

RF Test Report

Applicant : InnoComm Mobile Technology Corporation
Product Type : Wireless Audio Module
Trade Name : InnoComm
Model Number : WB15
Applicable Standard : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013
Received Date : Jul. 08, 2020
Test Period : Jul. 21 ~ Sep. 10, 2020
Issued Date : Oct. 29, 2020

Issued by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
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Taiwan Accreditation Foundation accreditation number: 1330
Frequency Range : 9 kHz to 40 GHz
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.
- 2.This report shall not be reproduced except in full, without the written approval of A Test Lab Technology Corporation.
- 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. 29, 2020	Initial Issue	Yu Chiang

Verification of Compliance

Applicant : InnoComm Mobile Technology Corporation
Product Type : Wireless Audio Module
Trade Name : InnoComm
Model Number : WB15
FCC ID : YAIWB15
EUT Rated Voltage : DC 5 V
Test Voltage : 120 Vac / 60 Hz
Applicable Standard : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013
Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
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Taiwan Accreditation Foundation accreditation number: 1330
<http://www.atl-lab.com.tw/e-index.htm>

A Test Lab Techno Corp. 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 A Test Lab Techno Corp. 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 : Ken Yang
(Manager) (Ken Yang)



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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	----

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)

Decision Rule

- Uncertainty is not included.
- Uncertainty is included.



1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	150 kHz ~ 30 MHz	2.68
Radiated Emission	9 kHz ~ 30 MHz	2.14
	30 MHz ~ 1000 MHz	4.99
	1000 MHz ~ 18000 MHz	4.99
	18000 MHz ~ 26500 MHz	4.23
	26500 MHz ~ 40000 MHz	4.39
Conducted Output Power	0.92 dB	
RF Bandwidth	4.79 %	
Power Spectral Density	0.92 dB	



2 EUT Description

Applicant	InnoComm Mobile Technology Corporation 3F, No. 6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu, Taiwan, R.O.C.			
Manufacturer	InnoComm Mobile Technology Corporation 3F, No. 6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu, Taiwan, R.O.C.			
Product Type	Wireless Audio Module			
Trade Name	InnoComm			
Model Number	WB15			
FCC ID	YAIWB15			
Difference description of Hardware Version	Mozart_R004 version difference than Mozart_R003 is fine-tunes the DDR trace spacing according to the vendor's recommendations to improve its performance. The appearance and all components are same. After evaluation, the verification of Mozart_R003 and Mozart_R004, The result is the worst case of Mozart_R003, Therefore, only the complete test data of Mozart_R003 is displayed.			
Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate 400 GI (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	20 MHz	Up to 144.4 Mbps
Antenna information	ANT	Model Number	Type	Max. Gain (dBi)
	ANT-0 / ANT-1	N12-5776-R0A	PCB Antenna	2.91
		N12-5777-R0A	PCB Antenna	2.22
		WA-F-LB-03-110	FPCB Antenna	5.42
		WA-F-LB-02-187	FPCB Antenna	5.28
		N12-7231-R0A	PCB Antenna	1.81
Note : Antenna (Model Number: N12-5777-R0A) is the worst case.				
Antenna Delivery	See section 3.1			
Operate Temp. Range	0 ~ +55 °C			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.234
IEEE 802.11g	0.495
IEEE 802.11n 2.4 GHz 20 MHz	0.471

3 Test Methodology

3.1. Mode of Operation

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:

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 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: ANT-1 is the worst case in Mode 2.

Test Mode	ANT-0	ANT-1	ANT-0+1
Mode 2	V	V	---
Mode 3	V	V	V
Mode 4	V	V	V

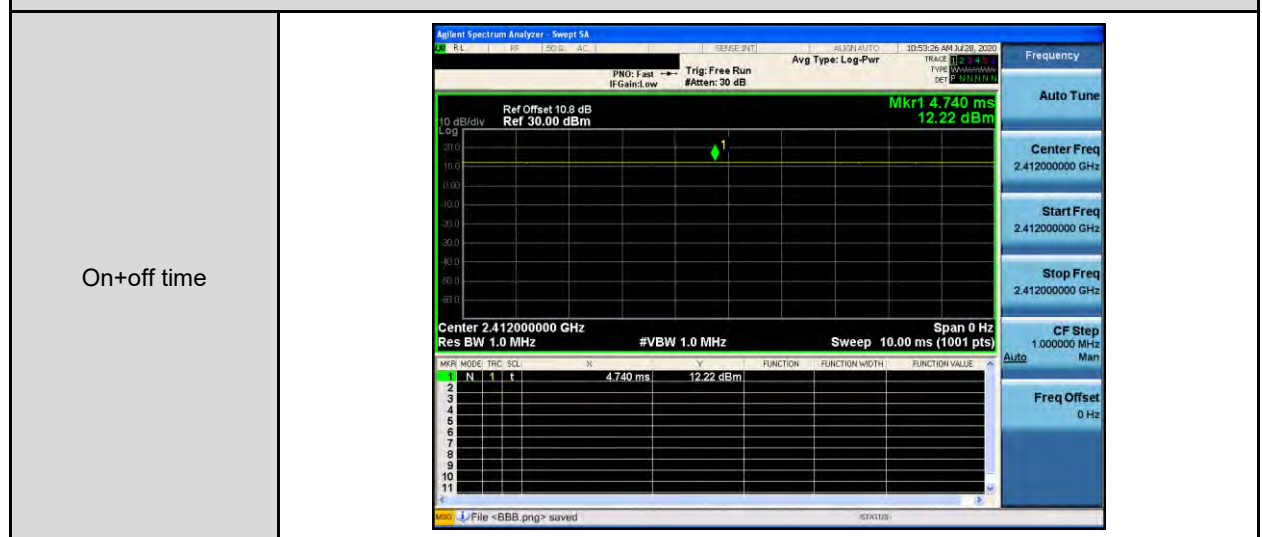
Test Mode	Antenna Delivery	Data Rate (Mbps)	Test Channel
Mode 2	1TX (Diversity)	1	1, 6, 11
Mode 3	2TX (CDD)	54	1, 6, 11
Mode 4	2TX (MIMO)	144.4	1, 6, 11

Duty cycle

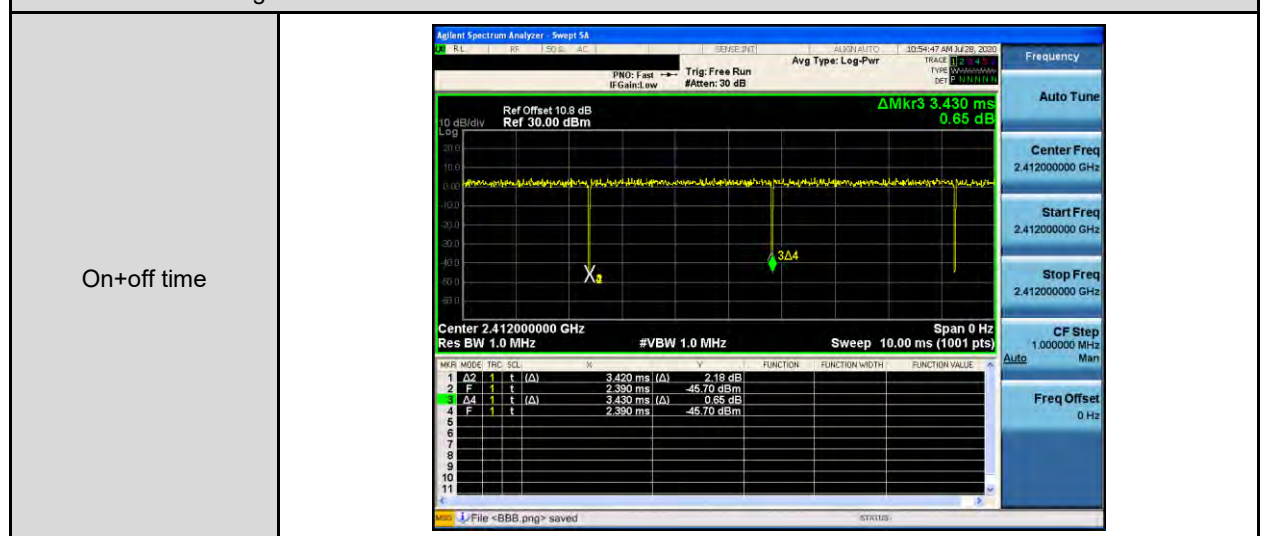
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	2412.0	1.000	1.000	1.000	0.000	0.010
Mode 3	2412.0	3.420	3.430	0.997	0.013	0.010
Mode 4	2412.0	1.614	1.632	0.989	0.048	0.010

Duty Cycle Graphs

Mode 2: IEEE 802.11b Continuous TX mode

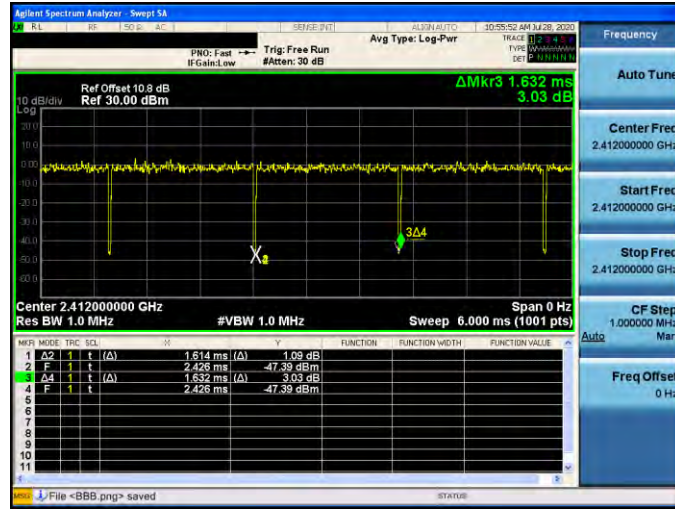


Mode 3: IEEE 802.11g Continuous TX mode



Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode

On+off time



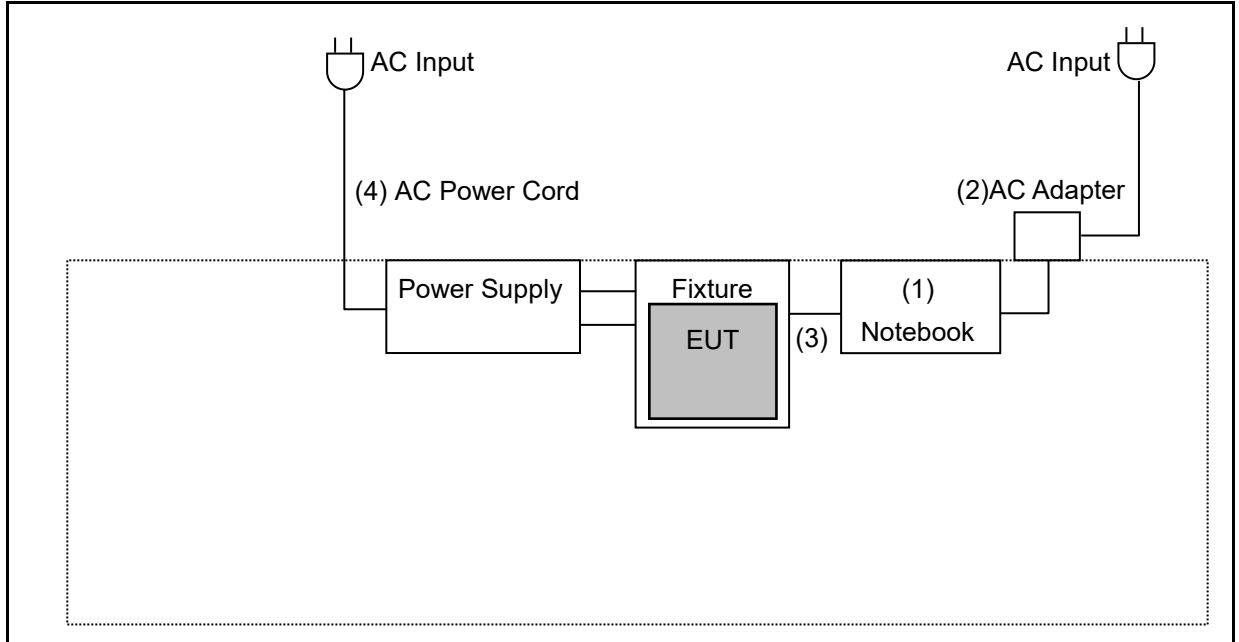
3.2. EUT Test Step

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.

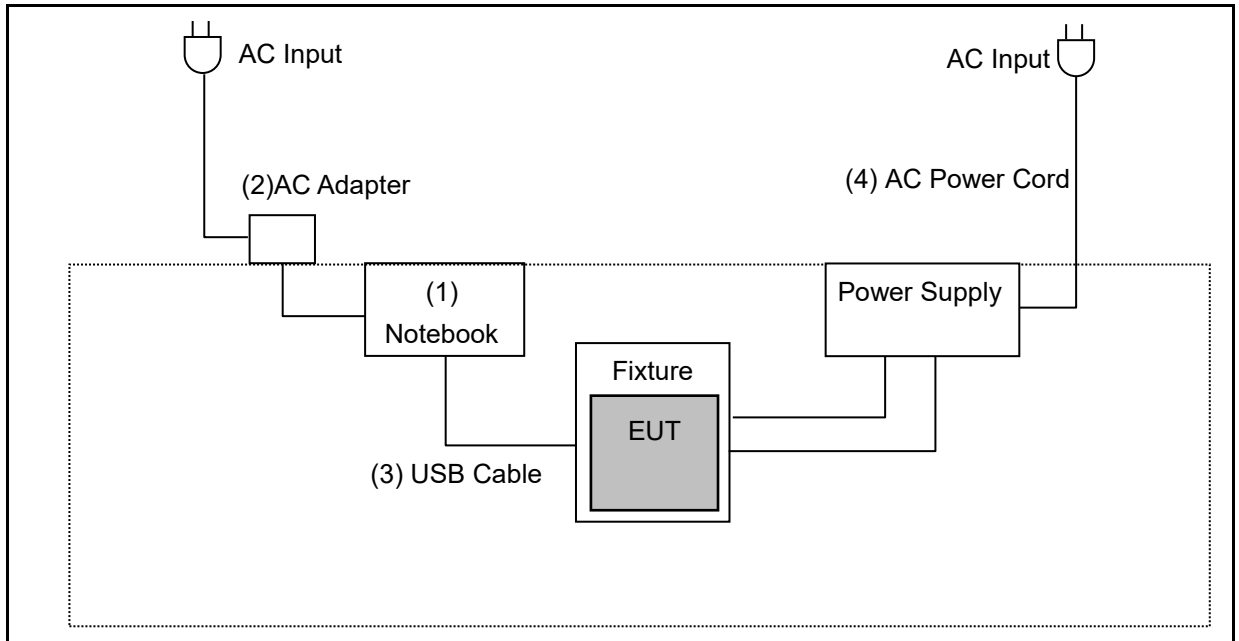
Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

3.3. Configuration of Test System Details

Conducted Emission



Radiated Emissions





Devices Description					
Product	Manufacturer	Model Number	Serial Number	Remark	
(1)	Notebook	DELL	LATITUDE E6440	48GBD72	---
(2)	AC Adapter	DELL	HA65NM130	---	INPUT : 100-240 VAC, 50Hz / 60 Hz, 1.7 A OUTPUT : 19.5 VDC, 3.34 A
(3)	USB Cable	LG	EAD62377902	---	STD-A →Micro-B Shielded, 0.8 m
(4)	AC Power Core	I-SHENG	---	---	14 AWG, 15 A 3 P 125 V Non-Shielded, 1.6 m



3.4. Test Instruments

For Conducted Emission

Test Period: Jul. 28 ~ Sep. 09, 2020

Testing Engineer: Louis Shen, Andy Lu

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESCI	100367	05/25/2020	1 year
LISN	R&S	ENV216	101040	03/23/2020	1 year
LISN	R&S	ENV216	101041	04/06/2020	1 year
RF Cable	Woken	00100D1380194M	TE-02-03	05/26/2020	1 year
Power Supply	KEITHLEY	2303	4045290	02/11/2020	-----

For Radiated Emissions

Test Period: Jul. 21 ~ Sep. 10, 2020

Testing Engineer: Marc Yeh, JS Liao

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/13/2020	1 year
Pre Amplifier (1~26.5 GHz)	EMCI	EMC012645SE	980289	01/15/2020	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/15/2020	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/23/2019	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/22/2019 08/17/2020	1 year
Horn Antenna (18~40 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	08/14/2019 08/18/2020	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	03/27/2020	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2020	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1 3000	170814	10/29/2019	1 year
Microwave Cable	EMCI	EMC102-KM-KM-1 4000	151001	02/20/2020	1 year
Power Supply	KEITHLEY	2303	4045290	02/17/2020	1 year

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



For Conducted

Test Period: Jul. 27 ~ Sep. 08, 2020

Testing Engineer: Peter Shui, Louis Shen

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	09/02/2019 09/01/2020	1 year
Power Meter	Anritsu	ML2495A	1135009	09/02/2019 09/01/2020	1 year
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/18/2019	1 year
Power Supply	KEITHLEY	2303	4045290	02/11/2020	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

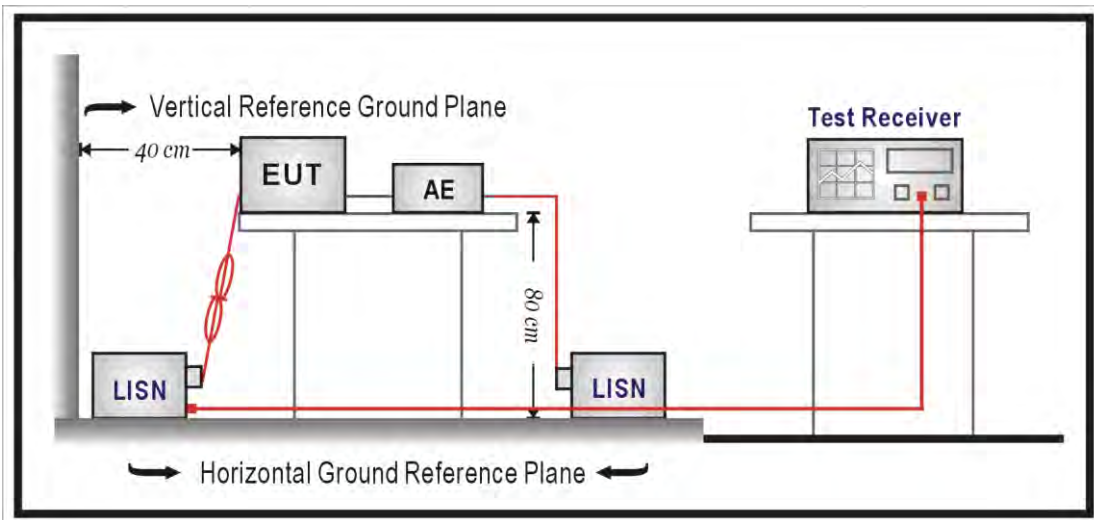
4 Measurement Procedure

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

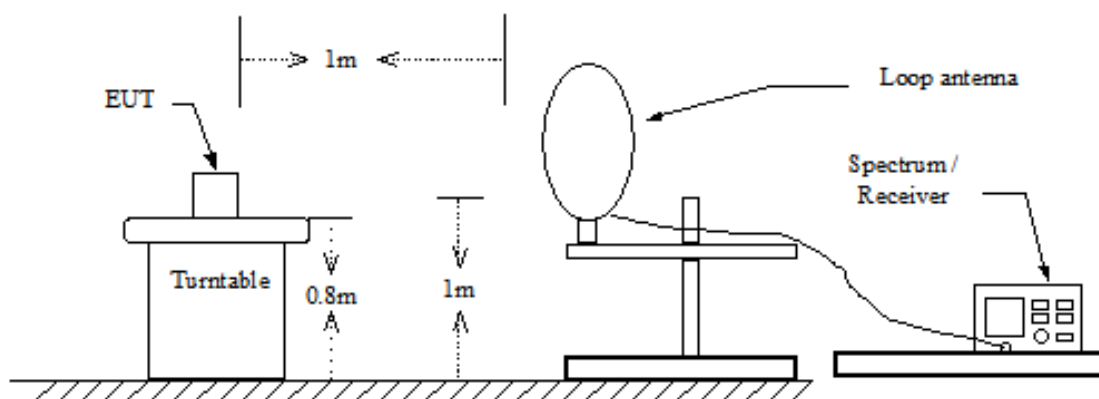
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

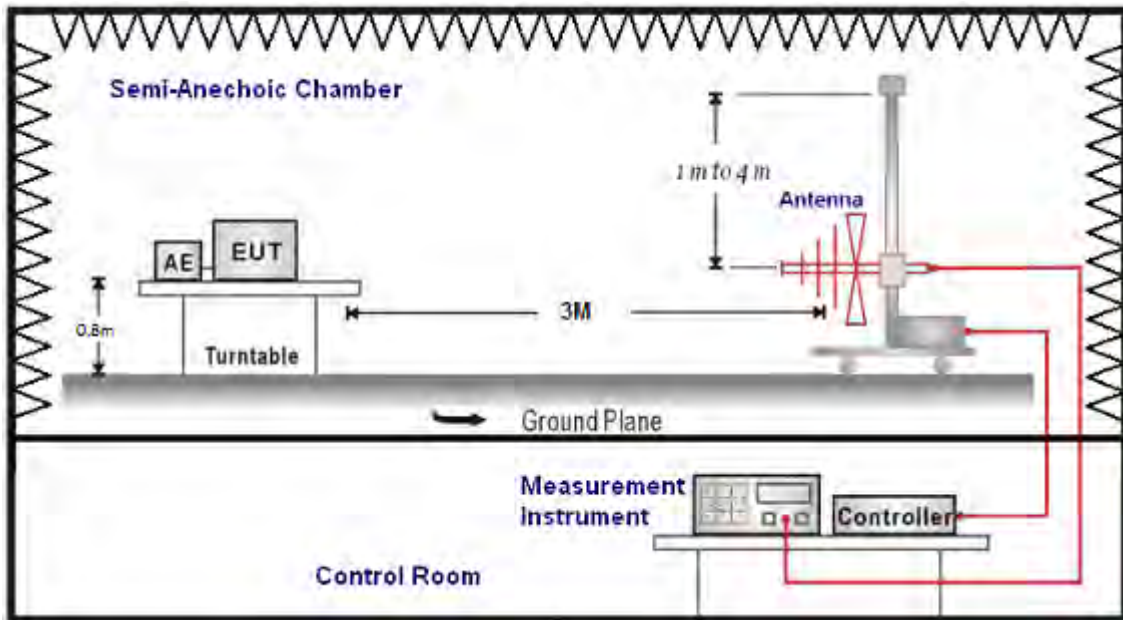
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this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

■ Setup

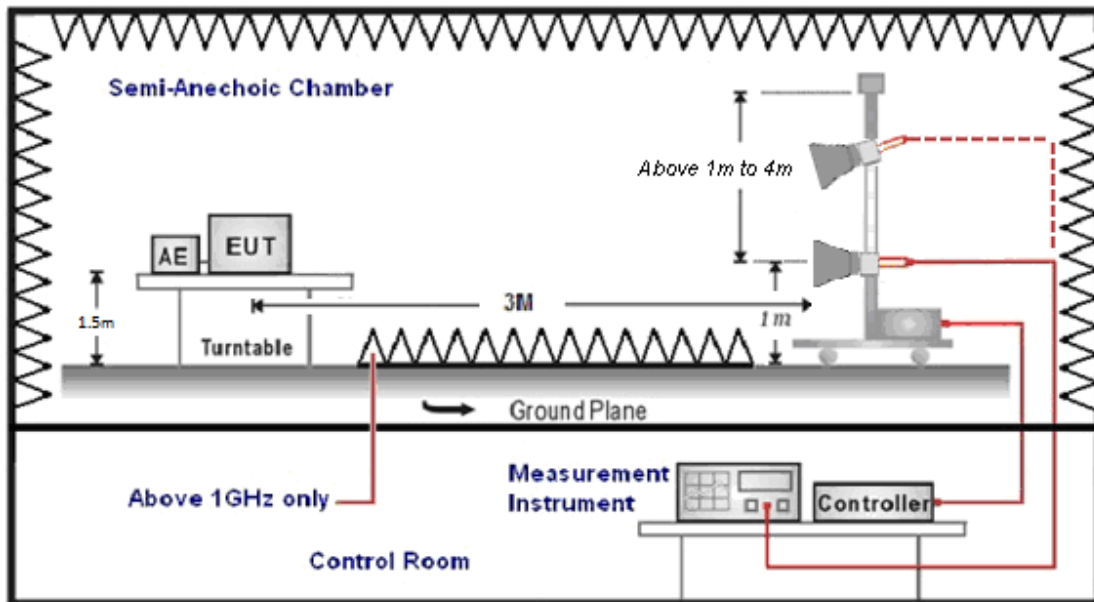
9 kHz ~ 30 MHz



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 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.

Diversity mode:

Directional = Max. Gain : 5.42 dBi < 6 dBi

CDD mode:

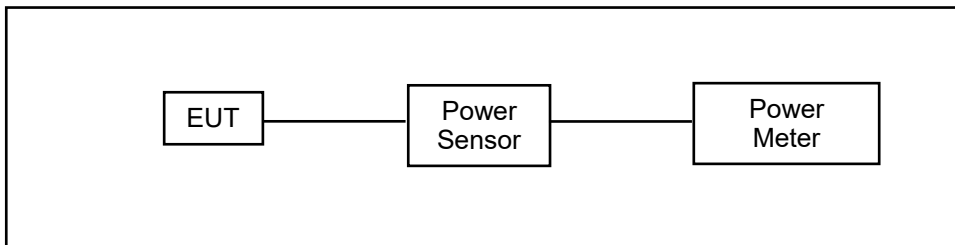
Directional = $G_{ANT} = 10 \cdot \log\{[10^{(G1/10)} + 10^{(G2/10)} + \dots + 10^{(Gn/10)}] / N_{ANT}\} = 5.42 \text{ dBi} < 6 \text{ dBi}$

MIMO mode:

Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / N_{ANT}\} = 8.43 \text{ dBi} > 6 \text{ dBi}$

* power limit shall be reduced = $30 - 2.43 = 27.57 \text{ dBm}$

■ **Test Setup**



■ **Test Procedure**

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

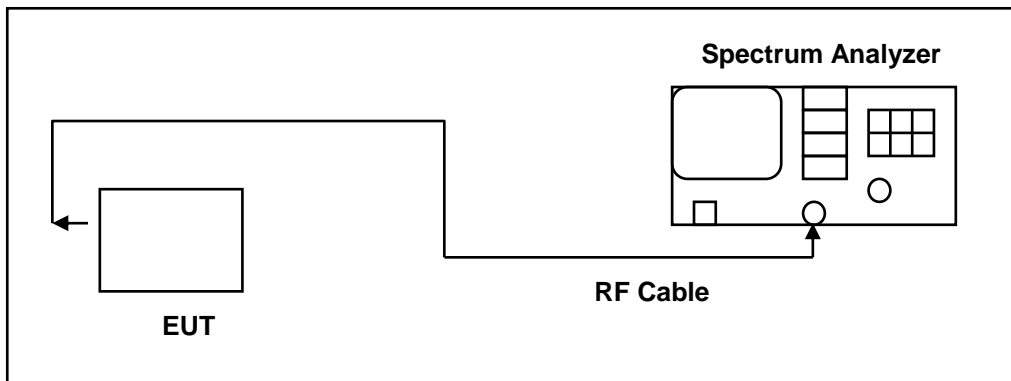
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor.

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.

Diversity mode:

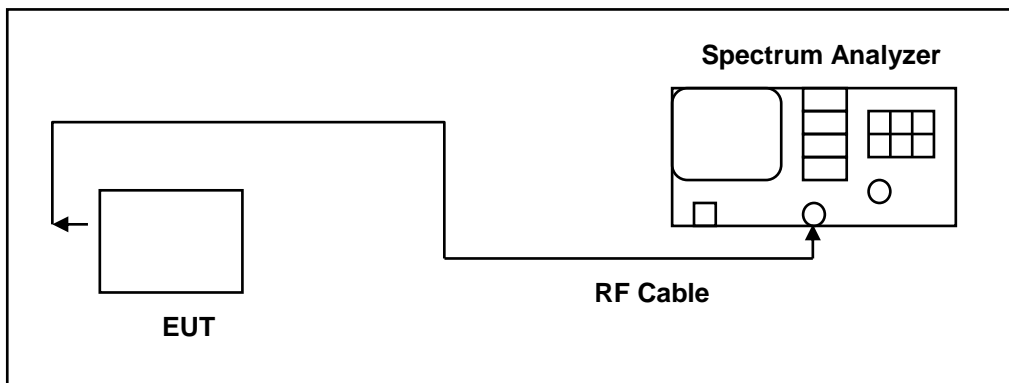
Directional = Max. Gain : 5.42 dBi < 6dBi

CDD/MIMO mode:

Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$ = 8.43 dBi > 6dBi

* power spectral density limit shall be reduced = $8 - 2.43 = 5.57$ dBm/3 kHz

■ 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.

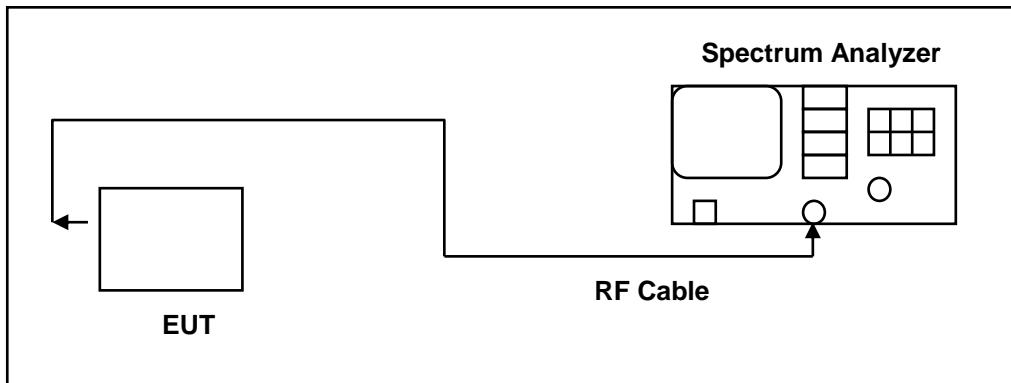
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
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

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b	5.42
IEEE 802.11g	5.42
IEEE 802.11n 2.4 GHz 20 MHz	8.43

OR

For Maximum Conducted Output Power

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b	5.42
IEEE 802.11g	5.42
IEEE 802.11n 2.4 GHz 20 MHz	8.43

For Maximum Power Density

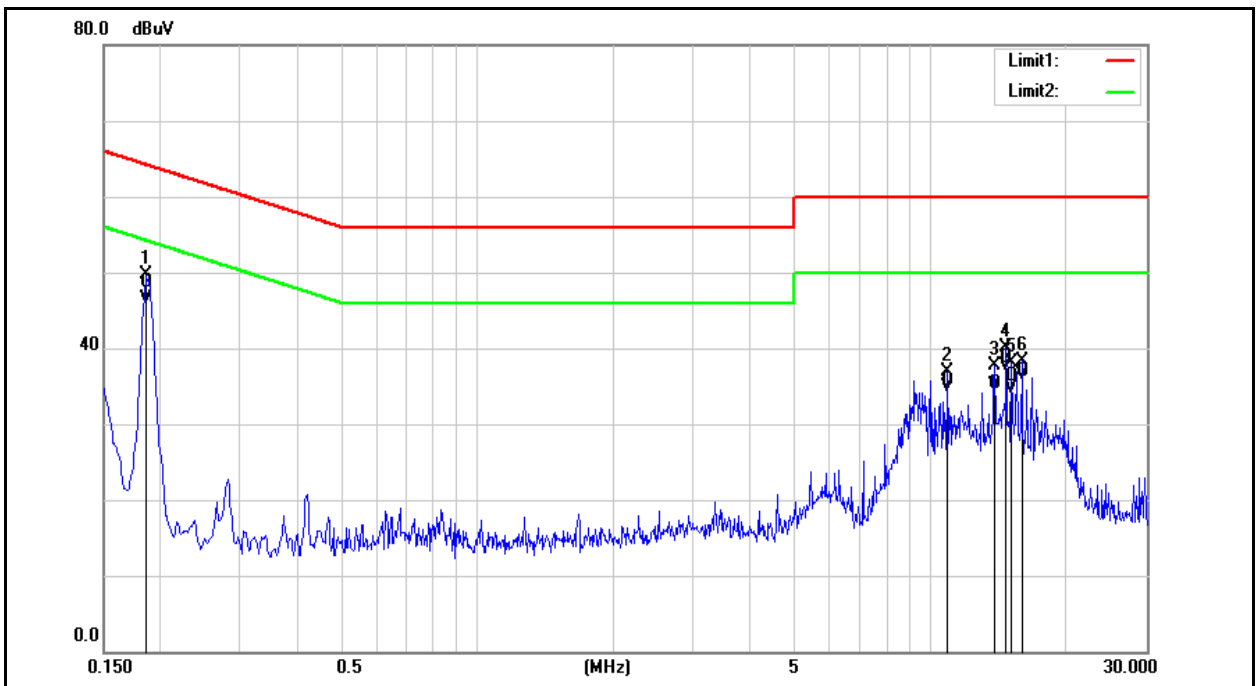
Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b	5.42
IEEE 802.11g	8.43
IEEE 802.11n 2.4 GHz 20 MHz	8.43

5 Test Results

Annex A. Conducted Emission

R003

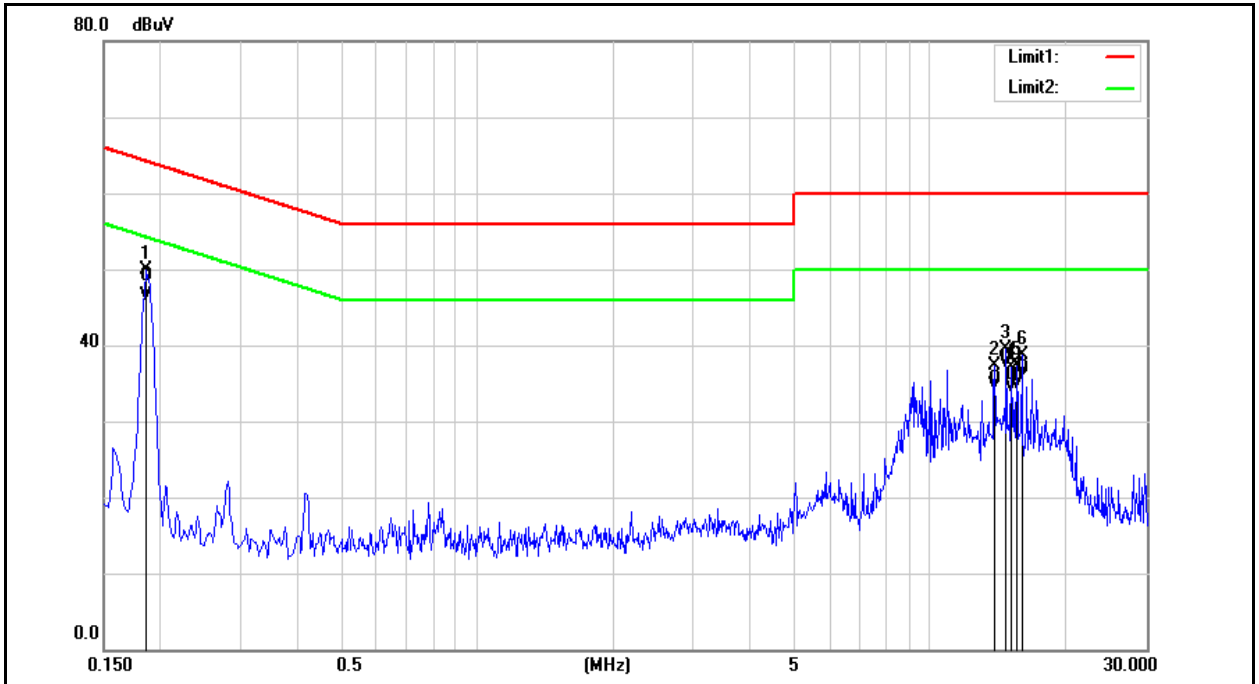
Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Mode:	Mode 1		
Description:			



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	0.1860	39.07	36.77	9.70	48.77	46.47	64.21	54.21	-15.44	-7.74	Pass
2	10.9060	25.86	24.92	9.89	35.75	34.81	60.00	50.00	-24.25	-15.19	Pass
3	13.8420	25.36	25.12	9.95	35.31	35.07	60.00	50.00	-24.69	-14.93	Pass
4	14.6820	28.64	27.76	9.97	38.61	37.73	60.00	50.00	-21.39	-12.27	Pass
5	15.0980	26.33	24.63	9.98	36.31	34.61	60.00	50.00	-23.69	-15.39	Pass
6	15.9380	27.00	26.45	9.99	36.99	36.44	60.00	50.00	-23.01	-13.56	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:			

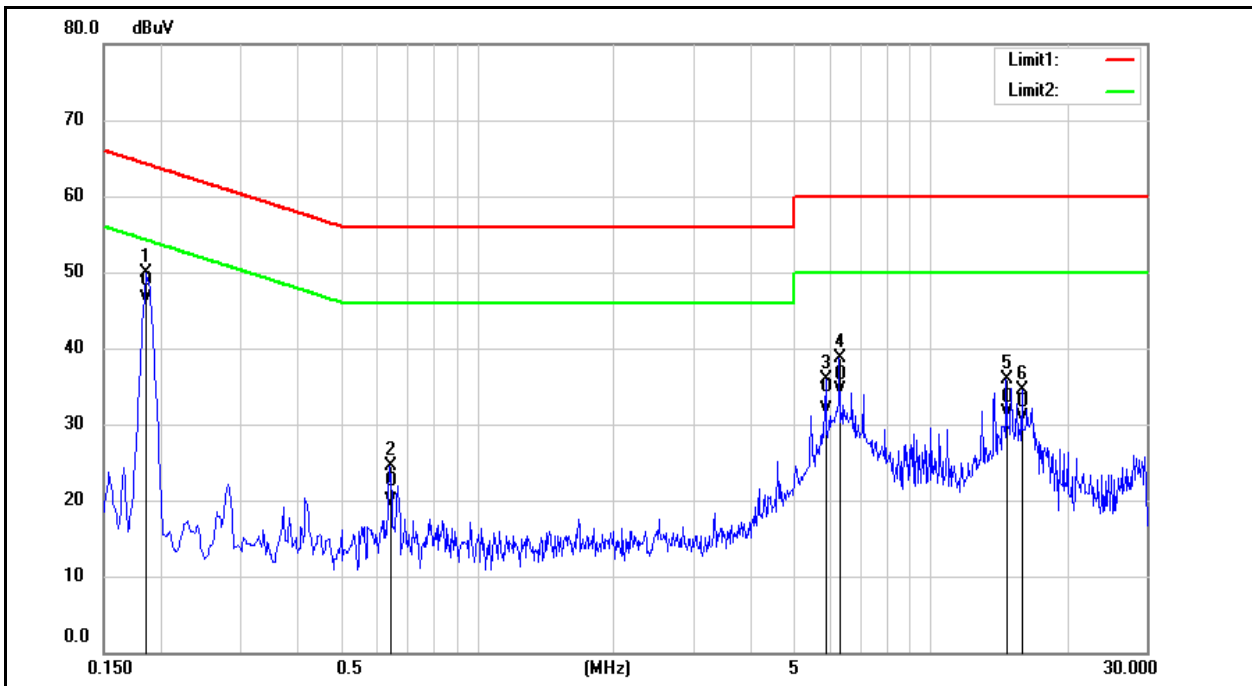


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1860	39.33	36.83	9.69	49.02	46.52	64.21	54.21	-15.19	-7.69	Pass
2	13.8420	25.57	24.79	9.96	35.53	34.75	60.00	50.00	-24.47	-15.25	Pass
3	14.6820	28.54	27.67	9.98	38.52	37.65	60.00	50.00	-21.48	-12.35	Pass
4	15.0980	26.12	24.55	9.99	36.11	34.54	60.00	50.00	-23.89	-15.46	Pass
5	15.5180	25.83	24.96	9.99	35.82	34.95	60.00	50.00	-24.18	-15.05	Pass
6	15.9380	26.93	26.38	10.00	36.93	36.38	60.00	50.00	-23.07	-13.62	Pass

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

R004

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

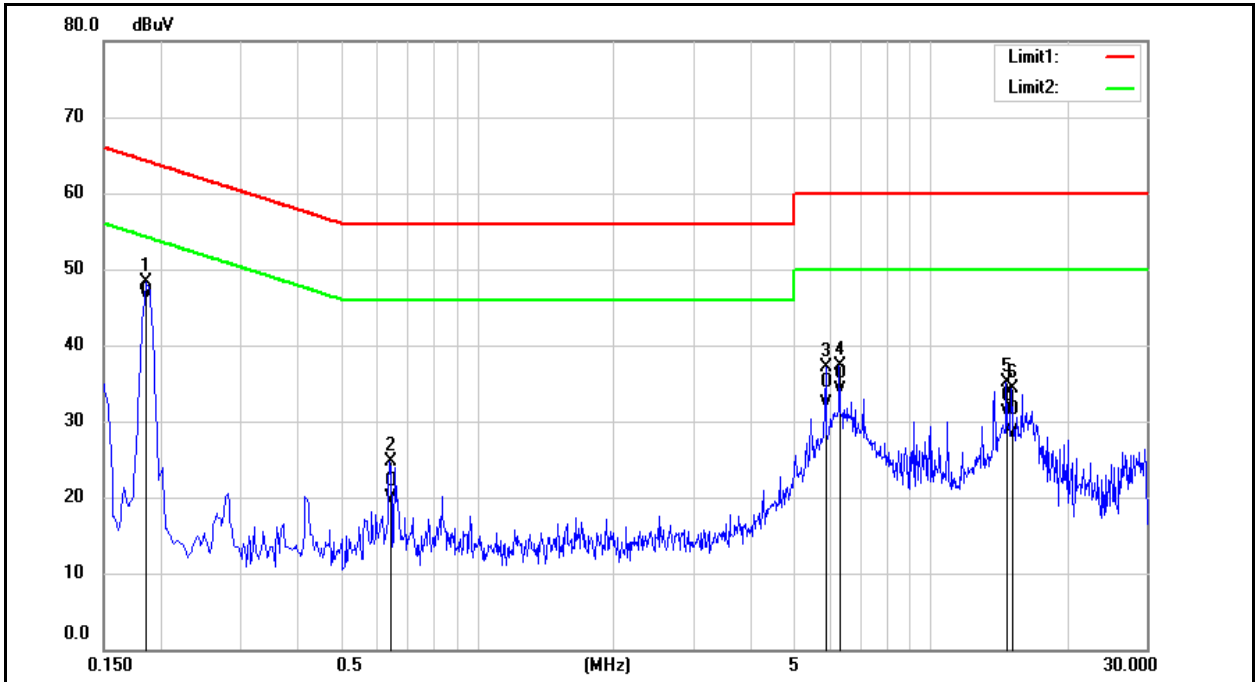


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1860	39.13	36.77	9.70	48.83	46.47	64.21	54.21	-15.38	-7.74	Pass
2	0.6420	12.89	10.18	9.71	22.60	19.89	56.00	46.00	-33.40	-26.11	Pass
3	5.8740	25.04	22.03	9.83	34.87	31.86	60.00	50.00	-25.13	-18.14	Pass
4	6.2900	26.72	24.61	9.83	36.55	34.44	60.00	50.00	-23.45	-15.56	Pass
5	14.6820	23.48	21.49	9.97	33.45	31.46	60.00	50.00	-26.55	-18.54	Pass
6	15.9380	22.83	20.85	9.99	32.82	30.84	60.00	50.00	-27.18	-19.16	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	0.1860	37.45	36.83	9.69	47.14	46.52	64.21	54.21	-17.07	-7.69	Pass
2	0.6420	12.45	10.18	9.70	22.15	19.88	56.00	46.00	-33.85	-26.12	Pass
3	5.8740	25.31	22.50	9.83	35.14	32.33	60.00	50.00	-24.86	-17.67	Pass
4	6.2900	26.42	24.33	9.83	36.25	34.16	60.00	50.00	-23.75	-15.84	Pass
5	14.6820	23.32	21.20	9.98	33.30	31.18	60.00	50.00	-26.70	-18.82	Pass
6	15.1020	21.48	18.55	9.99	31.47	28.54	60.00	50.00	-28.53	-21.46	Pass

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

Annex B. Conducted Test Results

Maximum Conducted Output Power Measurement

ANT-0							
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		Peak Output Power		
			Measurement Results		Measurement Results		Limit
			dBm	W	dBm	W	dBm
Mode 2	2412	1 M	16.51	0.045	19.62	0.092	≤ 30
	2437		18.61	0.073	21.71	0.148	≤ 30
	2462		17.30	0.054	20.43	0.110	≤ 30
Mode 3	2412	6 M	10.47	0.011	20.84	0.121	≤ 30
	2437		16.32	0.043	23.72	0.236	≤ 30
	2462		10.31	0.011	20.52	0.113	≤ 30
Mode 4	2412	13 M	7.92	0.006	17.92	0.062	≤ 27.57
	2437		16.24	0.042	23.57	0.228	≤ 27.57
	2462		9.25	0.008	18.92	0.078	≤ 27.57

ANT-1							
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		Peak Output Power		
			Measurement Results		Measurement Results		Limit
			dBm	W	dBm	W	dBm
Mode 2	2412	1 M	17.63	0.058	20.69	0.117	≤ 30
	2437		21.19	0.132	23.70	0.234	≤ 30
	2462		18.99	0.079	21.93	0.156	≤ 30
Mode 3	2412	6 M	10.39	0.011	20.52	0.113	≤ 30
	2437		17.29	0.054	24.14	0.259	≤ 30
	2462		10.74	0.012	20.81	0.121	≤ 30
Mode 4	2412	13 M	7.52	0.006	16.88	0.049	≤ 27.57
	2437		17.06	0.051	23.86	0.243	≤ 27.57
	2462		9.01	0.008	18.72	0.074	≤ 27.57

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



ANT-0+1							
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		Peak Output Power		
			Measurement Results		Measurement Results		Limit
			dBm	W	dBm	W	dBm
Mode 3	2412	6 M	13.44	0.022	23.69	0.234	≤ 30
	2437		19.84	0.096	26.95	0.495	≤ 30
	2462		13.54	0.023	23.68	0.233	≤ 30
Mode 4	2412	13 M	10.73	0.012	20.44	0.111	≤ 27.57
	2437		19.68	0.093	26.73	0.471	≤ 27.57
	2462		12.14	0.016	21.83	0.152	≤ 27.57

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



6 dB RF Bandwidth Measurement

ANT-0			
Test Mode	Frequency (MHz)	Measurement (kHz)	Limit (kHz)
Mode 3	2412	16400	≥ 500
	2437	16400	≥ 500
	2462	16430	≥ 500
Mode 4	2412	17620	≥ 500
	2437	17630	≥ 500
	2462	17640	≥ 500

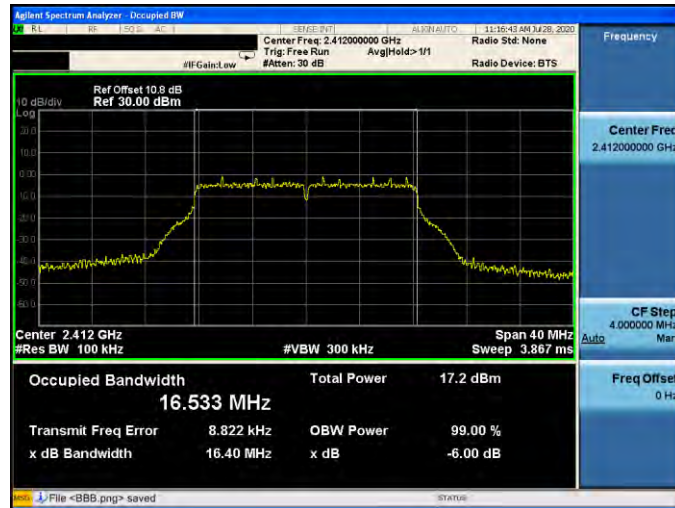
ANT-1			
Test Mode	Frequency (MHz)	Measurement (kHz)	Limit (kHz)
Mode 2	2412	7109	≥ 500
	2437	7608	≥ 500
	2462	7063	≥ 500
Mode 3	2412	16420	≥ 500
	2437	16400	≥ 500
	2462	16420	≥ 500
Mode 4	2412	17650	≥ 500
	2437	17660	≥ 500
	2462	17660	≥ 500



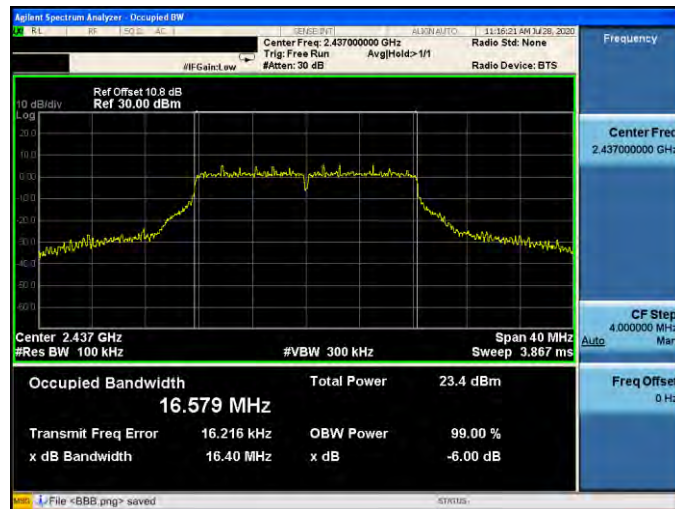
■ Test Graphs

Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

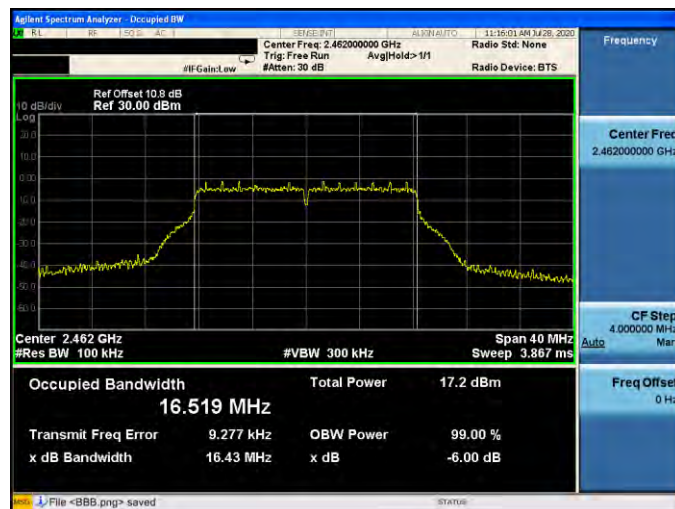
2412 MHz



2437 MHz



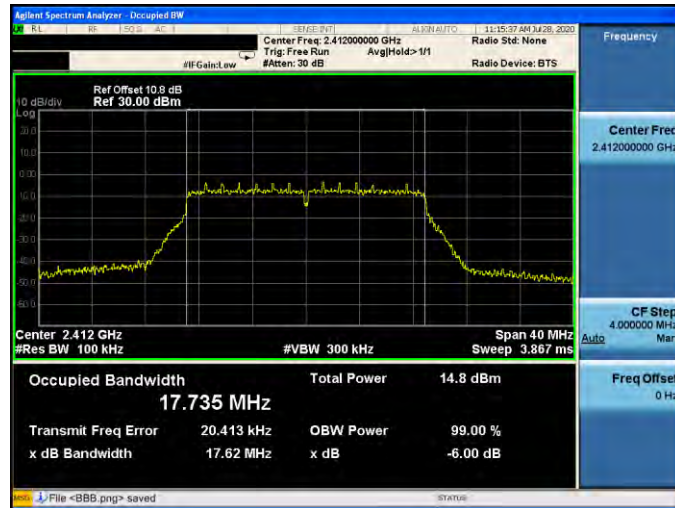
2462 MHz



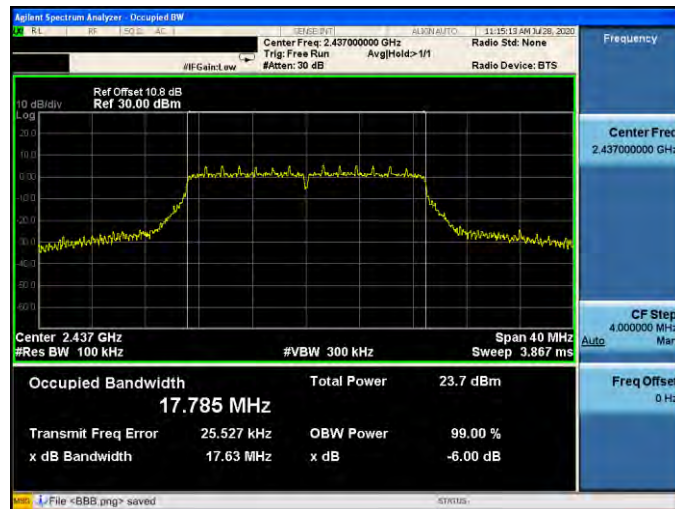


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-0

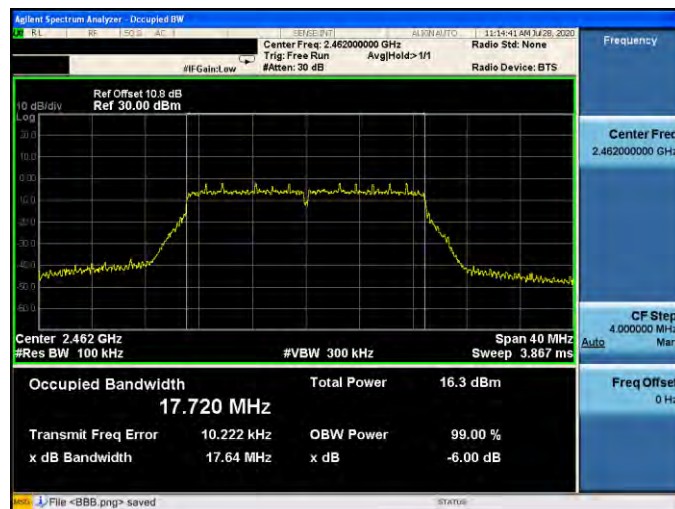
2412 MHz



2437 MHz



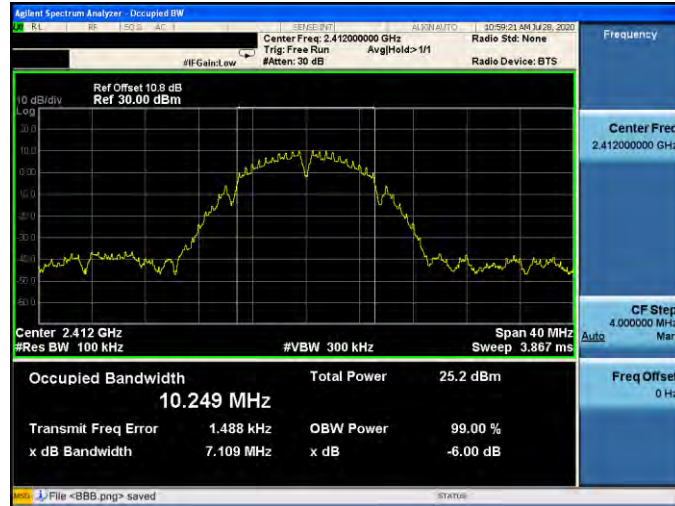
2462 MHz





Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

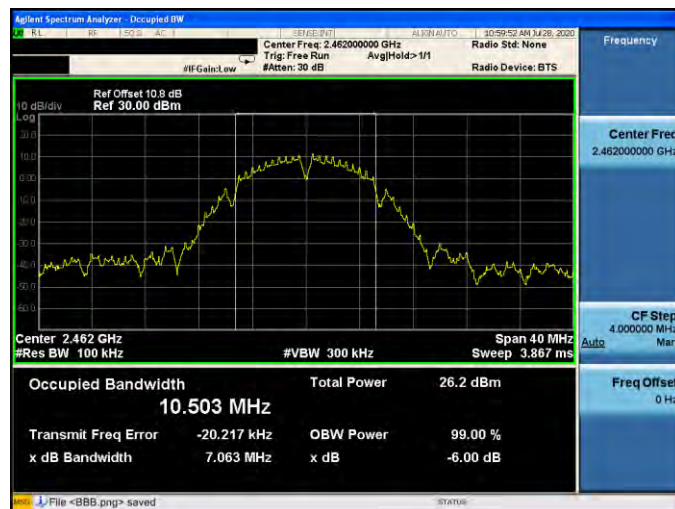
2412 MHz



2437 MHz



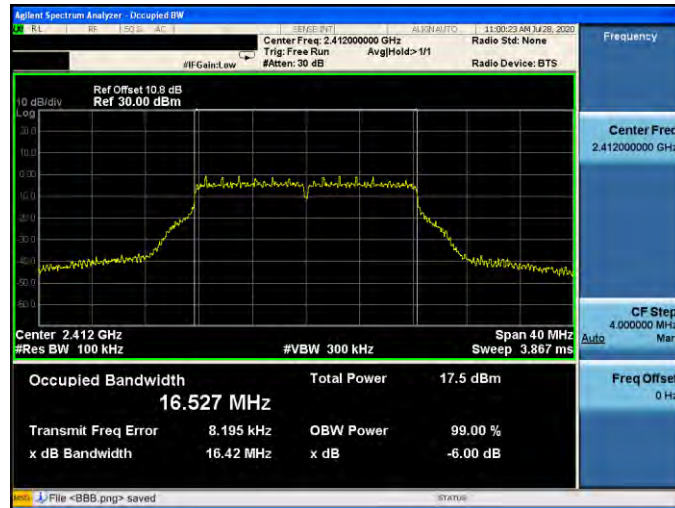
2462 MHz



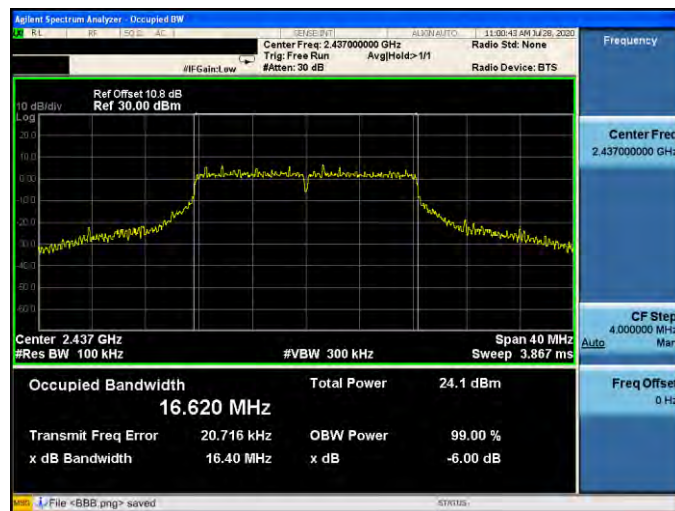


Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

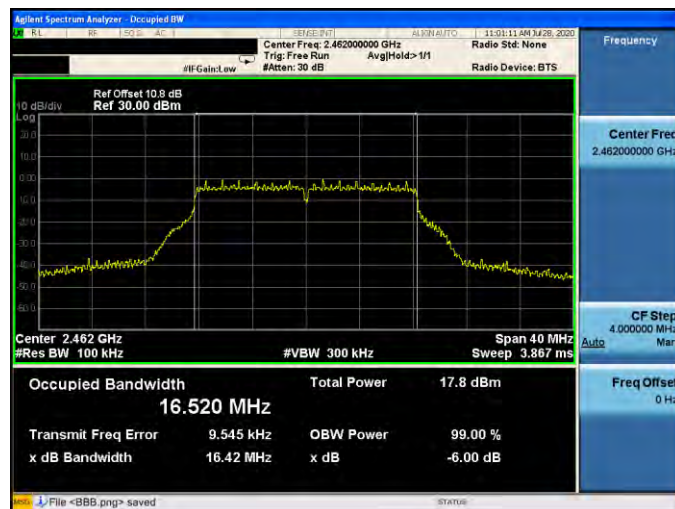
2412 MHz



2437 MHz



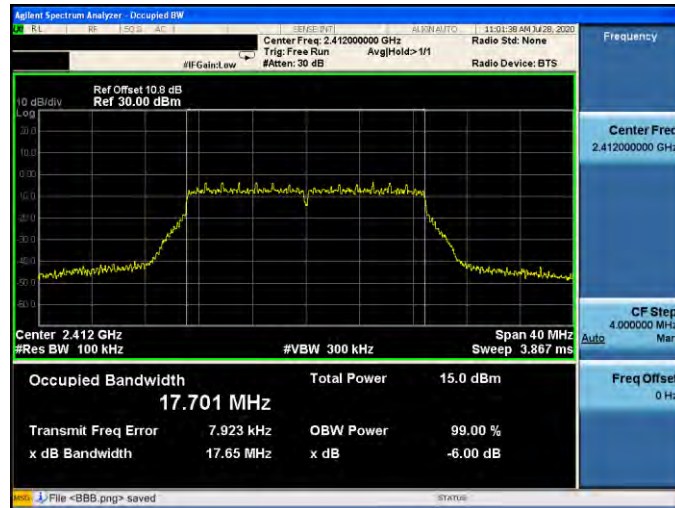
2462 MHz



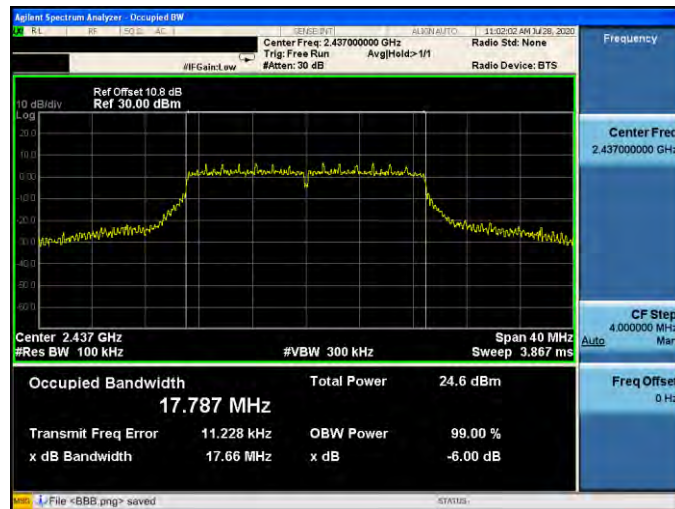


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-1

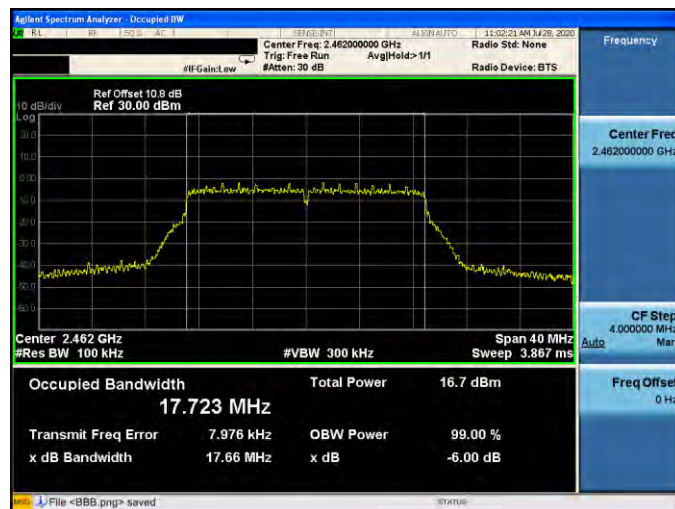
2412 MHz



2437 MHz



2462 MHz





Maximum Power Spectral Density Measurement

ANT-0			
Test Mode	Frequency (MHz)	Measurement (dBm/3 kHz)	Limit (dBm/ 3 kHz)
Mode 3	2412	-13.683	≤ 5.57
	2437	-9.303	≤ 5.57
	2462	-14.907	≤ 5.57
Mode 4	2412	-15.230	≤ 5.57
	2437	-9.138	≤ 5.57
	2462	-15.397	≤ 5.57

ANT-1			
Test Mode	Frequency (MHz)	Measurement (dBm/3 kHz)	Limit (dBm/ 3 kHz)
Mode 2	2412	-4.114	≤ 8
	2437	-1.170	≤ 8
	2462	-2.043	≤ 8
Mode 3	2412	-14.192	≤ 5.57
	2437	-7.275	≤ 5.57
	2462	-14.472	≤ 5.57
Mode 4	2412	-17.888	≤ 5.57
	2437	-8.499	≤ 5.57
	2462	-15.762	≤ 5.57

ANT-0+1			
Test Mode	Frequency (MHz)	Measurement (dBm/3 kHz)	Limit (dBm/ 3 kHz)
Mode 3	2412	-10.920	≤ 5.57
	2437	-5.161	≤ 5.57
	2462	-11.674	≤ 5.57
Mode 4	2412	-13.348	≤ 5.57
	2437	-5.796	≤ 5.57
	2462	-12.565	≤ 5.57

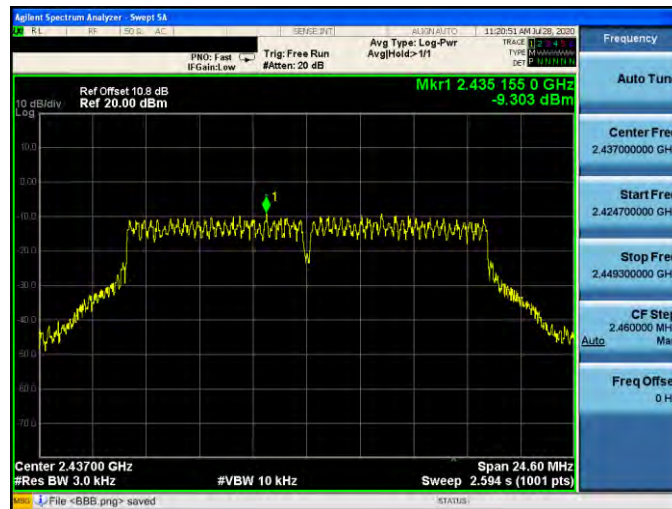


Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

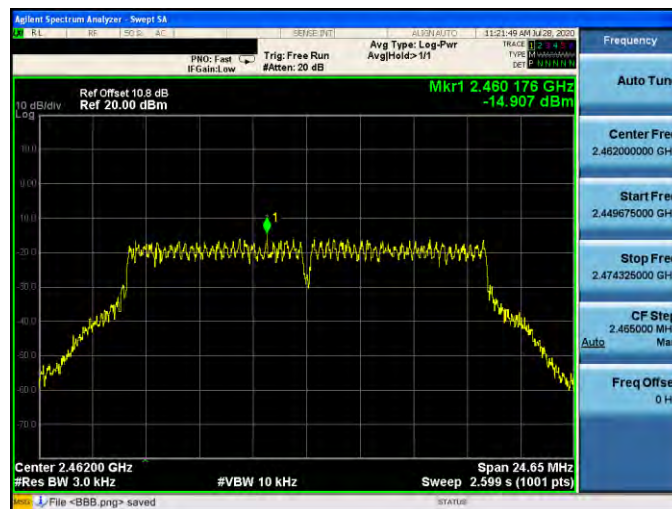
2412 MHz



2437 MHz



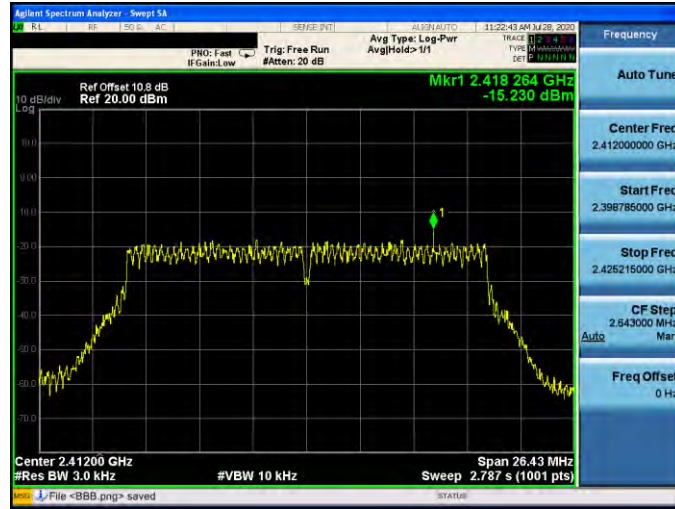
2462 MHz





Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-0

2412 MHz



2437 MHz



2462 MHz





Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

2412 MHz



2437 MHz



2462 MHz



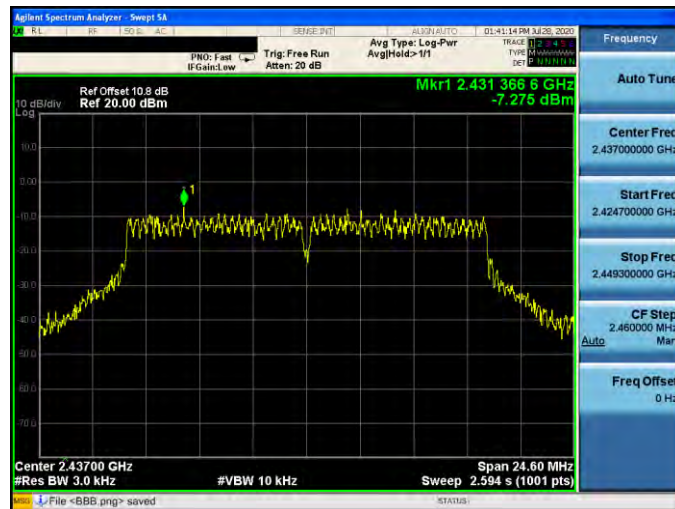


Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

2412 MHz



2437 MHz



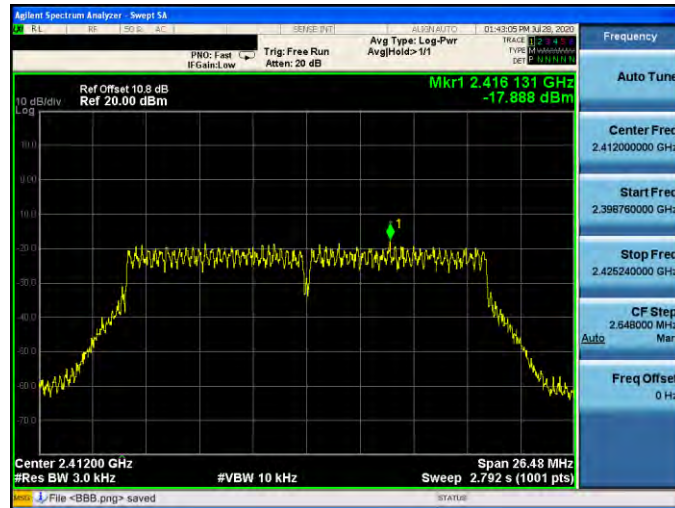
2462 MHz



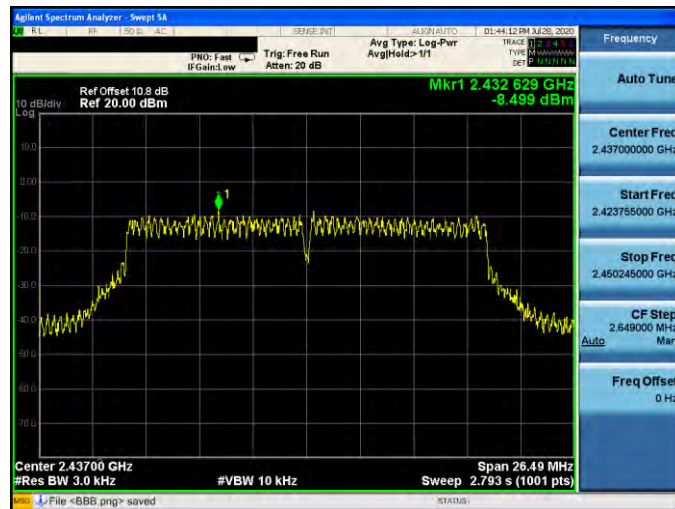


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-1

2412 MHz



2437 MHz



2462 MHz



Out of Band Conducted Emissions Measurement

■ Test Graphs

Reference level

Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

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



Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-0

2412 MHz



2437 MHz



2462 MHz





Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

2412 MHz



2437 MHz



2462 MHz





Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

2412 MHz



2437 MHz



2462 MHz





Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-1

2412 MHz



2437 MHz



2462 MHz





Out of Band Conducted Emissions

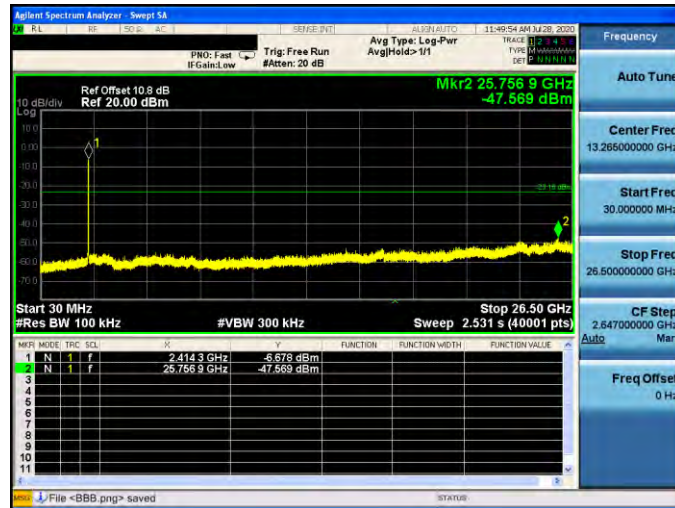
Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Sweep SA</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 25.698 0 GHz -48.036 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Stop 26.50 GHz Sweep 2.531 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR MODE</th> <th>TRC</th> <th>SQL</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 0 GHz</td> <td></td> <td></td> <td>-48.181 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>25.698 0 GHz</td> <td></td> <td></td> <td>-48.036 dBm</td> </tr> </tbody> </table>	MFR MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.412 0 GHz			-48.181 dBm	2	N	1	f	25.698 0 GHz			-48.036 dBm
MFR MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																		
1	N	1	f	2.412 0 GHz			-48.181 dBm																		
2	N	1	f	25.698 0 GHz			-48.036 dBm																		
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Sweep SA</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 25.578 8 GHz -48.813 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Stop 26.50 GHz Sweep 2.531 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR MODE</th> <th>TRC</th> <th>SQL</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 1 GHz</td> <td></td> <td></td> <td>-48.853 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>25.578 8 GHz</td> <td></td> <td></td> <td>-48.813 dBm</td> </tr> </tbody> </table>	MFR MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.437 1 GHz			-48.853 dBm	2	N	1	f	25.578 8 GHz			-48.813 dBm
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<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Sweep SA</p> <p>Ref Offset 10.8 dB Ref 20.00 dBm</p> <p>Mkr2 25.664 2 GHz -48.122 dBm</p> <p>Start 30 MHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Stop 26.50 GHz Sweep 2.531 s (40001 pts)</p> <table border="1"> <thead> <tr> <th>MFR MODE</th> <th>TRC</th> <th>SQL</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>2.461 3 GHz</td> <td></td> <td></td> <td>-48.300 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>25.664 2 GHz</td> <td></td> <td></td> <td>-48.122 dBm</td> </tr> </tbody> </table>	MFR MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.461 3 GHz			-48.300 dBm	2	N	1	f	25.664 2 GHz			-48.122 dBm
MFR MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																		
1	N	1	f	2.461 3 GHz			-48.300 dBm																		
2	N	1	f	25.664 2 GHz			-48.122 dBm																		

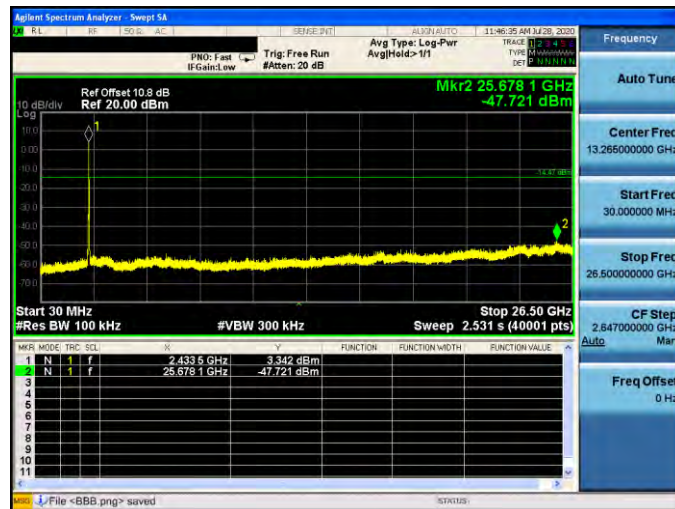


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-0

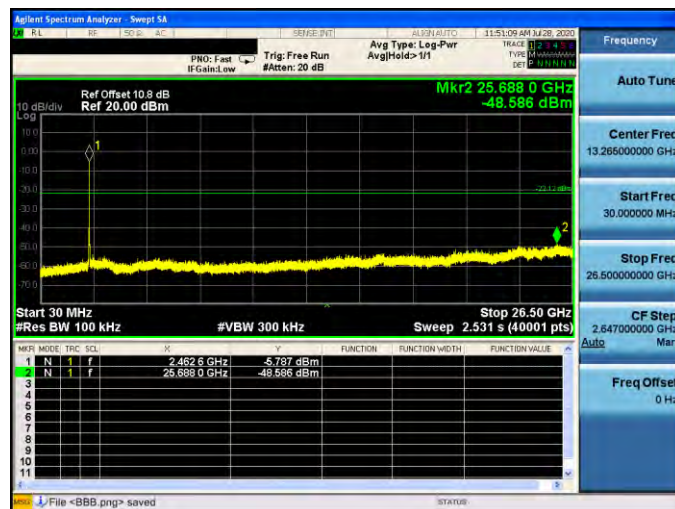
2412 MHz



2437 MHz



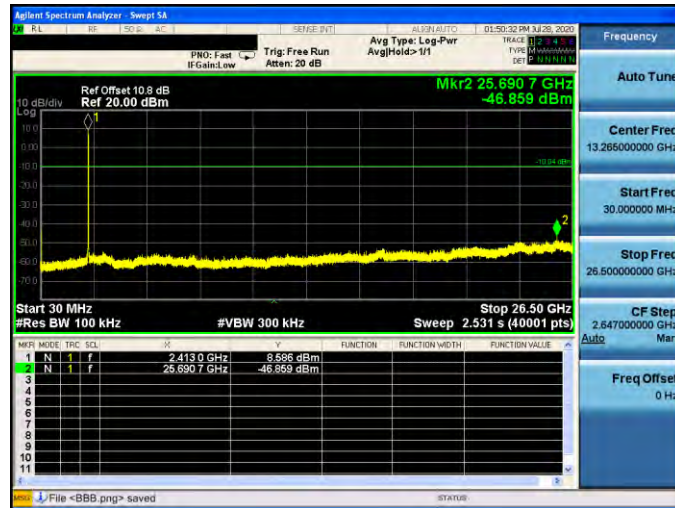
2462 MHz



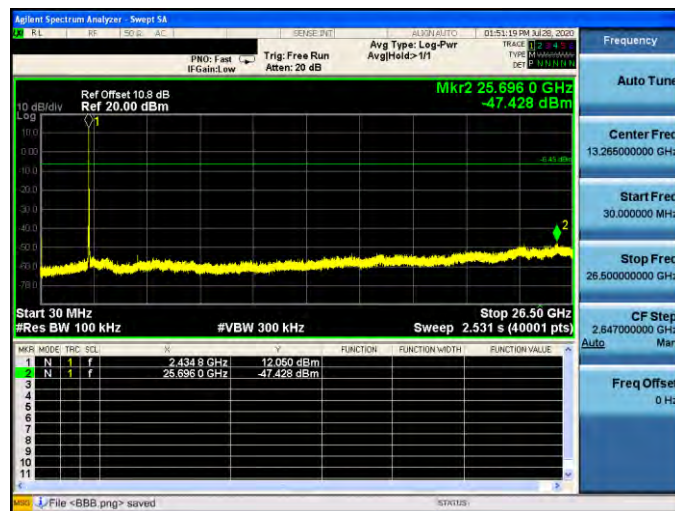


Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

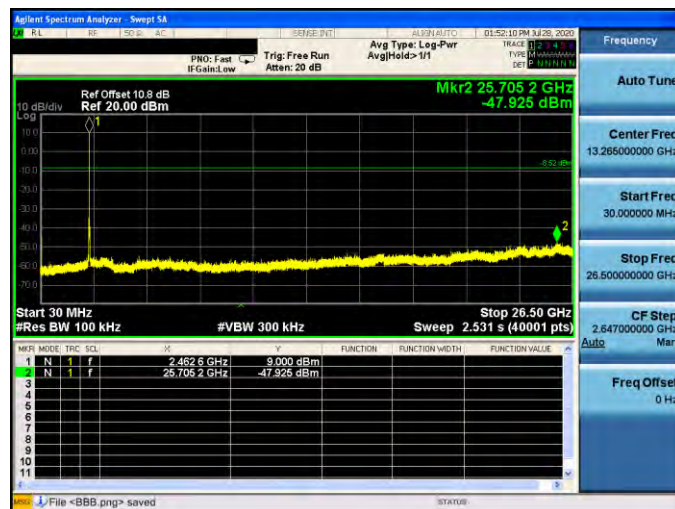
2412 MHz



2437 MHz



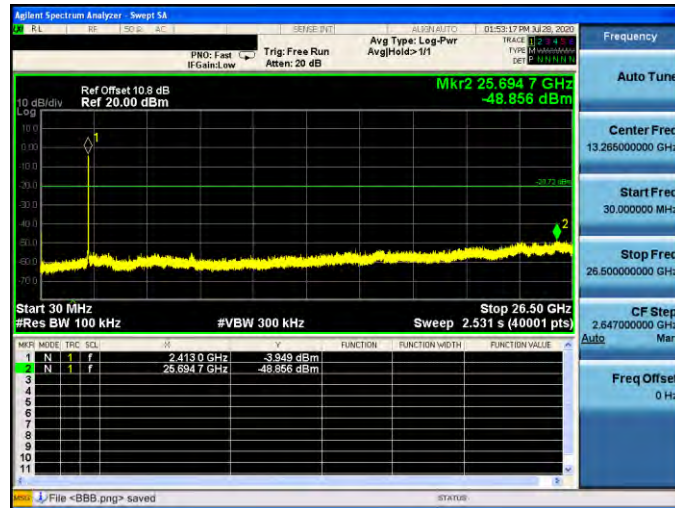
2462 MHz



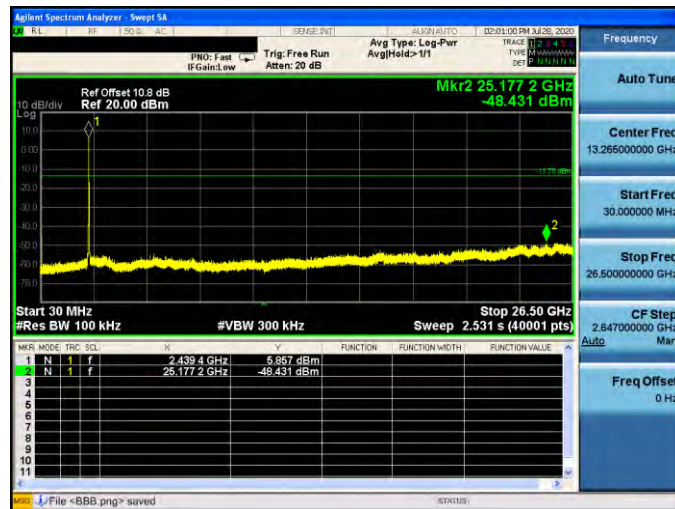


Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

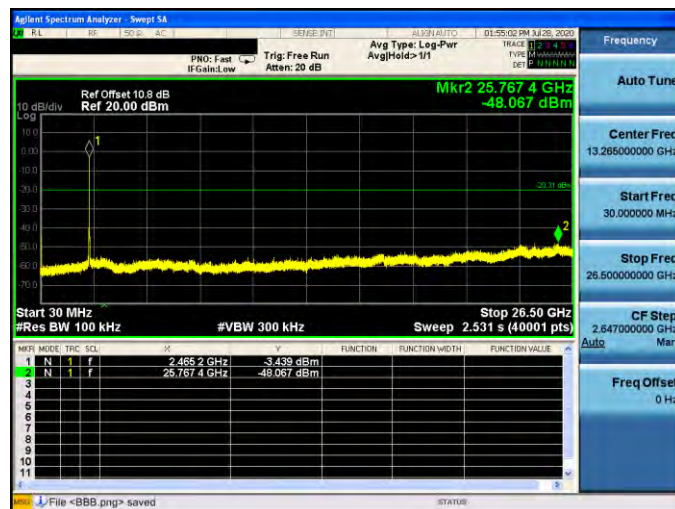
2412 MHz



2437 MHz



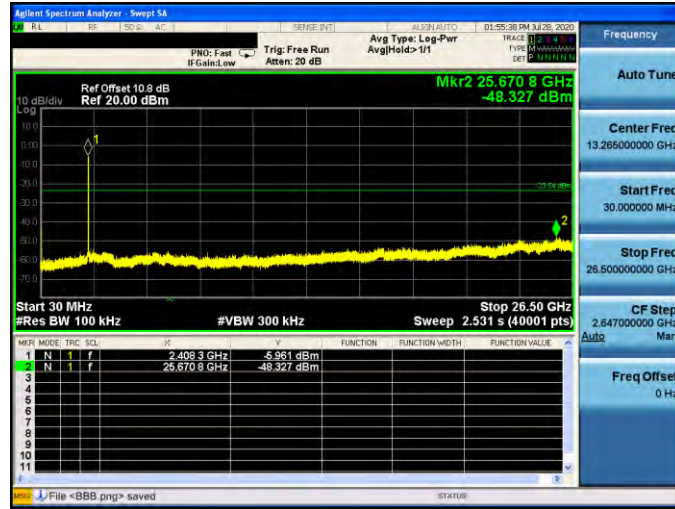
2462 MHz



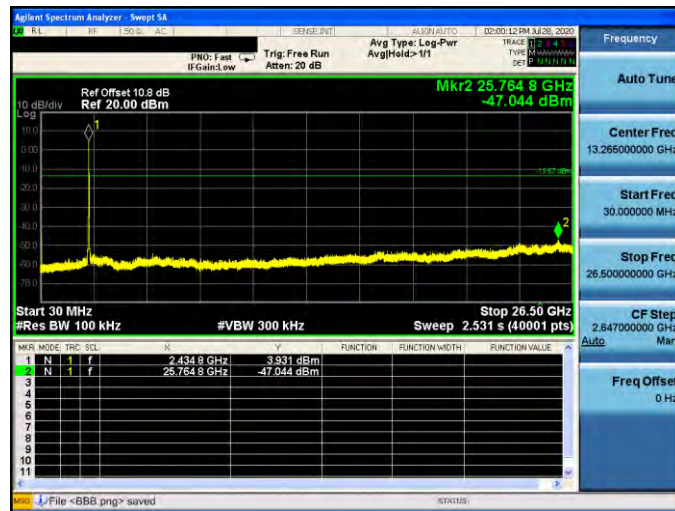


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-1

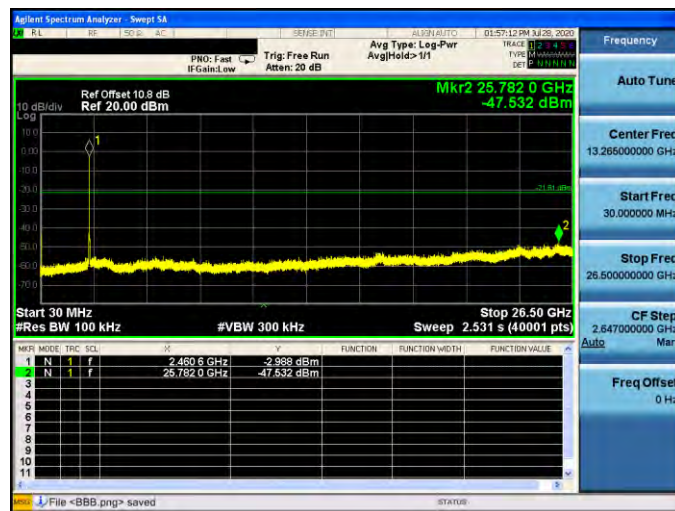
2412 MHz



2437 MHz



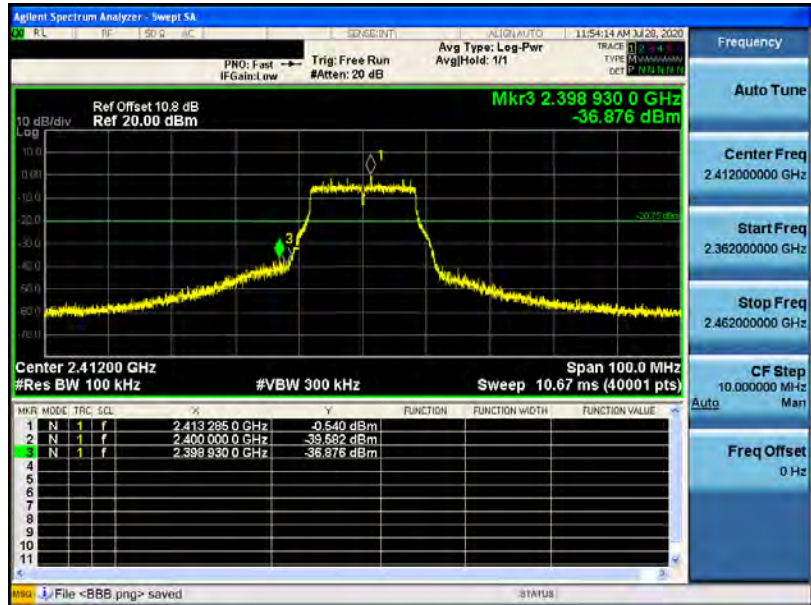
2462 MHz



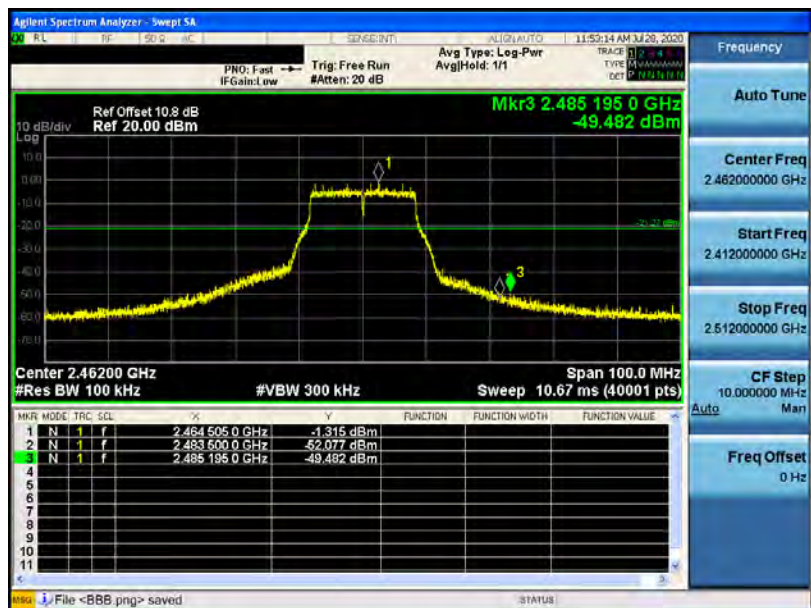
Conducted Band Edge

Mode 3: IEEE 802.11g Continuous TX mode_ANT-0

2412 MHz

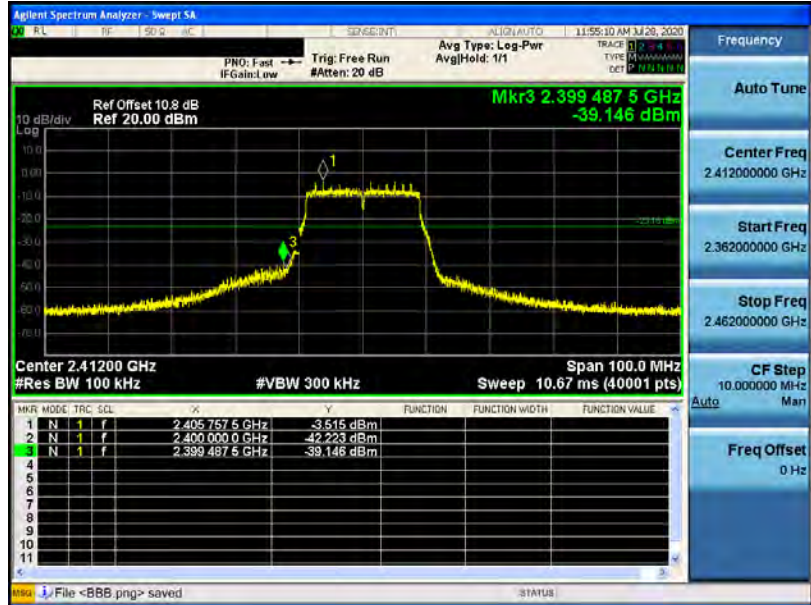


2462 MHz

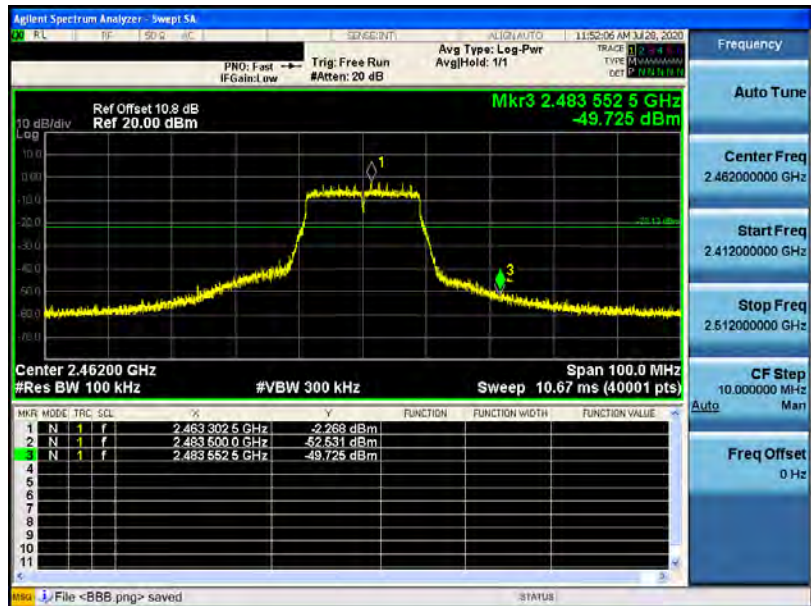


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode _ANT-0

2412 MHz

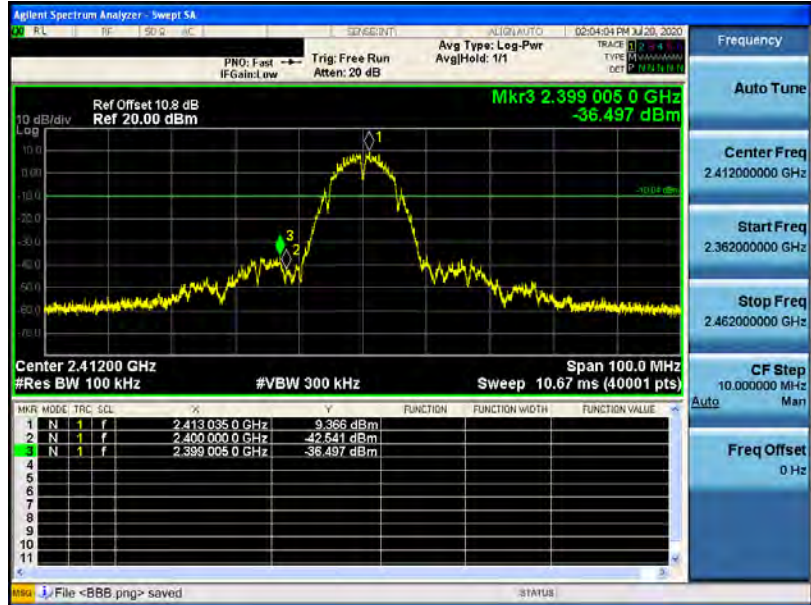


2462 MHz

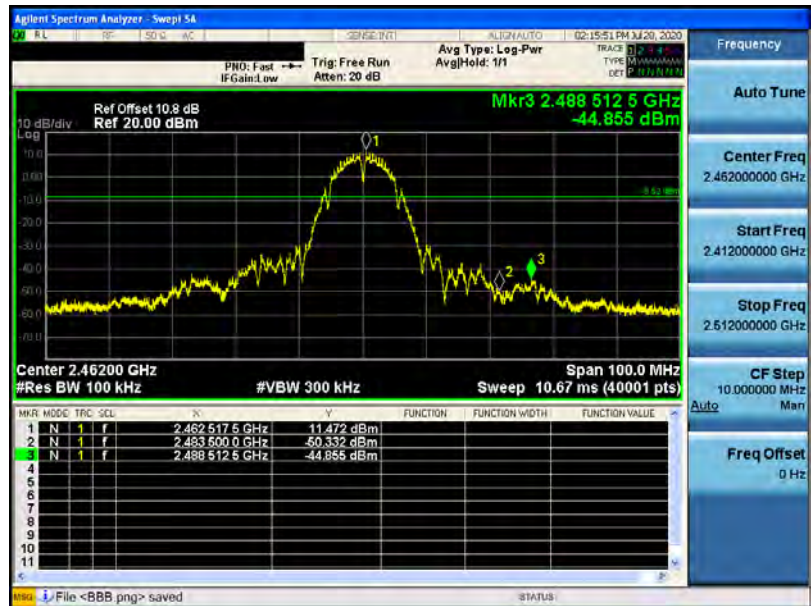


Mode 2: IEEE 802.11b Continuous TX mode_ANT-1

2412 MHz



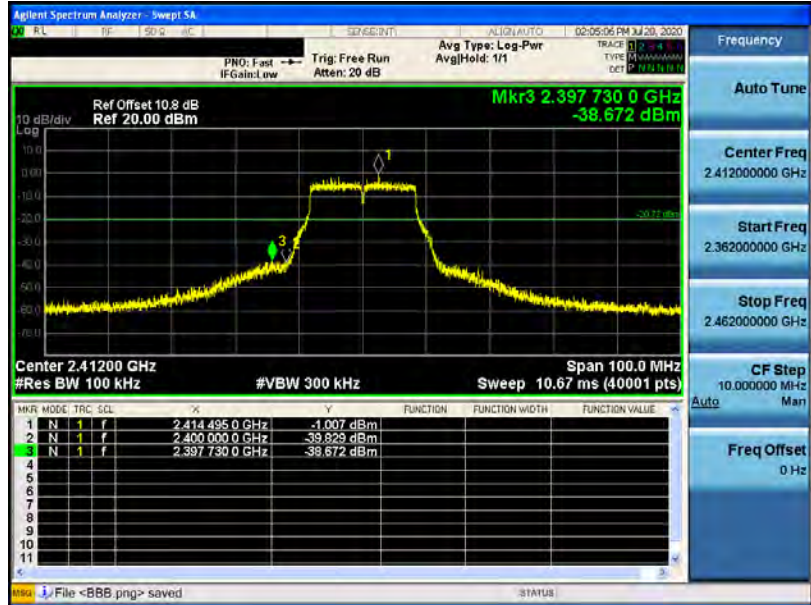
2462 MHz



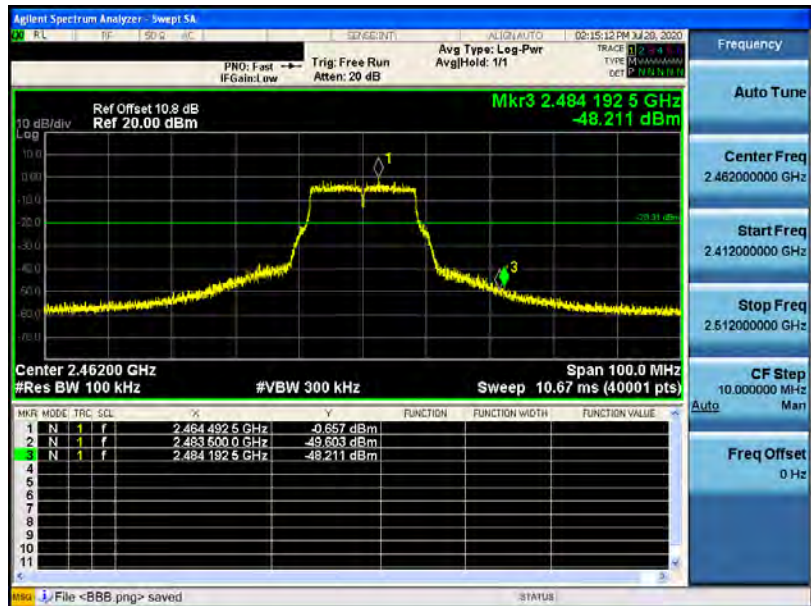


Mode 3: IEEE 802.11g Continuous TX mode_ANT-1

2412 MHz

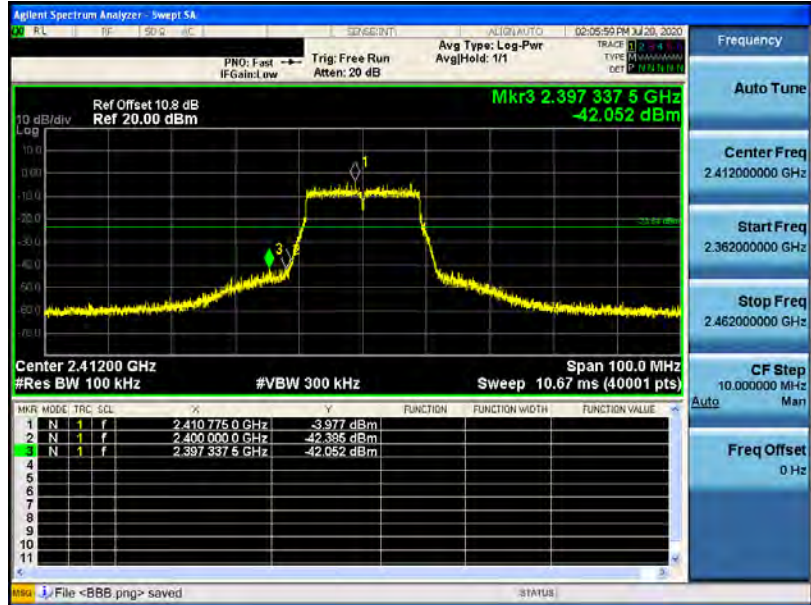


2462 MHz

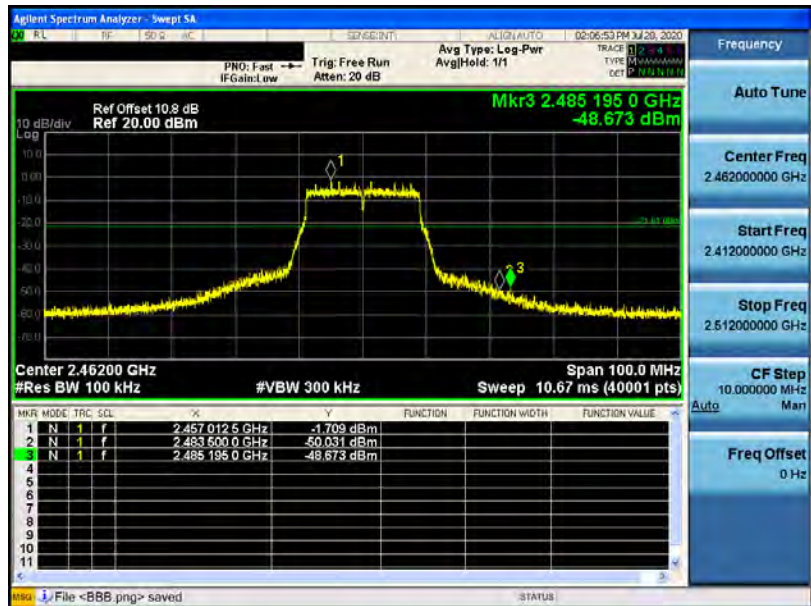


Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode_ANT-1

2412 MHz



2462 MHz

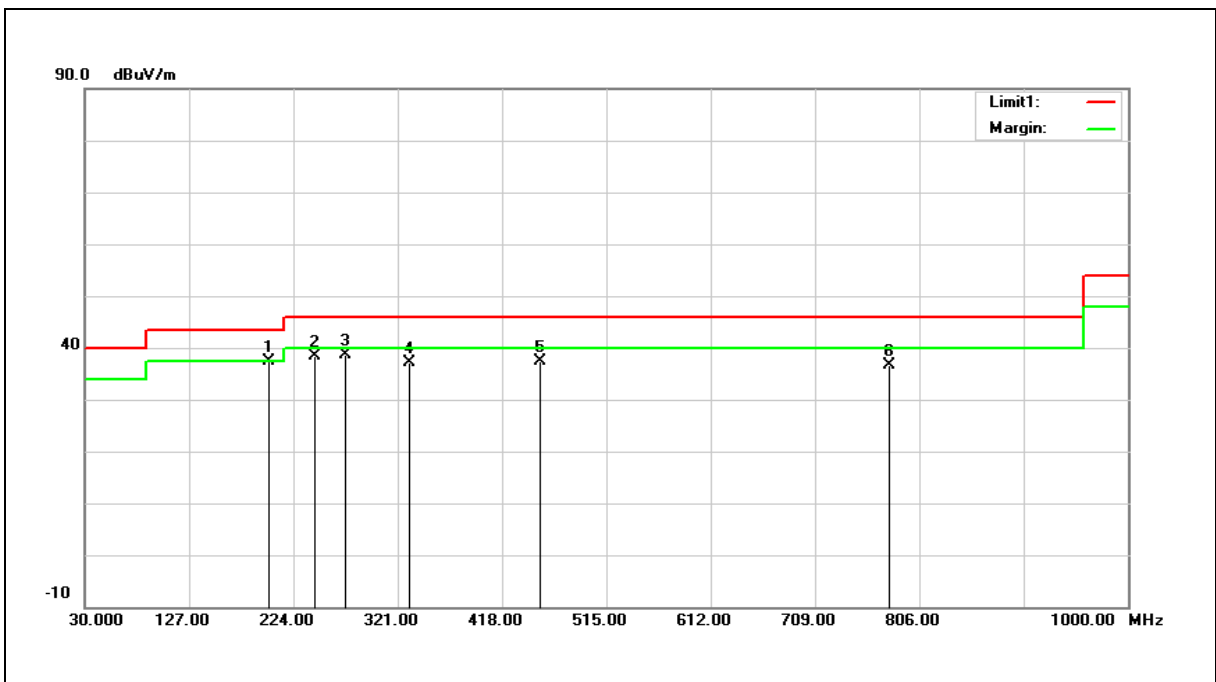


Annex C. Radiated Emission Measurement

Below 1 GHz

R003

Standard:	FCC Part 15.247	Test Distance:	3m
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	201.6900	45.16	-7.79	37.37	43.50	-6.13	QP
2	243.4000	44.48	-6.11	38.37	46.00	-7.63	QP
3	272.5000	43.68	-5.02	38.66	46.00	-7.34	QP
4	331.6700	40.75	-3.69	37.06	46.00	-8.94	QP
5	452.9200	37.99	-0.67	37.32	46.00	-8.68	QP
6	777.8700	31.12	5.55	36.67	46.00	-9.33	QP

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

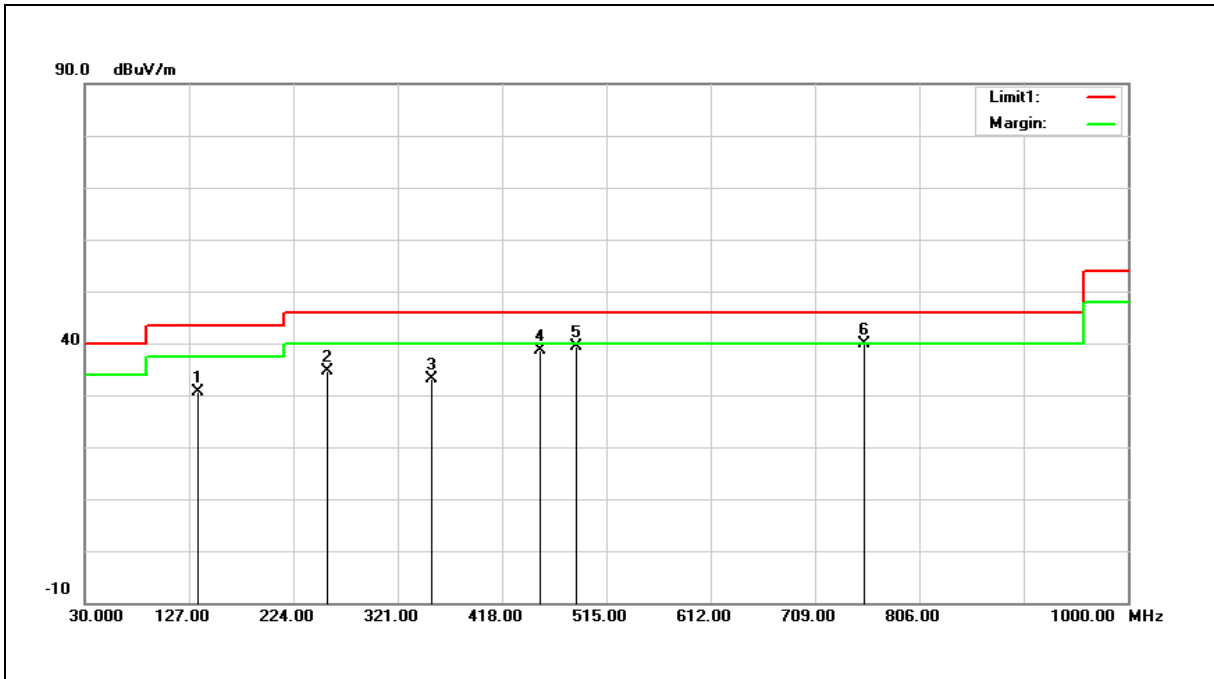
Example: $37.37 = -7.79 + 45.16$.

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:	3m
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	134.7600	37.54	-6.82	30.72	43.50	-12.78	QP
2	256.0100	40.45	-5.75	34.70	46.00	-11.30	QP
3	352.0400	36.51	-3.34	33.17	46.00	-12.83	QP
4	452.9200	39.41	-0.67	38.74	46.00	-7.26	QP
5	486.8700	39.67	-0.28	39.39	46.00	-6.61	QP
6	754.5900	34.57	5.27	39.84	46.00	-6.16	QP

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

Example: 30.72=-6.82+37.54.

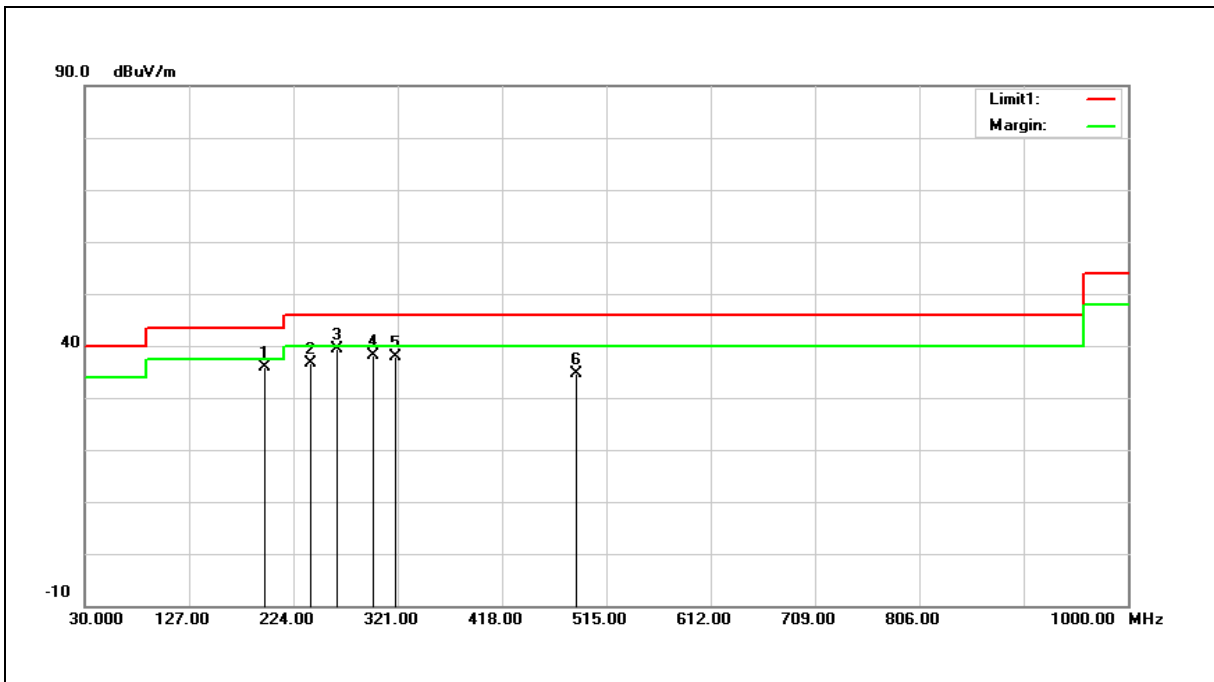
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

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



R004

Standard:	FCC Part 15.247	Test Distance:	3m
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	197.8100	43.46	-7.68	35.78	43.50	-7.72	QP
2	239.5200	42.93	-6.20	36.73	46.00	-9.27	QP
3	264.7400	44.76	-5.36	39.40	46.00	-6.60	QP
4	297.7200	42.36	-4.26	38.10	46.00	-7.90	QP
5	319.0600	41.66	-3.89	37.77	46.00	-8.23	QP
6	486.8700	34.80	-0.28	34.52	46.00	-11.48	QP

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

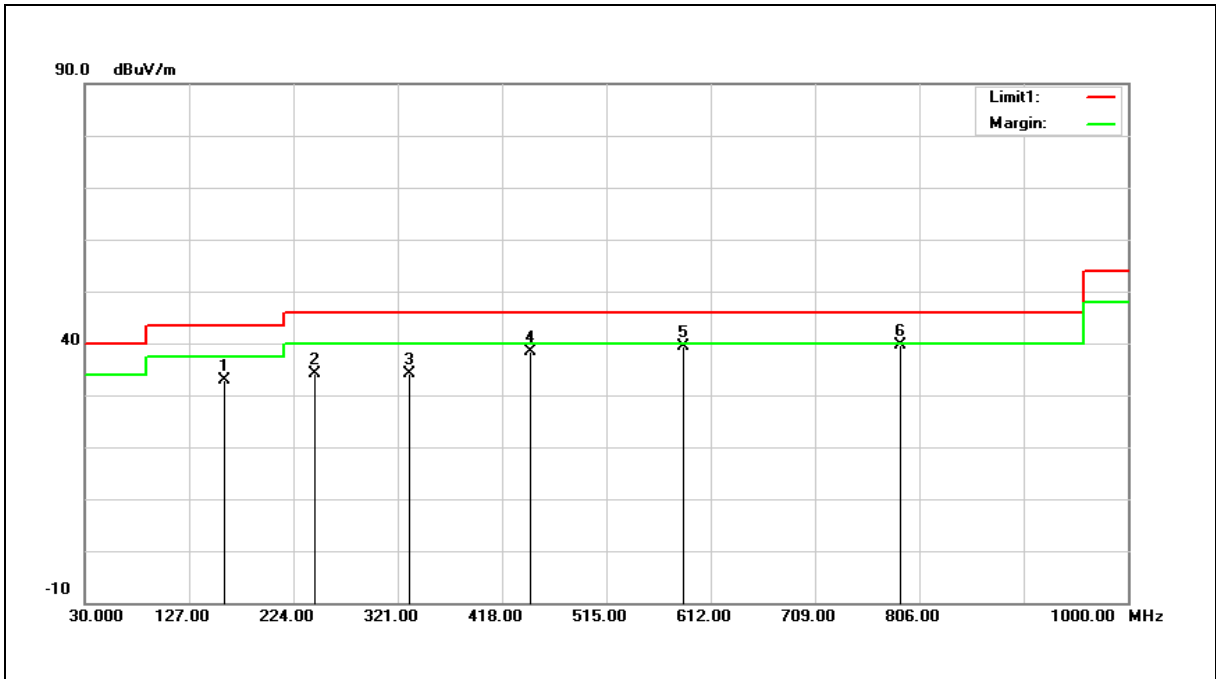
Example: 35.78=-7.68+43.46.

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:	3m
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	159.9800	38.32	-5.41	32.91	43.50	-10.59	QP
2	243.4000	40.12	-6.11	34.01	46.00	-11.99	QP
3	331.6700	37.70	-3.69	34.01	46.00	-11.99	QP
4	444.1900	39.21	-0.86	38.35	46.00	-7.65	QP
5	586.7800	37.24	2.11	39.35	46.00	-6.65	QP
6	788.5400	34.05	5.68	39.73	46.00	-6.27	QP

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

Example: 32.91=-5.41+38.32.

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

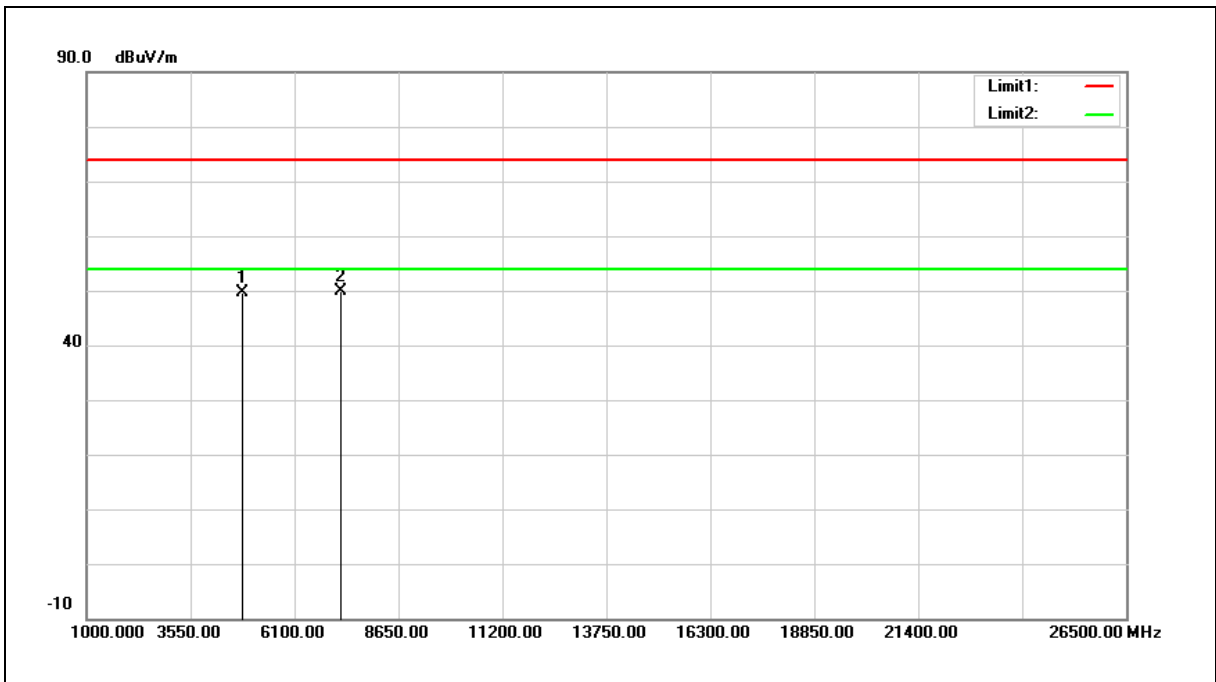
3.When the peak results are less than average limit, so not need to evaluate the average.



Harmonic

Above 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3m
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	58.16	-8.61	49.55	74.00	-24.45	peak
2	7236.000	50.85	-1.06	49.79	74.00	-24.21	peak

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

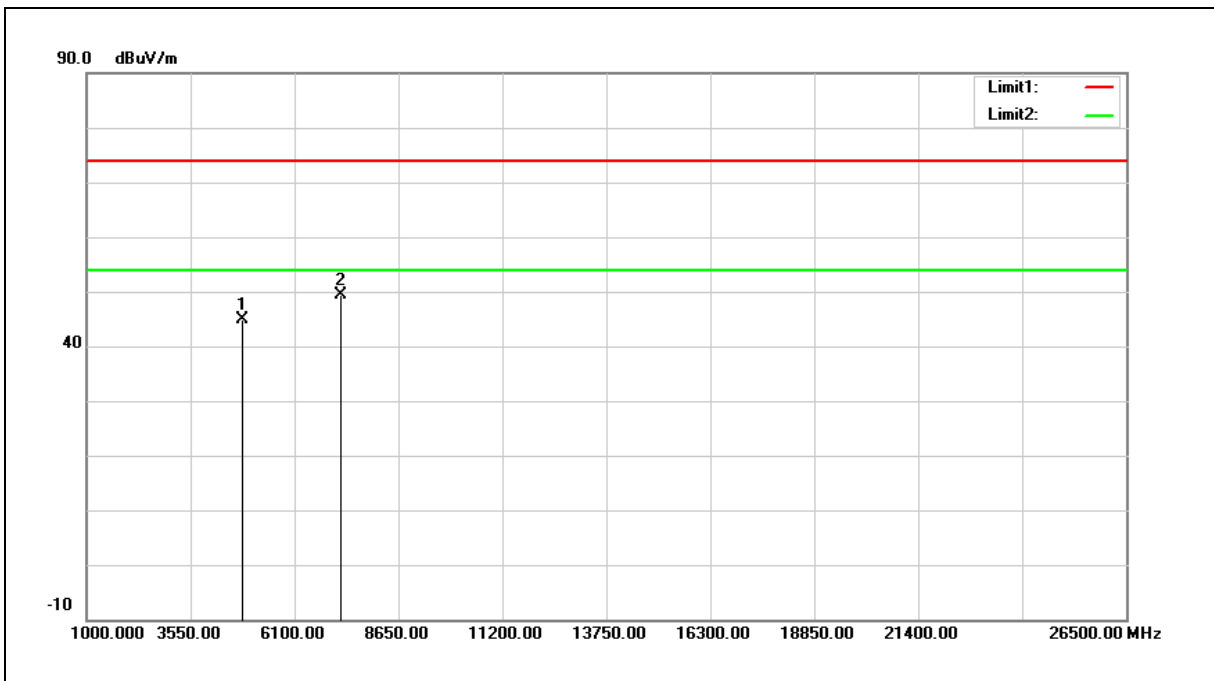
Example: 49.55=-8.61+58.16.

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:	3m
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	53.51	-8.61	44.90	74.00	-29.10	peak
2	7236.000	50.55	-1.06	49.49	74.00	-24.51	peak

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

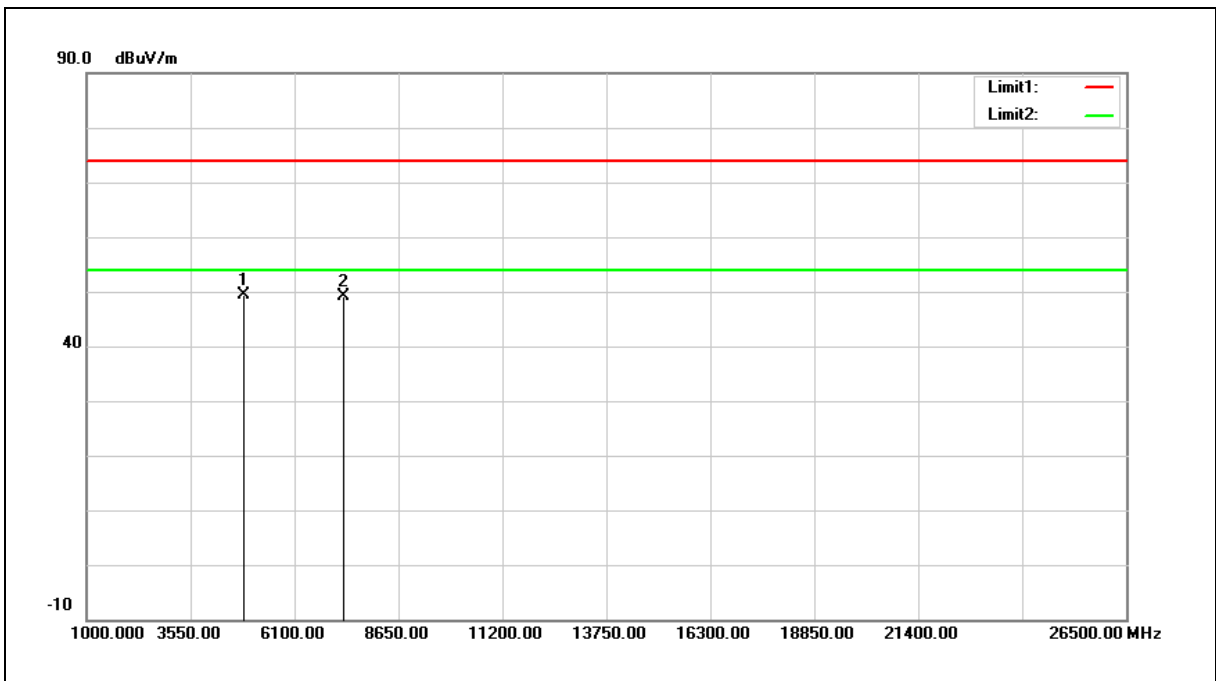
Example: $44.90 = -8.61 + 53.51$.

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:	3m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

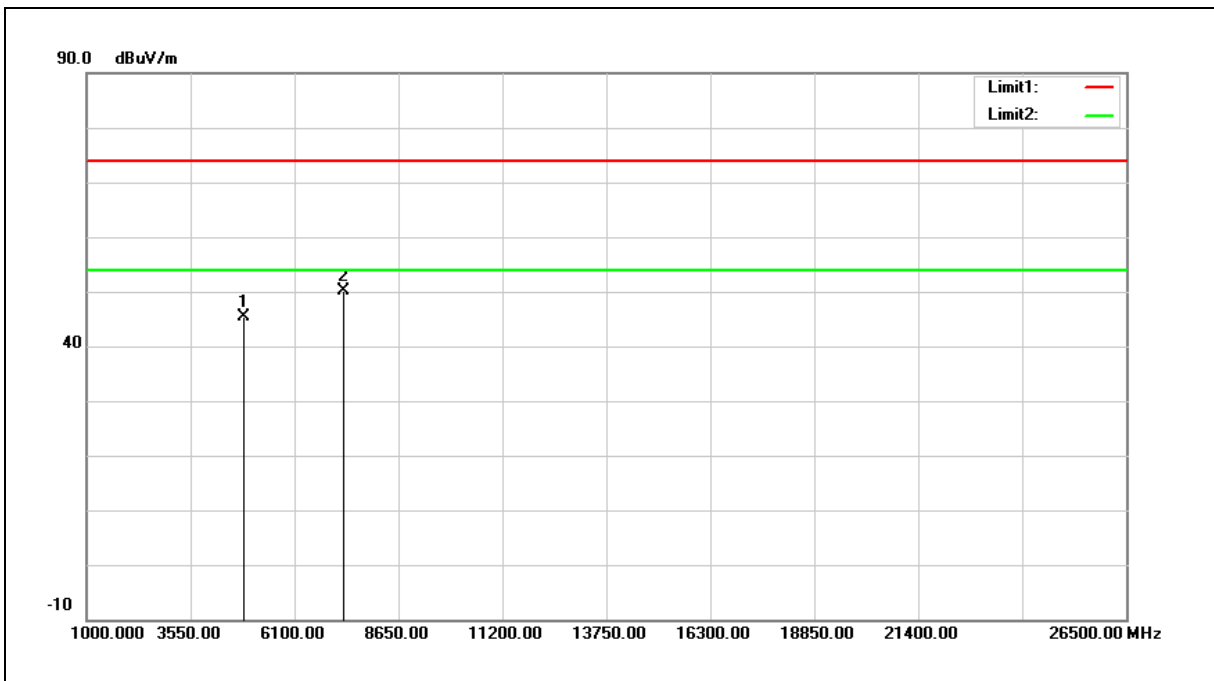


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	57.79	-8.48	49.31	74.00	-24.69	peak
2	7311.000	49.92	-0.73	49.19	74.00	-24.81	peak

- 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:	3m
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	53.77	-8.48	45.29	74.00	-28.71	peak
2	7311.000	50.85	-0.73	50.12	74.00	-23.88	peak

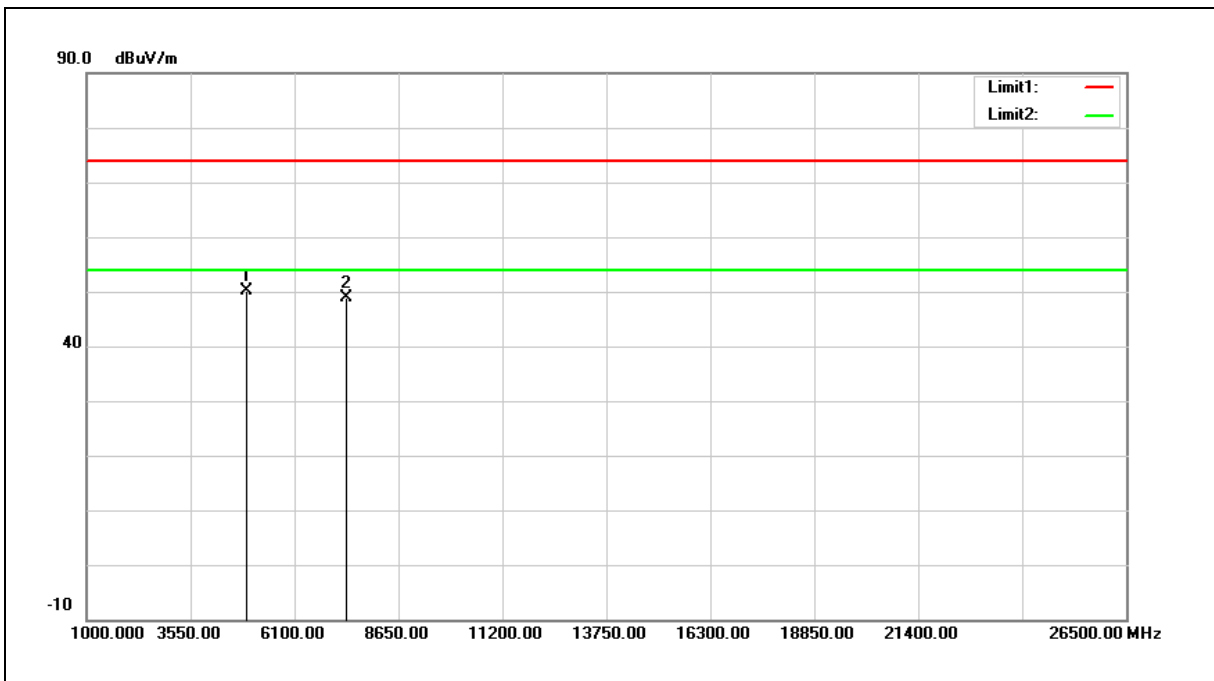
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
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	58.52	-8.35	50.17	74.00	-23.83	peak
2	7386.000	49.29	-0.38	48.91	74.00	-25.09	peak

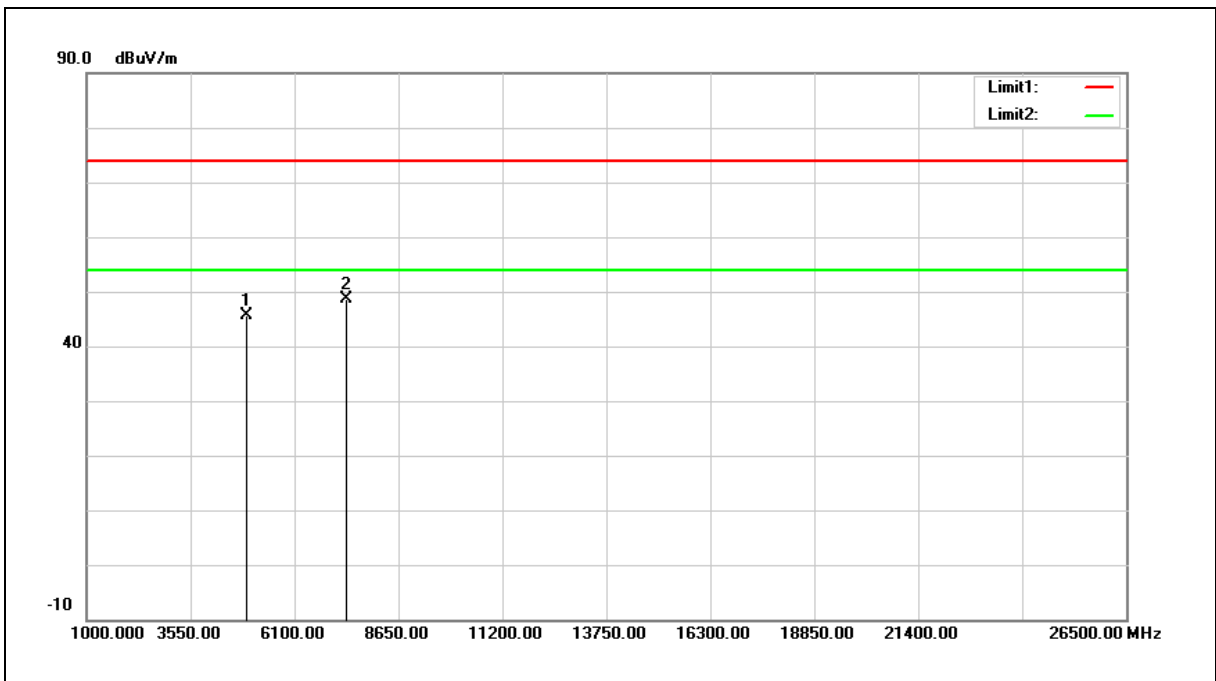
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
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	54.00	-8.35	45.65	74.00	-28.35	peak
2	7386.000	49.03	-0.38	48.65	74.00	-25.35	peak

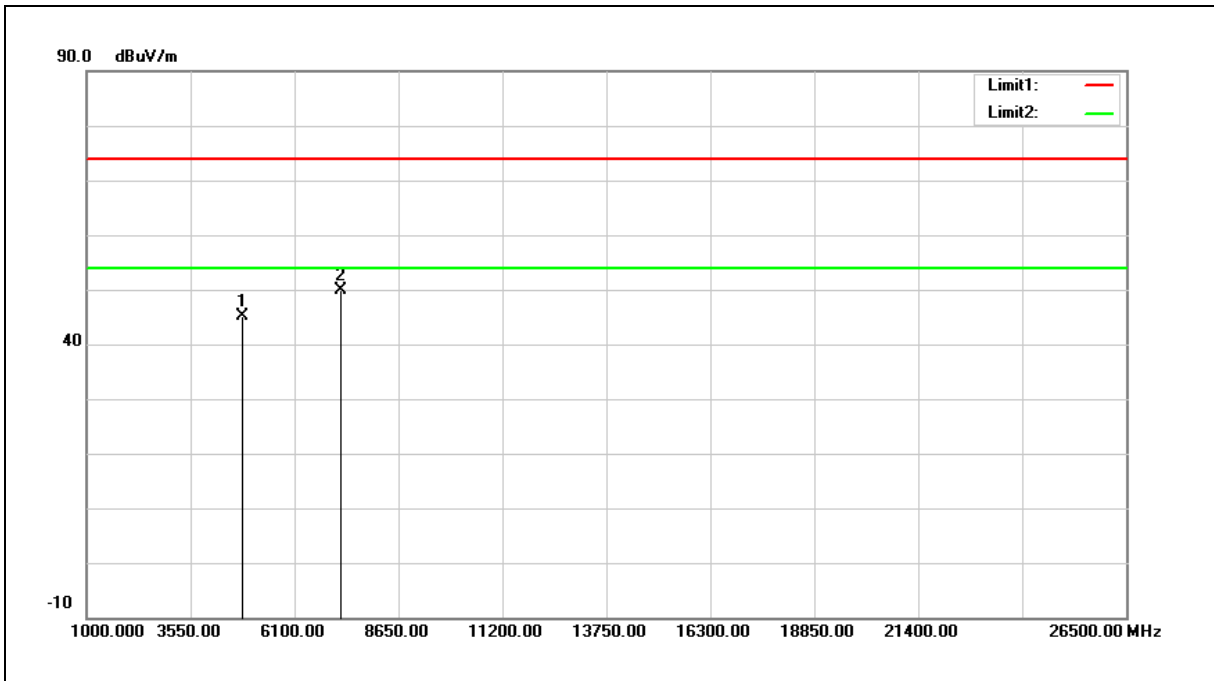
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

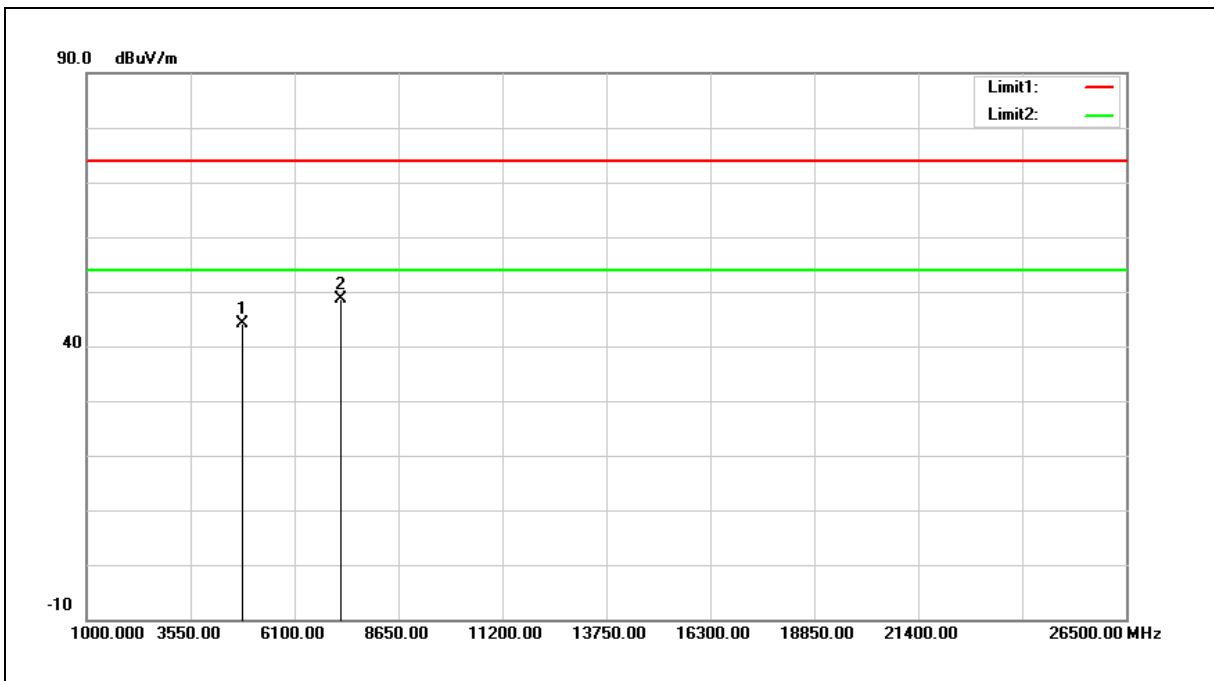


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	53.66	-8.61	45.05	74.00	-28.95	peak
2	7236.000	50.83	-1.06	49.77	74.00	-24.23	peak

- 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:	3m
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	52.75	-8.61	44.14	74.00	-29.86	peak
2	7236.000	49.76	-1.06	48.70	74.00	-25.30	peak

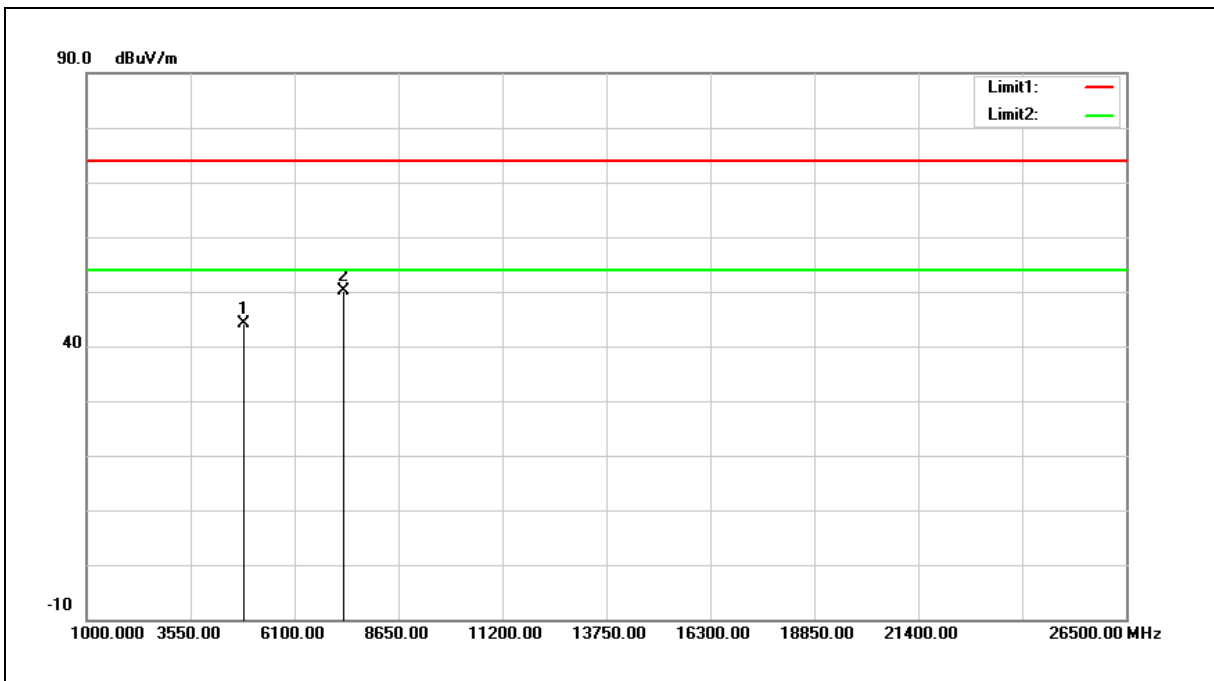
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

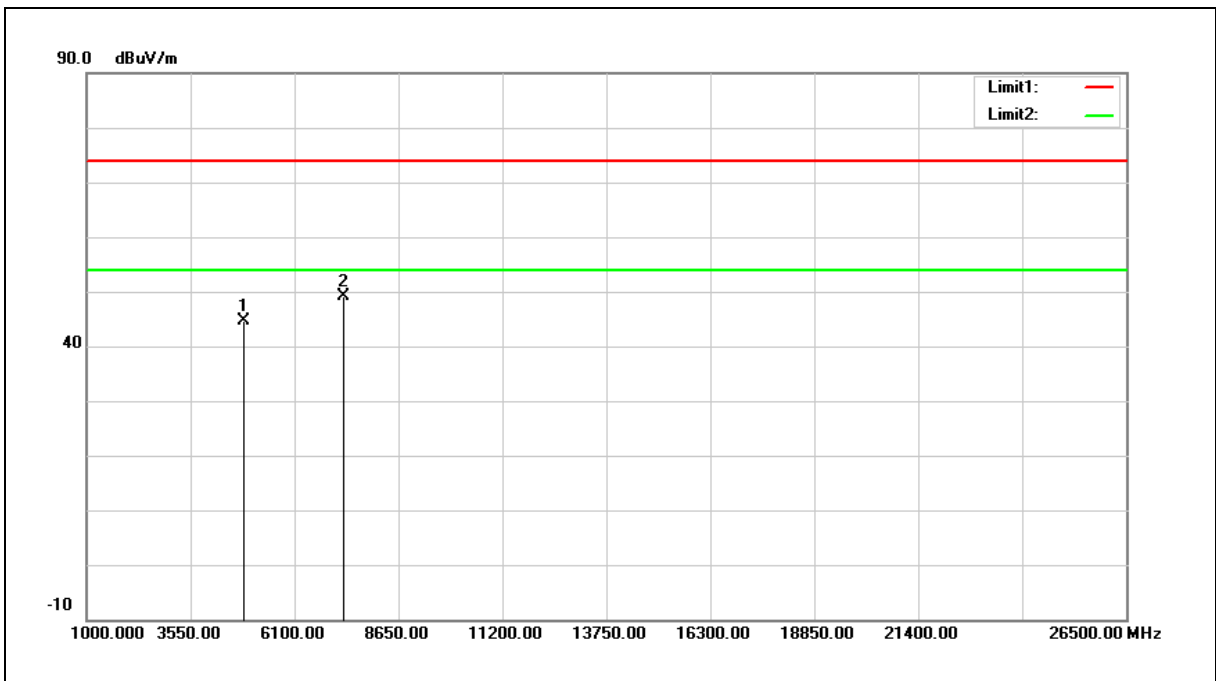


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	52.56	-8.48	44.08	74.00	-29.92	peak
2	7311.000	50.74	-0.73	50.01	74.00	-23.99	peak

- 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:	3m
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	53.05	-8.48	44.57	74.00	-29.43	peak
2	7311.000	49.87	-0.73	49.14	74.00	-24.86	peak

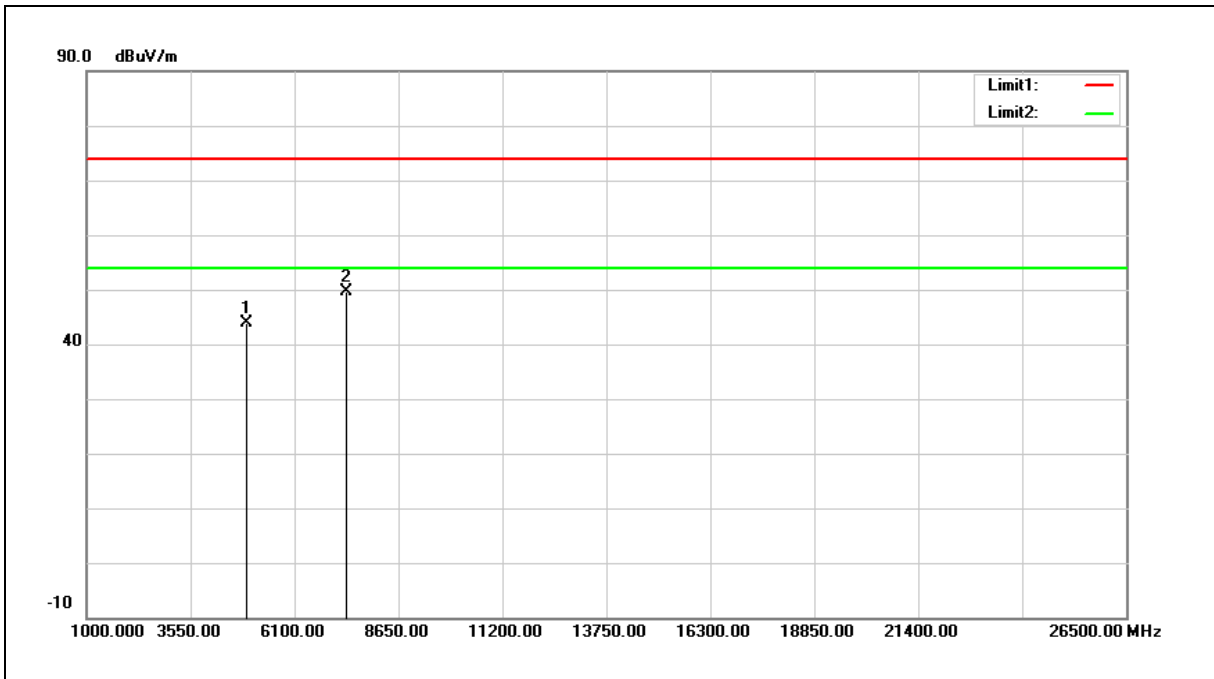
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

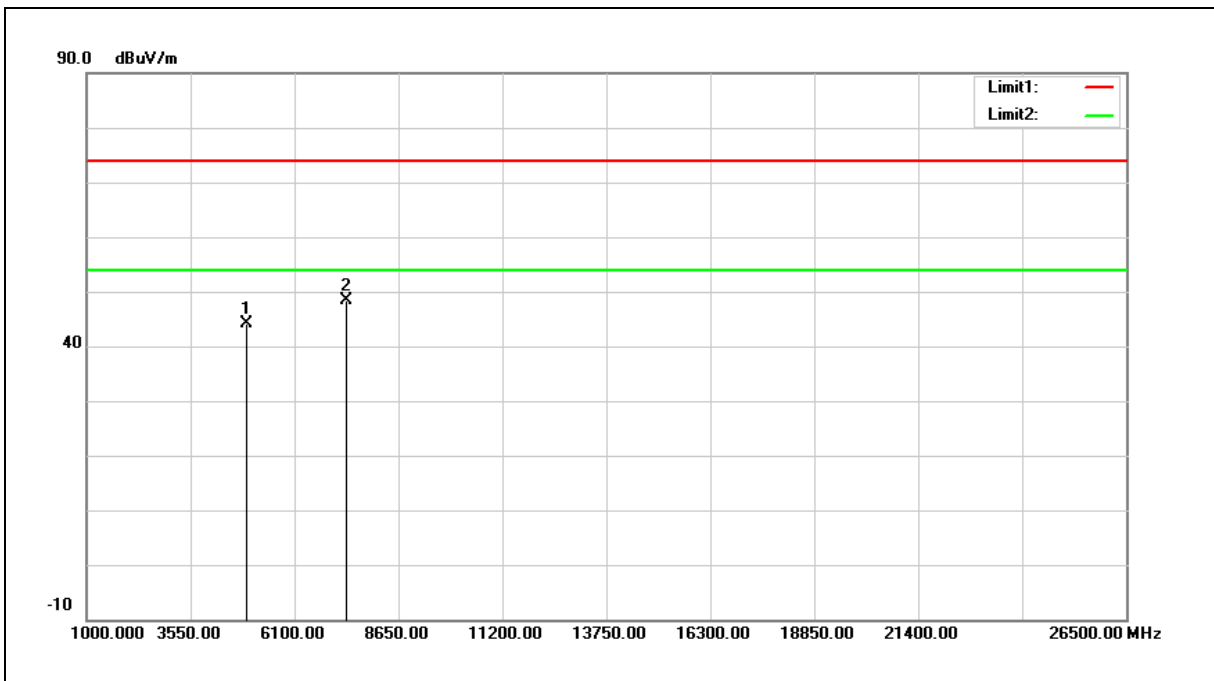


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	52.20	-8.35	43.85	74.00	-30.15	peak
2	7386.000	50.11	-0.38	49.73	74.00	-24.27	peak

- 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:	3m
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	52.48	-8.35	44.13	74.00	-29.87	peak
2	7386.000	48.64	-0.38	48.26	74.00	-25.74	peak

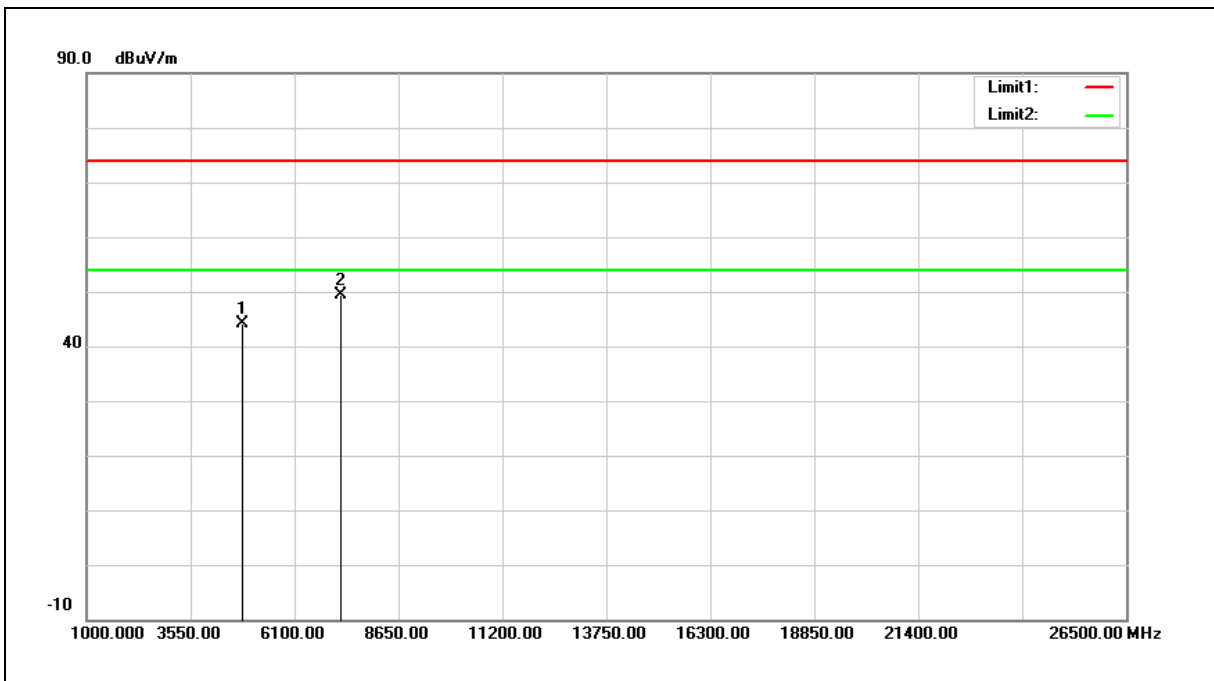
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	52.83	-8.61	44.22	74.00	-29.78	peak
2	7236.000	50.56	-1.06	49.50	74.00	-24.50	peak

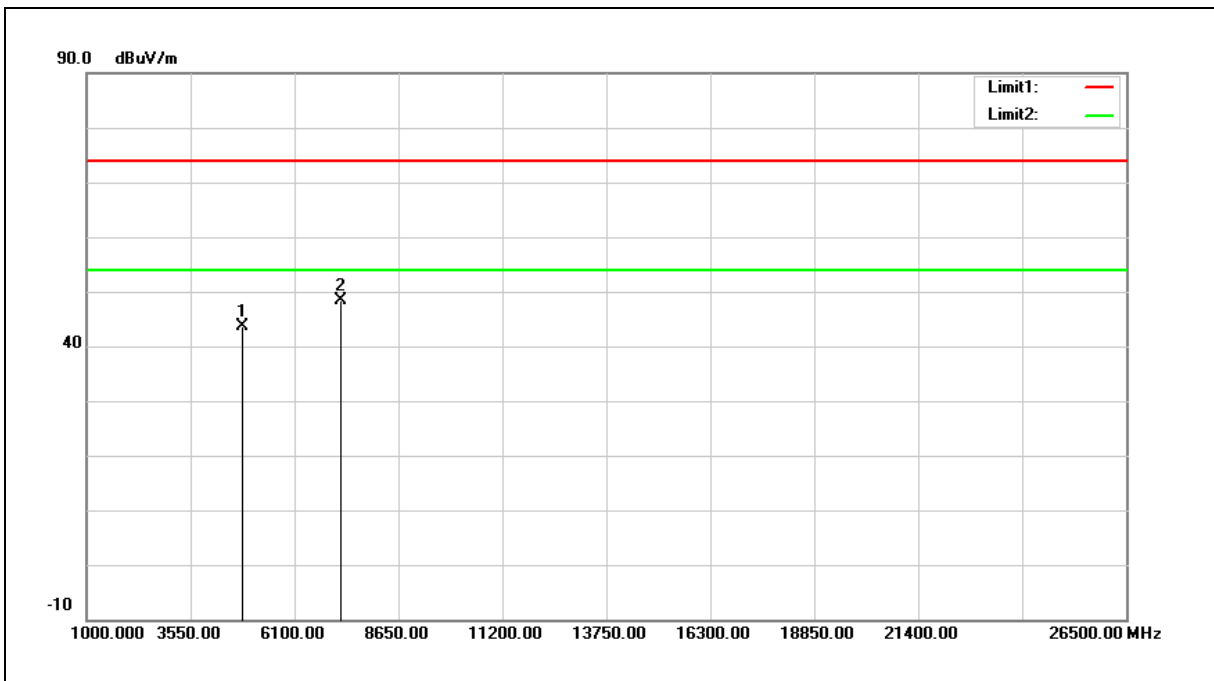
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	52.31	-8.61	43.70	74.00	-30.30	peak
2	7236.000	49.54	-1.06	48.48	74.00	-25.52	peak

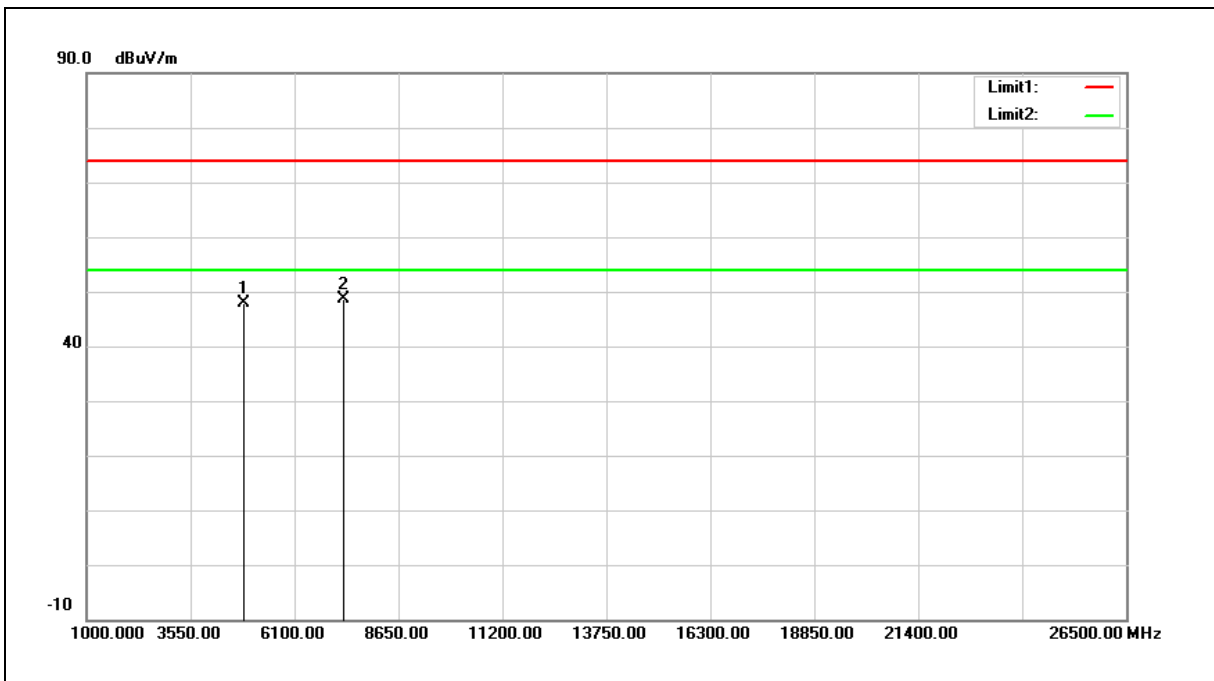
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	56.27	-8.48	47.79	74.00	-26.21	peak
2	7311.000	49.43	-0.73	48.70	74.00	-25.30	peak

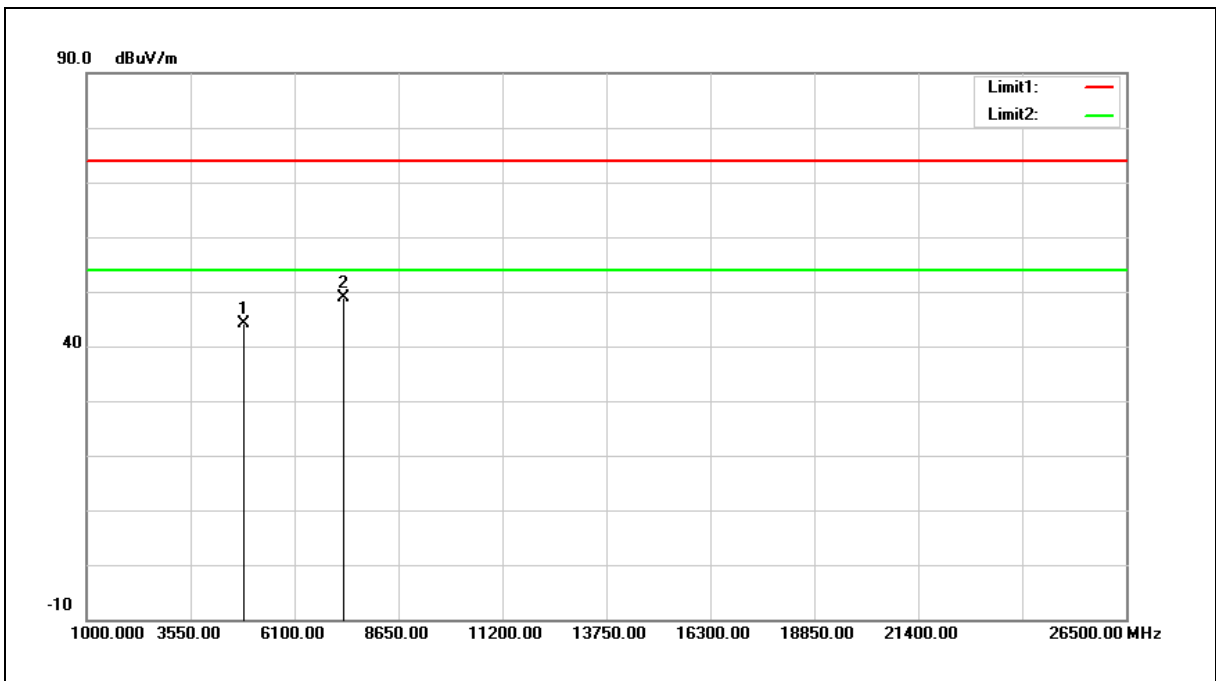
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	52.70	-8.48	44.22	74.00	-29.78	peak
2	7311.000	49.50	-0.73	48.77	74.00	-25.23	peak

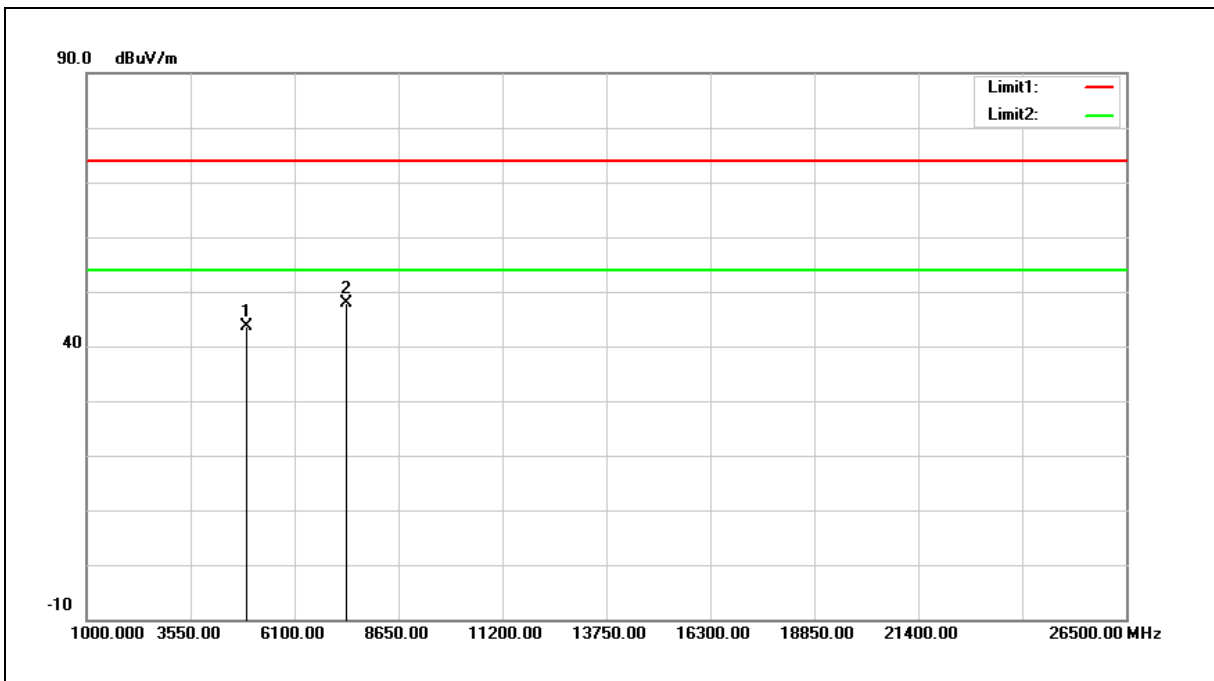
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	51.99	-8.35	43.64	74.00	-30.36	peak
2	7386.000	48.15	-0.38	47.77	74.00	-26.23	peak

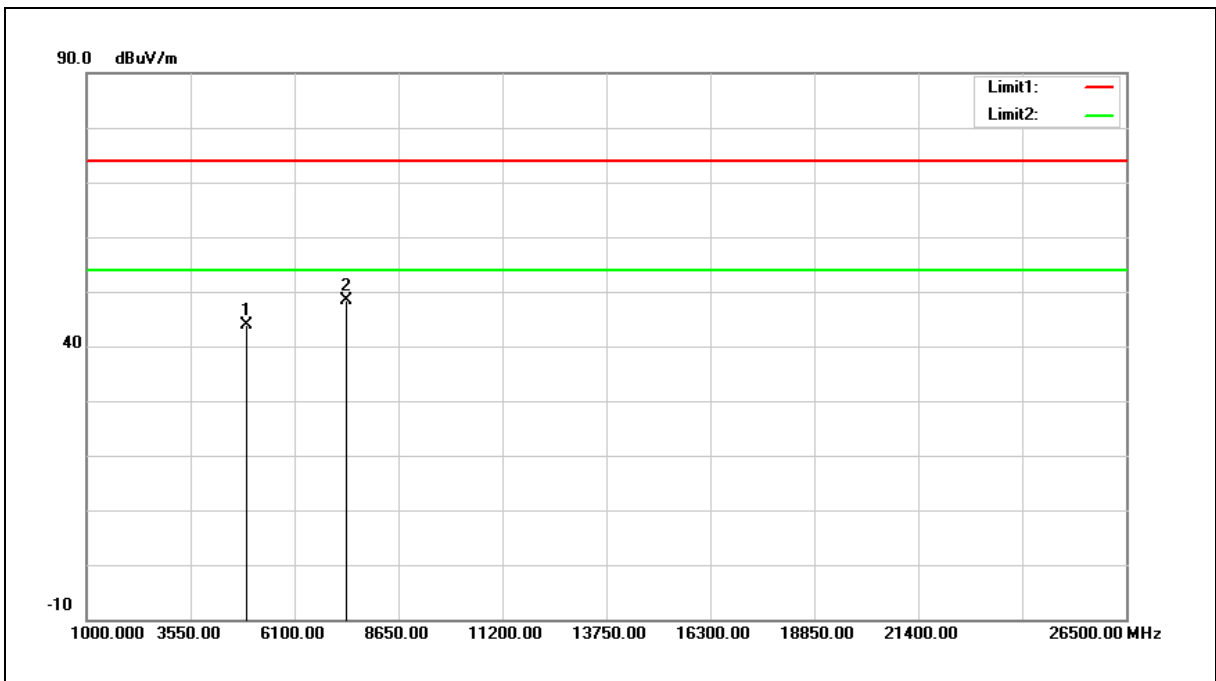
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

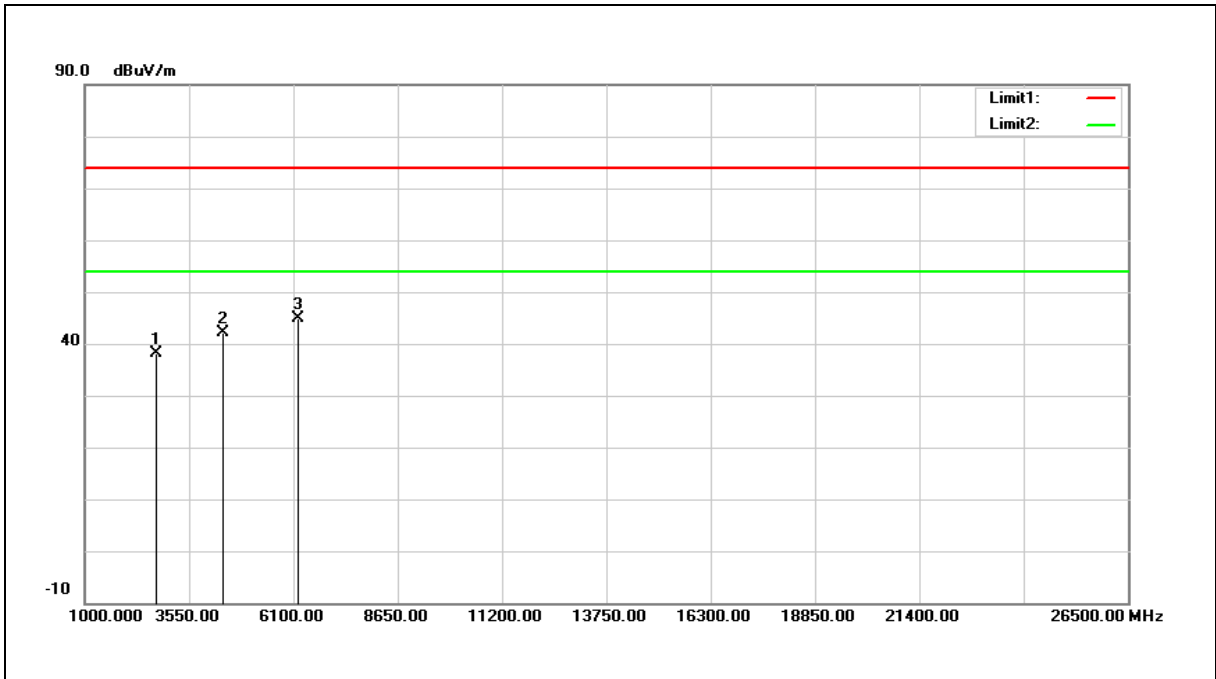


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	52.15	-8.35	43.80	74.00	-30.20	peak
2	7386.000	48.69	-0.38	48.31	74.00	-25.69	peak

- 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:	3m
Test item:	Simultaneous Transmitting		
Mode:	BT + 2.4 G		
Ant.Polar.:	Horizontal		

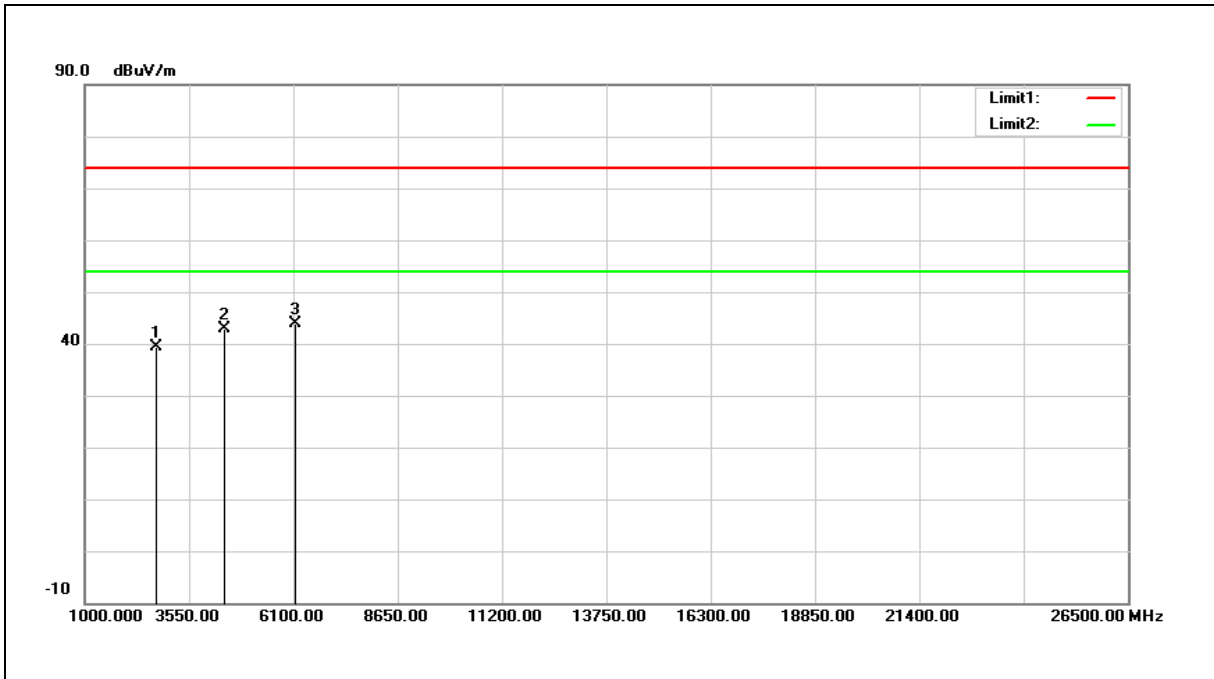


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2751.000	51.30	-13.22	38.08	74.00	-35.92	peak
2	4366.000	51.69	-9.65	42.04	74.00	-31.96	peak
3	6185.000	49.77	-4.88	44.89	74.00	-29.11	peak

- 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:	3m
Test item:	Simultaneous Transmitting		
Mode:	BT + 2.4 G		
Ant.Polar.:	Vertical		



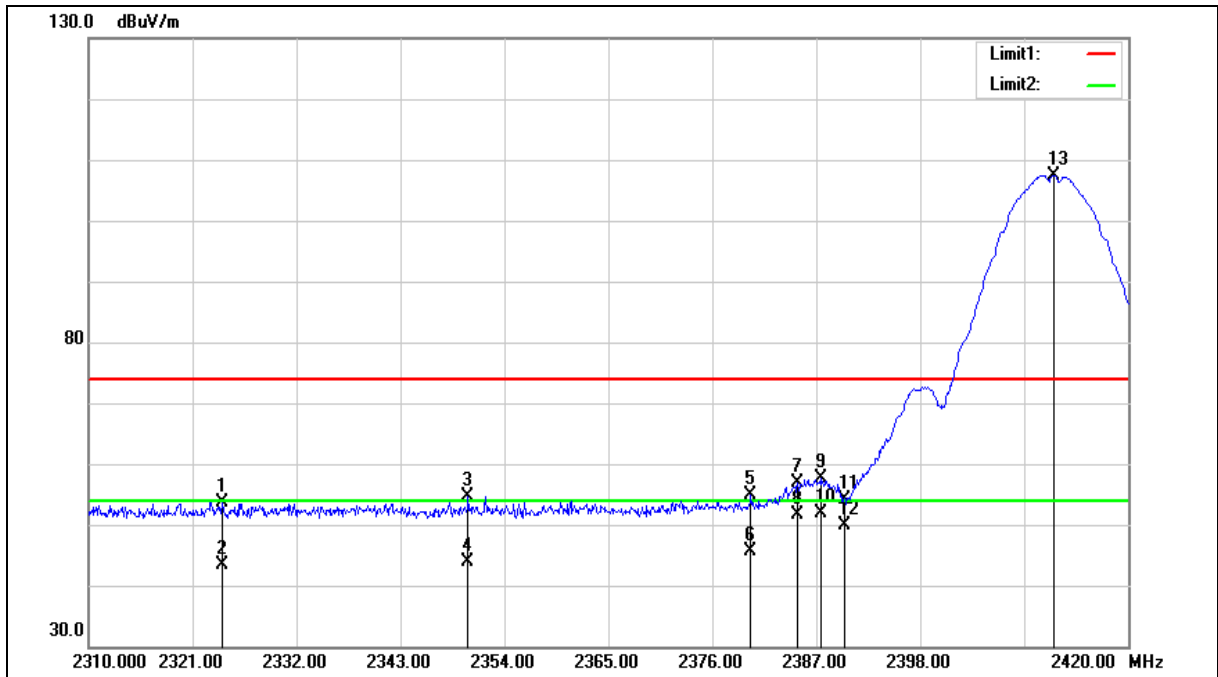
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2751.000	52.57	-13.22	39.35	74.00	-34.65	peak
2	4417.000	52.53	-9.57	42.96	74.00	-31.04	peak
3	6134.000	48.98	-5.05	43.93	74.00	-30.07	peak

- 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

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





Standard:	FCC Part 15.247	Test Distance:	3m
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	2324.190	68.40	-14.82	53.58	74.00	-20.42	peak
2	2324.190	58.29	-14.82	43.47	54.00	-10.53	AVG
3	2350.150	69.32	-14.69	54.63	74.00	-19.37	peak
4	2350.150	58.53	-14.69	43.84	54.00	-10.16	AVG
5	2380.070	69.44	-14.54	54.90	74.00	-19.10	peak
6	2380.070	60.25	-14.54	45.71	54.00	-8.29	AVG
7	2385.020	71.30	-14.51	56.79	74.00	-17.21	peak
8	2385.020	66.16	-14.51	51.65	54.00	-2.35	AVG
9	2387.550	72.10	-14.49	57.61	74.00	-16.39	peak
10	2387.550	66.35	-14.49	51.86	54.00	-2.14	AVG
11	2390.000	68.57	-14.48	54.09	74.00	-19.91	peak
12	2390.000	64.42	-14.48	49.94	54.00	-4.06	AVG
13	2412.080	121.84	-14.37	107.47	--	--	peak

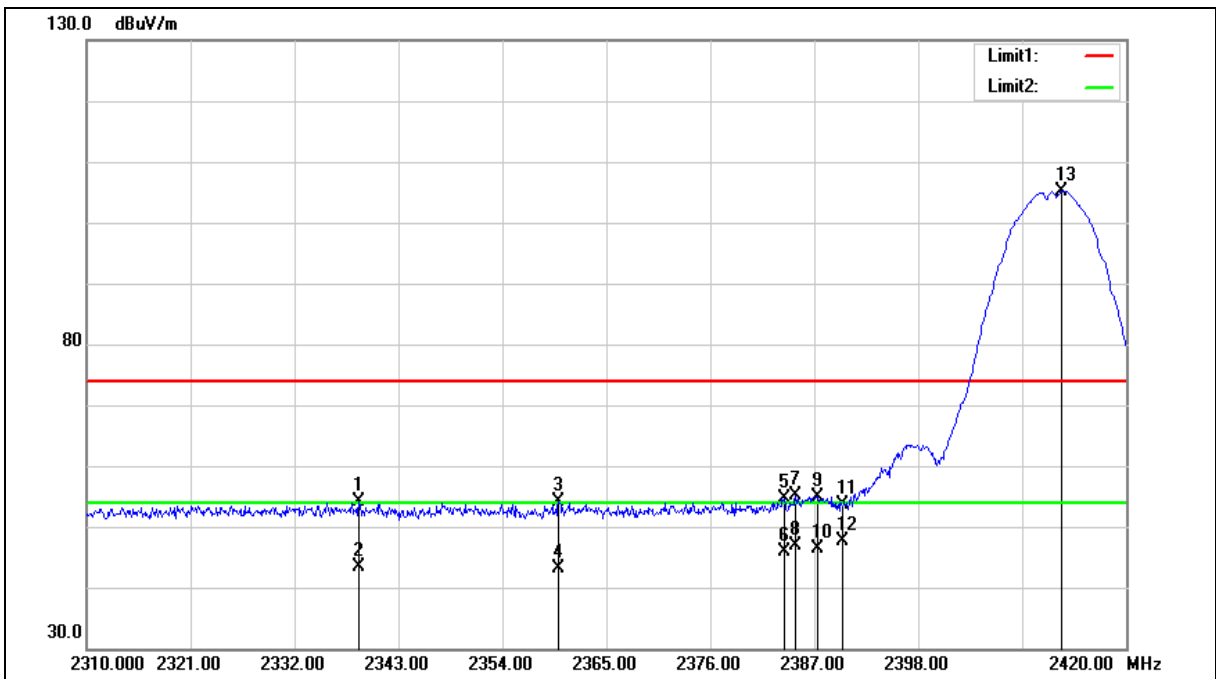
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2338.820	68.96	-14.75	54.21	74.00	-19.79	peak
2	2338.820	58.09	-14.75	43.34	54.00	-10.66	AVG
3	2359.940	68.78	-14.64	54.14	74.00	-19.86	peak
4	2359.940	57.87	-14.64	43.23	54.00	-10.77	AVG
5	2383.810	69.25	-14.52	54.73	74.00	-19.27	peak
6	2383.810	60.45	-14.52	45.93	54.00	-8.07	AVG
7	2385.020	69.73	-14.51	55.22	74.00	-18.78	peak
8	2385.020	61.36	-14.51	46.85	54.00	-7.15	AVG
9	2387.330	69.26	-14.49	54.77	74.00	-19.23	peak
10	2387.330	60.80	-14.49	46.31	54.00	-7.69	AVG
11	2390.000	68.09	-14.48	53.61	74.00	-20.39	peak
12	2390.000	62.10	-14.48	47.62	54.00	-6.38	AVG
13	2413.180	119.60	-14.37	105.23	--	--	peak

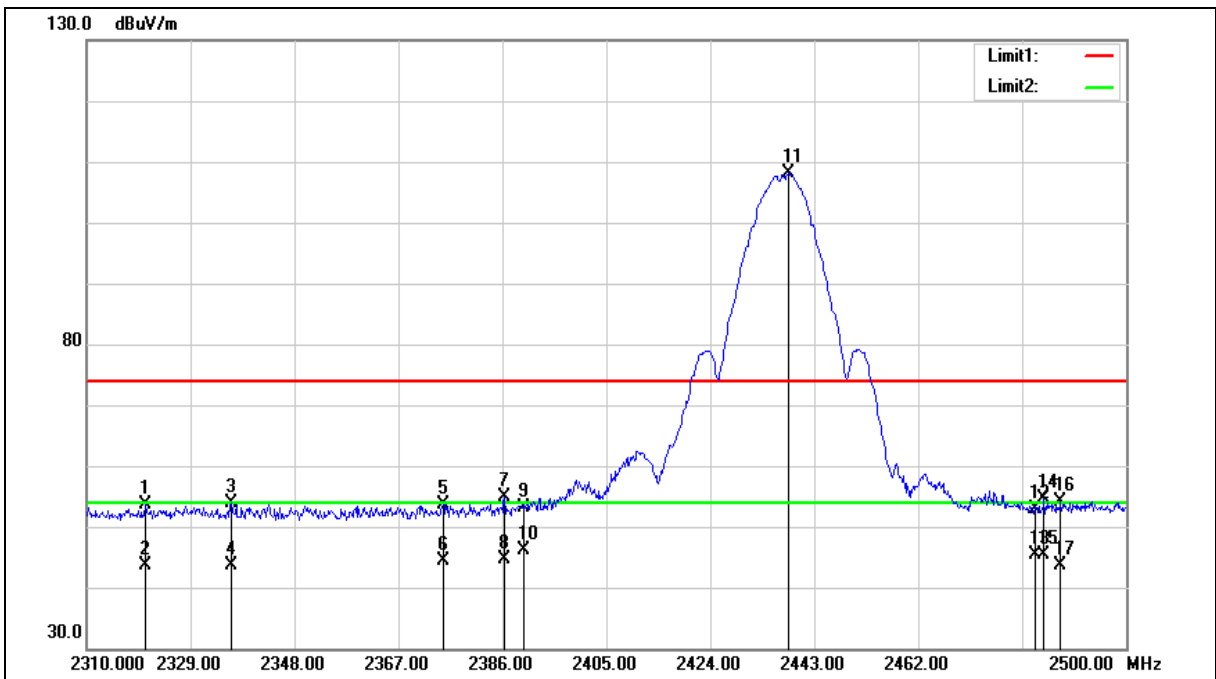
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
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	2320.640	68.54	-14.84	53.70	74.00	-20.30	peak
2	2320.640	58.36	-14.84	43.52	54.00	-10.48	AVG
3	2336.410	68.52	-14.76	53.76	74.00	-20.24	peak
4	2336.410	58.40	-14.76	43.64	54.00	-10.36	AVG
5	2375.170	68.18	-14.55	53.63	74.00	-20.37	peak
6	2375.170	58.88	-14.55	44.33	54.00	-9.67	AVG
7	2386.380	69.49	-14.51	54.98	74.00	-19.02	peak
8	2386.380	59.17	-14.51	44.66	54.00	-9.34	AVG
9	2390.000	67.49	-14.48	53.01	74.00	-20.99	peak
10	2390.000	60.73	-14.48	46.25	54.00	-7.75	AVG
11	2438.250	122.32	-14.24	108.08	--	--	peak
12	2483.500	67.00	-14.01	52.99	74.00	-21.01	peak
13	2483.500	59.38	-14.01	45.37	54.00	-8.63	AVG
14	2484.990	68.53	-14.00	54.53	74.00	-19.47	peak
15	2484.990	59.47	-14.00	45.47	54.00	-8.53	AVG
16	2488.030	68.05	-13.98	54.07	74.00	-19.93	peak
17	2488.030	57.62	-13.98	43.64	54.00	-10.36	AVG

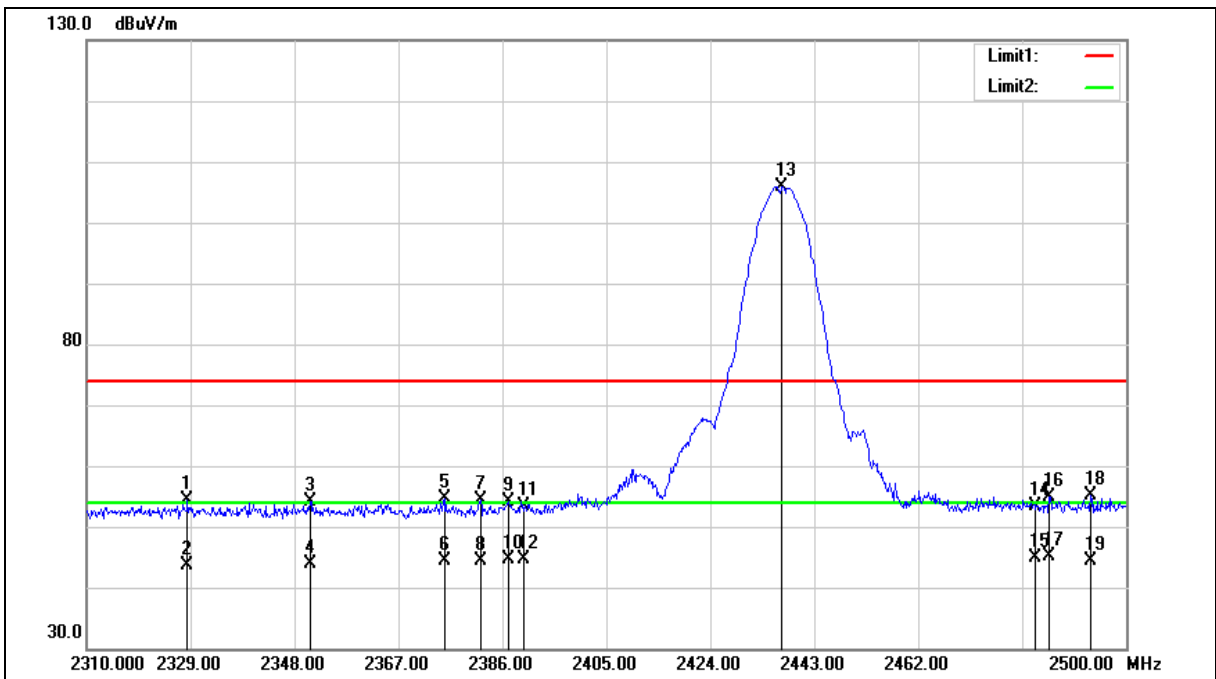
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
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	2328.430	69.15	-14.80	54.35	74.00	-19.65	peak
2	2328.430	58.52	-14.80	43.72	54.00	-10.28	AVG
3	2350.850	68.92	-14.69	54.23	74.00	-19.77	peak
4	2350.850	58.63	-14.69	43.94	54.00	-10.06	AVG
5	2375.550	69.12	-14.55	54.57	74.00	-19.43	peak
6	2375.550	58.83	-14.55	44.28	54.00	-9.72	AVG
7	2382.010	68.78	-14.52	54.26	74.00	-19.74	peak
8	2382.010	58.97	-14.52	44.45	54.00	-9.55	AVG
9	2387.140	68.68	-14.49	54.19	74.00	-19.81	peak
10	2387.140	59.00	-14.49	44.51	54.00	-9.49	AVG
11	2390.000	67.89	-14.48	53.41	74.00	-20.59	peak
12	2390.000	59.22	-14.48	44.74	54.00	-9.26	AVG
13	2437.110	120.16	-14.24	105.92	--	--	peak
14	2483.500	67.33	-14.01	53.32	74.00	-20.68	peak
15	2483.500	58.88	-14.01	44.87	54.00	-9.13	AVG
16	2485.940	68.98	-13.99	54.99	74.00	-19.01	peak
17	2485.940	59.21	-13.99	45.22	54.00	-8.78	AVG
18	2493.540	69.12	-13.95	55.17	74.00	-18.83	peak
19	2493.540	58.34	-13.95	44.39	54.00	-9.61	AVG

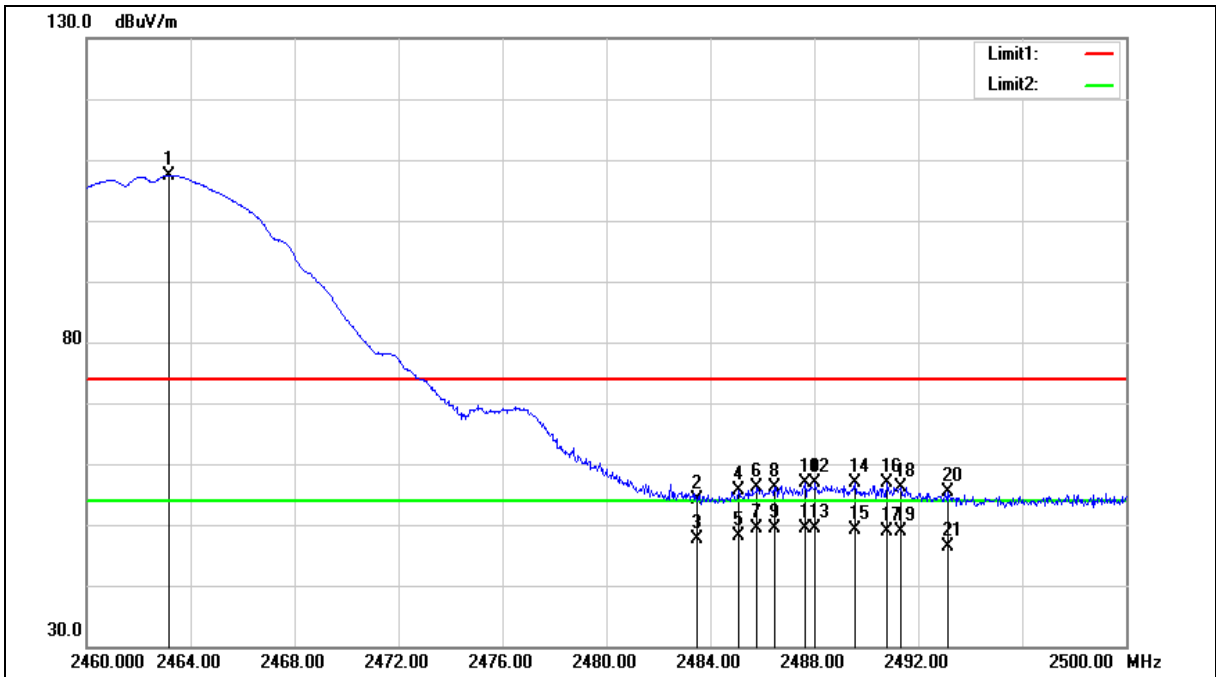
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2463.160	121.57	-14.11	107.46	--	--	peak
2	2483.500	68.14	-14.01	54.13	74.00	-19.87	peak
3	2483.500	61.75	-14.01	47.74	54.00	-6.26	AVG
4	2485.080	69.73	-14.00	55.73	74.00	-18.27	peak
5	2485.080	62.09	-14.00	48.09	54.00	-5.91	AVG
6	2485.800	70.18	-13.99	56.19	74.00	-17.81	peak
7	2485.800	63.39	-13.99	49.40	54.00	-4.60	AVG
8	2486.480	70.18	-13.99	56.19	74.00	-17.81	peak
9	2486.480	63.30	-13.99	49.31	54.00	-4.69	AVG
10	2487.640	70.95	-13.98	56.97	74.00	-17.03	peak
11	2487.640	63.41	-13.98	49.43	54.00	-4.57	AVG
12	2488.040	70.94	-13.98	56.96	74.00	-17.04	peak
13	2488.040	63.36	-13.98	49.38	54.00	-4.62	AVG
14	2489.560	70.91	-13.98	56.93	74.00	-17.07	peak
15	2489.560	63.19	-13.98	49.21	54.00	-4.79	AVG
16	2490.800	70.89	-13.97	56.92	74.00	-17.08	peak
17	2490.800	62.92	-13.97	48.95	54.00	-5.05	AVG
18	2491.320	70.13	-13.96	56.17	74.00	-17.83	peak
19	2491.320	62.74	-13.96	48.78	54.00	-5.22	AVG
20	2493.120	69.26	-13.95	55.31	74.00	-18.69	peak
21	2493.120	60.32	-13.95	46.37	54.00	-7.63	AVG

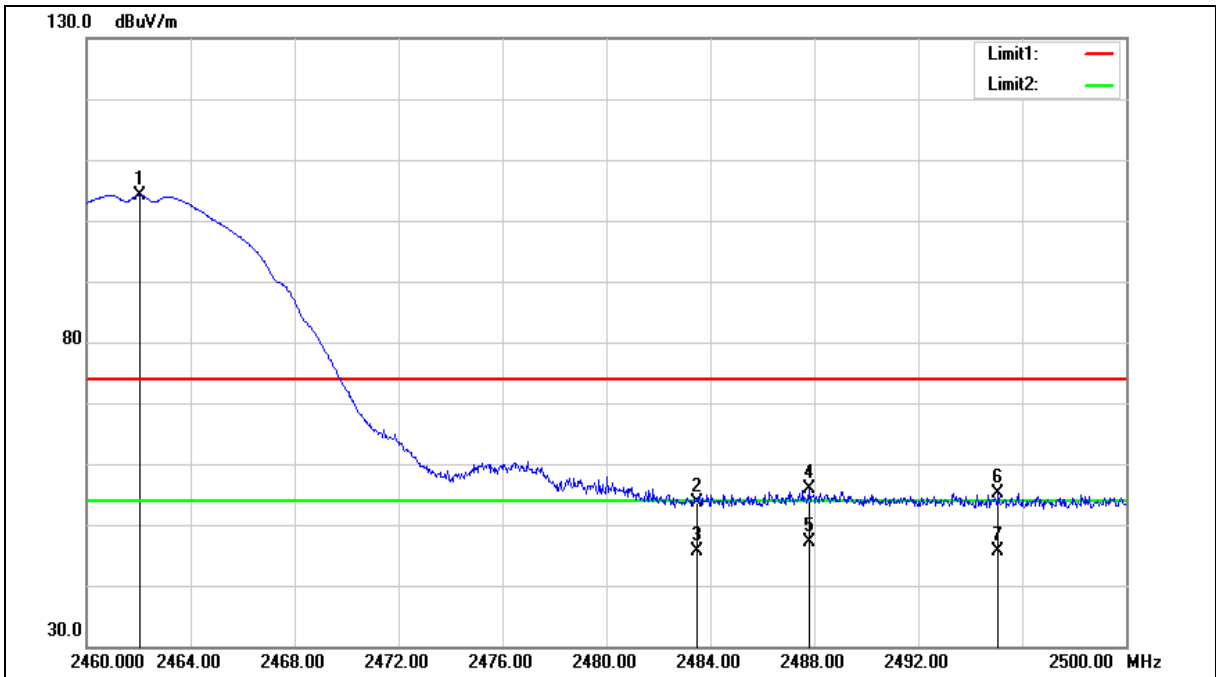
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2462.040	118.35	-14.12	104.23	--	--	peak
2	2483.500	67.57	-14.01	53.56	74.00	-20.44	peak
3	2483.500	59.53	-14.01	45.52	54.00	-8.48	AVG
4	2487.800	69.76	-13.98	55.78	74.00	-18.22	peak
5	2487.800	61.09	-13.98	47.11	54.00	-6.89	AVG
6	2495.080	69.20	-13.95	55.25	74.00	-18.75	peak
7	2495.080	59.61	-13.95	45.66	54.00	-8.34	AVG

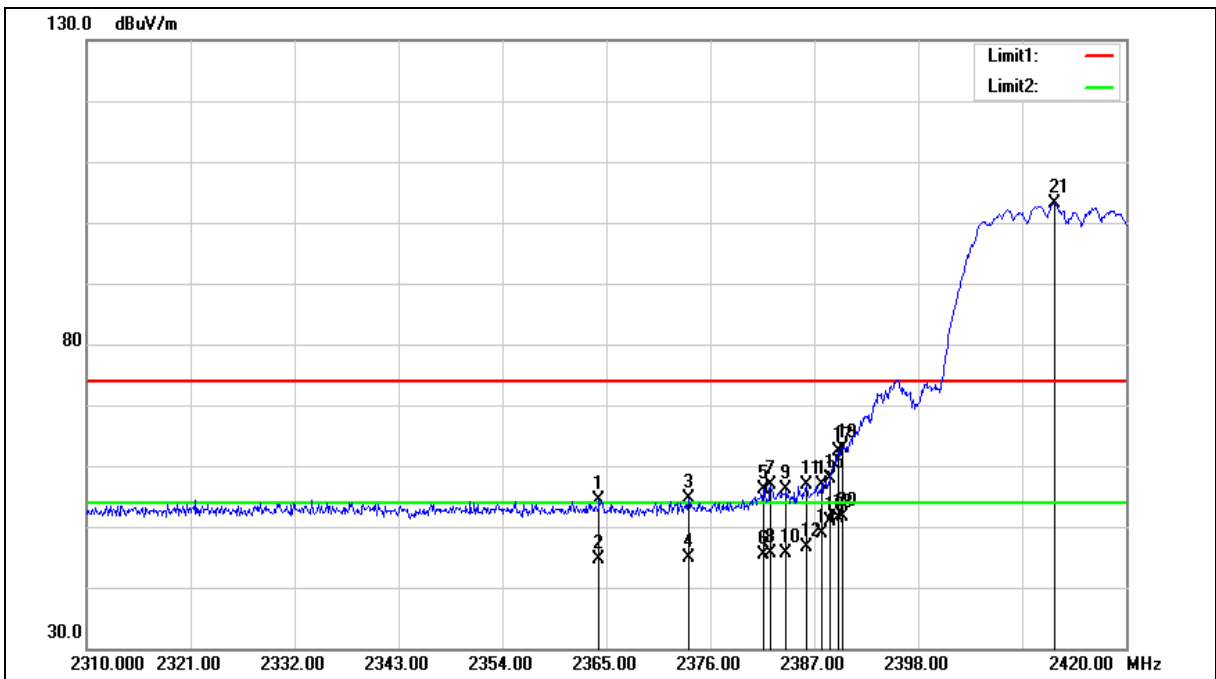
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2364.230	69.11	-14.61	54.50	74.00	-19.50	peak
2	2364.230	59.21	-14.61	44.60	54.00	-9.40	AVG
3	2373.690	69.09	-14.57	54.52	74.00	-19.48	peak
4	2373.690	59.50	-14.57	44.93	54.00	-9.07	AVG
5	2381.610	70.65	-14.52	56.13	74.00	-17.87	peak
6	2381.610	59.90	-14.52	45.38	54.00	-8.62	AVG
7	2382.380	71.46	-14.52	56.94	74.00	-17.06	peak
8	2382.380	60.21	-14.52	45.69	54.00	-8.31	AVG
9	2384.030	70.74	-14.51	56.23	74.00	-17.77	peak
10	2384.030	60.11	-14.51	45.60	54.00	-8.40	AVG
11	2386.230	71.32	-14.51	56.81	74.00	-17.19	peak
12	2386.230	61.17	-14.51	46.66	54.00	-7.34	AVG
13	2387.770	71.30	-14.49	56.81	74.00	-17.19	peak
14	2387.770	63.41	-14.49	48.92	54.00	-5.08	AVG
15	2388.650	72.46	-14.49	57.97	74.00	-16.03	peak
16	2388.650	65.34	-14.49	50.85	54.00	-3.15	AVG
17	2389.530	76.82	-14.49	62.33	74.00	-11.67	peak
18	2389.530	65.91	-14.49	51.42	54.00	-2.58	AVG
19	2390.000	77.30	-14.48	62.82	74.00	-11.18	peak
20	2390.000	66.12	-14.48	51.64	54.00	-2.36	AVG
21	2412.410	117.54	-14.37	103.17	--	--	peak

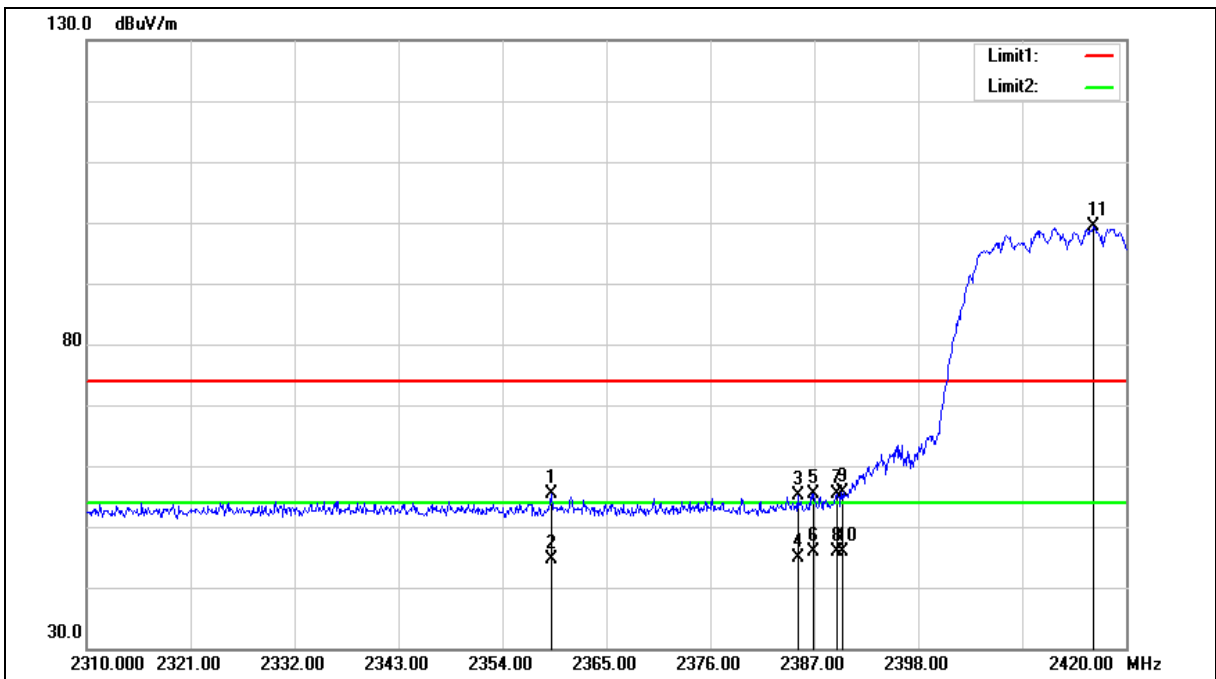
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2359.170	69.91	-14.64	55.27	74.00	-18.73	peak
2	2359.170	59.17	-14.64	44.53	54.00	-9.47	AVG
3	2385.240	69.59	-14.51	55.08	74.00	-18.92	peak
4	2385.240	59.37	-14.51	44.86	54.00	-9.14	AVG
5	2386.890	69.85	-14.49	55.36	74.00	-18.64	peak
6	2386.890	60.26	-14.49	45.77	54.00	-8.23	AVG
7	2389.420	69.95	-14.49	55.46	74.00	-18.54	peak
8	2389.420	60.39	-14.49	45.90	54.00	-8.10	AVG
9	2390.000	69.99	-14.48	55.51	74.00	-18.49	peak
10	2390.000	60.32	-14.48	45.84	54.00	-8.16	AVG
11	2416.590	113.70	-14.34	99.36	--	--	peak

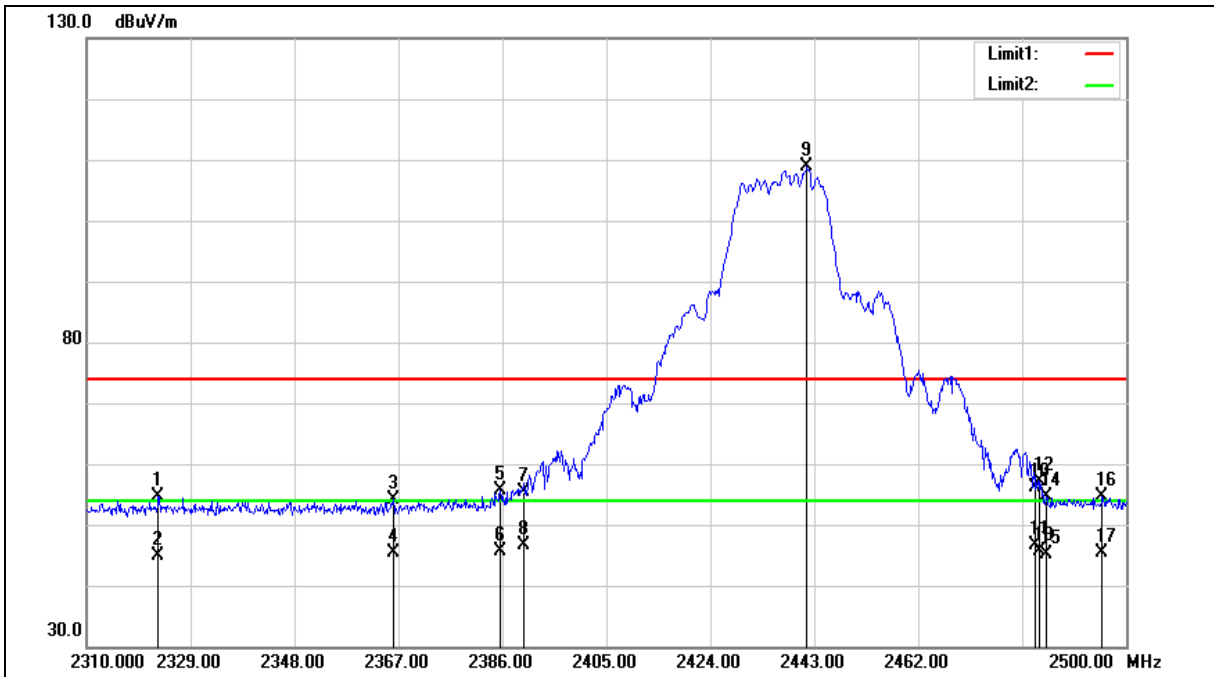
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
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	2323.110	69.47	-14.82	54.65	74.00	-19.35	peak
2	2323.110	59.81	-14.82	44.99	54.00	-9.01	AVG
3	2366.050	68.71	-14.61	54.10	74.00	-19.90	peak
4	2366.050	59.92	-14.61	45.31	54.00	-8.69	AVG
5	2385.620	70.24	-14.51	55.73	74.00	-18.27	peak
6	2385.620	60.13	-14.51	45.62	54.00	-8.38	AVG
7	2390.000	69.88	-14.48	55.40	74.00	-18.60	peak
8	2390.000	61.14	-14.48	46.66	54.00	-7.34	AVG
9	2441.670	123.08	-14.22	108.86	--	--	peak
10	2483.500	70.26	-14.01	56.25	74.00	-17.75	peak
11	2483.500	60.60	-14.01	46.59	54.00	-7.41	AVG
12	2484.230	71.12	-14.00	57.12	74.00	-16.88	peak
13	2484.230	59.52	-14.00	45.52	54.00	-8.48	AVG
14	2485.370	68.73	-14.00	54.73	74.00	-19.27	peak
15	2485.370	59.17	-14.00	45.17	54.00	-8.83	AVG
16	2495.630	68.46	-13.94	54.52	74.00	-19.48	peak
17	2495.630	59.25	-13.94	45.31	54.00	-8.69	AVG

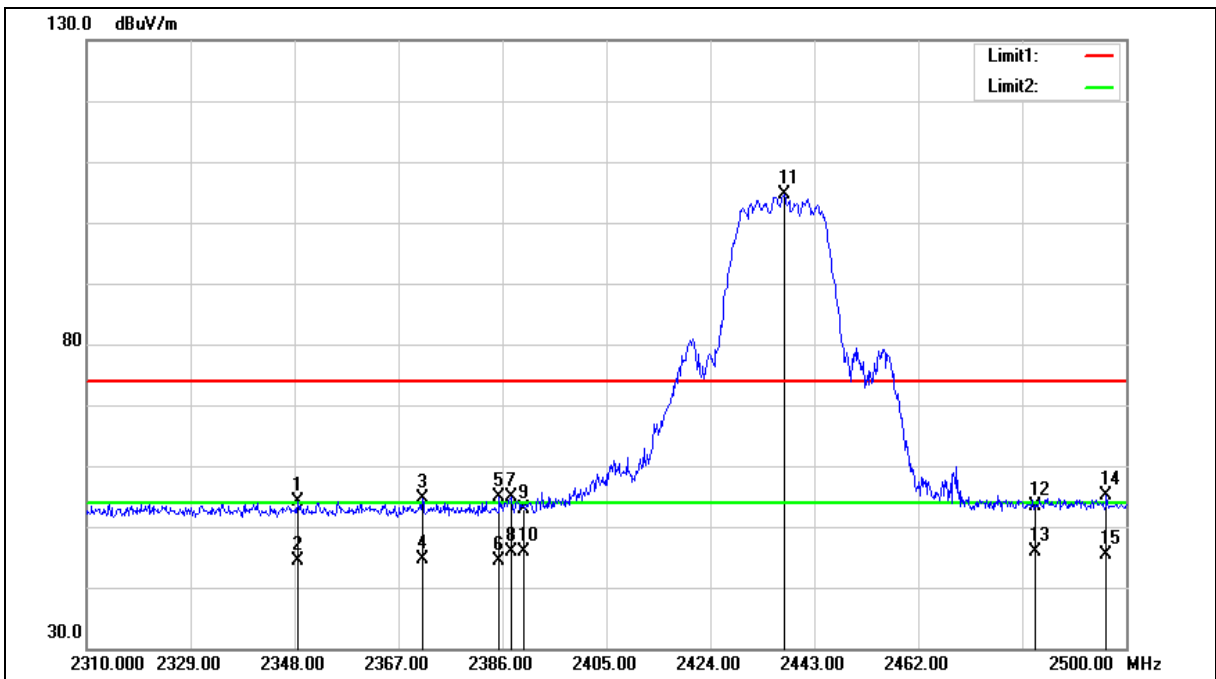
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
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	2348.570	68.90	-14.69	54.21	74.00	-19.79	peak
2	2348.570	59.17	-14.69	44.48	54.00	-9.52	AVG
3	2371.370	69.10	-14.58	54.52	74.00	-19.48	peak
4	2371.370	59.09	-14.58	44.51	54.00	-9.49	AVG
5	2385.430	69.30	-14.51	54.79	74.00	-19.21	peak
6	2385.430	58.94	-14.51	44.43	54.00	-9.57	AVG
7	2387.520	69.30	-14.49	54.81	74.00	-19.19	peak
8	2387.520	60.40	-14.49	45.91	54.00	-8.09	AVG
9	2390.000	67.26	-14.48	52.78	74.00	-21.22	peak
10	2390.000	60.44	-14.48	45.96	54.00	-8.04	AVG
11	2437.490	118.87	-14.24	104.63	--	--	peak
12	2483.500	67.49	-14.01	53.48	74.00	-20.52	peak
13	2483.500	59.92	-14.01	45.91	54.00	-8.09	AVG
14	2496.390	68.98	-13.94	55.04	74.00	-18.96	peak
15	2496.390	59.38	-13.94	45.44	54.00	-8.56	AVG

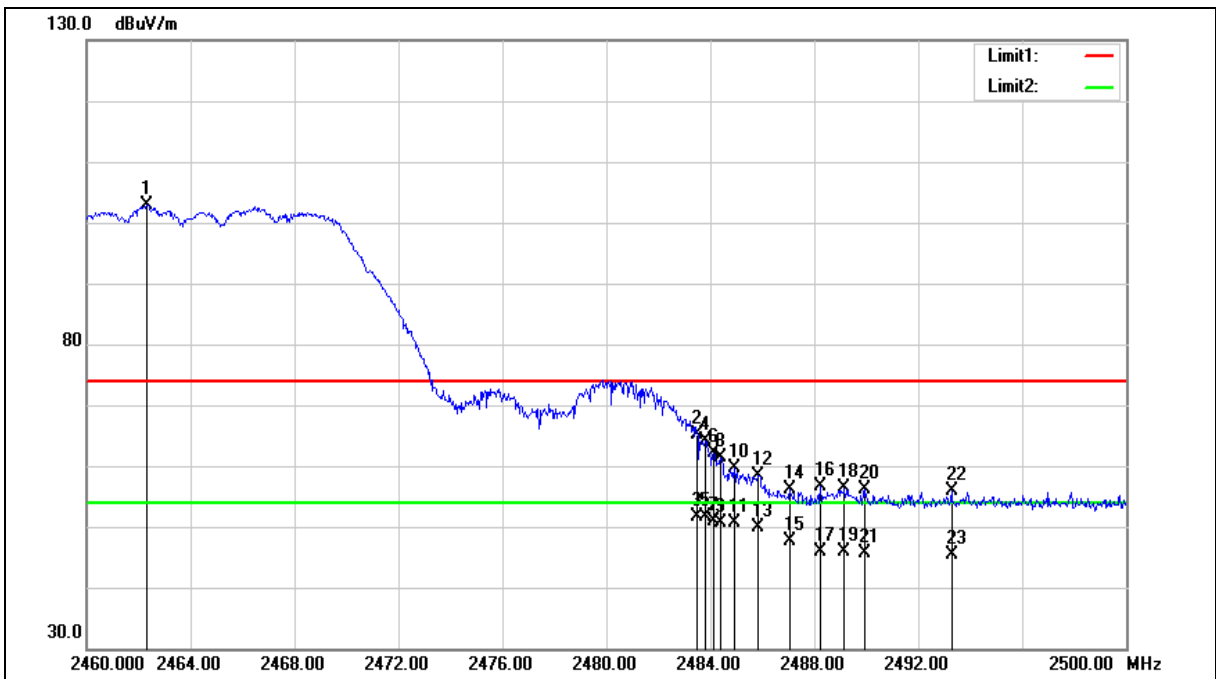
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2462.320	116.88	-14.11	102.77	--	--	peak
2	2483.500	79.02	-14.01	65.01	74.00	-8.99	peak
3	2483.500	65.76	-14.01	51.75	54.00	-2.25	AVG
4	2483.800	78.04	-14.01	64.03	74.00	-9.97	peak
5	2483.800	65.68	-14.01	51.67	54.00	-2.33	AVG
6	2484.120	76.15	-14.00	62.15	74.00	-11.85	peak
7	2484.120	64.85	-14.00	50.85	54.00	-3.15	AVG
8	2484.400	75.42	-14.00	61.42	74.00	-12.58	peak
9	2484.400	64.75	-14.00	50.75	54.00	-3.25	AVG
10	2484.920	73.51	-14.00	59.51	74.00	-14.49	peak
11	2484.920	64.57	-14.00	50.57	54.00	-3.43	AVG
12	2485.840	72.42	-13.99	58.43	74.00	-15.57	peak
13	2485.840	63.80	-13.99	49.81	54.00	-4.19	AVG
14	2487.040	70.18	-13.98	56.20	74.00	-17.80	peak
15	2487.040	61.54	-13.98	47.56	54.00	-6.44	AVG
16	2488.240	70.66	-13.98	56.68	74.00	-17.32	peak
17	2488.240	59.96	-13.98	45.98	54.00	-8.02	AVG
18	2489.160	70.29	-13.98	56.31	74.00	-17.69	peak
19	2489.160	59.83	-13.98	45.85	54.00	-8.15	AVG
20	2489.920	70.13	-13.97	56.16	74.00	-17.84	peak
21	2489.920	59.52	-13.97	45.55	54.00	-8.45	AVG
22	2493.280	69.83	-13.95	55.88	74.00	-18.12	peak
23	2493.280	59.34	-13.95	45.39	54.00	-8.61	AVG

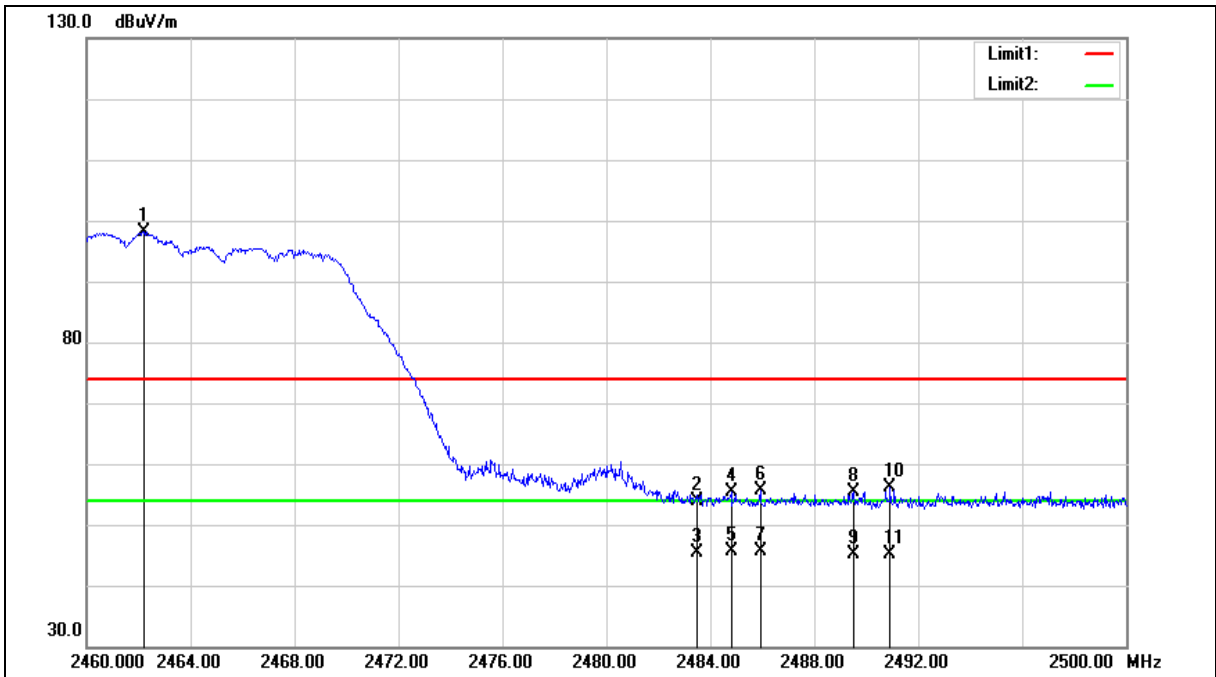
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
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	2462.200	112.23	-14.12	98.11	--	--	peak
2	2483.500	67.92	-14.01	53.91	74.00	-20.09	peak
3	2483.500	59.43	-14.01	45.42	54.00	-8.58	AVG
4	2484.800	69.28	-14.00	55.28	74.00	-18.72	peak
5	2484.800	59.51	-14.00	45.51	54.00	-8.49	AVG
6	2485.920	69.65	-13.99	55.66	74.00	-18.34	peak
7	2485.920	59.58	-13.99	45.59	54.00	-8.41	AVG
8	2489.520	69.38	-13.98	55.40	74.00	-18.60	peak
9	2489.520	59.12	-13.98	45.14	54.00	-8.86	AVG
10	2490.920	69.98	-13.97	56.01	74.00	-17.99	peak
11	2490.920	59.22	-13.97	45.25	54.00	-8.75	AVG

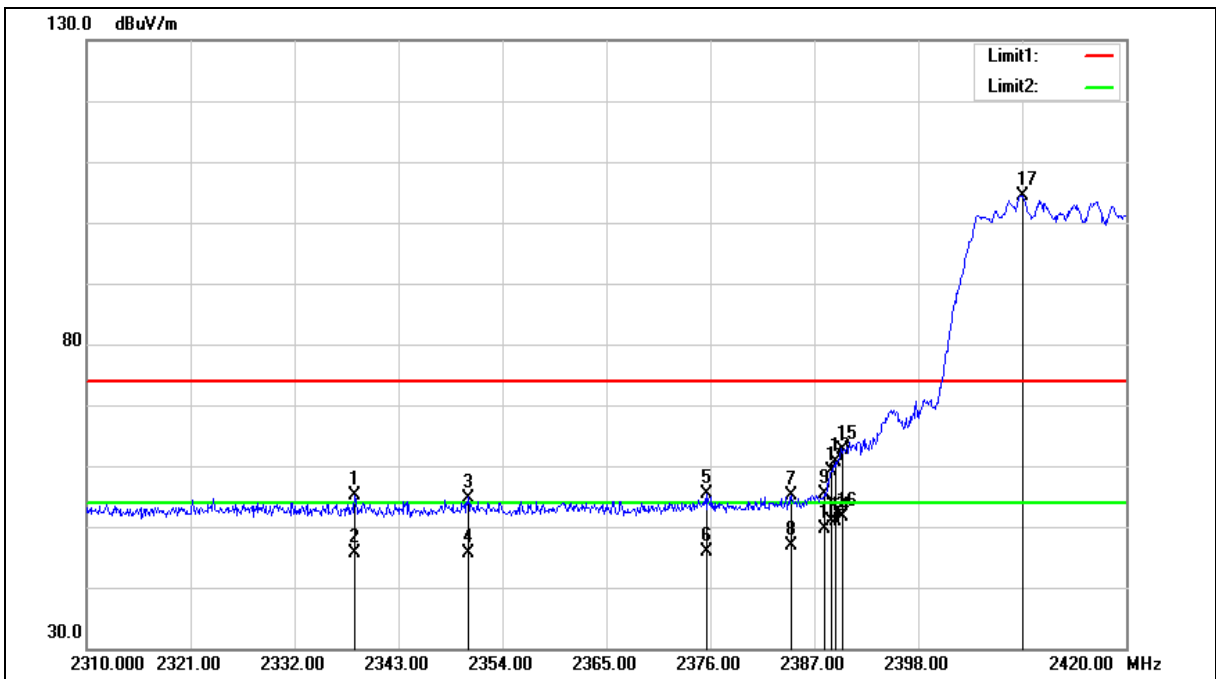
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2338.380	69.96	-14.75	55.21	74.00	-18.79	peak
2	2338.380	60.29	-14.75	45.54	54.00	-8.46	AVG
3	2350.370	69.44	-14.69	54.75	74.00	-19.25	peak
4	2350.370	60.38	-14.69	45.69	54.00	-8.31	AVG
5	2375.670	69.83	-14.55	55.28	74.00	-18.72	peak
6	2375.670	60.52	-14.55	45.97	54.00	-8.03	AVG
7	2384.580	69.57	-14.51	55.06	74.00	-18.94	peak
8	2384.580	61.30	-14.51	46.79	54.00	-7.21	AVG
9	2388.100	69.82	-14.49	55.33	74.00	-18.67	peak
10	2388.100	64.17	-14.49	49.68	54.00	-4.32	AVG
11	2388.870	73.70	-14.49	59.21	74.00	-14.79	peak
12	2388.870	65.37	-14.49	50.88	54.00	-3.12	AVG
13	2389.310	75.02	-14.49	60.53	74.00	-13.47	peak
14	2389.310	65.48	-14.49	50.99	54.00	-3.01	AVG
15	2390.000	77.06	-14.48	62.58	74.00	-11.42	peak
16	2390.000	66.21	-14.48	51.73	54.00	-2.27	AVG
17	2409.000	118.79	-14.39	104.40	--	--	peak

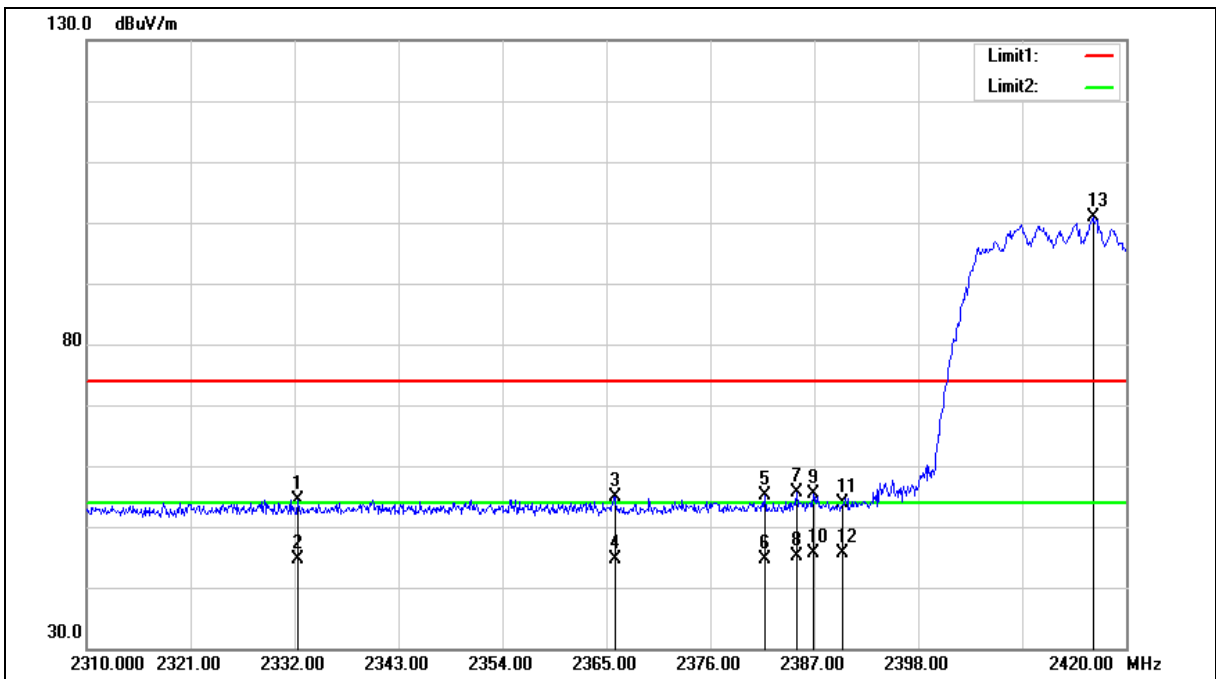
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2332.330	69.24	-14.78	54.46	74.00	-19.54	peak
2	2332.330	59.33	-14.78	44.55	54.00	-9.45	AVG
3	2365.880	69.45	-14.61	54.84	74.00	-19.16	peak
4	2365.880	59.20	-14.61	44.59	54.00	-9.41	AVG
5	2381.830	69.54	-14.52	55.02	74.00	-18.98	peak
6	2381.830	59.27	-14.52	44.75	54.00	-9.25	AVG
7	2385.130	70.25	-14.51	55.74	74.00	-18.26	peak
8	2385.130	59.73	-14.51	45.22	54.00	-8.78	AVG
9	2386.890	69.82	-14.49	55.33	74.00	-18.67	peak
10	2386.890	60.18	-14.49	45.69	54.00	-8.31	AVG
11	2390.000	68.38	-14.48	53.90	74.00	-20.10	peak
12	2390.000	60.11	-14.48	45.63	54.00	-8.37	AVG
13	2416.480	115.23	-14.34	100.89	--	--	peak

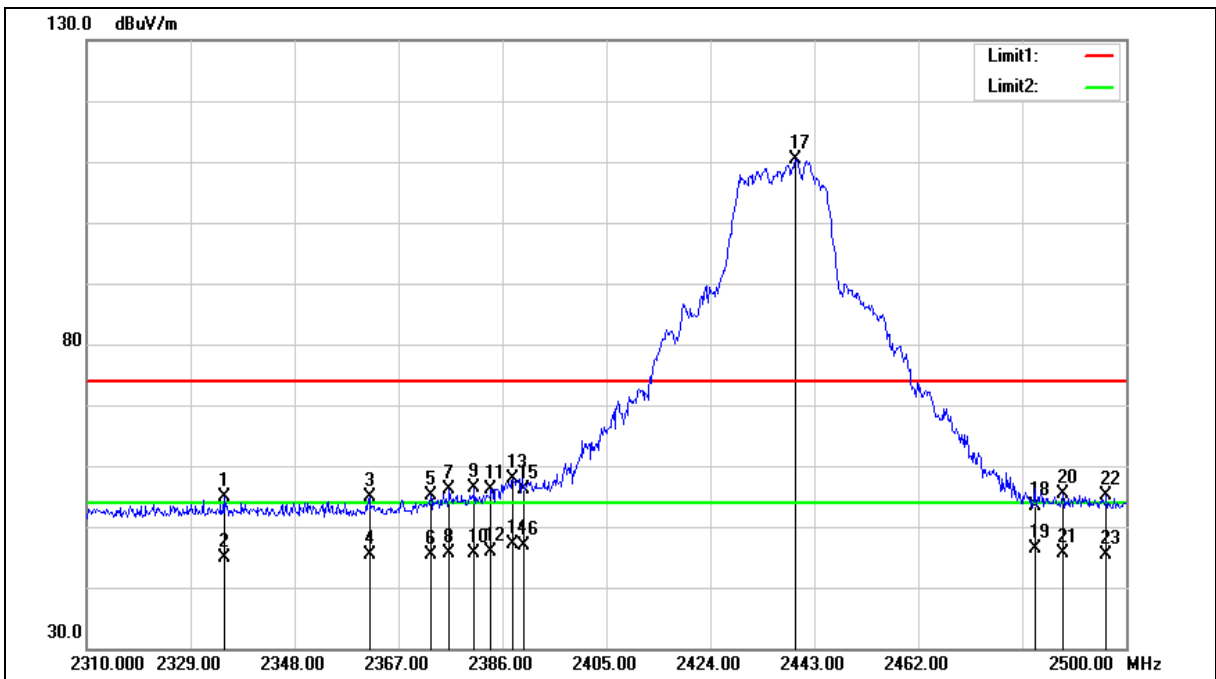
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2335.080	69.57	-14.76	54.81	74.00	-19.19	peak
2	2335.080	59.74	-14.76	44.98	54.00	-9.02	AVG
3	2361.680	69.41	-14.63	54.78	74.00	-19.22	peak
4	2361.680	60.07	-14.63	45.44	54.00	-8.56	AVG
5	2372.890	69.58	-14.57	55.01	74.00	-18.99	peak
6	2372.890	59.84	-14.57	45.27	54.00	-8.73	AVG
7	2376.310	70.74	-14.55	56.19	74.00	-17.81	peak
8	2376.310	60.17	-14.55	45.62	54.00	-8.38	AVG
9	2380.870	70.95	-14.53	56.42	74.00	-17.58	peak
10	2380.870	60.26	-14.53	45.73	54.00	-8.27	AVG
11	2383.910	70.71	-14.51	56.20	74.00	-17.80	peak
12	2383.910	60.48	-14.51	45.97	54.00	-8.03	AVG
13	2387.900	72.45	-14.49	57.96	74.00	-16.04	peak
14	2387.900	61.53	-14.49	47.04	54.00	-6.96	AVG
15	2390.000	70.69	-14.48	56.21	74.00	-17.79	peak
16	2390.000	61.38	-14.48	46.90	54.00	-7.10	AVG
17	2439.580	124.54	-14.23	110.31	--	--	peak
18	2483.500	67.41	-14.01	53.40	74.00	-20.60	peak
19	2483.500	60.35	-14.01	46.34	54.00	-7.66	AVG
20	2488.410	69.41	-13.98	55.43	74.00	-18.57	peak
21	2488.410	59.58	-13.98	45.60	54.00	-8.40	AVG
22	2496.390	69.14	-13.94	55.20	74.00	-18.80	peak
23	2496.390	59.33	-13.94	45.39	54.00	-8.61	AVG

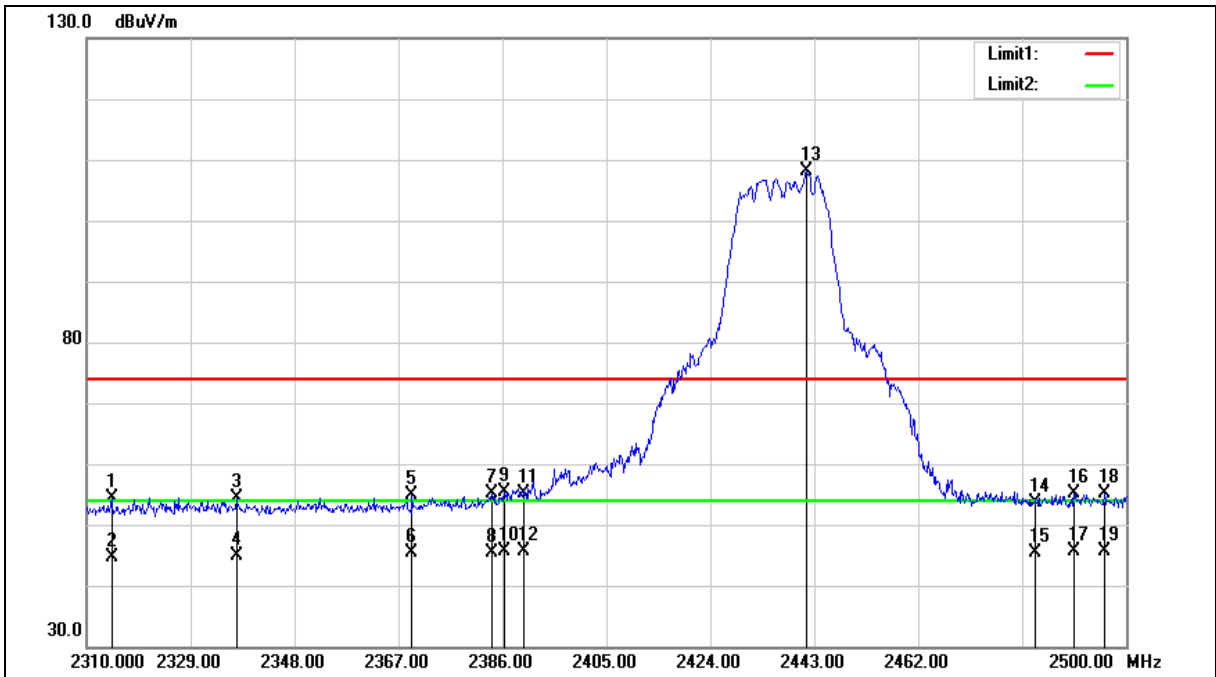
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2437 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2314.560	69.37	-14.87	54.50	74.00	-19.50	peak
2	2314.560	59.38	-14.87	44.51	54.00	-9.49	AVG
3	2337.360	69.15	-14.75	54.40	74.00	-19.60	peak
4	2337.360	59.71	-14.75	44.96	54.00	-9.04	AVG
5	2369.470	69.41	-14.58	54.83	74.00	-19.17	peak
6	2369.470	59.95	-14.58	45.37	54.00	-8.63	AVG
7	2384.100	69.66	-14.51	55.15	74.00	-18.85	peak
8	2384.100	59.91	-14.51	45.40	54.00	-8.60	AVG
9	2386.380	70.00	-14.51	55.49	74.00	-18.51	peak
10	2386.380	60.13	-14.51	45.62	54.00	-8.38	AVG
11	2390.000	69.68	-14.48	55.20	74.00	-18.80	peak
12	2390.000	60.06	-14.48	45.58	54.00	-8.42	AVG
13	2441.480	122.32	-14.22	108.10	--	--	peak
14	2483.500	67.65	-14.01	53.64	74.00	-20.36	peak
15	2483.500	59.32	-14.01	45.31	54.00	-8.69	AVG
16	2490.500	69.17	-13.97	55.20	74.00	-18.80	peak
17	2490.500	59.50	-13.97	45.53	54.00	-8.47	AVG
18	2496.010	69.19	-13.94	55.25	74.00	-18.75	peak
19	2496.010	59.52	-13.94	45.58	54.00	-8.42	AVG

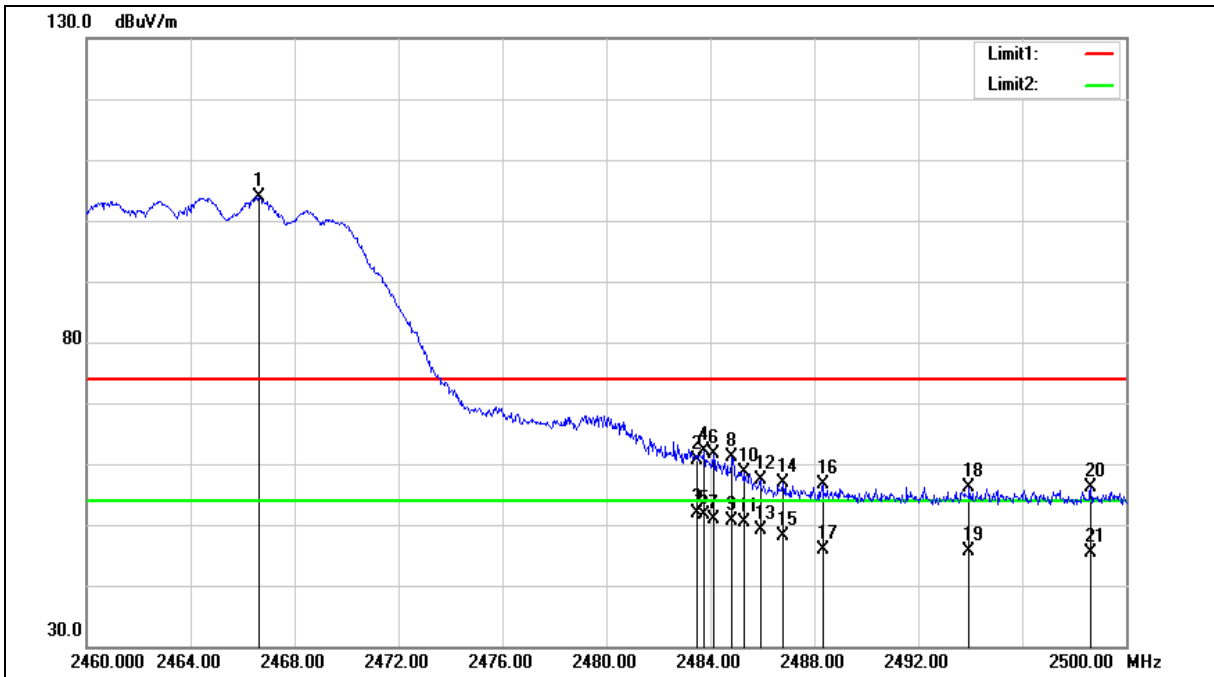
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2466.640	117.92	-14.09	103.83	--	--	peak
2	2483.500	74.67	-14.01	60.66	74.00	-13.34	peak
3	2483.500	65.85	-14.01	51.84	54.00	-2.16	AVG
4	2483.760	76.13	-14.01	62.12	74.00	-11.88	peak
5	2483.760	65.59	-14.01	51.58	54.00	-2.42	AVG
6	2484.120	75.68	-14.00	61.68	74.00	-12.32	peak
7	2484.120	64.82	-14.00	50.82	54.00	-3.18	AVG
8	2484.840	75.11	-14.00	61.11	74.00	-12.89	peak
9	2484.840	64.62	-14.00	50.62	54.00	-3.38	AVG
10	2485.320	72.59	-14.00	58.59	74.00	-15.41	peak
11	2485.320	64.50	-14.00	50.50	54.00	-3.50	AVG
12	2485.920	71.41	-13.99	57.42	74.00	-16.58	peak
13	2485.920	63.05	-13.99	49.06	54.00	-4.94	AVG
14	2486.800	70.98	-13.98	57.00	74.00	-17.00	peak
15	2486.800	62.09	-13.98	48.11	54.00	-5.89	AVG
16	2488.320	70.57	-13.98	56.59	74.00	-17.41	peak
17	2488.320	59.85	-13.98	45.87	54.00	-8.13	AVG
18	2493.960	70.19	-13.95	56.24	74.00	-17.76	peak
19	2493.960	59.67	-13.95	45.72	54.00	-8.28	AVG
20	2498.640	69.96	-13.92	56.04	74.00	-17.96	peak
21	2498.640	59.35	-13.92	45.43	54.00	-8.57	AVG

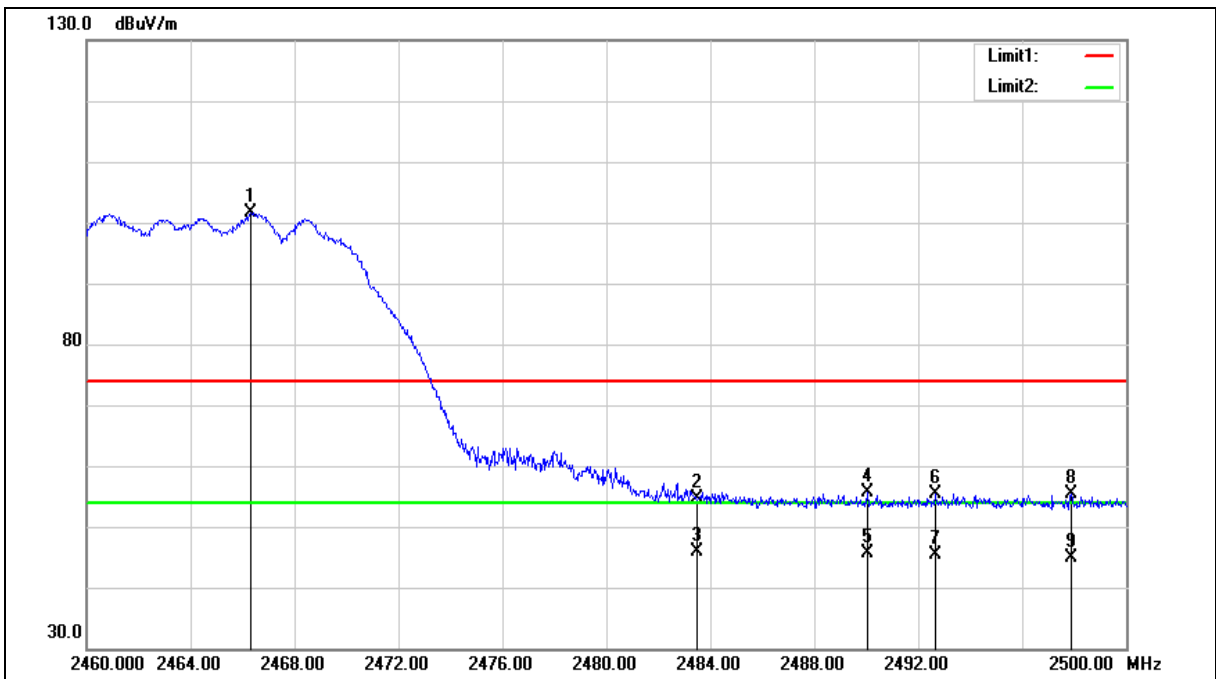
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2466.320	115.70	-14.09	101.61	--	--	peak
2	2483.500	68.71	-14.01	54.70	74.00	-19.30	peak
3	2483.500	59.95	-14.01	45.94	54.00	-8.06	AVG
4	2490.040	69.51	-13.97	55.54	74.00	-18.46	peak
5	2490.040	59.64	-13.97	45.67	54.00	-8.33	AVG
6	2492.640	69.43	-13.96	55.47	74.00	-18.53	peak
7	2492.640	59.35	-13.96	45.39	54.00	-8.61	AVG
8	2497.880	69.34	-13.93	55.41	74.00	-18.59	peak
9	2497.880	58.85	-13.93	44.92	54.00	-9.08	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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