



Shenzhen Huaxin Information Technology Service Co., Ltd

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TEST REPORT

Report No.: HX260806R003
FCC ID.....: 2BFLD-CDW20800
Applicant.....: CHINA DRAGON (HUNAN) TECHNOLOGY CO., LTD.
Address.....: NO.13, ZIYUAN ROAD, XUESHI STREET, YUELU DISTRICT,
CHANGSHA CITY, HUNAN PROVINCE, China
Manufacturer.....: CHINA DRAGON (HUNAN) TECHNOLOGY CO., LTD.
Address.....: NO.13, ZIYUAN ROAD, XUESHI STREET, YUELU DISTRICT,
CHANGSHA CITY, HUNAN PROVINCE, China
Product Name.....: Dual-band WiFi6 11ax+BT5.4 Module
Trade Mark.....: /
Model/Type reference.....: CDW-20800D4-10
Listed Model(s): /
Standard.....: FCC Rules Part 15.247
Date of receipt of test sample...: Jul. 02, 2026
Date of testing.....: Jul. 02, 2026 ~ Jul. 24, 2026
Date of issue.....: Jul. 25, 2026
Result.....: PASS

Compiled by:

(Printed name + signature)

Terry Su

Terry Su



Approved by:

(Printed name + signature)

Amy Zhai

Amy zhai

Testing Laboratory Name.....: Shenzhen Huaxin Information Technology Service Co., Ltd

Address.....: 101, R & D Building, No.3 guansheng 4th Road, Luhua Community,
Guanhu Street, Longhua District, Shenzhen, Guangdong, China

This test report shall not be copied in any form except with the written approval of our laboratory. The customer shall not claim that the product has been endorsed by Shenzhen Huaxin Information Technology Service Co., Ltd. based on this report, The test results in the report are only applicable to the samples tested. Without the signatures of the compiled engineer and the approver, the test report will be invalid. Any objection shall be submitted to Shenzhen Huaxin Information Technology Service Co., Ltd. within 15 days from the date of receiving the report. After this period, it will not be considered. The test report only corresponds to the test sample.



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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.

[RSS-247 Issue 4](#): Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices.

[ANSI C63.10-2020+COR. 1-2023+C63.10A-2024+ERRATA TO C63.10A-2024](#): American National Standard for Testing Unlicensed Wireless Devices.

[RSS-Gen Issue 5](#): General Requirements for Compliance of Radio Apparatus.

1.2. Report version

Revised No.	Date of issue	Description
01	Jul. 25, 2026	Original



1.3. Test Description

FCC Part 15 Subpart C (15.247) / RSS-247 Issue 4				
Test Item	Standard Section		Result	Test Engineer
	FCC	IC		
Antenna Requirement	15.203&15.247(b)(4)	RSS-Gen 6.8	Pass	Sain Liao
Conducted Emission	15.207	RSS-Gen 8.8	Pass	Ann Lu
Radiated Emissions Restricted Band and Radiated Spurious Emissions	15.205&15.209&15.247(d)	RSS-247 6.6 & RSS-Gen 8.10	Pass	Sain Liao
Conducted Band Edge and Spurious Emissions	15.247(d)	RSS-Gen 8.9 & RSS-Gen 8.10	Pass	Sain Liao
6dB Bandwidth	15.247(a)(2)	RSS-247 6.3.1 (a)	Pass	Sain Liao
Occupied Bandwidth	/	RSS-Gen 6.7	Pass	Sain Liao
Conducted Max Output Power	15.247(b)(3)	RSS-247 6.3.2	Pass	Sain Liao
Power Spectral Density	15.247(e)	RSS-247 6.3.1 (b)	Pass	Sain Liao
Transmitter Radiated Spurious	15.209&15.247(d)	RSS-247 6.6 & RSS-Gen 8.10	Pass	Sain Liao

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



1.4. Test Facility

Shenzhen Huaxin Information Technology Service Co., Ltd

Add: 101, R & D Building, No.3 guansheng 4th Road, Luhuhu Community, Guanhu Street, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

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

A2LA-Lab Cert. No.: 6855.01

Shenzhen Huaxin Information Technology Service Co., Ltd 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 (Company Number: 31786, CAB Identifier: CN0147)

Shenzhen Huaxin Information Technology Service Co., Ltd EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 31786.

FCC (Registration No.: 932271, Designation Number CN1344)

Shenzhen Huaxin Information Technology Service Co., Ltd 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 NO.: 932271.

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 Shenzhen Huaxin Information Technology Service Co., Ltd 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 Shenzhen Huaxin Information Technology Service Co., Ltd



Test Items	Measurement Uncertainty	Notes
DTS Bandwidth	$\pm 3.70\%$	(1)
Maximum Conducted Output Power	$\pm 0.60\text{dB}$	(1)
Maximum Power Spectral Density Level	$\pm 0.46\text{dB}$	(1)
Band-edge Compliance	$\pm 4.40\text{dB}$	(1)
Conducted Spurious Emissions	$\pm 1.40\text{dB}$	(1)
Conducted Emissions 9kHz~30MHz	$\pm 3.10\text{dB}$	(1)
Radiated Emissions 9kHz~30MHz	$\pm 3.62\text{dB}$	(1)
Radiated Emissions 30~1000MHz	$\pm 4.63\text{dB}$	(1)
Radiated Emissions 1~18GHz	$\pm 4.40\text{dB}$	(1)
Radiated Emissions 18~40GHz	$\pm 4.40\text{dB}$	(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

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

Temperature:	21°C ~ 27°C
Relative Humidity:	40% ~ 60%
Air Pressure:	101kPa



2. GENERAL INFORMATION

2.1. Client Information

Applicant:	CHINA DRAGON (HUNAN) TECHNOLOGY CO., LTD.
Address:	NO.13, ZIYUAN ROAD, XUESHI STREET, YUELU DISTRICT, CHANGSHA CITY, HUNAN PROVINCE, China
Manufacturer:	CHINA DRAGON (HUNAN) TECHNOLOGY CO., LTD.
Address:	NO.13, ZIYUAN ROAD, XUESHI STREET, YUELU DISTRICT, CHANGSHA CITY, HUNAN PROVINCE, China

2.2. General Description of EUT

Product Name:	Dual-band WiFi6 11ax+BT5.4 Module
Trade Mark:	/
Model/Type reference:	CDW-20800D4-10
Listed Model(s):	/
Power supply:	3.3Vdc form PCB board
Hardware version:	V1.0
Software version:	2026_0123_5f7be68d
Samples No.:	YP260702-E001-1
WIFI Specification	
Modulation:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/ n/ ax: OFDM(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): 11 Channels 802.11n(HT40)/ ax(HE40): 7 Channels
Channel separation:	5MHz
Antenna type:	FPC Antenna
Antenna gain:	3.48dBi



2.3. Accessory Equipment information

Equipment Information			
Name	Model	S/N	Manufacturer
Notebook	ThinkPad E450c	PF-07GNRF	Lenovo
Cable Information			
Name	Shielded Type	Ferrite Core	Length
USB Cable	With	Without	0.5M
Test Software Information			
Name	Versions	/	/
LINUX computer terminal	V5.0.17	/	/



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, This product does not support MRU, but only supports SU.

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).

Power setting

Test Mode	Frequency [MHz]	Power setting (Value)
802.11b	2412	11
	2437	12
	2462	13
802.11g	2412	6
	2437	6
	2462	7
802.11n(HT20)	2412	6
	2437	6
	2462	7
802.11ax(HE20)	2412	4
	2437	4
	2462	5
802.11n(HT40)	2422	5
	2437	5
	2452	5
802.11ax(HE40)	2422	3
	2437	3
	2452	3



RU Type

Bandwidth	20MHz BW	40MHz BW
RU Type	242-tone RU	484-tone RU

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)/ (HT40)	HT-MCS0
802.11ax(HE20)/ (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. 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 - SRD					
Item	Test Equipment	Manufacturer	Model No.	Versions/ Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY51280803	Apr. 08, 2027
2	Wideband Radio Communication Tester	R&S	CMW500	157763	Apr. 08, 2027
3	MXG Vector Signal Generator	Agilent	N5182A	101795	Apr. 08, 2027
4	EXG Analog Signal Generator	Agilent	N5181A	MY47421151	Apr. 08, 2027
5	RF Sensor Unit	Techy	TR1029-2	20220428P009	Apr. 08, 2027
6	High and low temperature test chamber	Asprey	LX-225L	2020091401	Apr. 08, 2027
7	SRD Test Software	TACHOY	RTS	V1.0.0	/
8	2G/3G/4G Test Software	TST	TST-PASS	V2.0	/

Radiated emission					
Item	Test Equipment	Manufacturer	Model No.	Versions/ Serial No.	Calibrated until
1	EMI spectrum receiver	R&S	ESR7	102543	Apr. 09, 2027
2	9*6*6 anechoic chamber	Mao Rui	9*6*6	/	Apr. 09, 2028
3	Spectrum analyzer	R&S	FSV40-N	101795	Apr. 09, 2027
4	Preamplifier	Agilent	8449B	3008A00551	Apr. 08, 2027
5	Preamplifier	HP	8447D	1616A02061	Apr. 09, 2027
6	Preamplifier	SKET	LNPA1840G-50	SK2019040302	Apr. 09, 2027
7	Horn Antenna	SCHWARZBECK	BBHA9170	00369	Apr. 10, 2028
8	Horn Antenna	A. H. System, Inc	SAS-571	915	Apr. 10, 2028
9	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	01318	Apr. 10, 2028
10	Loop Antenna	SCHWARZBECK	FMZB1519B	00128	Apr. 08, 2027
11	6dB Fixed Attenuator	SKET	AP_DC01G-2W-N-6 dB	SK2021012803	Apr. 08, 2027
12	RF Cable 0.009~1000MHz	Langjingkeji	N/J-NJ-RG58(1G) 9m	/	Apr. 09, 2027
13	RF Cable 1000~18000MHz	Langjingkeji	N/J-SMAAJ-406(18G) 9m	/	Apr. 09, 2027
14	RF Cable	Langjingkeji	2.92/M-2.92/M-0.5M	/	Apr. 12, 2027
15	RF Cable 18000~40000MHz	Langjingkeji	2.92/M-2.92/M-3M	/	Apr. 12, 2027
16	Test Software	SKET	EMC-I	V1.4.0.1	/
17	Test Software	FARA	EZ-EMC	FA-03A3	/

Conducted emission					
Item	Test Equipment	Manufacturer	Model No.	Versions/ Serial No.	Calibrated until
1	LISN	R&S	ENV216	101291	Apr. 09, 2027
2	LISN	R&S	ESH3-Z5	894981/024	Apr. 09, 2027



3	EMI Test Receiver	R&S	ESR7	102543	Apr. 09, 2027
5	RF Cable	Langjingkeji	N/J-NJ-RG58(1G) 10m	/	Apr. 09, 2027
6	Test Software	SKET	EMC-I	V1.4.0.1	/

Note: 1. The Cal. Interval was one year.

2. The cable loss has calculated in test result which connection between each test instruments.

3. TEST ITEM AND RESULTS

3.1. Conducted Emission

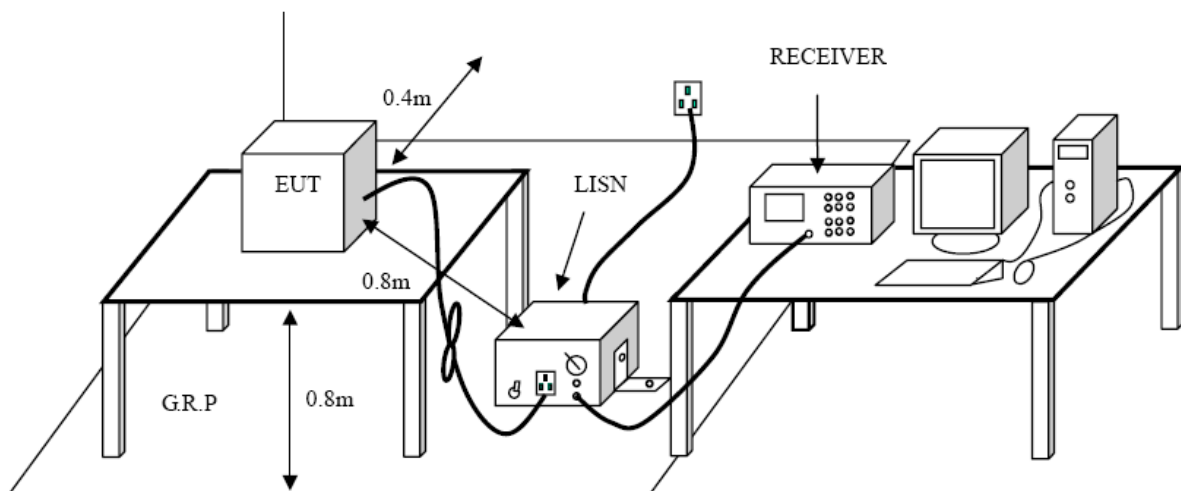
Limit

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

Frequency 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

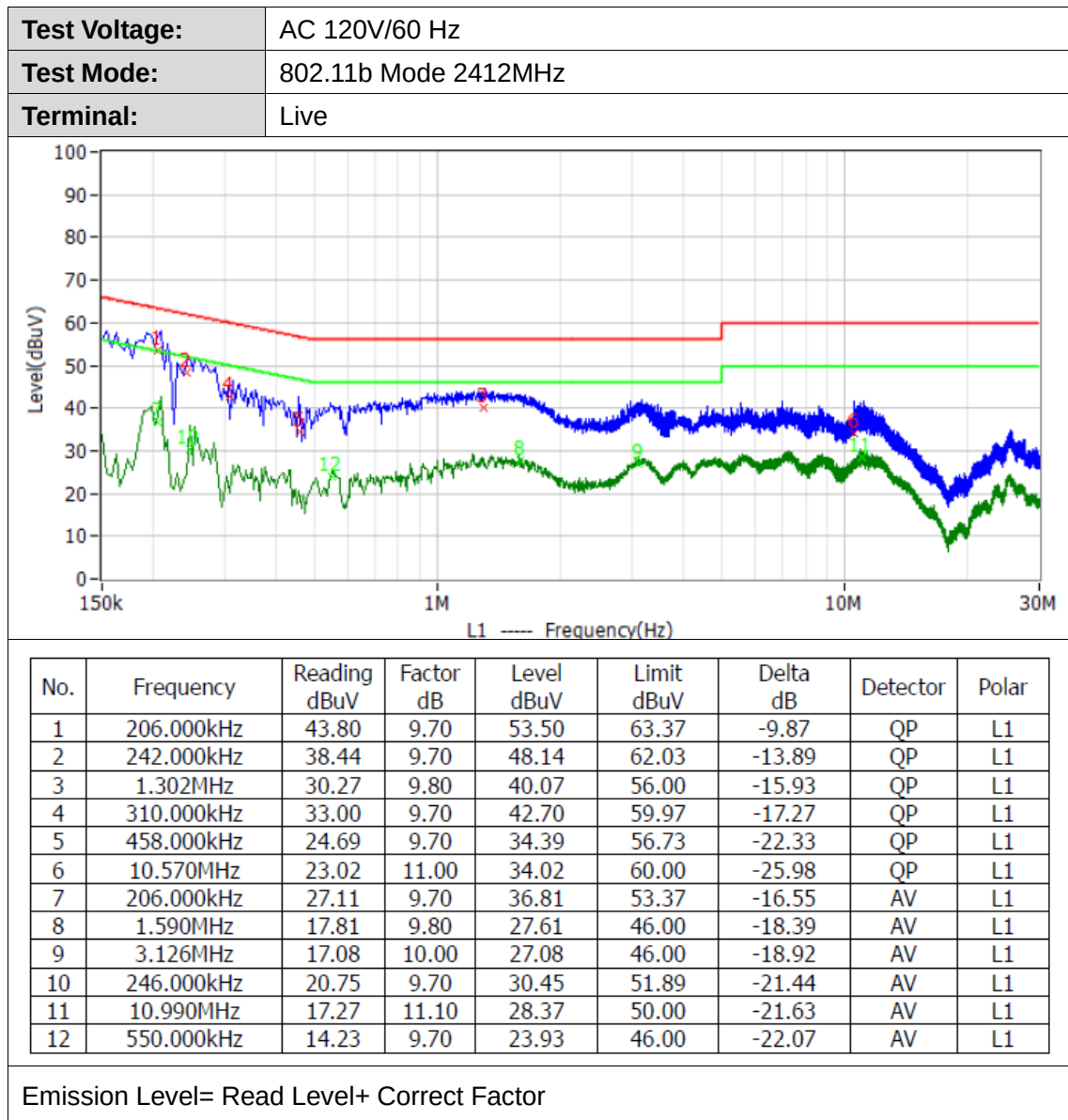


Test Procedure

1. The EUT was setup according to ANSI C63.10-2020+COR. 1-2023+C63.10A-2024+ERRATA TO C63.10A-2024 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.

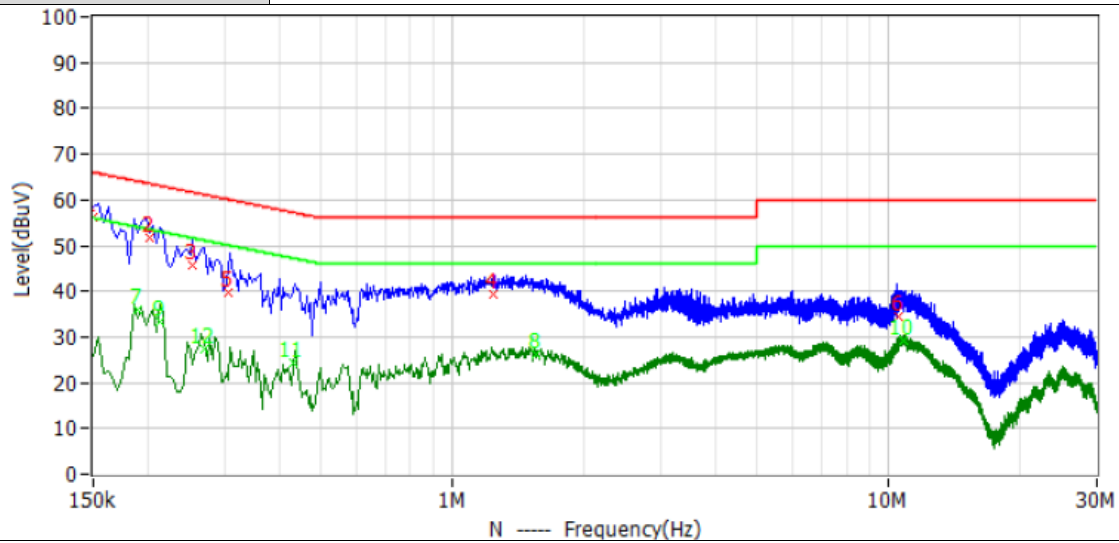
**Test Mode:**

Please refer to the clause 2.4.

Test Results



Test Voltage:	AC 120V/60 Hz
Test Mode:	802.11b Mode 2412MHz
Terminal:	Neutral



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Delta dB	Detector	Polar
1	150.000kHz	46.33	9.70	56.03	66.00	-9.97	QP	N
2	202.000kHz	41.93	9.70	51.63	63.53	-11.90	QP	N
3	254.000kHz	36.01	9.80	45.81	61.63	-15.82	QP	N
4	1.242MHz	29.51	9.90	39.41	56.00	-16.59	QP	N
5	306.000kHz	29.88	9.80	39.68	60.08	-20.40	QP	N
6	10.514MHz	23.25	11.20	34.45	60.00	-25.55	QP	N
7	190.000kHz	26.25	9.70	35.95	54.04	-18.09	AV	N
8	1.550MHz	16.36	9.90	26.26	46.00	-19.74	AV	N
9	214.000kHz	23.59	9.70	33.29	53.05	-19.76	AV	N
10	10.806MHz	18.01	11.20	29.21	50.00	-20.79	AV	N
11	430.000kHz	14.54	9.80	24.34	47.25	-22.92	AV	N
12	270.000kHz	17.47	9.80	27.27	51.12	-23.85	AV	N

Emission Level= Read Level+ Correct Factor

3.2. Radiated Emission

Limit

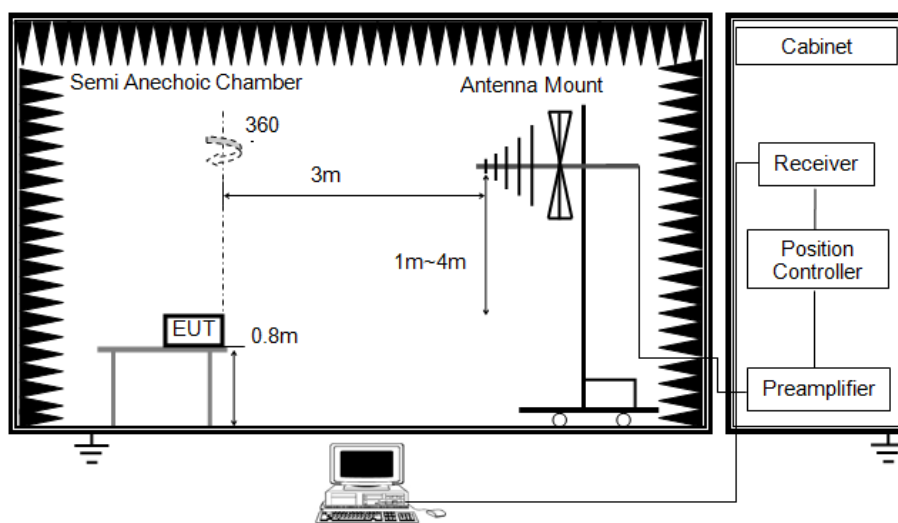
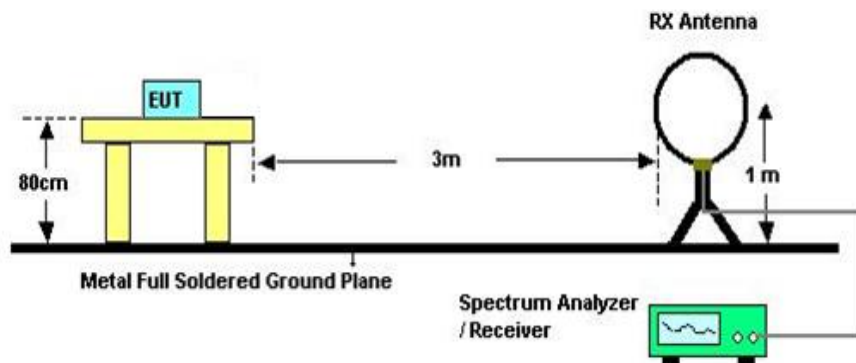
FCC CFR Title 47 Part 15 Subpart C Section 15.209/ RSS-Gen 8.9:

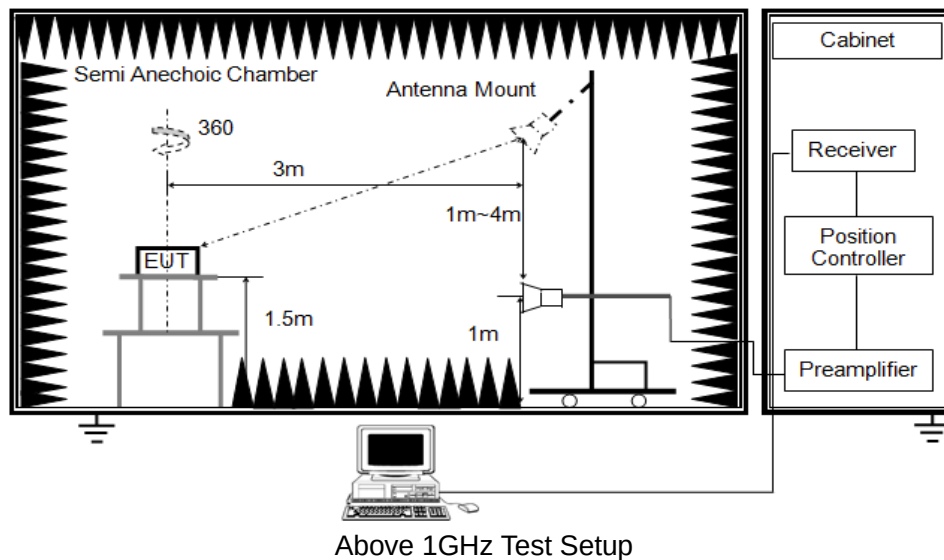
Frequency	Limit (dBuV/m @3m)	Value
30 MHz ~ 88 MHz	40.00	Quasi-peak
88 MHz ~ 216 MHz	43.50	Quasi-peak
216 MHz ~ 960 MHz	46.00	Quasi-peak
960 MHz ~ 1 GHz	54.00	Quasi-peak
Above 1 GHz	54.00	Average
	74.00	Peak

Note:

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

Test Configuration





Test Procedure

1. The EUT was setup and tested according to ANSI C63.10-2020+COR. 1-2023+C63.10A-2024+ERRATA TO C63.10A-2024
 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 30 MHz:
9kHz – 150kHz, RBW=200Hz, VBW $\geq$ RBW, Sweep=auto, Detector function=peak, Trace=max hold;
150kHz – 30MHz, RBW=9kHz, VBW $\geq$ RBW, 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) 30 MHz - 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.
 - (4) From 1 GHz to 10th harmonic:
RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW $\geq$ 1/T Peak detector for Average value.
- Note 1: For the 1/T& Duty Cycle please refer to clause 3.8 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Test Result

9 KHz~30 MHz

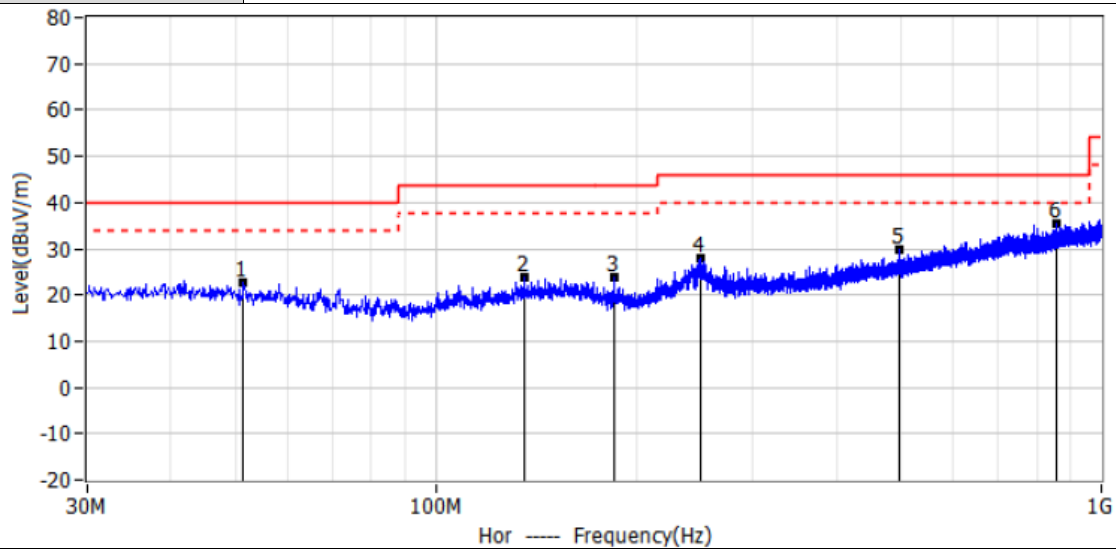
From 9 KHz to 30 MHz: Conclusion: PASS

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. Pol.	Horizontal
Test Mode:	802.11b Mode 2412MHz
Remark:	Only worse case is reported



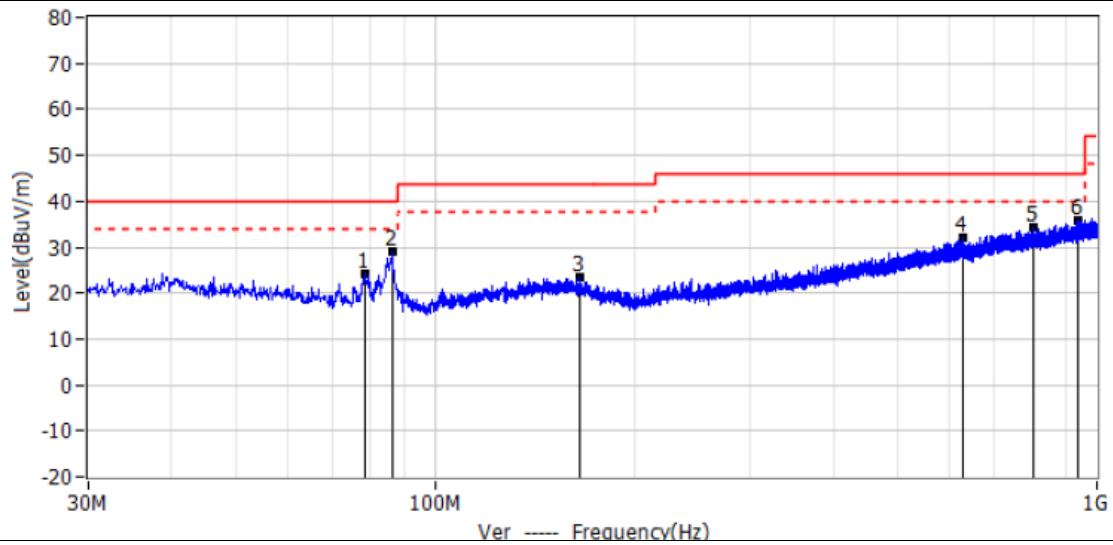
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Delta dB	Detector	Polar
1*	51.340MHz	9.2	13.5	22.7	40.0	-17.3	QP	Hor
2*	135.851MHz	10.3	13.4	23.7	43.5	-19.8	QP	Hor
3*	185.928MHz	12.6	11.2	23.8	43.5	-19.7	QP	Hor
4*	250.190MHz	15.4	12.4	27.8	46.0	-18.2	QP	Hor
5*	496.449MHz	11.9	18.1	30.0	46.0	-16.0	QP	Hor
6*	855.349MHz	12.0	23.5	35.5	46.0	-10.5	QP	Hor

Remarks:

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



Ant. Pol.	Vertical
Test Mode:	802.11b Mode 2412MHz
Remark:	Only worse case is reported



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Delta dB	Detector	Polar
1*	78.621MHz	14.6	9.7	24.3	40.0	-15.7	QP	Ver
2*	86.139MHz	19.5	9.6	29.1	40.0	-10.9	QP	Ver
3*	165.194MHz	9.8	13.8	23.6	43.5	-19.9	QP	Ver
4*	626.914MHz	11.5	20.7	32.2	46.0	-13.8	QP	Ver
5*	802.120MHz	11.4	22.9	34.3	46.0	-11.7	QP	Ver
6*	935.253MHz	11.4	24.5	35.9	46.0	-10.1	QP	Ver

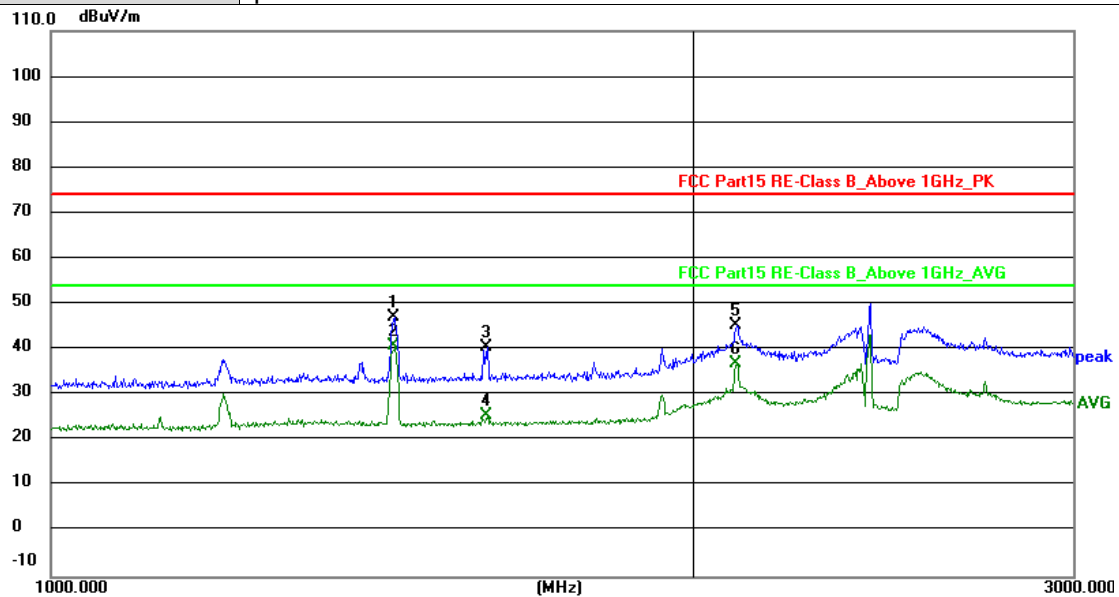
Remarks:

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



1GHz -3GHz

Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2412MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

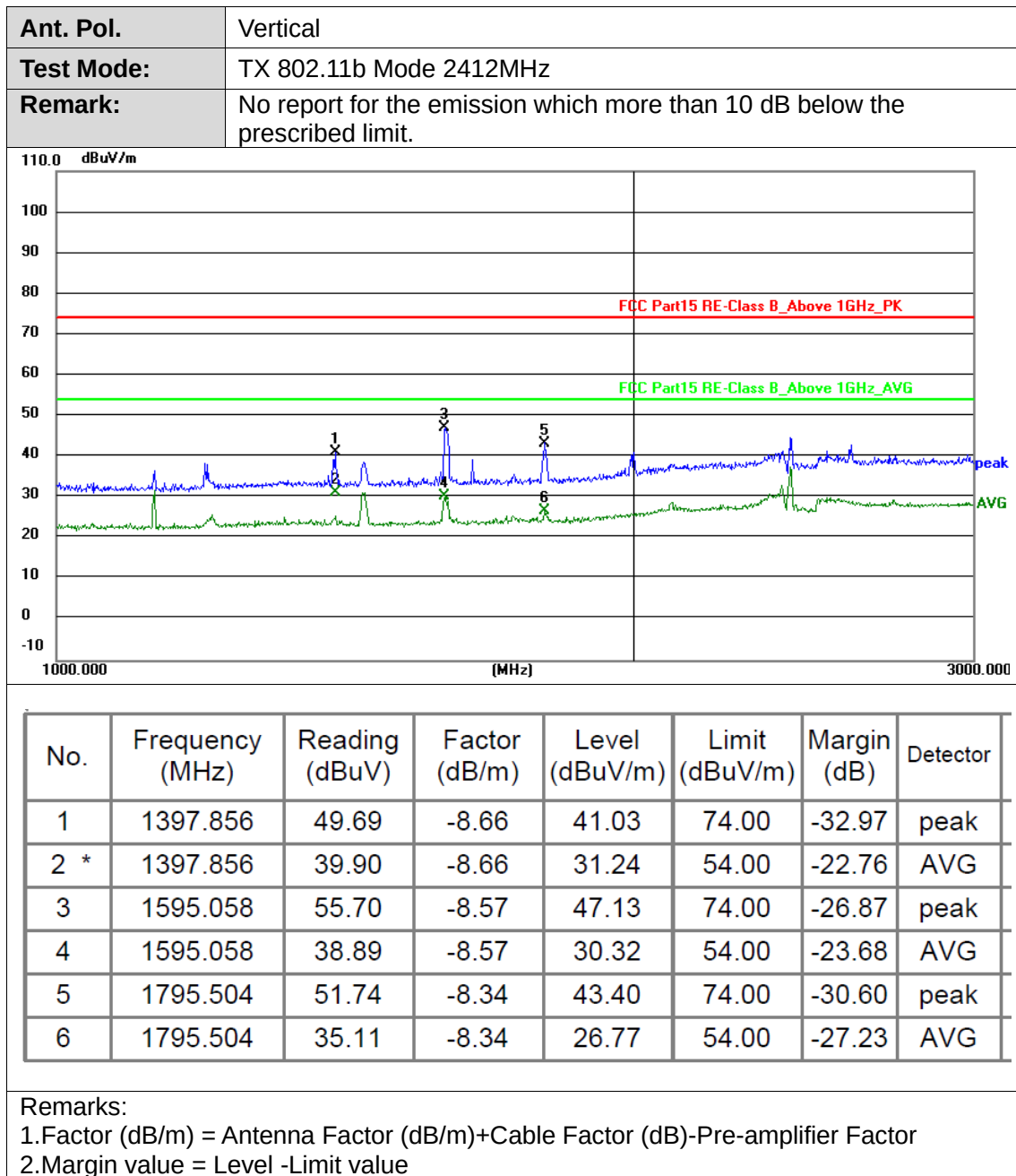


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1447.673	55.97	-8.87	47.10	74.00	-26.90	peak
2 *	1447.673	49.74	-8.87	40.87	54.00	-13.13	AVG
3	1598.786	48.97	-8.56	40.41	74.00	-33.59	peak
4	1598.786	34.18	-8.56	25.62	54.00	-28.38	AVG
5	2091.158	51.08	-5.67	45.41	74.00	-28.59	peak
6	2091.158	42.74	-5.67	37.07	54.00	-16.93	AVG

Remarks:

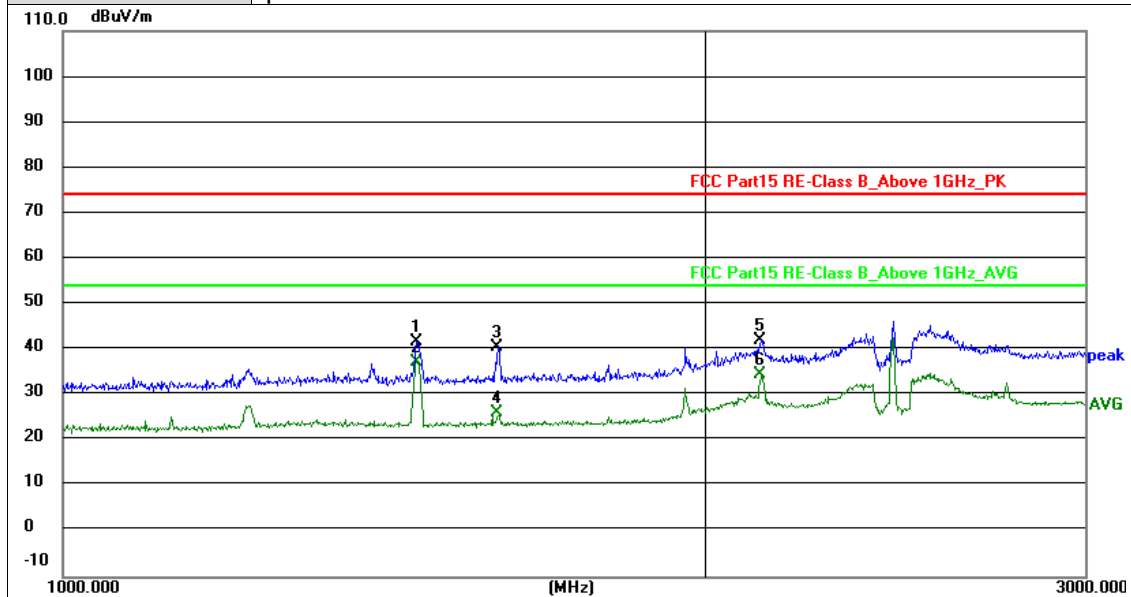
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

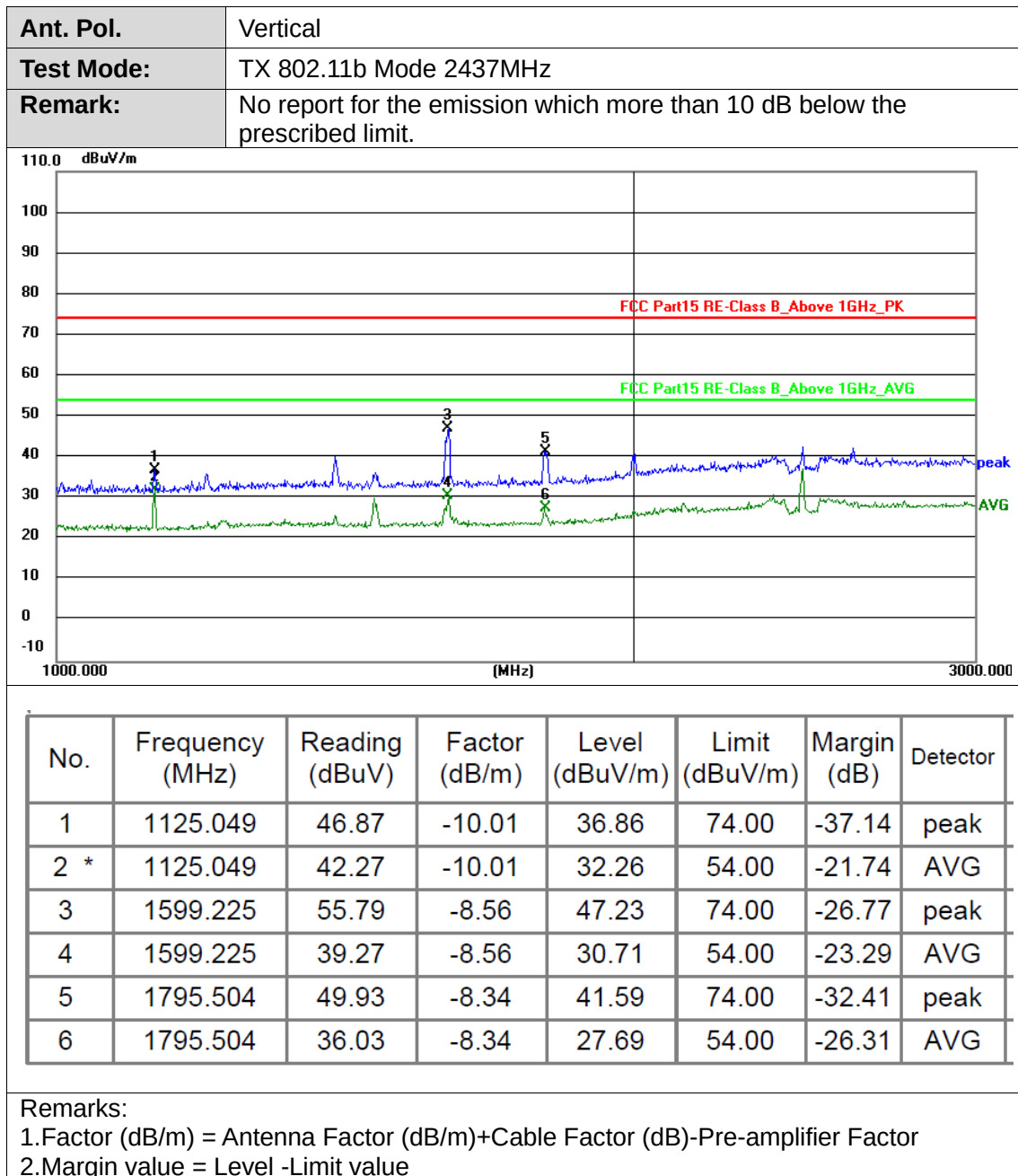


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1464.470	50.58	-8.88	41.70	74.00	-32.30	peak
2 *	1464.470	46.15	-8.88	37.27	54.00	-16.73	AVG
3	1598.347	49.25	-8.56	40.69	74.00	-33.31	peak
4	1598.347	34.70	-8.56	26.14	54.00	-27.86	AVG
5	2119.200	47.50	-5.52	41.98	74.00	-32.02	peak
6	2119.200	39.97	-5.52	34.45	54.00	-19.55	AVG

Remarks:

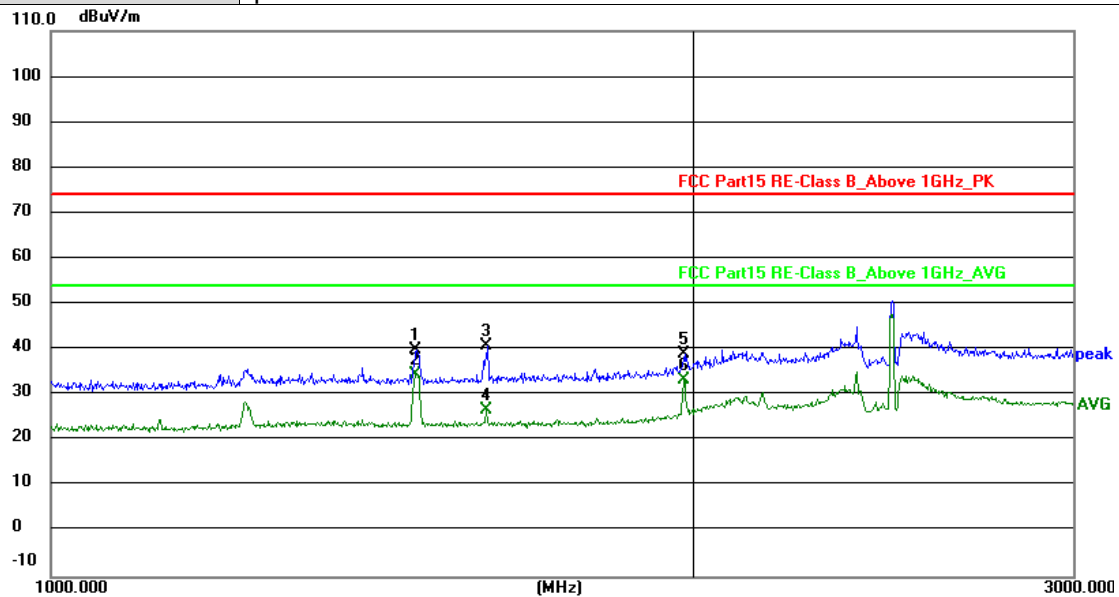
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2462MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

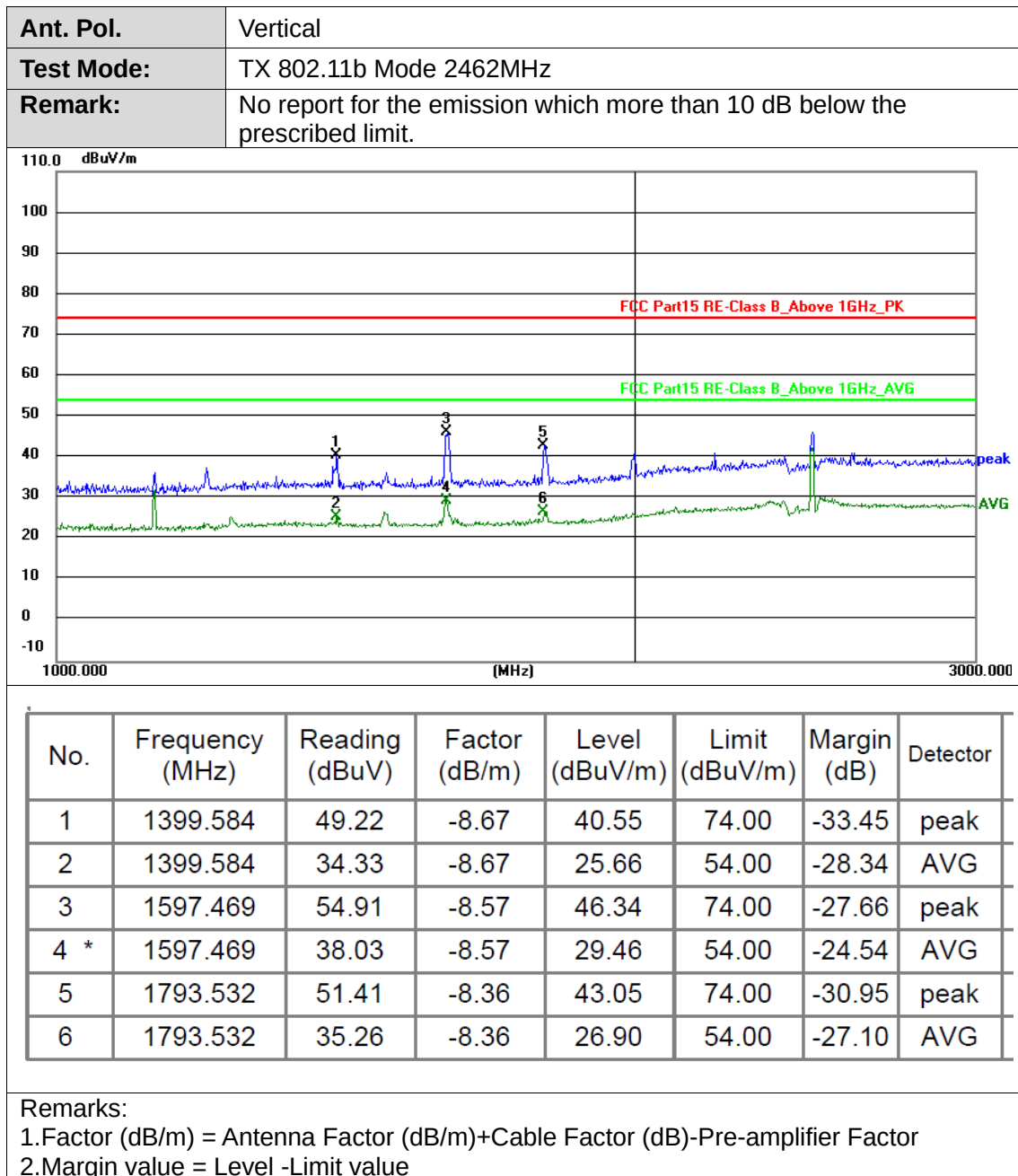


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1482.478	48.66	-8.84	39.82	74.00	-34.18	peak
2 *	1482.478	43.43	-8.84	34.59	54.00	-19.41	AVG
3	1600.104	49.29	-8.56	40.73	74.00	-33.27	peak
4	1600.104	35.38	-8.56	26.82	54.00	-27.18	AVG
5	1977.757	46.20	-7.12	39.08	74.00	-34.92	peak
6	1977.757	40.61	-7.12	33.49	54.00	-20.51	AVG

Remarks:

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

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2422MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

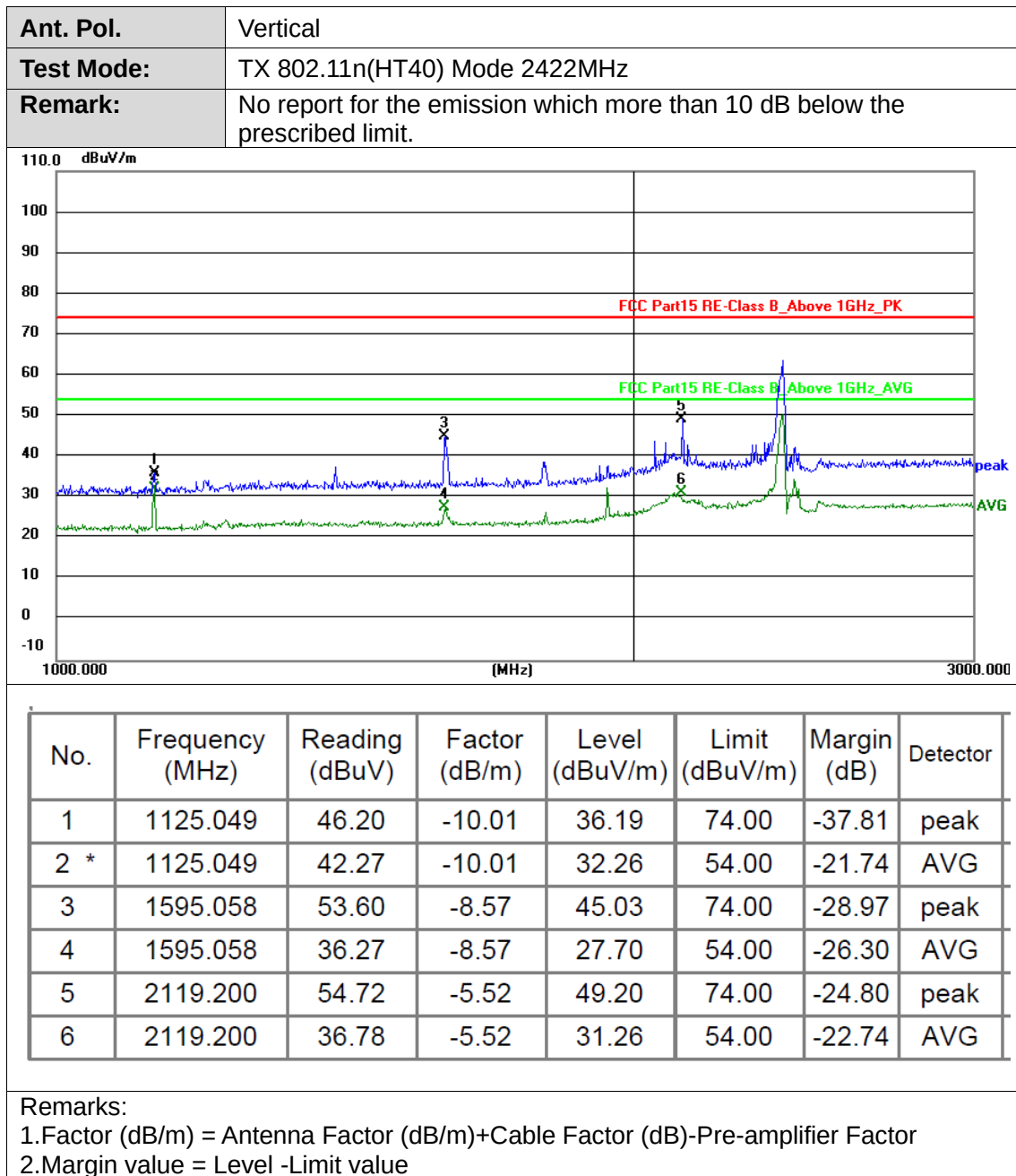


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1227.223	47.90	-9.47	38.43	74.00	-35.57	peak
2	1227.223	40.09	-9.47	30.62	54.00	-23.38	AVG
3	1445.687	44.86	-8.86	36.00	74.00	-38.00	peak
4	1445.687	35.89	-8.86	27.03	54.00	-26.97	AVG
5	2102.677	54.43	-5.60	48.83	74.00	-25.17	peak
6 *	2102.677	44.35	-5.60	38.75	54.00	-15.25	AVG

Remarks:

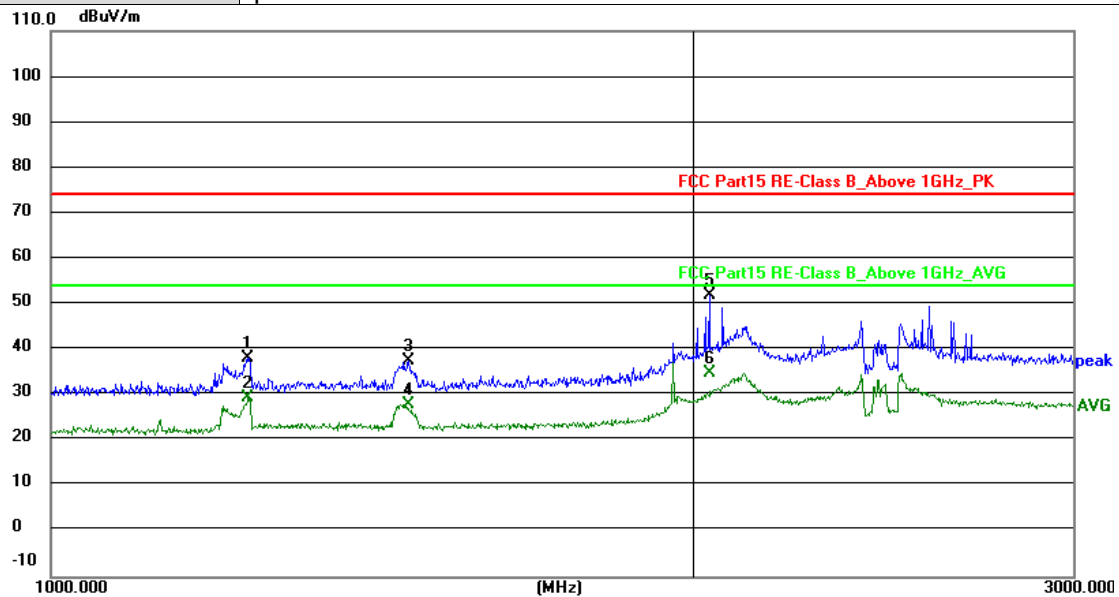
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

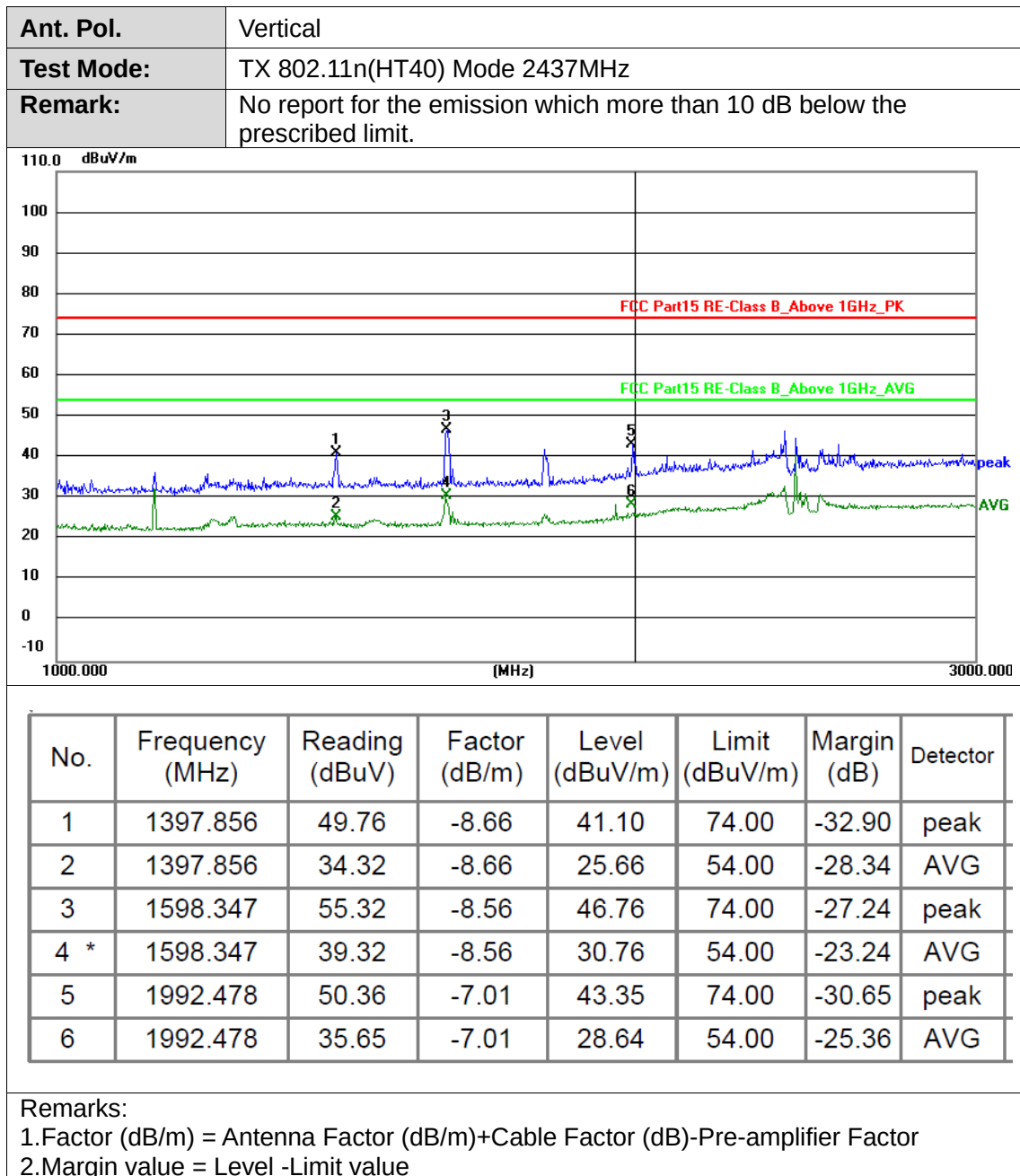


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1238.226	47.64	-9.35	38.29	74.00	-35.71	peak
2	1238.226	38.71	-9.35	29.36	54.00	-24.64	AVG
3	1469.910	46.46	-8.87	37.59	74.00	-36.41	peak
4	1469.910	36.85	-8.87	27.98	54.00	-26.02	AVG
5	2031.156	58.41	-6.37	52.04	74.00	-21.96	peak
6 *	2031.156	41.15	-6.37	34.78	54.00	-19.22	AVG

Remarks:

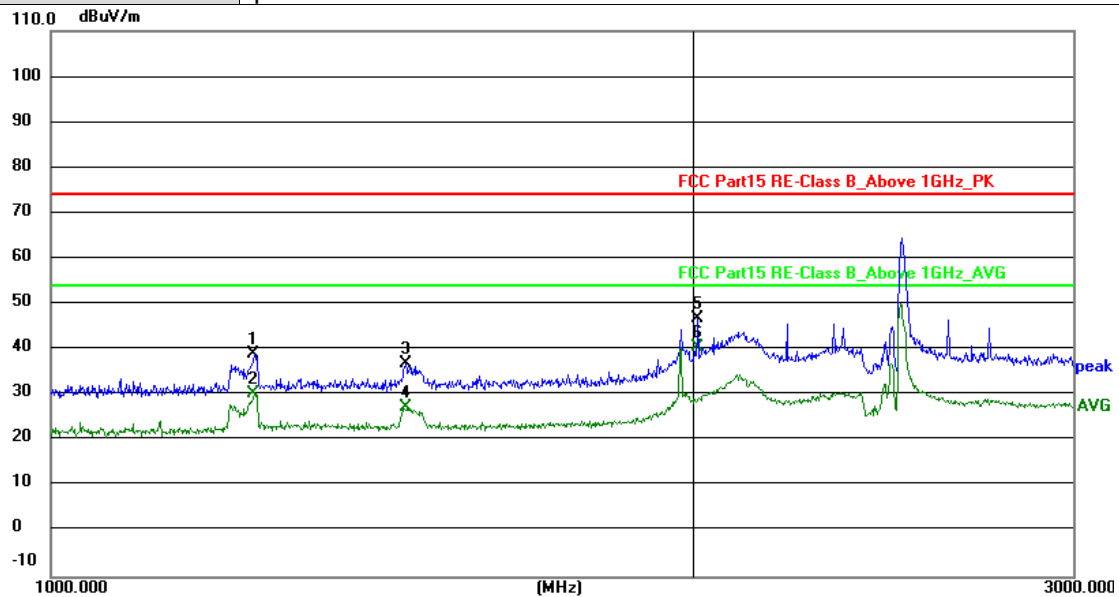
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2452MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

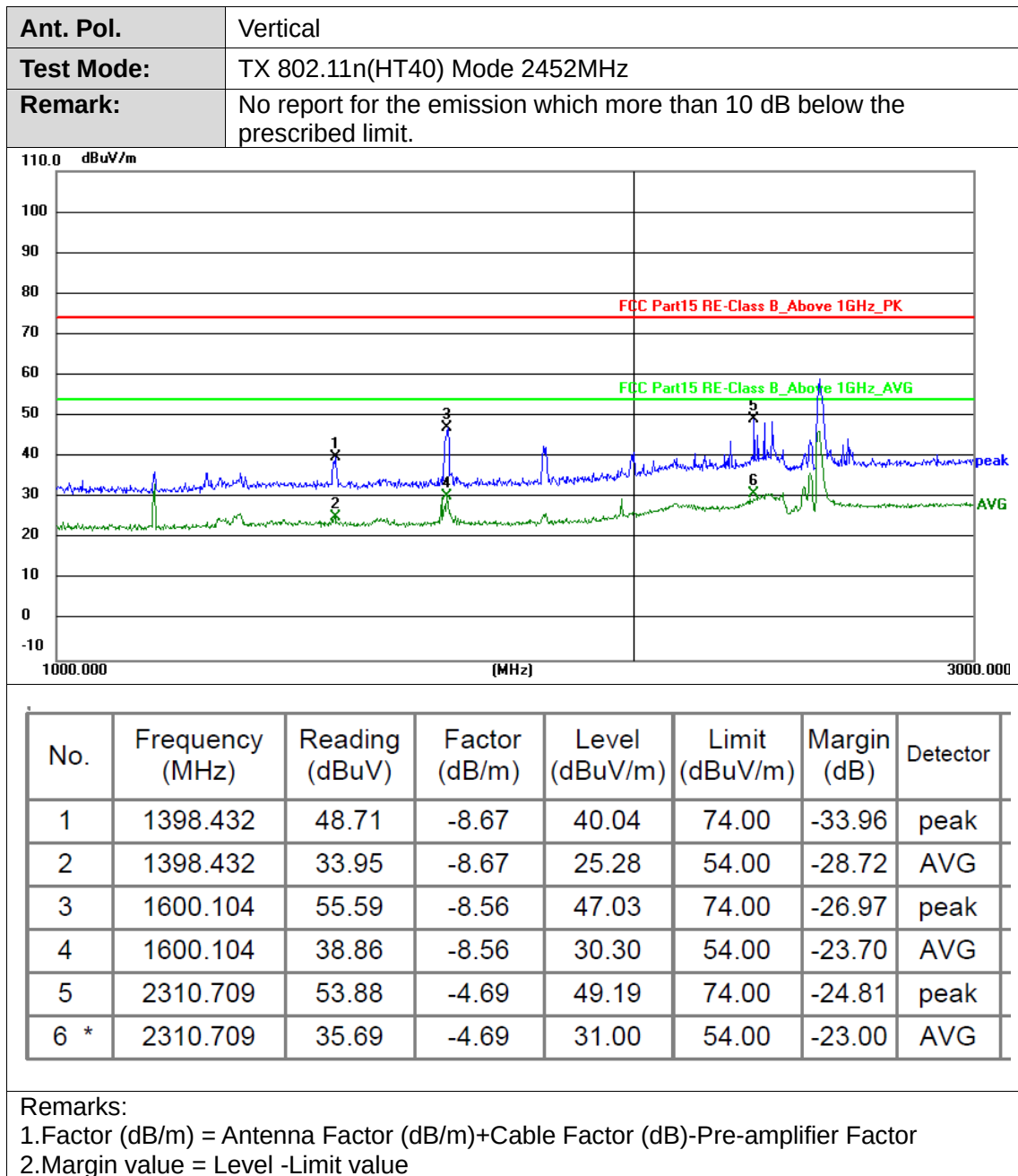


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1246.073	48.22	-9.26	38.96	74.00	-35.04	peak
2	1246.073	39.64	-9.26	30.38	54.00	-23.62	AVG
3	1466.482	45.70	-8.87	36.83	74.00	-37.17	peak
4	1466.482	36.12	-8.87	27.25	54.00	-26.75	AVG
5	2008.412	53.73	-6.78	46.95	74.00	-27.05	peak
6 *	2008.412	47.37	-6.78	40.59	54.00	-13.41	AVG

Remarks:

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

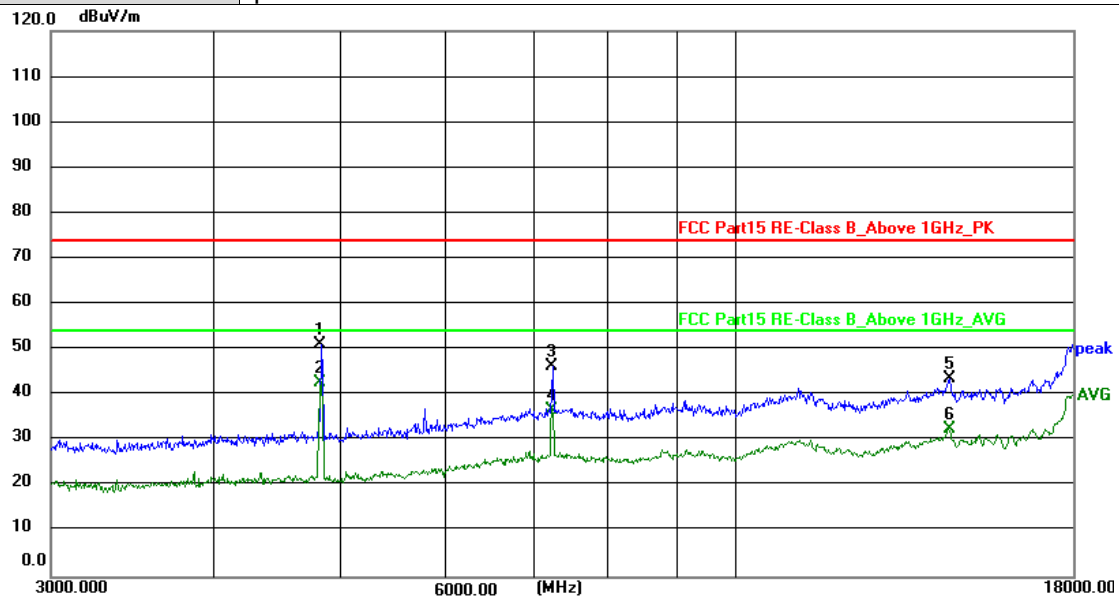
2. Margin value = Level - Limit value





3GHz -18GHz

Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2412MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

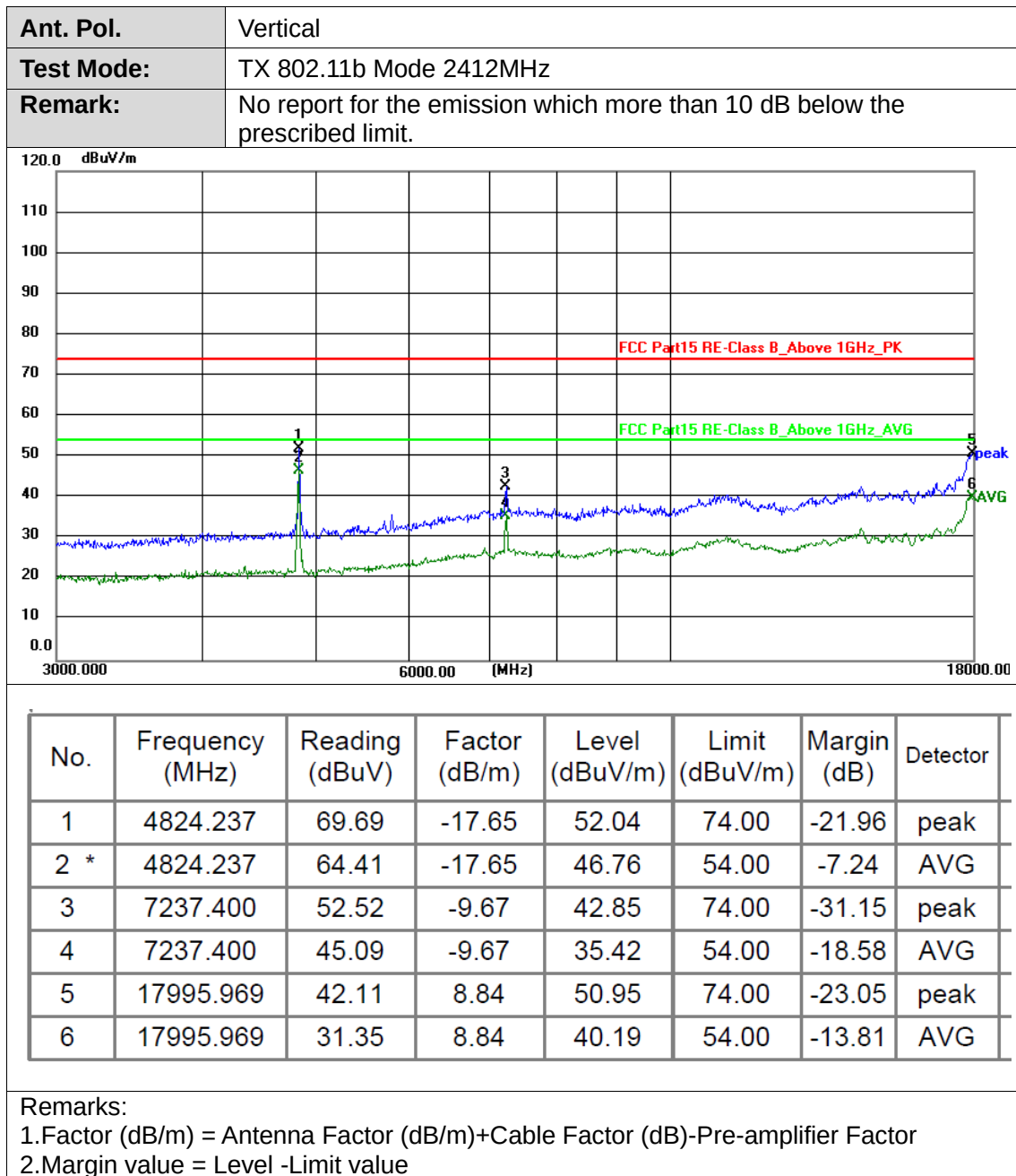


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4823.156	68.68	-17.66	51.02	74.00	-22.98	peak
2 *	4823.156	60.37	-17.66	42.71	54.00	-11.29	AVG
3	7237.400	56.15	-9.67	46.48	74.00	-27.52	peak
4	7237.400	46.35	-9.67	36.68	54.00	-17.32	AVG
5	14494.842	44.77	-1.23	43.54	74.00	-30.46	peak
6	14494.842	33.77	-1.23	32.54	54.00	-21.46	AVG

Remarks:

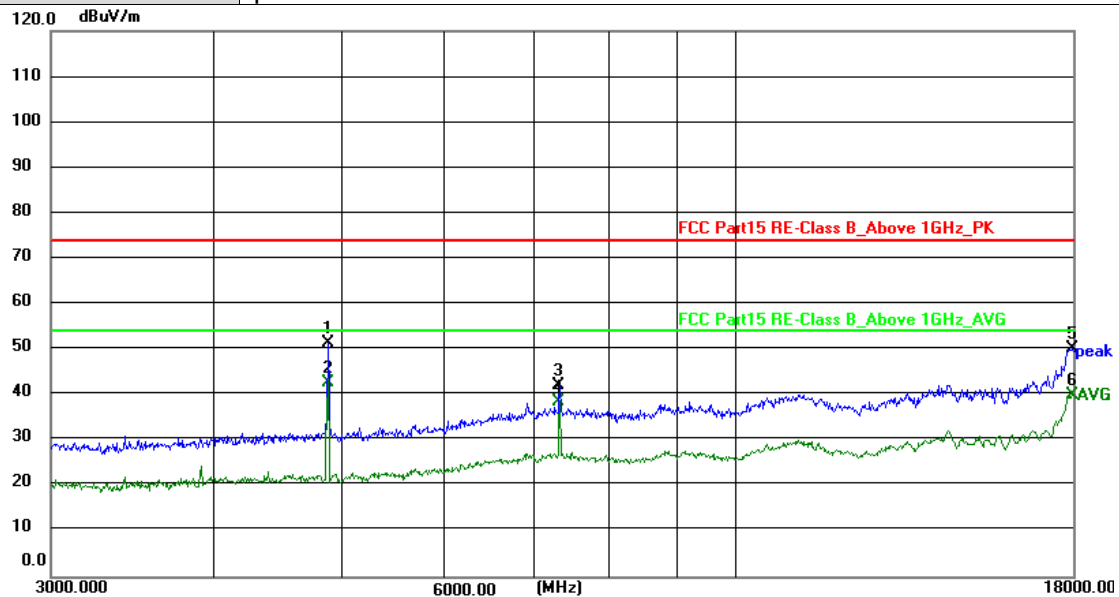
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

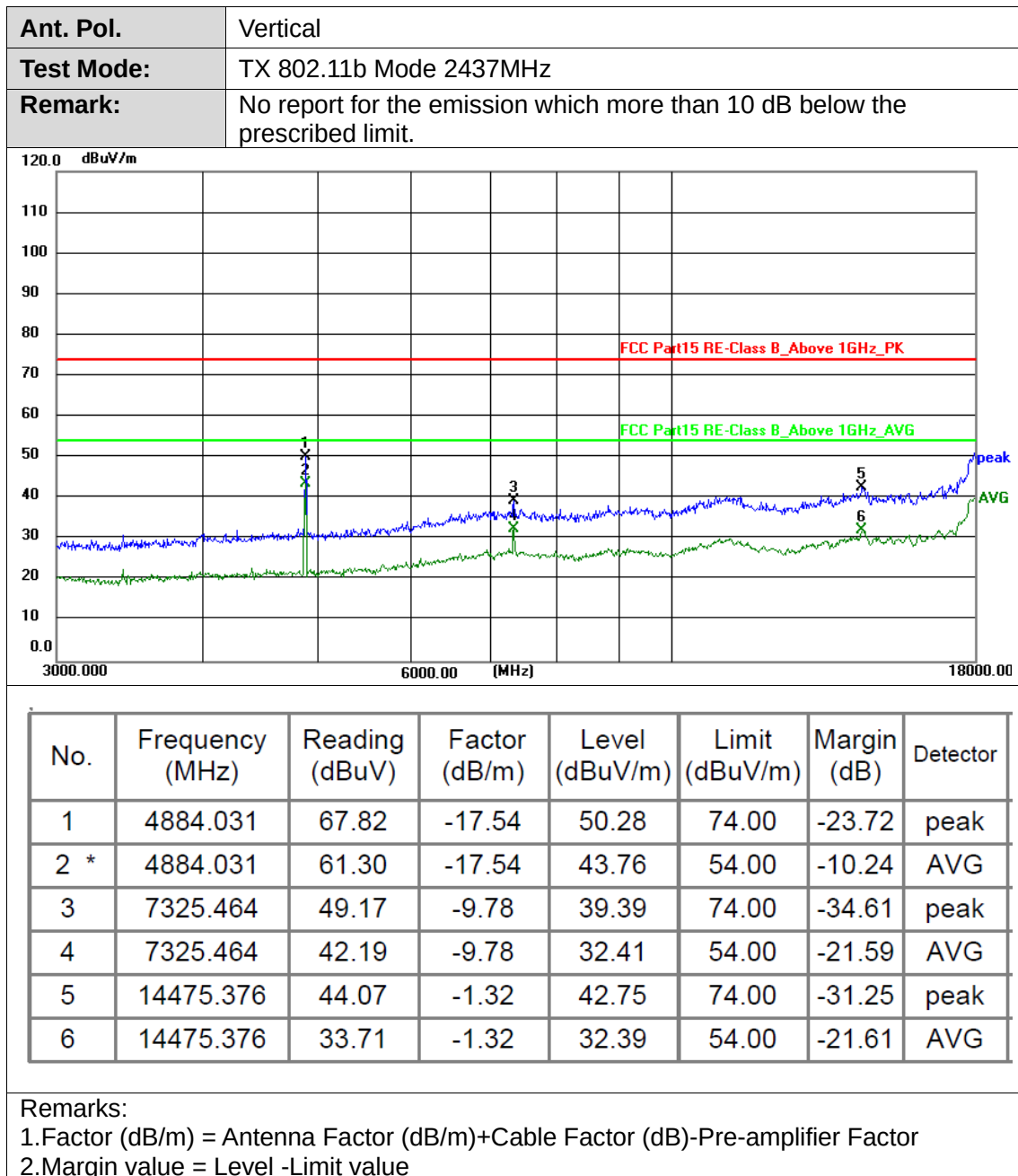


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4884.031	68.96	-17.54	51.42	74.00	-22.58	peak
2 *	4884.031	60.30	-17.54	42.76	54.00	-11.24	AVG
3	7327.104	51.99	-9.78	42.21	74.00	-31.79	peak
4	7327.104	48.29	-9.78	38.51	54.00	-15.49	AVG
5	17995.969	41.46	8.84	50.30	74.00	-23.70	peak
6	17995.969	31.08	8.84	39.92	54.00	-14.08	AVG

Remarks:

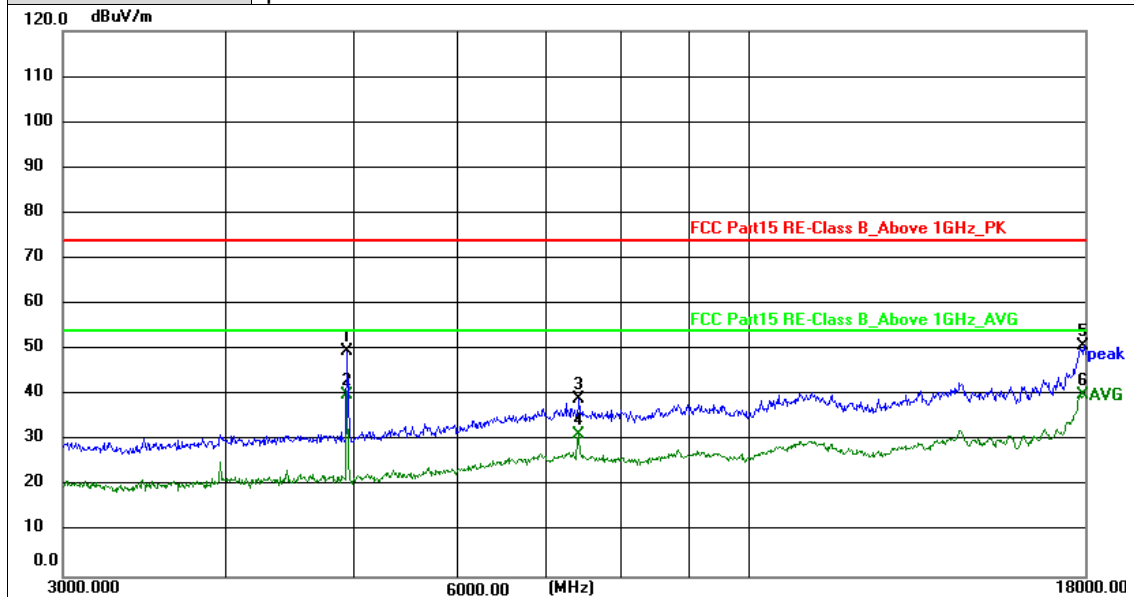
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2462MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

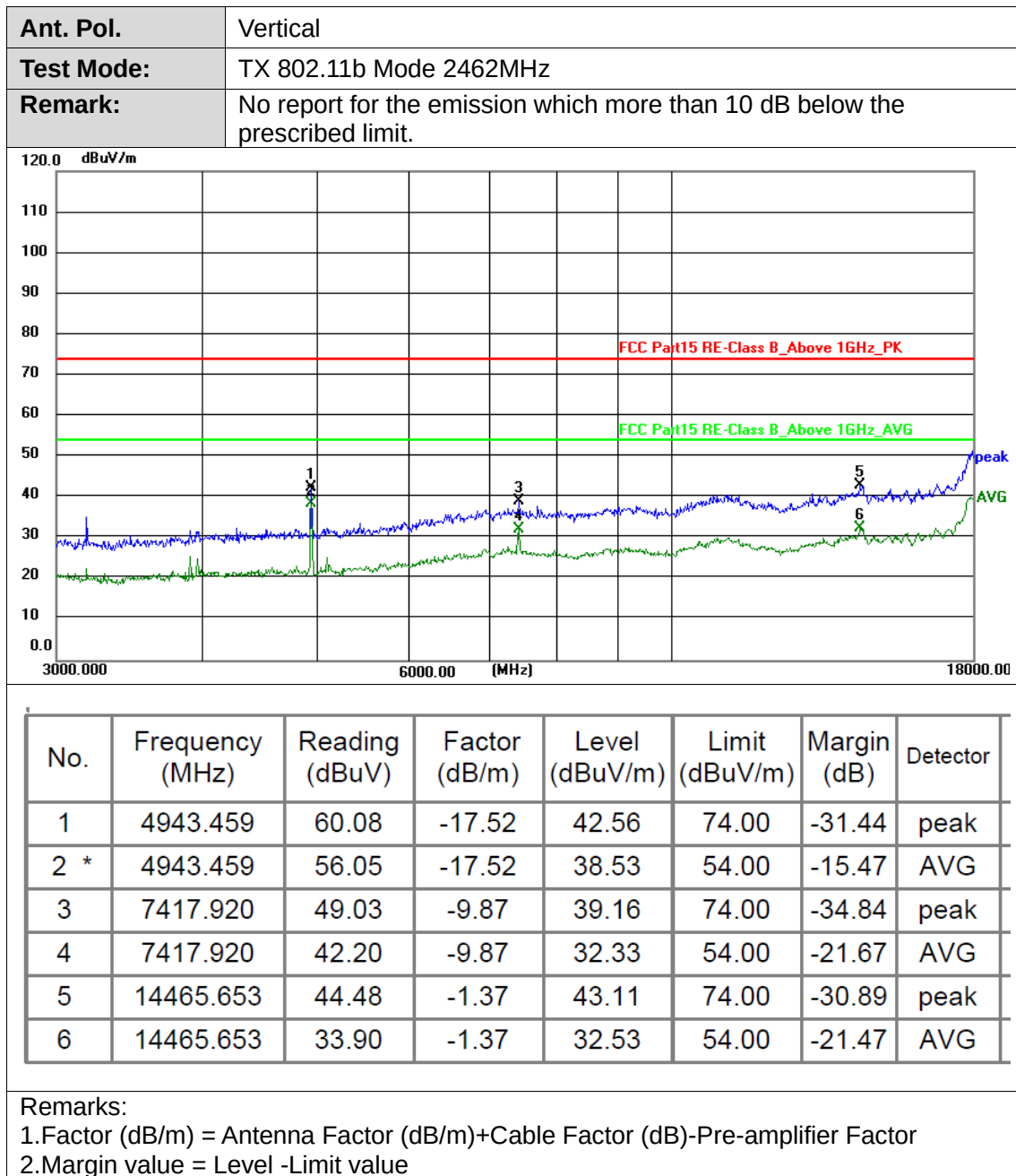


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4943.459	67.05	-17.52	49.53	74.00	-24.47	peak
2	4943.459	57.49	-17.52	39.97	54.00	-14.03	AVG
3	7416.259	48.91	-9.88	39.03	74.00	-34.97	peak
4	7416.259	41.35	-9.88	31.47	54.00	-22.53	AVG
5	17983.881	42.11	8.64	50.75	74.00	-23.25	peak
6 *	17983.881	31.45	8.64	40.09	54.00	-13.91	AVG

Remarks:

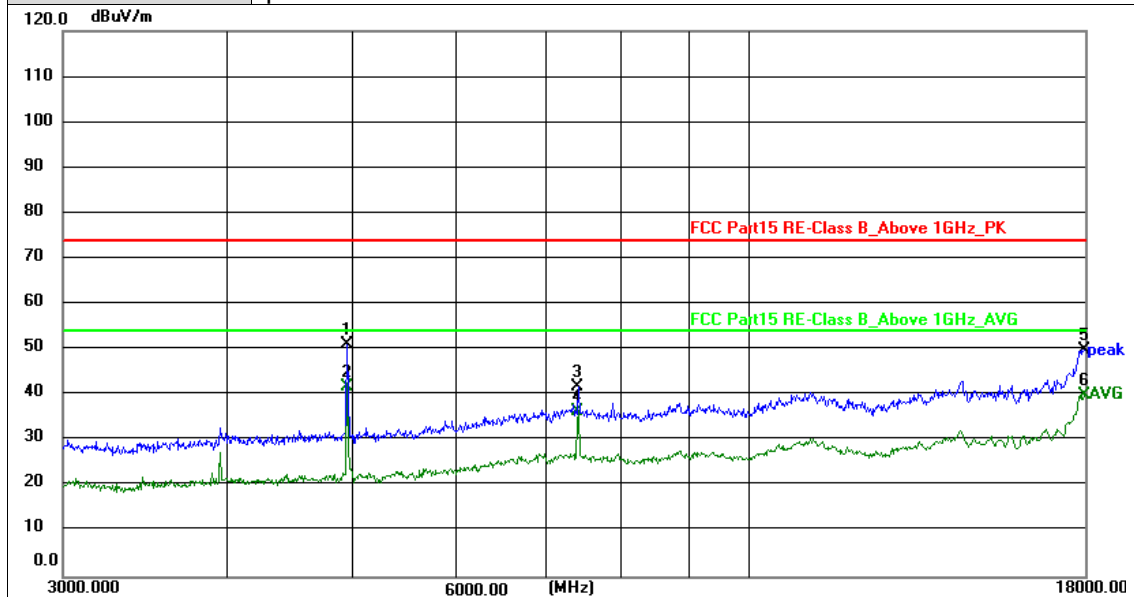
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2422MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

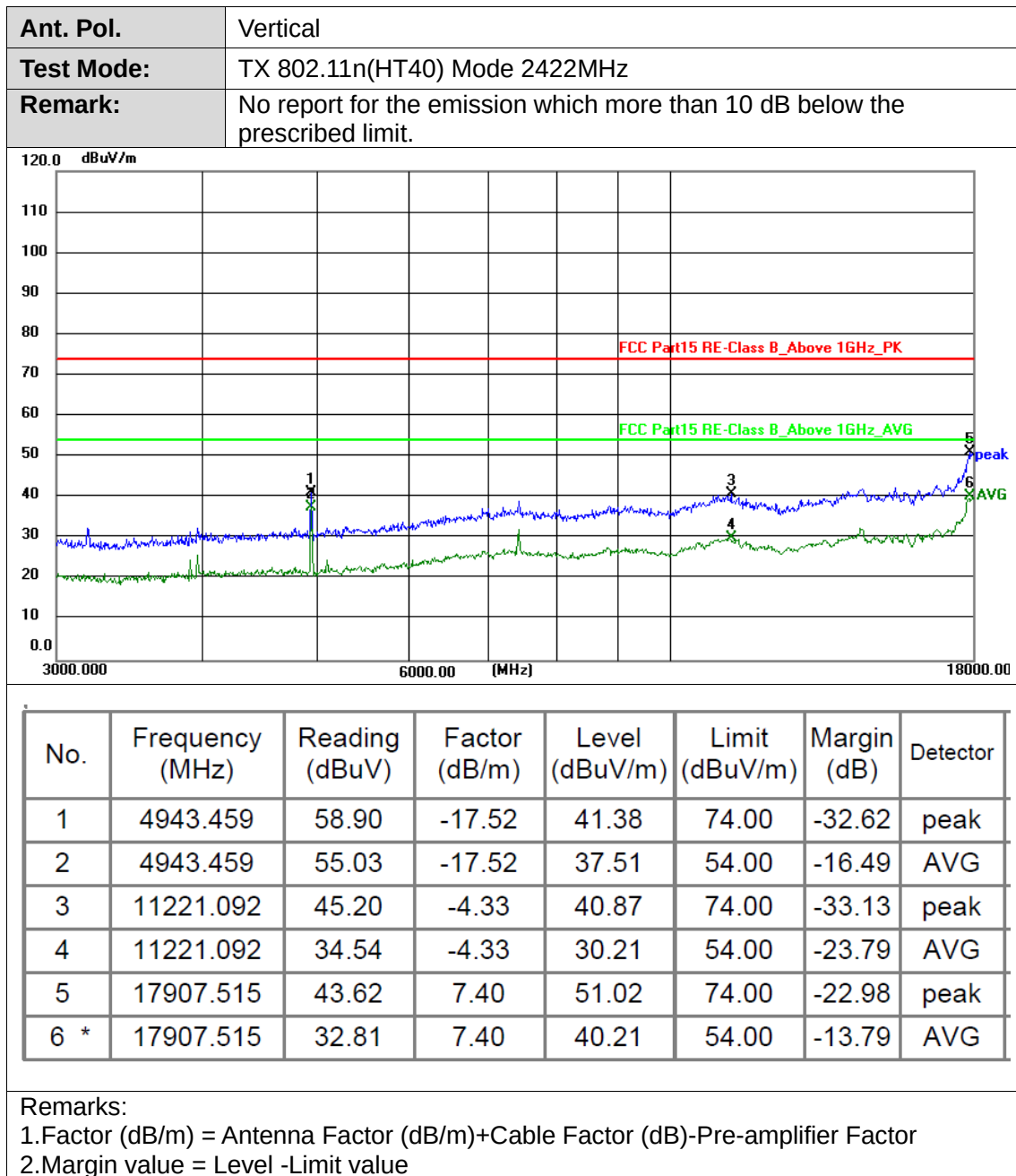


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4943.459	68.82	-17.52	51.30	74.00	-22.70	peak
2 *	4943.459	59.34	-17.52	41.82	54.00	-12.18	AVG
3	7414.598	51.63	-9.88	41.75	74.00	-32.25	peak
4	7414.598	46.45	-9.88	36.57	54.00	-17.43	AVG
5	17991.939	41.32	8.77	50.09	74.00	-23.91	peak
6	17991.939	31.35	8.77	40.12	54.00	-13.88	AVG

Remarks:

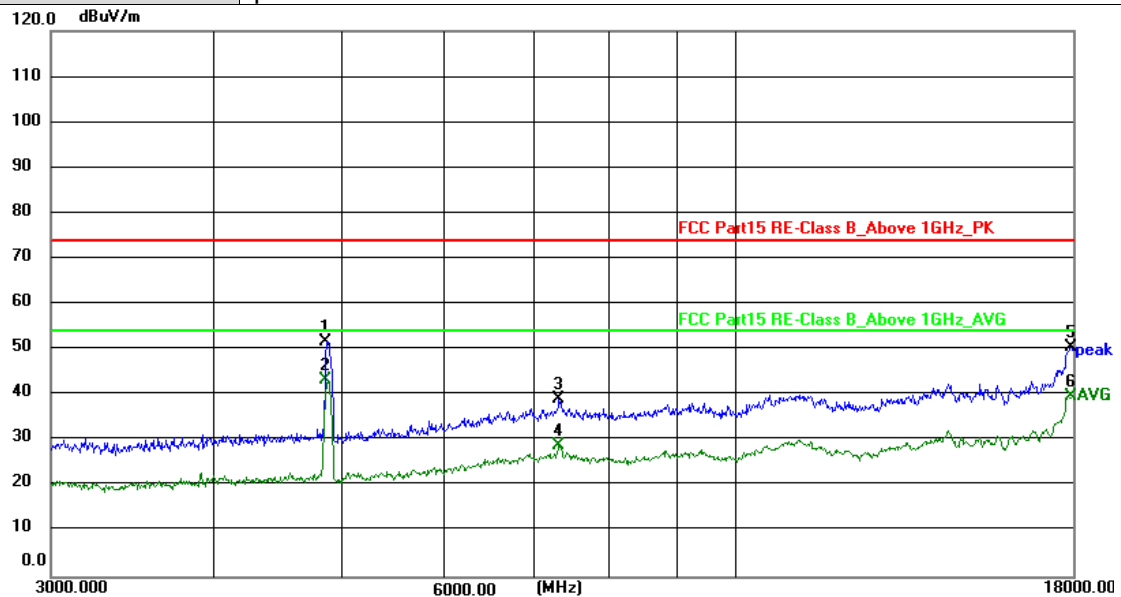
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4873.104	69.38	-17.53	51.85	74.00	-22.15	peak
2 *	4873.104	60.77	-17.53	43.24	54.00	-10.76	AVG
3	7322.183	48.85	-9.78	39.07	74.00	-34.93	peak
4	7322.183	38.67	-9.78	28.89	54.00	-25.11	AVG
5	17971.802	42.08	8.44	50.52	74.00	-23.48	peak
6	17971.802	31.43	8.44	39.87	54.00	-14.13	AVG

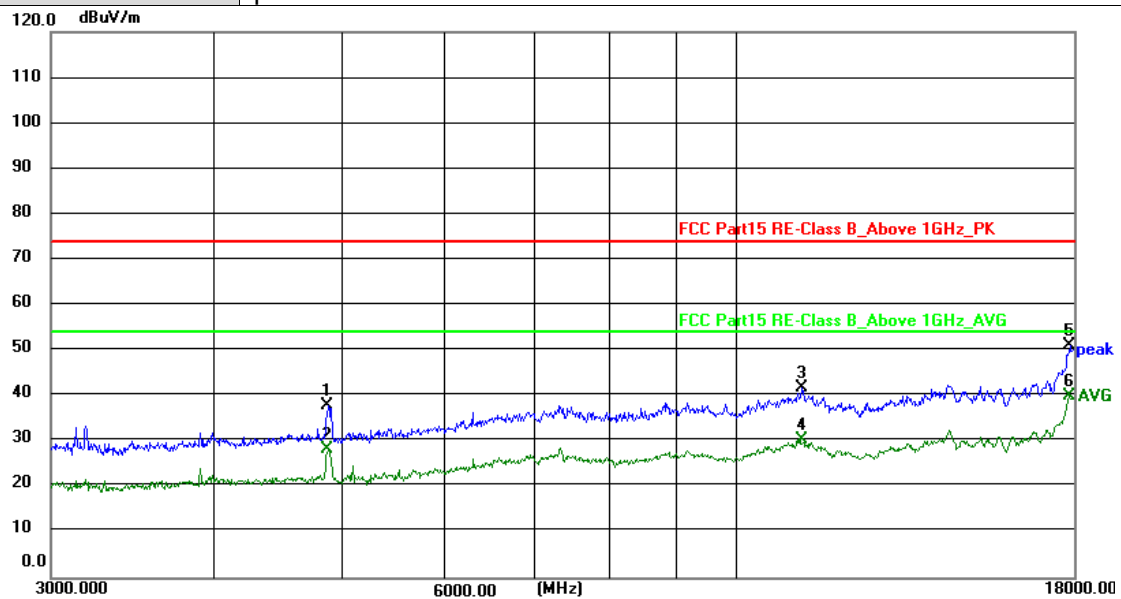
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



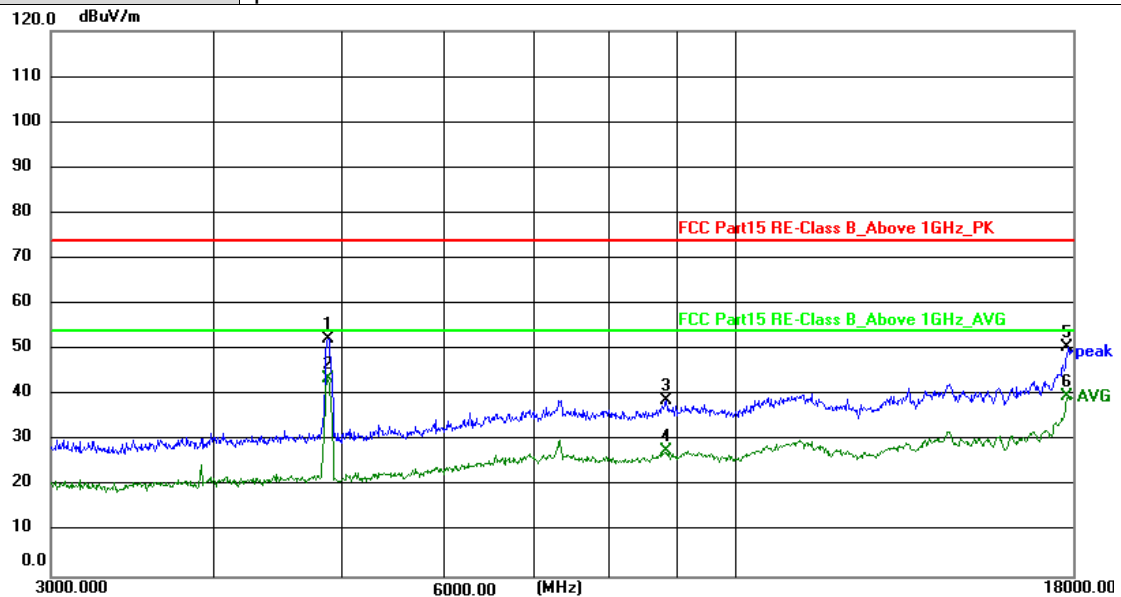
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4879.657	55.36	-17.54	37.82	74.00	-36.18	peak
2	4879.657	45.92	-17.54	28.38	54.00	-25.62	AVG
3	11193.481	45.98	-4.28	41.70	74.00	-32.30	peak
4	11193.481	34.63	-4.28	30.35	54.00	-23.65	AVG
5	17899.495	43.78	7.27	51.05	74.00	-22.95	peak
6 *	17899.495	32.69	7.27	39.96	54.00	-14.04	AVG

Remarks:

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



Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2452MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

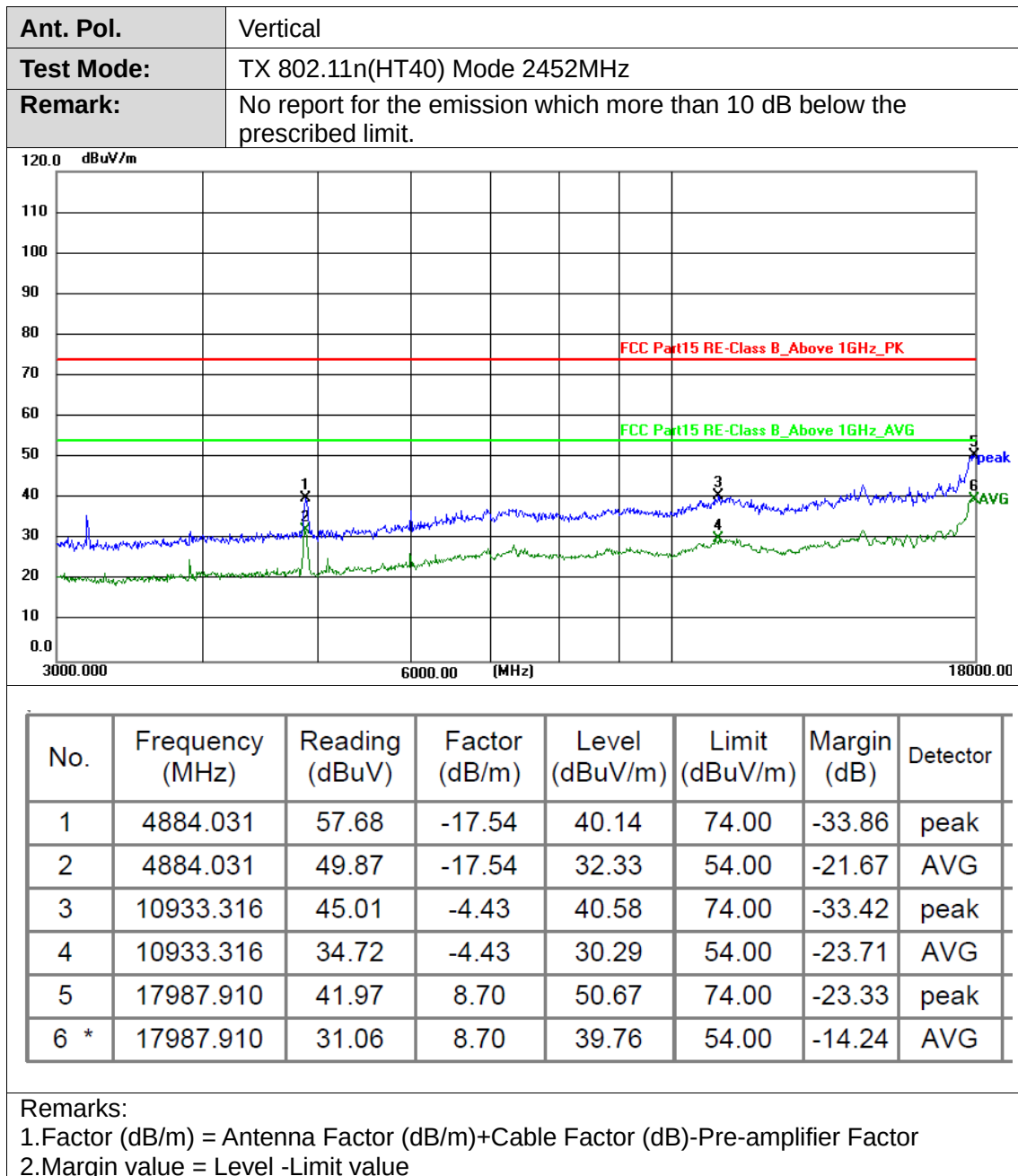


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4884.031	69.94	-17.54	52.40	74.00	-21.60	peak
2 *	4884.031	61.15	-17.54	43.61	54.00	-10.39	AVG
3	8845.768	47.37	-8.52	38.85	74.00	-35.15	peak
4	8845.768	36.22	-8.52	27.70	54.00	-26.30	AVG
5	17867.452	43.76	6.83	50.59	74.00	-23.41	peak
6	17867.452	32.92	6.83	39.75	54.00	-14.25	AVG

Remarks:

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

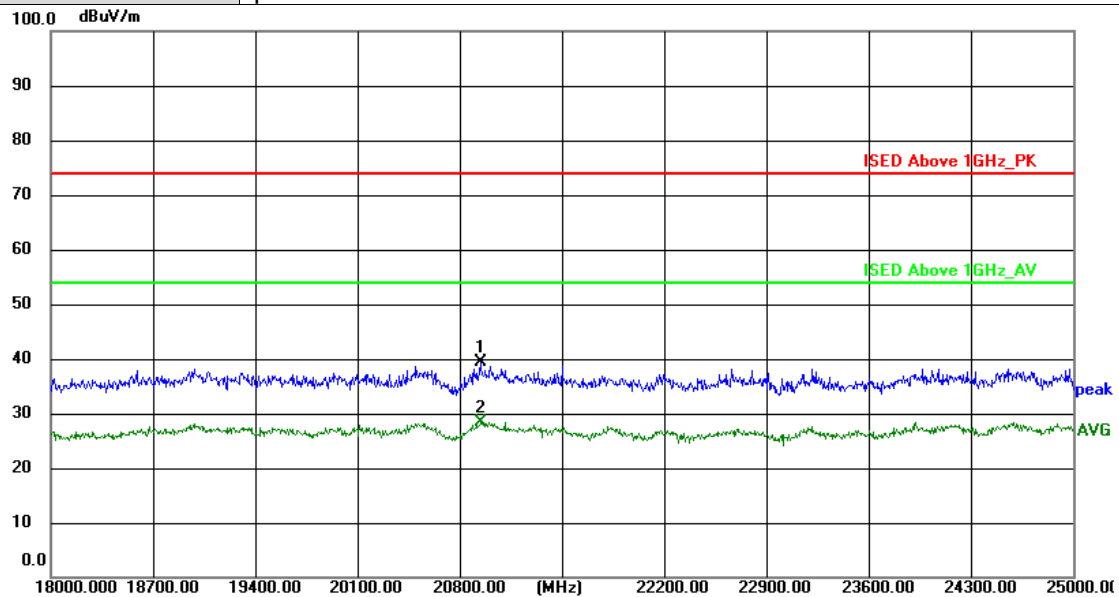
2. Margin value = Level - Limit value





18GHz -25GHz

Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2412MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	20946.125	58.17	-18.71	39.46	74.00	-34.54	peak
2 *	20946.125	47.12	-18.71	28.41	54.00	-25.59	AVG

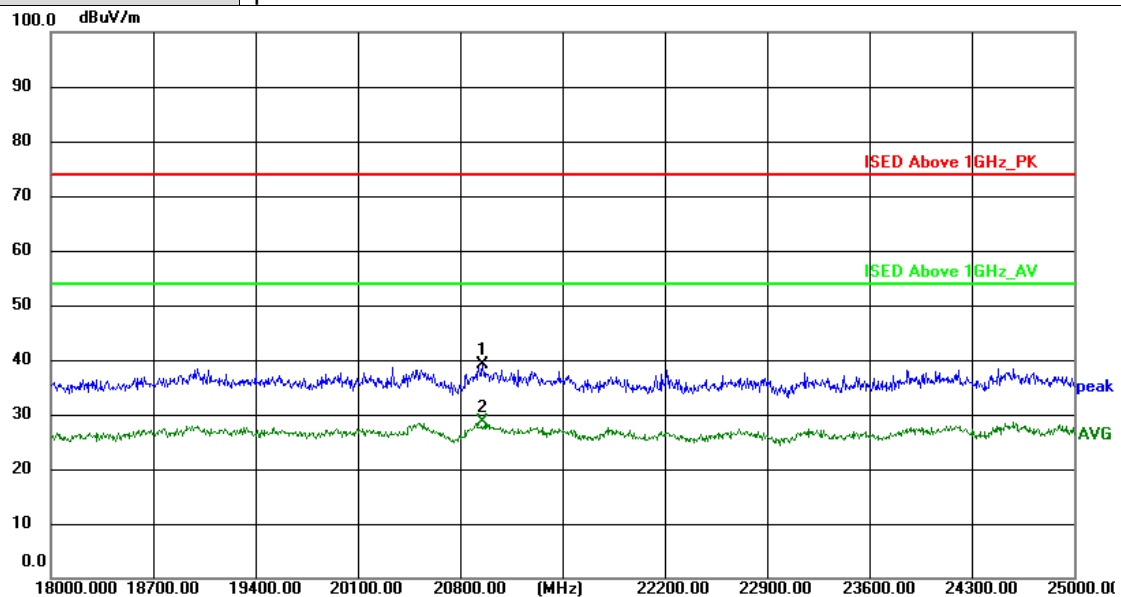
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11b Mode 2412MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	20956.625	57.85	-18.67	39.18	74.00	-34.82	peak
2 *	20956.625	47.20	-18.67	28.53	54.00	-25.47	AVG

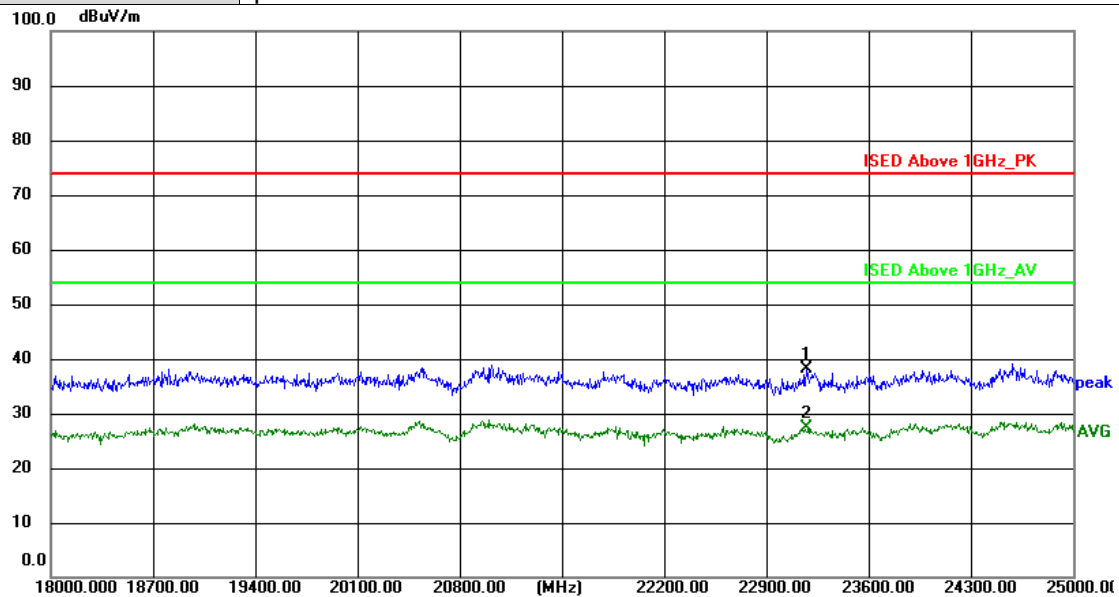
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

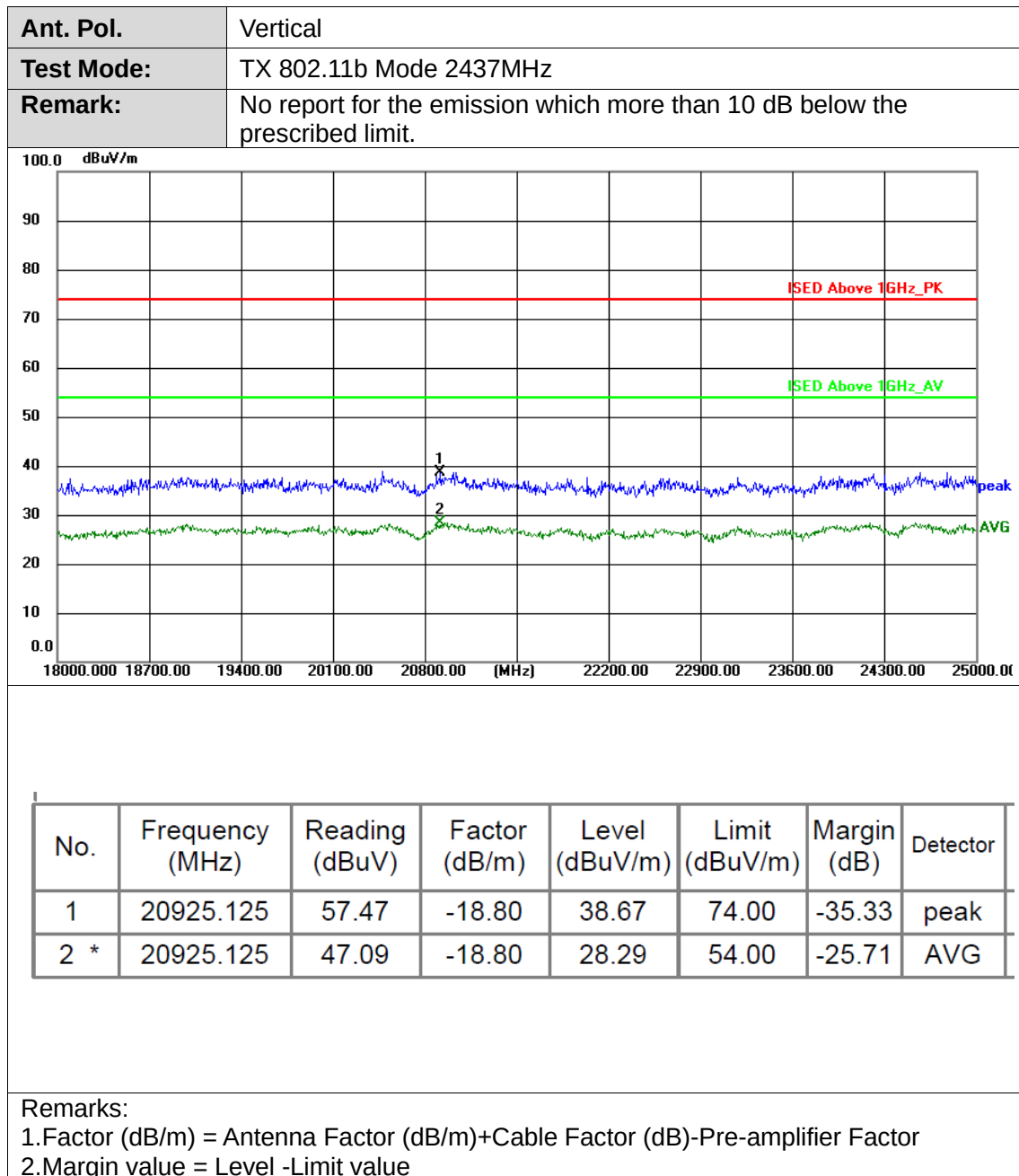


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	23180.000	56.90	-18.73	38.17	74.00	-35.83	peak
2 *	23180.000	46.06	-18.73	27.33	54.00	-26.67	AVG

Remarks:

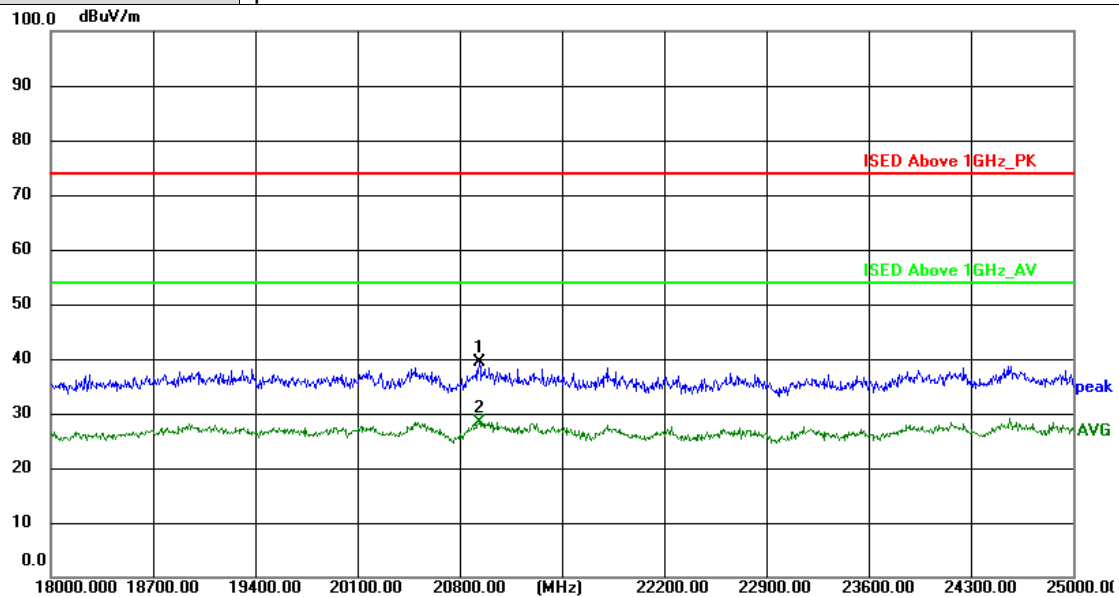
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value





Ant. Pol.	Horizontal
Test Mode:	TX 802.11b Mode 2462MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	20940.875	58.12	-18.74	39.38	74.00	-34.62	peak
2 *	20940.875	47.01	-18.74	28.27	54.00	-25.73	AVG

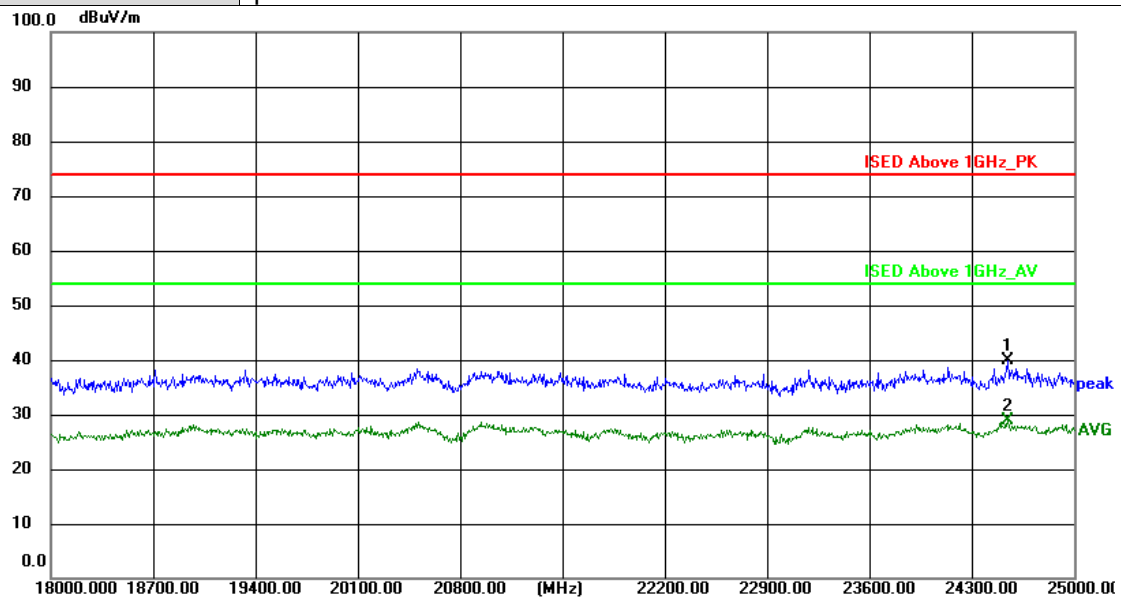
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11b Mode 2462MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	24545.000	56.82	-17.01	39.81	74.00	-34.19	peak
2 *	24545.000	45.78	-17.01	28.77	54.00	-25.23	AVG

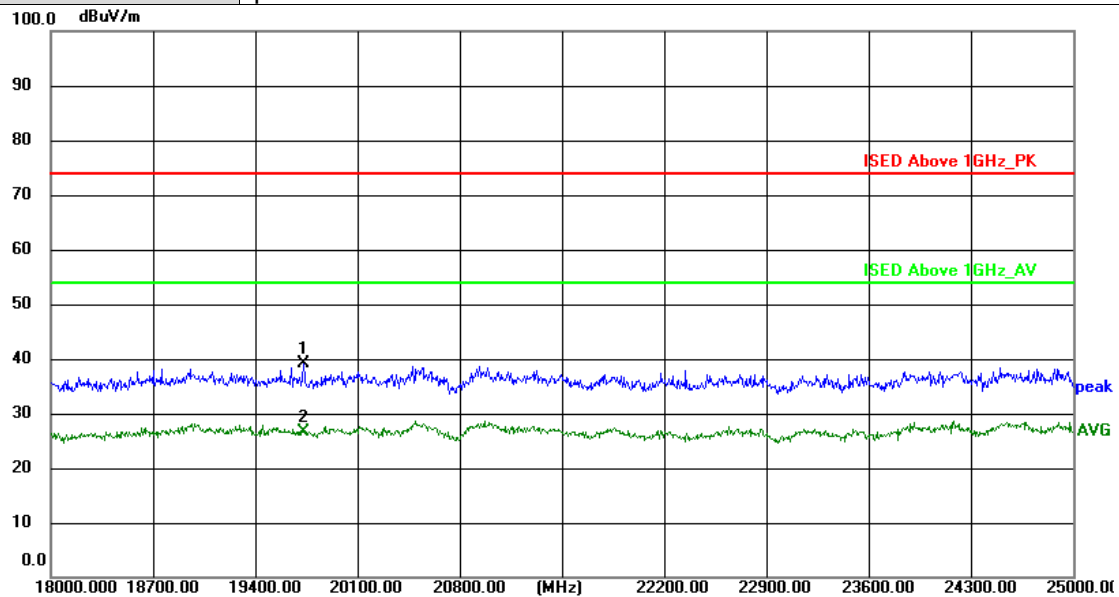
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2422MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19738.625	60.11	-20.88	39.23	74.00	-34.77	peak
2 *	19738.625	47.59	-20.88	26.71	54.00	-27.29	AVG

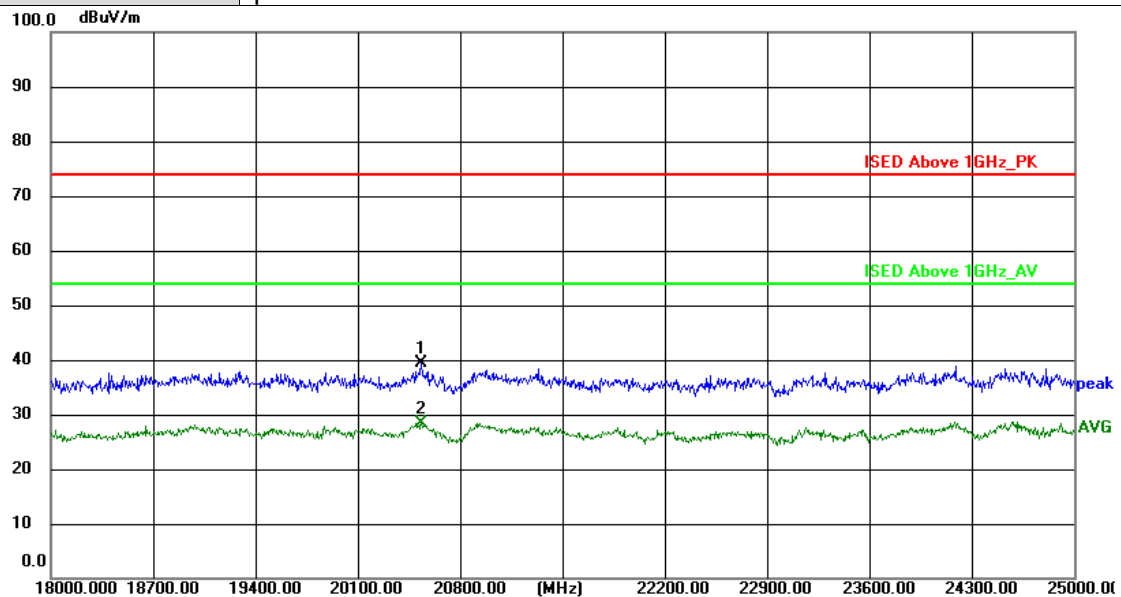
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 2422MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



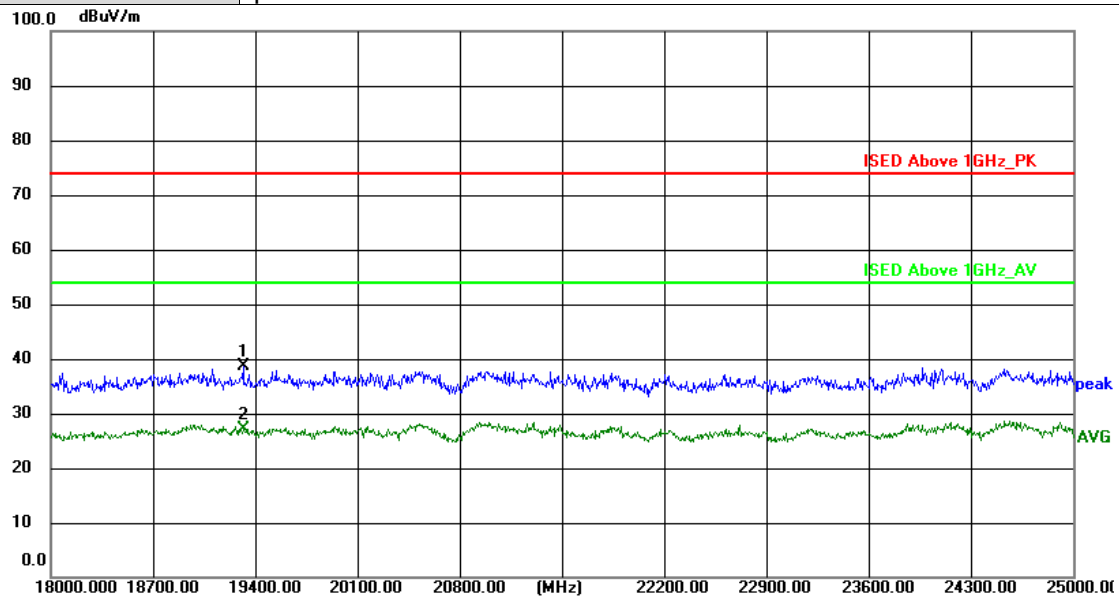
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	20540.125	58.91	-19.41	39.50	74.00	-34.50	peak
2 *	20540.125	47.88	-19.41	28.47	54.00	-25.53	AVG

Remarks:

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



Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19320.375	59.39	-20.79	38.60	74.00	-35.40	peak
2 *	19320.375	48.00	-20.79	27.21	54.00	-26.79	AVG

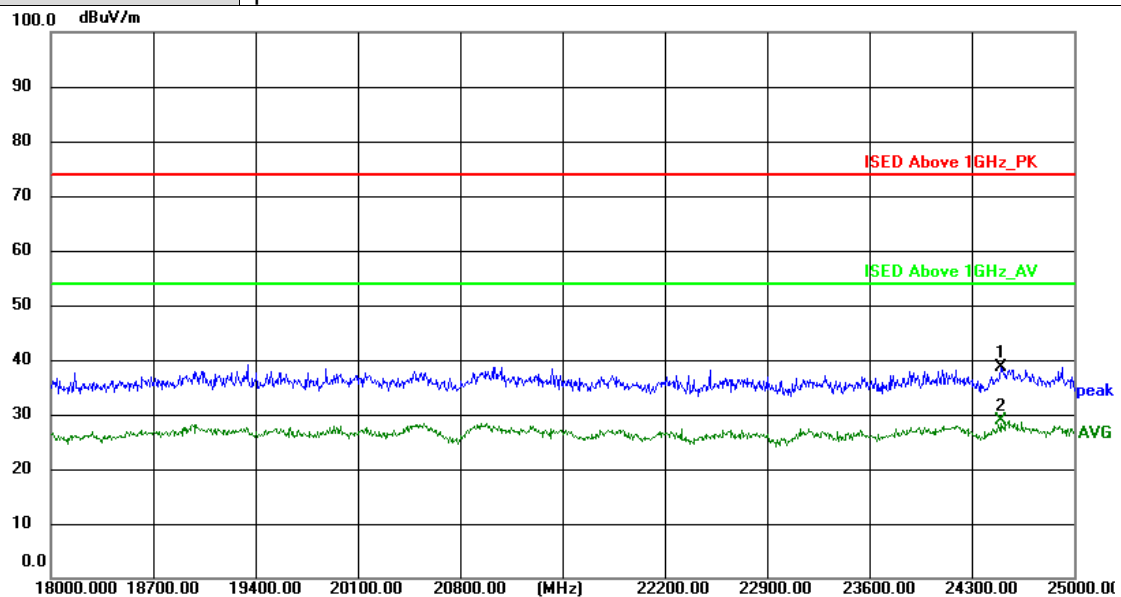
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 2437MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	24500.375	55.68	-17.00	38.68	74.00	-35.32	peak
2 *	24500.375	45.79	-17.00	28.79	54.00	-25.21	AVG

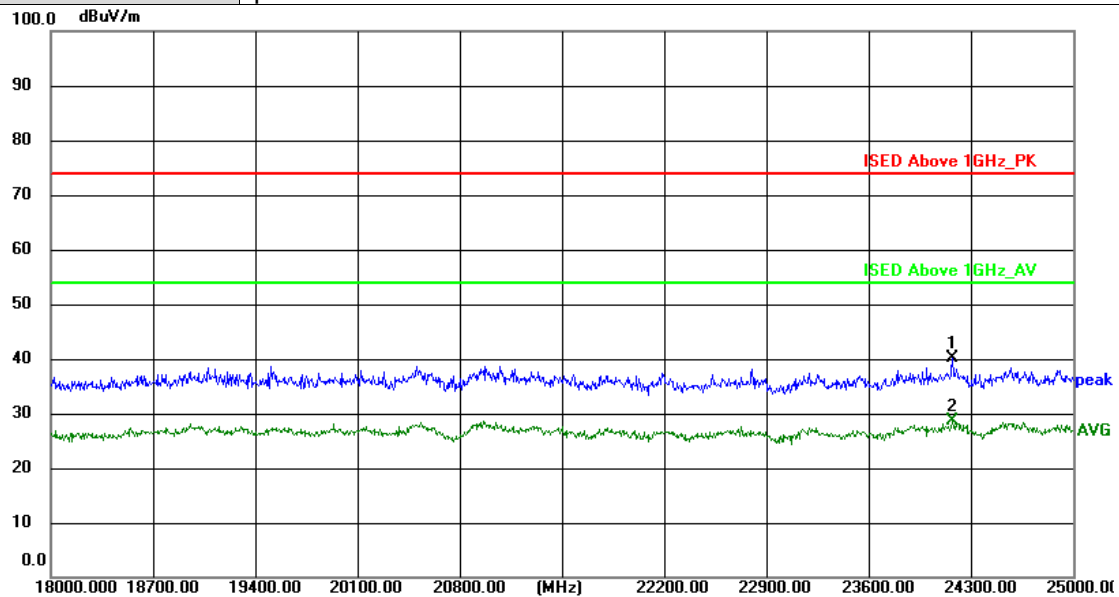
Remarks:

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

2. Margin value = Level - Limit value



Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 2452MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.

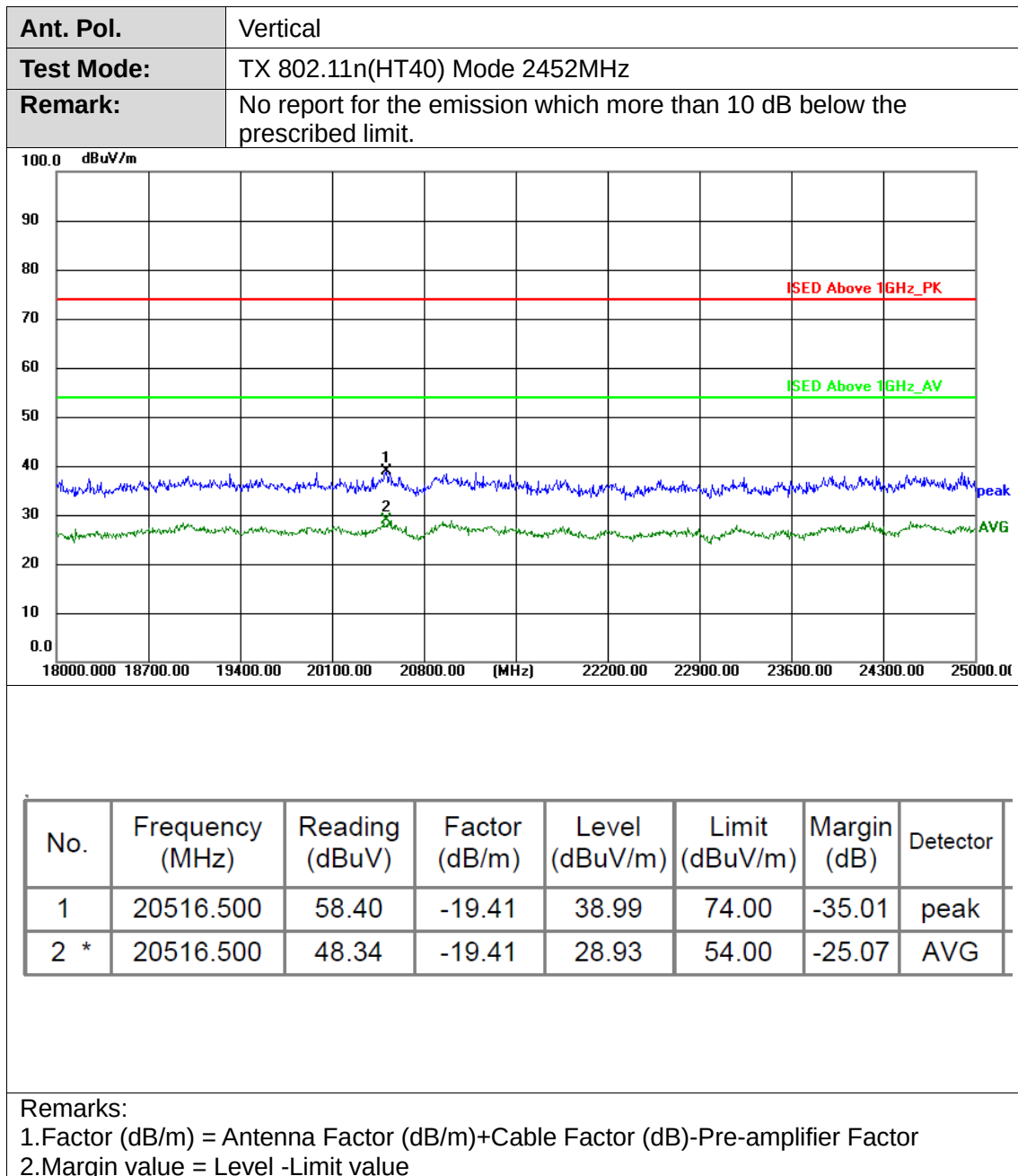


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	24177.500	57.72	-17.50	40.22	74.00	-33.78	peak
2 *	24177.500	46.01	-17.50	28.51	54.00	-25.49	AVG

Remarks:

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

2. Margin value = Level - Limit value



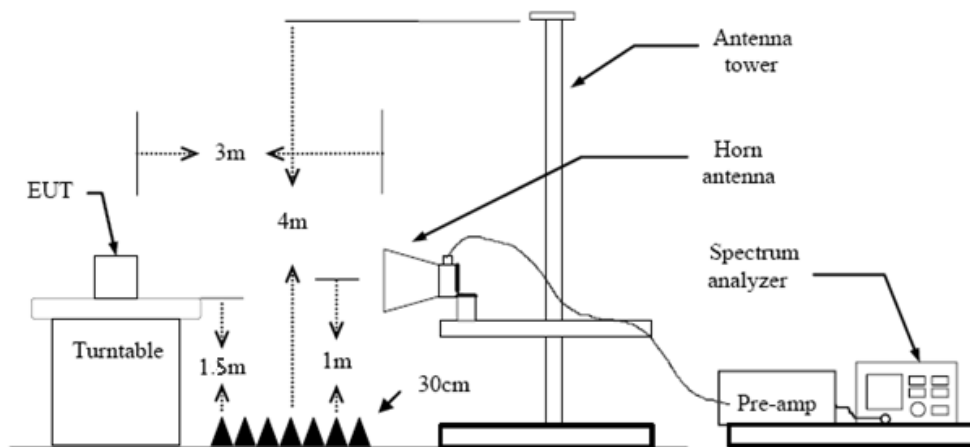
3.3. Radiated Emissions Restricted Band

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)/ RSS-Gen 8.10:

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 C63.10-2020+COR. 1-2023+C63.10A-2024+ERRATA TO C63.10A-2024 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 C63.10-2020+COR. 1-2023+C63.10A-2024+ERRATA TO C63.10A-2024 on radiated measurement.
5. The receiver set as follow:
RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

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

Test Mode

Please refer to the clause 2.4.

Test Results

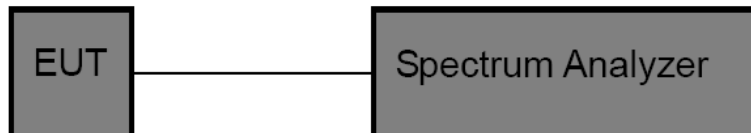


3.4. Band edge and Spurious Emissions (Conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)/ RSS-247 6.6: 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.

Test Configuration



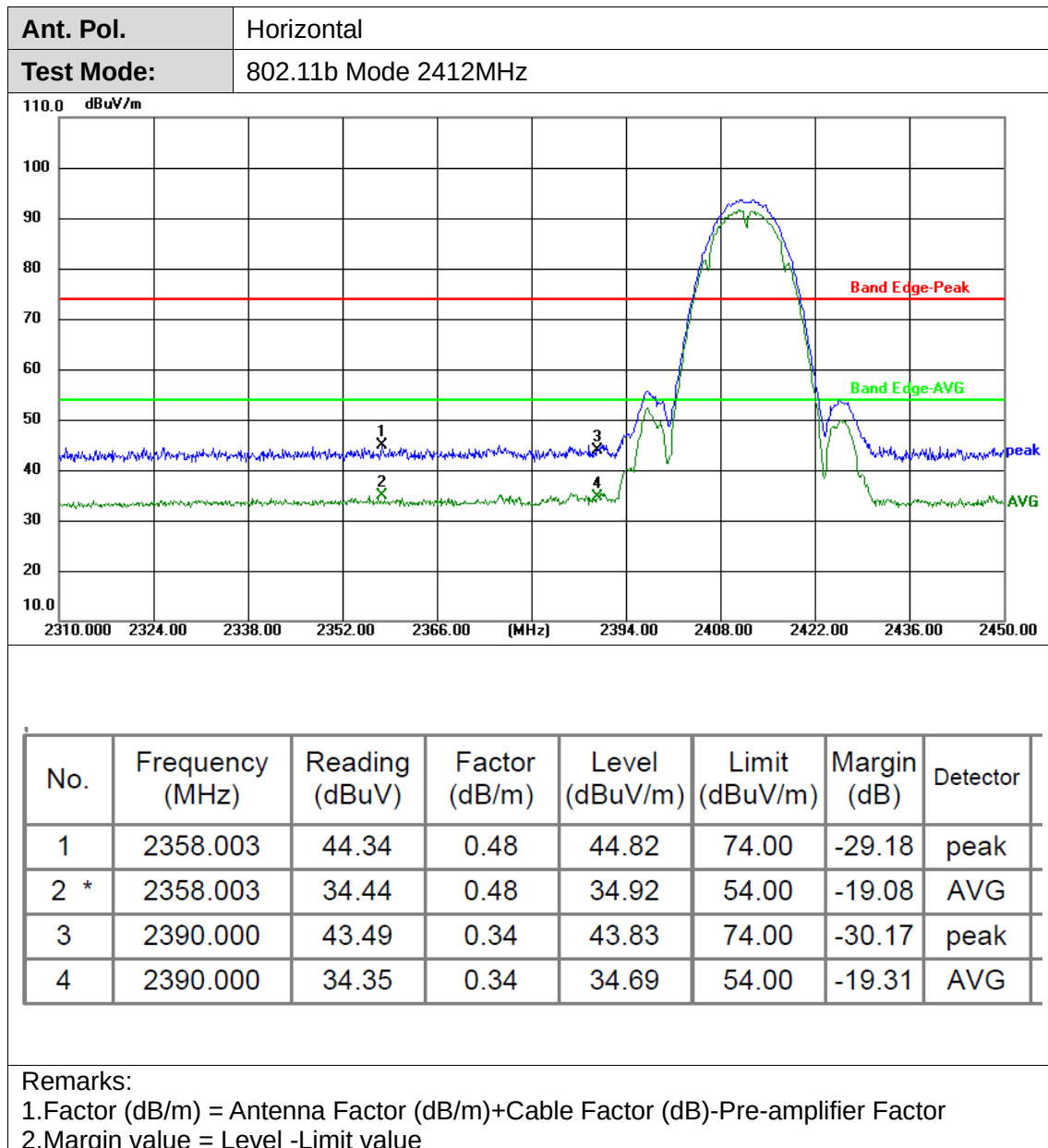
Test Procedure

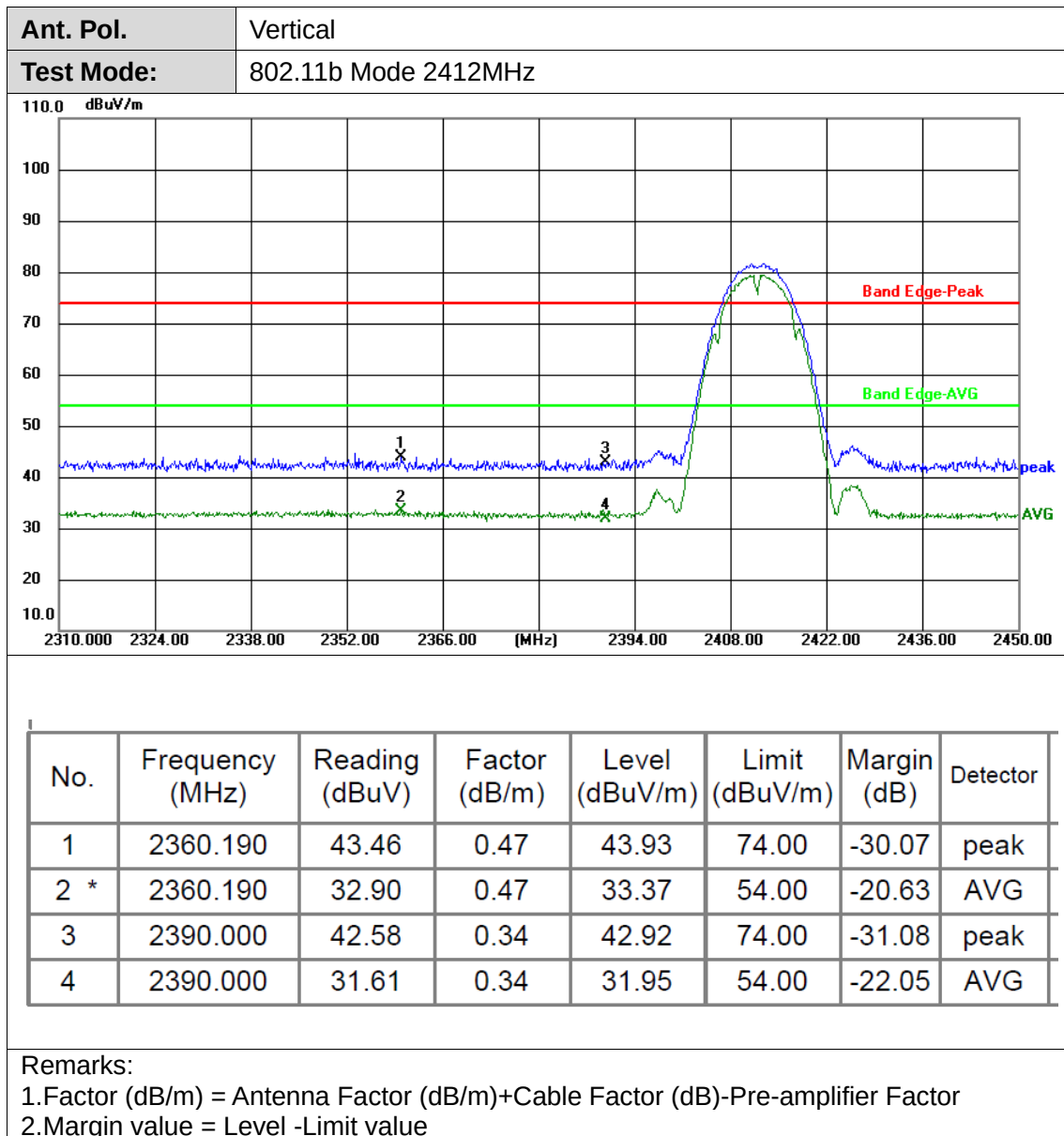
1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
RBW = 100 kHz, VBW $\geq$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

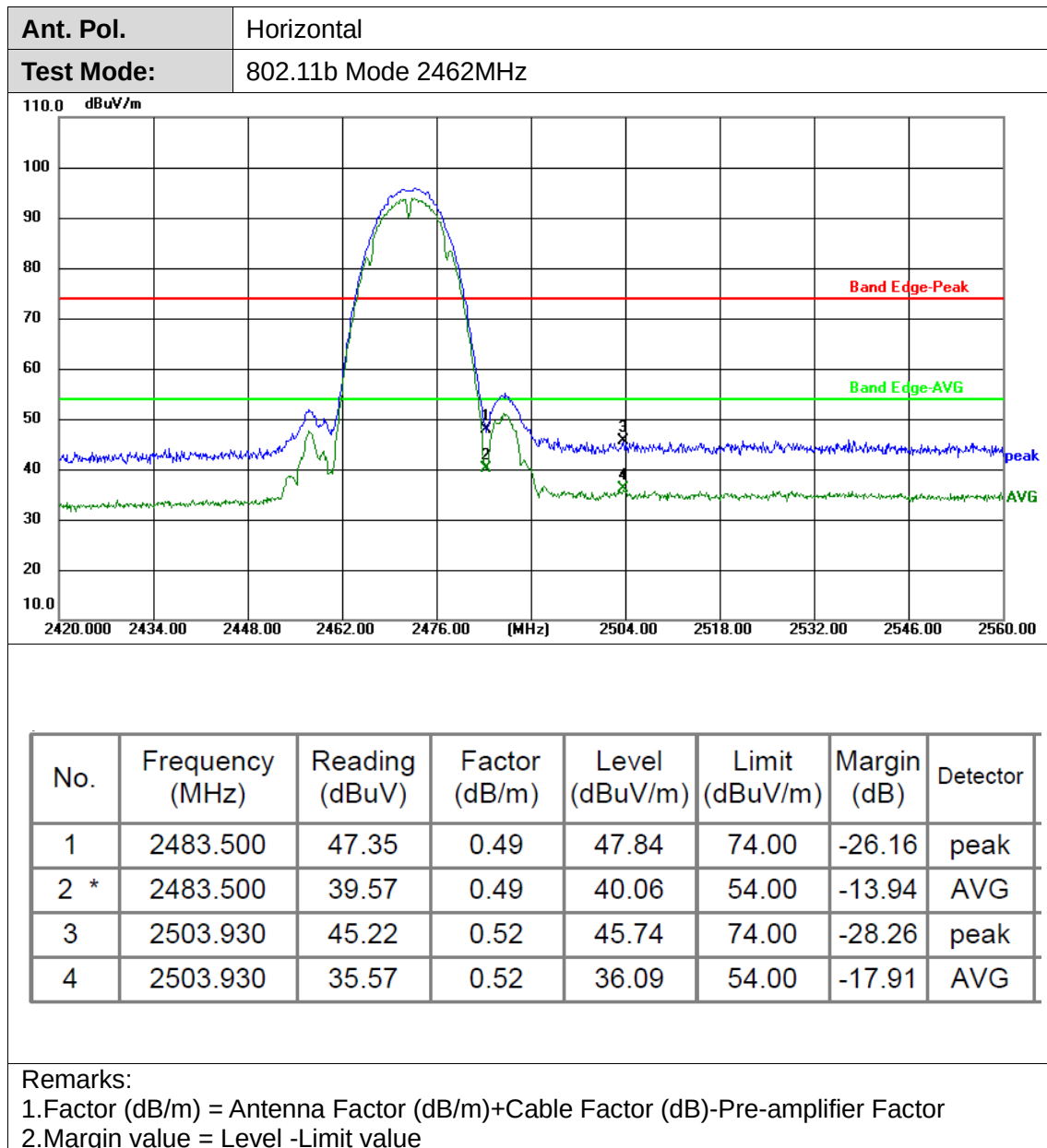
Test Mode

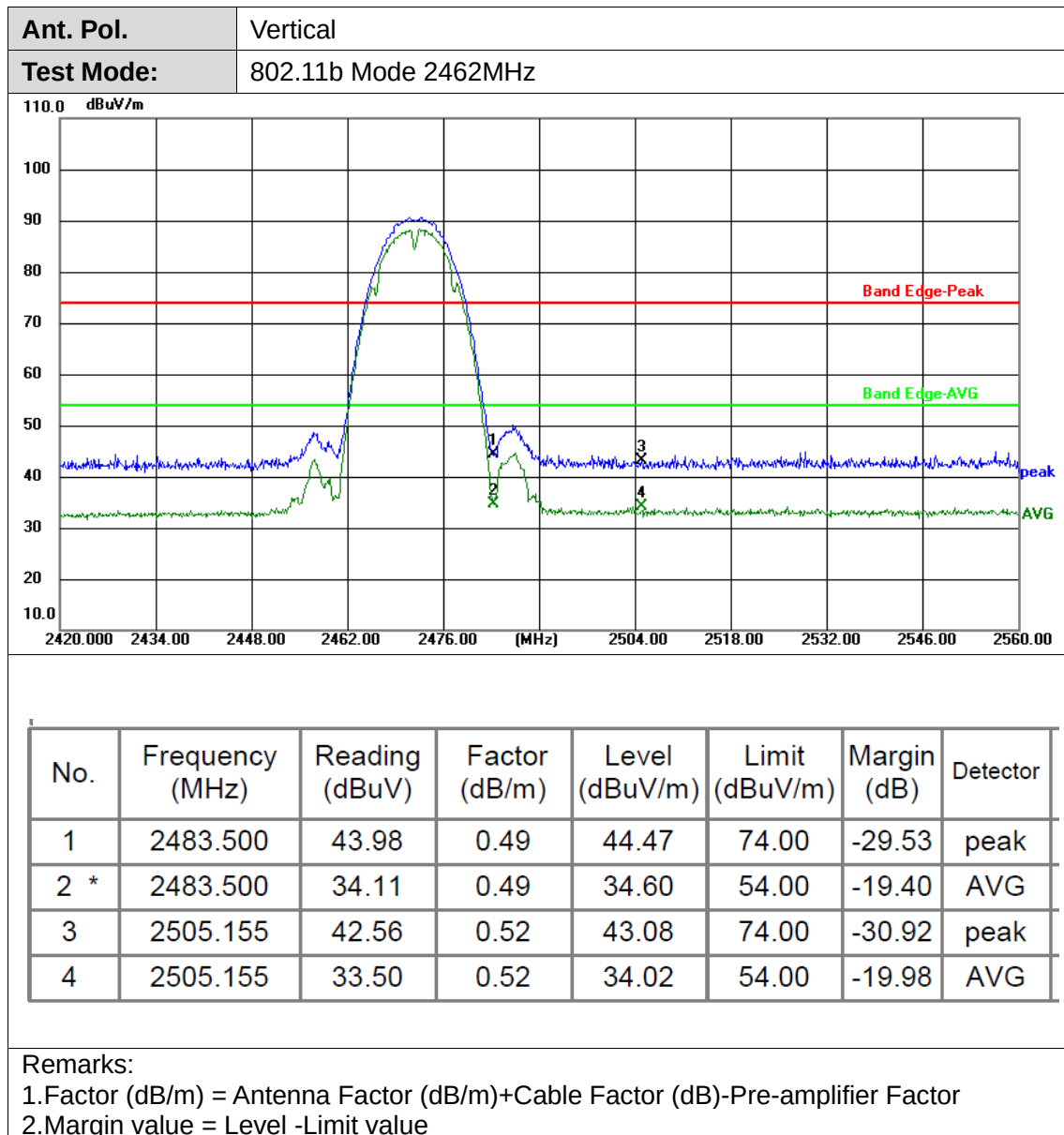
Please refer to the clause 2.4.

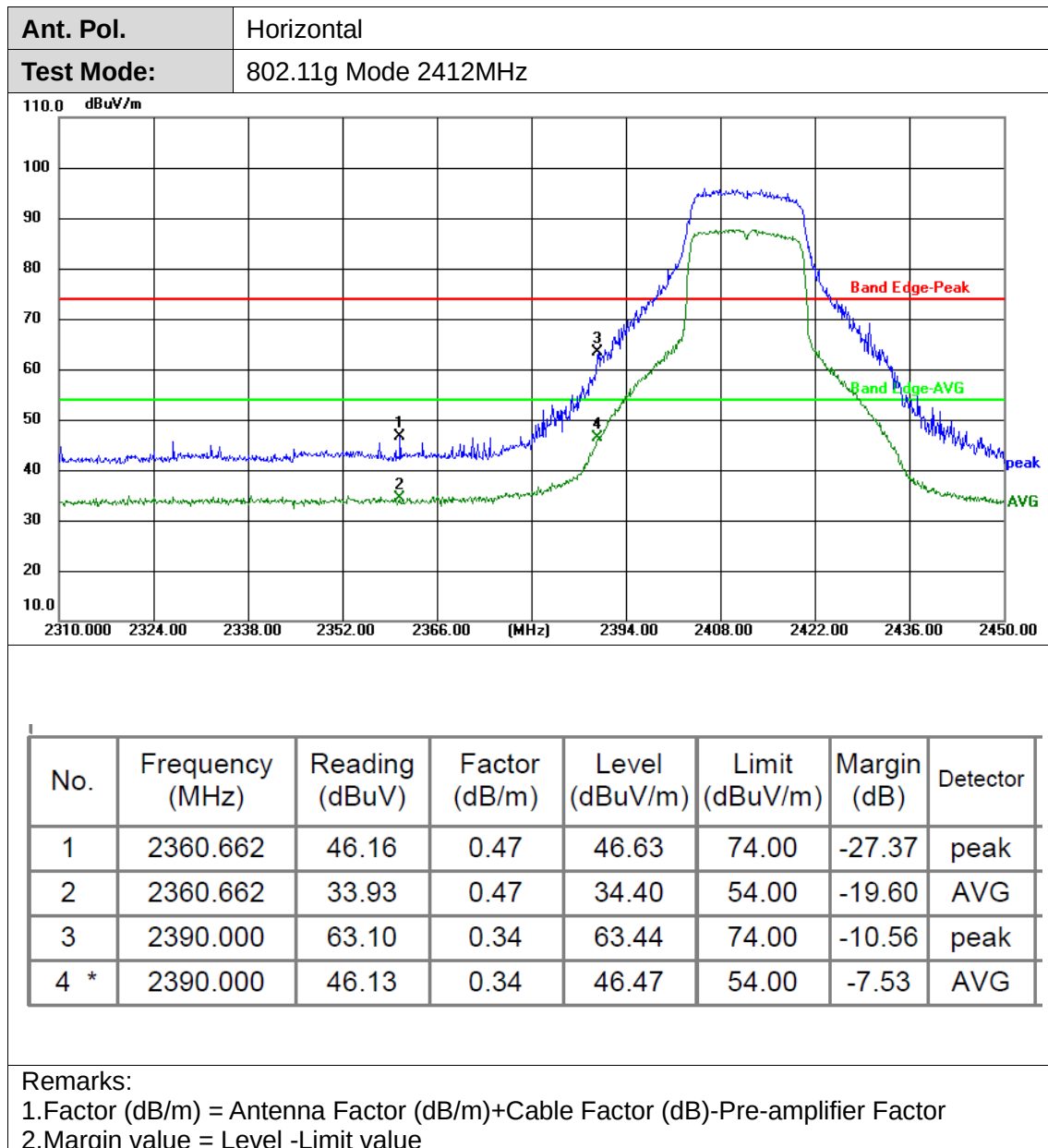
Test Results

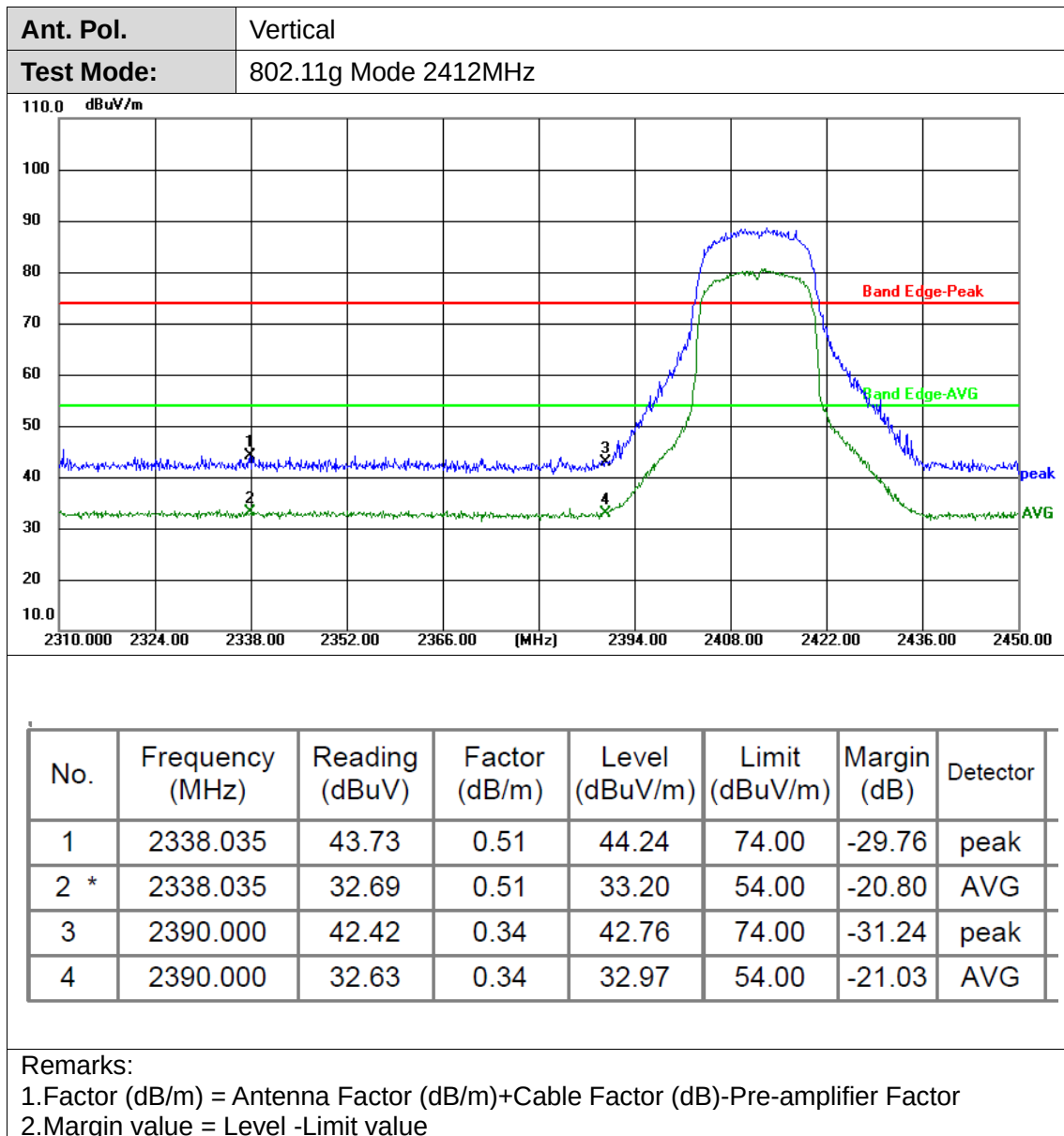


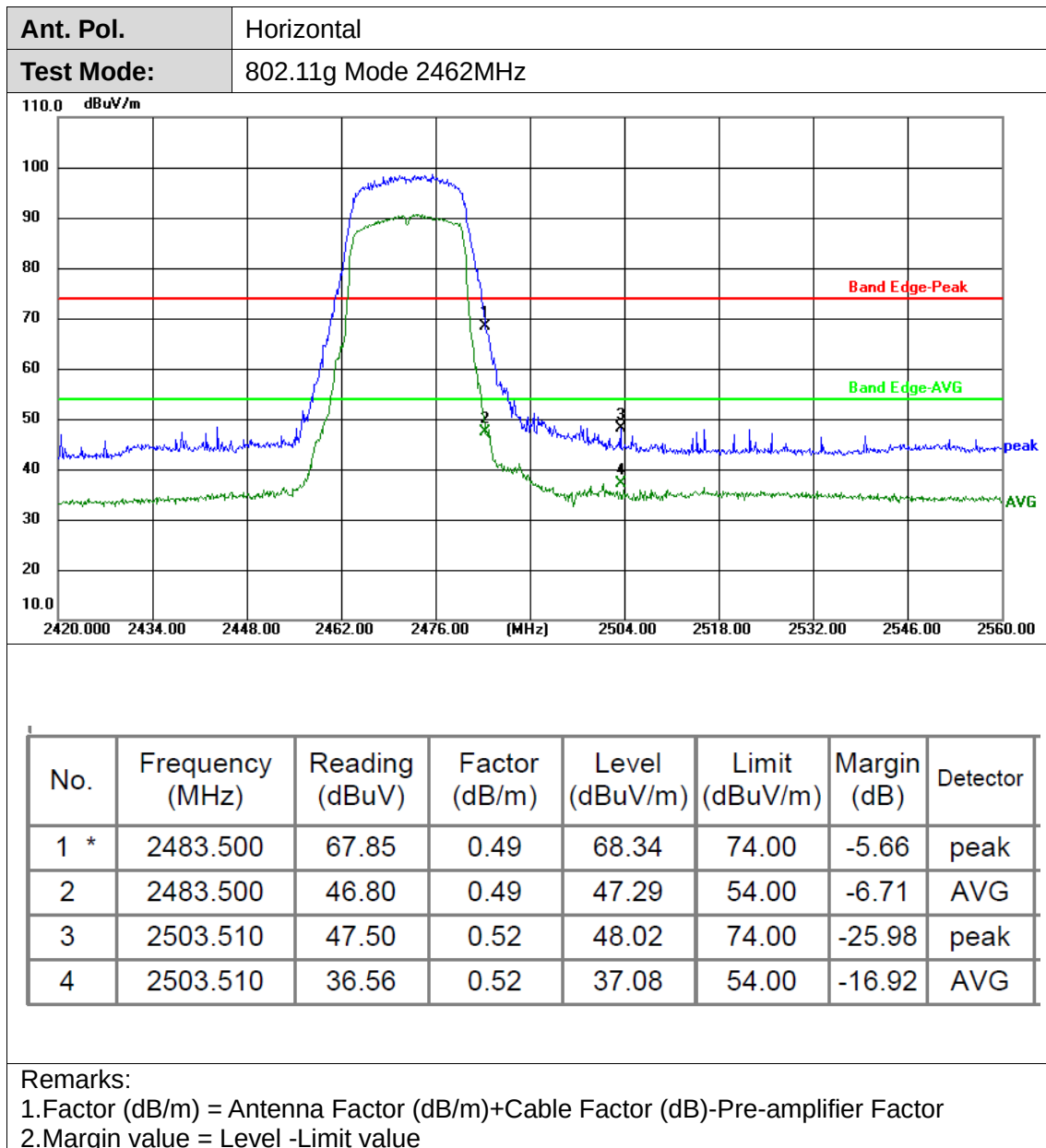


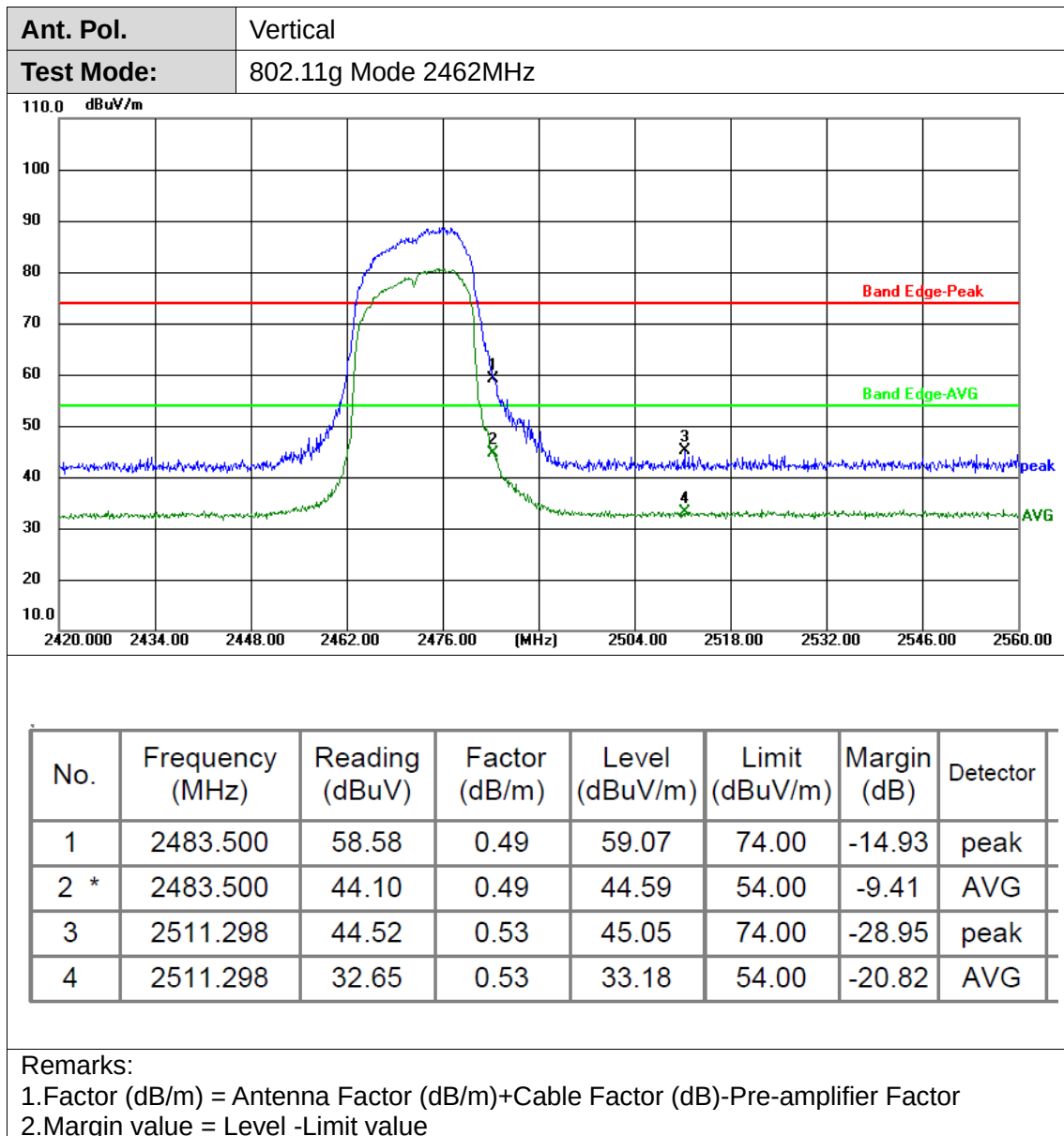


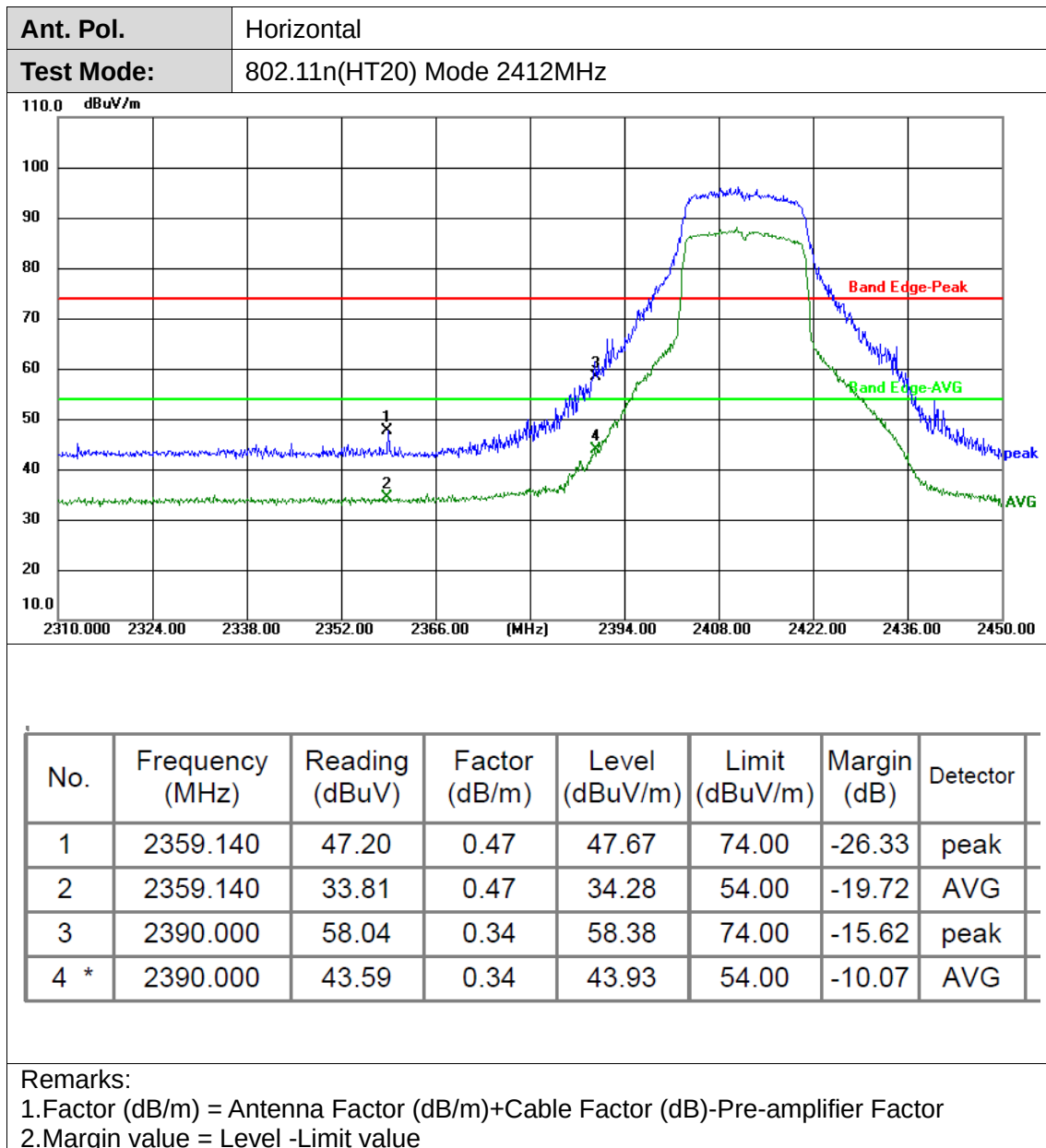


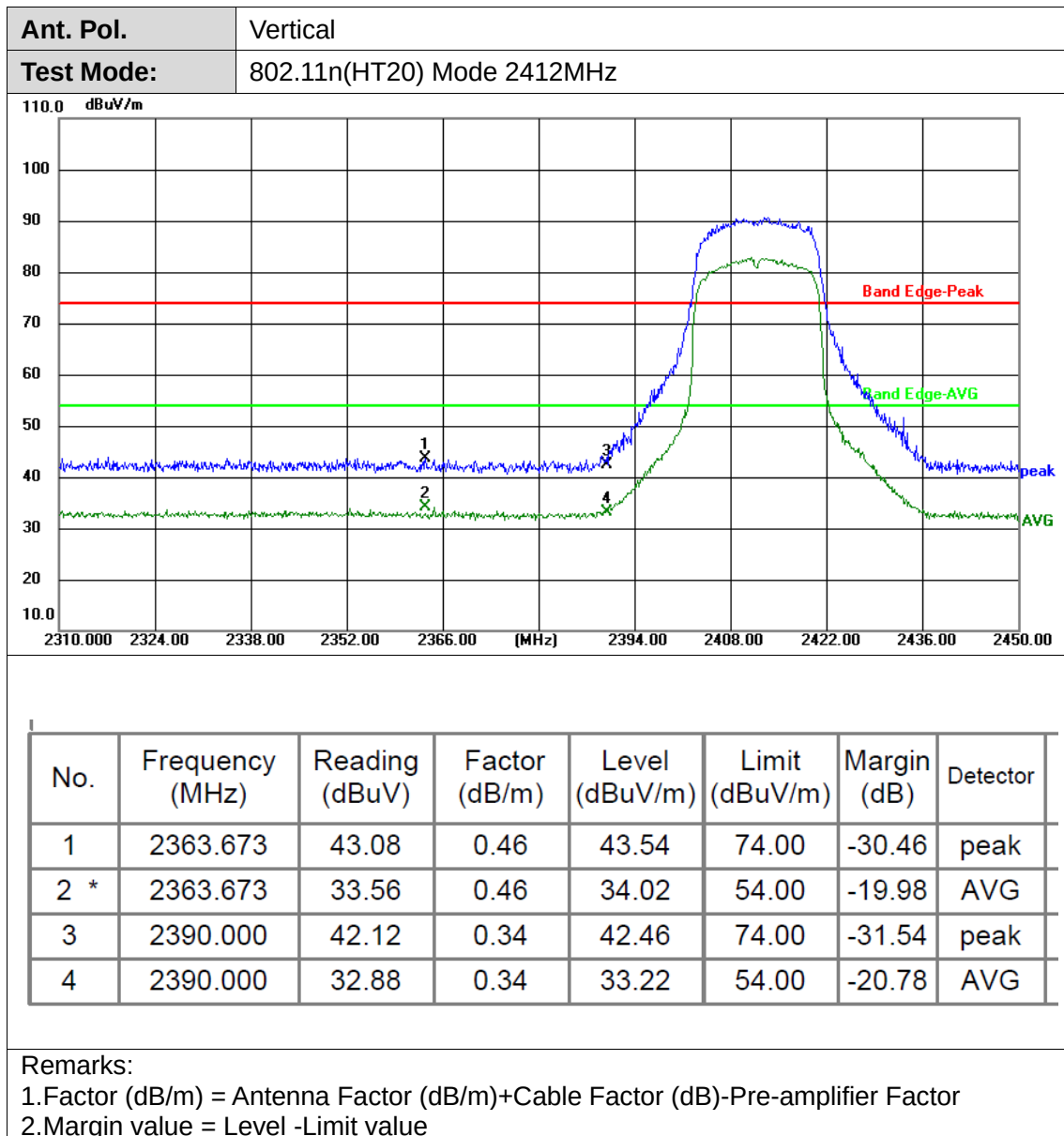


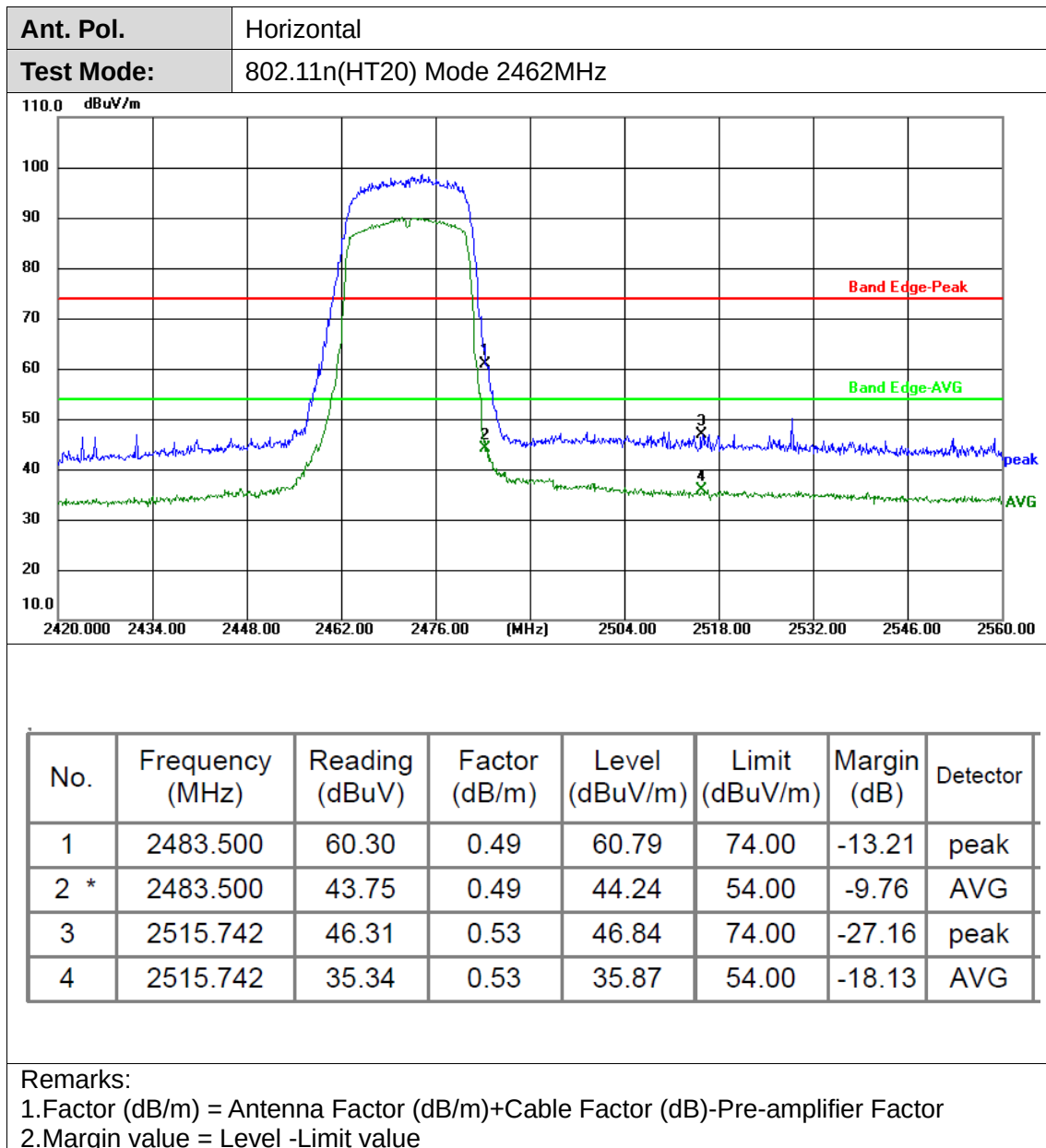


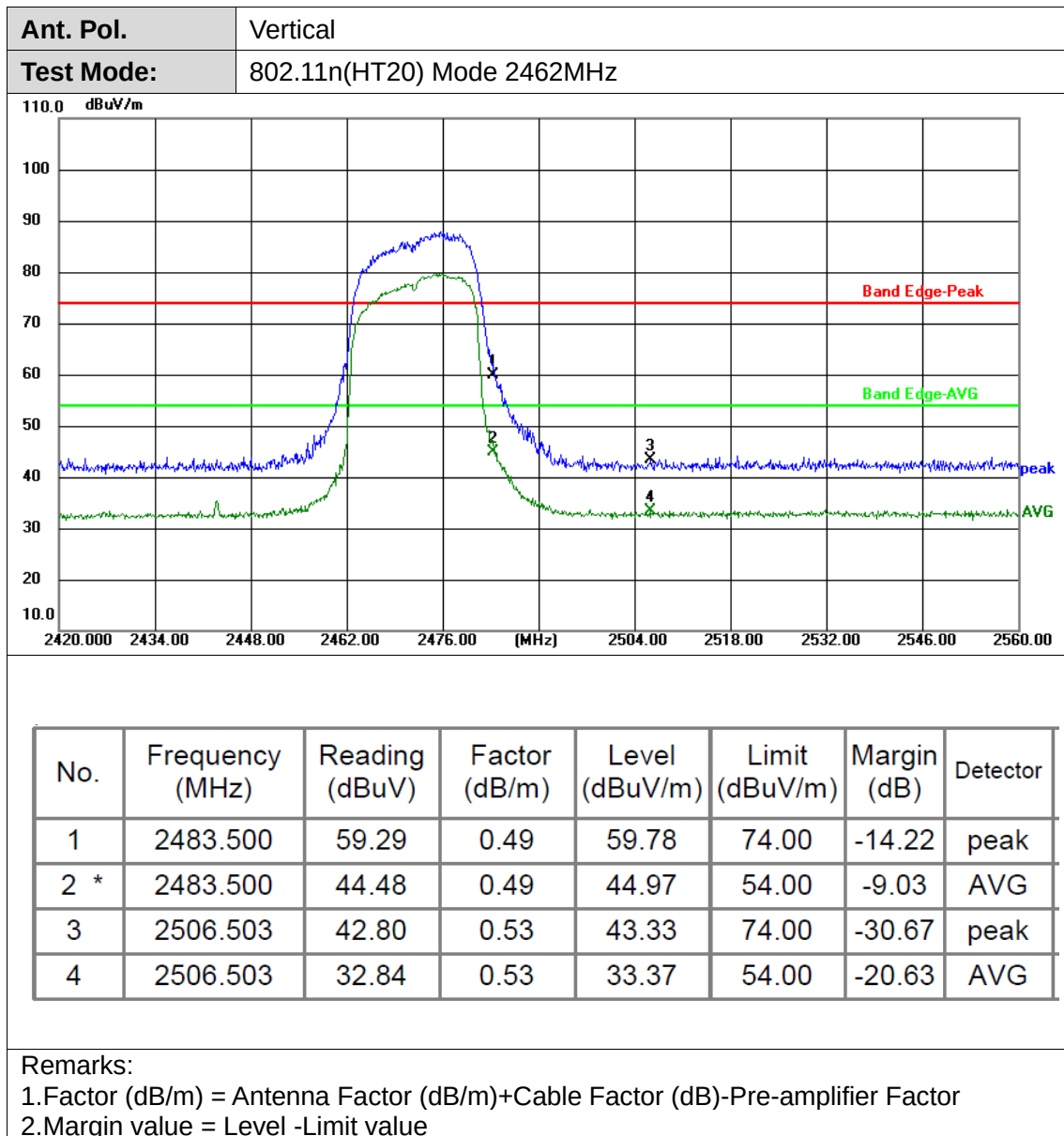


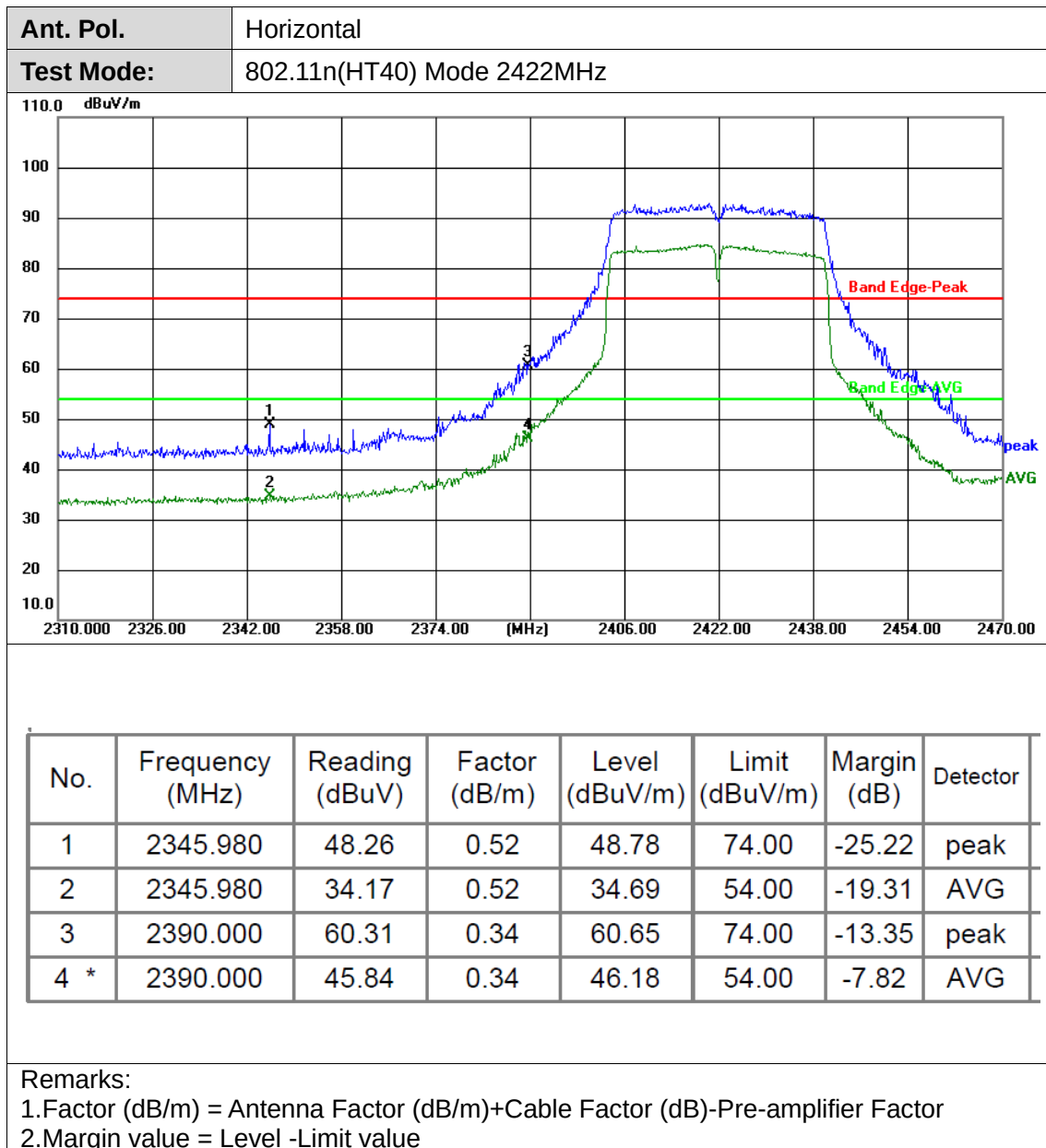


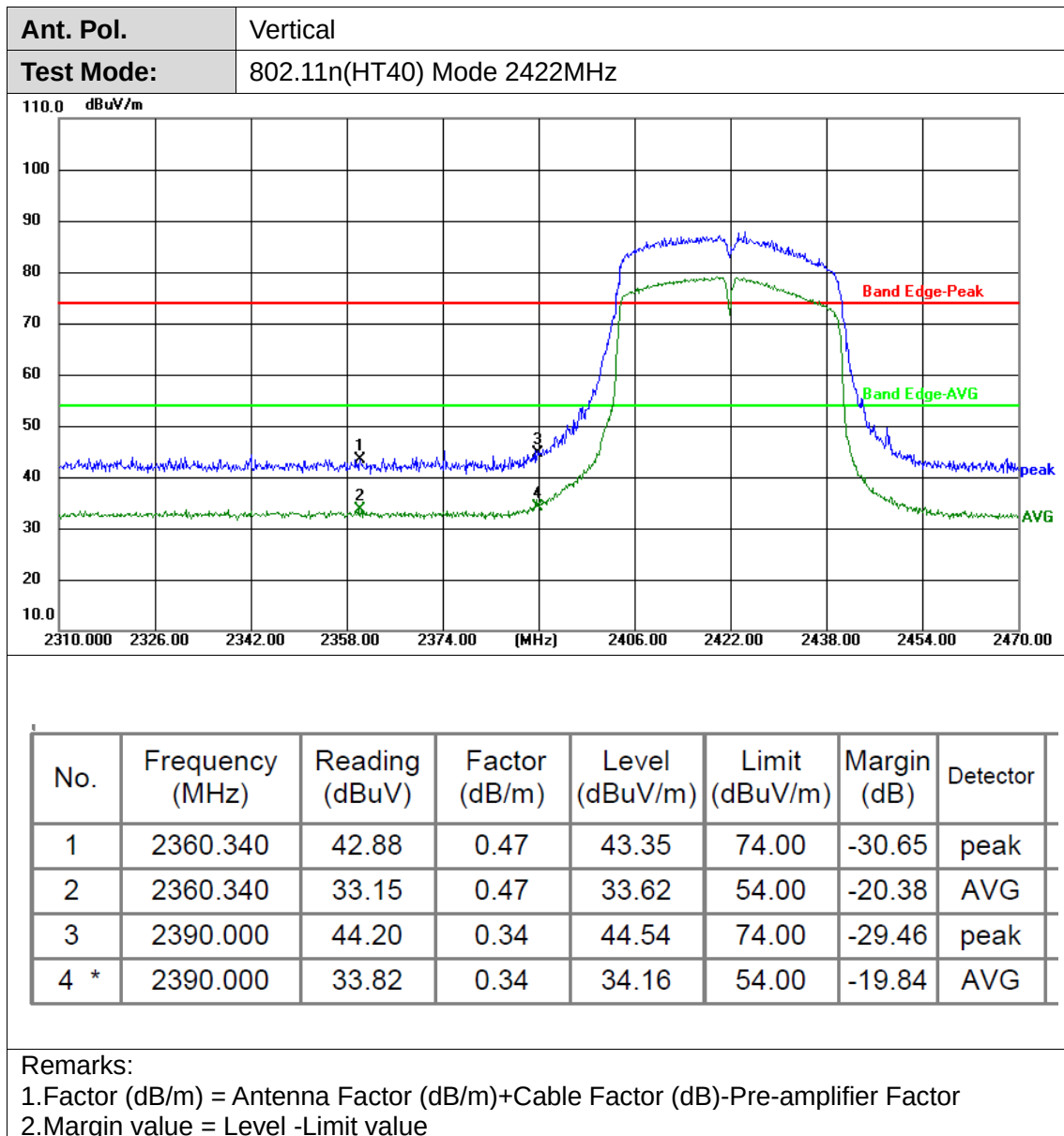


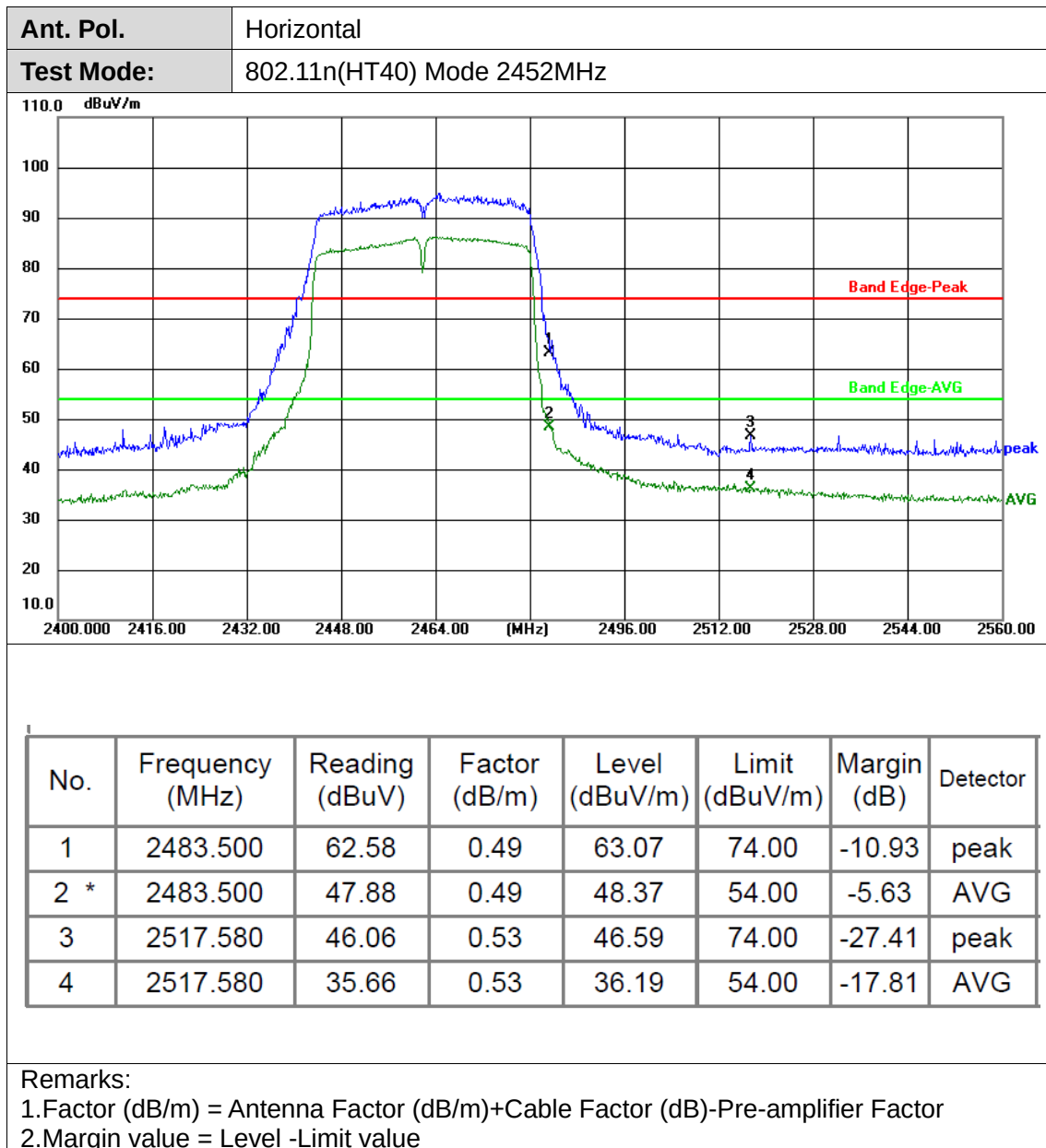


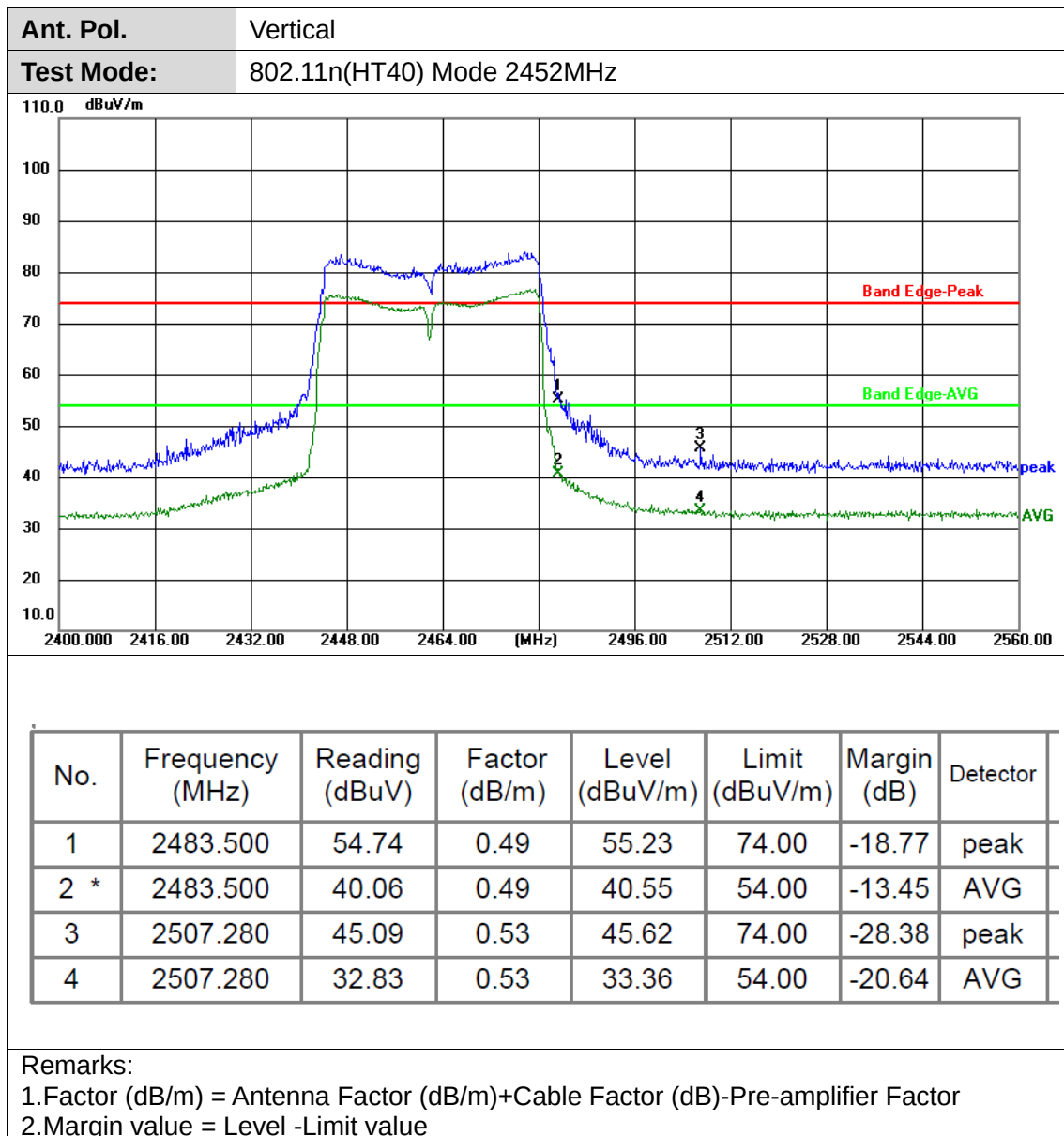


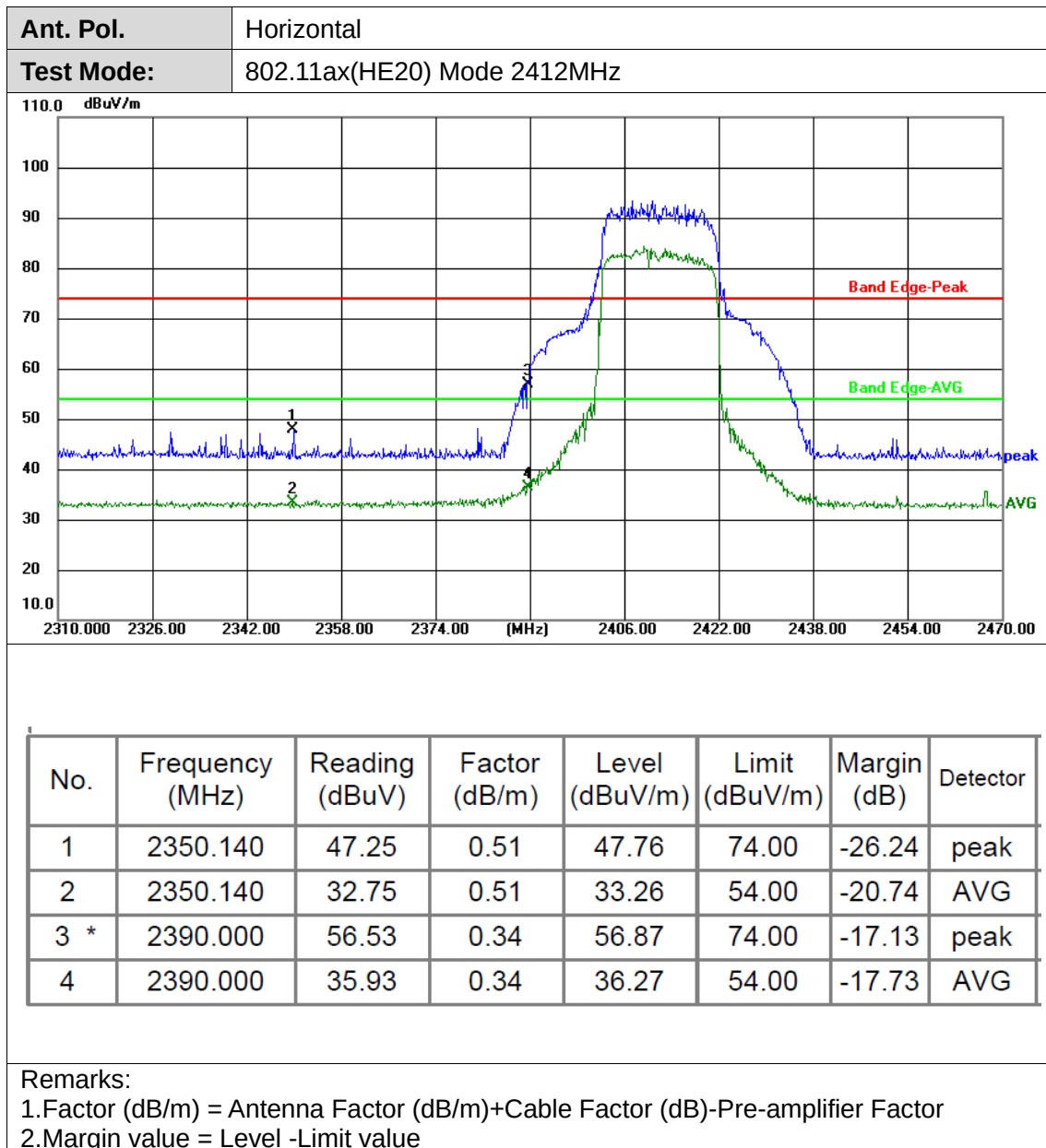


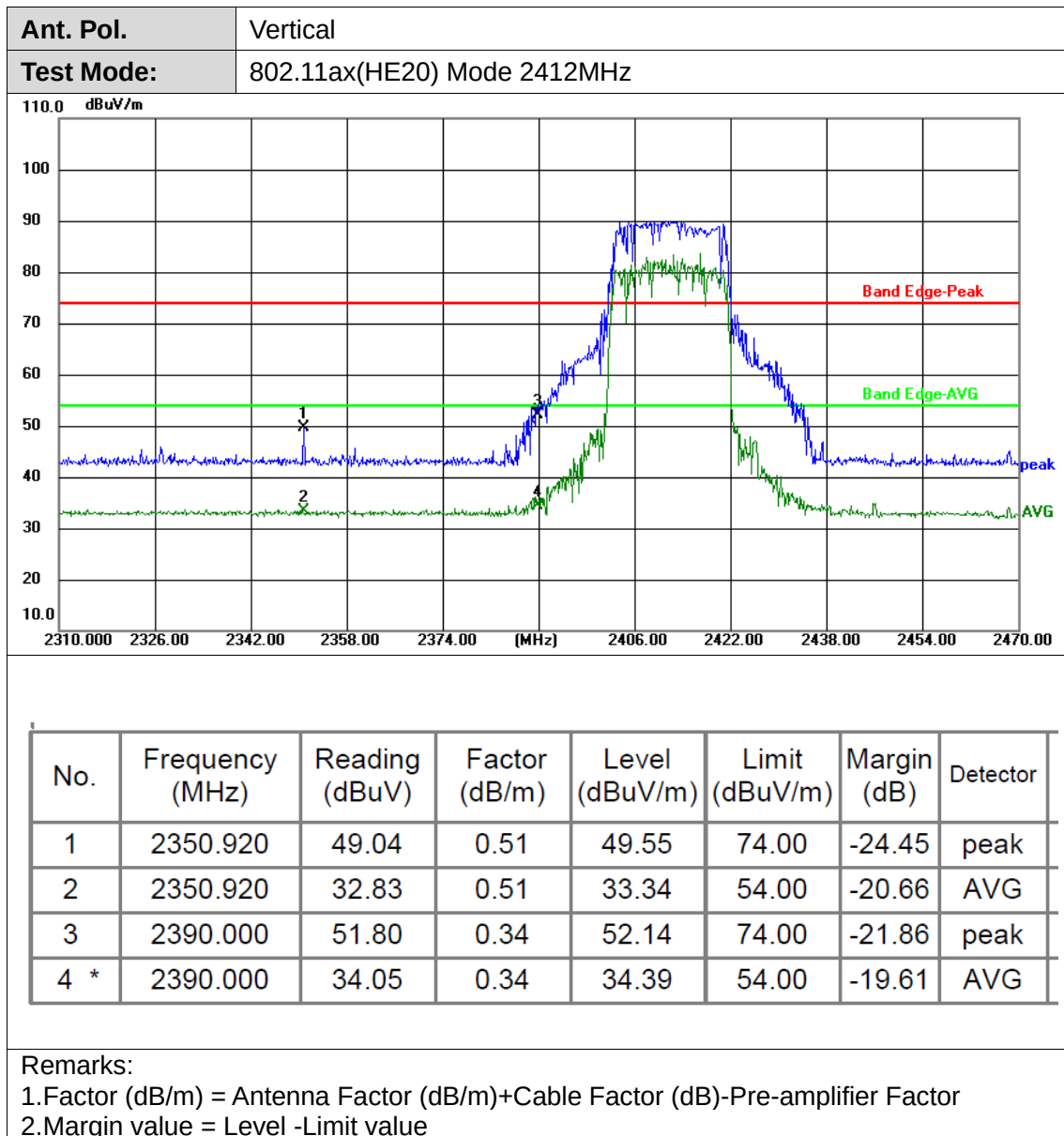


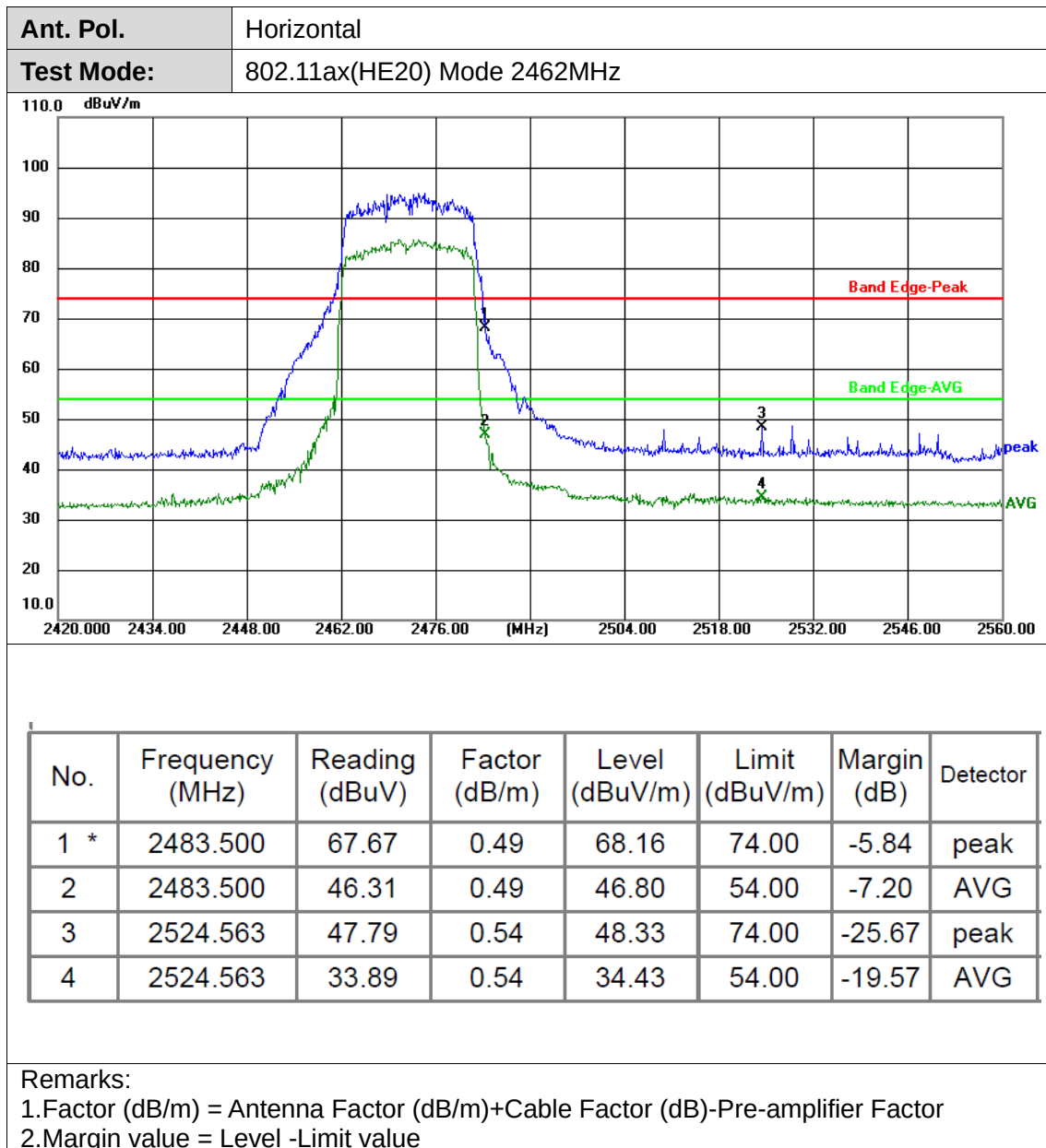


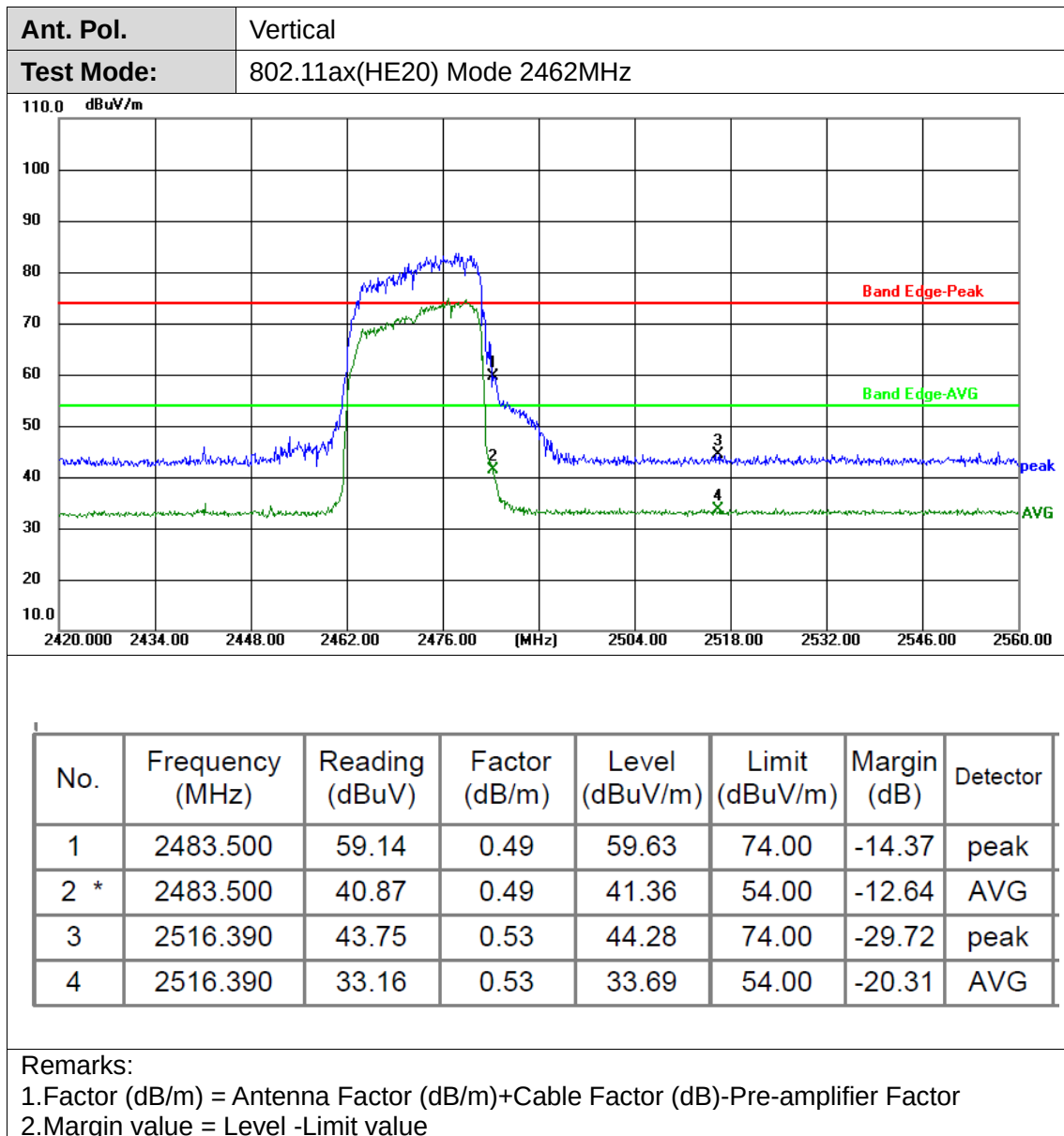


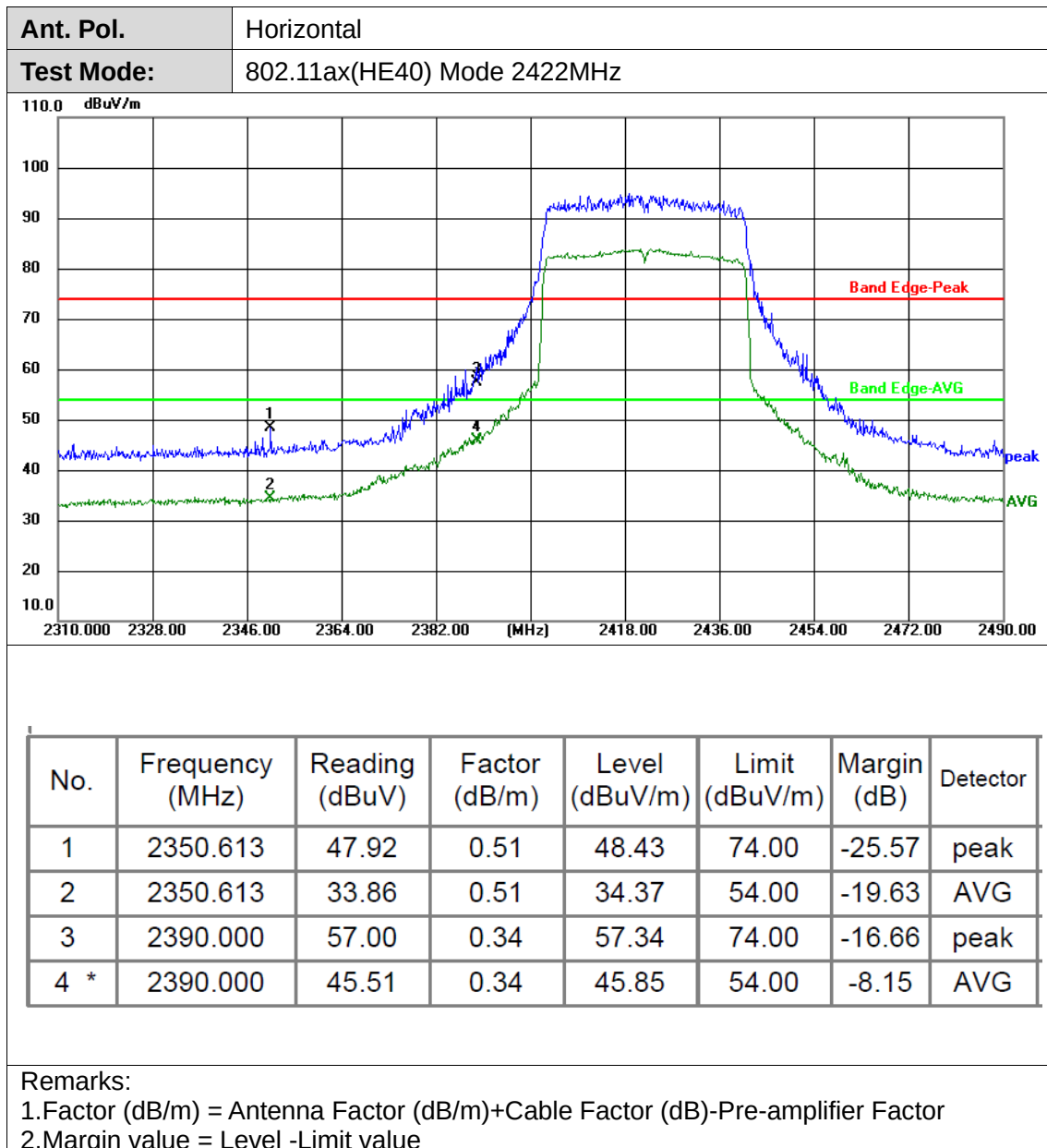


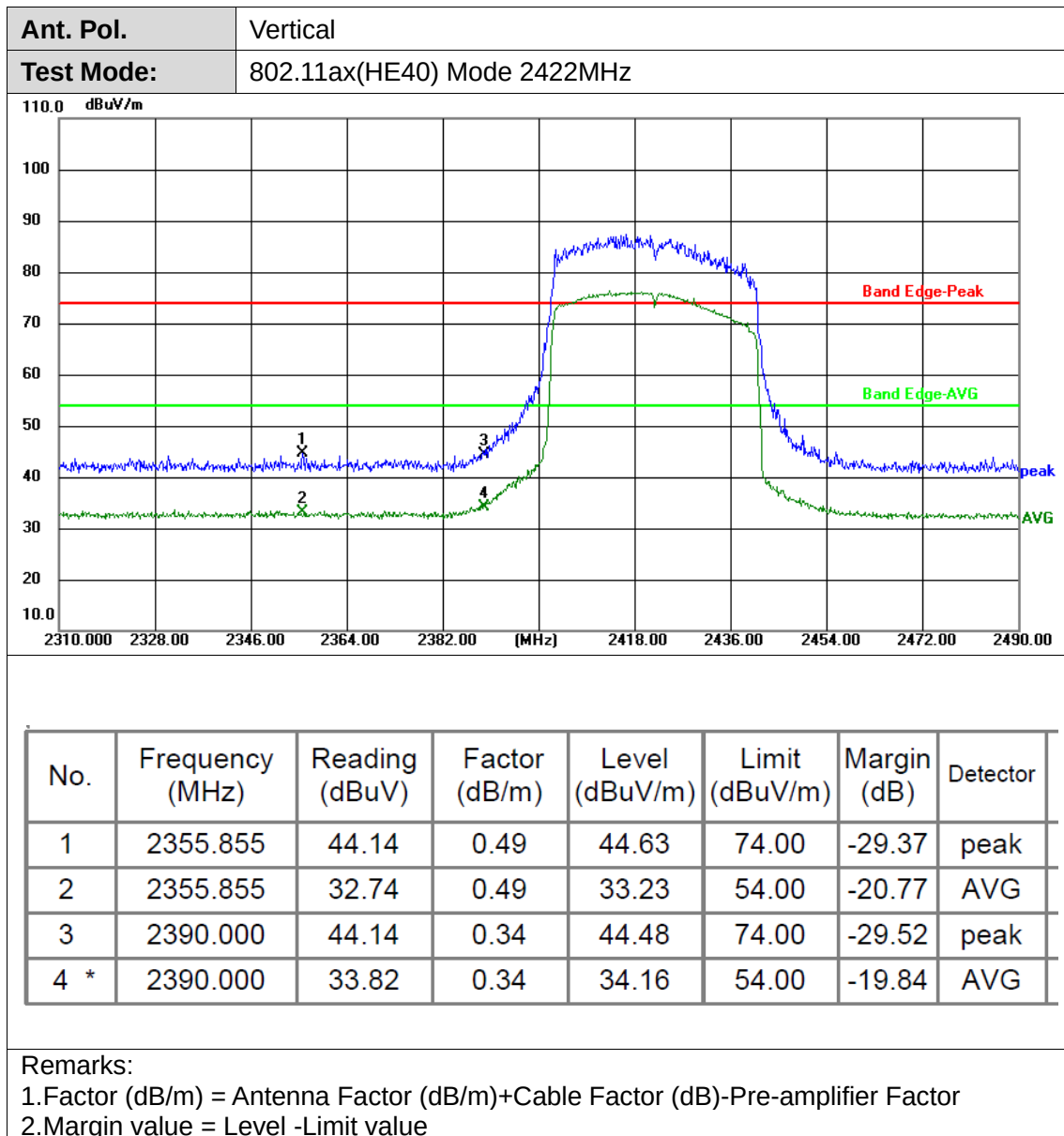


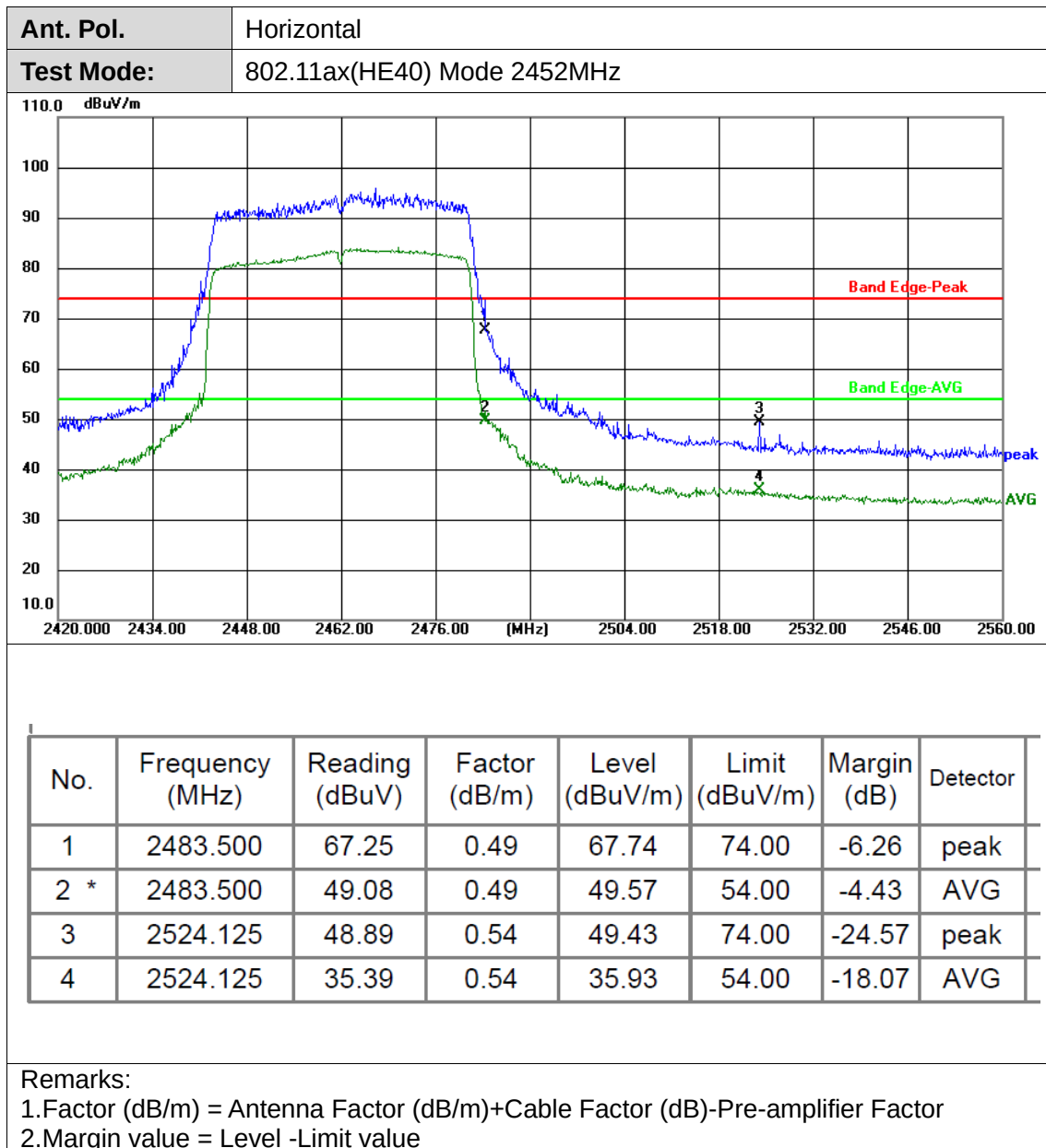


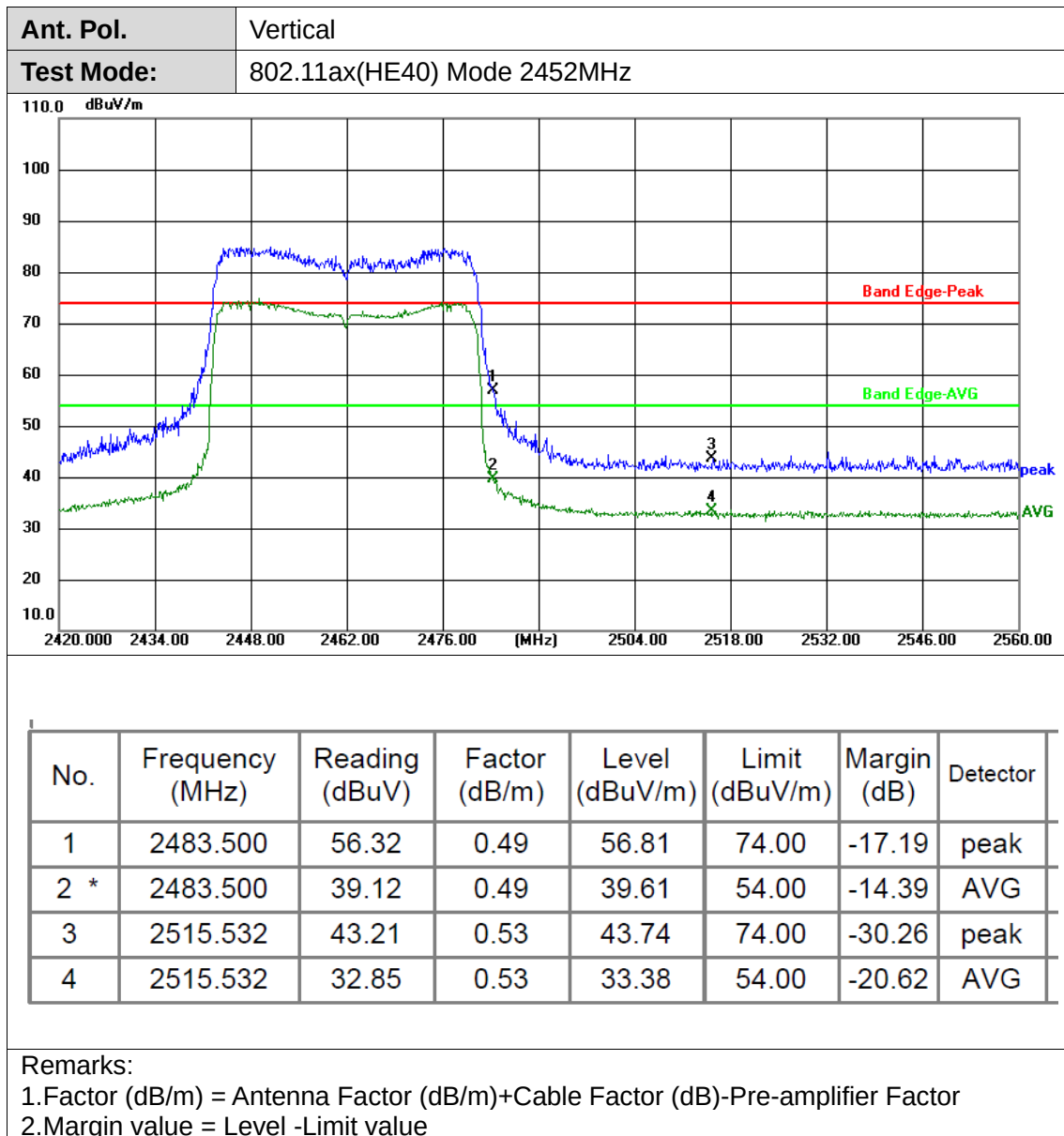










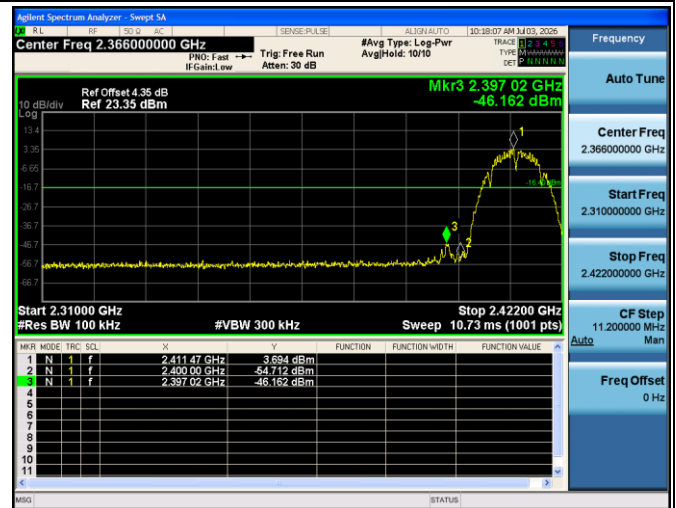
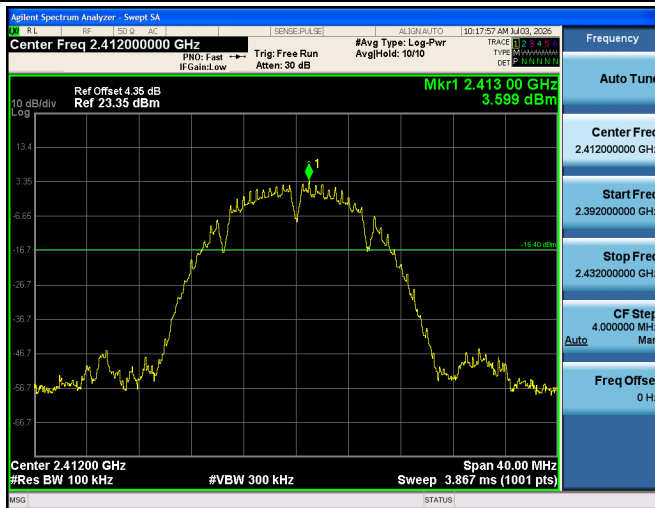


**(1) Band edge Conducted Test**

Test Mode	Test Frequency	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
802.11b	2412	3.599	-46.162	-16.401	PASS
	2462	3.549	-54.028	-16.451	PASS
802.11g	2412	-4.623	-33.029	-24.623	PASS
	2462	-4.794	-54.437	-24.794	PASS
802.11n(HT20)	2412	-4.618	-33.420	-24.618	PASS
	2462	-3.764	-54.084	-23.764	PASS
802.11ax(HE20)	2412	-6.918	-36.573	-26.918	PASS
	2462	-7.105	-55.606	-27.105	PASS
802.11n(HT40)	2422	-8.266	-40.058	-28.266	PASS
	2452	-8.651	-54.100	-28.651	PASS
802.11ax(HE40)	2422	-11.073	-41.555	-31.073	PASS
	2452	-10.246	-54.581	-30.246	PASS



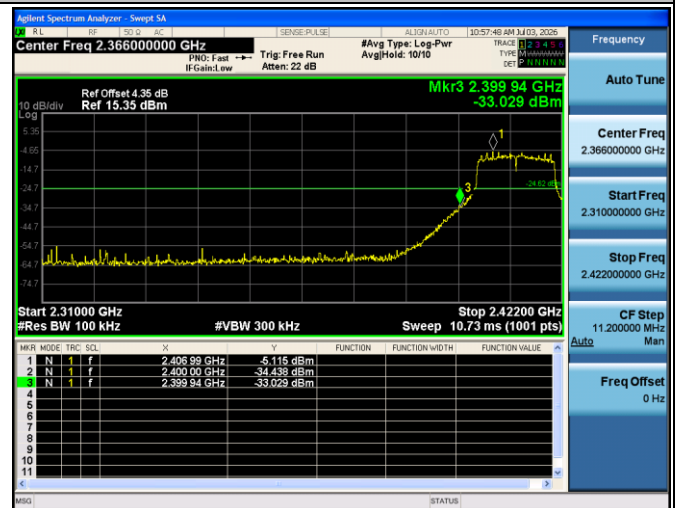
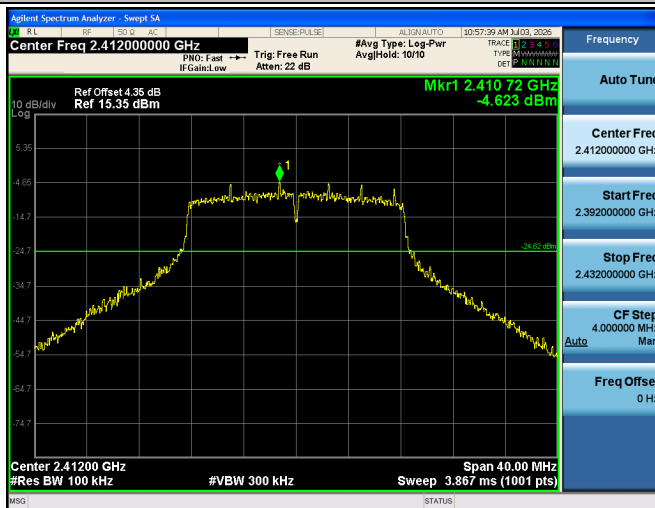
802.11b_2412



802.11b_2462



802.11g_2412



802.11g_2462