RF Test Report

Applicant	:	Pismo Labs Technology Limited
Product Type	:	Pepwave / Peplink / Pismo Labs Wireless Product
Trade Name	:	peplink, PEPWAVE, Pismo
Model Number	:	SpeedFusion Engine SFE-CAM-AB-LTEA-W SFE-CAM-VM-LTEA-W SFE-CAM Pismo827 Pismo 827
Test Specification	:	FCC 47 CFR PART 15 SUBPART E ANSI C63.10:2013
Receive Date	:	Sep. 11, 2018
Test Period	:	Nov. 06 ~ Nov. 16, 2018
Issue Date	:	Dec. 04, 2018

Issue by

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

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Nov. 21, 2018	Initial Issue	Janet Chao
01	Dec. 04, 2018	Revised Report Information	Janet Chao

Verification of Compliance

Issued Date: Dec. 04, 2018

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Model Number	:	SpeedFusion Engine SFE-CAM-AB-LTEA-W SFE-CAM-VM-LTEA-W SFE-CAM Pismo827 Pismo 827
FCC ID	:	U8G-P1827
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)

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1 General Information

1.1. Summary of Test Result

Standard	Item	Result	Remark
FCC			
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	Reference	---
15.407(e)	6 dB RF Bandwidth	PASS	-----
15.407(a)	Maximum Power Spectral Density	PASS	---
15.407(g)	Frequency Stability	PASS	---
15.407(c)	Automatically discontinue transmission	PASS	---
15.407(a) 15.203	Antenna Requirement	PASS	---

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

Standard	Description
CFR47, Part 15, Subpart C	Intentional Radiators
CFR47, Part 15, Subpart E	Unlicensed National Information Infrastructure Devices
ANSI C63. 10: 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB789033: D02	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
KDB 662911 D01 v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)

1.2. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	9 kHz ~ 150 kHz	2.7
	150 kHz ~ 30 MHz	2.7
Radiated Emission	9 kHz ~ 30 MHz	1.7
	30 MHz ~ 1000 MHz	5.7
	1000 MHz ~ 18000 MHz	5.5
	18000 MHz ~ 26500 MHz	4.8
	26500 MHz ~ 40000 MHz	4.8
Conducted Output Power		+0.27 dB / -0.28 dB
RF Bandwidth		4.96 %
Power Spectral Density		+0.71 dB / -0.77 dB
Frequency Stability		+ 2.212 x 10-7 % / - 2.170 x 10-7
Duty Cycle		1.06 %
Time Occupancy		1.40 %

2 EUT Description

<table>
<tr><td>Applicant</td><td colspan="5">Pismo Labs Technology Limited
A5, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong</td></tr>
<tr><td>Manufacturer</td><td colspan="5">Pismo Labs Technology Limited
Unit A5, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong</td></tr>
<tr><td>Product Type</td><td colspan="5">Pepwave / Peplink / Pismo Labs Wireless Product</td></tr>
<tr><td>Trade Name</td><td colspan="5">peplink, PEPWAVE, Pismo</td></tr>
<tr><td>Model No.</td><td colspan="5">SpeedFusion Engine
SFE-CAM-AB-LTEA-W
SFE-CAM-VM-LTEA-W
SFE-CAM
Pismo827
Pismo 827</td></tr>
<tr><td>Product Type / Trade Name / Models Different Description</td><td colspan="5">Those model numbers differ from each other in selling region.</td></tr>
<tr><td>FCC ID</td><td colspan="5">U8G-P1827</td></tr>
<tr><td rowspan="11">Operate Frequency</td><td colspan="2">Frequency Band</td><td colspan="2">Frequency Range (MHz)</td><td>Number of Channels</td></tr>
<tr><td rowspan="2">IEEE 802.11a</td><td>U-NII Band I</td><td colspan="2">5180 – 5240</td><td>4</td></tr>
<tr><td>U-NII Band III</td><td colspan="2">5745 – 5825</td><td>5</td></tr>
<tr><td rowspan="2">IEEE 802.11n 5 GHz 20 MHz / IEEE 802.11ac 20 MHz</td><td>U-NII Band I</td><td colspan="2">5180 – 5240</td><td>4</td></tr>
<tr><td>U-NII Band III</td><td colspan="2">5745 – 5825</td><td>5</td></tr>
<tr><td rowspan="2">IEEE 802.11n 5 GHz 40 MHz / IEEE 802.11ac 40 MHz</td><td>U-NII Band I</td><td colspan="2">5190 – 5230</td><td>2</td></tr>
<tr><td>U-NII Band III</td><td colspan="2">5755 – 5795</td><td>2</td></tr>
<tr><td rowspan="2">IEEE 802.11ac 80 MHz</td><td>U-NII Band I</td><td colspan="2">5210</td><td>1</td></tr>
<tr><td>U-NII Band III</td><td colspan="2">5775</td><td>1</td></tr>
<tr><td>Modulation Type</td><td colspan="5">OFDM</td></tr>
<tr><td>Equipment Type</td><td colspan="5">Client devices</td></tr>
<tr><td rowspan="7">Antenna information</td><td>Antenna</td><td>Model</td><td>Type</td><td>Frequency Range</td><td>Max. Gain (dBi)</td></tr>
<tr><td rowspan="2">ANT-0</td><td rowspan="2">98PD6PIPF000</td><td rowspan="2">PCB Antenna</td><td>U-NII Band I</td><td>5.25</td></tr>
<tr><td>U-NII Band III</td><td>5.62</td></tr>
<tr><td rowspan="2">ANT-1</td><td rowspan="2">98PD6PIPF000</td><td rowspan="2">PCB Antenna</td><td>U-NII Band I</td><td>5.38</td></tr>
<tr><td>U-NII Band III</td><td>5.73</td></tr>
<tr><td colspan="3" rowspan="2">G_{ANT}</td><td>U-NII Band I</td><td>5.32</td></tr>
<tr><td>U-NII Band III</td><td>5.68</td></tr>
<tr><td>Antenna Delivery</td><td colspan="5">Reference section 3.1</td></tr>
<tr><td>Frequency stability specification</td><td colspan="5">± 20 ppm</td></tr>
<tr><td>Operate Temp. Range</td><td colspan="5">-40 ~ +40 ℃</td></tr>
</table>

Frequency Band		RF Output Power (W)
IEEE 802.11a	U-NII Band I	0.243
	U-NII Band III	0.124
IEEE 802.11ac 20 MHz	U-NII Band I	0.468
	U-NII Band III	0.335
IEEE 802.11ac 40 MHz	U-NII Band I	0.193
	U-NII Band III	0.342
IEEE 802.11ac 80 MHz	U-NII Band I	0.031
	U-NII Band III	0.173

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 802.11ac 20 MHz Continuous TX mode
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode
Mode 5: 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 : ANT-1 for IEEE 802.11a is only RX function.

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

Test Mode	Antenna Delivery	Data Rate	Band	Test Channel
Mode 2	1TX	6M	U-NII Band I	36, 40, 44, 48
			U-NII Band III	149, 153, 157, 161, 165
Mode 3	2TX (CDD)	13M	U-NII Band I	36, 40, 44, 48
			U-NII Band III	149, 153, 157, 161, 165
Mode 4	2TX (CDD)	27M	U-NII Band I	38, 46
			U-NII Band III	151,159
Mode 5	2TX (CDD)	58.6M	U-NII Band I	42
			U-NII Band III	155

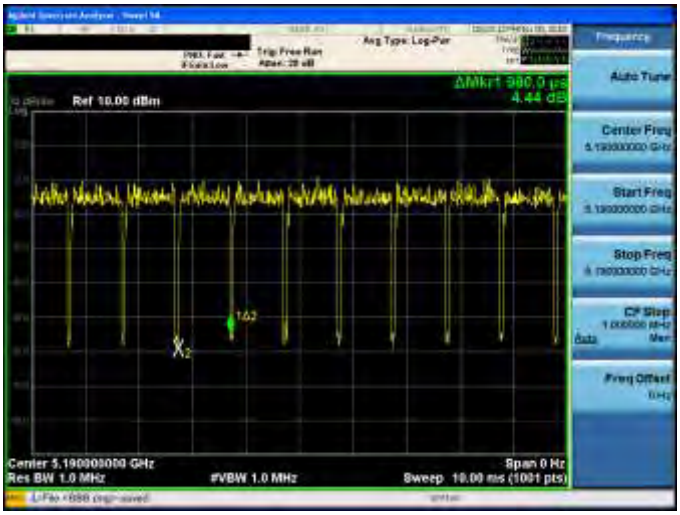
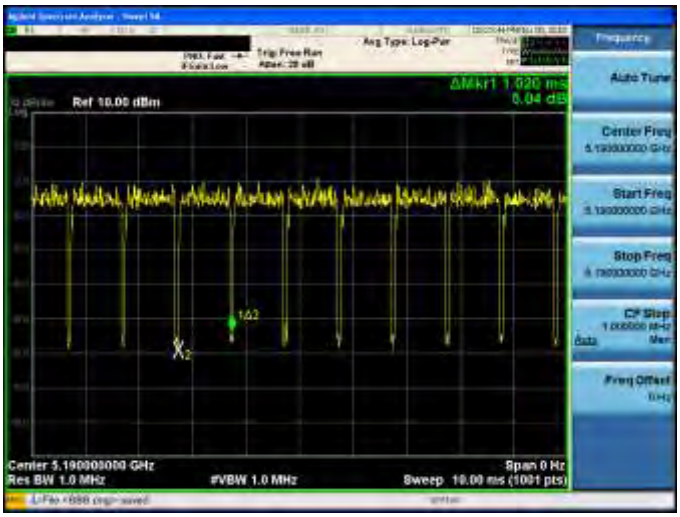
Duty cycle

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	2.050	2.110	0.972	0.125	0.488
Mode 3	5180.0	1.920	1.990	0.965	0.156	0.521
Mode 4	5190.0	0.980	1.020	0.961	0.174	1.020
Mode 5	5210.0	1.160	1.210	0.959	0.183	0.862

Duty Cycle Graphs

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

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode	
On time	
On+off time	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode	
On time	
On+off time	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode	
On time	
On+off time	

3.2. EUT Test Step

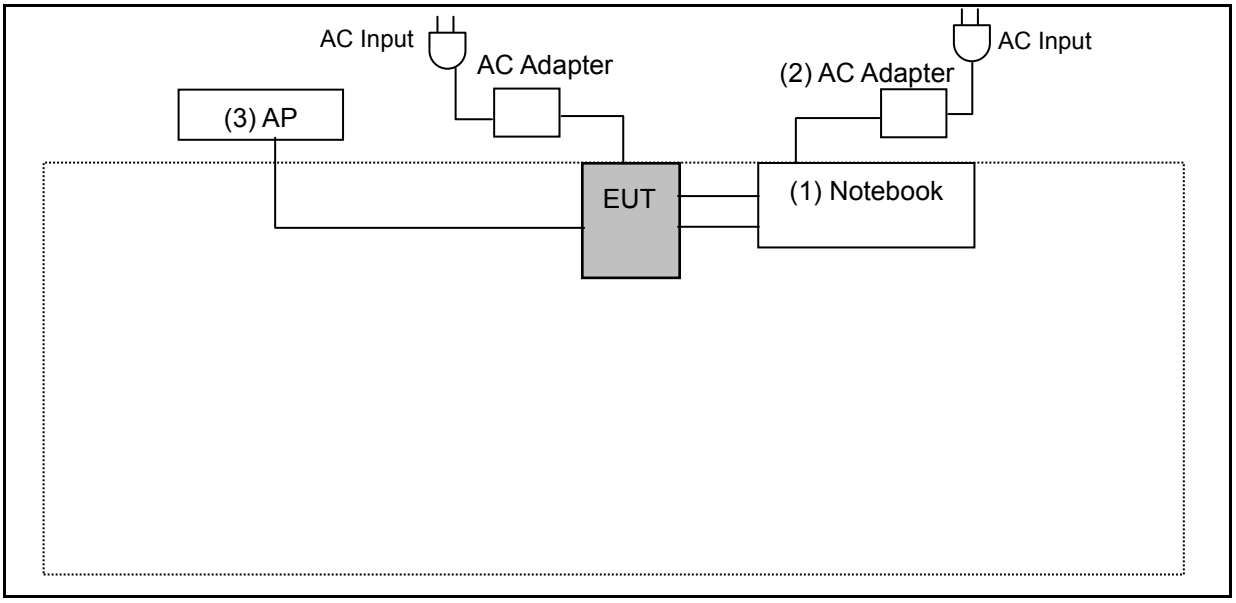
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

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.

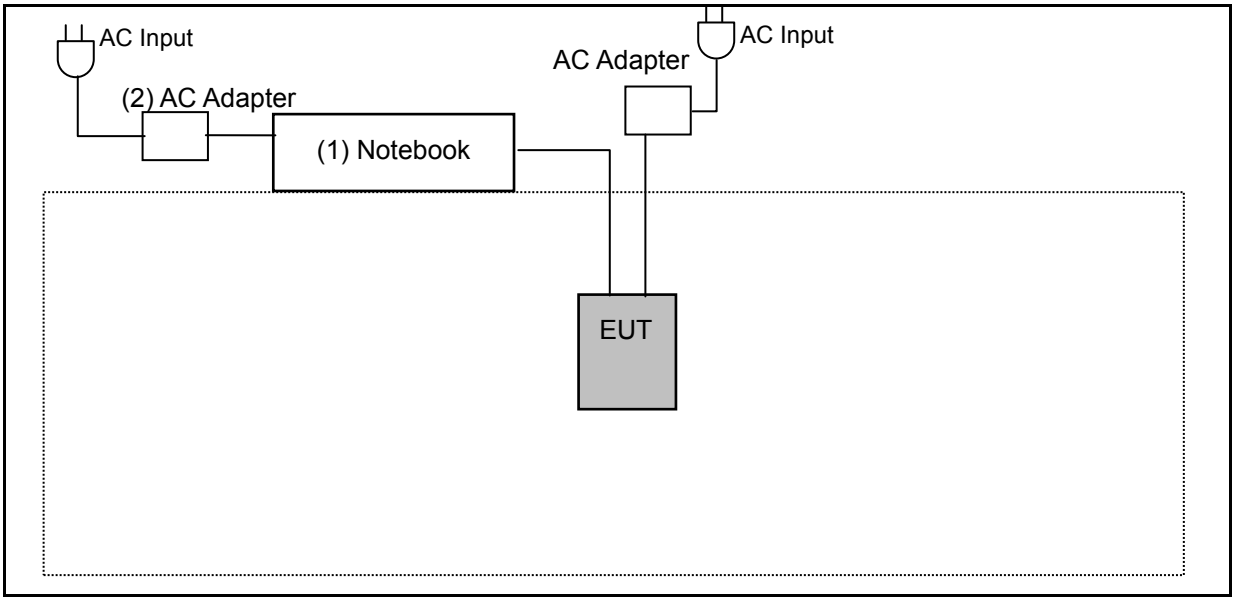
Measurement Software			
No.	Description	Software	Version
1	AC Power Line Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

3.3. Configuration of Test System Details

Conducted Emission



Radiated Emission



Devices Description					
Product		Manufacturer	Model Number	Serial Number	Power Cord
(1)	Notebook	DELL	LATITUDE E5440	BRTQXY1	---
(2)	AC Adapter	DELL	HA65NM130	---	Non-Shielded, 0.8 m
(3)	AP	Netgear	R7800	---	---

3.4. Test Instruments

For Conducted Emission

Test Period: Nov. 15, 2018

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

For Radiated Emissions

Test Period: Nov. 06 ~ Nov. 07, 2018

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/15/2018	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/19/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/10/2018	1 year
Pre Amplifier (26.5~40 GHz)	EMCI	EMC2654045	980028	08/23/2018	1 year
Trilog Broadband Antenna	SCHWARZBECK MESS-ELEKTRONIK	SB AC VULB	9168-0841	03/02/2018	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/23/2018	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	03/13/2018	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2018	1 year
Microwave Cable	EMCI	EMC102-KM-KM-14000	151001	02/20/2018	1 year
Broadband Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	9170	9170-320	08/07/2018	1 year

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

For Conducted

Test Period: Nov. 08 ~ Nov. 16, 2018

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	08/29/2018	1 year
Power Meter	Anritsu	ML2495A	1135009	08/29/2018	1 year
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/25/2018	1 year
Microwave Cable	EMCI	EMC102-SM-SM1500	001	11/22/2017	1 year
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	04/16/2018	1 year

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

3.5. Test Site Environment

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

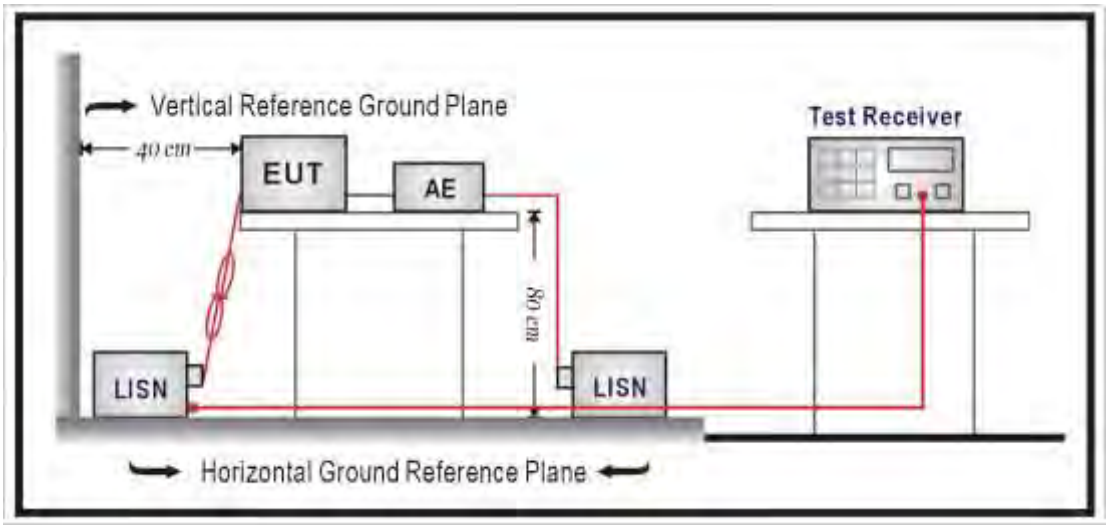
4 Measurement Procedure

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 Ω // 50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 Ω // 50 uH coupling impedance with 50 ohm termination.

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

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

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

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

4.2. 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

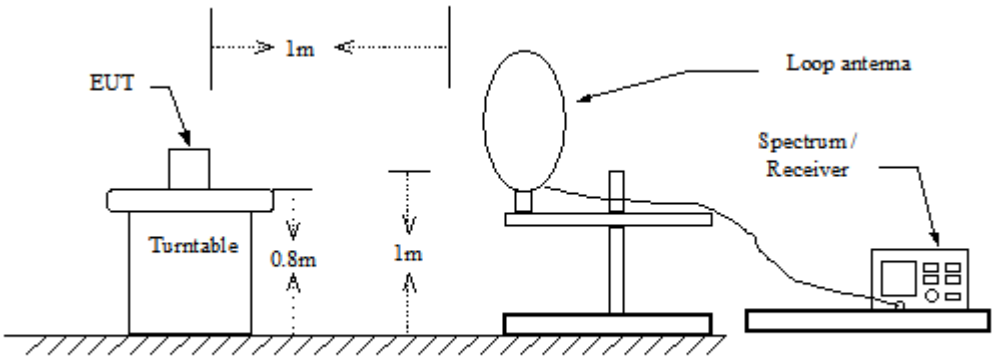
Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

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

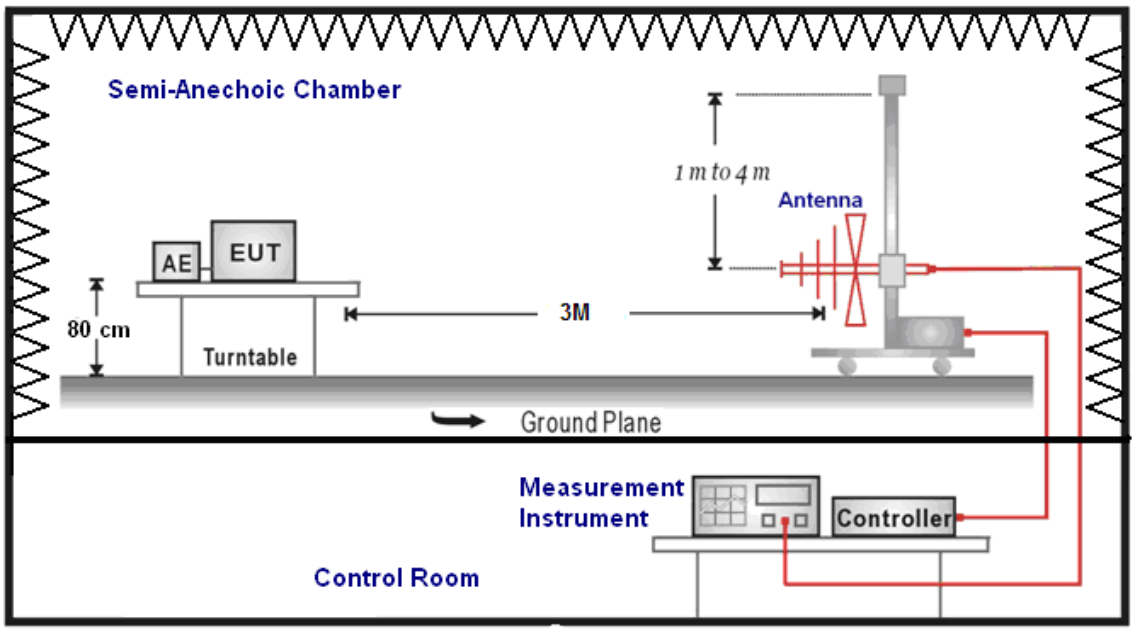
Note: 1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed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

■ **Setup**

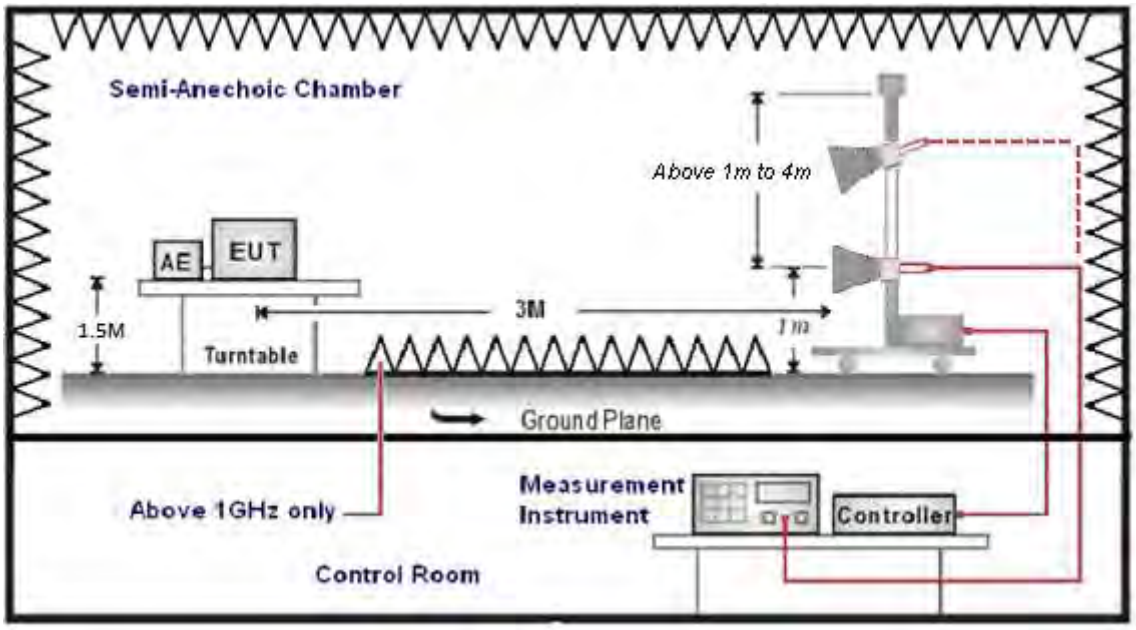
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz


Semi-Anechoic Chamber
Above 1m to 4m
AE
EUT
1.5M
3M
1m
Turntable
Ground Plane
Above 1GHz only
Measurement
Instrument
Controller
Control Room

■ **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 tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antnna 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 pre meter (uV/m).

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

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

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)
FI= Reading of the field intensity.
AF= Antenna factor.
CL= Cable loss.
P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)
The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:
(a) For fundamental frequency : Transmitter Output < +30 dBm
(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

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

■ **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)

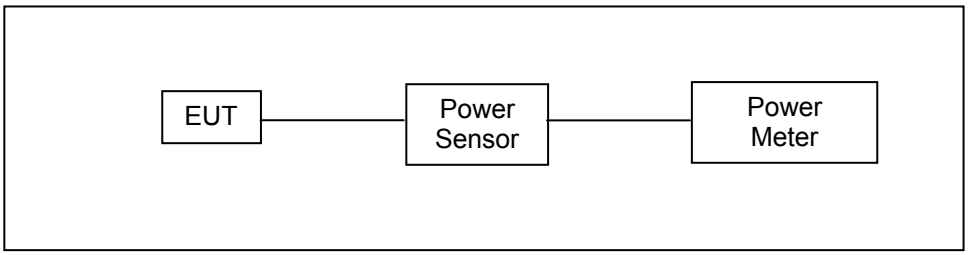
According FCC KDB 662911 D01 v02r01 – for power measurements on IEEE802.11 devices,

SISO mode:
IEEE 802.11a
Directional Gain = ANT. Gain = 5.25 dBi < 6 dBi (5.150 ~ 5.250 GHz)
Directional Gain = ANT. Gain = 5.62 dBi < 6 dBi (5.725 ~ 5.850 GHz)

CDD mode:
IEEE 802.11ac 20 MHz / IEEE 802.11ac 40 MHz / IEEE 802.11ac 80 MHz
Directional Gain =GANT = 10*log{[10^(G1/10)+10^(G2/10)+…+10^(Gn/10)]/NANT}
= 5.32 dBi < 6dBi (5.150 ~ 5.250 GHz)

Directional Gain =GANT = 10*log{[10^(G1/10)+10^(G2/10)+…+10^(Gn/10)]/NANT}
= 5.68 dBi < 6dBi (5.725 ~ 5.850 GHz)

■ **Test Setup**



■ **Test Procedure**

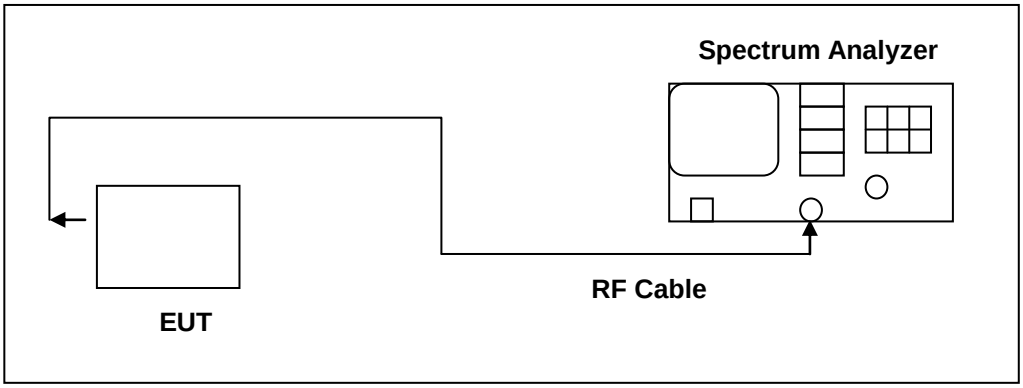
The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v02r01, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices
Section (E) Maximum Conducted Output Power
3. Measurement using a Power Meter (PM)
b) Method PM-G (Measurement using a gated RF average power meter)

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

■ **Limit**

N/A

■ **Test Setup**



■ **Test Procedure**

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v02r01, 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

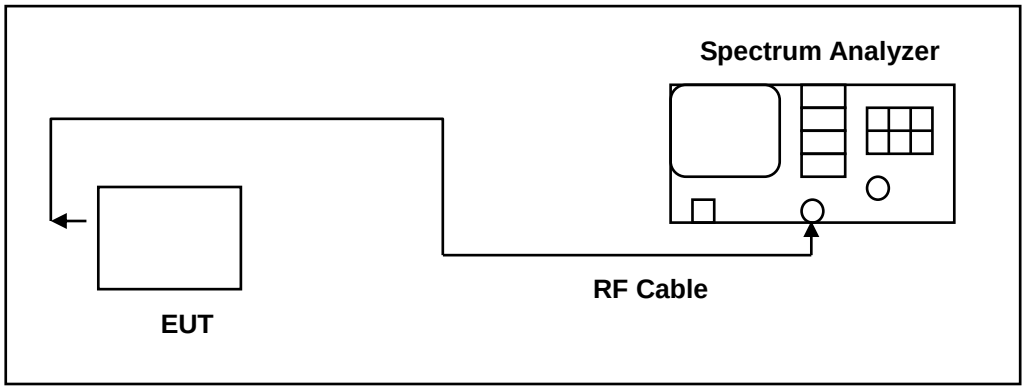
4.5. 6 dB RF Bandwidth Measurement

■ **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 KDB789033 D02 v02r01 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,

SISO mode:
IEEE 802.11a
Directional Gain = Max. Gain = 5.25 dBi < 6 dBi (5.150 ~ 5.250 GHz)
Directional Gain = Max. Gain = 5.62 dBi < 6 dBi (5.725 ~ 5.850 GHz)

CDD mode:

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

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

= 8.33 dBi > 6dBi (5.150 ~ 5.250 GHz)

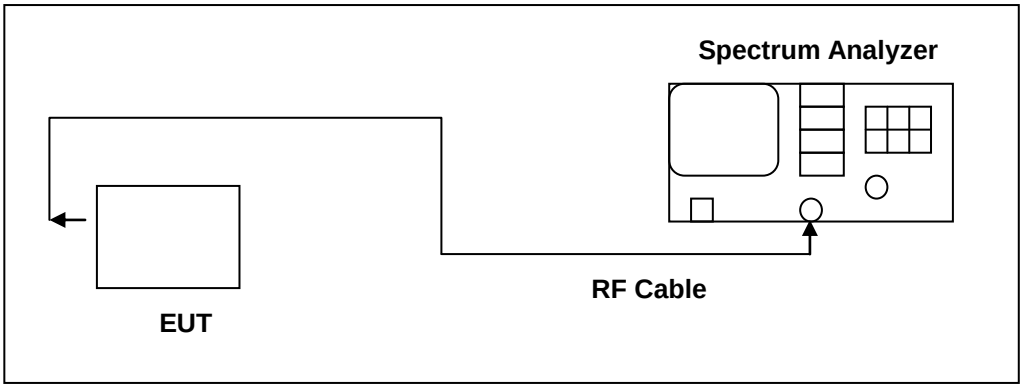
power limit shall be reduced = 17 – 2.33 = 14.67 dBm/MHz (5.150 ~ 5.250 GHz)

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

= 8.69 dBi > 6dBi (5.725 ~ 5.850 GHz)

power limit shall be reduced = 30 – 2.69 = 27.31 dBm/500 kHz (5.725 ~ 5.850 GHz)

■ **Test Setup**



■ **Test Procedure**

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v02r01, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

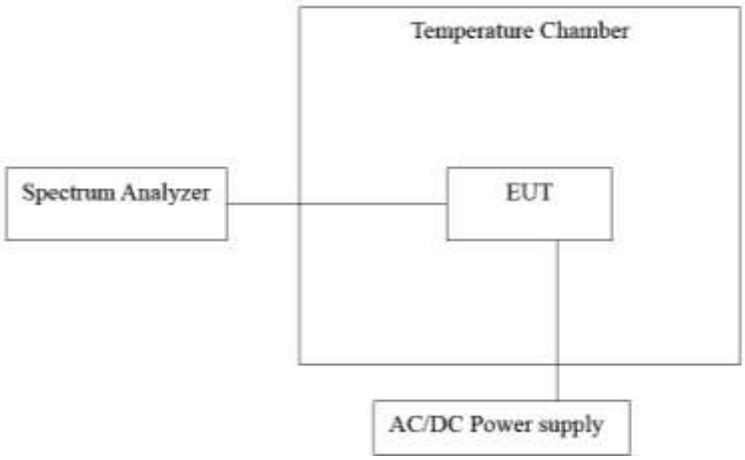
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz (5725 ~ 5850 MHz use 100 kHz)
VBW	3 MHz (5725 ~ 5850 MHz use 300 kHz)
Detector	RMS
Trace	AVERAGE
Sweep Time	Auto
Trace Average	100 times
Note: If measurement bandwidth of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

4.7. Frequency Stability Measurement

■ **Limit**

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

■ **Test Setup**



■ **Test Procedure**

1. The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85 % to 115 % and the frequency record.

4.8. 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.

4.9. 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**

Maximum Conducted Output Power

Operate Freq. Band		Directional Gain (dBi)
IEEE 802.11a	U-NII Band I	5.25
	U-NII Band III	5.62
IEEE 802.11ac 20 MHz	U-NII Band I	5.32
	U-NII Band III	5.68
IEEE 802.11ac 40 MHz	U-NII Band I	5.32
	U-NII Band III	5.68
IEEE 802.11ac 80 MHz	U-NII Band I	5.32
	U-NII Band III	5.68

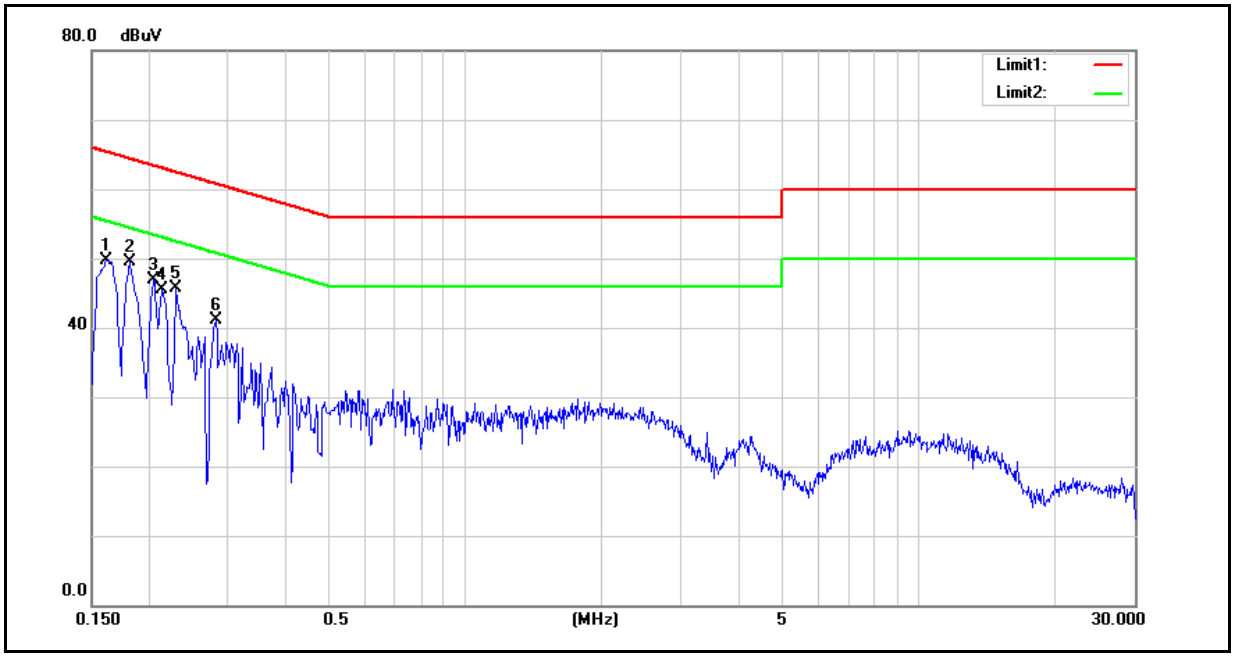
Maximum Power Spectral Density

Operate Freq. Band		Directional Gain (dBi)
IEEE 802.11a	U-NII Band I	5.25
	U-NII Band III	5.62
IEEE 802.11ac 20 MHz	U-NII Band I	8.33
	U-NII Band III	8.69
IEEE 802.11ac 40 MHz	U-NII Band I	8.33
	U-NII Band III	8.69
IEEE 802.11ac 80 MHz	U-NII Band I	8.33
	U-NII Band III	8.69

5 Test Results

5.1. AC Power Conducted Emission Measurement

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

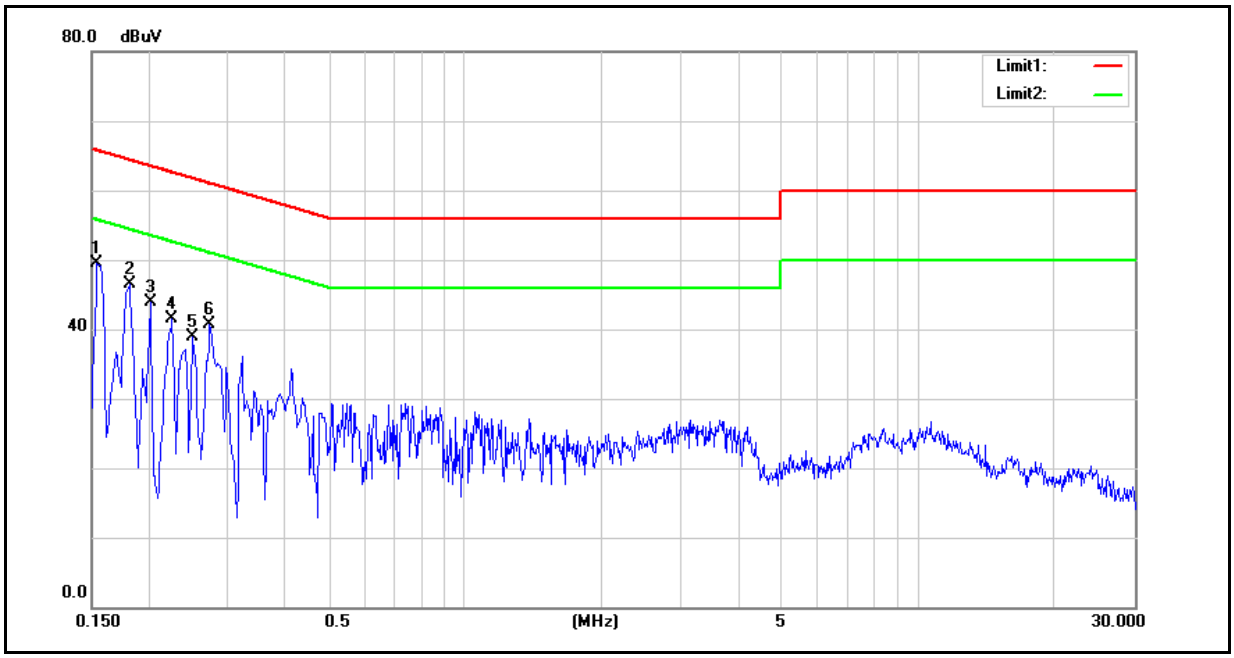


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	36.70	18.51	9.60	46.30	28.11	65.36	55.36	-19.06	-27.25	Pass
2	0.1820	32.92	17.18	9.60	42.52	26.78	64.39	54.39	-21.87	-27.61	Pass
3	0.2060	28.97	11.31	9.60	38.57	20.91	63.37	53.37	-24.80	-32.46	Pass
4	0.2140	29.82	13.46	9.60	39.42	23.06	63.05	53.05	-23.63	-29.99	Pass
5	0.2300	28.67	16.11	9.60	38.27	25.71	62.45	52.45	-24.18	-26.74	Pass
6	0.2820	26.37	15.84	9.60	35.97	25.44	60.76	50.76	-24.79	-25.32	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

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



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1540	37.49	18.63	9.71	47.20	28.34	65.78	55.78	-18.58	-27.44	Pass
2	0.1820	33.34	17.89	9.70	43.04	27.59	64.39	54.39	-21.35	-26.80	Pass
3	0.2020	30.82	15.13	9.70	40.52	24.83	63.53	53.53	-23.01	-28.70	Pass
4	0.2260	29.42	17.88	9.70	39.12	27.58	62.60	52.60	-23.48	-25.02	Pass
5	0.2500	28.99	18.24	9.70	38.69	27.94	61.76	51.76	-23.07	-23.82	Pass
6	0.2740	26.92	15.42	9.70	36.62	25.12	61.00	51.00	-24.38	-25.88	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

5.2. Transmitter Radiated Emissions Measurement

Below 1 GHz

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
280.2600	46.00	-4.27	41.73	46.00	-4.27	QP	H
360.7700	41.32	-2.76	38.56	46.00	-7.44	QP	H
600.3600	38.81	2.48	41.29	46.00	-4.71	QP	H
760.4100	37.85	5.71	43.56	46.00	-2.44	QP	H
839.9500	37.93	6.87	44.80	46.00	-1.20	QP	H
920.4600	35.69	8.21	43.90	46.00	-2.10	QP	H
500.4500	40.42	0.16	40.58	46.00	-5.42	QP	V
520.8200	42.07	0.52	42.59	46.00	-3.41	QP	V
600.3600	40.38	2.48	42.86	46.00	-3.14	QP	V
760.4100	37.53	5.71	43.24	46.00	-2.76	QP	V
840.9200	37.22	6.89	44.11	46.00	-1.89	QP	V
920.4600	35.72	8.21	43.93	46.00	-2.07	QP	V

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

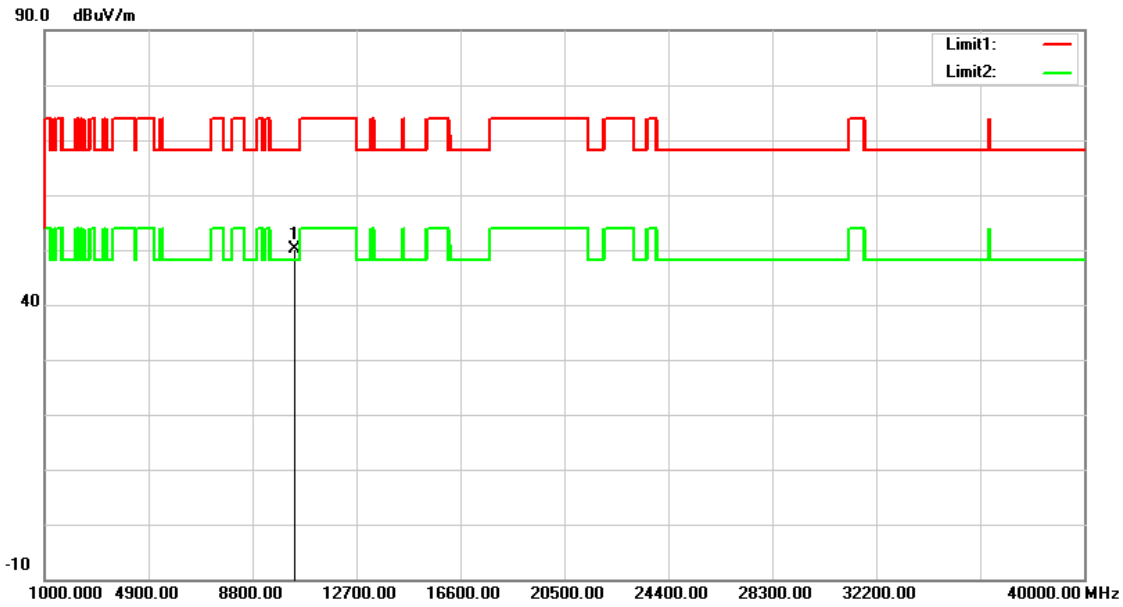
ex: 41.73= -4.27+46.00

2.Correction factor (dB/m) = Antenna Factor (dB/m) + 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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	33.42	16.66	50.08	68.20	-18.12	peak

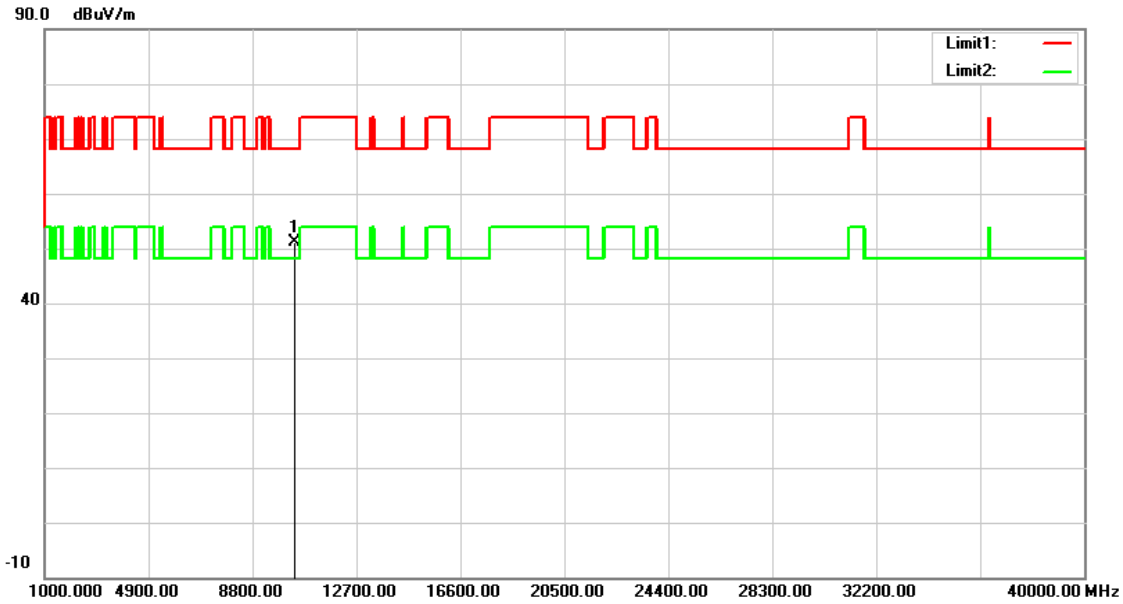
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

ex: 50.08= 16.66+33.42

2.Correction factor (dB/m) = Antenna Factor (dB/m) + 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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	34.47	16.66	51.13	68.20	-17.07	peak

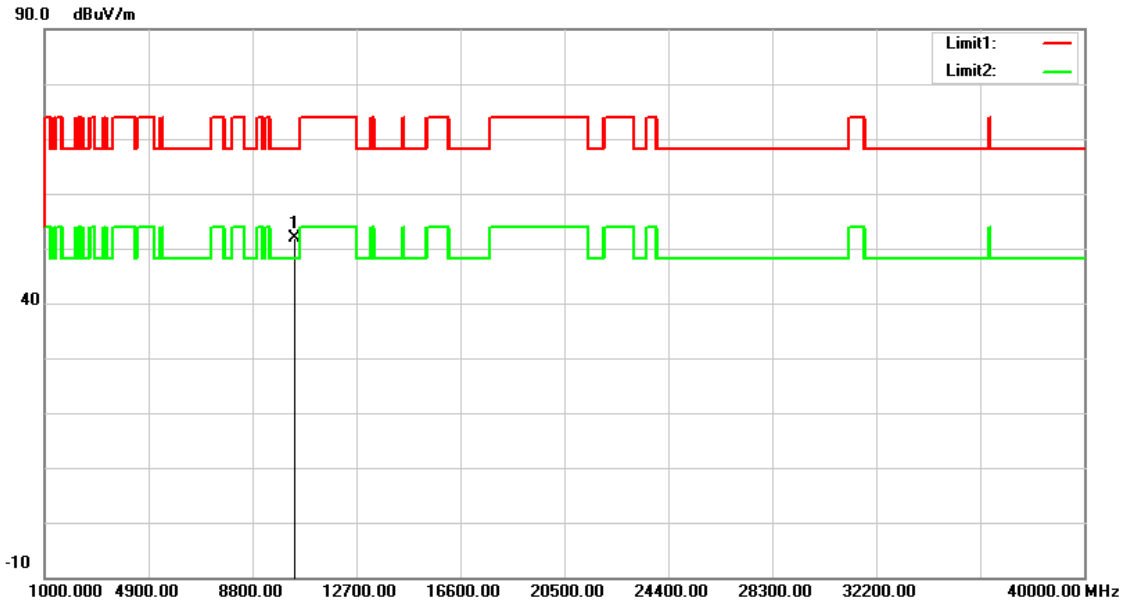
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

ex: 51.13= 16.66+34.47

2.Correction factor (dB/m) = Antenna Factor (dB/m) + 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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



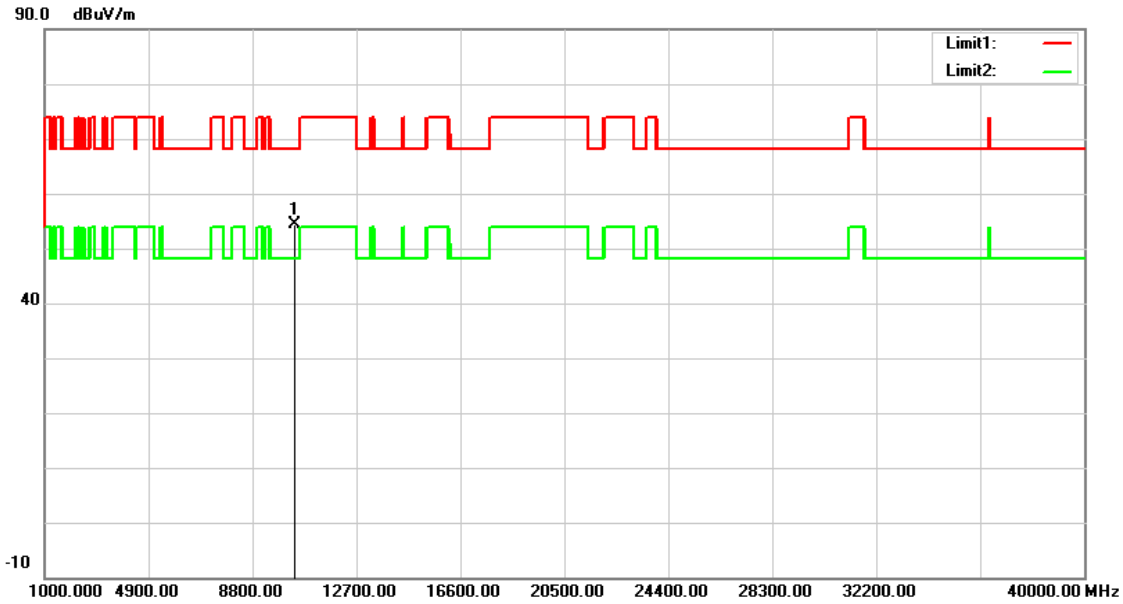
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	35.20	16.79	51.99	68.20	-16.21	peak

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:	5200 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



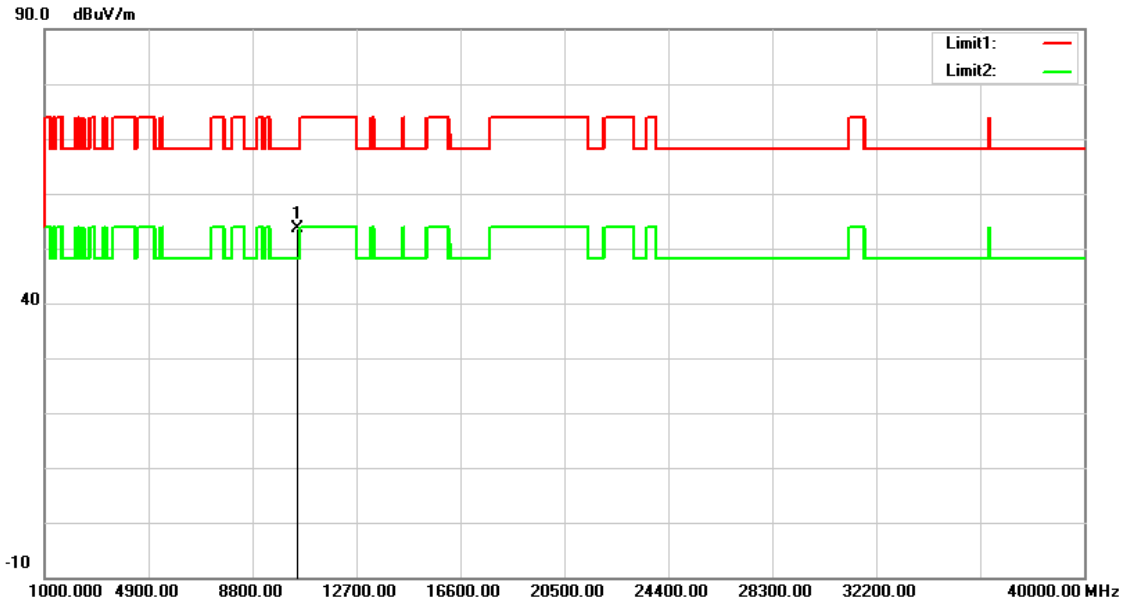
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	37.61	16.79	54.40	68.20	-13.80	peak

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:	5240 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



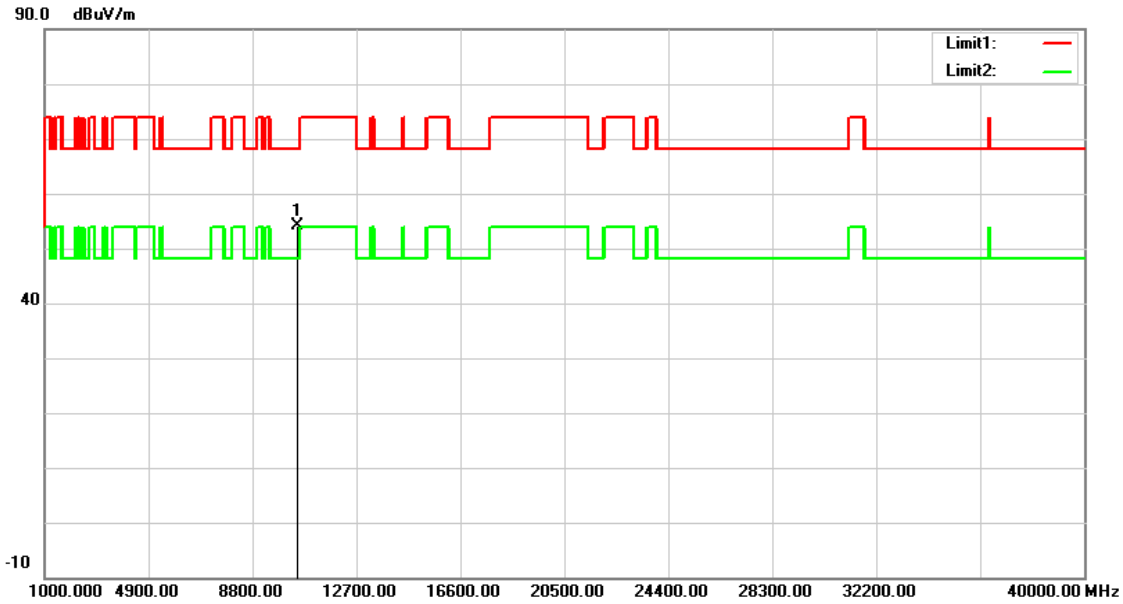
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	36.62	17.05	53.67	68.20	-14.53	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5240 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



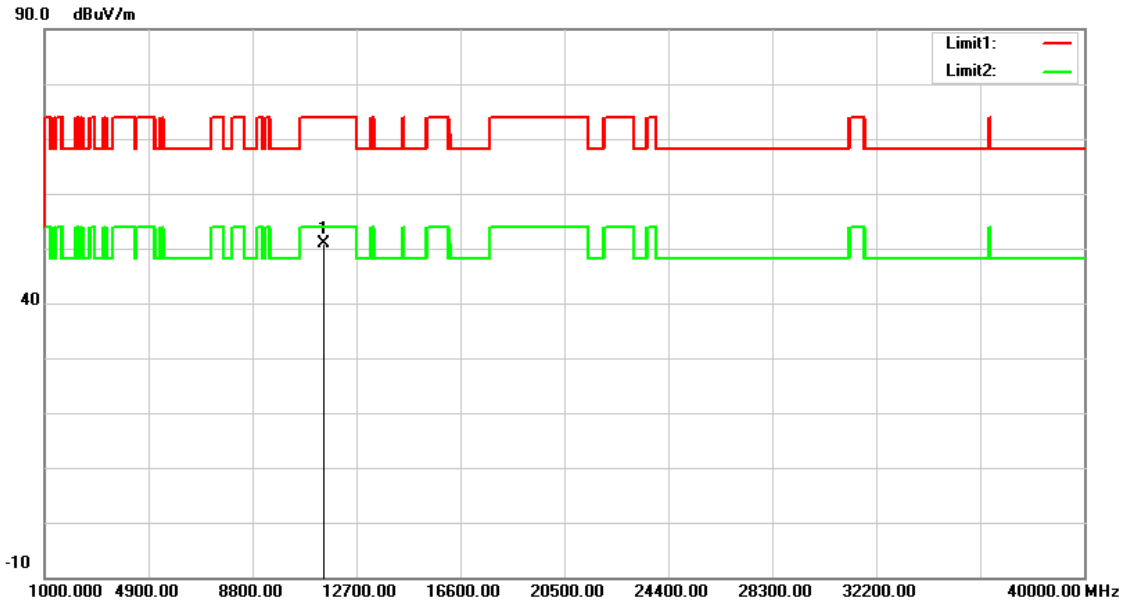
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	37.00	17.05	54.05	68.20	-14.15	peak

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:	5745 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



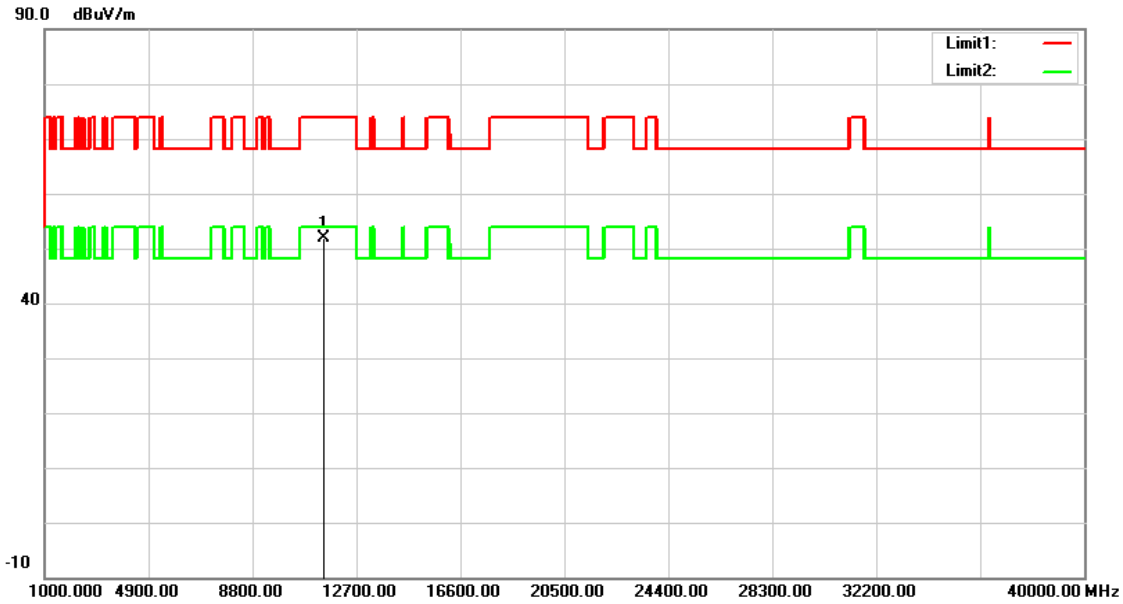
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	32.32	18.68	51.00	74.00	-23.00	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



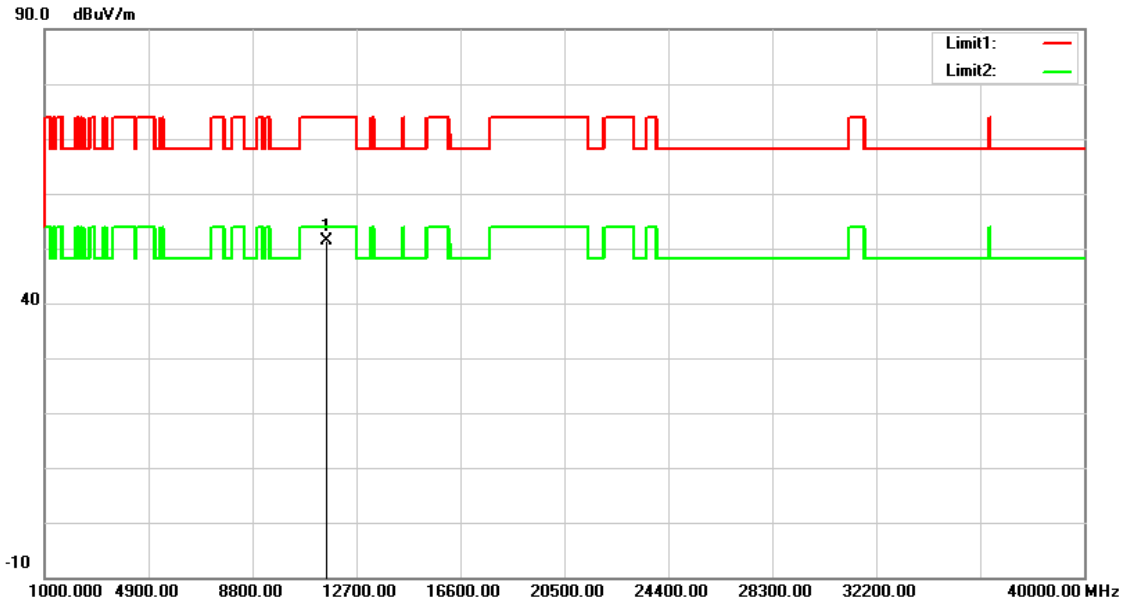
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	33.19	18.68	51.87	74.00	-22.13	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



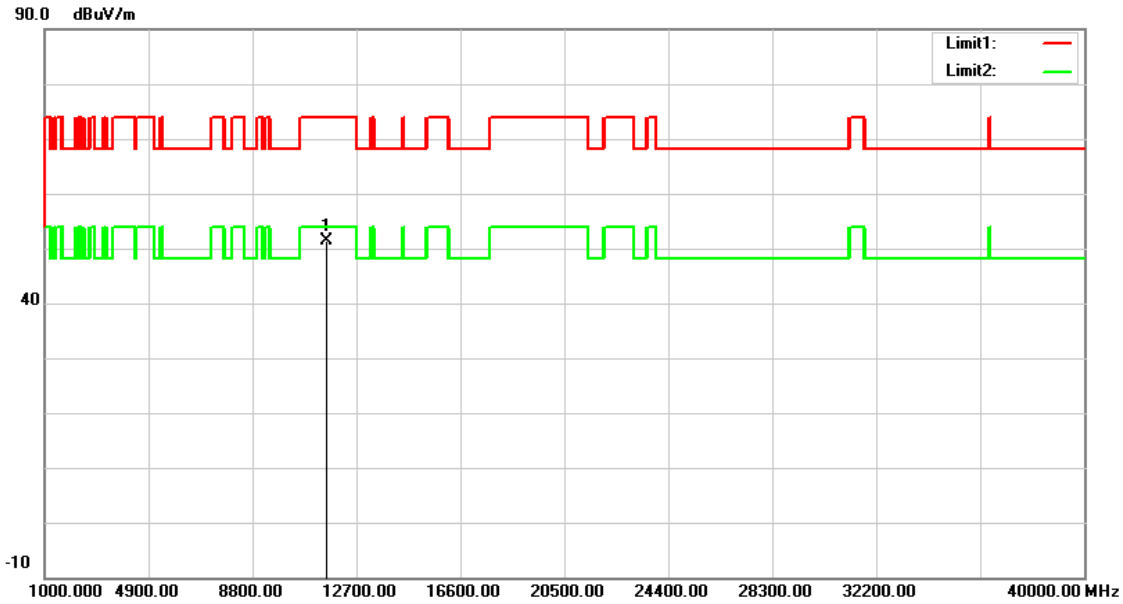
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	32.80	18.60	51.40	74.00	-22.60	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5785 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



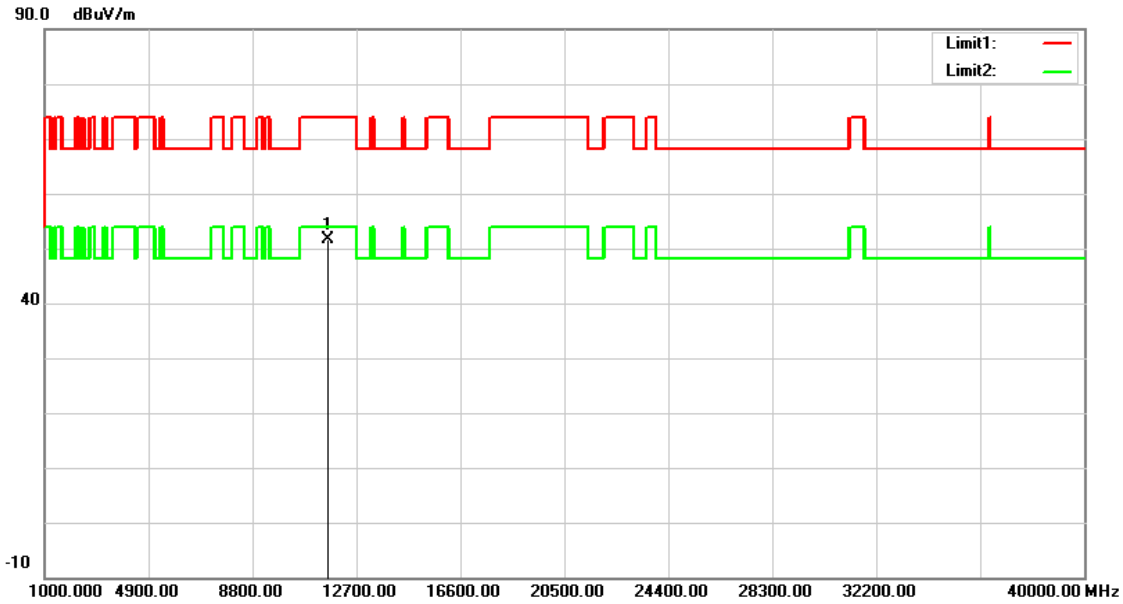
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	32.66	18.60	51.26	74.00	-22.74	peak

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

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

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

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



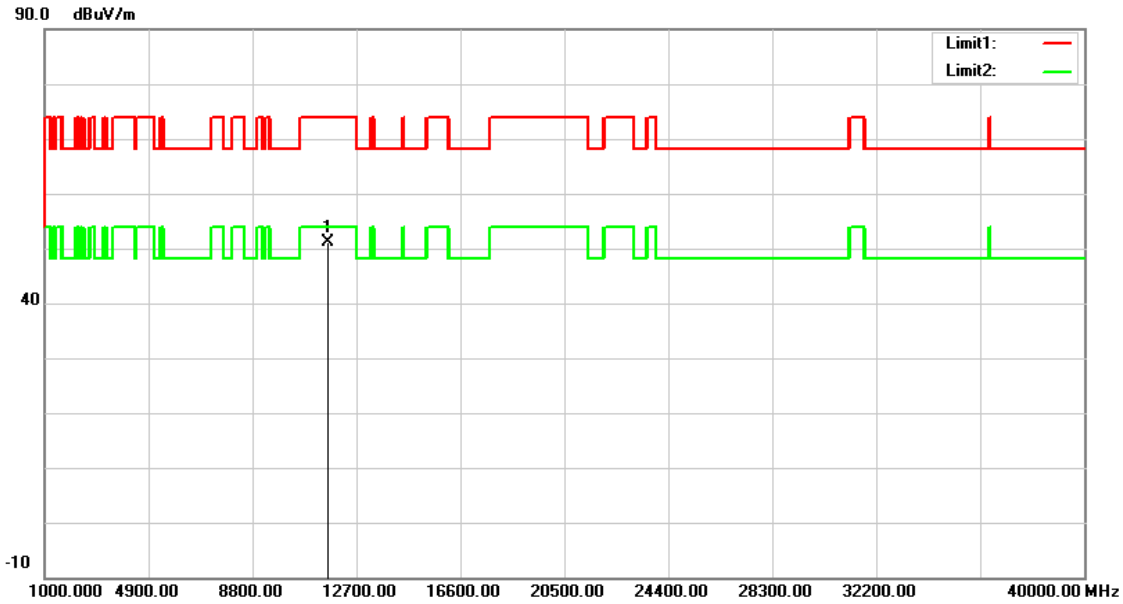
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	33.18	18.50	51.68	74.00	-22.32	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



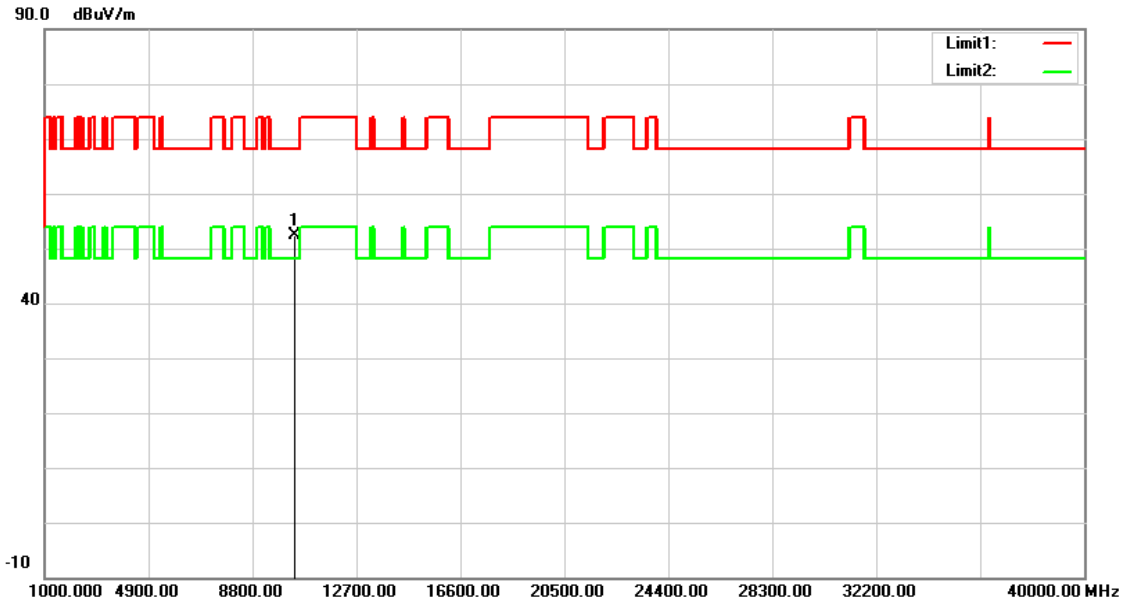
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	32.75	18.50	51.25	74.00	-22.75	peak

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:	5180 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



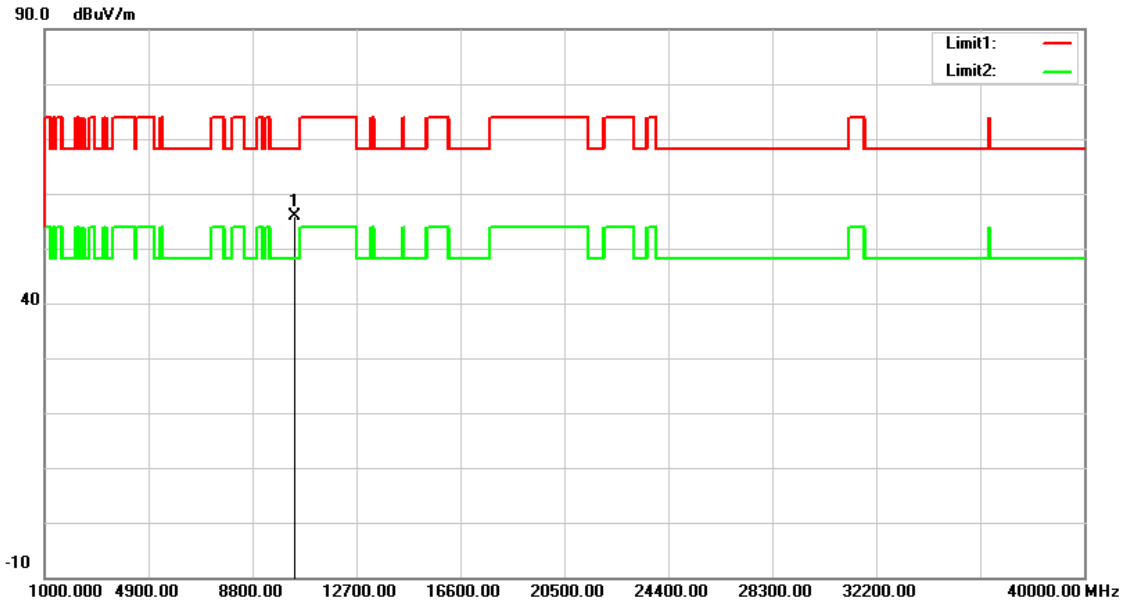
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	35.81	16.66	52.47	68.20	-15.73	peak

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:	5180 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



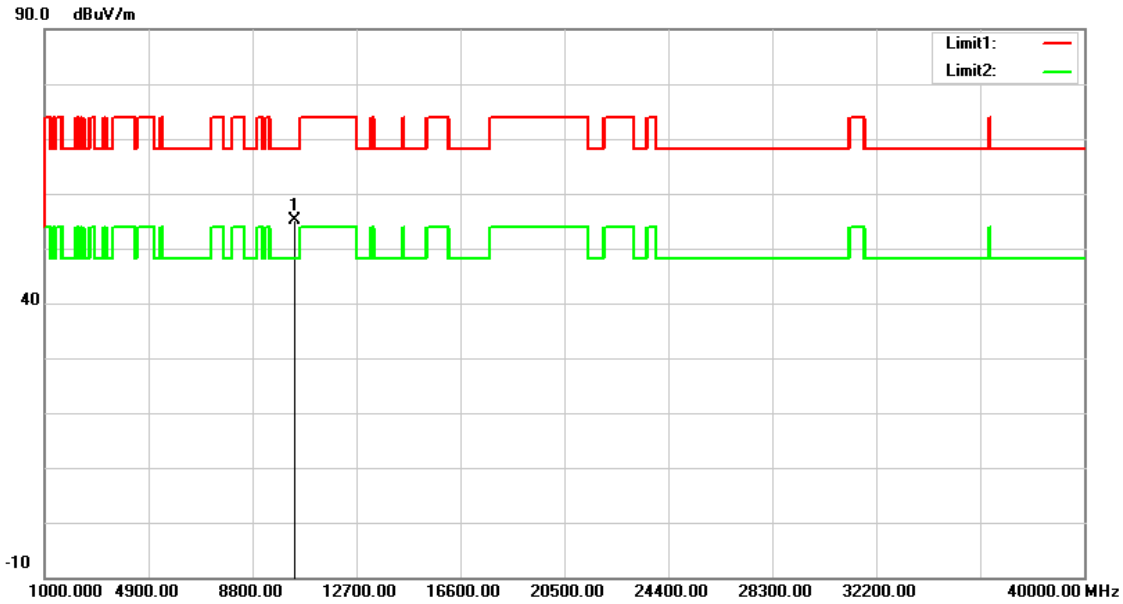
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	39.22	16.66	55.88	68.20	-12.32	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



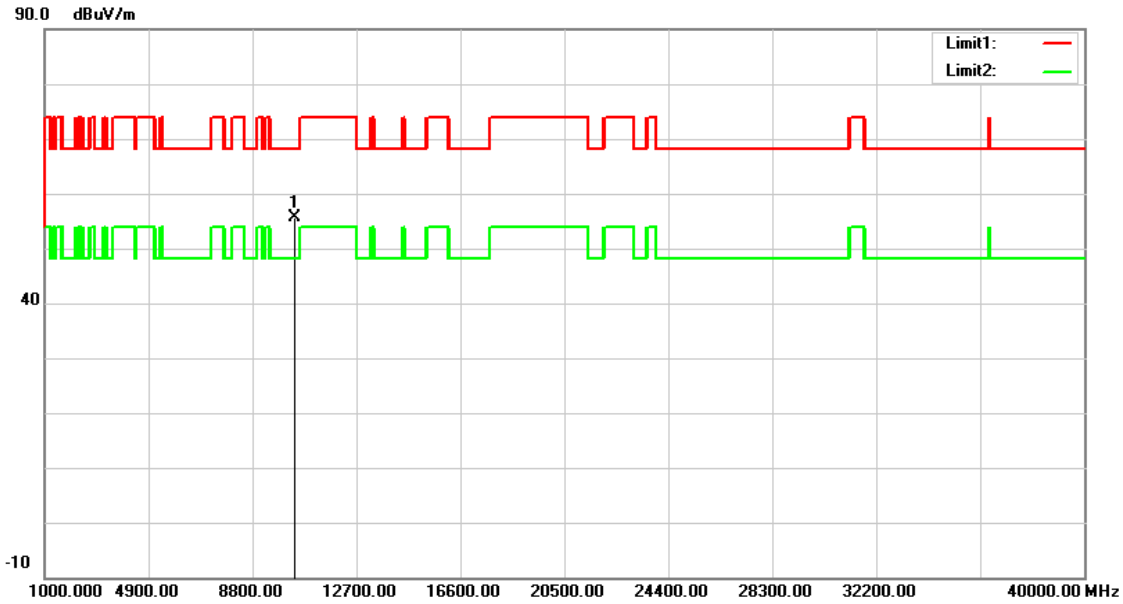
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	38.26	16.79	55.05	68.20	-13.15	peak

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:	5200 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



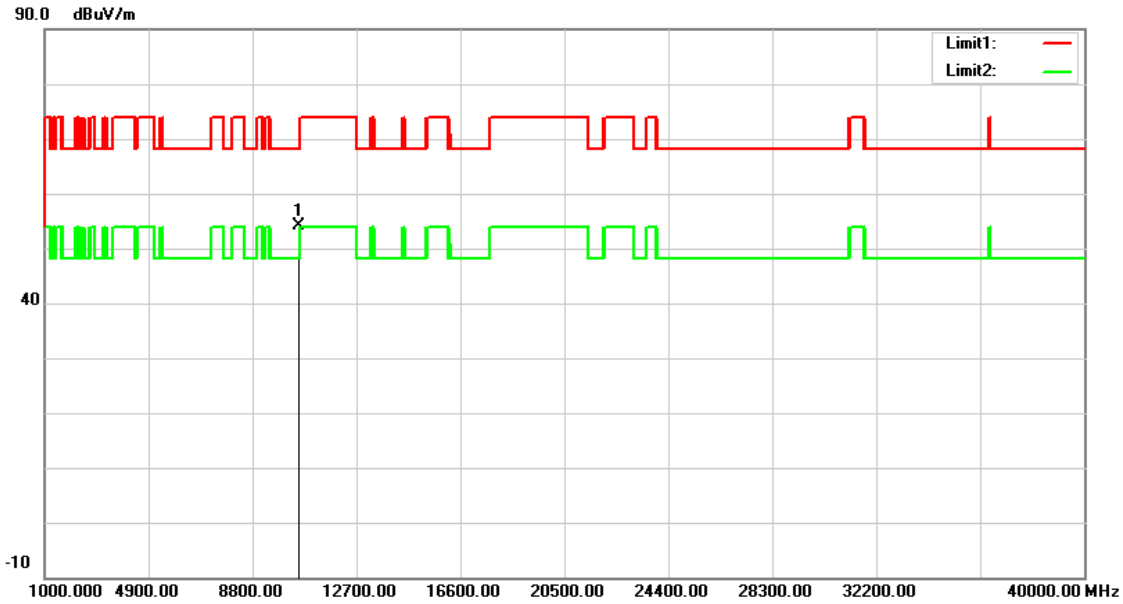
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	38.80	16.79	55.59	68.20	-12.61	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



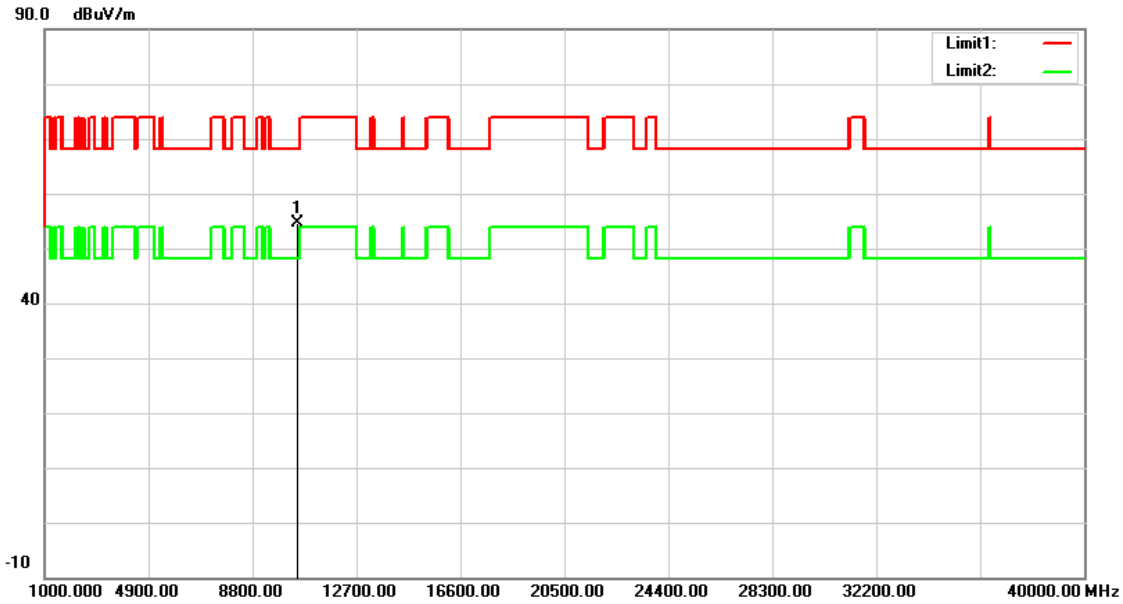
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10486.000	36.97	17.06	54.03	68.20	-14.17	peak

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:	5240 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



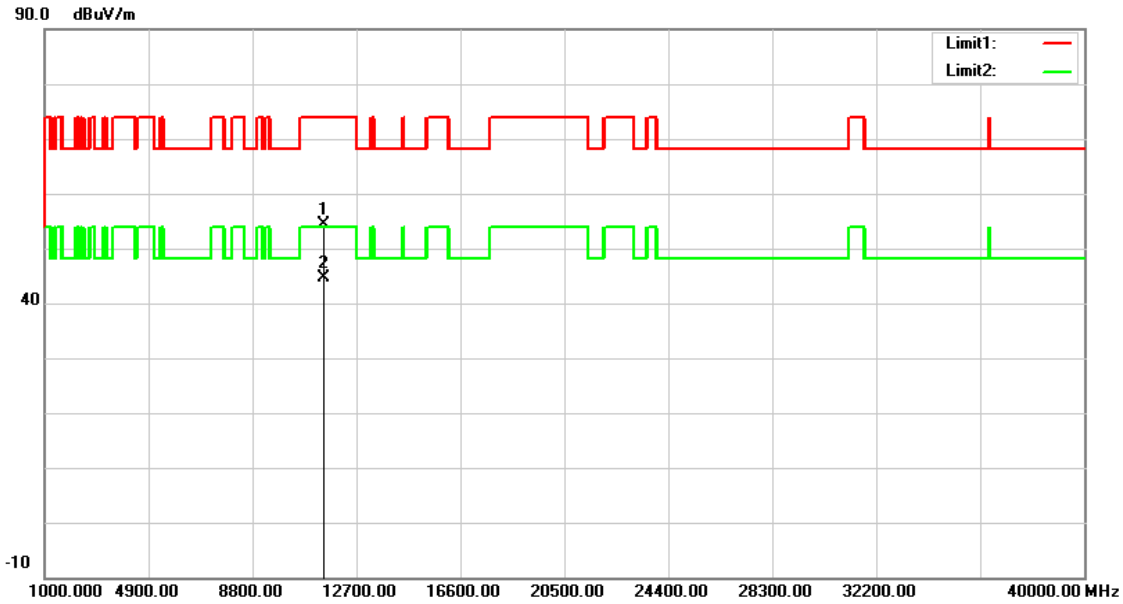
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	37.56	17.05	54.61	68.20	-13.59	peak

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

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

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

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



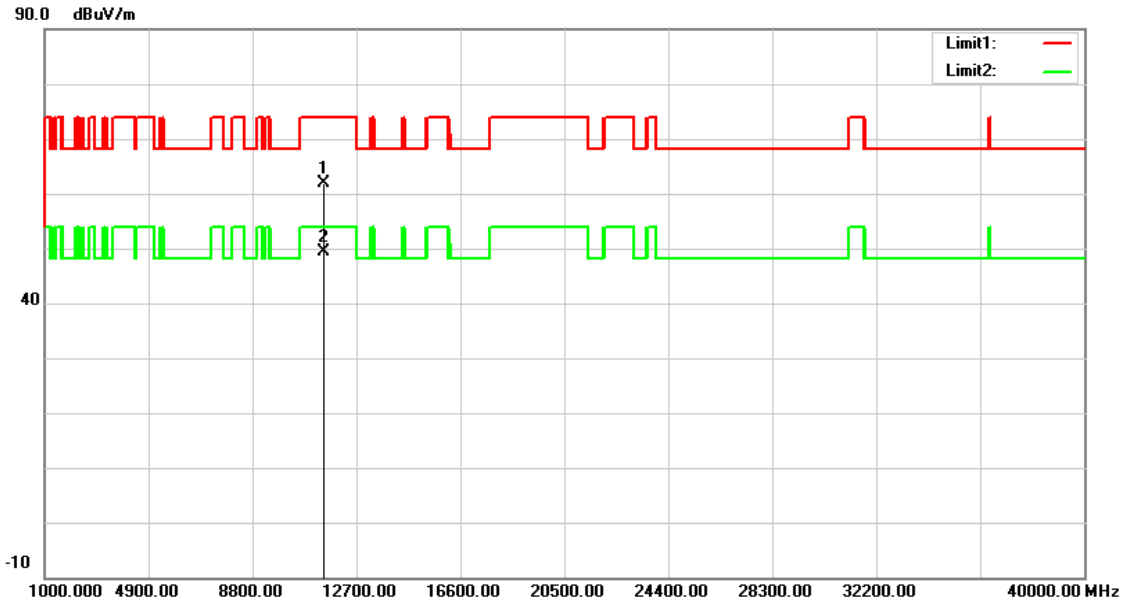
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	35.63	18.68	54.31	74.00	-19.69	peak
2	11490.000	26.06	18.68	44.74	54.00	-9.26	AVG

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

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

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

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



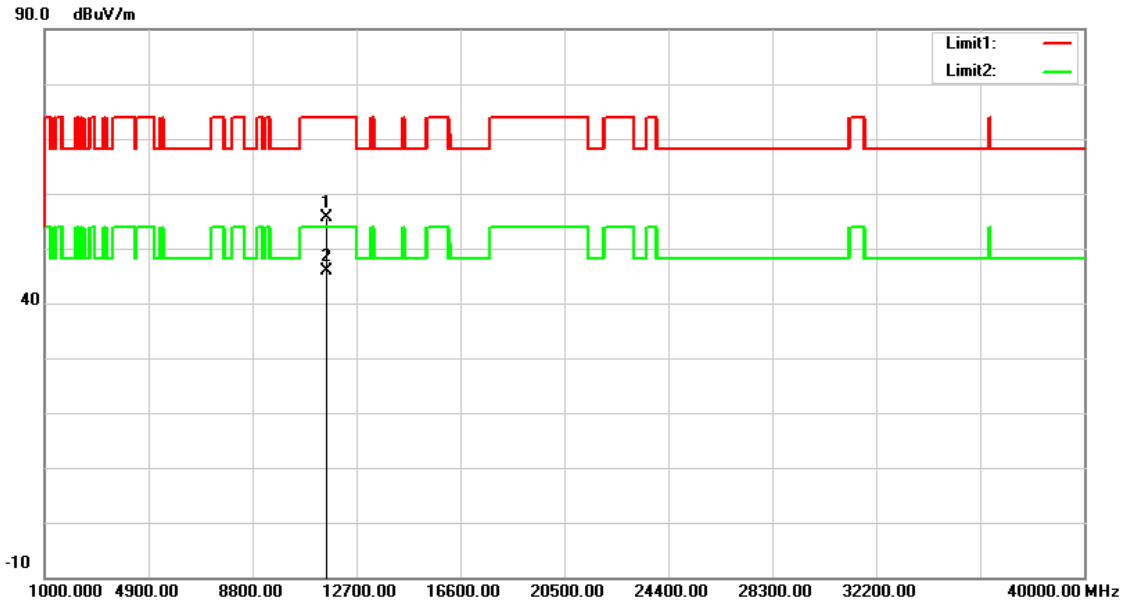
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	43.19	18.68	61.87	74.00	-12.13	peak
2	11490.000	30.82	18.68	49.50	54.00	-4.50	AVG

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:	5785 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



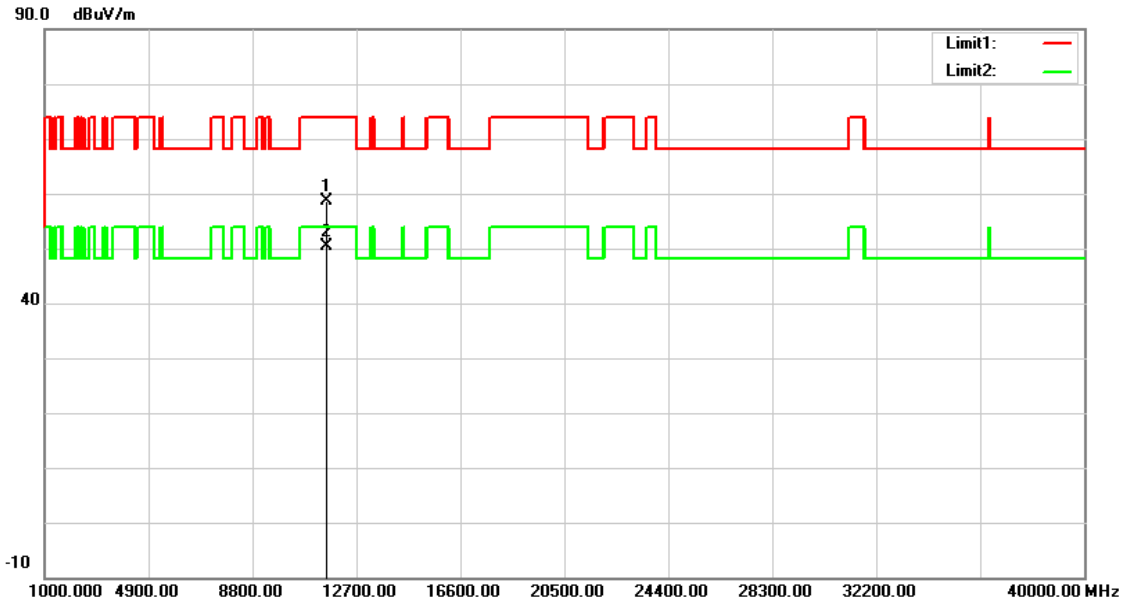
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	36.95	18.60	55.55	74.00	-18.45	peak
2	11570.000	27.36	18.60	45.96	54.00	-8.04	AVG

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:	5785 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



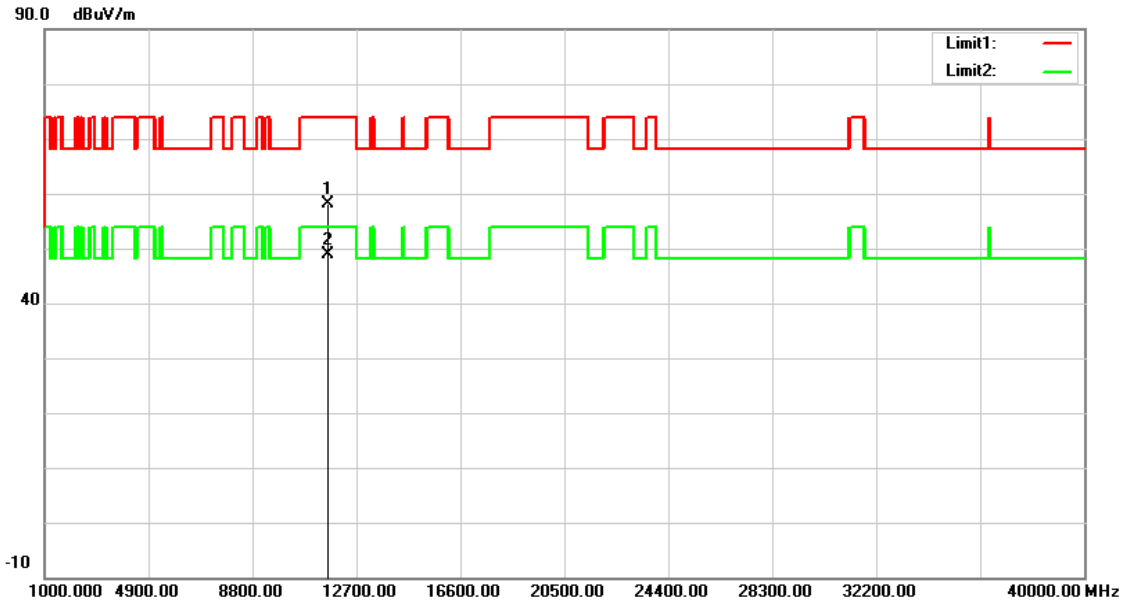
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	40.12	18.60	58.72	74.00	-15.28	peak
2	11570.000	31.90	18.60	50.50	54.00	-3.50	AVG

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:	5825 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



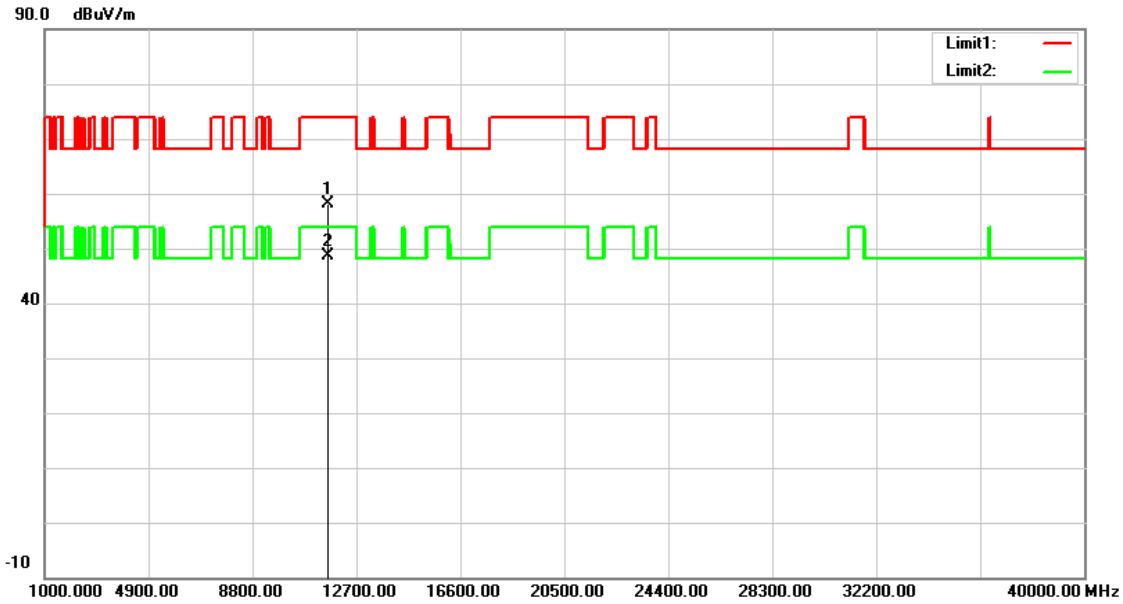
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	39.75	18.50	58.25	74.00	-15.75	peak
2	11650.000	30.28	18.50	48.78	54.00	-5.22	AVG

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

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

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

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



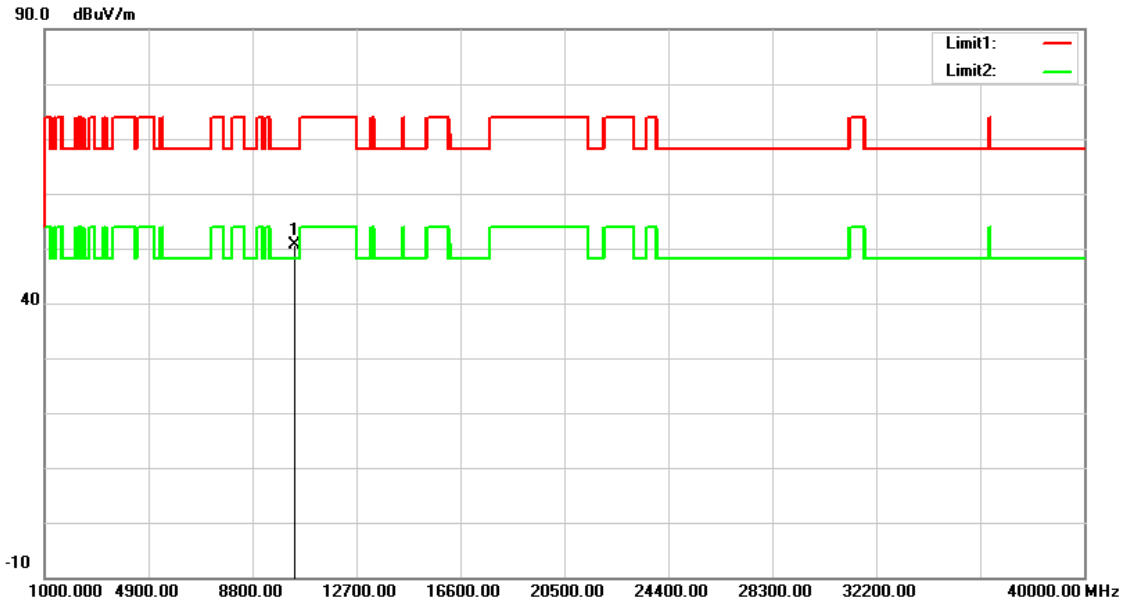
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	39.52	18.50	58.02	74.00	-15.98	peak
2	11650.000	30.11	18.50	48.61	54.00	-5.39	AVG

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:	5190 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



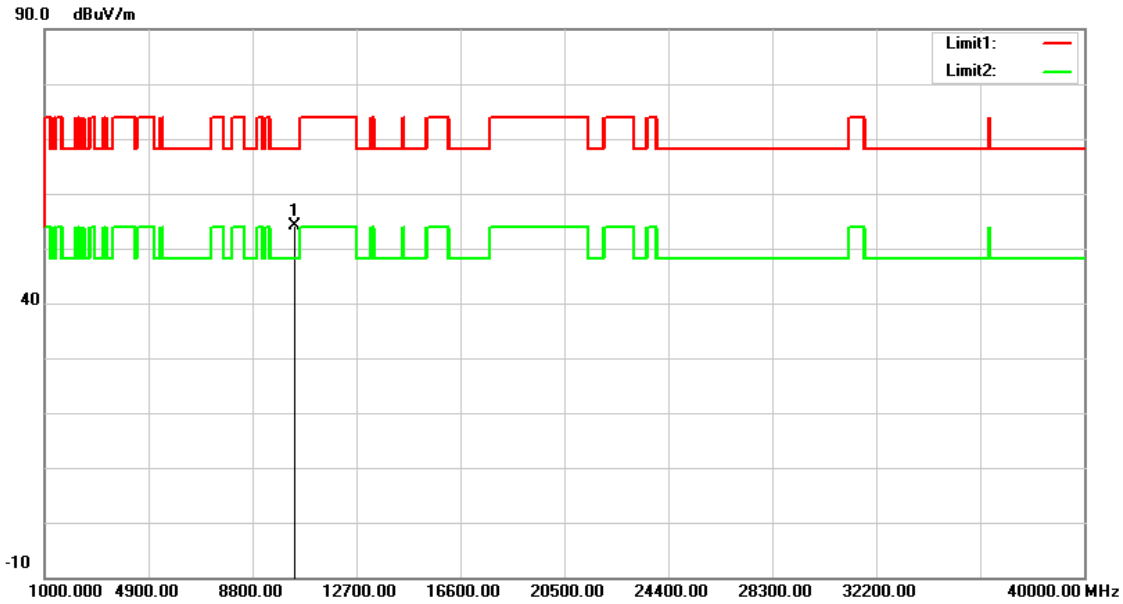
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	33.98	16.72	50.70	68.20	-17.50	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



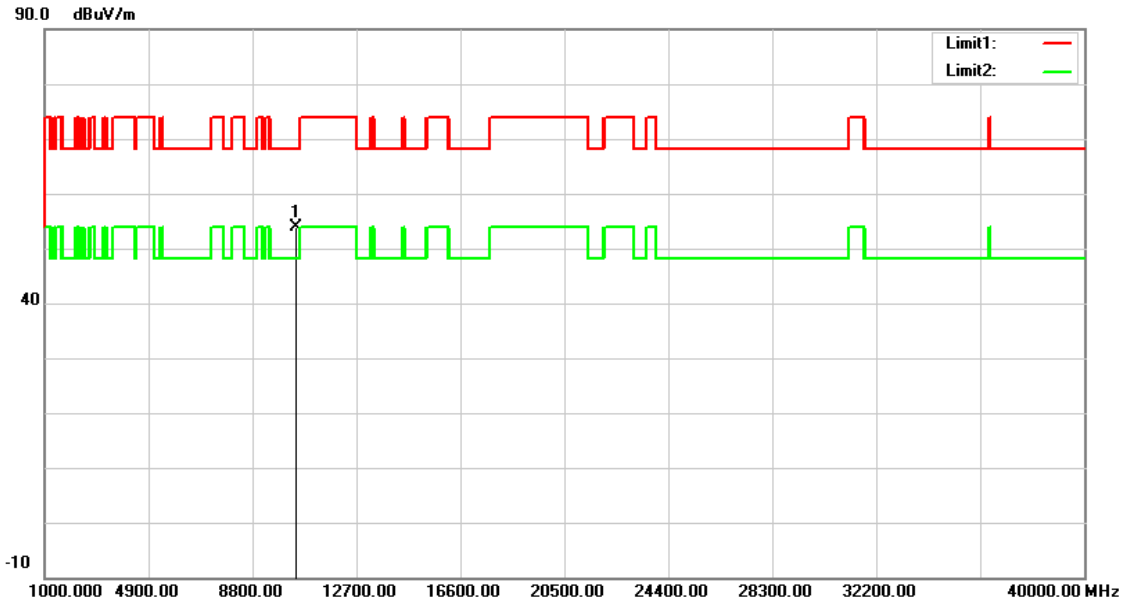
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	37.29	16.72	54.01	68.20	-14.19	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



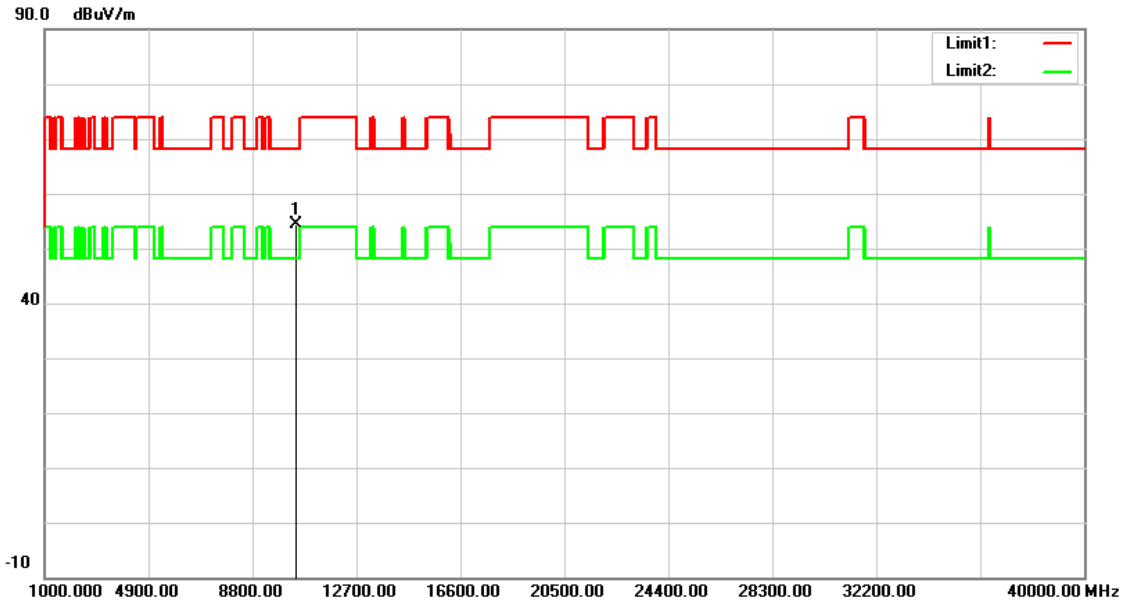
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	36.80	16.98	53.78	68.20	-14.42	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



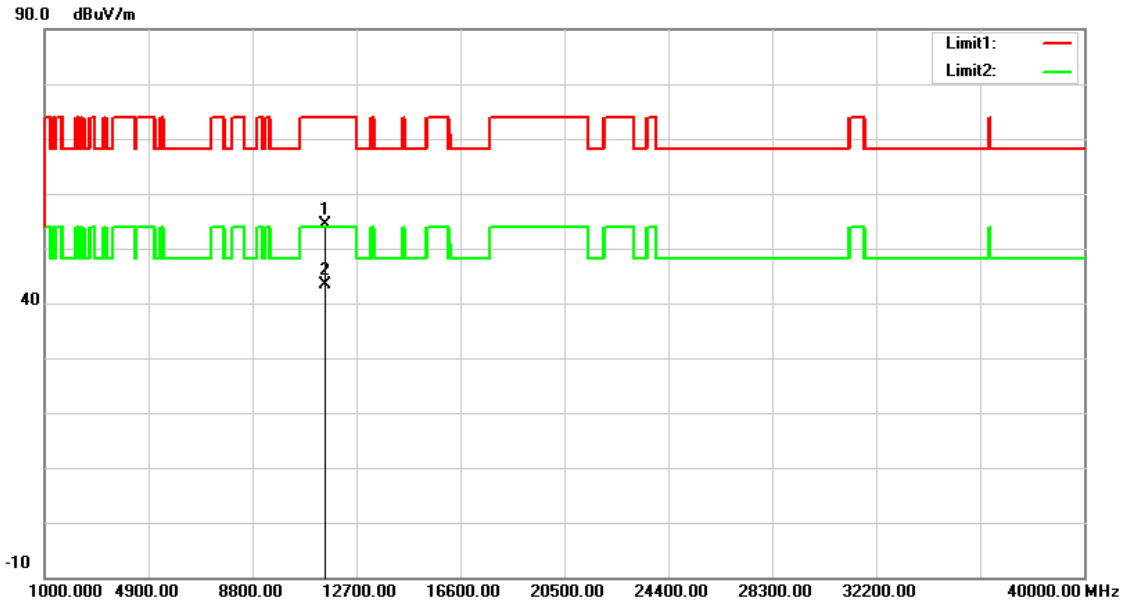
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	37.41	16.98	54.39	68.20	-13.81	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



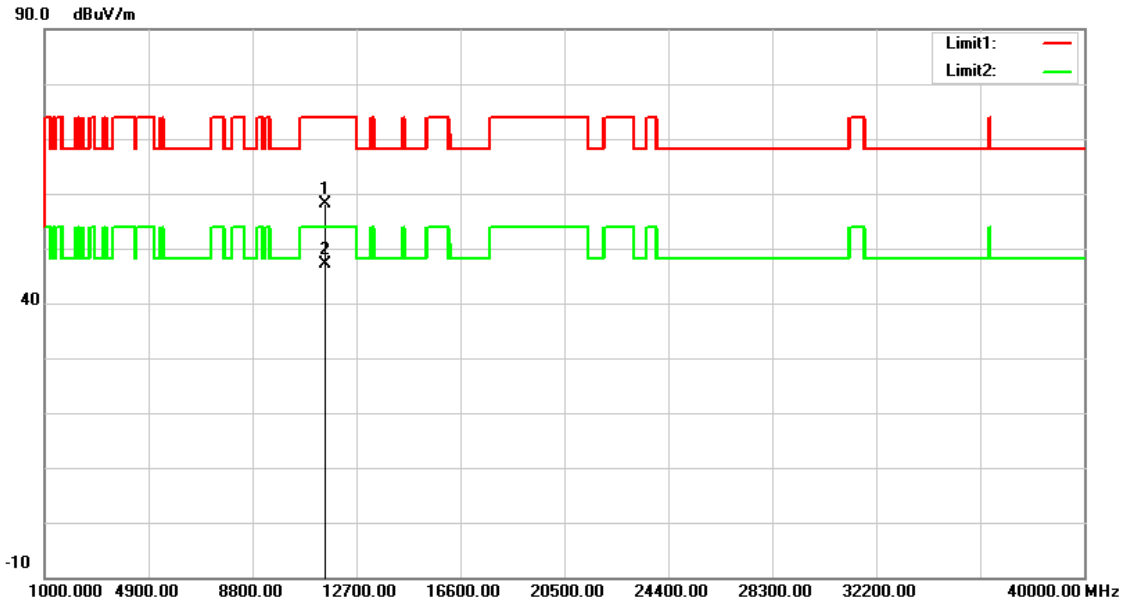
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	35.58	18.68	54.26	74.00	-19.74	peak
2	11510.000	24.66	18.68	43.34	54.00	-10.66	AVG

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



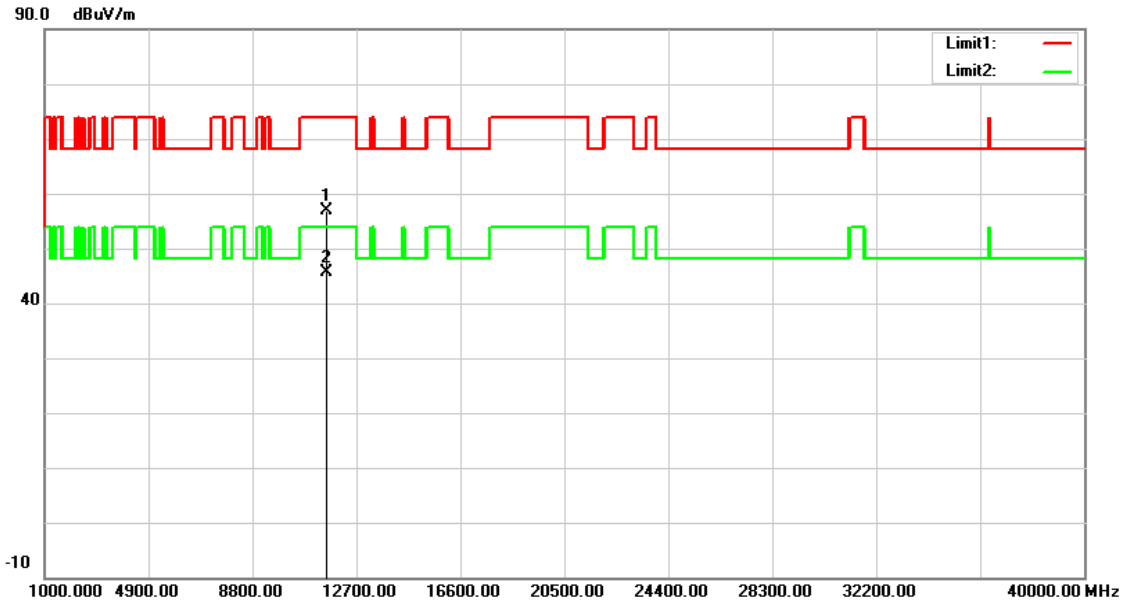
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	39.45	18.68	58.13	74.00	-15.87	peak
2	11510.000	28.39	18.68	47.07	54.00	-6.93	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5795 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



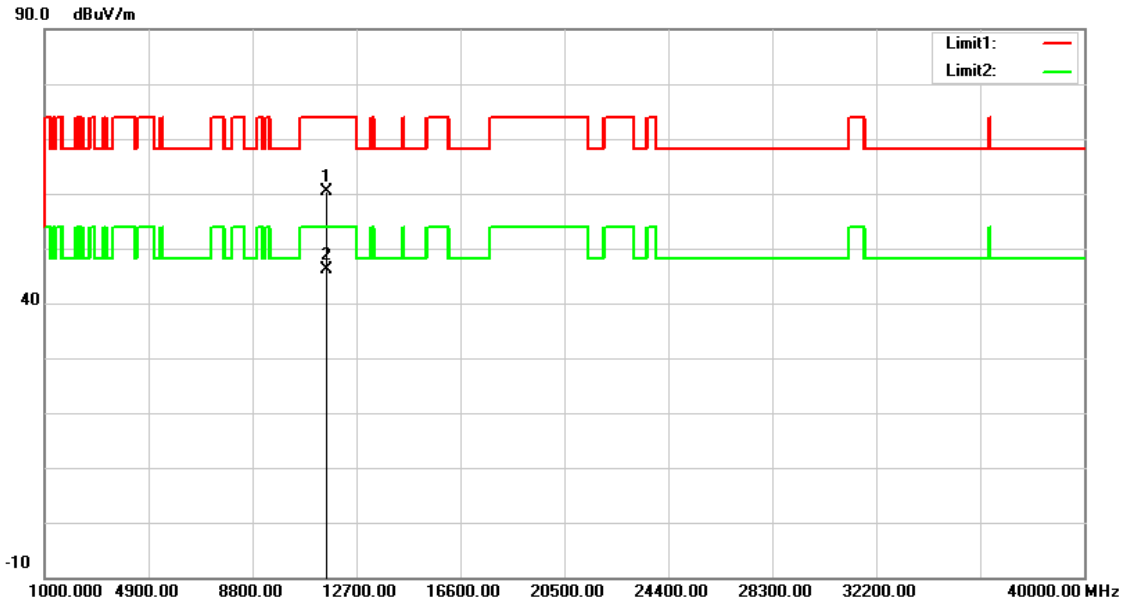
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	38.36	18.58	56.94	74.00	-17.06	peak
2	11590.000	27.07	18.58	45.65	54.00	-8.35	AVG

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:	5795 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



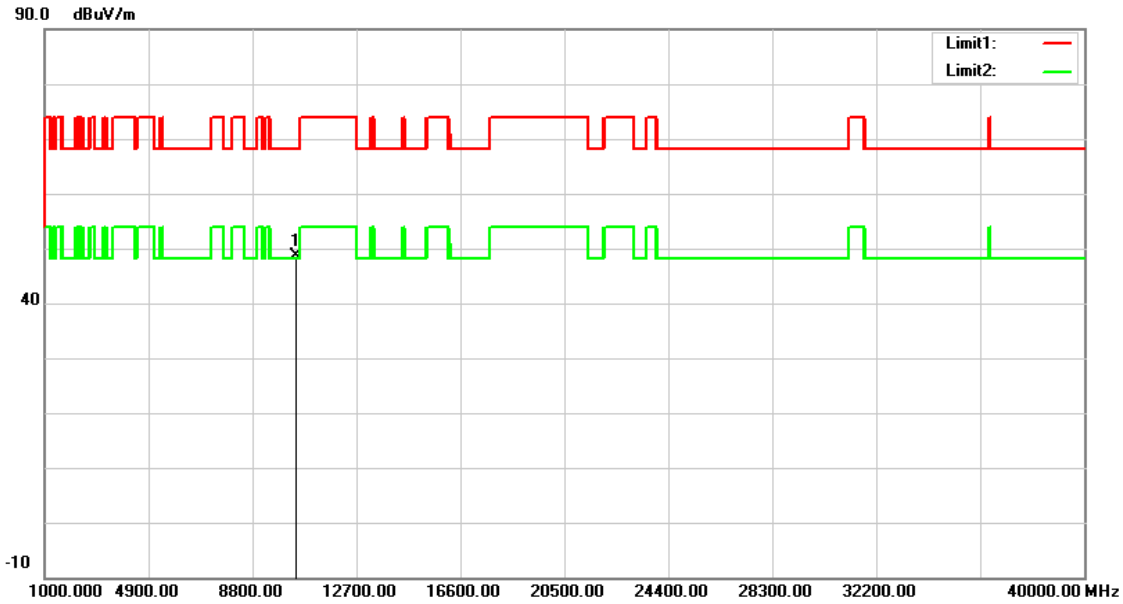
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	41.71	18.58	60.29	74.00	-13.71	peak
2	11590.000	27.54	18.58	46.12	54.00	-7.88	AVG

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:	5210 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



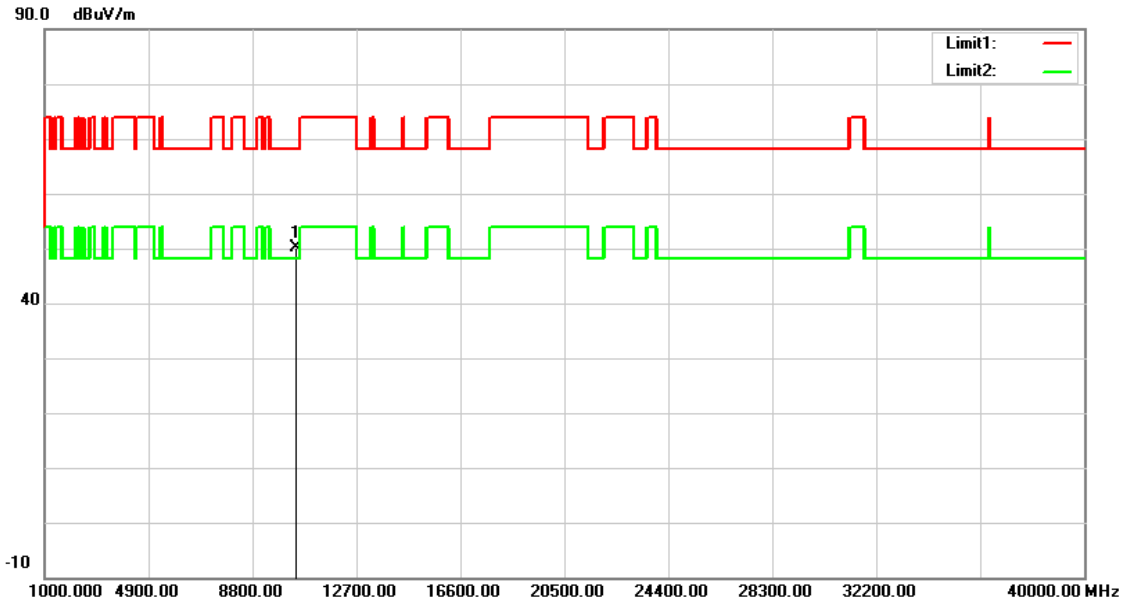
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	31.67	16.85	48.52	68.20	-19.68	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



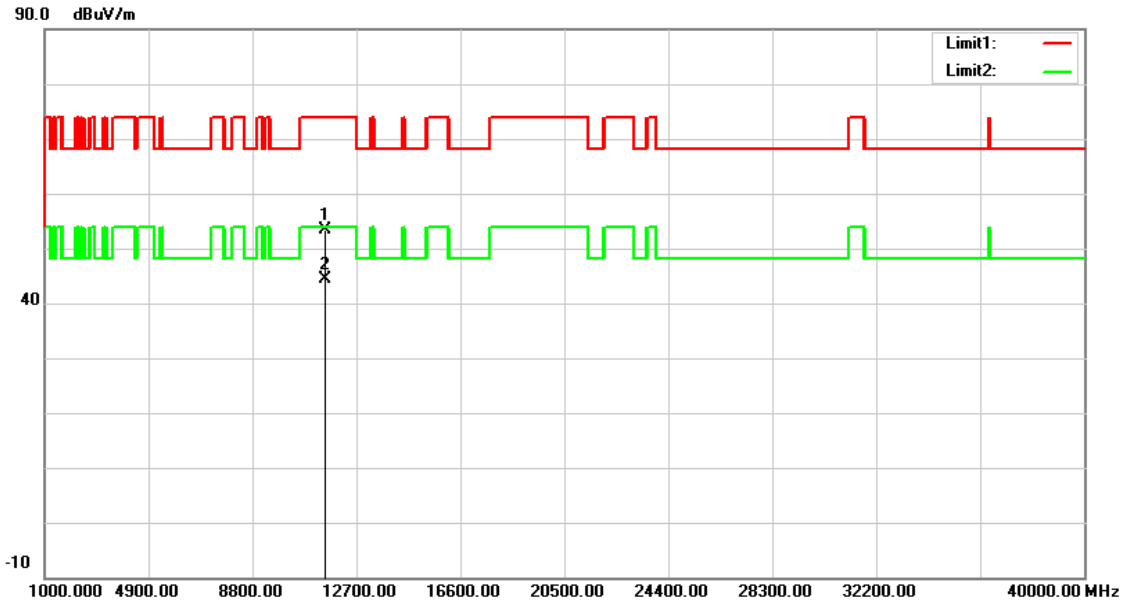
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	33.30	16.85	50.15	68.20	-18.05	peak

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:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



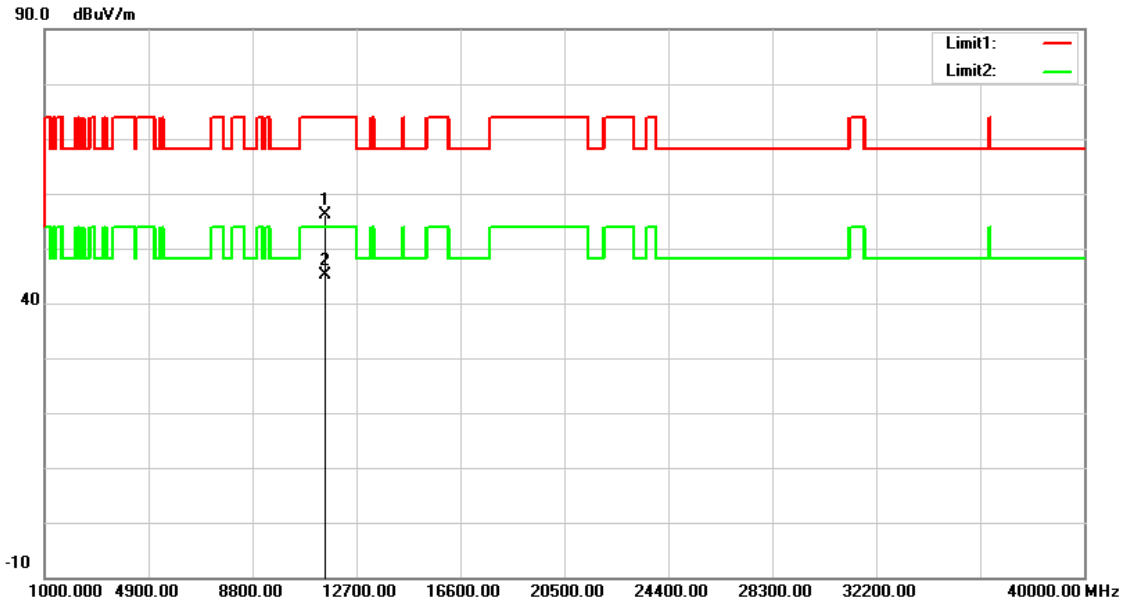
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	34.73	18.62	53.35	74.00	-20.65	peak
2	11550.000	25.70	18.62	44.32	54.00	-9.68	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	5775 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	37.40	18.62	56.02	74.00	-17.98	peak
2	11550.000	26.59	18.62	45.21	54.00	-8.79	AVG

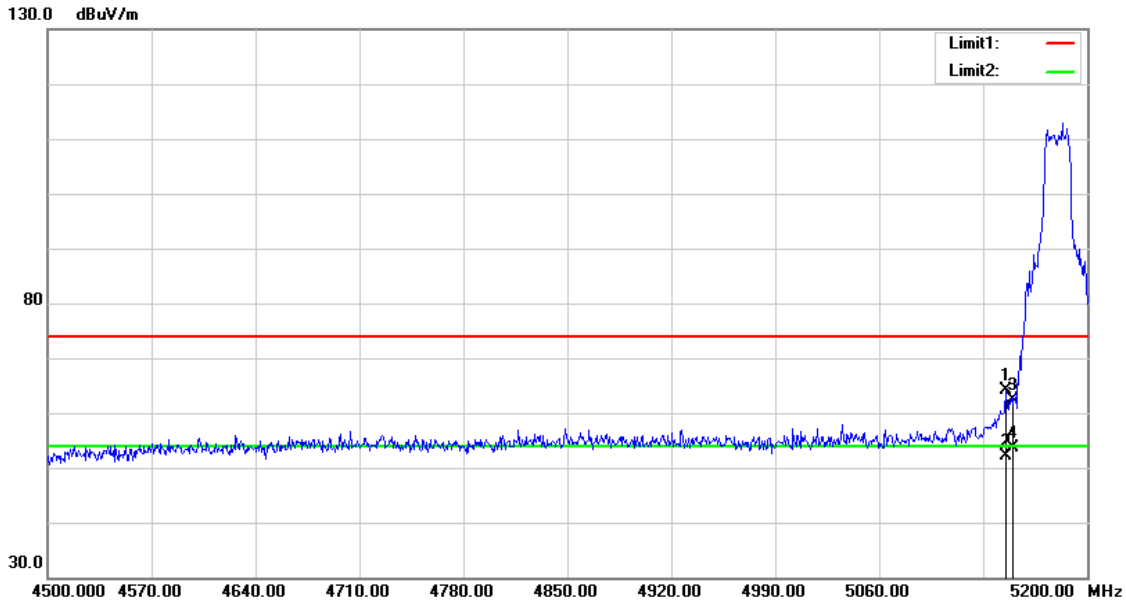
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



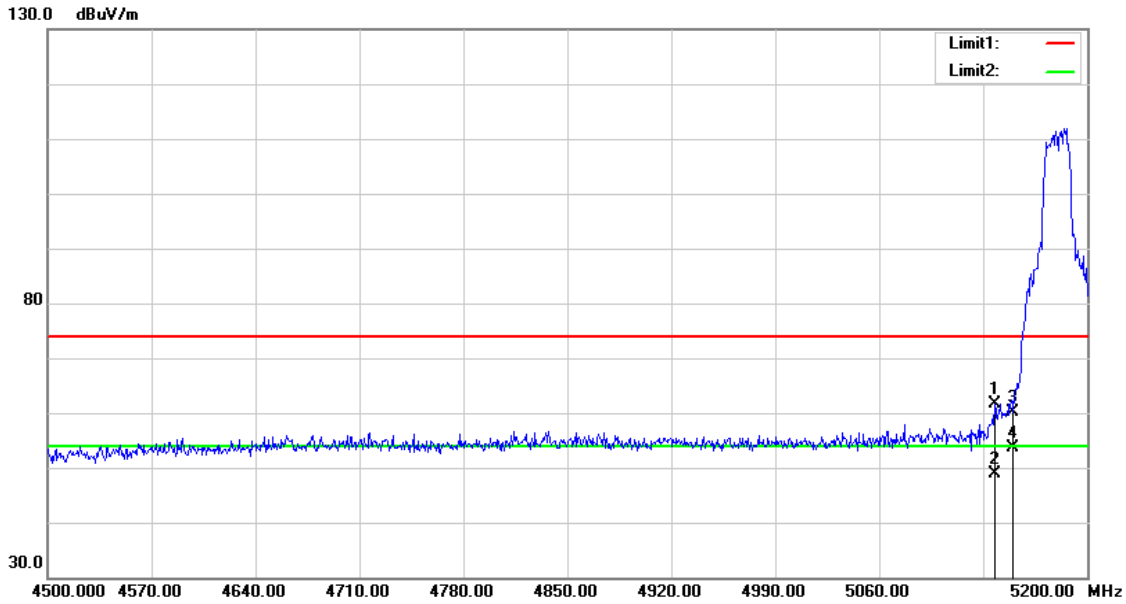
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5145.400	58.16	5.98	64.14	74.00	-9.86	peak
2	5145.400	46.09	5.98	52.07	54.00	-1.93	AVG
3	5150.000	56.28	5.99	62.27	74.00	-11.73	peak
4	5150.000	47.64	5.99	53.63	54.00	-0.37	AVG

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



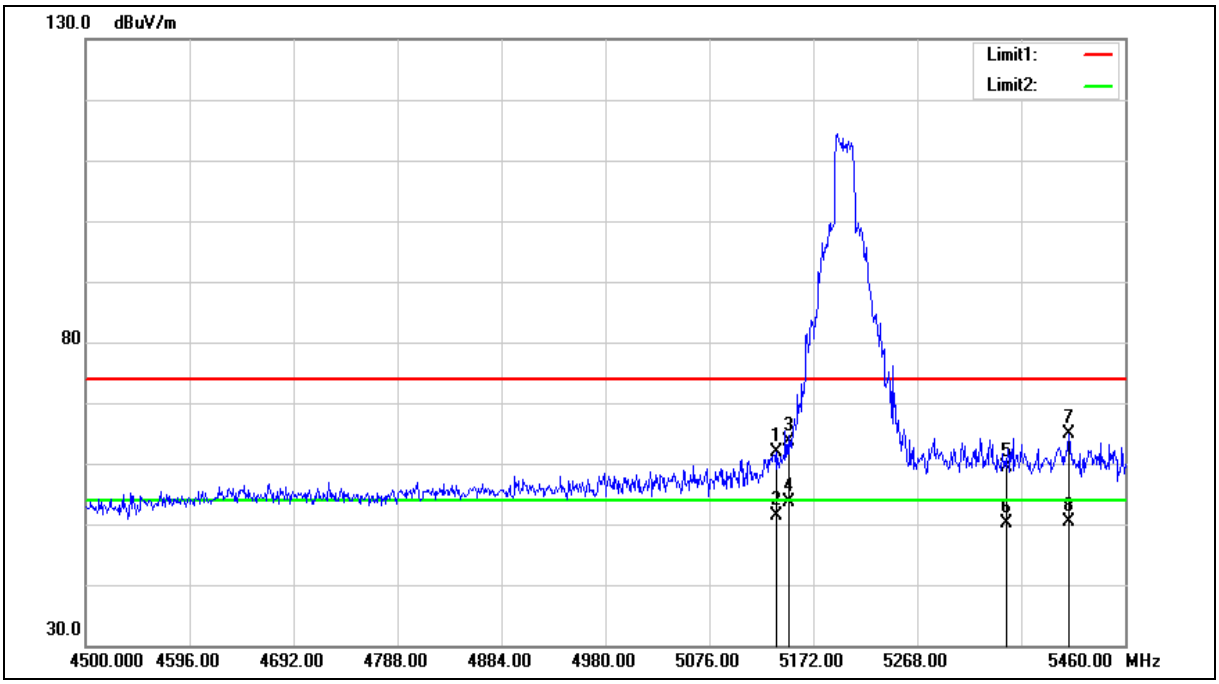
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5137.700	55.76	5.97	61.73	74.00	-12.27	peak
2	5137.700	43.00	5.97	48.97	54.00	-5.03	AVG
3	5150.000	54.23	5.99	60.22	74.00	-13.78	peak
4	5150.000	47.61	5.99	53.60	54.00	-0.40	AVG

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.(℃)/Hum.(%RH):	26(℃)/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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

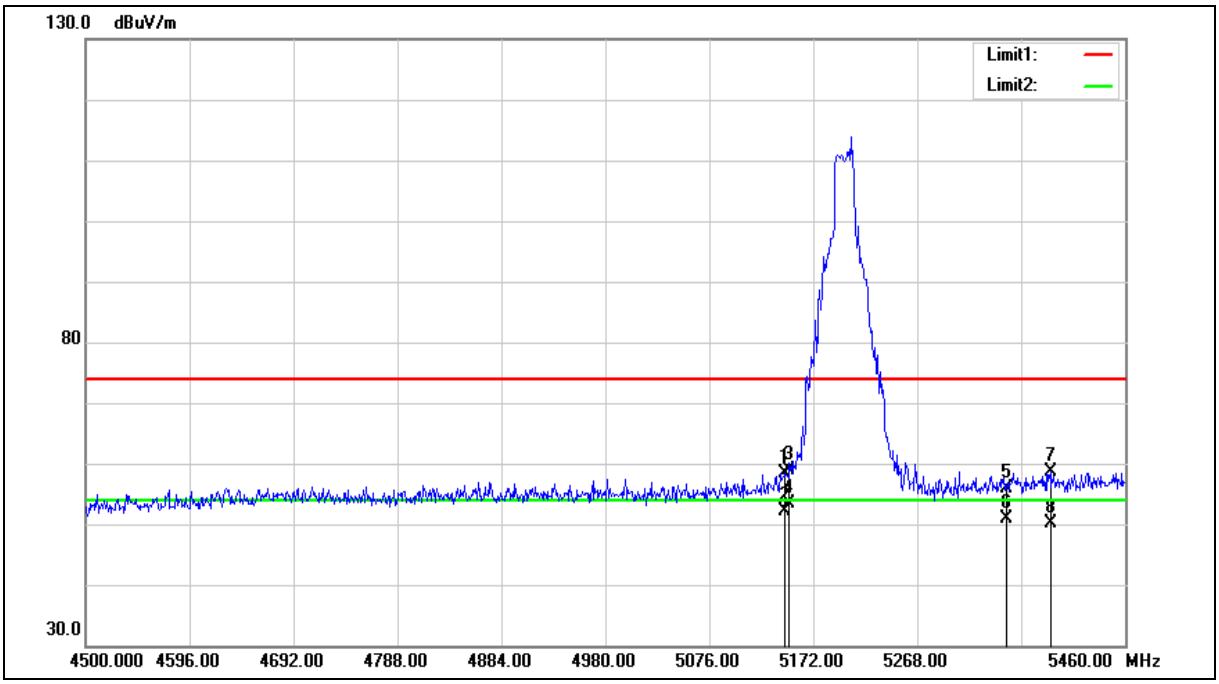
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5138.400	55.99	5.97	61.96	74.00	-12.04	peak
2	5138.400	45.43	5.97	51.40	54.00	-2.60	AVG
3	5150.000	57.54	5.99	63.53	74.00	-10.47	peak
4	5150.000	47.63	5.99	53.62	54.00	-0.38	AVG
5	5350.000	53.16	6.31	59.47	74.00	-14.53	peak
6	5350.000	43.82	6.31	50.13	54.00	-3.87	AVG
7	5408.160	58.44	6.40	64.84	74.00	-9.16	peak
8	5408.160	44.10	6.40	50.50	54.00	-3.50	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.(℃)/Hum.(%RH):	26(℃)/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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

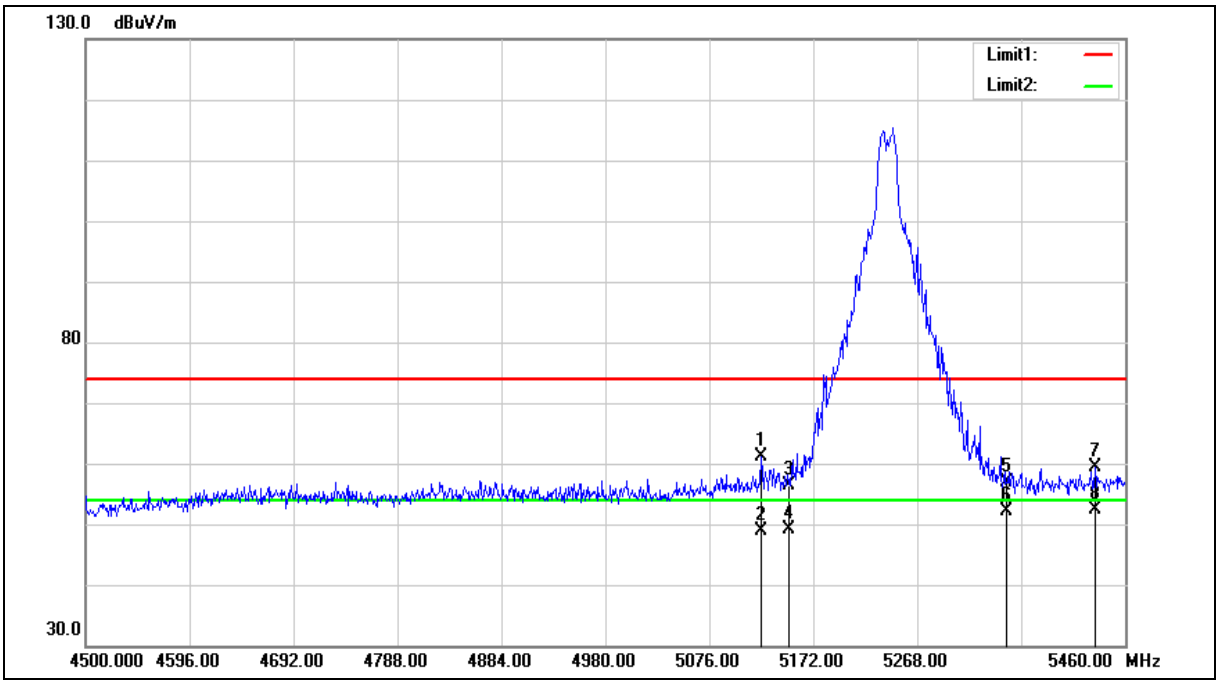
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.080	52.50	5.98	58.48	74.00	-15.52	peak
2	5146.080	46.22	5.98	52.20	54.00	-1.80	AVG
3	5150.000	52.80	5.99	58.79	74.00	-15.21	peak
4	5150.000	47.45	5.99	53.44	54.00	-0.56	AVG
5	5350.000	49.50	6.31	55.81	74.00	-18.19	peak
6	5350.000	44.54	6.31	50.85	54.00	-3.15	AVG
7	5390.880	52.19	6.38	58.57	74.00	-15.43	peak
8	5390.880	43.73	6.38	50.11	54.00	-3.89	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.(℃)/Hum.(%RH):	26(℃)/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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

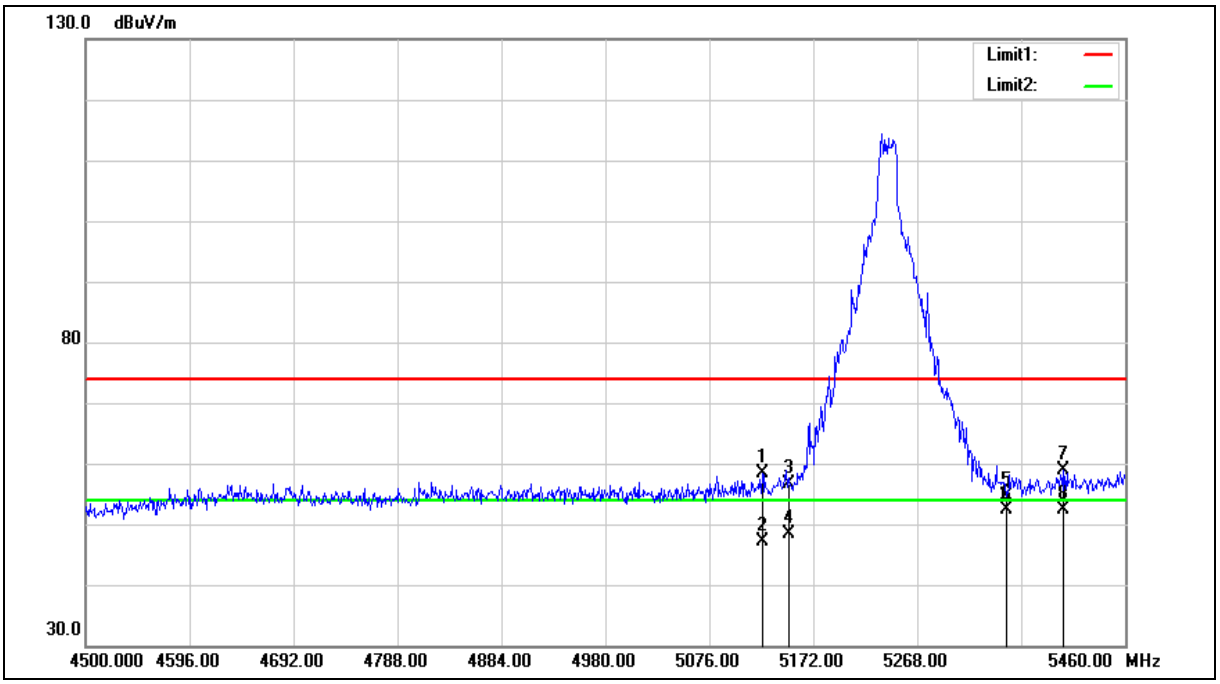
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5124.000	55.17	5.95	61.12	74.00	-12.88	peak
2	5124.000	42.84	5.95	48.79	54.00	-5.21	AVG
3	5150.000	50.42	5.99	56.41	74.00	-17.59	peak
4	5150.000	43.03	5.99	49.02	54.00	-4.98	AVG
5	5350.000	50.61	6.31	56.92	74.00	-17.08	peak
6	5350.000	45.88	6.31	52.19	54.00	-1.81	AVG
7	5432.160	52.87	6.45	59.32	74.00	-14.68	peak
8	5432.160	45.97	6.45	52.42	54.00	-1.58	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.(℃)/Hum.(%RH):	26(℃)/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:	5240 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

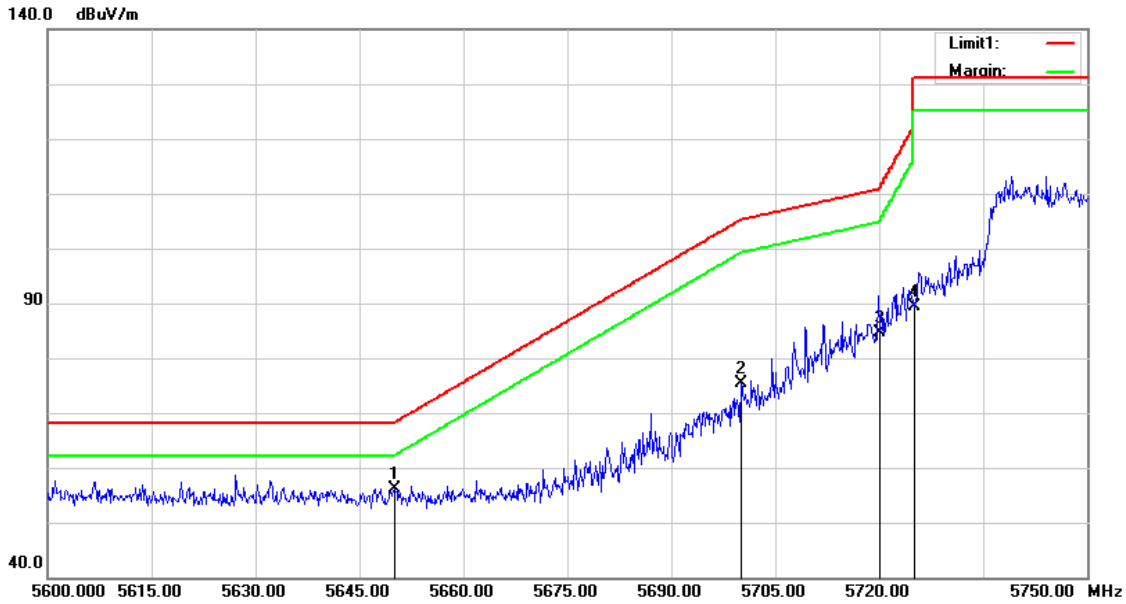
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5124.960	52.47	5.95	58.42	74.00	-15.58	peak
2	5124.960	41.15	5.95	47.10	54.00	-6.90	AVG
3	5150.000	50.75	5.99	56.74	74.00	-17.26	peak
4	5150.000	42.28	5.99	48.27	54.00	-5.73	AVG
5	5350.000	48.20	6.31	54.51	74.00	-19.49	peak
6	5350.000	45.99	6.31	52.30	54.00	-1.70	AVG
7	5403.360	52.48	6.40	58.88	74.00	-15.12	peak
8	5403.360	45.96	6.40	52.36	54.00	-1.64	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:	5745 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



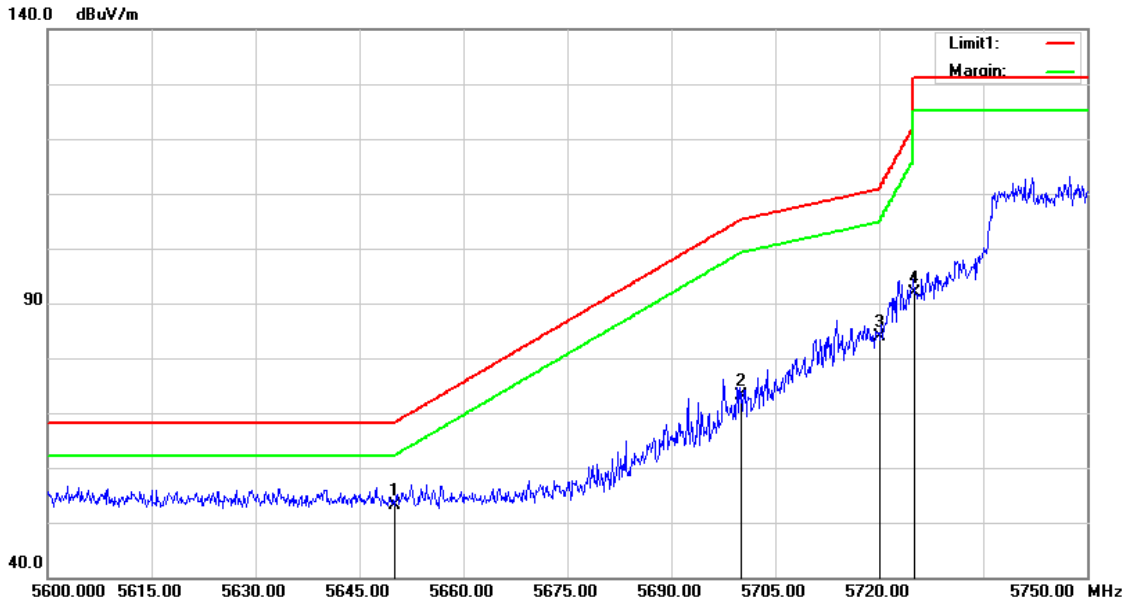
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	49.26	6.84	56.10	68.20	-12.10	peak
2	5700.000	68.50	6.93	75.43	105.20	-29.77	peak
3	5720.000	77.72	6.97	84.69	110.80	-26.11	peak
4	5725.000	82.48	6.98	89.46	122.20	-32.74	peak

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

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

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

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



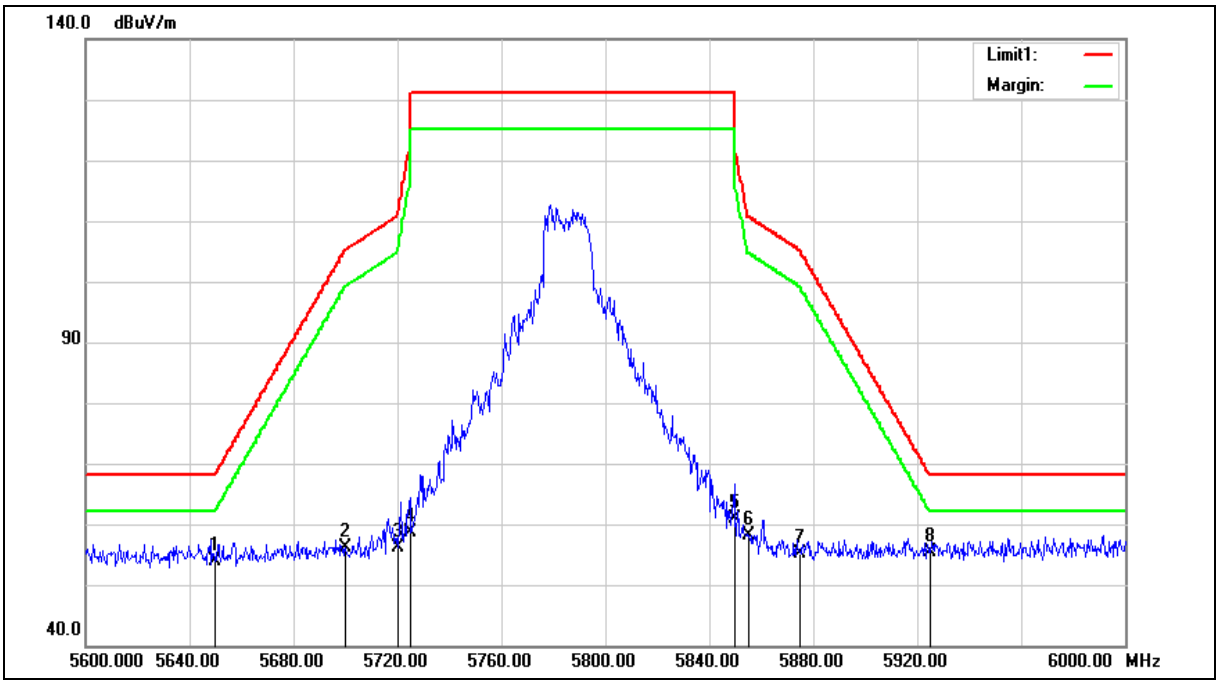
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.29	6.84	53.13	68.20	-15.07	peak
2	5700.000	66.16	6.93	73.09	105.20	-32.11	peak
3	5720.000	76.97	6.97	83.94	110.80	-26.86	peak
4	5725.000	84.81	6.98	91.79	122.20	-30.41	peak

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

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

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

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

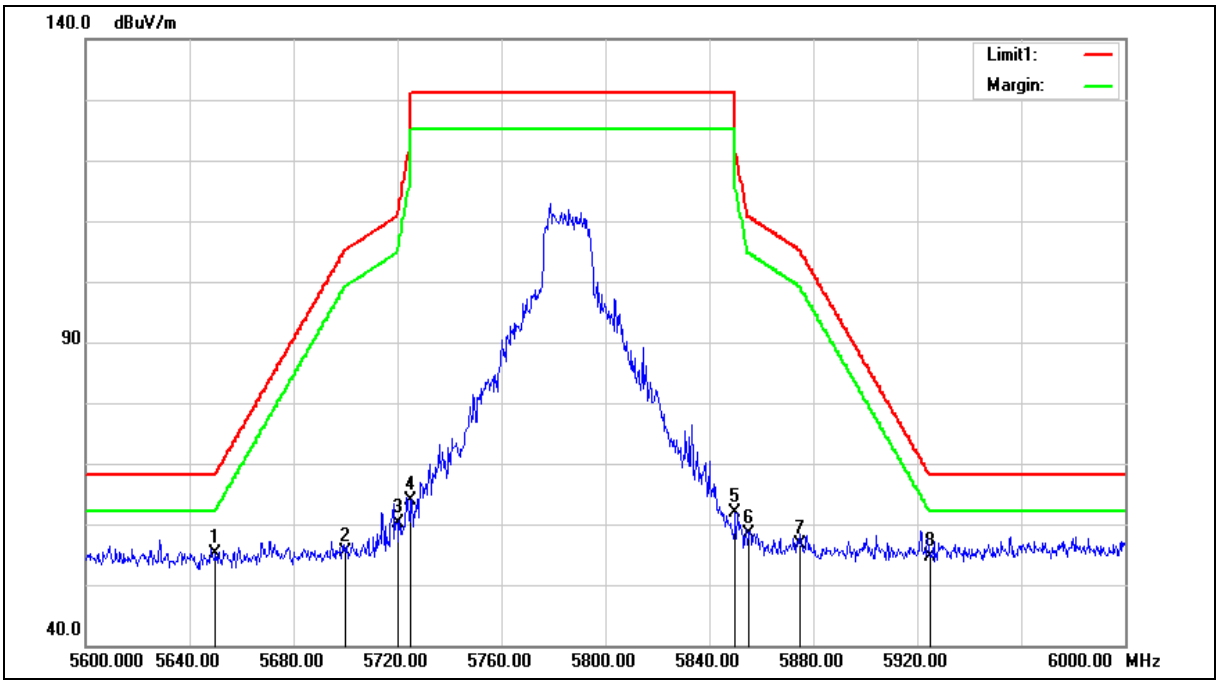
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.01	6.84	53.85	68.20	-14.35	peak
2	5700.000	49.25	6.93	56.18	105.20	-49.02	peak
3	5720.000	49.22	6.97	56.19	110.80	-54.61	peak
4	5725.000	51.55	6.98	58.53	122.20	-63.67	peak
5	5850.000	53.59	7.22	60.81	122.20	-61.39	peak
6	5855.000	50.92	7.23	58.15	110.80	-52.65	peak
7	5875.000	47.98	7.26	55.24	105.20	-49.96	peak
8	5925.000	47.92	7.36	55.28	68.20	-12.92	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.(℃)/Hum.(%RH):	26(℃)/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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

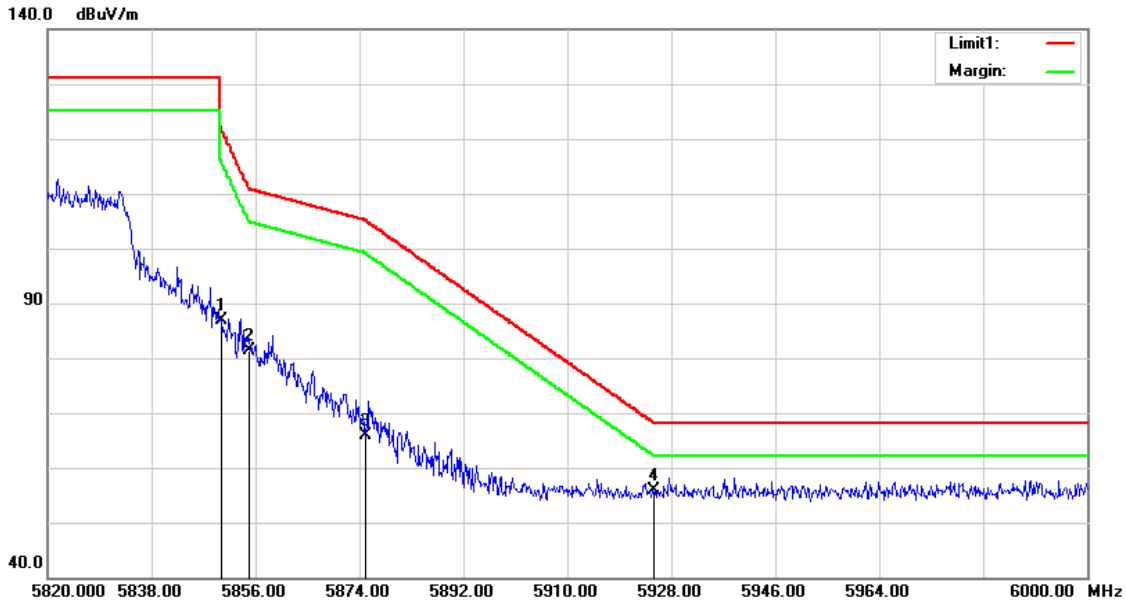
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	48.28	6.84	55.12	68.20	-13.08	peak
2	5700.000	48.36	6.93	55.29	105.20	-49.91	peak
3	5720.000	53.19	6.97	60.16	110.80	-50.64	peak
4	5725.000	56.96	6.98	63.94	122.20	-58.26	peak
5	5850.000	54.59	7.22	61.81	122.20	-60.39	peak
6	5855.000	51.22	7.23	58.45	110.80	-52.35	peak
7	5875.000	49.45	7.26	56.71	105.20	-48.49	peak
8	5925.000	47.20	7.36	54.56	68.20	-13.64	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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



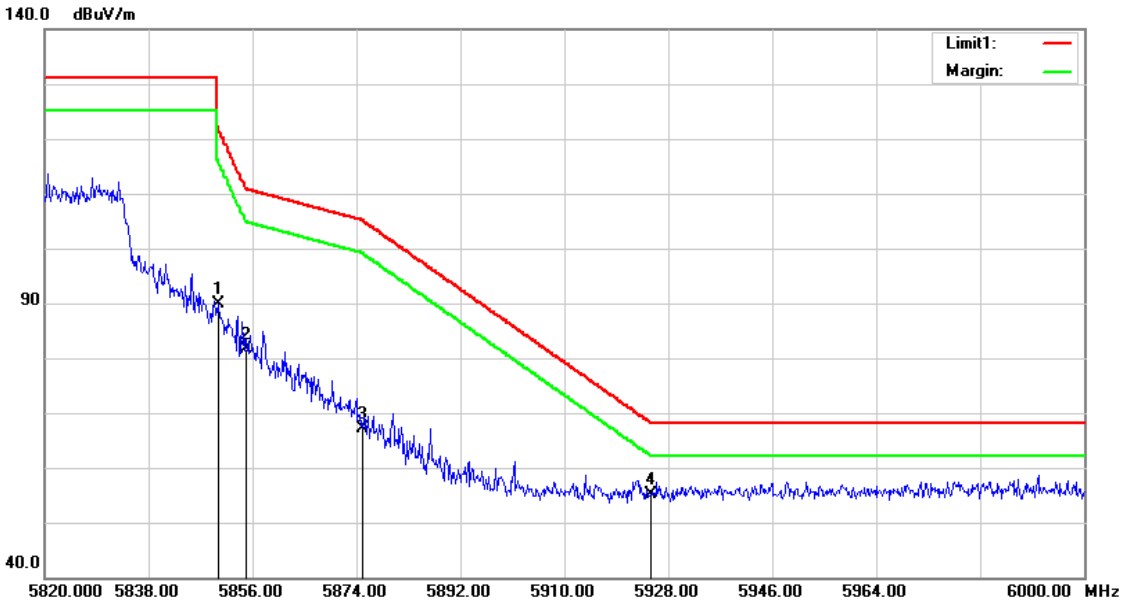
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	79.68	7.22	86.90	122.20	-35.30	peak
2	5855.000	74.10	7.23	81.33	110.80	-29.47	peak
3	5875.000	58.54	7.26	65.80	105.20	-39.40	peak
4	5925.000	48.46	7.36	55.82	68.20	-12.38	peak

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:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5825 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



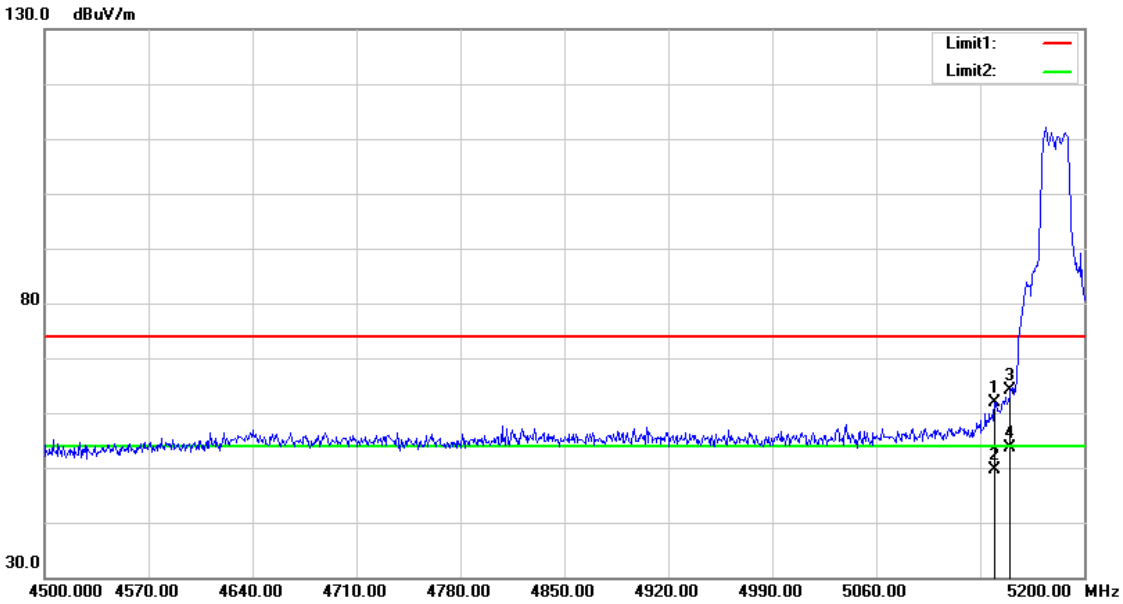
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	82.62	7.22	89.84	122.20	-32.36	peak
2	5855.000	74.37	7.23	81.60	110.80	-29.20	peak
3	5875.000	59.97	7.26	67.23	105.20	-37.97	peak
4	5925.000	47.82	7.36	55.18	68.20	-13.02	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



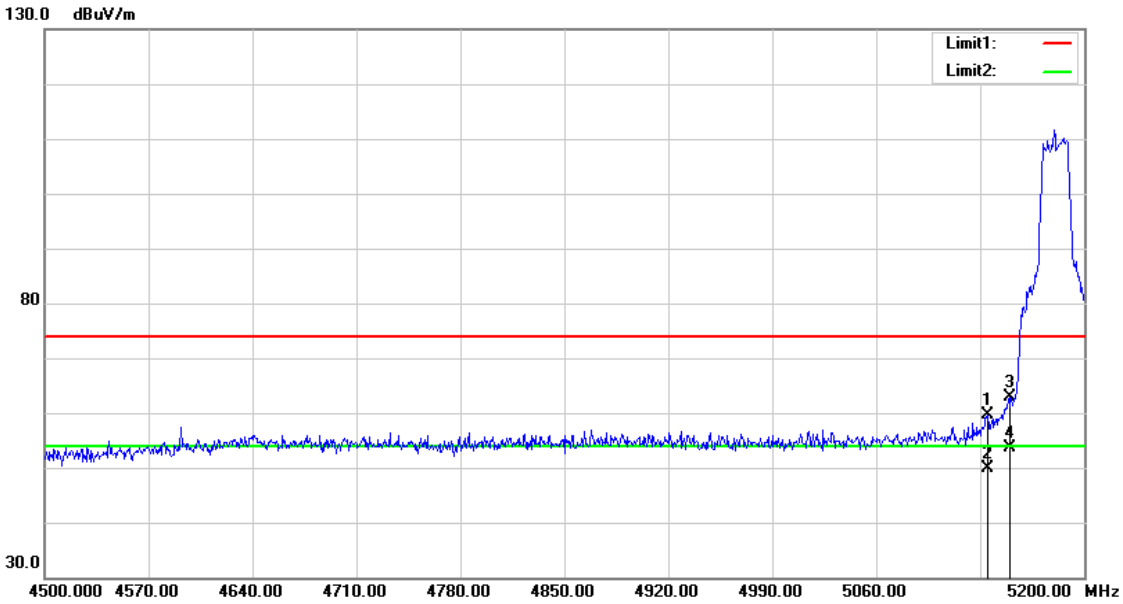
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5139.800	55.86	5.97	61.83	74.00	-12.17	peak
2	5139.800	43.65	5.97	49.62	54.00	-4.38	AVG
3	5150.000	58.25	5.99	64.24	74.00	-9.76	peak
4	5150.000	47.52	5.99	53.51	54.00	-0.49	AVG

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

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

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

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



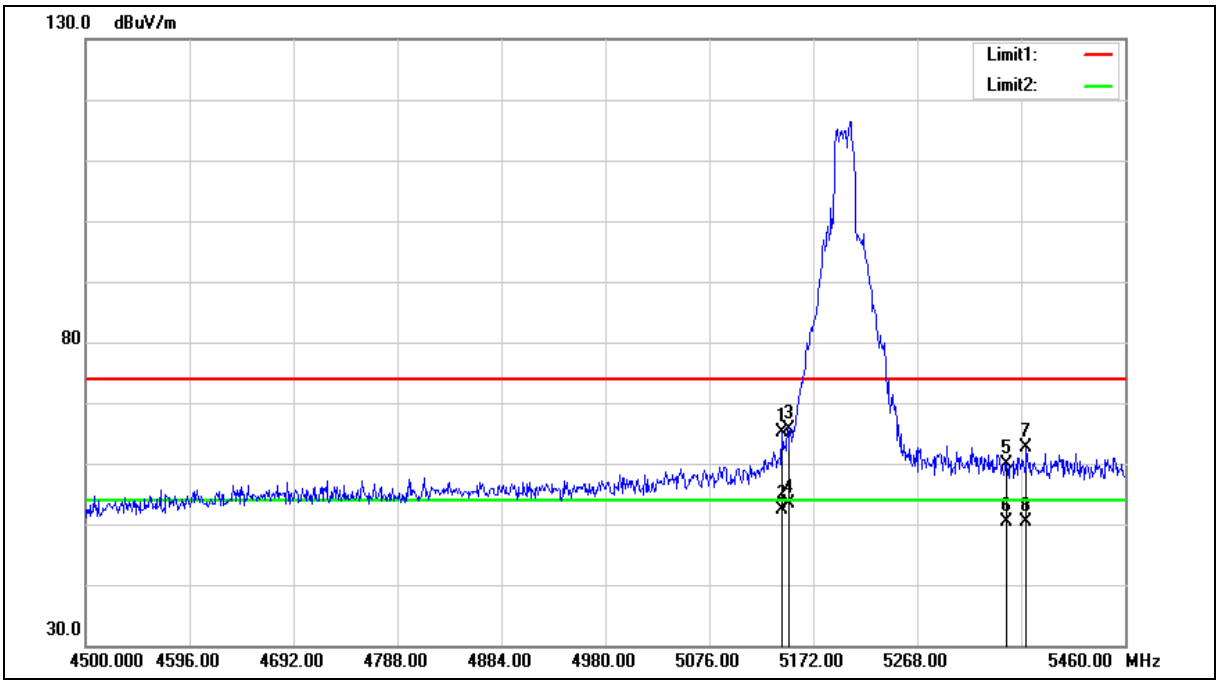
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5134.900	53.62	5.96	59.58	74.00	-14.42	peak
2	5134.900	43.86	5.96	49.82	54.00	-4.18	AVG
3	5150.000	56.77	5.99	62.76	74.00	-11.24	peak
4	5150.000	47.66	5.99	53.65	54.00	-0.35	AVG

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		

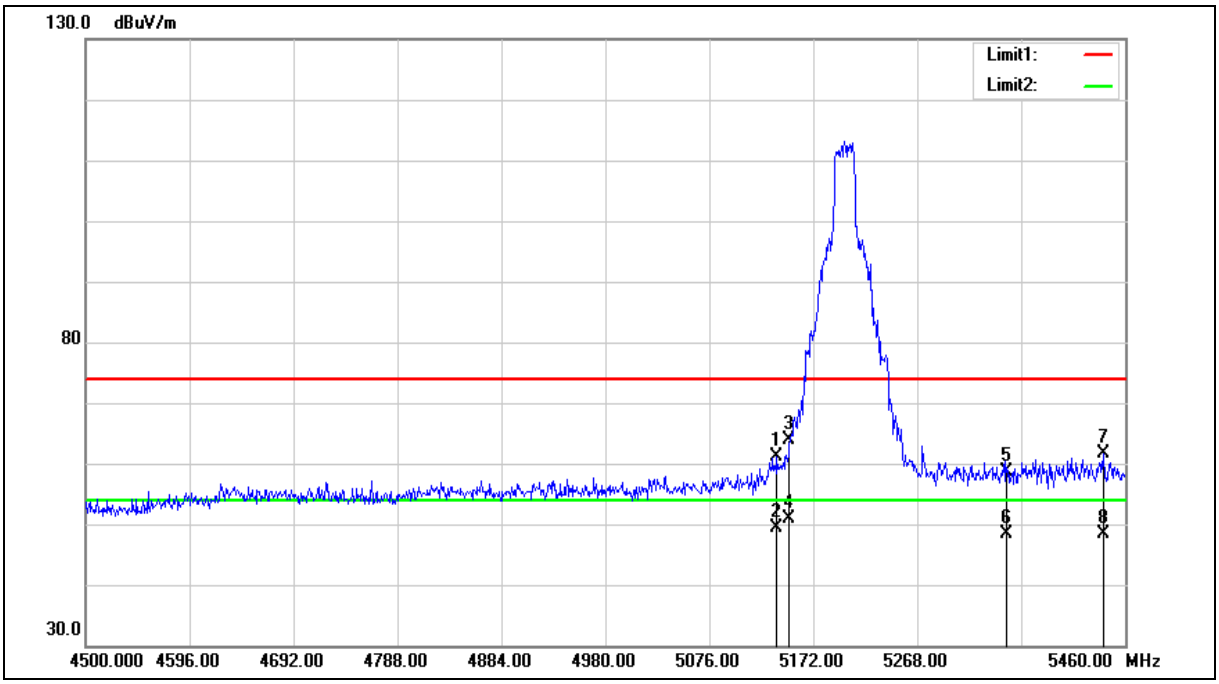
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.200	59.21	5.98	65.19	74.00	-8.81	peak
2	5143.200	46.52	5.98	52.50	54.00	-1.50	AVG
3	5150.000	59.56	5.99	65.55	74.00	-8.45	peak
4	5150.000	47.50	5.99	53.49	54.00	-0.51	AVG
5	5350.000	53.68	6.31	59.99	74.00	-14.01	peak
6	5350.000	44.00	6.31	50.31	54.00	-3.69	AVG
7	5368.800	56.16	6.35	62.51	74.00	-11.49	peak
8	5368.800	44.09	6.35	50.44	54.00	-3.56	AVG

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

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

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

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

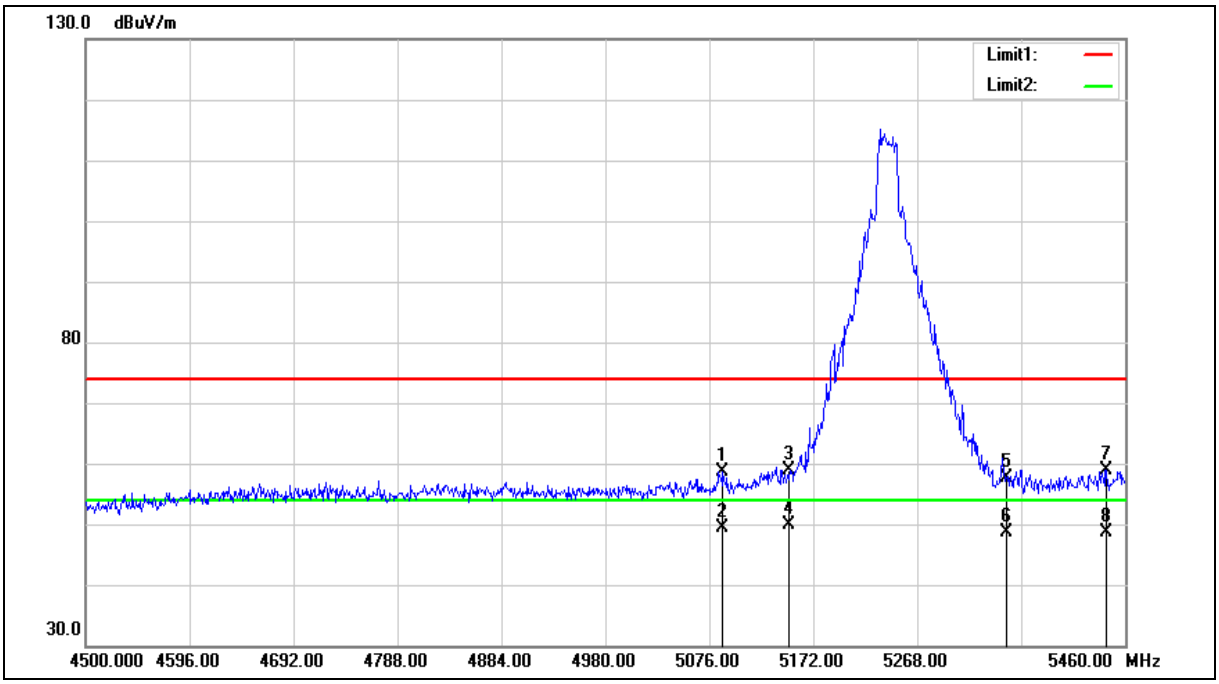
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5138.400	55.14	5.97	61.11	74.00	-12.89	peak
2	5138.400	43.31	5.97	49.28	54.00	-4.72	AVG
3	5150.000	57.83	5.99	63.82	74.00	-10.18	peak
4	5150.000	44.91	5.99	50.90	54.00	-3.10	AVG
5	5350.000	52.25	6.31	58.56	74.00	-15.44	peak
6	5350.000	42.04	6.31	48.35	54.00	-5.65	AVG
7	5439.840	55.18	6.47	61.65	74.00	-12.35	peak
8	5439.840	42.02	6.47	48.49	54.00	-5.51	AVG

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

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

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

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

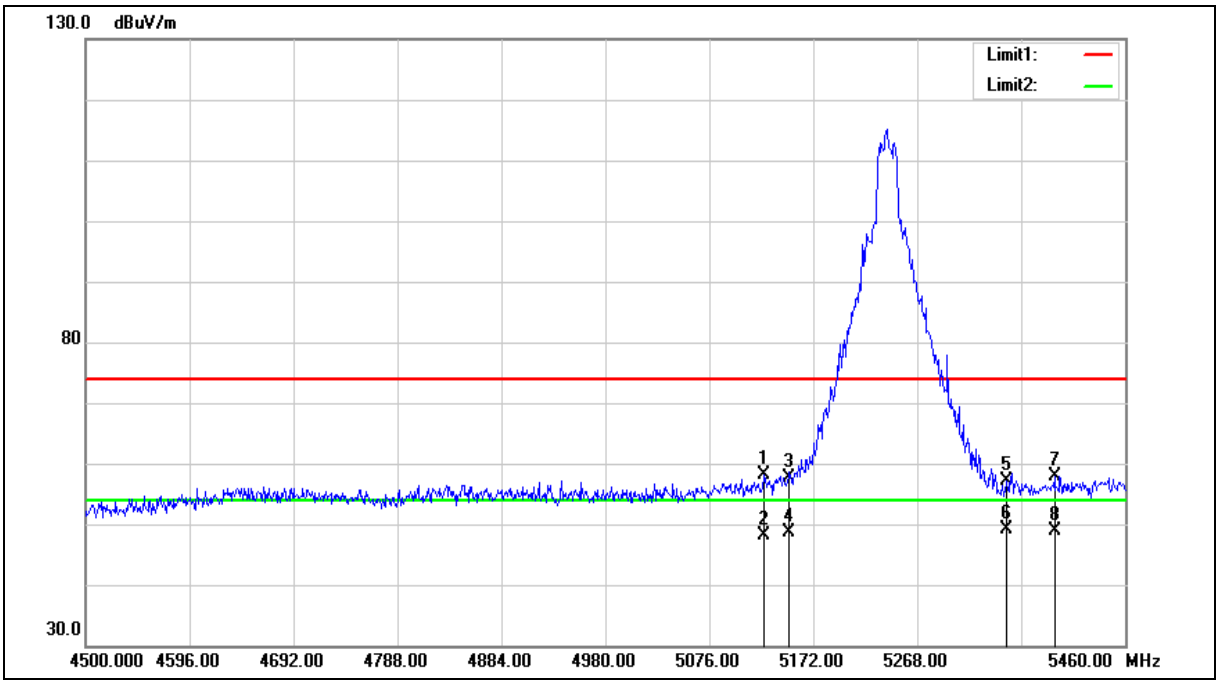
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5088.480	52.70	5.89	58.59	74.00	-15.41	peak
2	5088.480	43.37	5.89	49.26	54.00	-4.74	AVG
3	5150.000	52.87	5.99	58.86	74.00	-15.14	peak
4	5150.000	43.96	5.99	49.95	54.00	-4.05	AVG
5	5350.000	51.40	6.31	57.71	74.00	-16.29	peak
6	5350.000	42.27	6.31	48.58	54.00	-5.42	AVG
7	5442.720	52.35	6.47	58.82	74.00	-15.18	peak
8	5442.720	42.16	6.47	48.63	54.00	-5.37	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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		

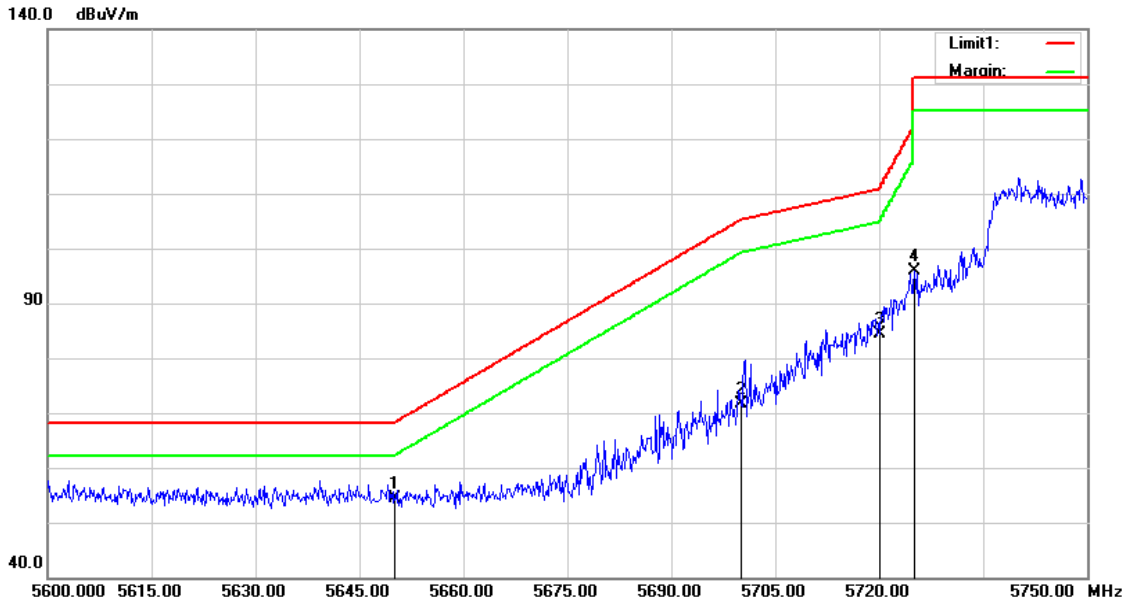
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5125.920	52.29	5.95	58.24	74.00	-15.76	peak
2	5125.920	42.22	5.95	48.17	54.00	-5.83	AVG
3	5150.000	51.76	5.99	57.75	74.00	-16.25	peak
4	5150.000	42.67	5.99	48.66	54.00	-5.34	AVG
5	5350.000	50.75	6.31	57.06	74.00	-16.94	peak
6	5350.000	42.74	6.31	49.05	54.00	-4.95	AVG
7	5394.720	51.44	6.39	57.83	74.00	-16.17	peak
8	5394.720	42.54	6.39	48.93	54.00	-5.07	AVG

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

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

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

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



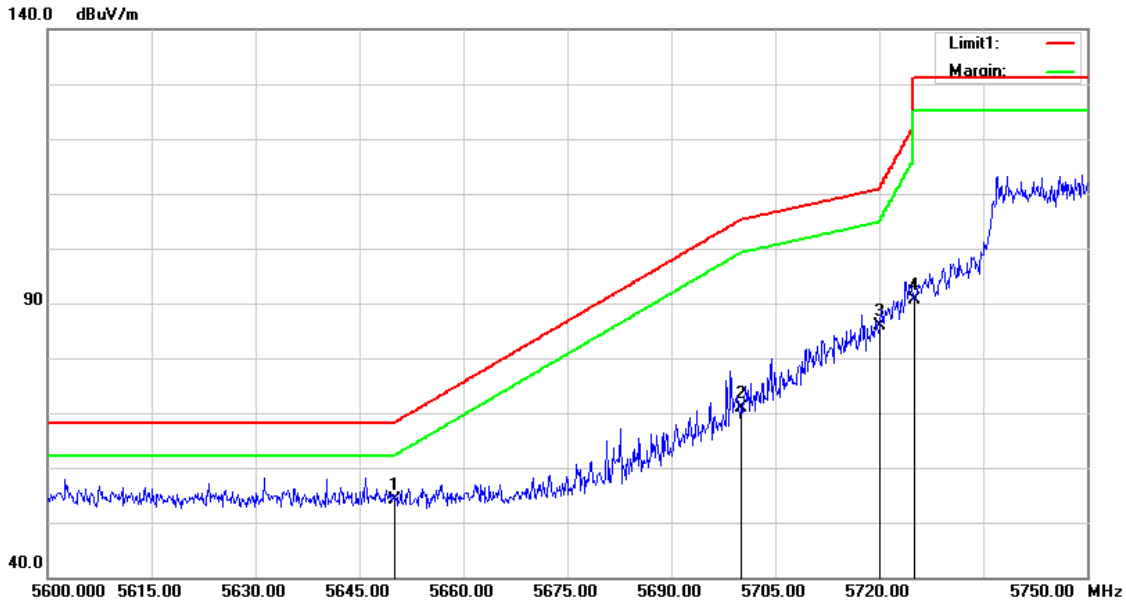
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.58	6.84	54.42	68.20	-13.78	peak
2	5700.000	64.81	6.93	71.74	105.20	-33.46	peak
3	5720.000	77.34	6.97	84.31	110.80	-26.49	peak
4	5725.000	88.84	6.98	95.82	122.20	-26.38	peak

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:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5745 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



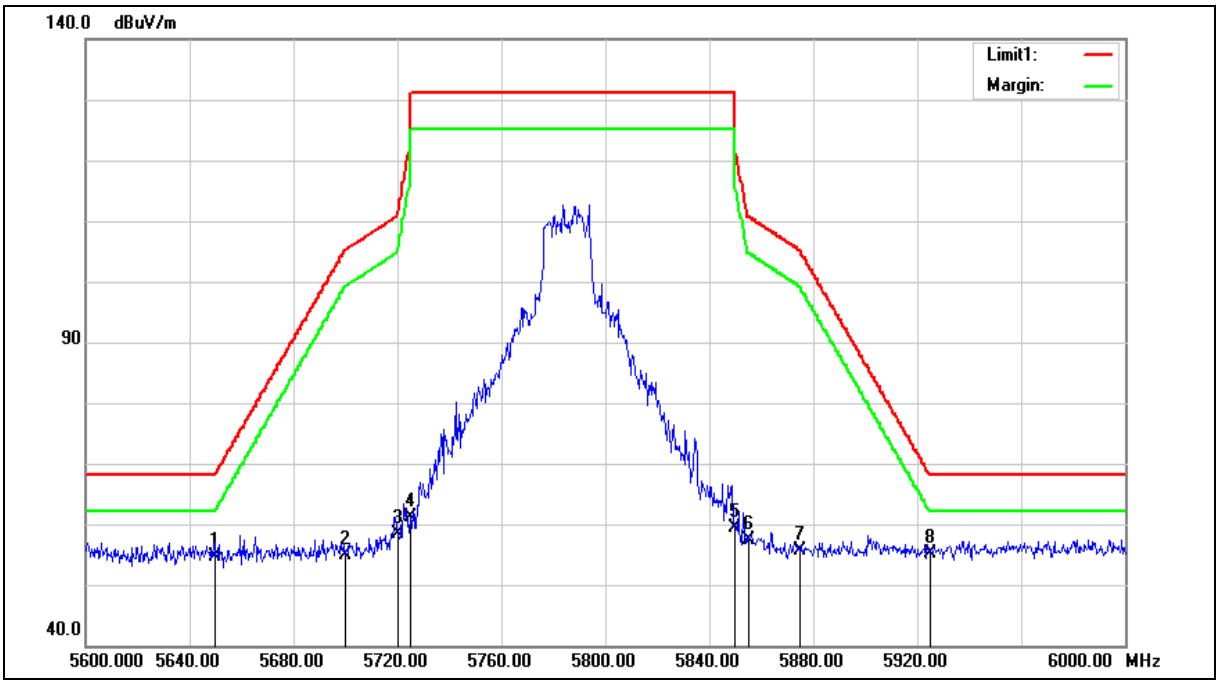
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.25	6.84	54.09	68.20	-14.11	peak
2	5700.000	63.85	6.93	70.78	105.20	-34.42	peak
3	5720.000	78.84	6.97	85.81	110.80	-24.99	peak
4	5725.000	83.75	6.98	90.73	122.20	-31.47	peak

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

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

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

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

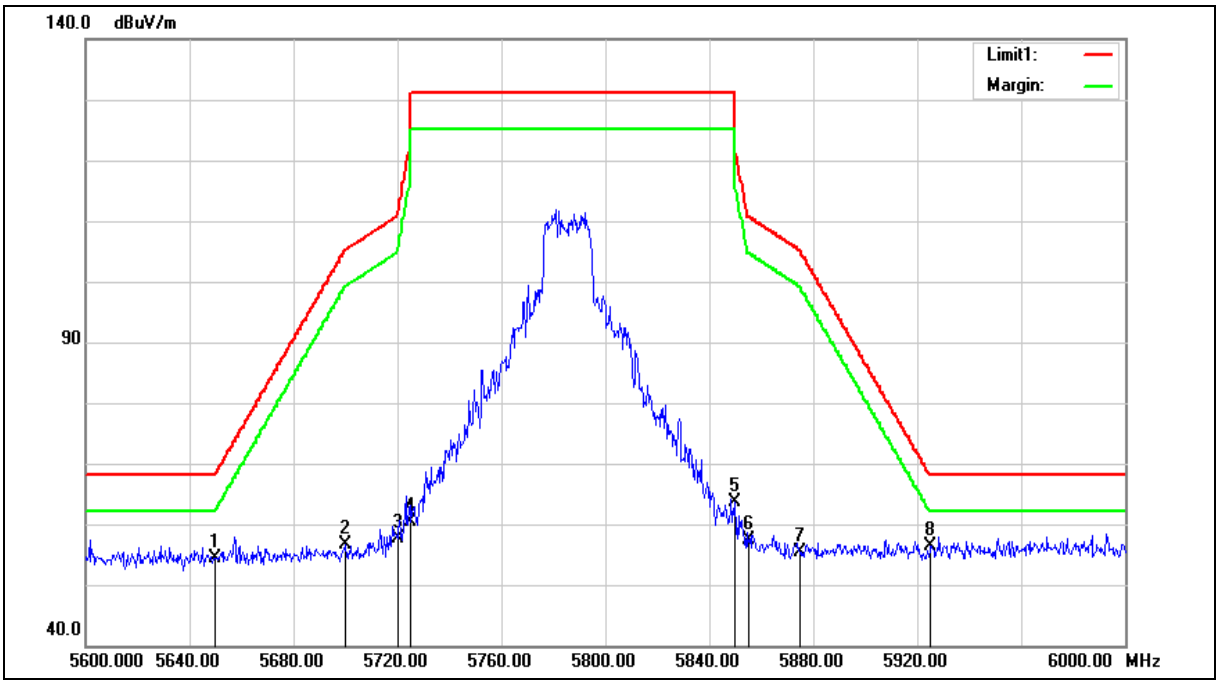
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.90	6.84	54.74	68.20	-13.46	peak
2	5700.000	47.87	6.93	54.80	105.20	-50.40	peak
3	5720.000	51.42	6.97	58.39	110.80	-52.41	peak
4	5725.000	54.22	6.98	61.20	122.20	-61.00	peak
5	5850.000	52.17	7.22	59.39	122.20	-62.81	peak
6	5855.000	50.10	7.23	57.33	110.80	-53.47	peak
7	5875.000	48.37	7.26	55.63	105.20	-49.57	peak
8	5925.000	47.76	7.36	55.12	68.20	-13.08	peak

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

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

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

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

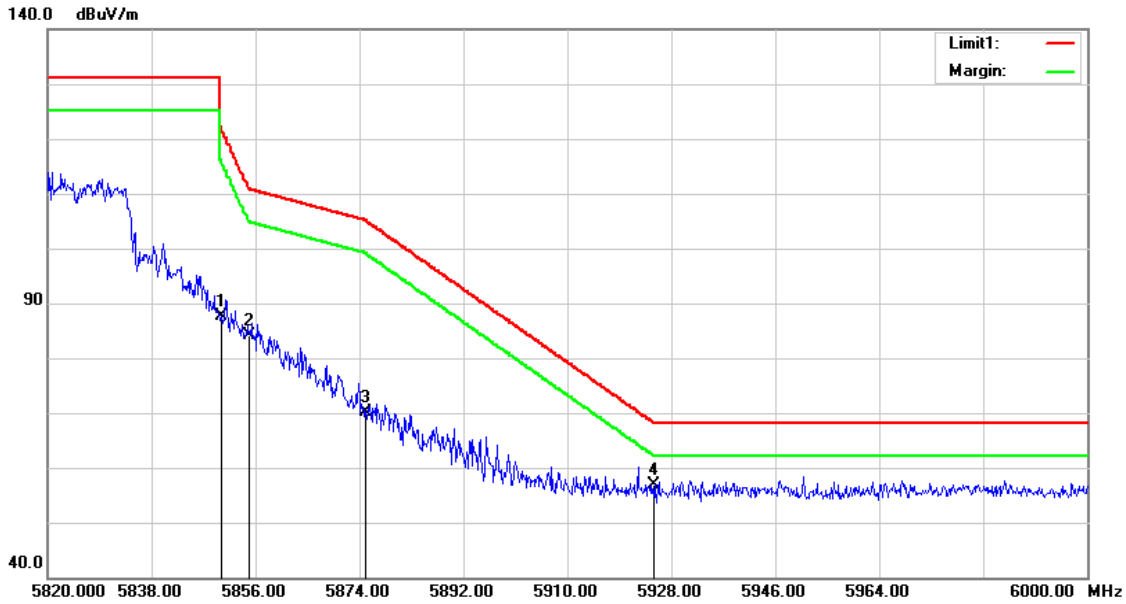
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.59	6.84	54.43	68.20	-13.77	peak
2	5700.000	49.74	6.93	56.67	105.20	-48.53	peak
3	5720.000	50.63	6.97	57.60	110.80	-53.20	peak
4	5725.000	53.44	6.98	60.42	122.20	-61.78	peak
5	5850.000	56.31	7.22	63.53	122.20	-58.67	peak
6	5855.000	50.19	7.23	57.42	110.80	-53.38	peak
7	5875.000	48.18	7.26	55.44	105.20	-49.76	peak
8	5925.000	49.05	7.36	56.41	68.20	-11.79	peak

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

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

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

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



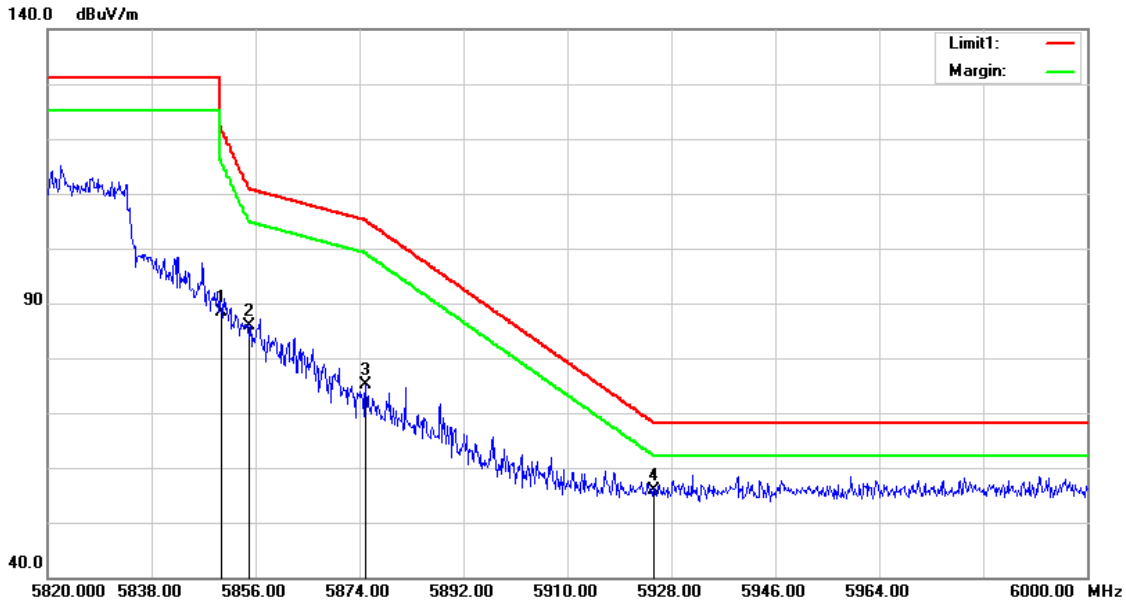
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	80.47	7.22	87.69	122.20	-34.51	peak
2	5855.000	76.82	7.23	84.05	110.80	-26.75	peak
3	5875.000	62.78	7.26	70.04	105.20	-35.16	peak
4	5925.000	49.63	7.36	56.99	68.20	-11.21	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



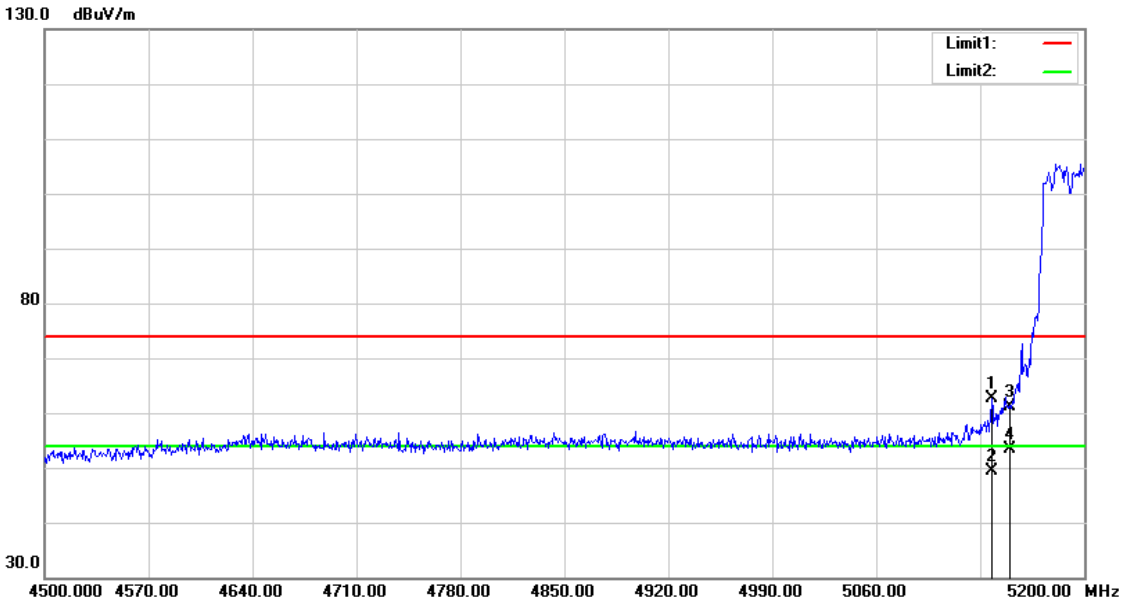
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	81.13	7.22	88.35	122.20	-33.85	peak
2	5855.000	78.53	7.23	85.76	110.80	-25.04	peak
3	5875.000	67.80	7.26	75.06	105.20	-30.14	peak
4	5925.000	48.59	7.36	55.95	68.20	-12.25	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5190 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



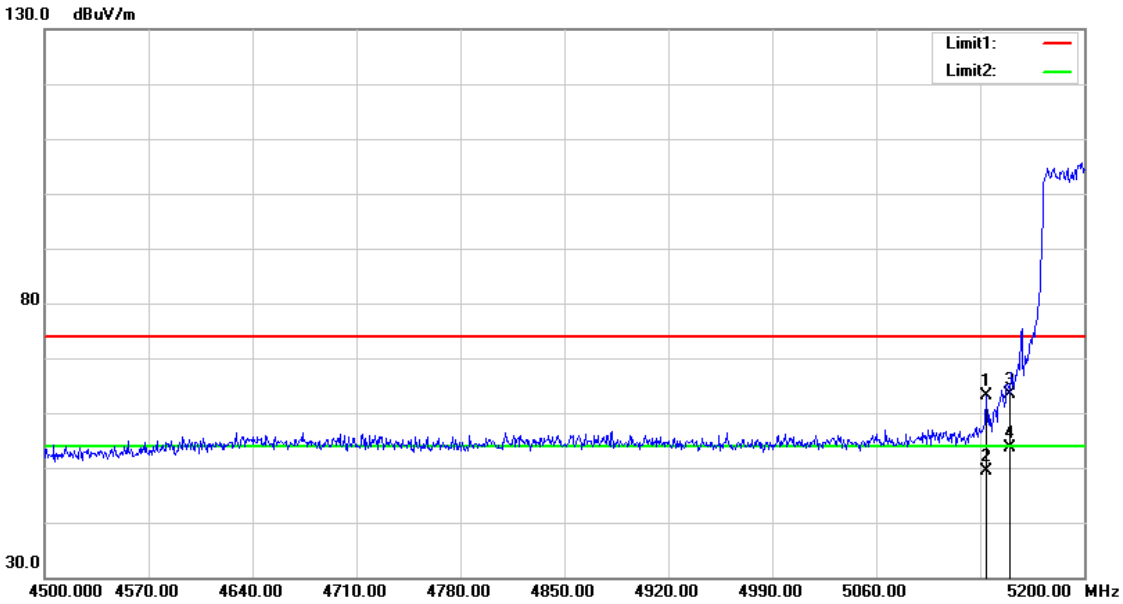
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5137.700	56.56	5.97	62.53	74.00	-11.47	peak
2	5137.700	43.47	5.97	49.44	54.00	-4.56	AVG
3	5150.000	55.25	5.99	61.24	74.00	-12.76	peak
4	5150.000	47.36	5.99	53.35	54.00	-0.65	AVG

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:	5190 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



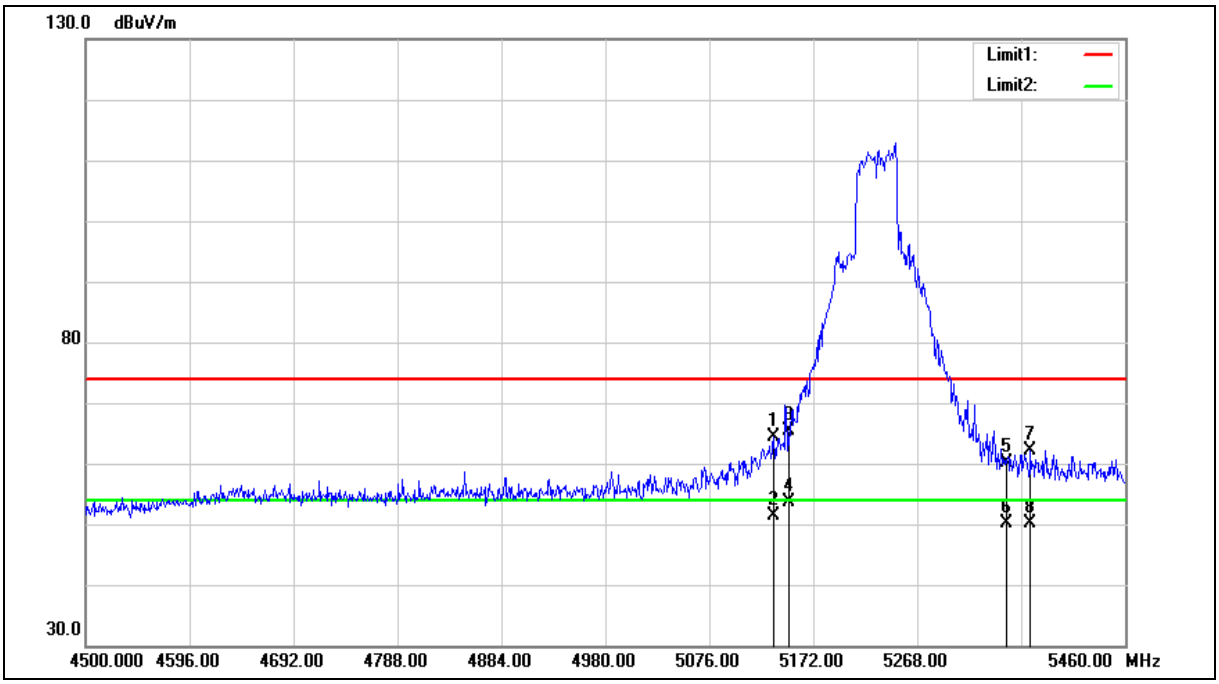
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5134.200	57.09	5.96	63.05	74.00	-10.95	peak
2	5134.200	43.45	5.96	49.41	54.00	-4.59	AVG
3	5150.000	57.45	5.99	63.44	74.00	-10.56	peak
4	5150.000	47.59	5.99	53.58	54.00	-0.42	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5230 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

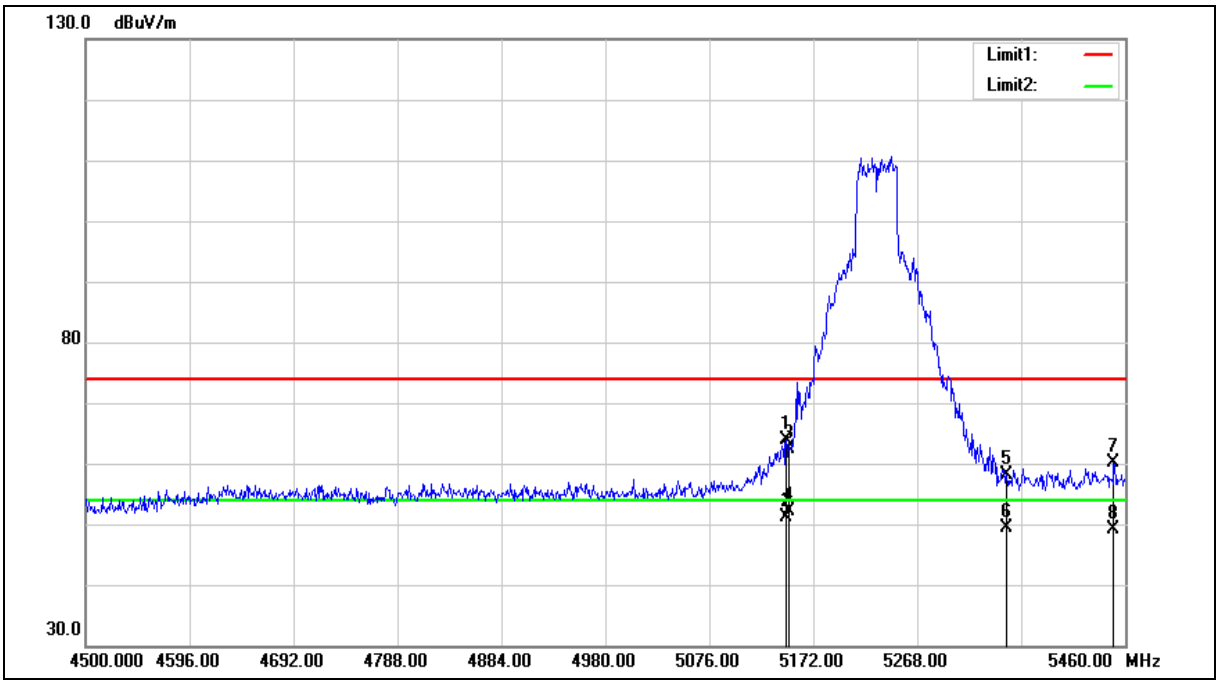
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5135.520	58.30	5.96	64.26	74.00	-9.74	peak
2	5135.520	45.51	5.96	51.47	54.00	-2.53	AVG
3	5150.000	59.41	5.99	65.40	74.00	-8.60	peak
4	5150.000	47.57	5.99	53.56	54.00	-0.44	AVG
5	5350.000	53.92	6.31	60.23	74.00	-13.77	peak
6	5350.000	43.80	6.31	50.11	54.00	-3.89	AVG
7	5372.640	55.88	6.35	62.23	74.00	-11.77	peak
8	5372.640	43.88	6.35	50.23	54.00	-3.77	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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		

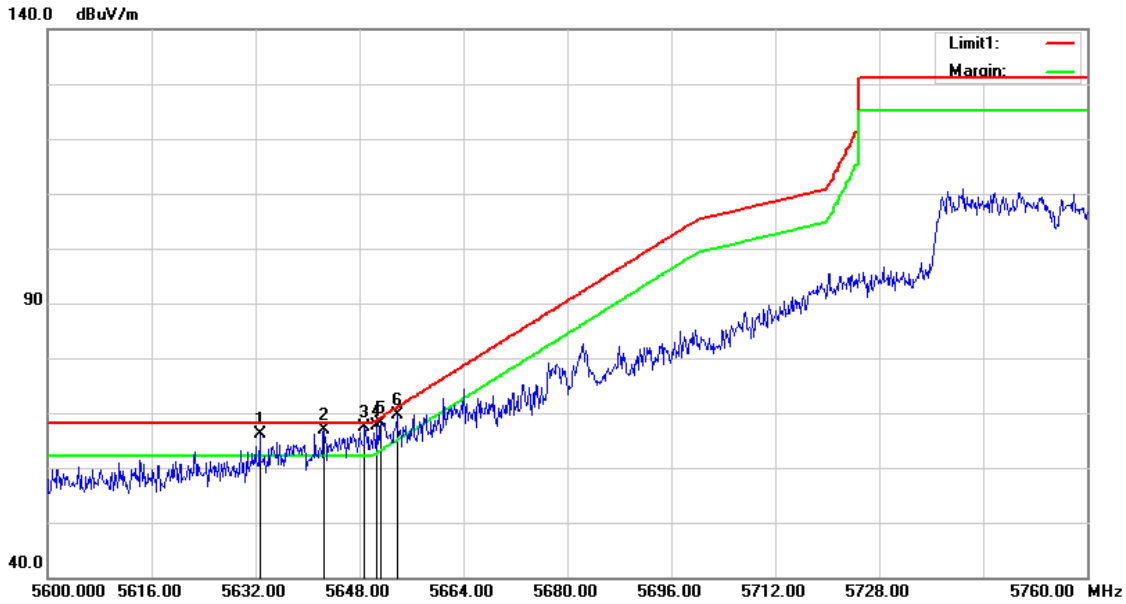
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5147.040	57.96	5.98	63.94	74.00	-10.06	peak
2	5147.040	45.20	5.98	51.18	54.00	-2.82	AVG
3	5150.000	56.46	5.99	62.45	74.00	-11.55	peak
4	5150.000	46.11	5.99	52.10	54.00	-1.90	AVG
5	5350.000	51.70	6.31	58.01	74.00	-15.99	peak
6	5350.000	43.07	6.31	49.38	54.00	-4.62	AVG
7	5449.440	53.54	6.48	60.02	74.00	-13.98	peak
8	5449.440	42.57	6.48	49.05	54.00	-4.95	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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



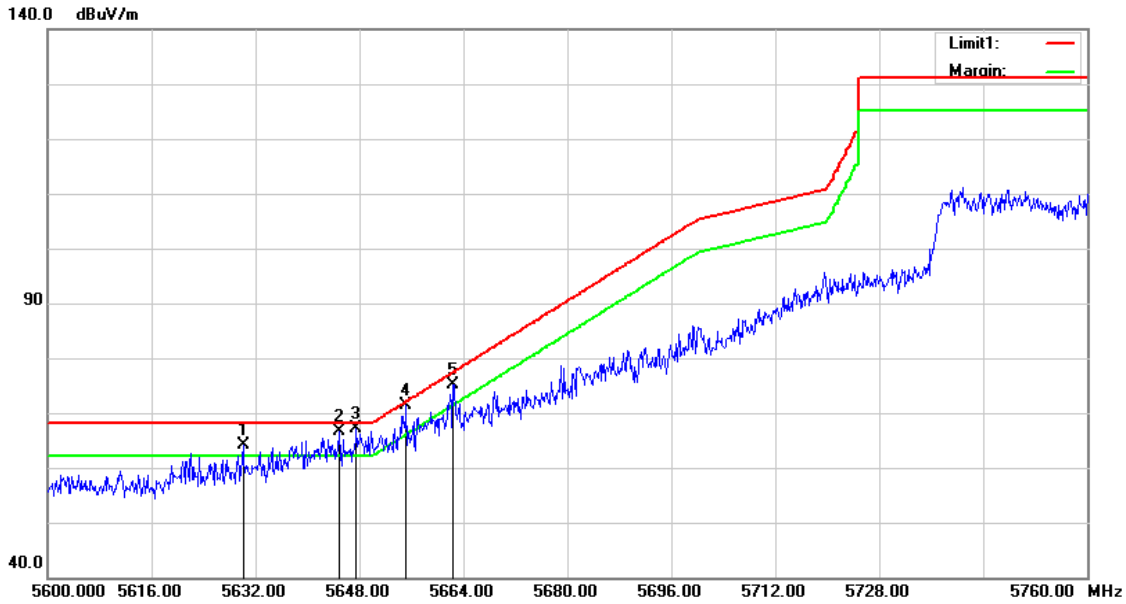
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5632.640	59.25	6.81	66.06	68.20	-2.14	peak
2	5642.560	60.00	6.83	66.83	68.20	-1.37	peak
3	5648.800	60.42	6.84	67.26	68.20	-0.94	peak
4	5650.720	60.77	6.84	67.61	68.73	-1.12	peak
5	5651.360	61.33	6.84	68.17	69.21	-1.04	peak
6	5653.760	62.88	6.85	69.73	70.98	-1.25	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5755 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



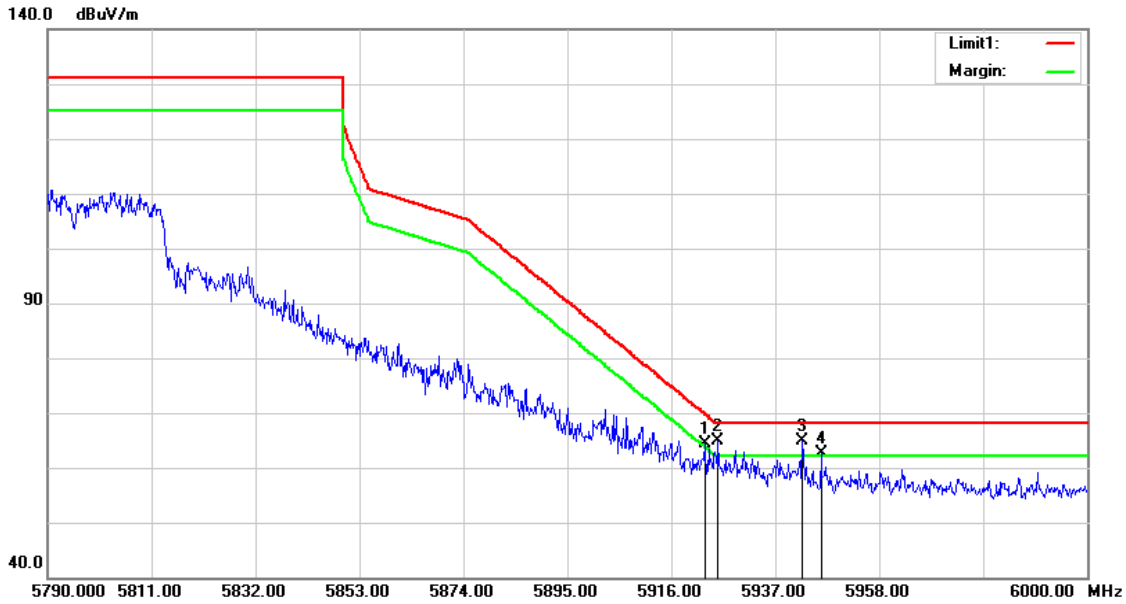
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5630.080	57.38	6.81	64.19	68.20	-4.01	peak
2	5644.960	59.76	6.83	66.59	68.20	-1.61	peak
3	5647.520	60.17	6.84	67.01	68.20	-1.19	peak
4	5655.200	64.41	6.85	71.26	72.05	-0.79	peak
5	5662.400	68.22	6.87	75.09	77.38	-2.29	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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



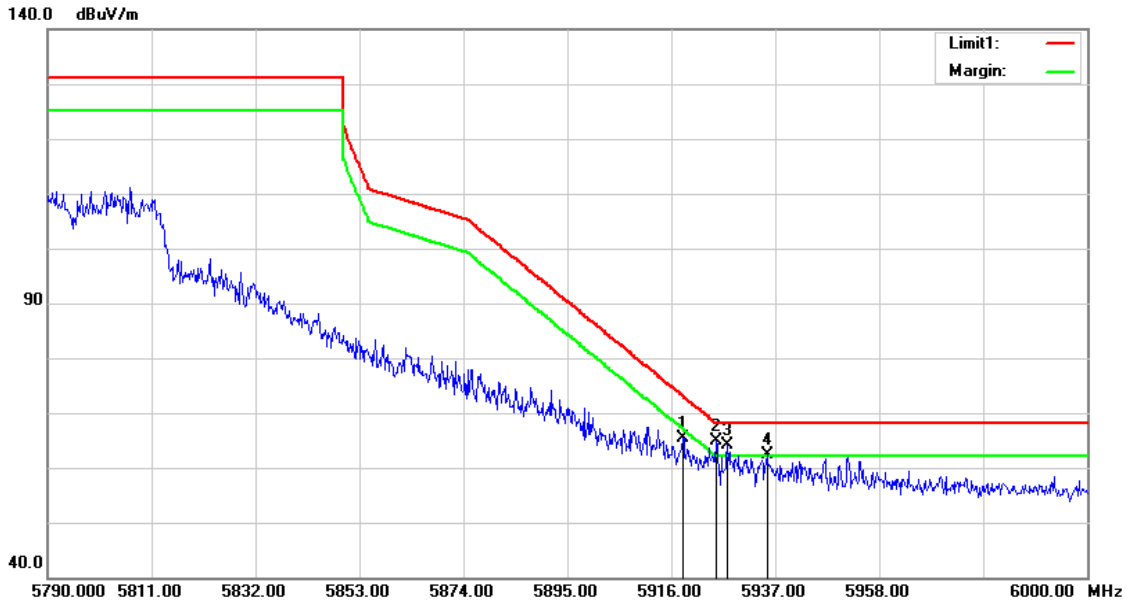
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5922.720	56.90	7.36	64.26	69.89	-5.63	peak
2	5925.450	57.42	7.36	64.78	68.20	-3.42	peak
3	5942.460	57.38	7.40	64.78	68.20	-3.42	peak
4	5946.240	55.16	7.40	62.56	68.20	-5.64	peak

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.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



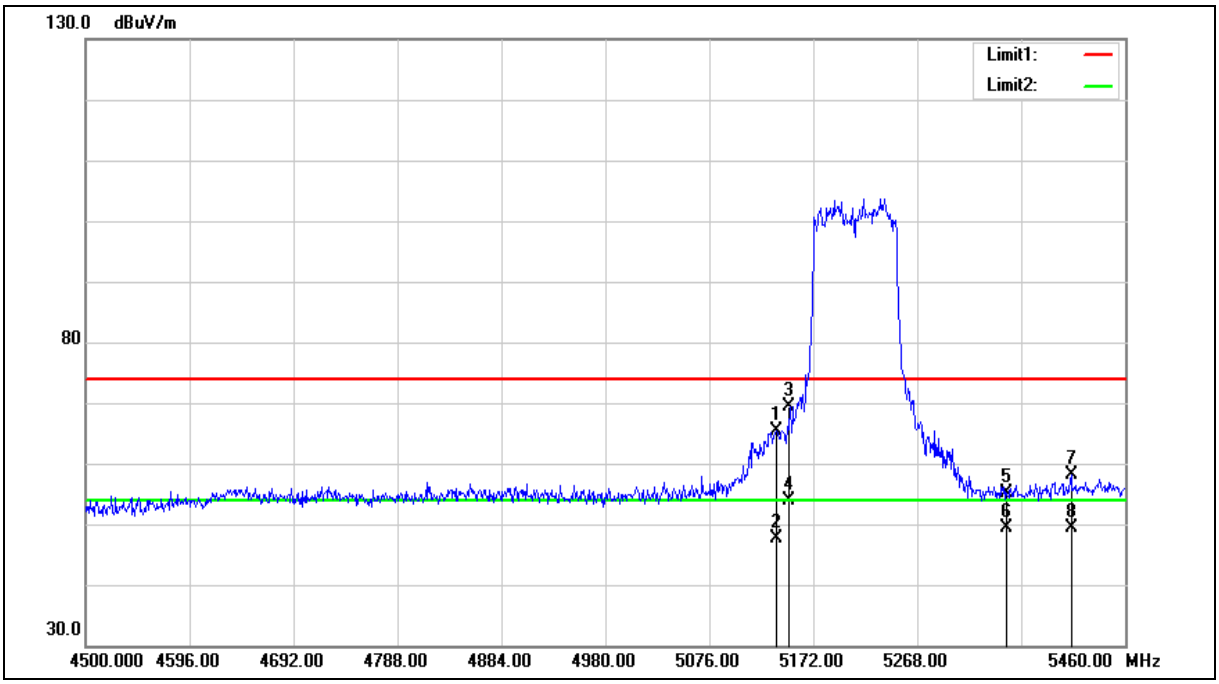
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5918.310	57.99	7.35	65.34	73.15	-7.81	peak
2	5925.030	57.56	7.36	64.92	68.20	-3.28	peak
3	5927.340	56.83	7.36	64.19	68.20	-4.01	peak
4	5935.320	55.00	7.39	62.39	68.20	-5.81	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	AC 120 V/60 Hz
Frequency:	5210 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/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:	5210 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

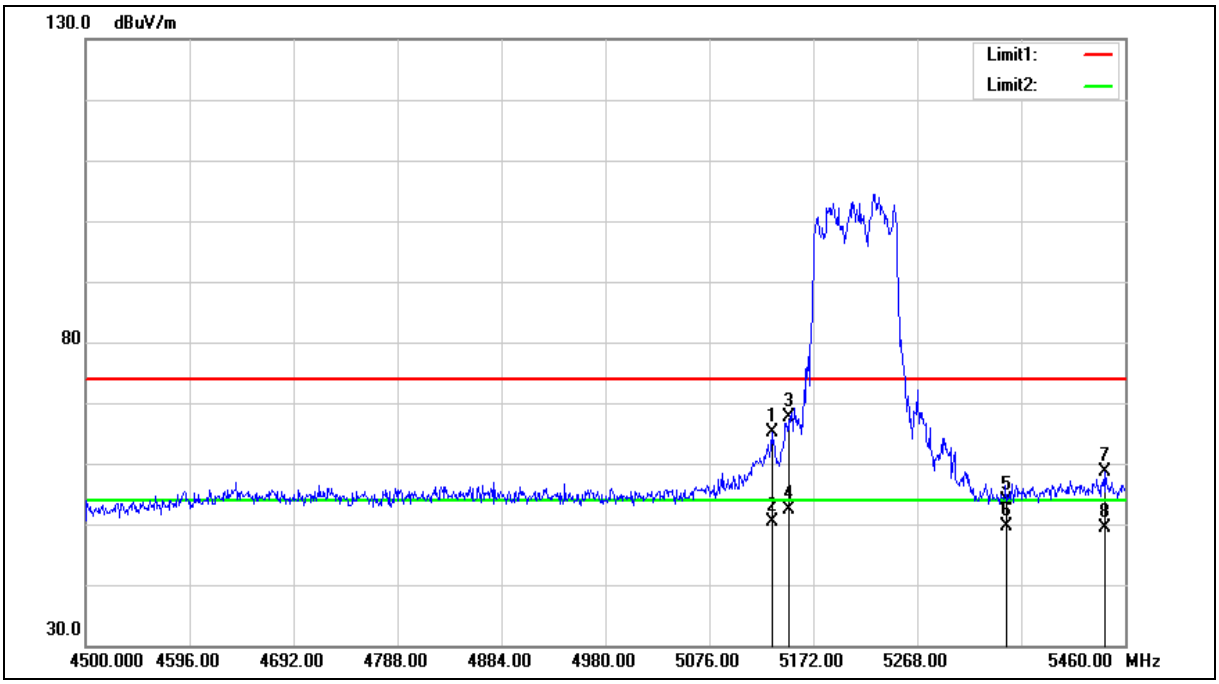
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5137.440	59.38	5.96	65.34	74.00	-8.66	peak
2	5137.440	41.70	5.96	47.66	54.00	-6.34	AVG
3	5150.000	63.34	5.99	69.33	74.00	-4.67	peak
4	5150.000	47.78	5.99	53.77	54.00	-0.23	AVG
5	5350.000	48.94	6.31	55.25	74.00	-18.75	peak
6	5350.000	43.05	6.31	49.36	54.00	-4.64	AVG
7	5410.080	51.62	6.40	58.02	74.00	-15.98	peak
8	5410.080	42.90	6.40	49.30	54.00	-4.70	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.(℃)/Hum.(%RH):	26(℃)/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:	5210 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

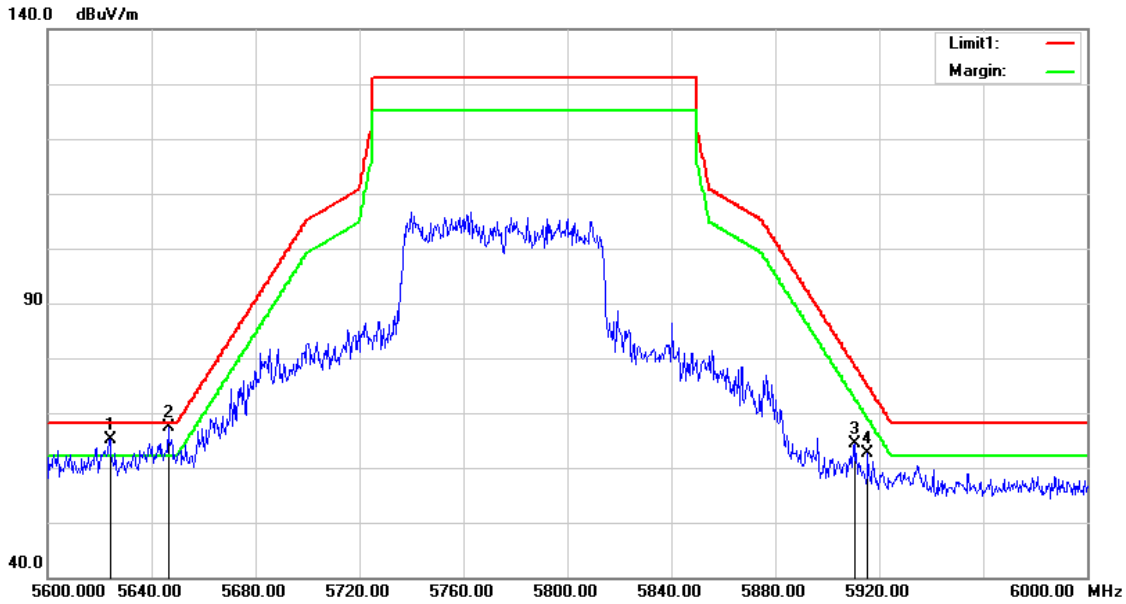
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5133.600	59.28	5.96	65.24	74.00	-8.76	peak
2	5133.600	44.32	5.96	50.28	54.00	-3.72	AVG
3	5150.000	61.70	5.99	67.69	74.00	-6.31	peak
4	5150.000	46.46	5.99	52.45	54.00	-1.55	AVG
5	5350.000	47.61	6.31	53.92	74.00	-20.08	peak
6	5350.000	43.20	6.31	49.51	54.00	-4.49	AVG
7	5441.760	52.25	6.47	58.72	74.00	-15.28	peak
8	5441.760	42.88	6.47	49.35	54.00	-4.65	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:	5775 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



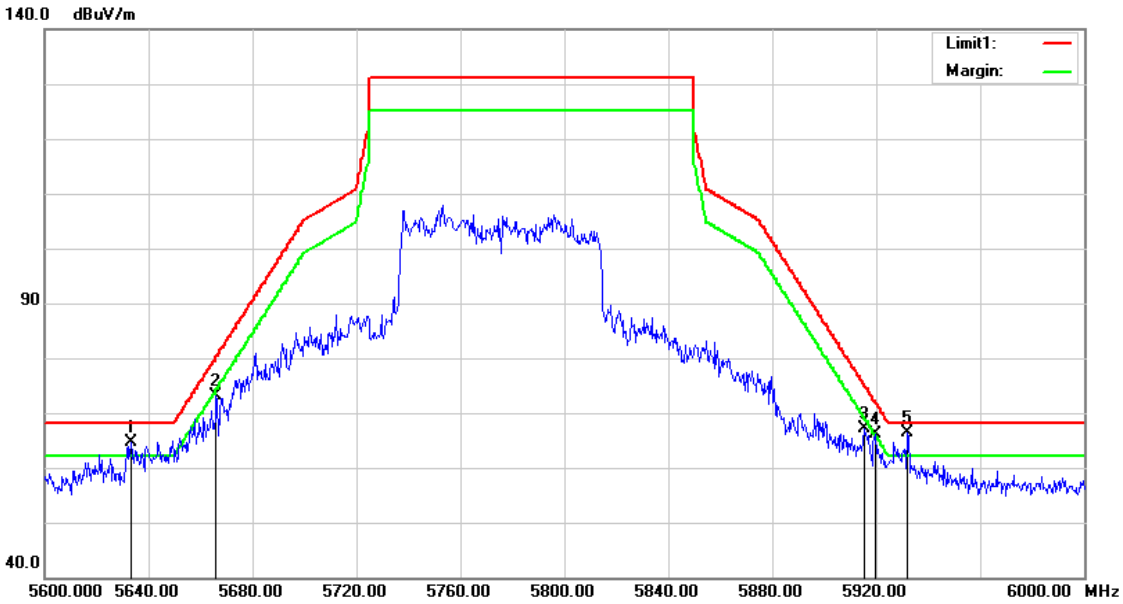
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5624.000	58.29	6.80	65.09	68.20	-3.11	peak
2	5646.400	60.50	6.83	67.33	68.20	-0.87	peak
3	5910.400	56.93	7.33	64.26	79.00	-14.74	peak
4	5915.600	55.41	7.33	62.74	75.16	-12.42	peak

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:	5775 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5633.200	57.86	6.81	64.67	68.20	-3.53	peak
2	5666.000	66.17	6.88	73.05	80.04	-6.99	peak
3	5915.600	59.76	7.33	67.09	75.16	-8.07	peak
4	5919.600	58.69	7.35	66.04	72.20	-6.16	peak
5	5932.000	58.88	7.38	66.26	68.20	-1.94	peak

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

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

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

5.3. Maximum Conducted Output Power

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	Data Rate	ANT-0		FCC Limit (dBm)
		(dBm)	(W)	
5180	6 M	15.51	0.036	≤ 30
5200		23.25	0.211	
5220		**23.85**	**0.243**	
5240		19.89	0.097	
5745		**20.92**	**0.124**	≤ 30
5765		20.81	0.121	
5785		20.58	0.114	
5805		20.07	0.102	
5825		19.80	0.095	
5180	54 M	15.41	0.035	≤ 30
5200		23.17	0.207	
5220		23.76	0.238	
5240		19.80	0.095	
5745		20.82	0.121	≤ 30
5765		20.70	0.117	
5785		20.50	0.112	
5805		19.96	0.099	
5825		19.72	0.094	

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

Test Mode		Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	13 M	18.75	0.075	17.59	0.057	21.22	0.132	≤ 30
5200		23.19	0.208	22.75	0.188	25.99	0.397	
5220		23.71	0.235	23.68	0.233	**26.71**	**0.468**	
5240		19.80	0.095	19.27	0.085	22.55	0.180	
5745		22.54	0.179	21.92	0.156	**25.25**	**0.335**	≤ 30
5765		22.41	0.174	21.98	0.158	25.21	0.332	
5785		21.45	0.140	21.39	0.138	24.43	0.277	
5805		21.86	0.153	21.41	0.138	24.65	0.292	
5825		21.57	0.144	21.26	0.134	24.43	0.277	
5180	173.4 M	18.70	0.074	17.47	0.056	21.14	0.130	≤ 30
5200		23.07	0.203	22.68	0.185	25.89	0.388	
5220		23.65	0.232	23.62	0.230	26.65	0.462	
5240		19.75	0.094	19.19	0.083	22.49	0.177	
5745		22.49	0.177	21.86	0.153	25.20	0.331	≤ 30
5765		22.35	0.172	21.88	0.154	25.13	0.326	
5785		22.38	0.173	21.30	0.135	24.88	0.308	
5805		21.80	0.151	21.36	0.137	24.60	0.288	
5825		21.50	0.141	21.17	0.131	24.35	0.272	

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

Test Mode		Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27 M	15.59	0.036	14.53	0.028	18.10	0.065	≤ 30
5230		20.81	0.121	18.58	0.072	**22.85**	**0.193**	
5755		22.45	0.176	22.21	0.166	**25.34**	**0.342**	≤ 30
5795		21.81	0.152	21.59	0.144	24.71	0.296	
5190	400 M	15.51	0.036	14.47	0.028	18.03	0.064	≤ 30
5230		20.75	0.119	18.50	0.071	22.78	0.190	
5755		22.38	0.173	22.14	0.164	25.27	0.337	≤ 30
5755		21.73	0.149	21.51	0.142	24.63	0.291	

Test Mode		Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6 M	11.98	0.016	11.85	0.015	**14.93**	**0.031**	≤ 30
5775		19.45	0.088	19.31	0.085	**22.39**	**0.173**	≤ 30
5210	866.6 M	11.83	0.015	11.77	0.015	14.81	0.030	≤ 30
5775		19.38	0.087	19.24	0.084	22.32	0.171	≤ 30

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

5.4. 26 dB RF Bandwidth & 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-0
5180	41.330	22.974
5200	57.760	39.162
5240	38.570	19.327

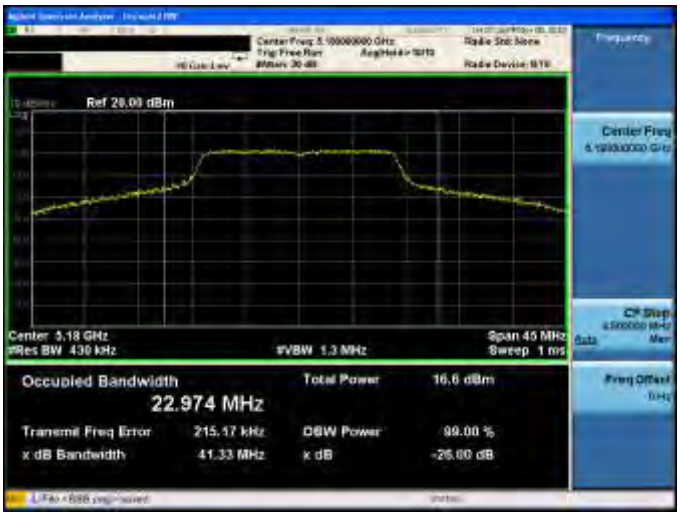
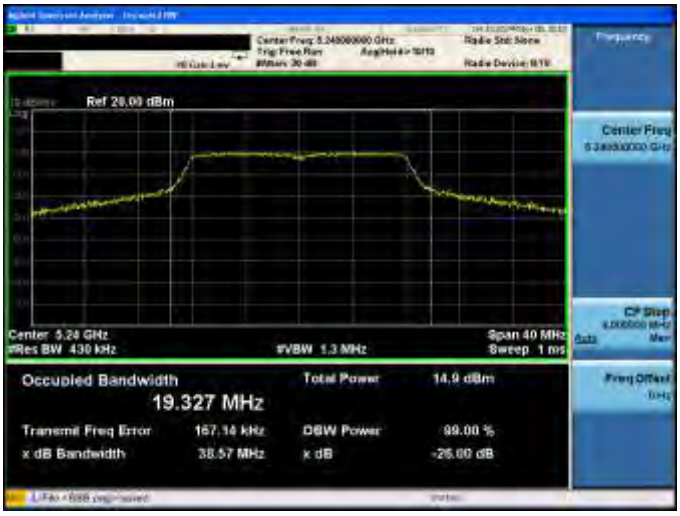
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5180	29.600	25.820	18.286	18.029
5200	50.860	49.530	36.888	35.135
5240	37.570	35.390	19.346	18.954

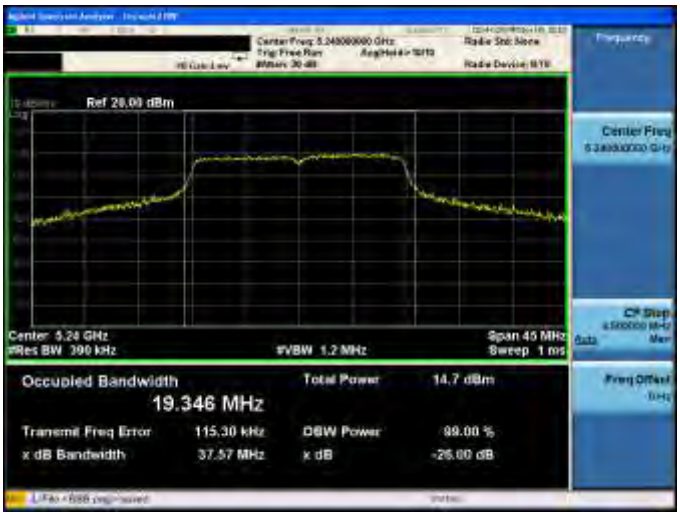
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5190	46.570	46.720	37.235	36.958
5230	79.960	72.890	38.205	37.892

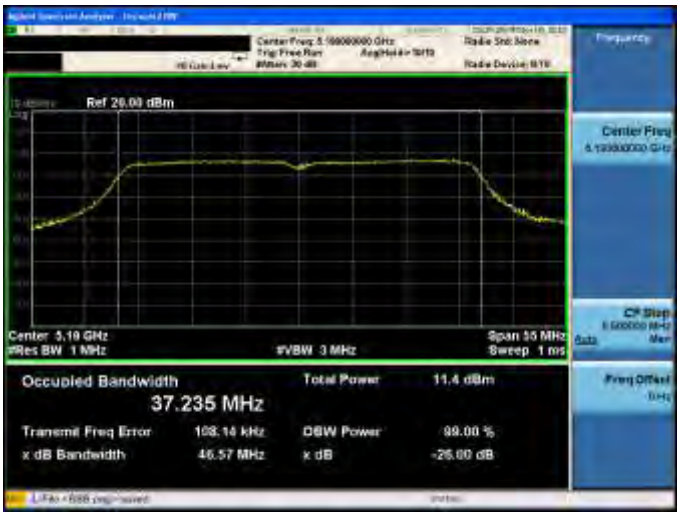
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	26 dB Bandwidth (MHz)		99 % Occupied Bandwidth (MHz)	
	Ant-0	Ant-1	Ant-0	Ant-1
5210	90.200	86.980	76.257	75.941

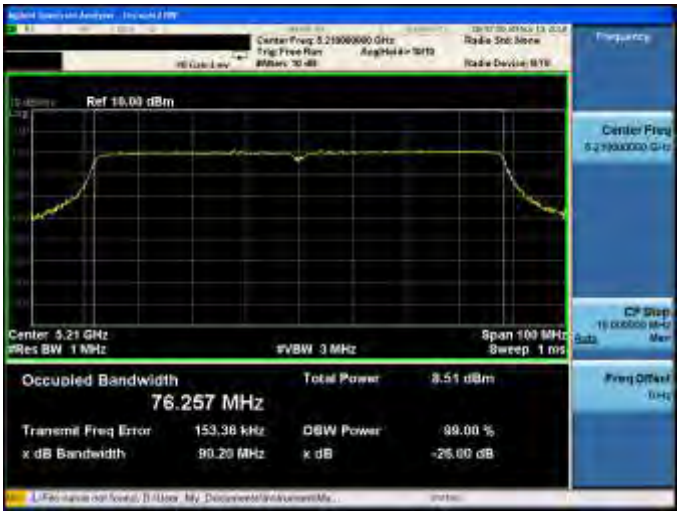
Note: The 99 % occupied bandwidth not crossed 5250 MHz.

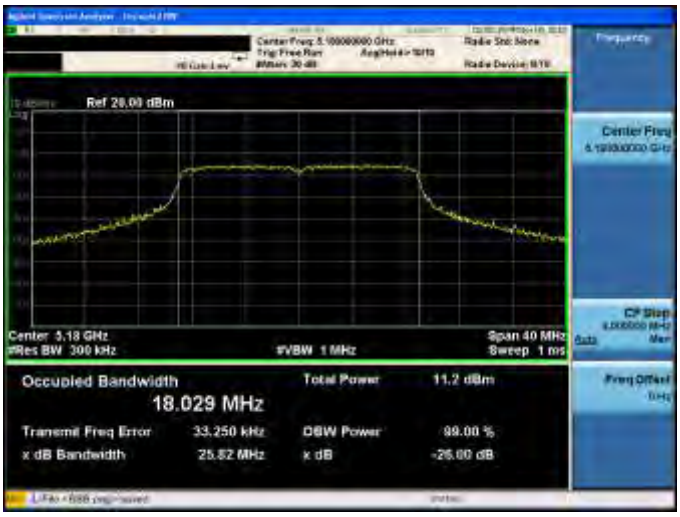
■ **Test Graphs**

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

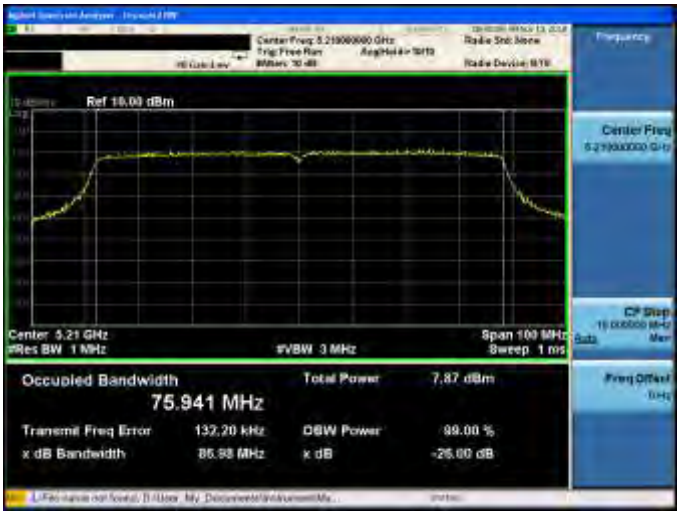
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5190 MHz	
5230 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-0	
5210 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	
5230 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-1	
5210 MHz	

5.5. 6 dB RF Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5745	16410	≥ 500
5785	16380	≥ 500
5825	16410	≥ 500

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5745	17610	17640	≥ 500
5785	17610	17610	≥ 500
5825	17610	17610	≥ 500

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5755	36070	35980	≥ 500
5795	36430	36380	≥ 500

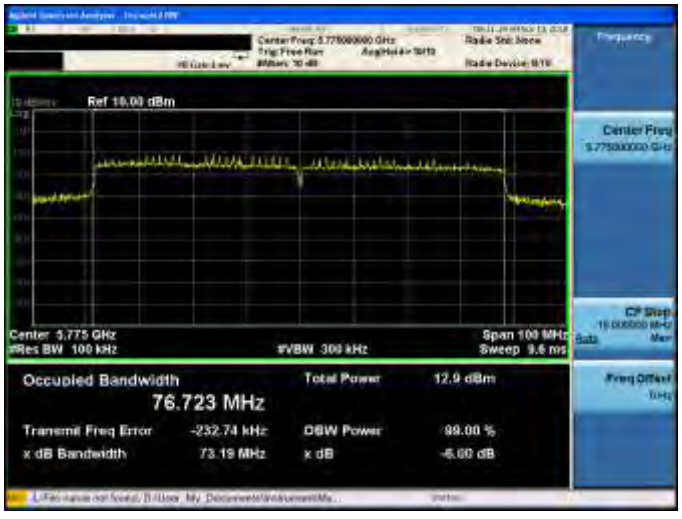
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode		
Frequency (MHz)	ANT-0	ANT-1	Limit (kHz)
5775	73190	73860	≥ 500

■ **Test Graphs**

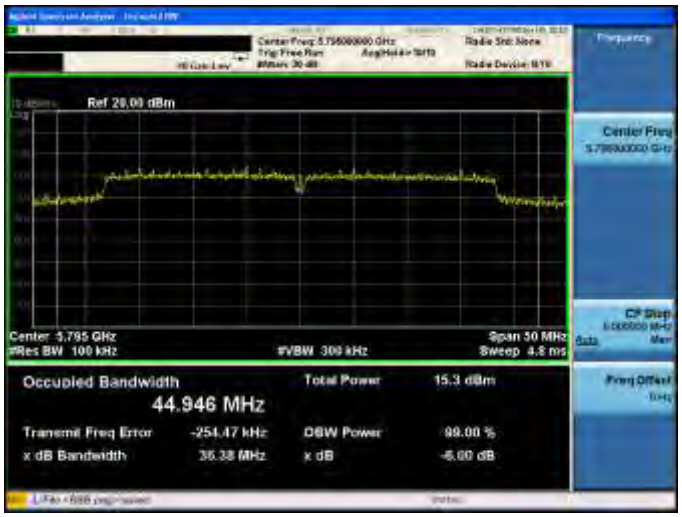
Mode 2: IEEE 802.11a Continuous TX mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

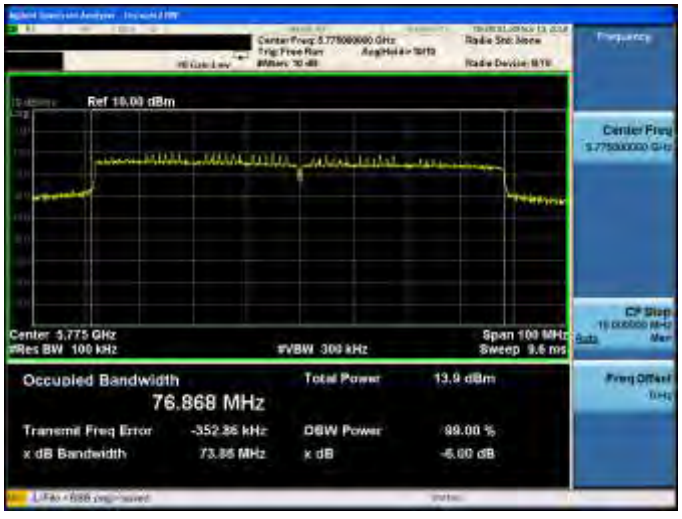
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-0	
5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-0	
5775 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-1	
5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-1	
5775 MHz	

5.6. Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	10.945	0.125	11.070	≤ 17
5200	12.456	0.125	12.581	
5240	9.332	0.125	9.457	

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 link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	1.37	0.125	8.49	≤ 30
5785	0.59	0.125	7.70	
5825	0.36	0.125	7.47	

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 3: IEEE 802.11ac 20 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	8.212	0.156	8.368	≤ 14.67
5200	11.086	0.156	11.242	
5240	8.074	0.156	8.230	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	6.034	0.156	6.190	≤ 14.67
5200	11.021	0.156	11.177	
5240	6.816	0.156	6.972	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5180	10.424			≤ 14.67
5200	14.219			
5240	10.656			

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

Test Mode	Mode 3: IEEE 802.11ac 20 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	1.19	0.156	8.34	≤ 27.31
5785	-0.05	0.156	7.09	
5825	-0.69	0.156	6.46	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-0.69	0.156	6.46	≤ 27.31
5785	-1.76	0.156	5.38	
5825	-1.55	0.156	5.59	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5745	10.51			≤ 27.31
5785	9.33			
5825	9.06			

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 4: IEEE 802.11ac 40 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	1.369	0.174	1.543	≤ 14.67
5230	5.746	0.174	5.920	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-0.081	0.174	0.093	≤ 14.67
5230	3.827	0.174	4.001	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5190	3.888			≤ 14.67
5230	8.076			

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

Test Mode	Mode 4: IEEE 802.11ac 40 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-2.67	0.174	4.49	≤ 27.31
5795	-3.51	0.174	3.65	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-3.47	0.174	3.69	≤ 27.31
5795	-3.55	0.174	3.62	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5755	7.12			≤ 27.31
5795	6.65			

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 80 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-4.222	0.183	-4.039	≤ 14.67
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-5.376	0.183	-5.193	≤ 14.67
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	-1.567			≤ 14.67

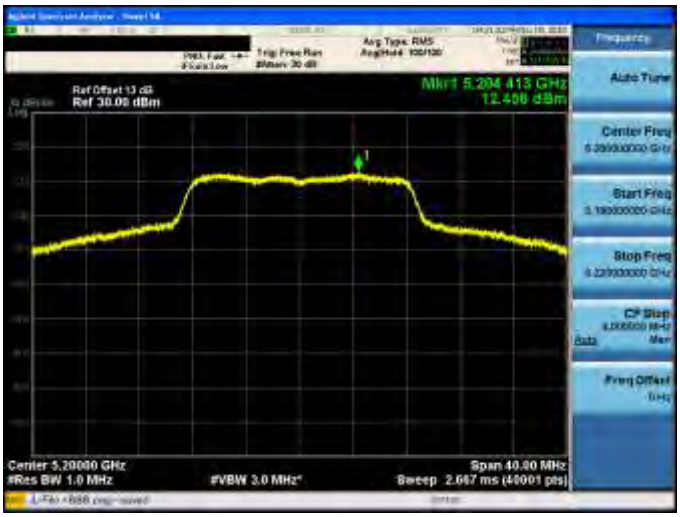
Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

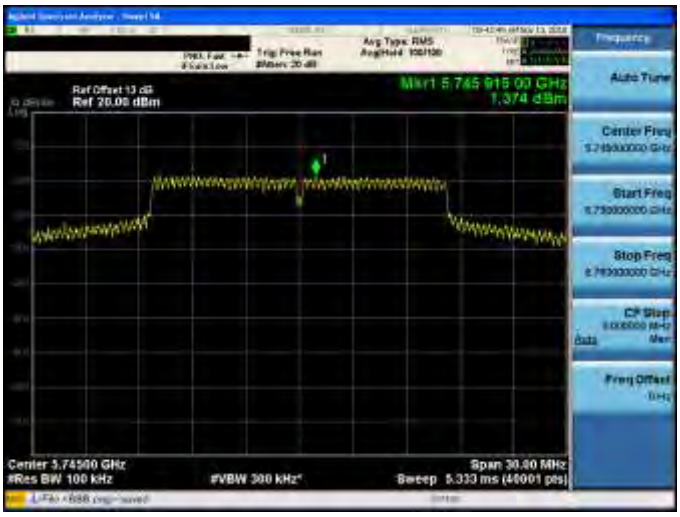
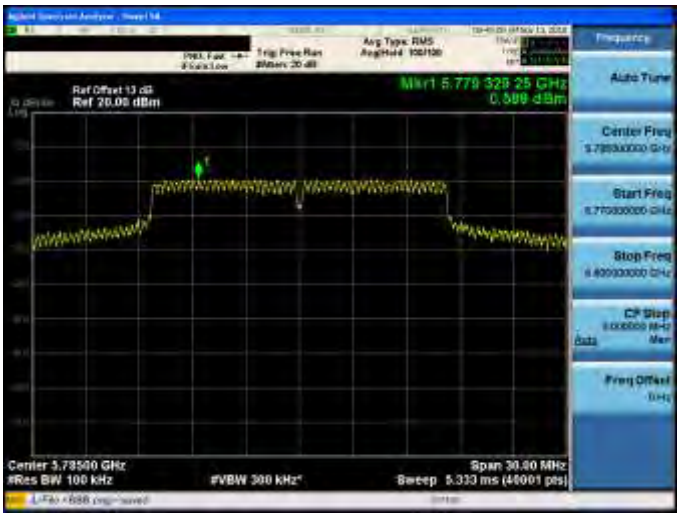
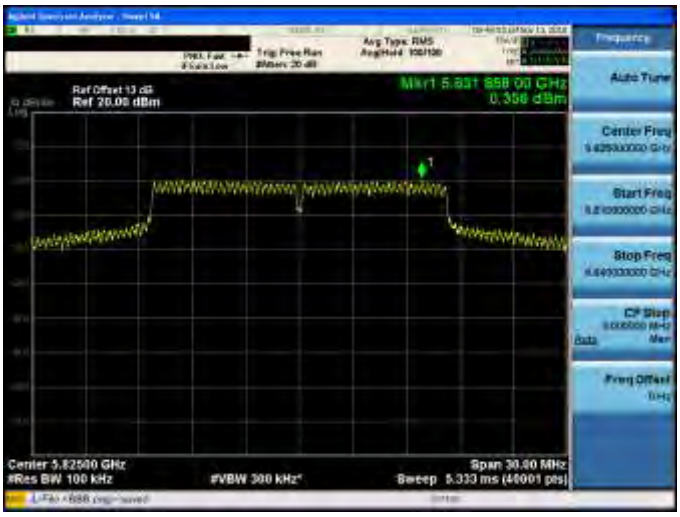
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-6.97	0.183	0.20	≤ 27.31
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-7.79	0.183	-0.61	≤ 27.31
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5775	2.82			≤ 27.31

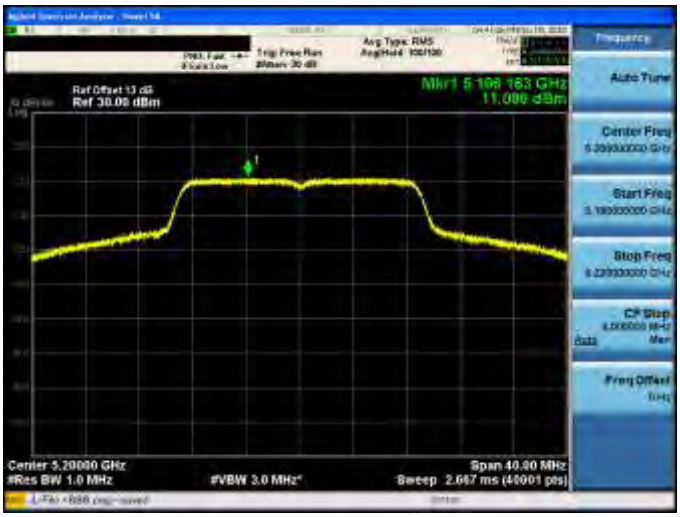
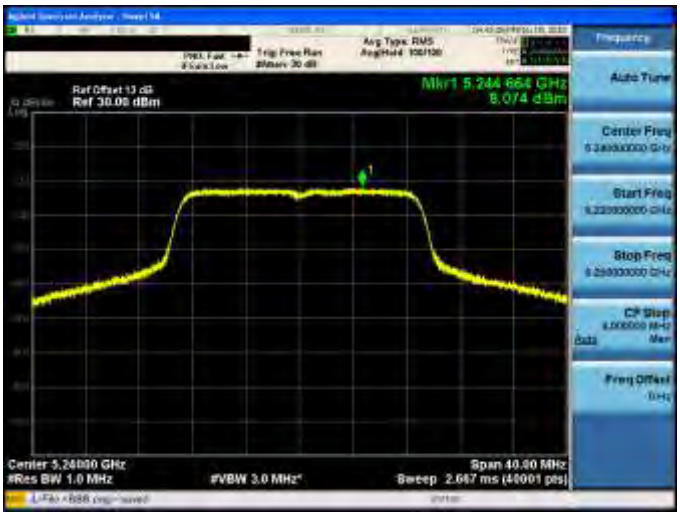
Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

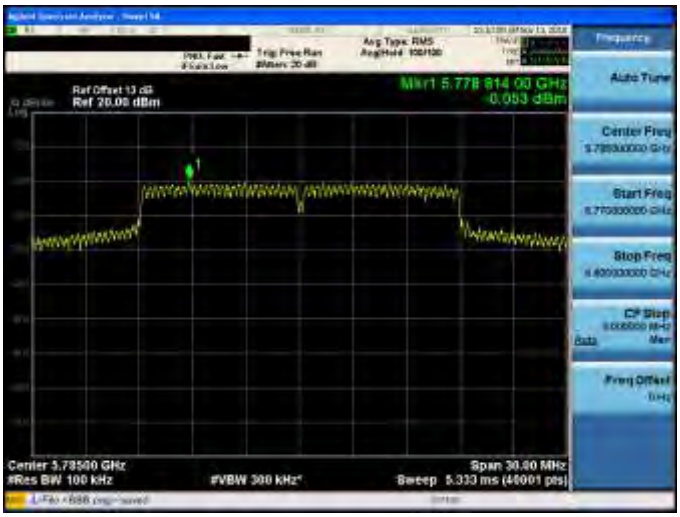
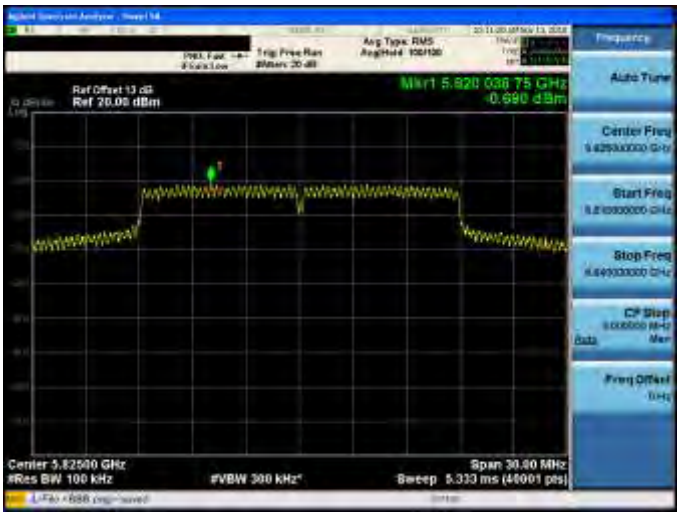
Conversion ratio = 10*Log(500 k/100 k)

■ **Test Graphs**

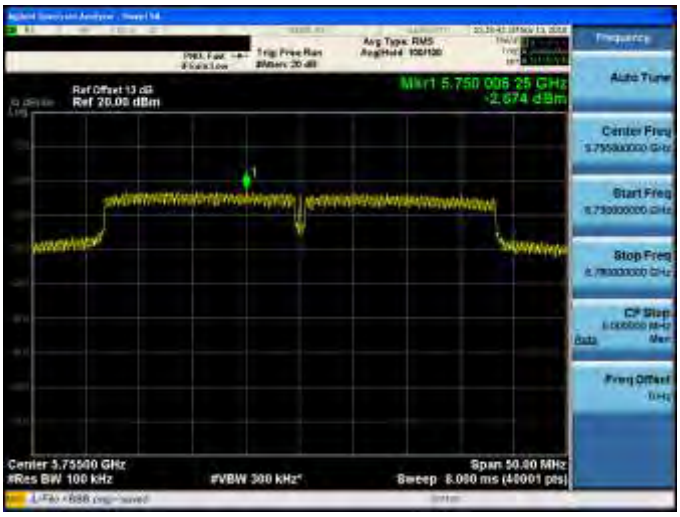
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

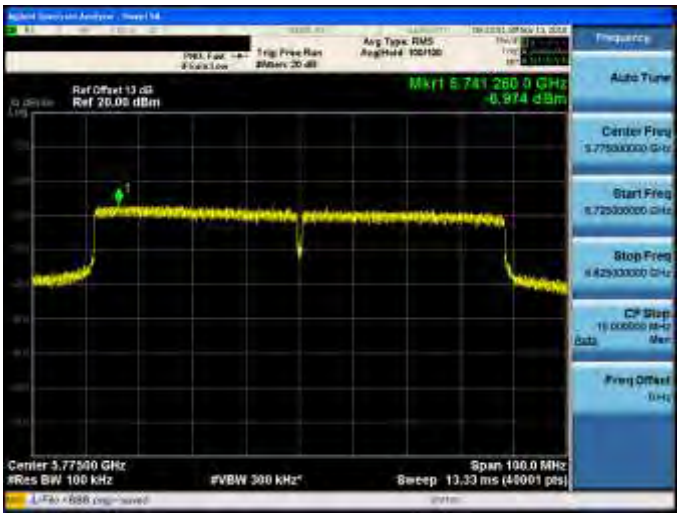
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

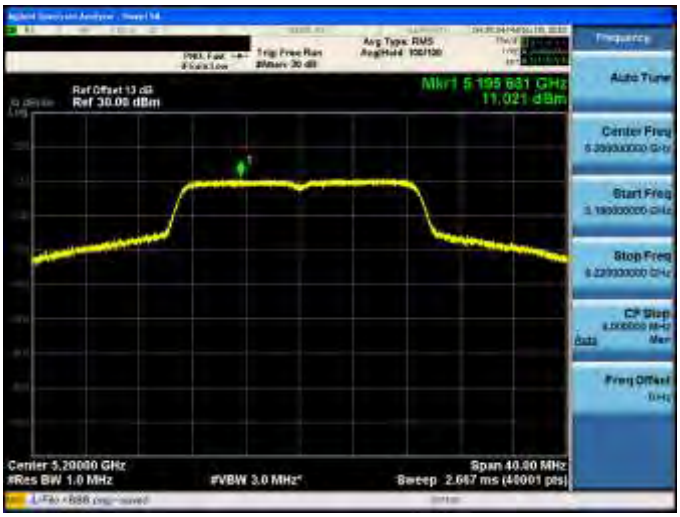
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

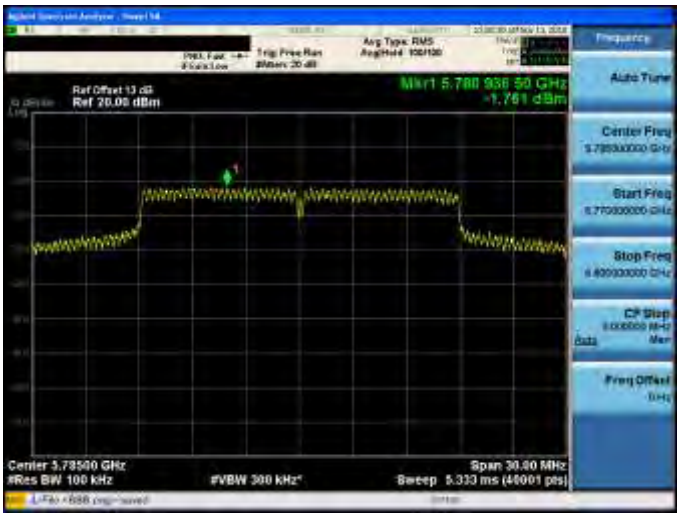
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

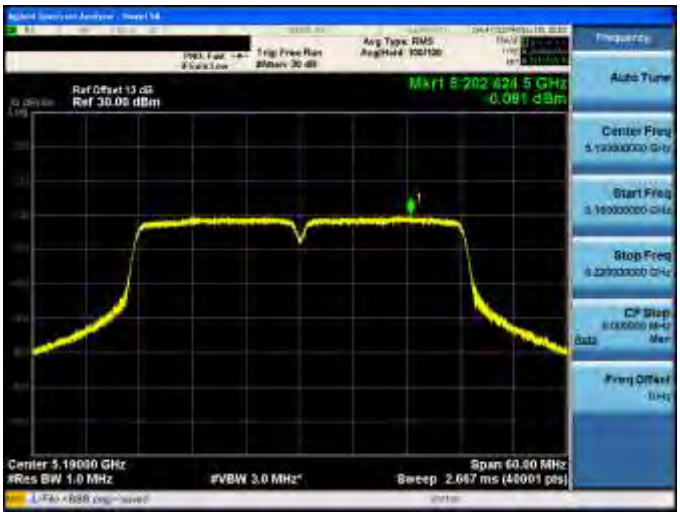
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5190 MHz	
5230 MHz	

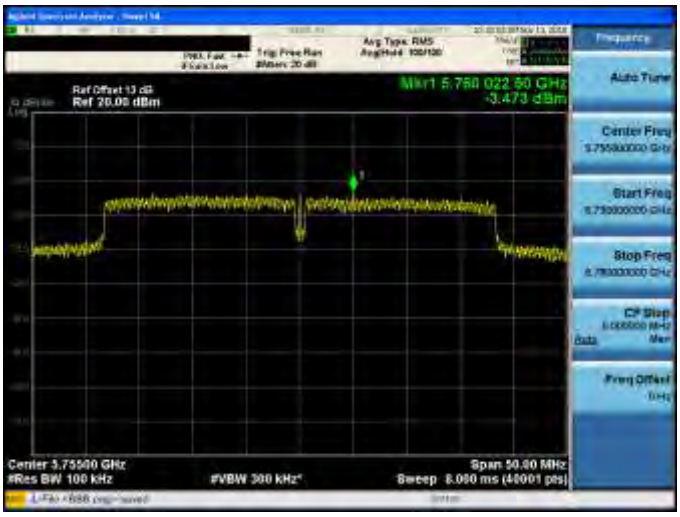
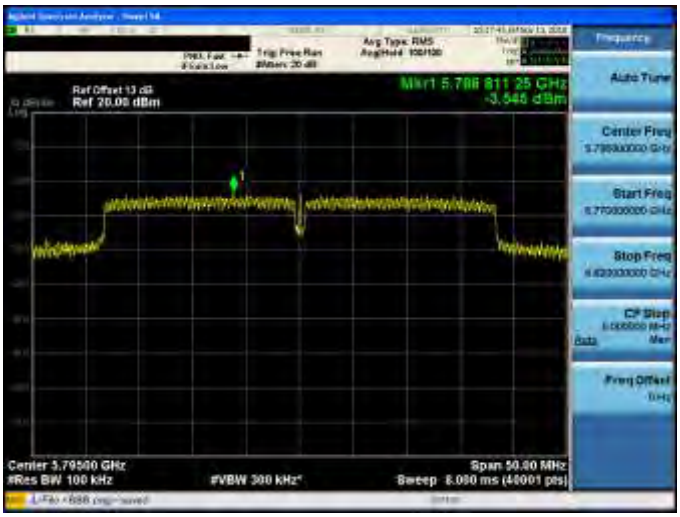
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0	
5210 MHz	
5775 MHz	

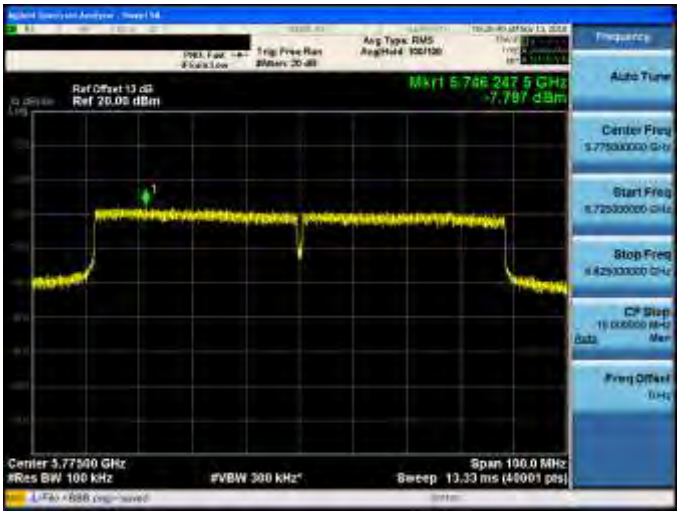
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	
5230 MHz	

Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-1	
5210 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-1	
5775 MHz	

5.7. Frequency Stability Measurement

Temperature Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	-40	120	5199.9683	-31700	-6.096	Pass
	-30		5199.9683	-31700	-6.096	Pass
	-20		5199.9763	-23700	-4.558	Pass
	-10		5199.9787	-21300	-4.096	Pass
	0		5199.9796	-20400	-3.923	Pass
	10		5199.9808	-19200	-3.692	Pass
	20		5199.9828	-17200	-3.308	Pass
	30		5199.9846	-15400	-2.962	Pass
	40		5199.9862	-13800	-2.654	Pass
5785 MHz	-40	120	5784.9515	-48500	-8.384	Pass
	-30		5784.9586	-41400	-7.156	Pass
	-20		5784.9623	-37700	-6.517	Pass
	-10		5784.9693	-30700	-5.307	Pass
	0		5784.9733	-26700	-4.615	Pass
	10		5784.9788	-21200	-3.665	Pass
	20		5784.9817	-18300	-3.163	Pass
	30		5784.9835	-16500	-2.852	Pass
	40		5784.9932	-6800	-1.175	Pass

Voltage Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138	5199.9834	-16600	-3.192	Pass
		120	5199.9828	-17200	-3.308	Pass
		102	5199.9828	-17200	-3.308	Pass
5785 MHz	20	138	5784.9817	-18300	-3.163	Pass
		120	5784.9817	-18300	-3.163	Pass
		102	5784.9827	-17300	-2.990	Pass

Note: The manufacturer's frequency stability specification is better then 20 ppm.