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TEST REPORT

Report No.: **CTC20231391E01**

FCC ID.....: **WNA-GN630V**

Applicant.....: **Shenzhen Skyworth Digital Technology Co.,LTD**

Address.....: 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China

Manufacturer: Shenzhen Skyworth Digital Technology Co.,LTD

Address.....: 14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China

Product Name.....: **GPON ONU, GPON ONT**

Trade Mark.....: SKYWORTH

Model/Type reference.....: GN630V

Listed Model(s): GN630VH, GN630, GN630E, GN630VE, SK-G6210, SK-G6215, SK-G6225, WN37A

Standard.....: **FCC CFR Title 47 Part 15 Subpart C Section 15.247**

Date of receipt of test sample...: Jun. 29, 2023

Date of testing.....: Jun. 29, 2023 to Aug. 14, 2023

Date of issue.....: Sep. 07, 2023

Result.....: **PASS**

Compiled by:

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Lucy Lan

Supervised by:

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Approved by:

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Totti Zhao

Testing Laboratory Name.....: **CTC Laboratories, Inc.**

Address.....: 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Operation within the bands of 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz.

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

1.2. Report version

Revised No.	Date of issue	Description
01	Sep. 07, 2023	Original



1.3. Test Description

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

Note: The measurement uncertainty is not included in the test result.



1.4. Test Facility

CTC Laboratories, Inc.

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

Laboratory accreditation

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

A2LA-Lab Cert. No.: 4340.01

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

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

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

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

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



1.5. Measurement Uncertainty

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

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

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

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

1.6. Environmental conditions

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

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



2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Manufacturer:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Factory:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China

2.2. General Description of EUT

Product Name:	GPON ONU, GPON ONT
Trade Mark:	SKYWORTH
Model/Type reference:	GN630V
Listed Model(s):	GN630VH, GN630, GN630E, GN630VE, SK-G6210, SK-G6215, SK-G6225, WN37A
Model Difference:	All these models are identical in the same PCB, layout and electrical circuit, Different is model number and Product Name.
Power supply:	DC12V 1.5A from AC/DC Adapter
Adapter Model:	YS-SKY120150U01P ^{Note1} Input: 100-240V~ 50/60Hz 0.6A Output: 12Vdc/1.5A
Hardware version:	/
Software version:	/
2.4G Wi-Fi	
Modulation:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Operation Frequency:	802.11b/g/n(HT20)/ax(HE20): 2412MHz~2462MHz 802.11n(HT40)/ax(HE40): 2422MHz~2452MHz
Channel Number:	802.11b/g/n(HT20)/ax(HE20): 11 channels 802.11n(HT40)/ax(HE40): 7 channels
Channel Separation:	5MHz
Antenna Type:	Multiple antennas
Antenna 0 Gain:	5.62dBi
Antenna 1 Gain:	5dBi

Note:

1. YS-SKY120150U0xP (x=0-9, indicates marketing purpose, no safety and EMC impact)



2.3. Accessory Equipment Information

Equipment Information			
Name	Model	S/N	Manufacturer
Notebook	ThinkBook 14 G3 ACL	/	Lenovo
Cable Information			
Name	Shielded Type	Ferrite Core	Length
LAN Cable	Unshielded	NO	150cm
Test Software Information			
Name	Version	/	/
QATool_UIv2.78	v2.78	/	/



2.4. Operation state

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

Operation Frequency List:

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

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

Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
0	NA	NA	Multiple antennas	IPEX	5.62
1	NA	NA	Multiple antennas	IPEX	5

Note: Antenna Gain=5 dBi. For 2.4G, this EUT supports MIMO 2X2, any transmit signals are correlated with each other,

so Directional gain = $10 \log[(10G1/20 + 10G2/20 + \dots + 10GN/20)^2 / NANT]$ dBi,

that is Directional gain = $10 \log[((10^{(5.62/20)} + 10^{(5/20)})^2) / 2] = 8.32 \text{ dBi}$. So output power limit is

$30 - 8.32 + 6 = 27.68 \text{ dBm}$, the power spectral density limit is $8 - 8.32 + 6 = 5.68 \text{ dBm/3KHz}$.

Data Rated

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

Mode	Data rate (worst mode)
802.11b	1Mbps
802.11g	6Mbps
802.11n(HT20)/ 802.11n(HT40)	HT-MCS8
802.11ax(HE20)/ 802.11ax(HE40)	HE-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 (duty cycle>98%). EUT support for SISO and MIMO Transmission,802.11b/g only supports SISO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case. Recorded in the report.



RU Configuration:

Operating Mode	Resource Unit	26 Tone (2M)
802.11ax(HE20)	Specific Resource Unit	0
		⋮
		4
		⋮
		8
	Resource Unit	52 Tone (4M)
	Specific Resource Unit	37
		38
		39
		40
	Resource Unit	106 Tone (8M)
	Specific Resource Unit	53
		54
	Resource Unit	242 Tone (20M)
	Specific Resource Unit	61
Operating Mode	Resource Unit	26 Tone (2M)
802.11ax(HE40)	Specific Resource Unit	0
		⋮
		8
		⋮
		17
	Resource Unit	52 Tone (4M)
	Specific Resource Unit	37
		38
		39
		40
		41
		42
		43
		44
	Resource Unit	106 Tone (8M)
	Specific Resource Unit	53
		54
		55
		56
	Resource Unit	242 Tone (20M)
	Specific Resource Unit	61
		62
	Resource Unit	484 Tone (40M)
	Specific Resource Unit	65



2.5. Measurement Instruments List

Tonscend RF Test System					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	MXA Signal Analyzer	Keysight	N9020A	MY46471737	Dec. 16, 2023
2	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023
3	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024
4	MXG Vector Signal Generator	Agilent	N5182A	MY47420864	Dec. 16, 2023
5	PSG Analog Signal Generator	Agilent	E8257D	MY46521908	Dec. 16, 2023
6	Power Sensor	Keysight	U2021XA	MY55130004	Mar. 14, 2024
7	Power Sensor	Keysight	U2021XA	MY55130006	Mar. 14, 2024
8	Wideband Radio Communication Tester	R&S	CMW500	102414	Dec. 16, 2023
9	High and low temperature box	ESPEC	MT3035	/	Mar. 24, 2024
10	JS1120 RF Test System	TONSCEND	v2.6	/	/

Radiated Emission (3m chamber 2)					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-1013	Dec. 07, 2024
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-648	Dec. 07, 2024
3	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023
4	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024
5	Pre-Amplifier	SONOMA	310	186194	Dec. 16, 2023
6	Low Noise Pre-Amplifier	EMCI	EMC051835	980075	Dec. 16, 2023
7	Test Receiver	R&S	ESC17	100967	Dec. 16, 2023
8	3m chamber 2	Frankonia	EE025	/	Oct. 23, 2024

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 Premplifier	SCHWARZBECK	BBV9743B	259	Dec. 16, 2023
5	Mirowave Broadband Amplifier	SCHWARZBECK	BBV9718C	111	Dec. 16, 2023
6	3m chamber 3	YIHENG	EE106	/	Sep. 09, 2023



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

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

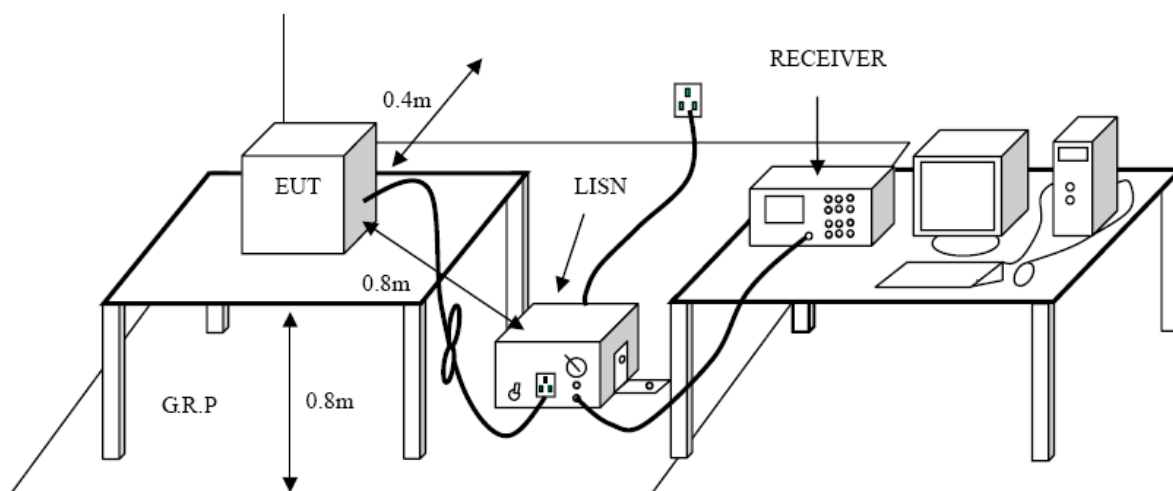
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	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

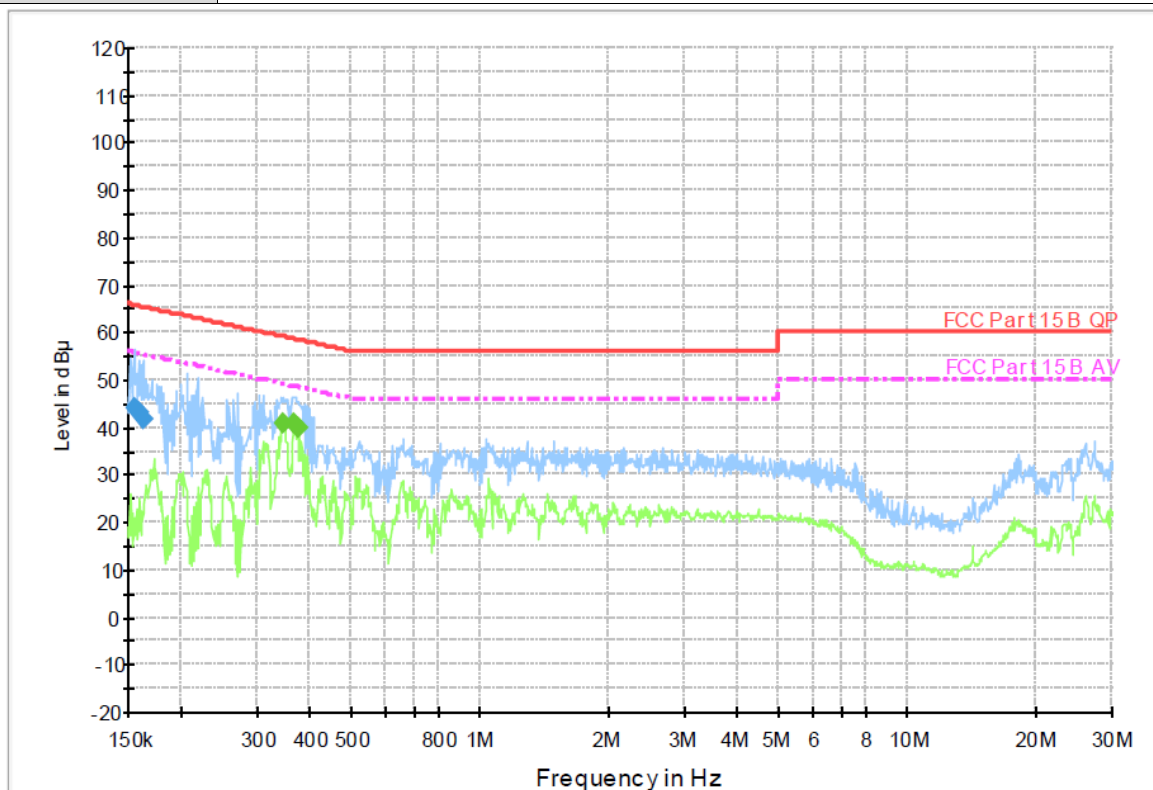
1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm / 50uH coupling impedance for the measuring equipment. 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)
4. 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.
5. 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.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

**Test Mode:**

Please refer to the clause 2.3.

Test Results

Test Voltage:	AC 120V/60 Hz
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
0.154870	44.0	1000.00	9.000	On	L1	9.7	21.7	65.7	
0.158620	43.1	1000.00	9.000	On	L1	9.7	22.4	65.5	
0.162470	41.8	1000.00	9.000	On	L1	9.7	23.5	65.3	

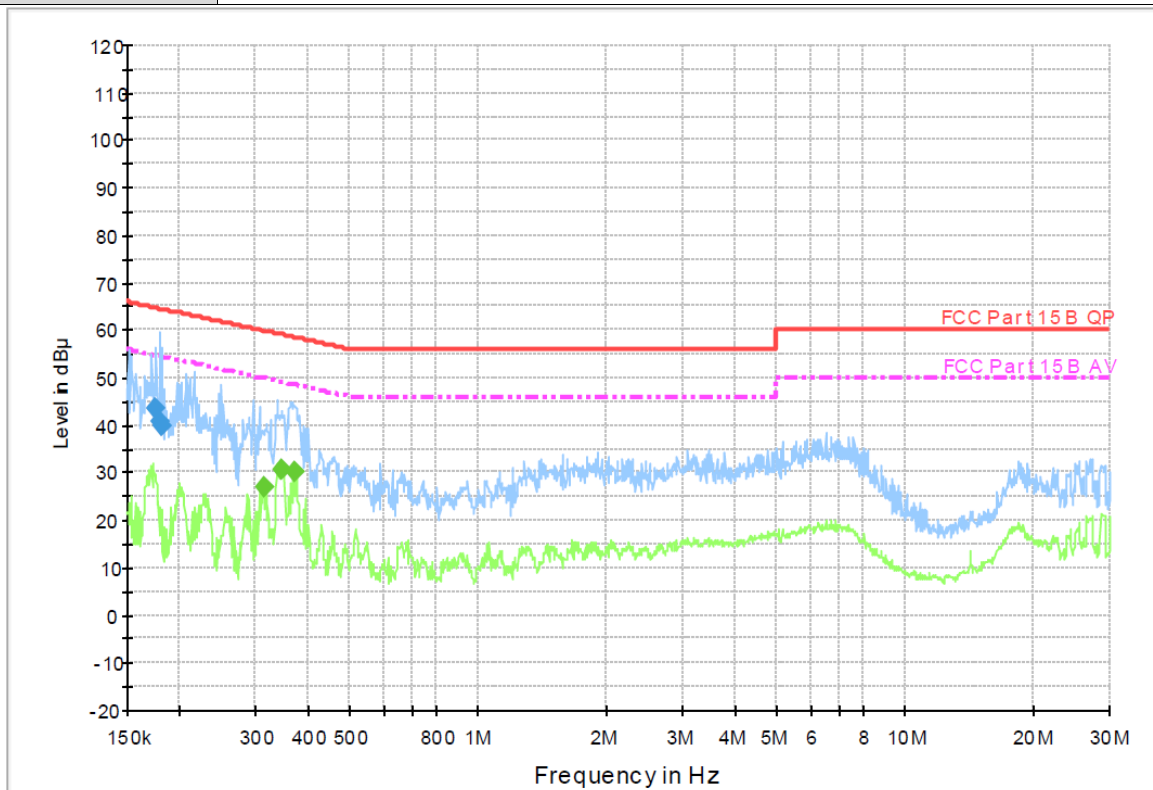
Final Measurement Detector 2

Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.345490	40.8	1000.00	9.000	On	L1	9.7	8.3	49.1	
0.368280	40.6	1000.00	9.000	On	L1	9.7	7.9	48.5	
0.377210	39.8	1000.00	9.000	On	L1	9.7	8.5	48.3	

Emission Level= Read Level+ Correct Factor



Test Voltage:	AC 120V/60 Hz
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
0.175270	43.5	1000.00	9.000	On	N	10.0	21.2	64.7	
0.178800	40.6	1000.00	9.000	On	N	10.0	23.9	64.5	
0.180240	39.8	1000.00	9.000	On	N	10.0	24.7	64.5	

Final Measurement Detector 2

Frequency (MHz)	Average (dBμ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμ V)	Comment
0.313930	26.8	1000.00	9.000	On	N	10.0	23.1	49.9	
0.344120	30.9	1000.00	9.000	On	N	10.0	18.2	49.1	
0.371230	30.0	1000.00	9.000	On	N	10.0	18.5	48.5	

Emission Level= Read Level+ Correct Factor

3.2. Radiated Emission

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.209:

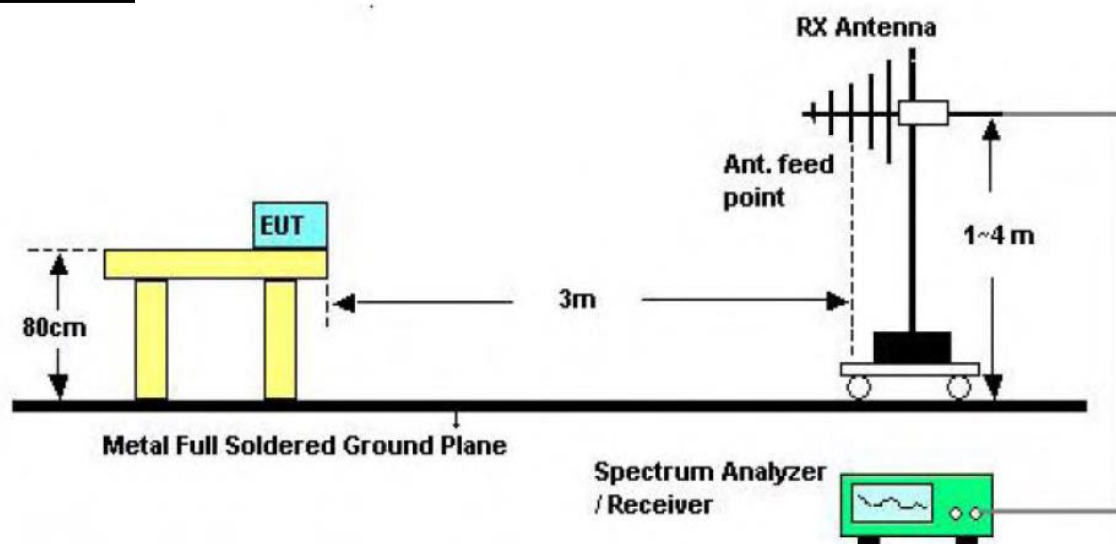
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F (kHz)	300
0.490~1.705	24000/F (kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

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

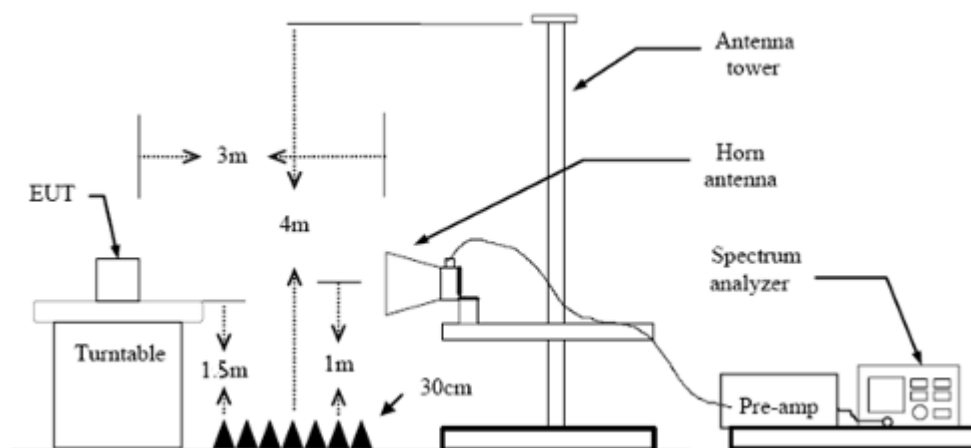
Note:

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

Test Configuration



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) Below 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.
 - (3) From 1 GHz to 10th harmonic:
RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW=3MHz RMS detector for Average value.

Test Mode

Please refer to the clause 2.4.

Test Result

9 KHz~30 MHz

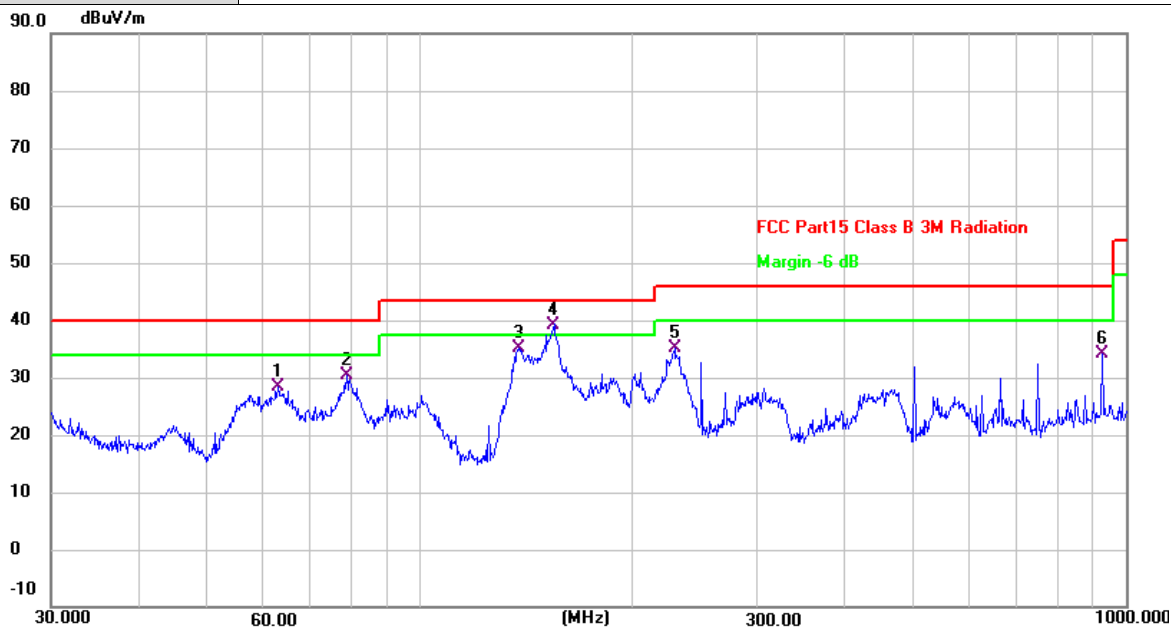
From 9 KHz to 30 MHz: Conclusion: PASS

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



30MHz-1GHz

Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	802.11b Mode 2412MHz
Remark:	Only worse case is reported



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	62.8707	47.60	-19.13	28.47	40.00	-11.53	QP
2	78.6887	52.12	-21.82	30.30	40.00	-9.70	QP
3	137.9028	52.78	-17.75	35.03	43.50	-8.47	QP
4 *	154.8204	55.90	-16.69	39.21	43.50	-4.29	QP
5	229.2930	54.59	-19.35	35.24	46.00	-10.76	QP
6	925.7562	39.63	-5.58	34.05	46.00	-11.95	QP

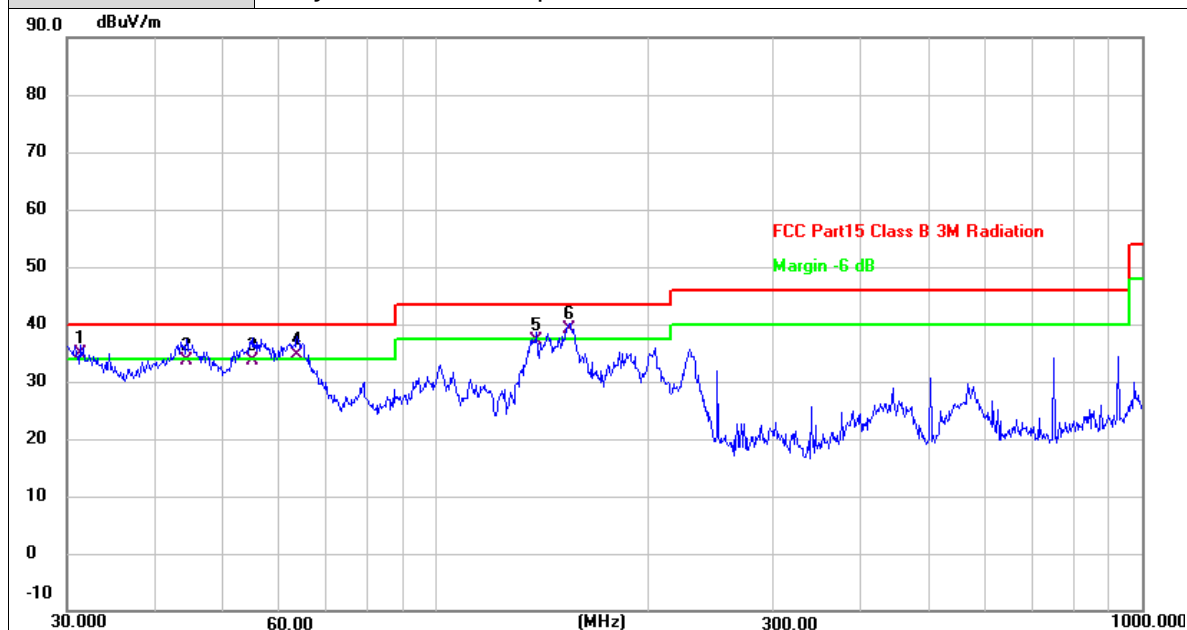
Remarks:

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:	802.11b Mode 2412MHz
Remark:	Only worse case is reported



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 !	31.2893	52.96	-18.20	34.76	40.00	-5.24	QP
2	44.2752	51.29	-17.68	33.61	40.00	-6.39	QP
3	55.0274	51.90	-18.18	33.72	40.00	-6.28	QP
4 !	63.5356	53.94	-19.26	34.68	40.00	-5.32	QP
5	138.8735	54.84	-17.63	37.21	43.50	-6.29	QP
6 *	154.2786	55.73	-16.64	39.09	43.50	-4.41	QP

Remarks:

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

2. Margin value = Level - Limit value



Adobe 1GHz

Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4824.009	40.93	2.20	43.13	54.00	-10.87	AVG
2	4824.151	45.79	2.20	47.99	74.00	-26.01	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4824.007	46.60	2.20	48.80	54.00	-5.20	AVG
2	4824.015	49.50	2.20	51.70	74.00	-22.30	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.794	45.56	2.30	47.86	74.00	-26.14	peak
2 *	4873.860	40.12	2.30	42.42	54.00	-11.58	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.989	50.10	2.30	52.40	74.00	-21.60	peak
2 *	4874.008	46.80	2.30	49.10	54.00	-4.90	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4923.936	43.14	2.41	45.55	54.00	-8.45	AVG
2	4924.067	47.16	2.41	49.57	74.00	-24.43	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4923.981	49.43	2.41	51.84	54.00	-2.16	AVG
2	4924.024	51.99	2.41	54.40	74.00	-19.60	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4824.010	27.78	2.20	29.98	54.00	-24.02	AVG
2	4824.027	42.35	2.20	44.55	74.00	-29.45	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1																														
Ant. Pol.	Vertical																														
Test Mode:	TX G Mode 2412MHz																														
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported																														
<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>4823.275</td><td>46.77</td><td>2.20</td><td>48.97</td><td>74.00</td><td>-25.03</td><td>peak</td></tr><tr><td>2 *</td><td>4824.447</td><td>33.51</td><td>2.20</td><td>35.71</td><td>54.00</td><td>-18.29</td><td>AVG</td></tr></table>								No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	1	4823.275	46.77	2.20	48.97	74.00	-25.03	peak	2 *	4824.447	33.51	2.20	35.71	54.00	-18.29	AVG
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector																								
1	4823.275	46.77	2.20	48.97	74.00	-25.03	peak																								
2 *	4824.447	33.51	2.20	35.71	54.00	-18.29	AVG																								
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value																															



Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.722	42.49	2.30	44.79	74.00	-29.21	peak
2 *	4873.897	27.10	2.30	29.40	54.00	-24.60	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.895	47.79	2.30	50.09	74.00	-23.91	peak
2 *	4874.394	33.96	2.30	36.26	54.00	-17.74	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT1						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4923.939	29.90	2.41	32.31	54.00	-21.69	AVG
2	4924.127	44.43	2.41	46.84	74.00	-27.16	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT1						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4924.685	49.54	2.41	51.95	74.00	-22.05	peak
2 *	4924.896	35.99	2.41	38.40	54.00	-15.60	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4823.995	41.47	2.20	43.67	74.00	-30.33	peak
2 *	4823.996	30.78	2.20	32.98	54.00	-21.02	AVG
Remarks:							
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor							
2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4823.997	33.76	2.20	35.96	54.00	-18.04	AVG
2	4824.000	42.10	2.20	44.30	74.00	-29.70	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4873.971	40.68	2.30	42.98	74.00	-31.02	peak
2 *	4874.044	30.14	2.30	32.44	54.00	-21.56	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4874.015	32.83	2.30	35.13	54.00	-18.87	AVG
2	4874.109	41.51	2.30	43.81	74.00	-30.19	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4923.705	40.29	2.41	42.70	74.00	-31.30	peak
2 *	4923.980	29.20	2.41	31.61	54.00	-22.39	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4923.924	42.27	2.41	44.68	74.00	-29.32	peak
2 *	4923.966	34.15	2.41	36.56	54.00	-17.44	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4823.919	23.09	2.20	25.29	54.00	-28.71	AVG
2	4824.143	38.26	2.20	40.46	74.00	-33.54	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4823.917	39.24	2.20	41.44	74.00	-32.56	peak
2 *	4824.064	24.03	2.20	26.23	54.00	-27.77	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4873.794	22.28	2.30	24.58	54.00	-29.42	AVG
2	4874.129	38.20	2.30	40.50	74.00	-33.50	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4874.052	22.61	2.30	24.91	54.00	-29.09	AVG
2	4874.124	39.01	2.30	41.31	74.00	-32.69	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	ANT2						
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4924.292	39.11	2.41	41.52	74.00	-32.48	peak
2 *	4924.474	22.32	2.41	24.73	54.00	-29.27	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	ANT2						
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4923.852	23.02	2.41	25.43	54.00	-28.57	AVG
2	4924.431	38.88	2.41	41.29	74.00	-32.71	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N20 Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4824.209	41.02	2.20	43.22	74.00	-30.78	peak
2 *	4824.407	26.17	2.20	28.37	54.00	-25.63	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX N20 Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4823.504	45.16	2.20	47.36	74.00	-26.64	peak
2 *	4824.320	30.92	2.20	33.12	54.00	-20.88	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N20 Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4874.082	24.75	2.30	27.05	54.00	-26.95	AVG
2	4874.417	41.44	2.30	43.74	74.00	-30.26	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 2						
Ant. Pol.	Vertical						
Test Mode:	TX N20 Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4874.085	30.74	2.30	33.04	54.00	-20.96	AVG
2	4874.136	44.76	2.30	47.06	74.00	-26.94	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N20 Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4923.685	41.89	2.41	44.30	74.00	-29.70	peak
2 *	4923.993	27.70	2.41	30.11	54.00	-23.89	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX N20 Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4923.653	46.79	2.41	49.20	74.00	-24.80	peak
2 *	4923.869	33.51	2.41	35.92	54.00	-18.08	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N40 Mode 2422MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4843.791	22.80	2.24	25.04	54.00	-28.96	AVG
2	4844.401	38.92	2.24	41.16	74.00	-32.84	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX N40 Mode 2422MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4843.544	42.49	2.24	44.73	74.00	-29.27	peak
2 *	4844.003	26.15	2.24	28.39	54.00	-25.61	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N40 Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.788	38.67	2.30	40.97	74.00	-33.03	peak
2 *	4873.877	22.45	2.30	24.75	54.00	-29.25	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 2						
Ant. Pol.	Vertical						
Test Mode:	TX N40 Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.578	40.83	2.30	43.13	74.00	-30.87	peak
2 *	4873.741	25.28	2.30	27.58	54.00	-26.42	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX N40 Mode 2452MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4903.836	39.73	2.36	42.09	74.00	-31.91	peak
2 *	4903.848	23.63	2.36	25.99	54.00	-28.01	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX N40 Mode 2452MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4903.709	41.10	2.36	43.46	74.00	-30.54	peak
2 *	4903.993	26.51	2.36	28.87	54.00	-25.13	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11ax(HE20) Mode 2412MHz 242/61						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4823.738	41.99	2.20	44.19	74.00	-29.81	peak
2 *	4824.175	26.87	2.20	29.07	54.00	-24.93	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ax(HE20) Mode 2412MHz 242/61						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4824.022	43.35	2.20	45.55	74.00	-28.45	peak
2 *	4824.237	29.89	2.20	32.09	54.00	-21.91	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11ax(HE20) Mode 2437MHz 242/61						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4873.959	39.69	2.30	41.99	74.00	-32.01	peak
2 *	4874.032	24.20	2.30	26.50	54.00	-27.50	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ax(HE20) Mode 2437MHz 242/61						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4873.776	29.87	2.30	32.17	54.00	-21.83	AVG
2	4873.981	43.19	2.30	45.49	74.00	-28.51	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 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 2462MHz 242/61
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4923.636	41.76	2.41	44.17	74.00	-29.83	peak
2 *	4924.042	25.90	2.41	28.31	54.00	-25.69	AVG

Remarks:

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

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ax(HE20) Mode 2462MHz 242/61
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4923.756	32.49	2.41	34.90	54.00	-19.10	AVG
2	4923.771	46.61	2.41	49.02	74.00	-24.98	peak

Remarks:

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

2.Margin value = Level -Limit value



Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11ax(HE40) Mode 2422MHz 484/65						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4843.561	38.78	2.24	41.02	74.00	-32.98	peak
2 *	4843.818	22.93	2.24	25.17	54.00	-28.83	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ax(HE40) Mode 2422MHz 484/65						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	4843.938	40.87	2.24	43.11	74.00	-30.89	peak
2 *	4844.440	25.92	2.24	28.16	54.00	-25.84	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE40) Mode 2437MHz 484/65
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4873.654	22.40	2.30	24.70	54.00	-29.30	AVG
2	4873.992	38.56	2.30	40.86	74.00	-33.14	peak

Remarks:

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

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ax(HE40) Mode 2437MHz 484/65
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4873.868	40.25	2.30	42.55	74.00	-31.45	peak
2 *	4874.043	25.28	2.30	27.58	54.00	-26.42	AVG

Remarks:

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

2.Margin value = Level -Limit value



Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11ax(HE40) Mode 2452MHz 484/65						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4903.520	39.21	2.36	41.57	74.00	-32.43	peak
2 *	4904.196	23.47	2.36	25.83	54.00	-28.17	AVG
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

Ant. No.	Ant 1 + Ant 2						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ax(HE40) Mode 2452MHz 484/65						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						
No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1 *	4903.638	26.60	2.36	28.96	54.00	-25.04	AVG
2	4904.464	41.64	2.36	44.00	74.00	-30.00	peak
Remarks: 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value							

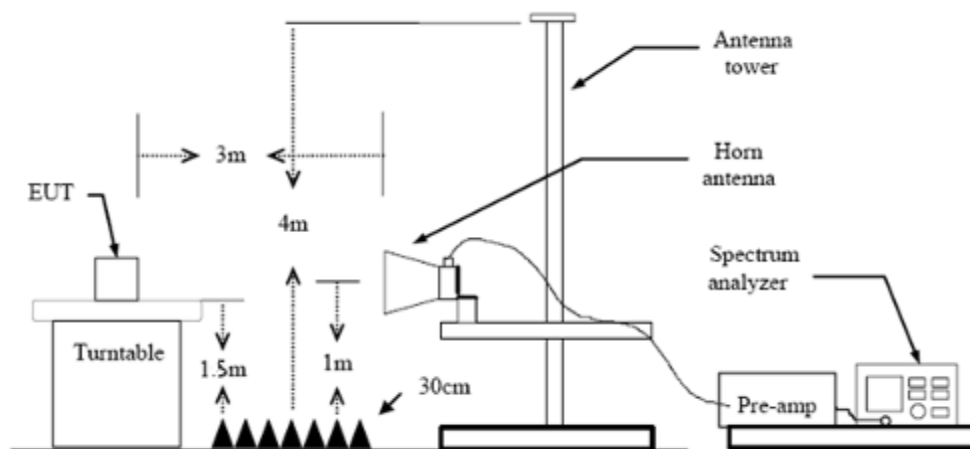
3.3. Band Edge Emissions

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)/ RSS 247 5.5:

Restricted Frequency Band (MHz)	(dBuV/m)(at 3m)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

Test Configuration



Test Procedure

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

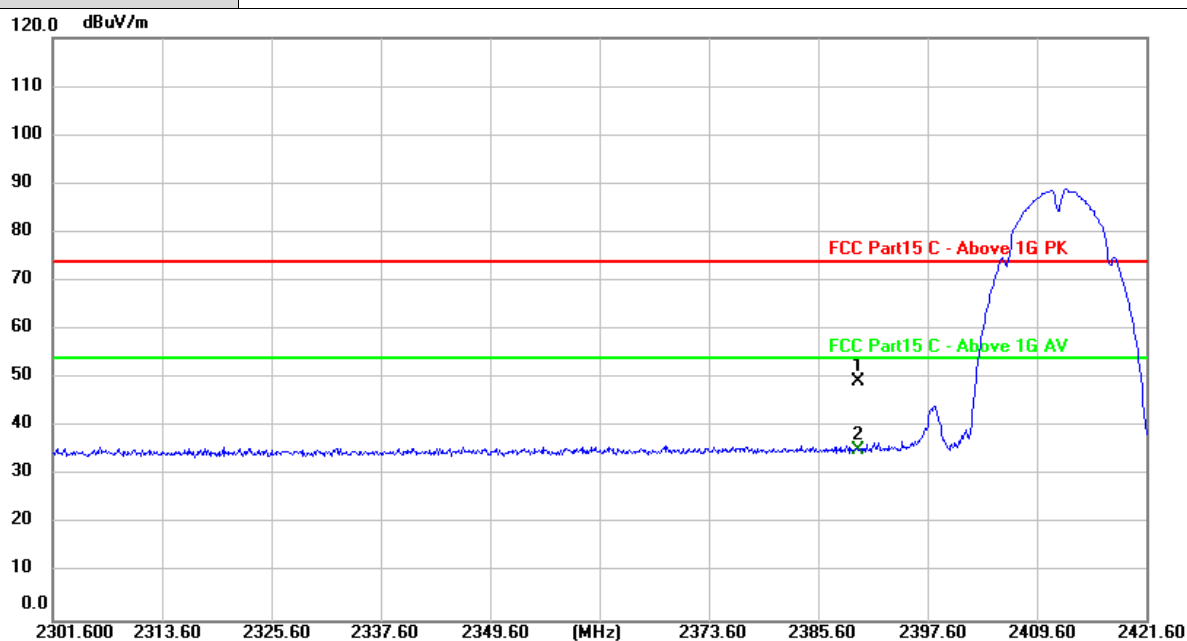
Test Mode

Please refer to the clause 2.4.

Test Results



Ant No.	ANT1
Ant. Pol.	Horizontal
Test Mode:	B Mode 2412MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	18.48	30.84	49.32	74.00	-24.68	peak
2 *	2390.000	4.30	30.84	35.14	54.00	-18.86	AVG

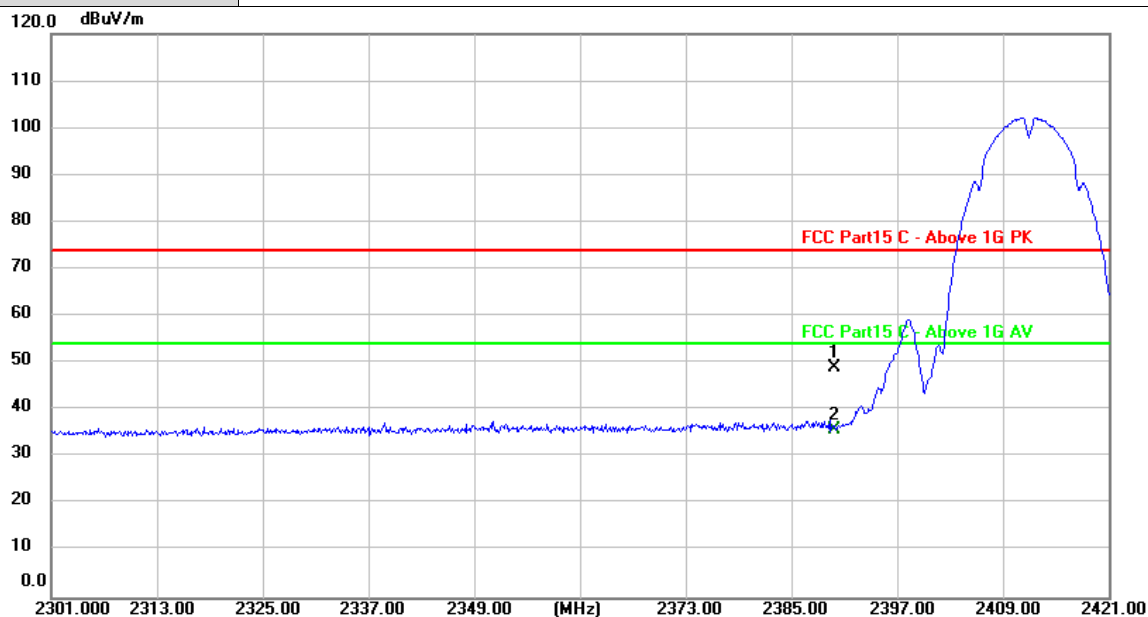
Remarks:

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

2.Margin value = Level -Limit value



Ant No.	ANT1
Ant. Pol.	Vertical
Test Mode:	B Mode 2412MHz

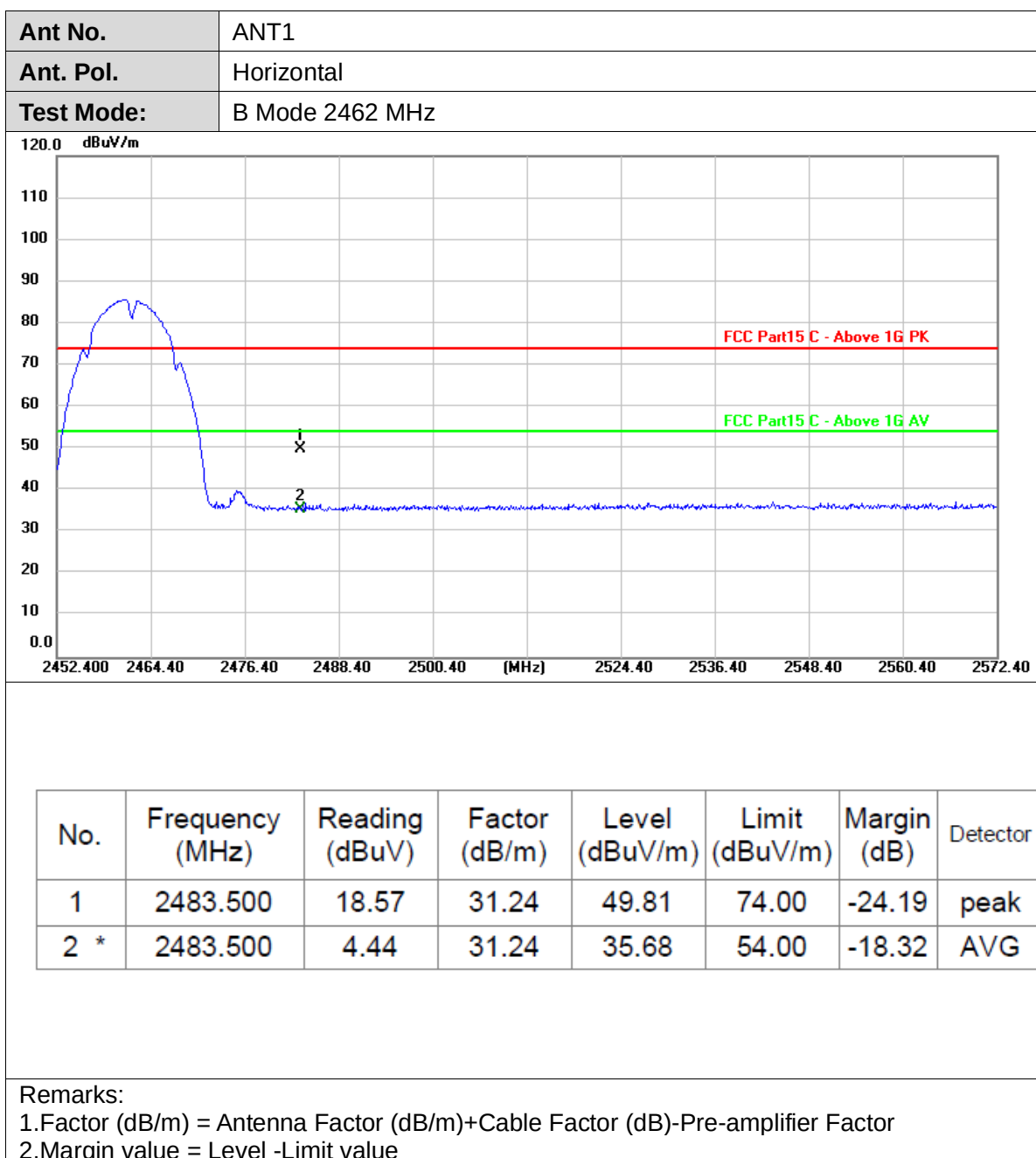


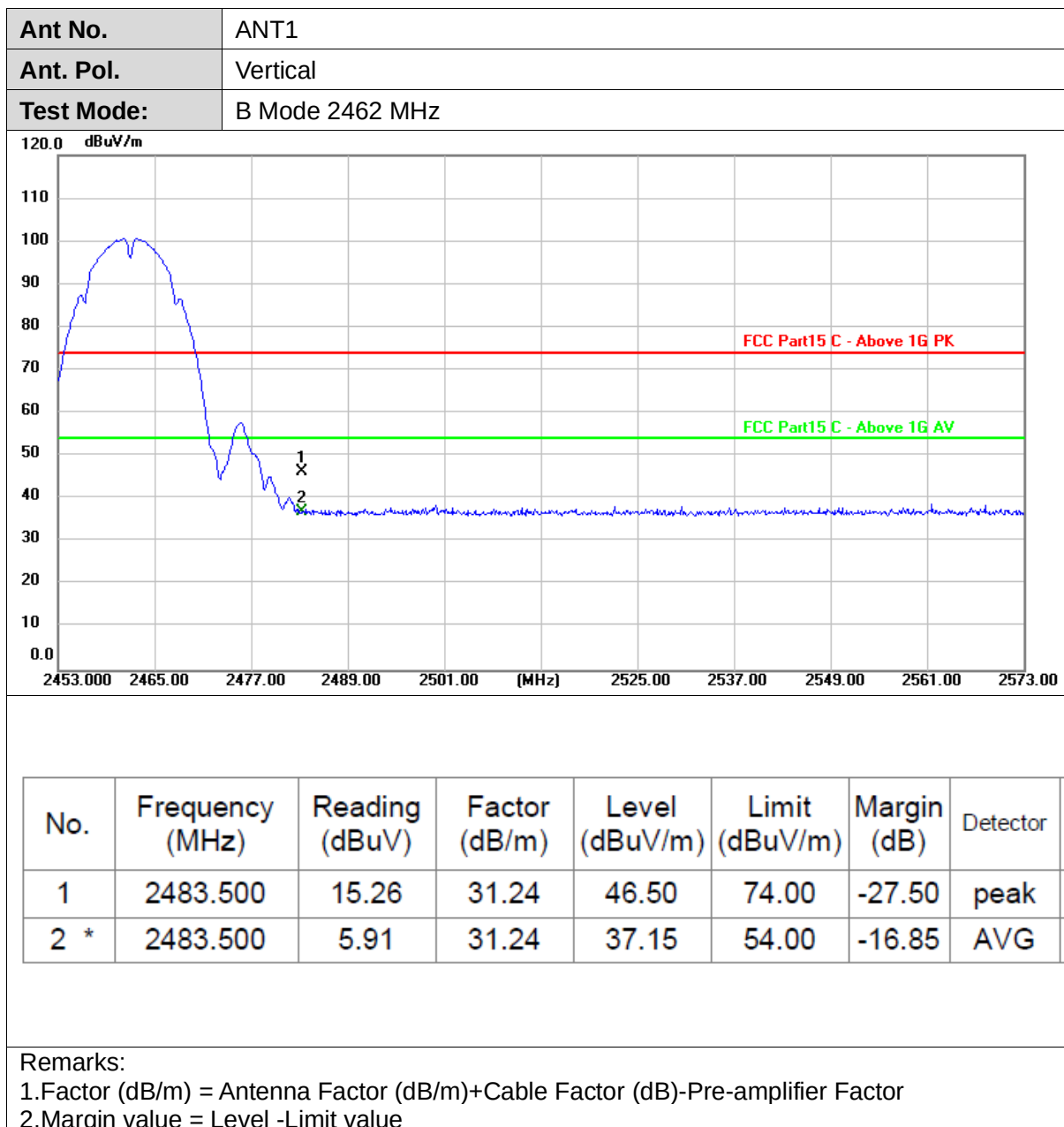
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	18.30	30.84	49.14	74.00	-24.86	peak
2 *	2390.000	5.04	30.84	35.88	54.00	-18.12	AVG

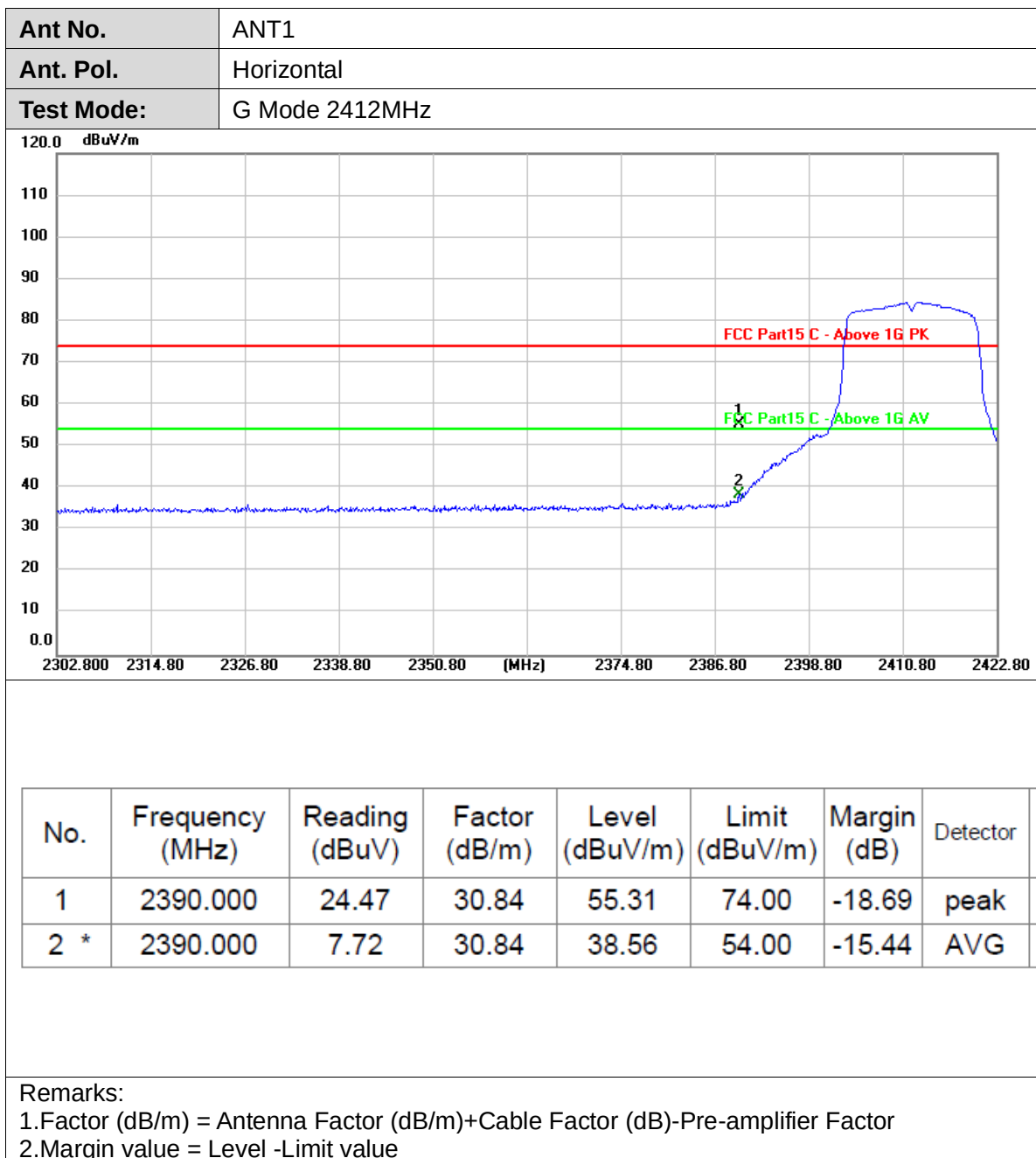
Remarks:

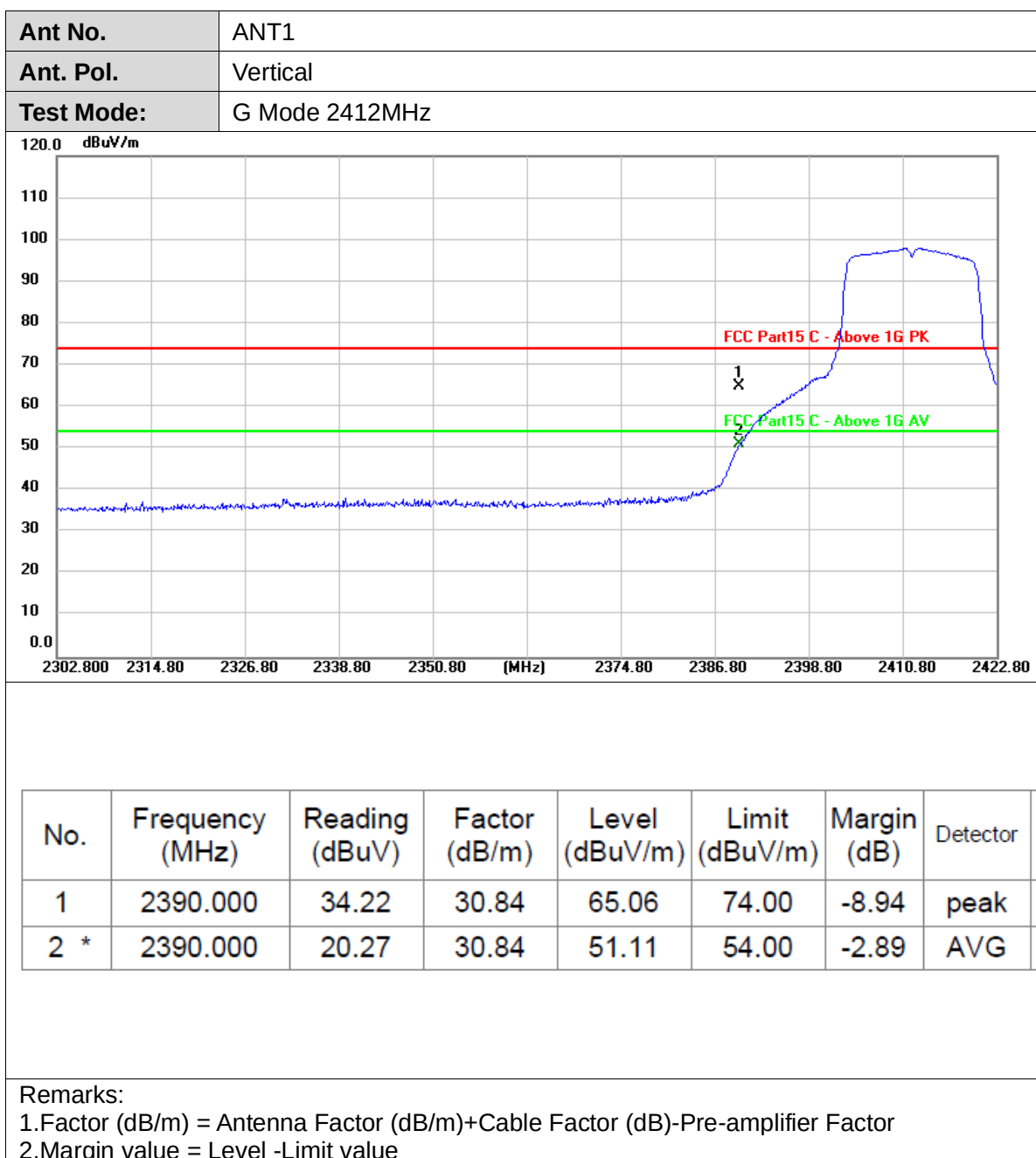
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

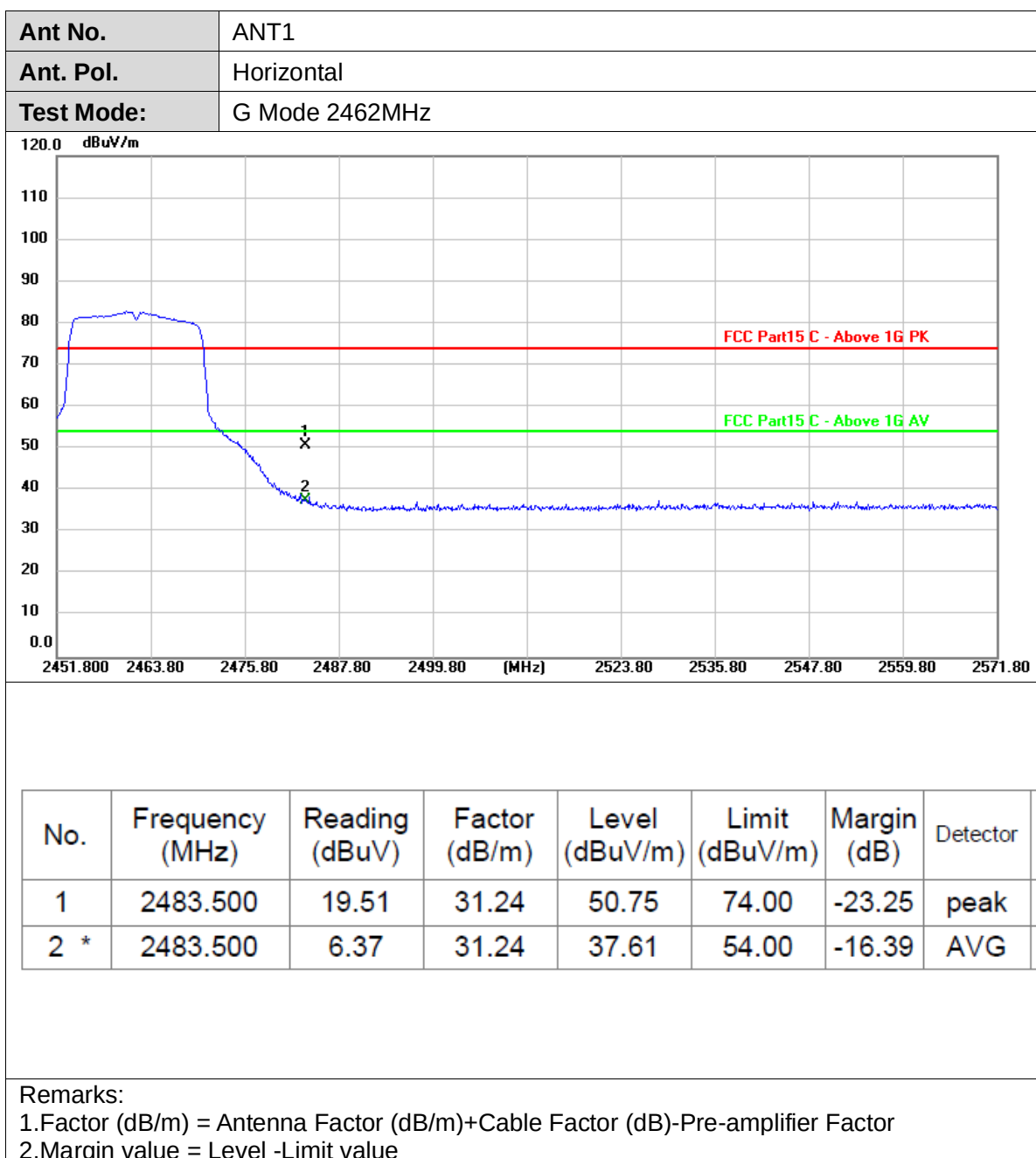
2.Margin value = Level -Limit value

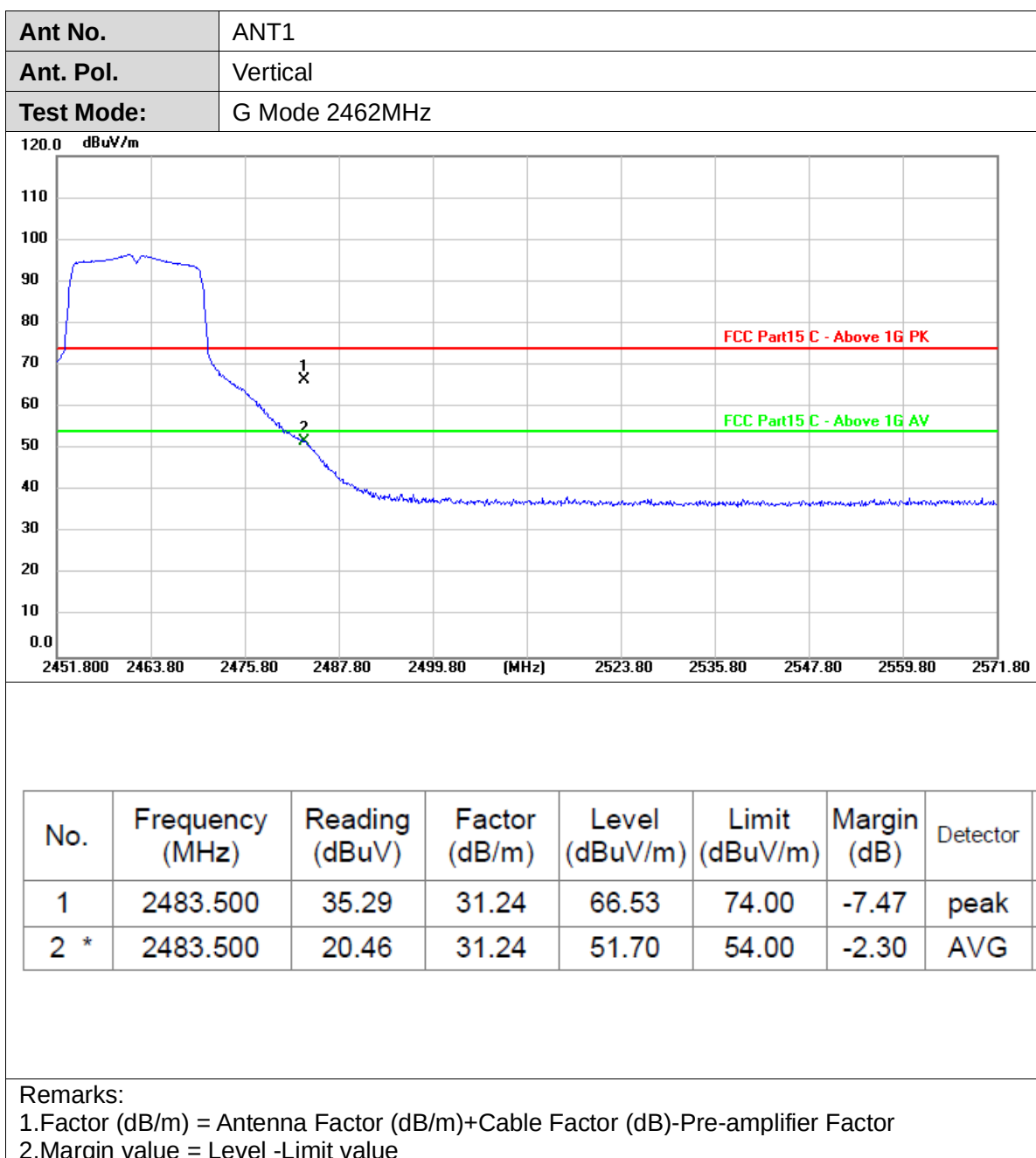






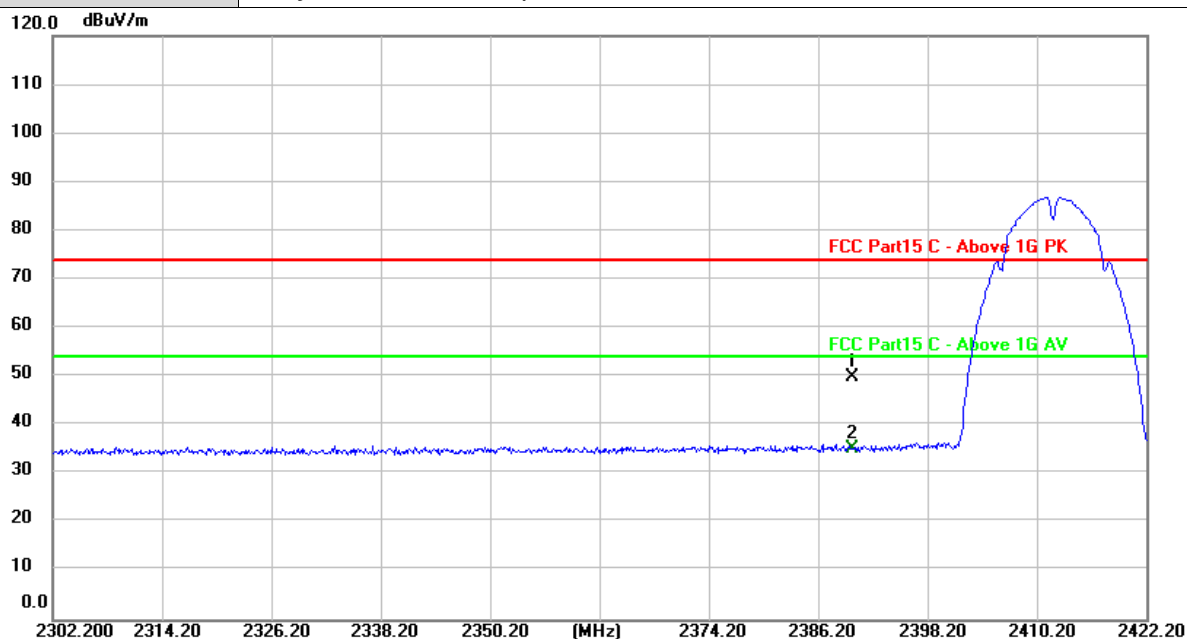








Ant No.	ANT2
Ant. Pol.	Horizontal
Test Mode:	B Mode 2412MHz
Remark:	Only worse case is reported

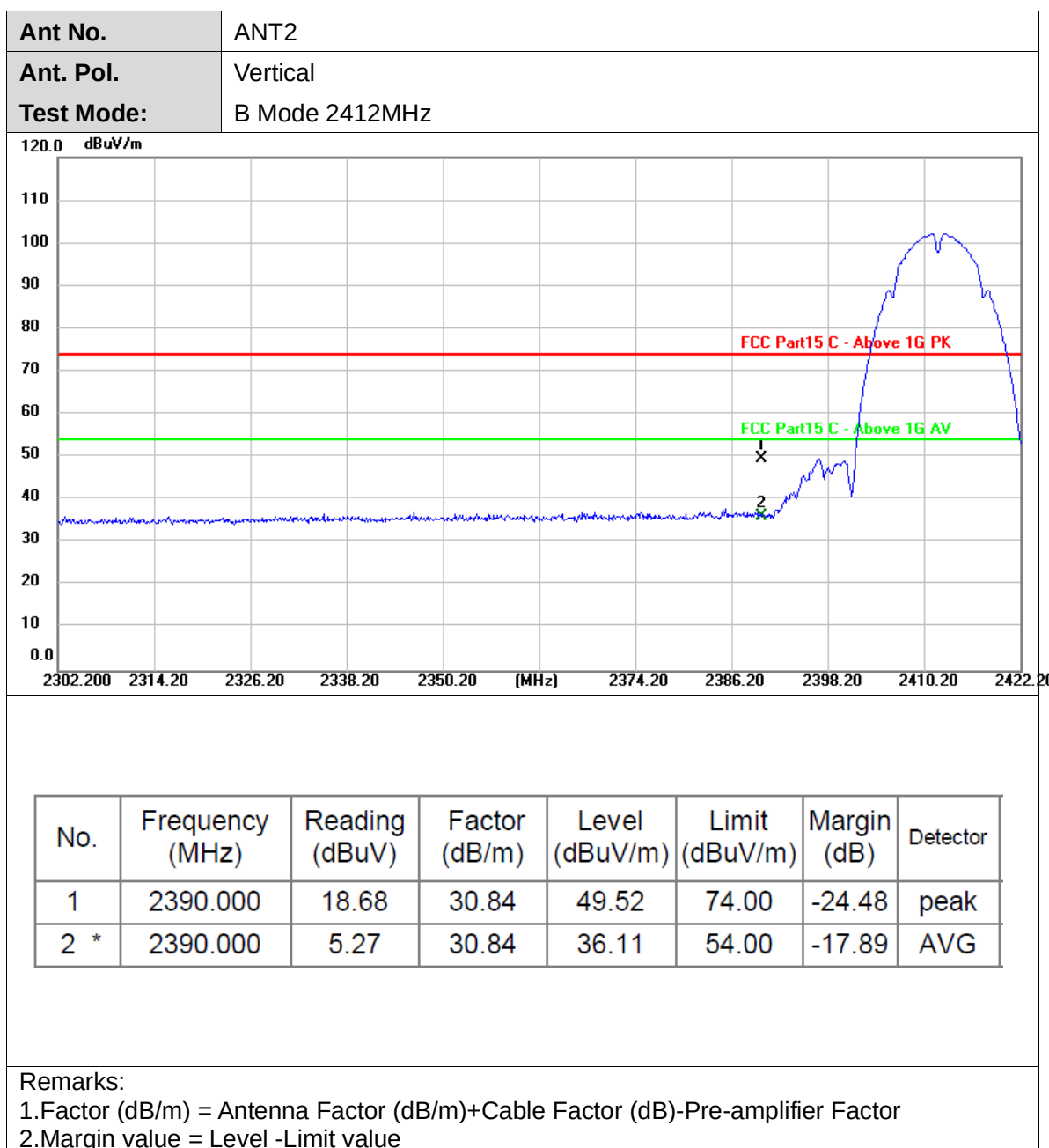


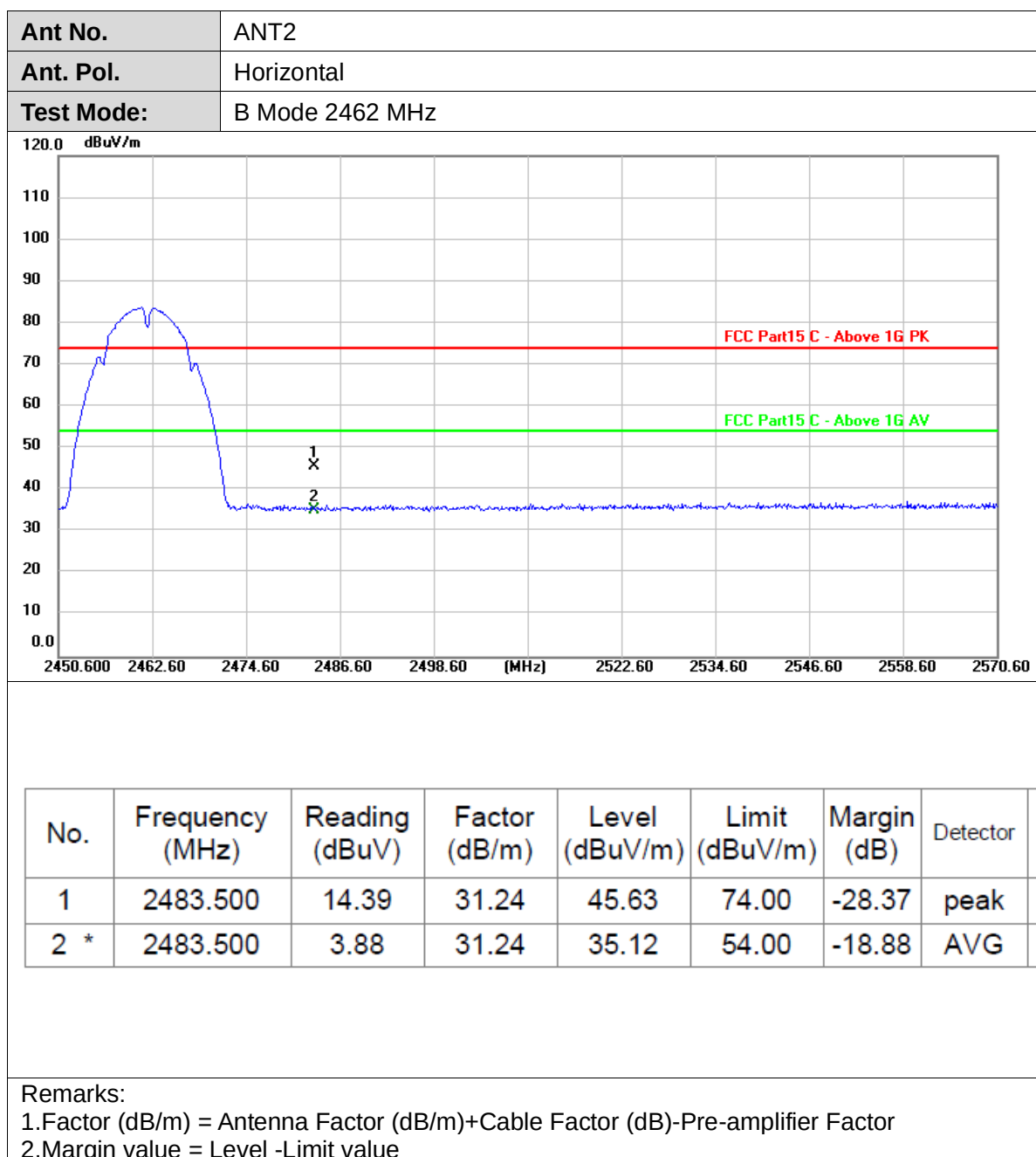
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	19.00	30.84	49.84	74.00	-24.16	peak
2 *	2390.000	4.52	30.84	35.36	54.00	-18.64	AVG

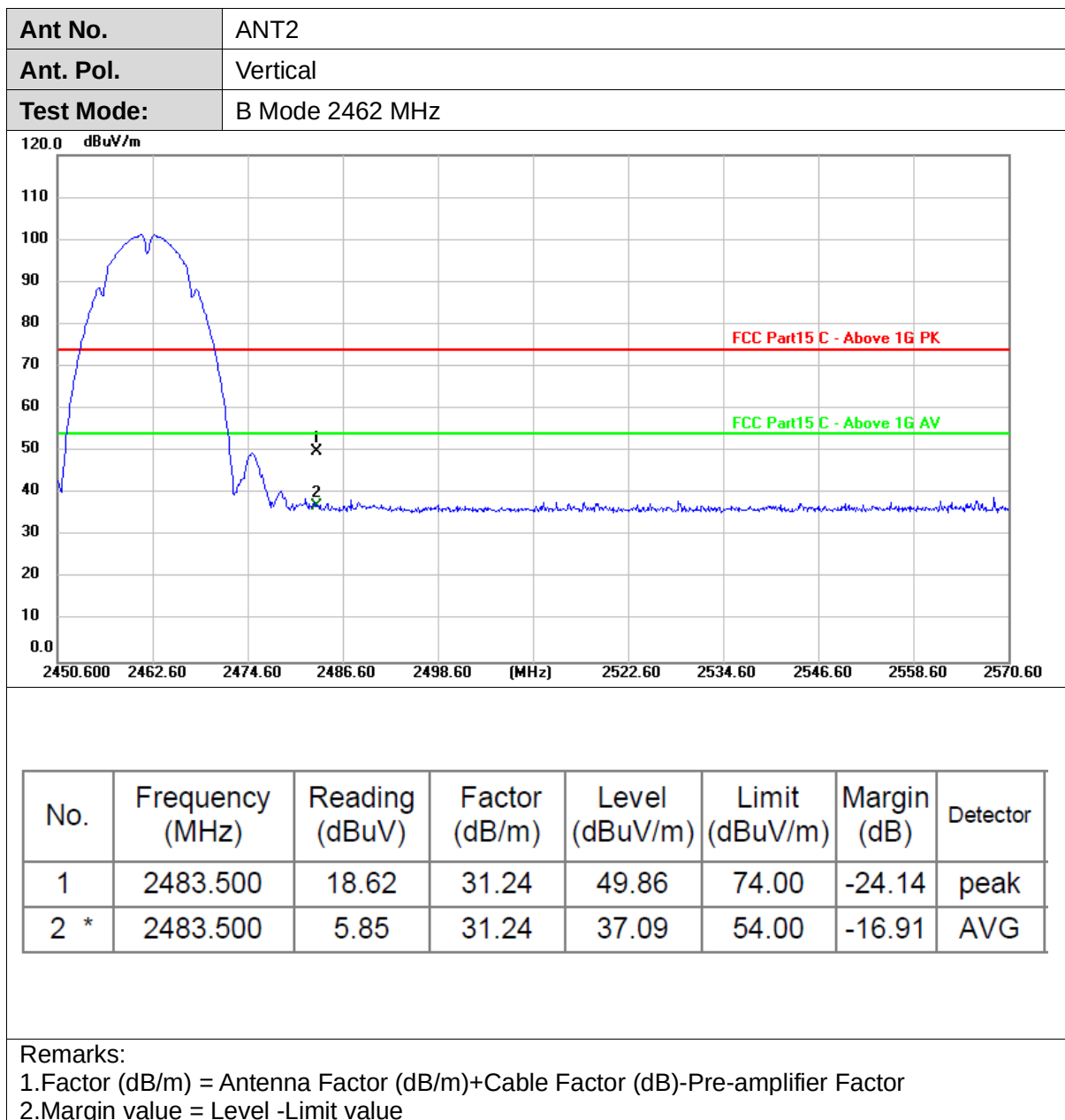
Remarks:

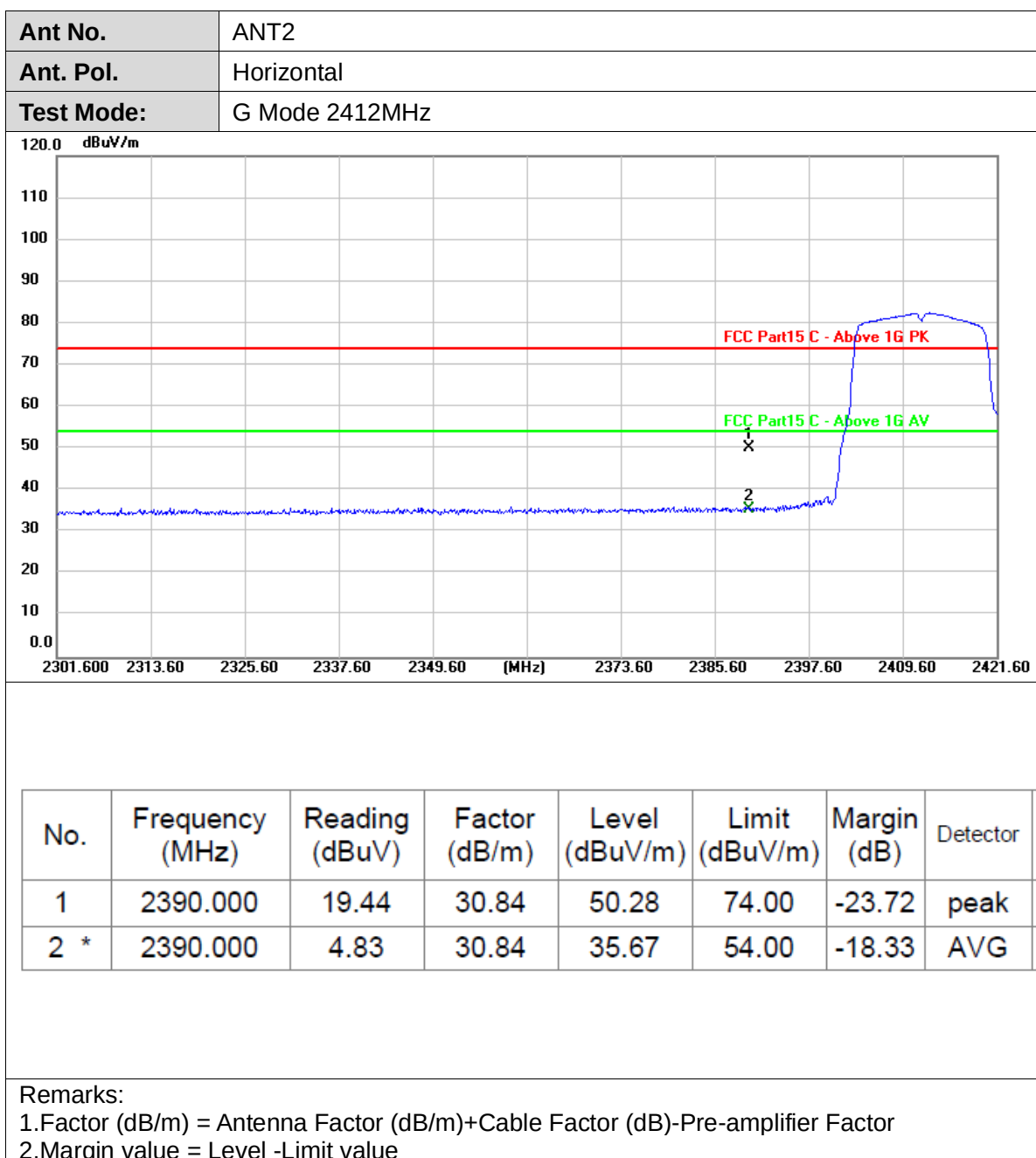
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



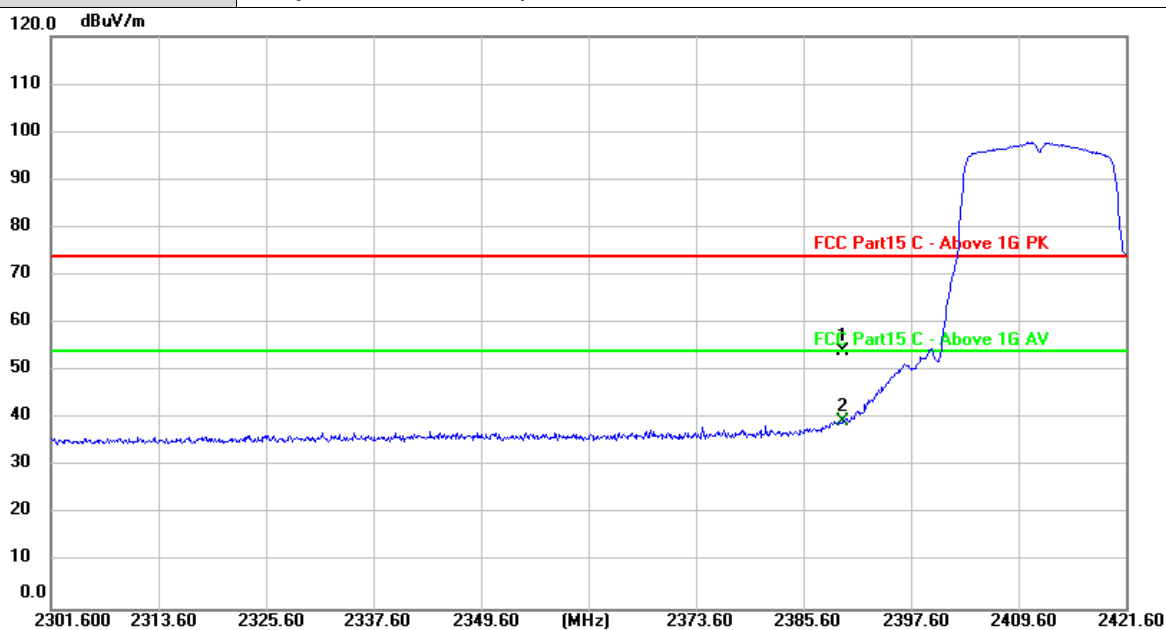








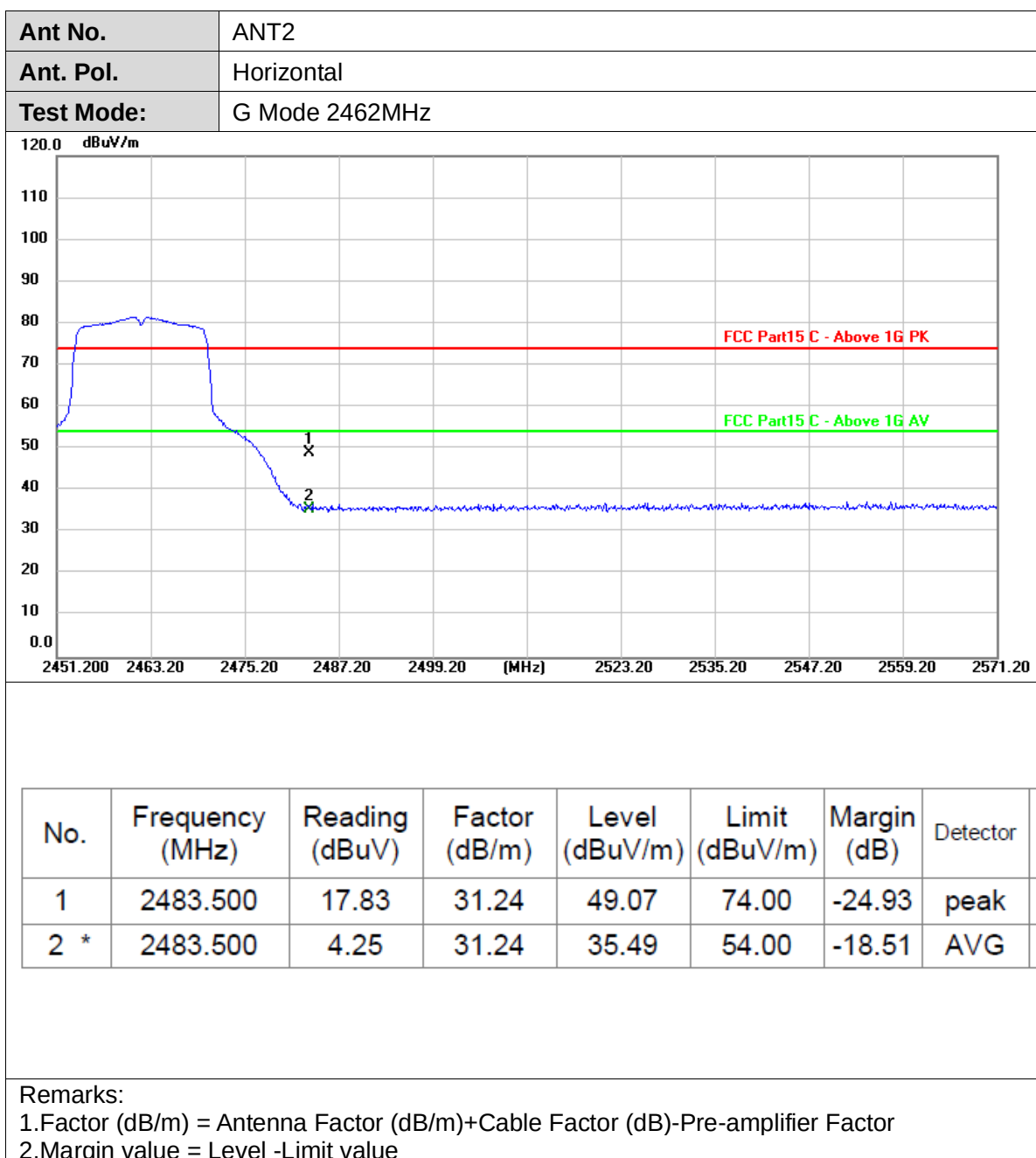
Ant No.	ANT2
Ant. Pol.	Vertical
Test Mode:	G Mode 2412MHz
Remark:	Only worse case is reported

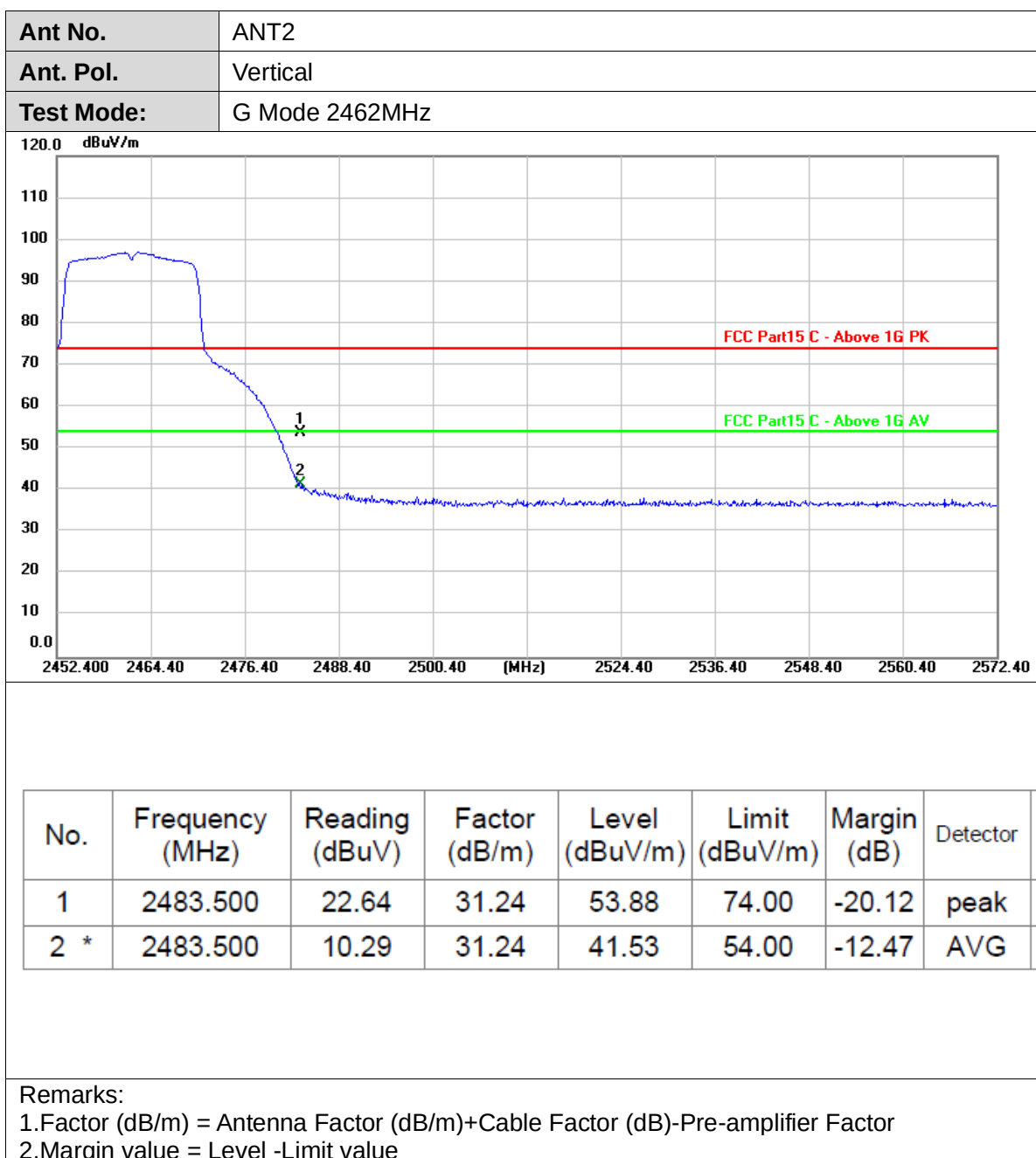


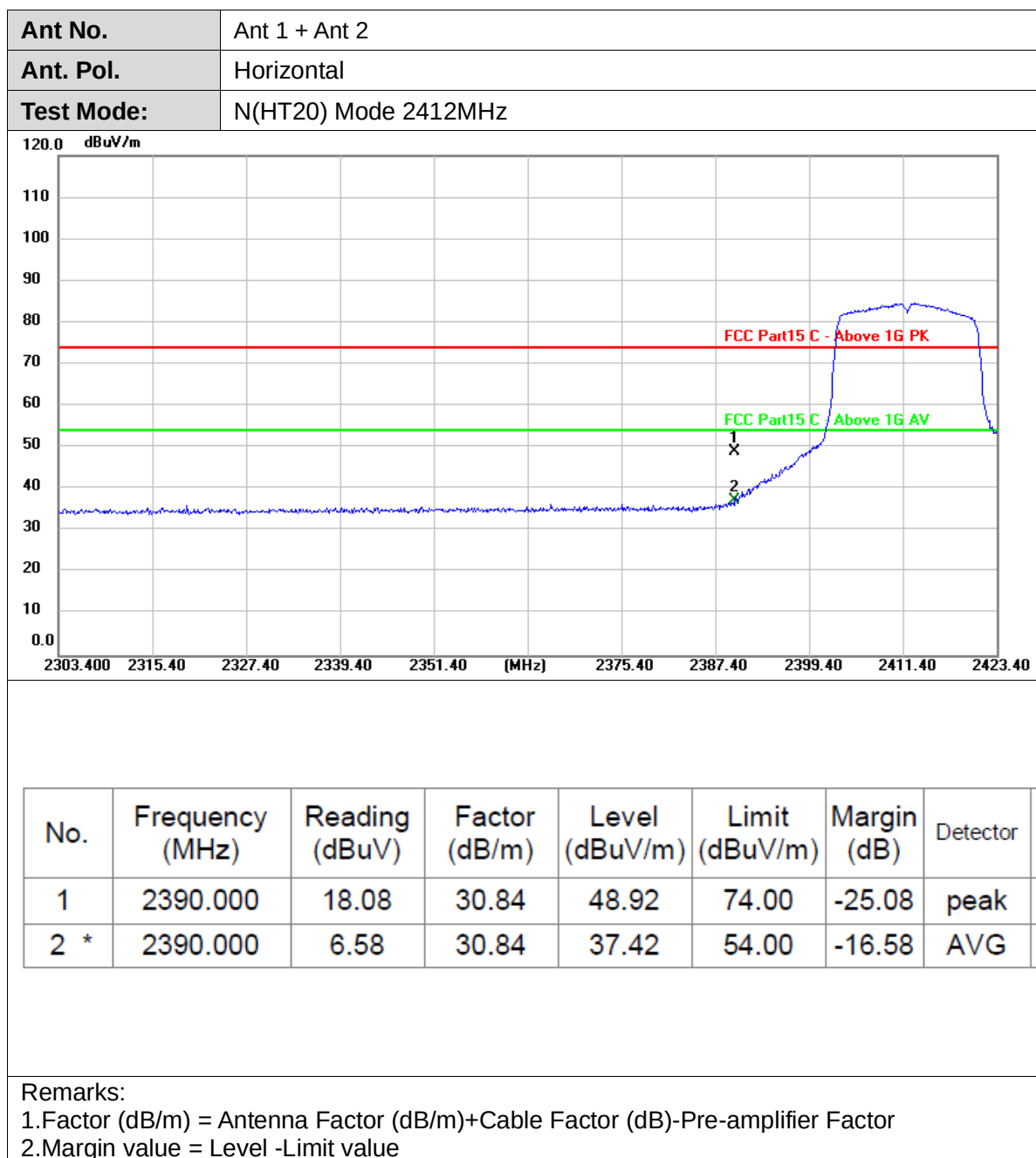
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	23.17	30.84	54.01	74.00	-19.99	peak
2 *	2390.000	8.63	30.84	39.47	54.00	-14.53	AVG

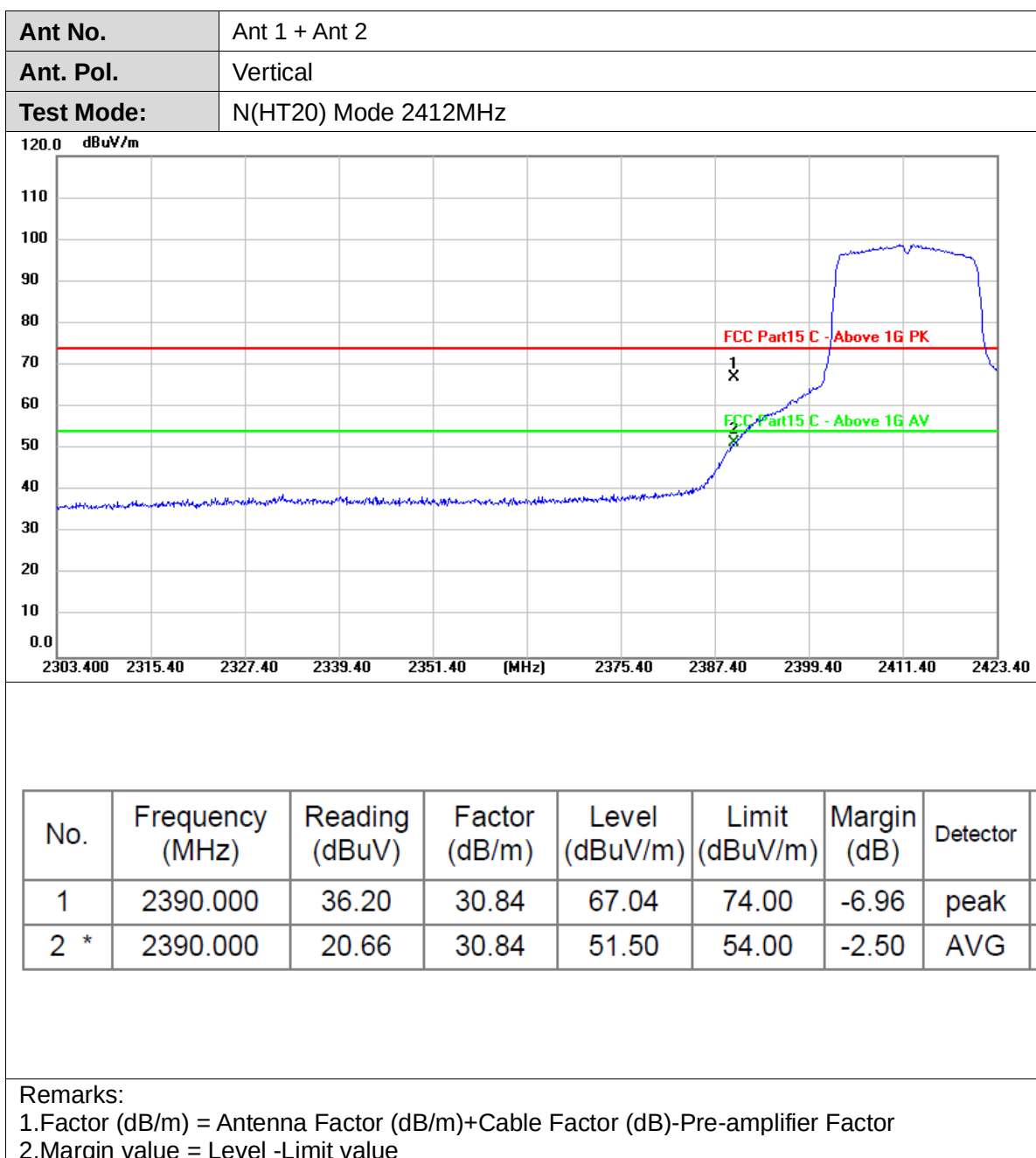
Remarks:

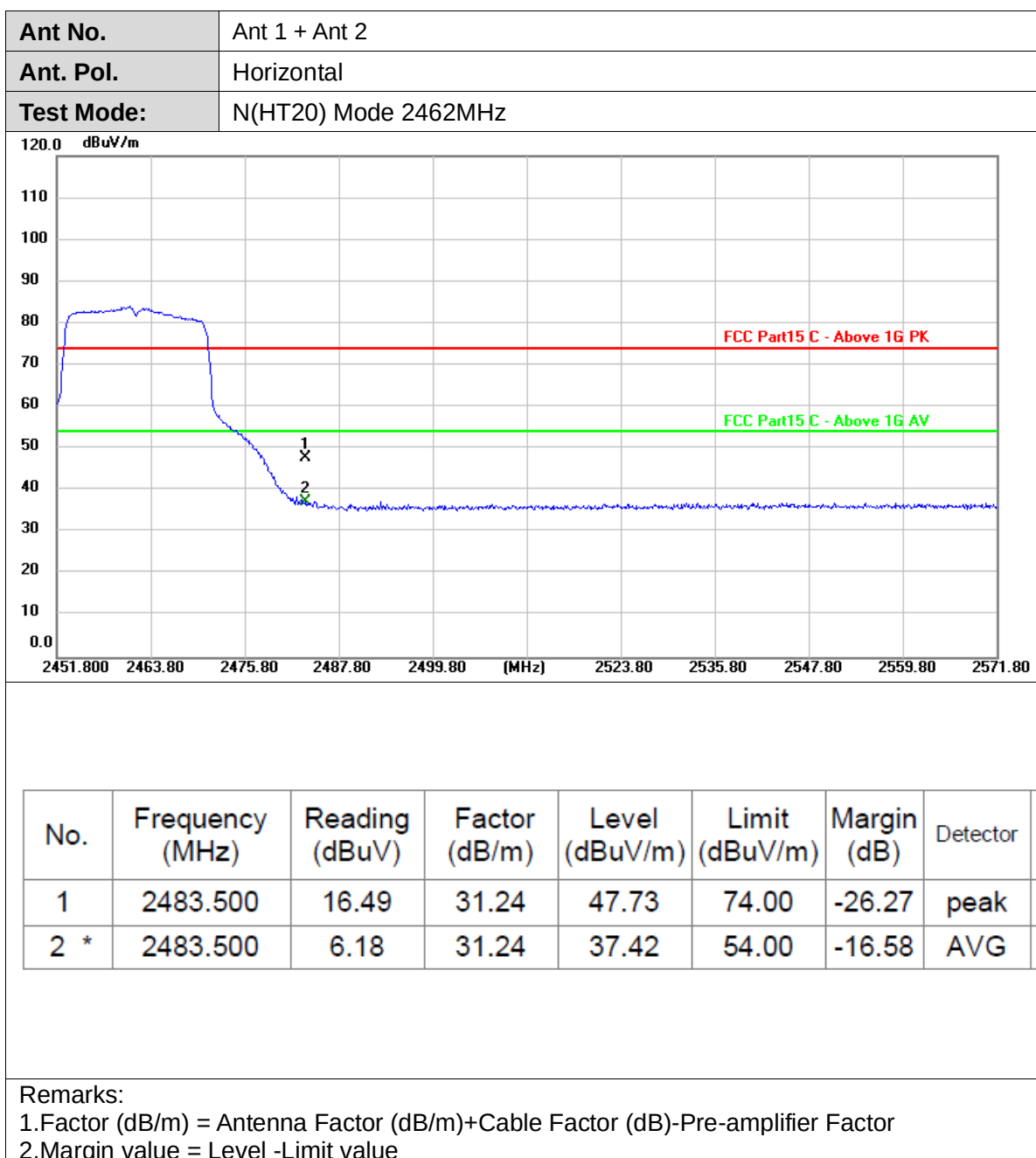
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value





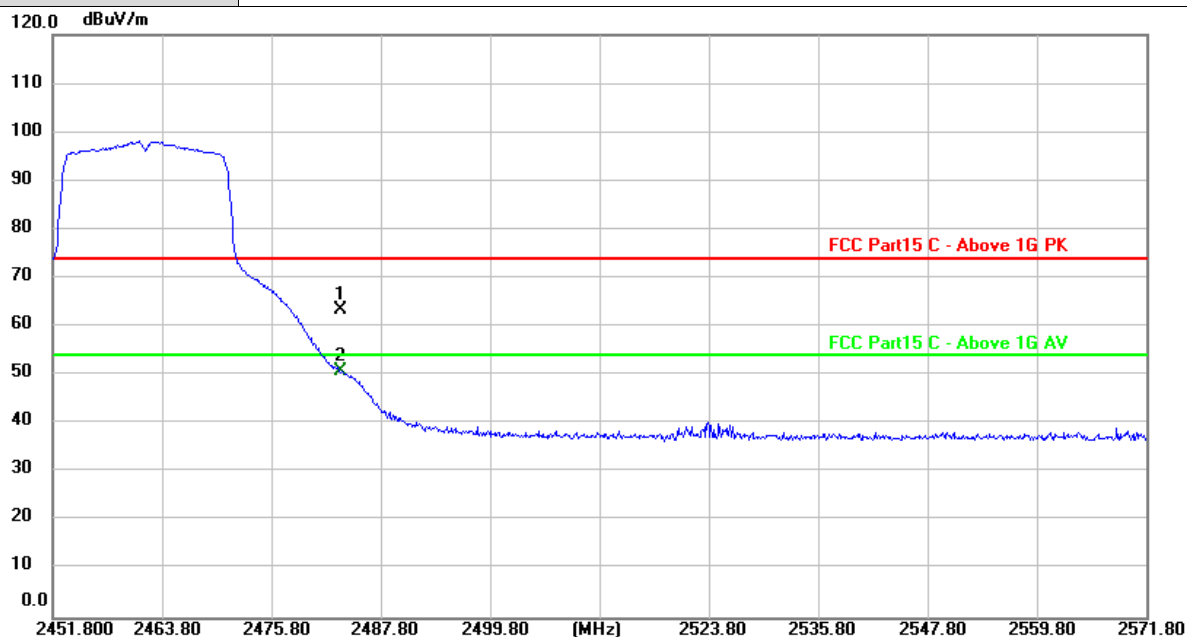








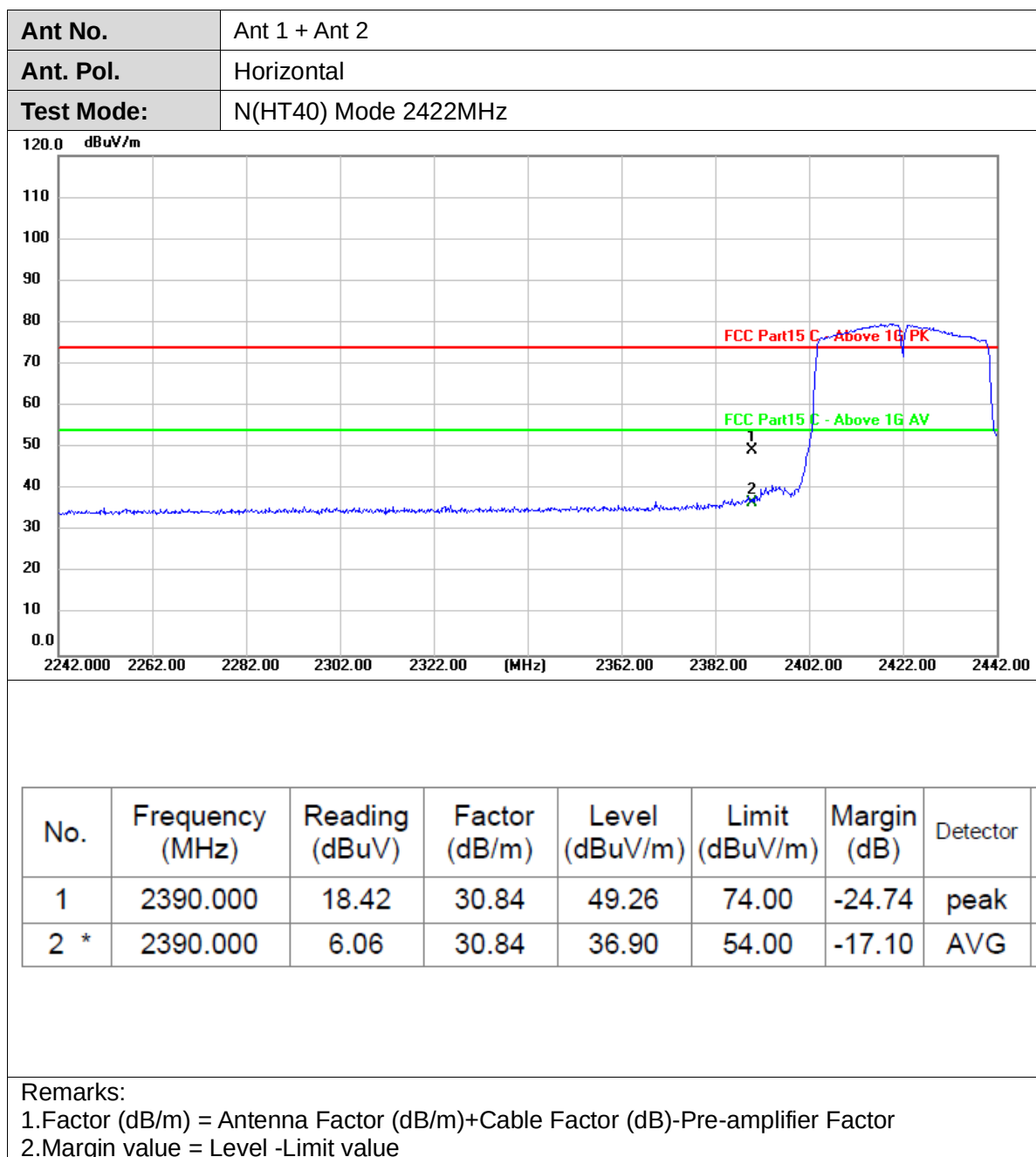
Ant No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	N(HT20) Mode 2462MHz

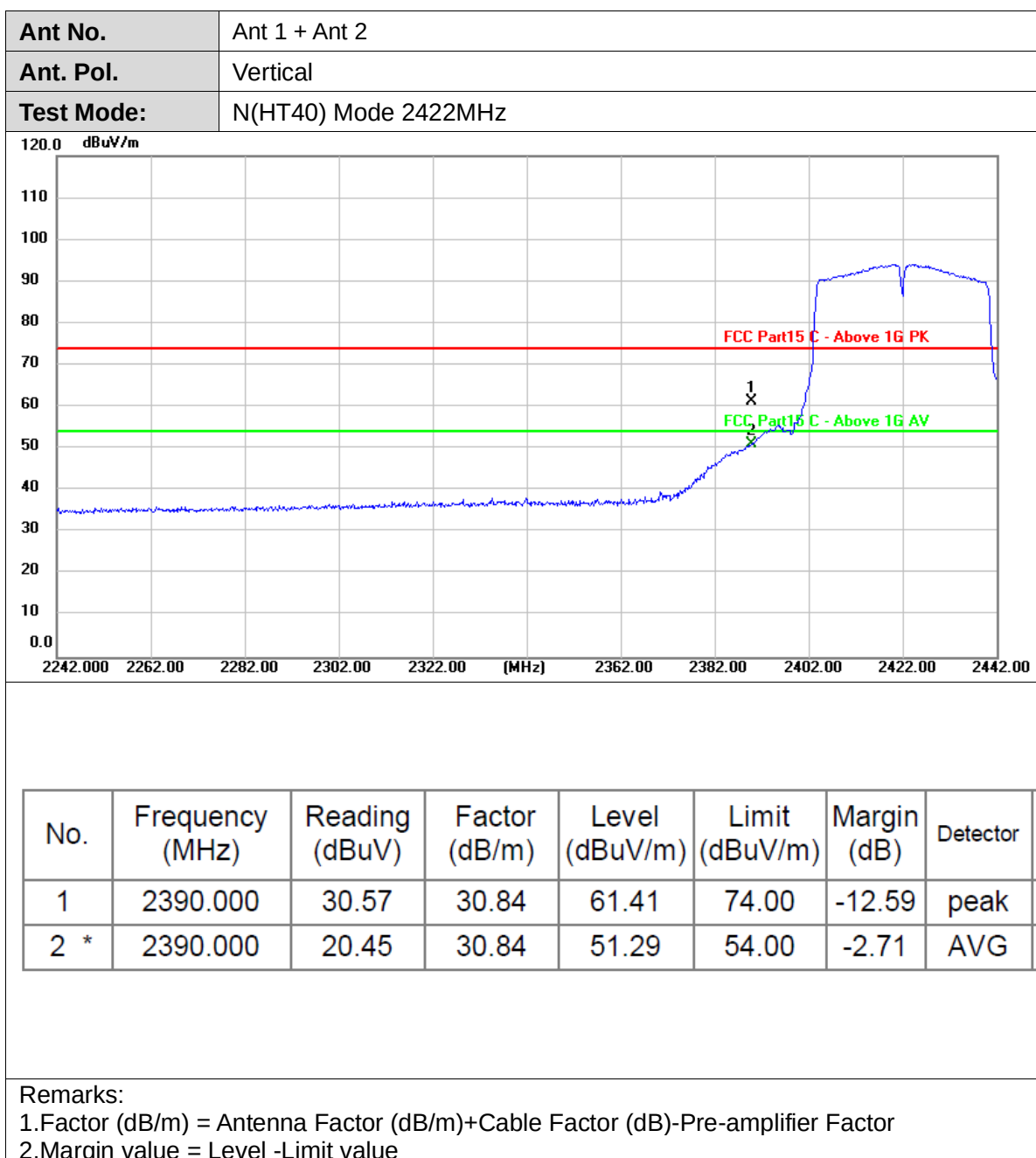


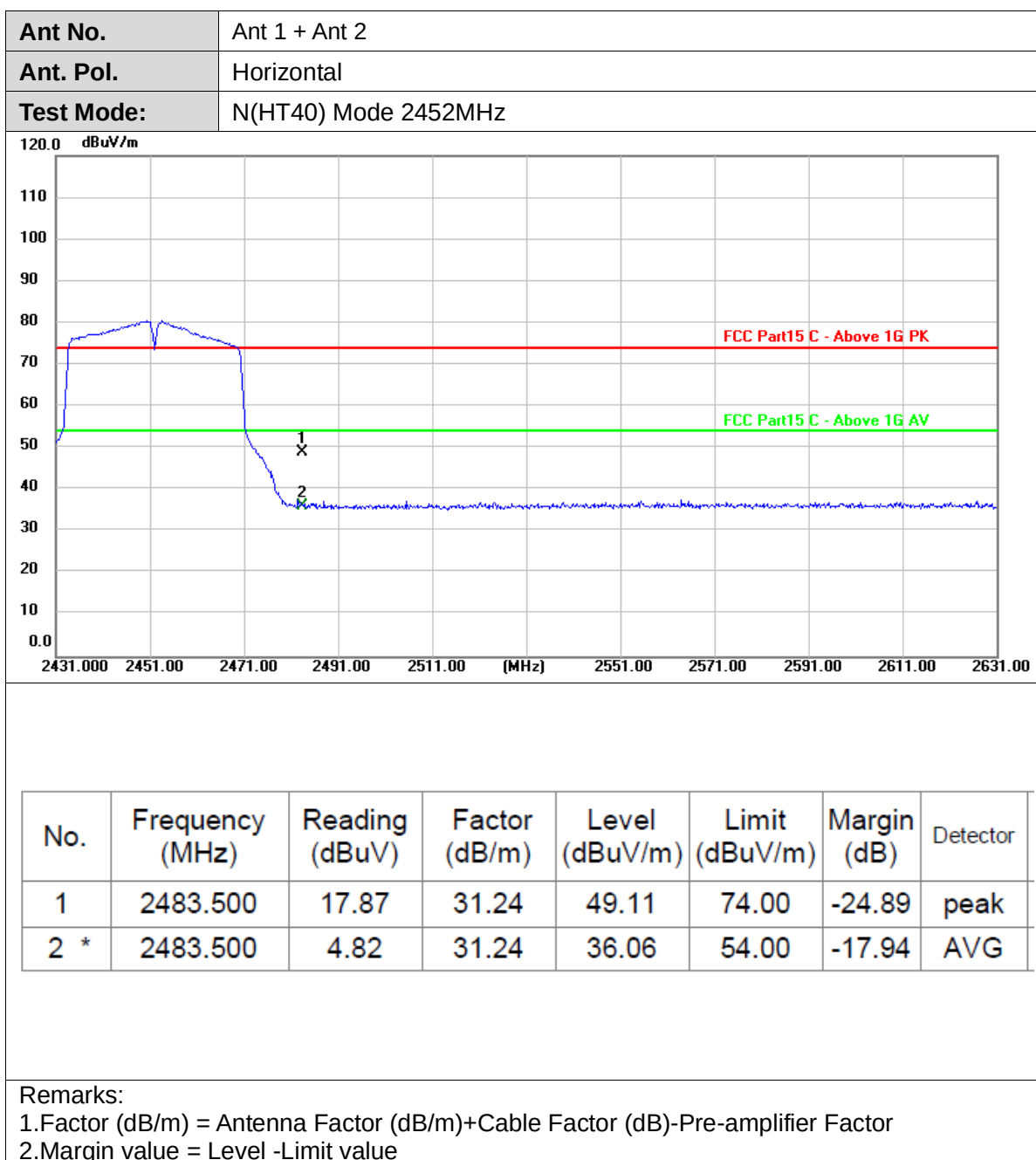
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	32.25	31.24	63.49	74.00	-10.51	peak
2 *	2483.500	19.47	31.24	50.71	54.00	-3.29	AVG

Remarks:

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

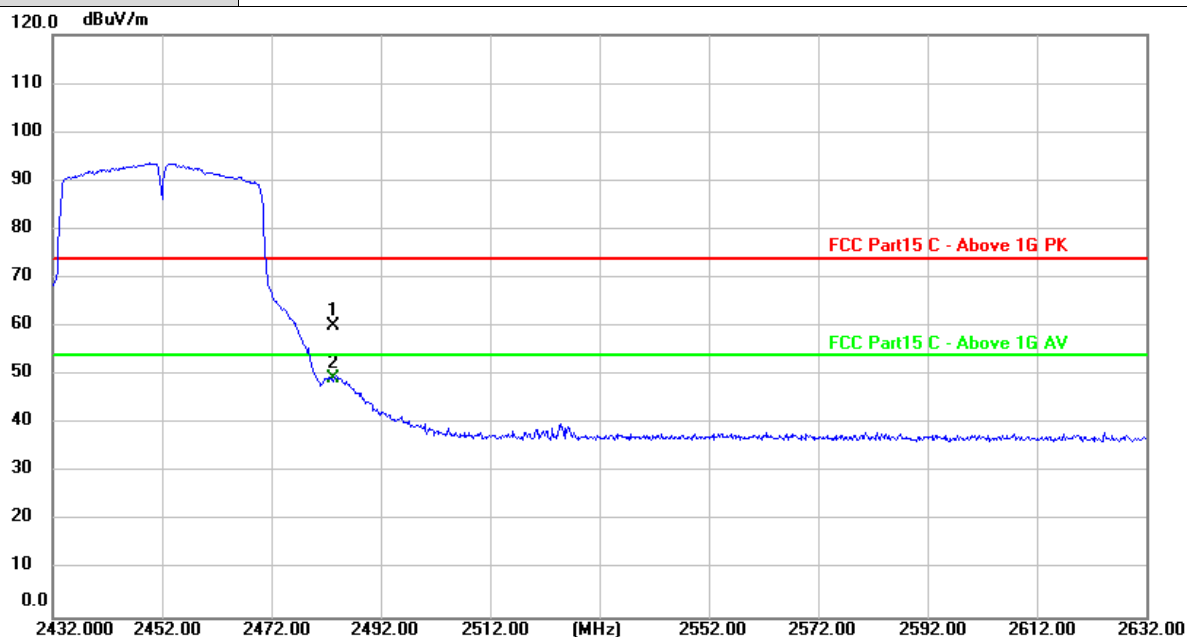








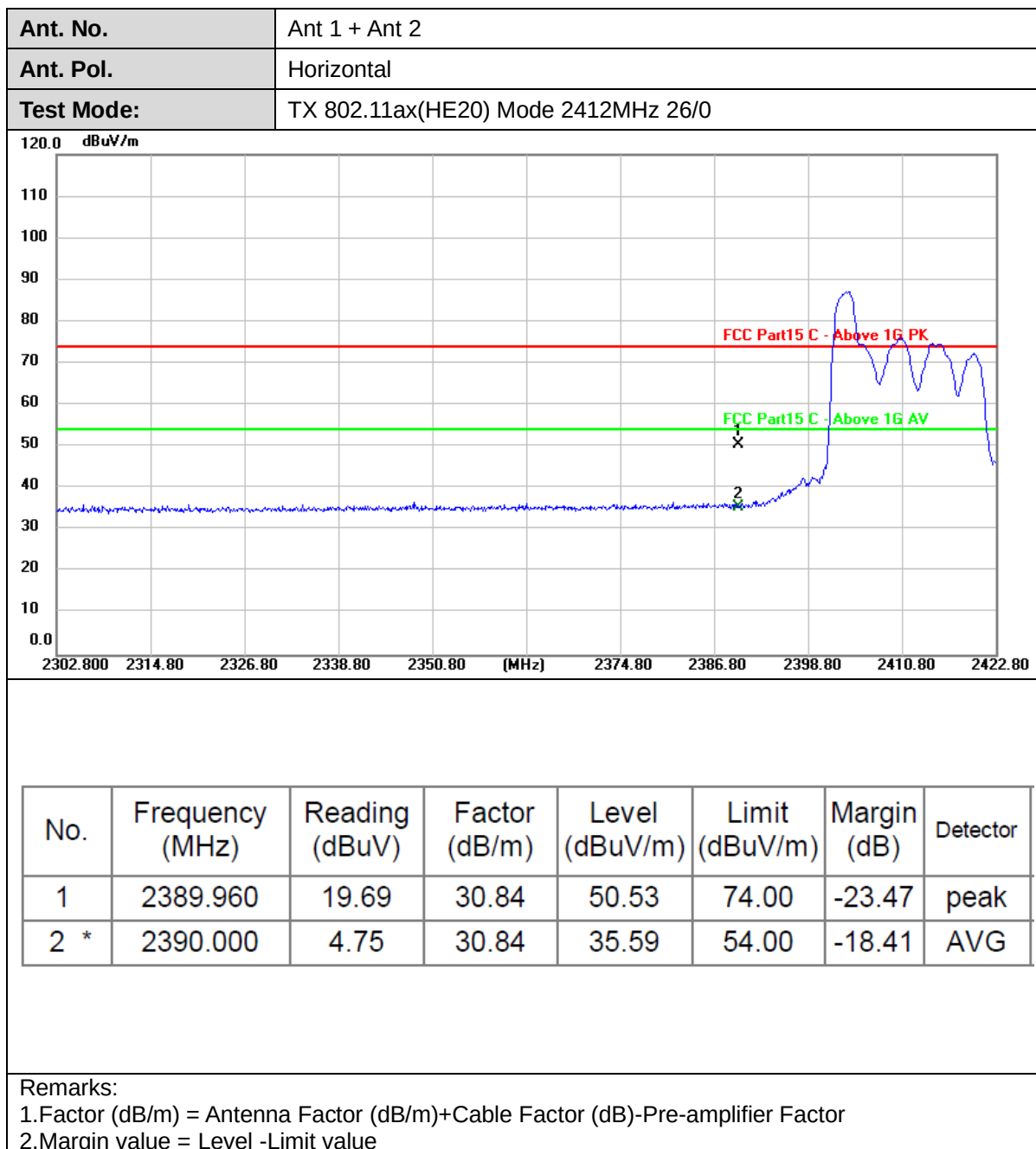
Ant No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	N(HT40) Mode 2452MHz

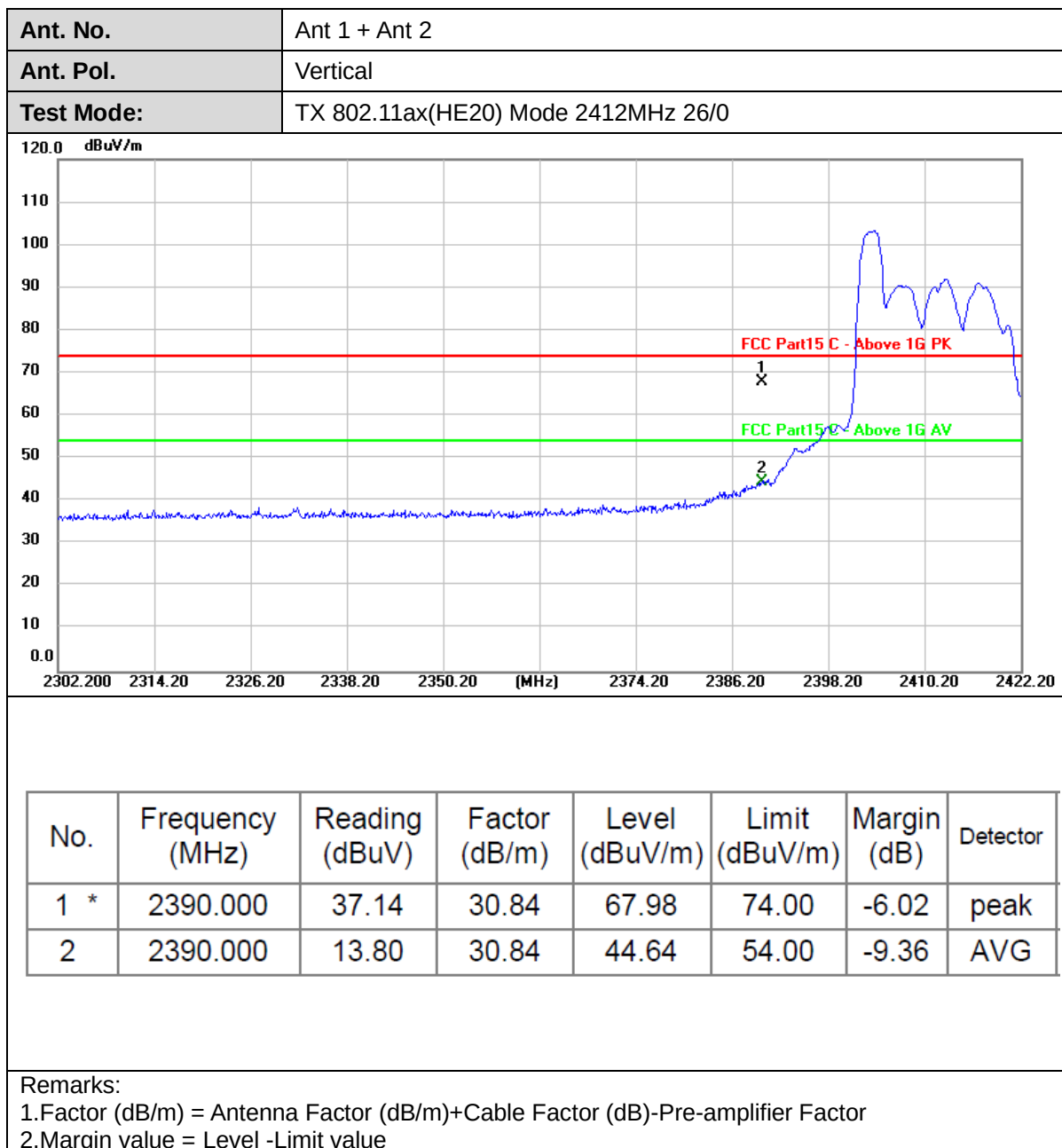


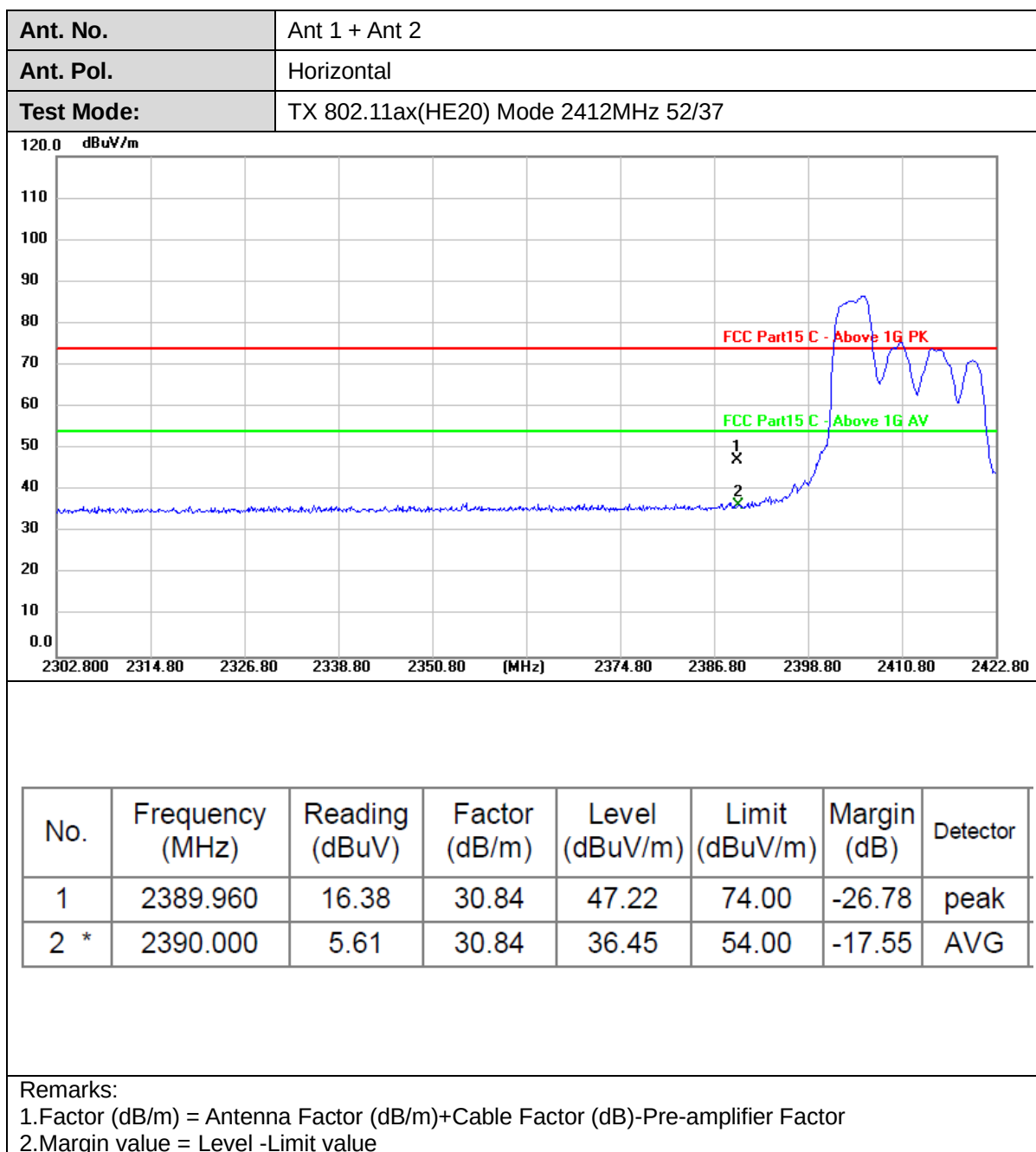
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	28.94	31.24	60.18	74.00	-13.82	peak
2 *	2483.500	18.03	31.24	49.27	54.00	-4.73	AVG

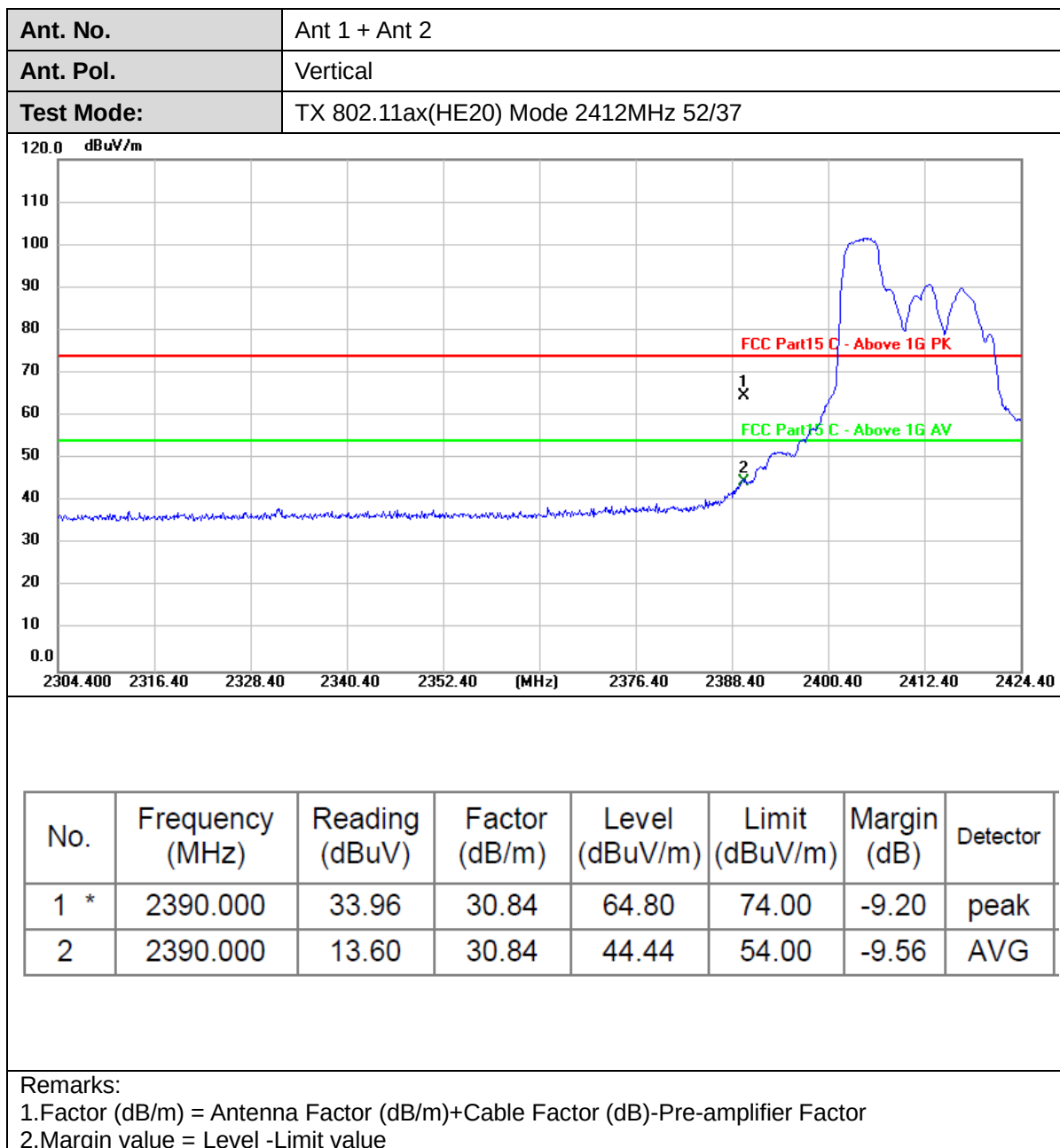
Remarks:

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



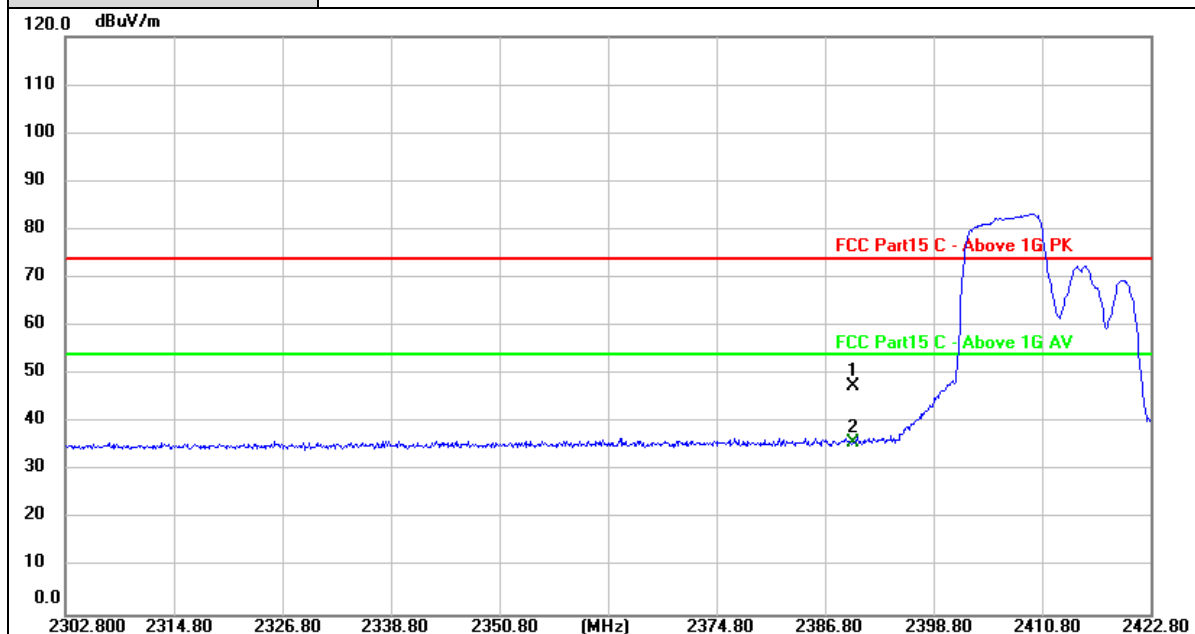








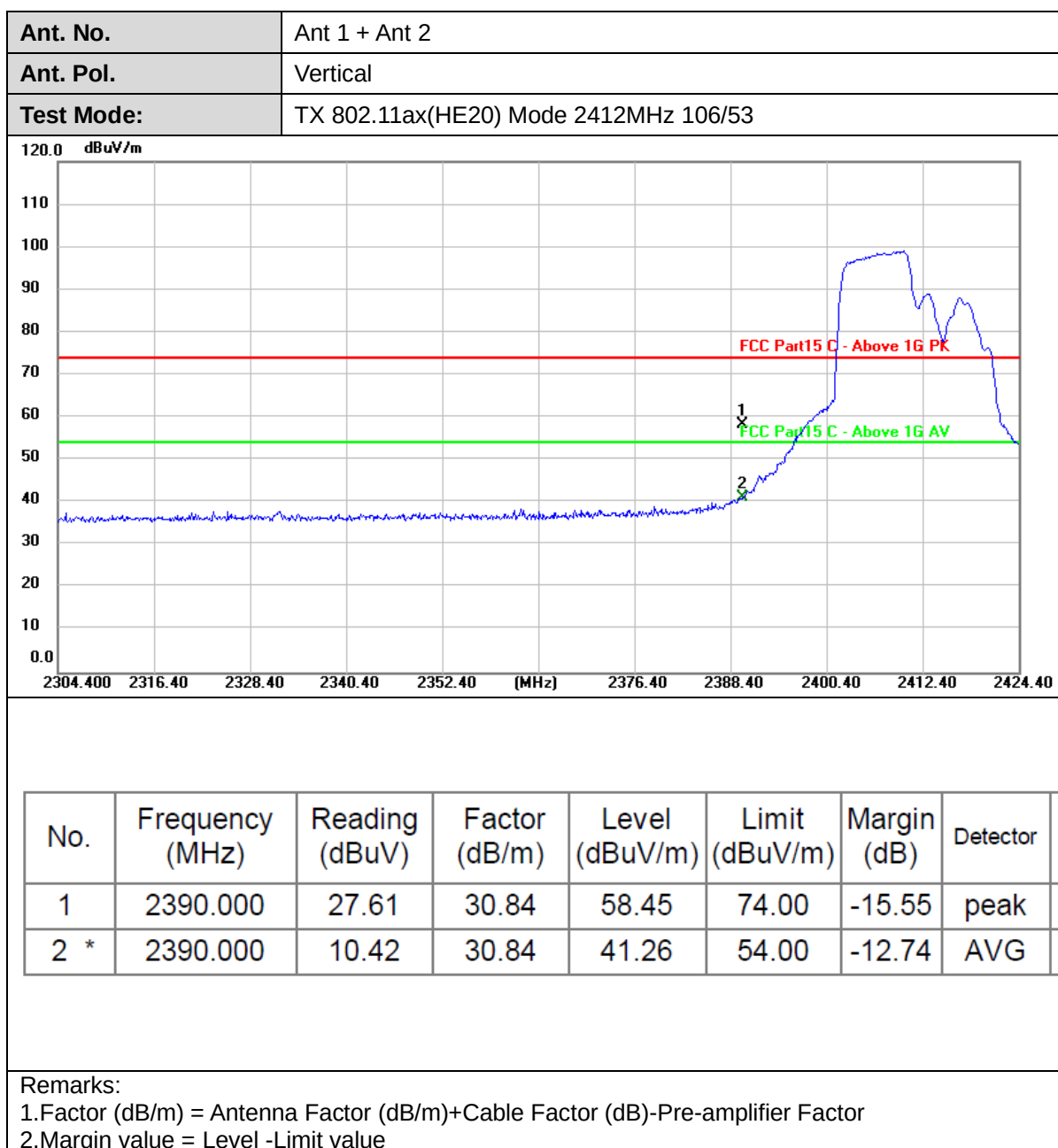
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 2412MHz 106/53

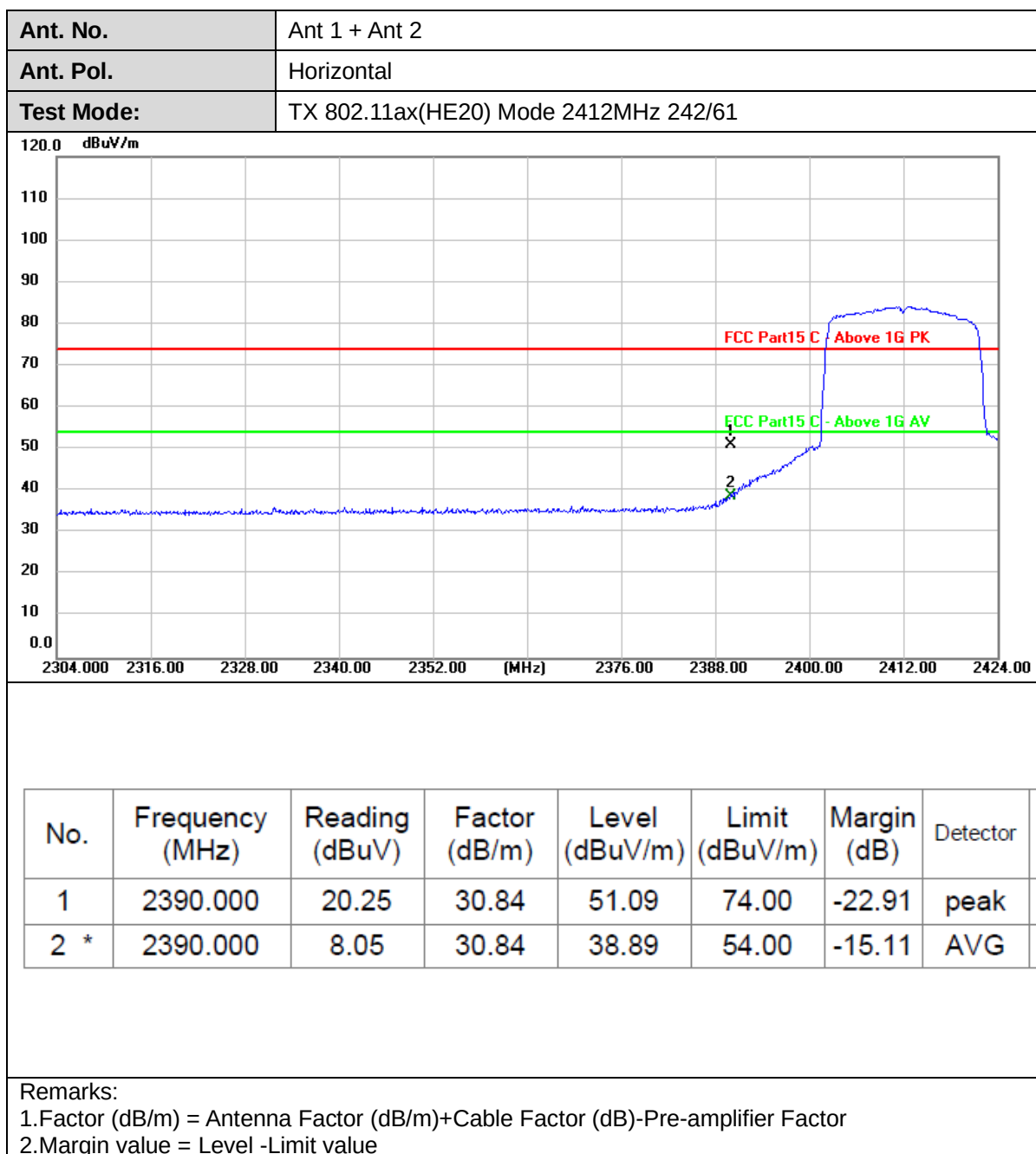


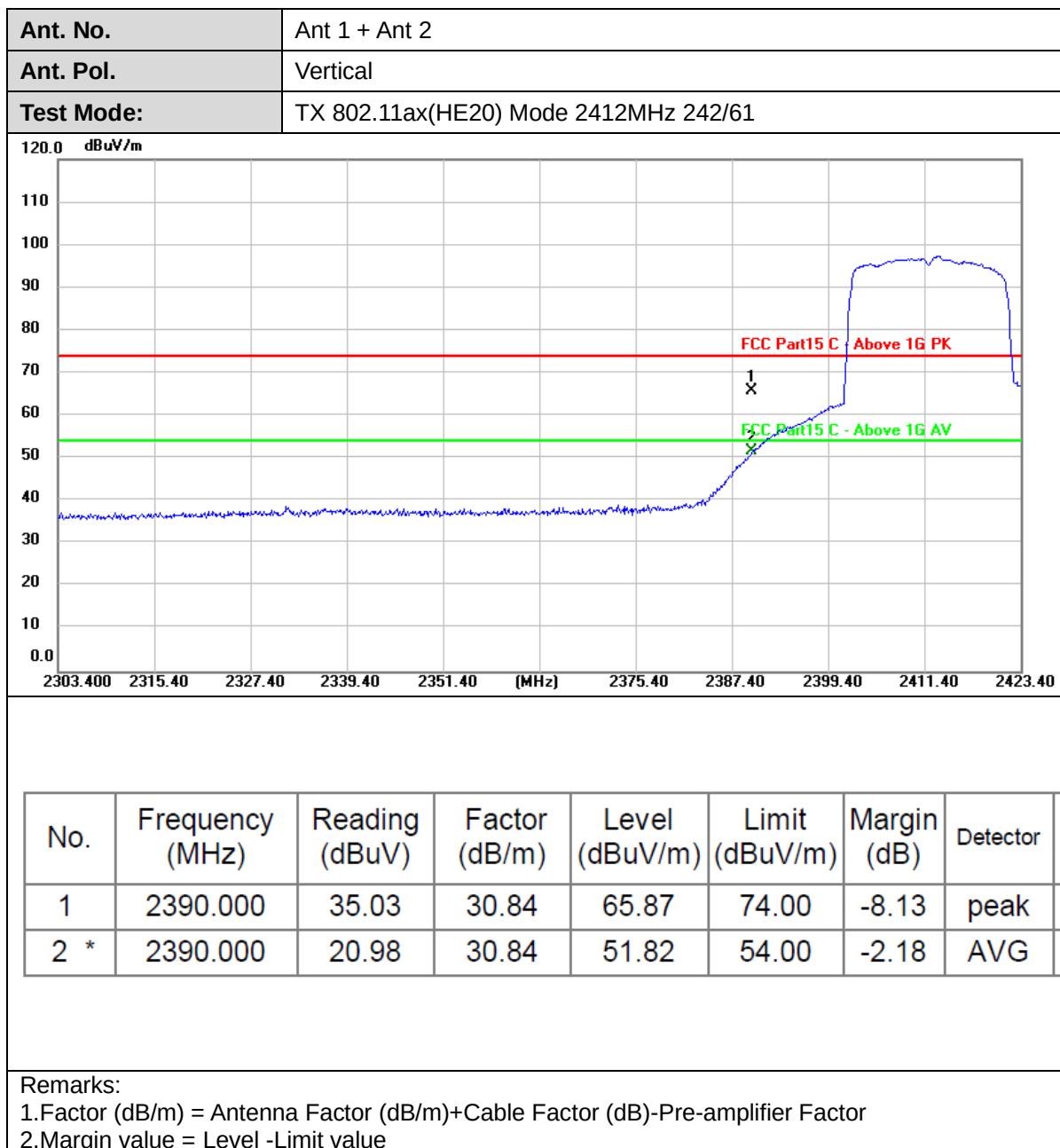
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	16.72	30.84	47.56	74.00	-26.44	peak
2 *	2390.000	5.08	30.84	35.92	54.00	-18.08	AVG

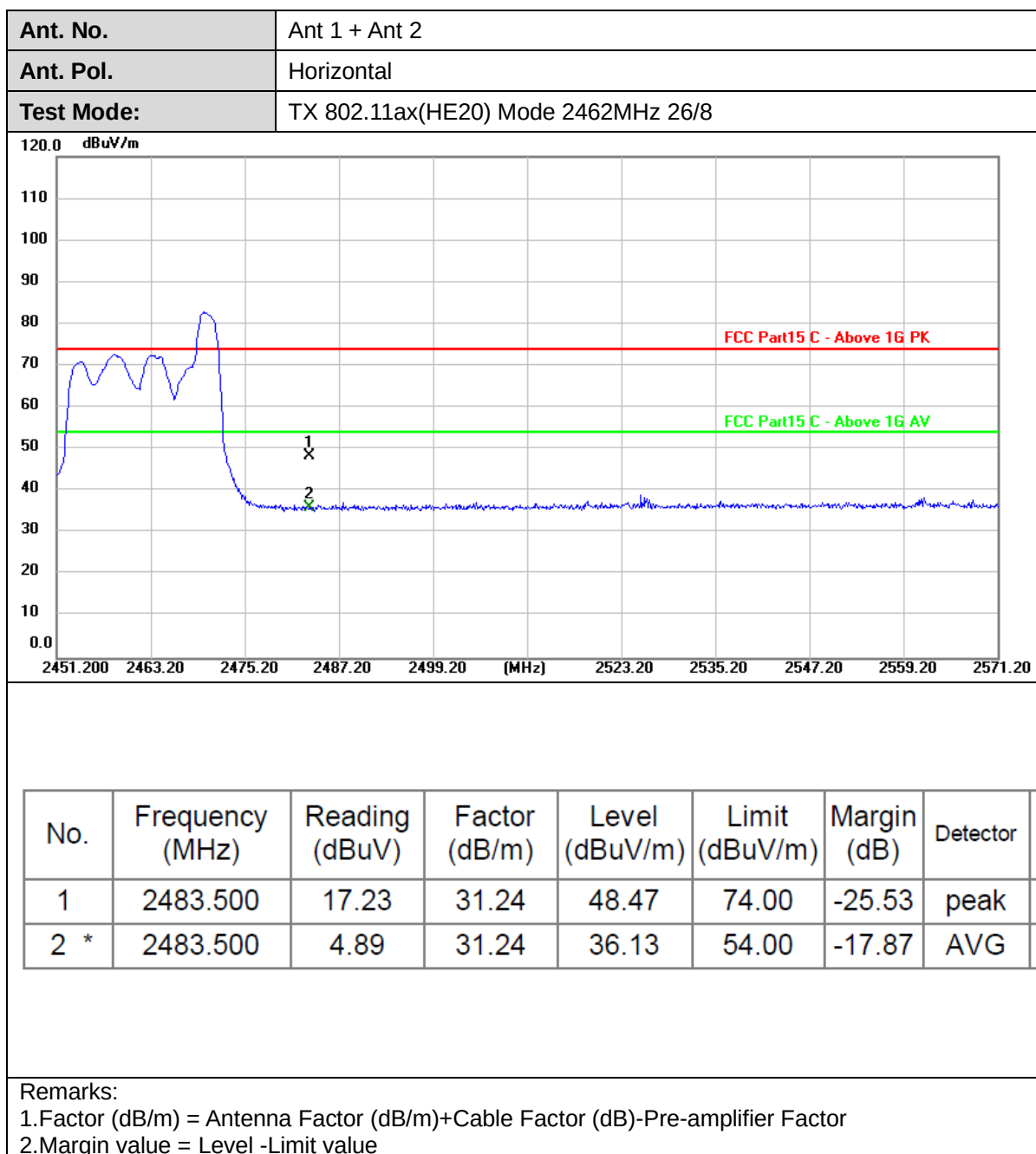
Remarks:

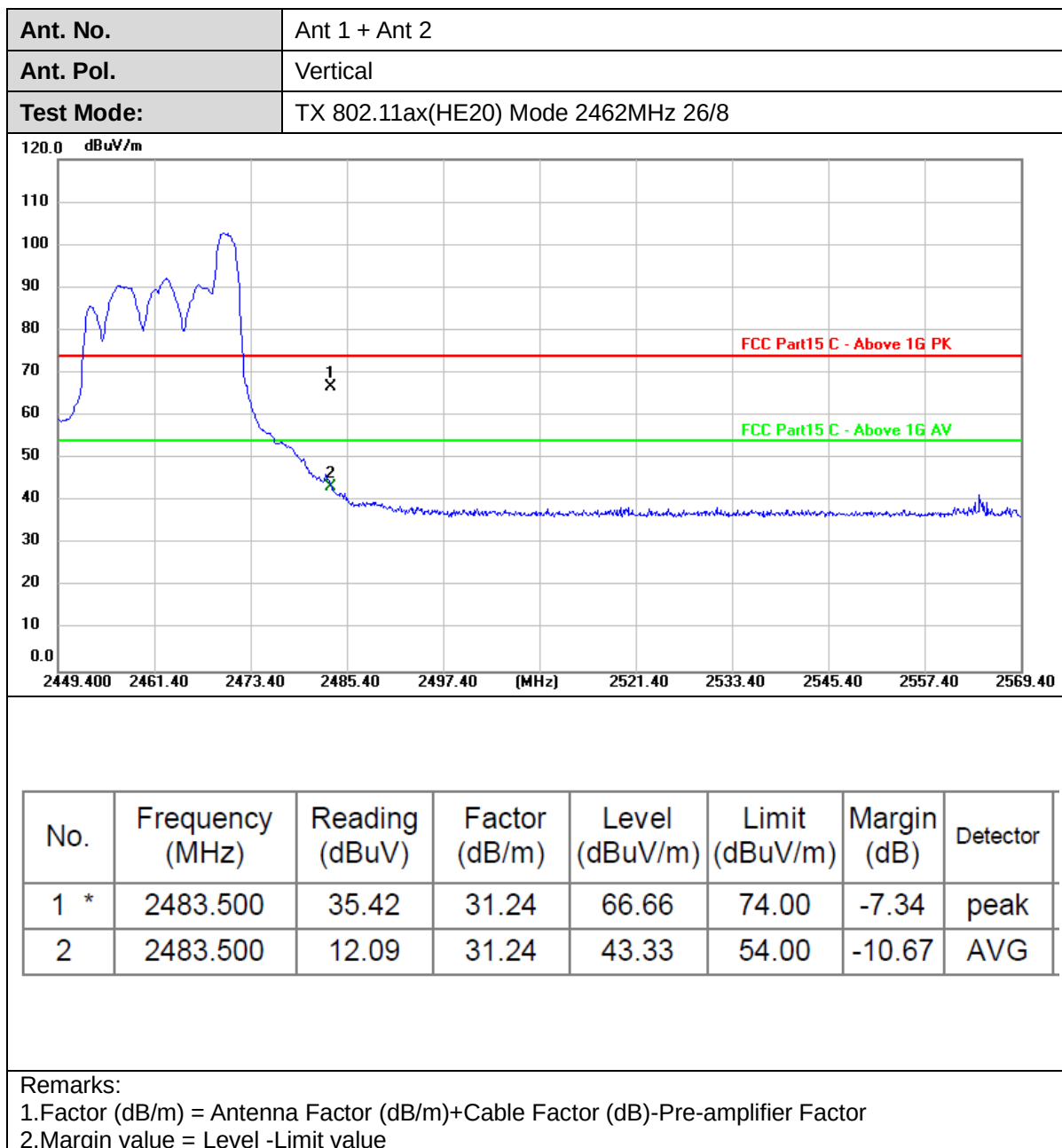
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value

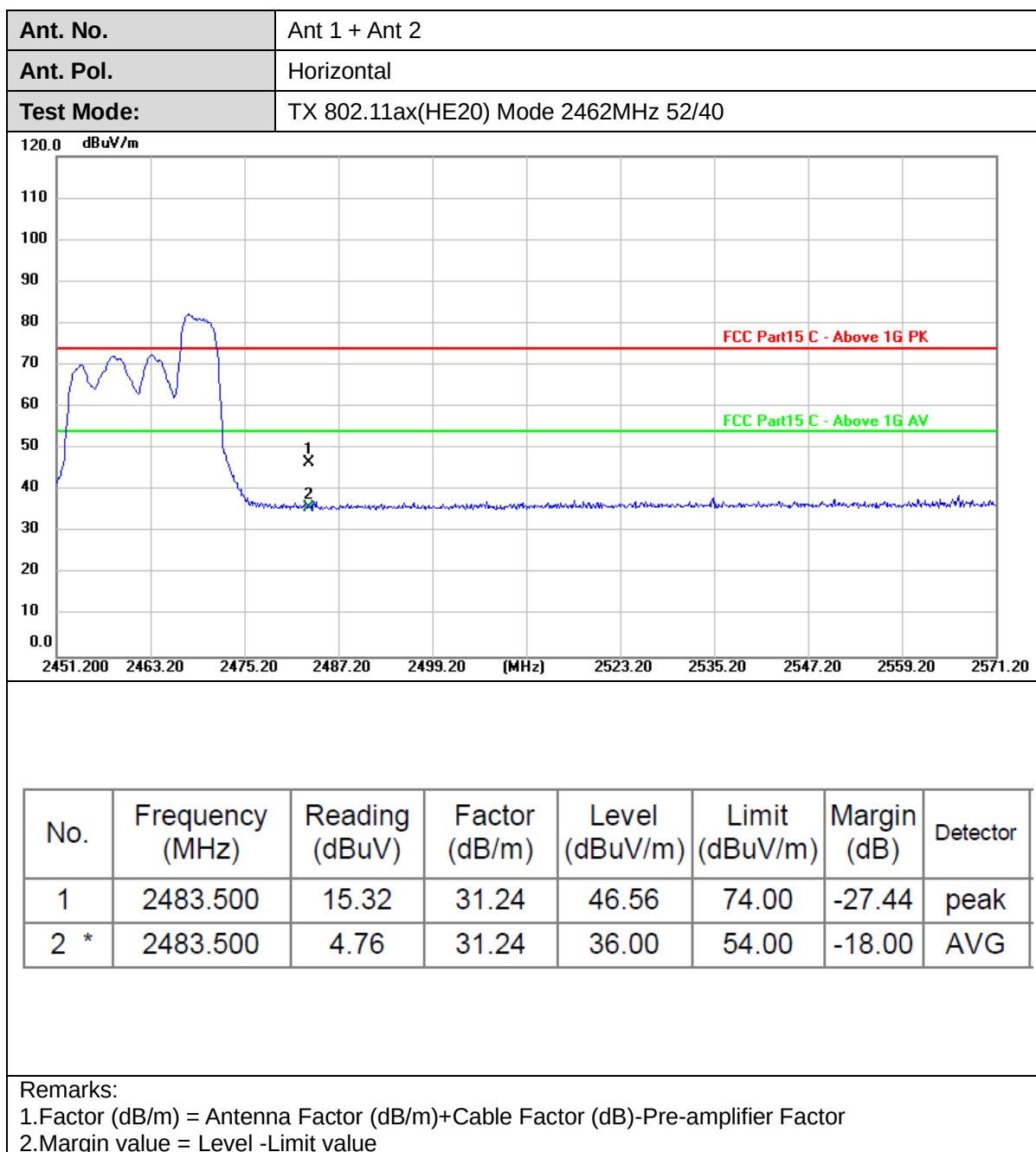


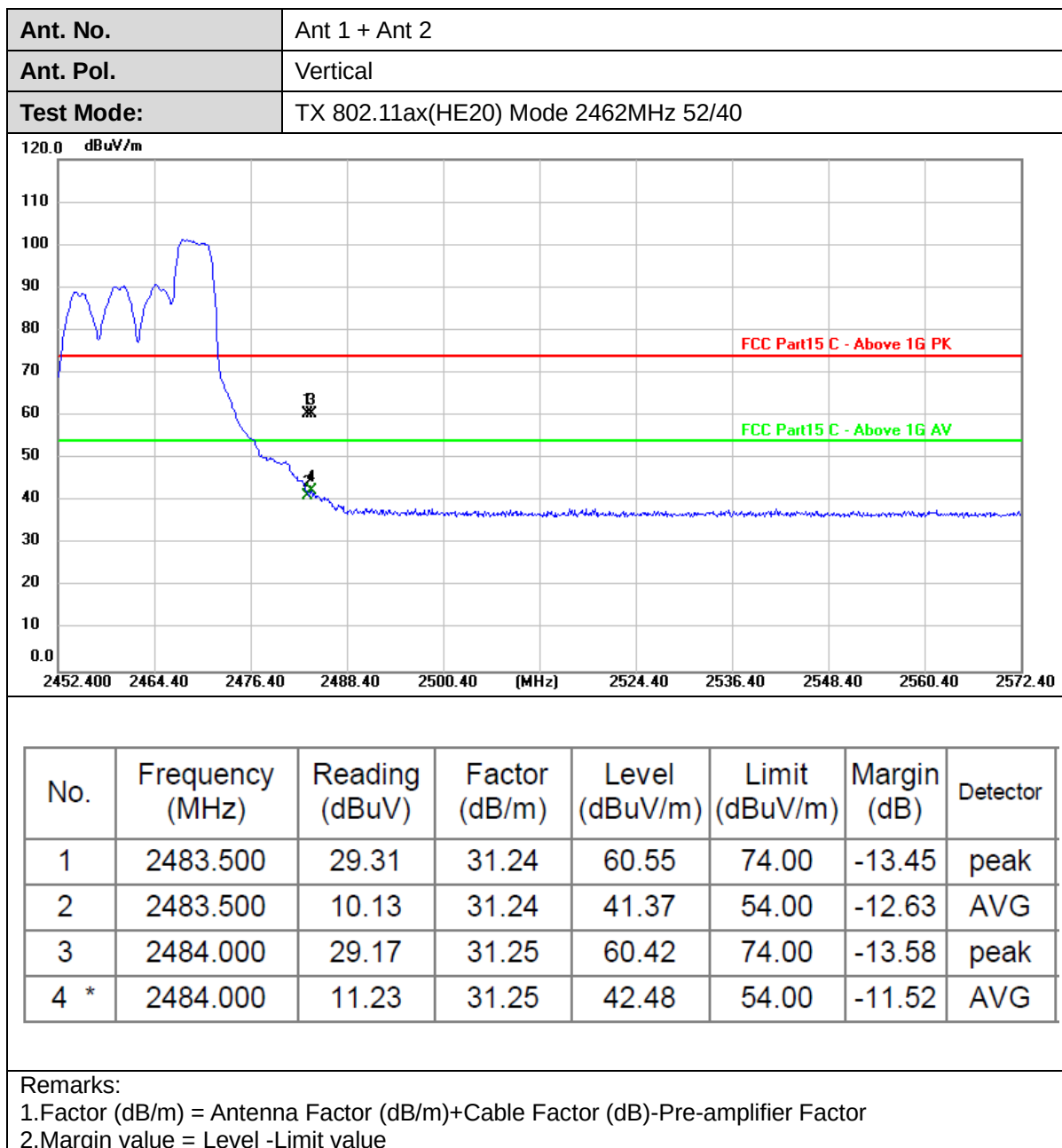






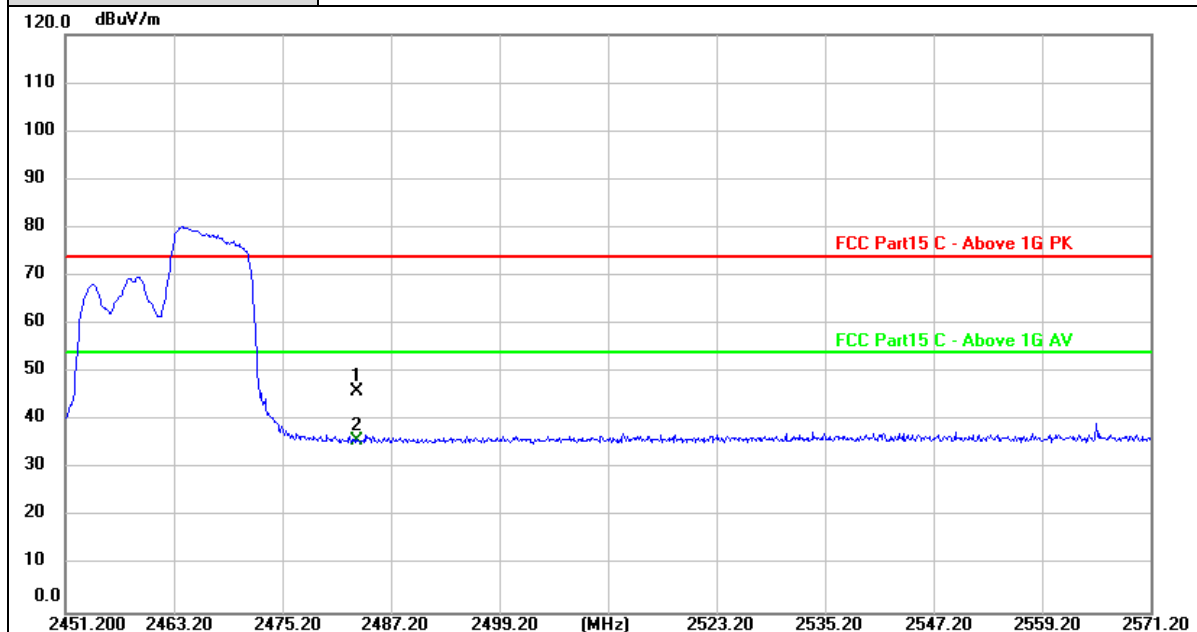








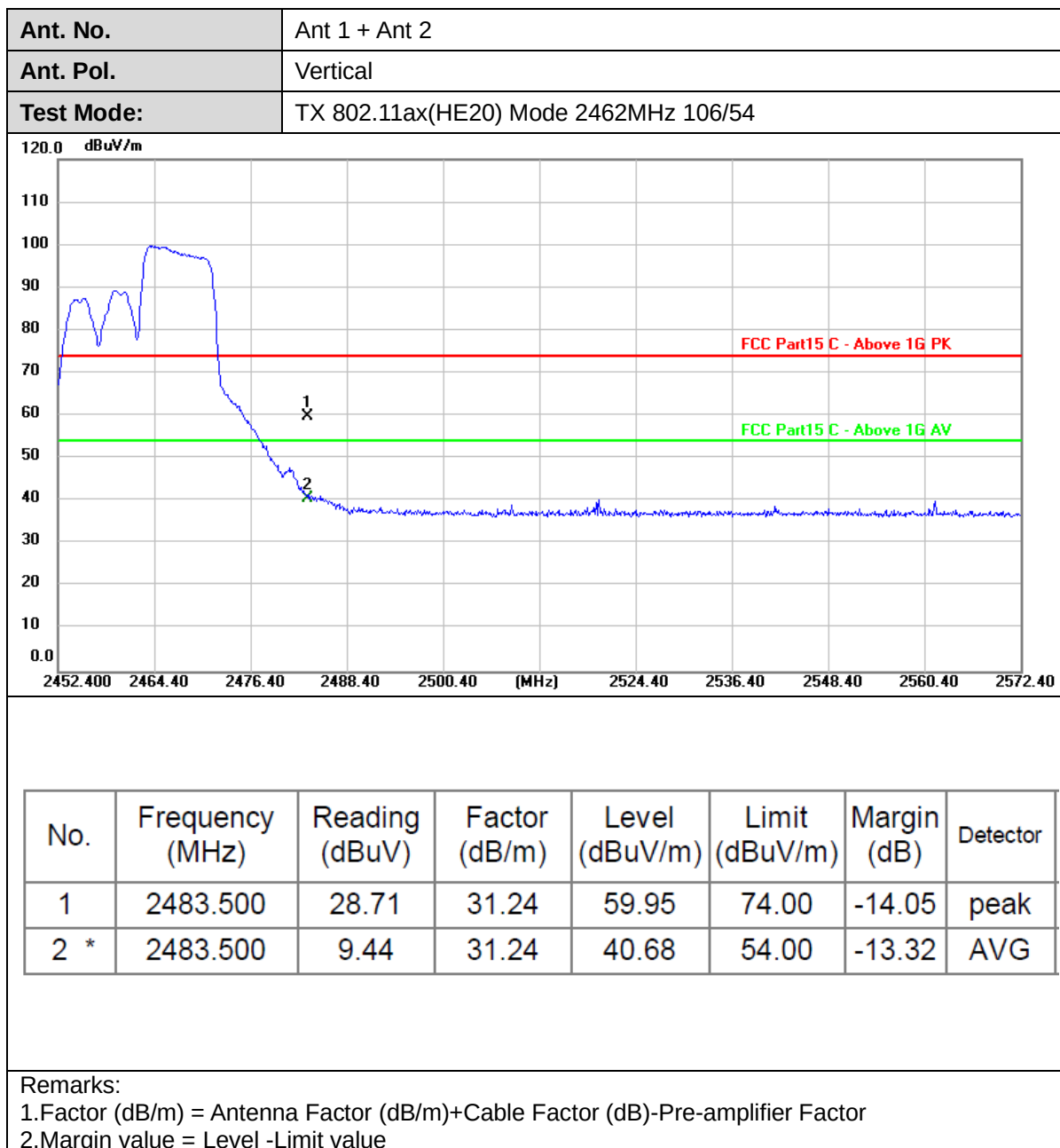
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 2462MHz 106/54

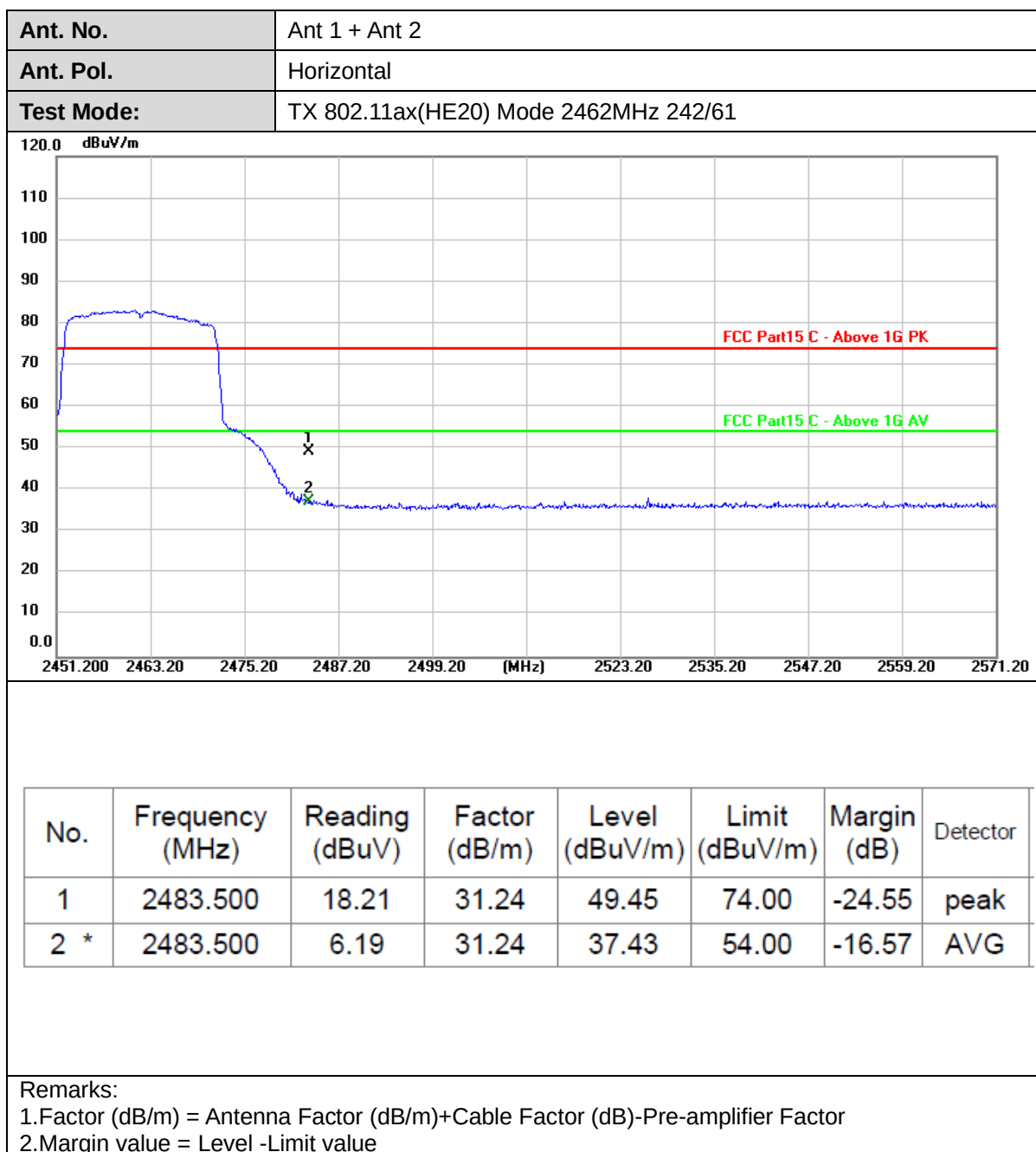


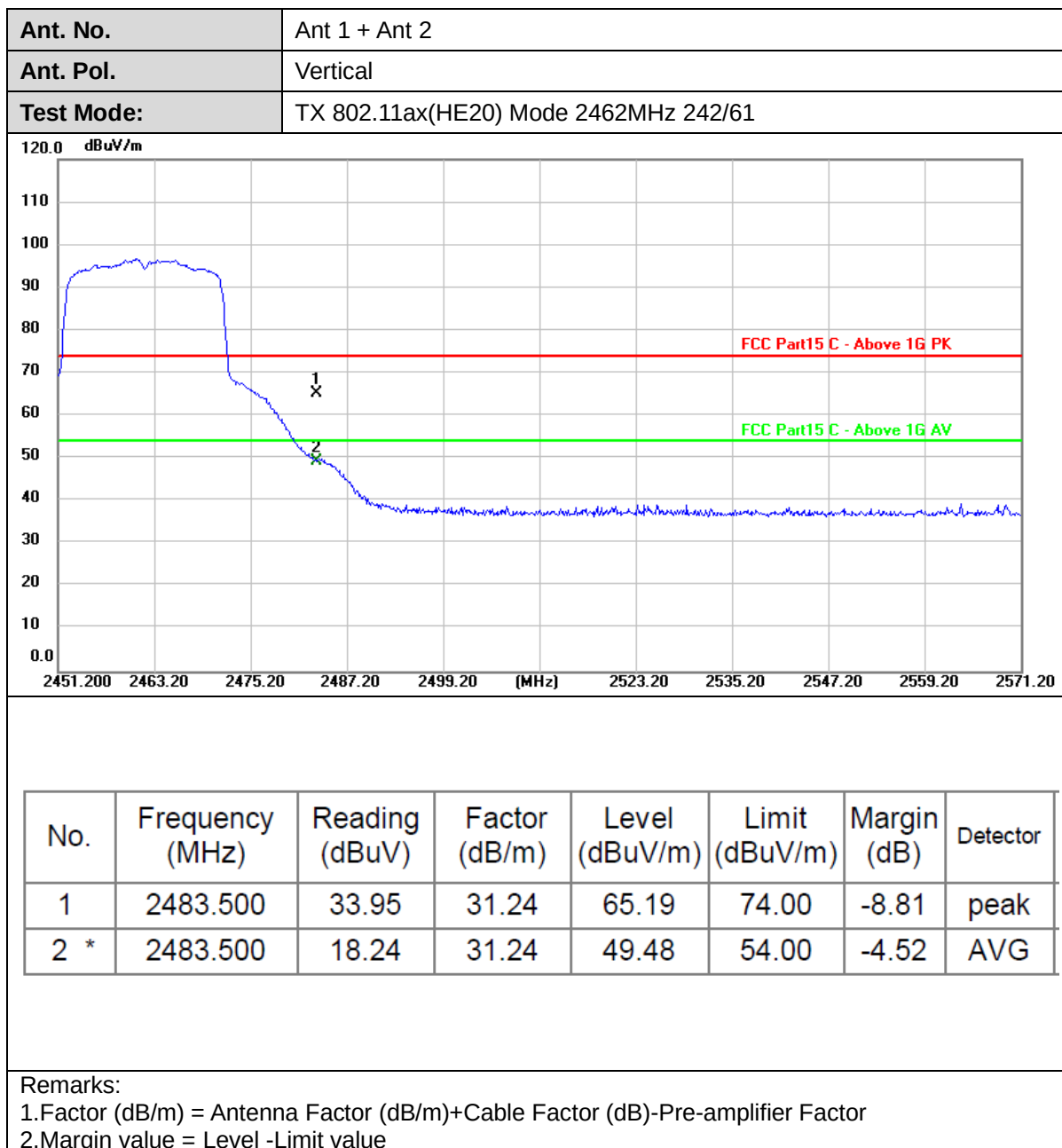
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	14.89	31.24	46.13	74.00	-27.87	peak
2 *	2483.500	4.62	31.24	35.86	54.00	-18.14	AVG

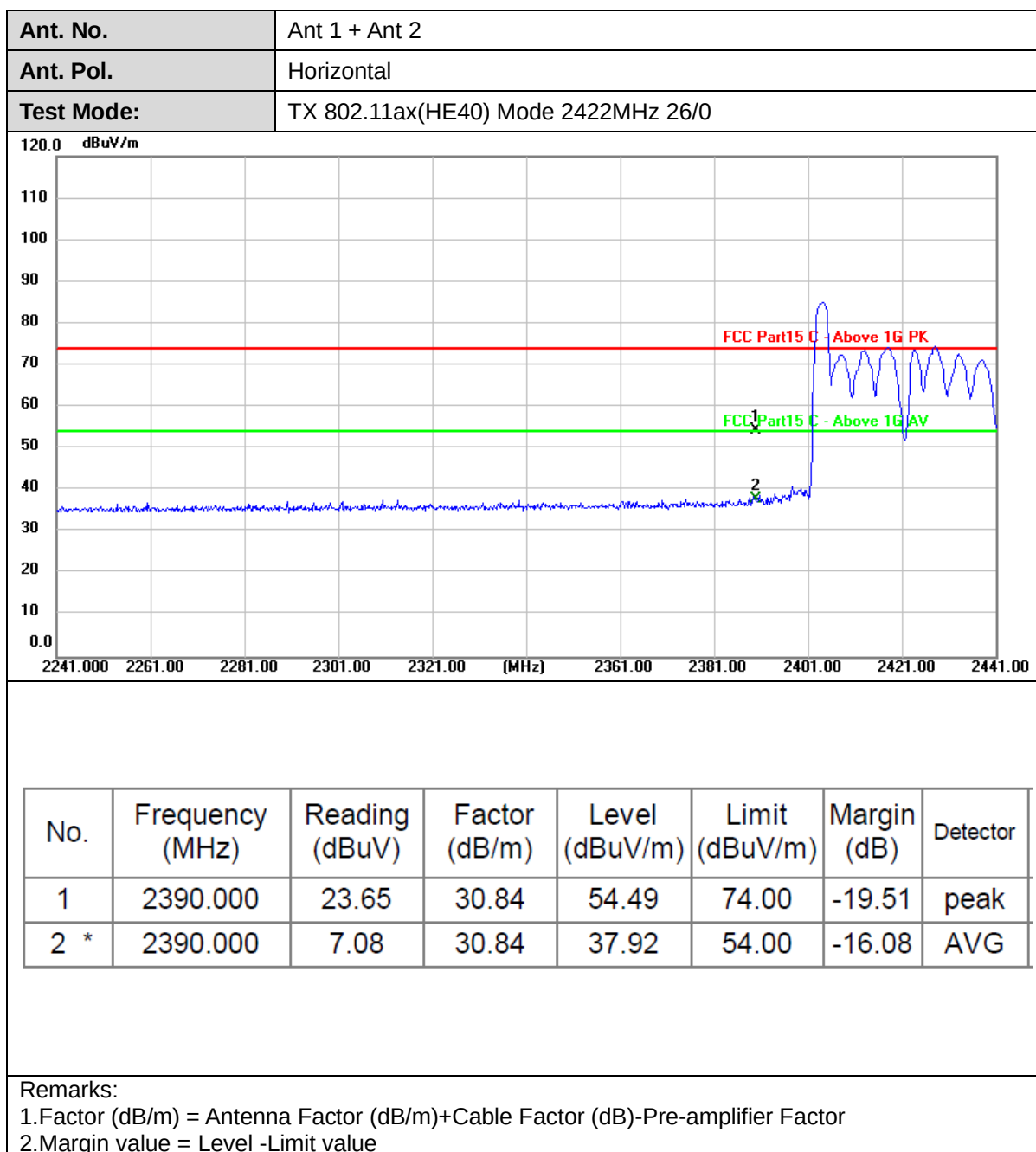
Remarks:

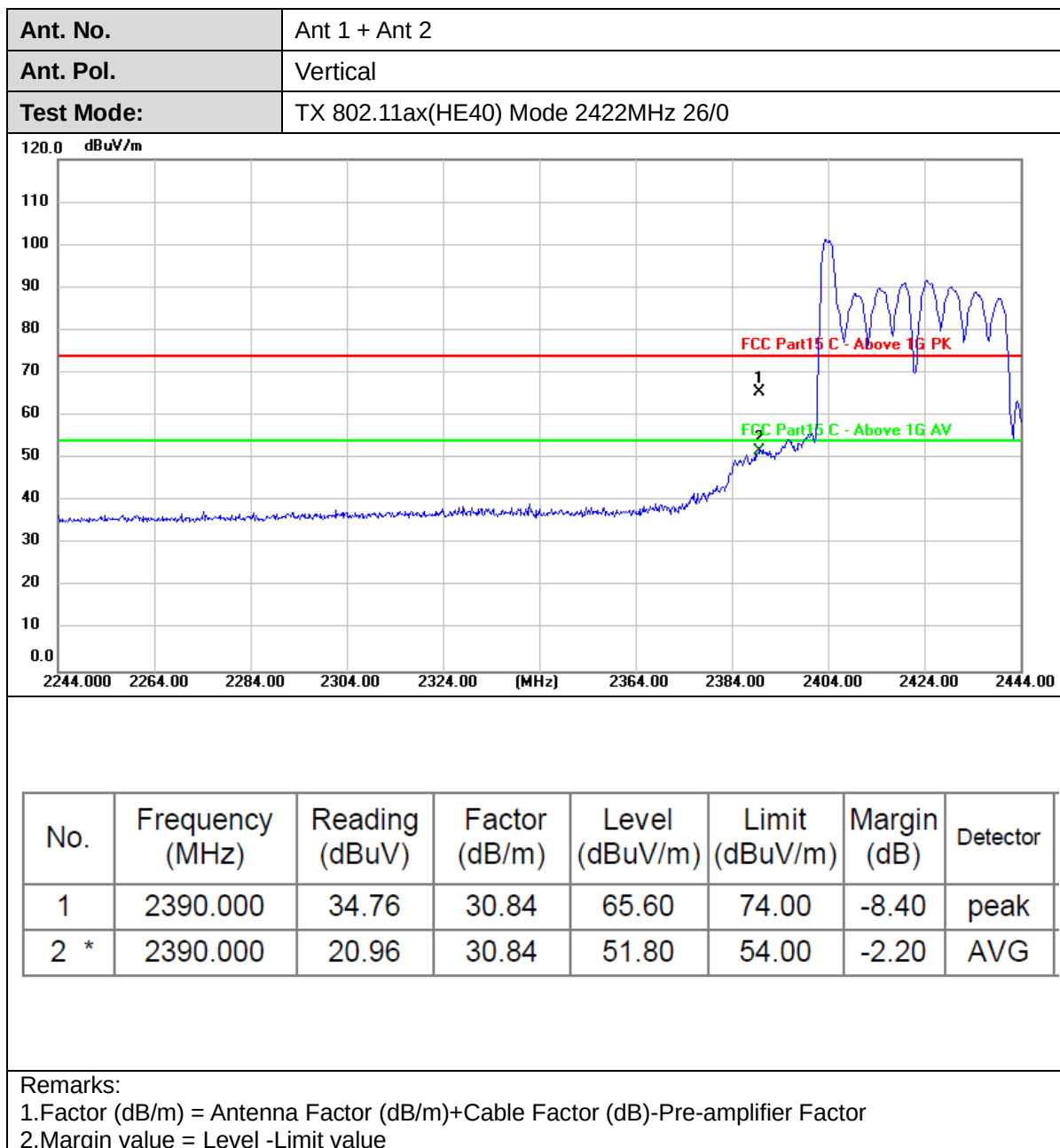
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value

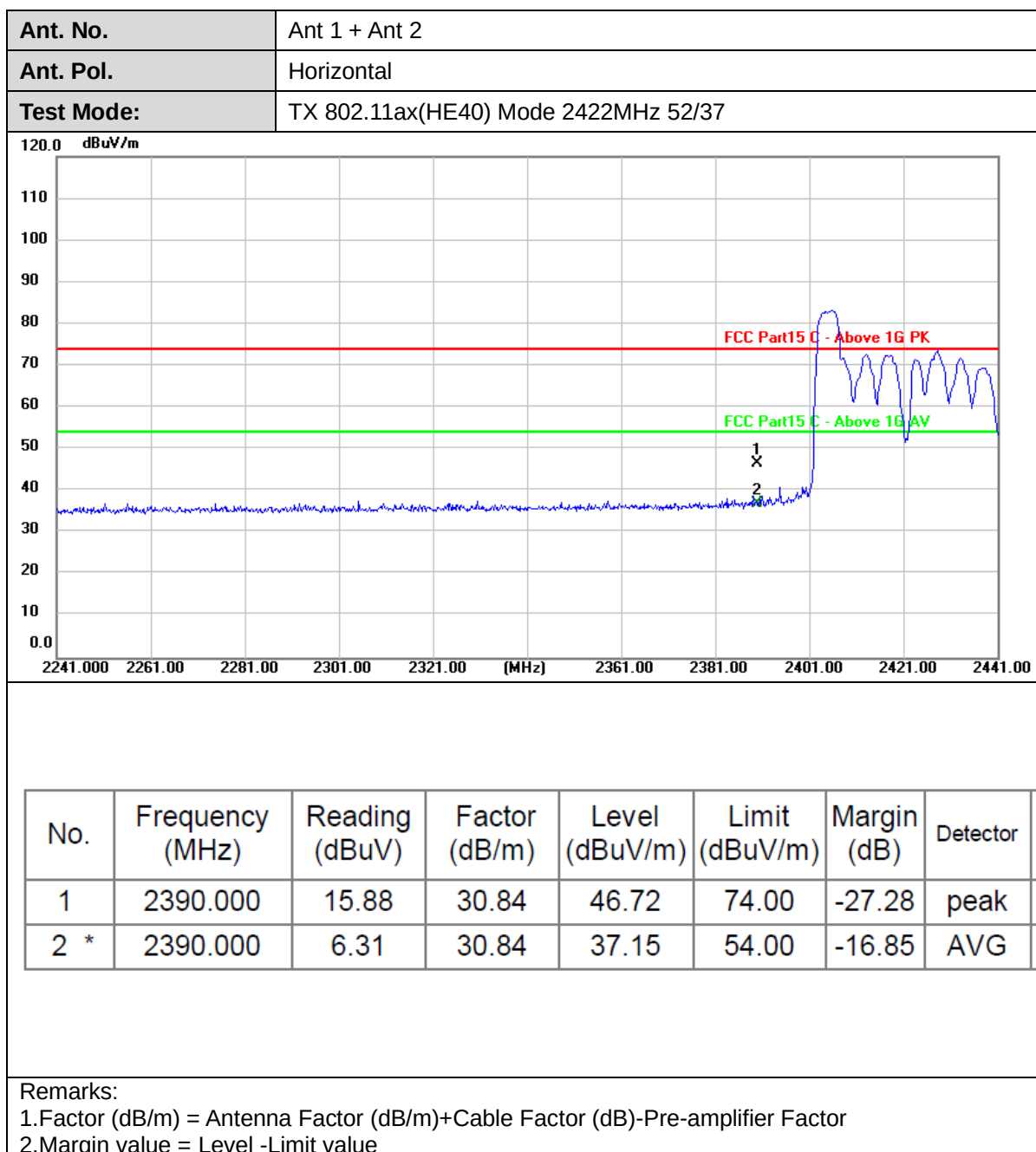


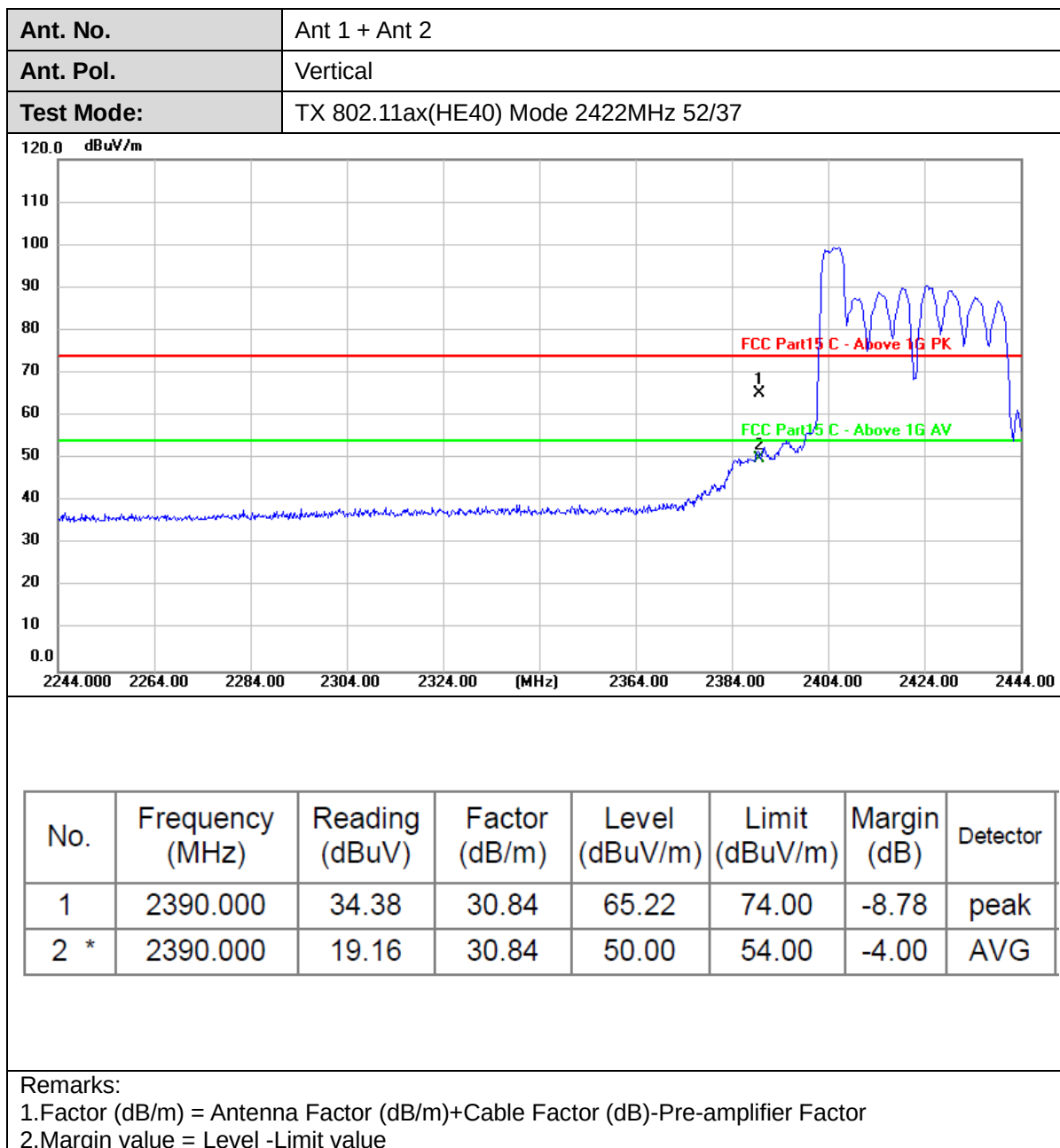


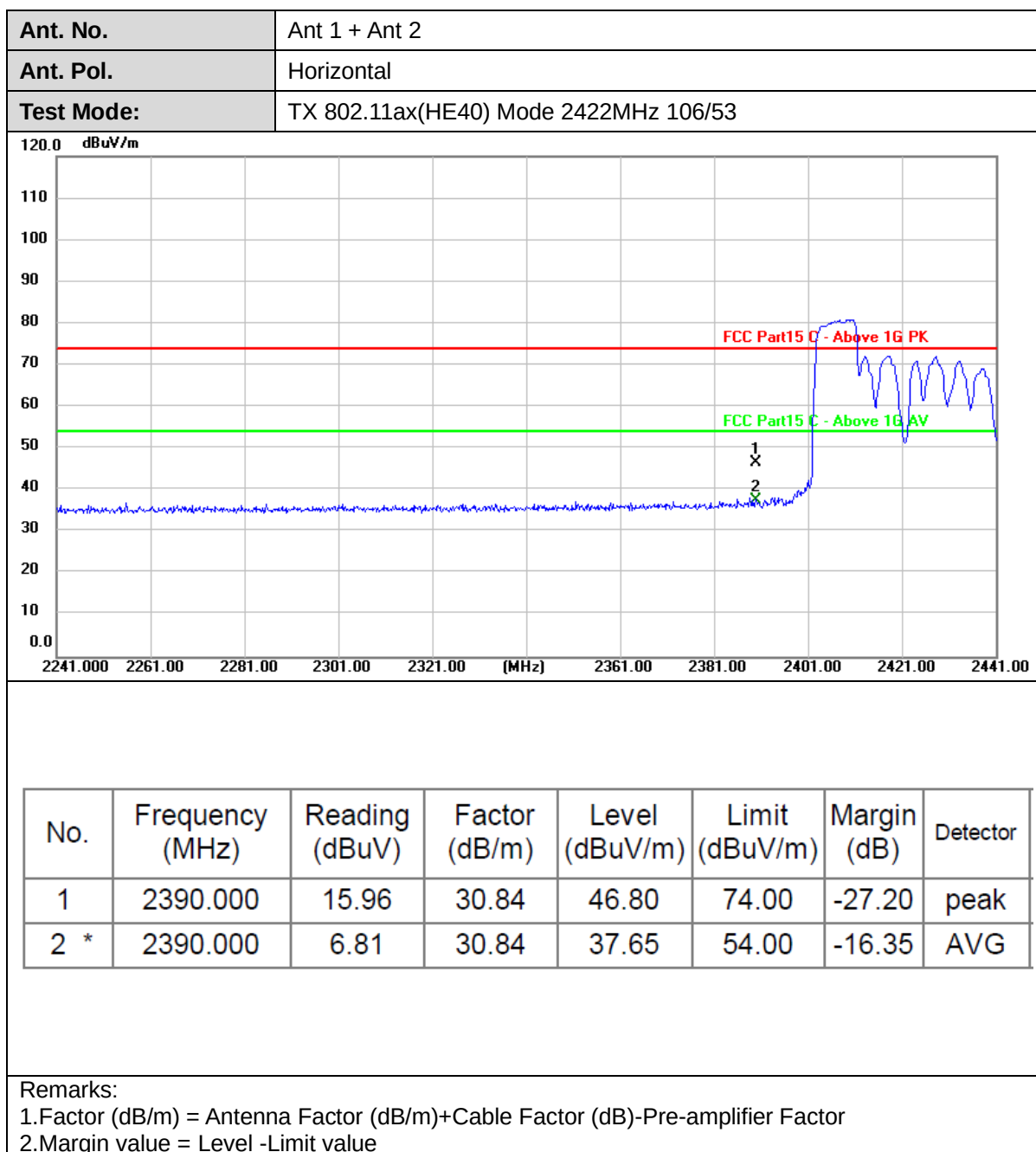


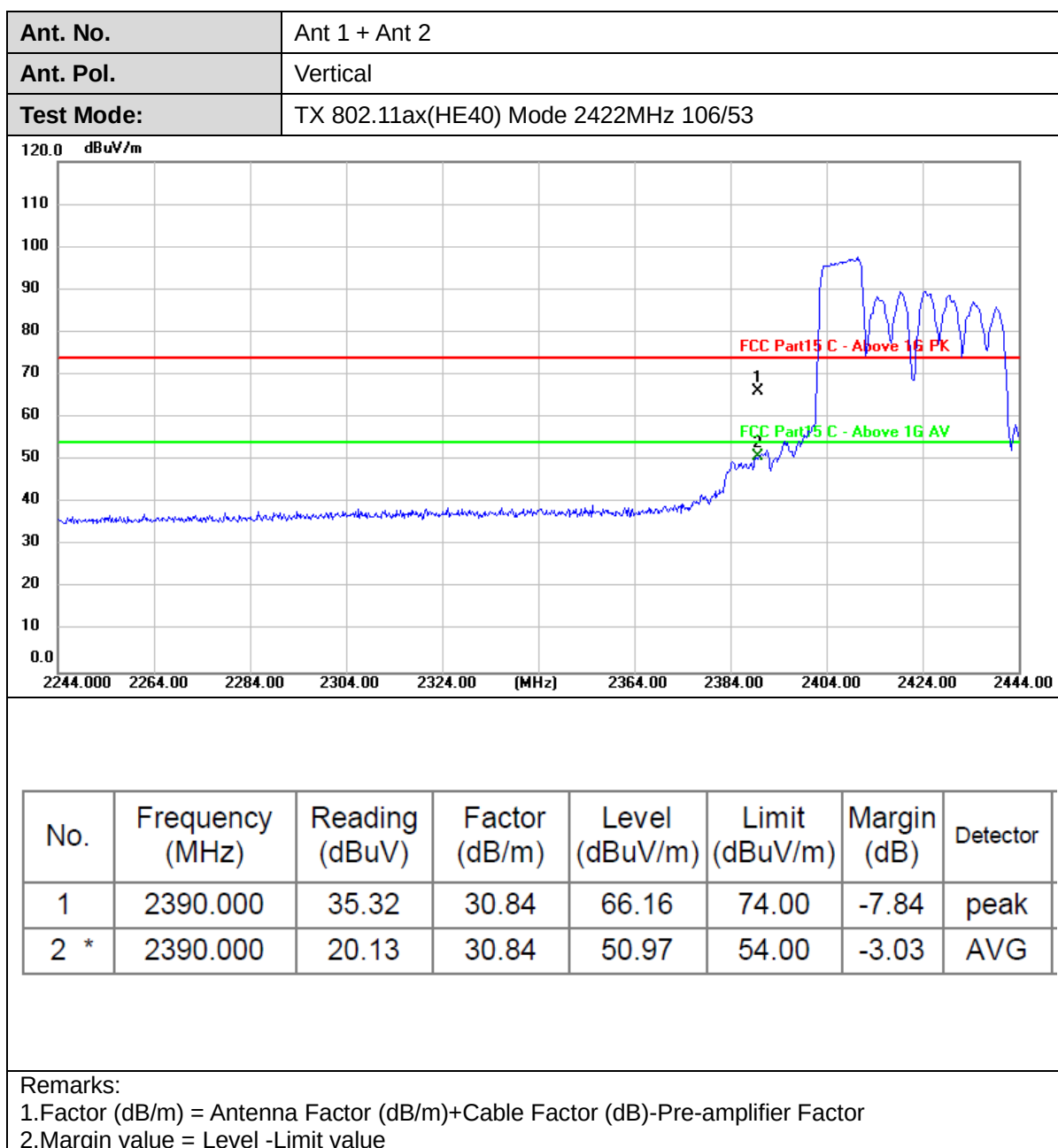






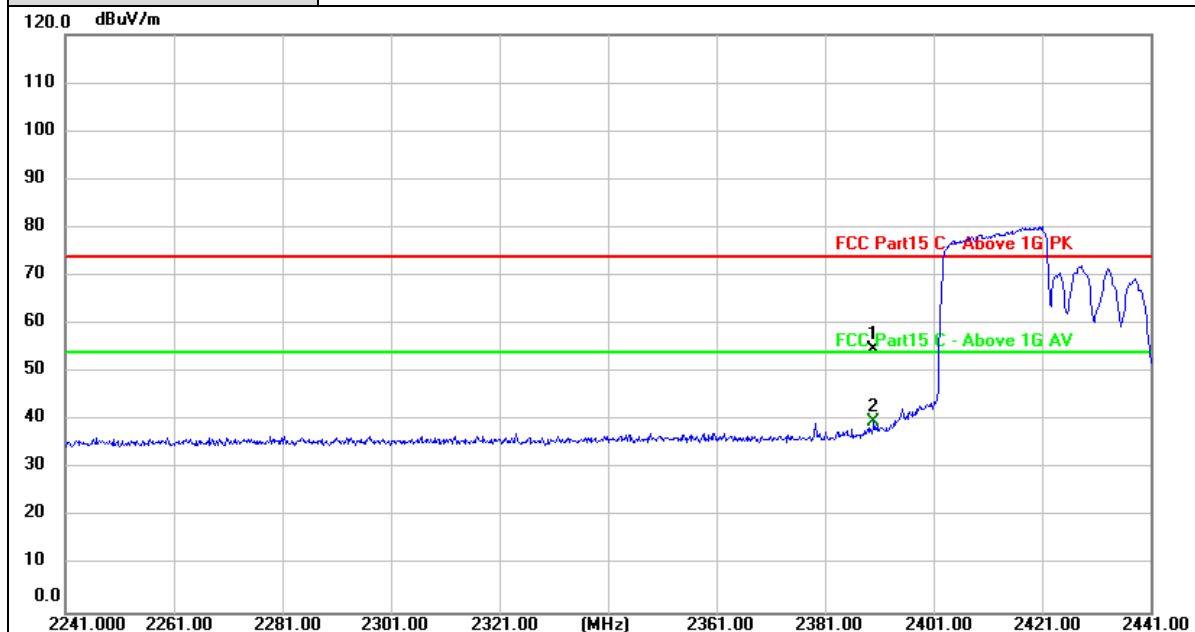








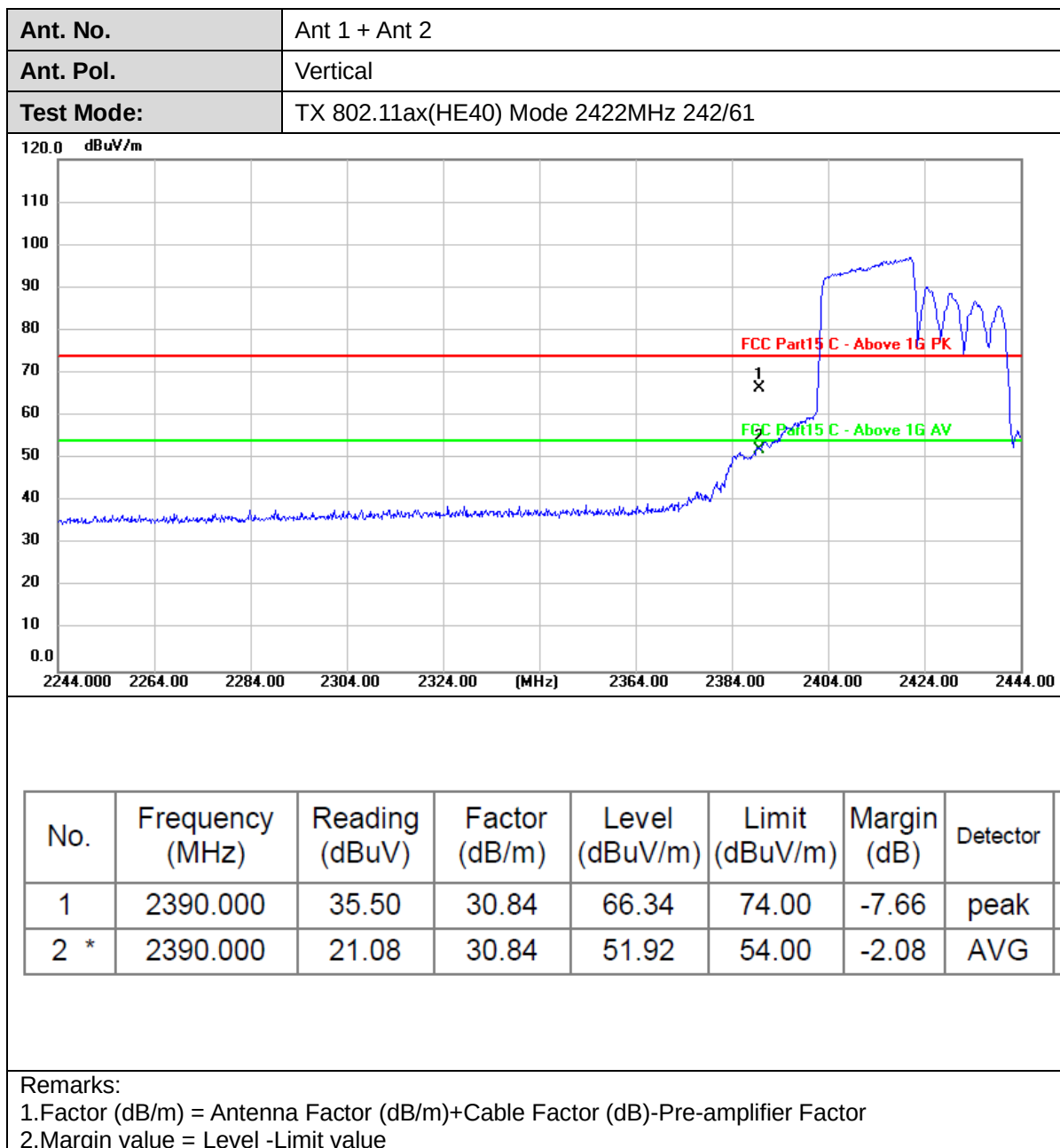
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE40) Mode 2422MHz 242/61

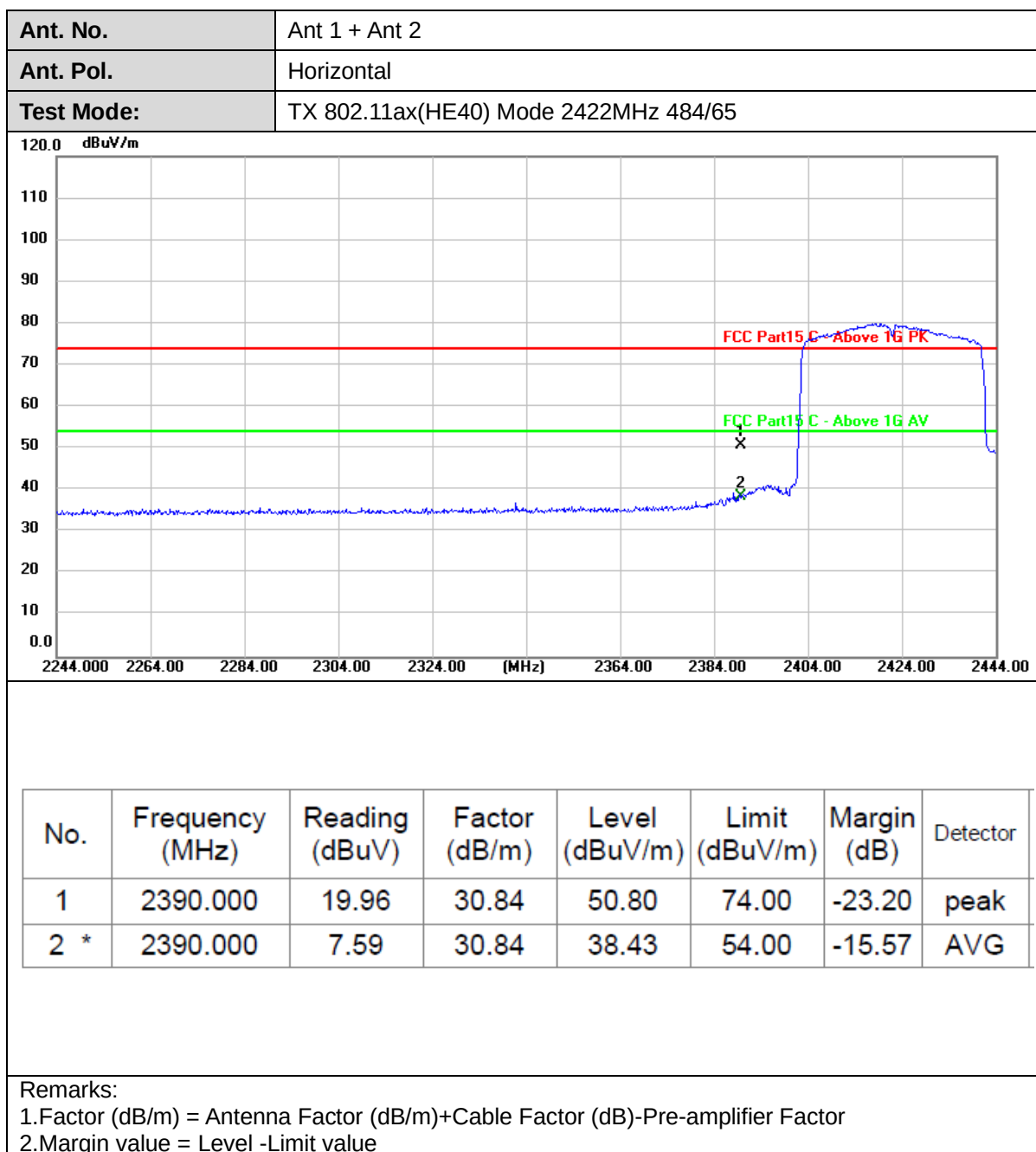


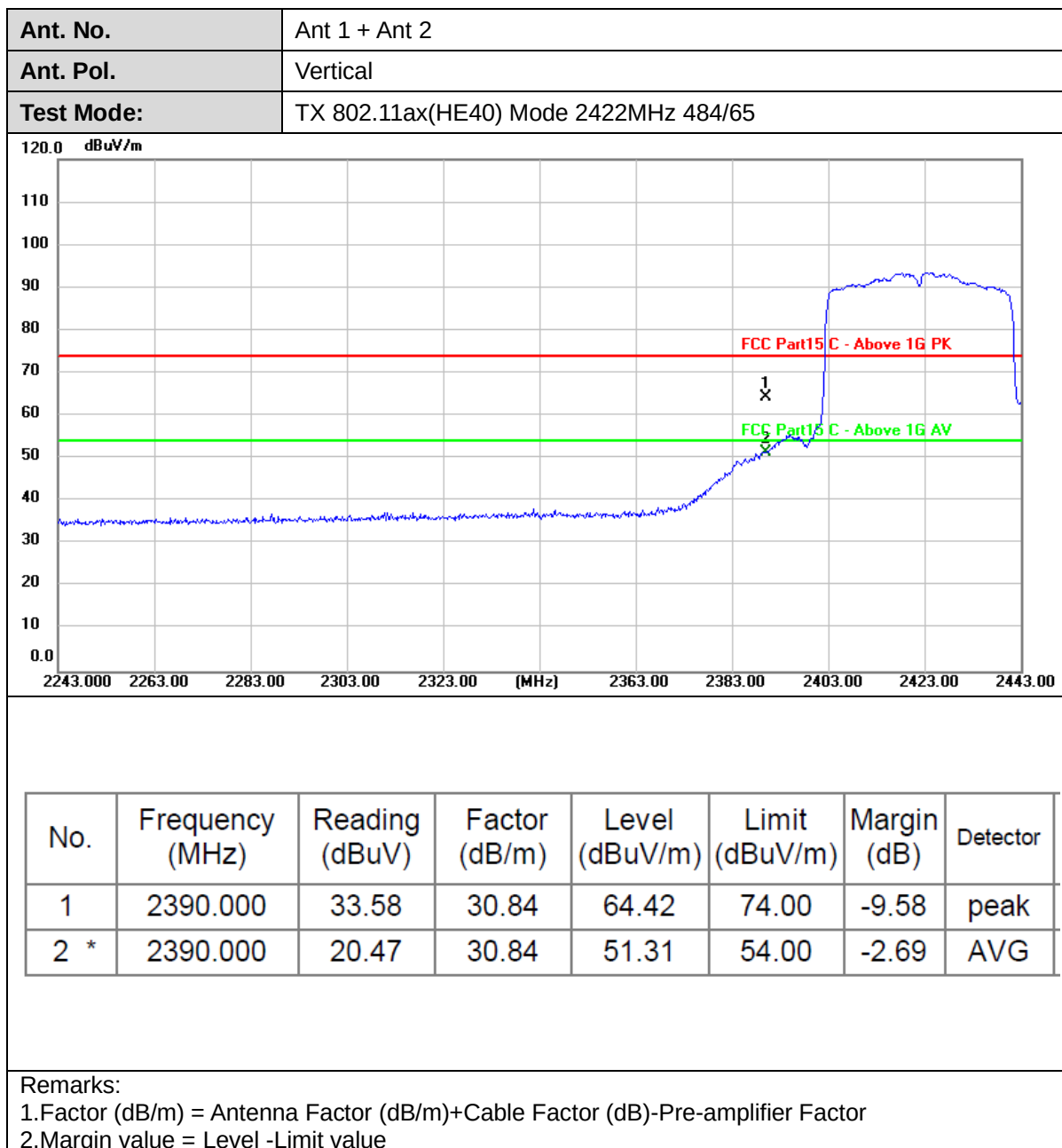
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	23.82	30.84	54.66	74.00	-19.34	peak
2 *	2390.000	8.88	30.84	39.72	54.00	-14.28	AVG

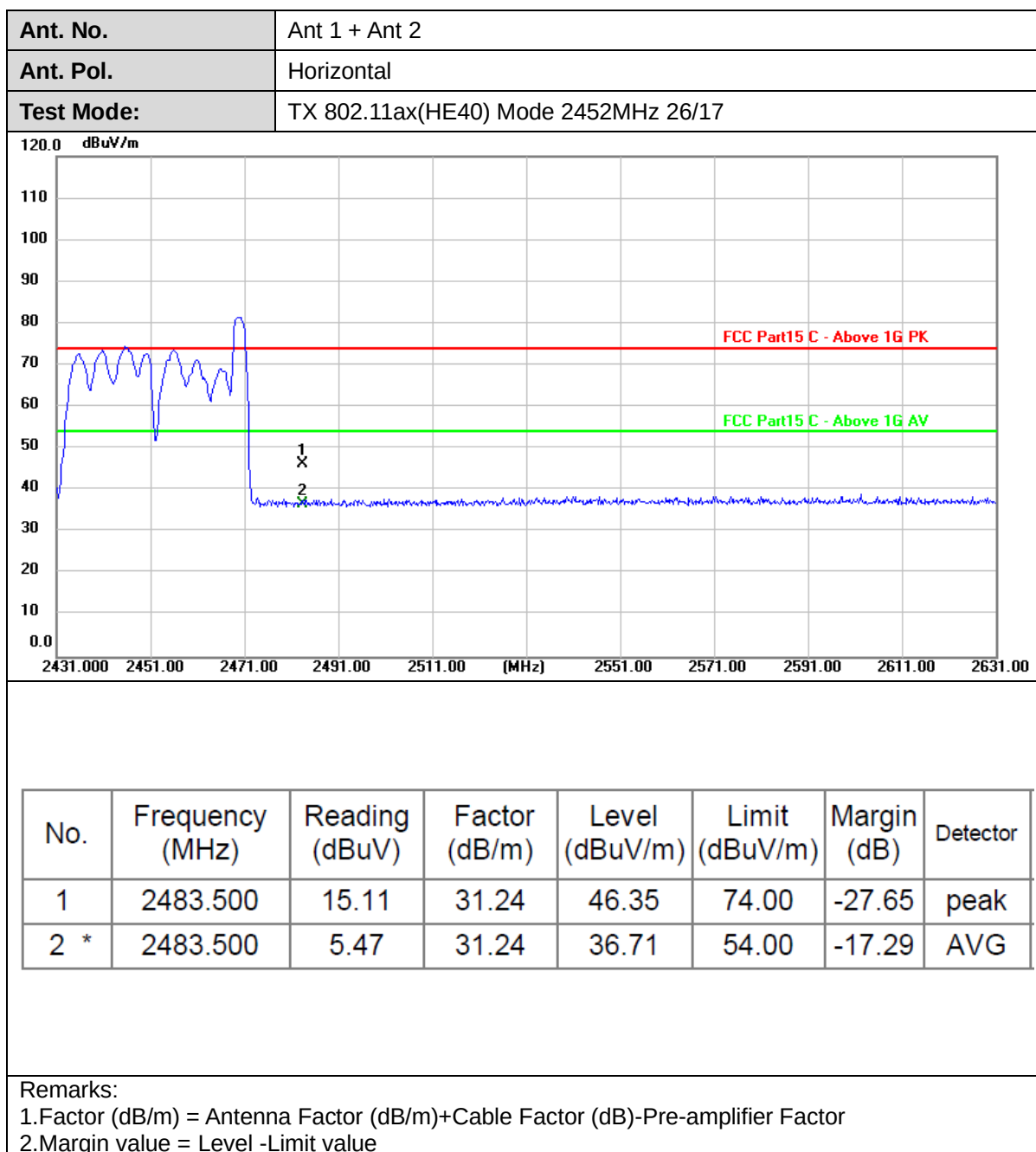
Remarks:

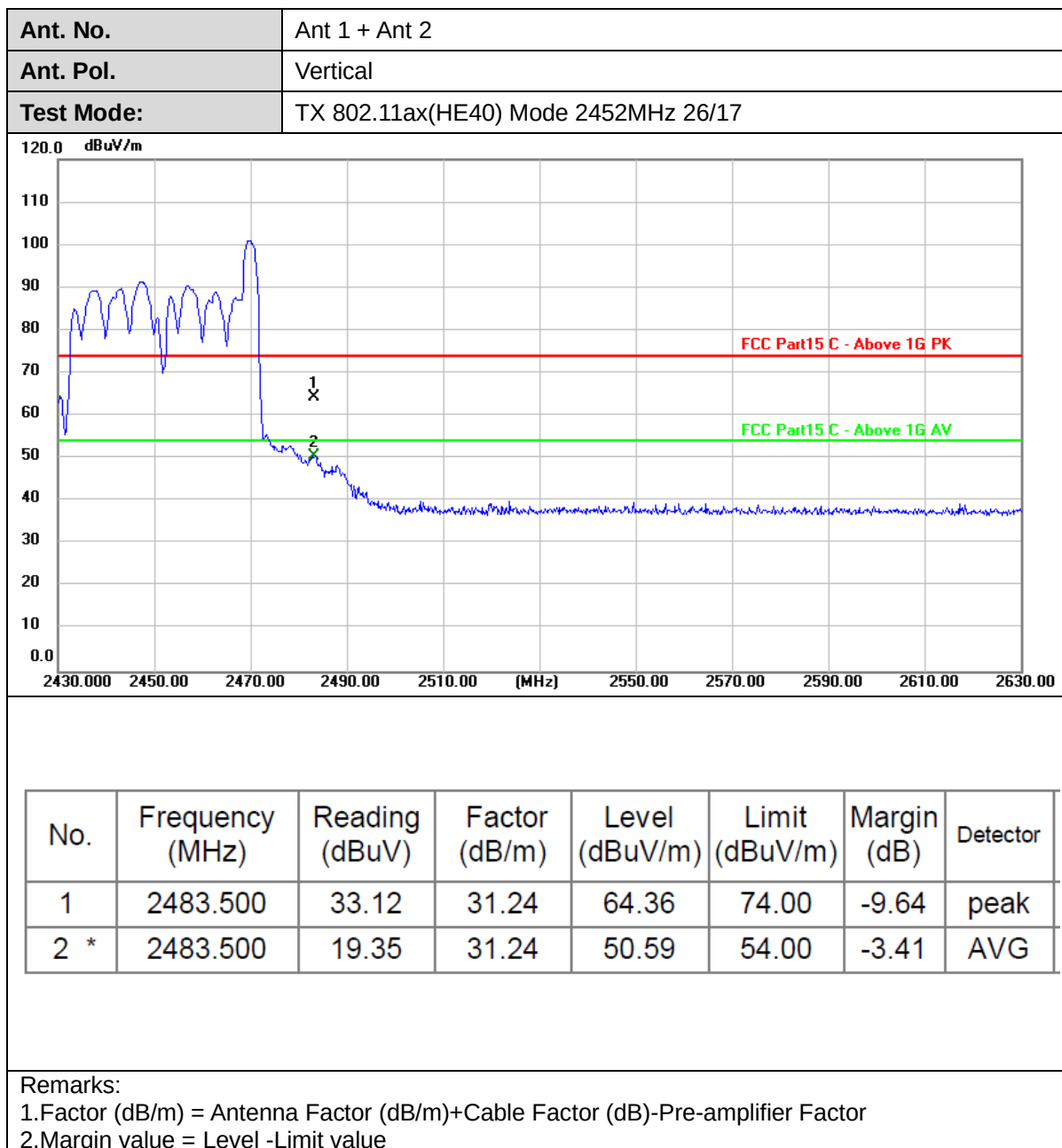
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value

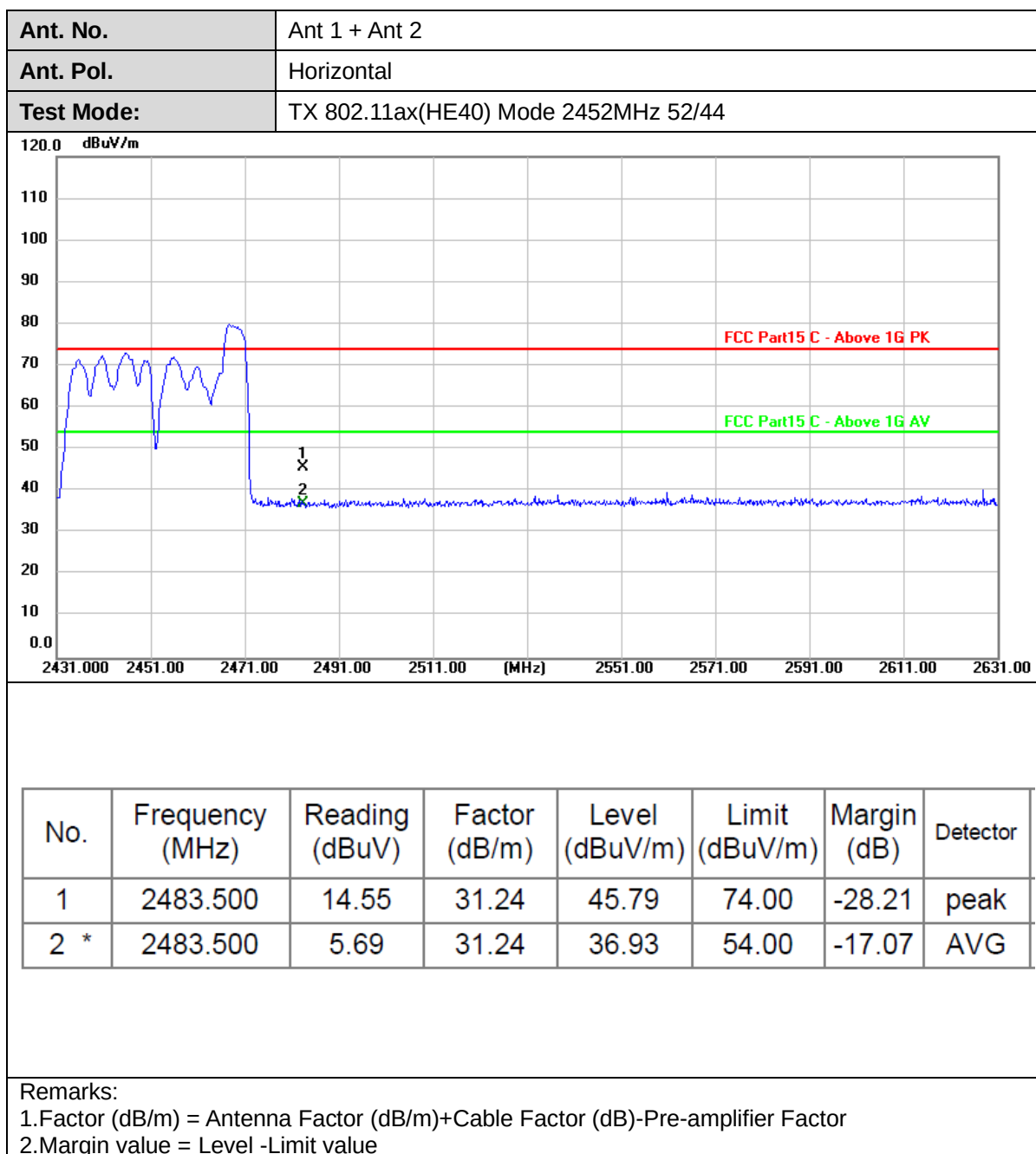


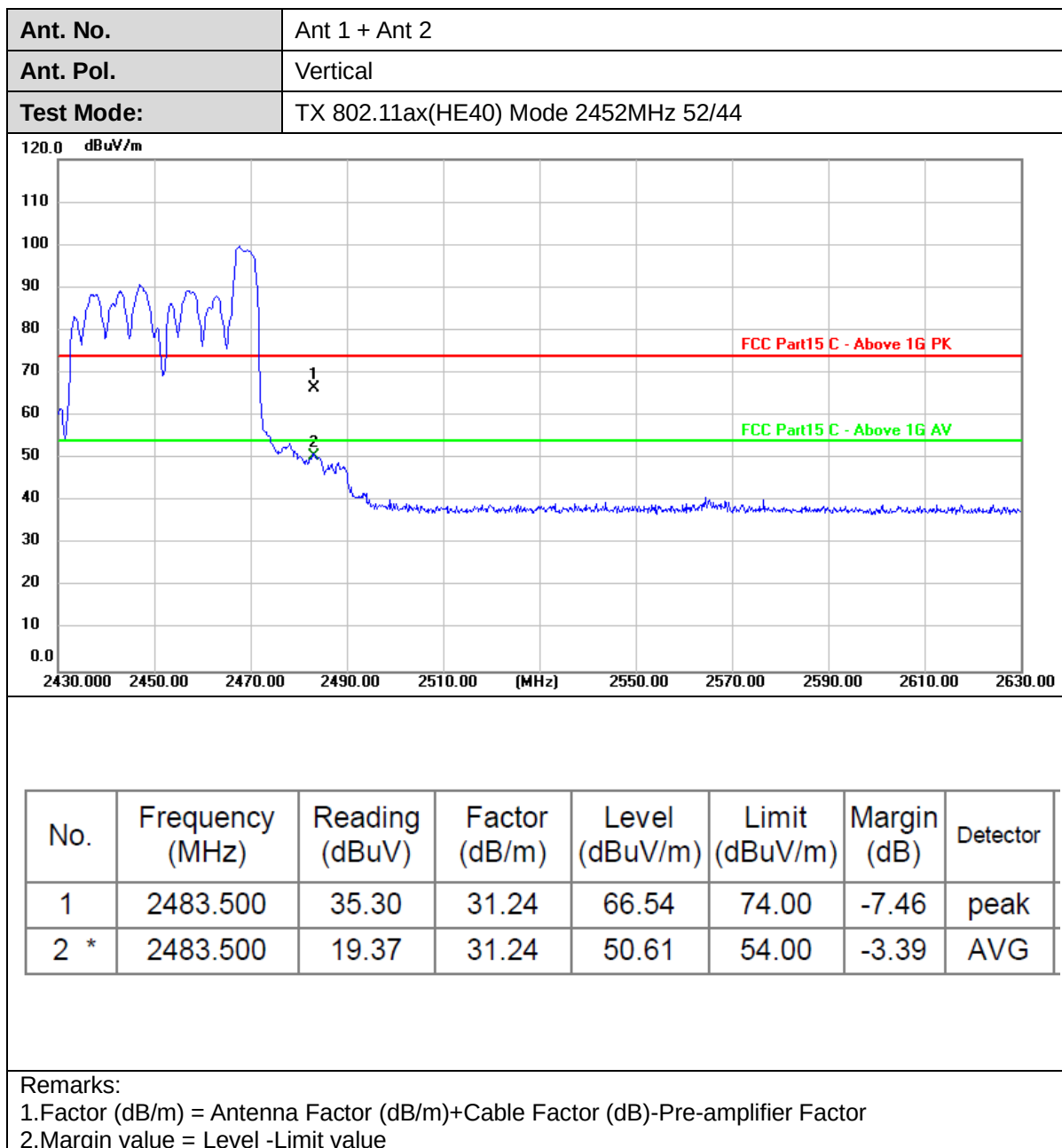


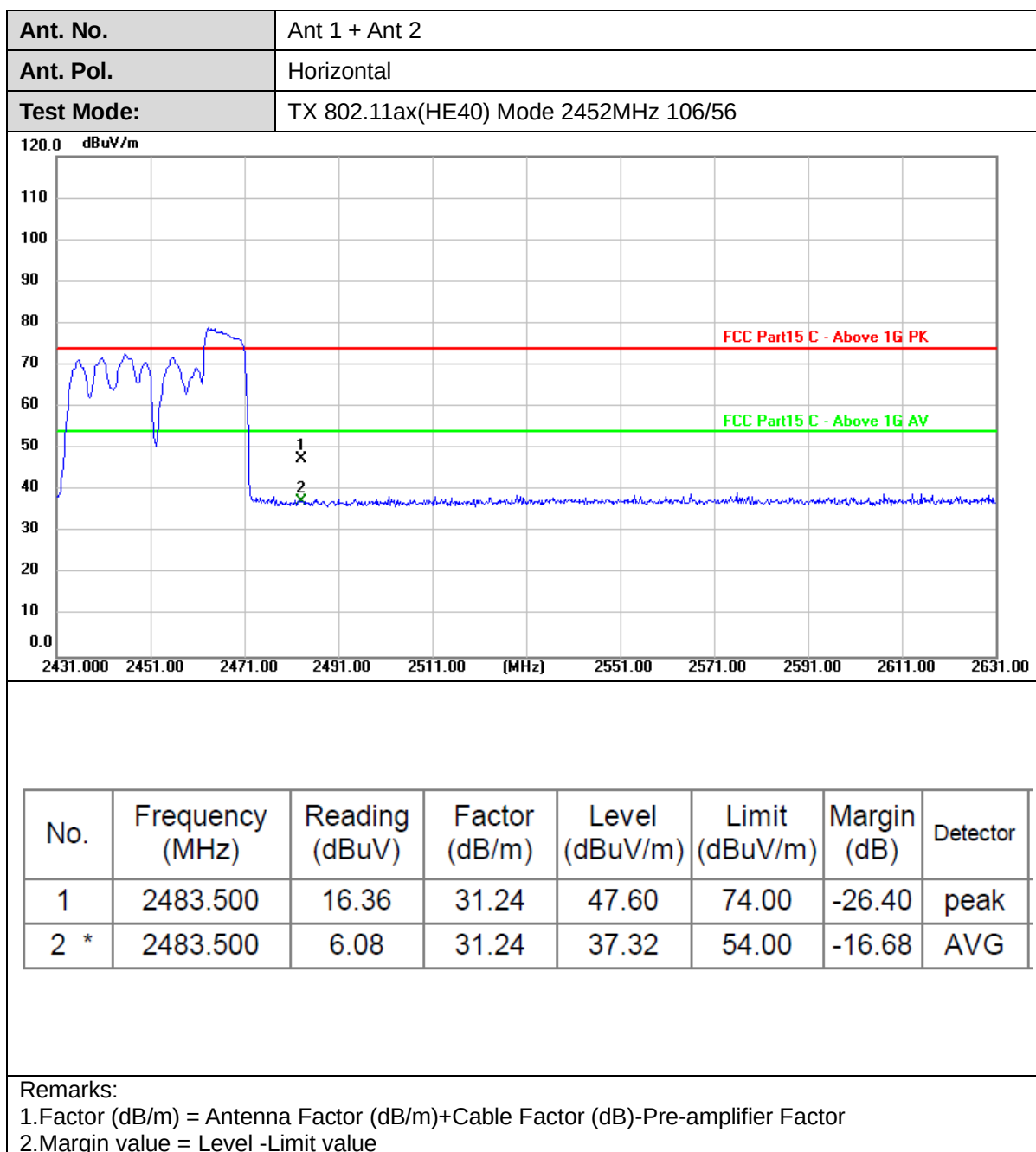


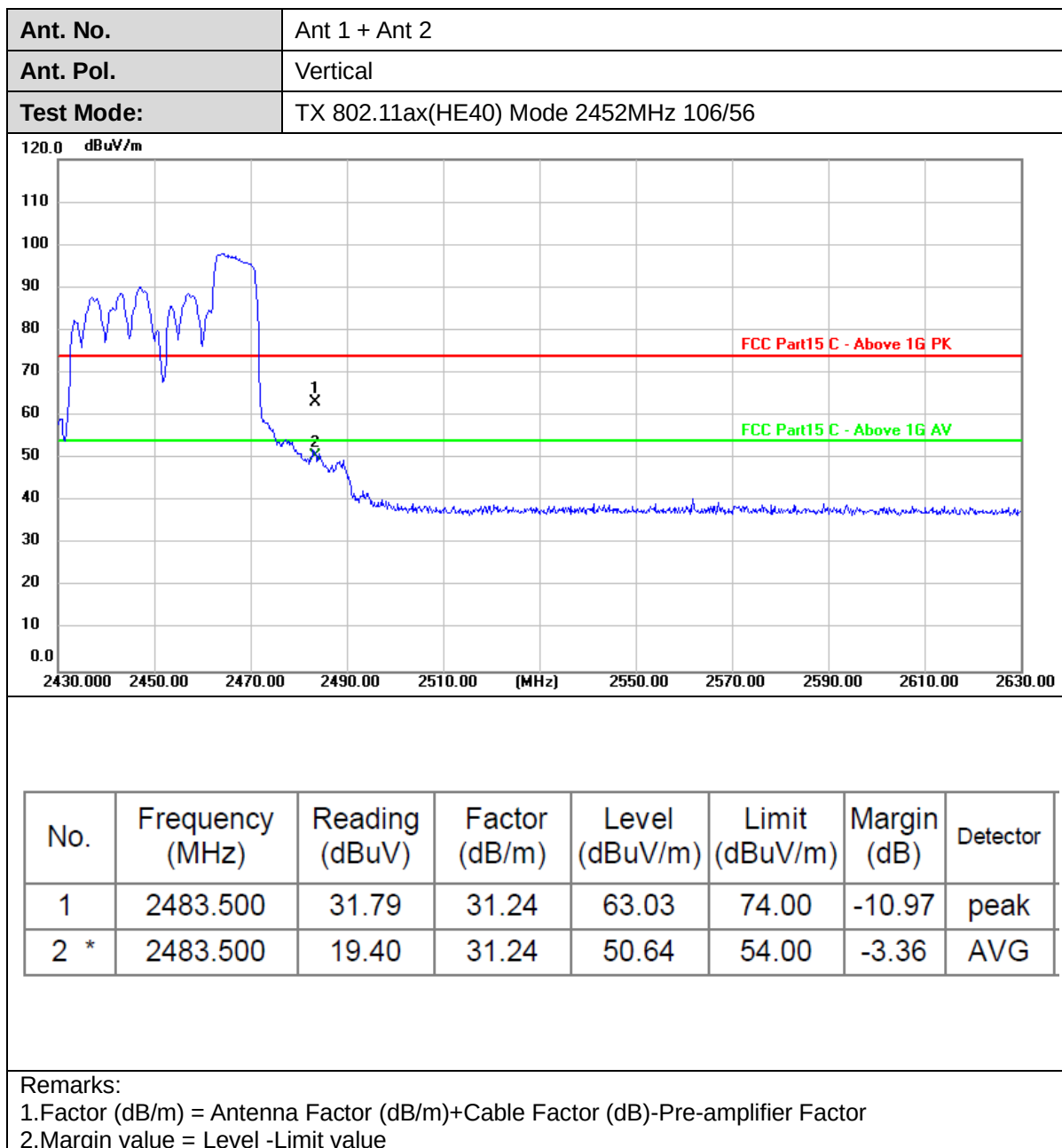


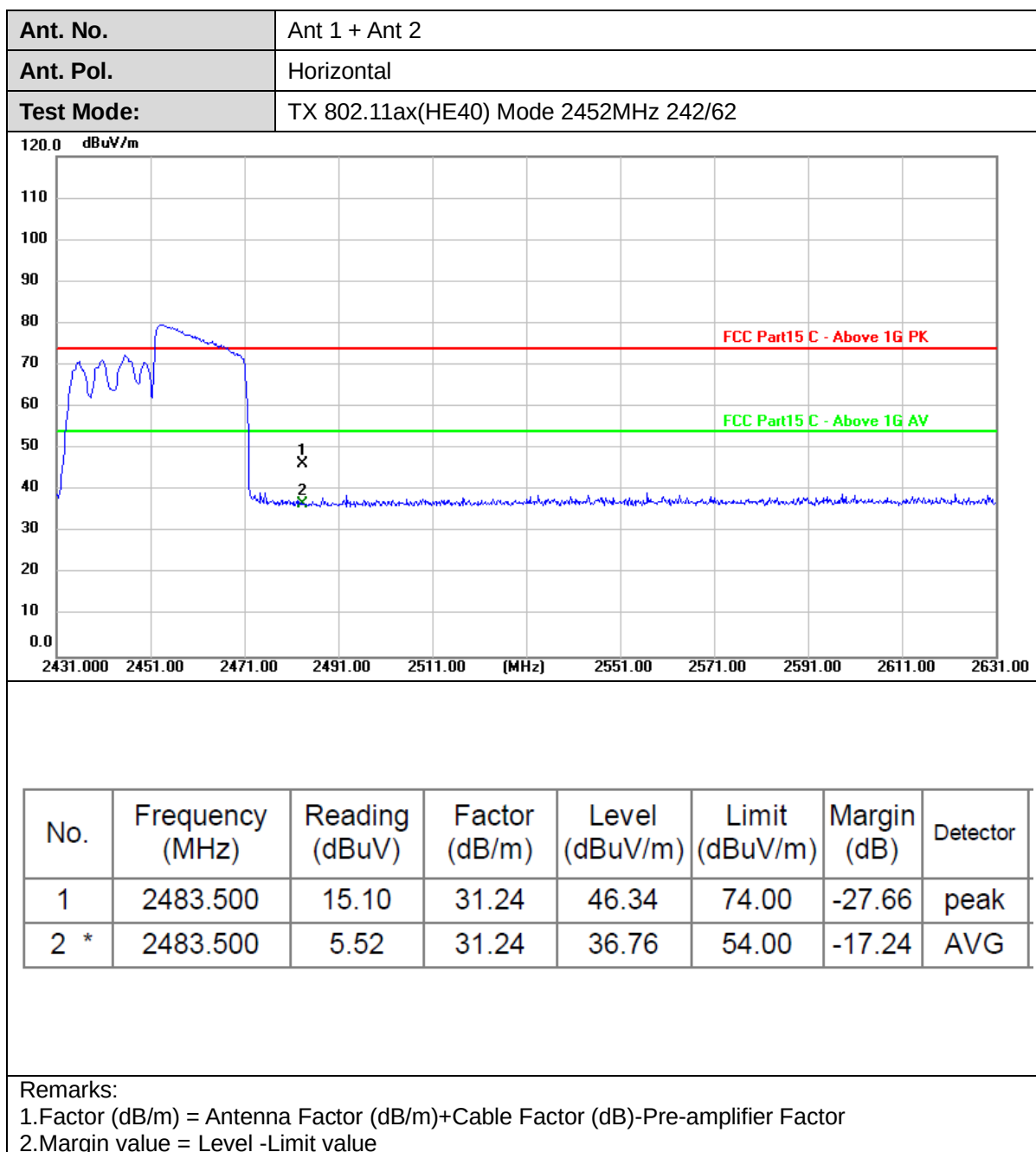


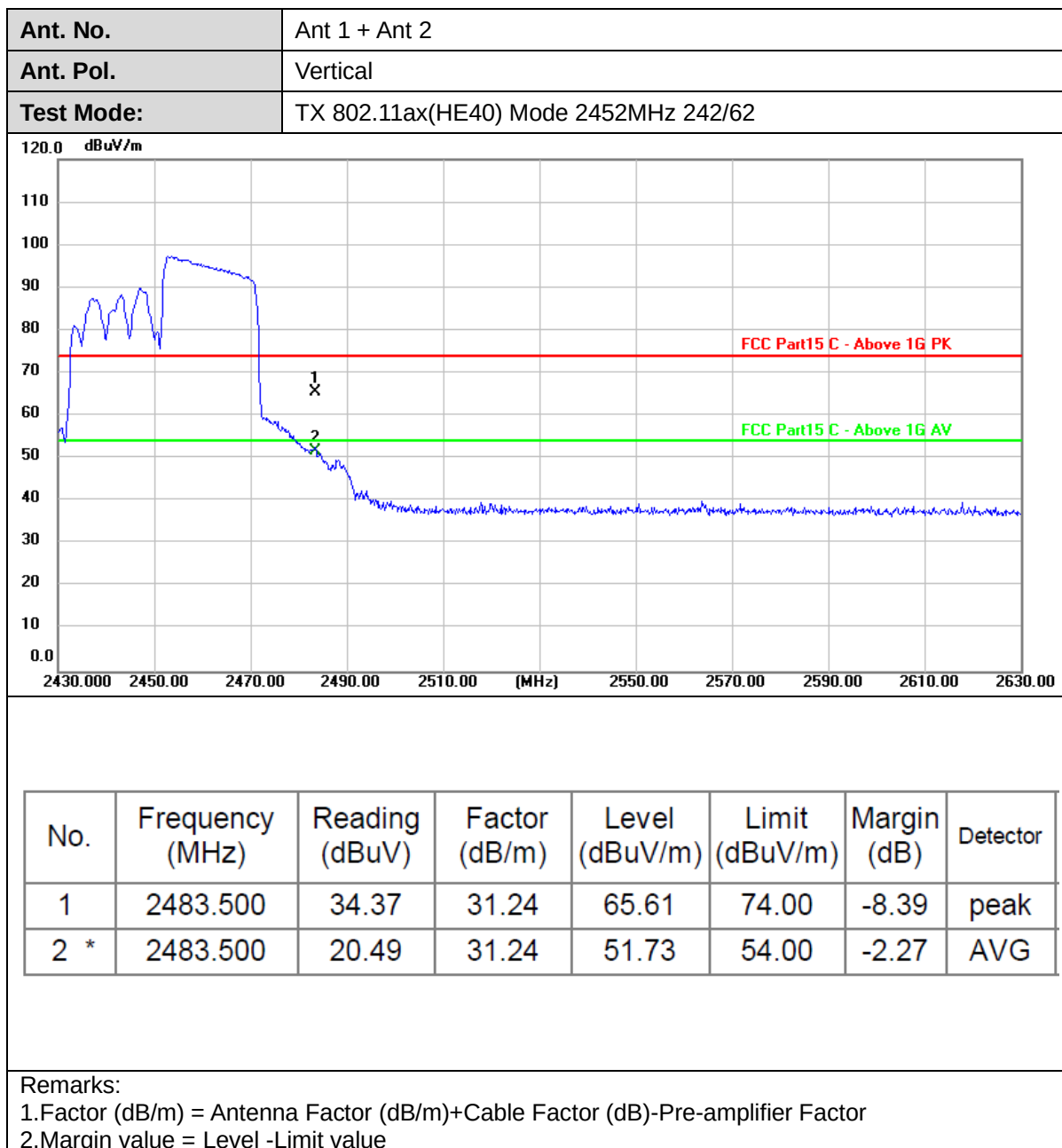


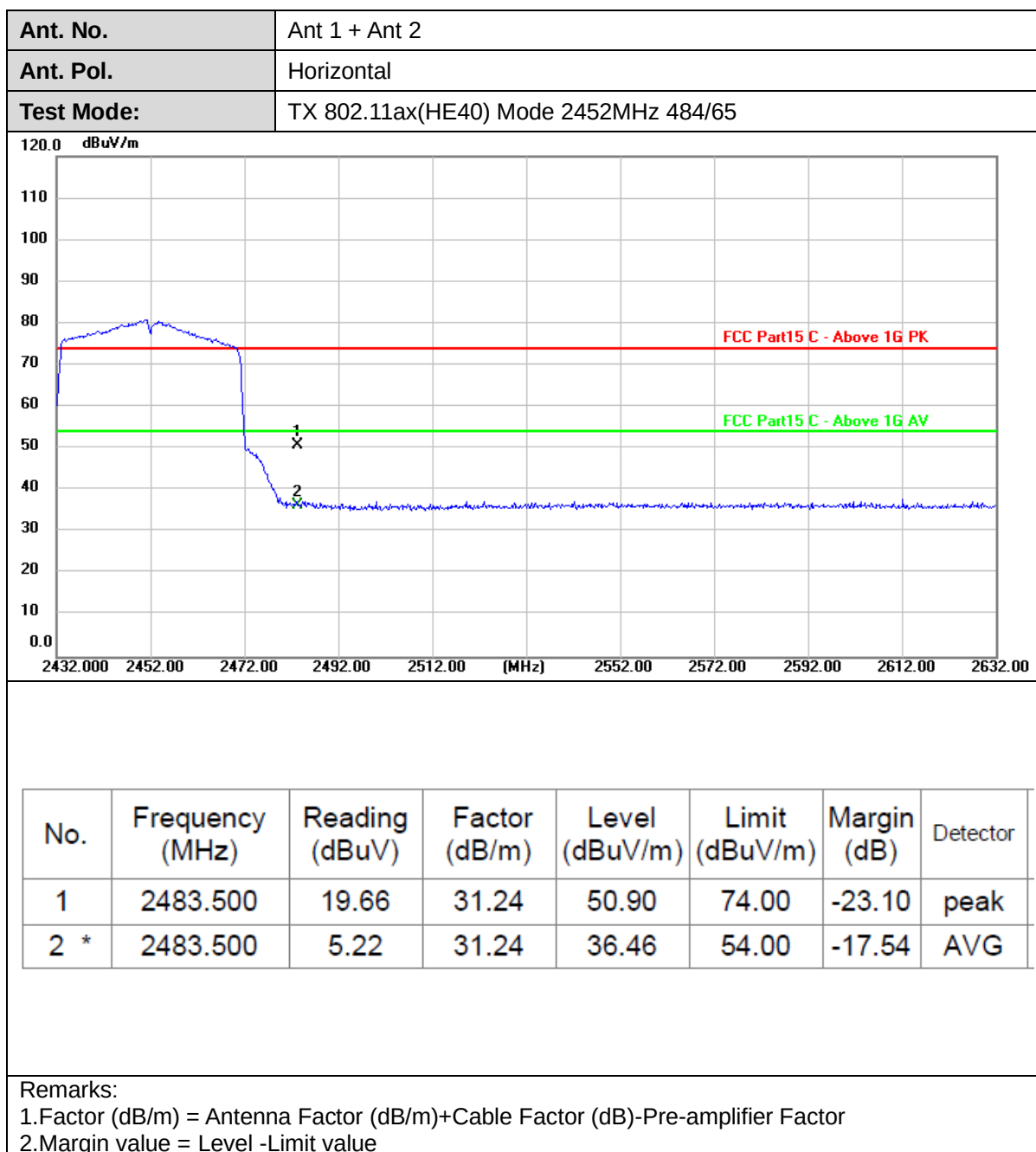


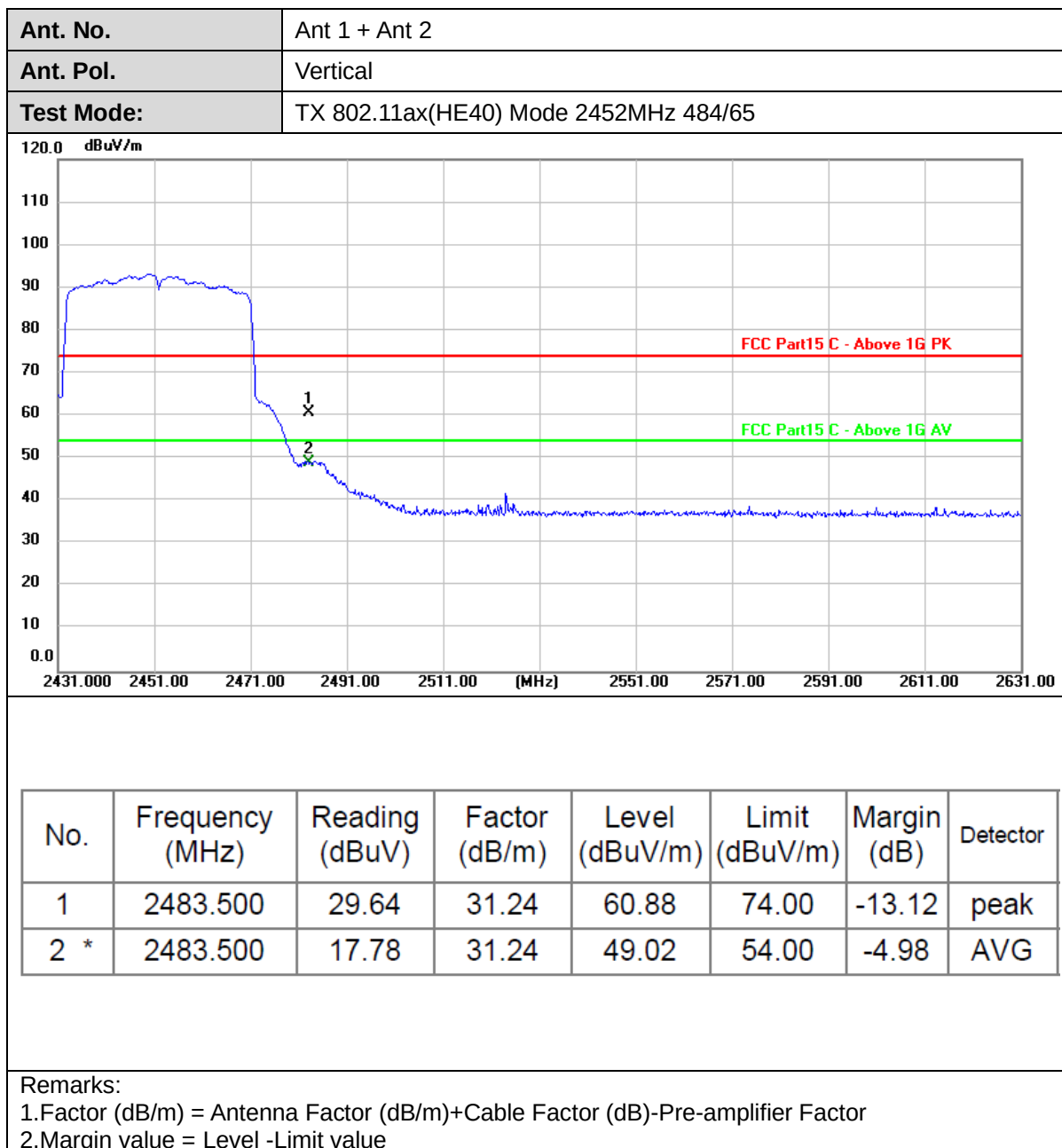














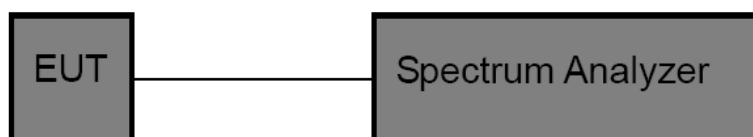
3.4. Band edge and Spurious Emissions (Conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d) / RSS-247 5.5

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

Test Configuration



Test Procedure

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

Test Mode

Please refer to the clause 2.4.

Test Results



Band edge measurements & Conducted Spurious Emission

Mode	Channel	RU & Index	Ant.	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result		
IEEE 802.11b	1	N/A	0	2400.00	-51.113	-24.61	PASS		
				2398.53	-37.509	-24.61	PASS		
				23526.1	-41.797	-24.61	PASS		
			1	2400.00	-47.804	-25.47	PASS		
				2397.10	-45.839	-25.47	PASS		
				24808.4	-41.988	-25.47	PASS		
	6		0	23575.4	-42.689	-24.88	PASS		
			1	21878.0	-41.715	-24.9	PASS		
			11	0	2483.50	-54.813	-24.61	PASS	
					24745.3	-42.305	-24.61	PASS	
				1	2483.50	-53.156	-25.83	PASS	
					23547.3	-41.956	-25.83	PASS	
IEEE 802.11g	1			0	2400.00	-30.518	-28.72	PASS	
					23465.6	-41.502	-28.72	PASS	
			1	2400.00	-41.581	-28.42	PASS		
				23691.5	-42.207	-28.42	PASS		
			0	24940.7	-41.661	-28.68	PASS		
				1	24790.2	-42.444	-27.6	PASS	
	11		0	2483.50	-42.469	-28.15	PASS		
				23523.0	-41.613	-28.15	PASS		
			1	2483.50	-51.158	-28.15	PASS		
				23594.8	-41.599	-28.15	PASS		
			IEEE 802.11n_20	1	0	2400.00	-32.438	-29.46	PASS
						2398.53	-30.808	-29.46	PASS
23634.1	-40.729					-29.46	PASS		
1	2400.00				-42.671	-29.67	PASS		
	24862.7				-41.888	-29.67	PASS		
	0				24696.6	-42.095	-29.12	PASS	
6	1			24874.5	-42.484	-29.15	PASS		
				0	2483.50	-41.649	-28.66	PASS	
	11			24946.9	-41.411	-28.66	PASS		
				1	2483.50	-52.908	-29.95	PASS	
	24875.1				-41.553	-29.95	PASS		
	IEEE 802.11n_40			3	0	2400.00	-47.274	-33.89	PASS
2395.80			-36.015			-33.89	PASS		
23748.3			-41.161			-33.89	PASS		
1			2400.00		-41.472	-34.04	PASS		
			22745.8		-42.309	-34.04	PASS		
			0		23531.1	-42.235	-34.05	PASS	
6			1	22774.5	-40.620	-33.53	PASS		
				0	2483.50	-44.777	-33.72	PASS	
			9	24920.1	-42.082	-33.72	PASS		
				1	2483.50	-52.791	-33.48	PASS	
			24874.5		-41.659	-33.48	PASS		