

RF Test Report

Applicant : Winmate Inc.

Product Name : Rugged Tablet PC

Trade Name : Winmate

Model Number : M140TG, M140TGXXXXXXXXXXXXX ("X"= A~Z,a~z,0~9,"-" Blank or Slash for marketing purpose only, no impact safety related constructions or critical components)

Applicable Standard : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013

Received Date : Jul. 25, 2022

Test Period : Aug. 10 ~ Oct. 07, 2022

Issued Date : Oct. 13, 2022

Issued by

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Taiwan Accreditation Foundation accreditation number: 1330
Frequency Range: 9 kHz to 325 GHz (Bade test site)
Frequency Range: 9 kHz to 40 GHz (Wugu test site)
Test Firm MRA designation number: TW0010

Note:

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
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3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

Revision History

Rev.	Issued Date	Revisions	Revised By
00	Oct. 13, 2022	Initial Issue	Abby Huang

Verification of Compliance

Applicant : Winmate Inc.

Product Name : Rugged Tablet PC

Trade Name : Winmate

Model Number : M140TG, M140TGXXXXXXXXXXXX ("X"= A~Z,a~z,0~9,"-"
Blank or Slash for marketing purpose only, no impact safety
related constructions or critical components)

FCC ID : PX9M140TG

Applicable Standard : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013

Test Result : Complied

Performing Lab. : Eurofins E&E Wireless Taiwan Co., Ltd.
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Eurofins E&E Wireless Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Eurofins E&E Wireless Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : _____

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1 General Information

1.1. Summary of Test Result

Standard	Item	Result	Remark
15.207	AC Power Conducted Emission	PASS	----
15.247(d)	Transmitter Radiated Emissions	PASS	----
15.247(b)(3)	Max. Output Power	PASS	----
15.247(a)(2)	6 dB RF Bandwidth	PASS	----
15.247(e)	Maximum Power Spectral Density	PASS	----
15.247(d)	Out of Band Conducted Spurious Emission	PASS	----
15.203	Antenna Requirement	PASS	----

Decision Rule

- Uncertainty is not included.
- Uncertainty is included.

Standard	Description
CFR47, Part 15, Subpart C	Intentional Radiators
ANSI C63. 10: 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01 15.247 Meas Guidance v05r02	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES
KDB 662911 D01 v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)

1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conducted Emission	150 kHz ~ 30 MHz	2.7 dB
Radiated Emission	9 kHz ~ 30 MHz	2.2 dB
	30 MHz ~ 1000 MHz	5.1 dB
	1000 MHz ~ 18000 MHz	5.2 dB
	18000 MHz ~ 26500 MHz	4.6 dB
	26500 MHz ~ 40000 MHz	4.6 dB
Conducted Output Power	1.1 dB	
RF Bandwidth	4.7 %	
Power Spectral Density	1.1 dB	

2 EUT Description

Applicant	Winmate Inc. 9F, No.111-6, Shing-De Rd., San-Chung District, New Taipei City 241, Taiwan			
Product Name	Rugged Tablet PC			
Trade Name	Winmate			
Model Number	M140TG, M140TGXXXXXXXXXXXXX ("X"= A~Z,a~z,0~9,"-" Blank or Slash for marketing purpose only, no impact safety related constructions or critical components)			
Model Different Description	All models are electrically identical, different model names are for marketing purpose.			
FCC ID	PX9M140TG			
Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate (ns)
IEEE 802.11b	2412 ~ 2462	DSSS	20 MHz	Up to 11 Mbps
IEEE 802.11g	2412 ~ 2462	OFDM	20 MHz	Up to 54 Mbps
IEEE 802.11n 2.4 GHz 20 MHz	2412 ~ 2462	OFDM (64QAM)	20 MHz	Up to 173.4 Mbps
IEEE 802.11n 2.4 GHz 40 MHz	2422 ~ 2452	OFDM (64QAM)	40 MHz	Up to 400 Mbps
IEEE 802.11ax 2.4 GHz 20 MHz	2412 ~ 2462	OFDMA	20 MHz	Up to MCS11
IEEE 802.11ax 2.4 GHz 40 MHz	2422 ~ 2452	OFDMA	40 MHz	Up to MCS11
Antenna information	Antenna	Model No	Type	Max. Gain (dBi)
	Main (ANT-0)	90RF0500001V	Dipole	1.89
	Aux (ANT-1)	90RF0600001J	Dipole	1.41
Antenna Delivery	See section 3.1			
Operate Temp. Range	0 ~ +35 °C			
EUT Power Rating	DC 19 V, 3.42 A			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.133
IEEE 802.11g	0.191
IEEE 802.11n 2.4 GHz 20 MHz(64QAM)	0.189
IEEE 802.11n 2.4 GHz 40 MHz(64QAM)	0.248
IEEE 802.11ax 2.4 GHz 20 MHz	0.195
IEEE 802.11ax 2.4 GHz 40 MHz	0.254

3 Test Methodology

3.1. Mode of Operation

In the test report use EUT model: M140TG to operate testing.

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz(64QAM) Continuous TX Mode
Mode 5: IEEE 802.11n 2.4 GHz 40 MHz(64QAM) Continuous TX Mode
Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode
Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode

Final-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode
Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "Z axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

Note 1: Investigation has been done on all the possible configurations for searching the worst cases (2.4 GHz HE20/HE40 covers 64QAM). The table is a list of the test modes show in this test report.

Note 2: IEEE 802.11ax test result only support Full RU.

Test Mode	ANT-0	ANT-1
Mode 2	V	V
Mode 3	V	V
Mode 4	V	V
Mode 5	V	V
Mode 6	V	V
Mode 7	V	V

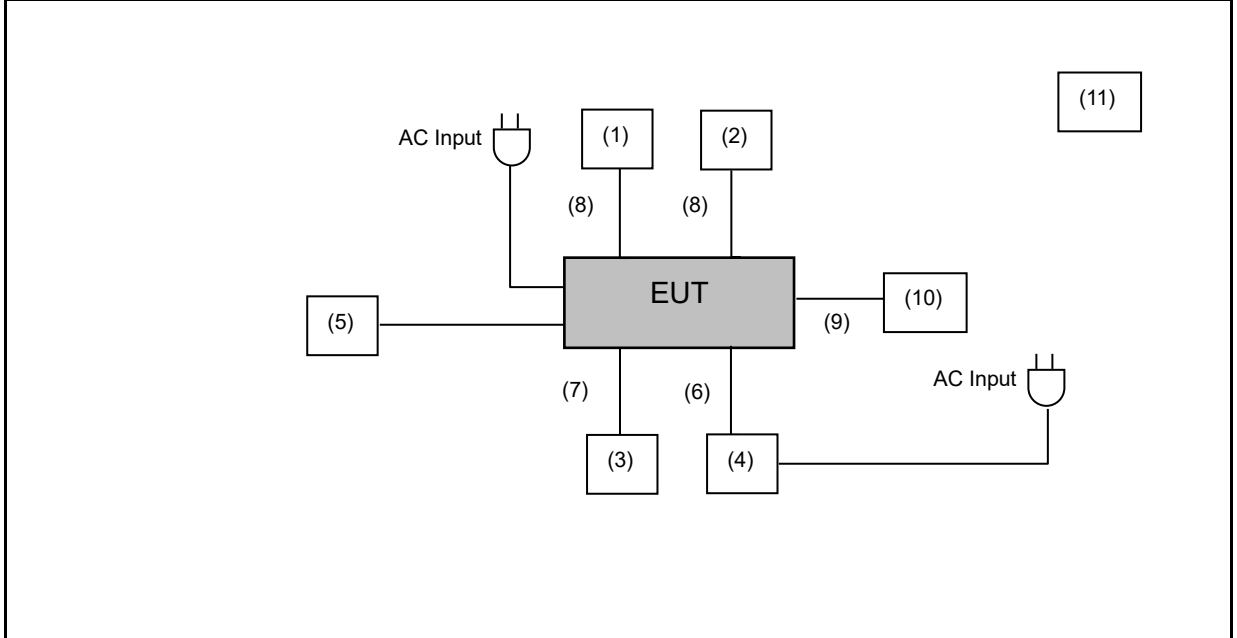
Test Mode	Antenna Delivery	Data Rate (Mbps)	Test Channel
Mode 2	2TX (MIMO)	1	1, 6, 11
Mode 3	2TX (MIMO)	6	1, 6, 11
Mode 4	2TX (MIMO)	13	1, 6, 11
Mode 5	2TX (MIMO)	27	3, 6, 9
Mode 6	2TX (MIMO)	MCS0	1, 6, 11
Mode 7	2TX (MIMO)	MCS0	3, 6, 9

3.2. EUT Test Step

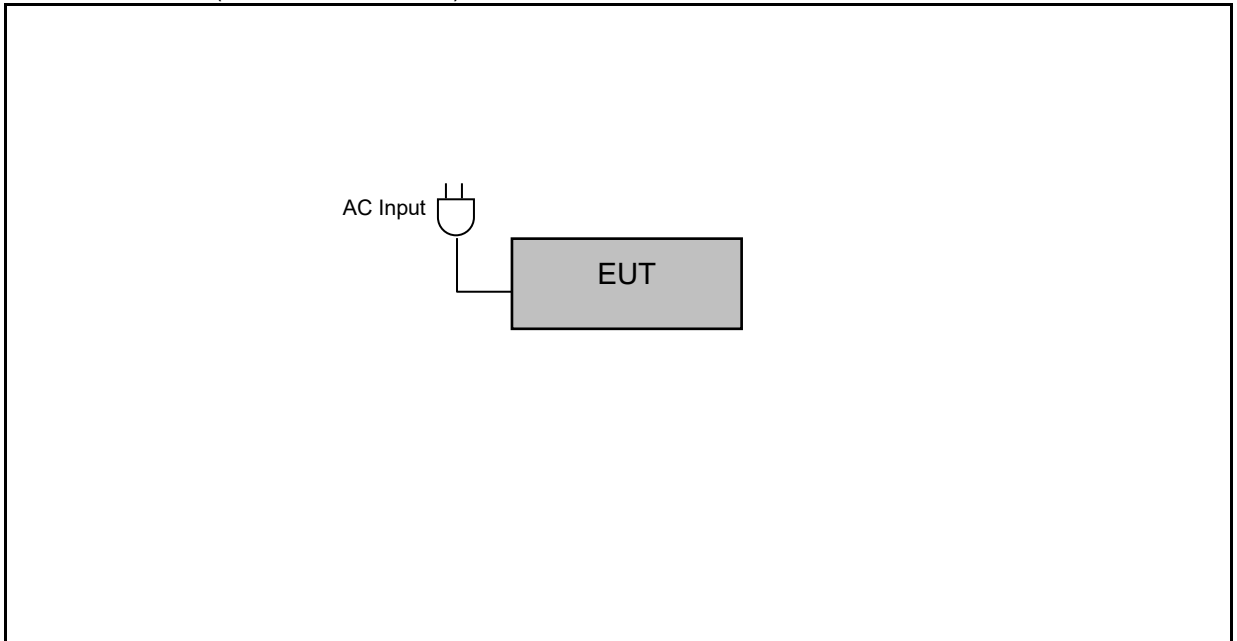
1.	Setup the EUT shown on "Configuration of Test System Details".
2.	Turn on the power of all equipment.
3.	Turn on TX function.
4.	EUT run test program.

3.3. Configuration of Test System Details

Conducted Emission



Radiated Emission (Below 1G / Above 1G)



Devices Description				
	Product	Manufacturer	Model Number	Power Cord
(1)	External Hard Drive	Transcend	TS1TSJ25A3K	---
(2)	External Hard Drive	Transcend	TS1TSJ25A3K	---
(3)	External Hard Drive	Transcend	TS1TSJ25A3K	---
(4)	LCD MONITOR	ASUS	MX27U	---
(5)	Earphone	YUJI	Y201	---
(6)	HDMI Cable	BENEVO	BHDMINI100	---
(7)	USB Cable	UGREEN	20103	---
(8)	USB Cable	Transcend	TS1TSJ25A3K	---
(9)	LAN Cable	TATUNG	CAT5E	---
(10)	Access Point	NETGEAR	R7800	---
(11)	Access Point	ASUS	RT-AX88U	---

3.4. Test Instruments

For Conducted Emission

Test Period: Aug. 17 ~ Oct. 07, 2022

Testing Engineer: Amber Cheng

Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
<input checked="" type="checkbox"/>	Test Receiver	R&S	ESCI	100367	May 19, 2022	1 year
<input checked="" type="checkbox"/>	LISN	R&S	ENV216	101040	Apr. 06, 2022	1 year
<input checked="" type="checkbox"/>	LISN	R&S	ENV216	101140	Jan. 25, 2022	1 year
<input checked="" type="checkbox"/>	RF Cable	Woken	00100D1380194M	TE-02-03	May 27, 2022	1 year
<input checked="" type="checkbox"/>	Software	EZ EMC	1.1.4.3	N/A	N.C.R.	---

For Radiated Emissions

Test Period: Aug. 10 ~ Sep. 26, 2022

Testing Engineer: Eason Lee, Jayson Hsieh, Ricky Liu

Radiation test sites		Semi Anechoic Room				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
<input checked="" type="checkbox"/>	Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	Jan. 13, 2022	1 year
<input checked="" type="checkbox"/>	Amplifier (10 kHz~3 GHz)	Agilent	EMC001330	980862	Nov. 29, 2022	1 year
<input checked="" type="checkbox"/>	Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02455	Jul. 12, 2021 Jul. 07, 2022	1 year
<input checked="" type="checkbox"/>	Trilog Broadband Antenna (30 kHz~1 GHz)	Schwarzbeck Mess-Elektronik	VULB9168	416	Nov. 17, 2021	1 year
<input checked="" type="checkbox"/>	Broadband Horn Antenna (1 GHz~18 GHz)	Schwarzbeck Mess-Elektronik	9120D	9120D-550	Aug. 24, 2021	1 year
<input checked="" type="checkbox"/>	Broadband Horn Antenna (1 GHz~18 GHz)	Schwarzbeck Mess-Elektronik	9120D	9120D-550	Aug. 25, 2022	1 year
<input checked="" type="checkbox"/>	Broadband Horn Antenna (18 GHz~40 GHz)	Schwarzbeck Mess-Elektronik	9170	9170-320	Aug. 24, 2021	1 year
<input checked="" type="checkbox"/>	Broadband Horn Antenna (18 GHz~40 GHz)	Schwarzbeck Mess-Elektronik	9170	9170-320	Aug. 25, 2022	1 year
<input checked="" type="checkbox"/>	Microwave Cable	EMCI	EMC104-SM-SM-13000	170814	Feb. 18, 2022	1 year
<input checked="" type="checkbox"/>	Microwave Cable	EMCI	EMCCFD400-NM-NM-6000	210902	Feb. 18, 2022	1 year
<input checked="" type="checkbox"/>	Microwave Cable	SUHNER	suflex104	313229/4	Feb. 18, 2022	1 year
<input checked="" type="checkbox"/>	Software	EZ EMC	1.1.4.4	N/A	N.C.R.	---

Note: N.C.R. = No Calibration Request.

For Conducted

Test Period: Sep. 23 ~ Sep. 26, 2022

Testing Engineer: Peter Shui

Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
<input checked="" type="checkbox"/>	Power Sensor	Anritsu	MA2411B	1126022	Sep. 04, 2022	1 year
<input checked="" type="checkbox"/>	Power Meter	Anritsu	ML2495A	1135009	Sep. 04, 2022	1 year
<input checked="" type="checkbox"/>	Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	Sep. 01, 2022	1 year

Note: N.C.R. = No Calibration Request.

3.5. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	20-30
Humidity (%RH)	25-75	45-75

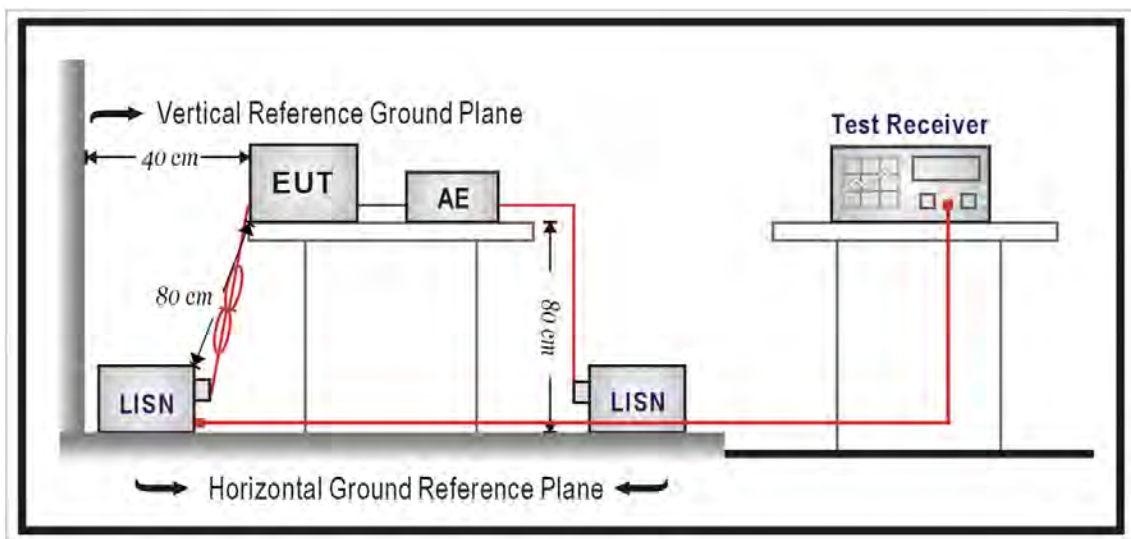
4 Measurement Procedure

4.1. AC Power Line Conducted Emission Measurement

■ Limit

Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

■ Test Setup



■ Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a $50 \Omega // 50 \mu\text{H}$ coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a $50 \Omega // 50 \mu\text{H}$ coupling impedance with 50 ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40 cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80 cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12 mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150 kHz to 30 MHz then quasi-peak and average measurement was unnecessary.

The AMN shall be placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8 m from the AMN. If the mains power cable is longer than 1 m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4 m. All of interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1 m. All 50Ω ports of the LISN shall be resistively terminated into 50Ω loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.

4.2. Radiated Emission Measurement

■ Limit

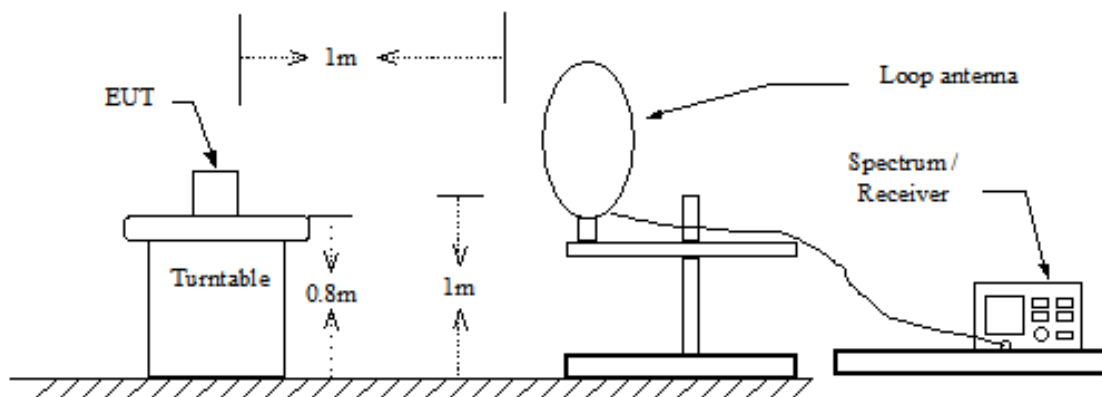
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$ at 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
30 - 88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

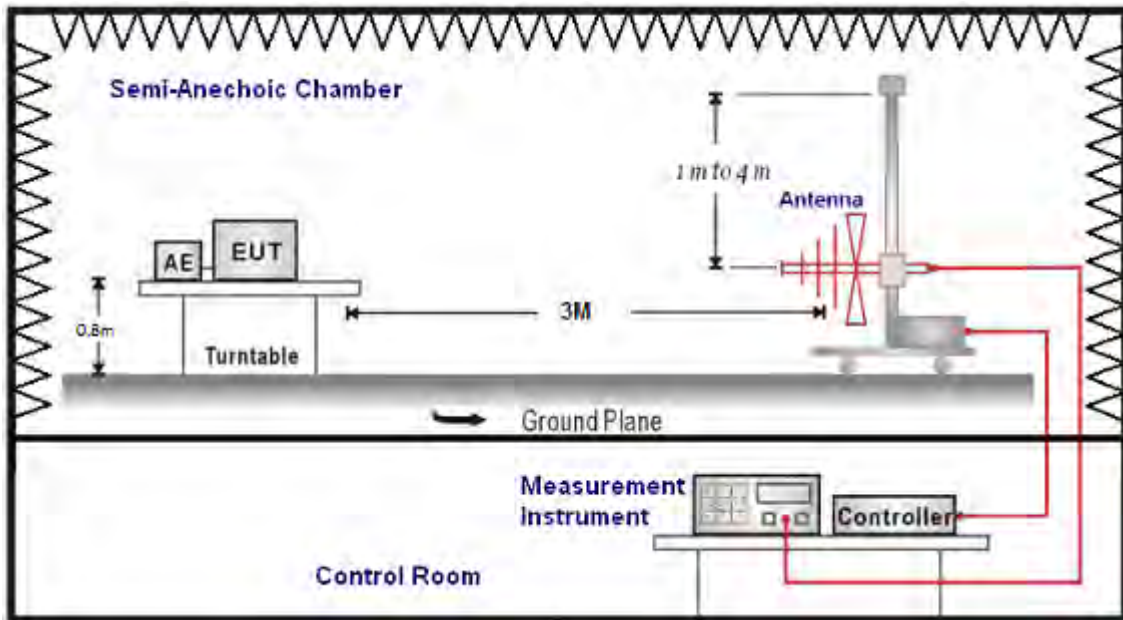
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

■ Setup

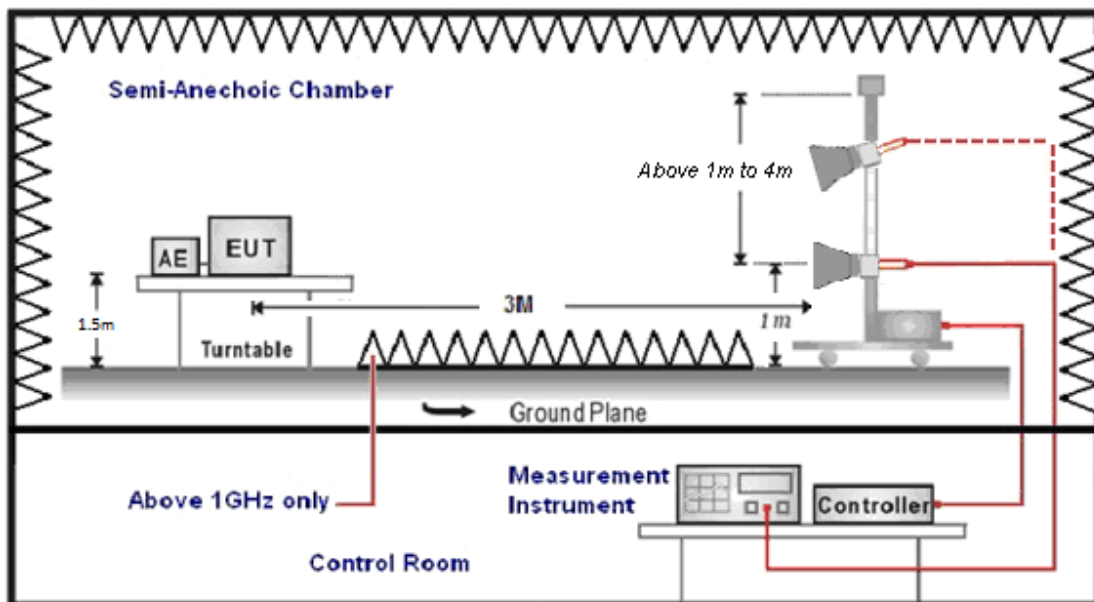
9 kHz ~ 30 MHz



Below 1 GHz



Above 1 GHz



■ Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle >0.98 / $1/T$ for average measurements when Duty cycle <0.98 . A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna was used in frequencies 1 –26.5 GHz at a distance of 3 meter. The antenna at an angle toward the source of the emission. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20 dB/decade).

For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30 dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.

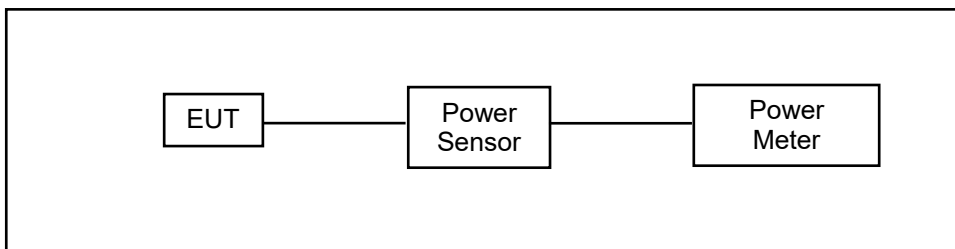
4.3. Maximum Conducted Output Power Measurement

■ **Limit**

For systems using digital modulation in the 2400-2483.5 MHz, the limit for maximum output power is 30 dBm.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ **Test Setup**



■ **Test Procedure**

The testing follows the Measurement Procedure of ANSI C63.10:2013 section 11.9.2.3.2 Method AVGPM.

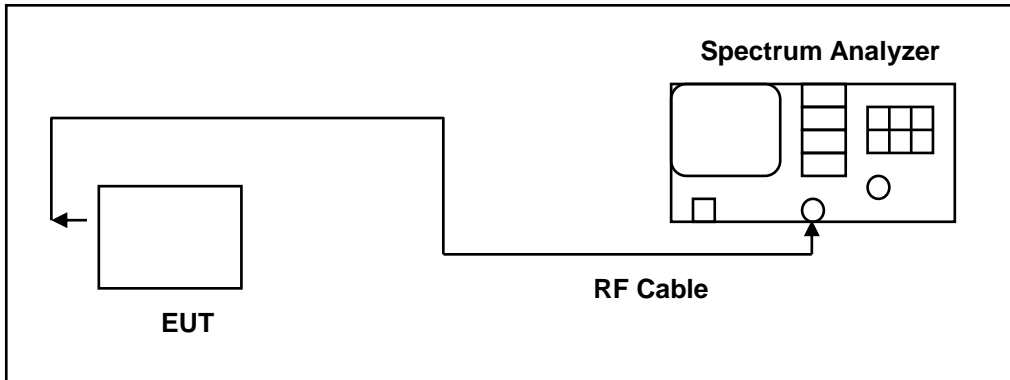
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor.

4.4. 6 dB RF Bandwidth Measurement

■ **Limit**

6 dB RF Bandwidth: Systems using digital modulation techniques may operate in the 2400–2483.5 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

■ **Test Setup**



■ **Test Procedure**

The EUT tested to DTS test procedure of ANSI C63.10:2013 section 11.8.2 option2 for compliance to FCC 47CFR 15.247 requirements.

6 dB RF Bandwidth: The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

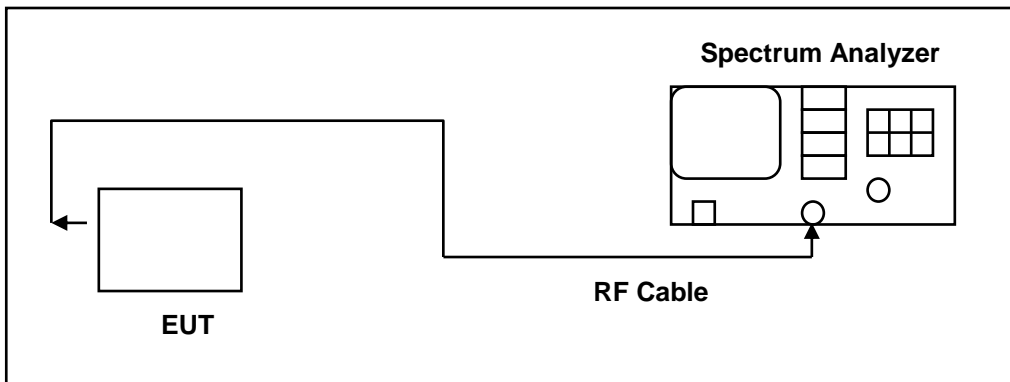
The test was performed at 3 channels (Channel low, middle, high)

4.5. Maximum Power Spectral Density Measurement

■ Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

■ Test Setup



■ Test Procedure

The EUT tested to DTS test procedure of ANSI C63.10:2013 section 11.10.2 Method PKPSD for compliance to FCC 47CFR 15.247 requirements.

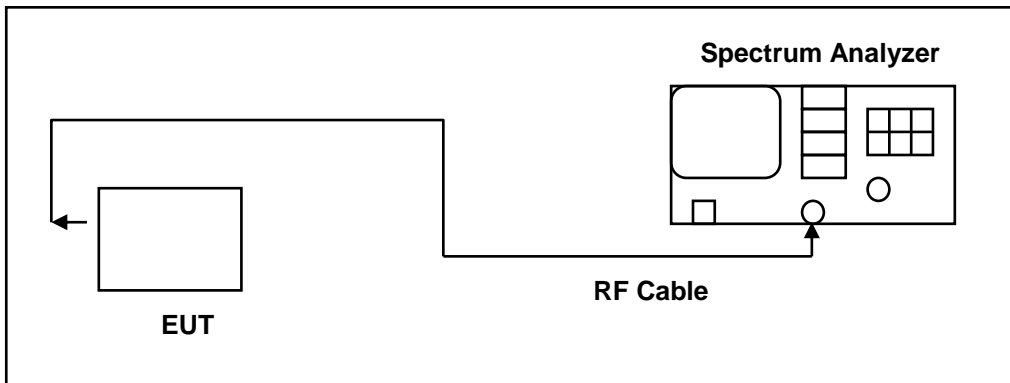
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.6. Out of Band Conducted Emissions Measurement

■ **Limit**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

■ **Test Setup**



■ **Test Procedure**

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function. All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band. The test was performed at 3 channels.

4.7. Antenna Measurement

■ Limit

For intentional device, according to 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.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ Antenna Description

See section 2 – antenna information.

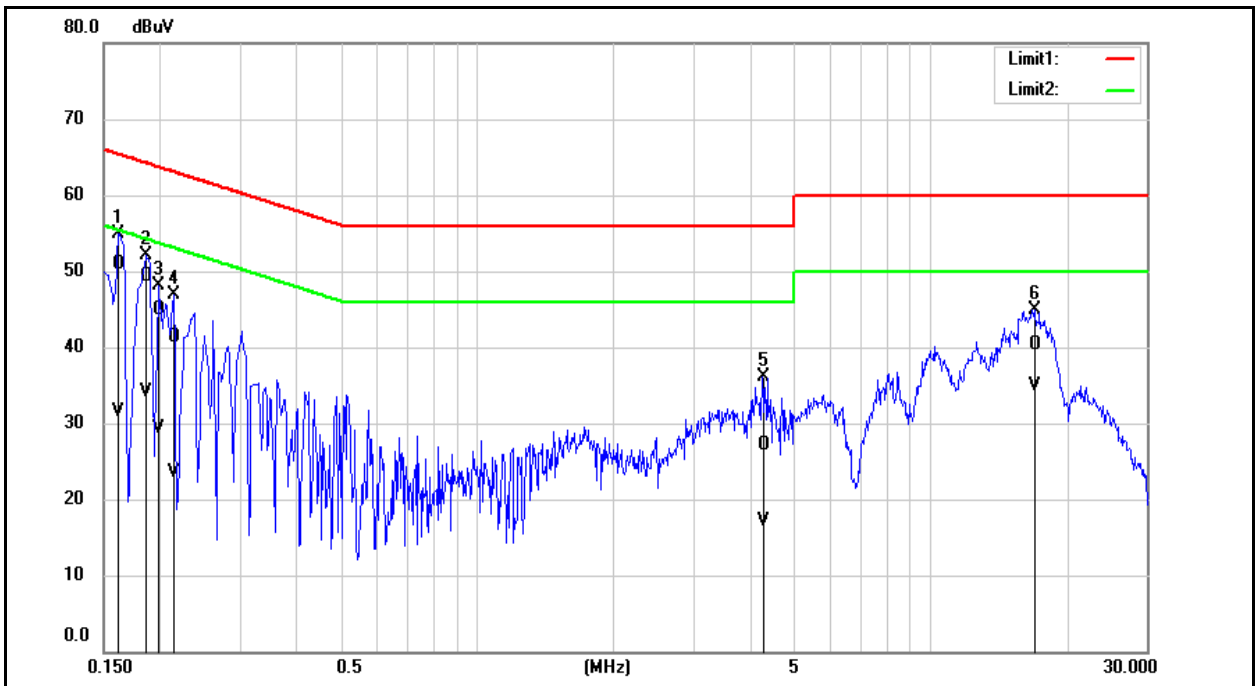
■ Directional Gain Calculated

Test mode	Transmission Type	Antenna		Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
		Ant-0 (dBi)	Ant-1 (dBi)		
IEEE 802.11b	MIMO	1.89	1.41	4.66	4.66
IEEE 802.11g	MIMO	1.89	1.41	4.66	4.66
IEEE 802.11n 2.4 GHz 20 MHz(64QAM) IEEE 802.11n 2.4 GHz 40 MHz(64QAM) IEEE 802.11ax 2.4 GHz 20 MHz IEEE 802.11ax 2.4 GHz 40 MHz	MIMO	1.89	1.41	4.66	4.66

5 Test Results

5.1. Conducted Emission

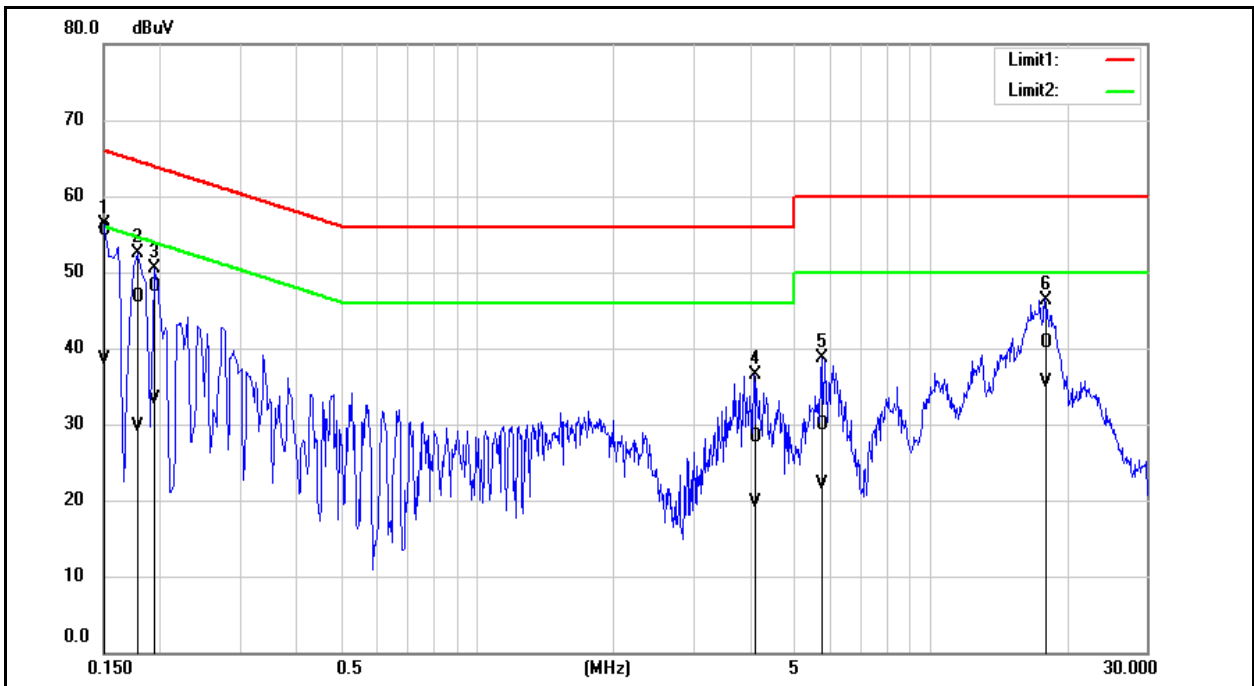
Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Mode:	Mode 1		
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	41.32	21.89	9.54	50.86	31.43	65.36	55.36	-14.50	-23.93	Pass
2	0.1860	39.76	24.56	9.54	49.30	34.10	64.21	54.21	-14.91	-20.11	Pass
3	0.1980	35.31	19.73	9.54	44.85	29.27	63.69	53.69	-18.84	-24.42	Pass
4	0.2140	31.86	14.02	9.54	41.40	23.56	63.05	53.05	-21.65	-29.49	Pass
5	4.2500	17.37	7.44	9.68	27.05	17.12	56.00	46.00	-28.95	-28.88	Pass
6	16.9980	30.45	25.03	9.84	40.29	34.87	60.00	50.00	-19.71	-15.13	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).
2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

Standard:	FCC Part 15.247	Line:	N
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Mode:	Mode 1		
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1500	45.90	28.96	9.60	55.50	38.56	66.00	56.00	-10.50	-17.44	Pass
2	0.1780	37.06	20.06	9.60	46.66	29.66	64.58	54.58	-17.92	-24.92	Pass
3	0.1940	38.49	23.75	9.60	48.09	33.35	63.86	53.86	-15.77	-20.51	Pass
4	4.0820	18.51	9.91	9.73	28.24	19.64	56.00	46.00	-27.76	-26.36	Pass
5	5.7740	20.13	12.28	9.78	29.91	22.06	60.00	50.00	-30.09	-27.94	Pass
6	17.8620	30.69	25.42	10.00	40.69	35.42	60.00	50.00	-19.31	-14.58	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).
2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

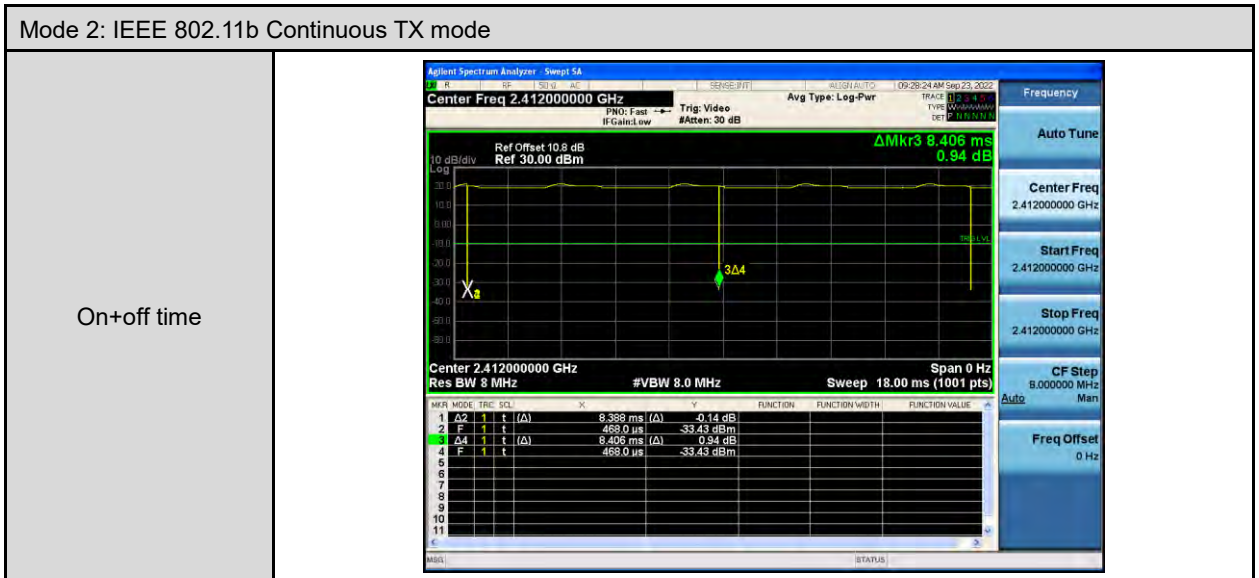
5.2. Conducted Test Results

Duty cycle

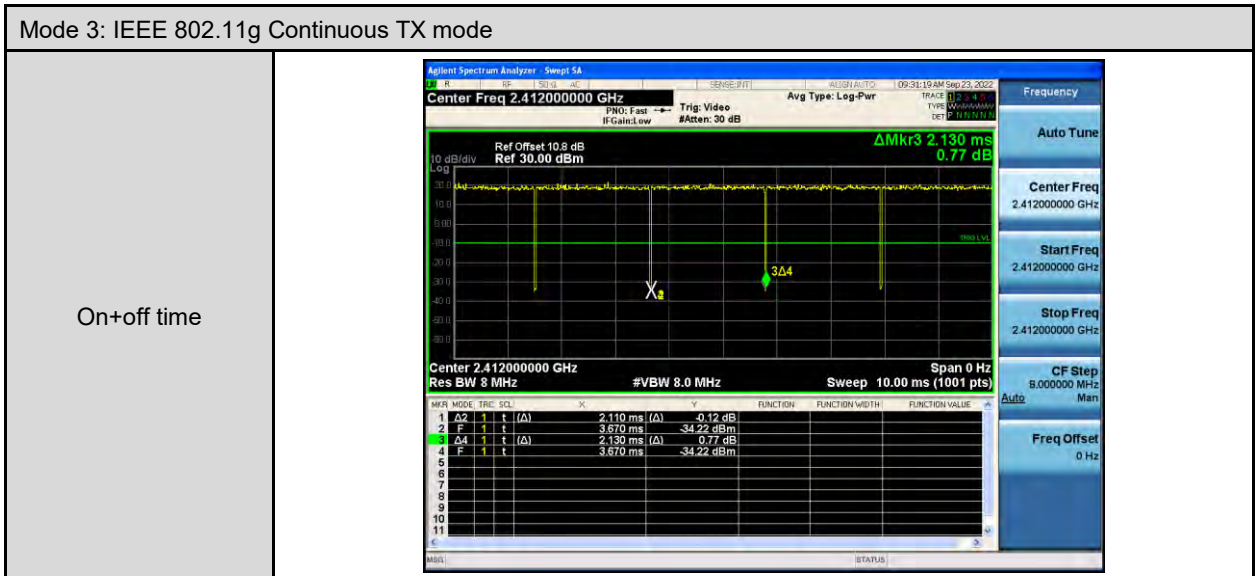
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	2412	8.388	8.406	0.998	0.009	0.010
Mode 3	2412	2.110	2.130	0.991	0.041	0.010
Mode 6	2412	7.940	7.960	0.997	0.011	0.010
Mode 7	2422	5.130	5.145	0.997	0.013	0.010

Duty Cycle Graphs

Mode 2: IEEE 802.11b Continuous TX mode

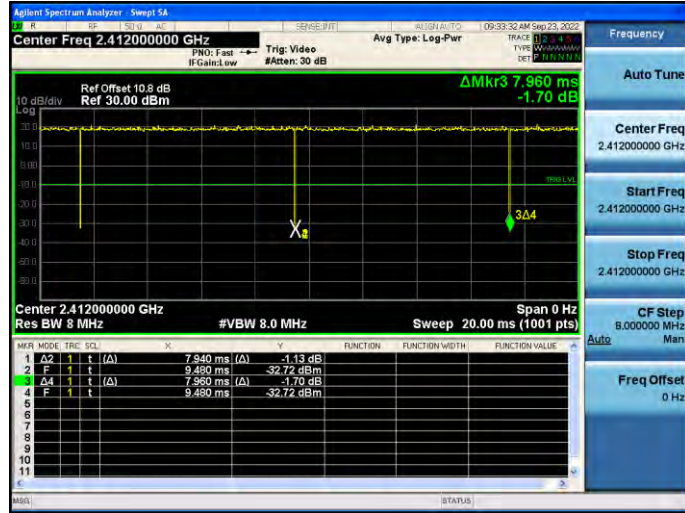


Mode 3: IEEE 802.11g Continuous TX mode



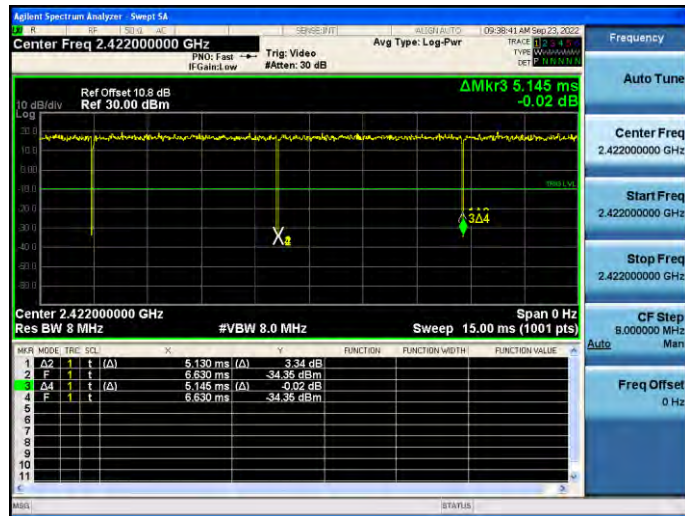
Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode

On+off time



Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode

On+off time



Maximum Conducted Output Power Measurement

Test Mode	Frequency (MHz)	RF Power setting in Test Software		Test Software Version
		ANT-0	ANT-1	
Mode 2	2412	16.25	16.25	DRTU version 22.21080.0.0
	2437	16.25	16.25	
	2462	16.25	16.25	
Mode 3	2412	16.25	16.25	
	2437	16.25	16.25	
	2462	16.25	16.25	
Mode 4	2412	16.25	16.25	
	2437	16.25	16.25	
	2462	16.25	16.25	
Mode 5	2422	16.25	16.25	
	2437	16.25	16.25	
	2452	16.25	16.25	
Mode 6	2412	16.25	16.25	
	2437	16.25	16.25	
	2462	16.25	16.25	
Mode 7	2422	16.25	16.25	
	2437	16.25	16.25	
	2452	16.25	16.25	

Mod.	Freq. (MHz)	Data Rate	Avg Conducted Power (dBm)			Peak Conducted Power (dBm)			Conducted Power Limit (dBm)
			ANT-0	ANT-1	ANT-0+1	ANT-0	ANT-1	ANT-0+1	
Mode 2	2412	1 M	16.24	16.22	19.24	18.25	18.22	21.25	30.00
	2437	1 M	16.15	16.19	19.18	18.14	18.17	21.17	30.00
	2462	1 M	16.08	16.13	19.12	18.10	18.13	21.13	30.00
Mode 3	2412	6 M	15.81	15.91	18.87	19.75	19.83	22.80	30.00
	2437	6 M	15.75	15.84	18.81	19.61	19.73	22.68	30.00
	2462	6 M	15.69	15.81	18.76	19.58	19.69	22.65	30.00
Mode 4	2412	13 M	15.62	15.79	18.72	19.75	19.78	22.78	30.00
	2437	13 M	15.63	15.70	18.68	19.76	19.75	22.77	30.00
	2462	13 M	15.55	15.66	18.62	19.68	19.73	22.72	30.00
Mode 5	2422	27 M	15.76	15.90	18.84	20.88	20.89	23.90	30.00
	2437	27 M	15.80	15.86	18.84	20.94	20.94	23.95	30.00
	2452	27 M	15.67	15.70	18.70	20.71	20.66	23.70	30.00
Mode 6	2412	13 M	15.86	15.87	18.88	19.91	19.87	22.90	30.00
	2437	13 M	15.75	15.91	18.84	19.82	19.89	22.87	30.00
	2462	13 M	15.74	15.86	18.81	19.80	19.82	22.82	30.00
Mode 7	2422	27 M	15.94	16.08	19.02	21.03	21.06	24.06	30.00
	2437	27 M	15.97	16.05	19.02	21.05	21.01	24.04	30.00
	2452	27 M	15.88	15.99	18.95	20.86	20.95	23.92	30.00

Note: The relevant measured result has the offset with cable loss already.

6 dB RF Bandwidth Measurement

Test Mode	Frequency (MHz)	Measurement (kHz)		Limit (kHz)
		ANT-0	ANT-1	
Mode 2	2412	9070	9080	≥ 500
	2437	9084	9083	≥ 500
	2462	9080	9061	≥ 500
Mode 3	2412	15170	15170	≥ 500
	2437	15160	15170	≥ 500
	2462	15170	15160	≥ 500
Mode 6	2412	17810	17060	≥ 500
	2437	18250	17230	≥ 500
	2462	17200	16270	≥ 500
Mode 7	2422	36870	36400	≥ 500
	2437	36300	35200	≥ 500
	2452	36000	35990	≥ 500

■ Test Graphs

Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Center Freq 2.412000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.412 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.506 MHz</p> <p>Total Power 23.4 dBm</p> <p>Transmit Freq Error 25.055 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.070 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.412000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Man</p> <p>Freq Offset 0 Hz</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Center Freq 2.437000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: >1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.521 MHz</p> <p>Total Power 23.3 dBm</p> <p>Transmit Freq Error 17.784 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.084 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Man</p> <p>Freq Offset 0 Hz</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Center Freq 2.462000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.462 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.507 MHz</p> <p>Total Power 23.2 dBm</p> <p>Transmit Freq Error -1.048 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.080 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.462000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Man</p> <p>Freq Offset 0 Hz</p>

Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.503 MHz Total Power 23.2 dBm</p> <p>Transmit Freq Error 10.767 kHz OBW Power 99.00 % x dB Bandwidth 15.17 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.412000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.593 MHz Total Power 23.1 dBm</p> <p>Transmit Freq Error 19.606 kHz OBW Power 99.00 % x dB Bandwidth 15.16 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.584 MHz Total Power 23.0 dBm</p> <p>Transmit Freq Error 3.174 kHz OBW Power 99.00 % x dB Bandwidth 15.17 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.462000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Freq Offset 0 Hz</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-0

<p>2412 MHz</p>		<p>Frequency</p> <p>Center Freq 2.41200000 GHz</p> <p>CF Step 4.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Center Freq 2.43700000 GHz</p> <p>CF Step 4.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>		<p>Frequency</p> <p>Center Freq 2.46200000 GHz</p> <p>CF Step 4.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-0

<p>2422 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.42200000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.422 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 37.360 MHz</p> <p>Total Power 24.2 dBm</p> <p>Transmit Freq Error 65.441 kHz</p> <p>x dB Bandwidth 36.87 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.42200000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.43700000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 37.380 MHz</p> <p>Total Power 24.4 dBm</p> <p>Transmit Freq Error 22.196 kHz</p> <p>x dB Bandwidth 36.30 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.43700000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2452 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.45200000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.452 GHz #Res BW 100 kHz</p> <p>Occupied Bandwidth 37.347 MHz</p> <p>Total Power 24.2 dBm</p> <p>Transmit Freq Error 30.298 kHz</p> <p>x dB Bandwidth 36.00 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.45200000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>

Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Center Freq 2.412000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.412 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.484 MHz</p> <p>Total Power 23.3 dBm</p> <p>Transmit Freq Error 11.704 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.080 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.412000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Center Freq 2.437000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.495 MHz</p> <p>Total Power 23.3 dBm</p> <p>Transmit Freq Error 8.474 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.083 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Center Freq 2.462000000 GHz</p> <p>Trig: Free Run</p> <p>Avg/Hold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 10.8 dB</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.462 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.367 ms</p> <p>Occupied Bandwidth 13.466 MHz</p> <p>Total Power 23.3 dBm</p> <p>Transmit Freq Error -7.344 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 9.061 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency</p> <p>Center Freq 2.462000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>

Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.563 MHz Total Power 23.2 dBm</p> <p>Transmit Freq Error 5.064 kHz OBW Power 99.0 % x dB Bandwidth 15.17 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.412000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.594 MHz Total Power 23.1 dBm</p> <p>Transmit Freq Error -2.109 kHz OBW Power 99.0 % x dB Bandwidth 15.17 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 16.573 MHz Total Power 23.1 dBm</p> <p>Transmit Freq Error -8.856 kHz OBW Power 99.0 % x dB Bandwidth 15.16 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.462000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-1

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>10 dB/div Log</p> <p>Center 2.412 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 18.864 MHz</p> <p>Total Power 24.1 dBm</p> <p>Transmit Freq Error 11.840 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 17.06 MHz</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.412000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>10 dB/div Log</p> <p>Center 2.437 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 18.849 MHz</p> <p>Total Power 24.0 dBm</p> <p>Transmit Freq Error 8.277 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 17.23 MHz</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>10 dB/div Log</p> <p>Center 2.462 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.367 ms</p> <p>Occupied Bandwidth 18.863 MHz</p> <p>Total Power 24.0 dBm</p> <p>Transmit Freq Error 16.207 kHz</p> <p>OBW Power 99.0 %</p> <p>x dB Bandwidth 16.27 MHz</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.462000000 GHz</p> <p>CF Step 4.000000 MHz</p> <p>Freq Offset 0 Hz</p>

Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-1

<p>2422 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.42200000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 80 MHz Sweep 7.667 ms</p> <p>Occupied Bandwidth 37.316 MHz Total Power 24.3 dBm</p> <p>Transmit Freq Error 31.822 kHz OBW Power 99.00 % x dB Bandwidth 36.40 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.42200000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 80 MHz Sweep 7.667 ms</p> <p>Occupied Bandwidth 37.419 MHz Total Power 23.8 dBm</p> <p>Transmit Freq Error 23.509 kHz OBW Power 99.00 % x dB Bandwidth 35.20 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.437000000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>2452 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.452000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Center 2.452 GHz #Res BW 100 kHz #VBW 300 kHz Span 80 MHz Sweep 7.667 ms</p> <p>Occupied Bandwidth 37.345 MHz Total Power 24.1 dBm</p> <p>Transmit Freq Error 22.772 kHz OBW Power 99.00 % x dB Bandwidth 35.99 MHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.452000000 GHz</p> <p>CF Step 8.000000 MHz</p> <p>Freq Offset 0 Hz</p>

Maximum Power Spectral Density Measurement

Test Mode	Frequency (MHz)	Measurement (dBm/3 kHz)			Limit (dBm/ 3 kHz)
		ANT-0	ANT-1	ANT-0+1	
Mode 2	2412	-6.32	-6.14	-3.13	≤ 8
	2437	-7.06	-6.90	-3.13	≤ 8
	2462	-7.23	-7.34	-3.13	≤ 8
Mode 3	2412	-8.43	-8.51	-5.42	≤ 8
	2437	-8.34	-8.45	-5.42	≤ 8
	2462	-9.27	-8.93	-5.42	≤ 8
Mode 6	2412	-9.22	-9.33	-6.21	≤ 8
	2437	-9.72	-9.00	-6.21	≤ 8
	2462	-10.35	-10.14	-6.21	≤ 8
Mode 7	2422	-12.26	-12.70	-9.25	≤ 8
	2437	-12.23	-13.45	-9.25	≤ 8
	2452	-13.14	-12.89	-9.25	≤ 8

Mode 2: IEEE 802.11b Continuous TX mode_ANT-0

2412 MHz






2437 MHz



2462 MHz



Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

<p>2412 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.400623549 GHz</p> <p>Stop Freq 2.423376451 GHz</p> <p>CF Step 2.275290 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.426629851 GHz</p> <p>Stop Freq 2.448370149 GHz</p> <p>CF Step 2.274030 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.450623889 GHz</p> <p>Stop Freq 2.473376111 GHz</p> <p>CF Step 2.275222 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-0

2412 MHz






2437 MHz






2462 MHz






Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-0

<p>2422 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.394347349 GHz</p> <p>Stop Freq 2.449652651 GHz</p> <p>CF Step 5.530530 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.409778278 GHz</p> <p>Stop Freq 2.464221722 GHz</p> <p>CF Step 5.444344 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2452 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.424999414 GHz</p> <p>Stop Freq 2.479000586 GHz</p> <p>CF Step 5.400117 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

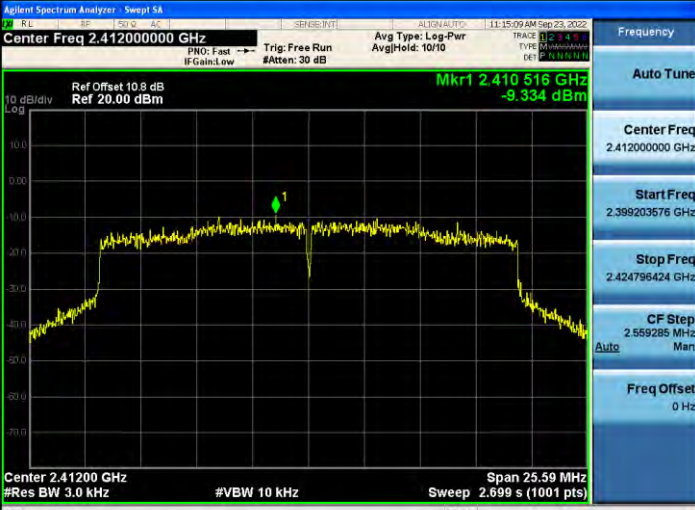


Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

<p>2412 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.412000000 GHz</p> <p>Start Freq 2.405190086 GHz</p> <p>Stop Freq 2.418809914 GHz</p> <p>CF Step 1.361983 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.437000000 GHz</p> <p>Start Freq 2.430188043 GHz</p> <p>Stop Freq 2.443811957 GHz</p> <p>CF Step 1.362391 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.462000000 GHz</p> <p>Start Freq 2.455204077 GHz</p> <p>Stop Freq 2.468795923 GHz</p> <p>CF Step 1.359185 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

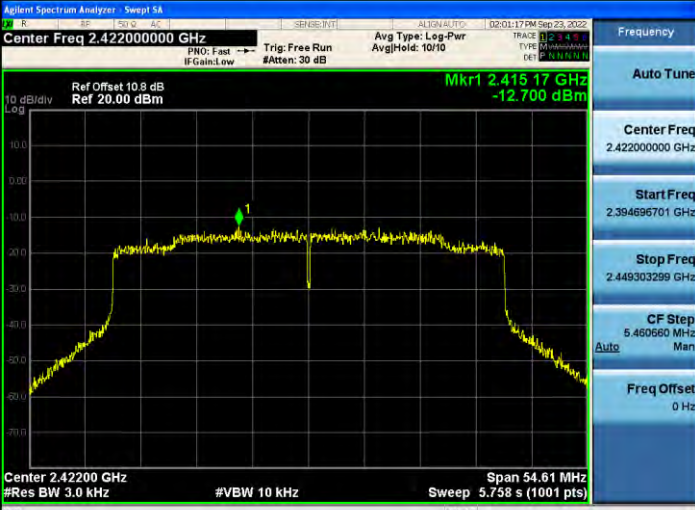

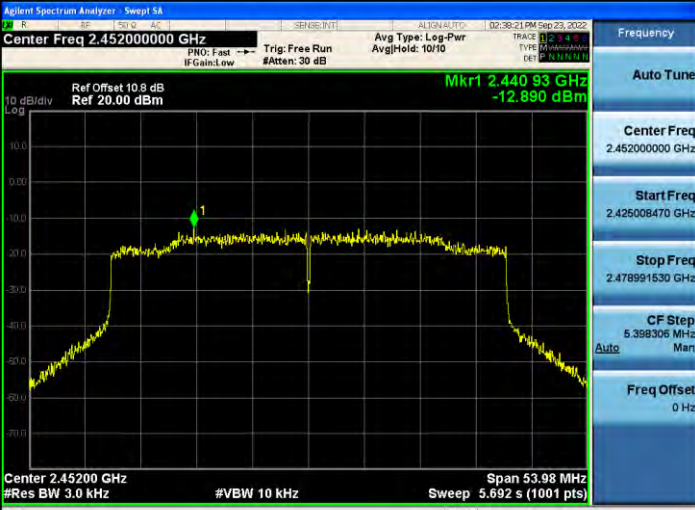
Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

<p>2412 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.40626948 GHz</p> <p>Stop Freq 2.423374052 GHz</p> <p>CF Step 2.274810 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.426621549 GHz</p> <p>Stop Freq 2.448378451 GHz</p> <p>CF Step 2.275690 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.450630135 GHz</p> <p>Stop Freq 2.473369865 GHz</p> <p>CF Step 2.273973 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-1

<p>2412 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.399203576 GHz</p> <p>Stop Freq 2.424796424 GHz</p> <p>CF Step 2.559285 MHz Auto</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.424074878 GHz</p> <p>Stop Freq 2.449925122 GHz</p> <p>CF Step 2.585024 MHz Auto</p> <p>Freq Offset 0 Hz</p>
<p>2462 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.449796006 GHz</p> <p>Stop Freq 2.474203994 GHz</p> <p>CF Step 2.440799 MHz Auto</p> <p>Freq Offset 0 Hz</p>

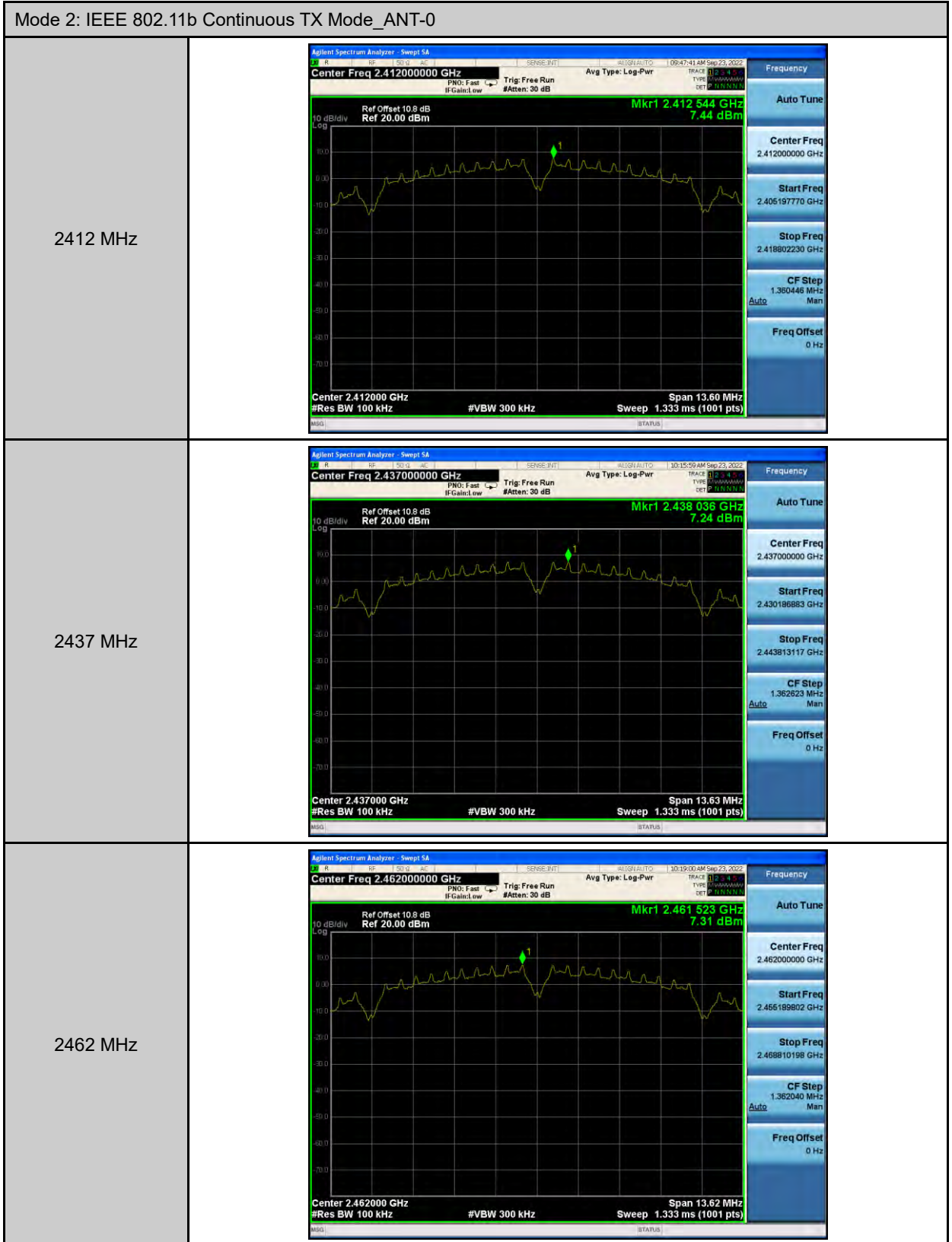
Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-1

<p>2422 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.394696701 GHz</p> <p>Stop Freq 2.449303299 GHz</p> <p>CF Step 5.460680 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2437 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.410601750 GHz</p> <p>Stop Freq 2.463398250 GHz</p> <p>CF Step 5.279650 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>2452 MHz</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.426008470 GHz</p> <p>Stop Freq 2.478991530 GHz</p> <p>CF Step 5.398306 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>

Out of Band Conducted Emissions Measurement

■ Test Graphs

Reference level



Mode 3: IEEE 802.11g Continuous TX Mode_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Mkr1 2.414 526 GHz 5.82 dBm Ref Offset: 10.8 dB Ref 20.00 dBm Center 2.41200 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.75 MHz Sweep 2.200 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Mkr1 2.438 273 GHz 5.47 dBm Ref Offset: 10.8 dB Ref 20.00 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.74 MHz Sweep 2.200 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Mkr1 2.464 503 GHz 5.61 dBm Ref Offset: 10.8 dB Ref 20.00 dBm Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.75 MHz Sweep 2.200 ms (1001 pts)</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Mkr1 2.414 512 GHz 5.86 dBm Center 2.41200 GHz #Res BW 100 kHz #VBW 300 kHz Span 26.72 MHz Sweep 2.600 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Mkr1 2.439 491 GHz 5.56 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 27.38 MHz Sweep 2.667 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Mkr1 2.463 264 GHz 5.55 dBm Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Span 25.80 MHz Sweep 2.467 ms (1001 pts)</p>

Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-0	
2422 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.42200000 GHz Mkr1 2.42703 GHz 1.88 dBm Center 2.42200 GHz #Res BW 100 kHz #VBW 300 kHz Span 55.31 MHz Sweep 5.333 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Mkr1 2.44081 GHz 2.18 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 54.44 MHz Sweep 5.267 ms (1001 pts)</p>
2452 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.45200000 GHz Mkr1 2.45578 GHz 1.95 dBm Center 2.45200 GHz #Res BW 100 kHz #VBW 300 kHz Span 54.00 MHz Sweep 5.200 ms (1001 pts)</p>

Mode 2: IEEE 802.11b Continuous TX Mode_ANT-1	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Mkr1 2.412 518 GHz 7.38 dBm Center 2.412000 GHz #Res BW 100 kHz #VBW 300 kHz Span 13.62 MHz Sweep 1.333 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Mkr1 2.436 523 GHz 7.44 dBm Center 2.437000 GHz #Res BW 100 kHz #VBW 300 kHz Span 13.62 MHz Sweep 1.333 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Mkr1 2.461 524 GHz 7.24 dBm Center 2.462000 GHz #Res BW 100 kHz #VBW 300 kHz Span 13.59 MHz Sweep 1.333 ms (1001 pts)</p>

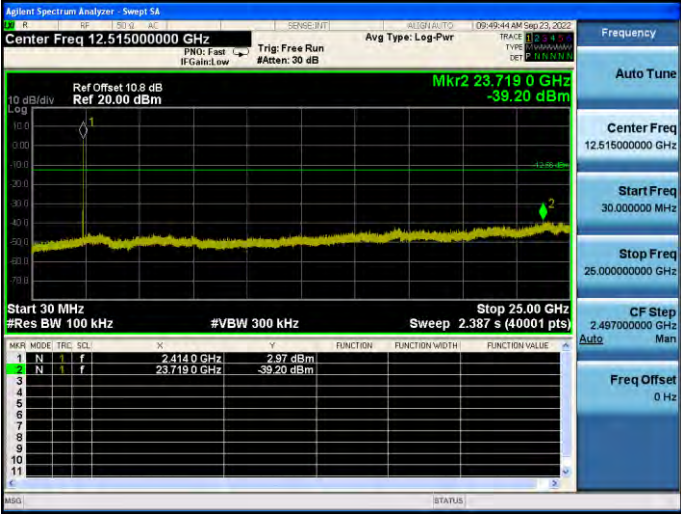
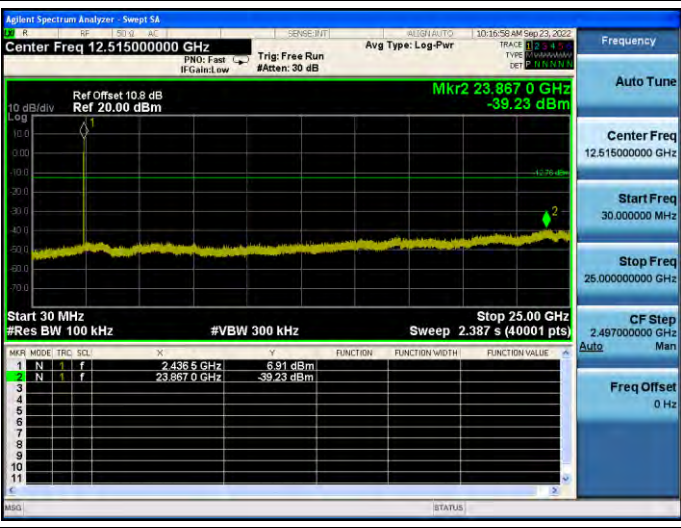
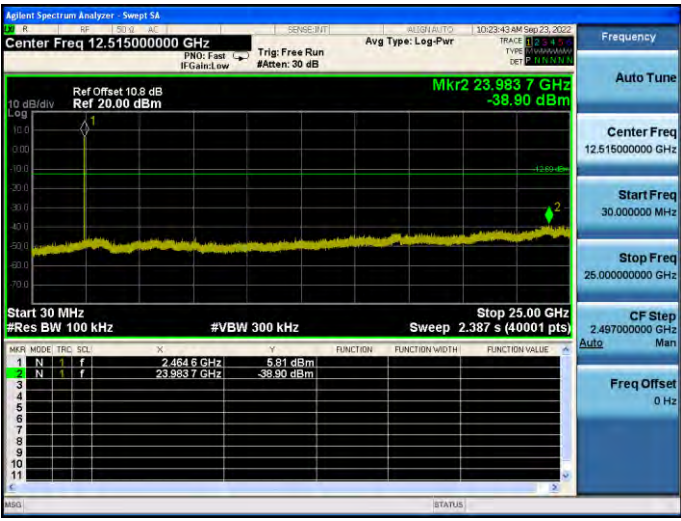
Mode 3: IEEE 802.11g Continuous TX Mode_ANT-1	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Mkr1 2.413 274 GHz 5.73 dBm Center 2.41200 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.75 MHz Sweep 2.200 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Mkr1 2.438 274 GHz 5.88 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.76 MHz Sweep 2.200 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Mkr1 2.463 273 GHz 5.84 dBm Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.74 MHz Sweep 2.200 ms (1001 pts)</p>

Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-1	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.412000000 GHz Mkr1 2.414 534 GHz 5.64 dBm Center 2.41200 GHz #Res BW 100 kHz #VBW 300 kHz Span 25.59 MHz Sweep 2.467 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.437000000 GHz Mkr1 2.438 293 GHz 6.01 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 25.85 MHz Sweep 2.533 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.462000000 GHz Mkr1 2.463 294 GHz 5.97 dBm Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Span 24.41 MHz Sweep 2.333 ms (1001 pts)</p>

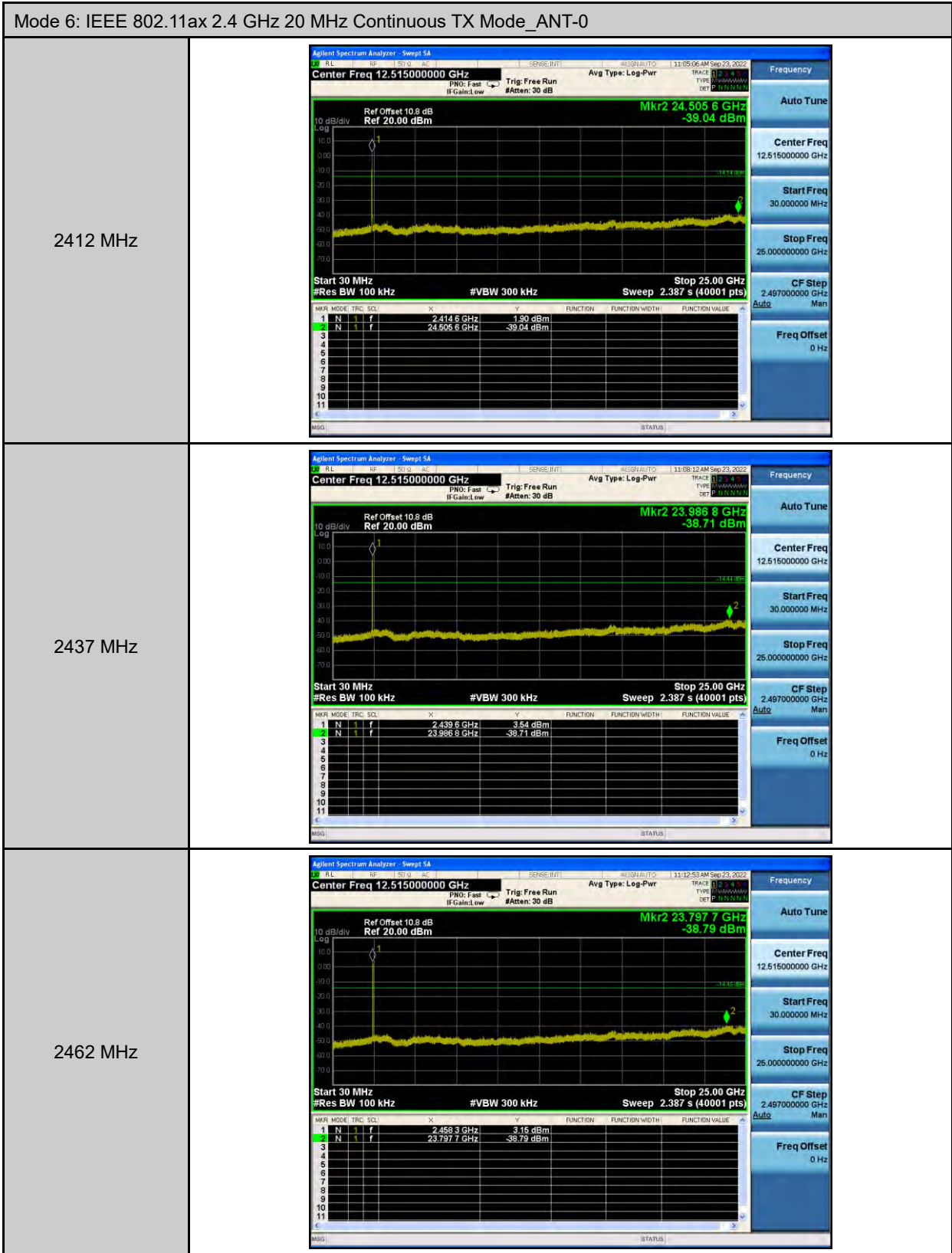
Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

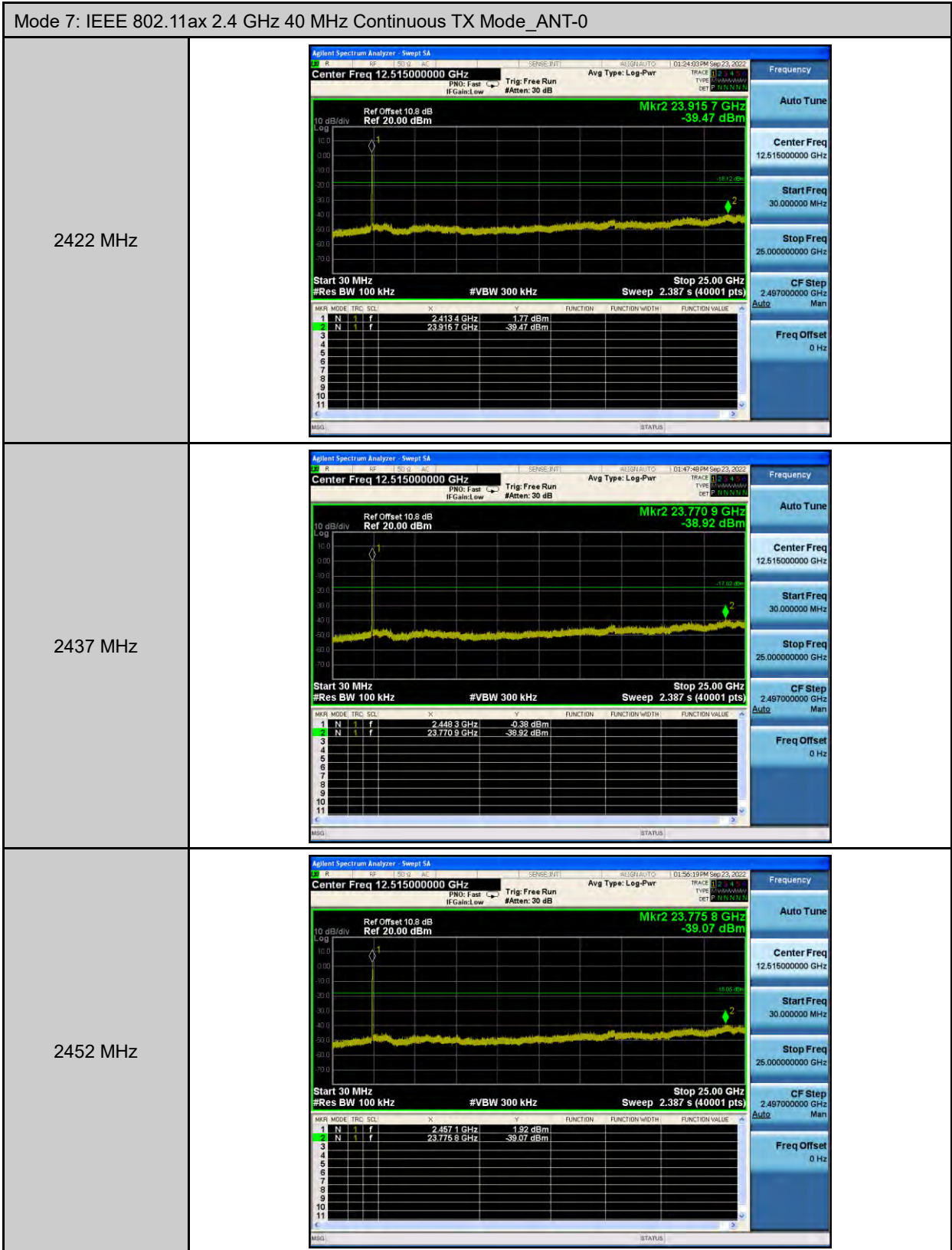
Out of Band Conducted Emissions

Mode 2: IEEE 802.11b Continuous TX mode _ANT-0

<p>2412 MHz</p>	
<p>2437 MHz</p>	
<p>2462 MHz</p>	

Mode 3: IEEE 802.11g Continuous TX Mode_ANT-0																												
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 24.111 1 GHz -38.87 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>Stop 25.00 GHz #VBW 300 kHz</p> <p>Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.419 8 GHz</td> <td>2.52 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>24.111 1 GHz</td> <td>-38.87 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.419 8 GHz	2.52 dBm				2	N	1	f	24.111 1 GHz	-38.87 dBm			
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2	N	1	f	24.111 1 GHz	-38.87 dBm																							
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 23.851 4 GHz -39.18 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>Stop 25.00 GHz #VBW 300 kHz</p> <p>Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.440 9 GHz</td> <td>3.49 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.851 4 GHz</td> <td>-39.18 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.440 9 GHz	3.49 dBm				2	N	1	f	23.851 4 GHz	-39.18 dBm			
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2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 23.990 0 GHz -39.05 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>Stop 25.00 GHz #VBW 300 kHz</p> <p>Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.463 3 GHz</td> <td>1.99 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.990 0 GHz</td> <td>-39.05 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.463 3 GHz	1.99 dBm				2	N	1	f	23.990 0 GHz	-39.05 dBm			
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	1	f	23.990 0 GHz	-39.05 dBm																							





Mode 2: IEEE 802.11b Continuous TX Mode_ANT-1																									
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 23.837 0 GHz -39.08 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.412 8 GHz</td> <td></td> <td></td> <td>6.10 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.837 0 GHz</td> <td></td> <td></td> <td>-39.08 dBm</td> </tr> </tbody> </table>	MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.412 8 GHz			6.10 dBm	2	N	1	f	23.837 0 GHz			-39.08 dBm
MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																		
1	N	1	f	2.412 8 GHz			6.10 dBm																		
2	N	1	f	23.837 0 GHz			-39.08 dBm																		
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 23.832 0 GHz -38.62 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.437 7 GHz</td> <td></td> <td></td> <td>4.71 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.832 0 GHz</td> <td></td> <td></td> <td>-38.62 dBm</td> </tr> </tbody> </table>	MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.437 7 GHz			4.71 dBm	2	N	1	f	23.832 0 GHz			-38.62 dBm
MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																		
1	N	1	f	2.437 7 GHz			4.71 dBm																		
2	N	1	f	23.832 0 GHz			-38.62 dBm																		
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.51500000 GHz</p> <p>Mkr2 23.773 3 GHz -38.95 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 25.00 GHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.462 7 GHz</td> <td></td> <td></td> <td>5.84 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.773 3 GHz</td> <td></td> <td></td> <td>-38.95 dBm</td> </tr> </tbody> </table>	MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.462 7 GHz			5.84 dBm	2	N	1	f	23.773 3 GHz			-38.95 dBm
MKR MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																		
1	N	1	f	2.462 7 GHz			5.84 dBm																		
2	N	1	f	23.773 3 GHz			-38.95 dBm																		

Mode 3: IEEE 802.11g Continuous TX mode_ANT-1																												
2412 MHz	<p>Agilent Spectrum Analyzer - Sweep 5A</p> <p>Center Freq 12.515000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 23.875 7 GHz -37.59 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR</th> <th>MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.417 1 GHz</td> <td>4.62 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.875 7 GHz</td> <td>-37.59 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MFR	MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.417 1 GHz	4.62 dBm				2	N	1	f	23.875 7 GHz	-37.59 dBm			
MFR	MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.417 1 GHz	4.62 dBm																							
2	N	1	f	23.875 7 GHz	-37.59 dBm																							
2437 MHz	<p>Agilent Spectrum Analyzer - Sweep 5A</p> <p>Center Freq 12.515000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 24.601 1 GHz -38.76 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR</th> <th>MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.432 1 GHz</td> <td>4.63 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>24.601 1 GHz</td> <td>-38.76 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MFR	MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.432 1 GHz	4.63 dBm				2	N	1	f	24.601 1 GHz	-38.76 dBm			
MFR	MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	1	f	24.601 1 GHz	-38.76 dBm																							
2462 MHz	<p>Agilent Spectrum Analyzer - Sweep 5A</p> <p>Center Freq 12.515000000 GHz</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 23.875 1 GHz -39.49 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR</th> <th>MODE</th> <th>TRC</th> <th>SOL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.460 8 GHz</td> <td>1.30 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.875 1 GHz</td> <td>-39.49 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MFR	MODE	TRC	SOL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.460 8 GHz	1.30 dBm				2	N	1	f	23.875 1 GHz	-39.49 dBm			
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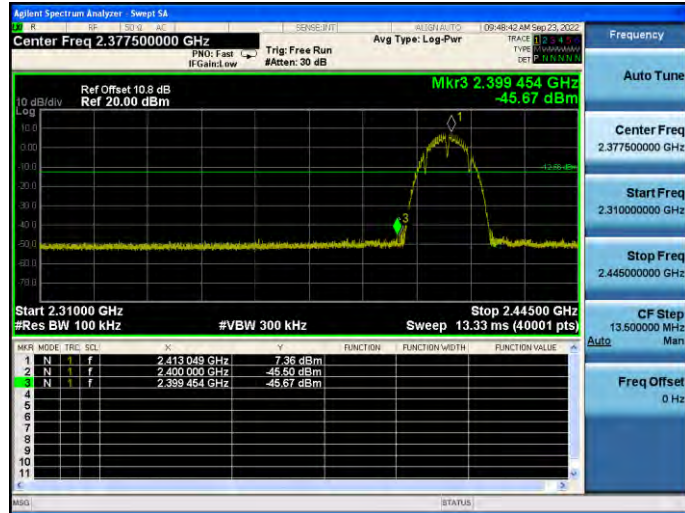
Mode 6: IEEE 802.11ax 2.4 GHz 20 MHz Continuous TX Mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 7: IEEE 802.11ax 2.4 GHz 40 MHz Continuous TX Mode_ANT-1																												
2422 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.515000000 GHz</p> <p>Mkr2 23.857 0 GHz -38.57 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCU</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.434 0 GHz</td> <td>-0.36 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.857 0 GHz</td> <td>-38.57 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.434 0 GHz	-0.36 dBm				2	N	1	f	23.857 0 GHz	-38.57 dBm			
MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	1	f	23.857 0 GHz	-38.57 dBm																							
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.515000000 GHz</p> <p>Mkr2 23.862 6 GHz -38.54 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCU</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.440 2 GHz</td> <td>-0.66 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>23.862 6 GHz</td> <td>-38.54 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.440 2 GHz	-0.66 dBm				2	N	1	f	23.862 6 GHz	-38.54 dBm			
MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.440 2 GHz	-0.66 dBm																							
2	N	1	f	23.862 6 GHz	-38.54 dBm																							
2452 MHz	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 12.515000000 GHz</p> <p>Mkr2 24.831 5 GHz -38.74 dBm</p> <p>Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCU</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.449 0 GHz</td> <td>-0.92 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>24.831 5 GHz</td> <td>-38.74 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.449 0 GHz	-0.92 dBm				2	N	1	f	24.831 5 GHz	-38.74 dBm			
MKR	MODE	TRC	SCU	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
1	N	1	f	2.449 0 GHz	-0.92 dBm																							
2	N	1	f	24.831 5 GHz	-38.74 dBm																							

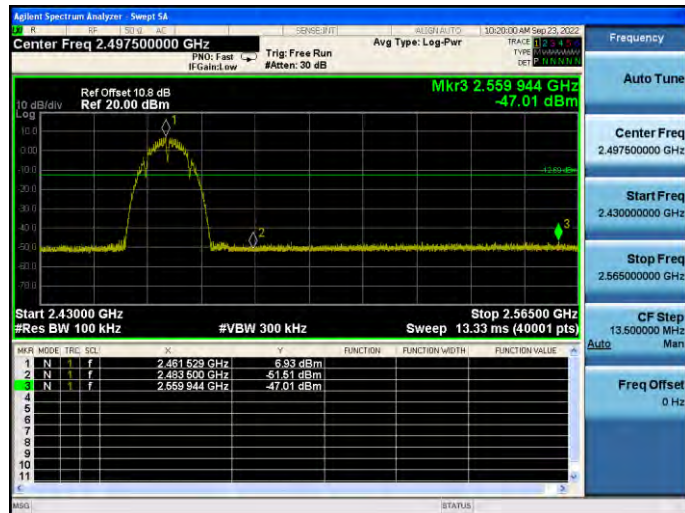
Conducted Band Edge

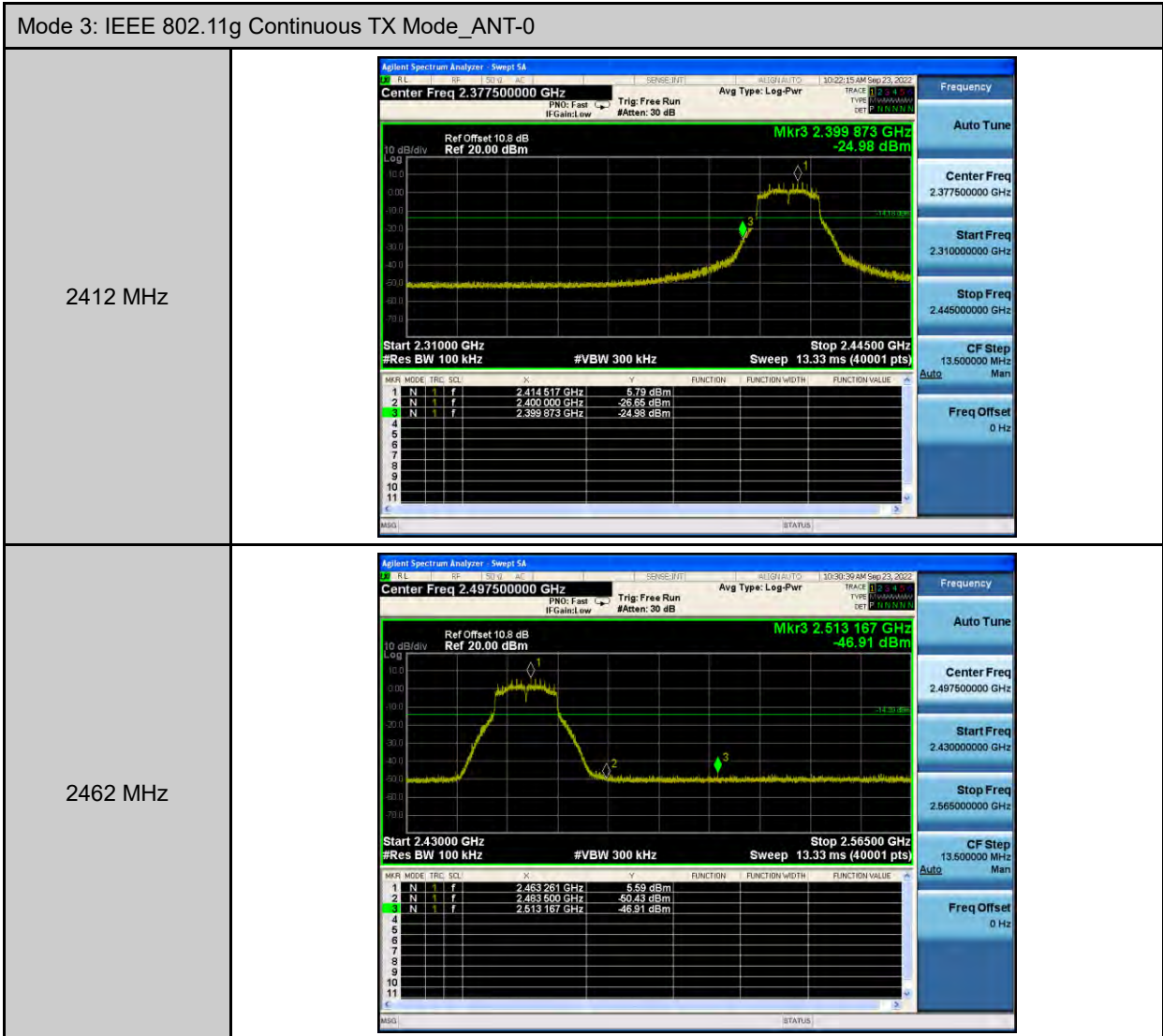
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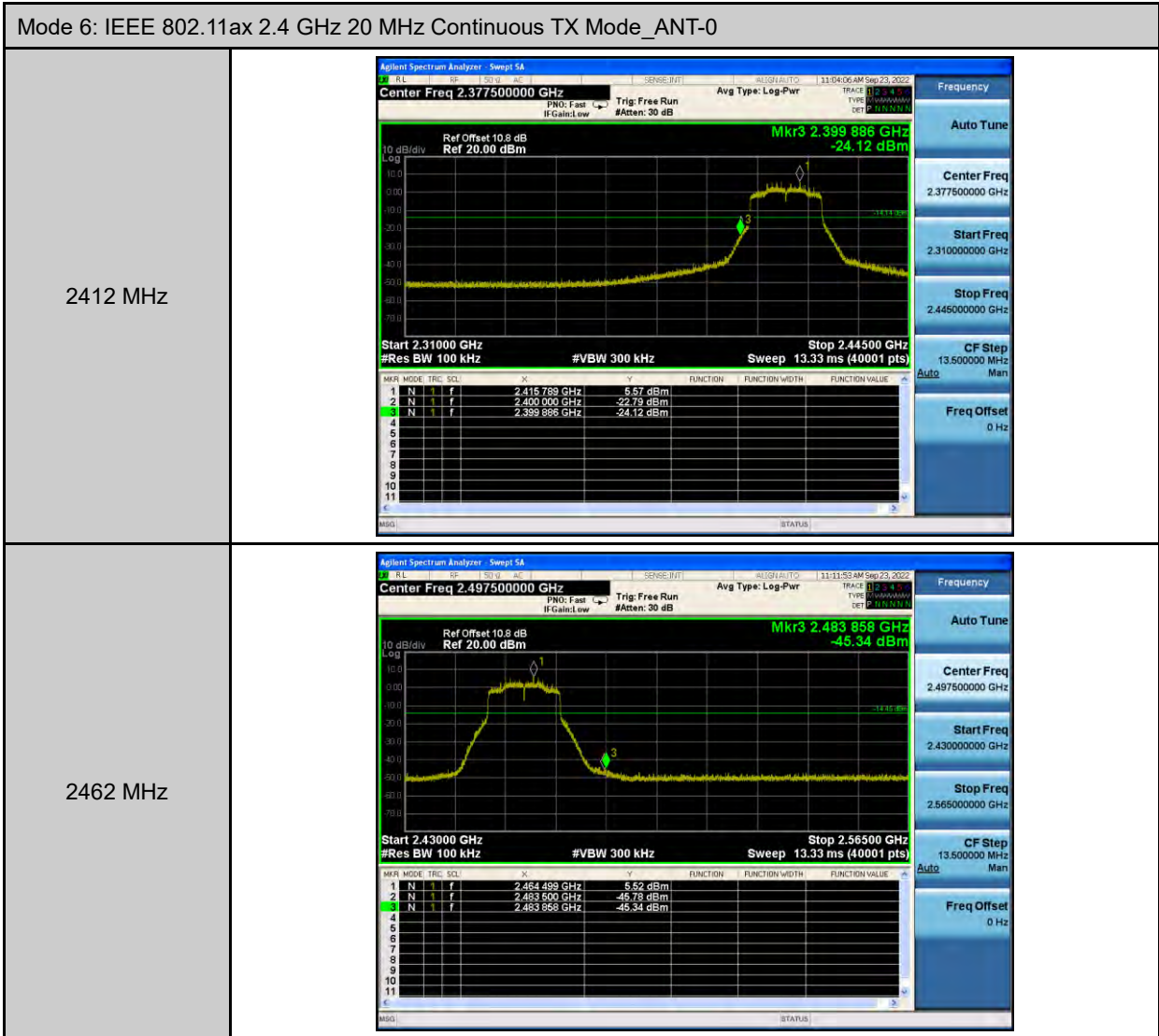
2412 MHz

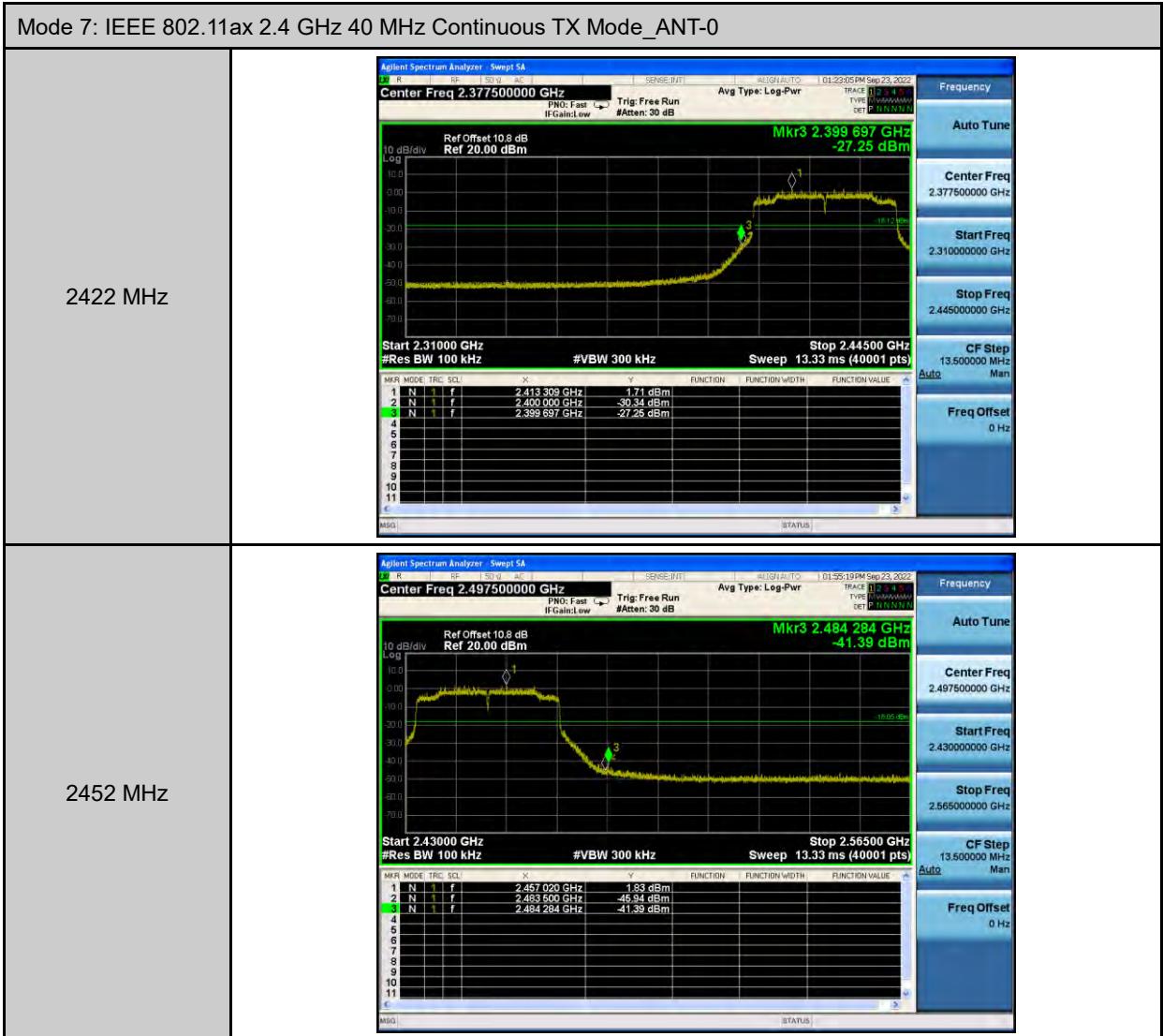


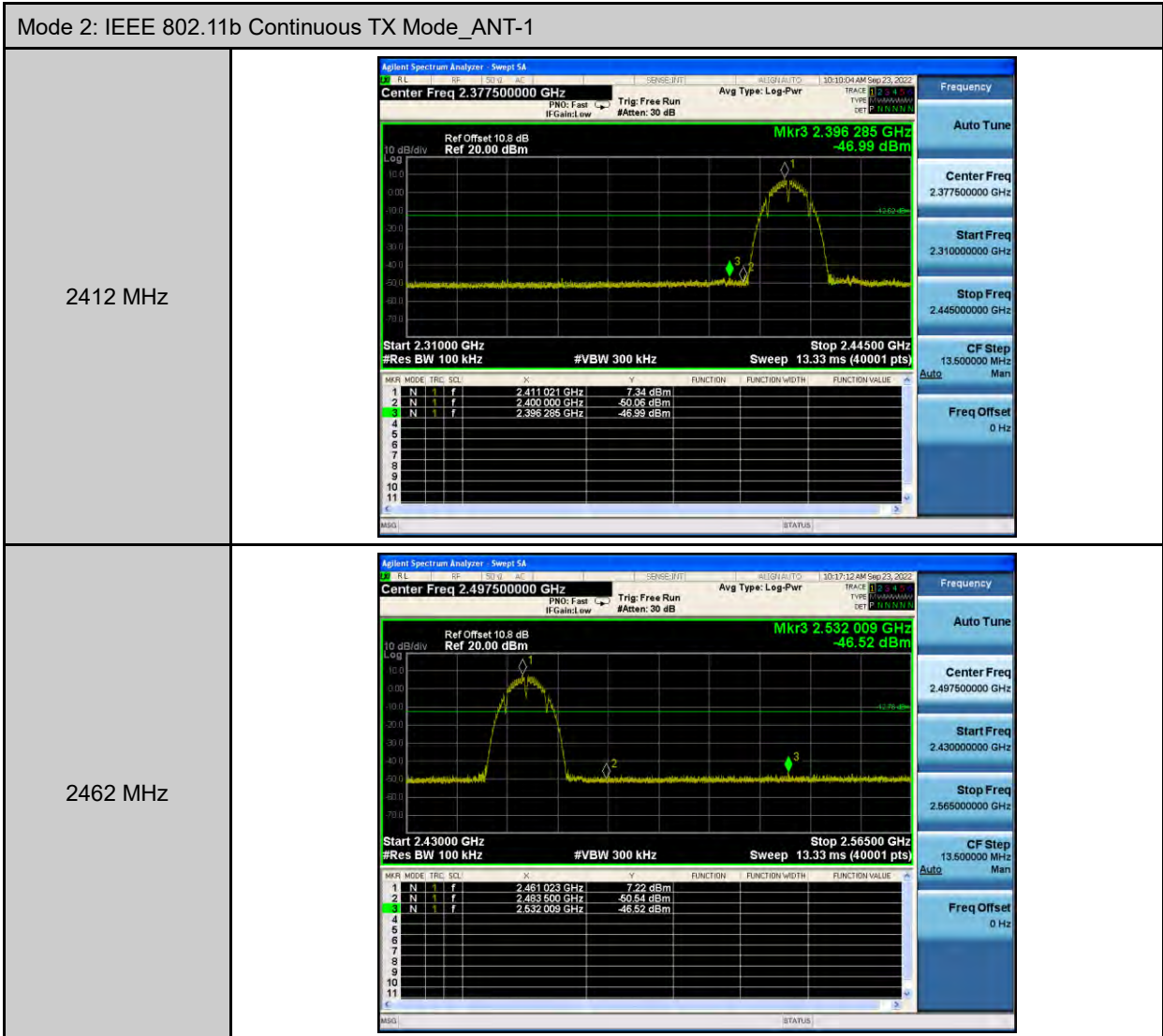
2462 MHz

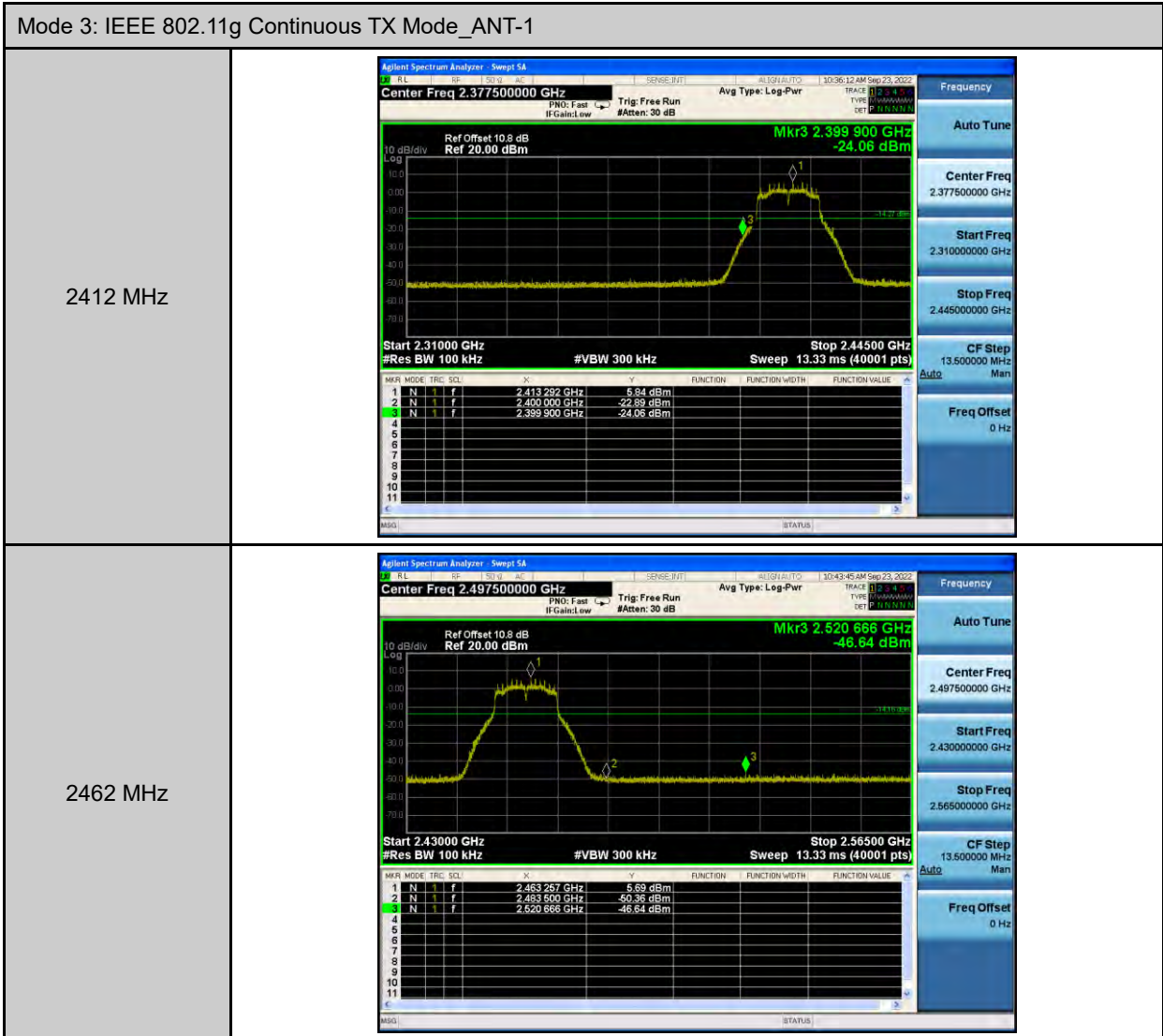


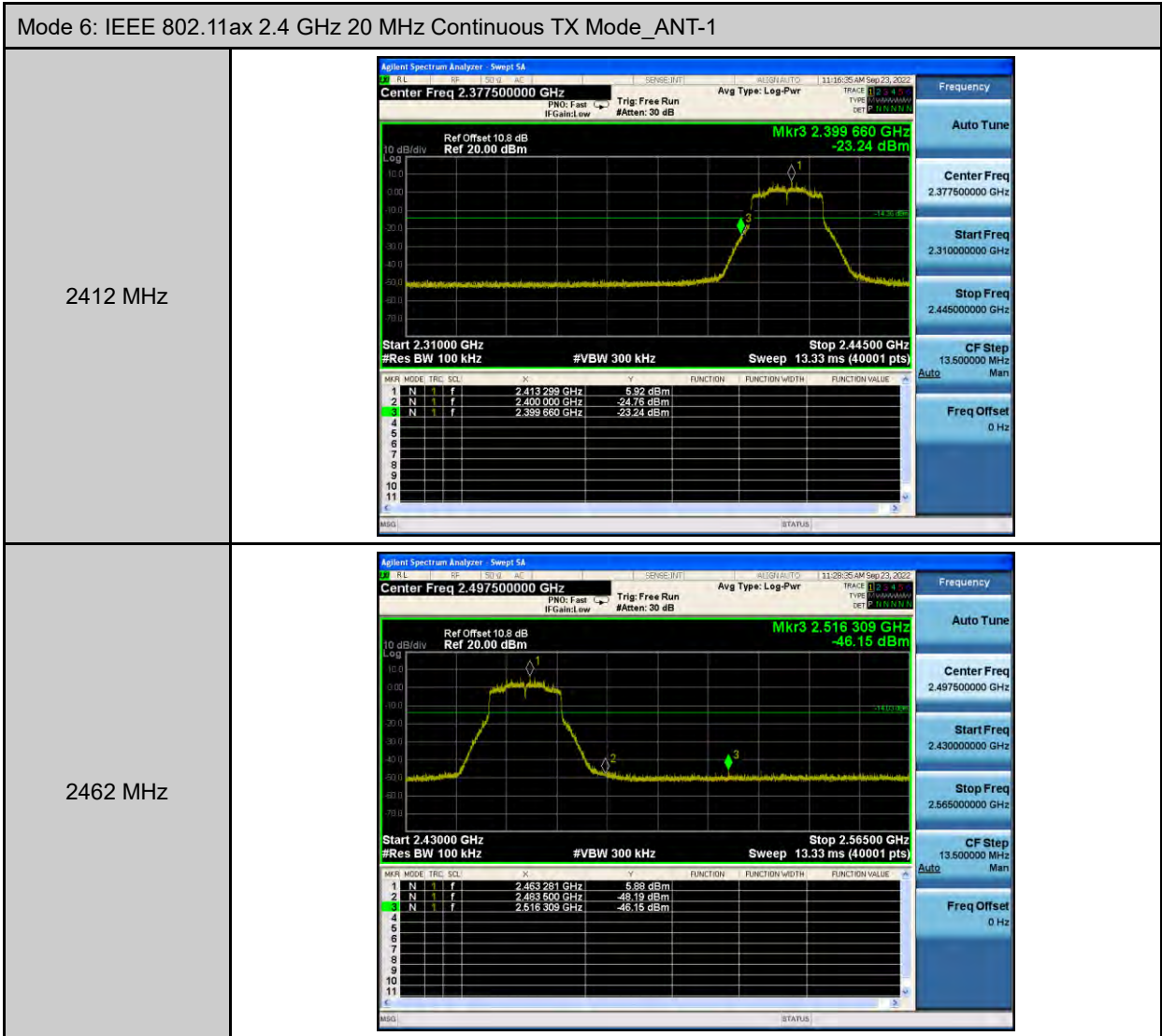


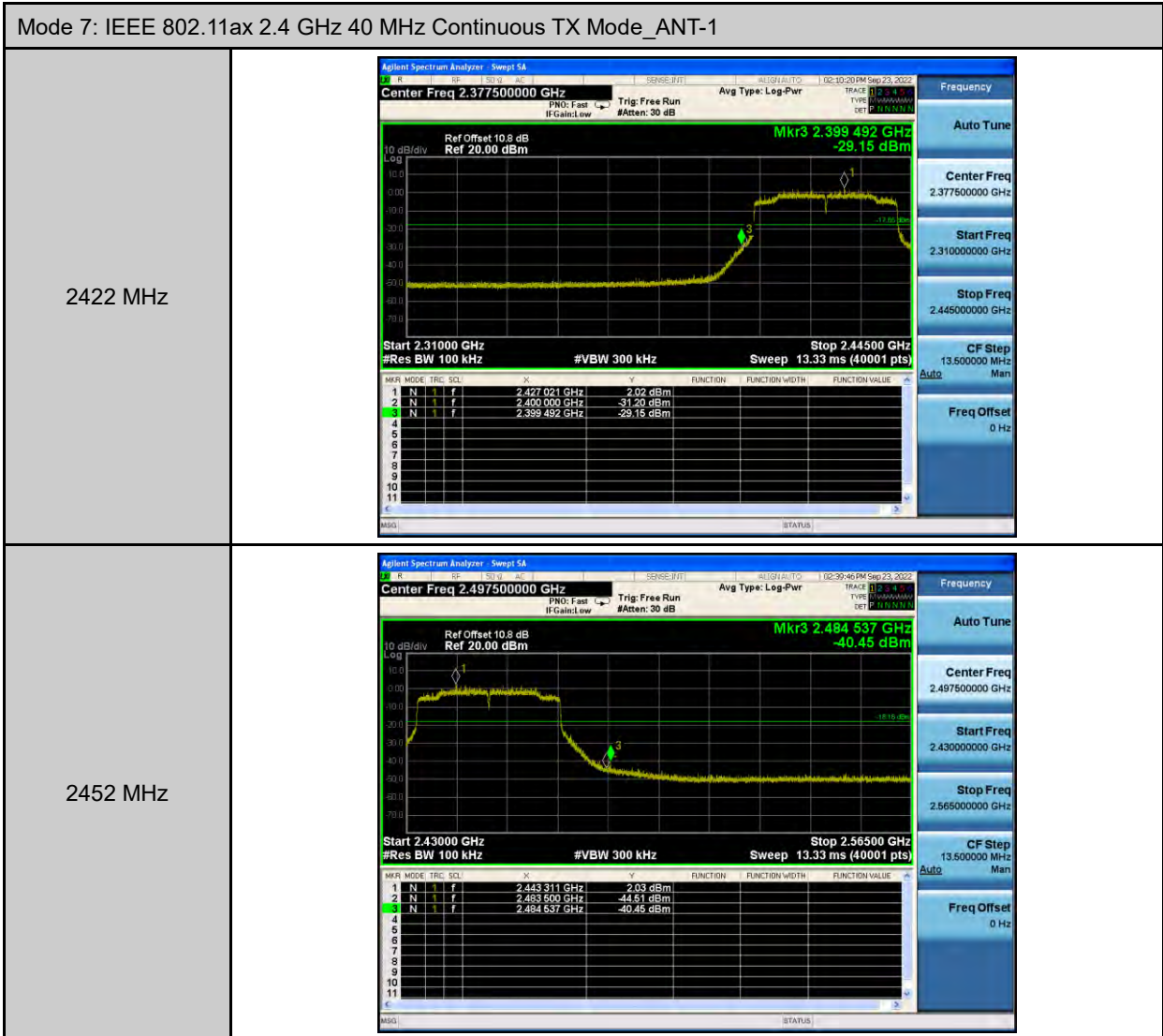








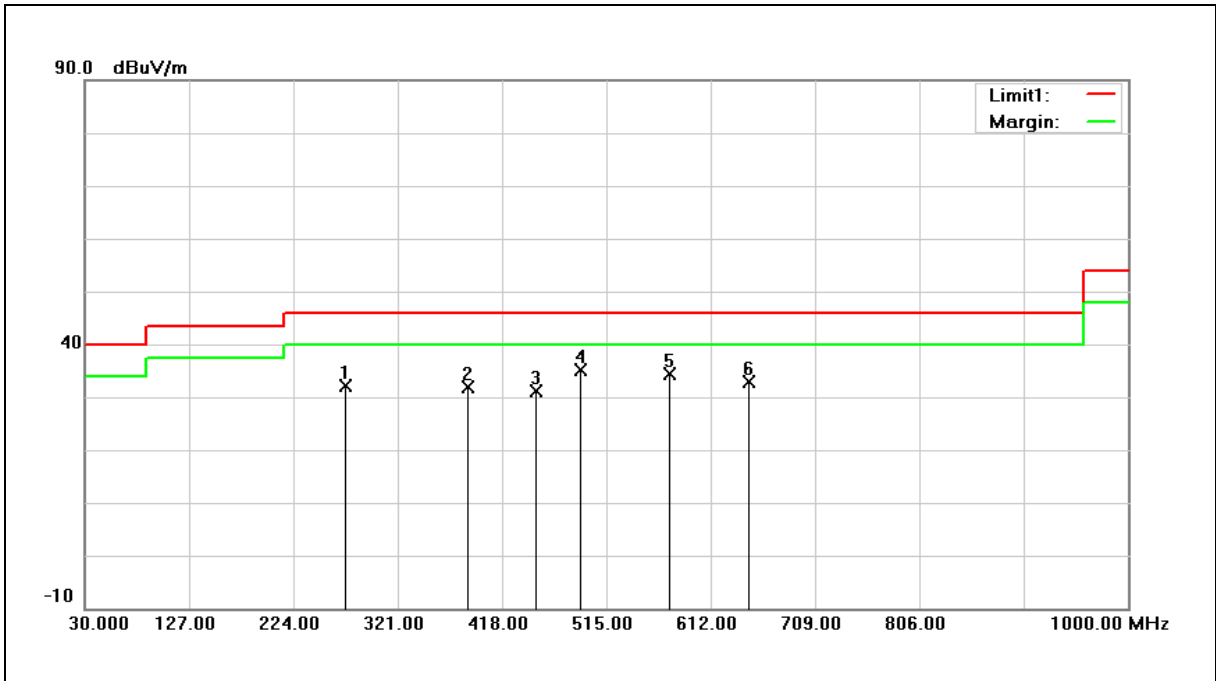




5.3. Radiated Emission Measurement

Below 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Mode:	Mode 1		
Ant.Polar.:	Horizontal		



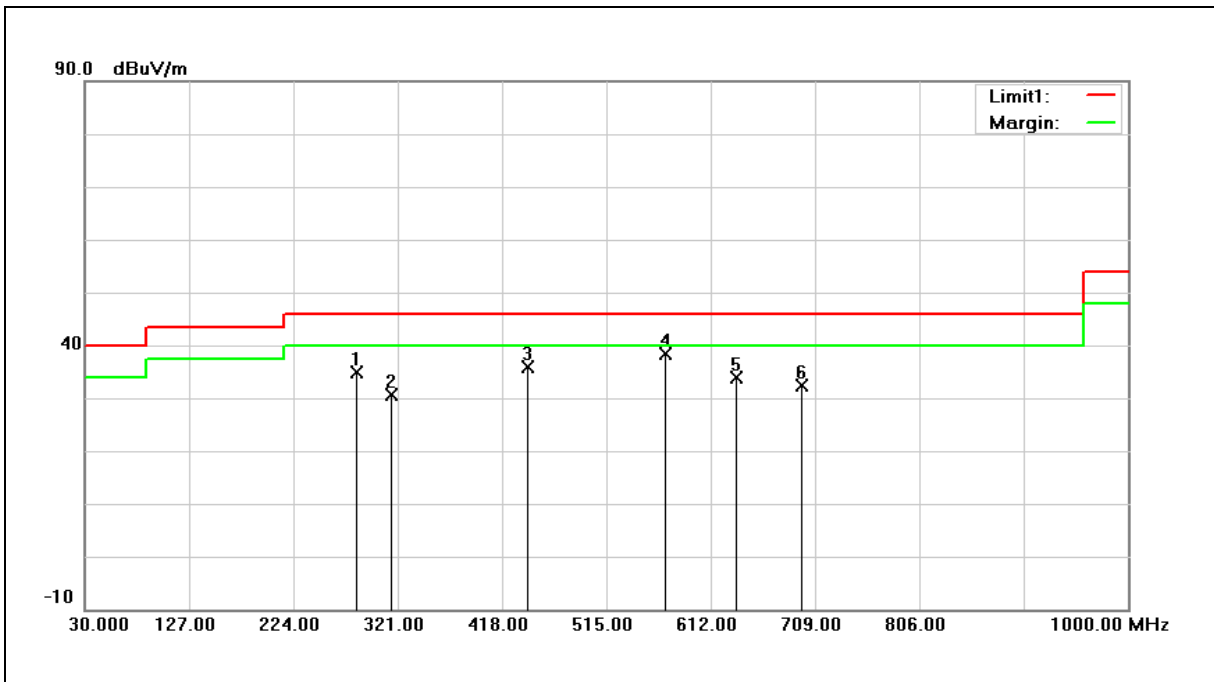
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	272.5000	42.30	-10.28	32.02	46.00	-13.98	QP
2	385.9900	39.15	-7.26	31.89	46.00	-14.11	QP
3	449.0400	36.52	-5.36	31.16	46.00	-14.84	QP
4	490.7500	39.85	-4.68	35.17	46.00	-10.83	QP
5	574.1700	37.41	-2.96	34.45	46.00	-11.55	QP
6	647.8900	34.37	-1.51	32.86	46.00	-13.14	QP

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Mode:	Mode 1		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	282.2000	44.80	-9.94	34.86	46.00	-11.14	QP
2	315.1800	39.91	-9.21	30.70	46.00	-15.30	QP
3	442.2500	41.51	-5.56	35.95	46.00	-10.05	QP
4	569.3200	41.50	-3.12	38.38	46.00	-7.62	QP
5	635.2800	35.63	-1.68	33.95	46.00	-12.05	QP
6	696.3900	33.34	-0.95	32.39	46.00	-13.61	QP

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

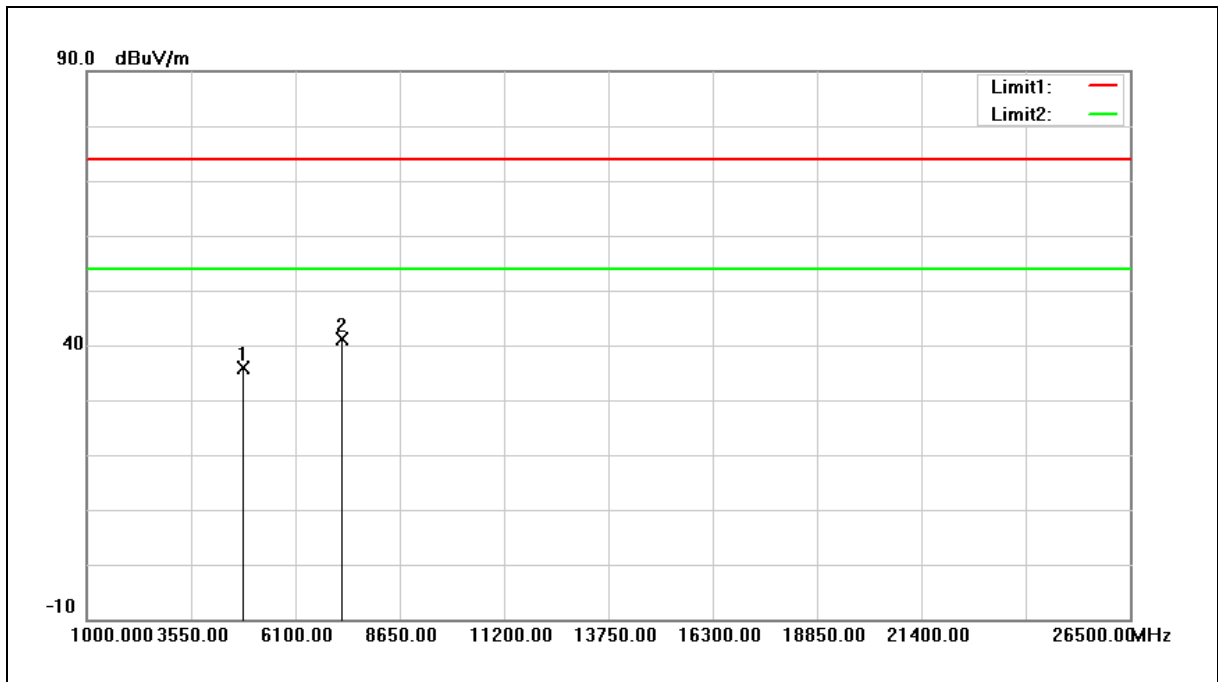
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Harmonic

Above 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



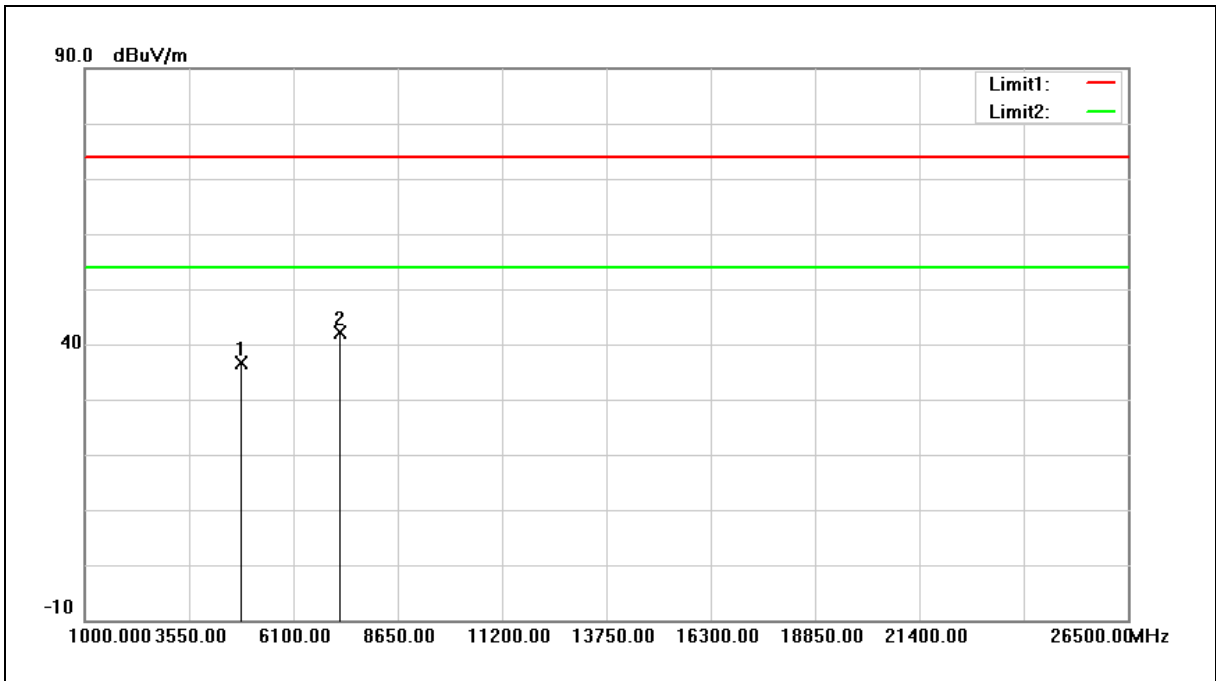
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	30.58	5.34	35.92	74.00	-38.08	peak
2	7236.000	28.48	12.63	41.11	74.00	-32.89	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



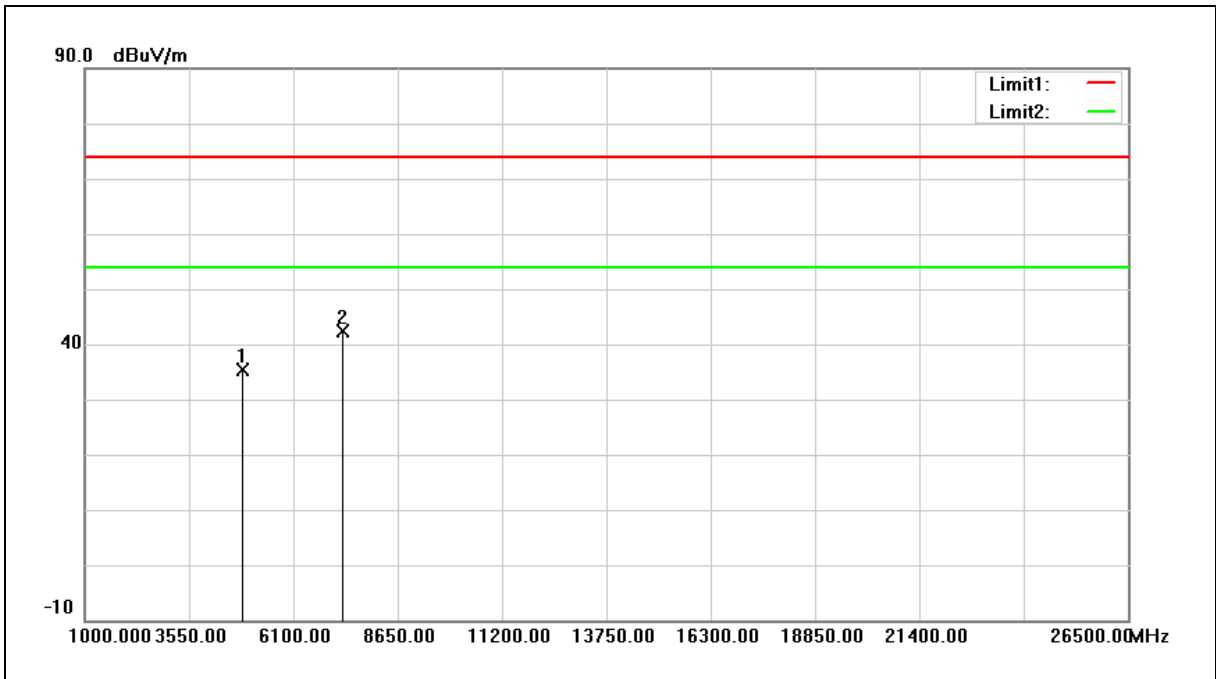
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	31.23	5.34	36.57	74.00	-37.43	peak
2	7236.000	29.42	12.63	42.05	74.00	-31.95	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



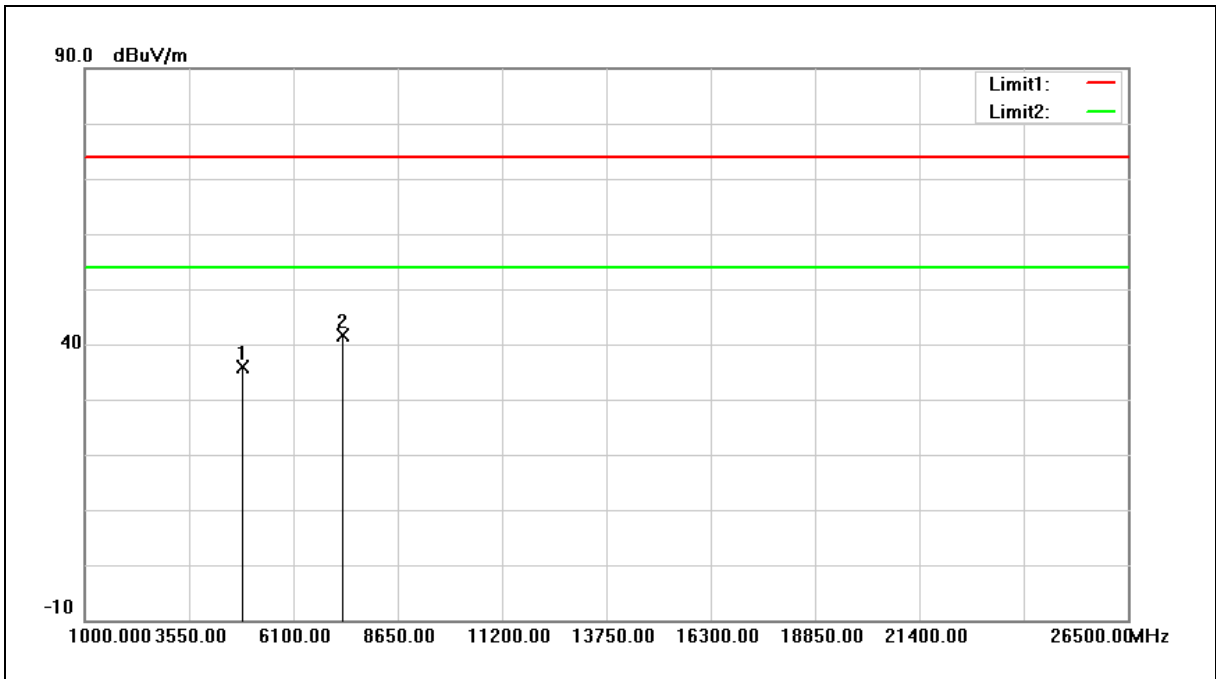
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	29.94	5.47	35.41	74.00	-38.59	peak
2	7311.000	29.55	12.80	42.35	74.00	-31.65	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



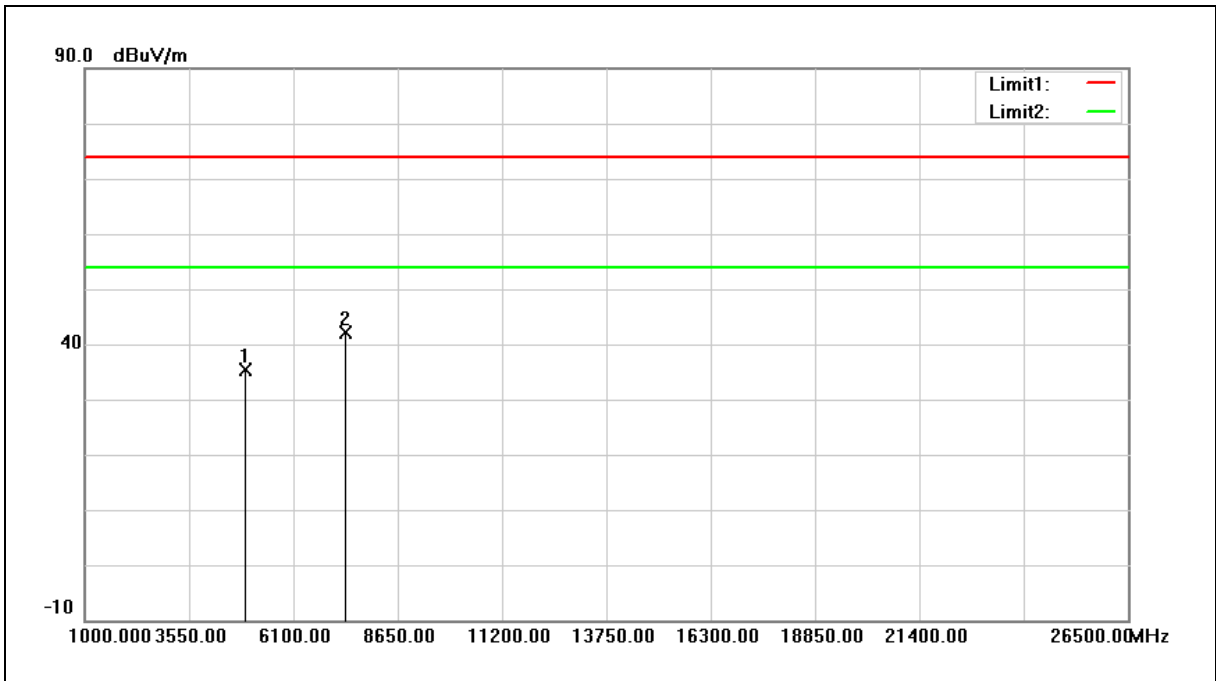
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.45	5.47	35.92	74.00	-38.08	peak
2	7311.000	28.71	12.80	41.51	74.00	-32.49	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



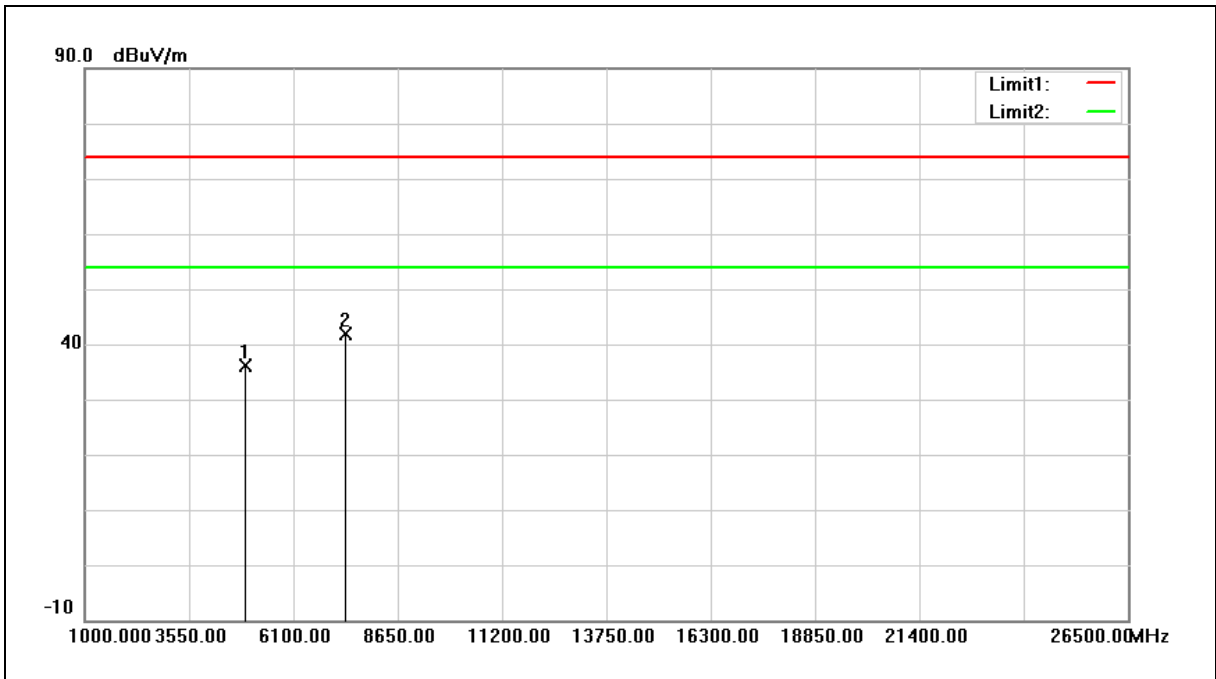
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	29.80	5.62	35.42	74.00	-38.58	peak
2	7386.000	29.15	12.98	42.13	74.00	-31.87	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



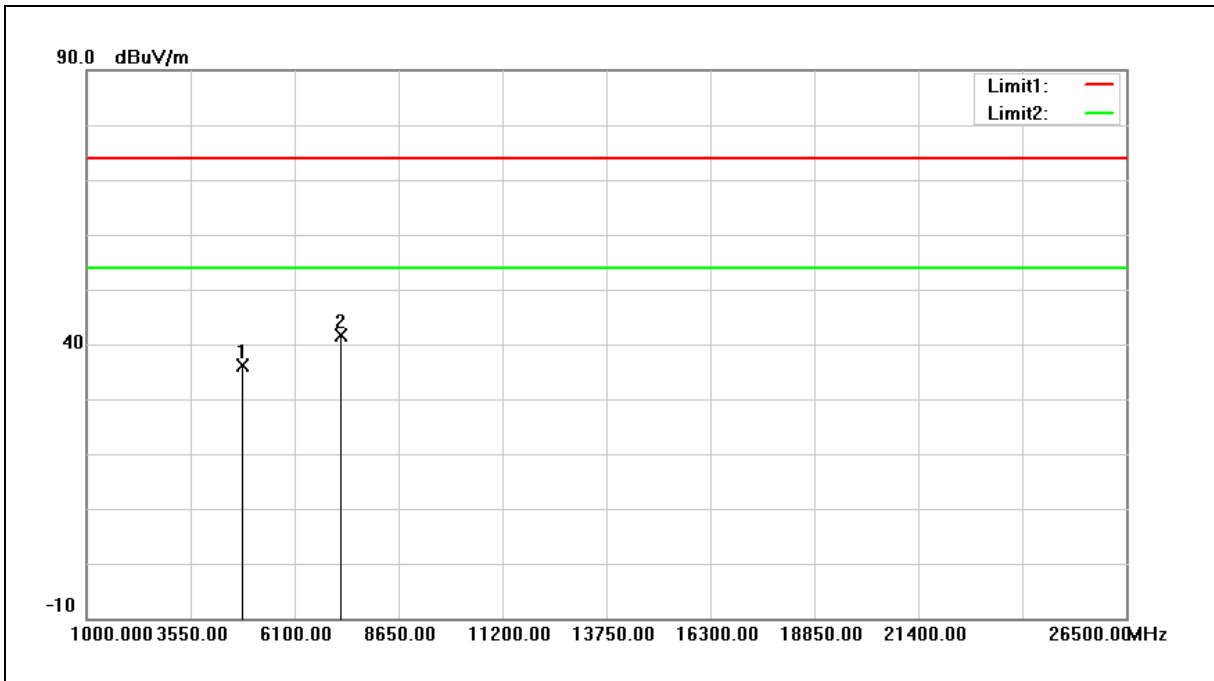
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	30.60	5.62	36.22	74.00	-37.78	peak
2	7386.000	28.78	12.98	41.76	74.00	-32.24	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



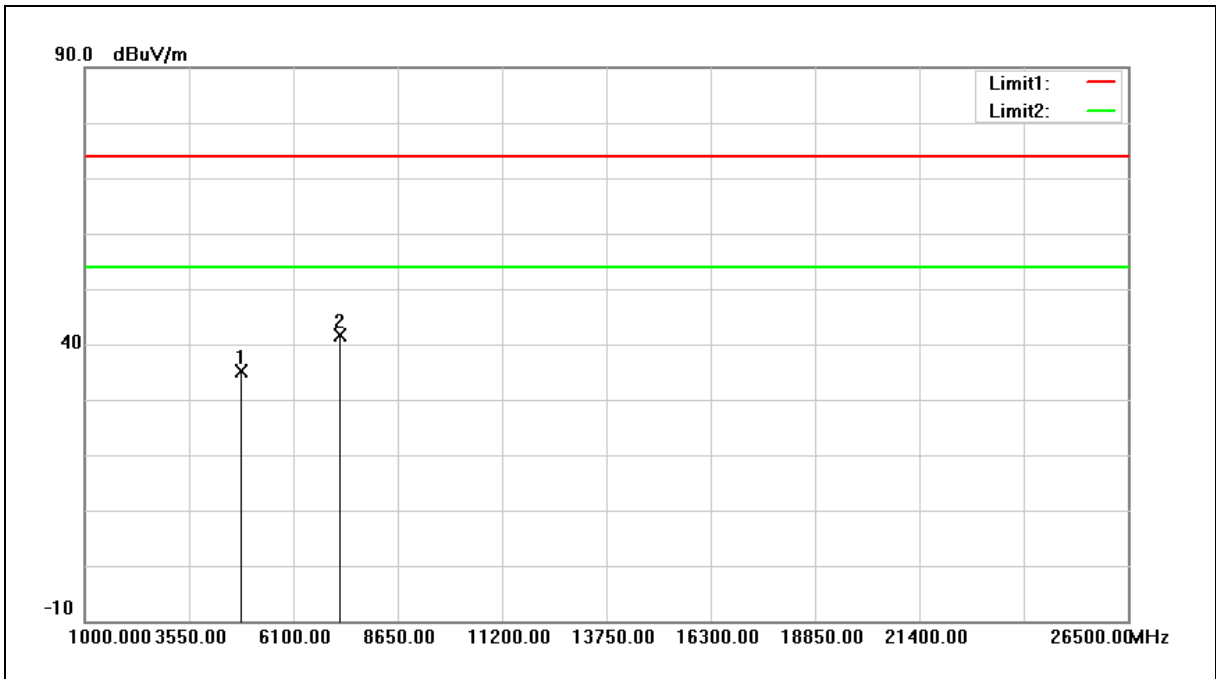
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	30.85	5.34	36.19	74.00	-37.81	peak
2	7236.000	29.03	12.63	41.66	74.00	-32.34	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



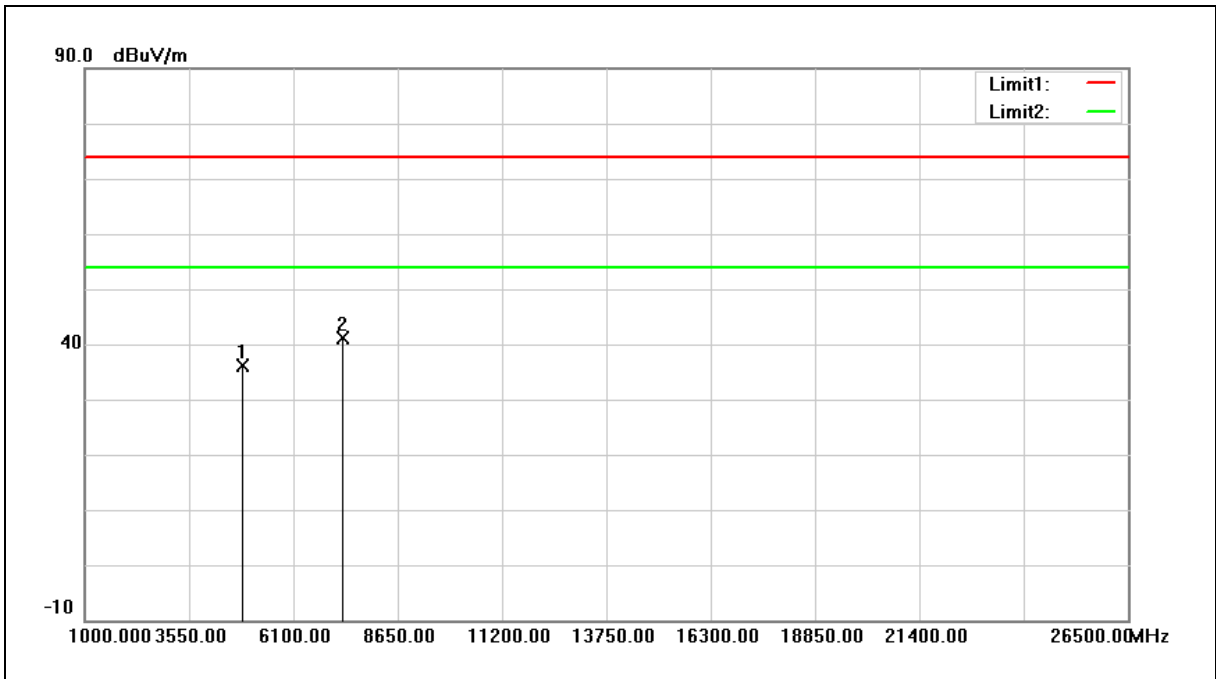
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	29.69	5.34	35.03	74.00	-38.97	peak
2	7236.000	28.88	12.63	41.51	74.00	-32.49	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



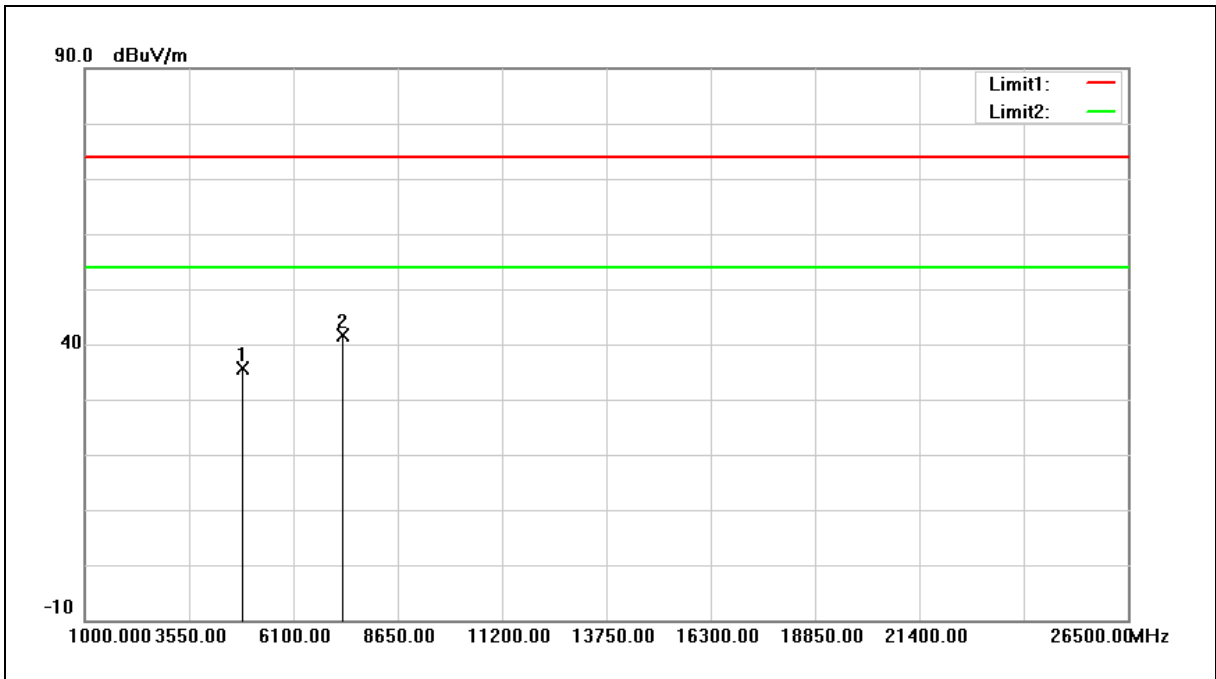
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.63	5.47	36.10	74.00	-37.90	peak
2	7311.000	28.43	12.80	41.23	74.00	-32.77	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



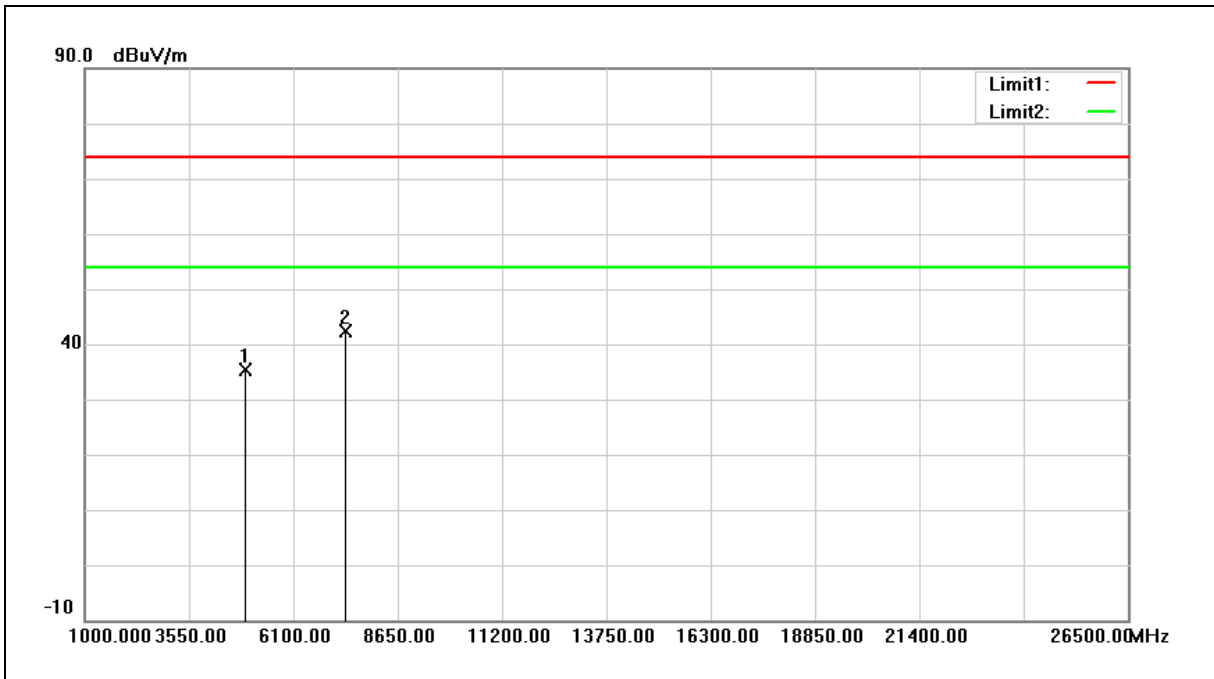
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.09	5.47	35.56	74.00	-38.44	peak
2	7311.000	28.91	12.80	41.71	74.00	-32.29	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



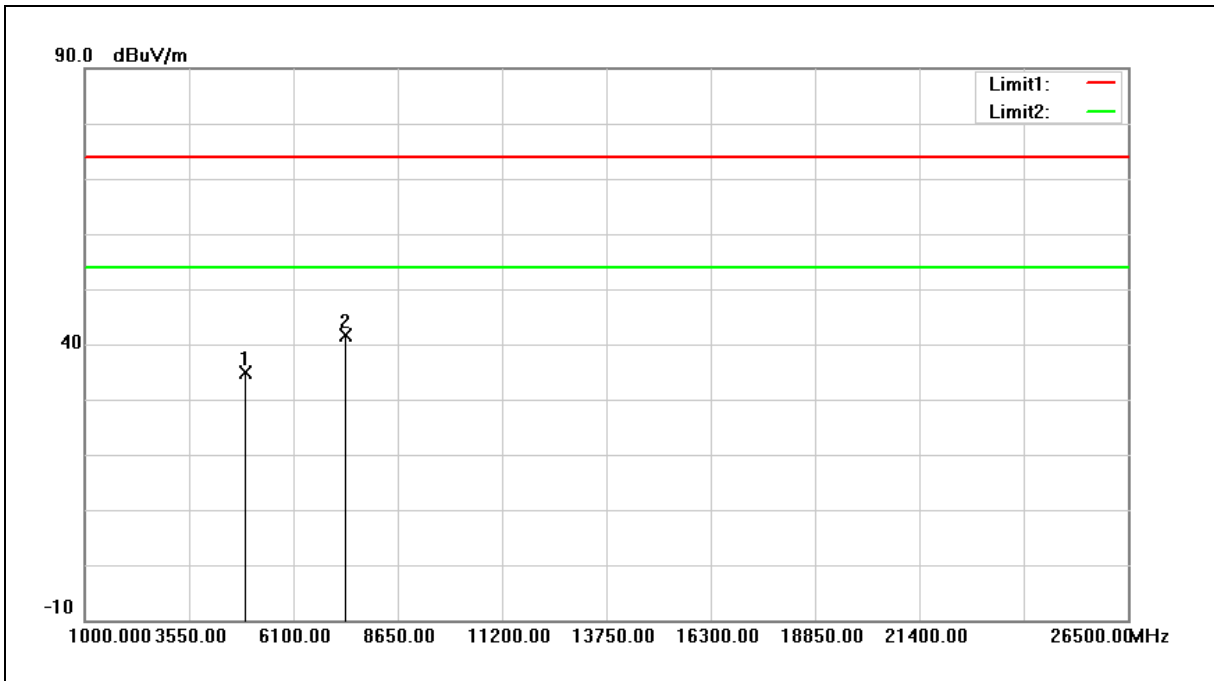
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	29.85	5.62	35.47	74.00	-38.53	peak
2	7386.000	29.51	12.98	42.49	74.00	-31.51	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



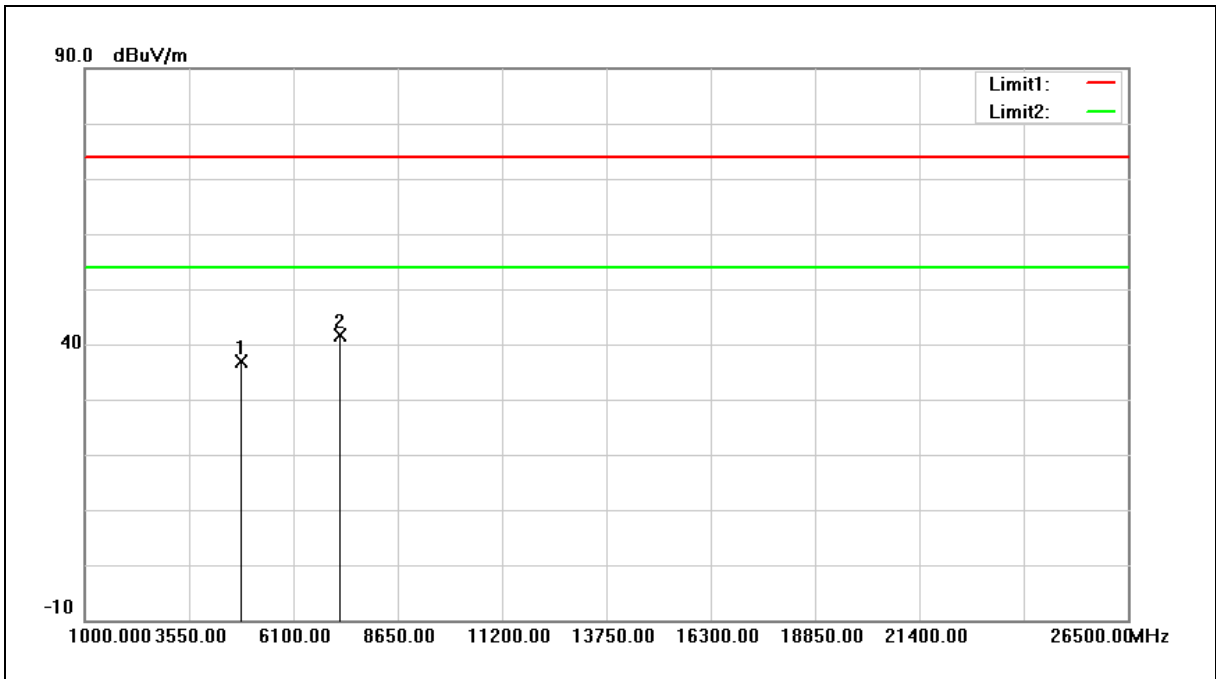
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	29.15	5.62	34.77	74.00	-39.23	peak
2	7386.000	28.69	12.98	41.67	74.00	-32.33	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



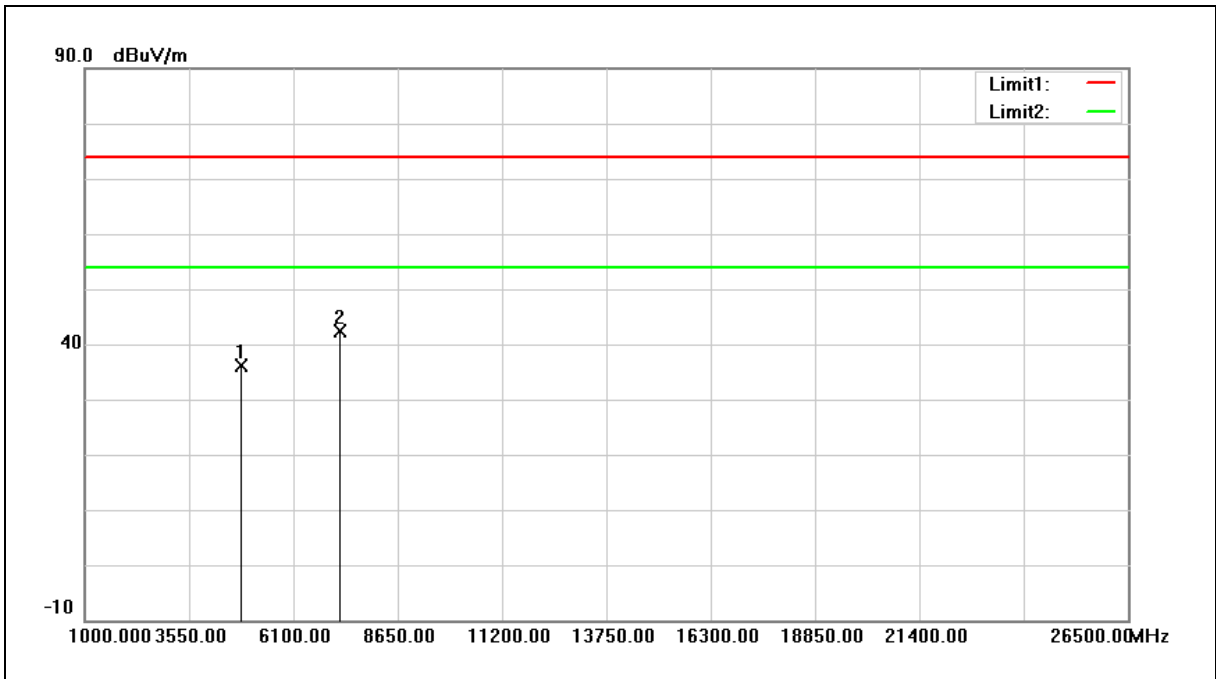
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	31.66	5.34	37.00	74.00	-37.00	peak
2	7236.000	29.02	12.63	41.65	74.00	-32.35	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



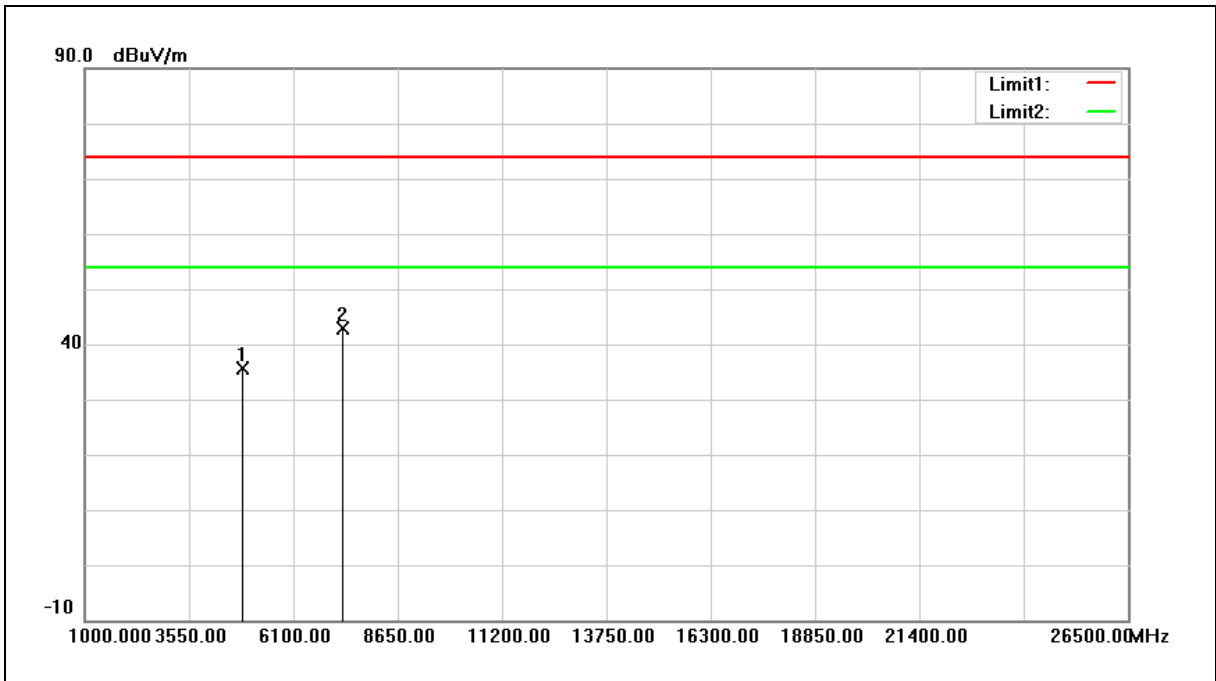
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	30.71	5.34	36.05	74.00	-37.95	peak
2	7236.000	29.65	12.63	42.28	74.00	-31.72	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



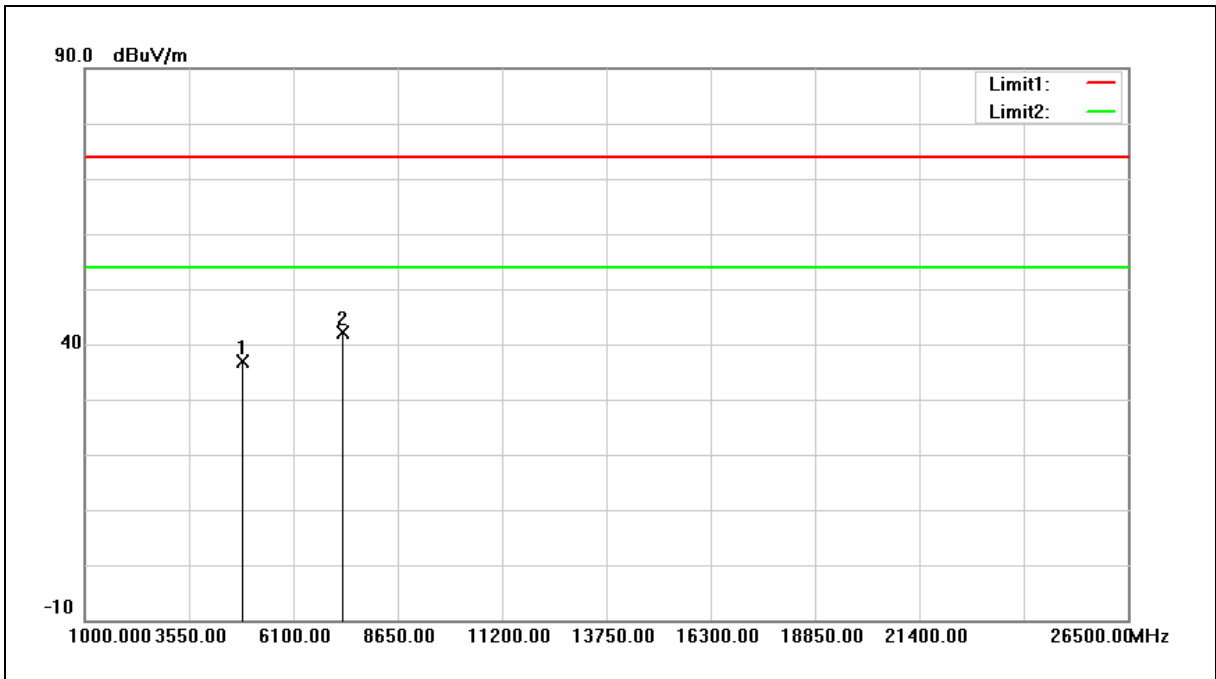
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.25	5.47	35.72	74.00	-38.28	peak
2	7311.000	30.19	12.80	42.99	74.00	-31.01	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



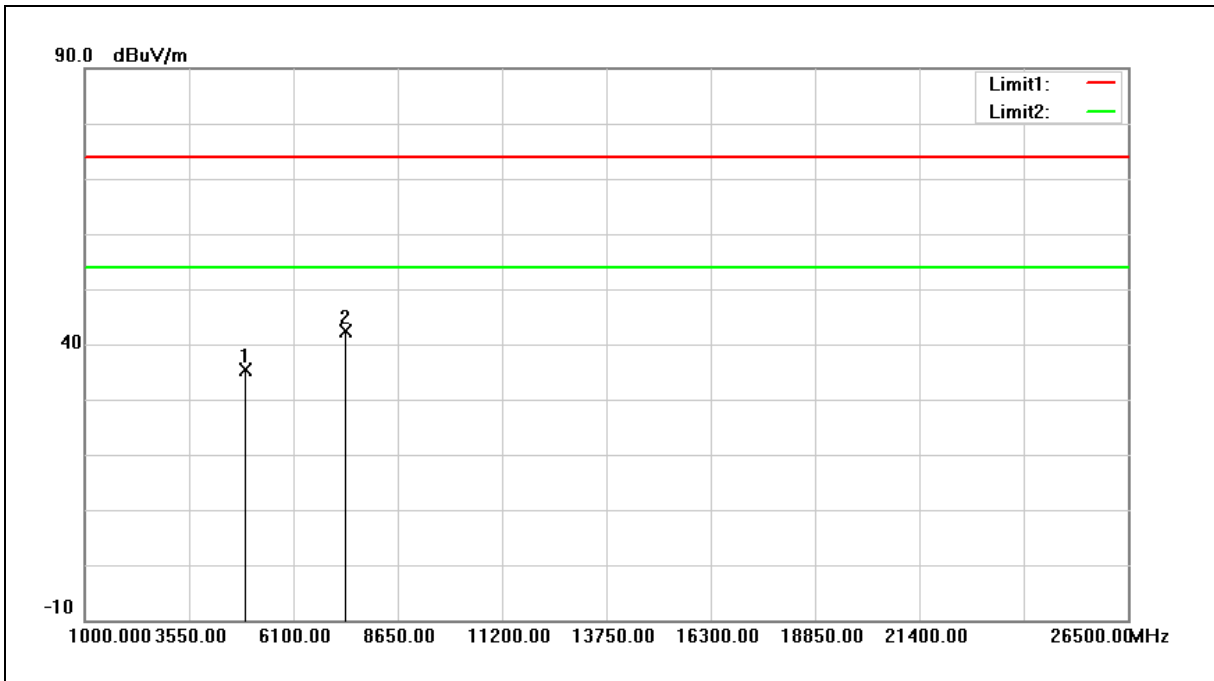
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	31.44	5.47	36.91	74.00	-37.09	peak
2	7311.000	29.42	12.80	42.22	74.00	-31.78	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



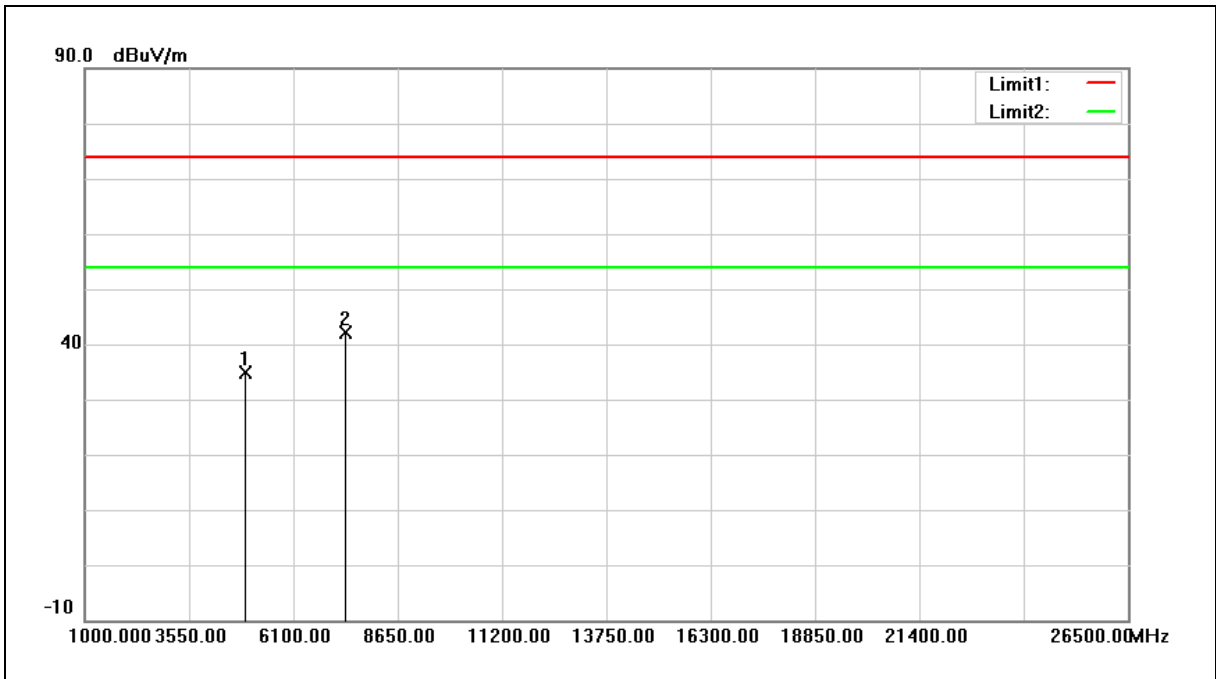
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	29.72	5.62	35.34	74.00	-38.66	peak
2	7386.000	29.39	12.98	42.37	74.00	-31.63	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



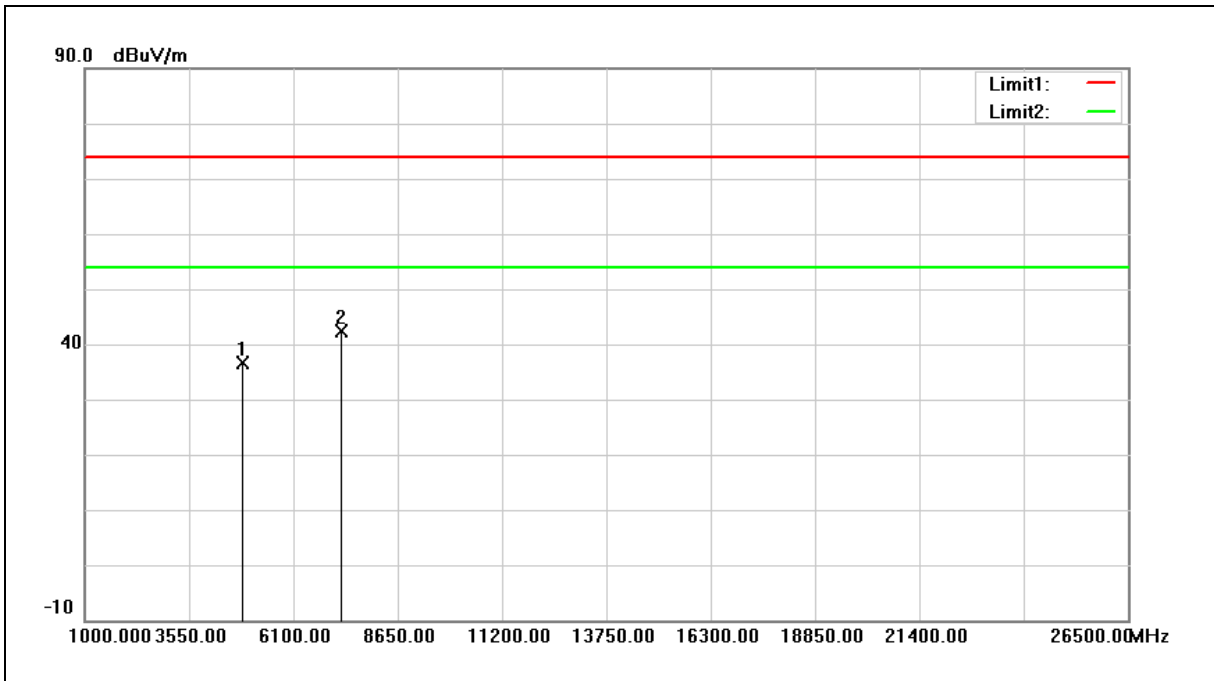
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	29.23	5.62	34.85	74.00	-39.15	peak
2	7386.000	29.15	12.98	42.13	74.00	-31.87	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



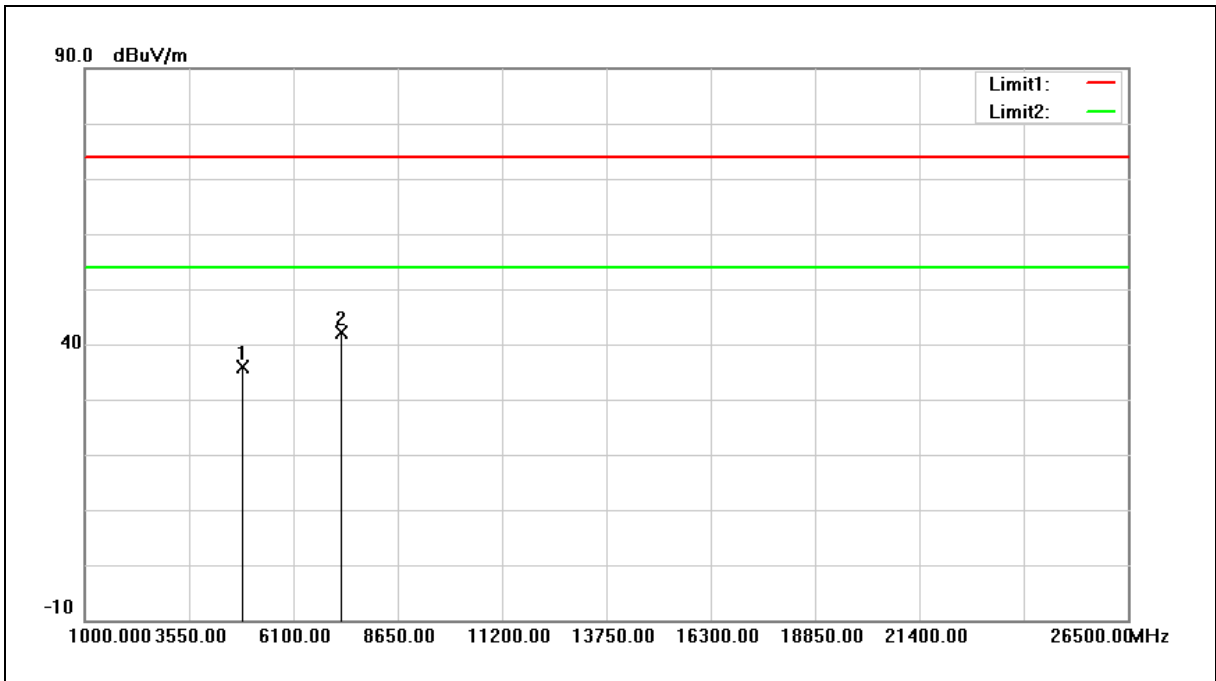
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	31.28	5.39	36.67	74.00	-37.33	peak
2	7266.000	29.72	12.71	42.43	74.00	-31.57	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



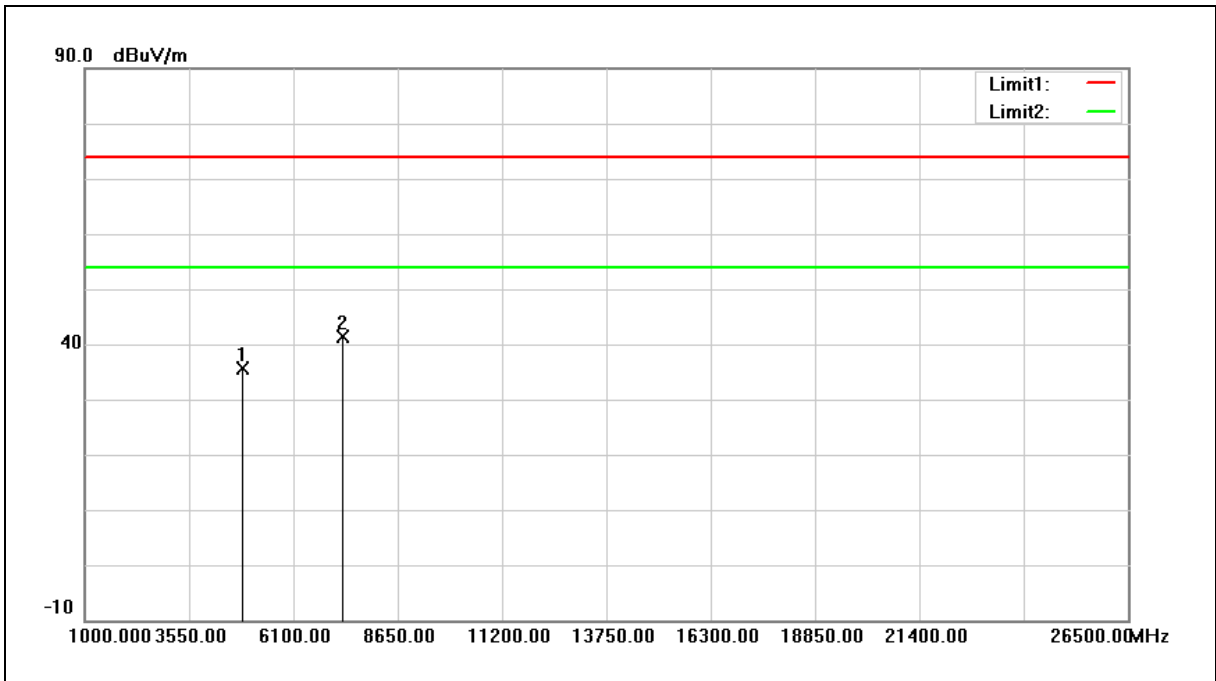
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	30.60	5.39	35.99	74.00	-38.01	peak
2	7266.000	29.36	12.71	42.07	74.00	-31.93	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



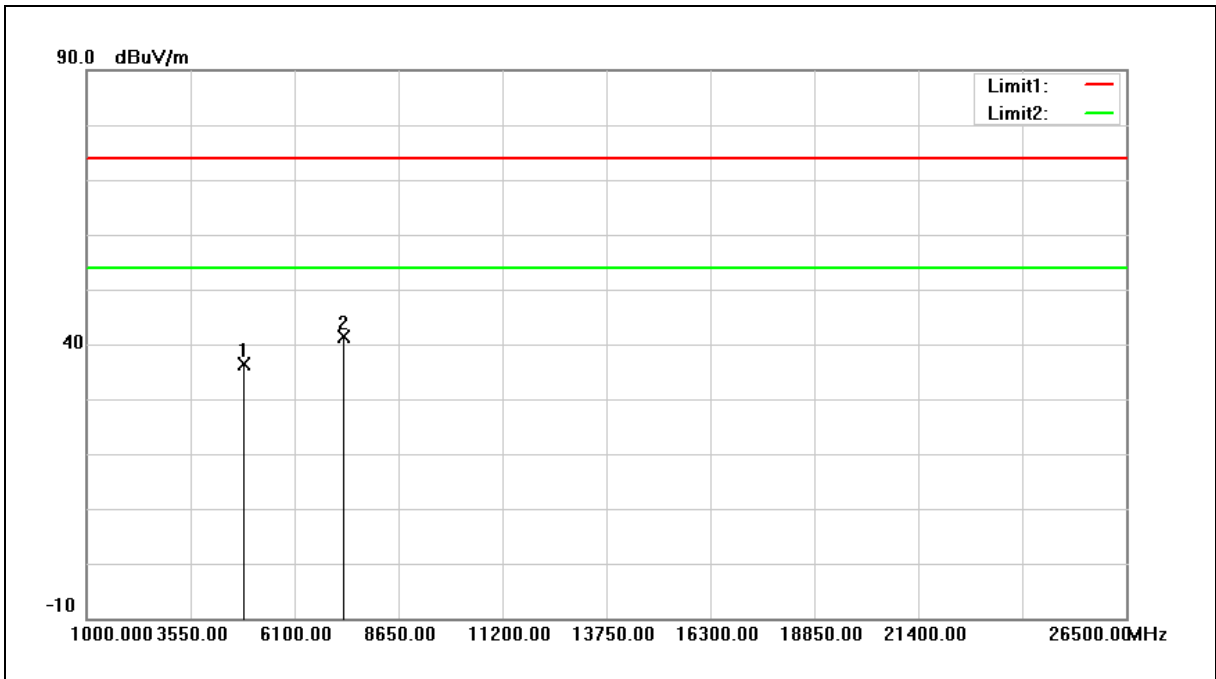
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.12	5.47	35.59	74.00	-38.41	peak
2	7311.000	28.63	12.80	41.43	74.00	-32.57	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



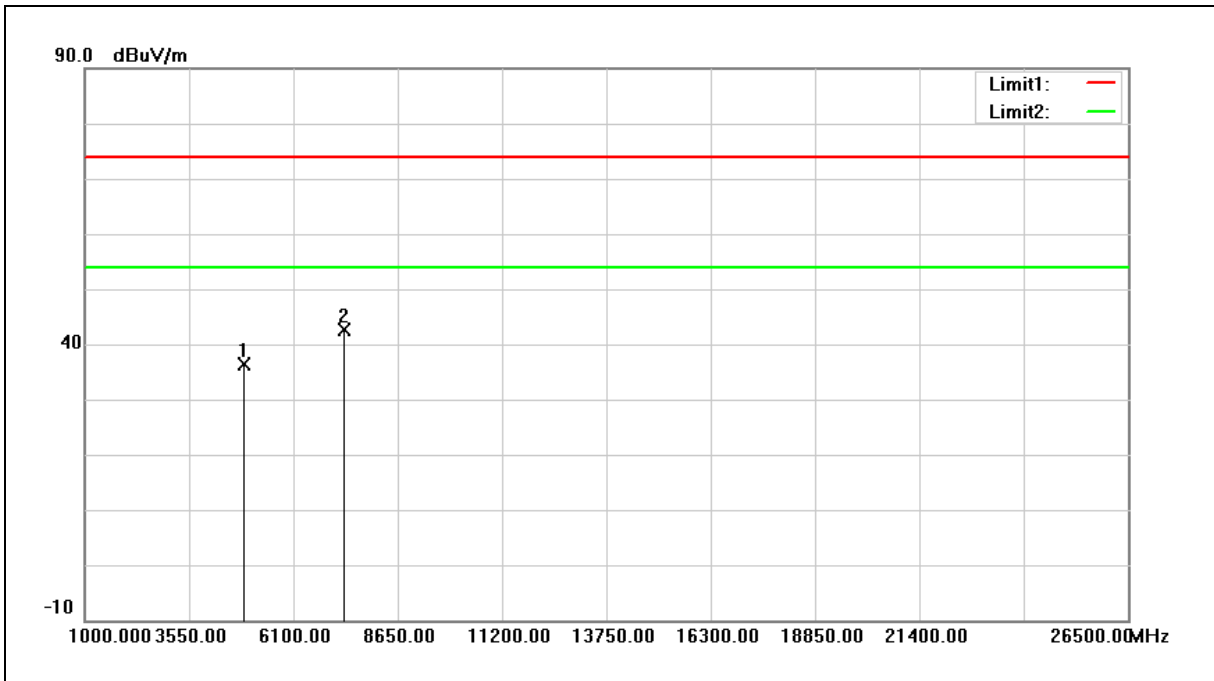
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	30.87	5.47	36.34	74.00	-37.66	peak
2	7311.000	28.54	12.80	41.34	74.00	-32.66	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



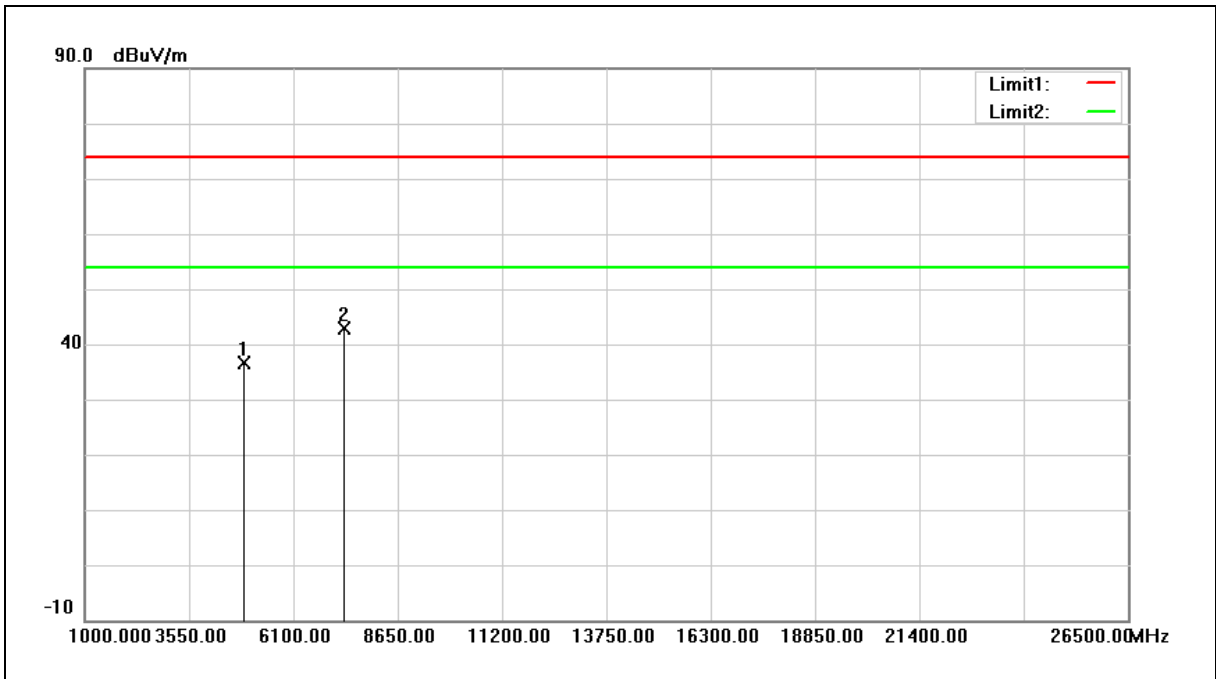
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	30.70	5.56	36.26	74.00	-37.74	peak
2	7356.000	29.62	12.91	42.53	74.00	-31.47	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



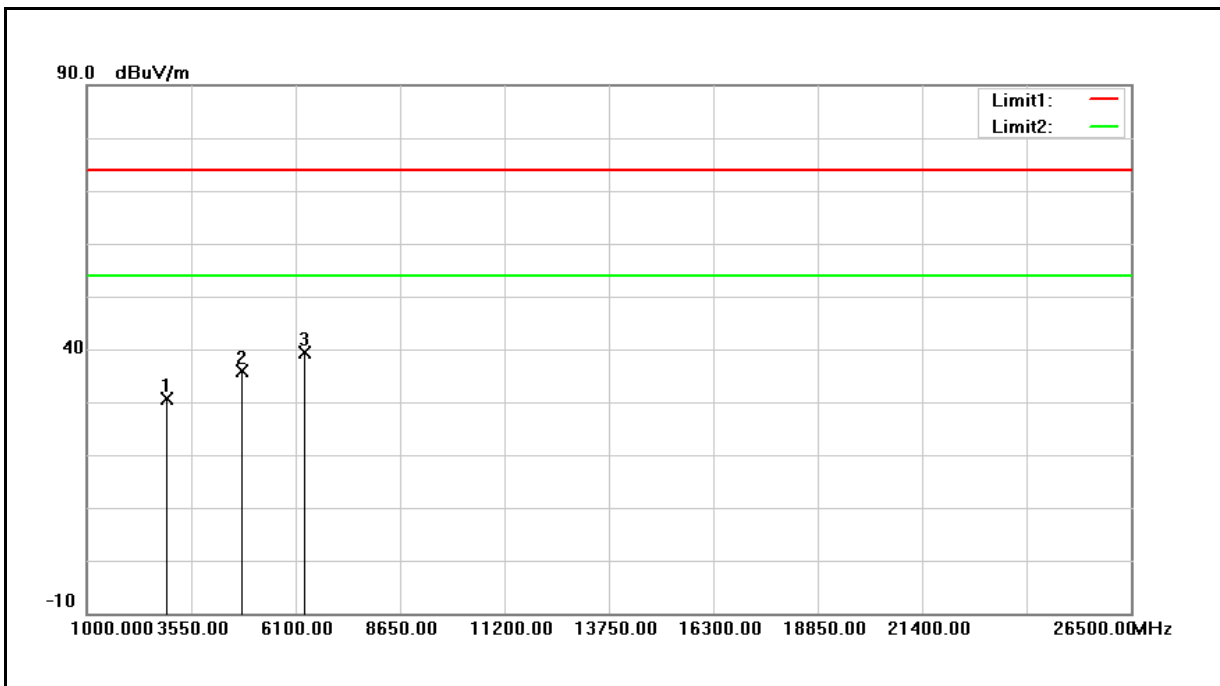
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	31.04	5.56	36.60	74.00	-37.40	peak
2	7356.000	29.86	12.91	42.77	74.00	-31.23	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + Bluetooth)		
Ant.Polar.:	Horizontal		



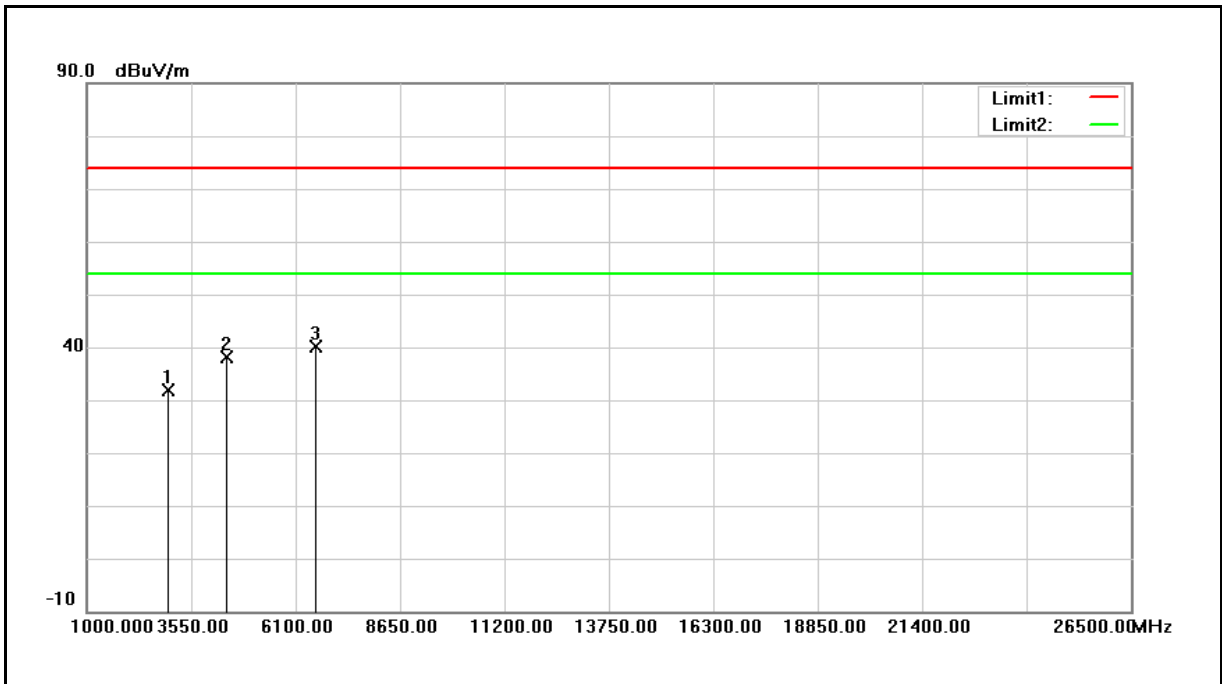
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2955.000	30.66	0.02	30.68	74.00	-43.32	peak
2	4774.000	30.79	5.19	35.98	74.00	-38.02	peak
3	6287.000	30.40	9.05	39.45	74.00	-34.55	peak

Note: 1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + Bluetooth)		
Ant.Polar.:	Vertical		



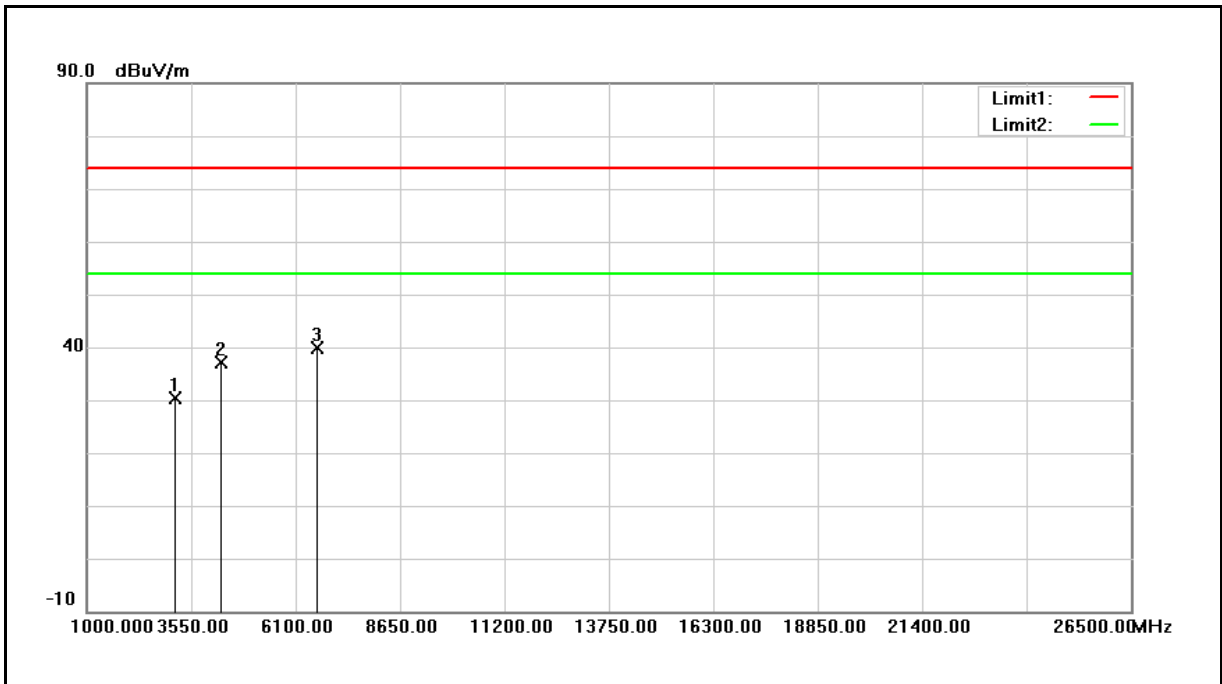
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2972.000	31.77	0.09	31.86	74.00	-42.14	peak
2	4417.000	33.91	4.27	38.18	74.00	-35.82	peak
3	6576.000	29.88	10.32	40.20	74.00	-33.80	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + Bluetooth LE)		
Ant.Polar.:	Horizontal		



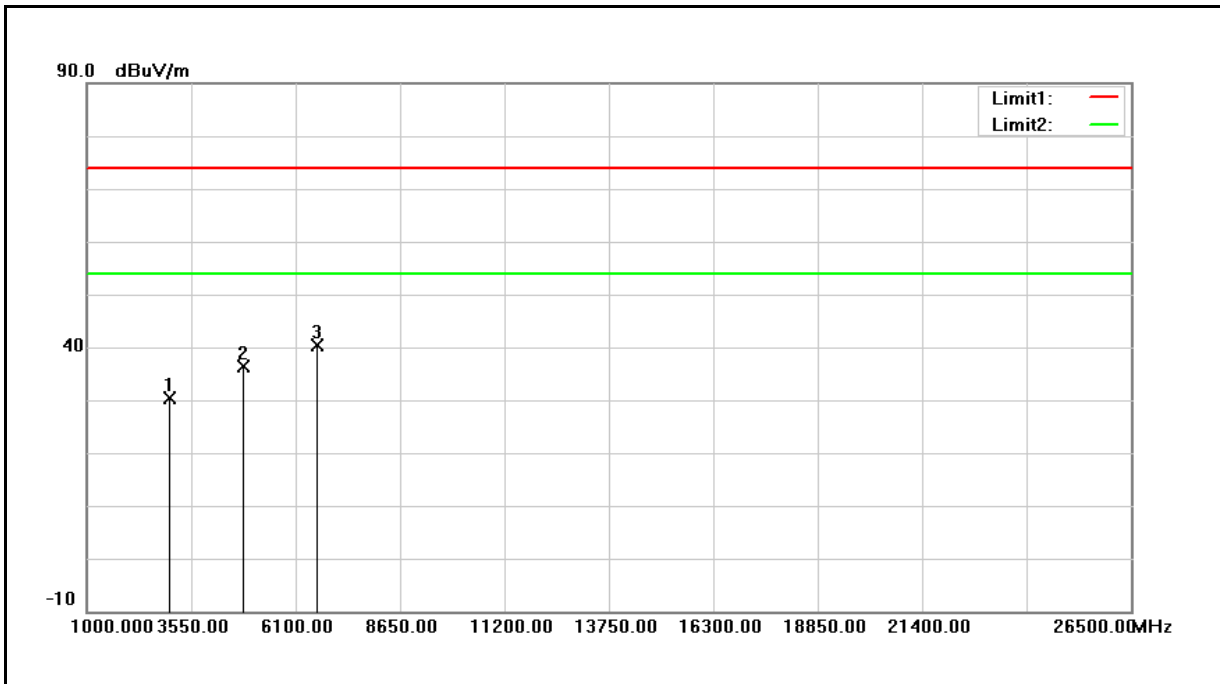
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3142.000	29.82	0.57	30.39	74.00	-43.61	peak
2	4281.000	33.22	3.98	37.20	74.00	-36.80	peak
3	6627.000	29.39	10.53	39.92	74.00	-34.08	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + Bluetooth LE)		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3006.000	30.08	0.20	30.28	74.00	-43.72	peak
2	4825.000	31.02	5.34	36.36	74.00	-37.64	peak
3	6627.000	29.75	10.53	40.28	74.00	-33.72	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

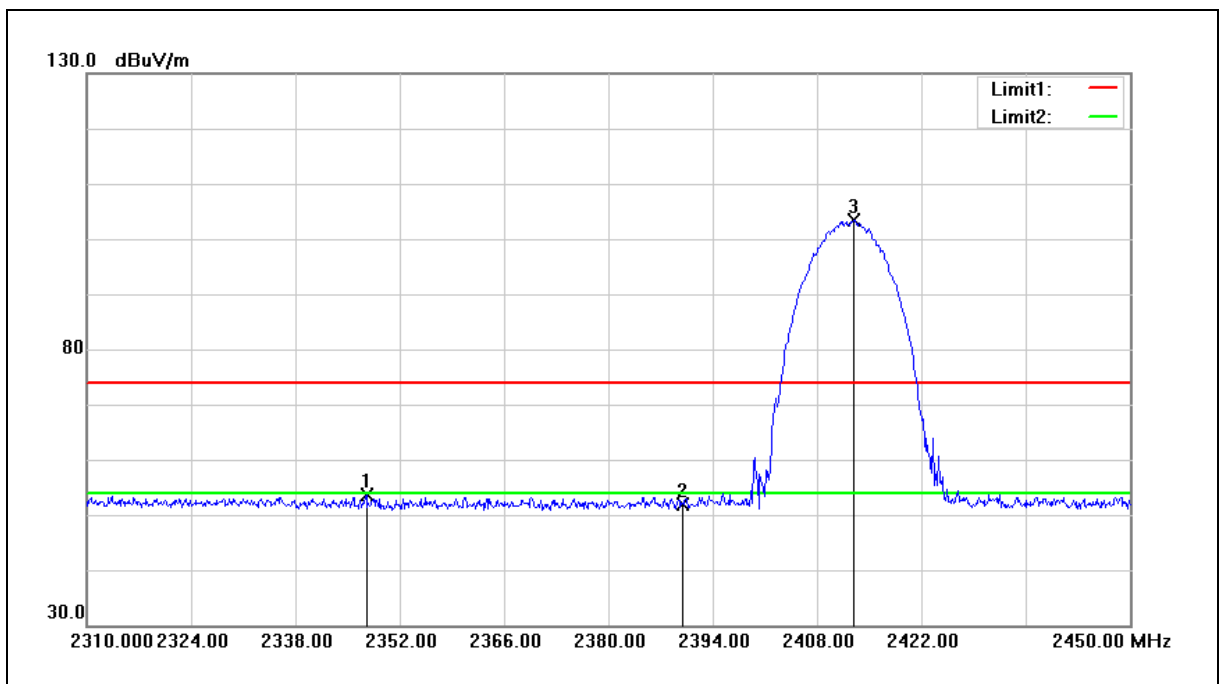
2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Band Edge

Peak

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



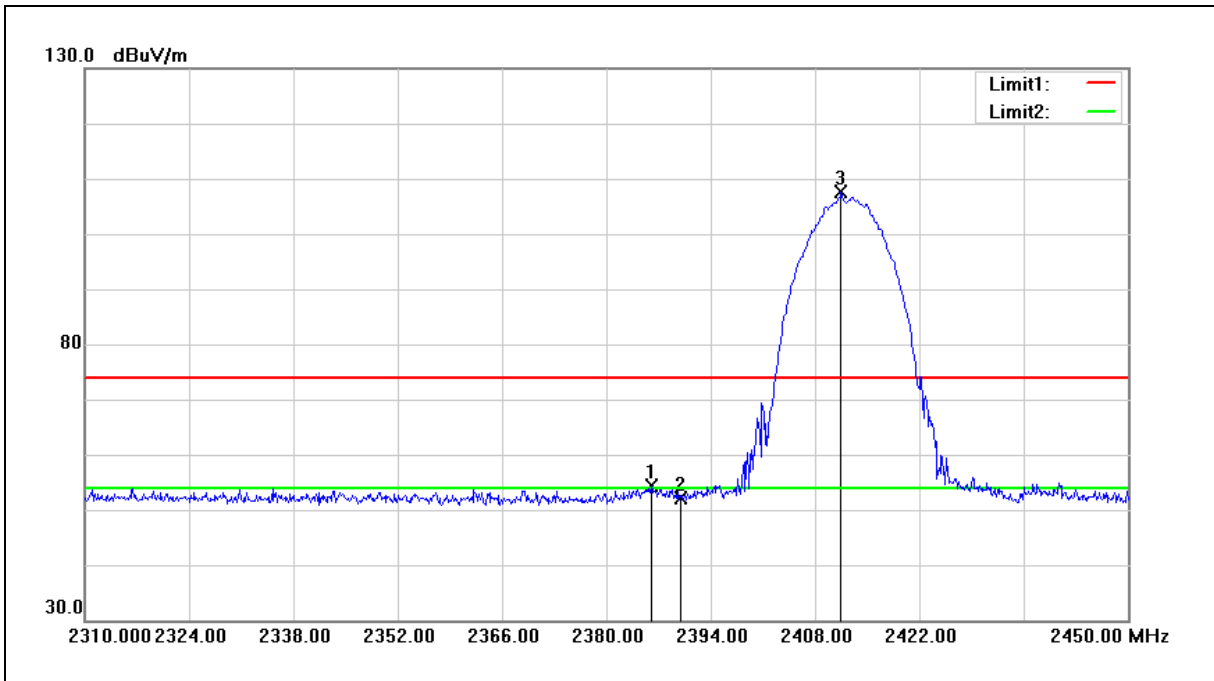
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2347.520	55.49	-1.89	53.60	74.00	-20.40	peak
2	2390.000	53.82	-2.02	51.80	74.00	-22.20	peak
3	2412.900	105.42	-2.03	103.39	74.00	29.39	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



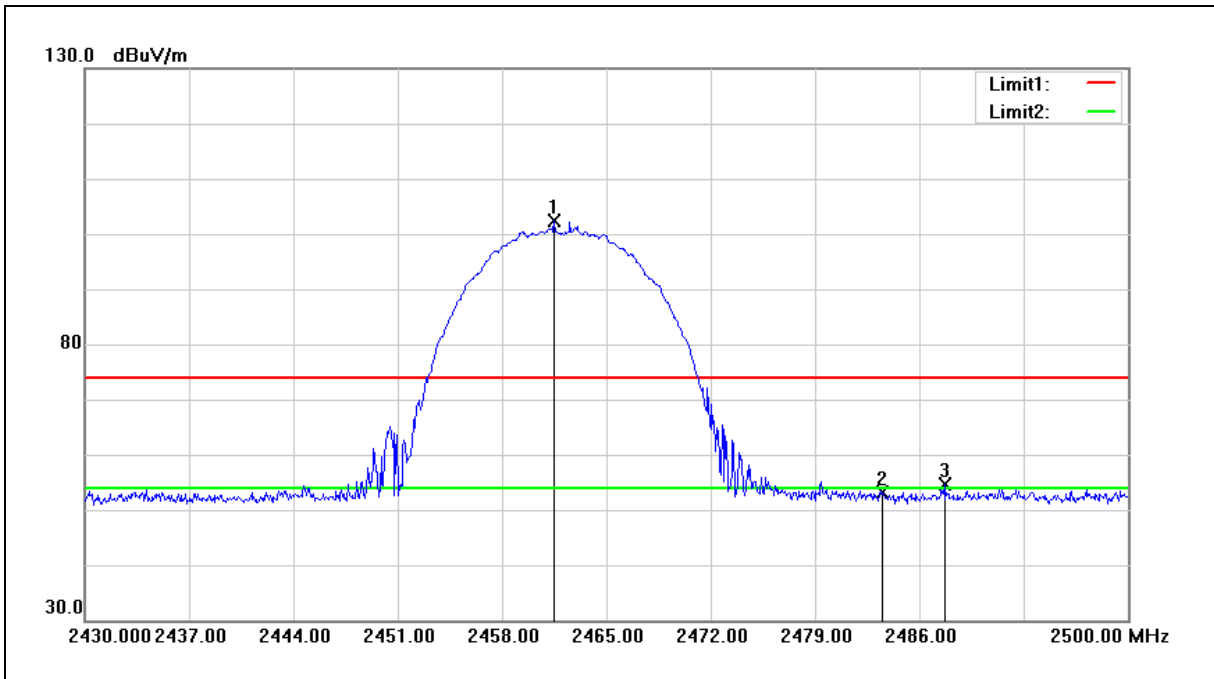
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.020	56.32	-2.01	54.31	74.00	-19.69	peak
2	2390.000	54.26	-2.02	52.24	74.00	-21.76	peak
3	2411.500	109.64	-2.04	107.60	74.00	33.60	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



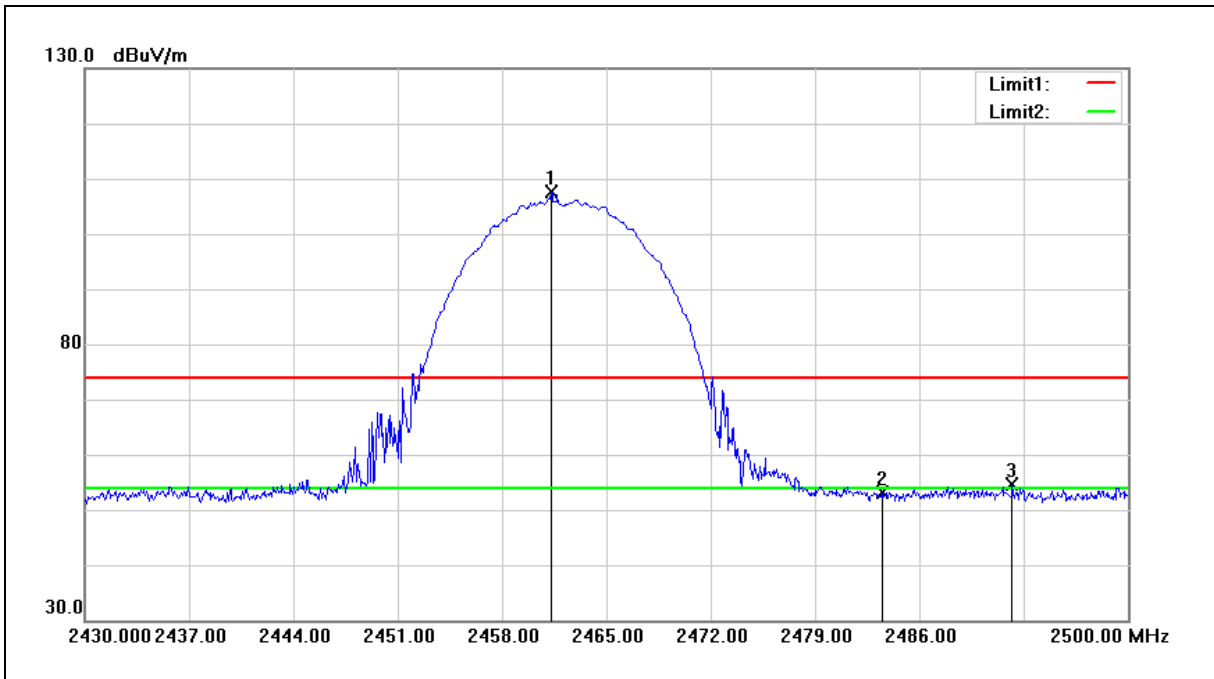
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.500	104.25	-1.93	102.32	74.00	28.32	peak
2	2483.500	54.95	-1.82	53.13	74.00	-20.87	peak
3	2487.680	56.52	-1.79	54.73	74.00	-19.27	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



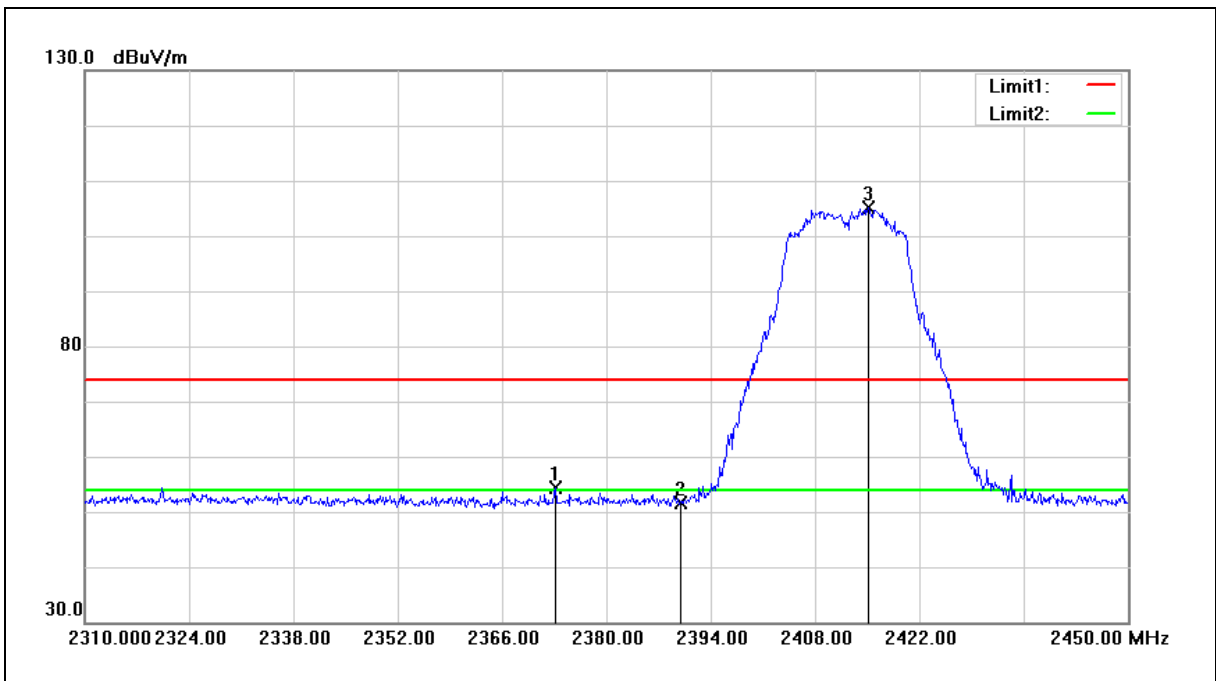
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.290	109.58	-1.93	107.65	74.00	33.65	peak
2	2483.500	54.87	-1.82	53.05	74.00	-20.95	peak
3	2492.230	56.46	-1.77	54.69	74.00	-19.31	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



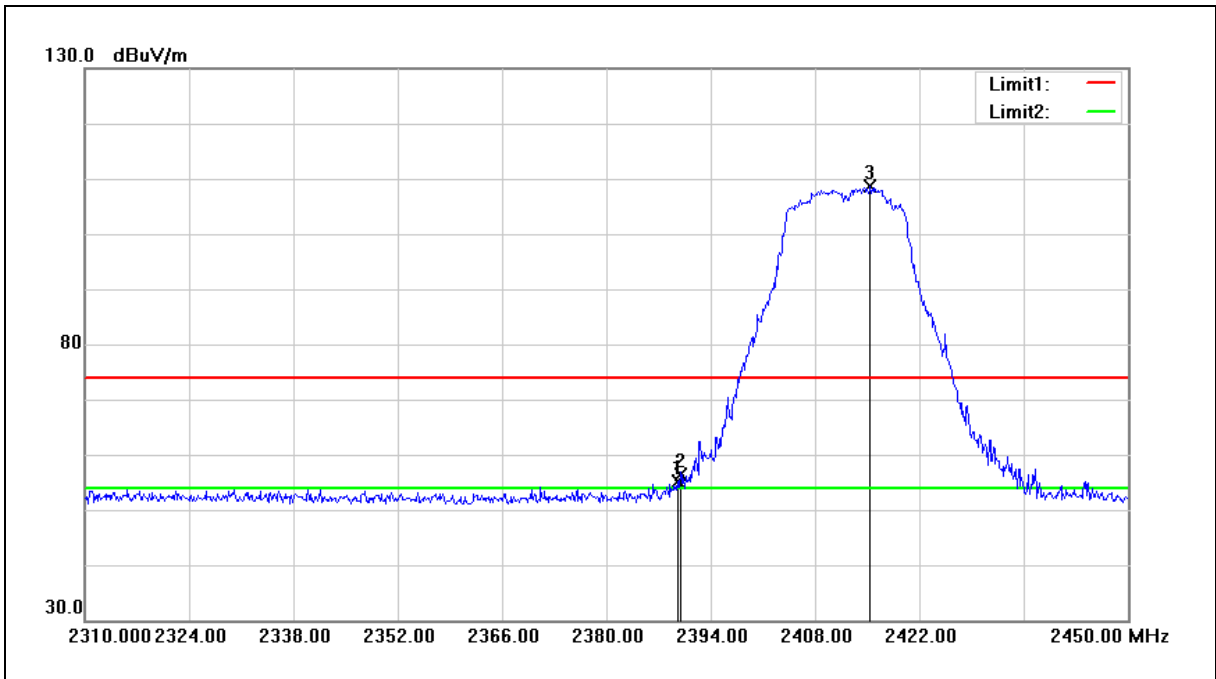
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.140	56.34	-1.97	54.37	74.00	-19.63	peak
2	2390.000	53.71	-2.02	51.69	74.00	-22.31	peak
3	2415.140	107.11	-2.03	105.08	74.00	31.08	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



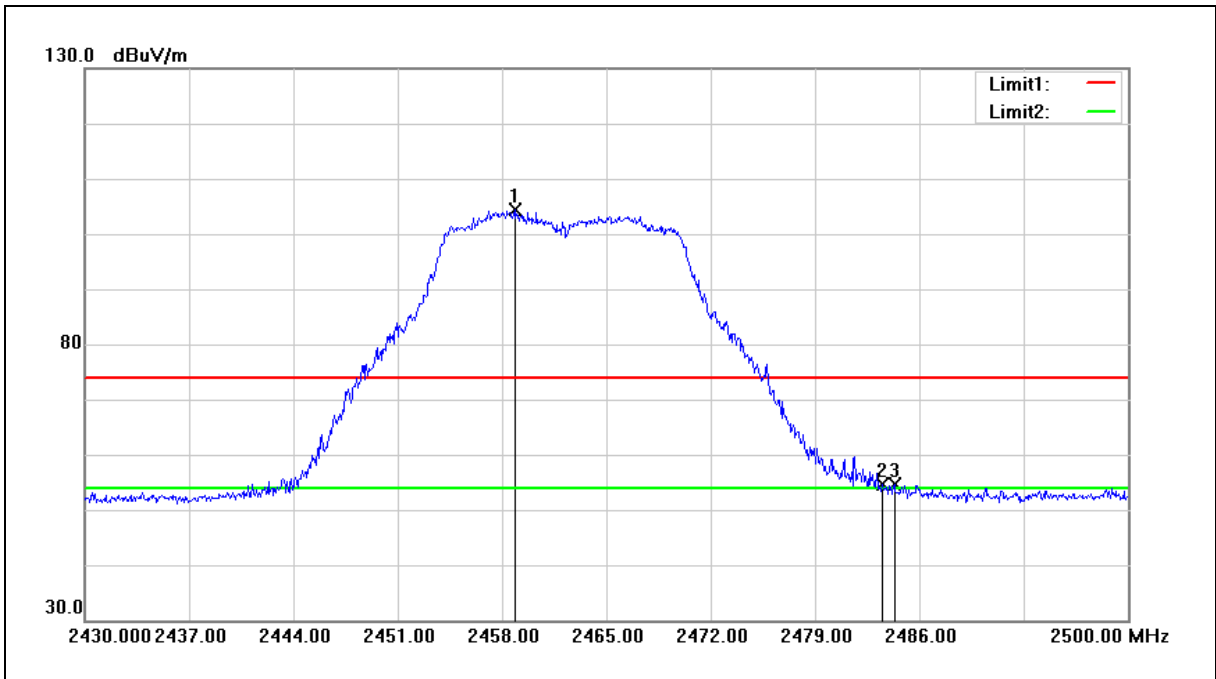
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.520	57.22	-2.02	55.20	74.00	-18.80	peak
2	2390.000	58.35	-2.02	56.33	74.00	-17.67	peak
3	2415.420	110.63	-2.03	108.60	74.00	34.60	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



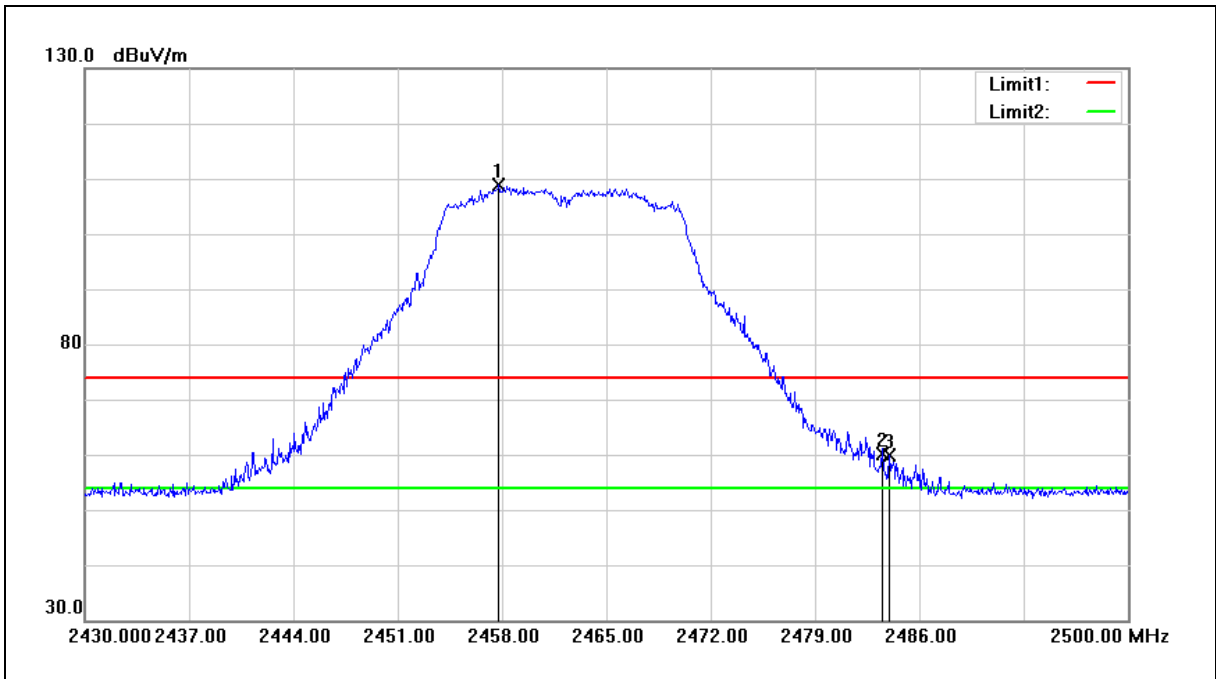
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2458.840	106.27	-1.94	104.33	74.00	30.33	peak
2	2483.500	56.53	-1.82	54.71	74.00	-19.29	peak
3	2484.320	56.39	-1.81	54.58	74.00	-19.42	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



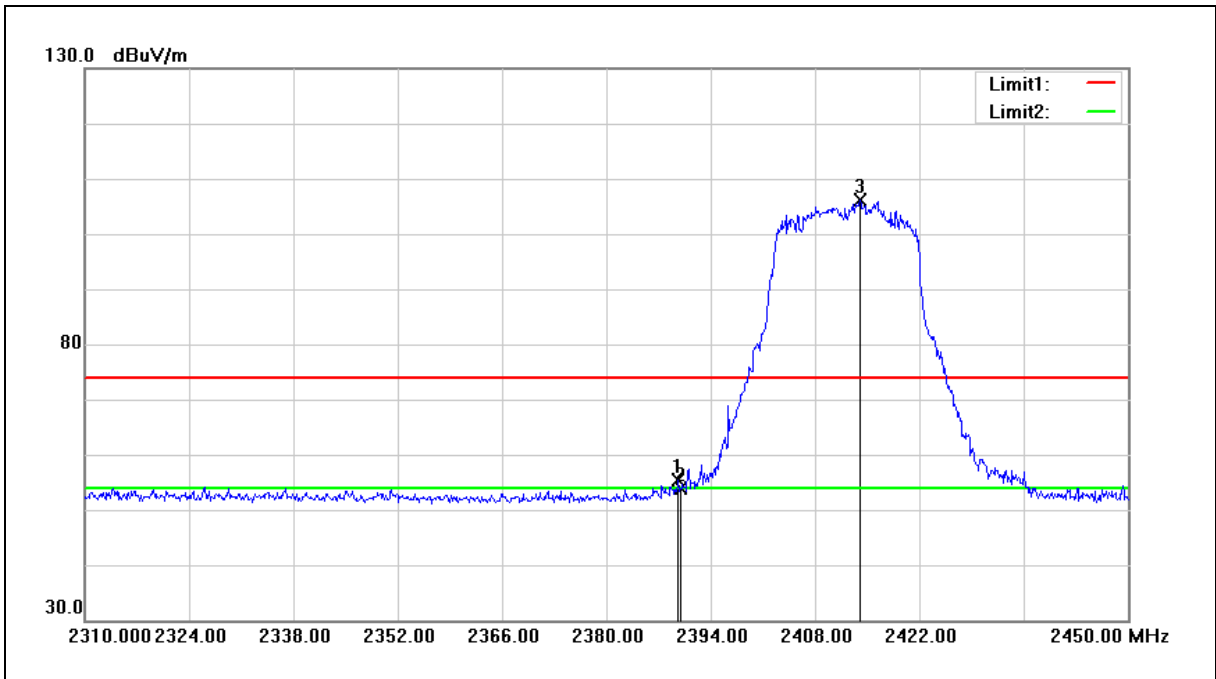
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2457.790	110.95	-1.95	109.00	74.00	35.00	peak
2	2483.500	61.87	-1.82	60.05	74.00	-13.95	peak
3	2483.970	61.69	-1.81	59.88	74.00	-14.12	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



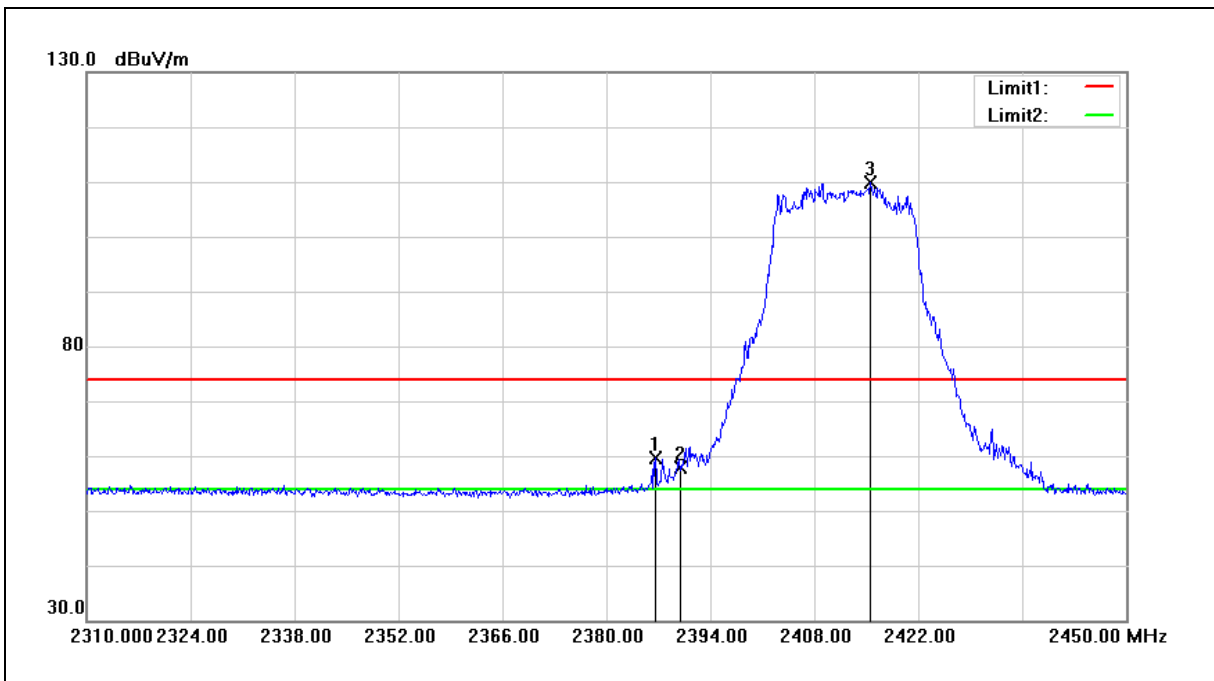
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.660	57.29	-2.02	55.27	74.00	-18.73	peak
2	2390.000	55.94	-2.02	53.92	74.00	-20.08	peak
3	2414.020	108.13	-2.03	106.10	74.00	32.10	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



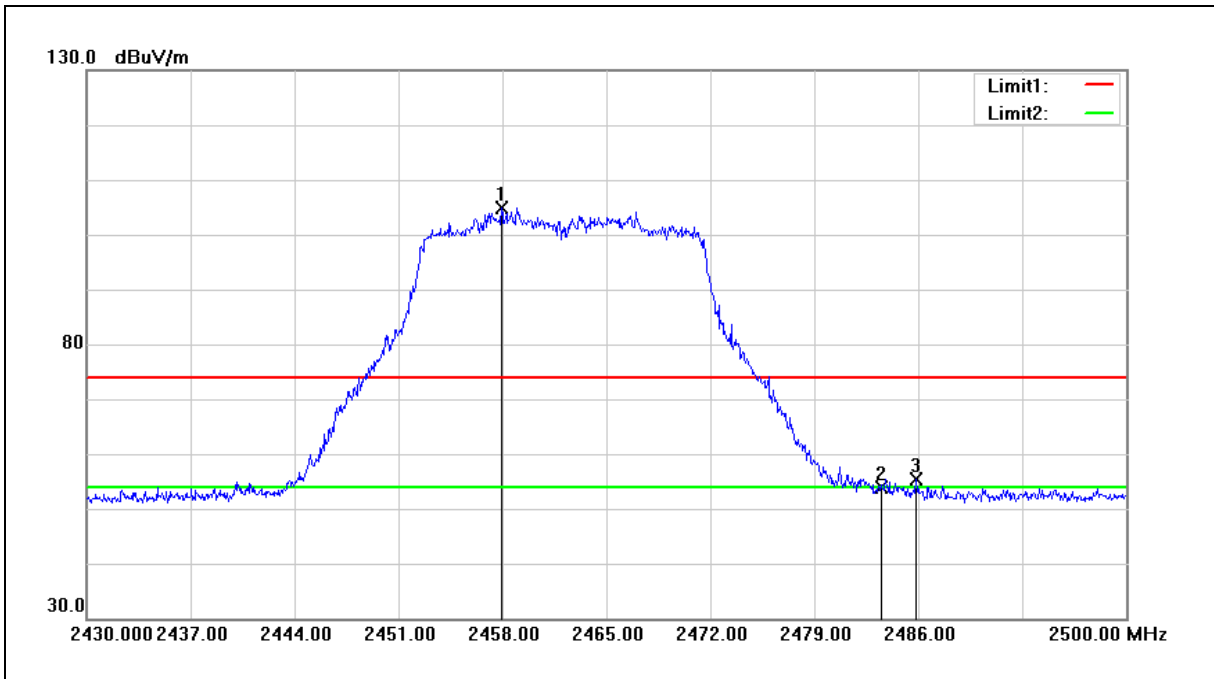
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.580	61.76	-2.02	59.74	74.00	-14.26	peak
2	2390.000	59.84	-2.02	57.82	74.00	-16.18	peak
3	2415.560	111.92	-2.03	109.89	74.00	35.89	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



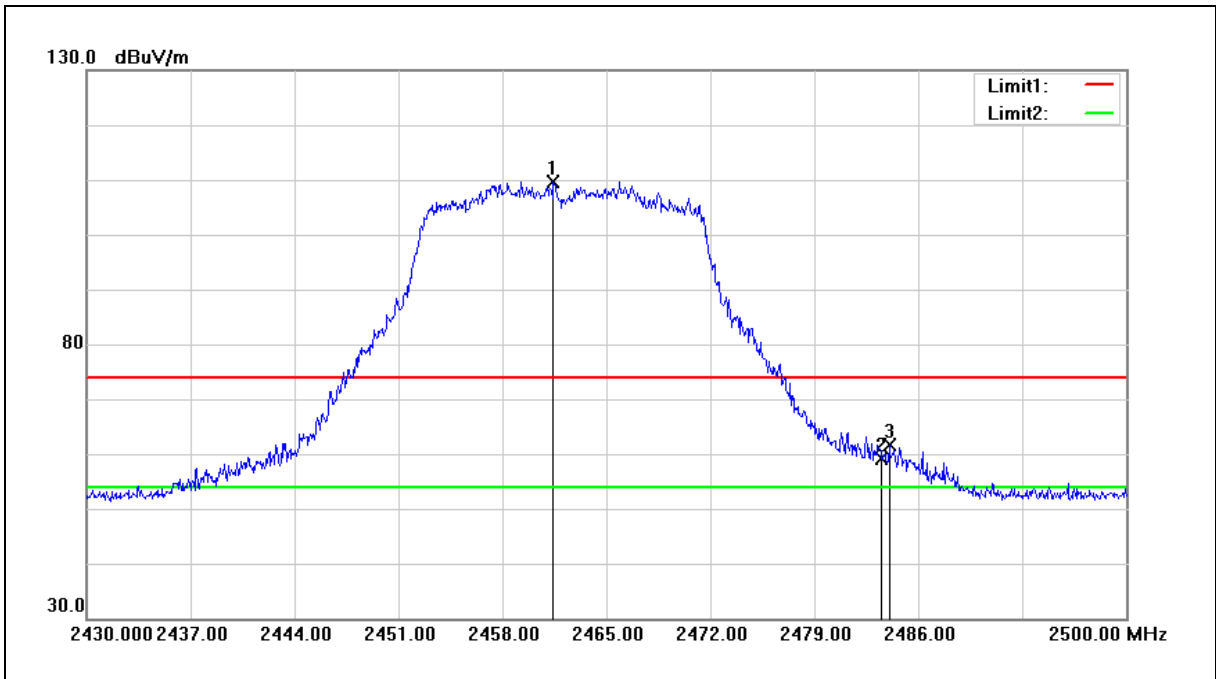
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2457.930	106.78	-1.95	104.83	74.00	30.83	peak
2	2483.500	55.72	-1.82	53.90	74.00	-20.10	peak
3	2485.860	57.14	-1.81	55.33	74.00	-18.67	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



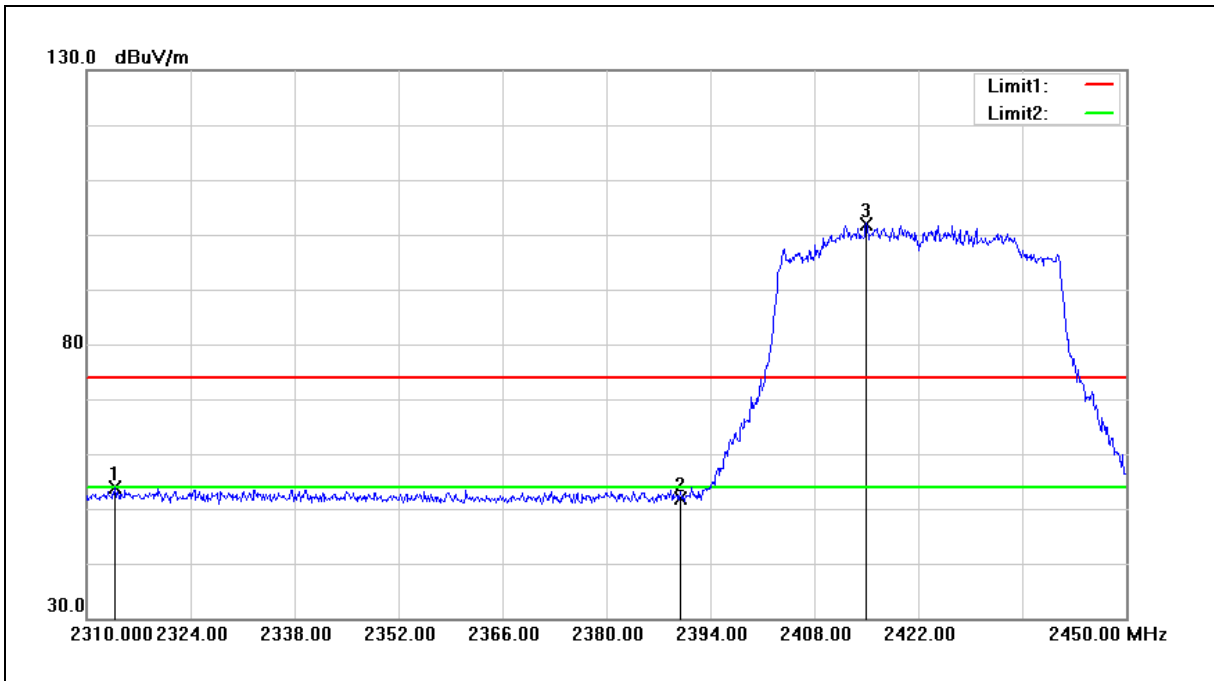
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.430	111.53	-1.93	109.60	74.00	35.60	peak
2	2483.500	60.99	-1.82	59.17	74.00	-14.83	peak
3	2484.040	63.52	-1.81	61.71	74.00	-12.29	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



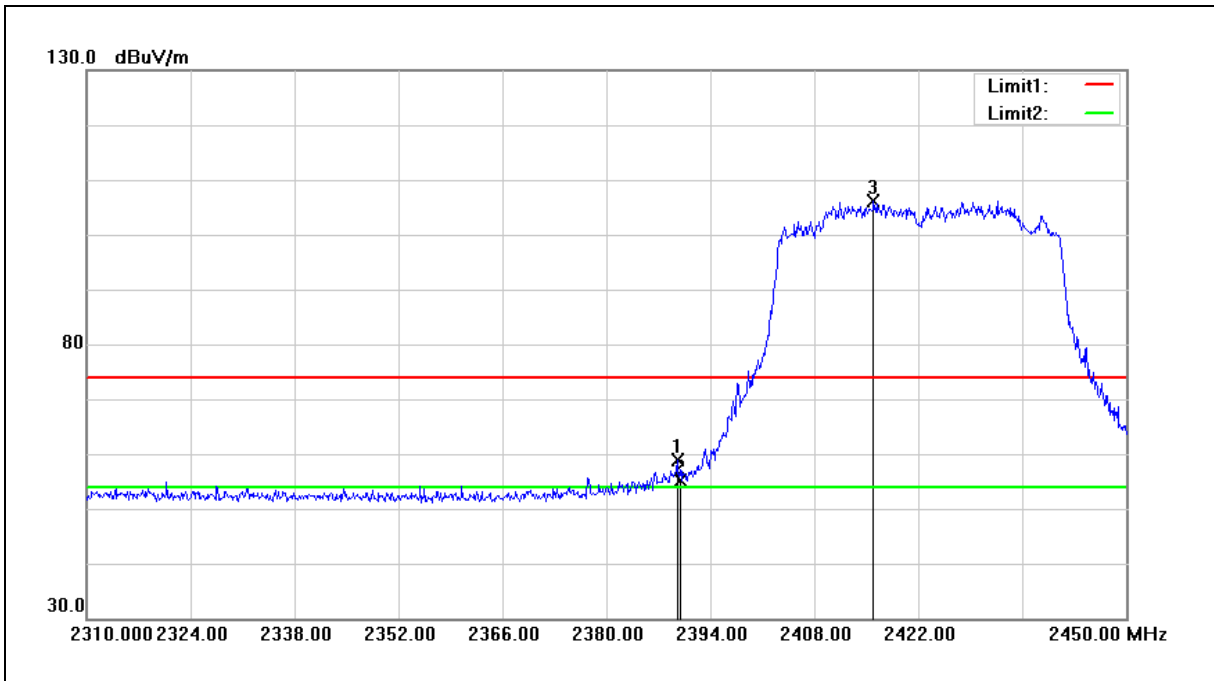
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2313.780	55.37	-1.59	53.78	74.00	-20.22	peak
2	2390.000	53.99	-2.02	51.97	74.00	-22.03	peak
3	2415.000	104.03	-2.03	102.00	74.00	28.00	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



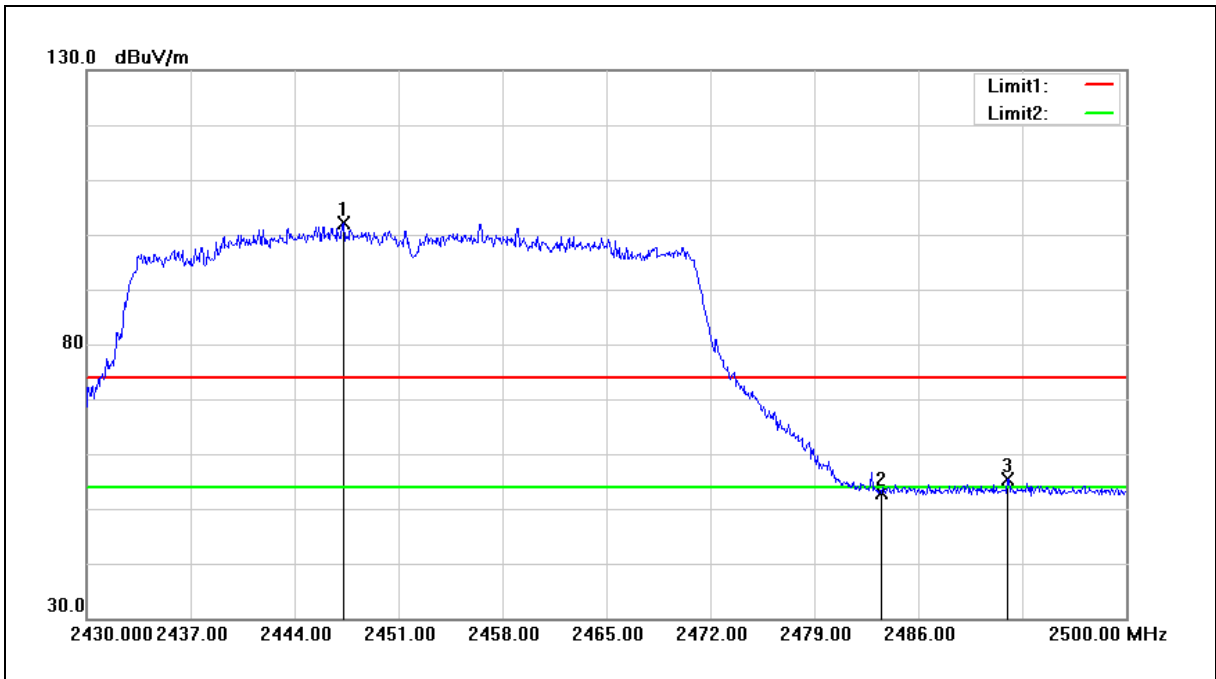
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.520	60.97	-2.02	58.95	74.00	-15.05	peak
2	2390.000	57.08	-2.02	55.06	74.00	-18.94	peak
3	2415.980	108.12	-2.03	106.09	74.00	32.09	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



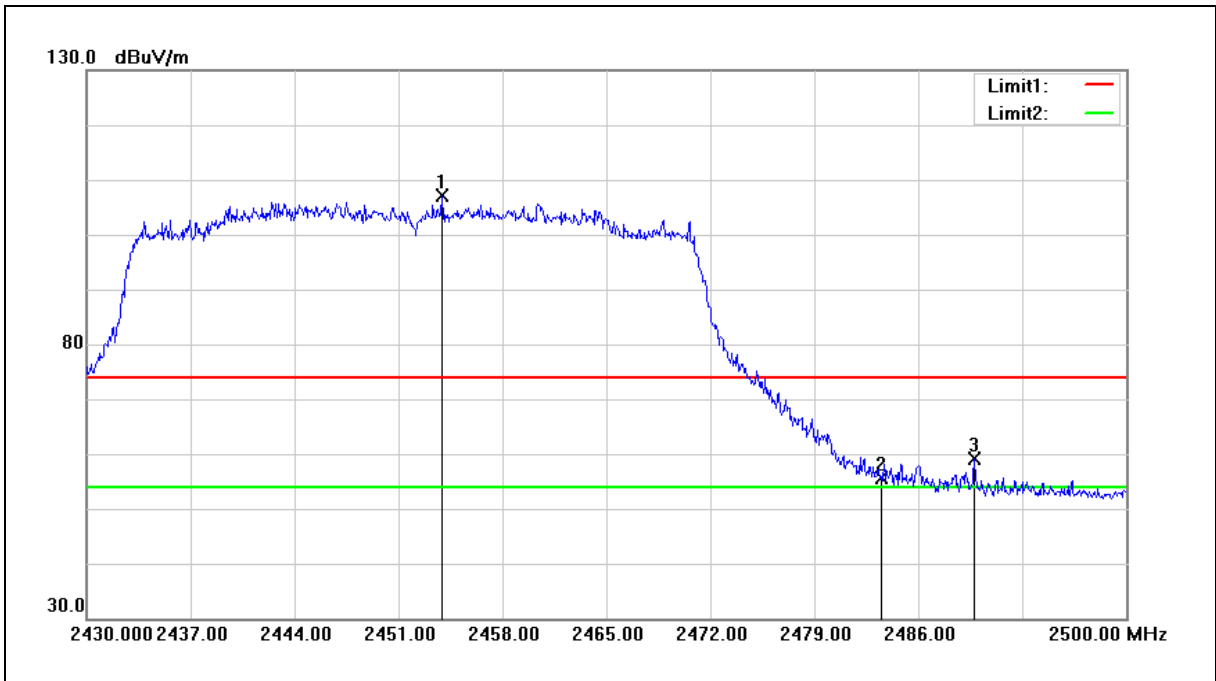
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2447.290	104.00	-1.99	102.01	74.00	28.01	peak
2	2483.500	54.66	-1.82	52.84	74.00	-21.16	peak
3	2492.020	57.21	-1.77	55.44	74.00	-18.56	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2453.940	109.16	-1.97	107.19	74.00	33.19	peak
2	2483.500	57.45	-1.82	55.63	74.00	-18.37	peak
3	2489.780	61.00	-1.78	59.22	74.00	-14.78	peak

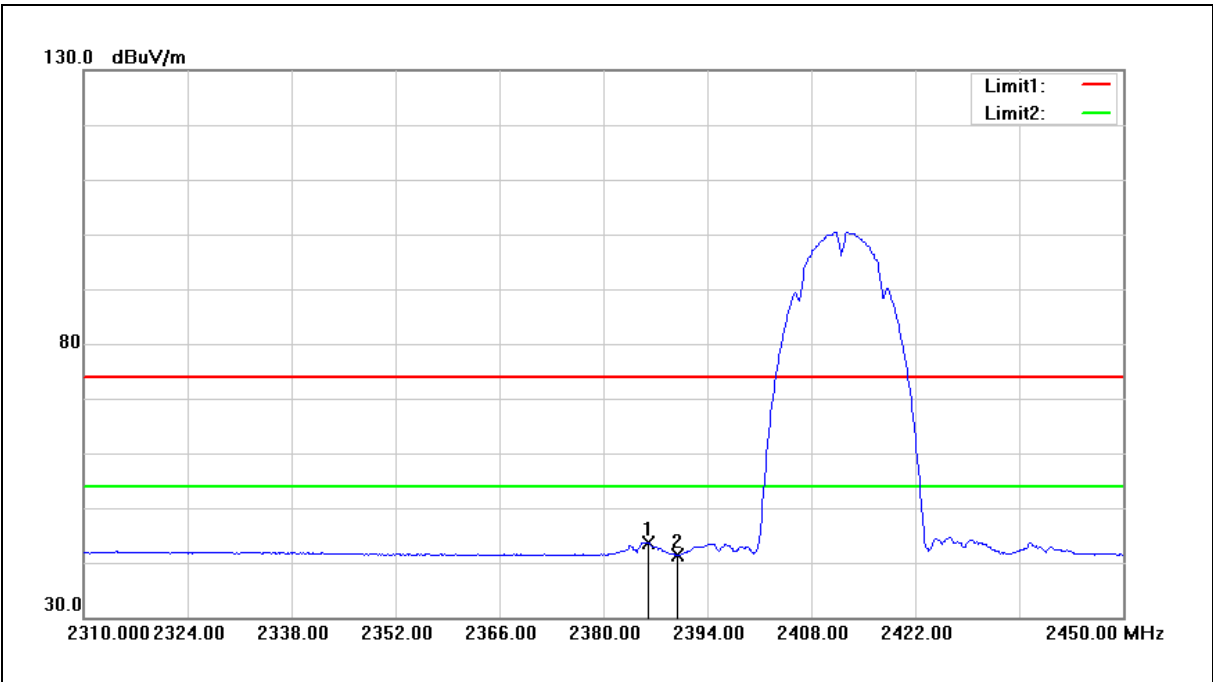
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Average

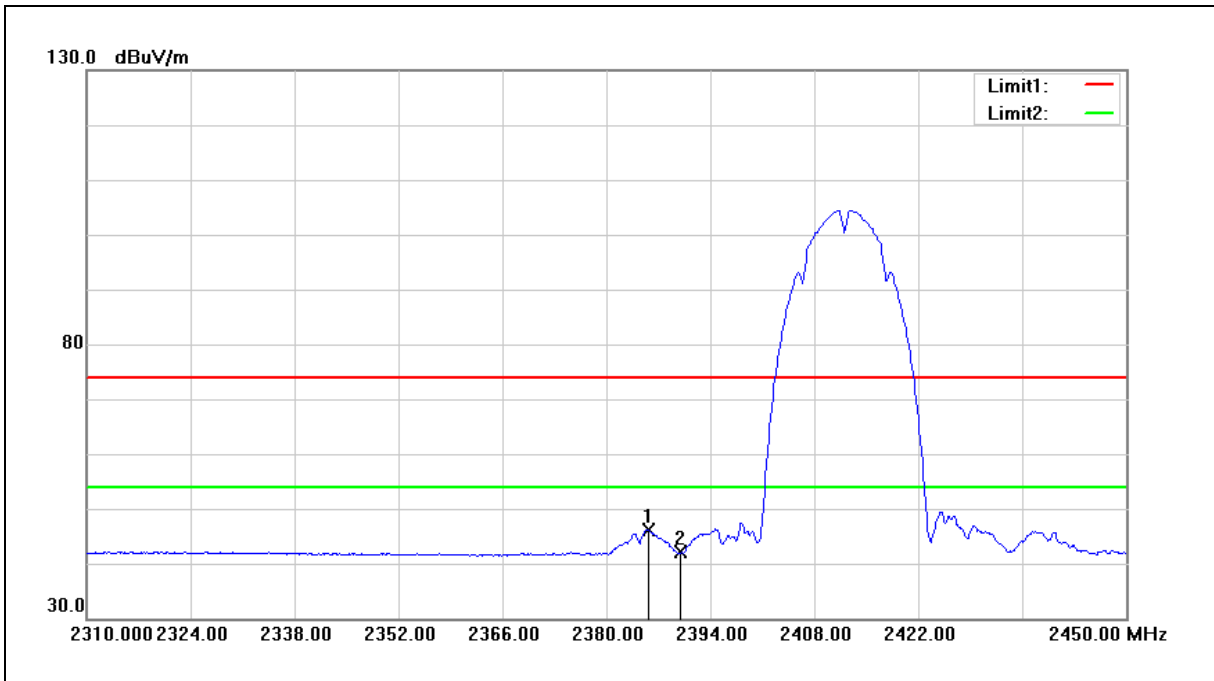
Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.020	45.73	-2.01	43.72	54.00	-10.28	AVG
2	2390.000	43.46	-2.02	41.44	54.00	-12.56	AVG

- Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).
- 2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).
- 3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



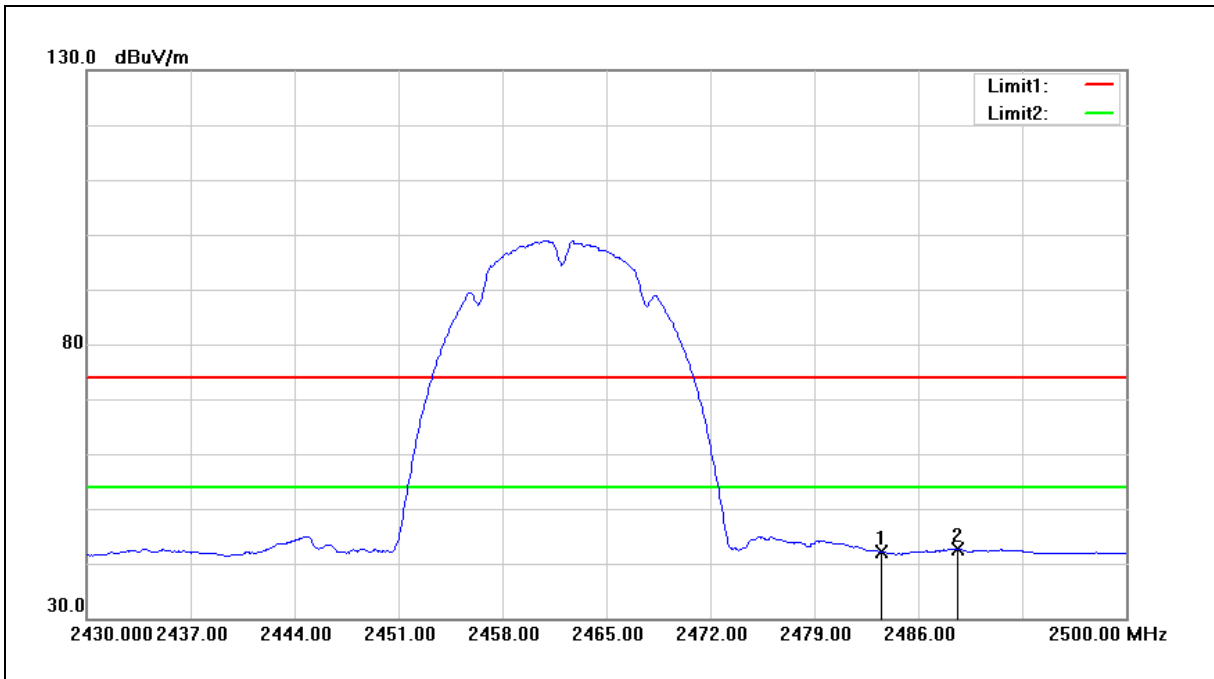
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.600	48.12	-2.01	46.11	54.00	-7.89	AVG
2	2390.000	44.24	-2.02	42.22	54.00	-11.78	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



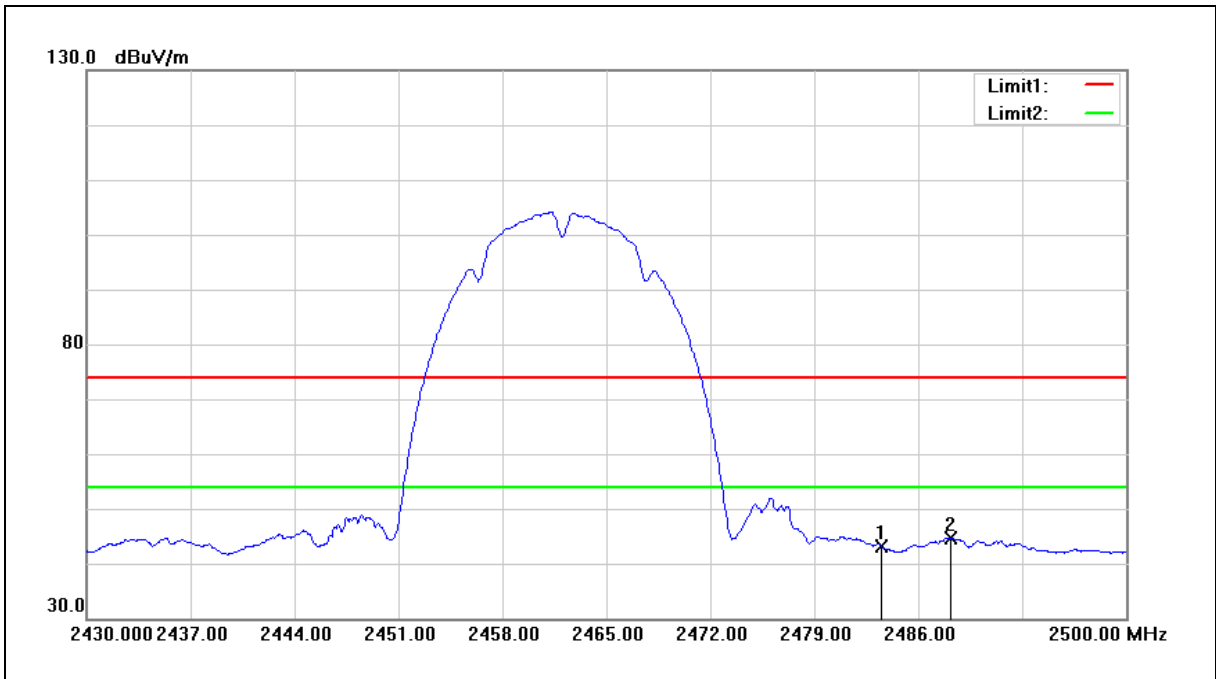
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	43.90	-1.82	42.08	54.00	-11.92	AVG
2	2488.660	44.53	-1.79	42.74	54.00	-11.26	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



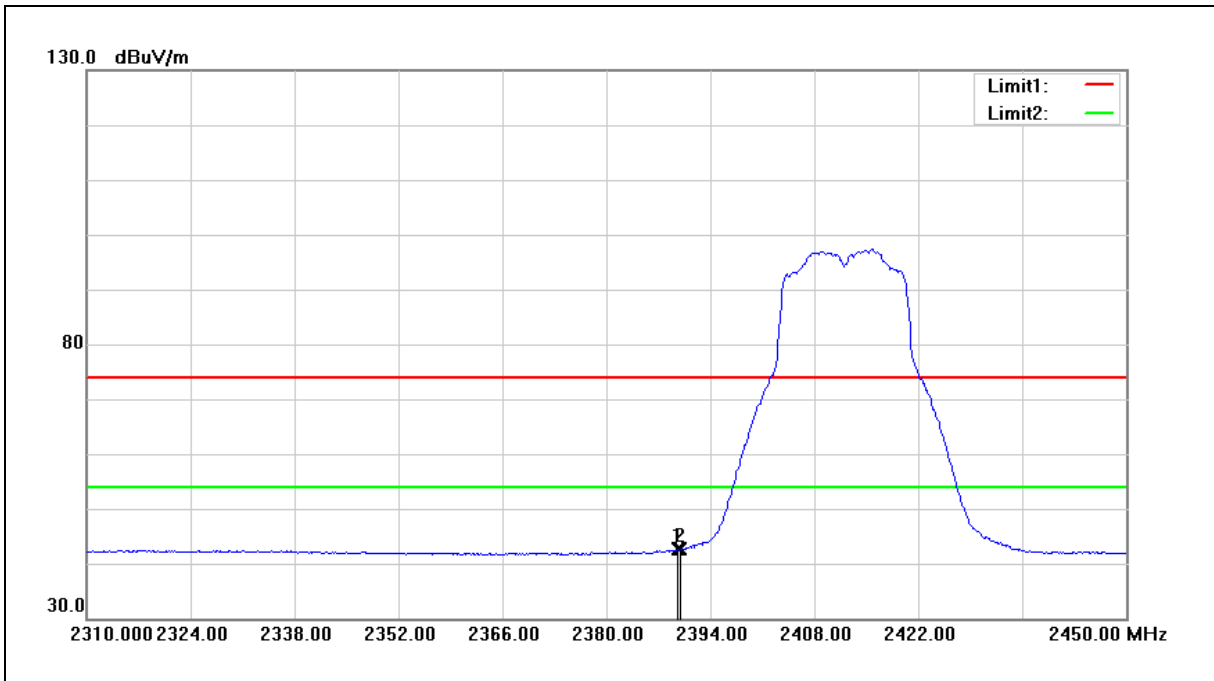
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	44.83	-1.82	43.01	54.00	-10.99	AVG
2	2488.170	46.48	-1.79	44.69	54.00	-9.31	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



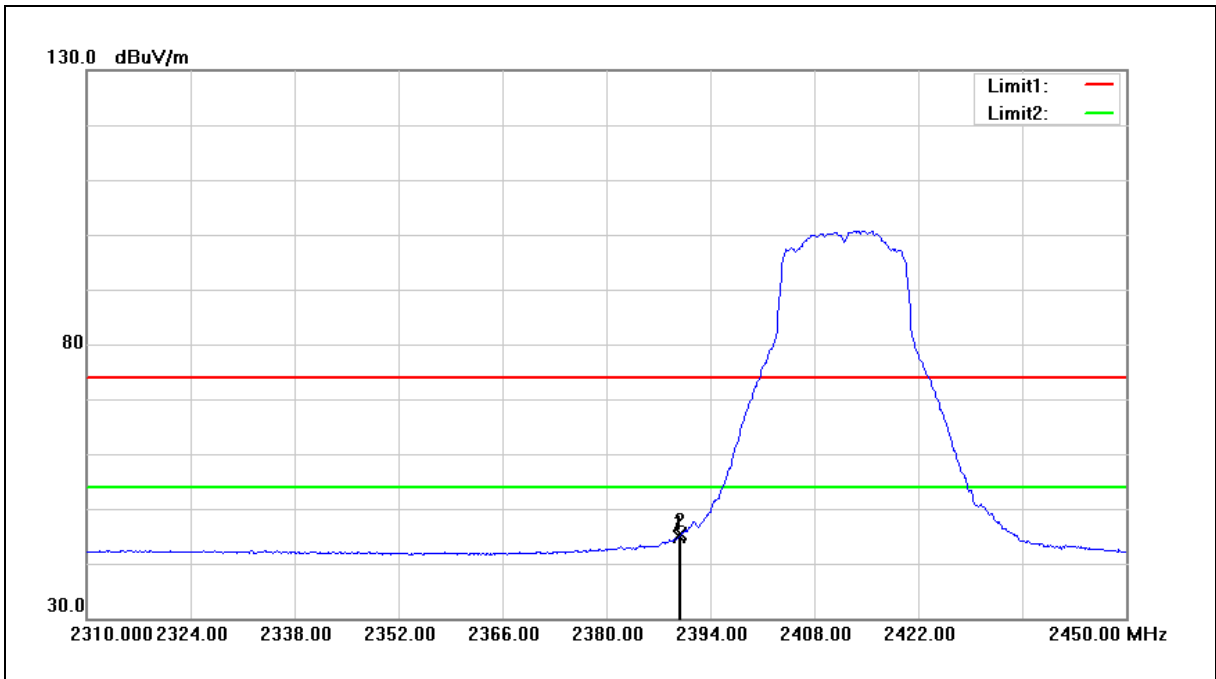
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.660	44.72	-2.02	42.70	54.00	-11.30	AVG
2	2390.000	44.64	-2.02	42.62	54.00	-11.38	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



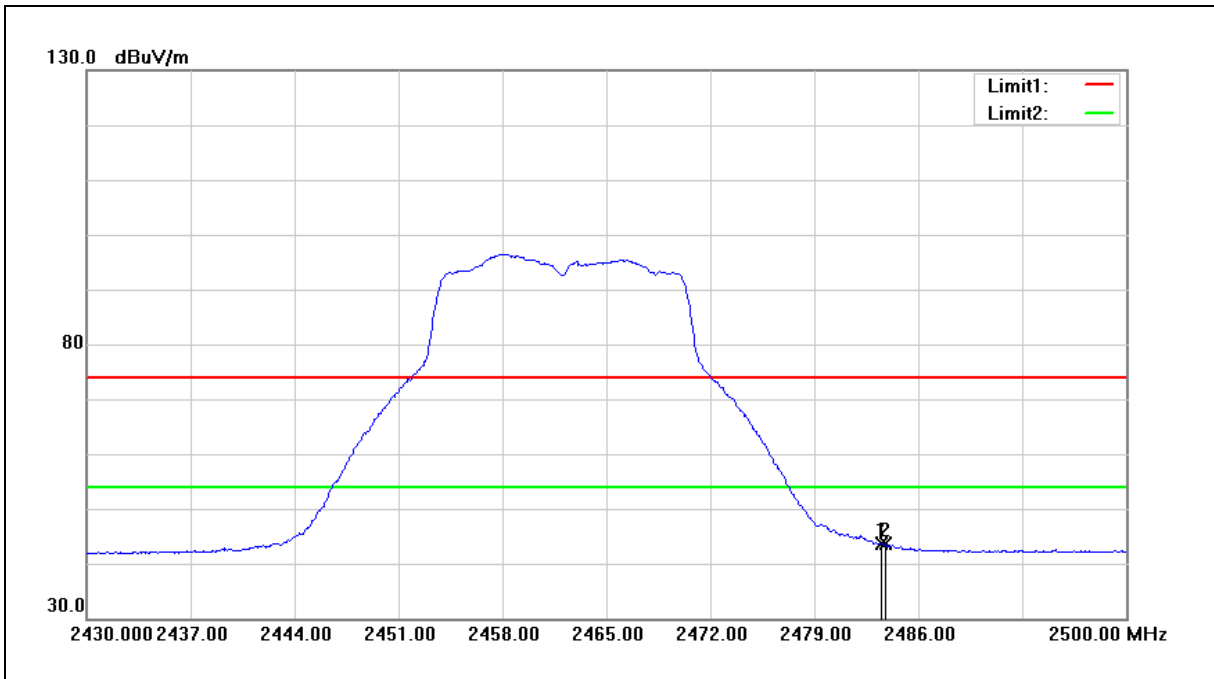
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.800	46.79	-2.02	44.77	54.00	-9.23	AVG
2	2390.000	47.43	-2.02	45.41	54.00	-8.59	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



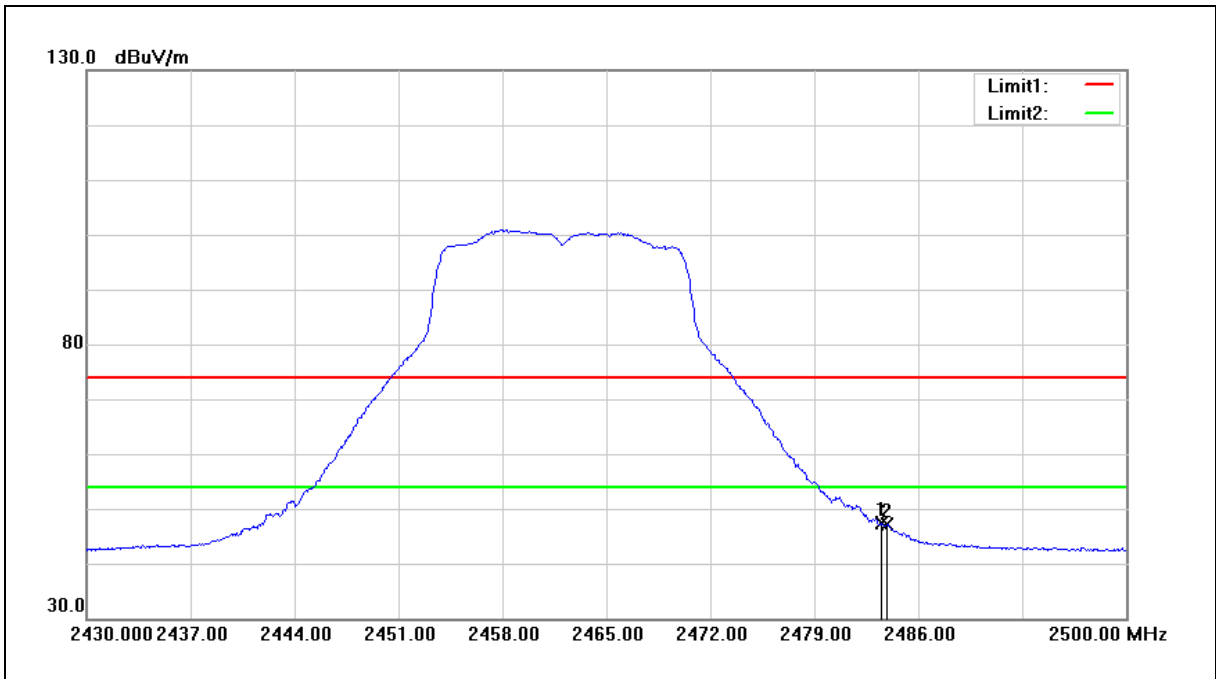
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	45.33	-1.82	43.51	54.00	-10.49	AVG
2	2483.830	45.36	-1.81	43.55	54.00	-10.45	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



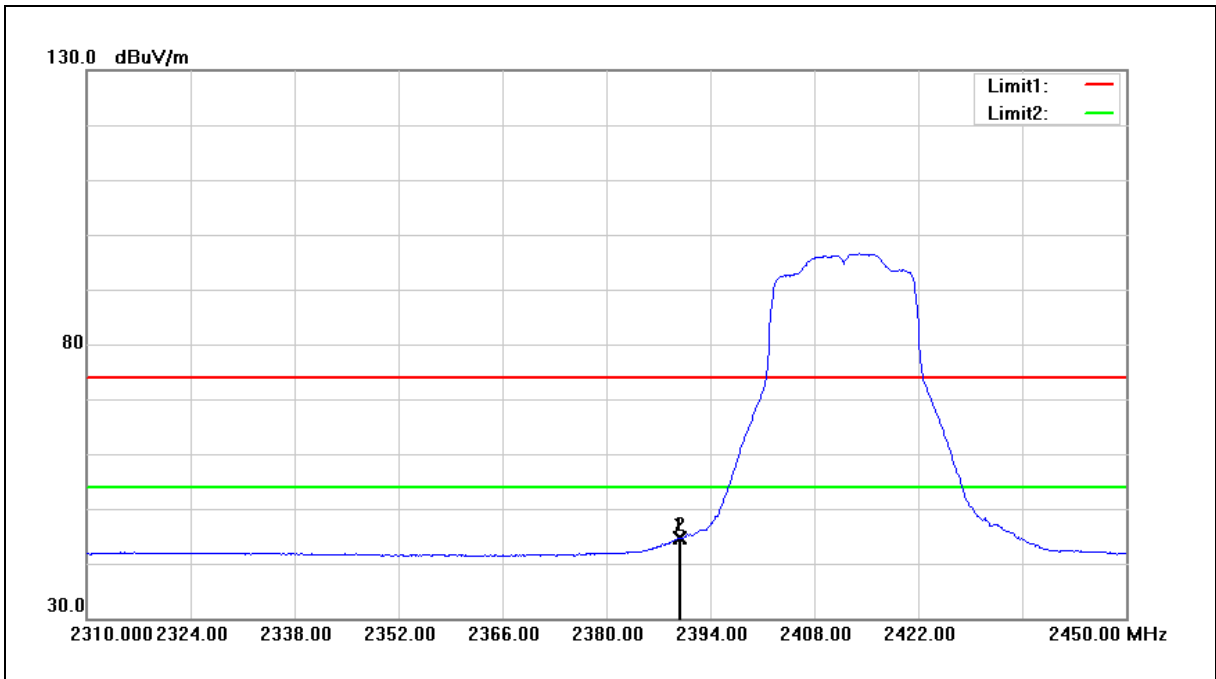
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	49.14	-1.82	47.32	54.00	-6.68	AVG
2	2483.900	48.85	-1.81	47.04	54.00	-6.96	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



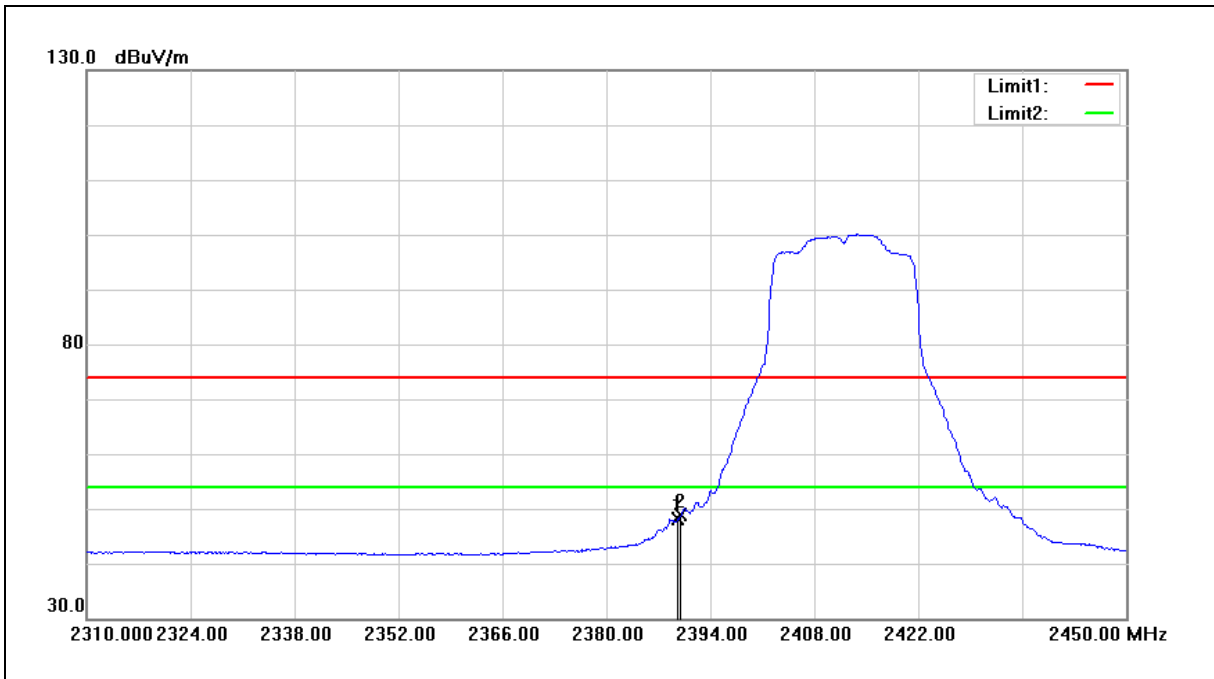
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.800	46.60	-2.02	44.58	54.00	-9.42	AVG
2	2390.000	46.55	-2.02	44.53	54.00	-9.47	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



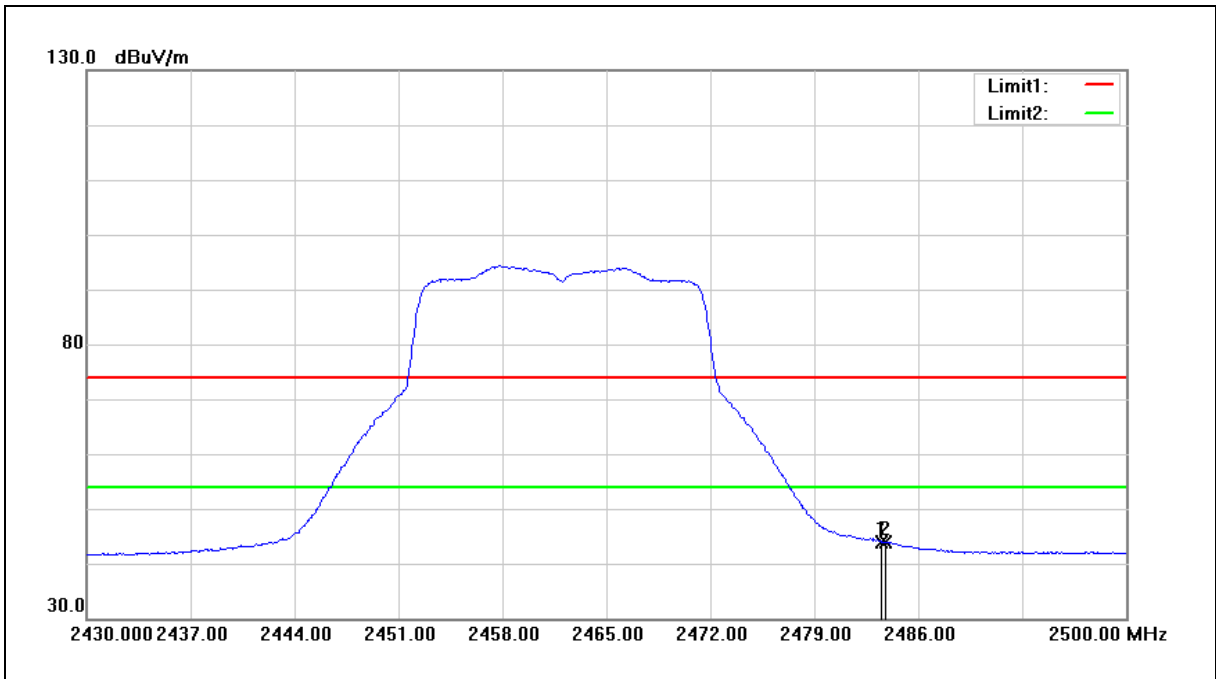
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.660	50.25	-2.02	48.23	54.00	-5.77	AVG
2	2390.000	50.82	-2.02	48.80	54.00	-5.20	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



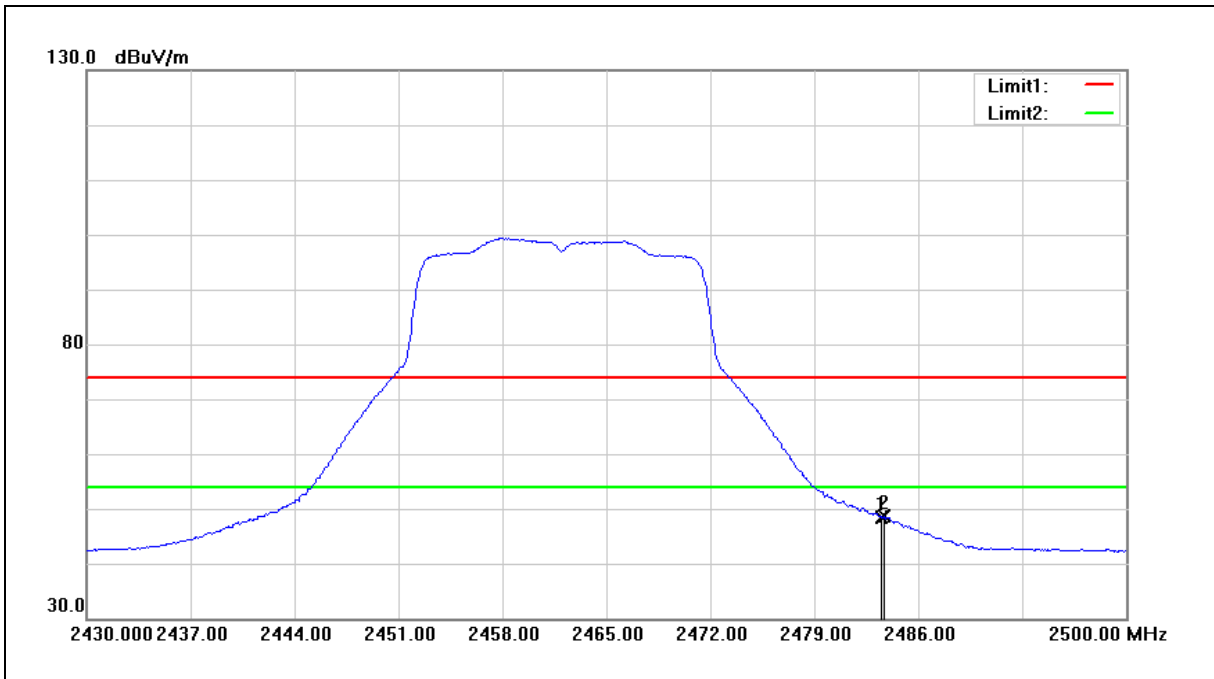
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	45.80	-1.82	43.98	54.00	-10.02	AVG
2	2483.760	45.80	-1.81	43.99	54.00	-10.01	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



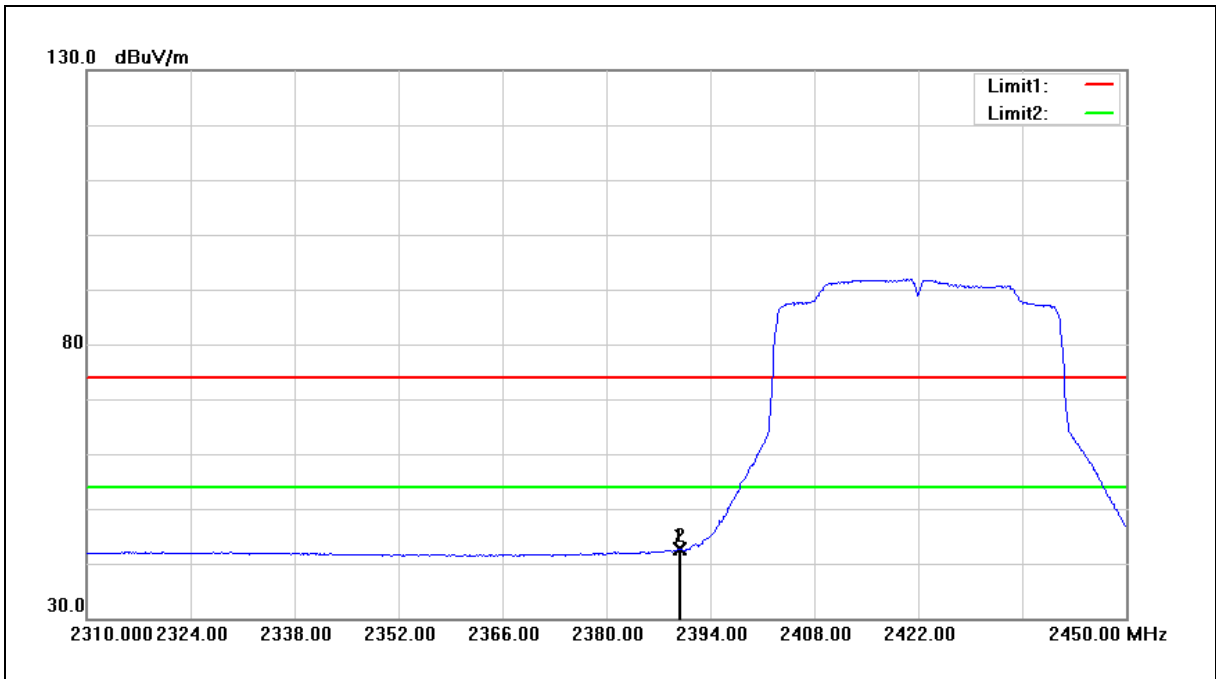
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	50.17	-1.82	48.35	54.00	-5.65	AVG
2	2483.690	50.35	-1.82	48.53	54.00	-5.47	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



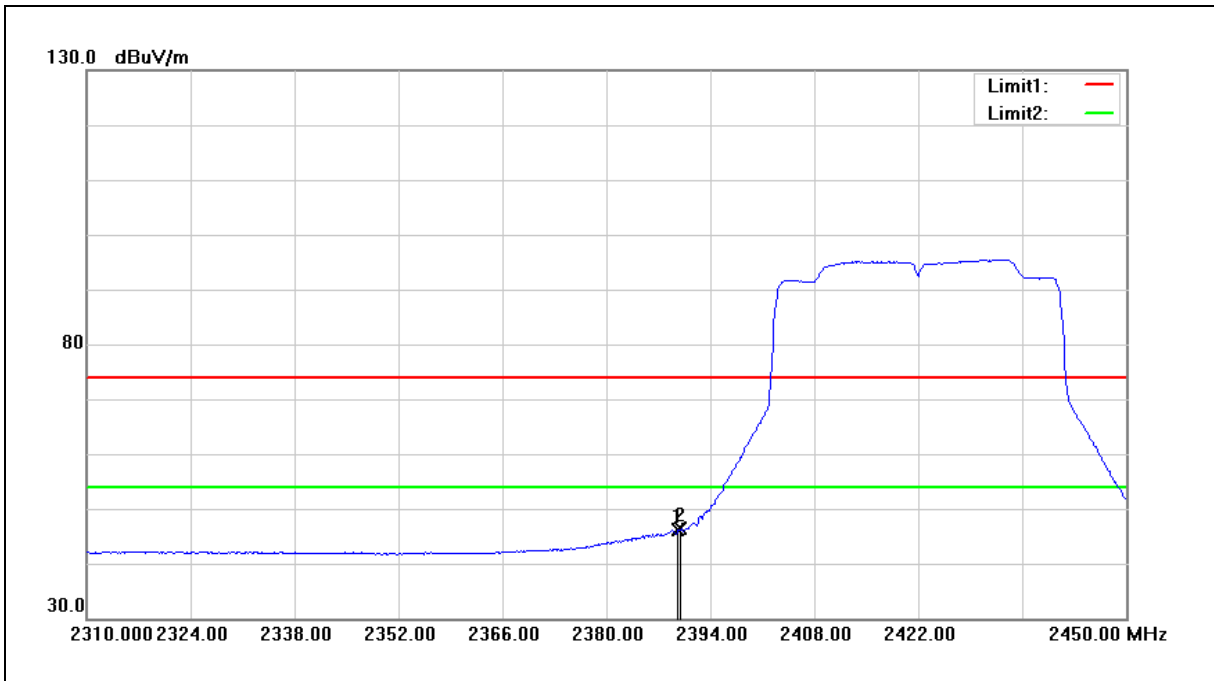
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.800	44.73	-2.02	42.71	54.00	-11.29	AVG
2	2390.000	44.70	-2.02	42.68	54.00	-11.32	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2422 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



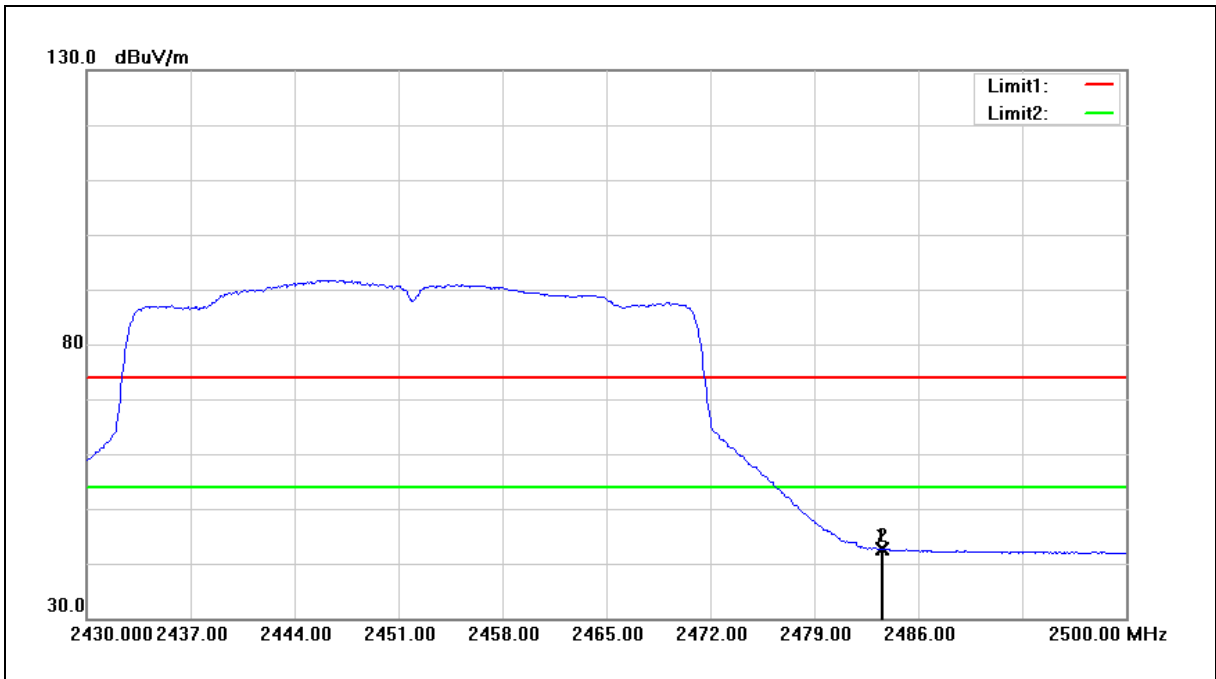
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.660	48.15	-2.02	46.13	54.00	-7.87	AVG
2	2390.000	48.36	-2.02	46.34	54.00	-7.66	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



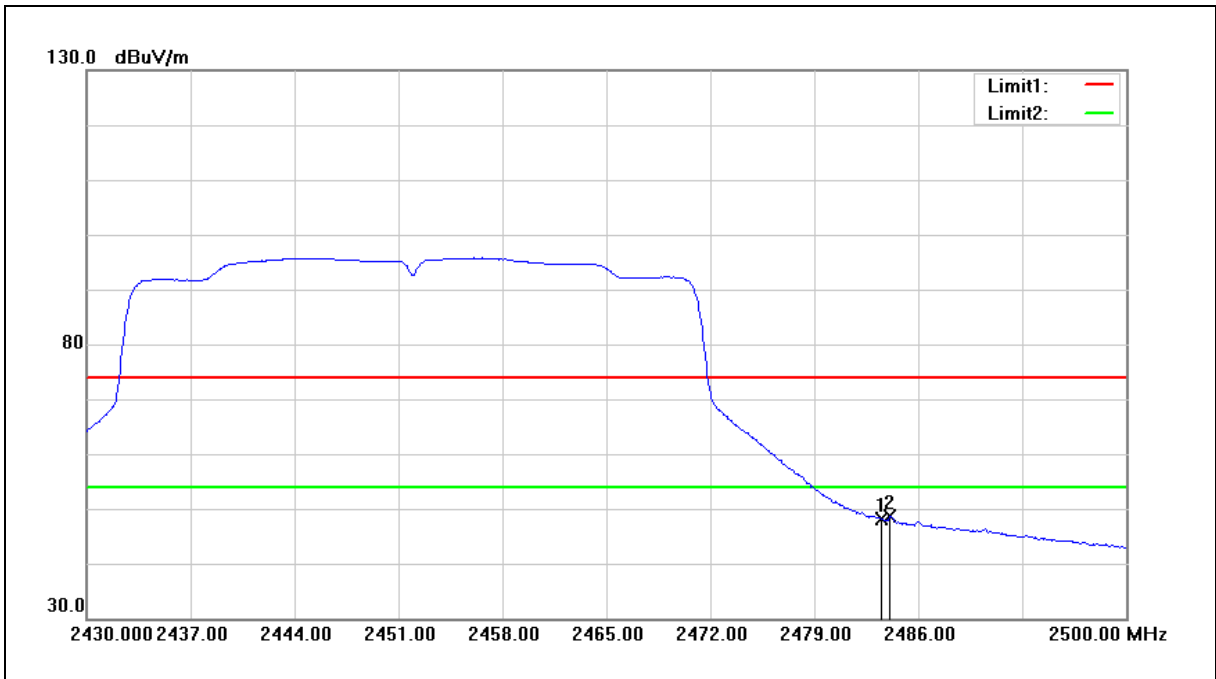
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	44.46	-1.82	42.64	54.00	-11.36	AVG
2	2483.620	44.47	-1.82	42.65	54.00	-11.35	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2452 MHz		
Mode:	Mode 7		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	49.87	-1.82	48.05	54.00	-5.95	AVG
2	2484.110	50.56	-1.81	48.75	54.00	-5.25	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

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