

FCC 47 CFR PART 15 SUBPART E

Applicant : PISMO LABS TECHNOLOGY LIMITED

Product Type : PEPWAVE / peplink Wireless Product

Trade Name : PEPWAVE, peplink

Model Number : AP One AC Mini, PismoAC0P, AC0P, APO-AC-MINI,
AP One series, AC0E, PismoAC0E

FCC ID : U8G-P1AC0P

Test Specification : FCC 47 CFR PART 15 SUBPART E
ANSI C63.10:2013

Receive Date : Jun. 13, 2019

Test Period : Jun. 24 ~ Jul. 09, 2019

Issue Date : Jul. 31, 2019

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C.)
Tel : +86-3-2710188 / Fax : +86-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

Note:

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
2. This report shall not be reproduced except in full, without the written approval of A Test Lab Technology Corporation.
3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.



Revision History

Rev.	Issue Date	Revisions	Revised By
00	Jul. 31, 2019	Initial Issue	Tobey Cheng

Verification of Compliance

Issued Date: Jul. 31, 2019

Applicant : PISMO LABS TECHNOLOGY LIMITED

Product Type : PEPWAVE / peplink Wireless Product

Trade Name : PEPWAVE, peplink

Model Number : AP One AC Mini, PismoAC0P, AC0P, APO-AC-MINI,
AP One series, AC0E, PismoAC0E

EUT Rated Voltage : DC 12 V, 2 A

Test Voltage : 120 Vac / 60 Hz

Applicable Standard : FCC 47 CFR PART 15 SUBPART E
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 : +86-3-2710188 / Fax : +86-3-2710190

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.....	9
3.1.	Mode of Operation.....	9
3.2.	EUT Test Step.....	13
3.3.	Configuration of Test System Details	14
3.4.	Test Instruments	15
3.5.	Test Site Environment.....	16
4	Measurement Procedure.....	17
4.1.	AC Power Conducted Emission Measurement	17
4.2.	Transmitter Radiated Emissions Measurement.....	19
4.3.	Maximum Conducted Output Power Measurement.....	24
4.4.	26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement	25
4.5.	6 dB RF Bandwidth Measurement	26
4.6.	Maximum Power Spectral Density Measurement.....	27
4.7.	Automatically discontinue transmission.....	29
4.8.	Antenna Requirement.....	29
5	Test Results.....	31
	Annex A. Conducted Emission	31
	Annex B. Radiated Emission Measurement	33
	Annex C. Conducted Test Results	132



1 General Information

1.1. Summary of Test Result

Standard	Item	Result	Remark
15.407(b)(6) 15.207	AC Power Conducted Emission	PASS	---
15.407(b) 15.205 / 15.209	Transmitter Radiated Emissions	PASS	---
15.407(a)	Maximum Conducted Output Power	PASS	---
15.407(a)	26 dB RF Bandwidth & 99 % Occupied Bandwidth	Reference	---
15.407(e)	6 dB RF Bandwidth	PASS	---
15.407(a)	Maximum Power Spectral Density	PASS	---
15.407(c)	Automatically discontinue transmission	PASS	---
15.407(a) 15.203	Antenna Requirement	PASS	---

Standard	Description
CFR47, Part 15, Subpart C §15.247	Intentional Radiators
ANSI C63. 10: 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01 v05	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES

1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	150 kHz ~ 30 MHz	2.8
Radiated Emission	9 kHz ~ 30 MHz	1.7
	30 MHz ~ 1000 MHz	5.7
	1000 MHz ~ 18000 MHz	5.6
	18000 MHz ~ 26500 MHz	4.9
	26500 MHz ~ 40000 MHz	4.8
Conducted Output Power		+0.27 dB / -0.28 dB
RF Bandwidth		4.96 %
Power Spectral Density		+0.71 dB / -0.77 dB
Frequency Stability		+ 2.212 x 10 ⁻⁷ % / - 2.170 x 10 ⁻⁷
Duty Cycle		1.06 %
Time Occupancy		1.40 %

Decision Rule

- ☒ Uncertainty is not included.
- ☐ Uncertainty is included.

2 EUT Description

Applicant	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong				
Manufacturer	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong				
Product Type	PEPWAVE / peplink Wireless Product				
Trade Name	PEPWAVE, peplink				
Model No.	AP One AC Mini, PismoAC0P, AC0P, APO-AC-MINI, AP One series, AC0E, PismoAC0E				
Product Type /Trade Name / Model Number Different Description	Those product Type & trade names & model numbers differ from each other in selling region.				
FCC ID	U8G-P1AC0P				
Operate Frequency	Frequency Band			Frequency Range (MHz)	Number of Channels
	IEEE 802.11a	U-NII Band I		5180 – 5240	3
		U-NII Band III		5745 – 5825	3
	IEEE 802.11n 5 GHz 20 MHz / IEEE 802.11ac 20 MHz	U-NII Band I		5180 – 5240	3
		U-NII Band III		5745 – 5825	3
	IEEE 802.11n 5 GHz 40 MHz / IEEE 802.11ac 40 MHz	U-NII Band I		5190 – 5230	2
		U-NII Band III		5755 – 5795	2
	IEEE 802.11ac 80 MHz	U-NII Band I		5210	1
U-NII Band III		5775	1		
Modulation Type	OFDM				
Equipment Type	Master				
Antenna information	Antenna	Model	Type	Frequency Range (MHz)	Max. Gain (dBi)
	ANT-0	SSP-16713	PIFA Antenna	5150 – 5250	2.62
				5725 – 5850	2.39
	ANT-1	SSP-16713	PIFA Antenna	5150 – 5250	2.71
5725 – 5850				2.92	
Antenna Delivery	Reference section 3.1				
Operate Temp. Range	-5 ~ +45 ℃				



Frequency Band		RF Output Power (W)
IEEE 802.11a	U-NII Band I	0.228
	U-NII Band III	0.209
IEEE 802.11n 5 GHz 20 MHz	U-NII Band I	0.216
	U-NII Band III	0.201
IEEE 802.11n 5 GHz 40 MHz	U-NII Band I	0.210
	U-NII Band III	0.218
IEEE 802.11ac 20 MHz	U-NII Band I	0.226
	U-NII Band III	0.207
IEEE 802.11ac 40 MHz	U-NII Band I	0.219
	U-NII Band III	0.226
IEEE 802.11ac 80 MHz	U-NII Band I	0.020
	U-NII Band III	0.135

Equipment Type		
Outdoor access point	point-to-point	---
	point-to-multipoint	---
Indoor access point		V
Fixed point-to-point access points		---
Client devices		---

3 Test Methodology

3.1. Mode of Operation

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

Test Mode
Mode 1: Transmit mode
Mode 2: IEEE 802.11a Continuous TX mode
Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode
Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode
Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode
Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode
Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode

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

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

Note: Investigation has been done on all the possible configurations for searching the worst cases (VHT20/40 covers HT20/40). The table is a list of the test modes show in this test report.

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



Test Mode	Antenna Delivery	Data Rate (Mbps)	Band	Test Channel
Mode 2	2TX / 2RX (CDD)	6	U-NII Band I	36, 40, 48
			U-NII Band III	149, 157, 165
Mode 3	2TX / 2RX (MIMO)	13	U-NII Band I	36, 40, 48
			U-NII Band III	149, 157, 165
Mode 4	2TX / 2RX (MIMO)	27	U-NII Band I	38, 46
			U-NII Band III	151,159
Mode 5	2TX / 2RX (MIMO)	13	U-NII Band I	36, 40, 48
			U-NII Band III	149, 157, 165
Mode 6	2TX / 2RX (MIMO)	27	U-NII Band I	38, 46
			U-NII Band III	151,159
Mode 7	2TX / 2RX (MIMO)	58.6	U-NII Band I	42
			U-NII Band III	155

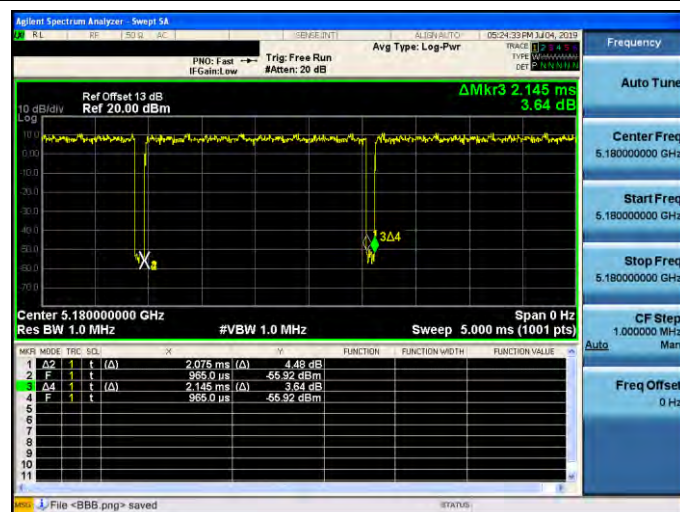


Duty cycle

Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	5180.0	2.075	2.145	0.967	0.144	0.482
Mode 5	5180.0	5.040	5.090	0.990	0.043	0.010
Mode 6	5190.0	2.450	2.515	0.974	0.114	0.408
Mode 7	5210.0	1.158	1.230	0.941	0.262	0.864

Duty Cycle Graphs

Mode 2: IEEE 802.11a Continuous TX mode

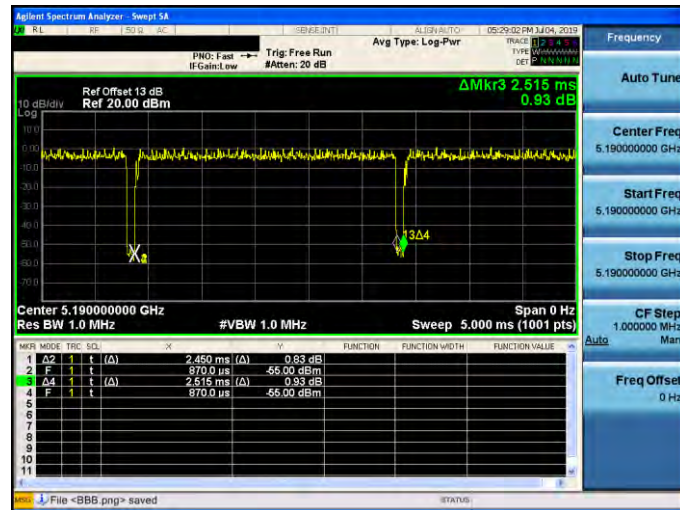


Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode

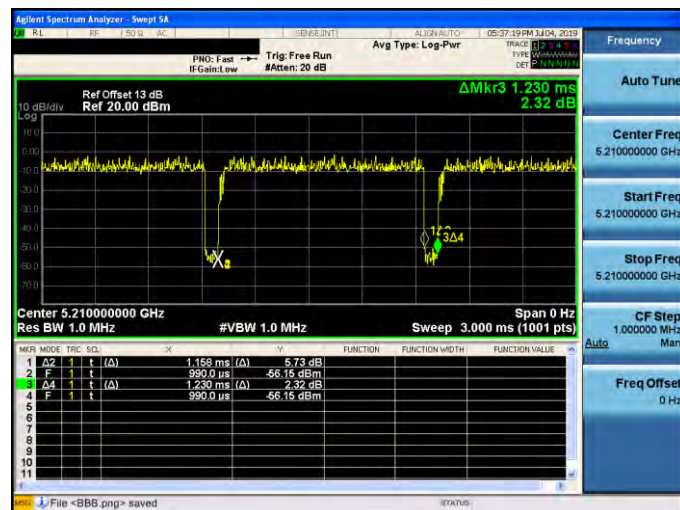




Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode



3.2. EUT Test Step

The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement.

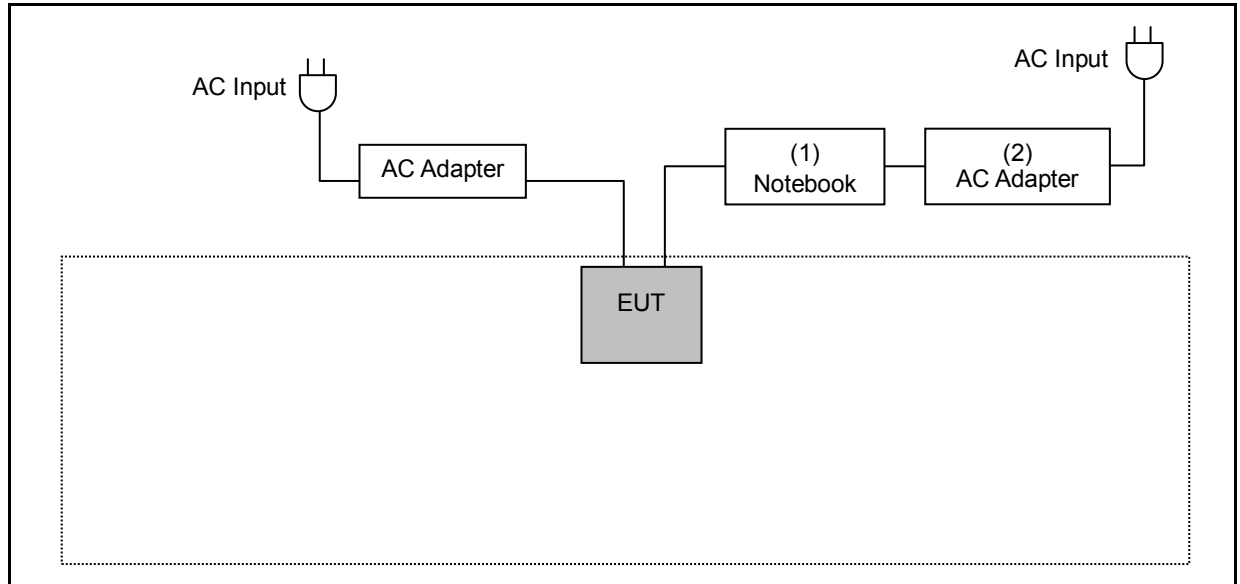
According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

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

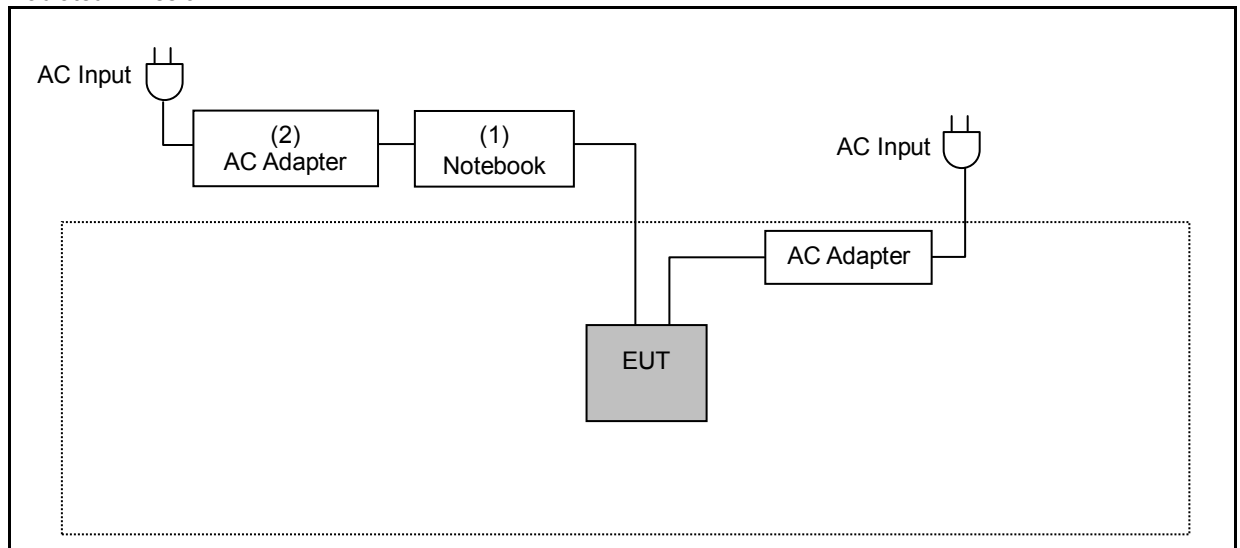
Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

3.3. Configuration of Test System Details

Conducted Emissions



Radiated Emission



Devices Description					
	Product	Manufacturer	Model Number	Serial Number	Power Cord
(1)	Notebook	DELL	LATITUDE E6440	5HZBD72	---
(2)	AC Adapter	DELL	HA65NM130	---	Non-Shielded, 1.7 m



3.4. Test Instruments

For Conducted Emission

Test Period: Jul. 09, 2019

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

For Radiated Emissions

Test Period: Jun. 24 ~ Jun. 28, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/14/2019	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/16/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/14/2019	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/19/2018	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/23/2018	1 year
Horn Antenna (18~40 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	08/07/2018	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	03/29/2019	1 year
RF Cable	EMCI	EMC104-N -N-6000	TE01-1	02/20/2019	1 year
Microwave Cable	EMCI	EMC104-SM -SM-13000	170814	10/30/2018	1 year
Microwave Cable	EMCI	EMC102-KM -KM-14000	151001	02/20/2019	1 year

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



For Conducted

Test Period: Jul. 03 ~ Jul. 05, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/25/2018	1 year
Power Sensor	Anritsu	MA2411B	1126022	08/29/2018	1 year
Power Meter	Anritsu	ML2495A	1135009	08/29/2018	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

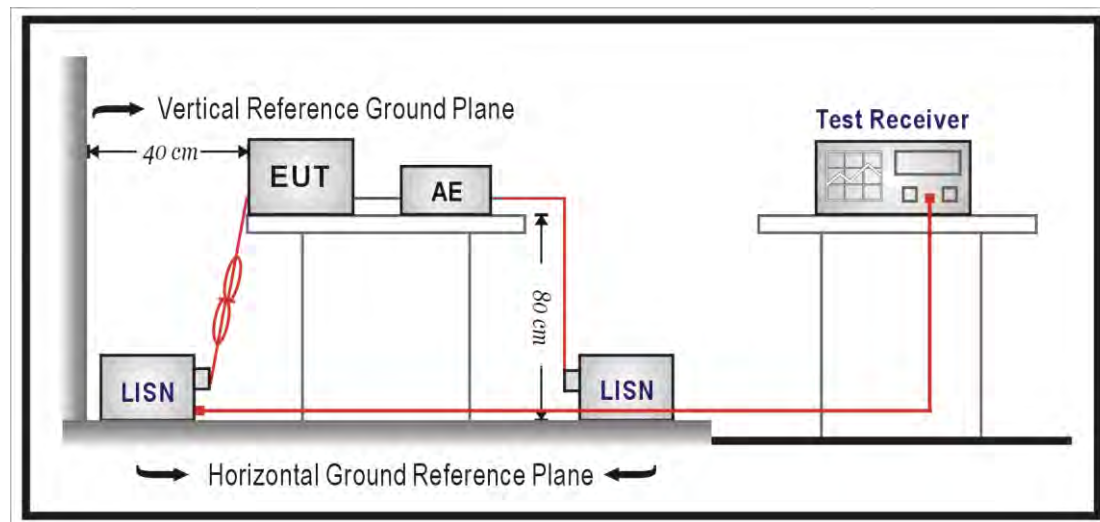
4 Measurement Procedure

4.1. AC Power Conducted Emission Measurement

■ Limit

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

■ Test Setup



■ Test Procedure

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

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

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

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

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

4.2. Transmitter Radiated Emissions Measurement

■ Limit

(1)Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (a)For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (b)For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (c)For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (d)For transmitters operating in the 5.725-5.85 GHz band:
 - (i)All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2)Limits of Radiated Emission Measurement

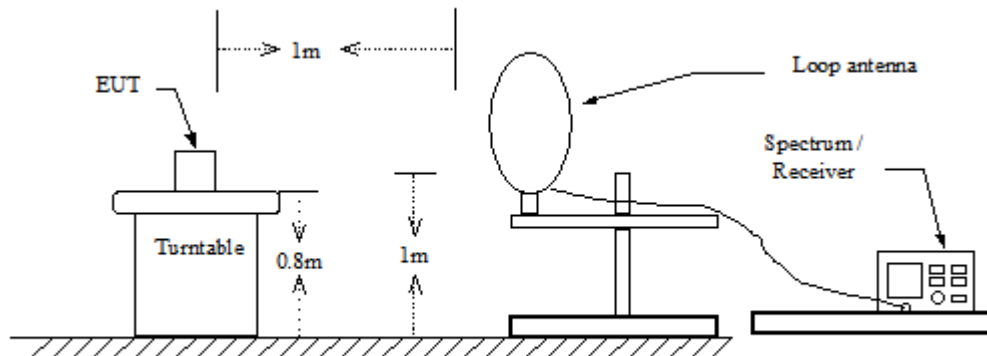
Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequency Range (MHz)	Field Strength (microvolts/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	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

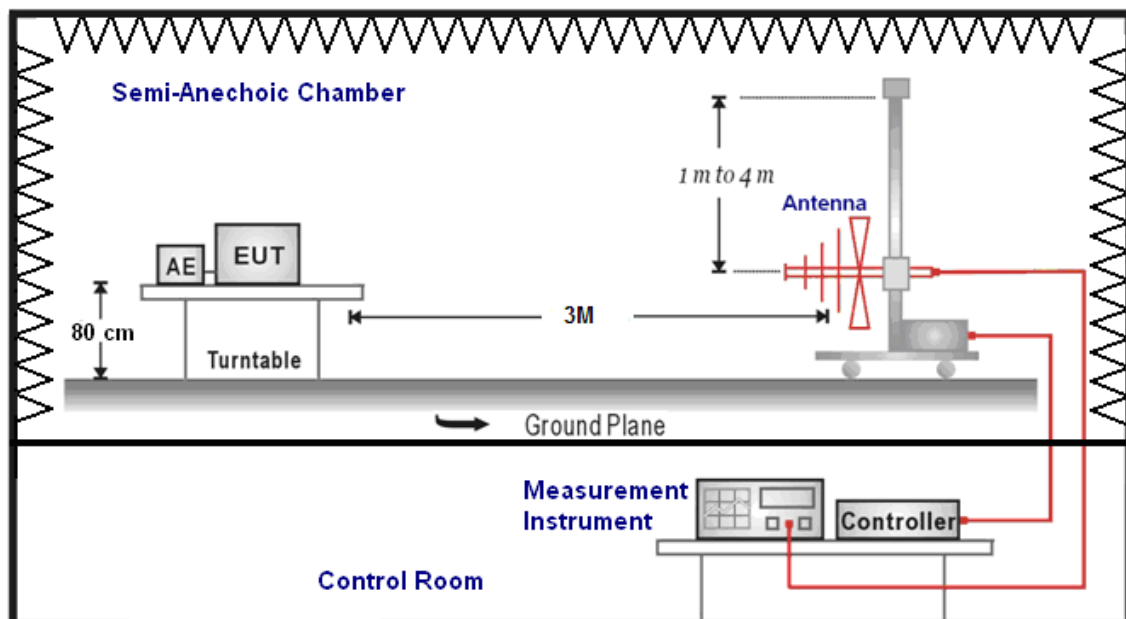
- Note:
1. The lower limit shall apply at the transition frequencies.
 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
 3. As shown in 15.35(b), for frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

■ Setup

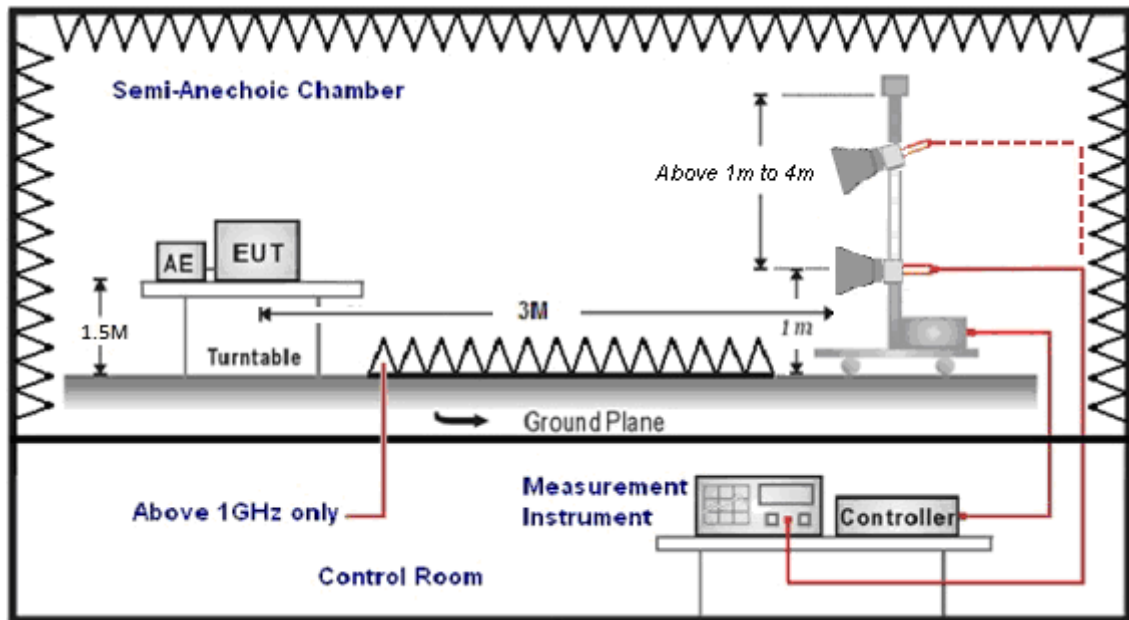
9 kHz ~ 30 MHz



30 MHz ~ 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 (below 1 GHz use 0.8 m turntable / above 1 GHz use 1.5 m turntable), 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 40 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 restricted measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle > 0.98 / 1/T for average measurements when Duty cycle < 0.98.

For out of band 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.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antenna Schwarzbeck Mess-Elektronik Broadband Horn Antenna was used in frequencies 1 – 40 GHz at a distance of 3 meter. The antenna at an angle toward the source of the emission. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20 dB/decade).

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

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

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

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

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

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

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

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

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

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

Measuring Instruments and setting

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RBW/VBW(Emission in restricted band)	1 MHz / 3 MHz for Peak 1 MHz / (1/T) for Average
RBW/VBW(Emission in non-restricted band)	1 MHz / 3 MHz for Peak

4.3. Maximum Conducted Output Power Measurement

■ Limit

Frequency Range (MHz)	FCC Maximum Conducted Output Power Limit
	Master
5.150 ~ 5.250 GHz	The lesser of 1 W (30 dBm)
5.725 ~ 5.850 GHz	The lesser of 1 W (30 dBm)

According FCC KDB 662911 D01 v02r01 – for power measurements on IEEE802.11 devices,

IEEE 802.11a

Band I :

* Directional Gain = $10 \cdot \log\left[\frac{10^{G1/10} + 10^{G2/10} + \dots + 10^{Gn/10}}{NANT}\right] = 2.67 \text{ dBi} < 6 \text{ dBi}$

Band III :

* Directional Gain = $10 \cdot \log\left[\frac{10^{G1/10} + 10^{G2/10} + \dots + 10^{Gn/10}}{NANT}\right] = 2.66 \text{ dBi} < 6 \text{ dBi}$

IEEE 802.11n 5 GHz 20 MHz / IEEE 802.11n 5 GHz 40 MHz / IEEE 802.11ac 20 MHz /

IEEE 802.11ac 40 MHz / IEEE 802.11ac 80 MHz

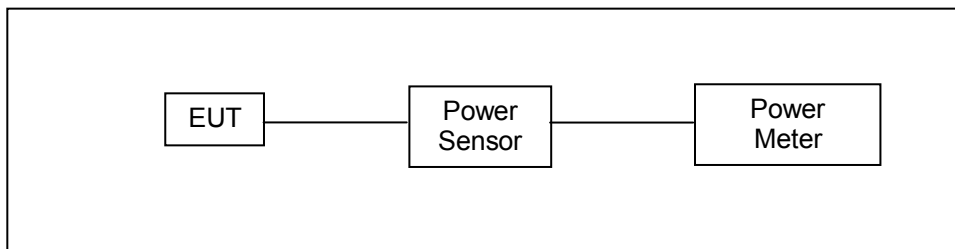
Band I :

* Directional Gain = $10 \cdot \log\left[\frac{10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}}{NANT}\right]^2 = 5.68 \text{ dBi} < 6 \text{ dBi}$

Band III :

* Directional Gain = $10 \cdot \log\left[\frac{10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}}{NANT}\right]^2 = 5.67 \text{ dBi} < 6 \text{ dBi}$

■ Test Setup



■ Test Procedure

The test is performed in accordance with ANSI C63.10:2013 section 12.3.3.2, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices

Section (E) Maximum Conducted Output Power

3. Measurement using a Power Meter (PM)

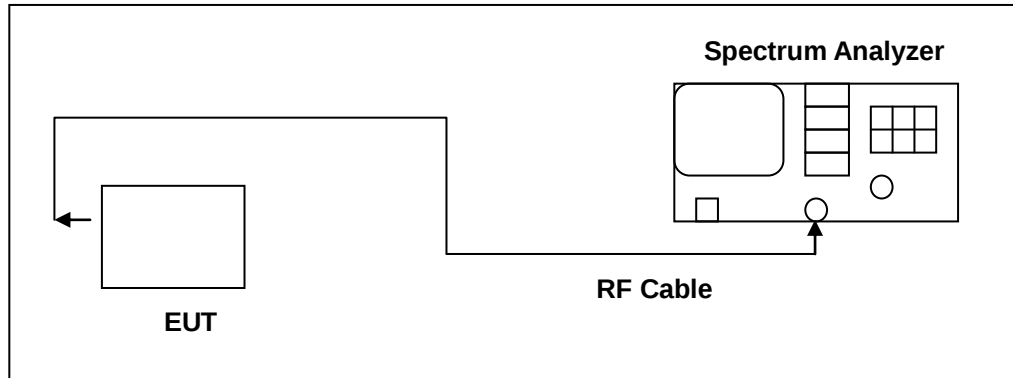
b) Method PM-G (Measurement using a gated RF average power meter)

4.4. 26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

■ **Limit**

N/A

■ **Test Setup**



■ **Test Procedure**

The test is performed in accordance with ANSI C63.10:2013 section 12.4, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	>26 dB Bandwidth
RBW	Approximately 1 % of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

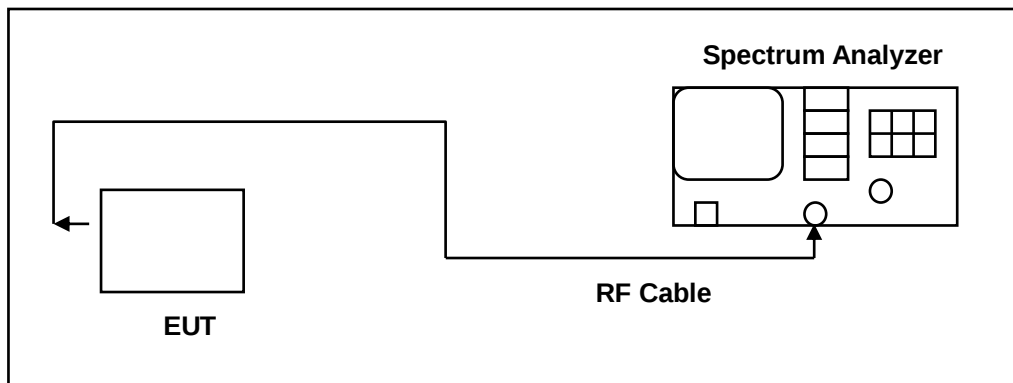
4.5. 6 dB RF Bandwidth Measurement

■ Limit

6 dB RF Bandwidth

Systems using digital modulation techniques may operate in the 5725~5850 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

■ Test Setup



■ Test Procedure

6 dB RF Bandwidth

The EUT tested to UNII test procedure of ANSI C63.10:2013 section 6.9.2 for compliance to FCC 47CFR 15.407 requirements.

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

The test was performed at 3 channels.



4.6. Maximum Power Spectral Density Measurement

■ Limit

Conducted power spectral density

Frequency Range (MHz)	FCC Limit
	Master
5.150 ~ 5.250 GHz	17 dBm/MHz
5.725 ~ 5.850 GHz	30 dBm/500 kHz

According FCC KDB 662911 D01 v02r01 – for power spectral density measurements on IEEE802.11 devices,

IEEE 802.11a / IEEE 802.11ac 20 MHz / IEEE 802.11ac 40 MHz / IEEE 802.11ac 80 MHz

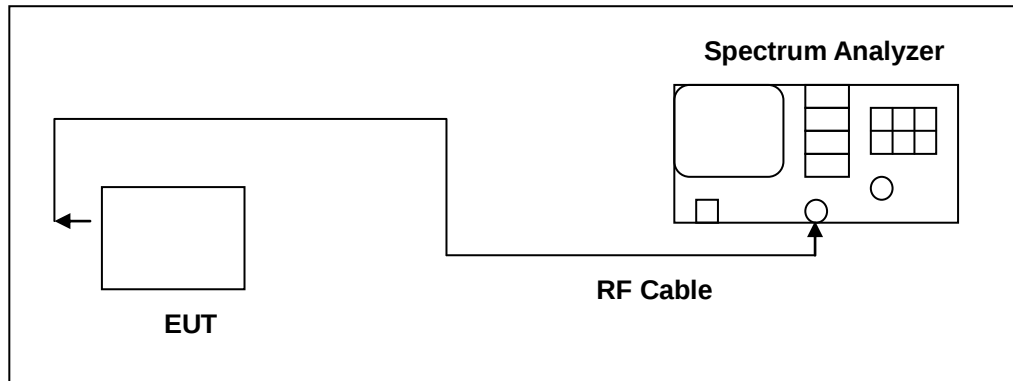
Band I :

* Directional Gain = $10 \cdot \log\{[10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}]^2 / NANT\}$ = 5.68 dBi < 6 dBi

Band III :

* Directional Gain = $10 \cdot \log\{[10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}]^2 / NANT\}$ = 5.67 dBi < 6 dBi

■ Test Setup



■ Test Procedure

The test is performed in accordance with ANSI C63.10:2013 section 12.5, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz (5725 ~ 5850 MHz use 100 kHz)
VBW	3 MHz (5725 ~ 5850 MHz use 300 kHz)
Detector	RMS
Trace	AVERAGE
Sweep Time	Auto
Trace Average	100 times
Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500 \text{ kHz}/100 \text{ kHz})$ to the measured result.	

4.7. Automatically discontinue transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

■ Declare

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

4.8. Antenna Requirement

■ 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 15.407 (a), 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.

■ Directional Gain Calculated

For Maximum Conducted Output Power

Operate Freq. Band		Directional Gain (dBi)
IEEE 802.11a	U-NII Band I	2.67
	U-NII Band III	2.66
IEEE 802.11n 5 GHz 20 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11n 5 GHz 40 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 20 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 40 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 80 MHz	U-NII Band I	5.68
	U-NII Band III	5.67



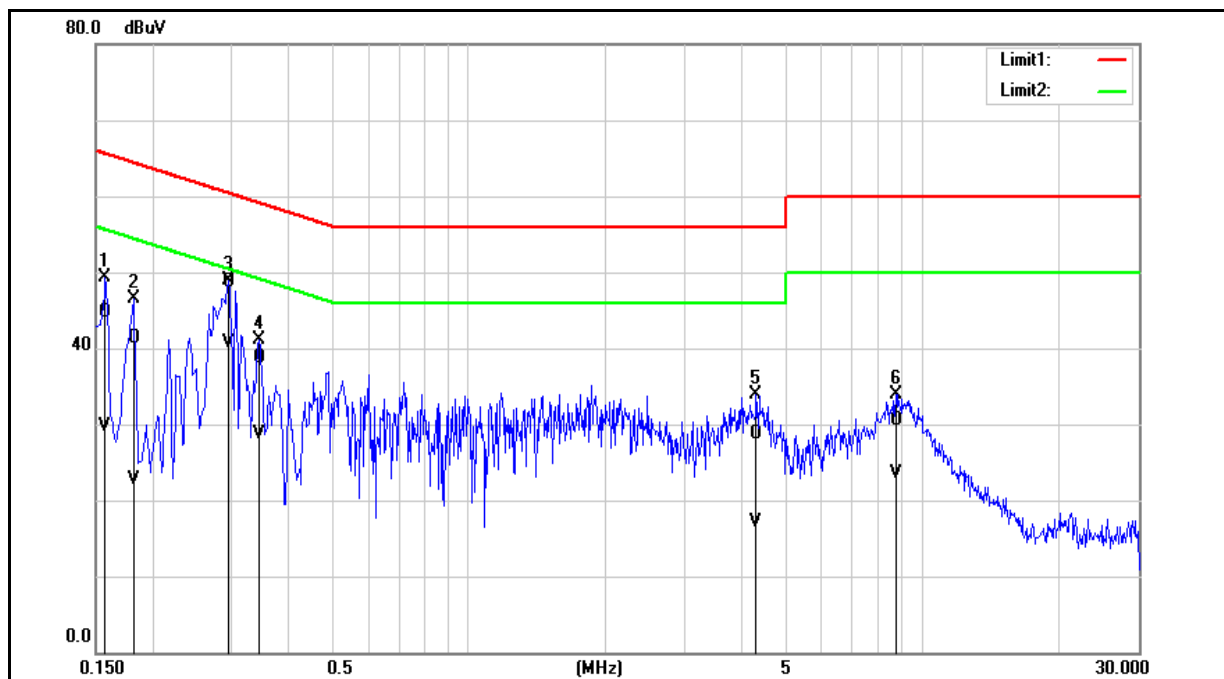
For Maximum Power Density

Operate Freq. Band		Directional Gain (dBi)
IEEE 802.11a	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 20 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 40 MHz	U-NII Band I	5.68
	U-NII Band III	5.67
IEEE 802.11ac 80 MHz	U-NII Band I	5.68
	U-NII Band III	5.67

5 Test Results

Annex A. Conducted Emission

Standard:	FCC Part 15.407	Line:	L1
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Test Mode:	Mode 1	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Description:			

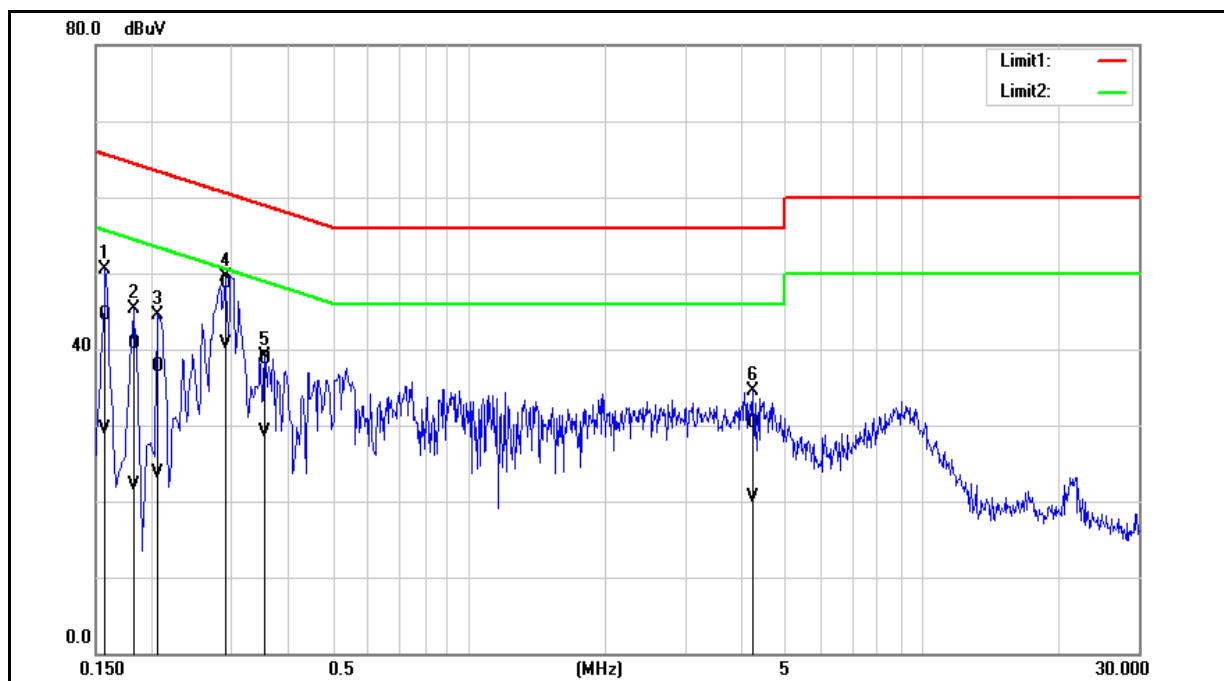


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	35.06	20.14	9.65	44.71	29.79	65.57	55.57	-20.86	-25.78	Pass
2	0.1820	31.58	13.05	9.64	41.22	22.69	64.39	54.39	-23.17	-31.70	Pass
3	0.2940	39.11	31.10	9.65	48.76	40.75	60.41	50.41	-11.65	-9.66	Pass
4	0.3460	28.96	18.99	9.65	38.61	28.64	59.06	49.06	-20.45	-20.42	Pass
5	4.3020	18.83	7.25	9.78	28.61	17.03	56.00	46.00	-27.39	-28.97	Pass
6	8.7620	20.61	13.62	9.88	30.49	23.50	60.00	50.00	-29.51	-26.50	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

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

Standard:	FCC Part 15.407	Line:	N
Test item:	Conducted Emission	Power:	AC 120 V/60 Hz
Test Mode:	Mode 1	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	34.83	19.87	9.68	44.51	29.55	65.57	55.57	-21.06	-26.02	Pass
2	0.1820	31.07	12.46	9.67	40.74	22.13	64.39	54.39	-23.65	-32.26	Pass
3	0.2060	27.95	14.05	9.67	37.62	23.72	63.37	53.37	-25.75	-29.65	Pass
4	0.2900	39.09	31.04	9.68	48.77	40.72	60.52	50.52	-11.75	-9.80	Pass
5	0.3540	28.97	19.33	9.68	38.65	29.01	58.87	48.87	-20.22	-19.86	Pass
6	4.2340	20.51	10.77	9.81	30.32	20.58	56.00	46.00	-25.68	-25.42	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

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

Annex B. Radiated Emission Measurement

Harmonic

Below 1 GHz

Standard:		FCC Part 15.407		Test Distance:		3 m	
Test item:		Harmonic		Power:		AC 120 V/60 Hz	
Frequency:		5240 MHz		Temp.(°C)/Hum.(%RH):		26(°C)/60 %RH	
Test Mode:		Mode 5					
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
96.9300	49.98	-11.46	38.52	43.50	-4.98	QP	H
120.2100	47.00	-8.44	38.56	43.50	-4.94	QP	H
168.7100	44.27	-6.01	38.26	43.50	-5.24	QP	H
231.7600	49.57	-7.11	42.46	46.00	-3.54	QP	H
325.8500	47.97	-3.61	44.36	46.00	-1.64	QP	H
384.0500	38.96	-2.56	36.40	46.00	-9.60	QP	H
72.6800	46.79	-9.29	37.50	40.00	-2.50	QP	V
96.9300	48.27	-11.46	36.81	43.50	-6.69	QP	V
168.7100	44.29	-6.01	38.28	43.50	-5.22	QP	V
200.7200	48.01	-7.91	40.10	43.50	-3.40	QP	V
216.2400	48.69	-7.64	41.05	46.00	-4.95	QP	V
320.0300	45.21	-3.70	41.51	46.00	-4.49	QP	V

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

Example: 38.52 = -11.46 + 49.98

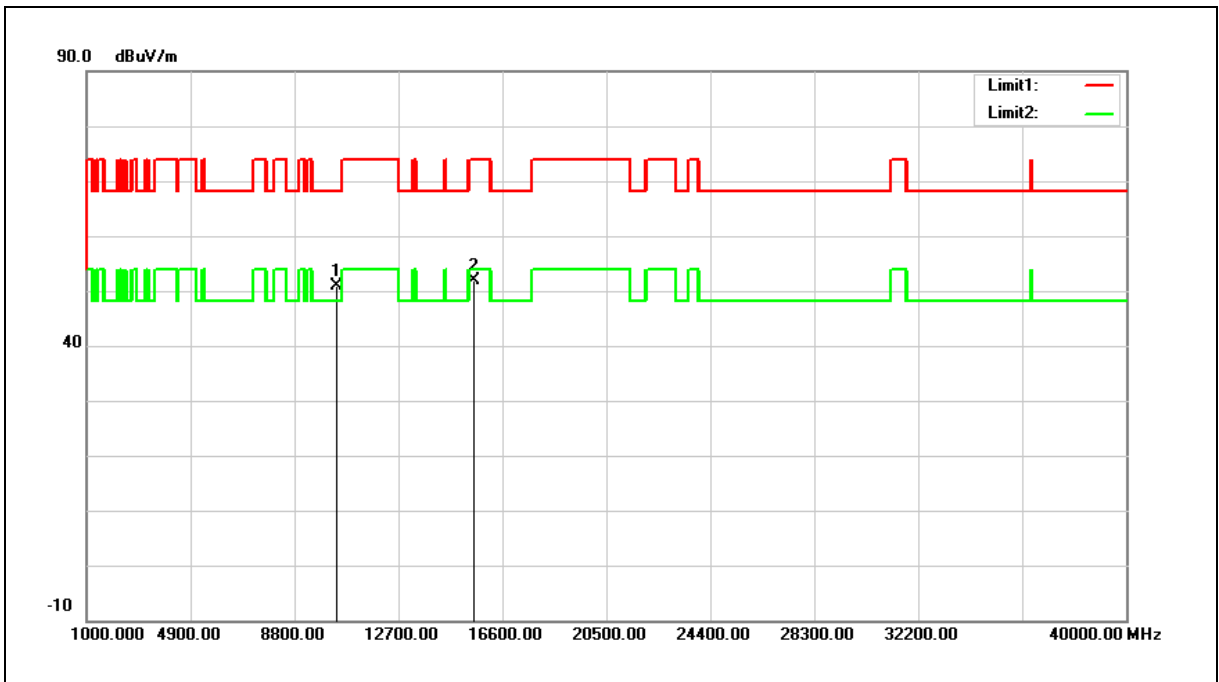
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

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



Above 1 GHz

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	10360.000	33.99	16.92	50.91	68.20	-17.29	peak
2	15540.000	32.77	19.18	51.95	74.00	-22.05	peak

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

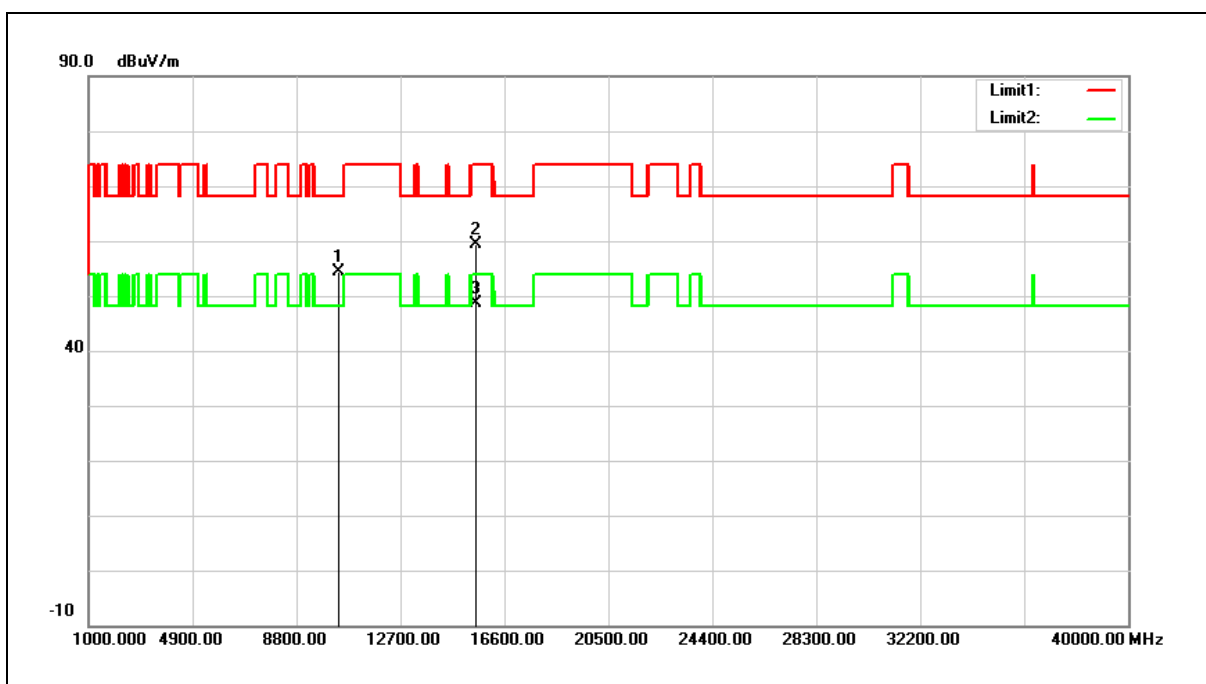
Example: 50.91 = 16.92 + 33.99

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	10360.000	37.52	16.92	54.44	68.20	-13.76	peak
2	15540.000	40.31	19.18	59.49	74.00	-14.51	peak
3	15540.000	29.38	19.18	48.56	54.00	-5.44	AVG

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

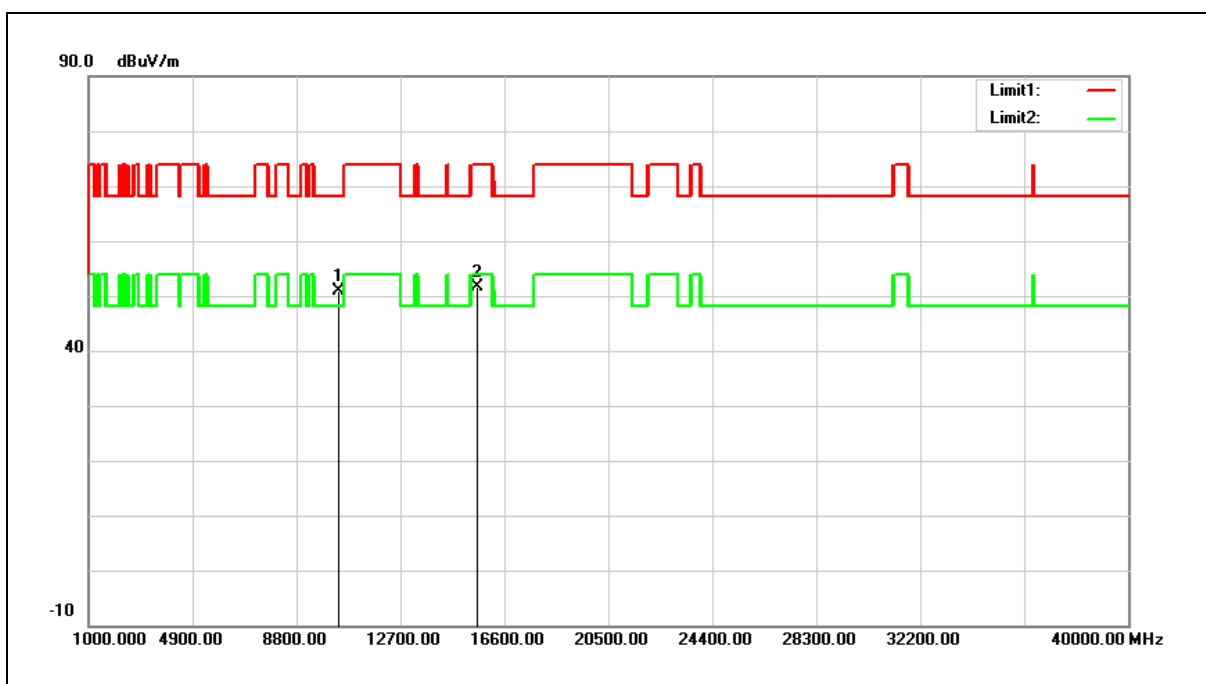
Example: 54.44 = 16.92 + 37.52

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



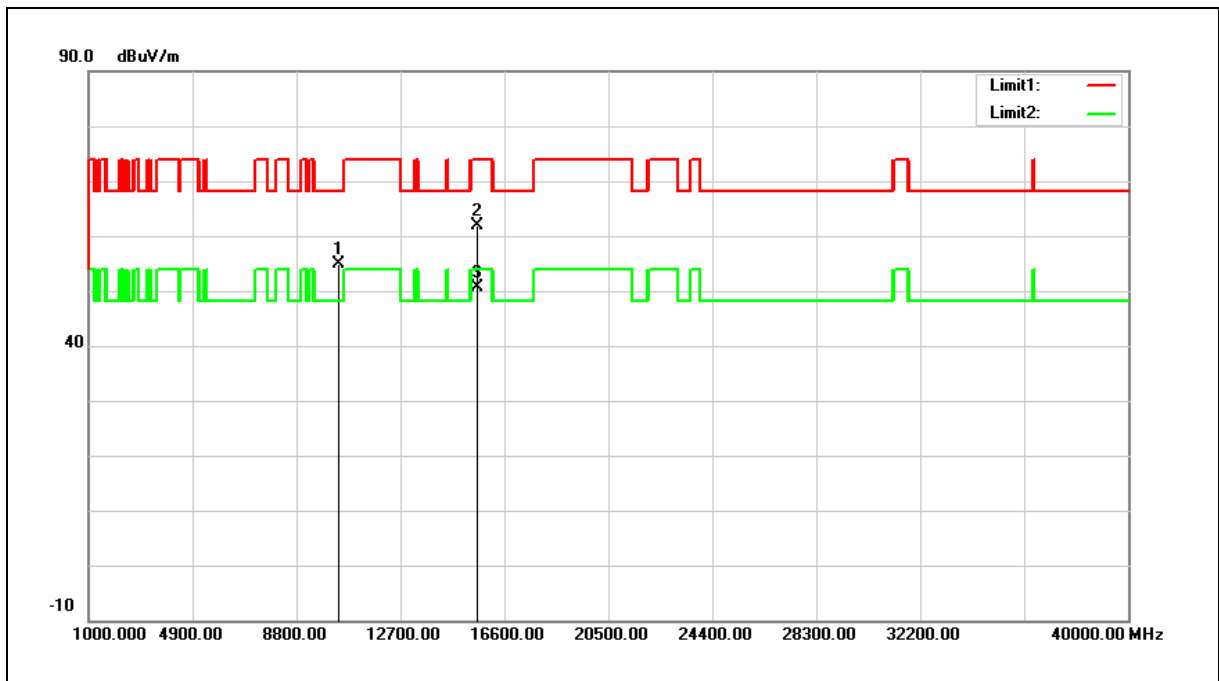
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	33.78	17.06	50.84	68.20	-17.36	peak
2	15600.000	32.60	19.02	51.62	74.00	-22.38	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	10400.000	37.75	17.06	54.81	68.20	-13.39	peak
2	15600.000	42.87	19.02	61.89	74.00	-12.11	peak
3	15600.000	31.72	19.02	50.74	54.00	-3.26	AVG

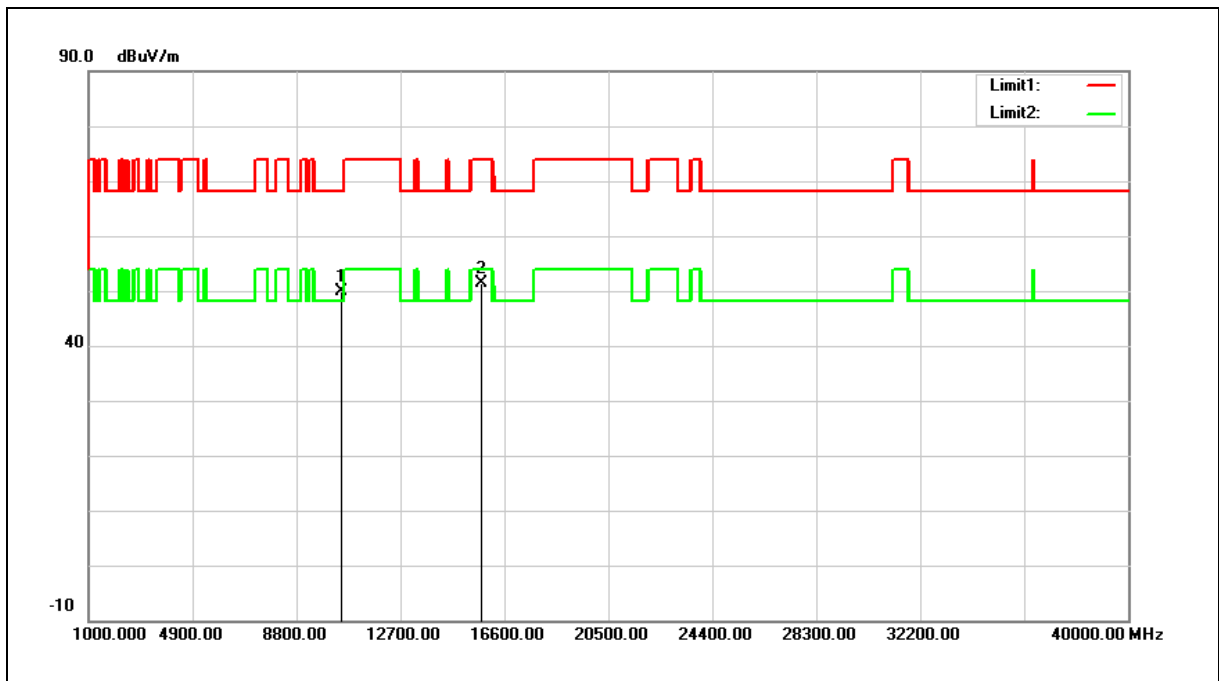
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



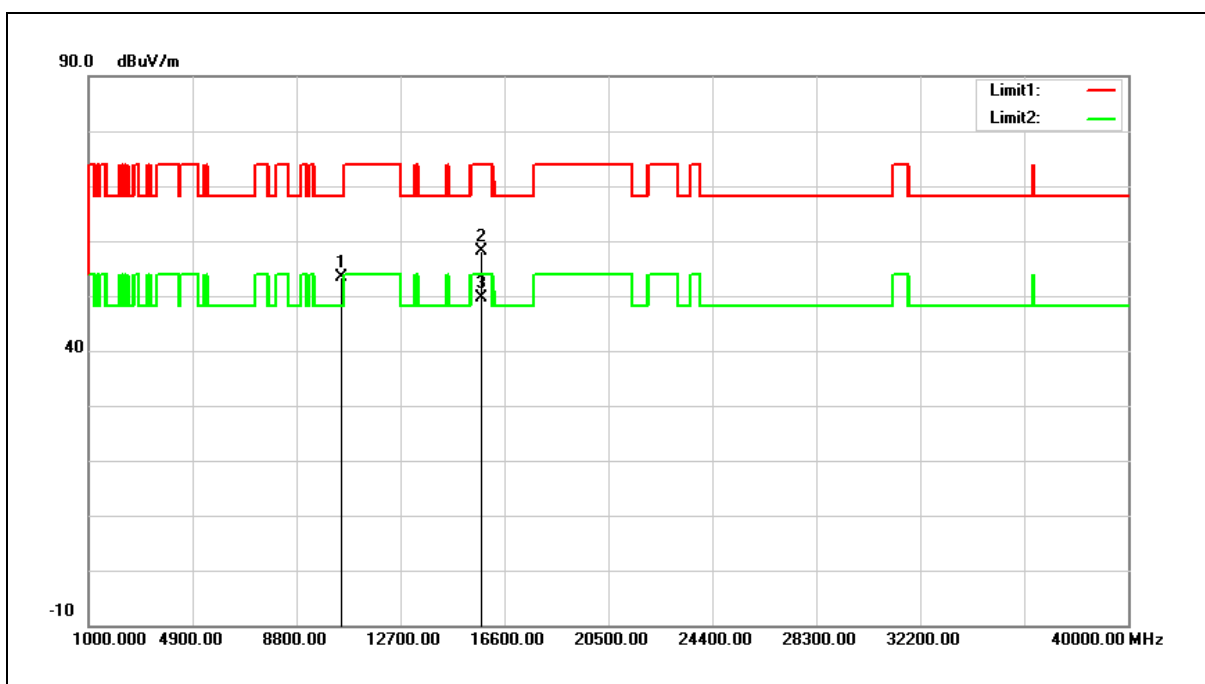
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	32.64	17.35	49.99	68.20	-18.21	peak
2	15720.000	32.59	18.71	51.30	74.00	-22.70	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	10480.000	35.95	17.35	53.30	68.20	-14.90	peak
2	15720.000	39.51	18.71	58.22	74.00	-15.78	peak
3	15720.000	30.97	18.71	49.68	54.00	-4.32	AVG

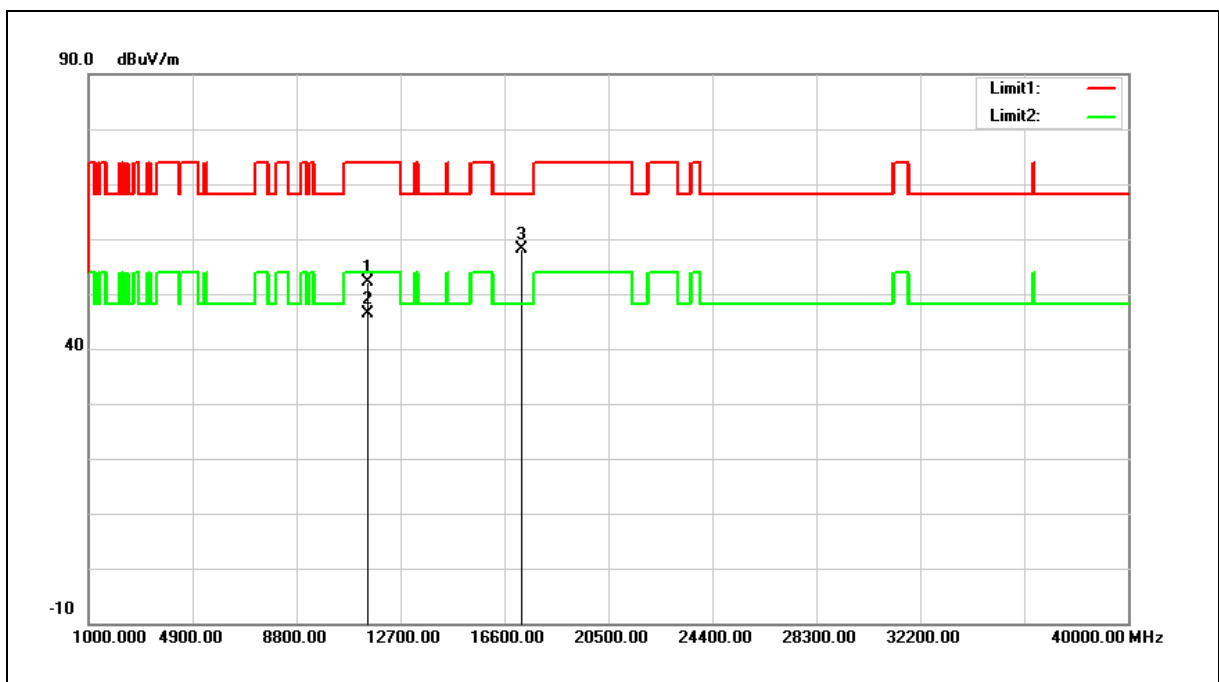
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



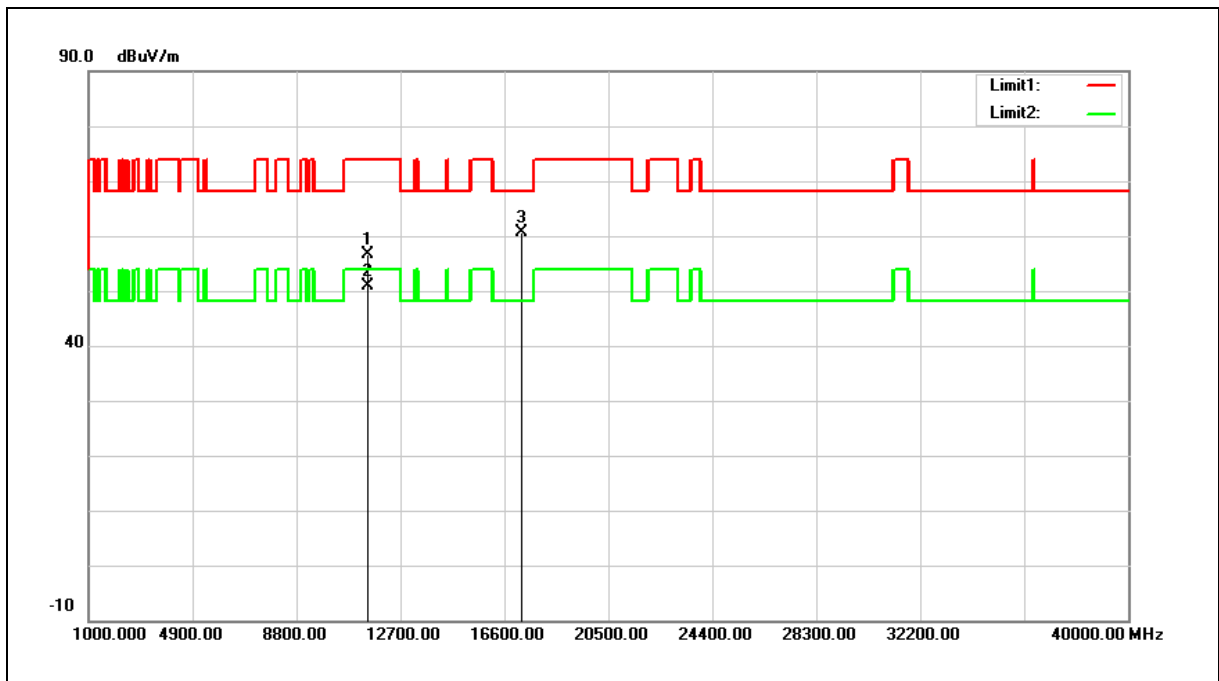
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	33.61	18.50	52.11	74.00	-21.89	peak
2	11490.000	27.78	18.50	46.28	54.00	-7.72	AVG
3	17235.000	33.92	24.31	58.23	68.20	-9.97	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



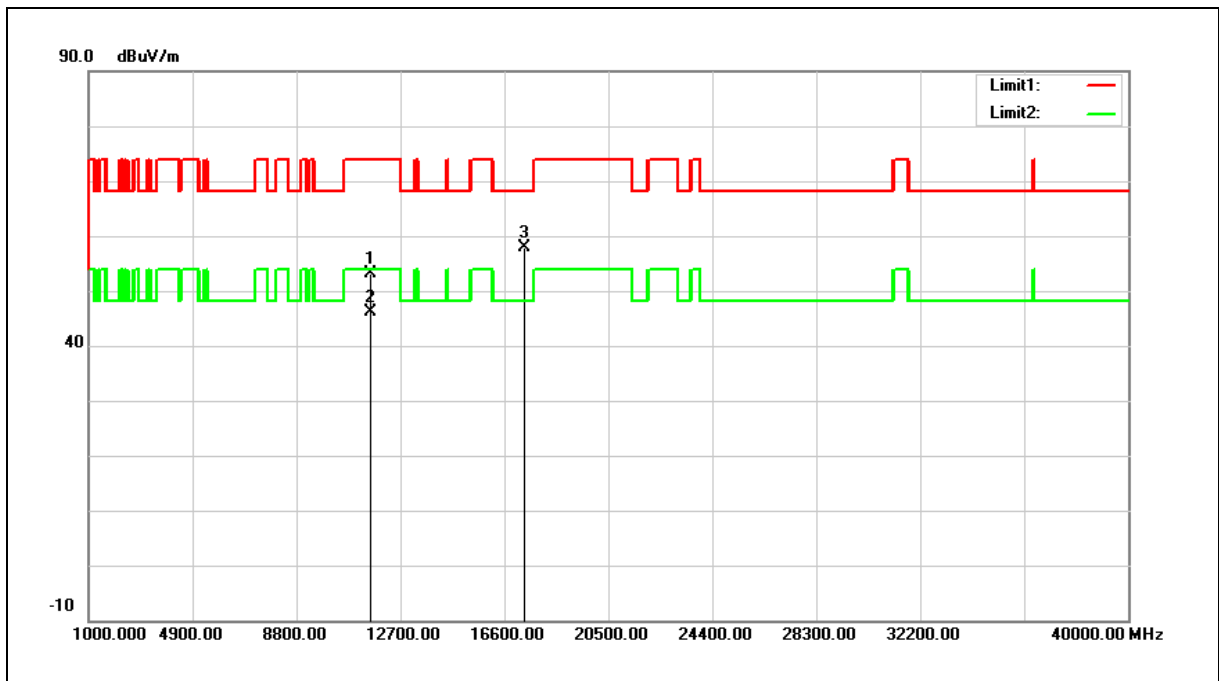
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	38.18	18.50	56.68	74.00	-17.32	peak
2	11490.000	32.33	18.50	50.83	54.00	-3.17	AVG
3	17235.000	36.35	24.31	60.66	68.20	-7.54	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



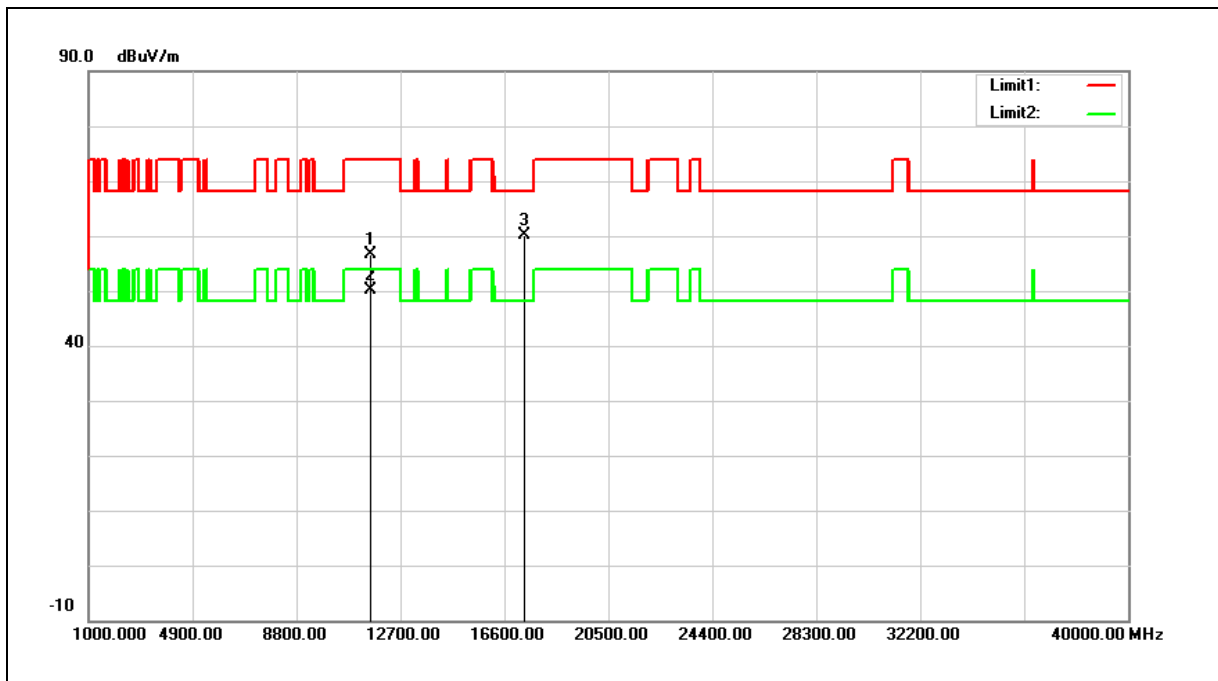
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	34.76	18.44	53.20	74.00	-20.80	peak
2	11570.000	27.65	18.44	46.09	54.00	-7.91	AVG
3	17355.000	33.03	24.79	57.82	68.20	-10.38	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



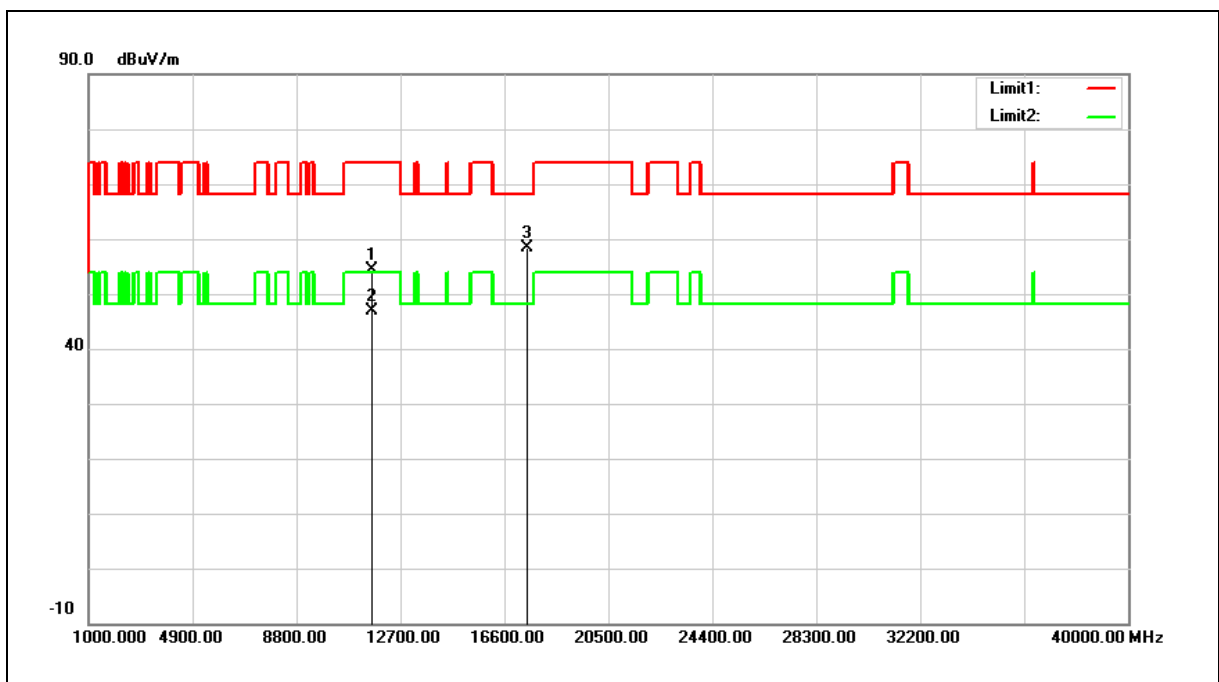
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	38.10	18.44	56.54	74.00	-17.46	peak
2	11570.000	31.77	18.44	50.21	54.00	-3.79	AVG
3	17355.000	35.26	24.79	60.05	68.20	-8.15	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



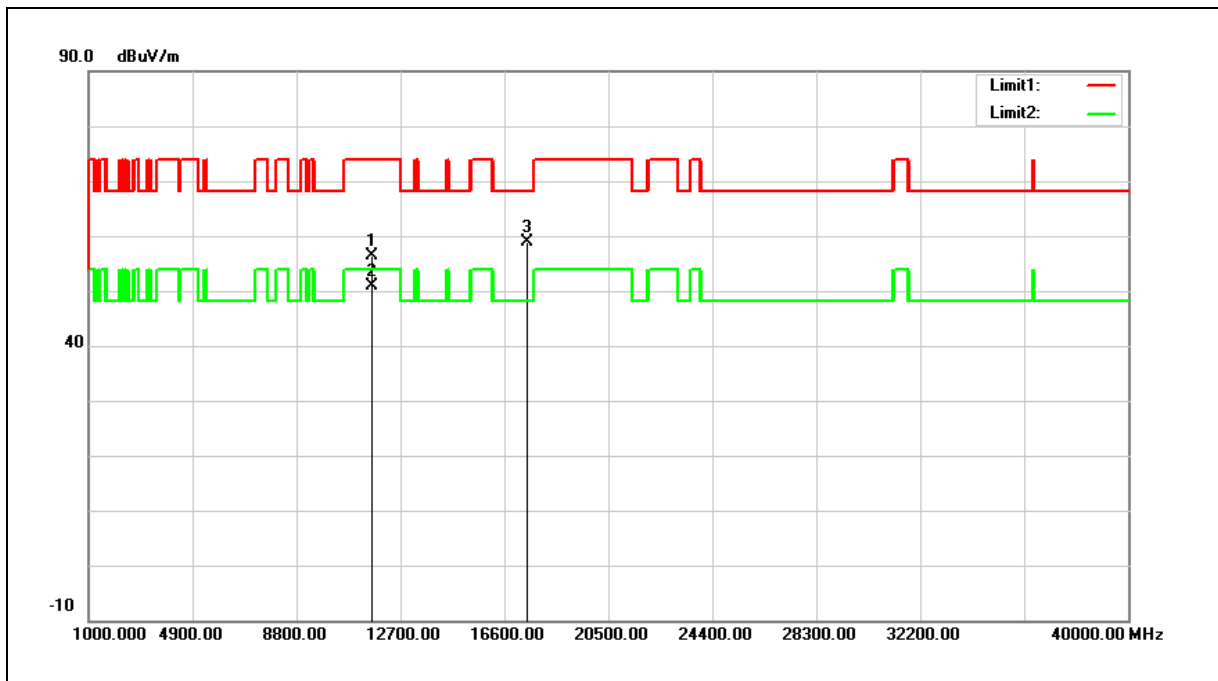
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	36.04	18.38	54.42	74.00	-19.58	peak
2	11650.000	28.42	18.38	46.80	54.00	-7.20	AVG
3	17475.000	33.19	25.26	58.45	68.20	-9.75	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



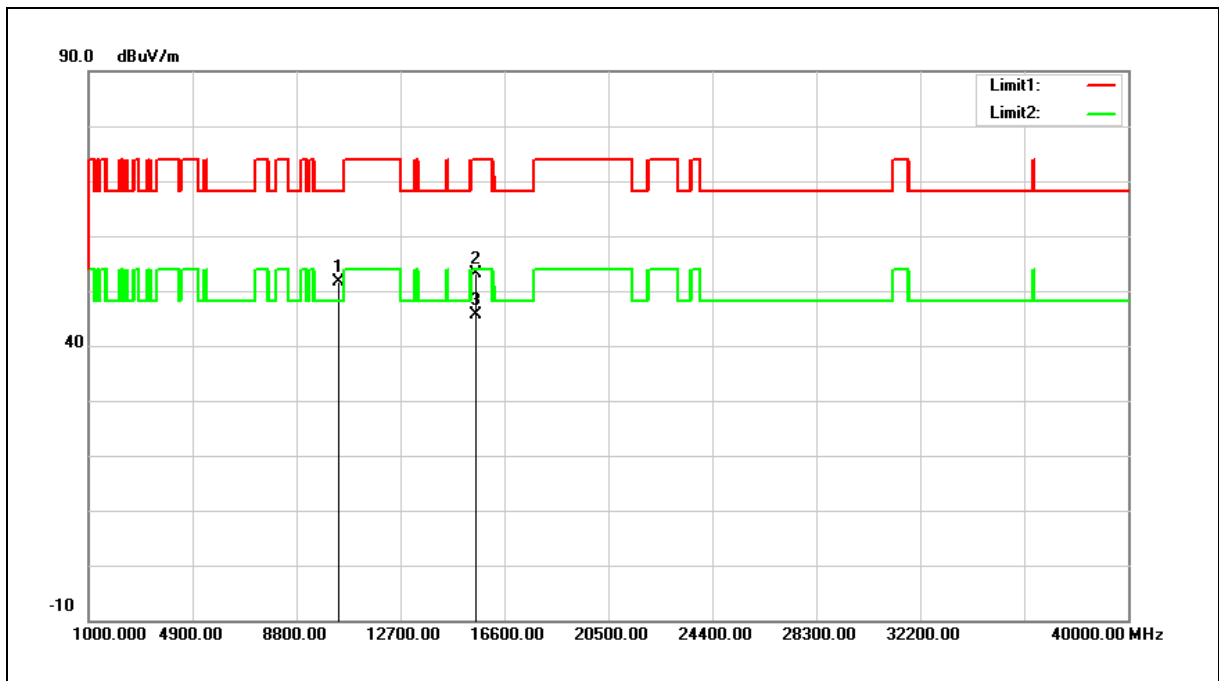
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	38.10	18.38	56.48	74.00	-17.52	peak
2	11650.000	32.49	18.38	50.87	54.00	-3.13	AVG
3	17475.000	33.57	25.26	58.83	68.20	-9.37	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	34.59	16.92	51.51	68.20	-16.69	peak
2	15540.000	33.83	19.18	53.01	74.00	-20.99	peak
3	15540.000	26.53	19.18	45.71	54.00	-8.29	AVG

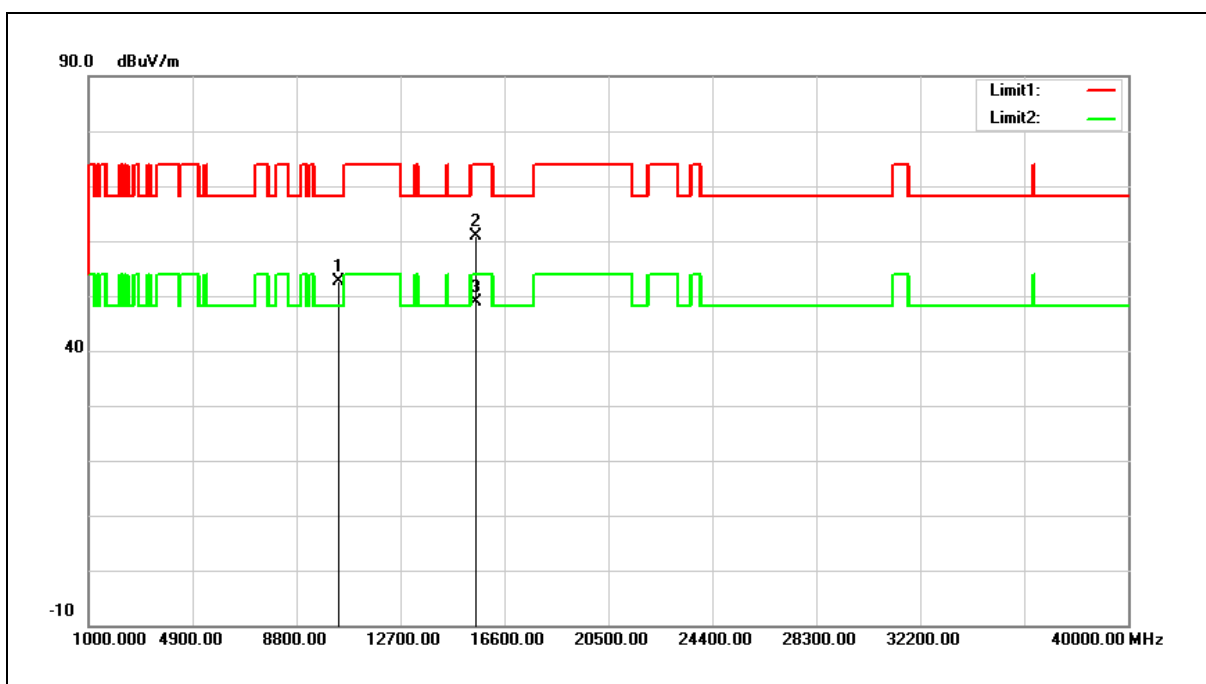
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



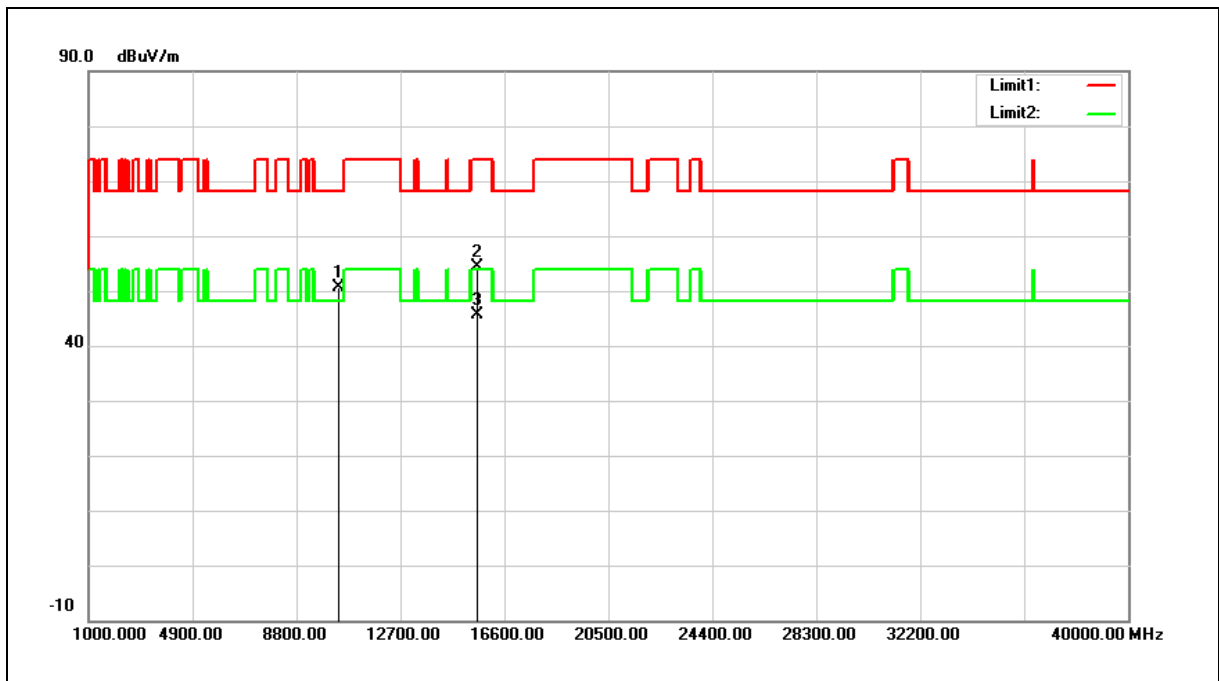
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	35.75	16.92	52.67	68.20	-15.53	peak
2	15540.000	41.71	19.18	60.89	74.00	-13.11	peak
3	15540.000	29.68	19.18	48.86	54.00	-5.14	AVG

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



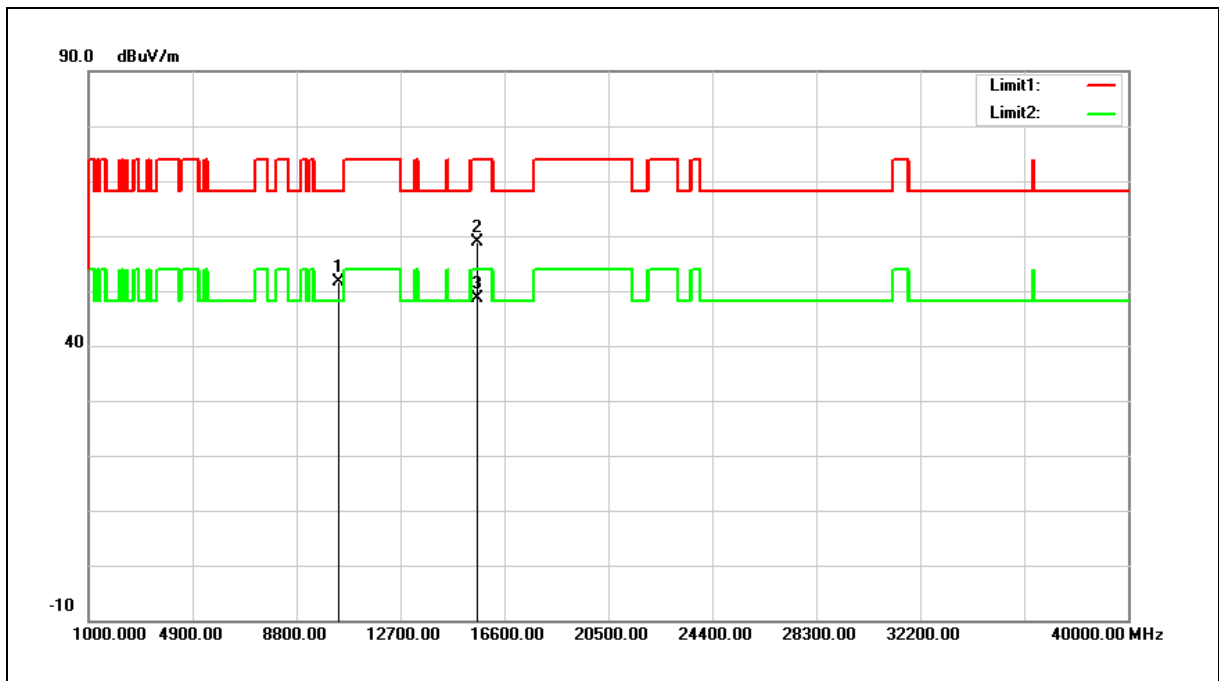
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	33.60	17.06	50.66	68.20	-17.54	peak
2	15600.000	35.28	19.02	54.30	74.00	-19.70	peak
3	15600.000	26.65	19.02	45.67	54.00	-8.33	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



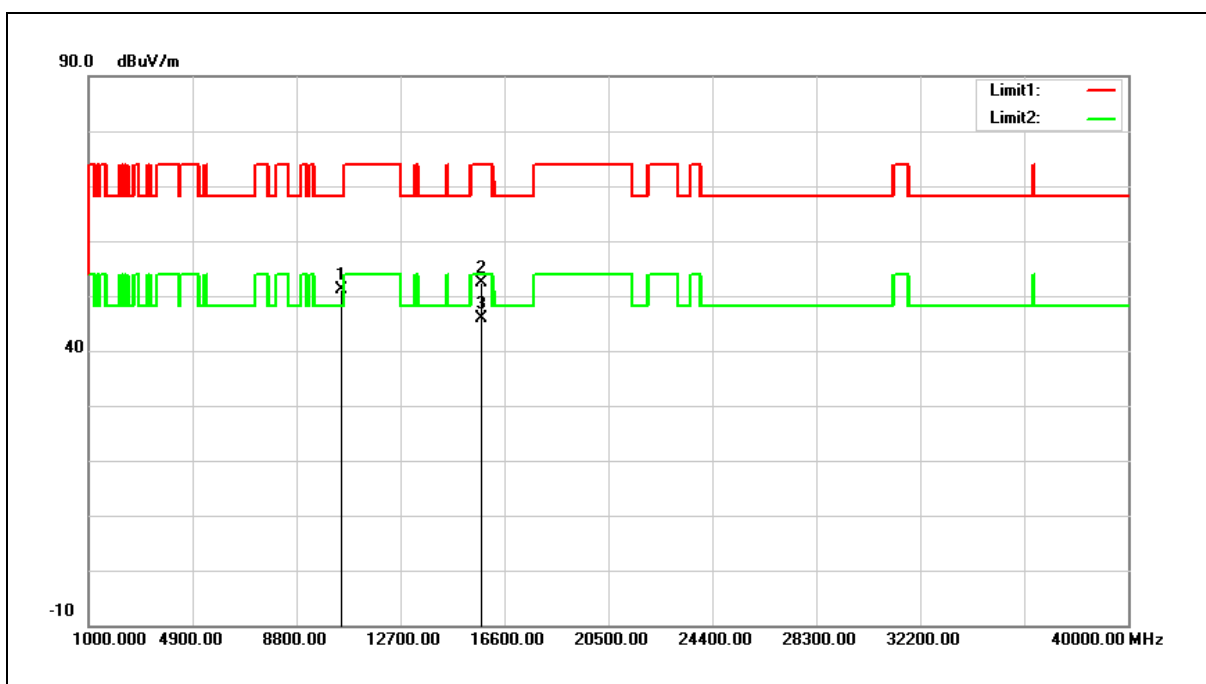
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	34.51	17.06	51.57	68.20	-16.63	peak
2	15600.000	39.92	19.02	58.94	74.00	-15.06	peak
3	15600.000	29.52	19.02	48.54	54.00	-5.46	AVG

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



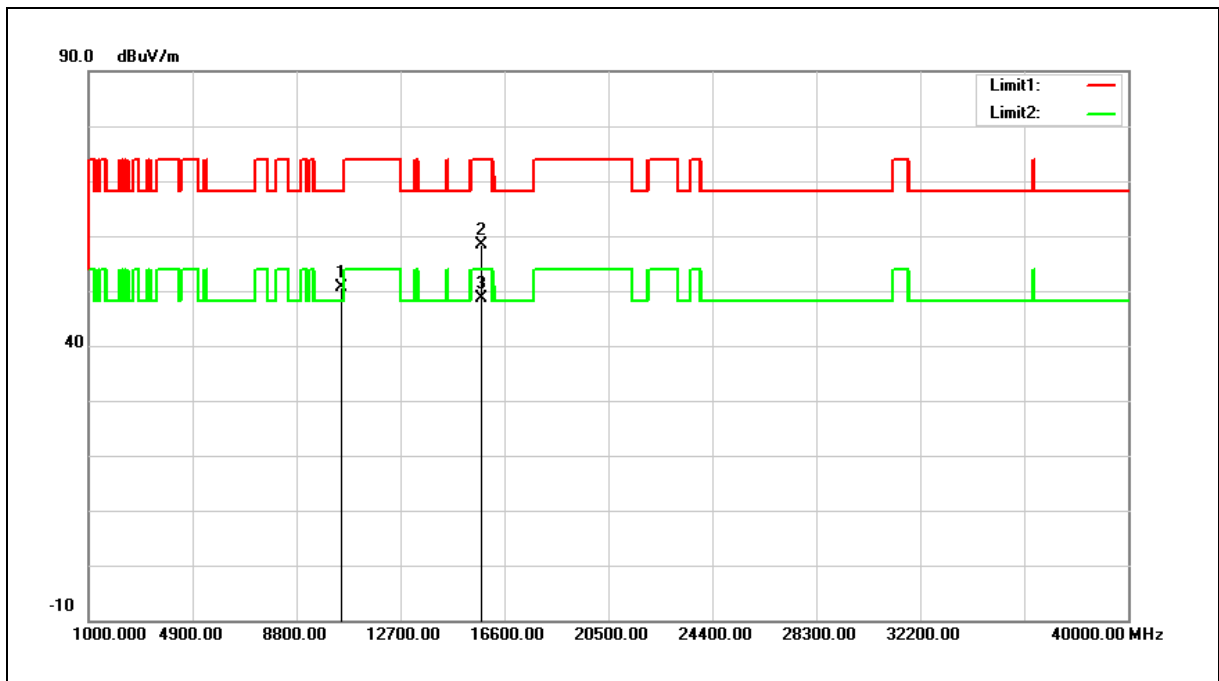
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	33.82	17.35	51.17	68.20	-17.03	peak
2	15720.000	33.63	18.71	52.34	74.00	-21.66	peak
3	15720.000	27.18	18.71	45.89	54.00	-8.11	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



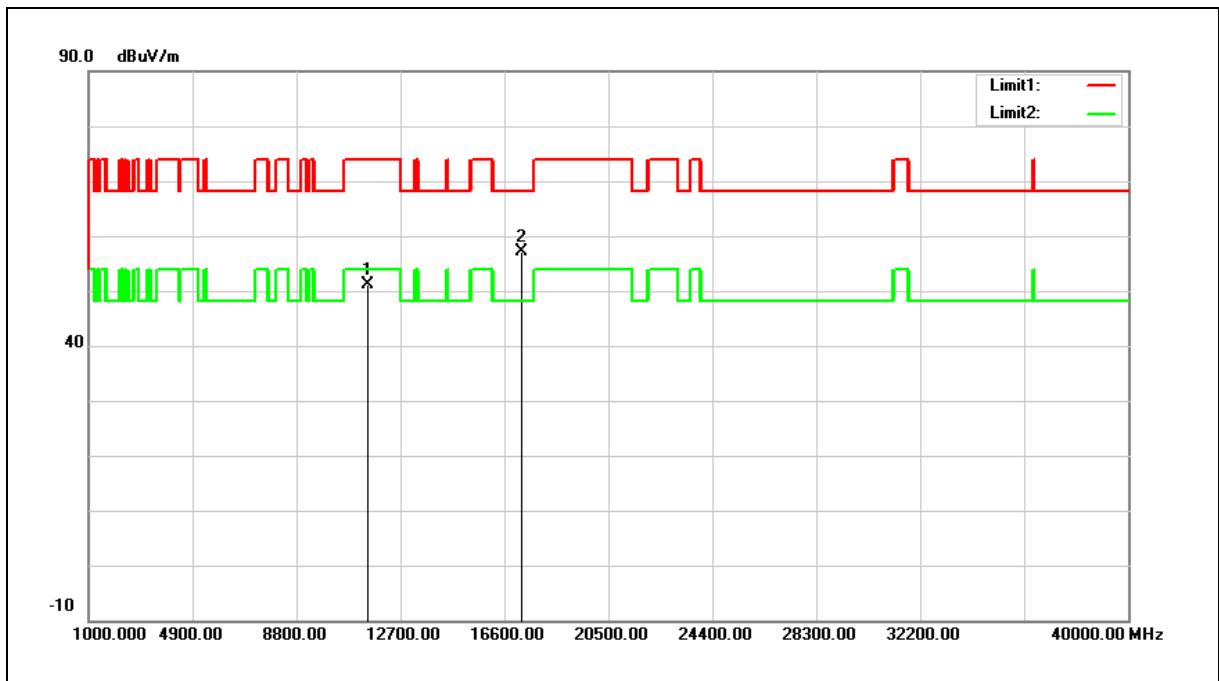
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	33.26	17.35	50.61	68.20	-17.59	peak
2	15720.000	39.67	18.71	58.38	74.00	-15.62	peak
3	15720.000	29.84	18.71	48.55	54.00	-5.45	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	32.72	18.50	51.22	74.00	-22.78	peak
2	17235.000	32.75	24.31	57.06	68.20	-11.14	peak

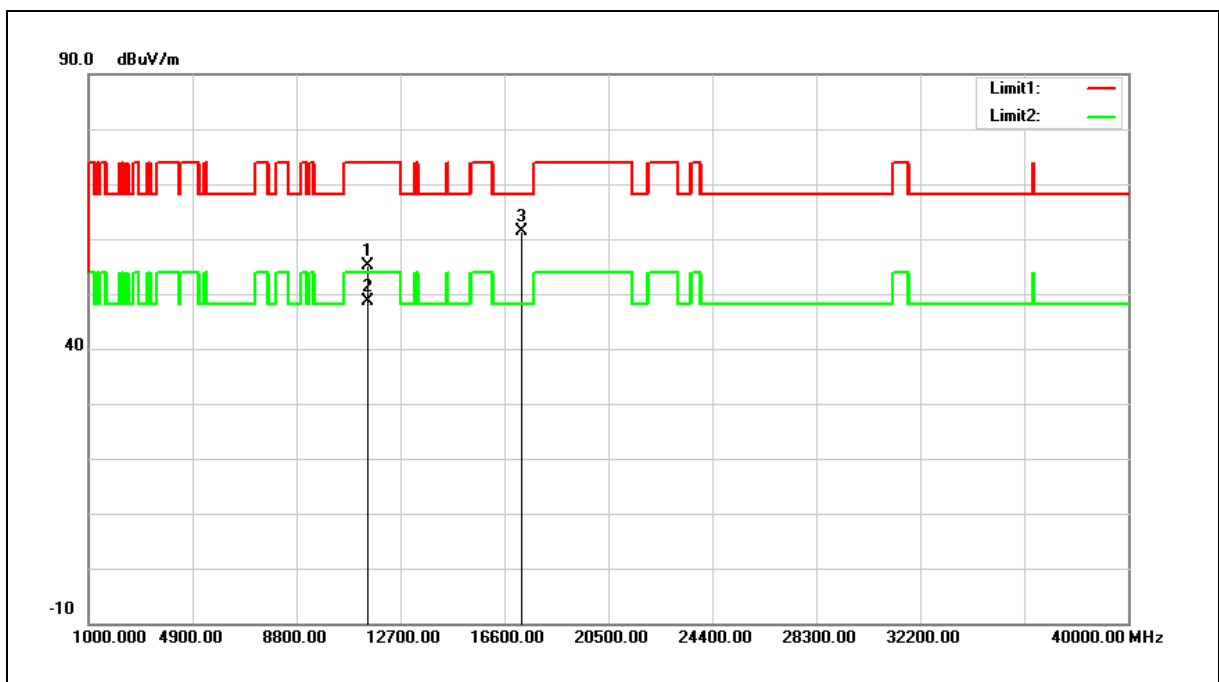
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



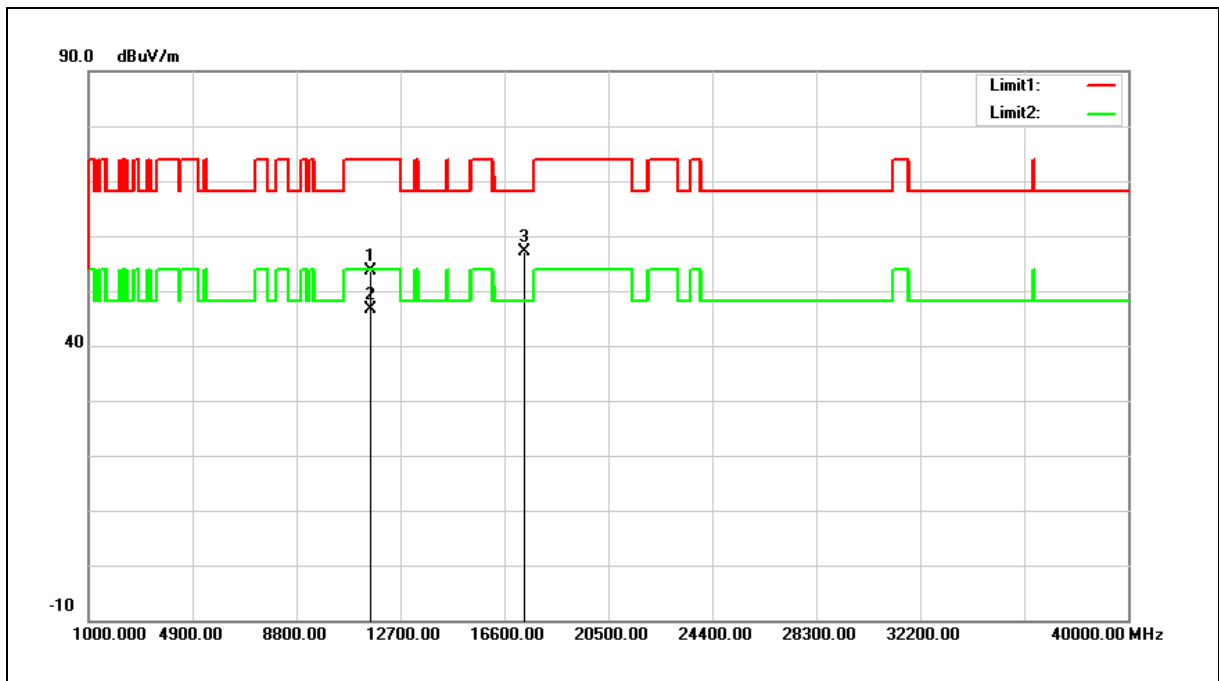
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	36.63	18.50	55.13	74.00	-18.87	peak
2	11490.000	30.02	18.50	48.52	54.00	-5.48	AVG
3	17235.000	37.00	24.31	61.31	68.20	-6.89	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	35.16	18.44	53.60	74.00	-20.40	peak
2	11570.000	28.08	18.44	46.52	54.00	-7.48	AVG
3	17355.000	32.44	24.79	57.23	68.20	-10.97	peak

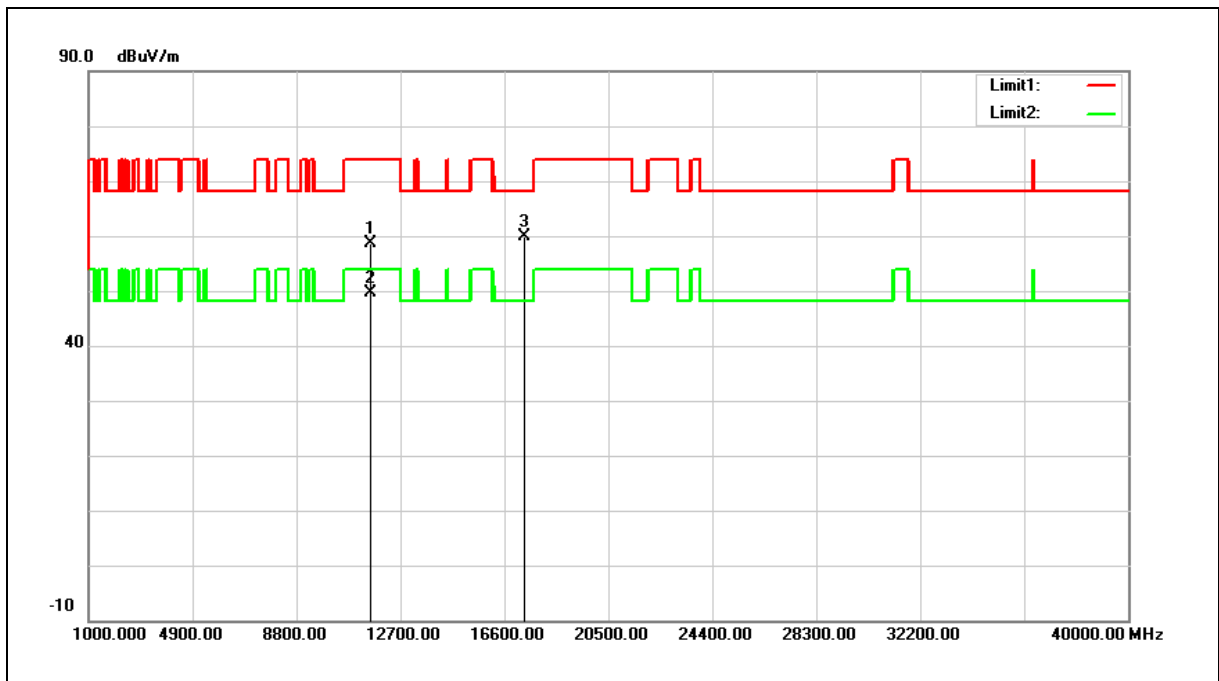
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



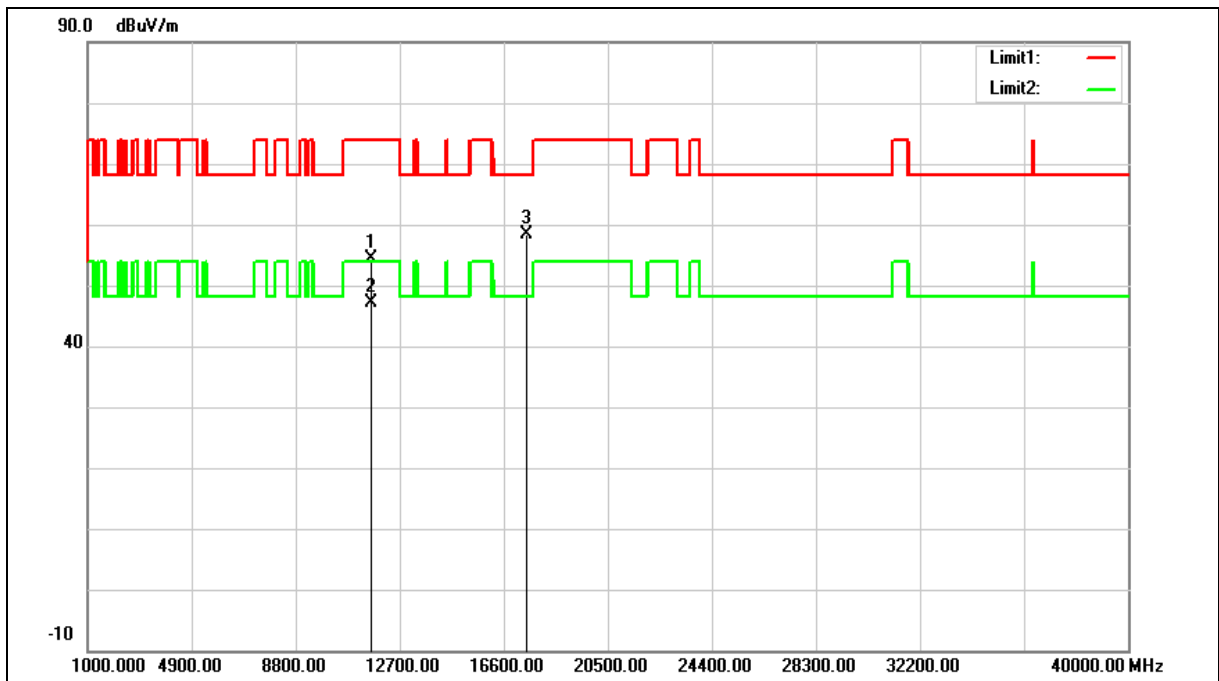
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	40.12	18.44	58.56	74.00	-15.44	peak
2	11570.000	31.30	18.44	49.74	54.00	-4.26	AVG
3	17355.000	35.20	24.79	59.99	68.20	-8.21	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



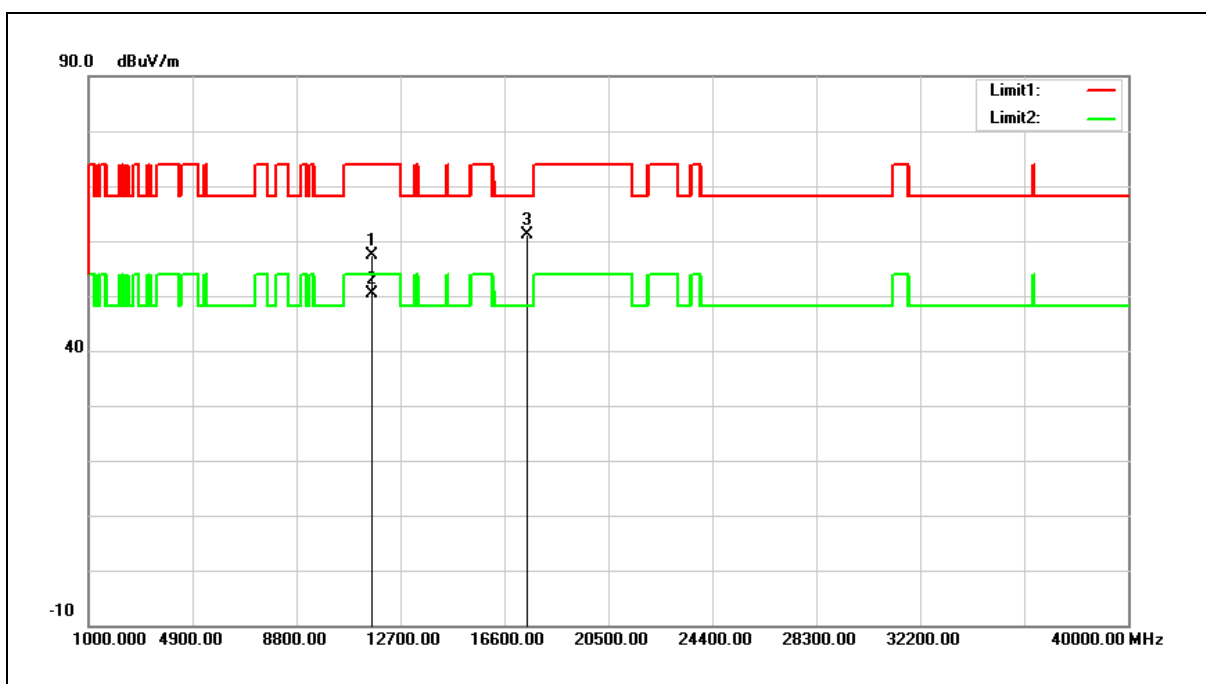
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	35.91	18.38	54.29	74.00	-19.71	peak
2	11650.000	28.73	18.38	47.11	54.00	-6.89	AVG
3	17475.000	33.12	25.26	58.38	68.20	-9.82	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



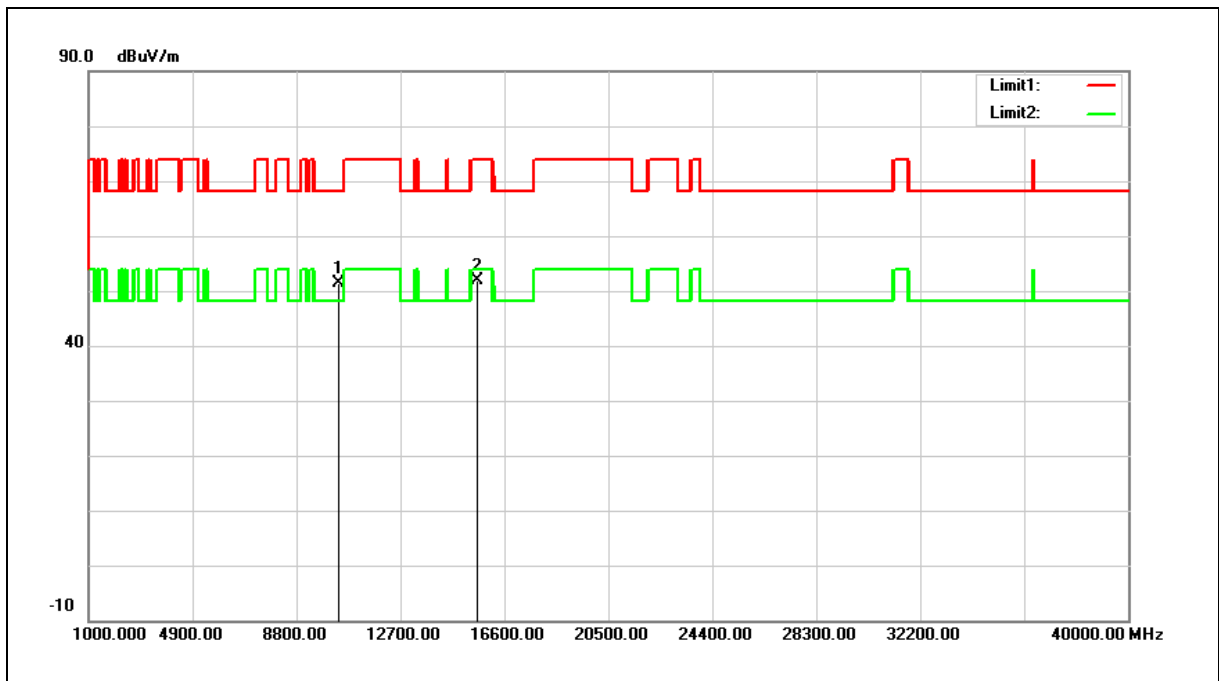
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	39.07	18.38	57.45	74.00	-16.55	peak
2	11650.000	31.90	18.38	50.28	54.00	-3.72	AVG
3	17475.000	35.85	25.26	61.11	68.20	-7.09	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	34.29	16.98	51.27	68.20	-16.93	peak
2	15570.000	32.73	19.11	51.84	74.00	-22.16	peak

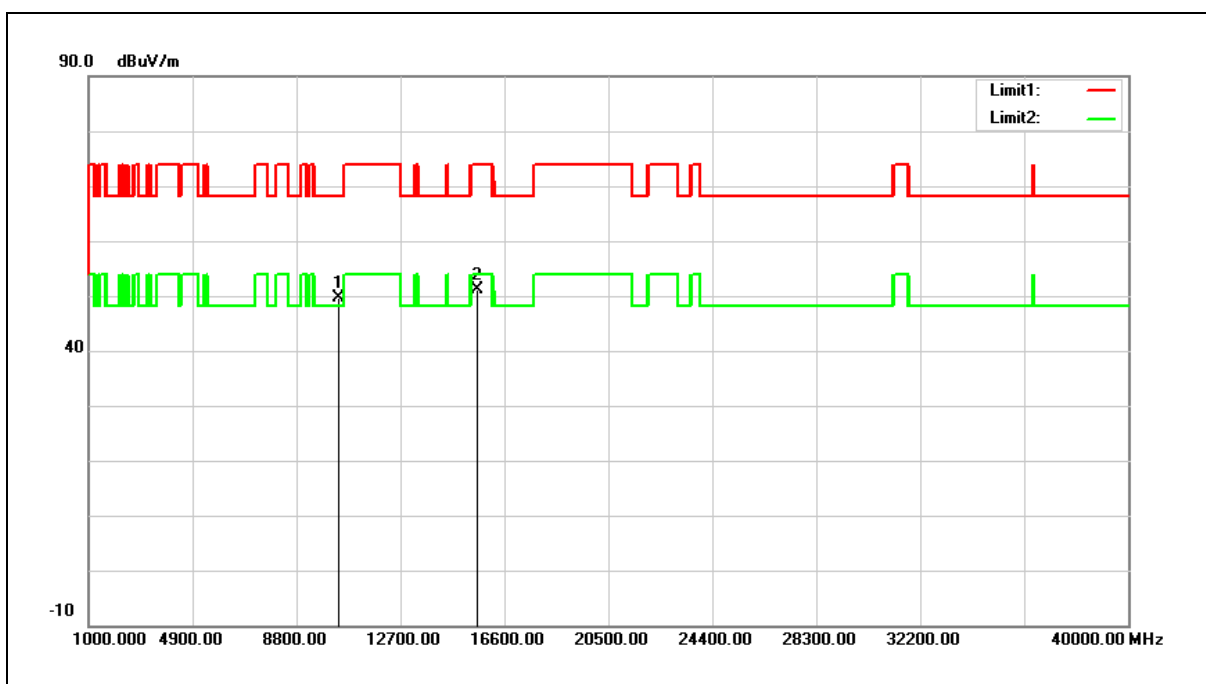
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



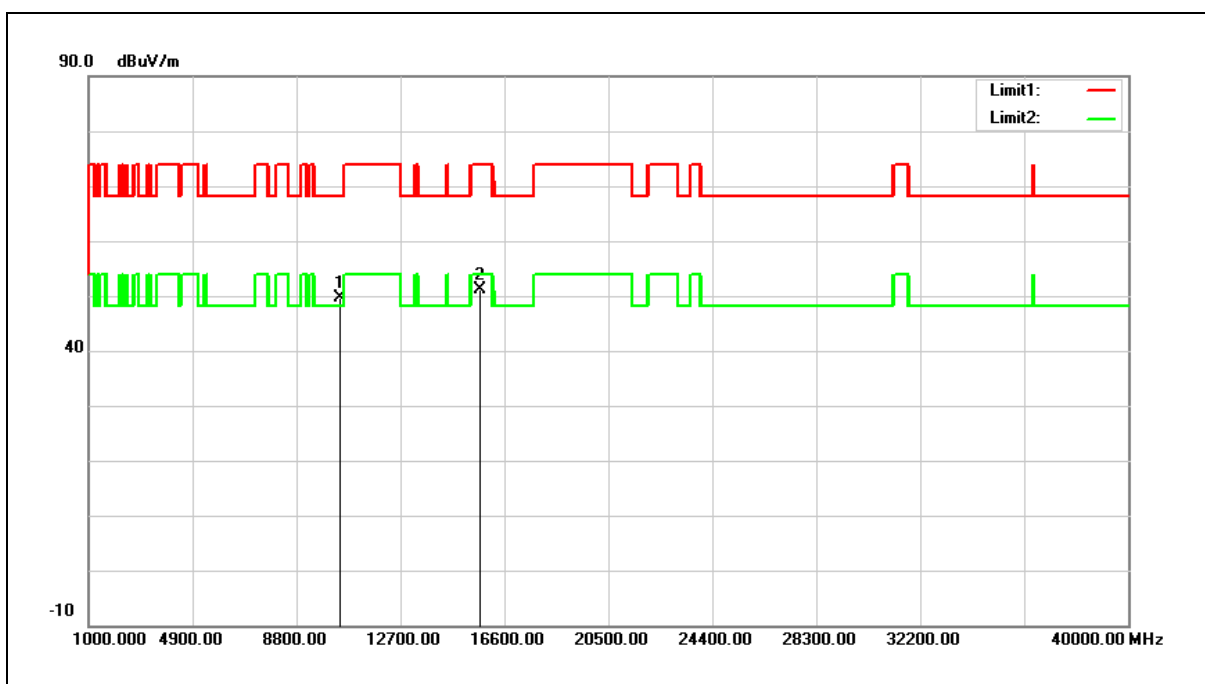
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	32.74	16.98	49.72	68.20	-18.48	peak
2	15570.000	31.90	19.11	51.01	74.00	-22.99	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



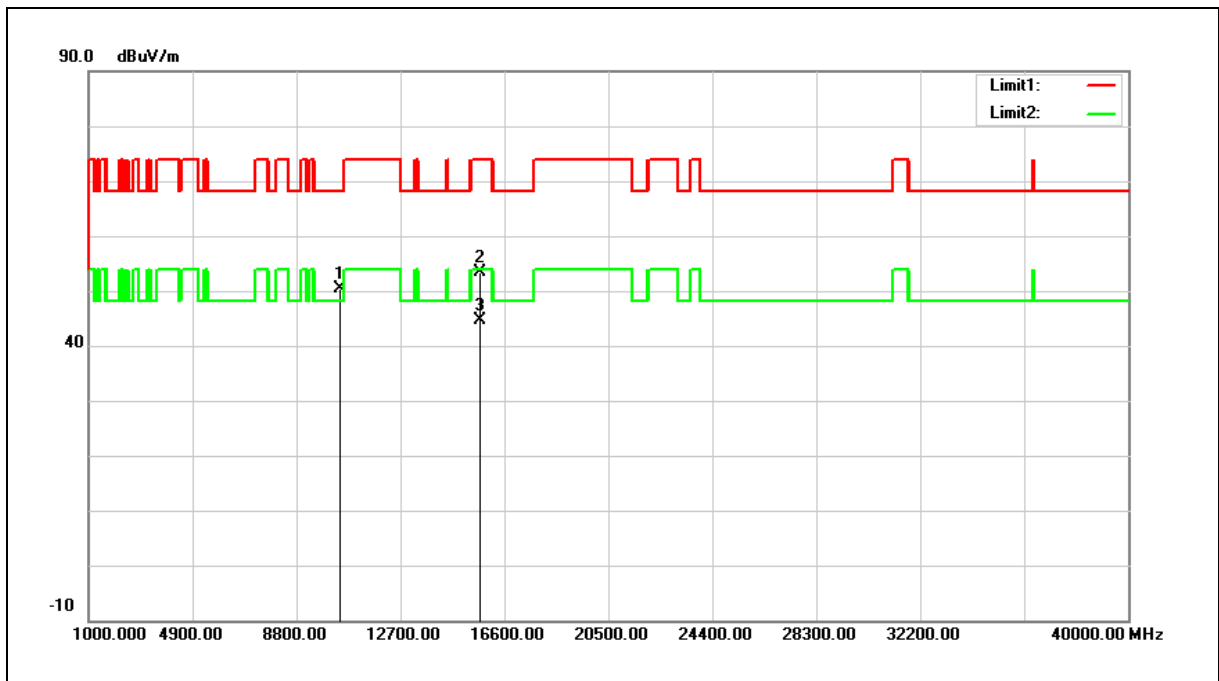
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	32.28	17.27	49.55	68.20	-18.65	peak
2	15690.000	32.42	18.78	51.20	74.00	-22.80	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



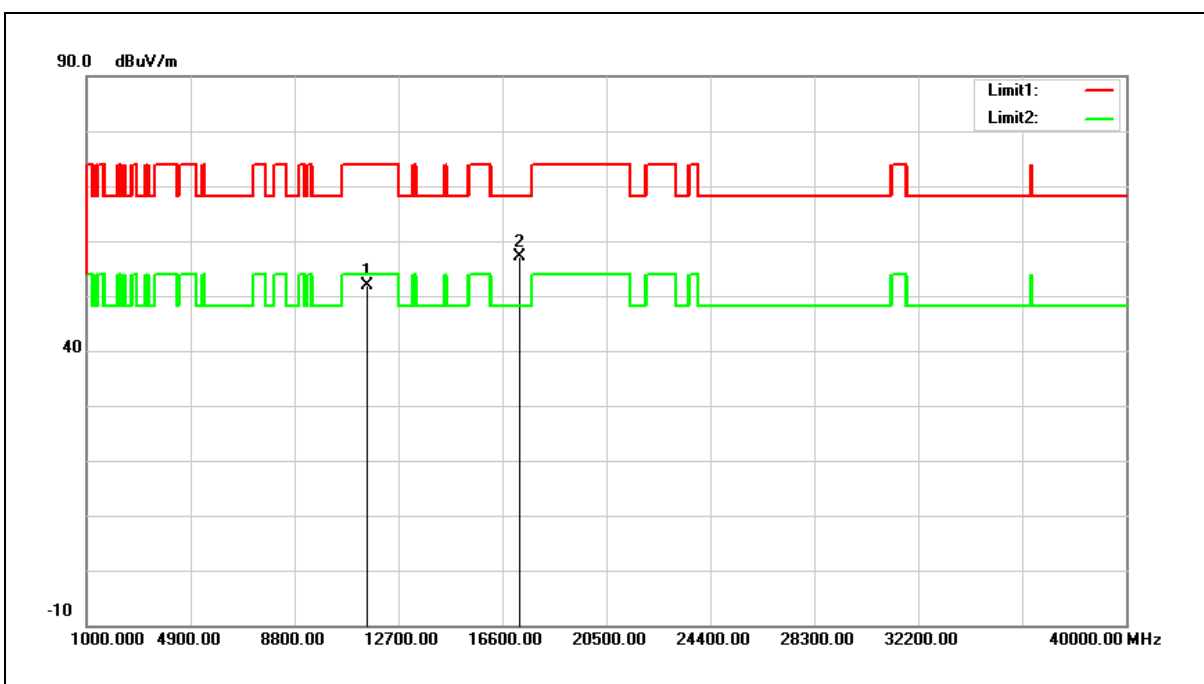
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	33.07	17.27	50.34	68.20	-17.86	peak
2	15690.000	34.48	18.78	53.26	74.00	-20.74	peak
3	15690.000	25.89	18.78	44.67	54.00	-9.33	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



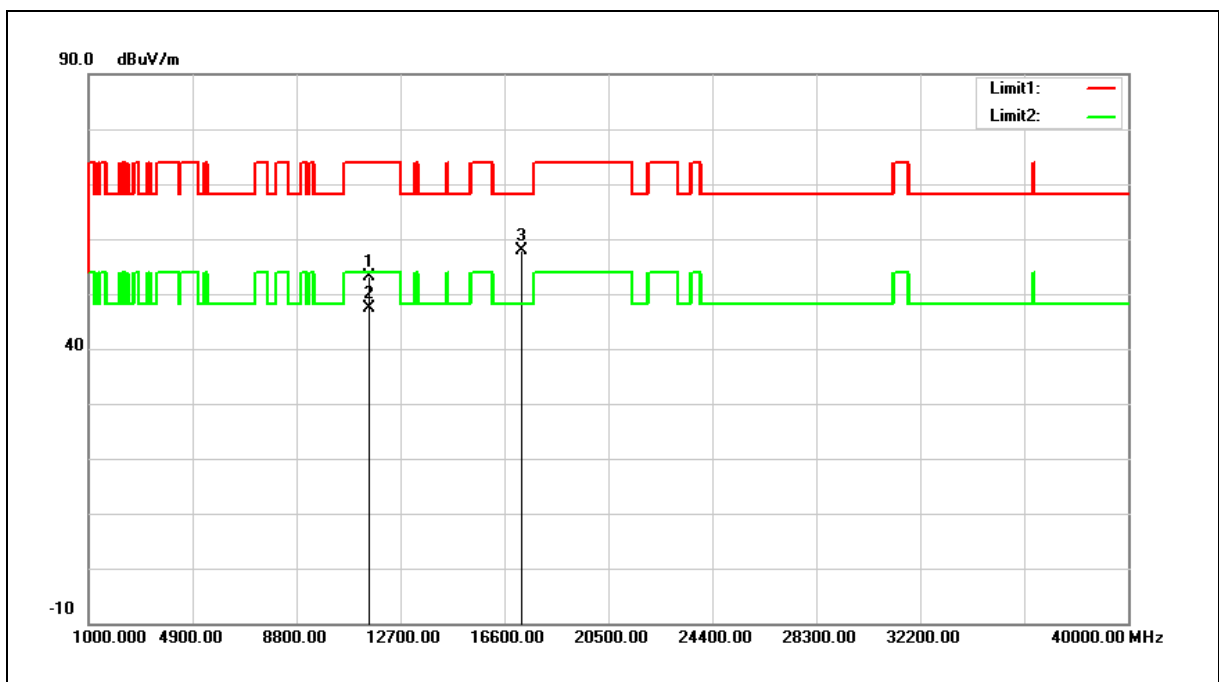
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	33.47	18.49	51.96	74.00	-22.04	peak
2	17265.000	32.72	24.44	57.16	68.20	-11.04	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



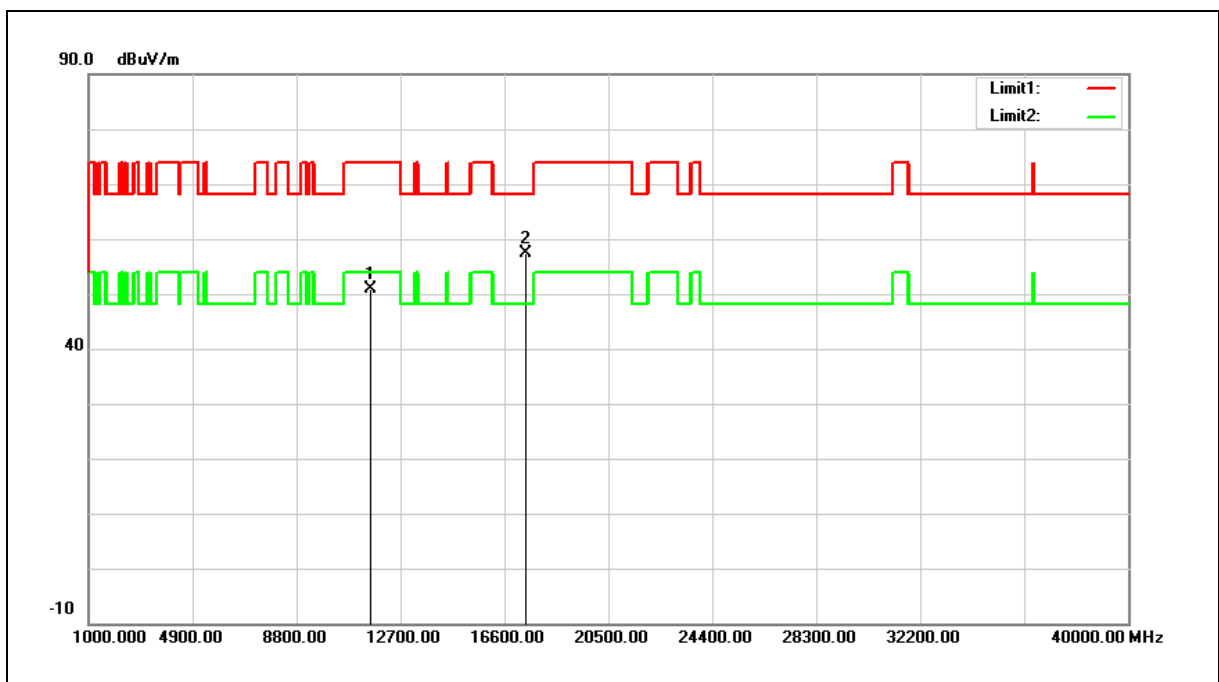
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	34.72	18.49	53.21	74.00	-20.79	peak
2	11510.000	28.77	18.49	47.26	54.00	-6.74	AVG
3	17265.000	33.40	24.44	57.84	68.20	-10.36	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



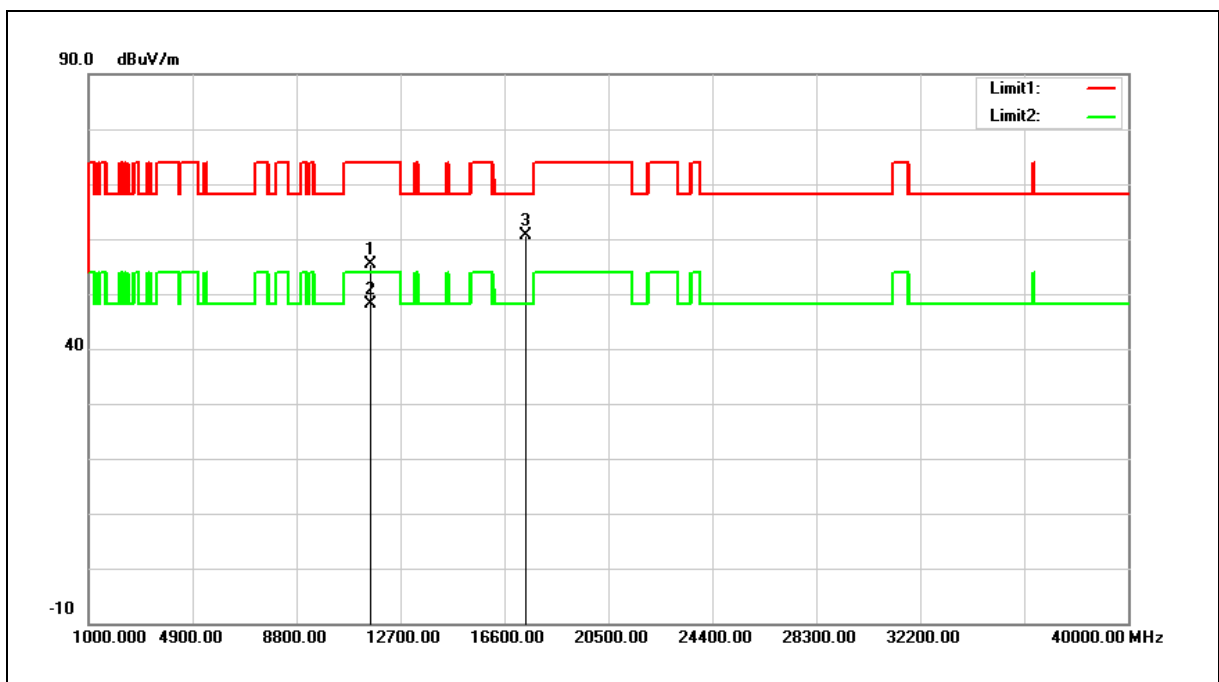
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	32.56	18.43	50.99	74.00	-23.01	peak
2	17385.000	32.57	24.90	57.47	68.20	-10.73	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



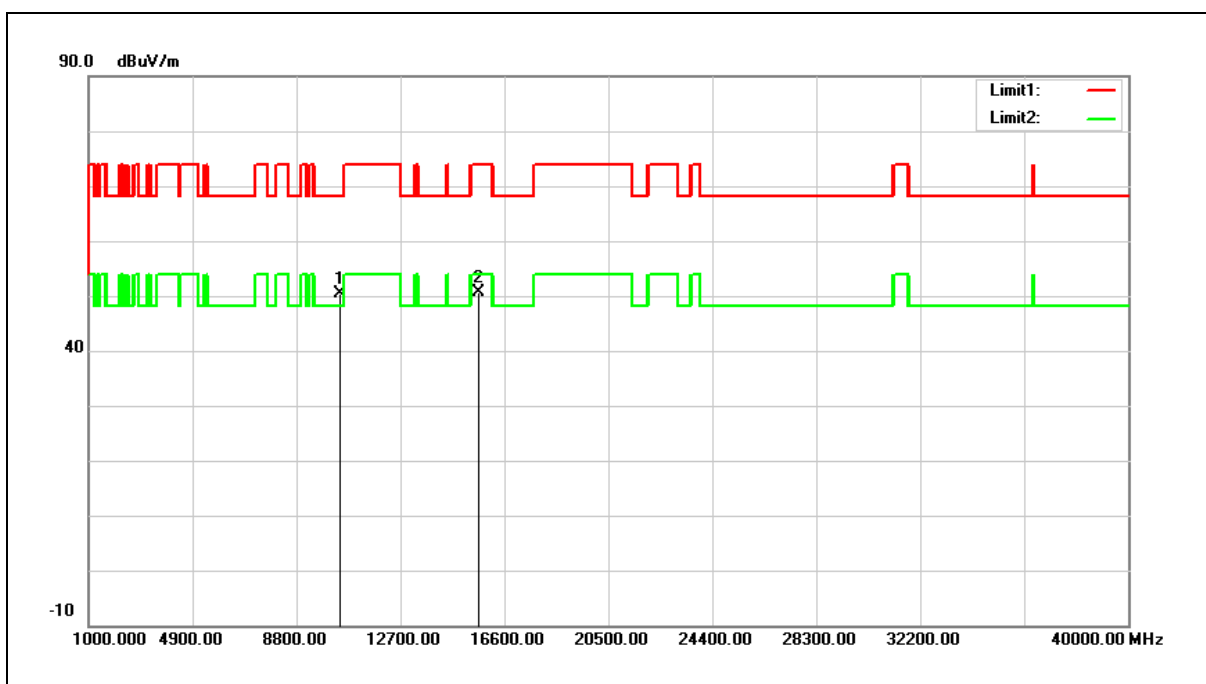
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	36.87	18.43	55.30	74.00	-18.70	peak
2	11590.000	29.67	18.43	48.10	54.00	-5.90	AVG
3	17385.000	35.78	24.90	60.68	68.20	-7.52	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



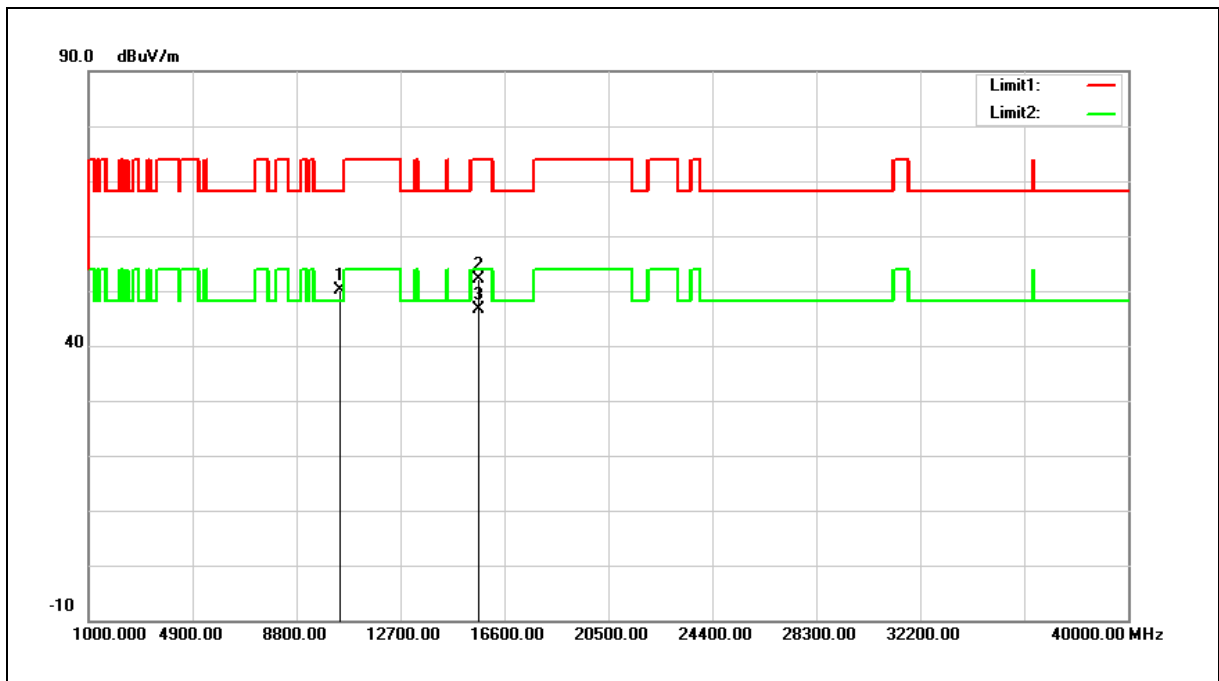
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	33.20	17.13	50.33	68.20	-17.87	peak
2	15630.000	31.71	18.94	50.65	74.00	-23.35	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		



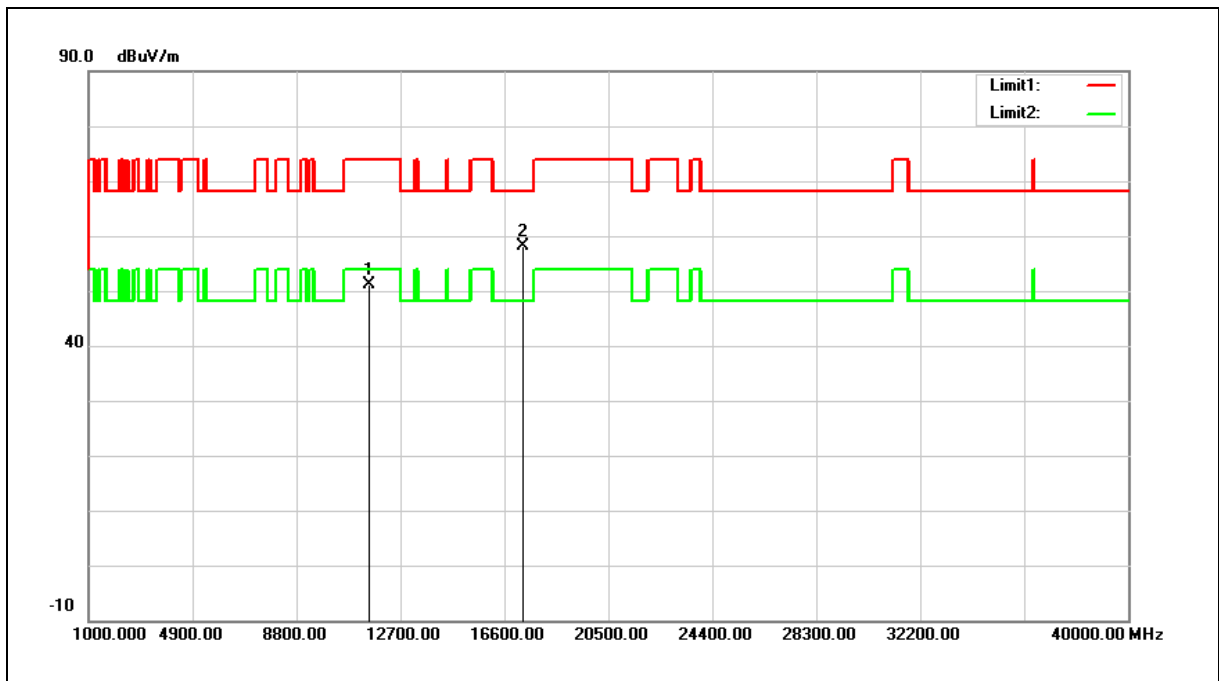
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	32.92	17.13	50.05	68.20	-18.15	peak
2	15630.000	33.18	18.94	52.12	74.00	-21.88	peak
3	15630.000	27.79	18.94	46.73	54.00	-7.27	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



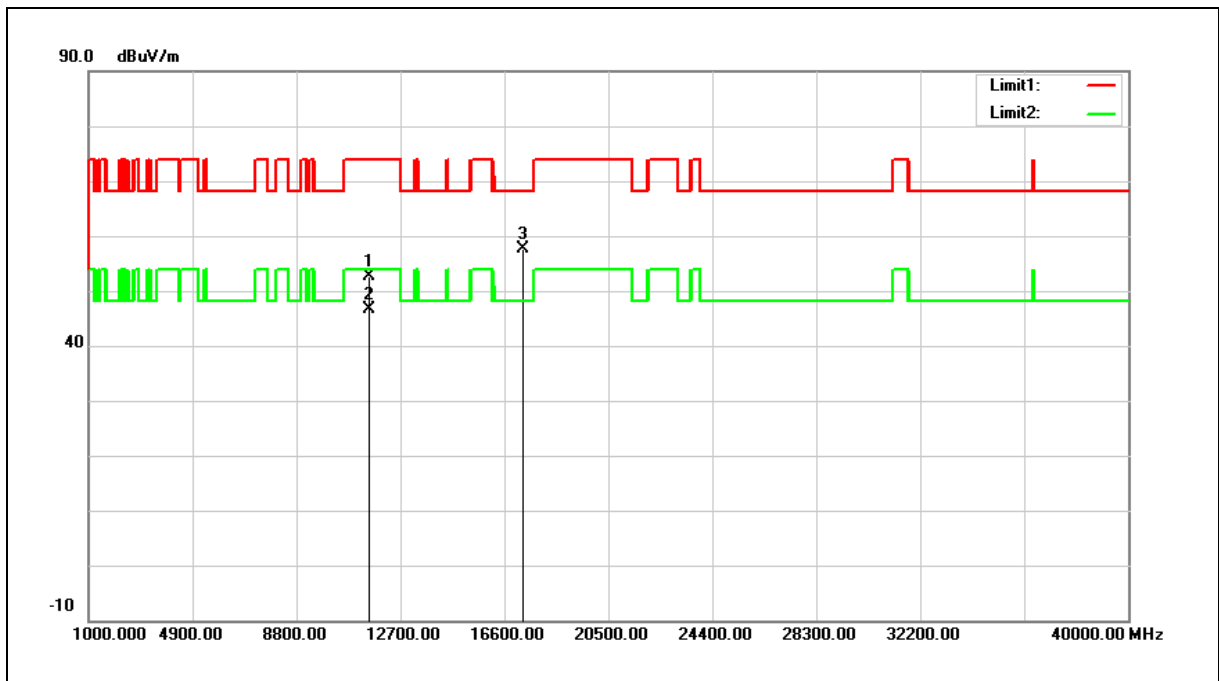
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	32.68	18.46	51.14	74.00	-22.86	peak
2	17325.000	33.35	24.68	58.03	68.20	-10.17	peak

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 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		



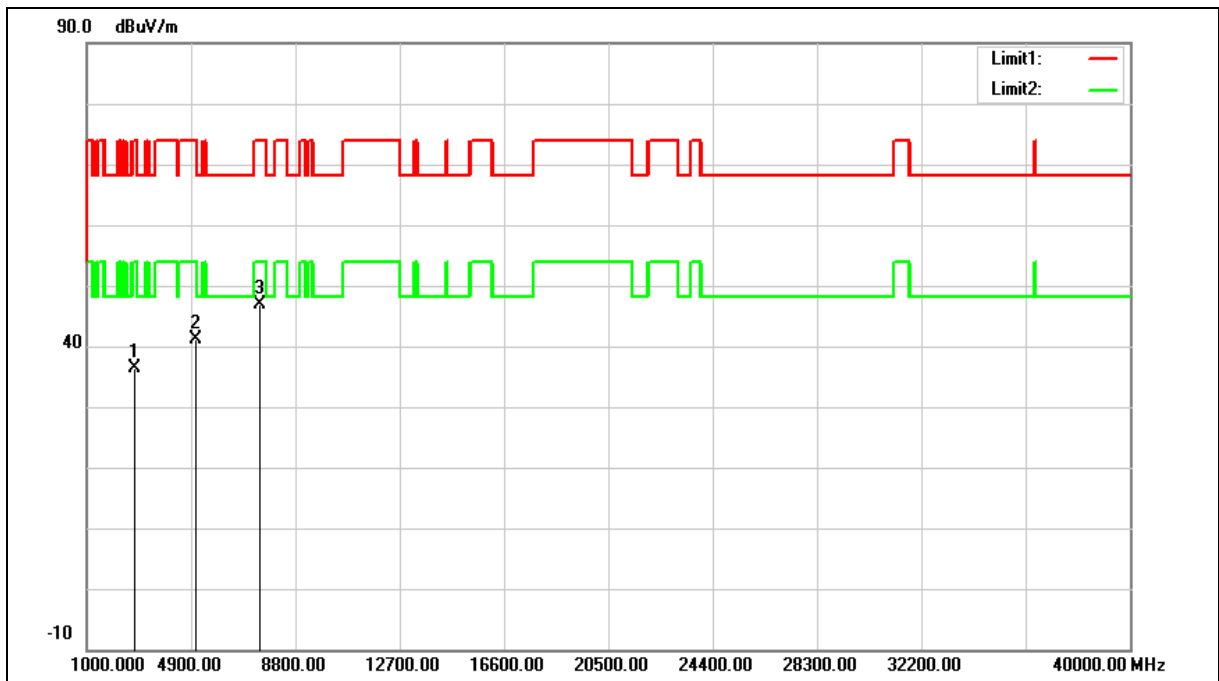
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	34.23	18.46	52.69	74.00	-21.31	peak
2	11550.000	28.13	18.46	46.59	54.00	-7.41	AVG
3	17325.000	32.99	24.68	57.67	68.20	-10.53	peak

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 15.407	Test Distance:	3 m
Test item:	Transmitter Unwanted Emissions	Power:	AC 120 V/60 Hz
Frequency:	Simultaneous Transmitting	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	(WLAN 2.4 GHz + 5 GHz)		
Ant.Polar.:	Horizontal		



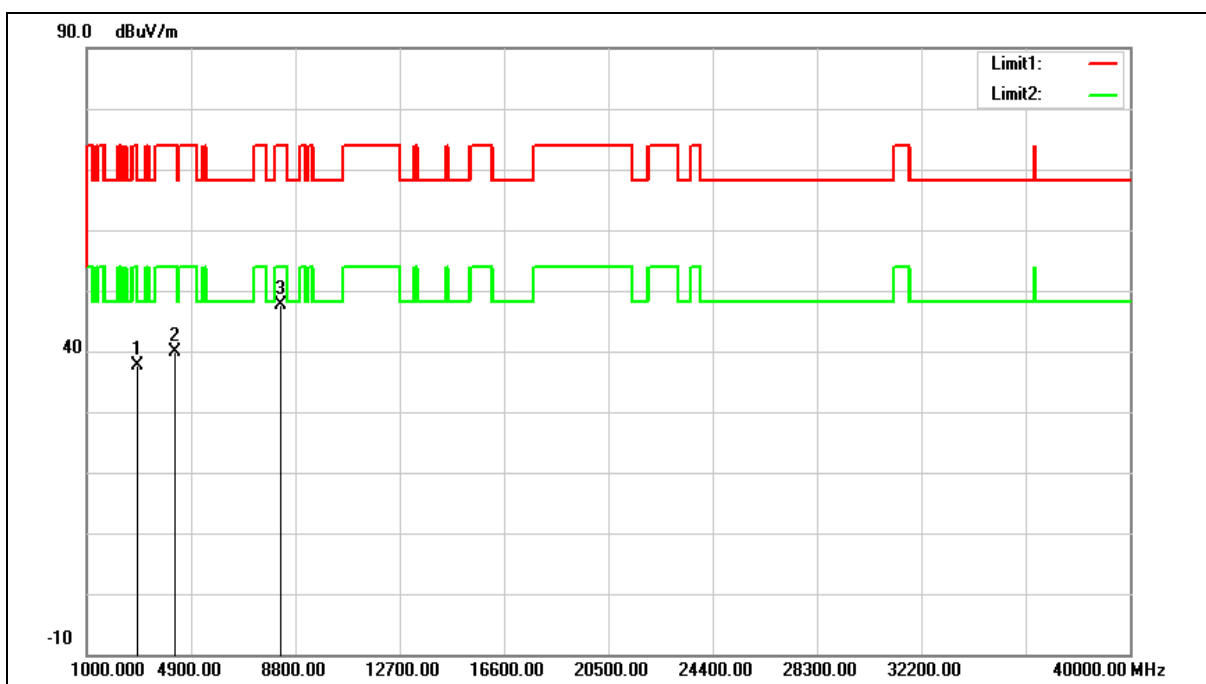
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2768.000	36.07	0.21	36.28	74.00	-37.72	peak
2	5063.000	35.19	6.06	41.25	74.00	-32.75	peak
3	7460.000	34.31	12.50	46.81	74.00	-27.19	peak

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 15.407	Test Distance:	3 m
Test item:	Transmitter Unwanted Emissions	Power:	AC 120 V/60 Hz
Frequency:	Simultaneous Transmitting	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	(WLAN 2.4 GHz + 5 GHz)		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2853.000	37.05	0.48	37.53	74.00	-36.47	peak
2	4281.000	35.75	4.19	39.94	74.00	-34.06	peak
3	8225.000	33.90	13.84	47.74	74.00	-26.26	peak

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

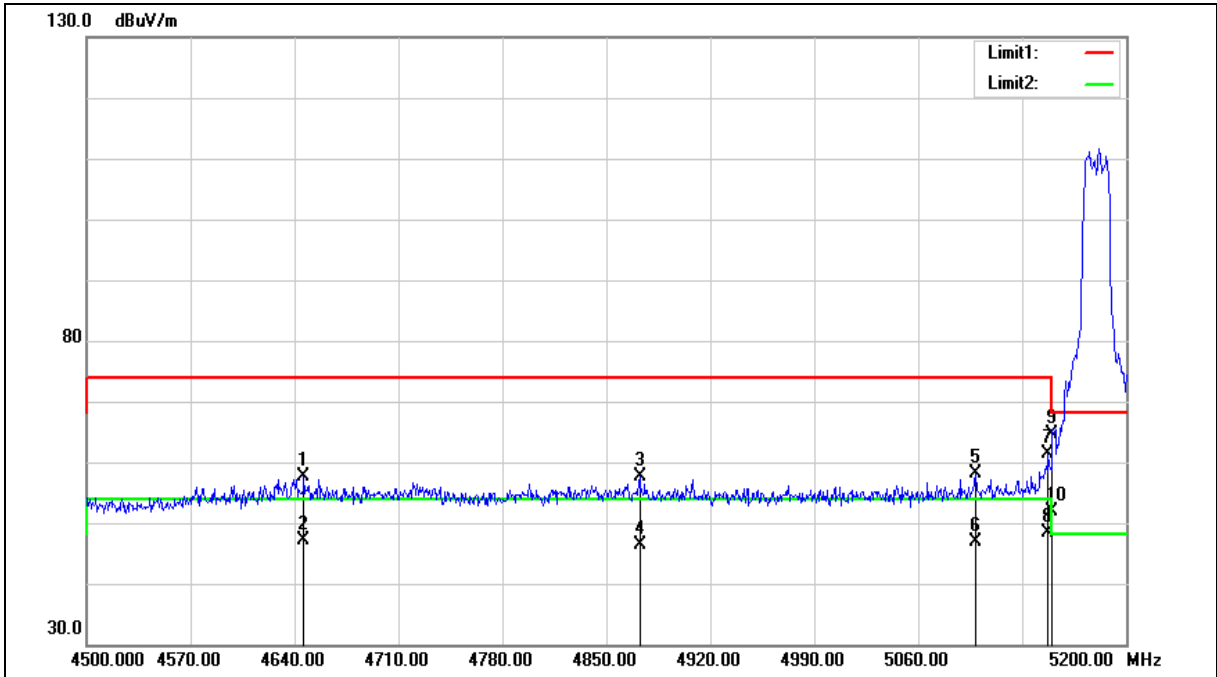
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

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



Band Edge

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4646.300	52.29	5.23	57.52	74.00	-16.48	peak
2	4646.300	42.01	5.23	47.24	54.00	-6.76	AVG
3	4872.400	51.95	5.66	57.61	74.00	-16.39	peak
4	4872.400	40.83	5.66	46.49	54.00	-7.51	AVG
5	5098.500	52.06	6.15	58.21	74.00	-15.79	peak
6	5098.500	40.78	6.15	46.93	54.00	-7.07	AVG
7	5147.500	55.13	6.26	61.39	74.00	-12.61	peak
8	5147.500	42.08	6.26	48.34	54.00	-5.66	AVG
9	5150.000	58.29	6.27	64.56	74.00	-9.44	peak
10	5150.000	45.65	6.27	51.92	54.00	-2.08	AVG

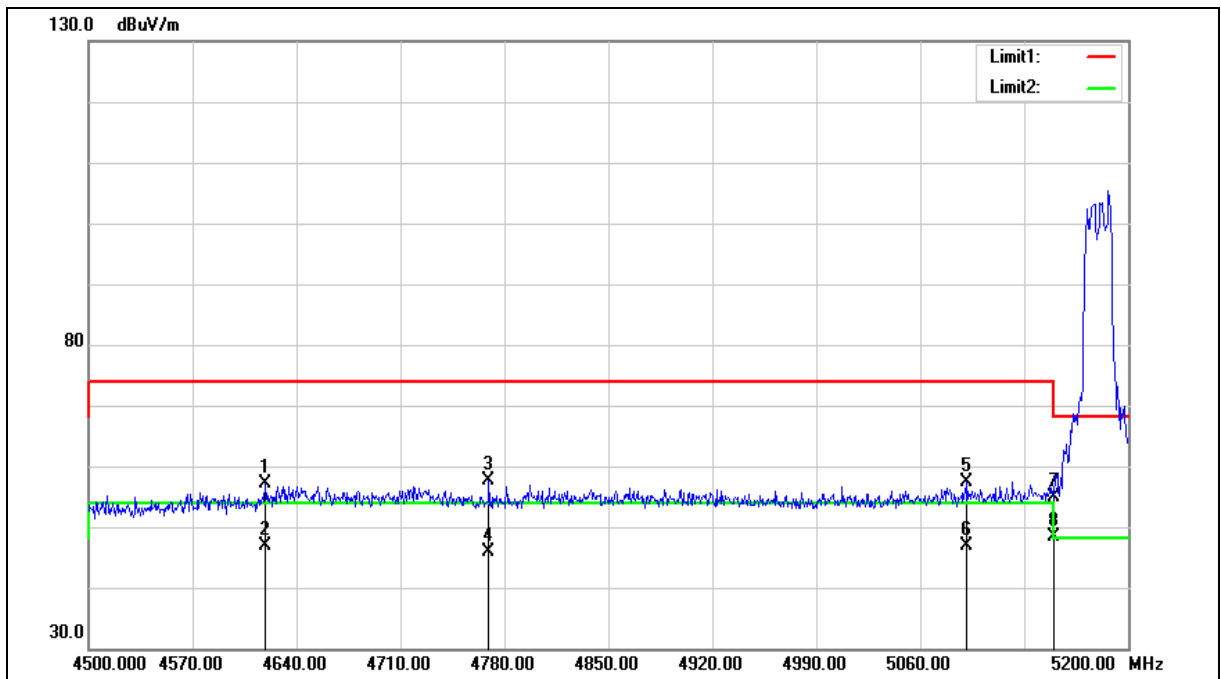
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4619.000	51.89	5.18	57.07	74.00	-16.93	peak
2	4619.000	41.66	5.18	46.84	54.00	-7.16	AVG
3	4769.500	52.09	5.48	57.57	74.00	-16.43	peak
4	4769.500	40.47	5.48	45.95	54.00	-8.05	AVG
5	5091.500	51.19	6.14	57.33	74.00	-16.67	peak
6	5091.500	40.63	6.14	46.77	54.00	-7.23	AVG
7	5150.000	48.54	6.27	54.81	74.00	-19.19	peak
8	5150.000	42.09	6.27	48.36	54.00	-5.64	AVG

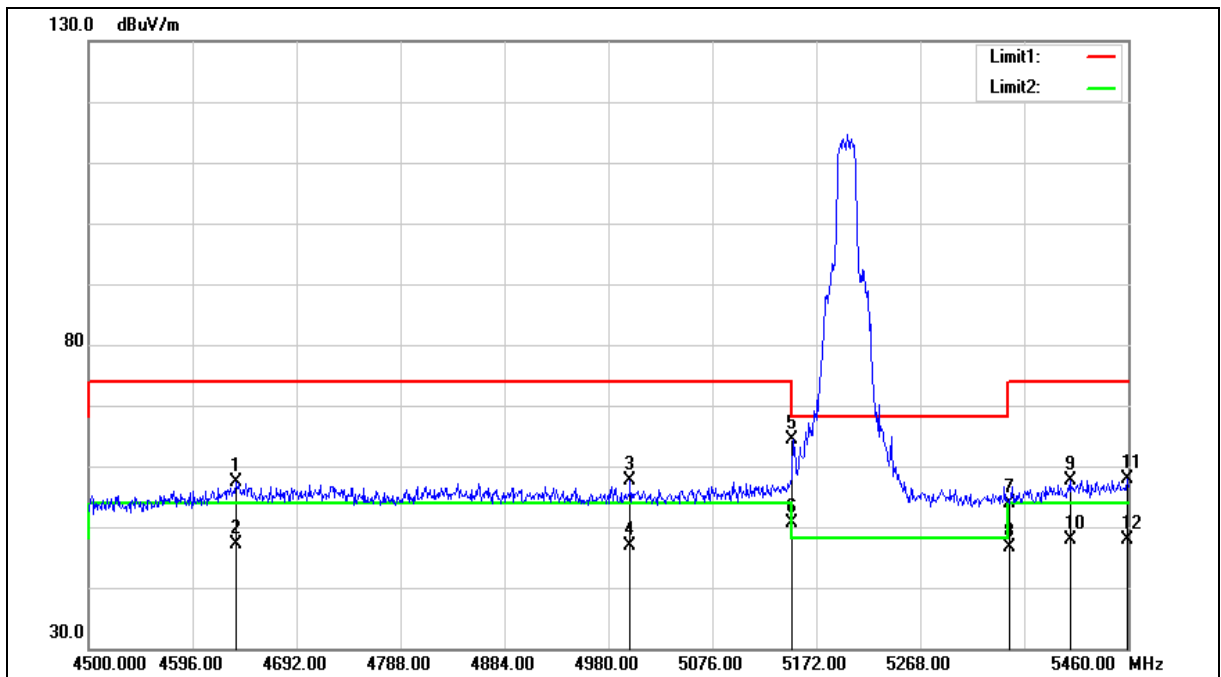
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4636.320	52.08	5.22	57.30	74.00	-16.70	peak
2	4636.320	42.00	5.22	47.22	54.00	-6.78	AVG
3	5000.160	51.69	5.91	57.60	74.00	-16.40	peak
4	5000.160	41.05	5.91	46.96	54.00	-7.04	AVG
5	5150.000	58.02	6.27	64.29	74.00	-9.71	peak
6	5150.000	44.38	6.27	50.65	54.00	-3.35	AVG
7	5350.000	47.24	6.74	53.98	74.00	-20.02	peak
8	5350.000	39.91	6.74	46.65	54.00	-7.35	AVG
9	5406.240	50.80	6.87	57.67	74.00	-16.33	peak
10	5406.240	41.06	6.87	47.93	54.00	-6.07	AVG
11	5459.040	50.83	7.00	57.83	74.00	-16.17	peak
12	5459.040	40.99	7.00	47.99	54.00	-6.01	AVG

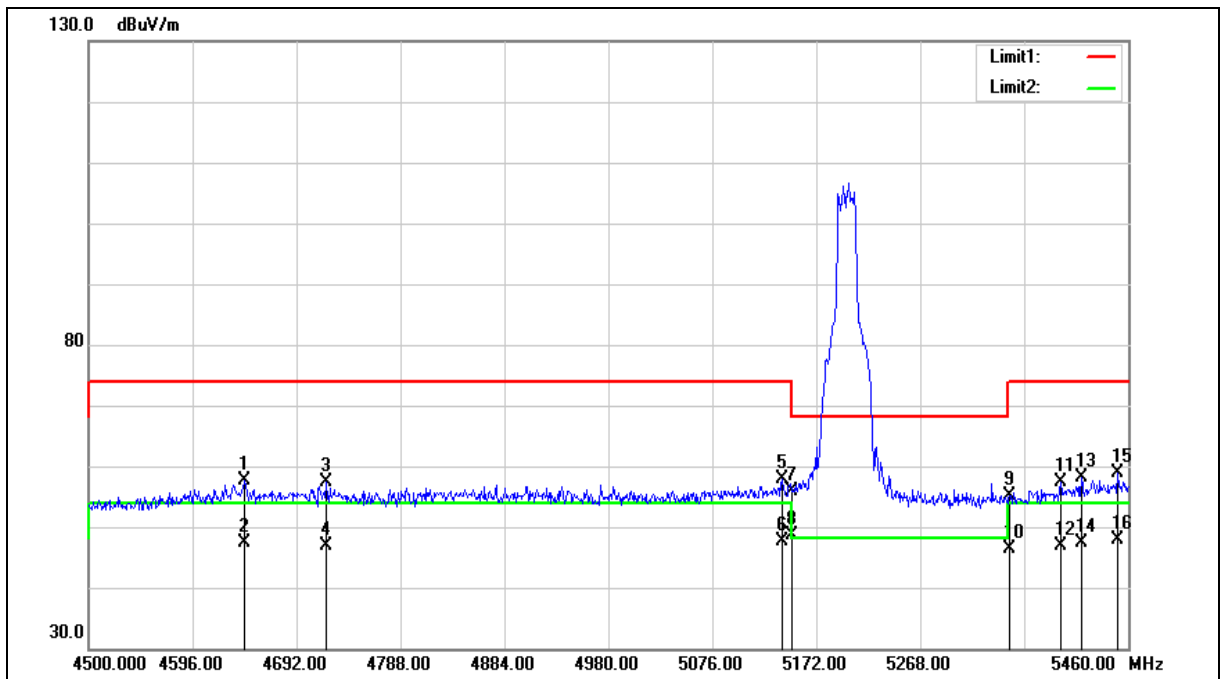
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4644.000	52.32	5.24	57.56	74.00	-16.44	peak
2	4644.000	42.10	5.24	47.34	54.00	-6.66	AVG
3	4719.840	51.96	5.38	57.34	74.00	-16.66	peak
4	4719.840	41.56	5.38	46.94	54.00	-7.06	AVG
5	5140.320	51.62	6.25	57.87	74.00	-16.13	peak
6	5140.320	41.36	6.25	47.61	54.00	-6.39	AVG
7	5150.000	49.54	6.27	55.81	74.00	-18.19	peak
8	5150.000	42.45	6.27	48.72	54.00	-5.28	AVG
9	5350.000	48.35	6.74	55.09	74.00	-18.91	peak
10	5350.000	39.75	6.74	46.49	54.00	-7.51	AVG
11	5397.600	50.42	6.85	57.27	74.00	-16.73	peak
12	5397.600	40.14	6.85	46.99	54.00	-7.01	AVG
13	5416.800	51.18	6.91	58.09	74.00	-15.91	peak
14	5416.800	40.39	6.91	47.30	54.00	-6.70	AVG
15	5450.400	51.90	6.98	58.88	74.00	-15.12	peak
16	5450.400	40.99	6.98	47.97	54.00	-6.03	AVG

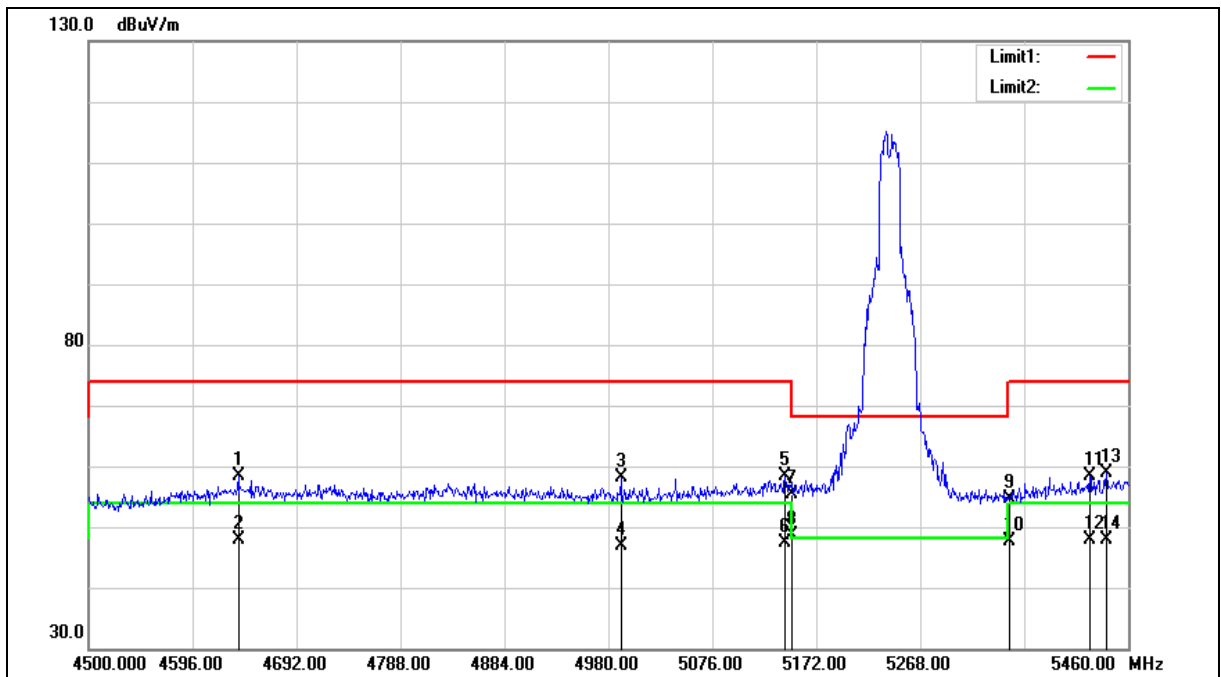
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4638.240	53.05	5.23	58.28	74.00	-15.72	peak
2	4638.240	42.72	5.23	47.95	54.00	-6.05	AVG
3	4991.520	52.13	5.89	58.02	74.00	-15.98	peak
4	4991.520	41.03	5.89	46.92	54.00	-7.08	AVG
5	5143.200	52.01	6.25	58.26	74.00	-15.74	peak
6	5143.200	41.08	6.25	47.33	54.00	-6.67	AVG
7	5150.000	49.17	6.27	55.44	74.00	-18.56	peak
8	5150.000	42.34	6.27	48.61	54.00	-5.39	AVG
9	5350.000	47.99	6.74	54.73	74.00	-19.27	peak
10	5350.000	40.92	6.74	47.66	54.00	-6.34	AVG
11	5424.480	51.53	6.93	58.46	74.00	-15.54	peak
12	5424.480	40.86	6.93	47.79	54.00	-6.21	AVG
13	5439.840	51.94	6.96	58.90	74.00	-15.10	peak
14	5439.840	40.93	6.96	47.89	54.00	-6.11	AVG

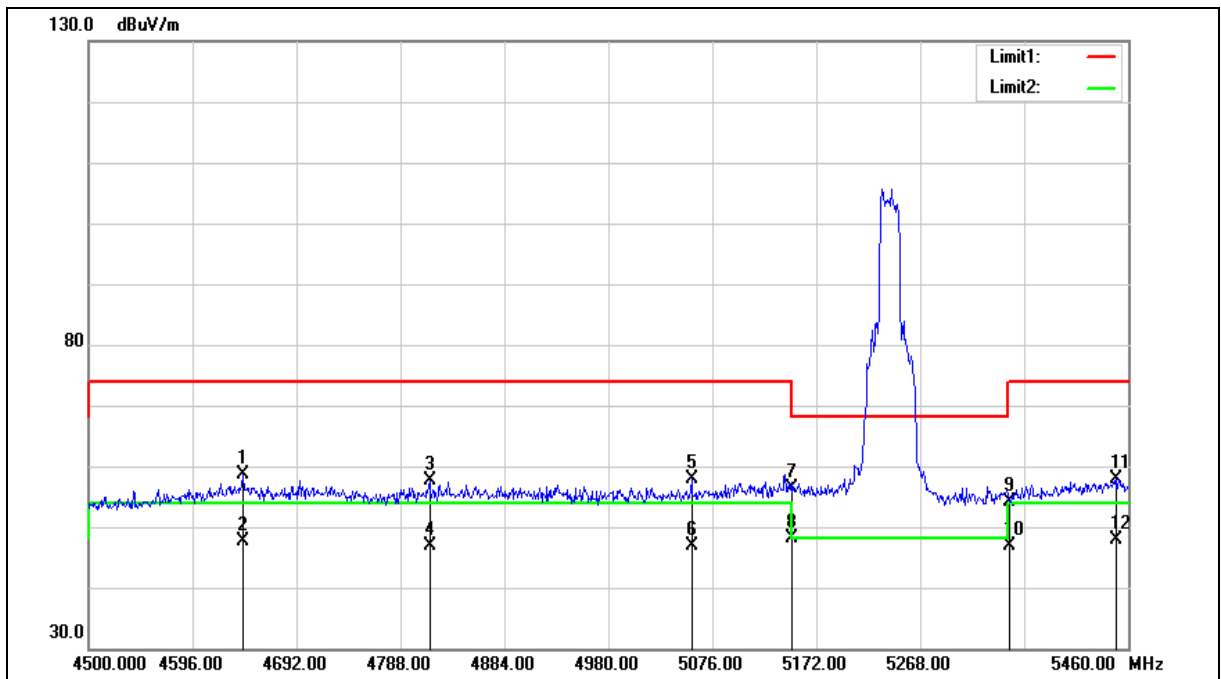
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

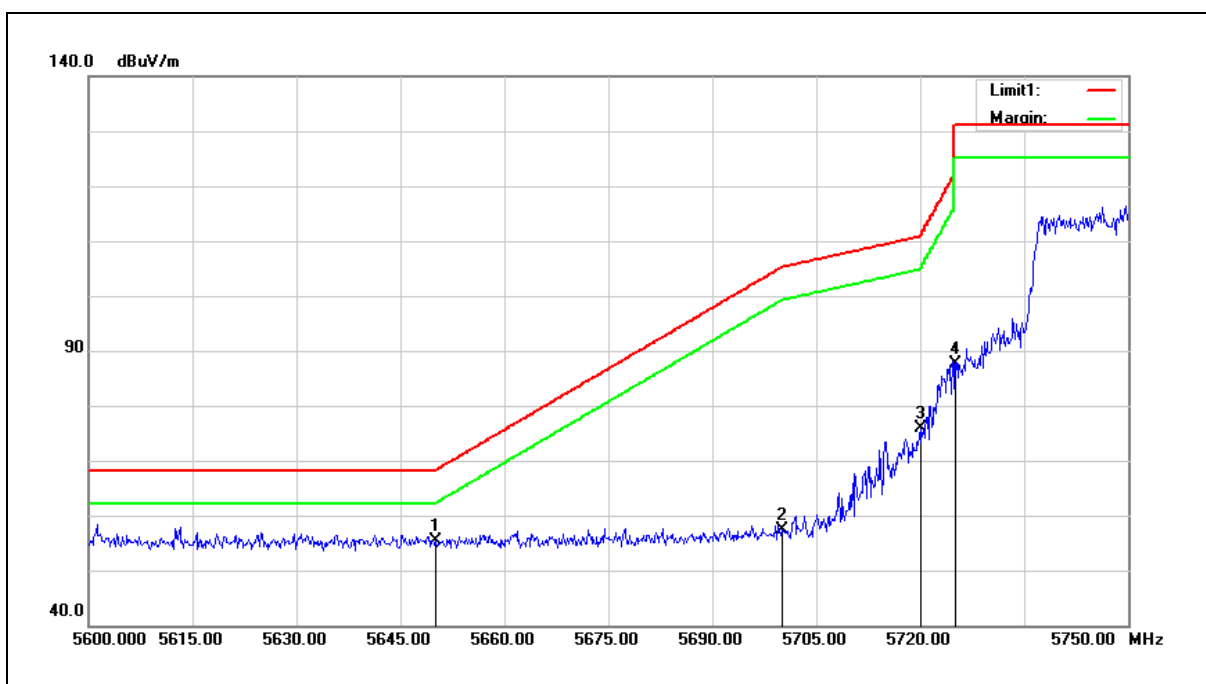
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4642.080	53.30	5.23	58.53	74.00	-15.47	peak
2	4642.080	42.42	5.23	47.65	54.00	-6.35	AVG
3	4814.880	52.11	5.55	57.66	74.00	-16.34	peak
4	4814.880	41.40	5.55	46.95	54.00	-7.05	AVG
5	5056.800	51.88	6.04	57.92	74.00	-16.08	peak
6	5056.800	40.79	6.04	46.83	54.00	-7.17	AVG
7	5150.000	50.15	6.27	56.42	74.00	-17.58	peak
8	5150.000	41.80	6.27	48.07	54.00	-5.93	AVG
9	5350.000	47.27	6.74	54.01	74.00	-19.99	peak
10	5350.000	40.22	6.74	46.96	54.00	-7.04	AVG
11	5449.440	50.88	6.98	57.86	74.00	-16.14	peak
12	5449.440	40.78	6.98	47.76	54.00	-6.24	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



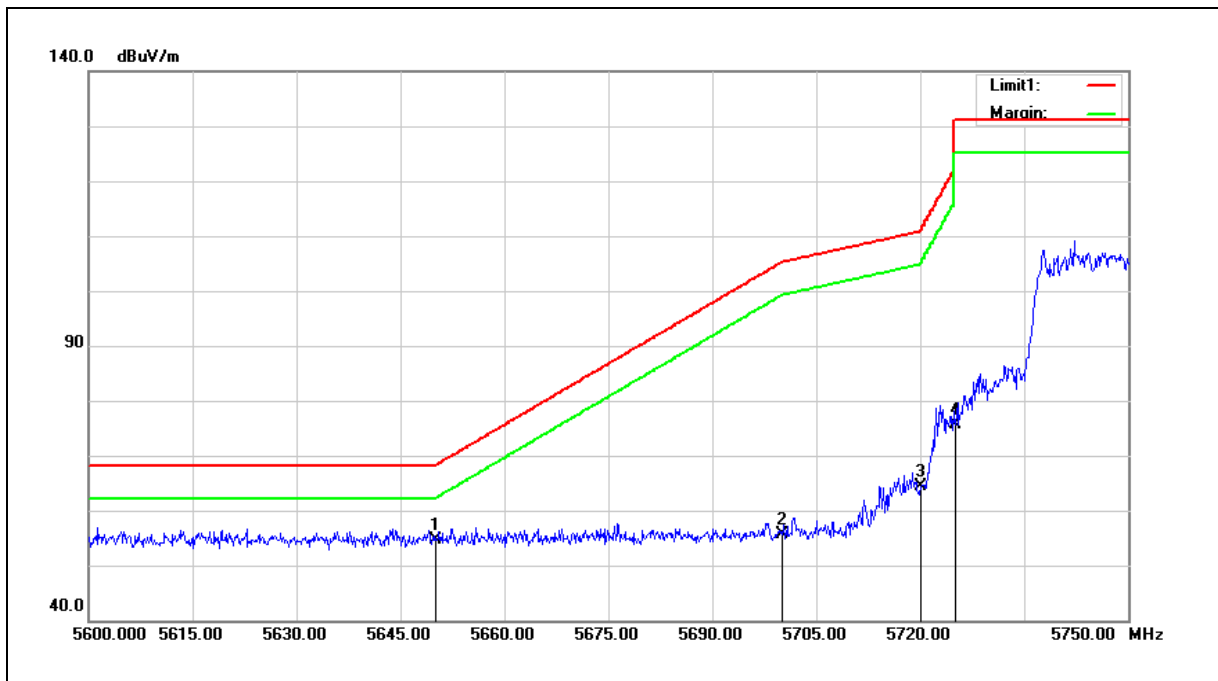
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.85	7.42	55.27	68.20	-12.93	peak
2	5700.000	49.81	7.52	57.33	105.20	-47.87	peak
3	5720.000	68.39	7.56	75.95	110.80	-34.85	peak
4	5725.000	80.07	7.57	87.64	122.20	-34.56	peak

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5650.000	47.24	7.42	54.66	68.20	-13.54	peak
2	5700.000	48.07	7.52	55.59	105.20	-49.61	peak
3	5720.000	56.74	7.56	64.30	110.80	-46.50	peak
4	5725.000	68.03	7.57	75.60	122.20	-46.60	peak

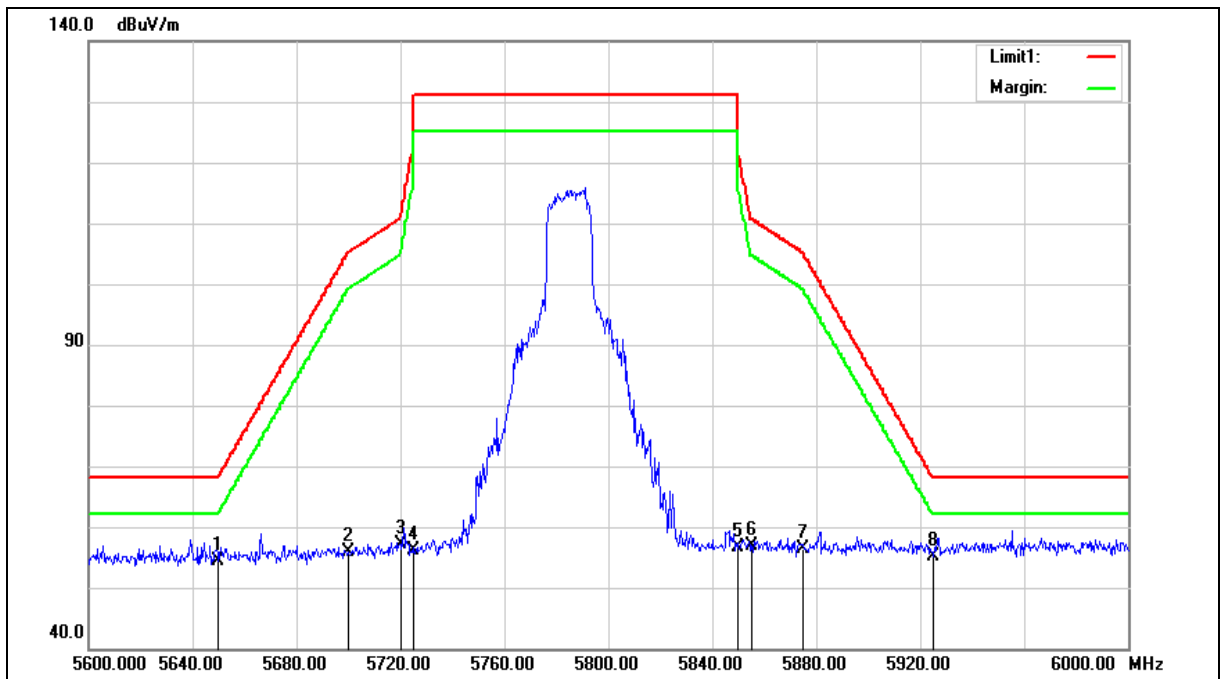
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5650.000	47.06	7.42	54.48	68.20	-13.72	peak
2	5700.000	48.43	7.52	55.95	105.20	-49.25	peak
3	5720.000	49.63	7.56	57.19	110.80	-53.61	peak
4	5725.000	48.46	7.57	56.03	122.20	-66.17	peak
5	5850.000	48.69	7.83	56.52	122.20	-65.68	peak
6	5855.000	48.91	7.85	56.76	110.80	-54.04	peak
7	5875.000	48.46	7.88	56.34	105.20	-48.86	peak
8	5925.000	47.13	8.00	55.13	68.20	-13.07	peak

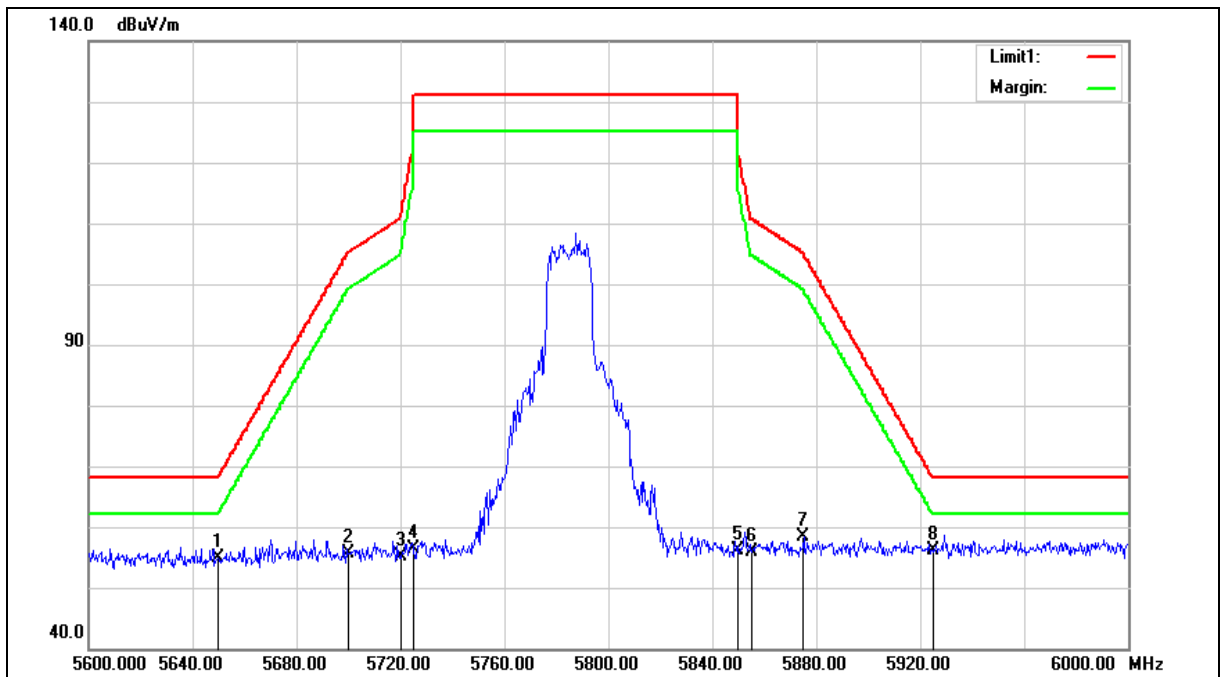
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

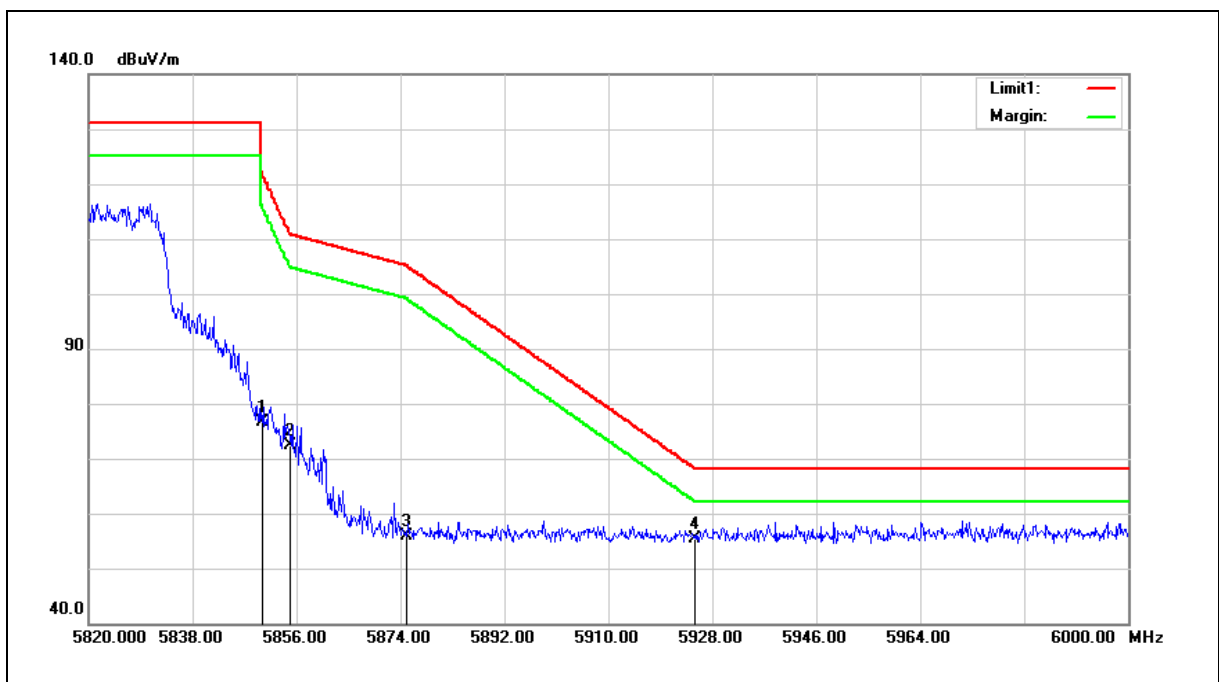
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.42	7.42	54.84	68.20	-13.36	peak
2	5700.000	48.04	7.52	55.56	105.20	-49.64	peak
3	5720.000	47.65	7.56	55.21	110.80	-55.59	peak
4	5725.000	48.84	7.57	56.41	122.20	-65.79	peak
5	5850.000	48.19	7.83	56.02	122.20	-66.18	peak
6	5855.000	48.11	7.85	55.96	110.80	-54.84	peak
7	5875.000	50.48	7.88	58.36	105.20	-46.84	peak
8	5925.000	48.07	8.00	56.07	68.20	-12.13	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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



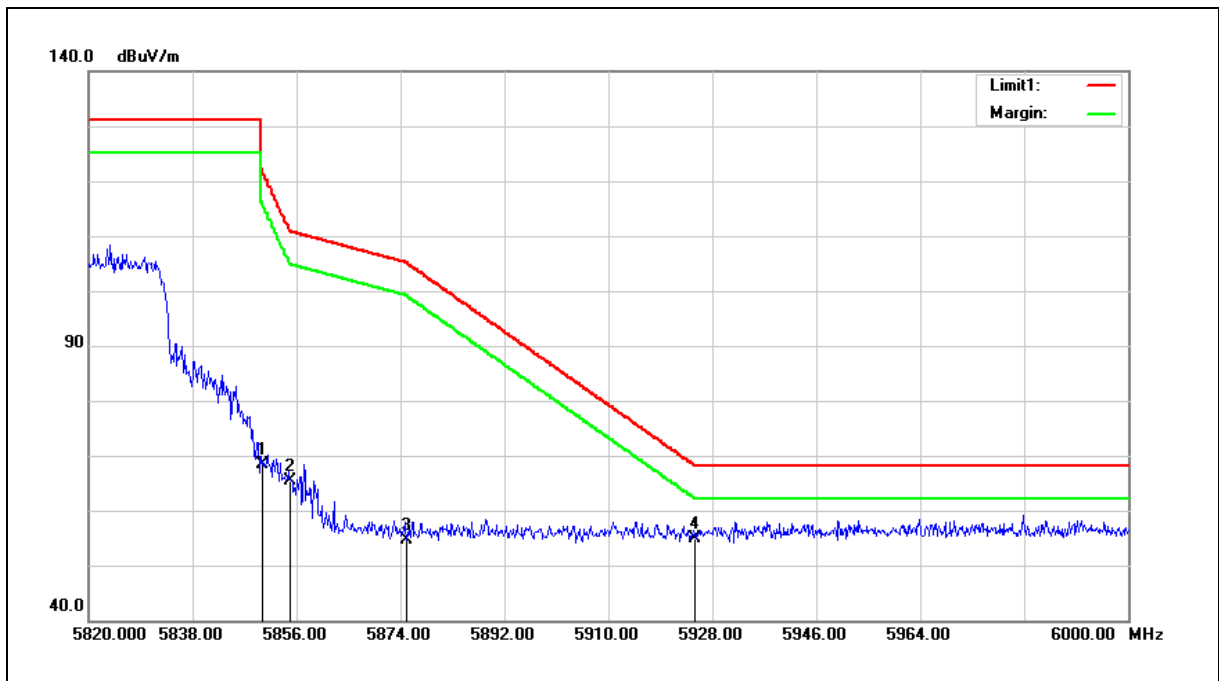
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	68.75	7.83	76.58	122.20	-45.62	peak
2	5855.000	64.57	7.85	72.42	110.80	-38.38	peak
3	5875.000	48.04	7.88	55.92	105.20	-49.28	peak
4	5925.000	47.44	8.00	55.44	68.20	-12.76	peak

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5850.000	60.57	7.83	68.40	122.20	-53.80	peak
2	5855.000	57.63	7.85	65.48	110.80	-45.32	peak
3	5875.000	46.66	7.88	54.54	105.20	-50.66	peak
4	5925.000	46.87	8.00	54.87	68.20	-13.33	peak

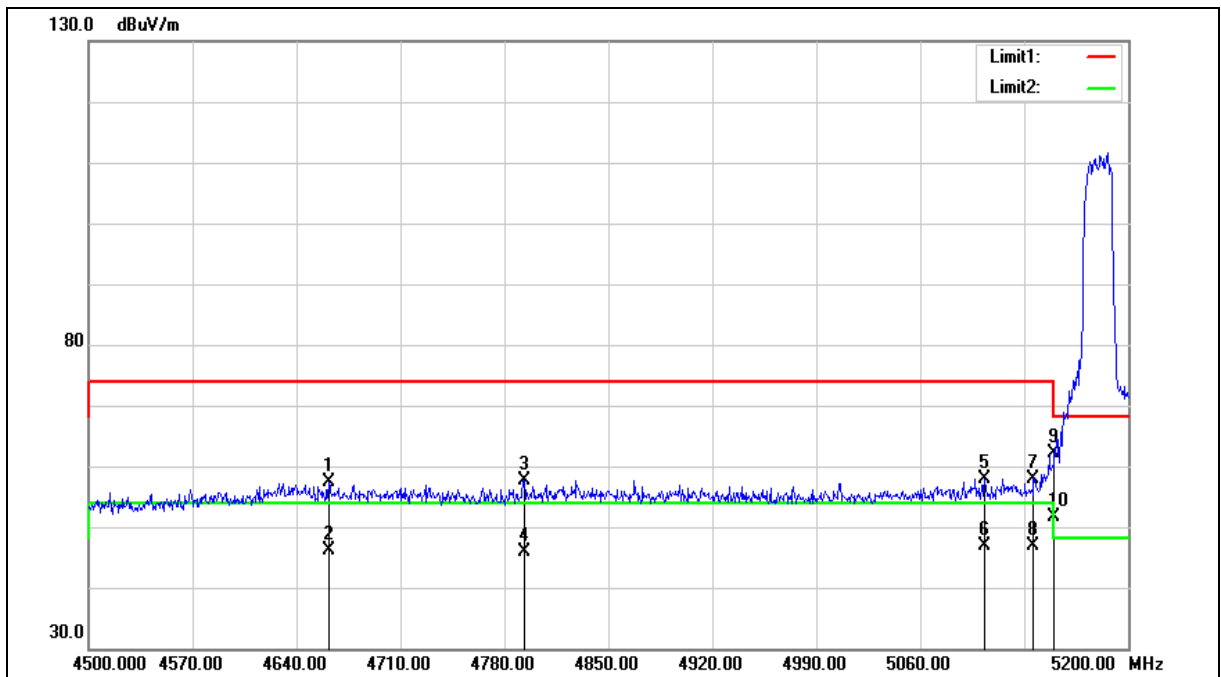
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4661.700	52.07	5.26	57.33	74.00	-16.67	peak
2	4661.700	40.83	5.26	46.09	54.00	-7.91	AVG
3	4793.300	52.05	5.52	57.57	74.00	-16.43	peak
4	4793.300	40.45	5.52	45.97	54.00	-8.03	AVG
5	5103.400	51.74	6.16	57.90	74.00	-16.10	peak
6	5103.400	40.67	6.16	46.83	54.00	-7.17	AVG
7	5136.300	51.77	6.23	58.00	74.00	-16.00	peak
8	5136.300	40.66	6.23	46.89	54.00	-7.11	AVG
9	5150.000	55.81	6.27	62.08	74.00	-11.92	peak
10	5150.000	45.46	6.27	51.73	54.00	-2.27	AVG

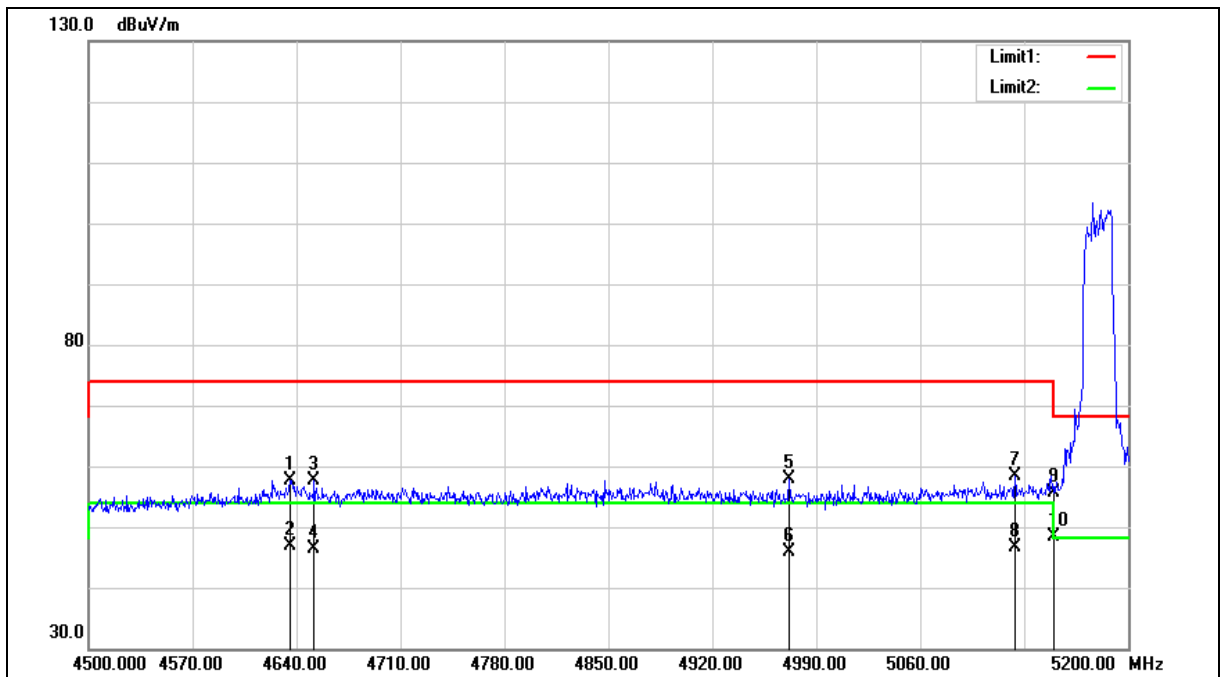
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4635.800	52.37	5.22	57.59	74.00	-16.41	peak
2	4635.800	41.76	5.22	46.98	54.00	-7.02	AVG
3	4651.900	52.48	5.24	57.72	74.00	-16.28	peak
4	4651.900	41.19	5.24	46.43	54.00	-7.57	AVG
5	4971.800	51.98	5.86	57.84	74.00	-16.16	peak
6	4971.800	40.01	5.86	45.87	54.00	-8.13	AVG
7	5123.700	52.09	6.21	58.30	74.00	-15.70	peak
8	5123.700	40.40	6.21	46.61	54.00	-7.39	AVG
9	5150.000	49.44	6.27	55.71	74.00	-18.29	peak
10	5150.000	42.00	6.27	48.27	54.00	-5.73	AVG

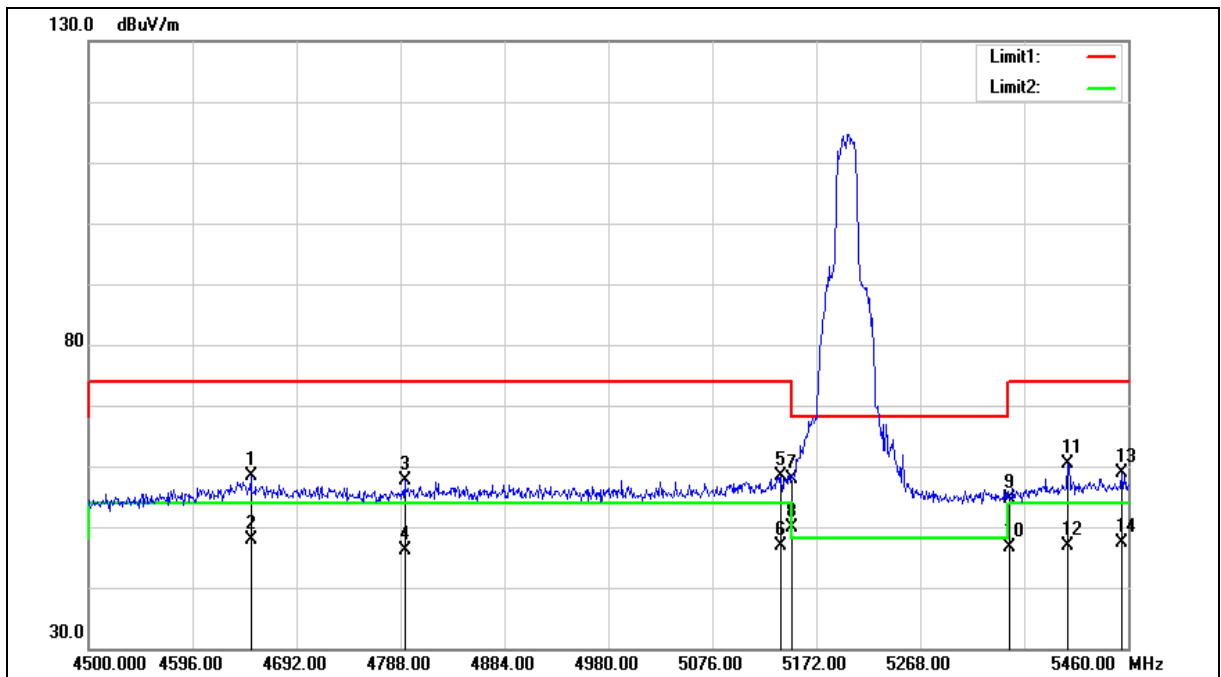
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4649.760	53.15	5.24	58.39	74.00	-15.61	peak
2	4649.760	42.71	5.24	47.95	54.00	-6.05	AVG
3	4791.840	52.12	5.51	57.63	74.00	-16.37	peak
4	4791.840	40.56	5.51	46.07	54.00	-7.93	AVG
5	5139.360	52.02	6.25	58.27	74.00	-15.73	peak
6	5139.360	40.64	6.25	46.89	54.00	-7.11	AVG
7	5150.000	51.50	6.27	57.77	74.00	-16.23	peak
8	5150.000	43.60	6.27	49.87	54.00	-4.13	AVG
9	5350.000	47.94	6.74	54.68	74.00	-19.32	peak
10	5350.000	39.83	6.74	46.57	54.00	-7.43	AVG
11	5404.320	53.39	6.87	60.26	74.00	-13.74	peak
12	5404.320	40.08	6.87	46.95	54.00	-7.05	AVG
13	5454.240	51.77	6.99	58.76	74.00	-15.24	peak
14	5454.240	40.42	6.99	47.41	54.00	-6.59	AVG

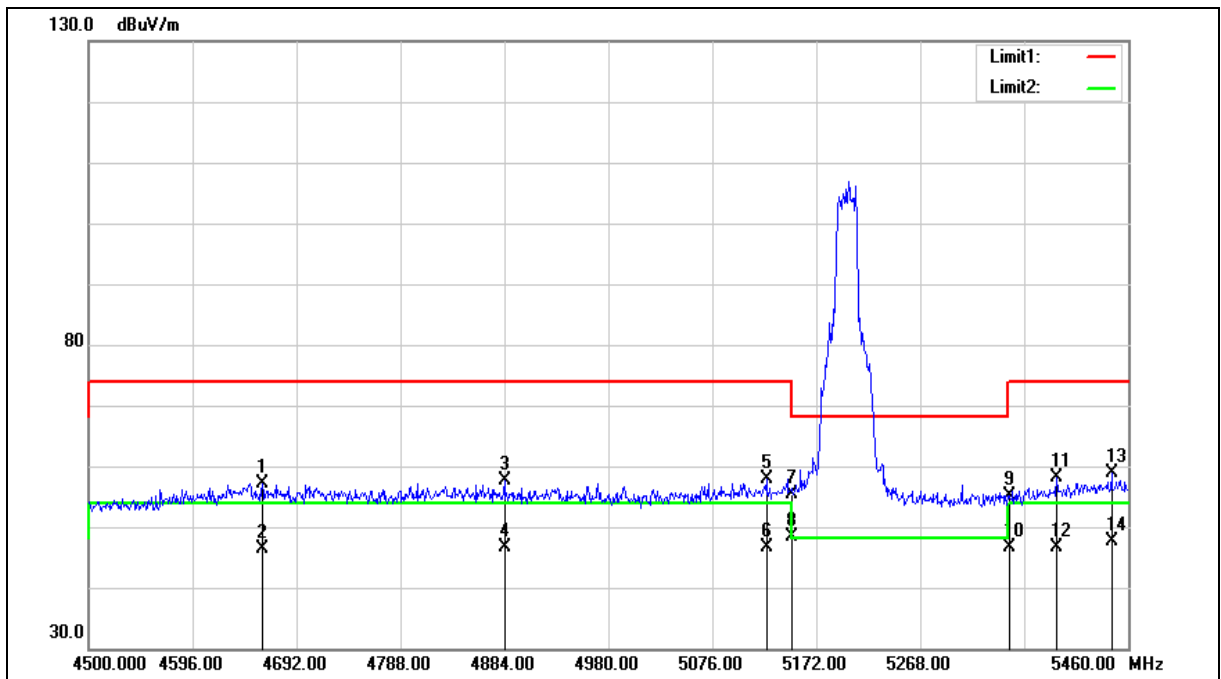
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4660.320	51.96	5.26	57.22	74.00	-16.78	peak
2	4660.320	41.13	5.26	46.39	54.00	-7.61	AVG
3	4884.000	51.97	5.69	57.66	74.00	-16.34	peak
4	4884.000	40.98	5.69	46.67	54.00	-7.33	AVG
5	5125.920	51.58	6.21	57.79	74.00	-16.21	peak
6	5125.920	40.48	6.21	46.69	54.00	-7.31	AVG
7	5150.000	49.18	6.27	55.45	74.00	-18.55	peak
8	5150.000	41.99	6.27	48.26	54.00	-5.74	AVG
9	5350.000	48.47	6.74	55.21	74.00	-18.79	peak
10	5350.000	39.81	6.74	46.55	54.00	-7.45	AVG
11	5393.760	51.16	6.85	58.01	74.00	-15.99	peak
12	5393.760	39.79	6.85	46.64	54.00	-7.36	AVG
13	5444.640	52.01	6.97	58.98	74.00	-15.02	peak
14	5444.640	40.55	6.97	47.52	54.00	-6.48	AVG

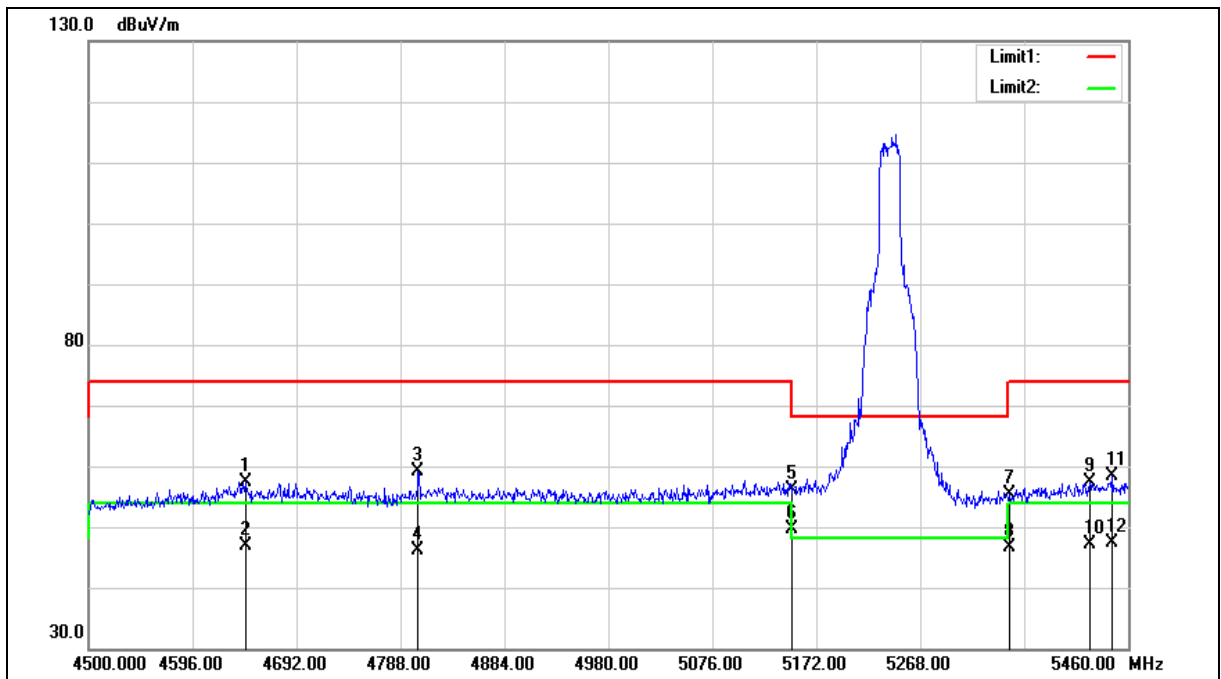
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4644.960	52.26	5.24	57.50	74.00	-16.50	peak
2	4644.960	41.59	5.24	46.83	54.00	-7.17	AVG
3	4804.320	53.50	5.54	59.04	74.00	-14.96	peak
4	4804.320	40.50	5.54	46.04	54.00	-7.96	AVG
5	5150.000	49.89	6.27	56.16	74.00	-17.84	peak
6	5150.000	43.46	6.27	49.73	54.00	-4.27	AVG
7	5350.000	48.58	6.74	55.32	74.00	-18.68	peak
8	5350.000	40.01	6.74	46.75	54.00	-7.25	AVG
9	5424.480	50.35	6.93	57.28	74.00	-16.72	peak
10	5424.480	40.15	6.93	47.08	54.00	-6.92	AVG
11	5445.600	51.35	6.98	58.33	74.00	-15.67	peak
12	5445.600	40.45	6.98	47.43	54.00	-6.57	AVG

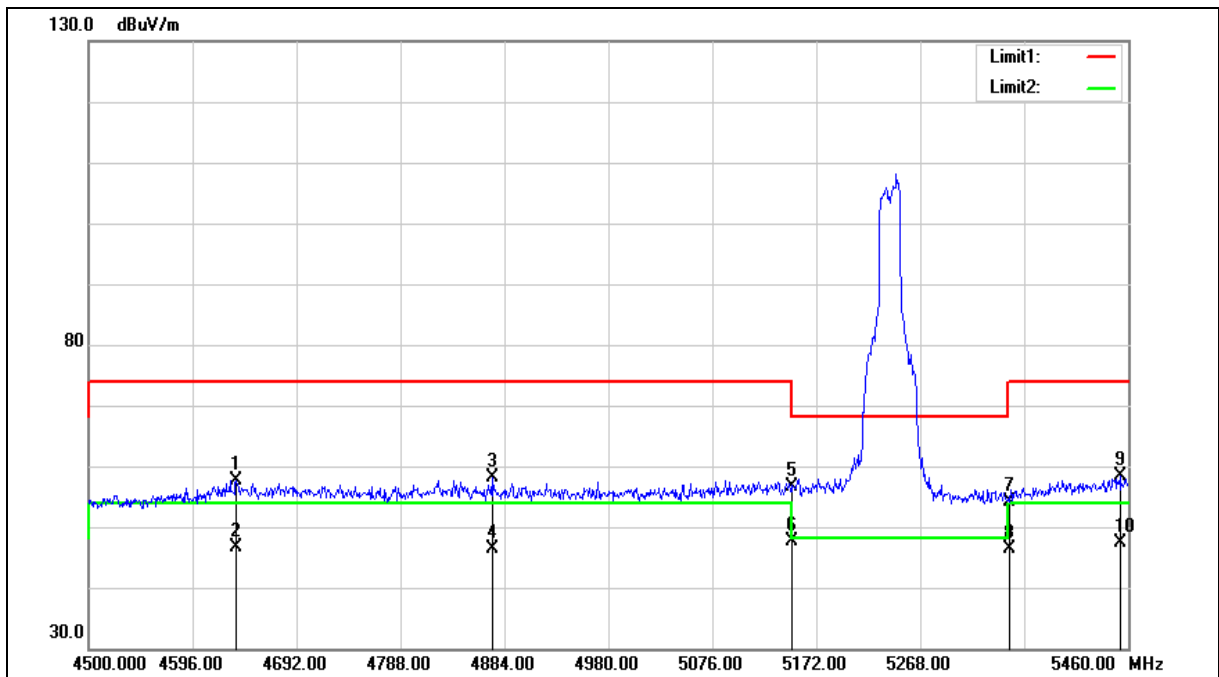
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

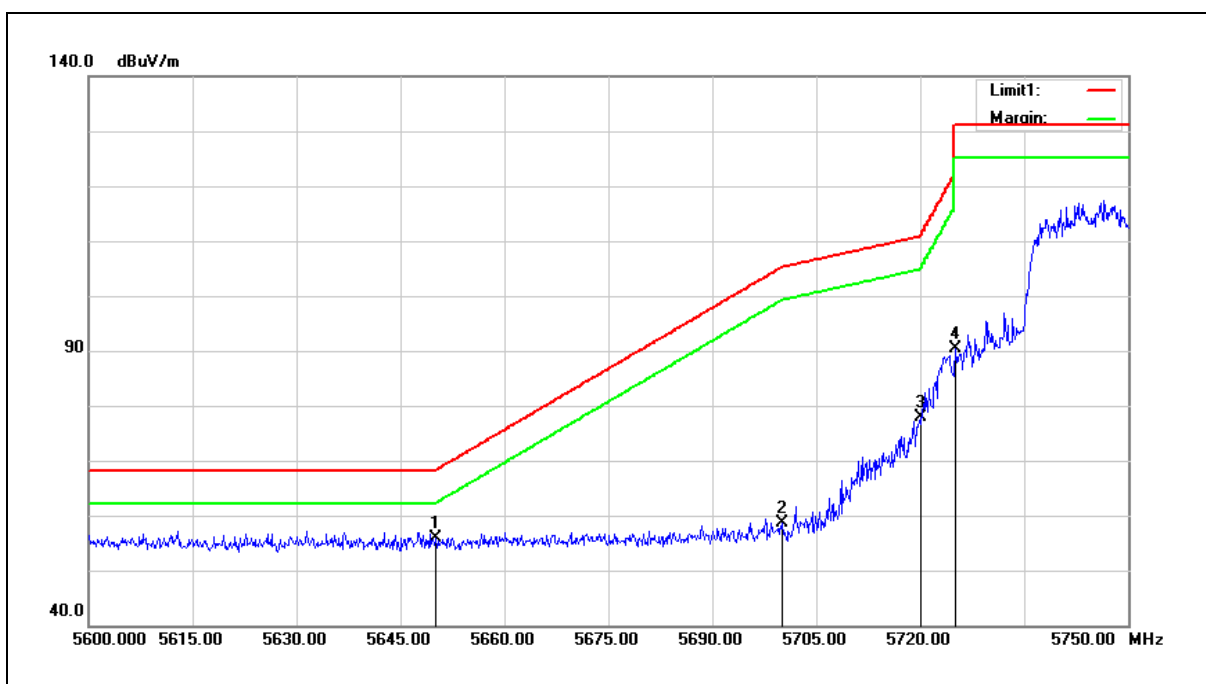
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4636.320	52.36	5.22	57.58	74.00	-16.42	peak
2	4636.320	41.50	5.22	46.72	54.00	-7.28	AVG
3	4872.480	52.56	5.66	58.22	74.00	-15.78	peak
4	4872.480	40.83	5.66	46.49	54.00	-7.51	AVG
5	5150.000	50.34	6.27	56.61	74.00	-17.39	peak
6	5150.000	41.39	6.27	47.66	54.00	-6.34	AVG
7	5350.000	47.42	6.74	54.16	74.00	-19.84	peak
8	5350.000	39.74	6.74	46.48	54.00	-7.52	AVG
9	5452.320	51.36	6.99	58.35	74.00	-15.65	peak
10	5452.320	40.36	6.99	47.35	54.00	-6.65	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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



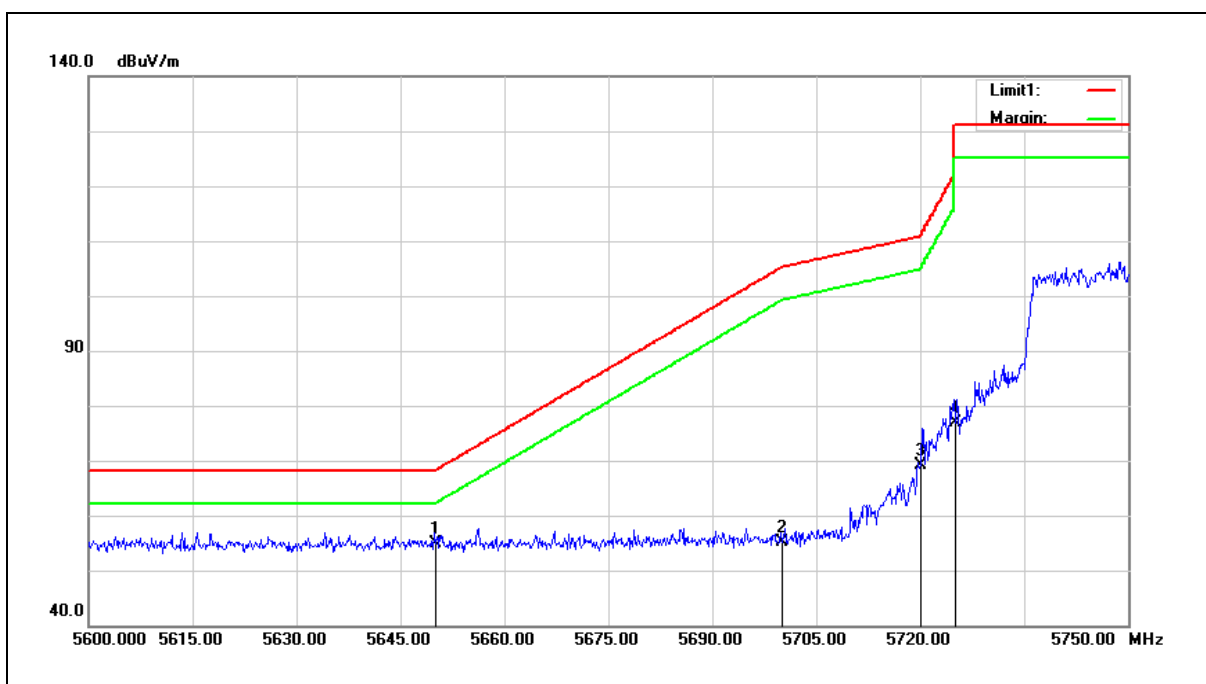
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	48.48	7.42	55.90	68.20	-12.30	peak
2	5700.000	51.03	7.52	58.55	105.20	-46.65	peak
3	5720.000	70.38	7.56	77.94	110.80	-32.86	peak
4	5725.000	82.81	7.57	90.38	122.20	-31.82	peak

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

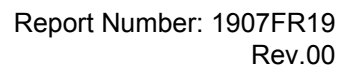


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.49	7.42	54.91	68.20	-13.29	peak
2	5700.000	47.71	7.52	55.23	105.20	-49.97	peak
3	5720.000	61.52	7.56	69.08	110.80	-41.72	peak
4	5725.000	69.32	7.57	76.89	122.20	-45.31	peak

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

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

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



140.0 dBuV/m

Limit1: —

Margin: —

90

40.0

5600.000 5640.00 5680.00 5720.00 5760.00 5800.00 5840.00 5880.00 5920.00 6000.00 MHz

1 2 3 4 5 6 7 8

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.96	7.42	54.38	68.20	-13.82	peak
2	5700.000	47.32	7.52	54.84	105.20	-50.36	peak
3	5720.000	48.15	7.56	55.71	110.80	-55.09	peak
4	5725.000	48.68	7.57	56.25	122.20	-65.95	peak
5	5850.000	50.04	7.83	57.87	122.20	-64.33	peak
6	5855.000	49.02	7.85	56.87	110.80	-53.93	peak
7	5875.000	48.34	7.88	56.22	105.20	-48.98	peak
8	5925.000	48.63	8.00	56.63	68.20	-11.57	peak

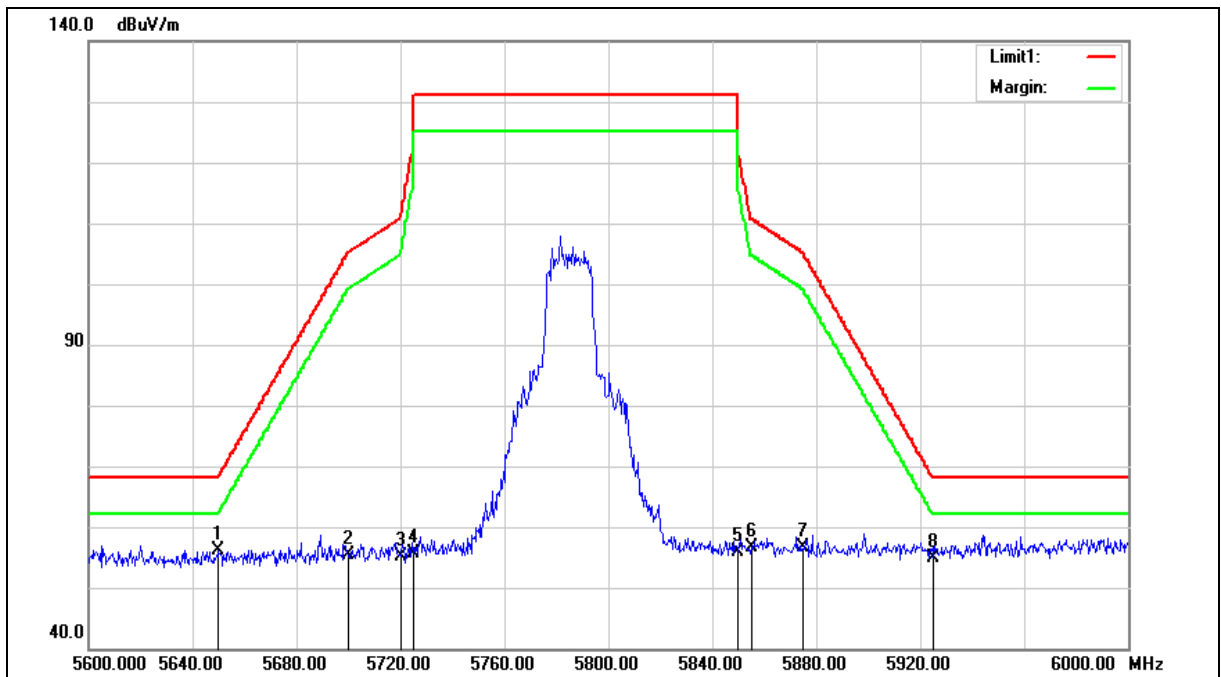
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

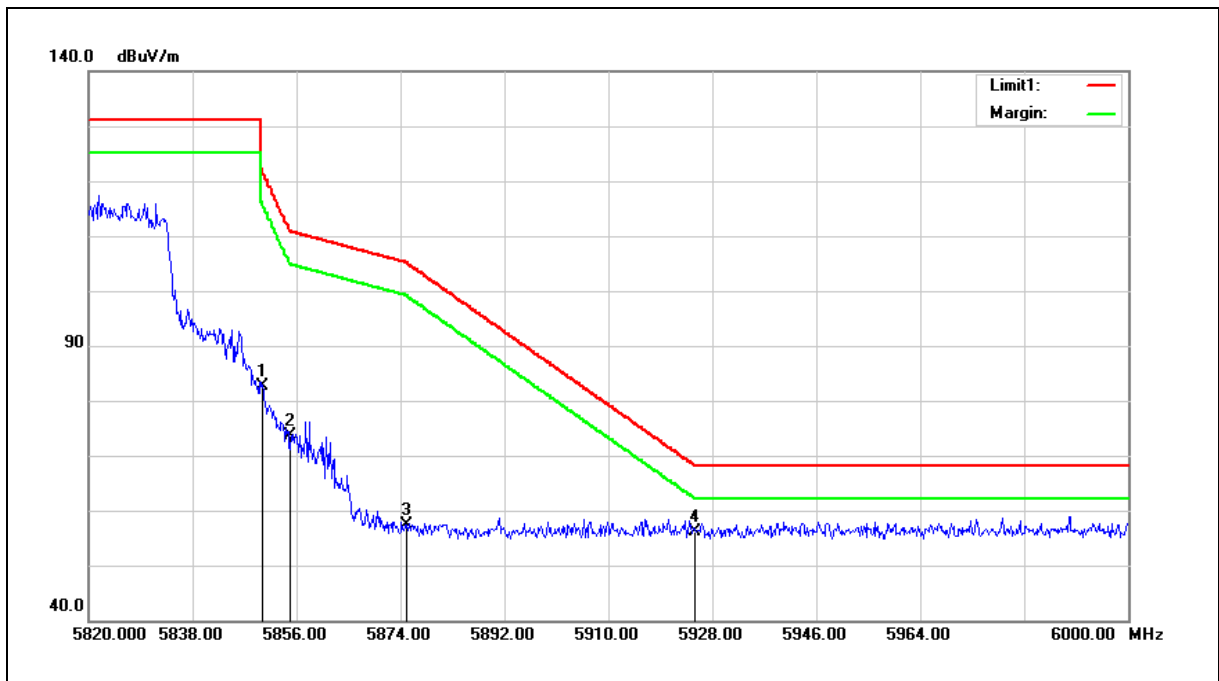
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	48.60	7.42	56.02	68.20	-12.18	peak
2	5700.000	47.85	7.52	55.37	105.20	-49.83	peak
3	5720.000	47.53	7.56	55.09	110.80	-55.71	peak
4	5725.000	48.13	7.57	55.70	122.20	-66.50	peak
5	5850.000	47.96	7.83	55.79	122.20	-66.41	peak
6	5855.000	48.78	7.85	56.63	110.80	-54.17	peak
7	5875.000	48.70	7.88	56.58	105.20	-48.62	peak
8	5925.000	46.99	8.00	54.99	68.20	-13.21	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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



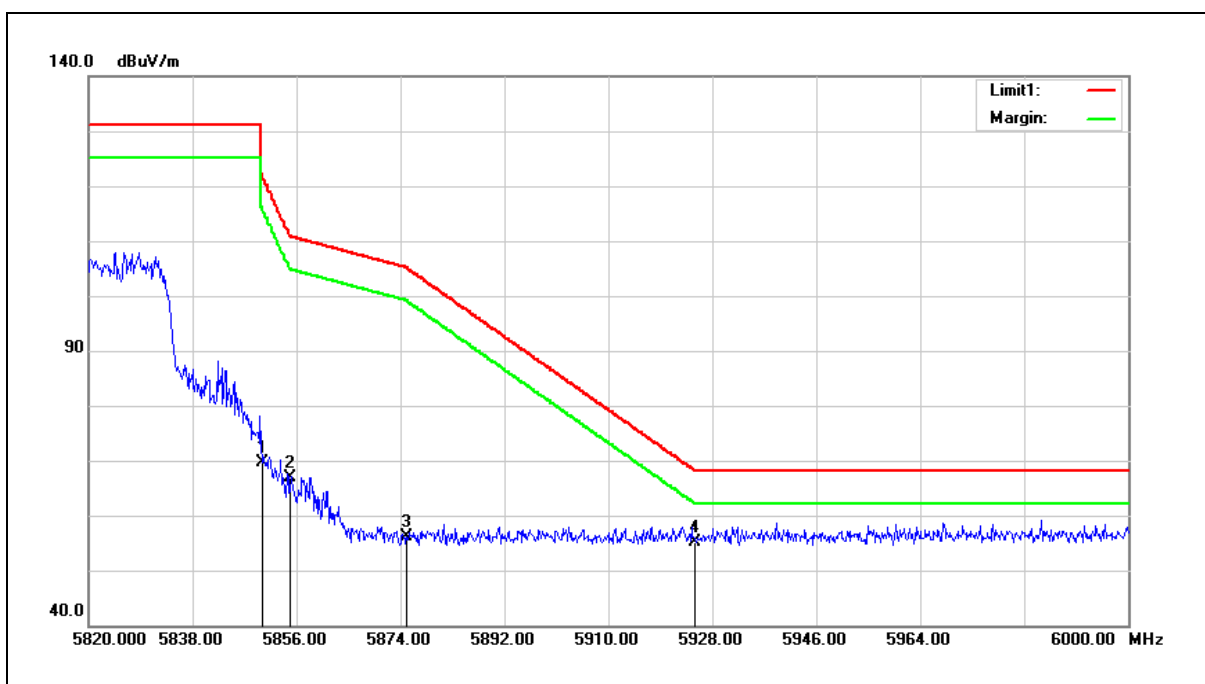
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	74.74	7.83	82.57	122.20	-39.63	peak
2	5855.000	65.82	7.85	73.67	110.80	-37.13	peak
3	5875.000	49.41	7.88	57.29	105.20	-47.91	peak
4	5925.000	48.08	8.00	56.08	68.20	-12.12	peak

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	61.74	7.83	69.57	122.20	-52.63	peak
2	5855.000	59.15	7.85	67.00	110.80	-43.80	peak
3	5875.000	48.21	7.88	56.09	105.20	-49.11	peak
4	5925.000	47.15	8.00	55.15	68.20	-13.05	peak

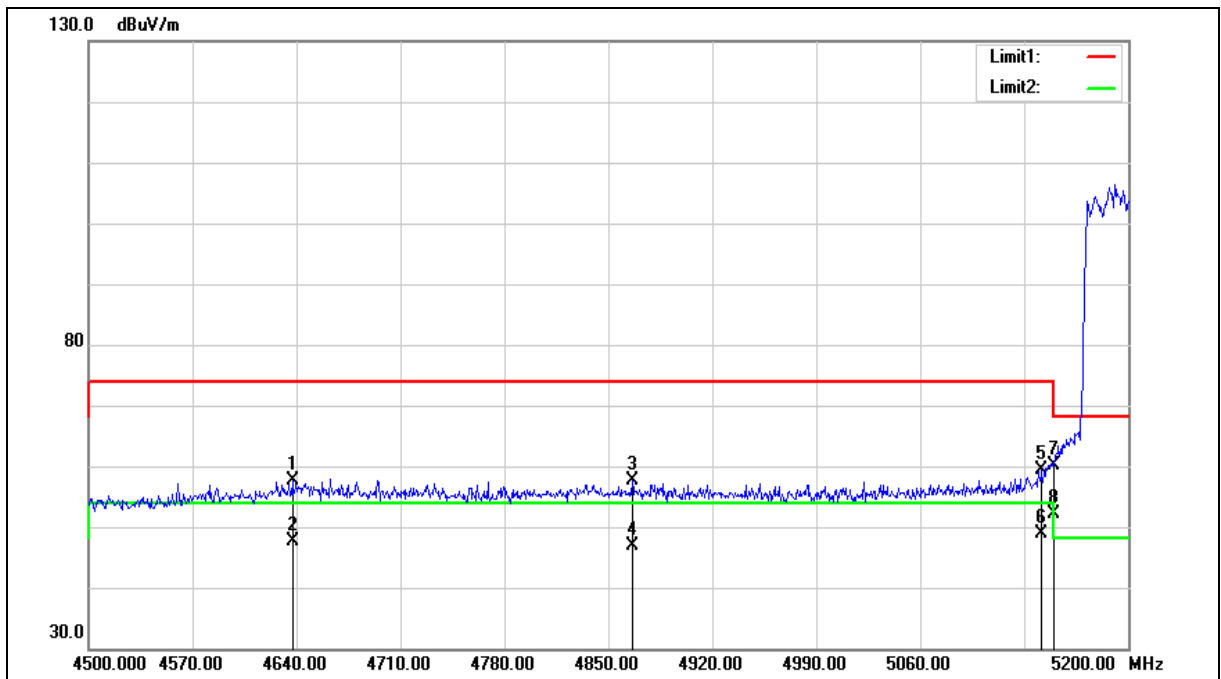
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4637.200	52.53	5.22	57.75	74.00	-16.25	peak
2	4637.200	42.49	5.22	47.71	54.00	-6.29	AVG
3	4866.100	52.05	5.65	57.70	74.00	-16.30	peak
4	4866.100	41.32	5.65	46.97	54.00	-7.03	AVG
5	5141.900	53.12	6.25	59.37	74.00	-14.63	peak
6	5141.900	42.69	6.25	48.94	54.00	-5.06	AVG
7	5150.000	53.85	6.27	60.12	74.00	-13.88	peak
8	5150.000	45.90	6.27	52.17	54.00	-1.83	AVG

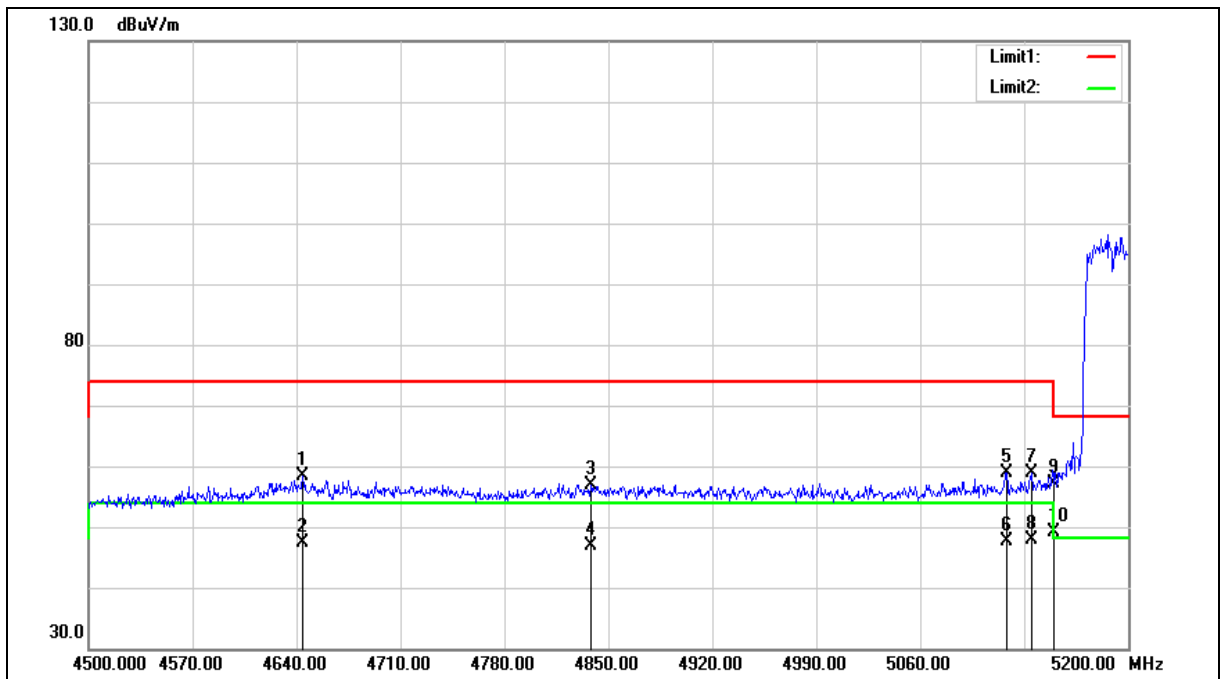
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4644.200	53.09	5.24	58.33	74.00	-15.67	peak
2	4644.200	42.22	5.24	47.46	54.00	-6.54	AVG
3	4838.100	51.33	5.61	56.94	74.00	-17.06	peak
4	4838.100	41.15	5.61	46.76	54.00	-7.24	AVG
5	5118.100	52.80	6.20	59.00	74.00	-15.00	peak
6	5118.100	41.40	6.20	47.60	54.00	-6.40	AVG
7	5134.900	52.55	6.23	58.78	74.00	-15.22	peak
8	5134.900	41.63	6.23	47.86	54.00	-6.14	AVG
9	5150.000	50.81	6.27	57.08	74.00	-16.92	peak
10	5150.000	42.90	6.27	49.17	54.00	-4.83	AVG

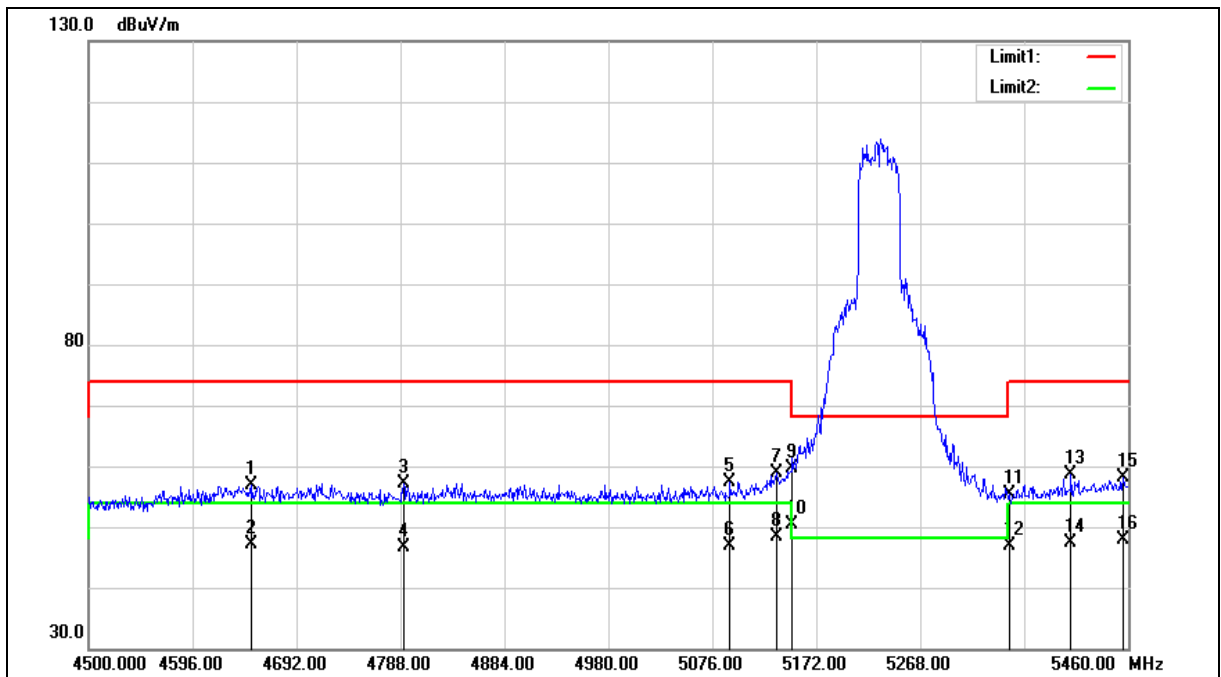
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4650.720	51.53	5.24	56.77	74.00	-17.23	peak
2	4650.720	41.80	5.24	47.04	54.00	-6.96	AVG
3	4790.880	51.68	5.51	57.19	74.00	-16.81	peak
4	4790.880	41.13	5.51	46.64	54.00	-7.36	AVG
5	5092.320	51.34	6.14	57.48	74.00	-16.52	peak
6	5092.320	40.80	6.14	46.94	54.00	-7.06	AVG
7	5135.520	52.72	6.23	58.95	74.00	-15.05	peak
8	5135.520	42.10	6.23	48.33	54.00	-5.67	AVG
9	5150.000	53.42	6.27	59.69	74.00	-14.31	peak
10	5150.000	44.07	6.27	50.34	54.00	-3.66	AVG
11	5350.000	48.61	6.74	55.35	74.00	-18.65	peak
12	5350.000	40.14	6.74	46.88	54.00	-7.12	AVG
13	5407.200	51.83	6.87	58.70	74.00	-15.30	peak
14	5407.200	40.56	6.87	47.43	54.00	-6.57	AVG
15	5455.200	51.06	6.99	58.05	74.00	-15.95	peak
16	5455.200	40.92	6.99	47.91	54.00	-6.09	AVG

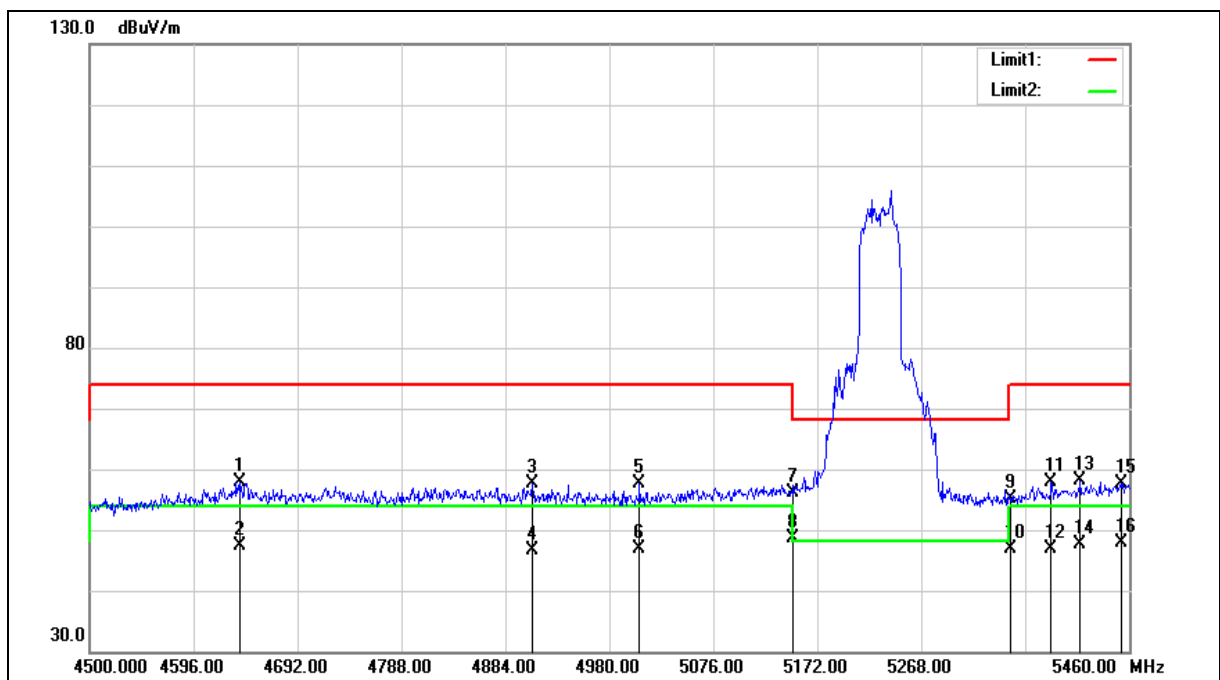
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		

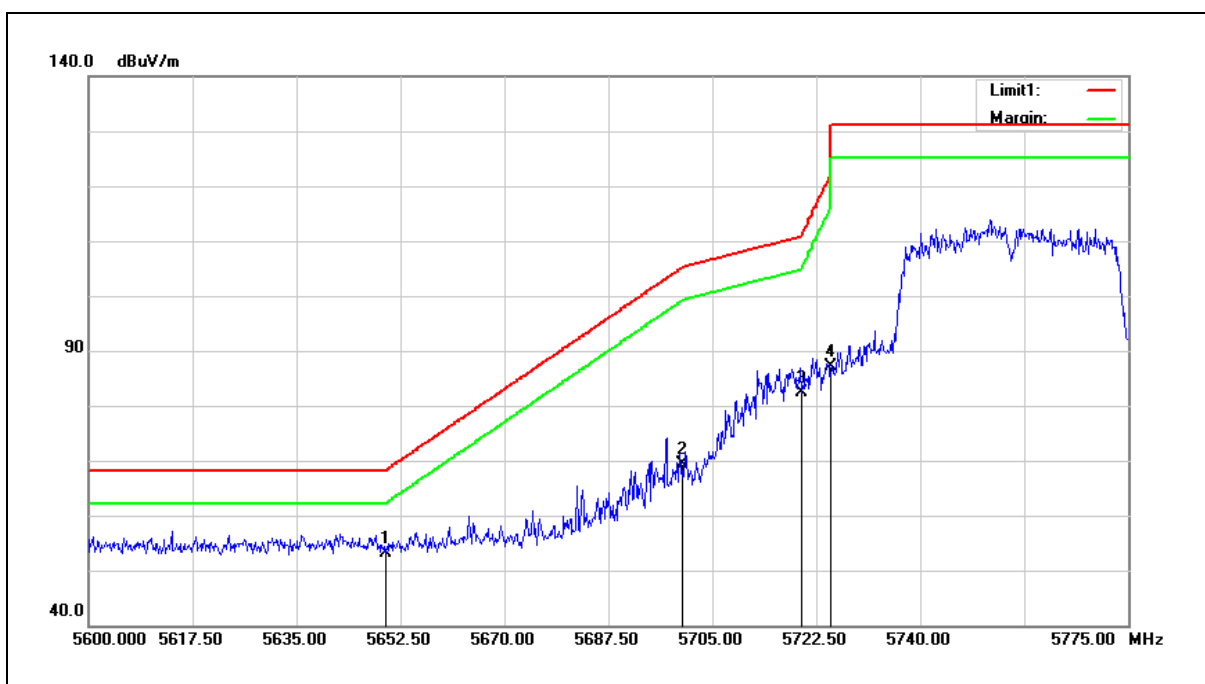
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4638.240	52.60	5.23	57.83	74.00	-16.17	peak
2	4638.240	42.10	5.23	47.33	54.00	-6.67	AVG
3	4908.960	51.86	5.74	57.60	74.00	-16.40	peak
4	4908.960	40.99	5.74	46.73	54.00	-7.27	AVG
5	5007.840	51.77	5.93	57.70	74.00	-16.30	peak
6	5007.840	41.03	5.93	46.96	54.00	-7.04	AVG
7	5150.000	49.76	6.27	56.03	74.00	-17.97	peak
8	5150.000	42.27	6.27	48.54	54.00	-5.46	AVG
9	5350.000	48.29	6.74	55.03	74.00	-18.97	peak
10	5350.000	40.24	6.74	46.98	54.00	-7.02	AVG
11	5388.000	51.16	6.83	57.99	74.00	-16.01	peak
12	5388.000	39.96	6.83	46.79	54.00	-7.21	AVG
13	5414.880	51.17	6.90	58.07	74.00	-15.93	peak
14	5414.880	40.63	6.90	47.53	54.00	-6.47	AVG
15	5453.280	50.74	6.99	57.73	74.00	-16.27	peak
16	5453.280	40.89	6.99	47.88	54.00	-6.12	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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



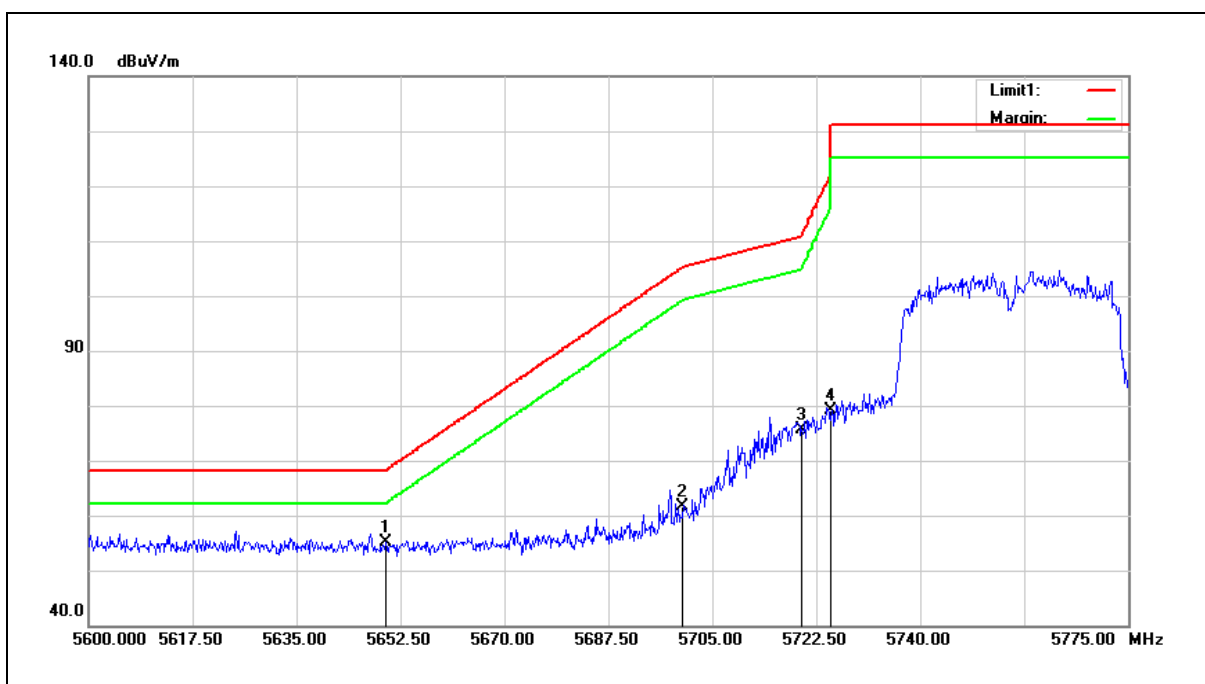
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	45.70	7.42	53.12	68.20	-15.08	peak
2	5700.000	61.96	7.52	69.48	105.20	-35.72	peak
3	5720.000	74.76	7.56	82.32	110.80	-28.48	peak
4	5725.000	79.67	7.57	87.24	122.20	-34.96	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



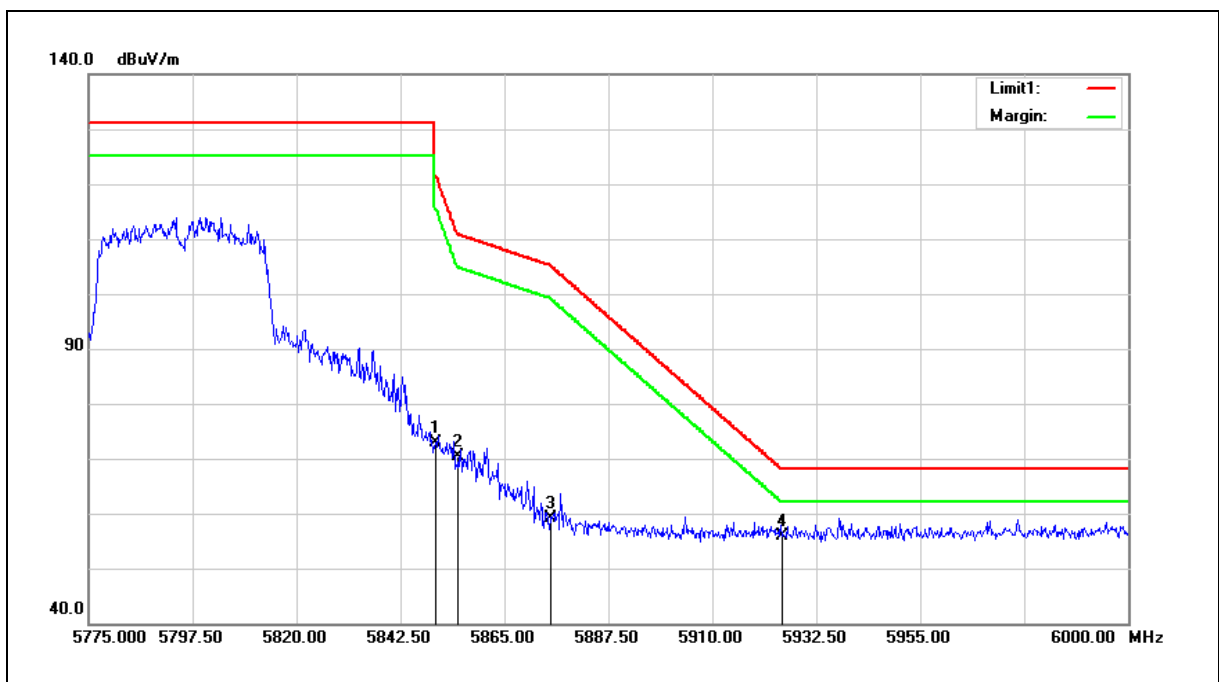
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.78	7.42	55.20	68.20	-13.00	peak
2	5700.000	54.18	7.52	61.70	105.20	-43.50	peak
3	5720.000	67.96	7.56	75.52	110.80	-35.28	peak
4	5725.000	71.58	7.57	79.15	122.20	-43.05	peak

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	64.97	7.83	72.80	122.20	-49.40	peak
2	5855.000	62.50	7.85	70.35	110.80	-40.45	peak
3	5875.000	51.36	7.88	59.24	105.20	-45.96	peak
4	5925.000	47.78	8.00	55.78	68.20	-12.42	peak

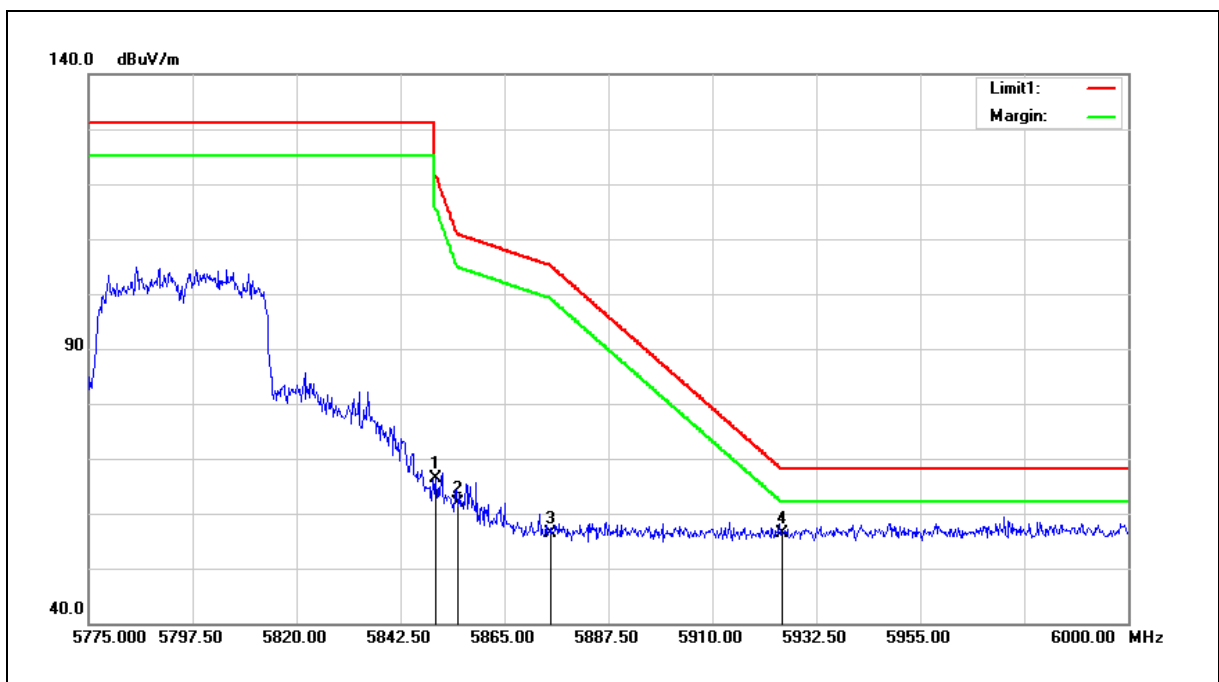
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 6		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	58.61	7.83	66.44	122.20	-55.76	peak
2	5855.000	54.05	7.85	61.90	110.80	-48.90	peak
3	5875.000	48.44	7.88	56.32	105.20	-48.88	peak
4	5925.000	48.35	8.00	56.35	68.20	-11.85	peak

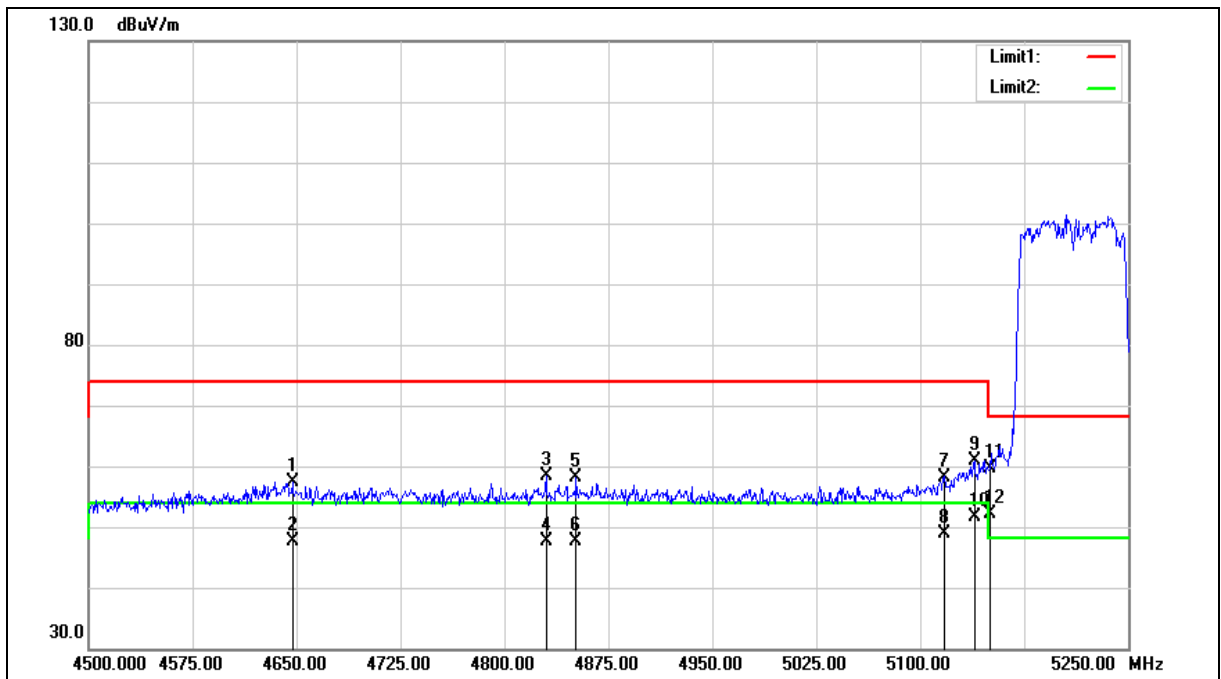
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4647.000	52.15	5.23	57.38	74.00	-16.62	peak
2	4647.000	42.28	5.23	47.51	54.00	-6.49	AVG
3	4830.000	52.82	5.58	58.40	74.00	-15.60	peak
4	4830.000	41.96	5.58	47.54	54.00	-6.46	AVG
5	4851.750	52.46	5.63	58.09	74.00	-15.91	peak
6	4851.750	42.00	5.63	47.63	54.00	-6.37	AVG
7	5117.250	52.05	6.20	58.25	74.00	-15.75	peak
8	5117.250	42.70	6.20	48.90	54.00	-5.10	AVG
9	5139.000	54.73	6.25	60.98	74.00	-13.02	peak
10	5139.000	45.50	6.25	51.75	54.00	-2.25	AVG
11	5150.000	53.27	6.27	59.54	74.00	-14.46	peak
12	5150.000	45.92	6.27	52.19	54.00	-1.81	AVG

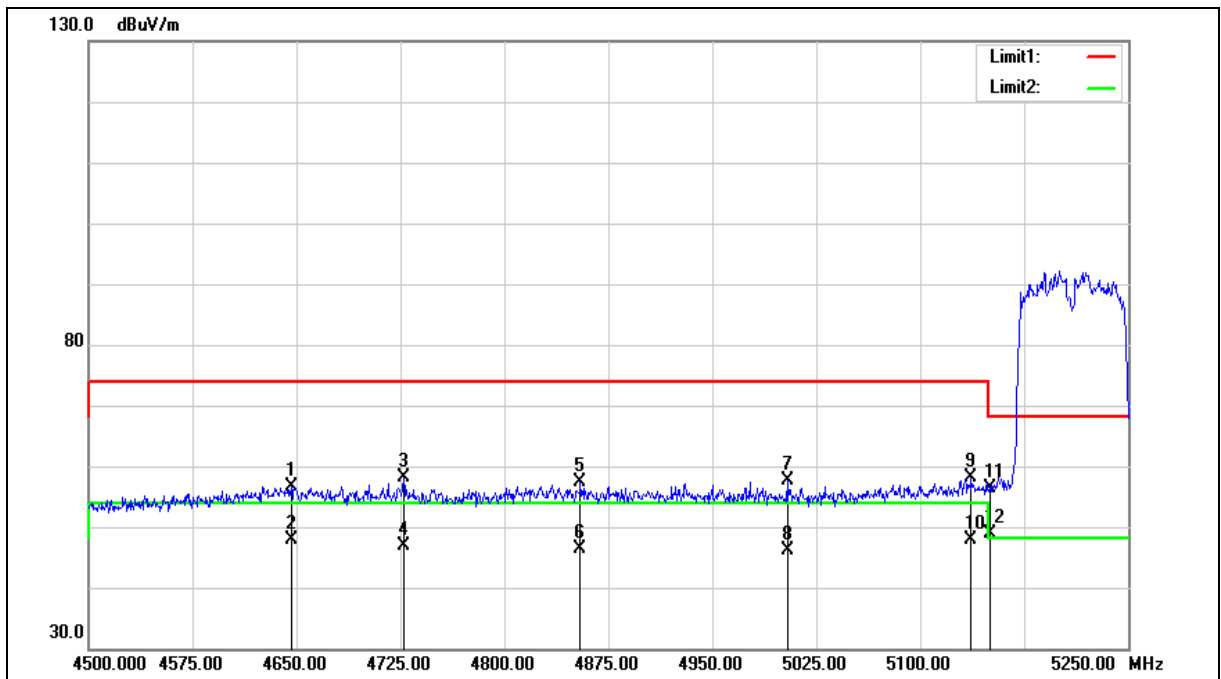
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4646.250	51.45	5.23	56.68	74.00	-17.32	peak
2	4646.250	42.59	5.23	47.82	54.00	-6.18	AVG
3	4727.250	52.62	5.39	58.01	74.00	-15.99	peak
4	4727.250	41.53	5.39	46.92	54.00	-7.08	AVG
5	4854.750	51.63	5.63	57.26	74.00	-16.74	peak
6	4854.750	40.64	5.63	46.27	54.00	-7.73	AVG
7	5004.000	51.76	5.92	57.68	74.00	-16.32	peak
8	5004.000	40.12	5.92	46.04	54.00	-7.96	AVG
9	5136.750	51.85	6.23	58.08	74.00	-15.92	peak
10	5136.750	41.62	6.23	47.85	54.00	-6.15	AVG
11	5150.000	50.04	6.27	56.31	74.00	-17.69	peak
12	5150.000	42.72	6.27	48.99	54.00	-5.01	AVG

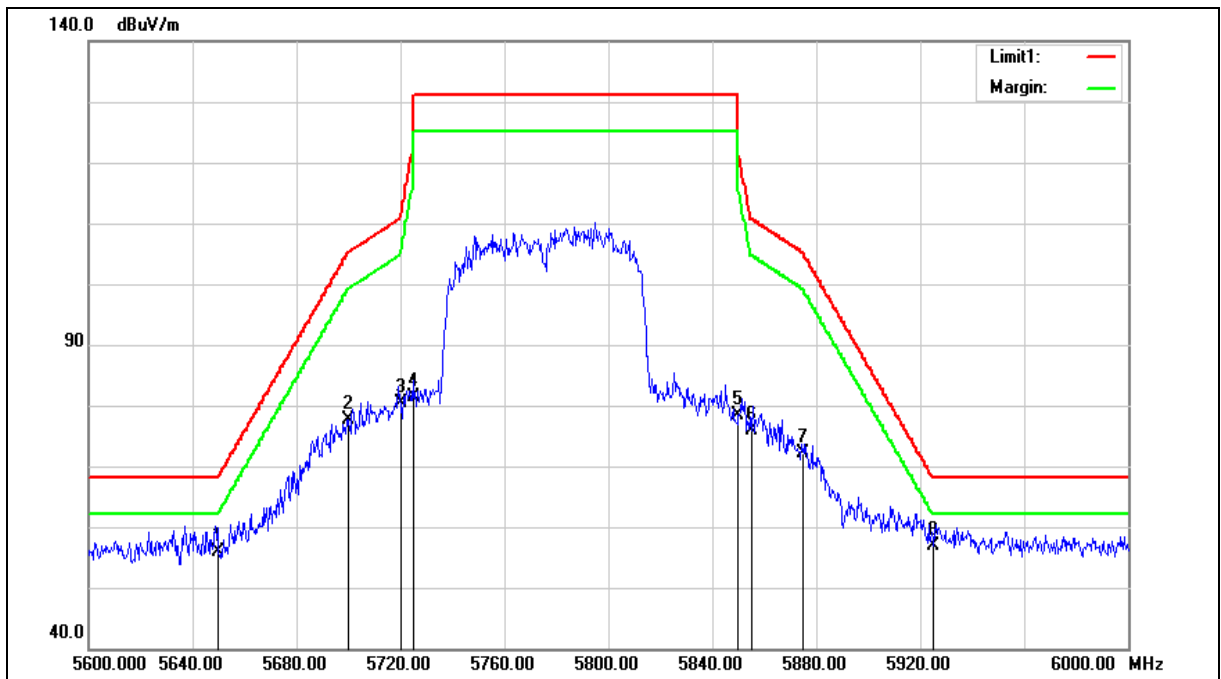
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	48.41	7.42	55.83	68.20	-12.37	peak
2	5700.000	70.21	7.52	77.73	105.20	-27.47	peak
3	5720.000	72.82	7.56	80.38	110.80	-30.42	peak
4	5725.000	73.88	7.57	81.45	122.20	-40.75	peak
5	5850.000	70.65	7.83	78.48	122.20	-43.72	peak
6	5855.000	68.15	7.85	76.00	110.80	-34.80	peak
7	5875.000	64.27	7.88	72.15	105.20	-33.05	peak
8	5925.000	48.97	8.00	56.97	68.20	-11.23	peak

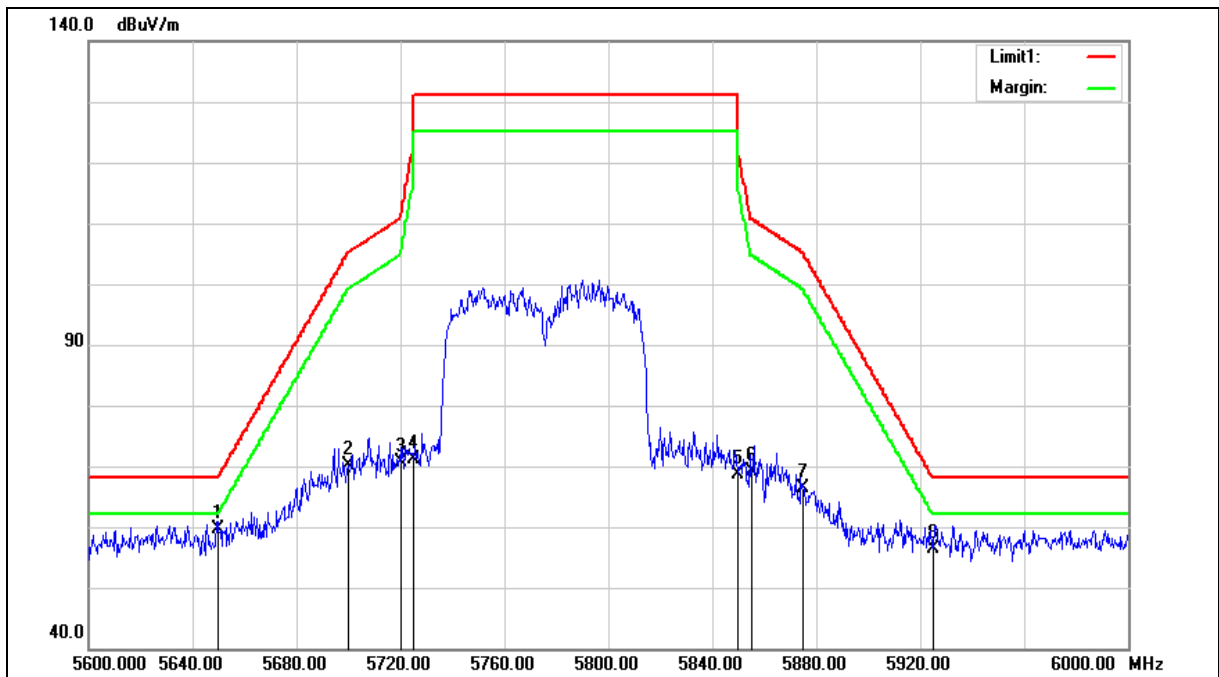
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 7		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	52.32	7.42	59.74	68.20	-8.46	peak
2	5700.000	62.50	7.52	70.02	105.20	-35.18	peak
3	5720.000	63.07	7.56	70.63	110.80	-40.17	peak
4	5725.000	63.61	7.57	71.18	122.20	-51.02	peak
5	5850.000	60.83	7.83	68.66	122.20	-53.54	peak
6	5855.000	61.38	7.85	69.23	110.80	-41.57	peak
7	5875.000	58.57	7.88	66.45	105.20	-38.75	peak
8	5925.000	48.42	8.00	56.42	68.20	-11.78	peak

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

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

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

Annex C. Conducted Test Results

Maximum Conducted Output Power Measurement

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5180	6 M	16.86	0.049	16.41	0.044	≤ 30
5200		20.45	0.111	20.12	0.103	
5220		20.62	0.115	20.31	0.107	
5240		20.73	0.118	20.41	0.110	
5745		20.03	0.101	20.20	0.105	≤ 30
5765		20.13	0.103	20.25	0.106	
5785		20.02	0.100	19.98	0.100	
5805		20.05	0.101	19.92	0.098	
5825		20.21	0.105	20.07	0.102	

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	
5180	6 M	19.65	0.092	≤ 30
5200		23.30	0.214	
5220		23.48	0.223	
5240		23.58	0.228	
5745		23.13	0.205	≤ 30
5765		23.20	0.209	
5785		23.01	0.200	
5805		23.00	0.199	
5825		23.15	0.207	

Note:1. The relevant measured result has the offset with cable loss already.

2. Evaluated high and low data rate, the report record worst case low data rate measurement results.



Test Mode		Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5180	13 M	16.58	0.045	16.29	0.043	≤ 30
5200		20.44	0.111	19.95	0.099	
5220		20.48	0.112	20.08	0.102	
5240		20.52	0.113	20.12	0.103	
5745		19.73	0.094	19.84	0.096	≤ 30
5765		19.95	0.099	19.80	0.095	
5785		19.91	0.098	19.88	0.097	
5805		19.90	0.098	19.89	0.097	
5825		20.02	0.100	20.01	0.100	

Test Mode		Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	
5180	13 M	19.45	0.088	≤ 30
5200		23.21	0.210	
5220		23.29	0.214	
5240		23.33	0.216	
5745		22.80	0.190	≤ 30
5765		22.89	0.194	
5785		22.91	0.195	
5805		22.91	0.195	
5825		23.03	0.201	

Note: 1. The relevant measured result has the offset with cable loss already.

2. Evaluated high and low data rate, the report record worst case low data rate measurement results.



Test Mode		Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5190	27 M	12.05	0.016	11.25	0.013	≤ 30
5230		20.53	0.113	19.88	0.097	
5755		20.52	0.113	19.95	0.099	
5795		20.78	0.120	19.92	0.098	

Test Mode		Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	
5190	27 M	14.68	0.029	≤ 30
5230		23.23	0.210	
5755		23.25	0.212	
5795		23.38	0.218	

Note:1. The relevant measured result has the offset with cable loss already.

2. Evaluated high and low data rate, the report record worst case low data rate measurement results.

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5180	13 M	16.79	0.048	16.41	0.044	≤ 30
5200		20.51	0.112	20.09	0.102	
5220		20.59	0.115	20.21	0.105	
5240		20.72	0.118	20.33	0.108	
5745		19.94	0.099	19.93	0.098	≤ 30
5765		20.07	0.102	19.91	0.098	
5785		20.02	0.100	19.95	0.099	
5805		20.01	0.100	20.05	0.101	
5825		20.15	0.104	20.13	0.103	

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	
5180	13 M	19.61	0.092	≤ 30
5200		23.32	0.215	
5220		23.41	0.220	
5240		23.54	0.226	
5745		22.95	0.197	≤ 30
5765		23.00	0.200	
5785		23.00	0.199	
5805		23.04	0.201	
5825		23.15	0.207	

Note: 1. The relevant measured result has the offset with cable loss already.

2. Evaluated high and low data rate, the report record worst case low data rate measurement results.

Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode					
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)	
		(dBm)	(W)	(dBm)	(W)		
5190	27 M	12.18	0.017	11.33	0.014	≤ 30	
5230		20.67	0.117	20.11	0.103		
5755		20.62	0.115	20.06	0.101		
5795		20.92	0.124	20.09	0.102		

Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)	
		(dBm)	(W)		
5190	27 M	14.79	0.030	≤ 30	
5230		23.41	0.219		
5755		23.36	0.217	≤ 30	
5795		23.54	0.226		

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode					
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)	
		(dBm)	(W)	(dBm)	(W)		
5210	58.6 M	10.21	0.010	9.55	0.009	≤ 30	
5775		18.43	0.070	18.15	0.065		

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	
5210	58.6 M	12.90	0.020	≤ 30
5775		21.30	0.135	≤ 30

Note: 1. The relevant measured result has the offset with cable loss already.

2. Evaluated high and low data rate, the report record worst case low data rate measurement results.

26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5180	19.620	19.160	16.478	16.426
5200	36.830	34.140	20.521	17.127
5240	36.440	34.220	20.799	17.363

Test Mode	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5180	20.650	20.670	17.618	17.621
5200	40.350	34.920	21.051	18.297
5240	40.360	35.740	21.755	18.330

Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5190	40.330	40.570	36.019	35.977
5230	77.640	72.670	37.820	36.880

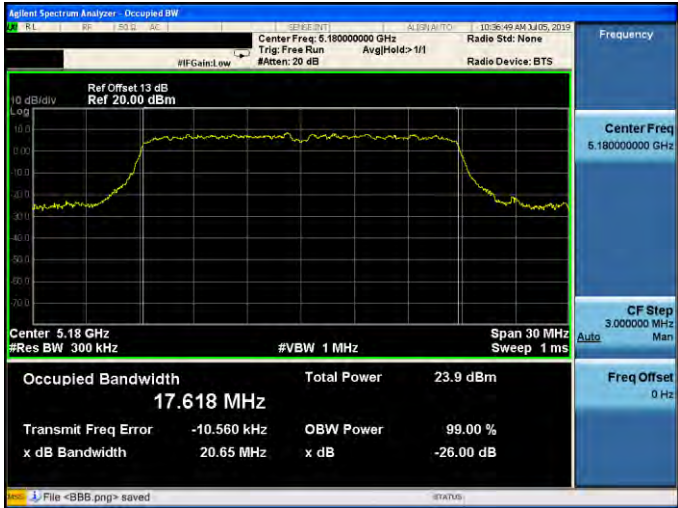
Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5210	83.400	83.290	75.672	75.659

Note: The 99 % occupied bandwidth not crossed 5250 MHz.

Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.478 MHz Total Power 24.2 dBm Transmit Freq Error -23.921 kHz OBW Power 99.00 % x dB Bandwidth 19.62 MHz x dB -26.00 dB File <BB6.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 20.521 MHz Total Power 27.9 dBm Transmit Freq Error 277.01 kHz OBW Power 99.00 % x dB Bandwidth 36.83 MHz x dB -26.00 dB File <BB6.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 20.799 MHz Total Power 27.7 dBm Transmit Freq Error 326.81 kHz OBW Power 99.00 % x dB Bandwidth 36.44 MHz x dB -26.00 dB File <BB6.png> saved



Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0

5190 MHz



5230 MHz

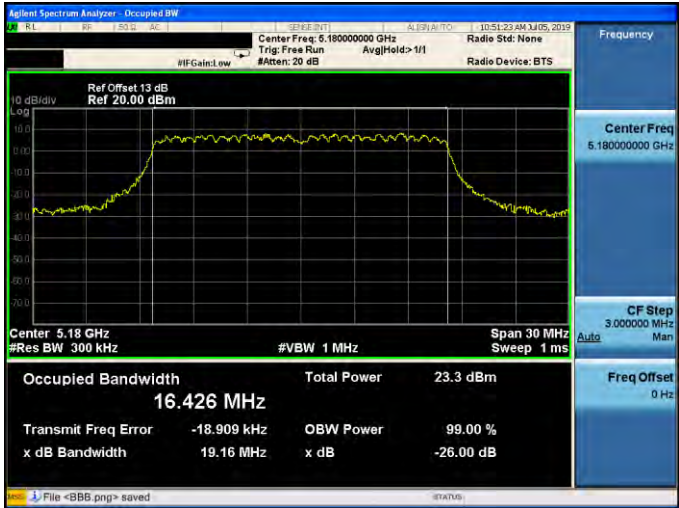


Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-0

5210 MHz





Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	 Agilent Spectrum Analyzer: Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.426 MHz Total Power 23.3 dBm Transmit Freq Error -18.909 kHz OBW Power 99.00 % x dB Bandwidth 19.16 MHz x dB -26.00 dB File <BB6.png> saved
5200 MHz	 Agilent Spectrum Analyzer: Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 17.127 MHz Total Power 27.4 dBm Transmit Freq Error 6.490 kHz OBW Power 99.00 % x dB Bandwidth 34.14 MHz x dB -26.00 dB File <BB6.png> saved
5240 MHz	 Agilent Spectrum Analyzer: Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 17.363 MHz Total Power 27.5 dBm Transmit Freq Error 44.684 kHz OBW Power 99.00 % x dB Bandwidth 34.22 MHz x dB -26.00 dB File <BB6.png> saved



Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-1

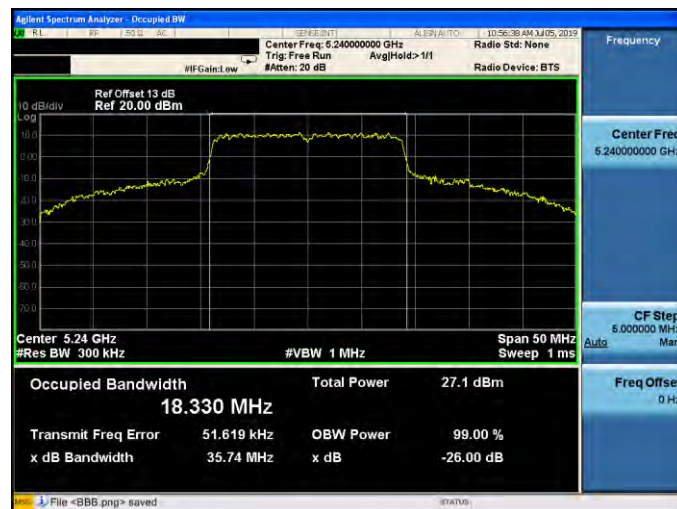
5180 MHz



5200 MHz



5240 MHz





Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1

5190 MHz



5230 MHz



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-1

5210 MHz





6 dB RF Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5745	16330	16350	≥ 500
5785	16330	16320	≥ 500
5825	16320	16310	≥ 500

Test Mode	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5745	17590	17590	≥ 500
5785	17600	17580	≥ 500
5825	17580	17570	≥ 500

Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5755	35140	33860	≥ 500
5795	35110	35110	≥ 500

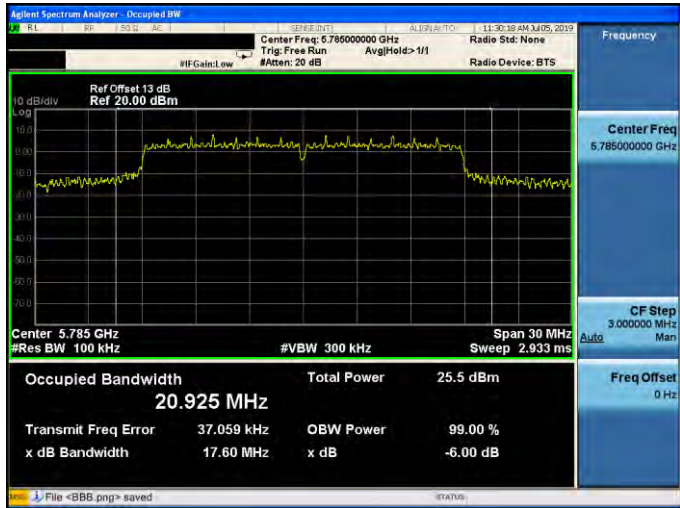
Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5775	75650	75280	≥ 500



■ Test Graphs

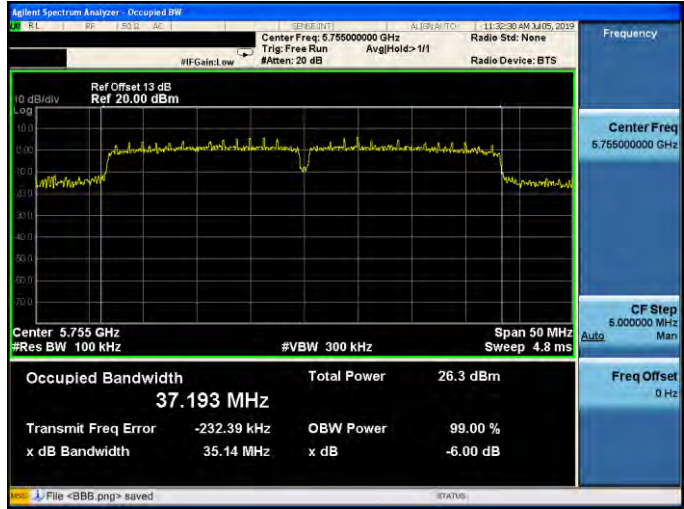
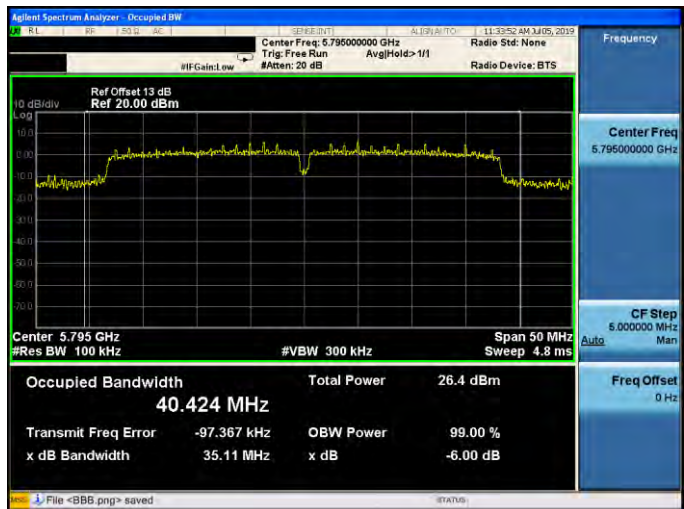
Mode 2: IEEE 802.11a Continuous TX mode_ANT-0	
5745 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.74500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 19.451 MHz Total Power 26.1 dBm Transmit Freq Error -34.150 kHz OBW Power 99.00 % x dB Bandwidth 16.33 MHz x dB -6.00 dB File <BBB.png> saved
5785 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.78500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 20.521 MHz Total Power 26.0 dBm Transmit Freq Error 103.22 kHz OBW Power 99.00 % x dB Bandwidth 16.33 MHz x dB -6.00 dB File <BBB.png> saved
5825 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.82500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 21.681 MHz Total Power 26.0 dBm Transmit Freq Error 183.75 kHz OBW Power 99.00 % x dB Bandwidth 16.32 MHz x dB -6.00 dB File <BBB.png> saved



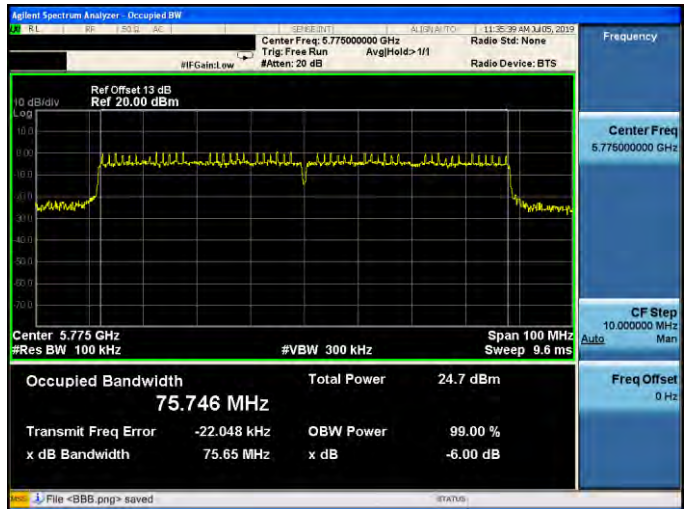
Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	



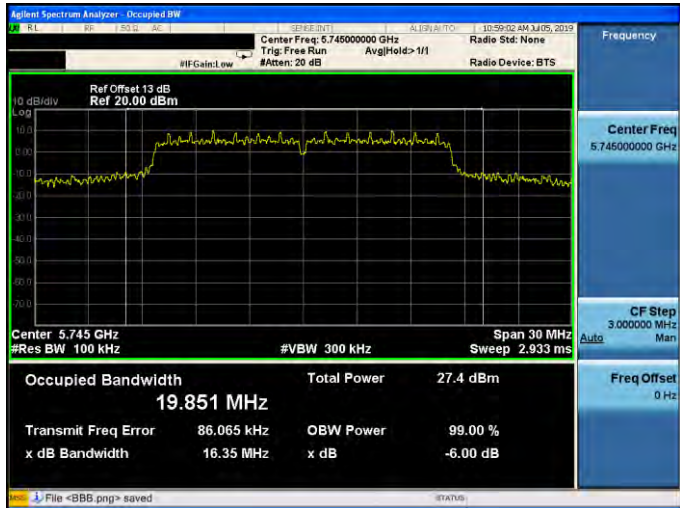
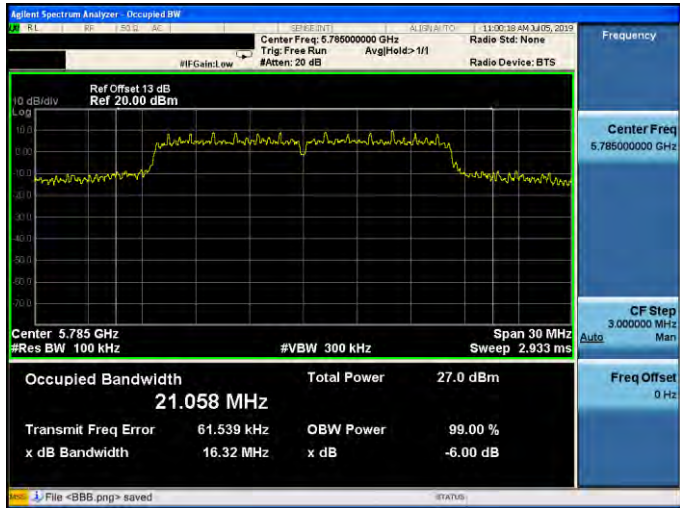
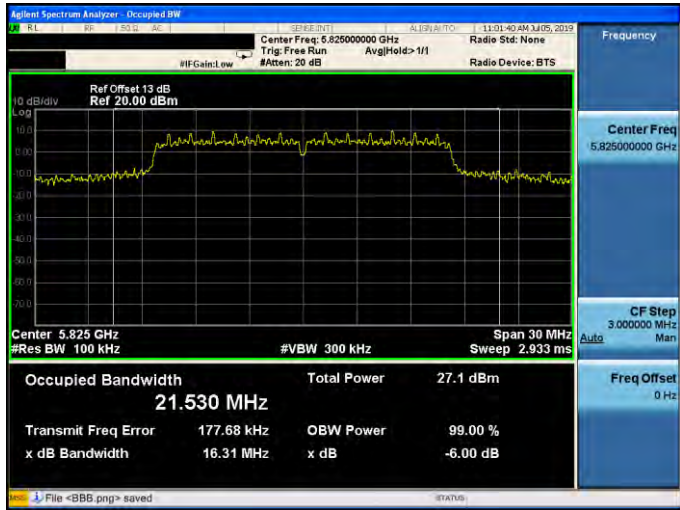
Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-0

5755 MHz	
5795 MHz	

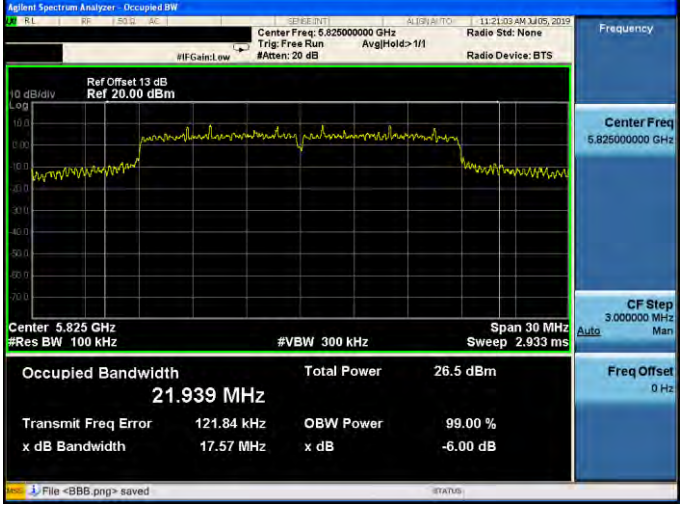
Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-0

5775 MHz	
----------	--



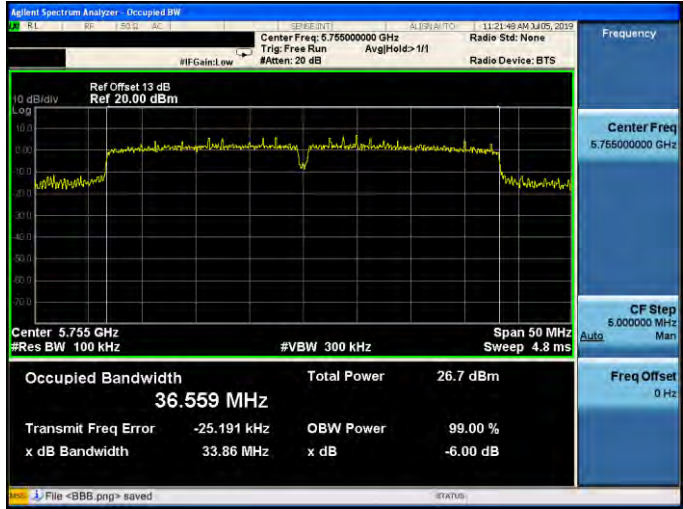
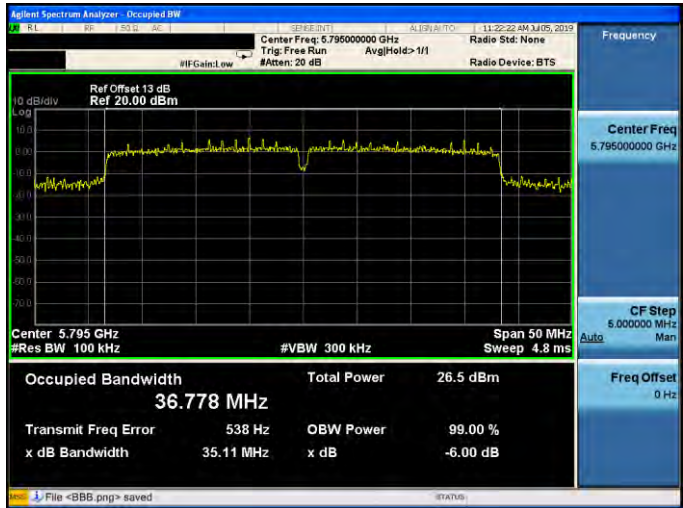
Mode 2: IEEE 802.11a Continuous TX mode_ANT-1	
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.74500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 19.851 MHz Total Power 27.4 dBm Transmit Freq Error 86.065 kHz OBW Power 99.00 % x dB Bandwidth 16.35 MHz x dB -6.00 dB File <BBB.png> saved
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.78500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 21.058 MHz Total Power 27.0 dBm Transmit Freq Error 61.539 kHz OBW Power 99.00 % x dB Bandwidth 16.32 MHz x dB -6.00 dB File <BBB.png> saved
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.82500000 GHz Trig: Free Run #IF Gain: Low #Atten: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset 13 dB Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 21.530 MHz Total Power 27.1 dBm Transmit Freq Error 177.68 kHz OBW Power 99.00 % x dB Bandwidth 16.31 MHz x dB -6.00 dB File <BBB.png> saved



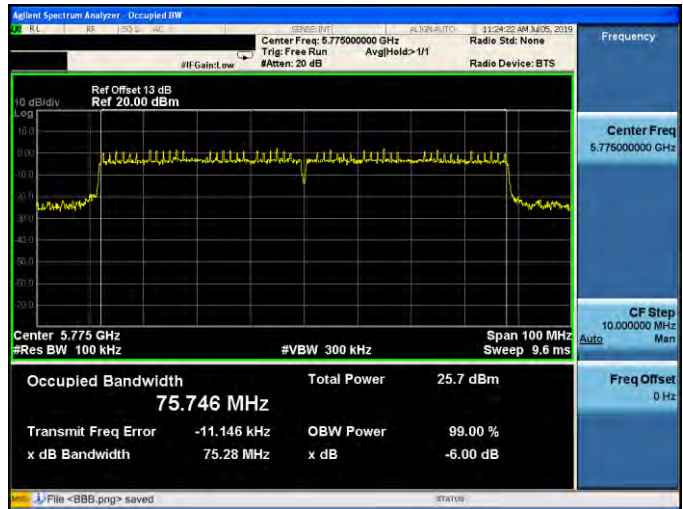
Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-1

5755 MHz	
5795 MHz	

Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-1

5775 MHz	
----------	--



Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	4.916	0.144	5.060	≤ 17.00
5200	8.409	0.144	8.553	
5240	8.651	0.144	8.795	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	4.537	0.144	4.681	≤ 17.00
5200	8.394	0.144	8.538	
5240	8.186	0.144	8.330	
Power Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180.0	7.885			≤ 17.00
5200.0	11.556			
5240.0	11.579			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.



Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-1.322	0.144	5.812	≤ 30.00
5785	-1.414	0.144	5.720	
5825	-1.855	0.144	5.279	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-1.603	0.144	5.531	≤ 30.00
5785	-1.890	0.144	5.244	
5825	-1.940	0.144	5.194	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	8.684			≤ 30.00
5785	8.499			
5825	8.247			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)



Test Mode	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	4.758	0.043	4.801	≤ 17.00
5200	8.200	0.043	8.243	
5240	8.207	0.043	8.250	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	4.421	0.043	4.464	≤ 17.00
5200	8.014	0.043	8.057	
5240	8.001	0.043	8.044	
Power Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180.0	7.646			≤ 17.00
5200.0	11.161			
5240.0	11.158			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-1.536	0.043	5.497	≤ 30.00
5785	-1.701	0.043	5.332	
5825	-1.949	0.043	5.084	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-1.704	0.043	5.329	≤ 30.00
5785	-1.865	0.043	5.168	
5825	-2.498	0.043	4.535	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	8.424			≤ 30.00
5785	8.261			
5825	7.828			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)



Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-2.548	0.114	-2.434	≤ 17.00
5230	5.302	0.114	5.416	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-3.394	0.114	-3.280	≤ 17.00
5230	4.865	0.114	4.979	
Power Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190.0	0.174			≤ 17.00
5230.0	8.213			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-4.344	0.114	2.759	≤ 30.00
5795	-4.521	0.114	2.582	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-4.505	0.114	2.598	≤ 30.00
5795	-5.095	0.114	2.008	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5755	5.690			≤ 30.00
5795	5.315			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)



Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-8.416	0.262	-8.154	≤ 17.00
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-8.786	0.262	-8.524	≤ 17.00
Power Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5210.0	-5.325			≤ 17.00

Note: Method SA-2, Power density = measured result + $10 \log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.



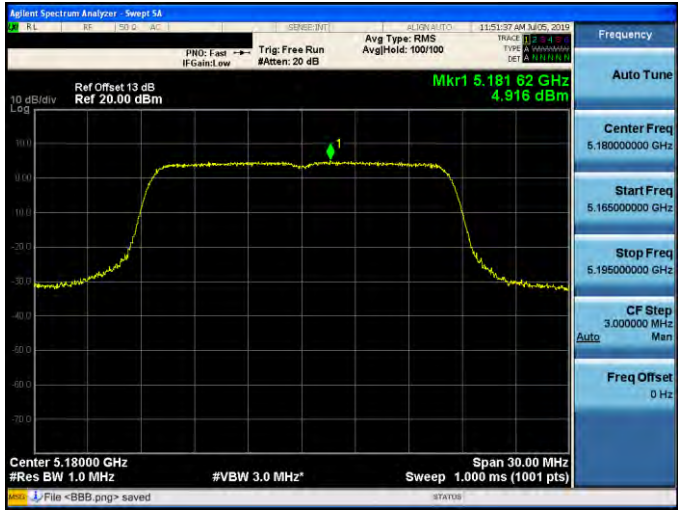
Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-10.285	0.262	-3.033	≤ 30.00
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-10.502	0.262	-3.250	≤ 30.00
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5775	-0.130			≤ 30.00

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

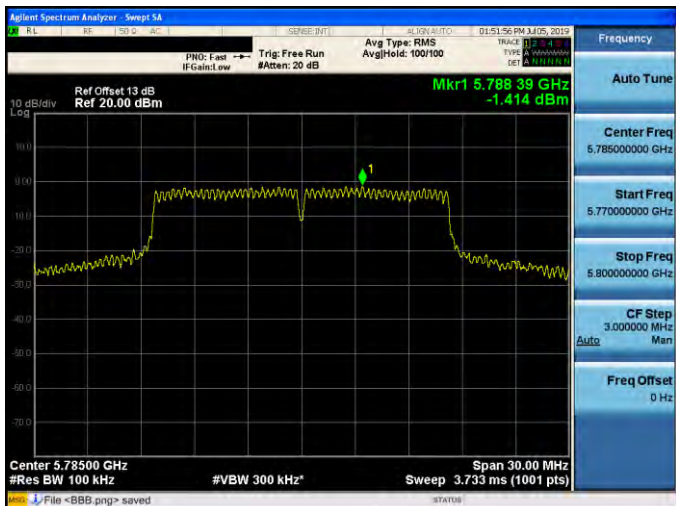
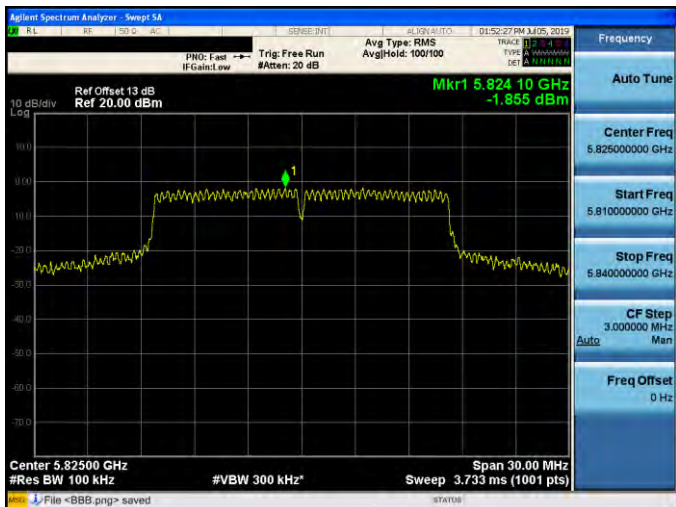


■ Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0

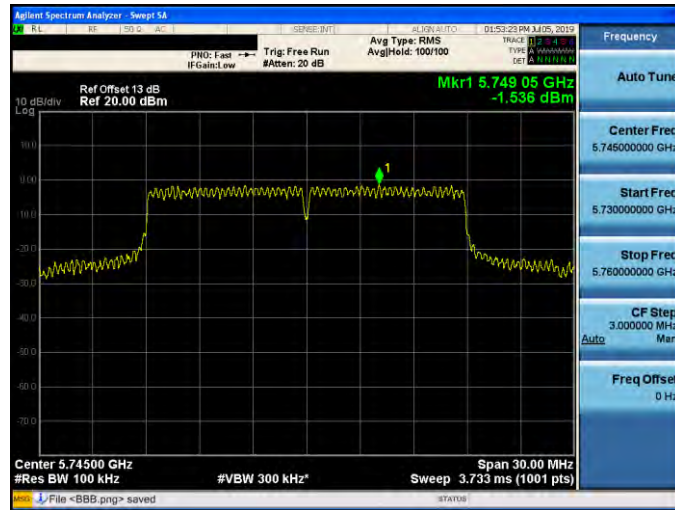
5745 MHz	
5785 MHz	
5825 MHz	

Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5180 MHz	 Agilent Spectrum Analyzer - Sweep 1A Ref Offset 13 dB Ref 20.00 dBm Mkr1 5.175 95 GHz 4.758 dBm Center 5.18000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts) Span 30.00 MHz File <BBB.png> saved Frequency Auto Tune Center Freq 5.18000000 GHz Start Freq 5.16500000 GHz Stop Freq 5.19500000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
5200 MHz	 Agilent Spectrum Analyzer - Sweep 1A Ref Offset 13 dB Ref 20.00 dBm Mkr1 5.204 29 GHz 8.200 dBm Center 5.20000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts) Span 30.00 MHz File <BBB.png> saved Frequency Auto Tune Center Freq 5.20000000 GHz Start Freq 5.18500000 GHz Stop Freq 5.21500000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
5240 MHz	 Agilent Spectrum Analyzer - Sweep 1A Ref Offset 13 dB Ref 20.00 dBm Mkr1 5.243 84 GHz 8.207 dBm Center 5.24000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts) Span 30.00 MHz File <BBB.png> saved Frequency Auto Tune Center Freq 5.24000000 GHz Start Freq 5.22500000 GHz Stop Freq 5.25500000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz

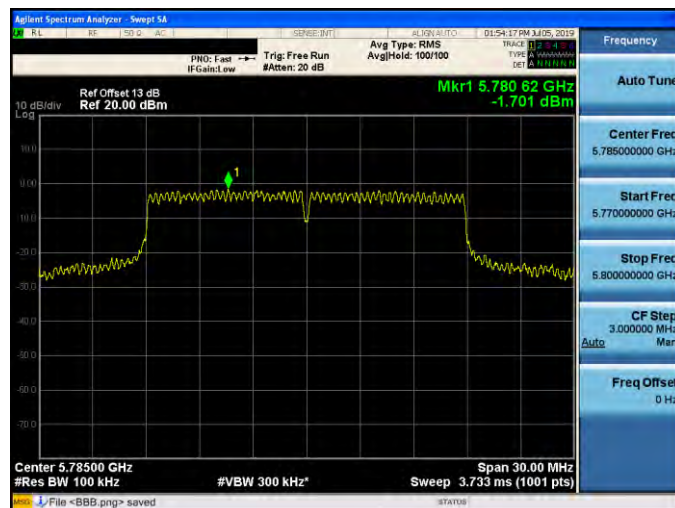


Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0

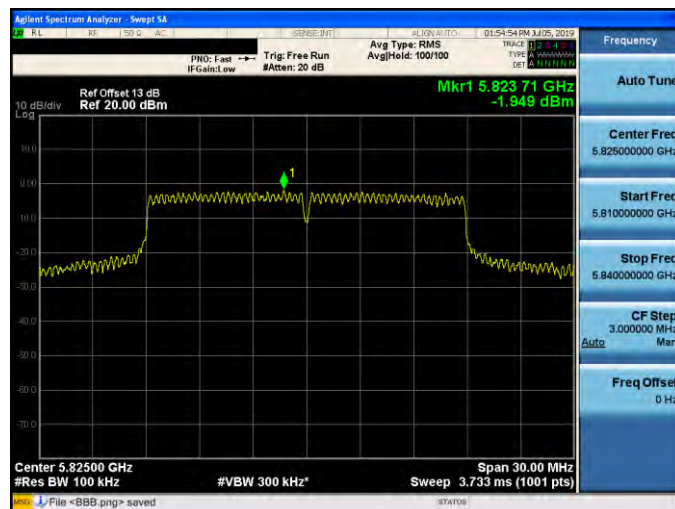
5745 MHz



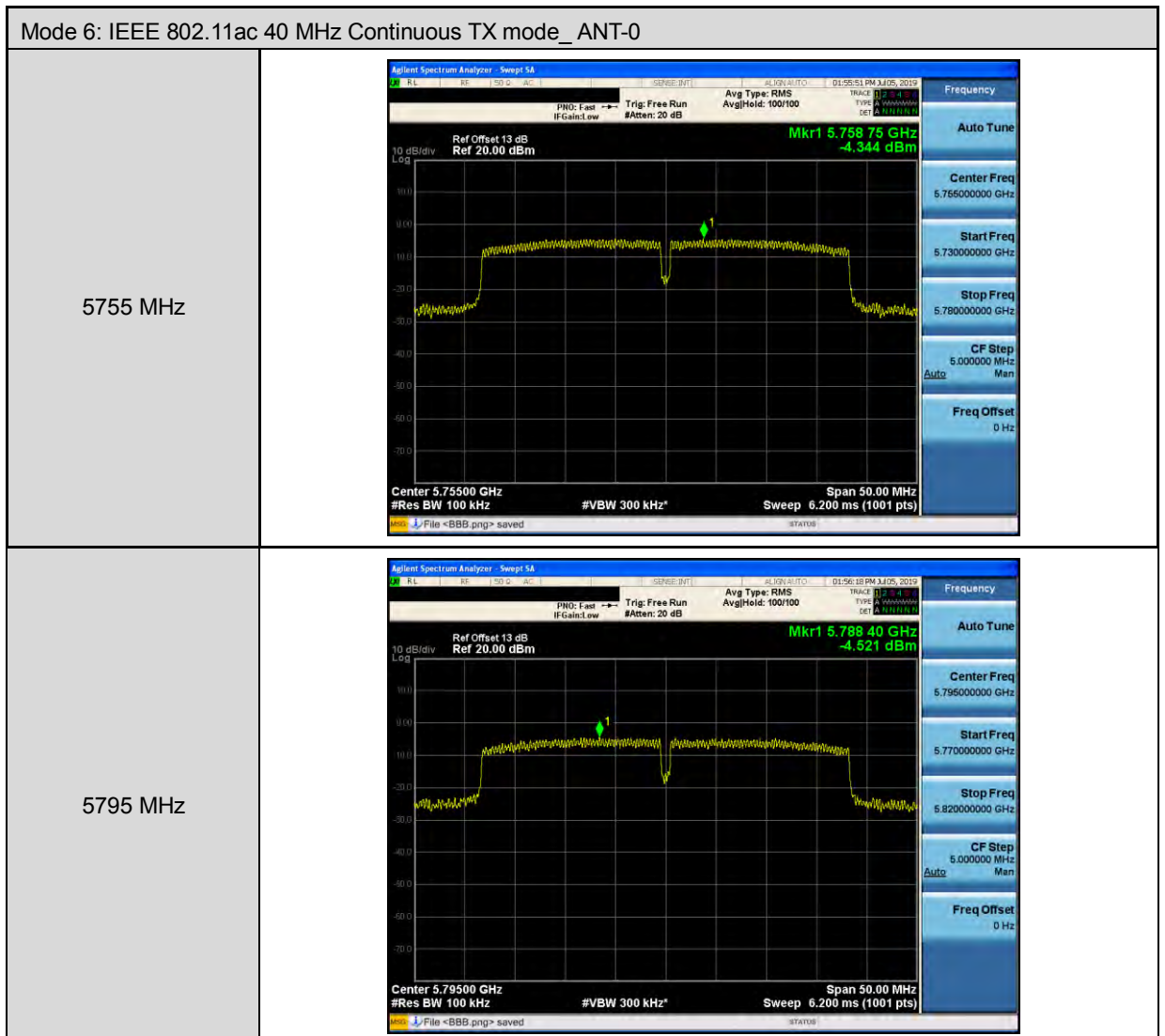
5785 MHz



5825 MHz









Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0

5210 MHz



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0

5775 MHz



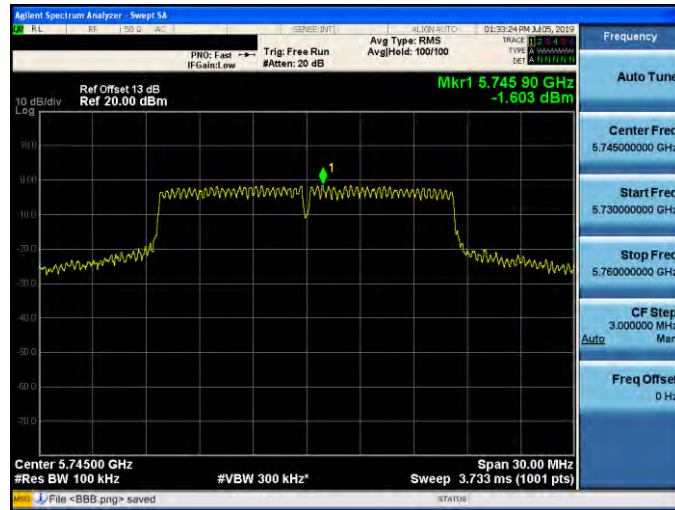


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

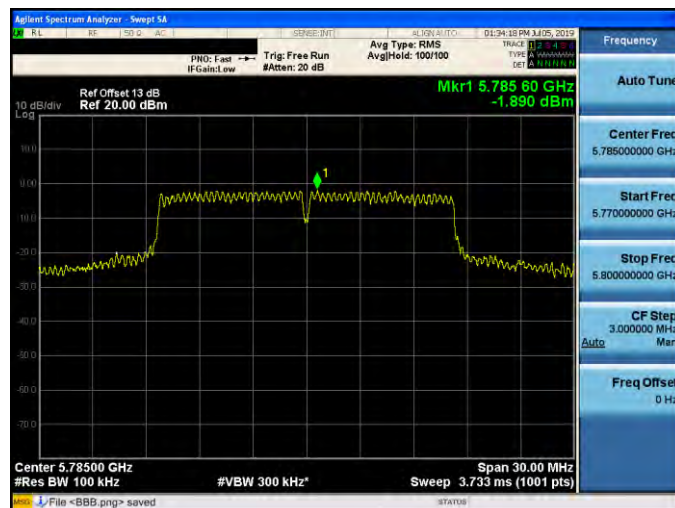


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

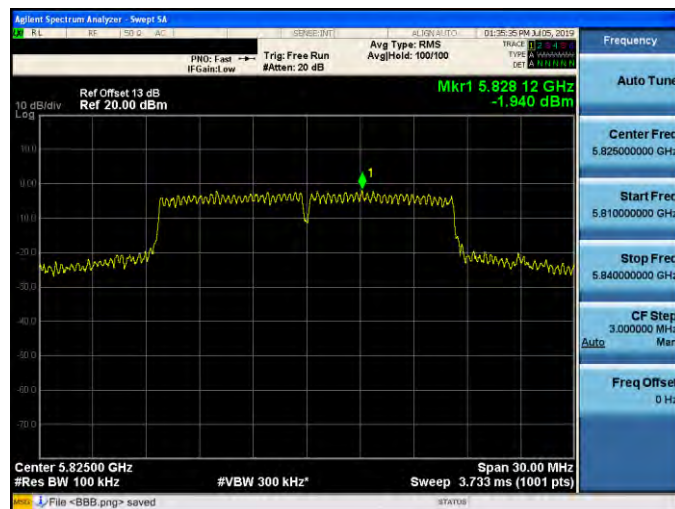
5745 MHz



5785 MHz



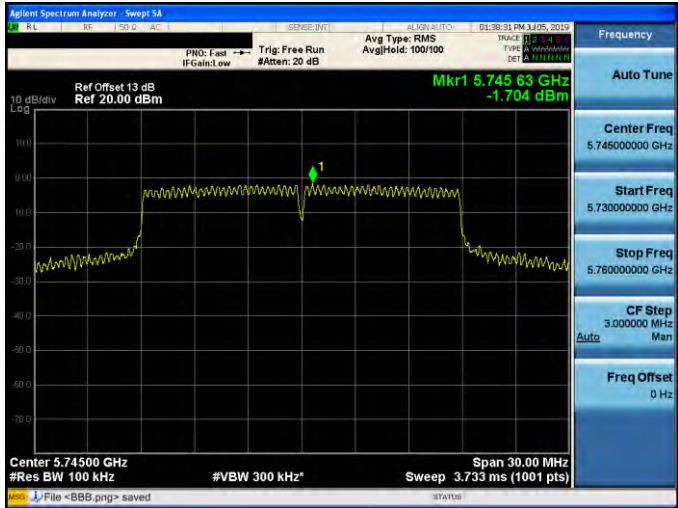
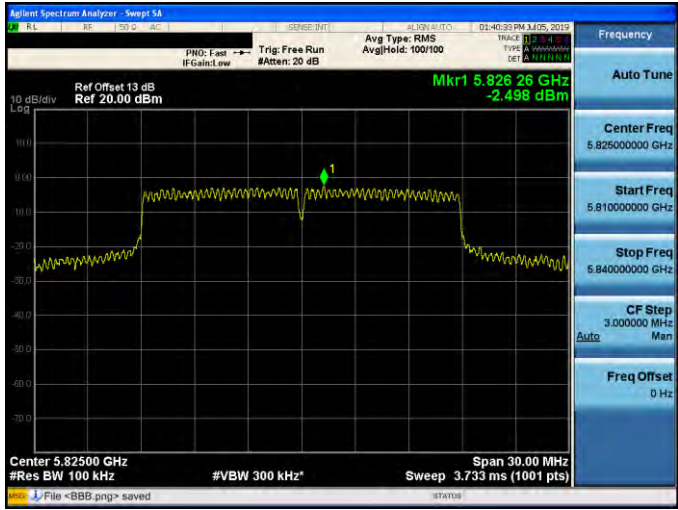
5825 MHz





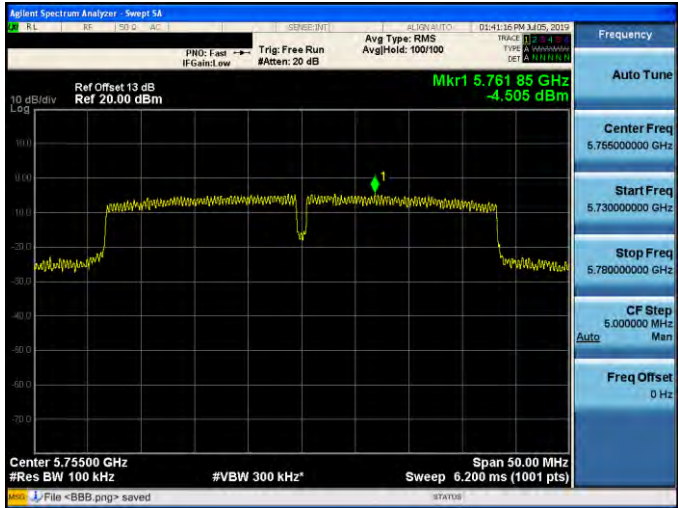
Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

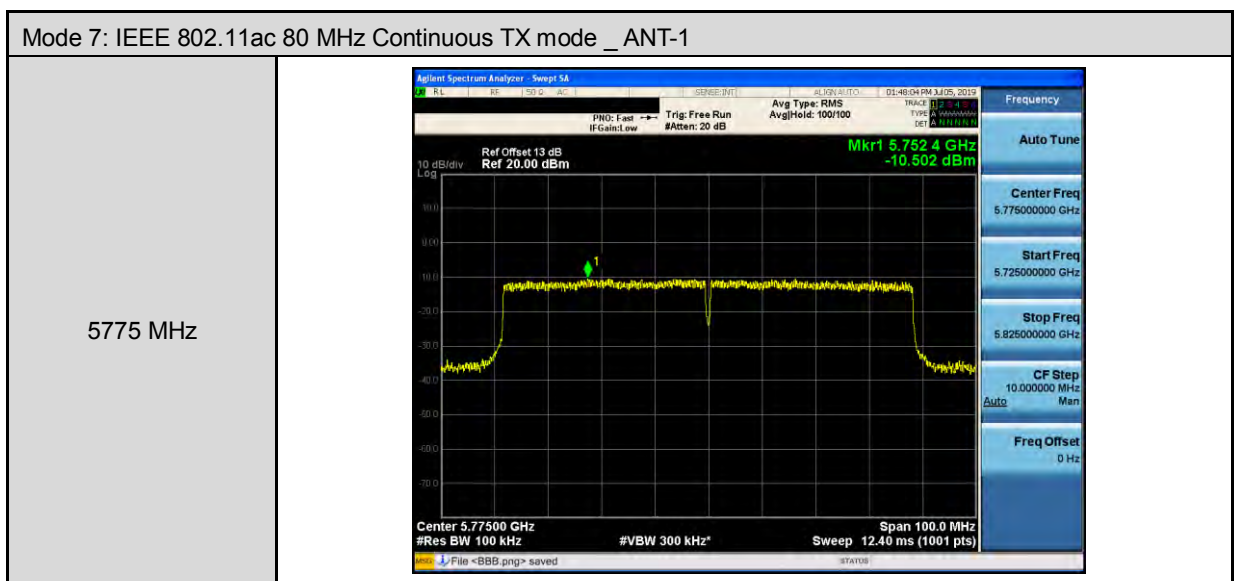
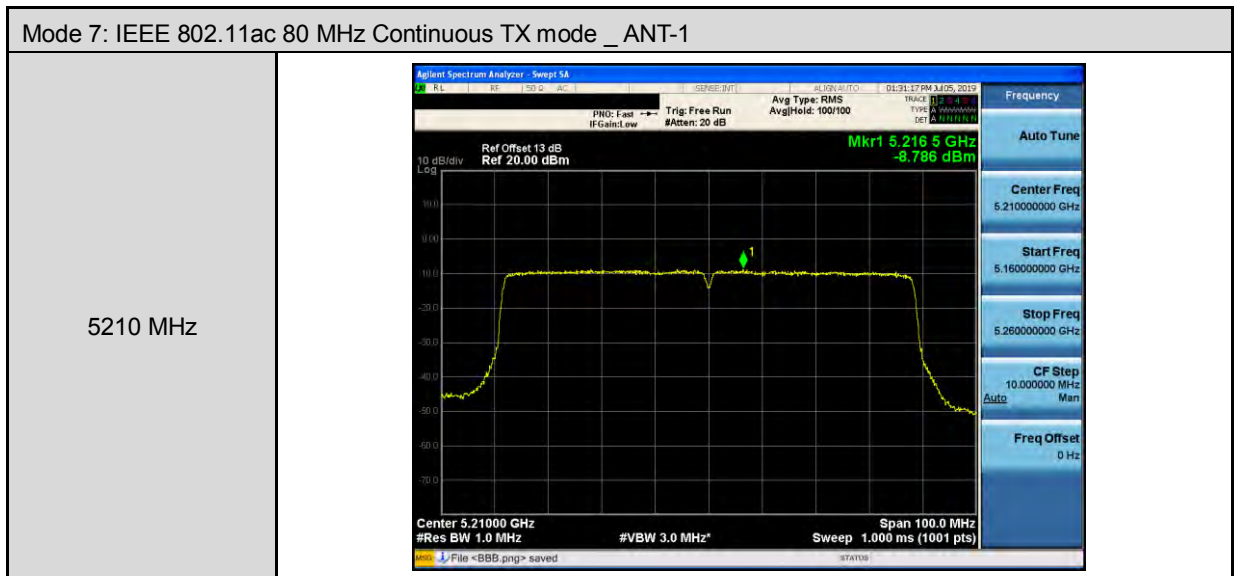


Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	





Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5755 MHz	
5795 MHz	



--- END---