RF Test Report

Applicant	:	Redpine Signals, Inc.
Product Type	:	Dual Band 802.11 a/b/g/n, Bluetooth 5.0, ZigBee Module
Trade Name	:	Redpine Signals Inc
Model Number	:	M7DB6
Test Specification	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Receive Date	:	Oct. 24, 2018
Test Period	:	Dec. 27, 2018 ~ Jan. 02, 2019
Issue Date	:	Jan. 11, 2019

Issue by

A Test Lab Techno Corp.
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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	Jan. 11, 2019	Initial Issue	Nina Lin

Verification of Compliance

Issued Date: Jan. 11, 2019

Applicant	:	Redpine Signals, Inc.
Product Type	:	Dual Band 802.11 a/b/g/n, Bluetooth 5.0, ZigBee Module
Trade Name	:	Redpine Signals Inc
Model Number	:	M7DB6
FCC ID	:	XF6-M7DB6
EUT Rated Voltage	:	DC 1.8 V, 0.4 A / DC 3.3 V, 0.4 A
Test Voltage	:	DC 3.3 V
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Test Result	:	Complied
Performing Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade District, Taoyuan City 33465, Taiwan (R.O.C) Tel：+886-3-2710188 / Fax：+886-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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

TABLE OF CONTENTS

1 General Information 5
1.1. Summary of Test Result 5
1.2. Measurement Uncertainty 6
2 EUT Description 7
3 Test Methodology 8
3.1. Mode of Operation 8
3.2. EUT Test Step 9
3.3. Configuration of Test System Details 10
3.4. Test Instruments 11
3.5. Test Site Environment 12
4 Measurement Procedure 13
4.1. Maximum Conducted Output Power Measurement 13
4.2. Radiated Emission Measurement 14
4.3. 20 dB RF Bandwidth Measurement 17
4.4. Carrier Frequency Separation Measurement 18
4.5. Number of Hopping Measurement 19
4.6. Time of Occupancy (Dwell Time) Measurement 20
4.7. Out of Band Conducted Emissions Measurement 21
4.8. Antenna Measurement 21
5 Test Results 22
Annex A. Conducted Test Results 22
Annex B. Radiated Emission Measurement 60

1 General Information

1.1. Summary of Test Result

Standard	Item	Result	Remark
FCC			
15.207	AC Power Conducted Emission	N/A	The device uses DC power source.
15.203	Antenna Requirement	PASS	-----
15.247(b)(1)	Max. Output Power	PASS	-----
15.247(d)	Transmitter Radiated Emissions	PASS	-----
15.247(a)(1)	20 dB RF Bandwidth	PASS	-----
15.247(a)(1)	Carrier Frequency Separation	PASS	-----
15.247(a)(1)(iii)	Number of Hopping	PASS	-----
15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	PASS	-----
15.247(d)	Out of Band Conducted Spurious Emission	PASS	-----

The test results of this report relate only to the tested sample(s) identified in this report.

Standard	Description
CFR47, Part 15, Subpart C	Intentional Radiators
ANSI C63. 10: 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
DA 00-705	Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems

1.2. Measurement Uncertainty

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

2 EUT Description

Applicant	Redpine Signals, Inc. 2107 N.First Street, Suite 680, San Jose, California, 95131-2019, United States				
Manufacturer	Redpine Signals, Inc. 2107 N.First Street, Suite 680, San Jose, California, 95131-2019, United States				
Product	Dual Band 802.11 a/b/g/n, Bluetooth 5.0, ZigBee Module				
Trade Name	Redpine Signals Inc				
Model Number	M7DB6				
FCC ID	XF6-M7DB6				
Frequency Range	2402 ~ 2480 MHz				
Modulation Type	GFSK for 1 Mbps				
	π/4-DQPSK for 2 Mbps				
	8DPSK for 3 Mbps				
Operate Temp. Range	-40 ~ +85 ℃				
Antenna information	Model	Type	Connector	Max. Gain (dBi)	
	RSIA7	PCB Trace Antenna	Internal	0.712	
	GW.71.5153	Dipole Antenna	SMA Reverse	Straight	3.3
				Bent	3.8
RF Output Power (Conducted)	Antenna Type: PCB Trace Antenna				
	GFSK for 1 Mbps	0.01109	W		
	π/4-DQPSK for 2 Mbps	0.01315	W		
	8DPSK for 3 Mbps	0.01343	W		
	Antenna Type: Dipole Antenna				
	GFSK for 1 Mbps	0.01005	W		
	π/4-DQPSK for 2 Mbps	0.00959	W		
	8DPSK for 3 Mbps	0.01202	W		

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:

Pre-Test Mode
Mode 1: Transmit mode
Mode 2: GFSK Continuous TX mode
Mode 3: π/4-DQPSK Continuous TX mode
Mode 4: 8DPSK Continuous TX mode

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

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

Note: Antenna model: GW.71.5153(Bent) is the worst cast.

RF Power setting	Antenna Type	Antenna Max. Gain (dBi)	Test Mode	Antenna Delivery	Frequency (MHz)
1	PCB Trace Antenna	0.712	Mode 2	1TX	2402, 2441, 2480
			Mode 4	1TX	2402, 2441, 2480
2	Dipole Antenna	3.3(Straight)/ 3.8(Bent)	Mode 2	1TX	2402, 2441, 2480
			Mode 4	1TX	2402, 2441, 2480
Note:Redpine software has antenna selection parameter which enables the user to select the antenna and it internally adjusts the gain parameters.Default antenna type will be Redpine PCB antenna.					

Final-Test Mode
Mode 1: Transmit mode
Mode 2: GFSK Continuous TX mode
Mode 4: 8DPSK Continuous TX mode

Description of Test Modes

Preliminary tests were performed in different modulation to find the worst case. The modulation has shown the worst-case in Maximum Conducted Output Power Measurement. Investigation has been done on all the possible configurations for searching the worst cases.

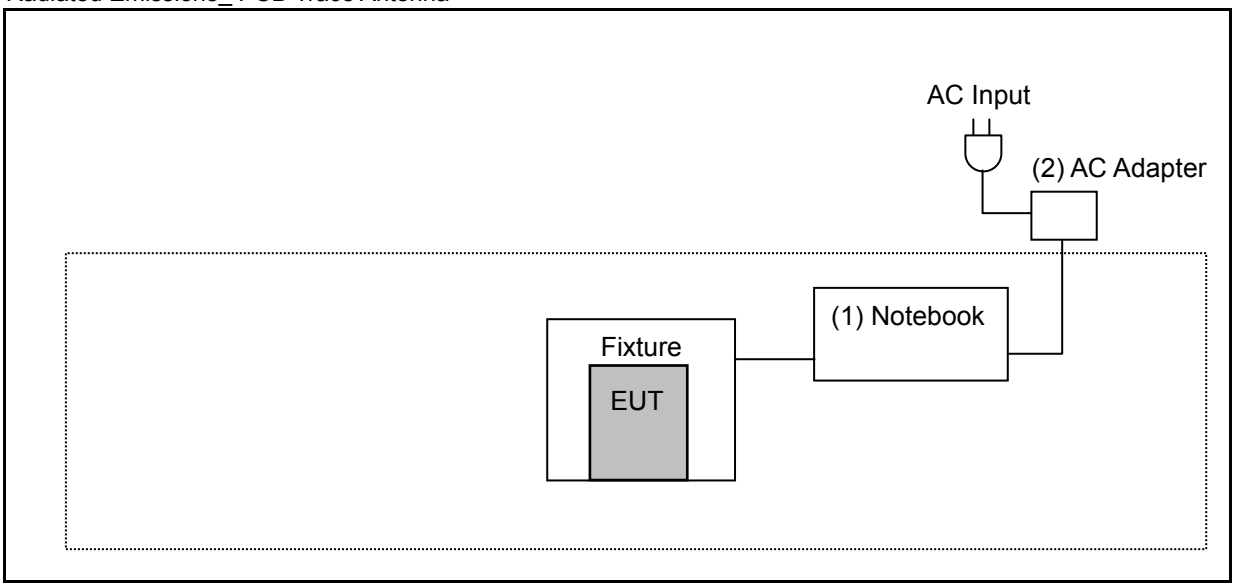
3.2. EUT Test Step

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

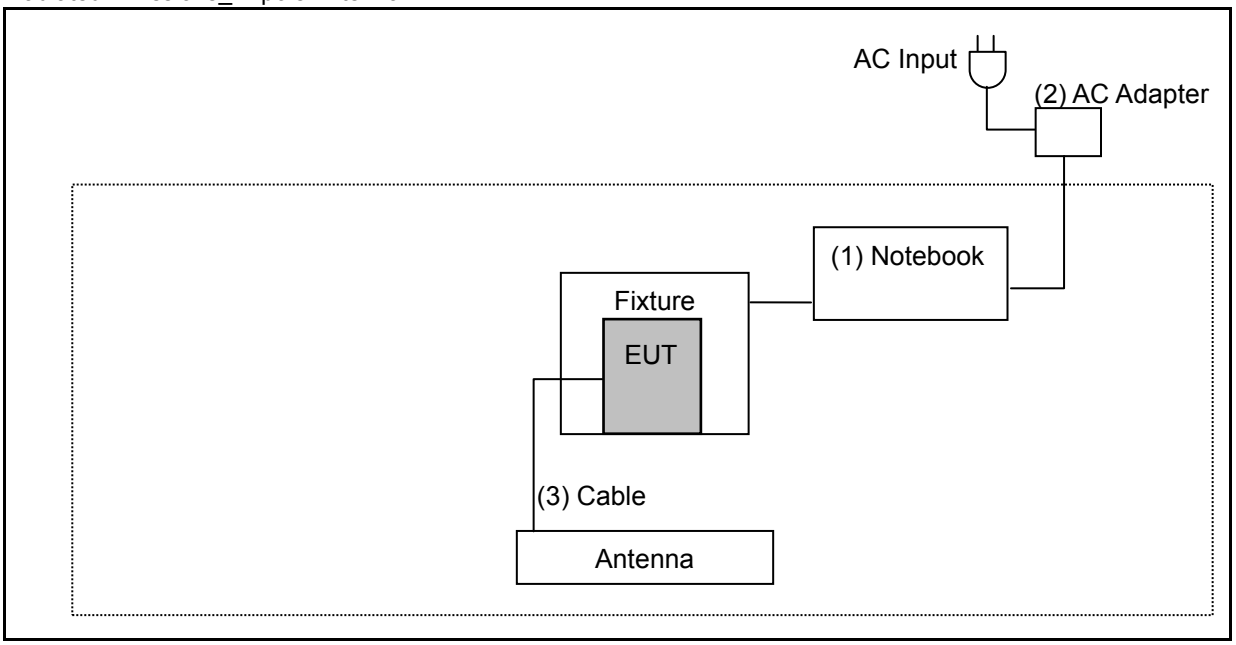
Measurement Software			
No.	Description	Software	Version
1	Radiated Emission	EZ EMC	1.1.4.4

3.3. Configuration of Test System Details

Radiated Emissions_ PCB Trace Antenna



Radiated Emissions_ Dipole Antenna



Devices Description						
Product		Manufacturer	Model Number	Serial Number	Power Cord	Loss
(1)	Notebook	DELL	Inspiron 15	726RWN2	---	---
(2)	AC Adapter	DELL	LA65NS2-01	---	Non-Shielded, 0.8 m	---
(3)	Cable	Amphenol RF	336314-12-0100	---	---	0.38 dB

3.4. Test Instruments

For Radiated Emissions

Test Period: Dec. 27 ~ Dec. 28, 2018

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44G Hz)	Keysight	N9010A	MY52221312	01/15/2018	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/19/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/10/2018	1 year
Pre Amplifier (26.5~40 GHz)	EMCI	EMC2654045	980028	08/23/2018	1 year
Trilog Broadband Antenna	SCHWARZBECK MESS-ELEKTRONIK	SB AC VULB	9168-0841	03/02/2018	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/23/2018	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	EMC102-KM-KM-14 000	151001	02/20/2018	1 year
Broadband Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	9170	9170-320	08/07/2018	1 year

For Conducted

Test Period: Jan. 02, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	08/29/2018	1 year
Power Meter	Anritsu	ML2495A	1135009	08/29/2018	1 year
EXA Signal Analyzer	Keysight	N9010A	MY52221312	01/15/2018	1 year
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/25/2018	1 year
Microwave Cable	EMCI	EMC104-SM-SM13 000	170814	10/30/2018	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	990

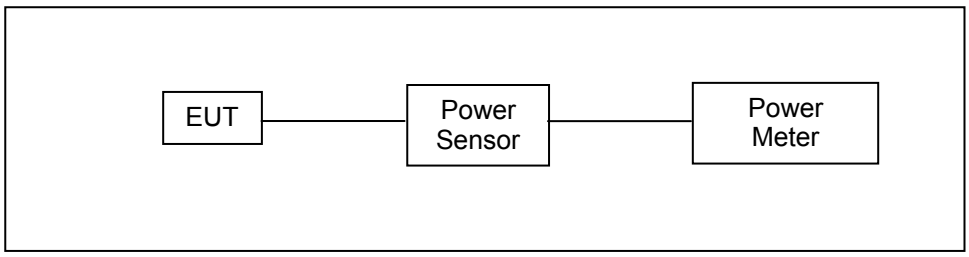
4 Measurement Procedure

4.1. Maximum Conducted Output Power Measurement

■ **Limit**

For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels < 0.125 watt.

■ **Test Setup**



■ **Test Procedure**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. 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. The maximum peak output power shall not exceed 1 watt.

Use a direct connection between the antenna port of transmitter and the power sensor, for prevent the power sensor input attenuation 40-50 dB. Set the RBW Bandwidth of the emission or use a channel power meter mode.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to (GAIN - 6)/3 dBm.

The antenna port of the EUT was connected to the input of a power sensor. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

4.2. Radiated Emission Measurement

■ **Limit**

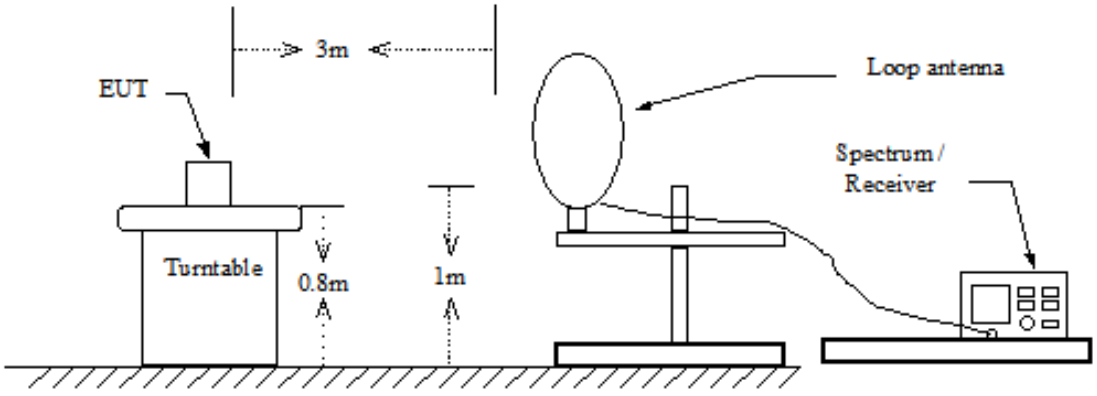
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m at meter)	Measurement Distance (meters)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 - 88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

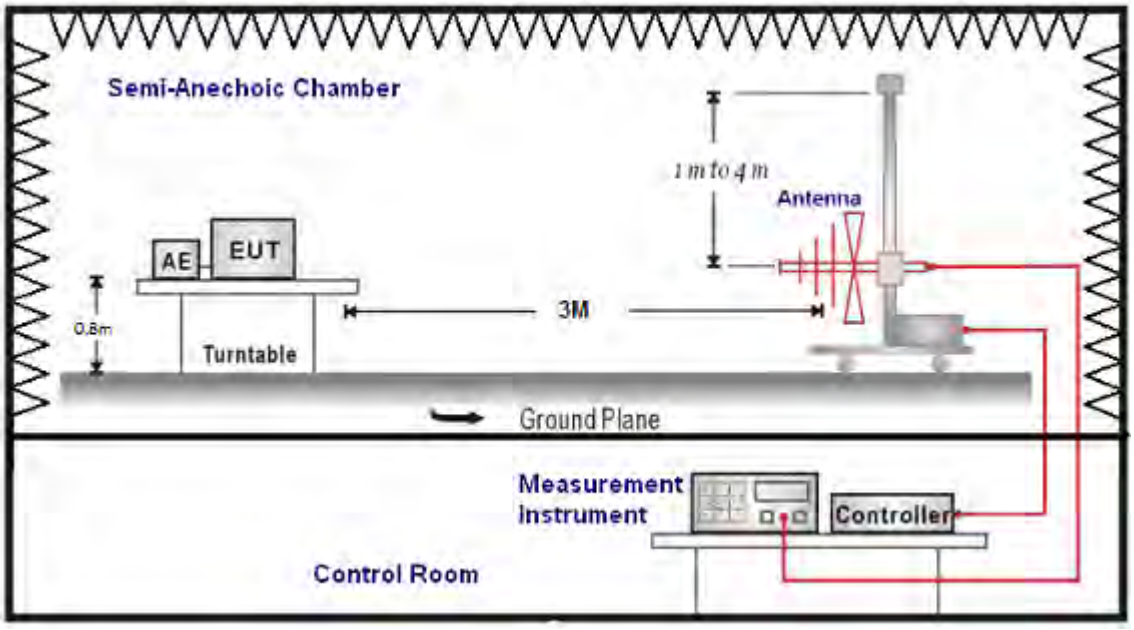
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this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

■ **Setup**

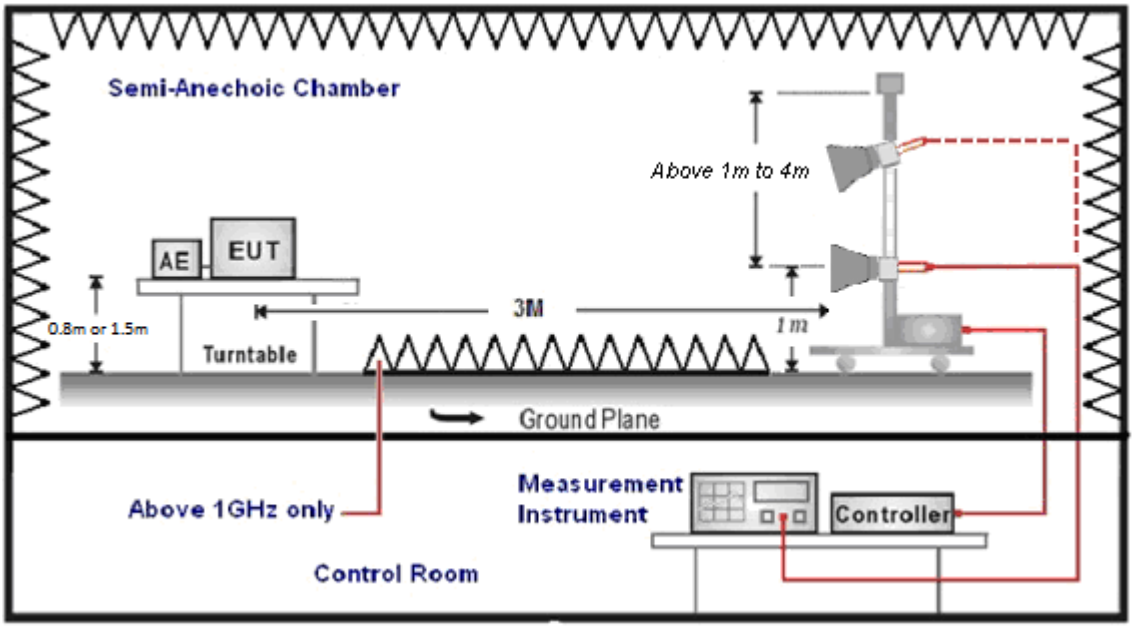
9 kHz ~ 30 MHz



Below 1 GHz



Above 1 GHz



■ **Test Procedure**

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

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle >98 % / 1/T for average measurements when Duty cycle <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 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20 dB/decade).

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

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

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

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

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

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

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

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

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

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

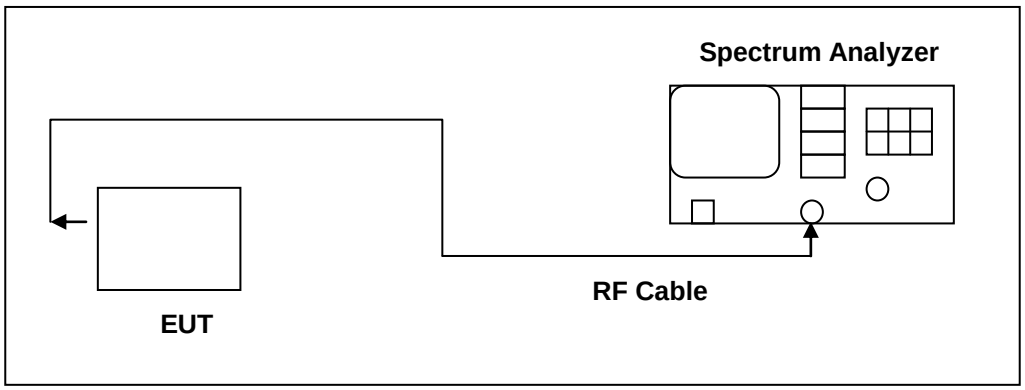
Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.

4.3. 20 dB RF Bandwidth Measurement

■ **Limit**

N/A

■ **Test Setup**



■ **Test Procedure**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10 dB passive attenuator. A fully charged battery was used for the supply voltage. The Bluetooth frequency hopping function of the EUT was enabled. The spectrum analyzer used the following settings:

1. Span = approx. 2 to 3 times the 20 dB bandwidth, centered on a hopping frequency
2. RBW ≥ 1 % of the 20 dB span
3. VBW ≥ RBW
4. Sweep = auto
5. Detector function = peak
6. Trace = max hold

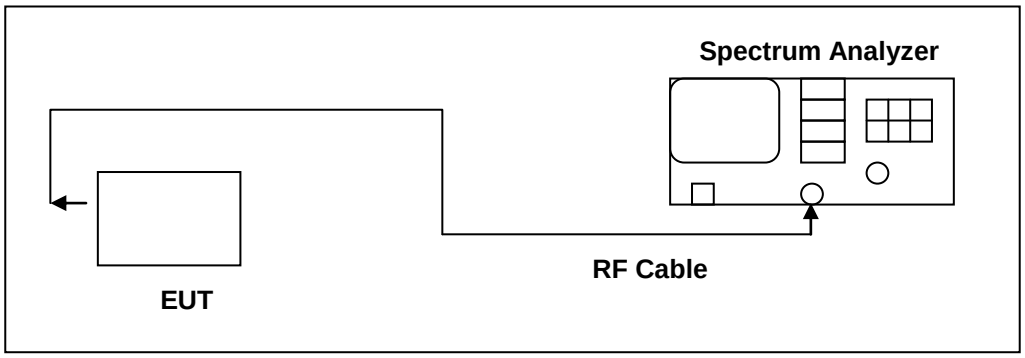
The trace was allowed to stabilize. The EUT was transmitting at its maximum data rate. The marker-to-peak function was used to set the marker to the peak of the emission. The marker-delta function was used to measure 20 dB down one side of the emission. The marker-delta function and marker was moved to the other side of the emission until it was even with the reference marker. The marker-delta reading at this point was the 20 dB bandwidth of the emission.

4.4. Carrier Frequency Separation Measurement

■ **Limit**

Title 47 of the CFR, Part 15 Subpart (c) 15.247(a)(1) requires the measurement of the bandwidth of the transmission between the -20 dB points on the transmitted spectrum. The results of this test determine the limits for channel spacing. The channel spacing shall be a minimum of 25 kHz or the 20 dB bandwidth, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel.

■ **Test Setup**



■ **Test Procedure**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10 dB passive attenuator. A fully charged battery was used for the supply voltage. The Bluetooth frequency hopping function of the EUT was enabled. The following spectrum analyzer settings were used:

1. Span = wide enough to capture the peaks of two adjacent channels
2. Resolution (or IF) Bandwidth (RBW) ≥ 1 % of the span
3. Video (or Average) Bandwidth (VBW) ≥ RBW
4. Sweep = auto
5. Detector function = peak
6. Trace = max hold

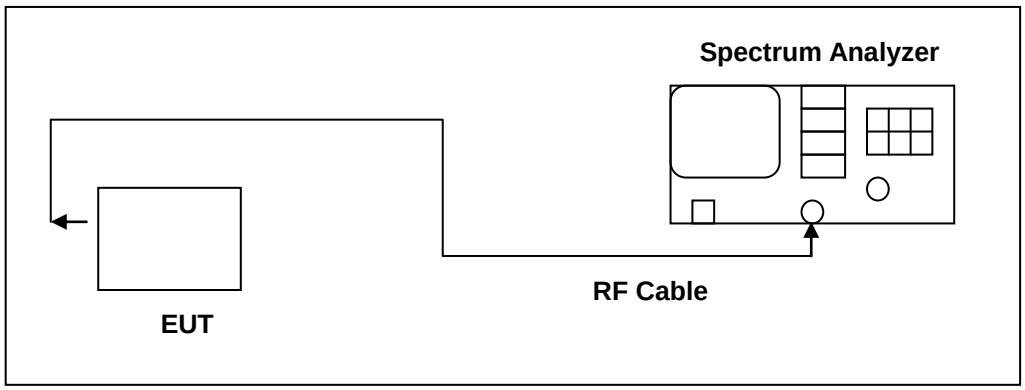
The trace was allowed to stabilize. The marker-delta function was used to determine the separation between the peaks of the adjacent channels.

4.5. Number of Hopping Measurement

■ **Limit**

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels.

■ **Test Setup**



■ **Test Procedure**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10 dB passive attenuator. A fully charged battery was used for the supply voltage. The Bluetooth frequency hopping function of the EUT was enabled. The spectrum analyzer used the following settings:

1. Span = the frequency band of operation
2. RBW ≥ 1 % of the span
3. VBW ≥ RBW
4. Sweep = auto
5. Detector function = peak
6. Trace = max hold

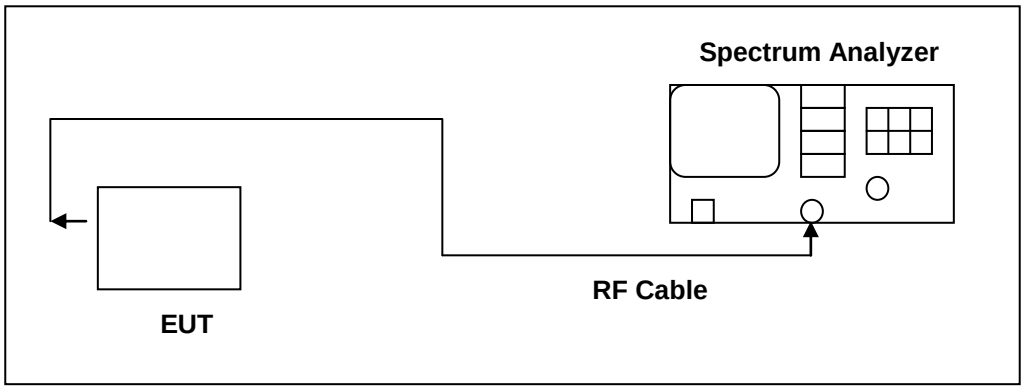
The trace was allowed to stabilize.

4.6. Time of Occupancy (Dwell Time) Measurement

■ **Limit**

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

■ **Test Setup**



■ **Test Procedure**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. The RF output port of the Equipment-Under-Test is directly coupled to the input of the spectrum through a specialized RF connector and a 10 dB passive attenuator. A fully charged battery was used for the supply voltage. The Bluetooth hopping function of the EUT was enabled. The following spectrum analyzer settings were used:

1. Span = zero span, centered on a hopping channel
2. RBW = 1 MHz
3. VBW ≥ RBW
4. Sweep = as necessary to capture the entire dwell time per hopping channel
5. Detector function = peak
6. Trace = max hold

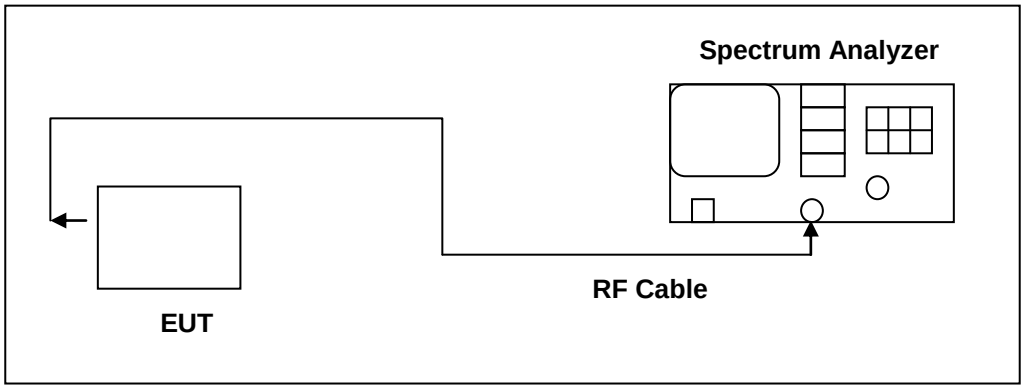
The marker-delta function was used to determine the dwell time.

4.7. 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**

Testing must be done according to this procedure, FCC Public Notice DA 00-705 - Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems. This is the only method recognized by the FCC. 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 (Channel 0, 39, 78)

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

■ **Antenna Connector Construction**

See section 2 – antenna information.

5 Test Results

Annex A. Conducted Test Results

Antenna Type: PCB Trace Antenna

Maximum Conducted Output Power Measurement

Test Mode	Frequency (MHz)	Packet Type	RF Power setting in Test Software	Test Software Version
Mode 2	2402	DH1	10.00	FCC Test App
		DH3	10.00	
		DH5	10.00	
	2441	DH1	11.00	
		DH3	11.00	
		DH5	11.00	
	2480	DH1	12.00	
		DH3	12.00	
		DH5	12.00	
Mode 3	2402	2DH1	11.00	
		2DH3	11.00	
		2DH5	11.00	
	2441	2DH1	11.00	
		2DH3	11.00	
		2DH5	11.00	
	2480	2DH1	12.00	
		2DH3	12.00	
		2DH5	12.00	
Mode 4	2402	3DH1	11.00	
		3DH3	11.00	
		3DH5	11.00	
	2441	3DH1	11.00	
		3DH3	11.00	
		3DH5	11.00	
	2480	3DH1	12.00	
		3DH3	12.00	
		3DH5	12.00	

Test Mode	Frequency (MHz)	Packet Type	Average Power		Peak Power		Limit (W)
			(dBm)	(W)	(dBm)	(W)	
Mode 2	2402	DH1	9.06	0.00805	10.38	0.01091	≤ 0.125
		DH3	9.09	0.00811	10.40	0.01096	≤ 0.125
		DH5	9.11	0.00815	10.43	0.01104	≤ 0.125
	2441	DH1	9.14	0.00820	10.40	0.01096	≤ 0.125
		DH3	9.16	0.00824	10.43	0.01104	≤ 0.125
		DH5	9.19	0.00830	**10.45**	**0.01109**	≤ 0.125
	2480	DH1	8.88	0.00773	10.10	0.01023	≤ 0.125
		DH3	8.91	0.00778	10.12	0.01028	≤ 0.125
		DH5	8.94	0.00783	10.14	0.01033	≤ 0.125
Mode 3	2402	2DH1	9.87	0.00971	11.13	0.01297	≤ 0.125
		2DH3	9.90	0.00977	11.16	0.01306	≤ 0.125
		2DH5	9.92	0.00982	**11.19**	**0.01315**	≤ 0.125
	2441	2DH1	8.90	0.00776	10.27	0.01064	≤ 0.125
		2DH3	8.93	0.00782	10.29	0.01069	≤ 0.125
		2DH5	8.95	0.00785	10.32	0.01076	≤ 0.125
	2480	2DH1	8.80	0.00759	10.06	0.01014	≤ 0.125
		2DH3	8.83	0.00764	10.09	0.01021	≤ 0.125
		2DH5	8.85	0.00767	10.11	0.01026	≤ 0.125
Mode 4	2402	3DH1	9.88	0.00973	11.21	0.01321	≤ 0.125
		3DH3	9.91	0.00979	11.25	0.01334	≤ 0.125
		3DH5	9.94	0.00986	**11.28**	**0.01343**	≤ 0.125
	2441	3DH1	9.05	0.00804	10.29	0.01069	≤ 0.125
		3DH3	9.07	0.00807	10.32	0.01076	≤ 0.125
		3DH5	9.10	0.00813	10.35	0.01084	≤ 0.125
	2480	3DH1	8.83	0.00764	10.24	0.01057	≤ 0.125
		3DH3	8.85	0.00767	10.26	0.01062	≤ 0.125
		3DH5	8.87	0.00771	10.29	0.01069	≤ 0.125

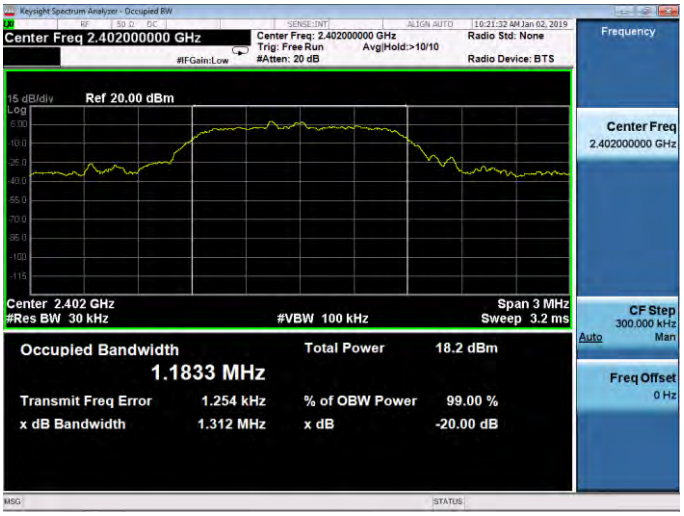
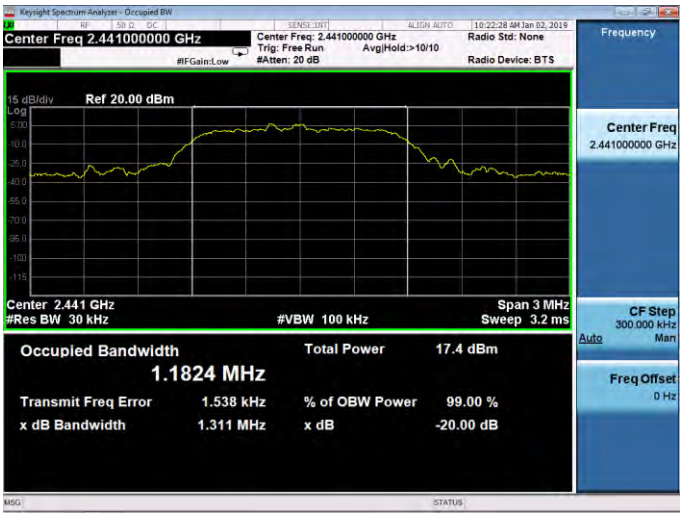
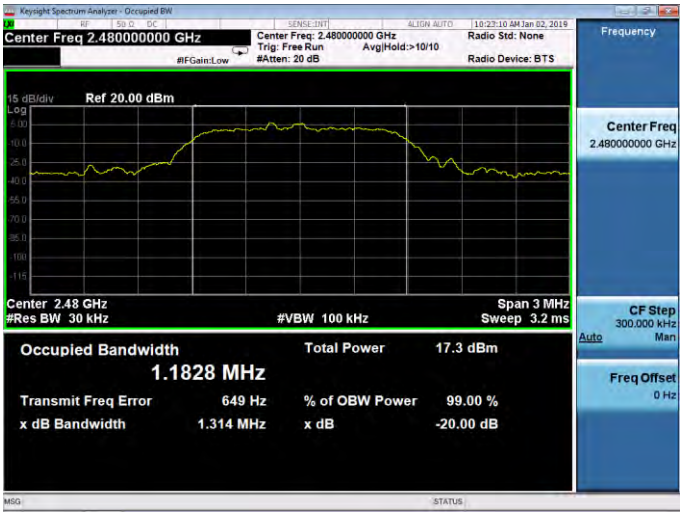
Note: The relevant measured result has the offset with cable loss already.

20 dB RF Bandwidth Measurement

Test Mode	Frequency (MHz)	Measurement Results (MHz)
Mode 2	2402	1.034
	2441	1.033
	2480	1.032
Mode 4	2402	1.312
	2441	1.311
	2480	1.314

■ Test Graphs

Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

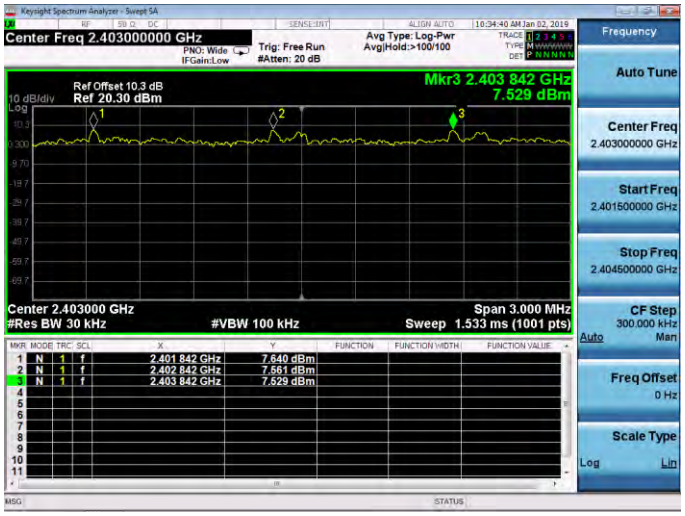
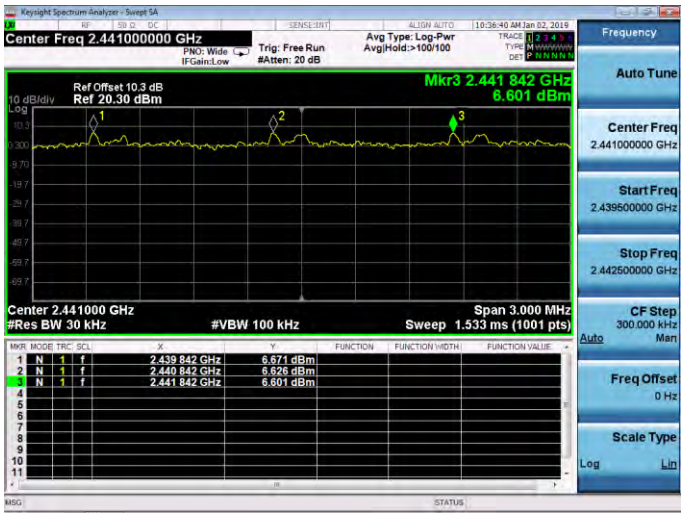
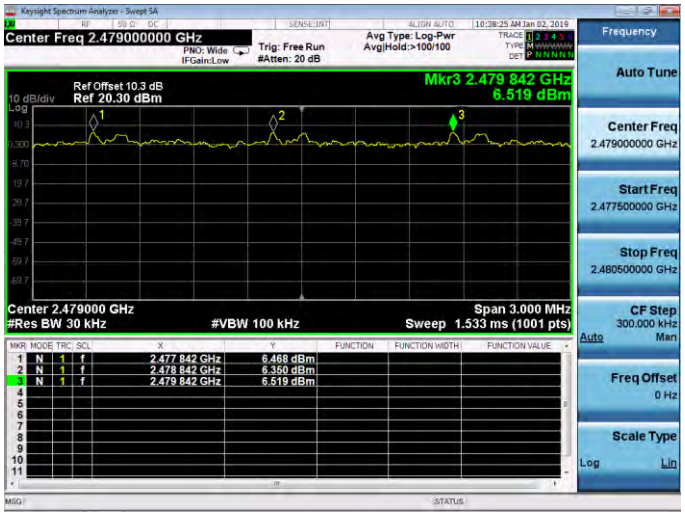
Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Carrier Frequency Separation Measurement

Test Mode	Frequency (MHz)	Measurement Results (MHz)	Limit (MHz)
Mode 2	2402	1.000	≥ 0.689
	2441	1.000	≥ 0.689
	2480	1.000	≥ 0.688
Mode 4	2402	1.000	≥ 0.875
	2441	1.000	≥ 0.874
	2480	1.000	≥ 0.876

■ Test Graphs

Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Number of Hopping Measurement

Test Mode	Frequency Range (MHz)	Measurement Results (Ch)	Limit (ch)
Mode 2	2402 - 2480	79	≥ 15
Mode 4	2402 - 2480	79	≥ 15

■ **Test Graphs**

Mode 2: GFSK Continuous TX mode	
CH0~CH39	
CH40~CH78	

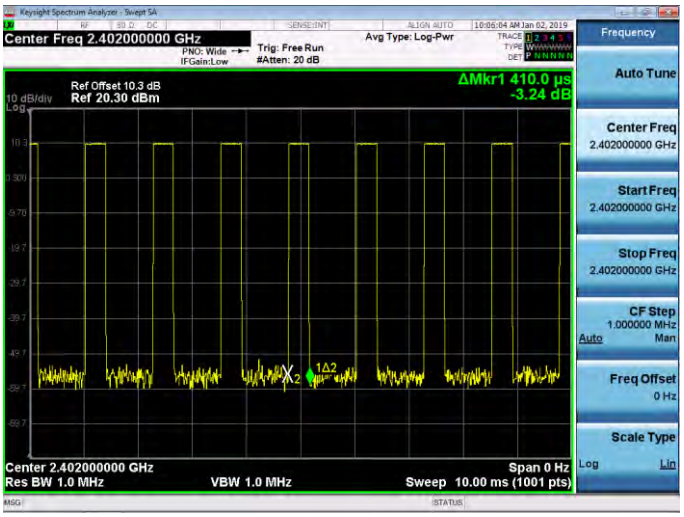
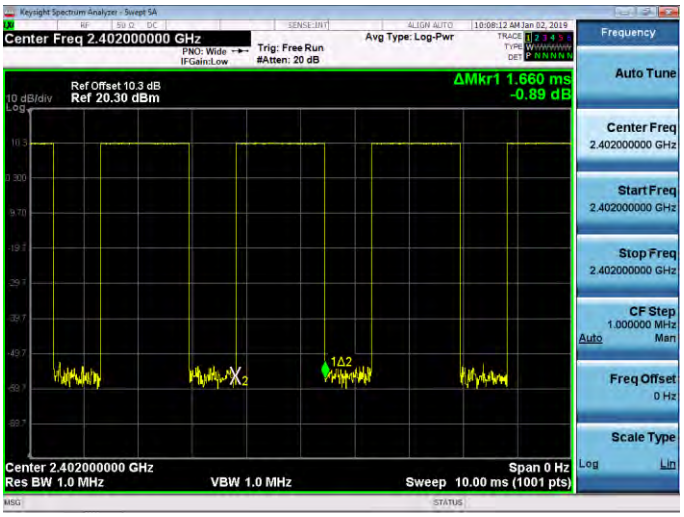
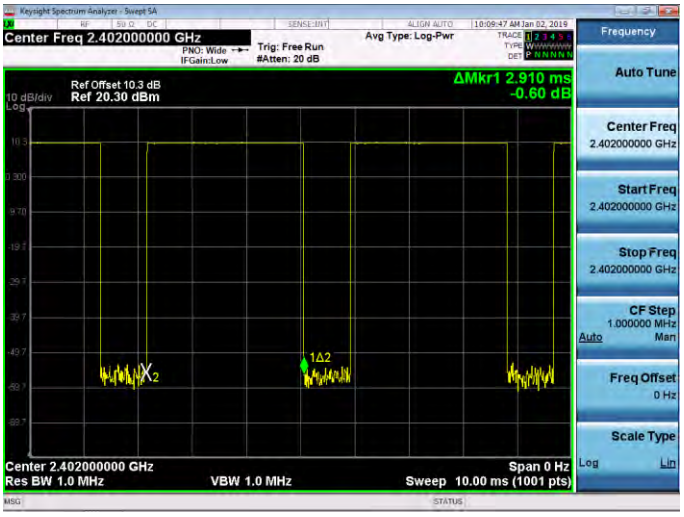
Mode 4: 8DPSK Continuous TX mode	
CH0~CH39	
CH40~CH78	

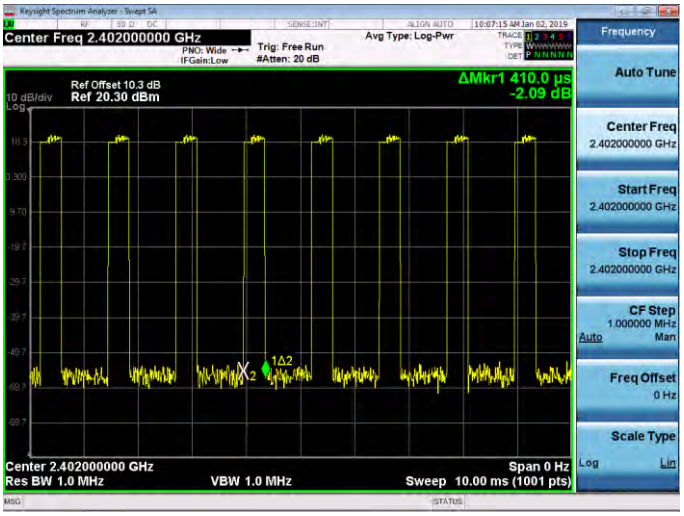
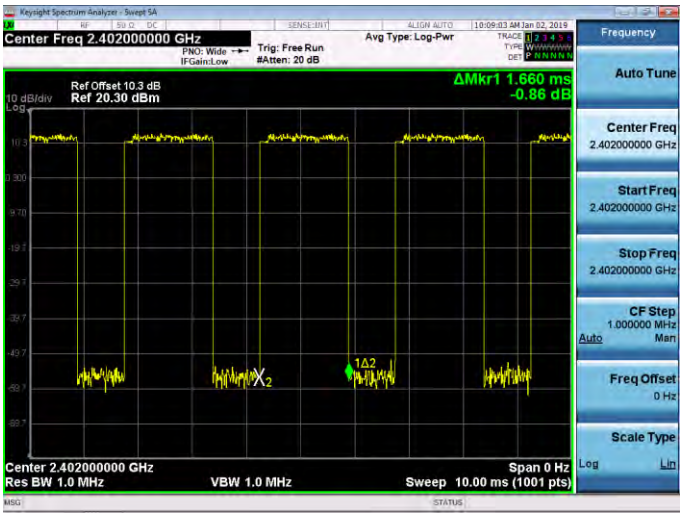
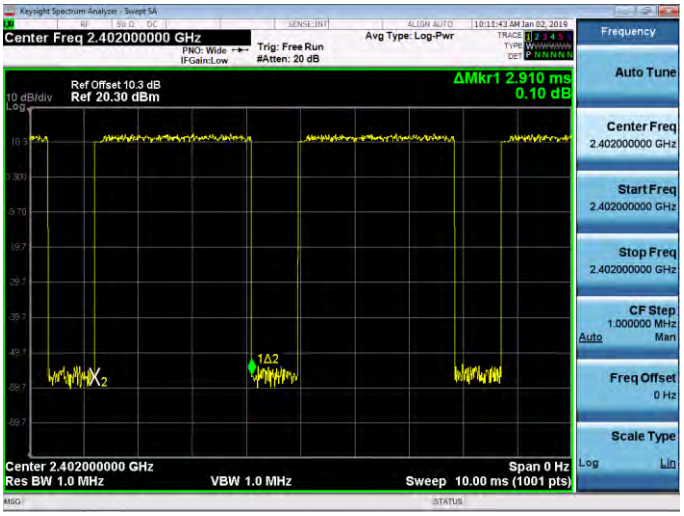
Time of Occupancy (Dwell Time) Measurement

Mode 2: GFSK Continuous TX mode	
DH1	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	800/79CH = 10.13(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 10.13 = 320.108(times)
Each Channel Dwell Times (2)	0.410 ms (sec)
Dwell Times on Cycle (1) * (2)	131.244 ms (sec)
LIMIT(msec)	< = 400
DH3	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	400/79CH = 5.1(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 5.1 = 161.16(times)
Each Channel Dwell Times (2)	1.660 ms (sec)
Dwell Times on Cycle (1) * (2)	265.427 ms (sec)
LIMIT(msec)	< = 400
DH5	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	266.7/79CH = 3.37(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 3.37 = 106.492(times)
Each Channel Dwell Times (2)	2.910 ms (sec)
Dwell Times on Cycle (1) * (2)	310.811 ms (sec)
LIMIT(msec)	< = 400

Mode 4: 8DPSK Continuous TX mode	
3DH1	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	800/79CH = 10.13(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 10.13 = 320.108(times)
Each Channel Dwell Times (2)	0.410 ms (sec)
Dwell Times on Cycle (1) * (2)	131.244 ms (sec)
LIMIT(msec)	< = 400
3DH3	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	400/79CH = 5.1(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 5.1 = 161.16(times)
Each Channel Dwell Times (2)	1.660 ms (sec)
Dwell Times on Cycle (1) * (2)	265.427 ms (sec)
LIMIT(msec)	< = 400
3DH5	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	266.7/79CH = 3.37(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 3.37 = 106.492(times)
Each Channel Dwell Times (2)	2.910 ms (sec)
Dwell Times on Cycle (1) * (2)	310.811 ms (sec)
LIMIT(msec)	< = 400

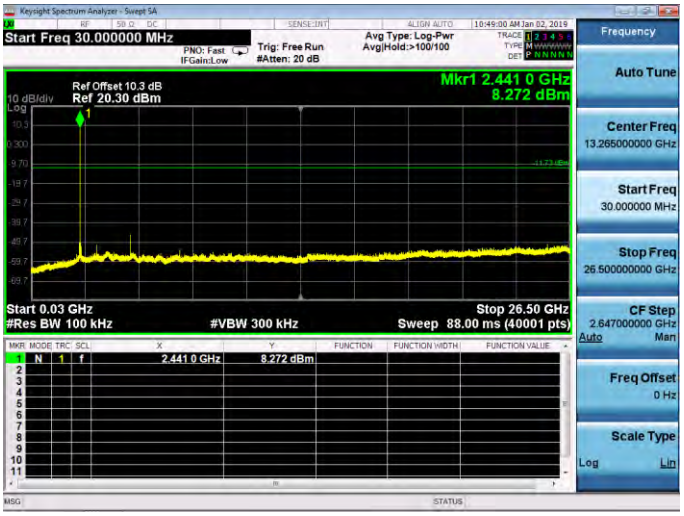
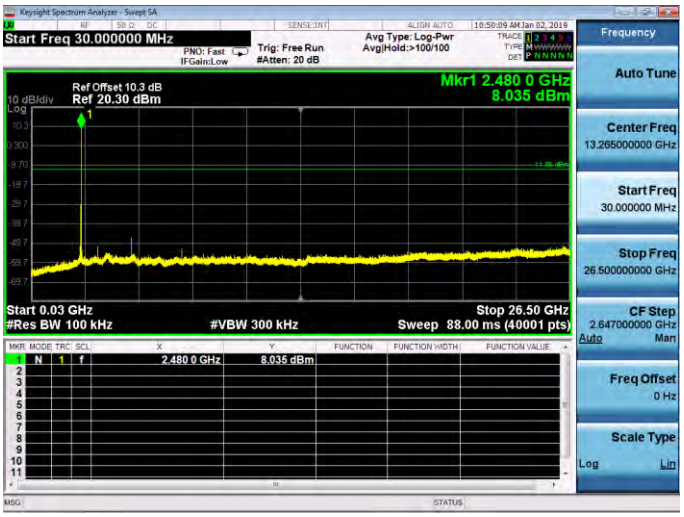
■ Test Graphs

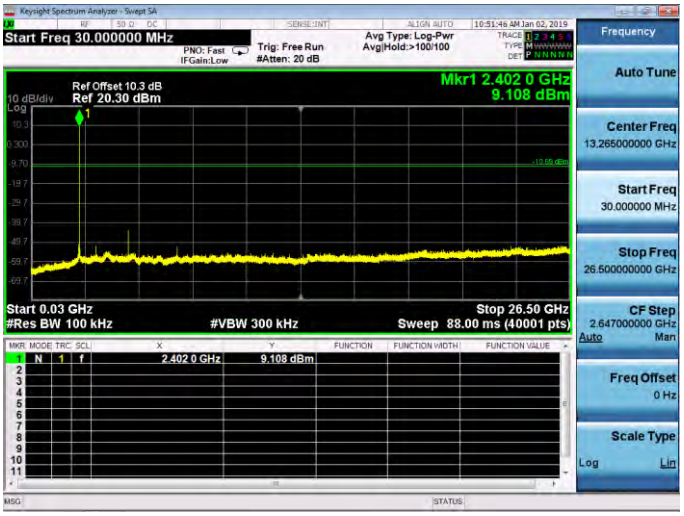
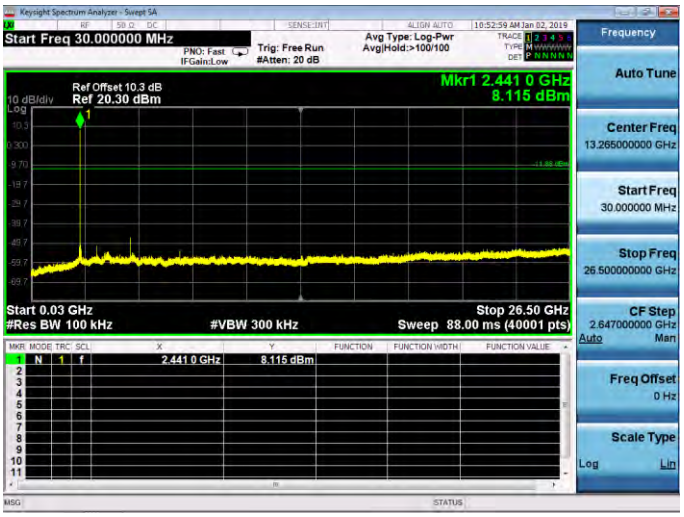
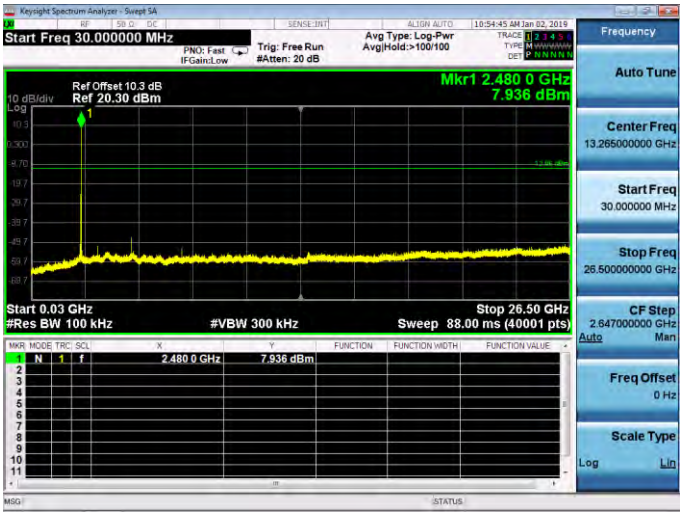
Mode 2: GFSK Continuous TX mode	
DH1	
DH3	
DH5	

Mode 4: 8DPSK Continuous TX mode	
3DH1	
3DH3	
3DH5	

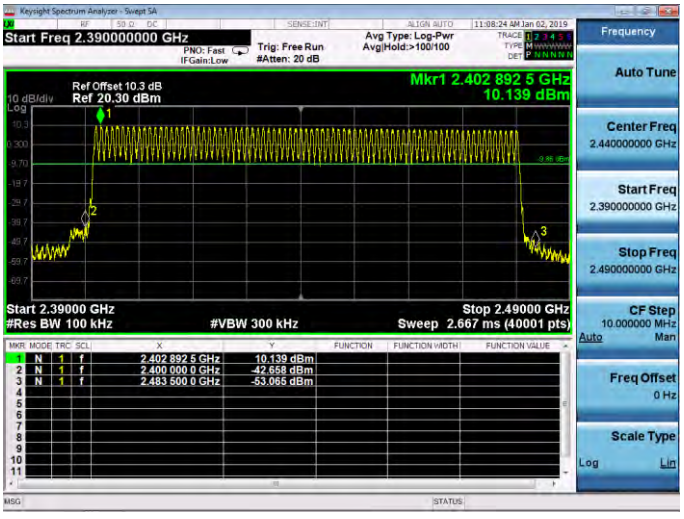
Out of Band Conducted Emissions Measurement

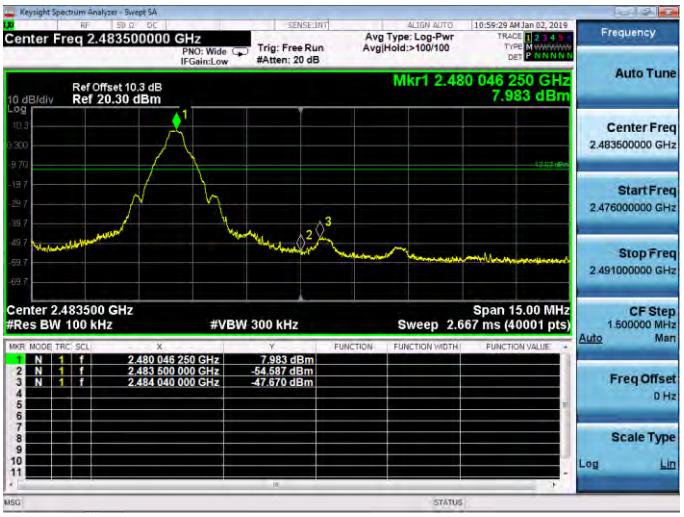
■ **Test Graphs**

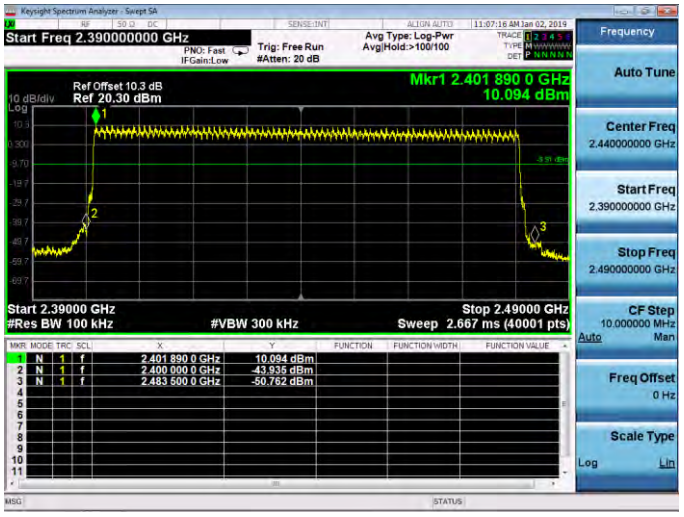
Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 2: GFSK Continuous TX mode _ Un-hopping	
2402 MHz	
2480 MHz	

Mode 2: GFSK Continuous TX mode _ Hopping	
2402 ~ 2480 MHz	

Mode 4: 8DPSK Continuous TX mode _ Un-hopping	
2402 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode _ Hopping	
2402 ~ 2480 MHz	

Antenna Type: Dipole Antenna

Maximum Conducted Output Power Measurement

Test Mode	Frequency (MHz)	Packet Type	RF Power setting in Test Software	Test Software Version
Mode 2	2402	DH1	9.00	FCC Test App
		DH3	9.00	
		DH5	9.00	
	2441	DH1	10.00	
		DH3	10.00	
		DH5	10.00	
	2480	DH1	11.00	
		DH3	11.00	
		DH5	11.00	
Mode 3	2402	2DH1	9.00	
		2DH3	9.00	
		2DH5	9.00	
	2441	2DH1	10.00	
		2DH3	10.00	
		2DH5	10.00	
	2480	2DH1	11.00	
		2DH3	11.00	
		2DH5	11.00	
Mode 4	2402	3DH1	9.00	
		3DH3	9.00	
		3DH5	9.00	
	2441	3DH1	10.00	
		3DH3	10.00	
		3DH5	10.00	
	2480	3DH1	11.00	
		3DH3	11.00	
		3DH5	11.00	

Test Mode	Frequency (MHz)	Packet Type	Average Power		Peak Power		Limit (W)
			(dBm)	(W)	(dBm)	(W)	
Mode 2	2402	DH1	8.59	0.00723	9.97	0.00993	≤ 0.125
		DH3	8.61	0.00726	10.00	0.01000	≤ 0.125
		DH5	8.64	0.00731	**10.02**	**0.01005**	≤ 0.125
	2441	DH1	8.46	0.00701	9.80	0.00955	≤ 0.125
		DH3	8.49	0.00706	9.82	0.00959	≤ 0.125
		DH5	8.51	0.00710	9.84	0.00964	≤ 0.125
	2480	DH1	8.03	0.00635	9.39	0.00869	≤ 0.125
		DH3	8.06	0.00640	9.41	0.00873	≤ 0.125
		DH5	8.09	0.00644	9.43	0.00877	≤ 0.125
Mode 3	2402	2DH1	8.27	0.00671	9.64	0.00920	≤ 0.125
		2DH3	8.30	0.00676	9.66	0.00925	≤ 0.125
		2DH5	8.32	0.00679	9.69	0.00931	≤ 0.125
	2441	2DH1	8.51	0.00710	9.77	0.00948	≤ 0.125
		2DH3	8.53	0.00713	9.80	0.00955	≤ 0.125
		2DH5	8.55	0.00716	**9.82**	**0.00959**	≤ 0.125
	2480	2DH1	7.93	0.00621	9.24	0.00839	≤ 0.125
		2DH3	7.95	0.00624	9.27	0.00845	≤ 0.125
		2DH5	7.98	0.00628	9.30	0.00851	≤ 0.125
Mode 4	2402	3DH1	8.51	0.00710	9.75	0.00944	≤ 0.125
		3DH3	8.53	0.00713	9.77	0.00948	≤ 0.125
		3DH5	8.56	0.00718	**10.80**	**0.01202**	≤ 0.125
	2441	3DH1	8.49	0.00706	9.87	0.00971	≤ 0.125
		3DH3	8.51	0.00710	9.90	0.00977	≤ 0.125
		3DH5	8.54	0.00714	9.93	0.00984	≤ 0.125
	2480	3DH1	8.02	0.00634	9.31	0.00853	≤ 0.125
		3DH3	8.04	0.00637	9.33	0.00857	≤ 0.125
		3DH5	8.06	0.00640	9.37	0.00865	≤ 0.125

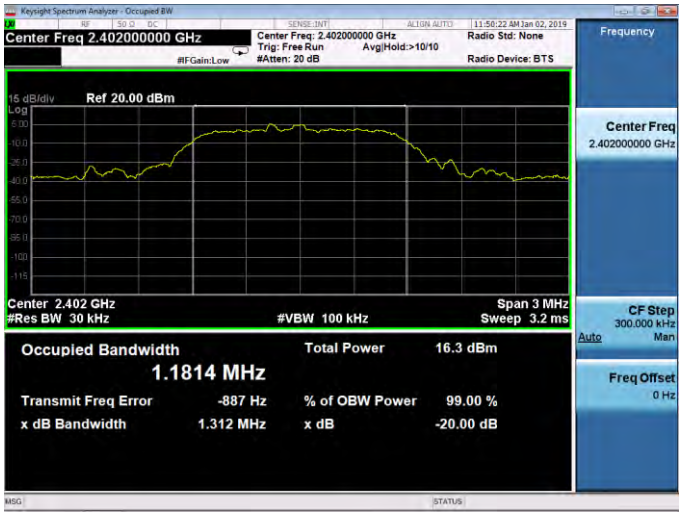
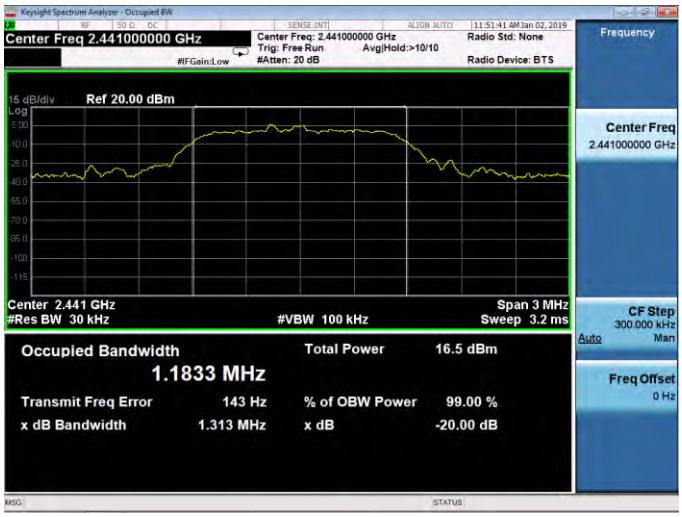
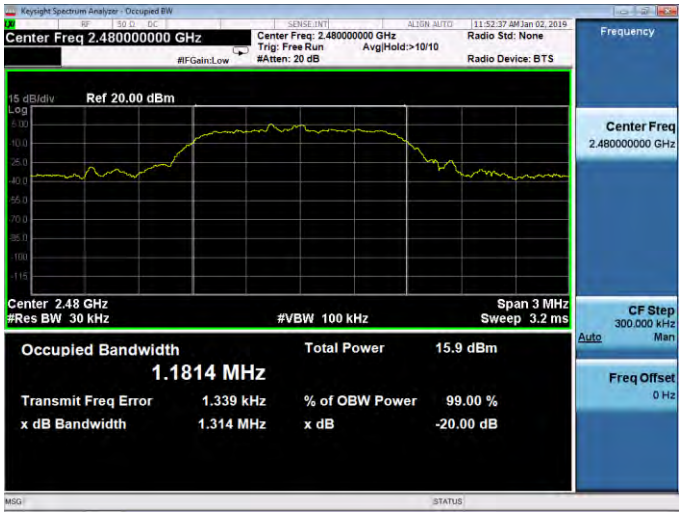
Note: The relevant measured result has the offset with cable loss already.

20 dB RF Bandwidth Measurement

Test Mode	Frequency (MHz)	Measurement Results (MHz)
Mode 2	2402	1.026
	2441	1.030
	2480	1.034
Mode 4	2402	1.312
	2441	1.313
	2480	1.314

■ Test Graphs

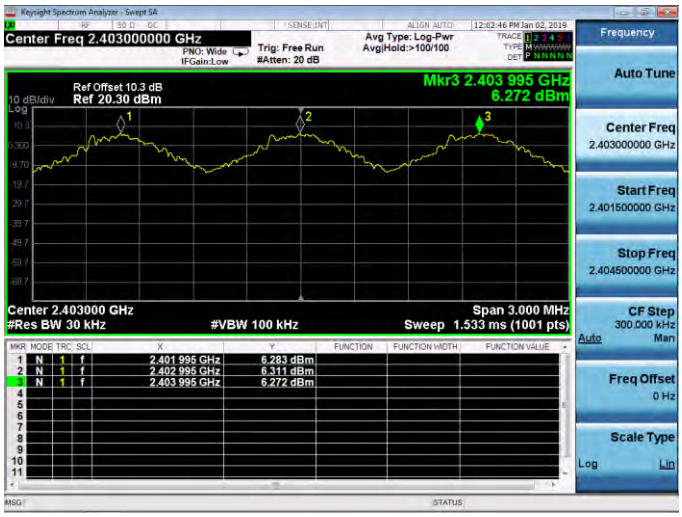
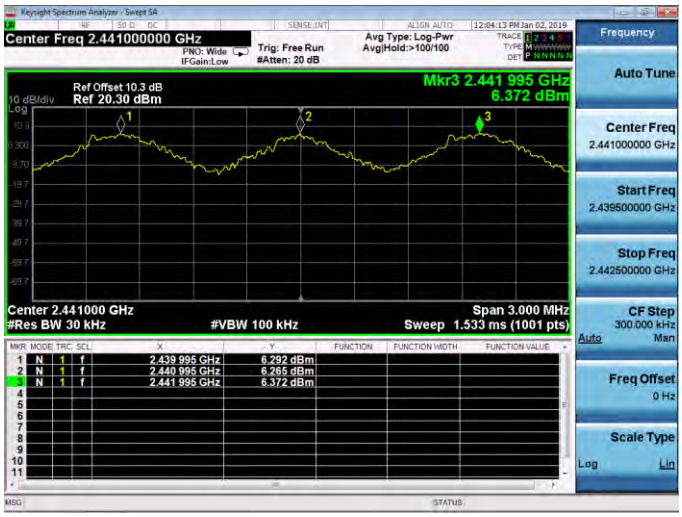
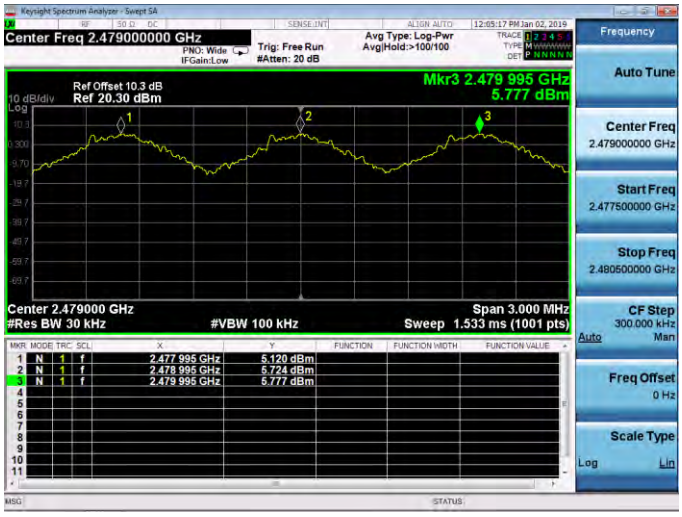
Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

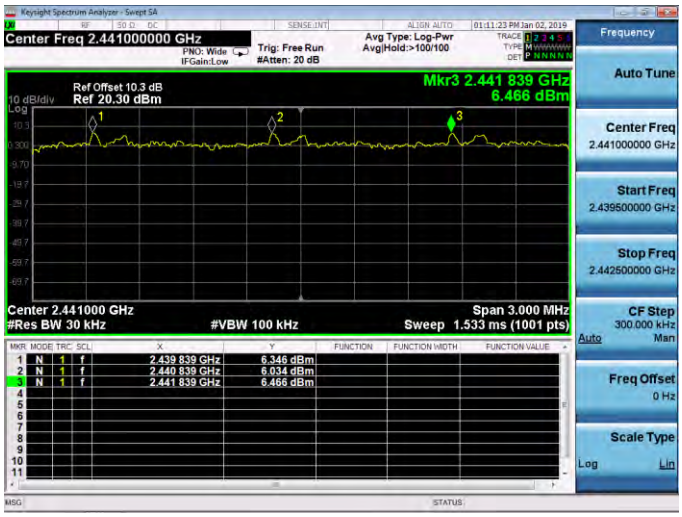
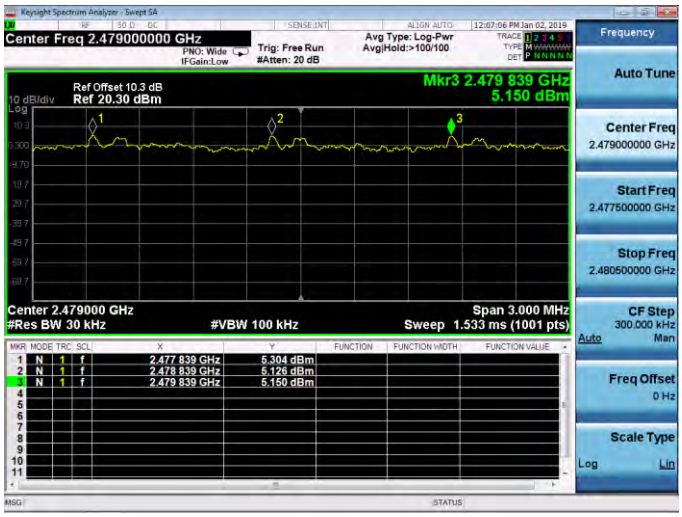
Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Carrier Frequency Separation Measurement

Test Mode	Frequency (MHz)	Measurement Results (MHz)	Limit (MHz)
Mode 2	2402	1.000	≥ 0.684
	2441	1.000	≥ 0.687
	2480	1.000	≥ 0.689
Mode 4	2402	1.000	≥ 0.875
	2441	1.000	≥ 0.875
	2480	1.000	≥ 0.876

■ Test Graphs

Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Number of Hopping Measurement

Test Mode	Frequency Range (MHz)	Measurement Results (Ch)	Limit (ch)
Mode 2	2402 - 2480	79	≥ 15
Mode 4	2402 - 2480	79	≥ 15

■ **Test Graphs**

Mode 2: GFSK Continuous TX mode	
CH0~CH39	
CH40~CH78	

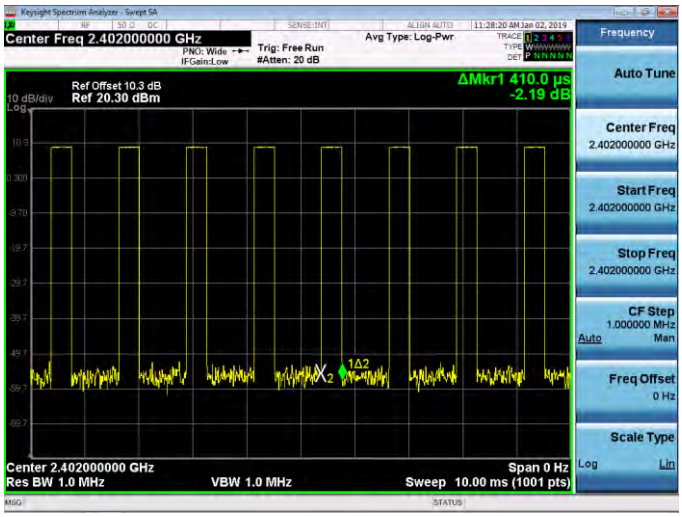
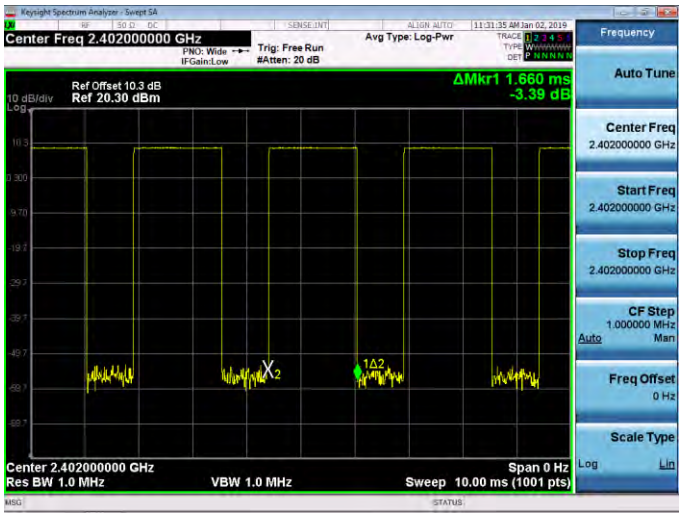
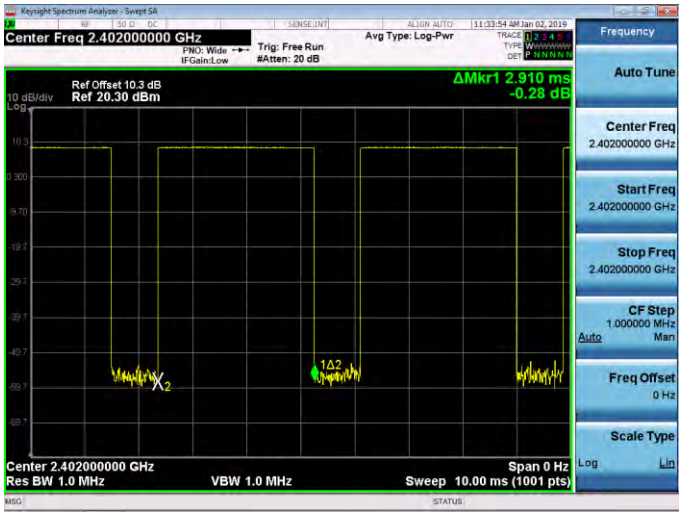
Mode 4: 8DPSK Continuous TX mode	
CH0~CH39	
CH40~CH78	

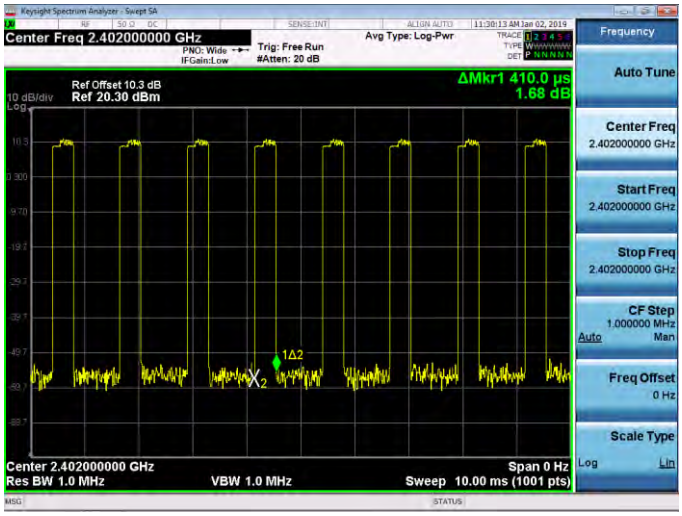
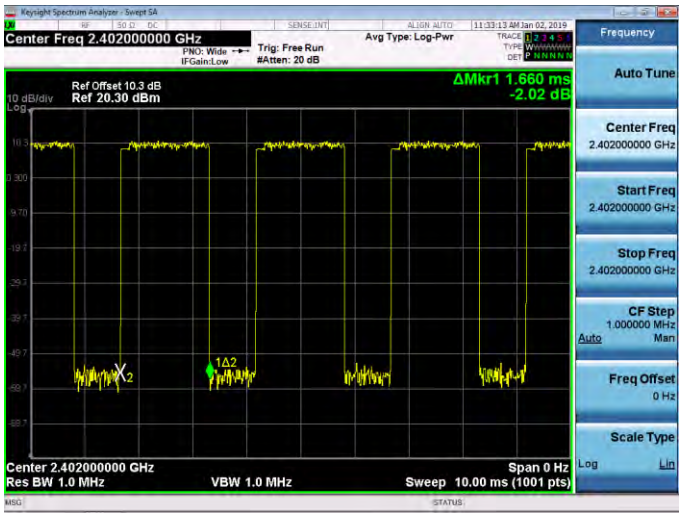
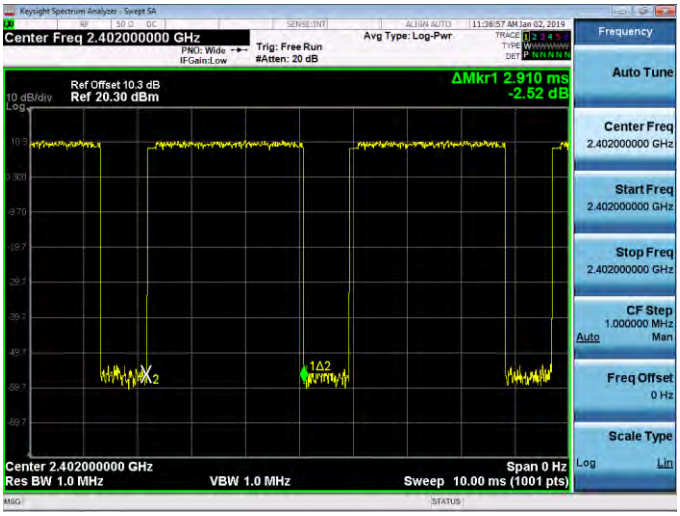
Time of Occupancy (Dwell Time) Measurement

Mode 2: GFSK Continuous TX mode	
DH1	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	800/79CH = 10.13(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 10.13 = 320.108(times)
Each Channel Dwell Times (2)	0.410 ms (sec)
Dwell Times on Cycle (1) * (2)	131.244 ms (sec)
LIMIT(msec)	< = 400
DH3	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	400/79CH = 5.1(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 5.1 = 161.16(times)
Each Channel Dwell Times (2)	1.660 ms (sec)
Dwell Times on Cycle (1) * (2)	265.427 ms (sec)
LIMIT(msec)	< = 400
DH5	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	266.7/79CH = 3.37(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 3.37 = 106.492(times)
Each Channel Dwell Times (2)	2.910 ms (sec)
Dwell Times on Cycle (1) * (2)	310.811 ms (sec)
LIMIT(msec)	< = 400

Mode 4: 8DPSK Continuous TX mode	
3DH1	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	800/79CH = 10.13(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 10.13 = 320.108(times)
Each Channel Dwell Times (2)	0.410 ms (sec)
Dwell Times on Cycle (1) * (2)	131.244 ms (sec)
LIMIT(msec)	< = 400
3DH3	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	400/79CH = 5.1(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 5.1 = 161.16(times)
Each Channel Dwell Times (2)	1.660 ms (sec)
Dwell Times on Cycle (1) * (2)	265.427 ms (sec)
LIMIT(msec)	< = 400
3DH5	
Cycle Calculate	79CH * 0.4 = 31.6 (sec)
The EUT Hopping Number per Sec	1600 times/sec
Each Channel Dwell Times per Sec	266.7/79CH = 3.37(times/sec)
Each Channel Dwell Times on Cycle(1)	31.6 * 3.37 = 106.492(times)
Each Channel Dwell Times (2)	2.910 ms (sec)
Dwell Times on Cycle (1) * (2)	310.811 ms (sec)
LIMIT(msec)	< = 400

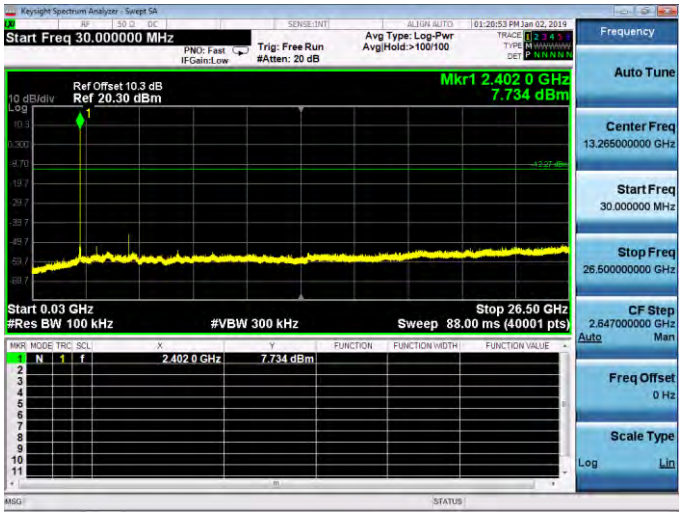
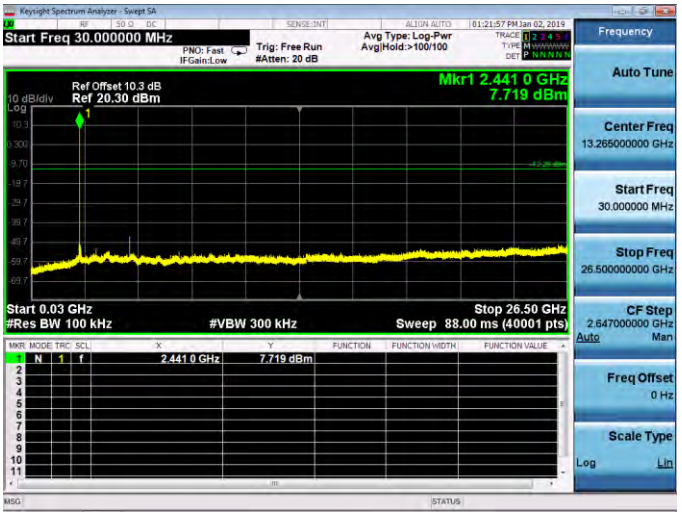
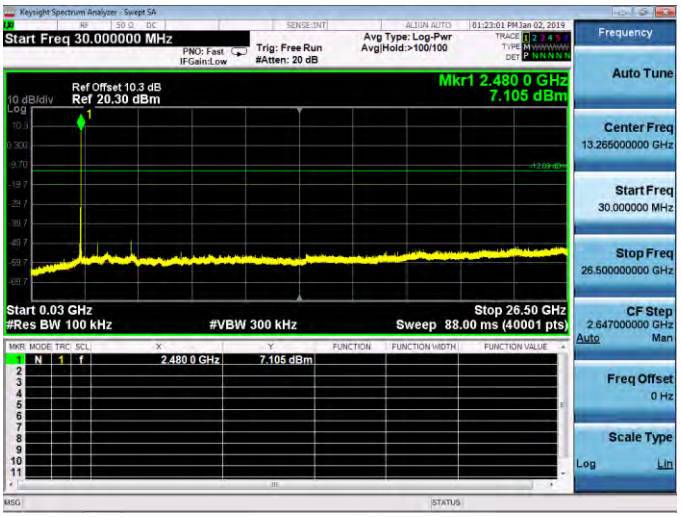
■ Test Graphs

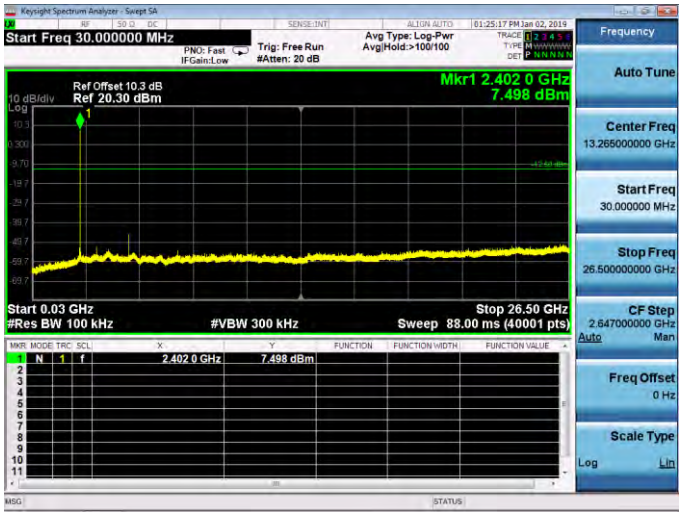
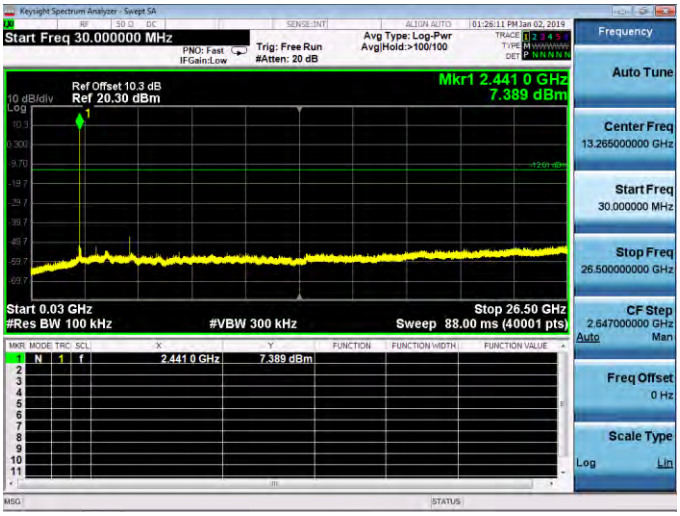
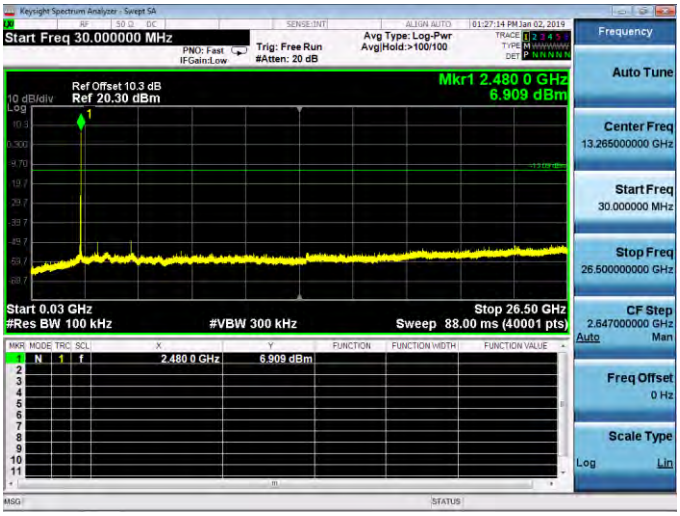
Mode 2: GFSK Continuous TX mode	
DH1	
DH3	
DH5	

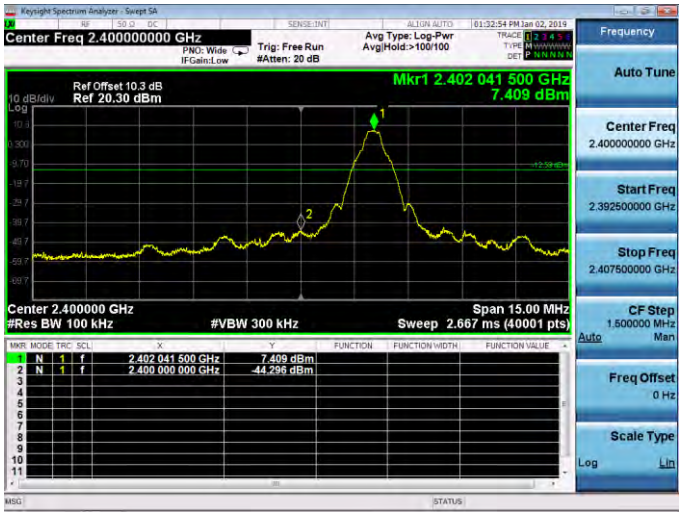
Mode 4: 8DPSK Continuous TX mode	
3DH1	
3DH3	
3DH5	

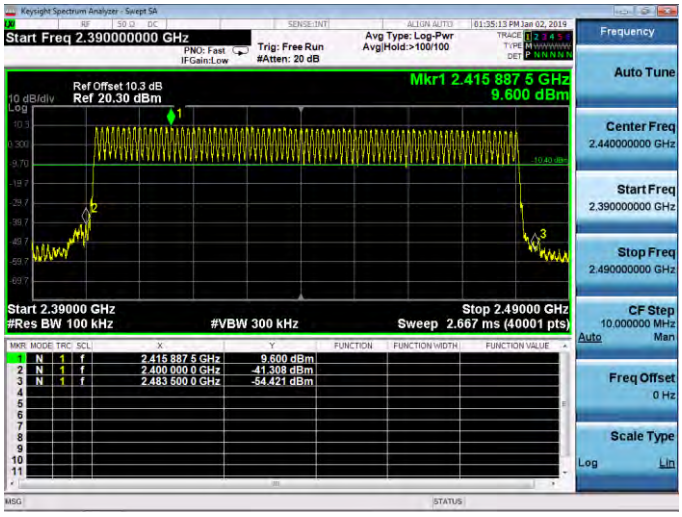
Out of Band Conducted Emissions Measurement

■ **Test Graphs**

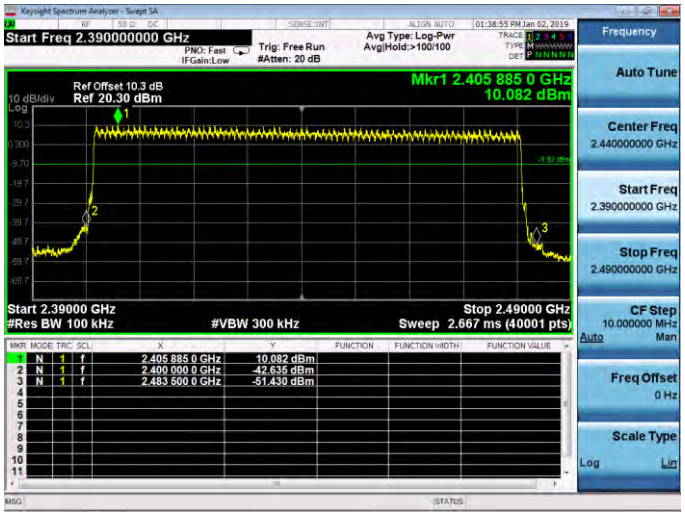
Mode 2: GFSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode	
2402 MHz	
2441 MHz	
2480 MHz	

Mode 2: GFSK Continuous TX mode _ Un-hopping	
2402 MHz	
2480 MHz	

Mode 2: GFSK Continuous TX mode _ Hopping	
2402 ~ 2480 MHz	

Mode 4: 8DPSK Continuous TX mode _ Un-hopping	
2402 MHz	
2480 MHz	

Mode 4: 8DPSK Continuous TX mode _ Hopping	
2402 ~ 2480 MHz	

Annex B. Radiated Emission Measurement

Antenna Type: PCB Trace Antenna

Harmonic

Below 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Test Mode:	Mode 1		

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
82.3800	46.13	-14.82	31.31	40.00	-8.69	QP	H
114.3900	49.90	-13.62	36.28	43.50	-7.22	QP	H
170.6500	44.99	-10.44	34.55	43.50	-8.95	QP	H
237.5800	44.98	-12.45	32.53	46.00	-13.47	QP	H
320.0300	44.06	-9.65	34.41	46.00	-11.59	QP	H
715.7900	40.85	-1.51	39.34	46.00	-6.66	QP	H
83.3500	48.42	-14.87	33.55	40.00	-6.45	QP	V
170.6500	43.27	-10.44	32.83	43.50	-10.67	QP	V
213.3300	47.53	-13.45	34.08	43.50	-9.42	QP	V
239.5200	47.92	-12.29	35.63	46.00	-10.37	QP	V
405.3900	39.52	-7.20	32.32	46.00	-13.68	QP	V
666.3200	41.25	-2.32	38.93	46.00	-7.07	QP	V

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

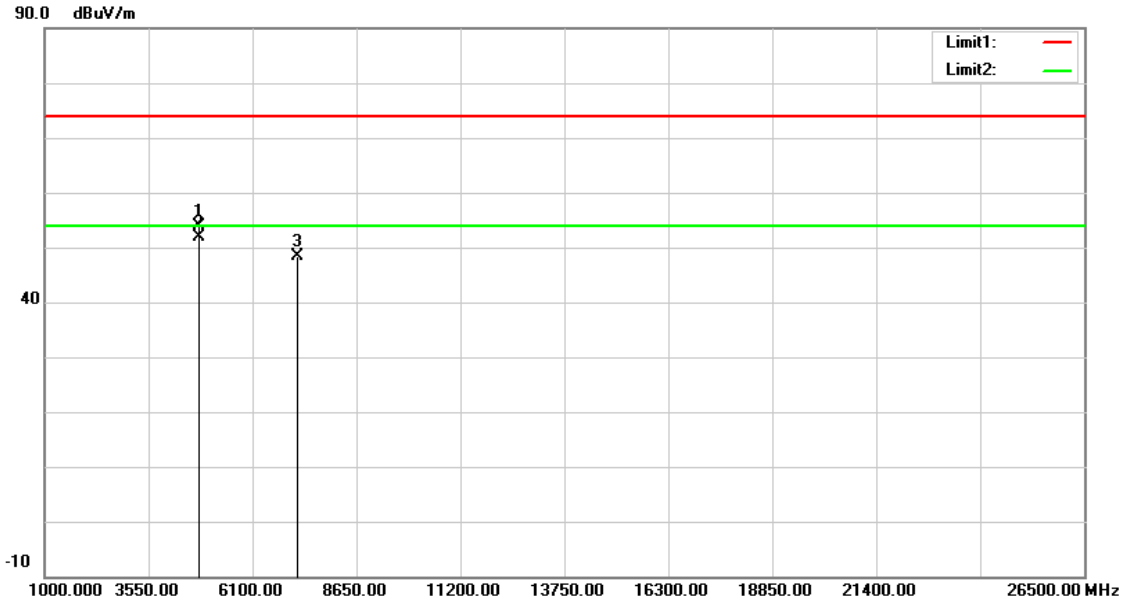
Example: 31.31= -14.82+46.13

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

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

Above 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	58.81	-5.03	53.78	74.00	-20.22	peak
2	4804.000	56.86	-5.03	51.83	54.00	-2.17	AVG
3	7206.000	49.24	-0.97	48.27	74.00	-25.73	peak

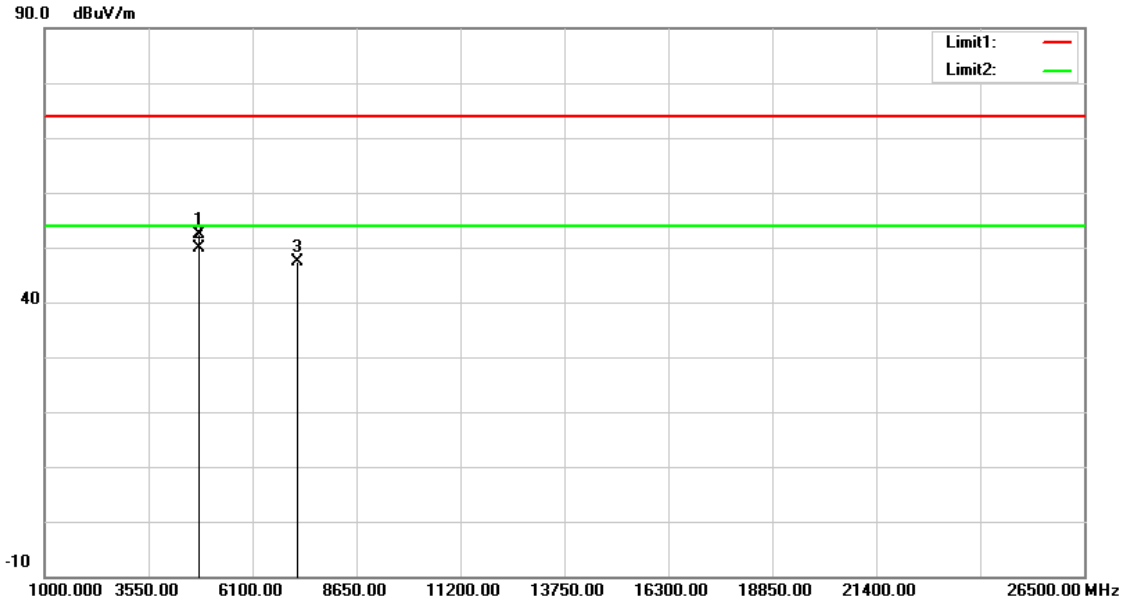
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 53.78= -5.03+58.81

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	57.53	-5.03	52.50	74.00	-21.50	peak
2	4804.000	54.96	-5.03	49.93	54.00	-4.07	AVG
3	7206.000	48.30	-0.97	47.33	74.00	-26.67	peak

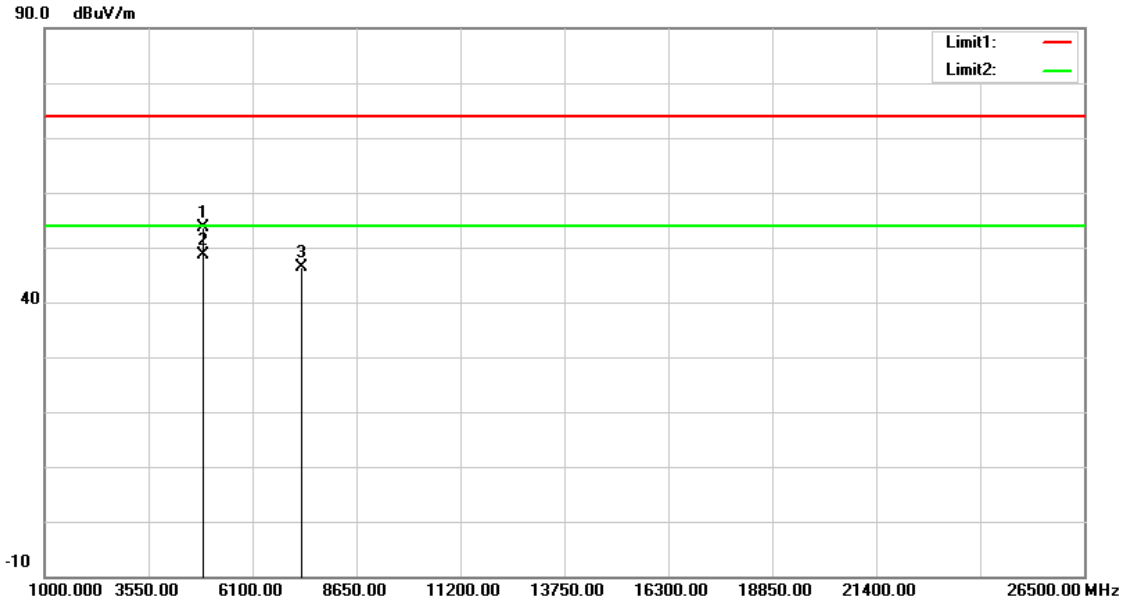
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 52.50= -5.03+57.53

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



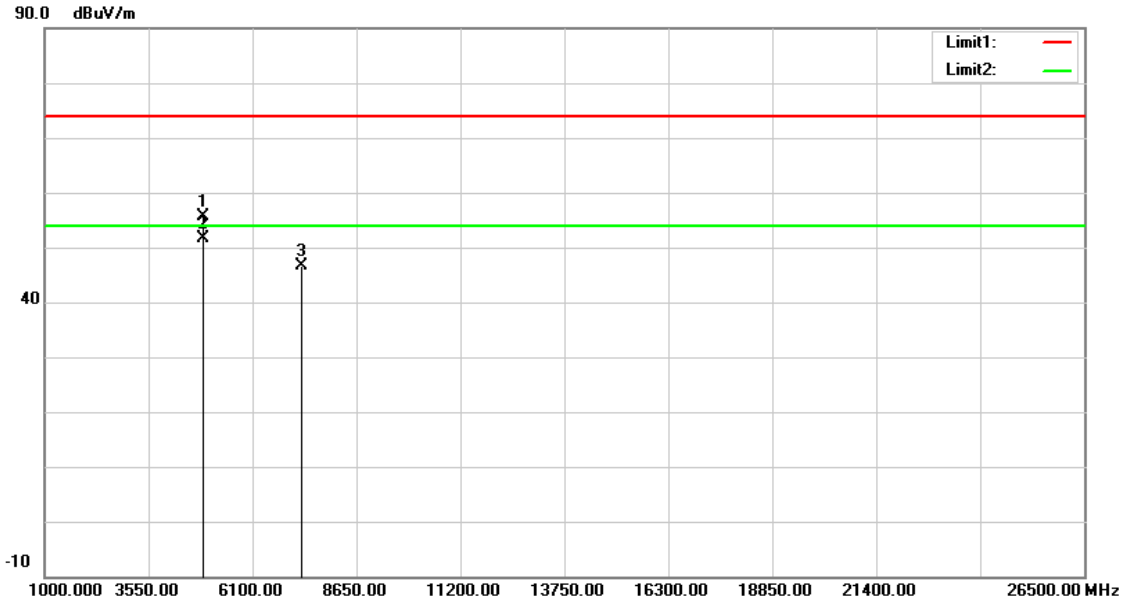
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	58.80	-5.10	53.70	74.00	-20.30	peak
2	4882.000	53.81	-5.10	48.71	54.00	-5.29	AVG
3	7323.000	47.11	-0.63	46.48	74.00	-27.52	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



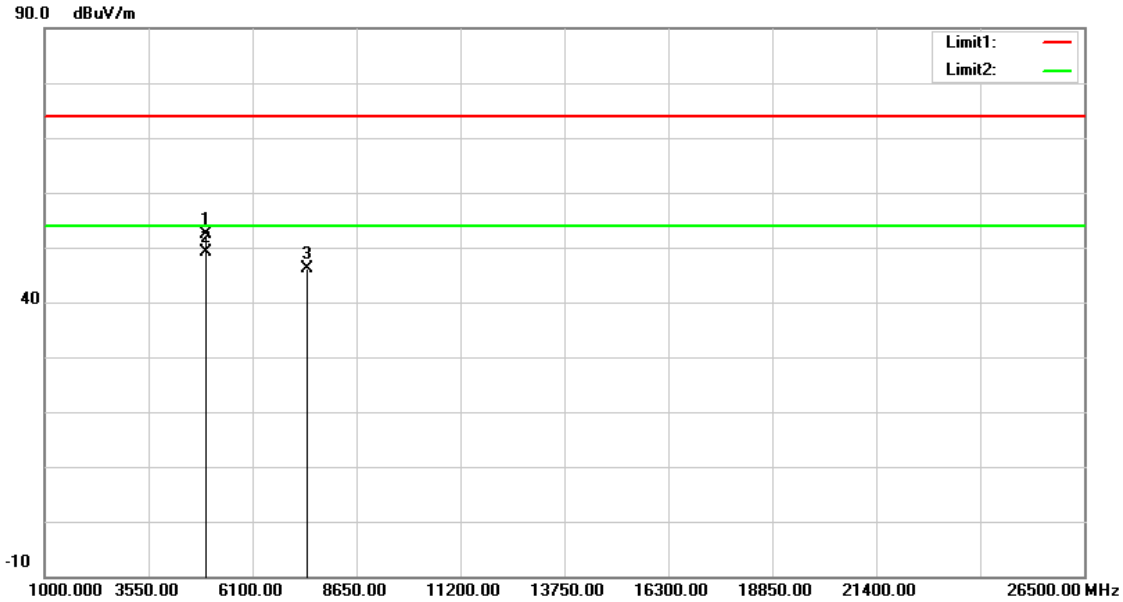
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	60.83	-5.10	55.73	74.00	-18.27	peak
2	4882.000	56.66	-5.10	51.56	54.00	-2.44	AVG
3	7323.000	47.21	-0.63	46.58	74.00	-27.42	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



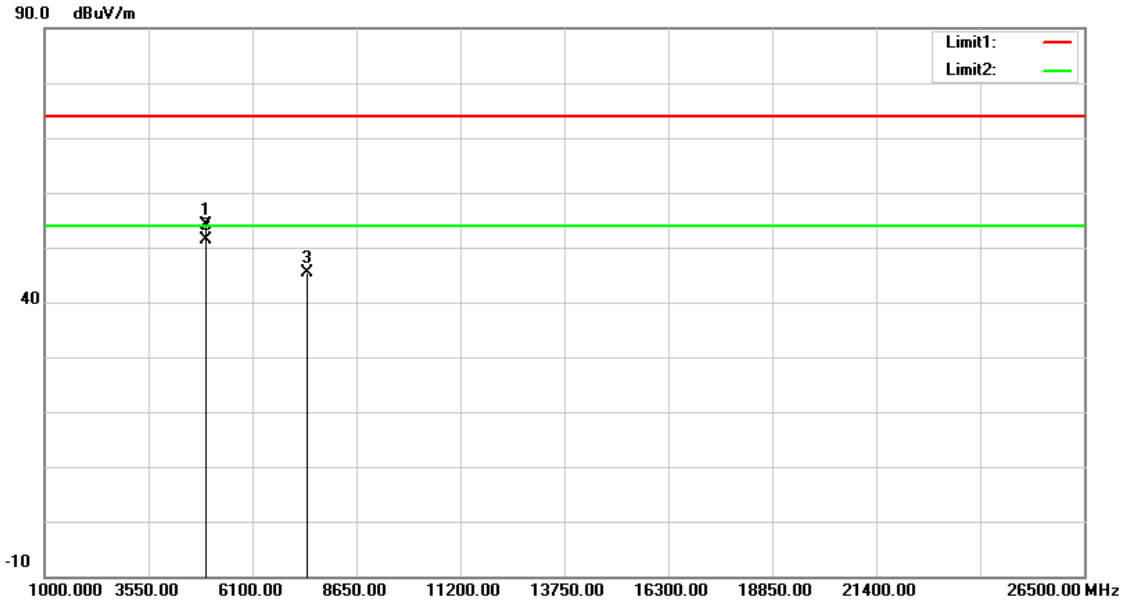
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	57.55	-5.17	52.38	74.00	-21.62	peak
2	4960.000	54.36	-5.17	49.19	54.00	-4.81	AVG
3	7440.000	46.46	-0.35	46.11	74.00	-27.89	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



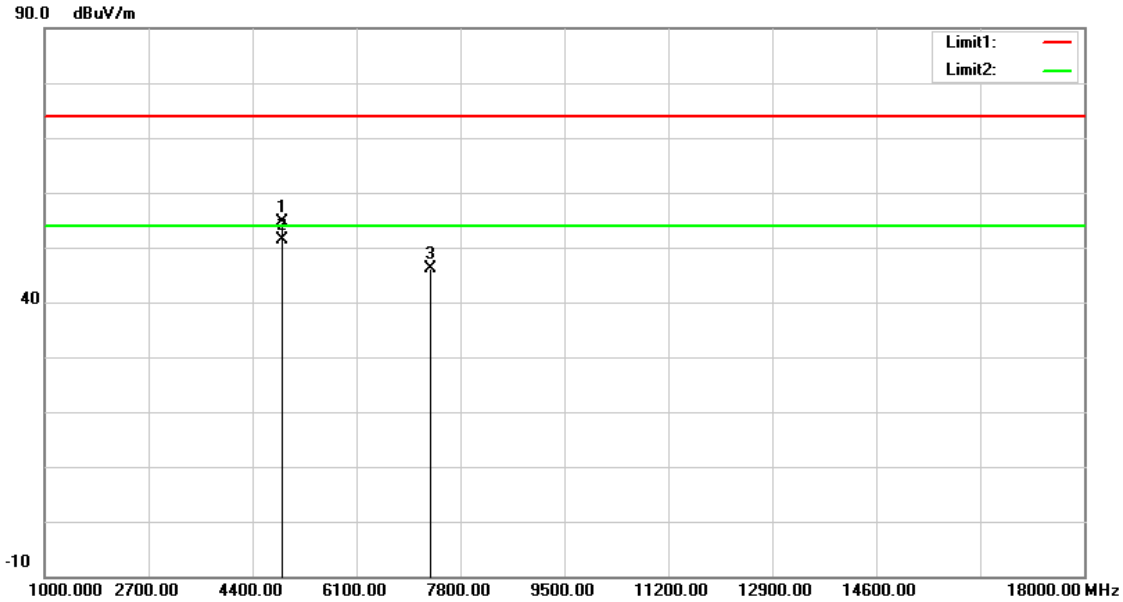
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	59.22	-5.17	54.05	74.00	-19.95	peak
2	4960.000	56.54	-5.17	51.37	54.00	-2.63	AVG
3	7440.000	45.62	-0.35	45.27	74.00	-28.73	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



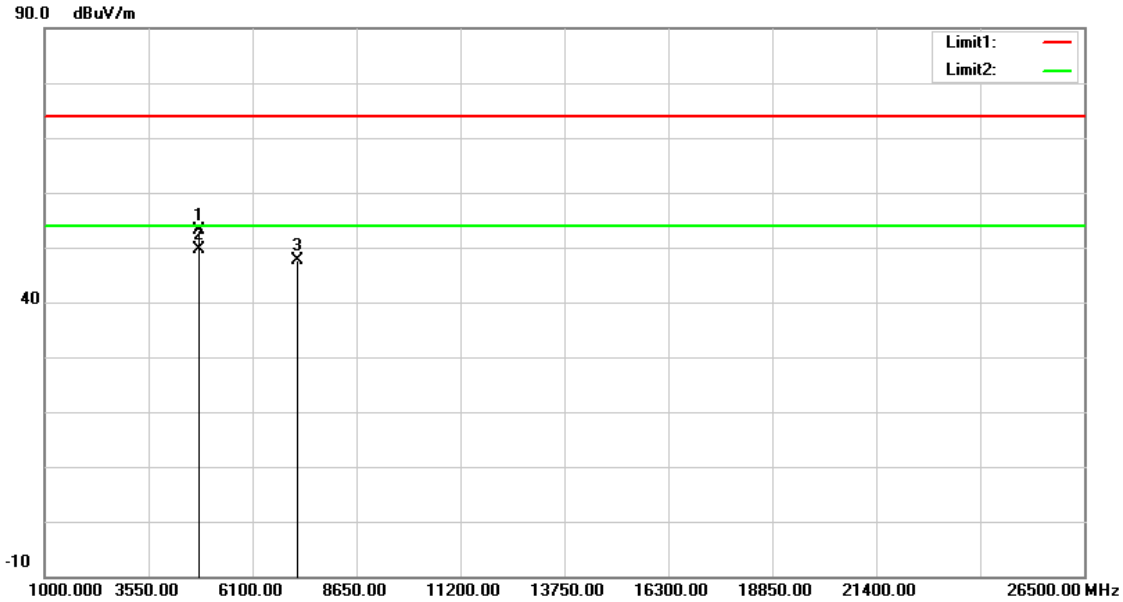
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	59.66	-5.10	54.56	74.00	-19.44	peak
2	4882.000	56.48	-5.10	51.38	54.00	-2.62	AVG
3	7323.000	46.72	-0.63	46.09	74.00	-27.91	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



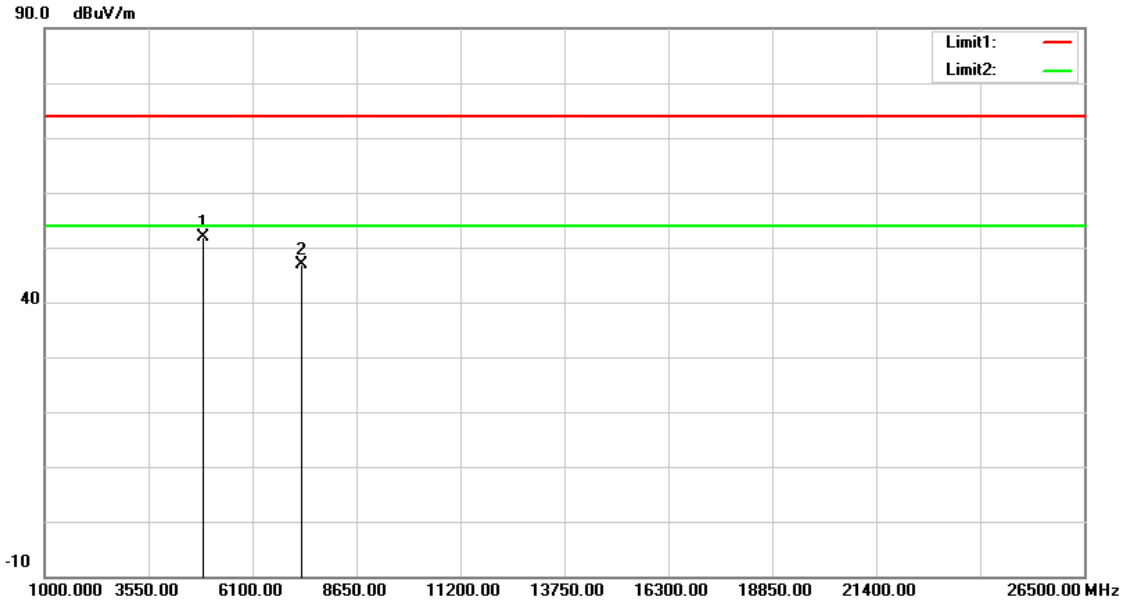
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	58.21	-5.03	53.18	74.00	-20.82	peak
2	4804.000	54.78	-5.03	49.75	54.00	-4.25	AVG
3	7206.000	48.60	-0.97	47.63	74.00	-26.37	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



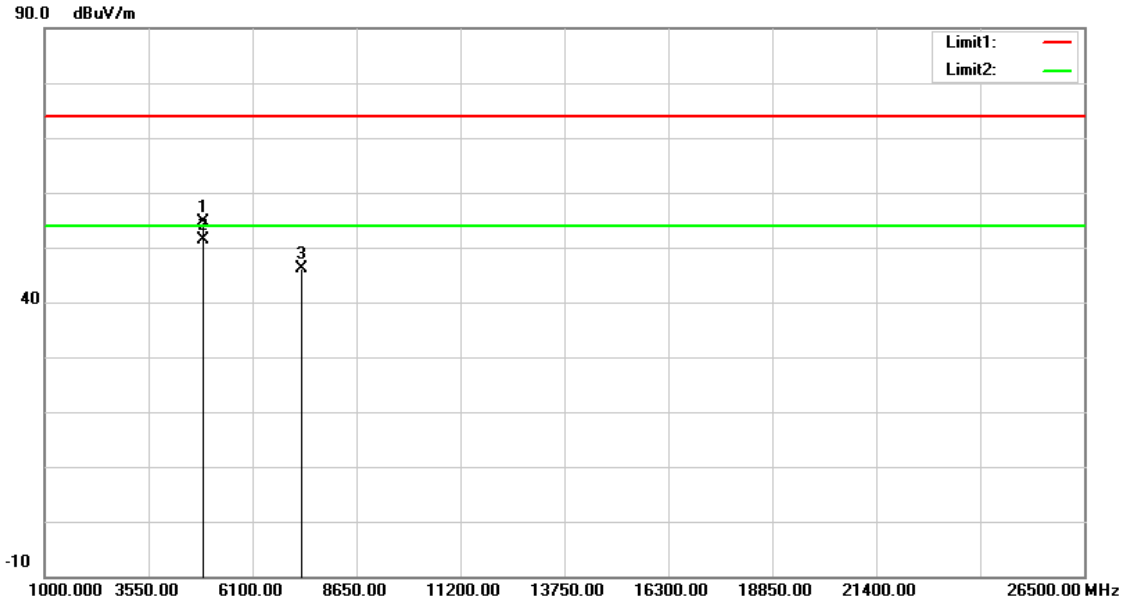
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	57.08	-5.10	51.98	74.00	-22.02	peak
2	7323.000	47.57	-0.63	46.94	74.00	-27.06	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



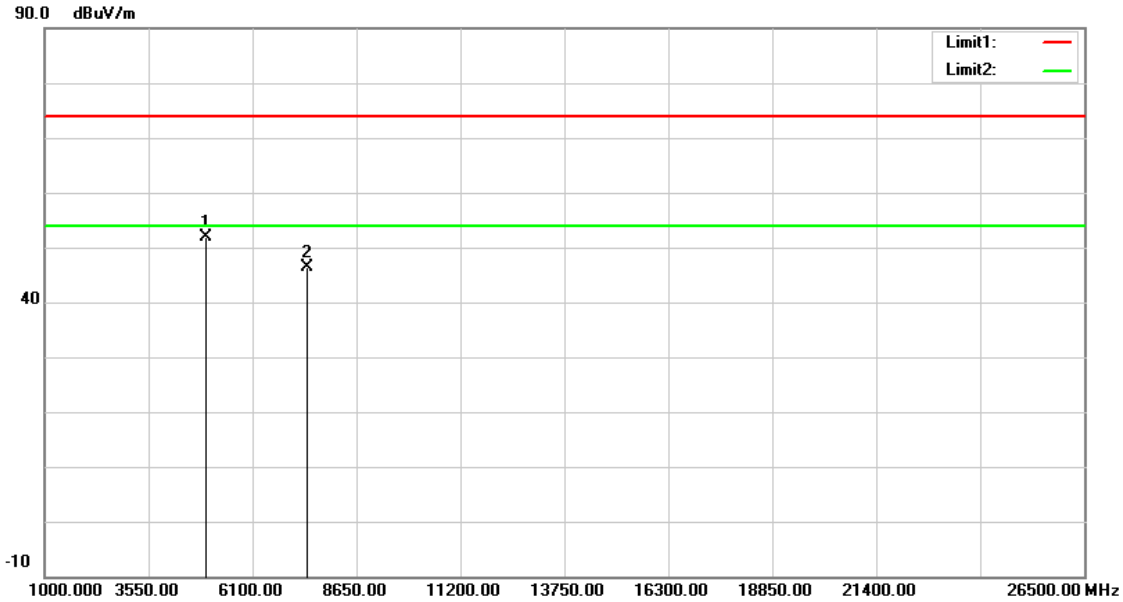
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	59.66	-5.10	54.56	74.00	-19.44	peak
2	4882.000	56.48	-5.10	51.38	54.00	-2.62	AVG
3	7323.000	46.72	-0.63	46.09	74.00	-27.91	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



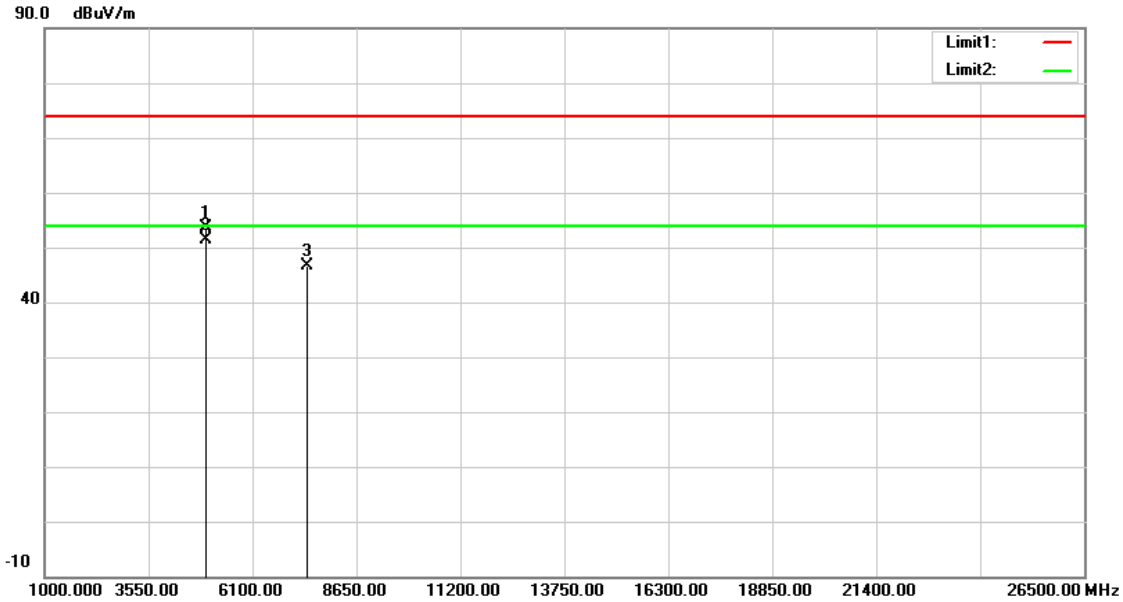
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	56.96	-5.17	51.79	74.00	-22.21	peak
2	7440.000	46.65	-0.35	46.30	74.00	-27.70	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	58.73	-5.17	53.56	74.00	-20.44	peak
2	4960.000	56.48	-5.17	51.31	54.00	-2.69	AVG
3	7440.000	46.94	-0.35	46.59	74.00	-27.41	peak

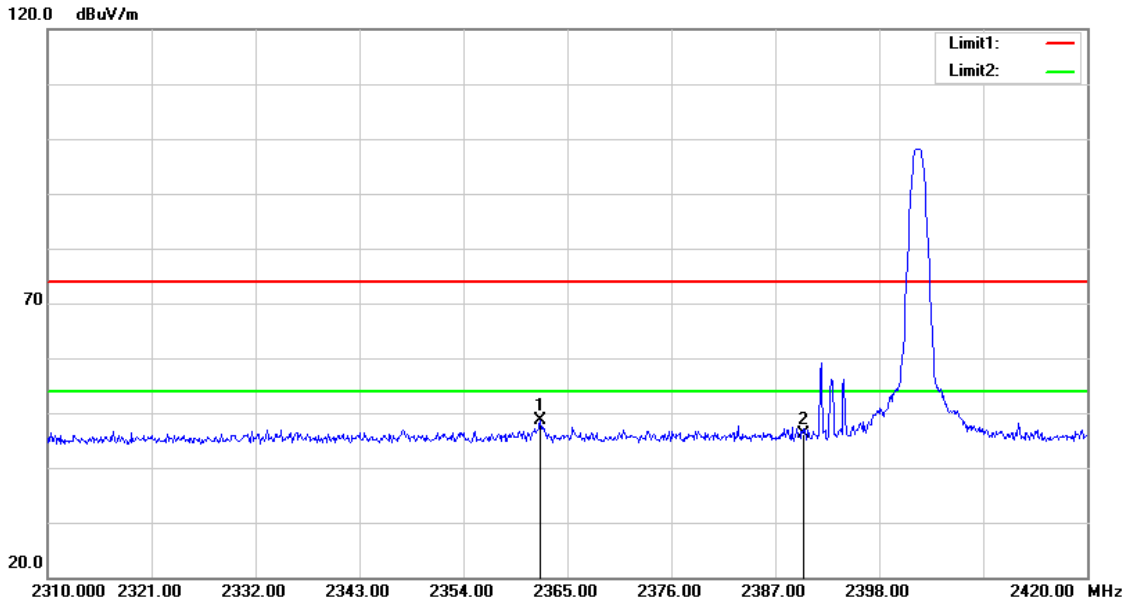
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

Band Edge

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



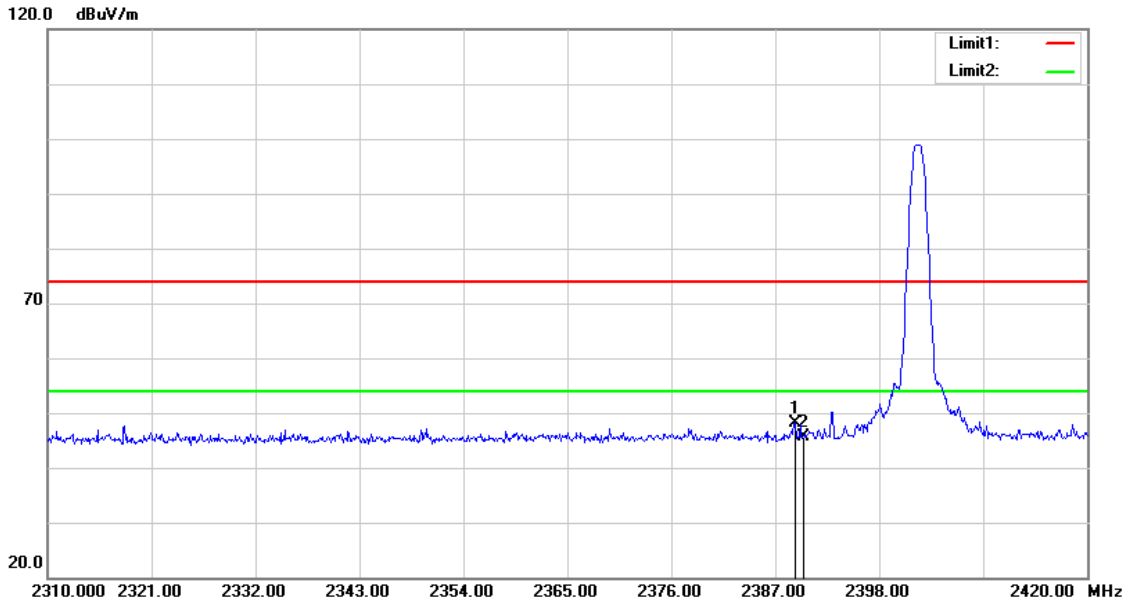
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2362.140	58.58	-9.87	48.71	74.00	-25.29	peak
2	2390.000	55.88	-9.78	46.10	74.00	-27.90	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



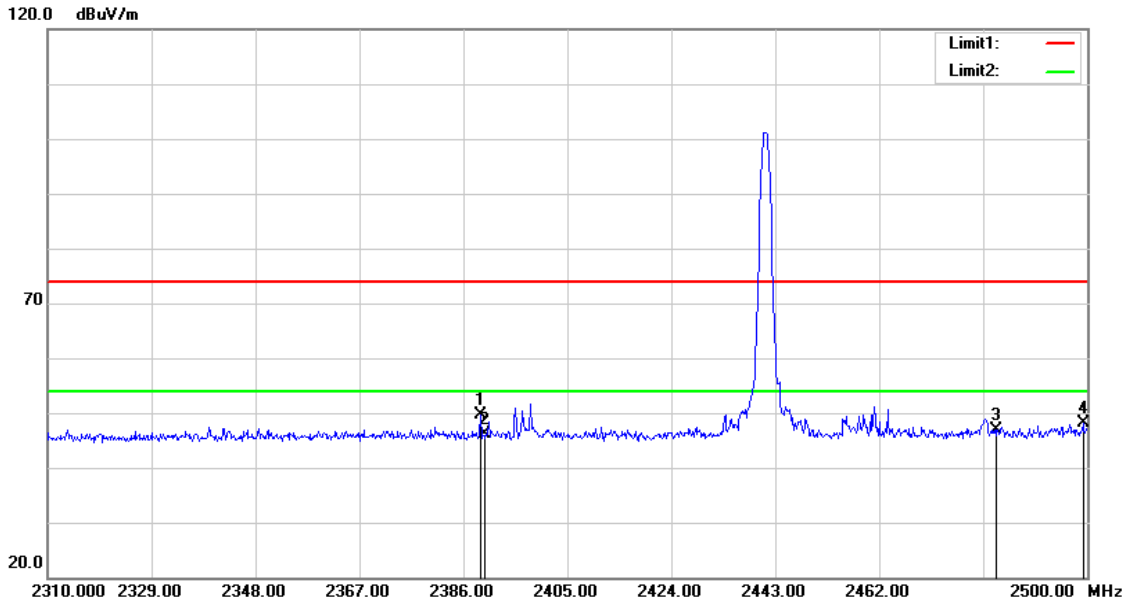
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.090	58.00	-9.79	48.21	74.00	-25.79	peak
2	2390.000	55.53	-9.78	45.75	74.00	-28.25	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



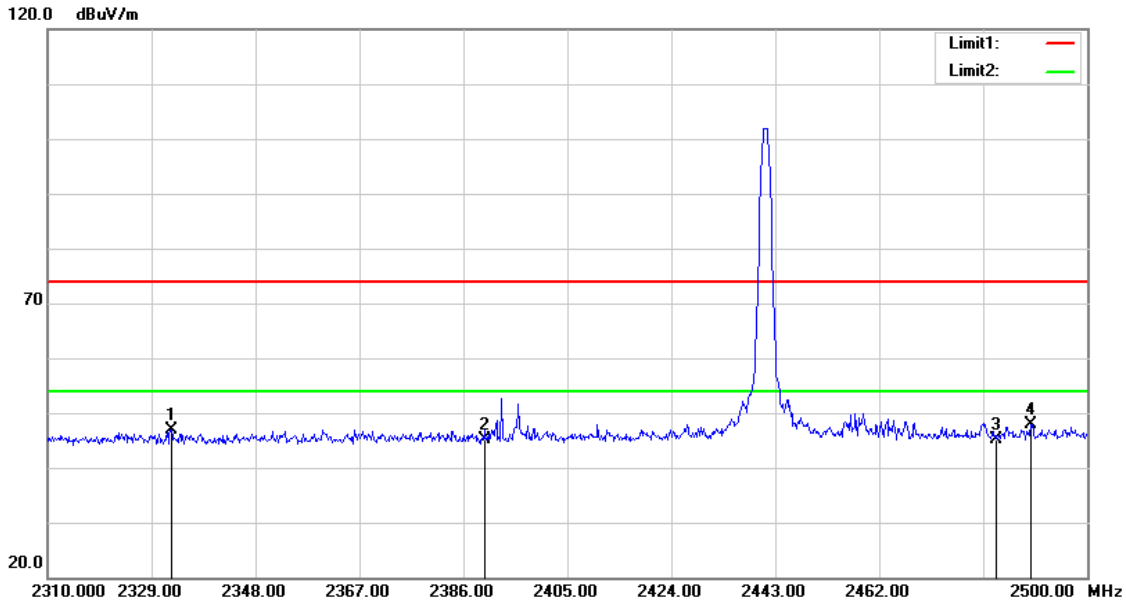
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.040	59.42	-9.79	49.63	74.00	-24.37	peak
2	2390.000	55.82	-9.78	46.04	74.00	-27.96	peak
3	2483.500	56.37	-9.56	46.81	74.00	-27.19	peak
4	2499.240	57.72	-9.53	48.19	74.00	-25.81	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



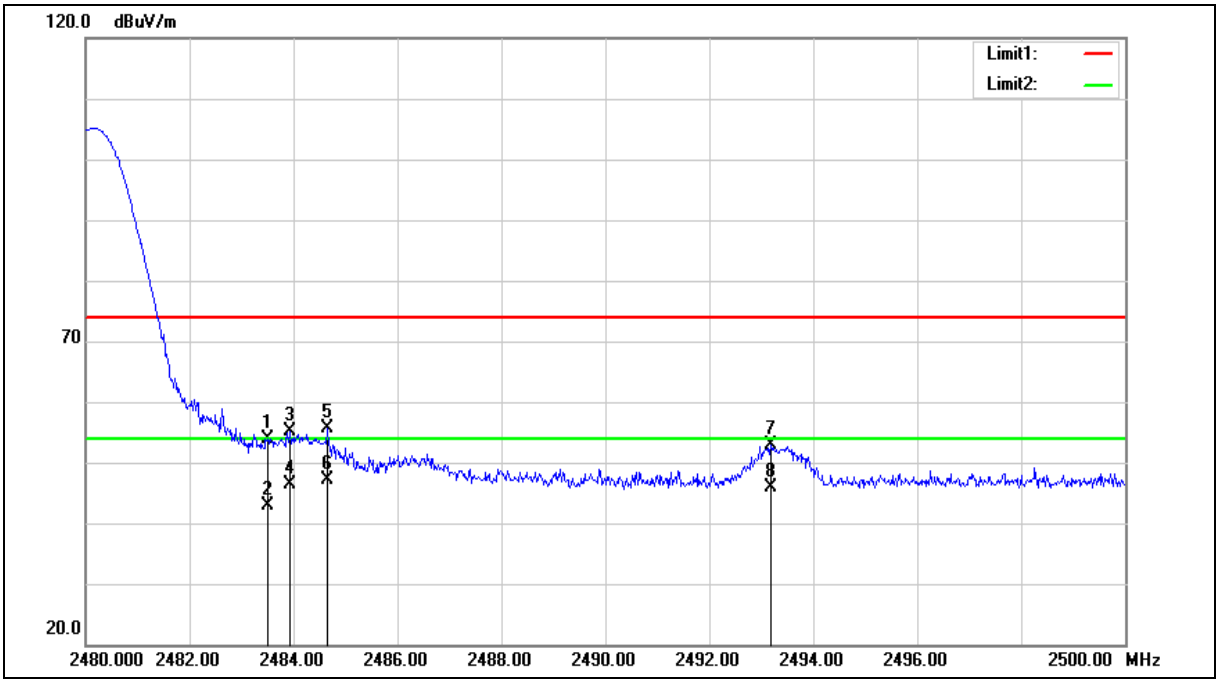
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2332.610	56.85	-9.96	46.89	74.00	-27.11	peak
2	2390.000	54.94	-9.78	45.16	74.00	-28.84	peak
3	2483.500	54.79	-9.56	45.23	74.00	-28.77	peak
4	2489.740	57.37	-9.55	47.82	74.00	-26.18	peak

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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

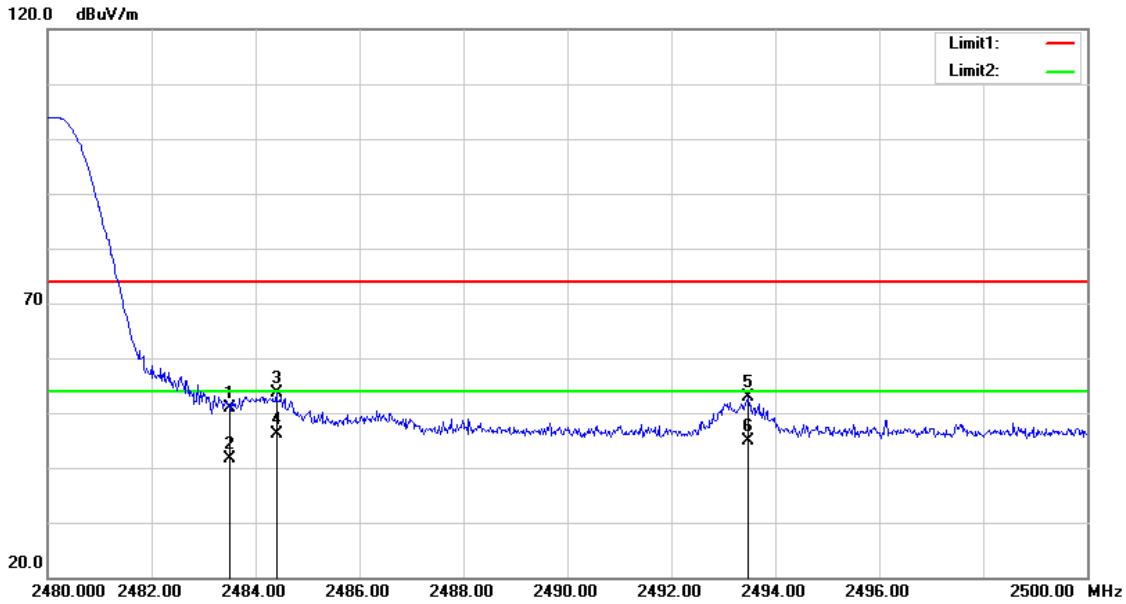
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	63.42	-9.56	53.86	74.00	-20.14	peak
2	2483.500	52.52	-9.56	42.96	54.00	-11.04	AVG
3	2483.940	64.78	-9.56	55.22	74.00	-18.78	peak
4	2483.940	55.82	-9.56	46.26	54.00	-7.74	AVG
5	2484.660	65.12	-9.56	55.56	74.00	-18.44	peak
6	2484.660	56.79	-9.56	47.23	54.00	-6.77	AVG
7	2493.180	62.40	-9.55	52.85	74.00	-21.15	peak
8	2493.180	55.39	-9.55	45.84	54.00	-8.16	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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



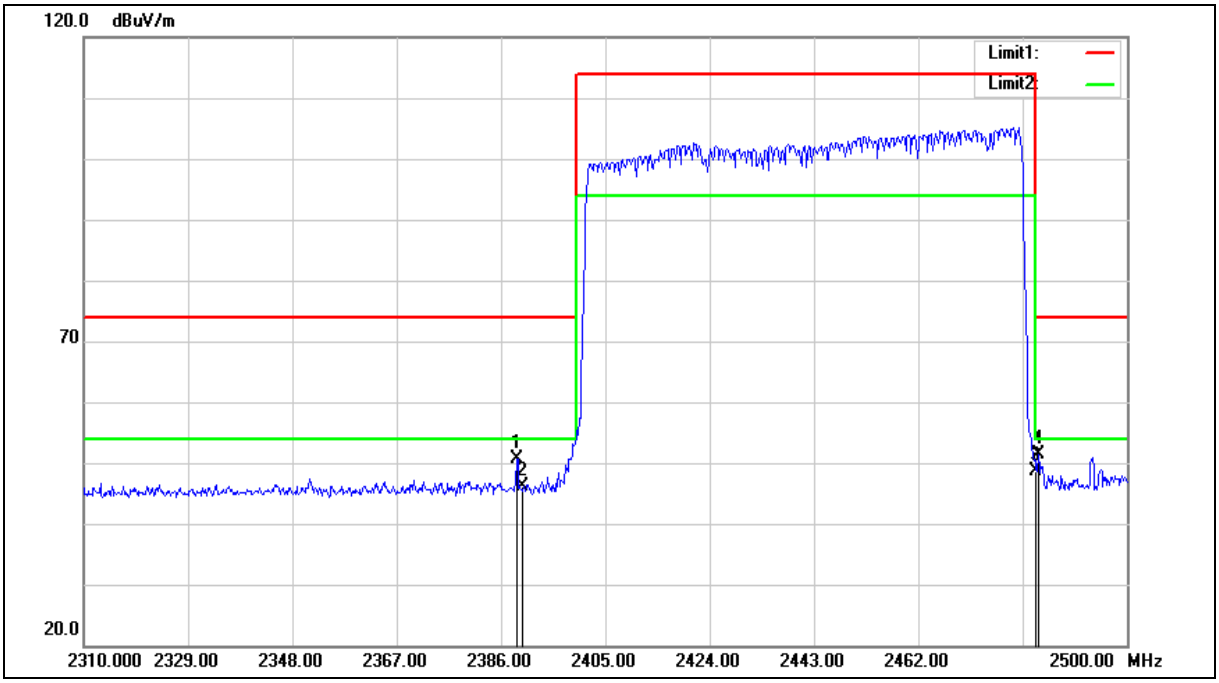
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	60.38	-9.56	50.82	74.00	-23.18	peak
2	2483.500	51.27	-9.56	41.71	54.00	-12.29	AVG
3	2484.400	63.16	-9.56	53.60	74.00	-20.40	peak
4	2484.400	55.70	-9.56	46.14	54.00	-7.86	AVG
5	2493.480	62.36	-9.55	52.81	74.00	-21.19	peak
6	2493.480	54.48	-9.55	44.93	54.00	-9.07	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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



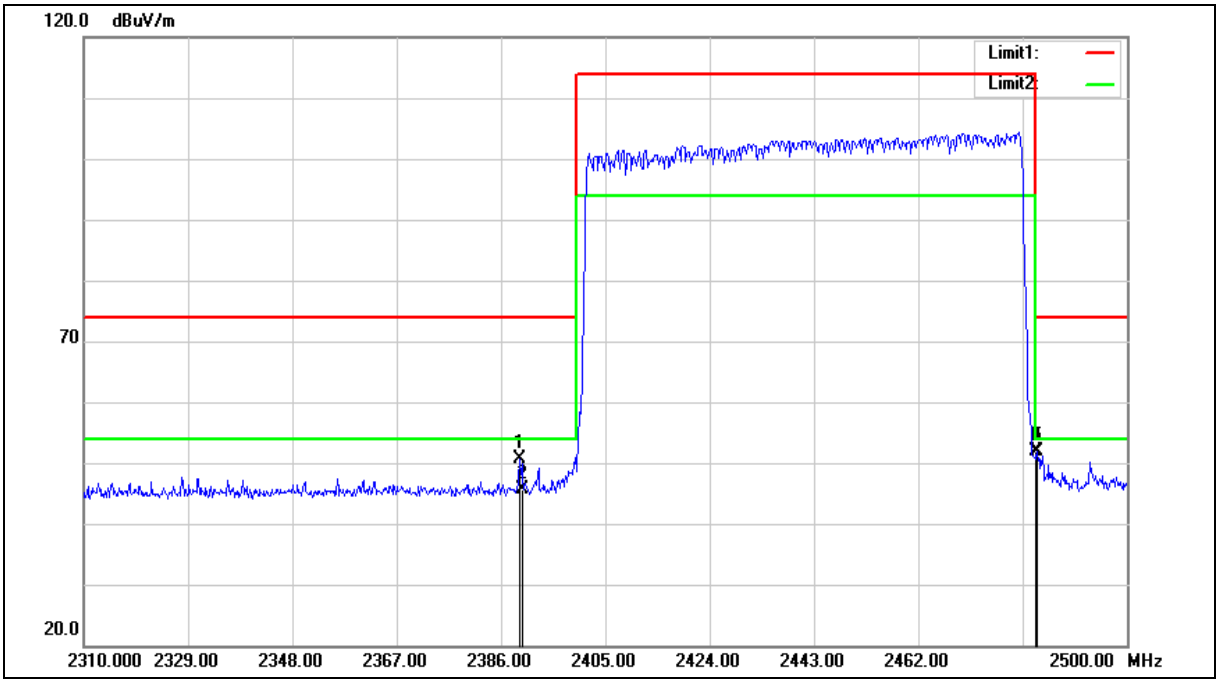
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.850	60.42	-9.79	50.63	74.00	-23.37	peak
2	2390.000	55.96	-9.78	46.18	74.00	-27.82	peak
3	2483.500	58.26	-9.56	48.70	74.00	-25.30	peak
4	2483.850	60.83	-9.56	51.27	74.00	-22.73	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



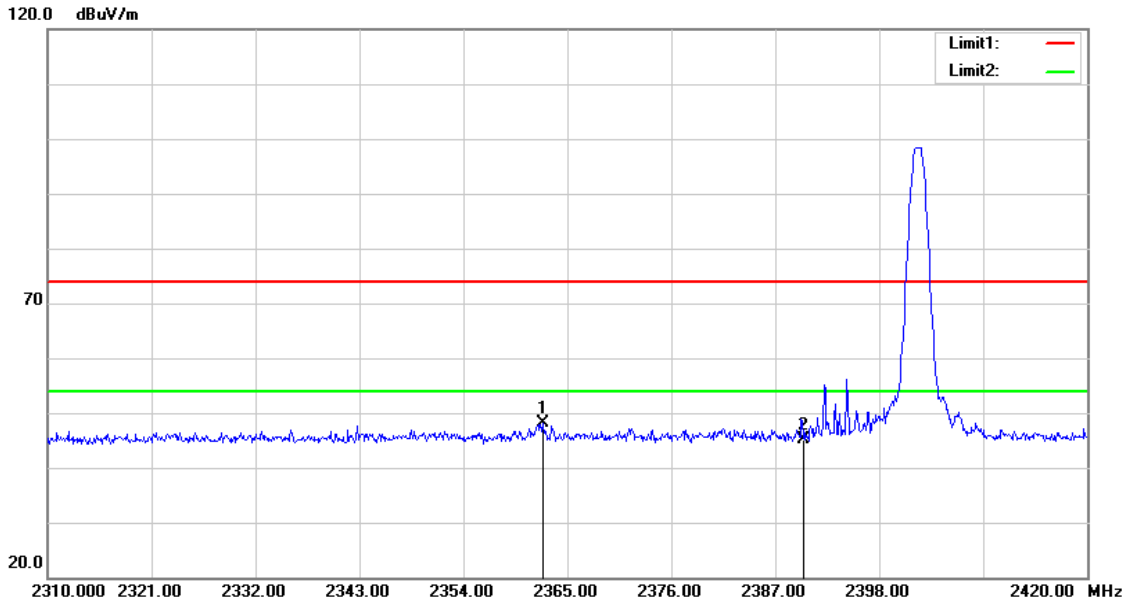
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.420	60.38	-9.79	50.59	74.00	-23.41	peak
2	2390.000	55.34	-9.78	45.56	74.00	-28.44	peak
3	2483.500	61.48	-9.56	51.92	74.00	-22.08	peak
4	2483.500	61.48	-9.56	51.92	74.00	-22.08	peak
5	2483.660	61.48	-9.56	51.92	74.00	-22.08	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



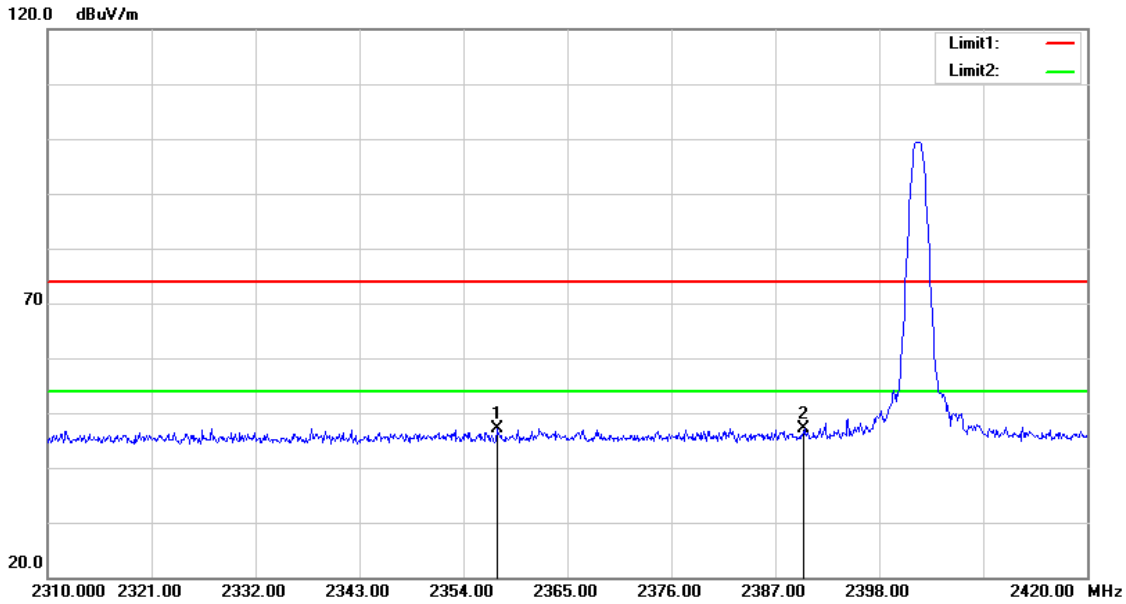
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2362.360	57.90	-9.87	48.03	74.00	-25.97	peak
2	2390.000	54.95	-9.78	45.17	74.00	-28.83	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



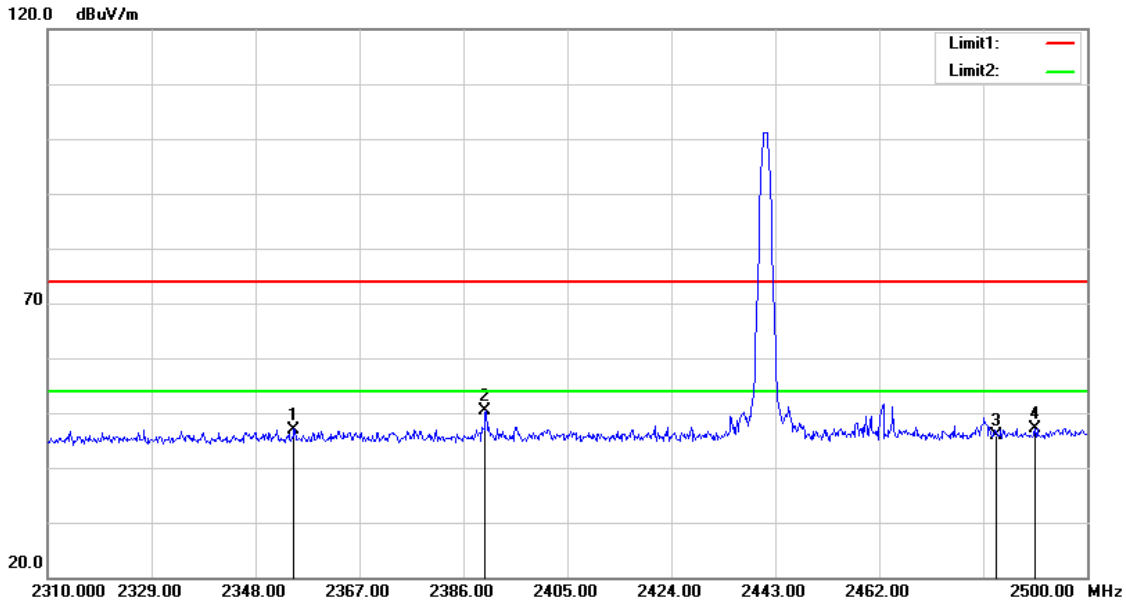
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2357.520	57.12	-9.88	47.24	74.00	-26.76	peak
2	2390.000	56.97	-9.78	47.19	74.00	-26.81	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



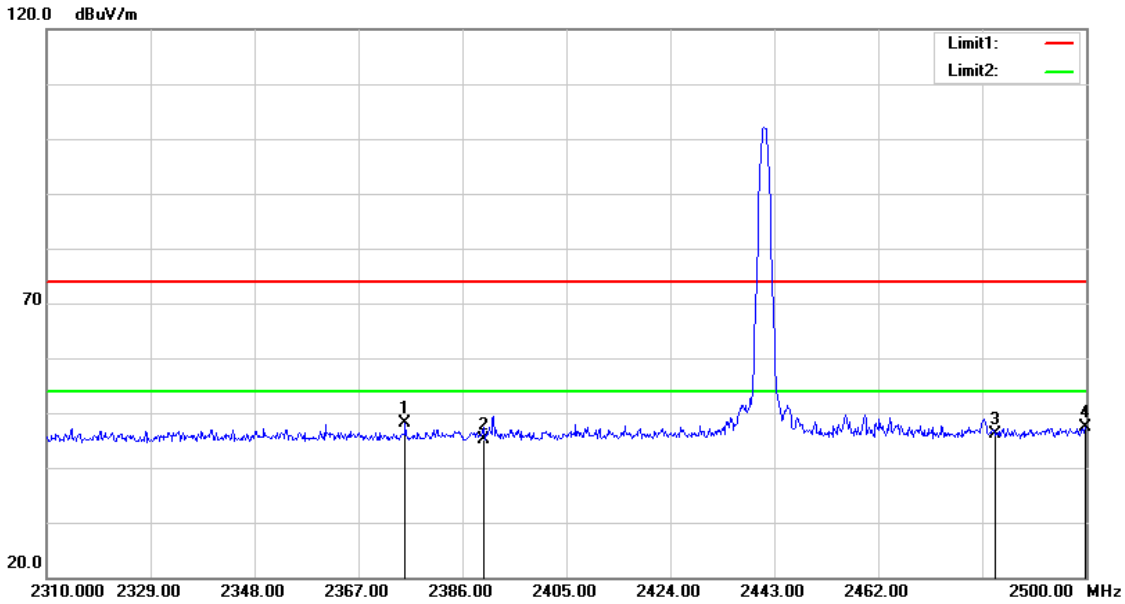
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2355.030	56.90	-9.90	47.00	74.00	-27.00	peak
2	2390.000	60.20	-9.78	50.42	74.00	-23.58	peak
3	2483.500	55.44	-9.56	45.88	74.00	-28.12	peak
4	2490.500	56.75	-9.55	47.20	74.00	-26.80	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



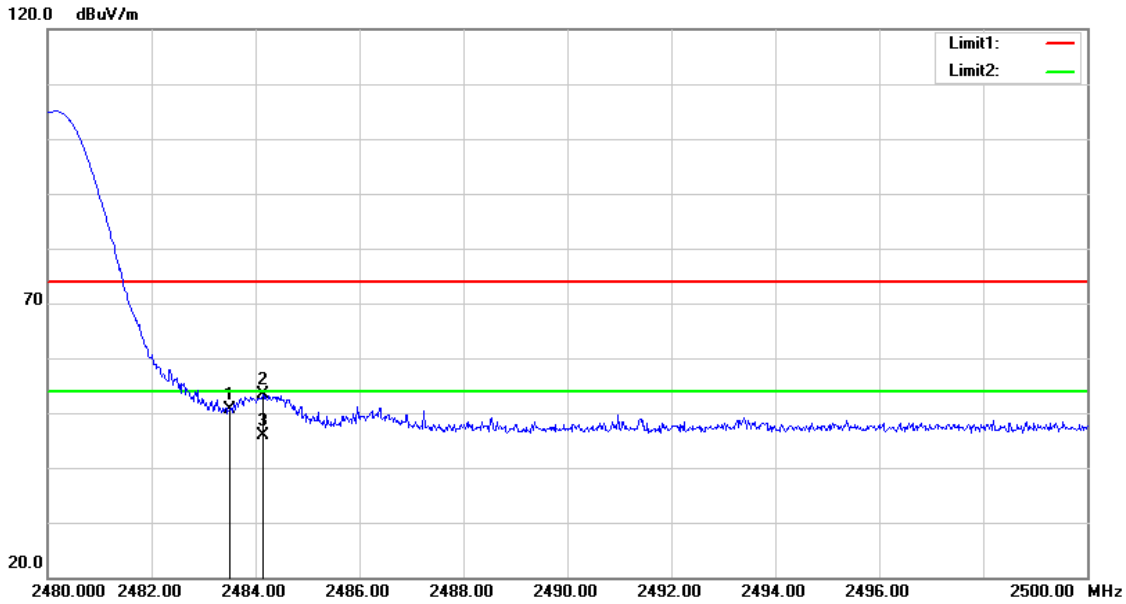
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2375.550	57.87	-9.83	48.04	74.00	-25.96	peak
2	2390.000	55.02	-9.78	45.24	74.00	-28.76	peak
3	2483.500	55.73	-9.56	46.17	74.00	-27.83	peak
4	2499.810	56.82	-9.53	47.29	74.00	-26.71	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



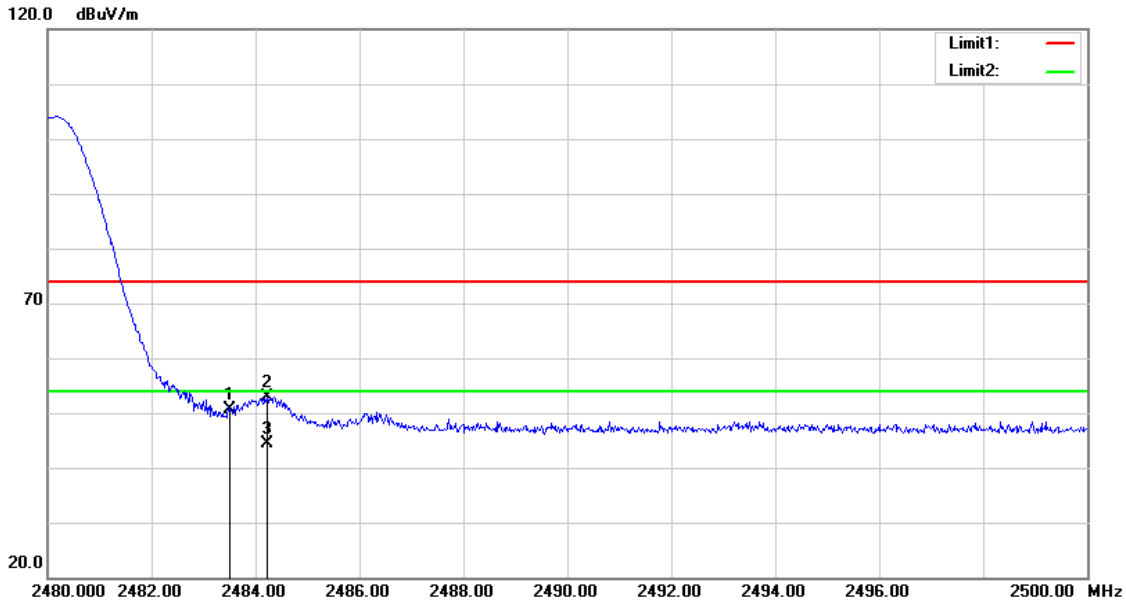
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	60.27	-9.56	50.71	74.00	-23.29	peak
2	2484.140	62.87	-9.56	53.31	74.00	-20.69	peak
3	2484.140	55.35	-9.56	45.79	54.00	-8.21	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



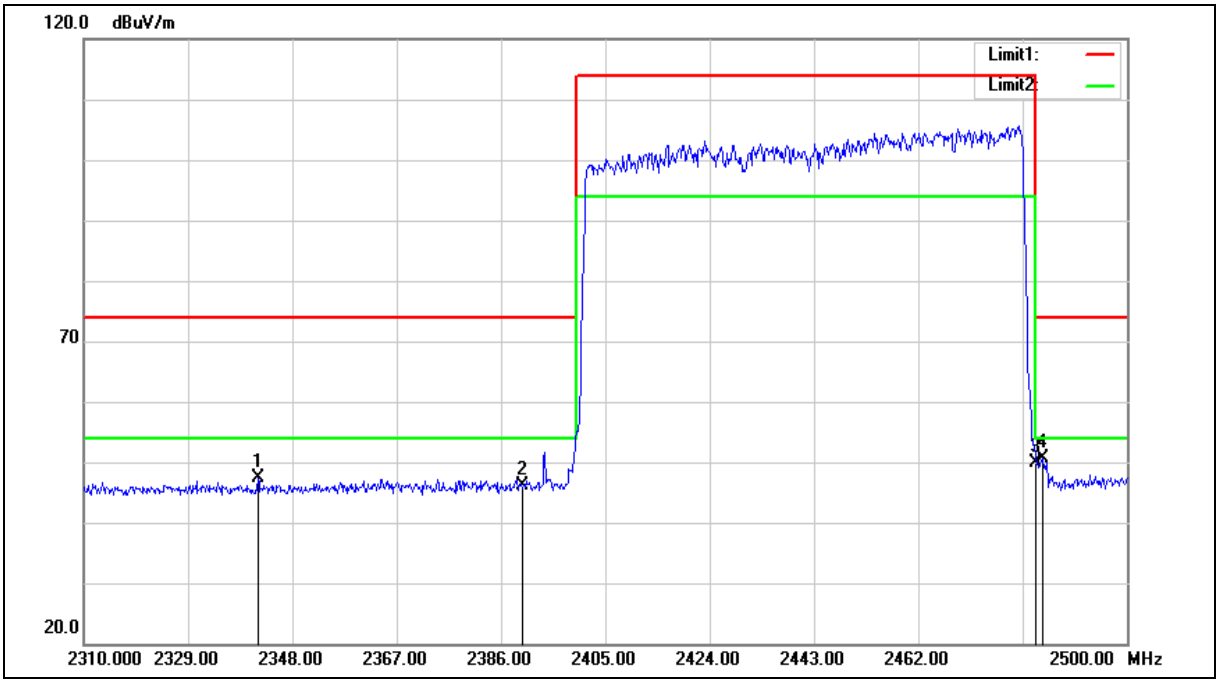
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	60.13	-9.56	50.57	74.00	-23.43	peak
2	2484.220	62.43	-9.56	52.87	74.00	-21.13	peak
3	2484.220	53.82	-9.56	44.26	54.00	-9.74	AVG

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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



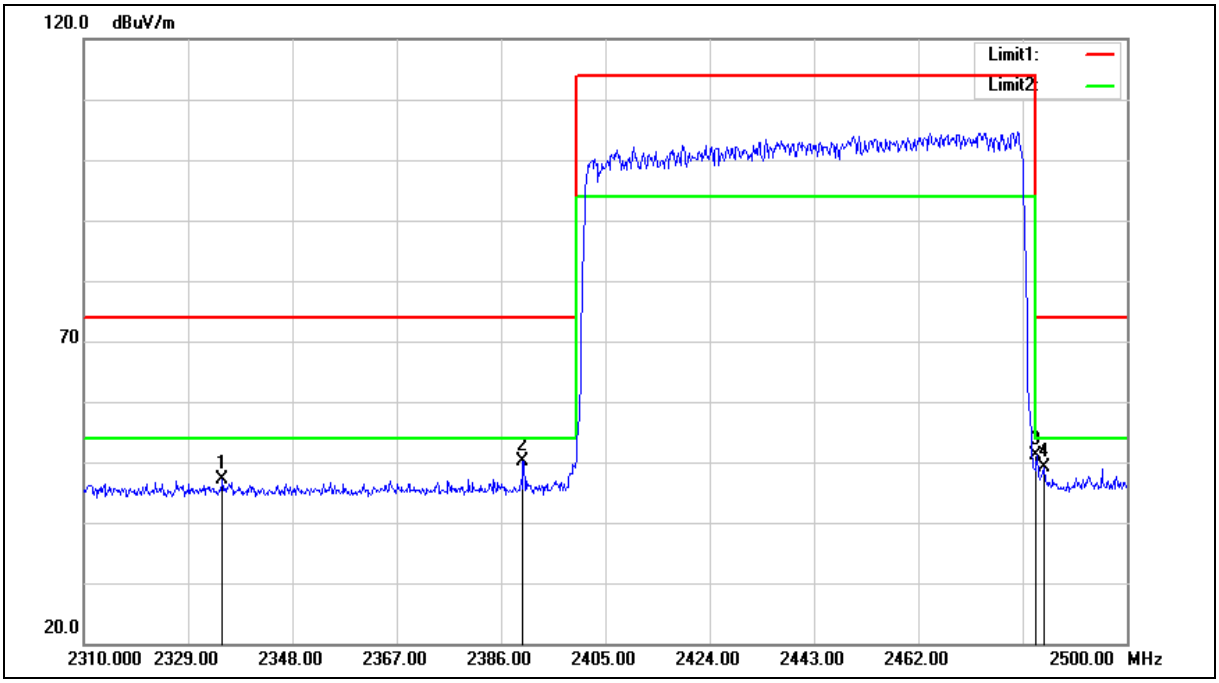
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2341.730	57.39	-9.94	47.45	74.00	-26.55	peak
2	2390.000	55.82	-9.78	46.04	74.00	-27.96	peak
3	2483.500	59.38	-9.56	49.82	74.00	-24.18	peak
4	2484.610	60.10	-9.56	50.54	74.00	-23.46	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	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	2335.270	57.17	-9.96	47.21	74.00	-26.79	peak
2	2390.000	59.86	-9.78	50.08	74.00	-23.92	peak
3	2483.500	60.58	-9.56	51.02	74.00	-22.98	peak
4	2484.990	58.77	-9.56	49.21	74.00	-24.79	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.

Antenna Type: Dipole Antenna

Harmonic

Below 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Test Mode:	Mode 1		

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
75.5900	45.20	-14.20	31.00	40.00	-9.00	QP	H
113.4200	50.37	-13.80	36.57	43.50	-6.93	QP	H
170.6500	44.98	-10.44	34.54	43.50	-8.96	QP	H
240.4900	44.60	-12.26	32.34	46.00	-13.66	QP	H
320.0300	43.78	-9.65	34.13	46.00	-11.87	QP	H
715.7900	41.02	-1.51	39.51	46.00	-6.49	QP	H
170.6500	43.04	-10.44	32.60	43.50	-10.90	QP	V
213.3300	47.68	-13.45	34.23	43.50	-9.27	QP	V
244.3700	49.85	-12.32	37.53	46.00	-8.47	QP	V
405.3900	39.43	-7.20	32.23	46.00	-13.77	QP	V
666.3200	37.97	-2.32	35.65	46.00	-10.35	QP	V
863.2300	33.48	1.12	34.60	46.00	-11.40	QP	V

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

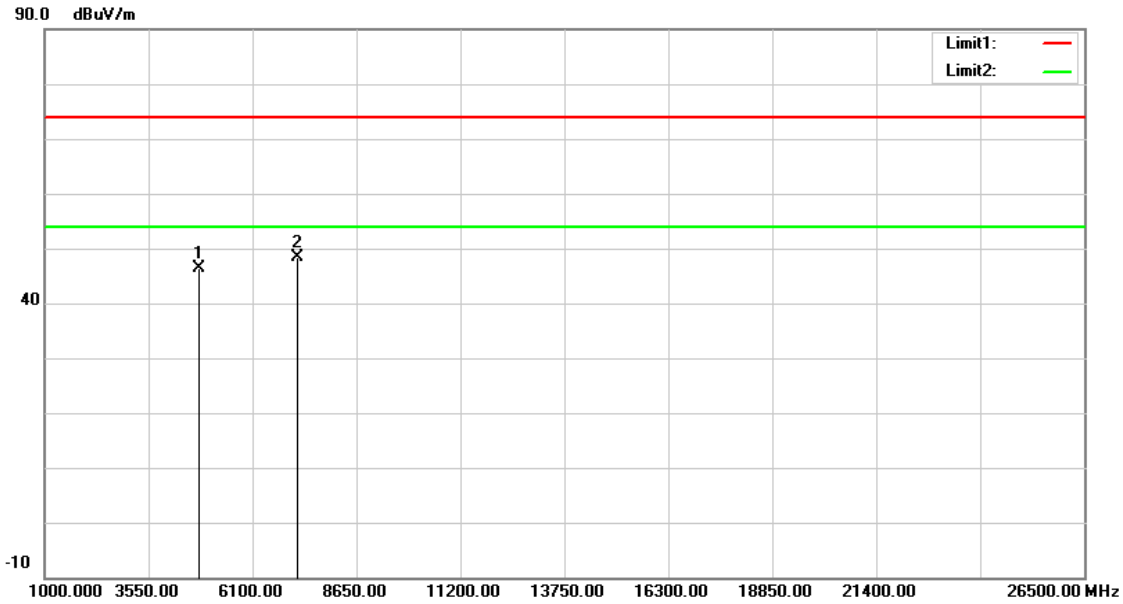
Example: 31.00= -14.20+45.20

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

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

Above 1 GHz

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	51.36	-5.03	46.33	74.00	-27.67	peak
2	7206.000	49.44	-0.97	48.47	74.00	-25.53	peak

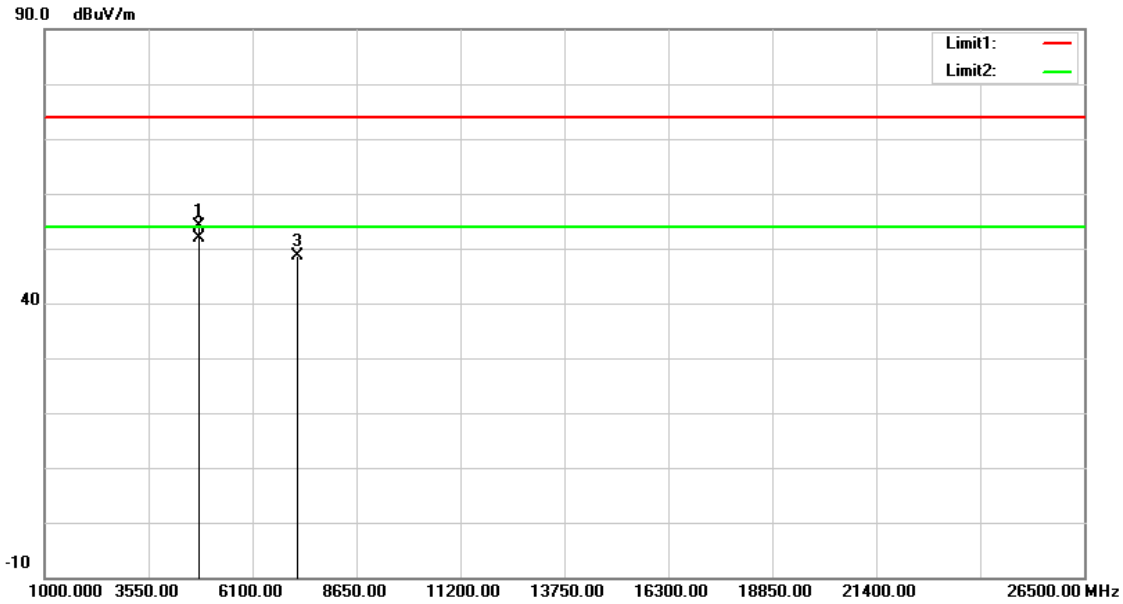
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 46.33= -5.03+51.36

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	59.28	-5.03	54.25	74.00	-19.75	peak
2	4804.000	56.80	-5.03	51.77	54.00	-2.23	AVG
3	7206.000	49.62	-0.97	48.65	74.00	-25.35	peak

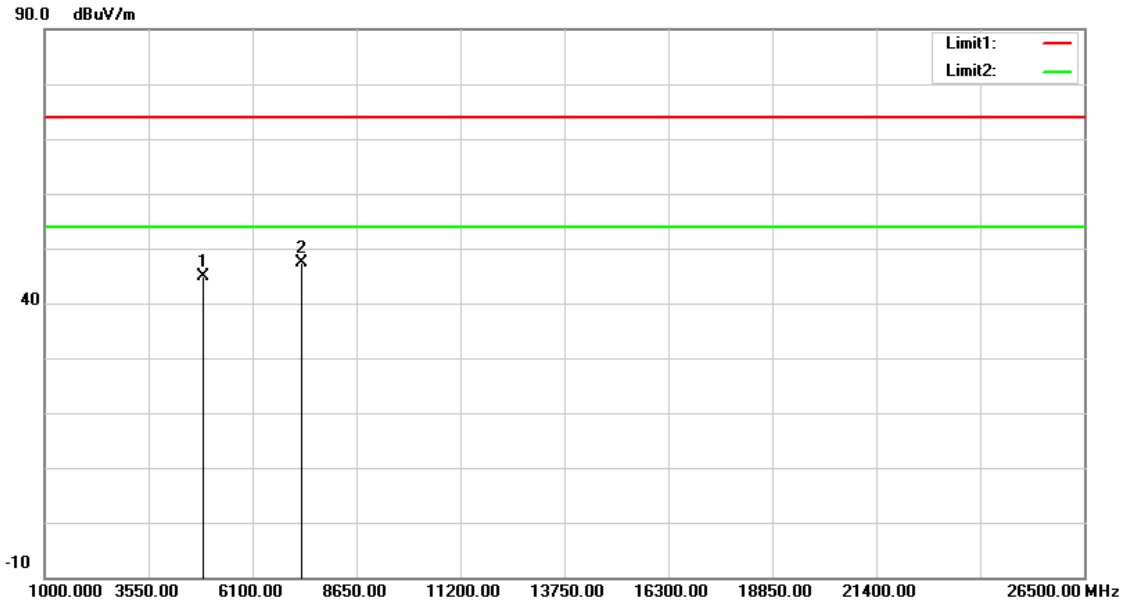
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 54.25= -5.03+59.28

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



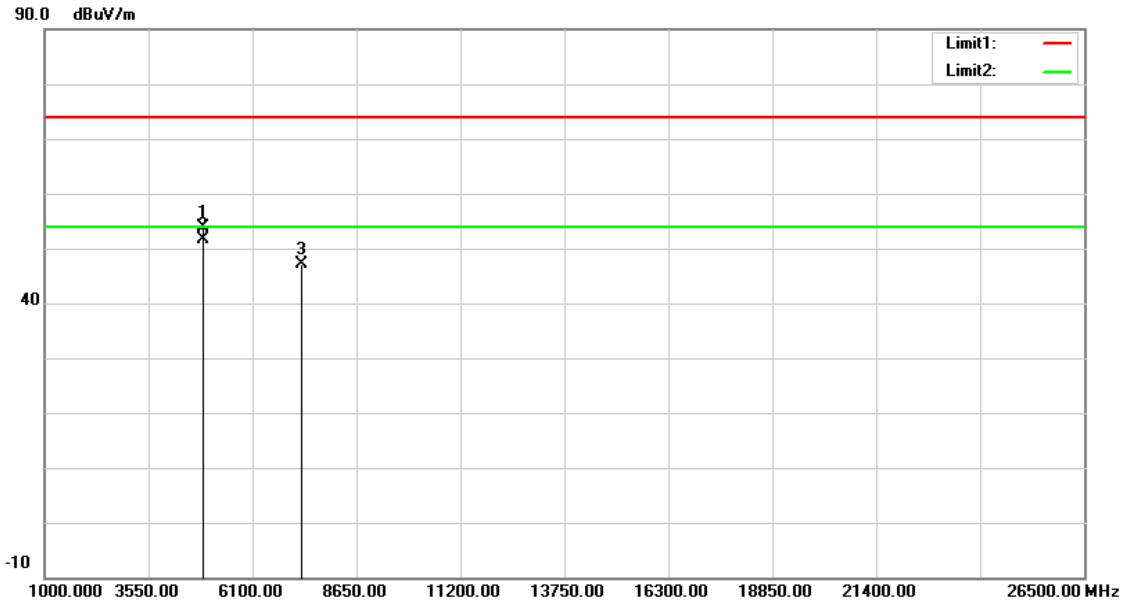
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	49.91	-5.10	44.81	74.00	-29.19	peak
2	7323.000	48.04	-0.63	47.41	74.00	-26.59	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



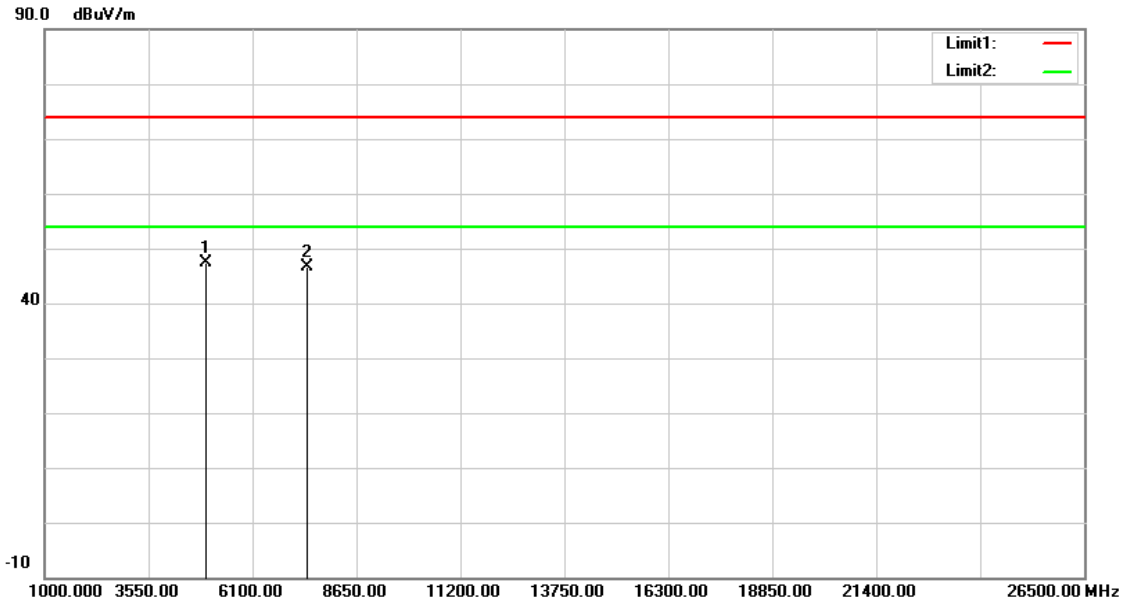
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	58.89	-5.10	53.79	74.00	-20.21	peak
2	4882.000	56.78	-5.10	51.68	54.00	-2.32	AVG
3	7323.000	47.80	-0.63	47.17	74.00	-26.83	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



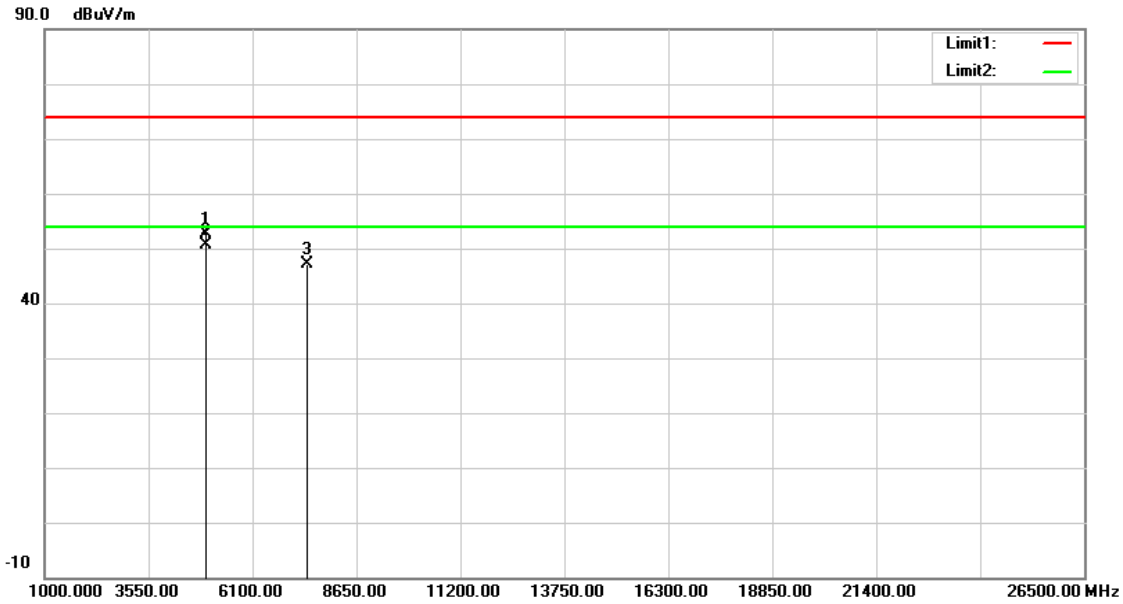
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	52.59	-5.17	47.42	74.00	-26.58	peak
2	7440.000	46.86	-0.35	46.51	74.00	-27.49	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



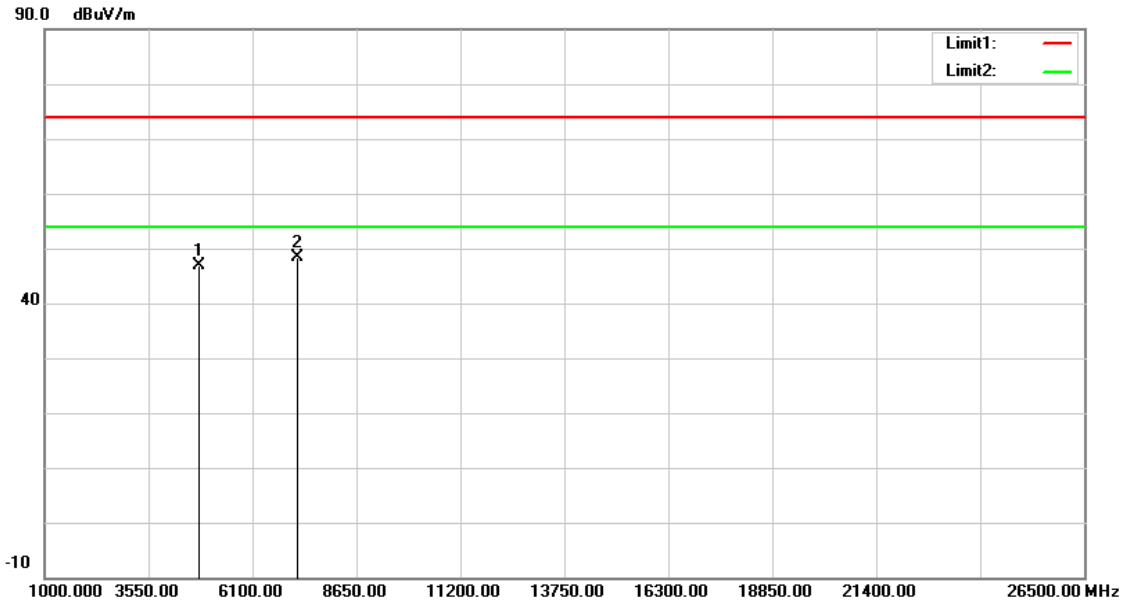
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	57.86	-5.17	52.69	74.00	-21.31	peak
2	4960.000	55.77	-5.17	50.60	54.00	-3.40	AVG
3	7440.000	47.45	-0.35	47.10	74.00	-26.90	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



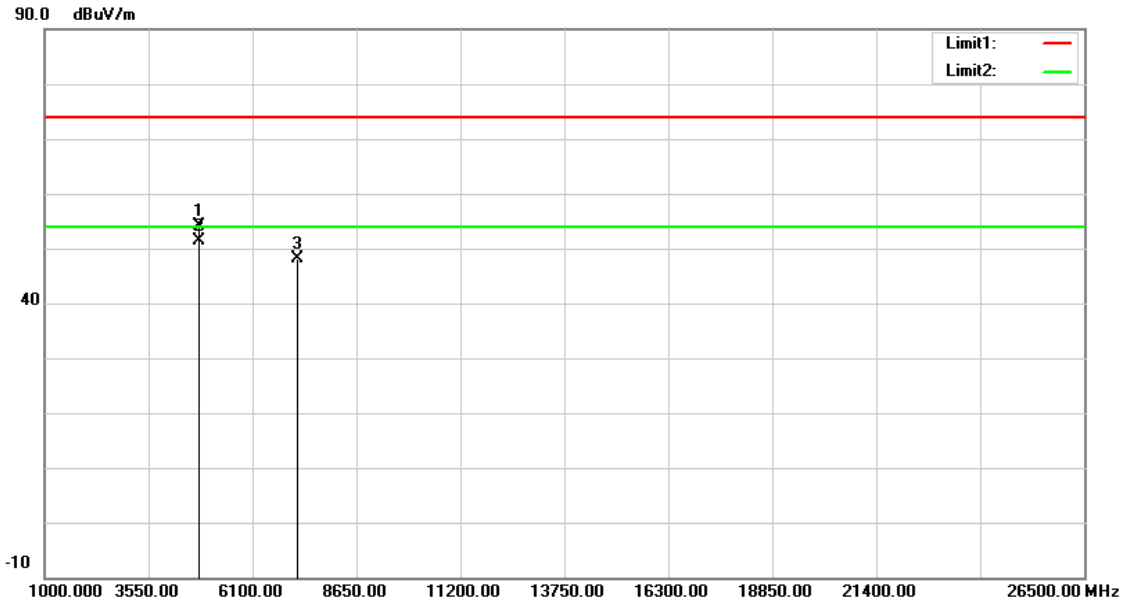
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	51.96	-5.03	46.93	74.00	-27.07	peak
2	7206.000	49.34	-0.97	48.37	74.00	-25.63	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



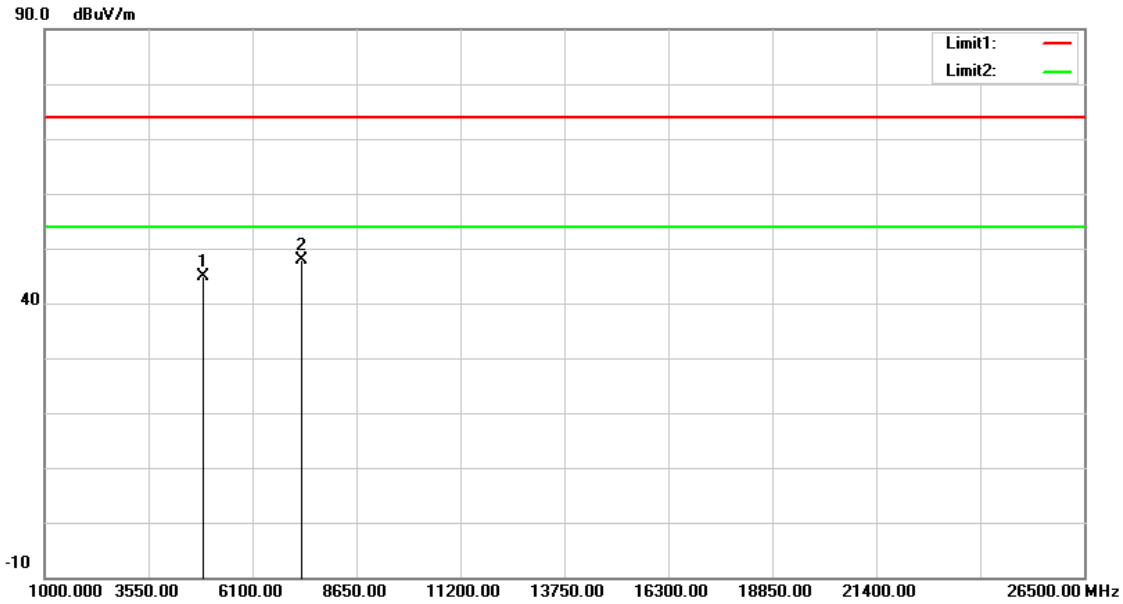
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	59.15	-5.03	54.12	74.00	-19.88	peak
2	4804.000	56.29	-5.03	51.26	54.00	-2.74	AVG
3	7206.000	49.00	-0.97	48.03	74.00	-25.97	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



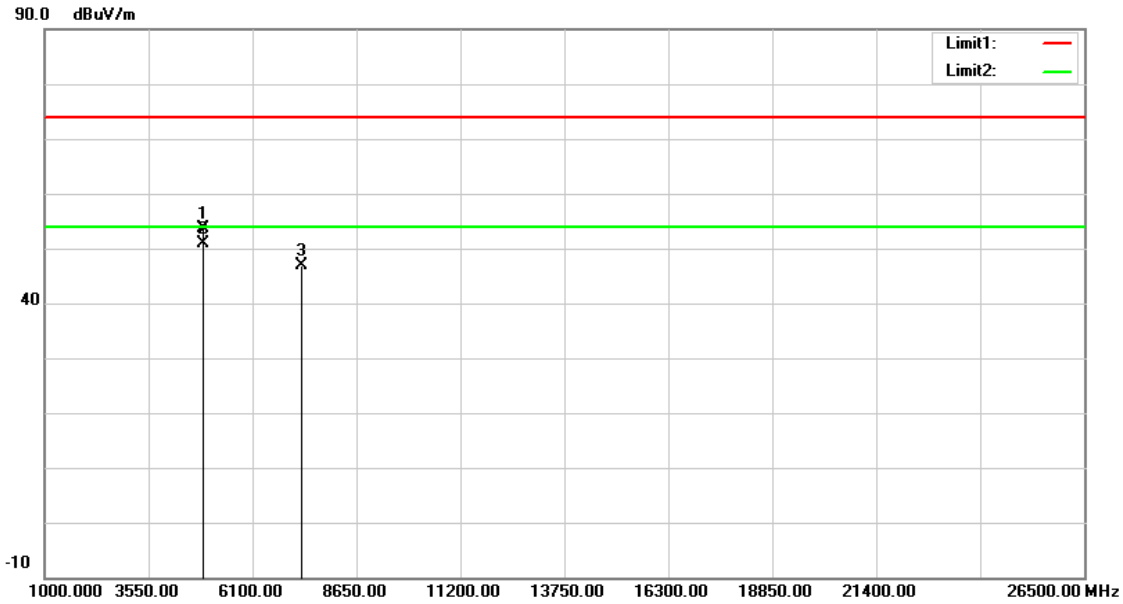
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	49.87	-5.10	44.77	74.00	-29.23	peak
2	7323.000	48.52	-0.63	47.89	74.00	-26.11	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



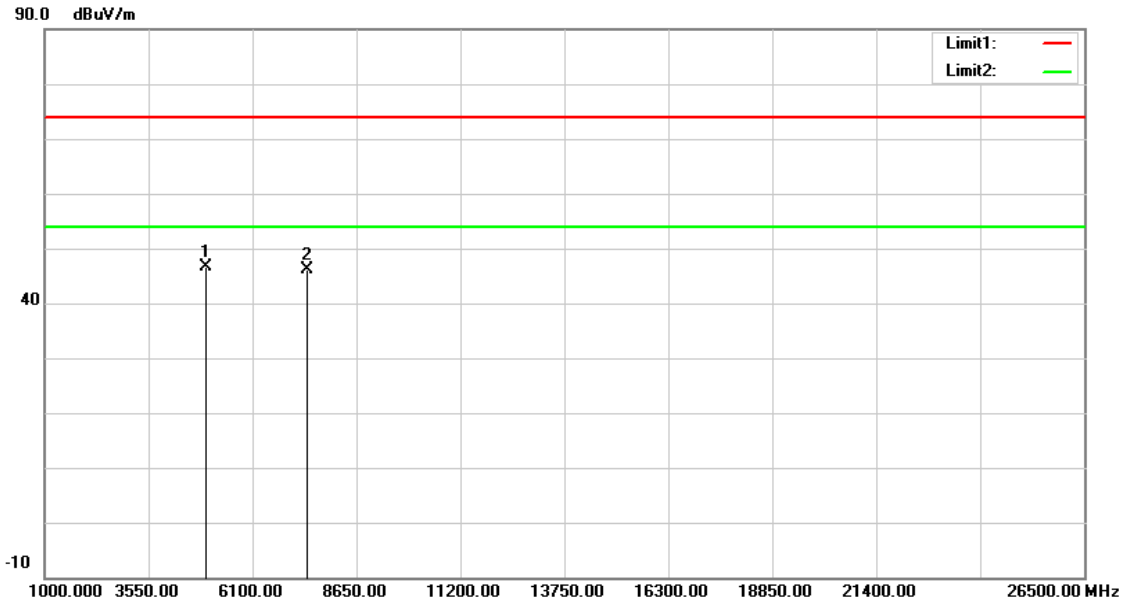
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	58.81	-5.10	53.71	74.00	-20.29	peak
2	4882.000	55.88	-5.10	50.78	54.00	-3.22	AVG
3	7323.000	47.50	-0.63	46.87	74.00	-27.13	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



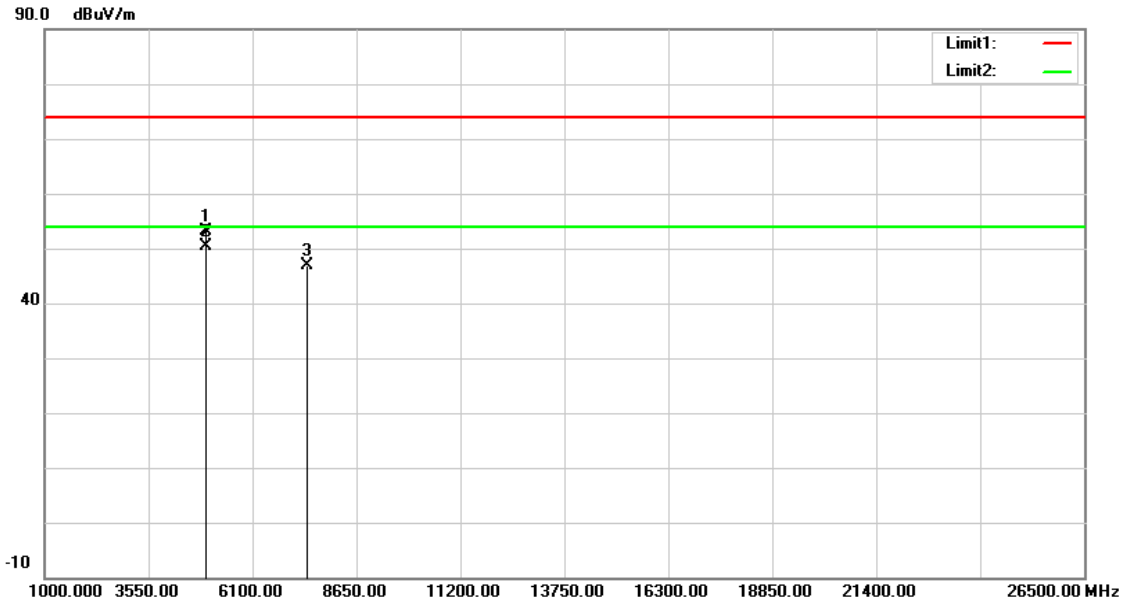
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	51.71	-5.17	46.54	74.00	-27.46	peak
2	7440.000	46.41	-0.35	46.06	74.00	-27.94	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	58.28	-5.17	53.11	74.00	-20.89	peak
2	4960.000	55.66	-5.17	50.49	54.00	-3.51	AVG
3	7440.000	47.11	-0.35	46.76	74.00	-27.24	peak

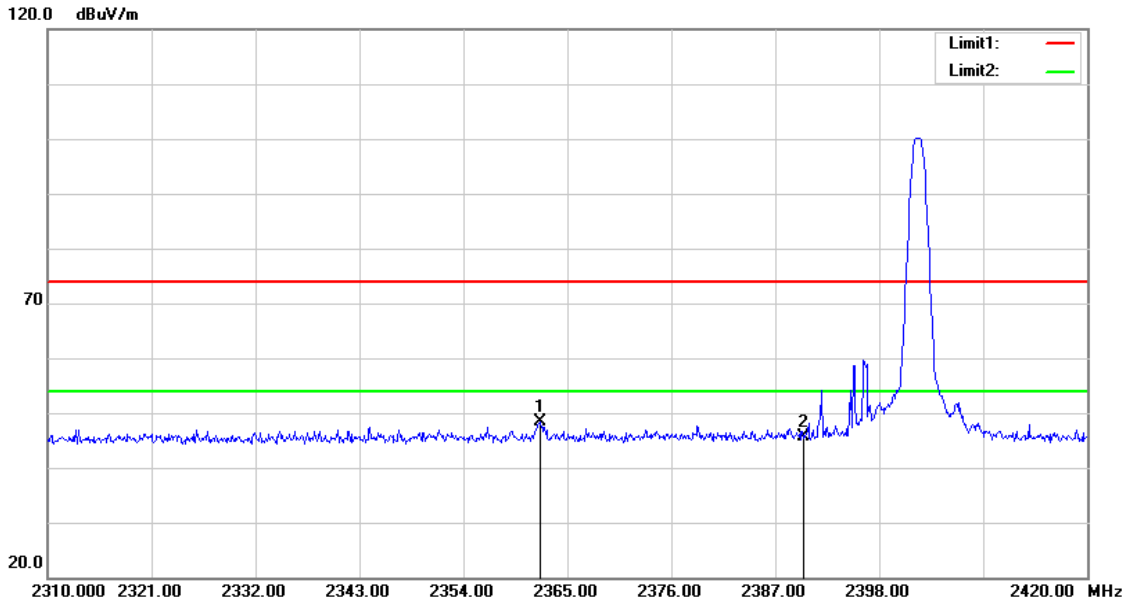
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

Band Edge

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



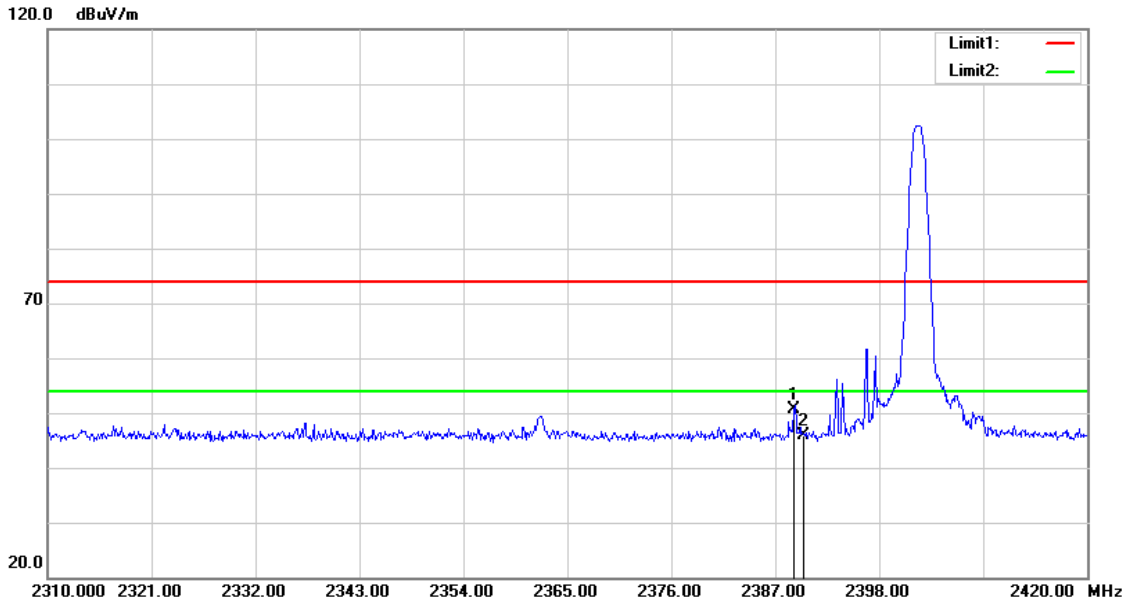
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2362.140	58.14	-9.87	48.27	74.00	-25.73	peak
2	2390.000	55.31	-9.78	45.53	74.00	-28.47	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



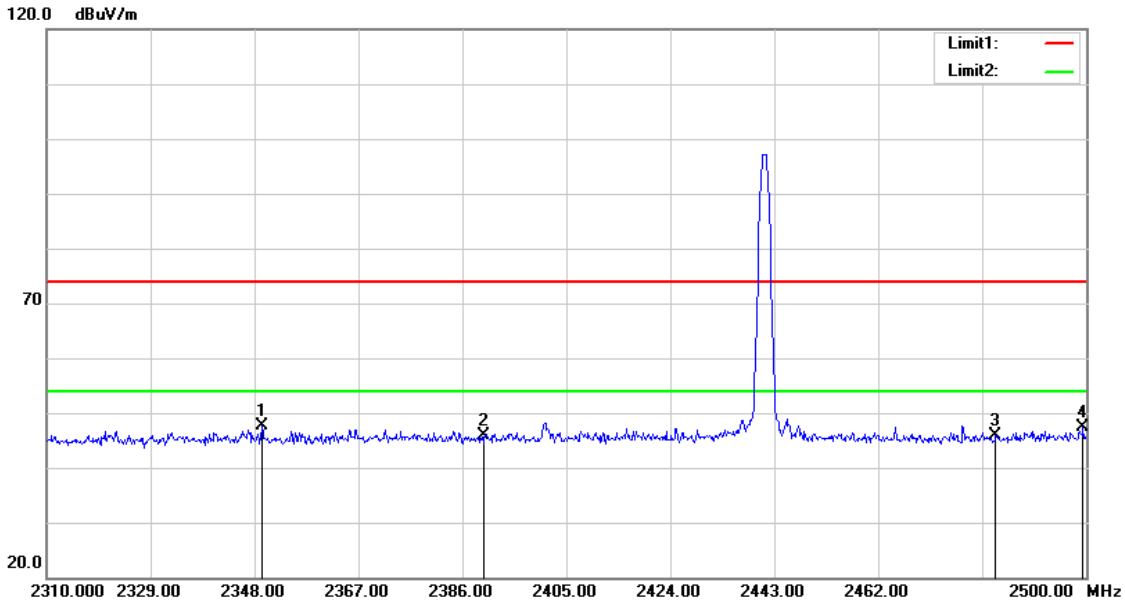
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.980	60.52	-9.79	50.73	74.00	-23.27	peak
2	2390.000	55.73	-9.78	45.95	74.00	-28.05	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



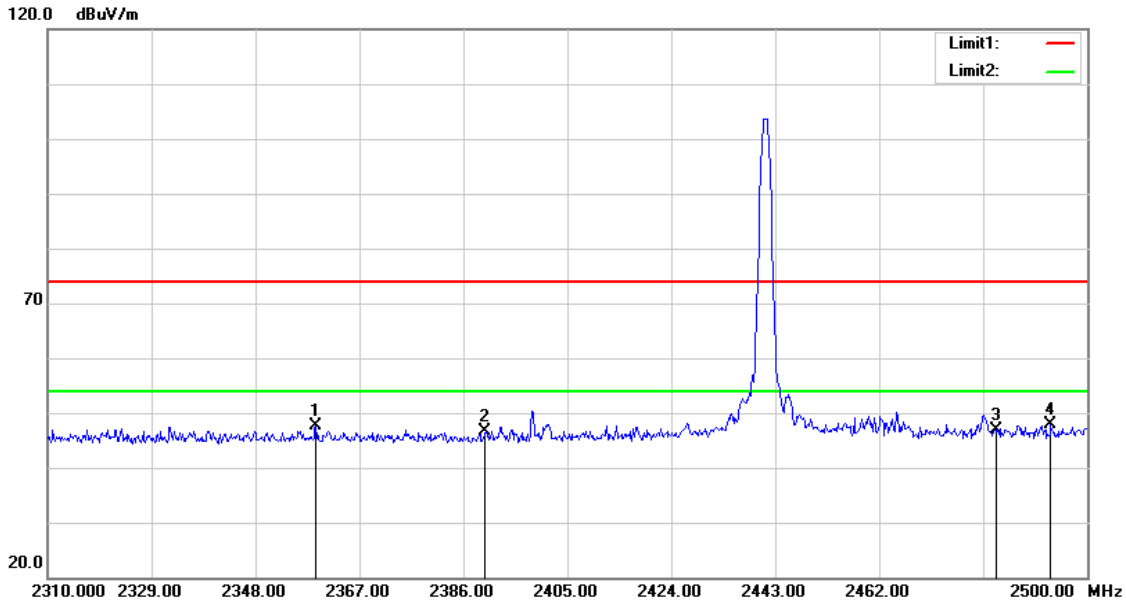
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2349.330	57.42	-9.91	47.51	74.00	-26.49	peak
2	2390.000	55.74	-9.78	45.96	74.00	-28.04	peak
3	2483.500	55.49	-9.56	45.93	74.00	-28.07	peak
4	2499.430	56.97	-9.53	47.44	74.00	-26.56	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



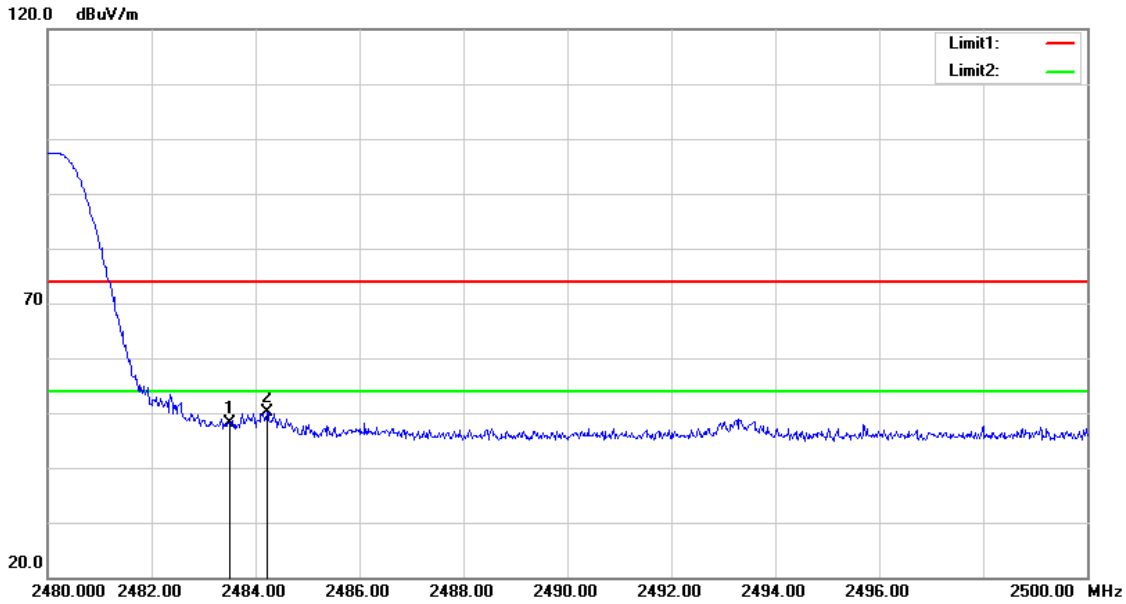
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2359.020	57.41	-9.88	47.53	74.00	-26.47	peak
2	2390.000	56.37	-9.78	46.59	74.00	-27.41	peak
3	2483.500	56.39	-9.56	46.83	74.00	-27.17	peak
4	2493.350	57.41	-9.55	47.86	74.00	-26.14	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



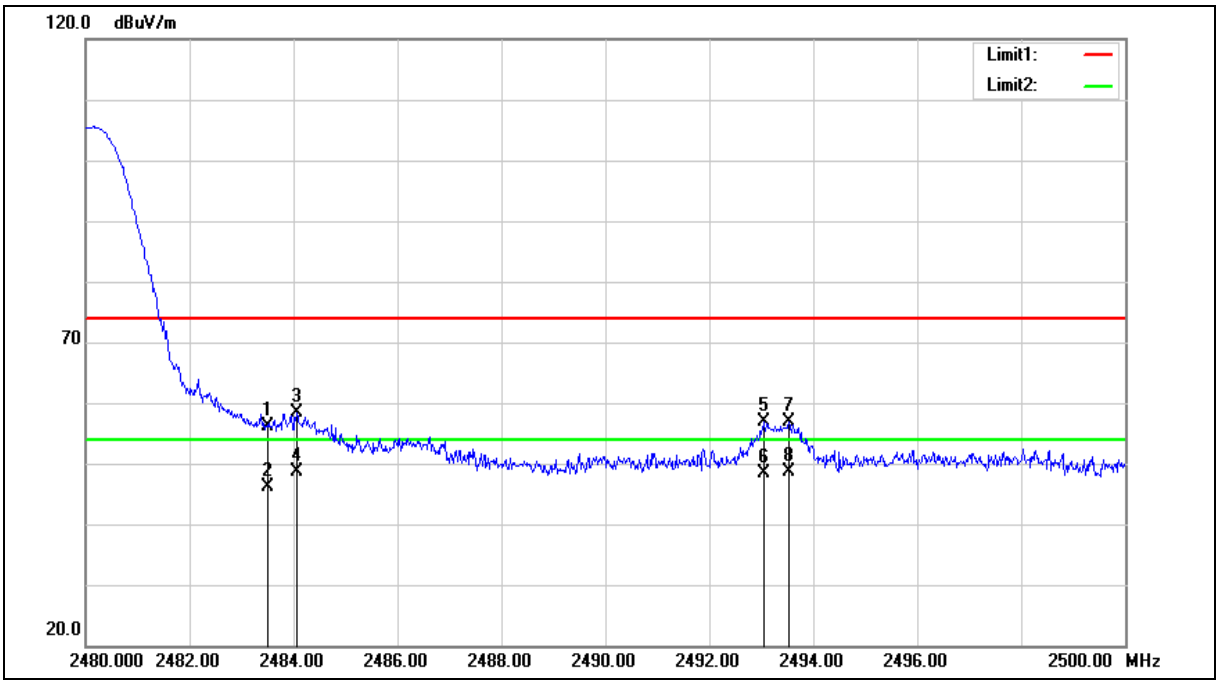
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	57.61	-9.56	48.05	74.00	-25.95	peak
2	2484.220	59.72	-9.56	50.16	74.00	-23.84	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

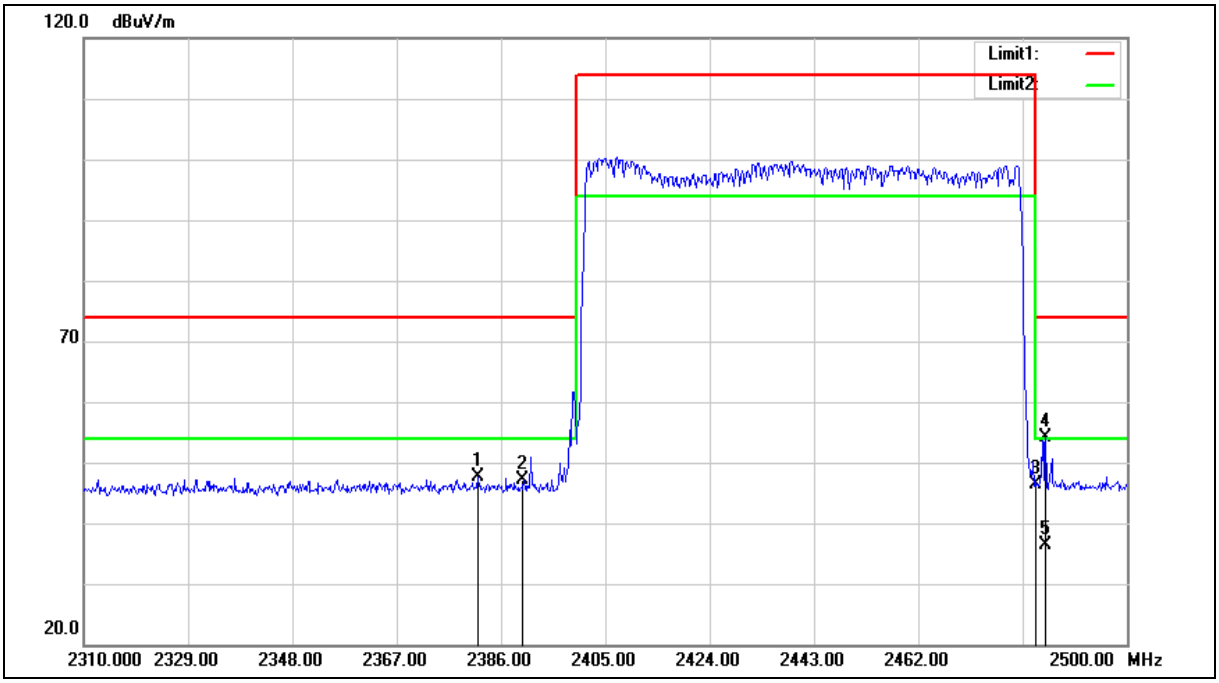
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	65.61	-9.56	56.05	74.00	-17.95	peak
2	2483.500	55.63	-9.56	46.07	54.00	-7.93	AVG
3	2484.060	67.92	-9.56	58.36	74.00	-15.64	peak
4	2484.060	58.16	-9.56	48.60	54.00	-5.40	AVG
5	2493.060	66.33	-9.55	56.78	74.00	-17.22	peak
6	2493.060	57.99	-9.55	48.44	54.00	-5.56	AVG
7	2493.540	66.52	-9.55	56.97	74.00	-17.03	peak
8	2493.540	58.09	-9.55	48.54	54.00	-5.46	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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



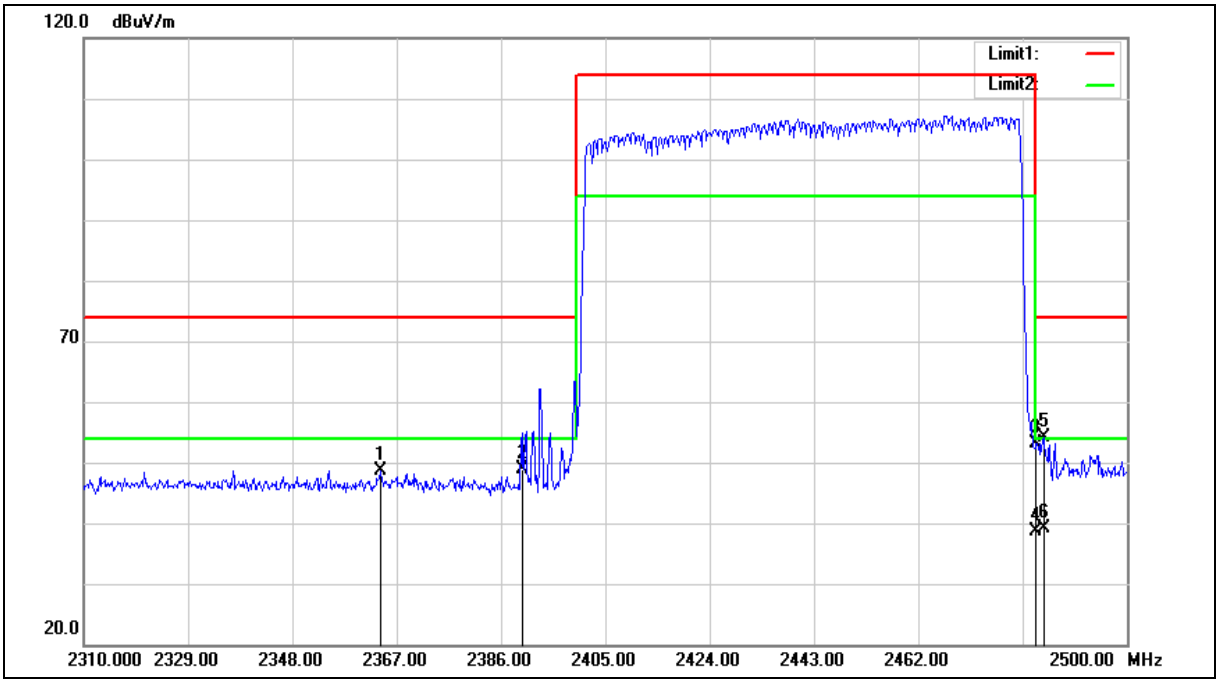
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2381.820	57.18	-9.65	47.53	74.00	-26.47	peak
2	2390.000	56.83	-9.62	47.21	74.00	-26.79	peak
3	2483.500	55.71	-9.37	46.34	74.00	-27.66	peak
4	2485.180	63.40	-9.37	54.03	74.00	-19.97	peak
5	2485.180	45.68	-9.37	36.31	54.00	-17.69	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



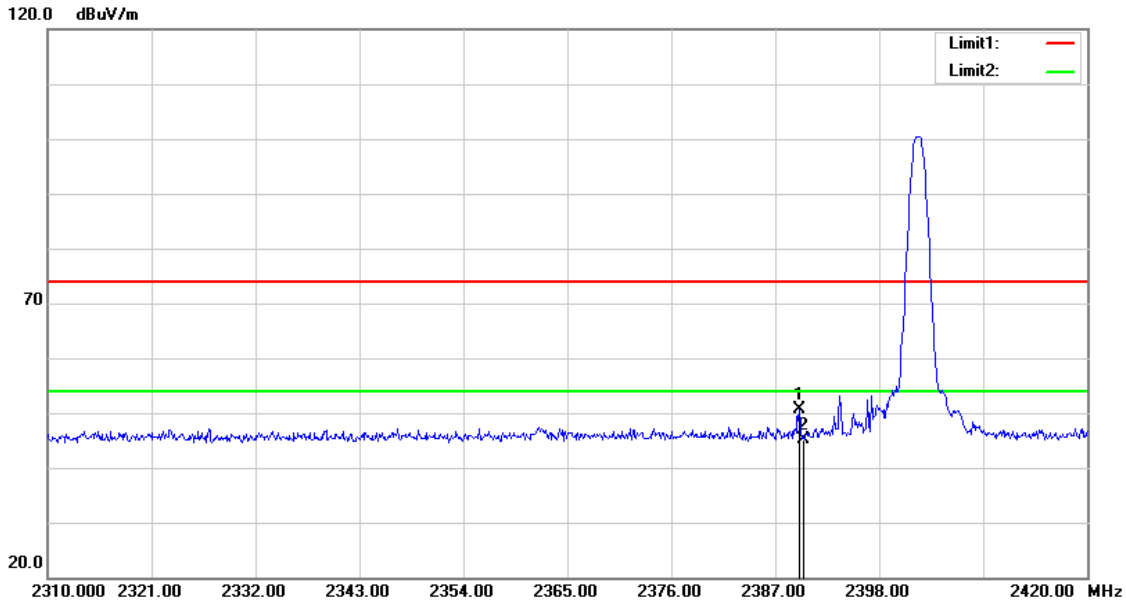
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2363.960	58.46	-9.72	48.74	74.00	-25.26	peak
2	2390.000	58.54	-9.62	48.92	74.00	-25.08	peak
3	2483.500	62.52	-9.37	53.15	74.00	-20.85	peak
4	2483.500	47.95	-9.37	38.58	54.00	-15.42	AVG
5	2484.800	63.49	-9.37	54.12	74.00	-19.88	peak
6	2484.800	48.54	-9.37	39.17	54.00	-14.83	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:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



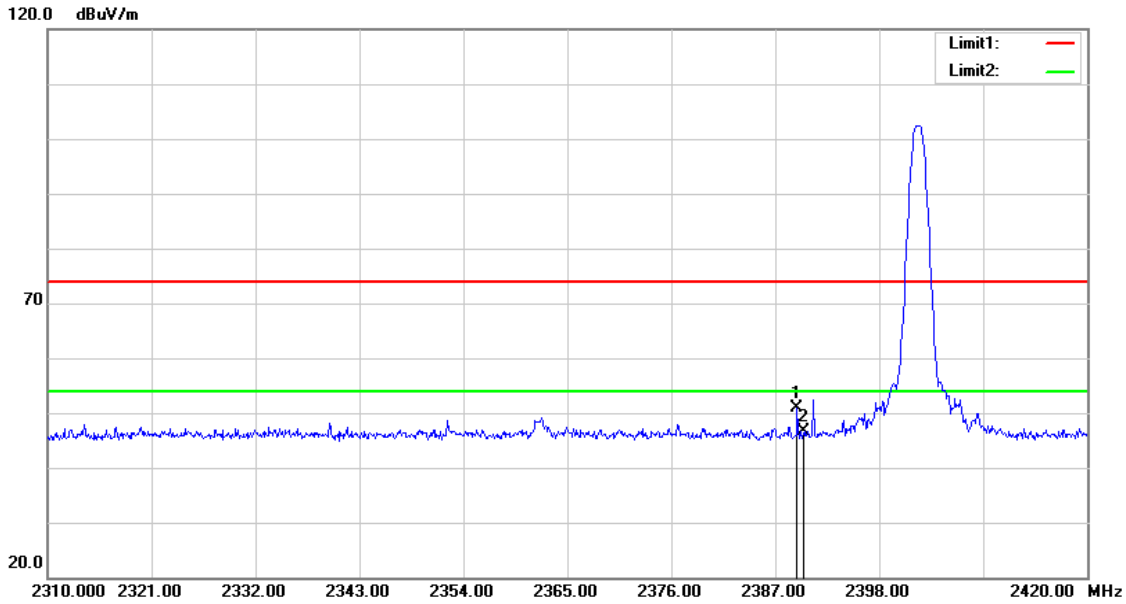
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	60.35	-9.79	50.56	74.00	-23.44	peak
2	2390.000	54.80	-9.78	45.02	74.00	-28.98	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2402 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



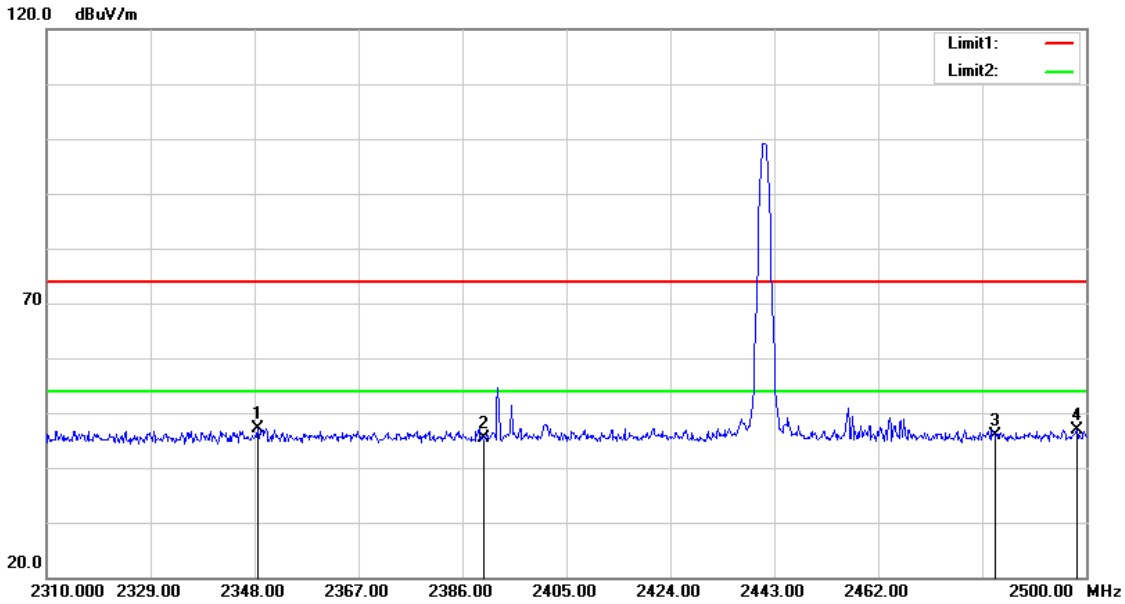
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.310	60.63	-9.79	50.84	74.00	-23.16	peak
2	2390.000	56.52	-9.78	46.74	74.00	-27.26	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



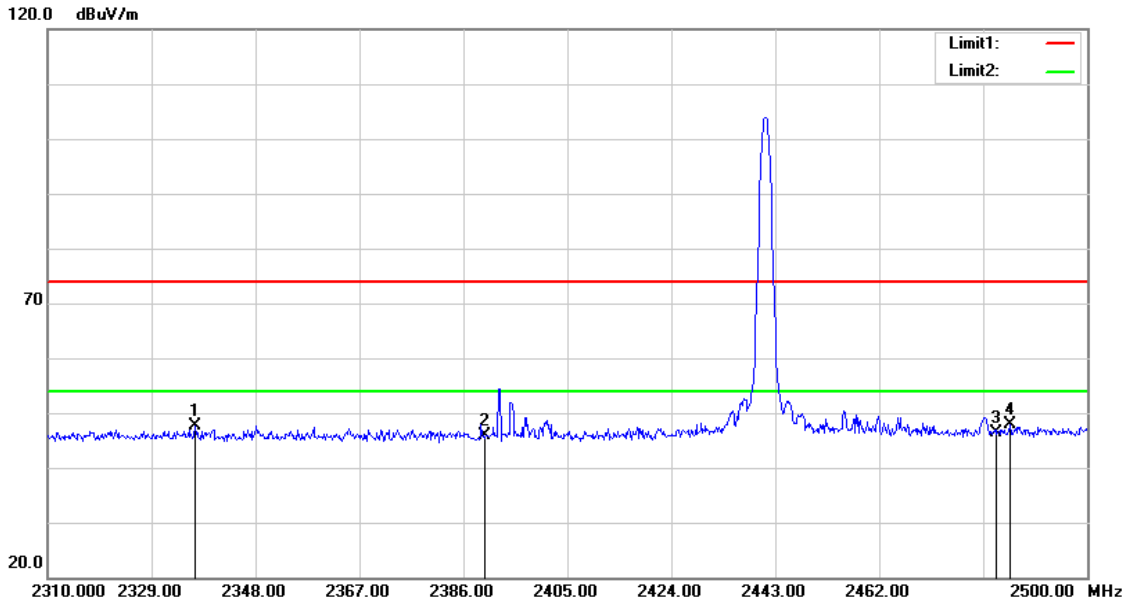
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2348.570	57.11	-9.91	47.20	74.00	-26.80	peak
2	2390.000	55.13	-9.78	45.35	74.00	-28.65	peak
3	2483.500	55.52	-9.56	45.96	74.00	-28.04	peak
4	2498.290	56.41	-9.53	46.88	74.00	-27.12	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2441 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



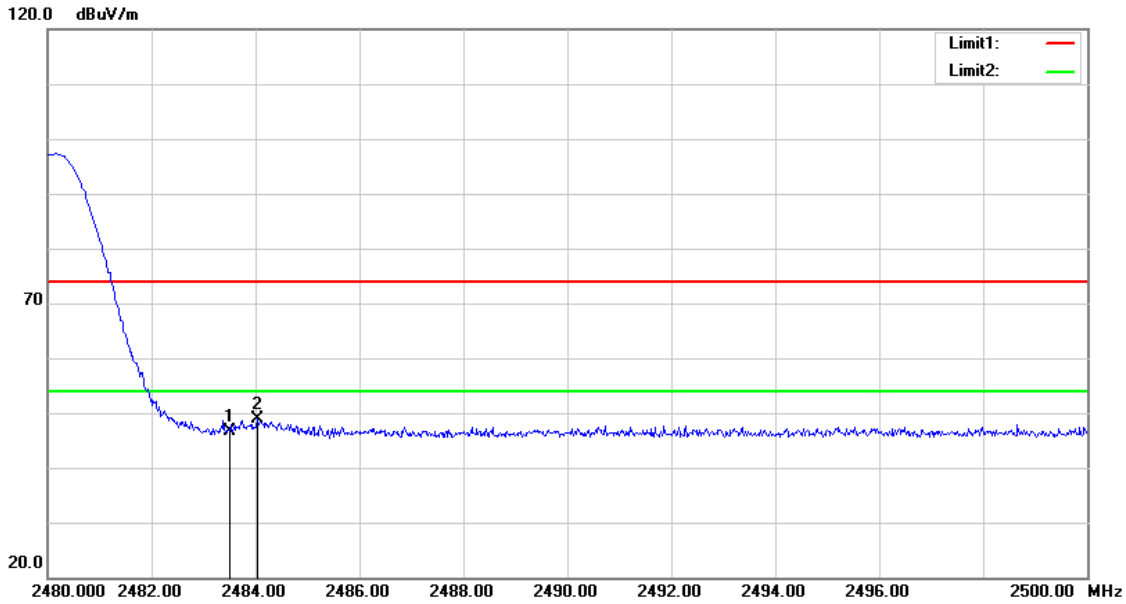
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2336.980	57.53	-9.95	47.58	74.00	-26.42	peak
2	2390.000	55.73	-9.78	45.95	74.00	-28.05	peak
3	2483.500	56.04	-9.56	46.48	74.00	-27.52	peak
4	2485.940	57.47	-9.56	47.91	74.00	-26.09	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



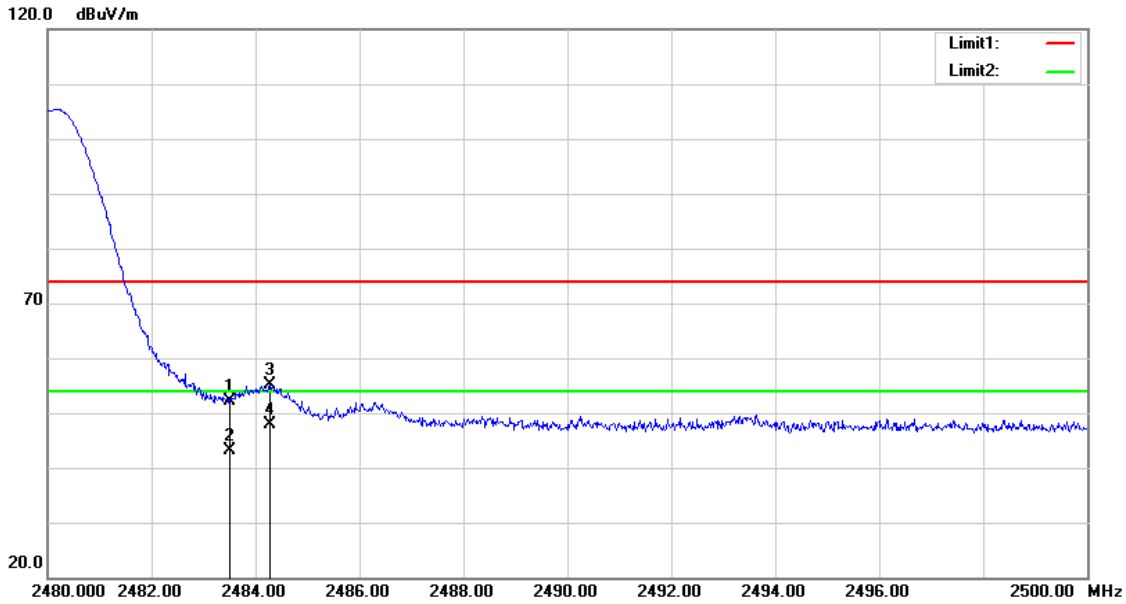
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	56.14	-9.56	46.58	74.00	-27.42	peak
2	2484.040	58.39	-9.56	48.83	74.00	-25.17	peak

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	2480 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



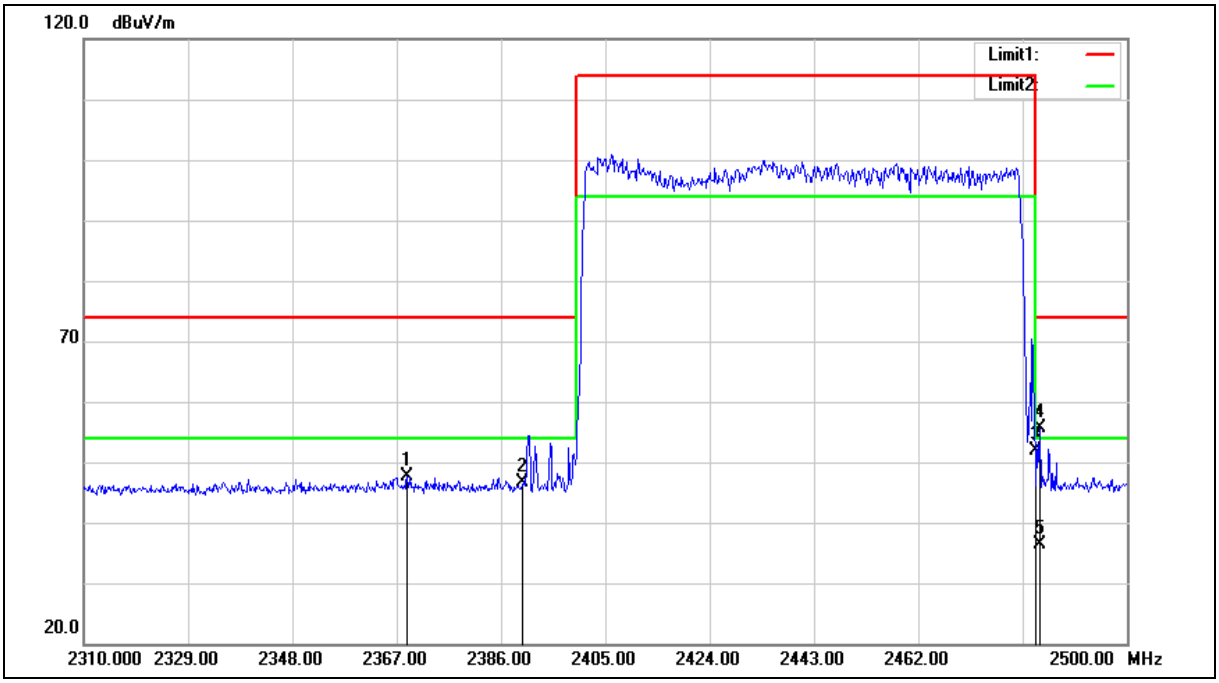
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	61.77	-9.56	52.21	74.00	-21.79	peak
2	2483.500	52.65	-9.56	43.09	54.00	-10.91	AVG
3	2484.280	64.79	-9.56	55.23	74.00	-18.77	peak
4	2484.280	57.38	-9.56	47.82	54.00	-6.18	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



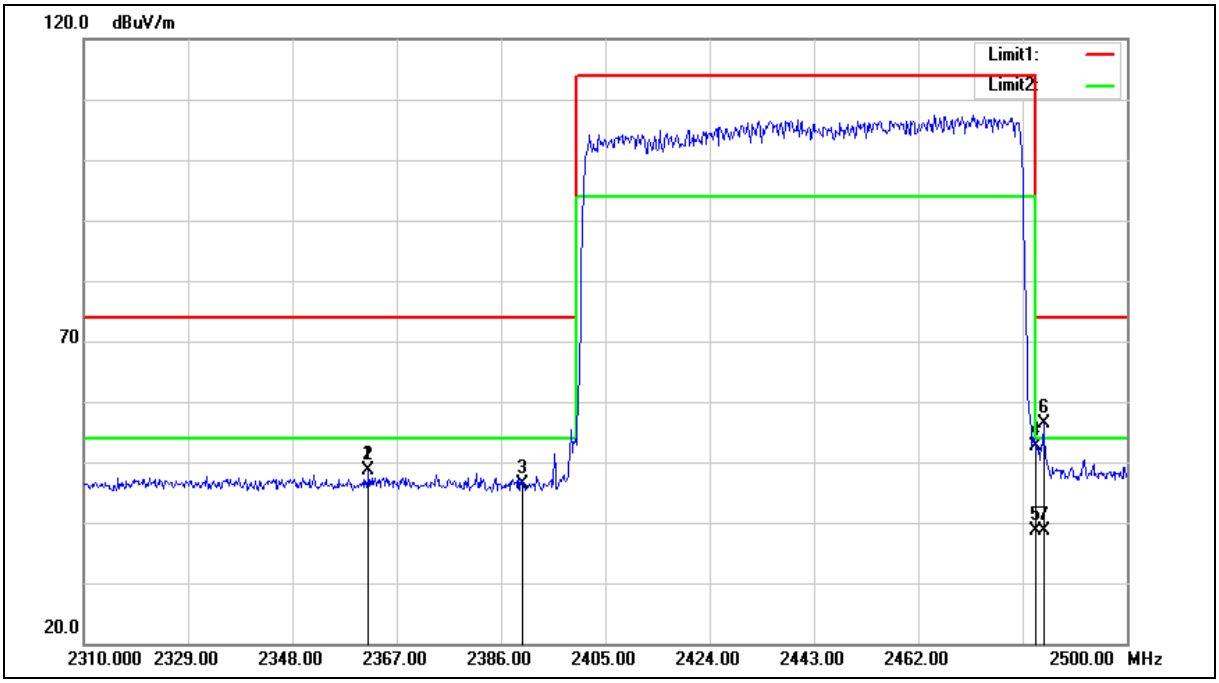
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2368.900	57.36	-9.70	47.66	74.00	-26.34	peak
2	2390.000	56.21	-9.62	46.59	74.00	-27.41	peak
3	2483.500	61.17	-9.37	51.80	74.00	-22.20	peak
4	2484.040	64.92	-9.37	55.55	74.00	-18.45	peak
5	2484.040	45.81	-9.37	36.44	54.00	-17.56	AVG

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

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

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

Standard:	FCC Part 15.247	Test Distance:	3 m
Test item:	Band edge	Power:	DC 3.3 V
Frequency:	Hopping	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	2361.870	58.24	-9.73	48.51	74.00	-25.49	peak
2	2361.870	58.24	-9.73	48.51	74.00	-25.49	peak
3	2390.000	55.97	-9.62	46.35	74.00	-27.65	peak
4	2483.500	62.00	-9.37	52.63	74.00	-21.37	peak
5	2483.500	48.09	-9.37	38.72	54.00	-15.28	AVG
6	2484.800	65.86	-9.37	56.49	74.00	-17.51	peak
7	2484.800	47.88	-9.37	38.51	54.00	-15.49	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.