RF Test Report

Applicant	:	Edimax Technology Co., Ltd.
Product Type	:	Indoor Air Quality Detector
Trade Name	:	EDIMAX
Model Number	:	AI-2004W, AI-2003W
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Receive Date	:	Aug. 01, 2019
Test Period	:	Aug. 21 ~ Sep. 10, 2019
Issue Date	:	Oct. 29, 2019

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C.)
Tel：+886-3-2710188 / Fax：+886-3-2710190

Taiwan Accreditation Foundation accreditation number: 1330
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.	Issue Date	Revisions	Revised By
00	Sep. 26, 2019	Initial Issue	Tobey Cheng
01	Oct. 29, 2019	Removed RX mode information.	Tobey Cheng

Verification of Compliance

Issued Date: Oct. 29, 2019

Applicant	:	Edimax Technology Co., Ltd.
Product Type	:	Indoor Air Quality Detector
Trade Name	:	EDIMAX
Model Number	:	AI-2004W, AI-2003W
FCC ID	:	NDD9520041907
EUT Rated Voltage	:	DC 12 V, 1 A
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, Taoyuan City 33465, Taiwan (R.O.C.) Tel：+886-3-2710188 / Fax：+886-3-2710190 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	:	Jet Lu	Reviewed By	: Ken Yang
(Manager)		(Jet Lu)	(Testing Engineer)	(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

1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	150 kHz ~ 30 MHz	2.8
Radiated Emission	9 kHz ~ 30 MHz	1.7
	30 MHz ~ 1000 MHz	5.7
	1000 MHz ~ 18000 MHz	5.6
	18000 MHz ~ 26500 MHz	4.9
	26500 MHz ~ 40000 MHz	4.8
Conducted Output Power	+0.27 dB / -0.28 dB	
RF Bandwidth	4.96 %	
Power Spectral Density	+0.71 dB / -0.77 dB	

Decision Rule

■ Uncertainty is not included.

□ Uncertainty is included.

2 EUT Description

Applicant	Edimax Technology Co., Ltd. No.278, Xinhu 1st Rd., Neihu Dist., Taipei City, Taiwan			
Manufacturer	Edimax Technology Co., Ltd. No.278, Xinhu 1st Rd., Neihu Dist., Taipei City, Taiwan			
Product Type	Indoor Air Quality Detector			
Trade Name	EDIMAX			
Model Number	AI-2004W, AI-2003W			
Difference description of model number	AI-2004W has a carbon monoxide sensor. AI-2003W has no carbon monoxide sensor.			
FCC ID	NDD9520041907			
Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate 400 / 800 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 72.2 Mbps
Antenna information	Model	Type	Max. Gain(dBi)	
	ALA120-051028-01	Dipole Antenna	4.7	
Antenna Delivery	See section 3.1			
Operate Temp. Range	0 ~ +40 ℃			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.070
IEEE 802.11g	0.420
IEEE 802.11n 2.4 GHz 20 MHz	0.416

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.

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

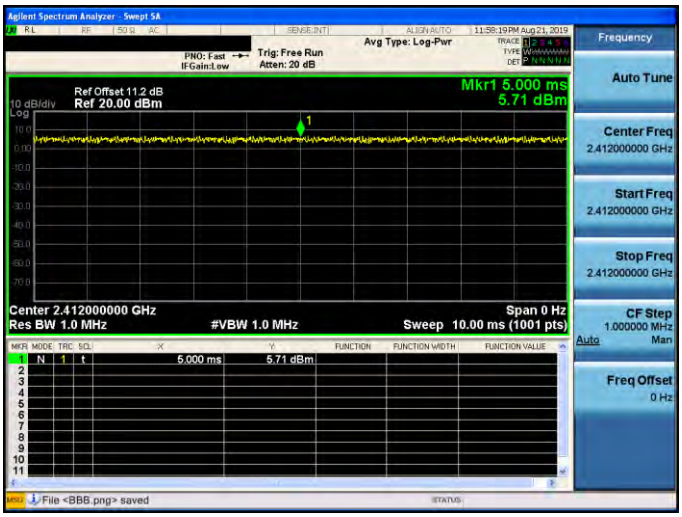
Test Mode	Antenna Delivery	Data Rate (Mbps)	Test Channel
Mode 2	1TX	1	1, 6, 11
Mode 3	1TX	6	1, 6, 11
Mode 4	1TX	6.5	1, 6, 11

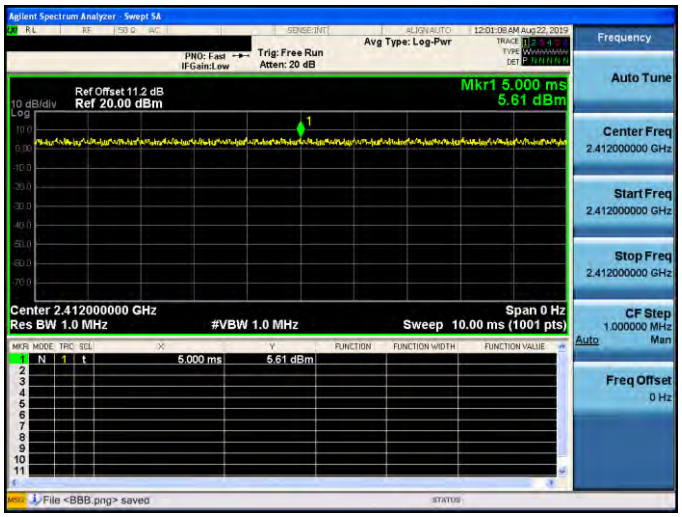
Duty cycle

Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	2412	10.000	10.000	1.000	0.000	0.010
Mode 3	2412	10.000	10.000	1.000	0.000	0.010
Mode 4	2412	10.000	10.000	1.000	0.000	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


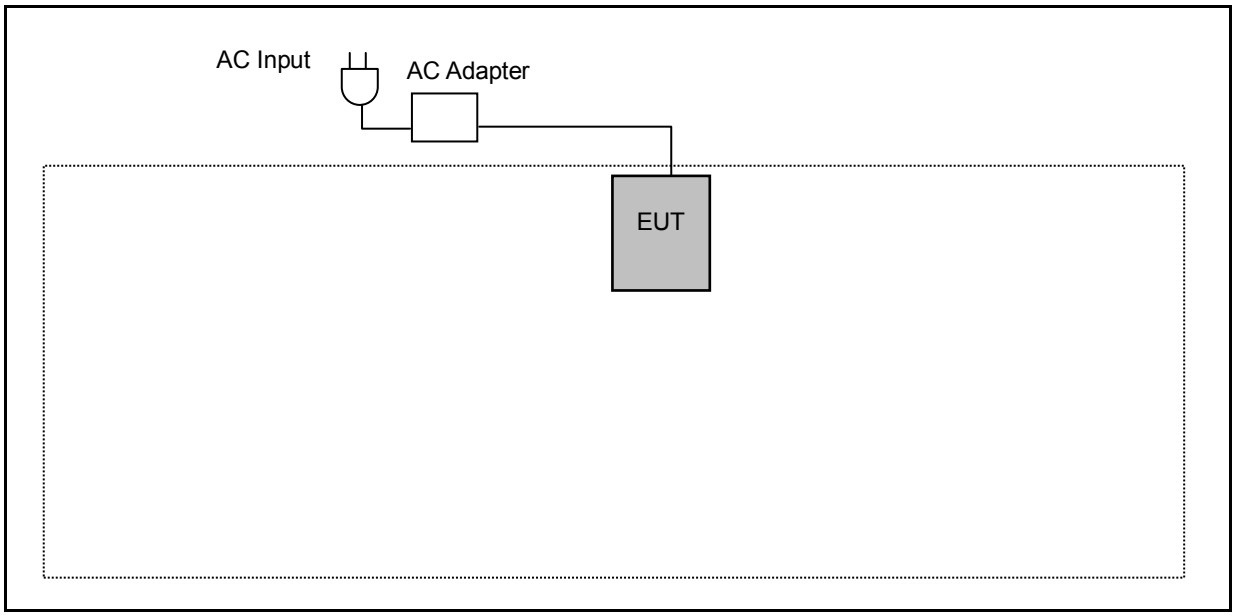
3.2. EUT Test Step

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.

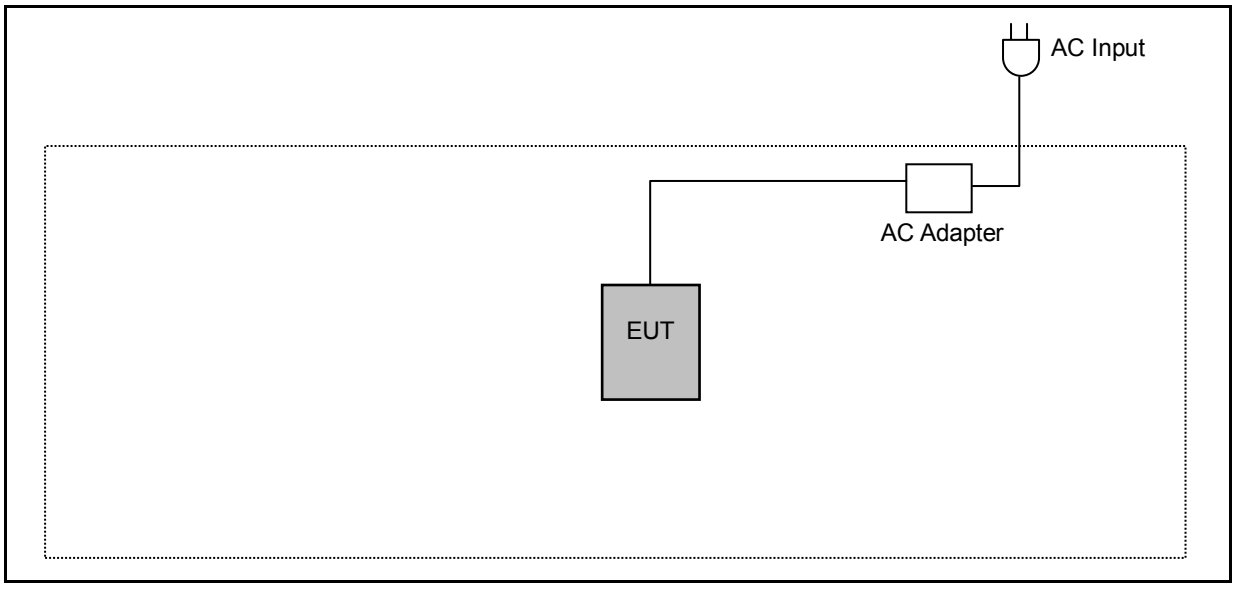
Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

3.3. Configuration of Test System Details

Conducted Emissions



Radiated Emission



Devices Description					
Product		Manufacturer	Model Number	Serial Number	Power Cord
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3.4. Test Instruments

For Conducted
Test Period: Aug. 21 ~ Aug. 22, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/25/2018	1 year
Power Sensor	Agilent	N1921A	MY45241957	12/13/2018	1 year
Power Meter	Agilent	N1911A	MY45101619	12/13/2018	1 year
Microwave Cable	EMCI	EMC102-SM-SM1500	001	11/21/2018	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

For Conducted Emission
Test Period: Sep. 10, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESCI	100367	05/23/2019	1 year
LISN	R&S	ENV216	101040	04/03/2019	1 year
LISN	R&S	ENV216	101041	03/28/2019	1 year
RF Cable	Woken	00100D1380194M	TE-02-03	05/23/2019	1 year

For Radiated Emissions
Test Period: Aug. 21, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/14/2019	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/16/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/14/2019	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/19/2018	1 year
Horn Antenna (1~18 GHz)	ETS-Lindgren	3117	00128055	08/16/2019	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	03/29/2019	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2019	1 year
Microwave Cable	EMCI	EMC104-SM-SM-13000	170814	10/30/2018	1 year
Microwave Cable	EMCI	EMC102-KM-KM-14000	151001	02/20/2019	1 year

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

3.5. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	990

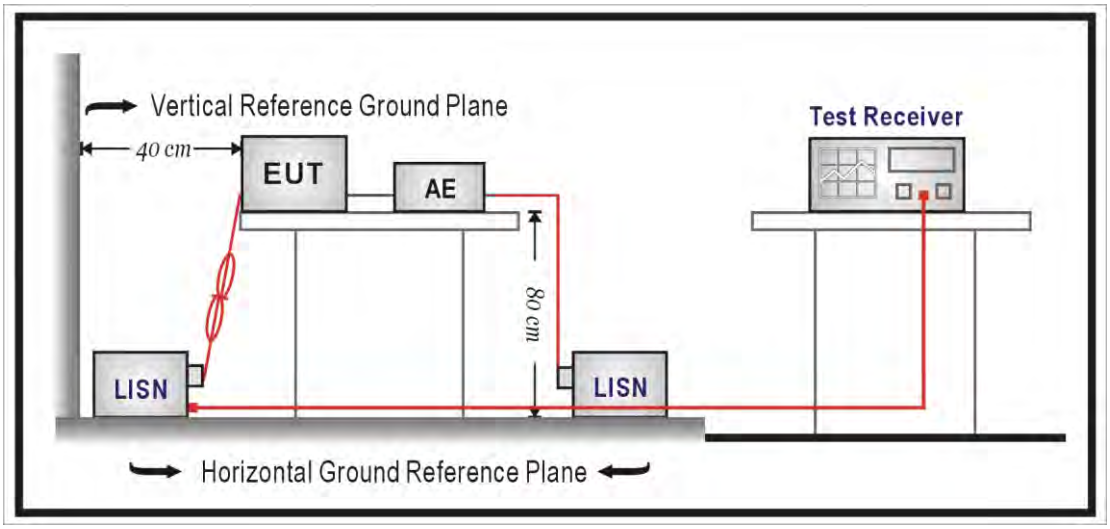
4 Measurement Procedure

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 Ω// 50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 Ω// 50 uH 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 50 Ω ports of the LISN shall be resistively terminated into 50 Ω 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**

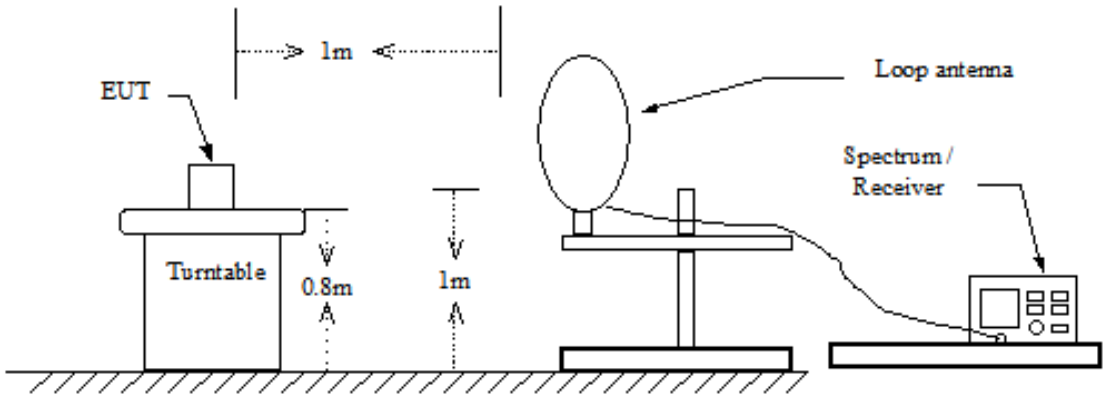
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/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

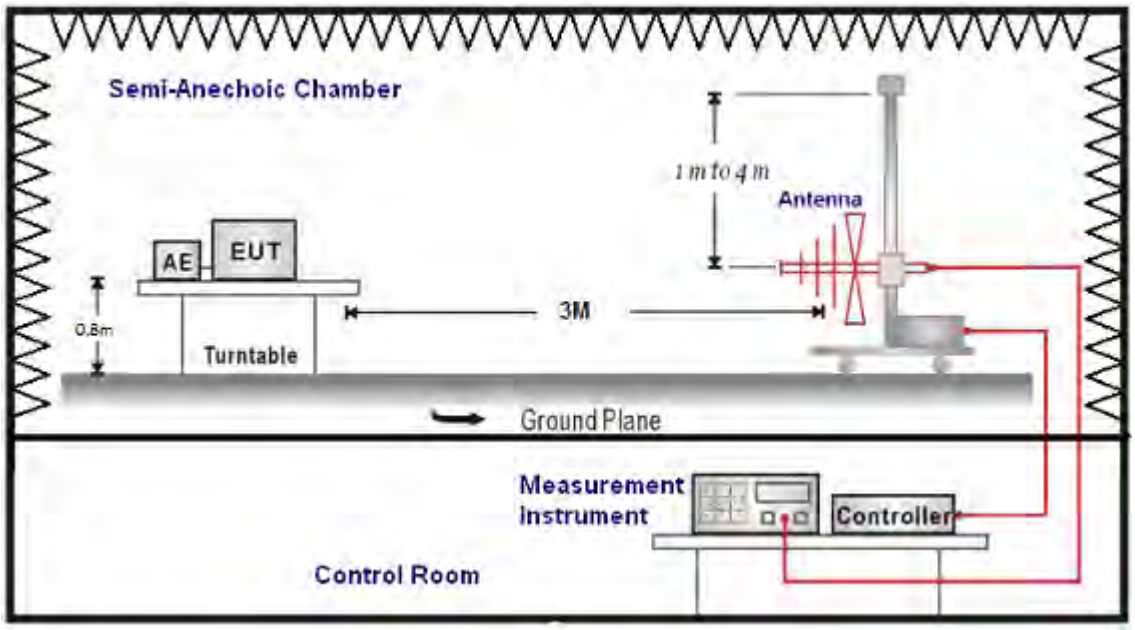
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this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

■ **Setup**

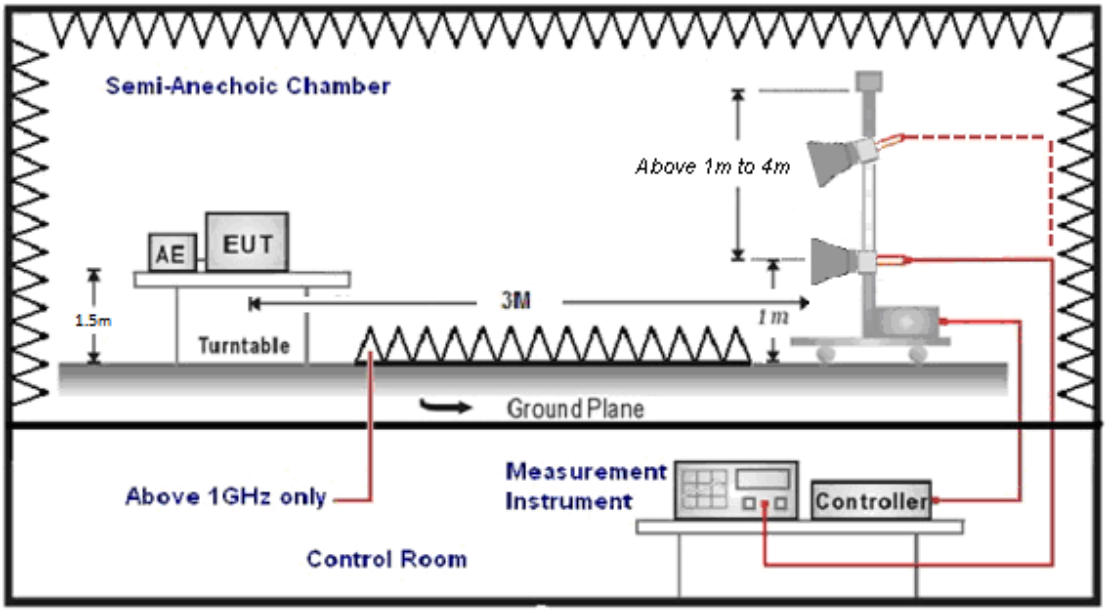
9 kHz ~ 30 MHz



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 tree 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 colts per meter (dBuV/m).

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

(1) 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) 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

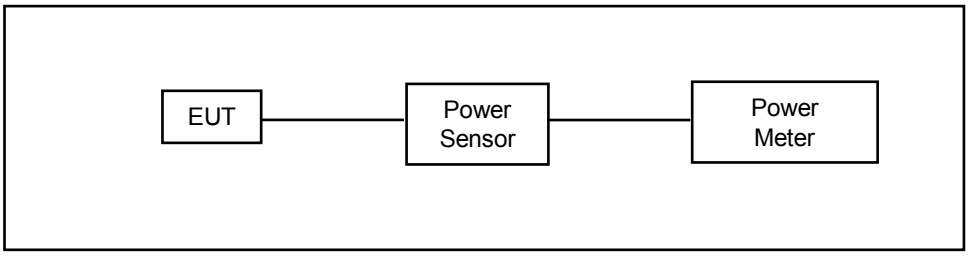
■ **Limit**

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.

∗ Directional Gain = Max. Gain = 4.7 dBi < 6 dBi.

■ **Test Setup**



■ **Test Procedure**

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

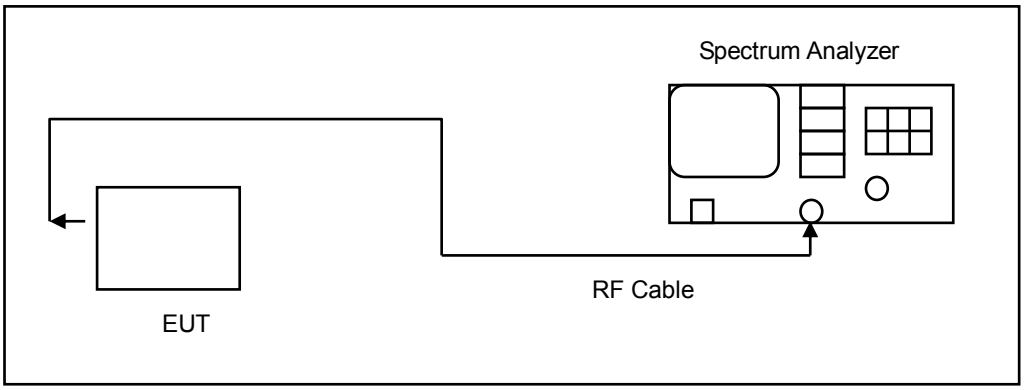
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor.

4.4. 6 dB RF Bandwidth Measurement

■ **Limit**

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

■ **Test Setup**



■ **Test Procedure**

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

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

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

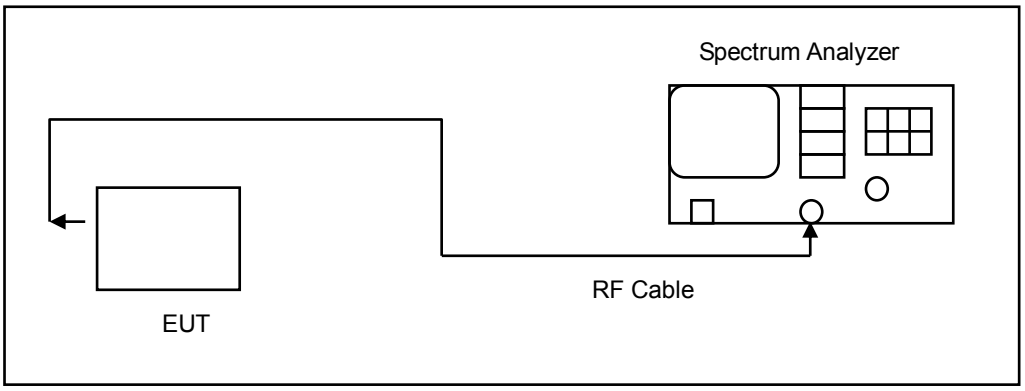
4.5. Maximum Power Spectral Density Measurement

■ **Limit**

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

∗ Directional Gain = Max. Gain = 4.7 dBi < 6 dBi.

■ **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.

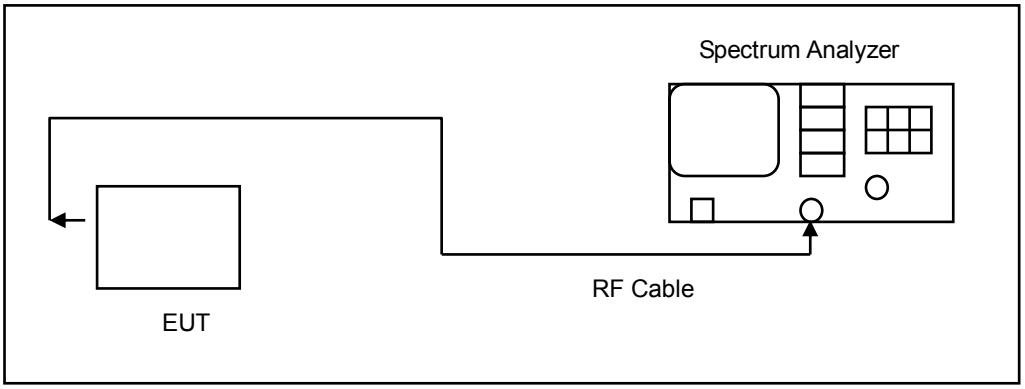
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 × RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the 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.

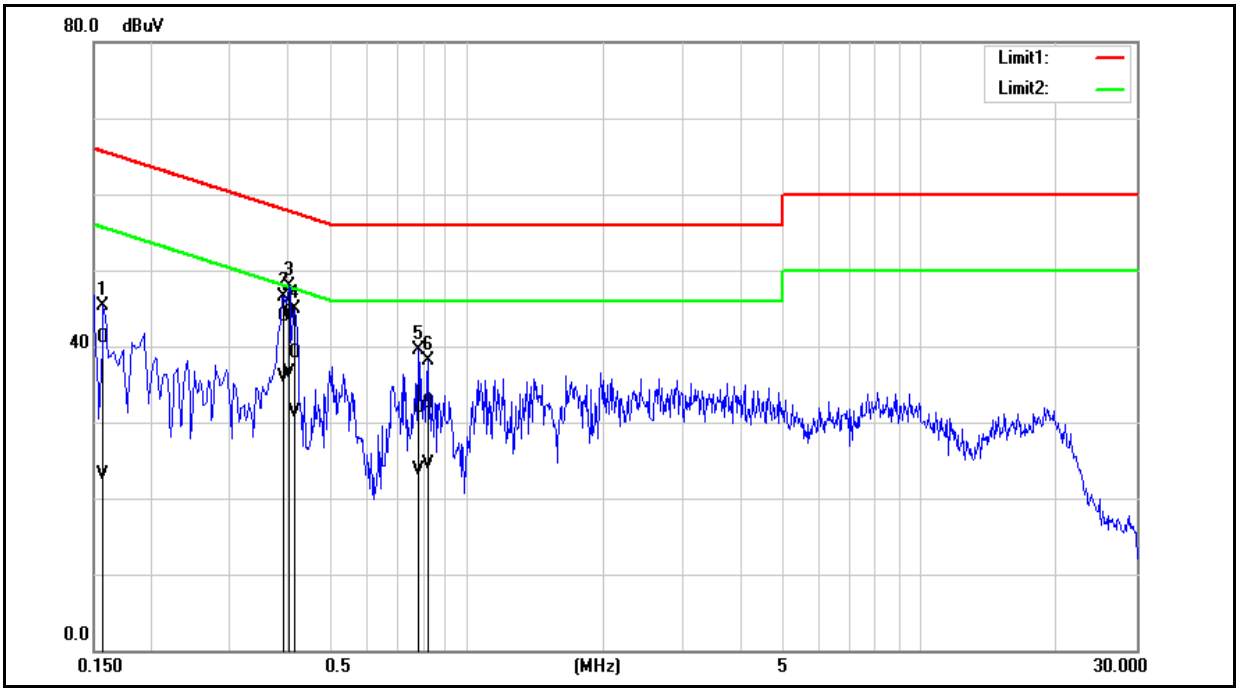
- **Antenna Description**

See section 2 – antenna information.

5 Test Results

Annex A. Conducted Emission

Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Description:			

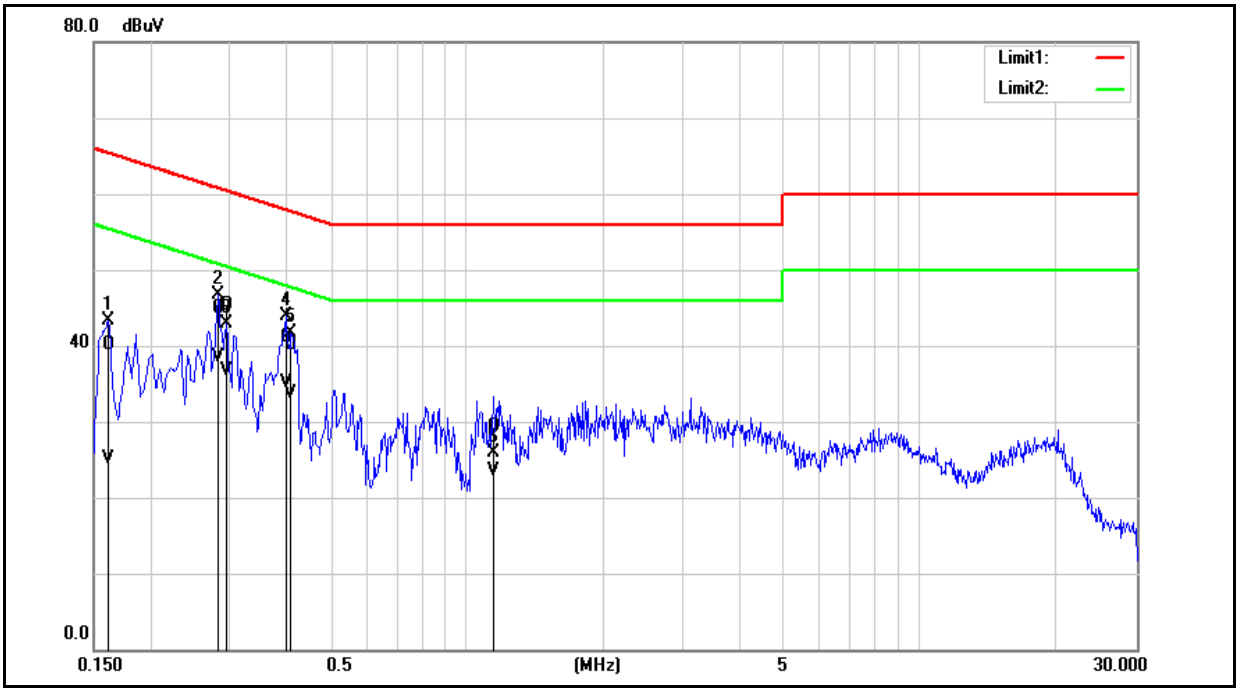


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	31.44	13.38	9.65	41.09	23.03	65.57	55.57	-24.48	-32.54	Pass
2	0.3940	34.22	26.27	9.65	43.87	35.92	57.98	47.98	-14.11	-12.06	Pass
3	0.4060	34.66	26.86	9.65	44.31	36.51	57.73	47.73	-13.42	-11.22	Pass
4	0.4180	29.39	21.65	9.65	39.04	31.30	57.49	47.49	-18.45	-16.19	Pass
5	0.7820	22.25	14.08	9.68	31.93	23.76	56.00	46.00	-24.07	-22.24	Pass
6	0.8180	22.83	14.87	9.68	32.51	24.55	56.00	46.00	-23.49	-21.45	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
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	30.43	15.36	9.68	40.11	25.04	65.36	55.36	-25.25	-30.32	Pass
2	0.2820	35.13	28.80	9.68	44.81	38.48	60.76	50.76	-15.95	-12.28	Pass
3	0.2940	35.53	26.96	9.68	45.21	36.64	60.41	50.41	-15.20	-13.77	Pass
4	0.3980	31.35	25.41	9.68	41.03	35.09	57.90	47.90	-16.87	-12.81	Pass
5	0.4100	30.33	23.95	9.68	40.01	33.63	57.65	47.65	-17.64	-14.02	Pass
6	1.1420	19.55	13.78	9.71	29.26	23.49	56.00	46.00	-26.74	-22.51	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

Test Mode	Frequency (MHz)	Data Rate	Average Output Power		Peak Output Power		
			Measurement Results		Measurement Results		Limit
			(dBm)	(W)	(dBm)	(W)	(W)
Mode 2	2412	1 M	15.29	0.034	18.17	0.066	≤ 30
	2437		15.25	0.033	18.06	0.064	≤ 30
	2462		15.62	0.036	**18.42**	**0.070**	≤ 30
Mode 3	2412	6 M	14.28	0.027	23.31	0.214	≤ 30
	2437		18.78	0.076	**26.23**	**0.420**	≤ 30
	2462		14.68	0.029	23.17	0.207	≤ 30
Mode 4	2412	6.5 M	12.75	0.019	22.09	0.162	≤ 30
	2437		18.19	0.066	**26.19**	**0.416**	≤ 30
	2462		14.78	0.030	22.93	0.196	≤ 30

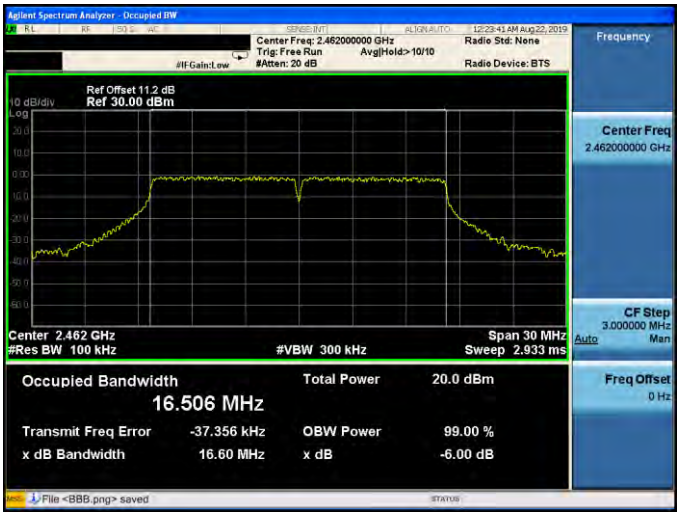
Note: The relevant measured result has the offset with cable loss already.

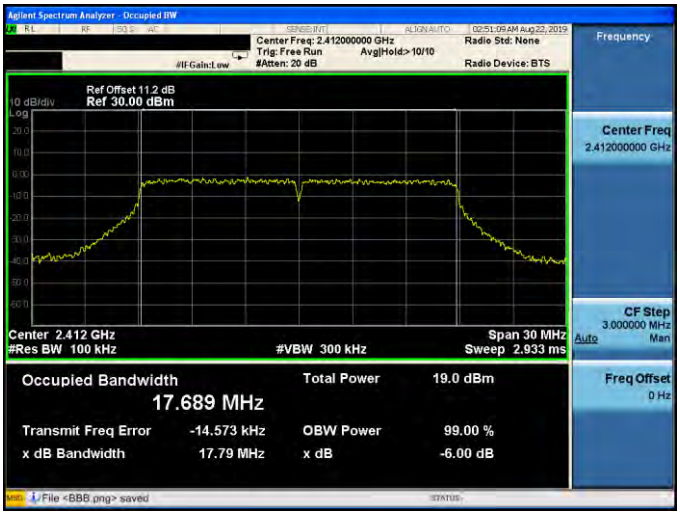
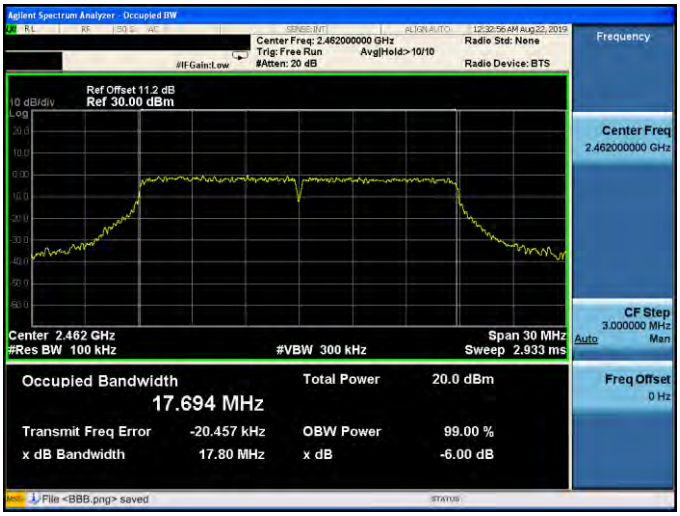
6 dB RF Bandwidth Measurement

Test Mode	Frequency (MHz)	Measurement Results	Limit
		(kHz)	(kHz)
Mode 2	2412	9083	≥ 500
	2437	9087	≥ 500
	2462	9070	≥ 500
Mode 3	2412	16600	≥ 500
	2437	16580	≥ 500
	2462	16600	≥ 500
Mode 4	2412	17790	≥ 500
	2437	17790	≥ 500
	2462	17800	≥ 500

■ Test Graphs

Mode 2: IEEE 802.11b Continuous TX mode	
2412	
2437	
2462	

Mode 3: IEEE 802.11g Continuous TX mode	
2412	
2437	
2462	

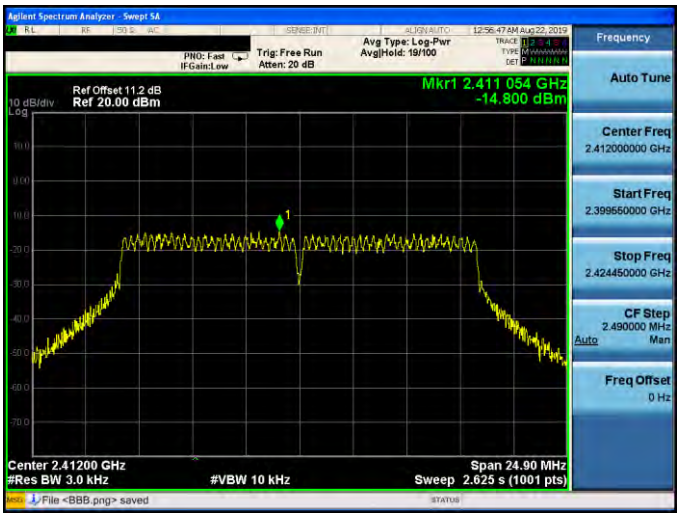
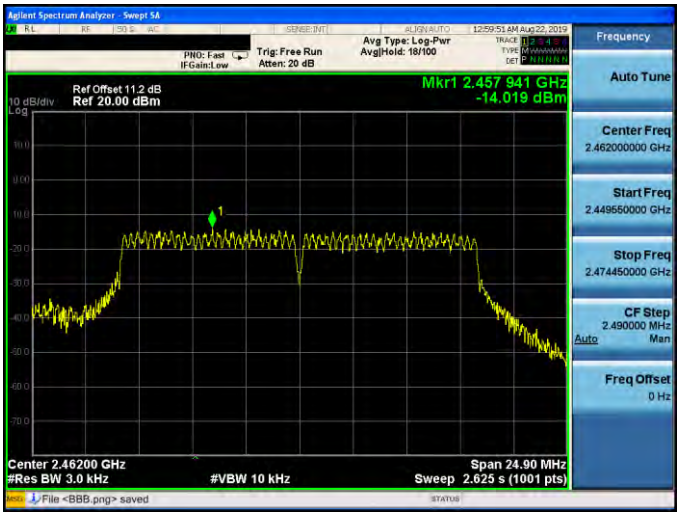
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode	
2412	
2437	
2462	

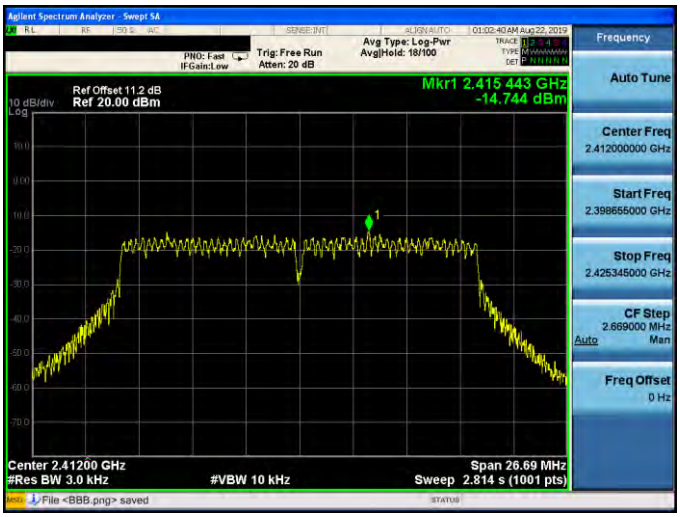
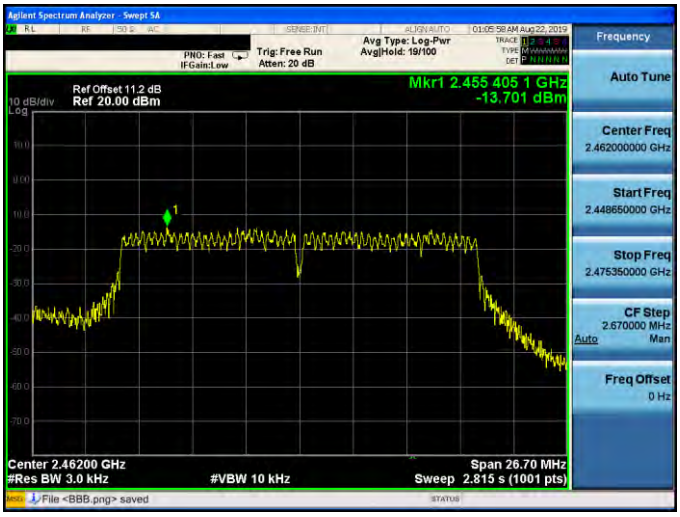
Maximum Power Spectral Density Measurement

Test Mode	Frequency (MHz)	Measurement (dBm/3 kHz)	Limit (dBm/3 kHz)
Mode 2	2412	-14.417	≤ 8
	2437	-14.633	≤ 8
	2462	-14.434	≤ 8
Mode 3	2412	-14.800	≤ 8
	2437	-10.442	≤ 8
	2462	-14.019	≤ 8
Mode 4	2412	-14.744	≤ 8
	2437	-9.847	≤ 8
	2462	-13.701	≤ 8

■ **Test Graphs**

Mode 2: IEEE 802.11b Continuous TX mode	
2412	
2437	
2462	

Mode 3: IEEE 802.11g Continuous TX mode	
2412	
2437	
2462	

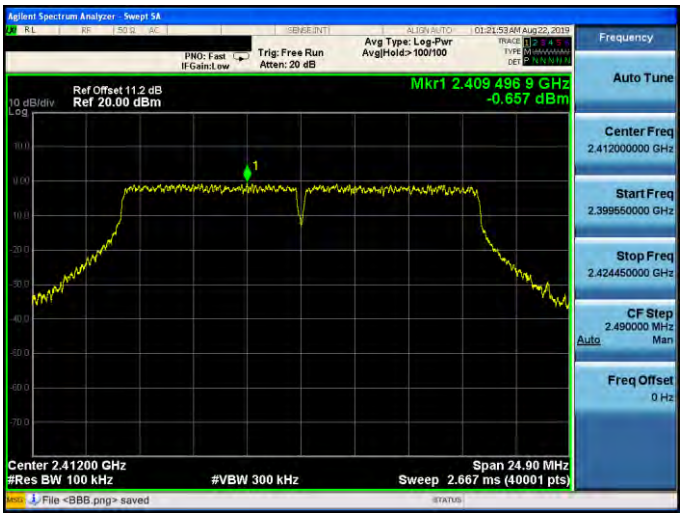
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode	
2412	
2437	
2462	

Out of Band Conducted Emissions Measurement

■ **Test Graphs**

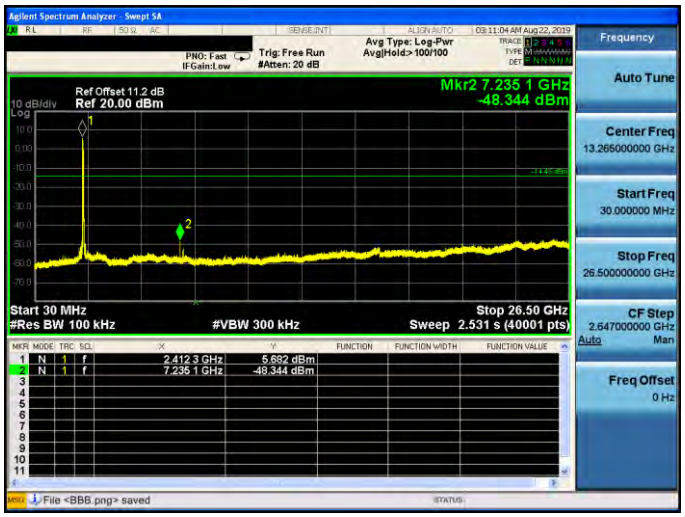
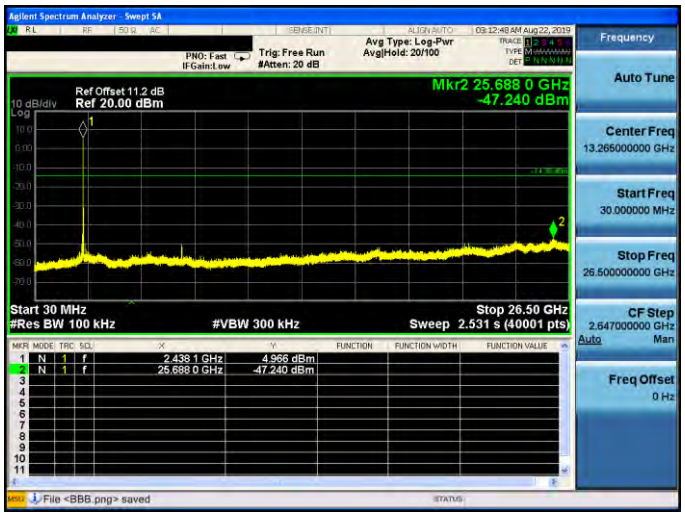
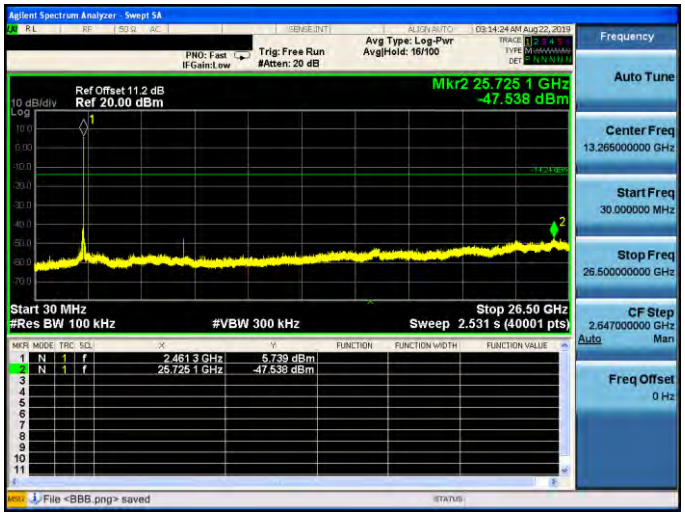
Reference level

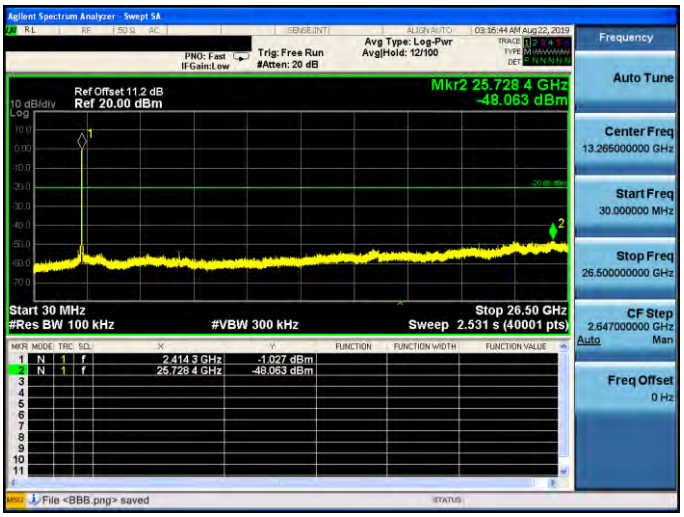
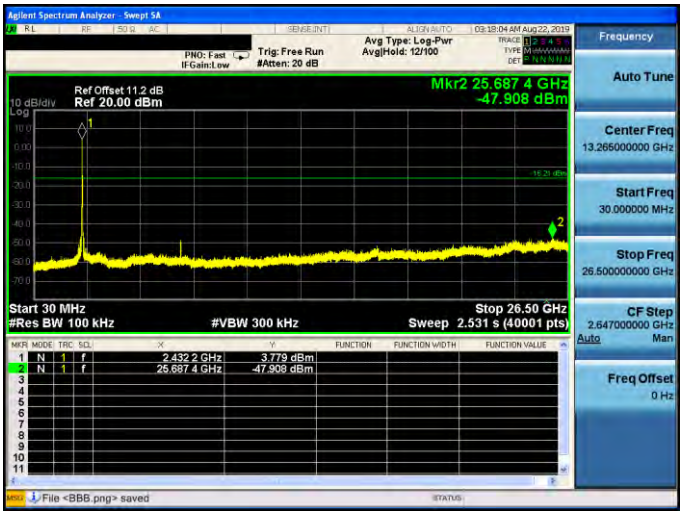
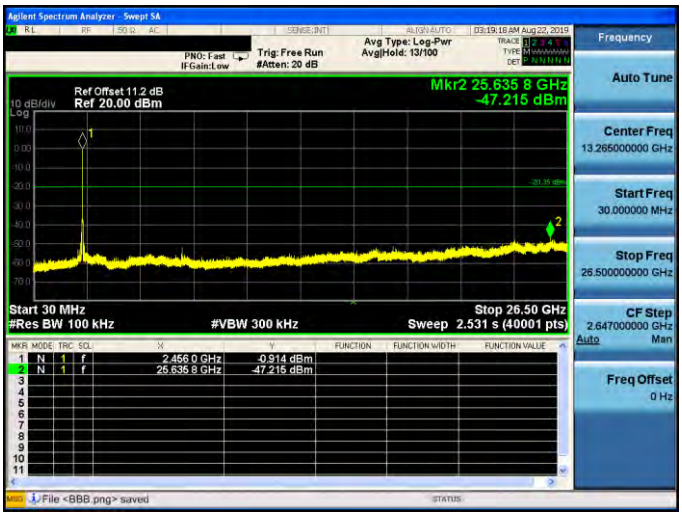
Mode 2: IEEE 802.11b Continuous TX mode	
2412	
2437	
2462	

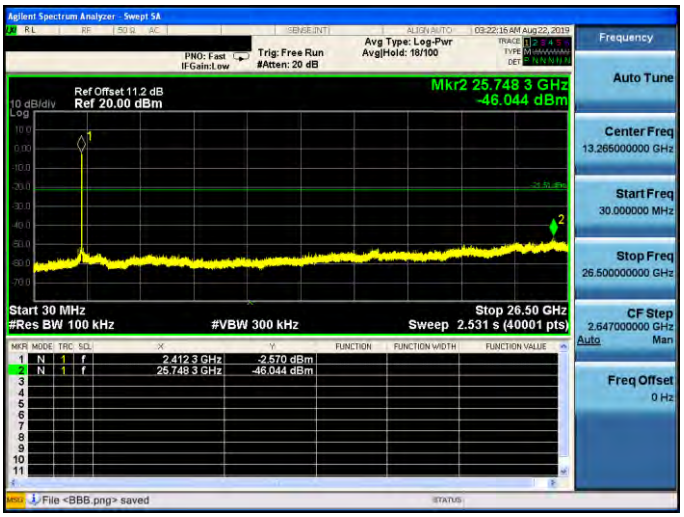
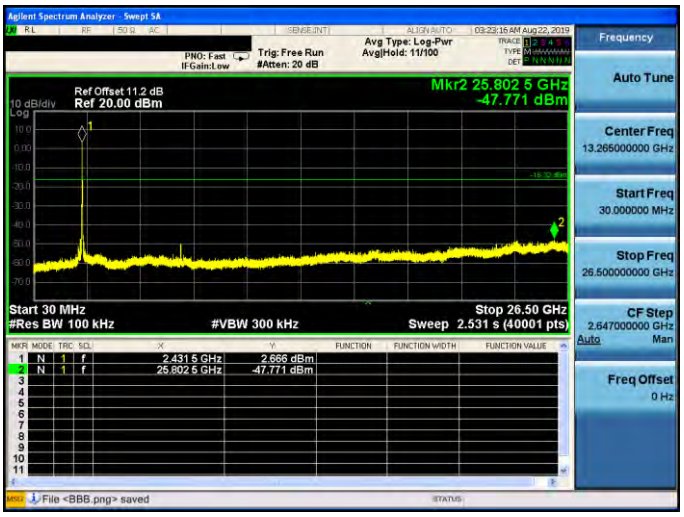
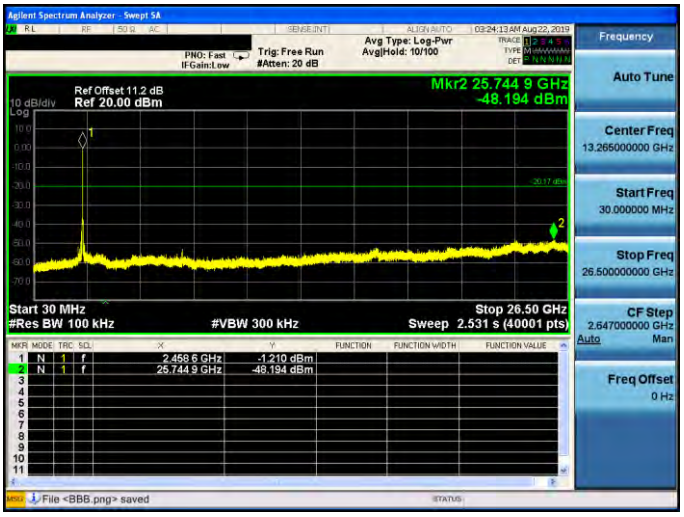
Mode 3: IEEE 802.11g Continuous TX mode	
2412	
2437	
2462	

Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode	
2412	
2437	
2462	

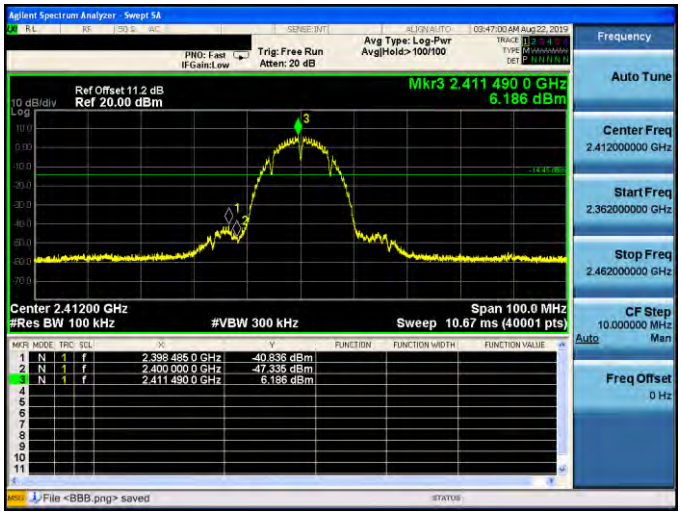
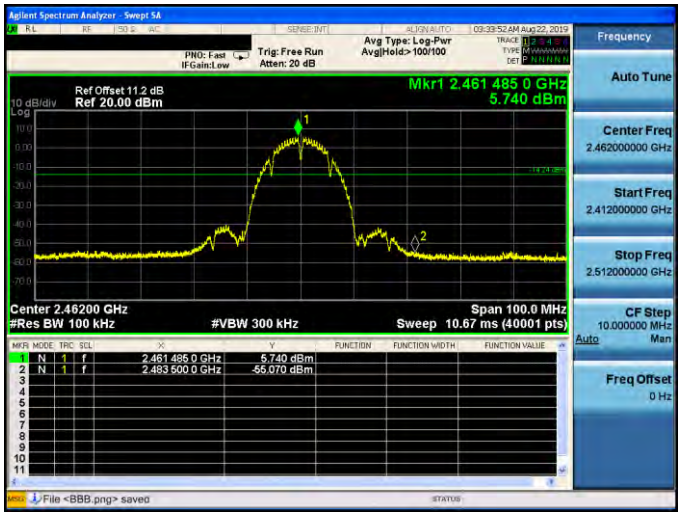
Out of Band Conducted Spurious Emission

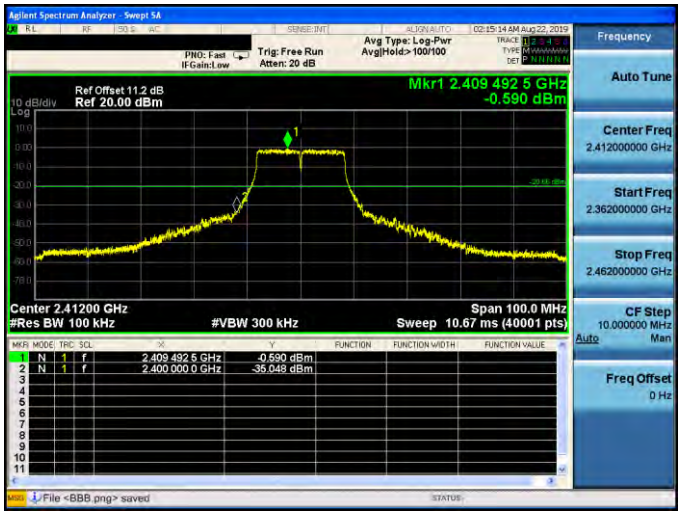
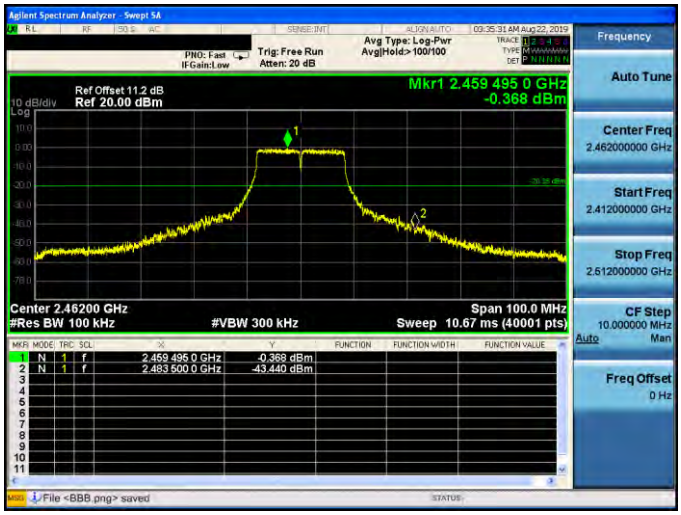
Mode 2: IEEE 802.11b Continuous TX mode	
2412	
2437	
2462	

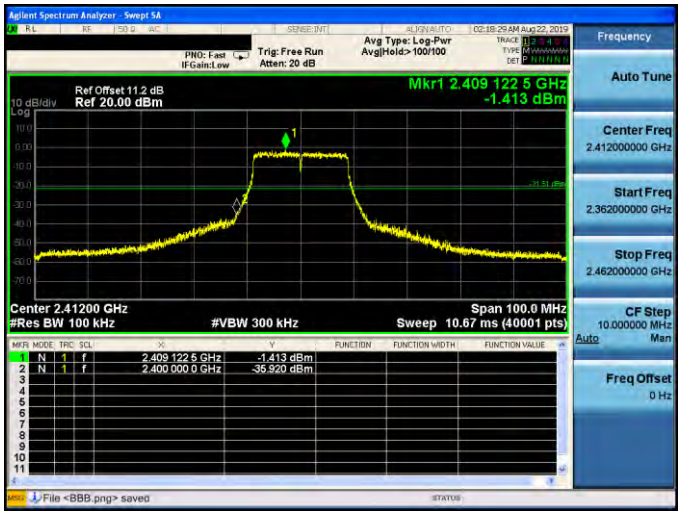
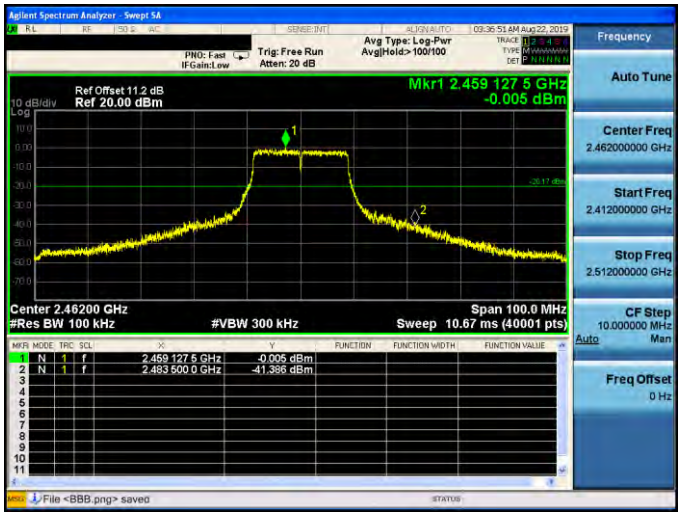
Mode 3: IEEE 802.11g Continuous TX mode	
2412	
2437	
2462	

Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode	
2412	
2437	
2462	

Conducted Band Edge

Mode 2: IEEE 802.11b Continuous TX mode	
2412 MHz	
2462 MHz	

Mode 3: IEEE 802.11g Continuous TX mode	
2412 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX mode	
2412 MHz	
2462 MHz	

Annex C. Radiated Emission Measurement

Harmonic

Below 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Test Mode:	Mode 3		

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
96.9300	59.58	-11.46	48.12	53.50	-5.38	QP	H
120.2100	61.07	-8.44	52.63	53.50	-0.87	QP	H
144.4600	57.73	-6.16	51.57	53.50	-1.93	QP	H
168.7100	59.11	-6.01	53.10	53.50	-0.40	QP	H
191.9900	56.26	-7.87	48.39	53.50	-5.11	QP	H
216.2400	58.65	-7.64	51.01	56.00	-4.99	QP	H
48.4300	54.04	-6.40	47.64	49.00	-1.36	QP	V
72.6800	52.14	-9.29	42.85	49.00	-6.15	QP	V
120.2100	53.05	-8.44	44.61	53.50	-8.89	QP	V
168.7100	53.86	-6.01	47.85	53.50	-5.65	QP	V
216.2400	53.27	-7.64	45.63	56.00	-10.37	QP	V
240.4900	53.79	-6.39	47.40	56.00	-8.60	QP	V

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

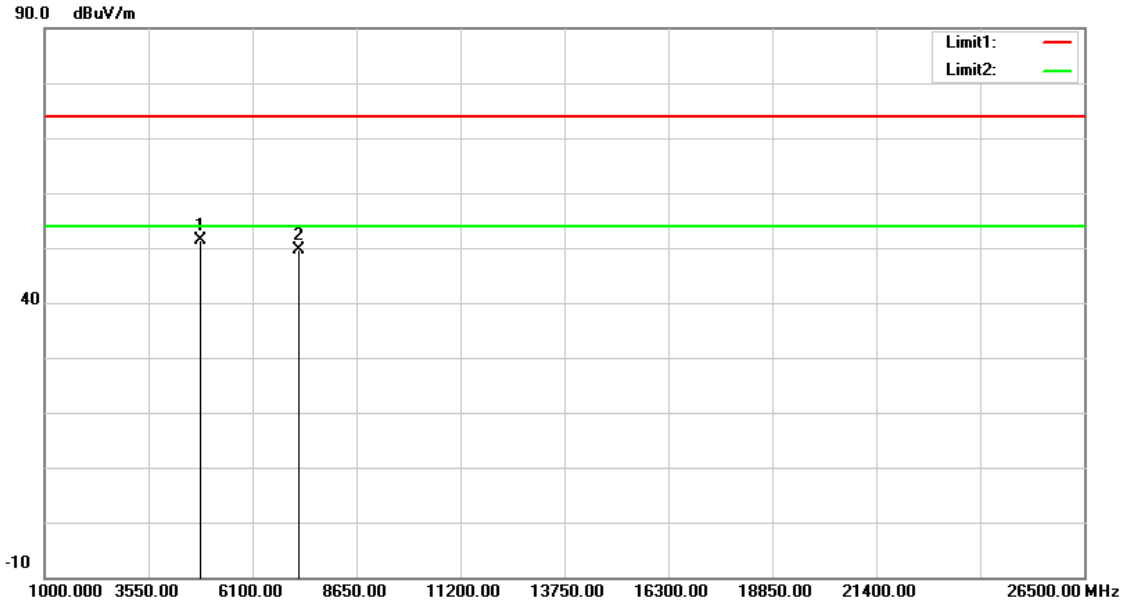
Example: 48.12 = -11.46 + 59.58

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.

Above 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	42.93	8.38	51.31	74.00	-22.69	peak
2	7236.000	37.72	11.81	49.53	74.00	-24.47	peak

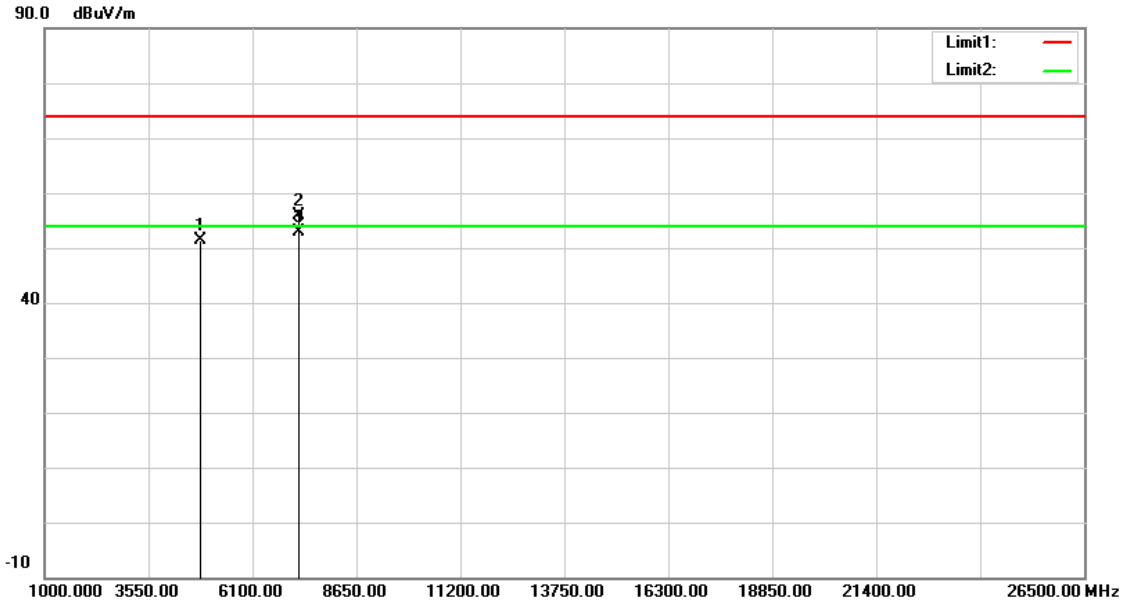
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 51.31 = 8.38 + 42.93

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	42.89	8.38	51.27	74.00	-22.73	peak
2	7236.000	44.06	11.81	55.87	74.00	-18.13	peak
3	7236.000	41.08	11.81	52.89	54.00	-1.11	AVG

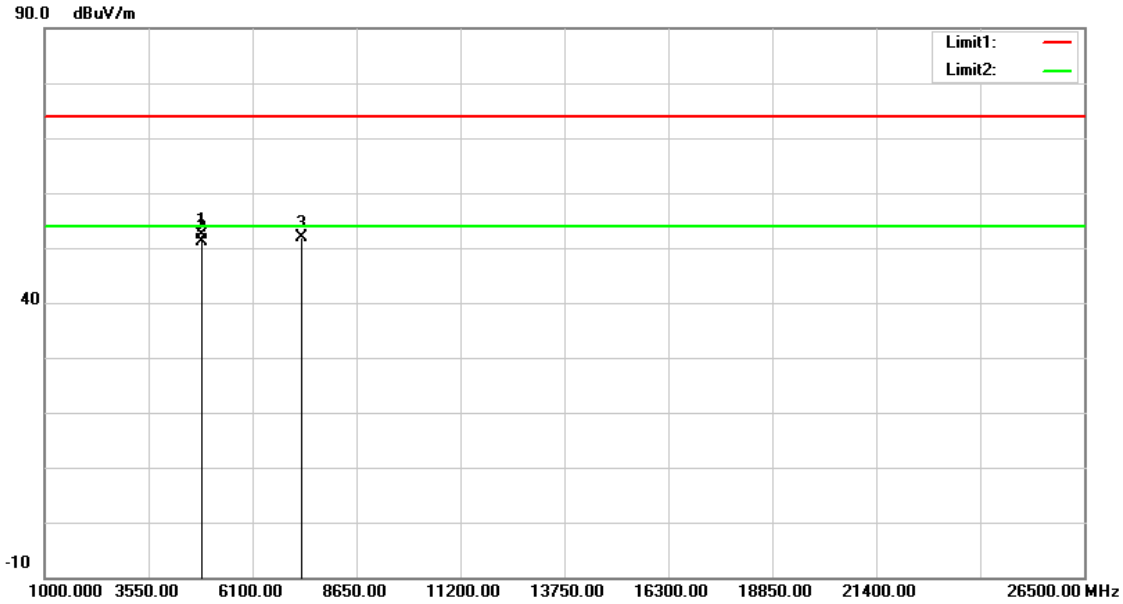
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 51.27 = 8.38 + 42.89

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



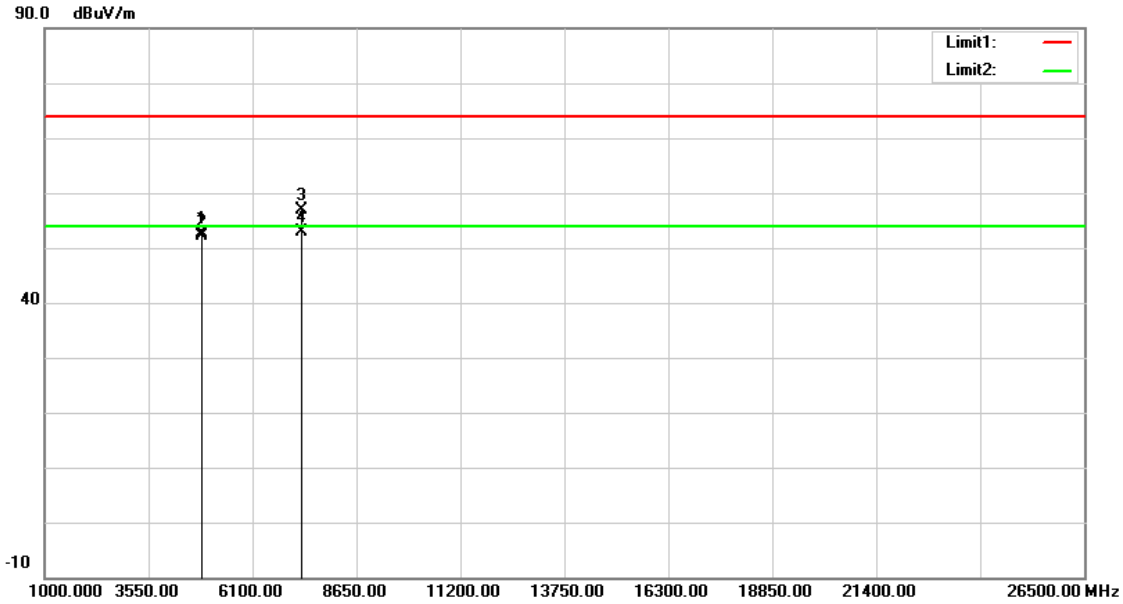
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	43.98	8.42	52.40	74.00	-21.60	peak
2	4874.000	42.72	8.42	51.14	54.00	-2.86	AVG
3	7311.000	40.13	11.80	51.93	74.00	-22.07	peak

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.

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



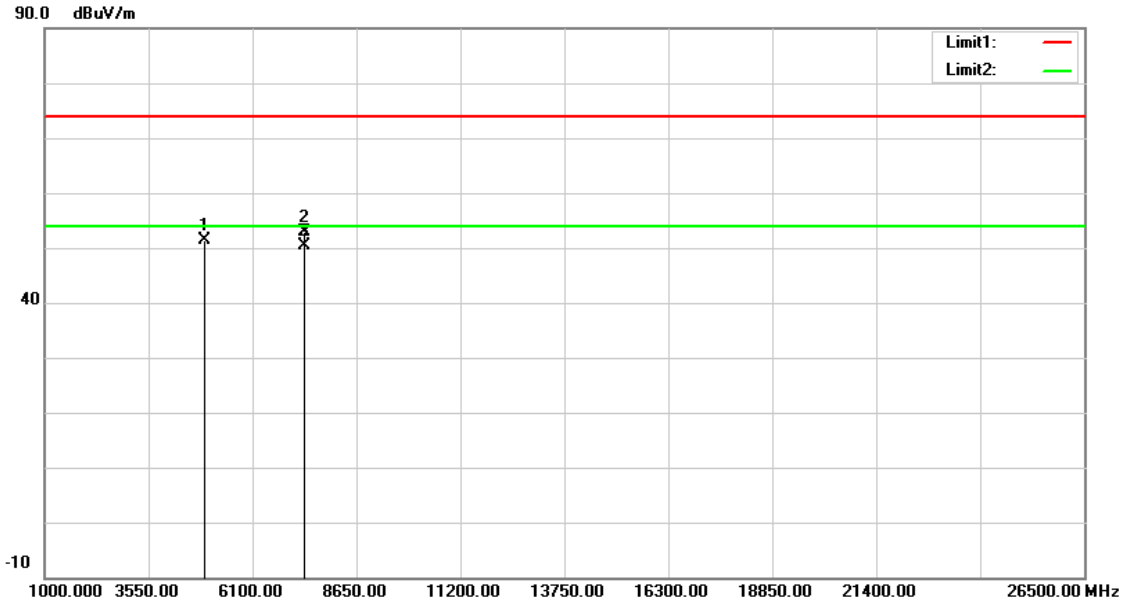
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	44.25	8.42	52.67	74.00	-21.33	peak
2	4874.000	43.68	8.42	52.10	54.00	-1.90	AVG
3	7311.000	45.06	11.80	56.86	74.00	-17.14	peak
4	7311.000	41.10	11.80	52.90	54.00	-1.10	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



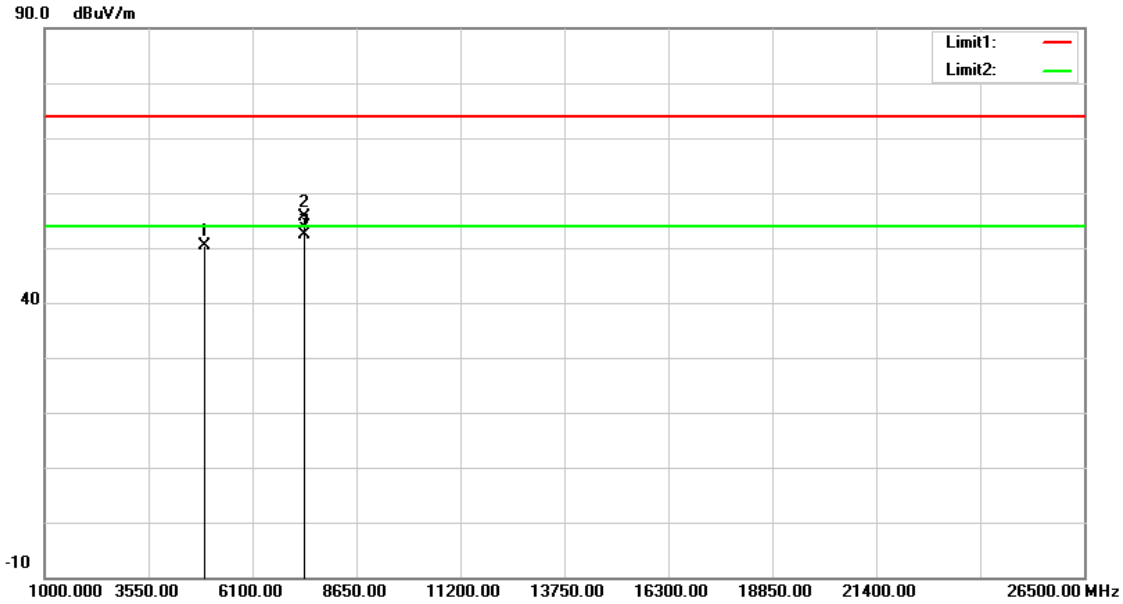
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	42.97	8.46	51.43	74.00	-22.57	peak
2	7386.000	40.96	11.80	52.76	74.00	-21.24	peak
3	7386.000	38.53	11.80	50.33	54.00	-3.67	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



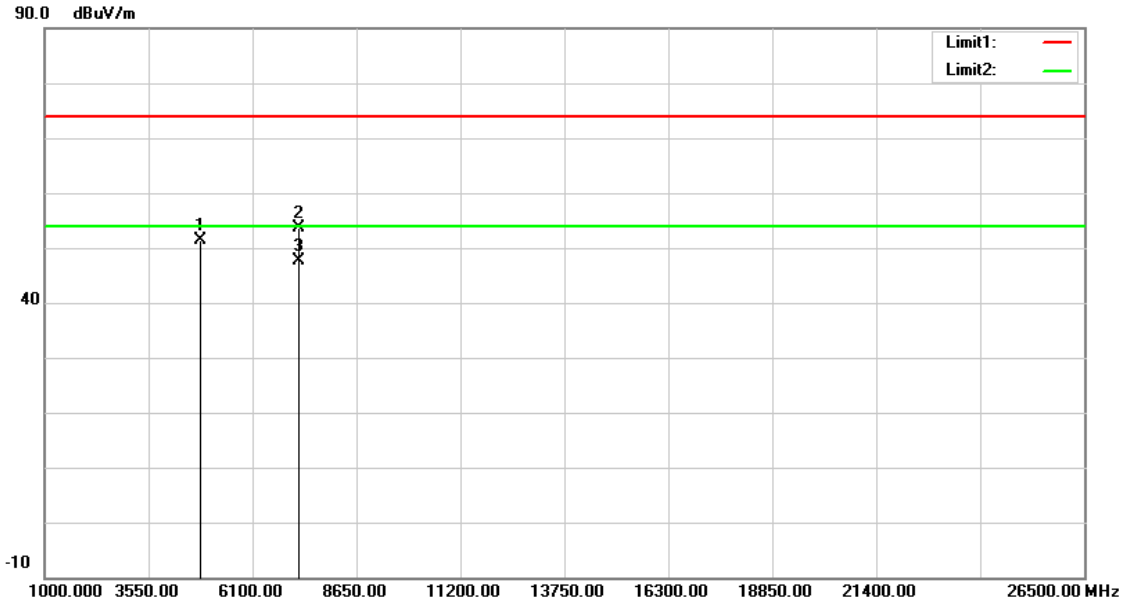
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	41.86	8.46	50.32	74.00	-23.68	peak
2	7386.000	43.93	11.80	55.73	74.00	-18.27	peak
3	7386.000	40.64	11.80	52.44	54.00	-1.56	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



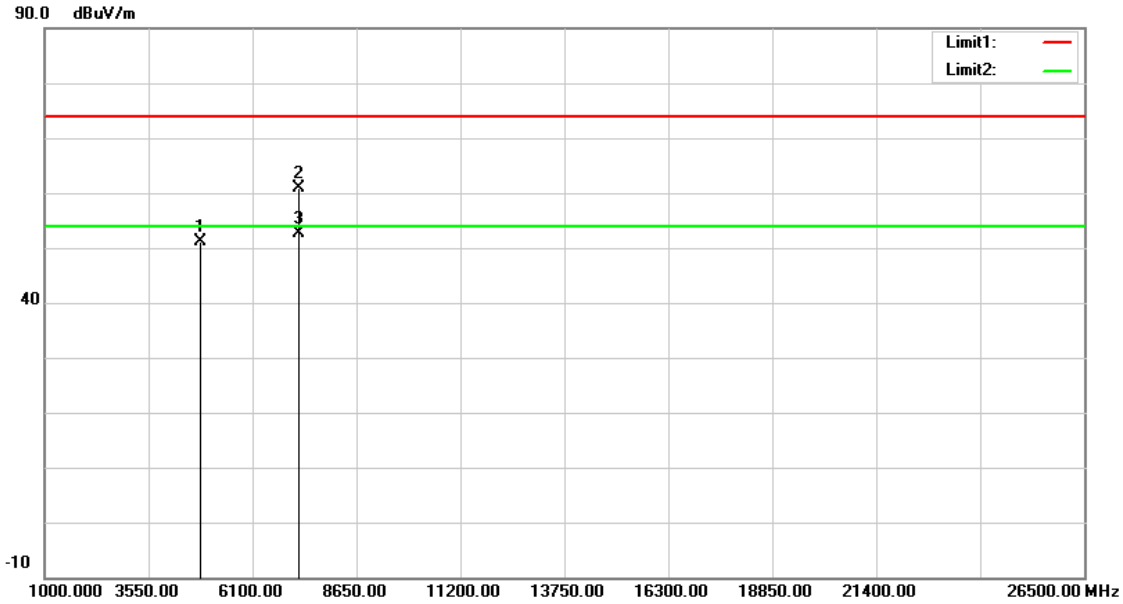
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	42.94	8.38	51.32	74.00	-22.68	peak
2	7236.000	41.84	11.81	53.65	74.00	-20.35	peak
3	7236.000	35.72	11.81	47.53	54.00	-6.47	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



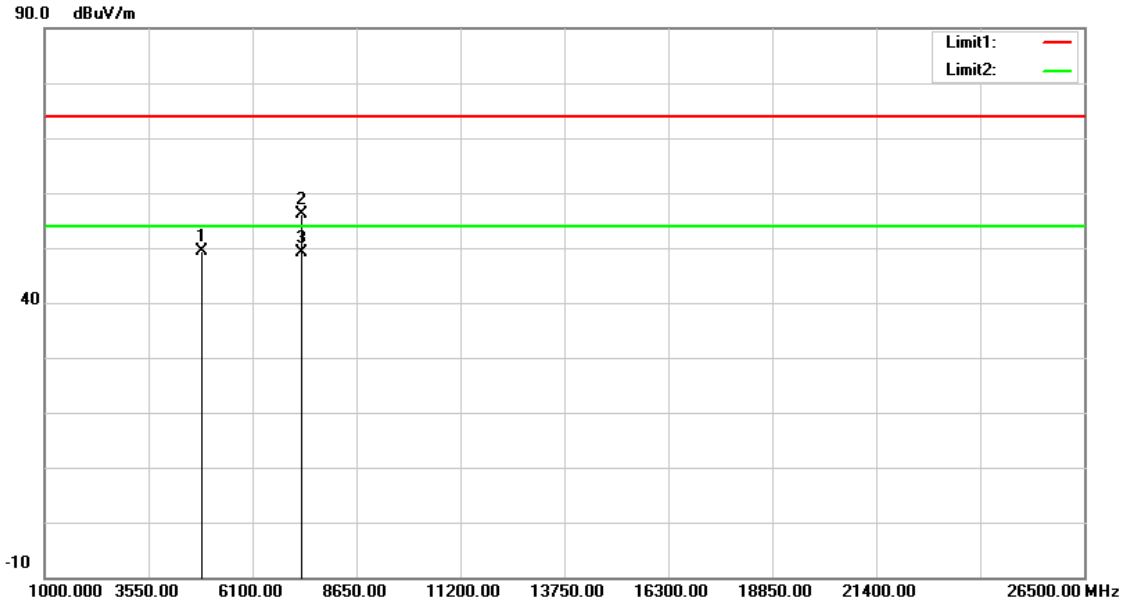
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	42.72	8.38	51.10	74.00	-22.90	peak
2	7236.000	49.09	11.81	60.90	74.00	-13.10	peak
3	7236.000	40.92	11.81	52.73	54.00	-1.27	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



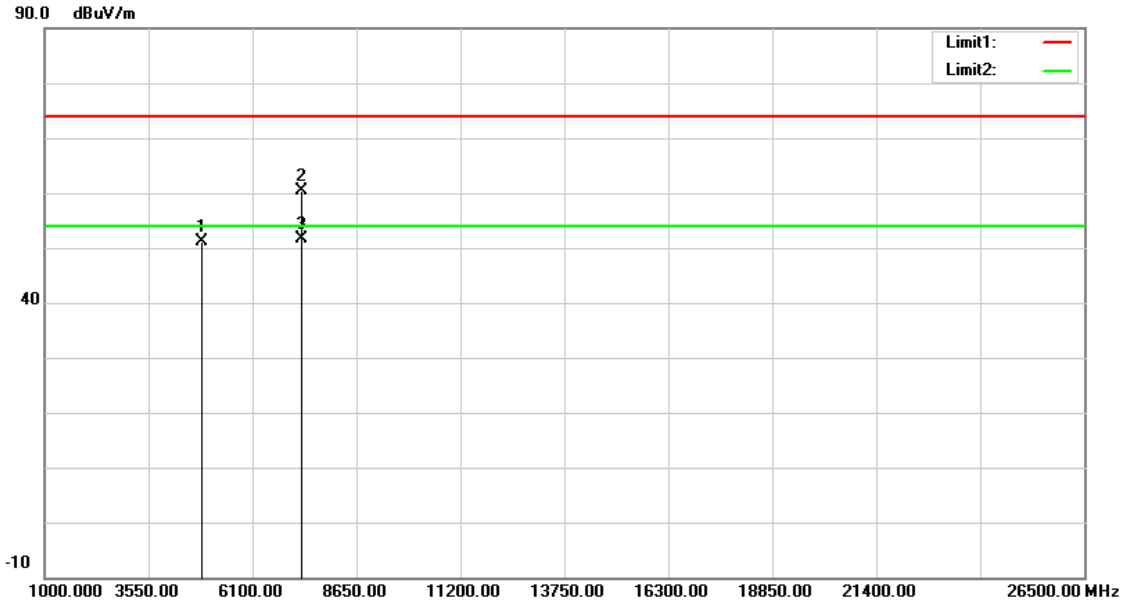
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	41.05	8.42	49.47	74.00	-24.53	peak
2	7311.000	44.42	11.80	56.22	74.00	-17.78	peak
3	7311.000	37.44	11.80	49.24	54.00	-4.76	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



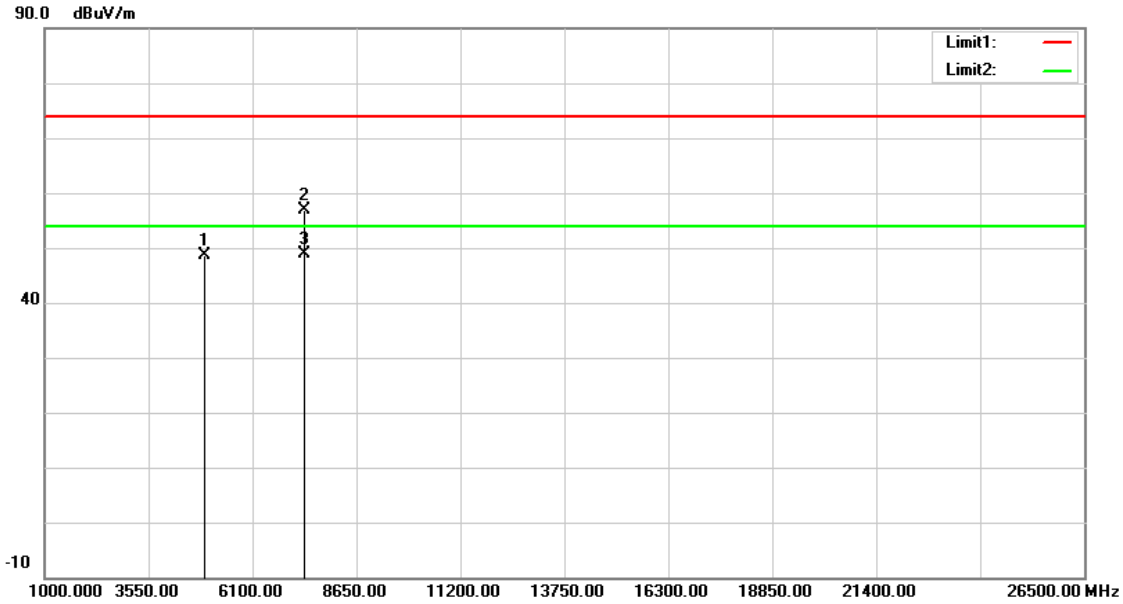
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	42.82	8.42	51.24	74.00	-22.76	peak
2	7311.000	48.64	11.80	60.44	74.00	-13.56	peak
3	7311.000	39.92	11.80	51.72	54.00	-2.28	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



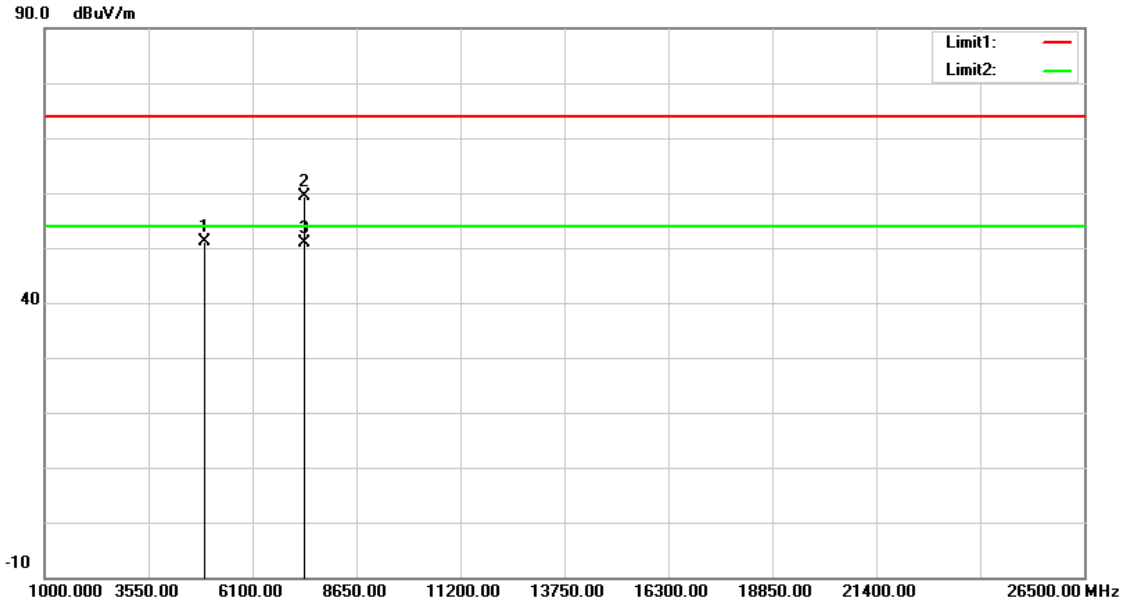
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	40.25	8.46	48.71	74.00	-25.29	peak
2	7386.000	45.12	11.80	56.92	74.00	-17.08	peak
3	7386.000	36.96	11.80	48.76	54.00	-5.24	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



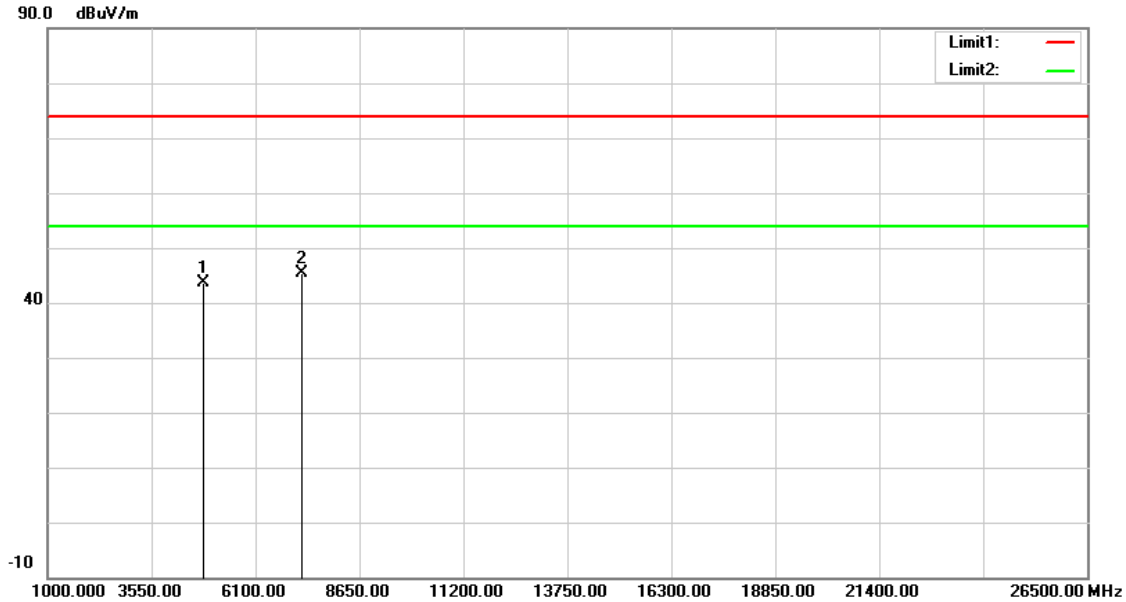
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	42.73	8.46	51.19	74.00	-22.81	peak
2	7386.000	47.49	11.80	59.29	74.00	-14.71	peak
3	7386.000	38.97	11.80	50.77	54.00	-3.23	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



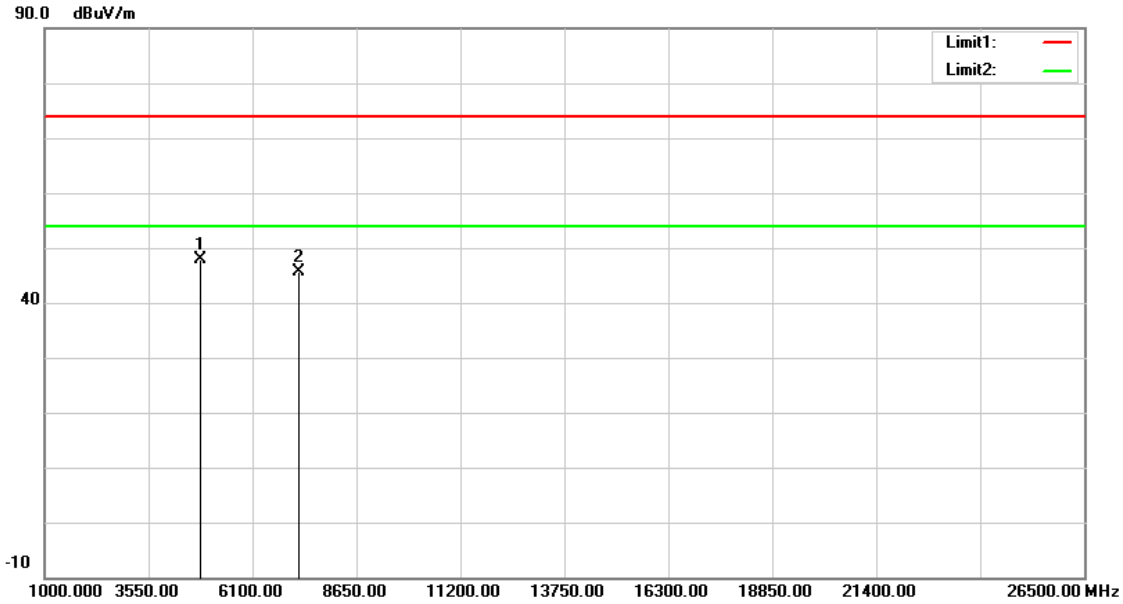
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	35.22	8.38	43.60	74.00	-30.40	peak
2	7236.000	33.67	11.81	45.48	74.00	-28.52	peak

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:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



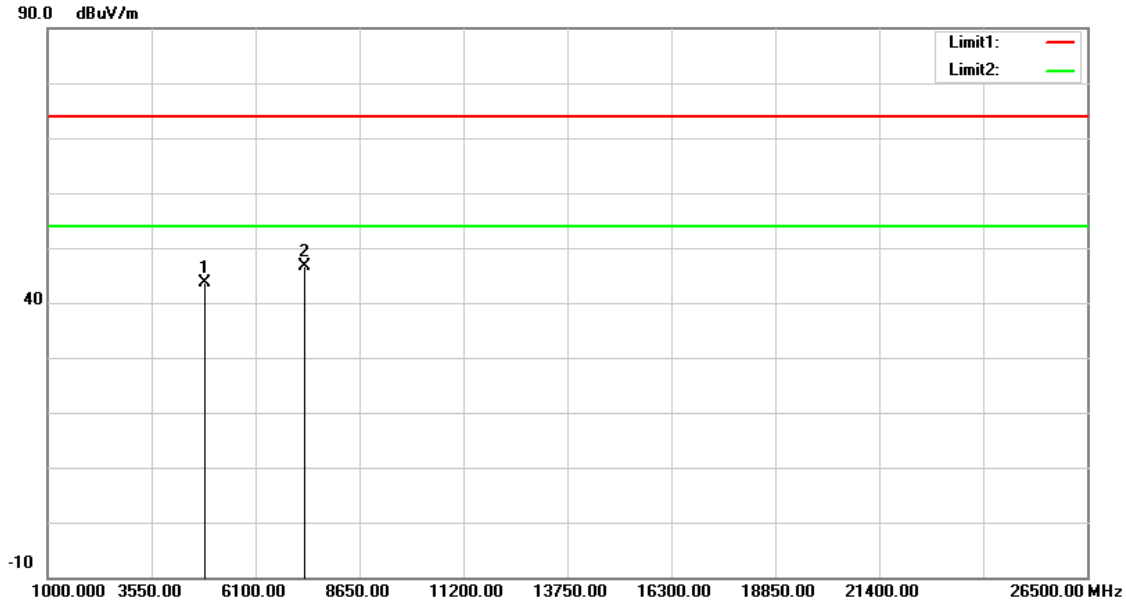
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	39.56	8.38	47.94	74.00	-26.06	peak
2	7236.000	33.84	11.81	45.65	74.00	-28.35	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



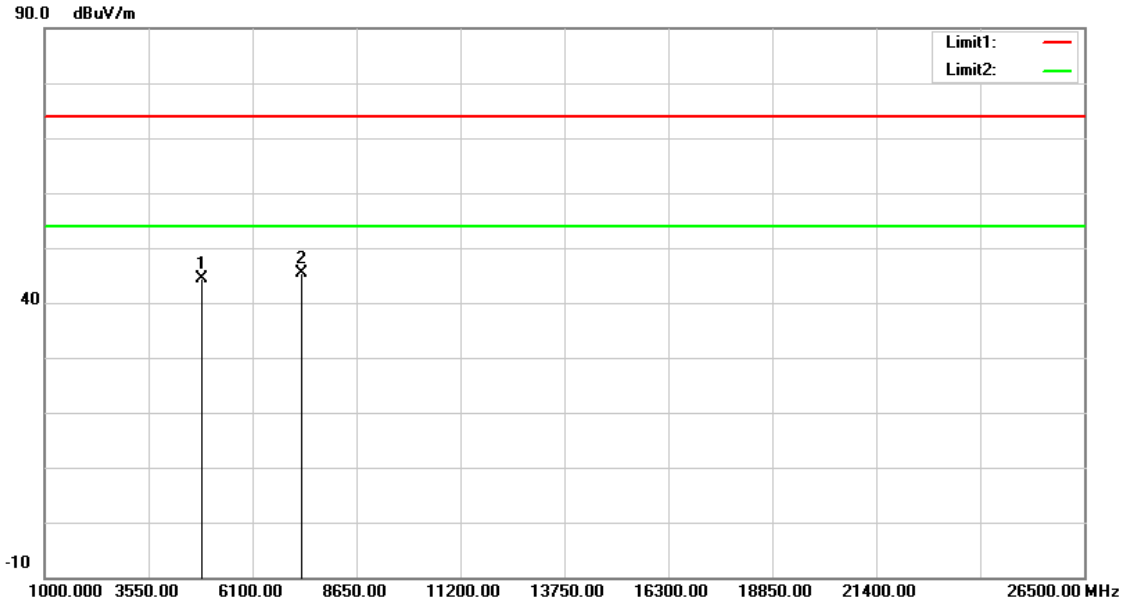
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	35.09	8.42	43.51	74.00	-30.49	peak
2	7311.000	34.86	11.80	46.66	74.00	-27.34	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



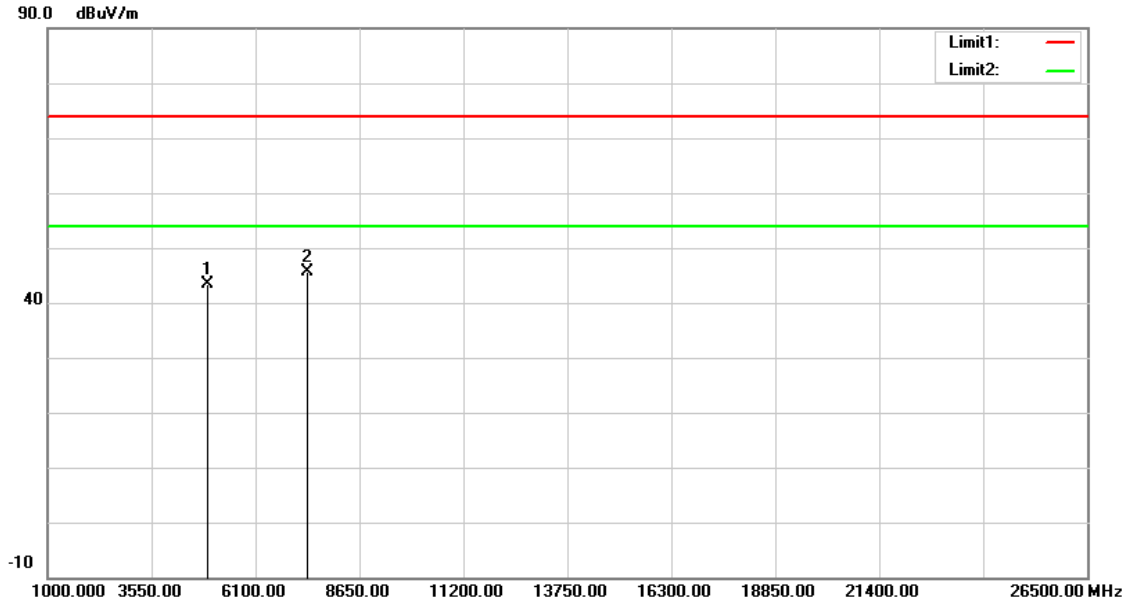
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	35.84	8.42	44.26	74.00	-29.74	peak
2	7311.000	33.63	11.80	45.43	74.00	-28.57	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



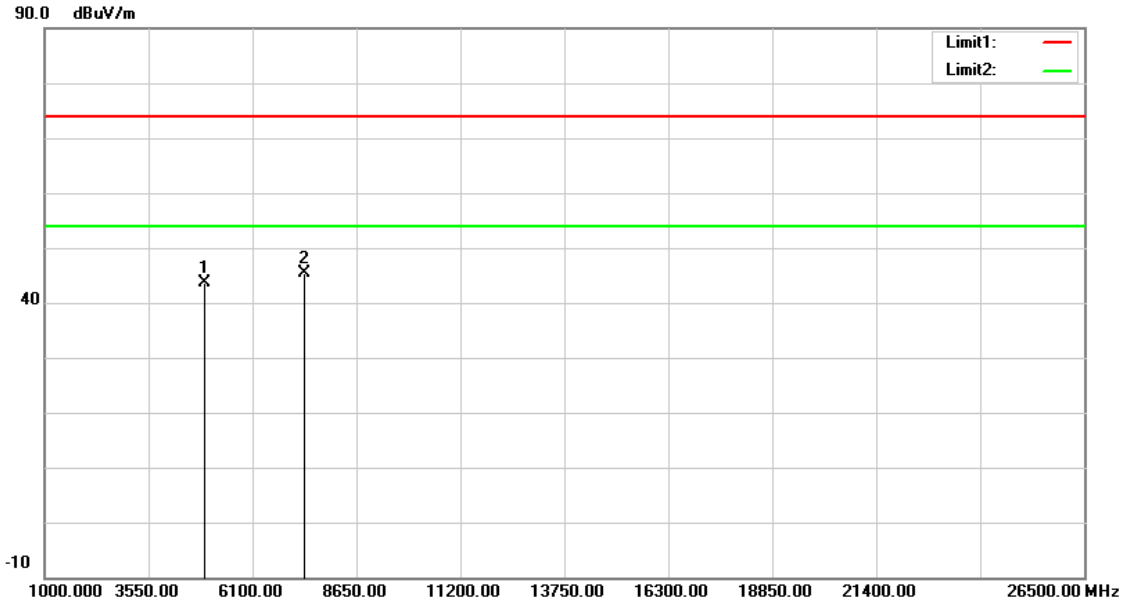
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	34.97	8.46	43.43	74.00	-30.57	peak
2	7386.000	33.82	11.80	45.62	74.00	-28.38	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



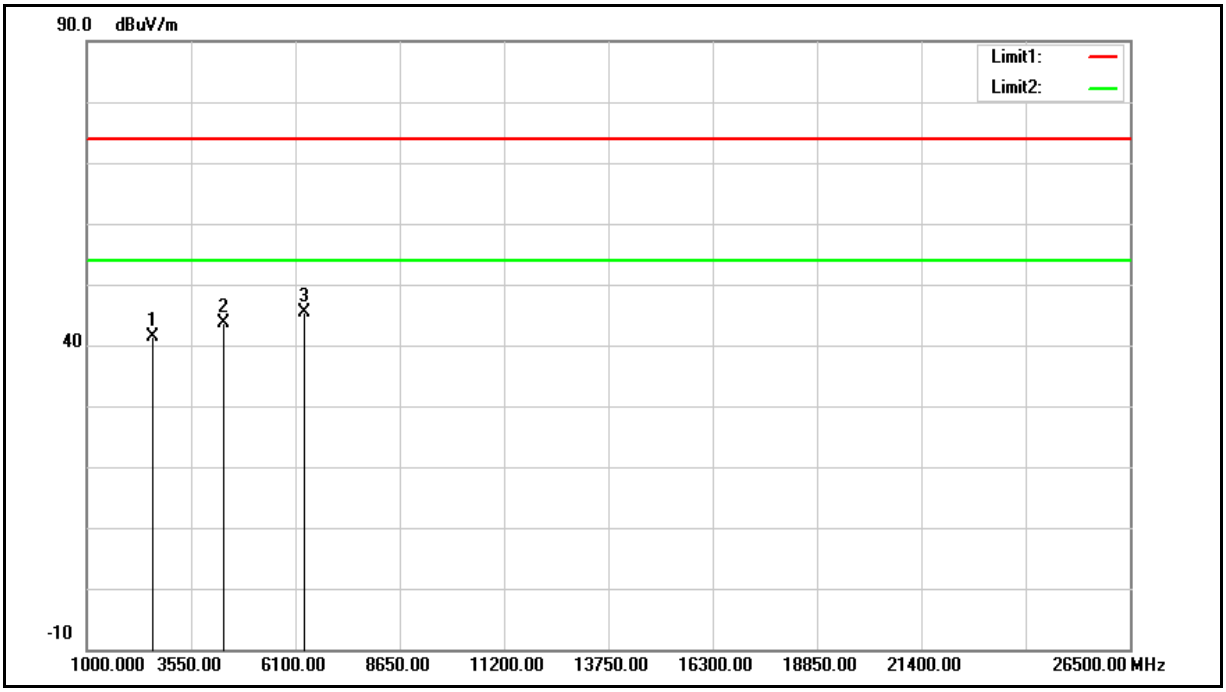
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.08	8.46	43.54	74.00	-30.46	peak
2	7386.000	33.64	11.80	45.44	74.00	-28.56	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Test Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + LE)	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Ant.Polar.:	Horizontal		



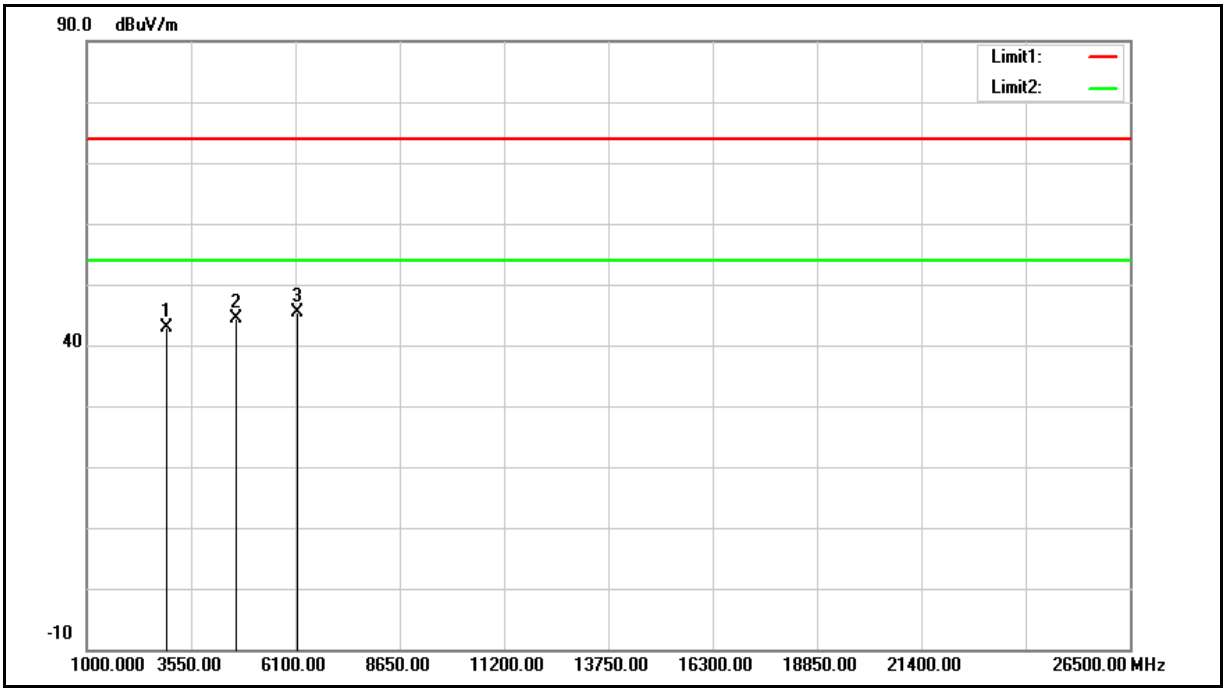
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2598.000	36.97	4.50	41.47	74.00	-32.53	peak
2	4332.000	35.93	7.70	43.63	74.00	-30.37	peak
3	6287.000	34.04	11.26	45.30	74.00	-28.70	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Test Mode:	Simultaneous Transmitting (WLAN 2.4 GHz + LE)	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2938.000	37.59	5.30	42.89	74.00	-31.11	peak
2	4638.000	36.10	8.26	44.36	74.00	-29.64	peak
3	6134.000	34.36	11.04	45.40	74.00	-28.60	peak

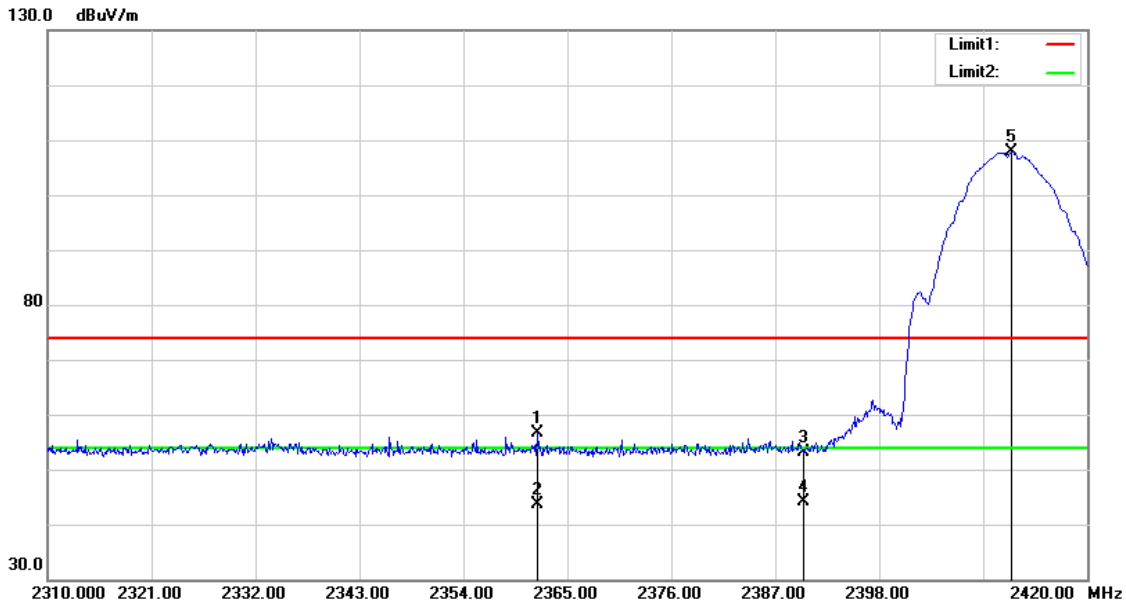
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

Band Edge

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



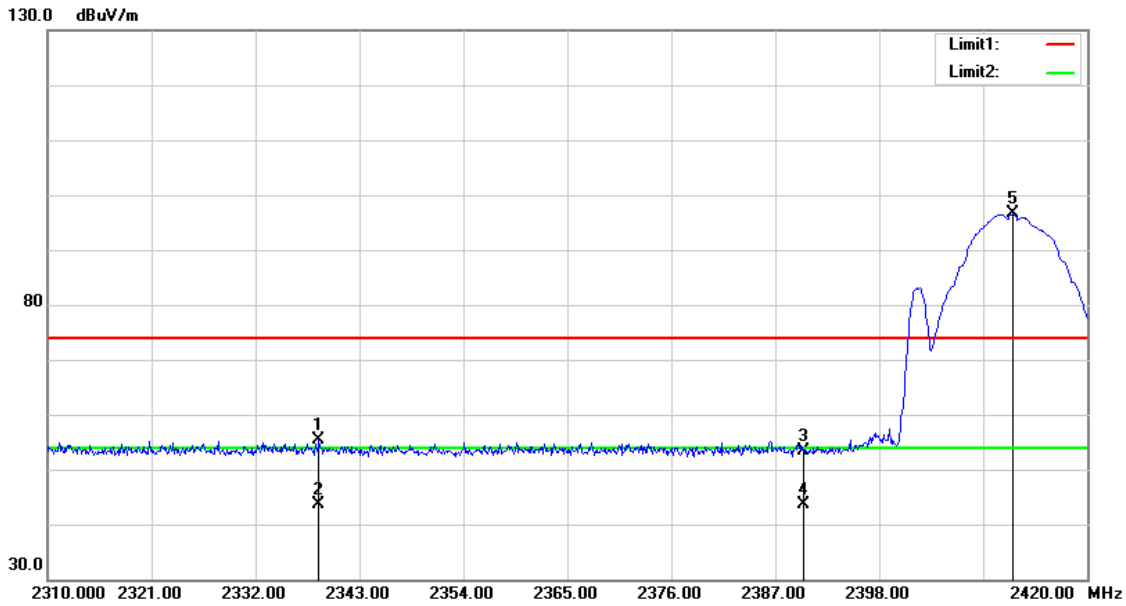
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2361.810	52.67	3.86	56.53	74.00	-17.47	peak
2	2361.810	39.88	3.86	43.74	54.00	-10.26	AVG
3	2390.000	49.25	3.94	53.19	74.00	-20.81	peak
4	2390.000	40.23	3.94	44.17	54.00	-9.83	AVG
5	2411.970	103.97	4.00	107.97	--	--	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



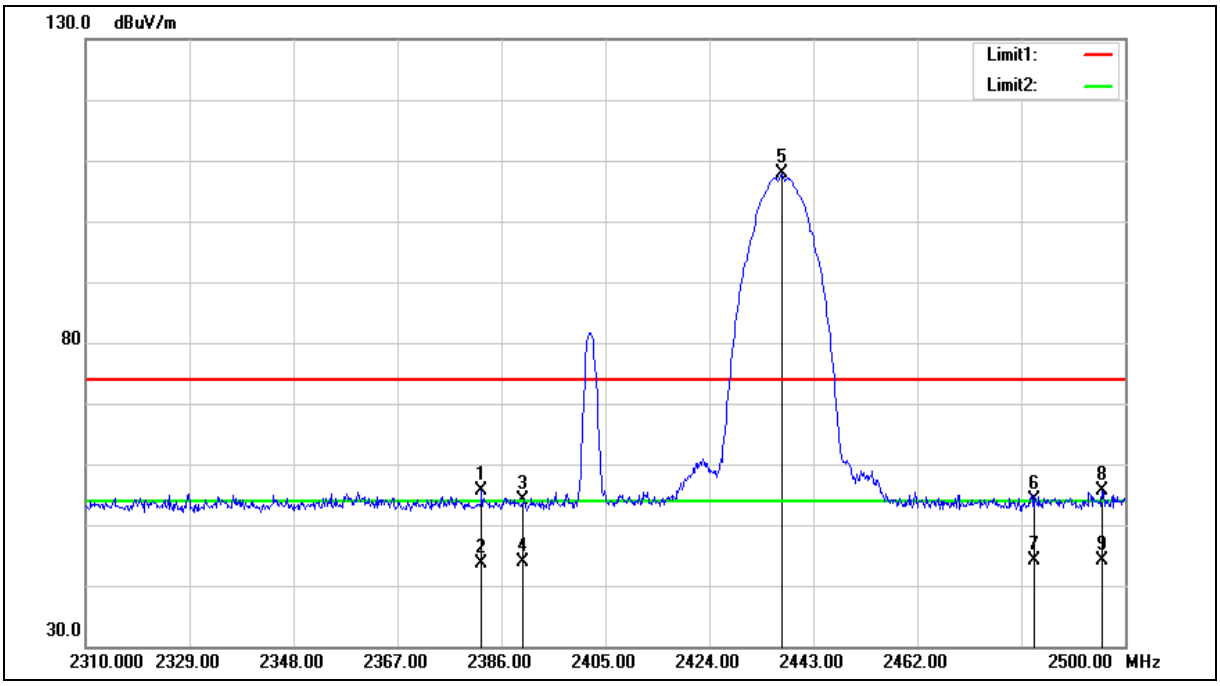
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2338.710	51.64	3.80	55.44	74.00	-18.56	peak
2	2338.710	39.76	3.80	43.56	54.00	-10.44	AVG
3	2390.000	49.44	3.94	53.38	74.00	-20.62	peak
4	2390.000	39.68	3.94	43.62	54.00	-10.38	AVG
5	2412.080	92.69	4.00	96.69	--	--	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:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

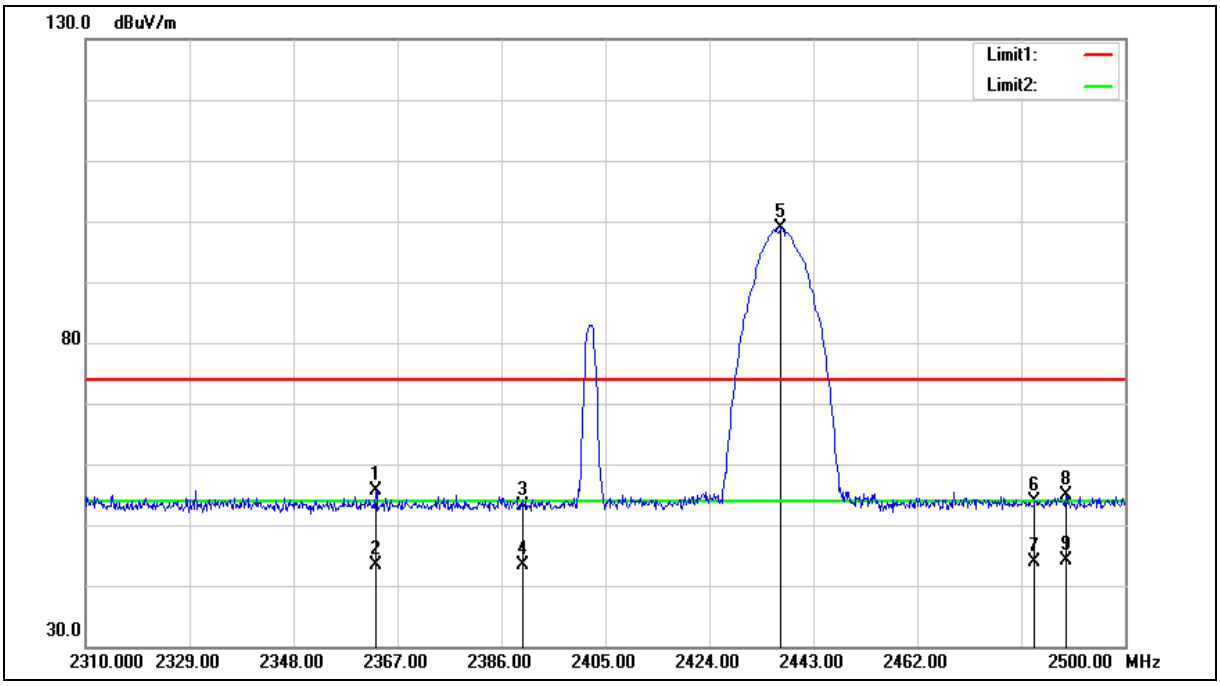
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2382.390	51.72	3.92	55.64	74.00	-18.36	peak
2	2382.390	39.75	3.92	43.67	54.00	-10.33	AVG
3	2390.000	50.08	3.94	54.02	74.00	-19.98	peak
4	2390.000	39.90	3.94	43.84	54.00	-10.16	AVG
5	2437.300	103.80	4.08	107.88	--	--	peak
6	2483.500	49.89	4.21	54.10	74.00	-19.90	peak
7	2483.500	39.85	4.21	44.06	54.00	-9.94	AVG
8	2495.820	51.40	4.24	55.64	74.00	-18.36	peak
9	2495.820	39.91	4.24	44.15	54.00	-9.85	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

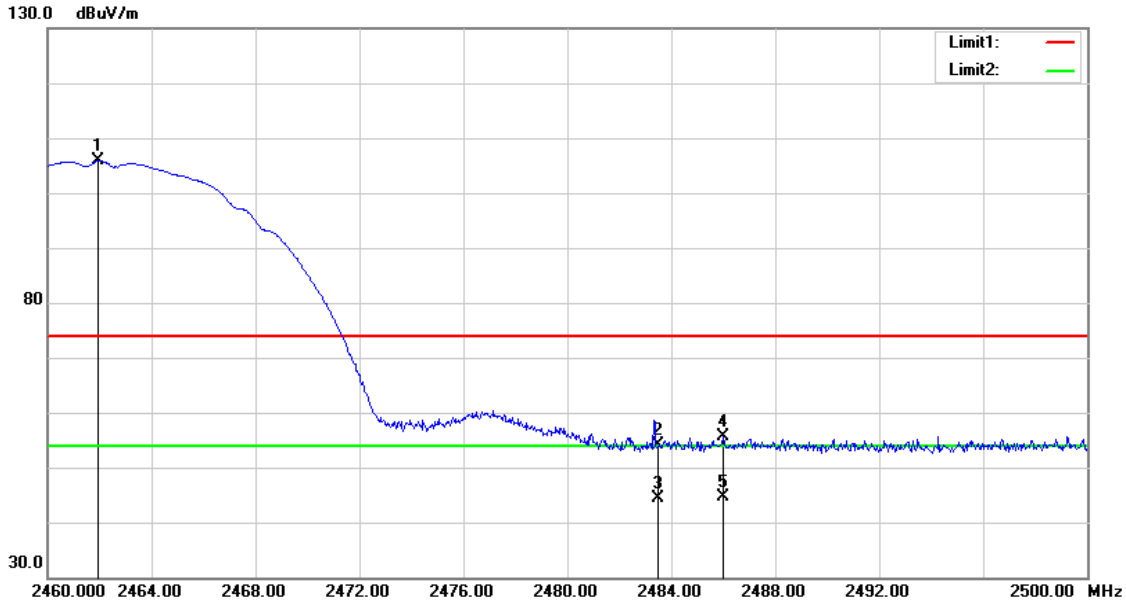
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2363.010	51.83	3.87	55.70	74.00	-18.30	peak
2	2363.010	39.57	3.87	43.44	54.00	-10.56	AVG
3	2390.000	49.19	3.94	53.13	74.00	-20.87	peak
4	2390.000	39.56	3.94	43.50	54.00	-10.50	AVG
5	2437.110	94.75	4.08	98.83	--	--	peak
6	2483.500	49.75	4.21	53.96	74.00	-20.04	peak
7	2483.500	39.70	4.21	43.91	54.00	-10.09	AVG
8	2489.170	50.54	4.23	54.77	74.00	-19.23	peak
9	2489.170	39.79	4.23	44.02	54.00	-9.98	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



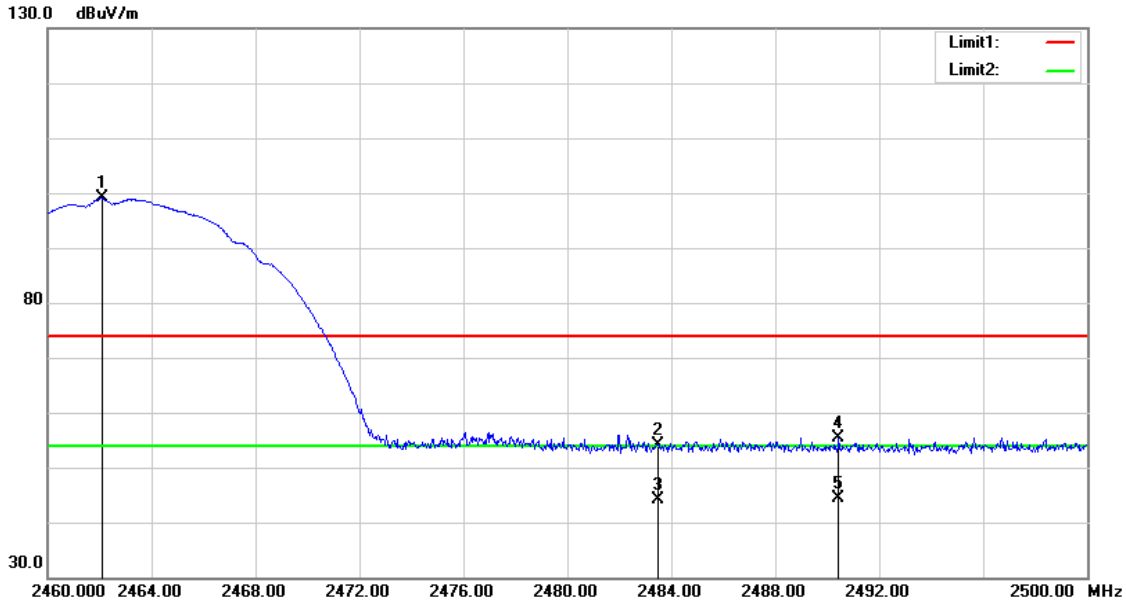
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.920	101.81	4.14	105.95	--	--	peak
2	2483.500	49.82	4.21	54.03	74.00	-19.97	peak
3	2483.500	40.10	4.21	44.31	54.00	-9.69	AVG
4	2486.000	51.33	4.21	55.54	74.00	-18.46	peak
5	2486.000	40.31	4.21	44.52	54.00	-9.48	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



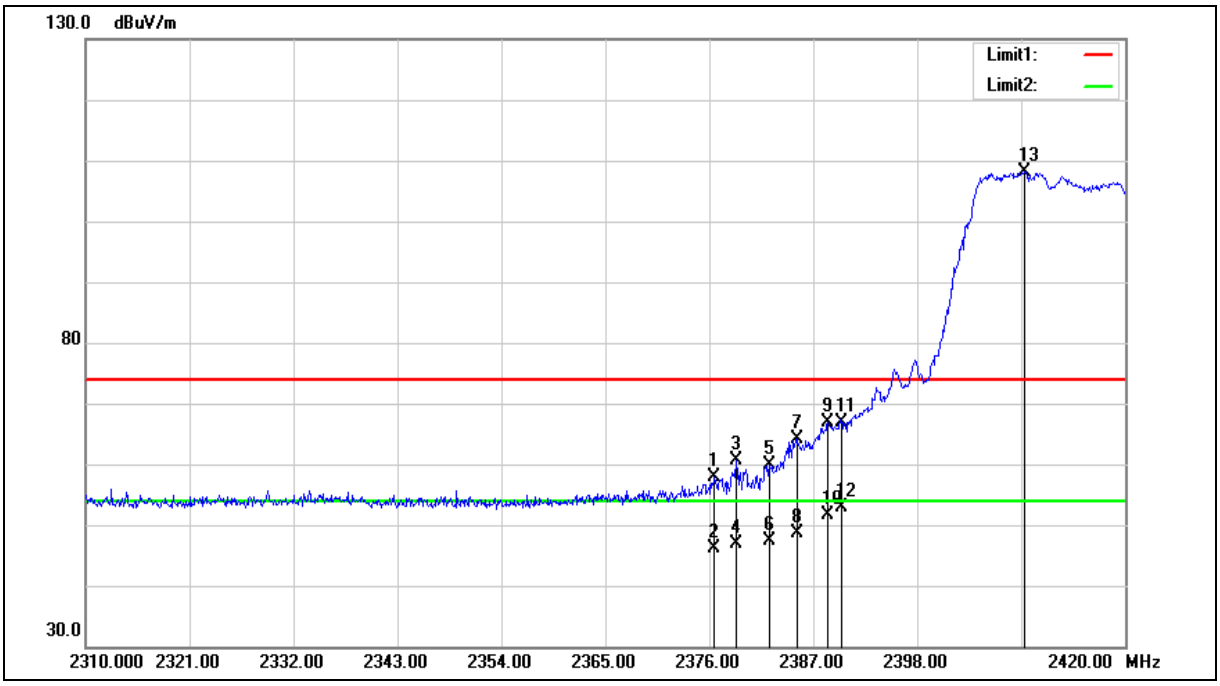
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2462.080	94.92	4.14	99.06	--	--	peak
2	2483.500	49.95	4.21	54.16	74.00	-19.84	peak
3	2483.500	40.01	4.21	44.22	54.00	-9.78	AVG
4	2490.440	51.06	4.23	55.29	74.00	-18.71	peak
5	2490.440	40.15	4.23	44.38	54.00	-9.62	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

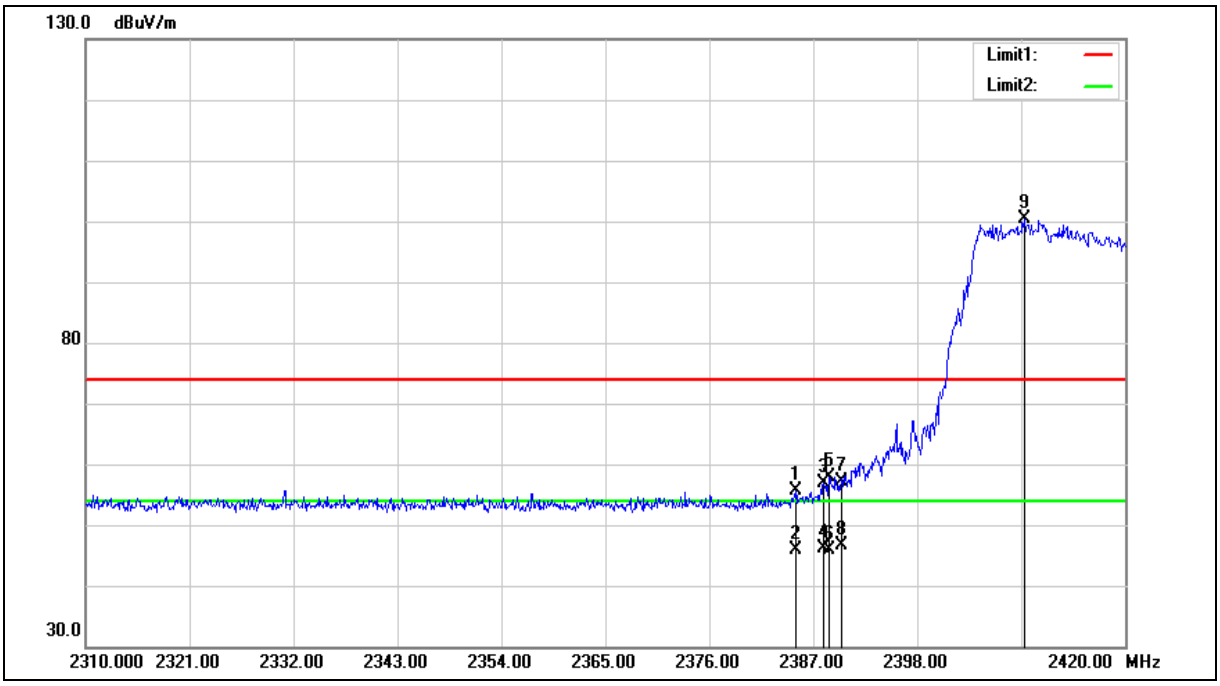
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2376.550	53.92	3.90	57.82	74.00	-16.18	peak
2	2376.550	42.35	3.90	46.25	54.00	-7.75	AVG
3	2378.860	56.62	3.90	60.52	74.00	-13.48	peak
4	2378.860	43.06	3.90	46.96	54.00	-7.04	AVG
5	2382.380	56.07	3.92	59.99	74.00	-14.01	peak
6	2382.380	43.37	3.92	47.29	54.00	-6.71	AVG
7	2385.240	60.17	3.92	64.09	74.00	-9.91	peak
8	2385.240	44.63	3.92	48.55	54.00	-5.45	AVG
9	2388.540	62.93	3.94	66.87	74.00	-7.13	peak
10	2388.540	47.74	3.94	51.68	54.00	-2.32	AVG
11	2390.000	62.93	3.94	66.87	74.00	-7.13	peak
12	2390.000	48.89	3.94	52.83	54.00	-1.17	AVG
13	2409.330	104.15	4.00	108.15	--	--	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		

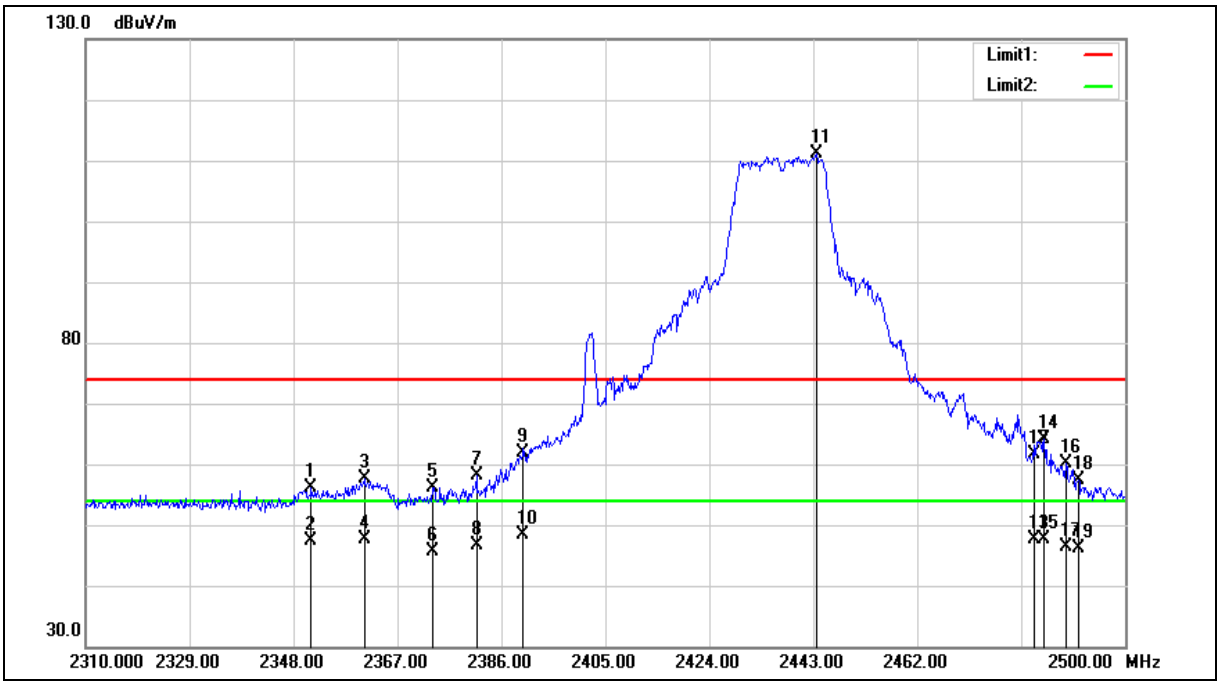
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.130	51.68	3.92	55.60	74.00	-18.40	peak
2	2385.130	41.89	3.92	45.81	54.00	-8.19	AVG
3	2388.100	53.01	3.94	56.95	74.00	-17.05	peak
4	2388.100	42.10	3.94	46.04	54.00	-7.96	AVG
5	2388.650	54.00	3.94	57.94	74.00	-16.06	peak
6	2388.650	41.95	3.94	45.89	54.00	-8.11	AVG
7	2390.000	53.21	3.94	57.15	74.00	-16.85	peak
8	2390.000	42.78	3.94	46.72	54.00	-7.28	AVG
9	2409.330	96.28	4.00	100.28	--	--	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

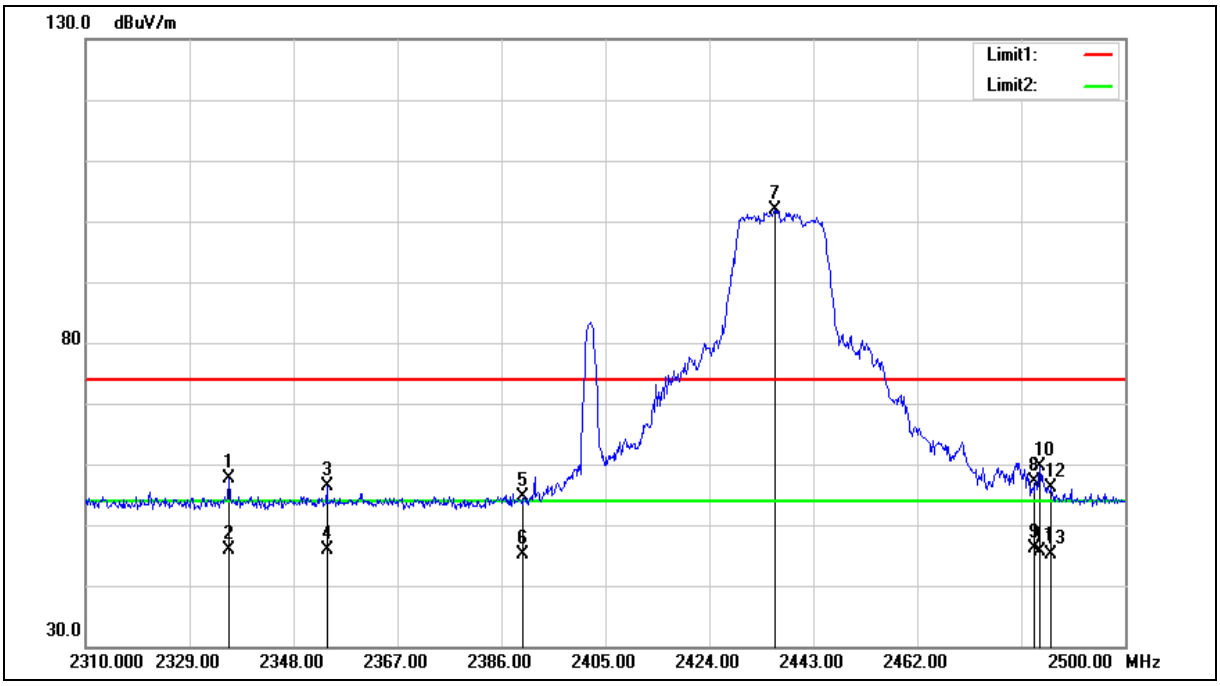
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2351.230	52.37	3.83	56.20	74.00	-17.80	peak
2	2351.230	43.49	3.83	47.32	54.00	-6.68	AVG
3	2360.920	53.77	3.86	57.63	74.00	-16.37	peak
4	2360.920	43.73	3.86	47.59	54.00	-6.41	AVG
5	2373.460	52.26	3.90	56.16	74.00	-17.84	peak
6	2373.460	41.78	3.90	45.68	54.00	-8.32	AVG
7	2381.440	54.17	3.92	58.09	74.00	-15.91	peak
8	2381.440	42.79	3.92	46.71	54.00	-7.29	AVG
9	2390.000	58.03	3.94	61.97	74.00	-12.03	peak
10	2390.000	44.42	3.94	48.36	54.00	-5.64	AVG
11	2443.570	106.95	4.10	111.05	--	--	peak
12	2483.500	57.45	4.21	61.66	74.00	-12.34	peak
13	2483.500	43.54	4.21	47.75	54.00	-6.25	AVG
14	2485.180	59.82	4.21	64.03	74.00	-9.97	peak
15	2485.180	43.53	4.21	47.74	54.00	-6.26	AVG
16	2489.170	55.87	4.23	60.10	74.00	-13.90	peak
17	2489.170	42.08	4.23	46.31	54.00	-7.69	AVG
18	2491.450	53.06	4.23	57.29	74.00	-16.71	peak
19	2491.450	41.84	4.23	46.07	54.00	-7.93	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		

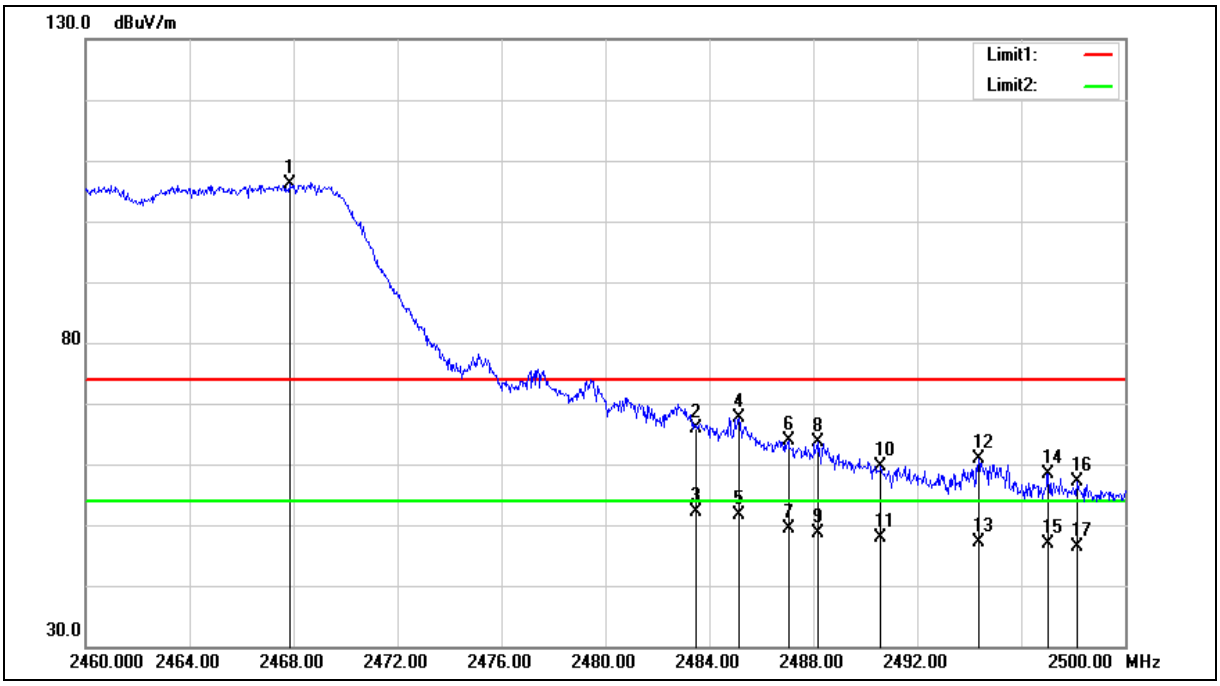
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2336.220	53.78	3.79	57.57	74.00	-16.43	peak
2	2336.220	42.15	3.79	45.94	54.00	-8.06	AVG
3	2354.080	52.46	3.84	56.30	74.00	-17.70	peak
4	2354.080	41.92	3.84	45.76	54.00	-8.24	AVG
5	2390.000	50.67	3.94	54.61	74.00	-19.39	peak
6	2390.000	41.23	3.94	45.17	54.00	-8.83	AVG
7	2435.970	97.79	4.07	101.86	--	--	peak
8	2483.500	52.97	4.21	57.18	74.00	-16.82	peak
9	2483.500	41.85	4.21	46.06	54.00	-7.94	AVG
10	2484.420	55.37	4.21	59.58	74.00	-14.42	peak
11	2484.420	41.31	4.21	45.52	54.00	-8.48	AVG
12	2486.510	51.94	4.22	56.16	74.00	-17.84	peak
13	2486.510	40.84	4.22	45.06	54.00	-8.94	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

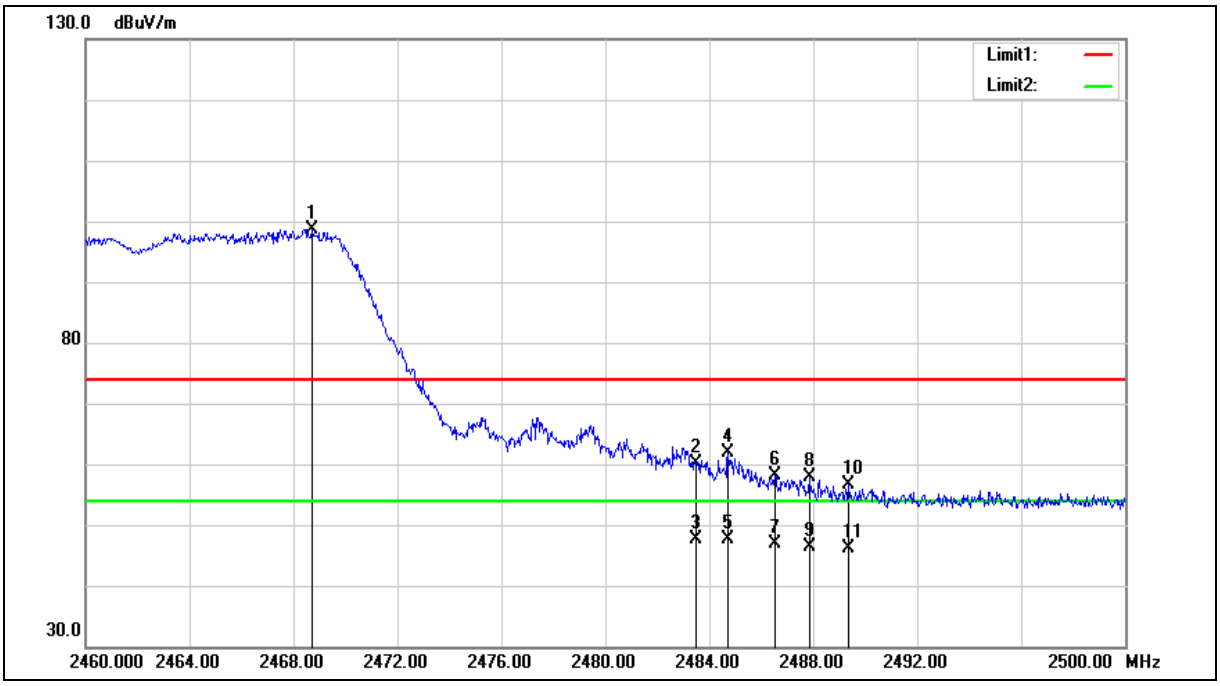
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2467.840	102.04	4.16	106.20	--	--	peak
2	2483.500	61.66	4.21	65.87	74.00	-8.13	peak
3	2483.500	47.92	4.21	52.13	54.00	-1.87	AVG
4	2485.120	63.39	4.21	67.60	74.00	-6.40	peak
5	2485.120	47.44	4.21	51.65	54.00	-2.35	AVG
6	2487.040	59.65	4.22	63.87	74.00	-10.13	peak
7	2487.040	45.06	4.22	49.28	54.00	-4.72	AVG
8	2488.160	59.41	4.23	63.64	74.00	-10.36	peak
9	2488.160	44.41	4.23	48.64	54.00	-5.36	AVG
10	2490.600	55.41	4.23	59.64	74.00	-14.36	peak
11	2490.600	43.64	4.23	47.87	54.00	-6.13	AVG
12	2494.360	56.62	4.24	60.86	74.00	-13.14	peak
13	2494.360	42.86	4.24	47.10	54.00	-6.90	AVG
14	2497.040	54.15	4.25	58.40	74.00	-15.60	peak
15	2497.040	42.59	4.25	46.84	54.00	-7.16	AVG
16	2498.160	52.95	4.26	57.21	74.00	-16.79	peak
17	2498.160	42.12	4.26	46.38	54.00	-7.62	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		

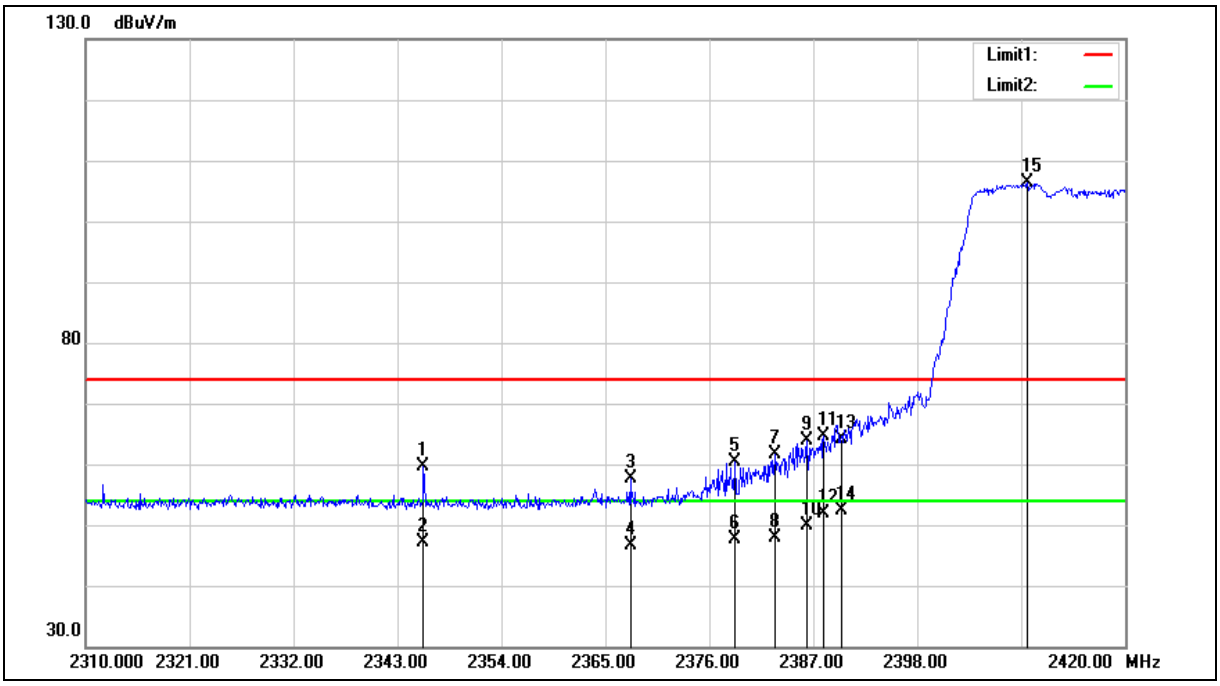
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2468.720	94.58	4.16	98.74	--	--	peak
2	2483.500	55.96	4.21	60.17	74.00	-13.83	peak
3	2483.500	43.43	4.21	47.64	54.00	-6.36	AVG
4	2484.720	57.69	4.21	61.90	74.00	-12.10	peak
5	2484.720	43.44	4.21	47.65	54.00	-6.35	AVG
6	2486.520	53.84	4.22	58.06	74.00	-15.94	peak
7	2486.520	42.56	4.22	46.78	54.00	-7.22	AVG
8	2487.840	53.70	4.23	57.93	74.00	-16.07	peak
9	2487.840	42.26	4.23	46.49	54.00	-7.51	AVG
10	2489.360	52.30	4.23	56.53	74.00	-17.47	peak
11	2489.360	41.97	4.23	46.20	54.00	-7.80	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

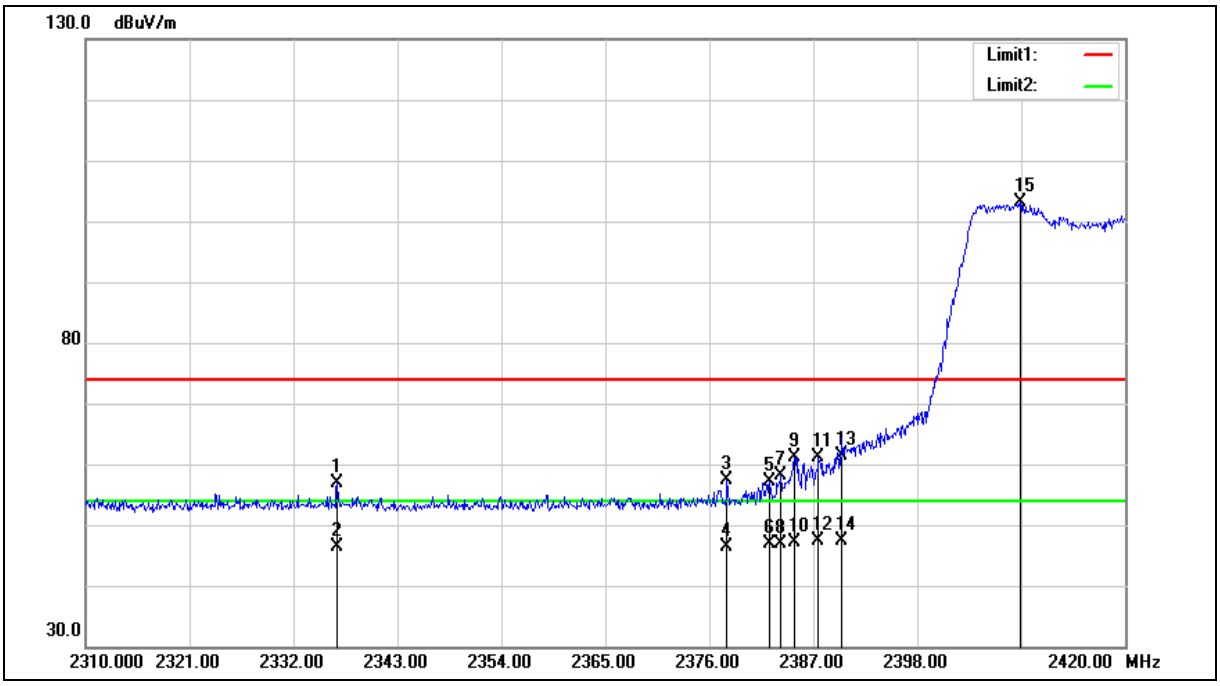
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2345.750	55.86	3.81	59.67	74.00	-14.33	peak
2	2345.750	43.40	3.81	47.21	54.00	-6.79	AVG
3	2367.640	53.85	3.88	57.73	74.00	-16.27	peak
4	2367.640	42.74	3.88	46.62	54.00	-7.38	AVG
5	2378.750	56.44	3.90	60.34	74.00	-13.66	peak
6	2378.750	43.64	3.90	47.54	54.00	-6.46	AVG
7	2382.930	57.65	3.92	61.57	74.00	-12.43	peak
8	2382.930	43.85	3.92	47.77	54.00	-6.23	AVG
9	2386.340	60.01	3.93	63.94	74.00	-10.06	peak
10	2386.340	46.00	3.93	49.93	54.00	-4.07	AVG
11	2388.100	60.64	3.94	64.58	74.00	-9.42	peak
12	2388.100	47.92	3.94	51.86	54.00	-2.14	AVG
13	2390.000	60.17	3.94	64.11	74.00	-9.89	peak
14	2390.000	48.49	3.94	52.43	54.00	-1.57	AVG
15	2409.660	102.33	4.00	106.33	--	--	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		

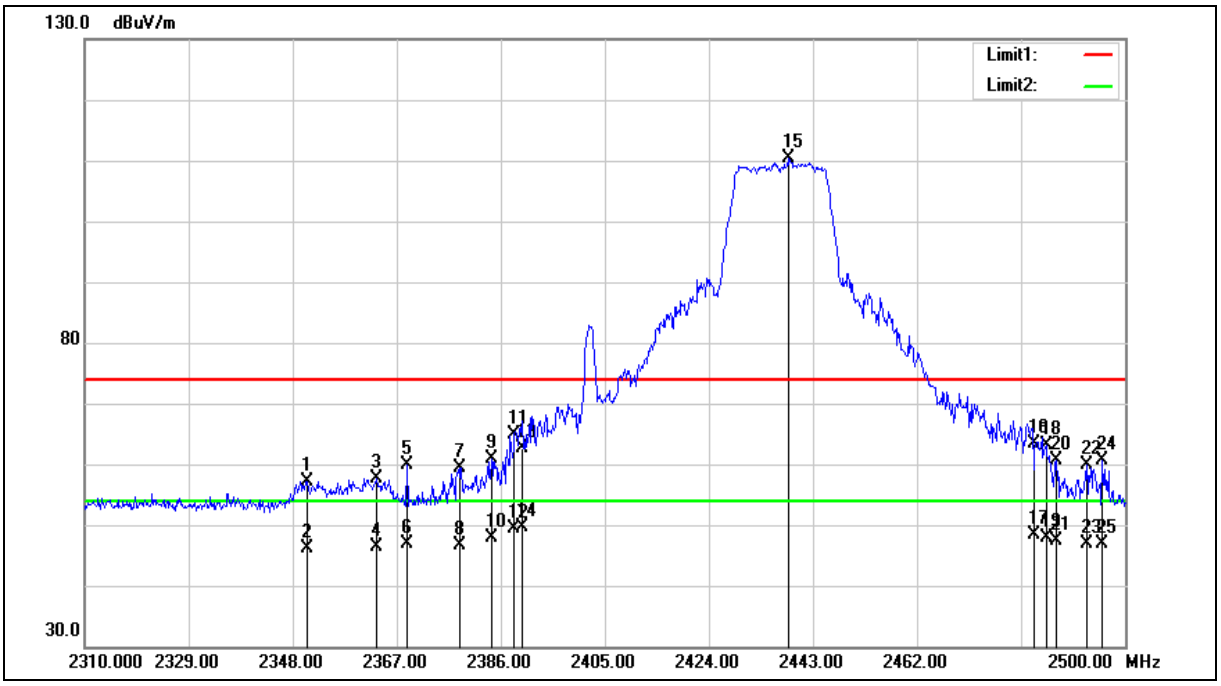
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2336.620	53.14	3.79	56.93	74.00	-17.07	peak
2	2336.620	42.71	3.79	46.50	54.00	-7.50	AVG
3	2377.870	53.41	3.90	57.31	74.00	-16.69	peak
4	2377.870	42.54	3.90	46.44	54.00	-7.56	AVG
5	2382.380	53.22	3.92	57.14	74.00	-16.86	peak
6	2382.380	42.89	3.92	46.81	54.00	-7.19	AVG
7	2383.590	54.33	3.92	58.25	74.00	-15.75	peak
8	2383.590	43.06	3.92	46.98	54.00	-7.02	AVG
9	2385.020	57.15	3.92	61.07	74.00	-12.93	peak
10	2385.020	43.19	3.92	47.11	54.00	-6.89	AVG
11	2387.550	57.09	3.94	61.03	74.00	-12.97	peak
12	2387.550	43.36	3.94	47.30	54.00	-6.70	AVG
13	2390.000	57.38	3.94	61.32	74.00	-12.68	peak
14	2390.000	43.49	3.94	47.43	54.00	-6.57	AVG
15	2408.890	99.10	4.00	103.10	--	--	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	2350.660	53.27	3.83	57.10	74.00	-16.90	peak
2	2350.660	42.26	3.83	46.09	54.00	-7.91	AVG
3	2363.390	53.86	3.87	57.73	74.00	-16.27	peak
4	2363.390	42.46	3.87	46.33	54.00	-7.67	AVG
5	2368.900	56.03	3.88	59.91	74.00	-14.09	peak
6	2368.900	42.93	3.88	46.81	54.00	-7.19	AVG
7	2378.590	55.41	3.90	59.31	74.00	-14.69	peak
8	2378.590	42.84	3.90	46.74	54.00	-7.26	AVG
9	2384.290	56.97	3.92	60.89	74.00	-13.11	peak
10	2384.290	43.97	3.92	47.89	54.00	-6.11	AVG
11	2388.470	60.93	3.94	64.87	74.00	-9.13	peak
12	2388.470	45.51	3.94	49.45	54.00	-4.55	AVG
13	2390.000	58.80	3.94	62.74	74.00	-11.26	peak
14	2390.000	45.69	3.94	49.63	54.00	-4.37	AVG
15	2438.440	106.17	4.09	110.26	--	--	peak
16	2483.500	59.16	4.21	63.37	74.00	-10.63	peak
17	2483.500	44.07	4.21	48.28	54.00	-5.72	AVG
18	2485.560	58.86	4.21	63.07	74.00	-10.93	peak
19	2485.560	43.67	4.21	47.88	54.00	-6.12	AVG
20	2487.460	56.34	4.22	60.56	74.00	-13.44	peak
21	2487.460	43.18	4.22	47.40	54.00	-6.60	AVG
22	2492.970	55.62	4.24	59.86	74.00	-14.14	peak
23	2492.970	42.73	4.24	46.97	54.00	-7.03	AVG
24	2495.820	56.46	4.24	60.70	74.00	-13.30	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:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

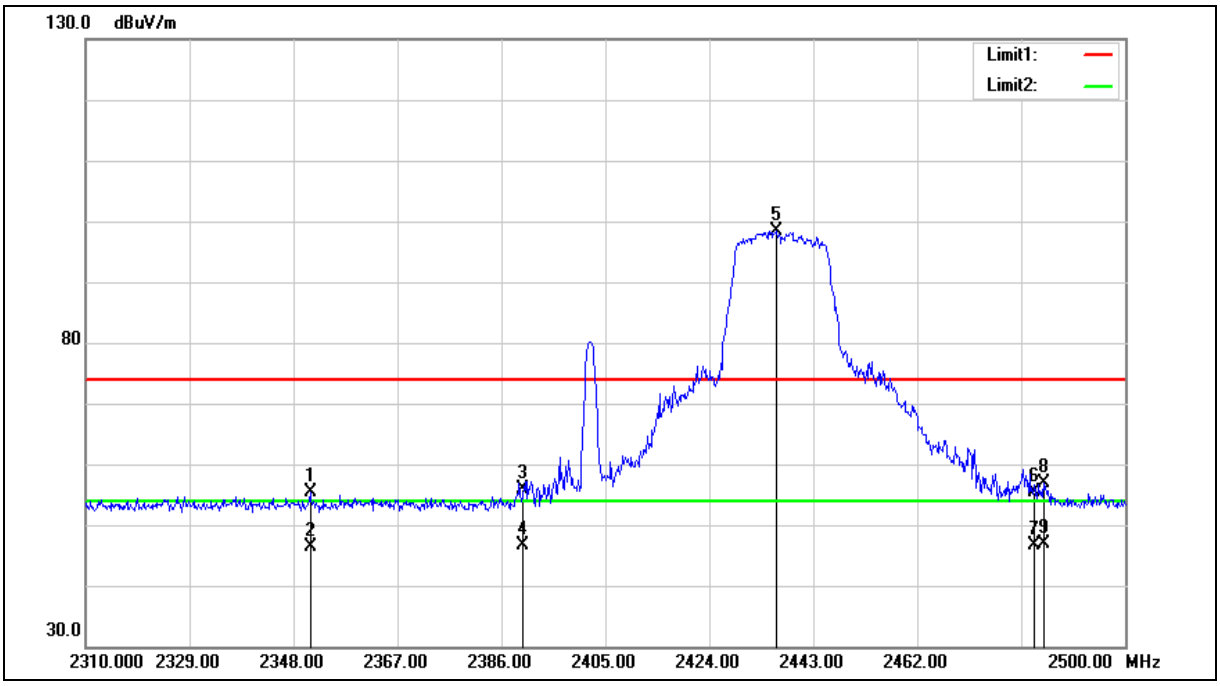
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
25	2495.820	42.65	4.24	46.89	54.00	-7.11	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		

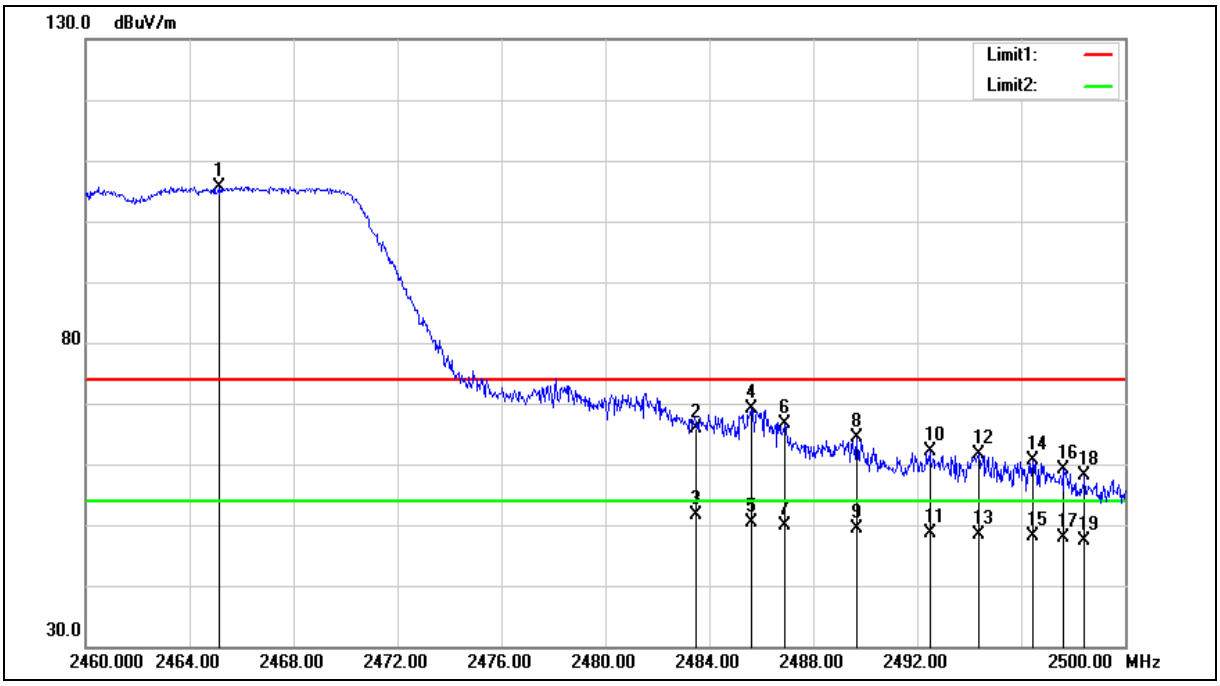
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2351.040	51.60	3.83	55.43	74.00	-18.57	peak
2	2351.040	42.52	3.83	46.35	54.00	-7.65	AVG
3	2390.000	51.94	3.94	55.88	74.00	-18.12	peak
4	2390.000	42.76	3.94	46.70	54.00	-7.30	AVG
5	2436.160	94.36	4.08	98.44	--	--	peak
6	2483.500	51.18	4.21	55.39	74.00	-18.61	peak
7	2483.500	42.33	4.21	46.54	54.00	-7.46	AVG
8	2485.180	52.77	4.21	56.98	74.00	-17.02	peak
9	2485.180	42.55	4.21	46.76	54.00	-7.24	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

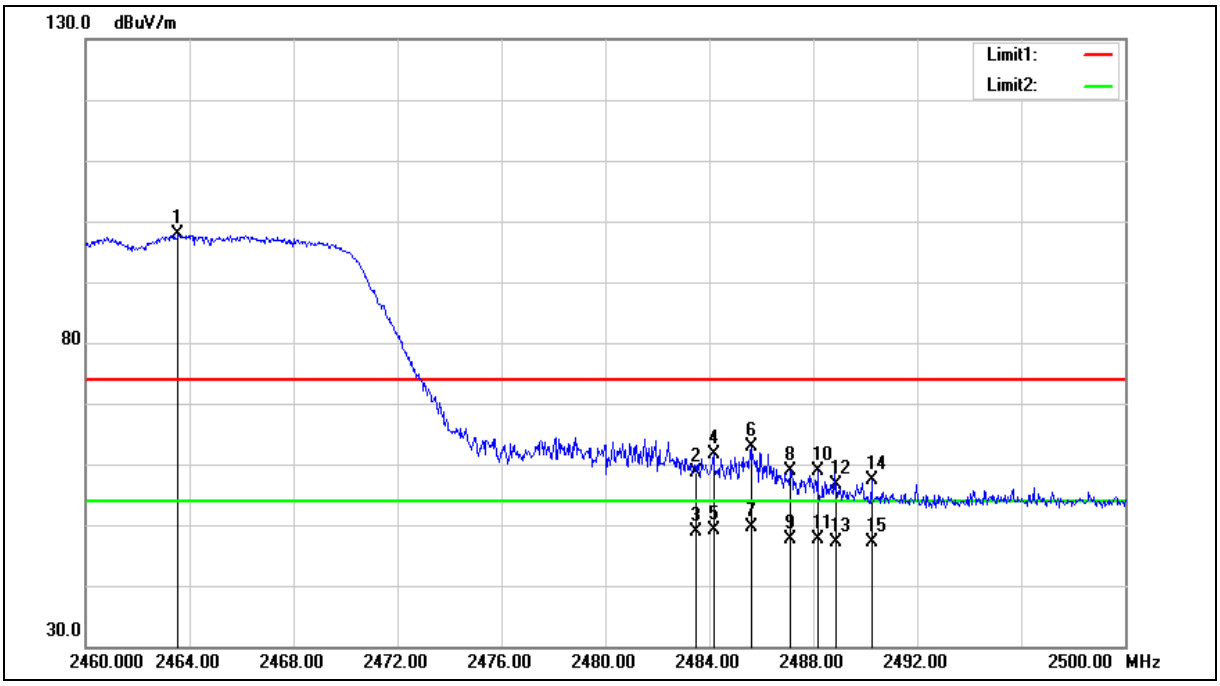
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2465.120	101.54	4.16	105.70	--	--	peak
2	2483.500	61.71	4.21	65.92	74.00	-8.08	peak
3	2483.500	47.40	4.21	51.61	54.00	-2.39	AVG
4	2485.600	64.83	4.21	69.04	74.00	-4.96	peak
5	2485.600	46.17	4.21	50.38	54.00	-3.62	AVG
6	2486.920	62.39	4.22	66.61	74.00	-7.39	peak
7	2486.920	45.68	4.22	49.90	54.00	-4.10	AVG
8	2489.680	60.11	4.23	64.34	74.00	-9.66	peak
9	2489.680	45.03	4.23	49.26	54.00	-4.74	AVG
10	2492.480	57.96	4.24	62.20	74.00	-11.80	peak
11	2492.480	44.34	4.24	48.58	54.00	-5.42	AVG
12	2494.360	57.47	4.24	61.71	74.00	-12.29	peak
13	2494.360	44.08	4.24	48.32	54.00	-5.68	AVG
14	2496.440	56.45	4.25	60.70	74.00	-13.30	peak
15	2496.440	43.85	4.25	48.10	54.00	-5.90	AVG
16	2497.640	54.86	4.26	59.12	74.00	-14.88	peak
17	2497.640	43.57	4.26	47.83	54.00	-6.17	AVG
18	2498.440	53.83	4.26	58.09	74.00	-15.91	peak
19	2498.440	43.16	4.26	47.42	74.00	-26.58	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	2463.560	93.68	4.15	97.83	--	--	peak
2	2483.500	54.51	4.21	58.72	74.00	-15.28	peak
3	2483.500	44.76	4.21	48.97	54.00	-5.03	AVG
4	2484.160	57.53	4.21	61.74	74.00	-12.26	peak
5	2484.160	44.99	4.21	49.20	54.00	-4.80	AVG
6	2485.600	58.71	4.21	62.92	74.00	-11.08	peak
7	2485.600	45.35	4.21	49.56	54.00	-4.44	AVG
8	2487.120	54.65	4.22	58.87	74.00	-15.13	peak
9	2487.120	43.41	4.22	47.63	54.00	-6.37	AVG
10	2488.160	54.75	4.23	58.98	74.00	-15.02	peak
11	2488.160	43.28	4.23	47.51	54.00	-6.49	AVG
12	2488.880	52.46	4.23	56.69	74.00	-17.31	peak
13	2488.880	42.96	4.23	47.19	54.00	-6.81	AVG
14	2490.240	53.04	4.23	57.27	74.00	-16.73	peak
15	2490.240	42.85	4.23	47.08	54.00	-6.92	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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