

TEST REPORT

Report No.: CTC2026447104
 FCC ID.....: 2BX6M-VAL11
 IC: 36206-VAL11
 Applicant: Bvio Technology Limited
 Address.....: 2201B, International Culture Building, No. 3039 Shennan Middle Road, Funan Community, Futian Street, Futian District, Shenzhen China
 Manufacturer.....: Same as the applicant
 Address.....: Same as the applicant
 Product Name: Violoop X
 Trade Mark: /
 Model/Type reference.....: VAL11
 Listed Model(s).....: /
 Standard: FCC CFR Title 47 Part 15 Subpart E Section 15.407 RSS-247 Issue 4
 Test Report Form No: CTC-TR-062_A5
 Master TRF.....: Dated 2026-06-01
 Date of receipt of test sample.....: Sept. 2, 2026
 Date of testing.....: Sept. 2, 2026 ~ Sept. 22, 2026
 Date of issue.....: Sept. 24, 2026
 Result.....: PASS

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Totti Zhao

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15.407](#): for 802.11a/n/ac/ax, the test procedure follows the FCC KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

[RSS-247 Issue 4](#): Digital Transmission Systems, Frequency Hopping Systems and Licence-Exempt Local Area Network Devices in 902-928 MHz, 2400-2483.5 MHz, 5150-5350 MHz, and 5470-5895 MHz bands

[RSS-Gen Issue 6](#): General Requirements for Compliance of Radio Apparatus.

[ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024](#): American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

[FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02](#)

[ETSI EN 301 893 V2.2.1:2024-11](#) – 5GHz WAS/RLAN; Harmonised Standard for access to radio spectrum

1.2. Report Version

Revised No.	Report No.	Date of issue	Description
01	CTC2026447104	Sept. 24, 2026	Original

1.3. Test Description

FCC Part 15 Subpart E (15.407) / RSS-247 Issue 4				
Test Item	Standard Section		Result	Note
	FCC	ISED		
Antenna Requirement	15.203	RSS-Gen 6.8	Pass	/
Conducted Emission	15.207	RSS-Gen 8.8	Pass	/
Band Edge Emissions	15.407(b)	RSS-247 7.3	Pass	/
26dB Bandwidth & 99% Bandwidth	15.407(a)	RSS-247 7.3.1.3	Pass	/
6dB Bandwidth (only for UNII-3)	15.407(e)	RSS-247 7.3.4.2	Pass	/
Peak Output Power	15.407(a)	RSS-247 7.3	Pass	/
Power Spectral Density	15.407(a)	RSS-247 7.3	Pass	/
Transmitter Radiated Spurious Emission	15.407(b) & 15.209	RSS-Gen 8.9 RSS-247 7.3	Pass	/
Frequency Stability	15.407(g)	RSS-Gen 6.11	Pass	/
Dynamic Frequency Selection (DFS)	15.407(h)	RSS-247 7.3.6	Pass	/
Automatically Discontinue Transmission	15.407(c)	RSS-247 7.3.7(a)	Pass	Note 3

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.
3. During no any information transmission, 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.

1.4. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: Room 107, 108, 207, 208 of Building A, Room 101 of Building B, No.7, Lanqing 1st Road, Luh Community, Guanhu Subdistrict, 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
Emission Bandwidth	$\pm 0.0196\%$	(1)
Maximum Conduct Output Power	$\pm 0.766\text{dB}$	(1)
Power Spectral Density	$\pm 1.22\text{dB}$	(1)
Band Edge Measurements	$\pm 1.328\text{dB}$	(1)
Unwanted Emissions Measurement	9kHz-1GHz: $\pm 0.746\text{dB}$ 1GHz-26GHz: $\pm 1.328\text{dB}$	(1)
Frequency Stability	$\pm 2.76\%$	(1)
Conducted Emissions 9kHz~30MHz	$\pm 3.08\text{ dB}$	(1)
Radiated Emissions 30~1000MHz	$\pm 4.51\text{ dB}$	(1)
Radiated Emissions 1~18GHz	$\pm 5.84\text{ dB}$	(1)
Radiated Emissions 18~40GHz	$\pm 6.12\text{ dB}$	(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

Normal Condition	Temperature	15 °C to 35 °C
	Relative Humidity	20 % to 75 %
	Air Pressure	101 kPa
	Voltage	The normal test voltage for the equipment shall be the nominal voltage for which the equipment was designed.
Extreme Condition	Temperature	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.
	Voltage	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.

Normal Condition	T_N =Normal Temperature	25 °C
Extreme Condition	T_L =Lower Temperature	0 °C
	T_H =Higher Temperature	40 °C

2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Bvio Technology Limited
Address:	2201B, International Culture Building, No. 3039 Shennan Middle Road, Funan Community, Futian Street, Futian District, Shenzhen China
Manufacturer:	Bvio Technology Limited
Address:	2201B, International Culture Building, No. 3039 Shennan Middle Road, Funan Community, Futian Street, Futian District, Shenzhen China
Factory:	Shenzhen TongLiang Intelligent Technology Co.,Ltd
Address:	6th Floor, Building 9, Comprehensive Building of Zhongyuntai Industrial ParkSongbai Road, Shiyan Sub-district, Bao'an District, Shenzhen, China

2.2. General Description of EUT

Product Name:	Violoop X
Trade Mark:	/
Model/Type reference:	VAL11
Listed Model(s):	/
Model Difference:	/
Sample ID:	CTC-GC260901-005-S006
Power Supply:	Input: 12V=== 3A
Hardware Version:	V4.2
Software Version:	V2.0.0

5G Wi-Fi					
Operation Band:	☒ U-NII-1	☒ U-NII-2A	☒ U-NII-2C	☒ U-NII-3	
Operation Frequency:	U-NII-1: 5150MHz~5250MHz U-NII-2A: 5250MHz~5350MHz U-NII-2C: 5470MHz~5725MHz U-NII-3: 5725MHz~5850MHz				
Support Bandwidth:	802.11a	☒ 20MHz			
	802.11n	☒ 20MHz	☒ 40MHz		
	802.11ac	☒ 20MHz	☒ 40MHz	☐ 80MHz	☐ 160MHz
	802.11ax	☒ 20MHz	☒ 40MHz	☐ 80MHz	☐ 160MHz
Modulation:	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)				
Antenna Type:	FPC Antenna				
Antenna Gain:	3.01dBi				

2.3. Accessory Equipment Information

Equipment Information			
Name	Model	S/N	Manufacturer
POWER SUPPLY	FJ-GN636S1203000N	/	FUJIA
Notebook	ThinkBook 14 G3 ACL	/	Lenovo
GPON ONU, GPON ONT	GN630V (FCC ID: WNA-GN630V)	/	Skyworth
Cable Information			
Name	Shielded Type	Ferrite Core	Length
USB Cable	Unshielded	No	100cm
Test Software Information			
Name	Version	/	/
SecureCRTPortable	7.1.1	/	/

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.

Operation Frequency List:

Operating Band	20MHz Bandwidth		40MHz Bandwidth	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
U-NII-1	36	5180	38	5190
	40	5200		
	44	5220	46	5230
	48	5240		
U-NII-2A	52	5260	54	5270
	56	5280		
	60	5300	62	5310
	64	5320		
U-NII-2C	100	5500	102	5510
	104	5520		
	108	5540	110	5550
	112	5560		
	116	5580	118	5590
	120	5600		
	124	5620	126	5630
	128	5640		
	132	5660	134	5670
	136	5680		
	140	5700		
U-NII-3	149	5745	151	5755
	153	5765		
	157	5785	159	5795
	161	5805		
	165	5825		

Test channel is below:

Operating Band	Test Channel	20MHz Bandwidth		40MHz Bandwidth	
		Channel	Frequency (MHz)	Channel	Frequency (MHz)
U-NII-1	CH _L	36	5180	38	5190
	CH _M	40	5200	/	/
	CH _H	48	5240	46	5230
U-NII-2A	CH _L	52	5260	54	5270
	CH _M	56	5280	/	/
	CH _H	64	5320	62	5310
U-NII-2C	CH _L	100	5500	102	5510
	CH _M	116	5580	110	5550
	CH _H	140	5700	134	5670
U-NII-3	CH _L	149	5745	151	5755
	CH _M	157	5785	/	/
	CH _H	165	5825	159	5795

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 the worsted case mode.

Test Mode	Data Rate (worst mode)
802.11a	6Mbps
802.11n(HT20)/ 802.11n(HT40)	HT-MCS0
802.11ac(VHT20)/ 802.11ac(VHT40)	VHT-MCS0
802.11ax(HE20) / 802.11ax(HE40)	HE-MCS0

Test Mode:

For RF test items:
1. The engineering test program was provided and enabled to make EUT continuous transmit. 2. IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.
For AC power line conducted emissions:
The engineering test program was provided and enabled to make EUT continuous transmit.
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.
For DFS test items:
The EUT has been tested under test mode condition. The Applicant provides software to control the EUT for staying in DFS mode for testing.

2.5. Measurement Instruments List

RF Test System - SRD					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Spectrum Analyzer	R&S	FSV40-N	101654	Dec. 12, 2026
2	MXA Signal Analyzer	Keysight	N9020A	MY52091402	Dec. 12, 2026
3	EXG Analog Signal Generator	Keysight	N5173B	MY59100842	Dec. 12, 2026
4	MXG Vector Signal Generator	Keysight	N5182B	MY59100212	Dec. 12, 2026
5	Wideband Radio Communication Tester	R&S	CMW500	102414	Dec. 12, 2026
6	RF Control Unit	Tonscend	JS0806-2	/	Dec. 12, 2026
7	Test Software	Tonscend	JS1120-3	V3.3.38	/
8	High and low temperature test chamber	ESPEC	MT3035	/	Dec. 12, 2026

Radiated emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-759	Oct. 16, 2027
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-648	Dec. 11, 2026
3	Test Receiver	Keysight	N9038A	MY56400071	Dec. 12, 2026
4	Broadband Amplifier	Schwarzbeck	BBV9743B	259	Dec. 12, 2026
5	Mirowave Broadband Amplifier	Schwarzbeck	BBV9718C	111	Dec. 12, 2026
6	3m chamber 3	YIHENG	EE106	/	Aug. 28, 2028
7	Test Software	FARA	EZ-EMC	FA-03A2	/
8	LOOP Antenna	ETS	6507	1446	Dec. 17, 2026

Conducted emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	LISN	R&S	ENV216	101112	Dec. 12, 2026
2	LISN	R&S	ENV216	101113	Dec. 12, 2026
3	EMI Test Receiver	R&S	ESCI	100524	Dec. 12, 2026
4	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 12, 2026
5	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 12, 2026
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

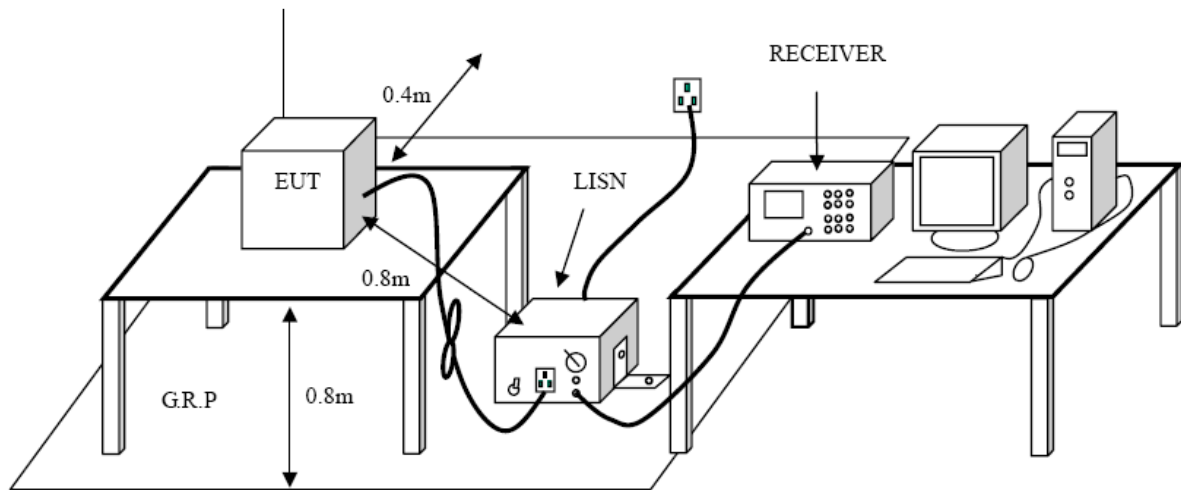
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207 / RSS-Gen 8.8

Frequency (MHz)	Conducted Limit (dBμV)	
	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

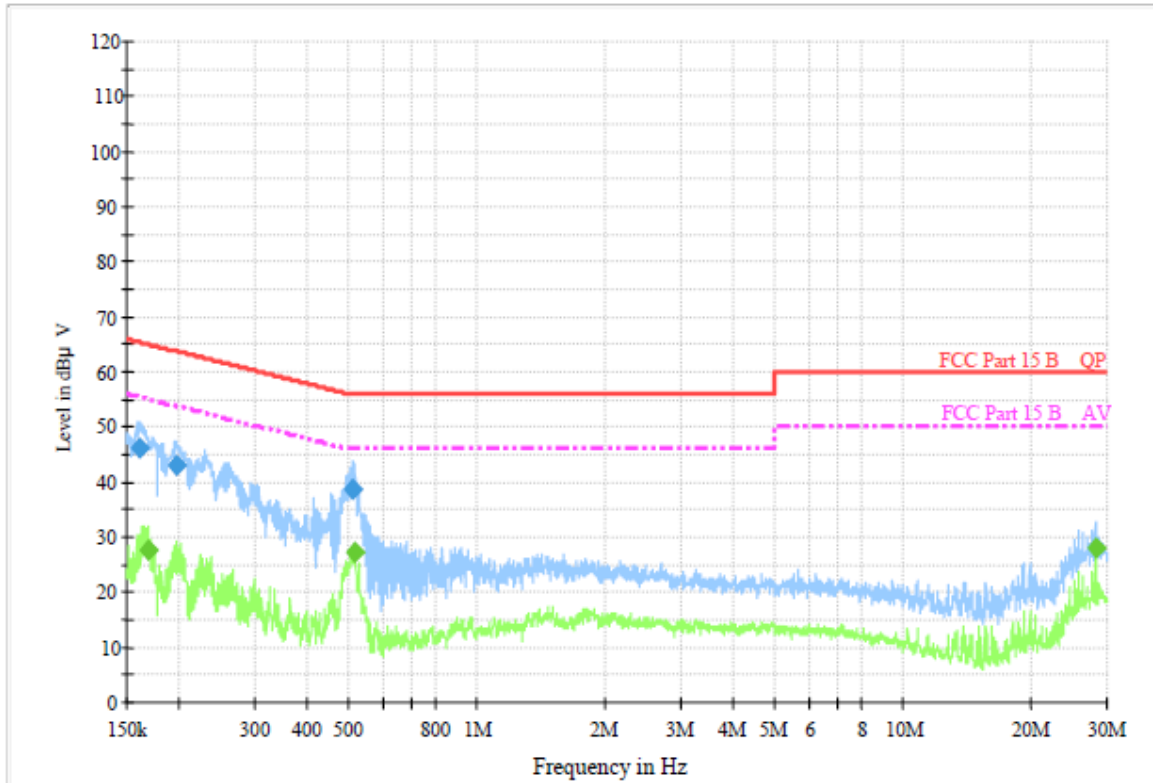
1. The EUT was setup according to ANSI C63.10 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any 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 μH 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

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

**Final Measurement Detector 1**

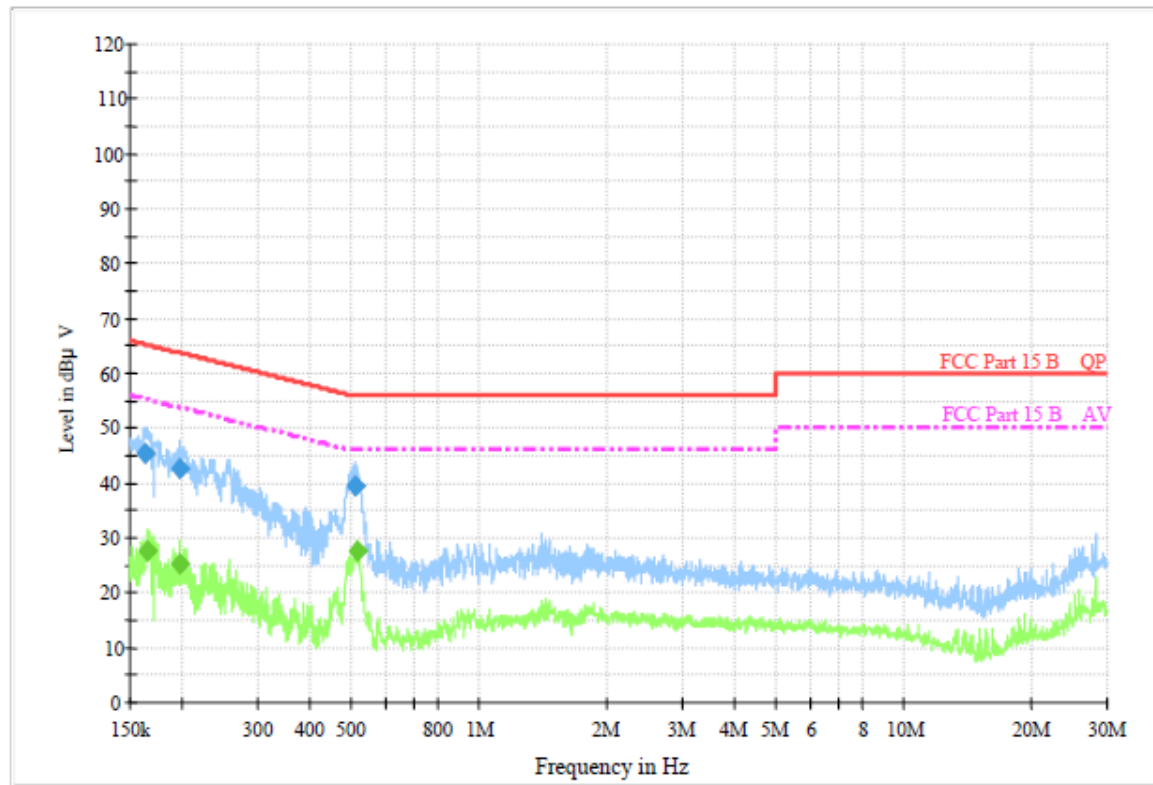
Frequency (MHz)	QuasiPeak (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.160544	46.2	1000.00	9.000	On	L1	9.3	19.2	65.4	
0.196835	42.9	1000.00	9.000	On	L1	9.3	20.8	63.7	
0.511532	38.7	1000.00	9.000	On	L1	9.4	17.4	56.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.168094	27.5	1000.00	9.000	On	L1	9.3	27.6	55.1	
0.512555	27.1	1000.00	9.000	On	L1	9.4	18.9	46.0	
28.152824	28.1	1000.00	9.000	On	L1	9.7	21.9	50.0	

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 (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.163131	45.4	1000.00	9.000	On	N	9.4	19.9	65.3	
0.196442	42.8	1000.00	9.000	On	N	9.2	21.0	63.8	
0.509492	39.4	1000.00	9.000	On	N	9.6	16.6	56.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.165098	27.5	1000.00	9.000	On	N	9.4	27.7	55.2	
0.196442	25.2	1000.00	9.000	On	N	9.2	28.6	53.8	
0.512555	27.4	1000.00	9.000	On	N	9.6	18.6	46.0	

Emission Level = Read Level + Correct Factor

3.2. Radiated Emission

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.209 / RSS-Gen 8.9

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)	dBμV/m (at 3 meters)	
	Peak	Average
Above 1000	74	54

Note:

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

Limits of unwanted emission out of the restricted bands

FCC CFR Title 47 Part 15 Subpart E Section 15.407(b) / RSS-247 6.2

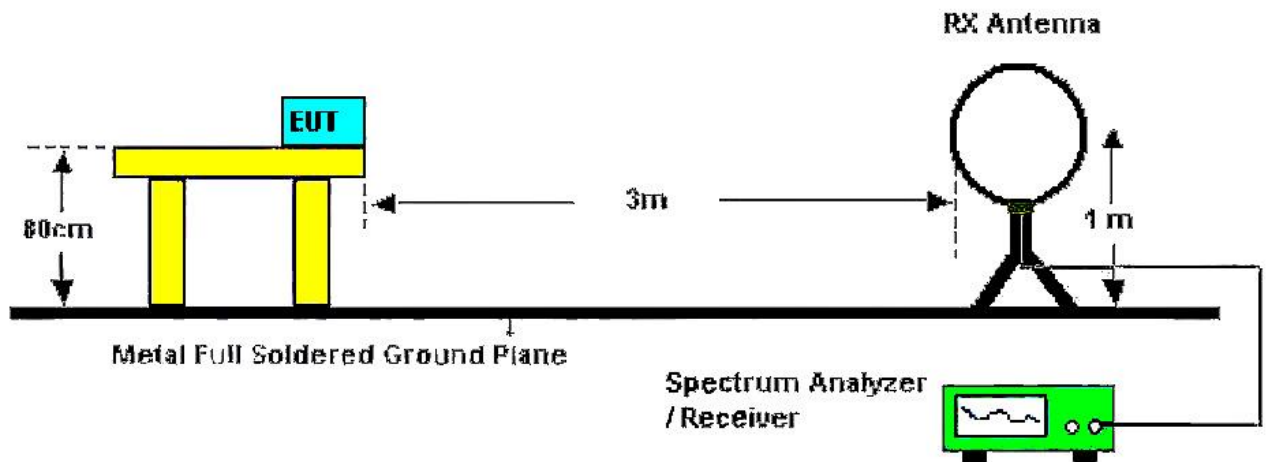
Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
5725~5825	-27 (Note 2)	68.2
	10 (Note 2)	105.2
	15.6 (Note 2)	110.8
	27 (Note 2)	122.2

Note:

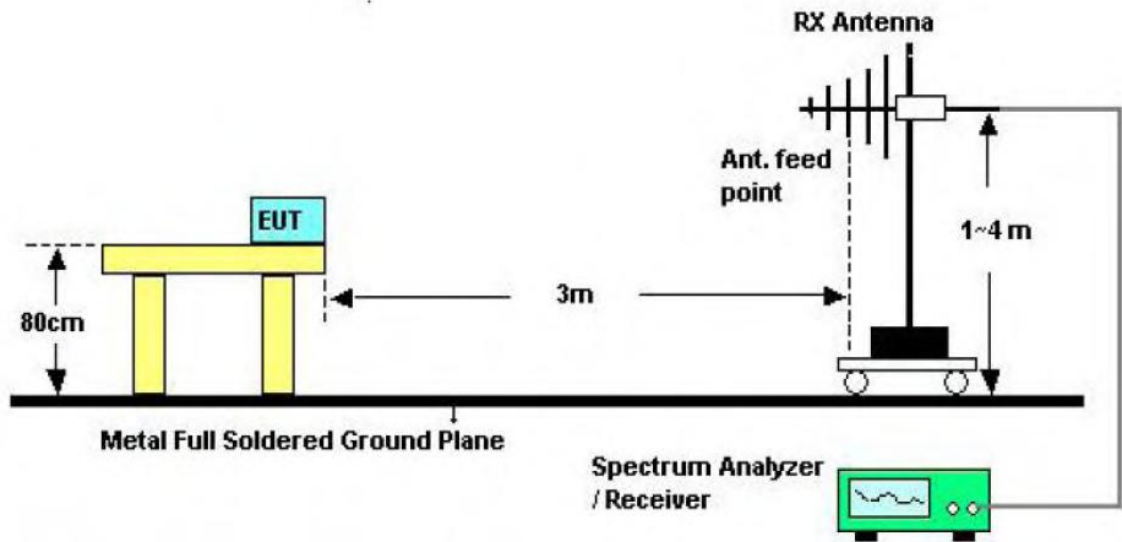
1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field

strength: $E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m}$, where P is the eirp (Watts).

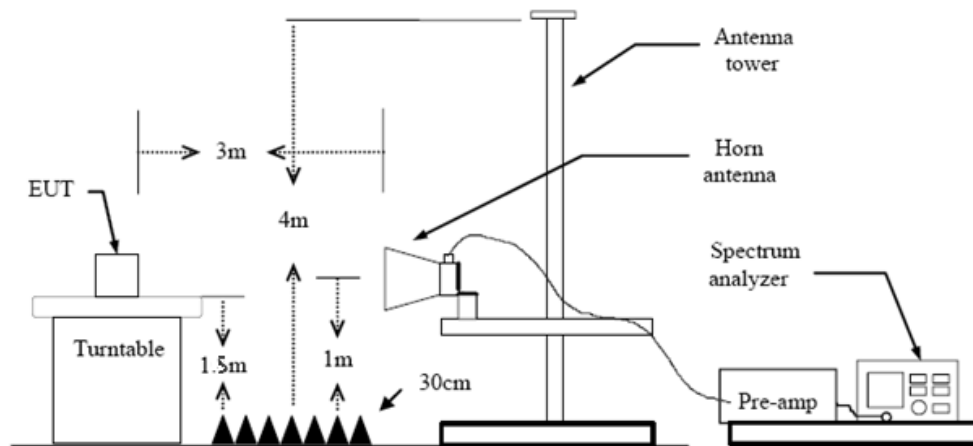
2. According to FCC 16-24, all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

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.
 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 40GHz 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 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

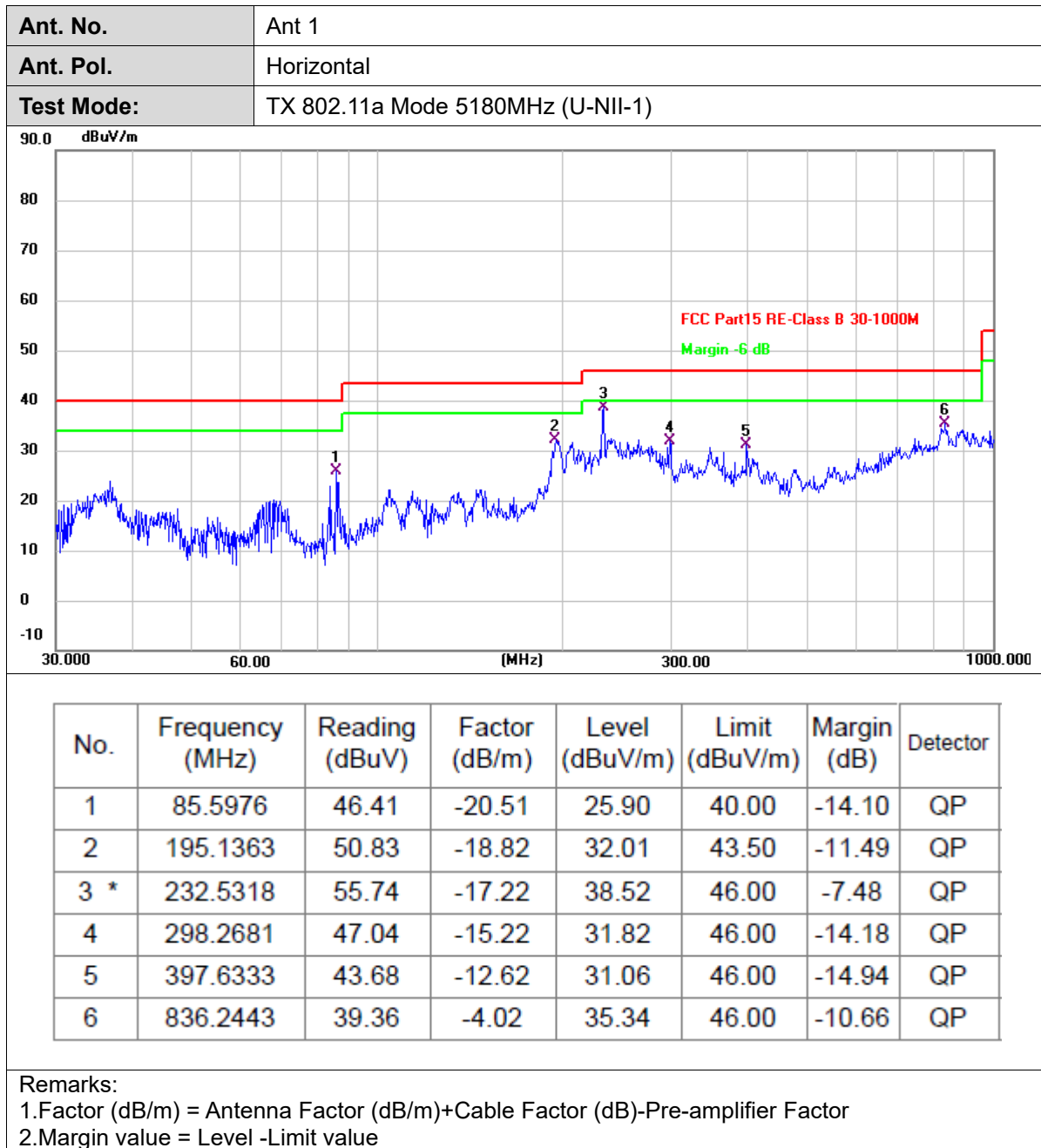
Test Result

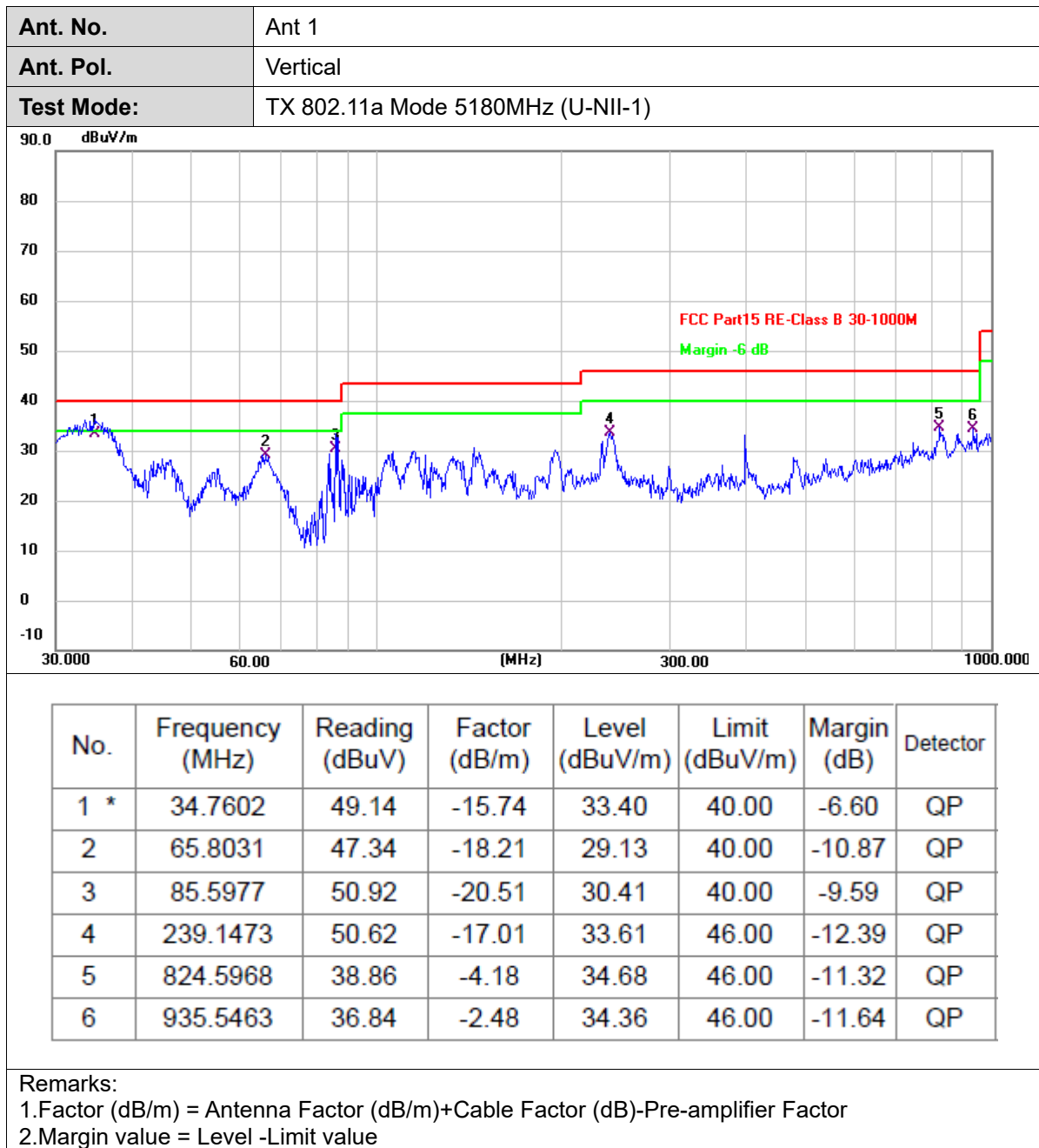
9kHz-30MHz

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

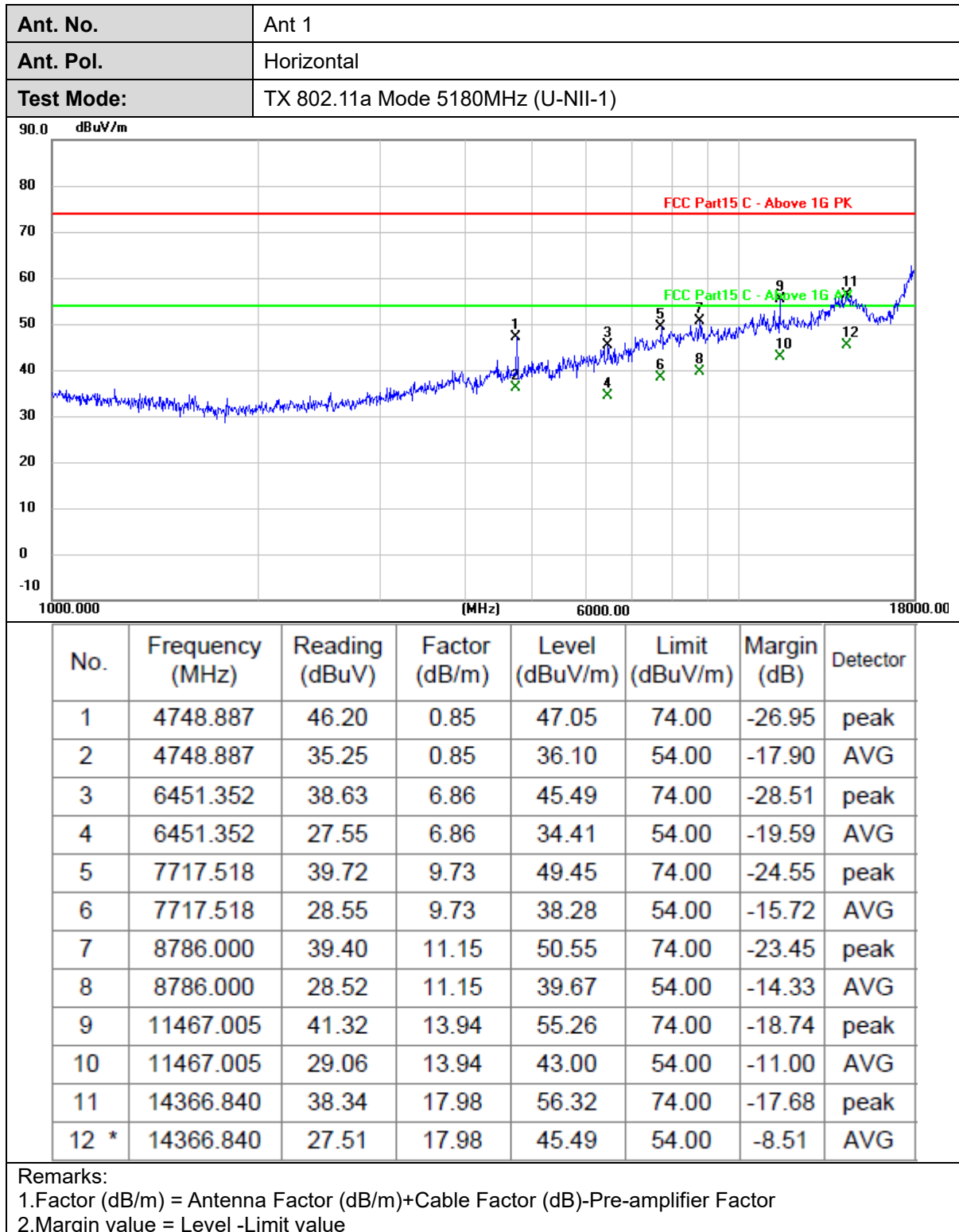
Note: All modes for required channel tested, only the worst-case reported.

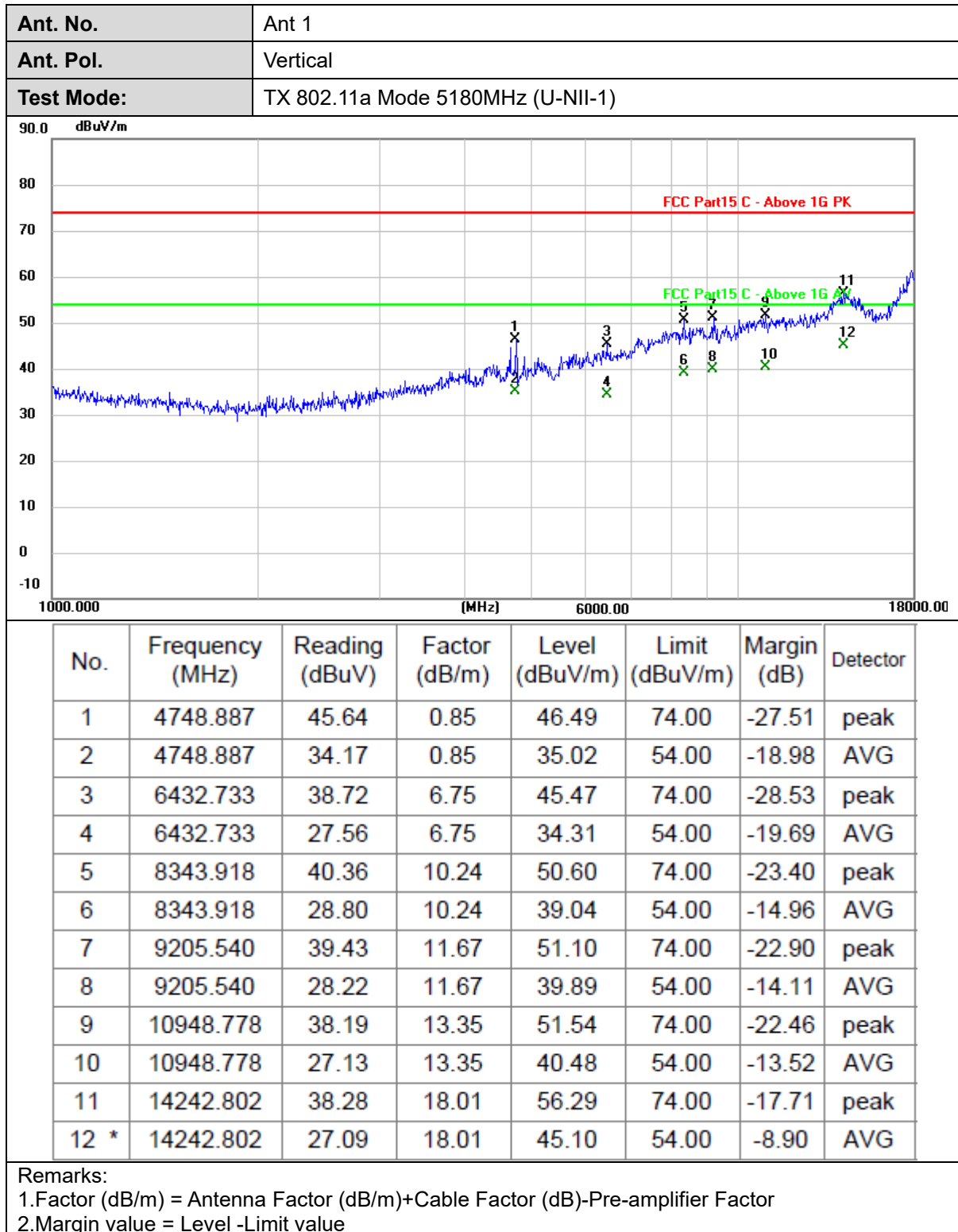
30MHz-1GHz

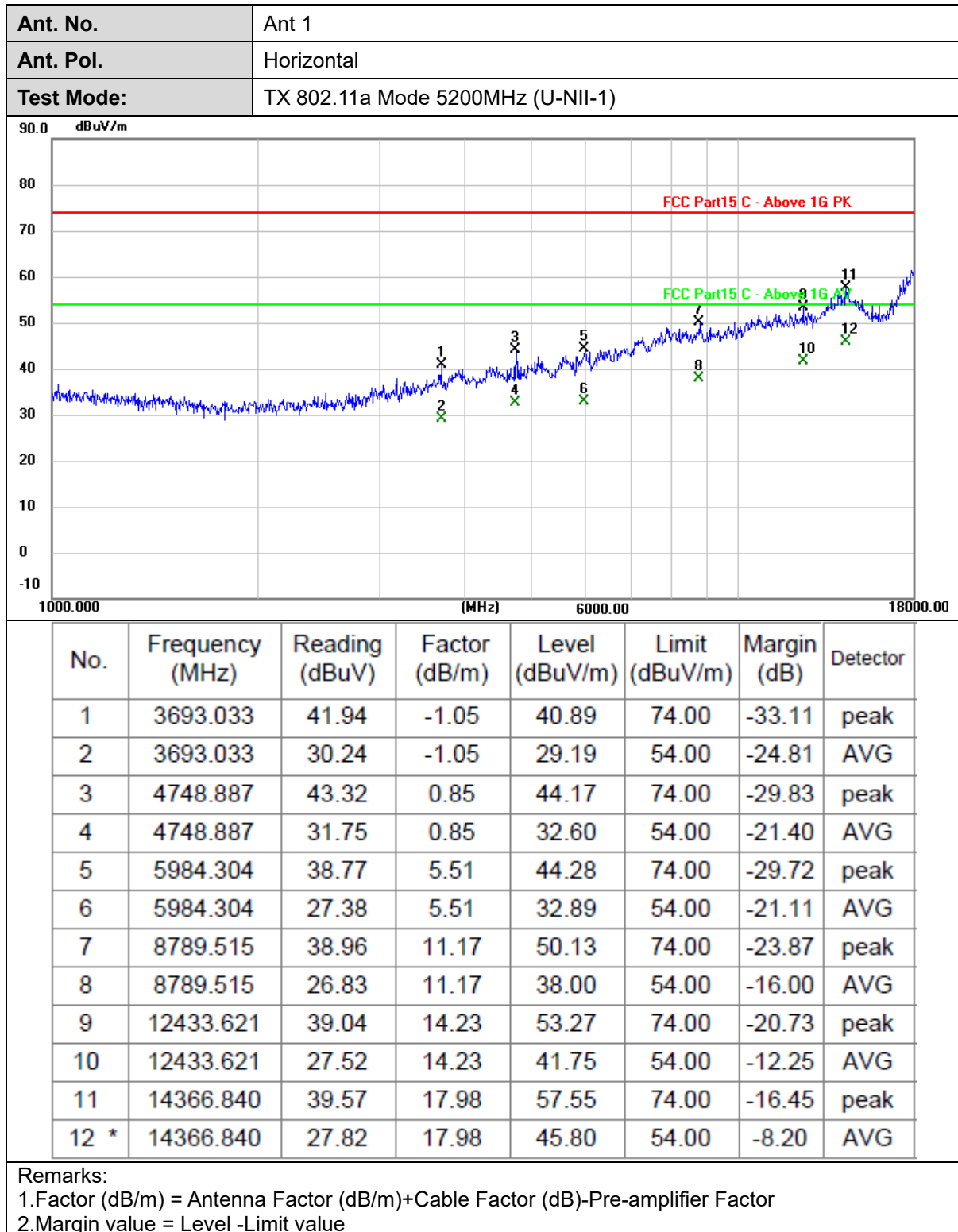


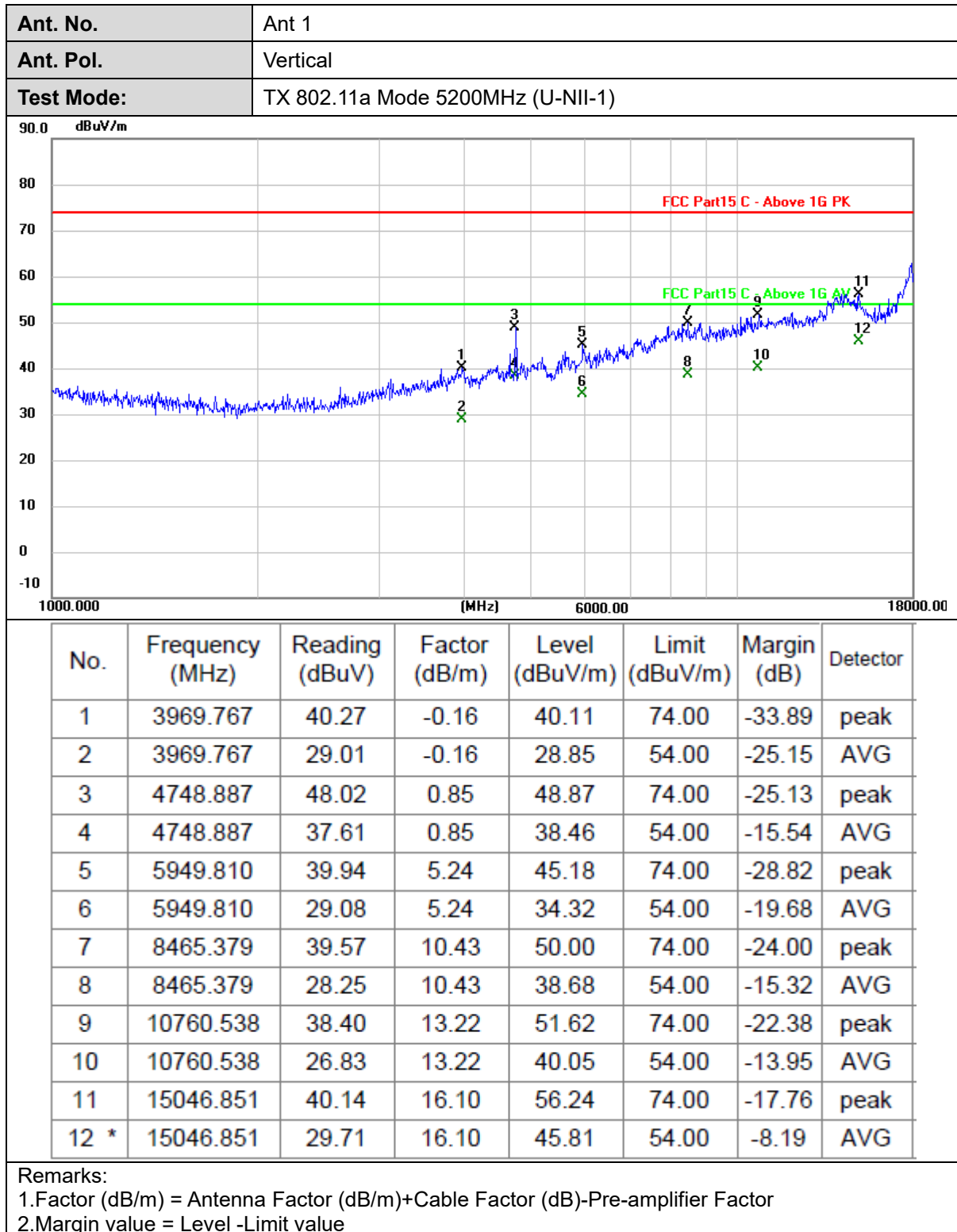


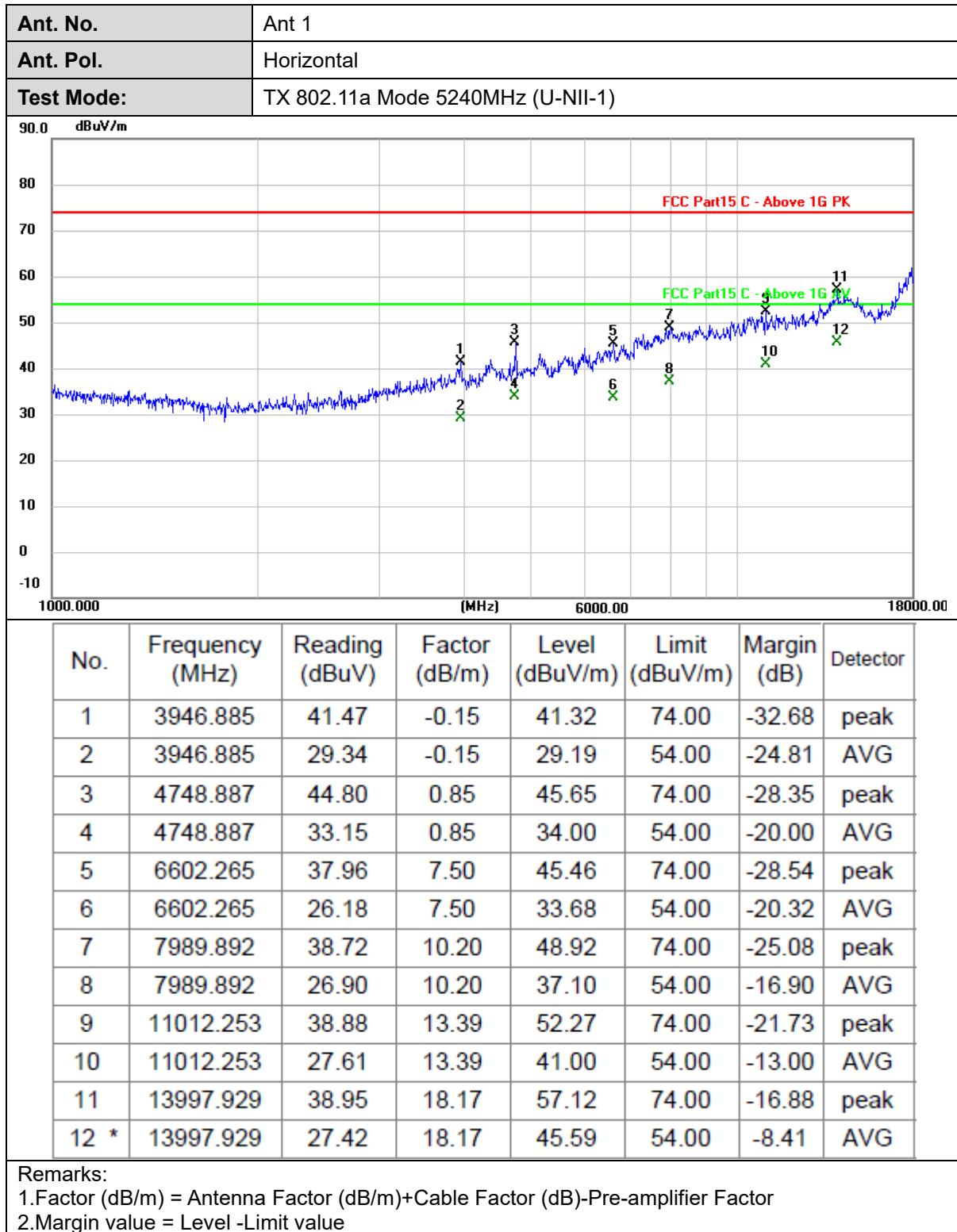
1GHz-18GHz

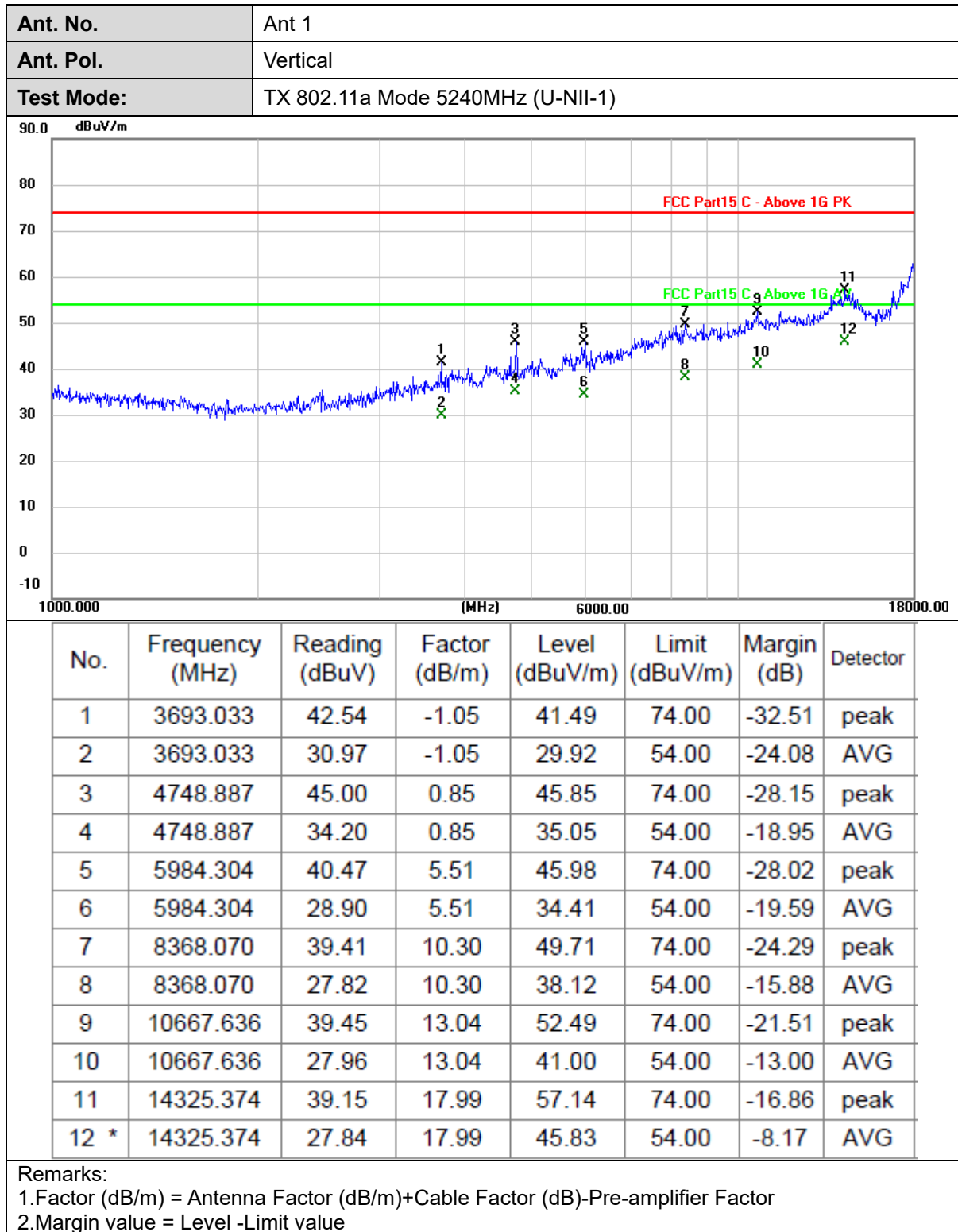


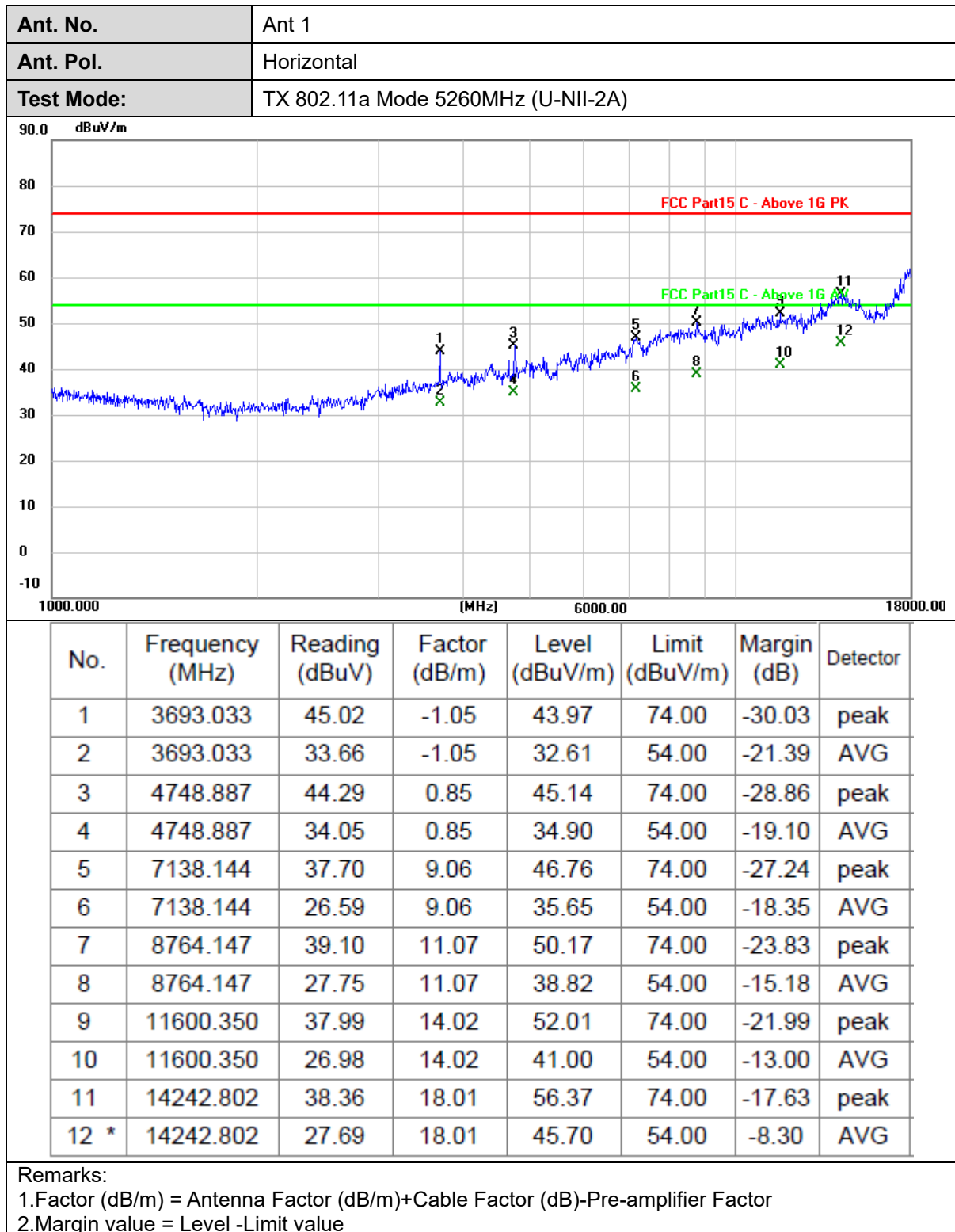


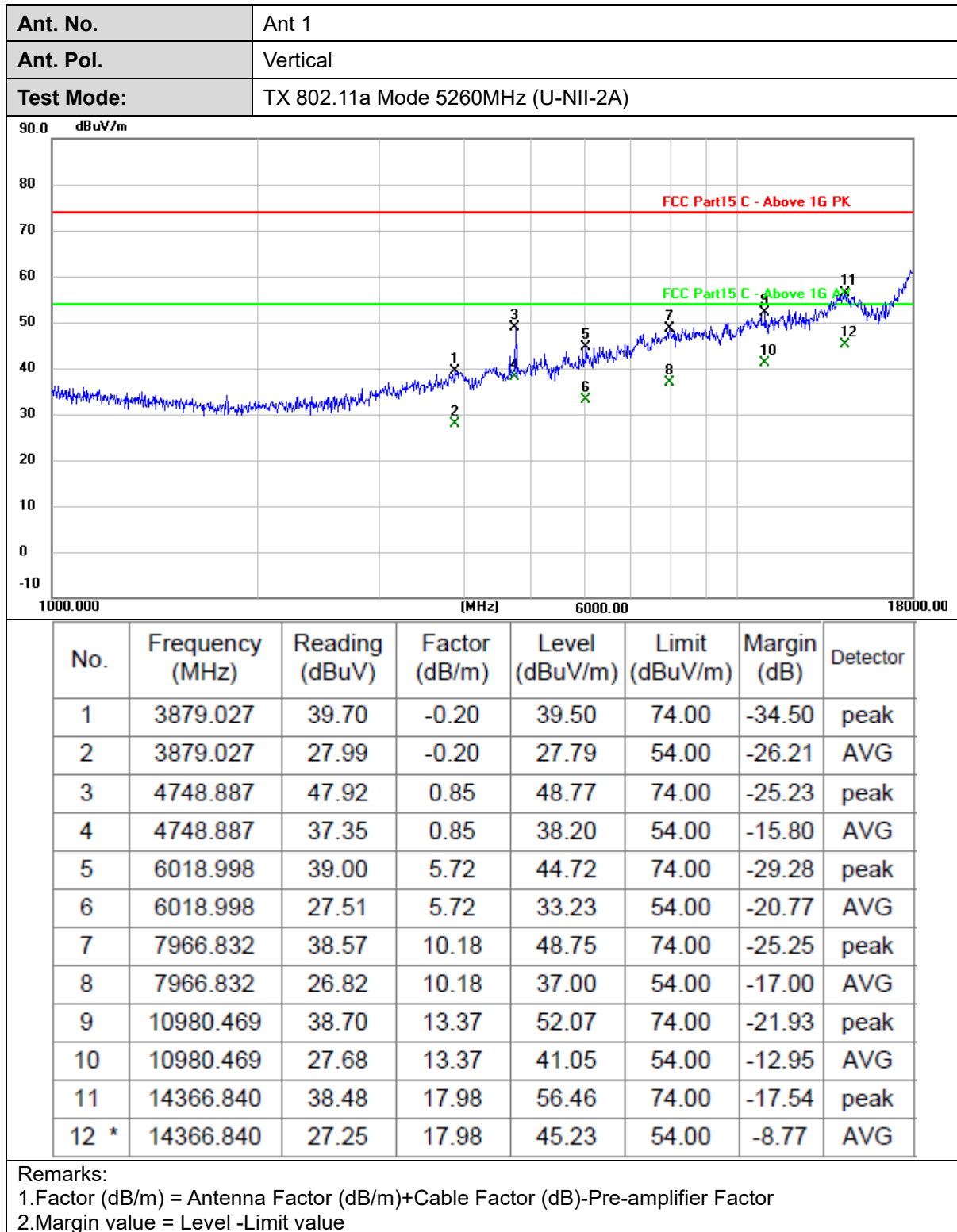


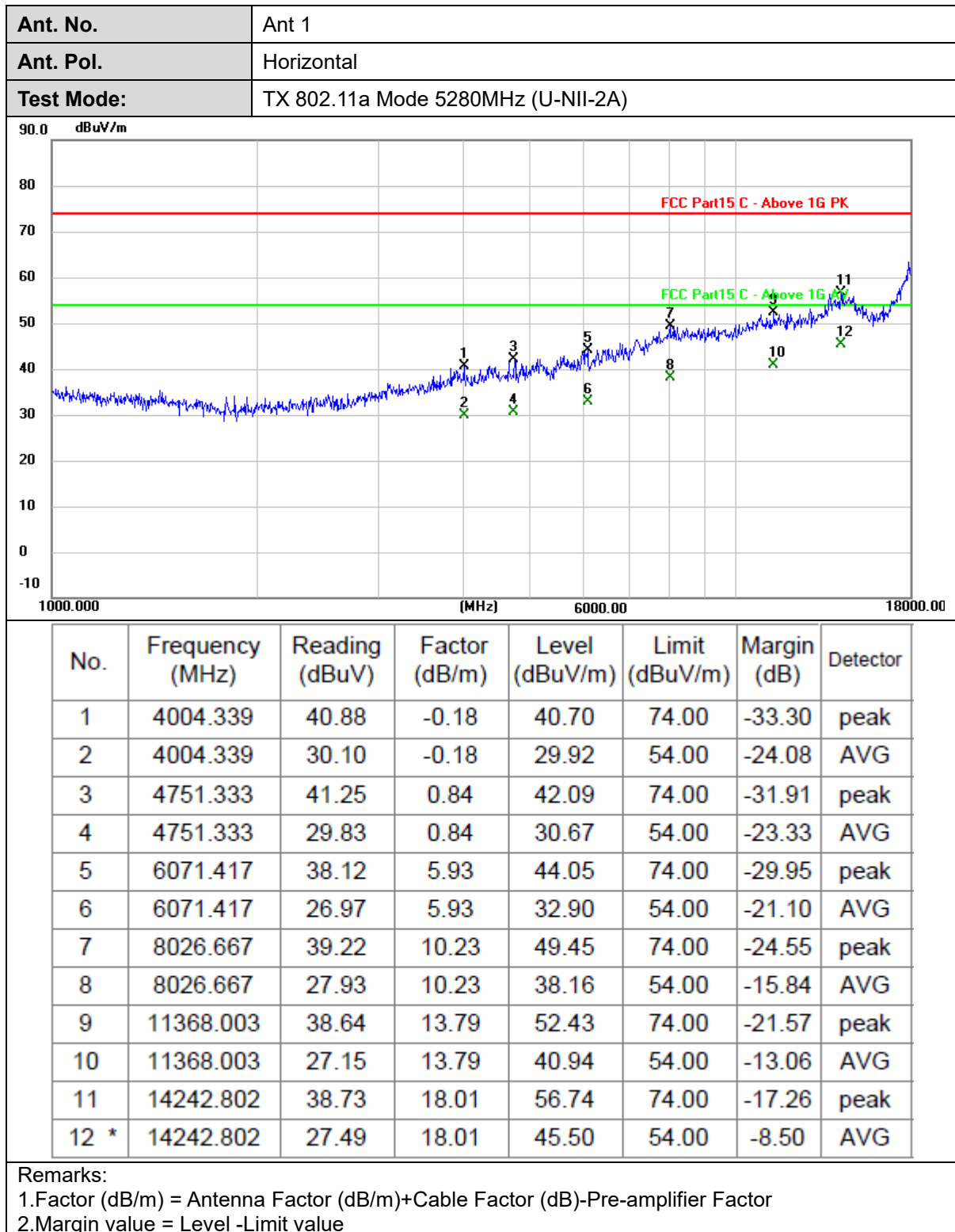


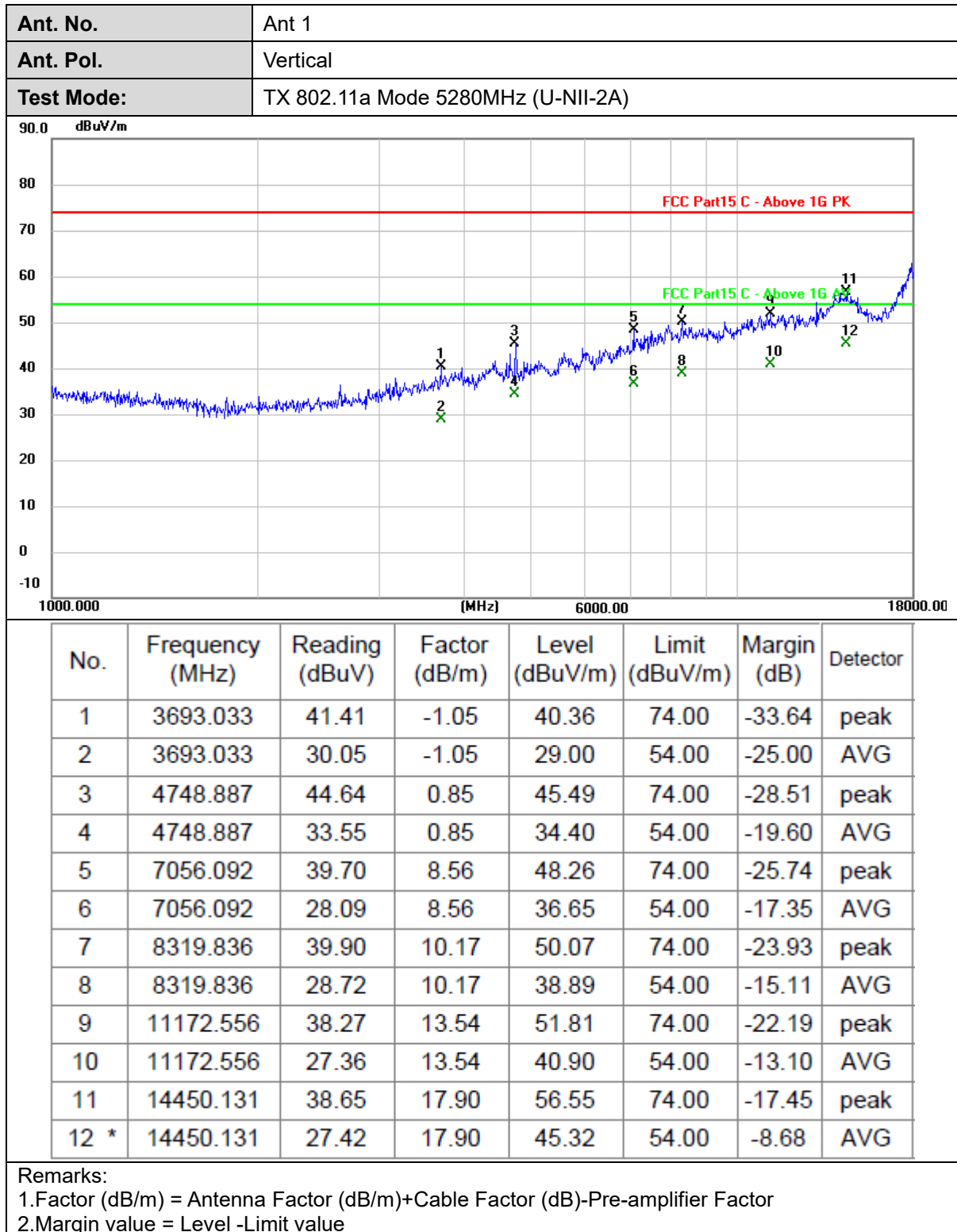


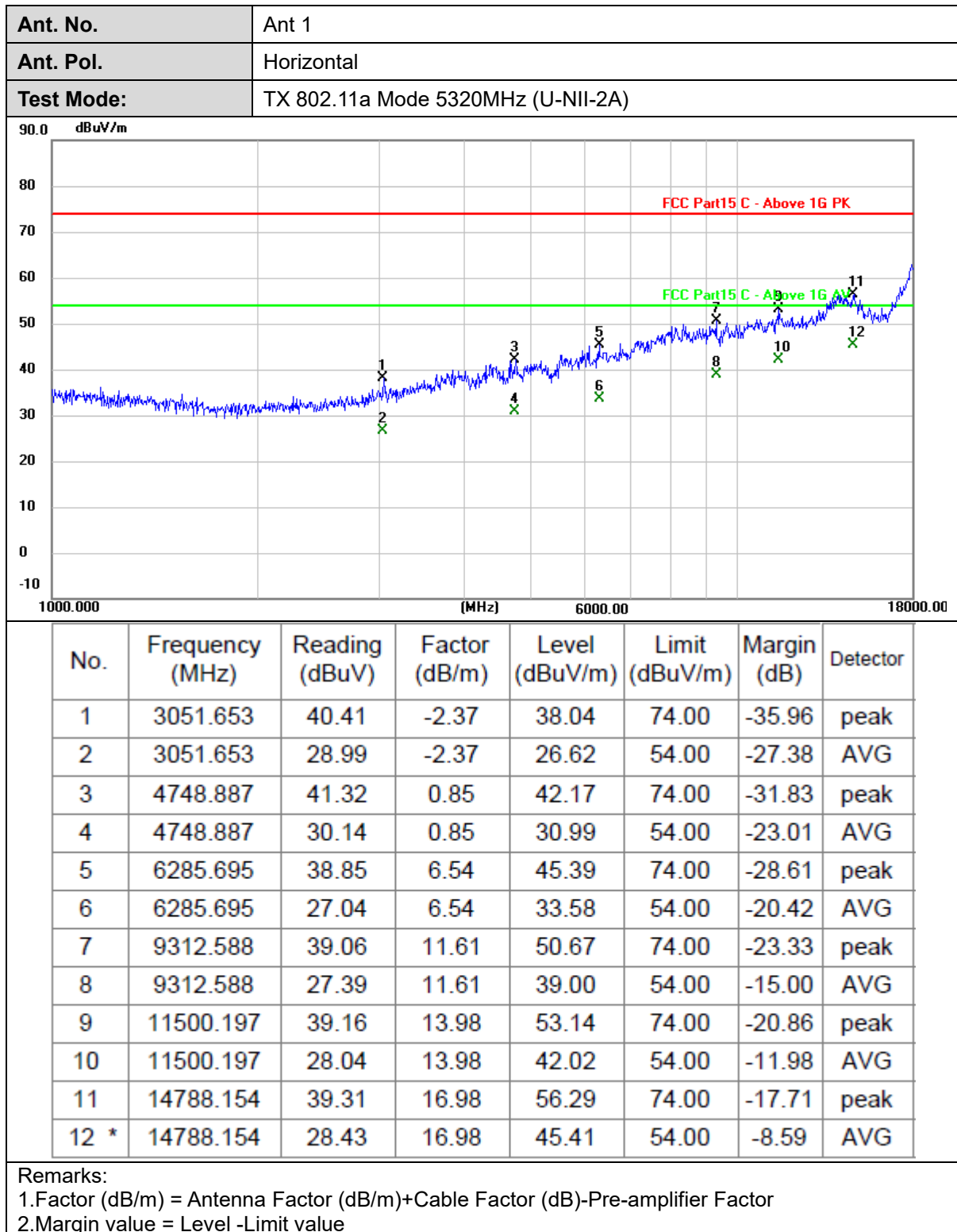


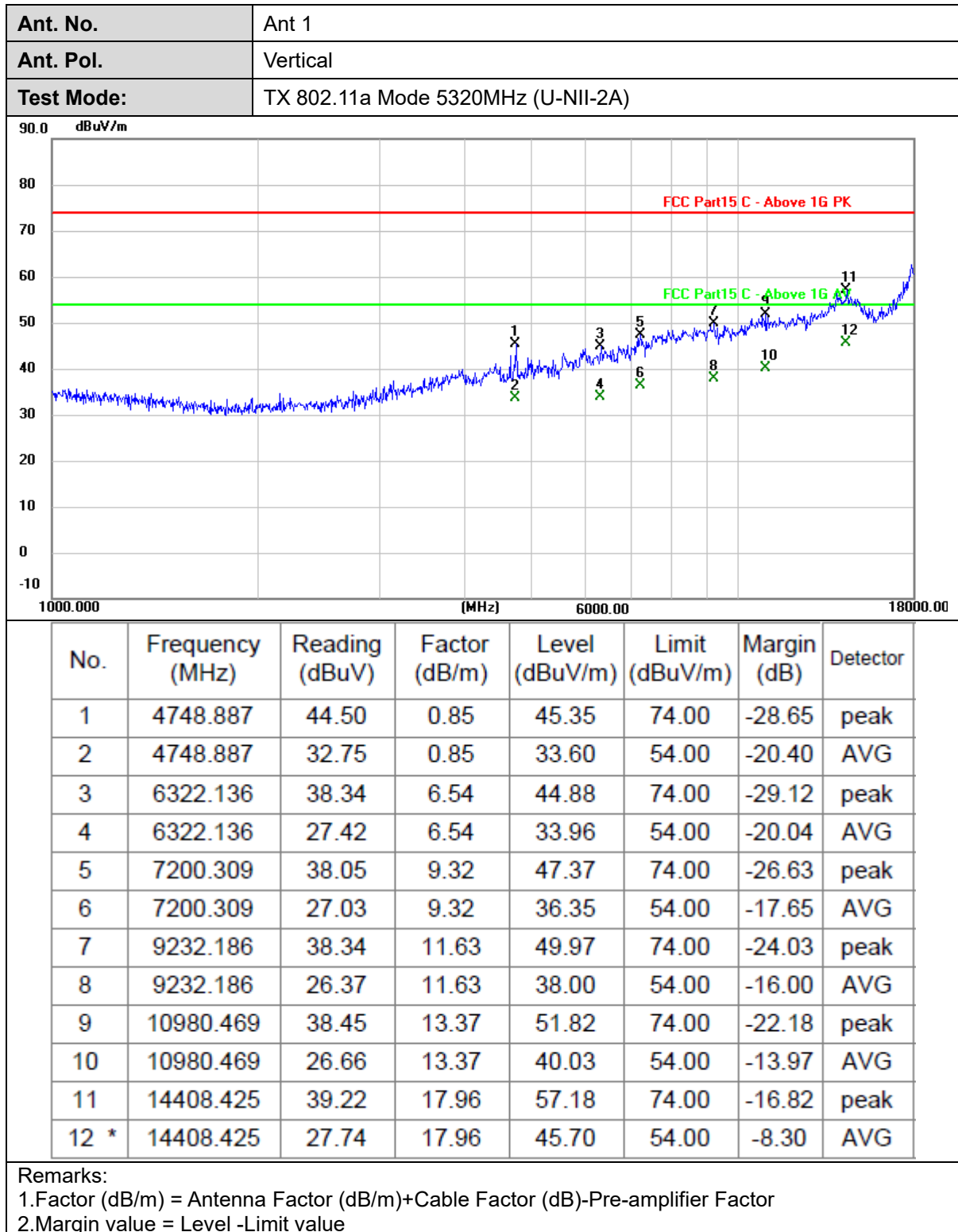


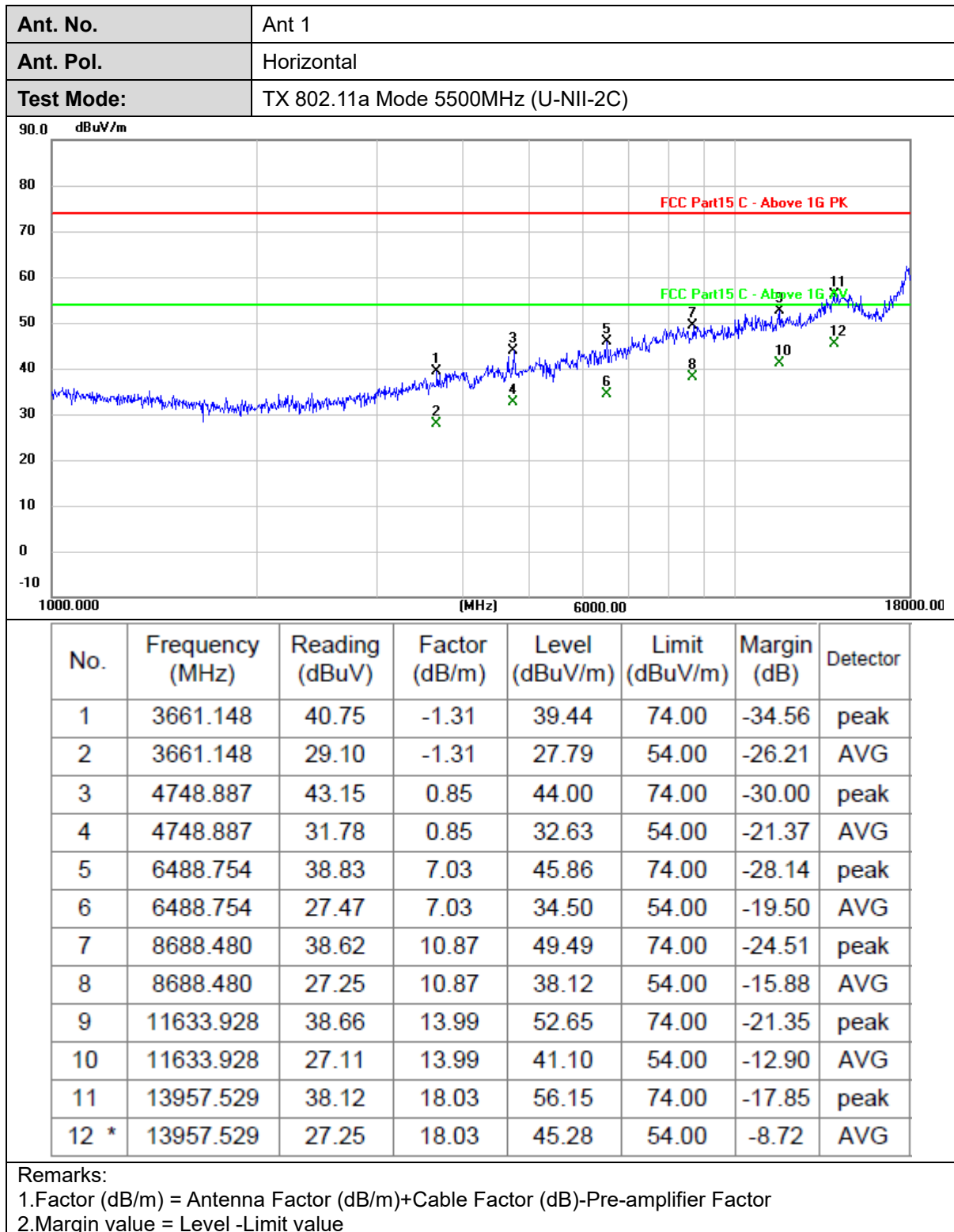


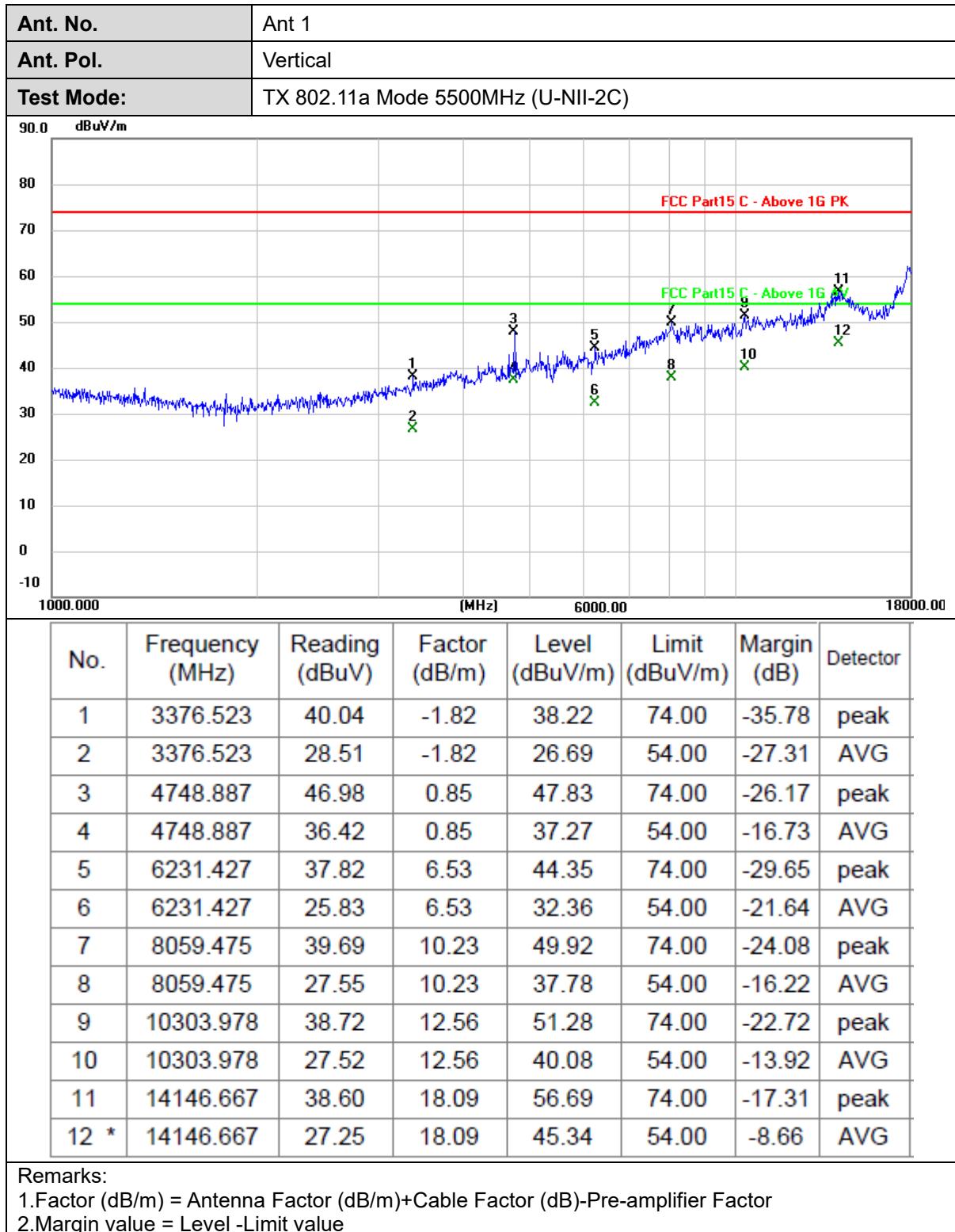


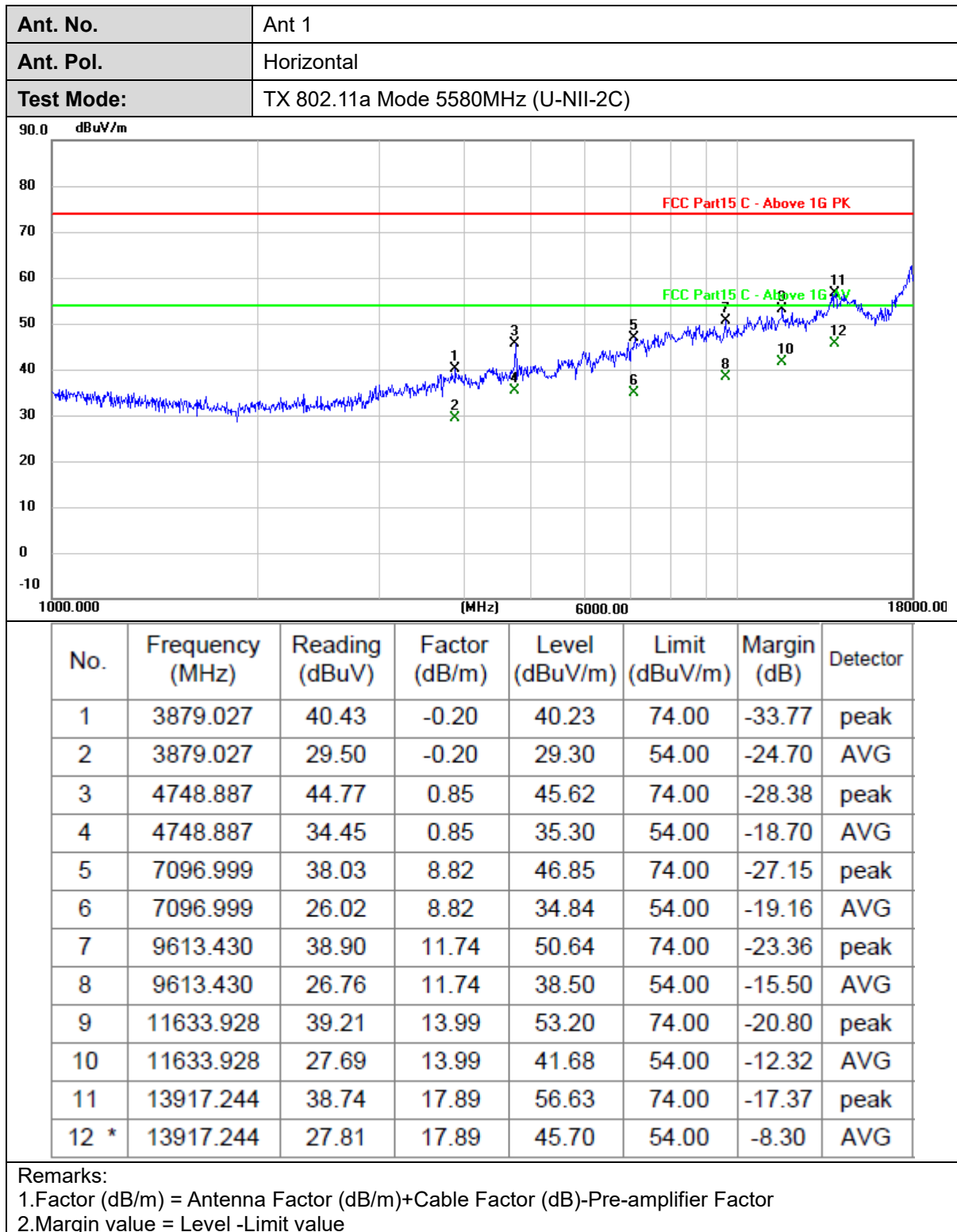


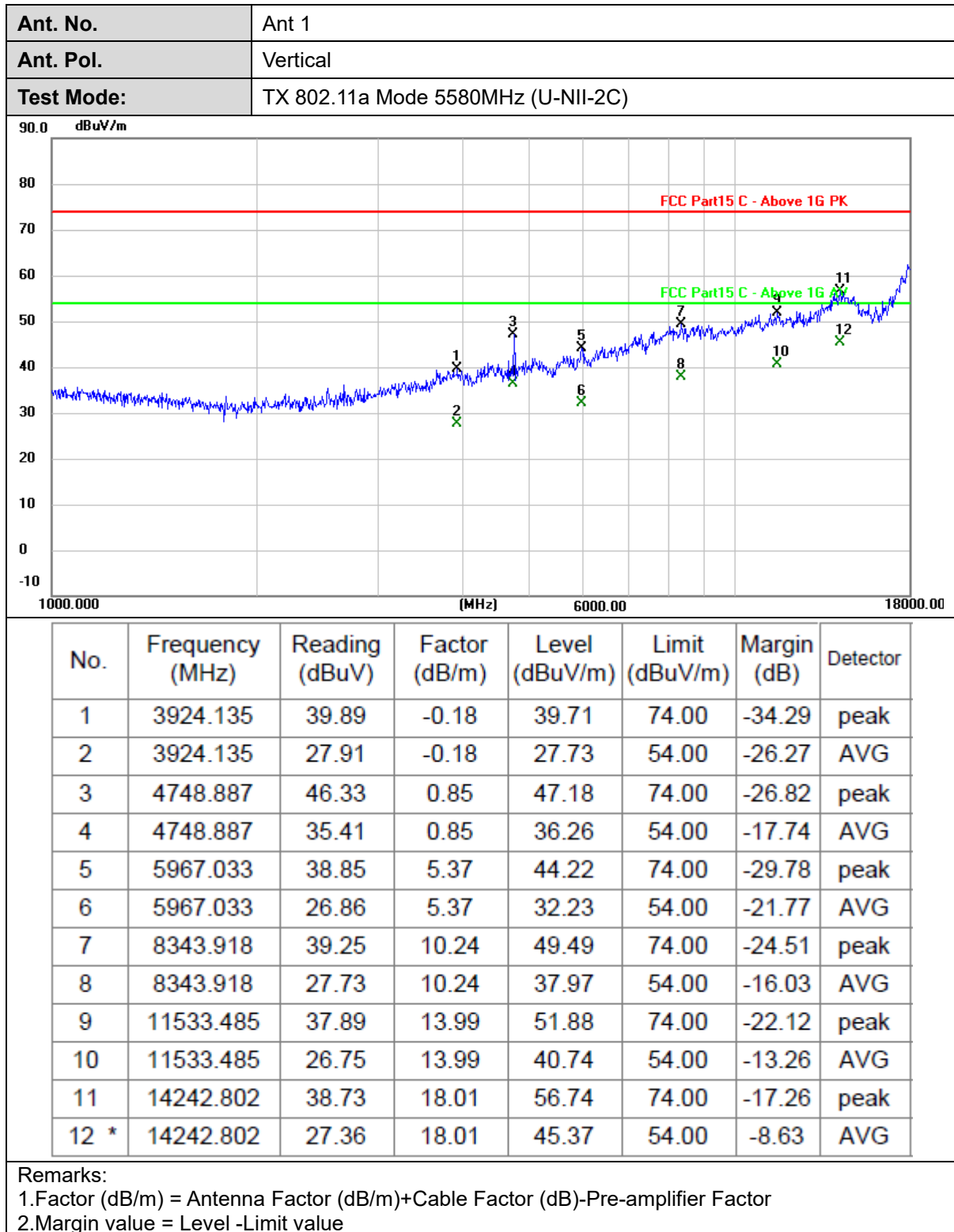


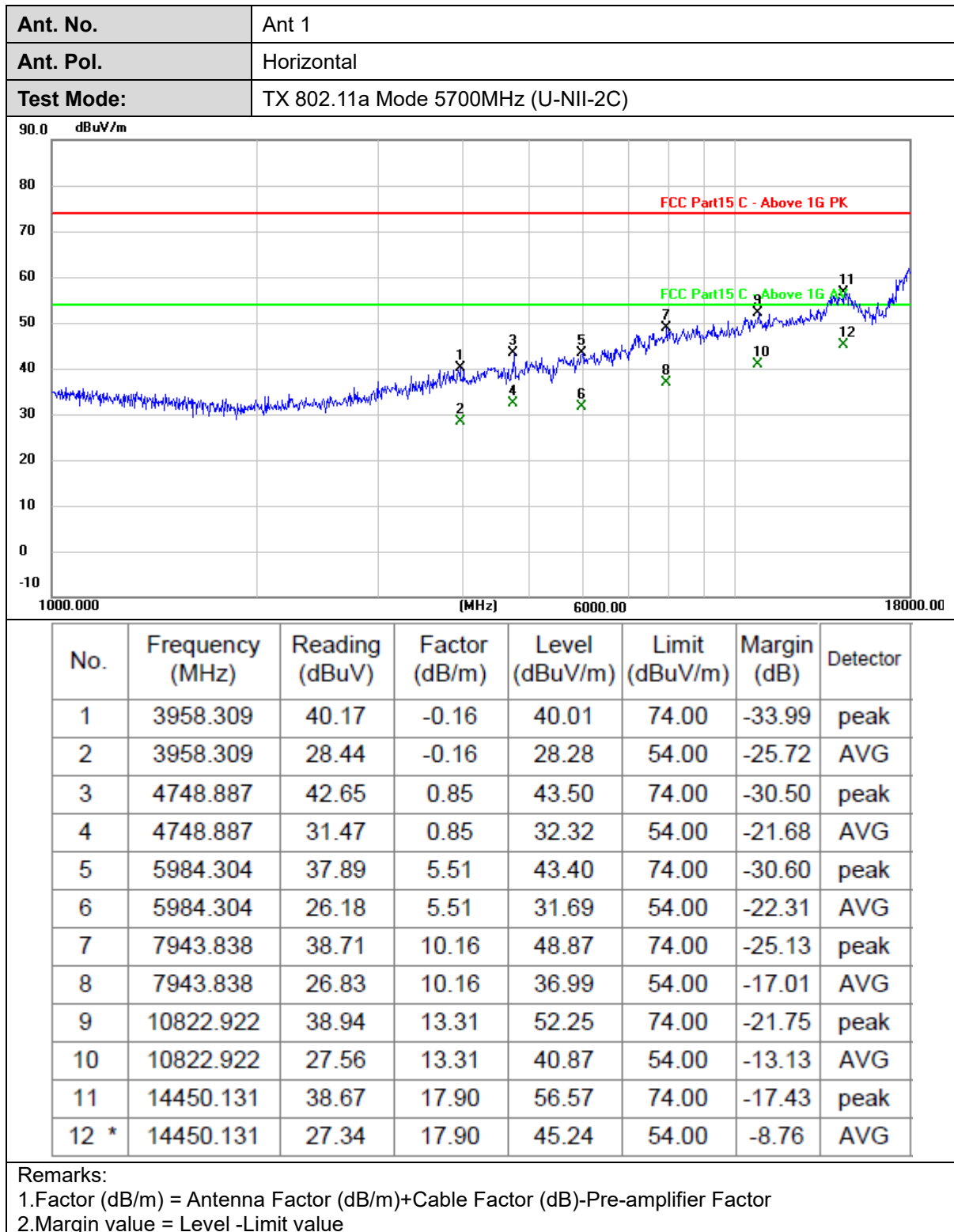


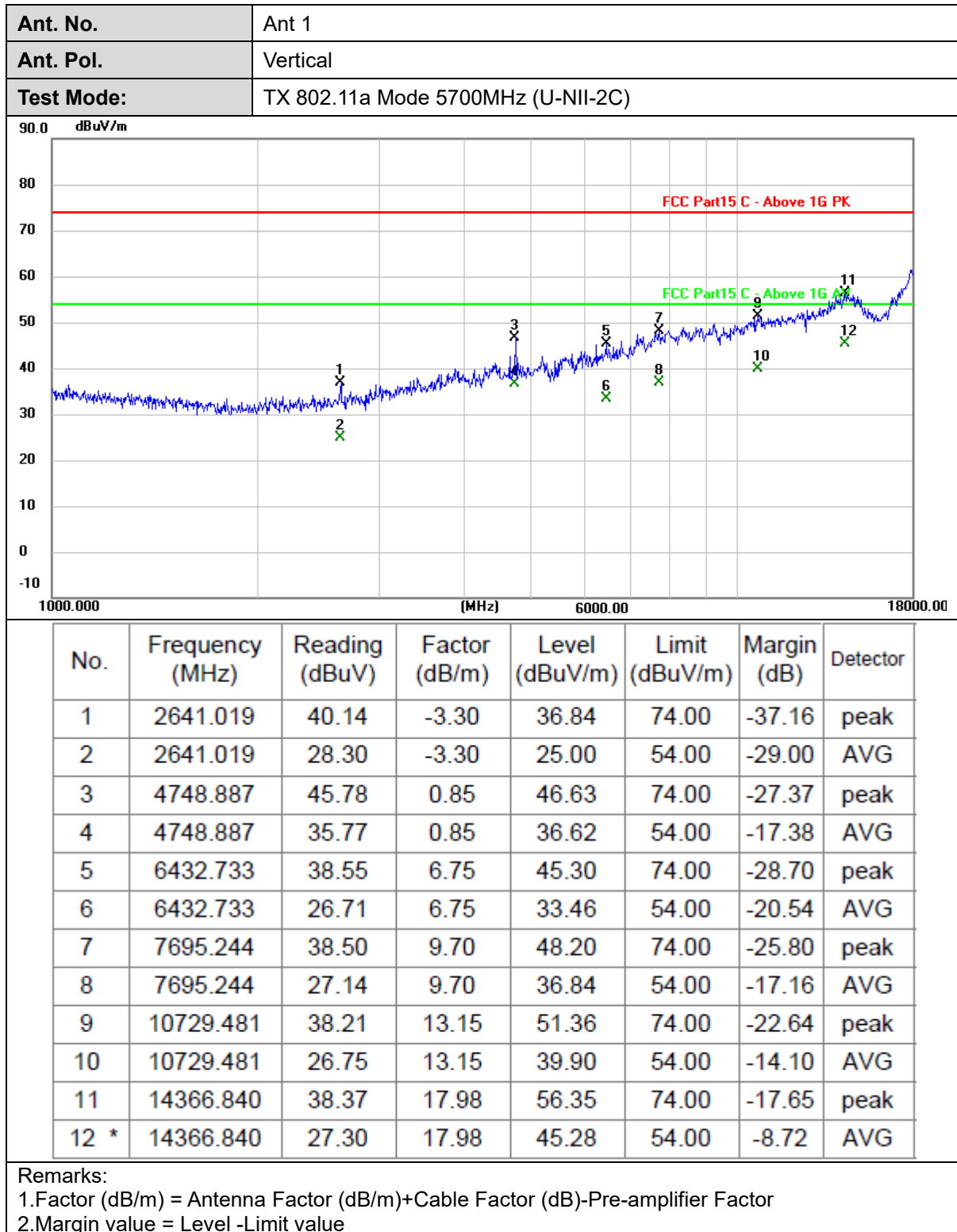


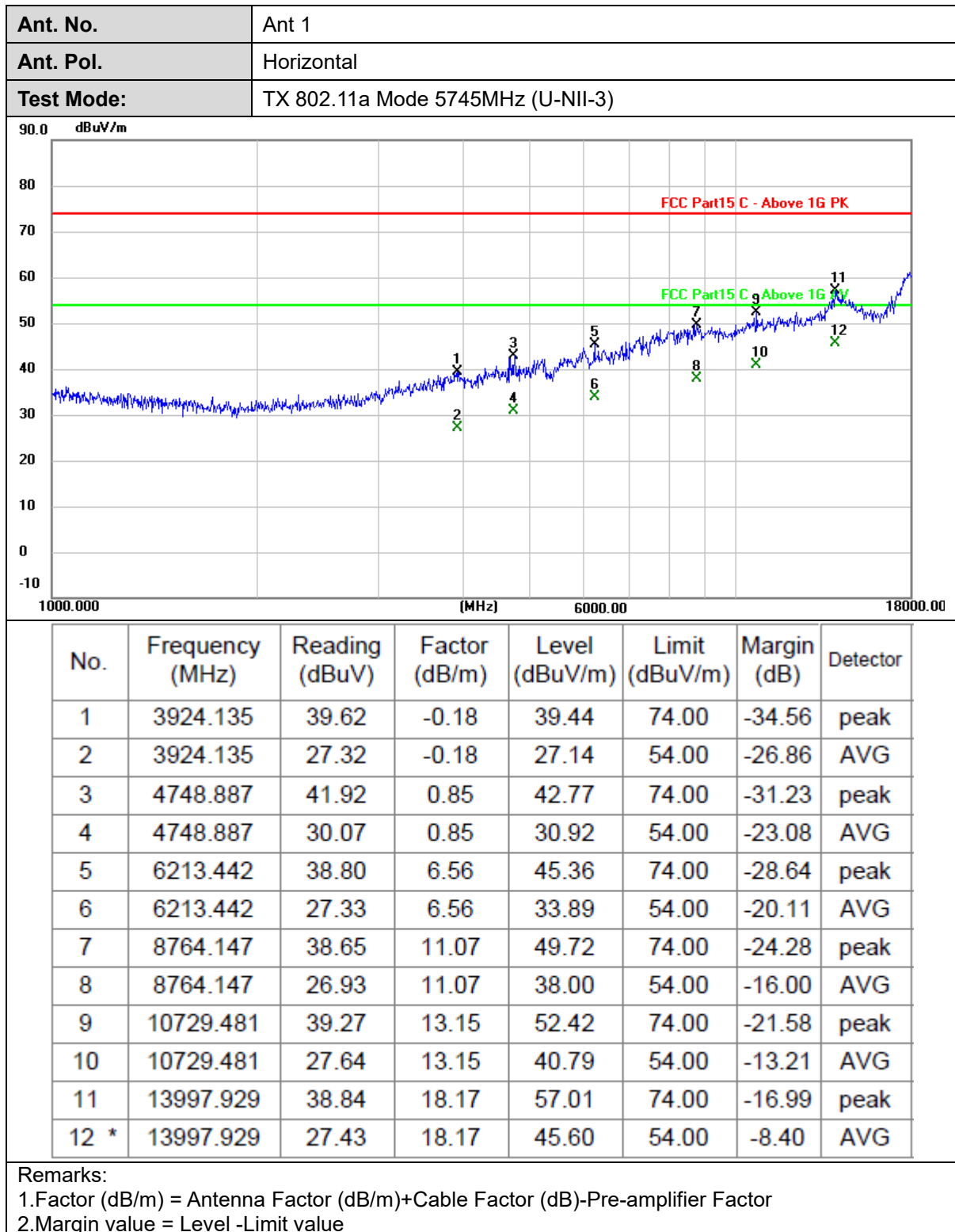


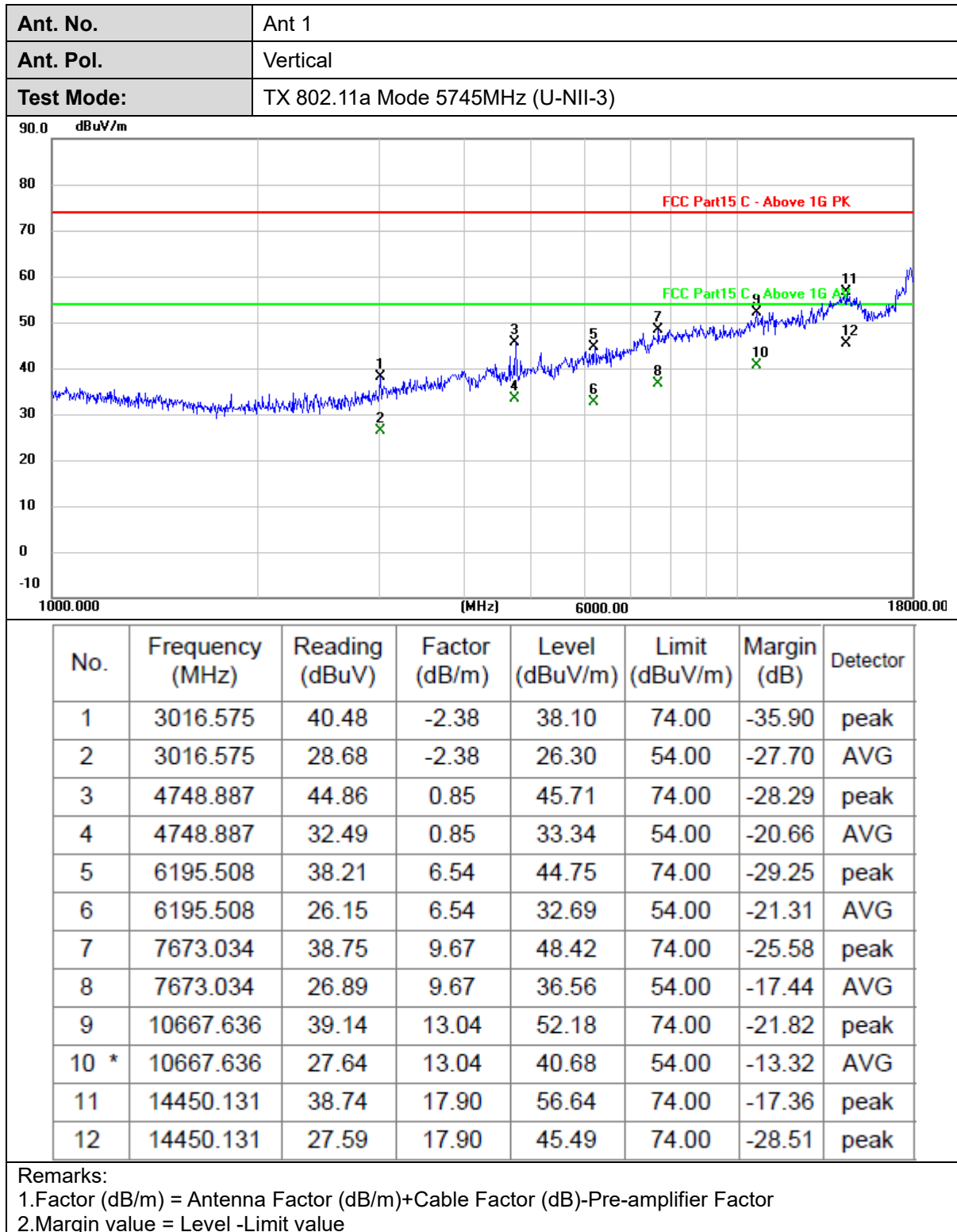


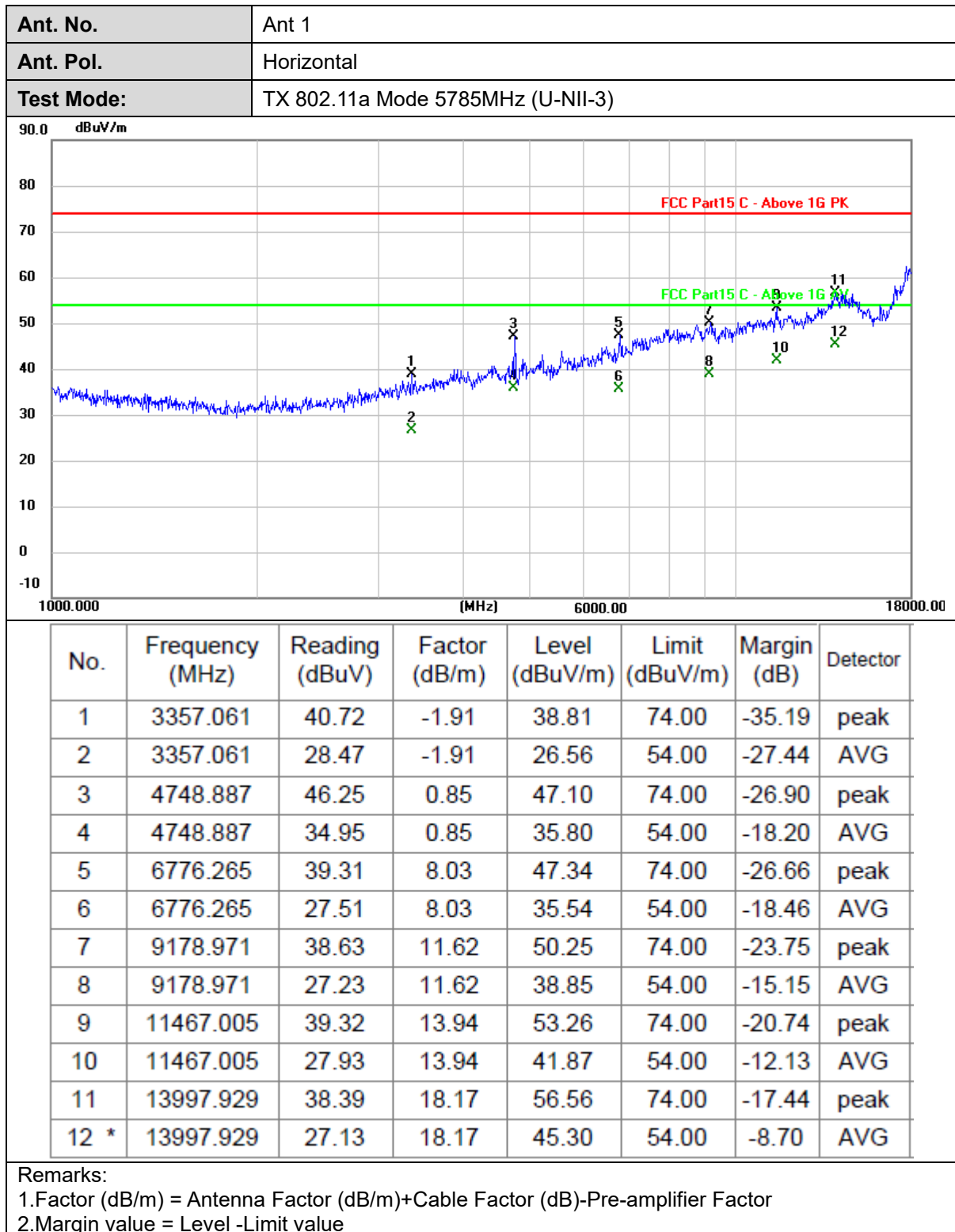


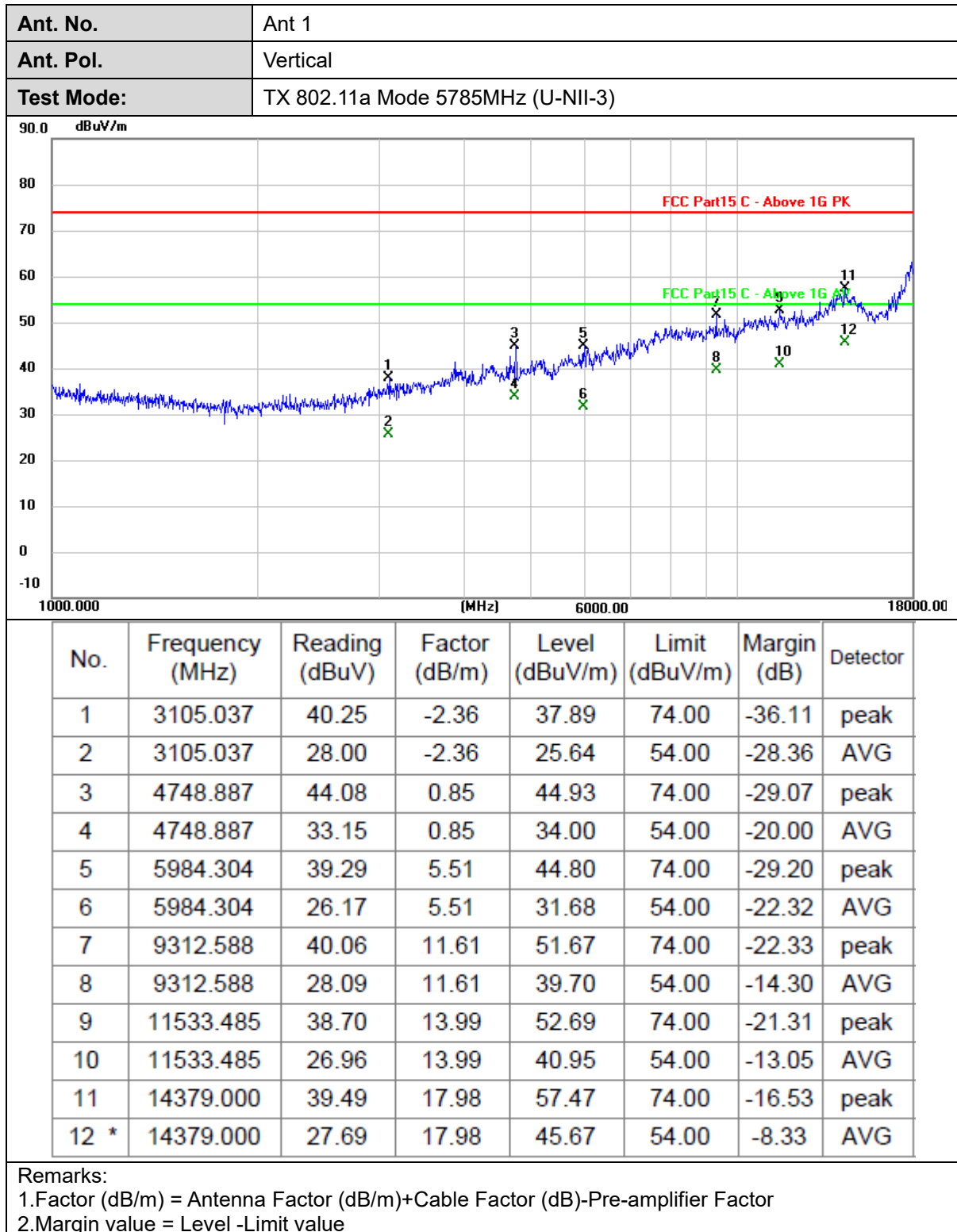


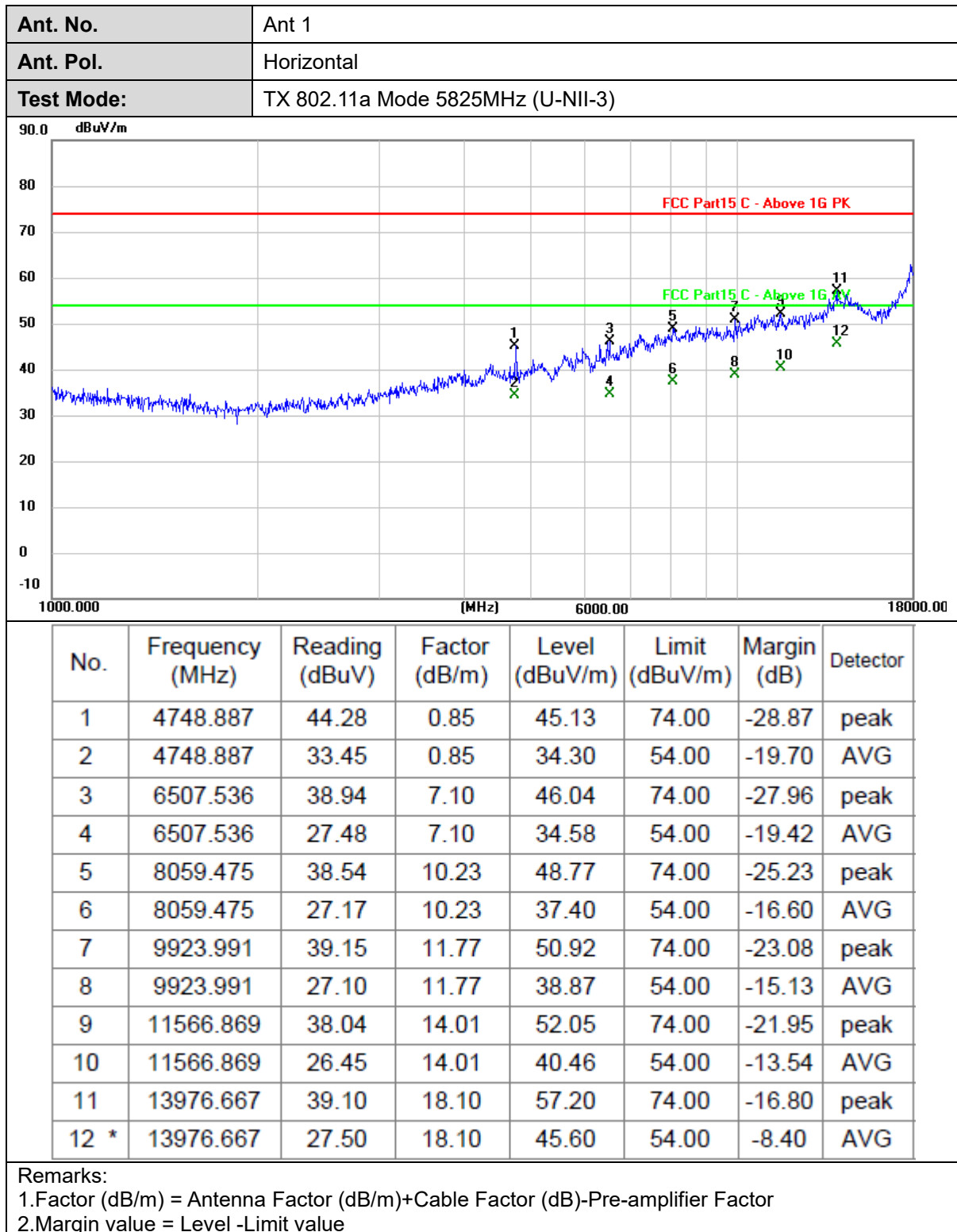


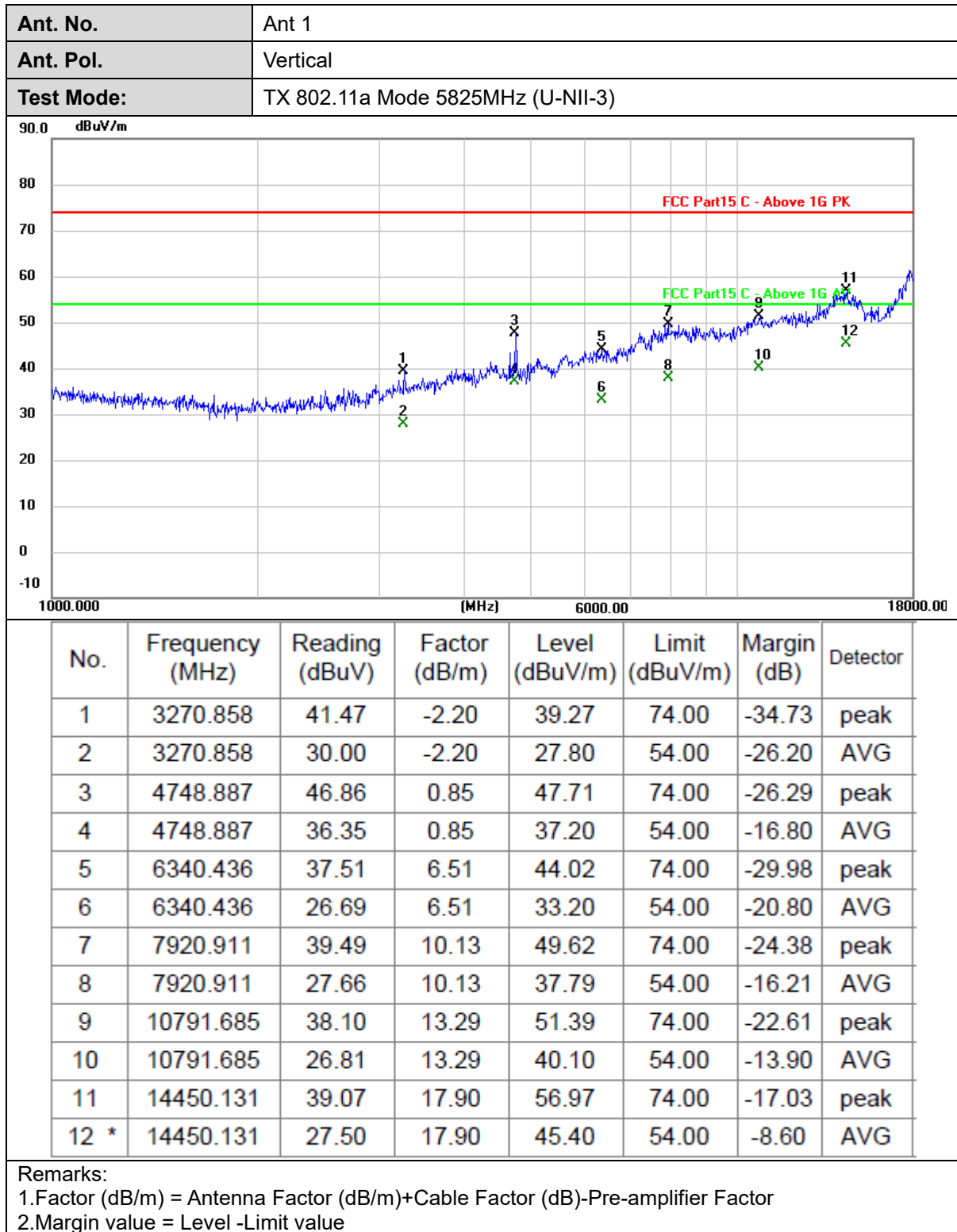




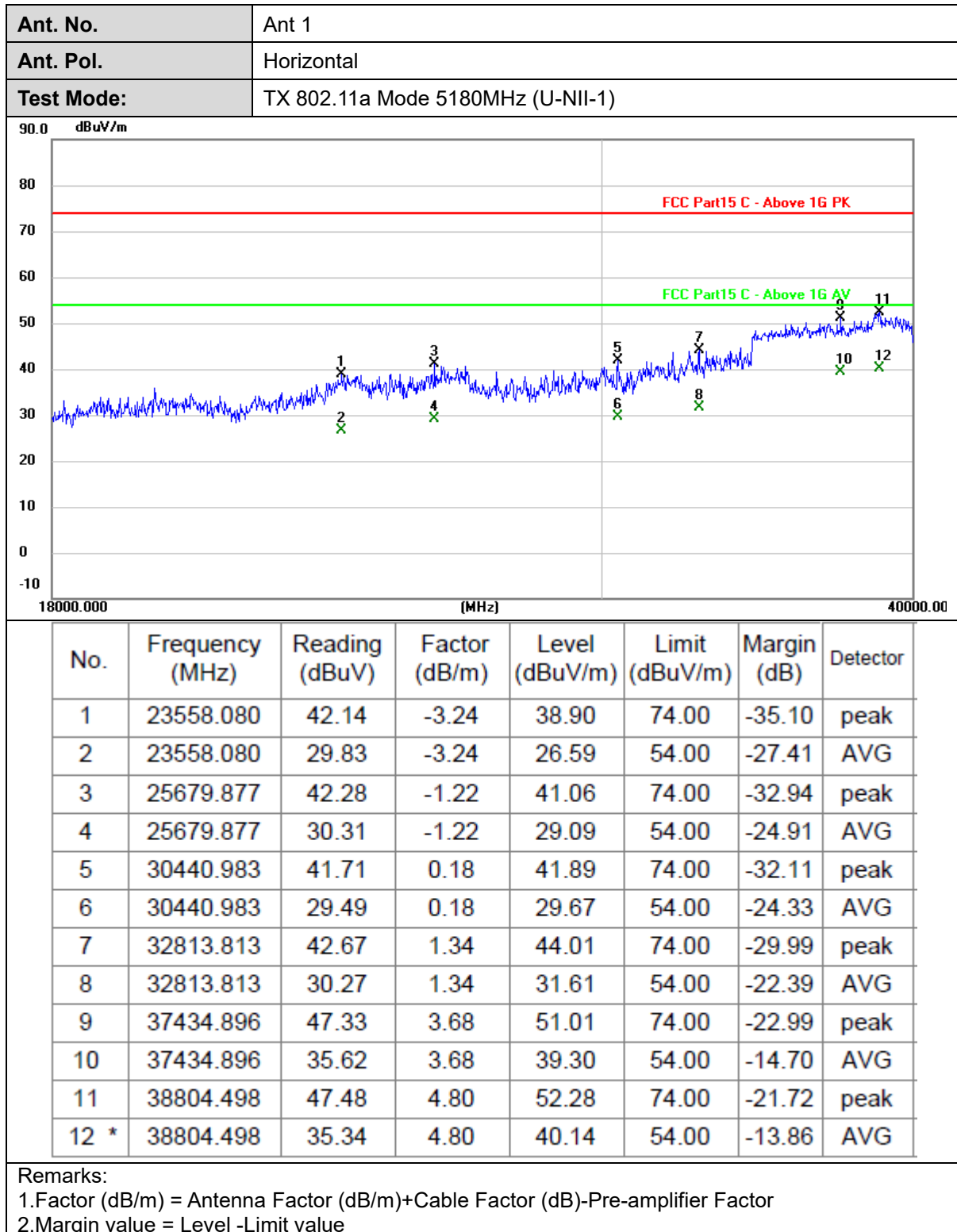


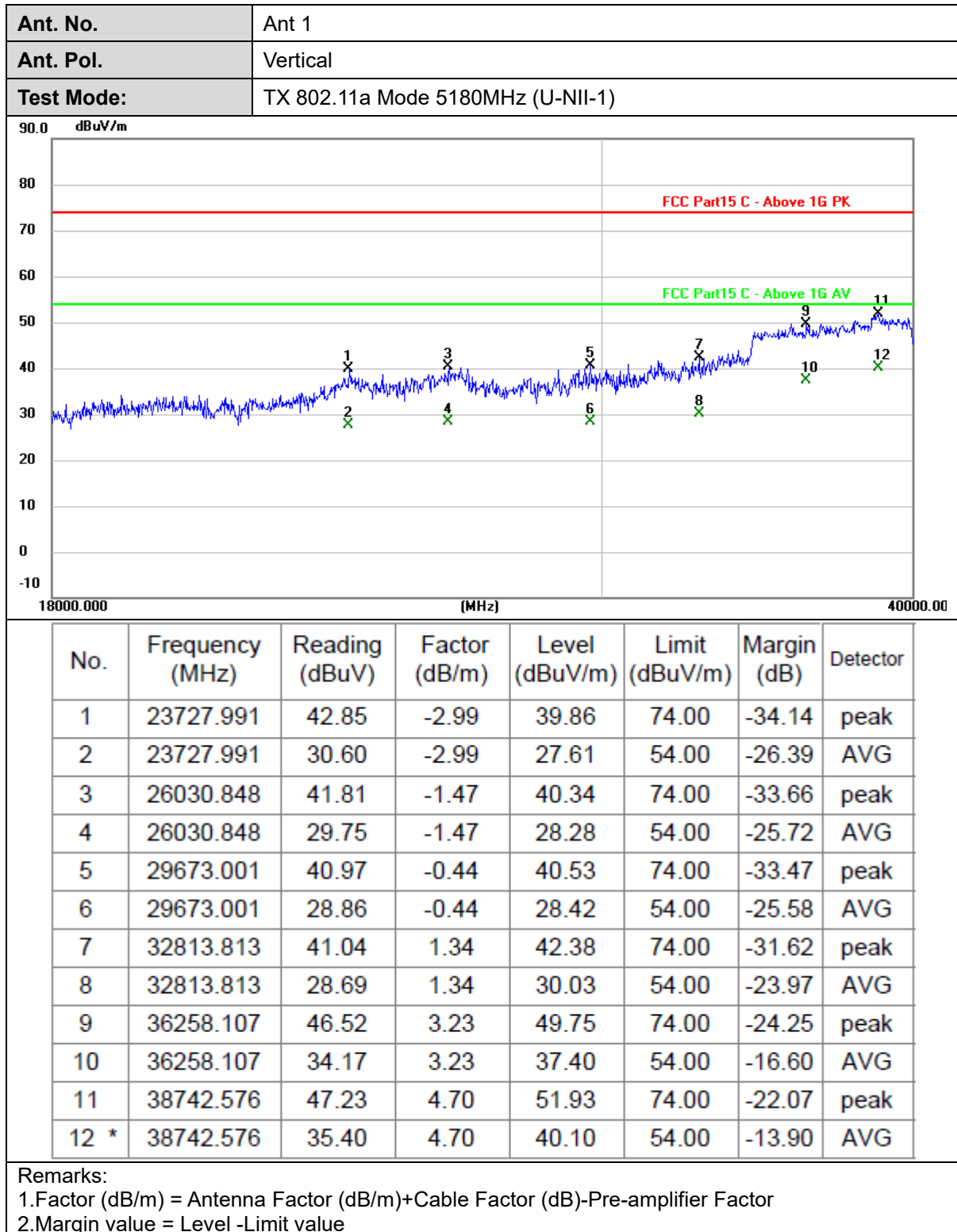


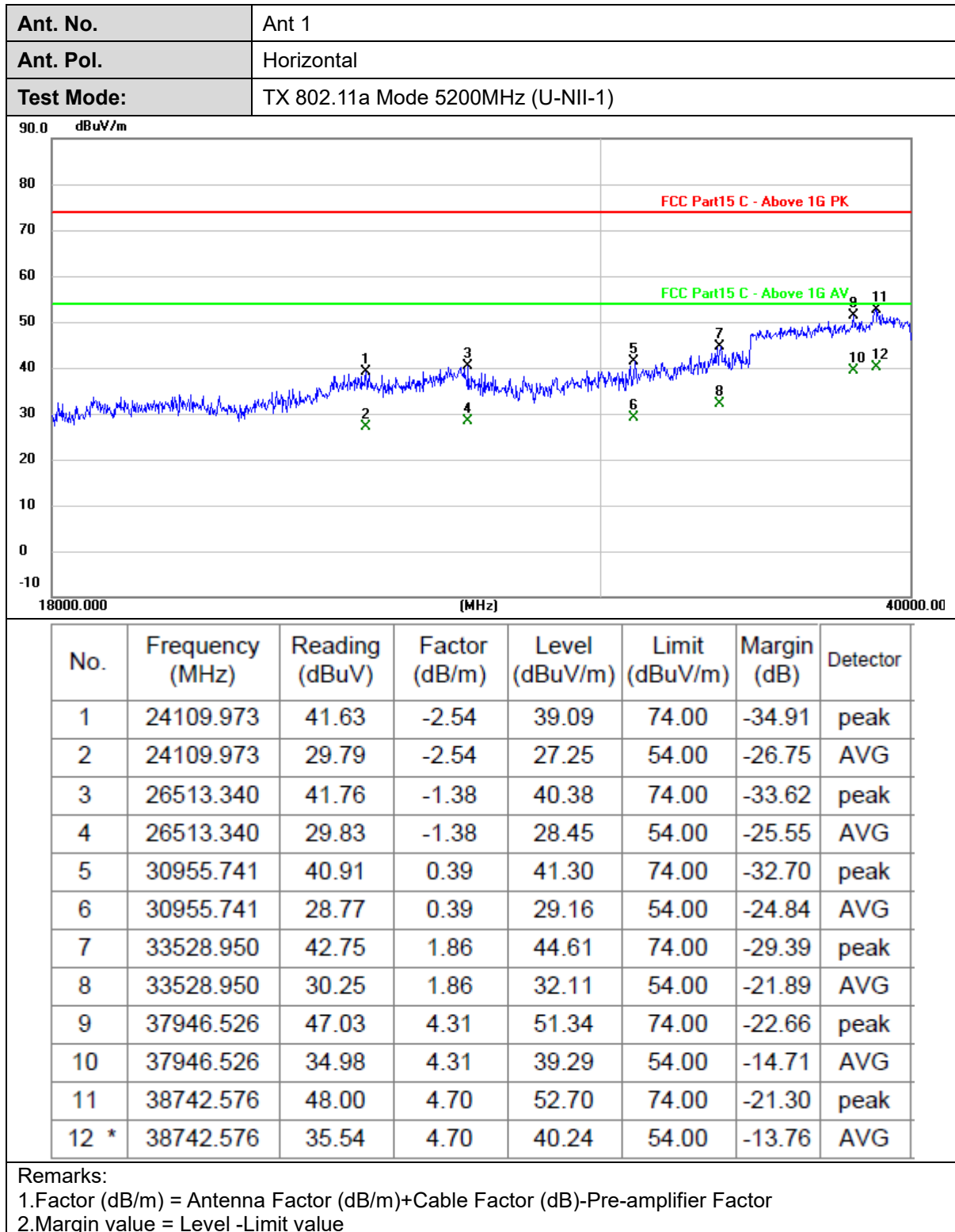


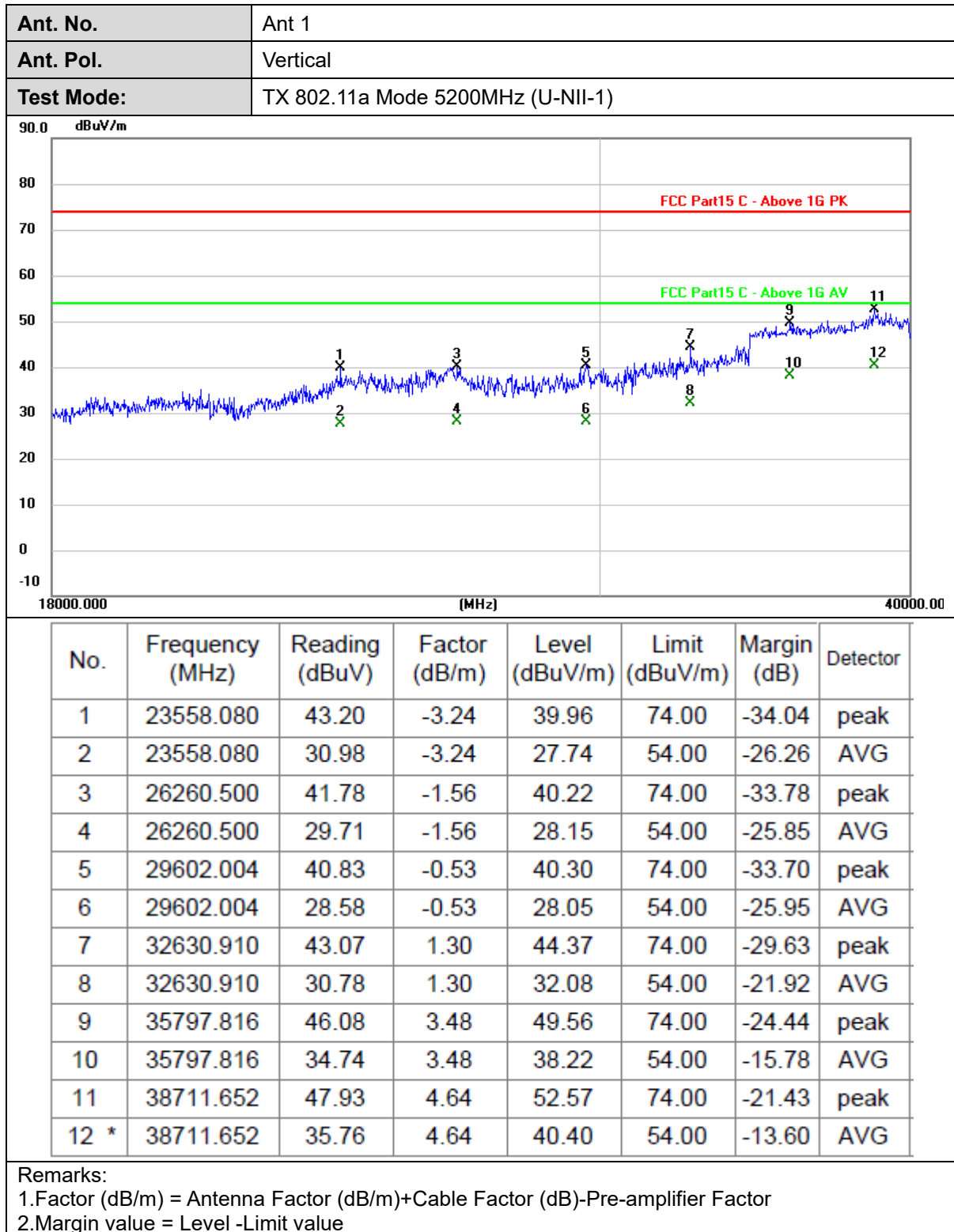


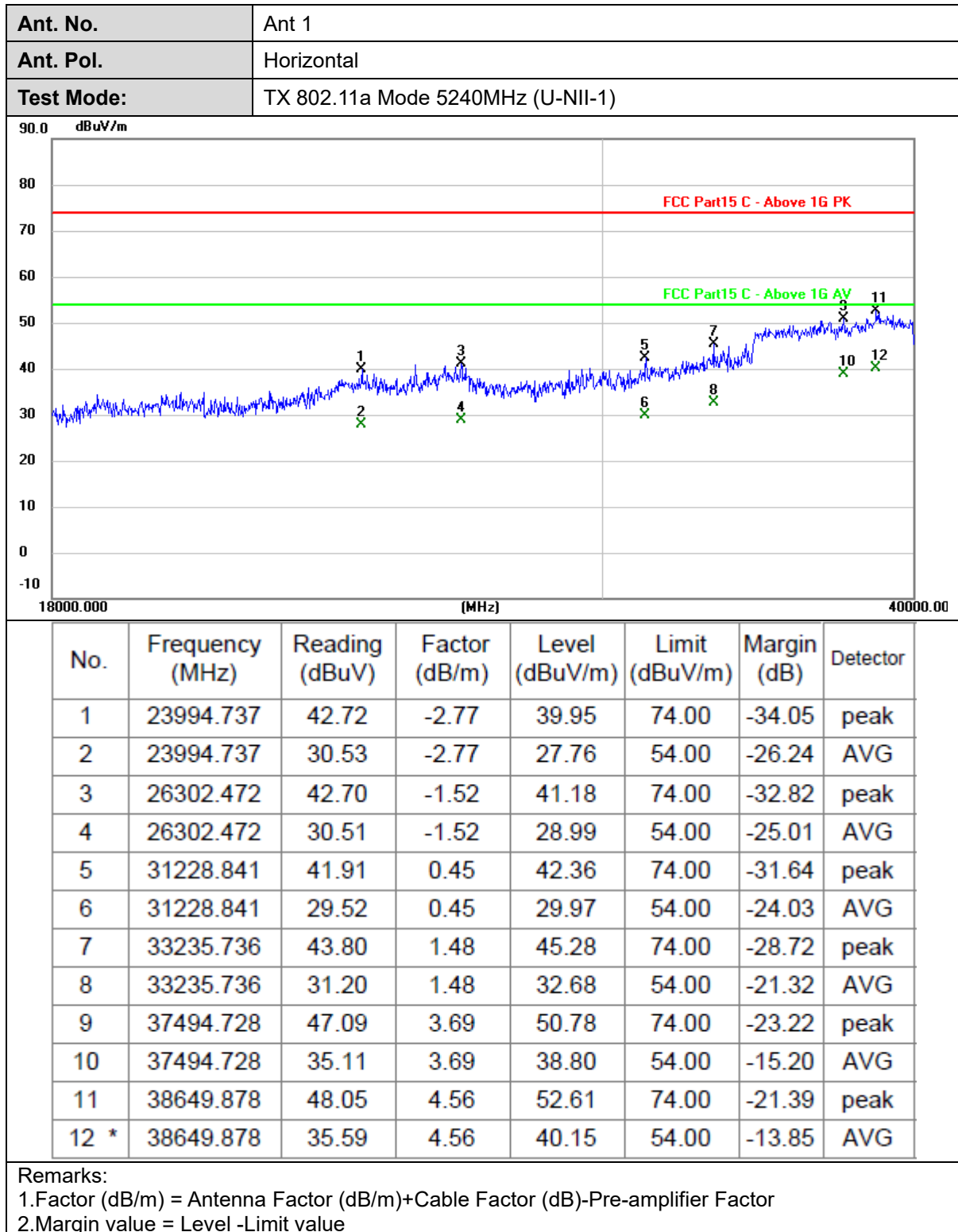
18GHz-40GHz

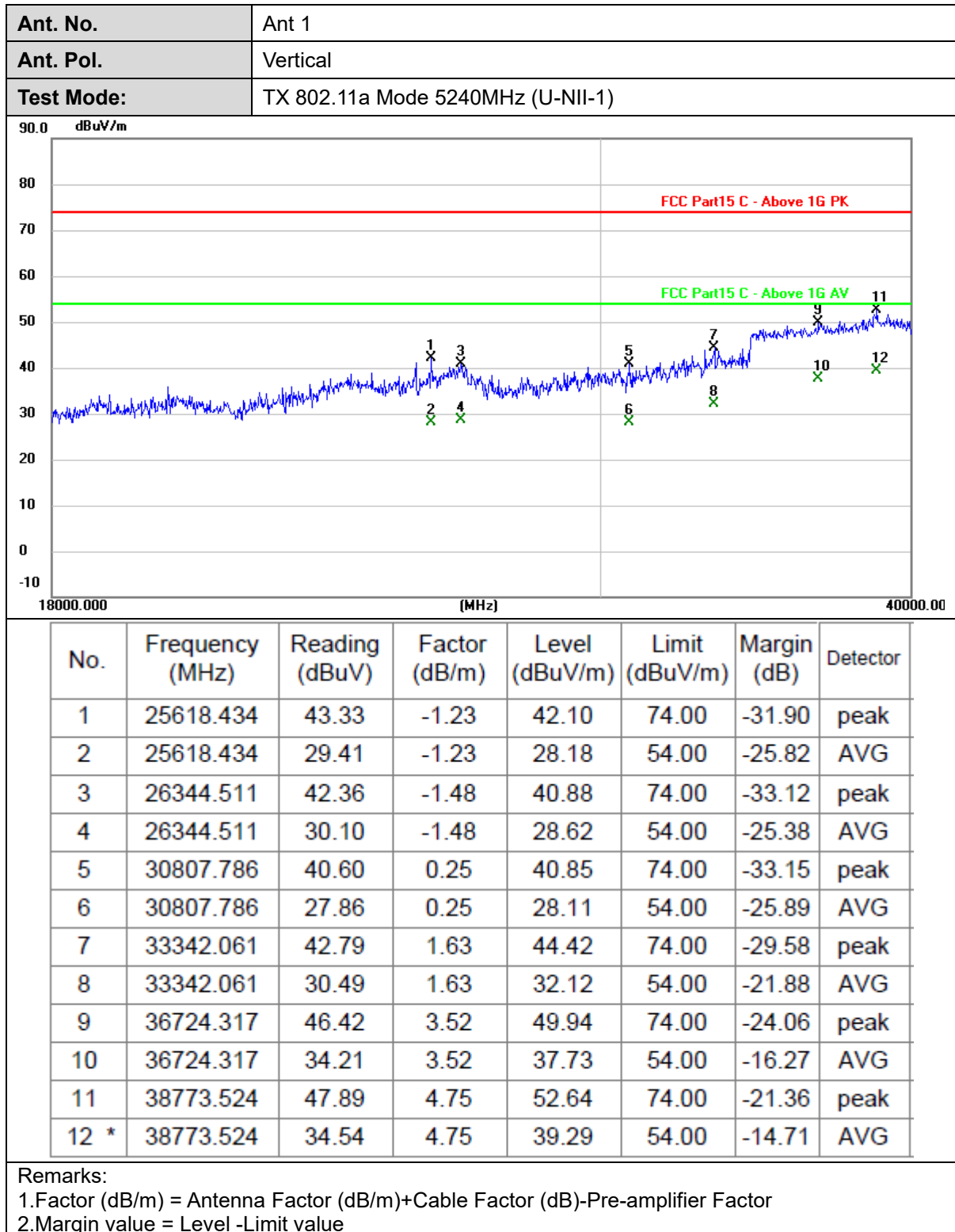


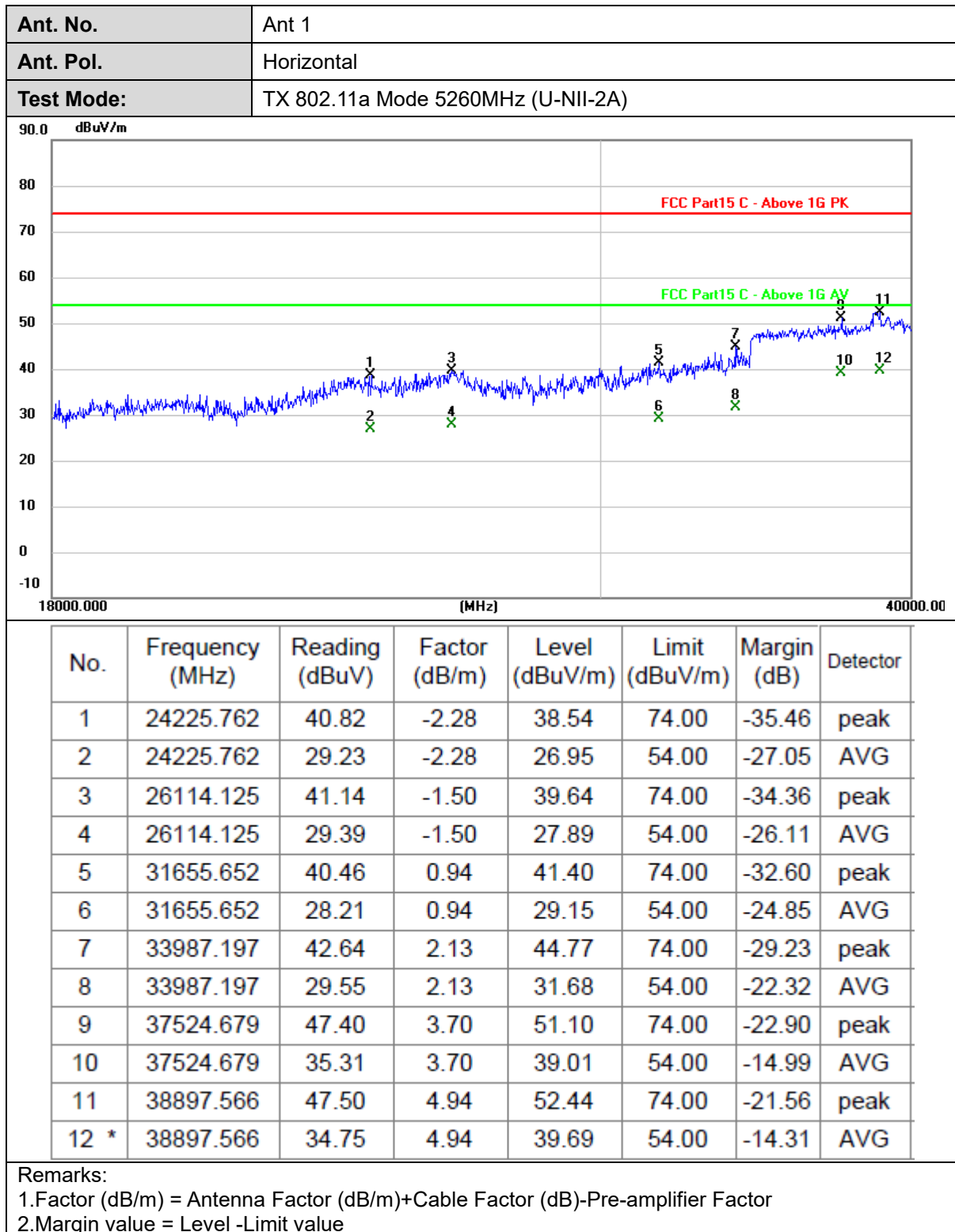


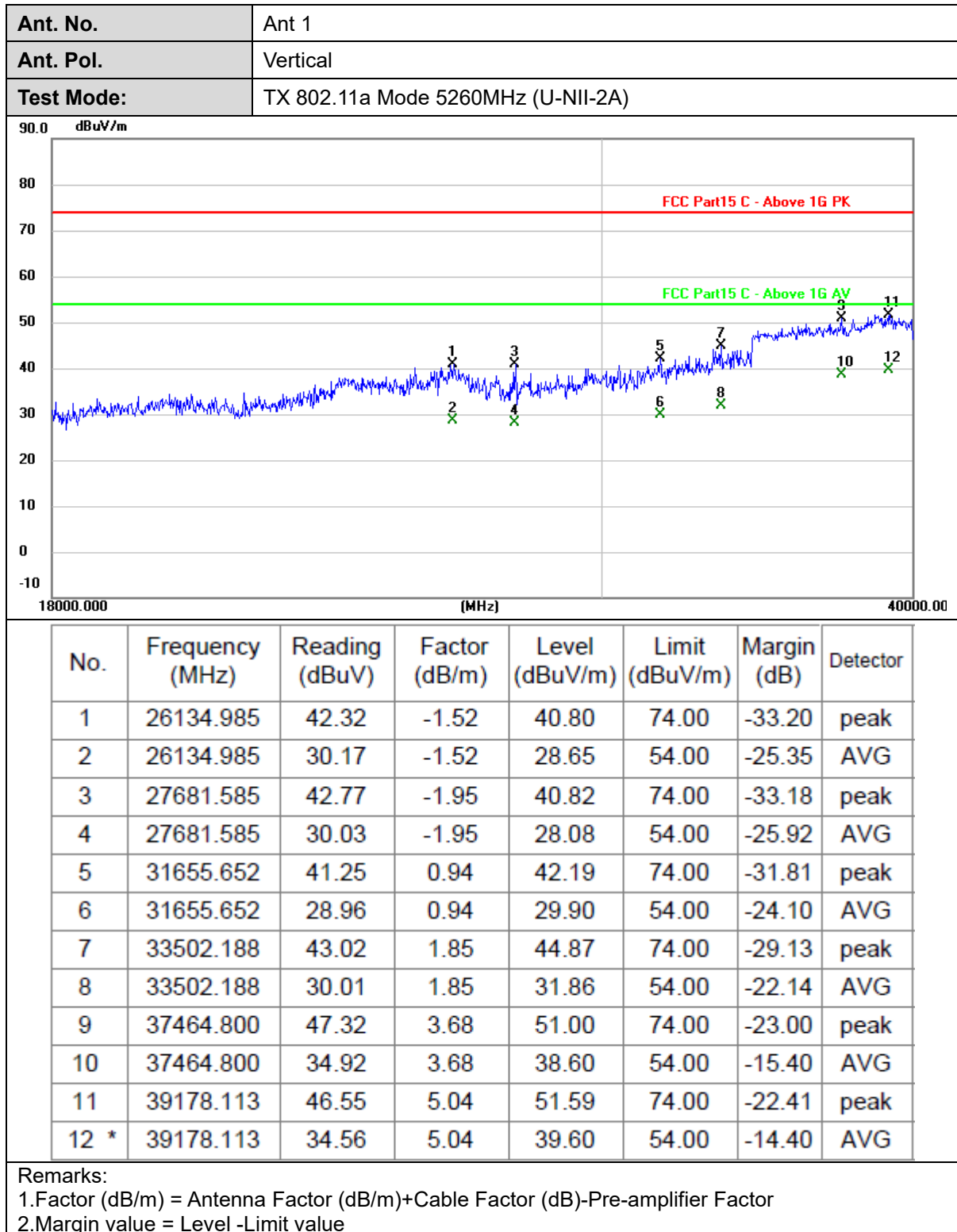


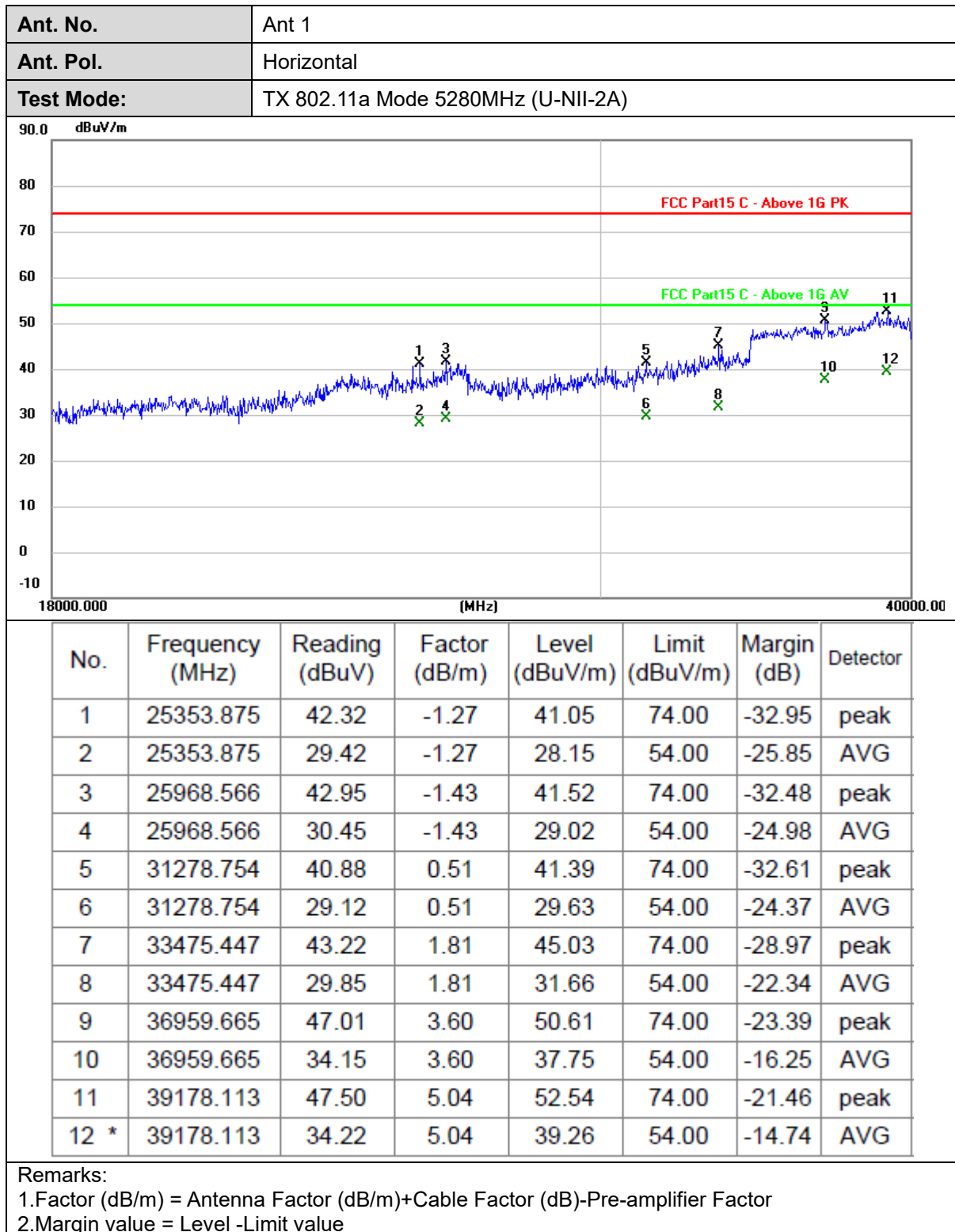


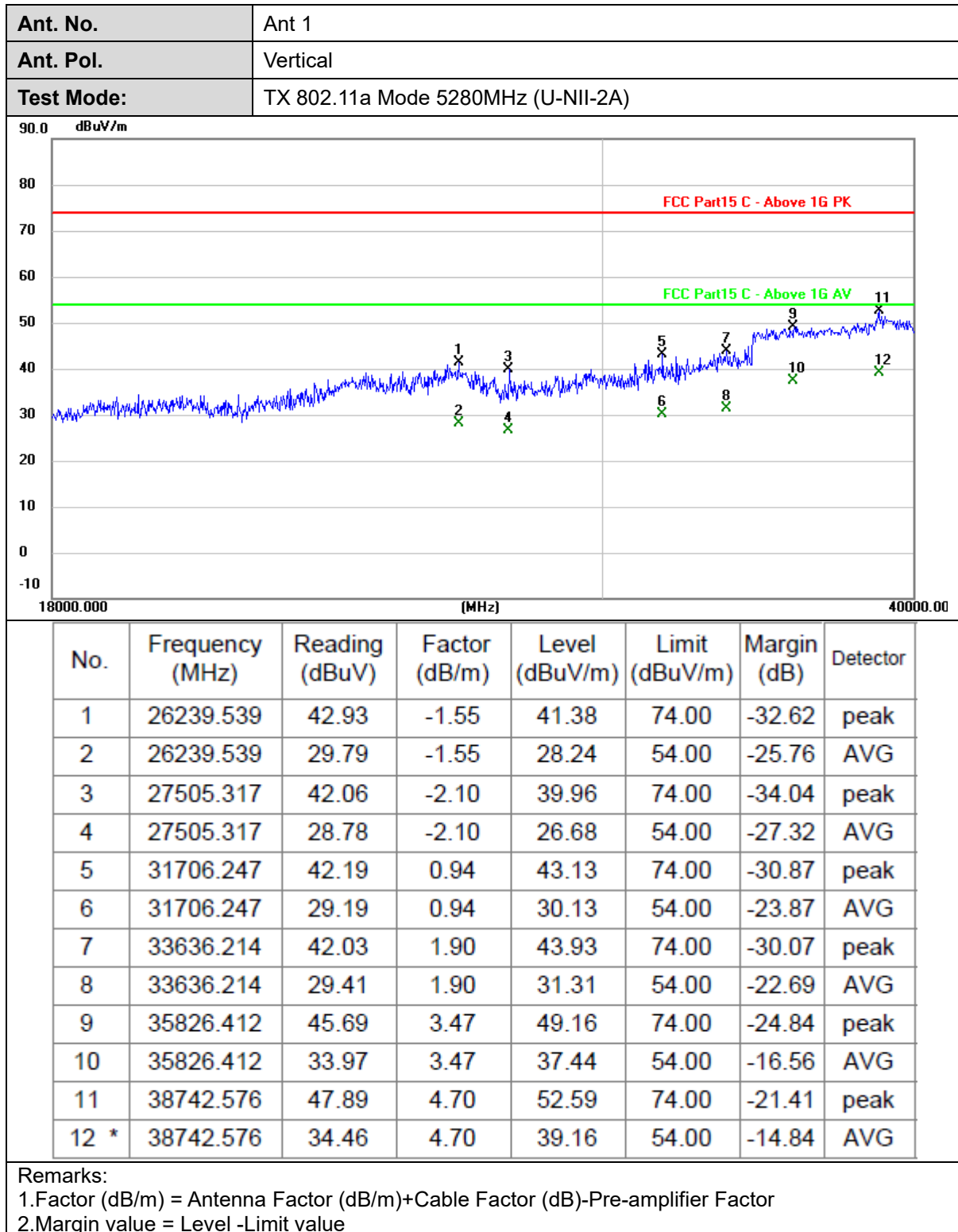


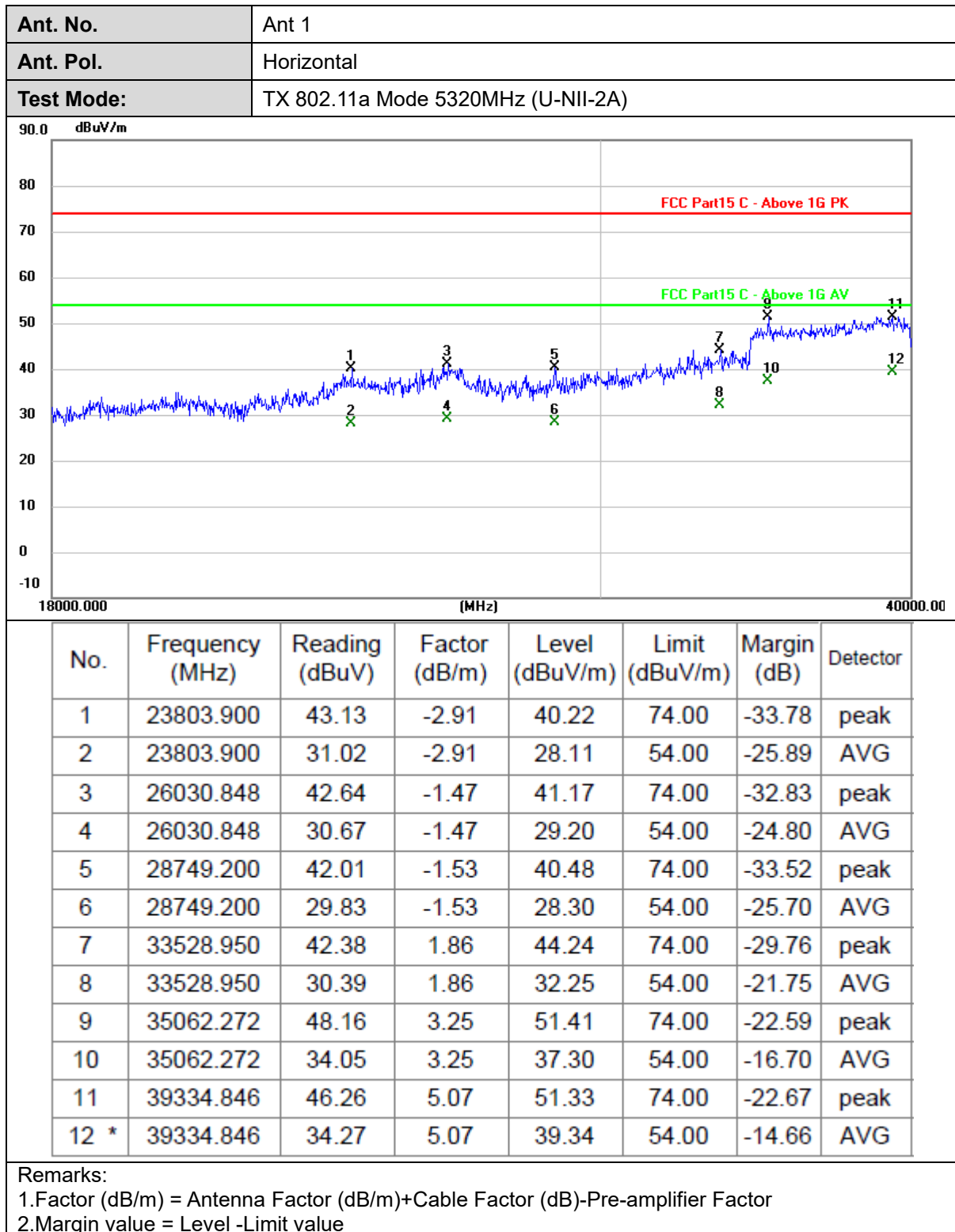


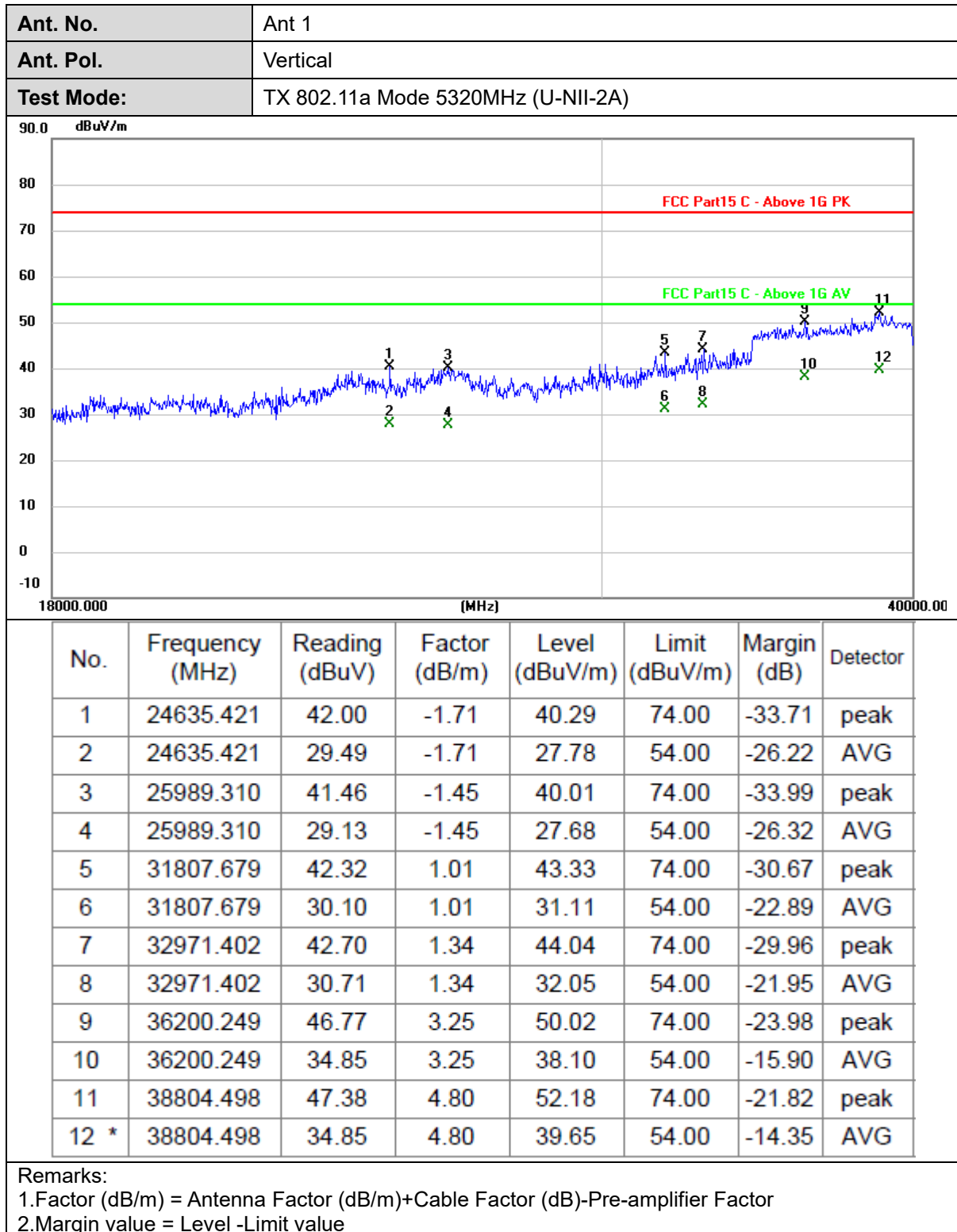


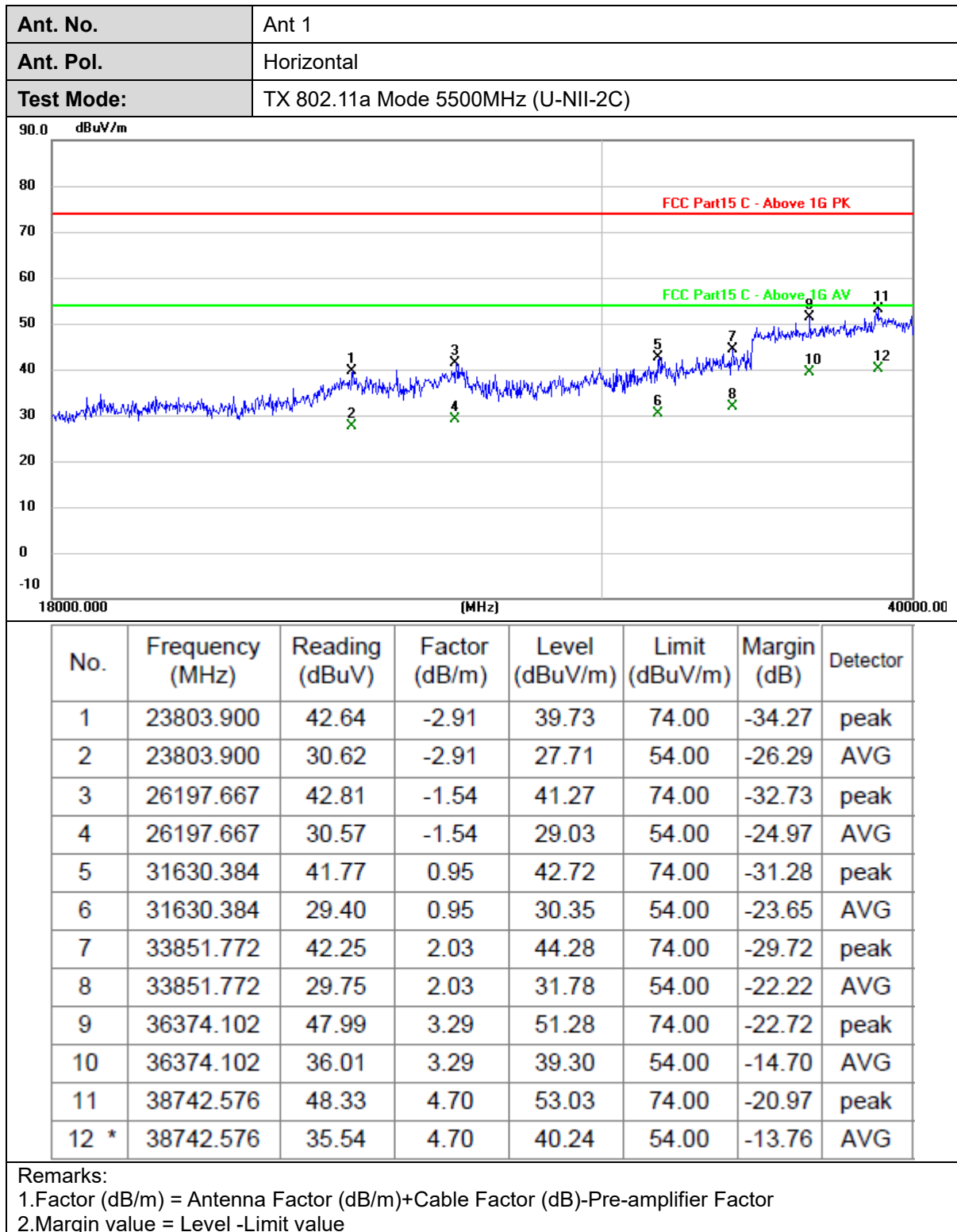


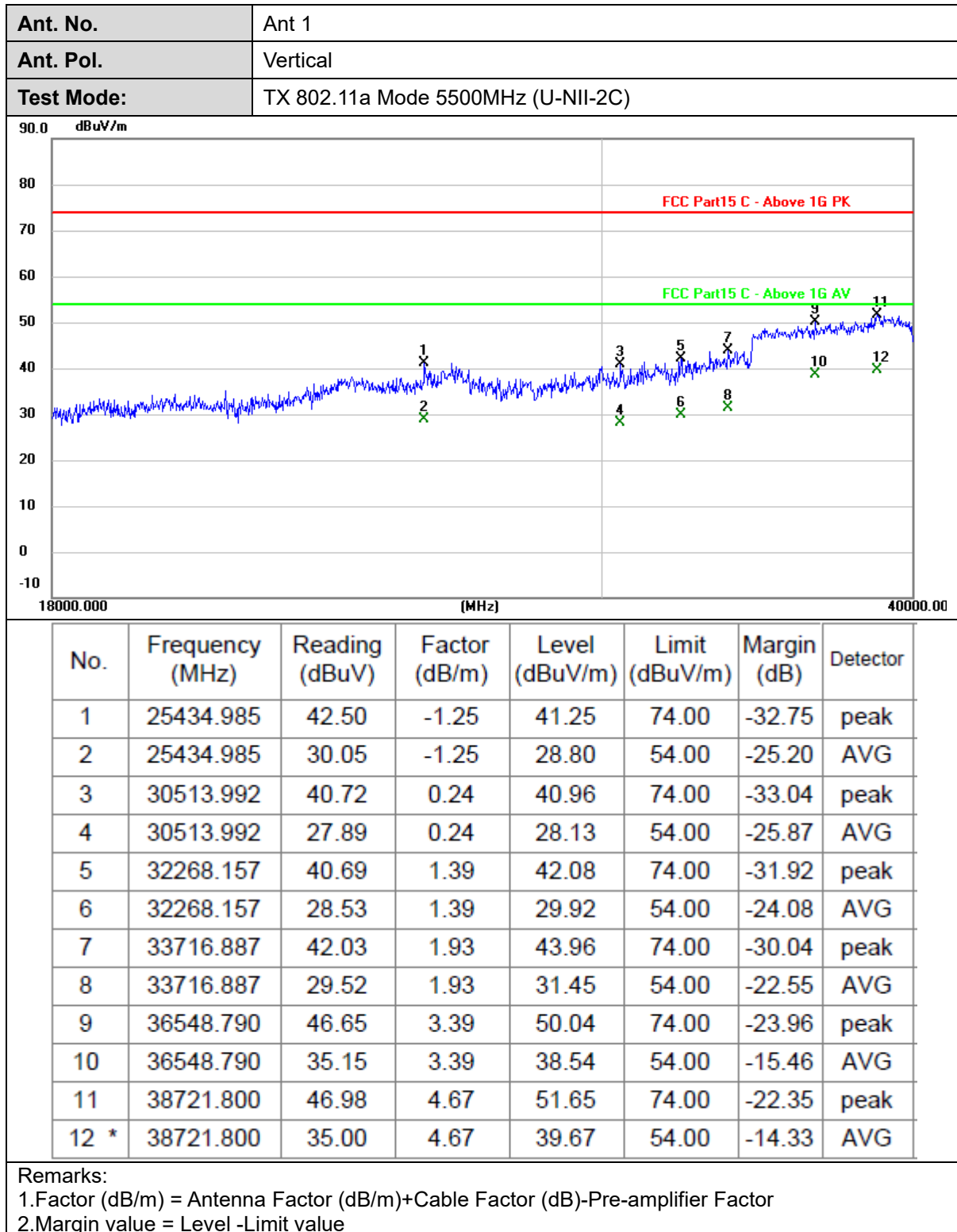


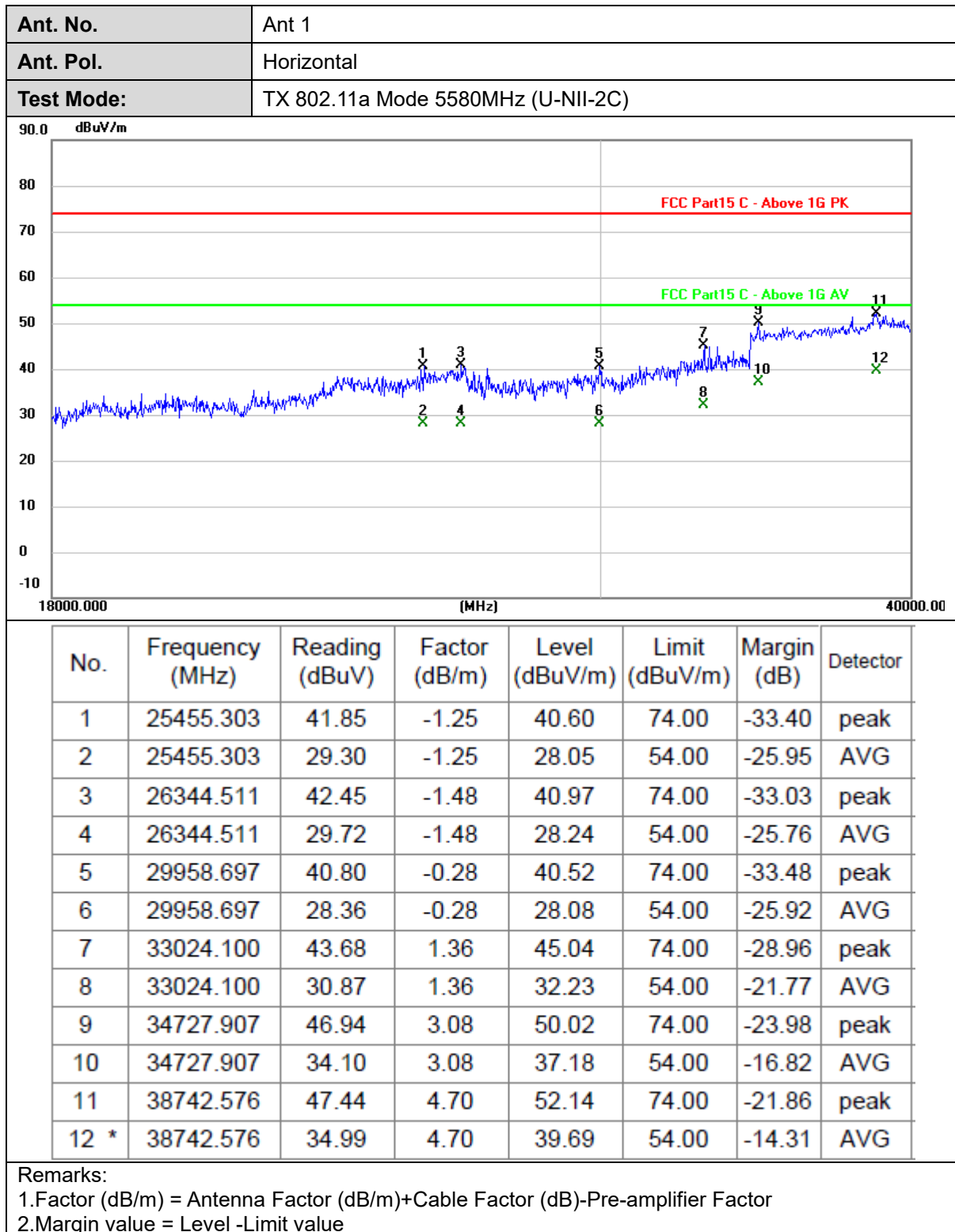


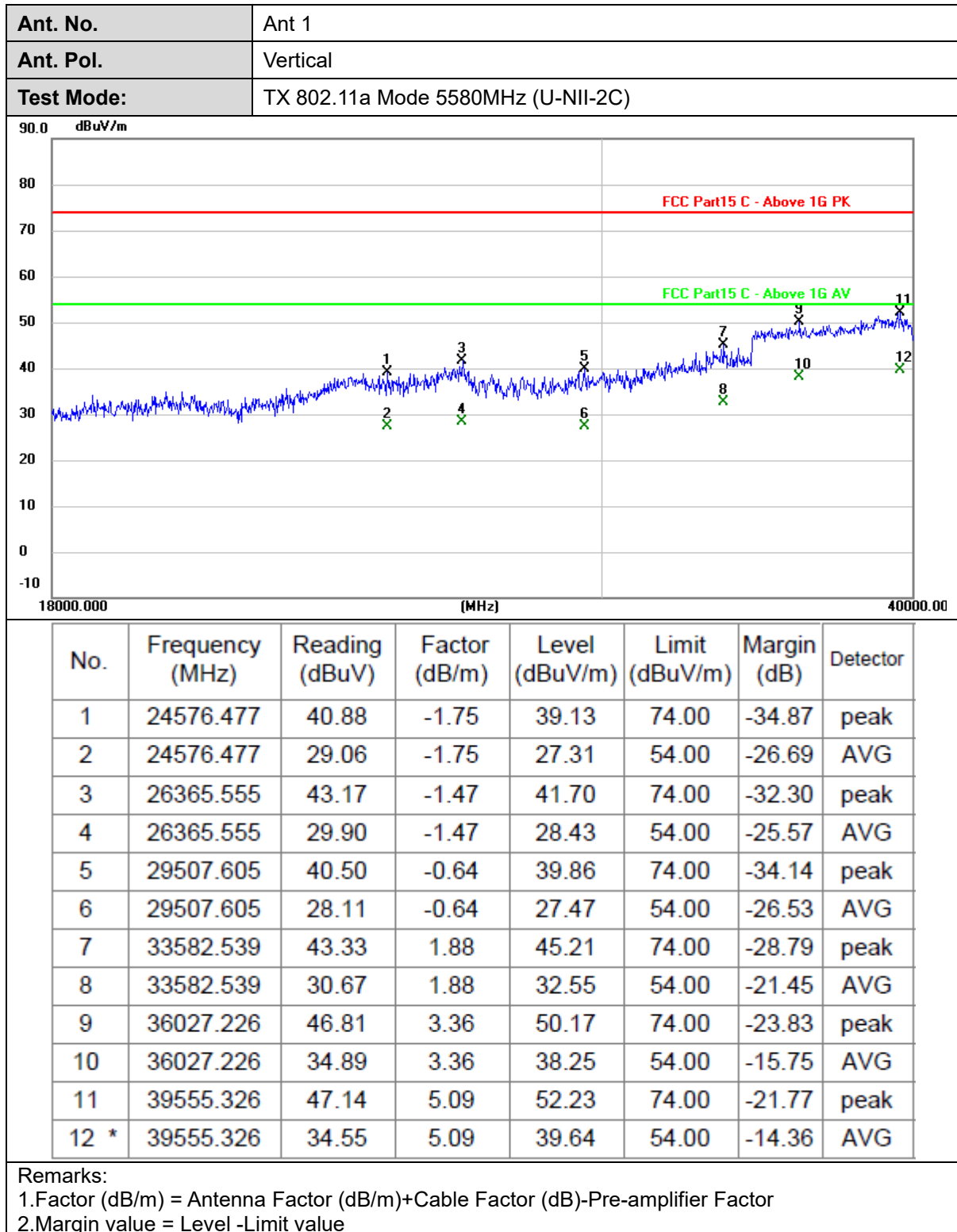


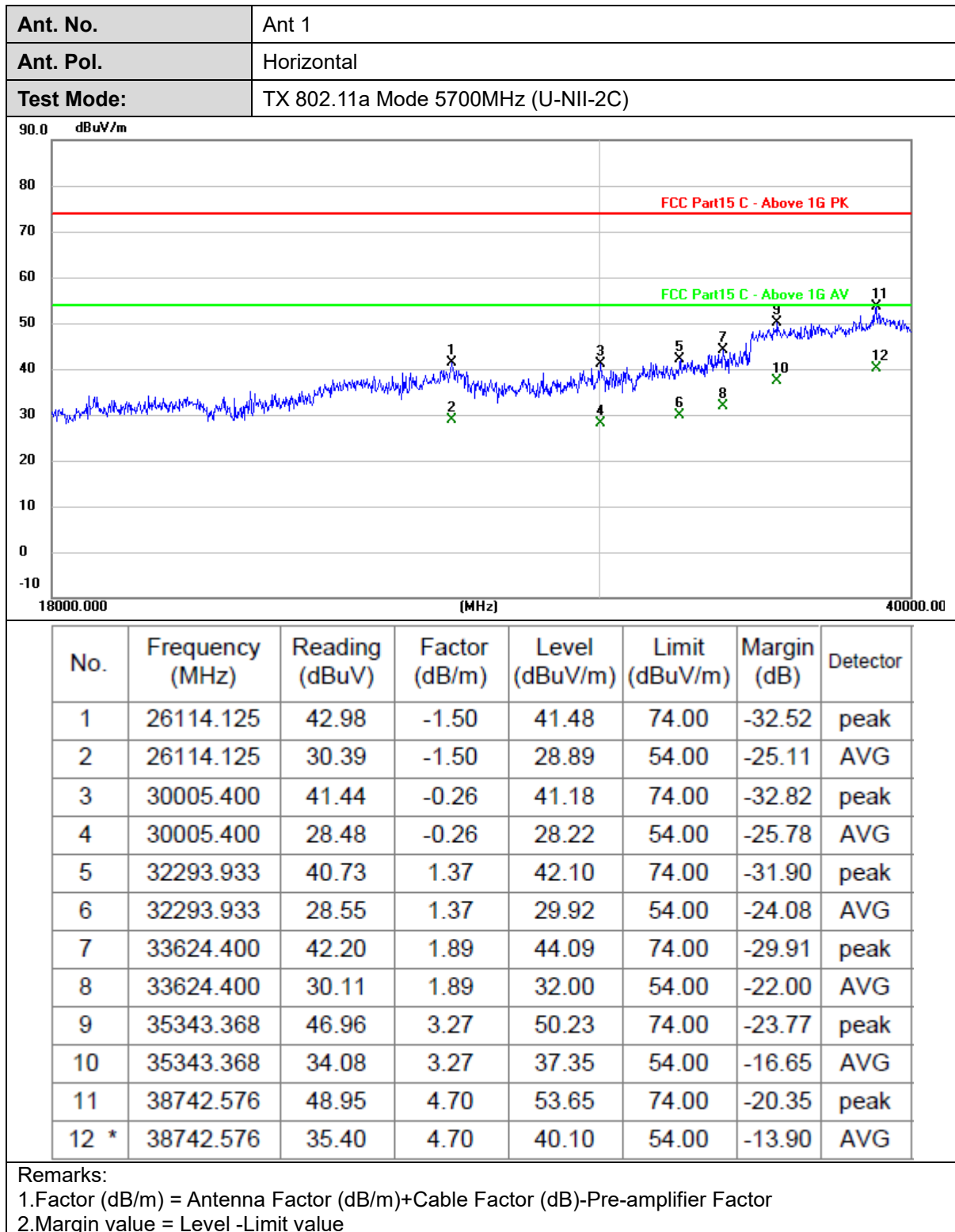


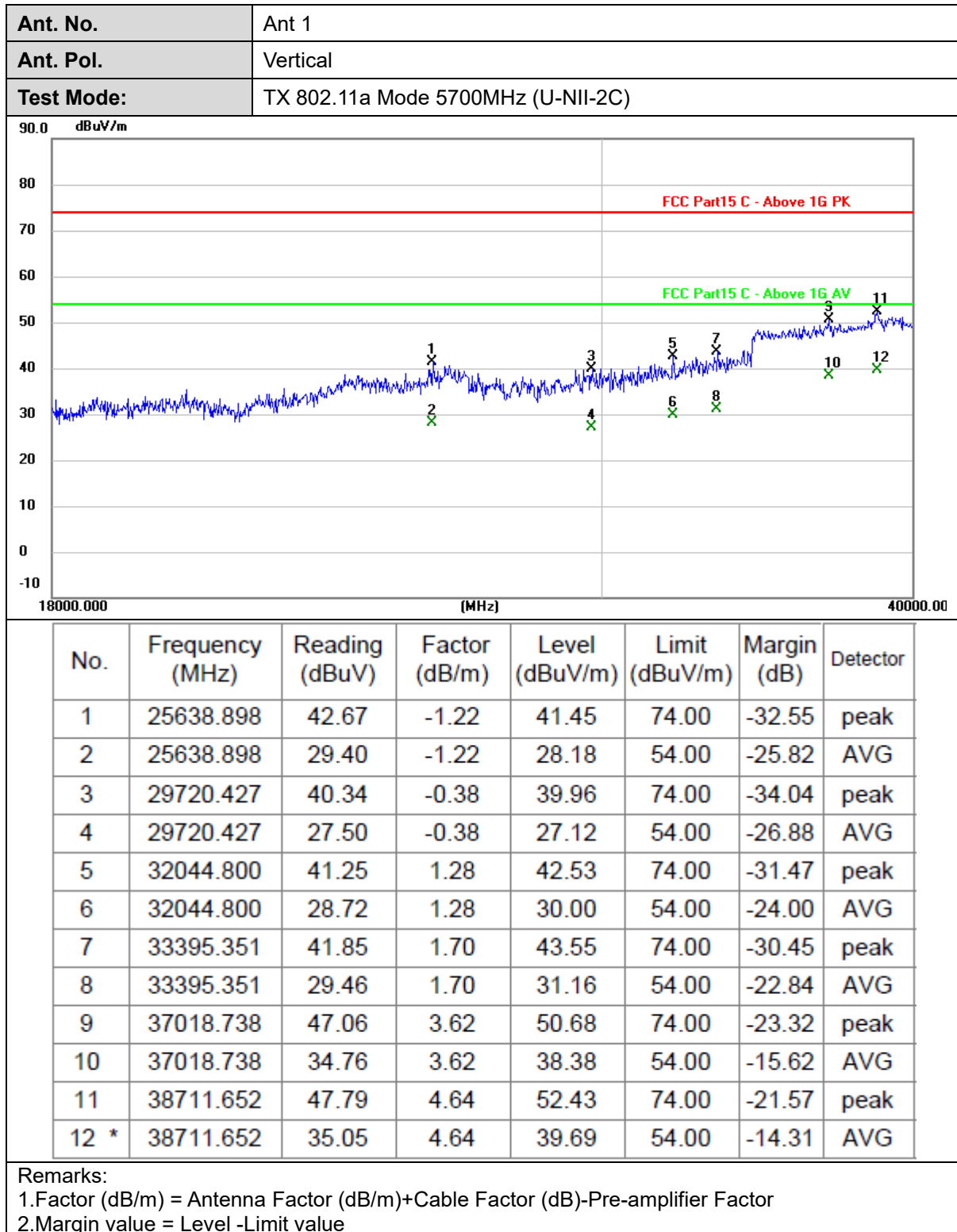


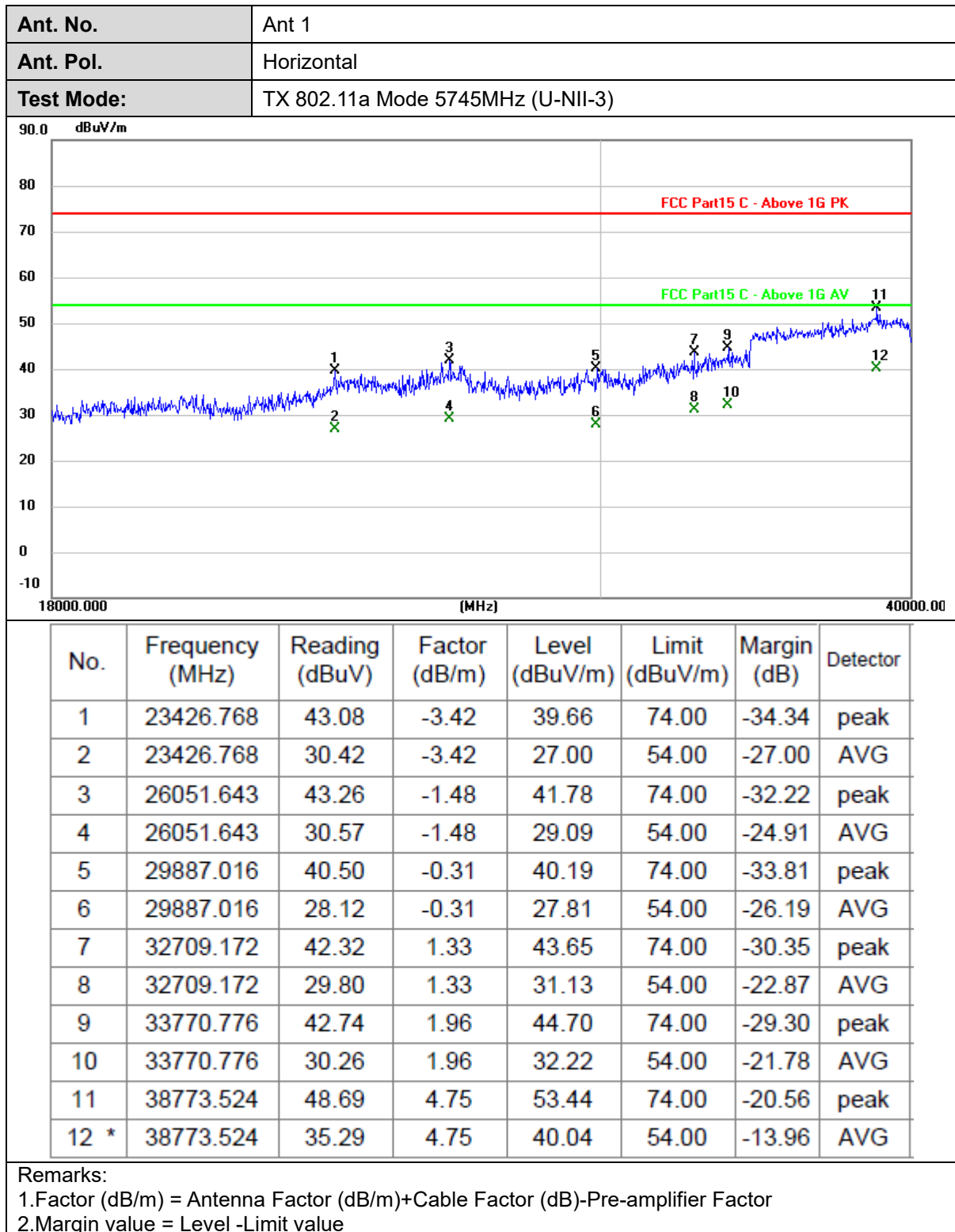


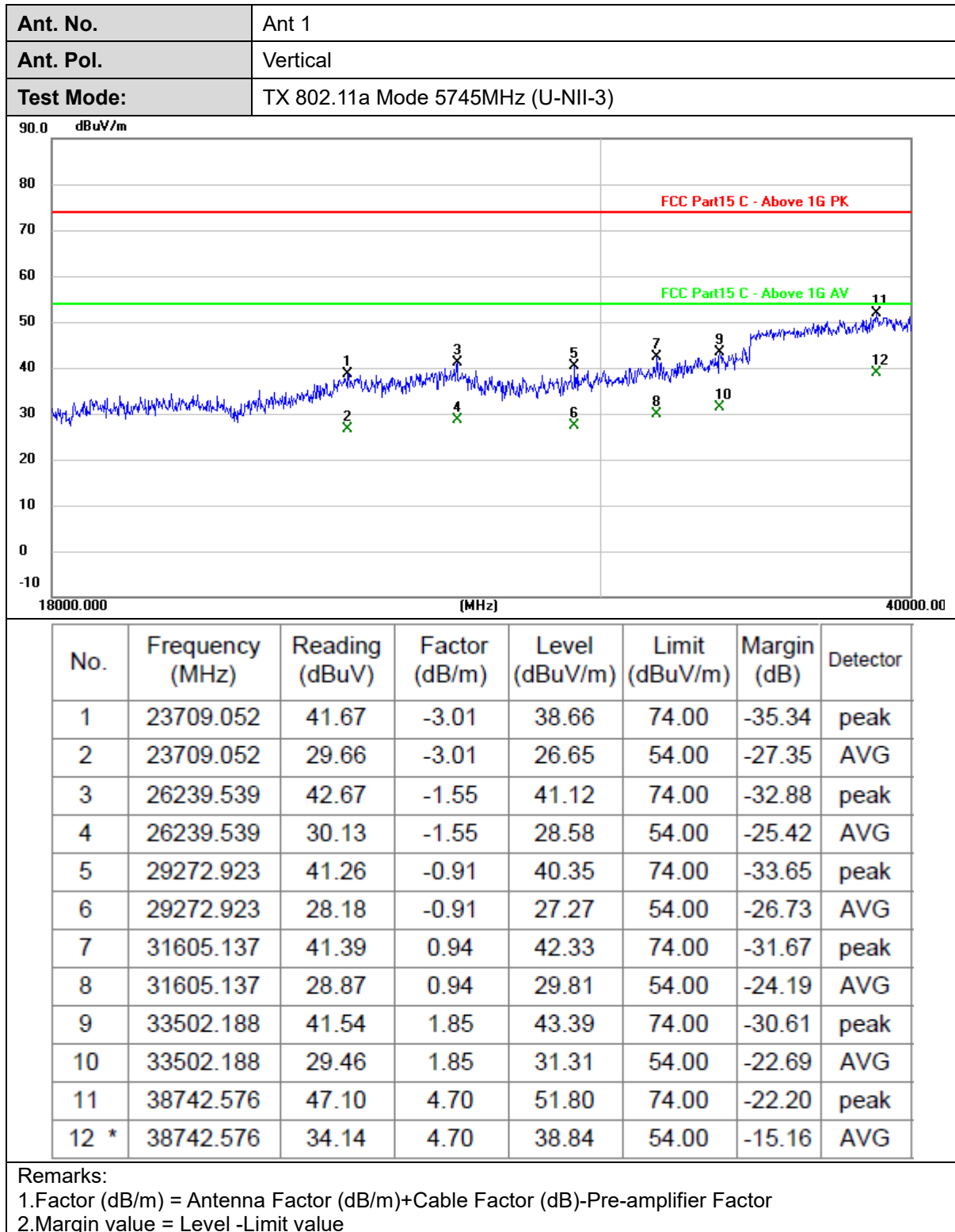


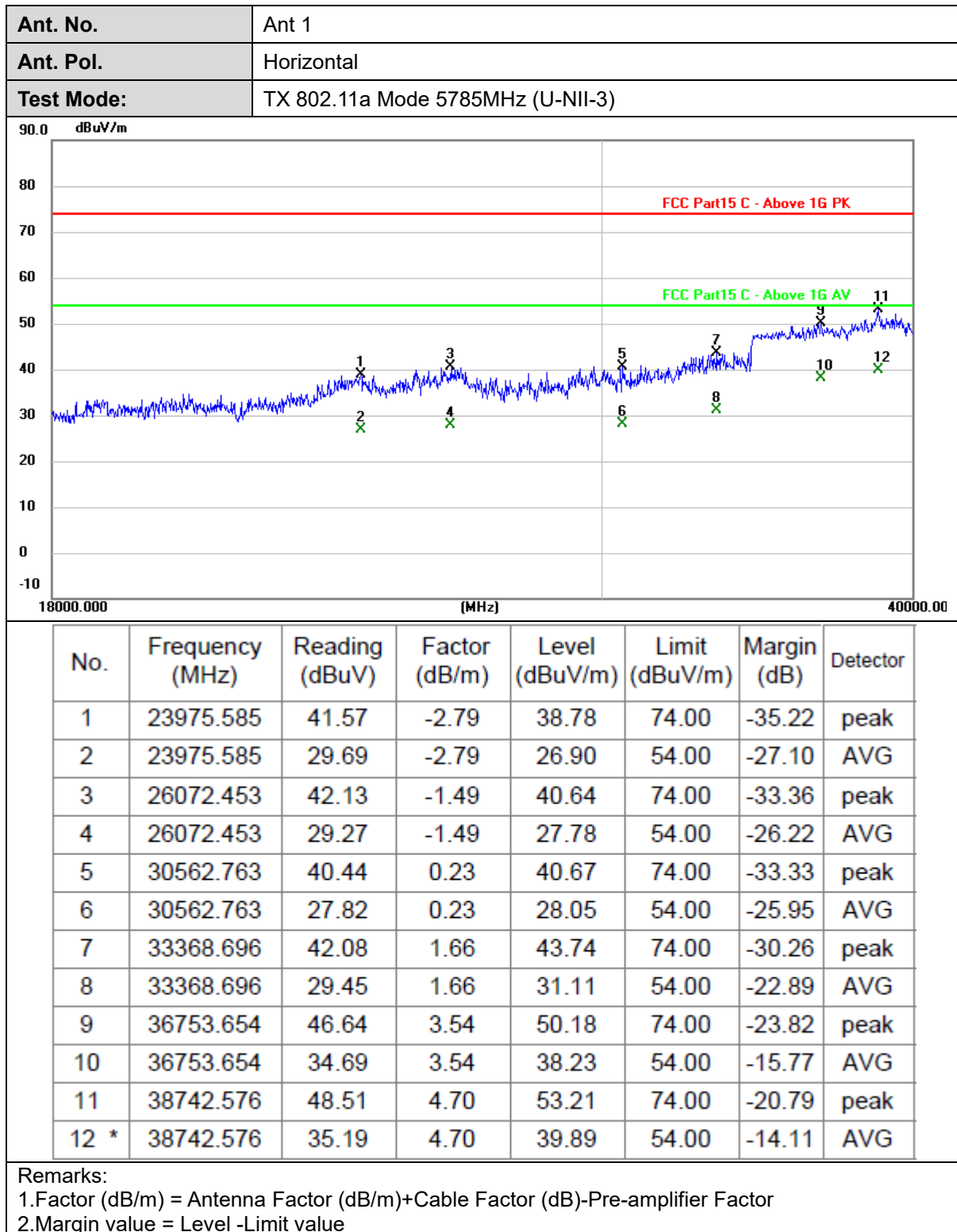


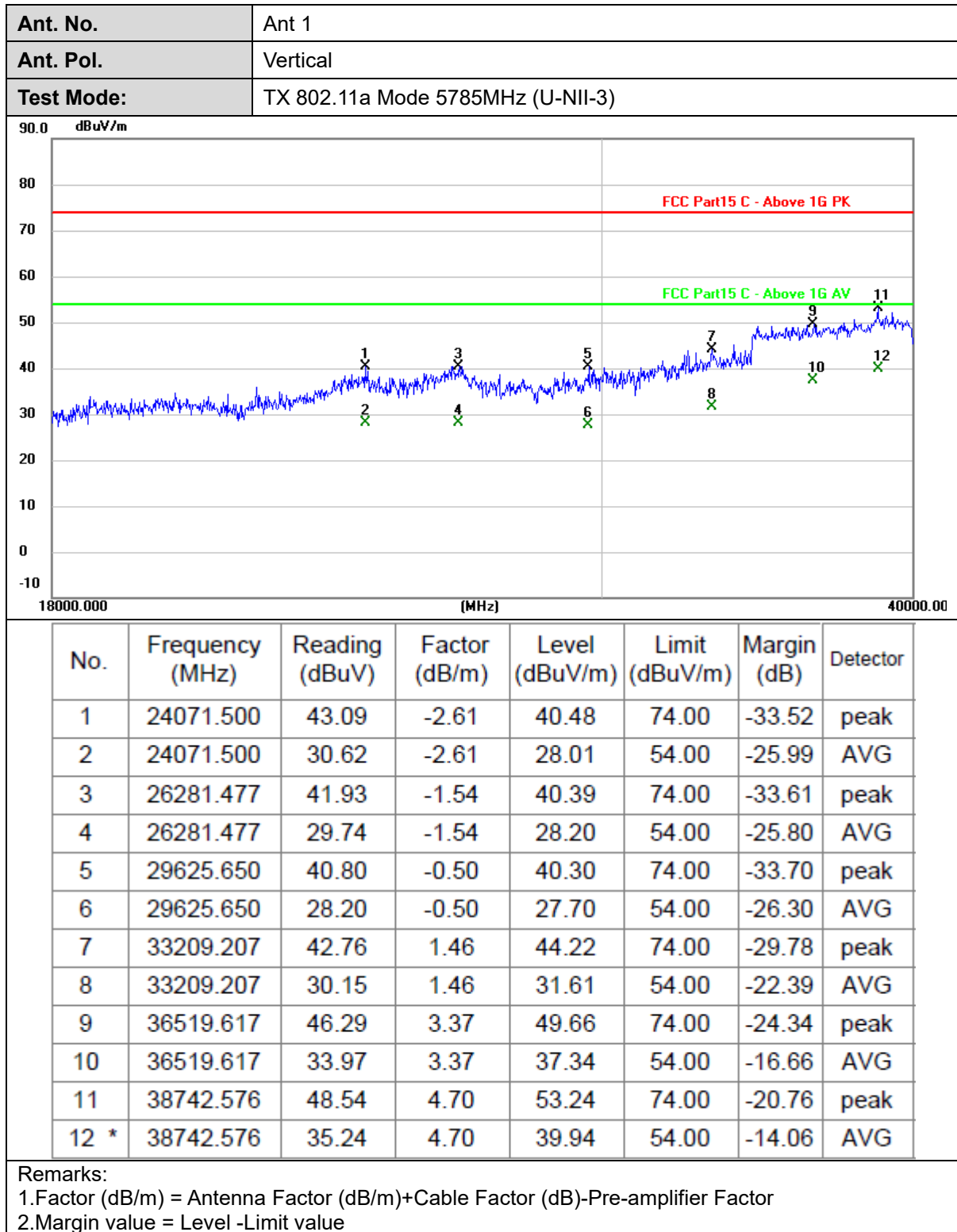


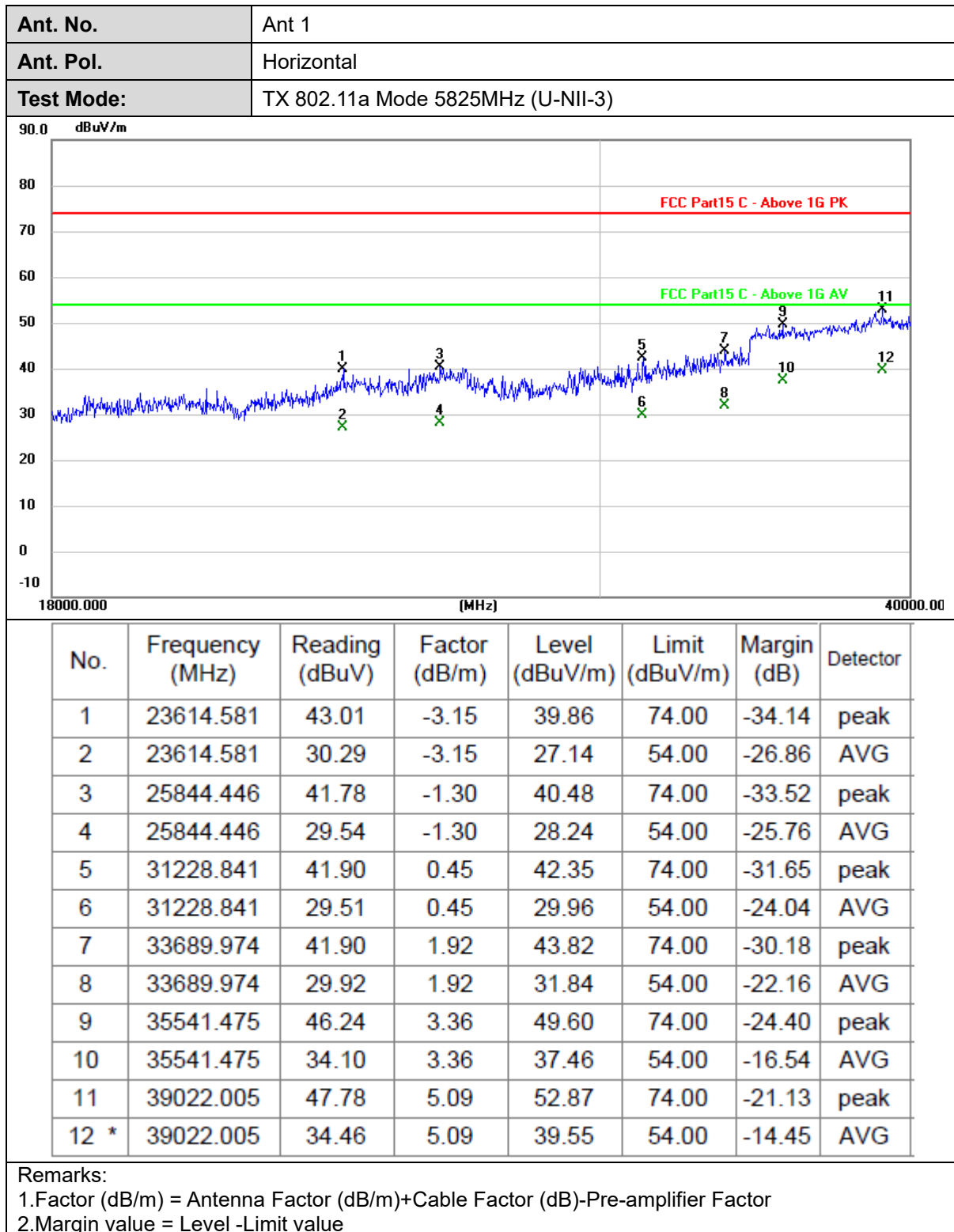


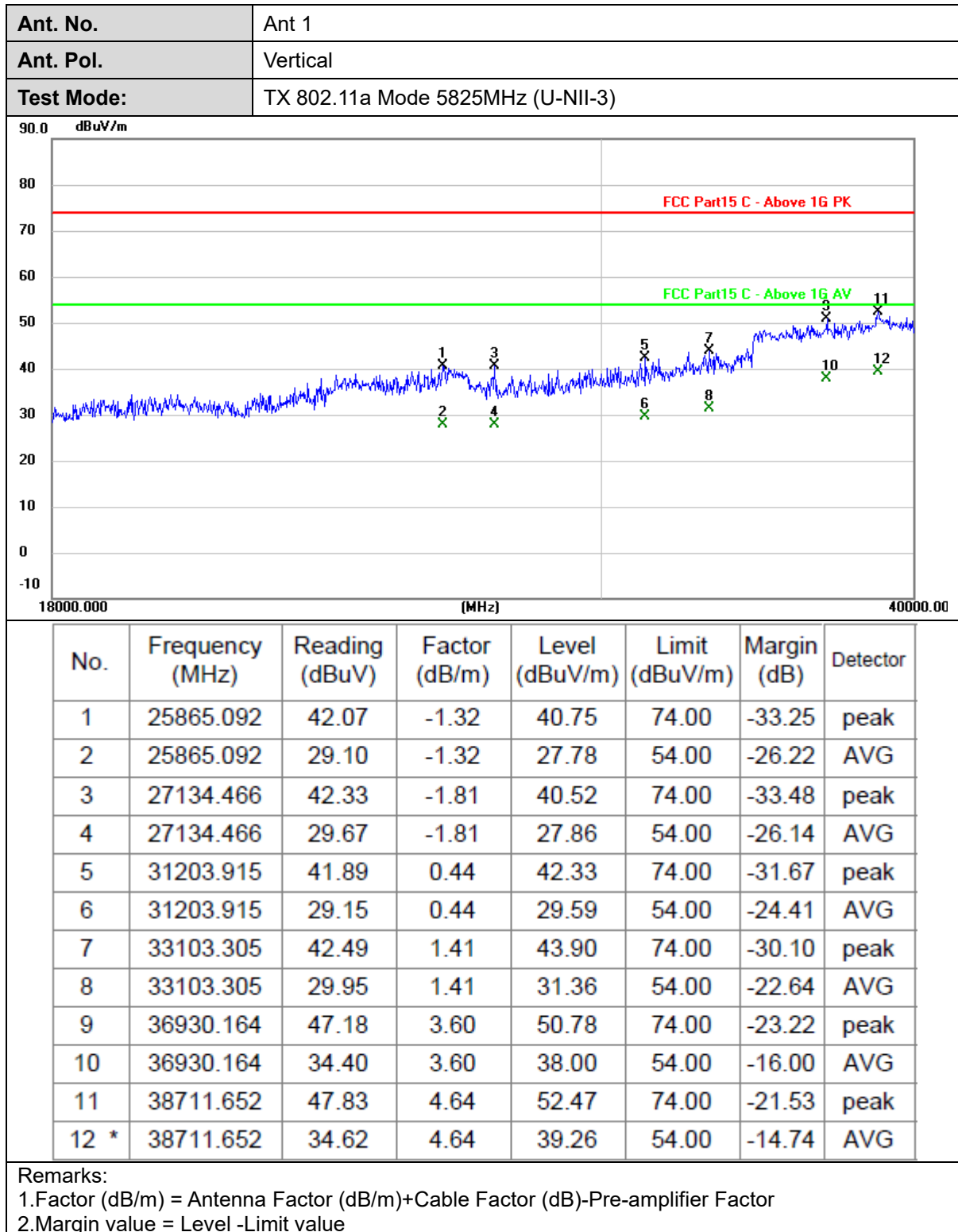












3.3. Band Edge Emissions

Limit

Limits of unwanted emission out of the restricted bands

FCC CFR Title 47 Part 15 Subpart E Section 15. 407(b) / RSS-247 7.3

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
5725~5825	-27 (Note 2)	68.2
	10 (Note 2)	105.2
	15.6 (Note 2)	110.8
	27 (Note 2)	122.2

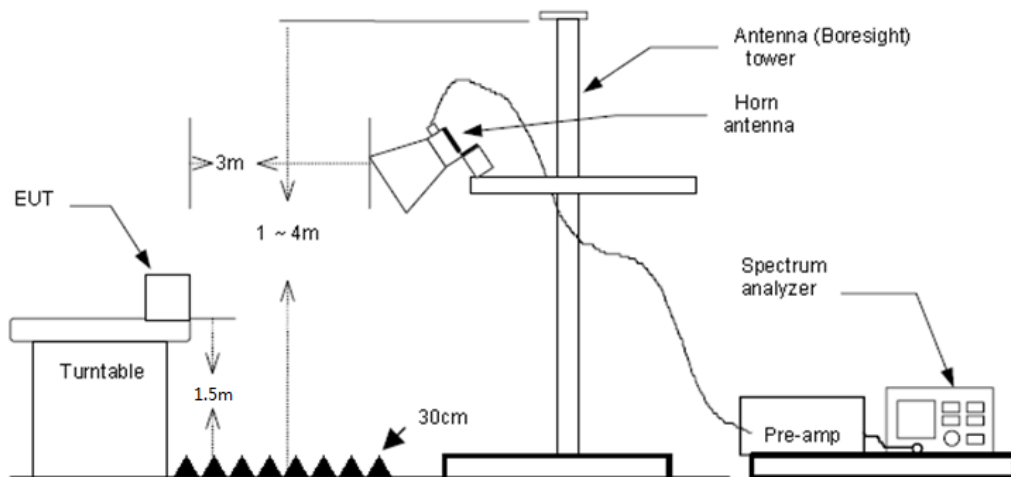
Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field

strength: $E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m}$, where P is the eirp (Watts).

2. According to FCC 16-24, 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 25MHz 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 27dBm/MHz at the band edge.

Test Configuration



Test Procedure

1. The EUT was setup and tested according to ANSI C63.10 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 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 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Note:

1. Pre-scan both 4500-5150MHz, 5350-5460MHz were investigated, report only shows the test data for worst case.
2. All modes for required channel tested, only the worst-case reported.

Test Result