

RF Test Report

Applicant : LANCOM Systems GmbH
Product Type : mini PCIe module
Trade Name : LANCOM
Model Number : EW-7955MAC
Test Specification : FCC 47 CFR PART 15 SUBPART E
ANSI C63.10:2013
Receive Date : Feb. 18, 2019
Test Period : Mar. 13 ~ Mar. 23, 2019
Issue Date : Apr. 08, 2019

Issue by

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

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Apr. 08, 2019	Initial Issue	Nina Lin

Verification of Compliance

Issued Date: Apr. 08, 2019

Applicant : LANCOM Systems GmbH
Product Type : mini PCIe module
Trade Name : LANCOM
Model Number : EW-7955MAC
FCC ID : U4Y-EW7955MAC
EUT Rated Voltage : DC 3.3 V
Test Voltage : DC 48 V
Applicable Standard : FCC 47 CFR PART 15 SUBPART E
ANSI C63.10:2013
Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
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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
(Manager) (Fly Lu)

Reviewed By : Eric Ou Yang
(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 & 99 % Occupied Bandwidth	Reference	---
15.407(a)	Maximum Power Spectral Density	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
Duty Cycle		1.06 %
Time Occupancy		1.40 %

2 EUT Description

Applicant	LANCOM Systems GmbH Adenauerstr. 20/B2, Wuerselen, 52146, Germany			
Manufacturer	Edimax Technology Co., Ltd. No.278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan			
Product Type	mini PCIe module			
Trade Name	LANCOM			
Model No.	EW-7955MAC			
FCC ID	U4Y-EW7955MAC			
Operate Frequency	Frequency Band		Frequency Range (MHz)	Number of Channels
	IEEE 802.11a	U-NII Band I	5180 – 5240	4
	IEEE 802.11n 5 GHz 20 MHz / IEEE 802.11ac 20 MHz	U-NII Band I	5180 – 5240	4
	IEEE 802.11n 5 GHz 40 MHz / IEEE 802.11ac 40 MHz	U-NII Band I	5190 – 5230	2
	IEEE 802.11ac 80 MHz	U-NII Band I	5210	1
Modulation Type	OFDM			
Equipment Type	Master			
Antenna information	ANT	Model	Type	Max. Gain (dBi)
	ANT-0/ANT-1/ANT-2/ANT-3	AT-25-A80355-B32D083	External Antenna	5
	ANT-0/ANT-1/ANT-2/ANT-3	TE-2118837-2	PIFA Antenna	3.93
Antenna Delivery	Reference section 3.1			
Operate Temp. Range	0 ~ +50 °C			



Frequency Band		RF Output Power (W)
IEEE 802.11a	U-NII Band I	0.171
IEEE 802.11ac 20 MHz	U-NII Band I	0.199
IEEE 802.11ac 40 MHz	U-NII Band I	0.317
IEEE 802.11ac 80 MHz	U-NII Band I	0.048

Beamforming on

Frequency Band		RF Output Power (W)
IEEE 802.11ac 20 MHz	U-NII Band I	0.046
IEEE 802.11ac 40 MHz	U-NII Band I	0.070
IEEE 802.11ac 80 MHz	U-NII Band I	0.010

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.

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

Test Mode	Antenna Delivery	Data Rate (Mbps)	Band	Test Channel
Mode 2	4TX (CDD)	6	U-NII Band I	36, 40, 48
Mode 3	4TX (CDD/Beamforming on)	26	U-NII Band I	36, 40, 48
Mode 4	4TX (CDD/Beamforming on)	54	U-NII Band I	38, 46
Mode 5	4TX (CDD/Beamforming on)	117.2	U-NII Band I	42



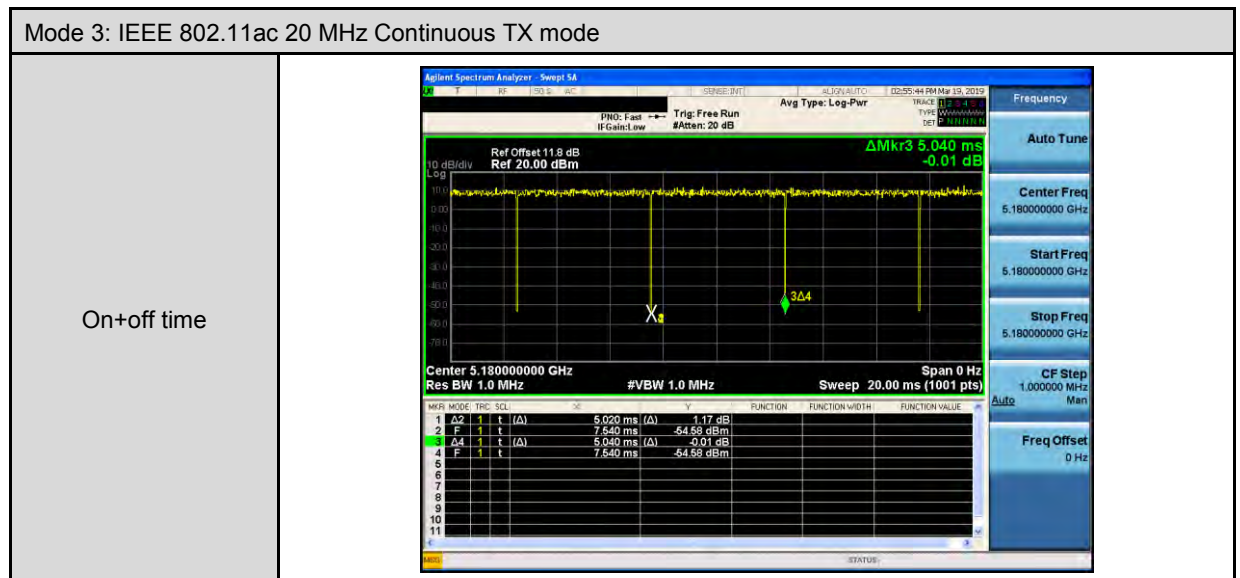
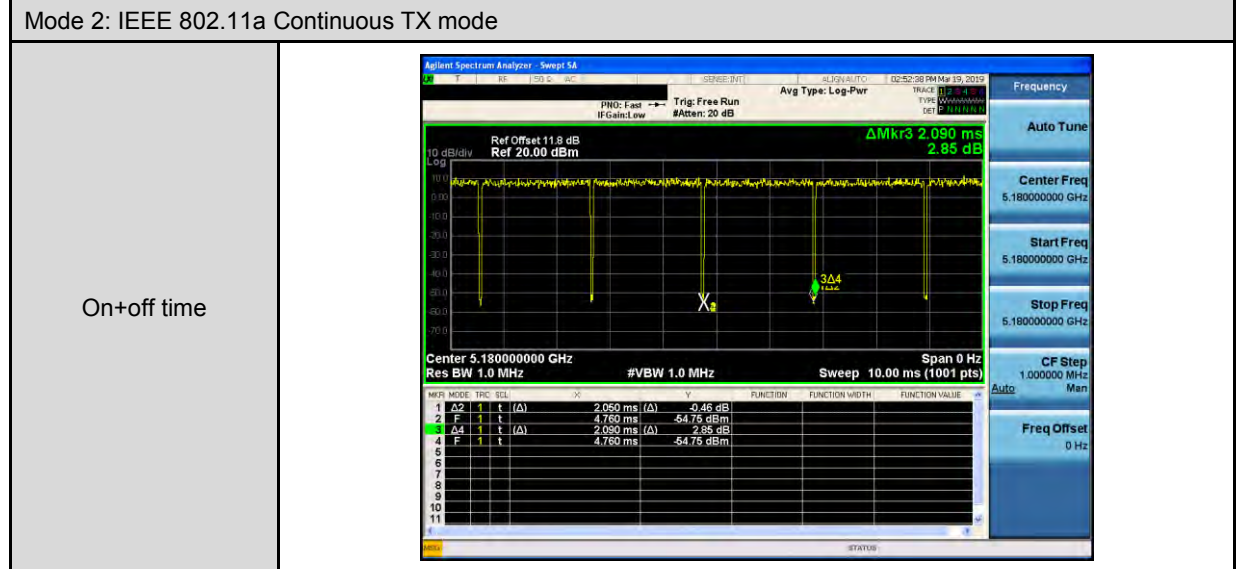
Duty cycle

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	2.090	0.981	0.084	0.010
Mode 3	5180.0	5.020	5.040	0.996	0.017	0.010
Mode 4	5190.0	2.440	2.480	0.984	0.071	0.010
Mode 5	5210.0	1.160	1.215	0.955	0.201	0.862

Beamforming on

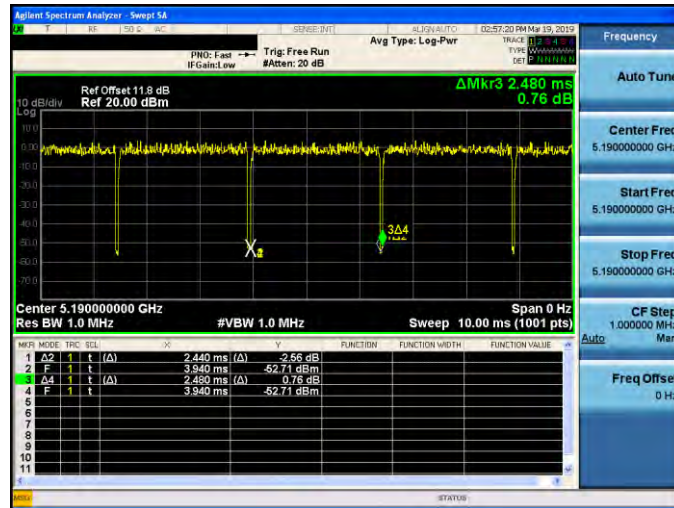
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 3	5180.0	5.020	5.040	0.996	0.017	0.010
Mode 4	5190.0	2.440	2.480	0.984	0.071	0.010
Mode 5	5210.0	1.160	1.215	0.955	0.201	0.862

Duty Cycle Graphs



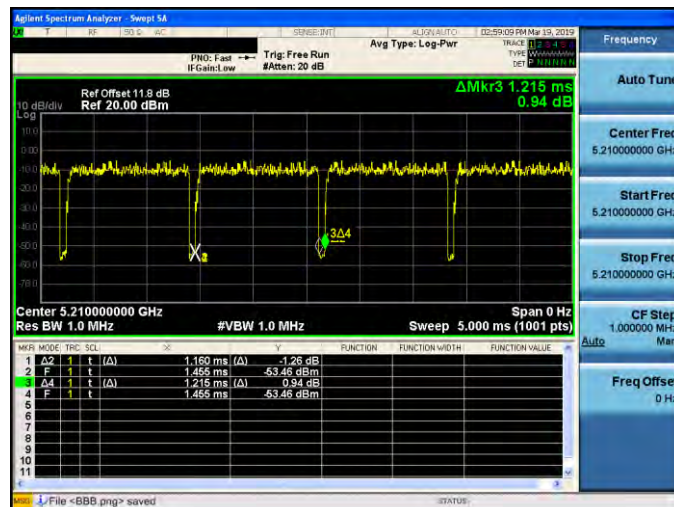
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode

On+off time



Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode

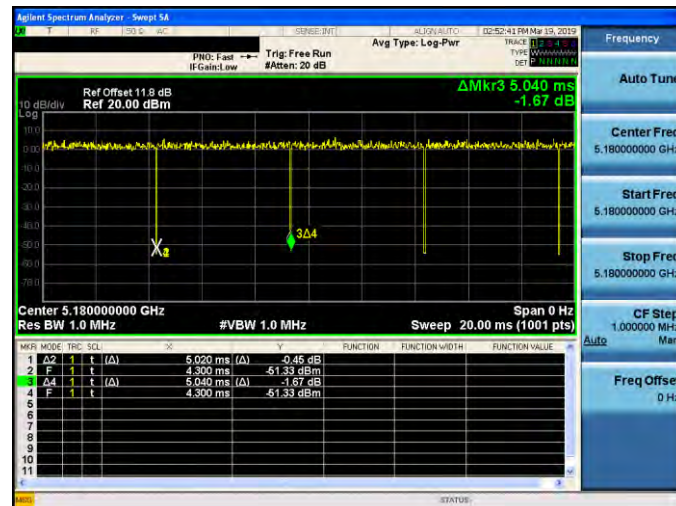
On+off time



Beamforming on

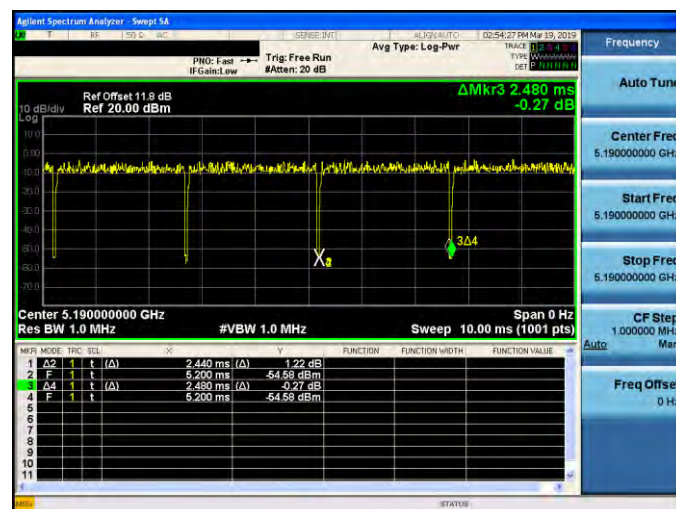
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode

On+off time



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode

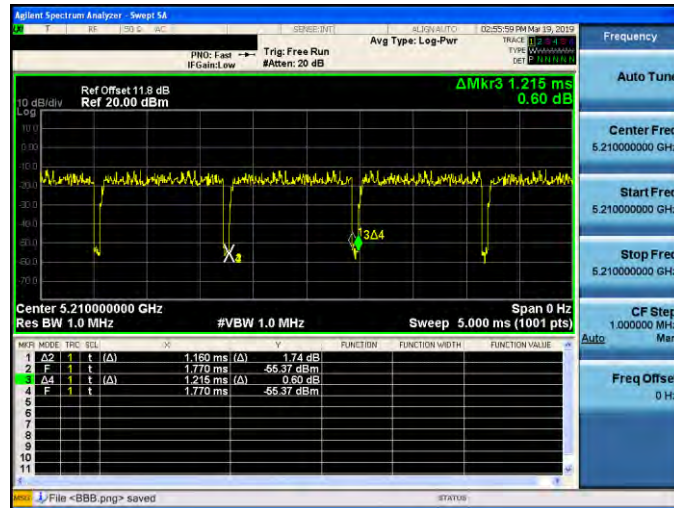
On+off time





Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode

On+off time





3.2. EUT Test Step

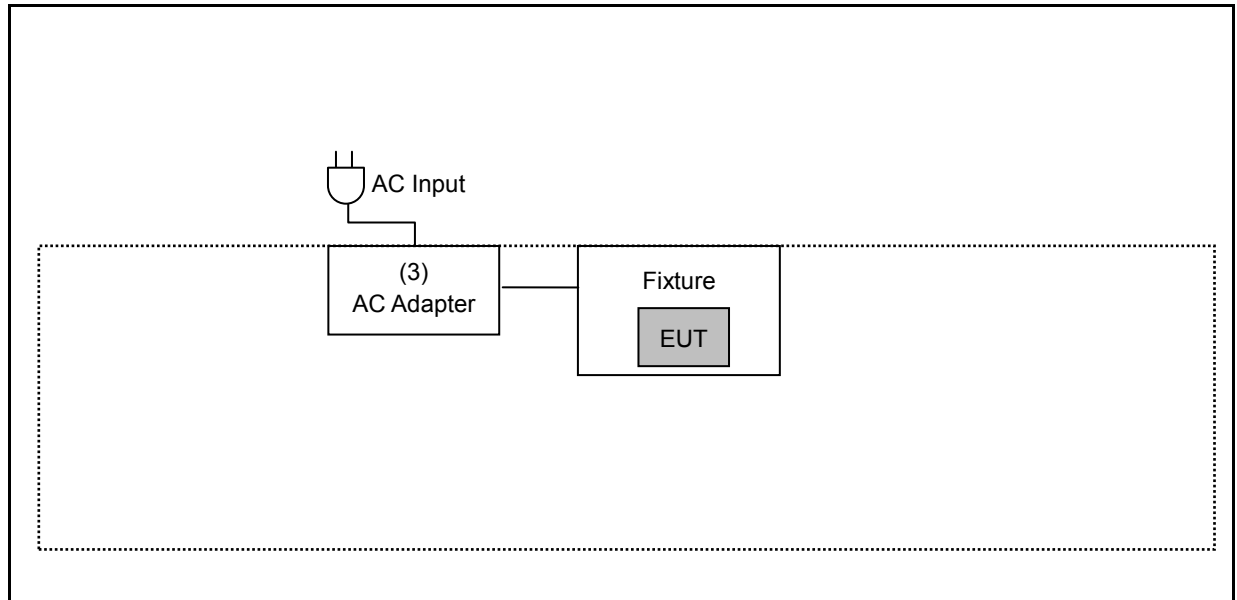
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

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.

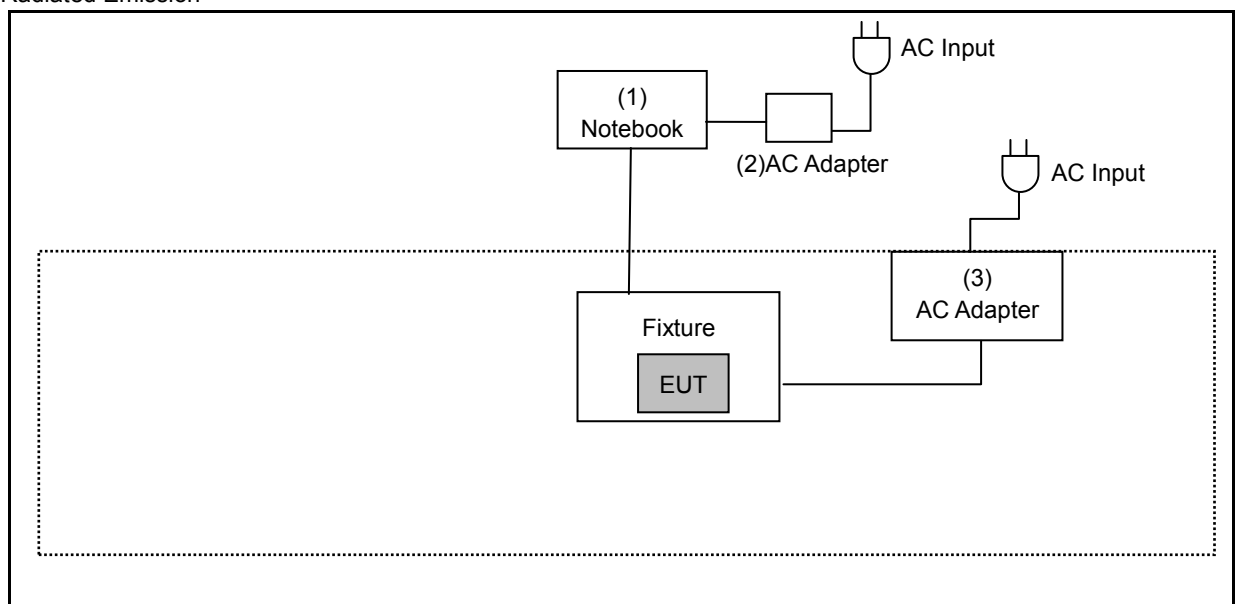
Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

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 E6440	5HZBD72	---
(2)	AC Adapter	DELL	HA65NM130	---	Non-Shielded, 0.8 m
(3)	AC Adapter	TPT	PMW480100	---	Non-Shielded, 1.5 m

3.4. Test Instruments

For Conducted Emission

Test Period: Mar. 23, 2019

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
RF Cable	Woken	00100D1380194M	TE-02-03	05/17/2018	1 year

For Radiated Emissions

Test Period: Mar. 13 ~ Mar. 18, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/14/2019	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/16/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/14/2019	1 year
Pre Amplifier (26.5~40 GHz)	EMCI	EMC2654045	980028	08/23/2018	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/19/2018	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/23/2018	1 year
Horn Antenna (18~40 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	08/07/2018	1 year
Loop Antenna	Electro-Metrics	EMCI-LPA600	227	04/19/2018	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2019	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1 3000	170814	10/30/2018	1 year
Microwave Cable	EMCI	EMC102-KM-KM-1 4000	151001	02/20/2019	1 year

For Conducted

Test Period: Mar. 18 ~ Mar. 20, 2019

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



3.5. Test Site Environment

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

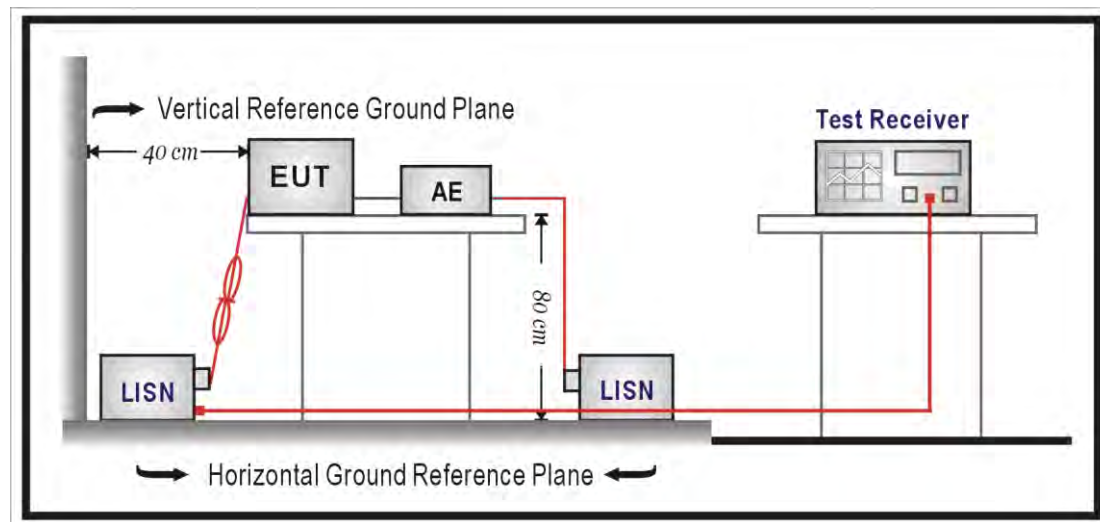
4 Measurement Procedure

4.1. AC Power Conducted Emission Measurement

■ Limit

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

■ Test Setup



■ Test Procedure

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

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

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

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

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

4.2. Transmitter Radiated Emissions Measurement

■ Limit

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

(a)For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(b)For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(c)For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(d)For transmitters operating in the 5.725-5.85 GHz band:

(i)All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2)Limits of Radiated Emission Measurement

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

Frequency Range (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

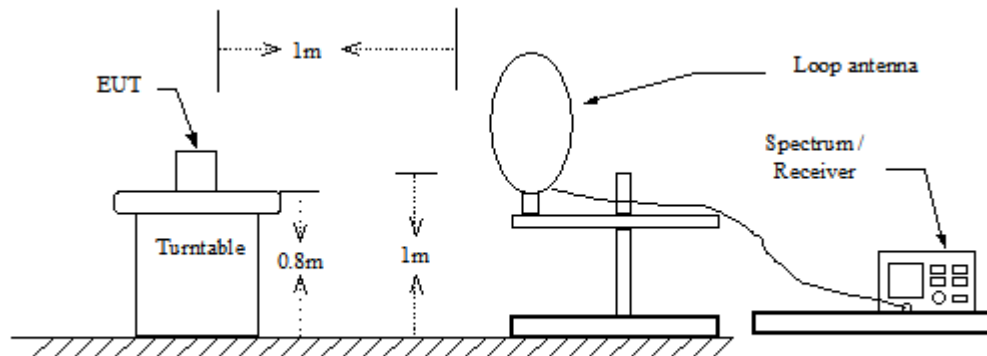
Note: 1. The lower limit shall apply at the transition frequencies.

2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

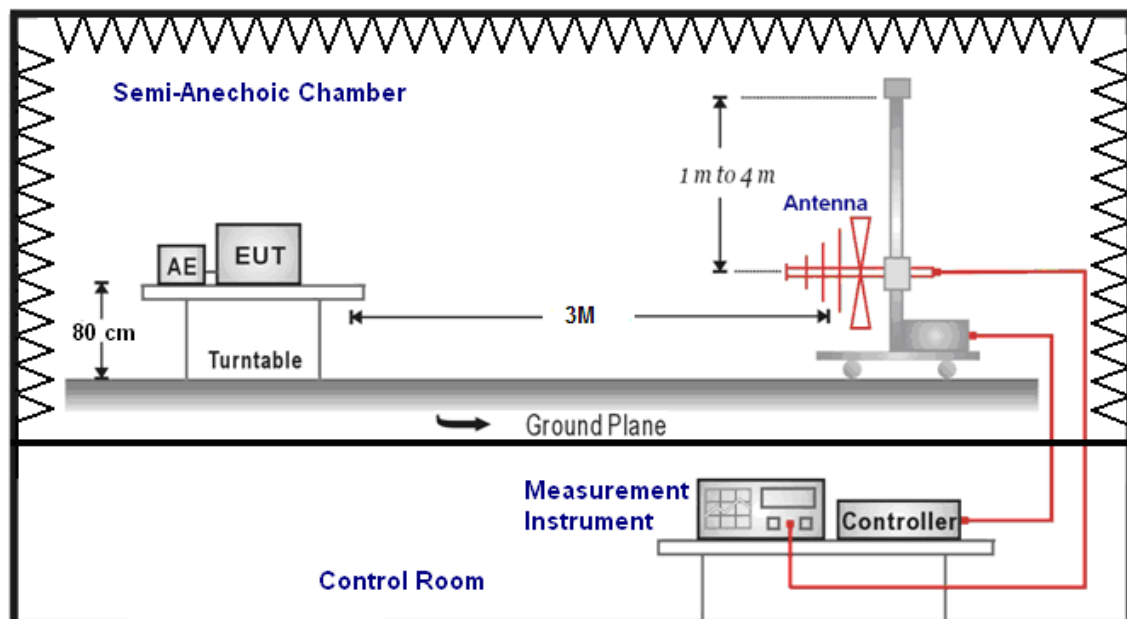
3. As shown in 15.35(b), for frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

■ Setup

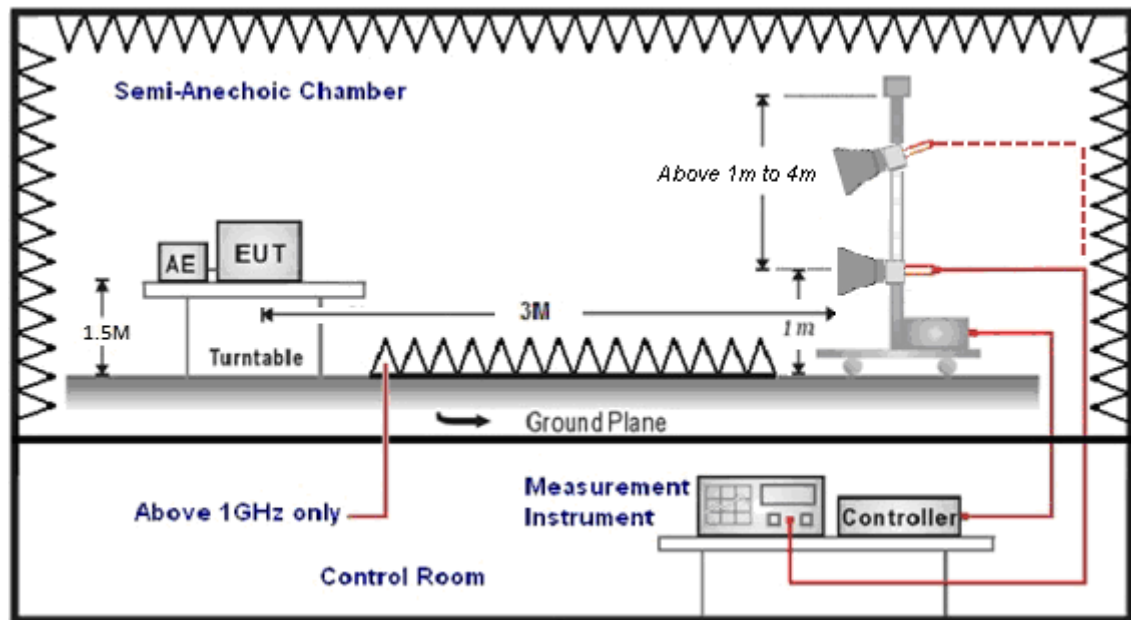
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



■ Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height (below 1 GHz use 0.8 m turntable / above 1 GHz use 1.5 m turntable), top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 40 GHz is investigated.

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

For restricted measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle > 0.98 / 1/T for average measurements when Duty cycle < 0.98.

For out of band measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements.

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

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

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

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

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

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

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

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

(1) 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 Measurement

■ Limit

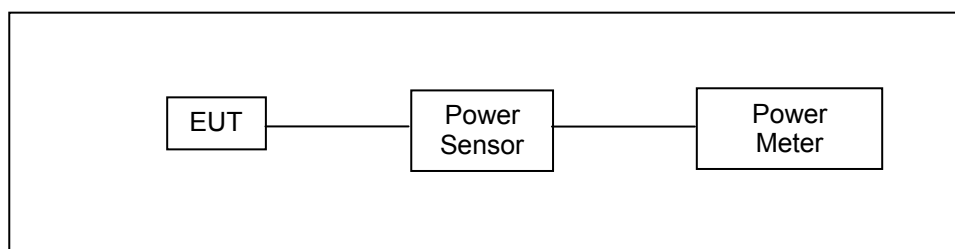
Frequency Range (MHz)	FCC Maximum Conducted Output Power Limit
5.150 ~ 5.250 GHz	The lesser of 1 W (30 dBm)

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

* Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$ = 11.02 dBi > 6 dBi

* BF mode : power limit shall be reduced = 30 - 5.02 = 24.98 dBm

■ Test Setup



■ Test Procedure

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

Section (E) Maximum Conducted Output Power

3. Measurement using a Power Meter (PM)

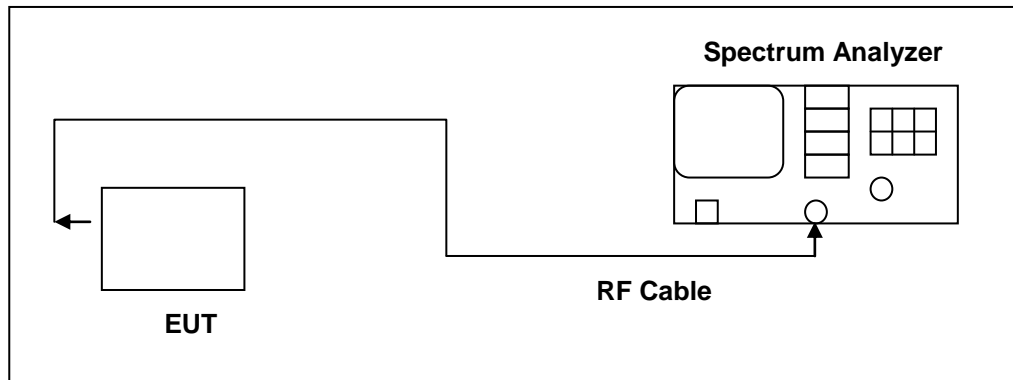
b) Method PM-G (Measurement using a gated RF average power meter)

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

■ **Limit**

N/A

■ **Test Setup**



■ **Test Procedure**

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

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

4.5. Maximum Power Spectral Density Measurement

■ Limit

Conducted power spectral density

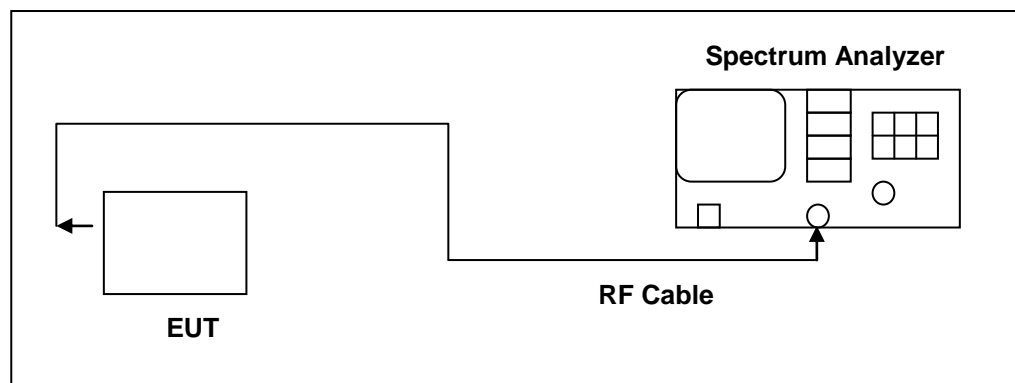
Frequency Range (MHz)	FCC Limit
5.150 ~ 5.250 GHz	17 dBm/MHz

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

* Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / N\} = 11.02 \text{ dBi} > 6 \text{ dBi}$

* CCD / BF mode : power spectral density limit shall be reduced = $17 - 5.02 = 11.98 \text{ dBm/MHz}$

■ Test Setup





■ **Test Procedure**

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

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

4.6. 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.

4.7. 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

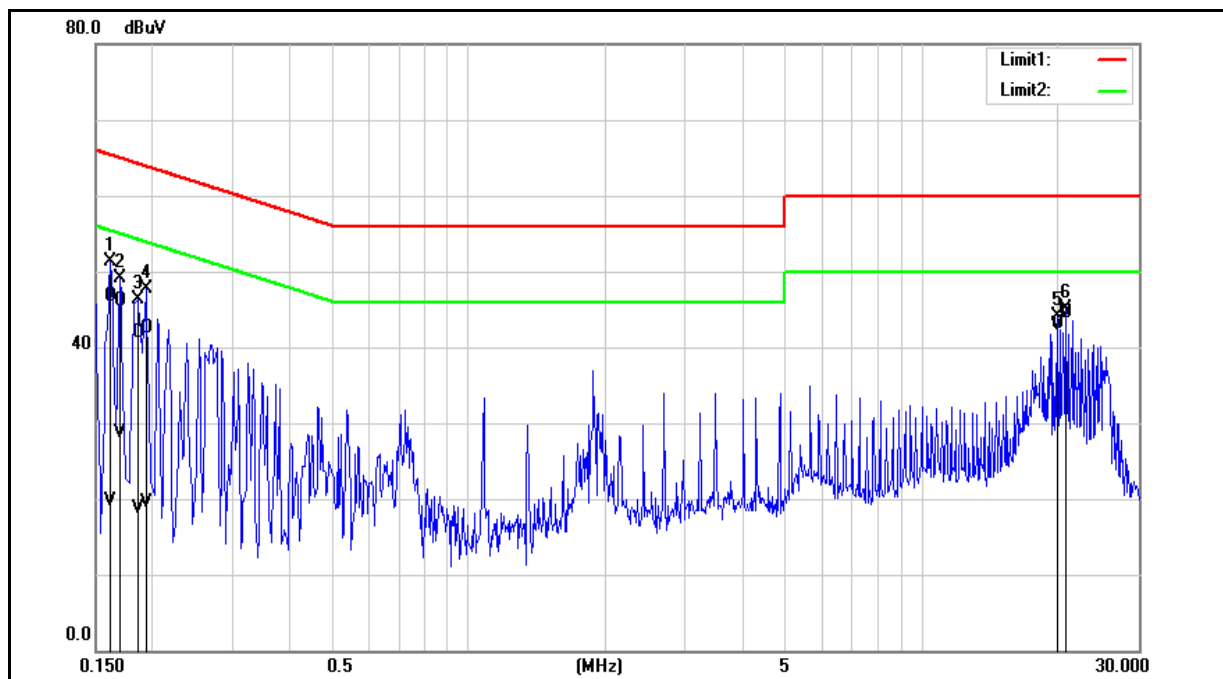
Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$ = 11.02 dBi > 6 dBi

Operate Freq. Band		Directional Gain (dBi)
IEEE 802.11a	U-NII Band I	11.02
IEEE 802.11ac 20 MHz	U-NII Band I	11.02
IEEE 802.11ac 40 MHz	U-NII Band I	11.02
IEEE 802.11ac 80 MHz	U-NII Band I	11.02

5 Test Results

5.1. AC Power Conducted Emission Measurement

Standard:	FCC Part 15.407	Line:	L1
Test item:	Conducted Emission	Power:	DC 48 V
Test Mode:	Mode 1	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Description:			

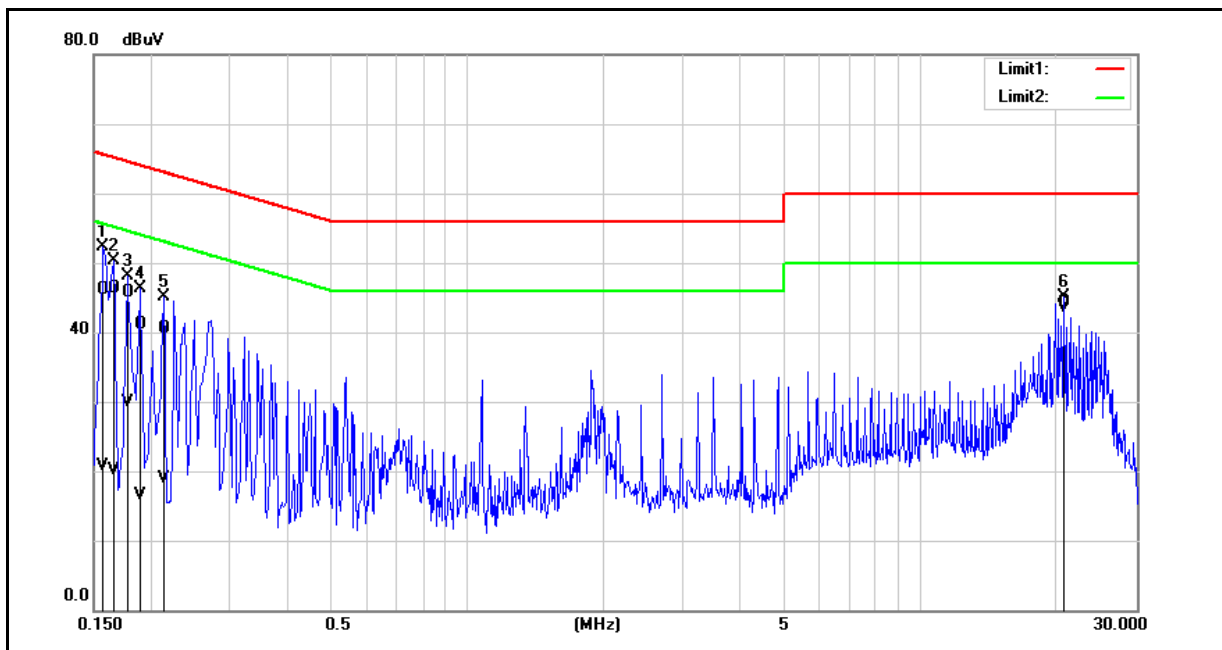


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	37.11	10.19	9.60	46.71	19.79	65.36	55.36	-18.65	-35.57	Pass
2	0.1700	36.48	19.16	9.60	46.08	28.76	64.96	54.96	-18.88	-26.20	Pass
3	0.1860	32.28	9.01	9.60	41.88	18.61	64.21	54.21	-22.33	-35.60	Pass
4	0.1940	32.99	9.89	9.60	42.59	19.49	63.86	53.86	-21.27	-34.37	Pass
5	19.9380	33.11	32.99	9.96	43.07	42.95	60.00	50.00	-16.93	-7.05	Pass
6	20.7460	34.51	34.47	9.96	44.47	44.43	60.00	50.00	-15.53	-5.57	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:	DC 48 V
Test Mode:	Mode 1	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	36.41	10.90	9.71	46.12	20.61	65.57	55.57	-19.45	-34.96	Pass
2	0.1660	36.65	10.44	9.71	46.36	20.15	65.16	55.16	-18.80	-35.01	Pass
3	0.1780	36.01	20.21	9.70	45.71	29.91	64.58	54.58	-18.87	-24.67	Pass
4	0.1900	31.50	6.77	9.70	41.20	16.47	64.04	54.04	-22.84	-37.57	Pass
5	0.2140	30.77	9.21	9.70	40.47	18.91	63.05	53.05	-22.58	-34.14	Pass
6	20.7460	34.01	33.39	10.20	44.21	43.59	60.00	50.00	-15.79	-6.41	Pass

Note: 1. Result = Correction factor + Reading

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

5.2. Transmitter Radiated Emissions Measurement

Antenna Type : External Antenna

Below 1 GHz

Standard:		FCC Part 15.407		Test Distance:		3 m	
Test item:		Harmonic		Power:		DC 48 V	
Test Mode:		Mode 1		Temp.(°C)/Hum. (%RH):		26(°C)/60 %RH	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
199.7500	43.08	-7.72	35.36	43.50	-8.14	QP	H
242.4300	40.31	-5.96	34.35	46.00	-11.65	QP	H
295.7800	37.79	-3.89	33.90	46.00	-12.10	QP	H
399.5700	34.40	-1.75	32.65	46.00	-13.35	QP	H
800.1800	34.35	6.35	40.70	46.00	-5.30	QP	H
997.0900	34.28	9.54	43.82	54.00	-10.18	QP	H
125.0600	44.54	-7.76	36.78	43.50	-6.72	QP	V
151.2500	38.50	-5.63	32.87	43.50	-10.63	QP	V
199.7500	44.26	-7.72	36.54	43.50	-6.96	QP	V
386.9600	38.24	-2.08	36.16	46.00	-9.84	QP	V
800.1800	35.22	6.35	41.57	46.00	-4.43	QP	V
997.0900	36.47	9.54	46.01	54.00	-7.99	QP	V

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

Example: 36.36=-7.72+43.08.

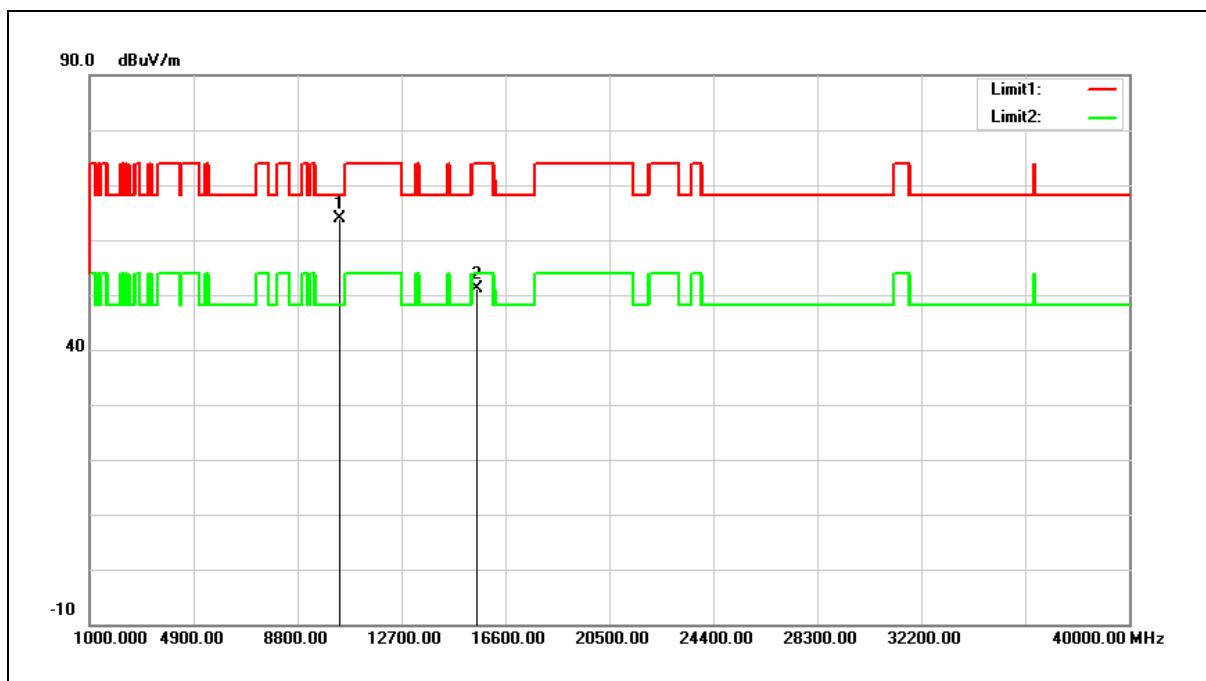
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



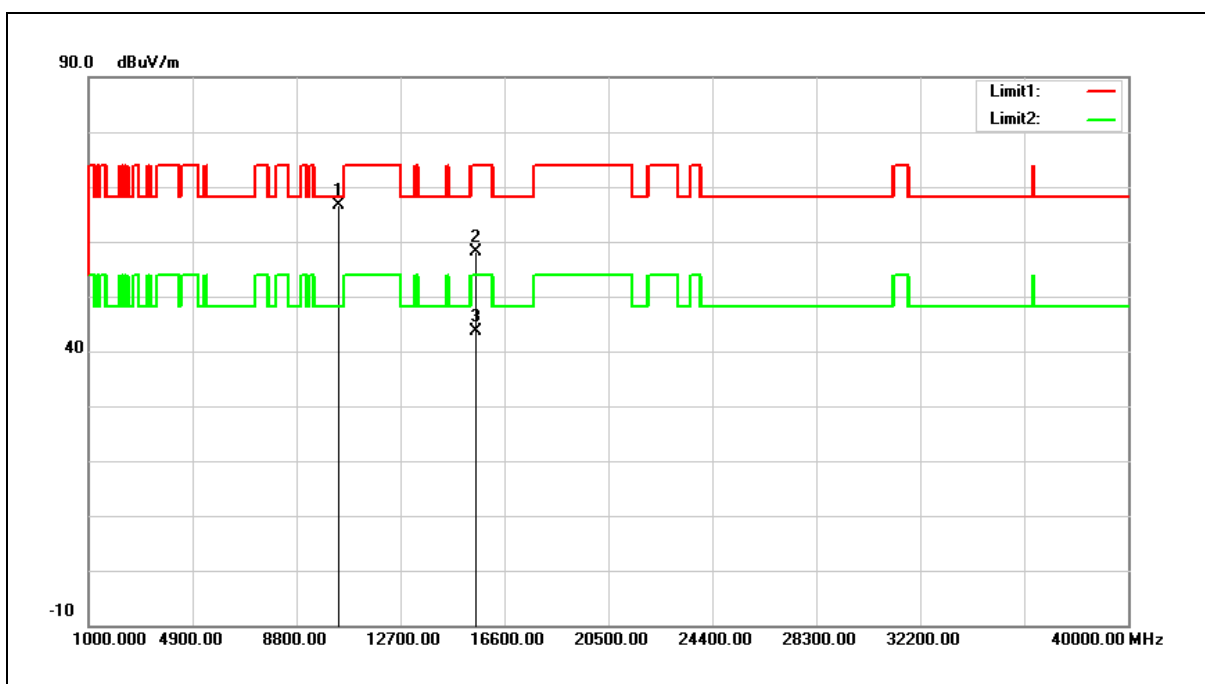
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	47.10	16.79	63.89	68.20	-4.31	peak
2	15540.000	32.16	19.03	51.19	74.00	-22.81	peak

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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



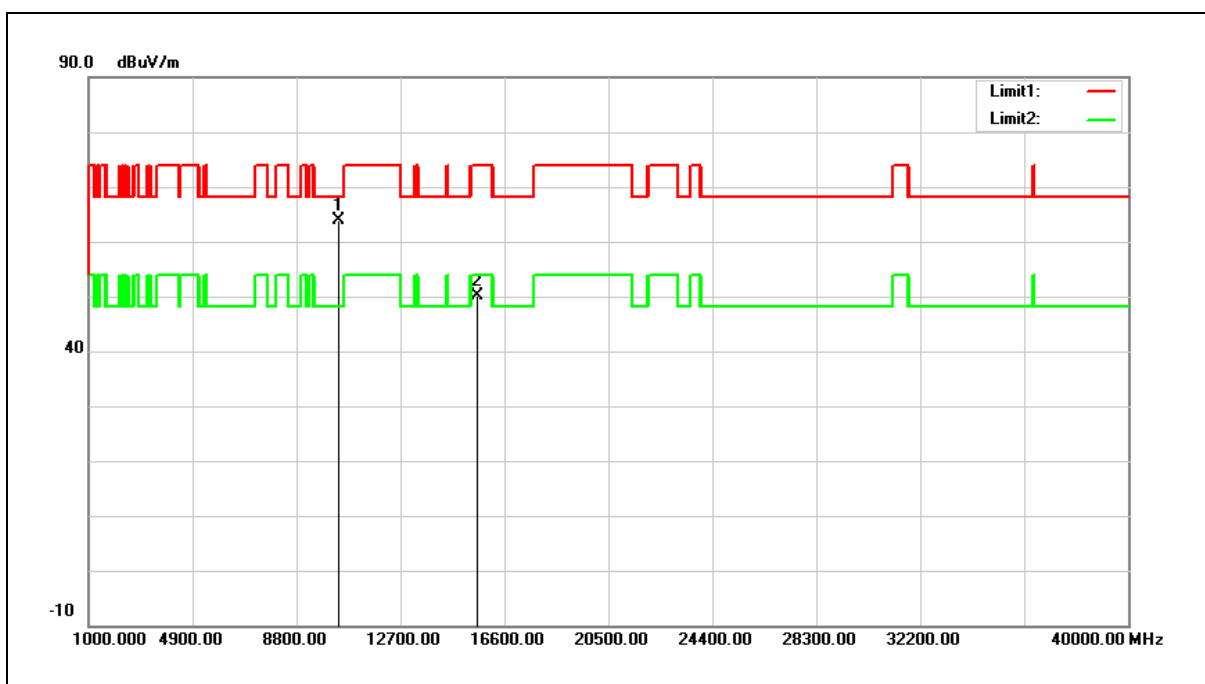
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	49.90	16.79	66.69	68.20	-1.51	peak
2	15540.000	39.11	19.03	58.14	74.00	-15.86	peak
3	15540.000	24.59	19.03	43.62	54.00	-10.38	AVG

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:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



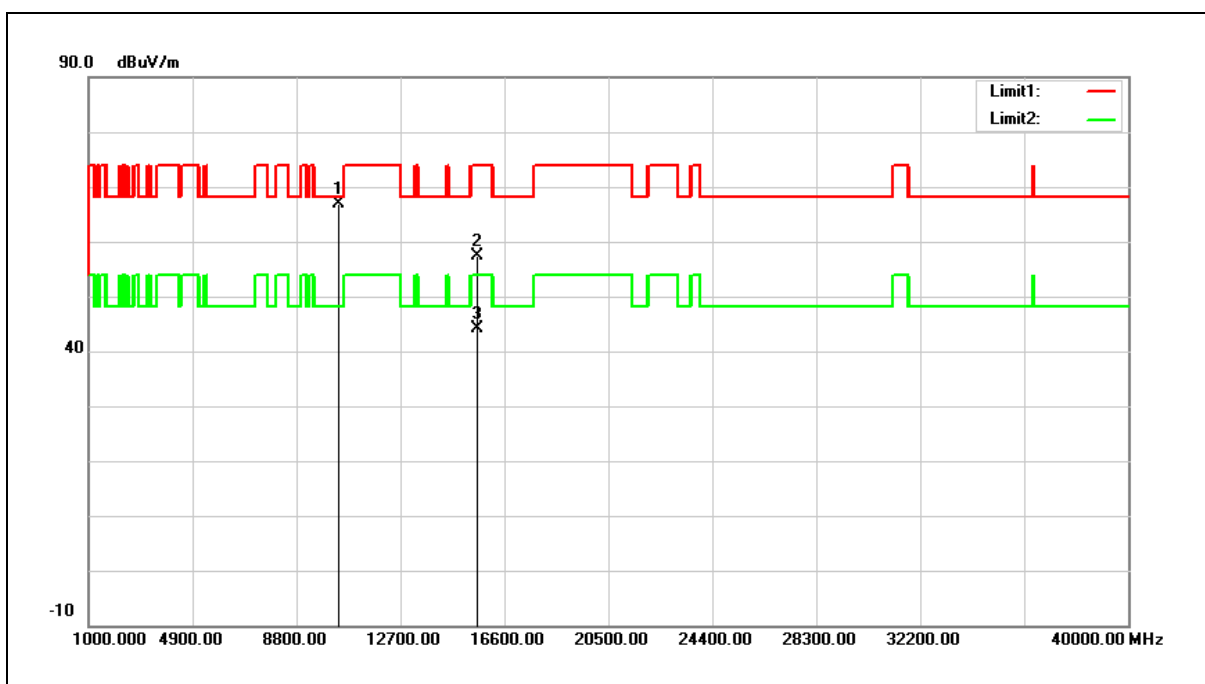
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	46.96	16.94	63.90	68.20	-4.30	peak
2	15600.000	31.24	18.87	50.11	74.00	-23.89	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



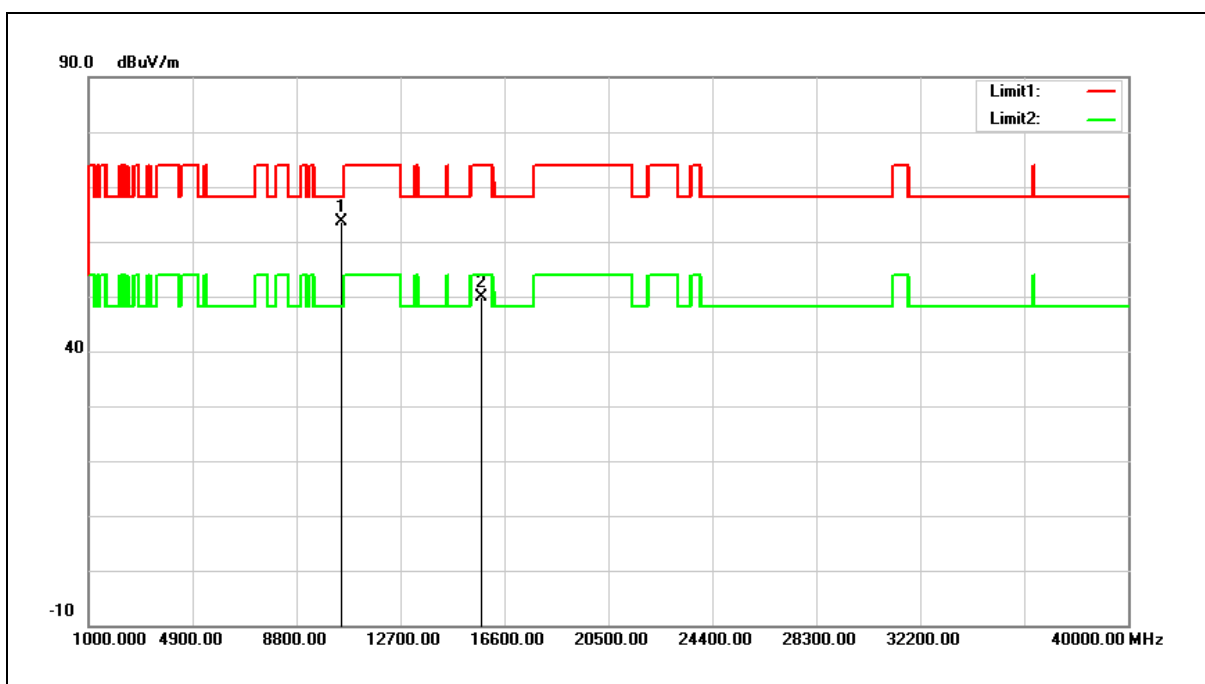
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	50.01	16.94	66.95	68.20	-1.25	peak
2	15600.000	38.55	18.87	57.42	74.00	-16.58	peak
3	15600.000	25.33	18.87	44.20	54.00	-9.80	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



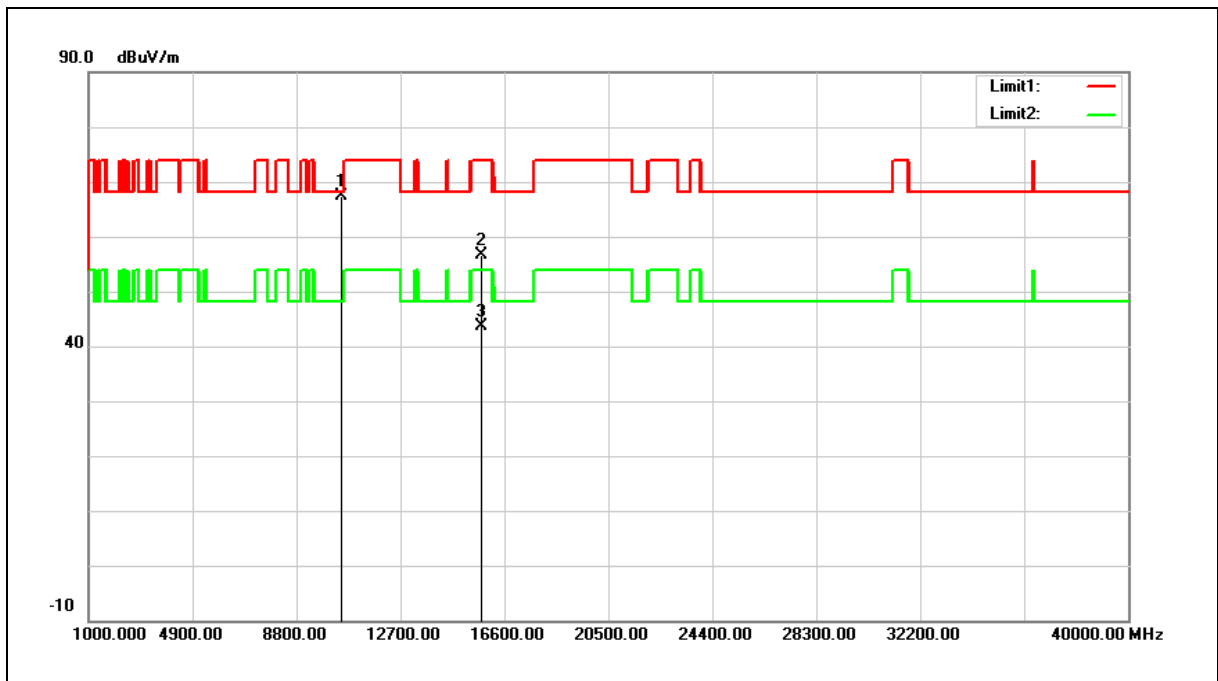
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	46.51	17.23	63.74	68.20	-4.46	peak
2	15720.000	31.21	18.57	49.78	74.00	-24.22	peak

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



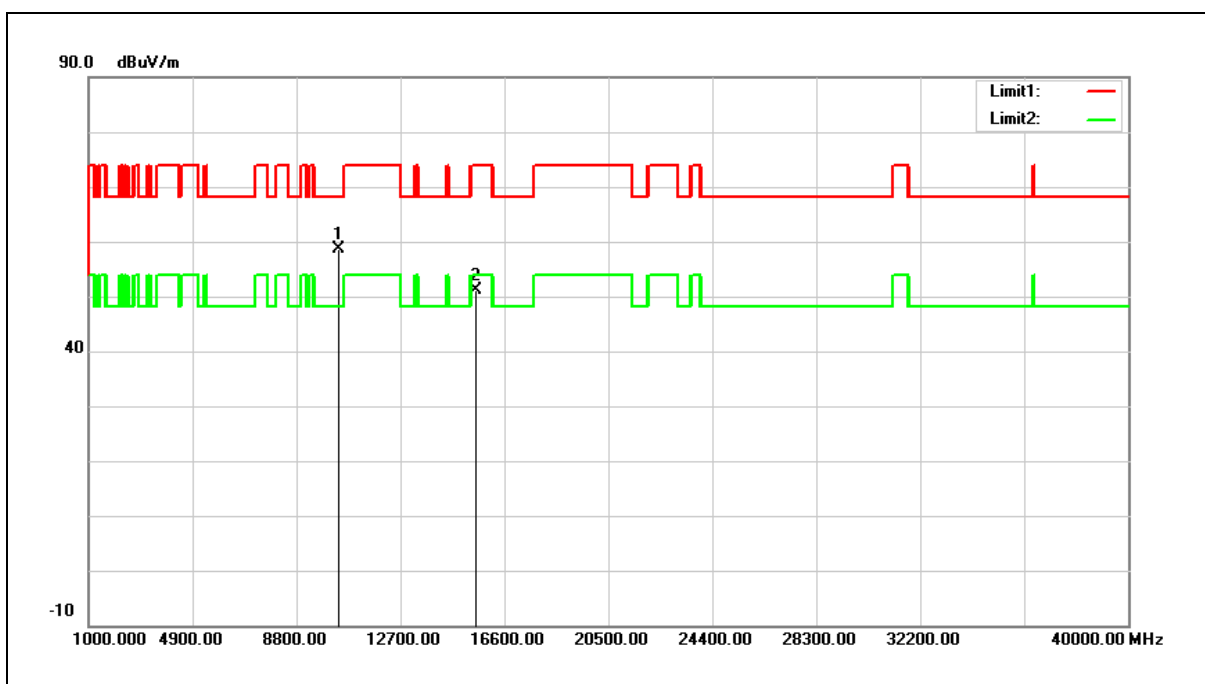
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	50.18	17.23	67.41	68.20	-0.79	peak
2	15720.000	37.99	18.57	56.56	74.00	-17.44	peak
3	15720.000	24.96	18.57	43.53	54.00	-10.47	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



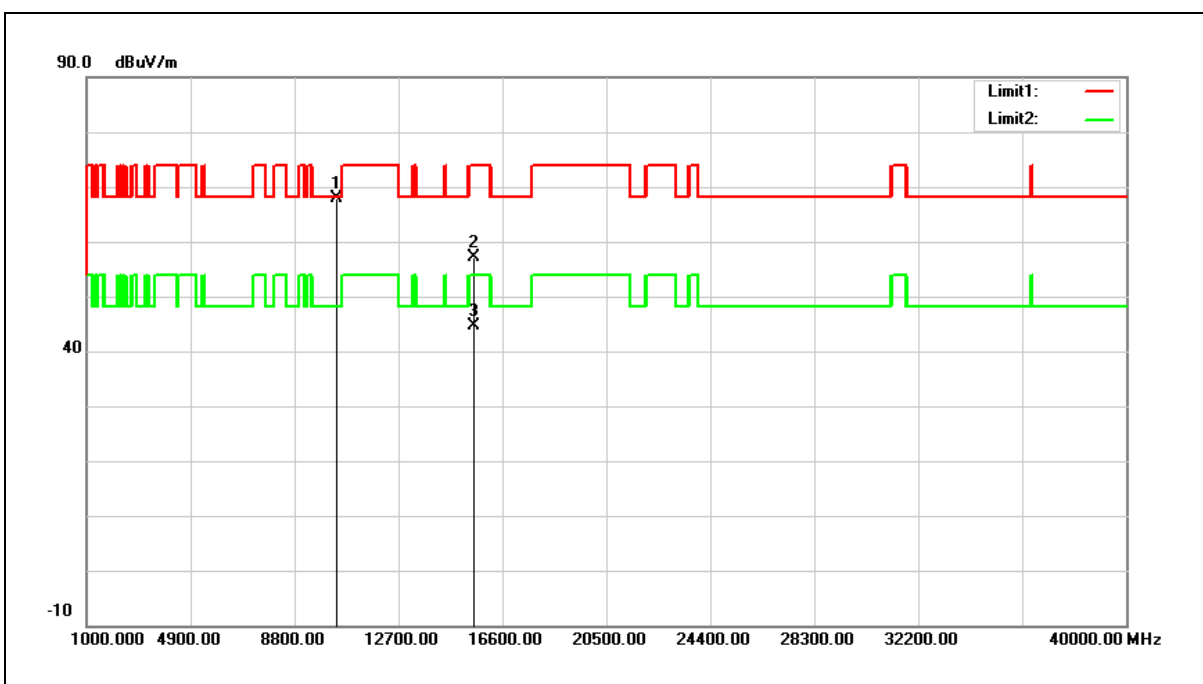
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	41.73	16.79	58.52	68.20	-9.68	peak
2	15540.000	31.99	19.03	51.02	74.00	-22.98	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



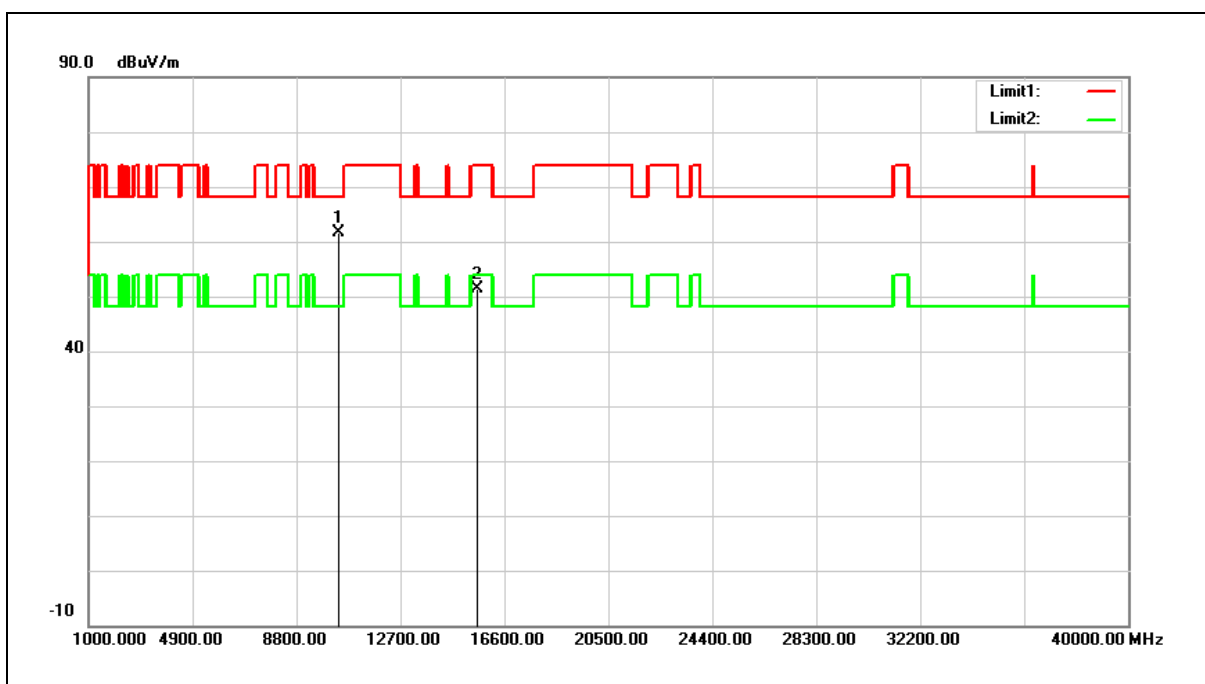
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	50.97	16.79	67.76	68.20	-0.44	peak
2	15540.000	38.16	19.03	57.19	74.00	-16.81	peak
3	15540.000	25.66	19.03	44.69	54.00	-9.31	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



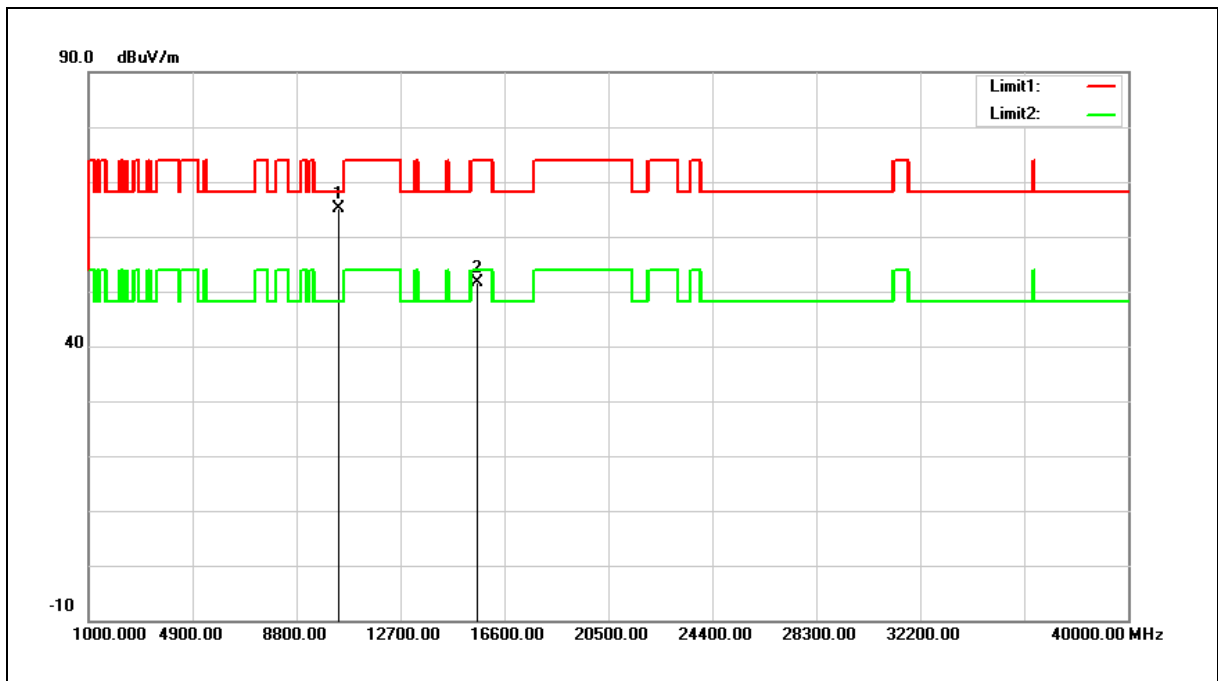
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	44.75	16.94	61.69	68.20	-6.51	peak
2	15600.000	32.47	18.87	51.34	74.00	-22.66	peak

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:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



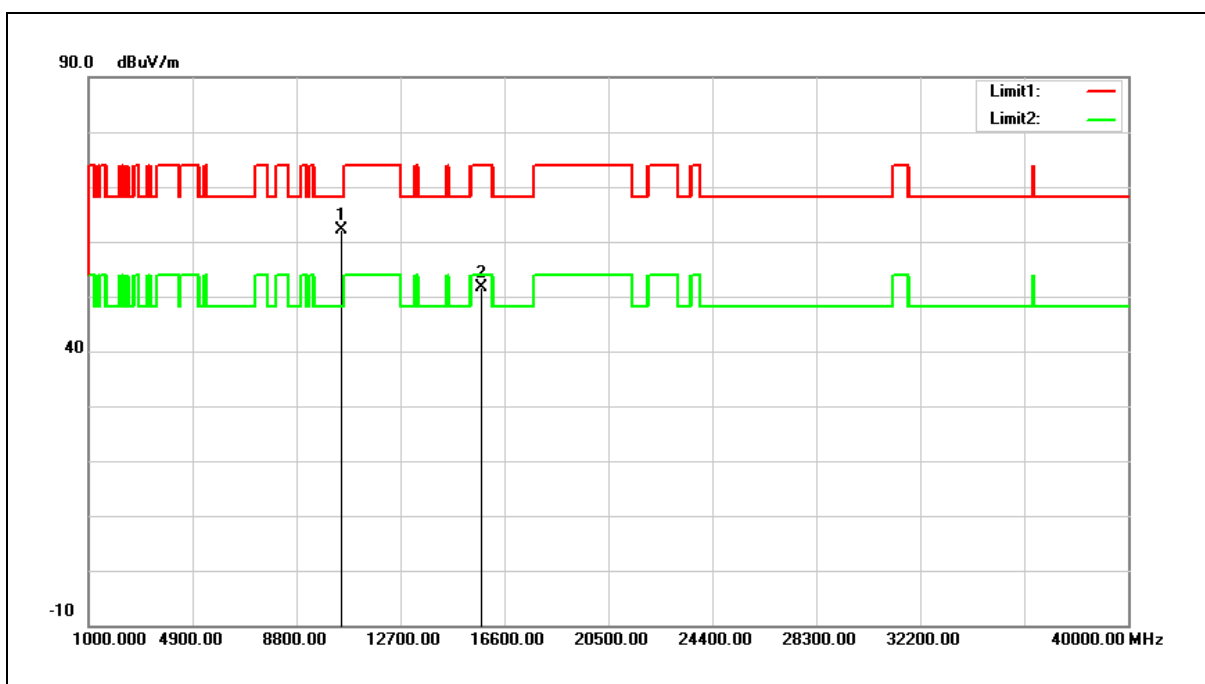
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	48.29	16.94	65.23	68.20	-2.97	peak
2	15600.000	32.70	18.87	51.57	74.00	-22.43	peak

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



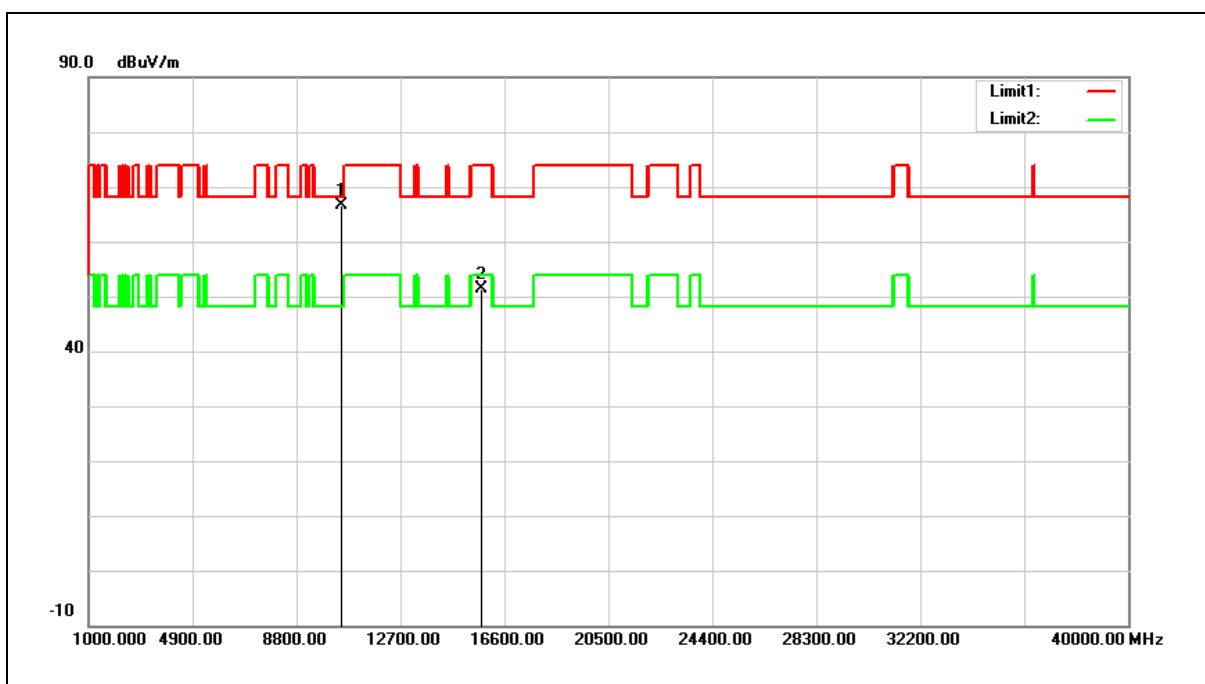
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	44.91	17.23	62.14	68.20	-6.06	peak
2	15720.000	33.14	18.57	51.71	74.00	-22.29	peak

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:	Harmonic	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



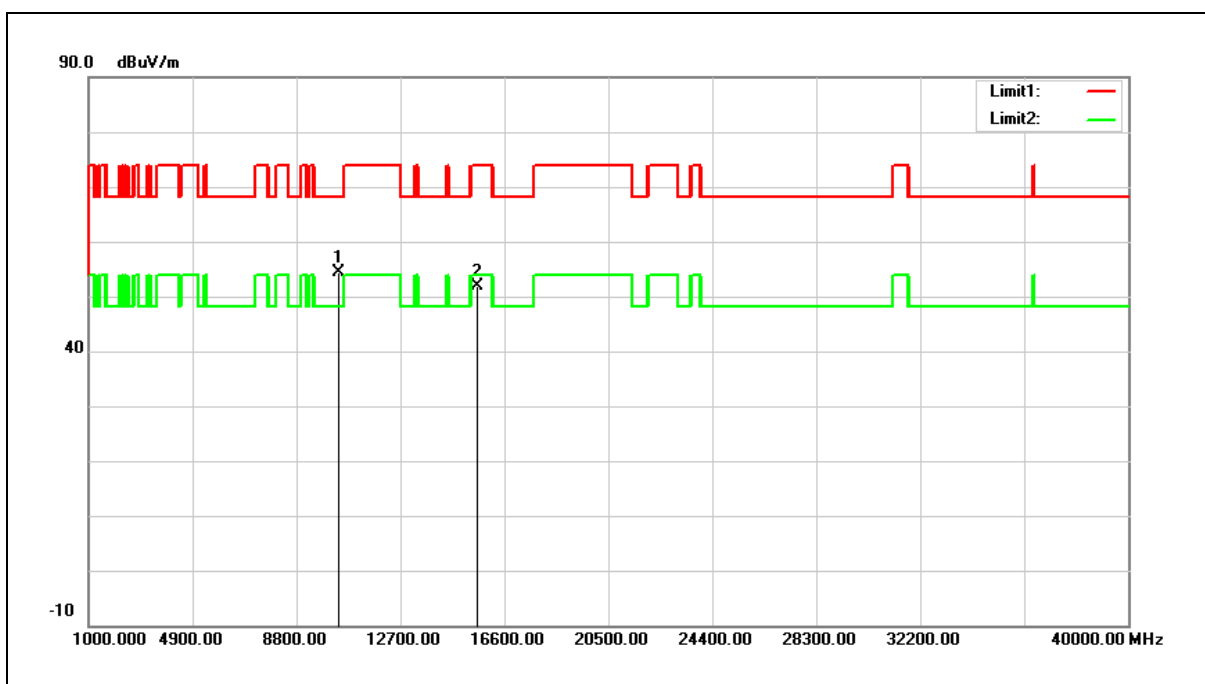
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	49.48	17.23	66.71	68.20	-1.49	peak
2	15720.000	32.92	18.57	51.49	74.00	-22.51	peak

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:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



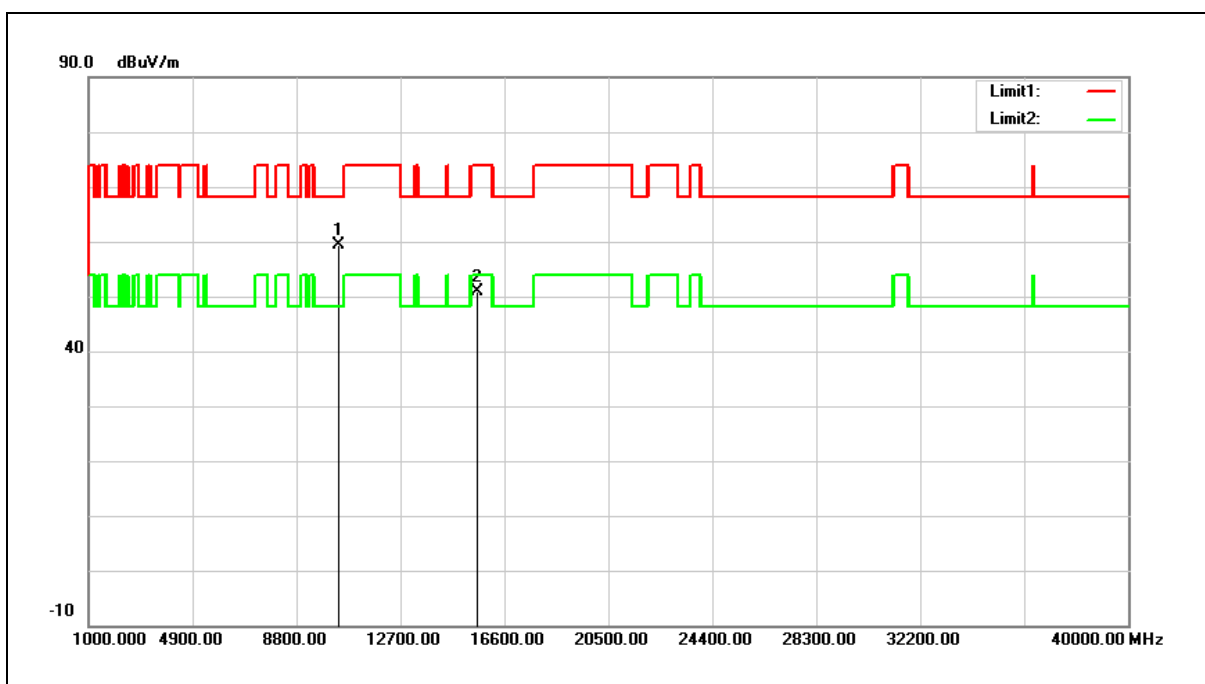
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	37.55	16.86	54.41	68.20	-13.79	peak
2	15570.000	32.90	18.95	51.85	74.00	-22.15	peak

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:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



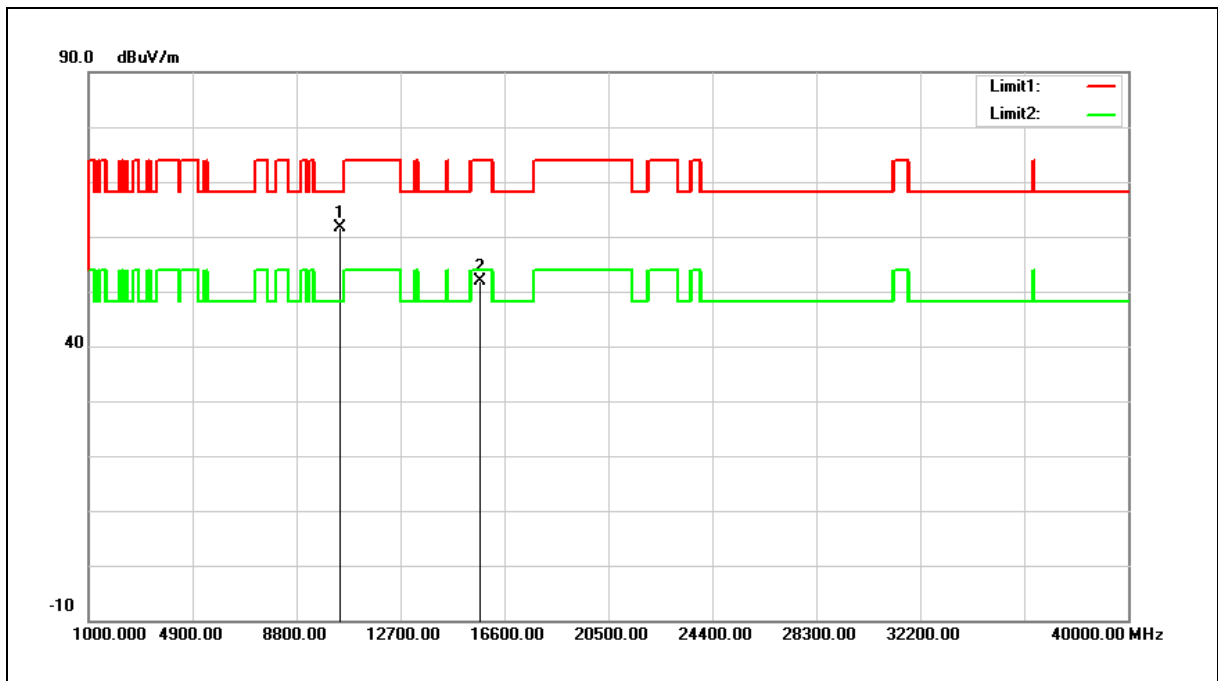
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	42.54	16.86	59.40	68.20	-8.80	peak
2	15570.000	32.00	18.95	50.95	74.00	-23.05	peak

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:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



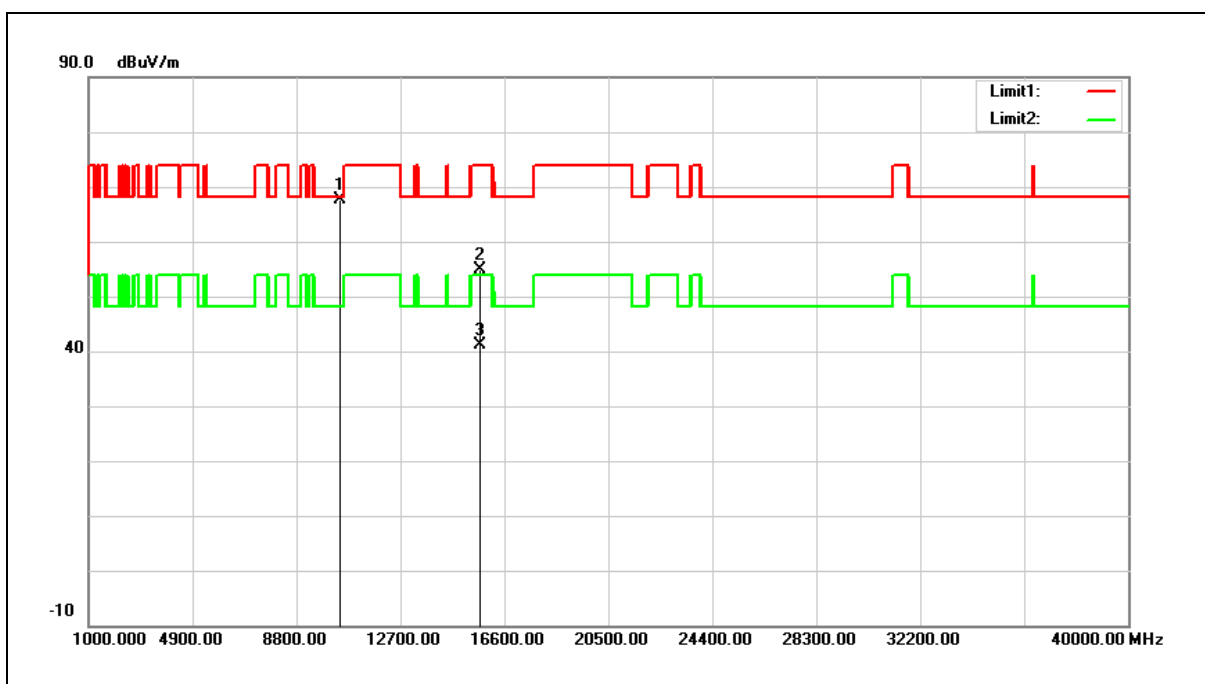
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	44.40	17.15	61.55	68.20	-6.65	peak
2	15690.000	33.18	18.64	51.82	74.00	-22.18	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



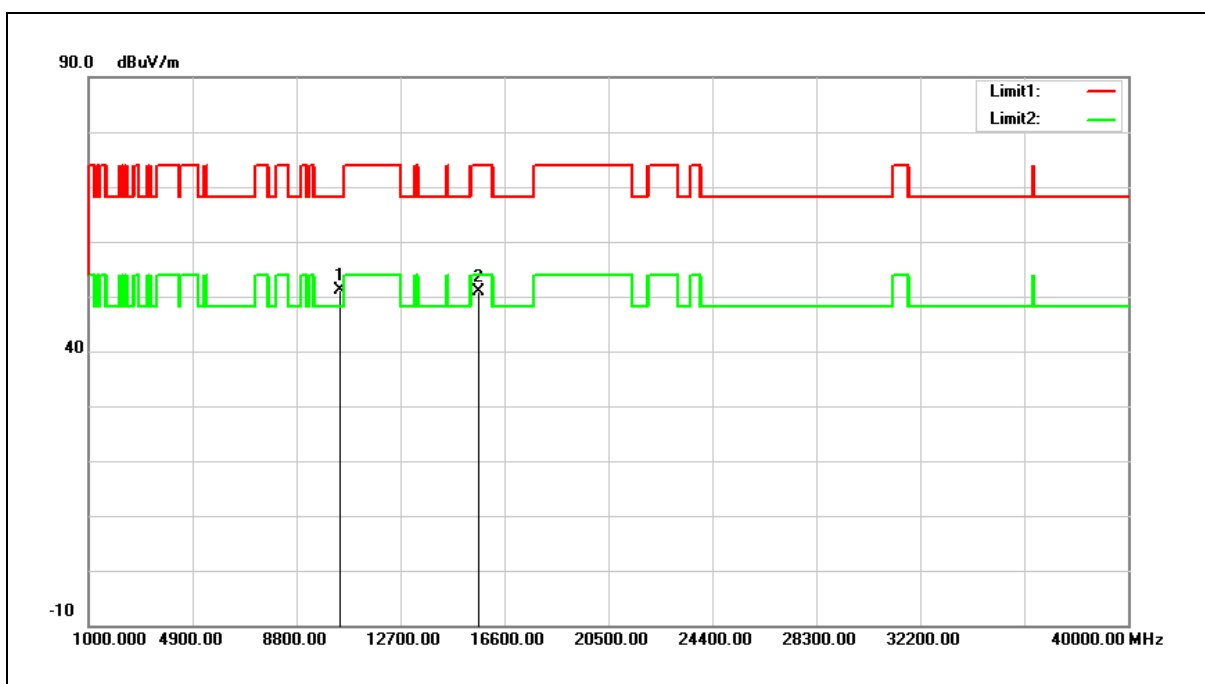
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	50.55	17.15	67.70	68.20	-0.50	peak
2	15690.000	36.18	18.64	54.82	74.00	-19.18	peak
3	15690.000	22.50	18.64	41.14	54.00	-12.86	AVG

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:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



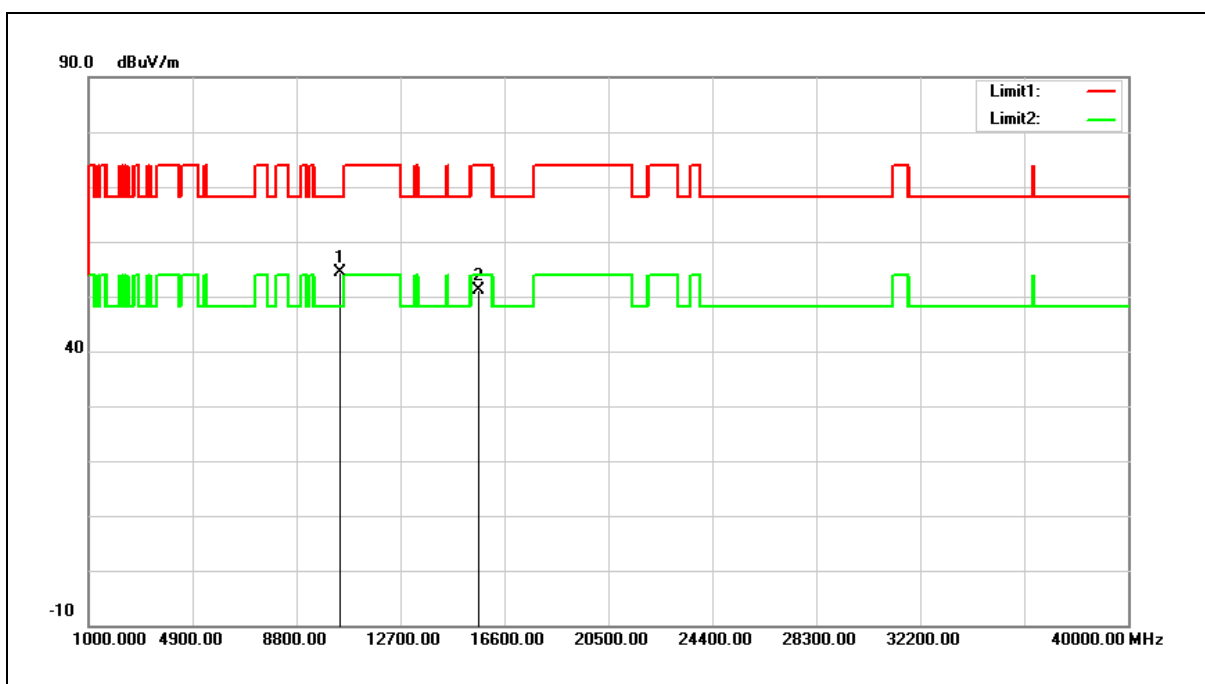
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	34.07	17.01	51.08	68.20	-17.12	peak
2	15630.000	32.14	18.79	50.93	74.00	-23.07	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	37.26	17.01	54.27	68.20	-13.93	peak
2	15630.000	32.44	18.79	51.23	74.00	-22.77	peak

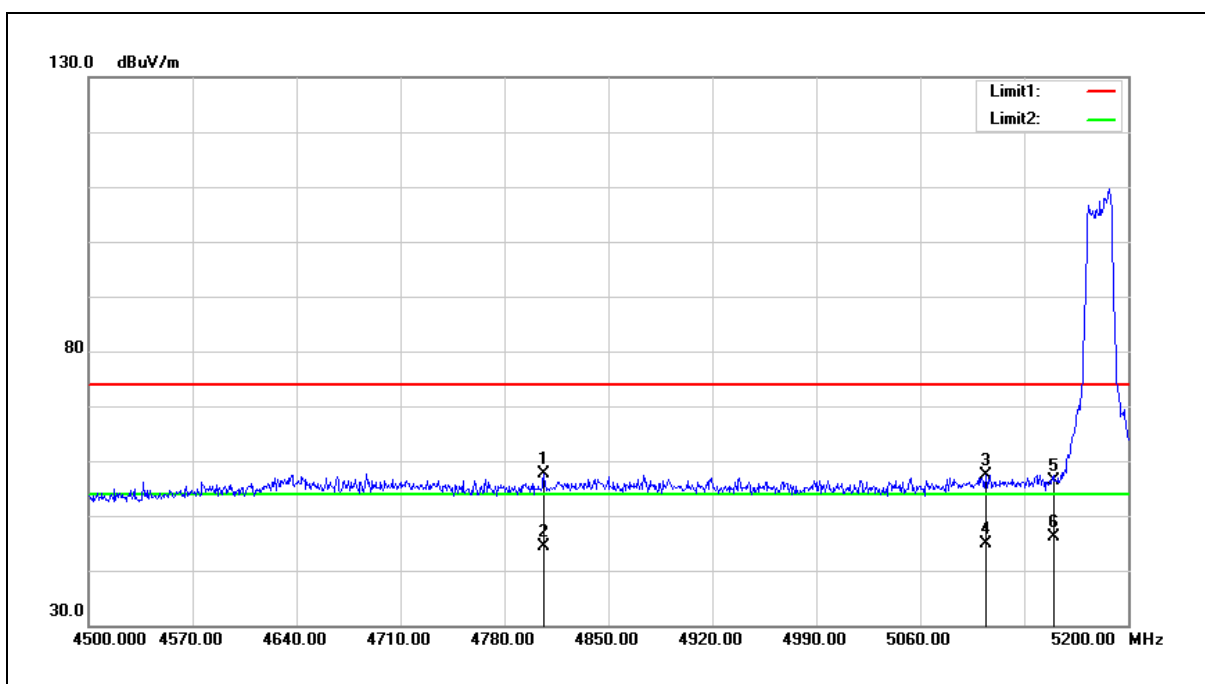
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

Band Edge

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4806.600	52.24	5.33	57.57	74.00	-16.43	peak
2	4806.600	39.02	5.33	44.35	54.00	-9.65	AVG
3	5104.100	51.52	5.97	57.49	74.00	-16.51	peak
4	5104.100	38.93	5.97	44.90	54.00	-9.10	AVG
5	5150.000	50.30	6.07	56.37	74.00	-17.63	peak
6	5150.000	40.10	6.07	46.17	54.00	-7.83	AVG

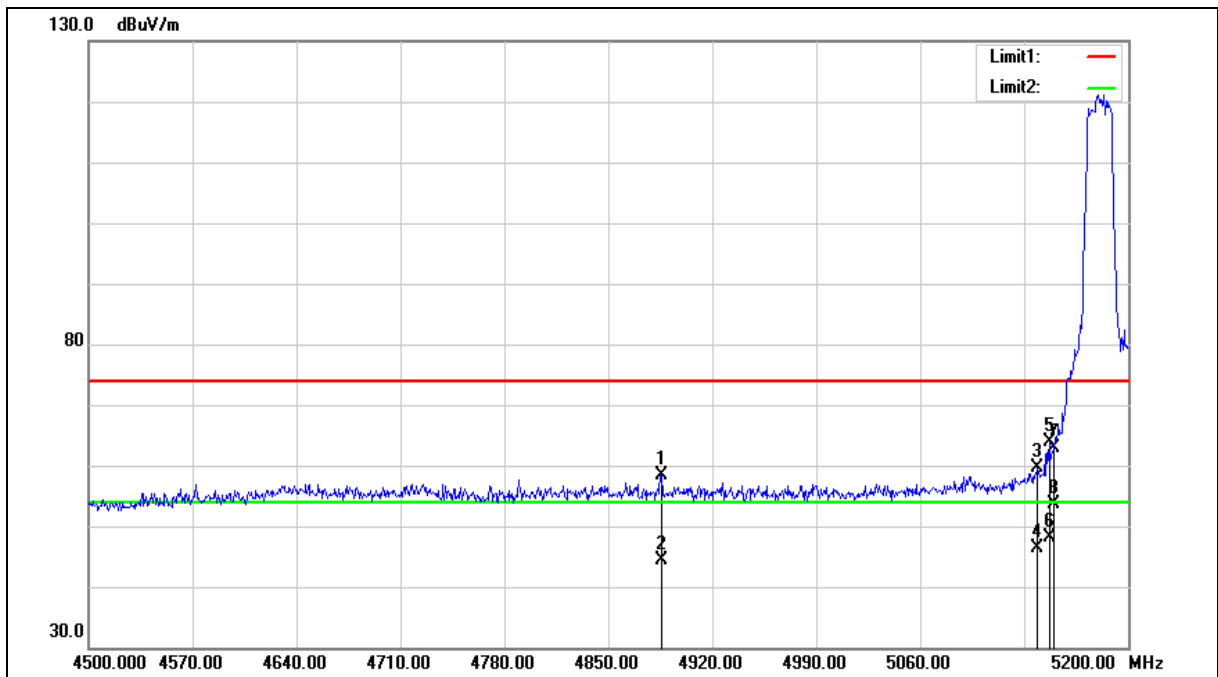
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4885.700	52.79	5.49	58.28	74.00	-15.72	peak
2	4885.700	38.94	5.49	44.43	54.00	-9.57	AVG
3	5139.100	53.54	6.05	59.59	74.00	-14.41	peak
4	5139.100	40.34	6.05	46.39	54.00	-7.61	AVG
5	5146.800	57.88	6.06	63.94	74.00	-10.06	peak
6	5146.800	42.00	6.06	48.06	54.00	-5.94	AVG
7	5150.000	56.80	6.07	62.87	74.00	-11.13	peak
8	5150.000	47.53	6.07	53.60	54.00	-0.40	AVG

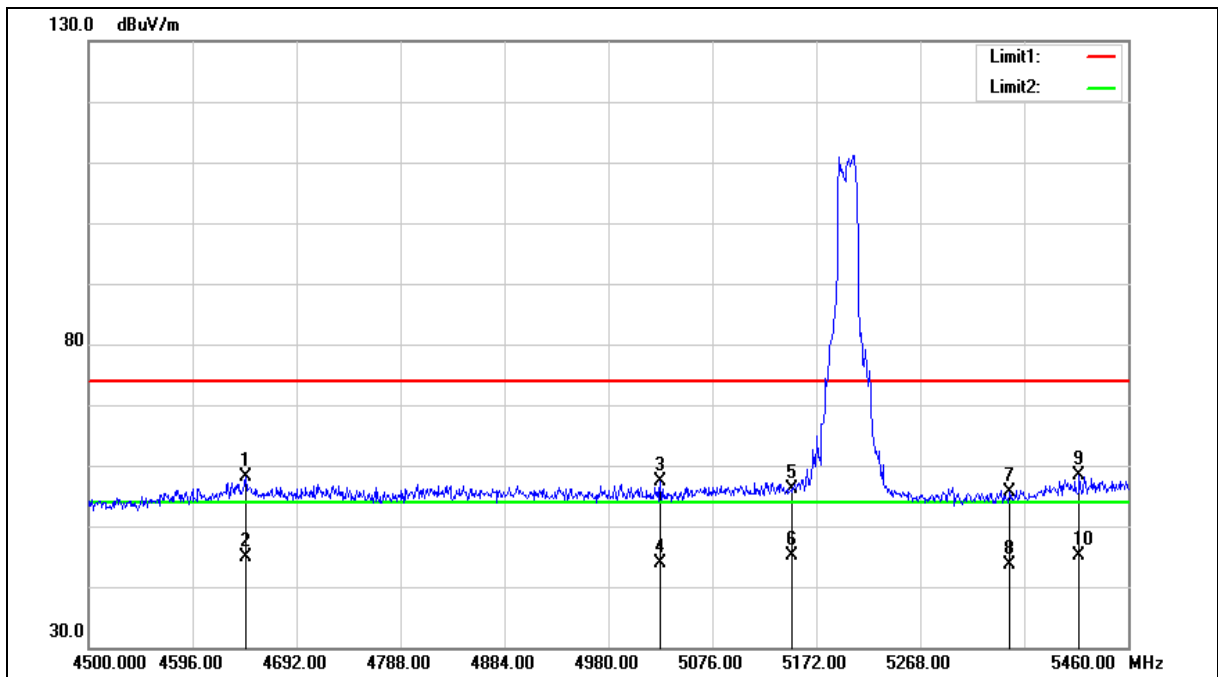
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4644.960	53.17	5.01	58.18	74.00	-15.82	peak
2	4644.960	39.95	5.01	44.96	54.00	-9.04	AVG
3	5028.000	51.63	5.79	57.42	74.00	-16.58	peak
4	5028.000	38.12	5.79	43.91	54.00	-10.09	AVG
5	5150.000	49.99	6.07	56.06	74.00	-17.94	peak
6	5150.000	39.16	6.07	45.23	54.00	-8.77	AVG
7	5350.000	49.06	6.52	55.58	74.00	-18.42	peak
8	5350.000	37.22	6.52	43.74	54.00	-10.26	AVG
9	5414.880	51.64	6.67	58.31	74.00	-15.69	peak
10	5414.880	38.57	6.67	45.24	54.00	-8.76	AVG

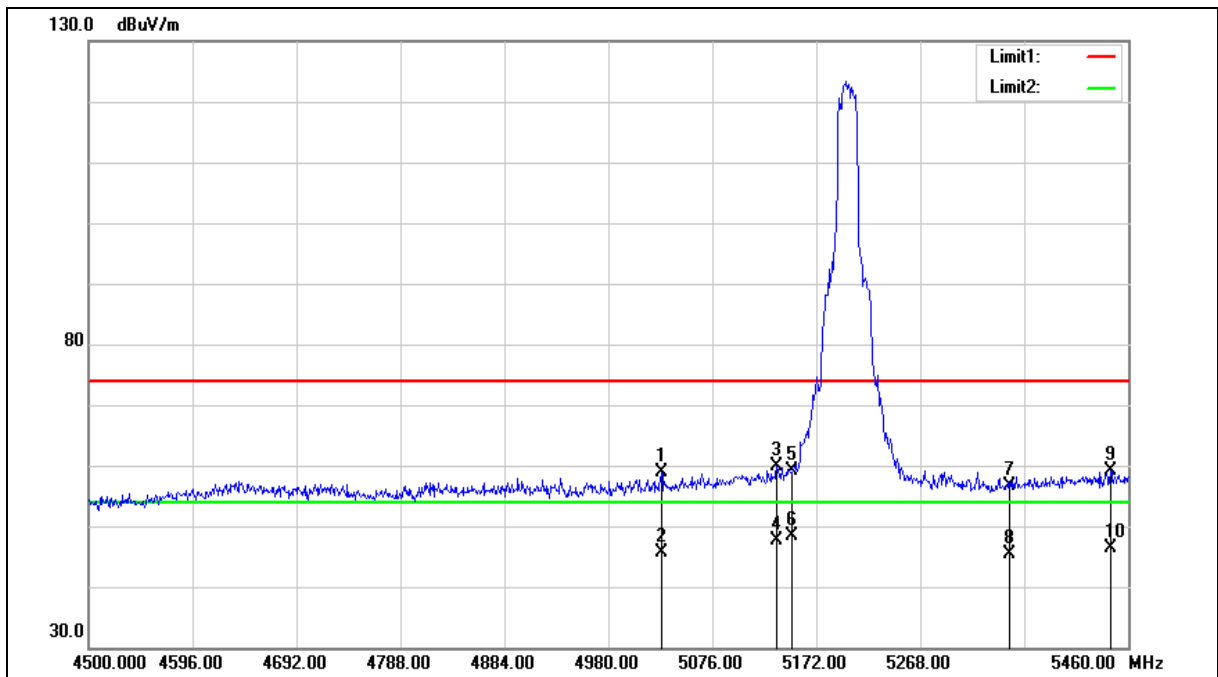
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5028.960	53.14	5.79	58.93	74.00	-15.07	peak
2	5028.960	39.94	5.79	45.73	54.00	-8.27	AVG
3	5135.520	53.78	6.03	59.81	74.00	-14.19	peak
4	5135.520	41.54	6.03	47.57	54.00	-6.43	AVG
5	5150.000	53.15	6.07	59.22	74.00	-14.78	peak
6	5150.000	42.36	6.07	48.43	54.00	-5.57	AVG
7	5350.000	50.05	6.52	56.57	74.00	-17.43	peak
8	5350.000	38.90	6.52	45.42	54.00	-8.58	AVG
9	5443.680	52.44	6.74	59.18	74.00	-14.82	peak
10	5443.680	39.54	6.74	46.28	54.00	-7.72	AVG

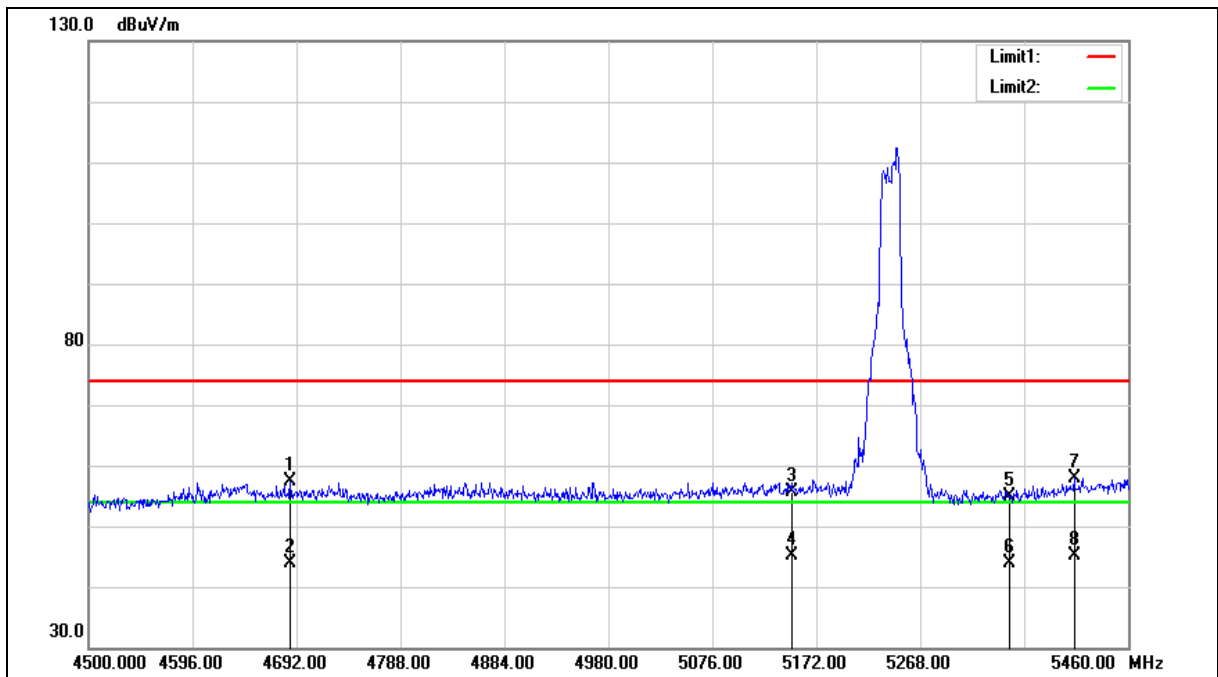
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4686.240	52.18	5.08	57.26	74.00	-16.74	peak
2	4686.240	38.84	5.08	43.92	54.00	-10.08	AVG
3	5150.000	49.46	6.07	55.53	74.00	-18.47	peak
4	5150.000	39.07	6.07	45.14	54.00	-8.86	AVG
5	5350.000	48.25	6.52	54.77	74.00	-19.23	peak
6	5350.000	37.46	6.52	43.98	54.00	-10.02	AVG
7	5410.080	51.31	6.65	57.96	74.00	-16.04	peak
8	5410.080	38.52	6.65	45.17	54.00	-8.83	AVG

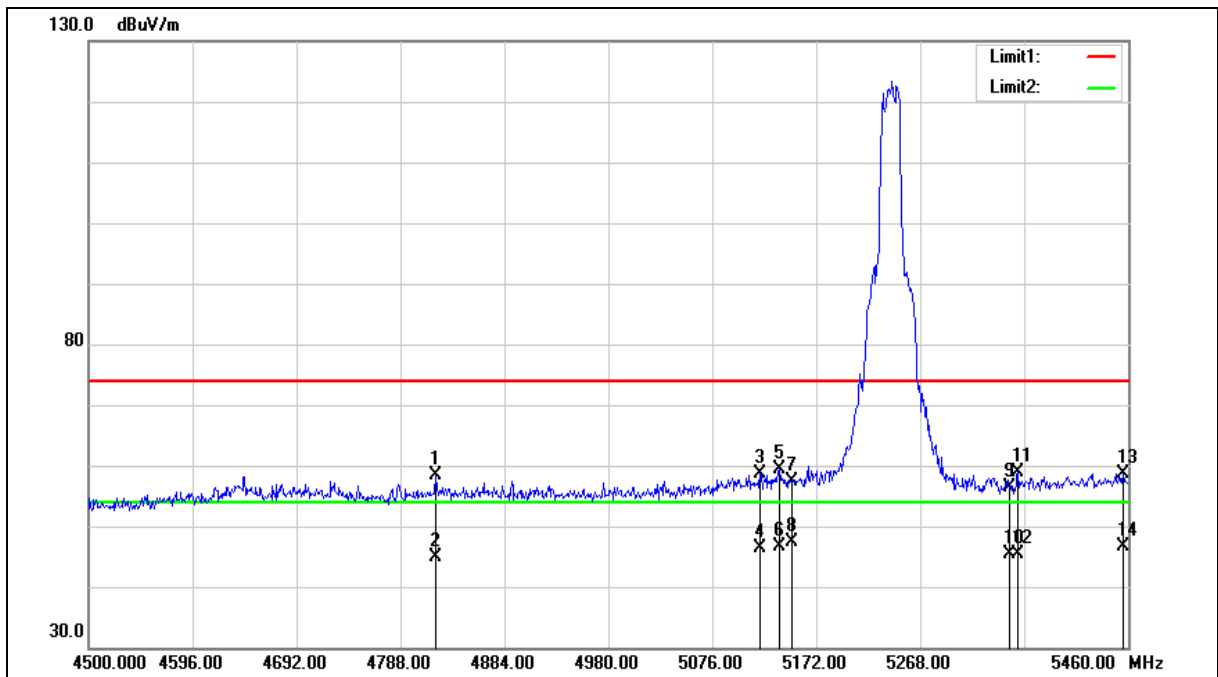
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		

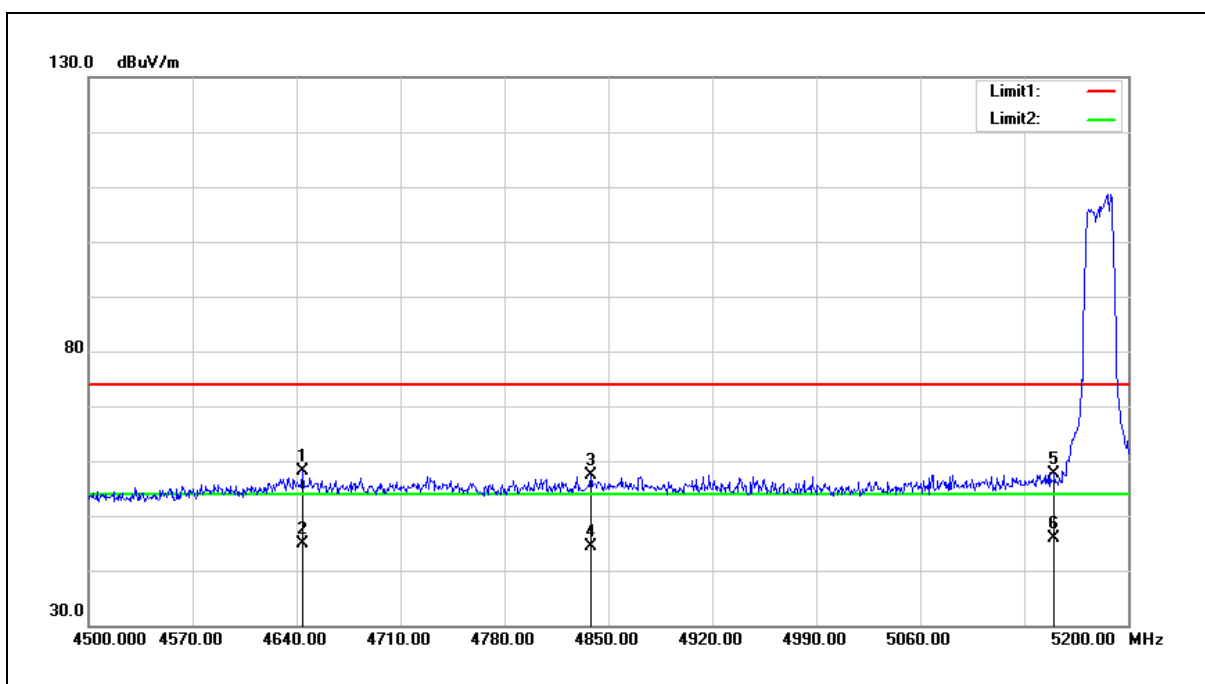
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4820.640	52.91	5.36	58.27	74.00	-15.73	peak
2	4820.640	39.43	5.36	44.79	54.00	-9.21	AVG
3	5120.160	52.63	6.01	58.64	74.00	-15.36	peak
4	5120.160	40.31	6.01	46.32	54.00	-7.68	AVG
5	5138.400	53.35	6.05	59.40	74.00	-14.60	peak
6	5138.400	40.57	6.05	46.62	54.00	-7.38	AVG
7	5150.000	51.25	6.07	57.32	74.00	-16.68	peak
8	5150.000	41.43	6.07	47.50	54.00	-6.50	AVG
9	5350.000	49.74	6.52	56.26	74.00	-17.74	peak
10	5350.000	38.86	6.52	45.38	54.00	-8.62	AVG
11	5358.240	52.34	6.53	58.87	74.00	-15.13	peak
12	5358.240	38.74	6.53	45.27	54.00	-8.73	AVG
13	5455.200	51.92	6.76	58.68	74.00	-15.32	peak
14	5455.200	39.96	6.76	46.72	54.00	-7.28	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4644.200	53.13	5.01	58.14	74.00	-15.86	peak
2	4644.200	39.98	5.01	44.99	54.00	-9.01	AVG
3	4838.100	52.06	5.41	57.47	74.00	-16.53	peak
4	4838.100	39.00	5.41	44.41	54.00	-9.59	AVG
5	5150.000	51.46	6.07	57.53	74.00	-16.47	peak
6	5150.000	39.90	6.07	45.97	54.00	-8.03	AVG

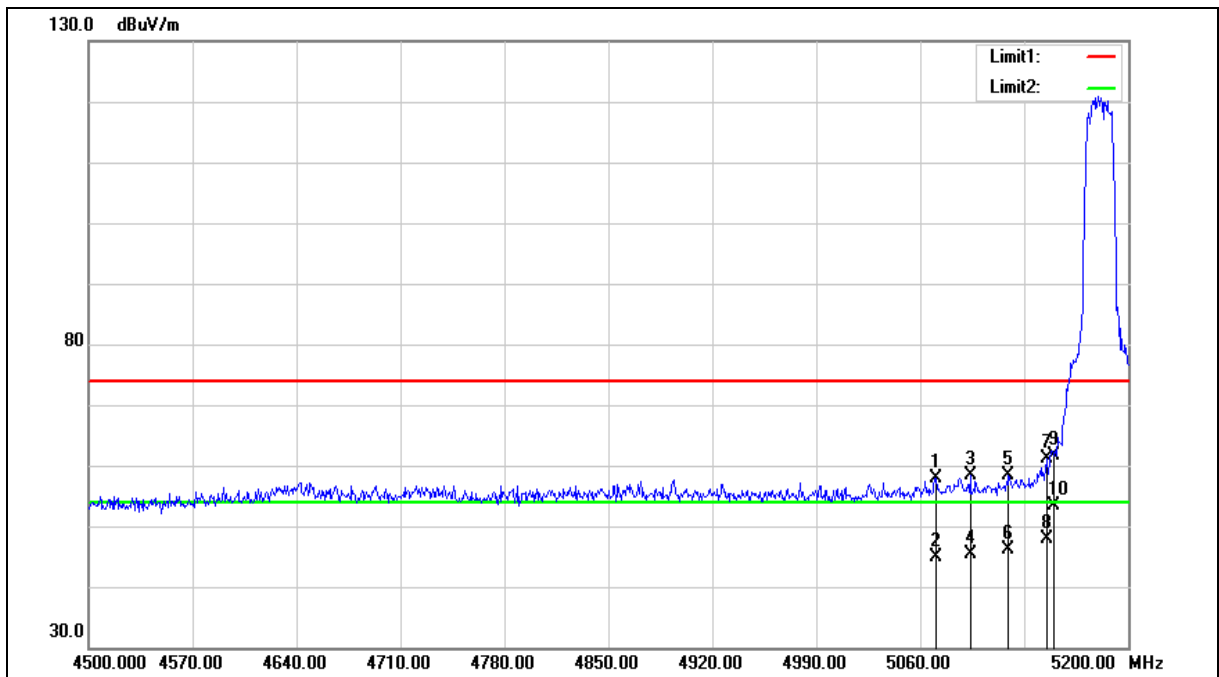
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum. (%RH):	26(°C)/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	5070.500	52.07	5.89	57.96	74.00	-16.04	peak
2	5070.500	38.98	5.89	44.87	54.00	-9.13	AVG
3	5093.600	52.45	5.95	58.40	74.00	-15.60	peak
4	5093.600	39.53	5.95	45.48	54.00	-8.52	AVG
5	5119.500	52.32	6.01	58.33	74.00	-15.67	peak
6	5119.500	40.17	6.01	46.18	54.00	-7.82	AVG
7	5145.400	55.07	6.06	61.13	74.00	-12.87	peak
8	5145.400	41.88	6.06	47.94	54.00	-6.06	AVG
9	5150.000	55.63	6.07	61.70	74.00	-12.30	peak
10	5150.000	47.40	6.07	53.47	54.00	-0.53	AVG

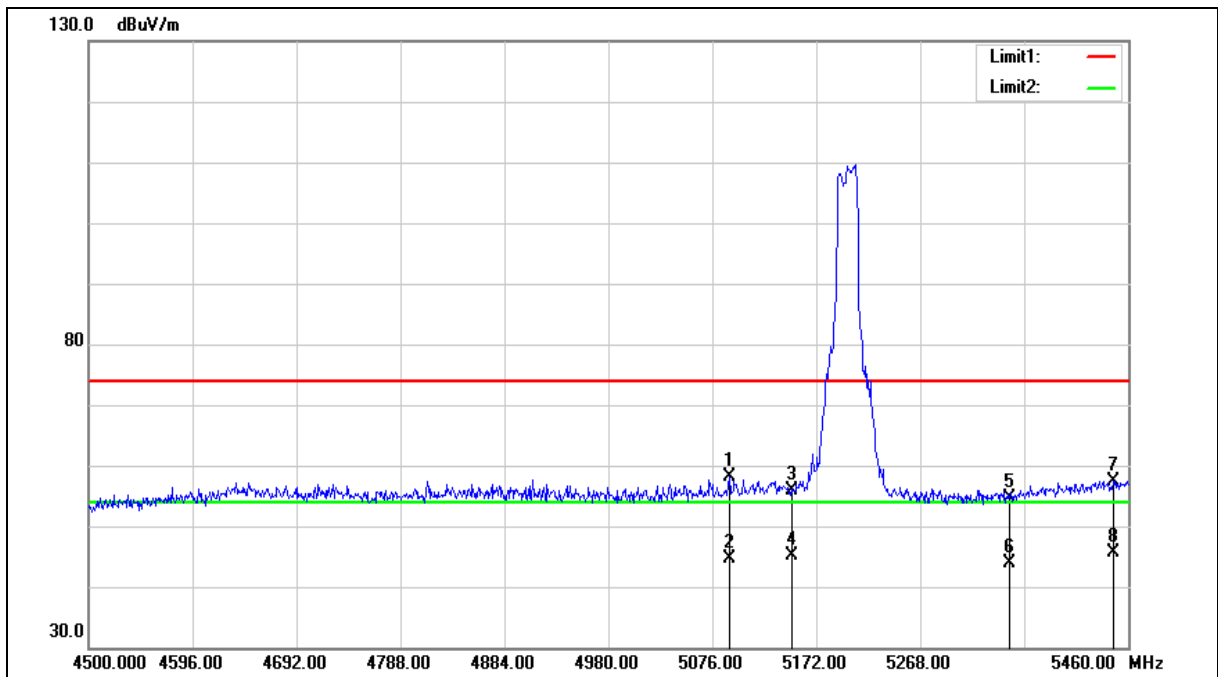
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5091.360	52.30	5.94	58.24	74.00	-15.76	peak
2	5091.360	38.70	5.94	44.64	54.00	-9.36	AVG
3	5150.000	49.86	6.07	55.93	74.00	-18.07	peak
4	5150.000	39.10	6.07	45.17	54.00	-8.83	AVG
5	5350.000	48.11	6.52	54.63	74.00	-19.37	peak
6	5350.000	37.43	6.52	43.95	54.00	-10.05	AVG
7	5446.560	50.71	6.74	57.45	74.00	-16.55	peak
8	5446.560	38.87	6.74	45.61	54.00	-8.39	AVG

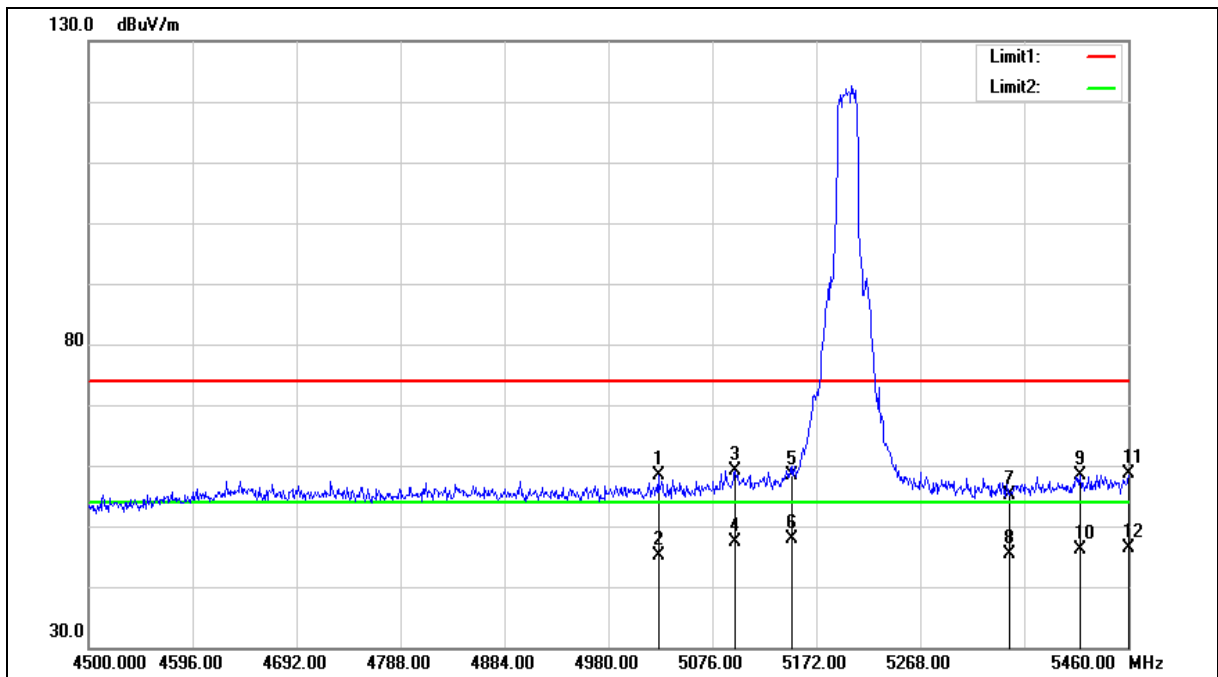
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5026.080	52.50	5.79	58.29	74.00	-15.71	peak
2	5026.080	39.28	5.79	45.07	54.00	-8.93	AVG
3	5097.120	53.28	5.95	59.23	74.00	-14.77	peak
4	5097.120	41.50	5.95	47.45	54.00	-6.55	AVG
5	5150.000	52.24	6.07	58.31	74.00	-15.69	peak
6	5150.000	41.82	6.07	47.89	54.00	-6.11	AVG
7	5350.000	48.68	6.52	55.20	74.00	-18.80	peak
8	5350.000	38.98	6.52	45.50	54.00	-8.50	AVG
9	5415.840	51.61	6.67	58.28	74.00	-15.72	peak
10	5415.840	39.35	6.67	46.02	54.00	-7.98	AVG
11	5460.000	51.94	6.77	58.71	74.00	-15.29	peak
12	5460.000	39.49	6.77	46.26	54.00	-7.74	AVG

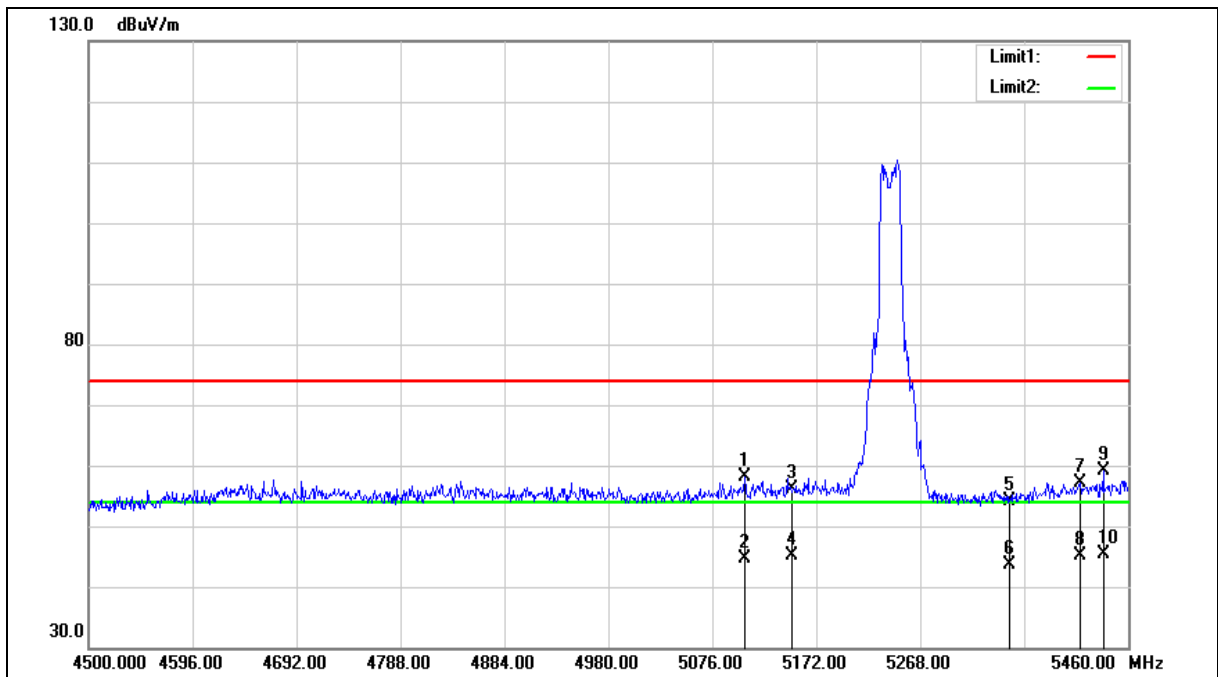
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5105.760	52.10	5.97	58.07	74.00	-15.93	peak
2	5105.760	38.68	5.97	44.65	54.00	-9.35	AVG
3	5150.000	50.03	6.07	56.10	74.00	-17.90	peak
4	5150.000	39.14	6.07	45.21	54.00	-8.79	AVG
5	5350.000	47.64	6.52	54.16	74.00	-19.84	peak
6	5350.000	37.23	6.52	43.75	54.00	-10.25	AVG
7	5415.840	50.44	6.67	57.11	74.00	-16.89	peak
8	5415.840	38.43	6.67	45.10	54.00	-8.90	AVG
9	5436.960	52.33	6.72	59.05	74.00	-14.95	peak
10	5436.960	38.68	6.72	45.40	54.00	-8.60	AVG

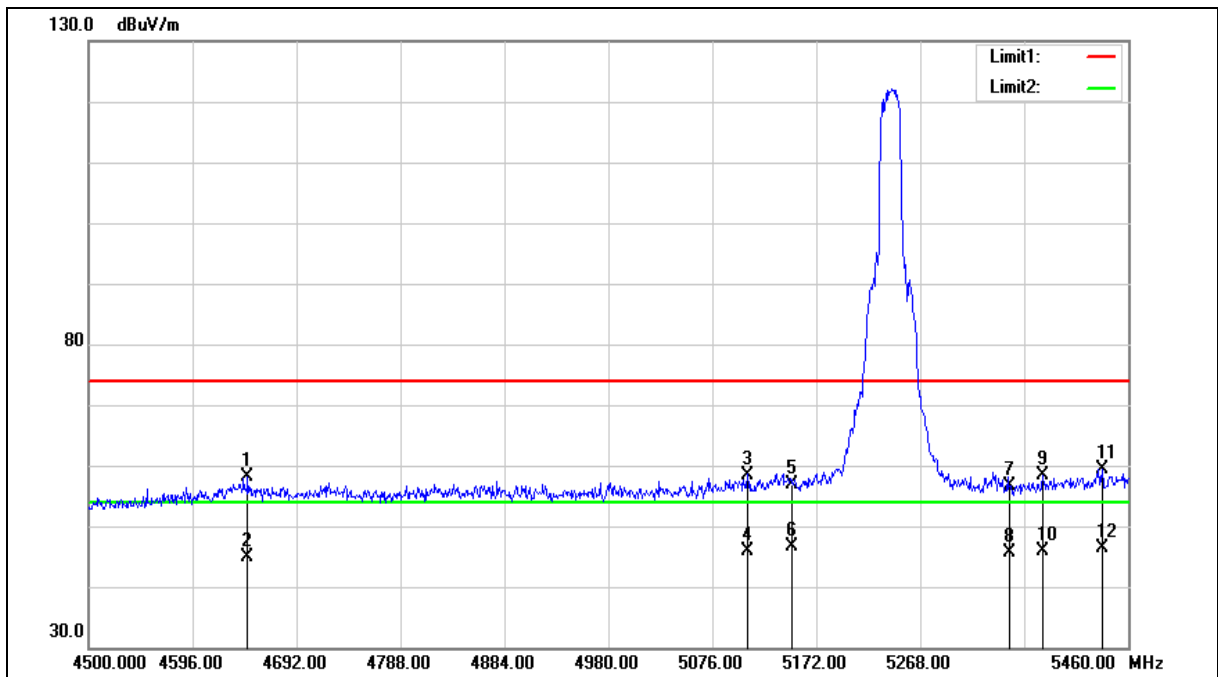
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		

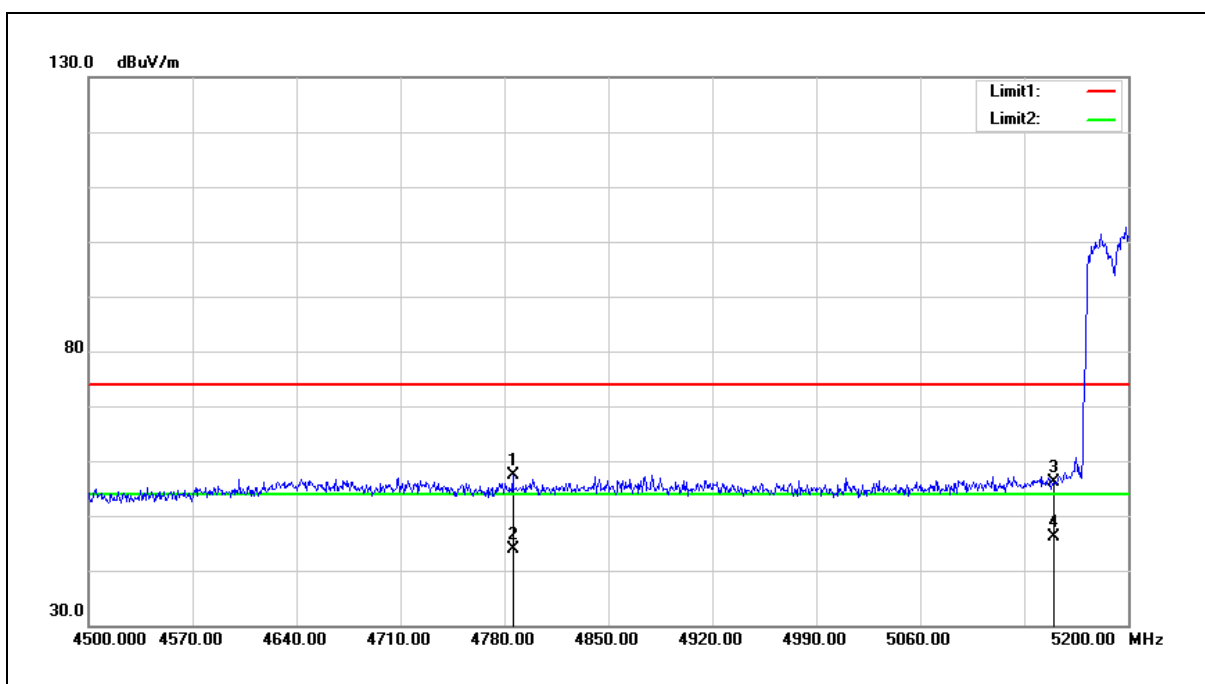
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4646.880	53.02	5.01	58.03	74.00	-15.97	peak
2	4646.880	39.82	5.01	44.83	54.00	-9.17	AVG
3	5108.640	52.52	5.98	58.50	74.00	-15.50	peak
4	5108.640	39.83	5.98	45.81	54.00	-8.19	AVG
5	5150.000	50.85	6.07	56.92	74.00	-17.08	peak
6	5150.000	40.60	6.07	46.67	54.00	-7.33	AVG
7	5350.000	50.15	6.52	56.67	74.00	-17.33	peak
8	5350.000	39.04	6.52	45.56	54.00	-8.44	AVG
9	5381.280	51.88	6.59	58.47	74.00	-15.53	peak
10	5381.280	39.21	6.59	45.80	54.00	-8.20	AVG
11	5436.000	52.60	6.71	59.31	74.00	-14.69	peak
12	5436.000	39.67	6.71	46.38	54.00	-7.62	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4785.600	52.20	5.29	57.49	74.00	-16.51	peak
2	4785.600	38.47	5.29	43.76	54.00	-10.24	AVG
3	5150.000	50.09	6.07	56.16	74.00	-17.84	peak
4	5150.000	39.98	6.07	46.05	54.00	-7.95	AVG

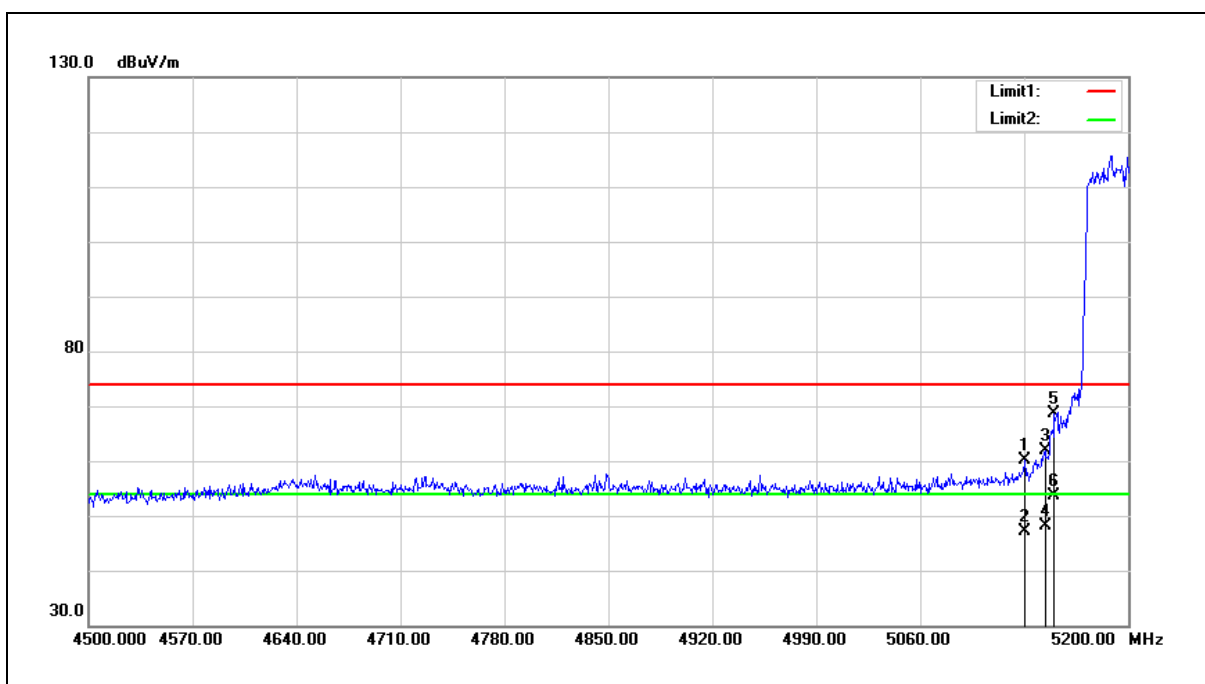
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5130.700	54.03	6.03	60.06	74.00	-13.94	peak
2	5130.700	40.98	6.03	47.01	54.00	-6.99	AVG
3	5144.000	55.83	6.06	61.89	74.00	-12.11	peak
4	5144.000	42.10	6.06	48.16	54.00	-5.84	AVG
5	5150.000	62.47	6.07	68.54	74.00	-5.46	peak
6	5150.000	47.50	6.07	53.57	54.00	-0.43	AVG

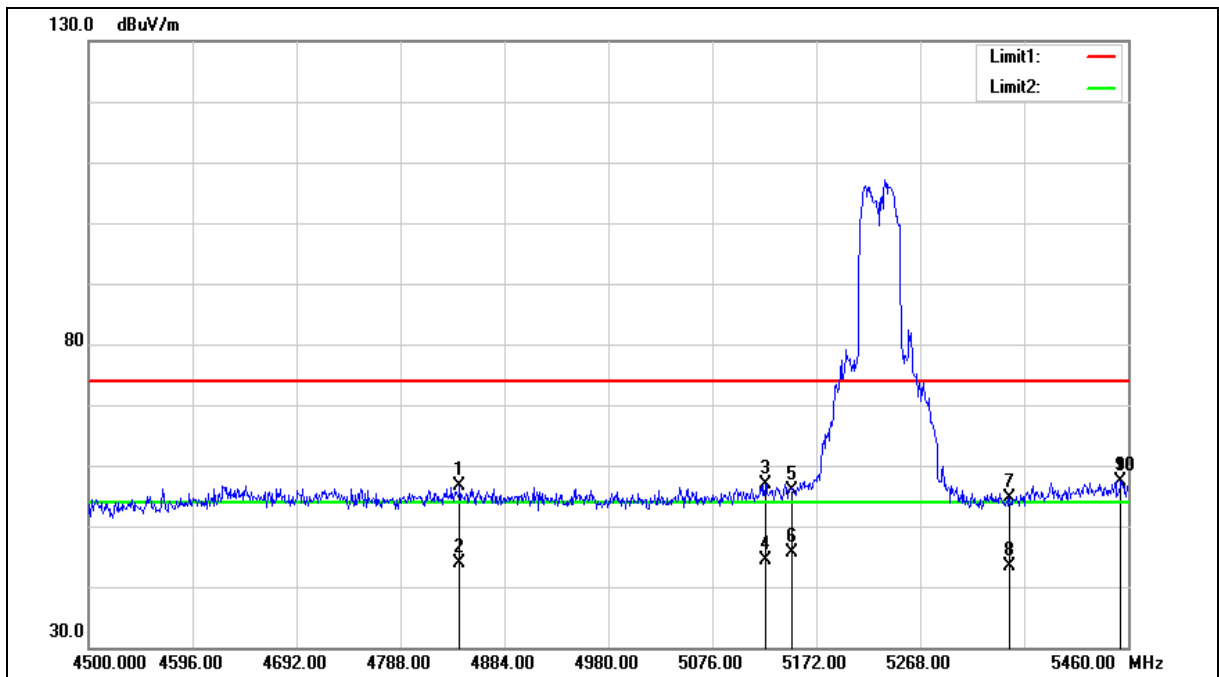
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4842.720	51.22	5.42	56.64	74.00	-17.36	peak
2	4842.720	38.46	5.42	43.88	54.00	-10.12	AVG
3	5124.960	50.99	6.01	57.00	74.00	-17.00	peak
4	5124.960	38.41	6.01	44.42	54.00	-9.58	AVG
5	5150.000	49.84	6.07	55.91	74.00	-18.09	peak
6	5150.000	39.65	6.07	45.72	54.00	-8.28	AVG
7	5350.000	48.01	6.52	54.53	74.00	-19.47	peak
8	5350.000	36.93	6.52	43.45	54.00	-10.55	AVG
9	5453.280	50.64	6.76	57.40	74.00	-16.60	peak
10	5453.280	50.64	6.76	57.40	74.00	-16.60	peak

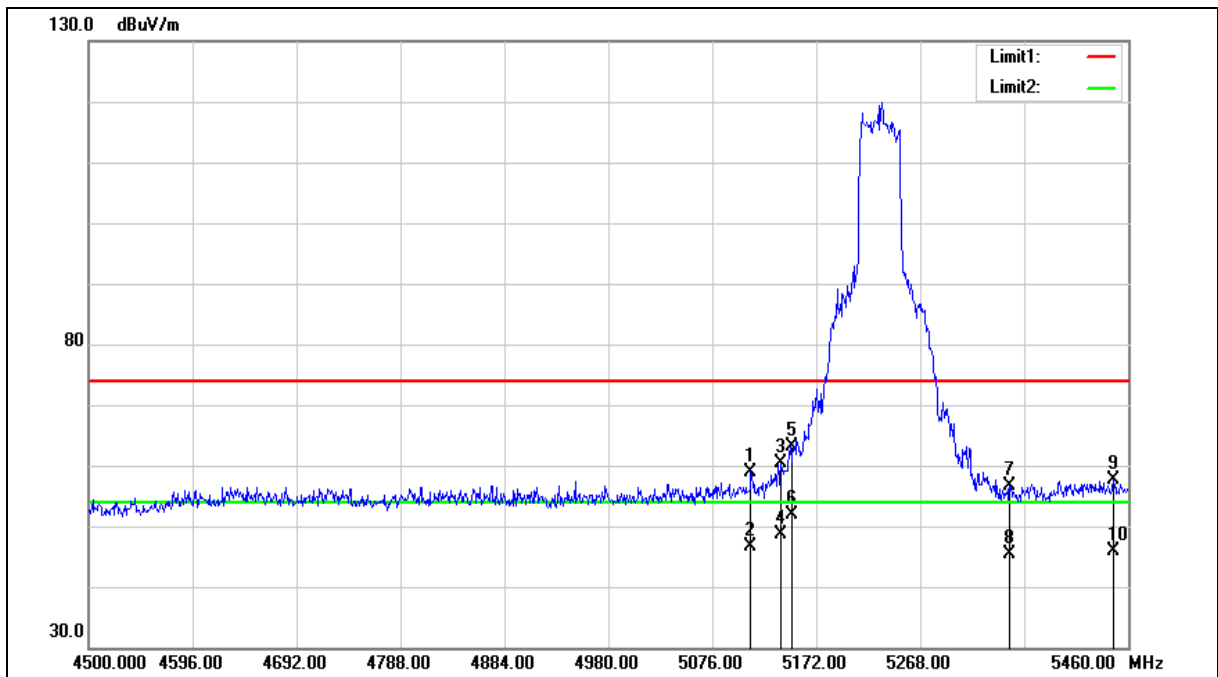
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5111.520	52.90	5.98	58.88	74.00	-15.12	peak
2	5111.520	40.56	5.98	46.54	54.00	-7.46	AVG
3	5139.360	54.37	6.05	60.42	74.00	-13.58	peak
4	5139.360	42.46	6.05	48.51	54.00	-5.49	AVG
5	5150.000	56.99	6.07	63.06	74.00	-10.94	peak
6	5150.000	45.73	6.07	51.80	54.00	-2.20	AVG
7	5350.000	50.00	6.52	56.52	74.00	-17.48	peak
8	5350.000	38.94	6.52	45.46	54.00	-8.54	AVG
9	5446.560	50.80	6.74	57.54	74.00	-16.46	peak
10	5446.560	39.18	6.74	45.92	54.00	-8.08	AVG

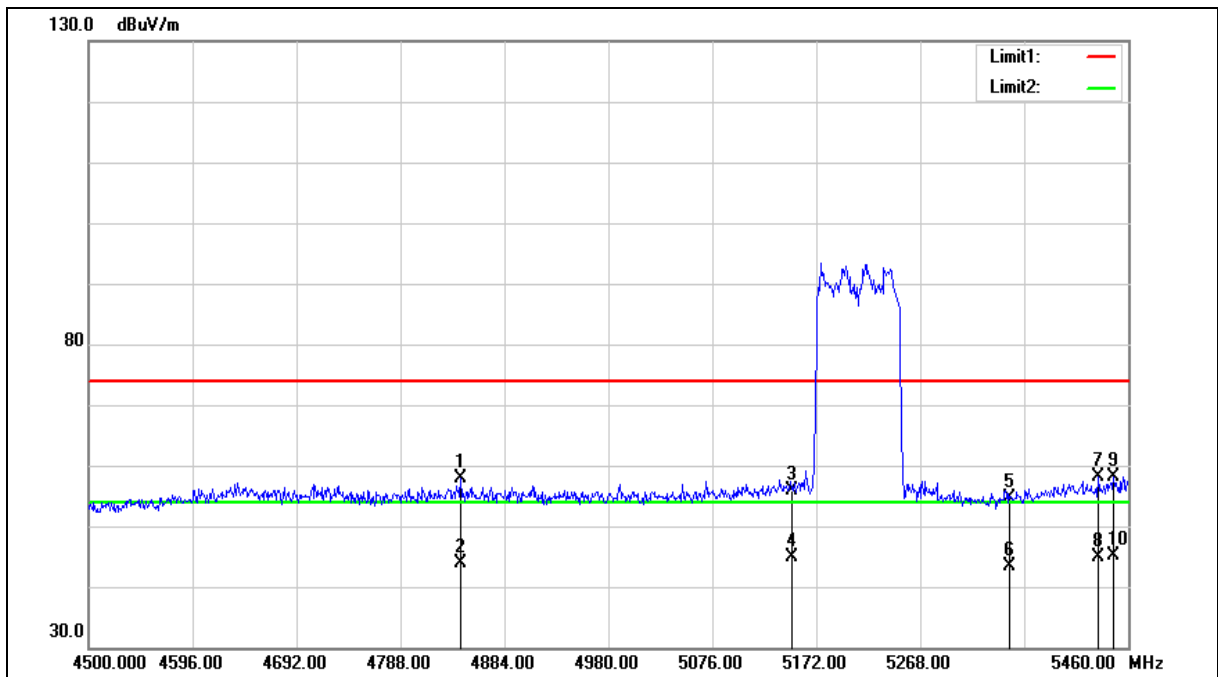
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4843.680	52.34	5.42	57.76	74.00	-16.24	peak
2	4843.680	38.39	5.42	43.81	54.00	-10.19	AVG
3	5150.000	49.78	6.07	55.85	74.00	-18.15	peak
4	5150.000	38.86	6.07	44.93	54.00	-9.07	AVG
5	5350.000	48.06	6.52	54.58	74.00	-19.42	peak
6	5350.000	36.82	6.52	43.34	54.00	-10.66	AVG
7	5432.160	51.30	6.71	58.01	74.00	-15.99	peak
8	5432.160	38.17	6.71	44.88	54.00	-9.12	AVG
9	5446.560	51.36	6.74	58.10	74.00	-15.90	peak
10	5446.560	38.34	6.74	45.08	54.00	-8.92	AVG

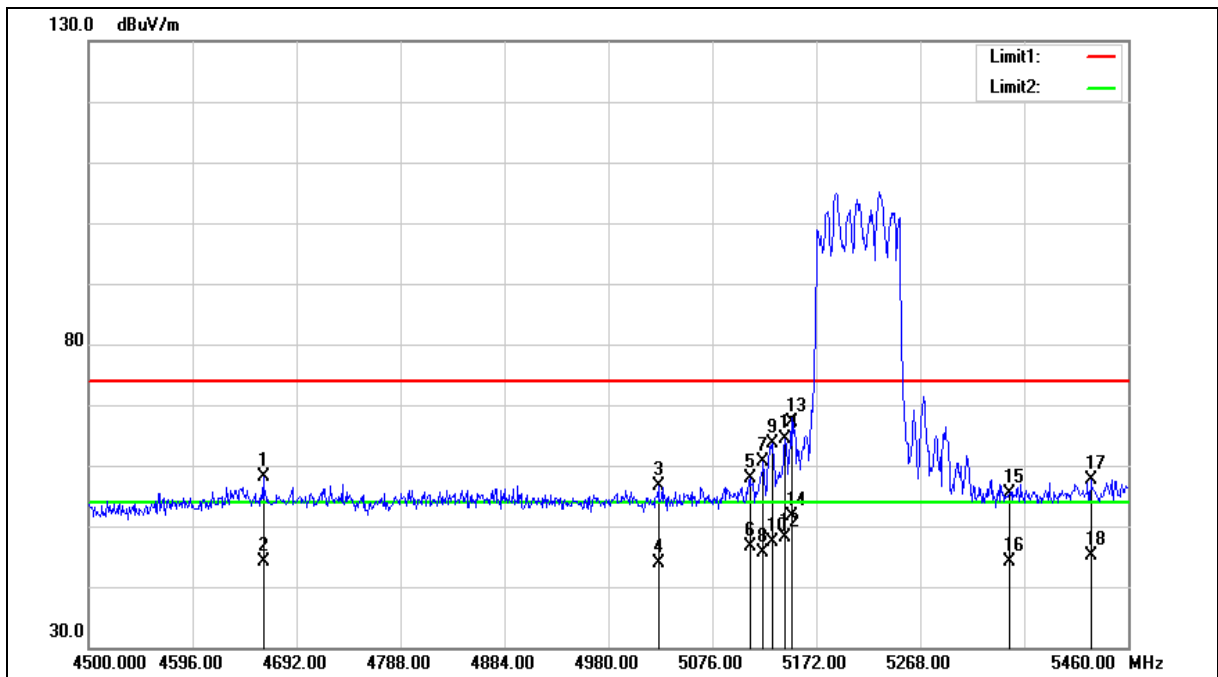
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4661.280	53.20	5.03	58.23	74.00	-15.77	peak
2	4661.280	39.05	5.03	44.08	54.00	-9.92	AVG
3	5026.080	50.77	5.79	56.56	74.00	-17.44	peak
4	5026.080	38.19	5.79	43.98	54.00	-10.02	AVG
5	5110.560	52.00	5.98	57.98	74.00	-16.02	peak
6	5110.560	40.76	5.98	46.74	54.00	-7.26	AVG
7	5123.040	54.62	6.01	60.63	74.00	-13.37	peak
8	5123.040	39.58	6.01	45.59	54.00	-8.41	AVG
9	5131.680	57.66	6.03	63.69	74.00	-10.31	peak
10	5131.680	41.30	6.03	47.33	54.00	-6.67	AVG
11	5143.200	58.32	6.06	64.38	74.00	-9.62	peak
12	5143.200	42.10	6.06	48.16	54.00	-5.84	AVG
13	5150.000	61.03	6.07	67.10	74.00	-6.90	peak
14	5150.000	45.65	6.07	51.72	54.00	-2.28	AVG
15	5350.000	48.85	6.52	55.37	74.00	-18.63	peak
16	5350.000	37.54	6.52	44.06	54.00	-9.94	AVG
17	5425.440	50.92	6.70	57.62	74.00	-16.38	peak
18	5425.440	38.35	6.70	45.05	54.00	-8.95	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.



Antenna Type : External Antenna
Beamforming on

Below 1 GHz

Standard:		FCC Part 15.407		Test Distance:		3 m	
Test item:		Harmonic		Power:		DC 48 V	
Test Mode:		Mode 1		Temp.(°C)/Hum.(%RH):		26(°C)/60 %RH	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
150.2800	38.60	-5.67	32.93	43.50	-10.57	QP	H
199.7500	42.54	-7.72	34.82	43.50	-8.68	QP	H
241.4600	39.83	-6.00	33.83	46.00	-12.17	QP	H
294.8100	36.81	-3.93	32.88	46.00	-13.12	QP	H
800.1800	34.54	6.35	40.89	46.00	-5.11	QP	H
995.1500	33.39	9.51	42.90	54.00	-11.10	QP	H
125.0600	42.05	-7.76	34.29	43.50	-9.21	QP	V
199.7500	42.17	-7.72	34.45	43.50	-9.05	QP	V
336.5200	34.28	-3.21	31.07	46.00	-14.93	QP	V
384.0500	36.65	-2.15	34.50	46.00	-11.50	QP	V
800.1800	34.74	6.35	41.09	46.00	-4.91	QP	V
997.0900	33.83	9.54	43.37	54.00	-10.63	QP	V

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

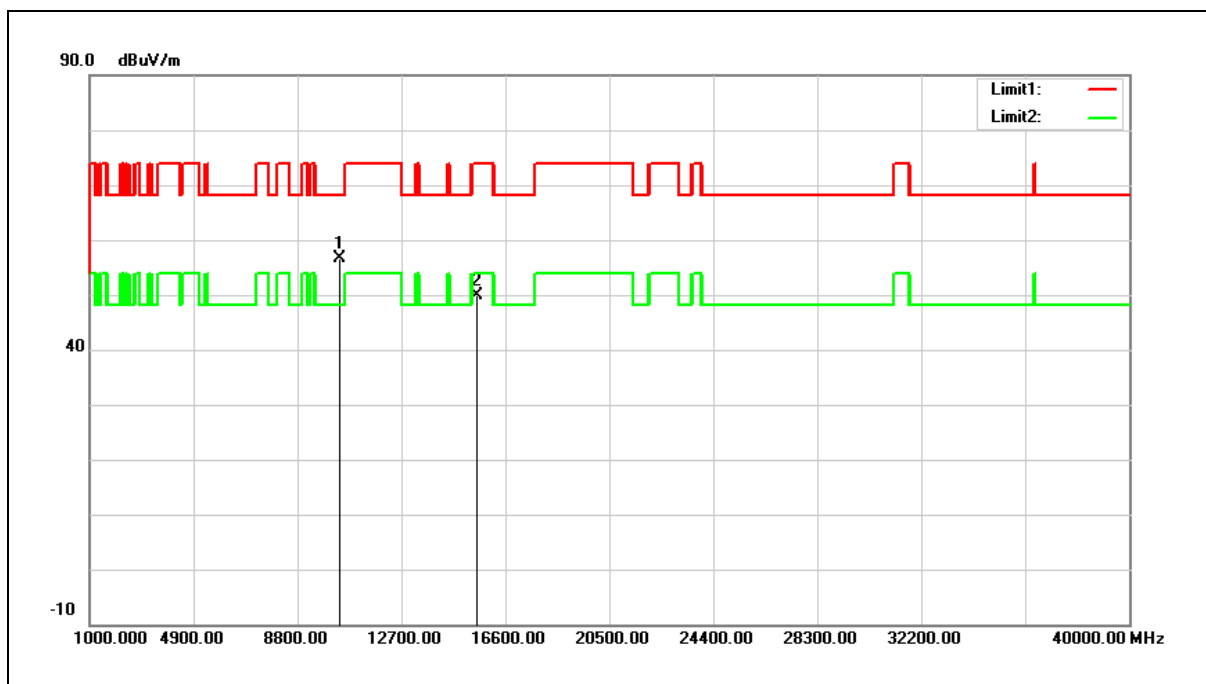
Example: 32.93=-5.67+38.60.

2.Correction factor (dB/m) = Antenna Factor (dB/m) + 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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



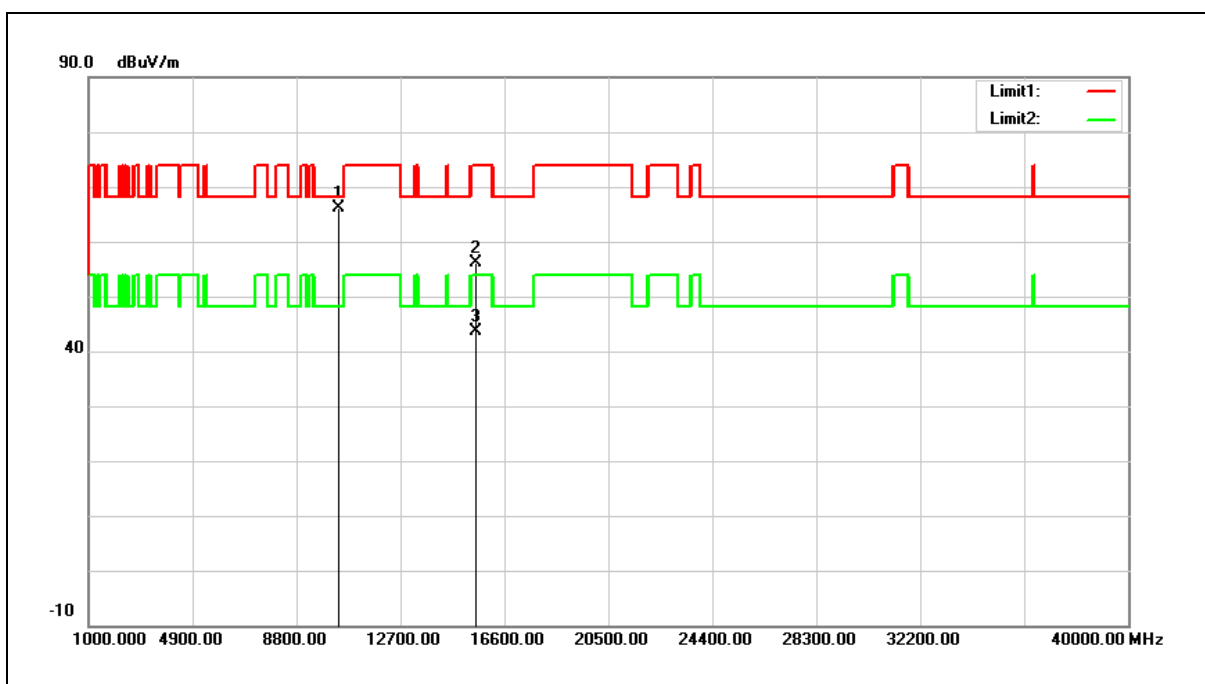
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	39.76	16.79	56.55	68.20	-11.65	peak
2	15540.000	30.84	19.03	49.87	74.00	-24.13	peak

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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



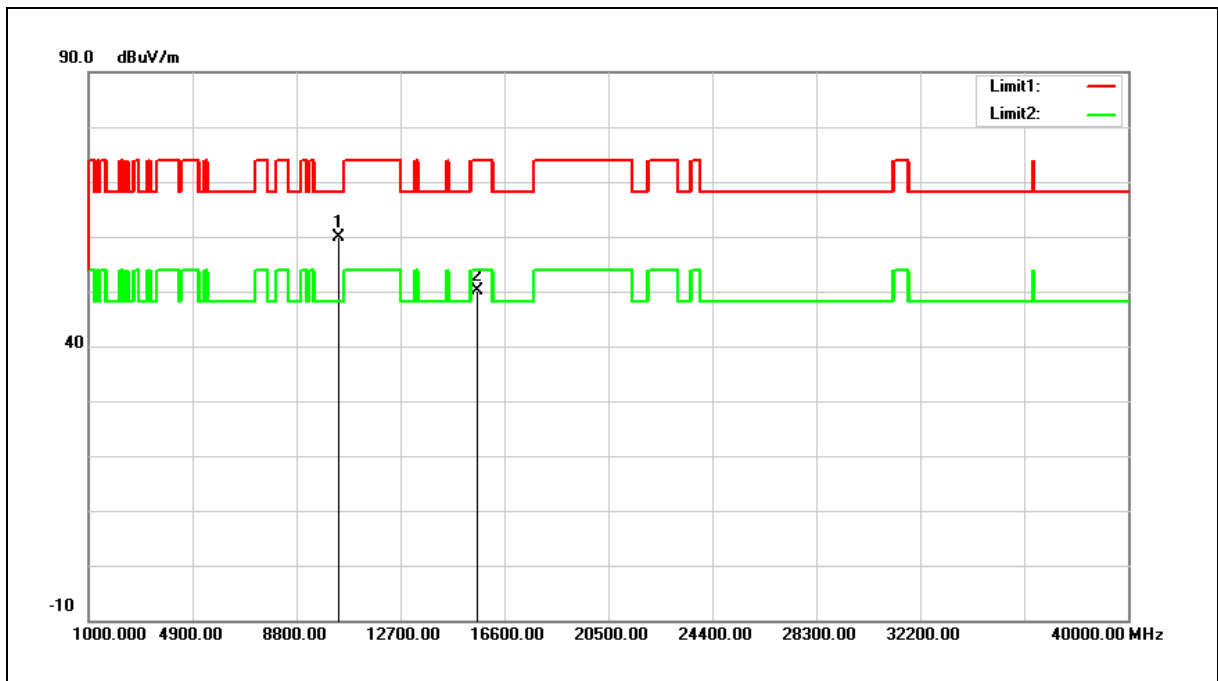
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	49.43	16.79	66.22	68.20	-1.98	peak
2	15540.000	36.98	19.03	56.01	74.00	-17.99	peak
3	15540.000	24.55	19.03	43.58	54.00	-10.42	AVG

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:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



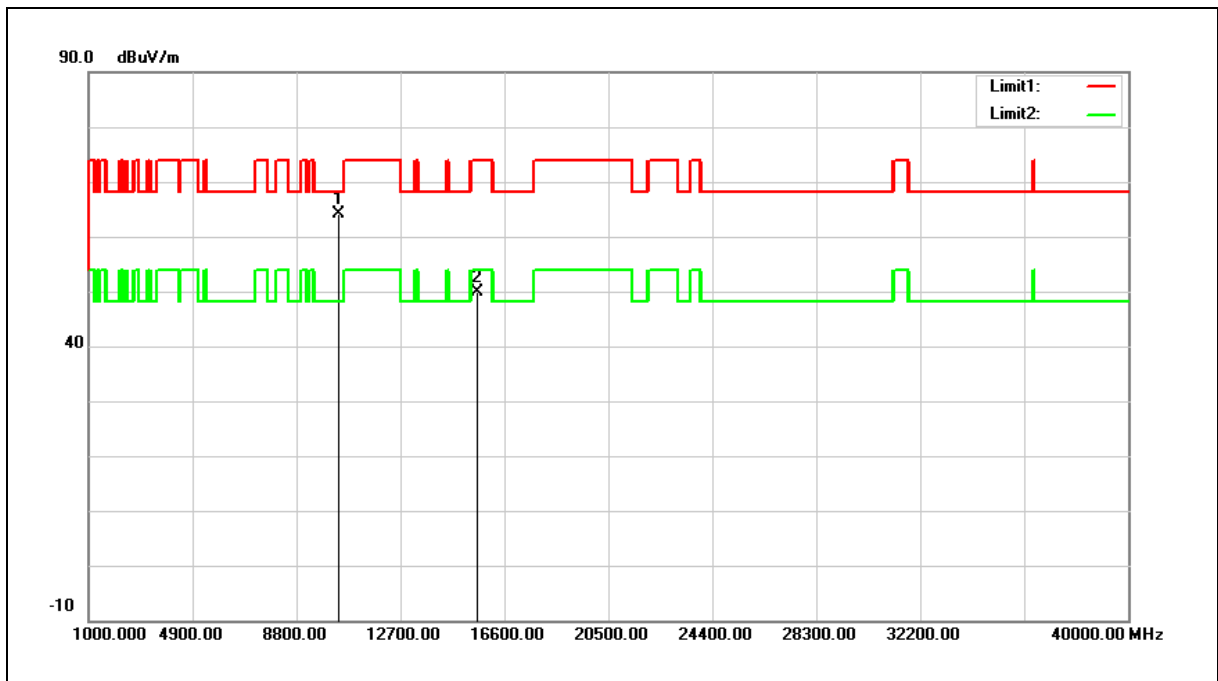
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	42.94	16.94	59.88	68.20	-8.32	peak
2	15600.000	31.30	18.87	50.17	74.00	-23.83	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



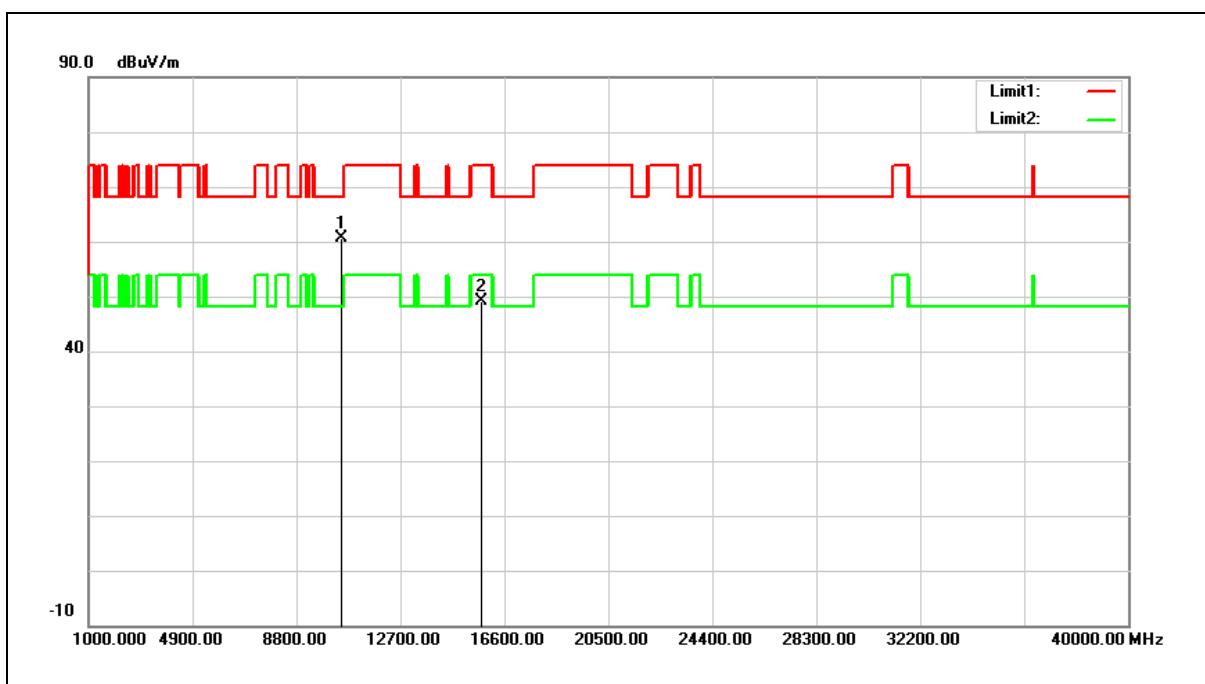
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	47.26	16.94	64.20	68.20	-4.00	peak
2	15600.000	30.98	18.87	49.85	74.00	-24.15	peak

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



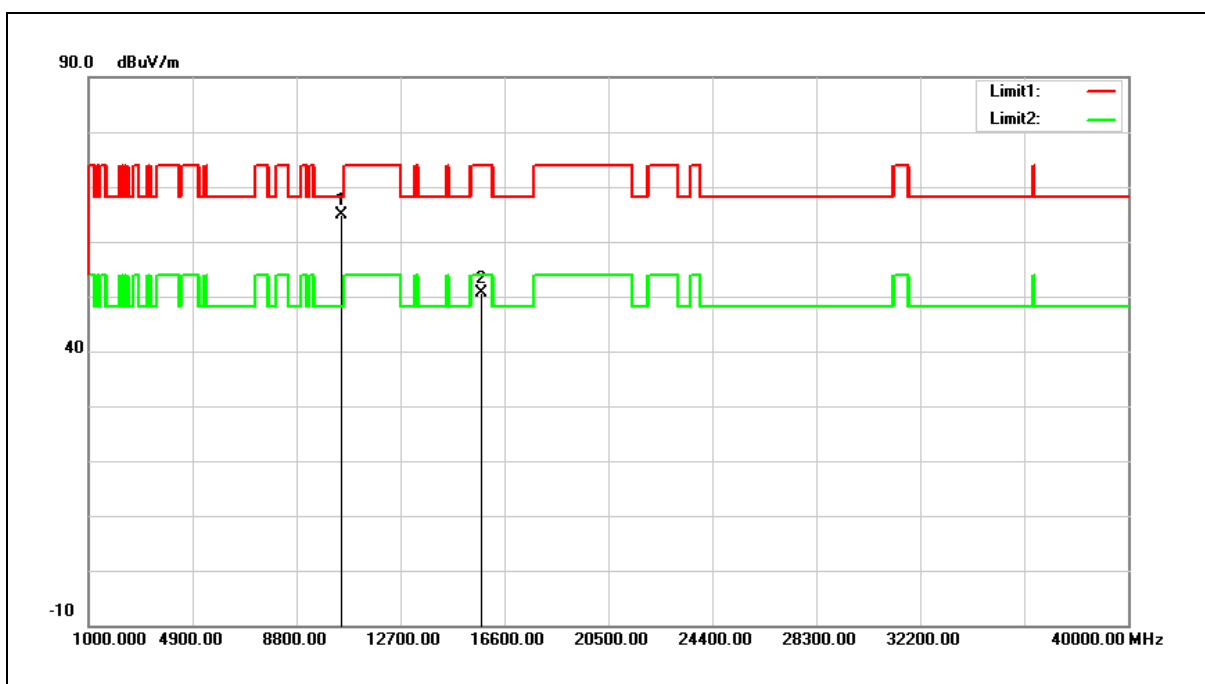
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	43.34	17.23	60.57	68.20	-7.63	peak
2	15720.000	30.61	18.57	49.18	74.00	-24.82	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



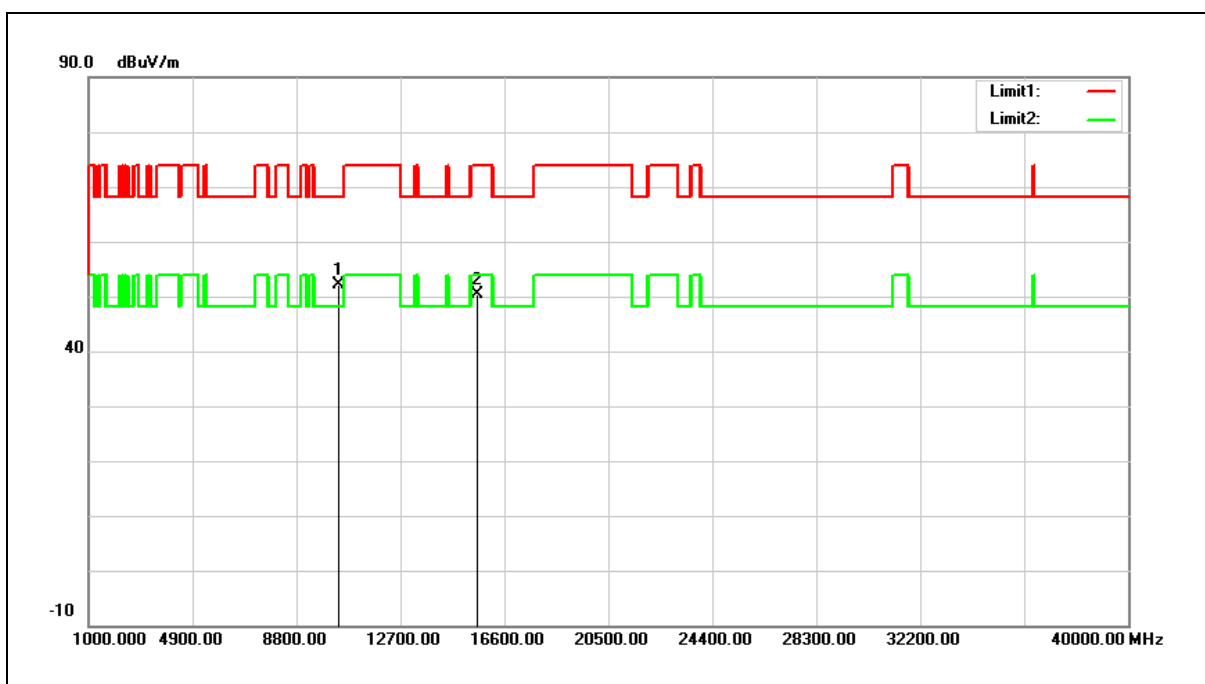
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	47.68	17.23	64.91	68.20	-3.29	peak
2	15720.000	32.17	18.57	50.74	74.00	-23.26	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



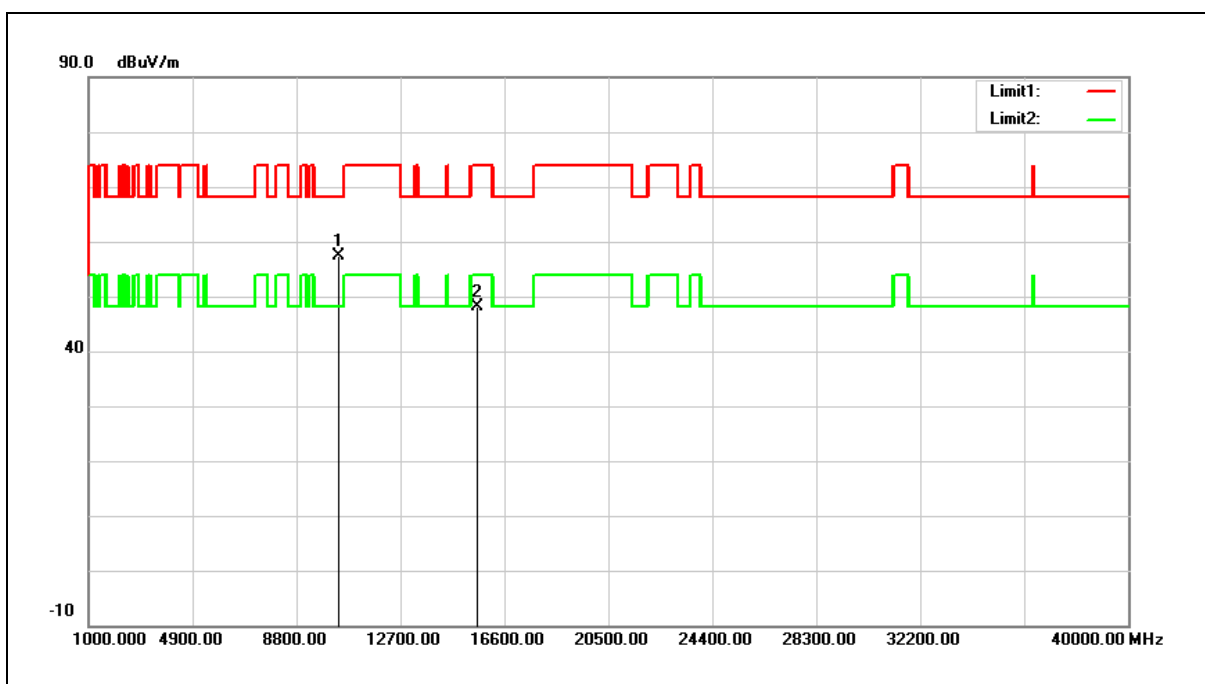
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	35.31	16.86	52.17	68.20	-16.03	peak
2	15570.000	31.43	18.95	50.38	74.00	-23.62	peak

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:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



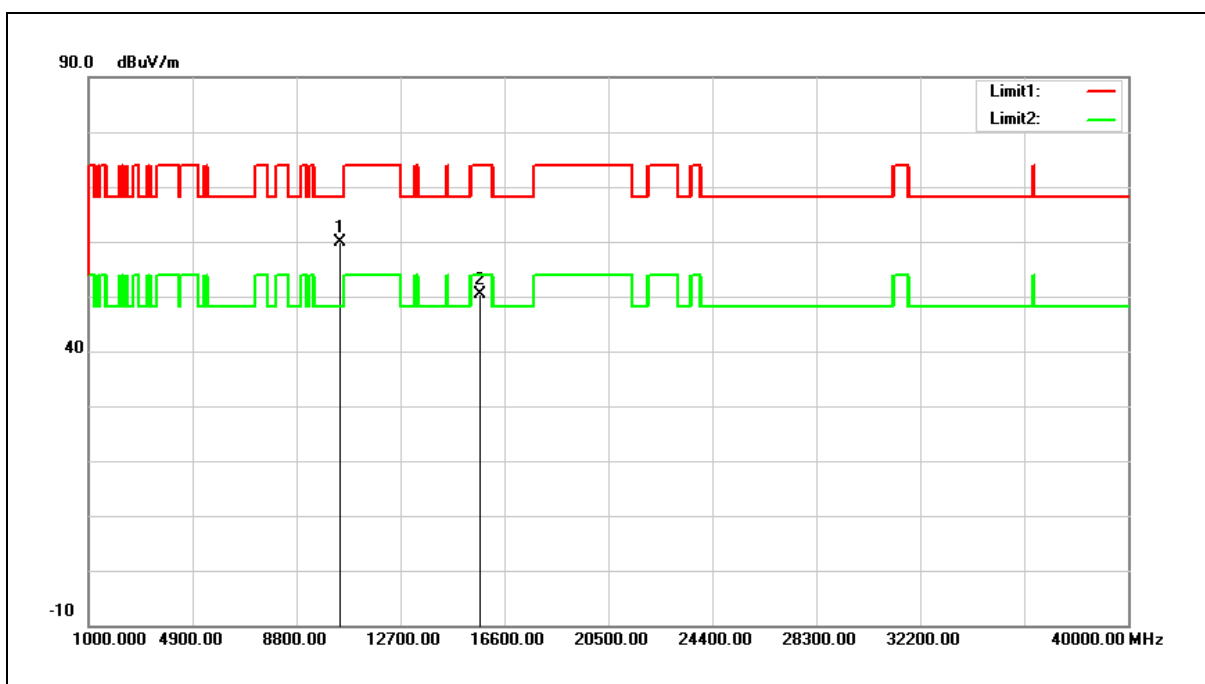
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	40.57	16.86	57.43	68.20	-10.77	peak
2	15570.000	29.24	18.95	48.19	74.00	-25.81	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



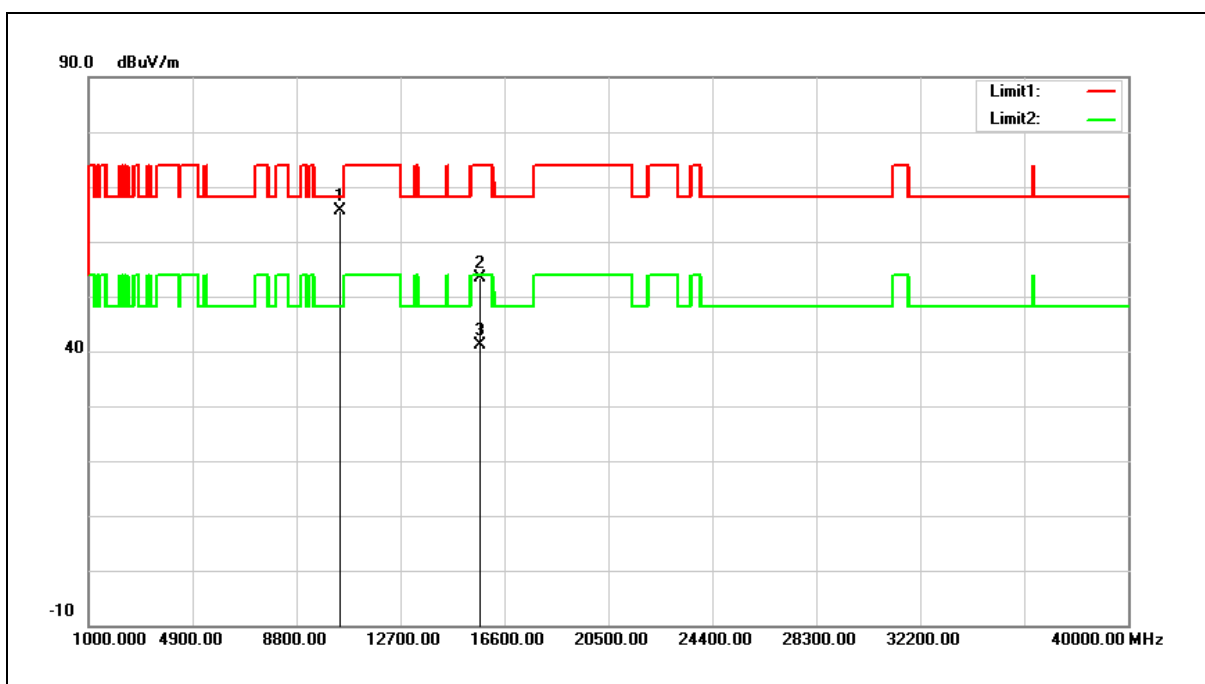
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	42.81	17.15	59.96	68.20	-8.24	peak
2	15690.000	31.80	18.64	50.44	74.00	-23.56	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



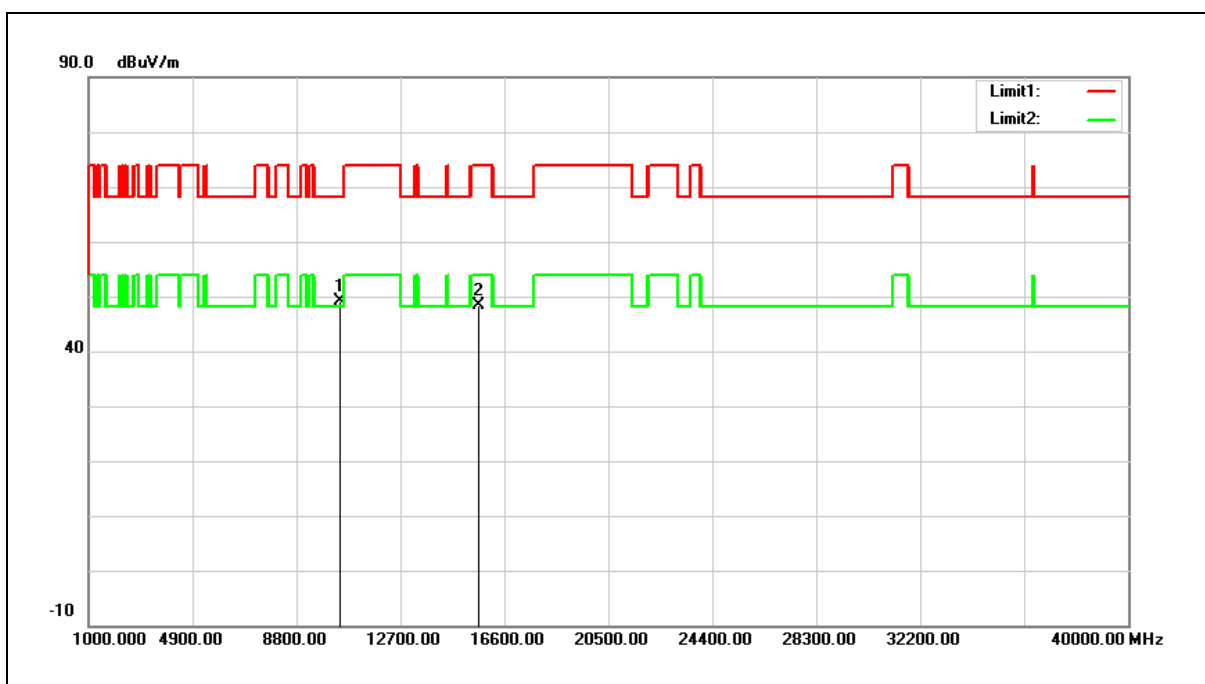
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	48.55	17.15	65.70	68.20	-2.50	peak
2	15690.000	34.85	18.64	53.49	74.00	-20.51	peak
3	15690.000	22.44	18.64	41.08	54.00	-12.92	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



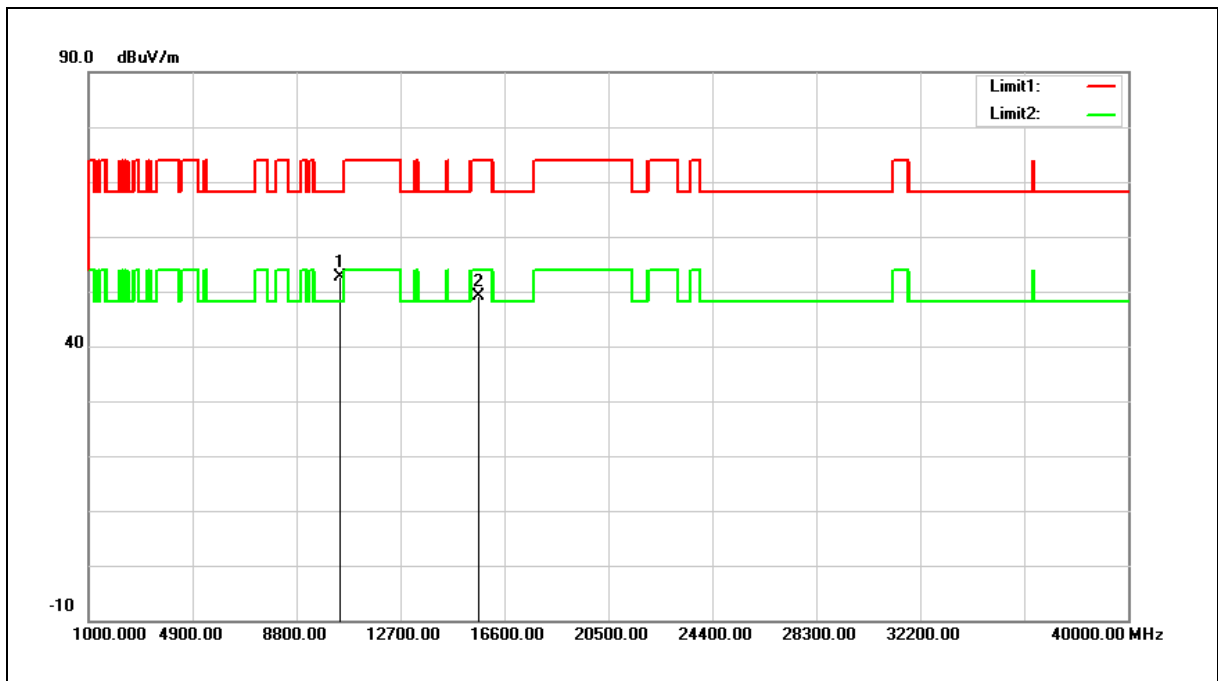
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	32.04	17.01	49.05	68.20	-19.15	peak
2	15630.000	29.63	18.79	48.42	74.00	-25.58	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	35.70	17.01	52.71	68.20	-15.49	peak
2	15630.000	30.45	18.79	49.24	74.00	-24.76	peak

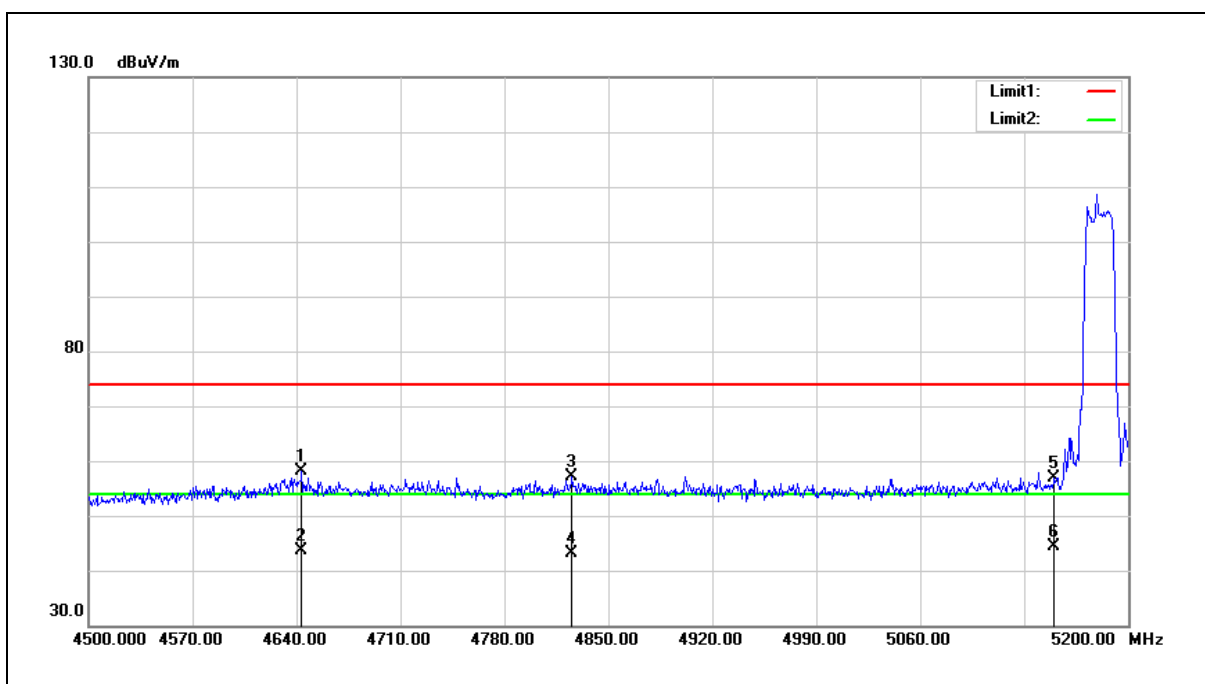
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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

Band Edge

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4643.500	53.15	5.01	58.16	74.00	-15.84	peak
2	4643.500	38.51	5.01	43.52	54.00	-10.48	AVG
3	4825.500	51.78	5.37	57.15	74.00	-16.85	peak
4	4825.500	37.71	5.37	43.08	54.00	-10.92	AVG
5	5150.000	50.76	6.07	56.83	74.00	-17.17	peak
6	5150.000	38.19	6.07	44.26	54.00	-9.74	AVG

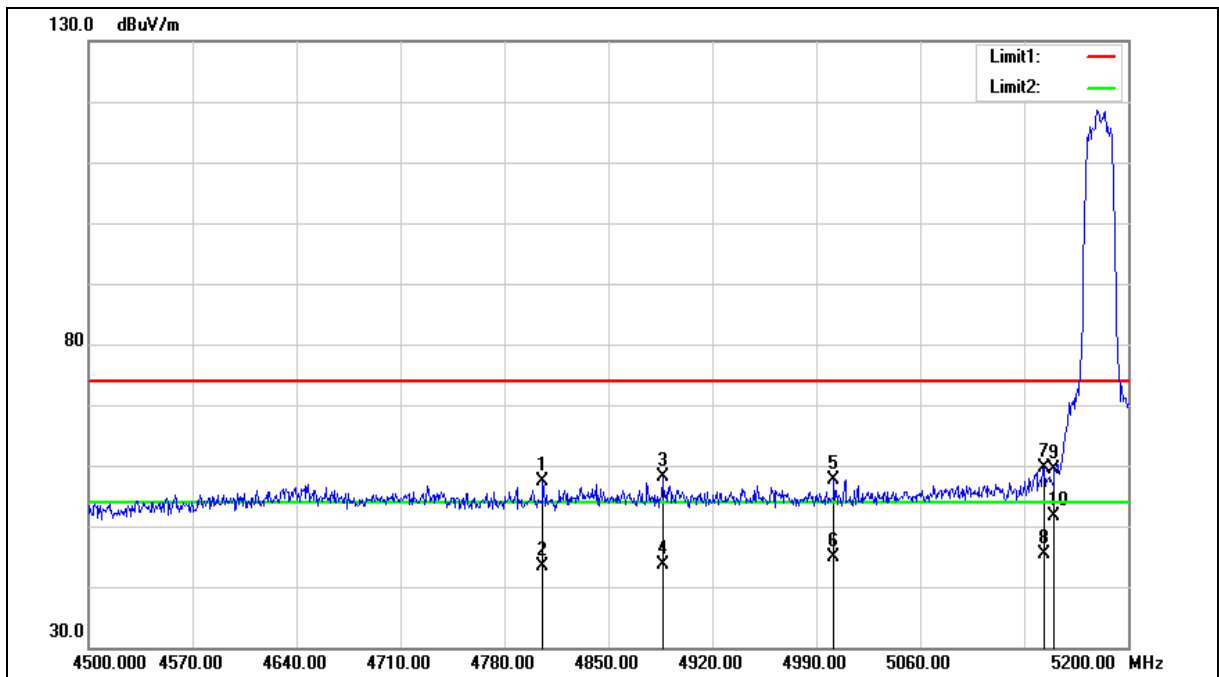
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum. (%RH):	26(°C)/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	4805.900	52.00	5.33	57.33	74.00	-16.67	peak
2	4805.900	37.94	5.33	43.27	54.00	-10.73	AVG
3	4886.400	52.61	5.49	58.10	74.00	-15.90	peak
4	4886.400	38.12	5.49	43.61	54.00	-10.39	AVG
5	5001.900	51.94	5.73	57.67	74.00	-16.33	peak
6	5001.900	39.09	5.73	44.82	54.00	-9.18	AVG
7	5143.300	53.66	6.06	59.72	74.00	-14.28	peak
8	5143.300	39.32	6.06	45.38	54.00	-8.62	AVG
9	5150.000	53.23	6.07	59.30	74.00	-14.70	peak
10	5150.000	45.54	6.07	51.61	54.00	-2.39	AVG

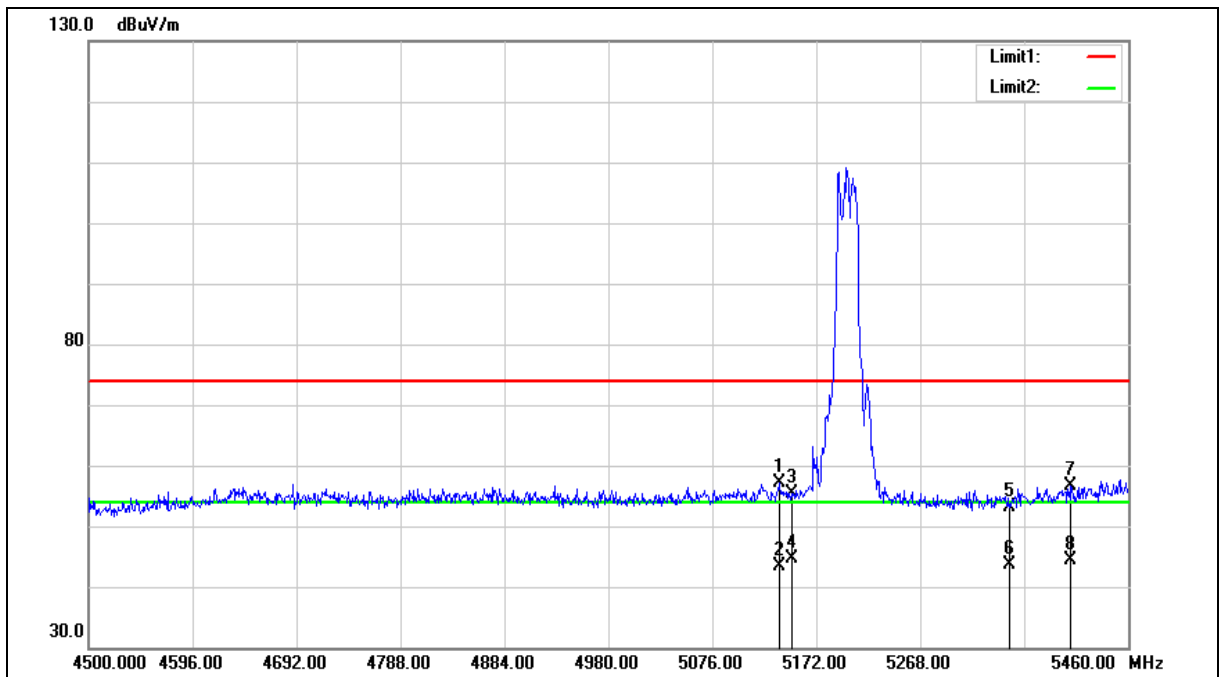
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5137.440	51.08	6.04	57.12	74.00	-16.88	peak
2	5137.440	37.41	6.04	43.45	54.00	-10.55	AVG
3	5150.000	49.19	6.07	55.26	74.00	-18.74	peak
4	5150.000	38.55	6.07	44.62	54.00	-9.38	AVG
5	5350.000	46.50	6.52	53.02	74.00	-20.98	peak
6	5350.000	37.06	6.52	43.58	54.00	-10.42	AVG
7	5407.200	49.87	6.64	56.51	74.00	-17.49	peak
8	5407.200	37.62	6.64	44.26	54.00	-9.74	AVG

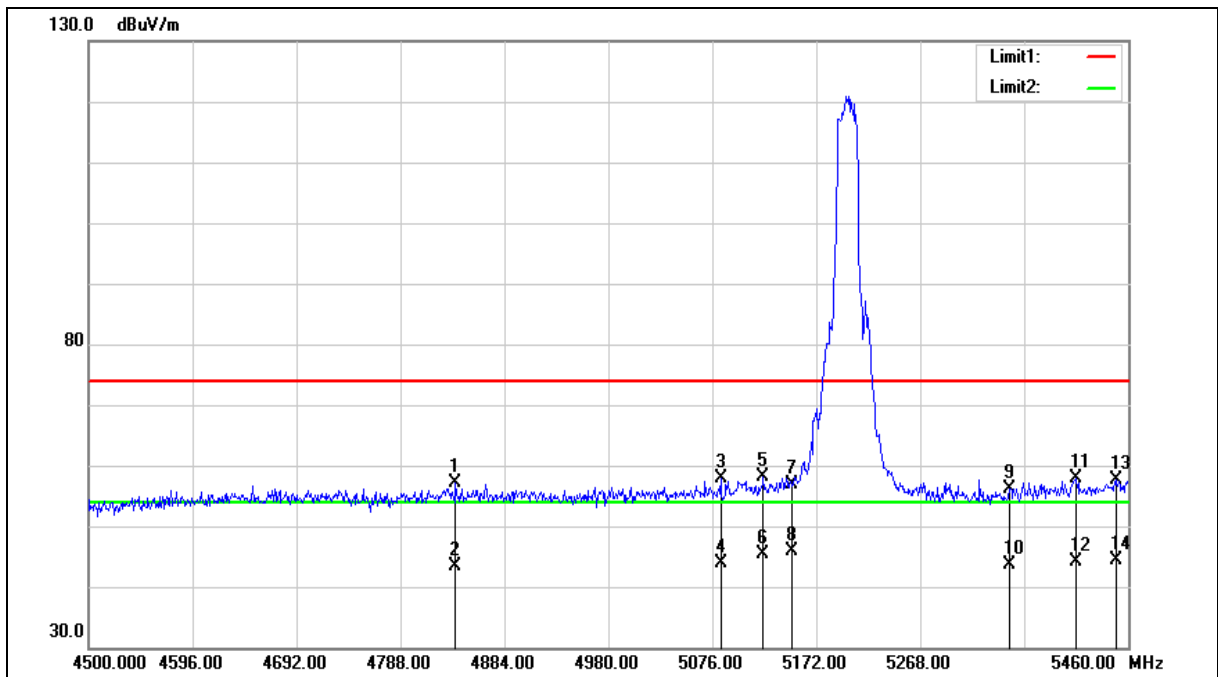
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4838.880	51.61	5.41	57.02	74.00	-16.98	peak
2	4838.880	38.08	5.41	43.49	54.00	-10.51	AVG
3	5083.680	52.02	5.92	57.94	74.00	-16.06	peak
4	5083.680	37.85	5.92	43.77	54.00	-10.23	AVG
5	5123.040	52.20	6.01	58.21	74.00	-15.79	peak
6	5123.040	39.30	6.01	45.31	54.00	-8.69	AVG
7	5150.000	50.92	6.07	56.99	74.00	-17.01	peak
8	5150.000	39.75	6.07	45.82	54.00	-8.18	AVG
9	5350.000	49.67	6.52	56.19	74.00	-17.81	peak
10	5350.000	37.09	6.52	43.61	54.00	-10.39	AVG
11	5412.000	51.20	6.65	57.85	74.00	-16.15	peak
12	5412.000	37.56	6.65	44.21	54.00	-9.79	AVG
13	5448.480	50.99	6.75	57.74	74.00	-16.26	peak
14	5448.480	37.61	6.75	44.36	54.00	-9.64	AVG

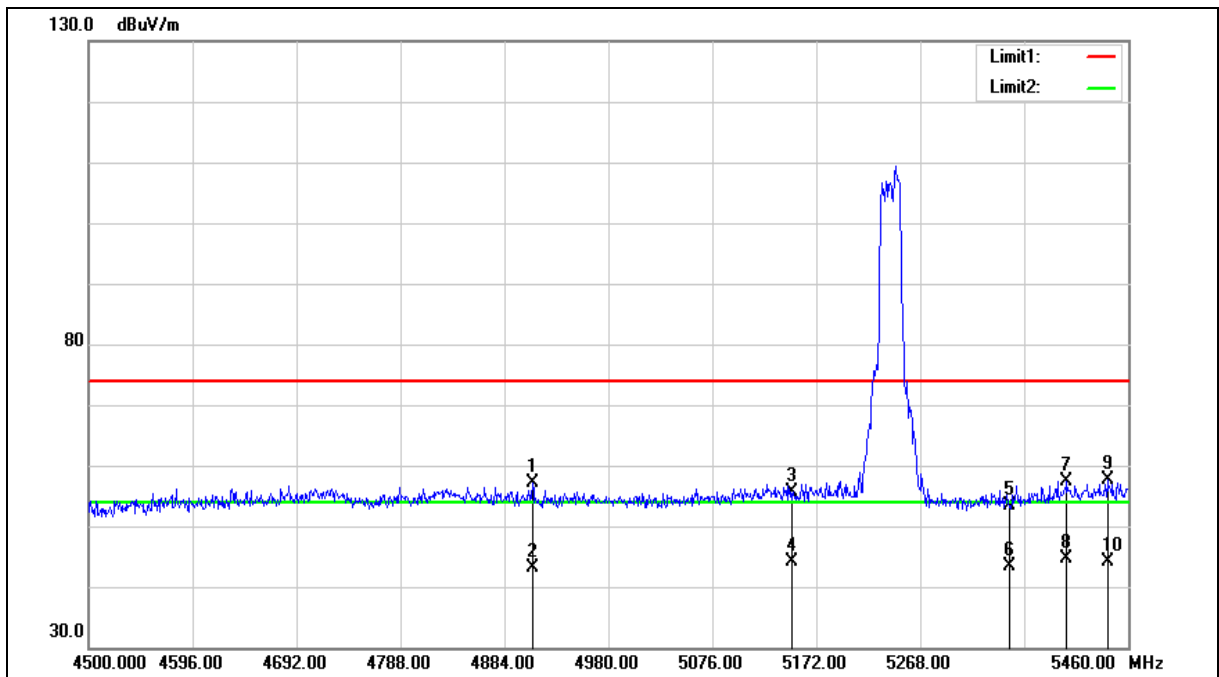
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4909.920	51.69	5.55	57.24	74.00	-16.76	peak
2	4909.920	37.61	5.55	43.16	54.00	-10.84	AVG
3	5150.000	49.68	6.07	55.75	74.00	-18.25	peak
4	5150.000	38.03	6.07	44.10	54.00	-9.90	AVG
5	5350.000	46.96	6.52	53.48	74.00	-20.52	peak
6	5350.000	36.75	6.52	43.27	54.00	-10.73	AVG
7	5403.360	50.76	6.64	57.40	74.00	-16.60	peak
8	5403.360	37.98	6.64	44.62	54.00	-9.38	AVG
9	5440.800	50.80	6.73	57.53	74.00	-16.47	peak
10	5440.800	37.47	6.73	44.20	54.00	-9.80	AVG

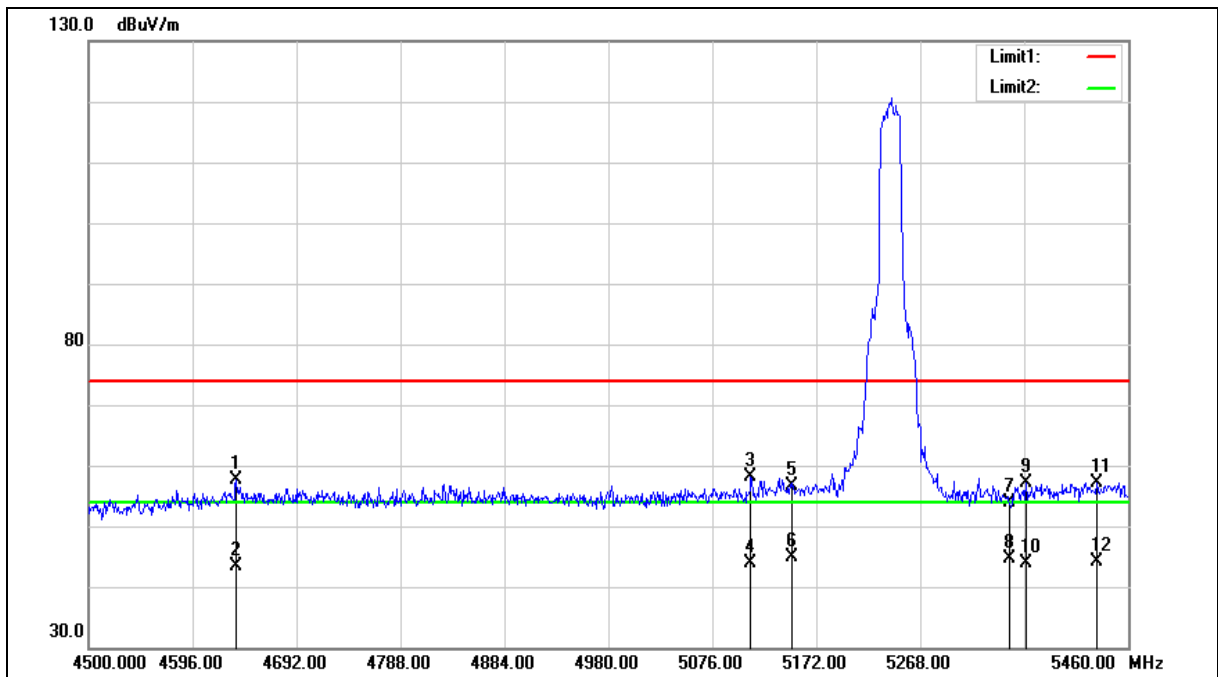
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4636.320	52.75	4.99	57.74	74.00	-16.26	peak
2	4636.320	38.28	4.99	43.27	54.00	-10.73	AVG
3	5111.520	52.18	5.98	58.16	74.00	-15.84	peak
4	5111.520	37.94	5.98	43.92	54.00	-10.08	AVG
5	5150.000	50.56	6.07	56.63	74.00	-17.37	peak
6	5150.000	38.80	6.07	44.87	54.00	-9.13	AVG
7	5350.000	47.47	6.52	53.99	74.00	-20.01	peak
8	5350.000	38.22	6.52	44.74	54.00	-9.26	AVG
9	5365.920	50.59	6.56	57.15	74.00	-16.85	peak
10	5365.920	37.41	6.56	43.97	54.00	-10.03	AVG
11	5431.200	50.41	6.71	57.12	74.00	-16.88	peak
12	5431.200	37.54	6.71	44.25	54.00	-9.75	AVG

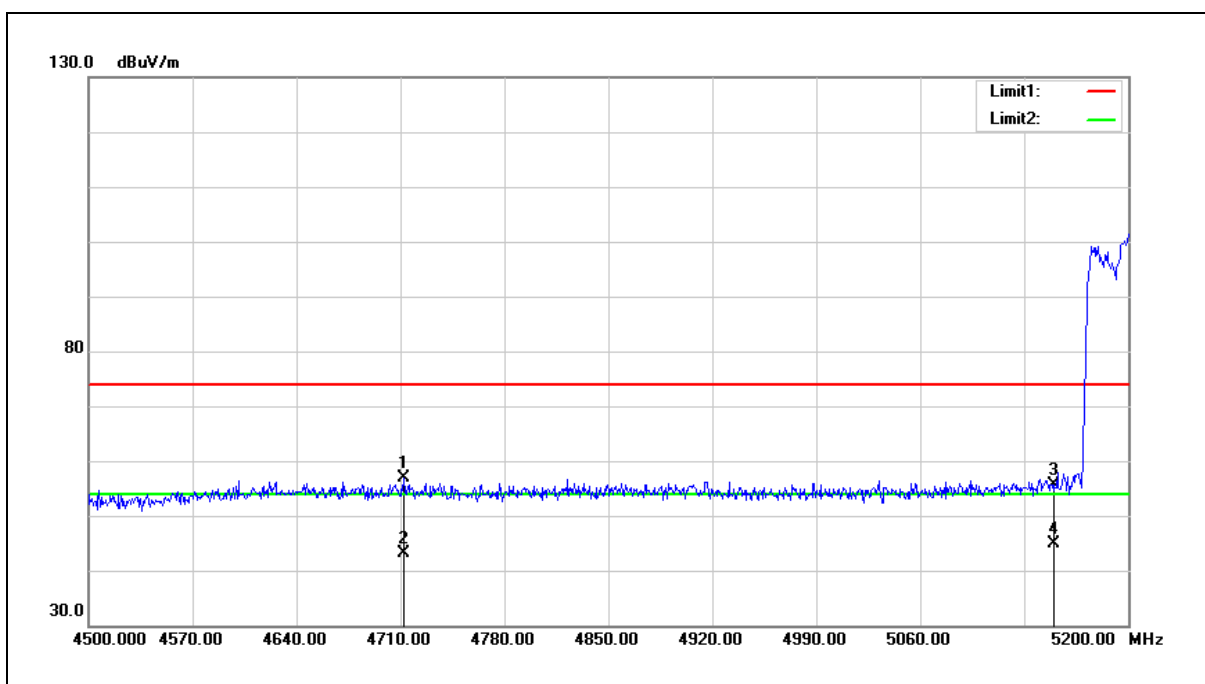
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



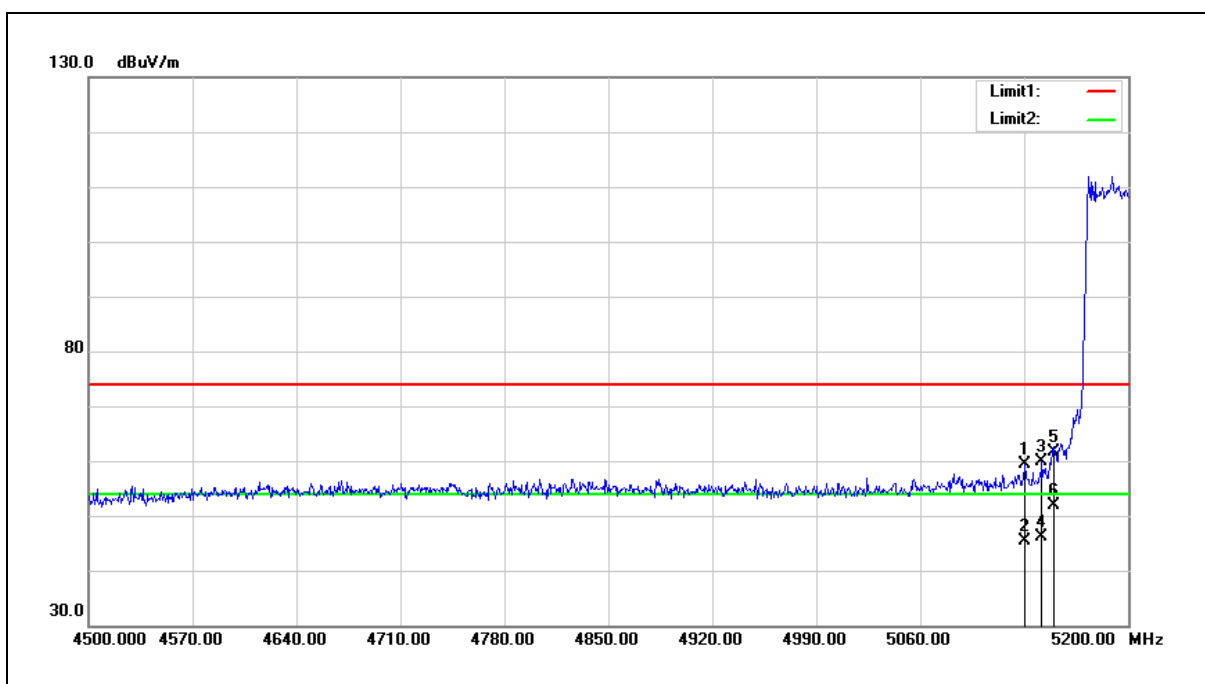
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4712.100	51.72	5.14	56.86	74.00	-17.14	peak
2	4712.100	38.03	5.14	43.17	54.00	-10.83	AVG
3	5150.000	49.67	6.07	55.74	74.00	-18.26	peak
4	5150.000	38.79	6.07	44.86	54.00	-9.14	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5130.700	53.23	6.03	59.26	74.00	-14.74	peak
2	5130.700	39.28	6.03	45.31	54.00	-8.69	AVG
3	5141.900	53.79	6.06	59.85	74.00	-14.15	peak
4	5141.900	40.02	6.06	46.08	54.00	-7.92	AVG
5	5150.000	55.61	6.07	61.68	74.00	-12.32	peak
6	5150.000	45.85	6.07	51.92	54.00	-2.08	AVG

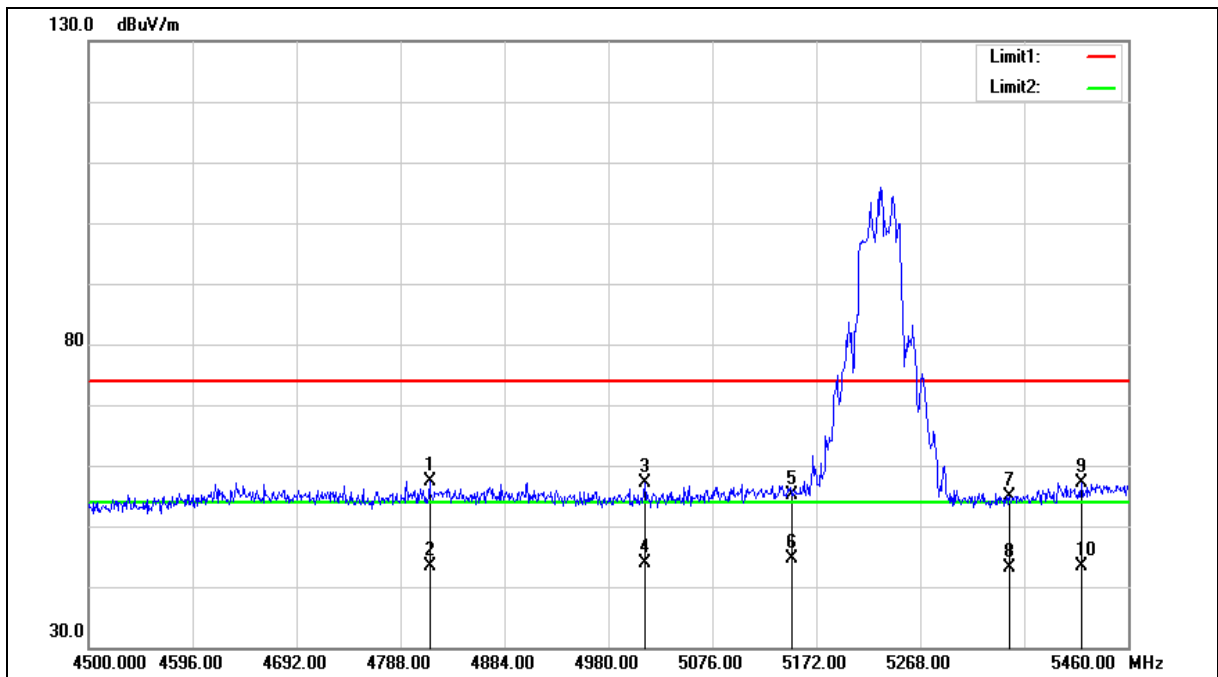
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	4814.880	52.08	5.35	57.43	74.00	-16.57	peak
2	4814.880	37.93	5.35	43.28	54.00	-10.72	AVG
3	5013.600	51.26	5.76	57.02	74.00	-16.98	peak
4	5013.600	38.00	5.76	43.76	54.00	-10.24	AVG
5	5150.000	49.13	6.07	55.20	74.00	-18.80	peak
6	5150.000	38.45	6.07	44.52	54.00	-9.48	AVG
7	5350.000	48.39	6.52	54.91	74.00	-19.09	peak
8	5350.000	36.64	6.52	43.16	54.00	-10.84	AVG
9	5416.800	50.55	6.68	57.23	74.00	-16.77	peak
10	5416.800	36.59	6.68	43.27	54.00	-10.73	AVG

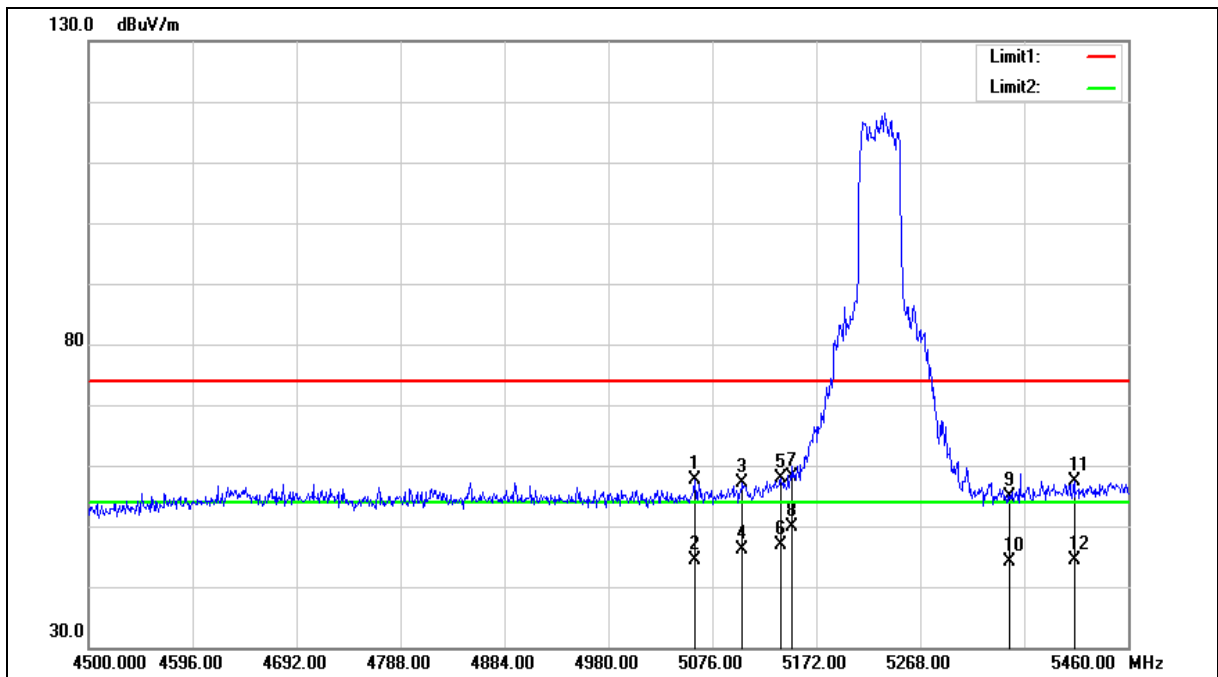
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/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	5059.680	51.69	5.86	57.55	74.00	-16.45	peak
2	5059.680	38.52	5.86	44.38	54.00	-9.62	AVG
3	5103.840	51.21	5.97	57.18	74.00	-16.82	peak
4	5103.840	40.20	5.97	46.17	54.00	-7.83	AVG
5	5139.360	51.85	6.05	57.90	74.00	-16.10	peak
6	5139.360	40.87	6.05	46.92	54.00	-7.08	AVG
7	5150.000	52.17	6.07	58.24	74.00	-15.76	peak
8	5150.000	43.79	6.07	49.86	54.00	-4.14	AVG
9	5350.000	48.26	6.52	54.78	74.00	-19.22	peak
10	5350.000	37.63	6.52	44.15	54.00	-9.85	AVG
11	5410.080	50.84	6.65	57.49	74.00	-16.51	peak
12	5410.080	37.73	6.65	44.38	54.00	-9.62	AVG

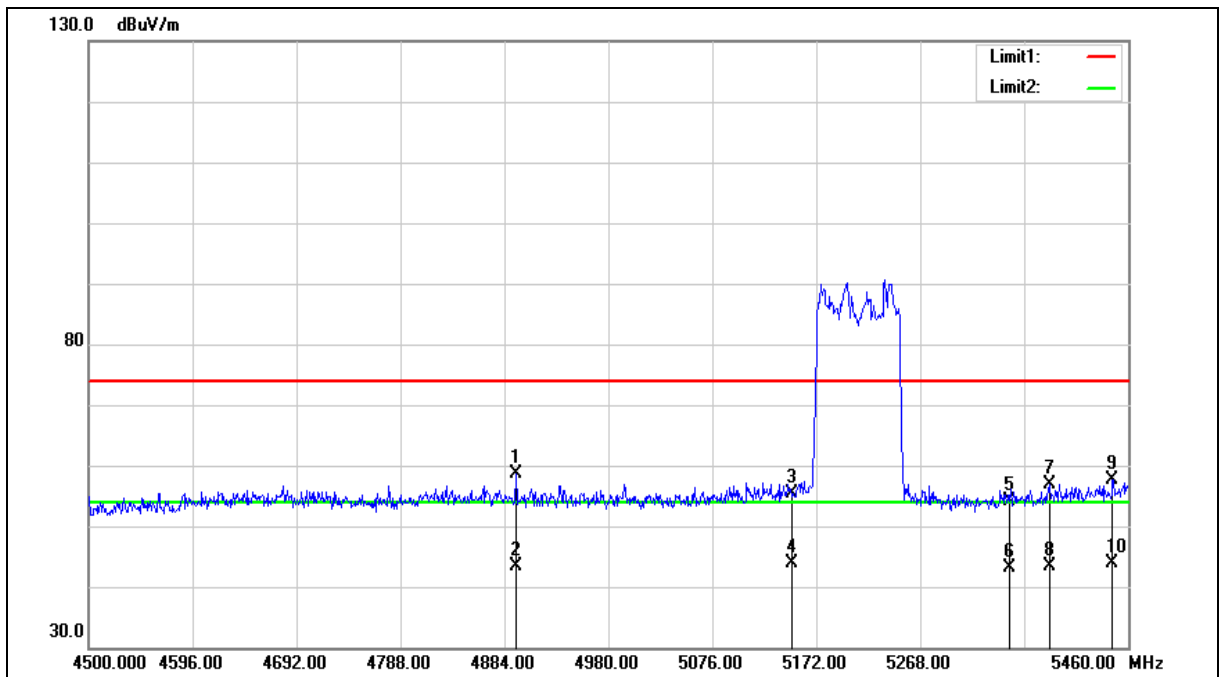
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

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



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4894.560	53.05	5.51	58.56	74.00	-15.44	peak
2	4894.560	37.87	5.51	43.38	54.00	-10.62	AVG
3	5150.000	49.43	6.07	55.50	74.00	-18.50	peak
4	5150.000	37.89	6.07	43.96	54.00	-10.04	AVG
5	5350.000	47.66	6.52	54.18	74.00	-19.82	peak
6	5350.000	36.66	6.52	43.18	54.00	-10.82	AVG
7	5387.040	50.20	6.60	56.80	74.00	-17.20	peak
8	5387.040	36.69	6.60	43.29	54.00	-10.71	AVG
9	5445.600	50.86	6.74	57.60	74.00	-16.40	peak
10	5445.600	37.24	6.74	43.98	54.00	-10.02	AVG

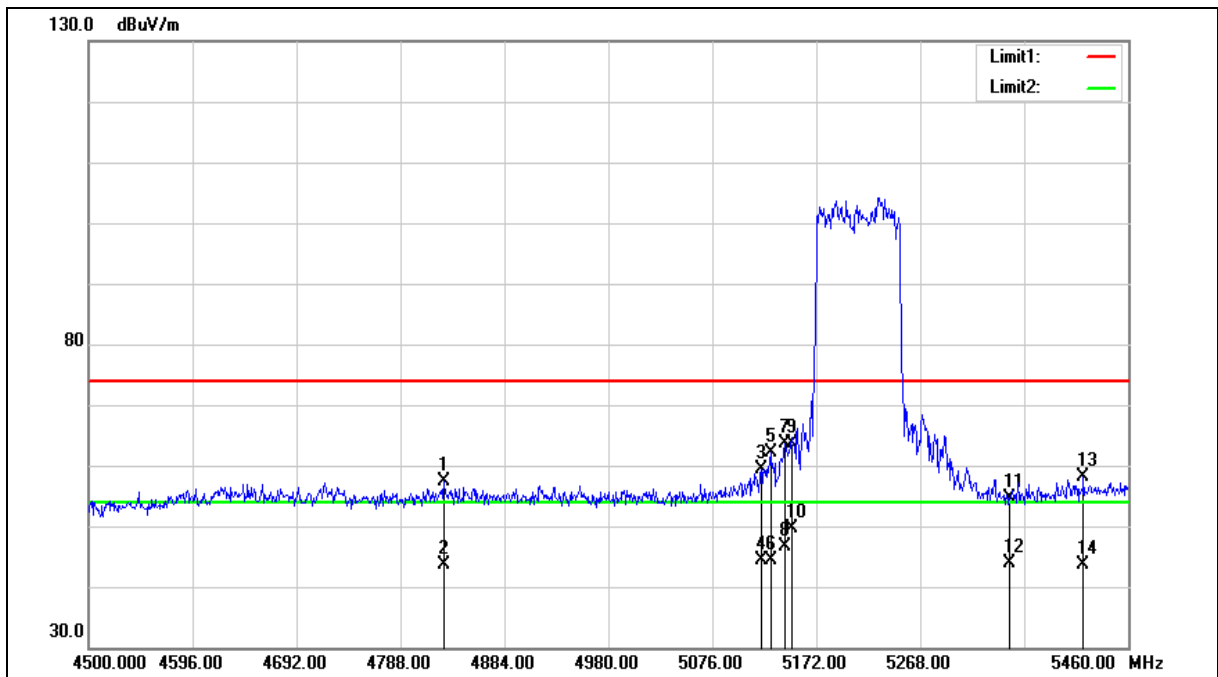
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Band edge	Power:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4828.320	51.92	5.38	57.30	74.00	-16.70	peak
2	4828.320	38.20	5.38	43.58	54.00	-10.42	AVG
3	5121.120	53.33	6.01	59.34	74.00	-14.66	peak
4	5121.120	38.26	6.01	44.27	54.00	-9.73	AVG
5	5129.760	56.18	6.02	62.20	74.00	-11.80	peak
6	5129.760	38.47	6.02	44.49	54.00	-9.51	AVG
7	5143.200	57.64	6.06	63.70	74.00	-10.30	peak
8	5143.200	40.65	6.06	46.71	54.00	-7.29	AVG
9	5150.000	57.62	6.07	63.69	74.00	-10.31	peak
10	5150.000	43.65	6.07	49.72	54.00	-4.28	AVG
11	5350.000	47.99	6.52	54.51	74.00	-19.49	peak
12	5350.000	37.30	6.52	43.82	54.00	-10.18	AVG
13	5418.720	51.33	6.68	58.01	74.00	-15.99	peak
14	5418.720	36.94	6.68	43.62	54.00	-10.38	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.



Antenna Type : PIFA Antenna

Below 1 GHz

Standard:		FCC Part 15.407		Test Distance:		3 m	
Test item:		Harmonic		Power:		DC 48 V	
Test Mode:		Mode 1		Temp.(°C)/Hum. (%RH):		26(°C)/60 %RH	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
199.7500	42.68	-7.72	34.96	43.50	-8.54	QP	H
250.1900	39.27	-5.73	33.54	46.00	-12.46	QP	H
292.8700	36.69	-4.00	32.69	46.00	-13.31	QP	H
399.5700	33.57	-1.75	31.82	46.00	-14.18	QP	H
800.1800	33.22	6.35	39.57	46.00	-6.43	QP	H
997.0900	33.22	9.54	42.76	54.00	-11.24	QP	H
150.2800	38.23	-5.67	32.56	43.50	-10.94	QP	V
199.7500	37.18	-7.72	29.46	43.50	-14.04	QP	V
338.4600	35.48	-3.19	32.29	46.00	-13.71	QP	V
384.0500	33.46	-2.15	31.31	46.00	-14.69	QP	V
800.1800	34.32	6.35	40.67	46.00	-5.33	QP	V
997.0900	30.07	9.54	39.61	54.00	-14.39	QP	V

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

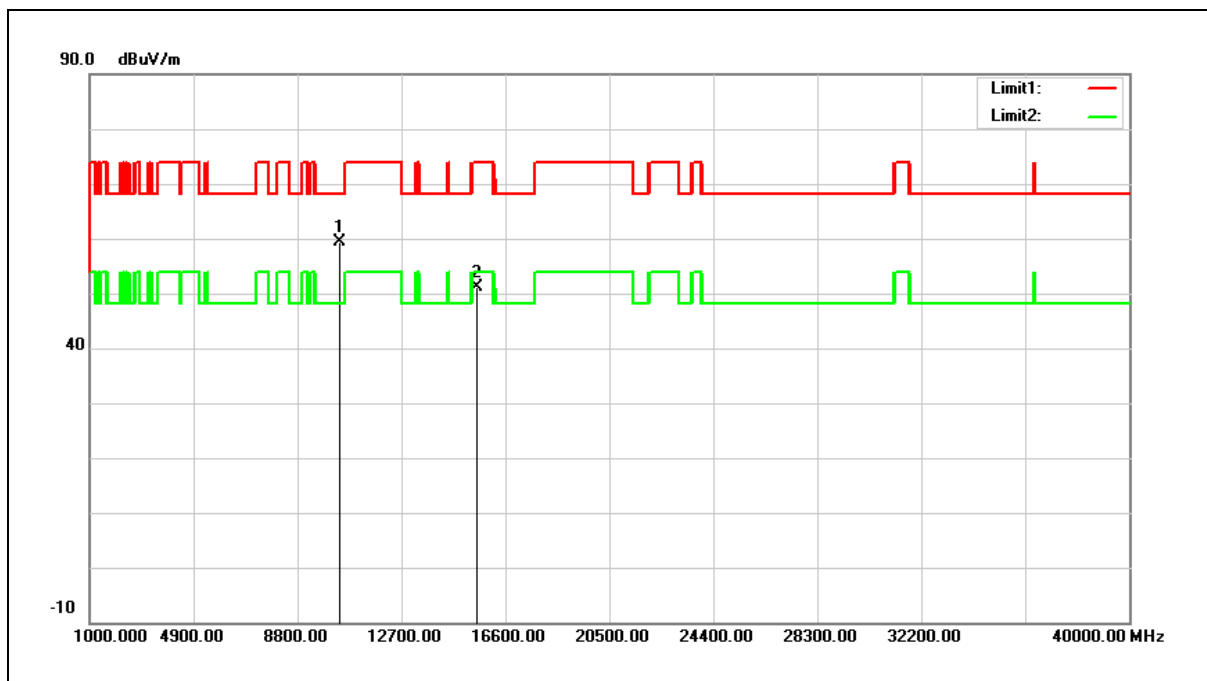
Example: 34.96=-7.72+42.68.

2.Correction factor (dB/m) = Antenna Factor (dB/m) + 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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



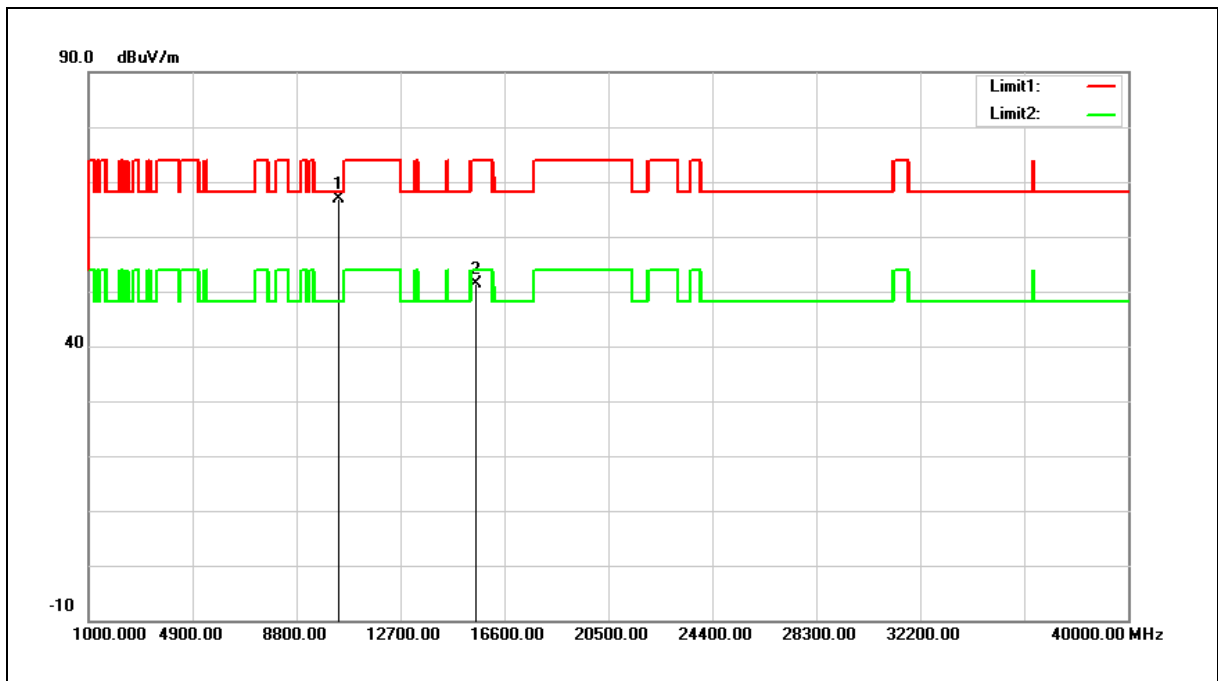
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	42.57	16.79	59.36	68.20	-8.84	peak
2	15540.000	32.07	19.03	51.10	74.00	-22.90	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



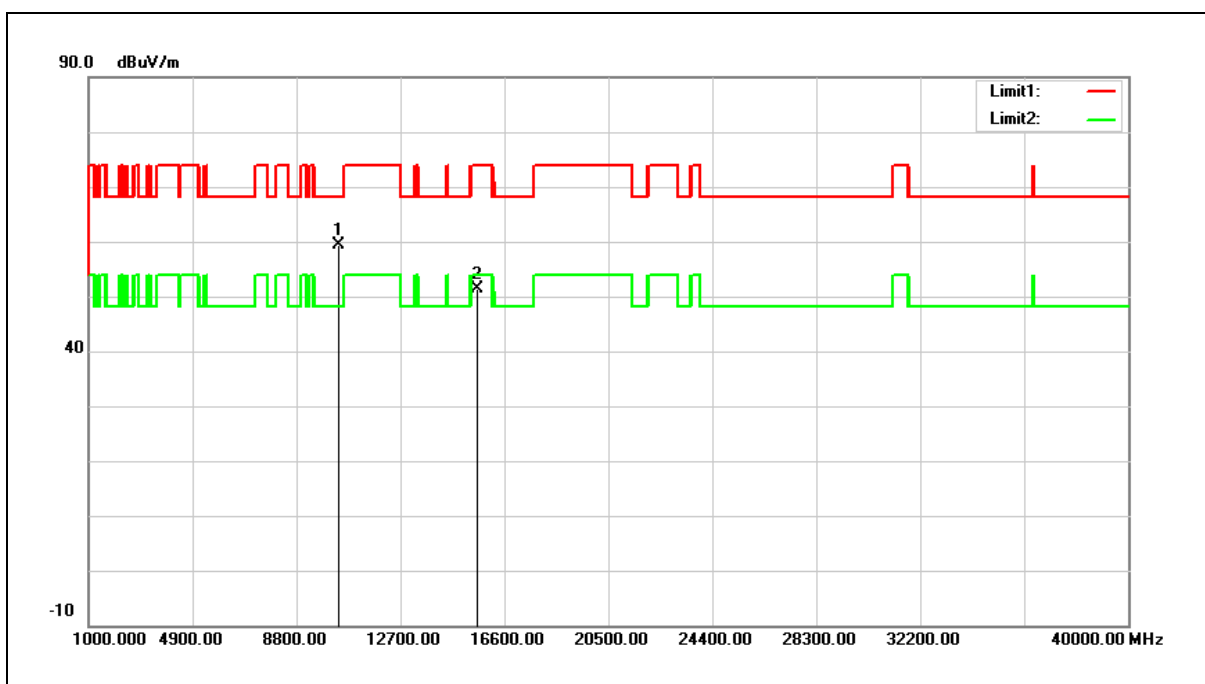
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	50.21	16.79	67.00	68.20	-1.20	peak
2	15540.000	32.24	19.03	51.27	74.00	-22.73	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



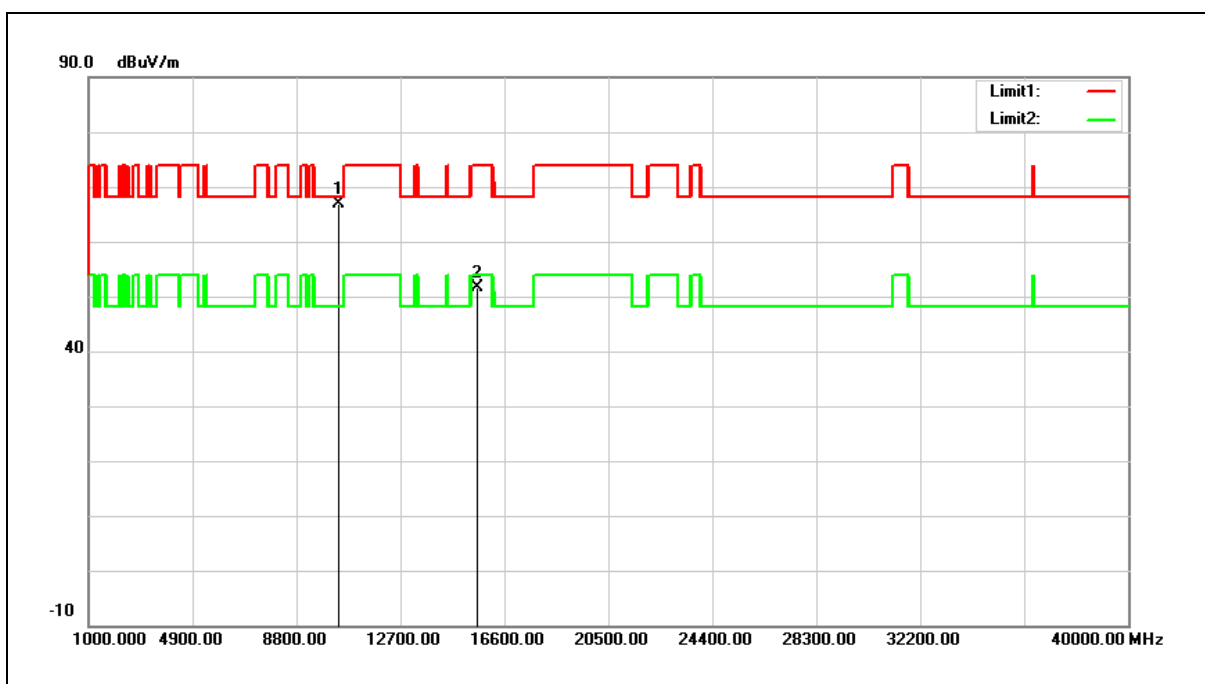
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	42.55	16.94	59.49	68.20	-8.71	peak
2	15600.000	32.42	18.87	51.29	74.00	-22.71	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



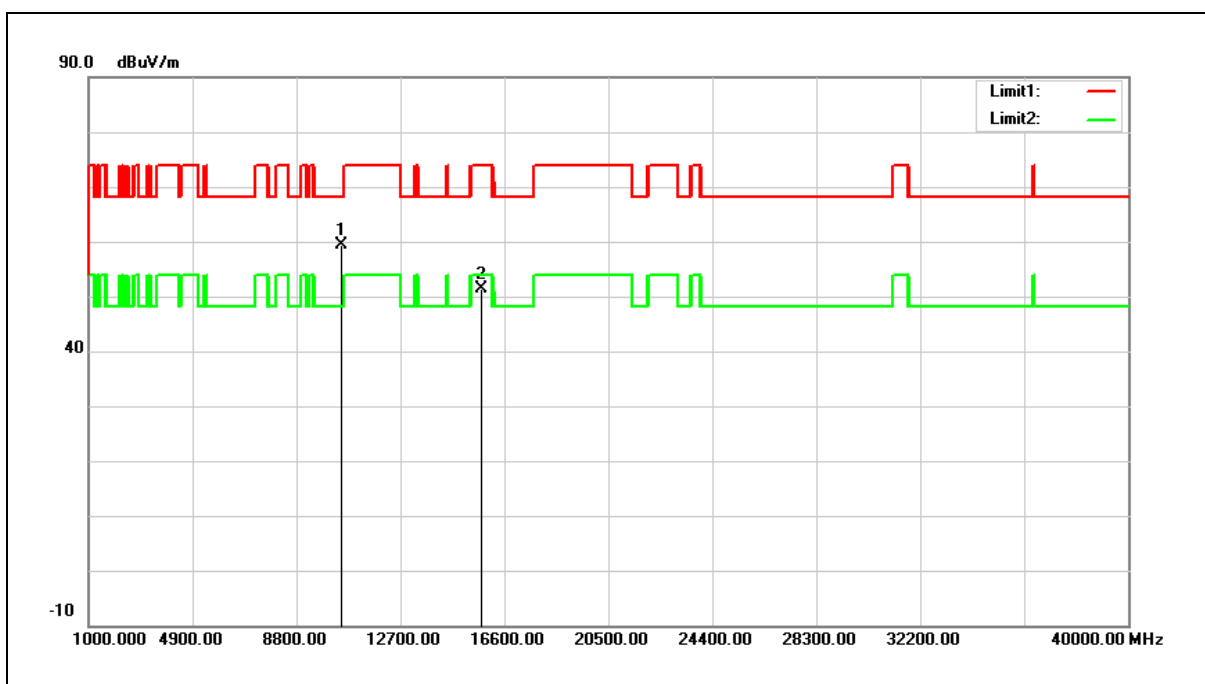
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	50.01	16.94	66.95	68.20	-1.25	peak
2	15600.000	32.73	18.87	51.60	74.00	-22.40	peak

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



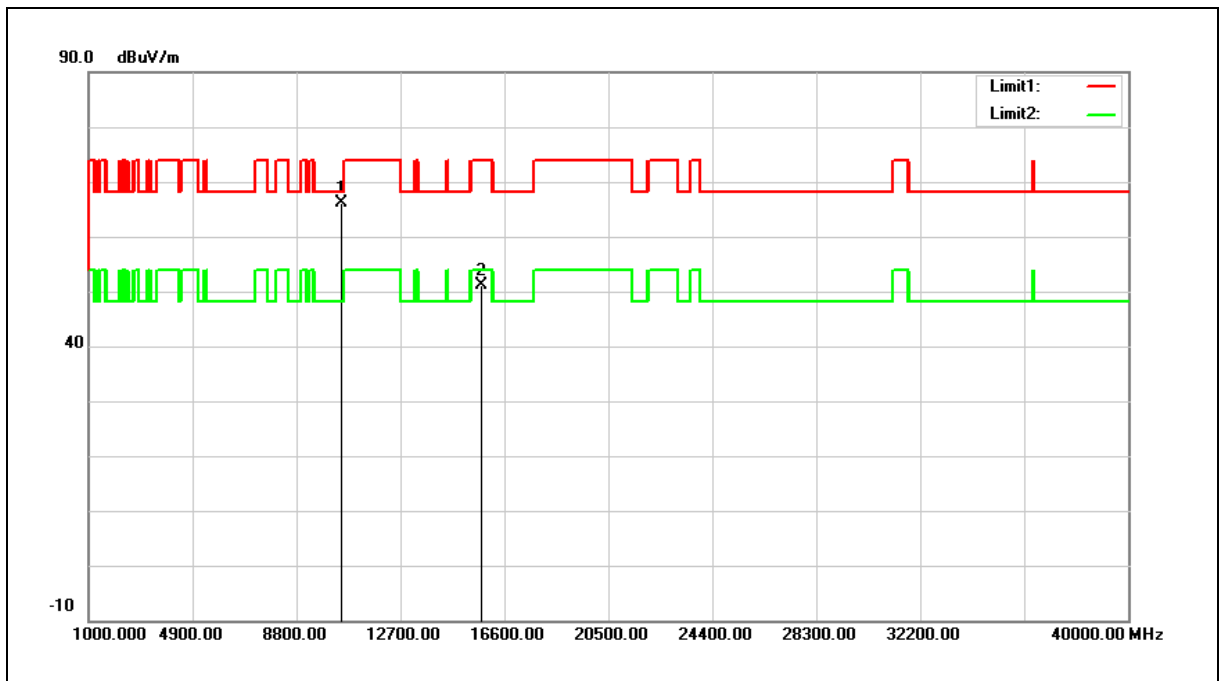
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	42.20	17.23	59.43	68.20	-8.77	peak
2	15720.000	32.70	18.57	51.27	74.00	-22.73	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



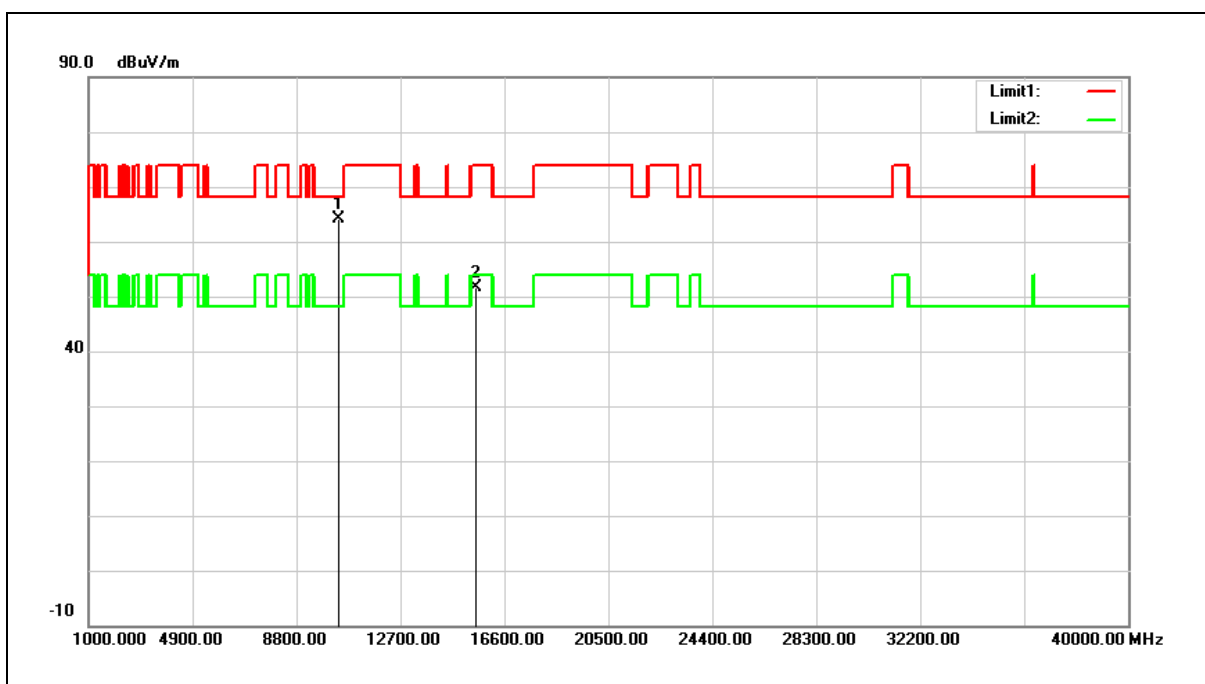
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	48.78	17.23	66.01	68.20	-2.19	peak
2	15720.000	32.66	18.57	51.23	74.00	-22.77	peak

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:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



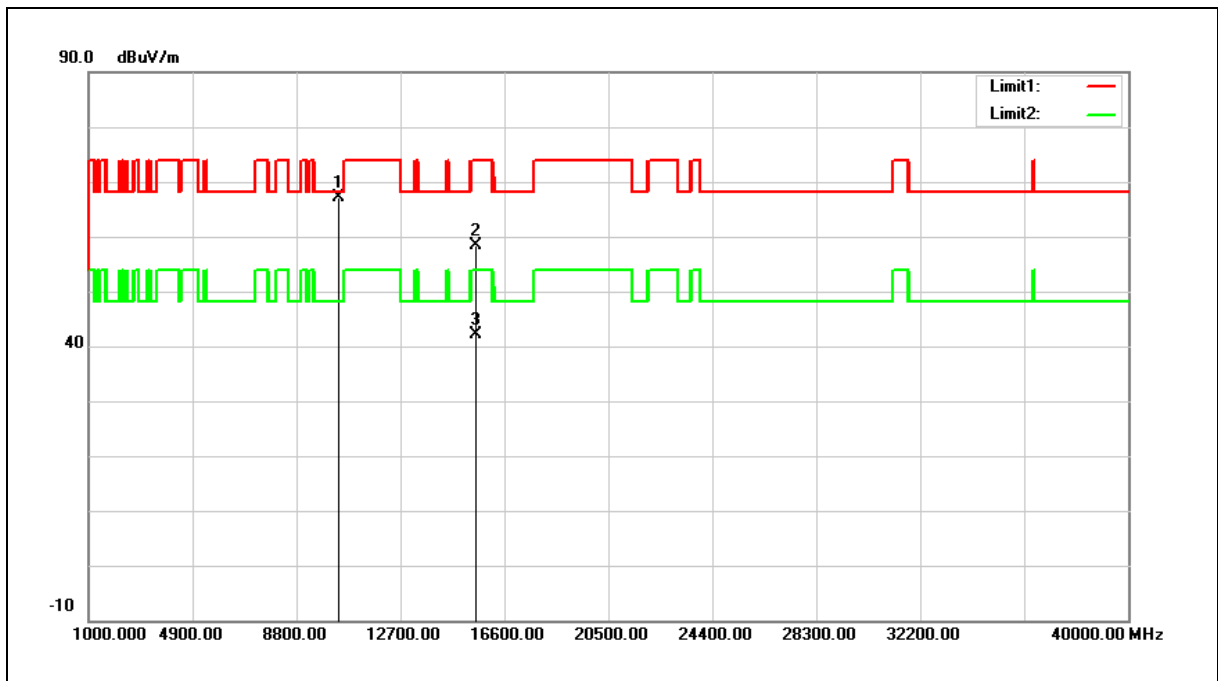
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	47.25	16.79	64.04	68.20	-4.16	peak
2	15540.000	32.71	19.03	51.74	74.00	-22.26	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5180 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



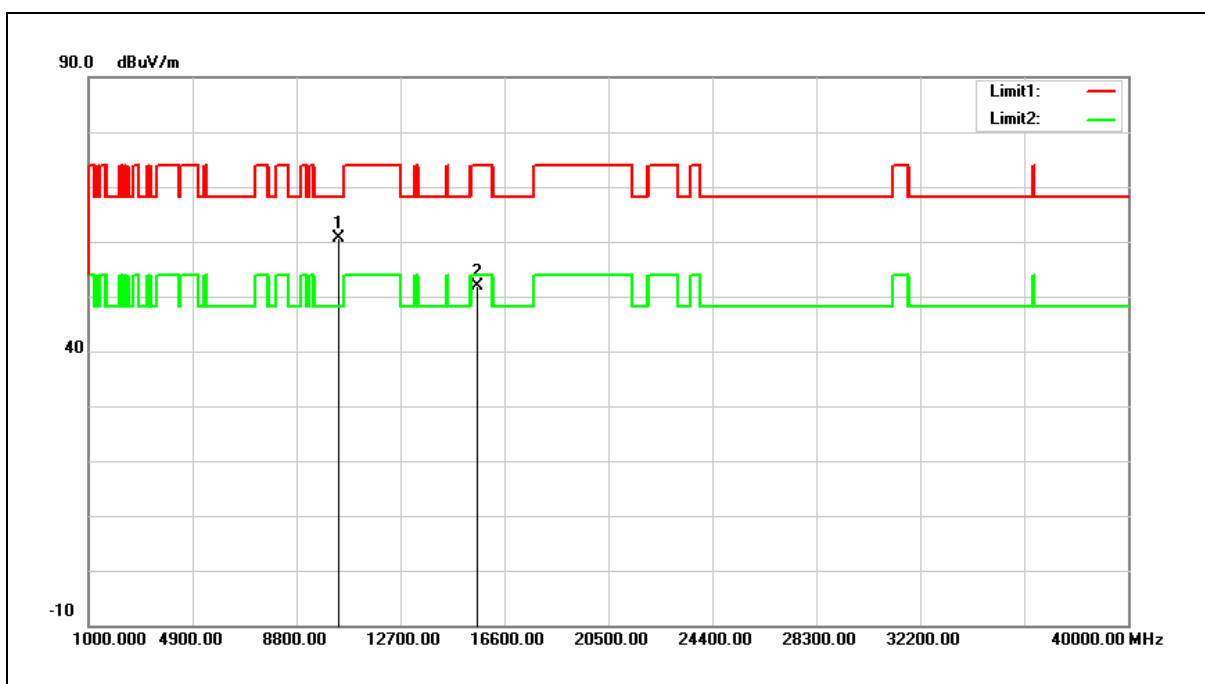
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	50.23	16.79	67.02	68.20	-1.18	peak
2	15540.000	39.39	19.03	58.42	74.00	-15.58	peak
3	15540.000	23.03	19.03	42.06	54.00	-11.94	AVG

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



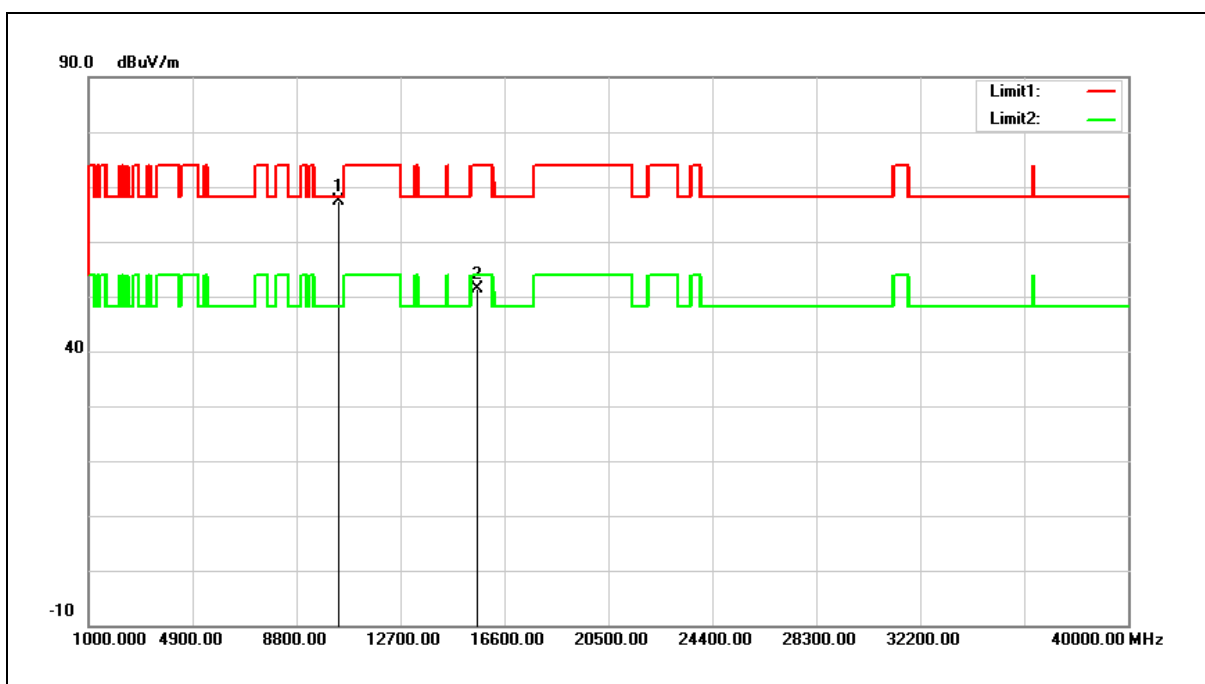
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	43.72	16.94	60.66	68.20	-7.54	peak
2	15600.000	33.08	18.87	51.95	74.00	-22.05	peak

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:	DC 48 V
Frequency:	5200 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



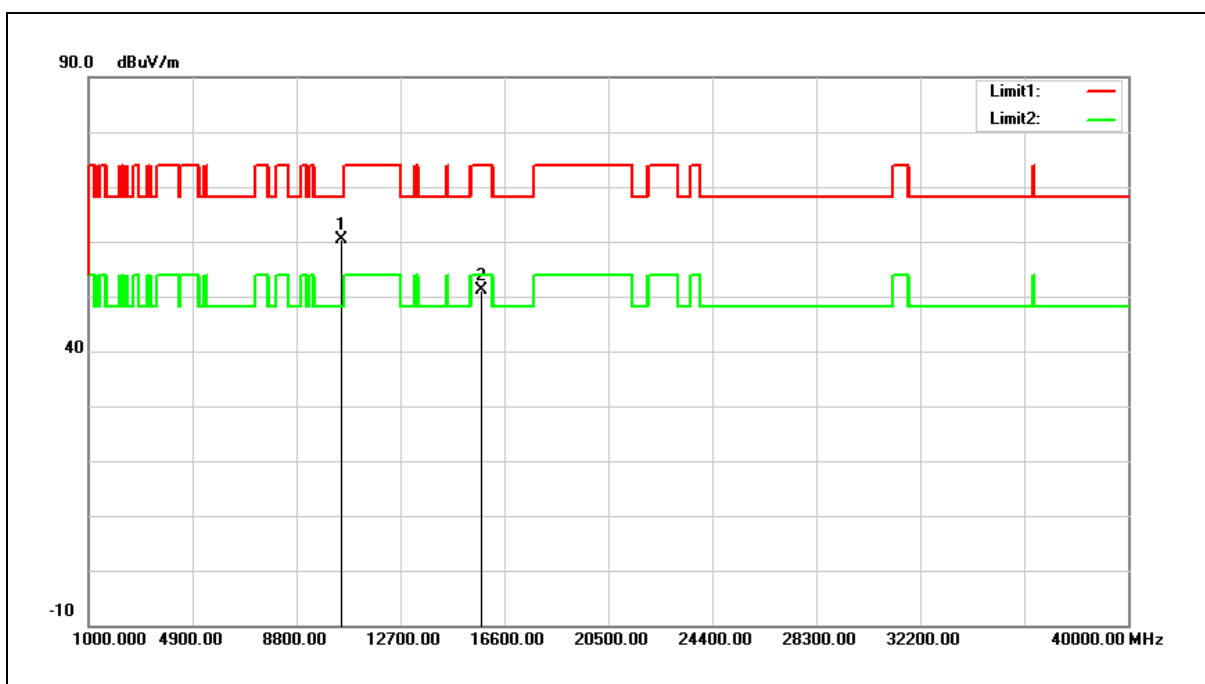
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	50.48	16.94	67.42	68.20	-0.78	peak
2	15600.000	32.47	18.87	51.34	74.00	-22.66	peak

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:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



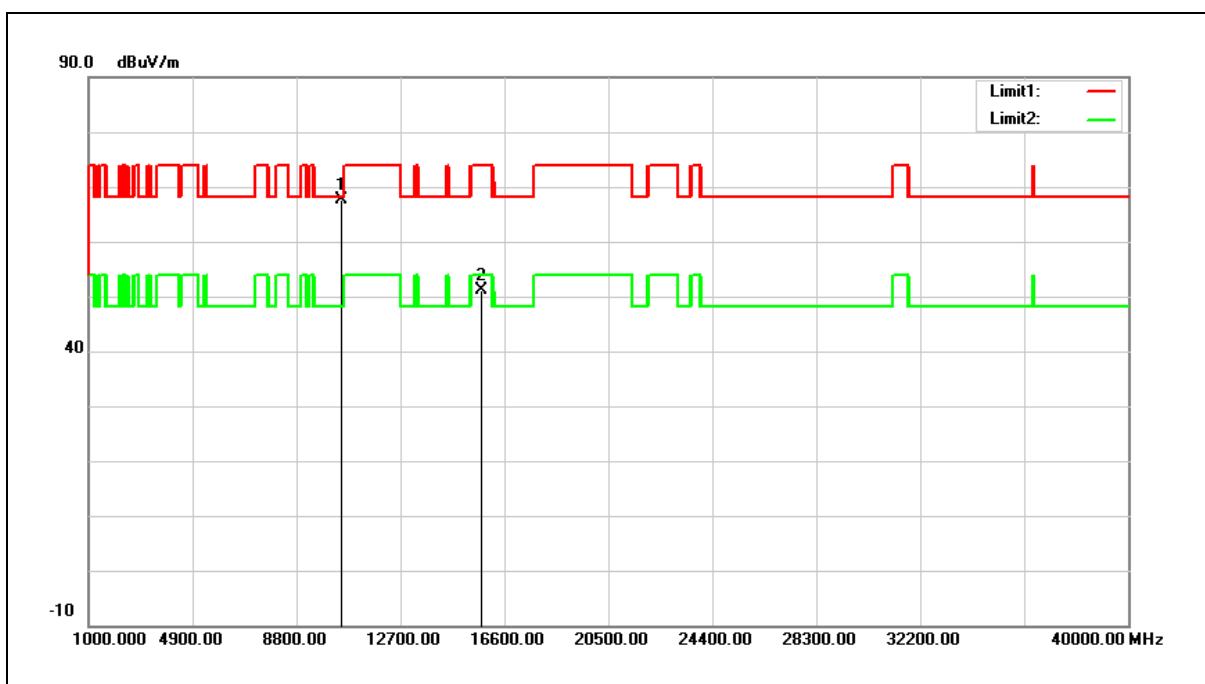
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	43.03	17.23	60.26	68.20	-7.94	peak
2	15720.000	32.57	18.57	51.14	74.00	-22.86	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5240 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



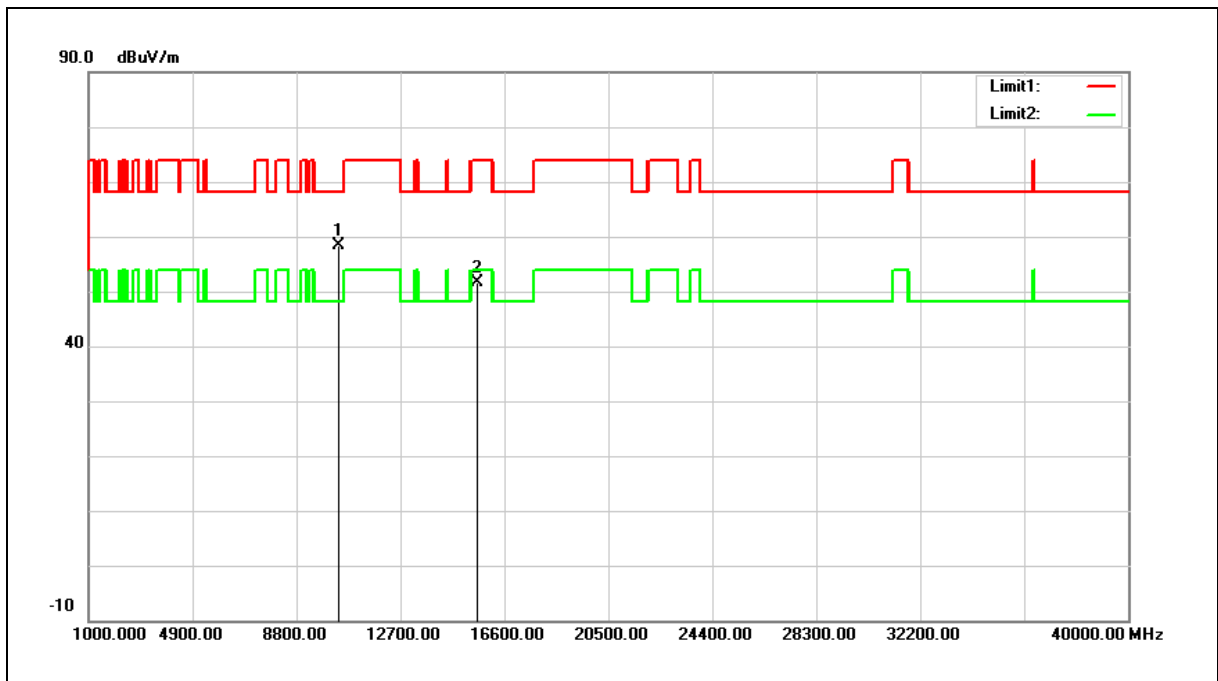
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	50.33	17.23	67.56	68.20	-0.64	peak
2	15720.000	32.54	18.57	51.11	74.00	-22.89	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



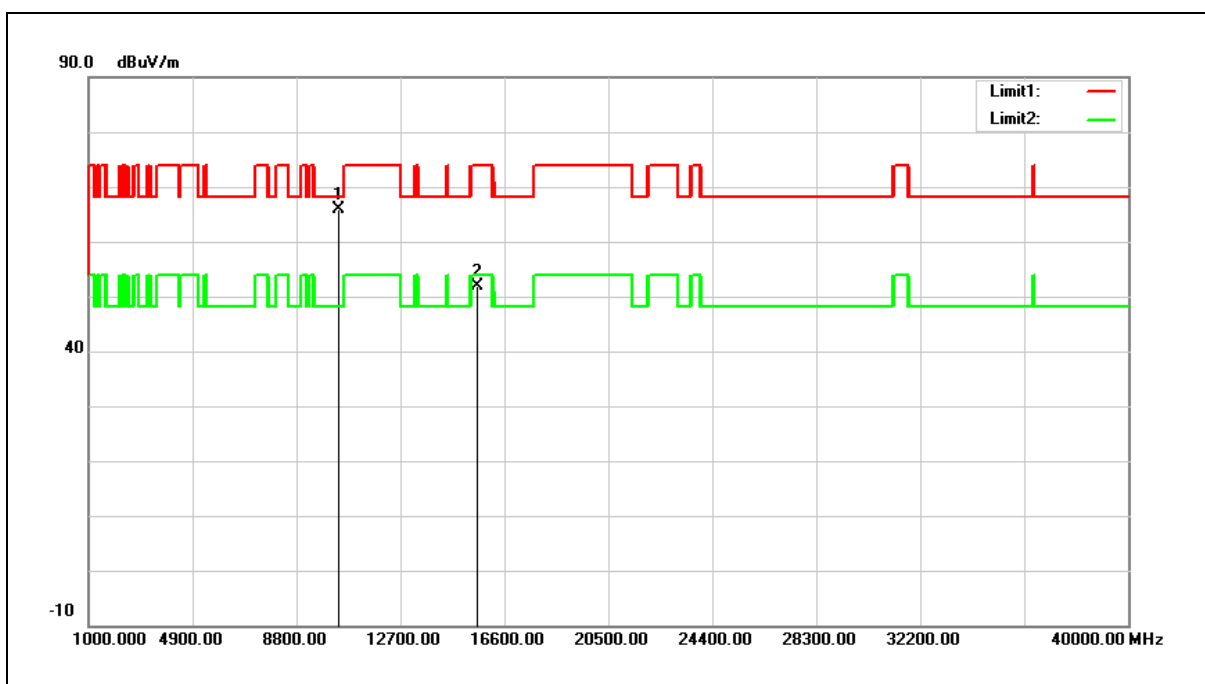
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	41.64	16.86	58.50	68.20	-9.70	peak
2	15570.000	32.76	18.95	51.71	74.00	-22.29	peak

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:	Harmonic	Power:	DC 48 V
Frequency:	5190 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



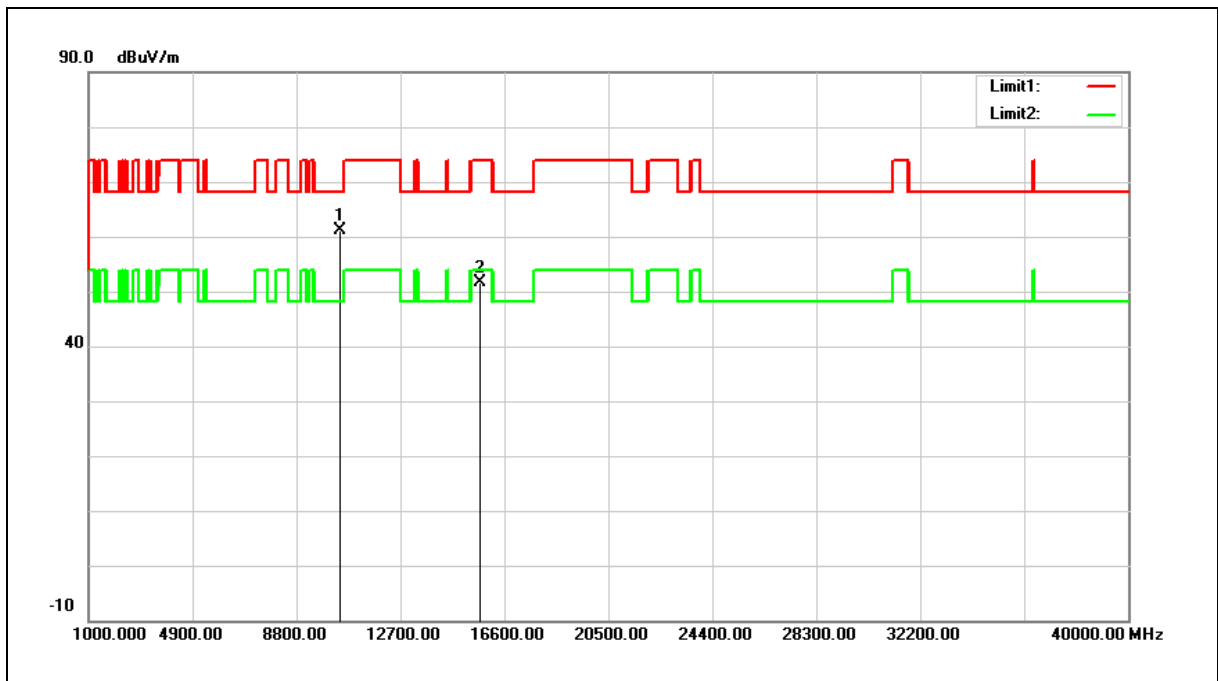
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	49.14	16.86	66.00	68.20	-2.20	peak
2	15570.000	32.82	18.95	51.77	74.00	-22.23	peak

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

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

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

Standard:	FCC Part 15.407	Test Distance:	3 m
Test item:	Harmonic	Power:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



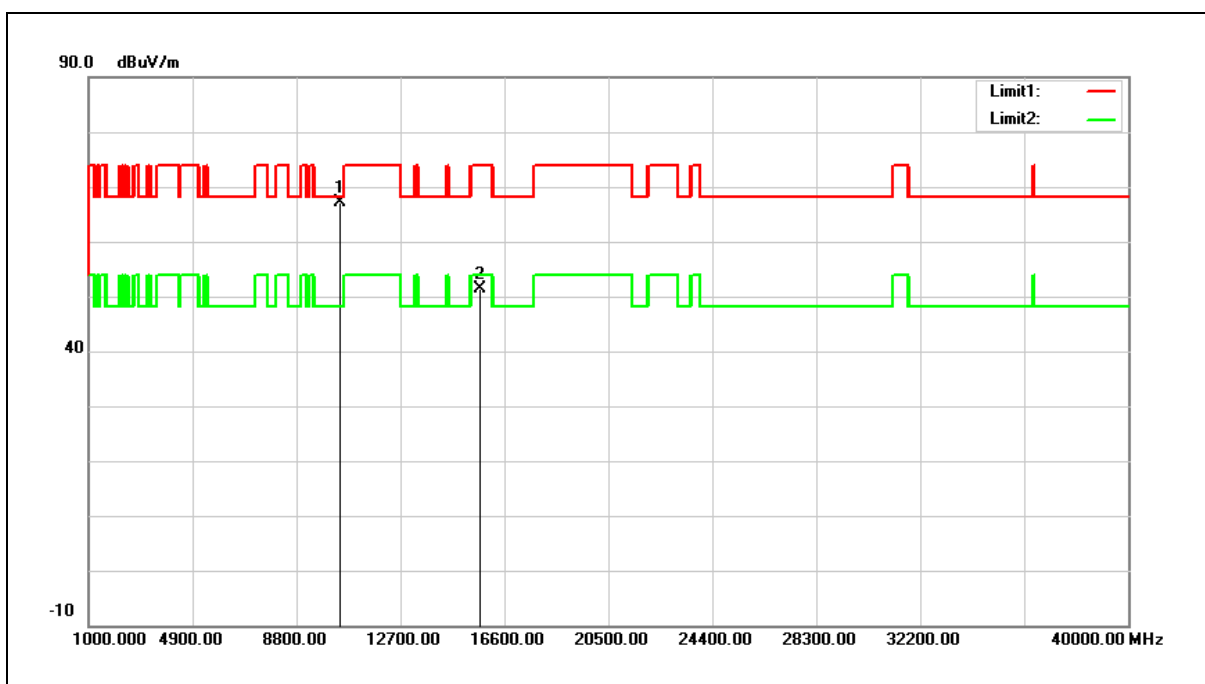
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	44.00	17.15	61.15	68.20	-7.05	peak
2	15690.000	32.97	18.64	51.61	74.00	-22.39	peak

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:	DC 48 V
Frequency:	5230 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



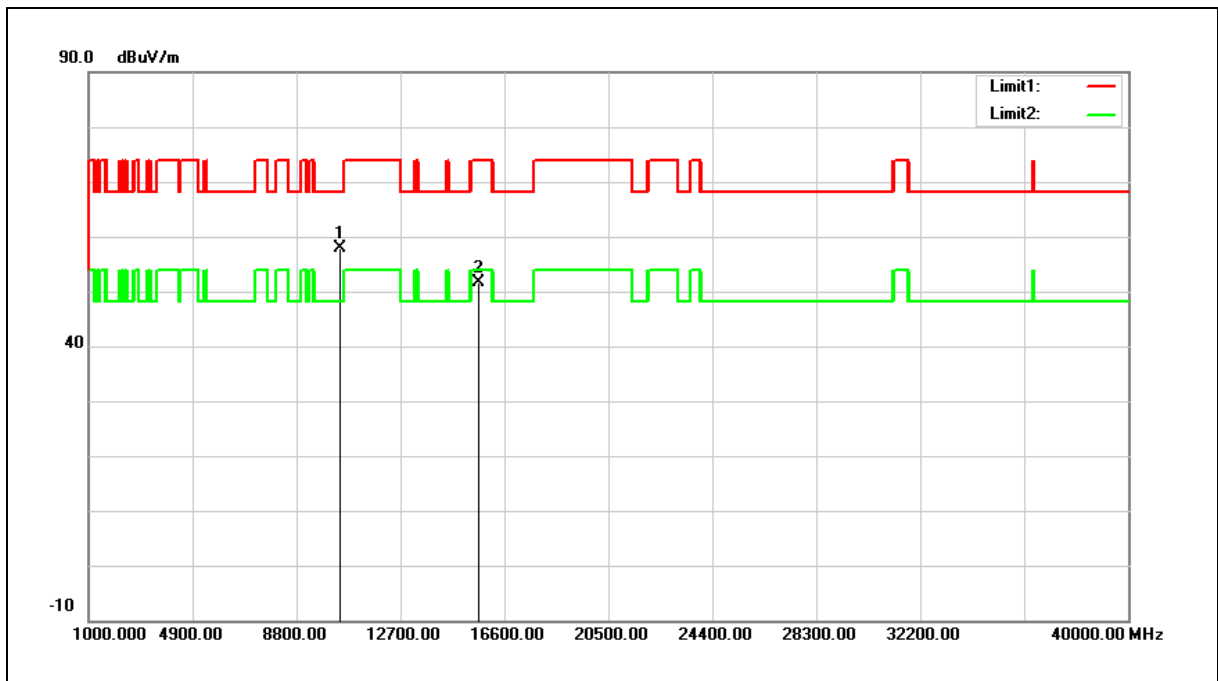
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	49.99	17.15	67.14	68.20	-1.06	peak
2	15690.000	32.70	18.64	51.34	74.00	-22.66	peak

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:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



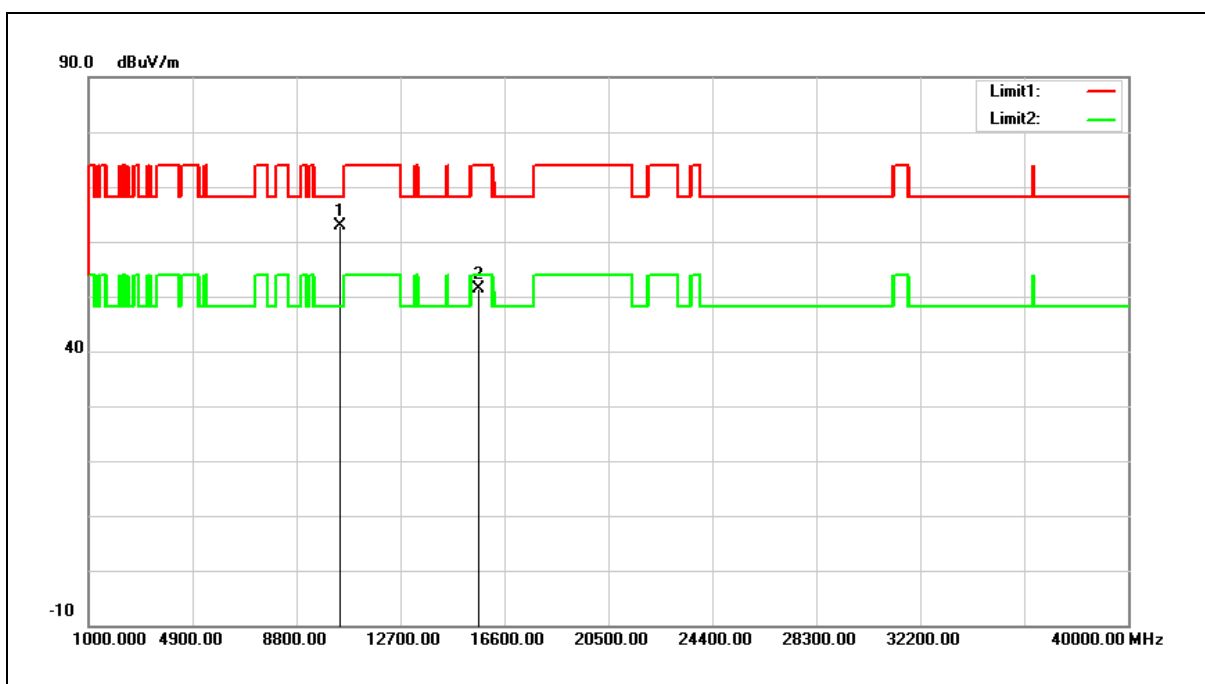
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	40.85	17.01	57.86	68.20	-10.34	peak
2	15630.000	32.78	18.79	51.57	74.00	-22.43	peak

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:	DC 48 V
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	45.75	17.01	62.76	68.20	-5.44	peak
2	15630.000	32.49	18.79	51.28	74.00	-22.72	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.