RF Test Report

Applicant	:	Araknis Networks
Product Type	:	WAVE 2 AC WIRELESS ACCESS POINT
Trade Name	:	Araknis Networks
Model Number	:	AN-510-AP-I-AC
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Receive Date	:	Aug. 29, 2017
Test Period	:	Feb. 01 ~ Dec. 06, 2018
Issue Date	:	Apr. 09, 2019

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
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Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Feb. 13, 2019	Initial Issue	Janet Chao
01	Apr. 09, 2019	Page 136 add formulas of directional gain for conducted output power	Janet Chao

Verification of Compliance

Issued Date: Apr. 09, 2019

Applicant	:	Araknis Networks
Product Type	:	WAVE 2 AC WIRELESS ACCESS POINT
Trade Name	:	Araknis Networks
Model Number	:	AN-510-AP-I-AC
FCC ID	:	2AG6R-AN510APIAC
EUT Rated Voltage	:	DC 12 V, 2 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. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By	:	Fly Lu	Reviewed By	:	Eric Ou Yang
(Manager)		(Fly Lu)	(Testing Engineer)		(Eric Ou Yang)

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1 General Information

1.1 Summary of Test Result

Standard	Item	Result	Remark
15.247			
15.207	AC Power Conducted Emission	PASS	-----
Standard	Item	Result	Remark
15.247			
15.247(d)	Transmitter Radiated Emissions	PASS	-----
15.247(b)(3)	Max. Output Power	PASS	-----
15.247(a)(2)	6dB 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	-----

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	9kHz ~ 150KHz	2.7
	150kHz ~ 30MHz	2.7
Radiated Emission	9kHz ~ 30MHz	1.7
	30MHz ~ 1000MHz	5.7
	1000MHz ~ 18000MHz	5.5
	18000MHz ~ 26500MHz	4.8
	26500MHz ~ 40000MHz	4.8
Conducted Output Power	+0.27 dB / -0.28 dB	
RF Bandwidth	4.96%	
Power Spectral Density	+0.71 dB / -0.77 dB	

2 EUT Description

Applicant	Araknis Networks 1800 Continental Blvd. Suite 300, Charlotte, North Carolina, 28273, United States			
Manufacturer	Emplus Technologies Inc. No. 42, Sec. 1, Minsheng N. Rd., Guishan Dist., Taoyuan City 333, Taiwan			
Product Type	WAVE 2 AC WIRELESS ACCESS POINT			
Trade Name	Araknis Networks			
Model Number	AN-510-AP-I-AC			
FCC ID	2AG6R-AN510APIAC			
Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate 400 / 800 GI (ns)
IEEE 802.11b	2412 ~ 2462	DSSS	20MHz	Up to 11Mbps
IEEE 802.11g	2412 ~ 2462	OFDM	20MHz	Up to 54Mbps
IEEE 802.11n 2.4GHz 20MHz	2412 ~ 2462	OFDM (256QAM)	20MHz	Up to 173.4Mbps
IEEE 802.11n 2.4GHz 40MHz	2422 ~ 2452	OFDM (256QAM)	40MHz	Up to 400Mbps
Antenna information	ANT	Type		Max. Gain (dBi)
	ANT-0	Metal PIFA Antenna		3.38
	ANT-1	Metal PIFA Antenna		4.26
	G_{ANT}			3.84
Antenna Delivery	See section 3.1			
Operate Temp. Range	0 ~ +50 ℃			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.439
IEEE 802.11g	0.354
IEEE 802.11n 2.4GHz 20MHz	0.358
IEEE 802.11n 2.4GHz 40MHz	0.159

EUT Modify Description：

Modify Description： (1) Change the applicant, applicant address, manufacturer, manufacturer address, product type, trade name, model number, FCC ID, temperature range, and the appearance. (2) Change adapter. (Trade name: Powertron Electronics Corp., Model: PA1024-120HUB200) After the evaluation, AC Power Conducted Emission and below 1 GHz in Transmitter Radiated Emissions need to be retested.Other test items refer to the original report.
Original Report：1803FR17-01 Modify：1901FR11

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 2.4GHz 20MHz Continuous TX mode
Mode 5: IEEE 802.11n 2.4GHz 40MHz 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 as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in TX mode only.

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

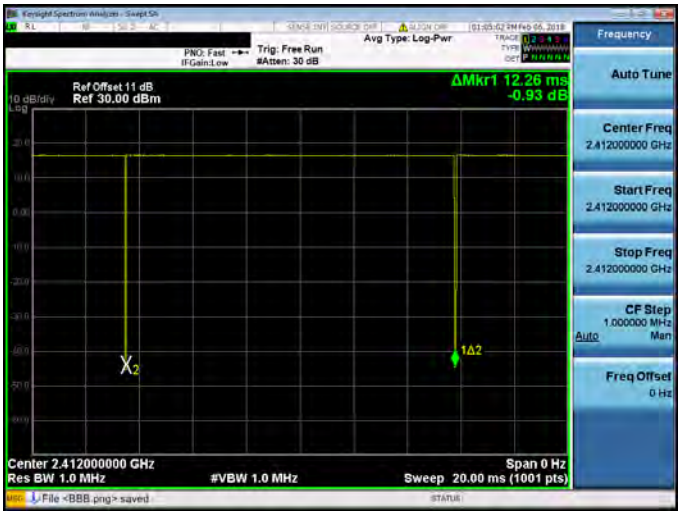
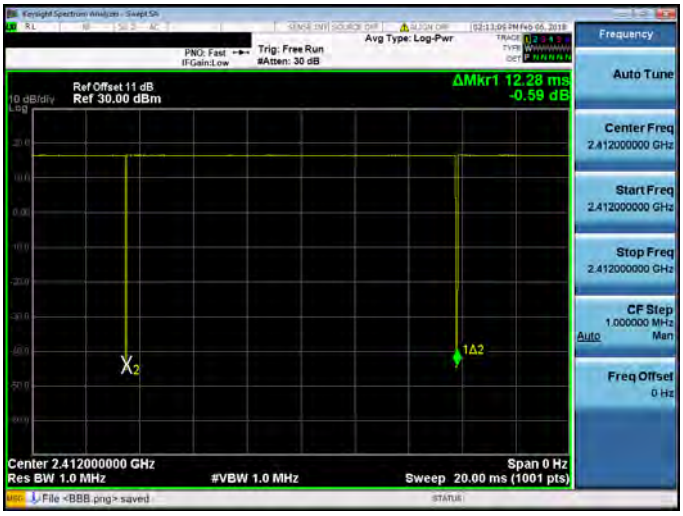
Test Mode	ANT-0	ANT-1	ANT-0+1
Mode 2	V	V	V
Mode 3	V	V	V
Mode 4	V	V	V
Mode 5	V	V	V

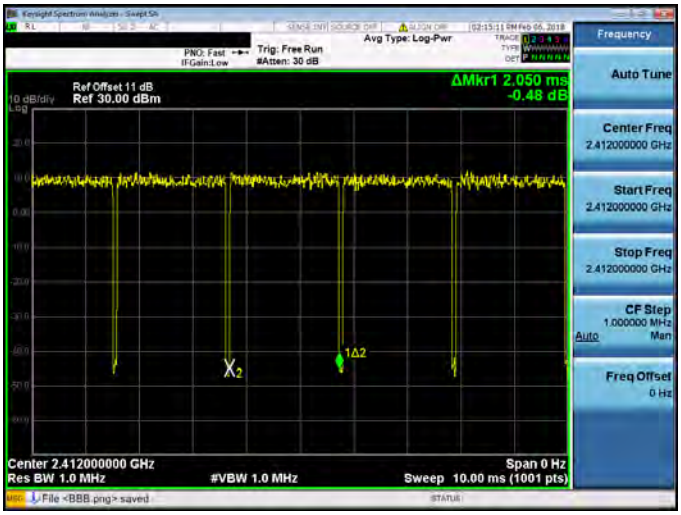
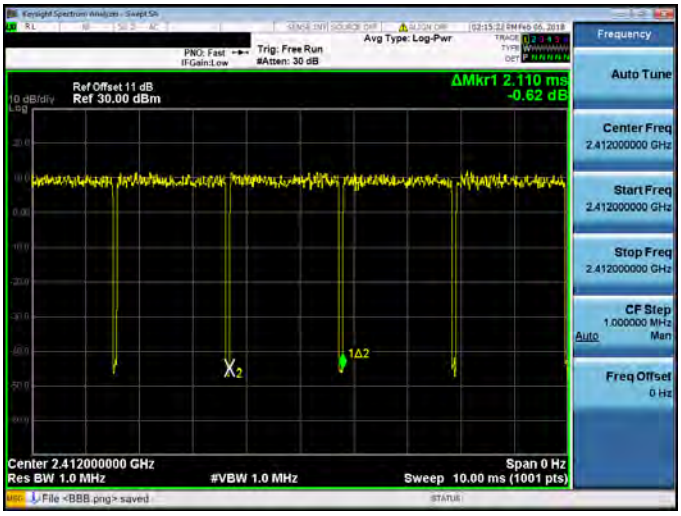
Test Mode	Antenna Delivery	Data Rate	Test Channel
Mode 2	2TX (CDD)	1M	1, 6, 11
Mode 3	2TX (CDD)	6M	1, 6, 11
Mode 4	2TX (CDD)	13M	1, 6, 11
Mode 5	2TX (CDD)	27M	3, 6, 9

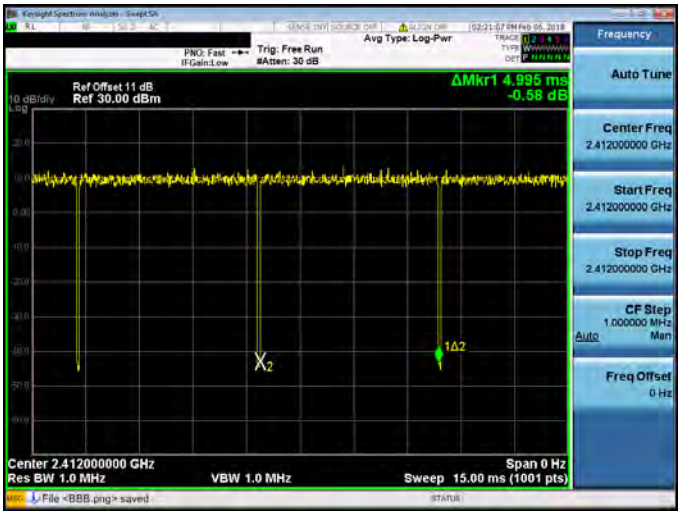
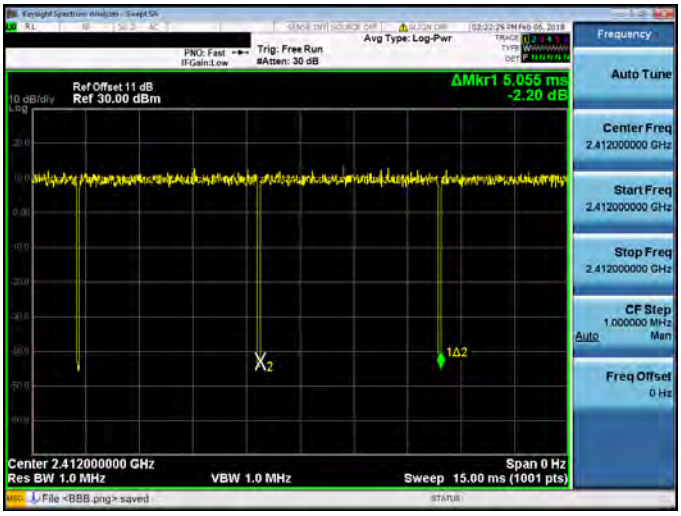
Duty cycle

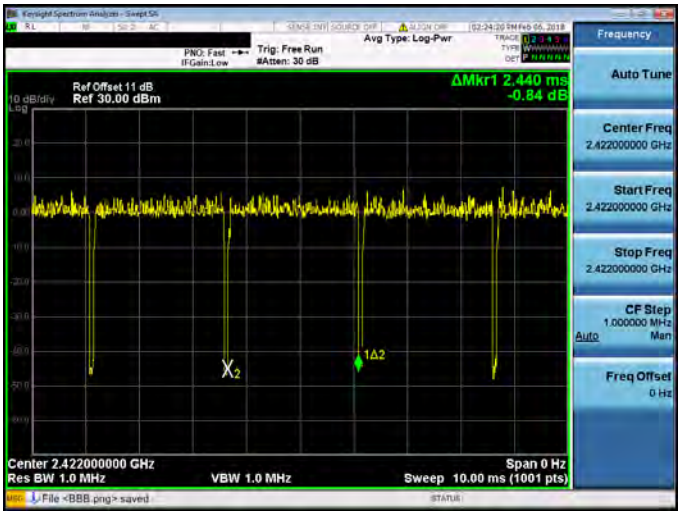
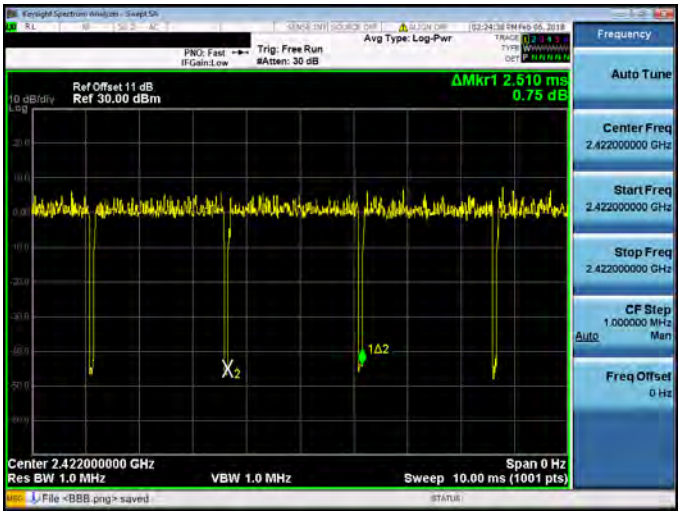
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	2412	12.260	12.280	0.998	0.007	0.010
Mode 3	2412	2.050	2.110	0.972	0.125	0.488
Mode 4	2412	4.995	5.055	0.988	0.052	0.010
Mode 5	2422	2.440	2.510	0.972	0.123	0.410

Duty Cycle Graphs

Mode 2: IEEE 802.11b Continuous TX mode	
On time	
On+off time	

Mode 3: IEEE 802.11g Continuous TX mode	
On time	
On+off time	

Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode	
On time	
On+off time	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode	
On time	
On+off time	

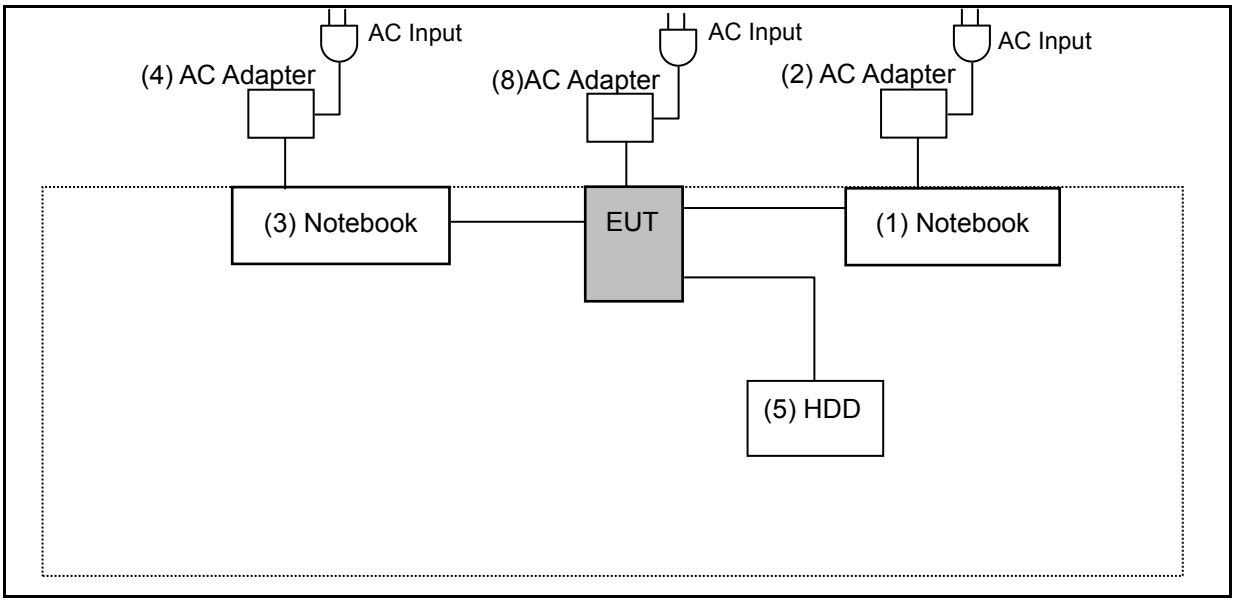
3.2. EUT Exercise Software

1. Setup the EUT shown on “Configuration of Test System Details.”
2. Turn on the power of all equipment.
3. Turn Wi-Fi function link to Notebook
4. EUT run test program.

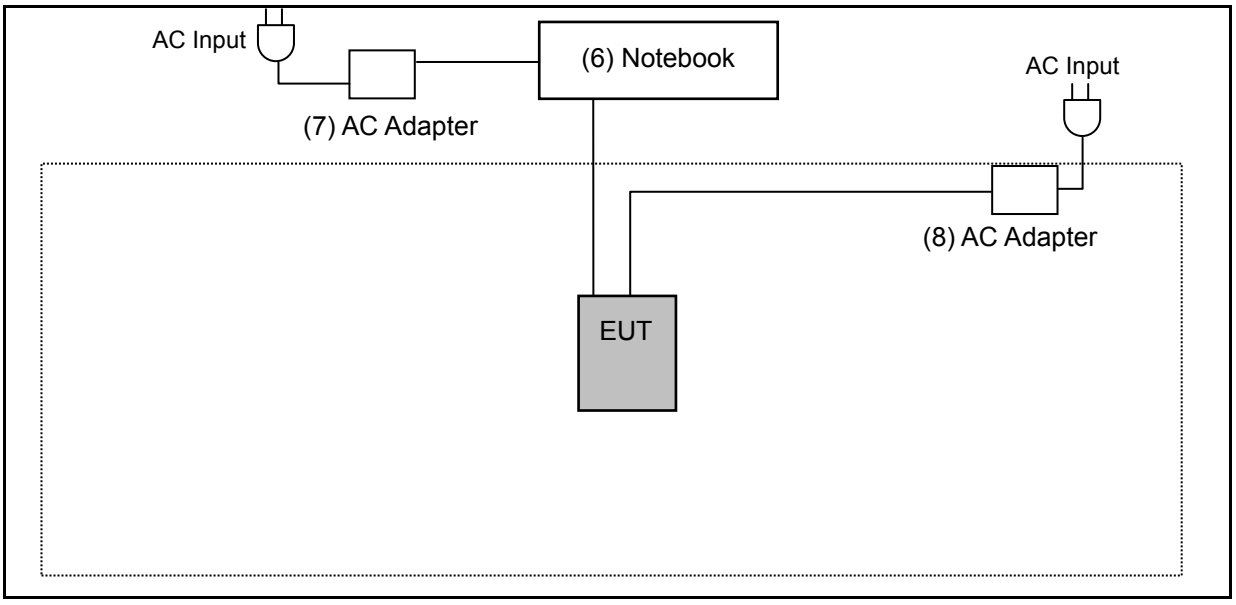
Measurement Software	
1	EZ-EMC Ver. ATL-03A1-1
2	EZ-EMC Ver ATL-ITC-3A1-1

3.3. Configuration of Test System Details

Conducted Emissions



Radiated Emission



Devices Description					
Product		Manufacturer	Model Number	Serial Number	Power Cord
(1)	Notebook	DELL	LATITUDE E5440	BRTQXY1	---
(2)	AC Adapter	DELL	HA65NM130	---	Non-shielded, 0.8 m
(3)	Notebook	ASUS	BU400A	D1NXAS148534020	---
(4)	AC Adapter	ASUS	EXA1203YH	---	Non-shielded, 0.8 m
(5)	Hard Drive	Transend	TS1TSJ25A3K-RU	D72654-0611	Power by EUT
(6)	Notebook	HP	PROBOOK 4421s	CNF1182X1G	---
(7)	AC Adapter	HP	Series PPP012H-S	---	Non-shielded, 1.7 m
(8)	AC Adapter	Powertron Electronics Corp.	PA1024-120HUB200	---	Input: 100-240 Vac, 50-60 Hz, 0.6 A Output: 12 V, 2 A

3.4. Test Instruments

For Conducted Emission

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESCI	100367	05/21/2018	1 year
LISN	R&S	ENV216	101040	04/11/2018	1 year
LISN	R&S	ENV216	101041	03/23/2018	1 year
RF Cable	Woken	00100D1380194M	TE-02-03	05/17/2018	1 year

For Radiated Emissions

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10Hz~44GHz)	Keysight	N9010A	MY52221312	01/15/2018	1 year
Pre Amplifier (1~26.5GHz)	Agilent	8449B	3008A02237	10/16/2017 10/16/2018	1 year
Pre Amplifier (100KHz~1.3GHz)	Agilent	8447D	2944A11119	01/10/2018	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/26/2017 10/19/2018	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/20/2017 08/23/2018	1 year
Horn Antenna (18~40GHz)	ETS	3116	86467	09/19/2017	1 year
Pre Amplifier (26.5~40 GHz)	EMCI	EMC2654045	980028	08/23/2018	1 year
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	08/07/2018	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	03/13/2018	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2018	1 year
Microwave Cable	EMCI	EMC104-SM-SM-13000	170814	10/30/2018	1 year
Microwave Cable	EMCI	EMC102-KM-KM-14000	151001	02/20/2018	1 year

For Conducted

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	08/28/2017	1 year
Power Meter	Anritsu	ML2495A	1135009	08/28/2017	1 year
Spectrum Analyzer (10Hz~44GHz)	Agilent	N9010A	MY52221312	01/16/2018	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	950

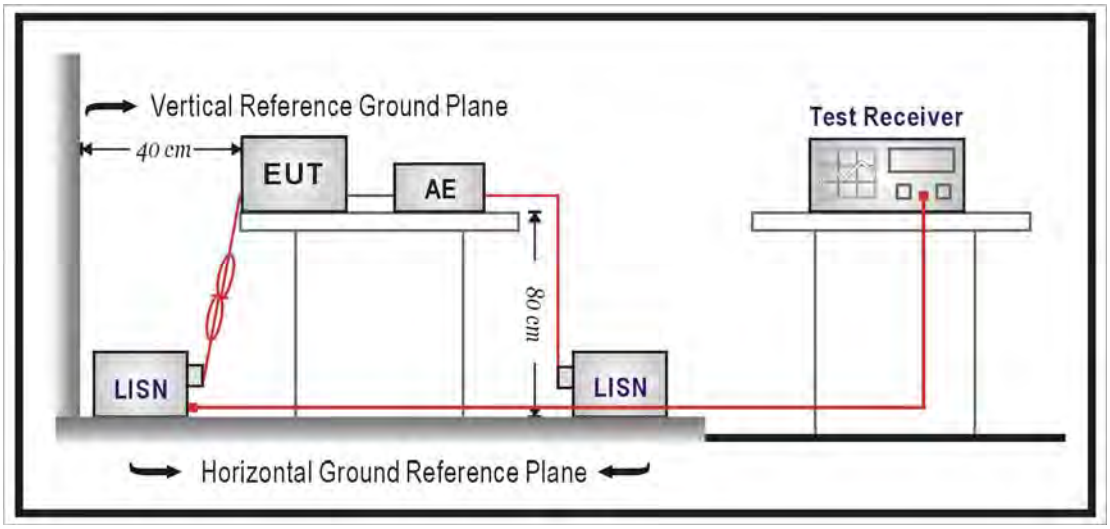
4 Measurement Procedure

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 50Ω// 50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50Ω// 50uH coupling impedance with 50ohm 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 40cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12mm 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 150kHz to 30MHz 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 1m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4m. All of interconnecting cables that hang closer than 40cm 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 0.1m. 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. Transmitter Radiated Emissions Measurement

■ **Limit**

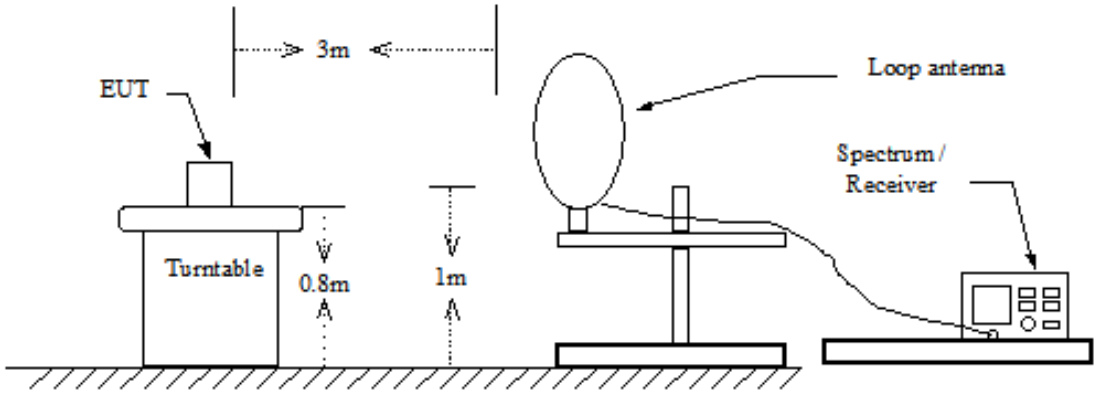
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

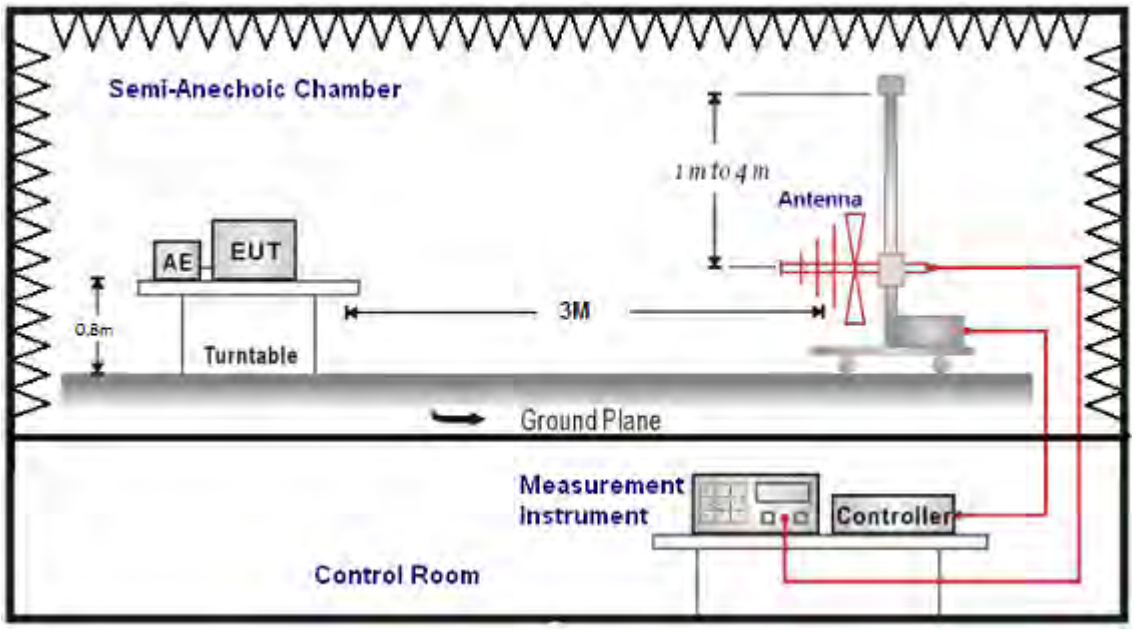
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this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

■ **Setup**

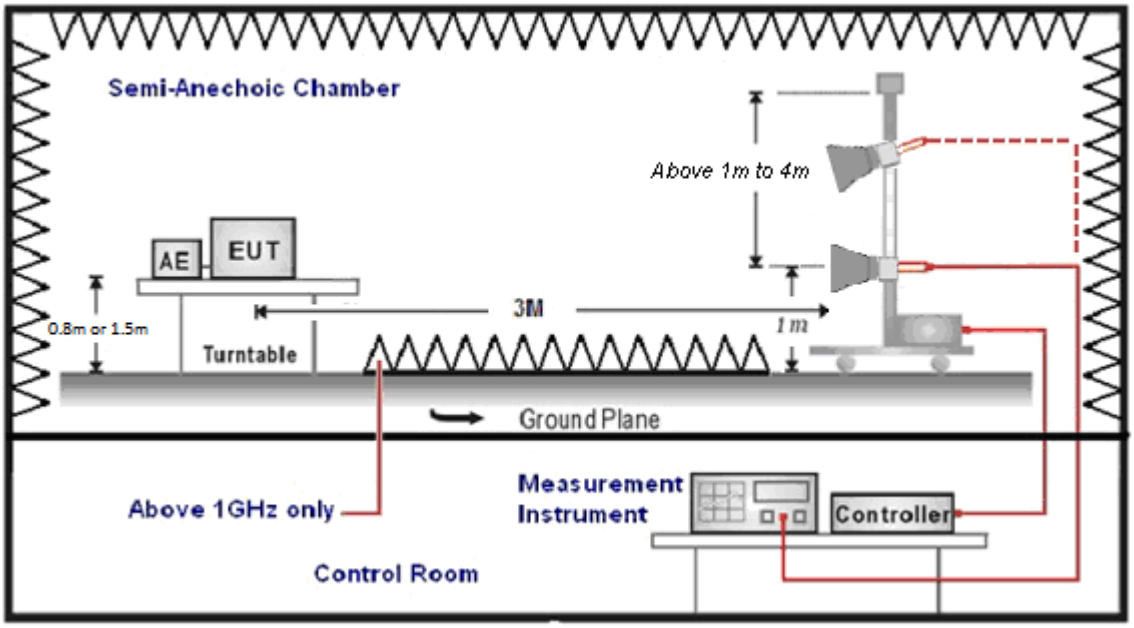
9kHz ~ 30MHz



Below 1GHz



Above 1GHz



■ **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 1 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 (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB 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 < +30dBm
(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 20dB below the permissible limits or the field strength is too small to be measured.

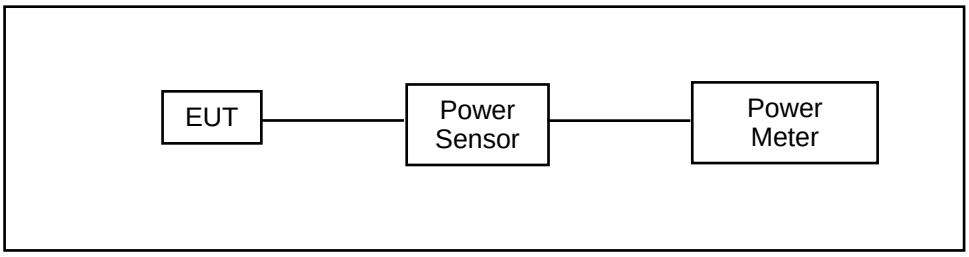
4.3. Maximum Conducted Output Power Measurement

- **Limit**

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

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 6dBi.

- **Test Setup**



- **Test Procedure**

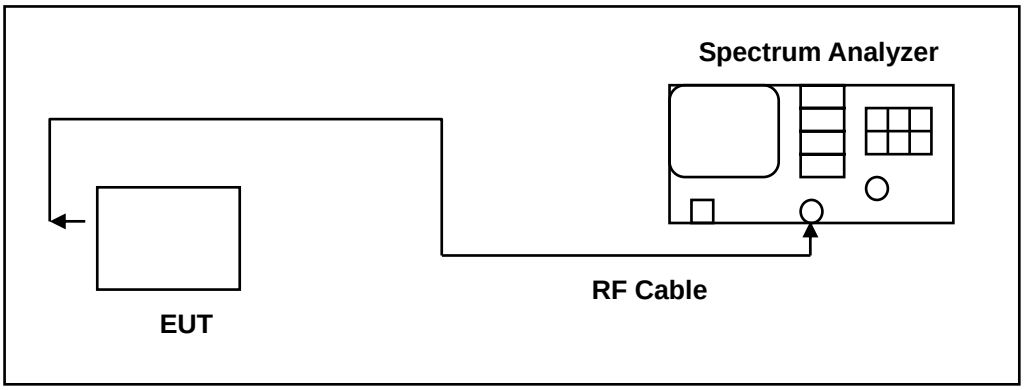
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor.

4.4. 6dB RF Bandwidth Measurement

■ **Limit**

6dB 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 KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.
6dB 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 Density Measurement

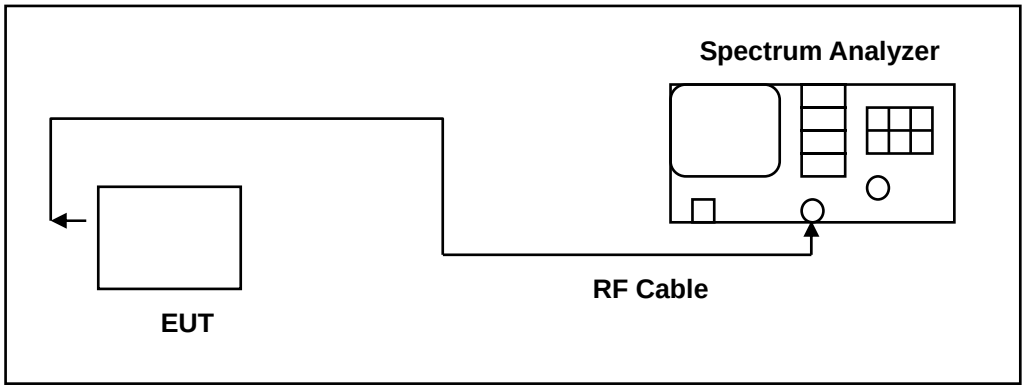
■ **Limit**

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.

∗ CDD mode：Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT} = 6.84 dBi > 6dBi

∗ CDD mode power limit shall be reduced = 8 – 0.84 = 7.16 dBm/ 3KHz

■ **Test Setup**



■ **Test Procedure**

The EUT tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

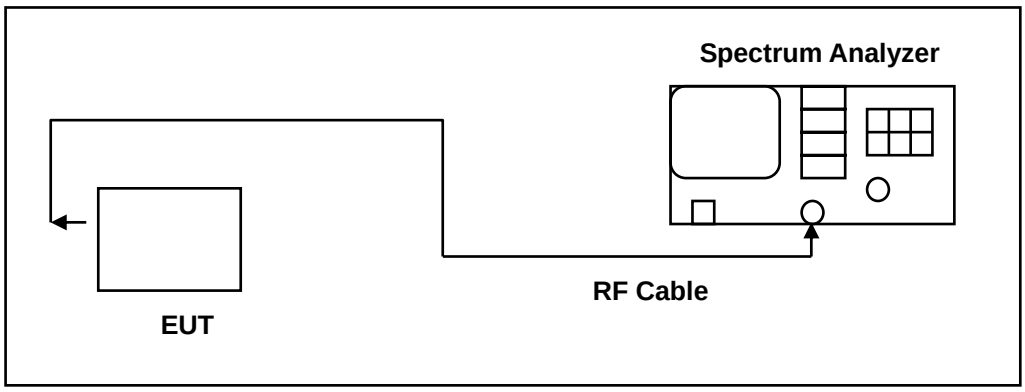
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 × RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the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

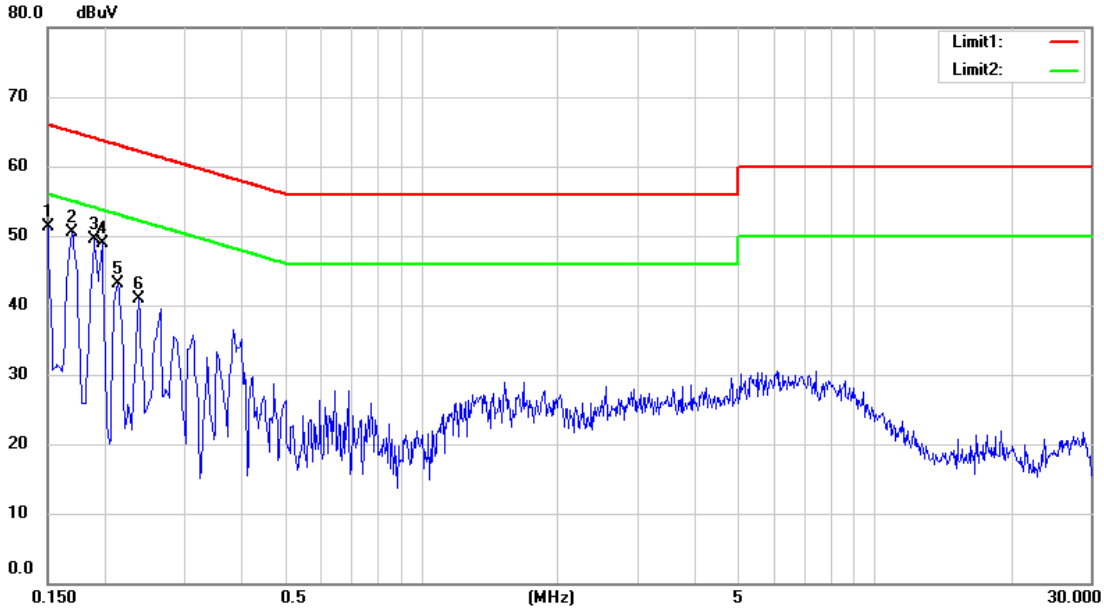
For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

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 6dBi.

5 Test Results

Annex A. AC Power Line Conducted Emission Test Results

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

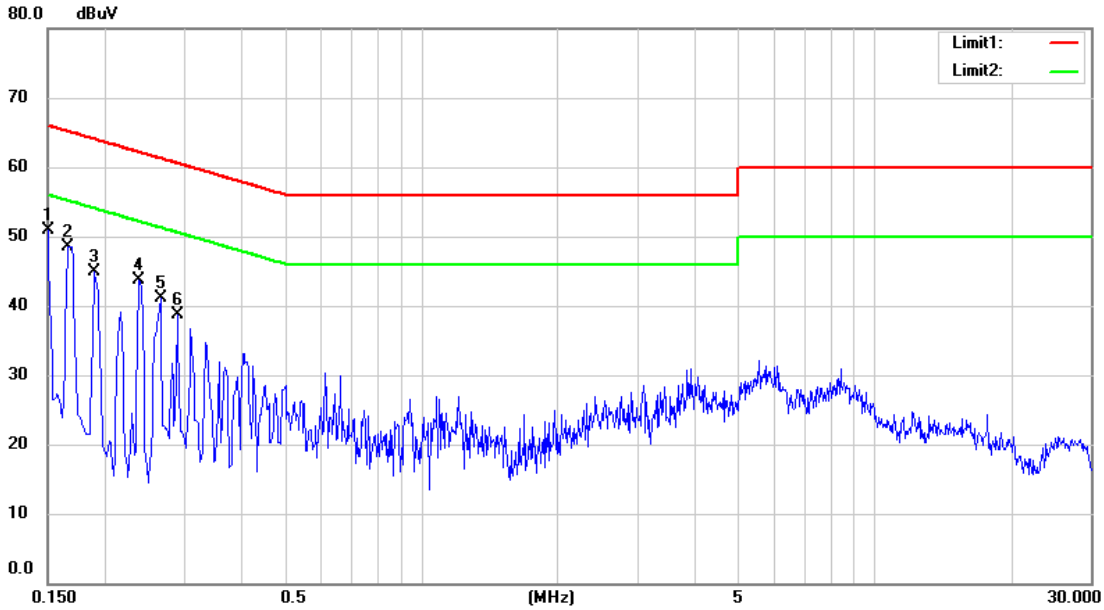


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1500	40.87	22.48	9.59	50.46	32.07	66.00	56.00	-15.54	-23.93	Pass
2	0.1700	37.80	19.77	9.60	47.40	29.37	64.96	54.96	-17.56	-25.59	Pass
3	0.1900	32.43	15.62	9.60	42.03	25.22	64.04	54.04	-22.01	-28.82	Pass
4	0.1980	32.02	14.14	9.60	41.62	23.74	63.69	53.69	-22.07	-29.95	Pass
5	0.2140	30.28	12.76	9.60	39.88	22.36	63.05	53.05	-23.17	-30.69	Pass
6	0.2380	26.98	11.60	9.60	36.58	21.20	62.17	52.17	-25.59	-30.97	Pass

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + 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 120V/60Hz
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	0.1500	40.76	20.77	9.70	50.46	30.47	66.00	56.00	-15.54	-25.53	Pass
2	0.1677	36.30	18.71	9.71	46.01	28.42	65.07	55.07	-19.06	-26.65	Pass
3	0.1900	31.44	14.08	9.70	41.14	23.78	64.04	54.04	-22.90	-30.26	Pass
4	0.2380	26.80	9.63	9.70	36.50	19.33	62.17	52.17	-25.67	-32.84	Pass
5	0.2660	25.17	10.74	9.70	34.87	20.44	61.24	51.24	-26.37	-30.80	Pass
6	0.2900	23.18	11.08	9.70	32.88	20.78	60.52	50.52	-27.64	-29.74	Pass

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

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

Annex B. Transmitter Radiated Emissions

Harmonic

Below 1GHz

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Description:			

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
118.2700	36.95	-8.45	28.50	43.50	-15.00	QP	H
200.7200	40.97	-7.80	33.17	43.50	-10.33	QP	H
284.1400	38.08	-4.20	33.88	46.00	-12.12	QP	H
332.6400	37.64	-3.25	34.39	46.00	-11.61	QP	H
427.7000	31.94	-1.01	30.93	46.00	-15.07	QP	H
627.5200	28.70	2.91	31.61	46.00	-14.39	QP	H
40.6700	42.28	-6.28	36.00	40.00	-4.00	QP	V
52.3100	36.25	-6.33	29.92	40.00	-10.08	QP	V
74.6200	41.48	-9.59	31.89	40.00	-8.11	QP	V
138.6400	37.77	-6.37	31.40	43.50	-12.10	QP	V
195.8700	41.47	-7.69	33.78	43.50	-9.72	QP	V
404.4200	36.41	-1.65	34.76	46.00	-11.24	QP	V

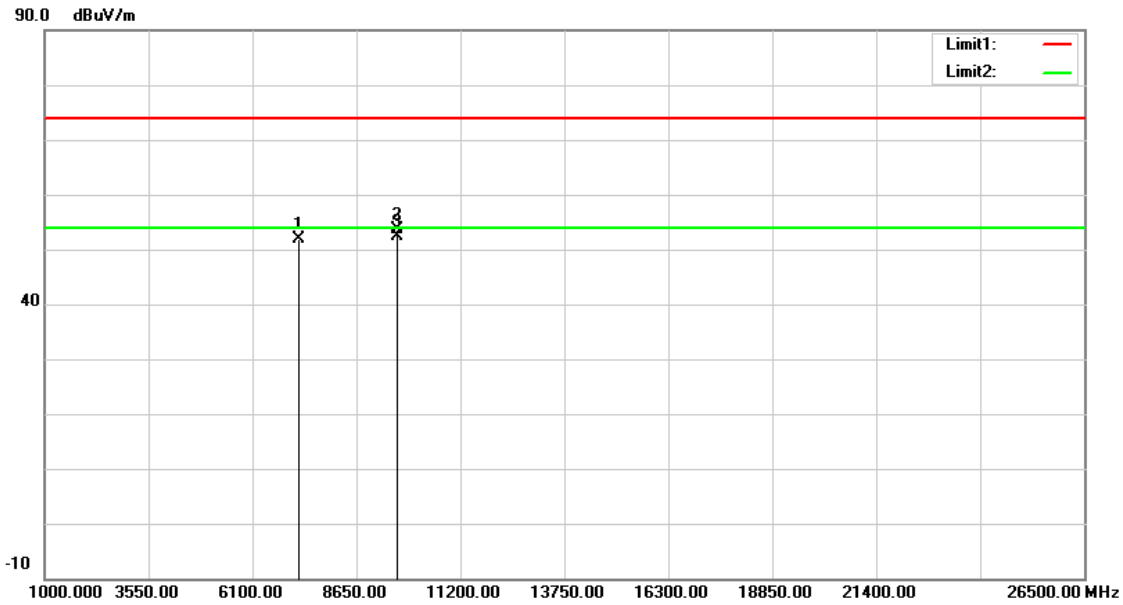
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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.

Above 1GHz

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



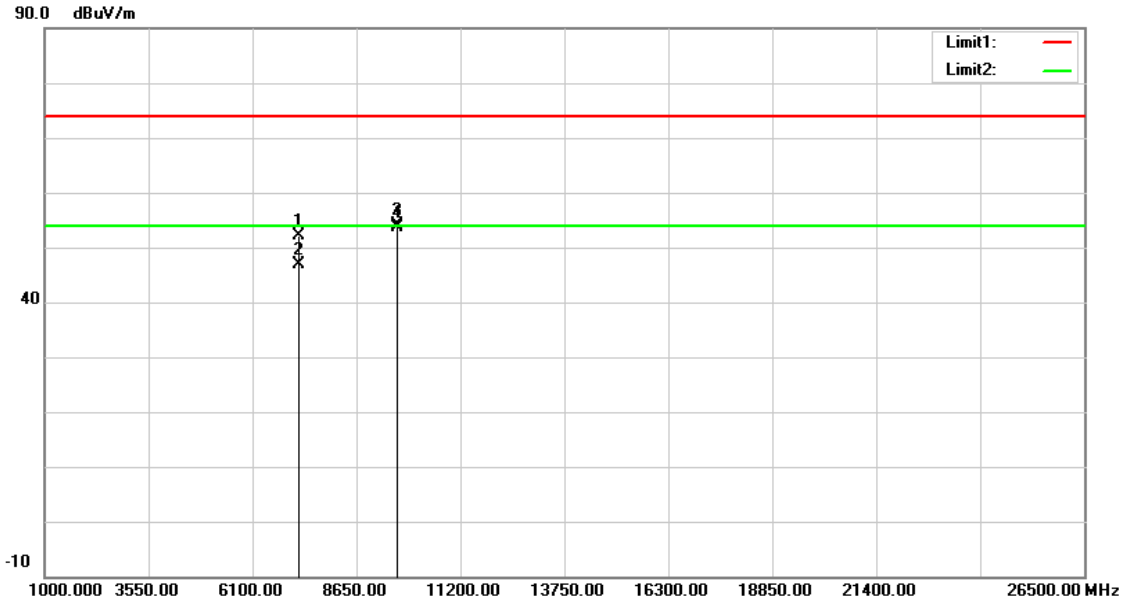
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7236.000	40.59	11.27	51.86	74.00	-22.14	peak
2	9648.000	39.30	14.24	53.54	74.00	-20.46	peak
3	9648.000	38.02	14.24	52.26	54.00	-1.74	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



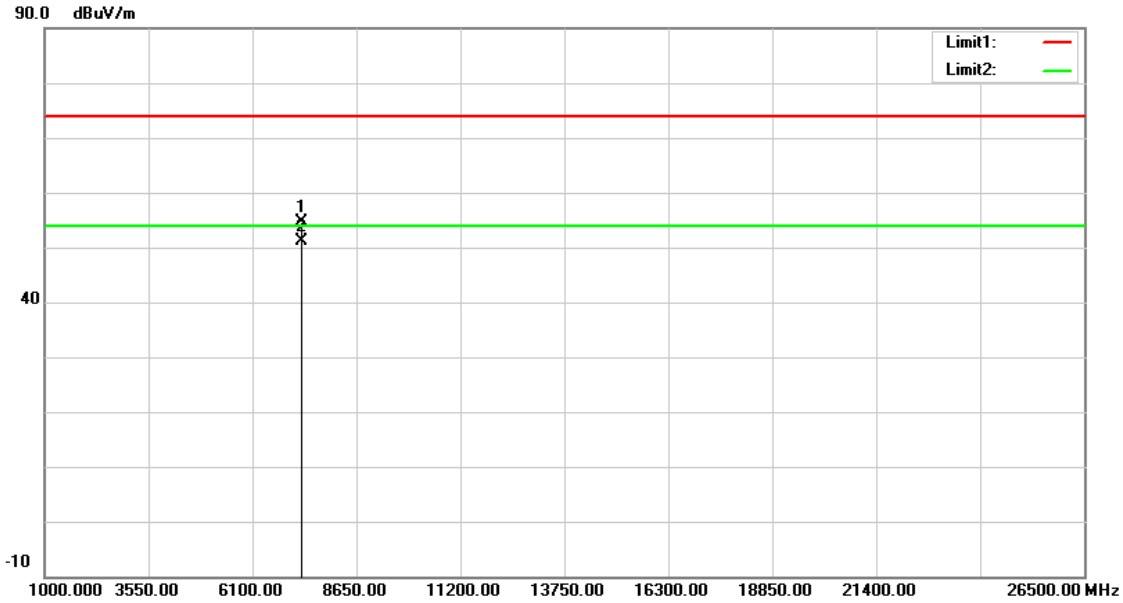
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7236.000	40.96	11.27	52.23	74.00	-21.77	peak
2	7236.000	35.49	11.27	46.76	54.00	-7.24	AVG
3	9648.000	39.93	14.24	54.17	74.00	-19.83	peak
4	9648.000	39.32	14.24	53.56	54.00	-0.44	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



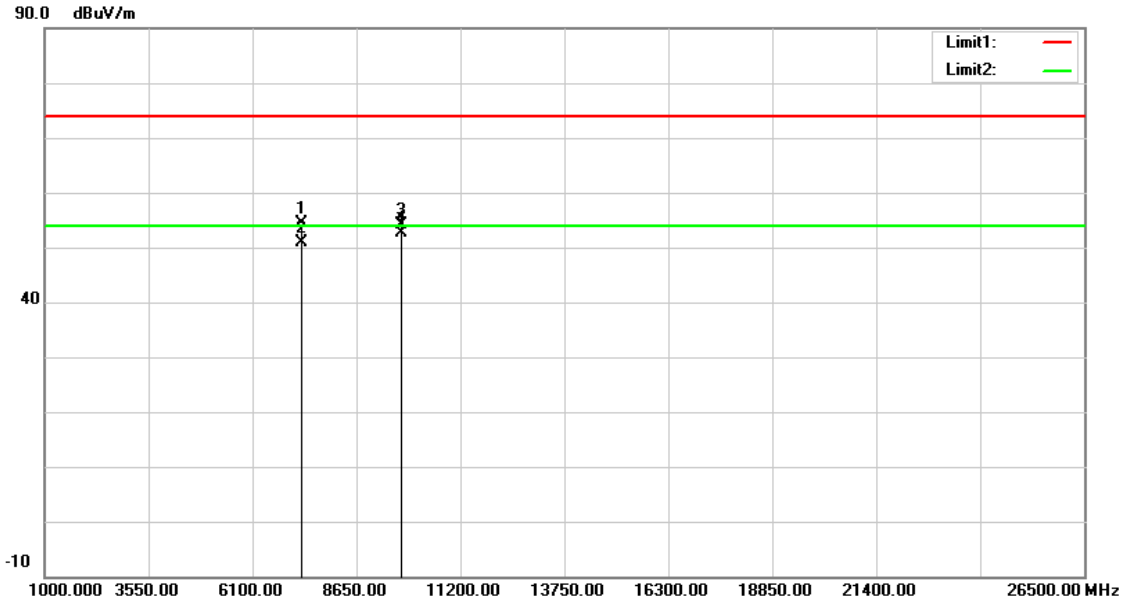
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	43.06	11.46	54.52	74.00	-19.48	peak
2	7311.000	39.76	11.46	51.22	54.00	-2.78	AVG

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

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

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

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



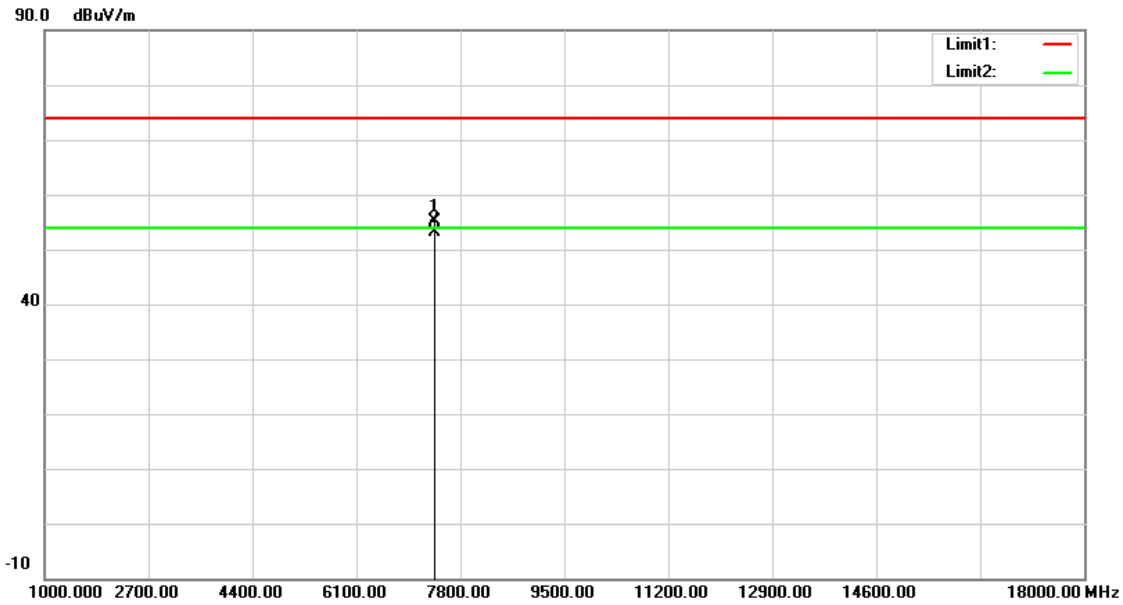
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	42.87	11.46	54.33	74.00	-19.67	peak
2	7311.000	39.54	11.46	51.00	54.00	-3.00	AVG
3	9748.000	39.62	14.44	54.06	74.00	-19.94	peak
4	9748.000	38.31	14.44	52.75	54.00	-1.25	AVG

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

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

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

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



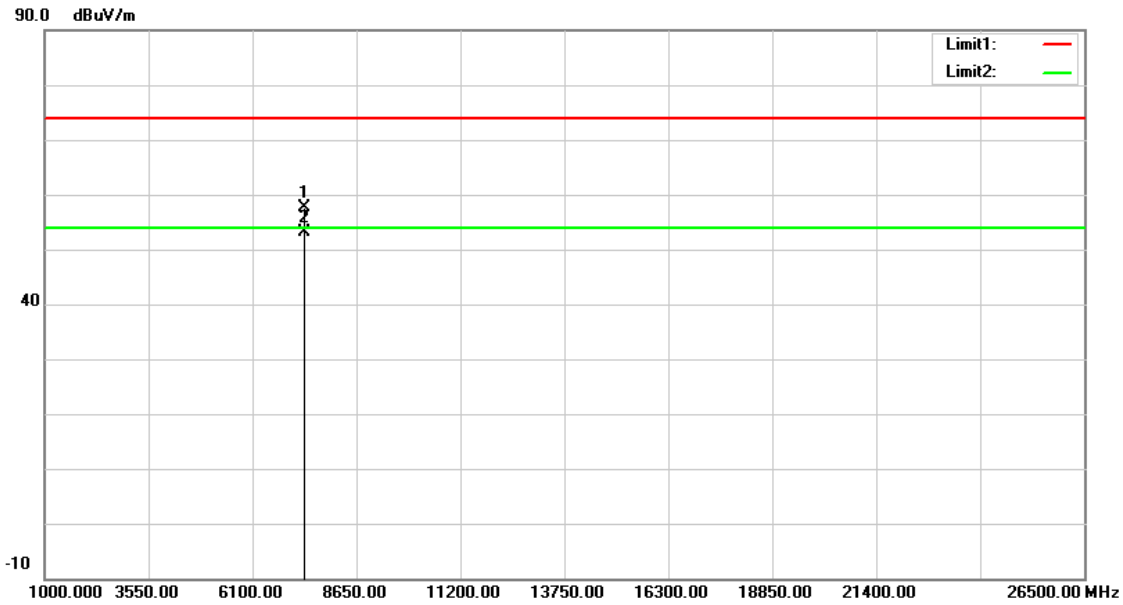
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	43.48	11.66	55.14	74.00	-18.86	peak
2	7386.000	41.58	11.66	53.24	54.00	-0.76	AVG

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



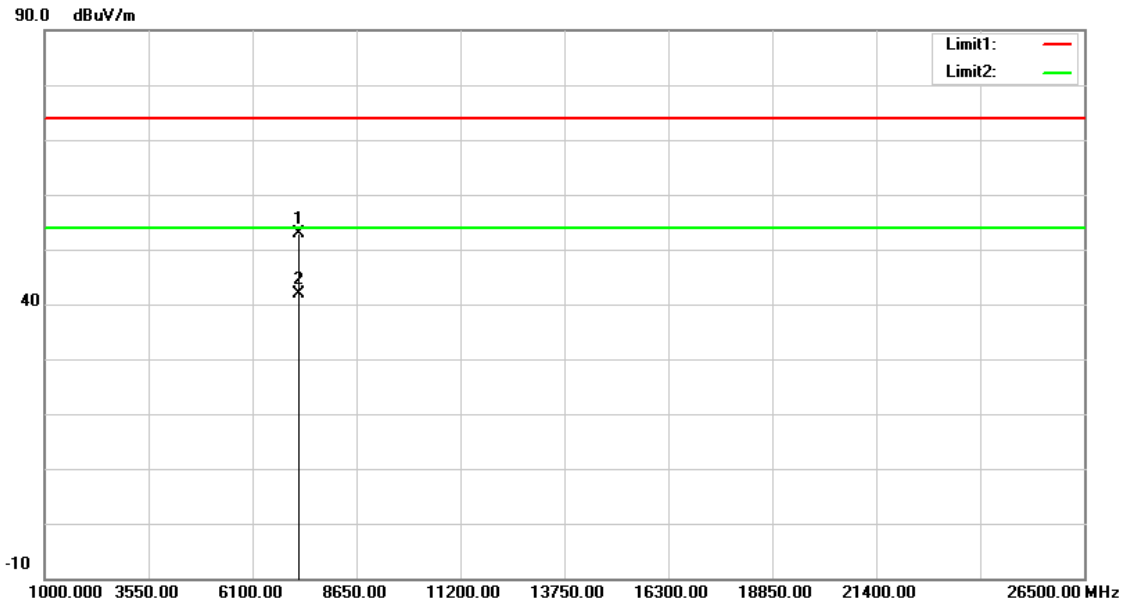
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	46.05	11.66	57.71	74.00	-16.29	peak
2	7386.000	41.48	11.66	53.14	74.00	-20.86	peak

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	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



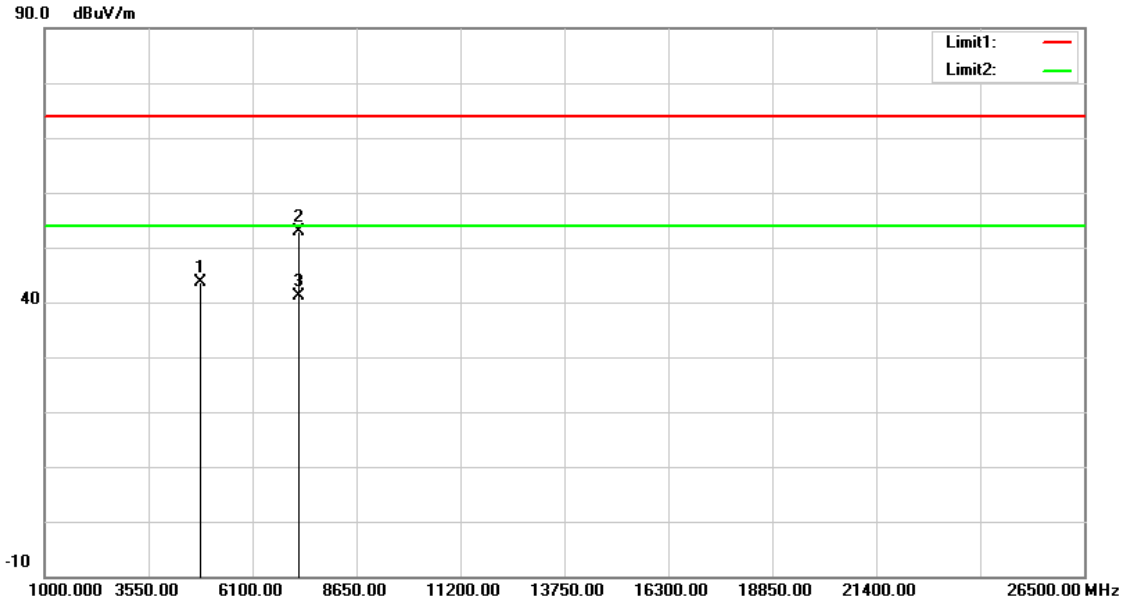
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7236.000	41.65	11.27	52.92	74.00	-21.08	peak
2	7236.000	30.64	11.27	41.91	54.00	-12.09	AVG

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



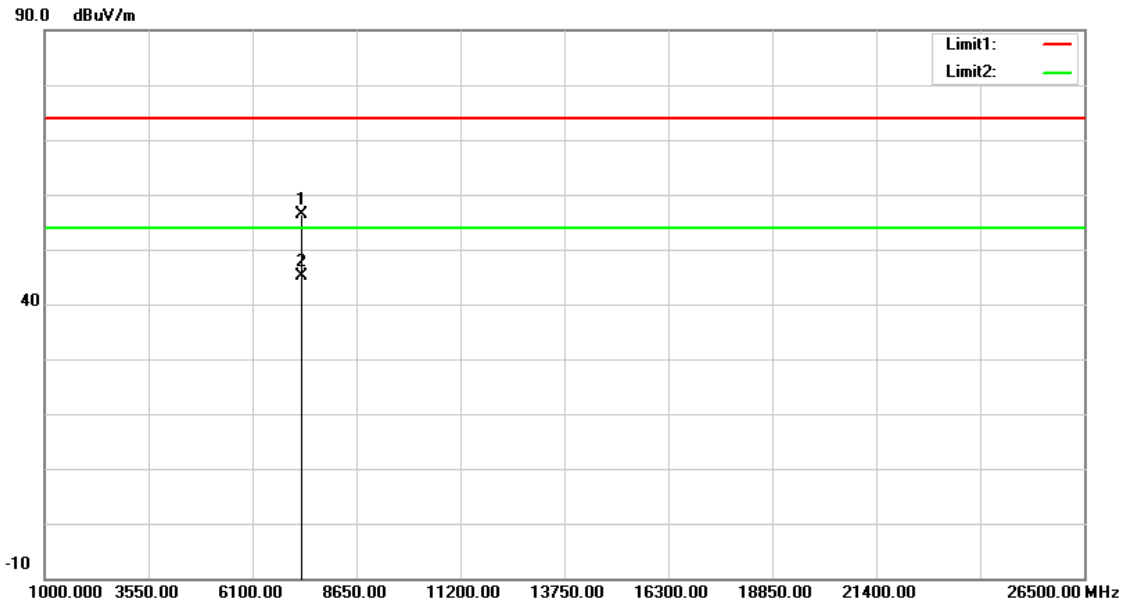
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	38.59	4.99	43.58	74.00	-30.42	peak
2	7236.000	41.65	11.27	52.92	74.00	-21.08	peak
3	7236.000	29.82	11.27	41.09	54.00	-12.91	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



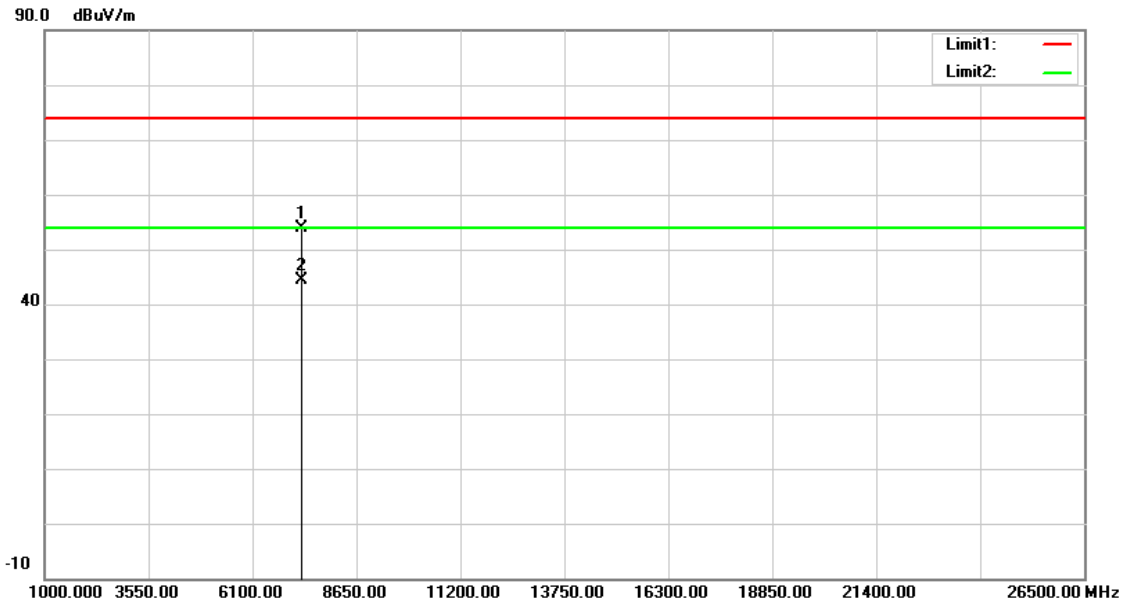
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	44.90	11.46	56.36	74.00	-17.64	peak
2	7311.000	33.78	11.46	45.24	54.00	-8.76	AVG

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



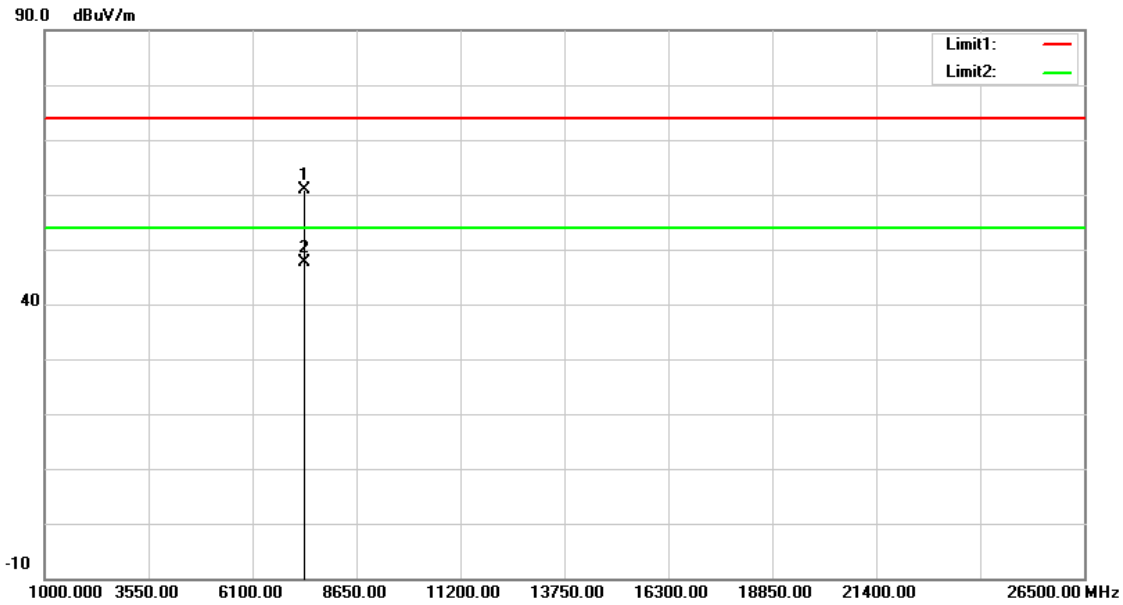
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	42.48	11.46	53.94	74.00	-20.06	peak
2	7311.000	32.90	11.46	44.36	54.00	-9.64	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



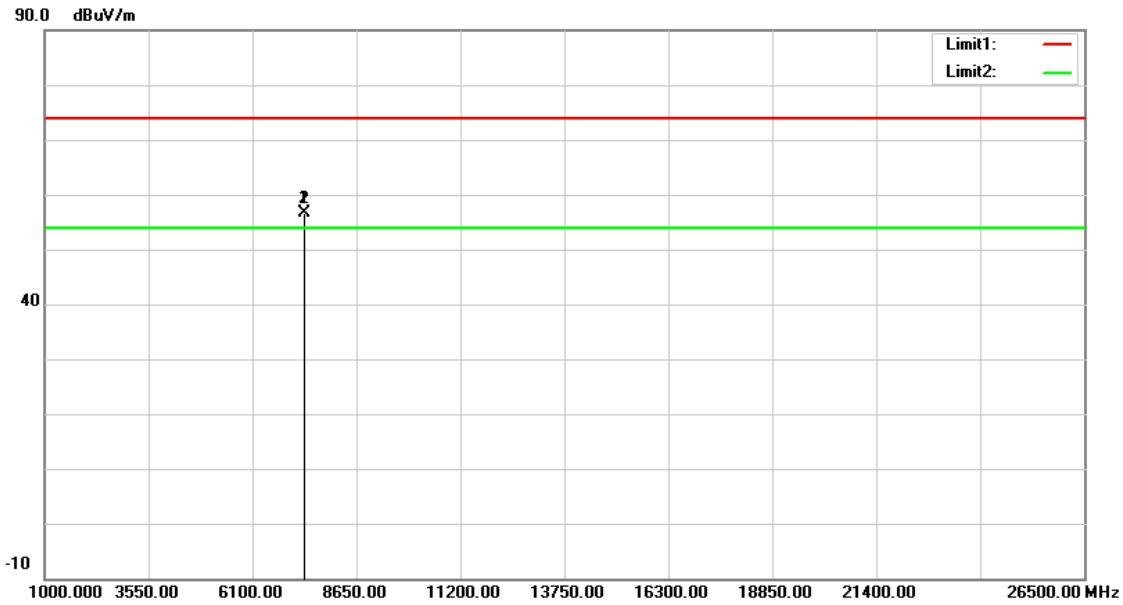
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	49.15	11.66	60.81	74.00	-13.19	peak
2	7386.000	36.01	11.66	47.67	54.00	-6.33	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



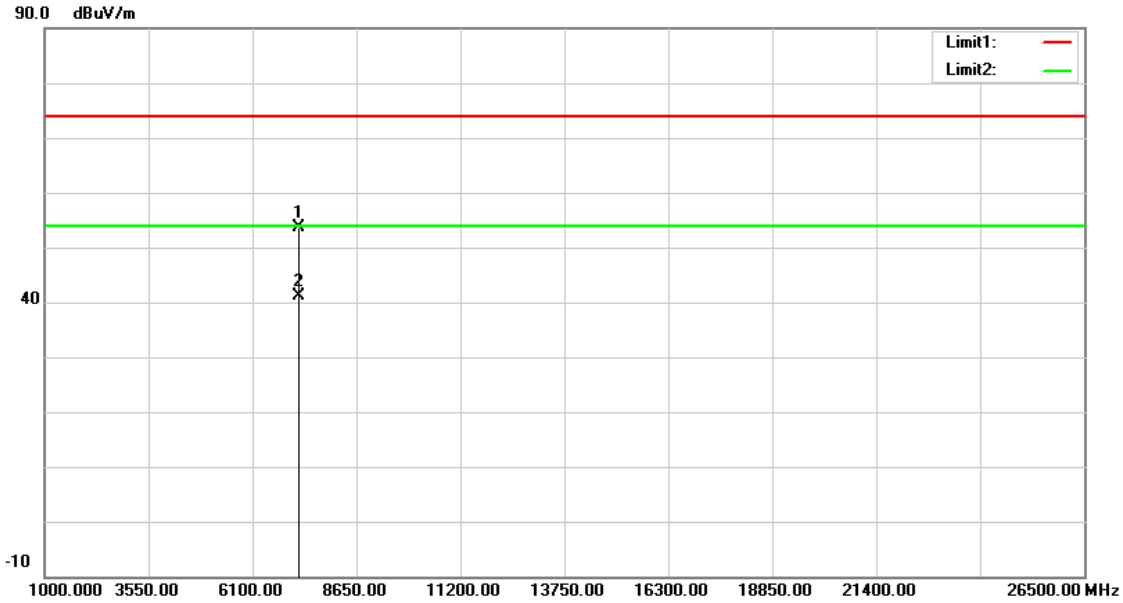
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	44.89	11.66	56.55	74.00	-17.45	peak
2	7386.000	44.89	11.66	56.55	74.00	-17.45	peak

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	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



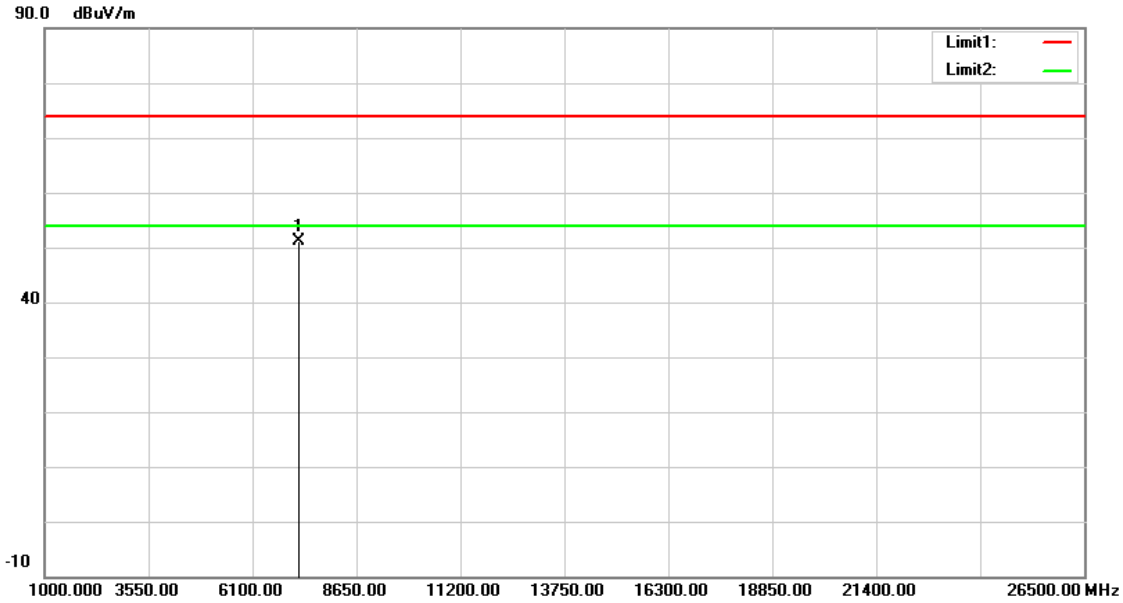
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7236.000	42.27	11.27	53.54	74.00	-20.46	peak
2	7236.000	29.94	11.27	41.21	54.00	-12.79	AVG

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



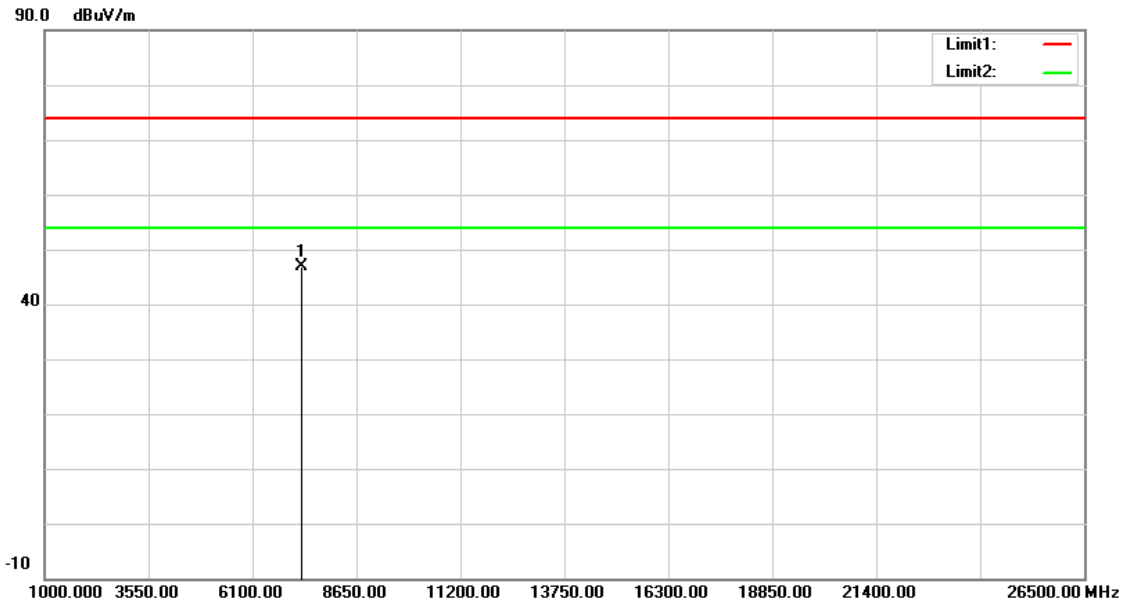
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7236.000	39.94	11.27	51.21	74.00	-22.79	peak

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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



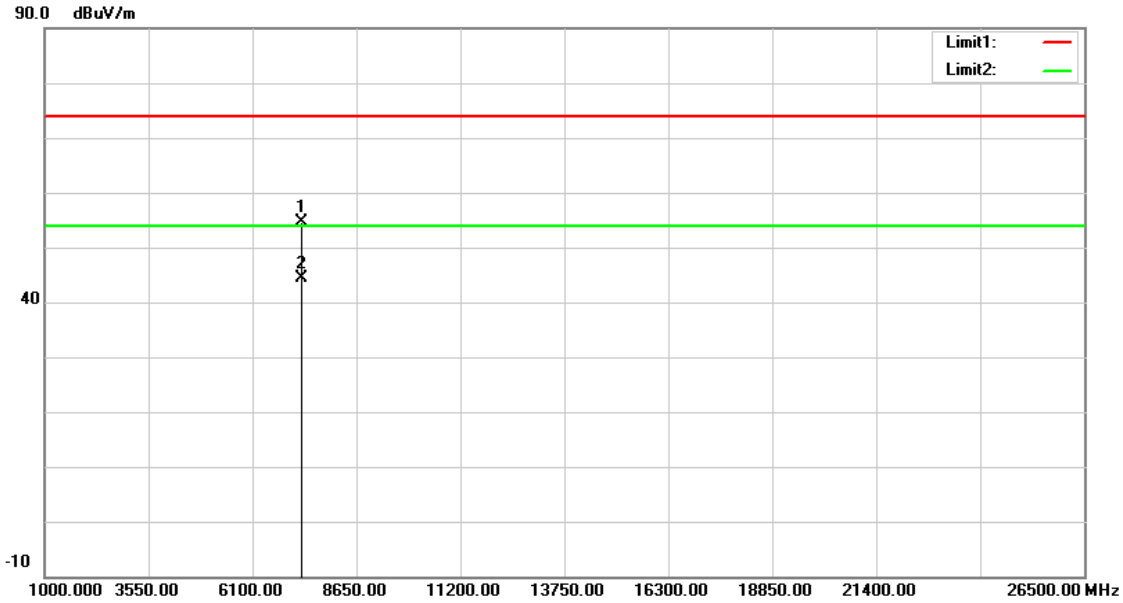
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	35.36	11.46	46.82	74.00	-27.18	peak

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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



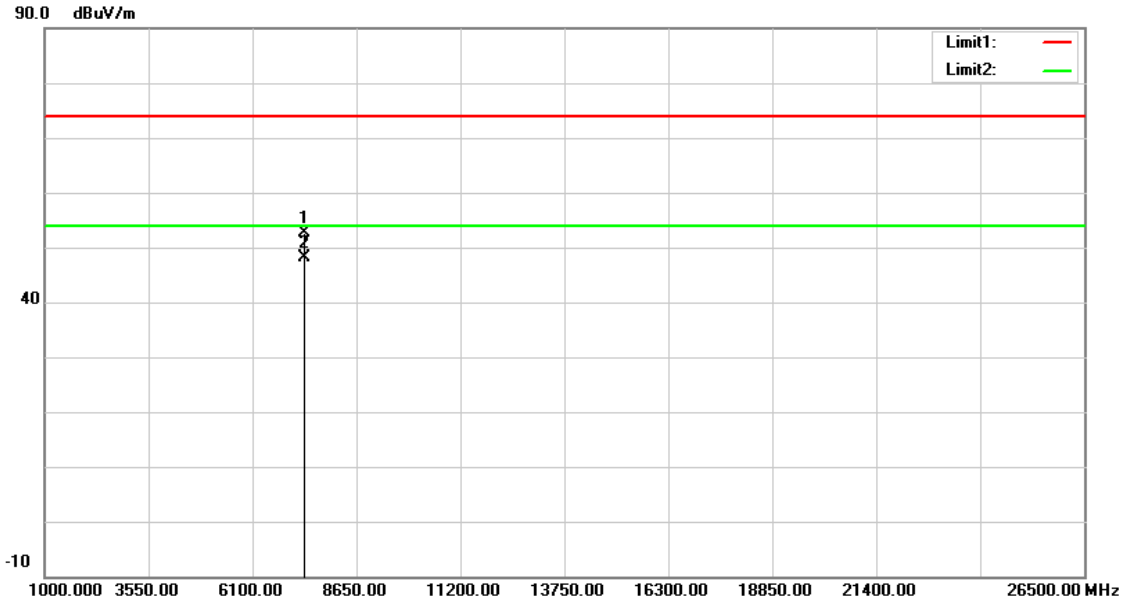
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	43.05	11.46	54.51	74.00	-19.49	peak
2	7311.000	33.02	11.46	44.48	54.00	-9.52	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



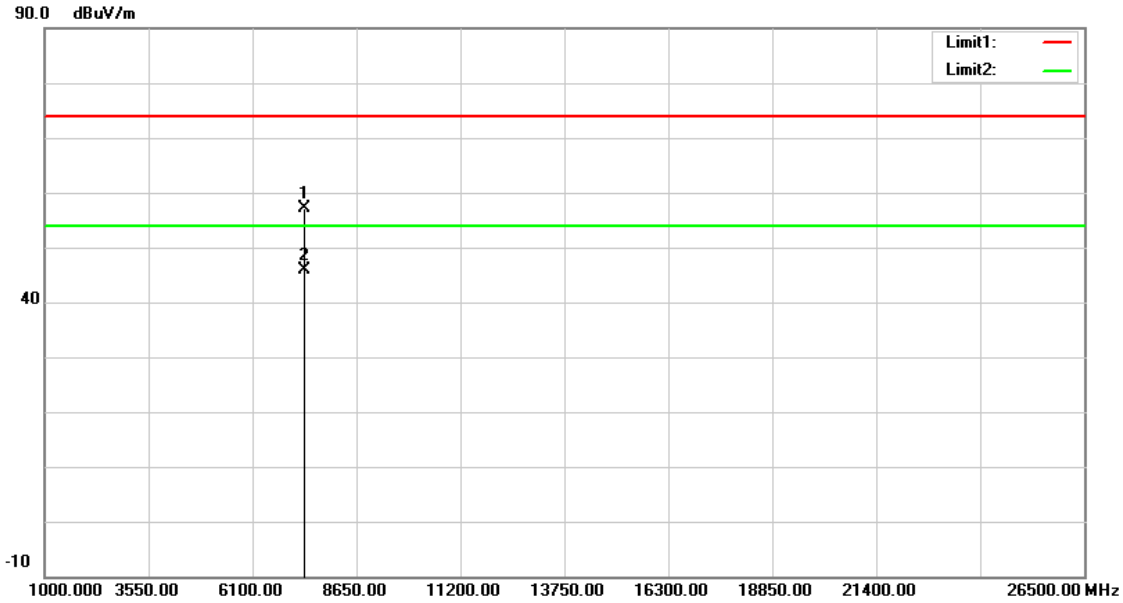
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	41.03	11.66	52.69	74.00	-21.31	peak
2	7386.000	36.36	11.66	48.02	54.00	-5.98	AVG

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



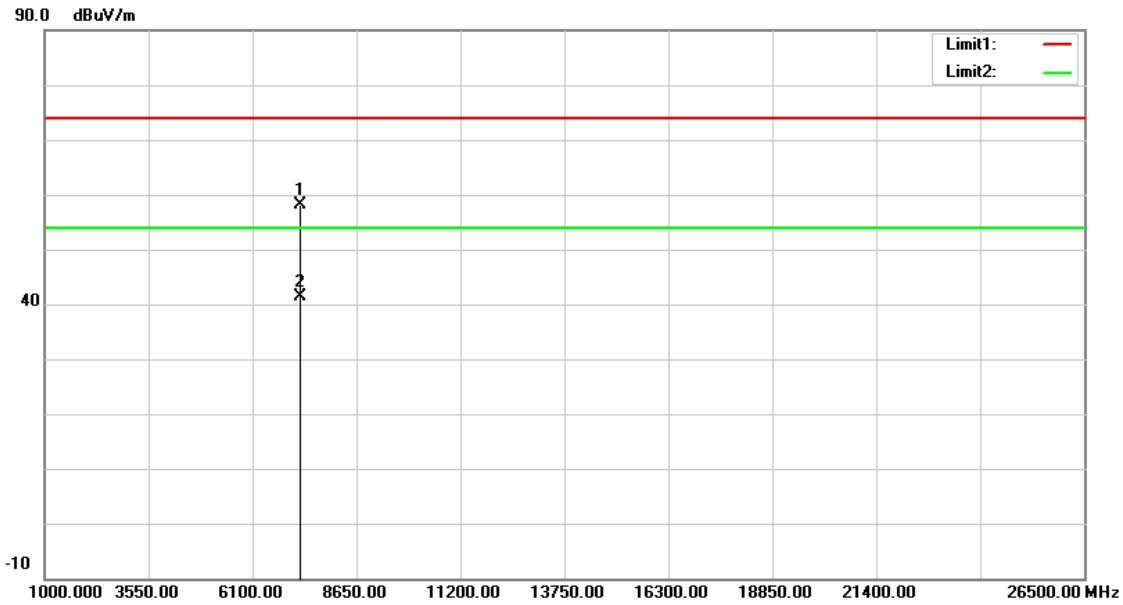
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7386.000	45.40	11.66	57.06	74.00	-16.94	peak
2	7386.000	34.25	11.66	45.91	54.00	-8.09	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



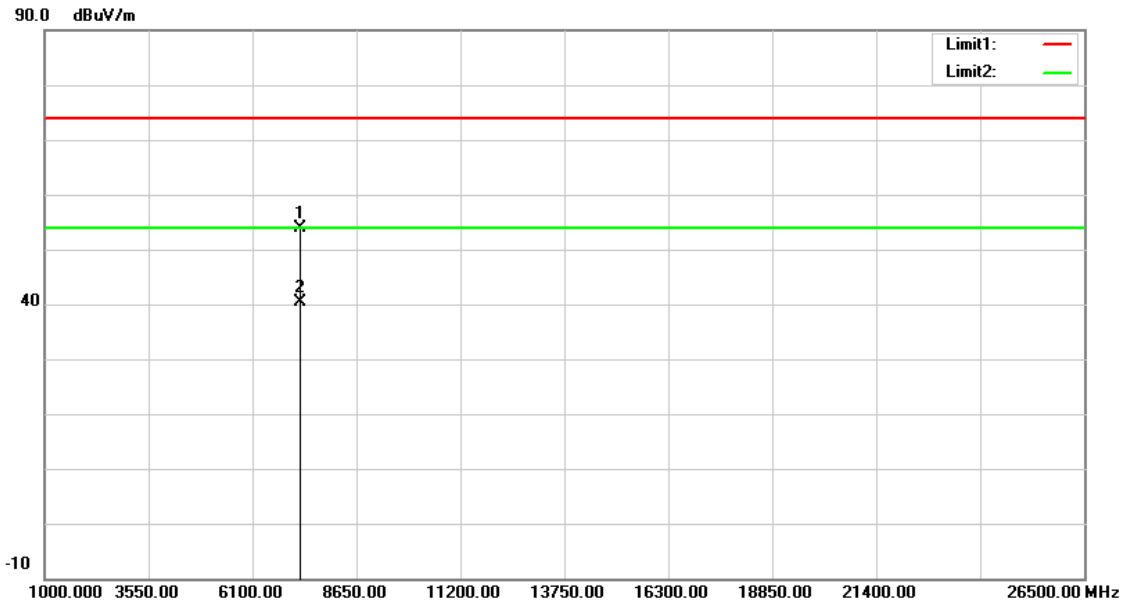
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7266.000	46.88	11.35	58.23	74.00	-15.77	peak
2	7266.000	30.06	11.35	41.41	54.00	-12.59	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



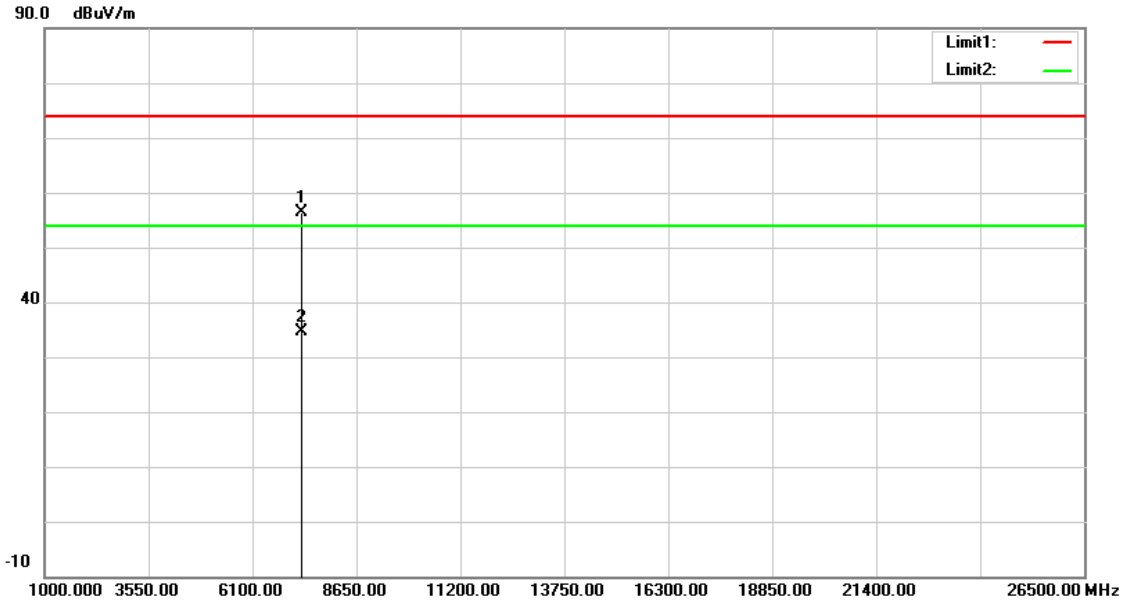
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7266.000	42.63	11.35	53.98	74.00	-20.02	peak
2	7266.000	29.11	11.35	40.46	54.00	-13.54	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



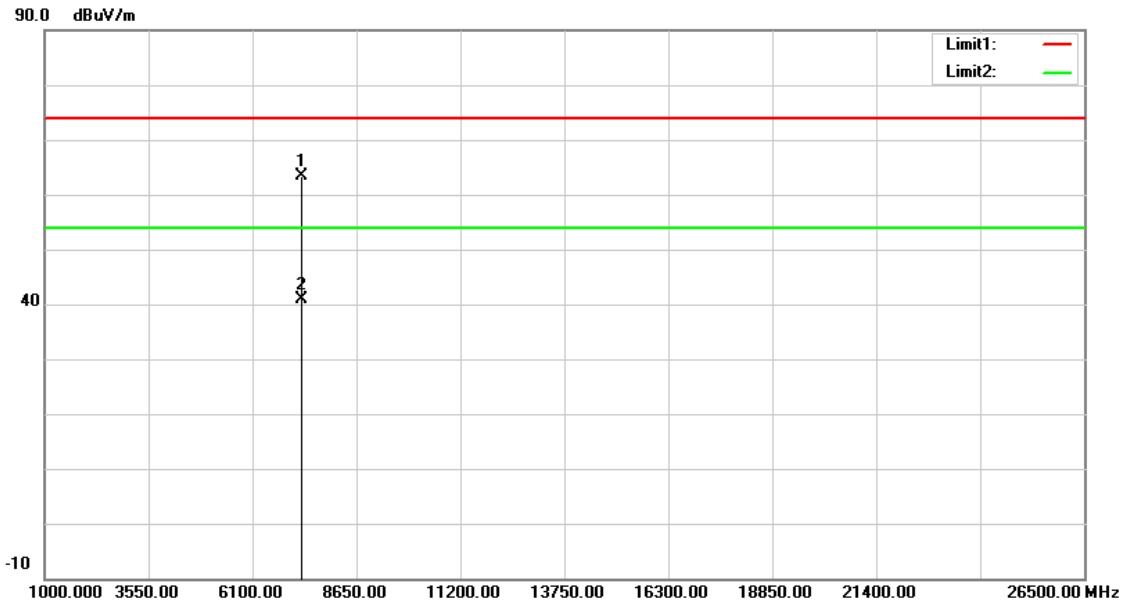
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	44.97	11.46	56.43	74.00	-17.57	peak
2	7311.000	23.28	11.46	34.74	54.00	-19.26	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



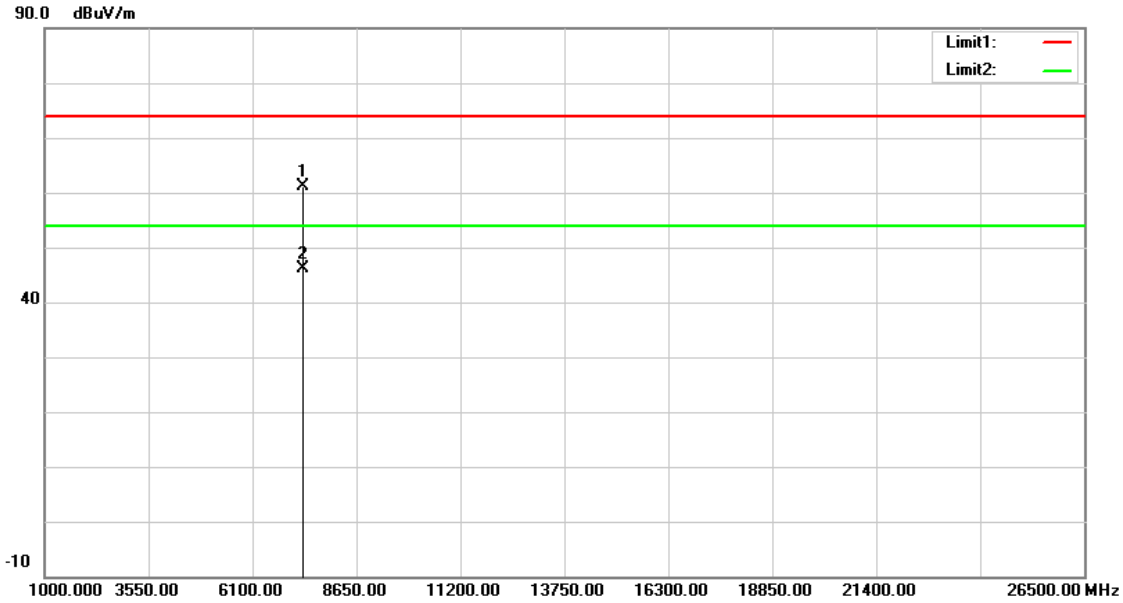
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7311.000	51.95	11.46	63.41	74.00	-10.59	peak
2	7311.000	29.47	11.46	40.93	54.00	-13.07	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



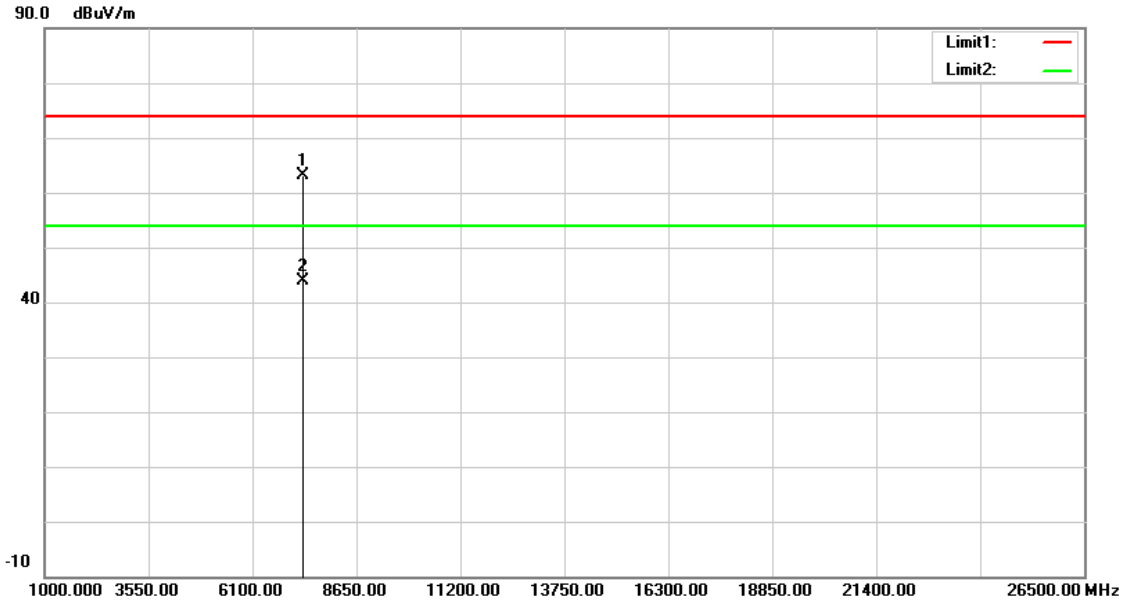
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7356.000	49.53	11.58	61.11	74.00	-12.89	peak
2	7356.000	34.67	11.58	46.25	54.00	-7.75	AVG

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:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



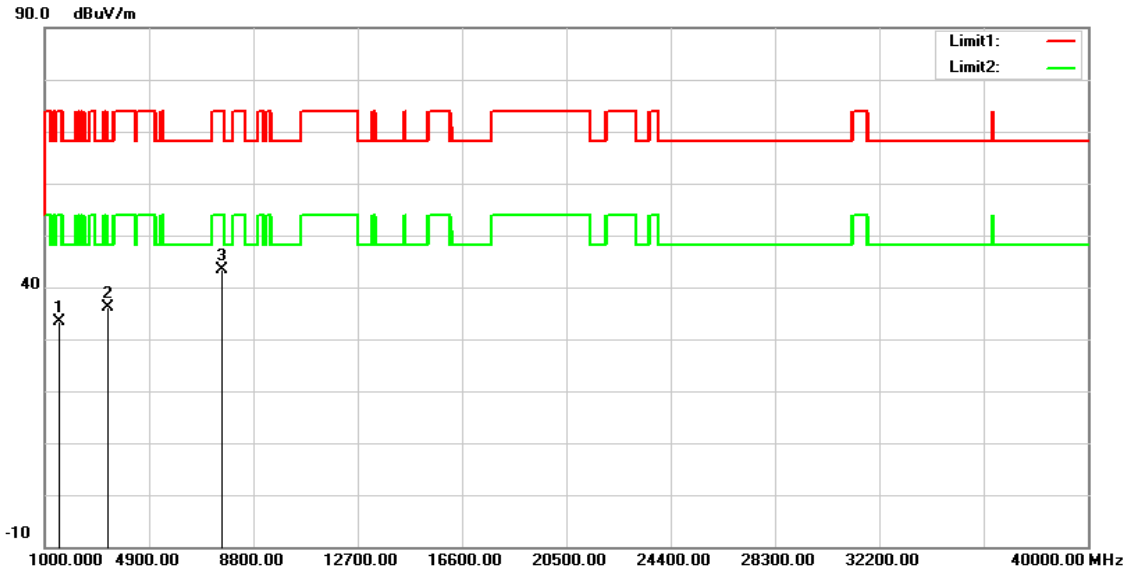
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7356.000	51.54	11.58	63.12	74.00	-10.88	peak
2	7356.000	32.23	11.58	43.81	54.00	-10.19	AVG

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:	LP0002	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Mode:	Simultaneous Transmitting (DTS+NII)	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Ant.Polar.:	Horizontal		



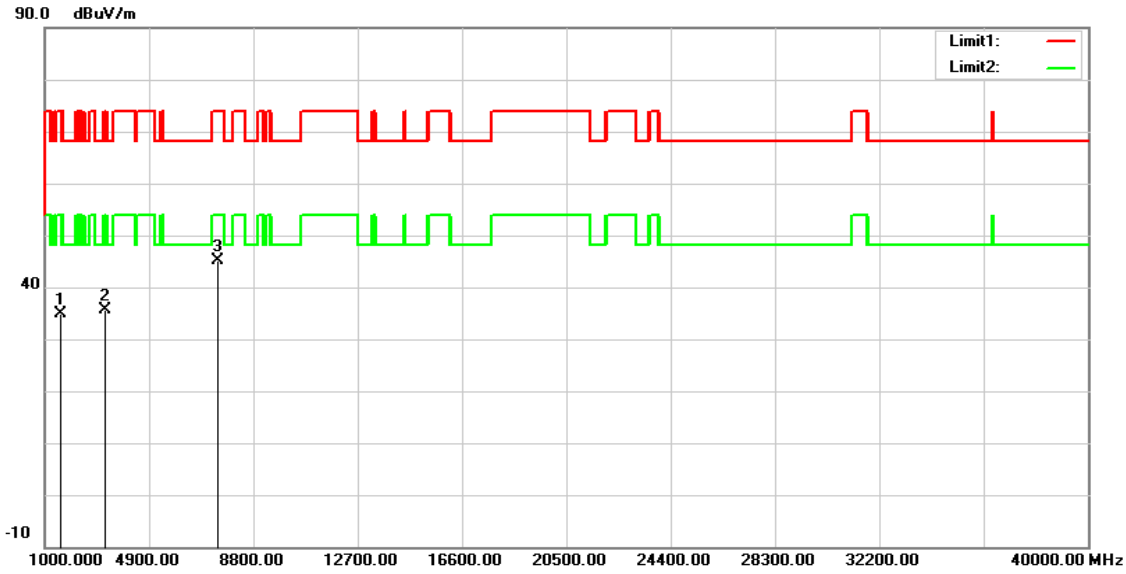
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1510.000	39.05	-5.60	33.45	74.00	-40.55	peak
2	3346.000	35.24	0.78	36.02	74.00	-37.98	peak
3	7613.000	31.36	12.12	43.48	74.00	-30.52	peak

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:	LP0002	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Mode:	Simultaneous Transmitting (DTS+NII)	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	1561.000	40.21	-5.35	34.86	74.00	-39.14	peak
2	3261.000	35.07	0.61	35.68	74.00	-38.32	peak
3	7443.000	33.24	11.80	45.04	74.00	-28.96	peak

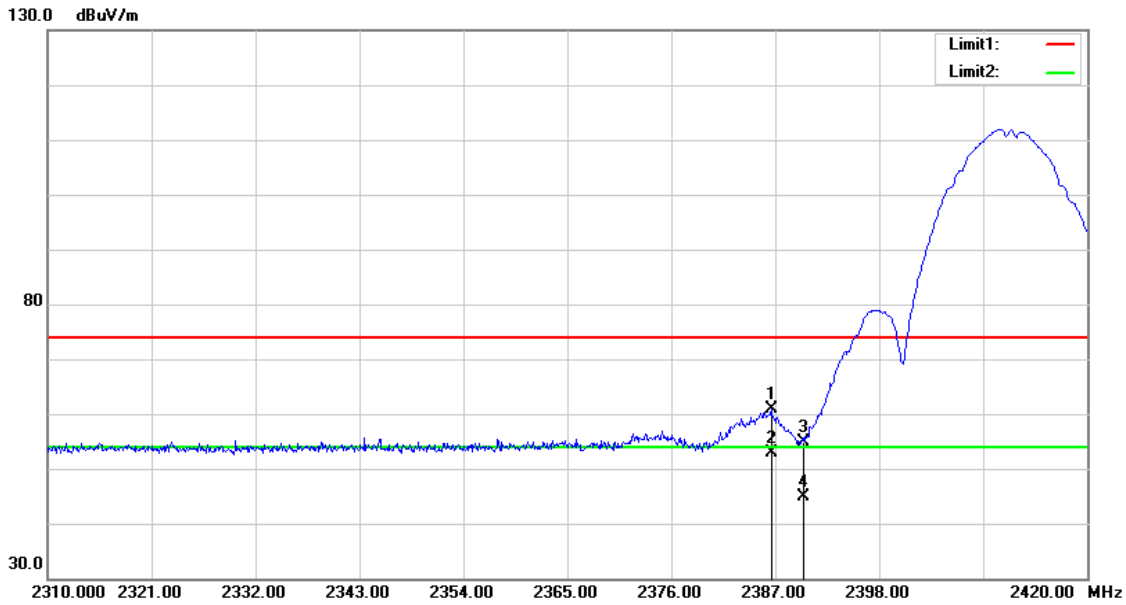
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



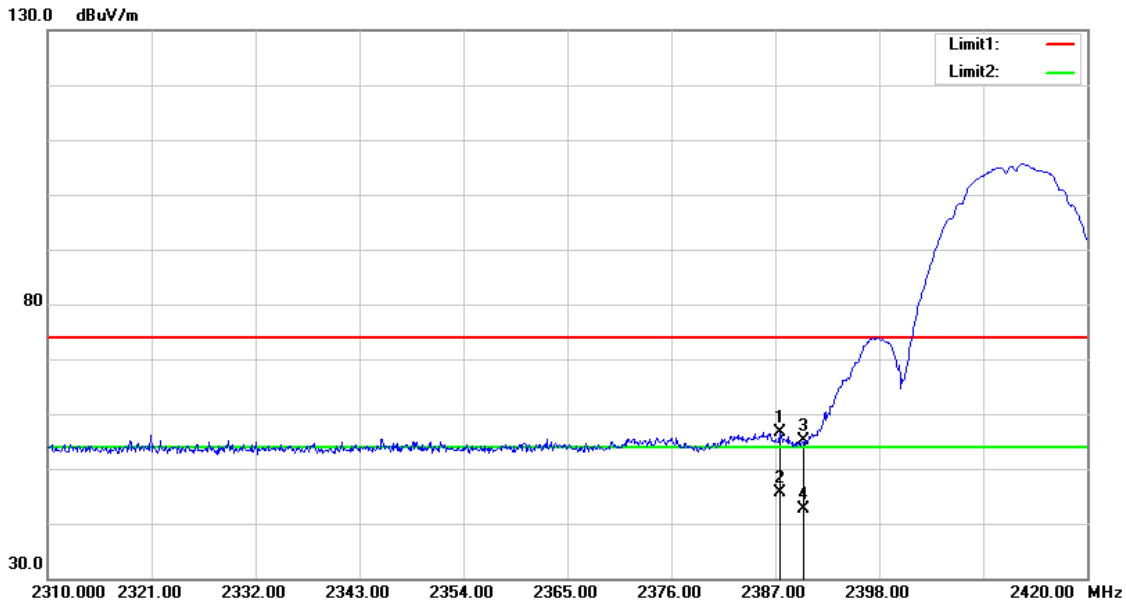
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.560	62.65	-1.84	60.81	74.00	-13.19	peak
2	2386.560	54.74	-1.84	52.90	54.00	-1.10	AVG
3	2390.000	56.73	-1.84	54.89	74.00	-19.11	peak
4	2390.000	46.61	-1.84	44.77	54.00	-9.23	AVG

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



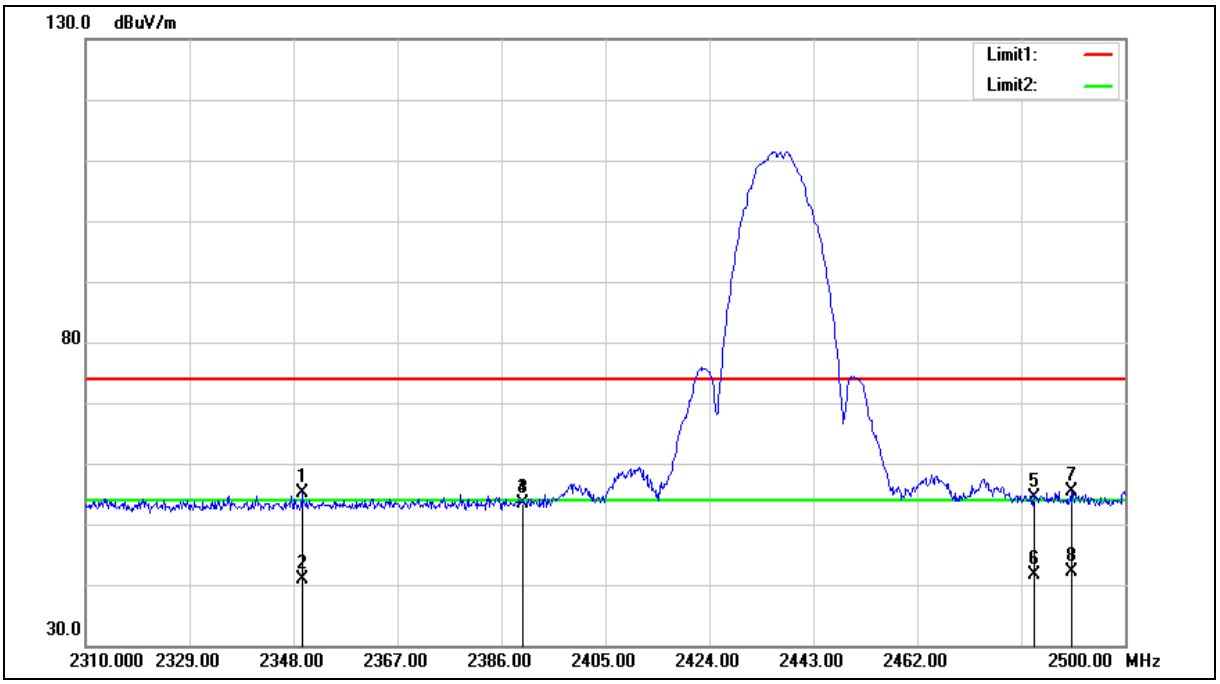
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.440	58.47	-1.84	56.63	74.00	-17.37	peak
2	2387.440	47.35	-1.84	45.51	54.00	-8.49	AVG
3	2390.000	56.86	-1.84	55.02	74.00	-18.98	peak
4	2390.000	44.38	-1.84	42.54	54.00	-11.46	AVG

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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



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

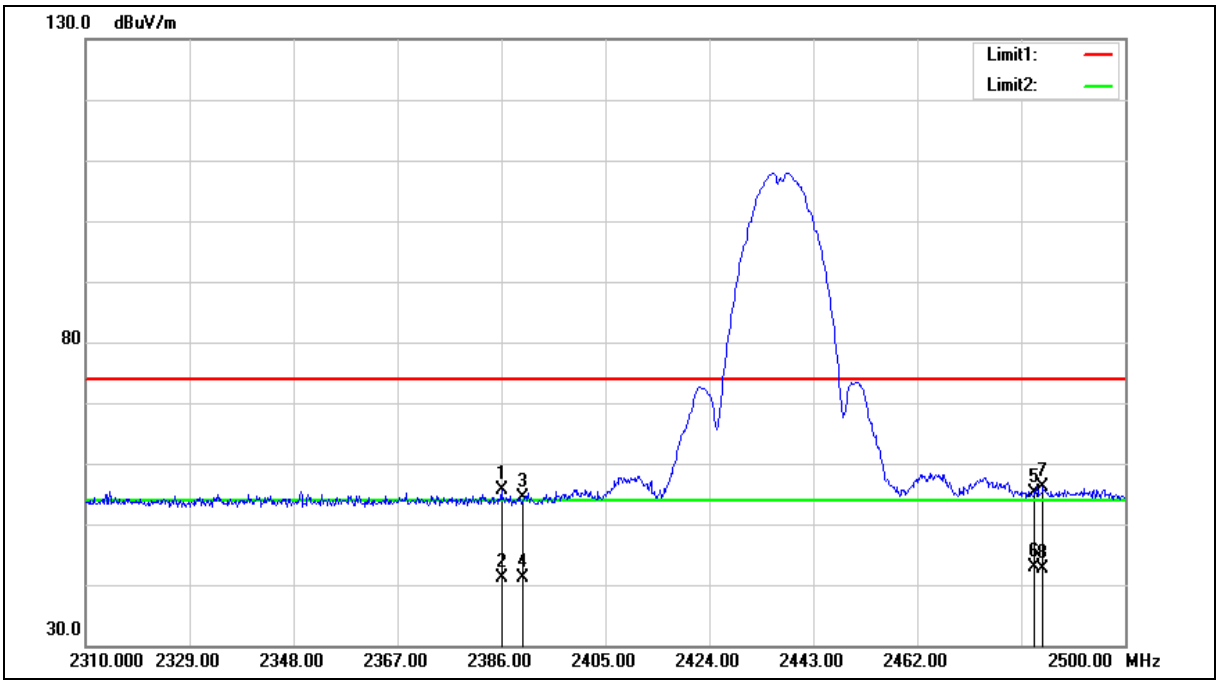
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2349.520	57.16	-1.98	55.18	74.00	-18.82	peak
2	2349.520	42.93	-1.98	40.95	54.00	-13.05	AVG
3	2390.000	55.25	-1.84	53.41	74.00	-20.59	peak
4	2390.000	55.25	-1.84	53.41	54.00	-0.59	AVG
5	2483.500	55.97	-1.47	54.50	74.00	-19.50	peak
6	2483.500	43.22	-1.47	41.75	54.00	-12.25	AVG
7	2490.120	56.94	-1.44	55.50	74.00	-18.50	peak
8	2490.120	43.52	-1.44	42.08	54.00	-11.92	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.

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



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

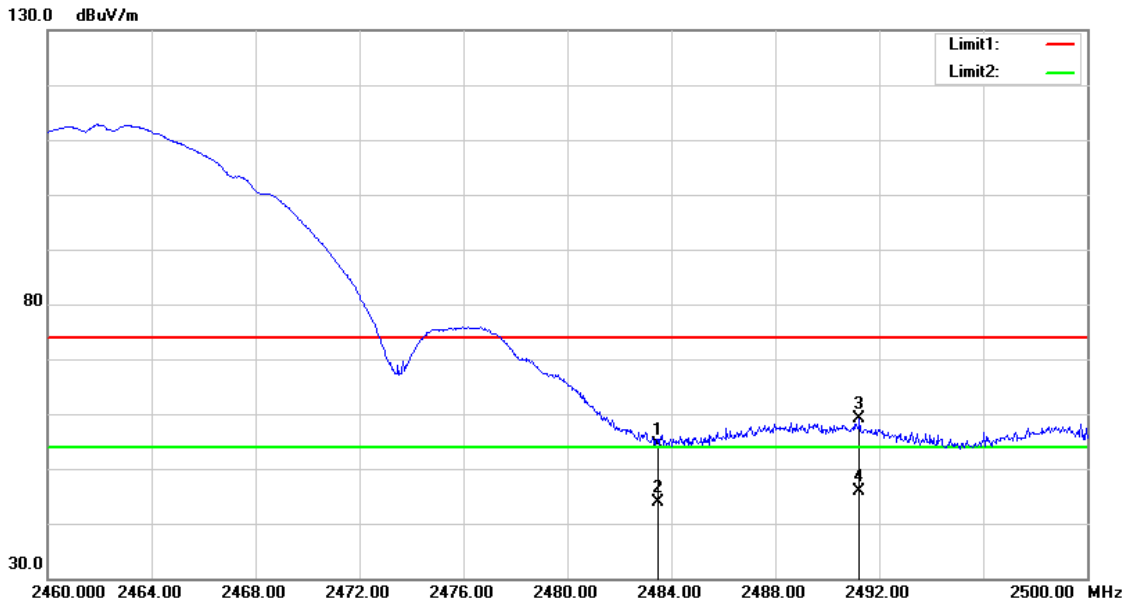
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.000	57.37	-1.84	55.53	74.00	-18.47	peak
2	2386.000	42.90	-1.84	41.06	54.00	-12.94	AVG
3	2390.000	56.19	-1.84	54.35	74.00	-19.65	peak
4	2390.000	43.07	-1.84	41.23	54.00	-12.77	AVG
5	2483.500	56.52	-1.47	55.05	74.00	-18.95	peak
6	2483.500	44.27	-1.47	42.80	54.00	-11.20	AVG
7	2484.990	57.60	-1.46	56.14	74.00	-17.86	peak
8	2484.990	44.15	-1.46	42.69	54.00	-11.31	AVG

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

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

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

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



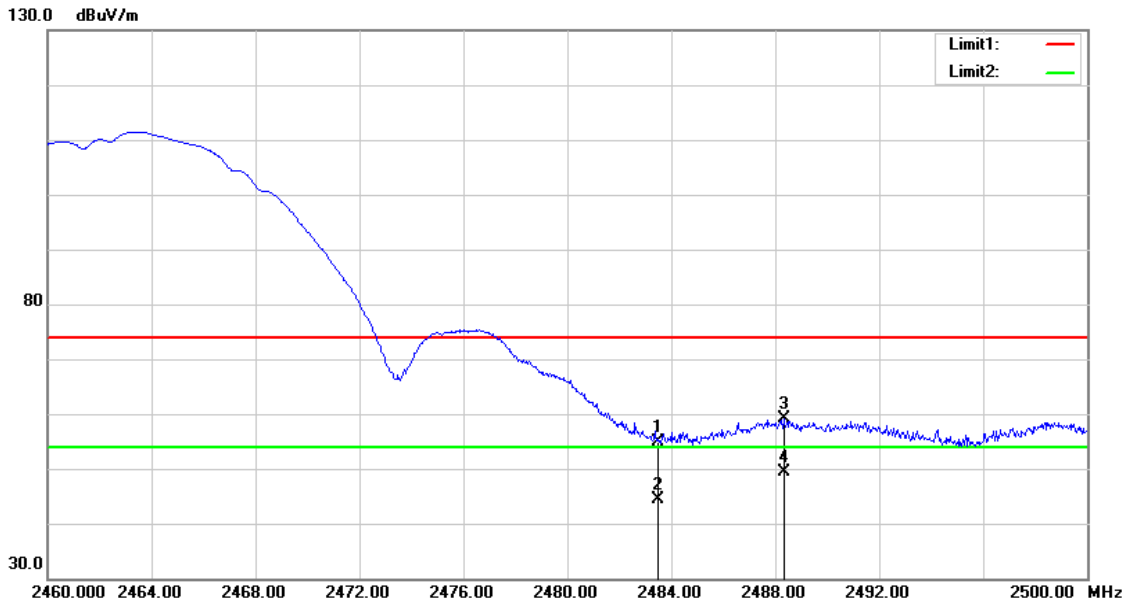
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	55.94	-1.47	54.47	74.00	-19.53	peak
2	2483.500	45.26	-1.47	43.79	54.00	-10.21	AVG
3	2491.240	60.55	-1.43	59.12	74.00	-14.88	peak
4	2491.240	47.37	-1.43	45.94	54.00	-8.06	AVG

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	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



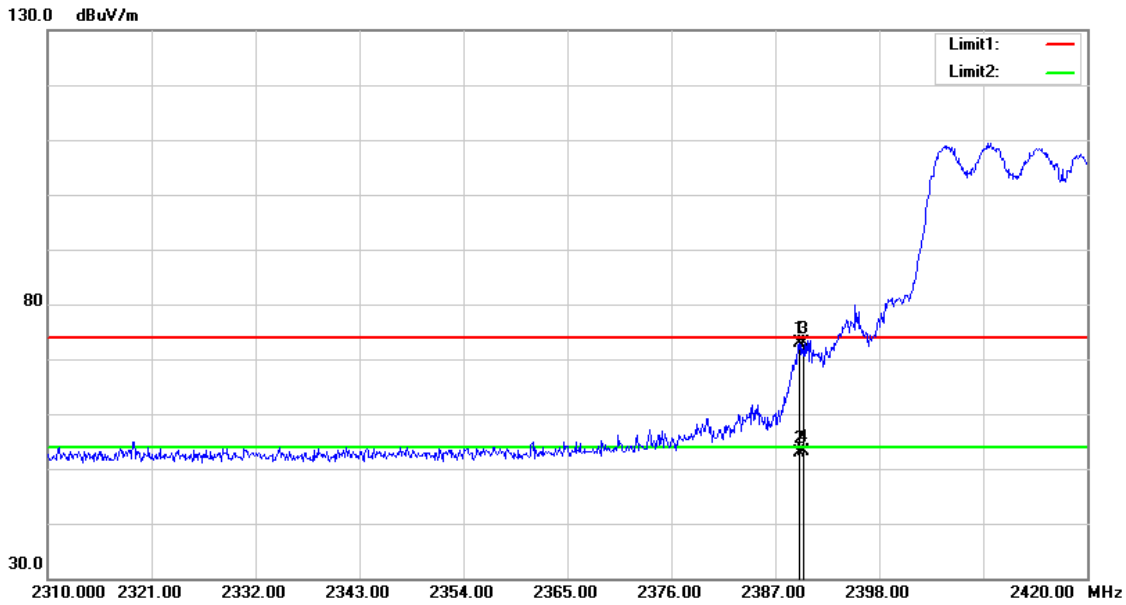
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	56.31	-1.47	54.84	74.00	-19.16	peak
2	2483.500	45.82	-1.47	44.35	54.00	-9.65	AVG
3	2488.320	60.51	-1.44	59.07	74.00	-14.93	peak
4	2488.320	50.87	-1.44	49.43	54.00	-4.57	AVG

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	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



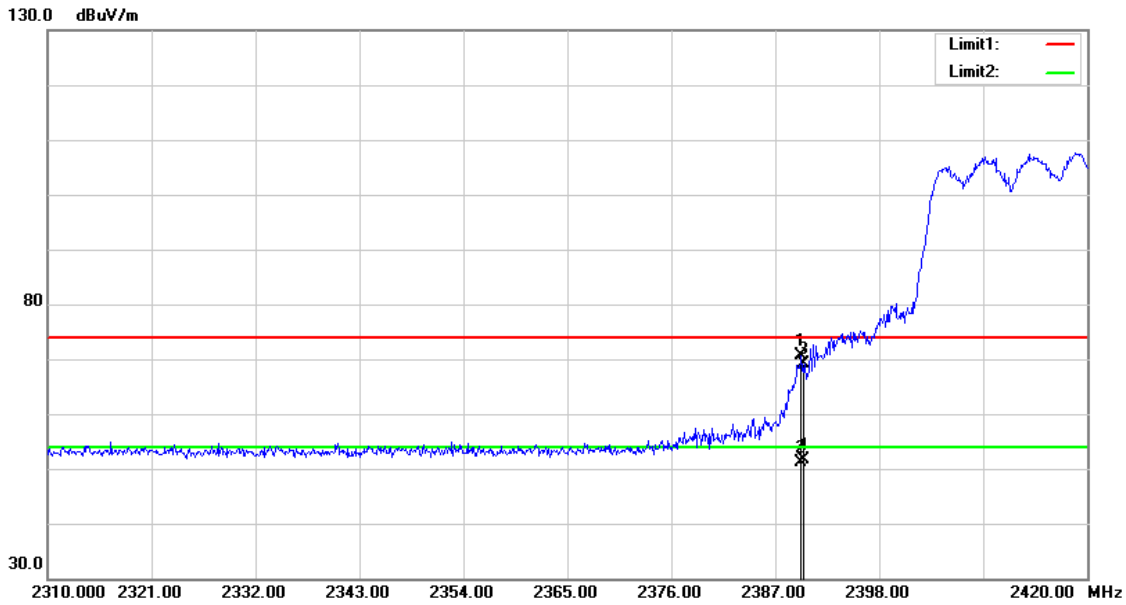
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	74.71	-1.84	72.87	74.00	-1.13	peak
2	2389.530	54.71	-1.84	52.87	54.00	-1.13	AVG
3	2390.000	74.66	-1.84	72.82	74.00	-1.18	peak
4	2390.000	55.05	-1.84	53.21	54.00	-0.79	AVG

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



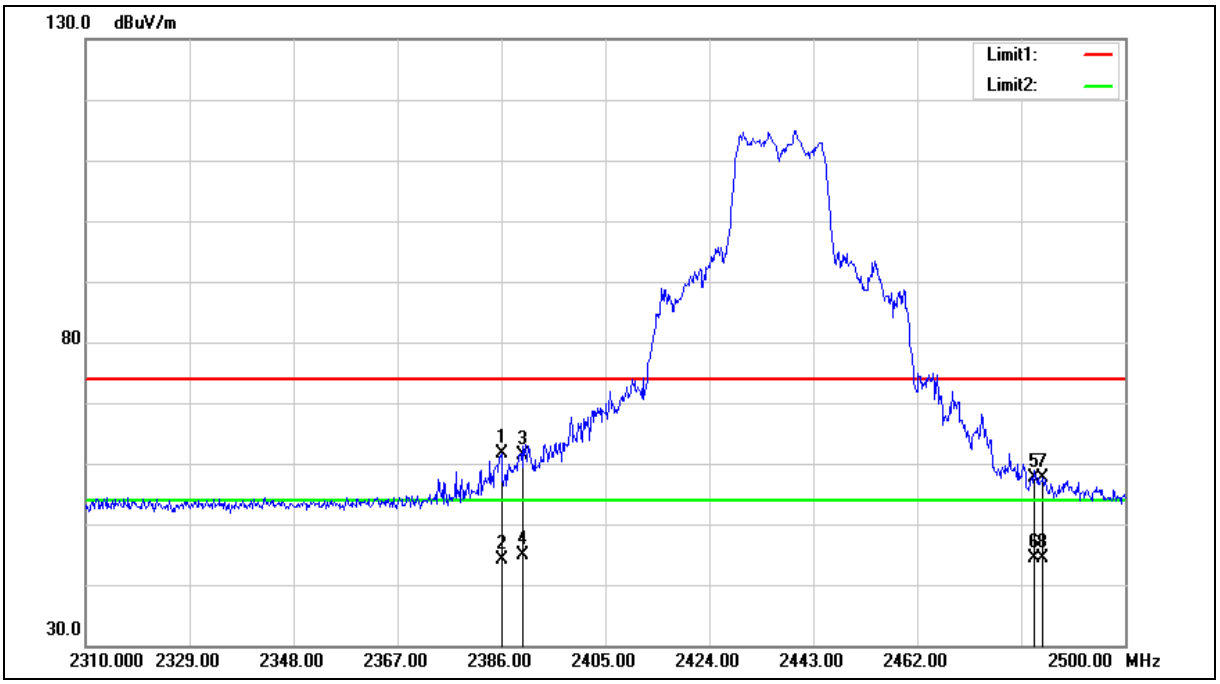
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.750	72.46	-1.84	70.62	74.00	-3.38	peak
2	2389.750	53.03	-1.84	51.19	54.00	-2.81	AVG
3	2390.000	71.05	-1.84	69.21	74.00	-4.79	peak
4	2390.000	53.58	-1.84	51.74	54.00	-2.26	AVG

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

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

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

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



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

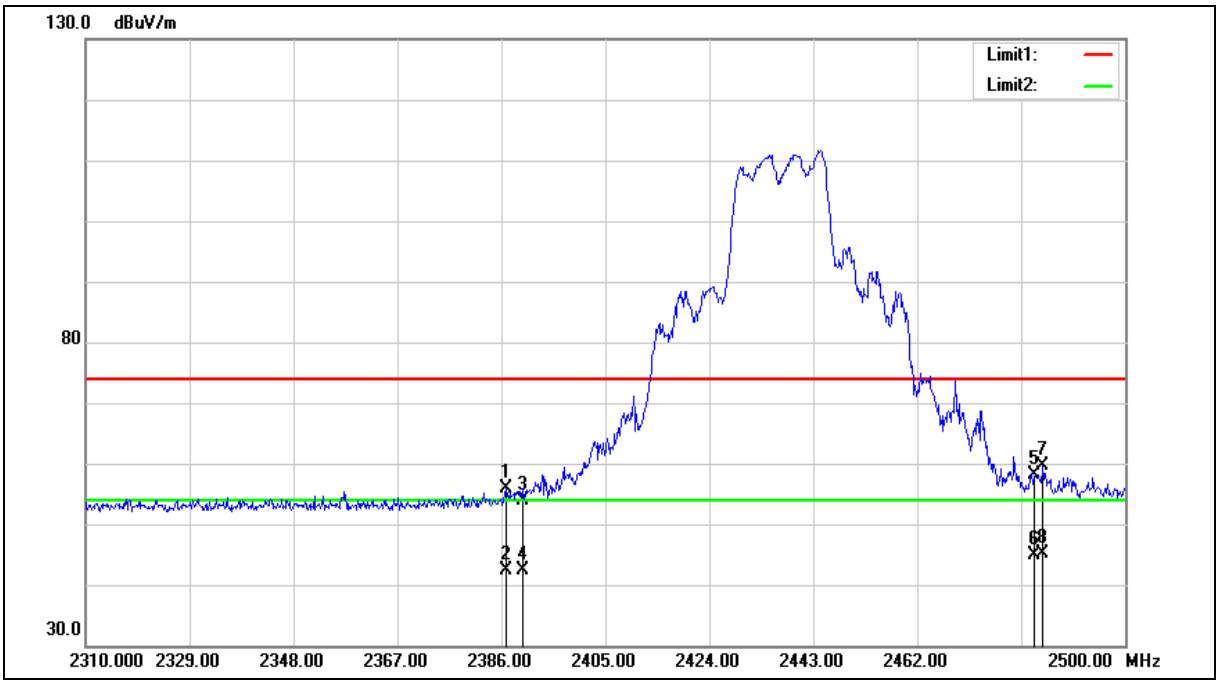
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.000	63.42	-1.84	61.58	74.00	-12.42	peak
2	2386.000	45.88	-1.84	44.04	54.00	-9.96	AVG
3	2390.000	63.17	-1.84	61.33	74.00	-12.67	peak
4	2390.000	46.69	-1.84	44.85	54.00	-9.15	AVG
5	2483.500	59.13	-1.47	57.66	74.00	-16.34	peak
6	2483.500	45.74	-1.47	44.27	54.00	-9.73	AVG
7	2484.990	59.15	-1.46	57.69	74.00	-16.31	peak
8	2484.990	45.95	-1.46	44.49	54.00	-9.51	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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



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

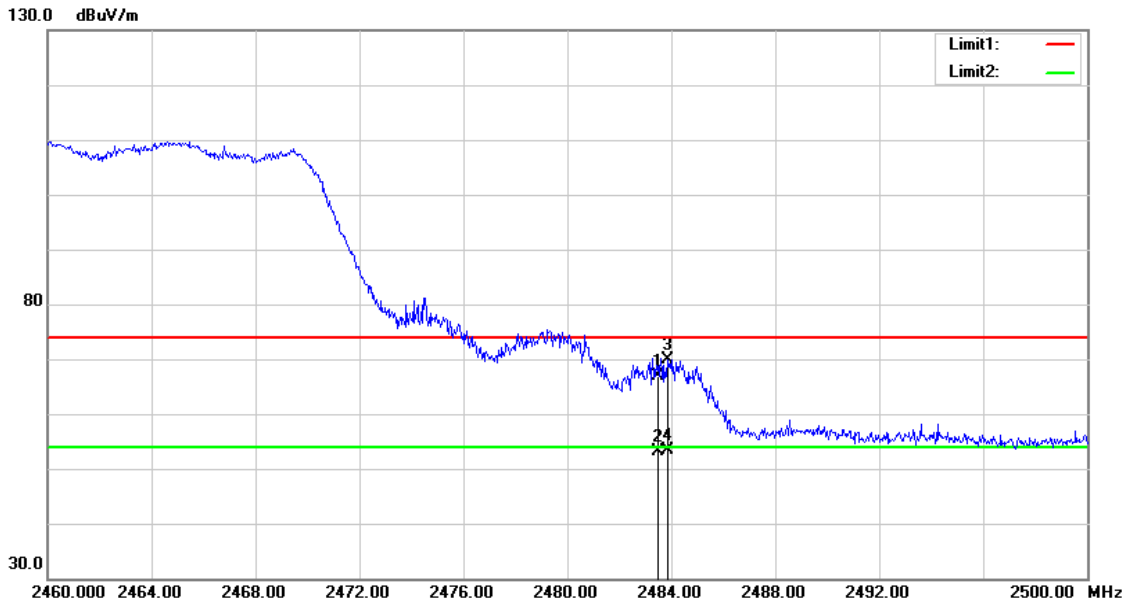
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.950	57.72	-1.84	55.88	74.00	-18.12	peak
2	2386.950	44.26	-1.84	42.42	54.00	-11.58	AVG
3	2390.000	55.84	-1.84	54.00	74.00	-20.00	peak
4	2390.000	44.14	-1.84	42.30	54.00	-11.70	AVG
5	2483.500	59.50	-1.47	58.03	74.00	-15.97	peak
6	2483.500	46.42	-1.47	44.95	54.00	-9.05	AVG
7	2484.990	61.06	-1.46	59.60	74.00	-14.40	peak
8	2484.990	46.70	-1.46	45.24	54.00	-8.76	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:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



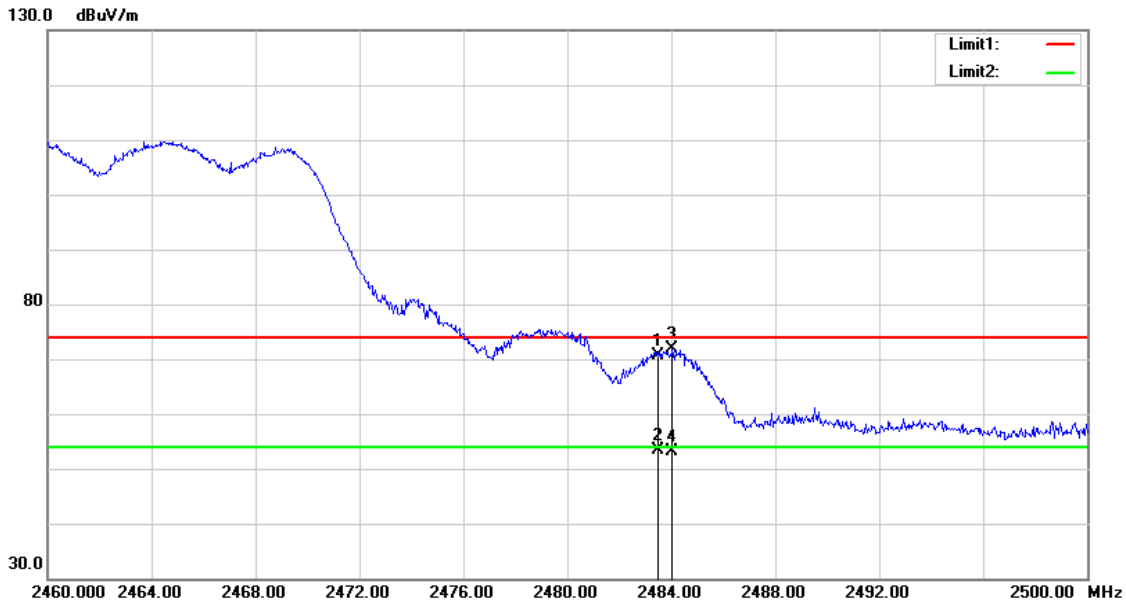
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.38	-1.47	66.91	74.00	-7.09	peak
2	2483.500	54.63	-1.47	53.16	54.00	-0.84	AVG
3	2483.840	71.37	-1.47	69.90	74.00	-4.10	peak
4	2483.840	54.74	-1.47	53.27	54.00	-0.73	AVG

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	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



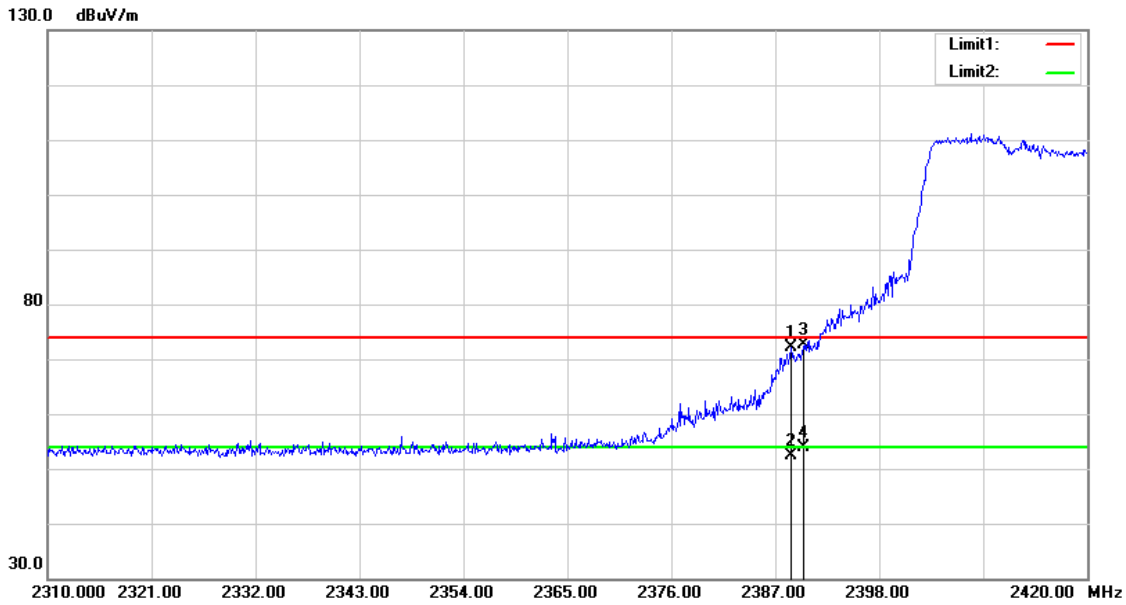
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	72.22	-1.47	70.75	74.00	-3.25	peak
2	2483.500	54.77	-1.47	53.30	54.00	-0.70	AVG
3	2484.040	73.23	-1.46	71.77	74.00	-2.23	peak
4	2484.040	54.63	-1.46	53.17	54.00	-0.83	AVG

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	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



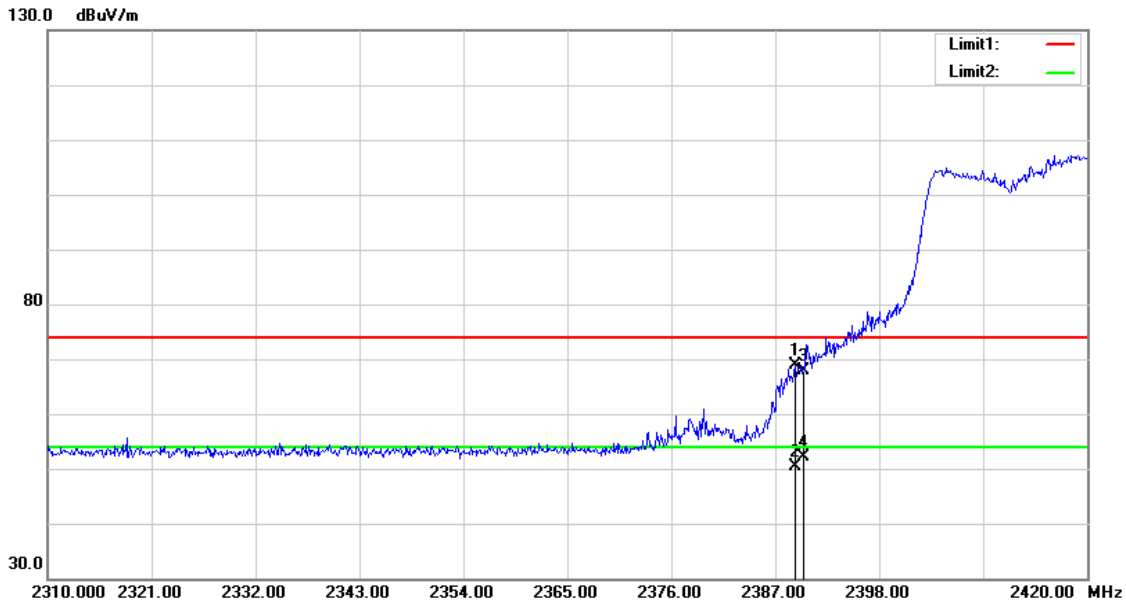
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.650	74.07	-1.83	72.24	74.00	-1.76	peak
2	2388.650	54.12	-1.83	52.29	54.00	-1.71	AVG
3	2390.000	74.51	-1.84	72.67	74.00	-1.33	peak
4	2390.000	55.62	-1.84	53.78	54.00	-0.22	AVG

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



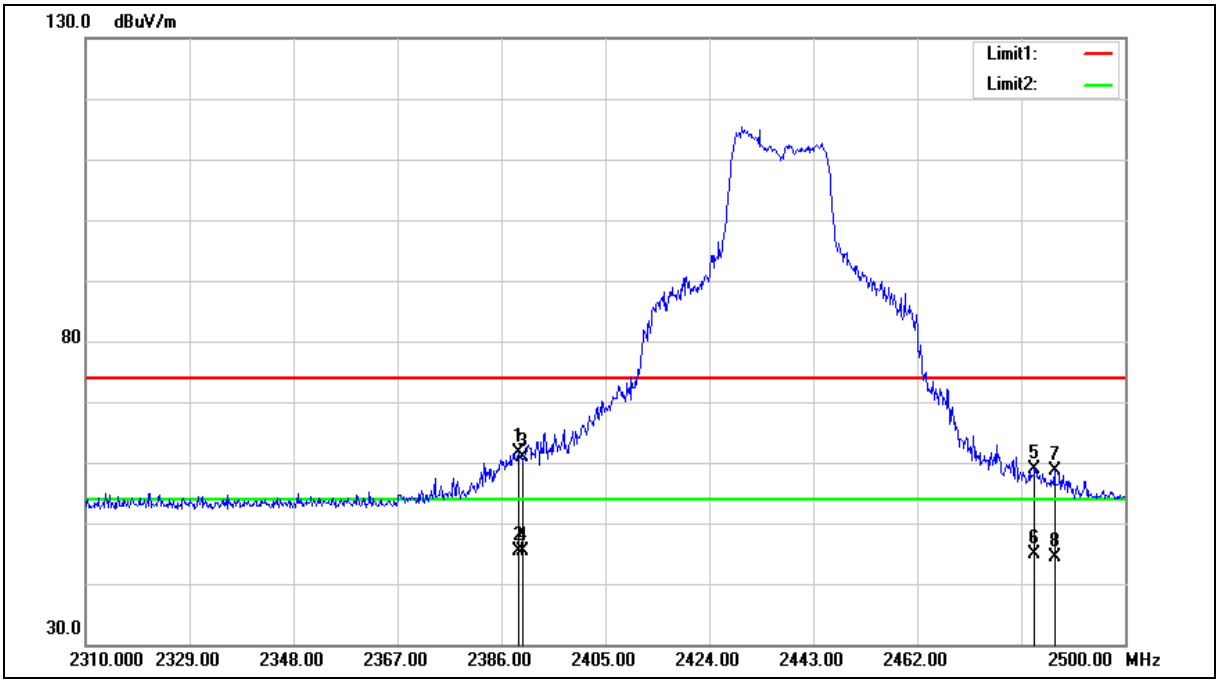
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.090	70.63	-1.84	68.79	74.00	-5.21	peak
2	2389.090	52.32	-1.84	50.48	54.00	-3.52	AVG
3	2390.000	69.71	-1.84	67.87	74.00	-6.13	peak
4	2390.000	54.02	-1.84	52.18	54.00	-1.82	AVG

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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



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

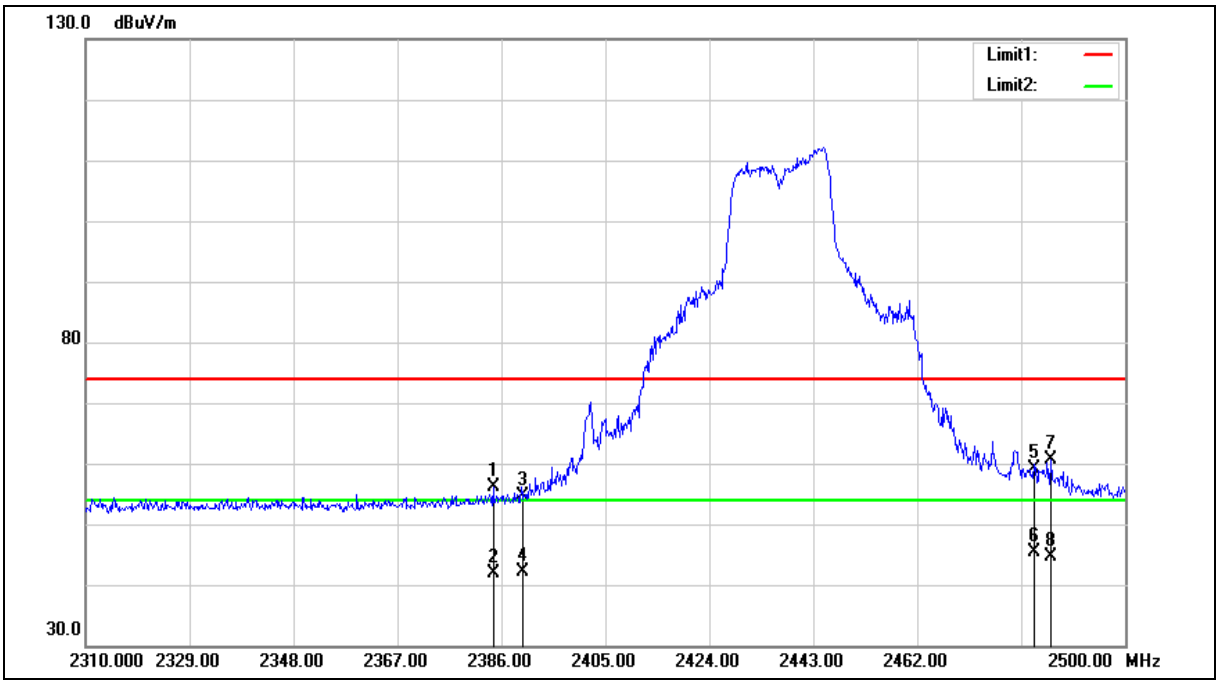
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.230	63.56	-1.84	61.72	74.00	-12.28	peak
2	2389.230	47.13	-1.84	45.29	54.00	-8.71	AVG
3	2390.000	62.77	-1.84	60.93	74.00	-13.07	peak
4	2390.000	47.31	-1.84	45.47	54.00	-8.53	AVG
5	2483.500	60.36	-1.47	58.89	74.00	-15.11	peak
6	2483.500	46.34	-1.47	44.87	54.00	-9.13	AVG
7	2487.080	60.20	-1.45	58.75	74.00	-15.25	peak
8	2487.080	45.78	-1.45	44.33	54.00	-9.67	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:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



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

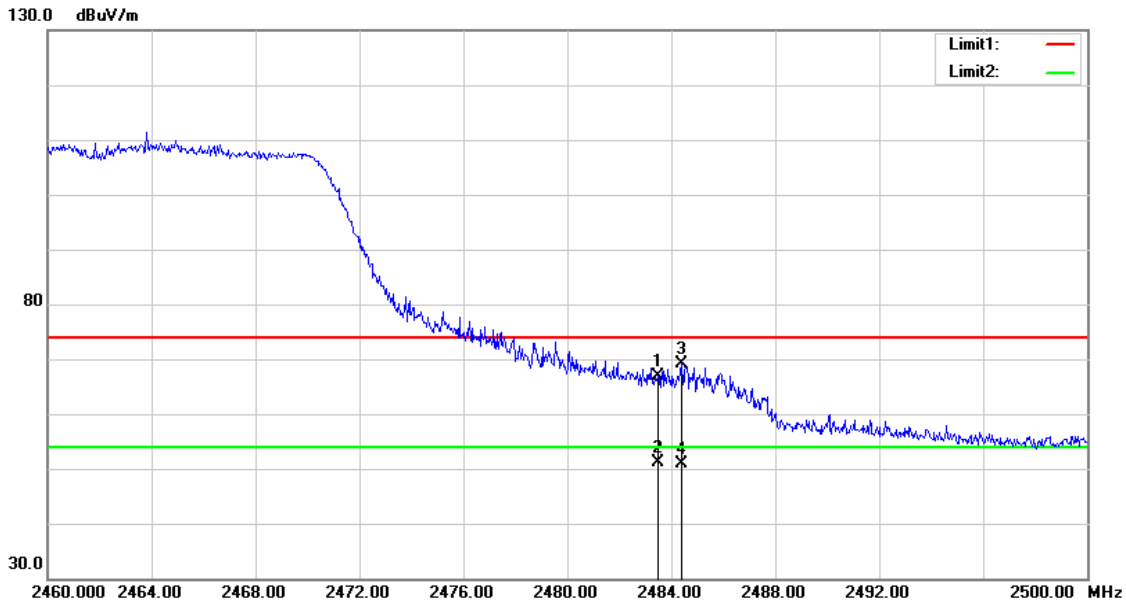
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.480	58.05	-1.84	56.21	74.00	-17.79	peak
2	2384.480	43.62	-1.84	41.78	54.00	-12.22	AVG
3	2390.000	56.48	-1.84	54.64	74.00	-19.36	peak
4	2390.000	43.97	-1.84	42.13	54.00	-11.87	AVG
5	2483.500	60.49	-1.47	59.02	74.00	-14.98	peak
6	2483.500	46.93	-1.47	45.46	54.00	-8.54	AVG
7	2486.510	62.12	-1.46	60.66	74.00	-13.34	peak
8	2486.510	46.20	-1.46	44.74	54.00	-9.26	AVG

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

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

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

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



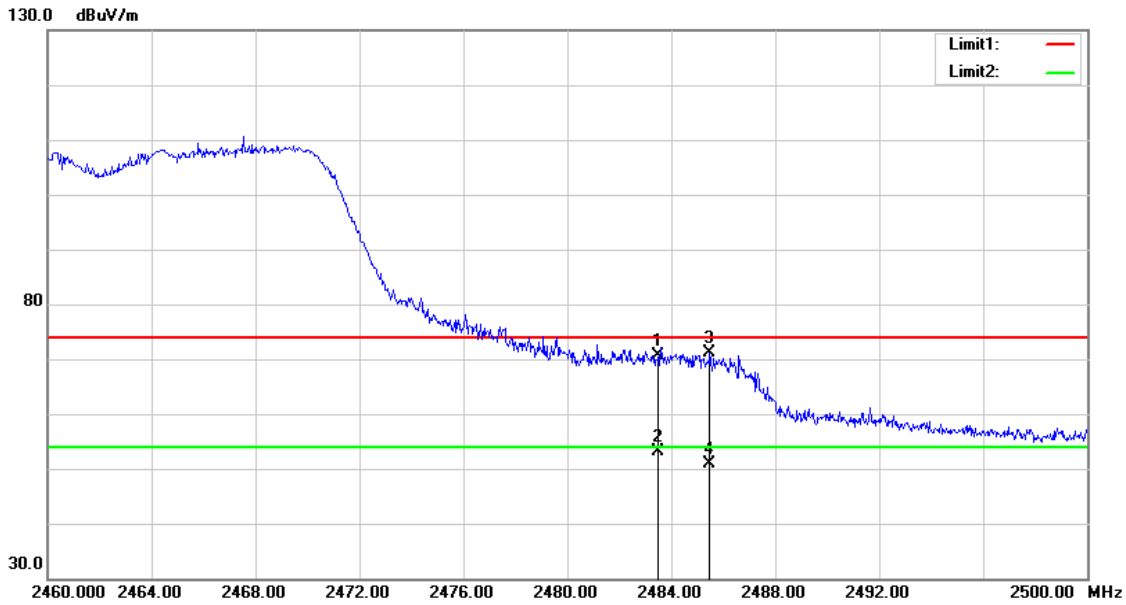
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.30	-1.47	66.83	74.00	-7.17	peak
2	2483.500	52.71	-1.47	51.24	54.00	-2.76	AVG
3	2484.400	70.49	-1.46	69.03	74.00	-4.97	peak
4	2484.400	52.23	-1.46	50.77	54.00	-3.23	AVG

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



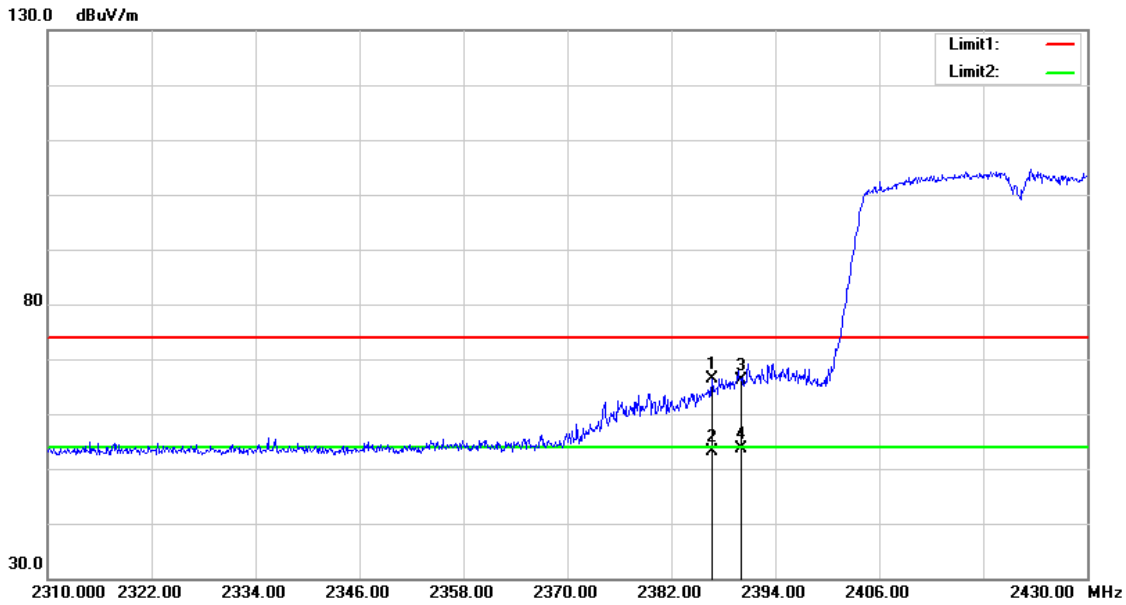
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	72.06	-1.47	70.59	74.00	-3.41	peak
2	2483.500	54.59	-1.47	53.12	54.00	-0.88	AVG
3	2485.480	72.47	-1.46	71.01	74.00	-2.99	peak
4	2485.480	52.30	-1.46	50.84	54.00	-3.16	AVG

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	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



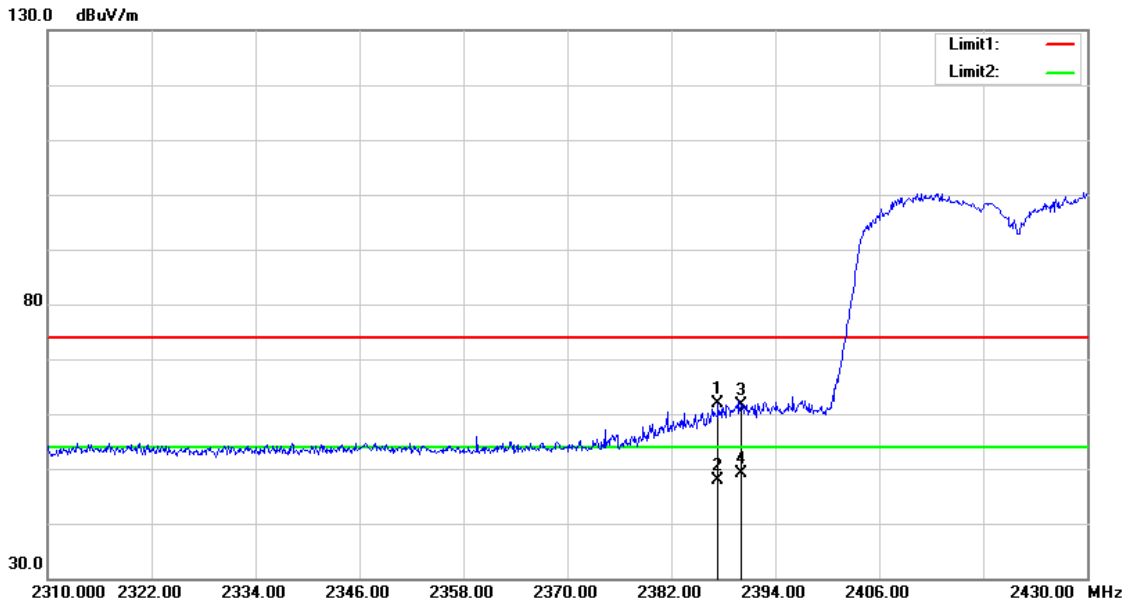
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.680	68.30	-1.84	66.46	74.00	-7.54	peak
2	2386.680	54.91	-1.84	53.07	54.00	-0.93	AVG
3	2390.000	67.90	-1.84	66.06	74.00	-7.94	peak
4	2390.000	55.58	-1.84	53.74	54.00	-0.26	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



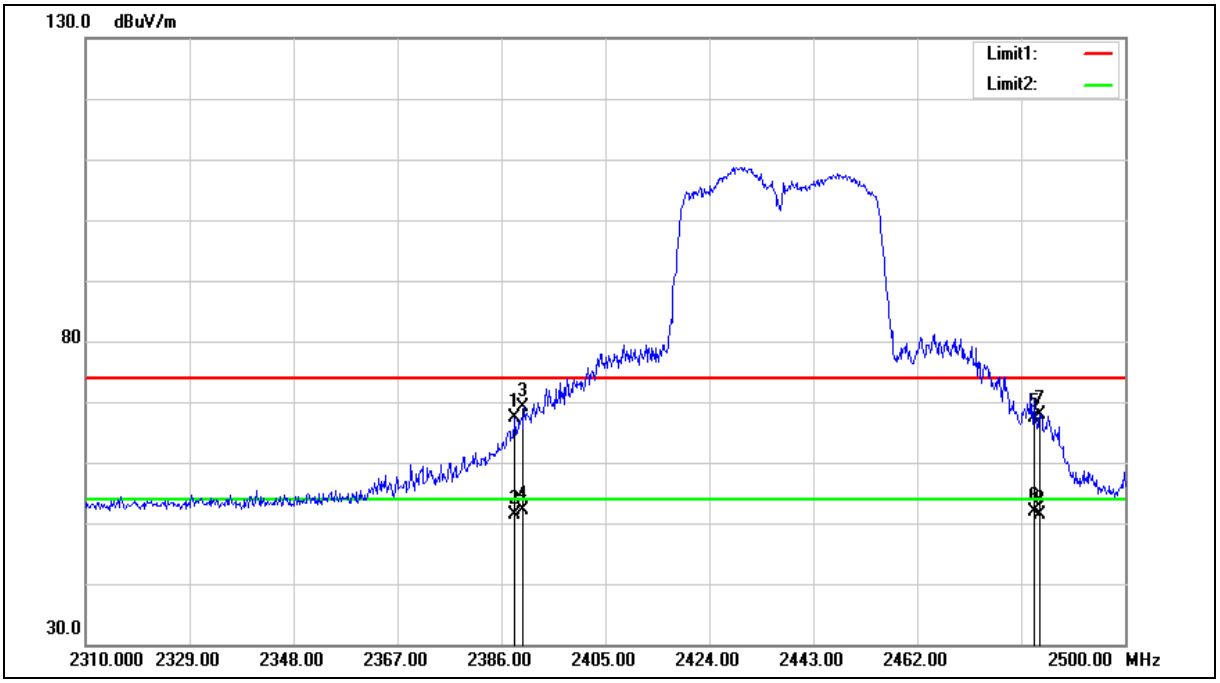
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.400	63.75	-1.84	61.91	74.00	-12.09	peak
2	2387.400	49.65	-1.84	47.81	54.00	-6.19	AVG
3	2390.000	63.41	-1.84	61.57	74.00	-12.43	peak
4	2390.000	50.85	-1.84	49.01	54.00	-4.99	AVG

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	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

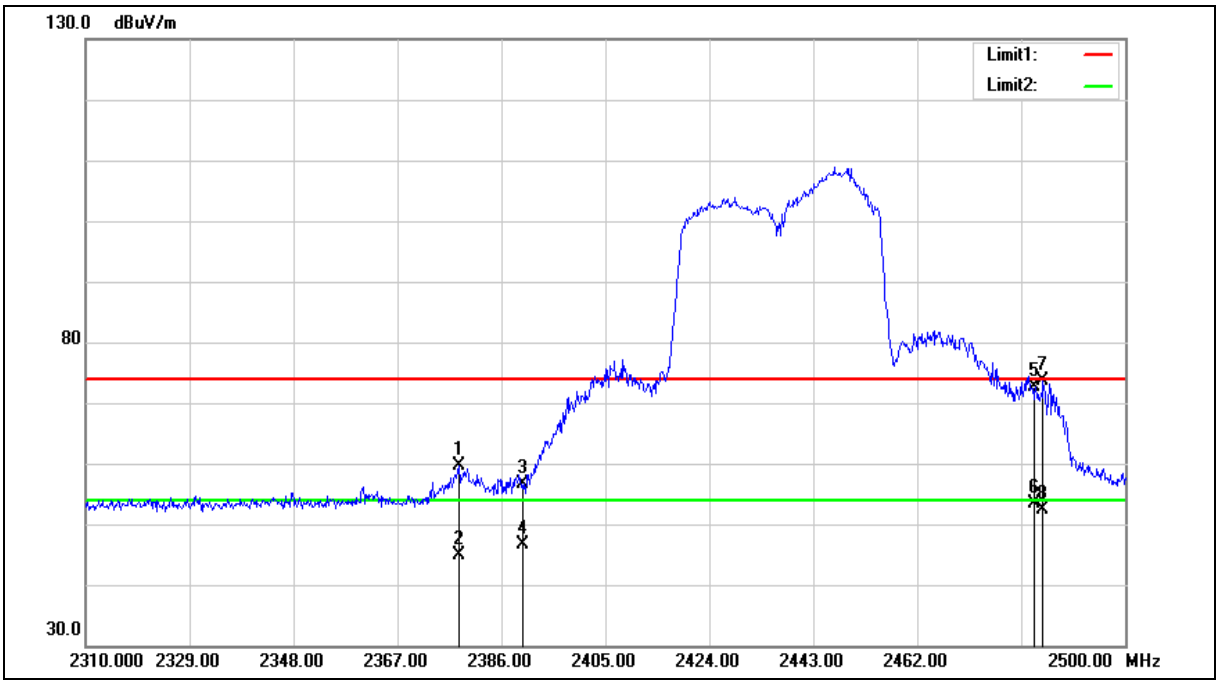
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.470	69.11	-1.83	67.28	74.00	-6.72	peak
2	2388.470	53.15	-1.83	51.32	54.00	-2.68	AVG
3	2390.000	71.08	-1.84	69.24	74.00	-4.76	peak
4	2390.000	54.06	-1.84	52.22	54.00	-1.78	AVG
5	2483.500	68.86	-1.47	67.39	74.00	-6.61	peak
6	2483.500	53.43	-1.47	51.96	54.00	-2.04	AVG
7	2484.420	69.38	-1.46	67.92	74.00	-6.08	peak
8	2484.420	52.87	-1.46	51.41	54.00	-2.59	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

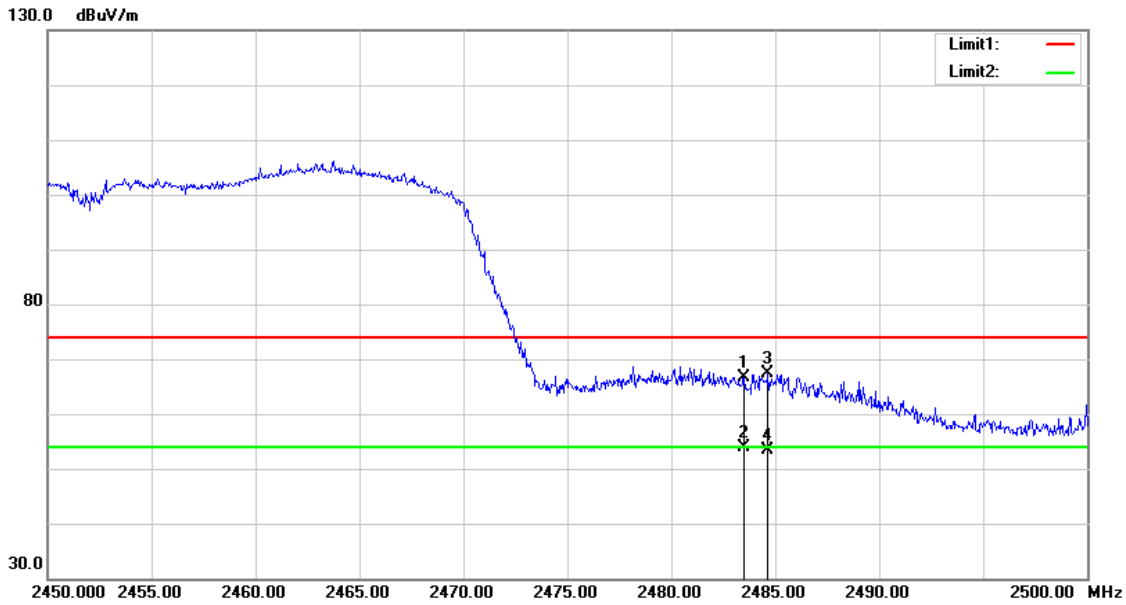
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2378.210	61.49	-1.87	59.62	74.00	-14.38	peak
2	2378.210	46.63	-1.87	44.76	54.00	-9.24	AVG
3	2390.000	58.36	-1.84	56.52	74.00	-17.48	peak
4	2390.000	48.50	-1.84	46.66	54.00	-7.34	AVG
5	2483.500	74.21	-1.47	72.74	74.00	-1.26	peak
6	2483.500	54.93	-1.47	53.46	54.00	-0.54	AVG
7	2484.990	75.13	-1.46	73.67	74.00	-0.33	peak
8	2484.990	53.78	-1.46	52.32	54.00	-1.68	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	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



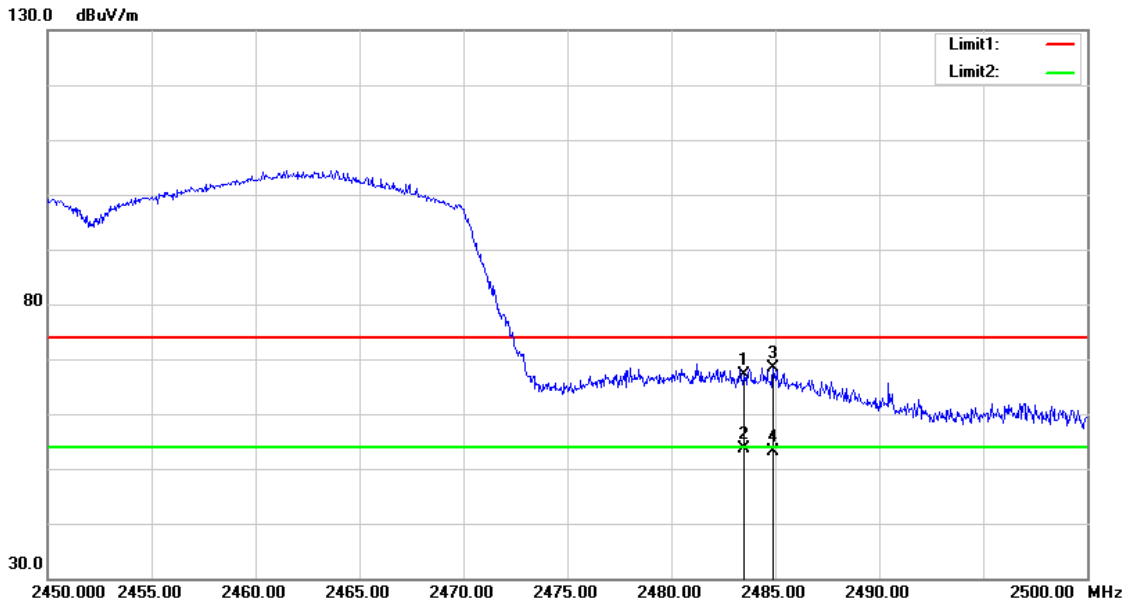
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.06	-1.47	66.59	74.00	-7.41	peak
2	2483.500	55.38	-1.47	53.91	54.00	-0.09	AVG
3	2484.650	68.84	-1.46	67.38	74.00	-6.62	peak
4	2484.650	54.85	-1.46	53.39	54.00	-0.61	AVG

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	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.54	-1.47	67.07	74.00	-6.93	peak
2	2483.500	55.19	-1.47	53.72	54.00	-0.28	AVG
3	2484.900	69.90	-1.46	68.44	74.00	-5.56	peak
4	2484.900	54.66	-1.46	53.20	54.00	-0.80	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.

Annex C. Conducted Test Results

Maximum Conducted Output Power Measurement

ANT-0					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 2	2412	1M	23.56	0.227	< 30
	2437		22.32	0.171	< 30
	2462		22.97	0.198	< 30
	2437	2M	22.28	0.169	< 30
	2437	5.5M	22.20	0.166	< 30
	2437	11M	22.15	0.164	< 30
Mode 3	2412	6M	17.52	0.056	< 30
	2437		22.66	0.185	< 30
	2462		18.12	0.065	< 30
	2437	9M	22.62	0.183	< 30
	2437	12M	22.60	0.182	< 30
	2437	18M	22.57	0.181	< 30
	2437	24M	22.52	0.179	< 30
	2437	36M	22.46	0.176	< 30
	2437	48M	22.42	0.175	< 30
	2437	54M	22.37	0.173	< 30

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

ANT-0					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 4	2412	13M	17.83	0.061	< 30
	2437		22.71	0.187	< 30
	2462		17.61	0.058	< 30
	2437	28.8M	22.68	0.185	< 30
	2437	43.4M	22.63	0.183	< 30
	2437	57.8M	22.60	0.182	< 30
	2437	86.6M	22.57	0.181	< 30
	2437	115.6M	22.52	0.179	< 30
	2437	130M	22.47	0.177	< 30
	2437	144.4M	22.45	0.176	< 30
	2437	173.4M	22.43	0.175	< 30
Mode 5	2422	27M	15.55	0.036	< 30
	2437		19.04	0.080	< 30
	2452		14.99	0.032	< 30
	2437	60M	19.00	0.079	< 30
	2437	90M	18.97	0.079	< 30
	2437	120M	18.92	0.078	< 30
	2437	180M	18.89	0.077	< 30
	2437	240M	18.85	0.077	< 30
	2437	270M	18.82	0.076	< 30
	2437	300M	18.80	0.076	< 30
	2437	360M	18.77	0.075	< 30
	2437	400M	18.74	0.075	< 30

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

ANT-1					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 2	2412	1M	23.26	0.212	< 30
	2437		22.68	0.185	< 30
	2462		22.79	0.190	< 30
	2437	2M	22.61	0.182	< 30
	2437	5.5M	22.57	0.181	< 30
	2437	11M	22.53	0.179	< 30
Mode 3	2412	6M	17.15	0.052	< 30
	2437		22.30	0.170	< 30
	2462		18.08	0.064	< 30
	2437	9M	22.25	0.168	< 30
	2437	12M	22.22	0.167	< 30
	2437	18M	22.20	0.166	< 30
	2437	24M	22.17	0.165	< 30
	2437	36M	22.14	0.164	< 30
	2437	48M	22.11	0.163	< 30
	2437	54M	22.08	0.161	< 30

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

ANT-1					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 4	2412	13M	17.52	0.056	< 30
	2437		22.34	0.171	< 30
	2462		17.24	0.053	< 30
	2437	28.8M	22.31	0.170	< 30
	2437	43.4M	22.28	0.169	< 30
	2437	57.8M	22.24	0.167	< 30
	2437	86.6M	22.21	0.166	< 30
	2437	115.6M	22.17	0.165	< 30
	2437	130M	22.13	0.163	< 30
	2437	144.4M	22.08	0.161	< 30
	2437	173.4M	22.02	0.159	< 30
Mode 5	2422	27M	15.68	0.037	< 30
	2437		18.97	0.079	< 30
	2452		14.92	0.031	< 30
	2437	60M	18.92	0.078	< 30
	2437	90M	18.86	0.077	< 30
	2437	120M	18.83	0.076	< 30
	2437	180M	18.80	0.076	< 30
	2437	240M	18.76	0.075	< 30
	2437	270M	18.74	0.075	< 30
	2437	300M	18.70	0.074	< 30
	2437	360M	18.65	0.073	< 30
	2437	400M	18.62	0.073	< 30

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

ANT-0+1					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 2	2412	1M	**26.42**	**0.439**	< 30
	2437		25.51	0.356	< 30
	2462		25.89	0.388	< 30
	2437	2M	25.46	0.351	< 30
	2437	5.5M	25.40	0.347	< 30
	2437	11M	25.35	0.343	< 30
Mode 3	2412	6M	20.35	0.108	< 30
	2437		**25.49**	**0.354**	< 30
	2462		21.11	0.129	< 30
	2437	9M	25.45	0.351	< 30
	2437	12M	25.42	0.349	< 30
	2437	18M	25.40	0.347	< 30
	2437	24M	25.36	0.343	< 30
	2437	36M	25.31	0.340	< 30
	2437	48M	25.28	0.337	< 30
	2437	54M	25.24	0.334	< 30

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

ANT-0+1					
Test Mode	Frequency (MHz)	Data Rate	Average Output Power		
			Measurement Results		Limit
			dBm	W	dBm
Mode 4	2412	13M	20.69	0.117	< 30
	2437		**25.54**	**0.358**	< 30
	2462		20.44	0.111	< 30
	2437	28.8M	25.51	0.356	< 30
	2437	43.4M	25.47	0.352	< 30
	2437	57.8M	25.43	0.349	< 30
	2437	86.6M	25.40	0.347	< 30
	2437	115.6M	25.36	0.343	< 30
	2437	130M	25.31	0.340	< 30
	2437	144.4M	25.28	0.337	< 30
	2437	173.4M	25.24	0.334	< 30
Mode 5	2422	27M	18.63	0.073	< 30
	2437		**22.02**	**0.159**	< 30
	2452		17.97	0.063	< 30
	2437	60M	21.97	0.157	< 30
	2437	90M	21.93	0.156	< 30
	2437	120M	21.89	0.154	< 30
	2437	180M	21.86	0.153	< 30
	2437	240M	21.82	0.152	< 30
	2437	270M	21.79	0.151	< 30
	2437	300M	21.76	0.150	< 30
	2437	360M	21.72	0.149	< 30
	2437	400M	21.69	0.148	< 30

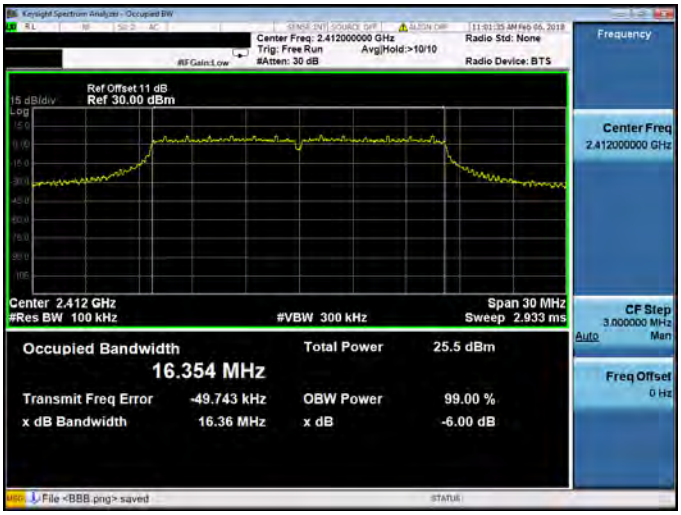
Note: The relevant measured result has the offset with cable loss already.

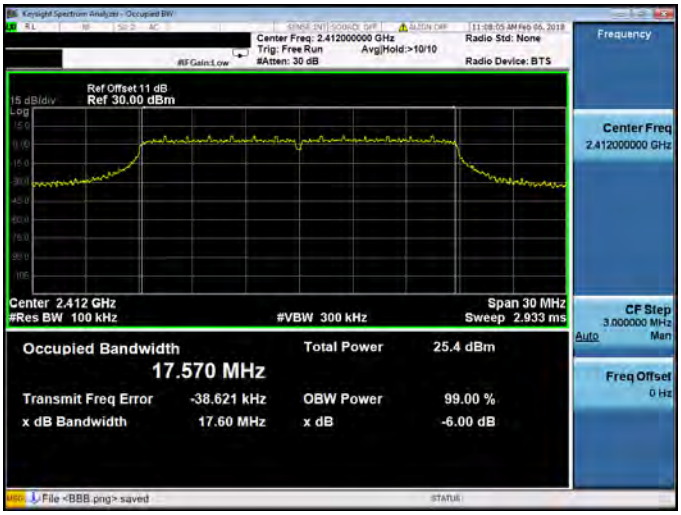
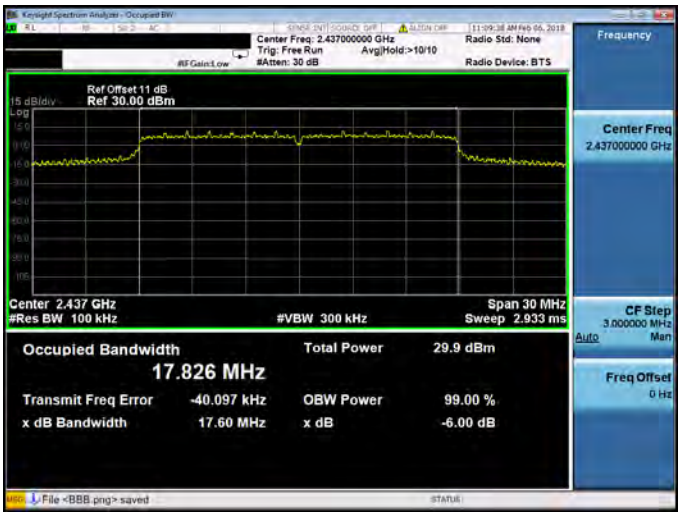
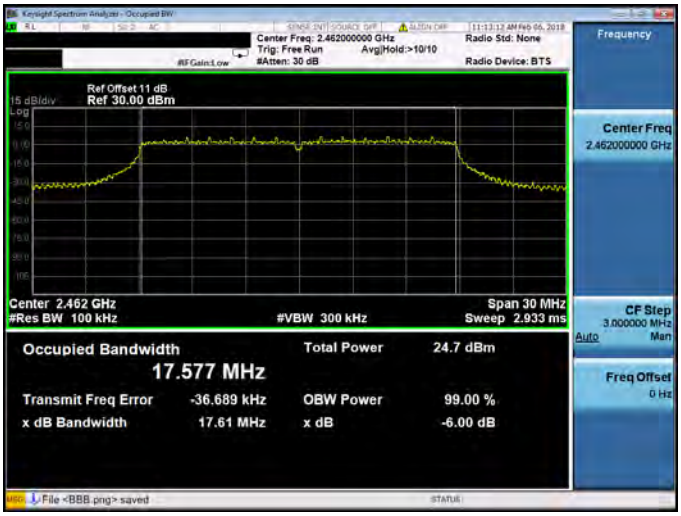
6dB RF Bandwidth Measurement

Test Mode	Frequency (MHz)	Measurement (kHz)		Limit (kHz)
		ANT-0	ANT-1	
Mode 2	2412	9046	9561	> 500
	2437	9036	8087	> 500
	2462	8568	8091	> 500
Mode 3	2412	16360	16360	> 500
	2437	16360	16370	> 500
	2462	16360	16360	> 500
Mode 4	2412	17600	17660	> 500
	2437	17600	17620	> 500
	2462	17610	17600	> 500
Mode 5	2422	35180	35160	> 500
	2437	35350	35180	> 500
	2452	35360	35140	> 500

■ **Test Graphs**

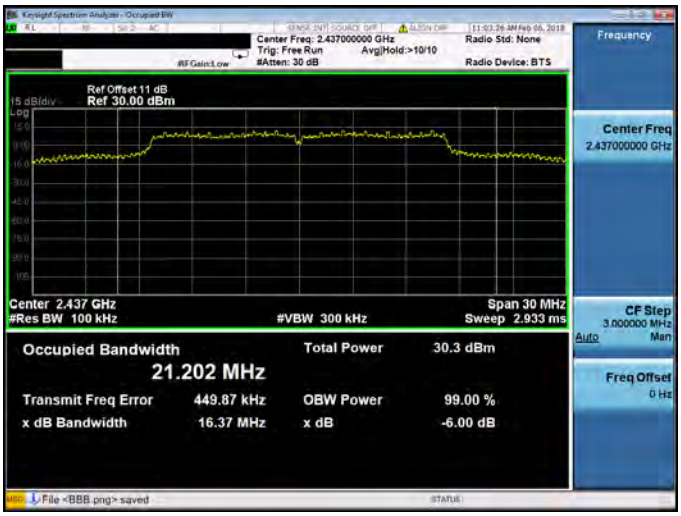
Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

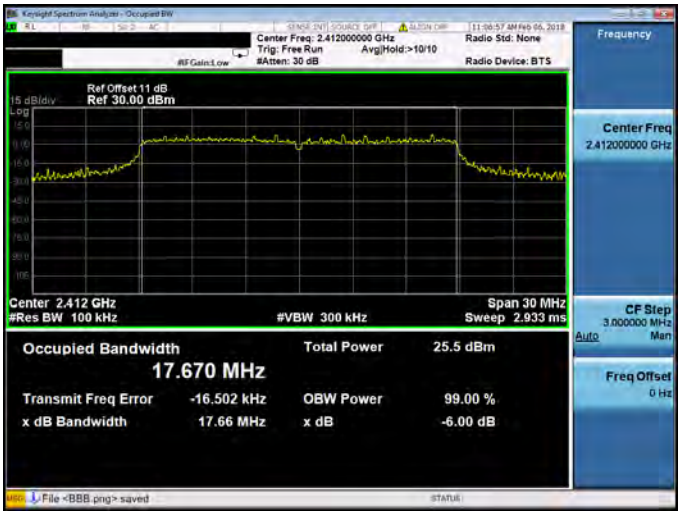
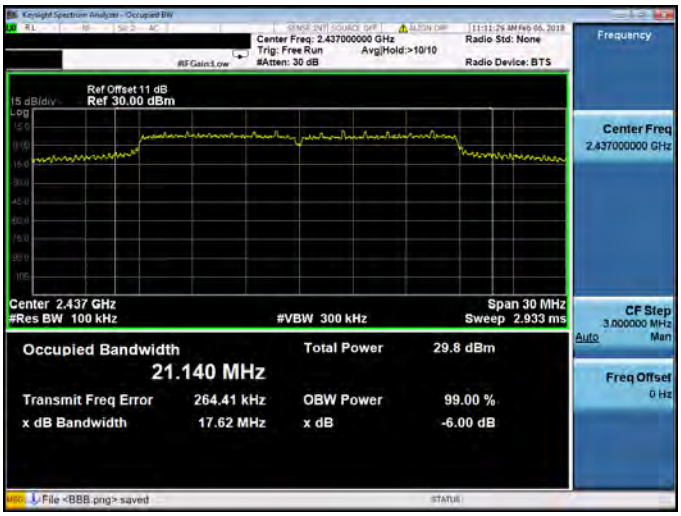
Mode 3: IEEE 802.11g Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

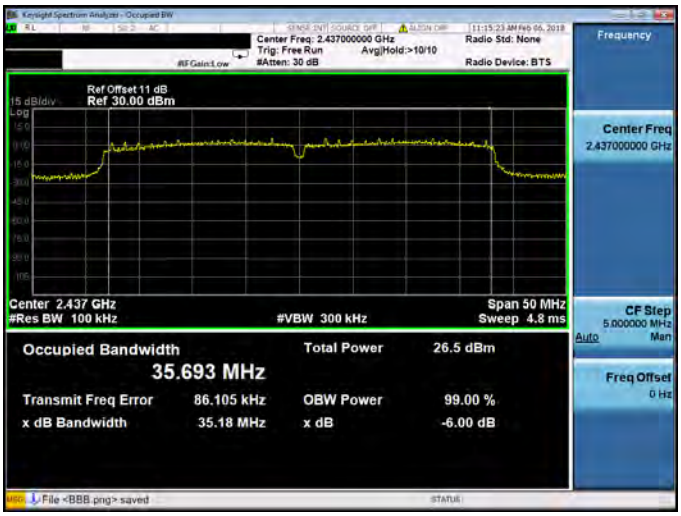
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-0	
2422 MHz	
2437 MHz	
2452 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	

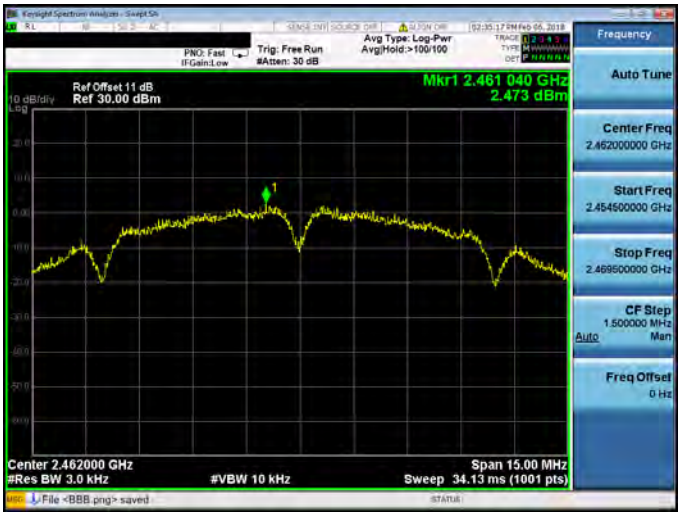
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

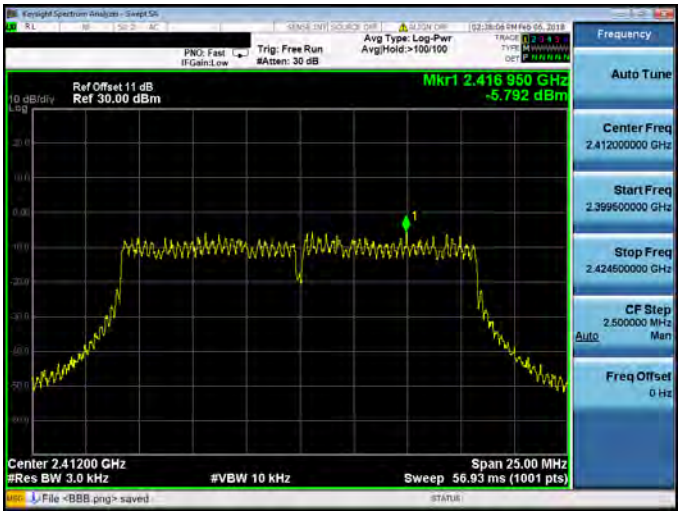
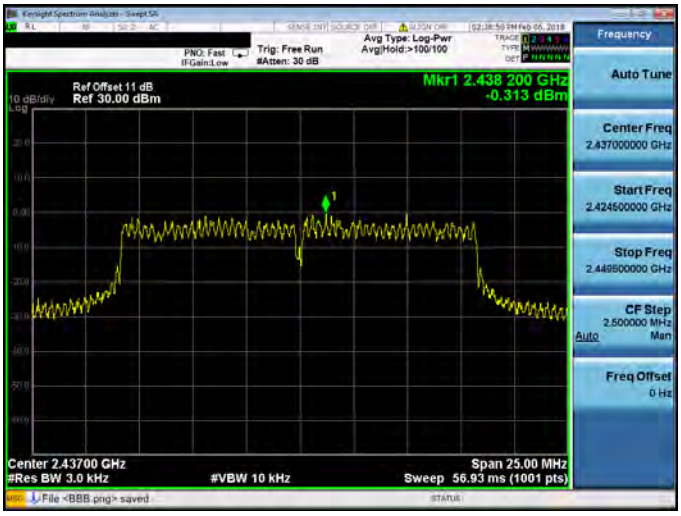
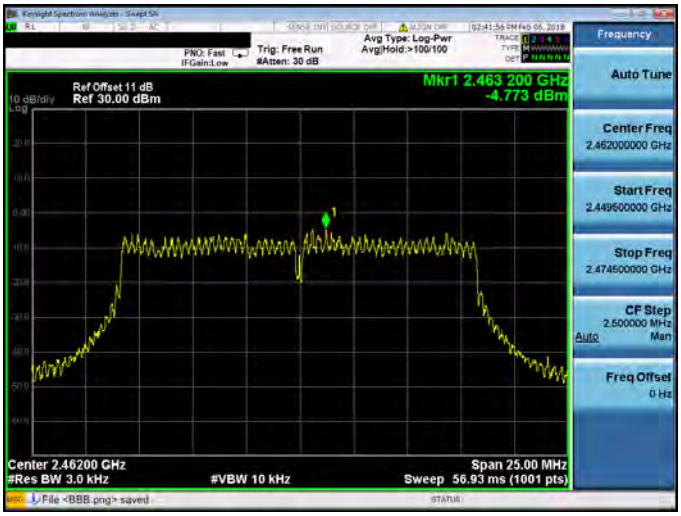
Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

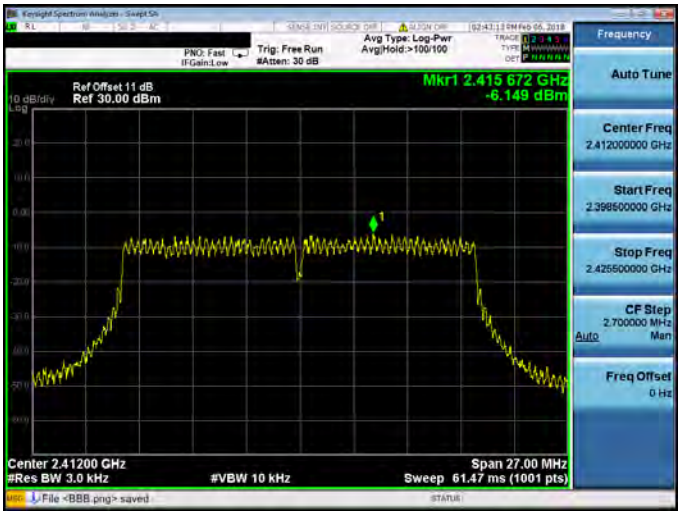
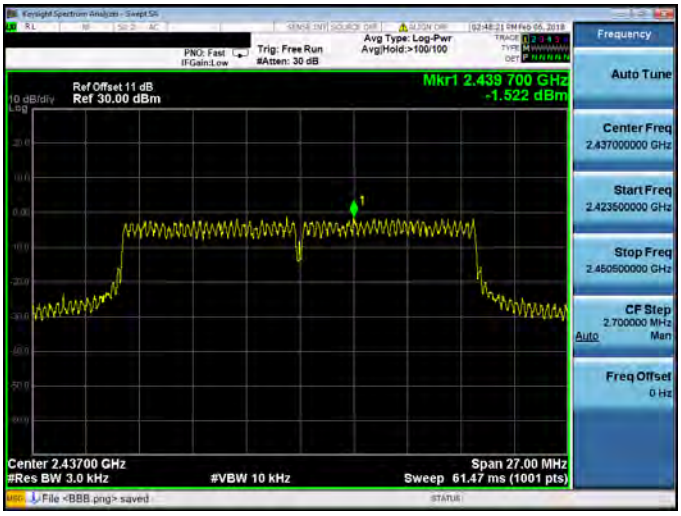
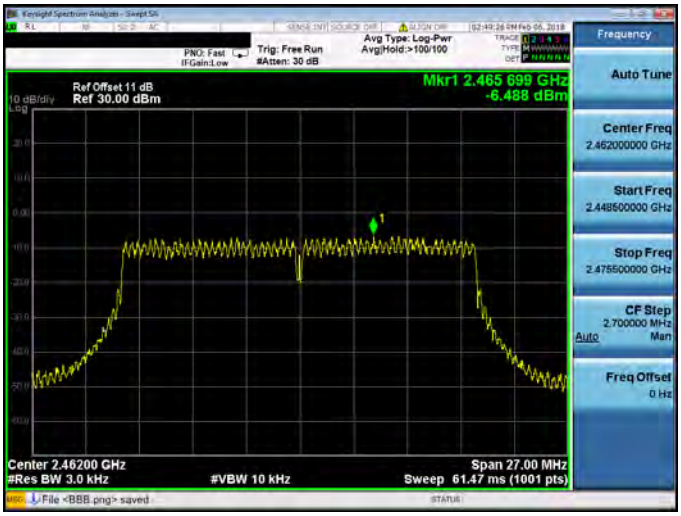
Maximum Power Density Measurement

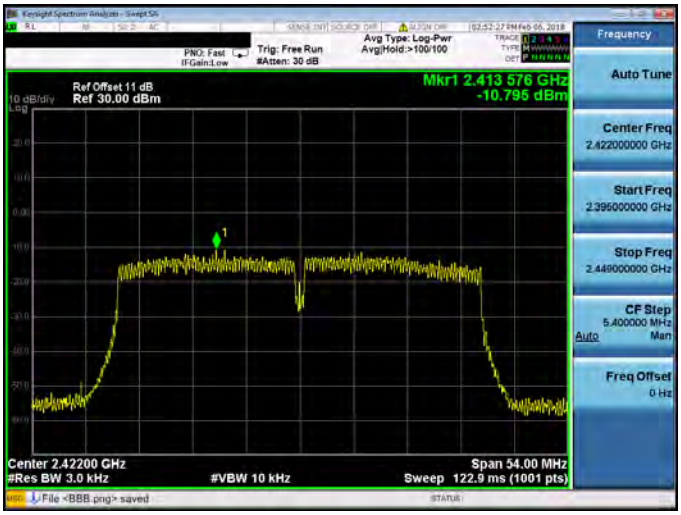
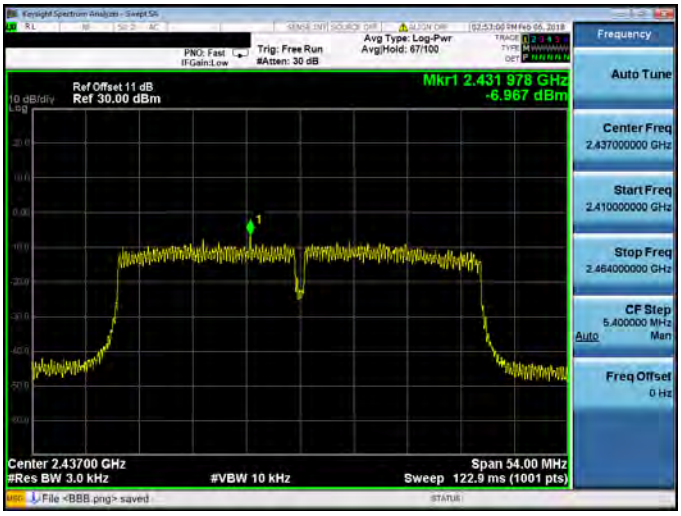
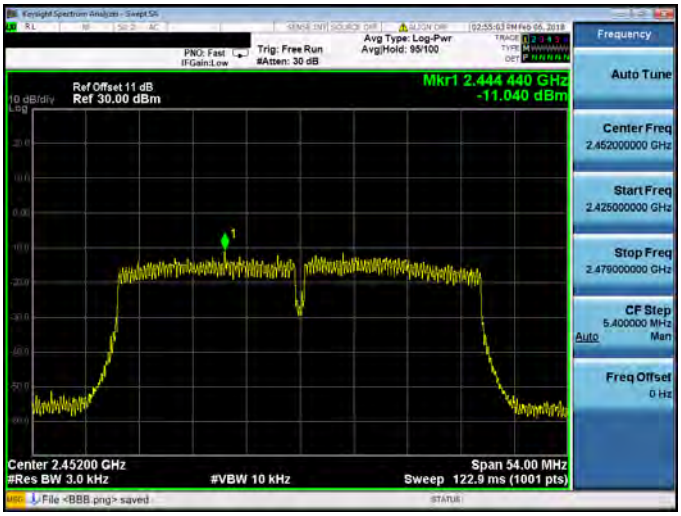
Test Mode	Frequency (MHz)	Measurement (dBm/3KHz)			Limit (dBm/3KHz)
		ANT-0	ANT-1	ANT-0+1	
Mode 2	2412	1.867	2.235	5.065	< 7.16
	2437	1.692	1.521	4.618	< 7.16
	2462	2.473	1.716	5.121	< 7.16
Mode 3	2412	-5.792	-6.030	-2.899	< 7.16
	2437	-0.313	-0.951	2.390	< 7.16
	2462	-4.733	-5.294	-1.994	< 7.16
Mode 4	2412	-6.149	-5.995	-3.061	< 7.16
	2437	-1.522	-0.752	1.890	< 7.16
	2462	-6.488	-6.256	-3.360	< 7.16
Mode 5	2422	-10.795	-10.206	-7.480	< 7.16
	2437	-6.967	-7.134	-4.039	< 7.16
	2452	-11.040	-11.066	-8.043	< 7.16

■ **Test Graphs**

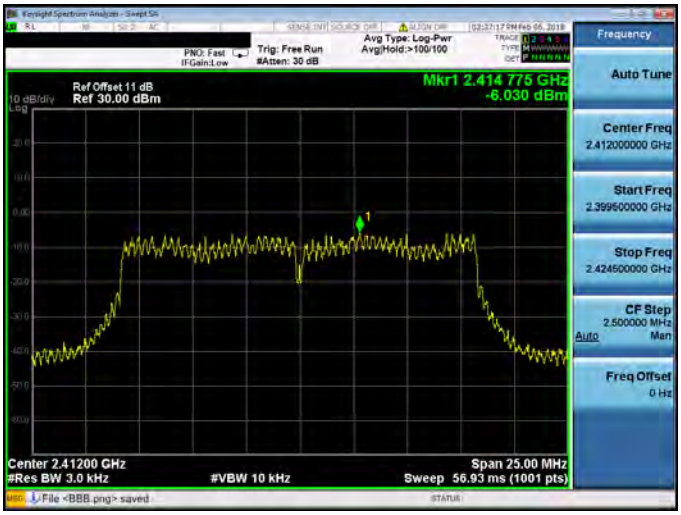
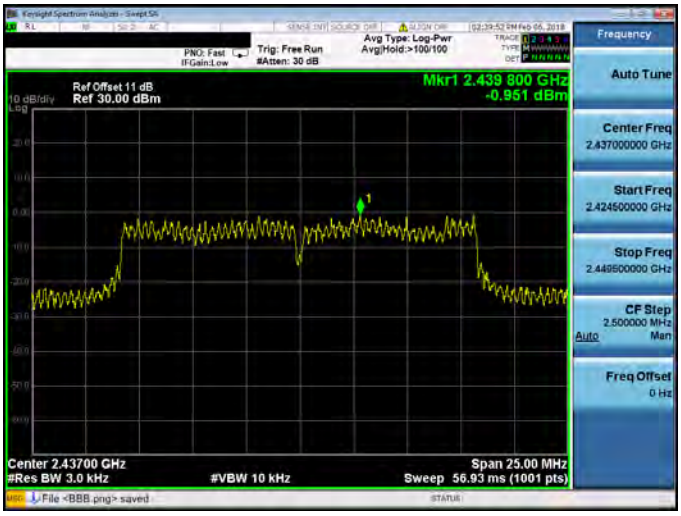
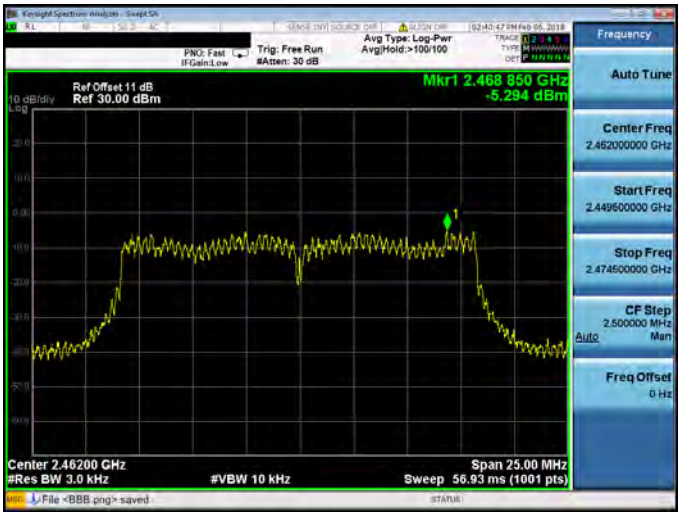
Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

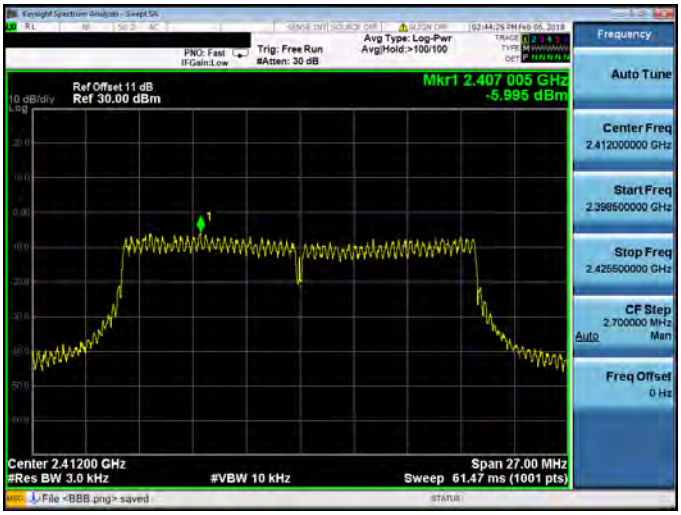
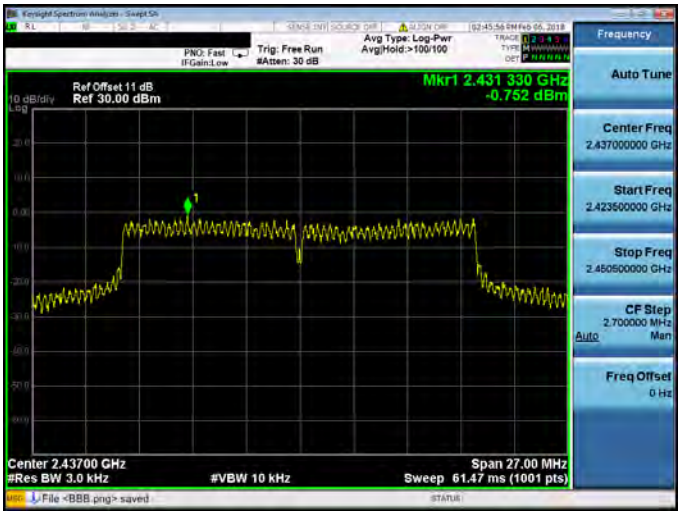
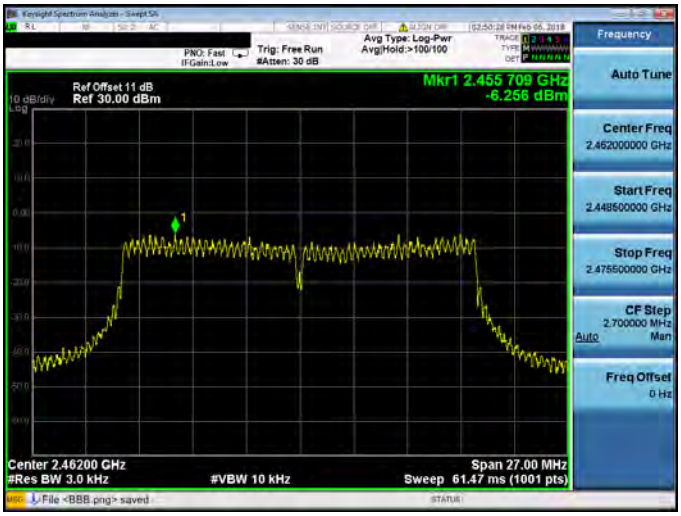
Mode 3: IEEE 802.11g Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

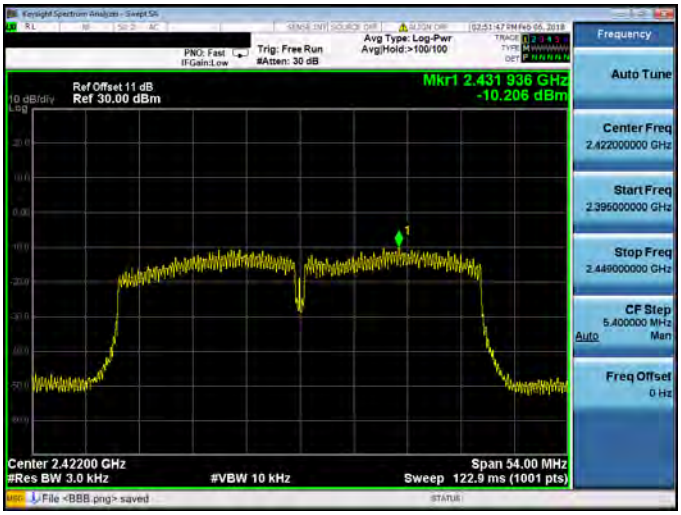
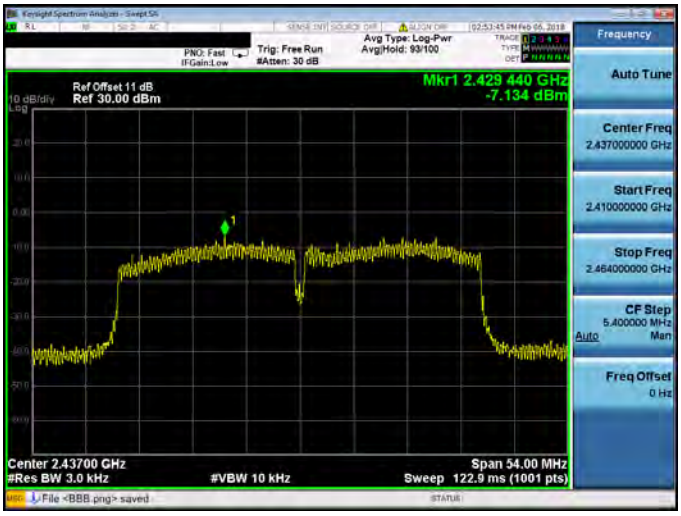
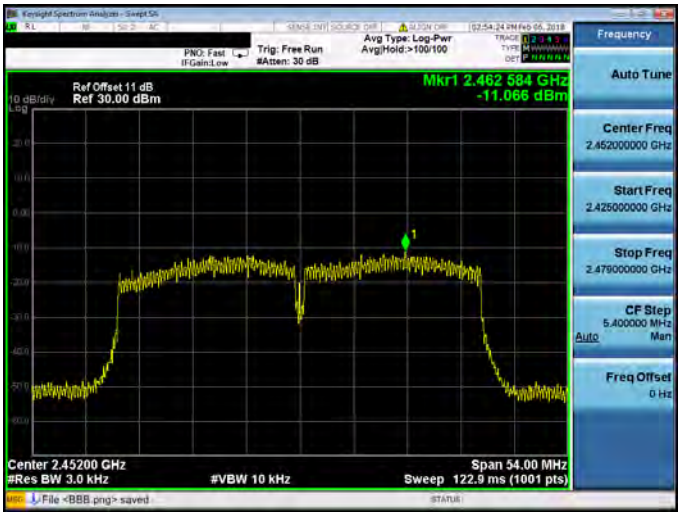
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-0	
2422 MHz	
2437 MHz	
2452 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 2.4GHz 20MHz Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

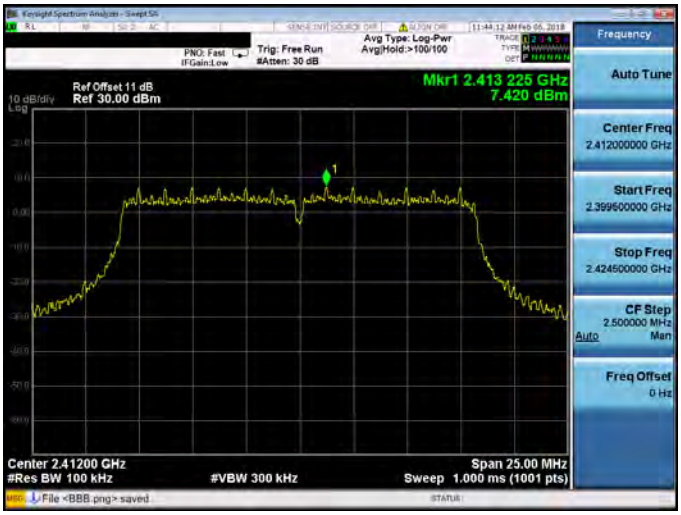
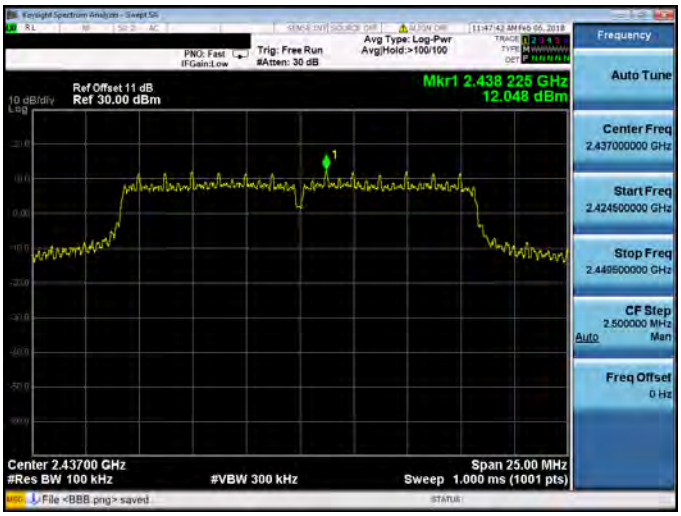
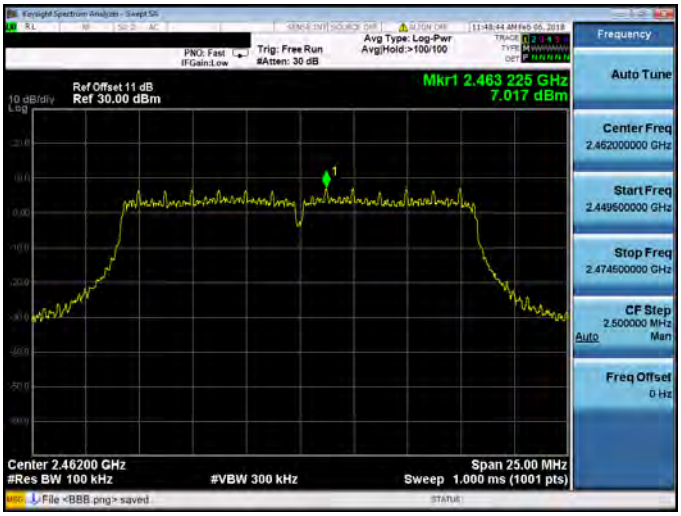
Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

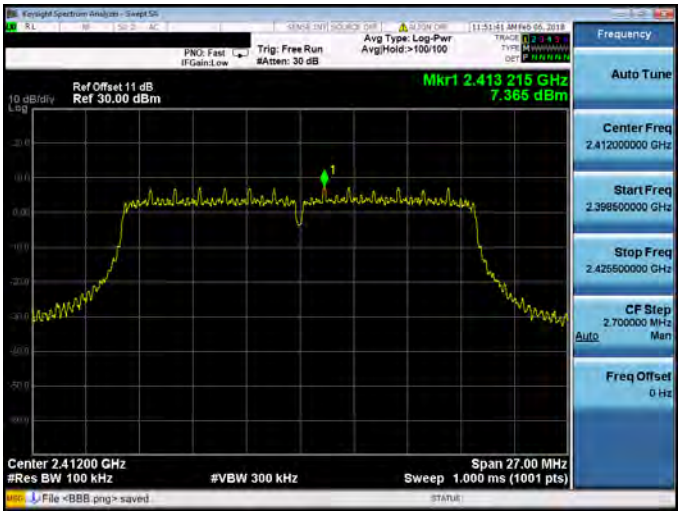
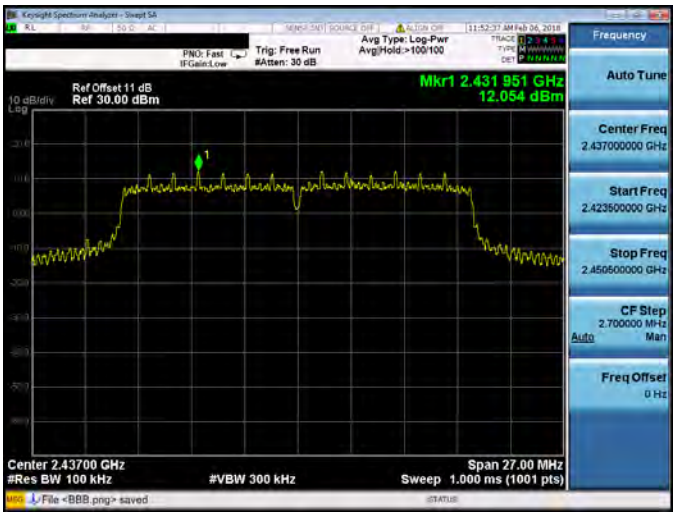
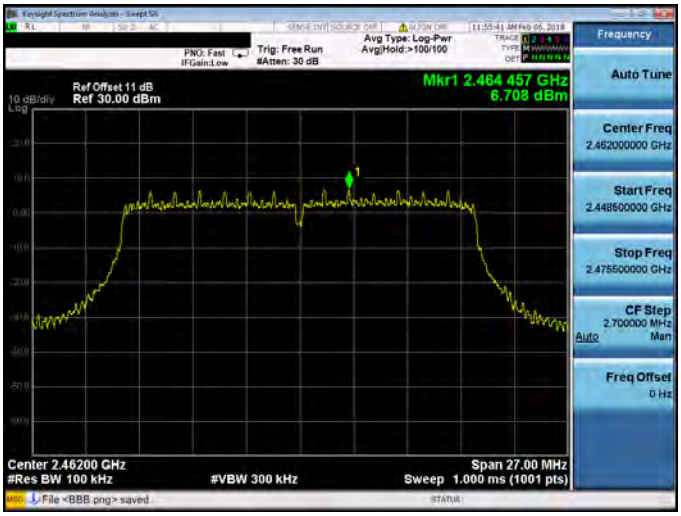
Out of Band Conducted Emissions Measurement

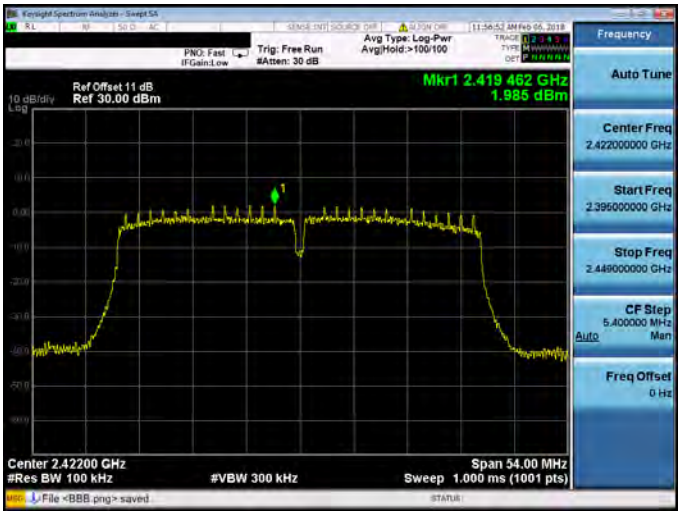
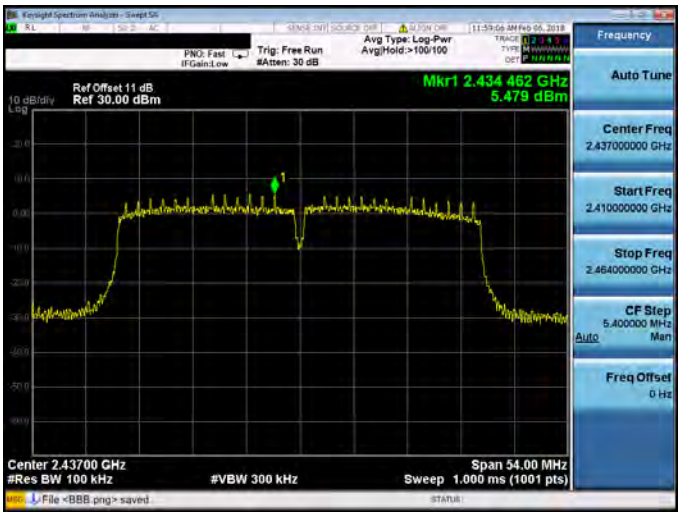
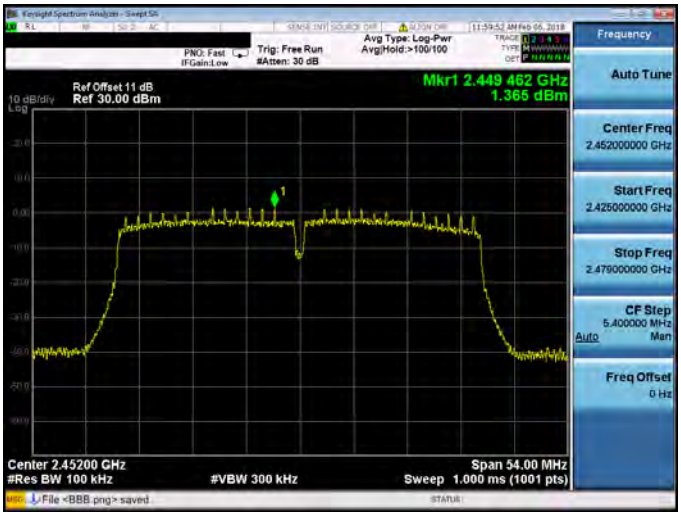
- **Test Graphs**

Reference level

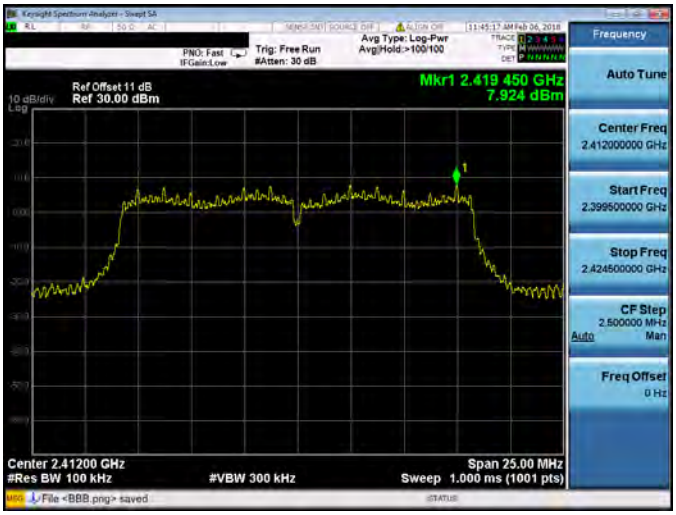
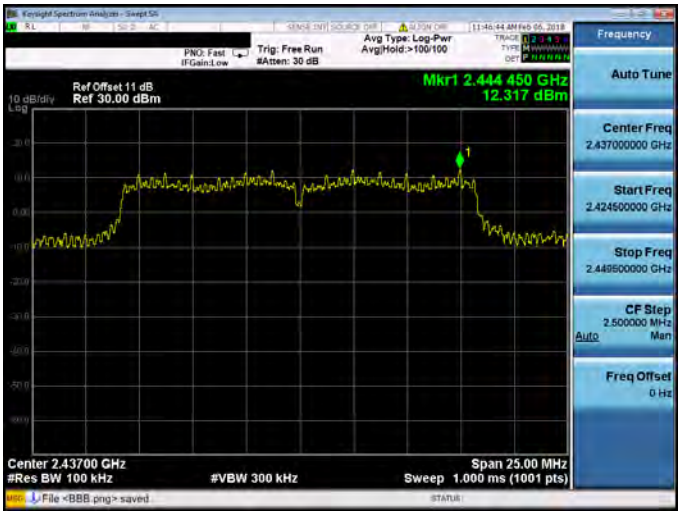
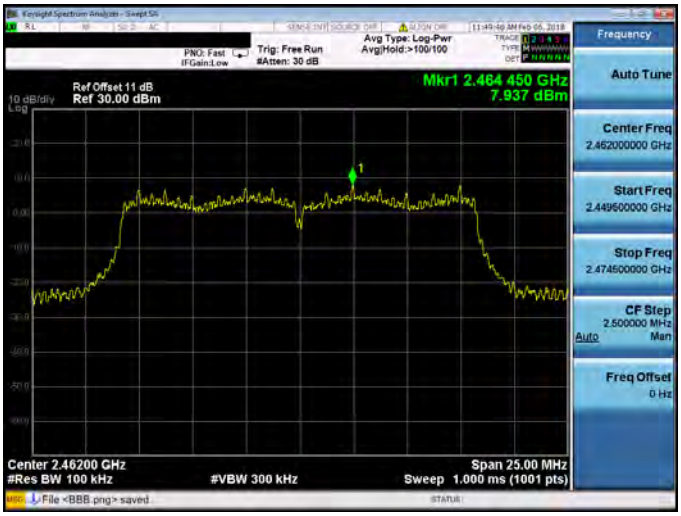
Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

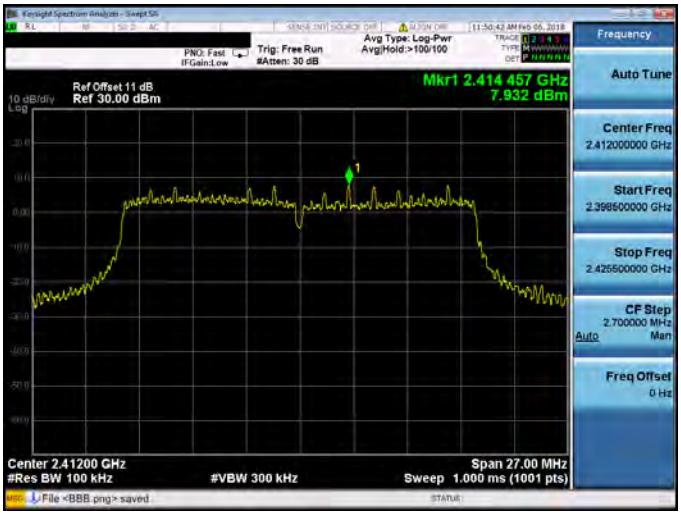
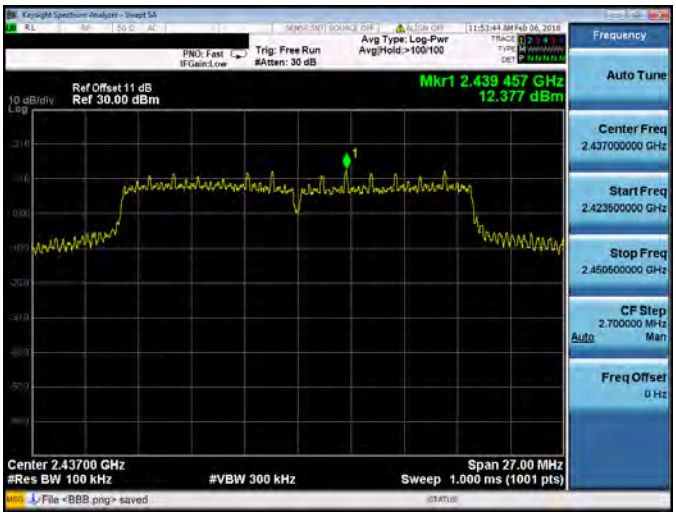
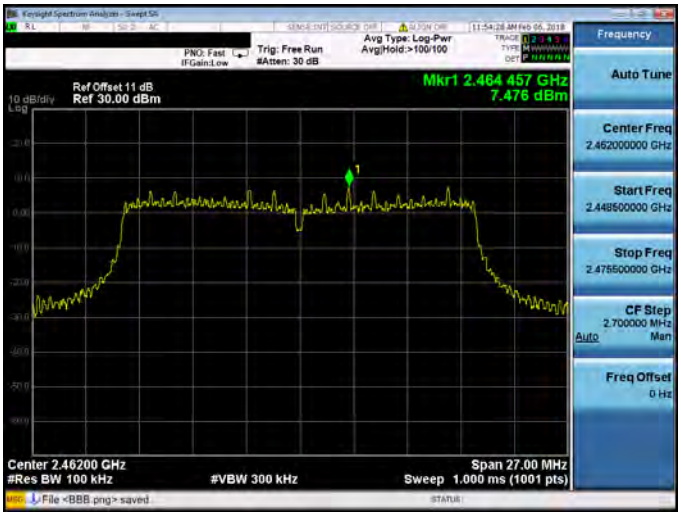
Mode 3: IEEE 802.11g Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

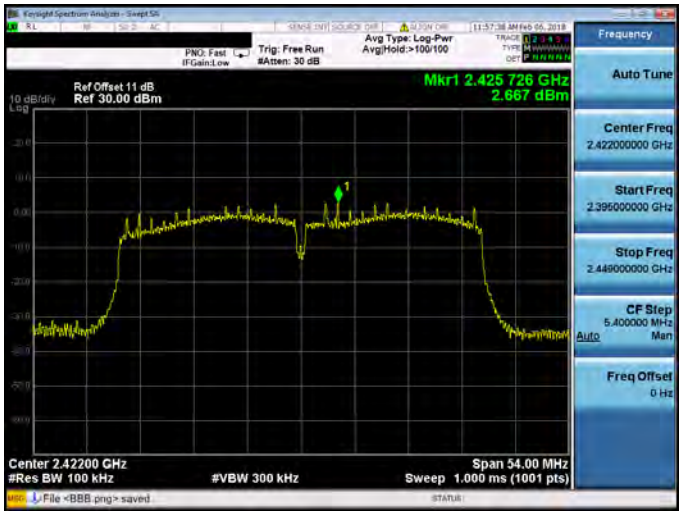
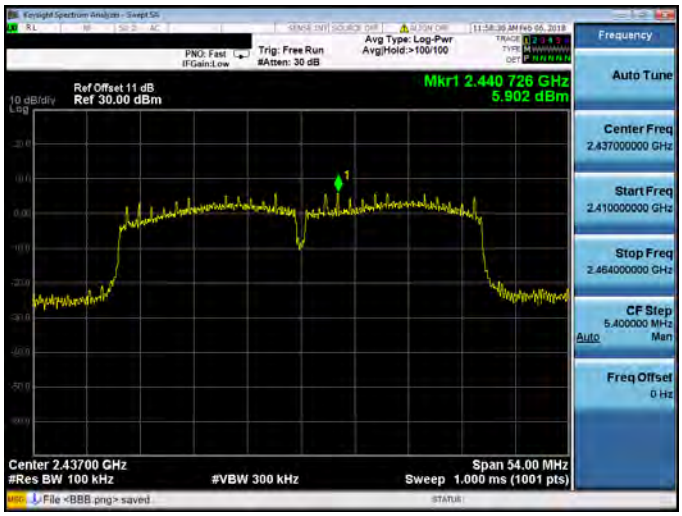
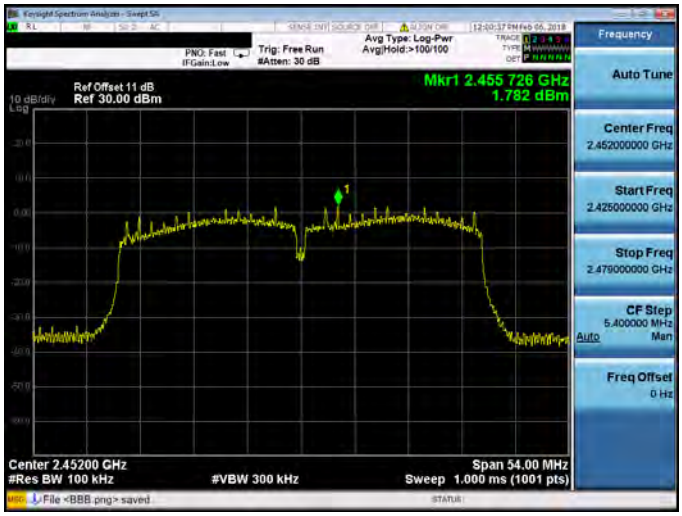
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-0	
2422 MHz	
2437 MHz	
2452 MHz	

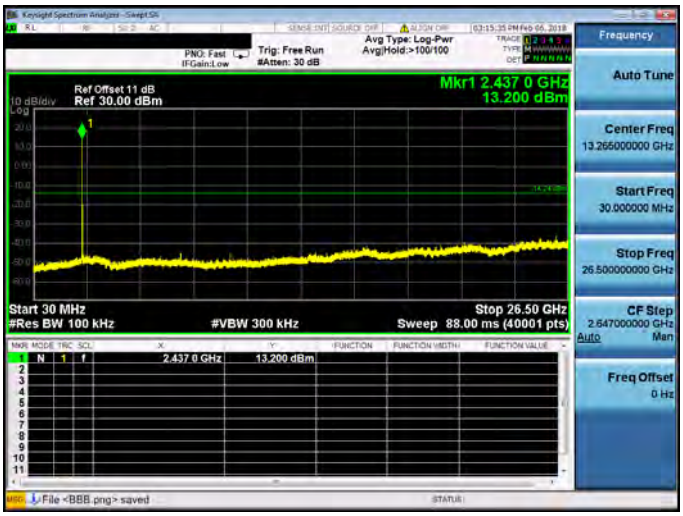
Mode 2: IEEE 802.11b Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

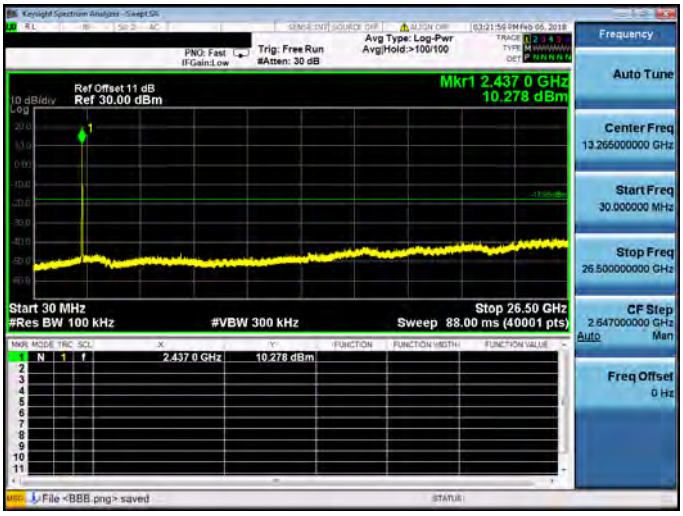
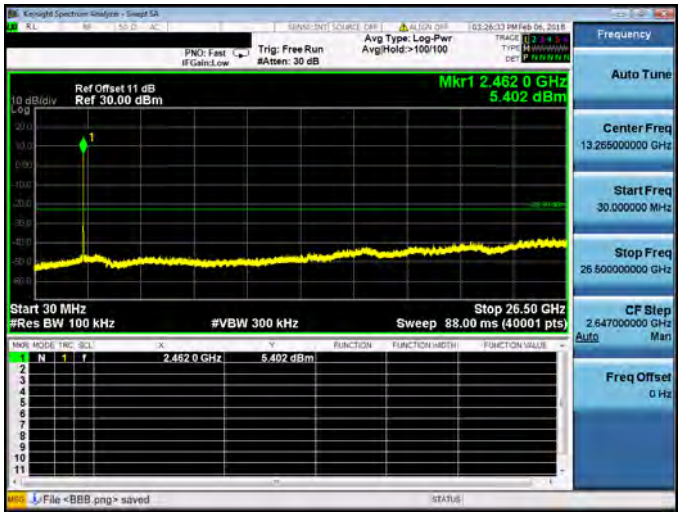
Mode 3: IEEE 802.11g Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

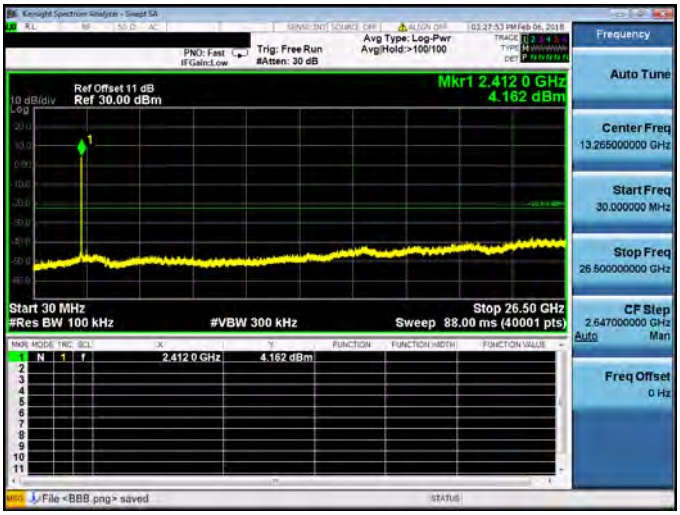
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

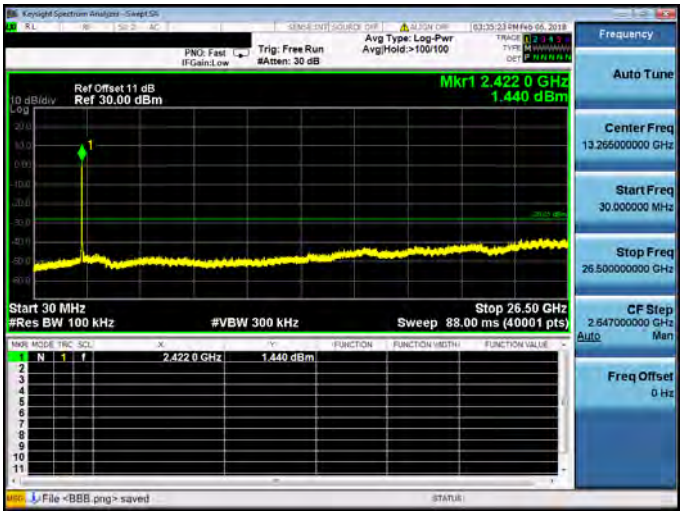
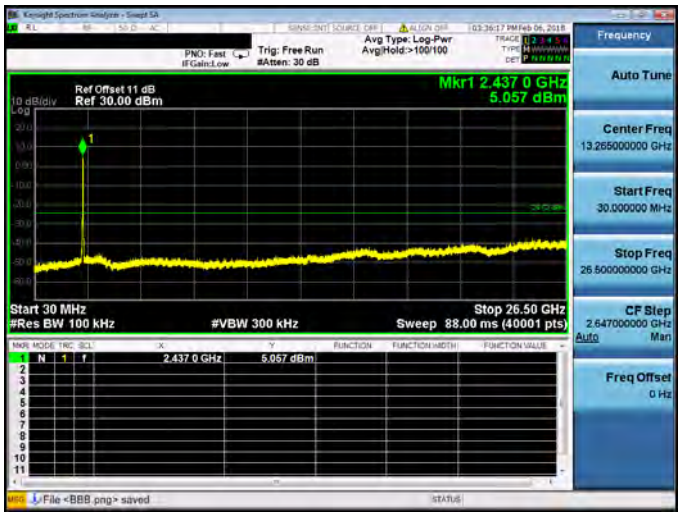
Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

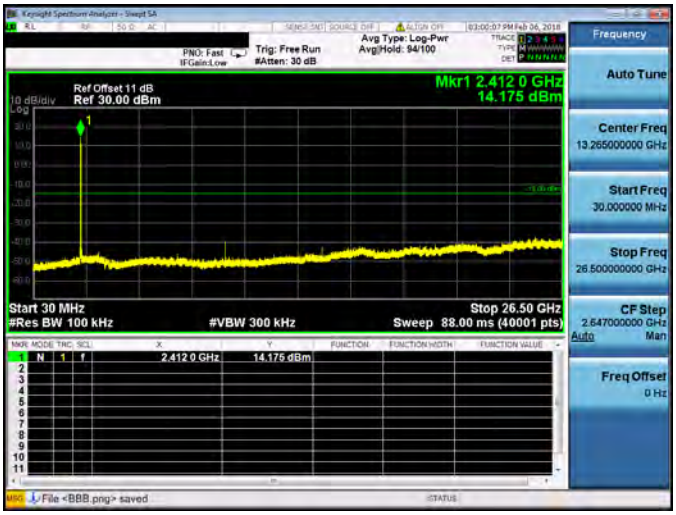
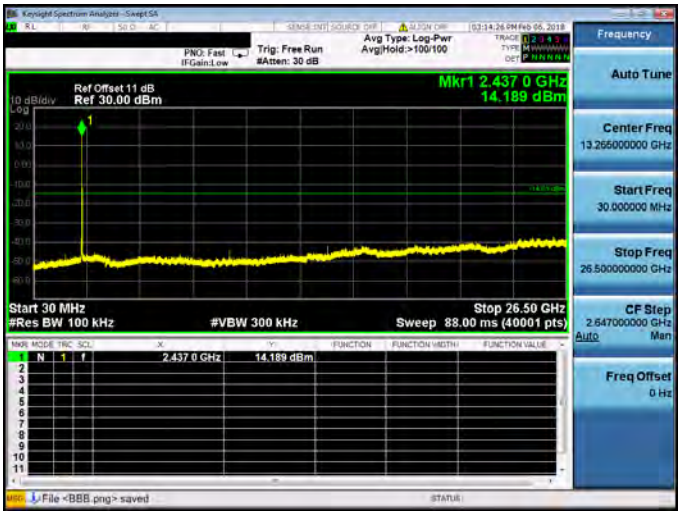
Out of Band Conducted Emissions

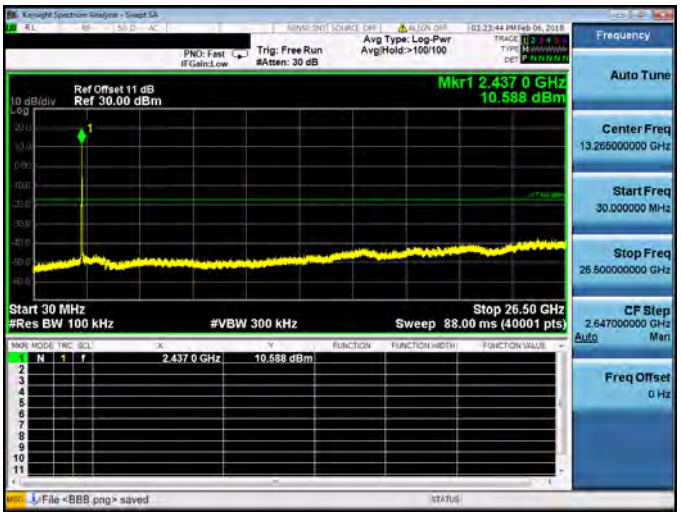
Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 3: IEEE 802.11g Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-0	
2422 MHz	
2437 MHz	
2452 MHz	

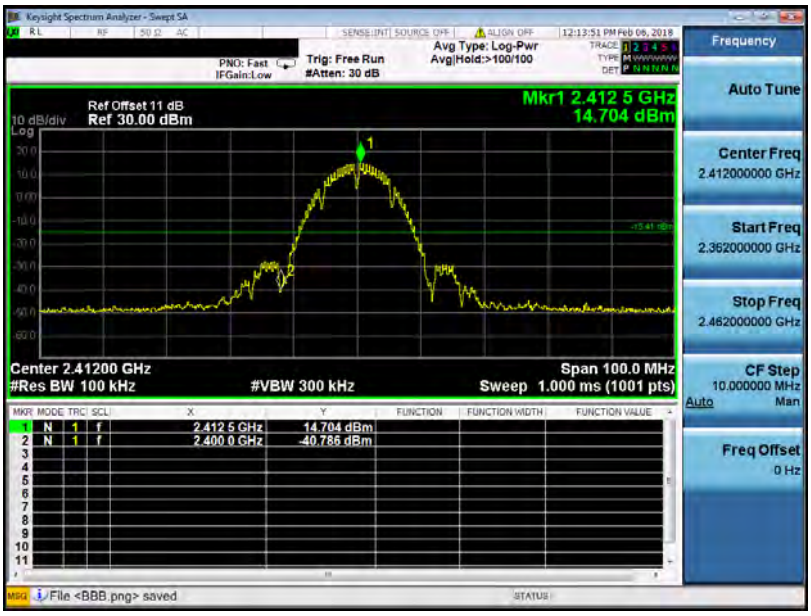
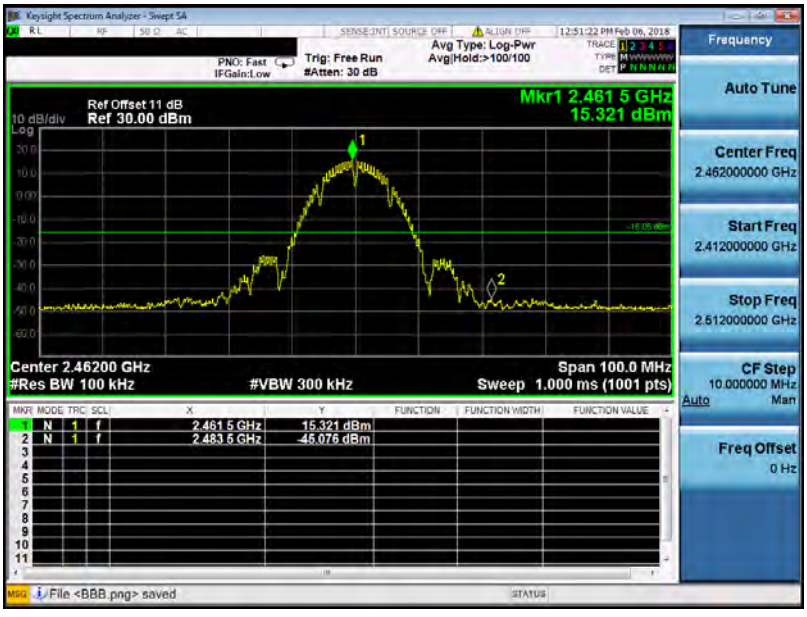
Mode 2: IEEE 802.11b Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

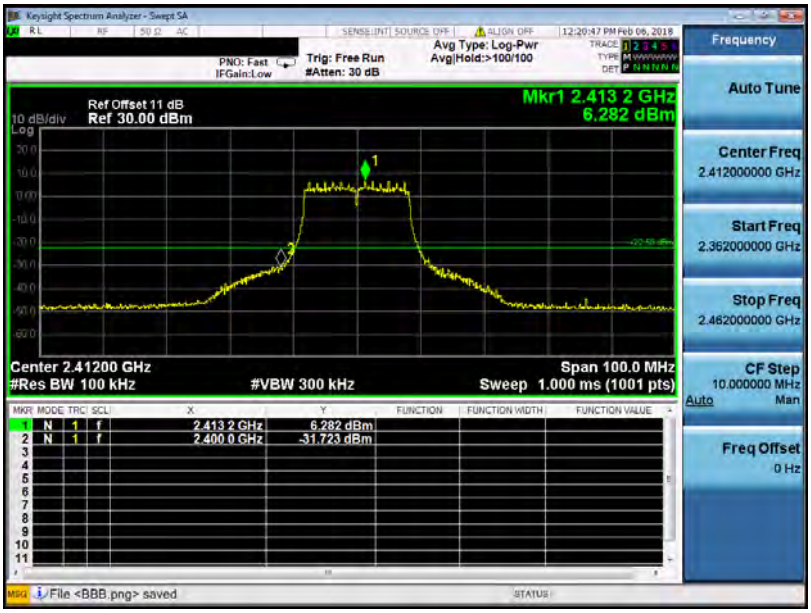
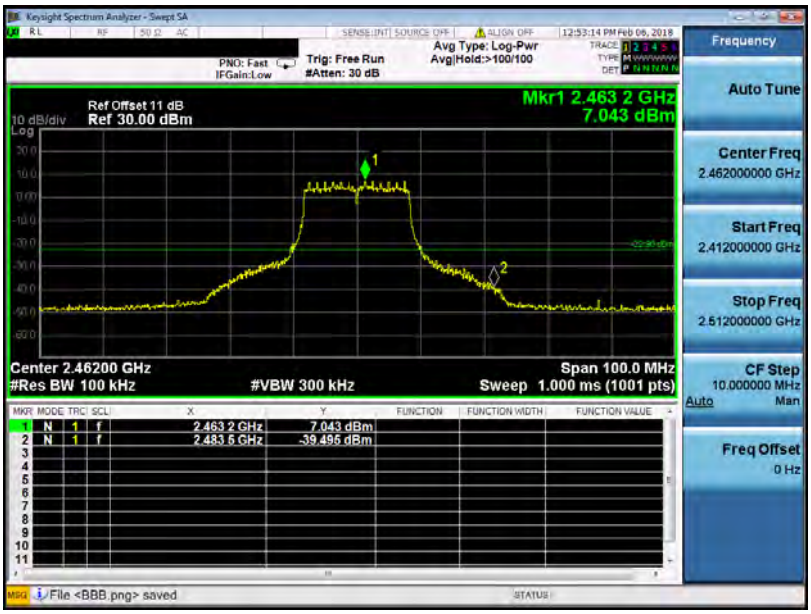
Mode 3: IEEE 802.11g Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

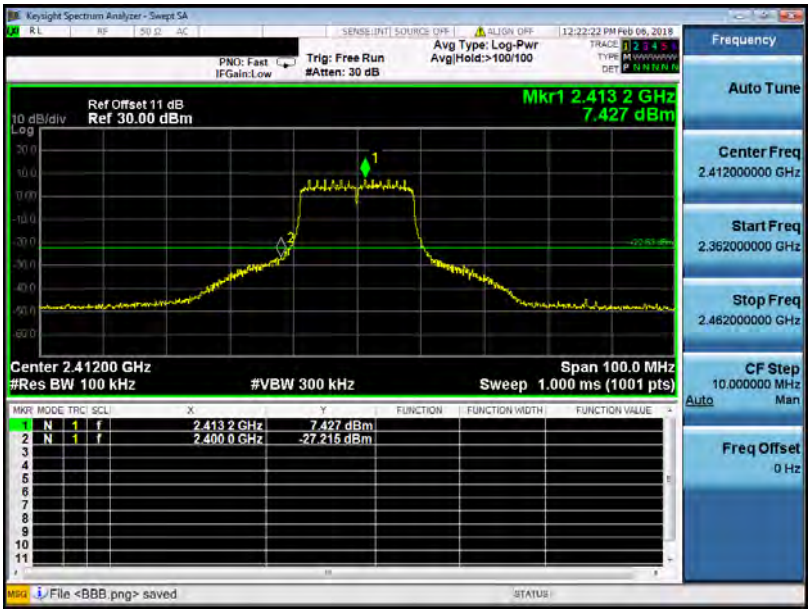
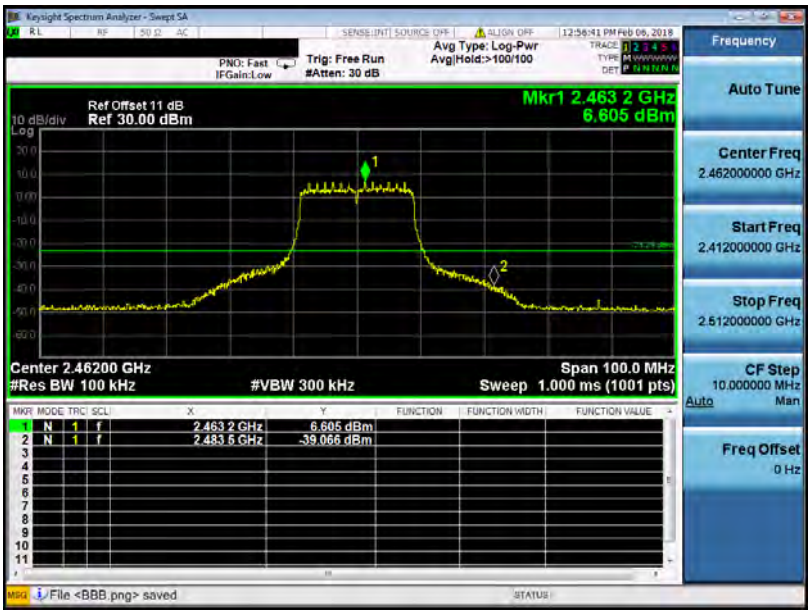
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

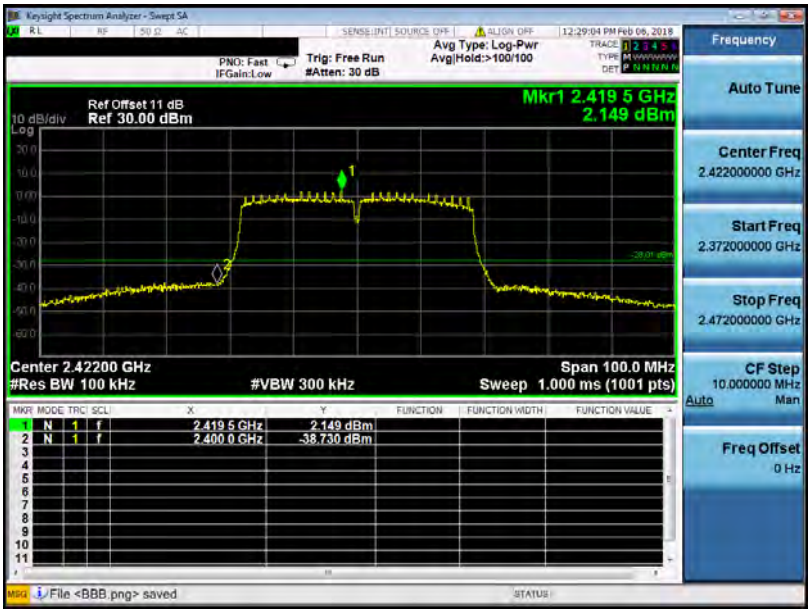
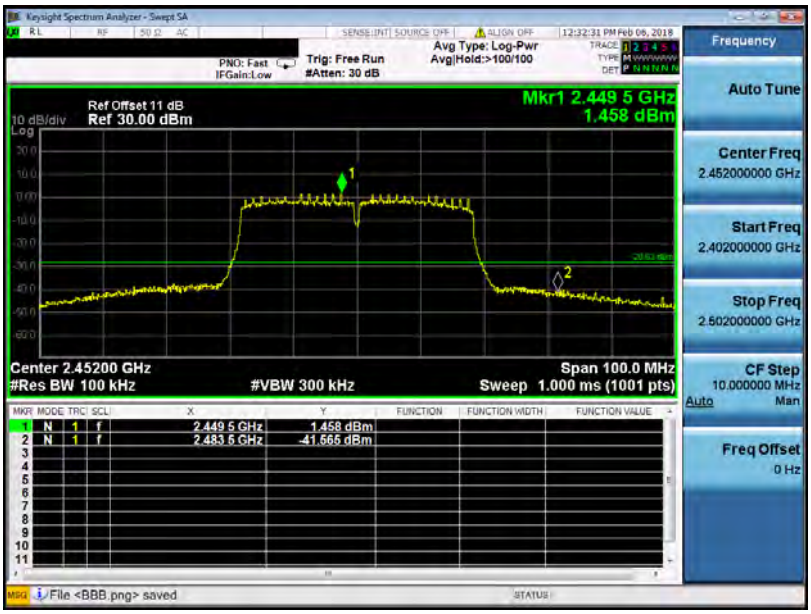
Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

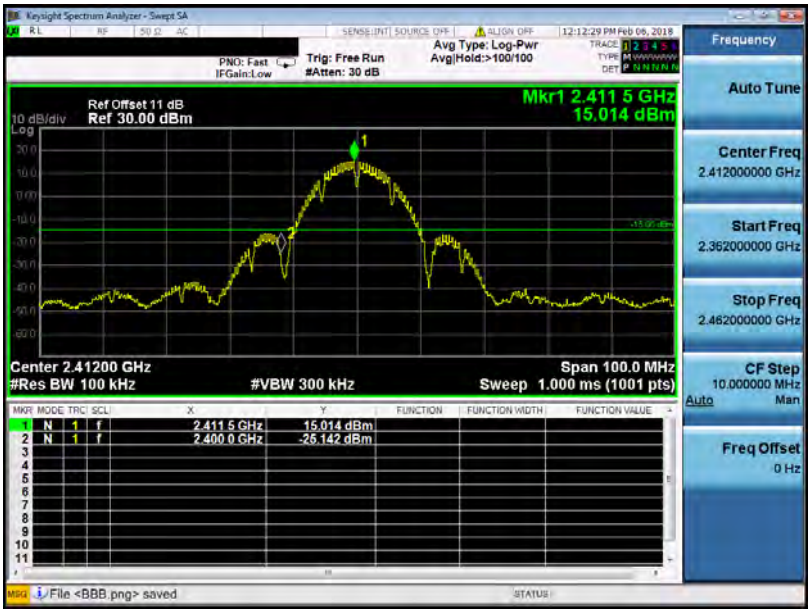
Conducted Band Edge

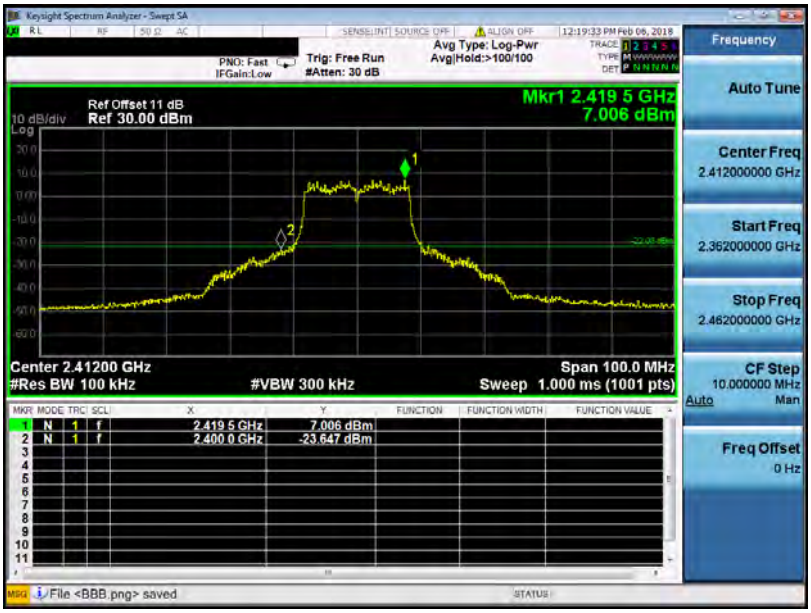
Mode 2: IEEE 802.11b Continuous TX mode_ANT-0	
2412 MHz	
2462 MHz	

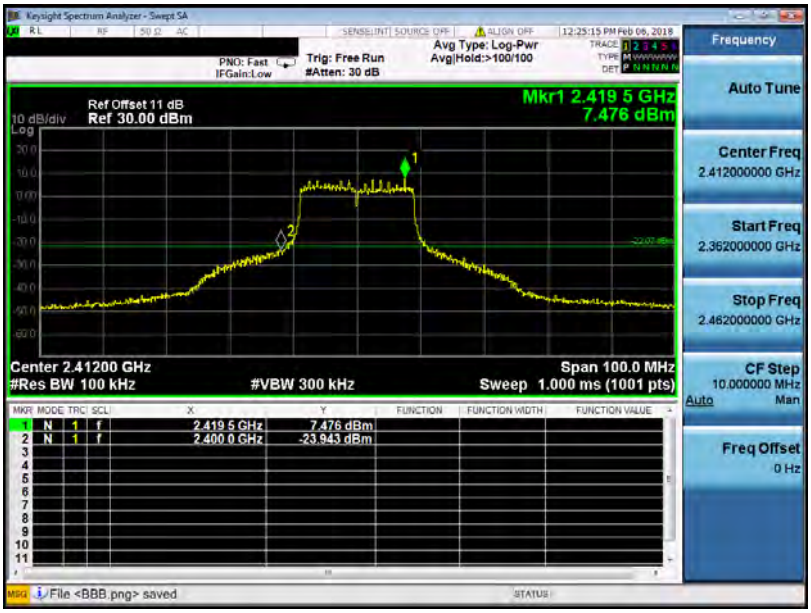
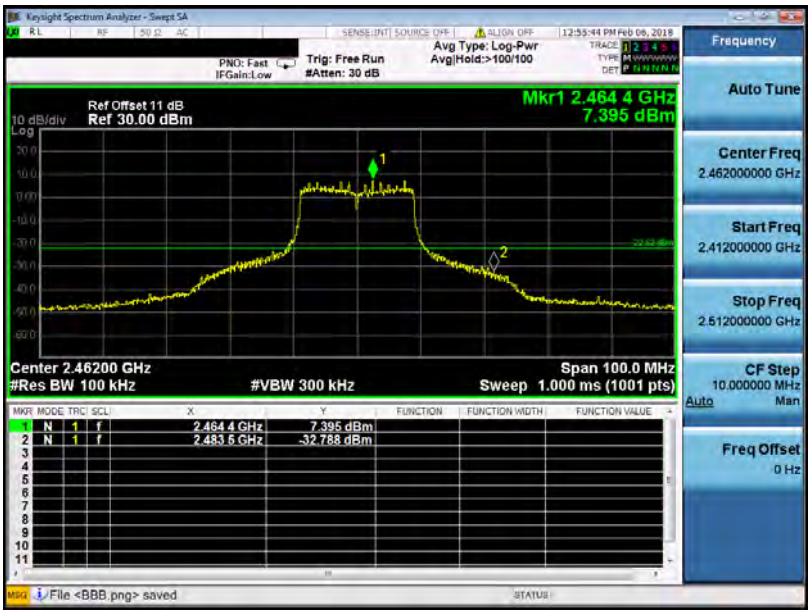
Mode 3: IEEE 802.11g Continuous TX mode_ANT-0	
2412 MHz	
2462 MHz	

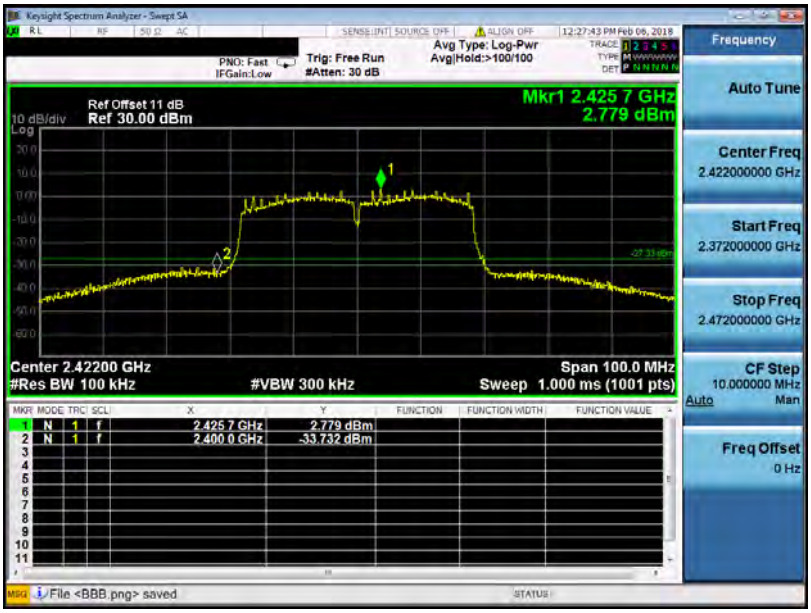
Mode 4: IEEE 802.11n 2.4GHz 20MHz Continuous TX mode_ANT-0	
2412 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-0	
2422 MHz	
2452 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 2.4GHz 20MHz Continuous TX mode_ANT-1	
2412 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Continuous TX mode_ANT-1	
2422 MHz	
2452 MHz	

Annex D. Antenna Requirement

■ **Antenna Description**

See section 2 – antenna information.

■ **Directional Gain Calculated**

For Maximum Conducted Output Power

∗ Directional Gain = 10*log{[10^(G1/10)+ 10^(G2/10)+…+10^(Gn/10)]/NANT} = 3.84 dBi < 6dBi

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b	3.84
IEEE 802.11g	3.84
IEEE 802.11n 2.4GHz 20MHz	3.84
IEEE 802.11n 2.4GHz 40MHz	3.84

For Maximum Power Density

∗ Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT} = 6.84 dBi > 6dBi

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b	6.84
IEEE 802.11g	6.84
IEEE 802.11n 2.4GHz 20MHz	6.84
IEEE 802.11n 2.4GHz 40MHz	6.84