



CTC Laboratories, Inc.

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TEST REPORT

| | |
|--------------------------------|---|
| Report No. | CTC20231849E01 |
| FCC ID | WNA-SK-R6215 |
| Applicant | Shenzhen Skyworth Digital Technology Co.,LTD. |
| Address | 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China |
| Manufacturer | Shenzhen Skyworth Digital Technology Co.,LTD. |
| Address | 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China |
| Product Name | Wi-Fi 6 Mesh Router |
| Trade Mark | SKYWORTH |
| Model/Type reference | SK-R6215 |
| Listed Model(s) | SK-G6210, SK-G6215, SK-G6225, TZN20 |
| Standard | FCC CFR Title 47 Part 15 Subpart C Section 15.247 |
| Date of receipt of test sample | Sep. 19, 2023 |
| Date of testing | Sep. 19, 2023 ~ Nov. 23, 2023 |
| Date of issue | Dec. 28, 2023 |
| Result | PASS |

| | |
|--------------------------|------------|
| Compiled by: | |
| (Printed name+signature) | Lucy Lan |
| Supervised by: | |
| (Printed name+signature) | Eric Zhang |
| Approved by: | |
| (Printed name+signature) | Totti Zhao |

| | |
|-------------------------|---|
| Testing Laboratory Name | CTC Laboratories, Inc. |
| Address | 2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China |

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.247: Operation within the bands 902–928MHz, 2400–2483.5MHz, and 5725–5850MHz.

ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

1.2. Report Version

| Revised No. | Date of issue | Description |
|-------------|---------------|-------------|
| 01 | Dec. 28, 2023 | Original |
| | | |
| | | |

1.3. Test Description

| FCC Part 15 Subpart C (15.247) | | | |
|--|-------------------------|--------|---------------|
| Test Item | Standard Section | Result | Test Engineer |
| Antenna Requirement | 15.203 | Pass | Curry |
| Conducted Emission | 15.207 | Pass | Curry |
| Conducted Band Edge and Spurious Emissions | 15.247(d) | Pass | Curry |
| Radiated Band Edge and Spurious Emissions | 15.205&15.209&15.247(d) | Pass | Curry |
| 6dB Bandwidth | 15.247(a)(2) | Pass | Curry |
| Conducted Max Output Power | 15.247(b)(3) | Pass | Curry |
| Power Spectral Density | 15.247(e) | Pass | Curry |
| Transmitter Radiated Spurious | 15.209&15.247(d) | Pass | Curry |

Note:

1. The measurement uncertainty is not included in the test result.
2. N/A: means this test item is not applicable for this device according to the technology characteristic of device.



1.4. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: 2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017.



1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.

| Test Items | Measurement Uncertainty | Notes |
|---|---|-------|
| DTS Bandwidth | ±0.0196% | (1) |
| Maximum Conducted Output Power | ±0.686 dB | (1) |
| Maximum Power Spectral Density Level | ±0.743 dB | (1) |
| Band-edge Compliance | ±1.328 dB | (1) |
| Unwanted Emissions In Non-restricted Freq Bands | 9kHz-1GHz: ±0.746dB 1GHz-26GHz: ±1.328dB | (1) |
| Conducted Emissions 9kHz~30MHz | ±3.08 dB | (1) |
| Radiated Emissions 30~1000MHz | ±4.51 dB | (1) |
| Radiated Emissions 1~18GHz | ±5.84 dB | (1) |
| Radiated Emissions 18~40GHz | ±6.12 dB | (1) |

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.6. Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|--------------------|----------------|
| Temperature: | 15 °C to 35 °C |
| Relative Humidity: | 20 % to 75 % |
| Air Pressure: | 101 kPa |



2. GENERAL INFORMATION

2.1. Client Information

| | |
|---------------|---|
| Applicant: | Shenzhen Skyworth Digital Technology Co.,LTD. |
| Address: | 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China |
| Manufacturer: | Shenzhen Skyworth Digital Technology Co.,LTD. |
| Address: | 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China |
| Factory: | Shenzhen Skyworth Digital Technology Co.,LTD. Baoan Branch Factory |
| Address: | 2-5F,Integration Multi-Storied Building, Skyworth Science and Technology Industrial Park, Tangtou Industrial Zone, Shiyan Street, Baoan District, Shenzhen city, China. |

2.2. General Description of EUT

| | |
|-----------------------|--|
| Product Name: | Wi-Fi 6 Mesh Router |
| Trade Mark: | SKYWORTH |
| Model/Type reference: | SK-R6215 |
| Listed Model(s): | SK-G6210, SK-G6215, SK-G6225, TZN20 |
| Model Difference: | All these models have the same product appearance, PCB, layout, material, RF circuit, and software and hardware, and will not affect the RF characteristics. The difference lies in the product model. |
| Power Supply: | DC12V 1.5A from AC/DC Adapter |
| Adapter Model | YS-SKY120150U01P Input: 100-240V~ 50/60Hz 0.6A Output: 12Vdc/1.5A |
| Hardware Version: | / |
| Software Version: | / |
| 2.4G Wi-Fi | |
| Modulation: | 802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/ n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) |
| Operation Frequency: | 802.11b/ g/ n(HT20)/ ax(HE20): 2412MHz~2462MHz 802.11n(HT40)/ ax(HE40): 2422MHz~2452MHz |
| Channel Number: | 802.11b/ g/ n(HT20)/ ax(HE20): 11 channels 802.11n(HT40)/ ax(HE40): 7 channels |
| Channel Separation: | 5MHz |
| Antenna Type: | Internal Antenna |
| Antenna Gain: | 3.37dBi |



2.3. Accessory Equipment Information

| Equipment Information | | | |
|----------------------------------|---------------------|--------------|--------------|
| Name | Model | S/N | Manufacturer |
| Notebook | ThinkBook 14 G3 ACL | / | Lenovo |
| Cable Information | | | |
| Name | Shielded Type | Ferrite Core | Length |
| LAN Cable | Unshielded | NO | 150cm |
| Test Software Information | | | |
| Name | Version | / | / |
| QATool | Ulv2.78_DLLv6.83 | / | / |

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2.4. Operation State

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Operation Frequency List:

| Channel | Frequency (MHz) |
|---------|-----------------|
| 01 | 2412 |
| 02 | 2417 |
| 03 | 2422 |
| 04 | 2427 |
| 05 | 2432 |
| 06 | 2437 |
| 07 | 2442 |
| 08 | 2447 |
| 09 | 2452 |
| 10 | 2457 |
| 11 | 2462 |

Note: CH 01~CH 11 for 802.11b/g/n(HT20)/ax(HE20), CH 03~CH 09 for 802.11n(HT40)/ax(HE40).

Antenna Specification:

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain(dBi) |
|------|-------|------------|------------------|-----------|-----------|
| 1 | NA | NA | Internal Antenna | IPEX | 3.37 |
| 2 | NA | NA | Internal Antenna | IPEX | 3.37 |

For 2.4G, this EUT supports MIMO 2X2 with the same antenna gain, and any transmit signals are correlated with each other.

According to KDB 662911 D01, Directional Gain = $G_{Ant.} + 10\log(N)$ dBi, that is Directional Gain=3.37+10log(2)dBi=6.38dBi. So output power limit is 30-6.38+6=29.62dBm, and the power spectral density limit is 8-6.38+6=7.62dBm/3kHz.

Data Rated:

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

| Test Mode | Data Rate (worst mode) |
|------------------------|------------------------|
| 802.11b | 1Mbps |
| 802.11g | 6Mbps |
| 802.11n(HT20)/ (HT40) | HT-MCS8 |
| 802.11ax(HE20)/ (HE40) | HE-MCS0 |

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Test Mode:

| |
|--|
| For RF test items: |
| The engineering test program was provided and enabled to make EUT continuous transmit. |
| For AC power line conducted emissions: |
| The EUT was set to connect with the WLAN AP under large package sizes transmission. |
| For Radiated spurious emissions test item: |
| The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report. |

RU Configuration:

| Operating Mode | Resource Unit | 26 Tone (2M) |
|------------------------|------------------------|----------------|
| 802.11ax(HE20) | Specific Resource Unit | 0 |
| | | : |
| | | 4 |
| | | : |
| | | 8 |
| | Specific Resource Unit | 52 Tone (4M) |
| | | 37 |
| | | 38 |
| | | 39 |
| | | 40 |
| 802.11ax(HE40) | Specific Resource Unit | 106 Tone (8M) |
| | | 53 |
| | | 54 |
| | | Resource Unit |
| | | 242 Tone (20M) |
| | Specific Resource Unit | 61 |
| Operating Mode | Resource Unit | 26 Tone (2M) |
| 0 | | |
| : | | |
| 8 | | |
| Specific Resource Unit | : | |
| | 17 | |
| | Resource Unit | |
| | 52 Tone (4M) | |
| | 37 | |
| Specific Resource Unit | 38 | |
| | 39 | |
| | 40 | |
| | 41 | |
| | 42 | |
| | 43 | |
| | 44 | |
| | Resource Unit | |
| Specific Resource Unit | 106 Tone (8M) | |
| | 53 | |

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| | |
|------------------------|----------------|
| | 54 |
| | 55 |
| | 56 |
| Resource Unit | 242 Tone (20M) |
| Specific Resource Unit | 61 |
| | 62 |
| Resource Unit | 484 Tone (40M) |
| Specific Resource Unit | 65 |

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2.5. Measurement Instruments List

| RF Test System | | | | | |
|----------------|---------------------------------------|--------------|-----------|------------|------------------|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Calibrated Until |
| 1 | MXA Signal Analyzer | Keysight | N9020A | MY52091402 | Aug. 22, 2024 |
| 2 | High and low temperature test chamber | ESPEC | MT3035 | / | Mar. 24, 2024 |
| 3 | USB Wideband Power Sensor | Keysight | U2021XA | MY55130004 | Mar. 14, 2024 |
| 4 | USB Wideband Power Sensor | Keysight | U2021XA | MY55130006 | Mar. 14, 2024 |
| 5 | Test Software | WCS | WCS-WCN | 2023.08.04 | / |

| Radiated Emission (3m chamber 3) | | | | | |
|----------------------------------|------------------------------|--------------|------------|------------|------------------|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Calibrated Until |
| 1 | Trilog-Broadband Antenna | Schwarzbeck | VULB 9163 | 01026 | Dec. 18, 2024 |
| 2 | Horn Antenna | Schwarzbeck | BBHA 9120D | 9120D-647 | Dec. 01, 2024 |
| 3 | Test Receiver | Keysight | N9038A | MY56400071 | Dec. 16, 2023 |
| 4 | Broadband Amplifier | SCHWARZBECK | BBV9743B | 259 | Dec. 16, 2023 |
| 5 | Mirowave Broadband Amplifier | SCHWARZBECK | BBV9718C | 111 | Dec. 16, 2023 |
| 6 | 3m chamber 3 | YIHENG | EE106 | / | Aug. 28, 2026 |
| 7 | Test Software | FARA | EZ-EMC | FA-03A2 | / |

| Conducted Emission | | | | | |
|--------------------|-------------------|--------------|-----------|----------------|------------------|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Calibrated Until |
| 1 | LISN | R&S | ENV216 | 101112 | Dec. 16, 2023 |
| 2 | LISN | R&S | ENV216 | 101113 | Dec. 16, 2023 |
| 3 | EMI Test Receiver | R&S | ESCS30 | 100353 | Dec. 16, 2023 |
| 4 | ISN CAT6 | Schwarzbeck | NTFM 8158 | CAT6-8158-0046 | Dec. 16, 2023 |
| 5 | ISN CAT5 | Schwarzbeck | NTFM 8158 | CAT5-8158-0046 | Dec. 16, 2023 |
| 6 | Test Software | R&S | EMC32 | 6.10.10 | / |

- Note:
1. The Cal. Interval was one year.
 2. The Cal. Interval was three years of the antenna.
 3. The cable loss has been calculated in test result which connection between each test instruments.

3. TEST ITEM AND RESULTS

3.1. Conducted Emission

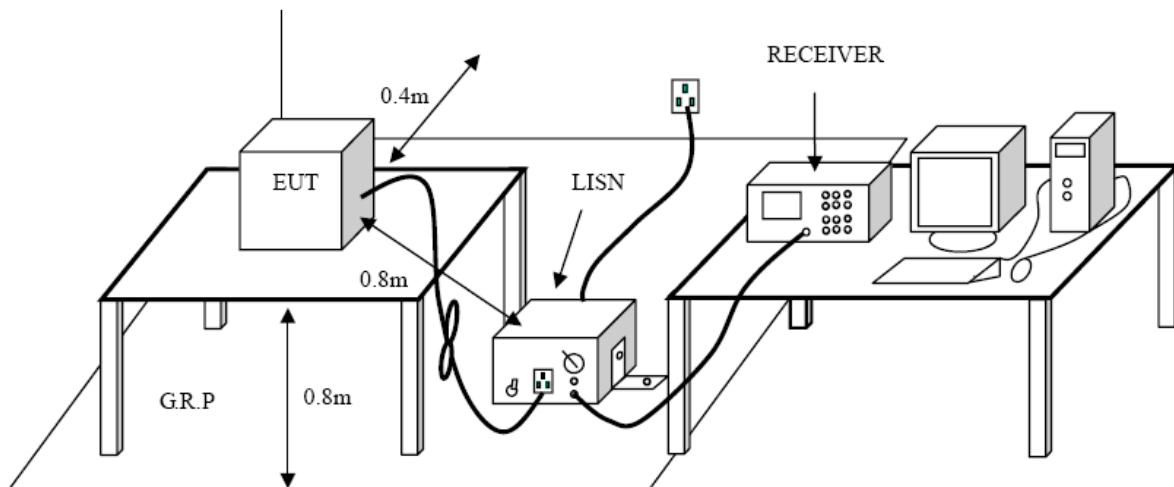
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

| Frequency (MHz) | Conducted Limit (dB μ V) | |
|-----------------|------------------------------|------------|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 to 56 * | 56 to 46 * |
| 0.5 - 5 | 56 | 46 |
| 5 - 30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

Test Configuration

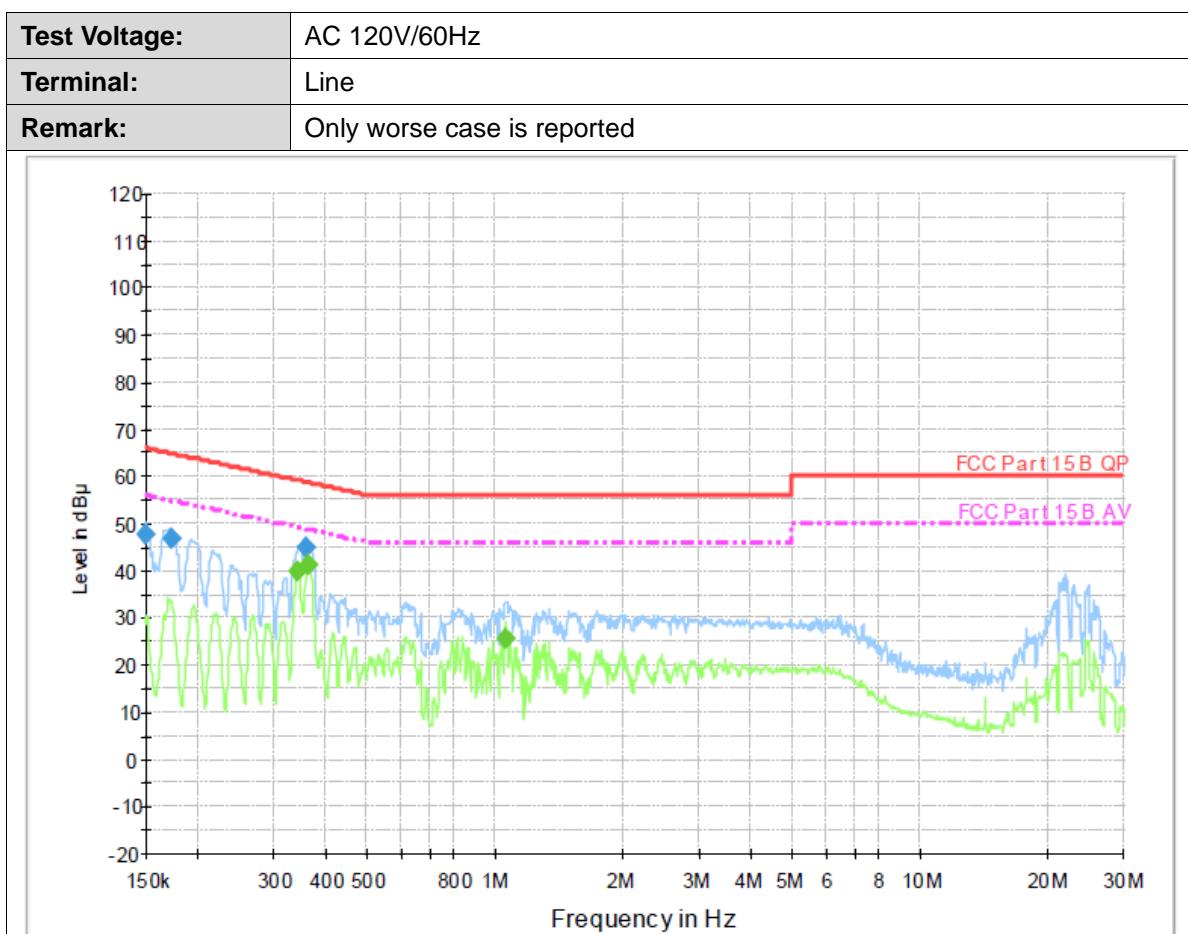


Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm / 50 μ H coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

Test Mode

Please refer to the clause 2.4.

**Test Result****Final Measurement Detector 1**

| Frequency (MHz) | QuasiPeak (dB μ V) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dB μ V) | Comment |
|-----------------|------------------------|-----------------|-----------------|--------|------|------------|-------------|--------------------|---------|
| 0.150000 | 47.6 | 1000.00 | 9.000 | On | L1 | 9.4 | 18.4 | 66.0 | |
| 0.171810 | 46.8 | 1000.00 | 9.000 | On | L1 | 9.4 | 18.1 | 64.9 | |
| 0.356700 | 45.1 | 1000.00 | 9.000 | On | L1 | 9.5 | 13.7 | 58.8 | |

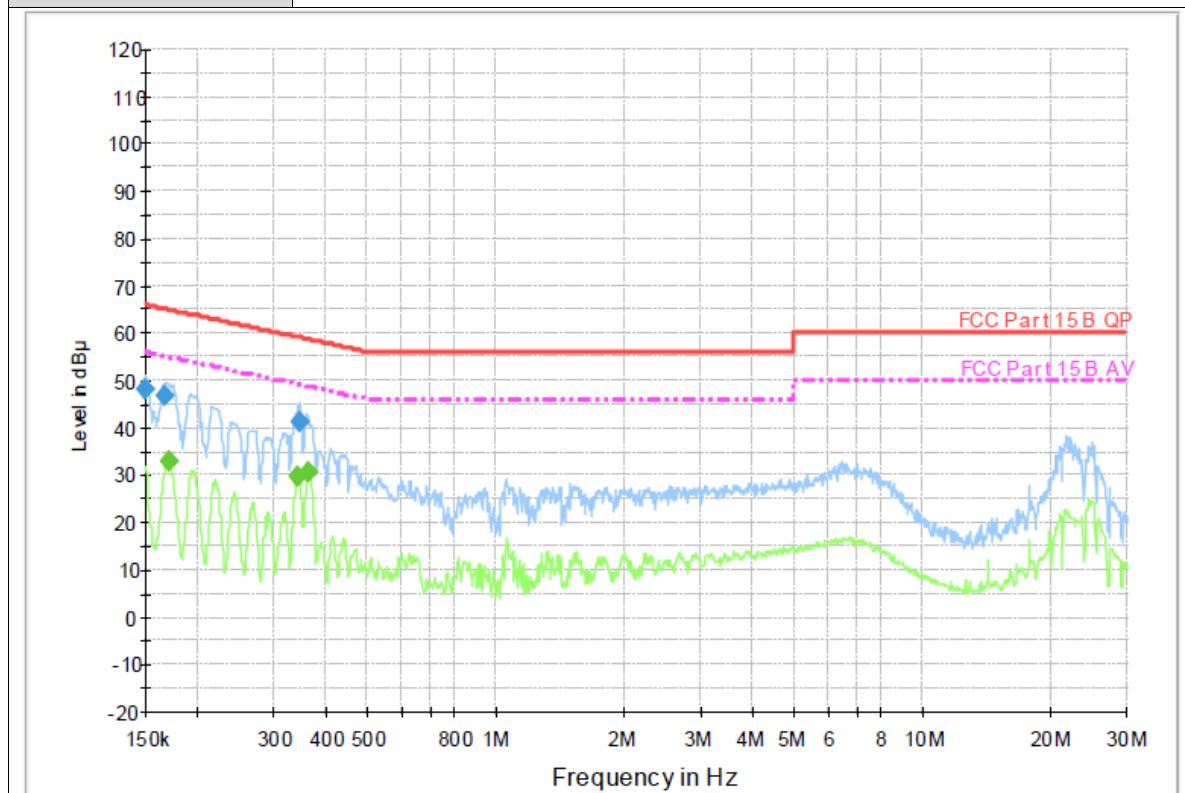
Final Measurement Detector 2

| Frequency (MHz) | Average (dB μ V) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dB μ V) | Comment |
|-----------------|----------------------|-----------------|-----------------|--------|------|------------|-------------|--------------------|---------|
| 0.341380 | 39.9 | 1000.00 | 9.000 | On | L1 | 9.5 | 9.3 | 49.2 | |
| 0.363890 | 41.5 | 1000.00 | 9.000 | On | L1 | 9.5 | 7.1 | 48.6 | |
| 1.052310 | 25.8 | 1000.00 | 9.000 | On | L1 | 9.5 | 20.2 | 46.0 | |

Emission Level = Read Level + Correct Factor



| | |
|----------------------|-----------------------------|
| Test Voltage: | AC 120V/60Hz |
| Terminal: | Neutral |
| Remark: | Only worse case is reported |



Final Measurement Detector 1

| Frequency (MHz) | QuasiPeak (dB μ V) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dB μ V) | Comment |
|-----------------|------------------------|-----------------|-----------------|--------|------|------------|-------------|--------------------|---------|
| 0.150000 | 48.2 | 1000.00 | 9.000 | On | N | 9.3 | 17.8 | 66.0 | |
| 0.167070 | 46.9 | 1000.00 | 9.000 | On | N | 9.3 | 18.2 | 65.1 | |
| 0.345490 | 41.4 | 1000.00 | 9.000 | On | N | 9.4 | 17.7 | 59.1 | |

Final Measurement Detector 2

| Frequency (MHz) | Average (dB μ V) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dB μ V) | Comment |
|-----------------|----------------------|-----------------|-----------------|--------|------|------------|-------------|--------------------|---------|
| 0.170440 | 33.1 | 1000.00 | 9.000 | On | N | 9.3 | 21.8 | 54.9 | |
| 0.341380 | 29.8 | 1000.00 | 9.000 | On | N | 9.4 | 19.4 | 49.2 | |
| 0.363890 | 30.5 | 1000.00 | 9.000 | On | N | 9.4 | 18.1 | 48.6 | |

Emission Level = Read Level + Correct Factor

3.2. Radiated Emission

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.209

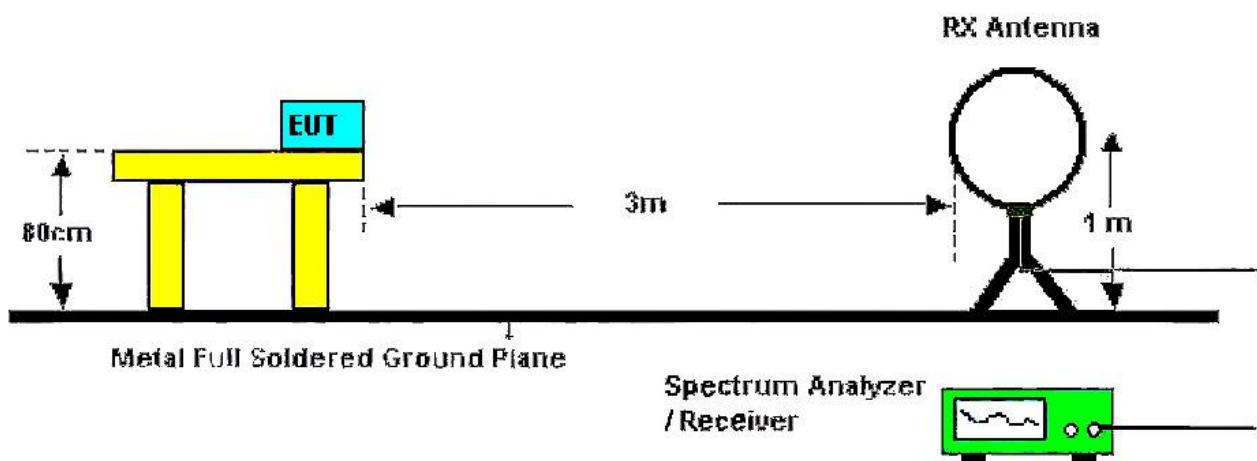
| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|--------------------|--------------------------------------|----------------------------------|
| 0.009~0.490 | 2400/F (kHz) | 300 |
| 0.490~1.705 | 24000/F (kHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| 960~1000 | 500 | 3 |

| Frequency Range (MHz) | dB μ V/m (at 3 meters) | |
|-----------------------|----------------------------|---------|
| | Peak | Average |
| Above 1000 | 74 | 54 |

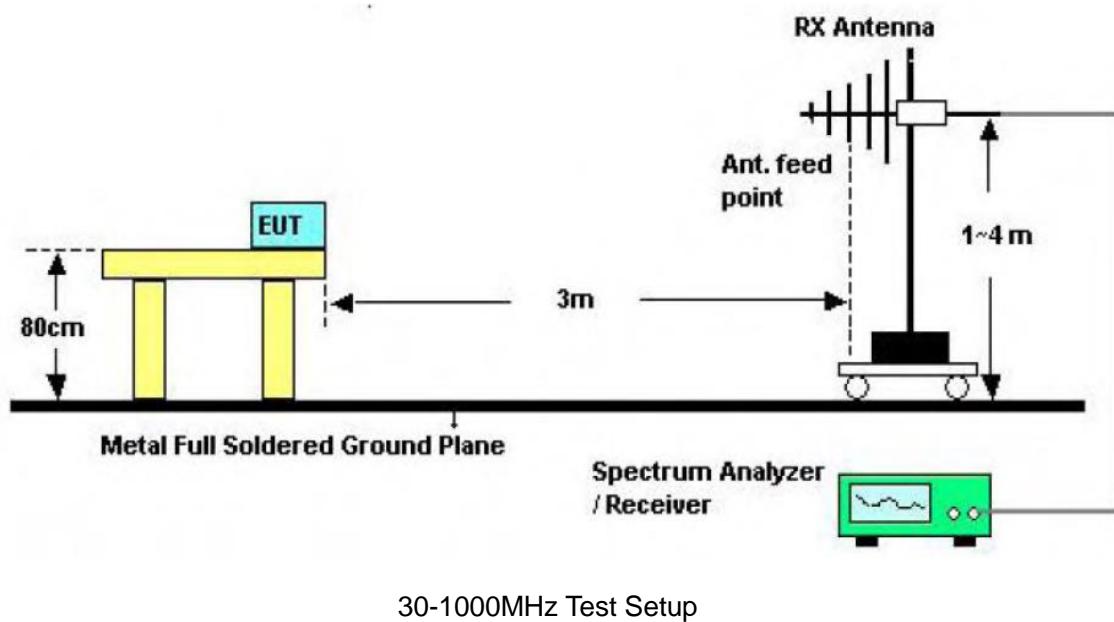
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dB μ V/m)=20log Emission Level (μ V/m).

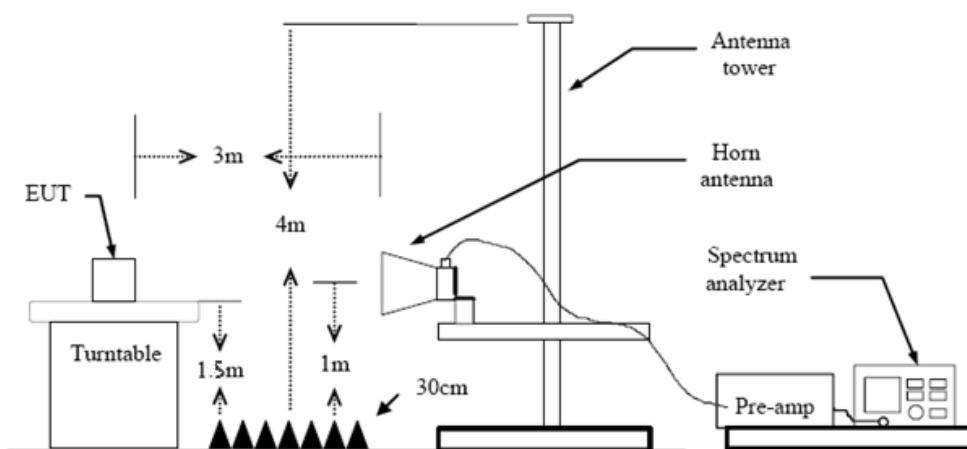
Test Configuration



Below 30MHz Test Setup



30-1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) 9k – 150kHz:
RBW=300 Hz, VBW=1 kHz, Sweep=auto, Detector function=peak, Trace=max hold
 - (3) 0.15M – 30MHz:
RBW=10 kHz, VBW=30 kHz, Sweep=auto, Detector function=peak, Trace=max hold
 - (4) 30M - 1 GHz:
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the



peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(5) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 3.8 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Test Result

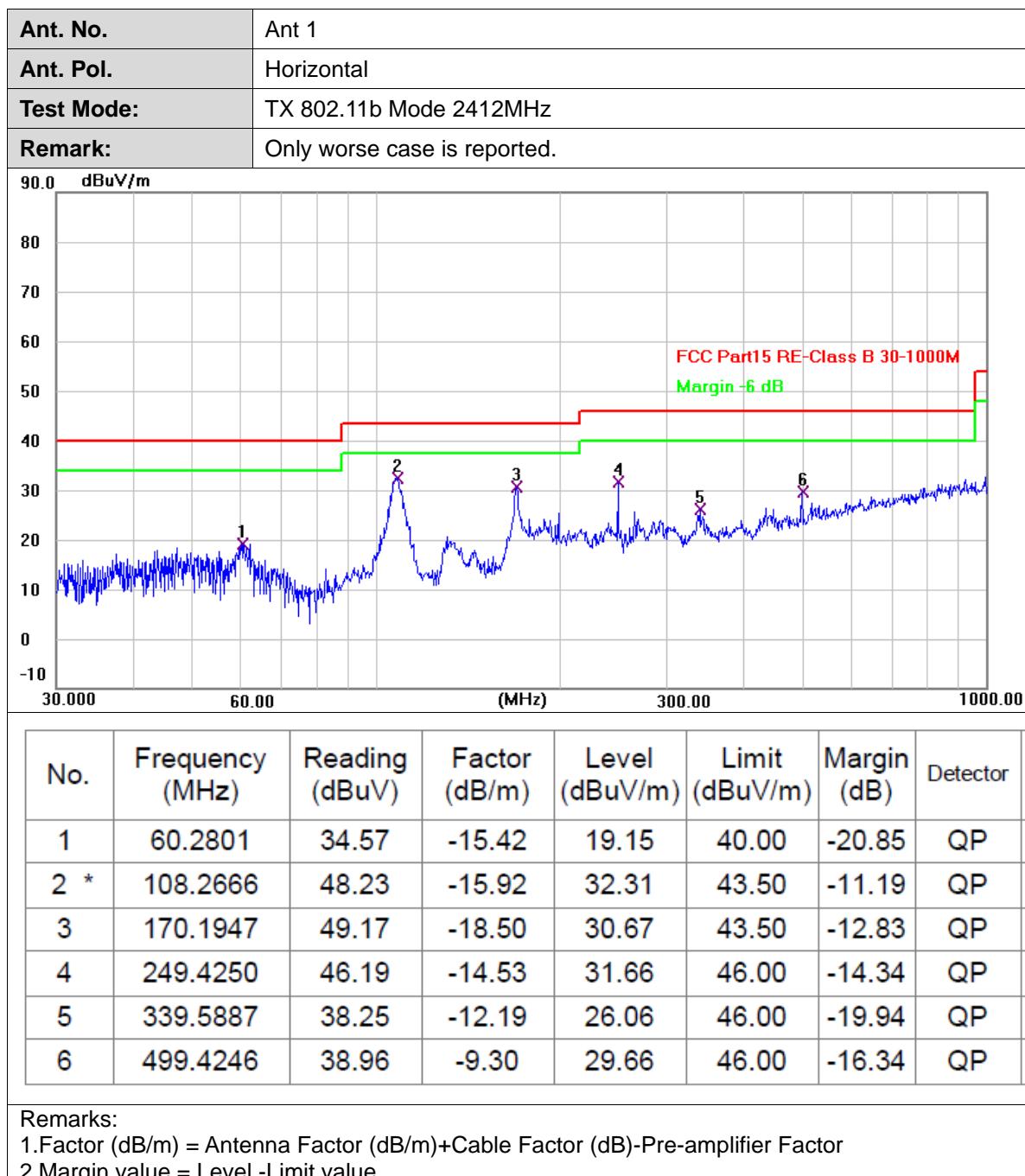
9 kHz~30 MHz

From 9 kHz to 30 MHz: The conclusion is PASS.

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

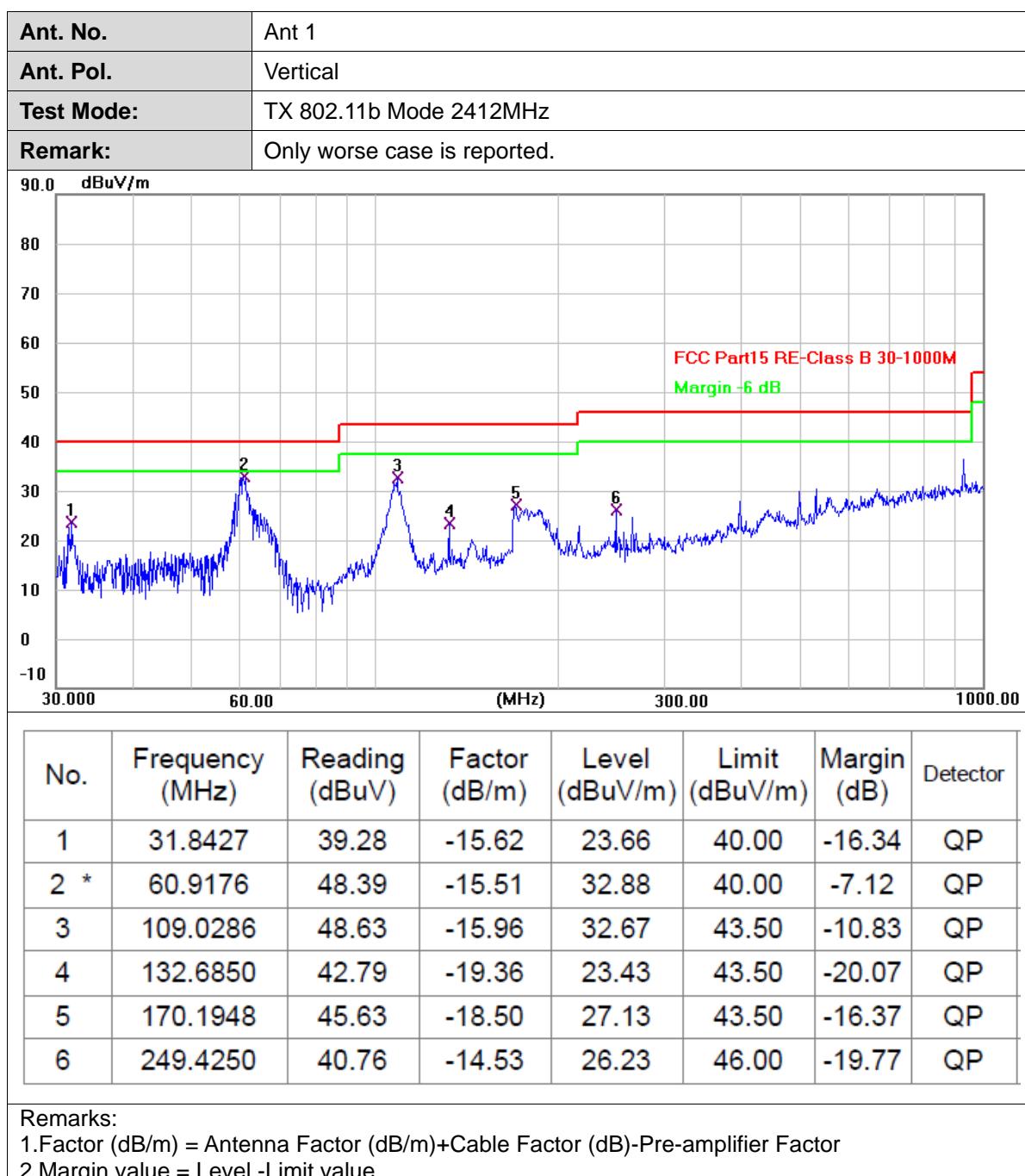


30MHz-1GHz



CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cnFor anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>





Above 1GHz

| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11b Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 4823.945 | 47.19 | 2.11 | 49.30 | 54.00 | -4.70 | AVG |
| 2 | 4823.992 | 50.06 | 2.11 | 52.17 | 74.00 | -21.83 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11b Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 4823.961 | 49.93 | 2.11 | 52.04 | 54.00 | -1.96 | AVG |
| 2 | 4824.039 | 52.72 | 2.11 | 54.83 | 74.00 | -19.17 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11b Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4873.945 | 49.37 | 2.18 | 51.55 | 74.00 | -22.45 | peak |
| 2 * | 4873.973 | 46.44 | 2.18 | 48.62 | 54.00 | -5.38 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11b Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4873.951 | 51.87 | 2.18 | 54.05 | 74.00 | -19.95 | peak |
| 2 * | 4874.013 | 49.66 | 2.18 | 51.84 | 54.00 | -2.16 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11b Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 * | 4923.985 | 46.93 | 2.26 | 49.19 | 54.00 | -4.81 | AVG |
| 2 | 4924.059 | 49.77 | 2.26 | 52.03 | 74.00 | -21.97 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11b Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 * | 4924.000 | 48.97 | 2.26 | 51.23 | 54.00 | -2.77 | AVG |
| 2 | 4924.033 | 51.60 | 2.26 | 53.86 | 74.00 | -20.14 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11g Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 4823.521 | 48.30 | 2.11 | 50.41 | 54.00 | -3.59 | AVG |
| 2 | 4824.044 | 60.82 | 2.11 | 62.93 | 74.00 | -11.07 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11g Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 | 4823.444 | 61.10 | 2.11 | 63.21 | 74.00 | -10.79 | peak |
| 2 * | 4823.895 | 49.71 | 2.11 | 51.82 | 54.00 | -2.18 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11g Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4874.205 | 60.28 | 2.18 | 62.46 | 74.00 | -11.54 | peak |
| 2 * | 4874.957 | 47.59 | 2.18 | 49.77 | 54.00 | -4.23 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11g Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4873.774 | 61.45 | 2.18 | 63.63 | 74.00 | -10.37 | peak |
| 2 * | 4873.960 | 49.28 | 2.18 | 51.46 | 54.00 | -2.54 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11g Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4923.113 | 60.19 | 2.25 | 62.44 | 74.00 | -11.56 | peak |
| 2 * | 4924.892 | 47.53 | 2.26 | 49.79 | 54.00 | -4.21 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11g Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 * | 4924.039 | 48.84 | 2.26 | 51.10 | 54.00 | -2.90 | AVG |
| 2 | 4924.915 | 60.99 | 2.26 | 63.25 | 74.00 | -10.75 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 | 4823.553 | 62.86 | 2.11 | 64.97 | 74.00 | -9.03 | peak |
| 2 * | 4823.858 | 49.42 | 2.11 | 51.53 | 54.00 | -2.47 | Avg |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2412MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 | 4823.210 | 61.73 | 2.10 | 63.83 | 74.00 | -10.17 | peak |
| 2 * | 4824.319 | 49.54 | 2.11 | 51.65 | 54.00 | -2.35 | Avg |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | | | | | | | |
| 1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor | | | | | | | |
| 2. Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT20) Mode 2462MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | | | | | | | |
| 1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor | | | | | | | |
| 2. Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2422MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2422MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2437MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2452MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | | | | | | | |
| 1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor | | | | | | | |
| 2. Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11n(HT40) Mode 2452MHz | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | | | | | | | |
| 1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor | | | | | | | |
| 2. Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2412MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 | 4823.240 | 53.96 | 2.10 | 56.06 | 74.00 | -17.94 | peak |
| 2 * | 4823.489 | 41.06 | 2.11 | 43.17 | 54.00 | -10.83 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2412MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 | 4823.103 | 63.70 | 2.10 | 65.80 | 74.00 | -8.20 | peak |
| 2 * | 4824.009 | 50.28 | 2.11 | 52.39 | 54.00 | -1.61 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2. Margin value = Level -Limit value



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2437MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 * | 4873.553 | 36.98 | 2.18 | 39.16 | 54.00 | -14.84 | AVG |
| 2 | 4874.046 | 50.82 | 2.18 | 53.00 | 74.00 | -21.00 | peak |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2437MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4874.433 | 61.58 | 2.18 | 63.76 | 74.00 | -10.24 | peak |
| 2 * | 4874.881 | 48.80 | 2.18 | 50.98 | 54.00 | -3.02 | AVG |

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2. Margin value = Level -Limit value



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2462MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE20) Mode 2462MHz 242/61 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|------------|---|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2422MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | |

| | | | | | | | |
|------------|---|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2422MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: | 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | |



| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2437MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2437MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value | | | | | | | |



| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Horizontal | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2452MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4903.193 | 48.56 | 2.21 | 50.77 | 74.00 | -23.23 | peak |
| 2 * | 4903.205 | 33.90 | 2.21 | 36.11 | 54.00 | -17.89 | AVG |

| | | | | | | | |
|------------|--|----------------|---------------|----------------|----------------|-------------|----------|
| Ant. No. | Ant 1 + Ant 2 | | | | | | |
| Ant. Pol. | Vertical | | | | | | |
| Test Mode: | TX 802.11ax(HE40) Mode 2452MHz 484/65 | | | | | | |
| Remark: | No report for the emission which more than 20 dB below the prescribed limit. | | | | | | |
| | | | | | | | |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 4903.333 | 58.46 | 2.21 | 60.67 | 74.00 | -13.33 | peak |
| 2 * | 4903.857 | 43.43 | 2.22 | 45.65 | 54.00 | -8.35 | AVG |

| |
|--|
| Remarks: |
| 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor |
| 2.Margin value = Level -Limit value |

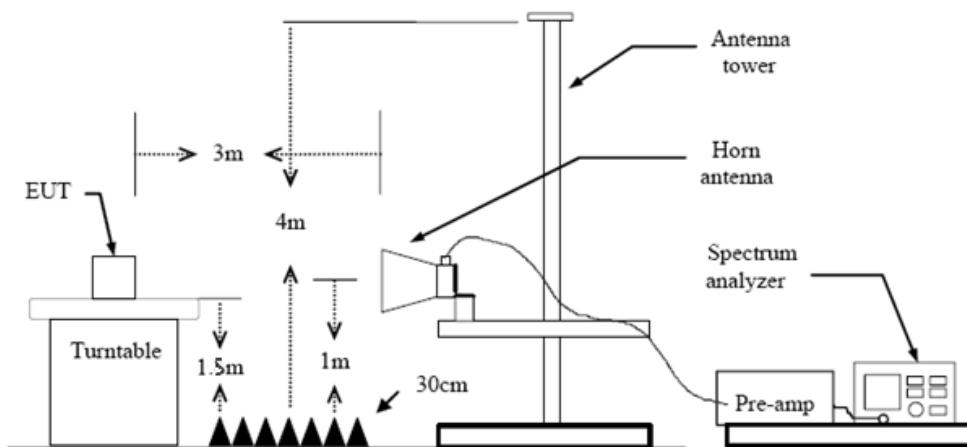
3.3. Band Edge Emissions (Radiated)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)

| Restricted Frequency Band (MHz) | (dB μ V/m) (at 3m) | |
|------------------------------------|------------------------|---------|
| | Peak | Average |
| 2310 ~ 2390 | 74 | 54 |
| 2483.5 ~ 2500 | 74 | 54 |

Test Configuration



Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
5. The receiver set as follow:
RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

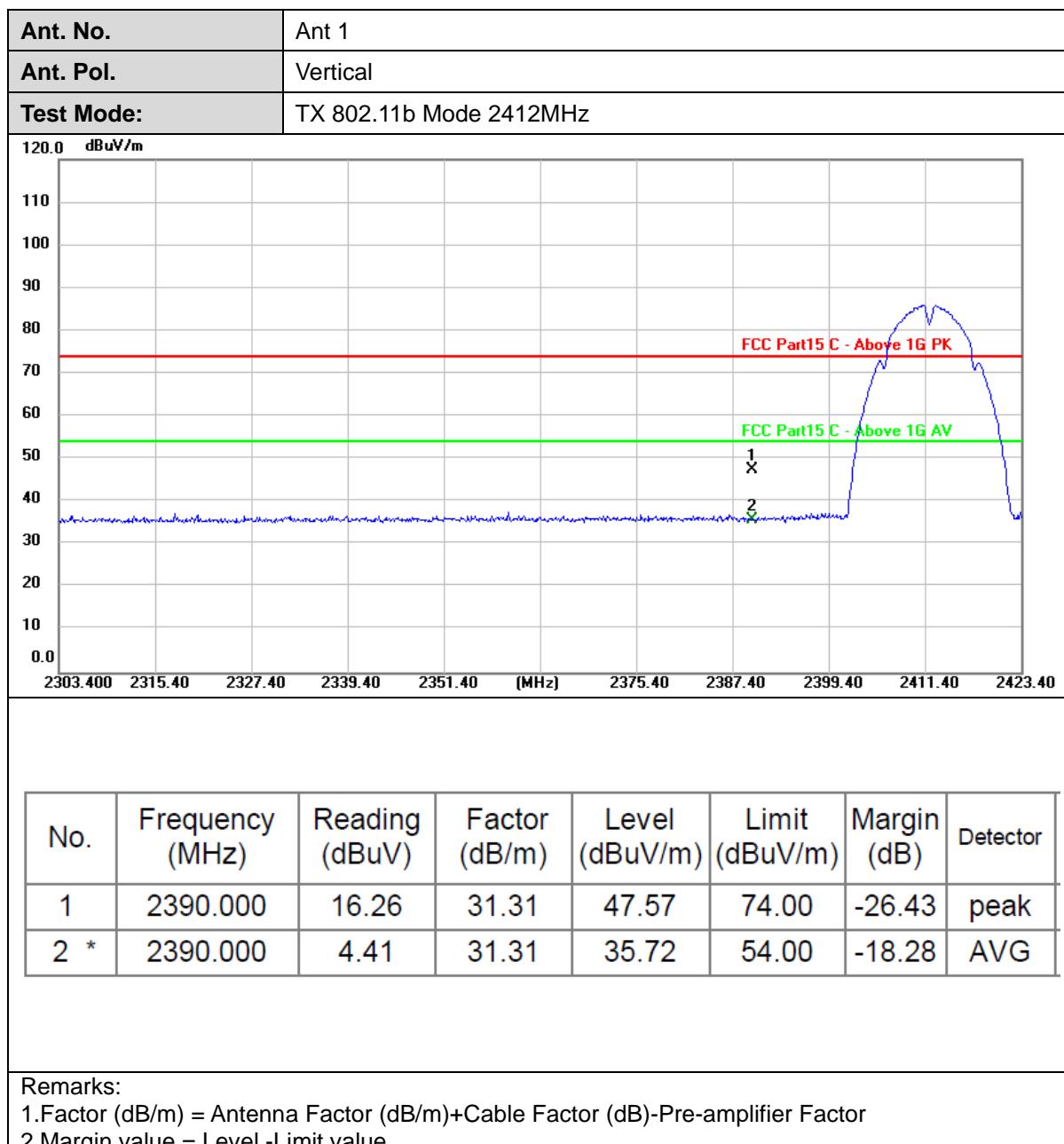
Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 3.8 Duty Cycle.

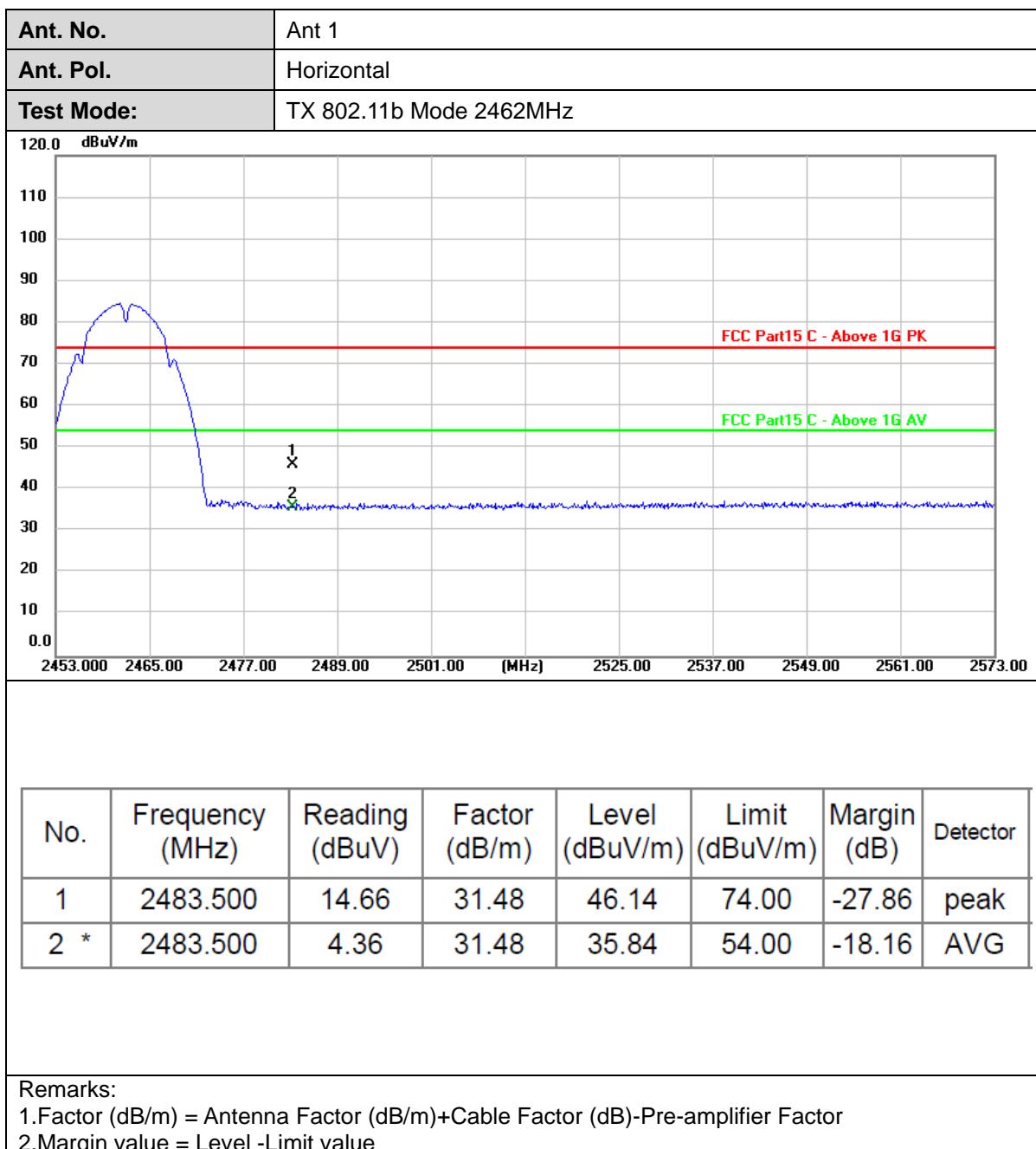
Test Mode

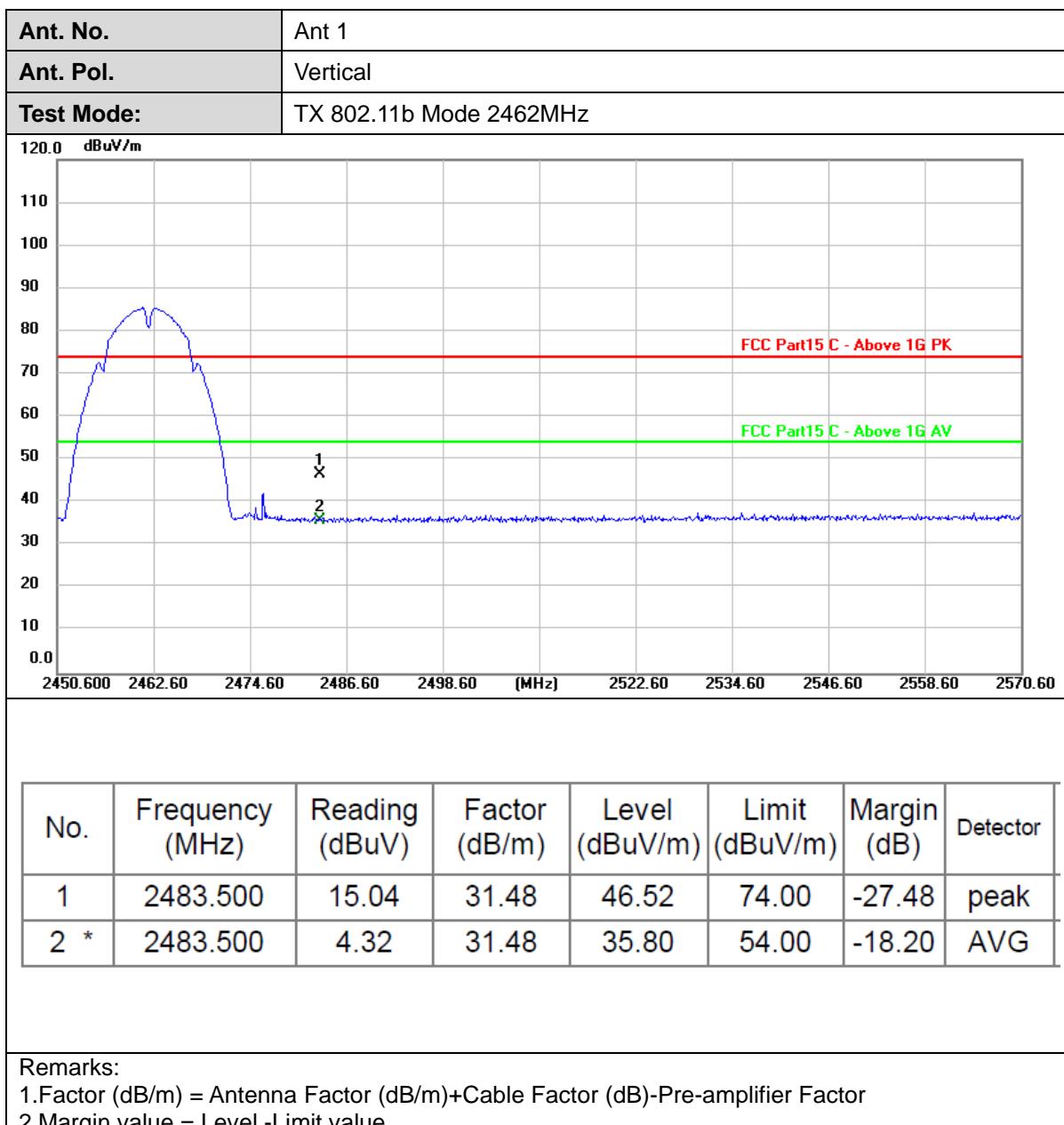
Please refer to the clause 2.4.

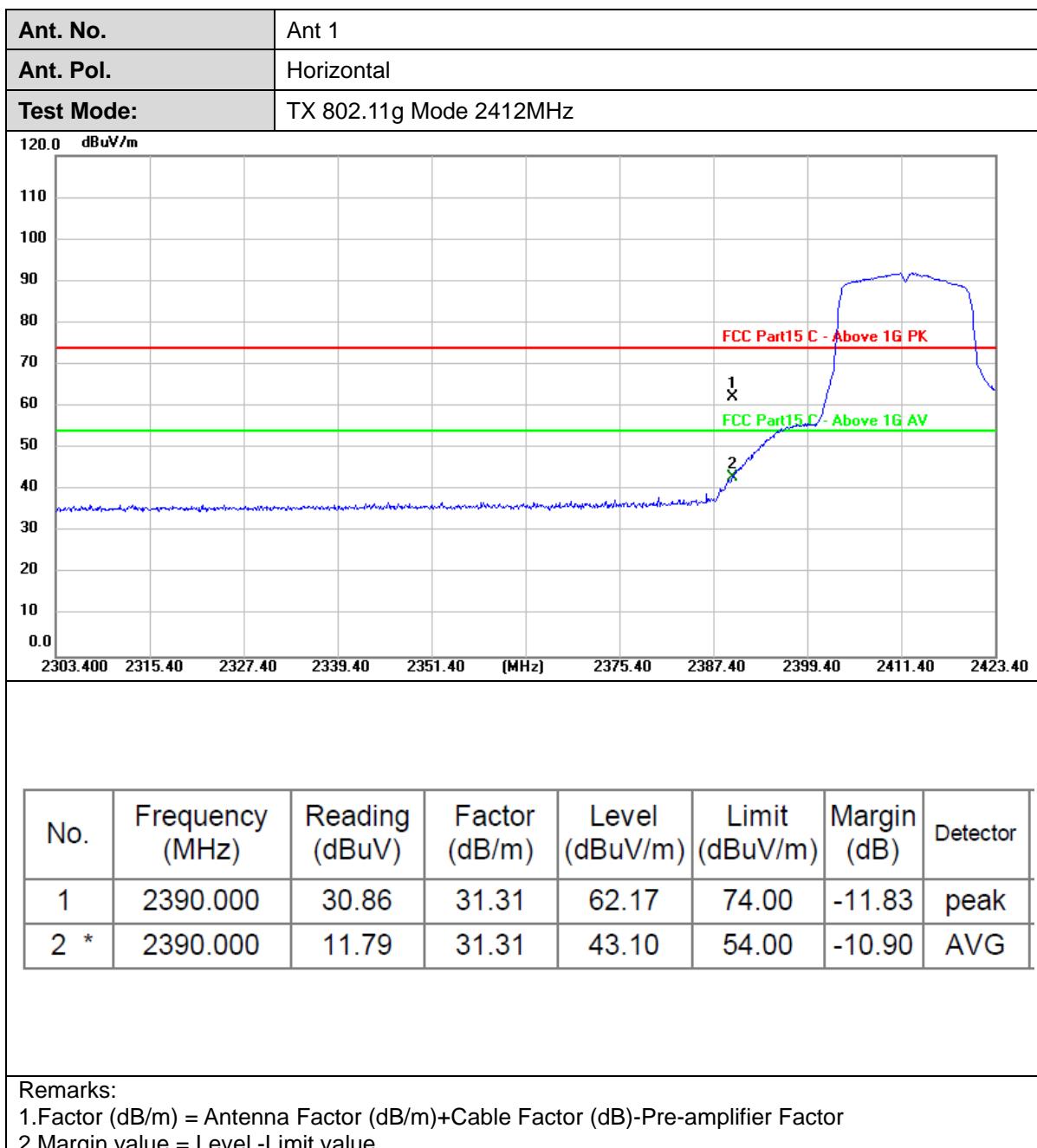
**Test Result**

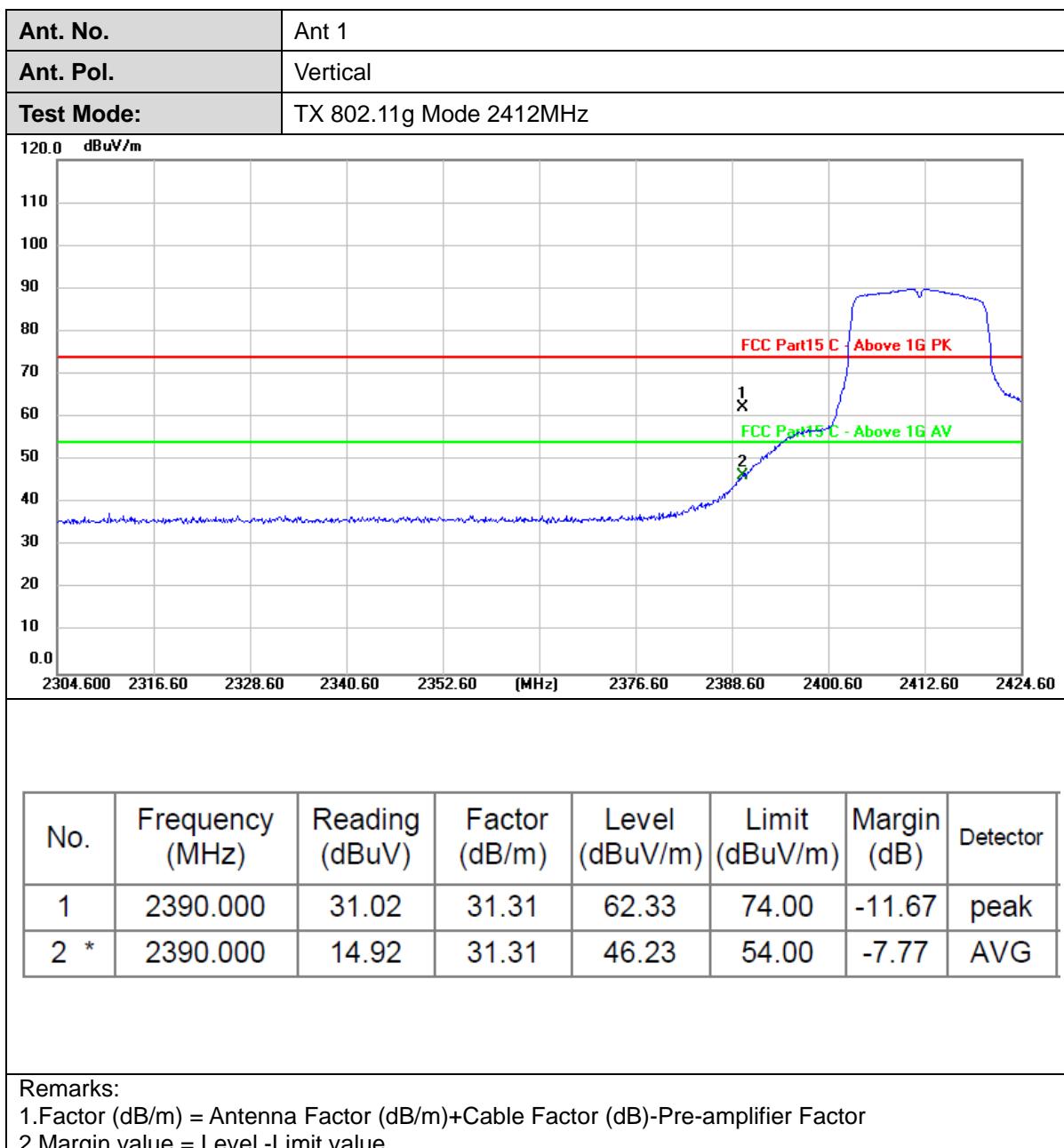
| Ant. No. | Ant 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|----------------|---------------|----------------|----------------|-------------|----------|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|---|----------|-------|-------|-------|-------|--------|------|-----|----------|------|-------|-------|-------|--------|-----|
| Ant. Pol. | Horizontal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test Mode: | TX 802.11b Mode 2412MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><thead><tr><th>No.</th><th>Frequency (MHz)</th><th>Reading (dBuV)</th><th>Factor (dB/m)</th><th>Level (dBuV/m)</th><th>Limit (dBuV/m)</th><th>Margin (dB)</th><th>Detector</th></tr></thead><tbody><tr><td>1</td><td>2390.000</td><td>14.55</td><td>31.31</td><td>45.86</td><td>74.00</td><td>-28.14</td><td>peak</td></tr><tr><td>2 *</td><td>2390.000</td><td>4.39</td><td>31.31</td><td>35.70</td><td>54.00</td><td>-18.30</td><td>Avg</td></tr></tbody></table> | | | | | | | | No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | 1 | 2390.000 | 14.55 | 31.31 | 45.86 | 74.00 | -28.14 | peak | 2 * | 2390.000 | 4.39 | 31.31 | 35.70 | 54.00 | -18.30 | Avg |
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2390.000 | 14.55 | 31.31 | 45.86 | 74.00 | -28.14 | peak | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 * | 2390.000 | 4.39 | 31.31 | 35.70 | 54.00 | -18.30 | Avg | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks: 1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2. Margin value = Level -Limit value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

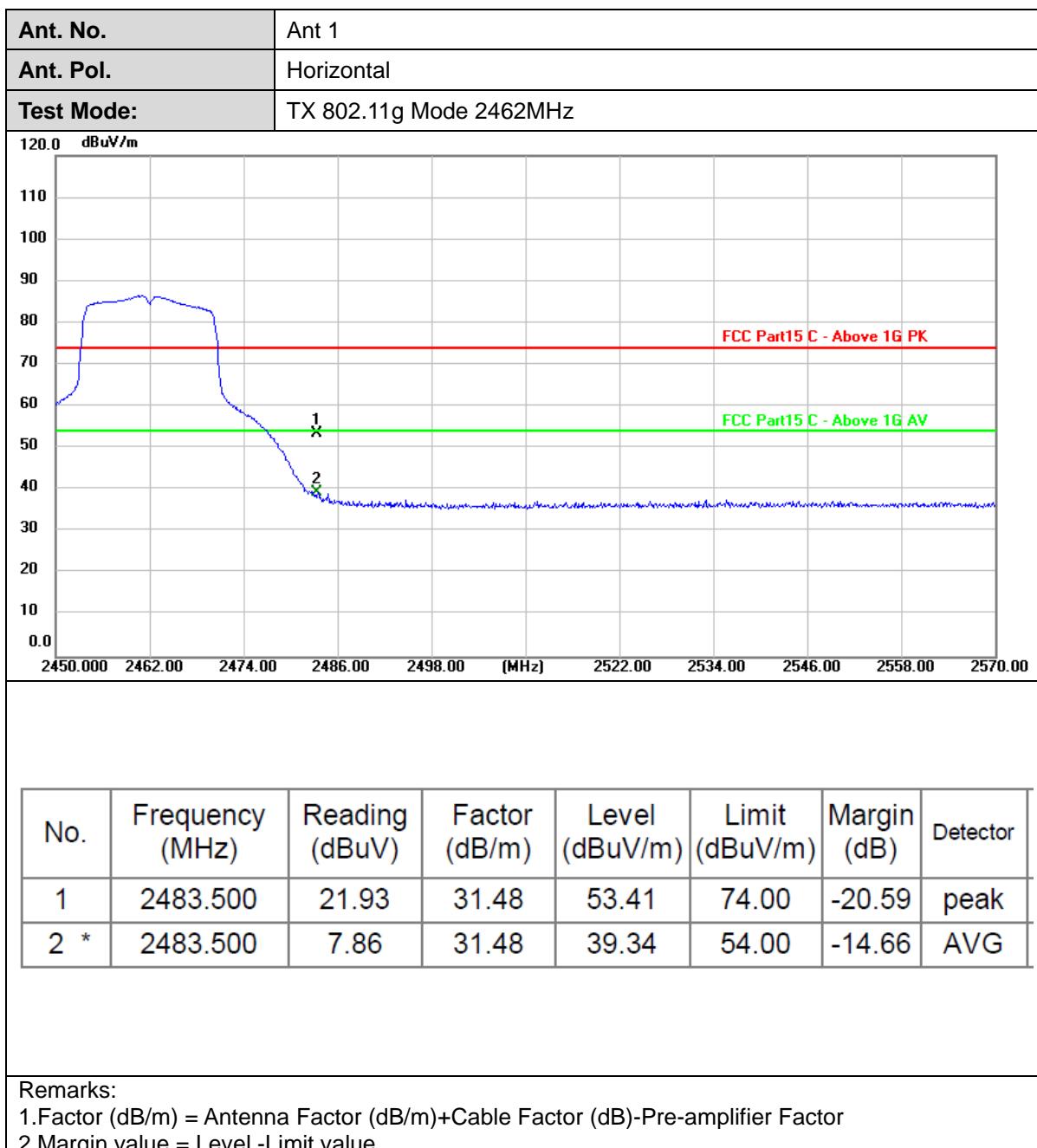


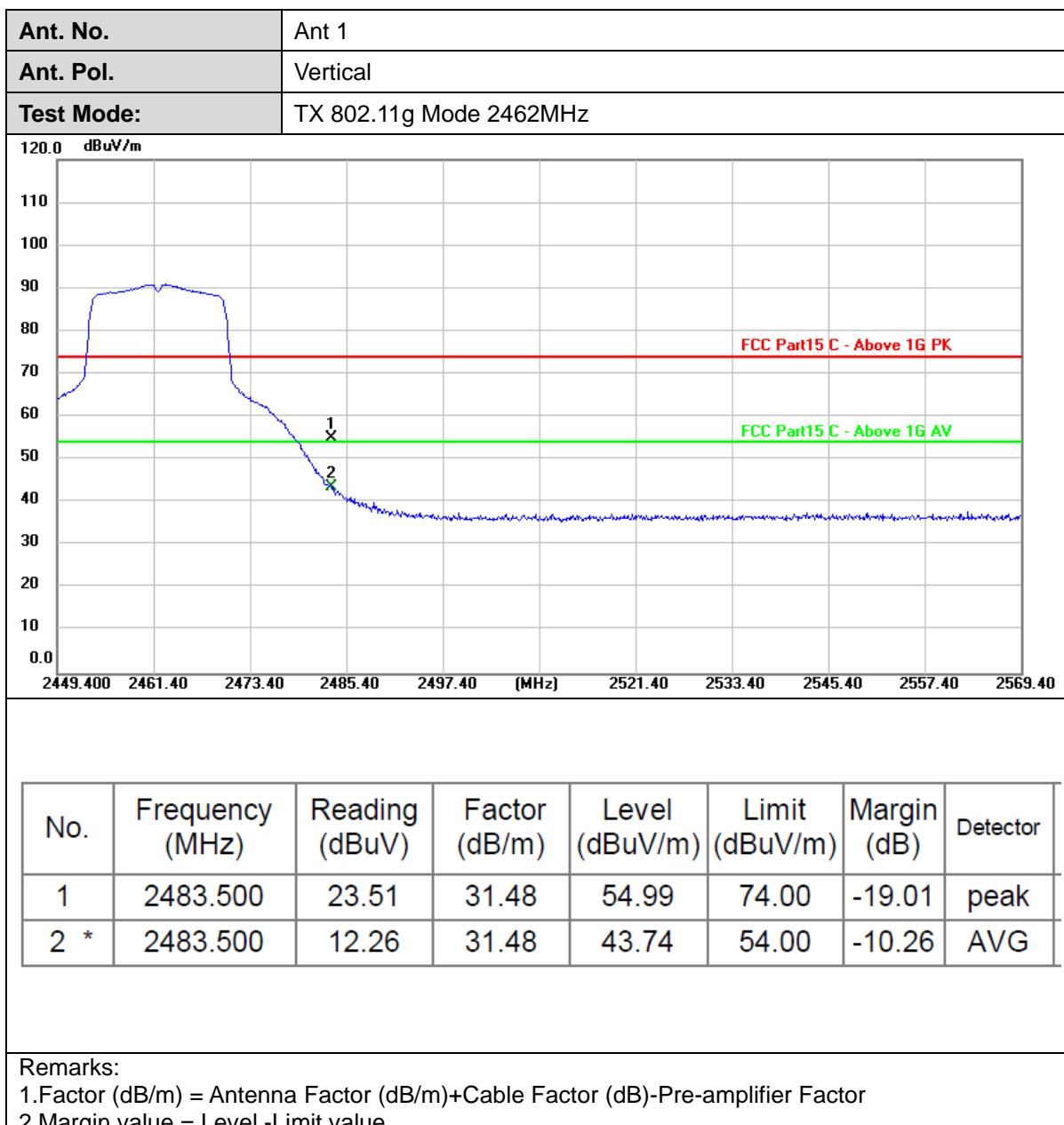


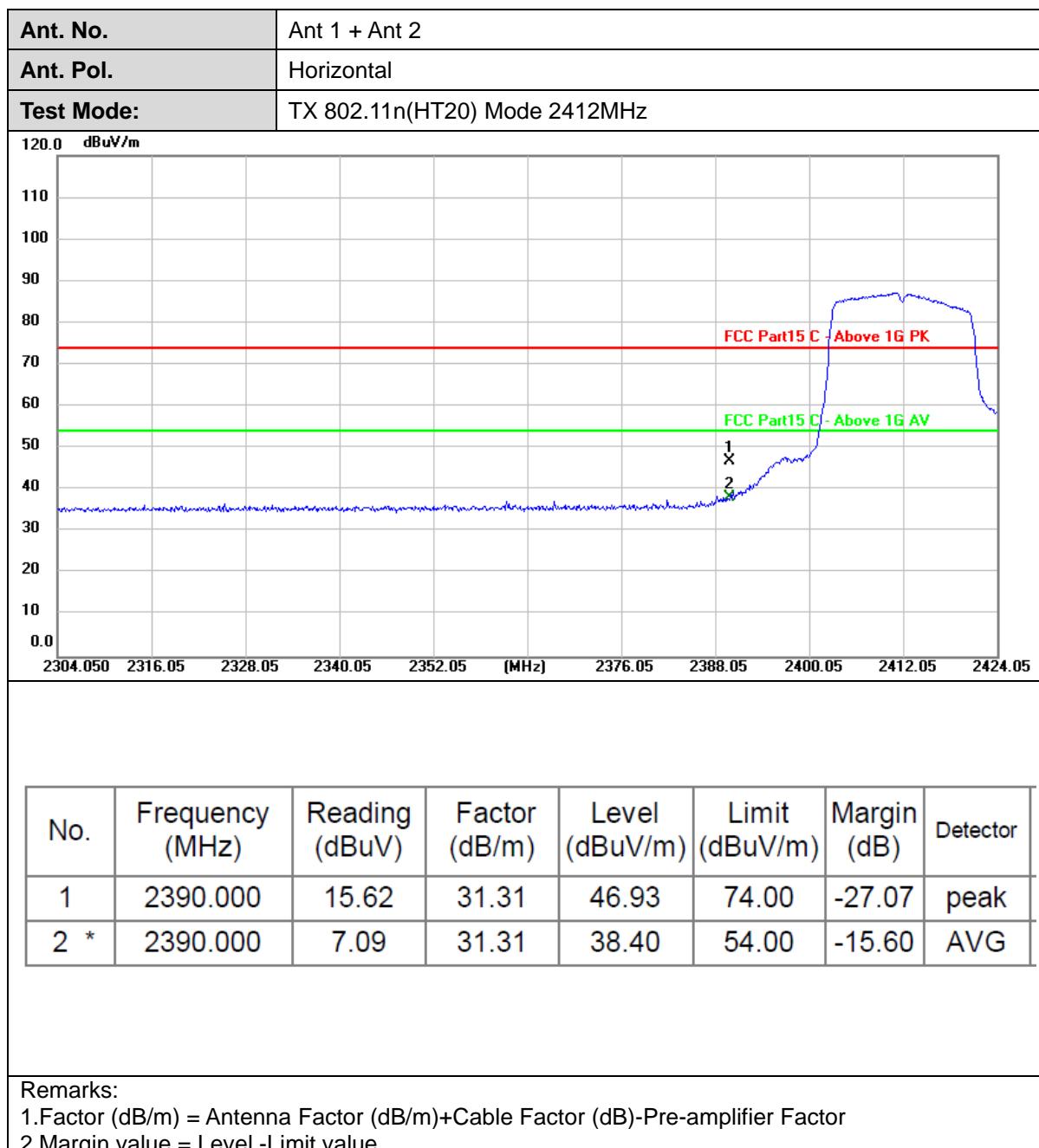


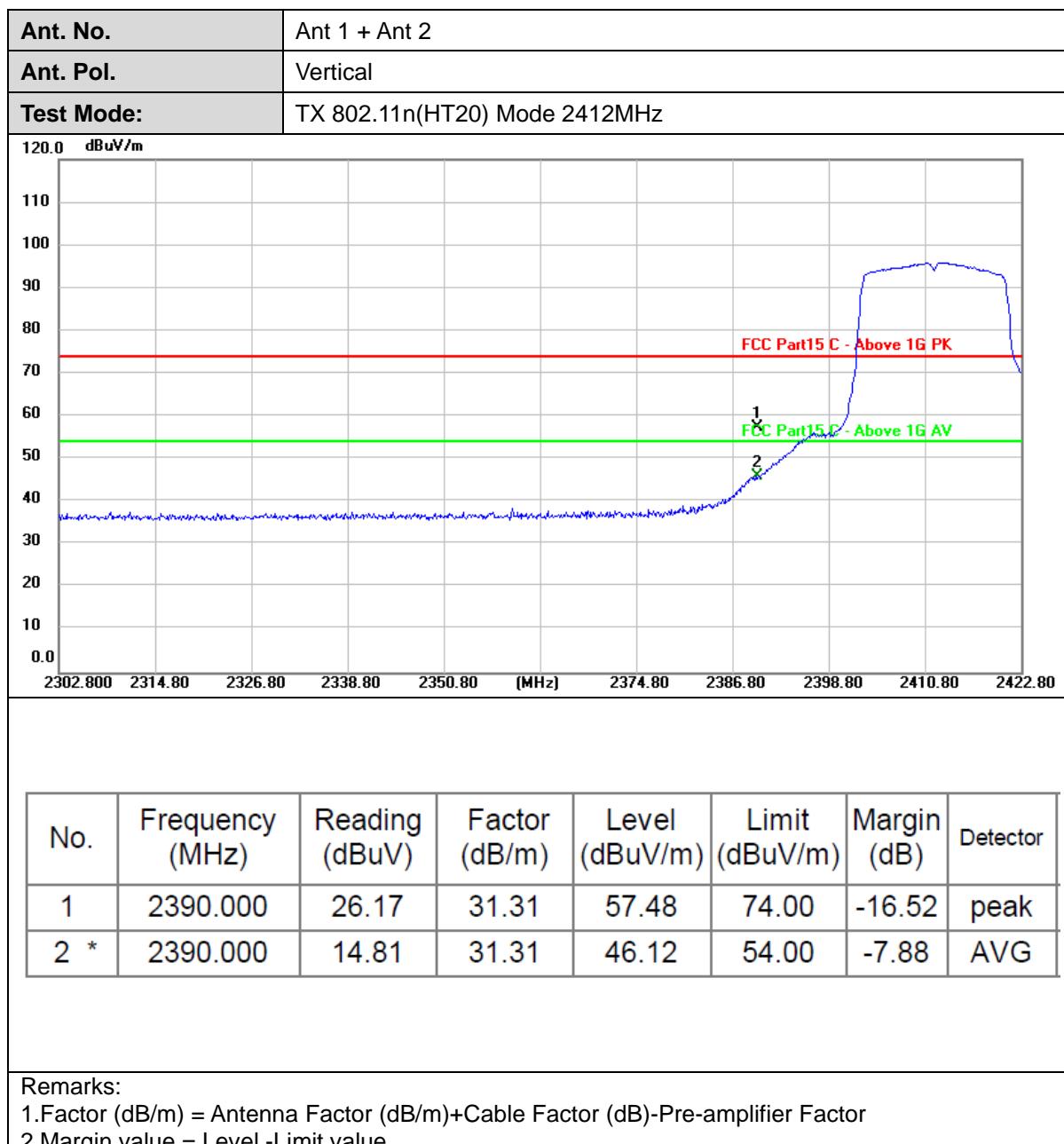


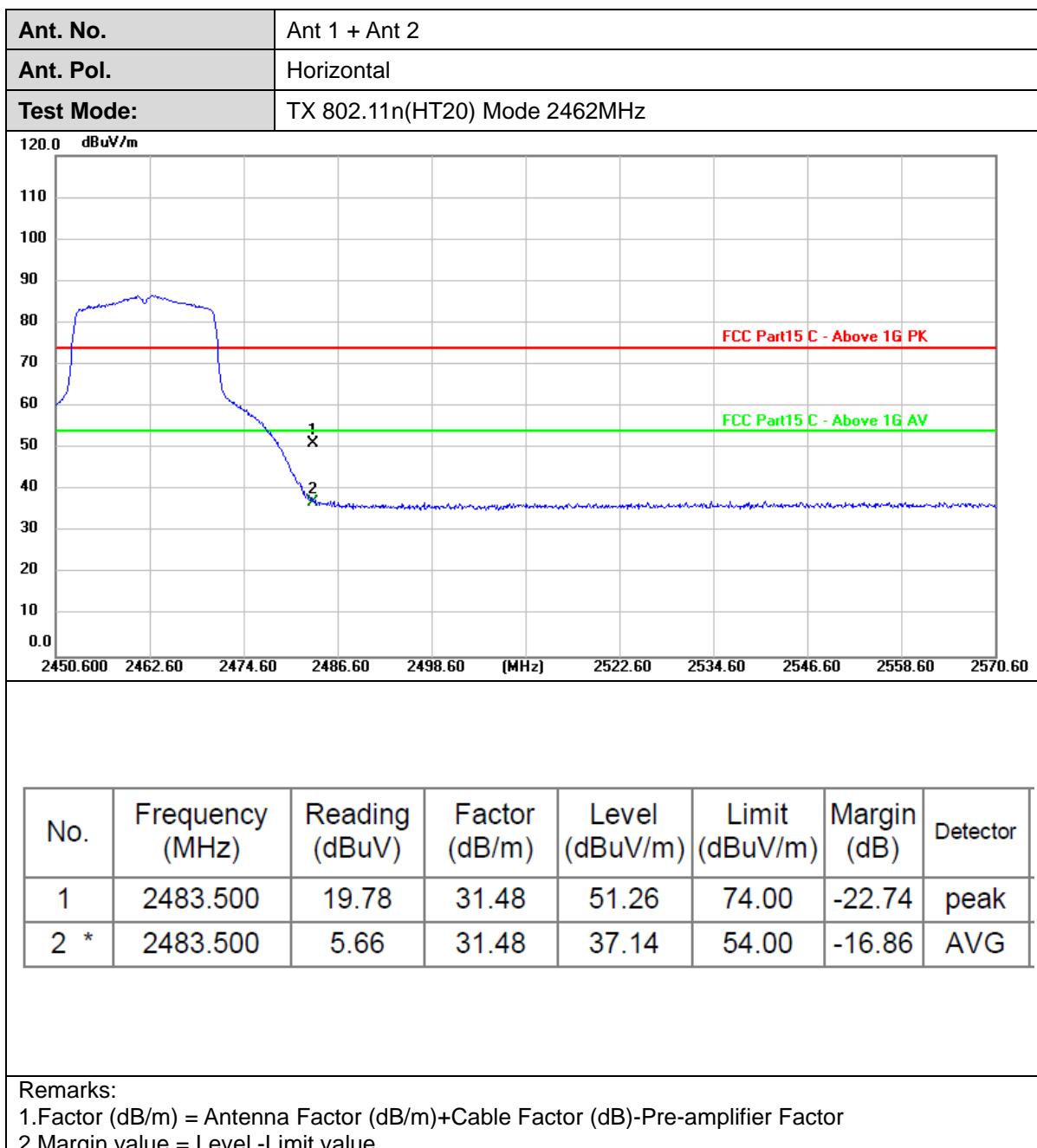


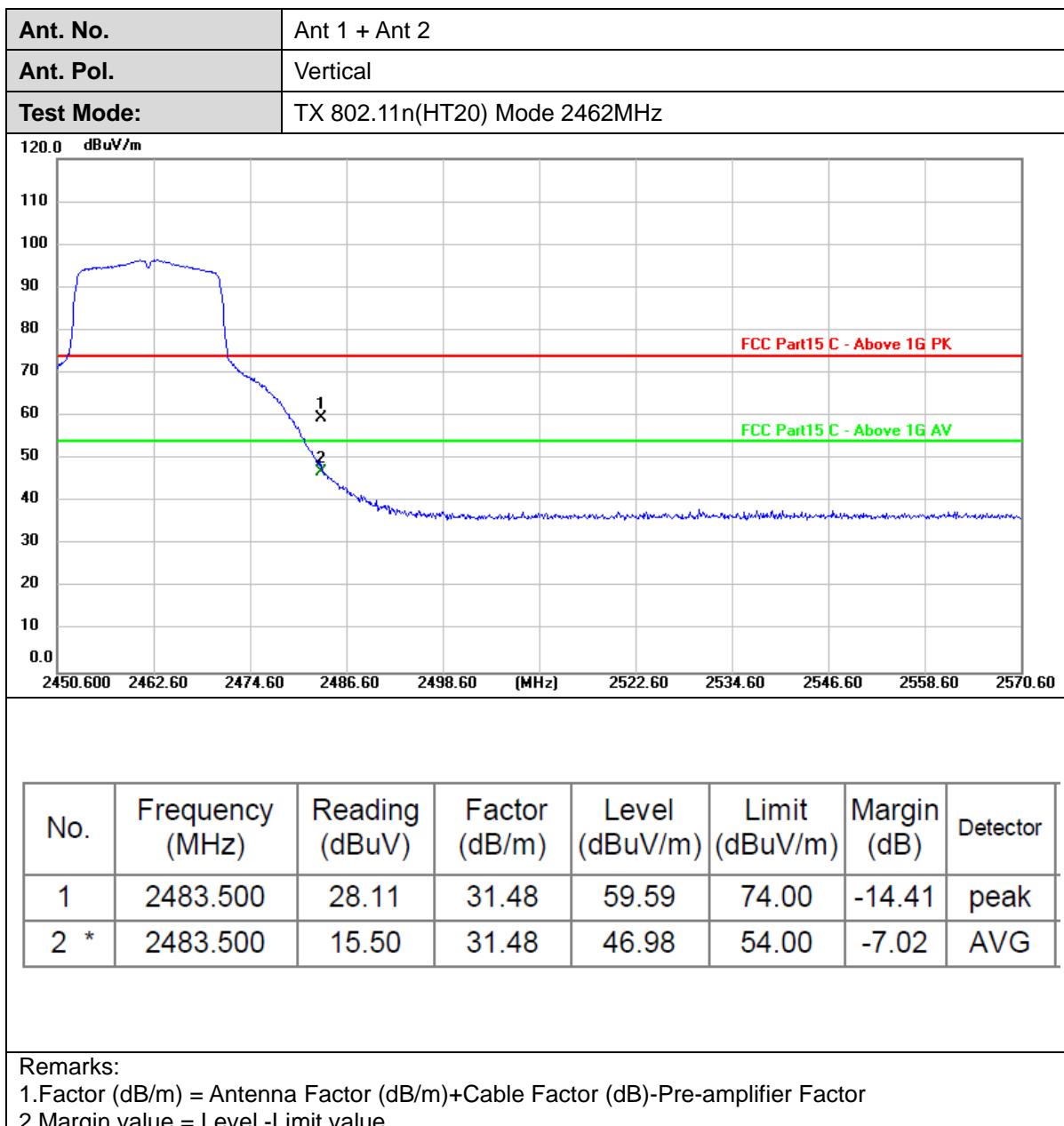


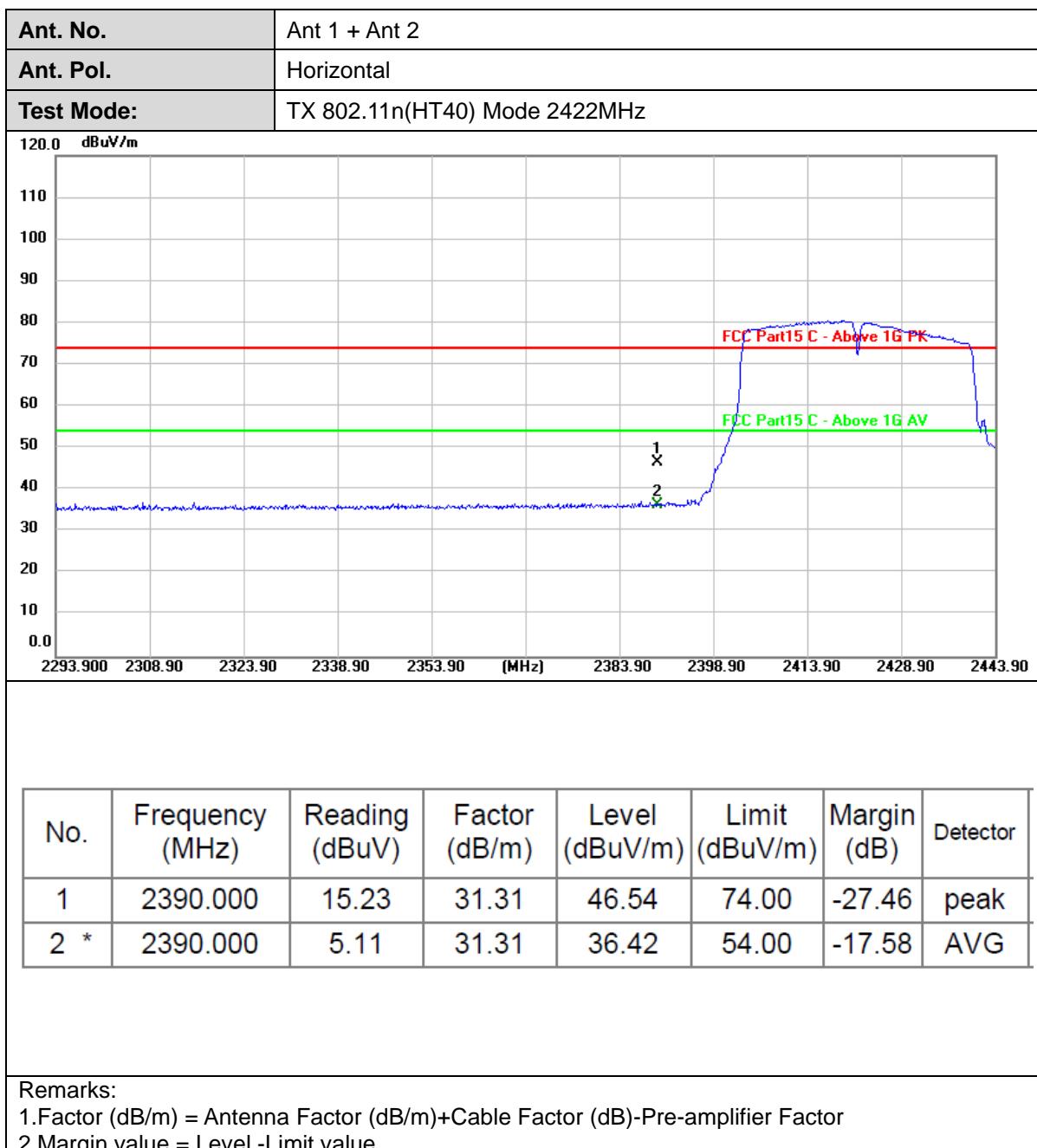


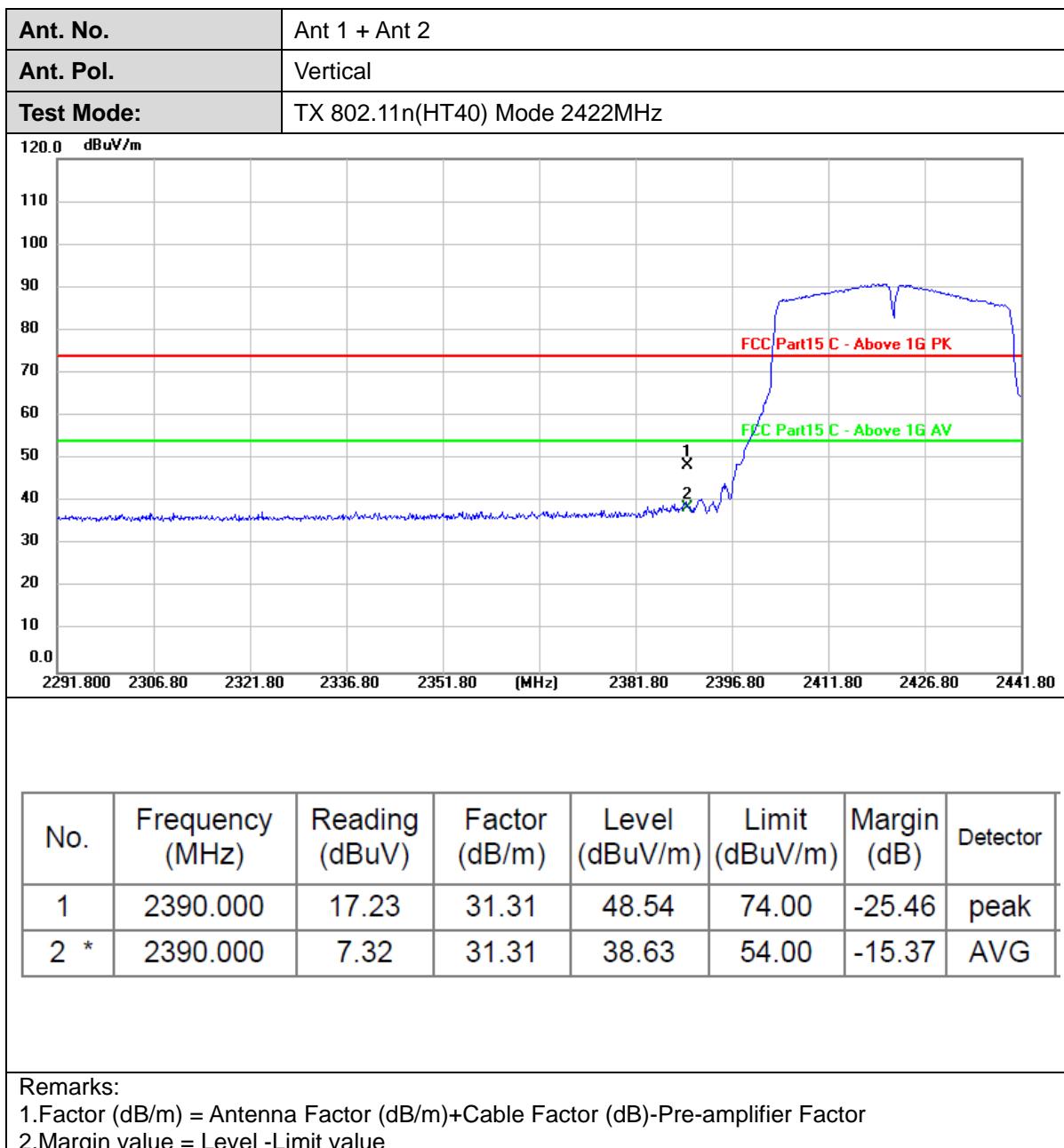


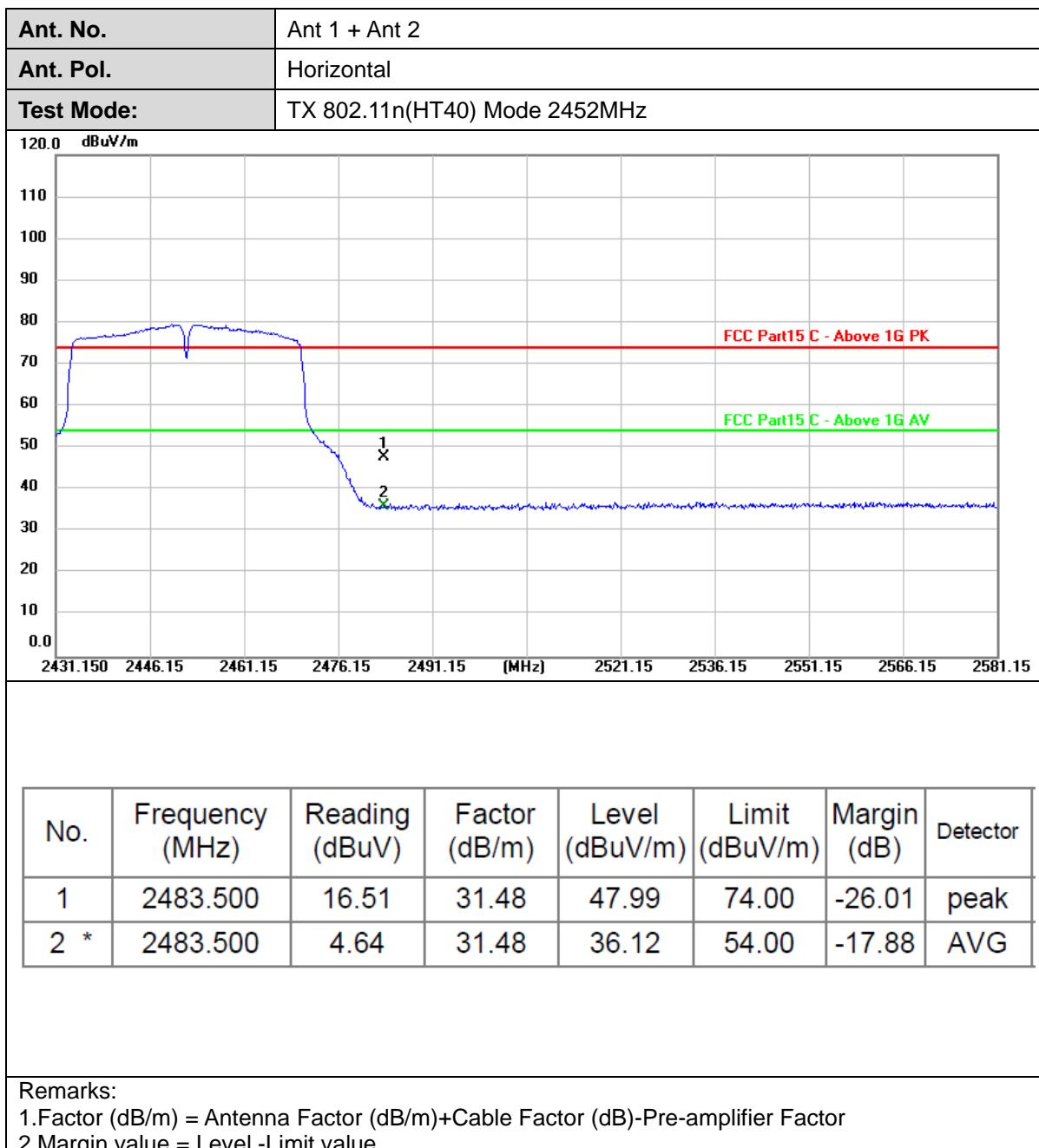


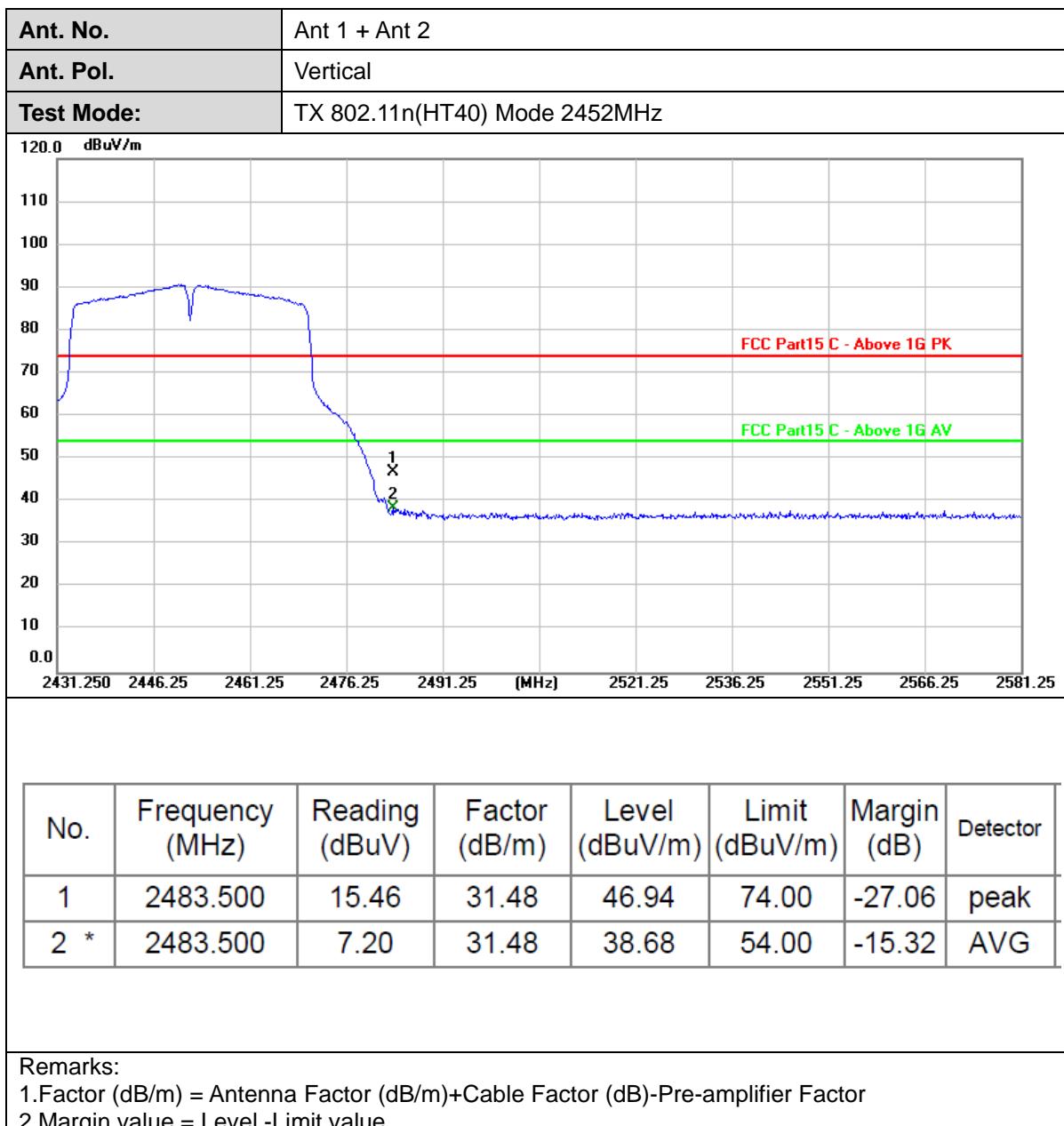


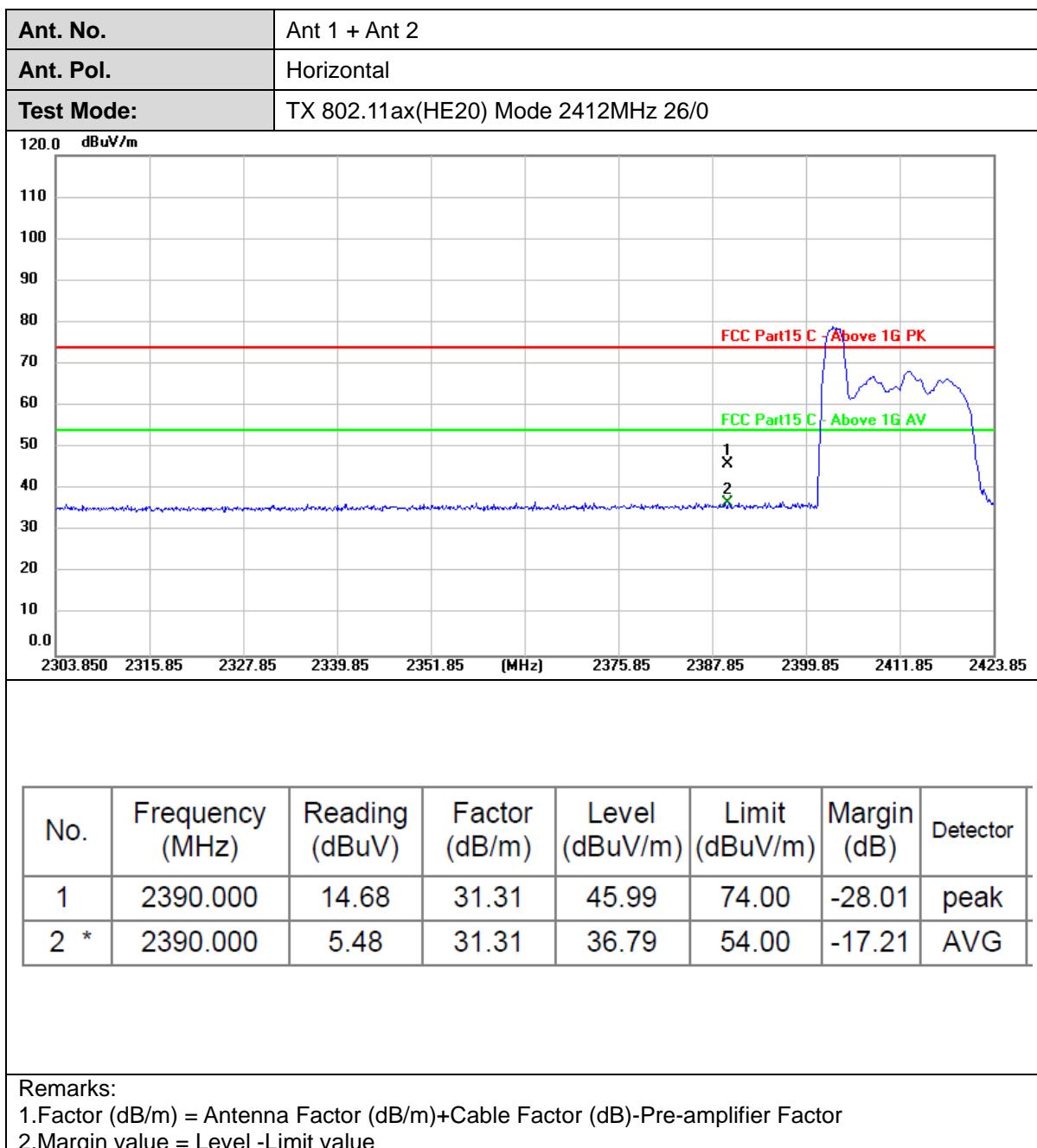


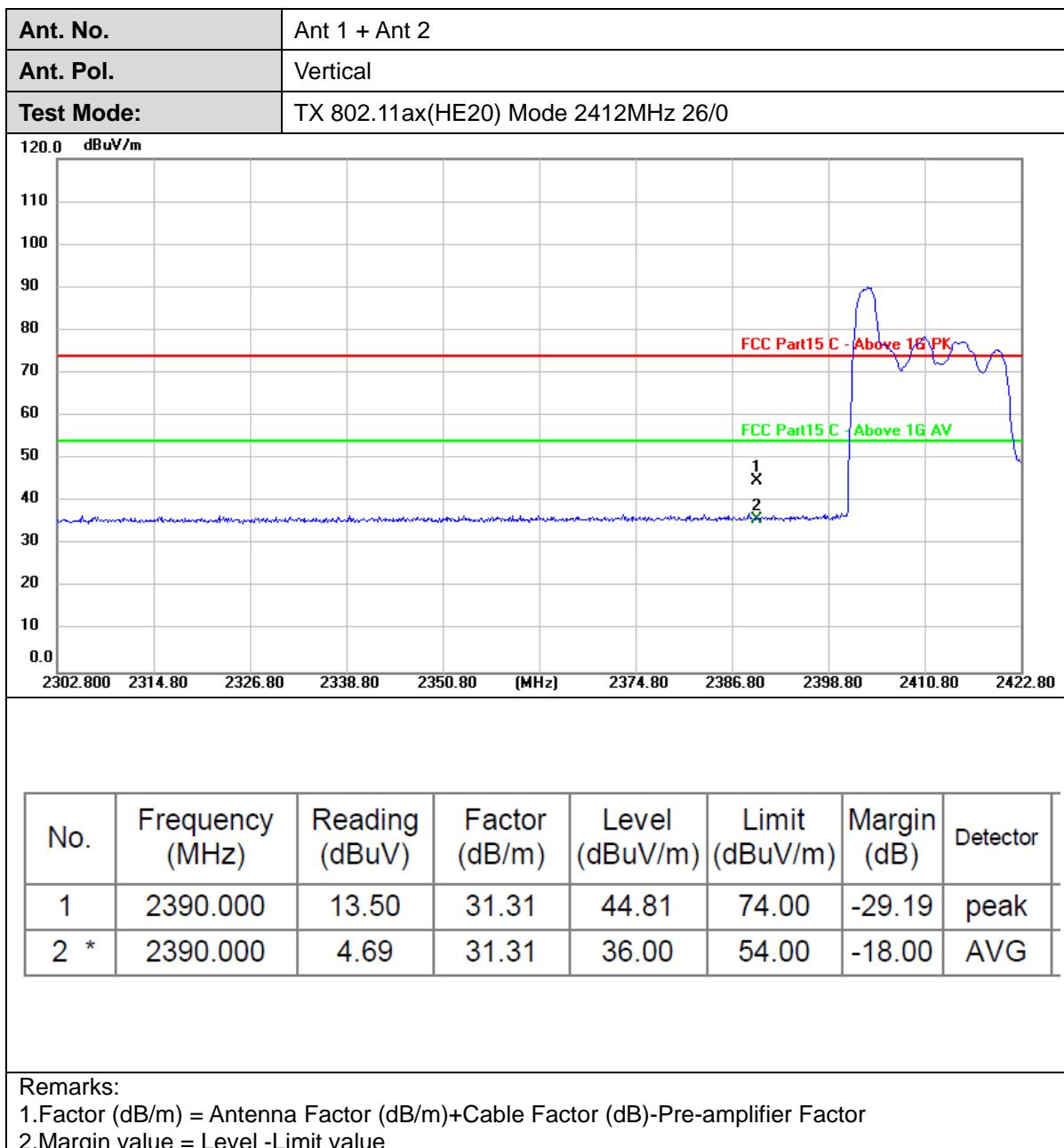


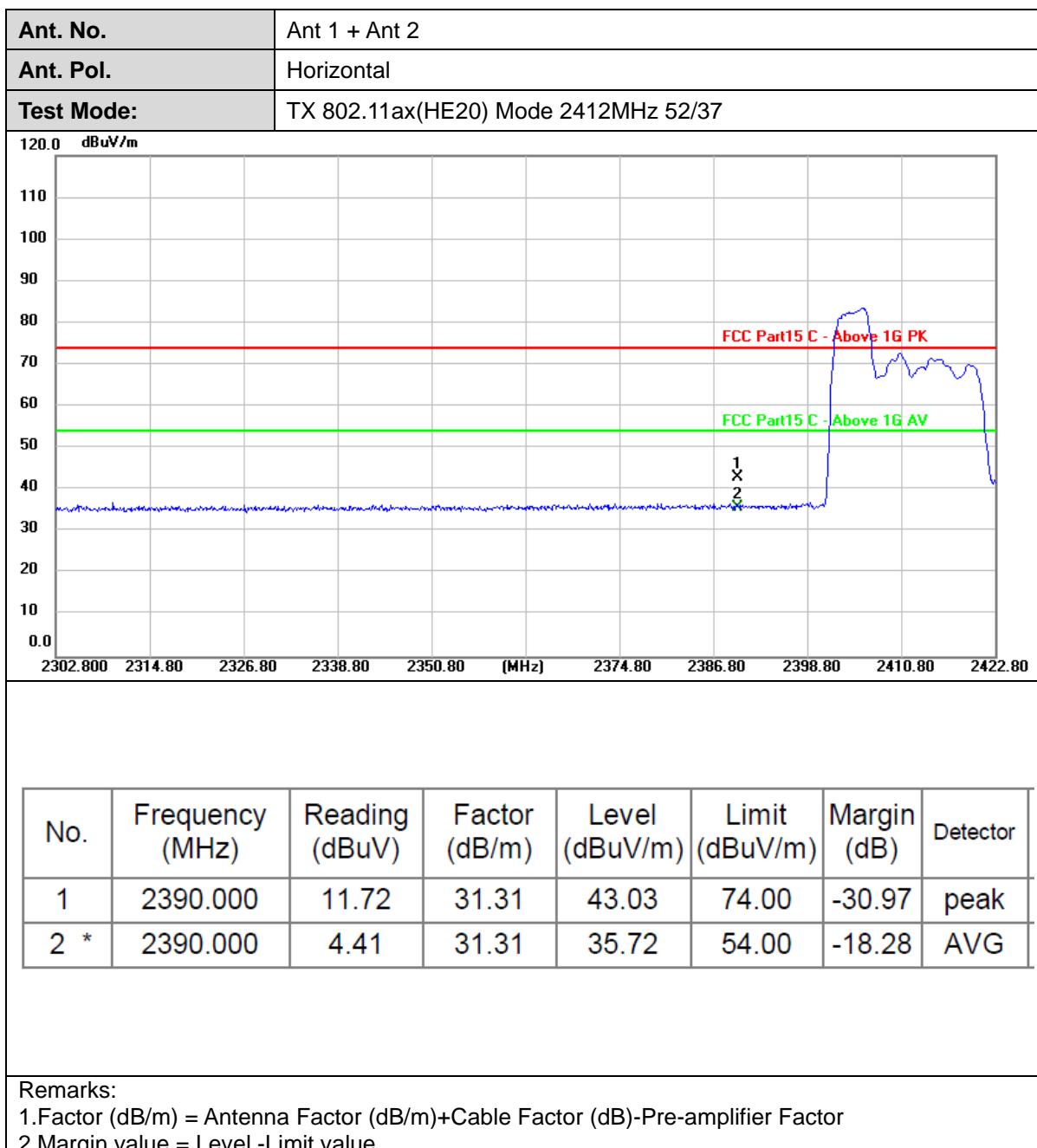


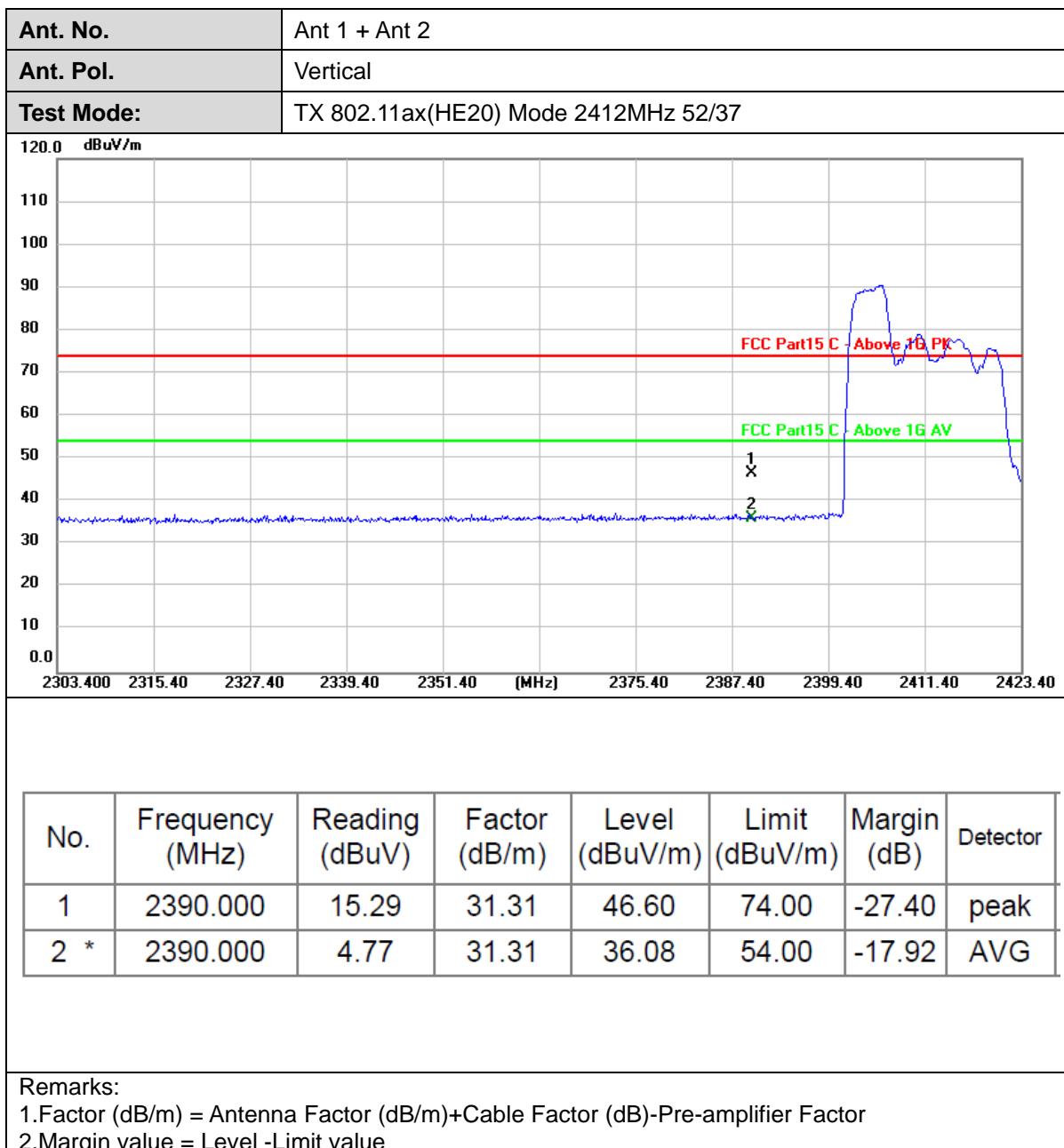


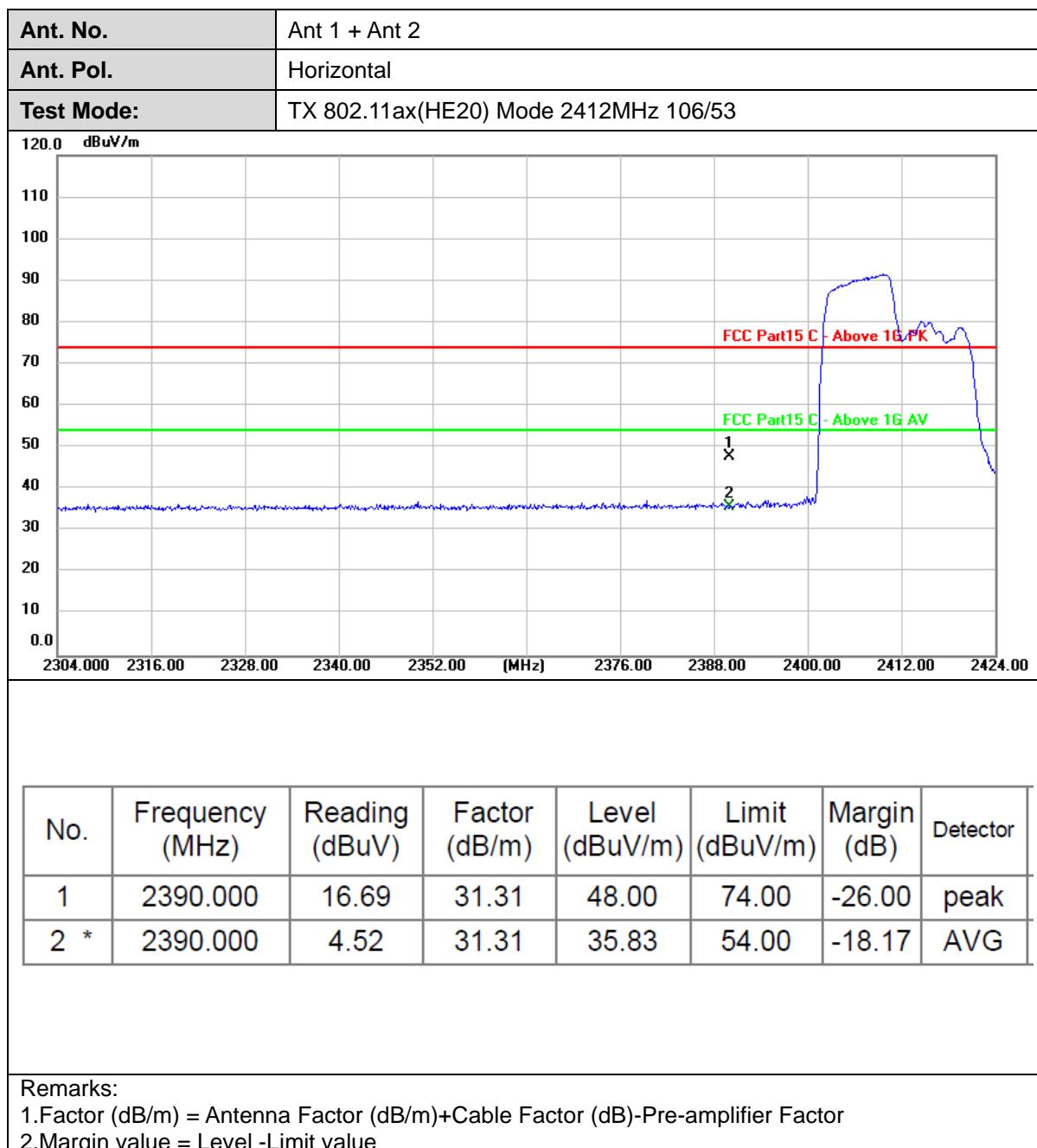


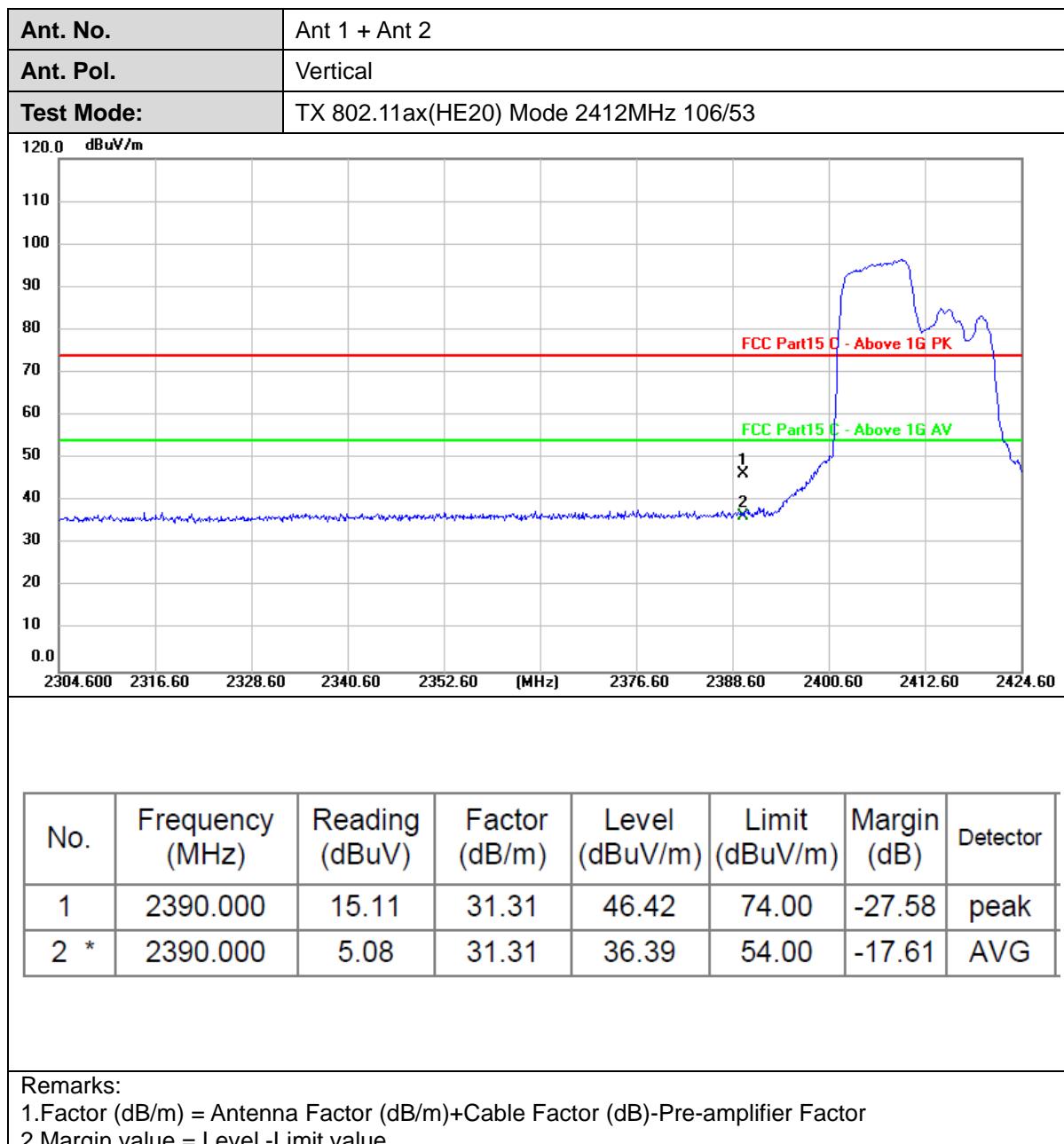


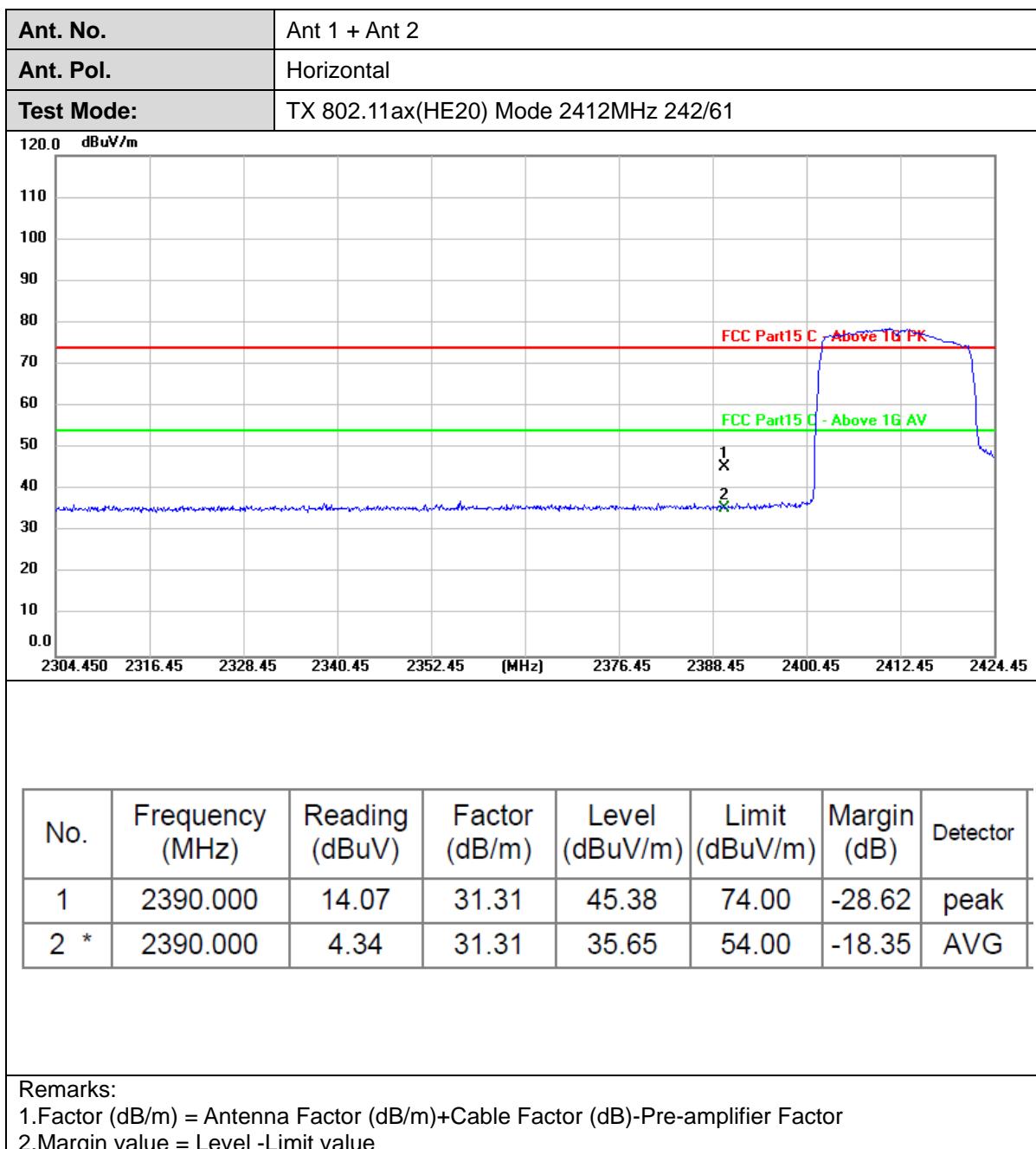


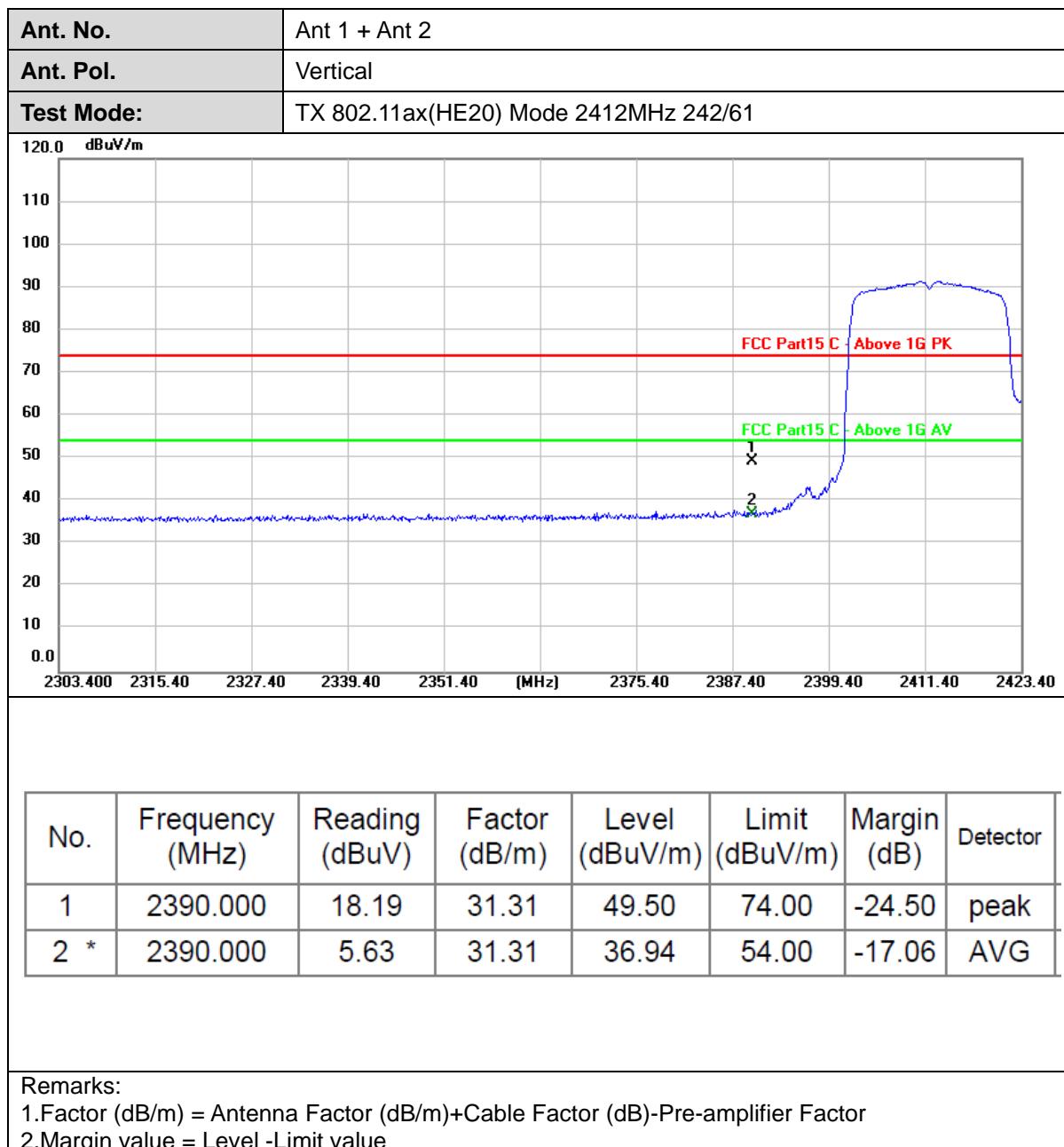


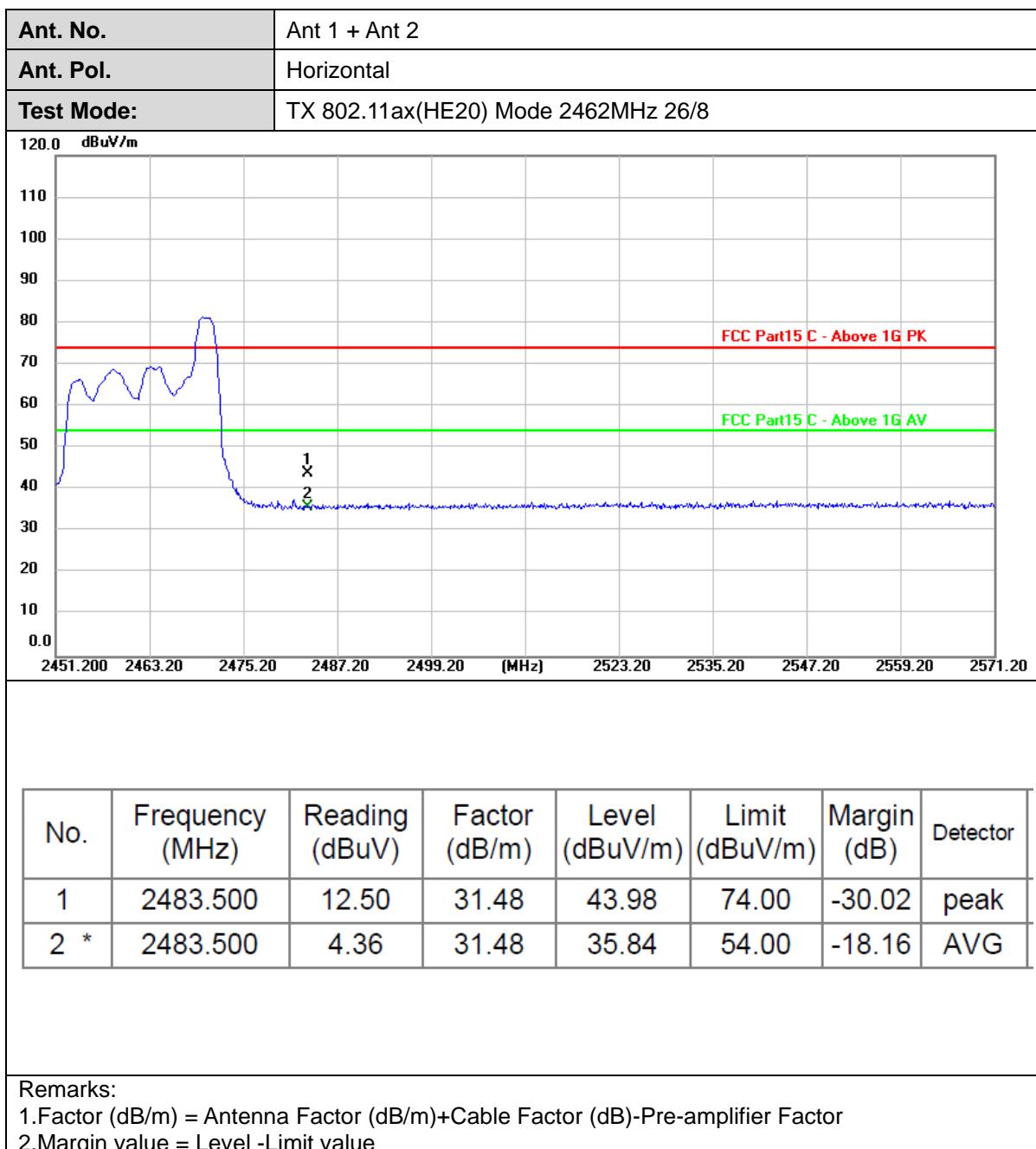


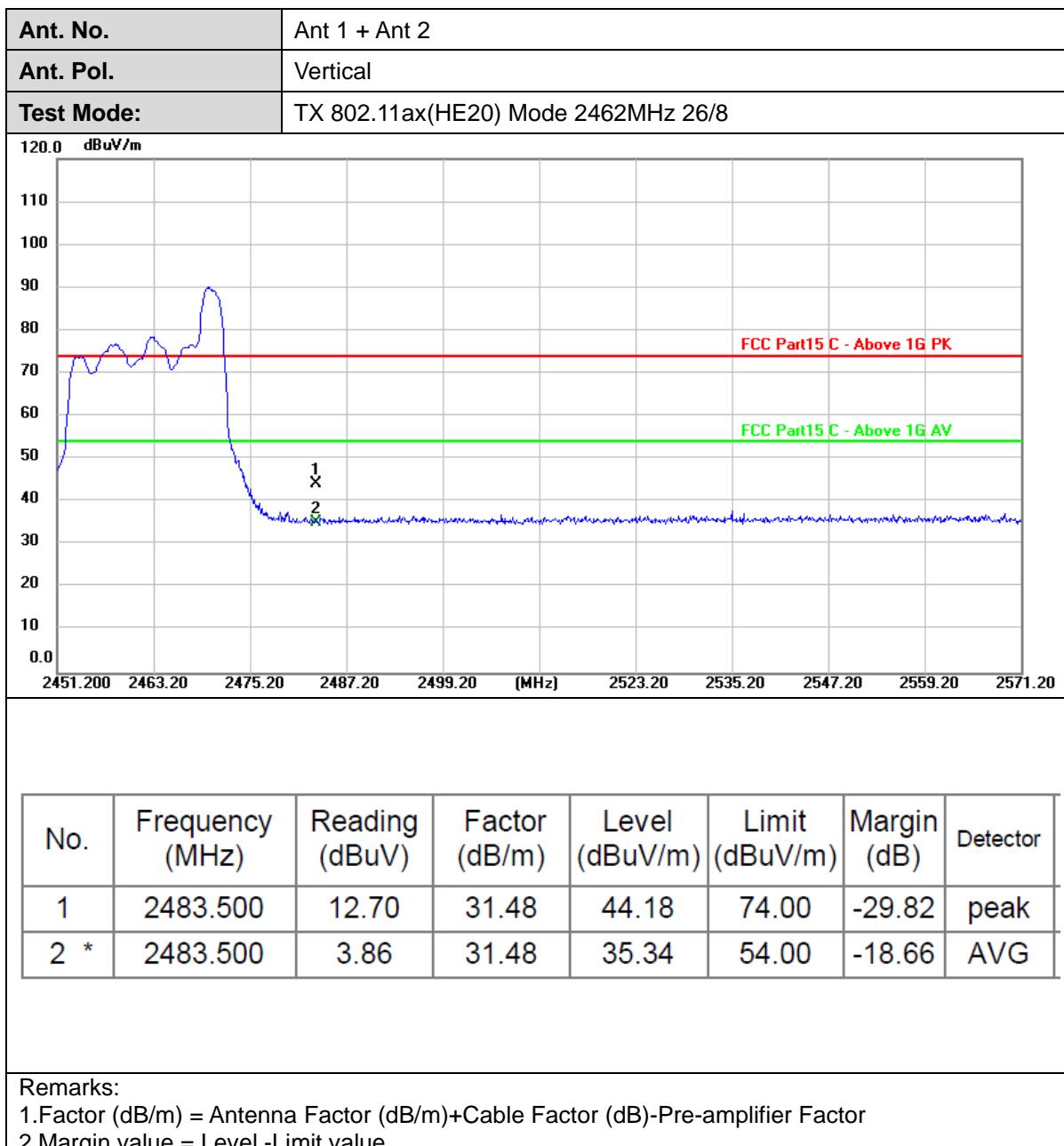


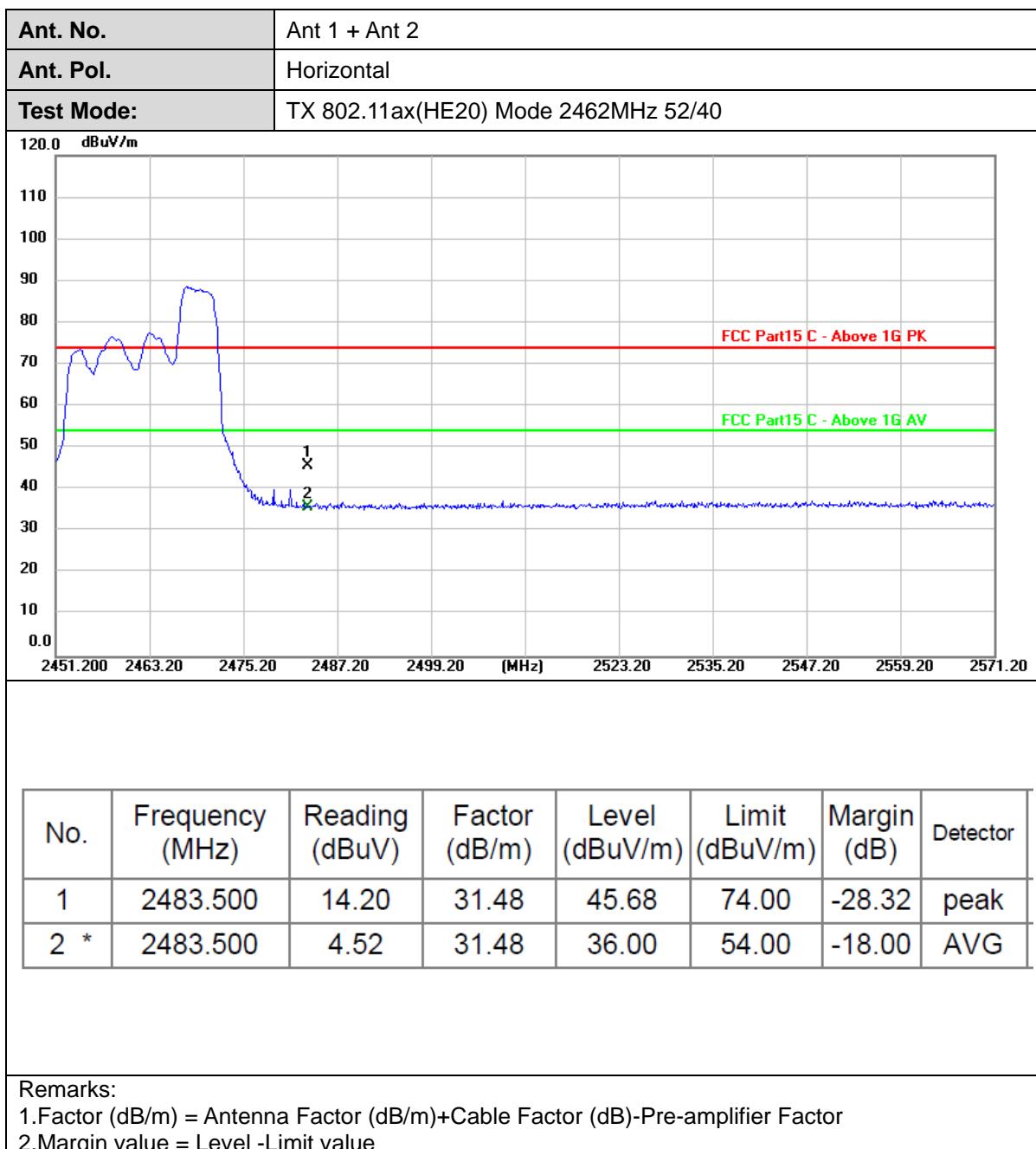


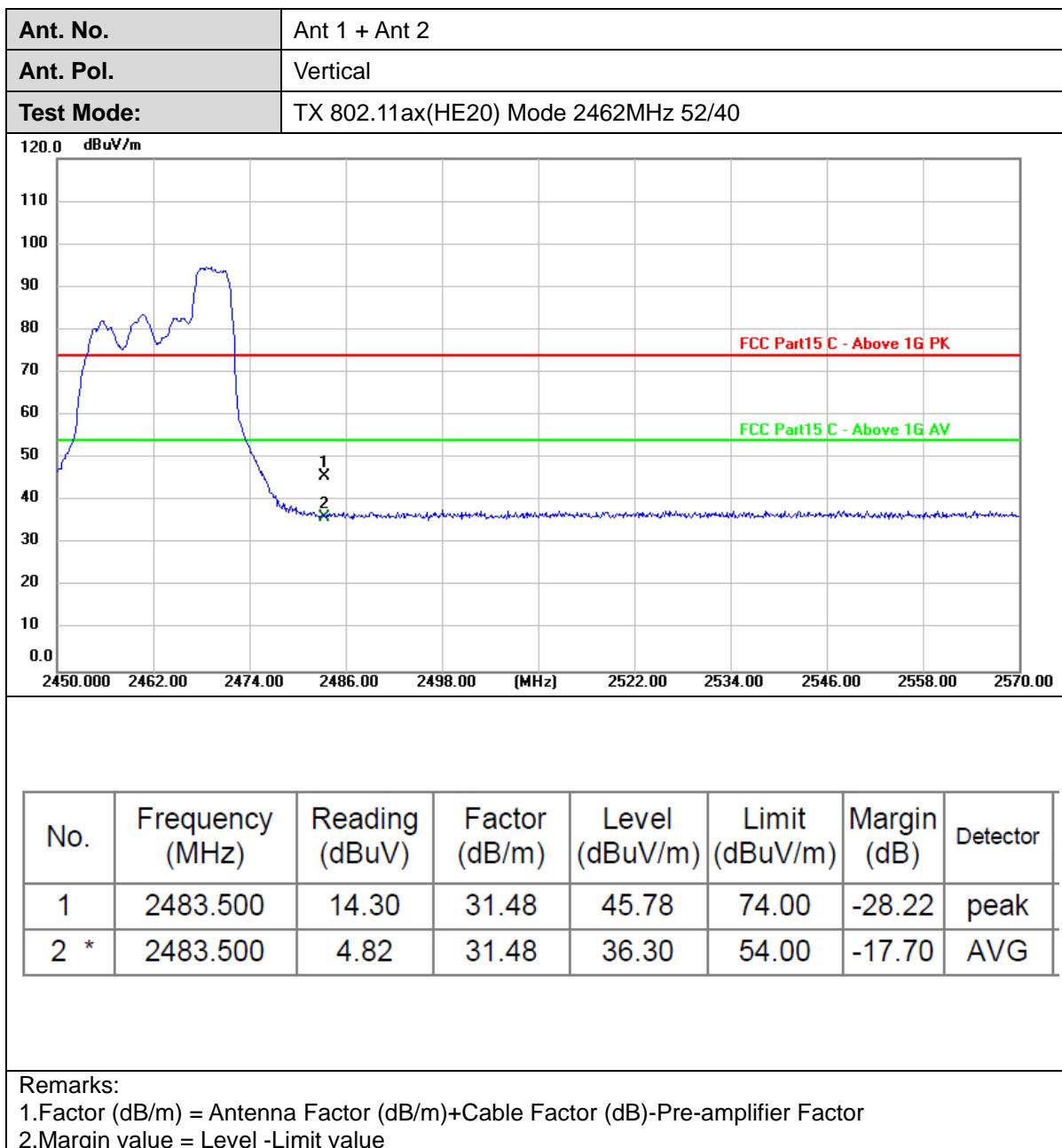


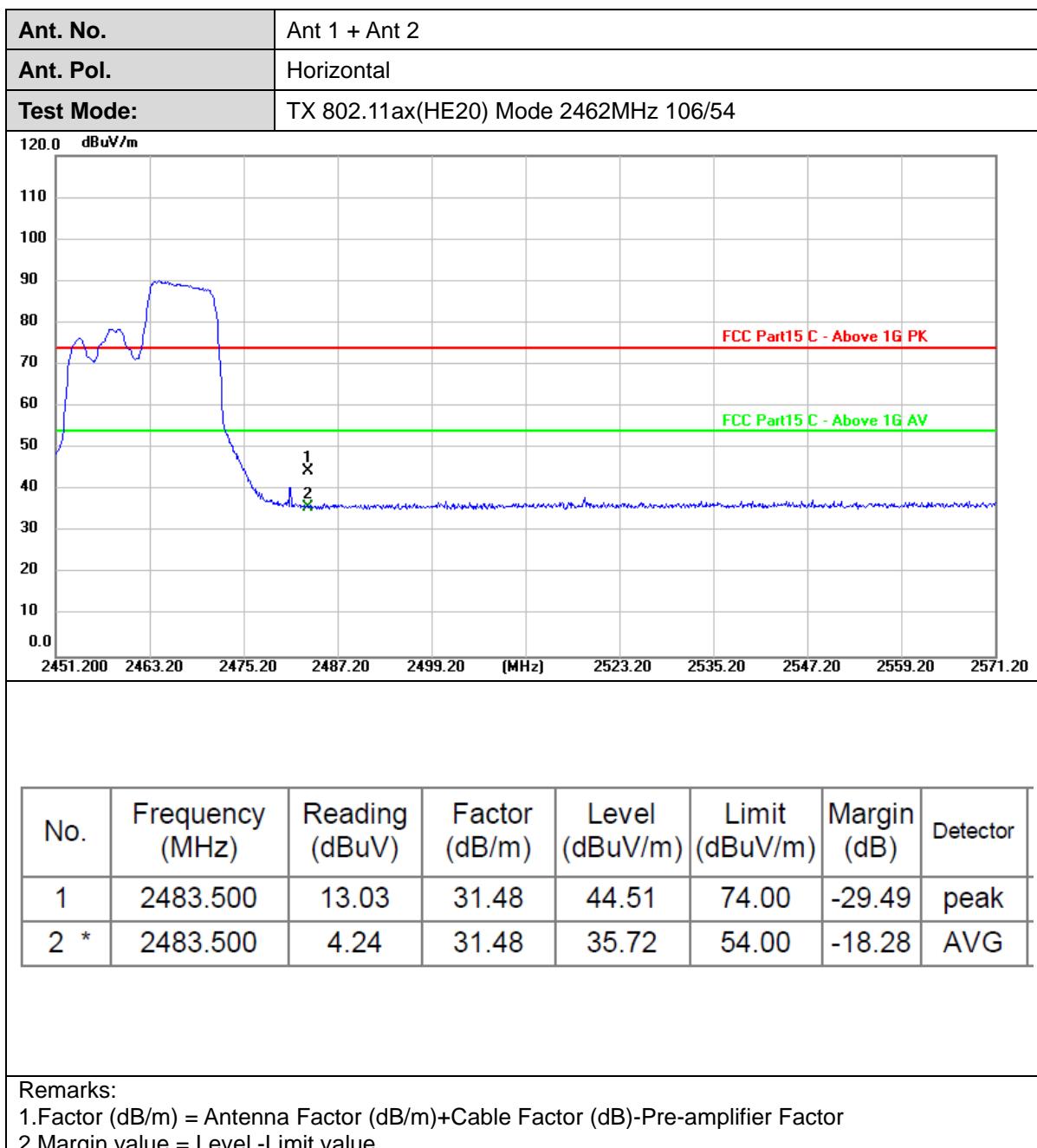


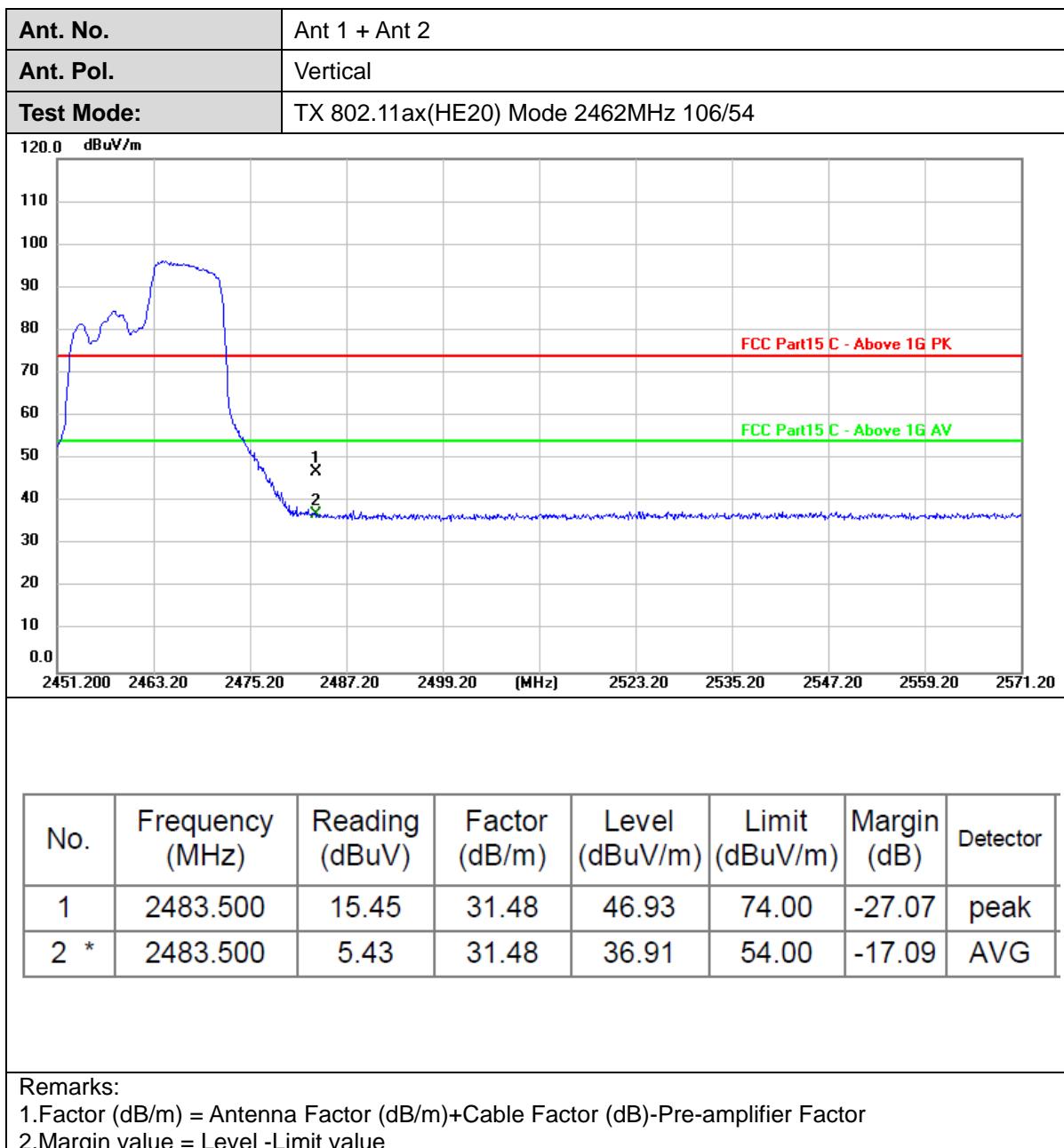


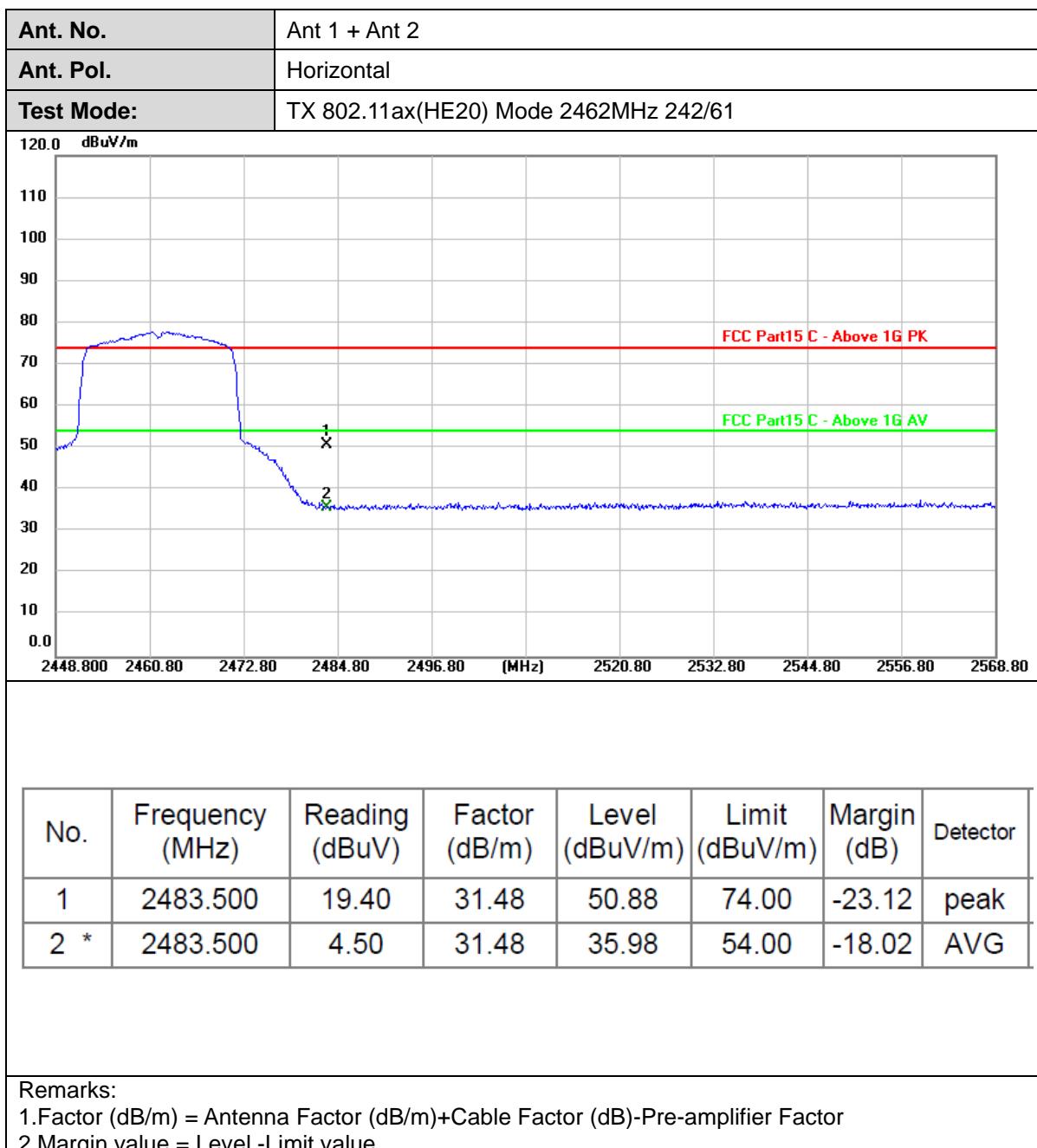


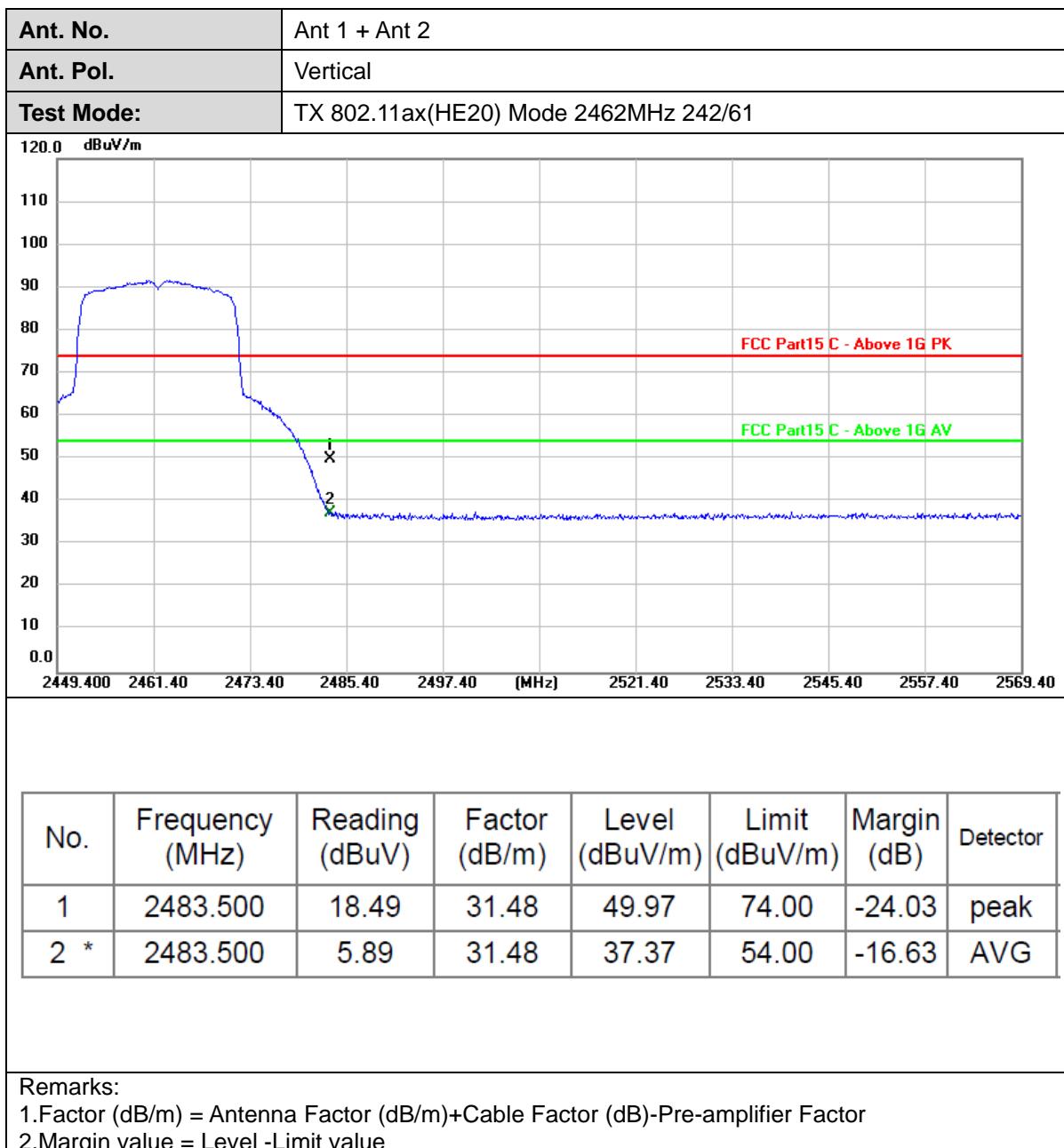


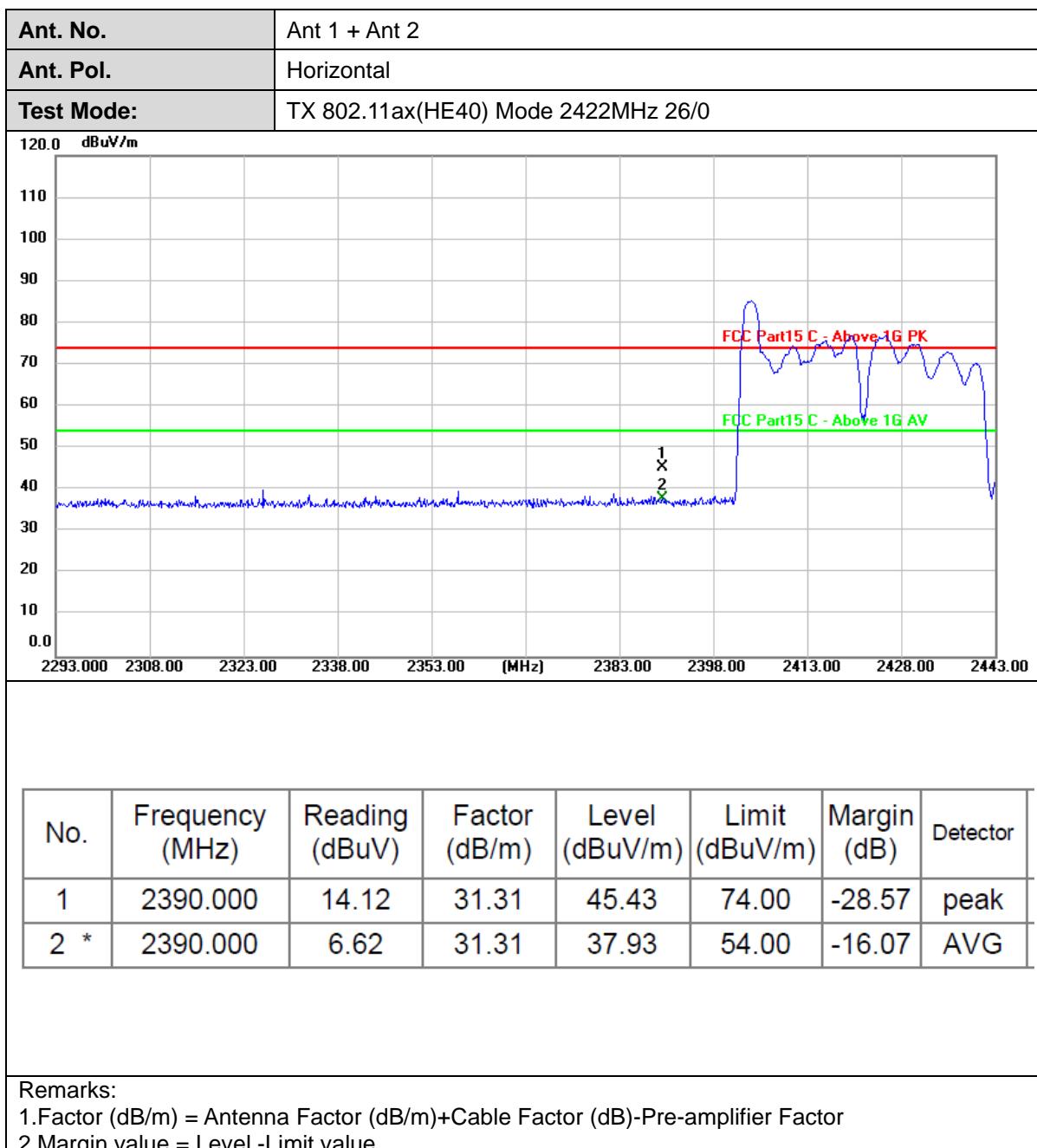


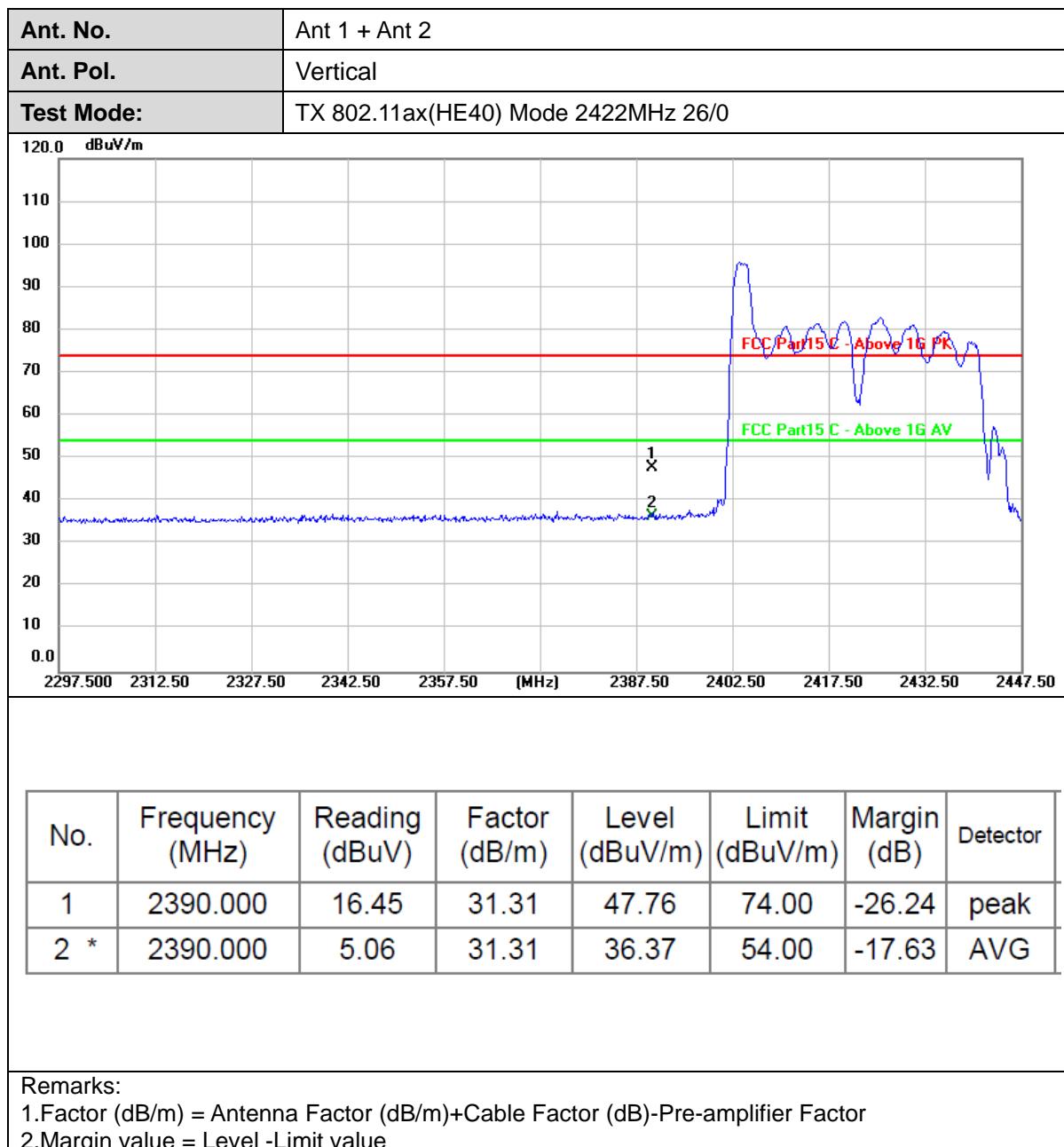


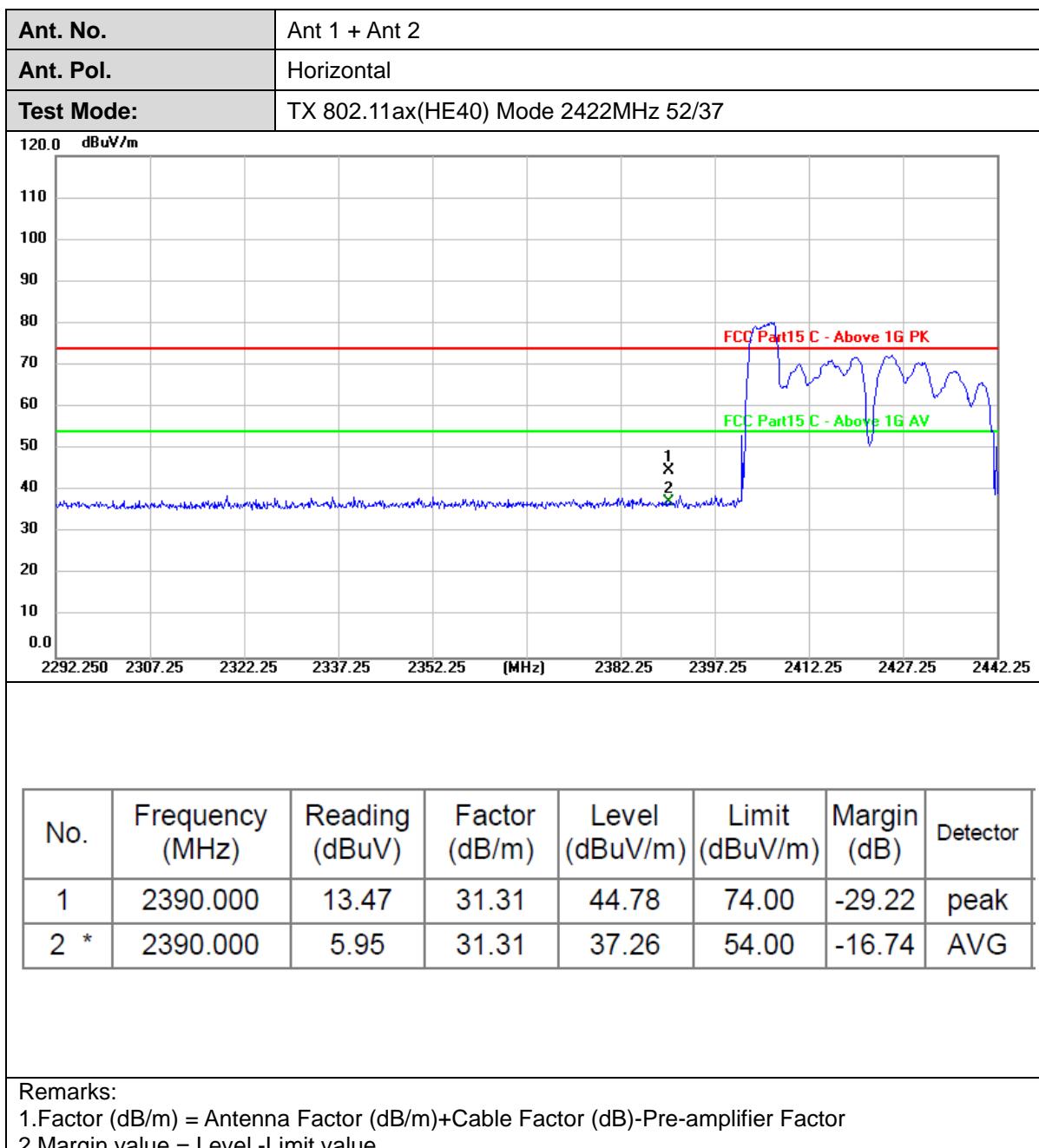


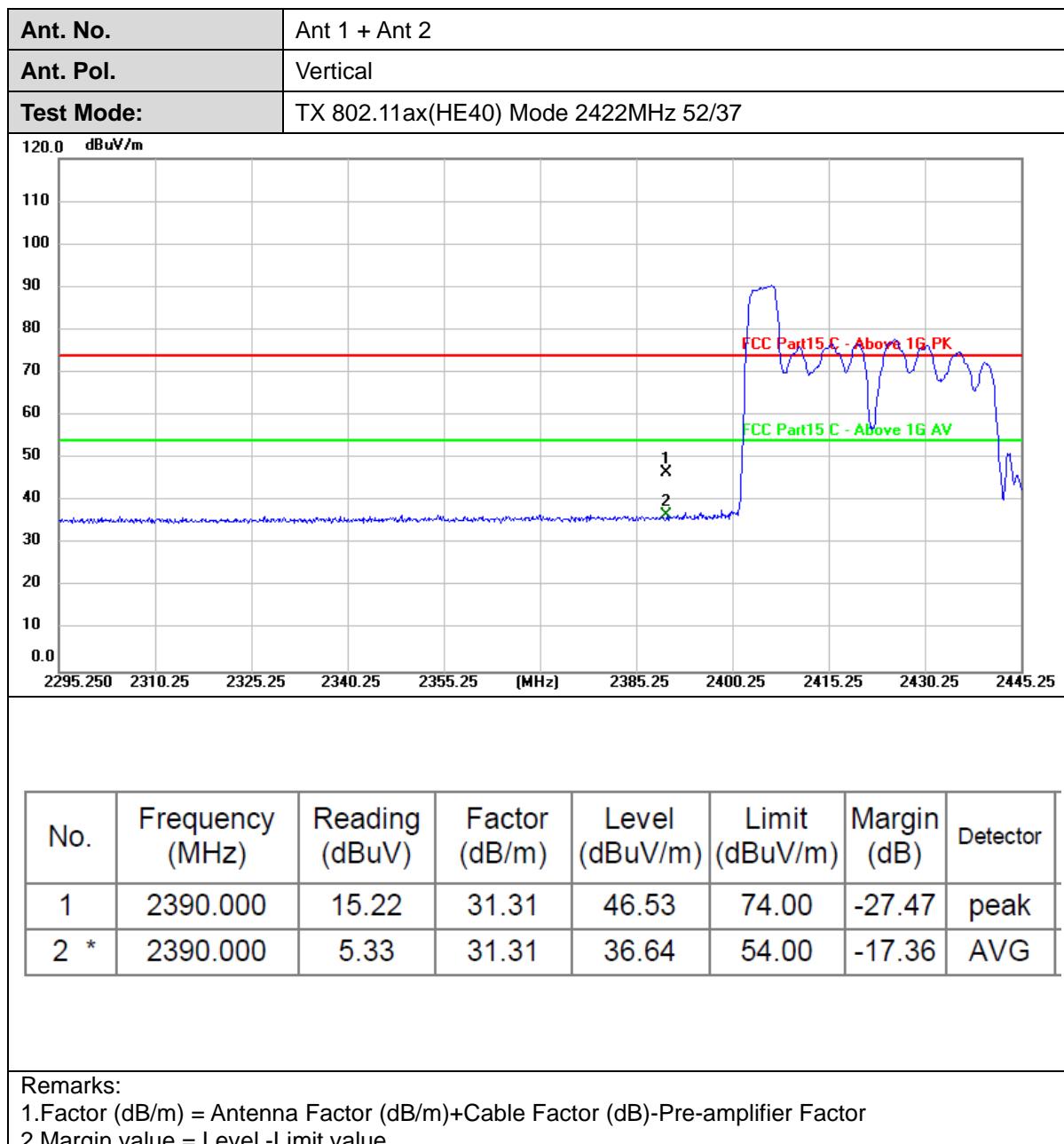


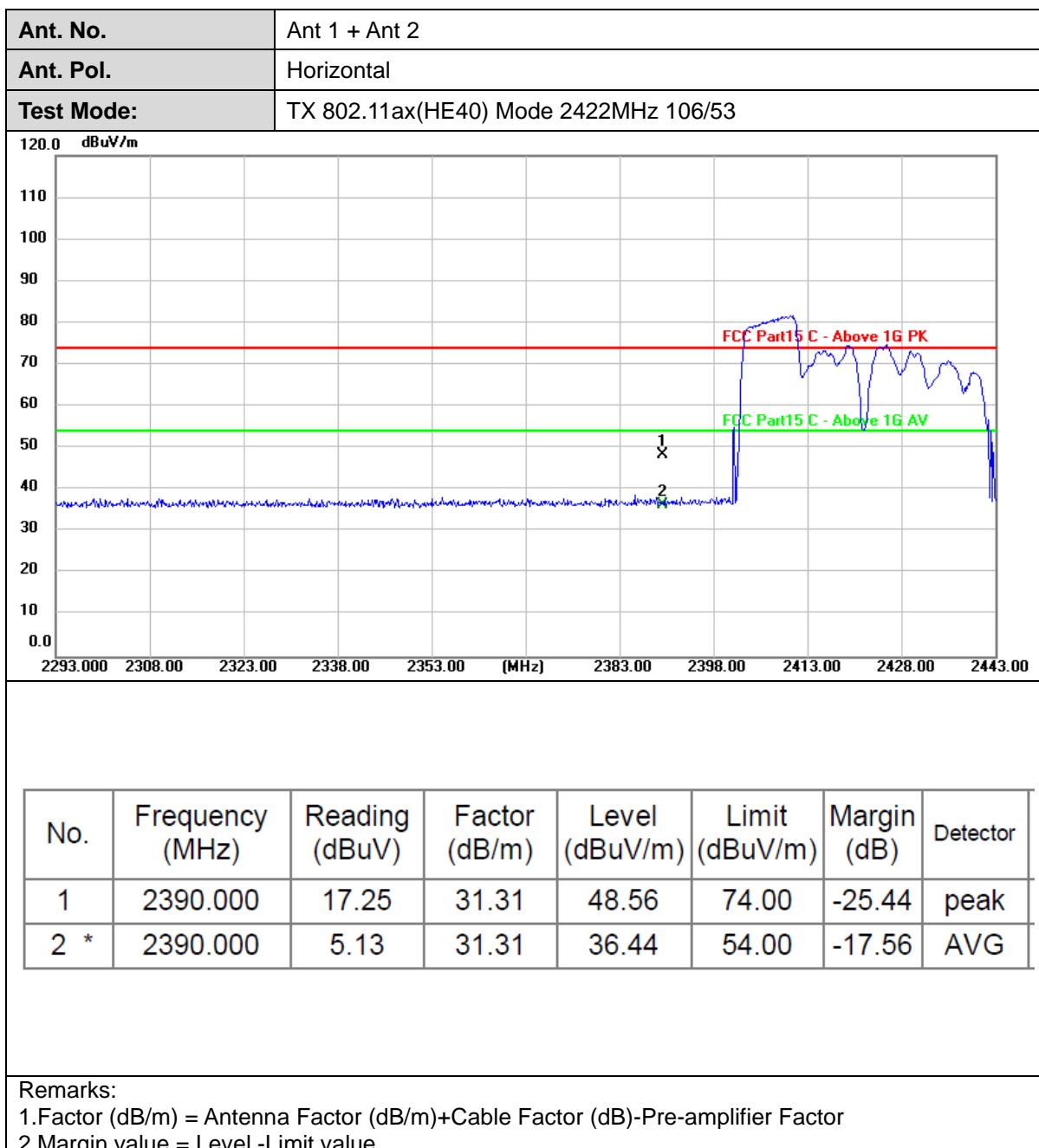


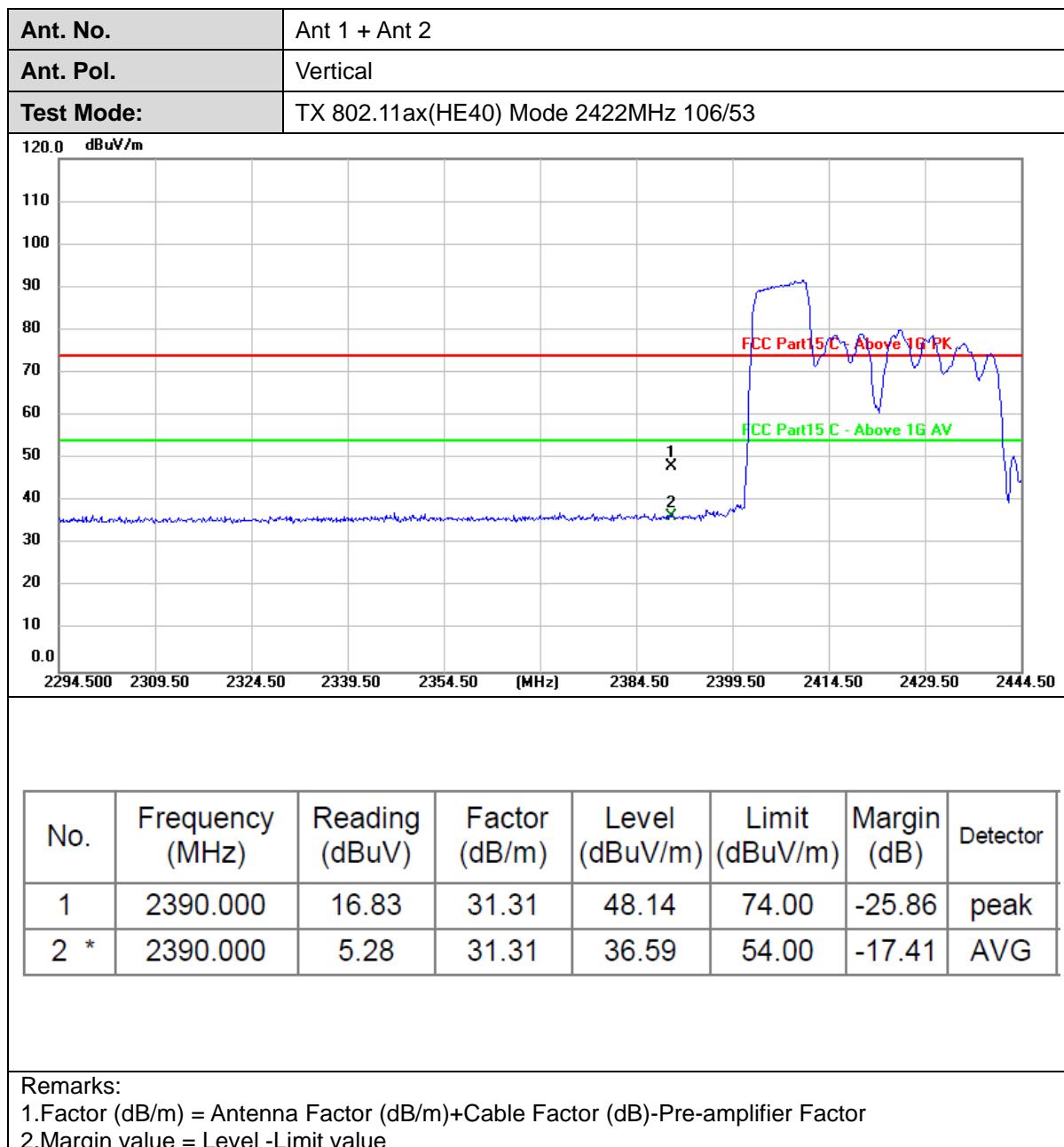


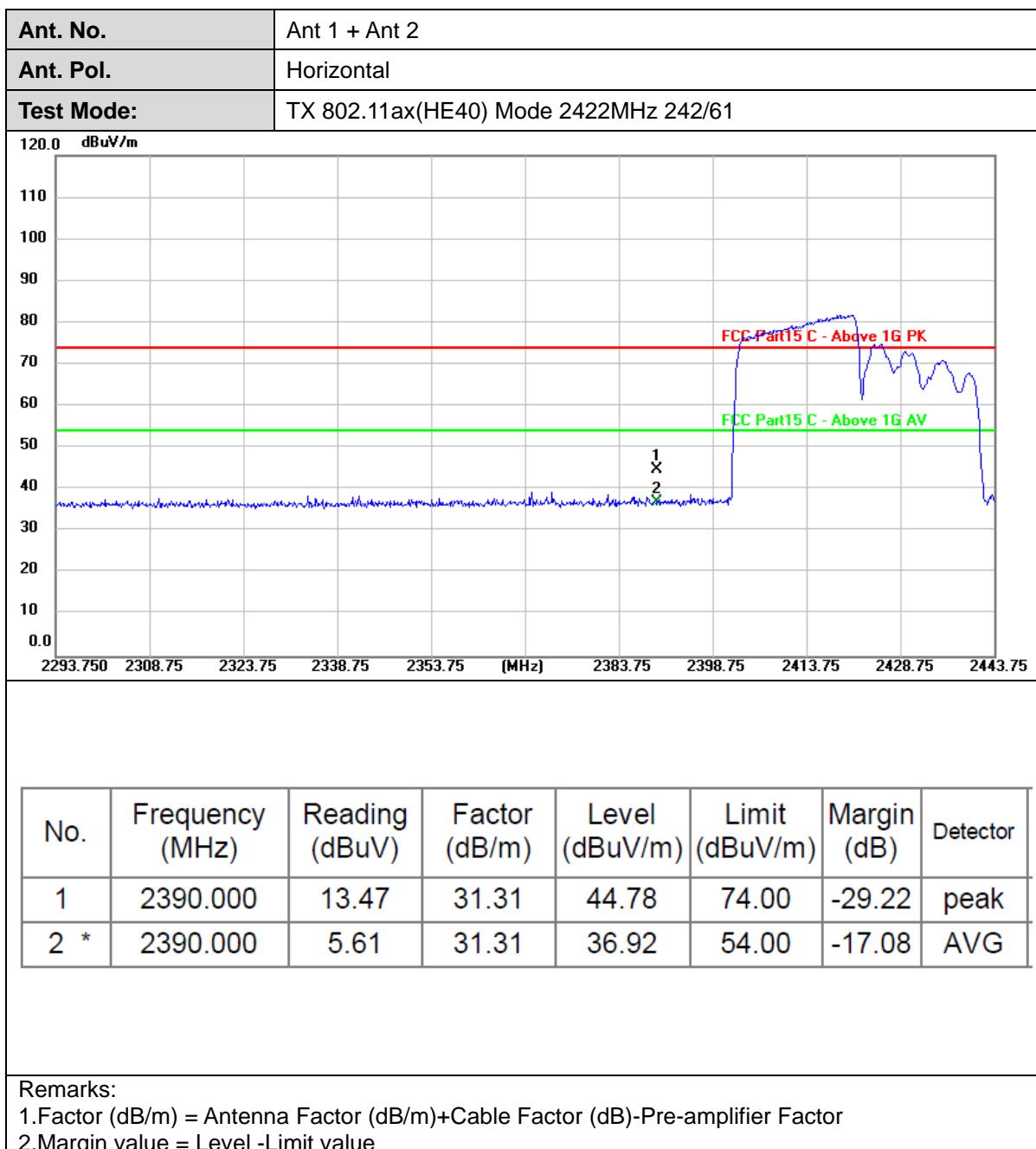


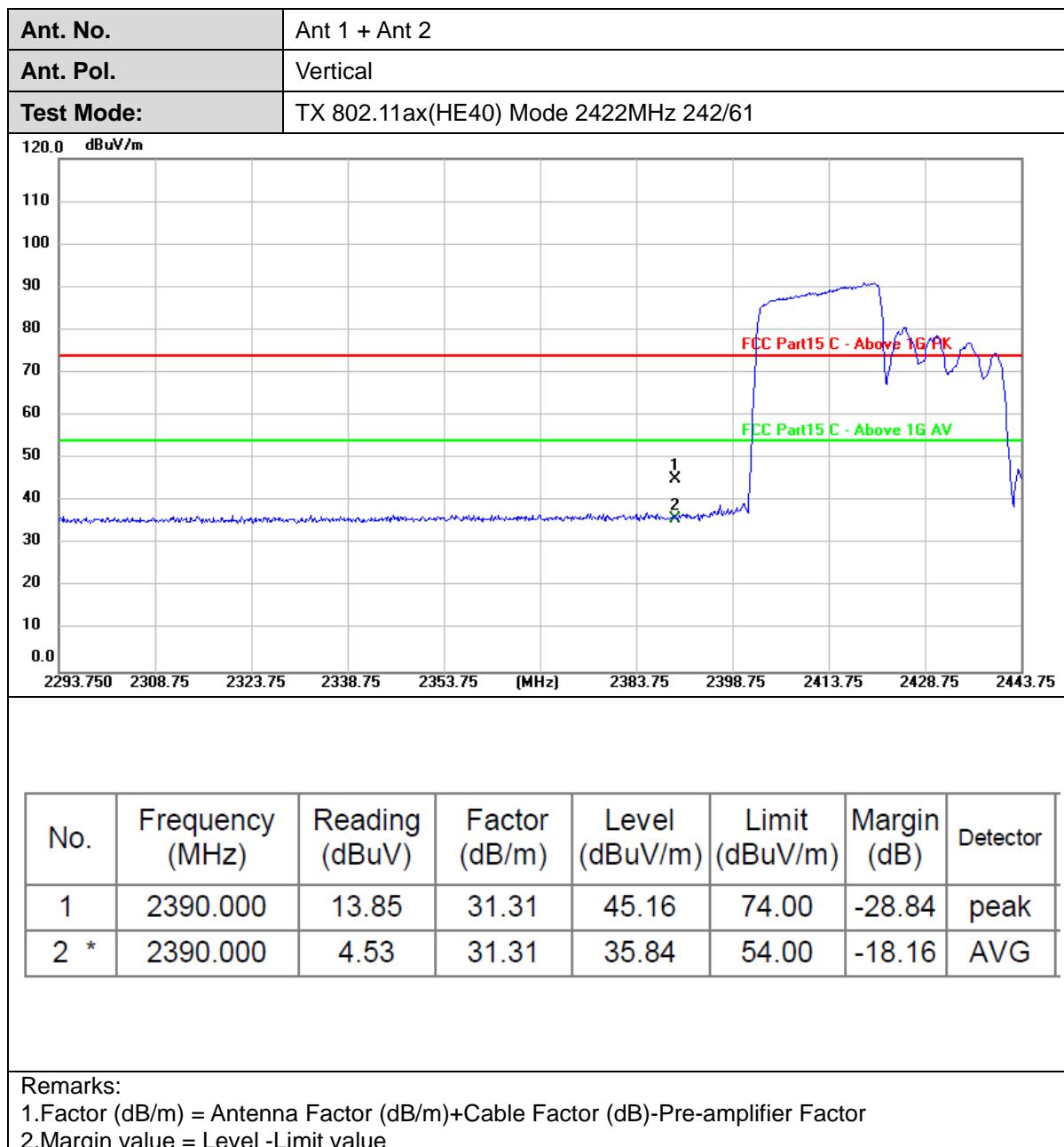


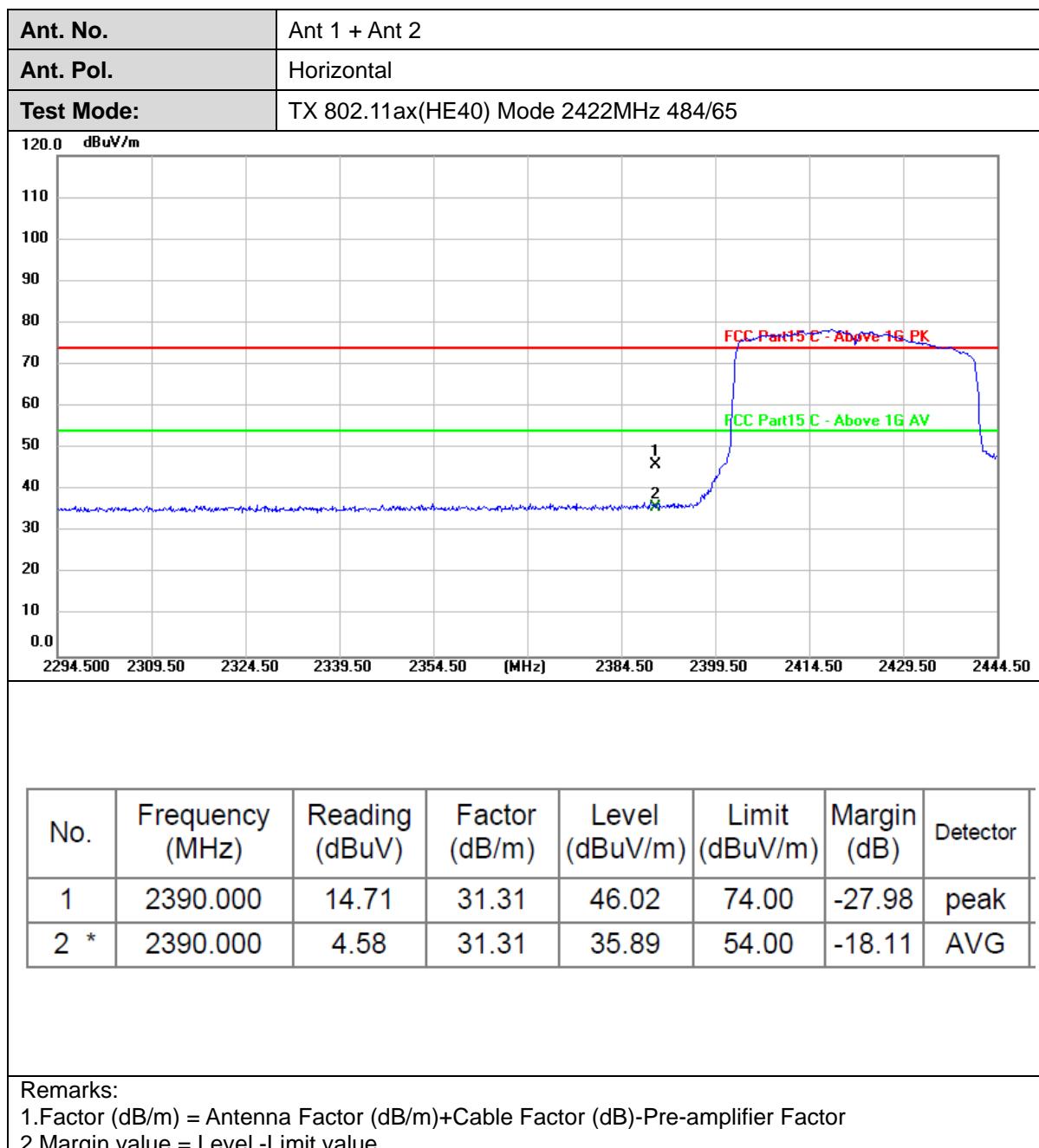


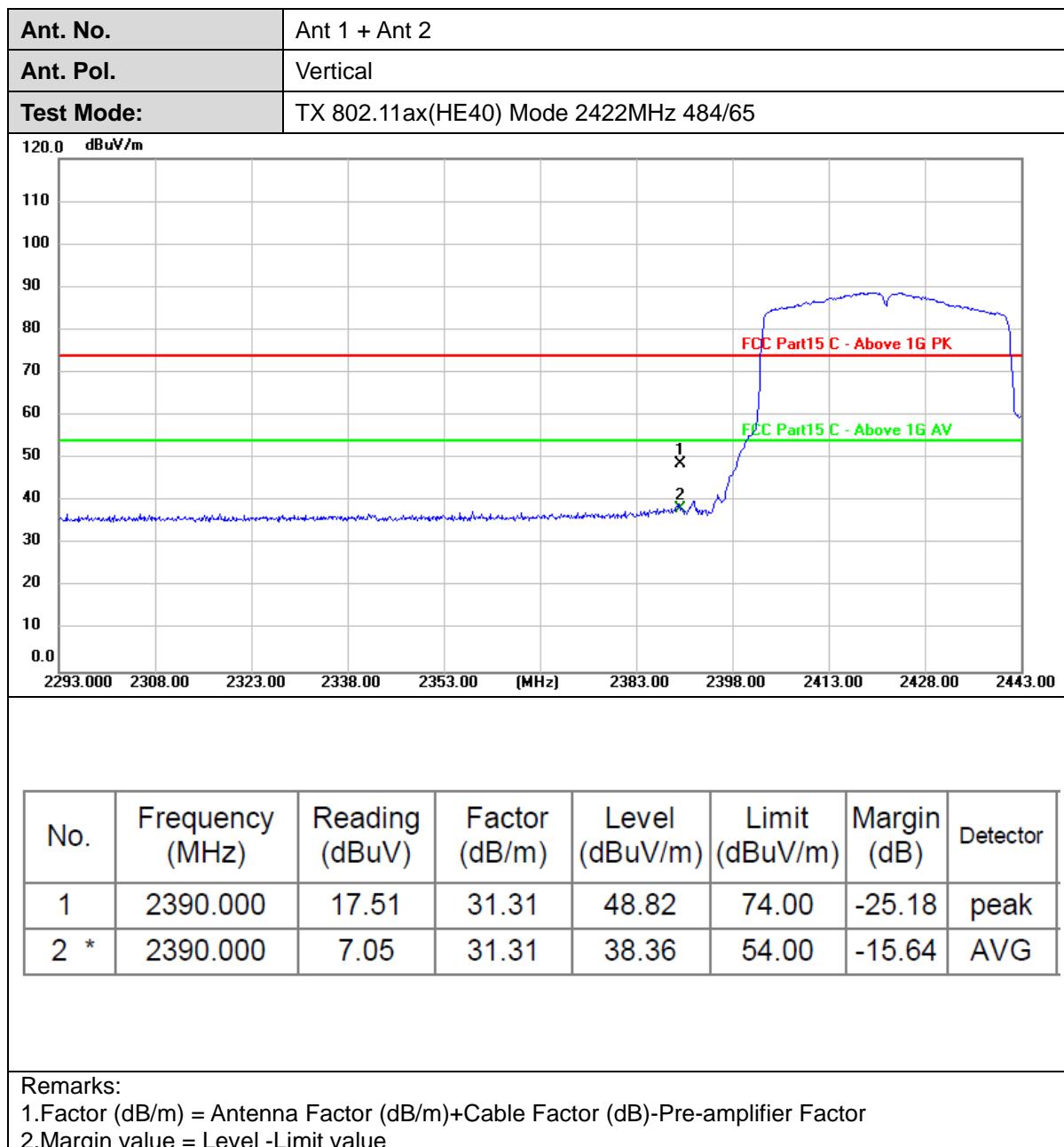


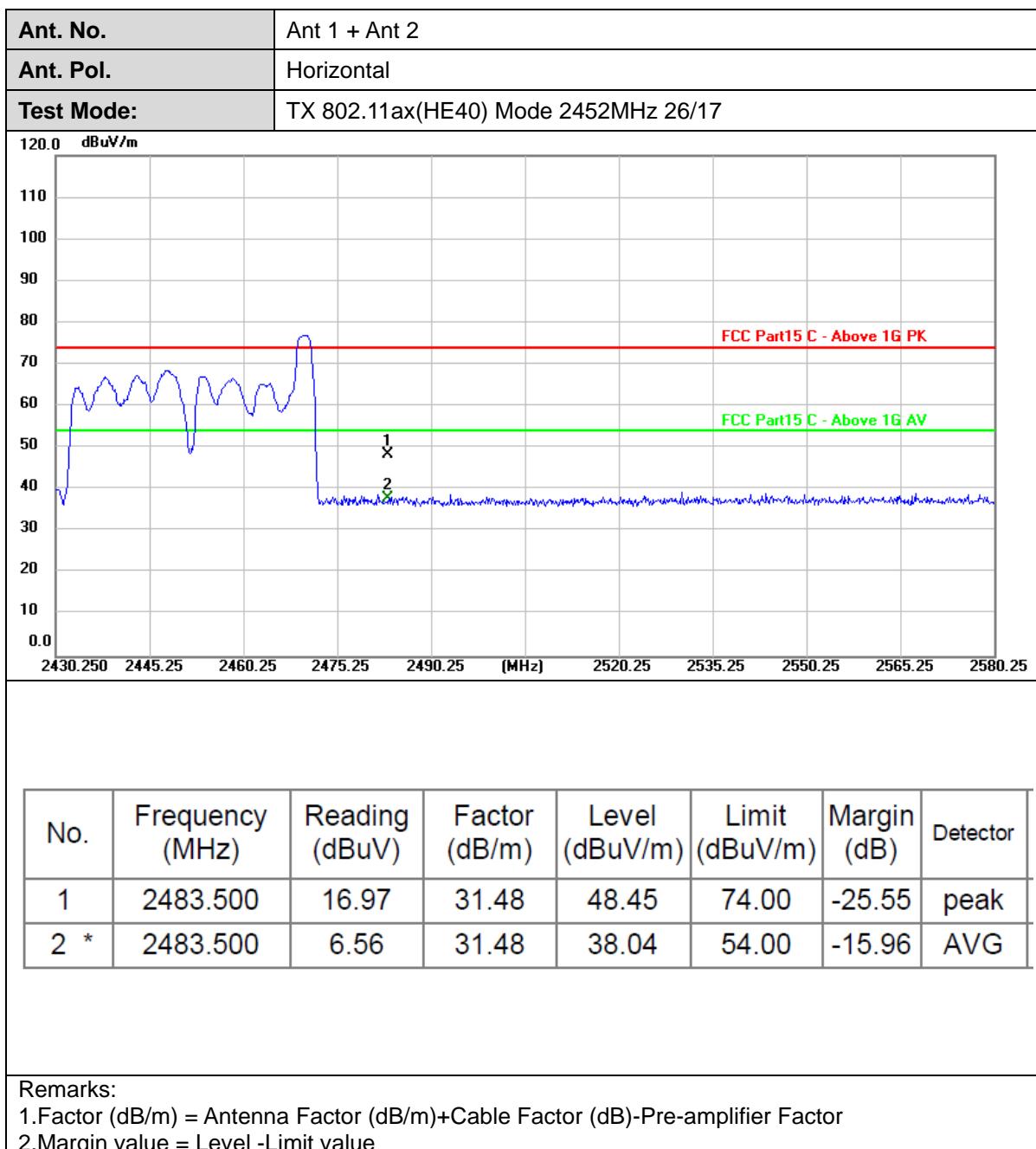


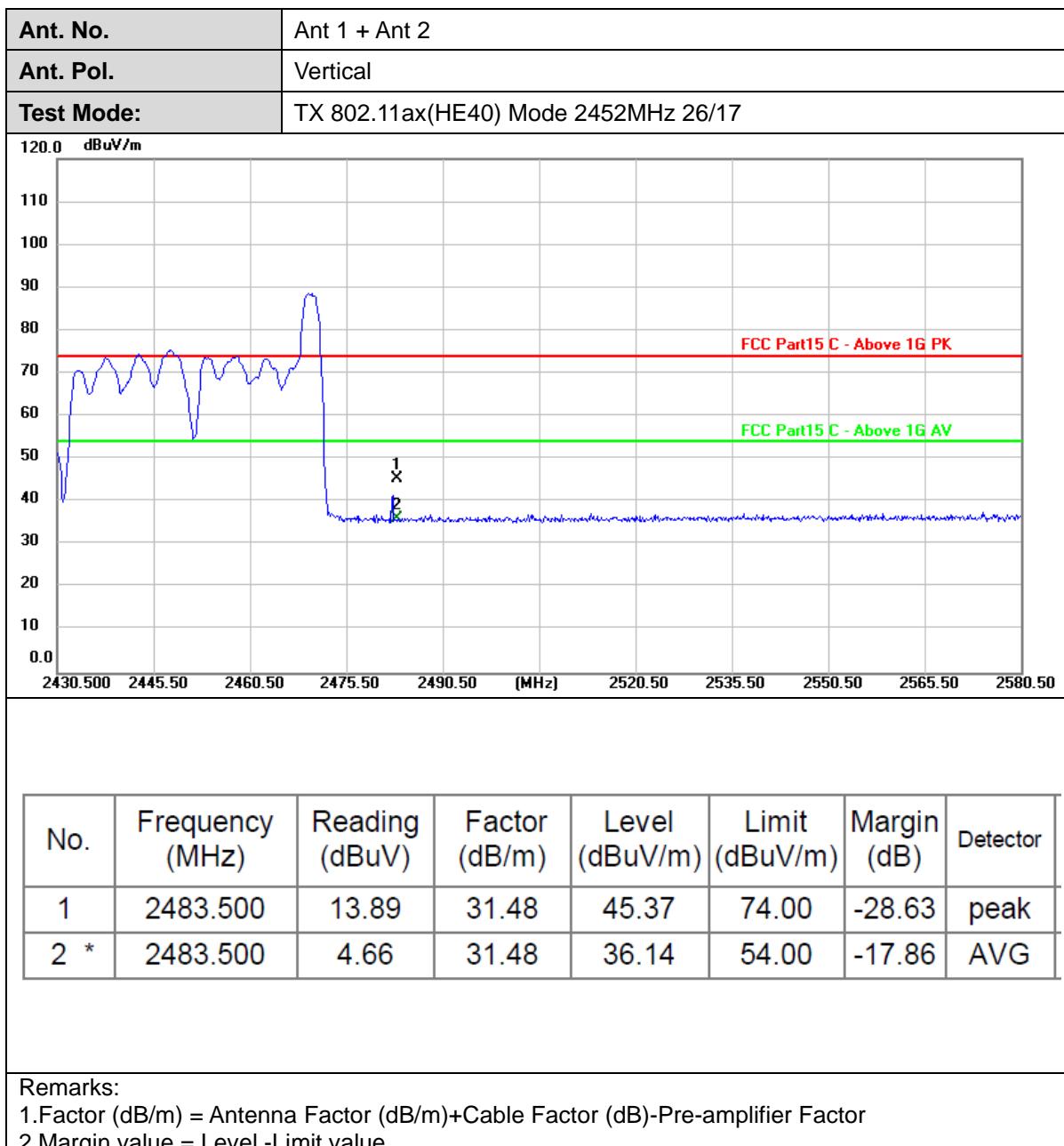


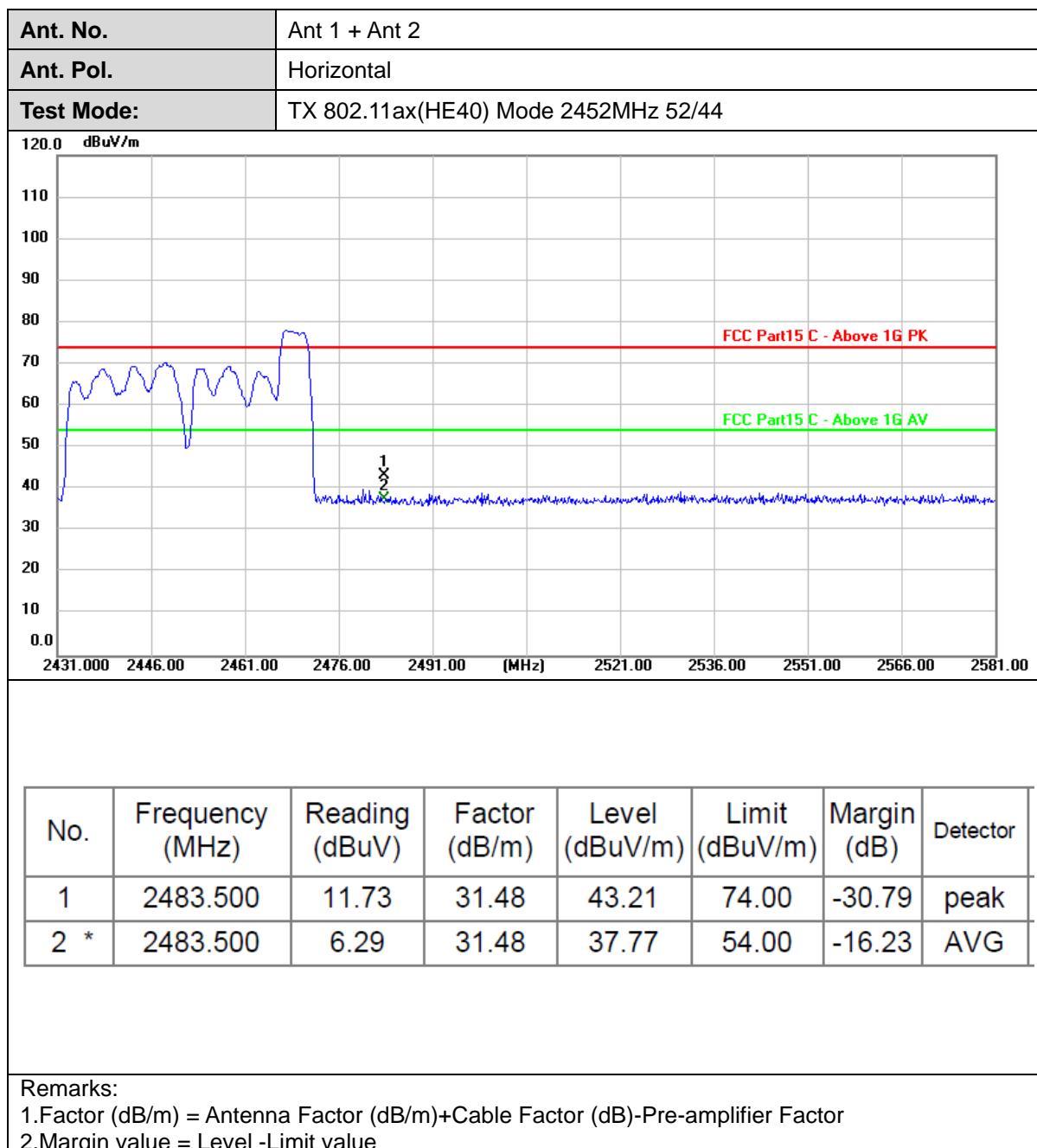


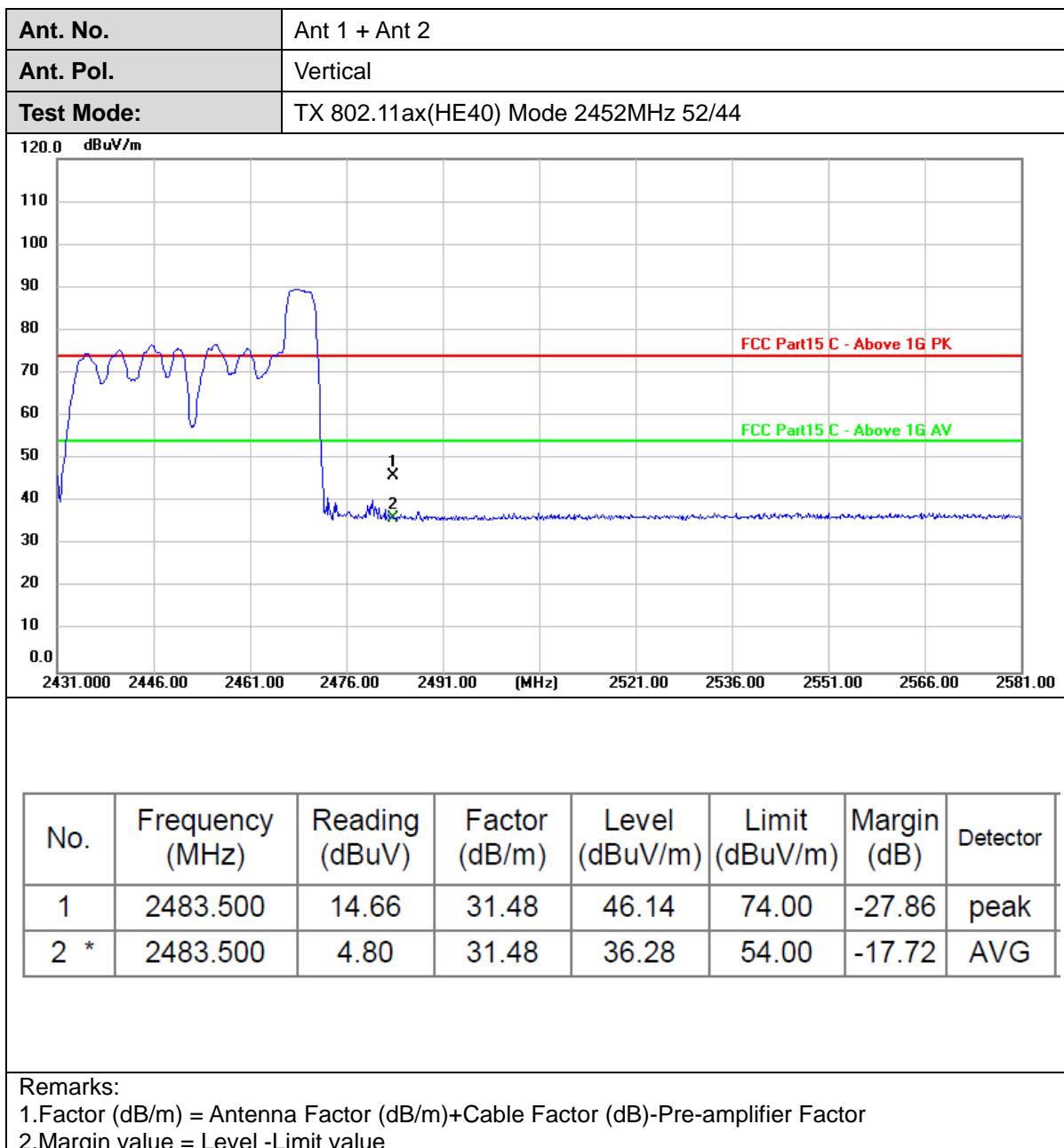


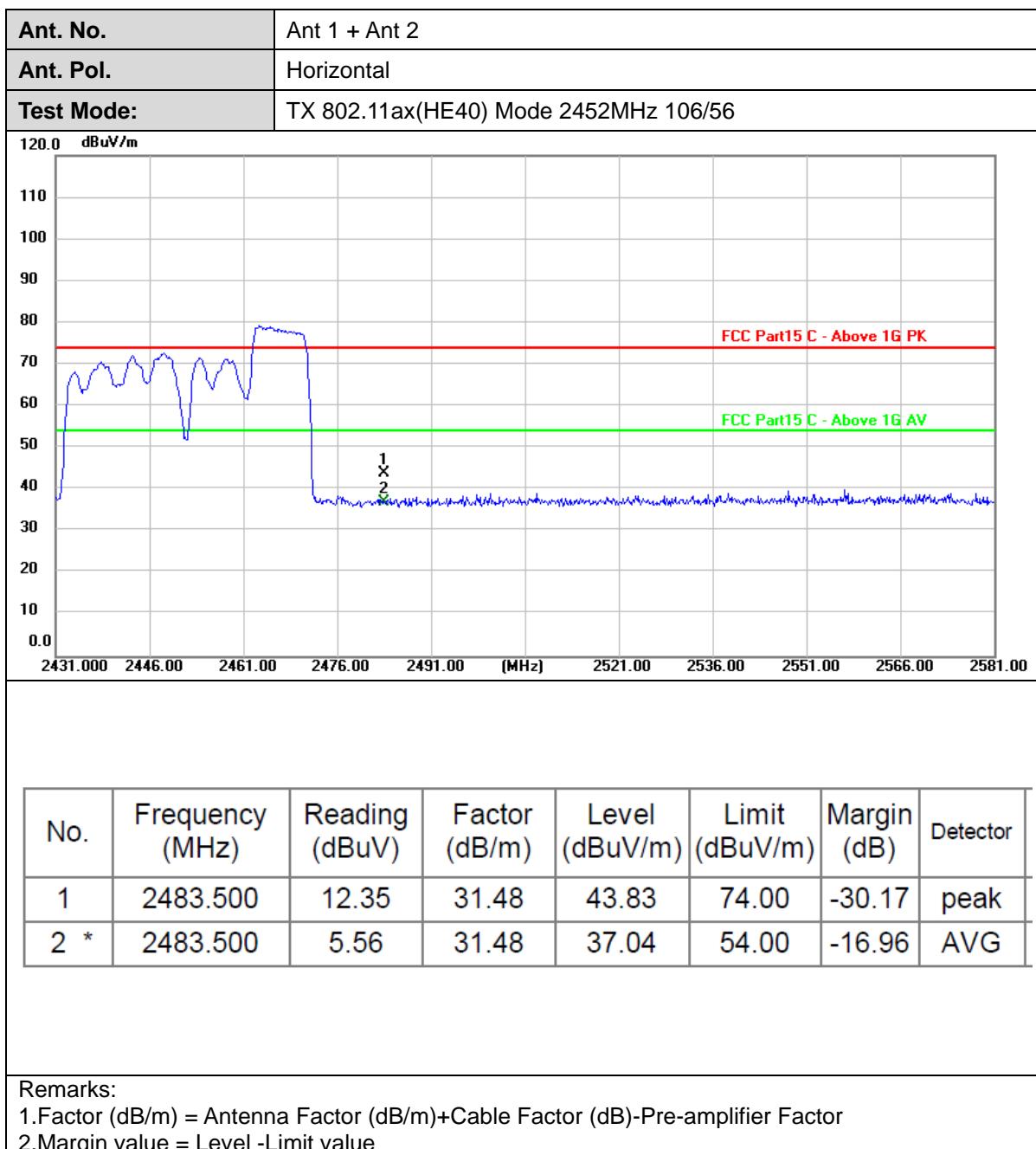


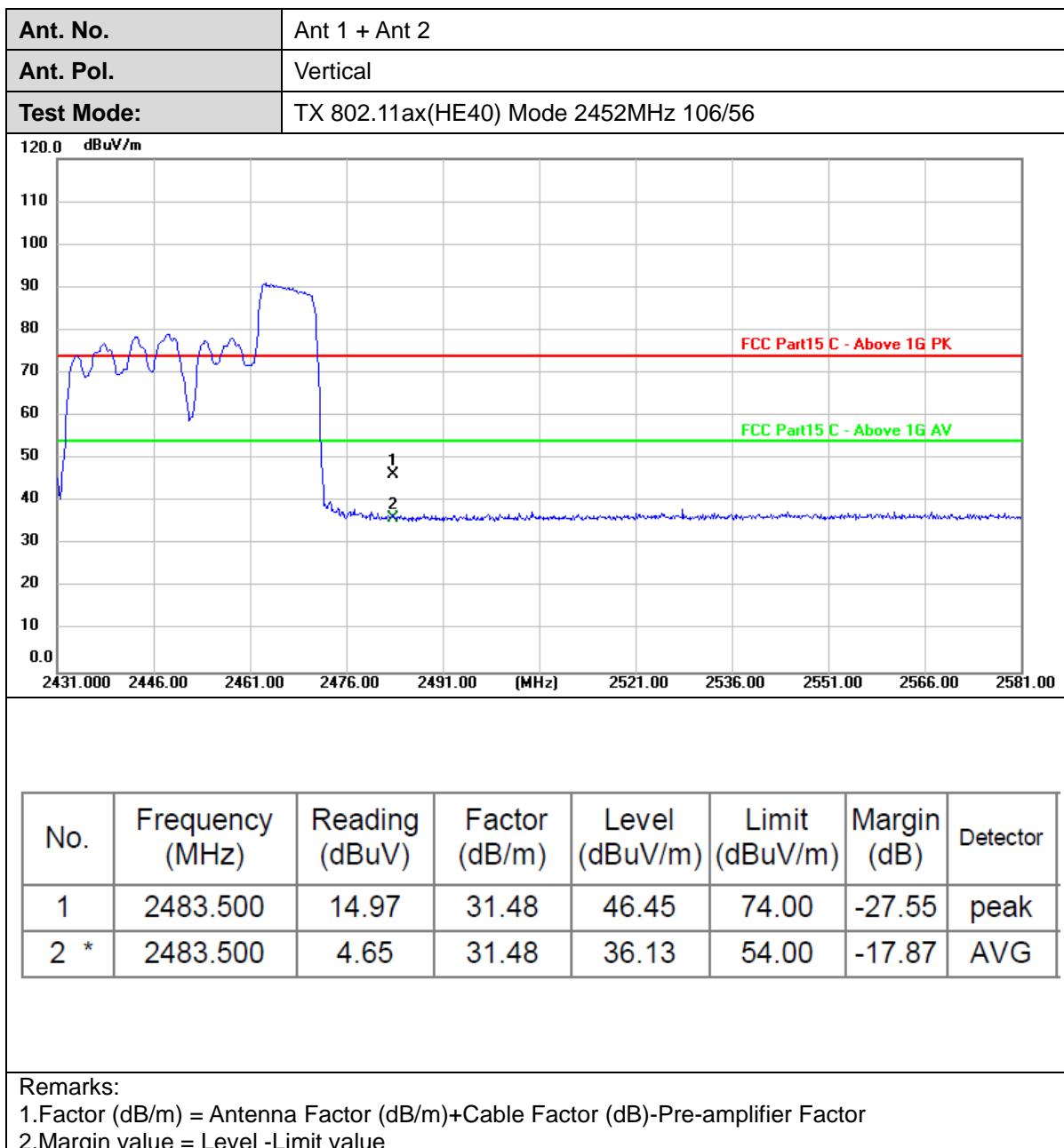


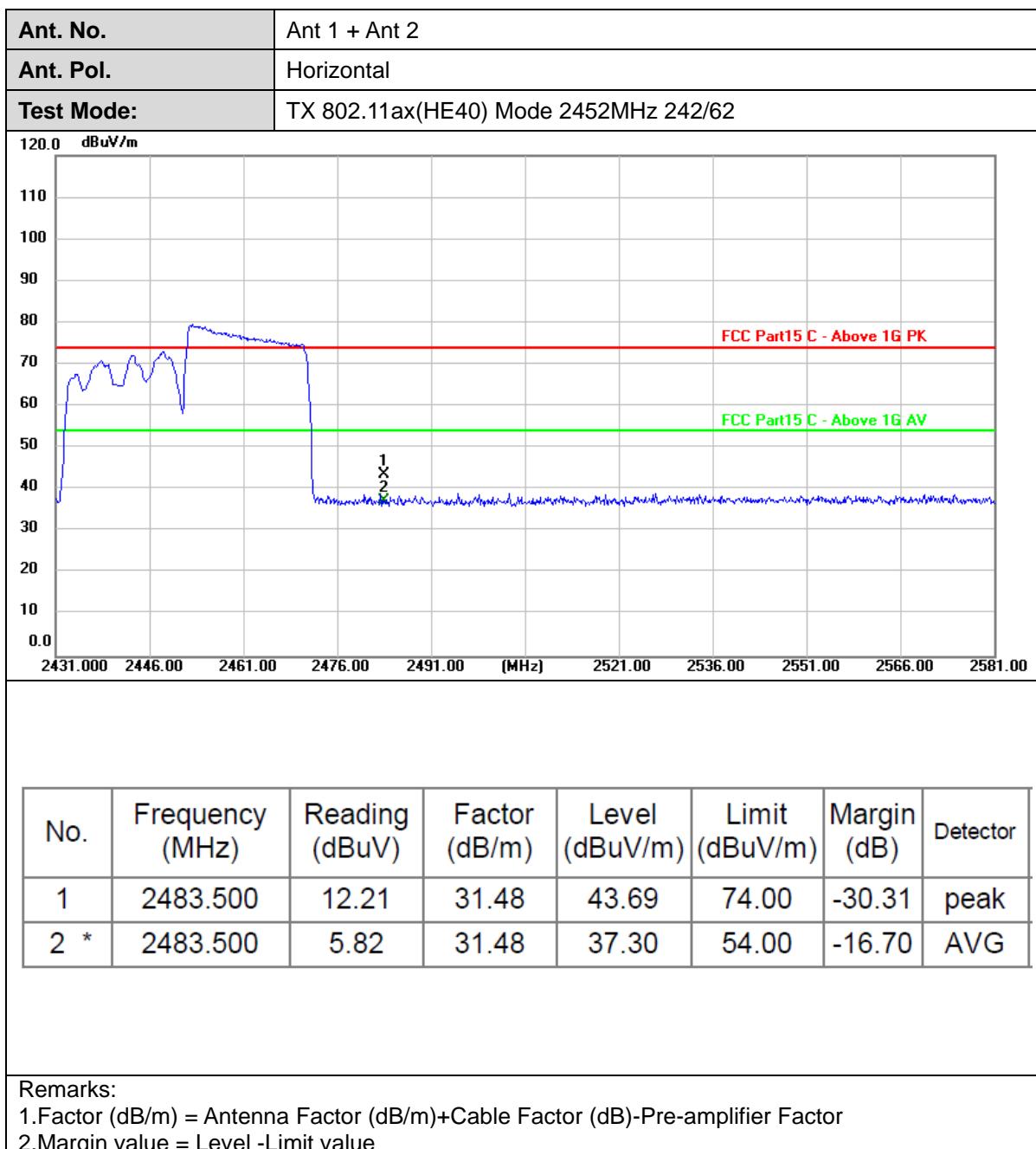


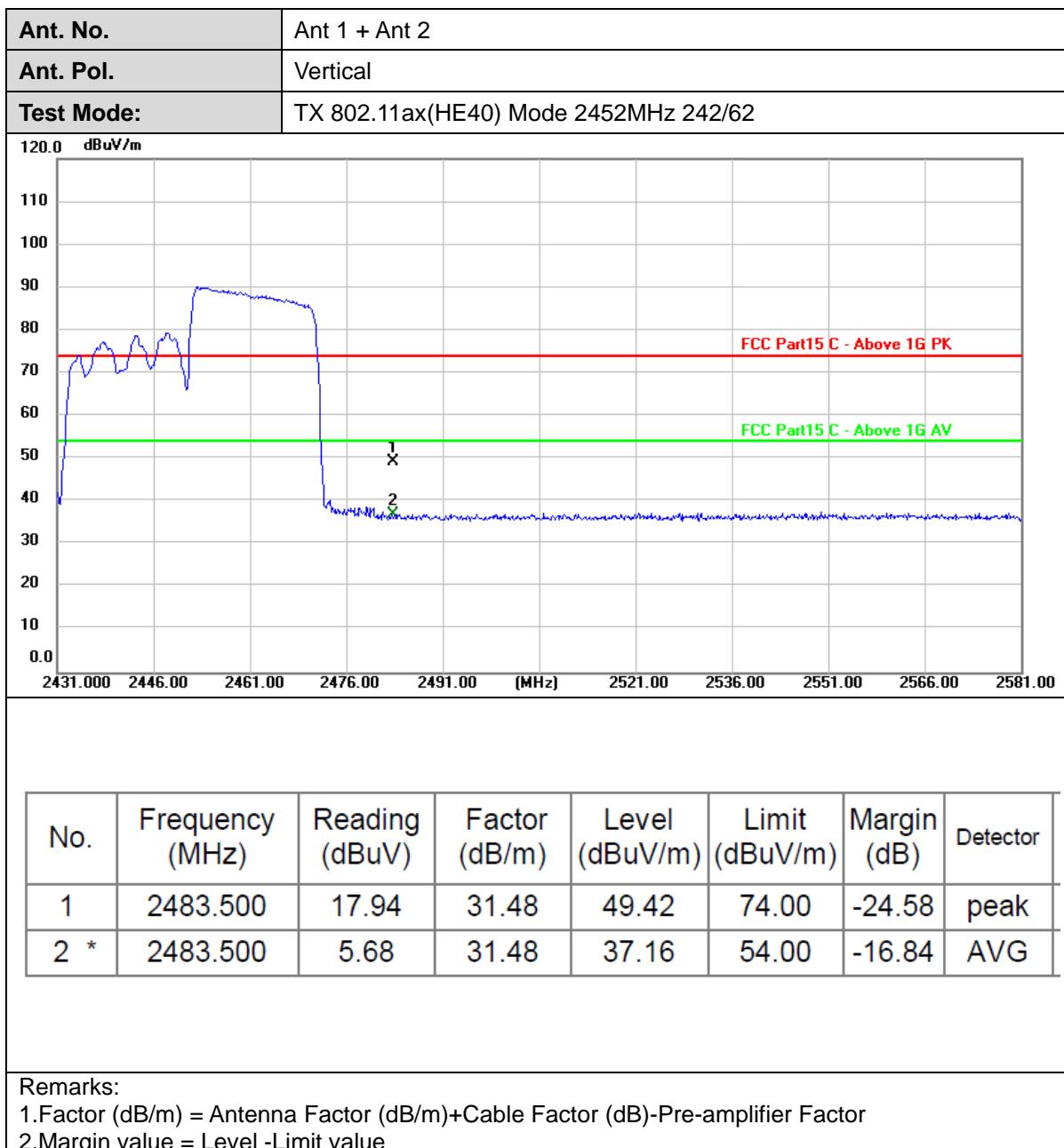


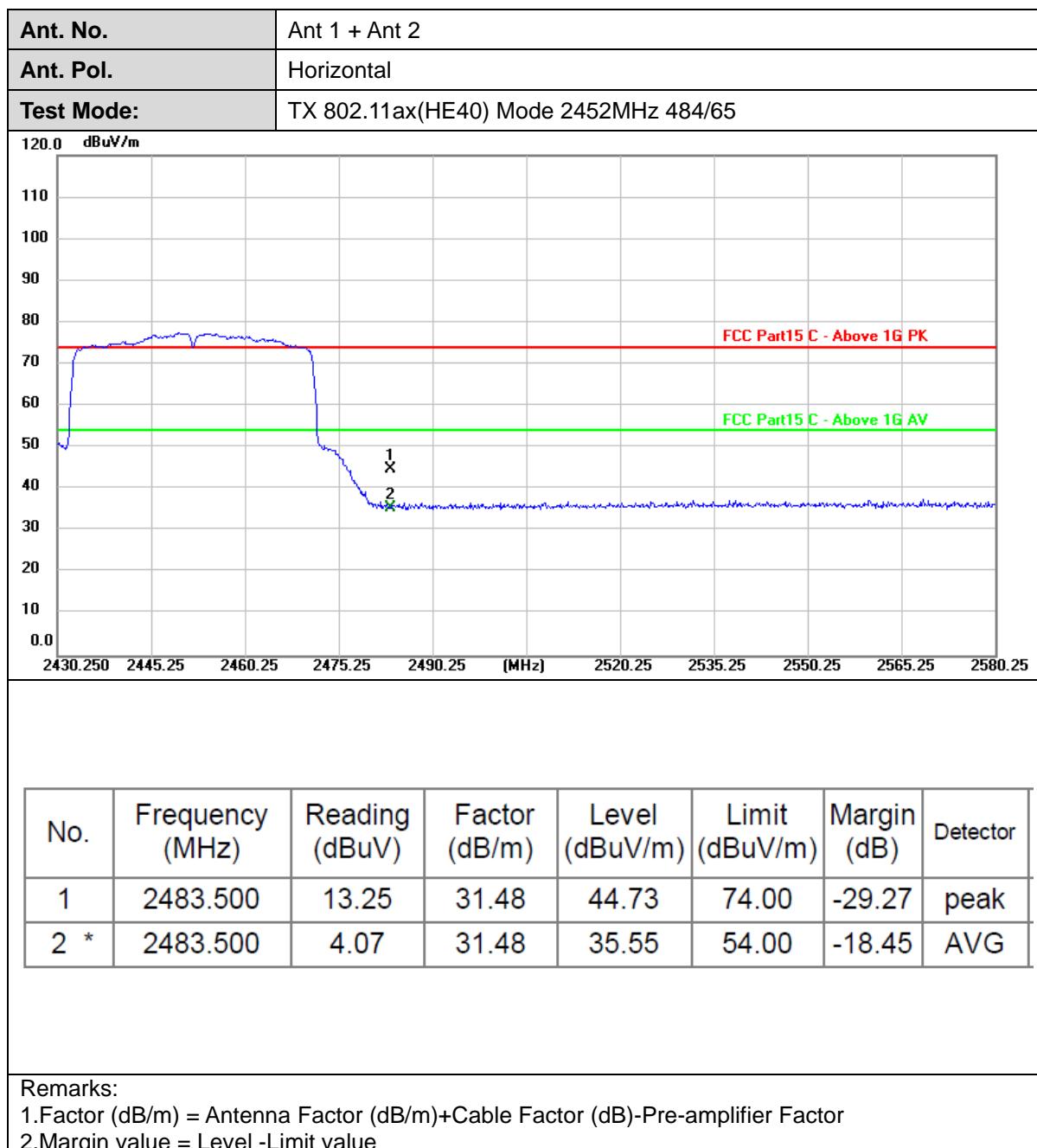


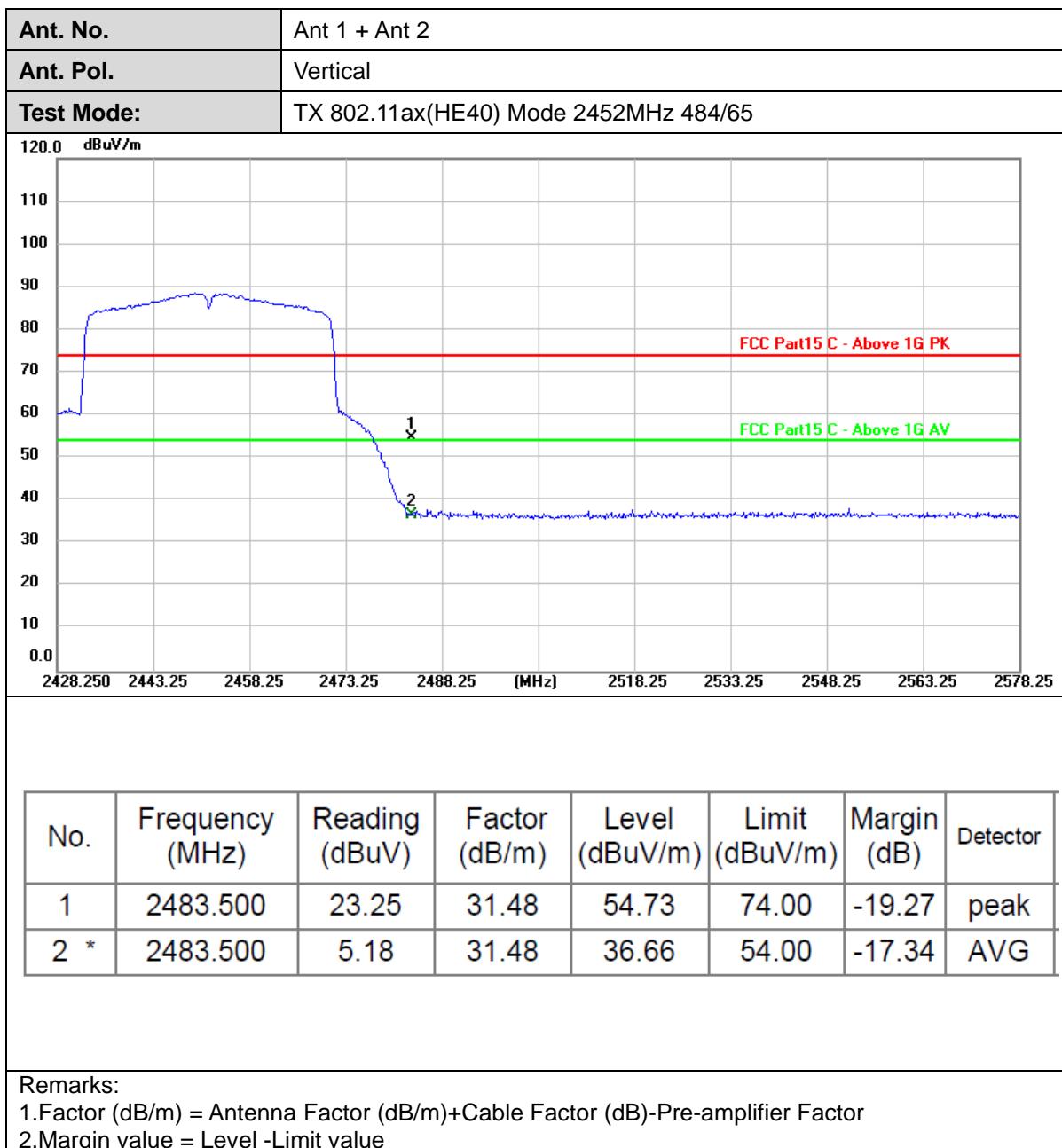














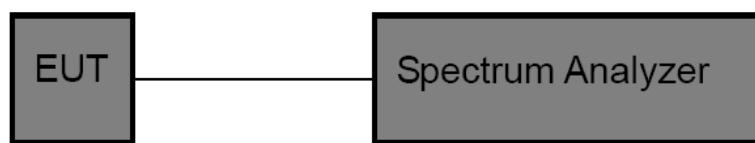
3.4. Band Edge and Spurious Emissions (Conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Test Configuration



Test Procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
RBW = 100 kHz, VBW \geq RBW, scan up through 10th harmonic.
Sweep = auto, Detector function = peak, Trace = max hold.
4. Measure and record the results in the test report.

Test Mode

Please refer to the clause 2.4.

**Test Result****(1) Band Edge Conducted Test & Conducted Spurious Emissions Test**

| Mode | Channel | Ant. | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Result |
|-----------------|---------|------|------------------------------|--------------------------|-------------|--------|
| IEEE 802.11b | 1 | 0 | 2400.00 | -53.066 | -35.78 | PASS |
| | | | 2393.98 | -50.367 | -35.78 | PASS |
| | | | 4823.70 | -42.152 | -35.78 | PASS |
| | | 1 | 2400.00 | -50.446 | -35.76 | PASS |
| | | | 4823.74 | -41.859 | -35.76 | PASS |
| | | | 4874.30 | -40.107 | -34.93 | PASS |
| | 6 | 0 | 4874.30 | -39.695 | -35.21 | PASS |
| | | 1 | 2483.50 | -54.469 | -33.07 | PASS |
| | | 0 | 4924.24 | -35.997 | -33.07 | PASS |
| | | | 2483.50 | -53.705 | -33.45 | PASS |
| | | | 4924.24 | -35.819 | -33.45 | PASS |
| | | 1 | 2400.00 | -46.584 | -31.93 | PASS |
| IEEE 802.11g | 1 | 0 | 2398.92 | -45.426 | -31.93 | PASS |
| | | | 4823.70 | -42.297 | -31.93 | PASS |
| | | | 2400.00 | -45.567 | -31.77 | PASS |
| | | 1 | 2396.97 | -45.368 | -31.77 | PASS |
| | | | 4823.70 | -40.724 | -31.77 | PASS |
| | | | 4873.68 | -39.784 | -31.33 | PASS |
| | 6 | 0 | 4873.05 | -37.425 | -31.59 | PASS |
| | | 1 | 2483.50 | -50.192 | -29.49 | PASS |
| | | 0 | 4922.99 | -35.314 | -29.49 | PASS |
| | | | 2483.50 | -48.929 | -29.7 | PASS |
| | | | 4924.87 | -36.944 | -29.7 | PASS |
| | | 1 | 2400.00 | -46.947 | -32.45 | PASS |
| IEEE 802.11n_20 | 1 | 0 | 2398.79 | -46.671 | -32.45 | PASS |
| | | | 23591.0 | -42.971 | -32.45 | PASS |
| | | | 2400.00 | -46.152 | -32.42 | PASS |
| | | 1 | 2396.97 | -45.486 | -32.42 | PASS |
| | | | 4819.40 | -42.192 | -32.42 | PASS |
| | | | 4876.17 | -39.424 | -31.4 | PASS |
| | 6 | 0 | 4873.05 | -38.357 | -31.09 | PASS |
| | | 0 | 2483.50 | -39.706 | -30.03 | PASS |
| | | | 4921.75 | -36.447 | -30.03 | PASS |
| | | | 2483.50 | -39.881 | -29.88 | PASS |
| | | 1 | 4921.75 | -34.269 | -29.88 | PASS |
| | | 1 | 2400.00 | -45.401 | -31.88 | PASS |
| IEEE 802.11n_40 | 3 | 0 | 2395.80 | -36.447 | -31.88 | PASS |
| | | | 4845.60 | -38.611 | -31.88 | PASS |
| | | | 2400.00 | -40.721 | -31.51 | PASS |
| | | 1 | 4845.58 | -38.184 | -31.51 | PASS |
| | | | 4875.55 | -36.420 | -31.75 | PASS |
| | | | 4874.30 | -40.263 | -31.63 | PASS |
| | 9 | 0 | 2483.50 | -43.222 | -31.75 | PASS |
| | | | 4903.02 | -36.597 | -31.75 | PASS |
| | | | 2483.50 | -52.900 | -31.74 | PASS |
| | | 1 | 4897.40 | -40.745 | -31.74 | PASS |
| | | | 2400.00 | -45.401 | -31.88 | PASS |
| | | | 4875.55 | -36.420 | -31.75 | PASS |



| Mode | Channel | RU & Index | Ant. | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Result |
|------------------|---------|------------|------|------------------------------|--------------------------|-------------|--------|
| IEEE 802.11ax_20 | 1 | 26RU0 | 0 | 2400.00 | -52.907 | -35.72 | PASS |
| | | | | 2349.26 | -51.424 | -35.72 | PASS |
| | | | | 24917.0 | -43.222 | -35.72 | PASS |
| | | | 1 | 2400.00 | -52.217 | -35.76 | PASS |
| | | | | 2379.68 | -51.204 | -35.76 | PASS |
| | | | | 24860.2 | -42.881 | -35.76 | PASS |
| | | 52RU37 | 0 | 2400.00 | -51.590 | -35.99 | PASS |
| | | | | 2340.94 | -51.333 | -35.99 | PASS |
| | | | | 24907.0 | -43.277 | -35.99 | PASS |
| | | | 1 | 2400.00 | -52.168 | -34.56 | PASS |
| | | | | 2314.16 | -51.024 | -34.56 | PASS |
| | | | | 24849.6 | -43.367 | -34.56 | PASS |
| | | 106RU53 | 0 | 2400.00 | -44.573 | -29.89 | PASS |
| | | | | 4813.75 | -36.841 | -29.89 | PASS |
| | | | | 2400.00 | -42.313 | -29.04 | PASS |
| | | | 1 | 4824.98 | -37.483 | -29.04 | PASS |
| | | | | 2400.00 | -34.937 | -29.81 | PASS |
| | | | | 4820.61 | -40.057 | -29.81 | PASS |
| | | 242RU61 | 0 | 2400.00 | -47.570 | -30.45 | PASS |
| | | | | 2396.97 | -47.046 | -30.45 | PASS |
| | | | | 4820.60 | -41.510 | -30.45 | PASS |
| | | | 1 | 2400.00 | -36.903 | -30.15 | PASS |
| | | | | 4874.93 | -39.330 | -30.35 | PASS |
| | | | | 4877.42 | -39.330 | -30.35 | PASS |
| | 11 | 26RU8 | 0 | 2483.50 | -52.370 | -35.34 | PASS |
| | | | | 23575.4 | -43.064 | -35.34 | PASS |
| | | | 1 | 2483.50 | -53.765 | -34.59 | PASS |
| | | | | 24891.4 | -42.938 | -34.59 | PASS |
| | | 52RU40 | 0 | 2483.50 | -52.877 | -30.39 | PASS |
| | | | | 4922.99 | -41.704 | -30.39 | PASS |
| | | | 1 | 2483.50 | -53.160 | -28.98 | PASS |
| | | | | 4937.98 | -38.825 | -28.98 | PASS |
| | | 106RU54 | 0 | 2483.50 | -53.172 | -27.69 | PASS |
| | | | | 4925.49 | -37.053 | -27.69 | PASS |
| | | | 1 | 2483.50 | -52.125 | -28.32 | PASS |
| | | | | 4935.48 | -35.102 | -28.32 | PASS |
| | | 242RU61 | 0 | 2483.50 | -44.032 | -29.57 | PASS |
| | | | | 4925.49 | -36.891 | -29.57 | PASS |
| | | | 1 | 2483.50 | -51.815 | -30.13 | PASS |
| | | | | 4921.12 | -40.207 | -30.13 | PASS |
| IEEE 802.11ax_40 | 3 | 26RU0 | 0 | 2400.00 | -43.898 | -31.1 | PASS |
| | | | | 2398.01 | -38.901 | -31.1 | PASS |
| | | | | 23732.1 | -43.440 | -31.1 | PASS |
| | | | 1 | 2400.00 | -52.393 | -30.18 | PASS |
| | | | | 2396.97 | -50.331 | -30.18 | PASS |
| | | | | 4808.10 | -41.965 | -30.18 | PASS |
| | | 52RU37 | 0 | 2400.00 | -53.544 | -35.23 | PASS |
| | | | | 2359.92 | -51.480 | -35.23 | PASS |
| | | | | 23759.0 | -43.062 | -35.23 | PASS |
| | | | 1 | 2400.00 | -53.789 | -34.89 | PASS |
| | | | | 2397.62 | -51.550 | -34.89 | PASS |
| | | | | 23205.2 | -42.528 | -34.89 | PASS |
| | | 106RU53 | 0 | 2400.00 | -48.961 | -34.91 | PASS |
| | | | | 2396.45 | -43.867 | -34.91 | PASS |
| | | | | 23723.4 | -42.240 | -34.91 | PASS |
| | | | 1 | 2400.00 | -53.340 | -34.14 | PASS |
| | | | | 2395.67 | -49.012 | -34.14 | PASS |
| | | | | 24700.4 | -43.212 | -34.14 | PASS |
| | | 242RU61 | 0 | 2400.00 | -42.349 | -33.93 | PASS |
| | | | | 2395.54 | -41.503 | -33.93 | PASS |
| | | | 1 | 23768.3 | -42.859 | -33.93 | PASS |
| | | | | 2400.00 | -53.334 | -32.44 | PASS |

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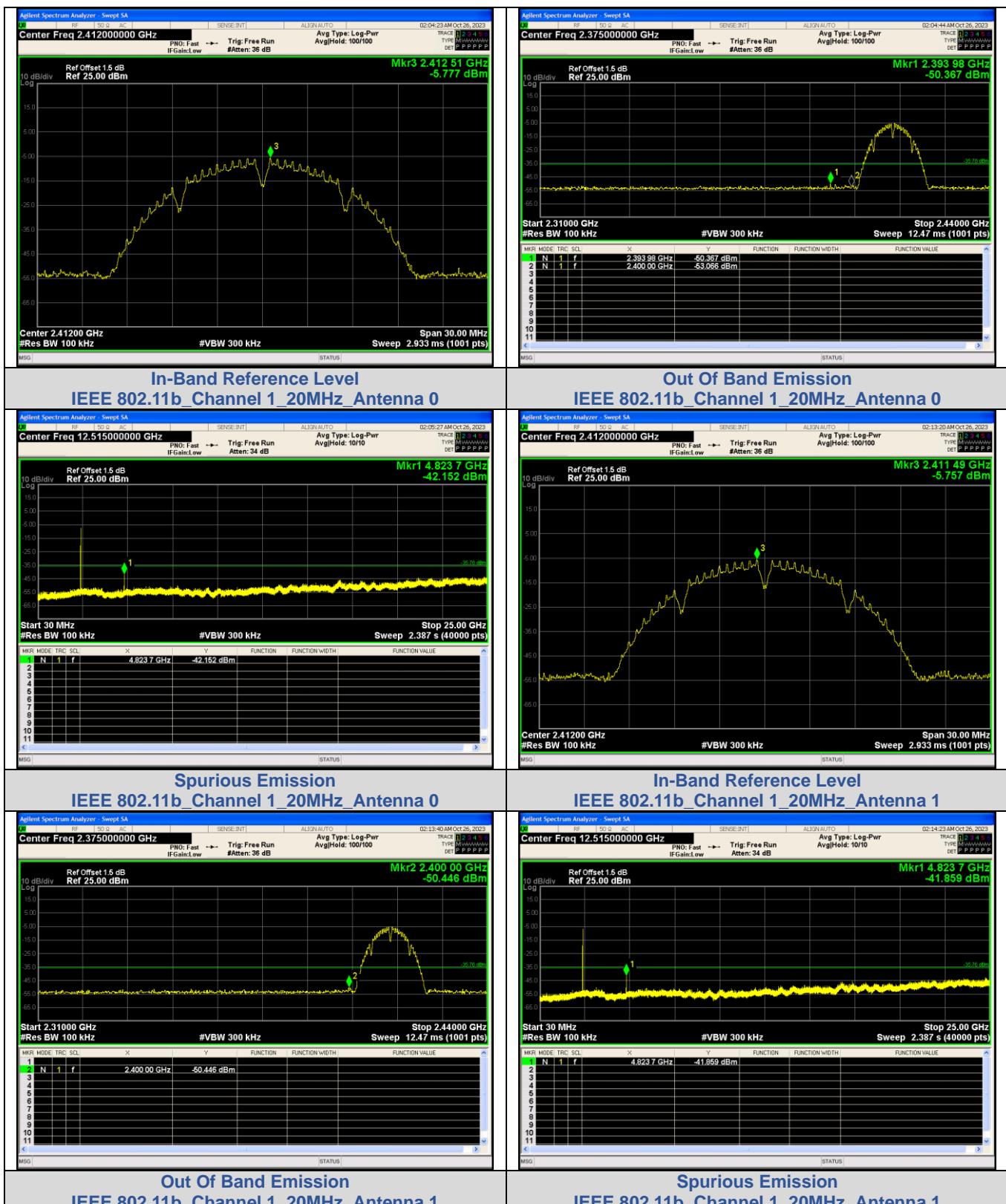
2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059Fax: (86)755-27521011 [Http://www.sz-ctc.org.cn](http://www.sz-ctc.org.cn)
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| | | | | | | | |
|---|---------|---------|---|---------|---------|--------|------|
| | | | | 2395.80 | -49.895 | -32.44 | PASS |
| | | | | 21869.9 | -42.717 | -32.44 | PASS |
| 6 | 484RU65 | 0 | | 2400.00 | -44.359 | -32.96 | PASS |
| | | | | 2395.02 | -42.256 | -32.96 | PASS |
| | | | | 4845.60 | -40.979 | -32.96 | PASS |
| | | | 1 | 2400.00 | -41.231 | -32.96 | PASS |
| | | | | 4842.46 | -40.118 | -32.96 | PASS |
| | | | 0 | 4886.16 | -41.458 | -33.04 | PASS |
| 9 | 484RU65 | 1 | | 4872.43 | -38.391 | -33.0 | PASS |
| | | | 0 | 2483.50 | -54.313 | -34.02 | PASS |
| | | 26RU17 | | 24855.2 | -43.017 | -34.02 | PASS |
| | | | 1 | 2483.50 | -53.157 | -35.03 | PASS |
| | | | | 22817.6 | -43.283 | -35.03 | PASS |
| | | 52RU44 | 0 | 2483.50 | -53.281 | -35.14 | PASS |
| | | | | 24873.3 | -42.876 | -35.14 | PASS |
| | | | 1 | 2483.50 | -53.800 | -33.74 | PASS |
| | | | | 23614.1 | -43.167 | -33.74 | PASS |
| | | 106RU56 | 0 | 2483.50 | -50.962 | -34.2 | PASS |
| | | | | 23737.7 | -43.622 | -34.2 | PASS |
| | | | 1 | 2483.50 | -51.707 | -32.64 | PASS |
| | | | | 24879.5 | -43.431 | -32.64 | PASS |
| | | 242RU62 | 0 | 2483.50 | -49.046 | -32.9 | PASS |
| | | | | 24790.9 | -42.160 | -32.9 | PASS |
| | | | 1 | 2483.50 | -54.088 | -33.53 | PASS |
| | | | | 24812.1 | -42.636 | -33.53 | PASS |
| | | 484RU65 | 0 | 2483.50 | -45.512 | -33.18 | PASS |
| | | | | 4903.02 | -37.933 | -33.18 | PASS |
| | | | 1 | 2483.50 | -53.331 | -33.2 | PASS |
| | | | | 4903.02 | -38.467 | -33.2 | PASS |



Test plot as follows:



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