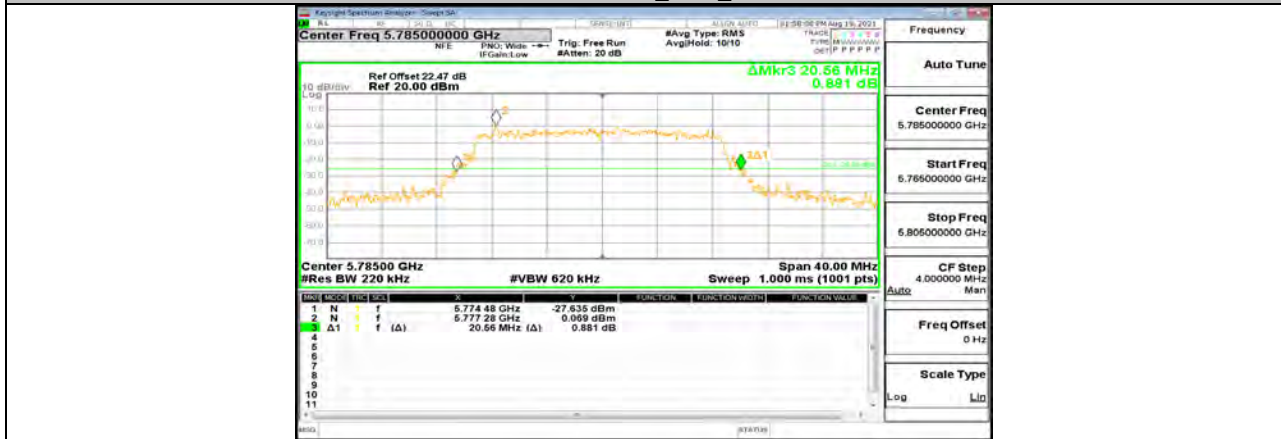
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11AC20MIMO_Ant1_5745



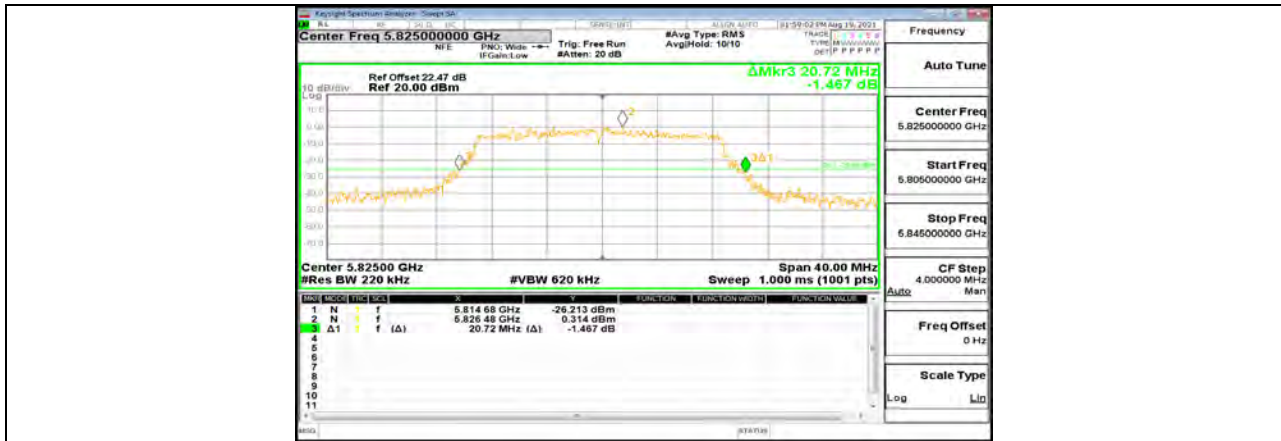
11AC20MIMO_Ant2_5745



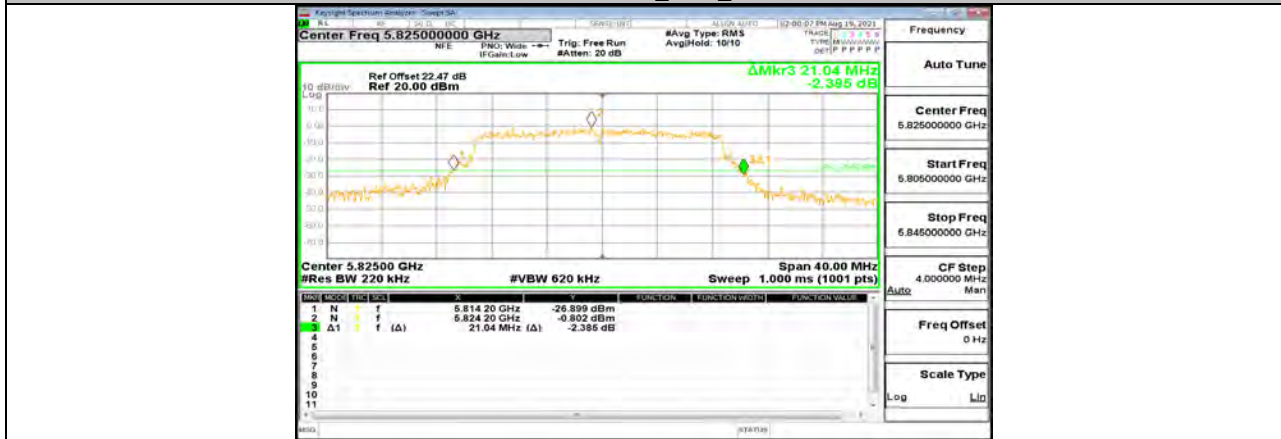
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11AC20MIMO_Ant2_5785



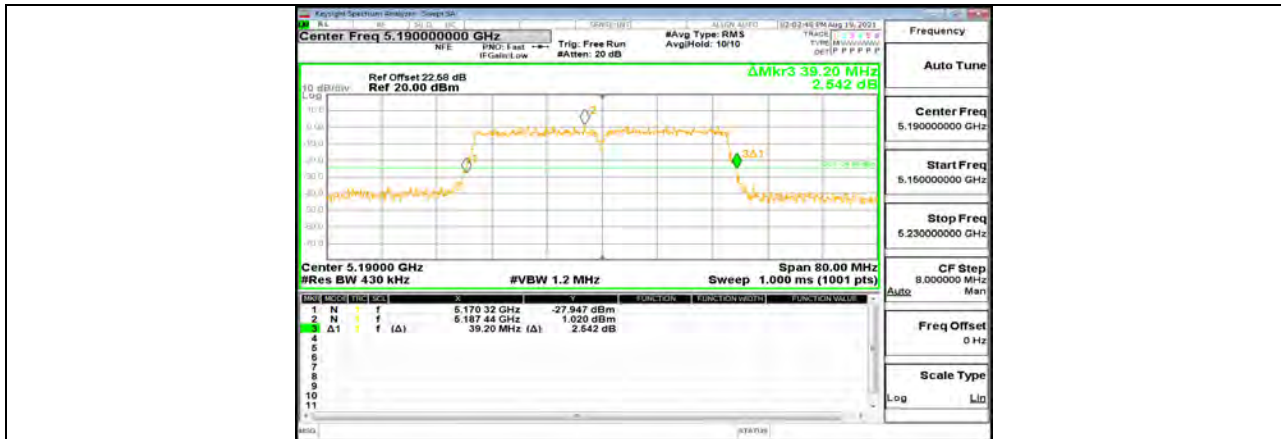
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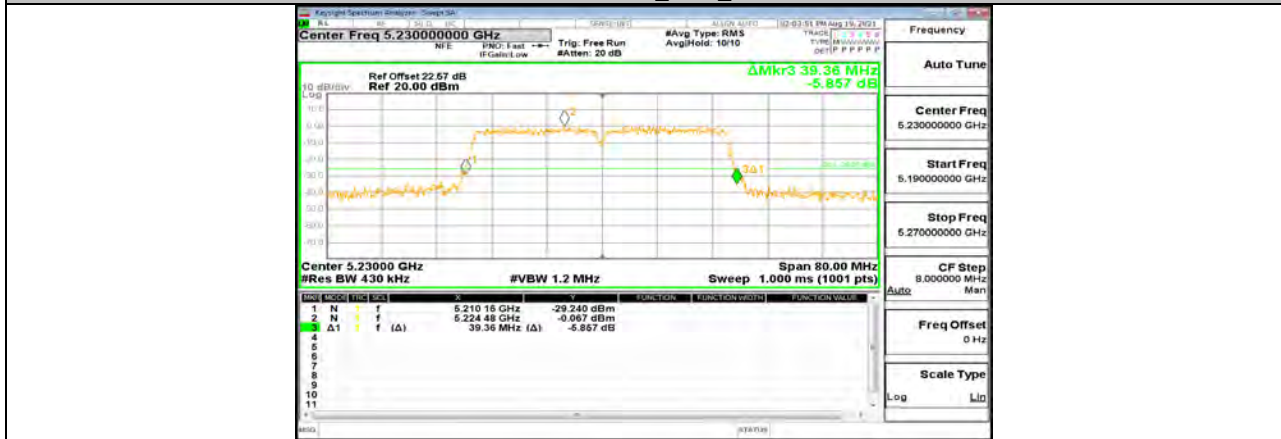
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11AC40MIMO_Ant1_5190



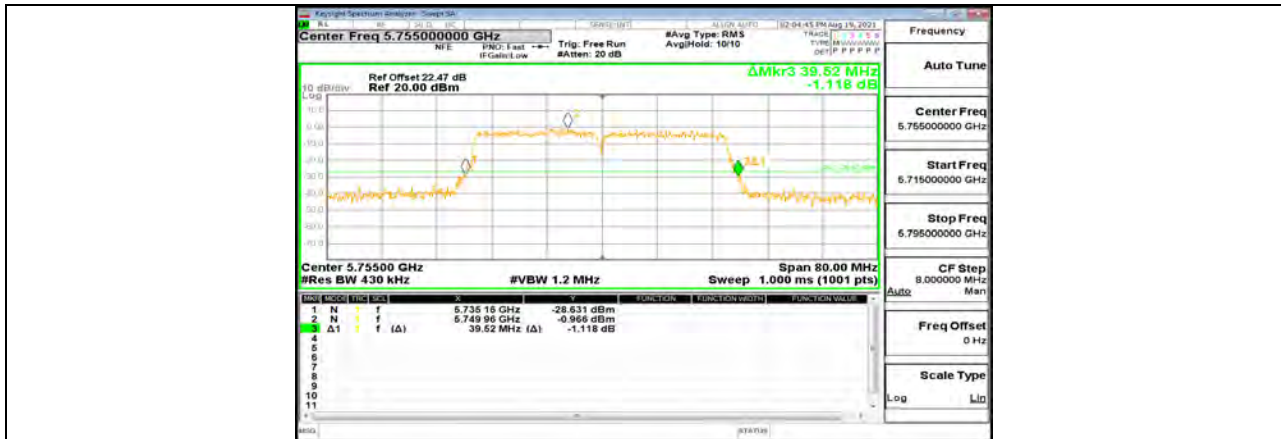
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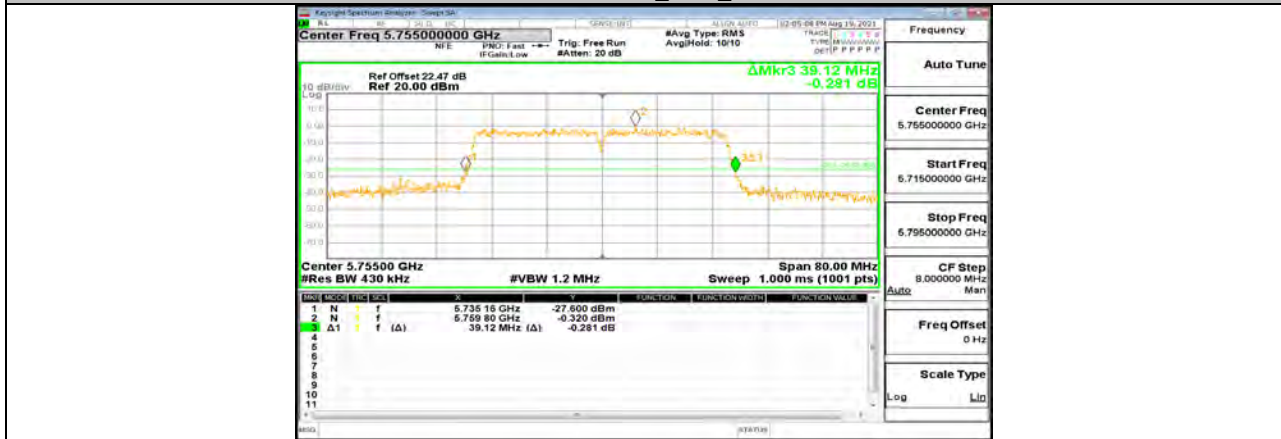
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11AC40MIMO_Ant2_5230



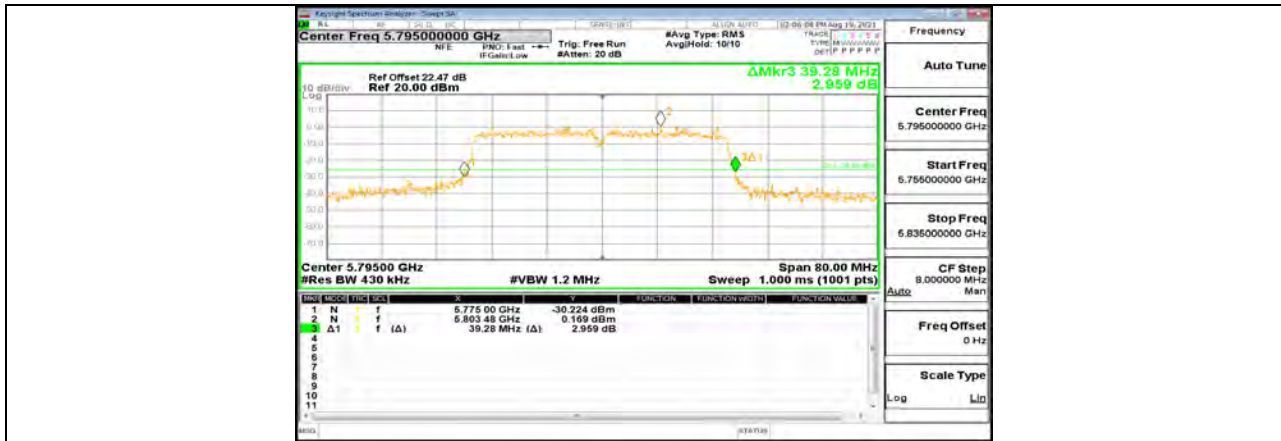
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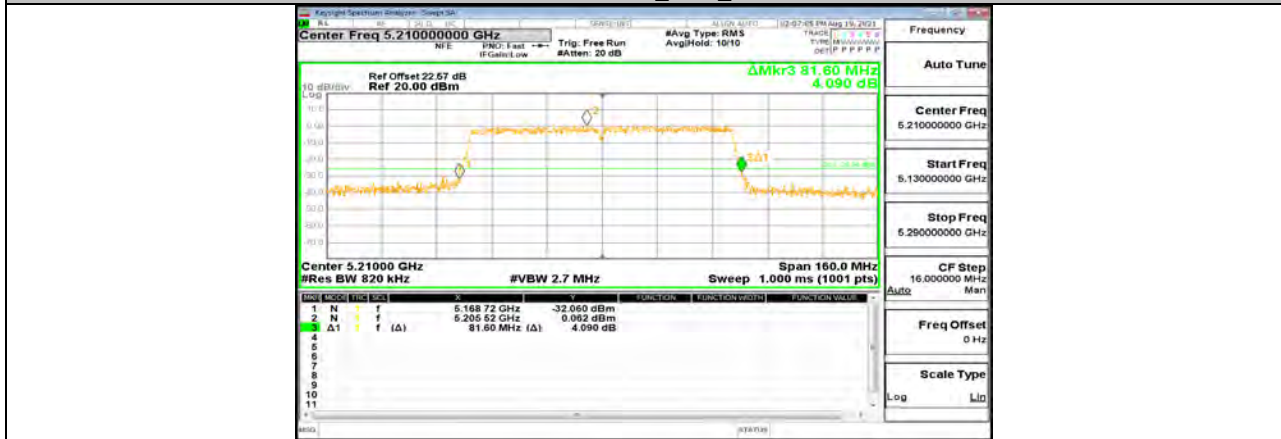
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11AC40MIMO_Ant1_5795



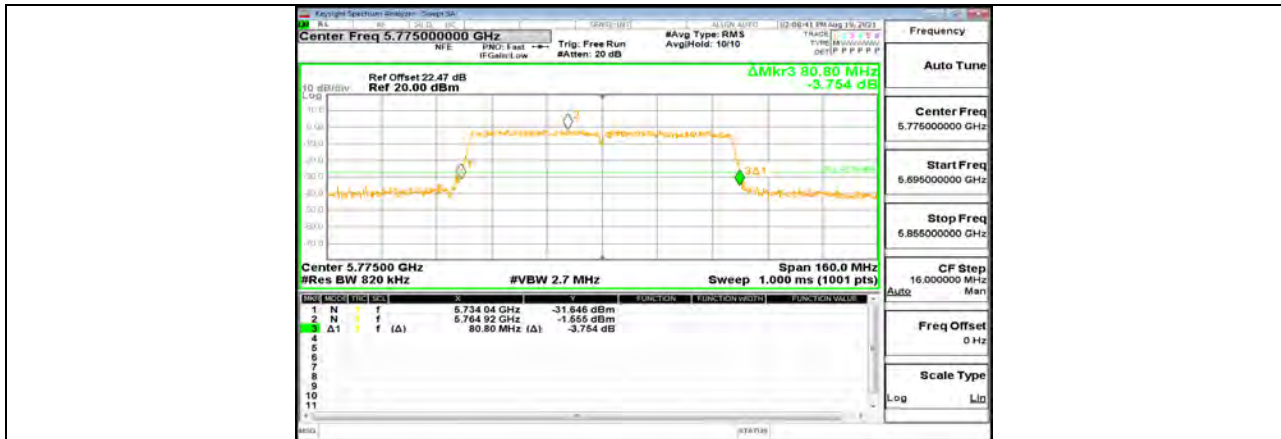
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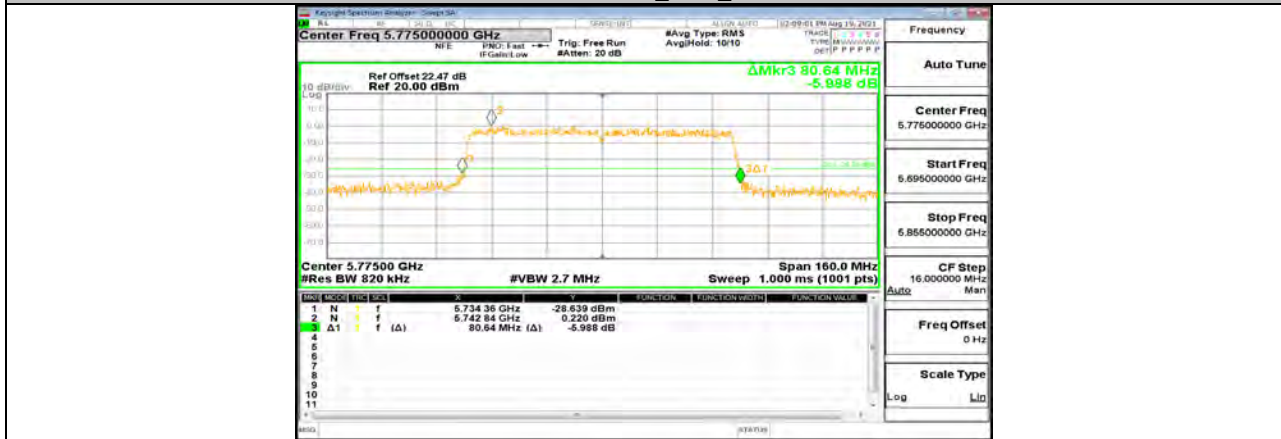
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11AC80MIMO_Ant2_5210



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775

**12.2. Appendix A2: Occupied channel bandwidth****12.2.1. Test Result**

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	16.928	5171.432	5188.360	PASS
	Ant2	5180	17.066	5171.432	5188.498	PASS
	Ant1	5200	17.012	5191.377	5208.389	PASS
	Ant2	5200	17.213	5191.382	5208.595	PASS
	Ant1	5240	17.001	5231.480	5248.481	PASS
	Ant2	5240	17.003	5231.439	5248.442	PASS
	Ant1	5745	16.978	5736.509	5753.487	PASS
	Ant2	5745	17.179	5736.400	5753.579	PASS
	Ant1	5785	17.122	5776.449	5793.571	PASS
	Ant2	5785	17.087	5776.467	5793.554	PASS
	Ant1	5825	17.211	5816.396	5833.607	PASS
	Ant2	5825	17.199	5816.399	5833.598	PASS
11N20MIMO	Ant1	5180	18.014	5170.978	5188.992	PASS
	Ant2	5180	18.207	5170.902	5189.109	PASS
	Ant1	5200	17.946	5190.983	5208.929	PASS
	Ant2	5200	18.130	5190.929	5209.059	PASS
	Ant1	5240	17.945	5231.061	5249.006	PASS
	Ant2	5240	18.025	5231.037	5249.062	PASS
	Ant1	5745	18.059	5736.023	5754.082	PASS
	Ant2	5745	18.152	5735.923	5754.075	PASS
	Ant1	5785	18.322	5775.910	5794.232	PASS
	Ant2	5785	18.203	5775.877	5794.080	PASS
	Ant1	5825	18.288	5815.827	5834.115	PASS
	Ant2	5825	18.226	5815.788	5834.014	PASS
11N40MIMO	Ant1	5190	36.623	5171.715	5208.338	PASS
	Ant2	5190	36.511	5171.809	5208.320	PASS
	Ant1	5230	36.668	5211.693	5248.361	PASS
	Ant2	5230	36.672	5211.649	5248.321	PASS
	Ant1	5755	36.430	5736.760	5773.190	PASS
	Ant2	5755	36.728	5736.590	5773.318	PASS
	Ant1	5795	37.222	5776.297	5813.519	PASS
	Ant2	5795	36.904	5776.488	5813.392	PASS
11AC20MIMO	Ant1	5180	17.845	5171.061	5188.906	PASS
	Ant2	5180	17.942	5171.060	5189.002	PASS
	Ant1	5200	17.870	5191.101	5208.971	PASS
	Ant2	5200	18.057	5191.004	5209.061	PASS
	Ant1	5240	18.003	5231.063	5249.066	PASS
	Ant2	5240	18.294	5230.752	5249.046	PASS
	Ant1	5745	18.015	5736.035	5754.050	PASS
	Ant2	5745	18.021	5735.971	5753.992	PASS
	Ant1	5785	18.185	5775.911	5794.096	PASS
	Ant2	5785	18.140	5775.906	5794.046	PASS
	Ant1	5825	18.227	5815.825	5834.052	PASS
	Ant2	5825	18.106	5815.980	5834.086	PASS
11AC40MIMO	Ant1	5190	36.635	5171.766	5208.401	PASS
	Ant2	5190	36.570	5171.796	5208.366	PASS
	Ant1	5230	36.623	5211.755	5248.378	PASS
	Ant2	5230	36.533	5211.723	5248.256	PASS
	Ant1	5755	36.842	5736.611	5773.453	PASS
	Ant2	5755	36.767	5736.659	5773.426	PASS
	Ant1	5795	36.868	5776.542	5813.410	PASS
	Ant2	5795	36.789	5776.430	5813.219	PASS

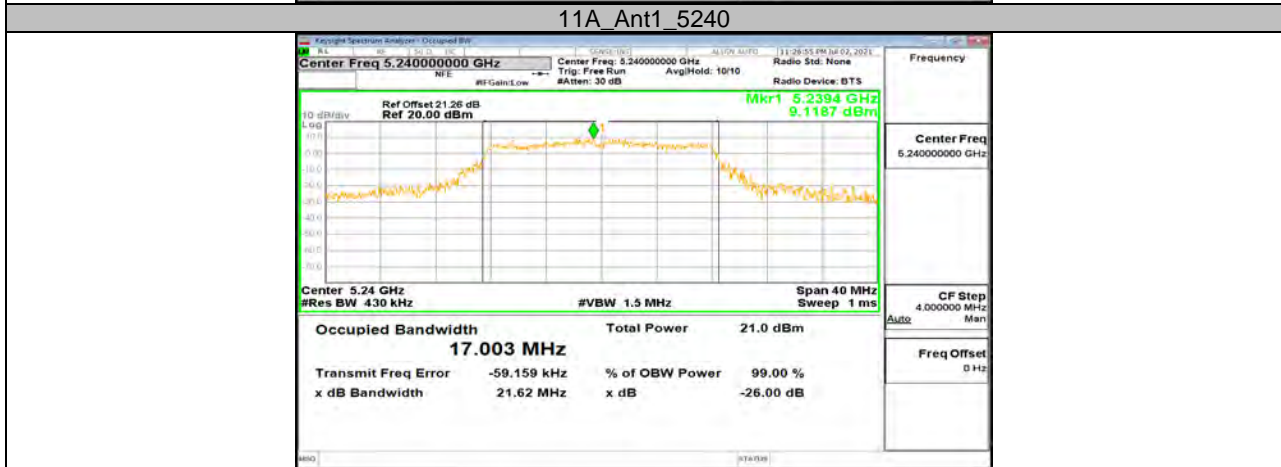
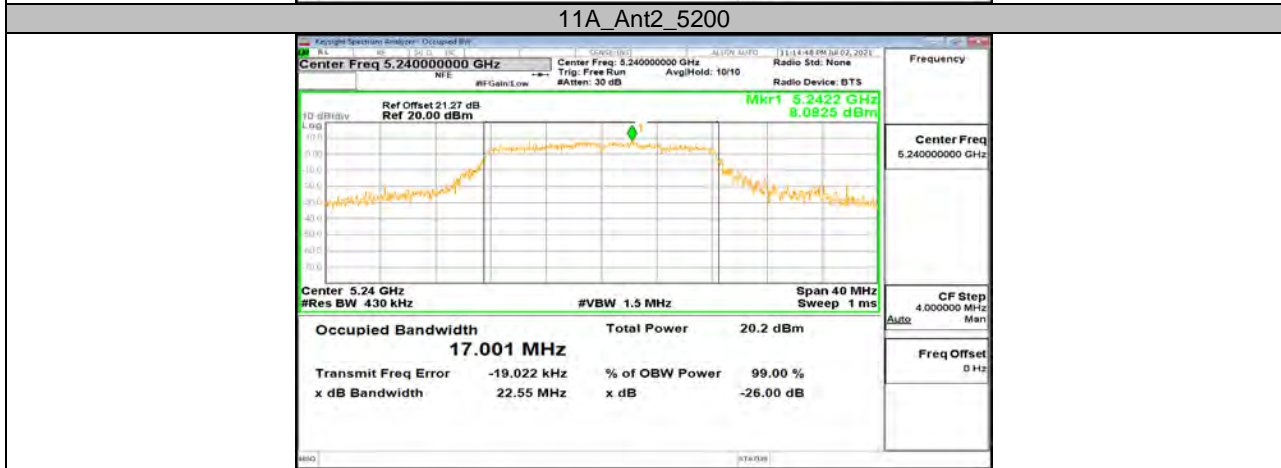
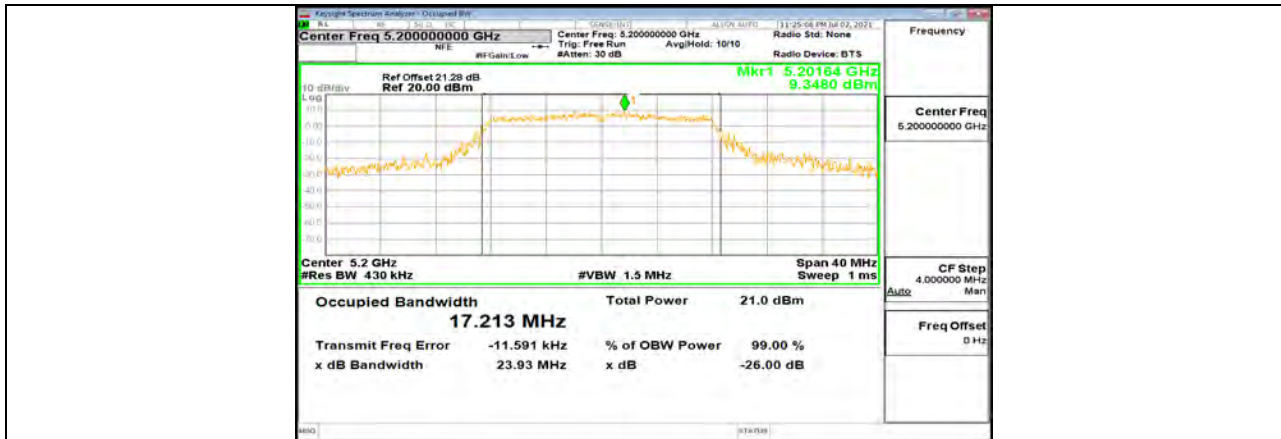


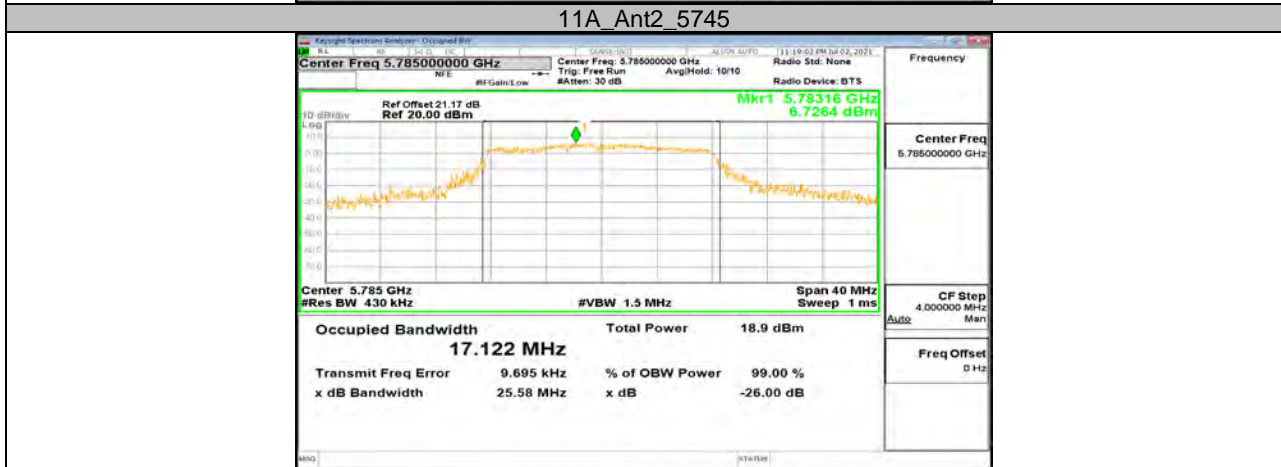
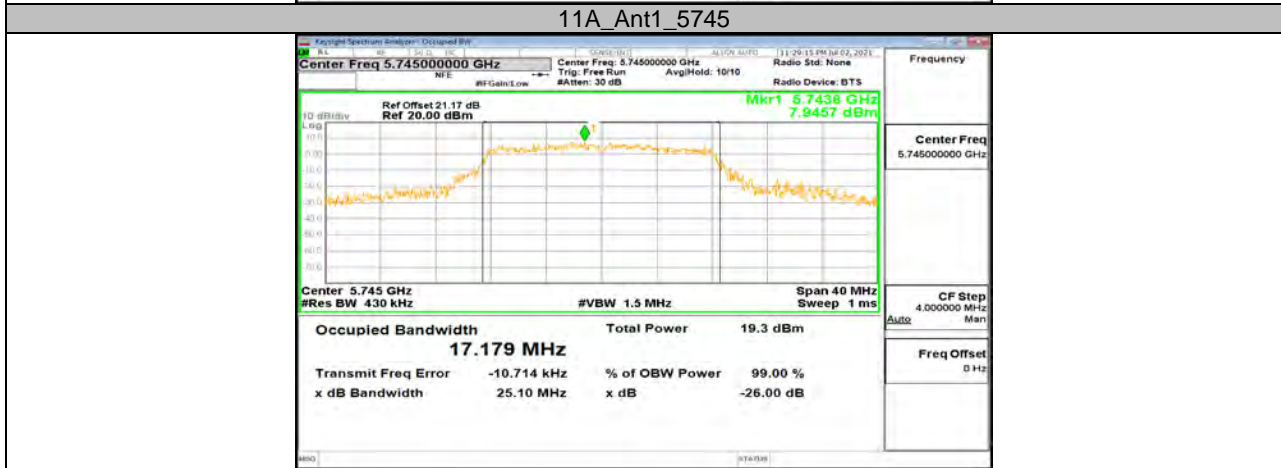
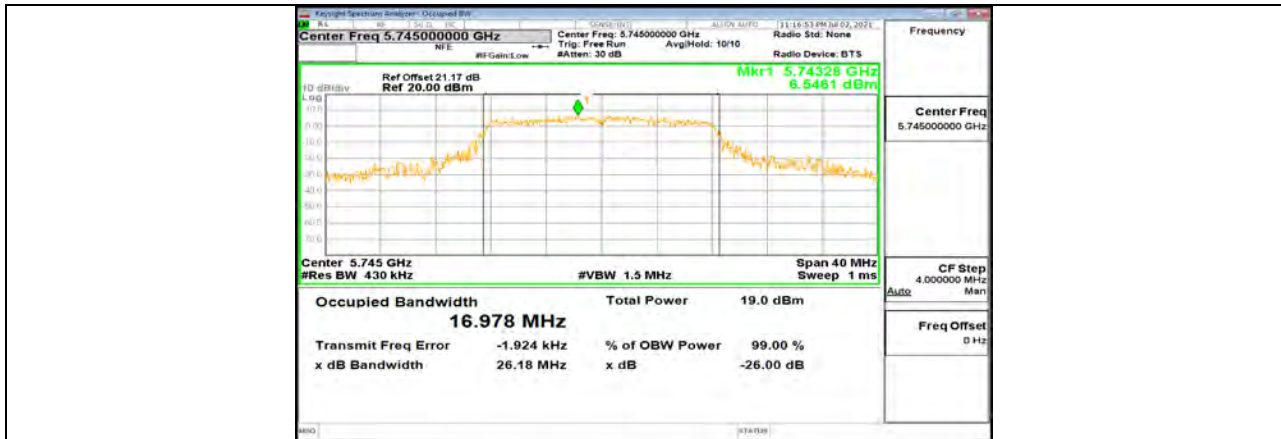
11AC80MIMO	Ant1	5210	76.218	5171.862	5248.080	PASS
	Ant2	5210	76.409	5171.768	5248.177	PASS
	Ant1	5775	76.212	5736.685	5812.897	PASS
	Ant2	5775	76.480	5736.339	5812.819	PASS

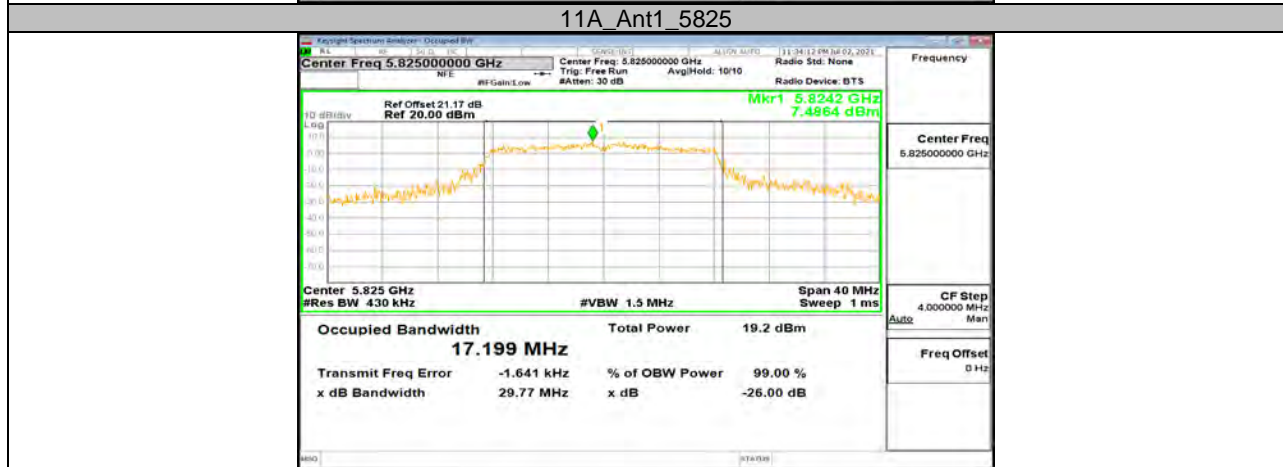
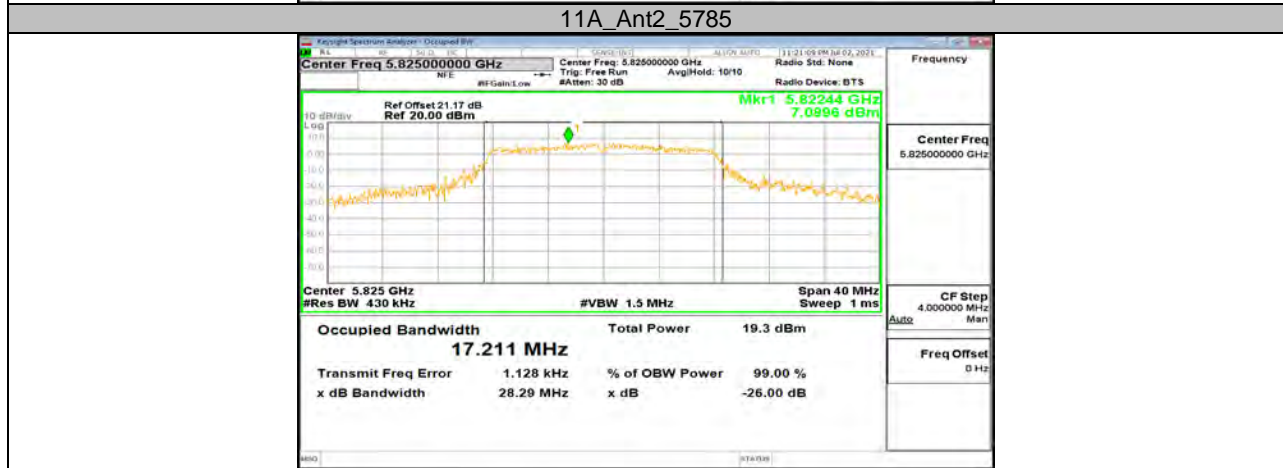
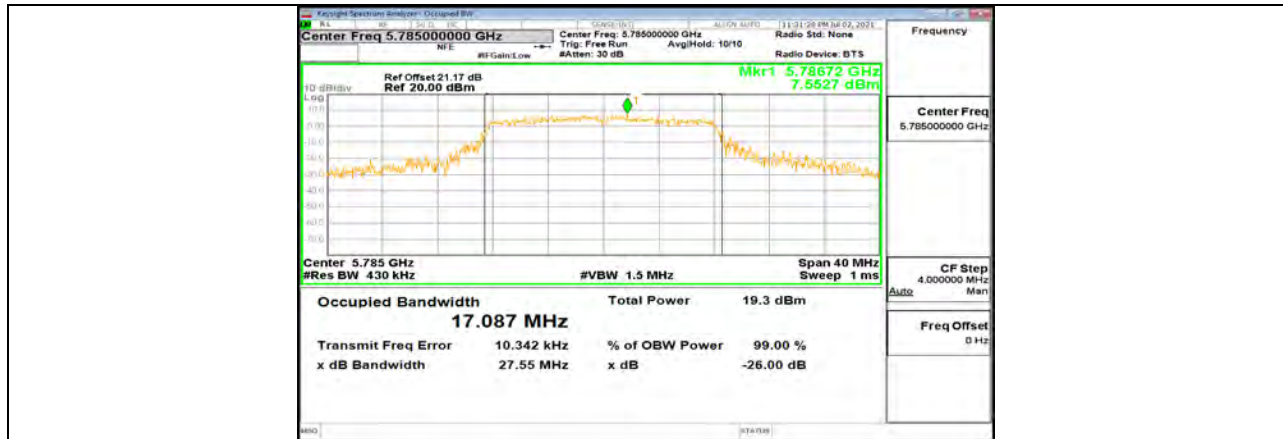


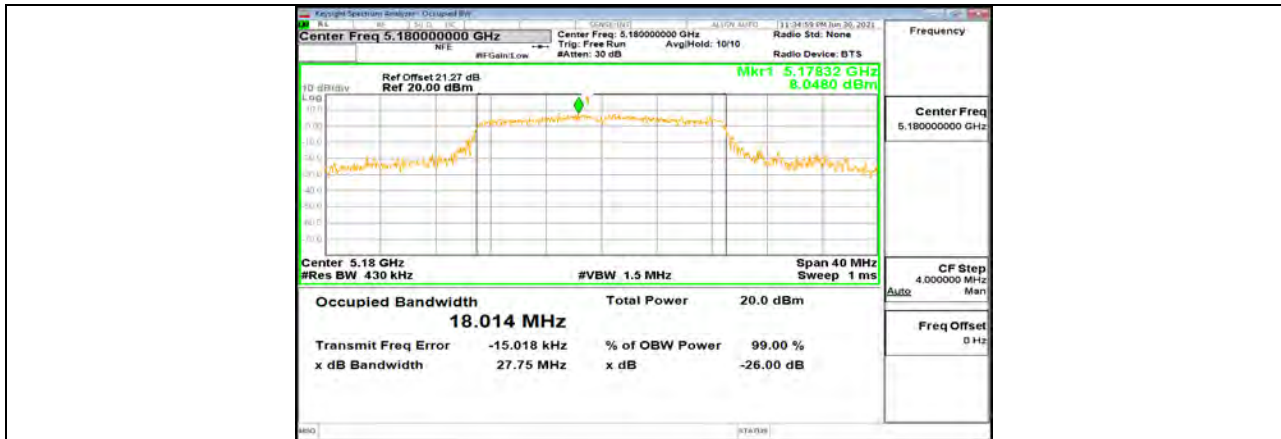
12.2.2. Test Graphs



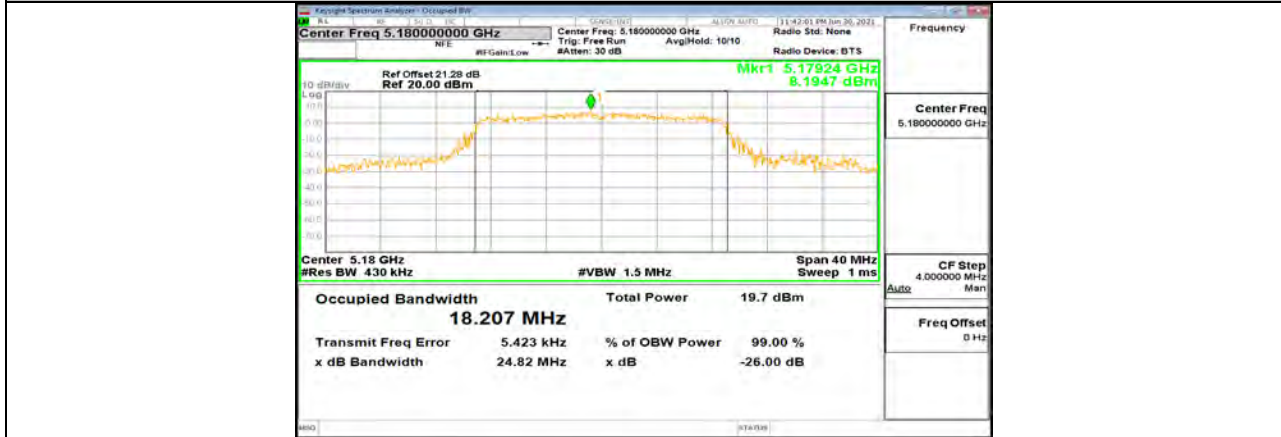




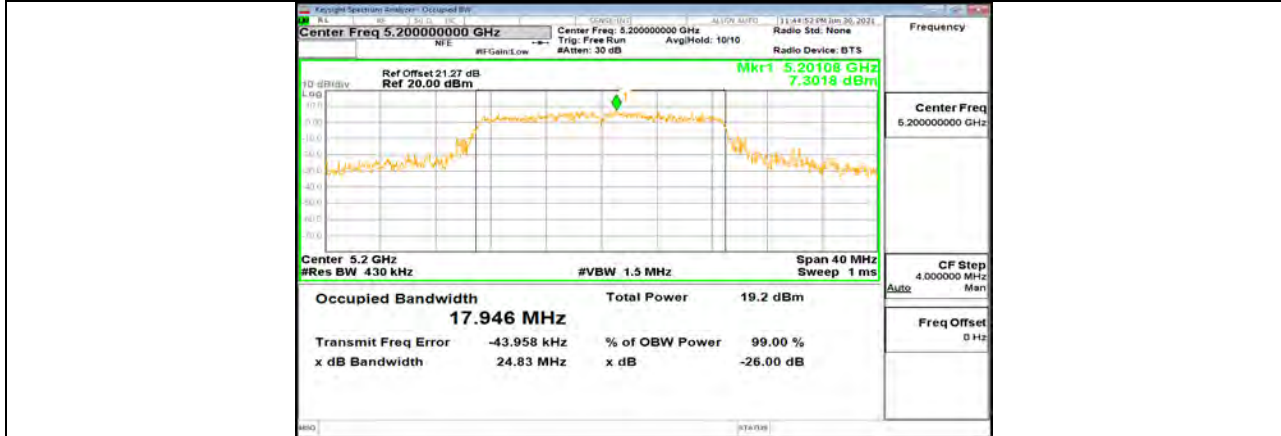




11N20MIMO_Ant1_5180



11N20MIMO_Ant2_5180



11N20MIMO_Ant1_5200