



CTC Laboratories, Inc.

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TEST REPORT

Report No. : **CTC20231666E16**

FCC ID : **2AR24-XBOX**

Applicant : **Shenzhen Absen Optoelectronic Co.,Ltd**

Address : 18-20/F, Tower A, Building 3, Phase I, Tian An Cloud Park,
N0.2018, Xuegang Rd, Bantian, Longgang District, Shenzhen,
Guangdong, P.R. China

Manufacturer : Shenzhen Absen Optoelectronic Co.,Ltd

Address : 18-20/F, Tower A, Building 3, Phase I, Tian An Cloud Park,
N0.2018, Xuegang Rd, Bantian, Longgang District, Shenzhen,
Guangdong, P.R. China

Product Name : **LED Multimedia Processor**

Trade Mark : **Abjen**

Model/Type reference : X-Box

Listed Model(s) : /

Standard : **FCC CFR Title 47 Part 15 Subpart E Section 15.407**

Date of receipt of test sample : Aug. 18, 2023

Date of testing : Aug. 19, 2023 ~ Dec 3, 2023

Date of issue : Aug. 09, 2024

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 : Room 101 Building B, No. 7, Lanqing 1st Road, Luhuhu
Community, Guanhu Subdistrict, 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 15.407](#): for 802.11a/n/ac/ax, the test procedure follows the FCC KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

[ANSI C63.10-2013](#): American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

1.2. Report Version

Revised No.	Report No.	Date of issue	Description
01	CTC20231666E16	Aug. 09, 2024	Original



1.3. Test Description

FCC Part 15 Subpart E (15.407)			
Test Item	Standard Section	Result	Test Engineer
Antenna Requirement	15.203	Pass	Lucy Lan
Conducted Emission	15.207	Pass	Lucy Lan
Band Edge Emissions	15.407(b)	Pass	Lucy Lan
26dB Bandwidth & 99% Bandwidth	15.407(a)	Pass	Lucy Lan
6dB Bandwidth (only for UNII-3)	15.407(e)	Pass	Lucy Lan
Peak Output Power	15.407(a)	Pass	Lucy Lan
Power Spectral Density	15.407(a)	Pass	Lucy Lan
Transmitter Radiated Spurious Emission	15.407(b) & 15.209	Pass	Lucy Lan
Frequency Stability	15.407(g)	Pass	Lucy Lan
Dynamic Frequency Selection (DFS)	15.407(h)	N/A	N/A
Automatically Discontinue Transmission	15.407(c)	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 101 of Building B, Room 107, 108, 207, 208 of Building A, No. 7, Lanqing 1st Road, Luhuhu 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	-10 °C
	T_H =Higher Temperature	40 °C

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2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Shenzhen Absen Optoelectronic Co.,Ltd
Address:	18-20/F, Tower A, Building 3, Phase I, Tian An Cloud Park, N0.2018, Xuegang Rd, Bantian, Longgang District, Shenzhen, Guangdong, P.R. China
Manufacturer:	Shenzhen Absen Optoelectronic Co.,Ltd
Address:	18-20/F, Tower A, Building 3, Phase I, Tian An Cloud Park, N0.2018, Xuegang Rd, Bantian, Longgang District, Shenzhen, Guangdong, P.R. China
Factory:	Huizhou Absen Optoelectronic Limited.
Address:	No. 03, Donghua South road, Dongjiang Hi-tech Industry Park, Huizhou. Guangdong, China

2.2. General Description of EUT

Product Name:	LED Multimedia Processor				
Trade Mark:					
Model/Type reference:	X-Box				
Listed Model(s):	/				
Model Difference:	/				
Power Supply:	AC 100-240V~2.6A 50/60Hz				
RF Module Model:	BL-M8811CU2				
Hardware Version:	/				
Software Version:	/				
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-3	5725MHz~5850MHz			
Support Bandwidth:	802.11a	☒ 20MHz			
	802.11n	☒ 20MHz	☒ 40MHz		
	802.11ac	☒ 20MHz	☒ 40MHz	☒ 80MHz	☐ 160MHz
Modulation:	802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)				
Antenna Type:	PCB Antenna				
Antenna Gain:	2.08dBi				



2.3. Accessory Equipment Information

Equipment Information			
Name	Model	S/N	Manufacturer
Notebook	ThinkPad T460s	/	Lenovo
Cable Information			
Name	Shielded Type	Ferrite Core	Length
USB Cable	Unshielded	NO	150cm
Test Software Information			
Name	Version	/	/
adb.exe	/	/	/



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		80MHz Bandwidth		160MHz Bandwidth			
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
U-NII-1	36	5180	38	5190	42	5210	50	5250		
	40	5200								
	44	5220	46	5230						
	48	5240								
U-NII-2A	52	5260	54	5270	58	5290				
	56	5280								
	60	5300	62	5310						
	64	5320								
U-NII-2C	100	5500	102	5510	106	5530	114	5570		
	104	5520								
	108	5540	110	5550						
	112	5560								
	116	5580	118	5590	122	5610				
	120	5600								
	124	5620	126	5630						
	128	5640								
	132	5660	134	5670						
	136	5680								
	140	5700								
U-NII-3	149	5745	151	5755	155	5775	/			
	153	5765								
	157	5785	159	5795						
	161	5805								
	165	5825								



Test channel is below:

Operating Band	Test Channel	20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth		160MHz Bandwidth	
		Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
U-NII-1	CH _L	36	5180	38	5190	/	/	50	5250
	CH _M	40	5200	/	/	42	5210		
	CH _H	48	5240	46	5230	/	/		
U-NII-2A	CH _L	52	5260	54	5270	/	/		
	CH _M	56	5280	/	/	58	5290		
	CH _H	64	5320	62	5310	/	/		
U-NII-2C	CH _L	100	5500	102	5510	106	5530	/	/
	CH _M	116	5580	110	5550	/	/	114	5570
	CH _H	140	5700	134	5670	122	5610	/	/
U-NII-3	CH _L	149	5745	151	5755	/	/	/	/
	CH _M	157	5785	/	/	155	5775	/	/
	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)/ 802.11ac(VHT80)	VHT-MCS0



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.



2.5. Measurement Instruments List

RF Test System					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Spectrum Analyzer	R&S	FSV40-N	101654	Aug. 07, 2024
2	High and low temperature test chamber	ESPEC	MT3035	/	Mar. 24, 2024
3	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

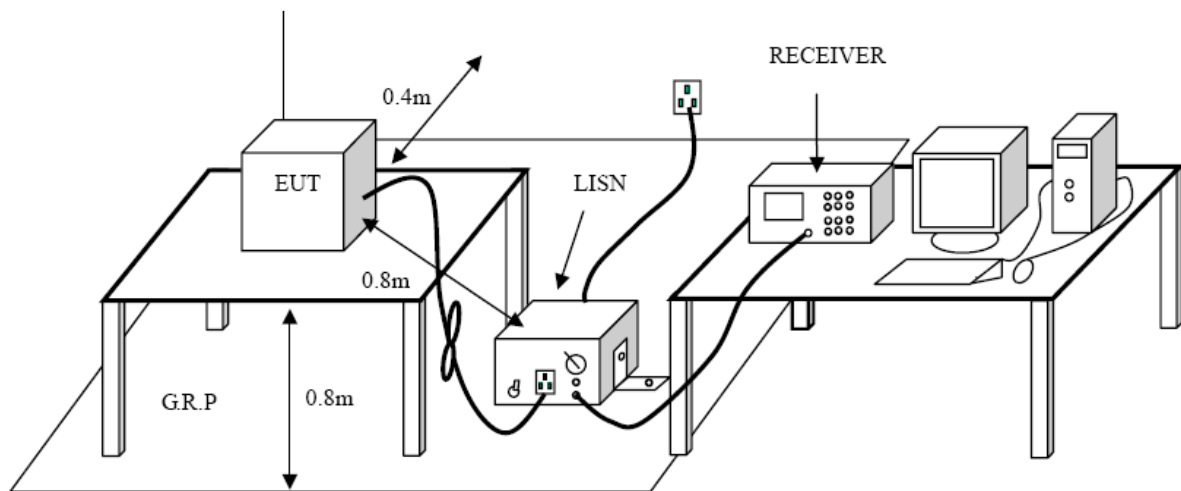
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency (MHz)	Conducted Limit (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

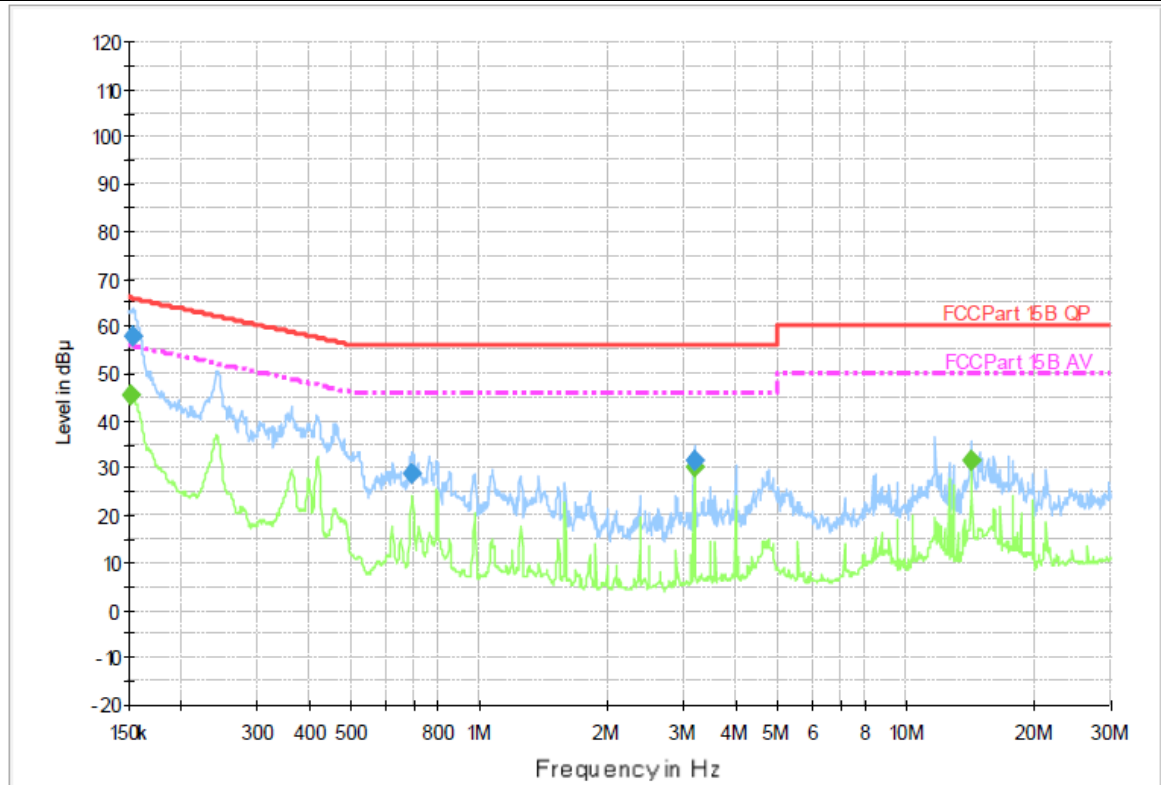
1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from 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 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 (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.153640	57.9	1000.00	9.000	On	L1	9.4	7.9	65.8	
0.692000	28.8	1000.00	9.000	On	L1	9.5	27.2	56.0	
3.167000	31.7	1000.00	9.000	On	L1	9.5	24.3	56.0	

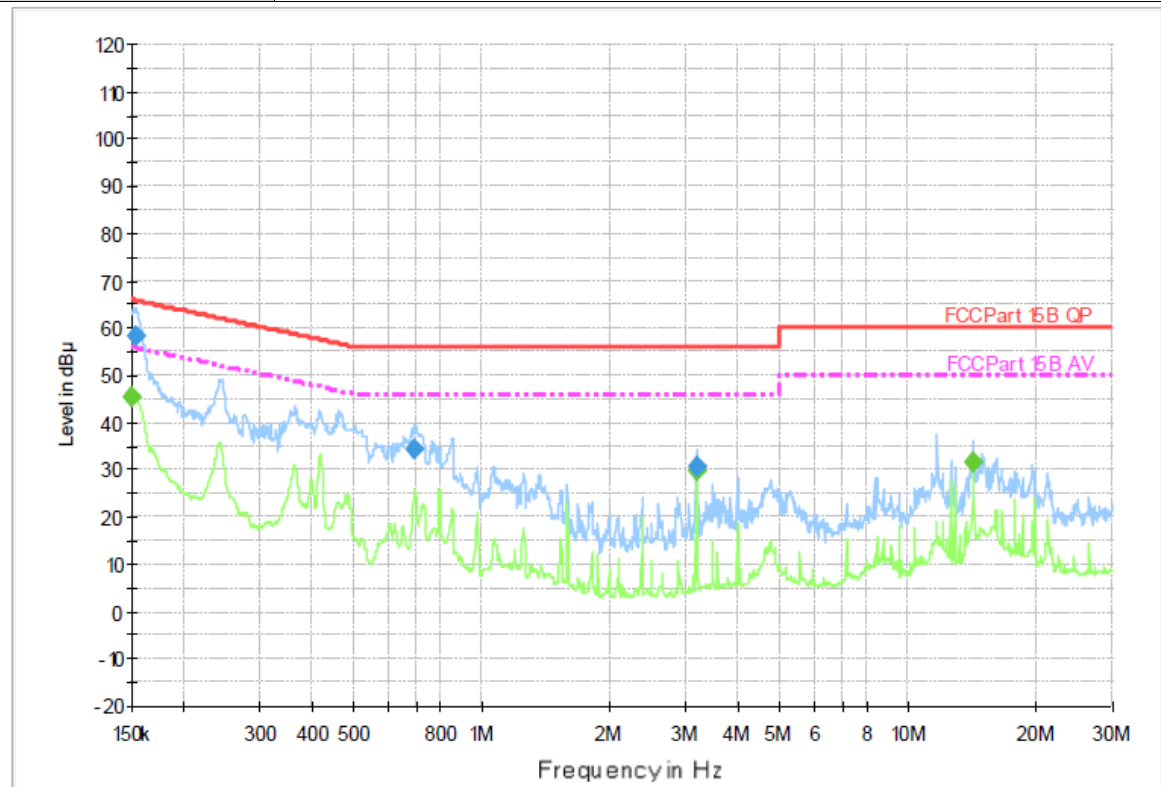
Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.151200	45.3	1000.00	9.000	On	L1	9.4	10.6	55.9	
3.167000	30.1	1000.00	9.000	On	L1	9.5	15.9	46.0	
14.151110	31.4	1000.00	9.000	On	L1	9.8	18.6	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 (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.153020	58.2	1000.00	9.000	On	N	9.3	7.6	65.8	
0.694760	34.5	1000.00	9.000	On	N	9.4	21.5	56.0	
3.167000	30.7	1000.00	9.000	On	N	9.4	25.3	56.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.150600	45.5	1000.00	9.000	On	N	9.3	10.5	56.0	
3.167000	29.8	1000.00	9.000	On	N	9.4	16.2	46.0	
14.151110	31.5	1000.00	9.000	On	N	9.6	18.5	50.0	

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)	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)

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.

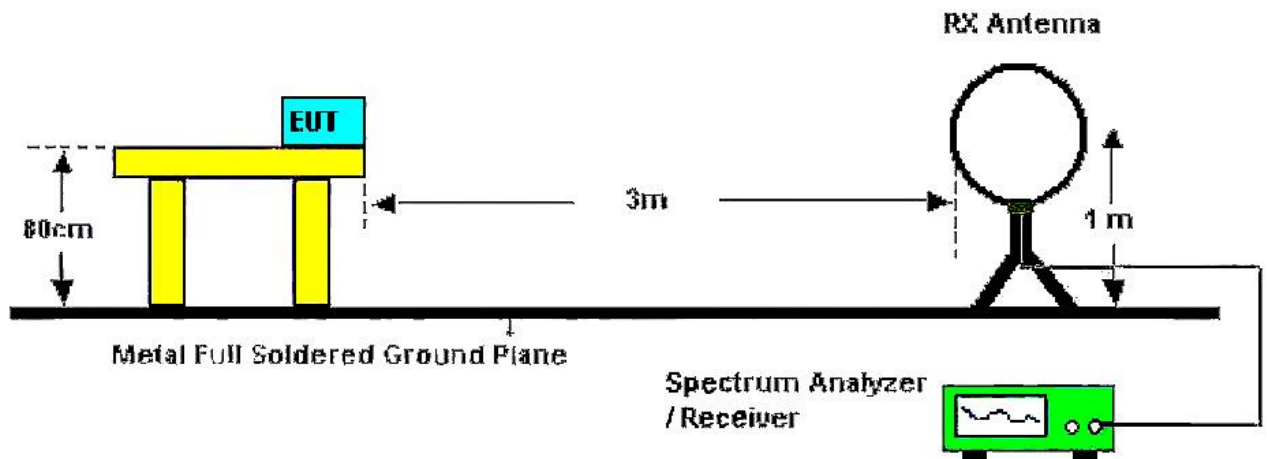
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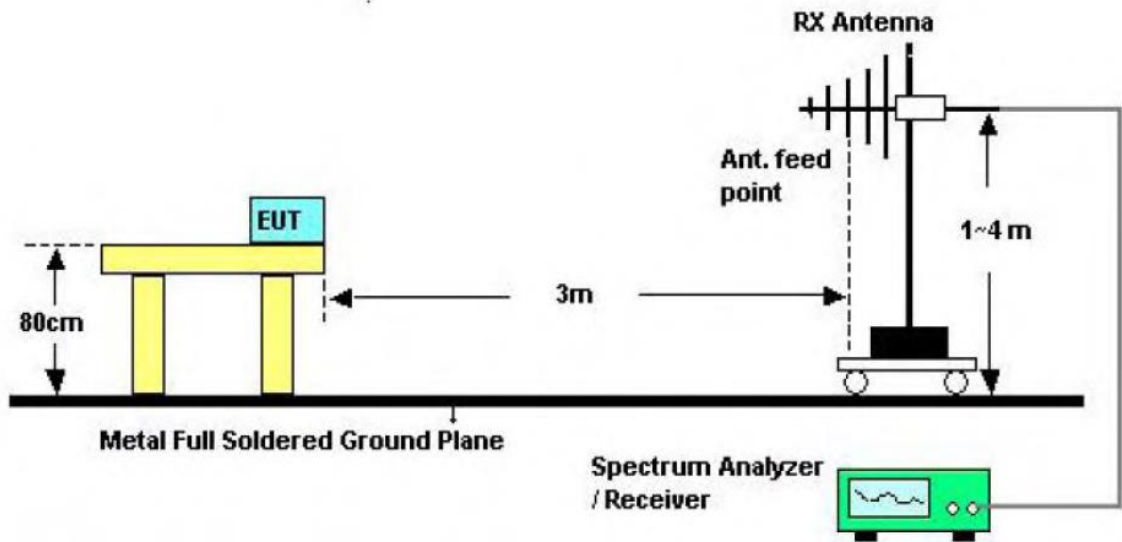


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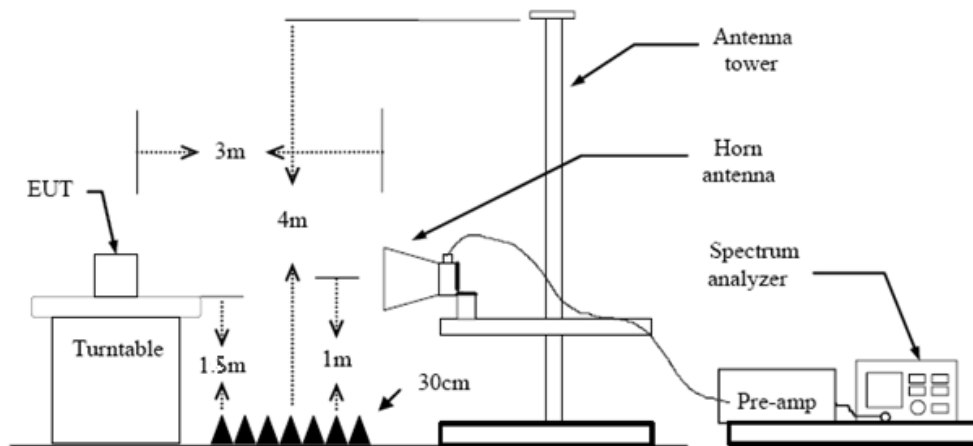
Test Configuration



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 holdIf 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 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Test Result

9 kHz~30 MHz

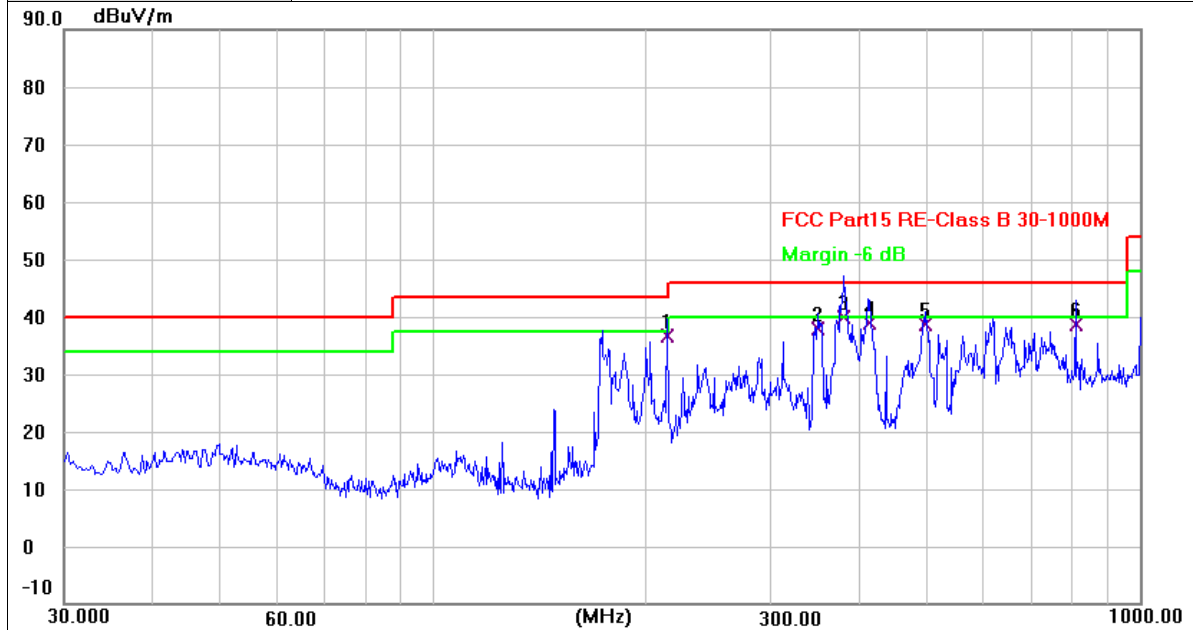
From 9 kHz to 30 MHz: The conclusion is PASS.

- Note: 1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Pre-scan all antenna, only show the test data for worse case antenna on the test report.



30MHz-1GHz

Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)
Remark:	Only worse case is reported.



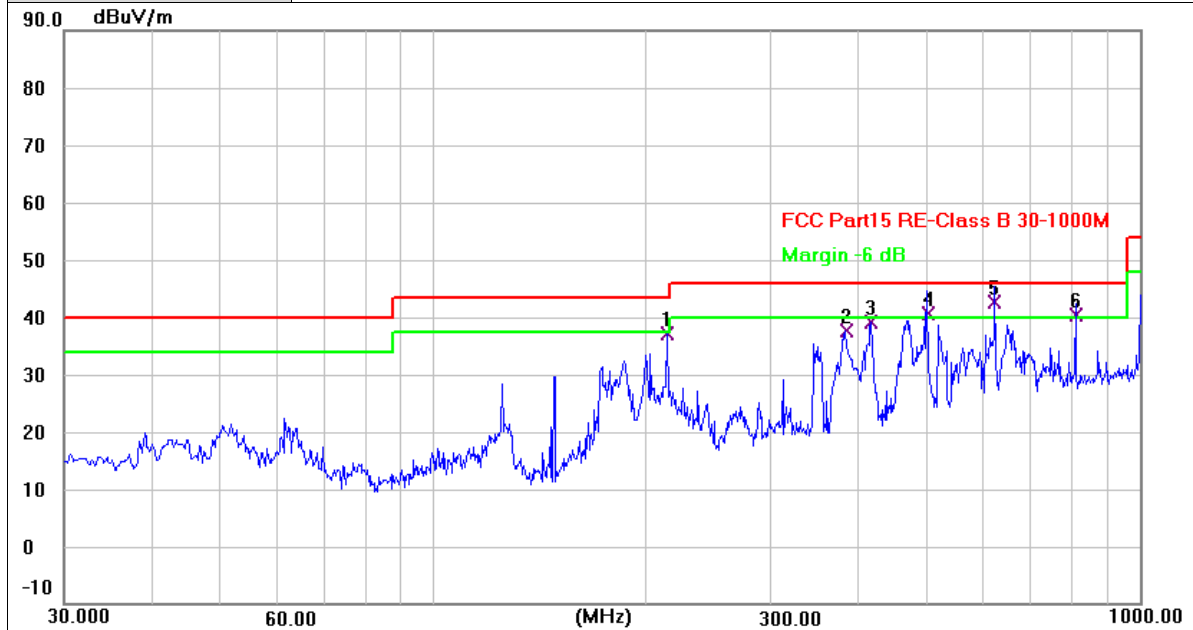
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	214.6233	52.12	-15.54	36.58	43.50	-6.92	QP
2	351.3933	49.78	-11.83	37.95	46.00	-8.05	QP
3 *	382.4333	51.36	-11.38	39.98	46.00	-6.02	QP
4	411.8567	49.90	-10.93	38.97	46.00	-7.03	QP
5	496.8933	47.98	-9.36	38.62	46.00	-7.38	QP
6	812.4667	42.70	-4.15	38.55	46.00	-7.45	QP

Remarks:

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



Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)
Remark:	Only worse case is reported.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	214.3000	52.62	-15.55	37.07	43.50	-6.43	QP
2	382.7567	48.99	-11.38	37.61	46.00	-8.39	QP
3	416.3833	50.10	-10.85	39.25	46.00	-6.75	QP
4 !	500.1267	49.86	-9.29	40.57	46.00	-5.43	QP
5 *	624.9333	49.44	-6.81	42.63	46.00	-3.37	QP
6 !	812.4667	44.46	-4.15	40.31	46.00	-5.69	QP

Remarks:

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

2. Margin value = Level - Limit value



Above 1GHz

Ant. No.	Ant 1						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
</							

Ant. No.	Ant 1																														
Ant. Pol.	Vertical																														
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)																														
Remark:	No report for the emission which more than 20 dB below the prescribed limit.																														
<table><tr><td>No.</td><td>Frequency (MHz)</td><td>Reading (dBUV)</td><td>Factor (dB/m)</td><td>Level (dBUV/m)</td><td>Limit (dBUV/m)</td><td>Margin (dB)</td><td>Detector</td></tr><tr><td>1 *</td><td>10359.121</td><td>23.74</td><td>13.93</td><td>37.67</td><td>54.00</td><td>-16.33</td><td>AVG</td></tr><tr><td>2</td><td>10360.199</td><td>38.39</td><td>13.93</td><td>52.32</td><td>74.00</td><td>-21.68</td><td>peak</td></tr></table>								No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	1 *	10359.121	23.74	13.93	37.67	54.00	-16.33	AVG	2	10360.199	38.39	13.93	52.32	74.00	-21.68	peak
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector																								
1 *	10359.121	23.74	13.93	37.67	54.00	-16.33	AVG																								
2	10360.199	38.39	13.93	52.32	74.00	-21.68	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 802.11a Mode 5200MHz (U-NII-1)						
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 *	10400.247	23.81	13.99	37.80	54.00	-16.20	AVG
2	10400.813	40.25	13.99	54.24	74.00	-19.76	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 802.11a Mode 5200MHz (U-NII-1)						
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	10399.150	38.99	13.99	52.98	74.00	-21.02	peak
2 *	10399.391	23.70	13.99	37.69	54.00	-16.31	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 802.11a Mode 5240MHz (U-NII-1)						
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	10480.163	38.77	14.03	52.80	74.00	-21.20	peak
2 *	10480.443	23.25	14.03	37.28	54.00	-16.72	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 802.11a Mode 5240MHz (U-NII-1)						
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 *	10479.372	23.45	14.03	37.48	54.00	-16.52	AVG
2	10480.505	38.32	14.03	52.35	74.00	-21.65	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 802.11n(HT20) Mode 5180MHz (U-NII-1)						
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	10360.400	38.69	13.92	52.61	74.00	-21.39	peak
2 *	10360.621	23.21	13.92	37.13	54.00	-16.87	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 802.11n(HT20) Mode 5180MHz (U-NII-1)						
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	10359.360	37.94	13.93	51.87	74.00	-22.13	peak
2 *	10359.713	23.66	13.93	37.59	54.00	-16.41	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 802.11n(HT20) Mode 5200MHz (U-NII-1)						
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 *	10399.443	23.81	13.99	37.80	54.00	-16.20	AVG
2	10399.981	39.26	13.99	53.25	74.00	-20.75	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. Pol.	Vertical						
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)						
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	10399.291	38.80	13.99	52.79	74.00	-21.21	peak
2 *	10400.145	24.03	13.99	38.02	54.00	-15.98	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 802.11n(HT20) Mode 5240MHz (U-NII-1)																														
Remark:	No report for the emission which more than 20 dB below the prescribed limit.																														
<table><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><tr><td>1</td><td>10479.019</td><td>37.98</td><td>14.03</td><td>52.01</td><td>74.00</td><td>-21.99</td><td>peak</td></tr><tr><td>2 *</td><td>10480.801</td><td>23.83</td><td>14.03</td><td>37.86</td><td>54.00</td><td>-16.14</td><td>AVG</td></tr></table>								No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	1	10479.019	37.98	14.03	52.01	74.00	-21.99	peak	2 *	10480.801	23.83	14.03	37.86	54.00	-16.14	AVG
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector																								
1	10479.019	37.98	14.03	52.01	74.00	-21.99	peak																								
2 *	10480.801	23.83	14.03	37.86	54.00	-16.14	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 802.11n(HT20) Mode 5240MHz (U-NII-1)						
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 *	10479.349	23.15	14.03	37.18	54.00	-16.82	AVG
2	10480.148	38.34	14.03	52.37	74.00	-21.63	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 802.11ac(VHT20) Mode 5180MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

Ant. No.	Ant 1																														
Ant. Pol.	Vertical																														
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)																														
Remark:	No report for the emission which more than 20 dB below the prescribed limit.																														
<table><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><tr><td>1 *</td><td>10359.413</td><td>23.14</td><td>13.93</td><td>37.07</td><td>54.00</td><td>-16.93</td><td>AVG</td></tr><tr><td>2</td><td>10360.801</td><td>38.51</td><td>13.92</td><td>52.43</td><td>74.00</td><td>-21.57</td><td>peak</td></tr></table>								No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	1 *	10359.413	23.14	13.93	37.07	54.00	-16.93	AVG	2	10360.801	38.51	13.92	52.43	74.00	-21.57	peak
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector																								
1 *	10359.413	23.14	13.93	37.07	54.00	-16.93	AVG																								
2	10360.801	38.51	13.92	52.43	74.00	-21.57	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 802.11ac(VHT20) Mode 5200MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

Ant. No.	Ant 1						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						



Ant. No.	Ant 1						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11ac(VHT20) Mode 5240MHz (U-NII-1)						
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 *	10479.375	23.19	14.03	37.22	54.00	-16.78	AVG
2	10480.967	38.19	14.03	52.22	74.00	-21.78	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 802.11ac(VHT20) Mode 5240MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						



Ant. No.	Ant 1						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)						
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 *	10379.249	23.73	13.96	37.69	54.00	-16.31	AVG
2	10380.105	38.18	13.96	52.14	74.00	-21.86	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 802.11n(HT40) Mode 5190MHz (U-NII-1)						
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	10379.052	38.26	13.96	52.22	74.00	-21.78	peak
2 *	10379.416	23.51	13.96	37.47	54.00	-16.53	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 802.11n(HT40) Mode 5230MHz (U-NII-1)
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 *	10459.849	23.50	14.02	37.52	54.00	-16.48	AVG
2	10460.235	38.72	14.02	52.74	74.00	-21.26	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 802.11n(HT40) Mode 5230MHz (U-NII-1)
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 *	10459.332	23.36	14.02	37.38	54.00	-16.62	AVG
2	10460.481	38.25	14.02	52.27	74.00	-21.73	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 802.11ac(VHT40) Mode 5190MHz (U-NII-1)						
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 *	10379.167	24.01	13.96	37.97	54.00	-16.03	AVG
2	10379.413	38.53	13.96	52.49	74.00	-21.51	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 802.11ac(VHT40) Mode 5190MHz (U-NII-1)						
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 *	10379.732	23.65	13.96	37.61	54.00	-16.39	AVG
2	10380.549	38.48	13.96	52.44	74.00	-21.56	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 802.11ac(VHT40) Mode 5230MHz (U-NII-1)						
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	10460.192	38.12	14.02	52.14	74.00	-21.86	peak
2 *	10460.365	23.46	14.02	37.48	54.00	-16.52	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 802.11ac(VHT40) Mode 5230MHz (U-NII-1)						
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	10459.504	37.94	14.02	51.96	74.00	-22.04	peak
2 *	10459.851	23.60	14.02	37.62	54.00	-16.38	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.	Horizontal						
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

Ant. No.	Ant 1																														
Ant. Pol.	Vertical																														
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)																														
Remark:	No report for the emission which more than 20 dB below the prescribed limit.																														
<table><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><tr><td>1 *</td><td>10419.473</td><td>23.38</td><td>13.99</td><td>37.37</td><td>54.00</td><td>-16.63</td><td>AVG</td></tr><tr><td>2</td><td>10420.041</td><td>38.46</td><td>13.99</td><td>52.45</td><td>74.00</td><td>-21.55</td><td>peak</td></tr></table>								No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	1 *	10419.473	23.38	13.99	37.37	54.00	-16.63	AVG	2	10420.041	38.46	13.99	52.45	74.00	-21.55	peak
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector																								
1 *	10419.473	23.38	13.99	37.37	54.00	-16.63	AVG																								
2	10420.041	38.46	13.99	52.45	74.00	-21.55	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 802.11a Mode 5745MHz (U-NII-3)						
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 *	11489.077	22.48	15.08	37.56	54.00	-16.44	AVG
2	11489.384	38.45	15.09	53.54	74.00	-20.46	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 802.11a Mode 5745MHz (U-NII-3)						
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	11490.249	38.75	15.09	53.84	74.00	-20.16	peak
2 *	11490.911	22.17	15.09	37.26	54.00	-16.74	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 802.11a Mode 5785MHz (U-NII-3)						
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	11569.055	38.70	15.23	53.93	74.00	-20.07	peak
2 *	11570.491	23.03	15.23	38.26	54.00	-15.74	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 802.11a Mode 5785MHz (U-NII-3)						
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	11569.843	37.79	15.23	53.02	74.00	-20.98	peak
2 *	11570.127	22.65	15.23	37.88	54.00	-16.12	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 802.11a Mode 5825MHz (U-NII-3)						
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 *	11649.073	22.51	15.28	37.79	54.00	-16.21	AVG
2	11650.694	37.14	15.29	52.43	74.00	-21.57	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 802.11a Mode 5825MHz (U-NII-3)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						



Ant. No.	Ant 1						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)						
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	11490.115	37.91	15.09	53.00	74.00	-21.00	peak
2 *	11490.183	22.36	15.09	37.45	54.00	-16.55	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 802.11n(HT20) Mode 5745MHz (U-NII-3)						
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	11489.012	37.57	15.08	52.65	74.00	-21.35	peak
2 *	11489.521	22.36	15.09	37.45	54.00	-16.55	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 802.11n(HT20) Mode 5785MHz (U-NII-3)						
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 *	11570.436	23.13	15.23	38.36	54.00	-15.64	AVG
2	11570.821	37.70	15.23	52.93	74.00	-21.07	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 802.11n(HT20) Mode 5785MHz (U-NII-3)						
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 *	11569.207	22.93	15.23	38.16	54.00	-15.84	AVG
2	11570.409	38.26	15.23	53.49	74.00	-20.51	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 802.11n(HT20) Mode 5825MHz (U-NII-3)						
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 *	11649.080	22.66	15.28	37.94	54.00	-16.06	AVG
2	11649.121	37.85	15.28	53.13	74.00	-20.87	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 802.11n(HT20) Mode 5825MHz (U-NII-3)						
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 *	11649.453	22.54	15.28	37.82	54.00	-16.18	AVG
2	11650.579	37.90	15.29	53.19	74.00	-20.81	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 802.11ac(VHT20) Mode 5745MHz (U-NII-3)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

Ant. No.	Ant 1																														
Ant. Pol.	Vertical																														
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)																														
Remark:	No report for the emission which more than 20 dB below the prescribed limit.																														
<table><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><tr><td>1</td><td>11490.359</td><td>37.78</td><td>15.09</td><td>52.87</td><td>74.00</td><td>-21.13</td><td>peak</td></tr><tr><td>2 *</td><td>11490.944</td><td>22.17</td><td>15.09</td><td>37.26</td><td>54.00</td><td>-16.74</td><td>AVG</td></tr></table>								No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	1	11490.359	37.78	15.09	52.87	74.00	-21.13	peak	2 *	11490.944	22.17	15.09	37.26	54.00	-16.74	AVG
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector																								
1	11490.359	37.78	15.09	52.87	74.00	-21.13	peak																								
2 *	11490.944	22.17	15.09	37.26	54.00	-16.74	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 802.11ac(VHT20) Mode 5785MHz (U-NII-3)						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

Ant. No.	Ant 1						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)						
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 *	11569.048	22.79	15.23	38.02	54.00	-15.98	AVG
2	11570.040	37.86	15.23	53.09	74.00	-20.91	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 802.11ac(VHT20) Mode 5825MHz (U-NII-3)						
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 *	11649.633	22.70	15.28	37.98	54.00	-16.02	AVG
2	11650.375	39.25	15.29	54.54	74.00	-19.46	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 802.11ac(VHT20) Mode 5825MHz (U-NII-3)						
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 *	11649.261	22.49	15.28	37.77	54.00	-16.23	AVG
2	11649.277	38.08	15.28	53.36	74.00	-20.64	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 802.11n(HT40) Mode 5755MHz (U-NII-3)						
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	11510.122	37.82	15.12	52.94	74.00	-21.06	peak
2 *	11510.959	22.32	15.12	37.44	54.00	-16.56	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 802.11n(HT40) Mode 5755MHz (U-NII-3)						
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	11509.624	38.16	15.12	53.28	74.00	-20.72	peak
2 *	11509.759	22.28	15.12	37.40	54.00	-16.60	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 802.11n(HT40) Mode 5795MHz (U-NII-3)						
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 *	11589.230	22.88	15.27	38.15	54.00	-15.85	AVG
2	11589.352	38.31	15.27	53.58	74.00	-20.42	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 802.11n(HT40) Mode 5795MHz (U-NII-3)						
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 *	11589.388	22.67	15.27	37.94	54.00	-16.06	AVG
2	11589.679	37.72	15.27	52.99	74.00	-21.01	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 802.11ac(VHT40) Mode 5755MHz (U-NII-3)						
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 *	11510.121	22.48	15.12	37.60	54.00	-16.40	AVG
2	11510.211	37.82	15.12	52.94	74.00	-21.06	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 802.11ac(VHT40) Mode 5755MHz (U-NII-3)						
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	11509.040	37.59	15.12	52.71	74.00	-21.29	peak
2 *	11510.163	22.61	15.12	37.73	54.00	-16.27	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 802.11ac(VHT40) Mode 5795MHz (U-NII-3)						
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 *	11589.703	22.80	15.27	38.07	54.00	-15.93	AVG
2	11590.876	37.73	15.27	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. Pol.	Vertical						
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)						
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 *	11590.564	22.68	15.27	37.95	54.00	-16.05	AVG
2	11590.709	37.30	15.27	52.57	74.00	-21.43	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 802.11ac(VHT80) Mode 5775MHz (U-NII-3)						
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	11550.349	37.73	15.20	52.93	74.00	-21.07	peak
2 *	11550.885	22.33	15.20	37.53	54.00	-16.47	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. Pol.	Vertical						
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)						
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	11550.349	37.73	15.20	52.93	74.00	-21.07	peak
2 *	11550.885	22.33	15.20	37.53	54.00	-16.47	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

Limit

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

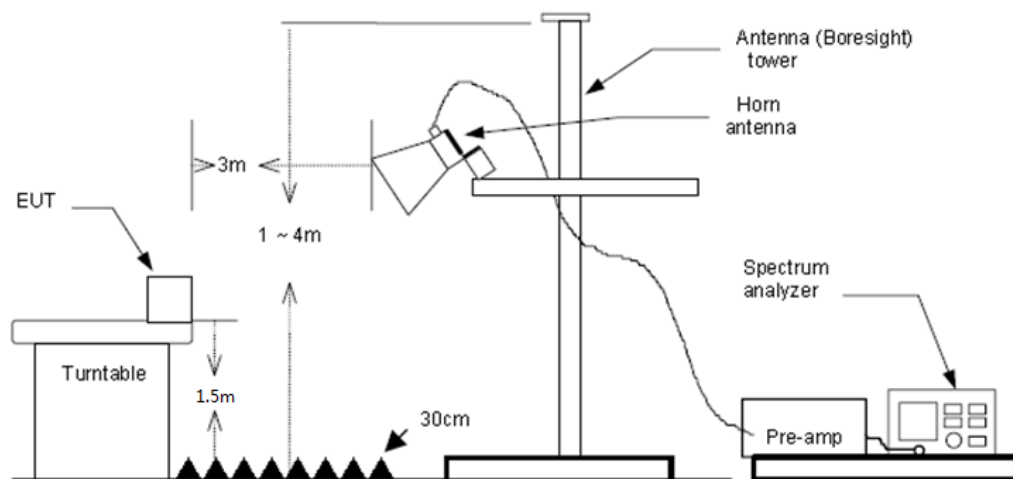
Note:

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





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 Duty Cycle.

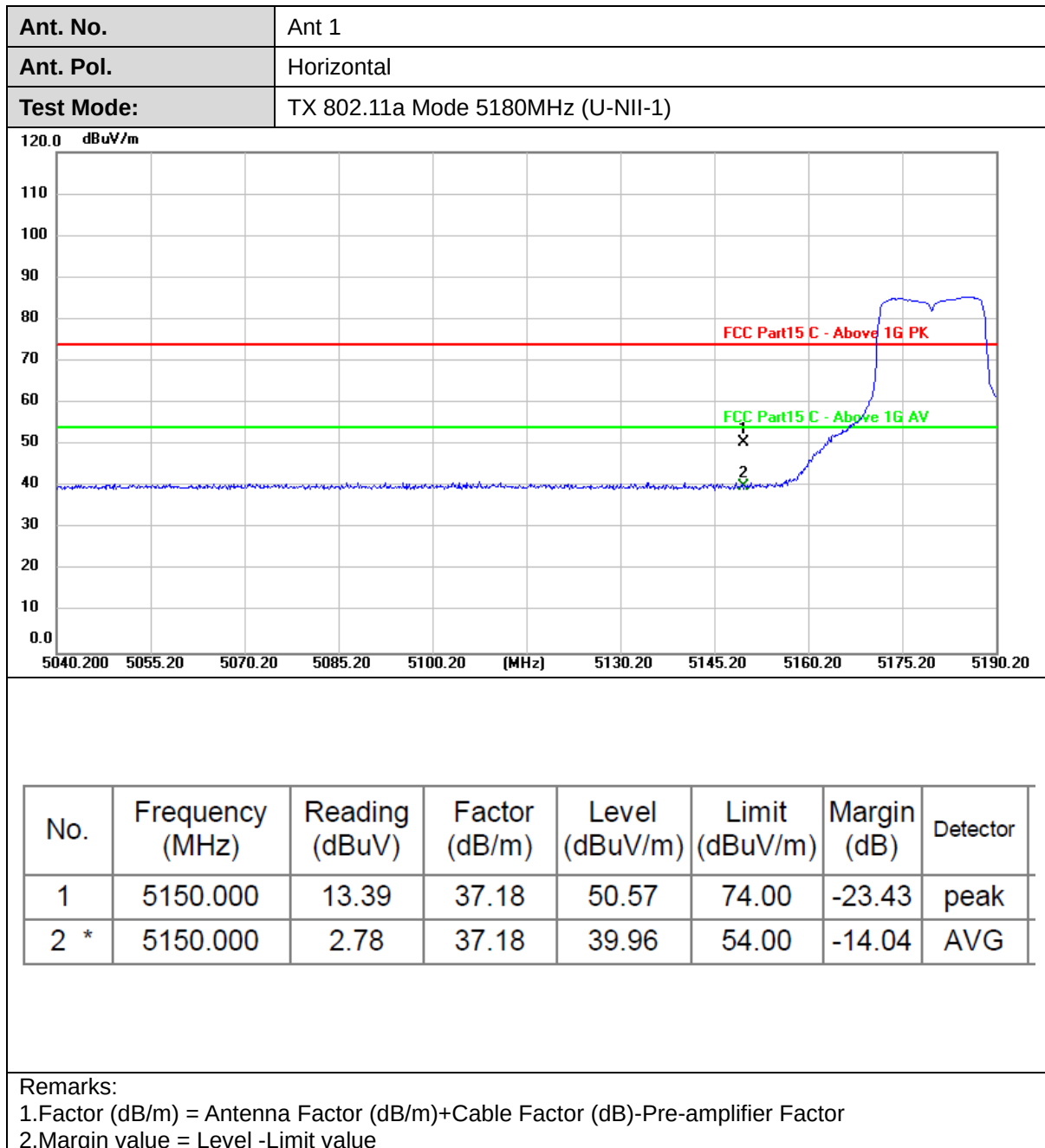
Test Mode

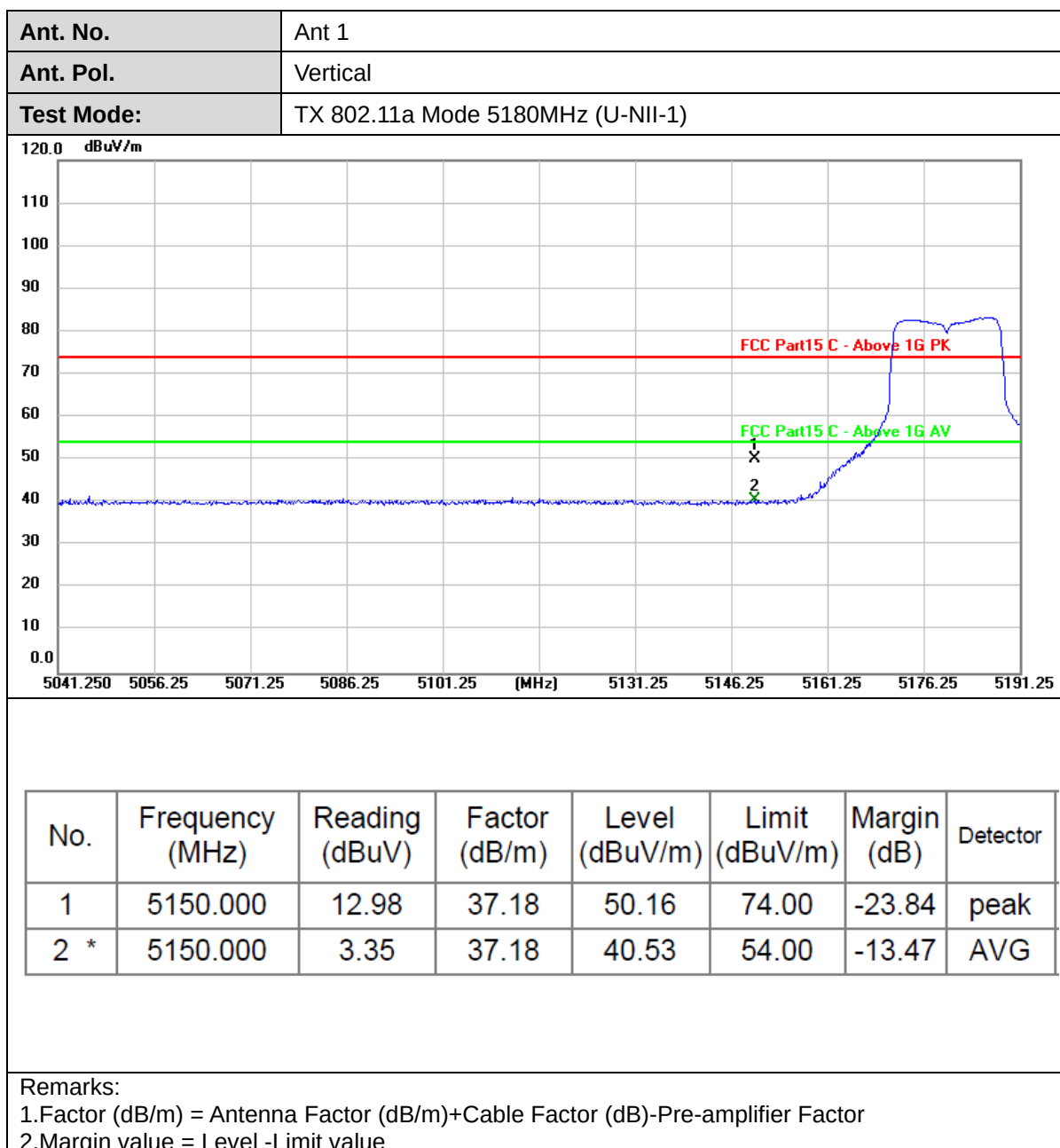
Please refer to the clause 2.4.

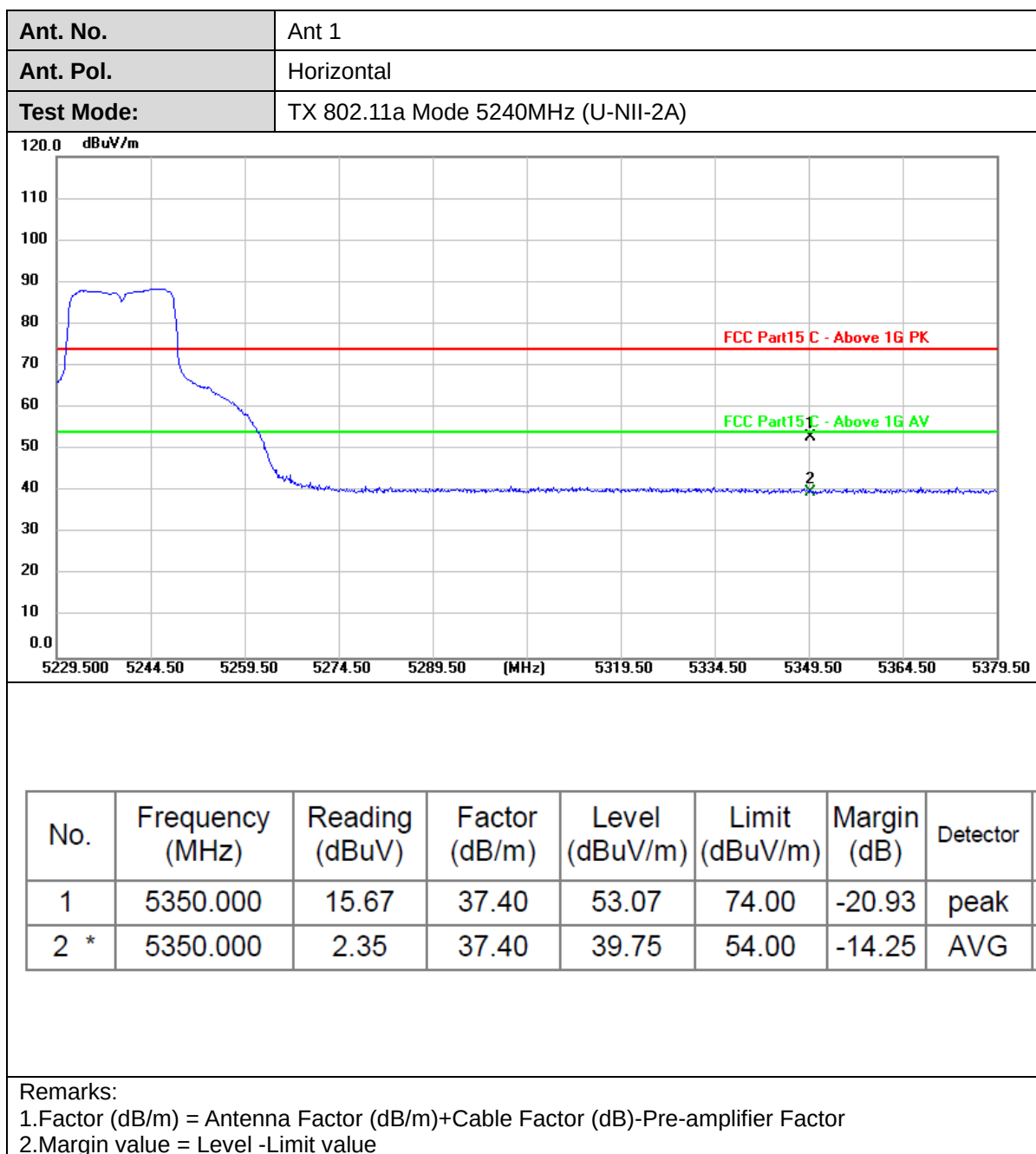


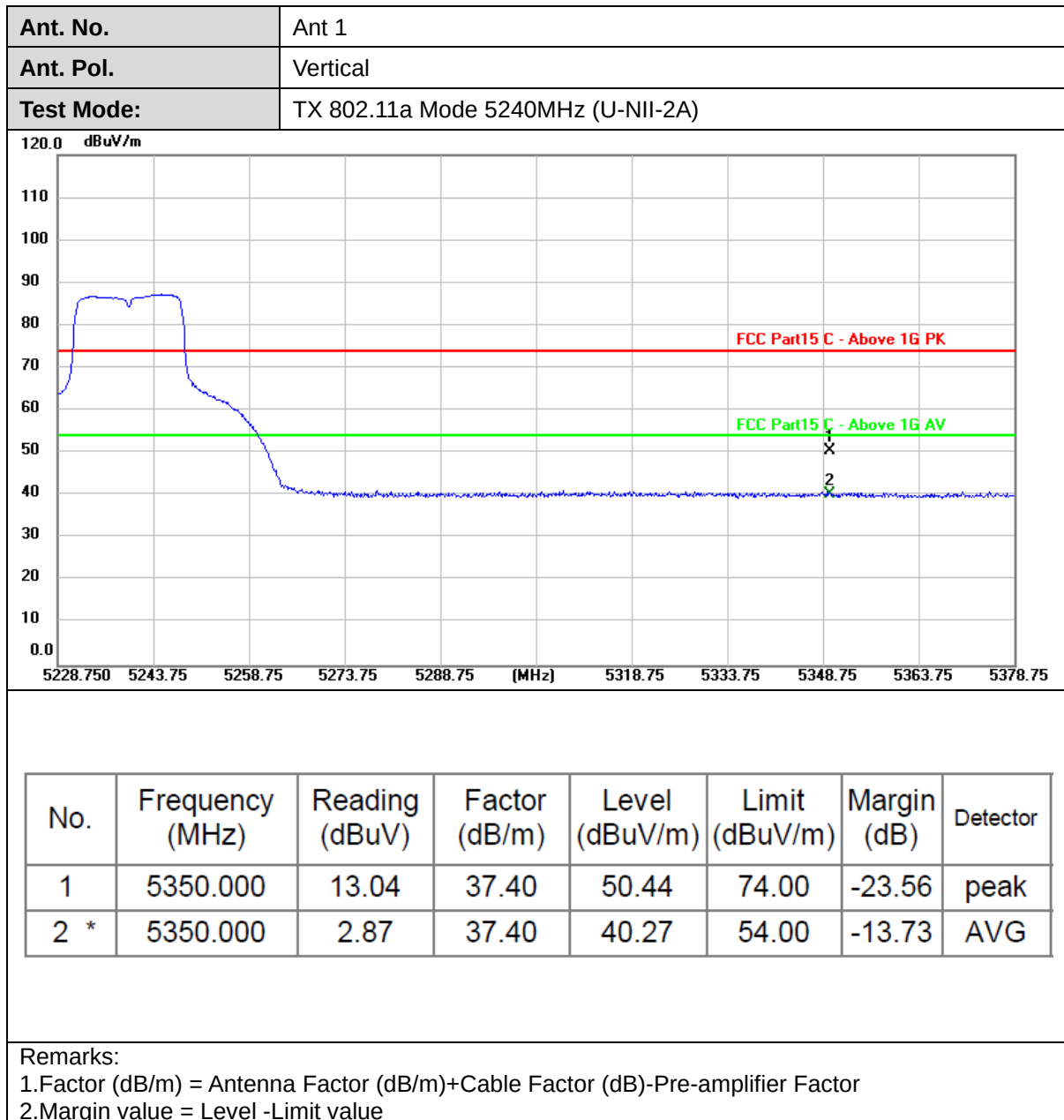
Test Result

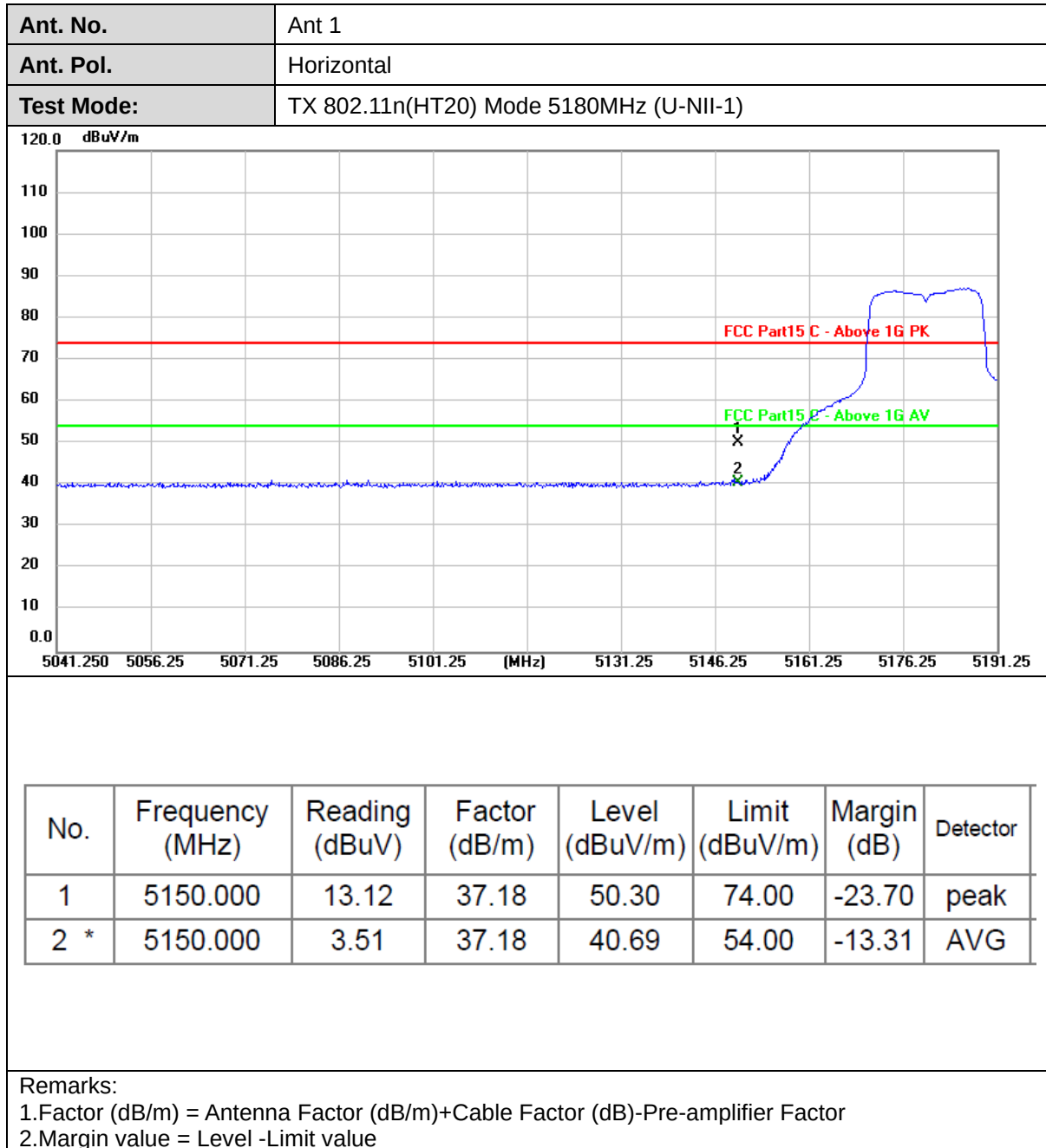
Note: 1. Pre-scan both 4500-5150MHz, 5350-5460MHz were investigated, report only shows the test data for worst case.

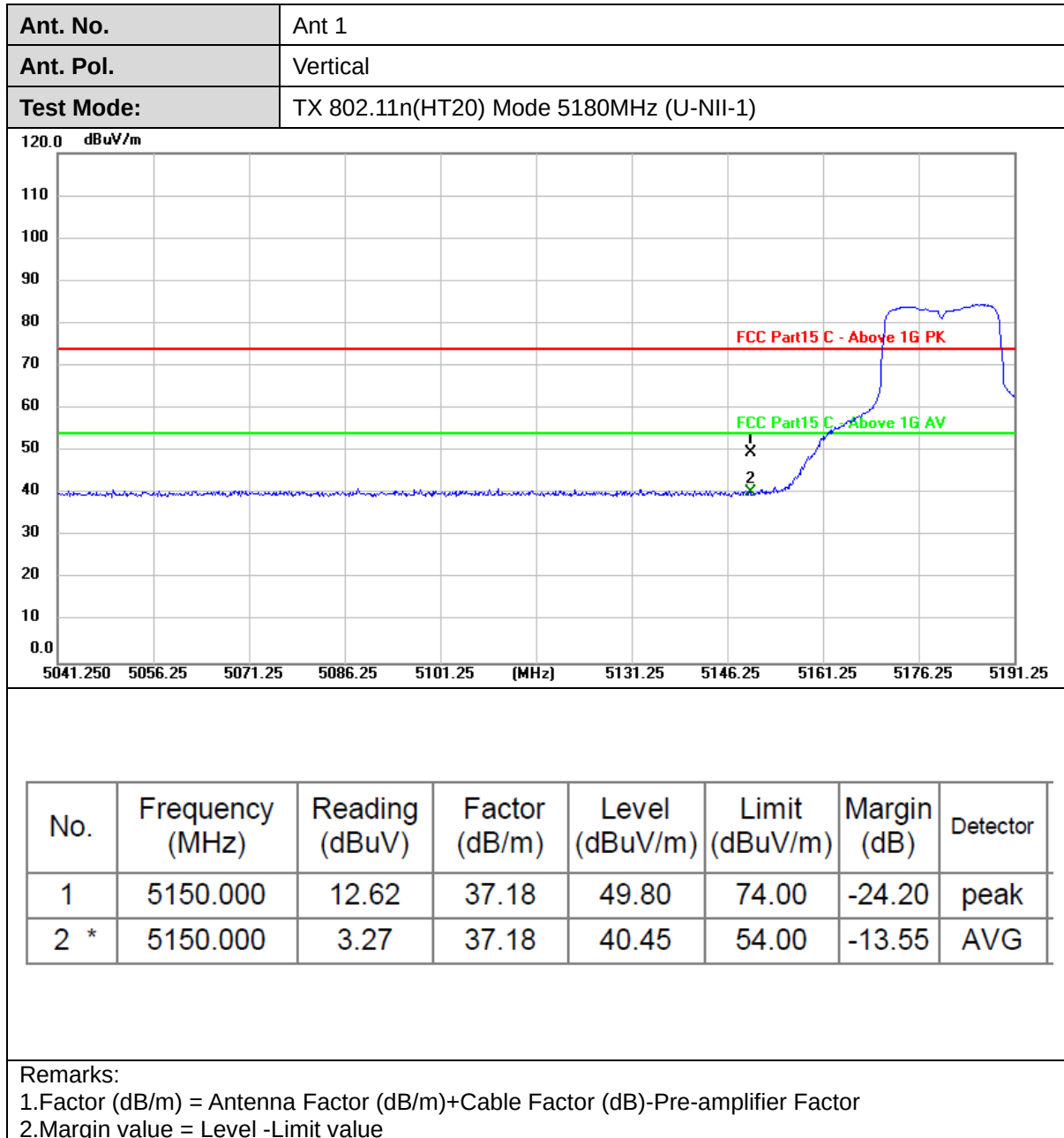


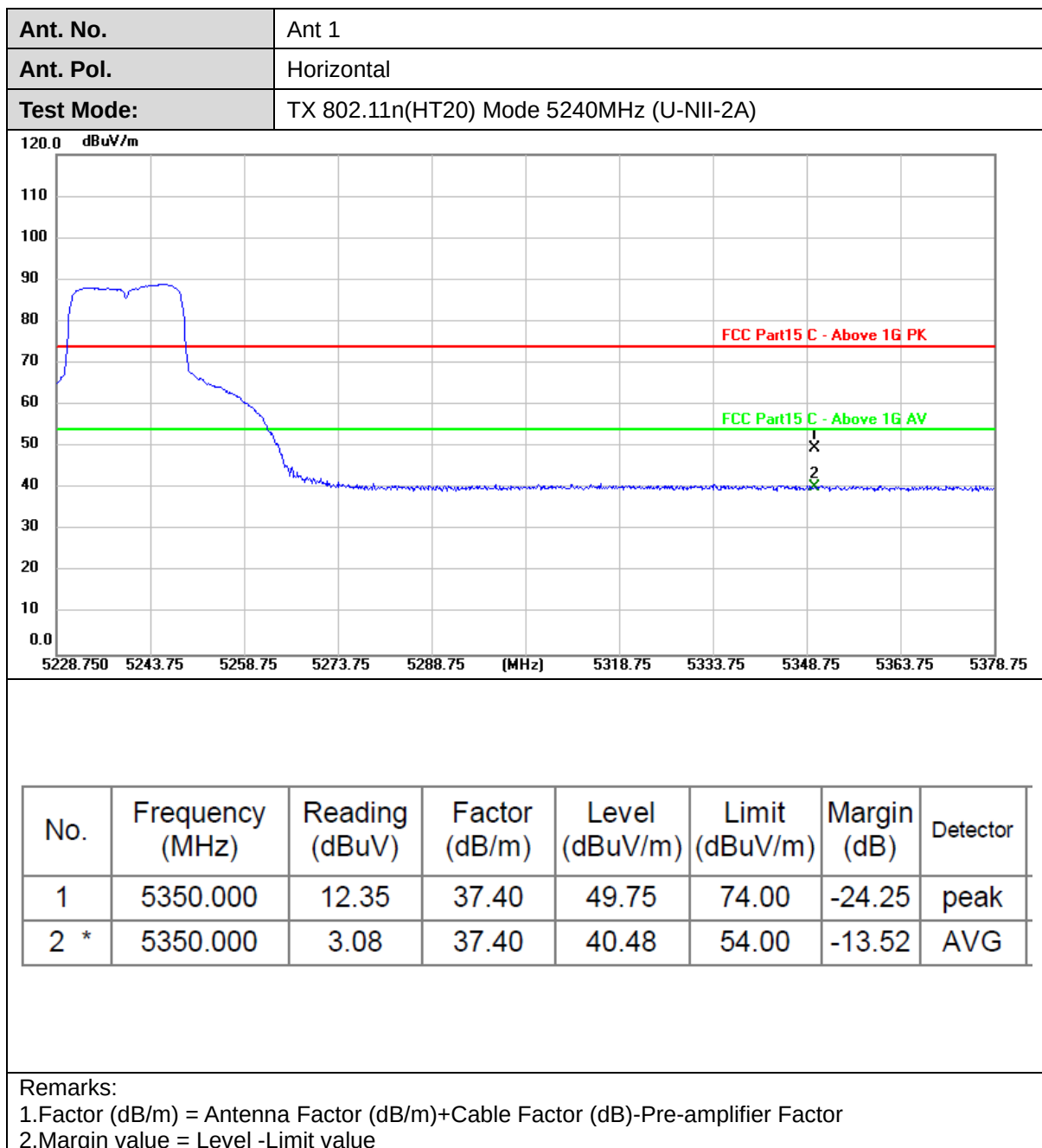


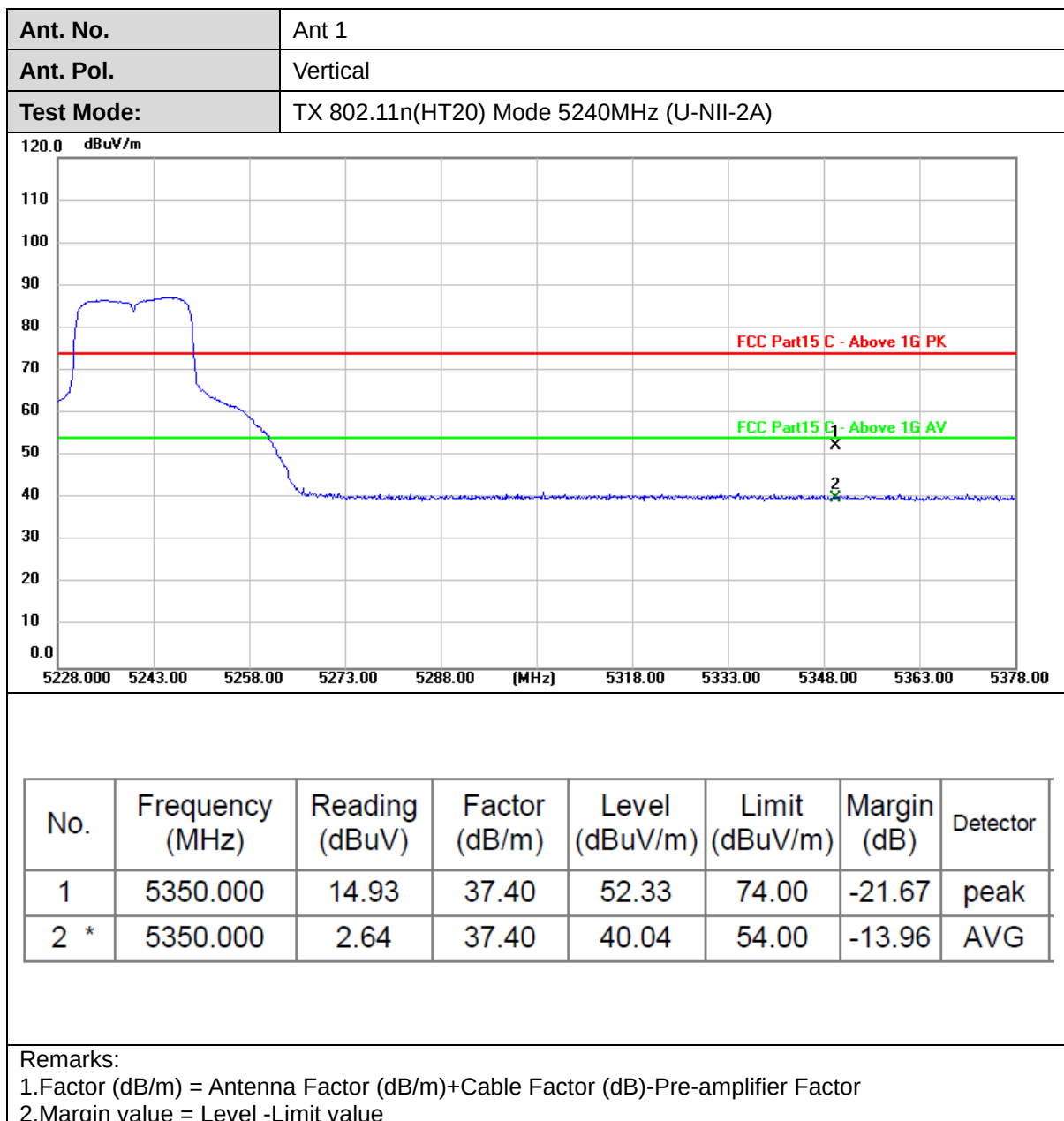


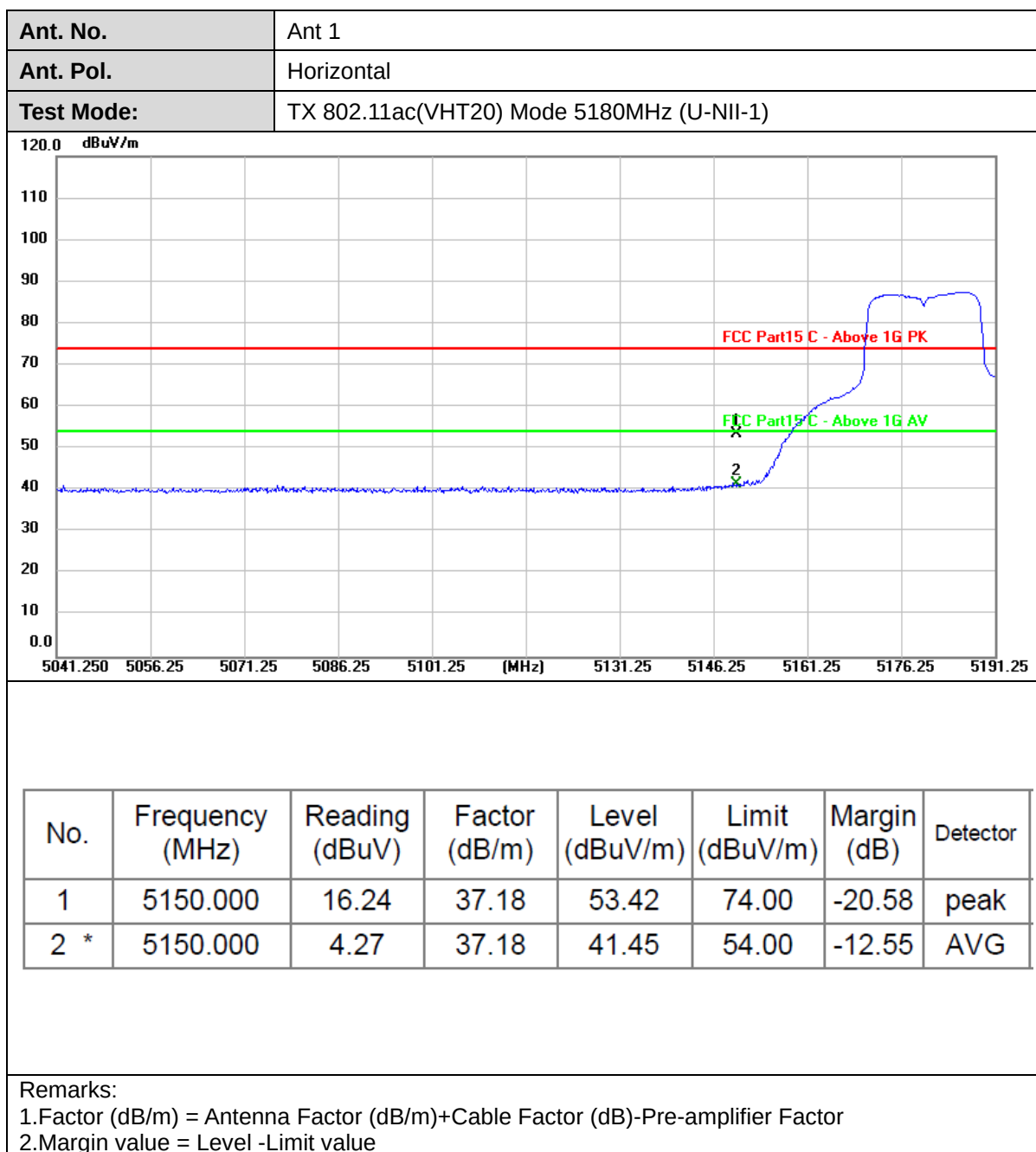


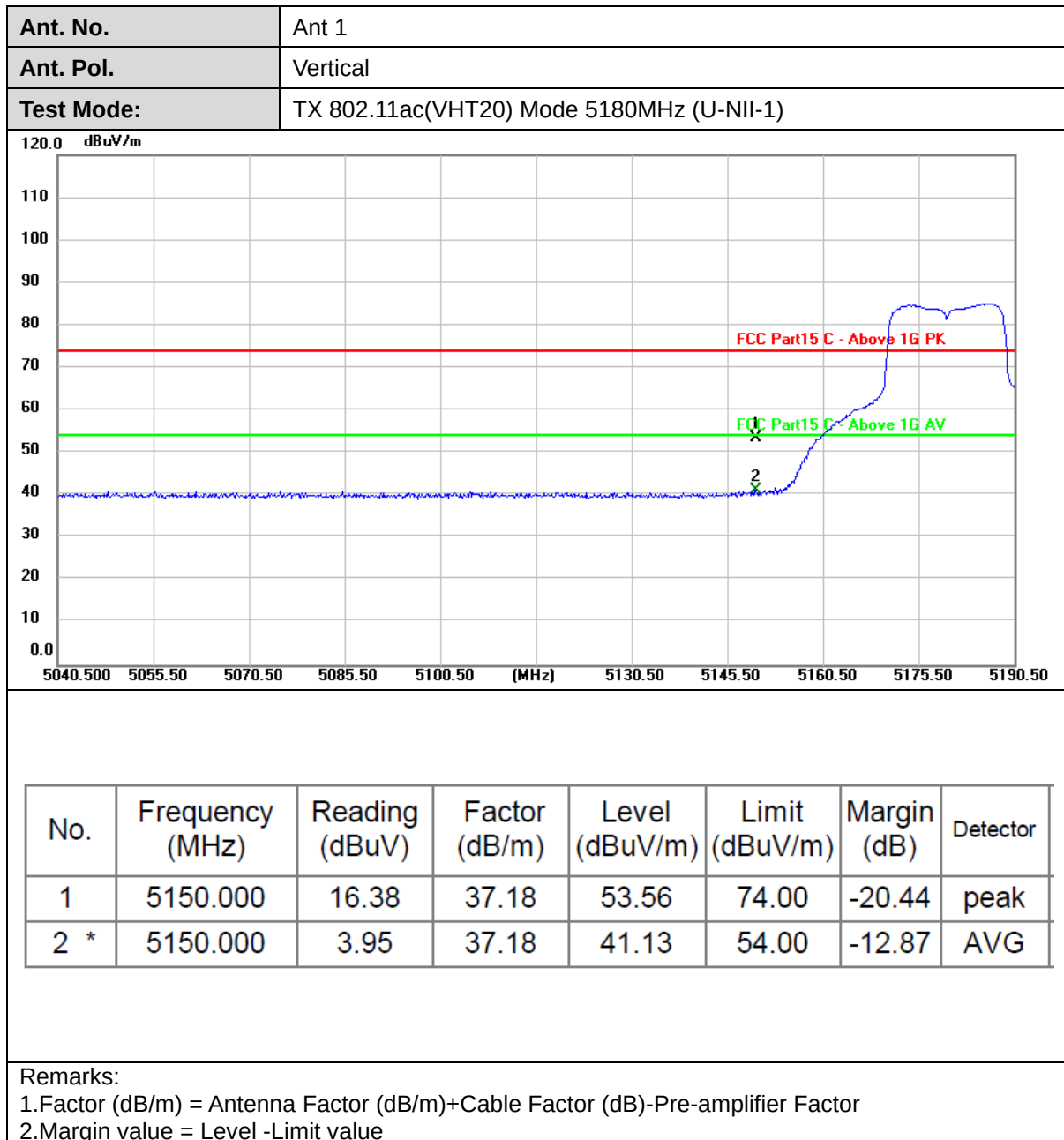


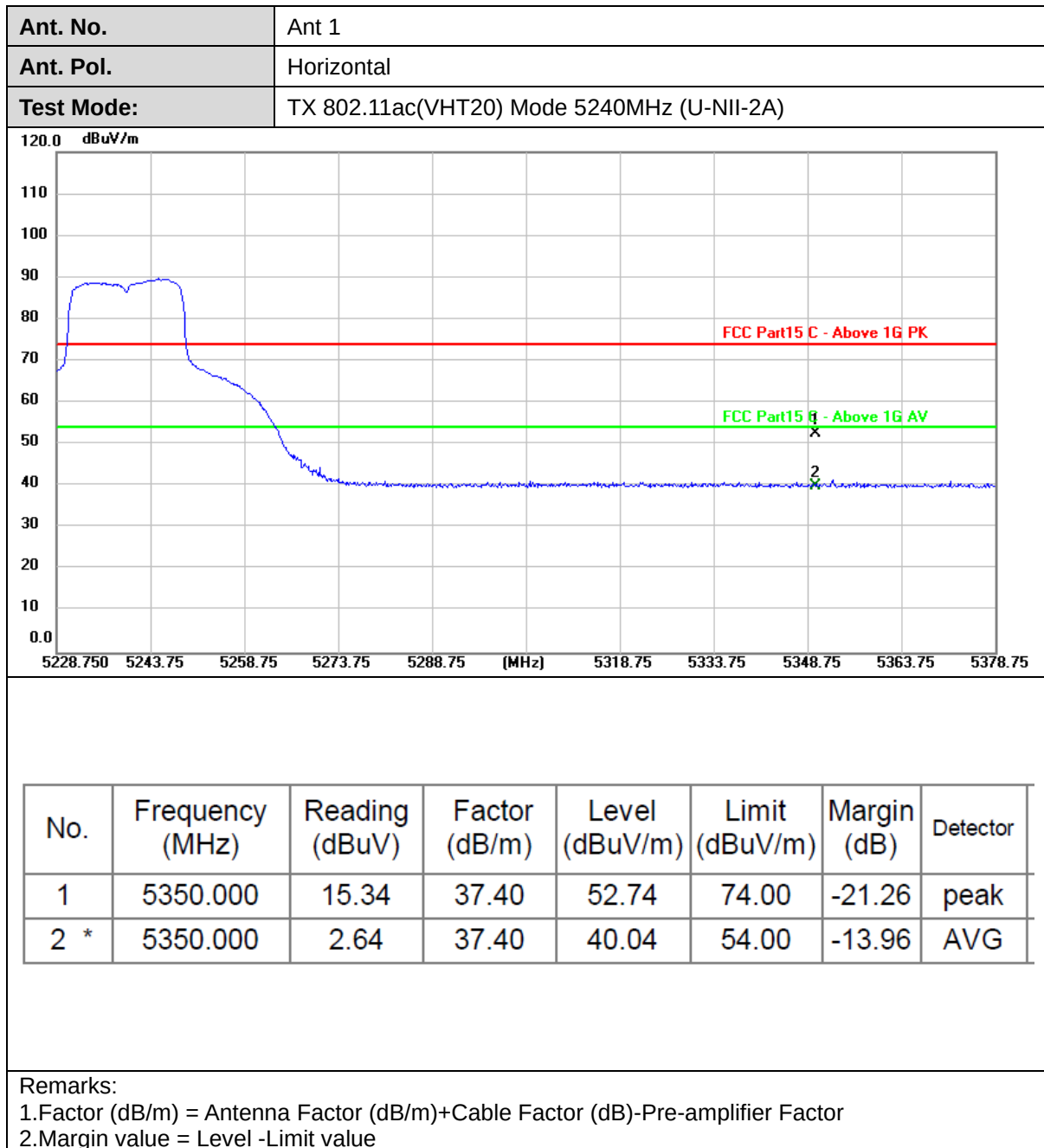


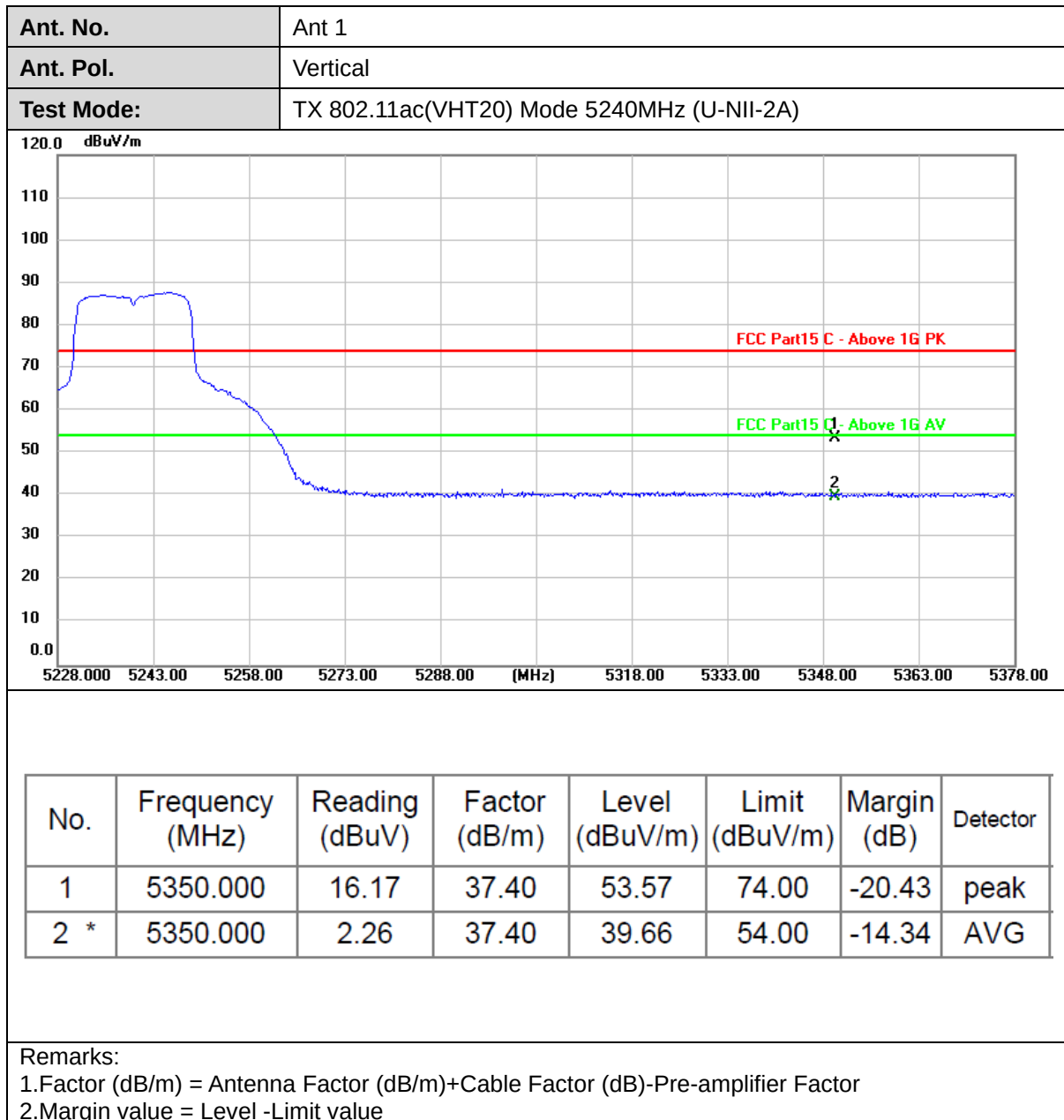


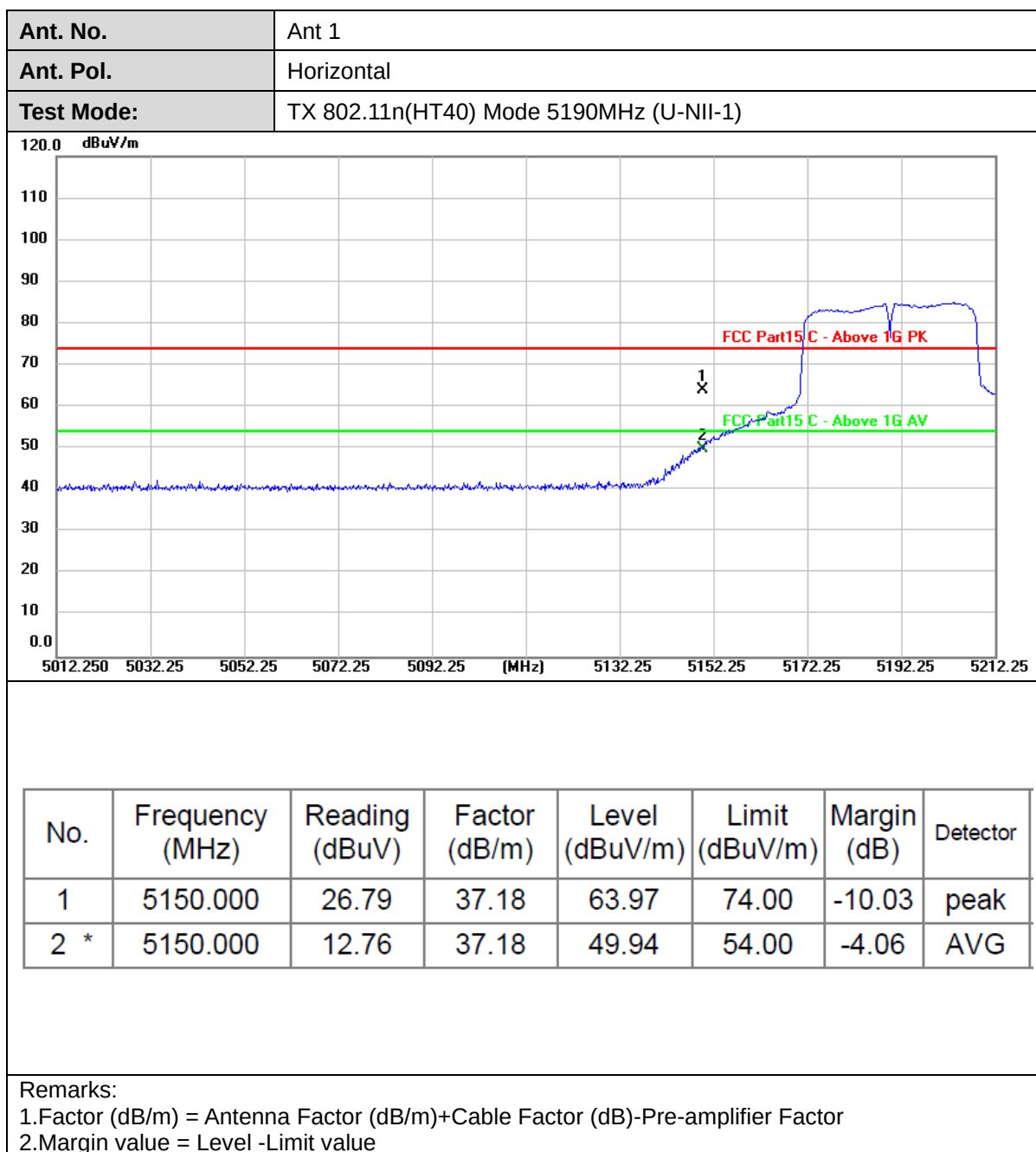






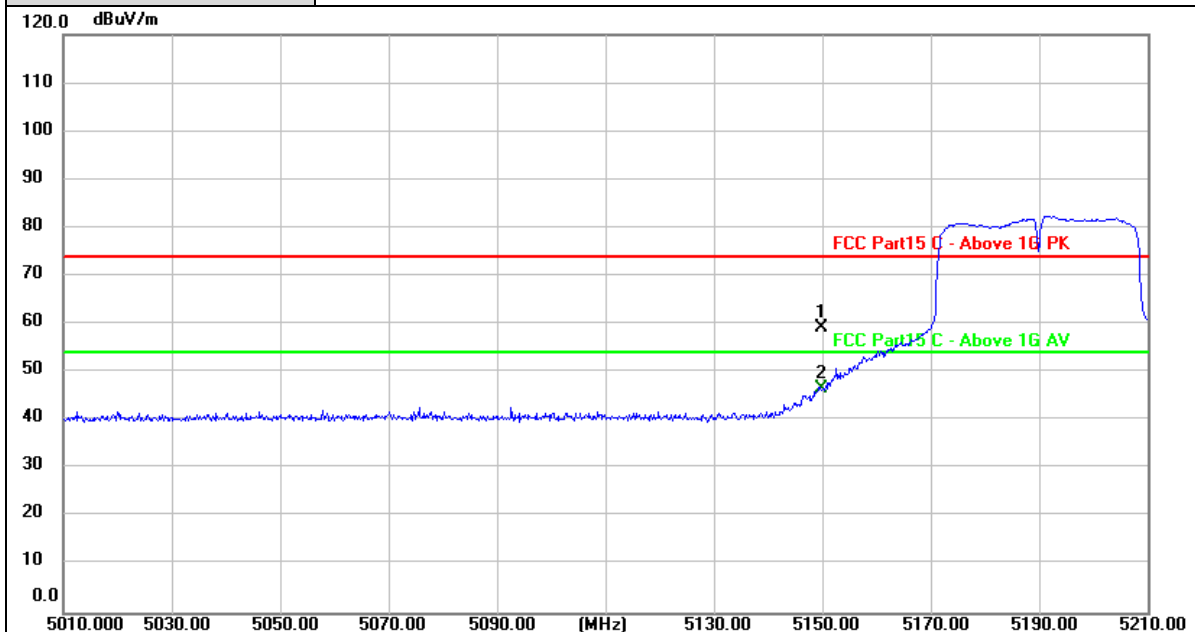








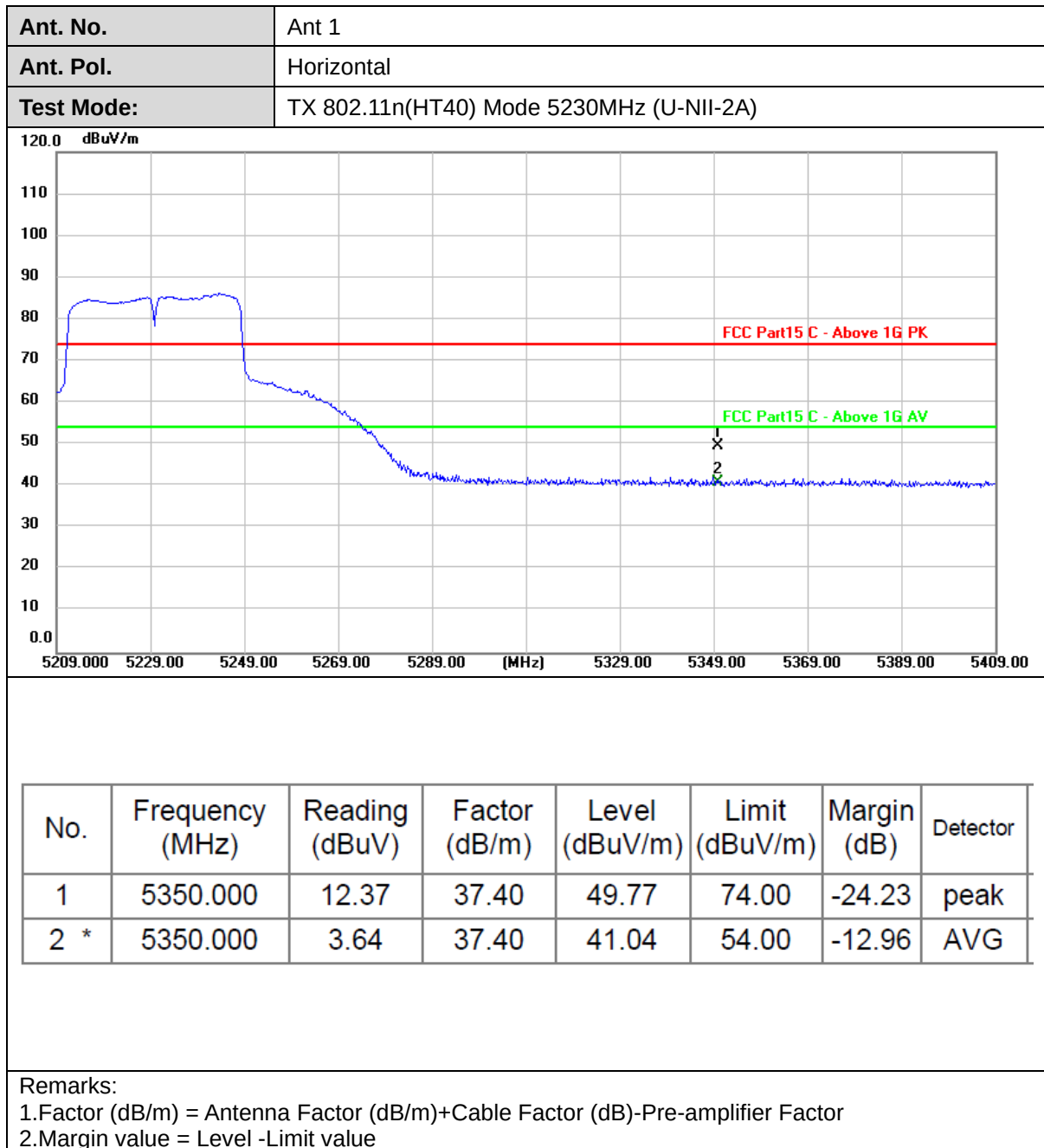
Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)

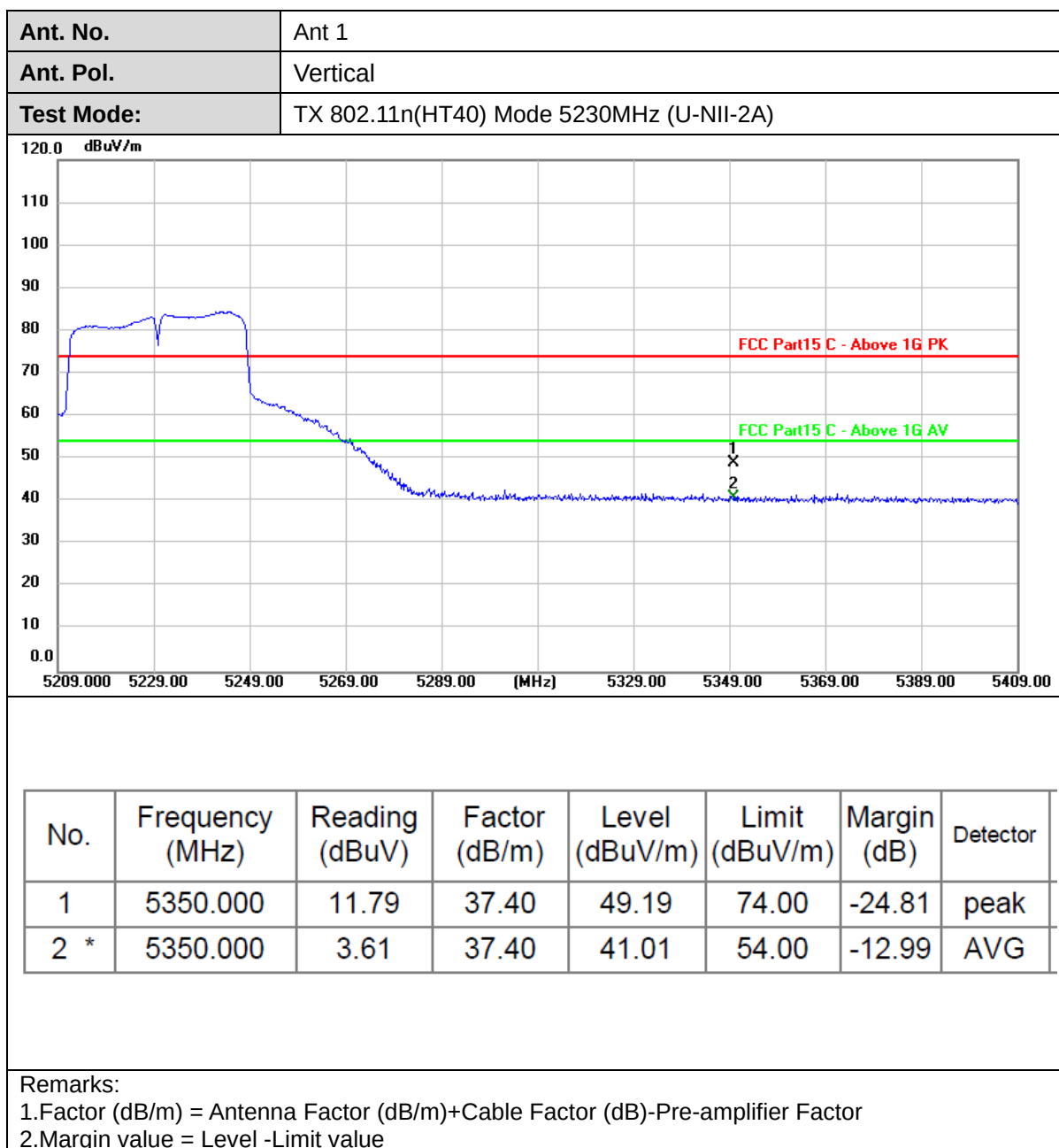


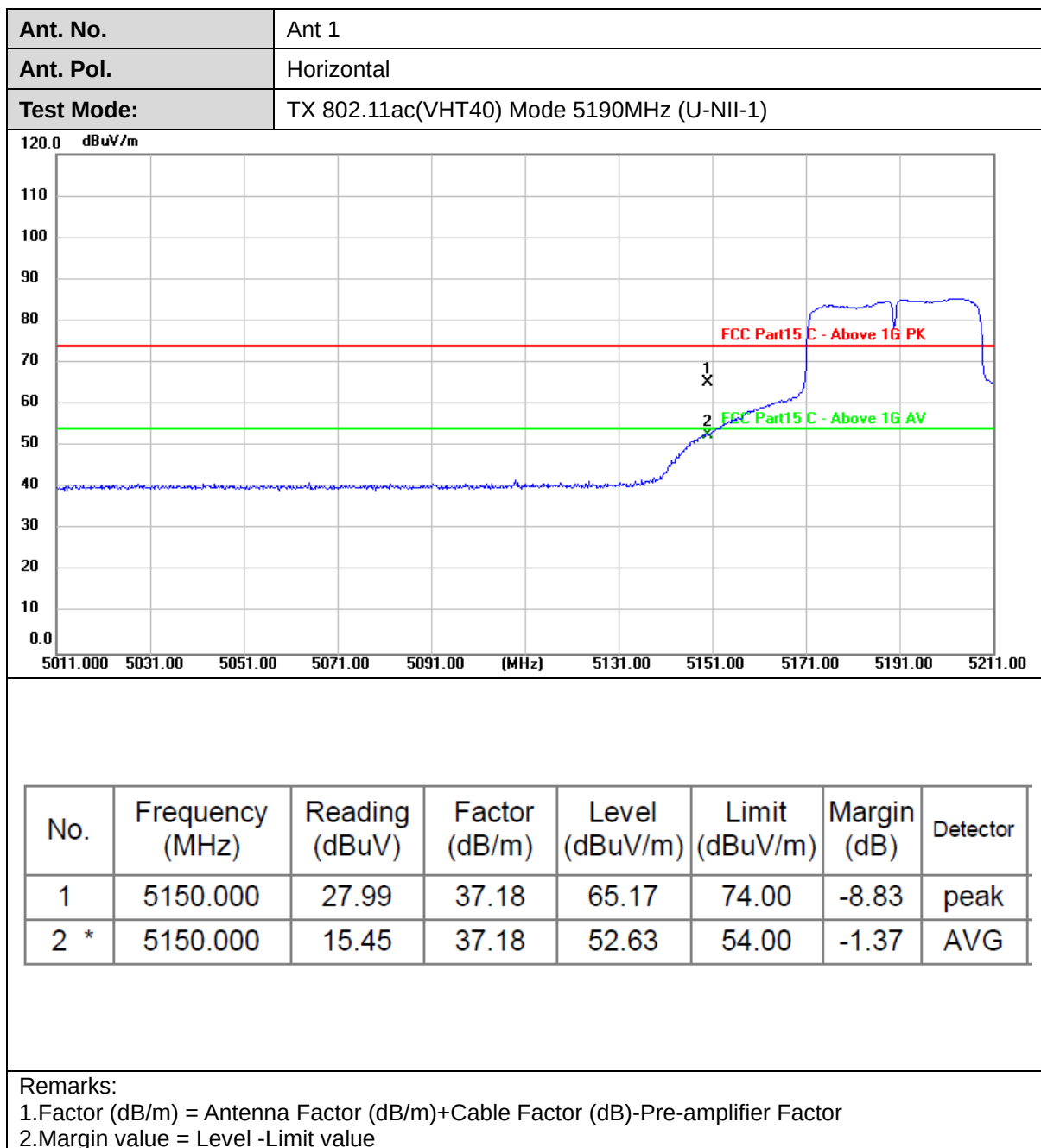
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.000	22.20	37.18	59.38	74.00	-14.62	peak
2 *	5150.000	9.57	37.18	46.75	54.00	-7.25	AVG

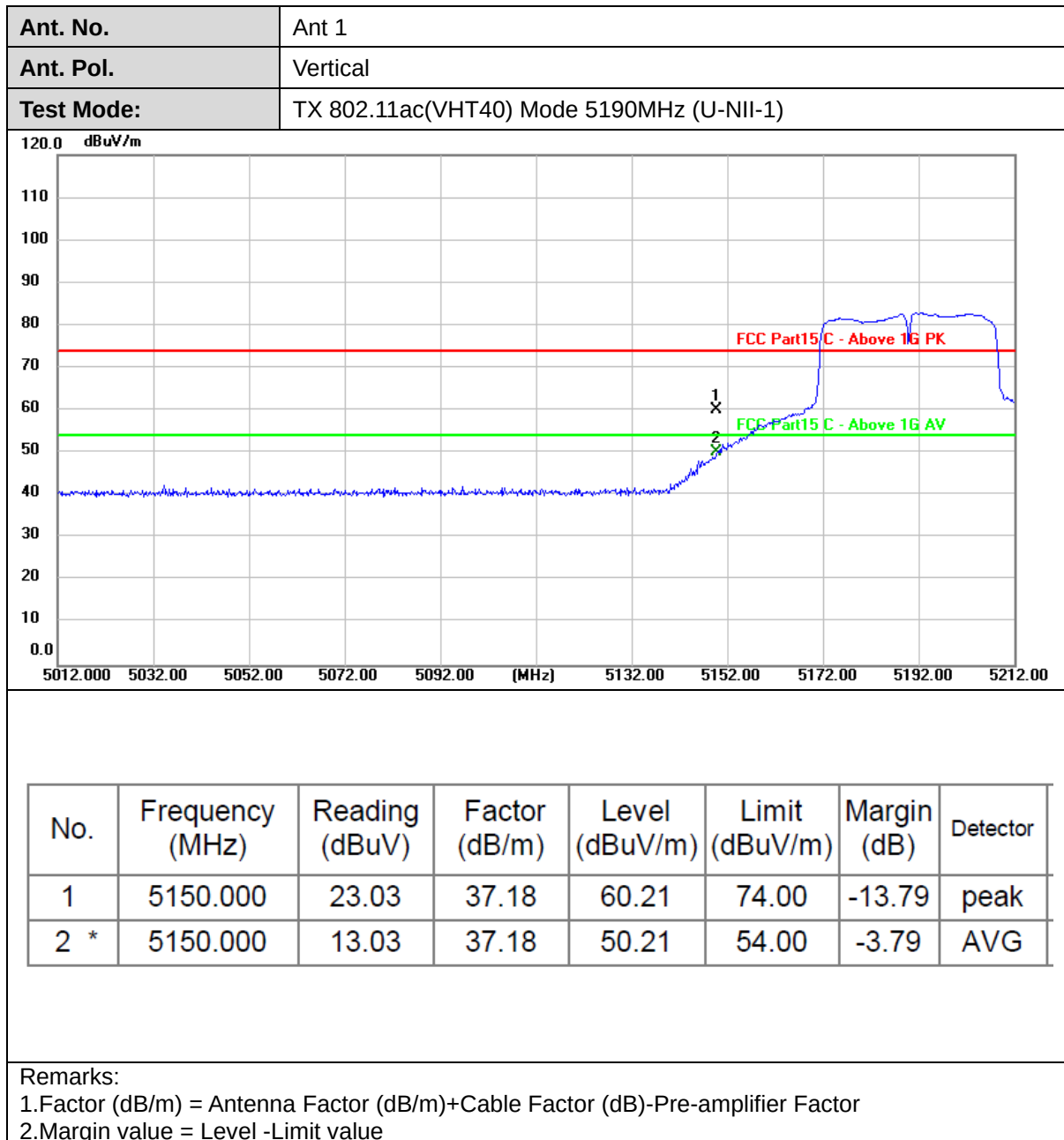
Remarks:

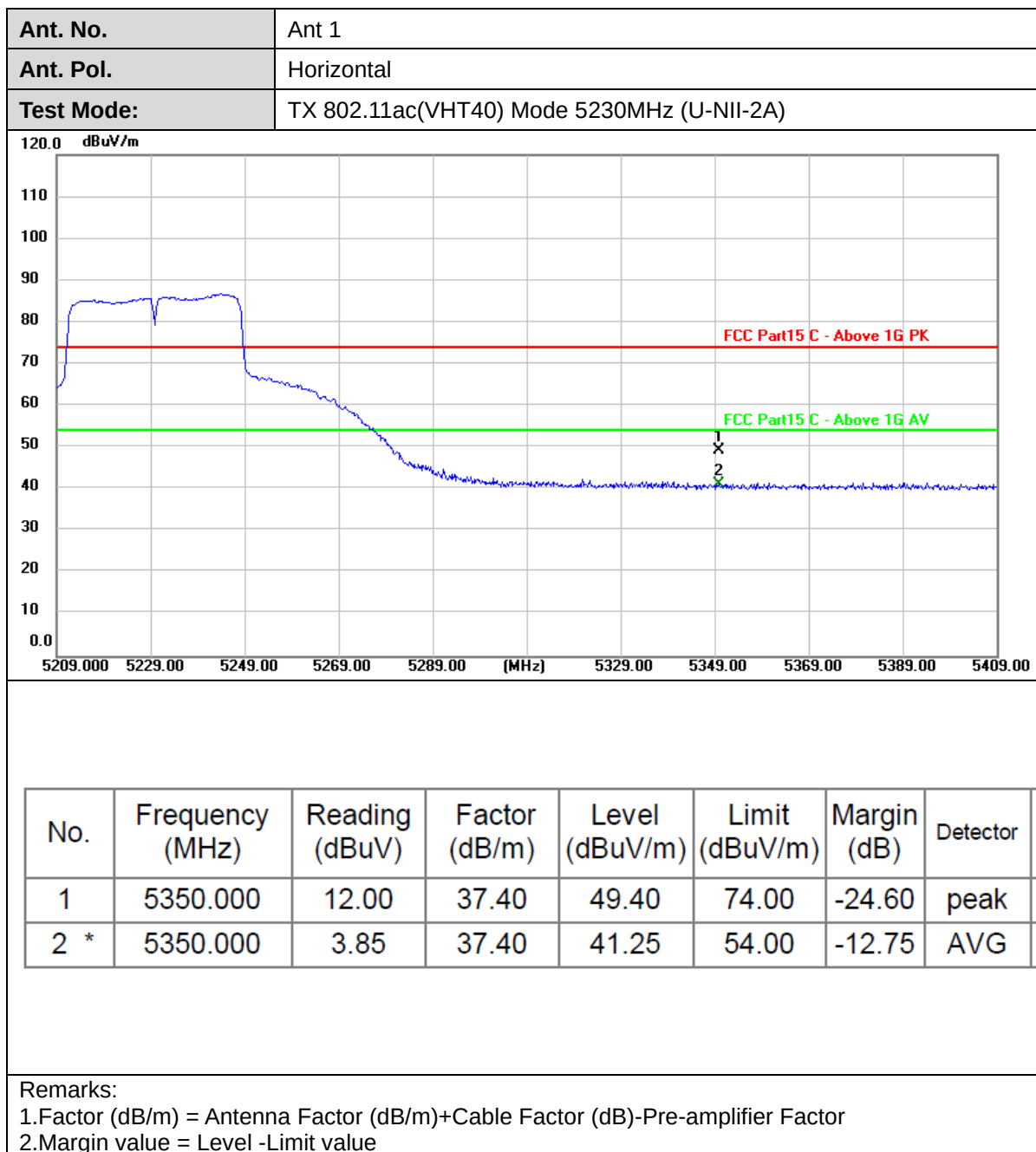
- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value

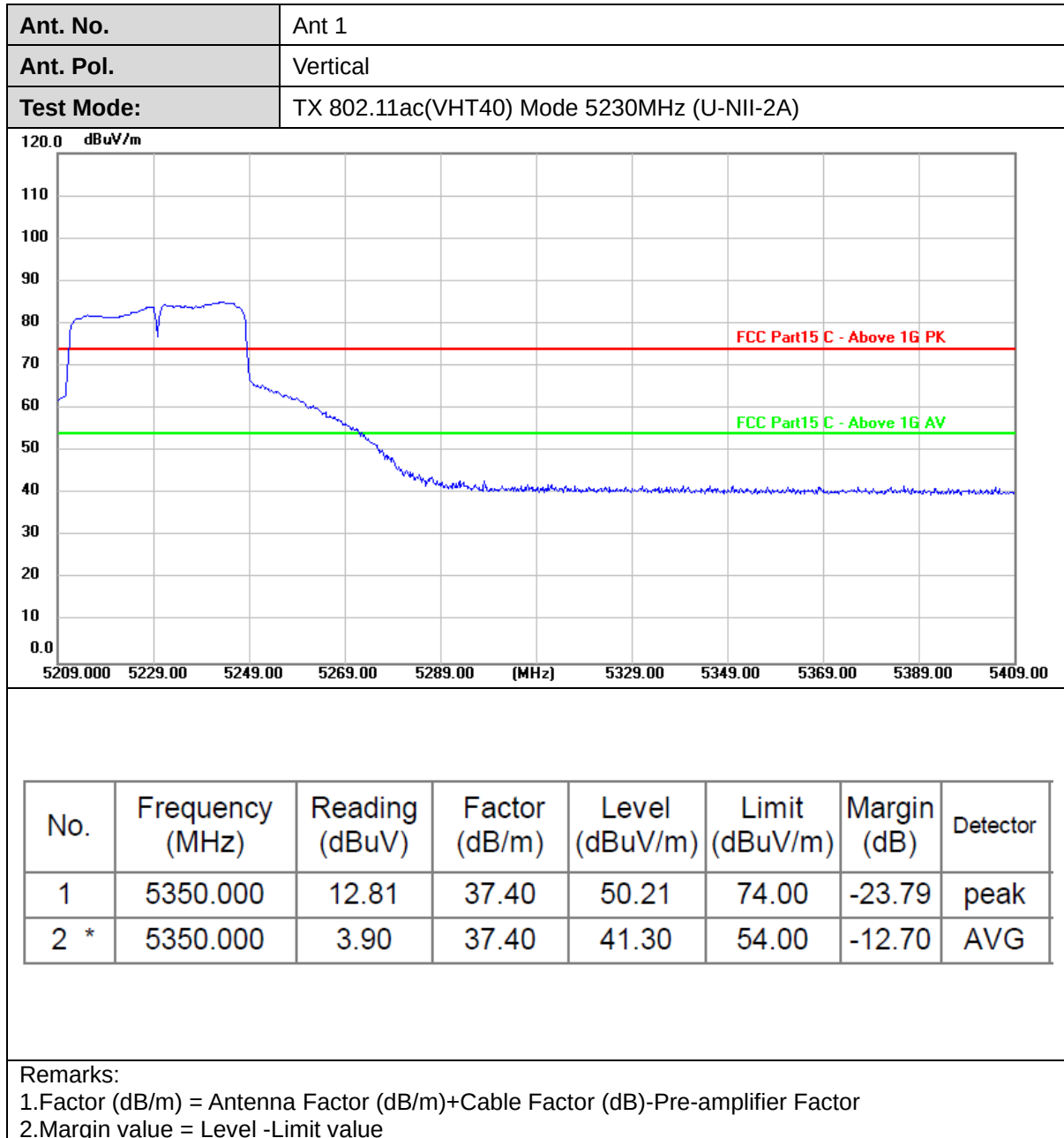


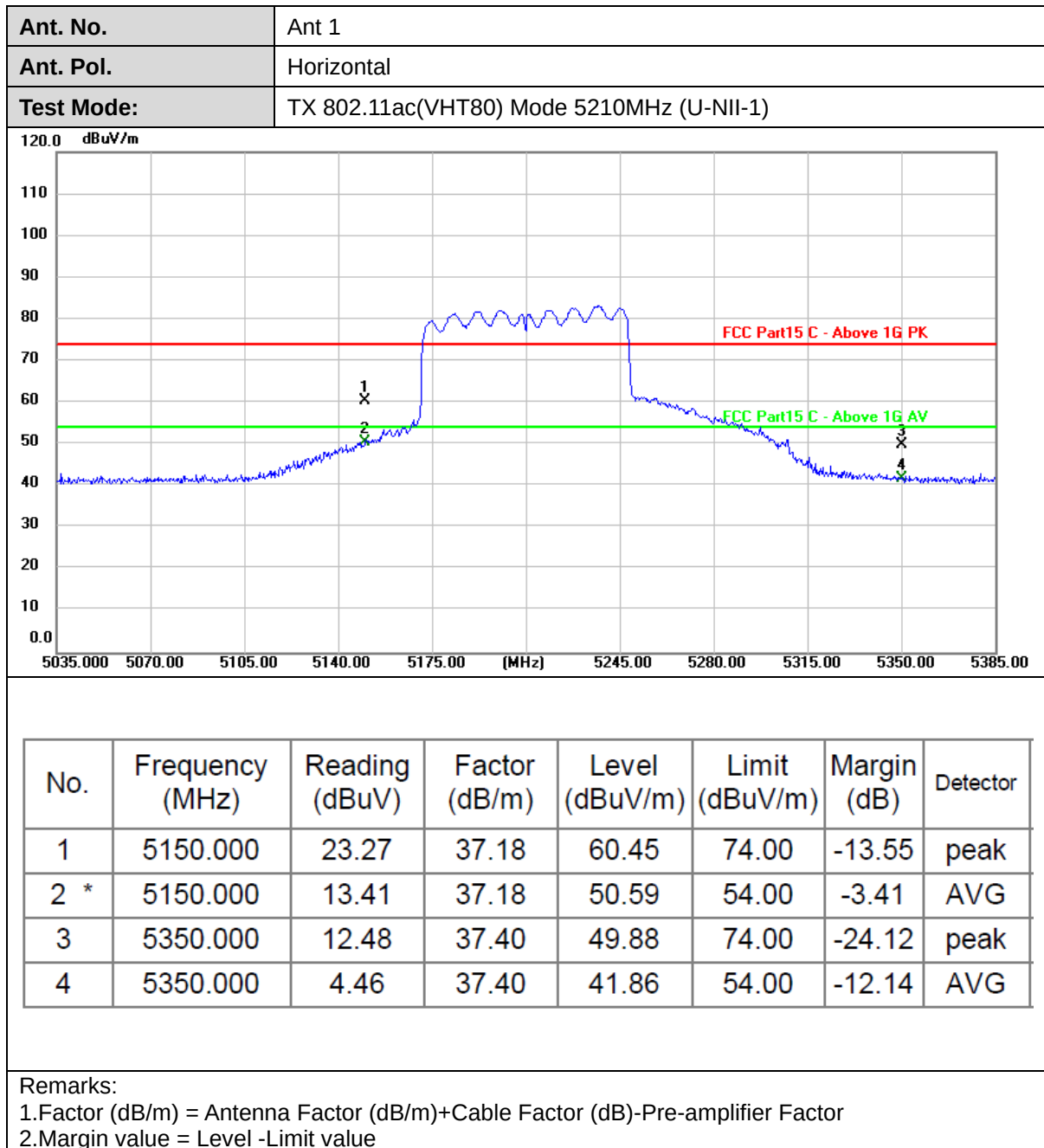


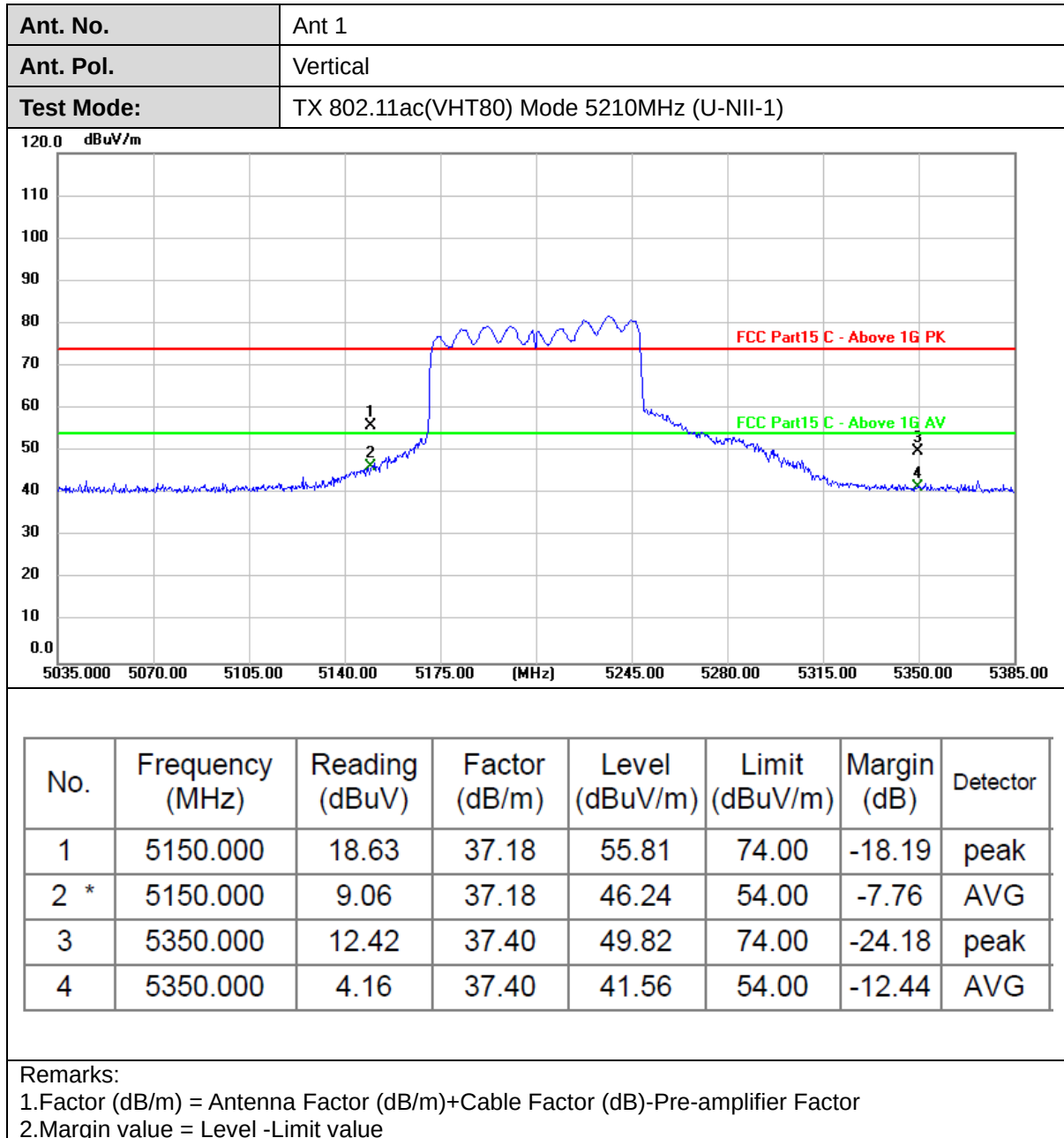


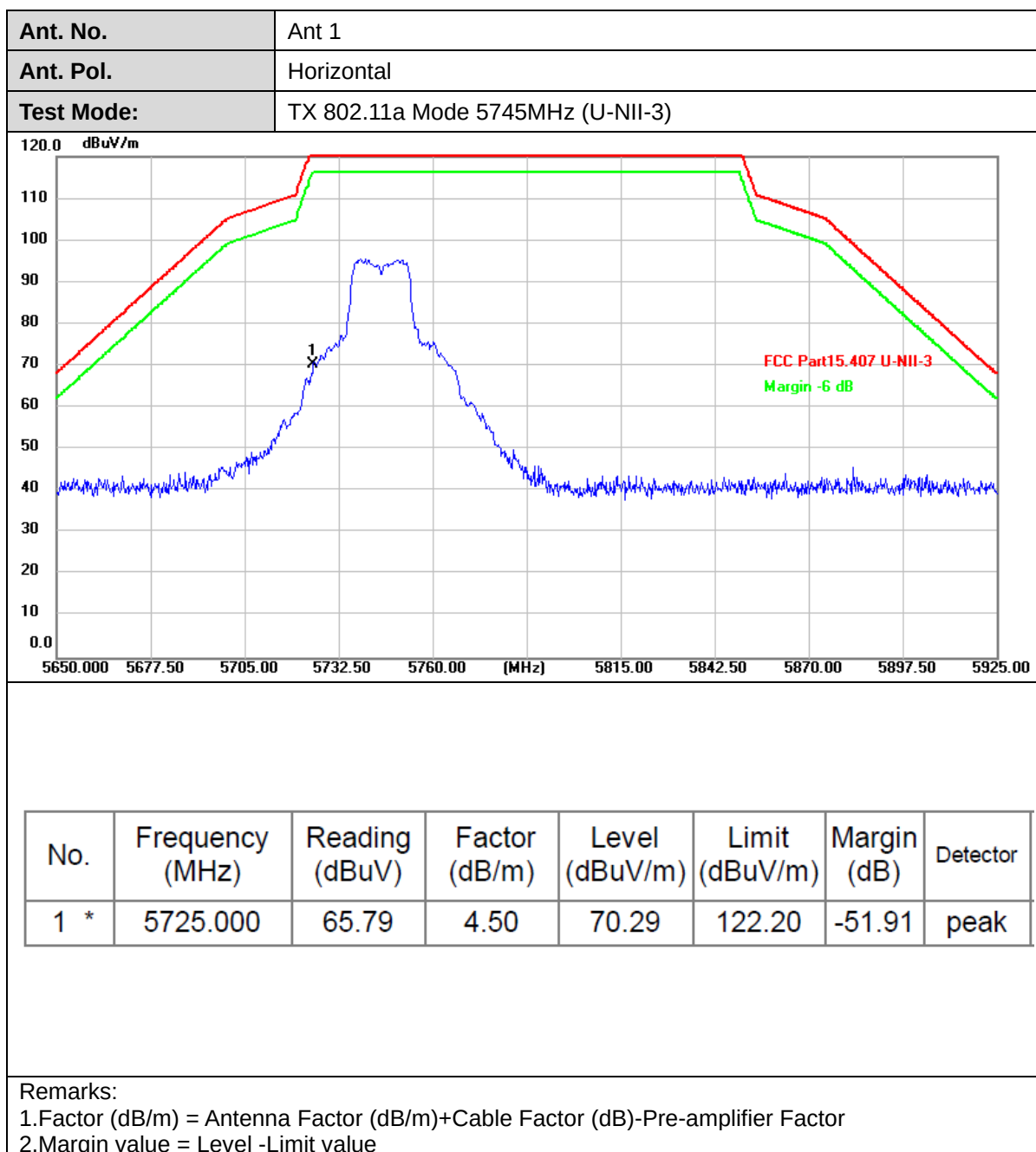


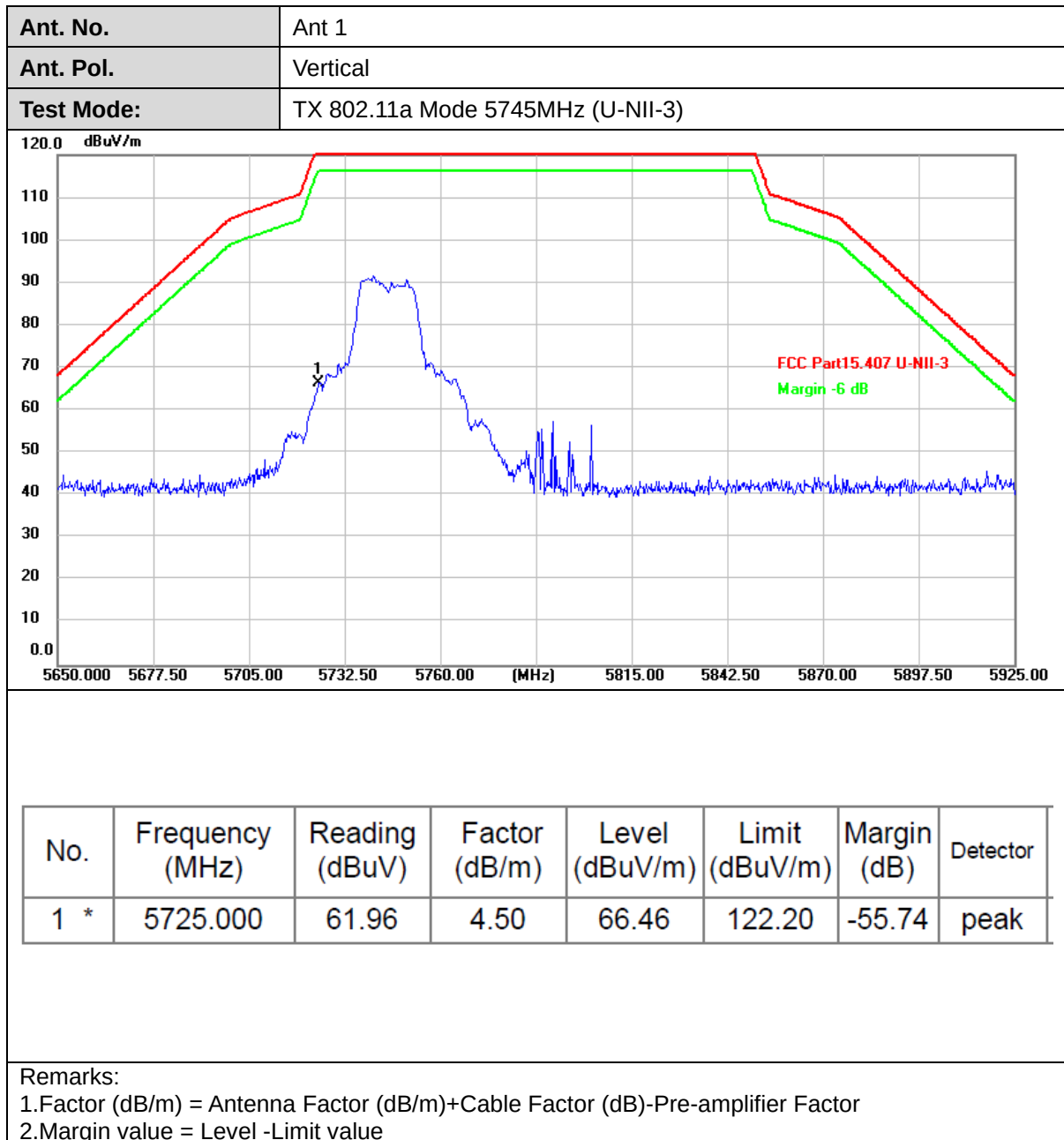


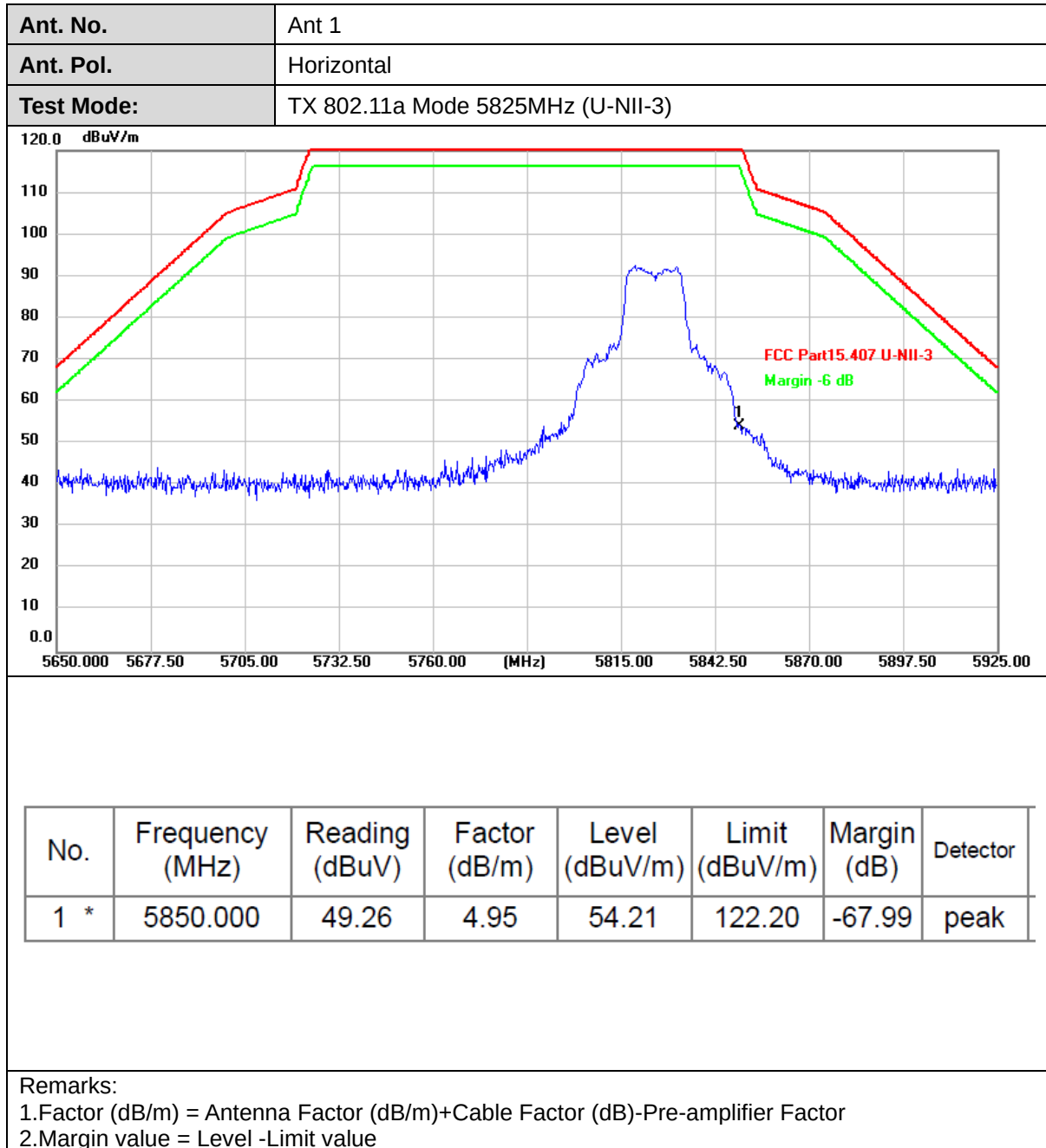


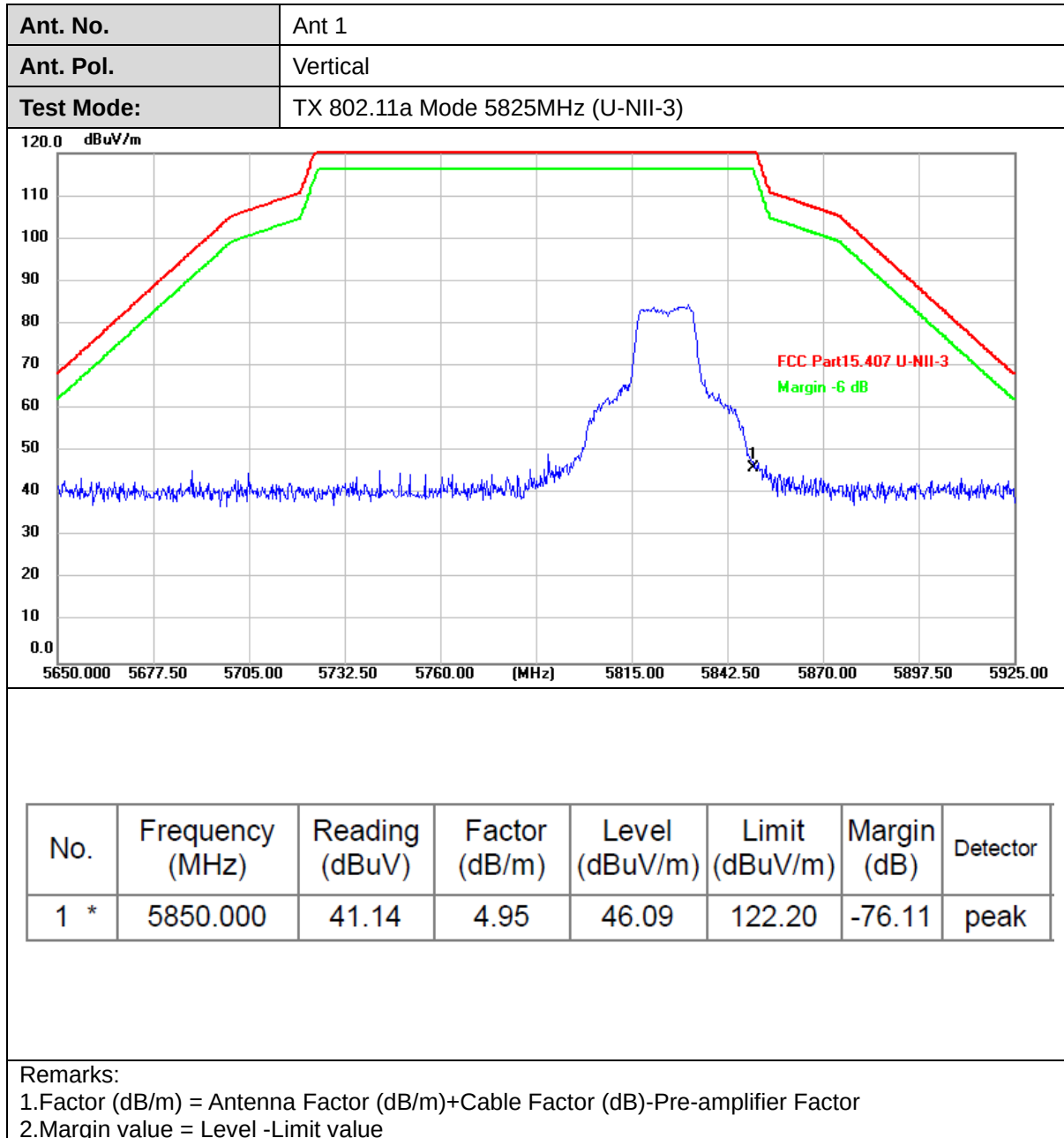


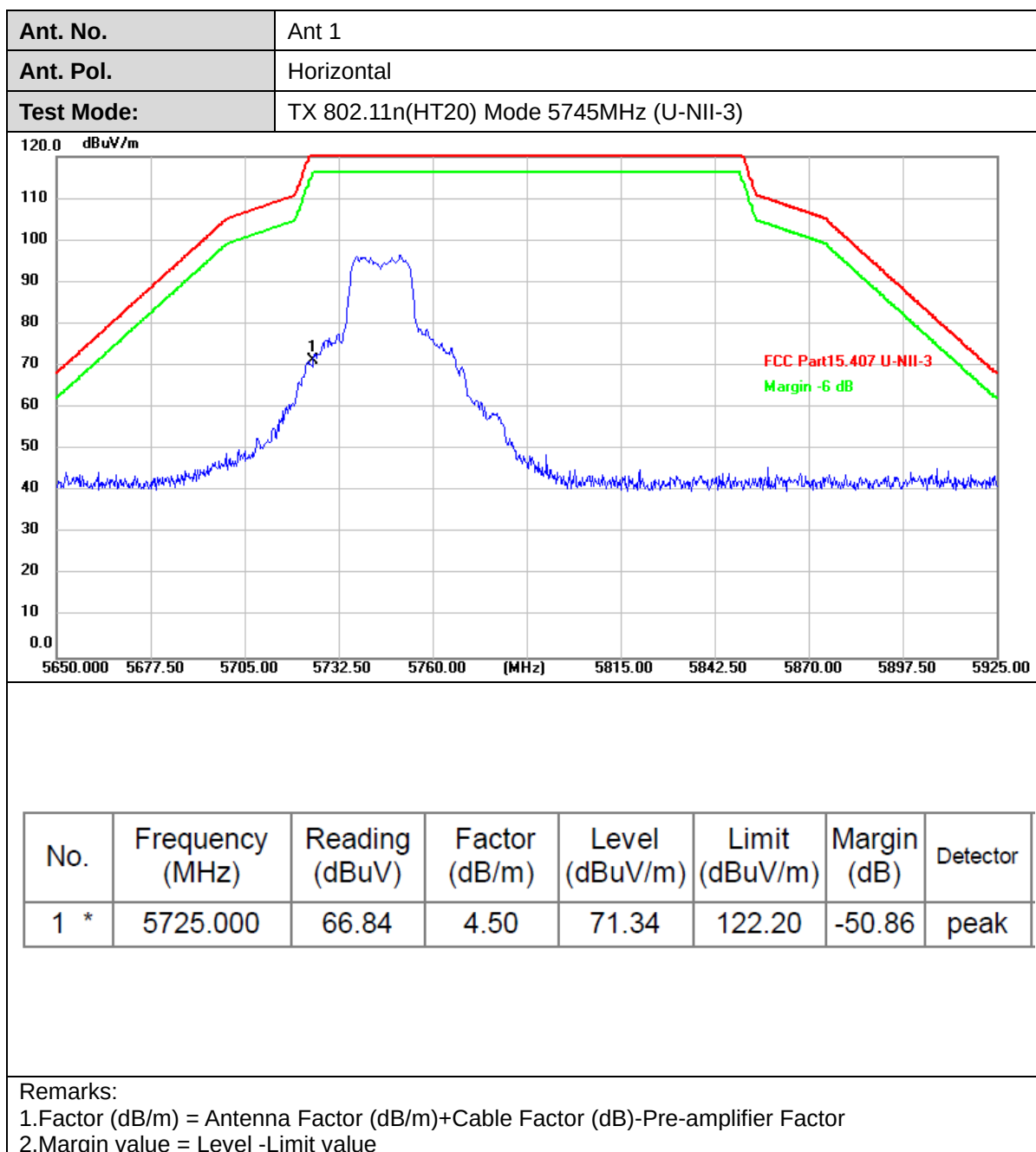


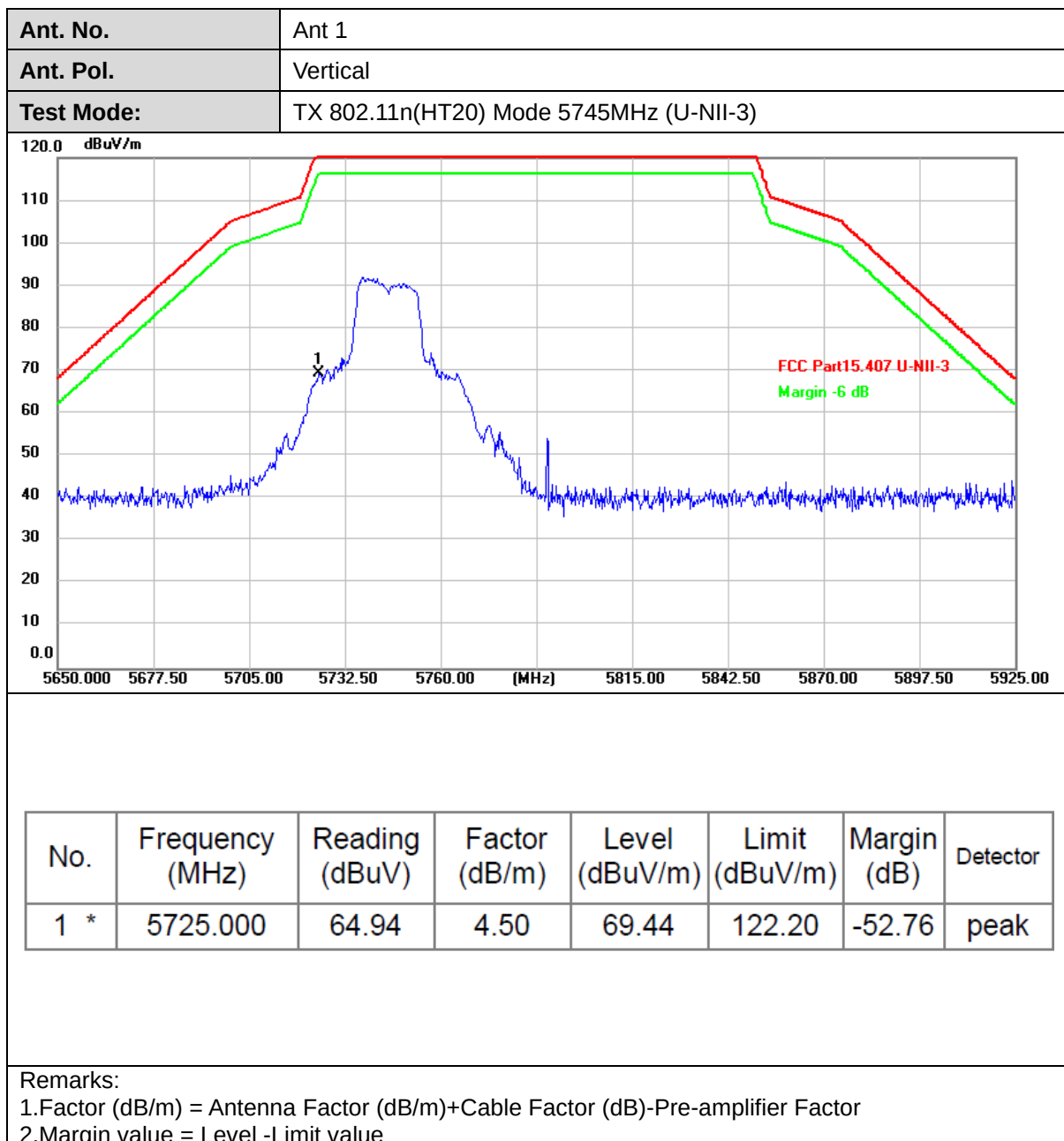


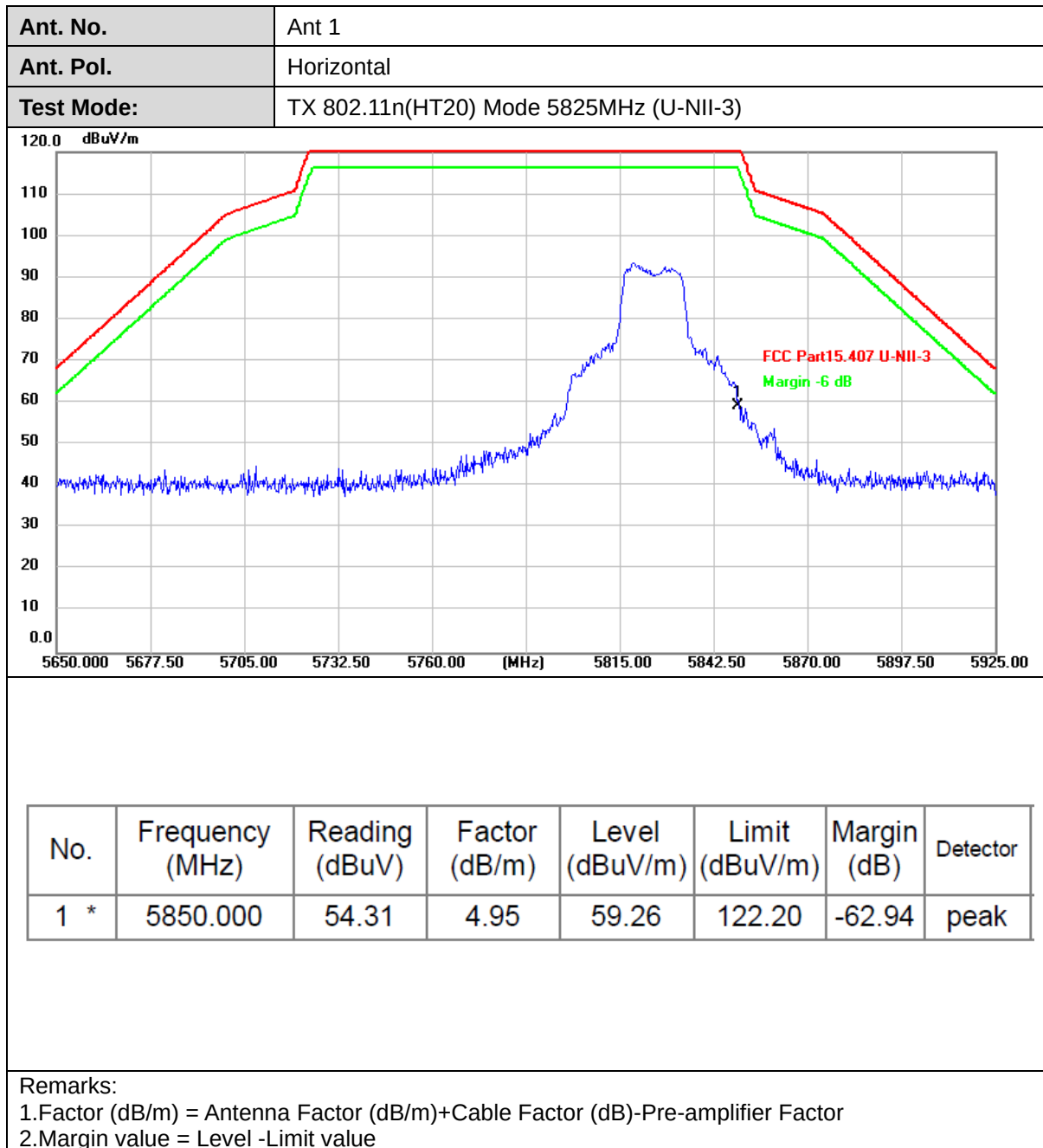






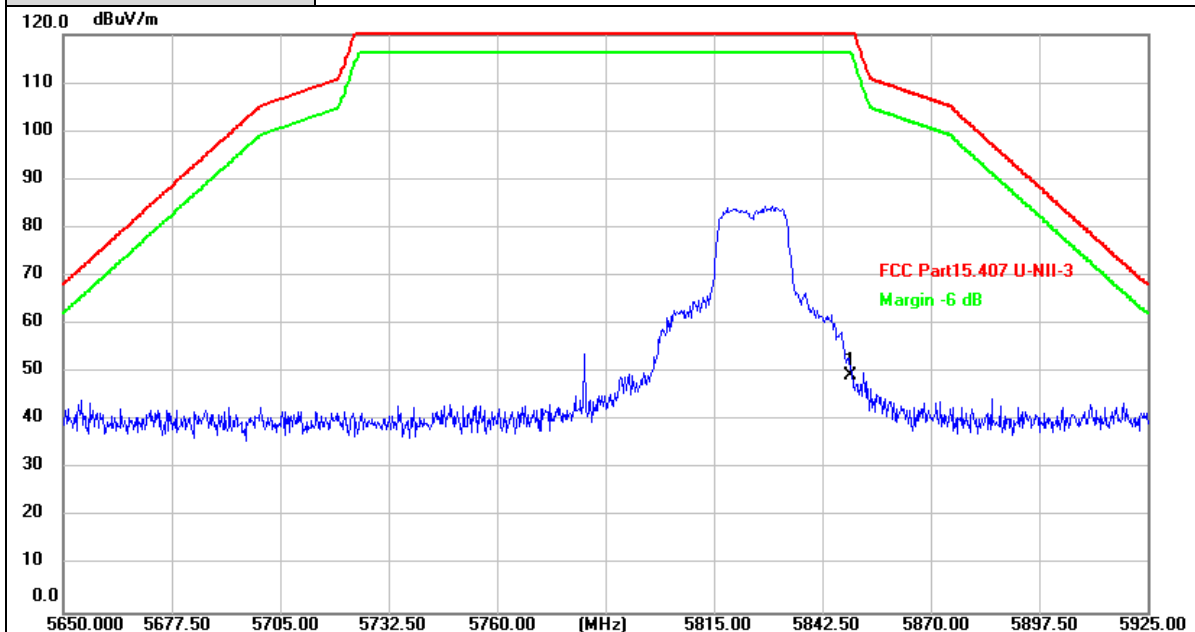








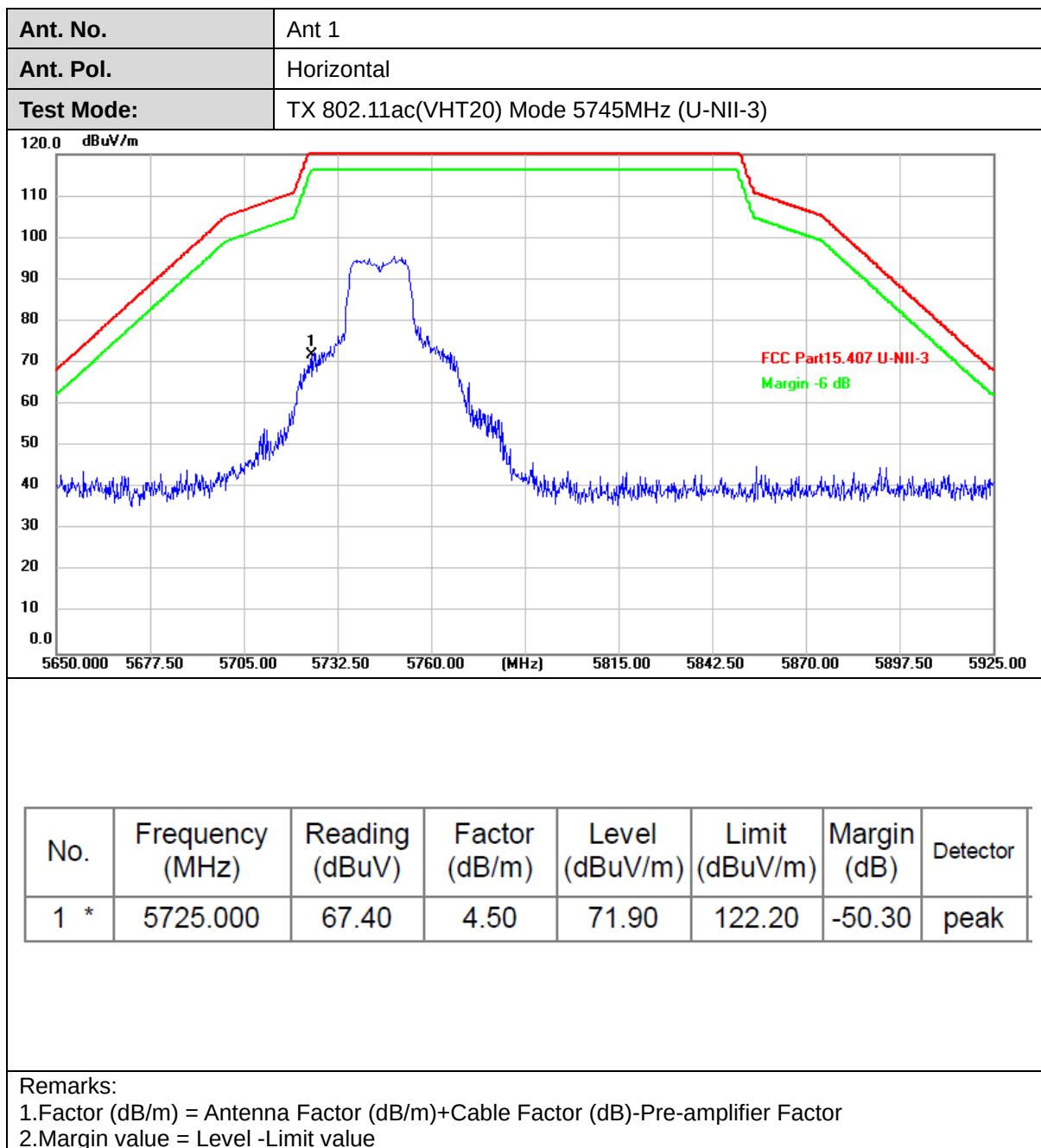
Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)

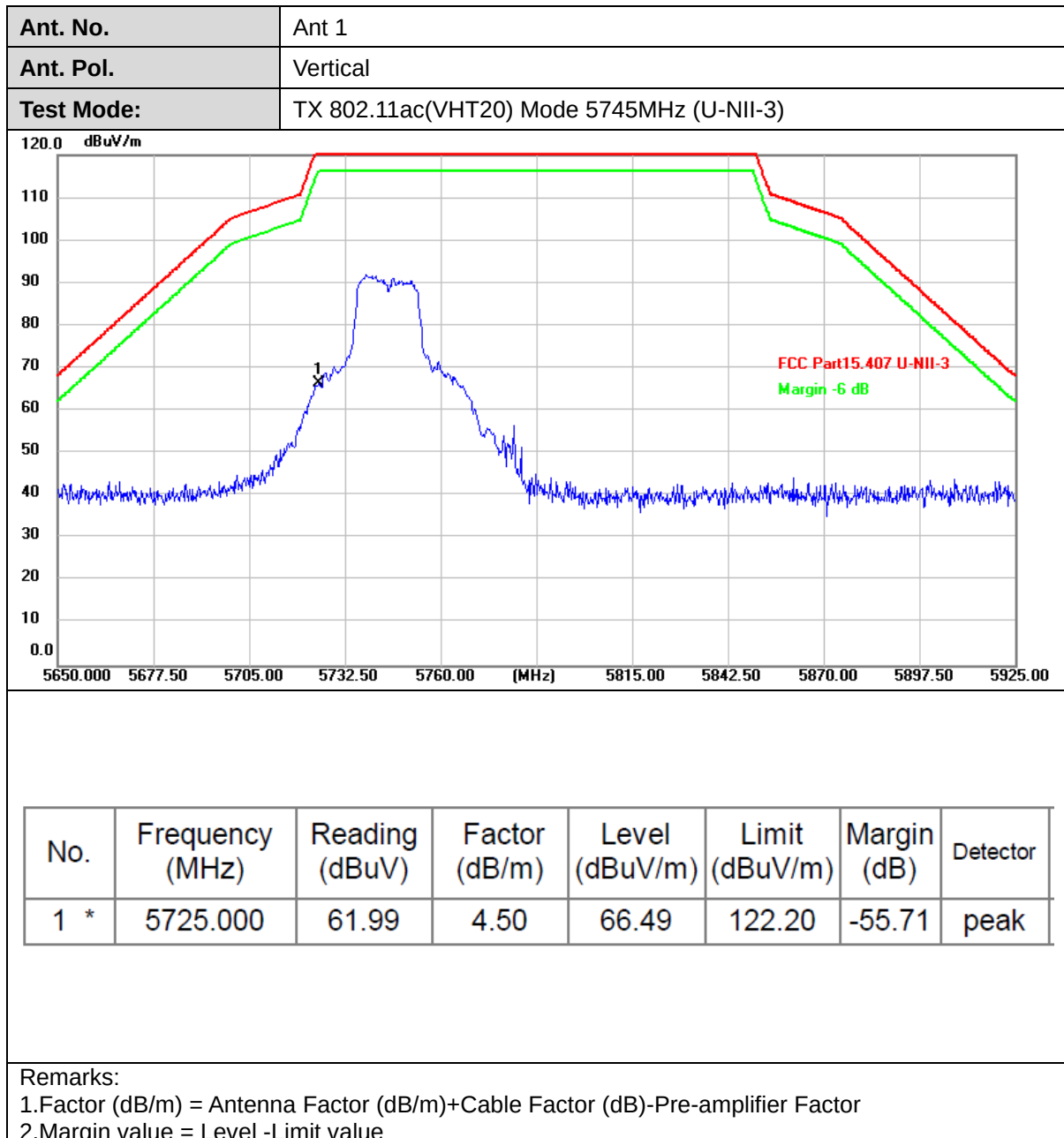


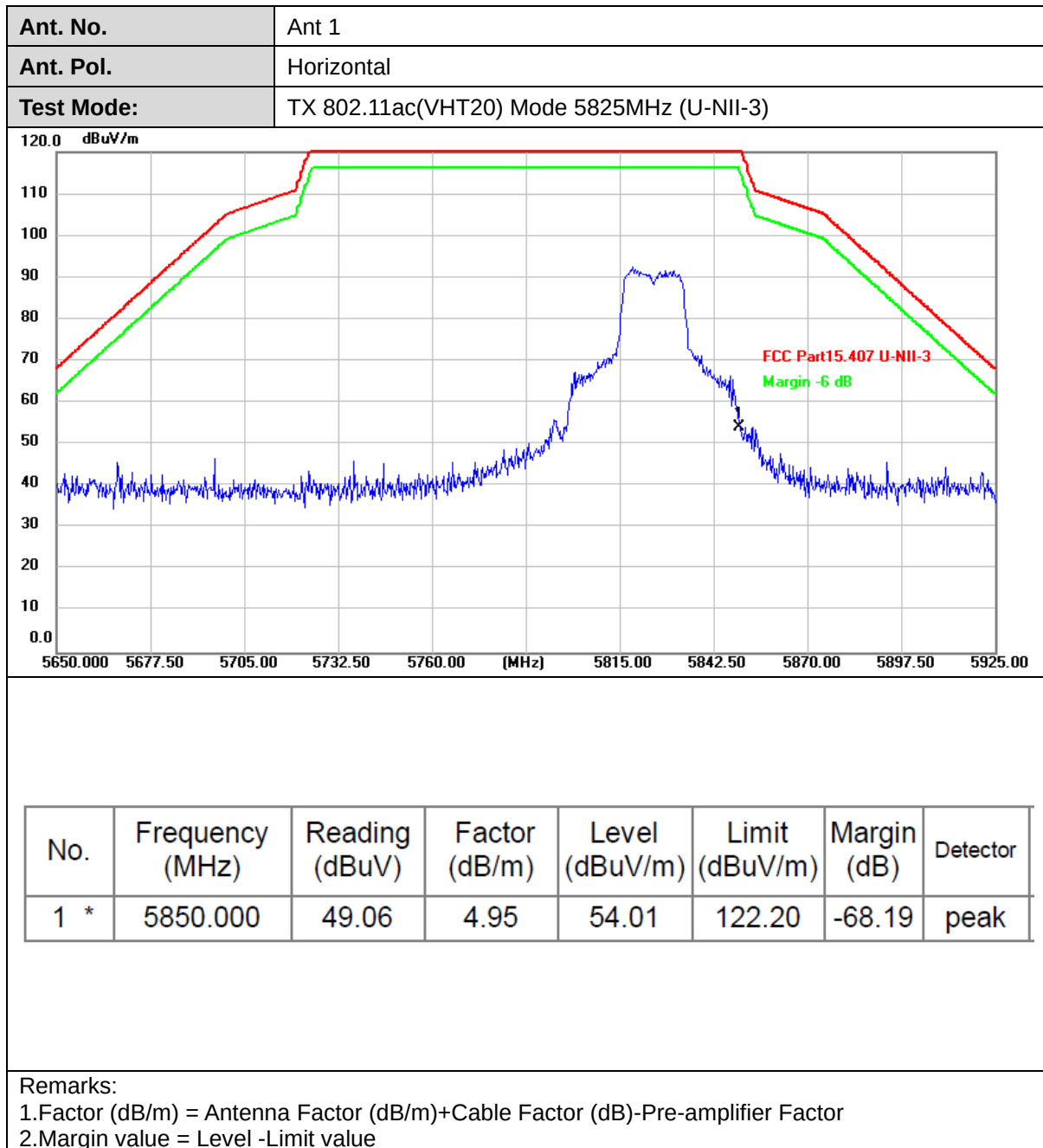
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	44.36	4.95	49.31	122.20	-72.89	peak

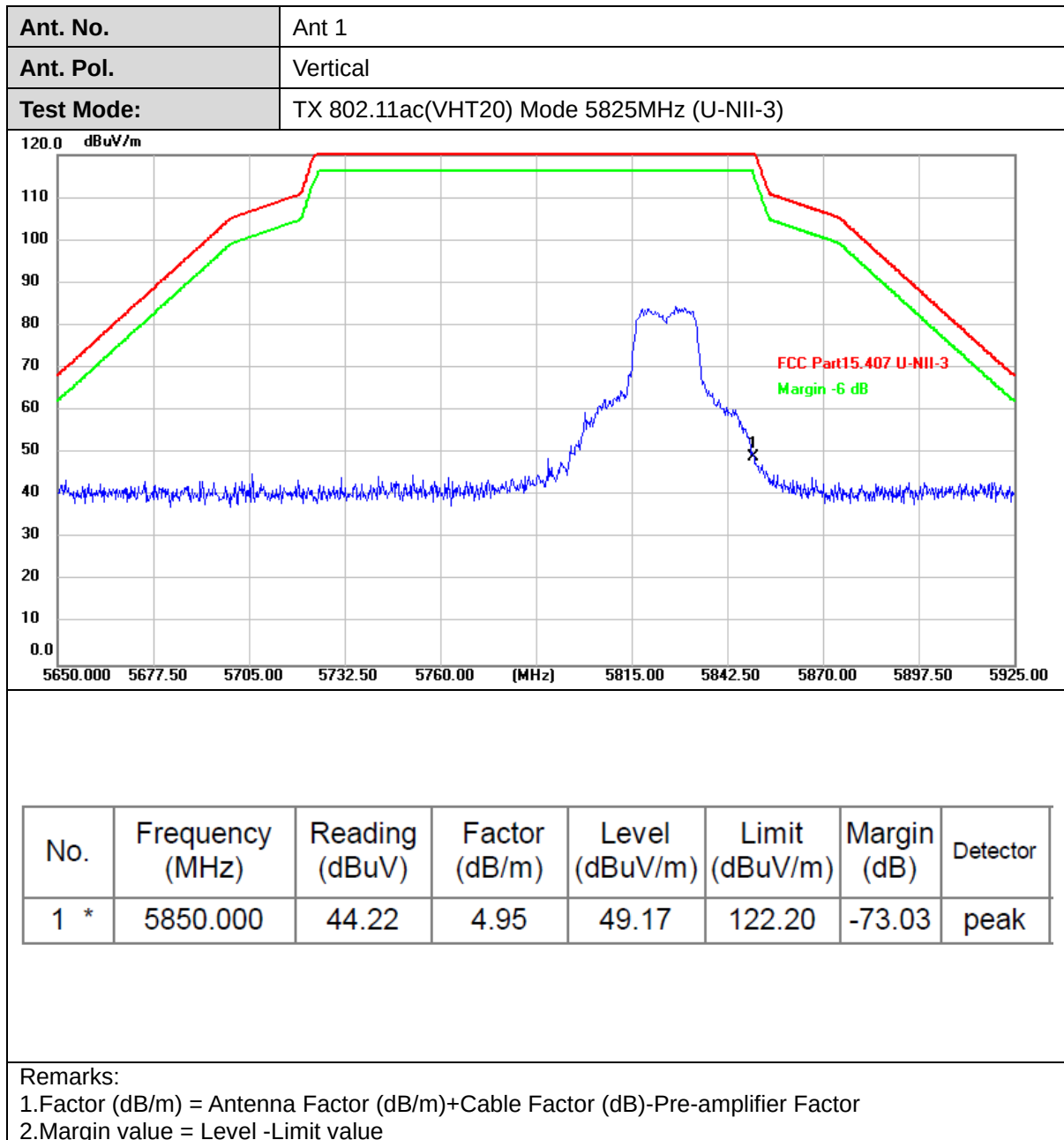
Remarks:

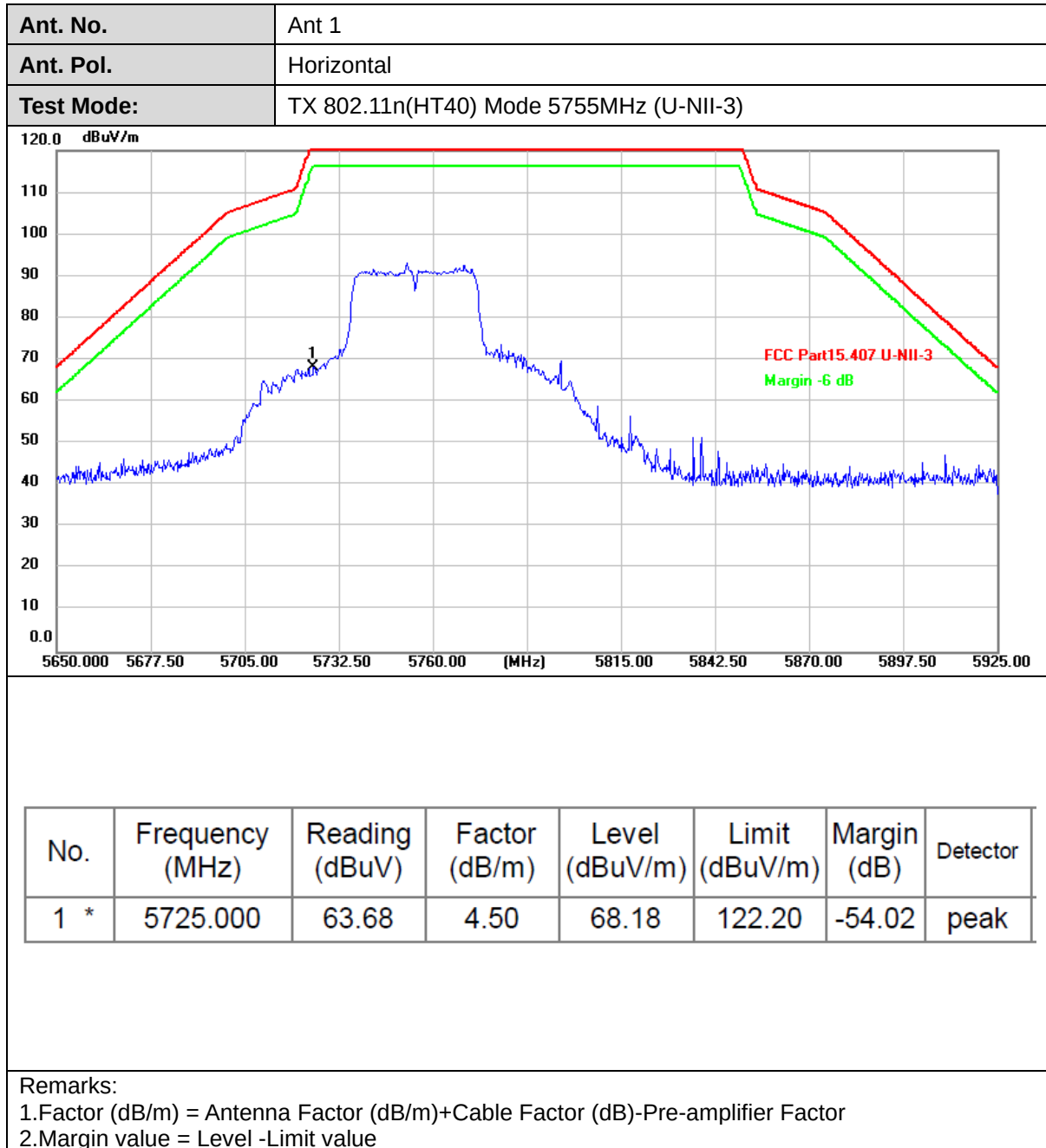
- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value

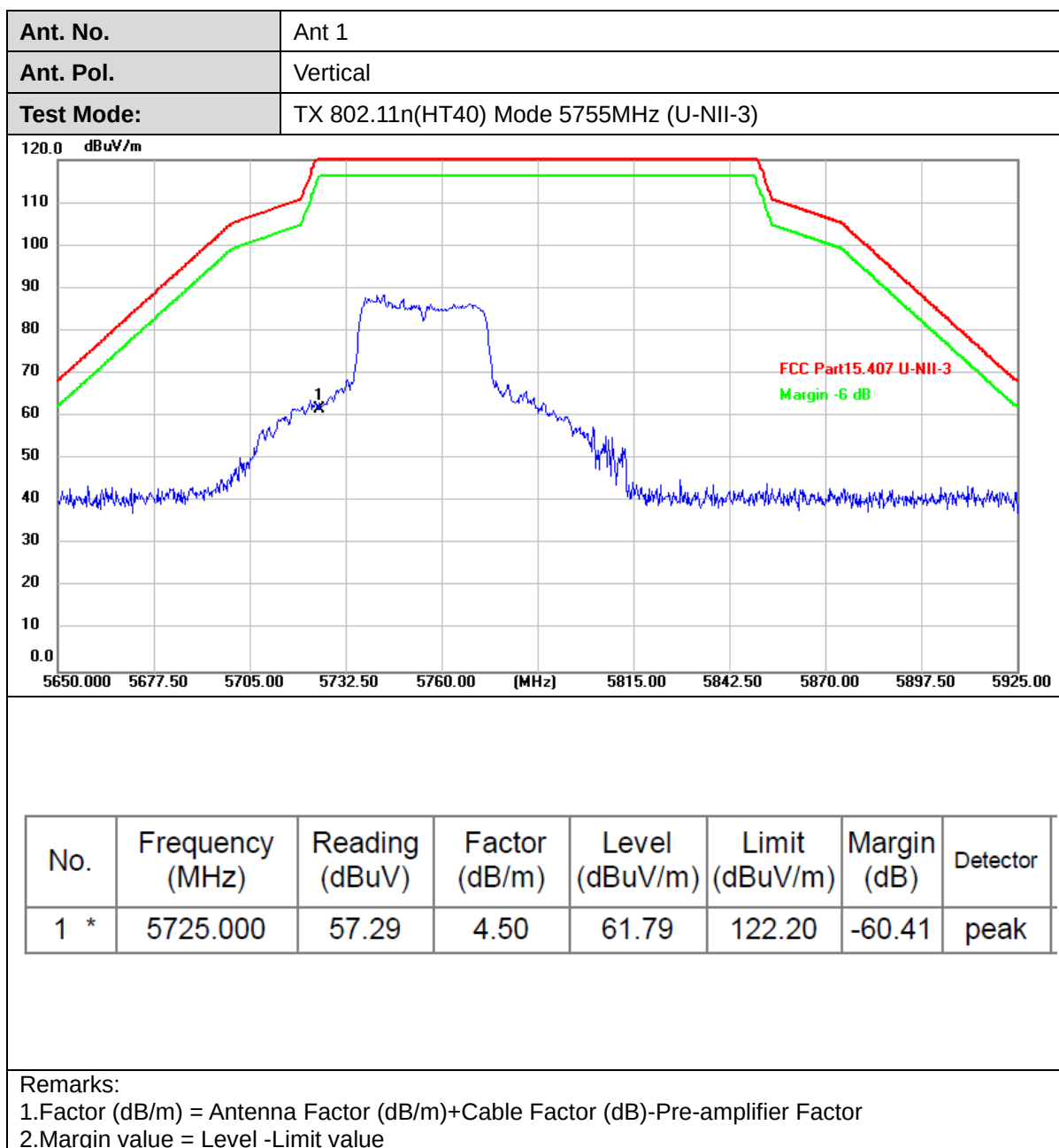


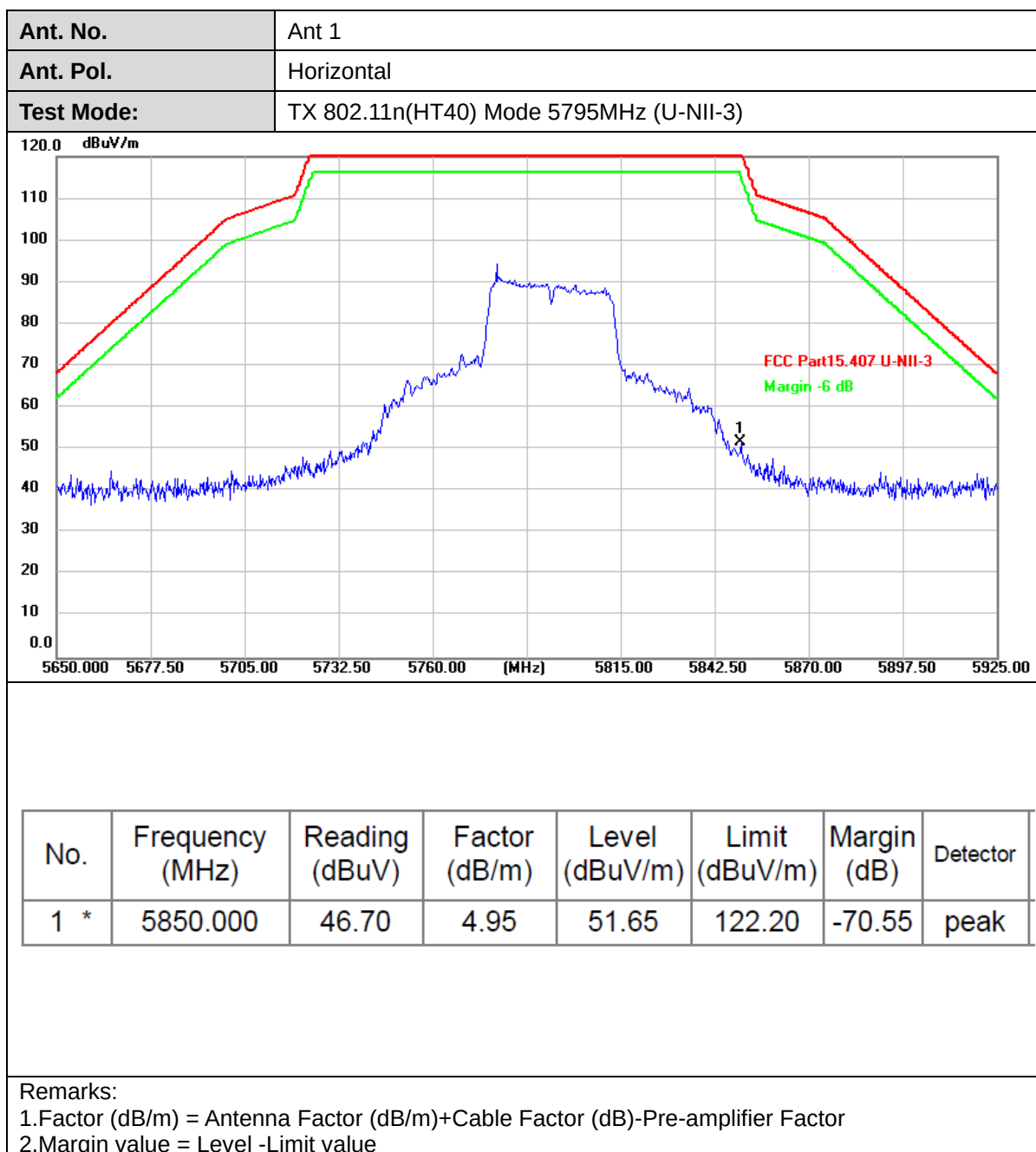


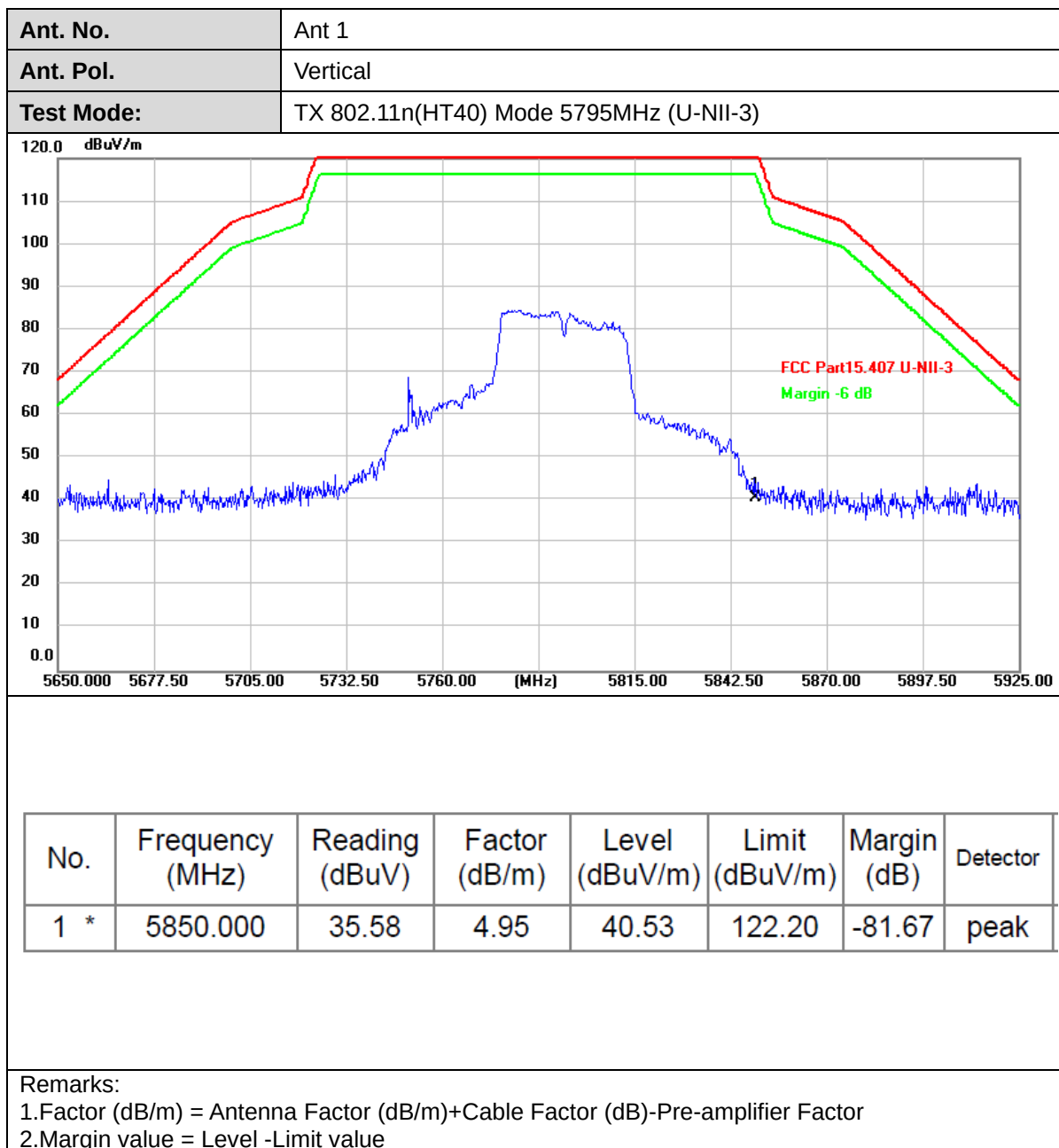


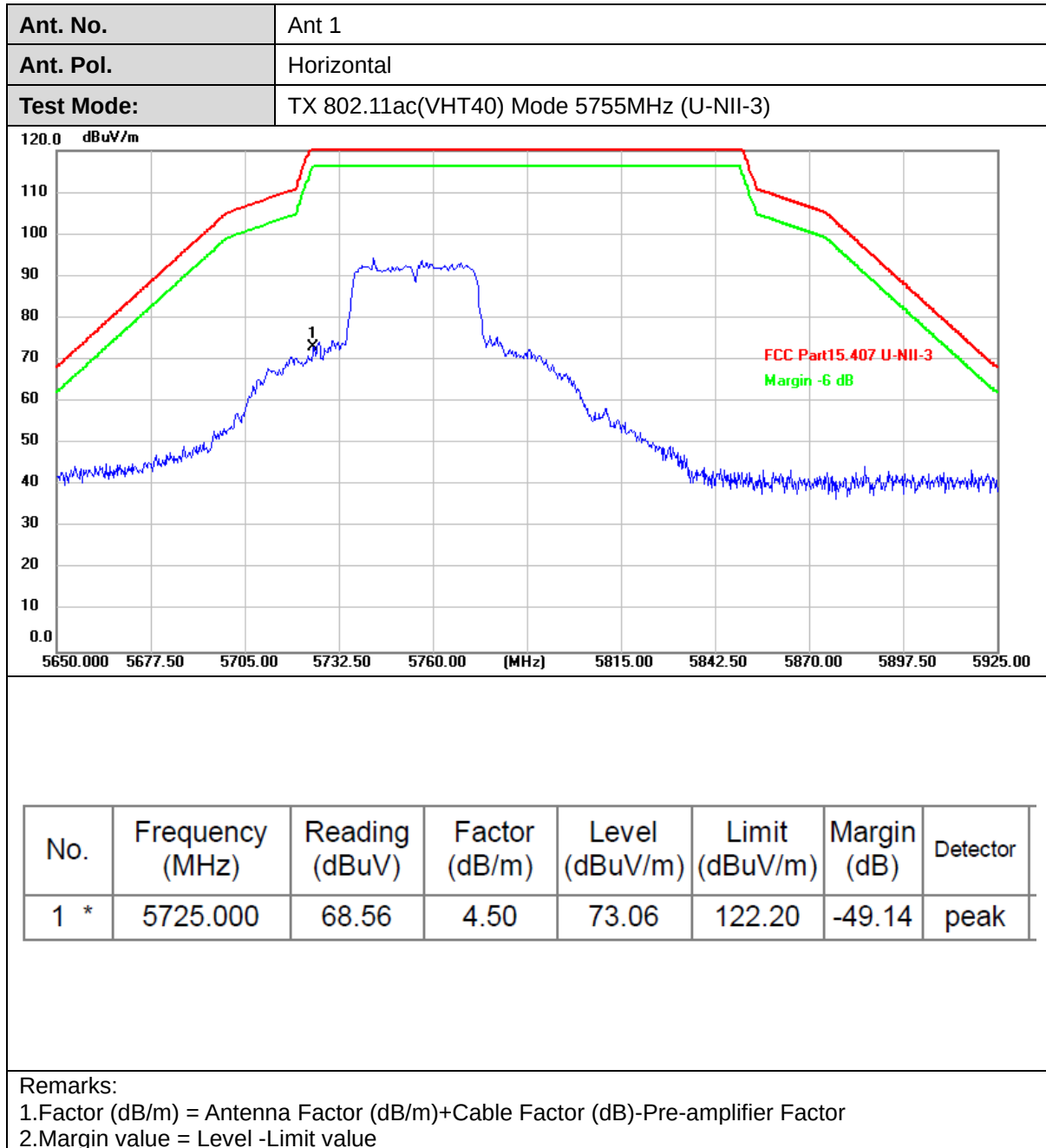


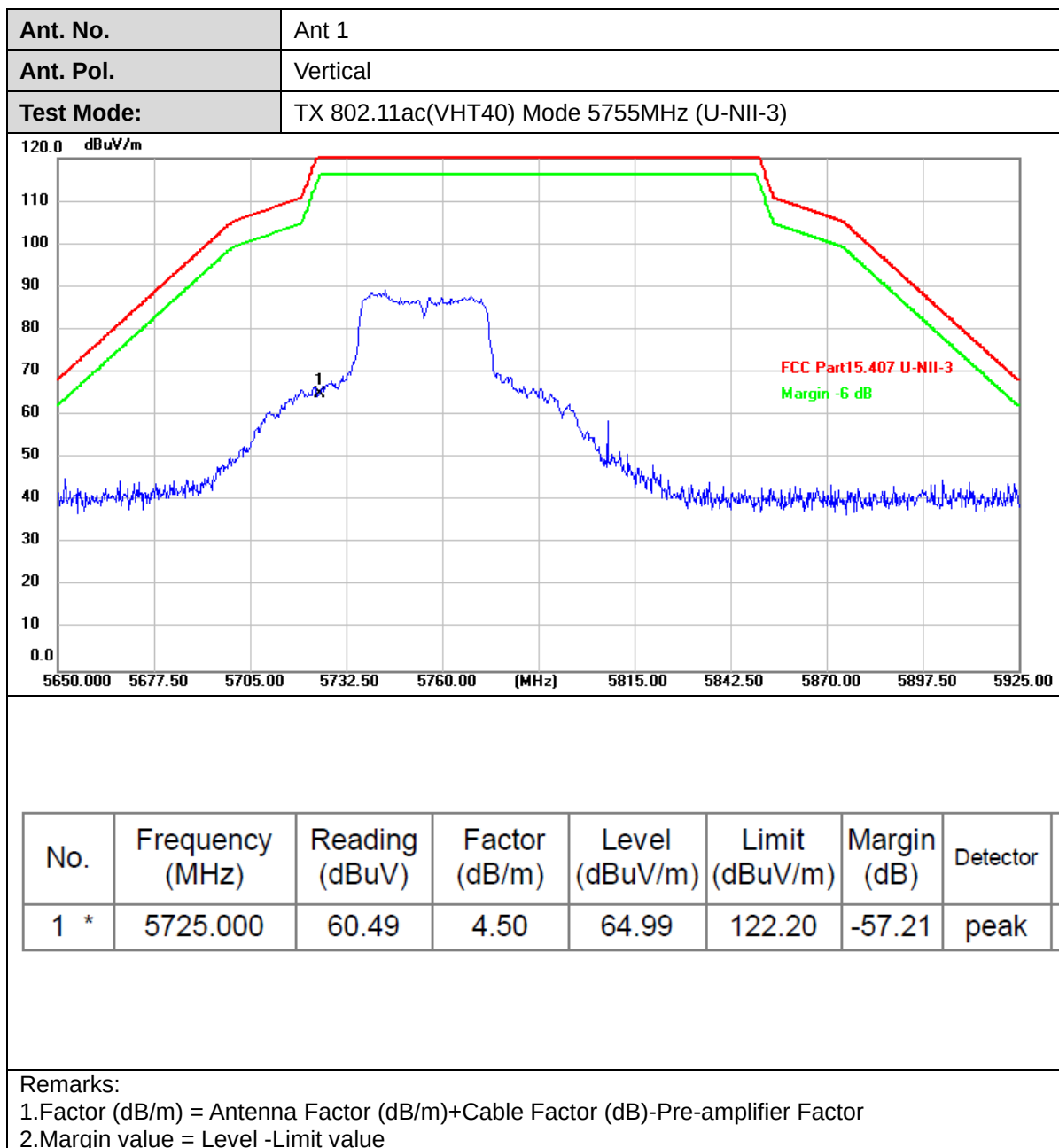


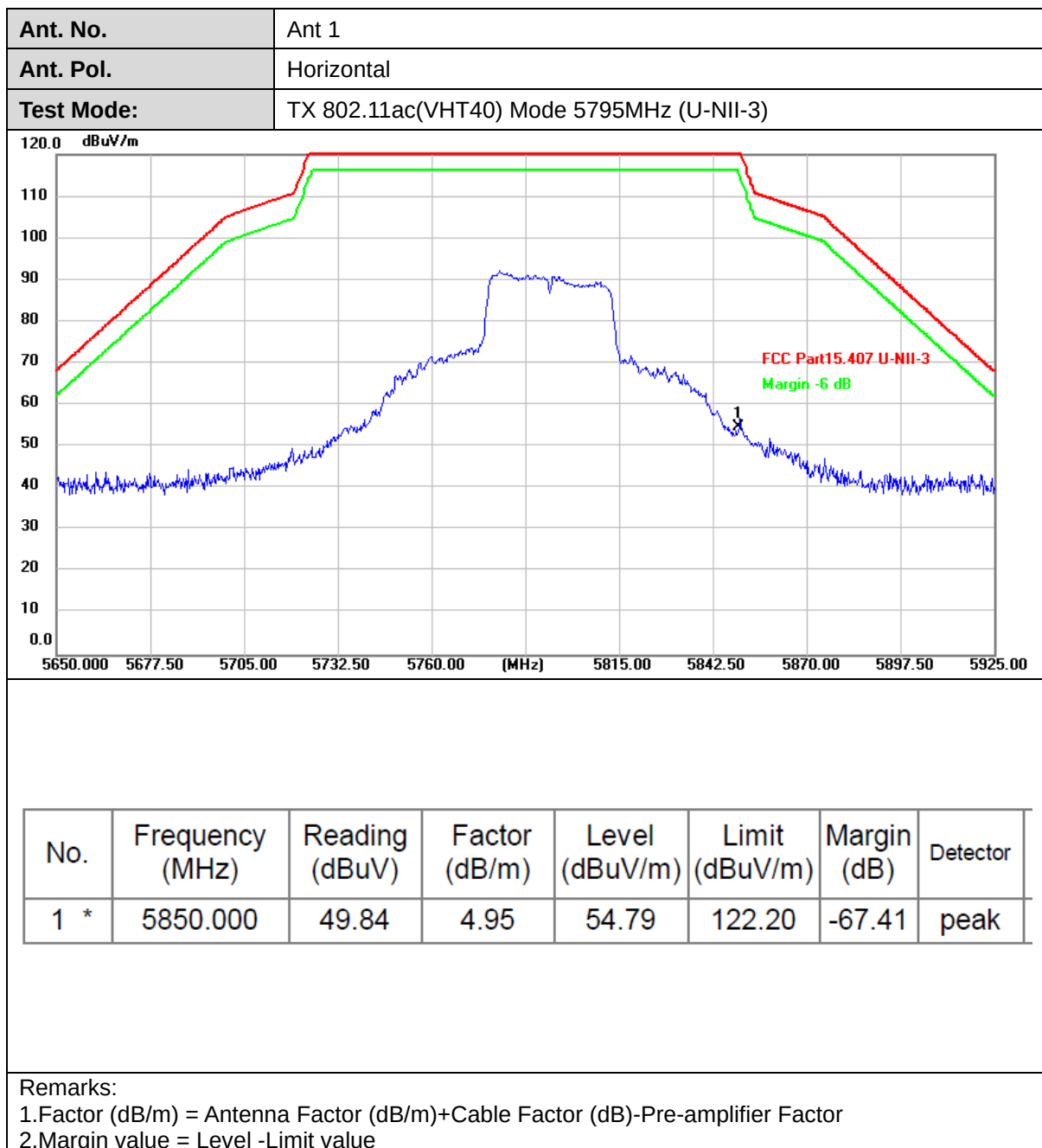


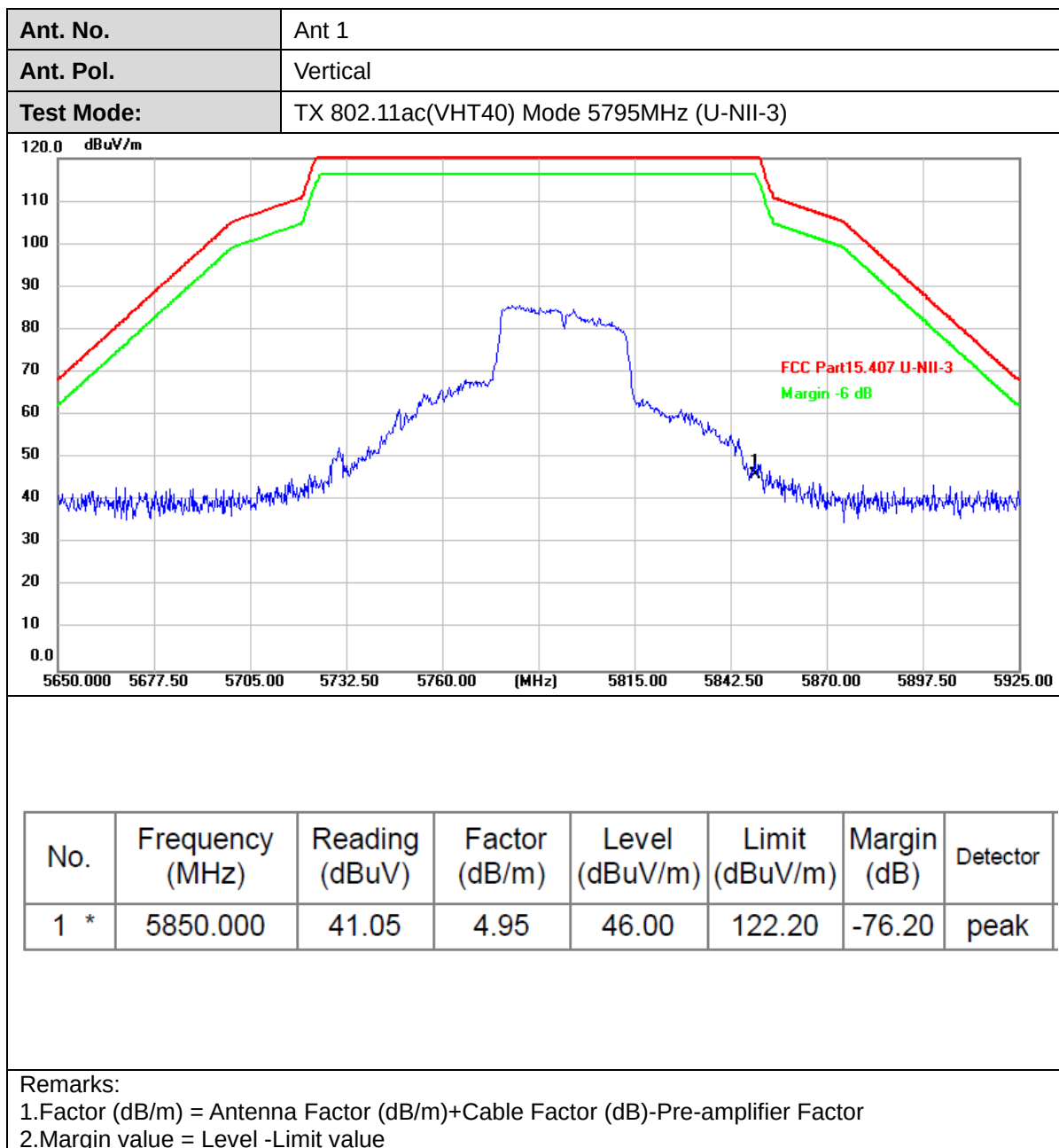


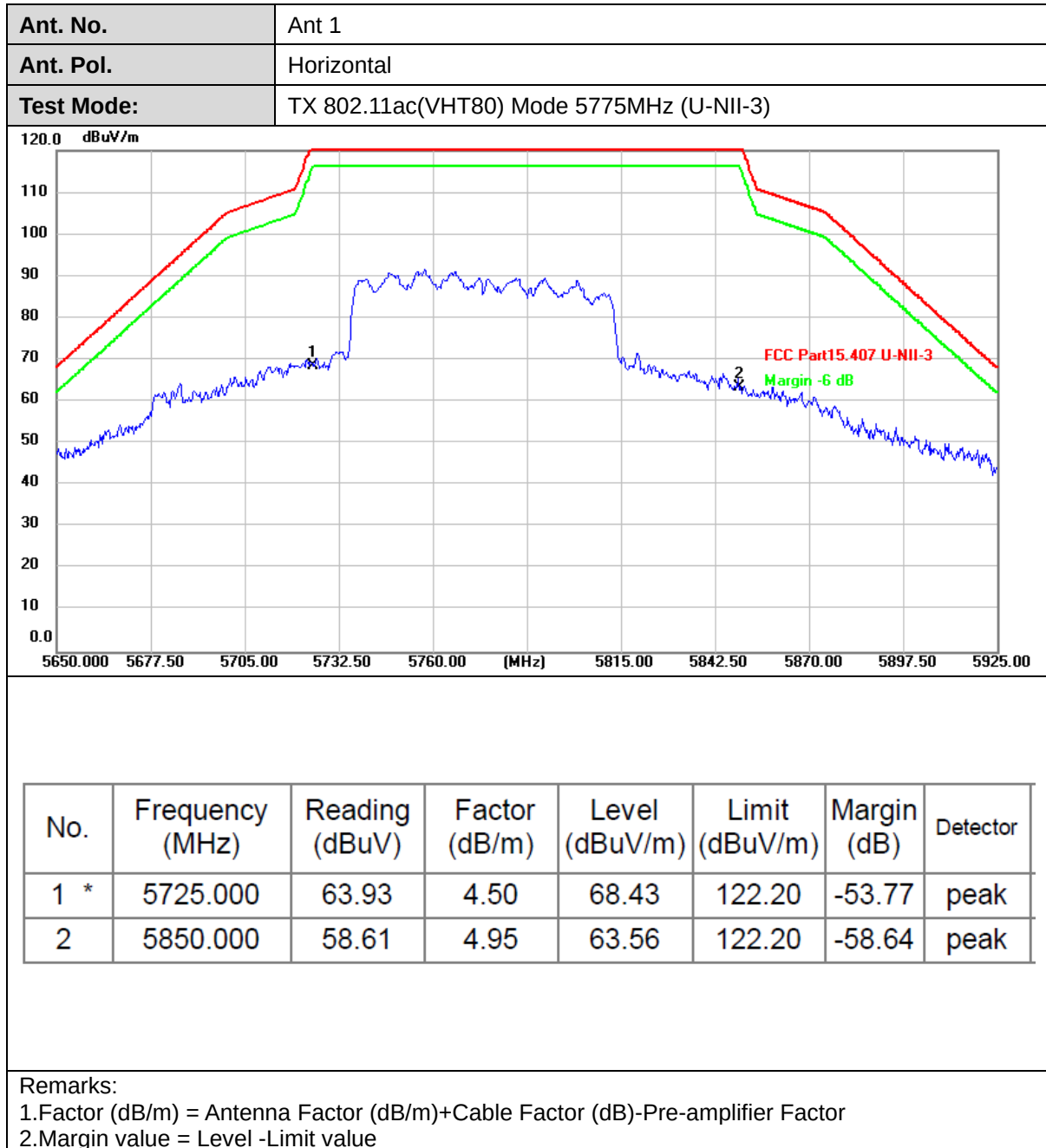


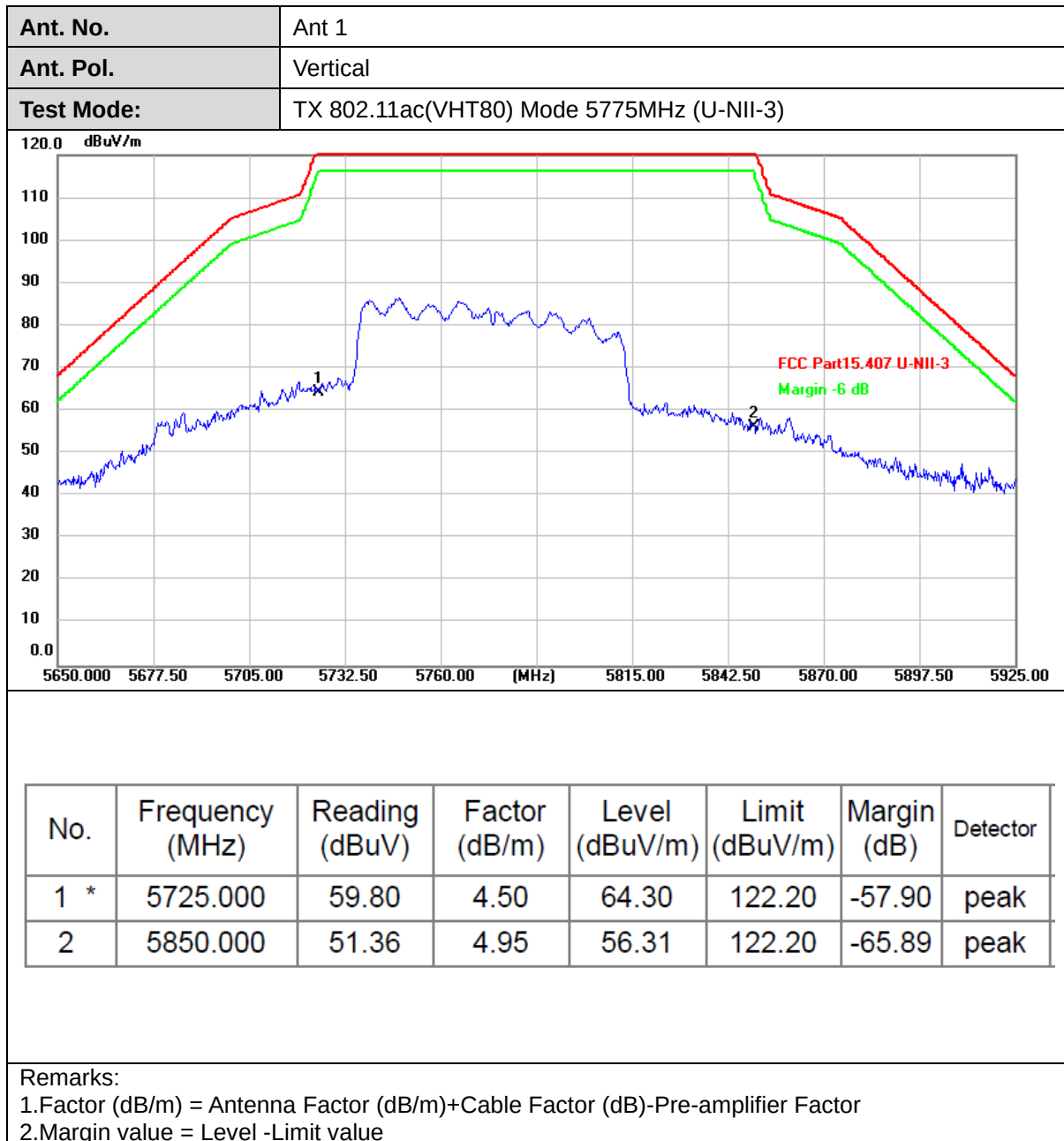














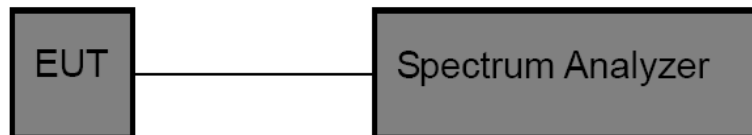
3.4. Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a) & (e)

Test Item	Limit	Frequency Range (MHz)
26dB Bandwidth& 99% Bandwidth	N/A	5150~5250
		5250~5350
		5500~5700
6 dB Bandwidth	≥500 kHz	5725~5850

Test Configuration



Test Procedure

Please refer to KDB789033 D02 for the measurement methods.

The setting of the spectrum analyzer as below:

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



6dB Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
Span	>6 dB Bandwidth
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
RBW	1% to 5% of the OBW
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold

NOTE: The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

Test Mode

Please refer to the clause 2.4.

**Test Result****26dB Bandwidth & 99% Bandwidth**

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	OCB [MHz]
11A	Ant1	5180	29.60	17.582
		5200	30.28	17.742
		5240	29.36	17.902
		5745	32.24	17.662
		5785	30.72	17.982
		5825	32.04	17.862
11N20SISO	Ant1	5180	24.68	18.102
		5200	25.48	18.062
		5240	31.24	18.342
		5745	33.92	18.941
		5785	32.00	18.462
		5825	34.44	18.621
11N40SISO	Ant1	5190	75.28	37.163
		5230	75.76	37.403
		5755	74.64	36.843
		5795	74.08	37.003
11AC20SISO	Ant1	5180	31.28	18.541
		5200	33.64	18.541
		5240	34.36	18.981
		5745	33.20	18.861
		5785	35.12	19.261
		5825	30.60	18.142
11AC40SISO	Ant1	5190	66.08	37.083
		5230	76.32	38.282
		5755	75.76	37.562
		5795	79.60	37.483
11AC80SISO	Ant1	5210	129.44	77.363
		5775	149.12	76.563

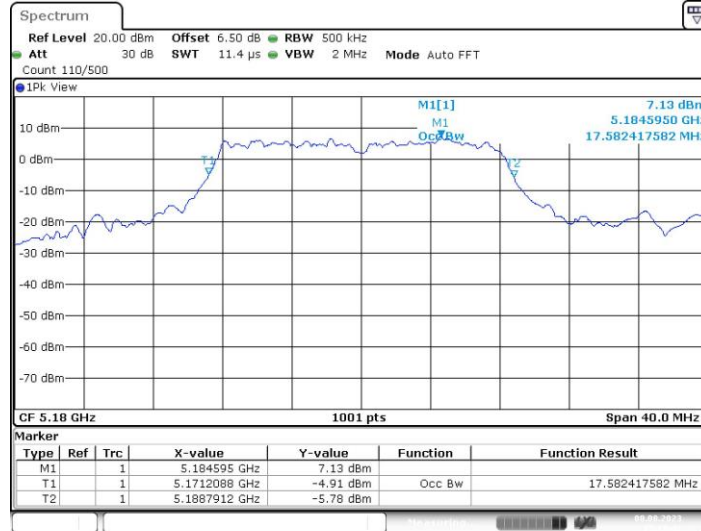
**6dB Bandwidth**

Mode	Channel	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	149	16.36	0.5	PASS
	157	16.36		PASS
	165	16.36		PASS
IEEE 802.11n_20	149	17.56		PASS
	157	17.20		PASS
	165	16.72		PASS
IEEE 802.11n_40	151	35.36		PASS
	159	35.76		PASS
IEEE 802.11ac_20	149	17.72		PASS
	157	16.04		PASS
	165	17.28		PASS
IEEE 802.11ac_40	151	35.36		PASS
	159	34.16		PASS
IEEE 802.11ac_80	155	72.64		PASS

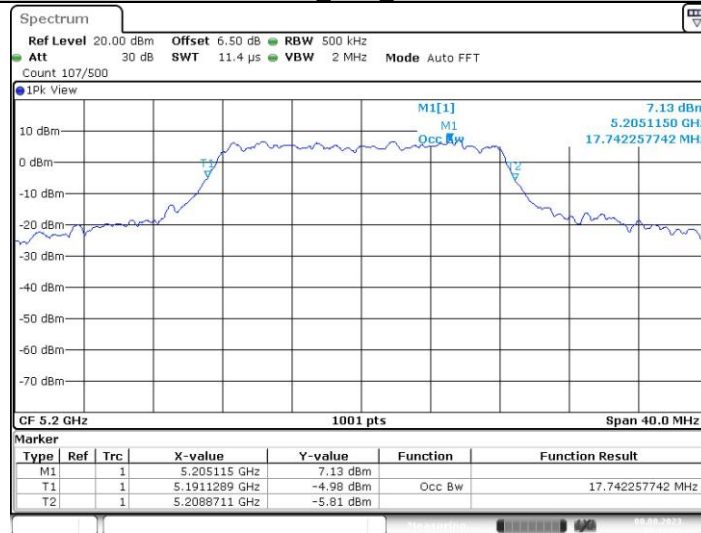


99% Bandwidth:

11A_Ant1_5180



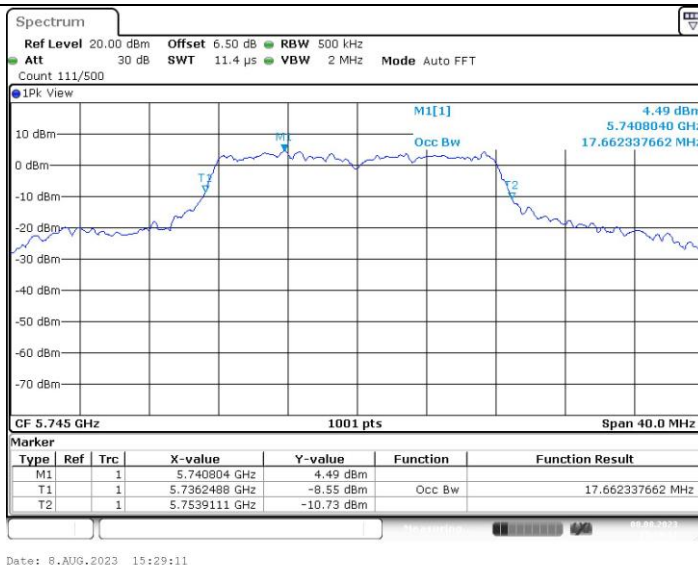
11A_Ant1_5200



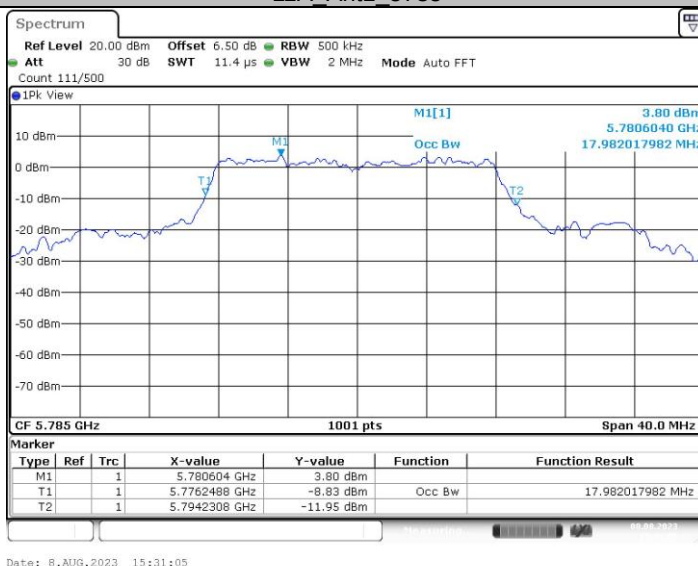
11A_Ant1_5240



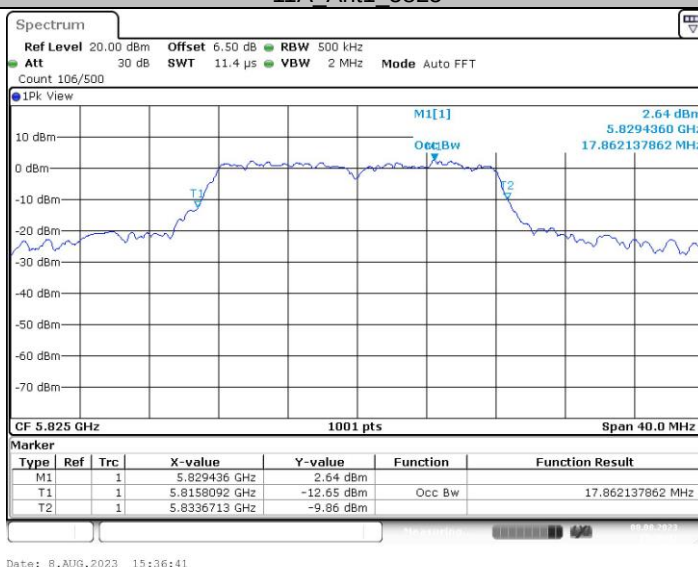
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

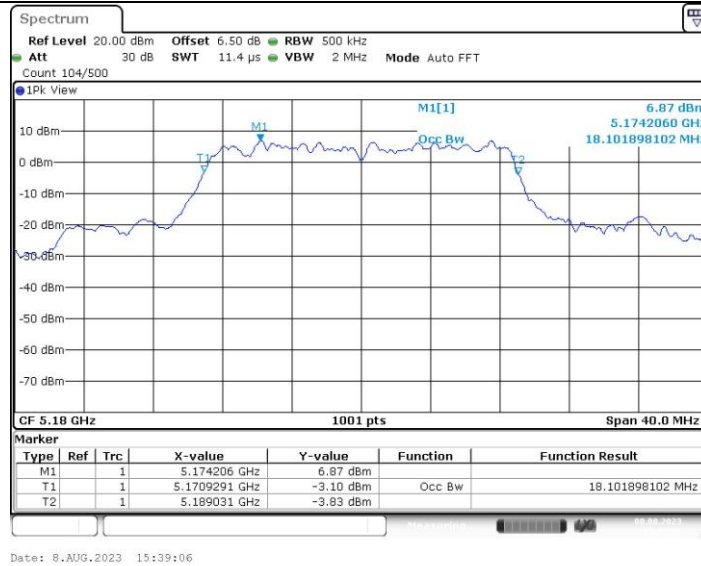
Fax: (86)755-27521011

Http://www.sz-ctc.org.cn

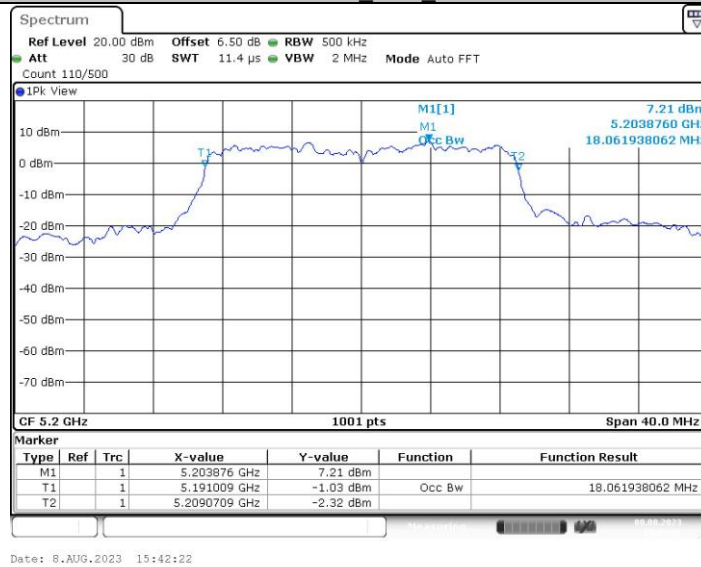


For anti-fake verification, please visit the official website of Certification and

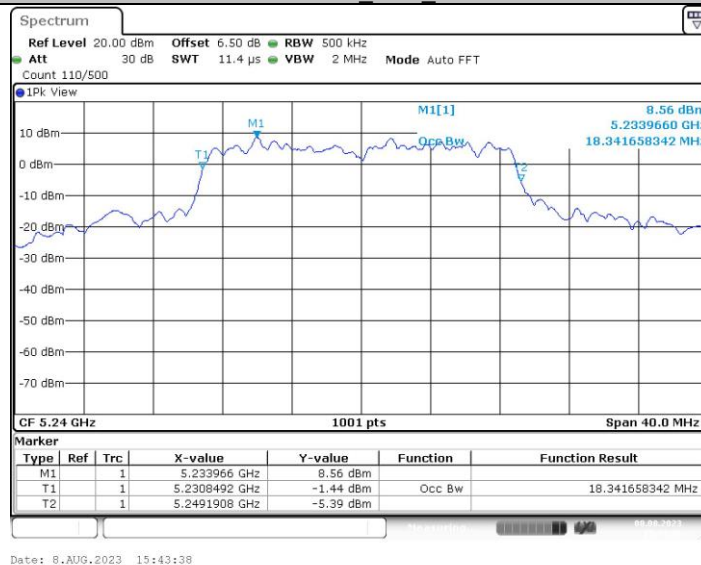
Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



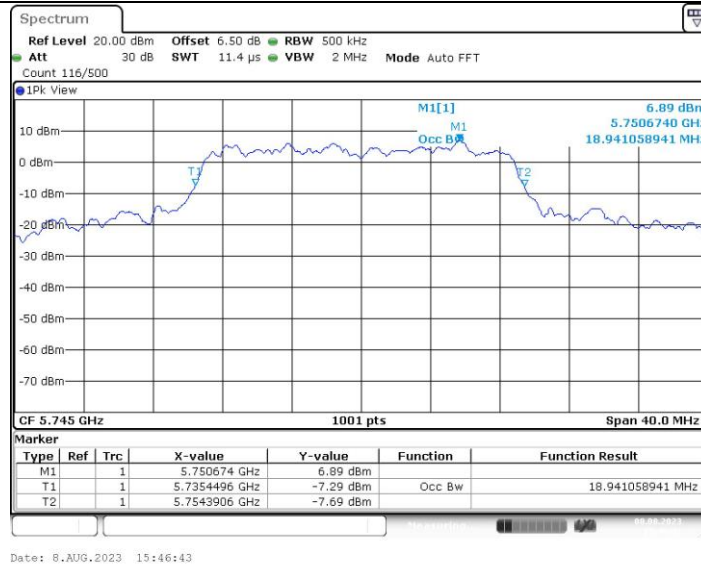
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CTC Laboratories, Inc.

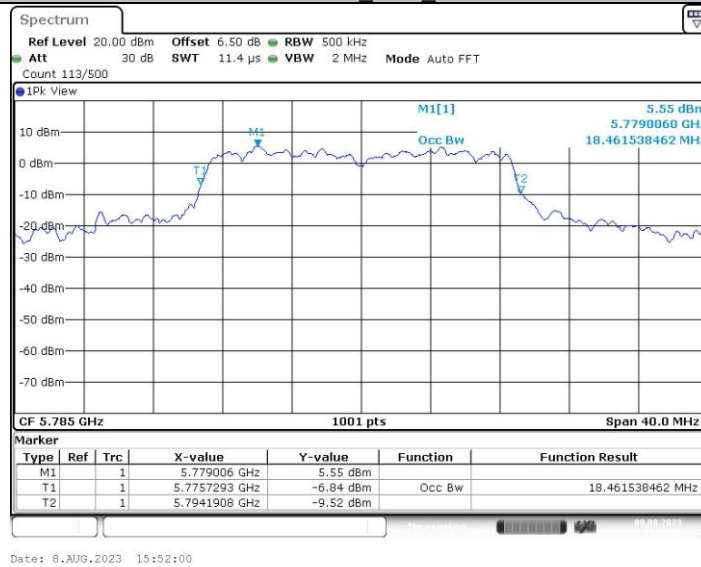
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



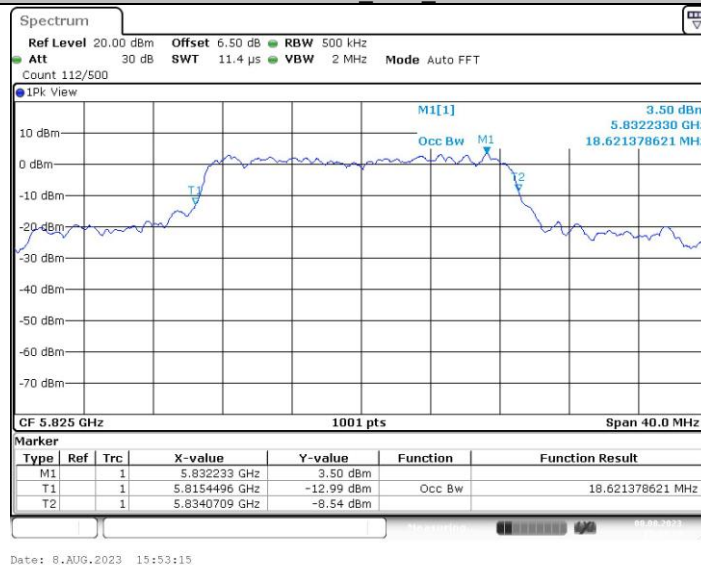
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11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190

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