



CFR 47 FCC PART 15 SUBPART C

TEST REPORT

For

Kasa Smart Wi-Fi Plug Slim, Energy Monitoring

MODEL NUMBER: KP125M

REPORT NUMBER: 4790728772-1-RF-2

ISSUE DATE: February 9, 2023

FCC ID: 2AXJ4KP125M

Prepared for

TP-Link Corporation Limited

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	February 9, 2023	Initial Issue	



Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2	FCC Part 15.207	Pass
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.1.3	FCC Part 15.247 (b)(3)	Pass
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2013, Clause 11.8.1	FCC Part 15.247 (a)(2)	Pass
Power Spectral Density	ANSI C63.10-2013, Clause 11.10.2	FCC Part 15.247 (e)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2013, Clause 11.11	FCC Part 15.247(d)	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2013, Clause 11.12 & Clause 11.13	FCC Part 15.247 (d) FCC Part 15.205/15.209	Pass
Duty Cycle	ANSI C63.10-2013, Clause 11.6	None; for reporting purposes only.	Pass

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C> when <Accuracy Method> decision rule is applied.



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: TP-Link Corporation Limited
Address: Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

Manufacturer Information

Company Name: TP-Link Corporation Limited
Address: Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

EUT Information

EUT Name: Kasa Smart Wi-Fi Plug Slim, Energy Monitoring
Model: KP125M
Brand: tp-link
Sample Received Date: January 31, 2023
Sample Status: Normal
Sample ID: 5748455
Date of Tested: February 1, 2023 to February 9, 2023

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	Pass

Prepared By:

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2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART C , KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, ANSI C63.10-2013.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011
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Note1:

All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China.

Note2:

The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note3:

For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 26 GHz)	5.78 dB (1 GHz ~ 18 GHz)
	5.23 dB (18 GHz ~ 26 GHz)
Duty Cycle	±0.028%
DTS and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.686 dB
Maximum Power Spectral Density Level	±0.743 dB
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted Frequency Bands	±0.746 dB (9 kHz ~ 1 GHz)
	±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Kasa Smart Wi-Fi Plug Slim, Energy Monitoring
Model	KP125M
Frequency Range:	2412 MHz to 2462 MHz
Radio Technology	IEEE802.11b/g/n HT20
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Normal Test Voltage:	AC 120 V, 60 Hz

5.2. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

5.3. MAXIMUM EIRP

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	17.15	20.65
g	2412 ~ 2462	1-11[11]	17.32	20.82
n HT20	2412 ~ 2462	1-11[11]	17.30	20.80

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency(MHz)
802.11b	CH 1, CH2 CH 6,CH10, CH 11	2412, 2417, 2437, 2457, 2462
802.11g	CH 1, CH2 CH 6,CH10, CH 11	2412, 2417, 2437, 2457, 2462
802.11n HT20	CH 1, CH2 CH 6,CH10, CH 11	2412, 2417, 2437, 2457, 2462



5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band											
Test Software		UI_mptool									
Modulation Mode	Transmit Antenna Number	Test Software Setting Value									
		NCB: 20MHz					NCB: 40MHz				
		CH1	CH2	CH6	CH10	CH11	CH3	CH4	CH6	CH8	CH9
802.11b	1	95	95	95	95	95	NA				
802.11g	1	110	110	110	110	110					
802.11n HT20	1	110	110	110	110	106					

WORST-CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20 mode: MCS0

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.



5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	IFA Antenna	3.5

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

Note: The value of the antenna gain was declared by customer.

5.7. SUPPORT UNITS FOR SYSTEM TEST

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	PC	Lenovo	E42-80	/
2	UART	/	/	/

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

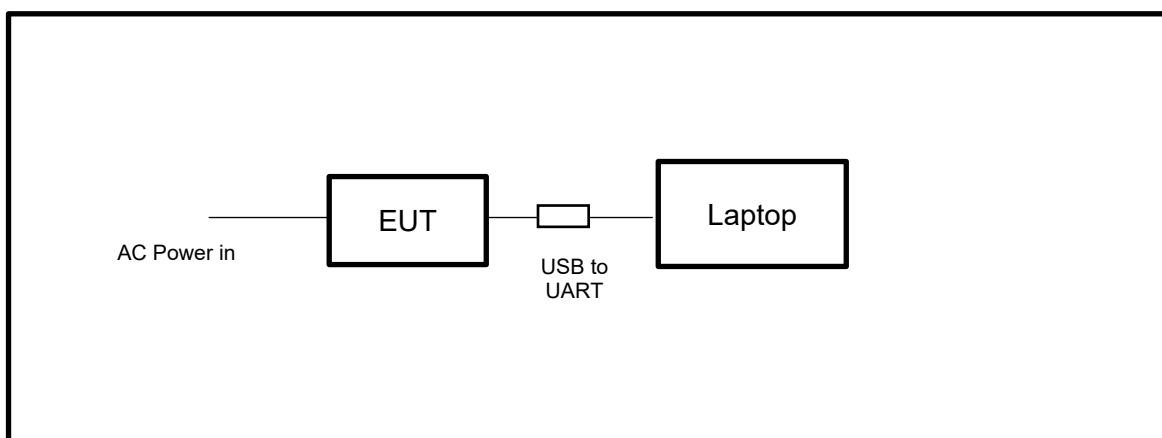
ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
1	/	/	/	/

TEST SETUP

The EUT can work in engineering mode with a software through a Laptop.

SETUP DIAGRAM FOR TESTS





6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Apr.02,2022	Apr.01,2023
Vector Signal Generator	R&S	SMBV100A	261637	Oct.17, 2022	Oct.16, 2023
Signal Generator	R&S	SMB100A	178553	Oct.17, 2022	Oct.16, 2023
Signal Analyzer	R&S	FSV40	101118	Oct.17, 2022	Oct.16, 2023
Signal&Spectrum Analyzer	R&S	FSW	103950	Oct.18, 2022	Oct.17, 2023
Software					
Description	Manufacturer		Name	Version	
For R&S TS 8997 Test System	Rohde & Schwarz		EMC 32	10.60.10	
Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wideband Radio Communication Tester	R&S	CMW500	155523	Oct.17, 2022	Oct.16, 2023
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.28, 2022	Sep.27, 2023
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Oct.17, 2022	Oct.16, 2023
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Oct.17, 2022	Oct.16, 2023
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Oct.17, 2022	Oct.16, 2023
DC power supply	Keysight	E3642A	MY55159130	Oct.17, 2022	Oct.16, 2023
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Oct.17, 2022	Oct.16, 2023
Software					
Description	Manufacturer	Name		Version	
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System		2.6.77.0518	



Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Oct.17, 2022	Oct.16, 2023
Two-Line V-Network	R&S	ENV216	101983	Oct.17, 2022	Oct.16, 2023
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Oct.17, 2022	Oct.16, 2023
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1

Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.17, 2022	Oct.16, 2023
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024
Preamplifier	HP	8447D	2944A09099	Oct.17, 2022	Oct.16, 2023
EMI Measurement Receiver	R&S	ESR26	101377	Oct.17, 2022	Oct.16, 2023
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Oct.17, 2022	Oct.16, 2023
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-2	TRS-307-00003	Oct.17, 2022	Oct.16, 2023
Preamplifier	TDK	PA-02-3	TRS-308-00002	Oct.17, 2022	Oct.16, 2023
Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024
Preamplifier	TDK	PA-02-001-3000	TRS-302-00050	Oct.17, 2022	Oct.16, 2023
Preamplifier	Mini-Circuits	ZX60-83LN-S+	SUP01202035	Oct.17, 2022	Oct.16, 2023
High Pass Filter	Wi	WHKX10-2700-3000-18000-40SS	23	/	/
Highpass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	4	/	/
Band Reject Filter	Wainwright	WRCJV12-5695-5725-5850-5880-40SS	4	/	/
Band Reject Filter	Wainwright	WRCJV20-5120-5150-	2	/	/



		5350-5380-60SS			
Band Reject Filter	Wainwright	WRCJV20-5440-5470-5725-5755-60SS	1	/	/
Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4	/	/
Band Reject Filter	Wainwright	WRCD5-1879-1879.85-1880.15-1881-40SS	1	/	/
Notch Filter	Wainwright	WHJ10-882-980-7000-40SS	1	/	/
Software					
Description			Manufacturer	Name	Version
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

Other Instrument					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Oct.22, 2022	Oct.21, 2023
Barometer	Yiyi	Baro	N/A	Oct.24, 2022	Oct.23, 2023
Attenuator	Agilent	8495B	2814a12853	Oct.18, 2022	Oct.17, 2023



7. ANTENNA PORT TEST RESULTS

7.1. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	AVG Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

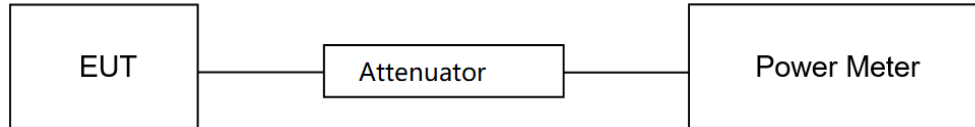
Refer to ANSI C63.10-2013 clause 11.9.2.3.1.

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).

Measure peak emission level, the indicated level is the average output power, after any corrections for external attenuators and cables.

The test result in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.2°C	Relative Humidity	55.3%
Atmosphere Pressure	101.3kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Walker Yuan
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TEST RESULTS

Please refer to section "Test Data" - Appendix C

7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	For reporting purposes only.	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

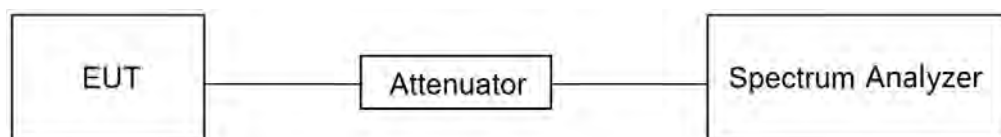
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Frequency Span	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission For 99 % Occupied Bandwidth: Between 1.5 times and 5.0 times the OBW
Detector	Peak
RBW	For 6 dB Bandwidth: 100 kHz For 99 % Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth: $\geq 3 \times$ RBW For 99 % Occupied Bandwidth: $\geq 3 \times$ RBW
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP





TEST ENVIRONMENT

Temperature	25.2°C	Relative Humidity	55.3%
Atmosphere Pressure	101.3kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Walker Yuan
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TEST RESULTS

Please refer to section "Test Data" - Appendix A&B



7.3. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.10.5.

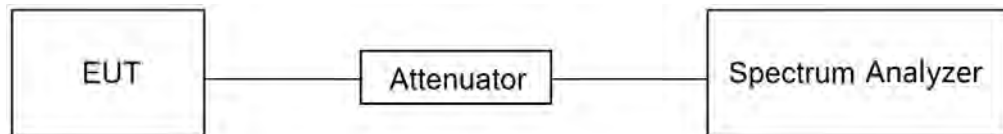
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	power averaging (rms)
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x OBW bandwidth
Trace	Average
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.2°C	Relative Humidity	55.3%
Atmosphere Pressure	101.3kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Walker Yuan
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TEST RESULTS

Please refer to section "Test Data" - Appendix D

7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyser and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.

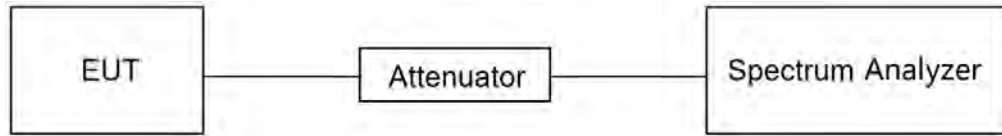
Change the settings for emission level measurement:

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.



TEST SETUP



TEST ENVIRONMENT

Temperature	25.2°C	Relative Humidity	55.3%
Atmosphere Pressure	101.3kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Walker Yuan
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TEST RESULTS

Please refer to section "Test Data" - Appendix E&F

7.5. DUTY CYCLE

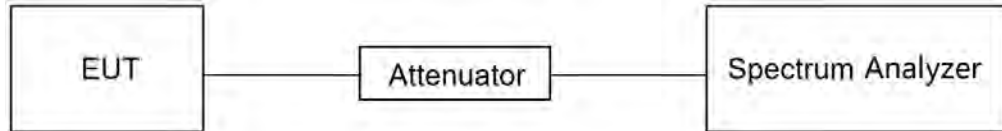
LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.2°C	Relative Humidity	55.3%
Atmosphere Pressure	101.3kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Walker Yuan
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TEST RESULTS

Please refer to section "Test Data" - Appendix G



8. RADIATED TEST RESULTS

LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
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

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6c

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.
2. The EUT was arranged to its worst case and then 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. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. 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 and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made

to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω . For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.
2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

Above 1G

The setting of the spectrum analyser

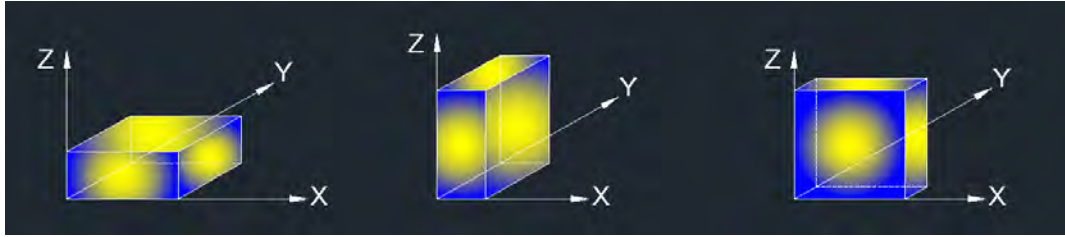
RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.



2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5 m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. 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 7.5.ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For Band edge note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Horizontal and Vertical have been tested, only the worst data was recorded in the report.
8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 1GHz-3GHz note:

- Note:
1. Measurement = Reading Level + Correct Factor.
 2. If the Peak values are less than the Average limit of 54 dBuV/m, the Average result is deemed to comply with Average limit.
 3. Peak: Peak detector.
 4. AVG: $VBW=1/Ton$, where: Ton is the transmitting duration.
 5. For the transmitting duration, please refer to clause 7.5.
 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
 8. All modes and channels have been tested, only the worst data was recorded in the report.



For Radiate Spurious emission 3GHz-18GHz note:

Note: 1. Peak Result = Reading Level + Correct Factor.

2. If the Peak values are less than the Average limit of 54 dBuV/m, the Average result is deemed to comply with Average limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.5.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 9kHz-30MHz note:

1. Measurement = Reading Level + Correct Factor.

2. If the Peak values are less than the QP limit, the QP result is deemed to comply with QP limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 18GHz-26GHz note:

1. Measurement = Reading Level + Correct Factor.

2. If the Peak values are less than the Average limit of 54 dBuV/m, the Average result is deemed to comply with Average limit.

3. Peak: Peak detector.

4. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 30MHz-1GHz note:

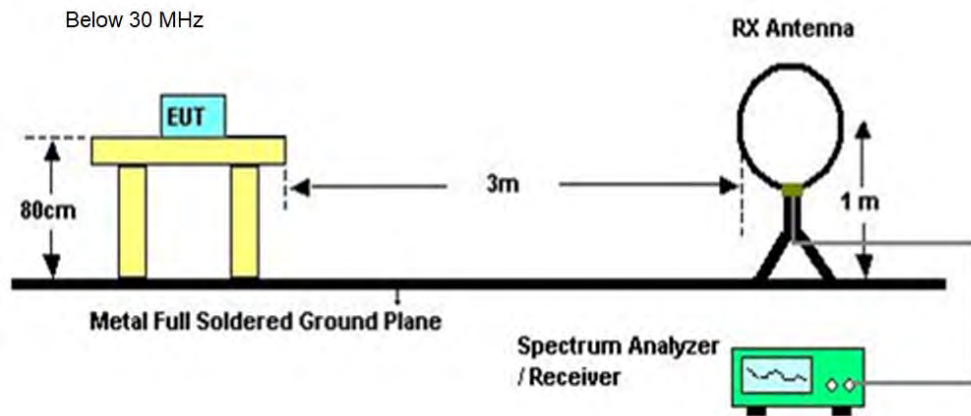
1. Result Level = Read Level + Correct Factor.

2. If the Peak values are less than the QP limit, the QP result is deemed to comply with QP limit.

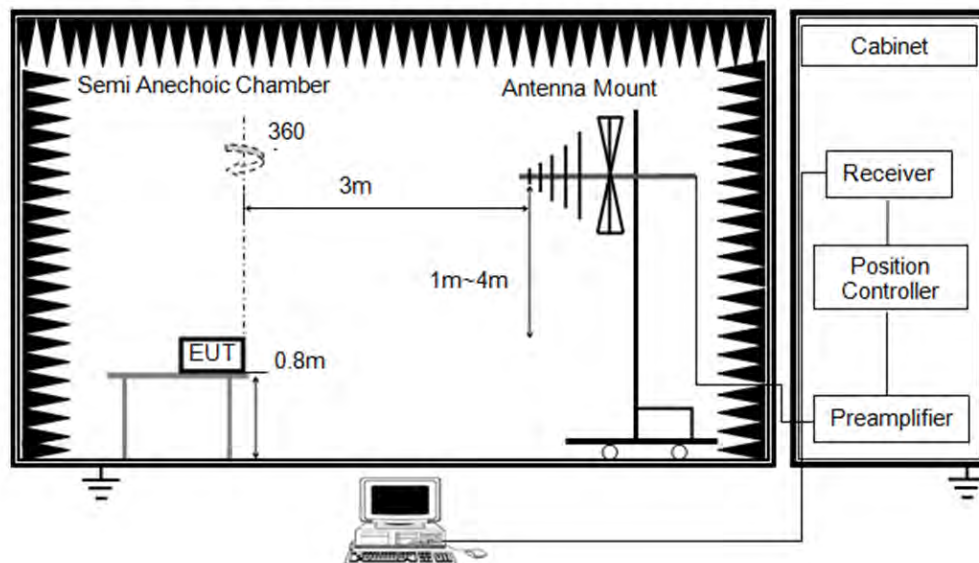
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

4. All modes and channels have been tested, only the worst data was recorded in the report.

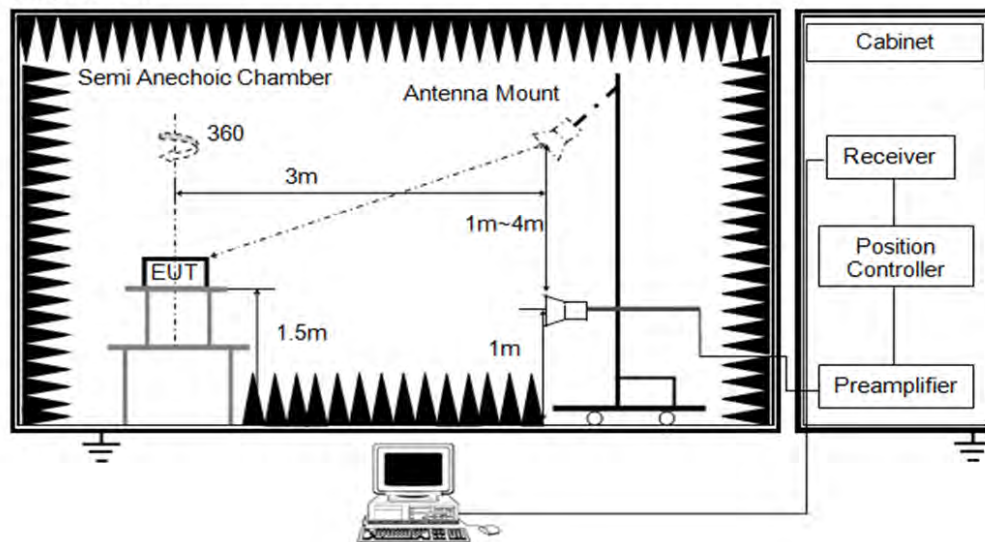
TEST SETUP



Below 1 GHz and above 30 MHz



Above 1 GHz





TEST ENVIRONMENT

Temperature	25.1℃	Relative Humidity	61%
Atmosphere Pressure	101kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

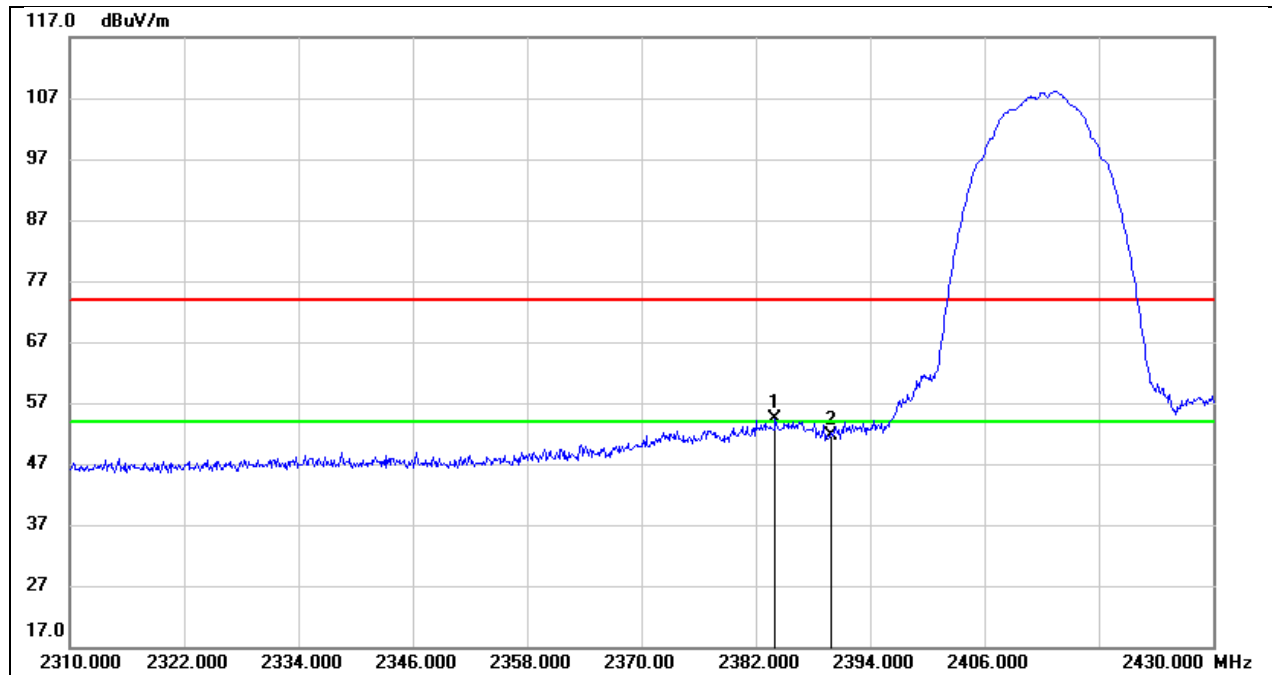
Test Date	February 2, 2023	Test By	Rex Huang
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TEST RESULTS



8.1. RESTRICTED BANDEDGE

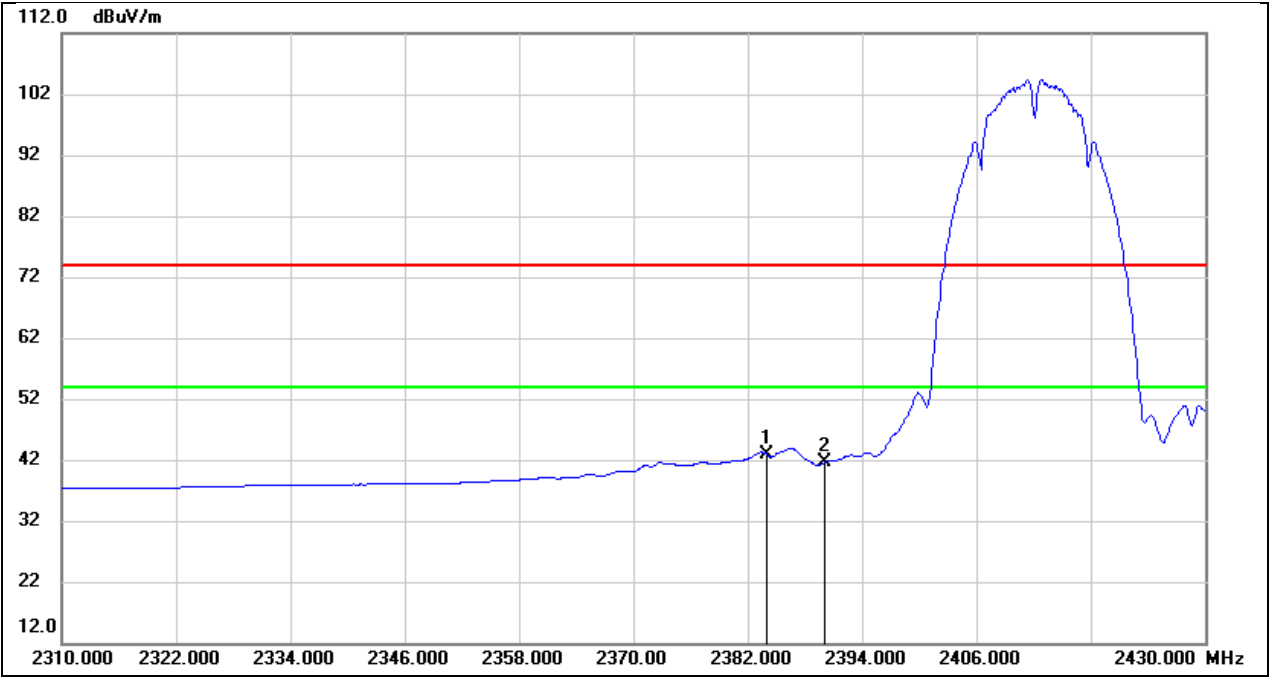
Test Mode:	802.11b PK	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.040	22.12	32.14	54.26	74.00	-19.74	peak
2	2390.000	19.55	32.16	51.71	74.00	-22.29	peak



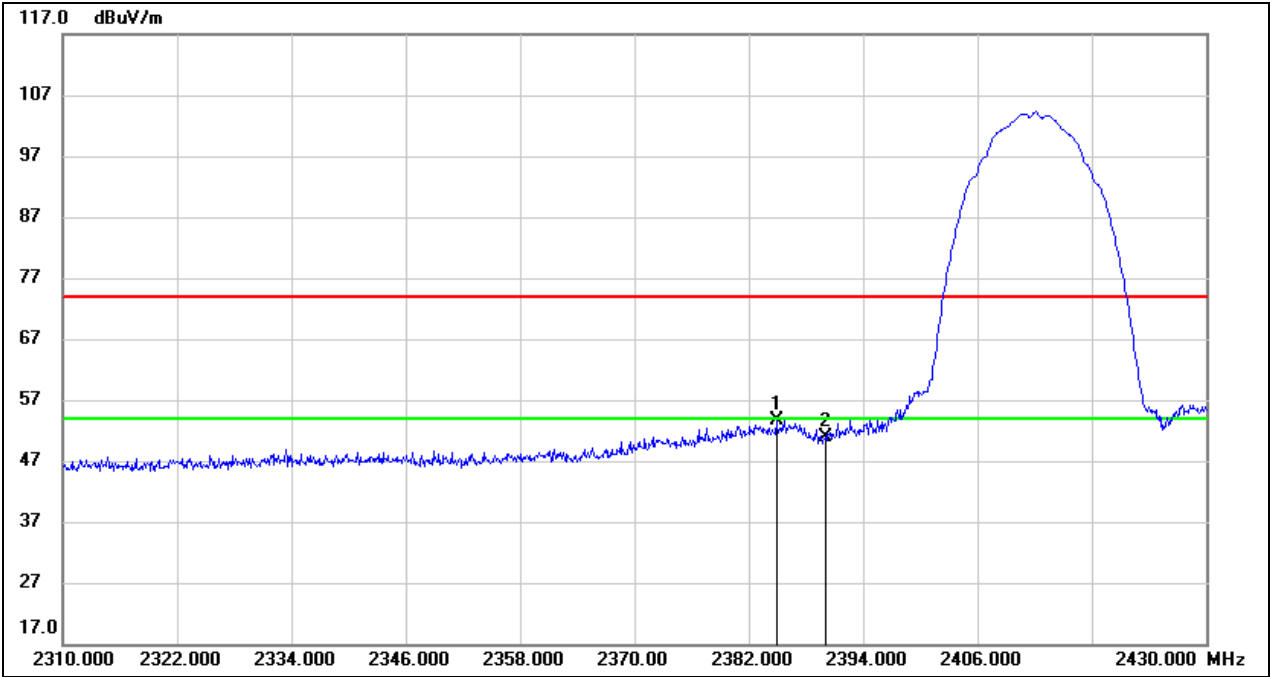
Test Mode:	802.11b AV	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.040	10.74	32.14	42.88	54.00	-11.12	AVG
2	2390.000	9.40	32.16	41.56	54.00	-12.44	AVG



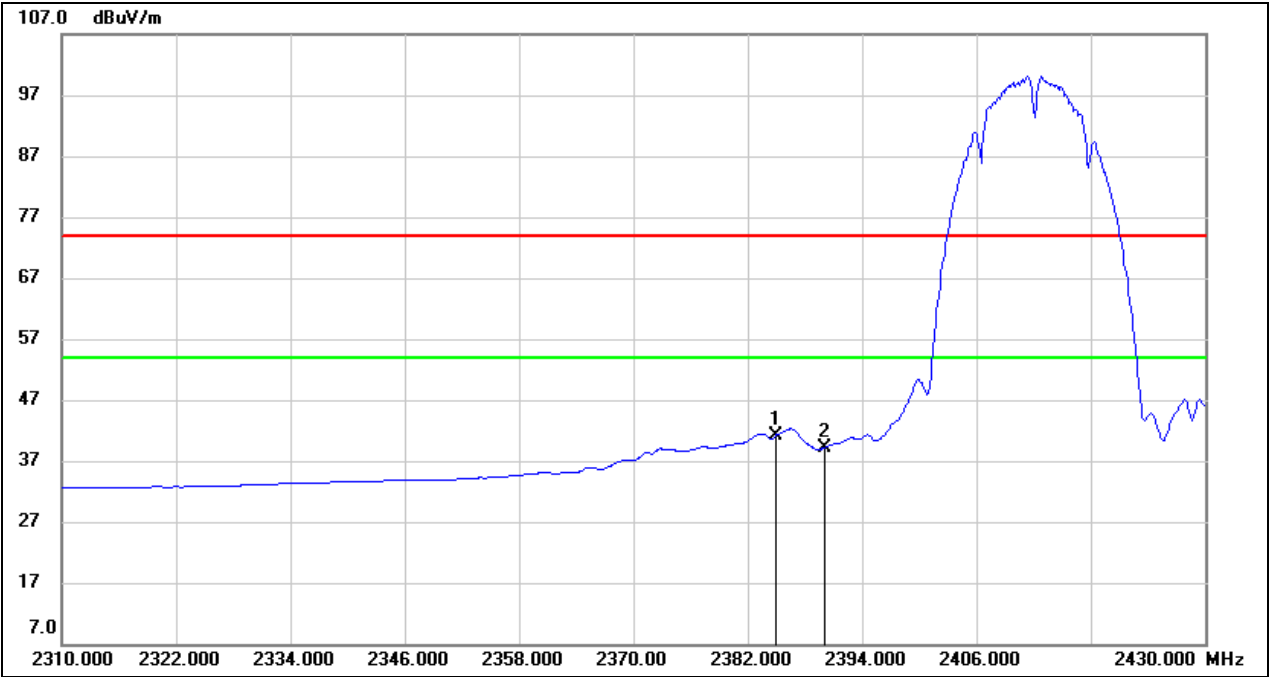
Test Mode:	802.11b PK	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.880	21.58	32.14	53.72	74.00	-20.28	peak
2	2390.000	18.68	32.16	50.84	74.00	-23.16	peak



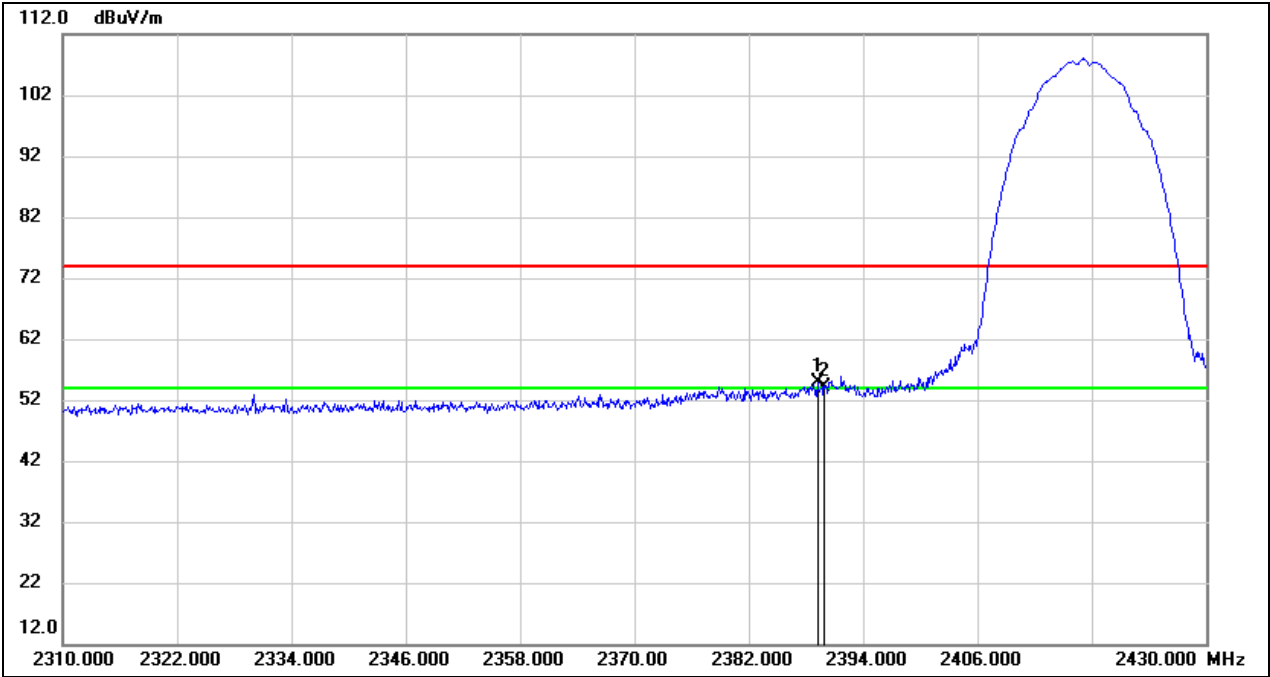
Test Mode:	802.11b AV	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.880	8.90	32.14	41.04	54.00	-12.96	AVG
2	2390.000	7.09	32.16	39.25	54.00	-14.75	AVG



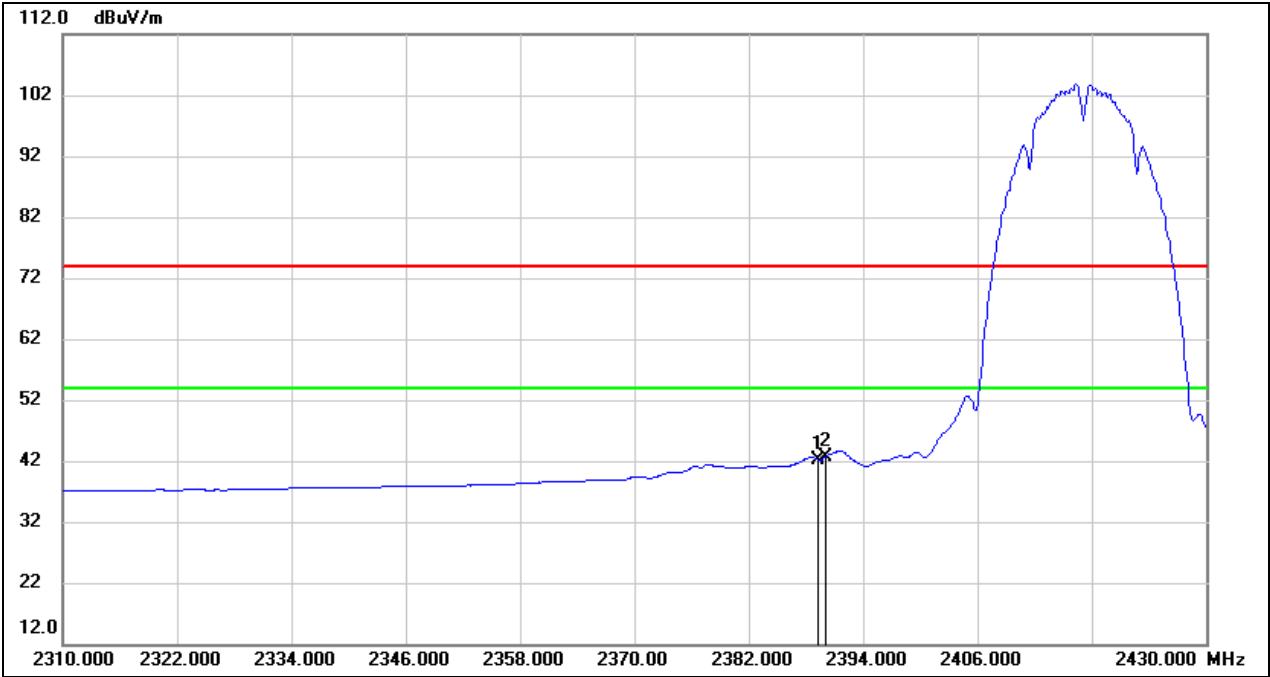
Test Mode:	802.11b PK	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.200	22.73	32.16	54.89	74.00	-19.11	peak
2	2390.000	22.06	32.16	54.22	74.00	-19.78	peak



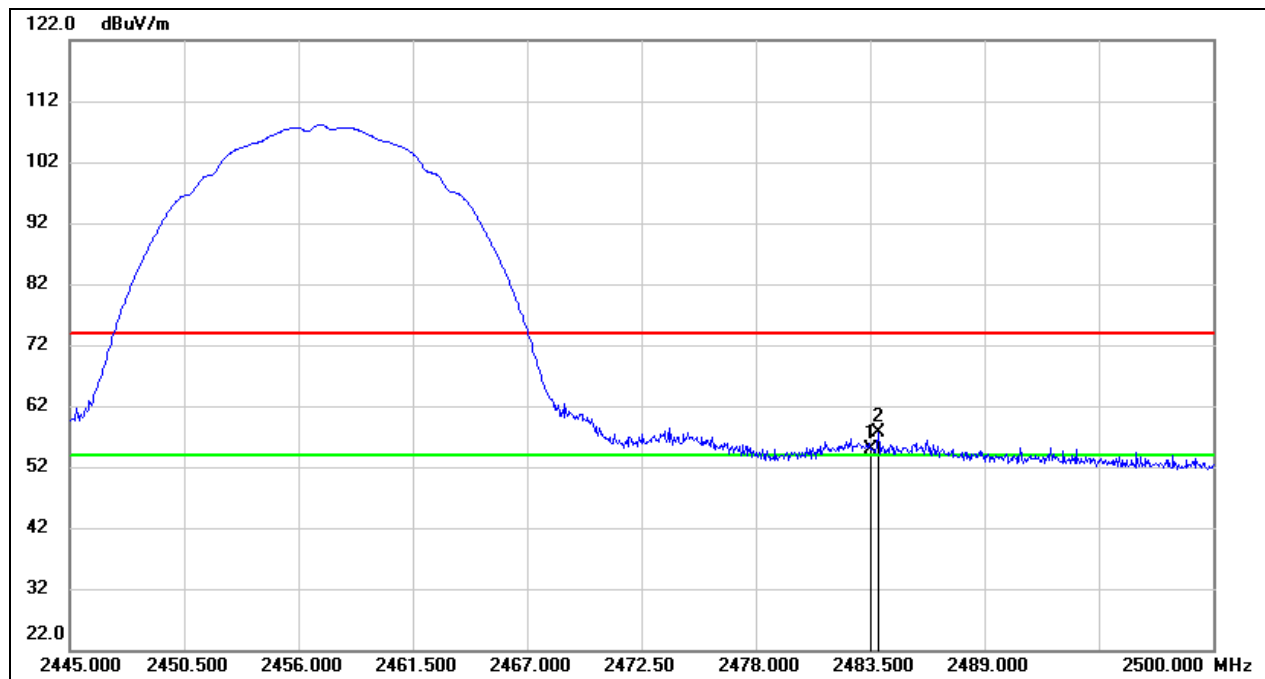
Test Mode:	802.11b AV	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.200	10.03	32.16	42.19	54.00	-11.81	AVG
2	2390.000	10.53	32.16	42.69	54.00	-11.31	AVG



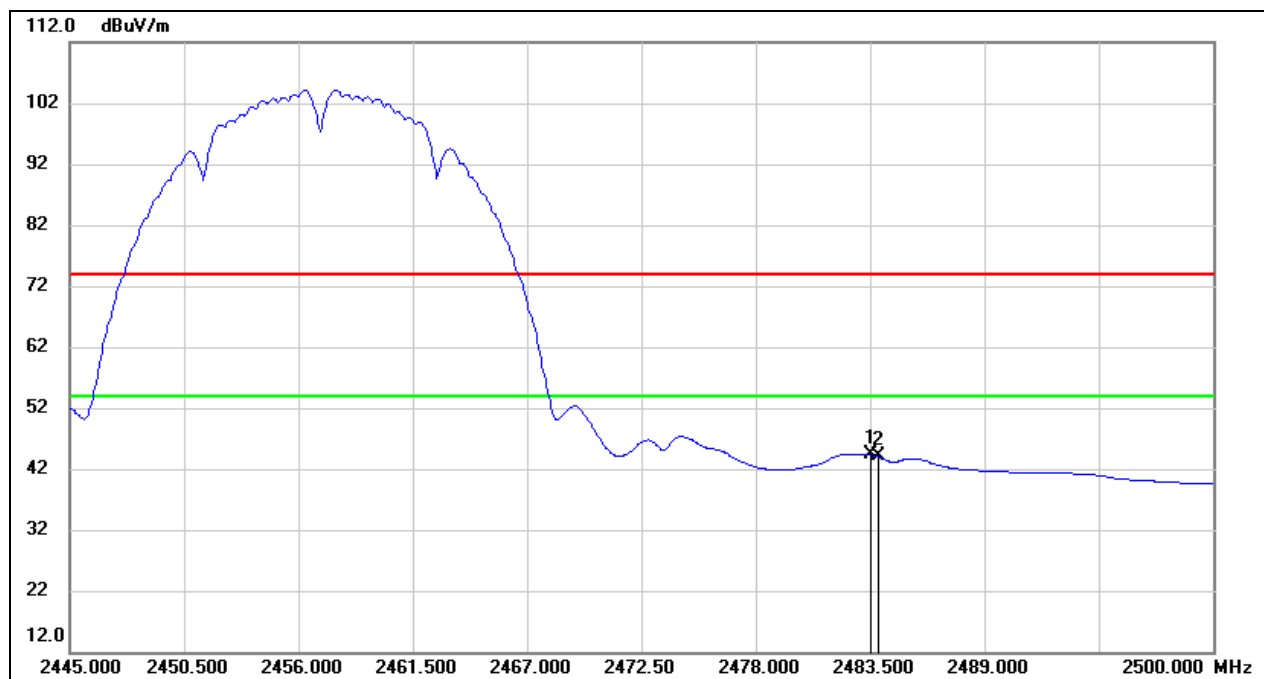
Test Mode:	802.11b PK	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	22.35	32.44	54.79	74.00	-19.21	peak
2	2483.885	25.27	32.44	57.71	74.00	-16.29	peak



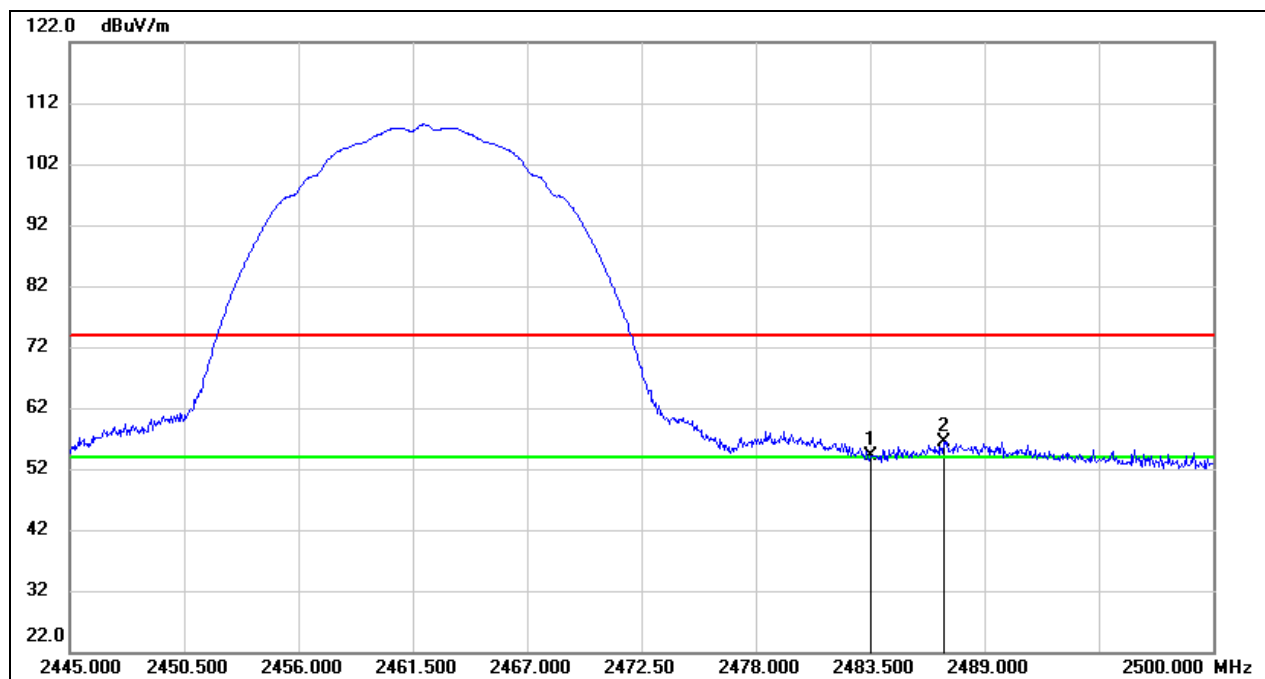
Test Mode:	802.11b AV	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	11.85	32.44	44.29	54.00	-9.71	AVG
2	2483.885	11.68	32.44	44.12	54.00	-9.88	AVG



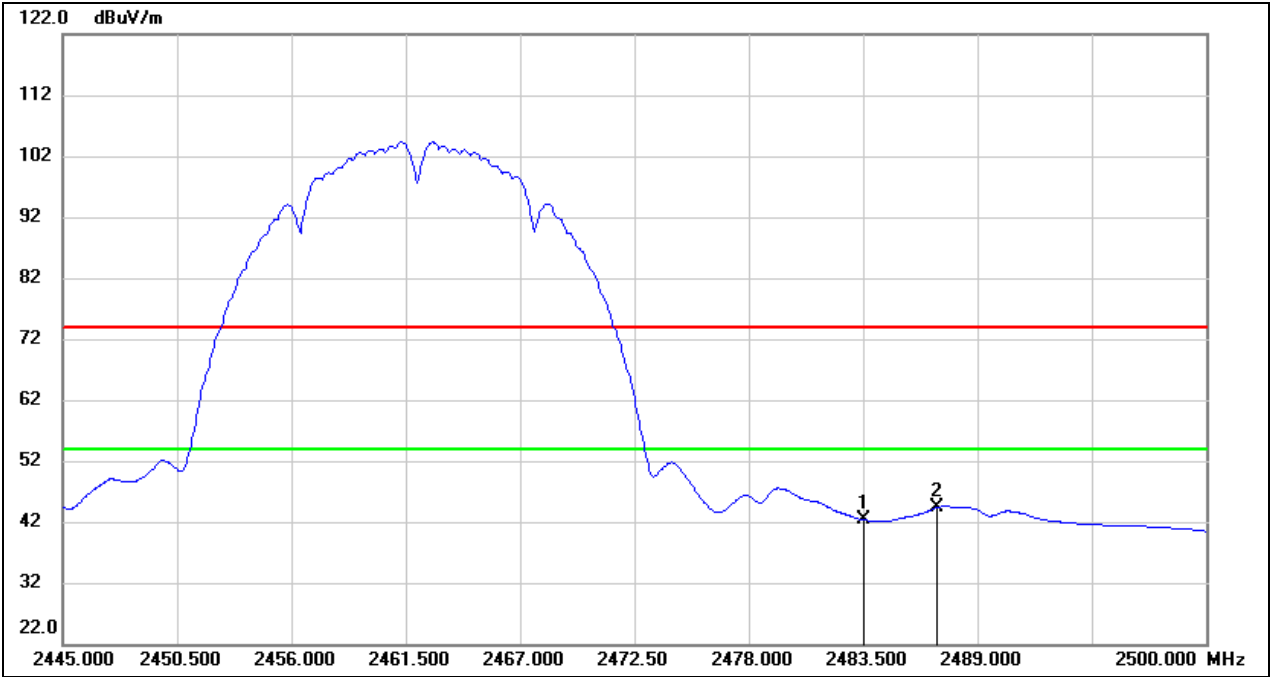
Test Mode:	802.11b PK	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	21.64	32.44	54.08	74.00	-19.92	peak
2	2487.020	23.93	32.45	56.38	74.00	-17.62	peak



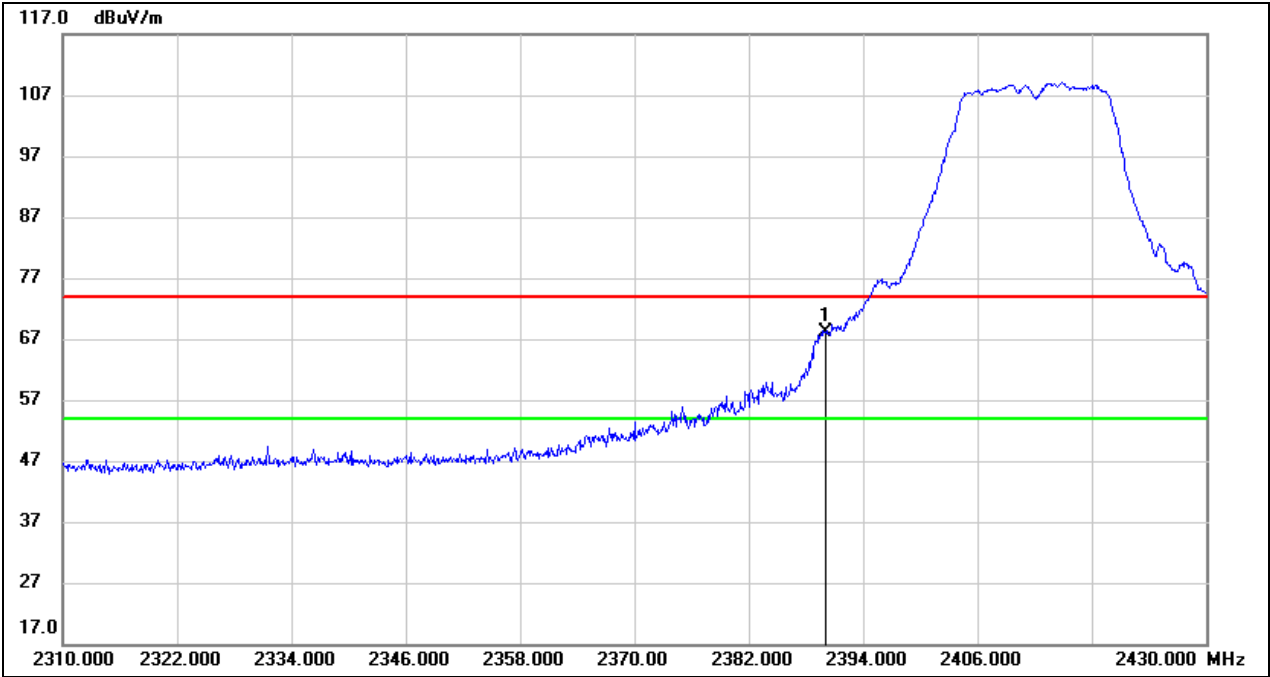
Test Mode:	802.11b AV	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	10.00	32.44	42.44	54.00	-11.56	AVG
2	2487.020	11.83	32.45	44.28	54.00	-9.72	AVG



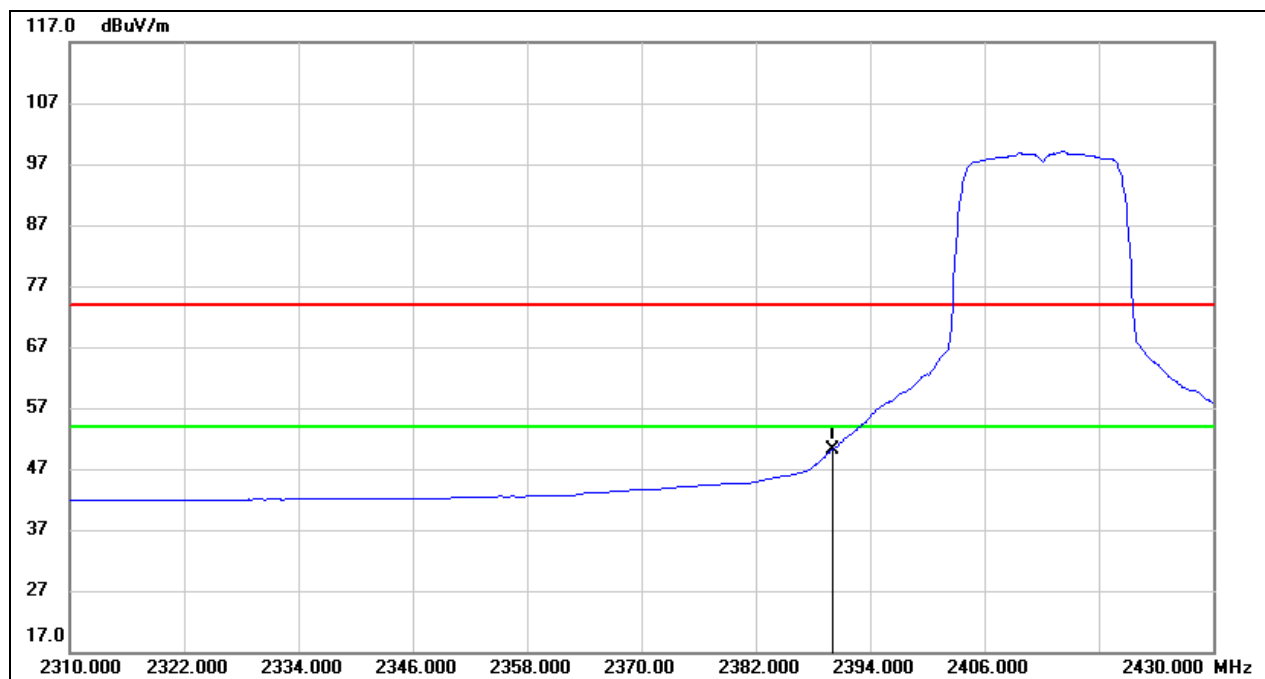
Test Mode:	802.11g PK	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	36.07	32.16	68.23	74.00	-5.77	peak



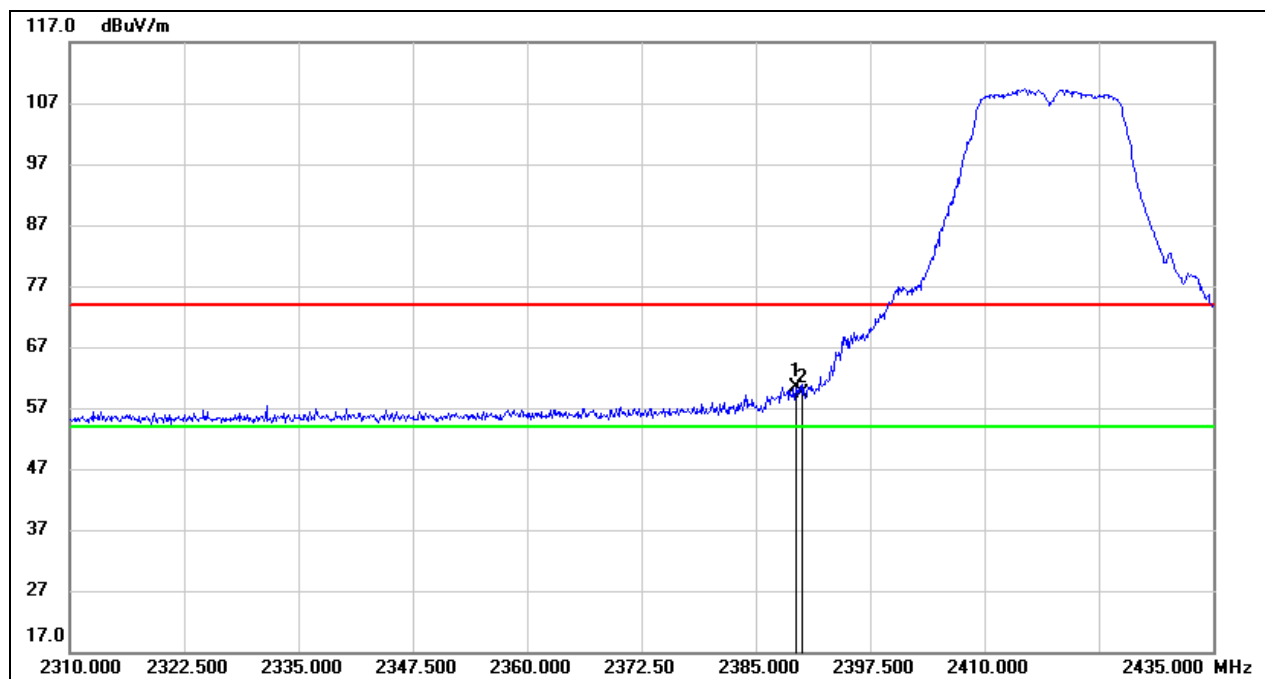
Test Mode:	802.11g AV	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	18.00	32.16	50.16	54.00	-3.84	AVG



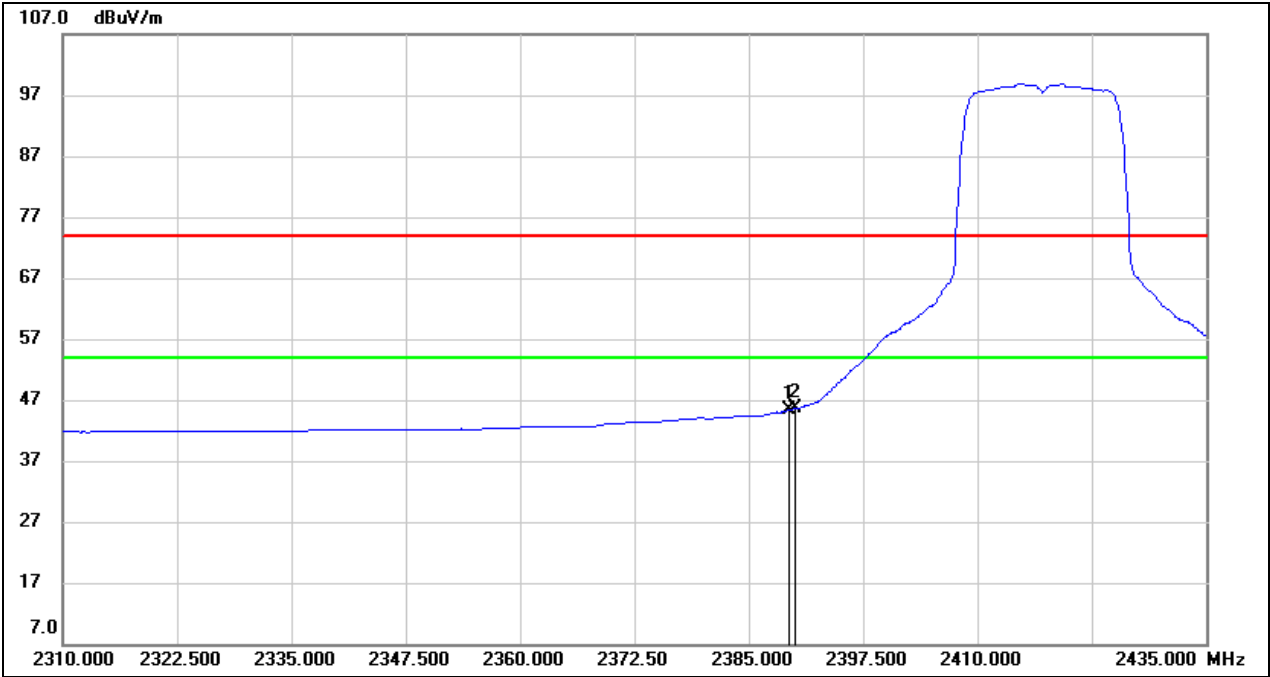
Test Mode:	802.11g PK	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.375	28.26	32.16	60.42	74.00	-13.58	peak
2	2390.000	27.16	32.16	59.32	74.00	-14.68	peak



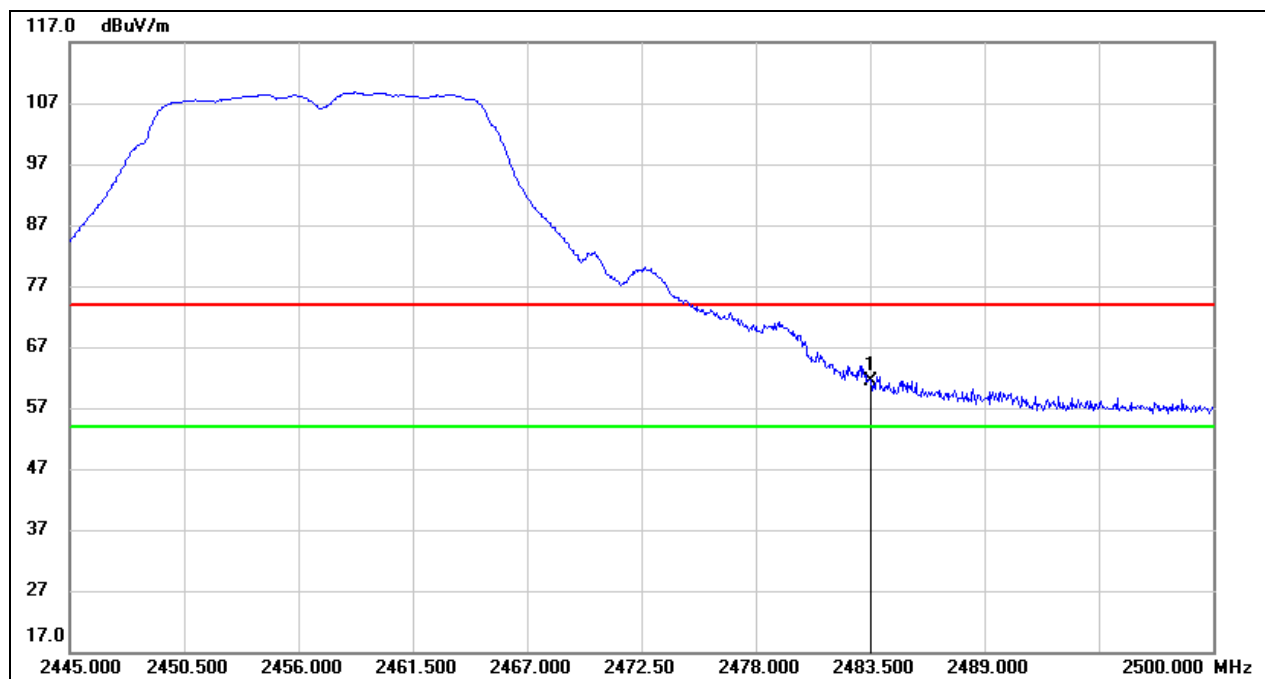
Test Mode:	802.11g AV	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.375	13.18	32.16	45.34	54.00	-8.66	AVG
2	2390.000	13.38	32.16	45.54	54.00	-8.46	AVG



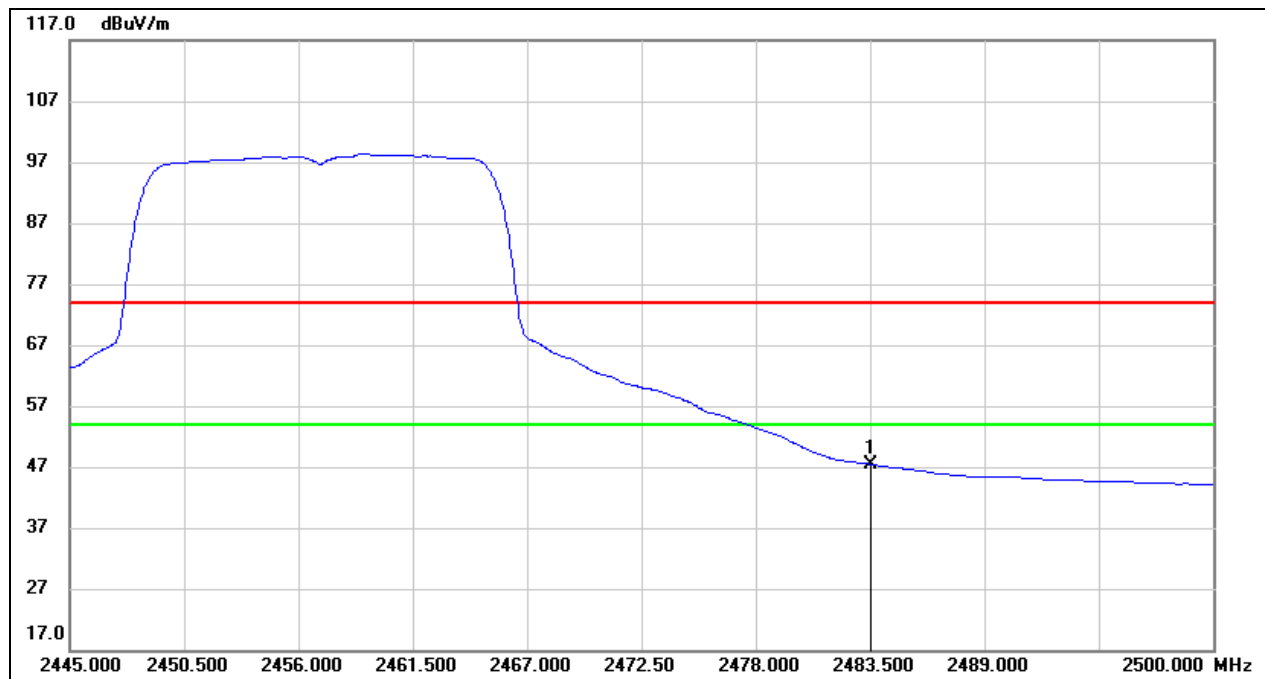
Test Mode:	802.11g PK	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	28.97	32.44	61.41	74.00	-12.59	peak



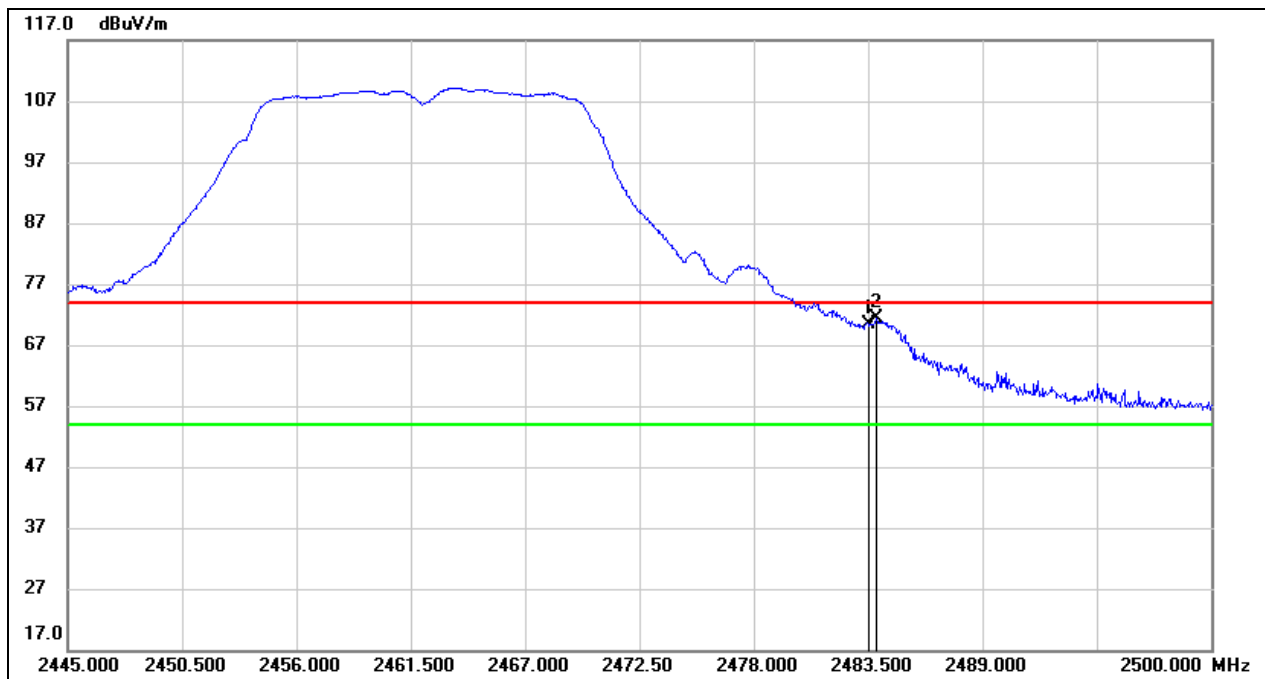
Test Mode:	802.11g AV	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	15.02	32.44	47.46	54.00	-6.54	AVG



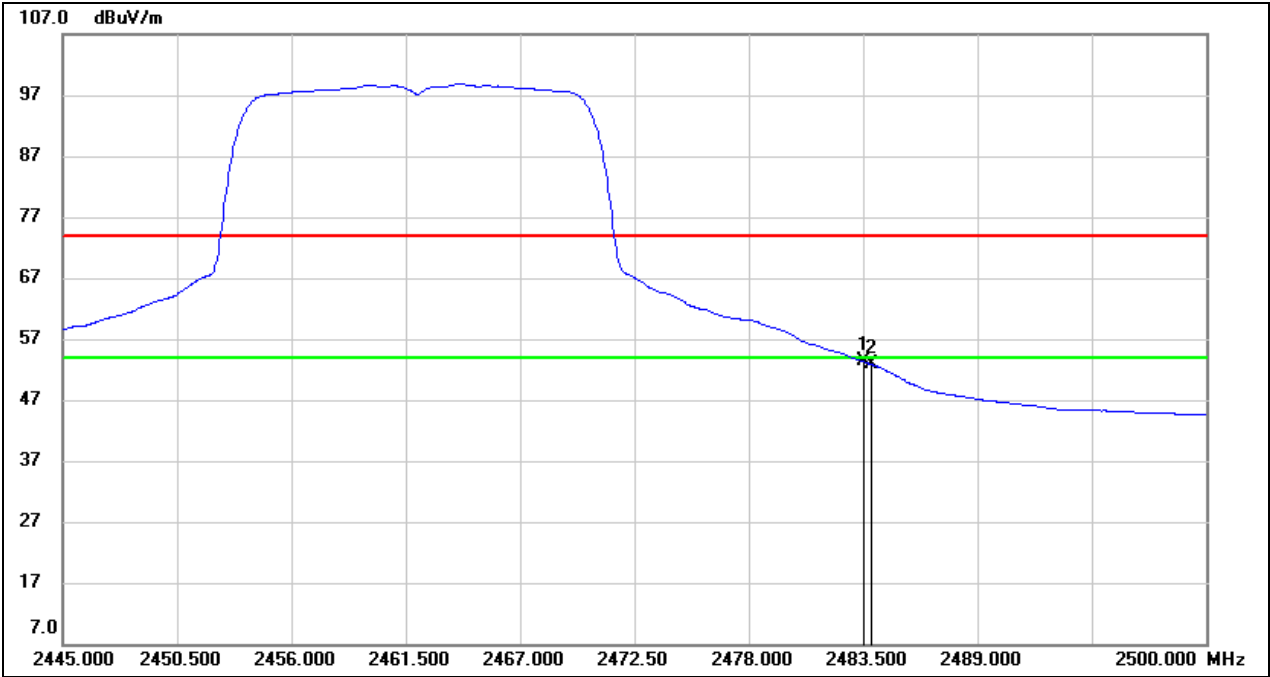
Test Mode:	802.11g PK	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	37.92	32.44	70.36	74.00	-3.64	peak
2	2483.885	39.00	32.44	71.44	74.00	-2.56	peak



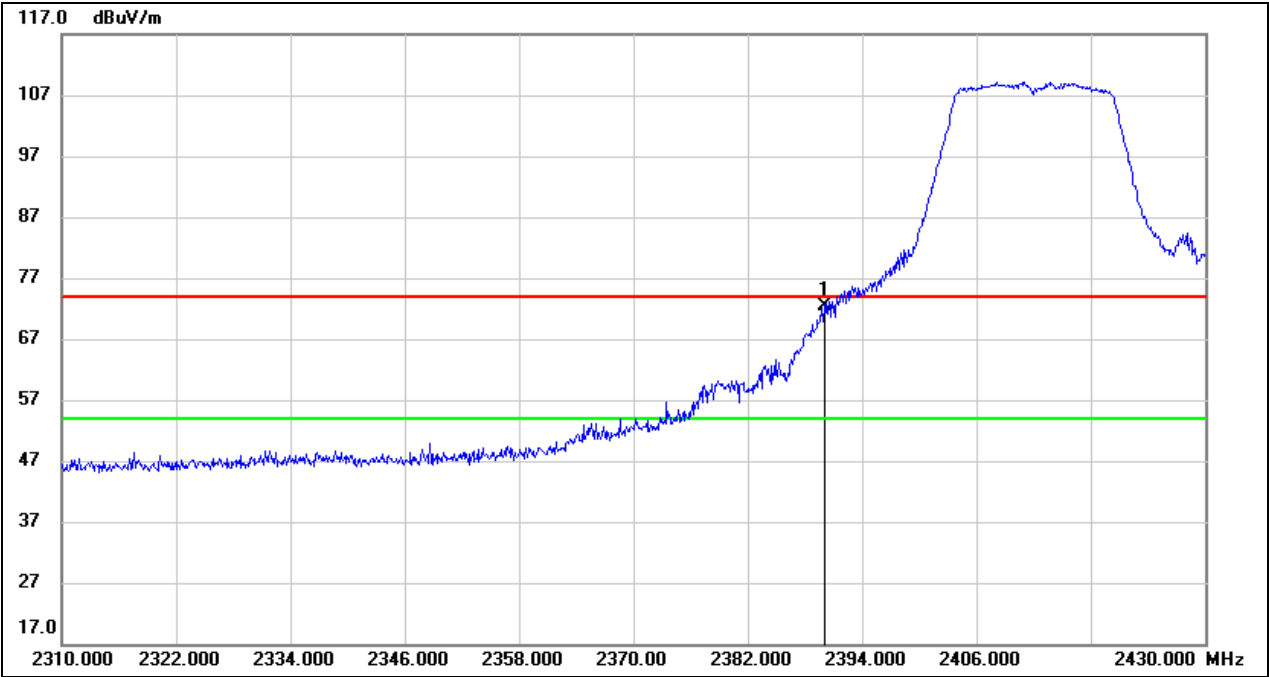
Test Mode:	802.11g AV	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.82	32.44	53.26	54.00	-0.74	AVG
2	2483.885	20.49	32.44	52.93	54.00	-1.07	AVG



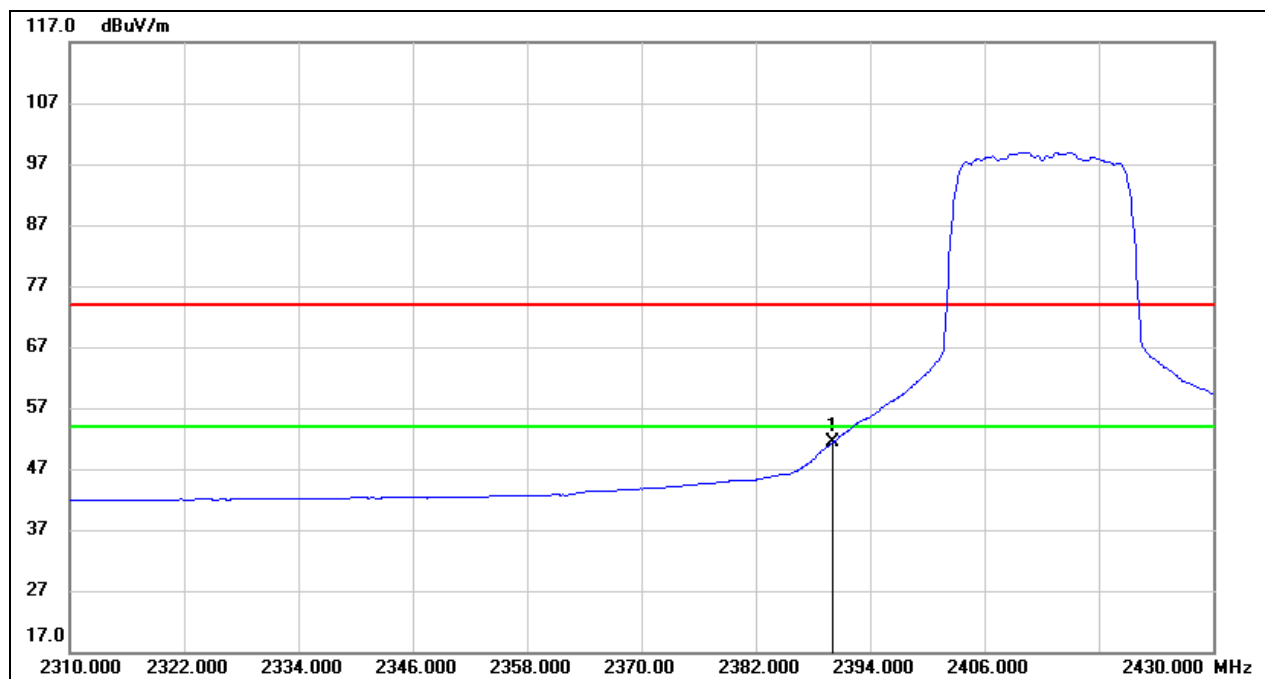
Test Mode:	802.11n HT20 PK	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	40.33	32.16	72.49	74.00	-1.51	peak



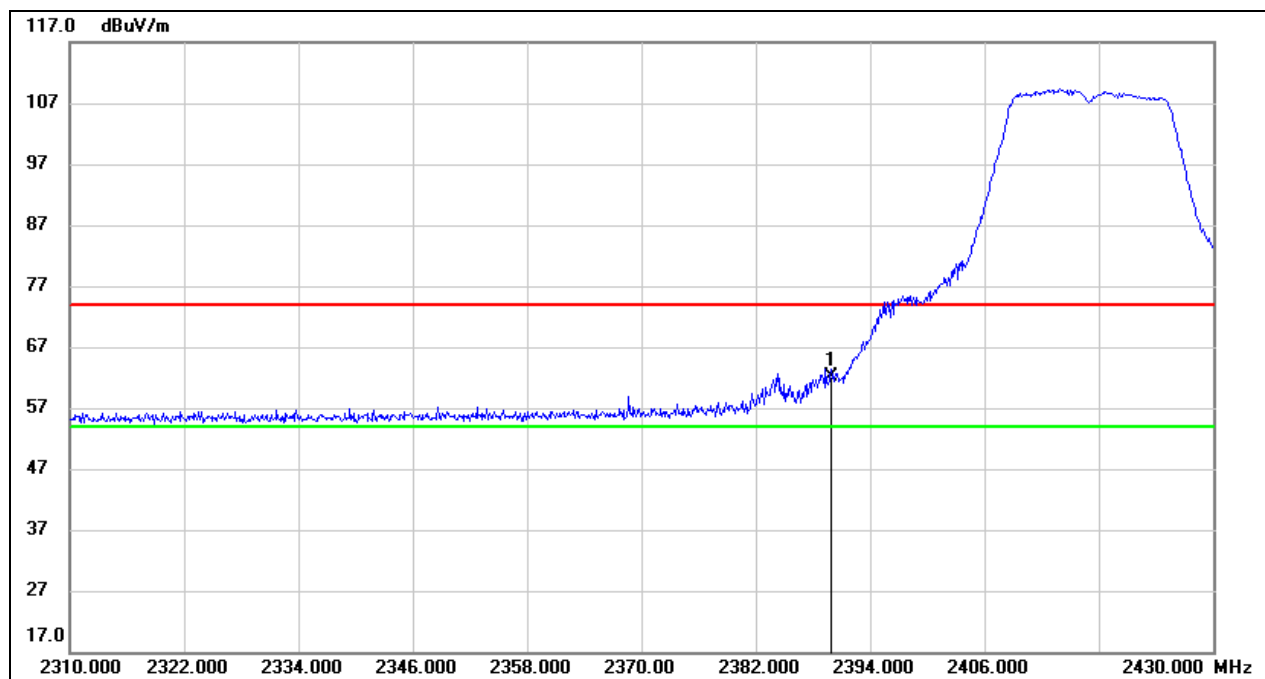
Test Mode:	802.11n HT20 AV	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	19.13	32.16	51.29	54.00	-2.71	AVG



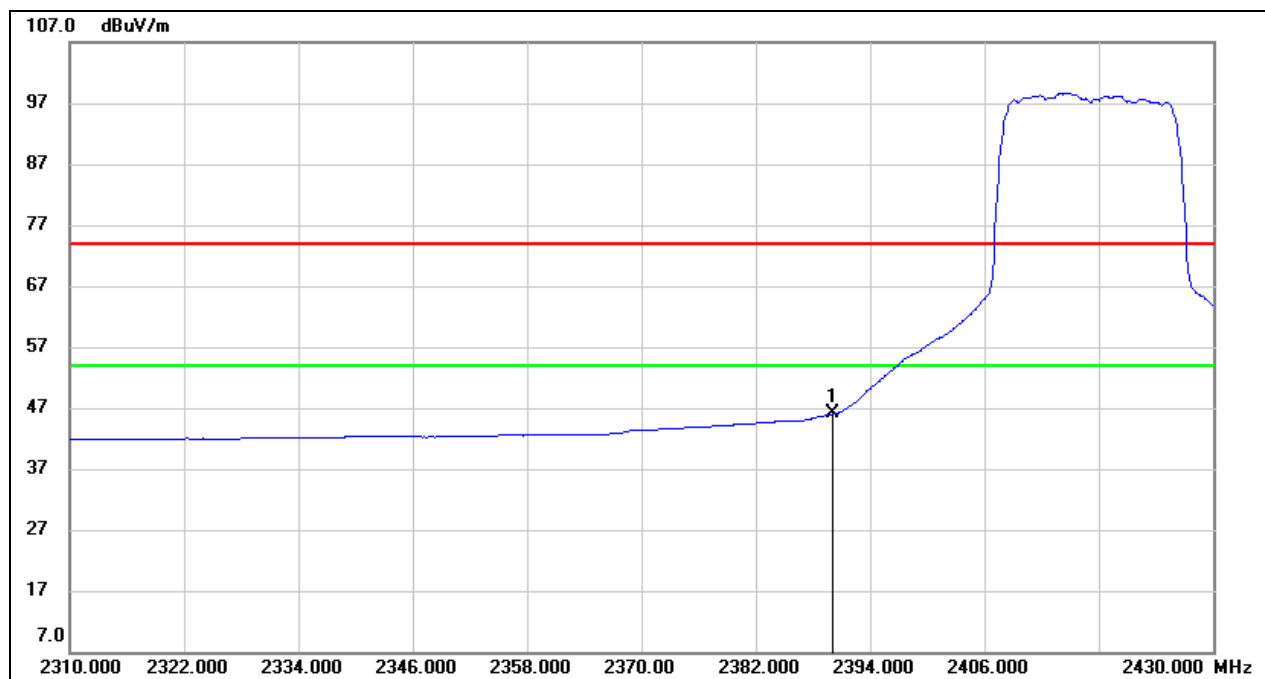
Test Mode:	802.11n HT20 PK	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	30.08	32.16	62.24	74.00	-11.76	peak



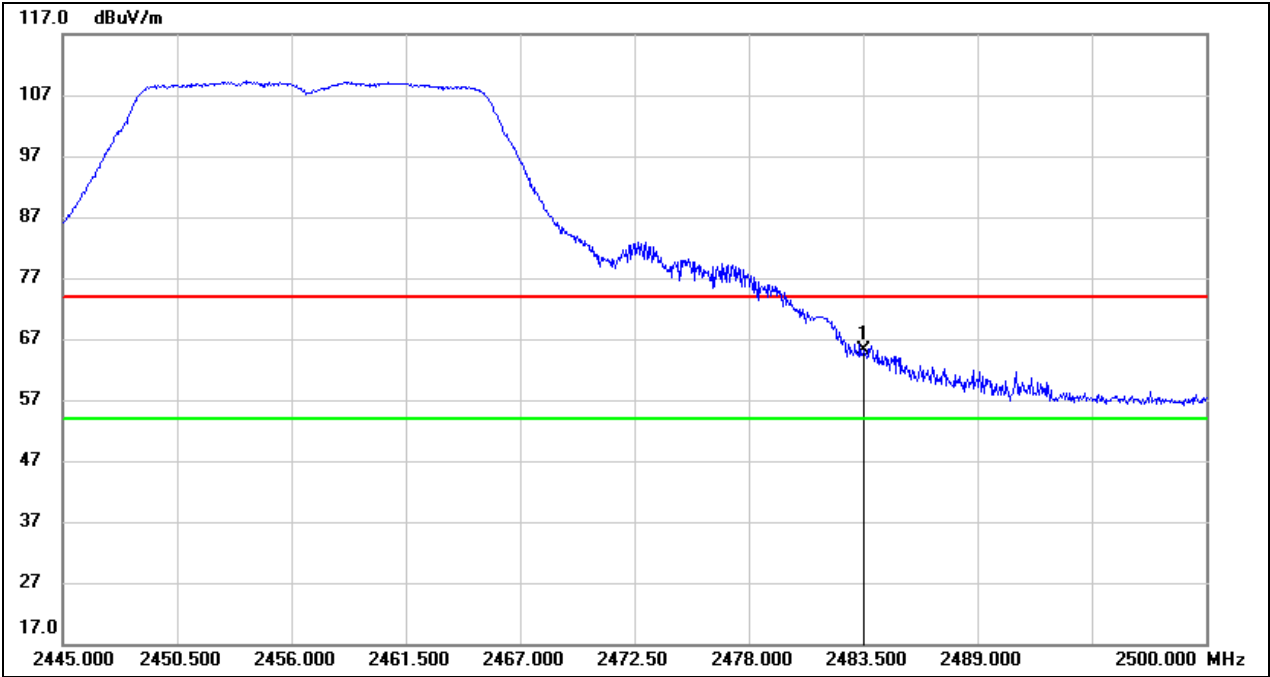
Test Mode:	802.11n HT20 AV	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	13.86	32.16	46.02	54.00	-7.98	AVG



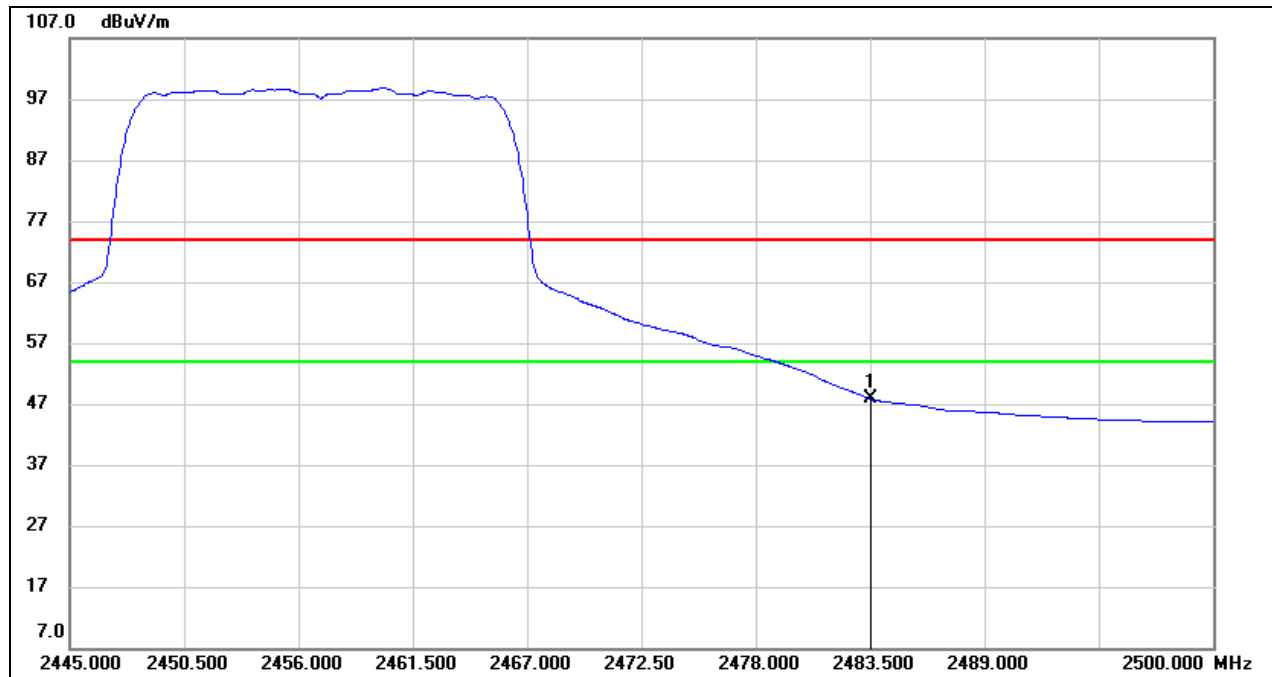
Test Mode:	802.11n HT20 PK	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	32.79	32.44	65.23	74.00	-8.77	peak



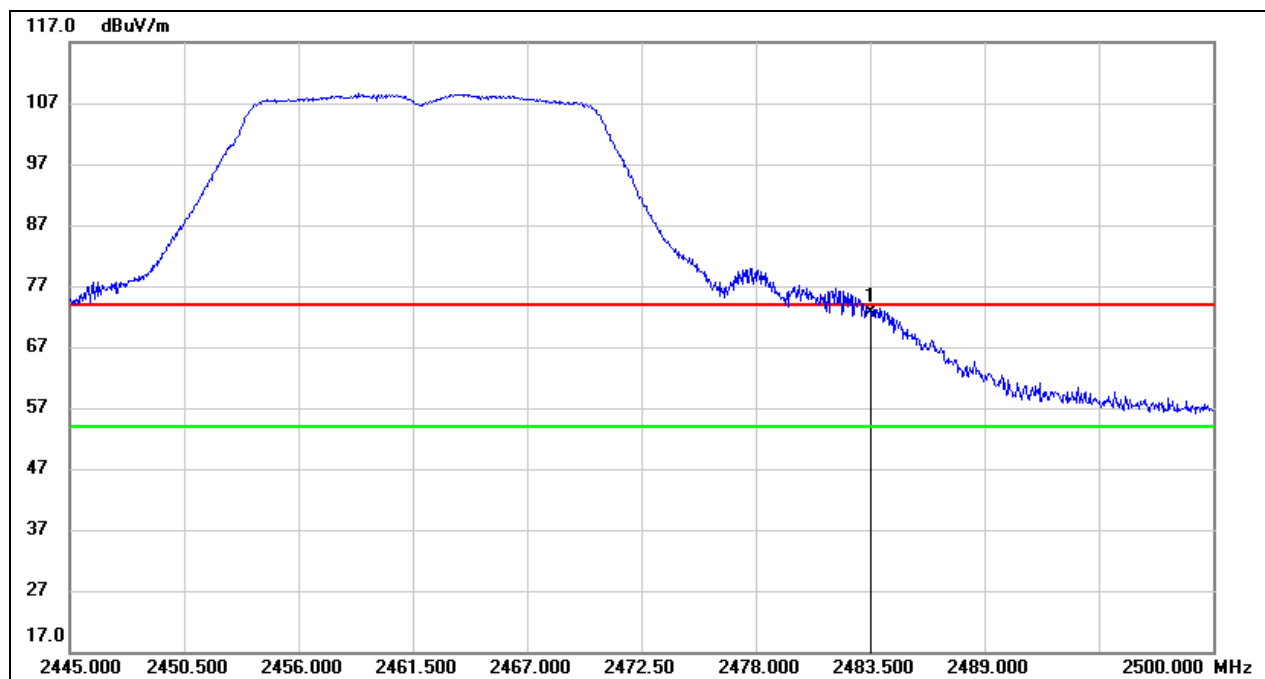
Test Mode:	802.11n HT20 AV	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	15.53	32.44	47.97	54.00	-6.03	AVG



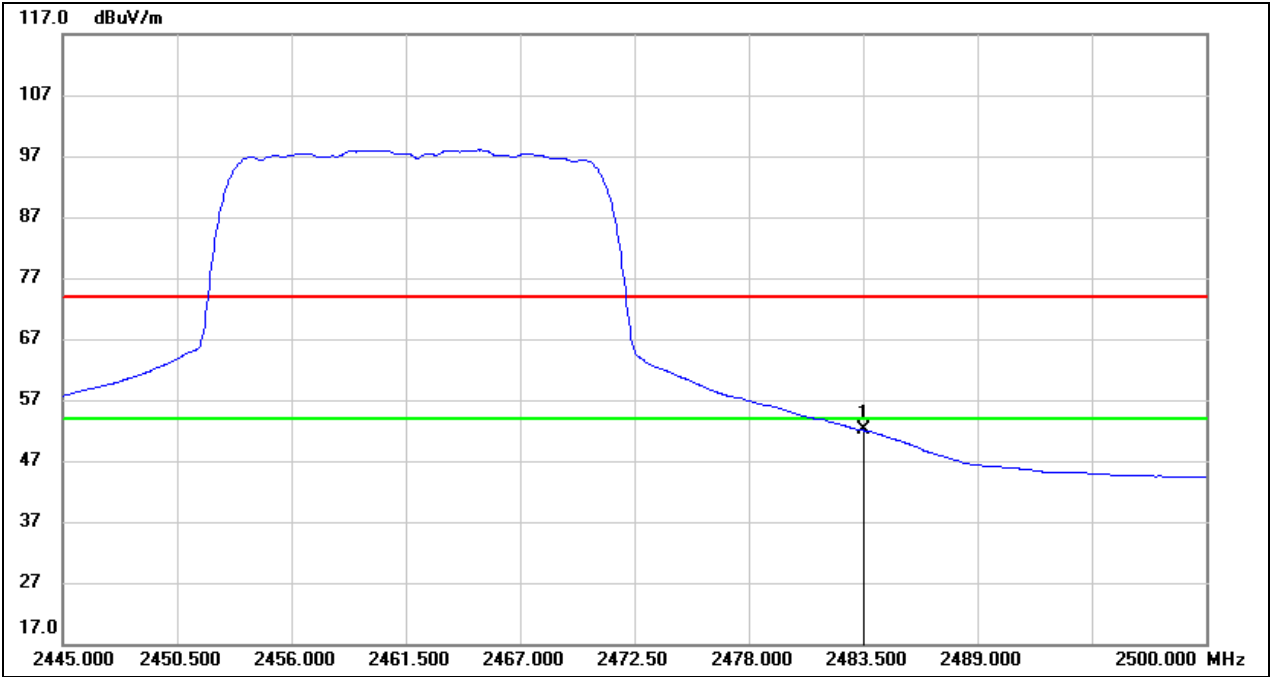
Test Mode:	802.11n HT20 PK	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.15	32.44	72.59	74.00	-1.41	peak



Test Mode:	802.11n HT20 AV	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz

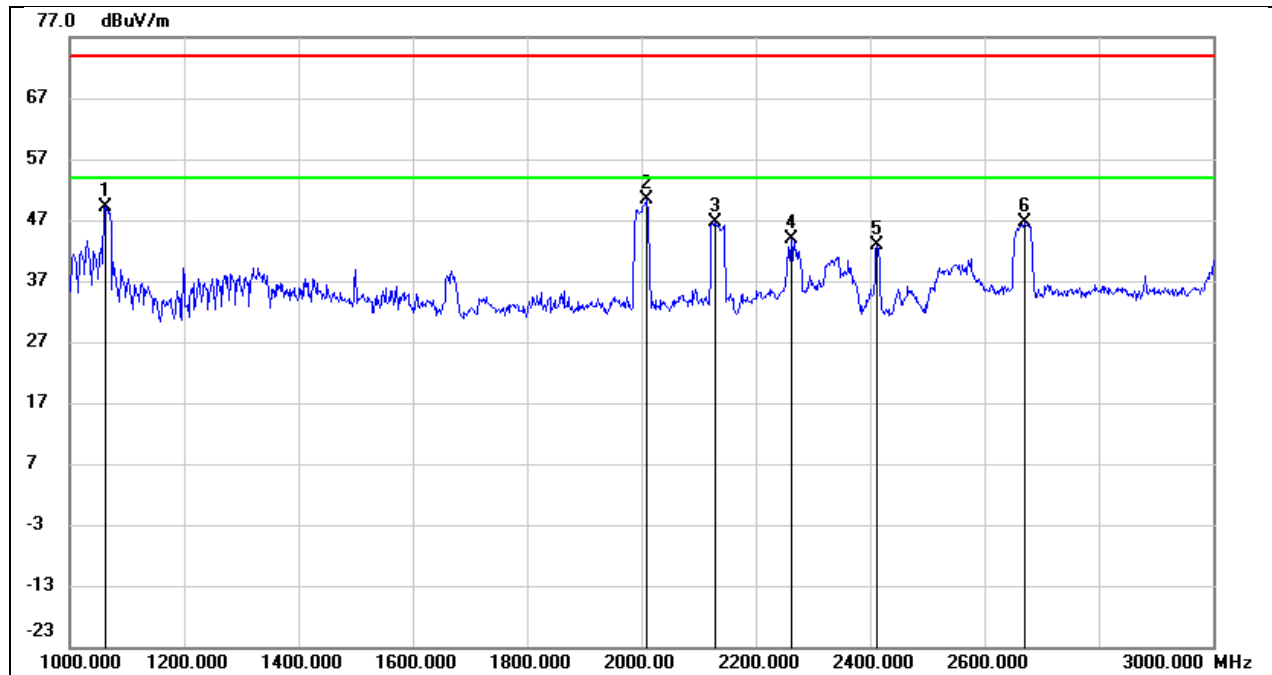


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	19.60	32.44	52.04	54.00	-1.96	AVG



8.2. SPURIOUS EMISSIONS(1 GHZ~3 GHZ)

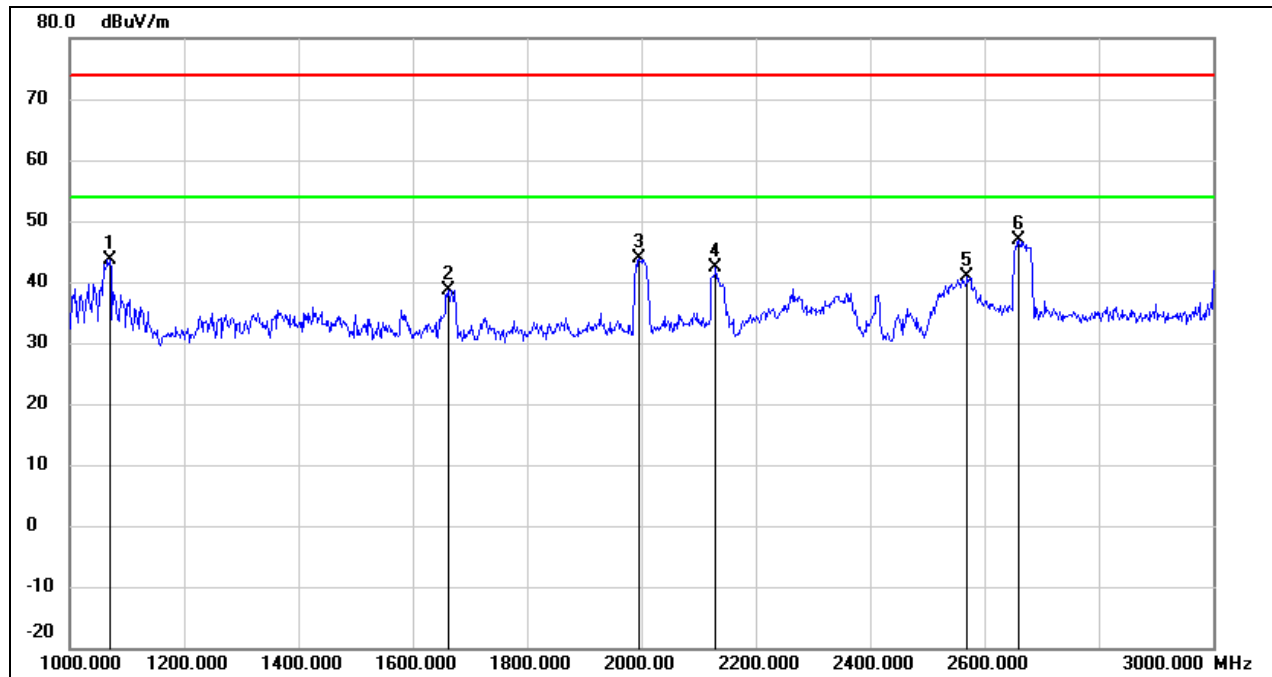
Test Mode:	802.11b	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	63.79	-14.74	49.05	74.00	-24.95	peak
2	2010.000	61.35	-11.00	50.35	74.00	-23.65	peak
3	2128.000	56.97	-10.40	46.57	74.00	-27.43	peak
4	2262.000	53.55	-9.72	43.83	74.00	-30.17	peak
5	2412.000	51.79	-8.94	42.85	74.00	-31.15	peak
6	2670.000	54.48	-7.97	46.51	74.00	-27.49	peak



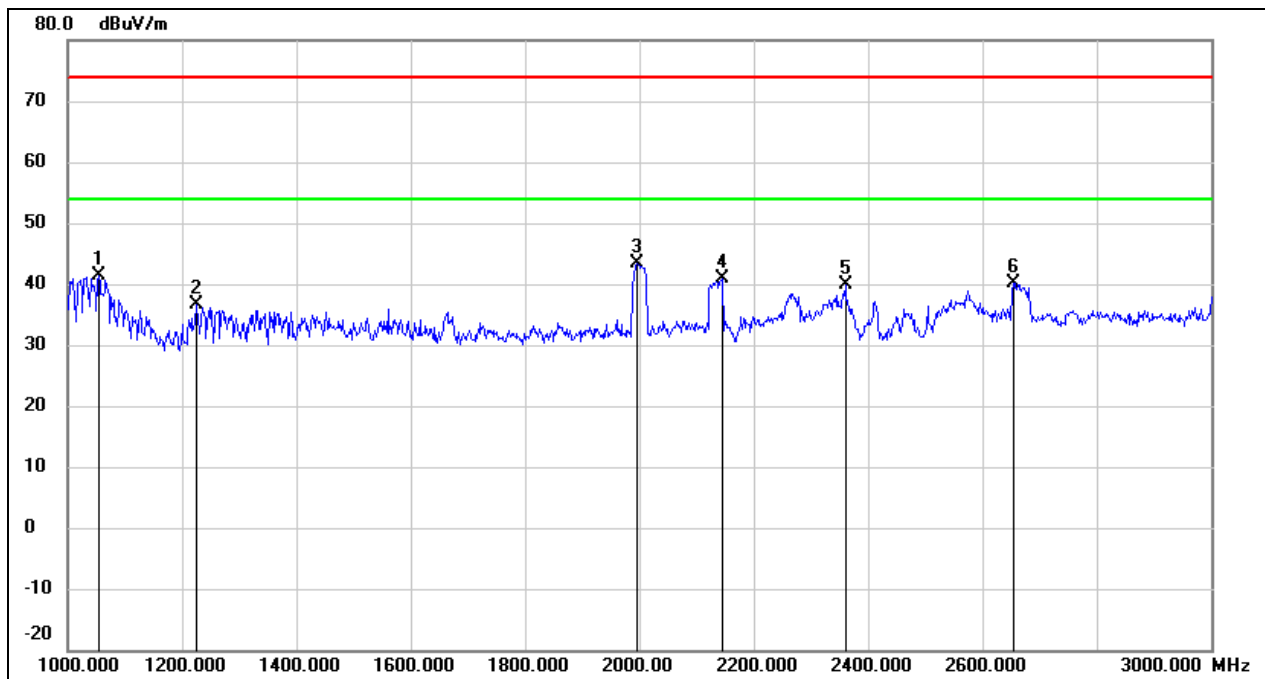
Test Mode:	802.11b	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1070.000	58.43	-14.70	43.73	74.00	-30.27	peak
2	1662.000	50.90	-12.17	38.73	74.00	-35.27	peak
3	1996.000	54.88	-11.07	43.81	74.00	-30.19	peak
4	2130.000	52.67	-10.39	42.28	74.00	-31.72	peak
5	2570.000	49.05	-8.27	40.78	74.00	-33.22	peak
6	2660.000	54.84	-8.01	46.83	74.00	-27.17	peak



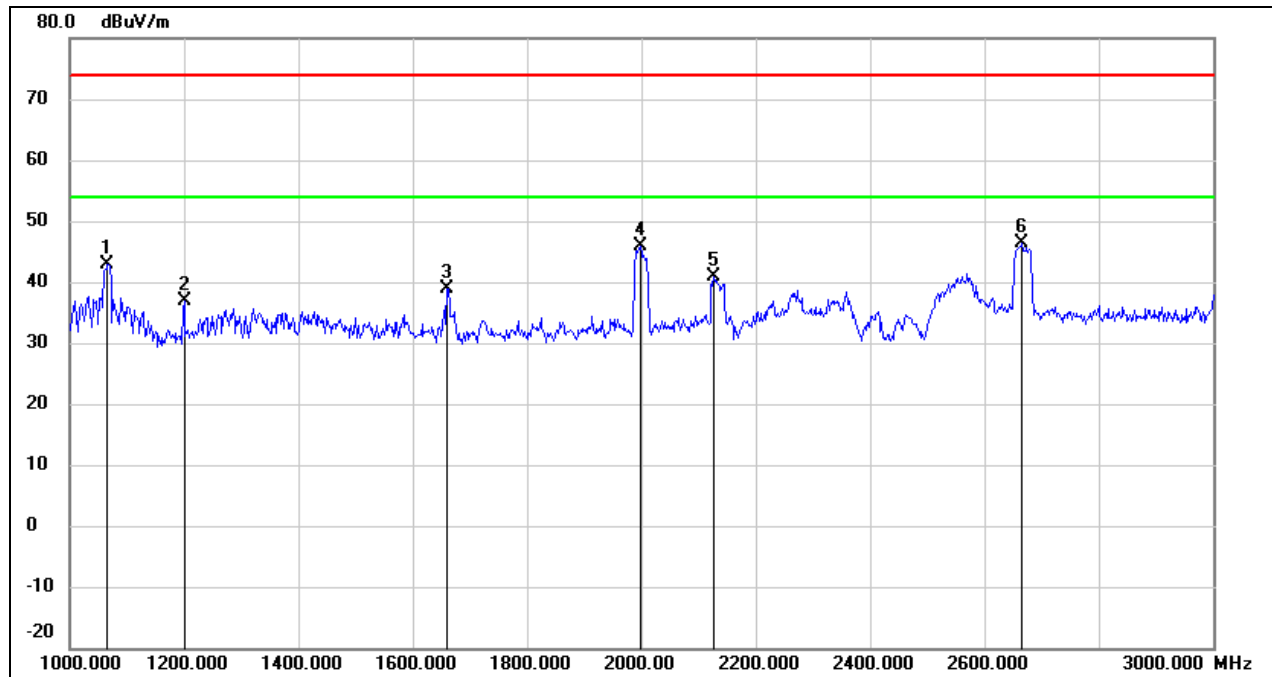
Test Mode:	802.11b	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1054.000	56.20	-14.78	41.42	74.00	-32.58	peak
2	1224.000	50.63	-13.99	36.64	74.00	-37.36	peak
3	1996.000	54.35	-11.07	43.28	74.00	-30.72	peak
4	2144.000	51.32	-10.33	40.99	74.00	-33.01	peak
5	2360.000	49.18	-9.21	39.97	74.00	-34.03	peak
6	2654.000	48.15	-8.02	40.13	74.00	-33.87	peak



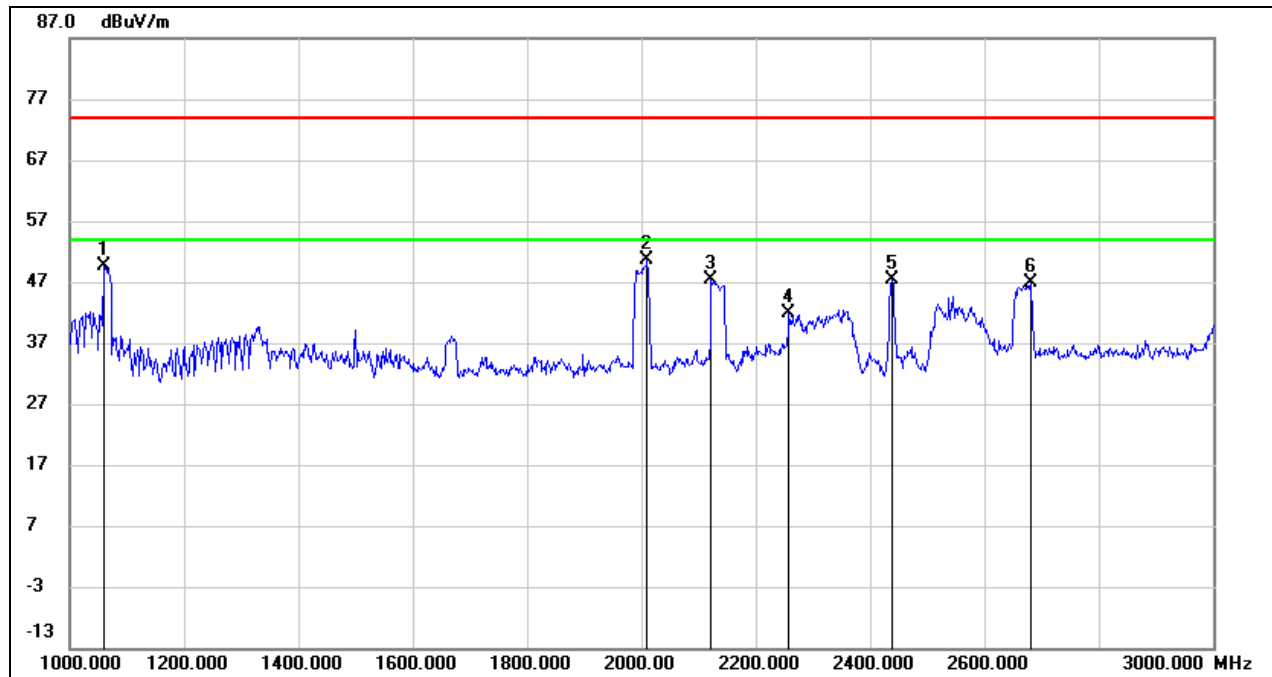
Test Mode:	802.11b	Channel:	2417
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1066.000	57.66	-14.73	42.93	74.00	-31.07	peak
2	1200.000	51.04	-14.10	36.94	74.00	-37.06	peak
3	1660.000	51.09	-12.19	38.90	74.00	-35.10	peak
4	1998.000	57.01	-11.06	45.95	74.00	-28.05	peak
5	2126.000	51.36	-10.41	40.95	74.00	-33.05	peak
6	2666.000	54.28	-7.98	46.30	74.00	-27.70	peak



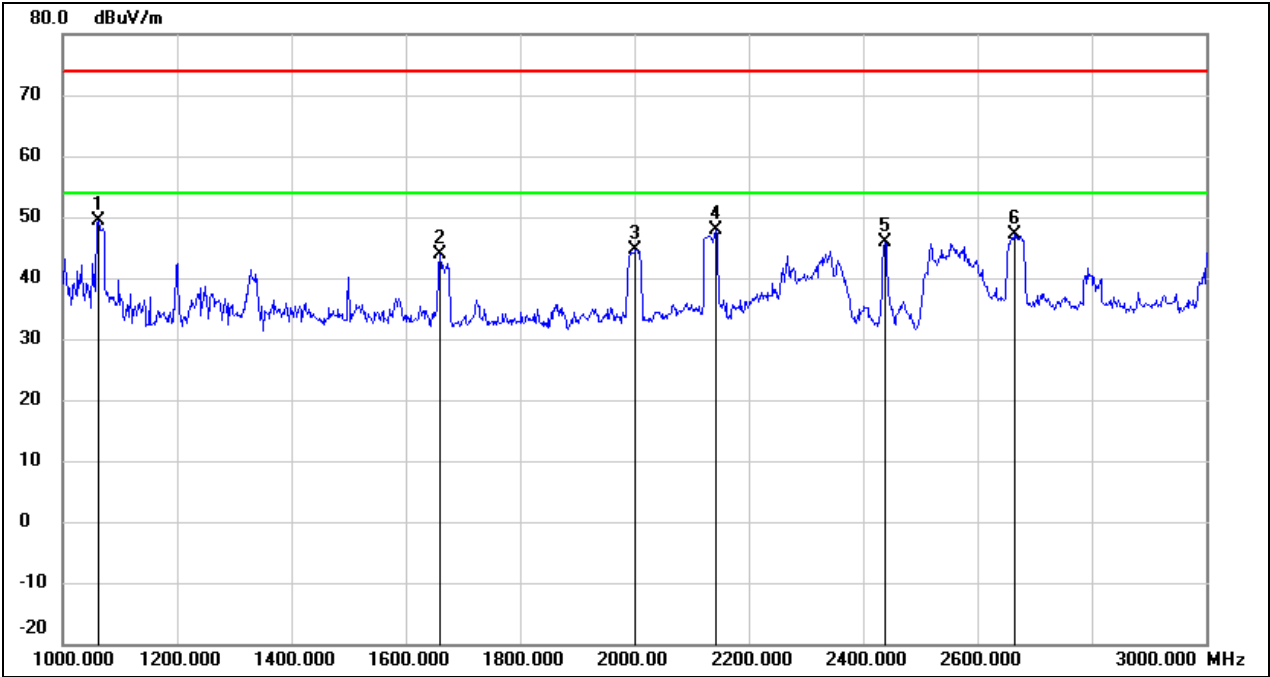
Test Mode:	802.11b	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1060.000	64.49	-14.76	49.73	74.00	-24.27	peak
2	2010.000	61.68	-11.00	50.68	74.00	-23.32	peak
3	2122.000	57.70	-10.43	47.27	74.00	-26.73	peak
4	2258.000	51.52	-9.74	41.78	74.00	-32.22	peak
5	2438.000	56.10	-8.80	47.30	74.00	-26.70	peak
6	2680.000	54.93	-7.95	46.98	74.00	-27.02	peak



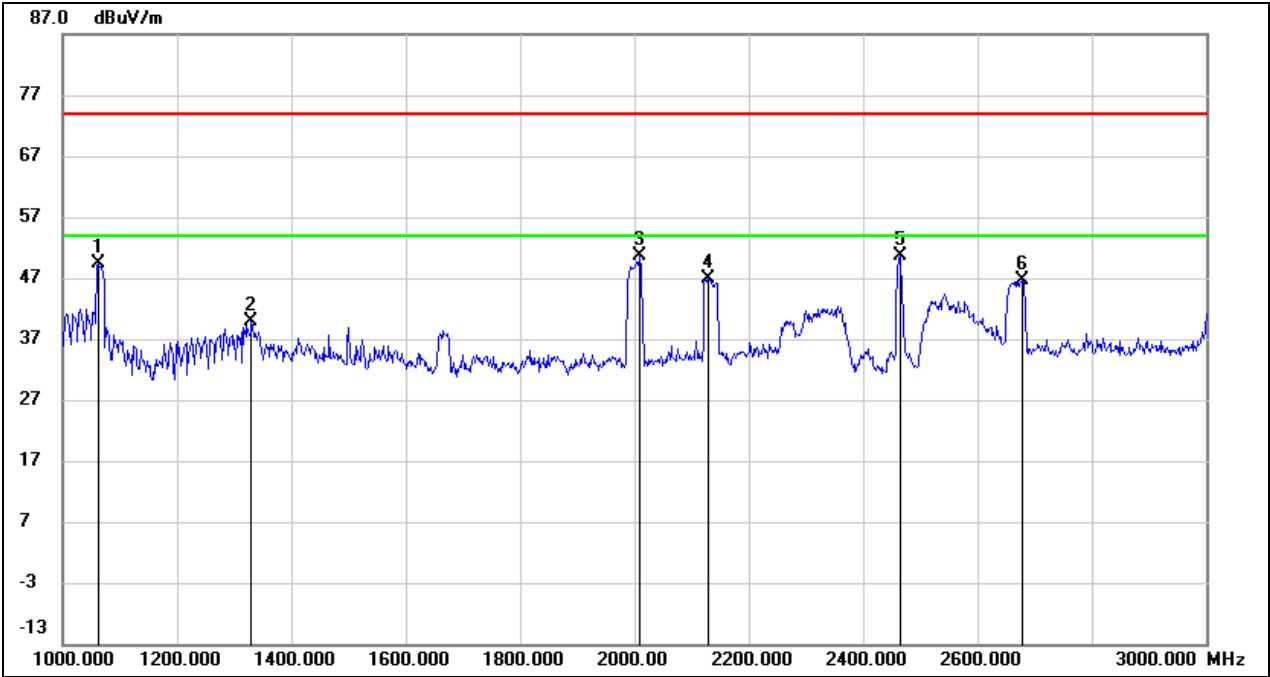
Test Mode:	802.11b	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	64.16	-14.74	49.42	74.00	-24.58	peak
2	1660.000	56.14	-12.19	43.95	74.00	-30.05	peak
3	2002.000	55.68	-11.05	44.63	74.00	-29.37	peak
4	2142.000	58.28	-10.33	47.95	74.00	-26.05	peak
5	2438.000	54.58	-8.80	45.78	74.00	-28.22	peak
6	2664.000	55.00	-7.99	47.01	74.00	-26.99	peak



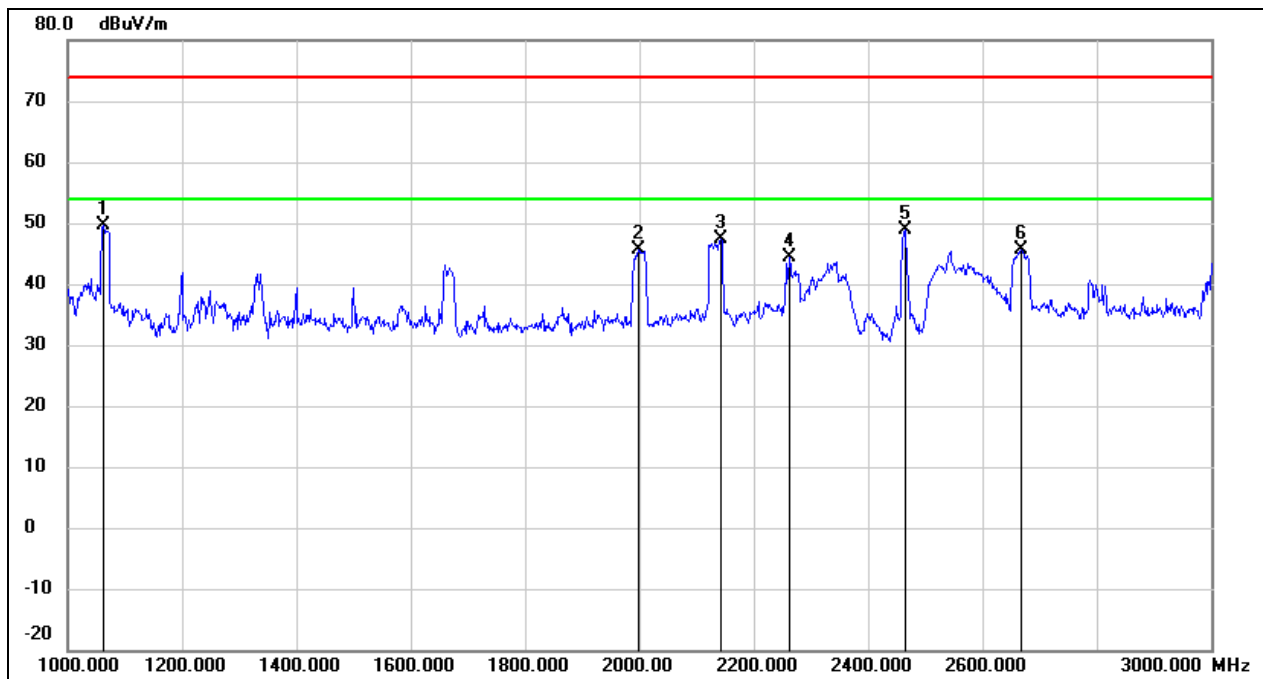
Test Mode:	802.11b	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	64.06	-14.74	49.32	74.00	-24.68	peak
2	1330.000	53.30	-13.50	39.80	74.00	-34.20	peak
3	2010.000	61.54	-11.00	50.54	74.00	-23.46	peak
4	2128.000	57.30	-10.40	46.90	74.00	-27.10	peak
5	2464.000	59.38	-8.68	50.70	74.00	-23.30	peak
6	2678.000	54.54	-7.96	46.58	74.00	-27.42	peak



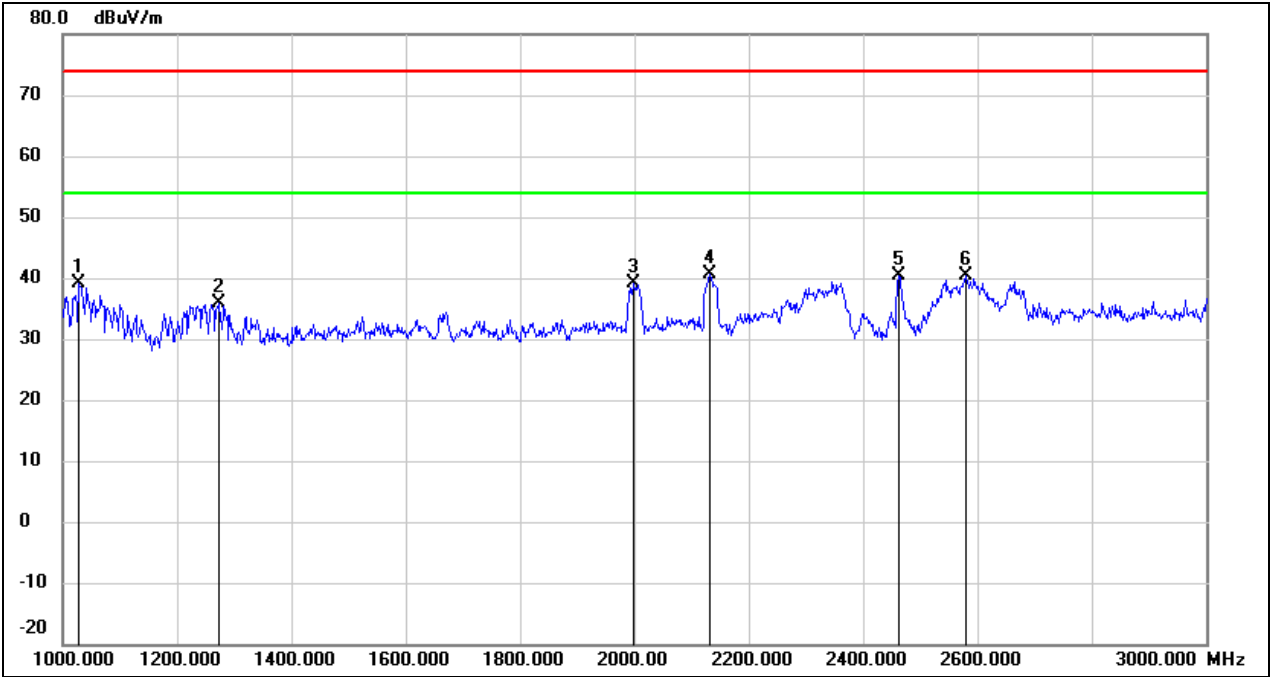
Test Mode:	802.11b	Channel:	2457
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1062.000	64.27	-14.74	49.53	74.00	-24.47	peak
2	1998.000	56.72	-11.06	45.66	74.00	-28.34	peak
3	2142.000	57.59	-10.33	47.26	74.00	-26.74	peak
4	2262.000	54.12	-9.72	44.40	74.00	-29.60	peak
5	2464.000	57.65	-8.68	48.97	74.00	-25.03	peak
6	2668.000	53.49	-7.98	45.51	74.00	-28.49	peak



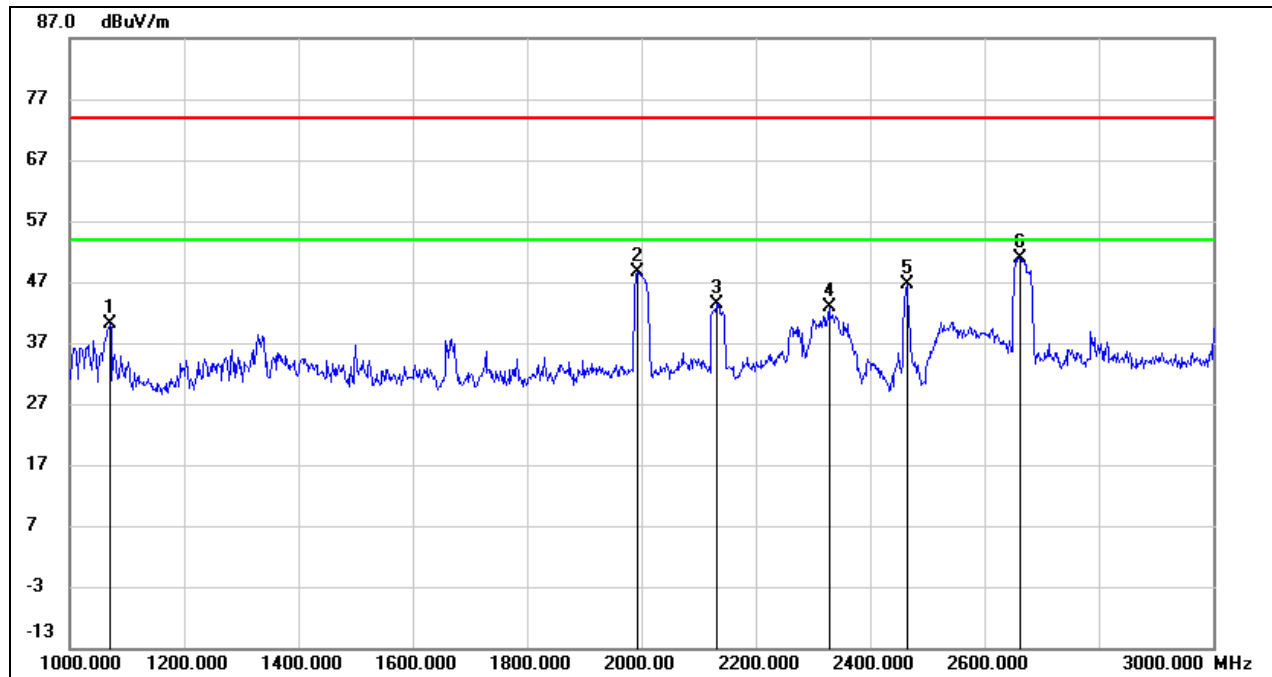
Test Mode:	802.11b	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1028.000	54.02	-14.90	39.12	74.00	-34.88	peak
2	1272.000	49.75	-13.77	35.98	74.00	-38.02	peak
3	1998.000	50.07	-11.06	39.01	74.00	-34.99	peak
4	2132.000	51.05	-10.39	40.66	74.00	-33.34	peak
5	2462.000	49.11	-8.69	40.42	74.00	-33.58	peak
6	2580.000	48.68	-8.25	40.43	74.00	-33.57	peak



Test Mode:	802.11b	Channel:	2462
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz

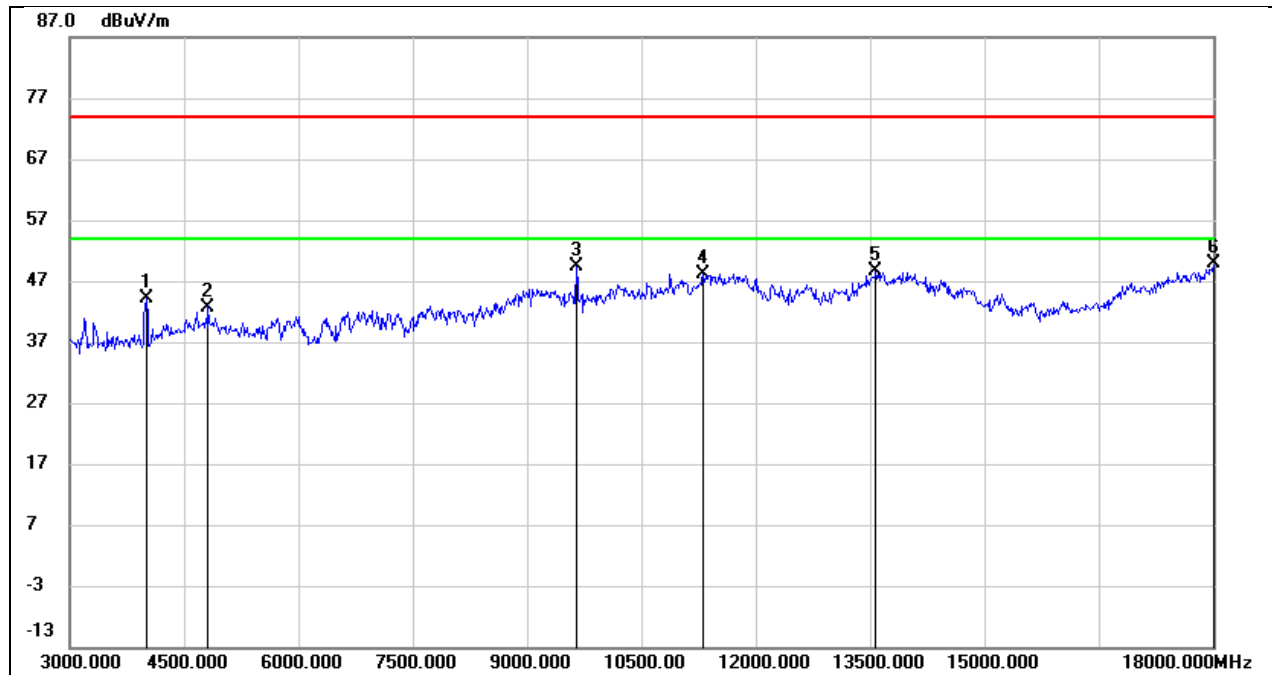


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1070.000	54.88	-14.70	40.18	74.00	-33.82	peak
2	1992.000	59.69	-11.09	48.60	74.00	-25.40	peak
3	2132.000	53.88	-10.39	43.49	74.00	-30.51	peak
4	2328.000	52.14	-9.38	42.76	74.00	-31.24	peak
5	2464.000	55.23	-8.68	46.55	74.00	-27.45	peak
6	2662.000	58.98	-8.01	50.97	74.00	-23.03	peak



8.3. SPURIOUS EMISSIONS(3 GHZ~18 GHZ)

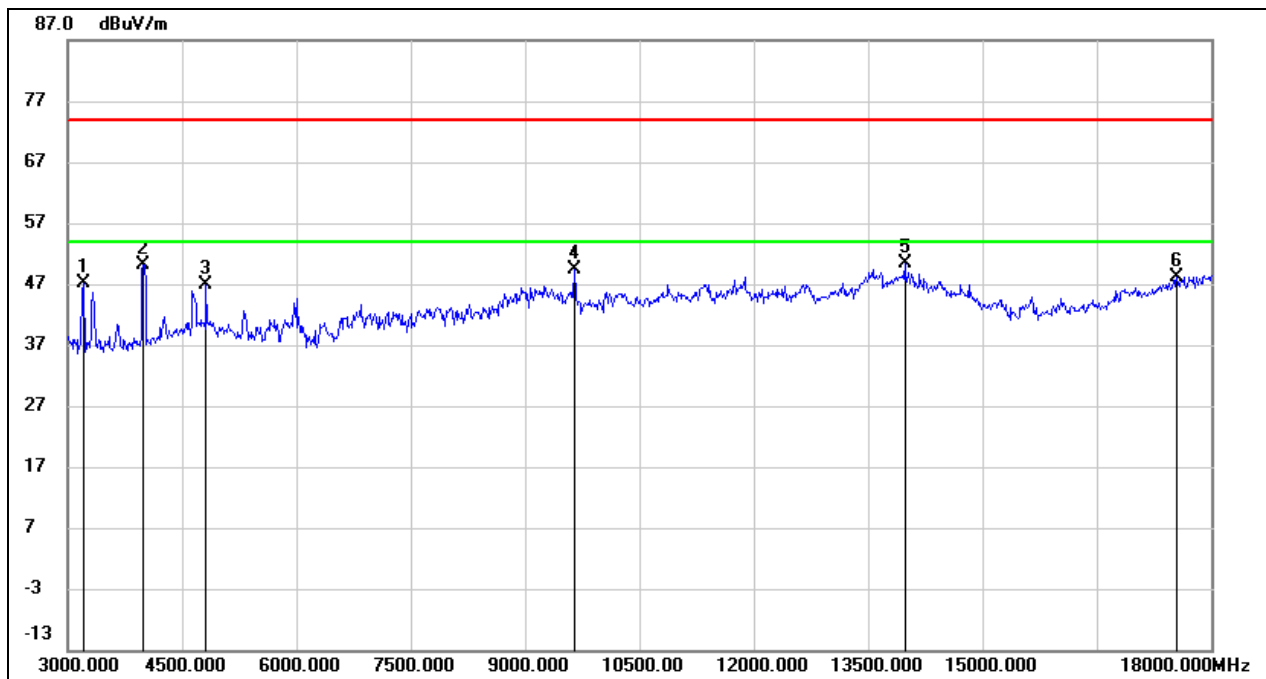
Test Mode:	802.11b	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.87	-3.78	44.09	74.00	-29.91	peak
2	4815.000	43.01	-0.26	42.75	74.00	-31.25	peak
3	9645.000	38.38	11.08	49.46	74.00	-24.54	peak
4	11310.000	32.27	15.91	48.18	74.00	-25.82	peak
5	13575.000	27.63	21.06	48.69	74.00	-25.31	peak
6	18000.000	24.17	25.69	49.86	74.00	-24.14	peak



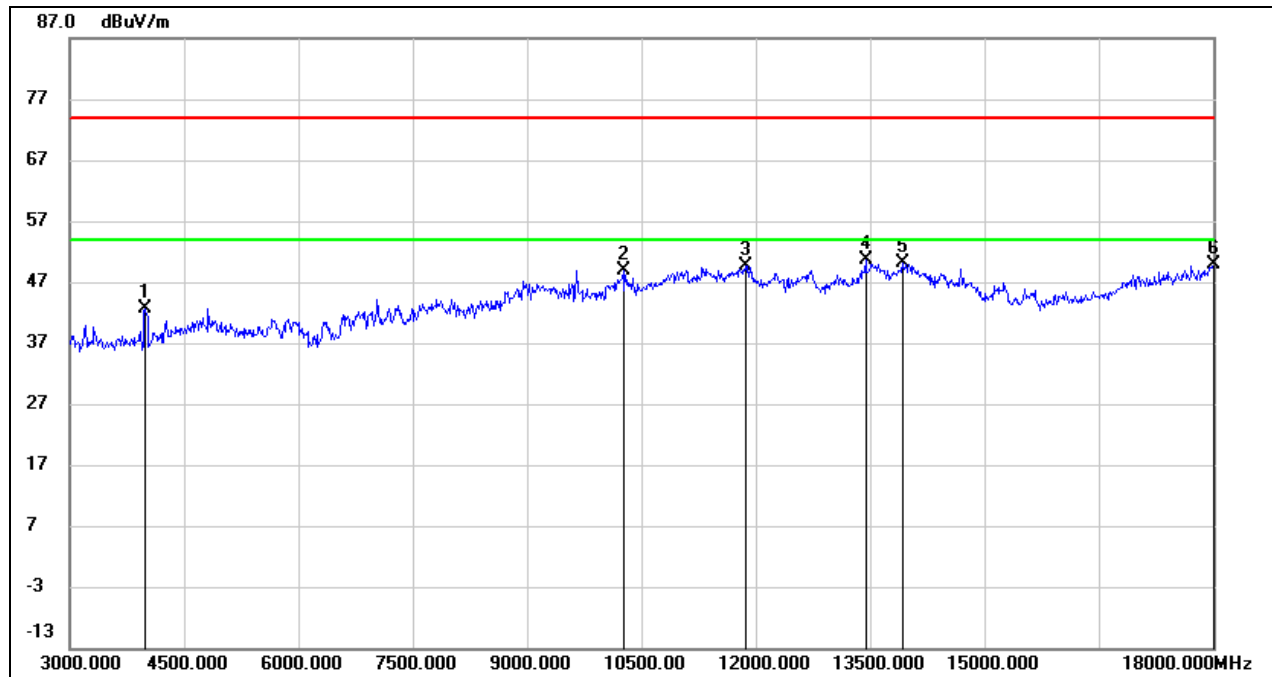
Test Mode:	802.11b	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210.000	52.32	-5.12	47.20	74.00	-26.80	peak
2	3990.000	54.06	-3.82	50.24	74.00	-23.76	peak
3	4815.000	47.11	-0.26	46.85	74.00	-27.15	peak
4	9645.000	38.21	11.08	49.29	74.00	-24.71	peak
5	13980.000	28.50	21.92	50.42	74.00	-23.58	peak
6	17550.000	25.09	23.03	48.12	74.00	-25.88	peak



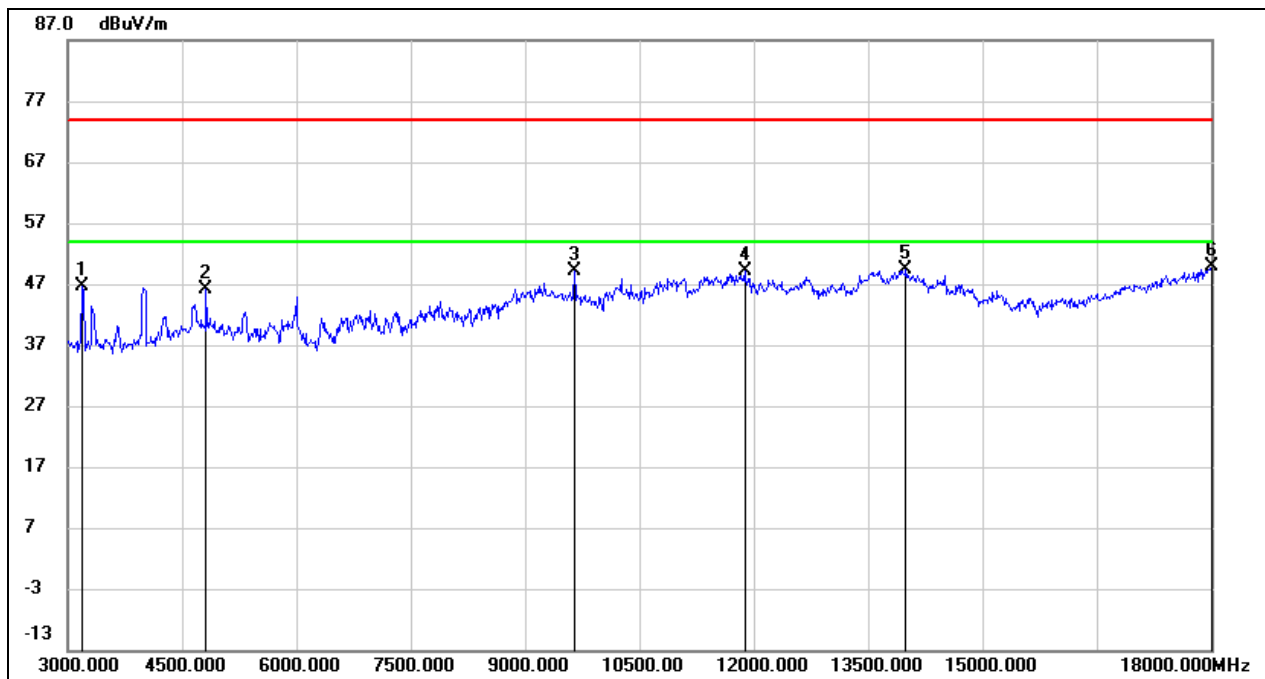
Test Mode:	802.11b	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	46.49	-3.82	42.67	74.00	-31.33	peak
2	10260.000	36.24	12.52	48.76	74.00	-25.24	peak
3	11865.000	32.13	17.59	49.72	74.00	-24.28	peak
4	13440.000	29.96	20.64	50.60	74.00	-23.40	peak
5	13920.000	28.22	21.79	50.01	74.00	-23.99	peak
6	18000.000	24.29	25.69	49.98	74.00	-24.02	peak



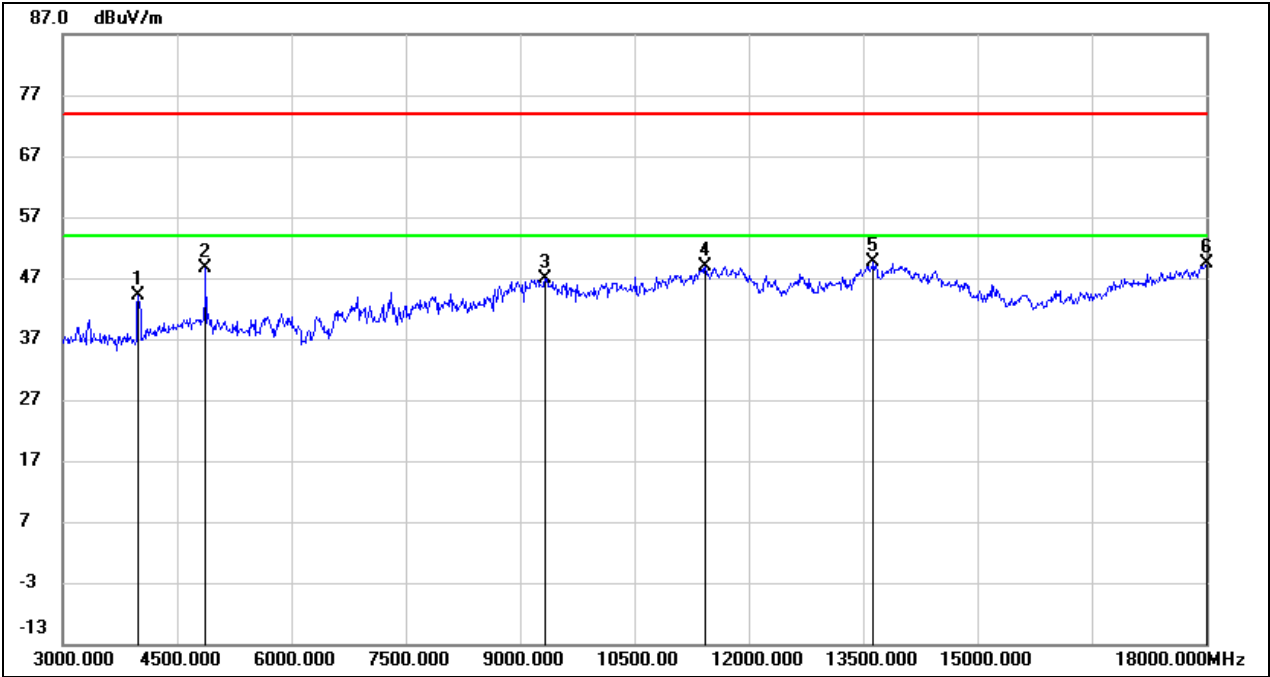
Test Mode:	802.11b	Channel:	2417
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3195.000	51.64	-5.13	46.51	74.00	-27.49	peak
2	4815.000	46.38	-0.26	46.12	74.00	-27.88	peak
3	9645.000	38.05	11.08	49.13	74.00	-24.87	peak
4	11880.000	31.60	17.63	49.23	74.00	-24.77	peak
5	13995.000	27.39	21.95	49.34	74.00	-24.66	peak
6	18000.000	24.20	25.69	49.89	74.00	-24.11	peak



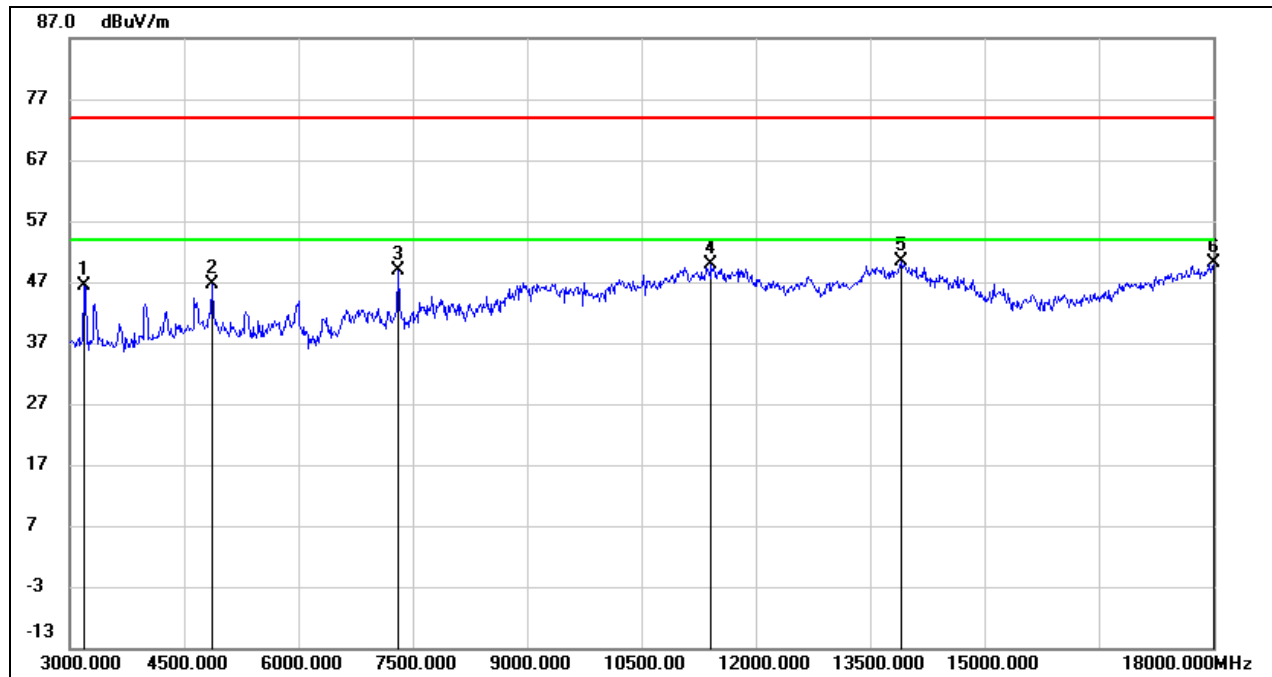
Test Mode:	802.11b	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	48.01	-3.82	44.19	74.00	-29.81	peak
2	4875.000	48.62	-0.03	48.59	74.00	-25.41	peak
3	9330.000	36.19	10.62	46.81	74.00	-27.19	peak
4	11430.000	32.56	16.34	48.90	74.00	-25.10	peak
5	13635.000	28.37	21.19	49.56	74.00	-24.44	peak
6	18000.000	23.63	25.69	49.32	74.00	-24.68	peak



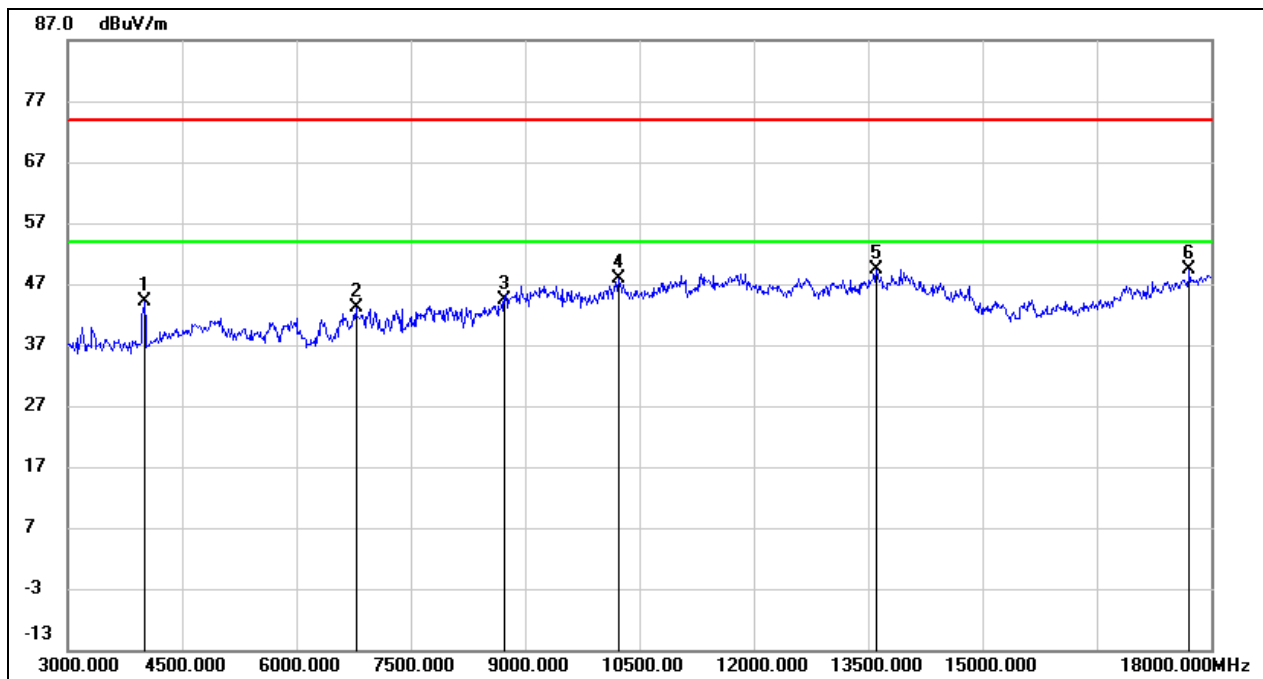
Test Mode:	802.11b	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3195.000	51.52	-5.13	46.39	74.00	-27.61	peak
2	4875.000	46.65	-0.03	46.62	74.00	-27.38	peak
3	7305.000	42.36	6.47	48.83	74.00	-25.17	peak
4	11415.000	33.69	16.29	49.98	74.00	-24.02	peak
5	13905.000	28.70	21.76	50.46	74.00	-23.54	peak
6	18000.000	24.54	25.69	50.23	74.00	-23.77	peak



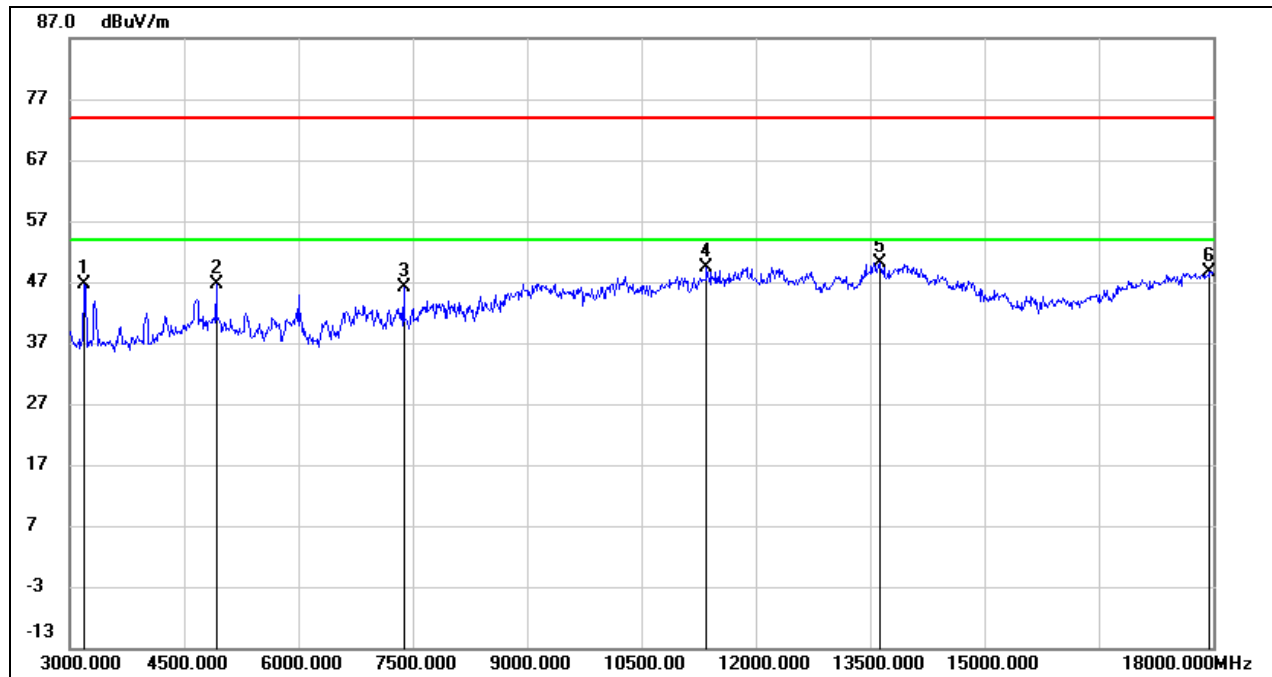
Test Mode:	802.11b	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.92	-3.78	44.14	74.00	-29.86	peak
2	6780.000	37.41	5.60	43.01	74.00	-30.99	peak
3	8730.000	35.98	8.52	44.50	74.00	-29.50	peak
4	10230.000	35.37	12.46	47.83	74.00	-26.17	peak
5	13605.000	28.32	21.12	49.44	74.00	-24.56	peak
6	17715.000	25.40	24.00	49.40	74.00	-24.60	peak



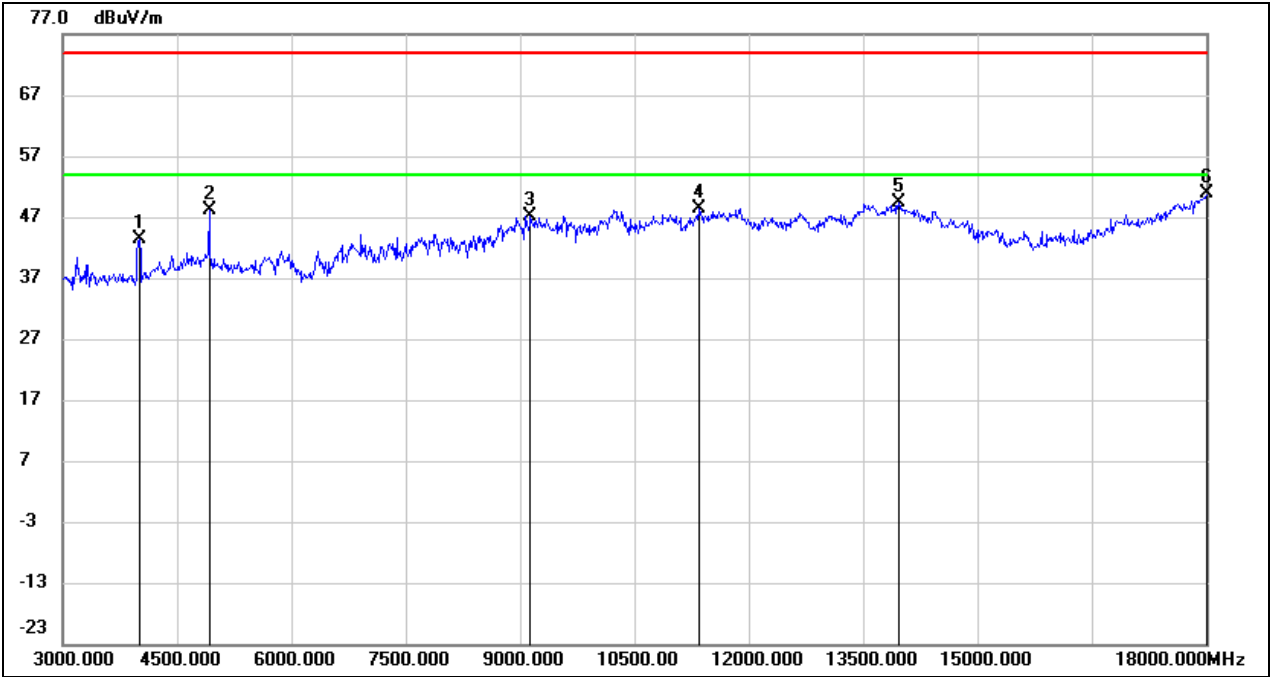
Test Mode:	802.11b	Channel:	2457
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3195.000	51.65	-5.13	46.52	74.00	-27.48	peak
2	4920.000	46.51	0.14	46.65	74.00	-27.35	peak
3	7380.000	39.77	6.42	46.19	74.00	-27.81	peak
4	11355.000	33.43	16.06	49.49	74.00	-24.51	peak
5	13620.000	28.92	21.15	50.07	74.00	-23.93	peak
6	17955.000	23.33	25.42	48.75	74.00	-25.25	peak



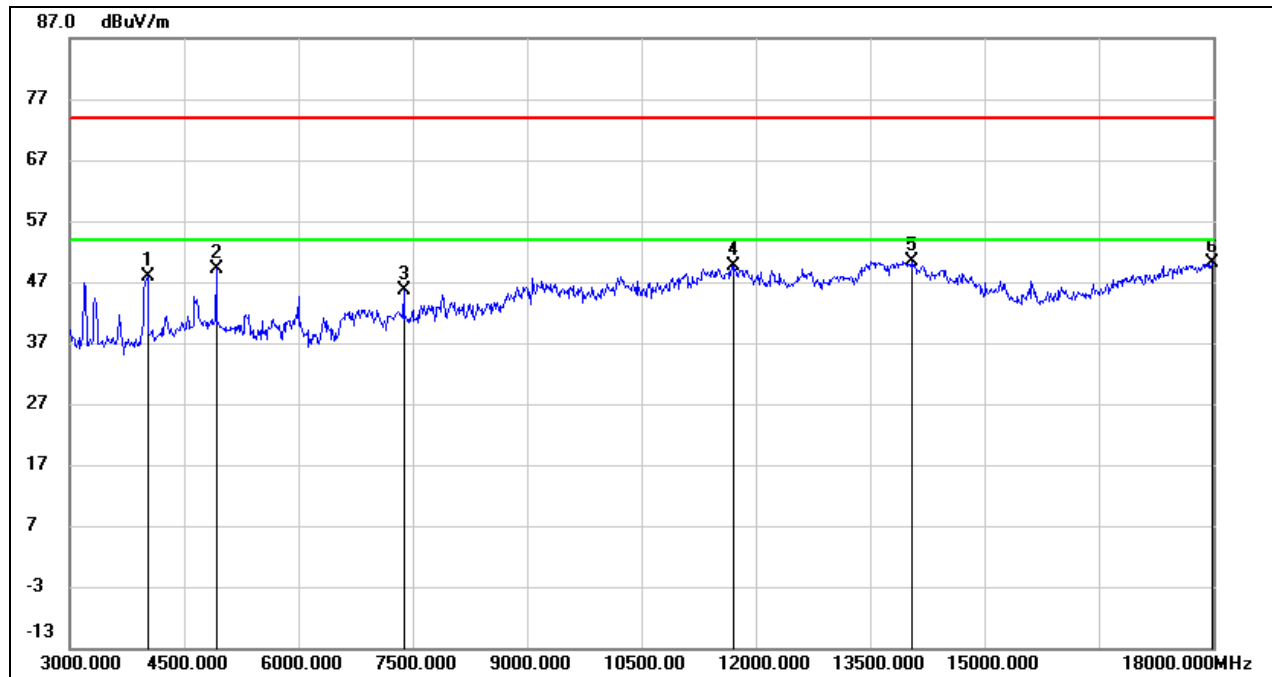
Test Mode:	802.11b	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.22	-3.78	43.44	74.00	-30.56	peak
2	4920.000	47.94	0.14	48.08	74.00	-25.92	peak
3	9135.000	36.68	10.55	47.23	74.00	-26.77	peak
4	11340.000	32.38	16.01	48.39	74.00	-25.61	peak
5	13965.000	27.42	21.89	49.31	74.00	-24.69	peak
6	18000.000	25.10	25.69	50.79	74.00	-23.21	peak



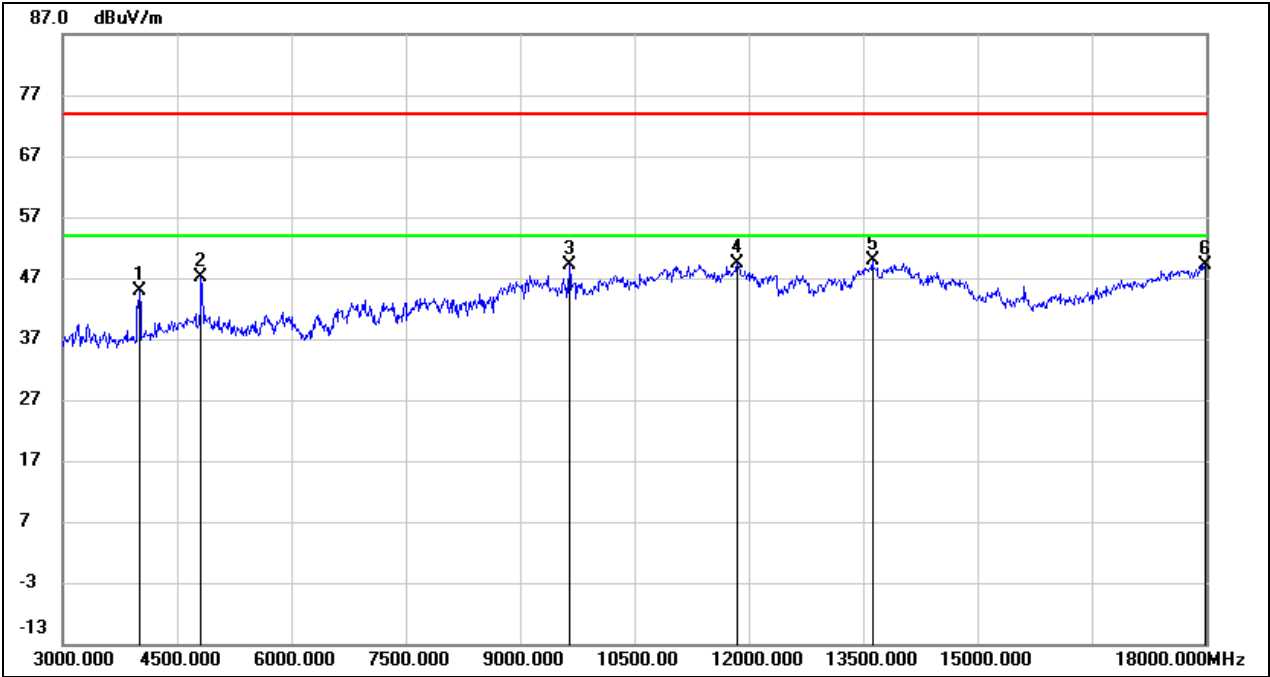
Test Mode:	802.11b	Channel:	2462
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4020.000	51.49	-3.71	47.78	74.00	-26.22	peak
2	4920.000	49.07	0.14	49.21	74.00	-24.79	peak
3	7380.000	39.13	6.42	45.55	74.00	-28.45	peak
4	11700.000	32.52	17.14	49.66	74.00	-24.34	peak
5	14055.000	28.66	21.73	50.39	74.00	-23.61	peak
6	17985.000	24.63	25.60	50.23	74.00	-23.77	peak



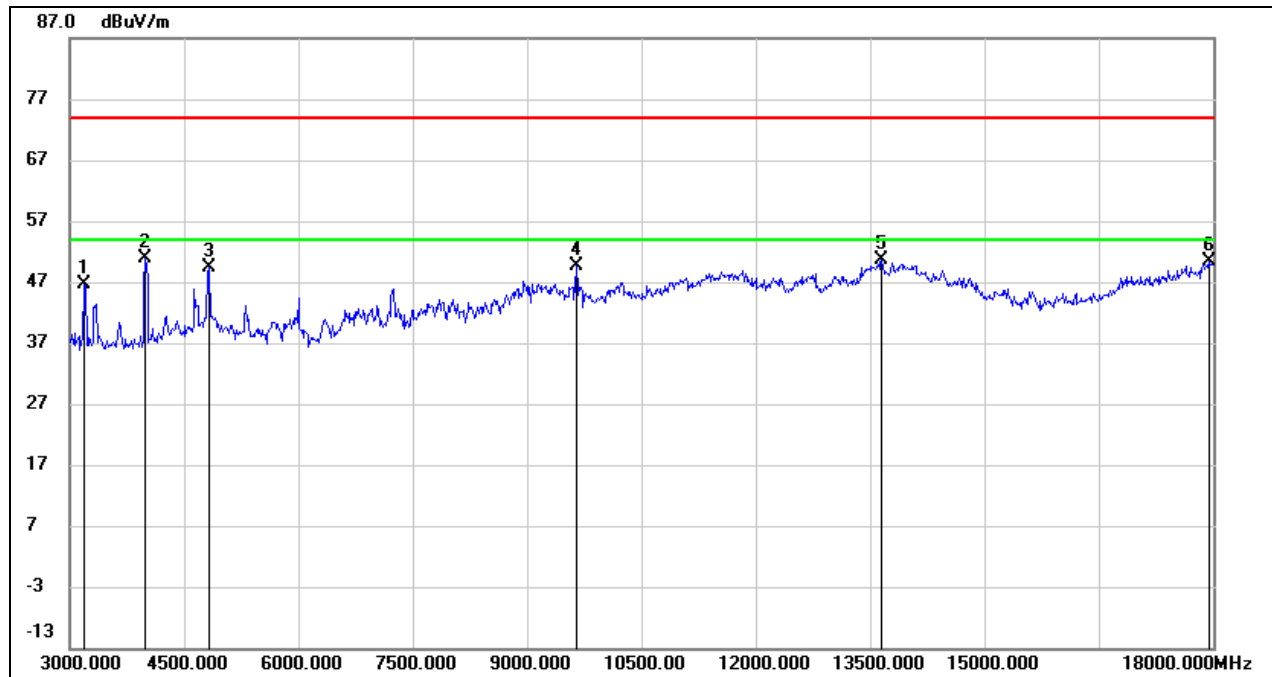
Test Mode:	802.11g	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	48.65	-3.78	44.87	74.00	-29.13	peak
2	4815.000	47.29	-0.26	47.03	74.00	-26.97	peak
3	9645.000	38.04	11.08	49.12	74.00	-24.88	peak
4	11850.000	31.87	17.56	49.43	74.00	-24.57	peak
5	13620.000	28.80	21.15	49.95	74.00	-24.05	peak
6	17985.000	23.50	25.60	49.10	74.00	-24.90	peak



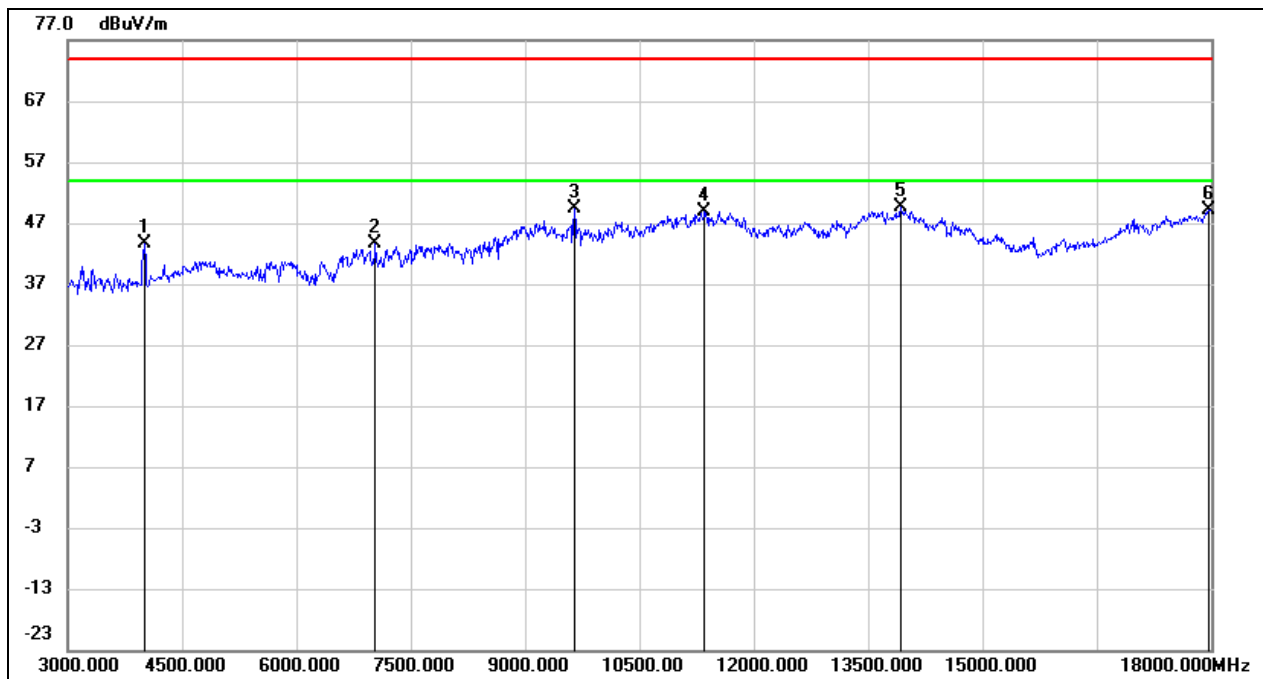
Test Mode:	802.11g	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3180.000	51.81	-5.14	46.67	74.00	-27.33	peak
2	3990.000	54.71	-3.82	50.89	74.00	-23.11	peak
3	4830.000	49.59	-0.20	49.39	74.00	-24.61	peak
4	9645.000	38.53	11.08	49.61	74.00	-24.39	peak
5	13650.000	29.52	21.21	50.73	74.00	-23.27	peak
6	17940.000	25.08	25.34	50.42	74.00	-23.58	peak



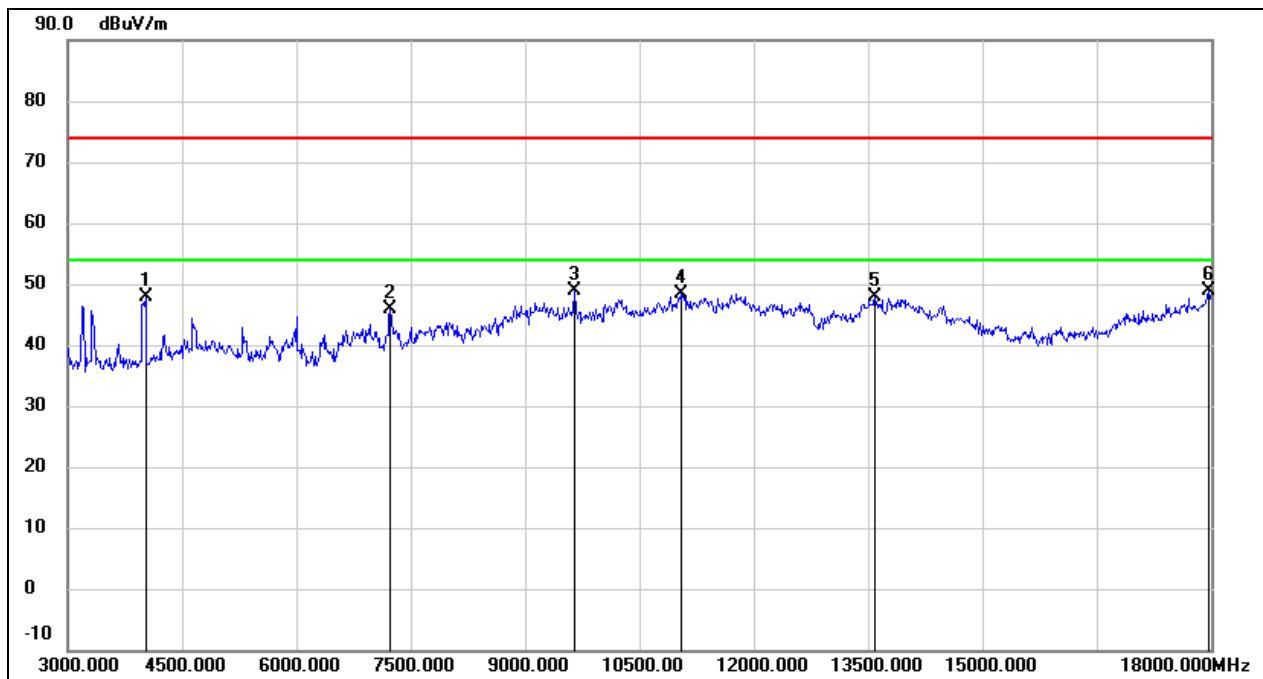
Test Mode:	802.11g	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.45	-3.78	43.67	74.00	-30.33	peak
2	7035.000	36.97	6.67	43.64	74.00	-30.36	peak
3	9645.000	38.29	11.08	49.37	74.00	-24.63	peak
4	11355.000	32.89	16.06	48.95	74.00	-25.05	peak
5	13920.000	27.92	21.79	49.71	74.00	-24.29	peak
6	17970.000	23.68	25.51	49.19	74.00	-24.81	peak



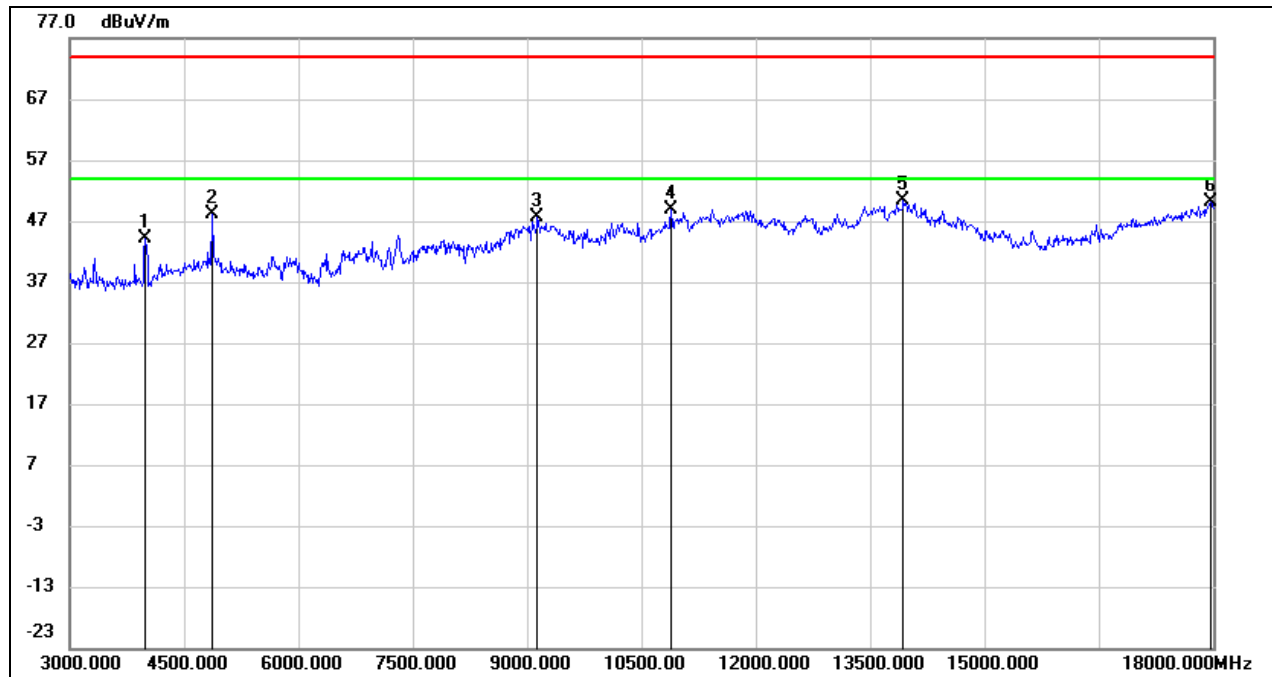
Test Mode:	802.11g	Channel:	2417
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4020.000	51.47	-3.71	47.76	74.00	-26.24	peak
2	7230.000	39.33	6.53	45.86	74.00	-28.14	peak
3	9645.000	37.85	11.08	48.93	74.00	-25.07	peak
4	11055.000	33.35	14.96	48.31	74.00	-25.69	peak
5	13590.000	26.89	21.09	47.98	74.00	-26.02	peak
6	17970.000	23.40	25.51	48.91	74.00	-25.09	peak



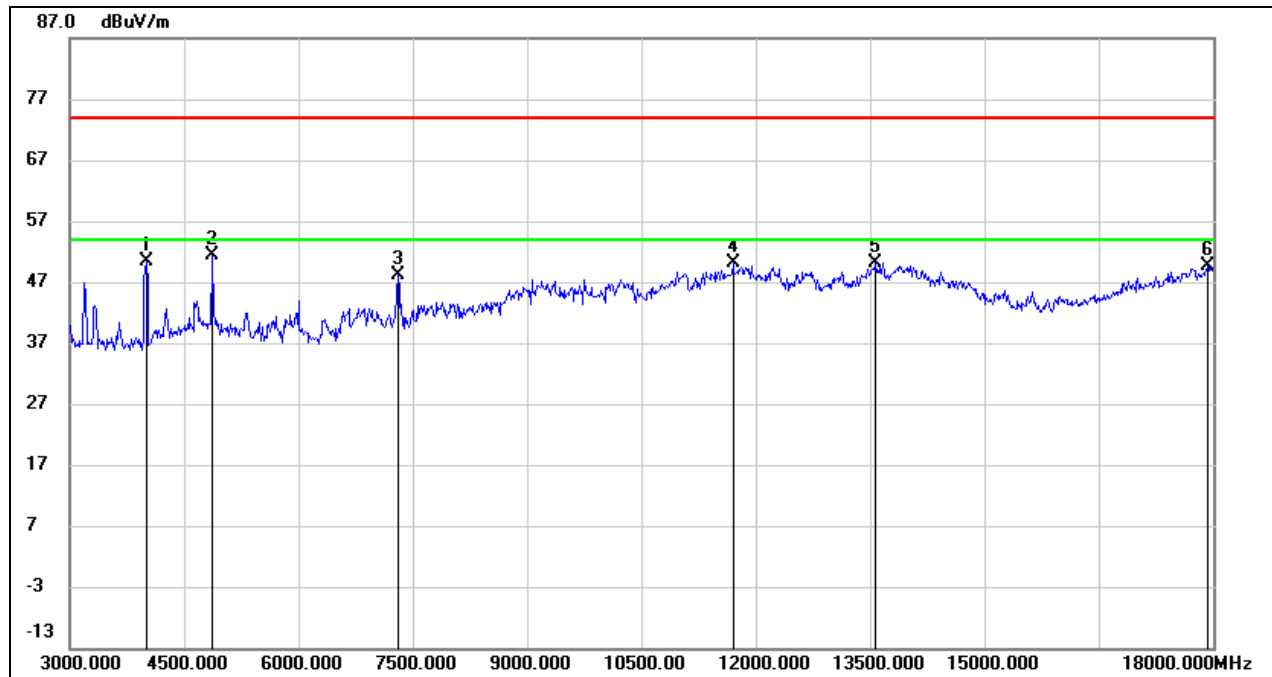
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	47.98	-3.82	44.16	74.00	-29.84	peak
2	4875.000	48.18	-0.03	48.15	74.00	-25.85	peak
3	9135.000	37.05	10.55	47.60	74.00	-26.40	peak
4	10890.000	34.48	14.39	48.87	74.00	-25.13	peak
5	13935.000	28.49	21.82	50.31	74.00	-23.69	peak
6	17970.000	24.59	25.51	50.10	74.00	-23.90	peak



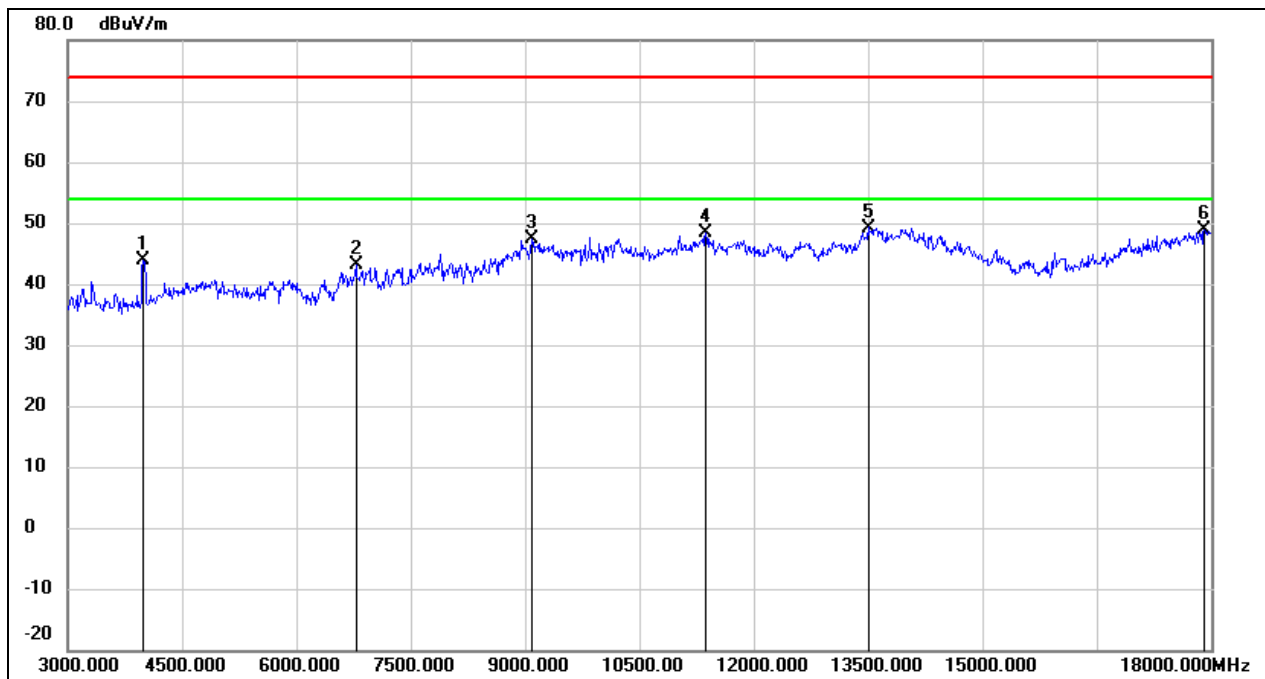
Test Mode:	802.11g	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	54.11	-3.78	50.33	74.00	-23.67	peak
2	4875.000	51.49	-0.03	51.46	74.00	-22.54	peak
3	7305.000	41.69	6.47	48.16	74.00	-25.84	peak
4	11700.000	33.07	17.14	50.21	74.00	-23.79	peak
5	13575.000	29.11	21.06	50.17	74.00	-23.83	peak
6	17925.000	24.40	25.25	49.65	74.00	-24.35	peak



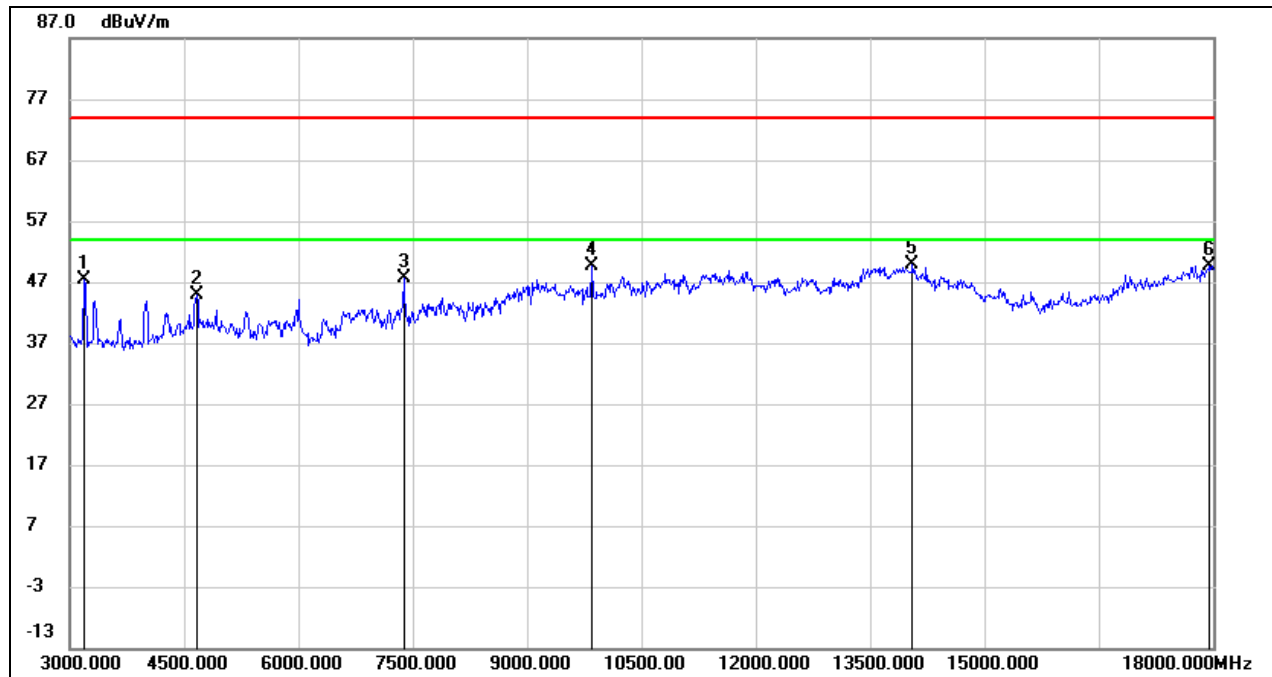
Test Mode:	802.11g	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	47.58	-3.82	43.76	74.00	-30.24	peak
2	6780.000	37.47	5.60	43.07	74.00	-30.93	peak
3	9090.000	36.86	10.51	47.37	74.00	-26.63	peak
4	11370.000	32.31	16.12	48.43	74.00	-25.57	peak
5	13500.000	28.35	20.90	49.25	74.00	-24.75	peak
6	17910.000	23.63	25.16	48.79	74.00	-25.21	peak



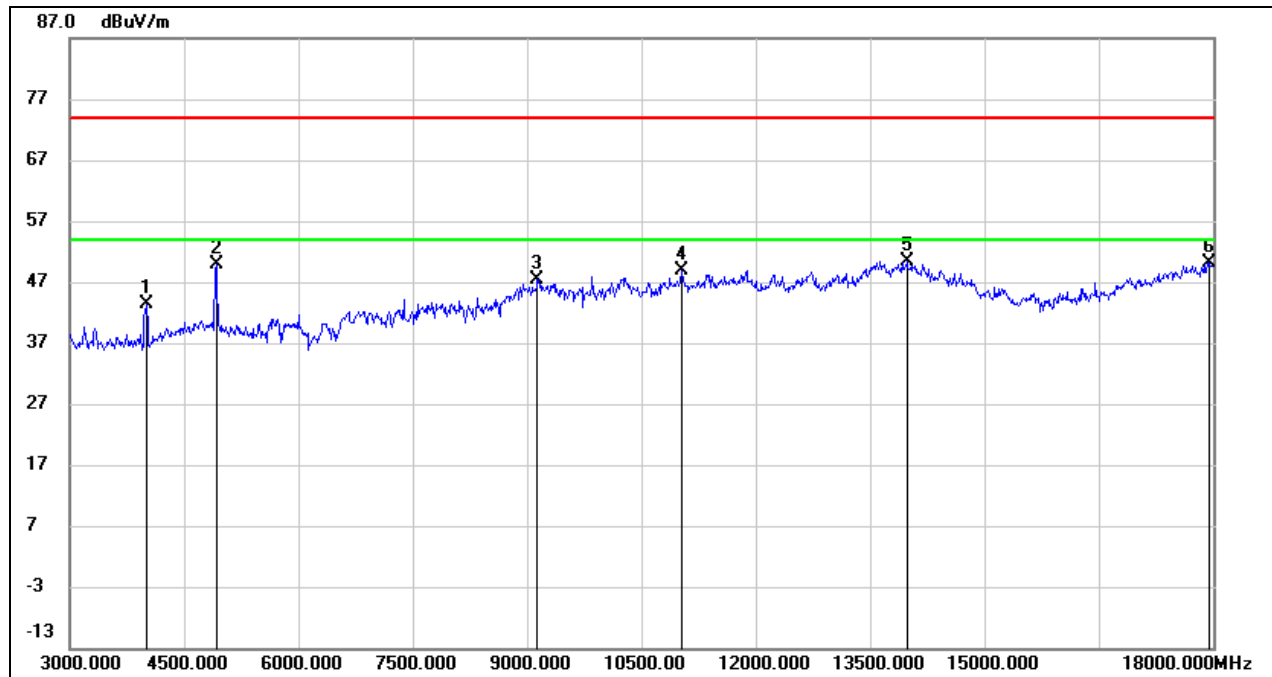
Test Mode:	802.11g	Channel:	2457
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3195.000	52.44	-5.13	47.31	74.00	-26.69	peak
2	4665.000	45.66	-0.83	44.83	74.00	-29.17	peak
3	7380.000	41.28	6.42	47.70	74.00	-26.30	peak
4	9855.000	37.95	11.63	49.58	74.00	-24.42	peak
5	14055.000	28.03	21.73	49.76	74.00	-24.24	peak
6	17955.000	24.24	25.42	49.66	74.00	-24.34	peak



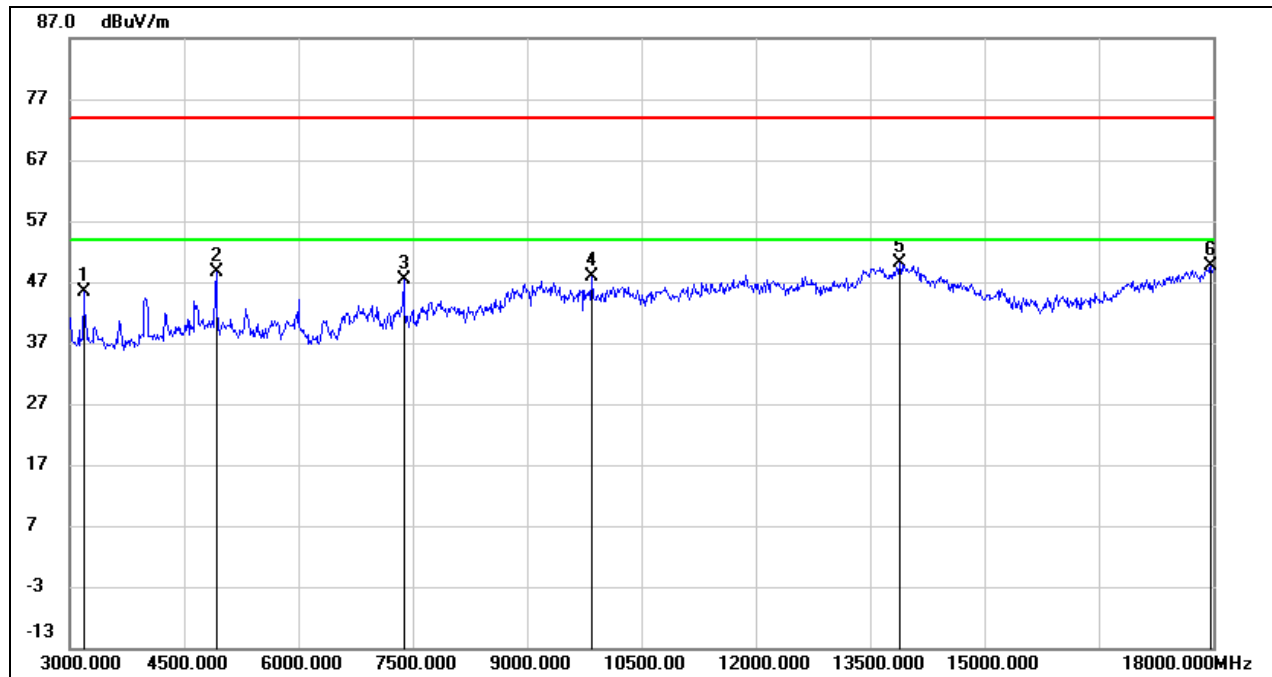
Test Mode:	802.11g	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.14	-3.78	43.36	74.00	-30.64	peak
2	4920.000	49.63	0.14	49.77	74.00	-24.23	peak
3	9135.000	36.86	10.55	47.41	74.00	-26.59	peak
4	11025.000	34.09	14.85	48.94	74.00	-25.06	peak
5	13980.000	28.51	21.92	50.43	74.00	-23.57	peak
6	17940.000	24.89	25.34	50.23	74.00	-23.77	peak



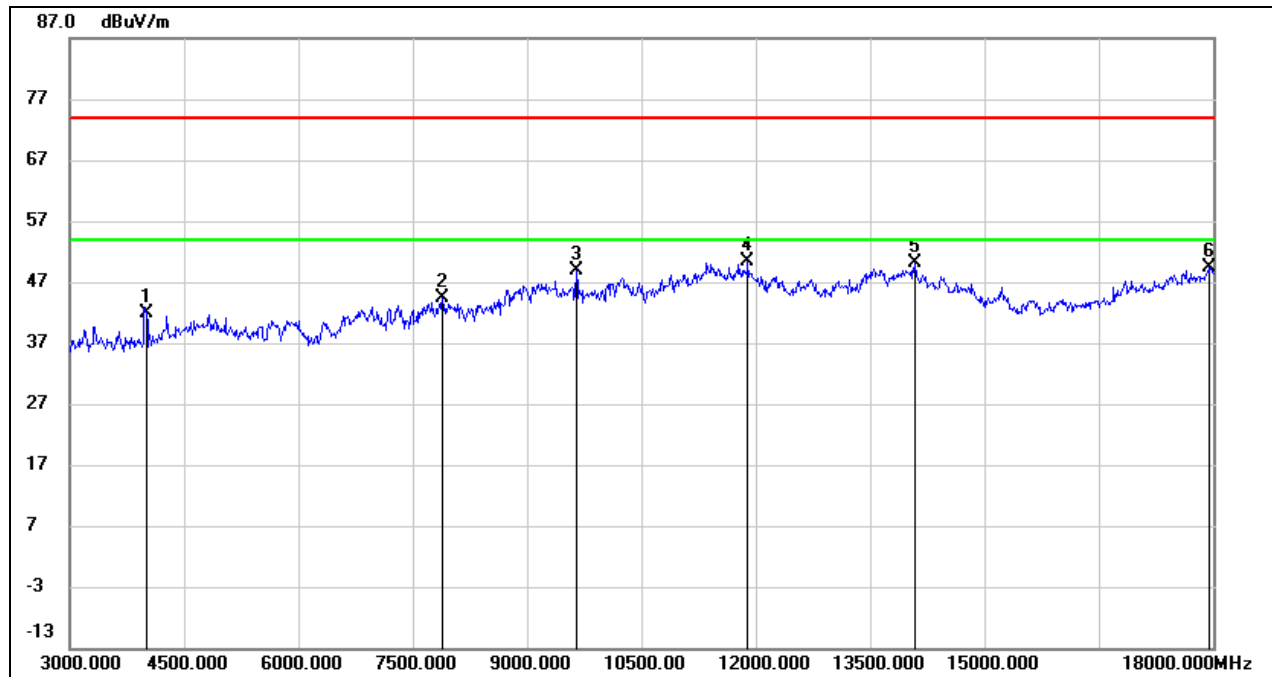
Test Mode:	802.11g	Channel:	2462
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3180.000	50.51	-5.14	45.37	74.00	-28.63	peak
2	4920.000	48.45	0.14	48.59	74.00	-25.41	peak
3	7380.000	40.87	6.42	47.29	74.00	-26.71	peak
4	9855.000	36.19	11.63	47.82	74.00	-26.18	peak
5	13890.000	28.49	21.72	50.21	74.00	-23.79	peak
6	17970.000	24.22	25.51	49.73	74.00	-24.27	peak



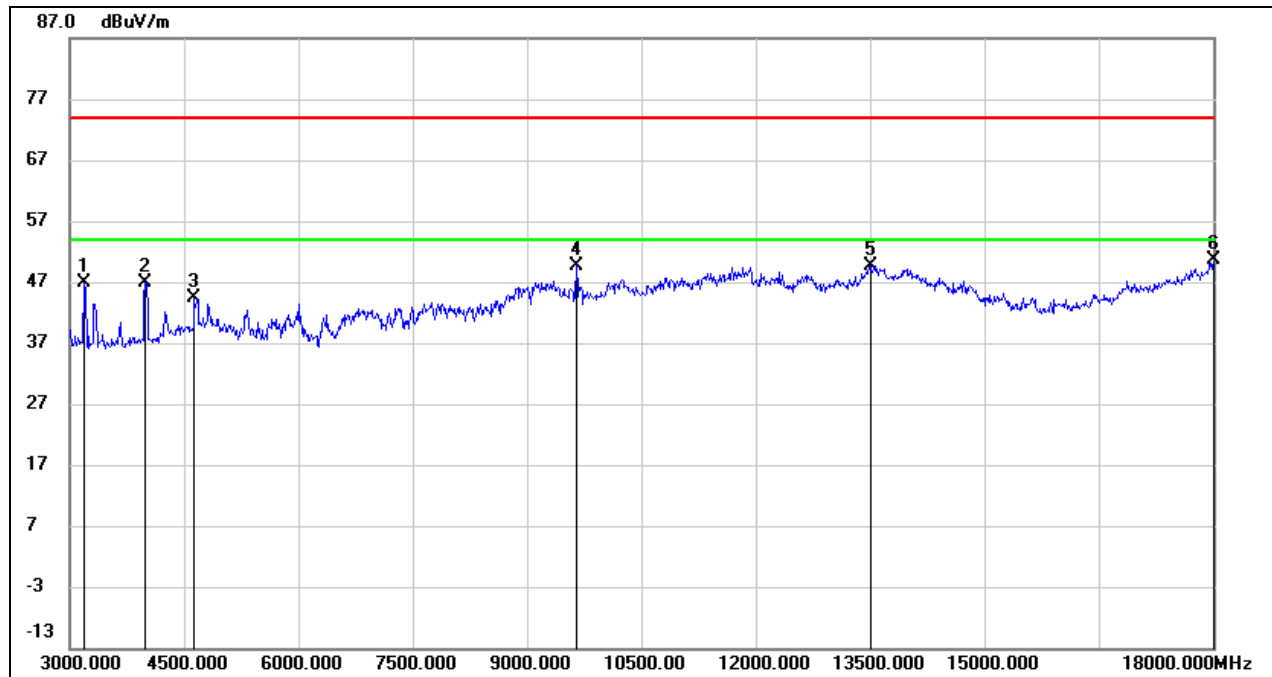
Test Mode:	802.11n HT20	Channel:	2412
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	45.69	-3.78	41.91	74.00	-32.09	peak
2	7890.000	38.11	6.31	44.42	74.00	-29.58	peak
3	9645.000	37.82	11.08	48.90	74.00	-25.10	peak
4	11895.000	32.77	17.68	50.45	74.00	-23.55	peak
5	14085.000	28.64	21.61	50.25	74.00	-23.75	peak
6	17940.000	24.16	25.34	49.50	74.00	-24.50	peak



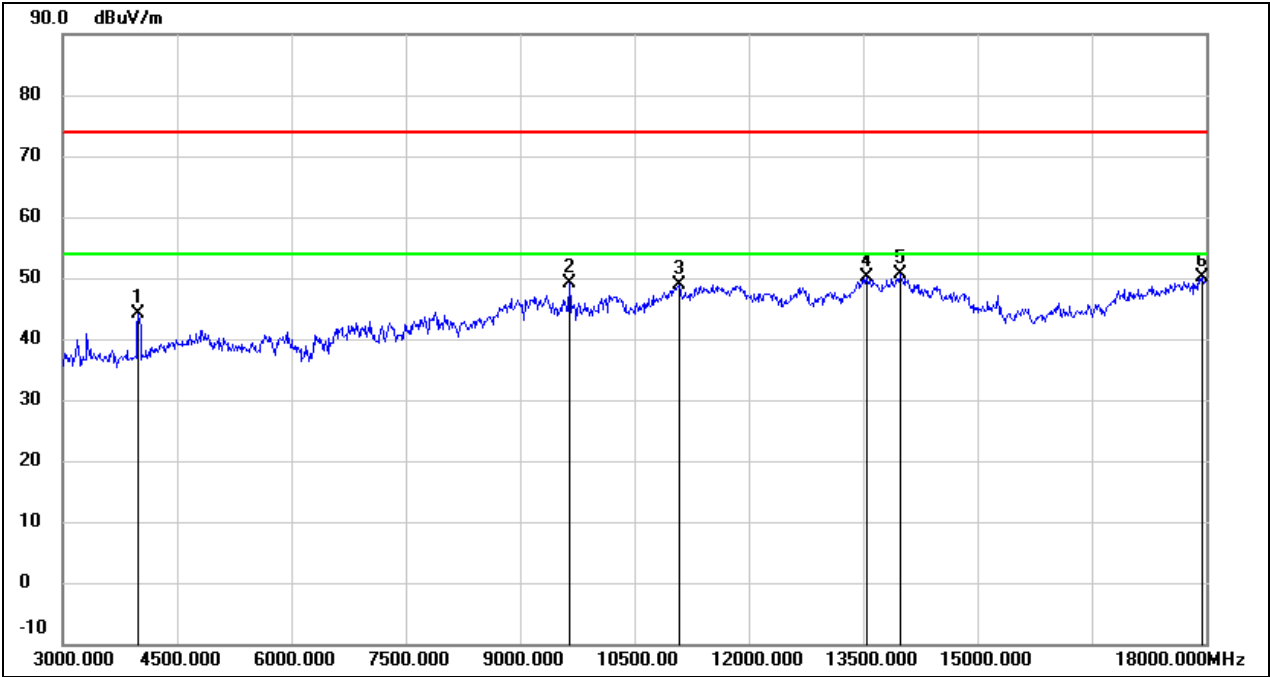
Test Mode:	802.11n HT20	Channel:	2412
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3180.000	52.11	-5.14	46.97	74.00	-27.03	peak
2	3990.000	50.73	-3.82	46.91	74.00	-27.09	peak
3	4635.000	45.27	-0.95	44.32	74.00	-29.68	peak
4	9645.000	38.67	11.08	49.75	74.00	-24.25	peak
5	13500.000	28.66	20.90	49.56	74.00	-24.44	peak
6	18000.000	24.83	25.69	50.52	74.00	-23.48	peak



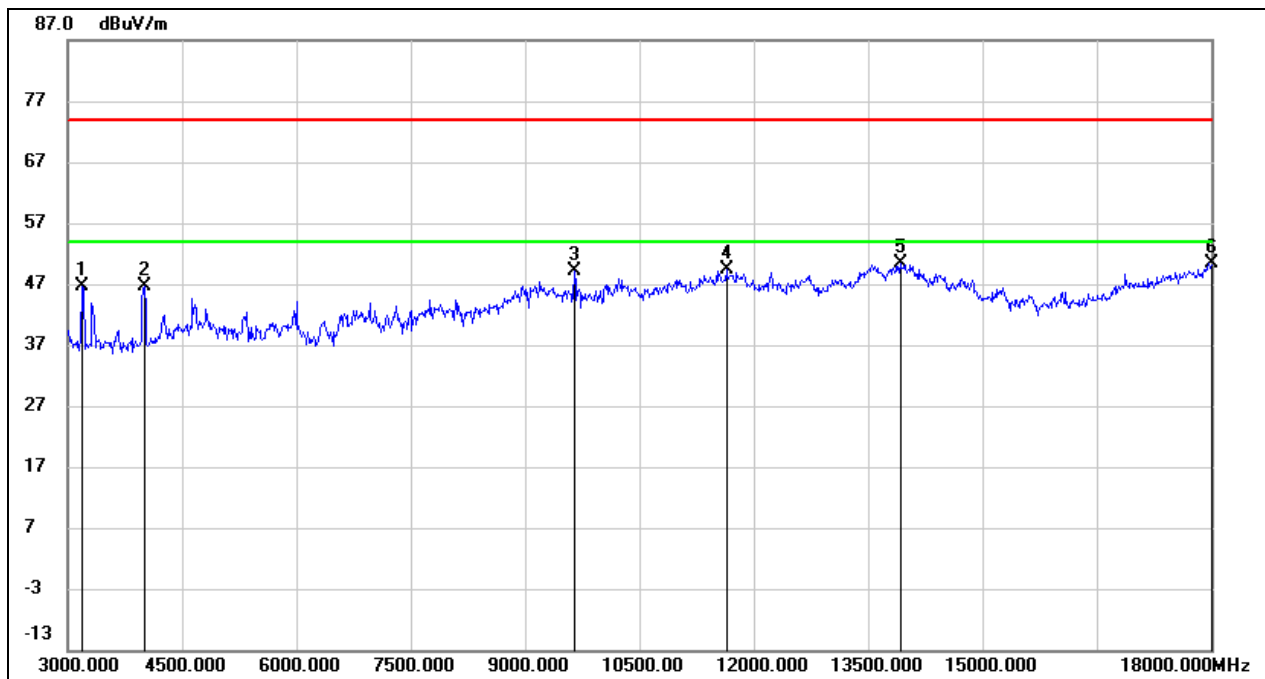
Test Mode:	802.11n HT20	Channel:	2417
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3990.000	47.98	-3.82	44.16	74.00	-29.84	peak
2	9645.000	38.05	11.08	49.13	74.00	-24.87	peak
3	11085.000	33.75	15.08	48.83	74.00	-25.17	peak
4	13545.000	29.22	20.99	50.21	74.00	-23.79	peak
5	13980.000	28.77	21.92	50.69	74.00	-23.31	peak
6	17940.000	24.72	25.34	50.06	74.00	-23.94	peak



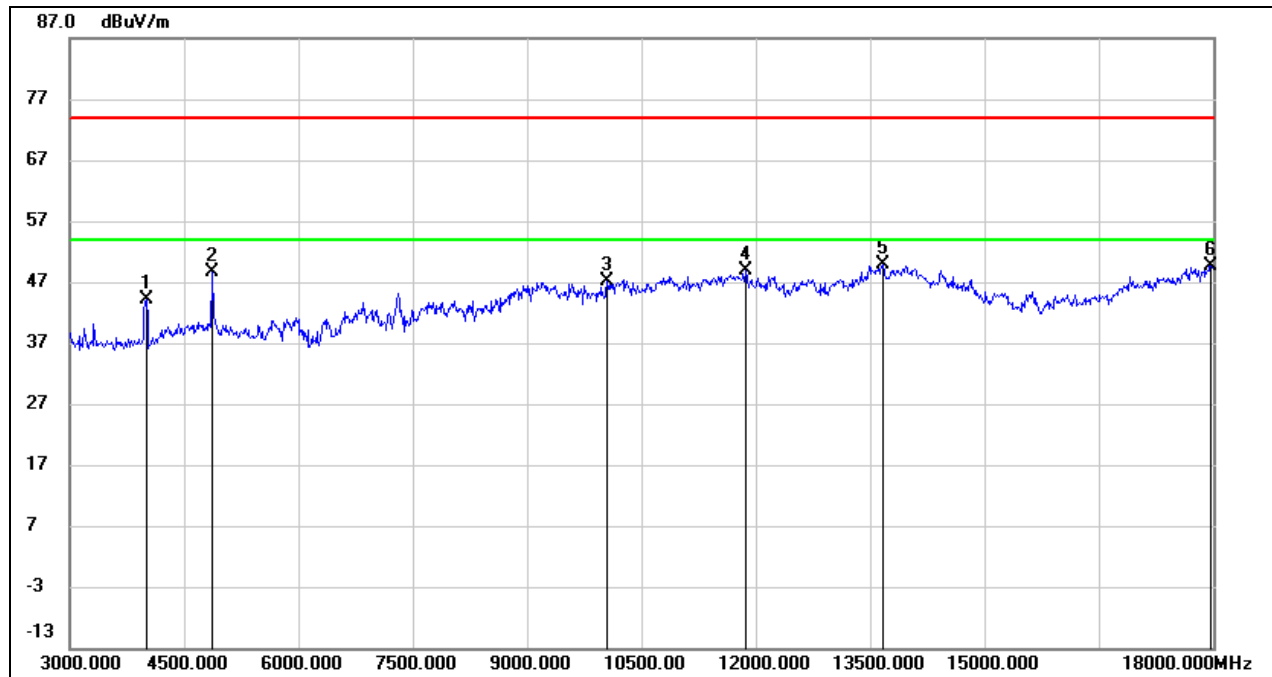
Test Mode:	802.11n HT20	Channel:	2417
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3180.000	51.82	-5.14	46.68	74.00	-27.32	peak
2	4005.000	50.51	-3.78	46.73	74.00	-27.27	peak
3	9645.000	38.00	11.08	49.08	74.00	-24.92	peak
4	11640.000	32.44	16.98	49.42	74.00	-24.58	peak
5	13920.000	28.50	21.79	50.29	74.00	-23.71	peak
6	18000.000	24.77	25.69	50.46	74.00	-23.54	peak



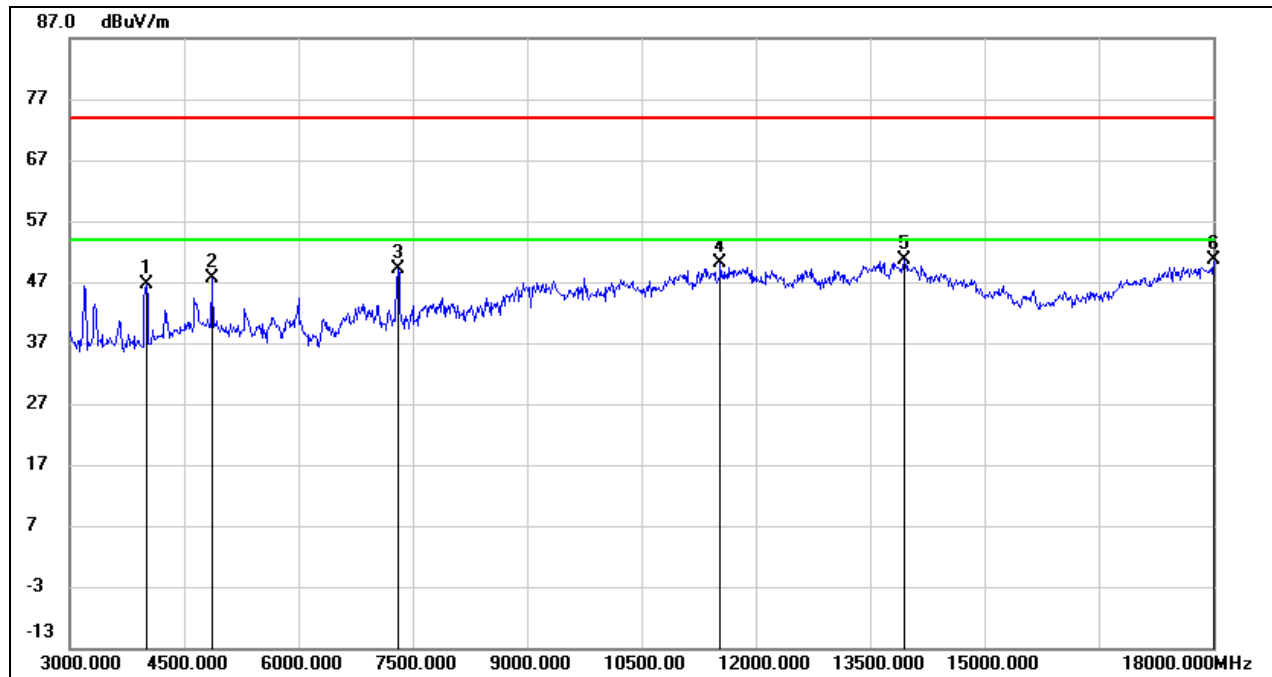
Test Mode:	802.11n HT20	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	47.80	-3.78	44.02	74.00	-29.98	peak
2	4875.000	48.54	-0.03	48.51	74.00	-25.49	peak
3	10050.000	34.98	12.11	47.09	74.00	-26.91	peak
4	11865.000	31.18	17.59	48.77	74.00	-25.23	peak
5	13665.000	28.61	21.25	49.86	74.00	-24.14	peak
6	17970.000	24.01	25.51	49.52	74.00	-24.48	peak



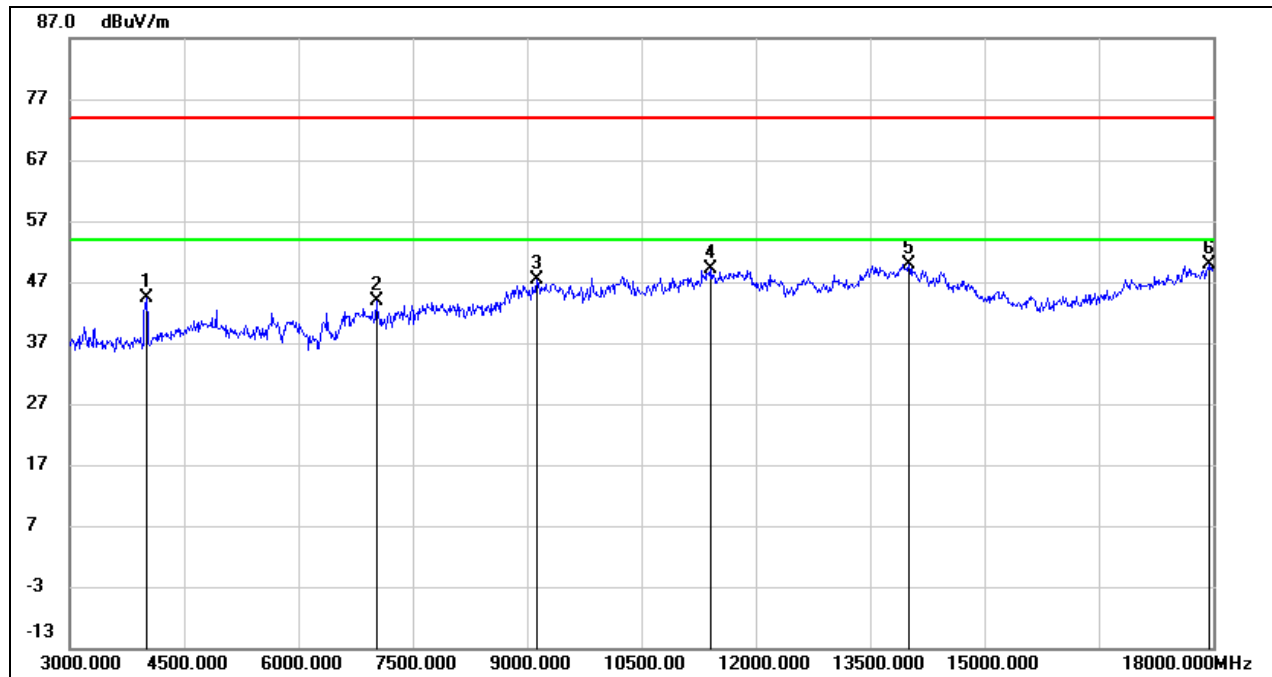
Test Mode:	802.11n HT20	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	50.38	-3.78	46.60	74.00	-27.40	peak
2	4860.000	47.66	-0.09	47.57	74.00	-26.43	peak
3	7305.000	42.66	6.47	49.13	74.00	-24.87	peak
4	11535.000	33.42	16.70	50.12	74.00	-23.88	peak
5	13950.000	28.74	21.86	50.60	74.00	-23.40	peak
6	18000.000	25.00	25.69	50.69	74.00	-23.31	peak



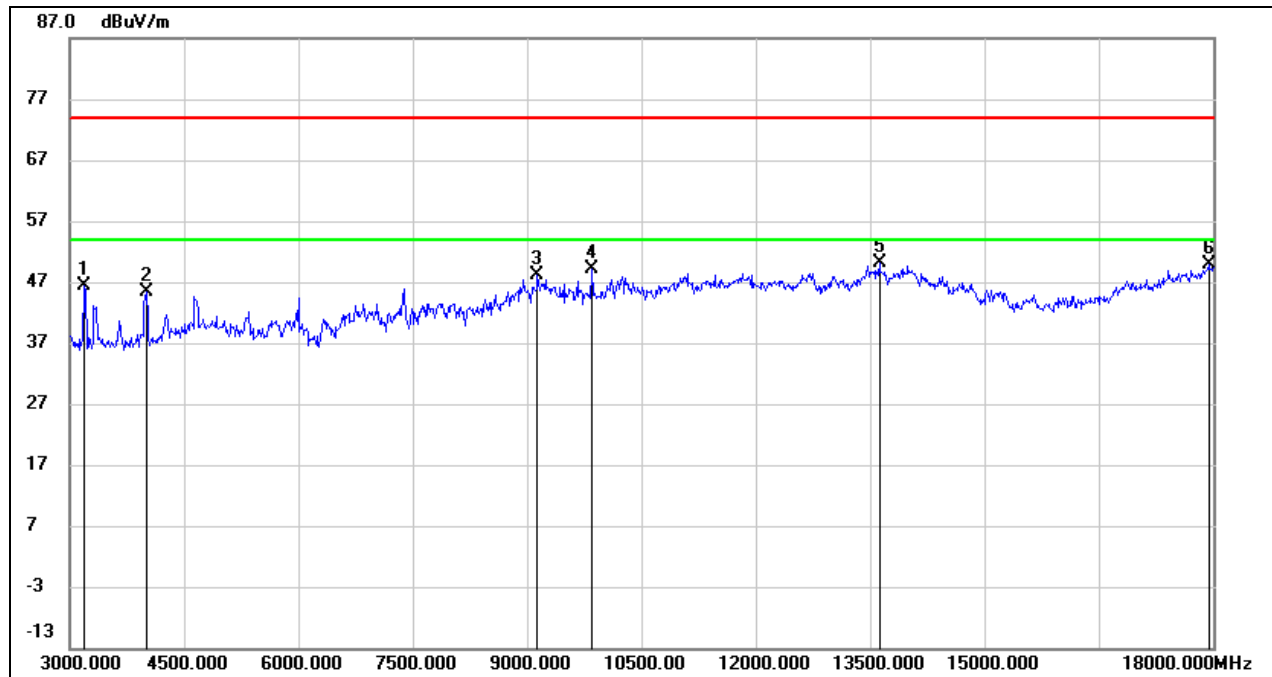
Test Mode:	802.11n HT20	Channel:	2457
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4005.000	48.26	-3.78	44.48	74.00	-29.52	peak
2	7020.000	37.31	6.67	43.98	74.00	-30.02	peak
3	9120.000	36.81	10.53	47.34	74.00	-26.66	peak
4	11415.000	32.76	16.29	49.05	74.00	-24.95	peak
5	14010.000	28.03	21.93	49.96	74.00	-24.04	peak
6	17955.000	24.38	25.42	49.80	74.00	-24.20	peak



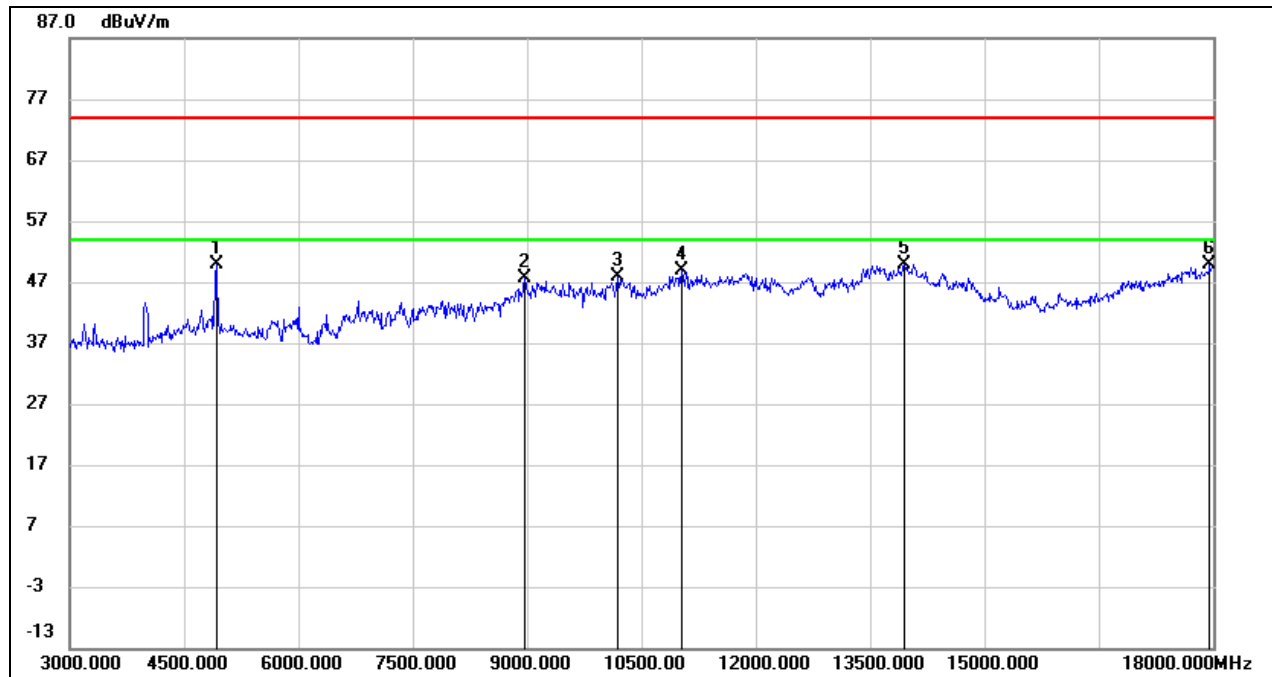
Test Mode:	802.11n HT20	Channel:	2457
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3180.000	51.54	-5.14	46.40	74.00	-27.60	peak
2	4005.000	49.24	-3.78	45.46	74.00	-28.54	peak
3	9135.000	37.59	10.55	48.14	74.00	-25.86	peak
4	9855.000	37.40	11.63	49.03	74.00	-24.97	peak
5	13620.000	28.91	21.15	50.06	74.00	-23.94	peak
6	17940.000	24.60	25.34	49.94	74.00	-24.06	peak



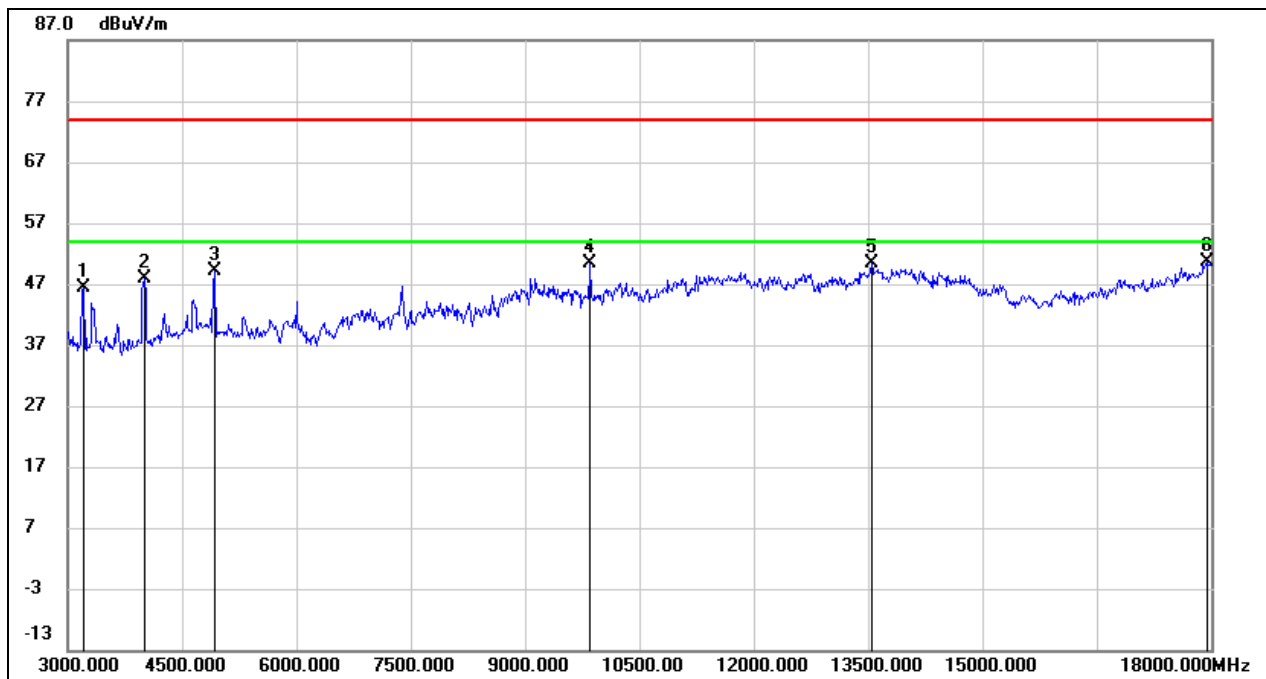
Test Mode:	802.11n HT20	Channel:	2462
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	49.69	0.14	49.83	74.00	-24.17	peak
2	8970.000	37.29	10.26	47.55	74.00	-26.45	peak
3	10185.000	35.45	12.38	47.83	74.00	-26.17	peak
4	11025.000	33.99	14.85	48.84	74.00	-25.16	peak
5	13950.000	28.07	21.86	49.93	74.00	-24.07	peak
6	17955.000	24.42	25.42	49.84	74.00	-24.16	peak



Test Mode:	802.11n HT20	Channel:	2462
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz

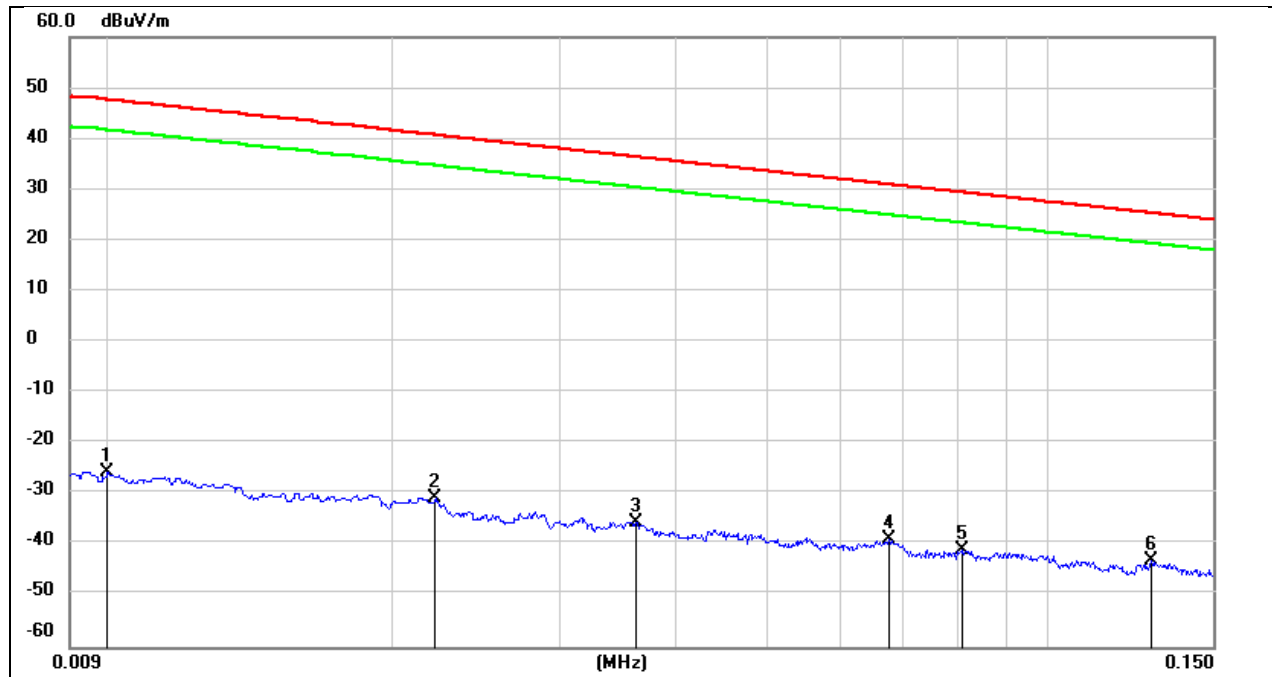


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210.000	51.59	-5.12	46.47	74.00	-27.53	peak
2	4005.000	51.75	-3.78	47.97	74.00	-26.03	peak
3	4920.000	48.99	0.14	49.13	74.00	-24.87	peak
4	9855.000	38.85	11.63	50.48	74.00	-23.52	peak
5	13545.000	29.36	20.99	50.35	74.00	-23.65	peak
6	17955.000	25.27	25.42	50.69	74.00	-23.31	peak



8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

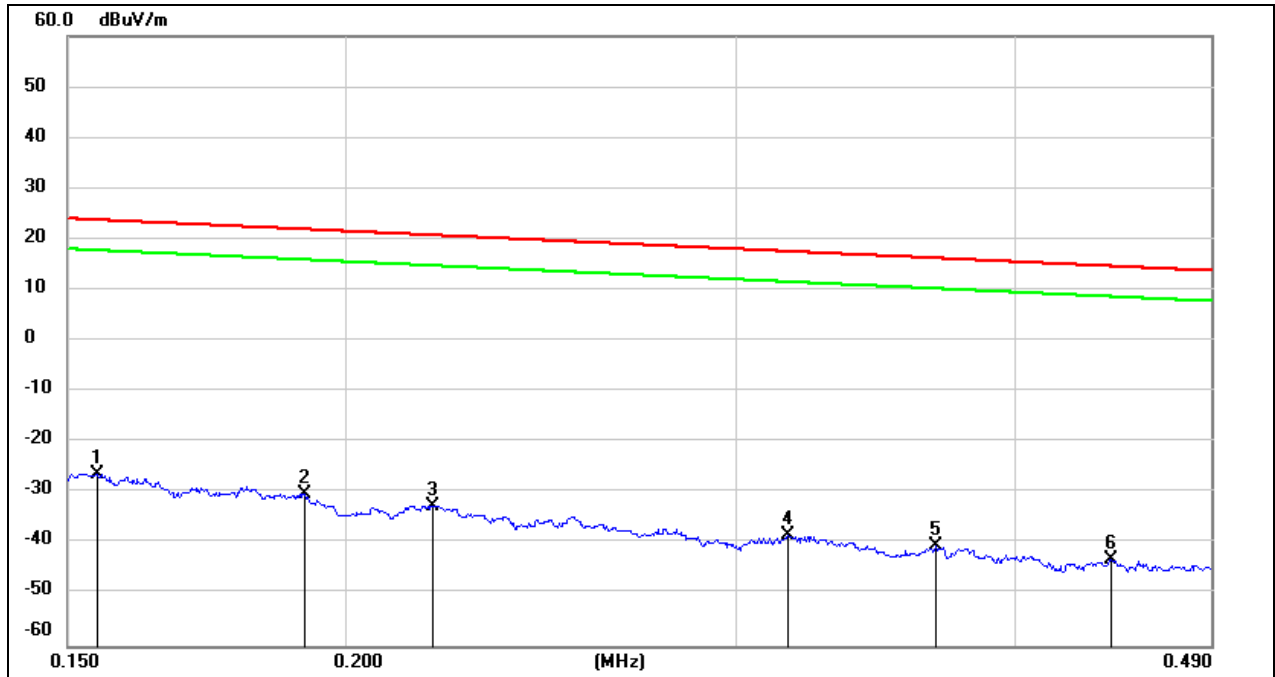
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.0100	75.72	-101.40	-25.68	47.60	-77.18	-3.90	-73.28	peak
2	0.0221	70.63	-101.35	-30.72	40.71	-82.22	-10.79	-71.43	peak
3	0.0362	66.01	-101.42	-35.41	36.43	-86.91	-15.07	-71.84	peak
4	0.0675	62.64	-101.56	-38.92	31.02	-90.42	-20.48	-69.94	peak
5	0.0806	60.68	-101.63	-40.95	29.47	-92.45	-22.03	-70.42	peak
6	0.1290	58.58	-101.70	-43.12	25.40	-94.62	-26.10	-68.52	peak



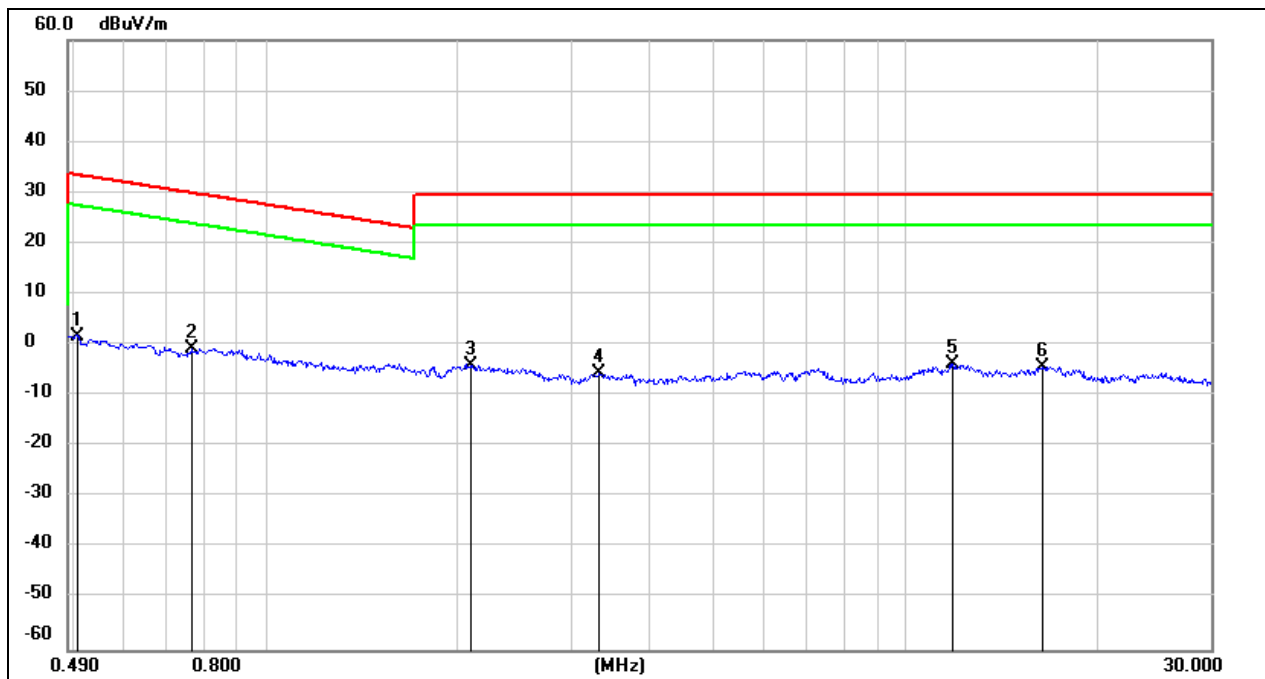
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1547	75.31	-101.65	-26.34	23.81	-77.84	-27.69	-50.15	peak
2	0.1917	71.54	-101.70	-30.16	21.95	-81.66	-29.55	-52.11	peak
3	0.2190	69.27	-101.75	-32.48	20.79	-83.98	-30.71	-53.27	peak
4	0.3163	63.70	-101.87	-38.17	17.60	-89.67	-33.90	-55.77	peak
5	0.3684	61.48	-101.93	-40.45	16.27	-91.95	-35.23	-56.72	peak
6	0.4415	58.85	-102.01	-43.16	14.70	-94.66	-36.80	-57.86	peak



Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz

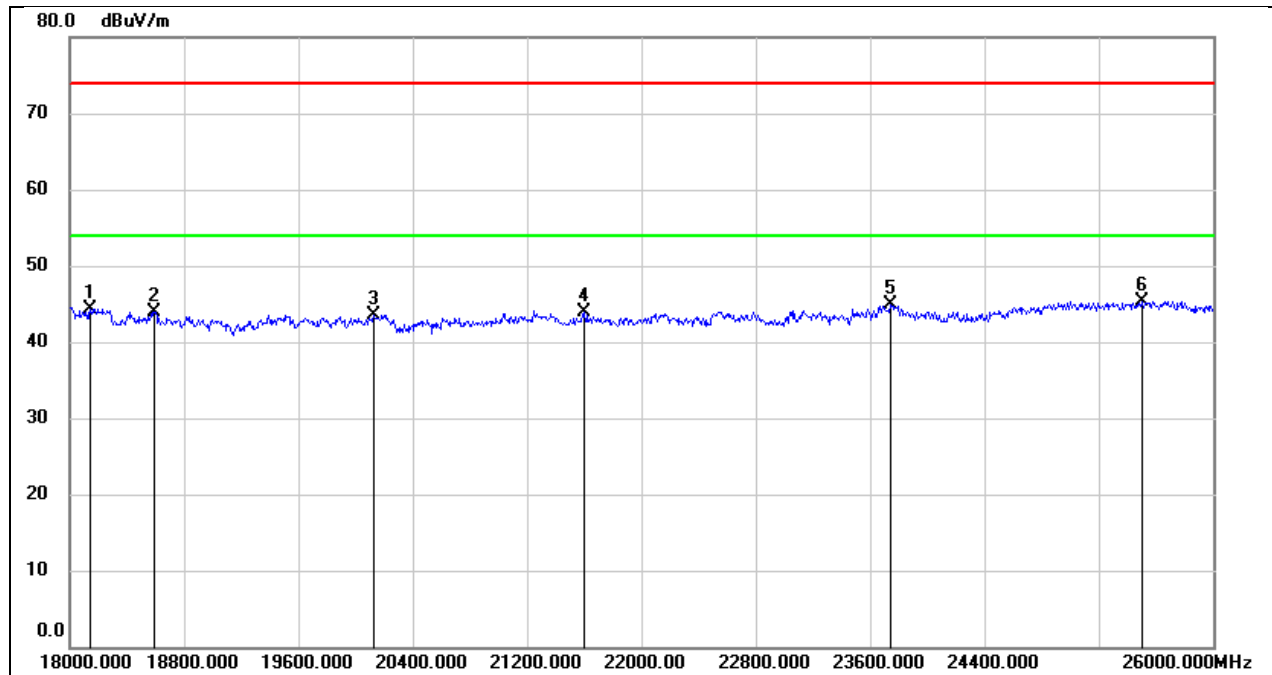


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.5080	63.85	-62.07	1.78	33.49	-49.72	-18.01	-31.71	peak
2	0.7641	61.42	-62.12	-0.70	29.94	-52.20	-21.56	-30.64	peak
3	2.0939	57.89	-61.79	-3.90	29.54	-55.40	-21.96	-33.44	peak
4	3.3229	55.89	-61.50	-5.61	29.54	-57.11	-21.96	-35.15	peak
5	11.8513	57.06	-60.88	-3.82	29.54	-55.32	-21.96	-33.36	peak
6	16.3959	56.67	-60.96	-4.29	29.54	-55.79	-21.96	-33.83	peak



8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

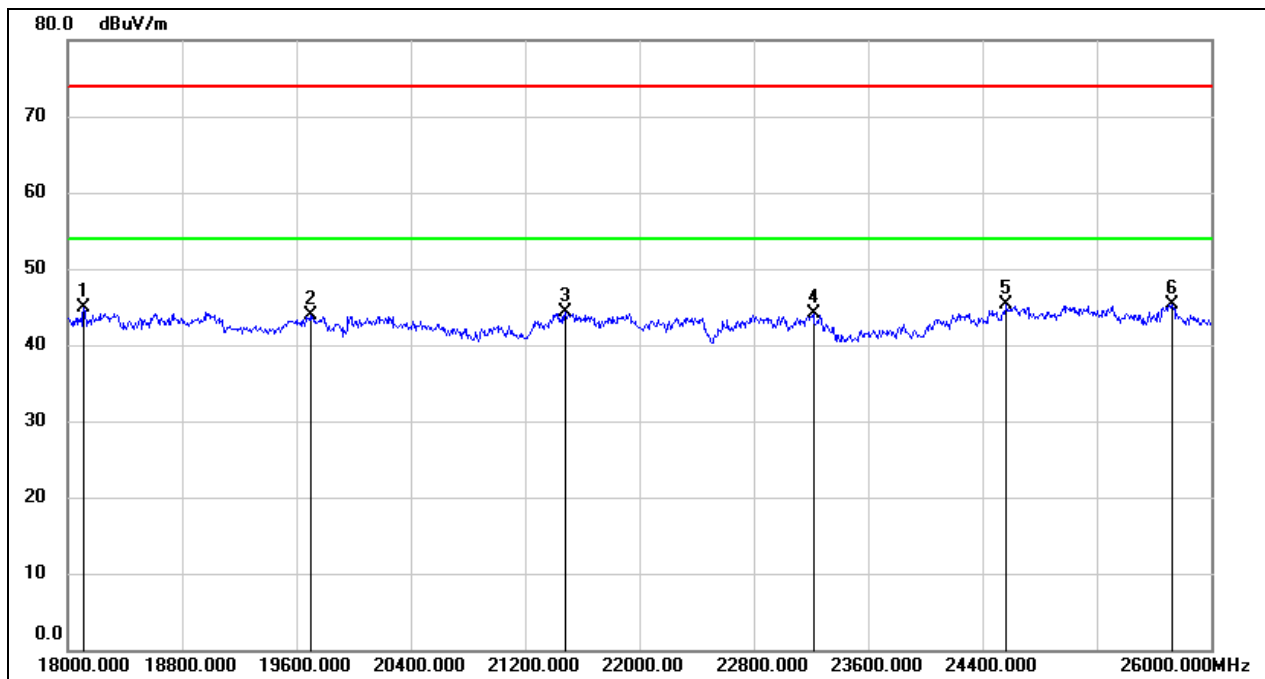
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18144.000	49.77	-5.48	44.29	74.00	-29.71	peak
2	18592.000	49.25	-5.31	43.94	74.00	-30.06	peak
3	20128.000	49.12	-5.53	43.59	74.00	-30.41	peak
4	21600.000	48.52	-4.54	43.98	74.00	-30.02	peak
5	23744.000	48.15	-3.20	44.95	74.00	-29.05	peak
6	25504.000	47.07	-1.77	45.30	74.00	-28.70	peak



Test Mode:	802.11g	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz

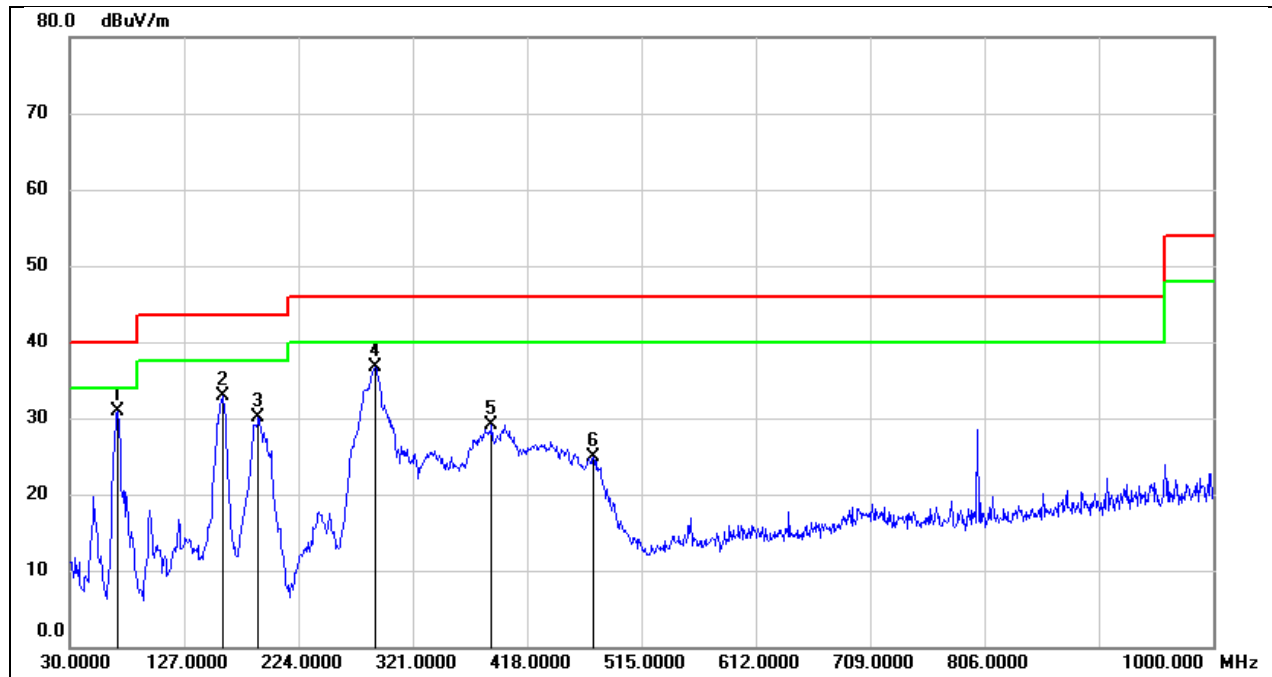


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18112.000	50.46	-5.47	44.99	74.00	-29.01	peak
2	19696.000	49.15	-5.32	43.83	74.00	-30.17	peak
3	21480.000	48.99	-4.70	44.29	74.00	-29.71	peak
4	23216.000	47.51	-3.38	44.13	74.00	-29.87	peak
5	24568.000	47.60	-2.33	45.27	74.00	-28.73	peak
6	25728.000	46.11	-0.72	45.39	74.00	-28.61	peak



8.6. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

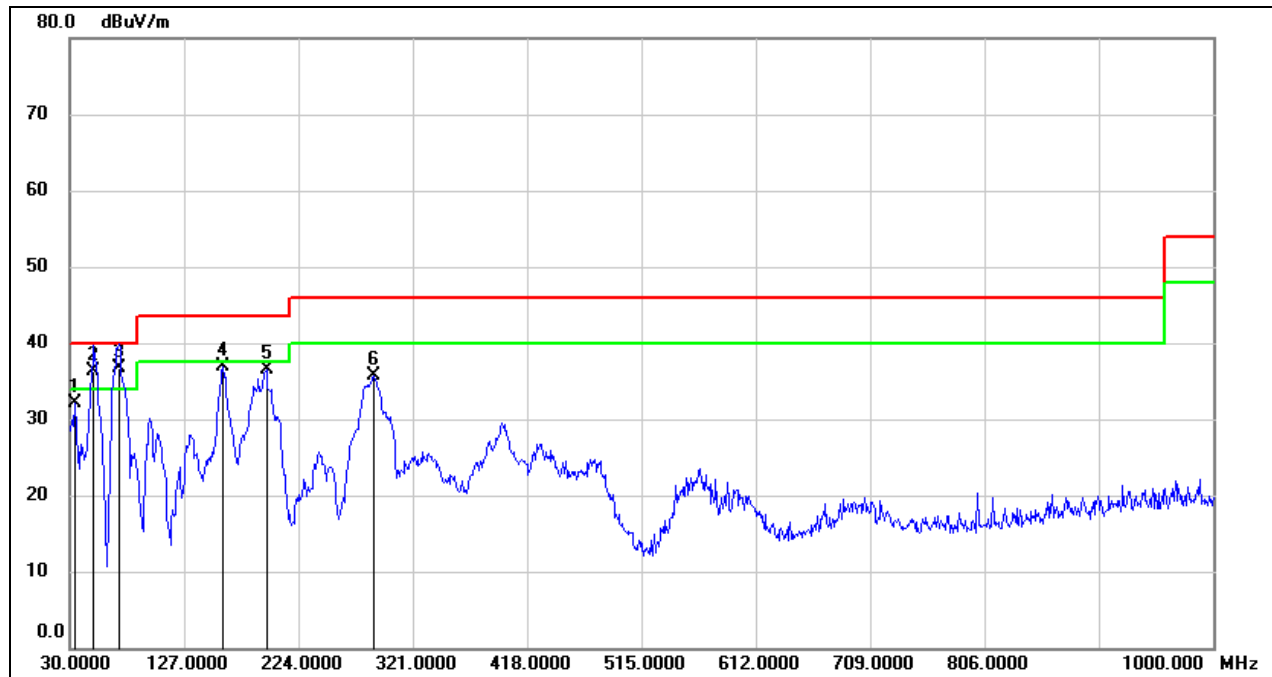
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.7400	51.46	-20.63	30.83	40.00	-9.17	QP
2	159.9800	50.74	-17.75	32.99	43.50	-10.51	QP
3	190.0500	46.74	-16.60	30.14	43.50	-13.36	QP
4	288.9900	52.78	-15.98	36.80	46.00	-9.20	QP
5	387.9300	42.54	-13.53	29.01	46.00	-16.99	QP
6	474.2600	36.83	-11.93	24.90	46.00	-21.10	QP



Test Mode:	802.11g	Channel:	2437
Polarity:	Vertical	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.8500	51.56	-19.40	32.16	40.00	-7.84	QP
2	50.3700	57.02	-20.76	36.26	40.00	-3.74	QP
3	71.7100	57.40	-20.70	36.70	40.00	-3.30	QP
4	159.9800	54.73	-17.75	36.98	43.50	-6.52	QP
5	196.8400	53.02	-16.45	36.57	43.50	-6.93	QP
6	288.0200	51.83	-16.06	35.77	46.00	-10.23	QP



9. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC part 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass

10. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a).

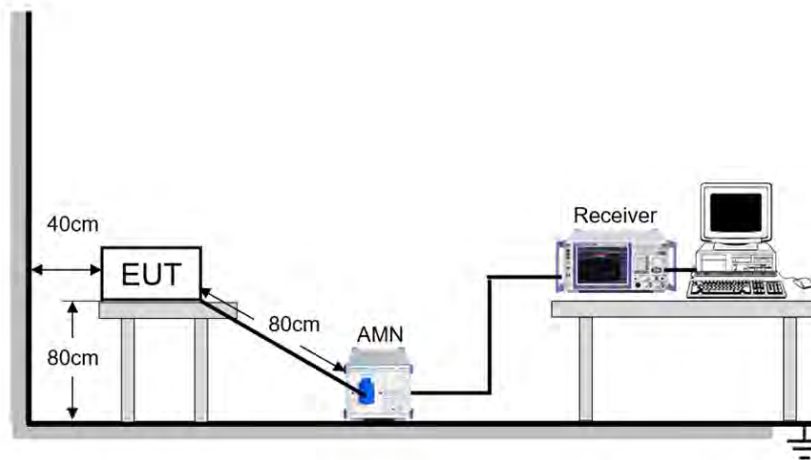
FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP





TEST ENVIRONMENT

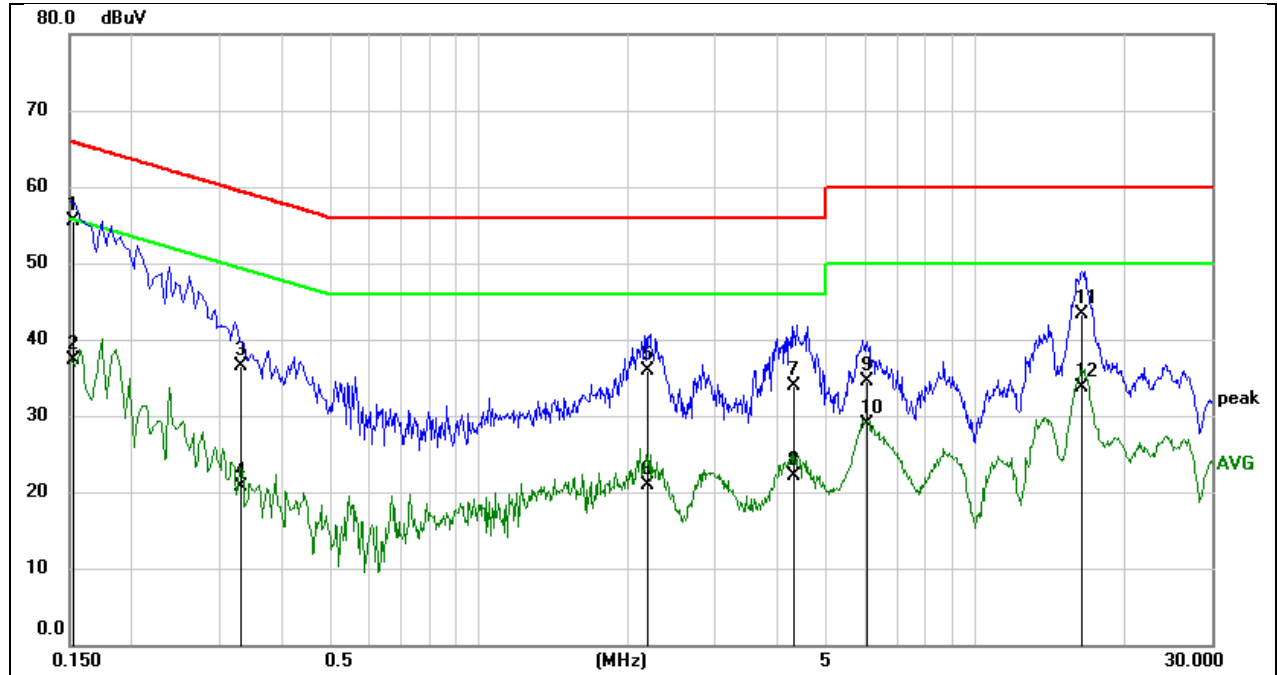
Temperature	22.9°C	Relative Humidity	58.9%
Atmosphere Pressure	101kPa	Test Voltage:	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	February 9, 2023	Test By	Wite Chen
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TEST RESULTS

Test Mode:	802.11g	Channel:	2437
Line:	Line	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1525	45.99	9.59	55.58	65.86	-10.28	QP
2	0.1525	27.76	9.59	37.35	55.86	-18.51	AVG
3	0.3332	26.90	9.59	36.49	59.37	-22.88	QP
4	0.3332	11.10	9.59	20.69	49.37	-28.68	AVG
5	2.1823	26.29	9.64	35.93	56.00	-20.07	QP
6	2.1823	11.33	9.64	20.97	46.00	-25.03	AVG
7	4.3265	24.11	9.70	33.81	56.00	-22.19	QP
8	4.3265	12.46	9.70	22.16	46.00	-23.84	AVG
9	6.0293	24.75	9.74	34.49	60.00	-25.51	QP
10	6.0293	19.24	9.74	28.98	50.00	-21.02	AVG
11	16.4528	33.46	9.76	43.22	60.00	-16.78	QP
12	16.4528	24.02	9.76	33.78	50.00	-16.22	AVG

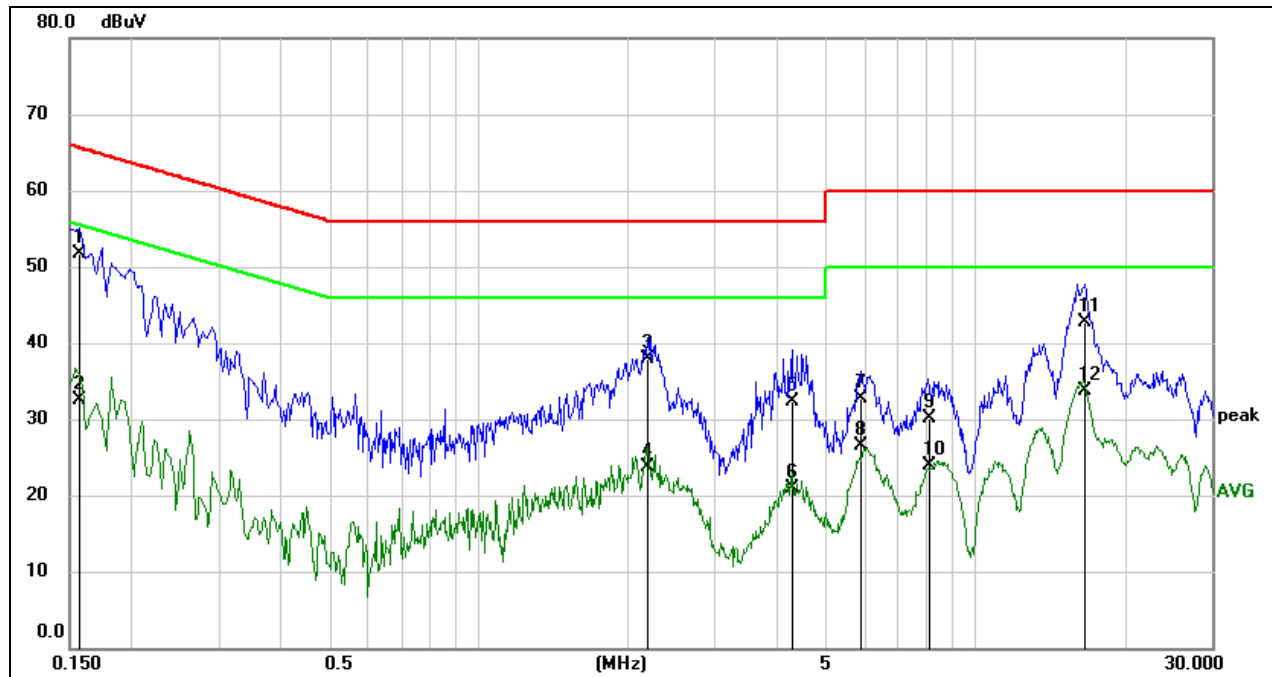
Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.



Test Mode:	802.11g	Channel:	2437
Line:	Neutral	Test Voltage:	AC 120 V, 60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1569	42.29	9.50	51.79	65.63	-13.84	QP
2	0.1569	22.97	9.50	32.47	55.63	-23.16	AVG
3	2.1989	28.26	9.63	37.89	56.00	-18.11	QP
4	2.1989	14.09	9.63	23.72	46.00	-22.28	AVG
5	4.2665	22.64	9.60	32.24	56.00	-23.76	QP
6	4.2665	11.24	9.60	20.84	46.00	-25.16	AVG
7	5.9421	23.08	9.64	32.72	60.00	-27.28	QP
8	5.9421	16.95	9.64	26.59	50.00	-23.41	AVG
9	8.0807	20.58	9.61	30.19	60.00	-29.81	QP
10	8.0807	14.21	9.61	23.82	50.00	-26.18	AVG
11	16.5951	32.96	9.66	42.62	60.00	-17.38	QP
12	16.5951	23.99	9.66	33.65	50.00	-16.35	AVG

Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.



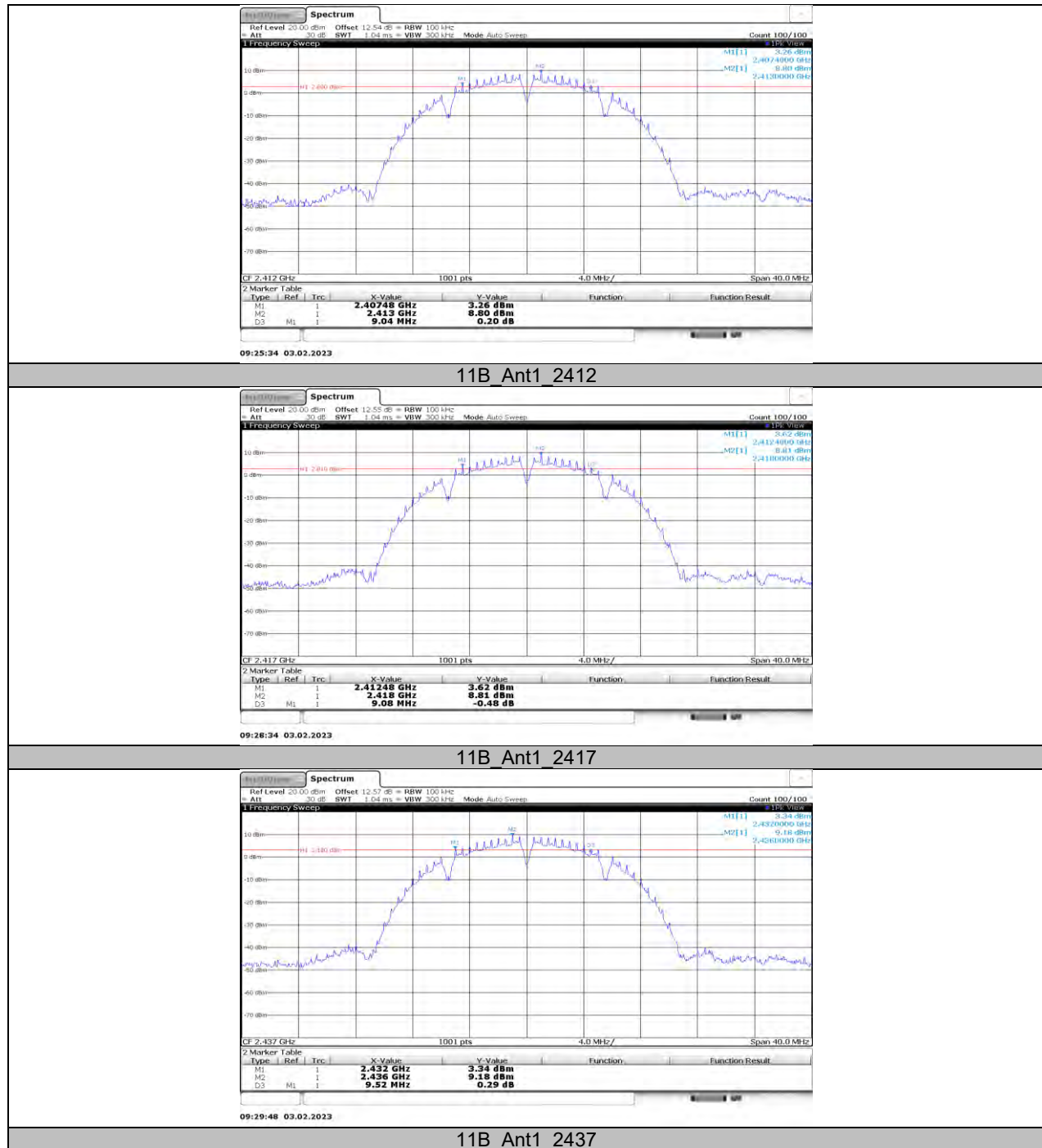
11. TEST DATA

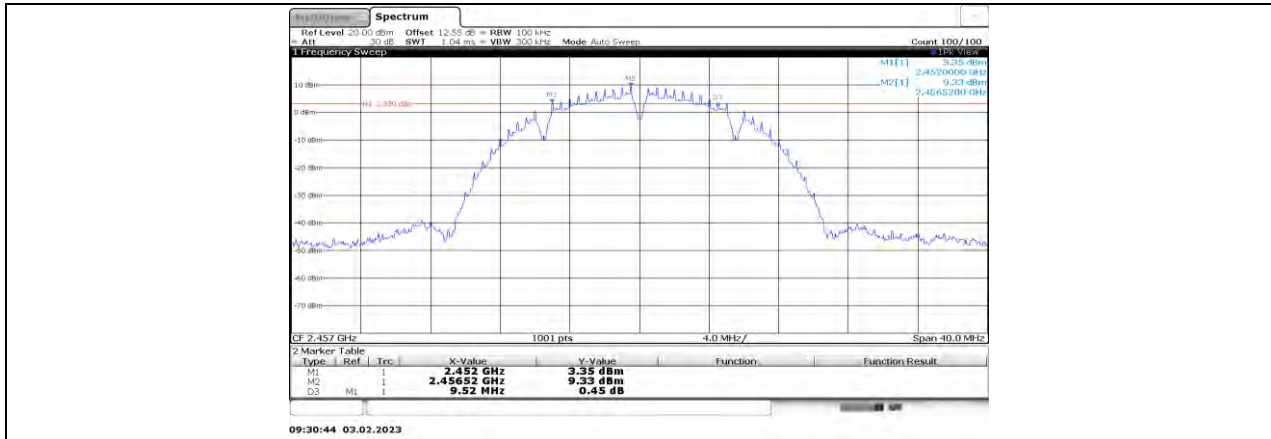
11.1. APPENDIX A: DTS BANDWIDTH

11.1.1. Test Result

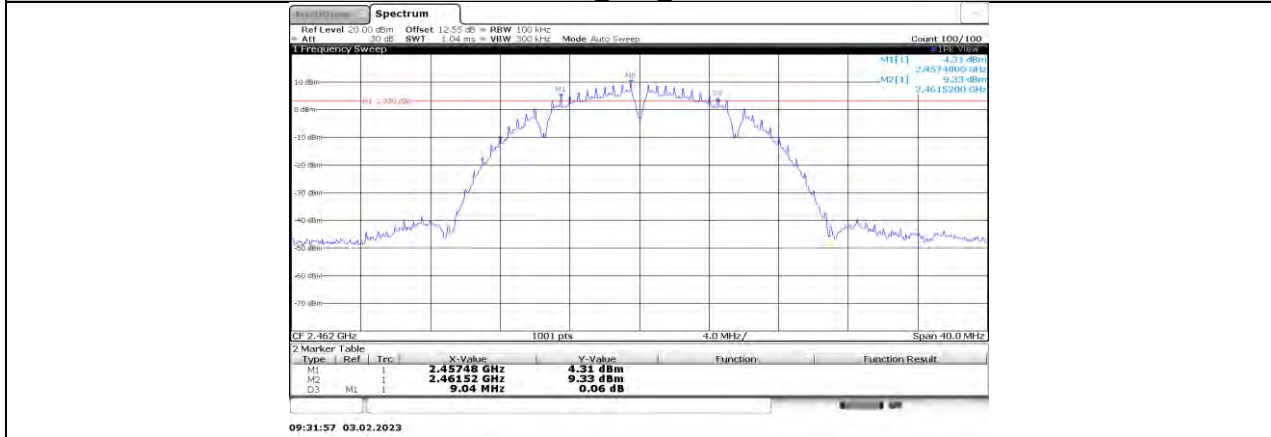
Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.04	2407.48	2416.52	0.5	PASS
		2417	9.08	2412.48	2421.56	0.5	PASS
		2437	9.52	2432.00	2441.52	0.5	PASS
		2457	9.52	2452.00	2461.52	0.5	PASS
		2462	9.04	2457.48	2466.52	0.5	PASS
11G	Ant1	2412	16.32	2403.84	2420.16	0.5	PASS
		2417	16.32	2408.84	2425.16	0.5	PASS
		2437	16.32	2428.84	2445.16	0.5	PASS
		2457	16.32	2448.84	2465.16	0.5	PASS
		2462	16.36	2453.84	2470.20	0.5	PASS
11N20SISO	Ant1	2412	17.56	2403.24	2420.80	0.5	PASS
		2417	17.56	2408.24	2425.80	0.5	PASS
		2437	17.56	2428.24	2445.80	0.5	PASS
		2457	17.56	2448.24	2465.80	0.5	PASS
		2462	17.56	2453.24	2470.80	0.5	PASS

11.1.2. Test Graphs

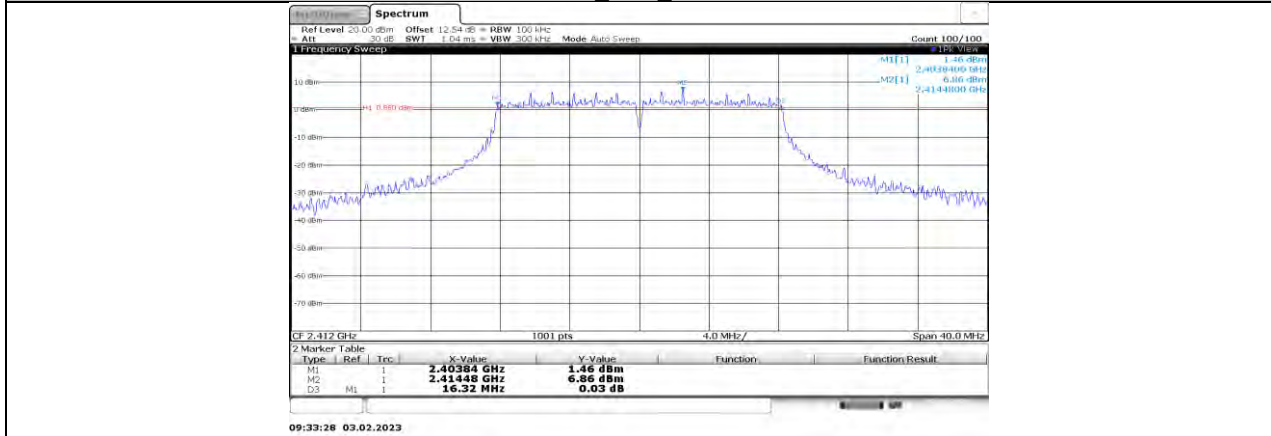




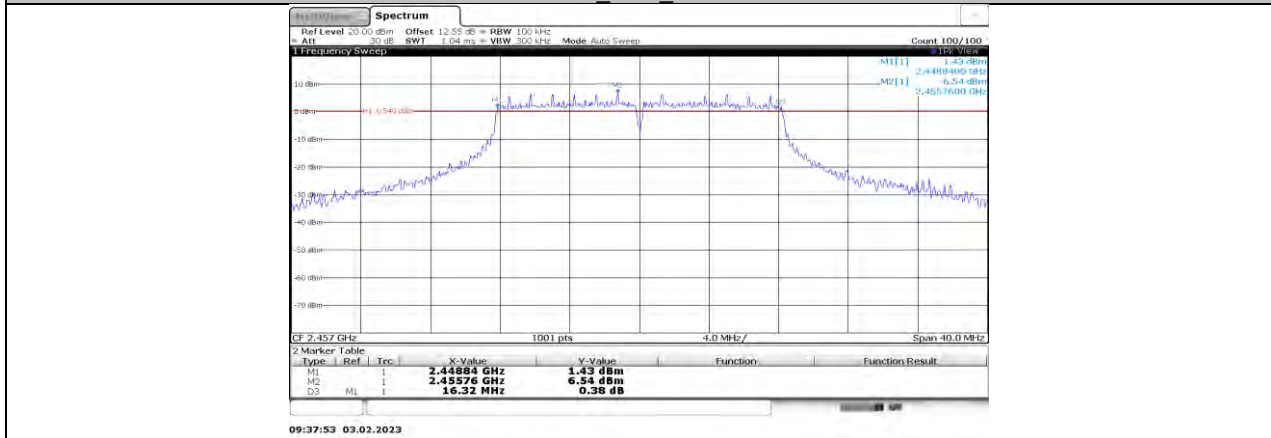
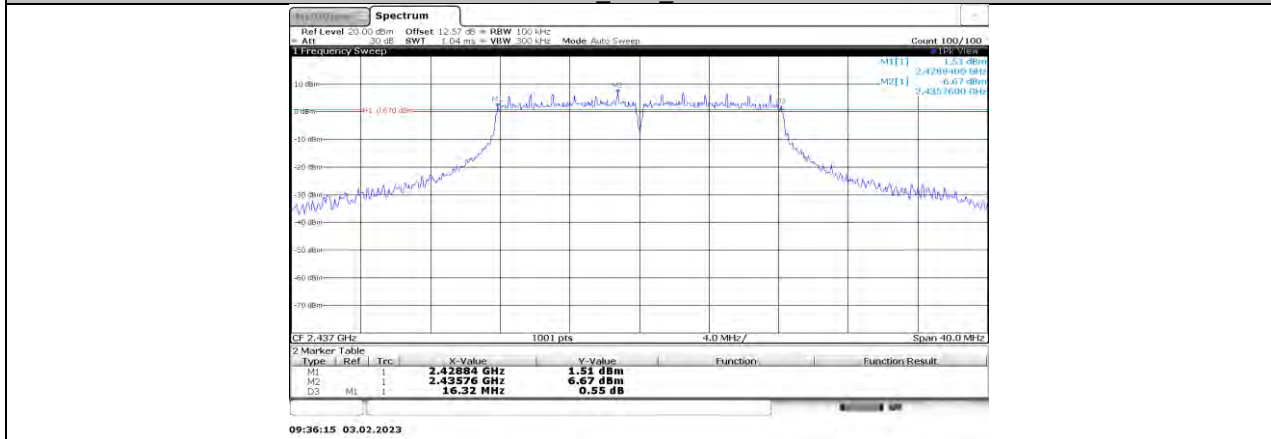
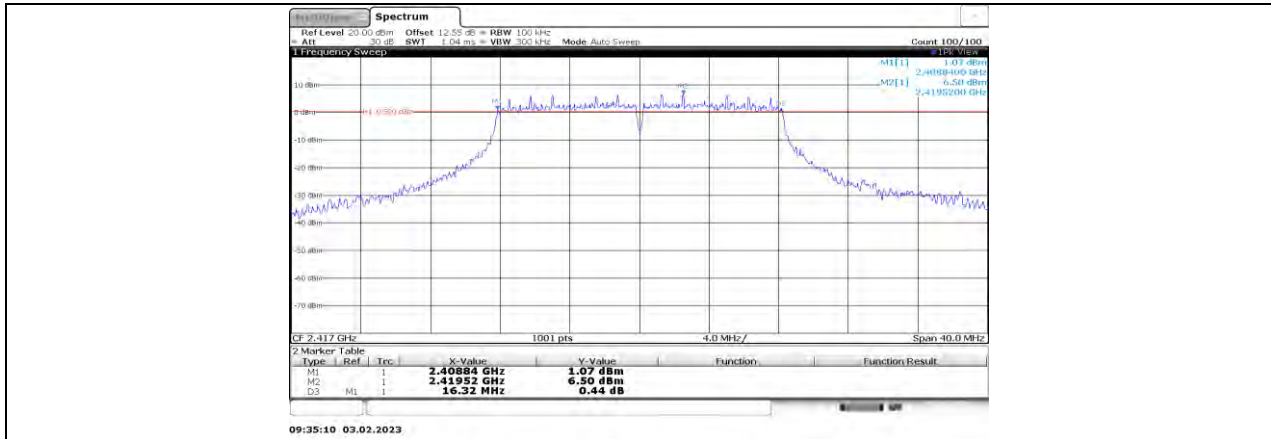
11B_Ant1_2457

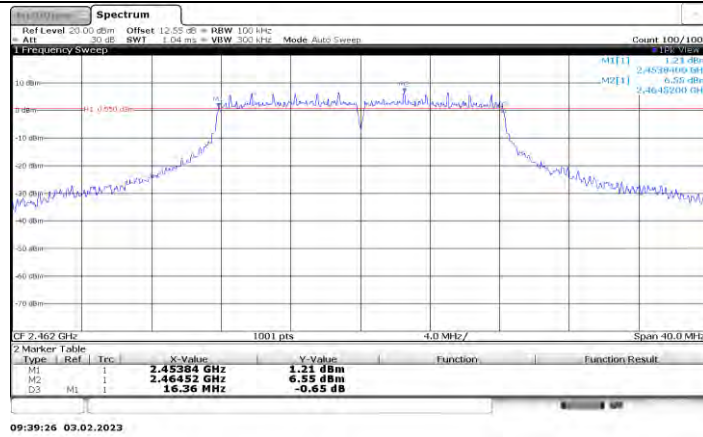


11B_Ant1_2462

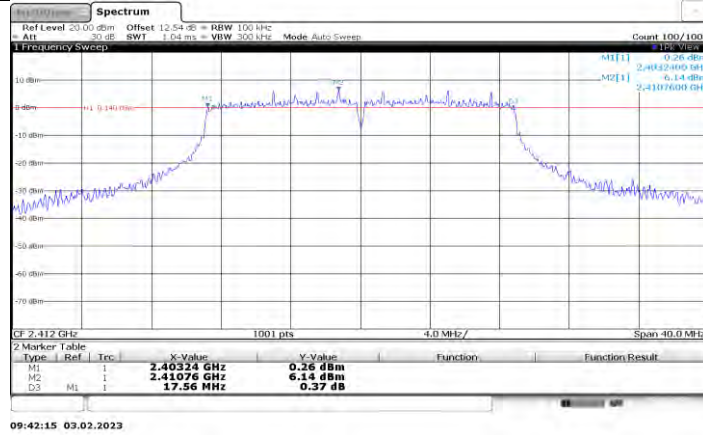


11G_Ant1_2412

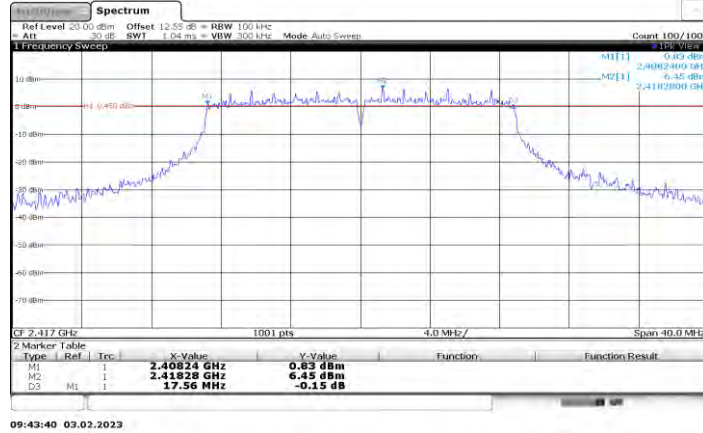




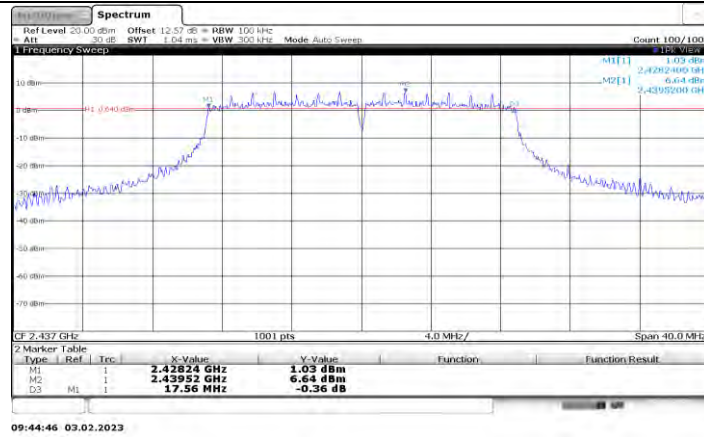
11G_Ant1_2462



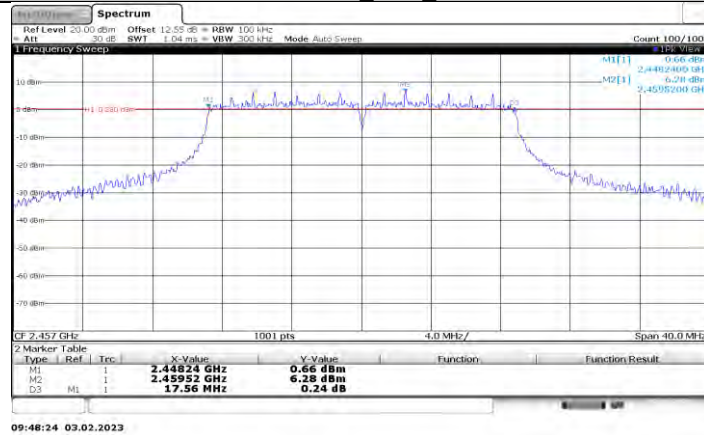
11N20SISO_Ant1_2412



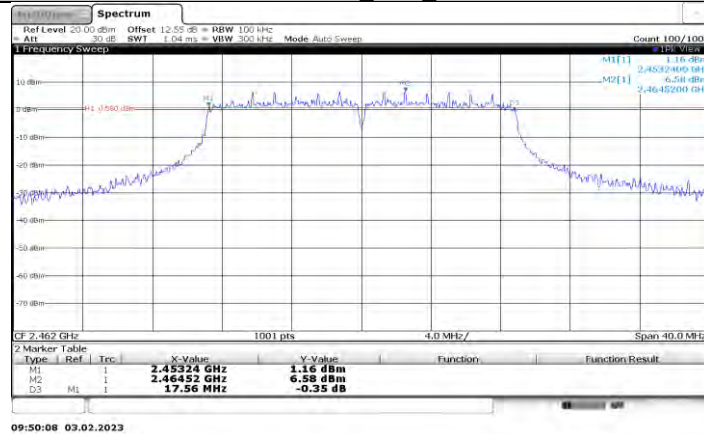
11N20SISO_Ant1_2417



11N20SISO_Ant1_2437



11N20SISO_Ant1_2457

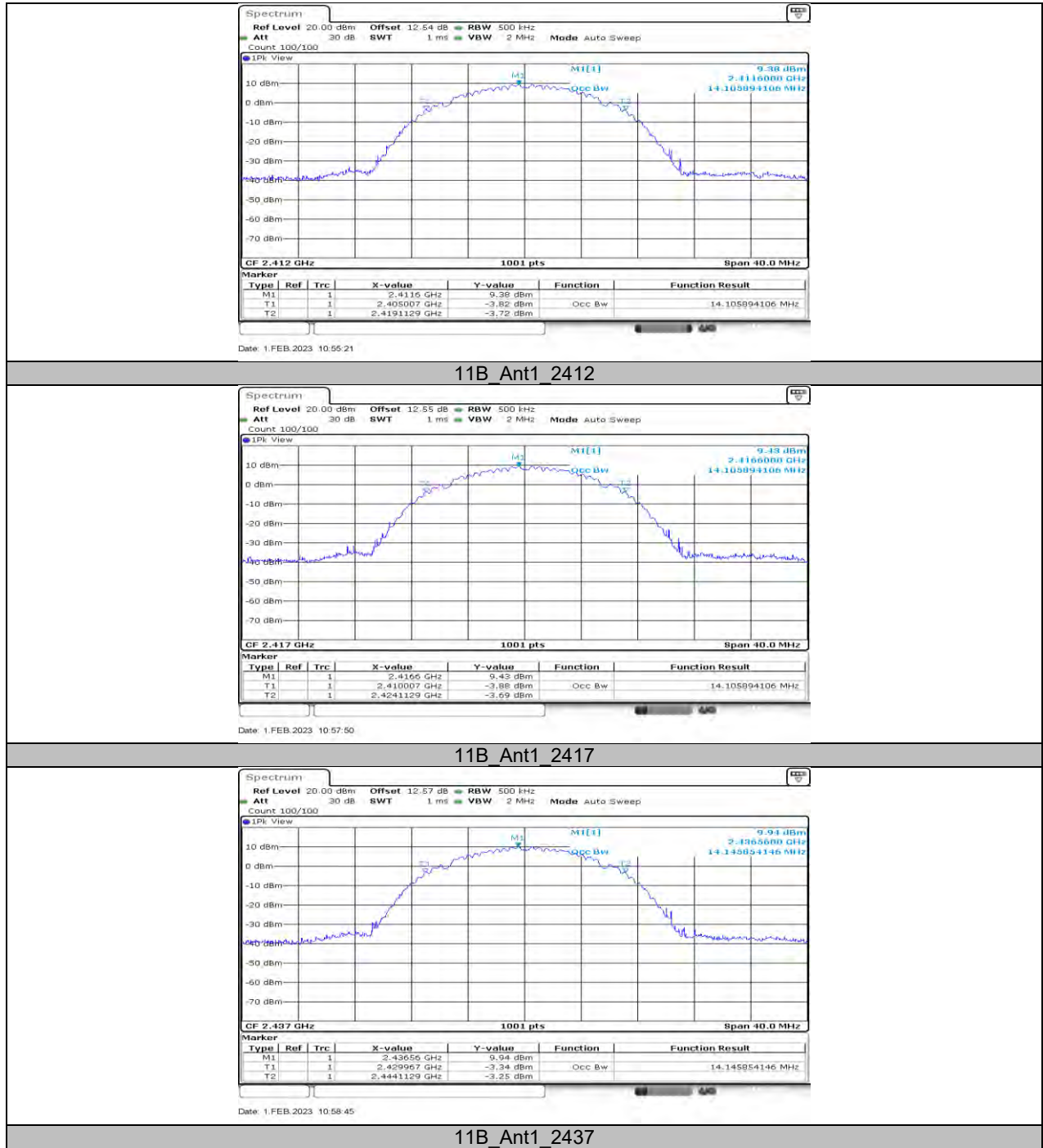


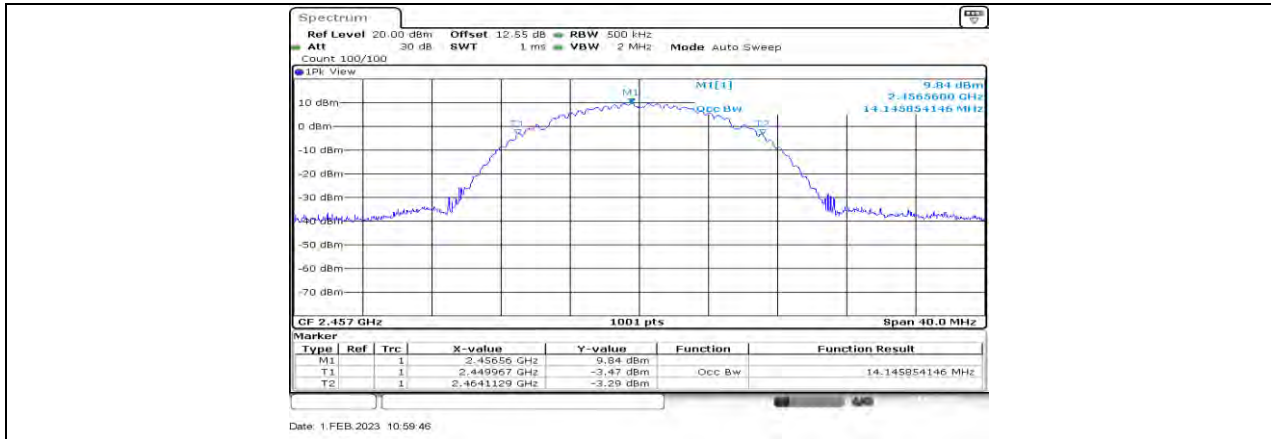
11N20SISO_Ant1_2462

**11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH****11.2.1. Test Result**

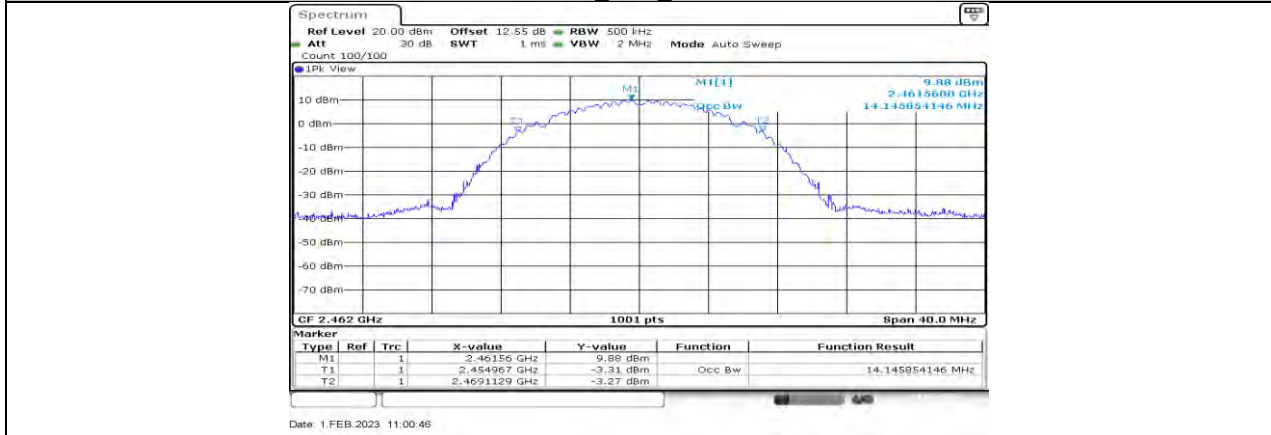
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant1	2412	14.106	2405.0070	2419.1129	PASS
		2417	14.106	2410.0070	2424.1129	PASS
		2437	14.146	2429.9670	2444.1129	PASS
		2457	14.146	2449.9670	2464.1129	PASS
		2462	14.146	2454.9670	2469.1129	PASS
11G	Ant1	2412	17.662	2403.3287	2420.9910	PASS
		2417	17.982	2407.9690	2425.9510	PASS
		2437	17.942	2428.0090	2445.9510	PASS
		2457	17.862	2448.1289	2465.9910	PASS
		2462	17.942	2453.1688	2471.1109	PASS
11N20SISO	Ant1	2412	18.941	2402.6094	2421.5504	PASS
		2417	18.981	2407.6094	2426.5904	PASS
		2437	18.661	2427.7293	2446.3906	PASS
		2457	18.741	2447.6893	2466.4306	PASS
		2462	18.741	2452.7692	2471.5105	PASS

11.2.2. Test Graphs

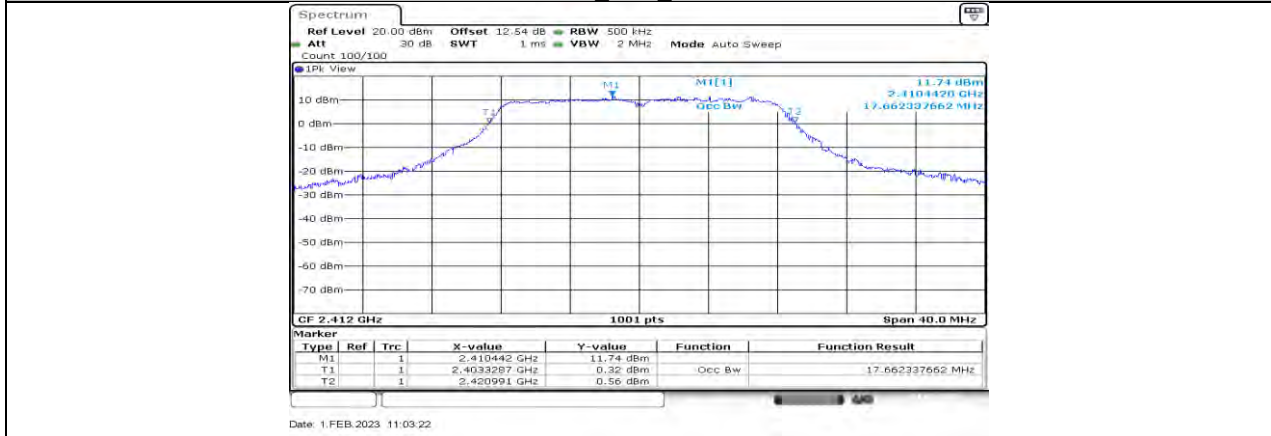




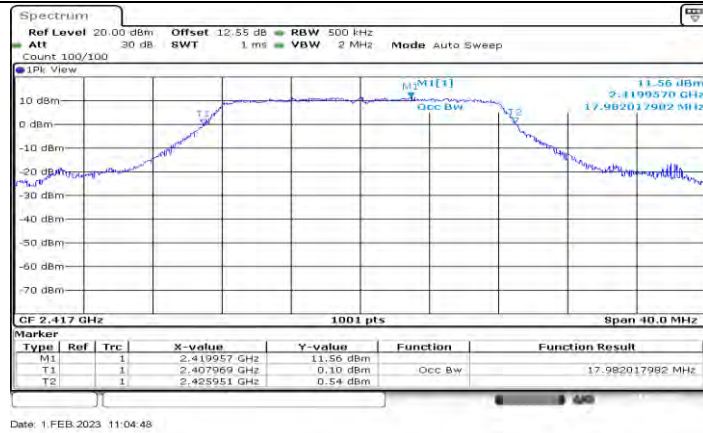
11B_Ant1_2457



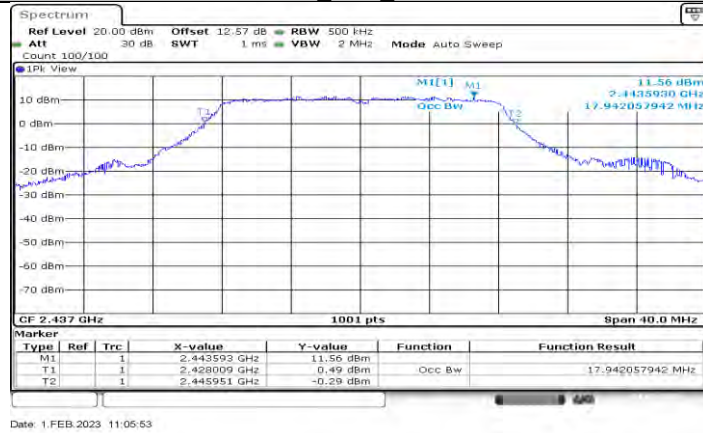
11B_Ant1_2462



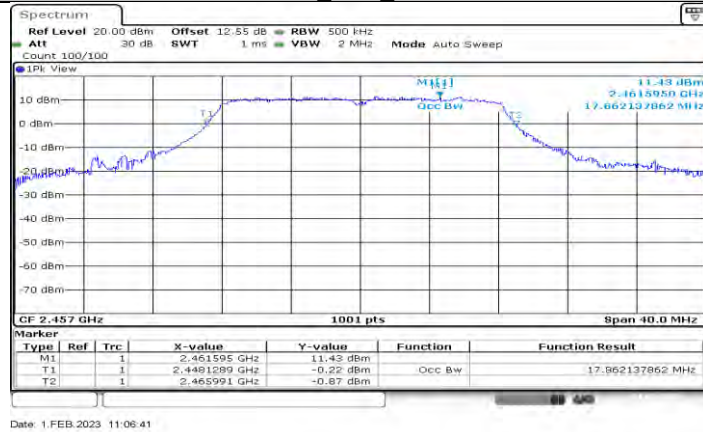
11G_Ant1_2412



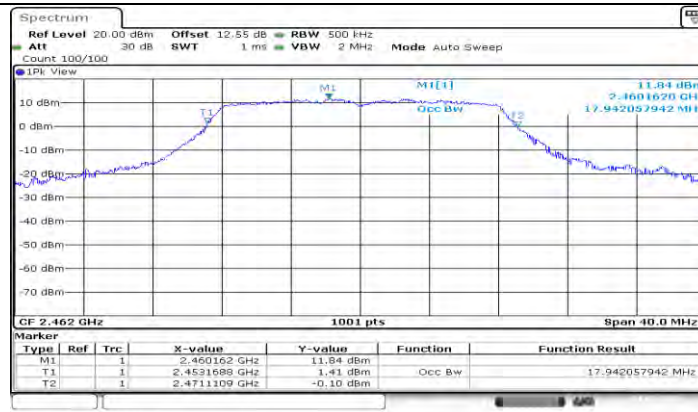
11G_Ant1_2417



11G_Ant1_2437

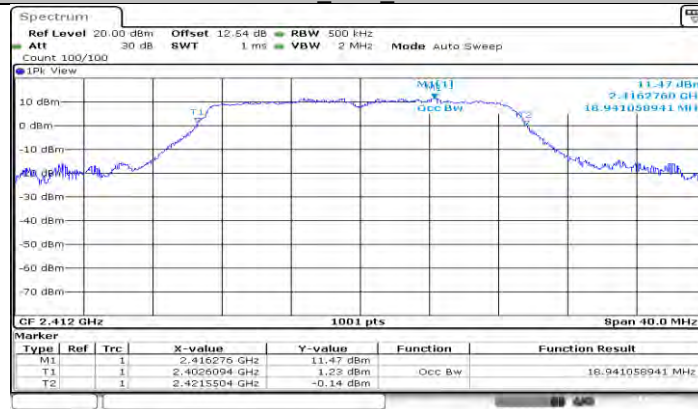


11G_Ant1_2457



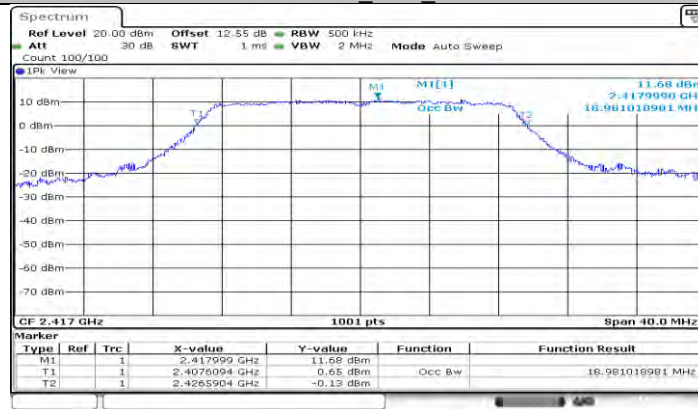
Date: 1.FEB.2023 11:07:33

11G Ant1 2462



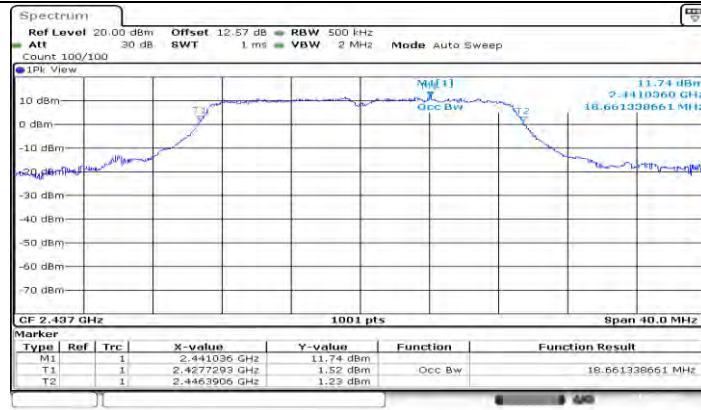
Date: 1.FEB.2023 11:08:33

11N20SISO Ant1 2412



Date: 1.FEB.2023 11:09:24

11N20SISO Ant1 2417



Date: 1.FEB.2023 11:10:09

11N20SISO_Ant1_2437



Date: 1.FEB.2023 11:11:00

11N20SISO_Ant1_2457



Date: 1.FEB.2023 11:11:42

11N20SISO_Ant1_2462

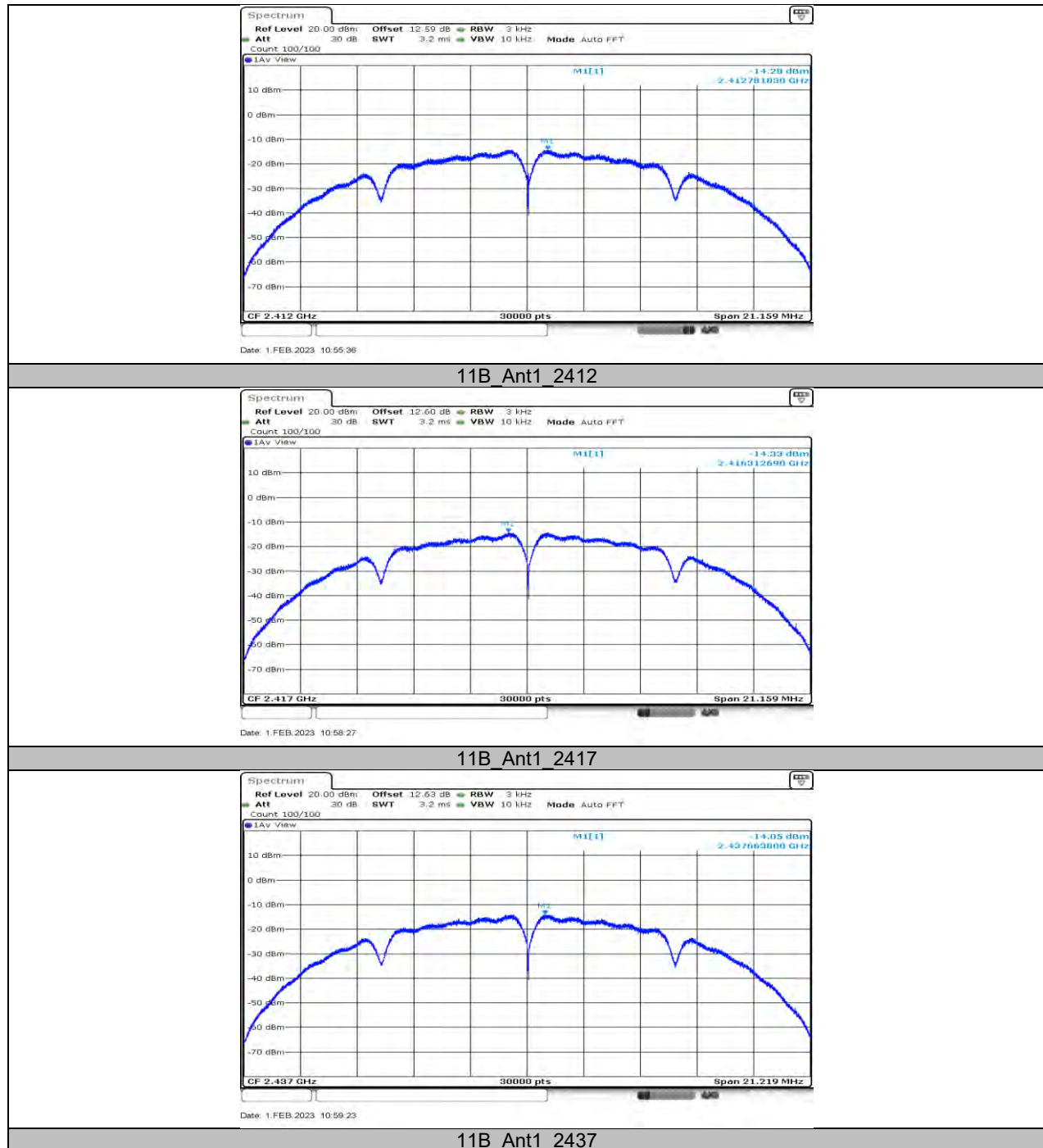
**11.3. APPENDIX C: MAXIMUM CONDUCTED AVG OUTPUT POWER****11.3.1. Test Result**

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.83	≤30.00	PASS
		2417	16.86	≤30.00	PASS
		2437	17.15	≤30.00	PASS
		2457	17.07	≤30.00	PASS
		2462	17.04	≤30.00	PASS
11G	Ant1	2412	16.96	≤30.00	PASS
		2417	17.18	≤30.00	PASS
		2437	17.32	≤30.00	PASS
		2457	17.24	≤30.00	PASS
		2462	17.22	≤30.00	PASS
11N20SISO	Ant1	2412	17.18	≤30.00	PASS
		2417	17.13	≤30.00	PASS
		2437	17.30	≤30.00	PASS
		2457	17.24	≤30.00	PASS
		2462	15.56	≤30.00	PASS

**11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY****11.4.1. Test Result**

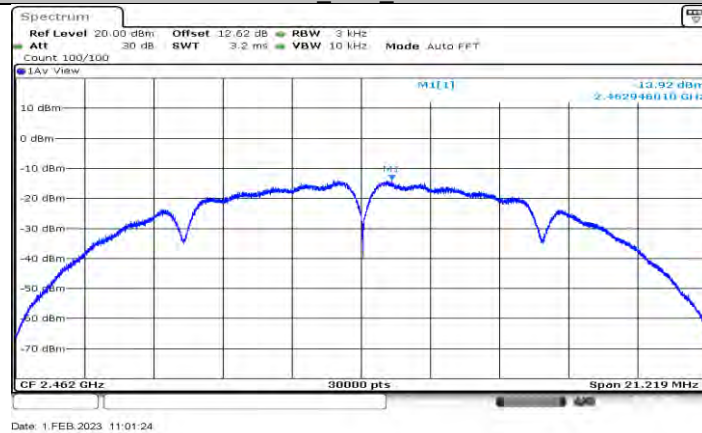
Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.28	≤8.00	PASS
		2417	-14.33	≤8.00	PASS
		2437	-14.05	≤8.00	PASS
		2457	-13.71	≤8.00	PASS
		2462	-13.92	≤8.00	PASS
11G	Ant1	2412	-14.62	≤8.00	PASS
		2417	-14.34	≤8.00	PASS
		2437	-14.09	≤8.00	PASS
		2457	-14.22	≤8.00	PASS
		2462	-14.65	≤8.00	PASS
11N20SISO	Ant1	2412	-14.32	≤8.00	PASS
		2417	-14.35	≤8.00	PASS
		2437	-13.67	≤8.00	PASS
		2457	-13.39	≤8.00	PASS
		2462	-15.25	≤8.00	PASS

11.4.2. Test Graphs

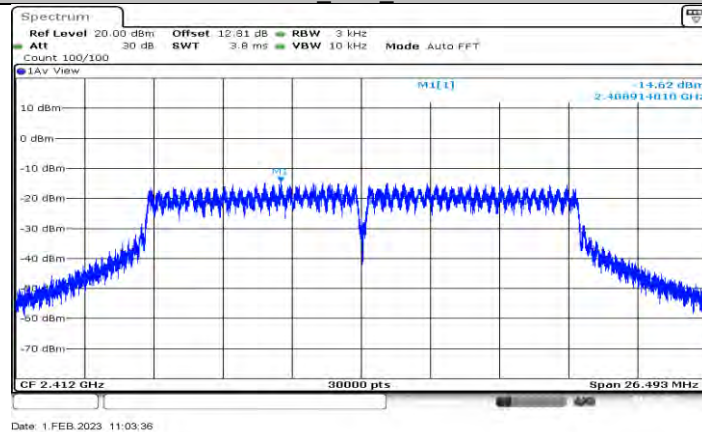




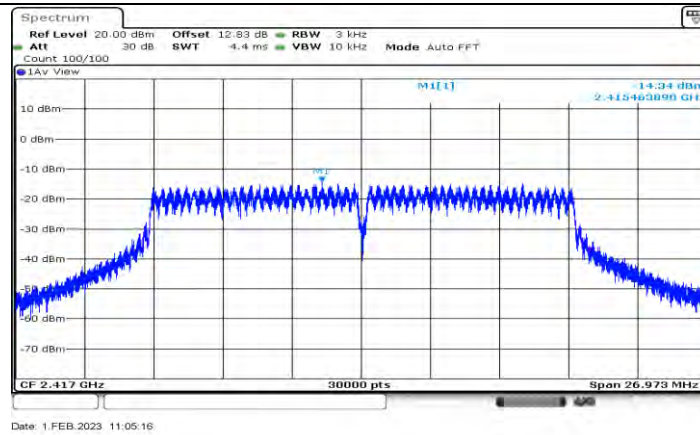
11B_Ant1_2457



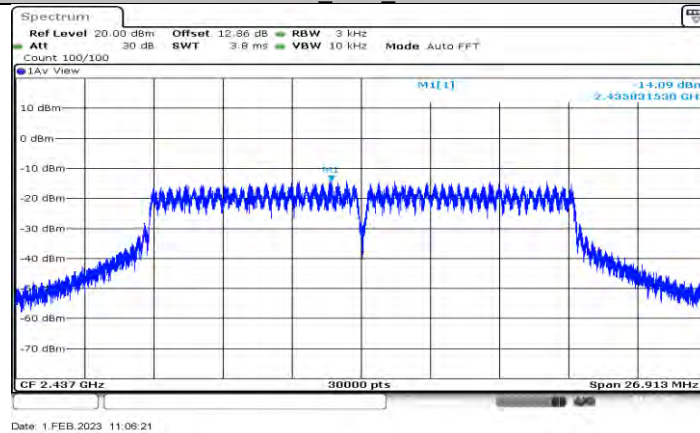
11B_Ant1_2462



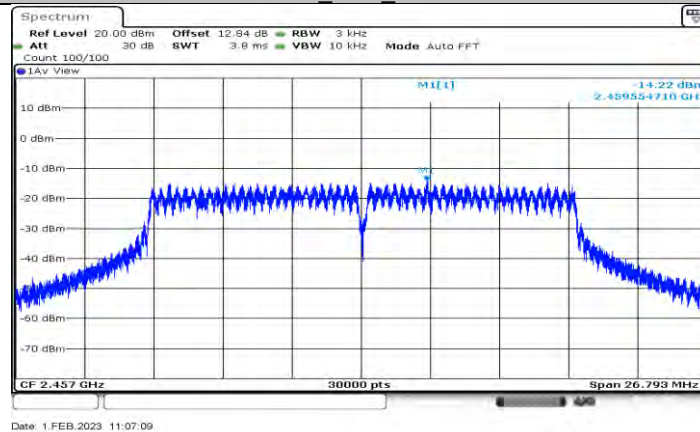
11G_Ant1_2412



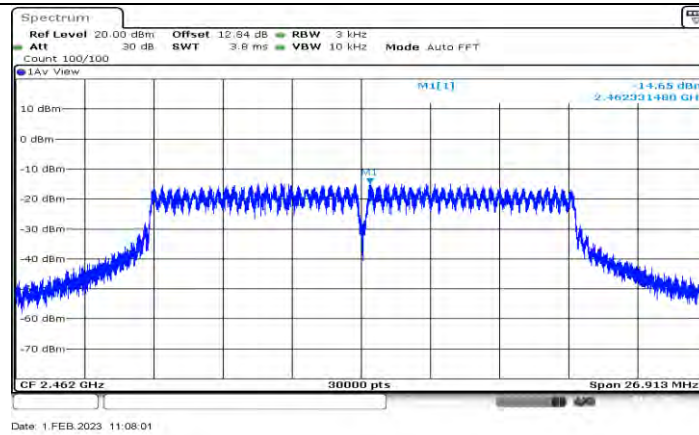
11G_Ant1_2417



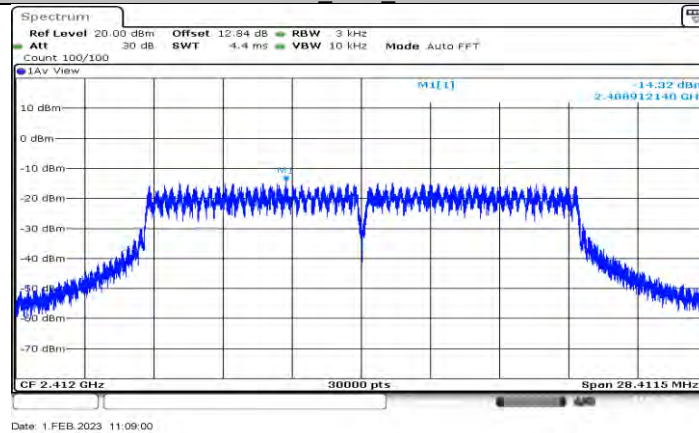
11G_Ant1_2437



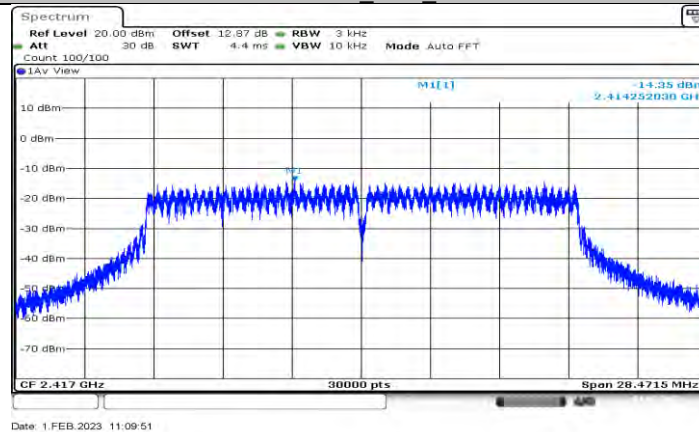
11G_Ant1_2457



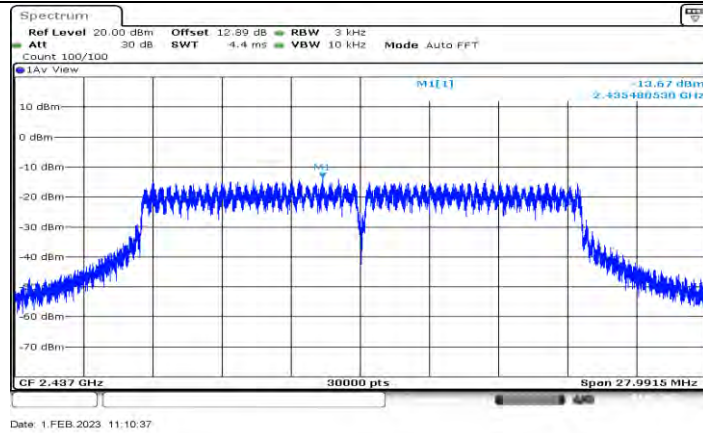
11G Ant1_2462



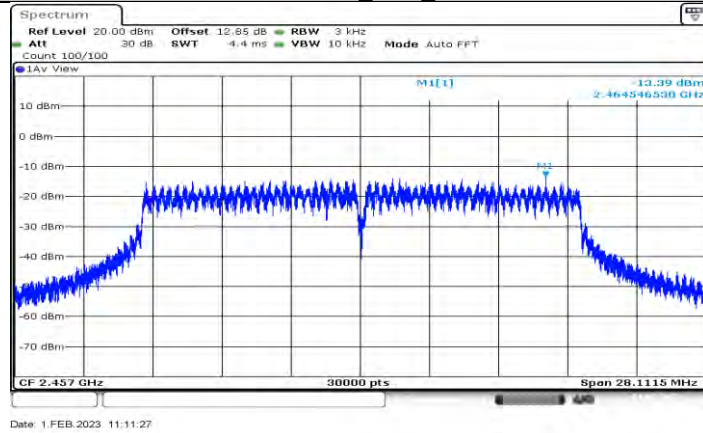
11N20SISO Ant1_2412



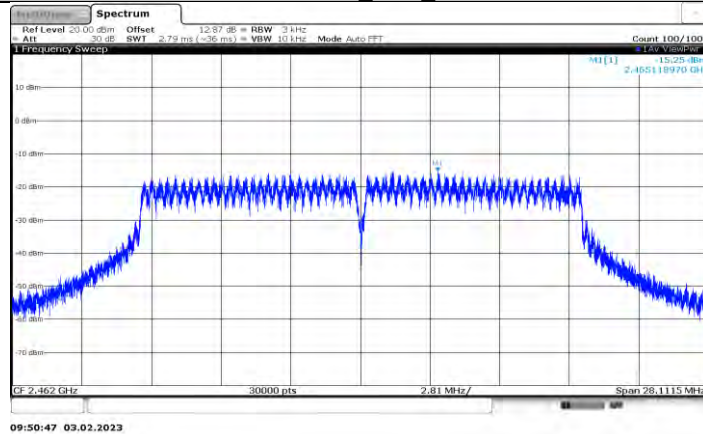
11N20SISO Ant1_2417



11N20SISO_Ant1_2437



11N20SISO_Ant1_2457



11N20SISO_Ant1_2462



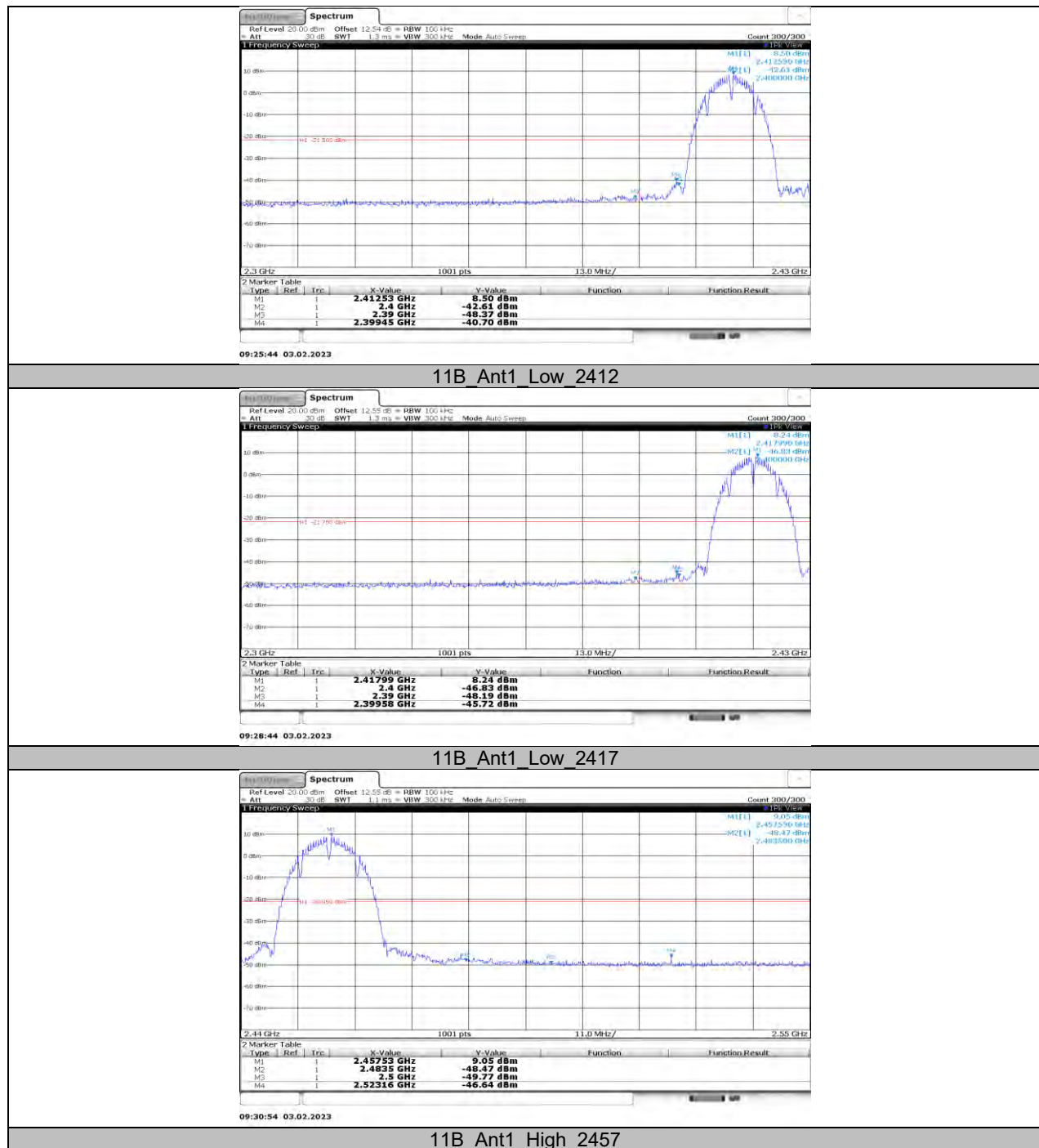
11.5. APPENDIX E: BAND EDGE MEASUREMENTS

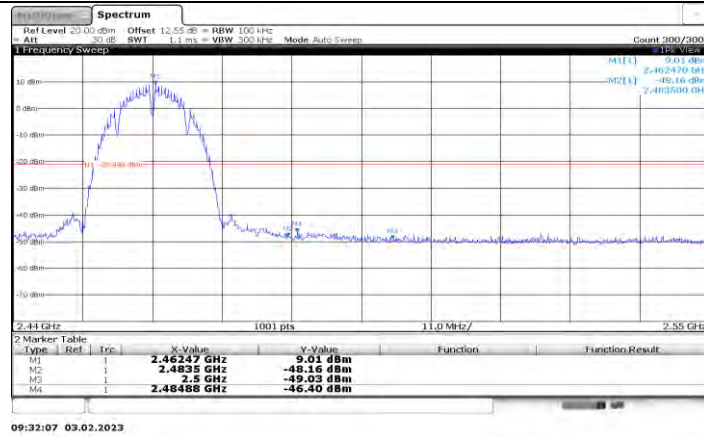
11.5.1. Test Result

Test Mode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.50	-40.7	≤ -21.5	PASS
			2417	8.24	-45.72	≤ -21.76	PASS
		High	2457	9.05	-46.64	≤ -20.95	PASS
			2462	9.01	-46.4	≤ -20.99	PASS
11G	Ant1	Low	2412	5.76	-24.48	≤ -24.24	PASS
			2417	5.82	-32.09	≤ -24.18	PASS
		High	2457	6.05	-42.35	≤ -23.95	PASS
			2462	6.22	-32.64	≤ -23.78	PASS
11N20SISO	Ant1	Low	2412	5.73	-26.18	≤ -24.27	PASS
			2417	5.87	-30.76	≤ -24.13	PASS
		High	2457	5.99	-42.29	≤ -24.01	PASS
			2462	5.17	-32.64	≤ -24.83	PASS

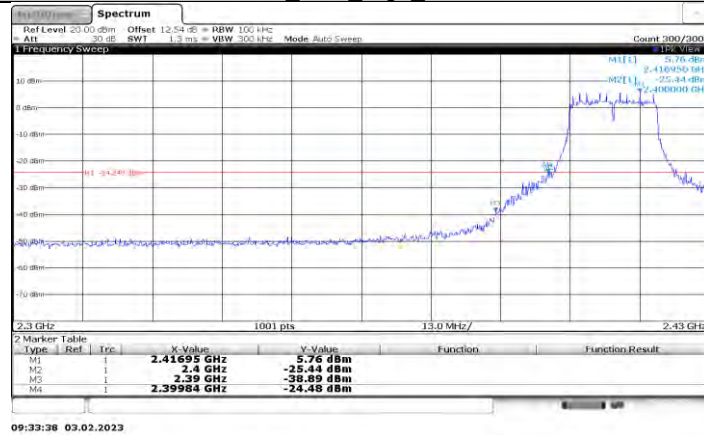


11.5.2. Test Graphs

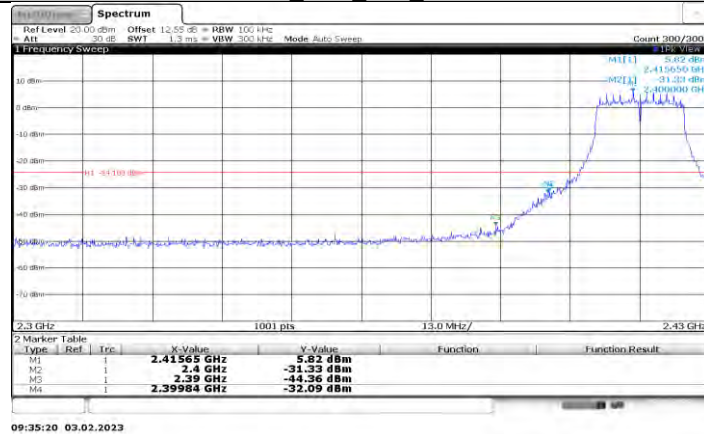




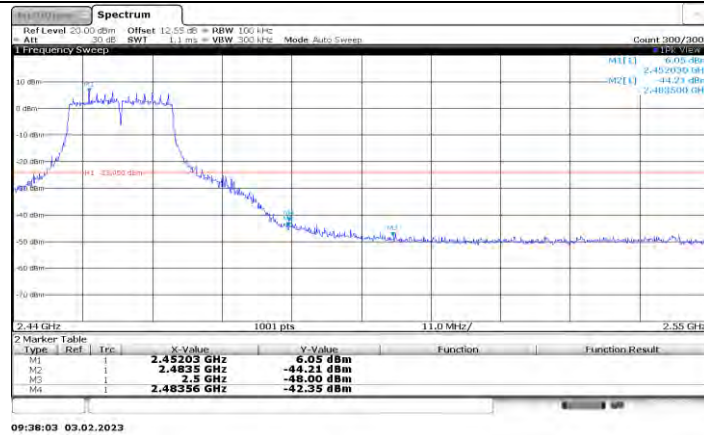
11B_Ant1_High_2462



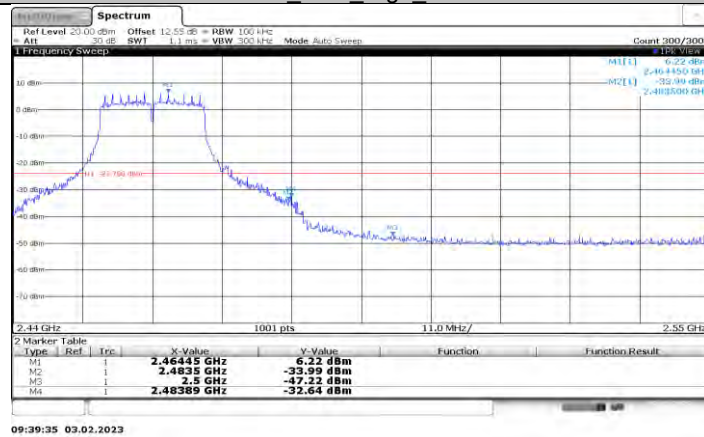
11G_Ant1_Low_2412



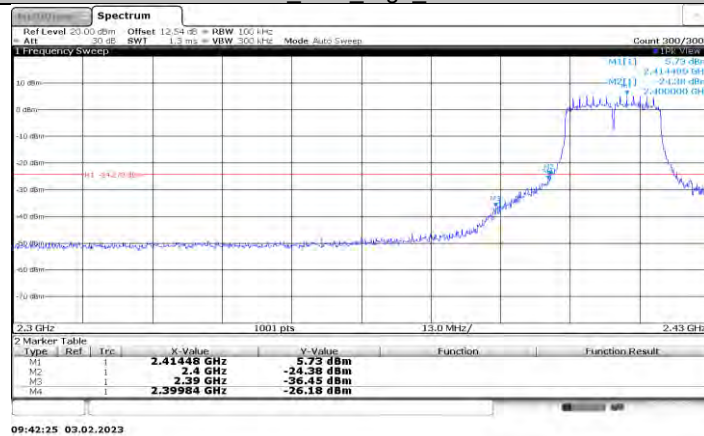
11G_Ant1_Low_2417



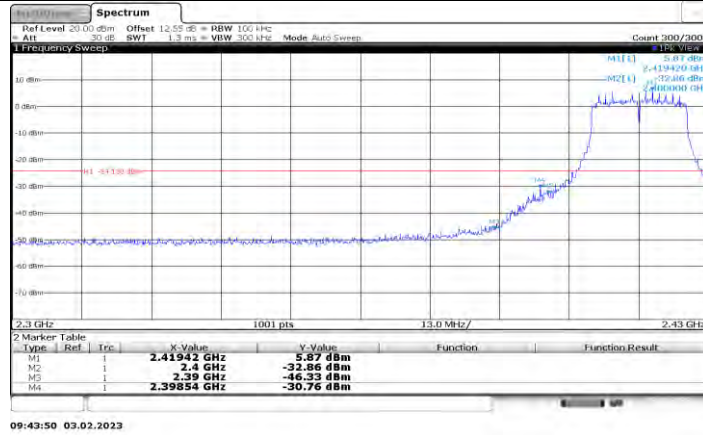
11G_Ant1_High_2457



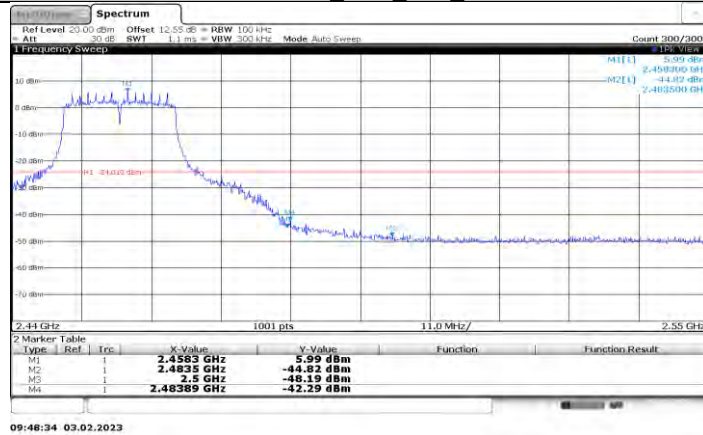
11G_Ant1_High_2462



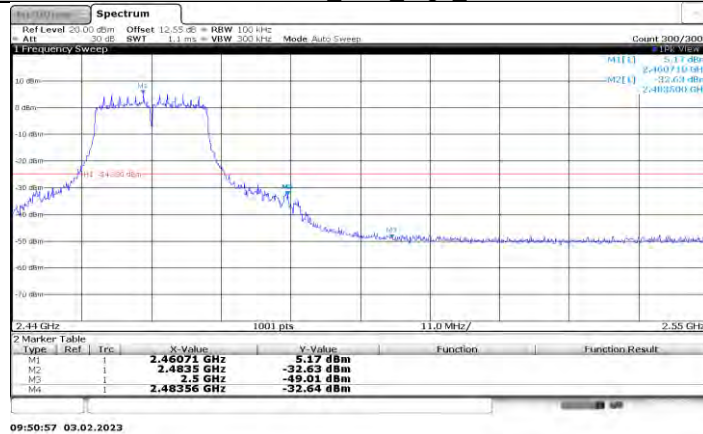
11N20SISO_Ant1_Low_2412



11N20SISO Ant1 Low 2417



11N20SISO Ant1 High 2457

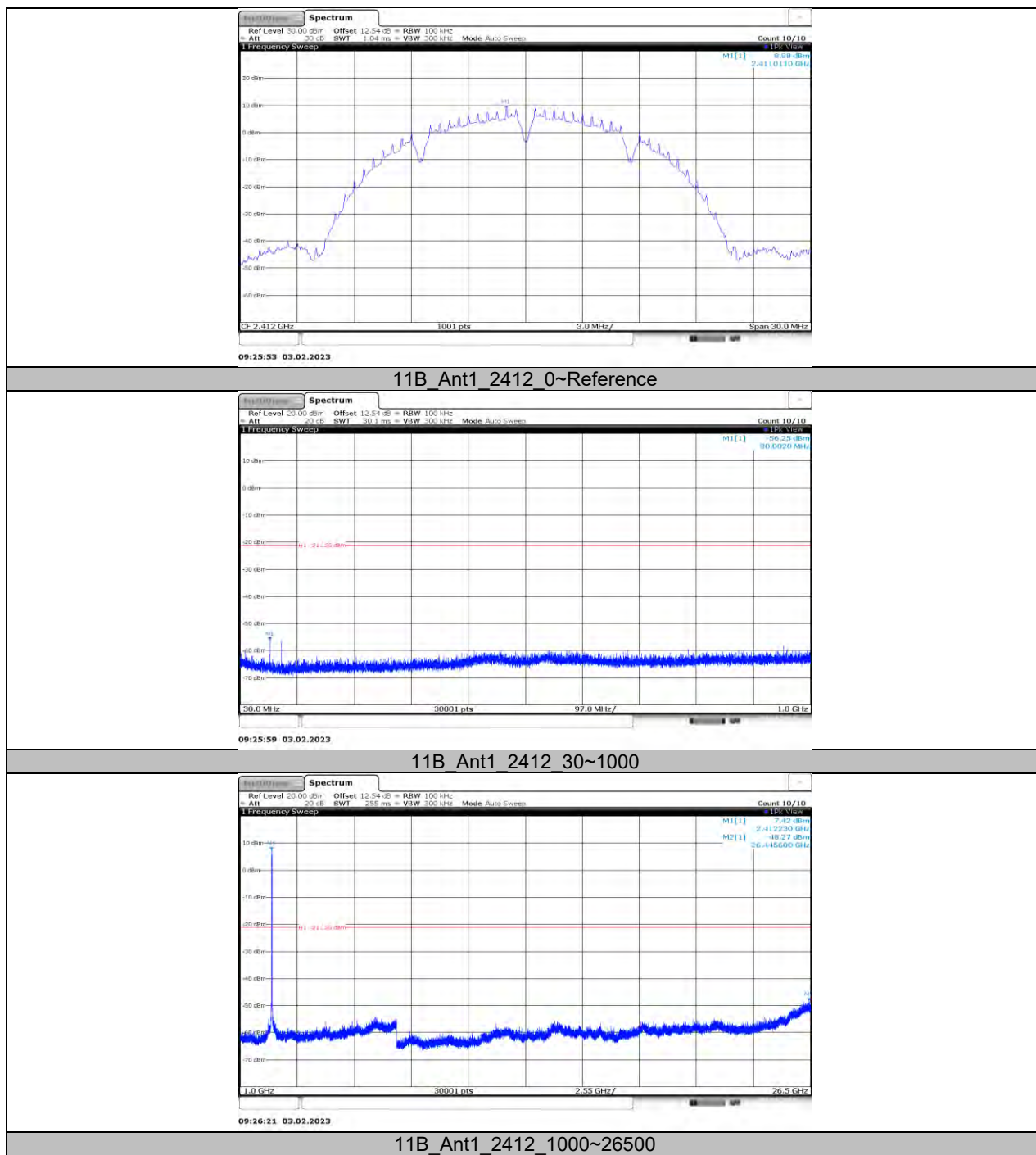


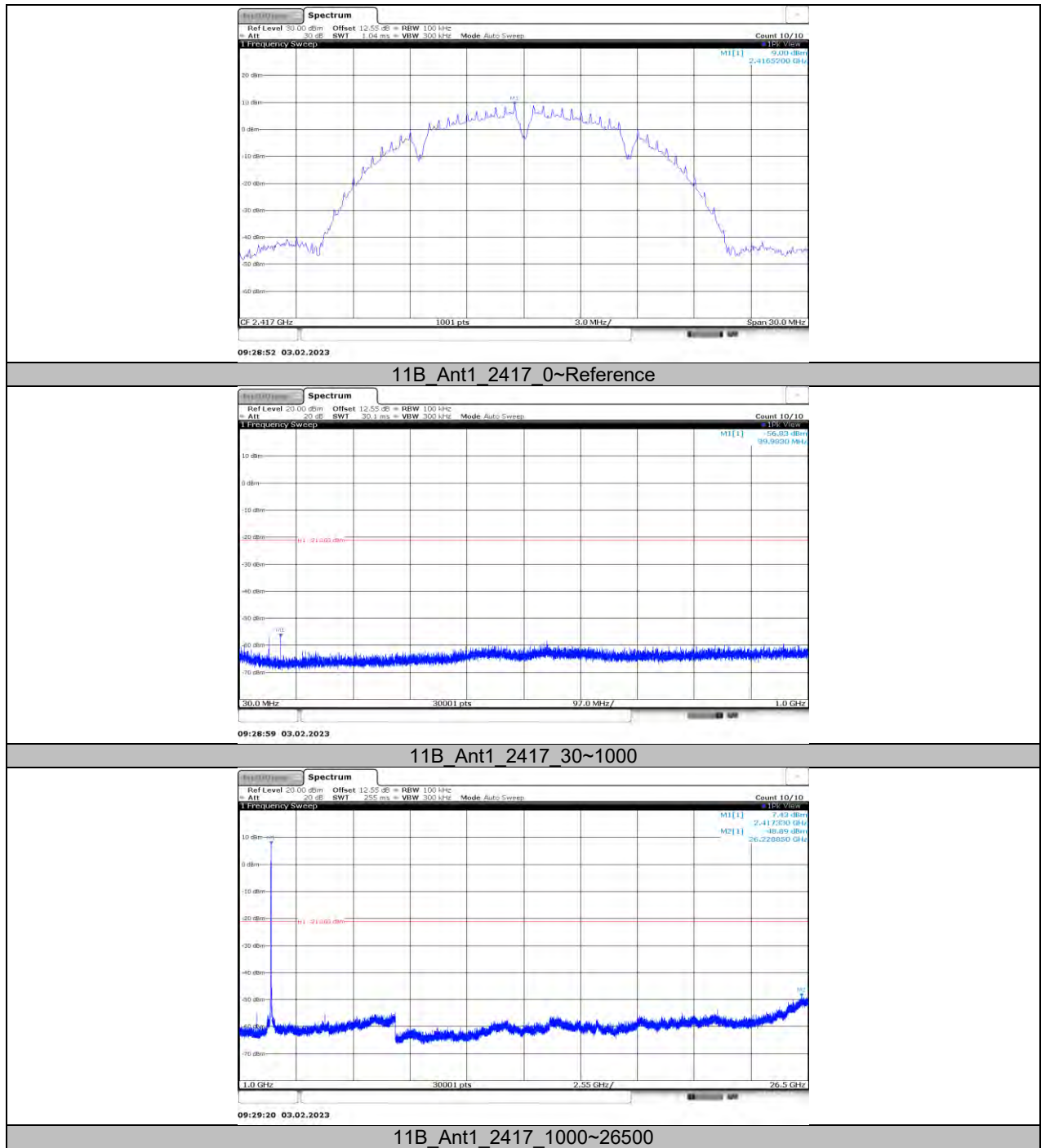
11N20SISO Ant1 High 2462

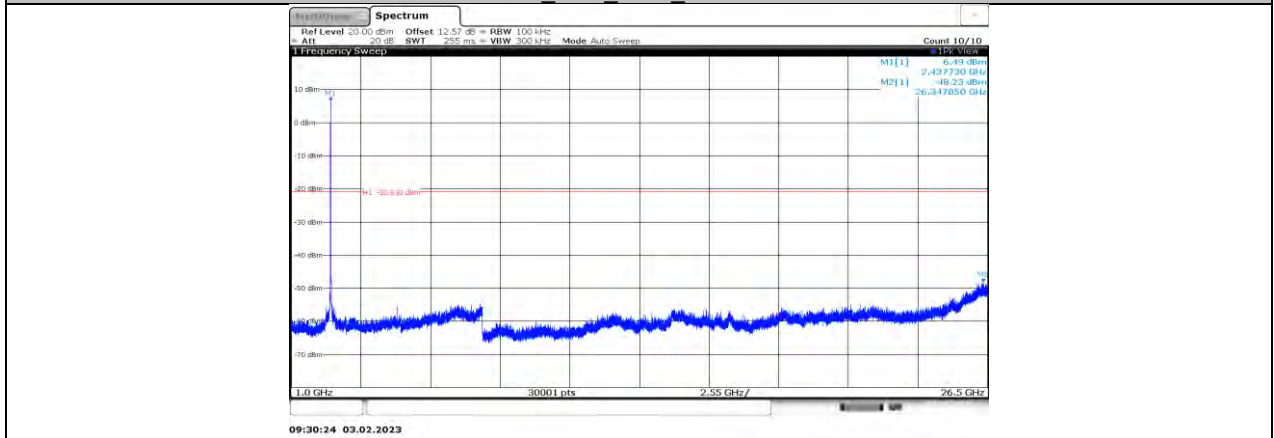
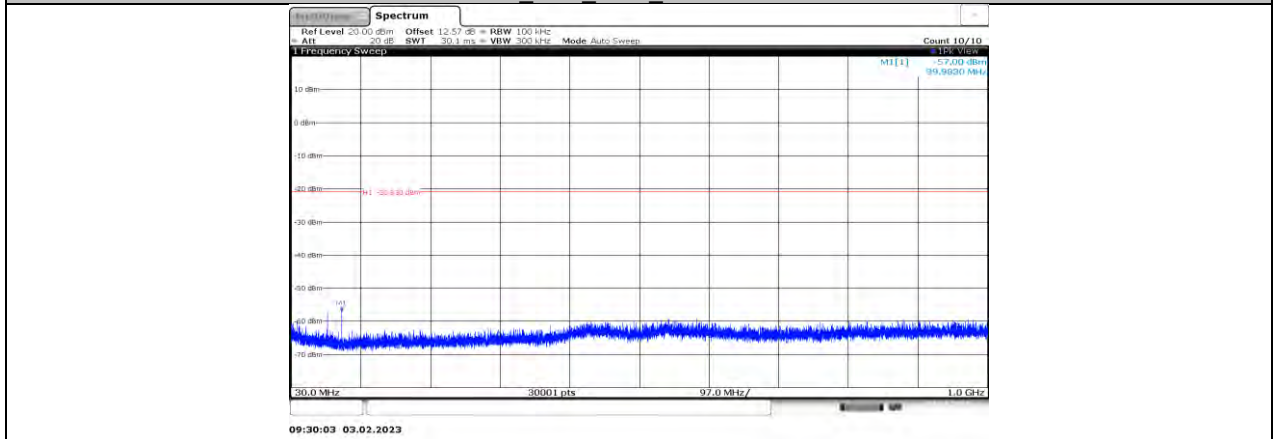
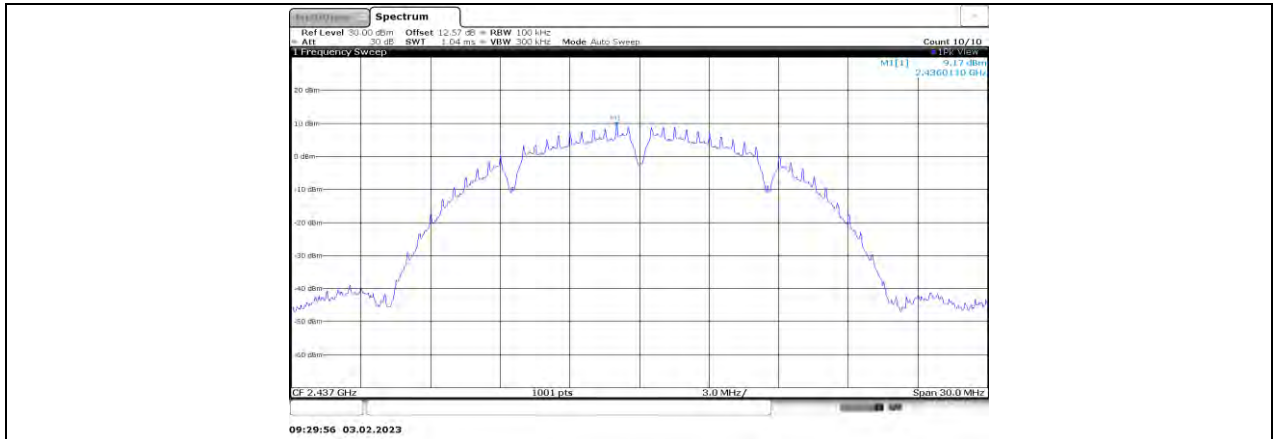
**11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION****11.6.1. Test Result**

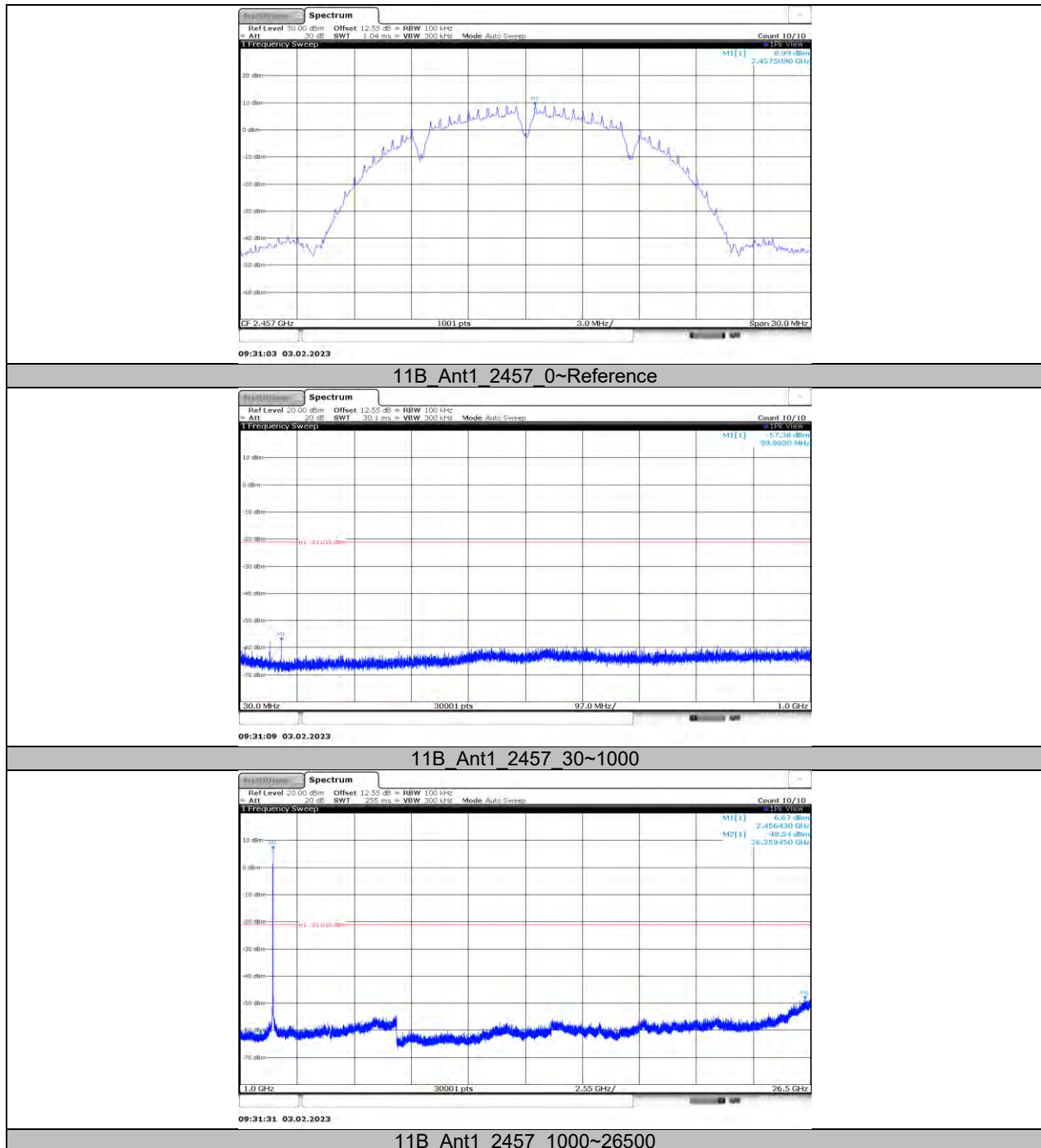
Test Mode	Antenna	Channel	FreqRange [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.88	---	PASS
			30~1000	-56.25	≤-21.12	PASS
			1000~26500	-48.27	≤-21.12	PASS
		2417	Reference	9.00	---	PASS
			30~1000	-56.83	≤-21	PASS
			1000~26500	-48.89	≤-21	PASS
		2437	Reference	9.17	---	PASS
			30~1000	-57	≤-20.83	PASS
			1000~26500	-48.23	≤-20.83	PASS
		2457	Reference	8.99	---	PASS
			30~1000	-57.38	≤-21.01	PASS
			1000~26500	-48.54	≤-21.01	PASS
		2462	Reference	8.98	---	PASS
			30~1000	-56.74	≤-21.02	PASS
			1000~26500	-48.27	≤-21.02	PASS
11G	Ant1	2412	Reference	6.43	---	PASS
			30~1000	-54.14	≤-23.57	PASS
			1000~26500	-48.62	≤-23.57	PASS
		2417	Reference	6.30	---	PASS
			30~1000	-54.62	≤-23.7	PASS
			1000~26500	-47.95	≤-23.7	PASS
		2437	Reference	6.60	---	PASS
			30~1000	-54.93	≤-23.4	PASS
			1000~26500	-48.2	≤-23.4	PASS
		2457	Reference	6.39	---	PASS
			30~1000	-55.27	≤-23.61	PASS
			1000~26500	-48.86	≤-23.61	PASS
		2462	Reference	6.31	---	PASS
			30~1000	-55.21	≤-23.69	PASS
			1000~26500	-48.13	≤-23.69	PASS
11N20SISO	Ant1	2412	Reference	6.15	---	PASS
			30~1000	-54.88	≤-23.85	PASS
			1000~26500	-48.23	≤-23.85	PASS
		2417	Reference	6.35	---	PASS
			30~1000	-54.26	≤-23.65	PASS
			1000~26500	-48.26	≤-23.65	PASS
		2437	Reference	6.59	---	PASS
			30~1000	-54.58	≤-23.41	PASS
			1000~26500	-47.94	≤-23.41	PASS
		2457	Reference	6.22	---	PASS
			30~1000	-54.51	≤-23.78	PASS
			1000~26500	-48.39	≤-23.78	PASS
		2462	Reference	5.37	---	PASS
			30~1000	-54.63	≤-24.63	PASS
			1000~26500	-48.26	≤-24.63	PASS

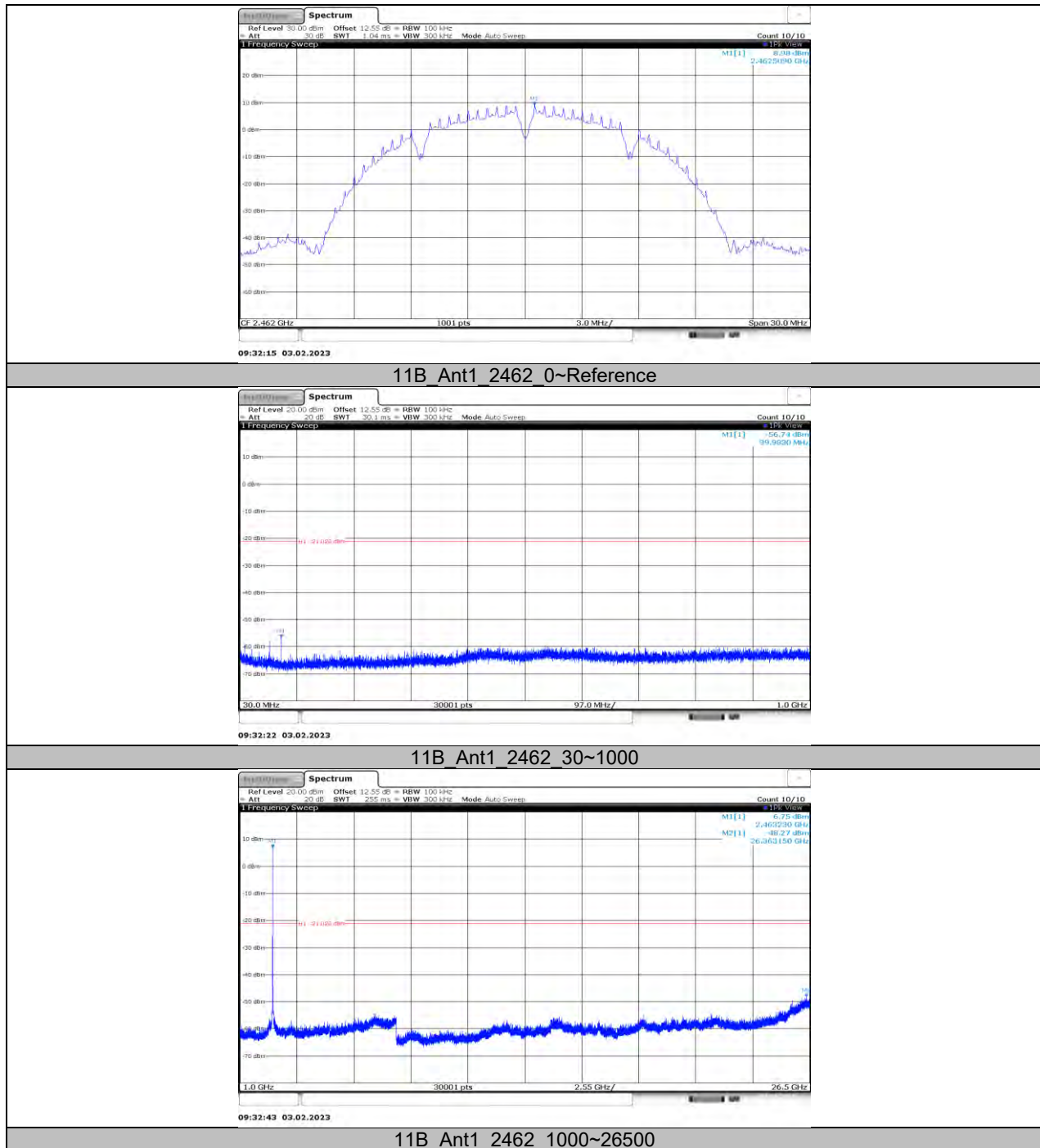
11.6.2. Test Graphs

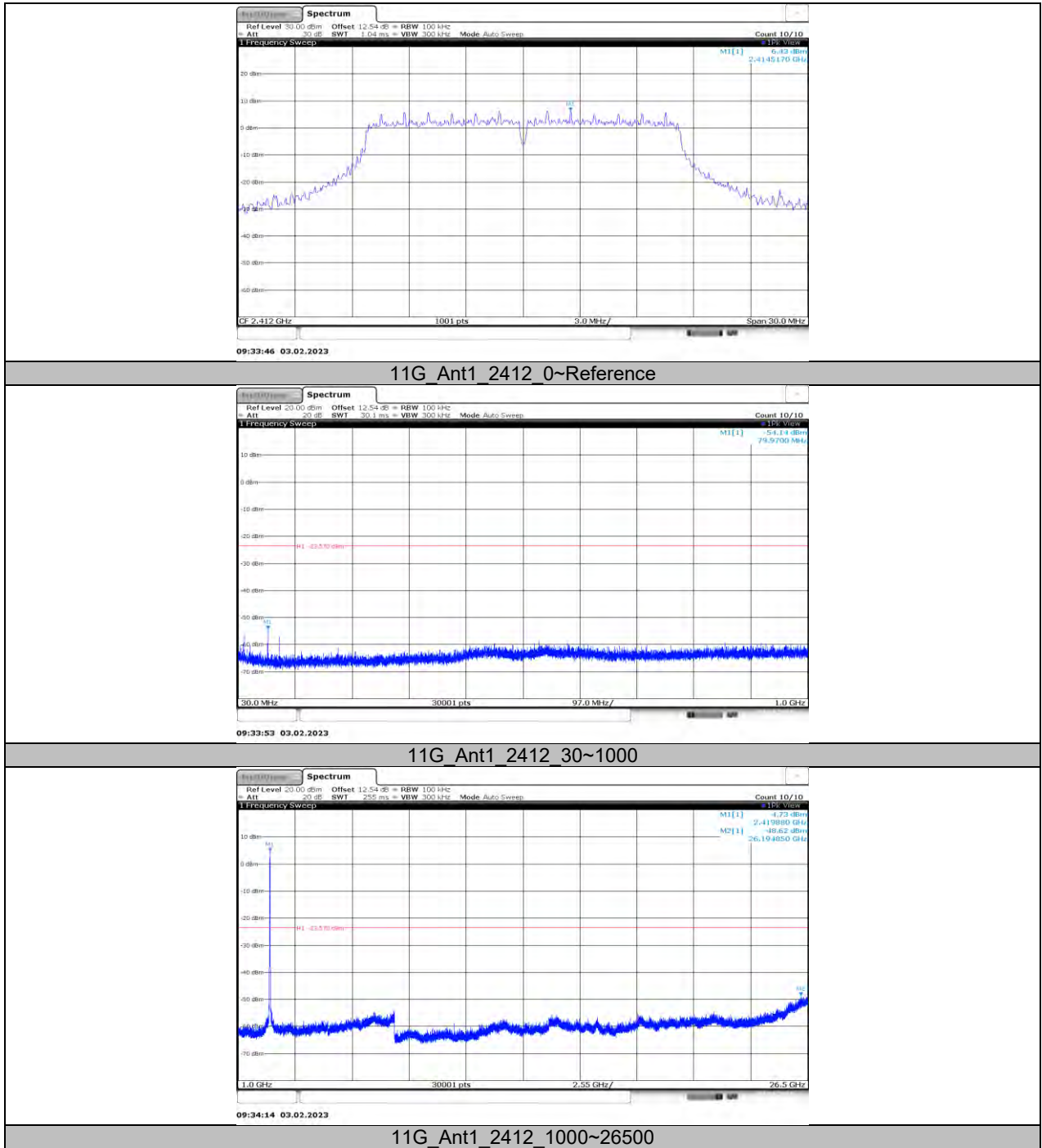


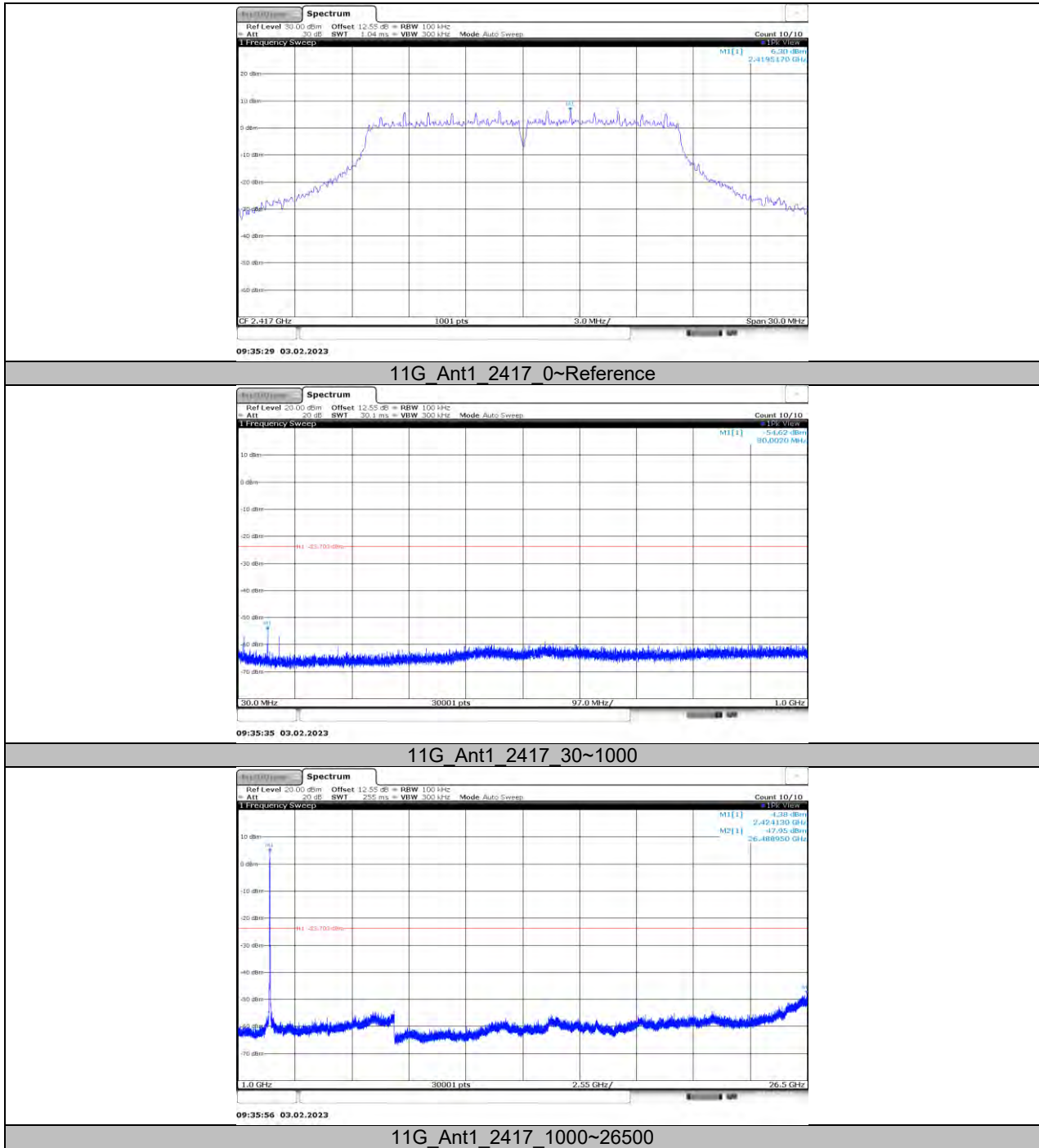


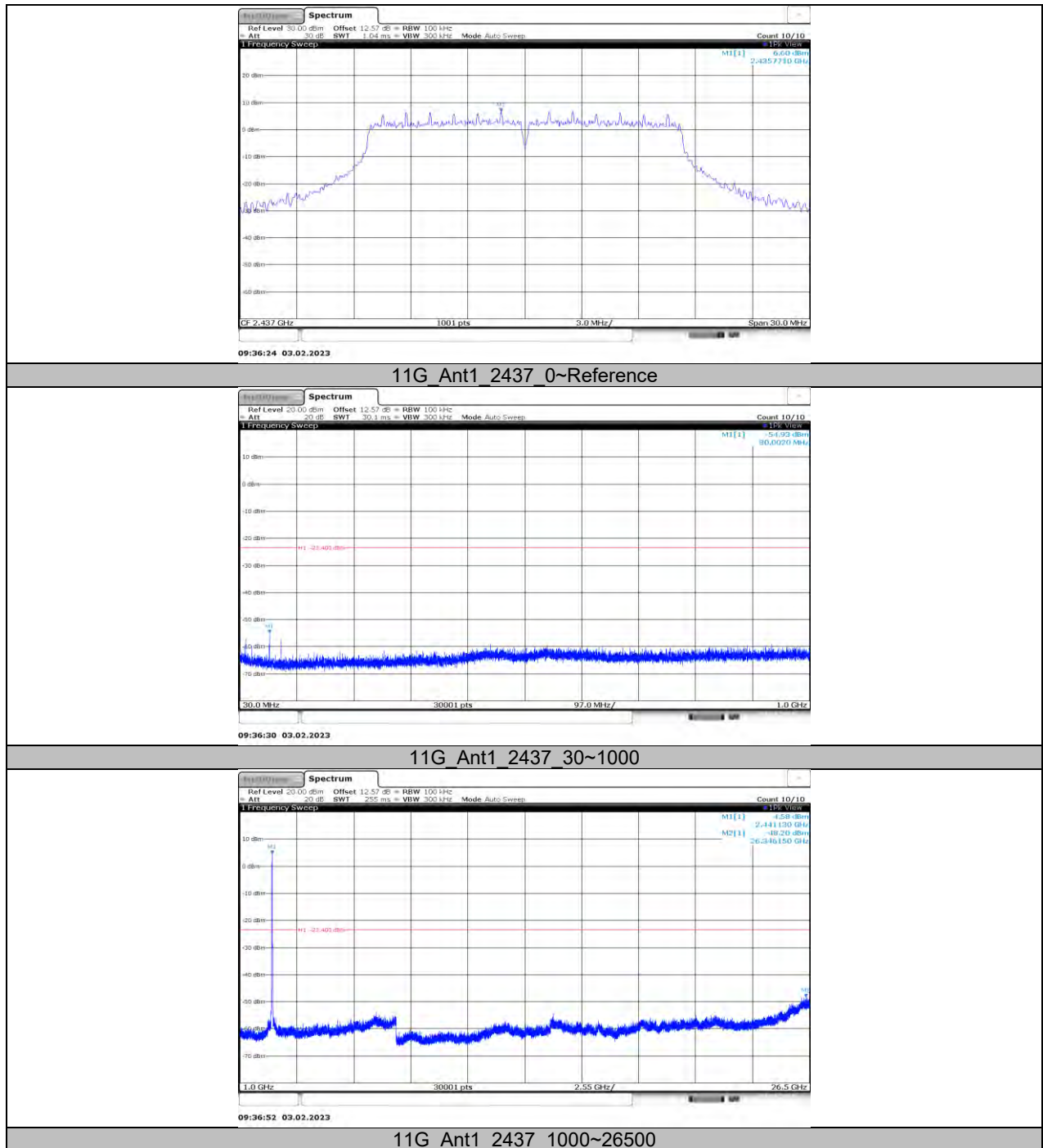


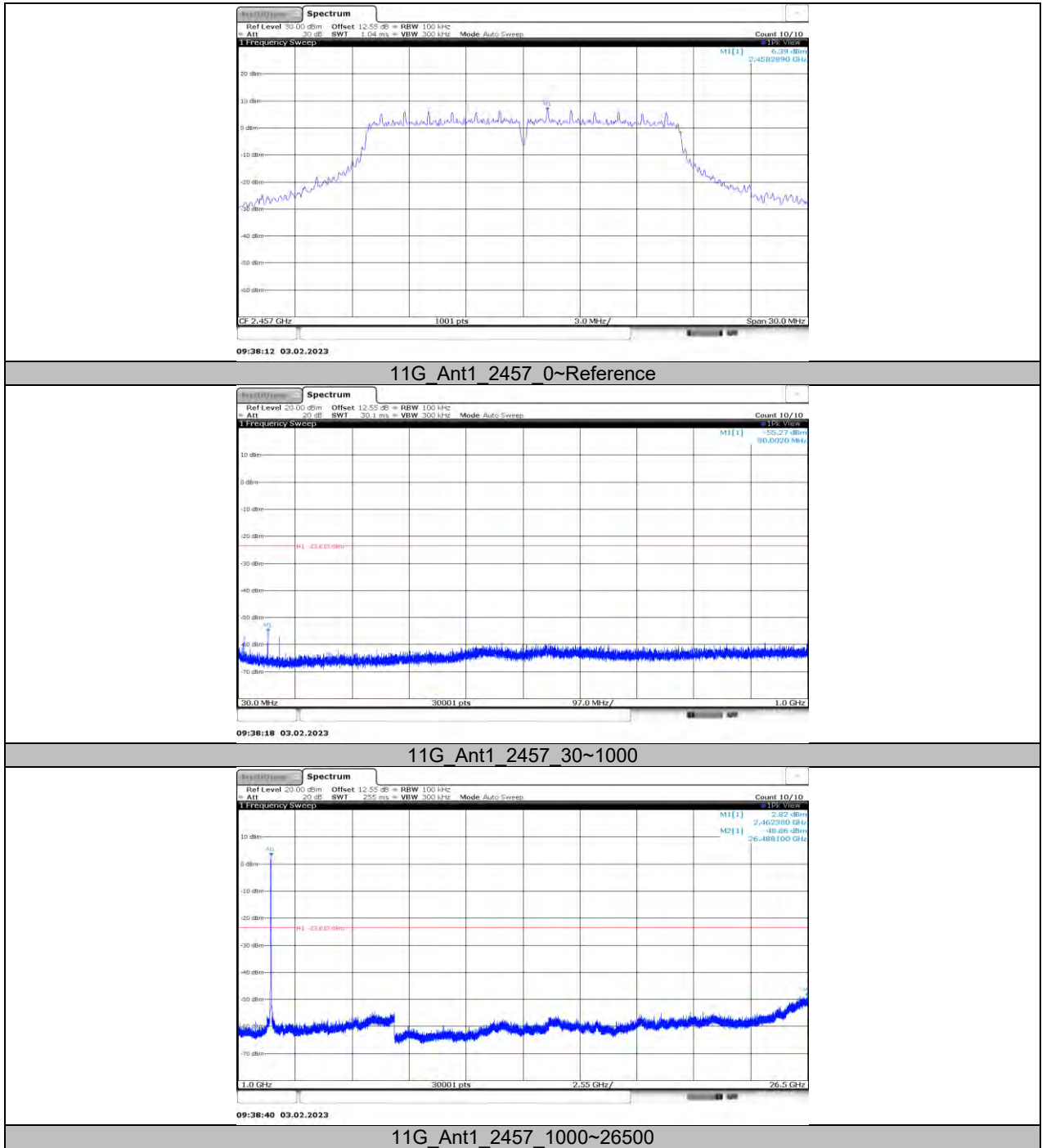


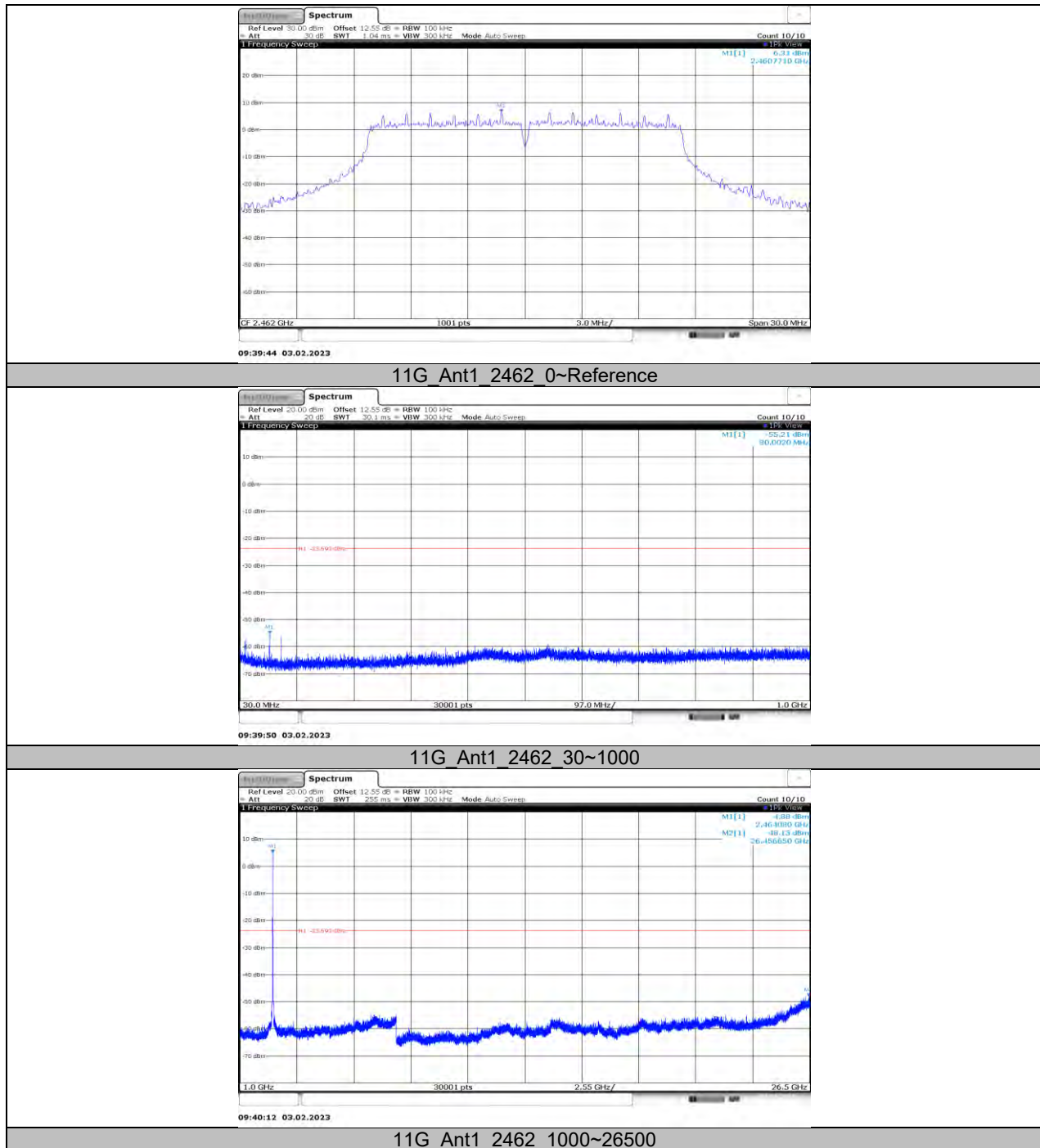


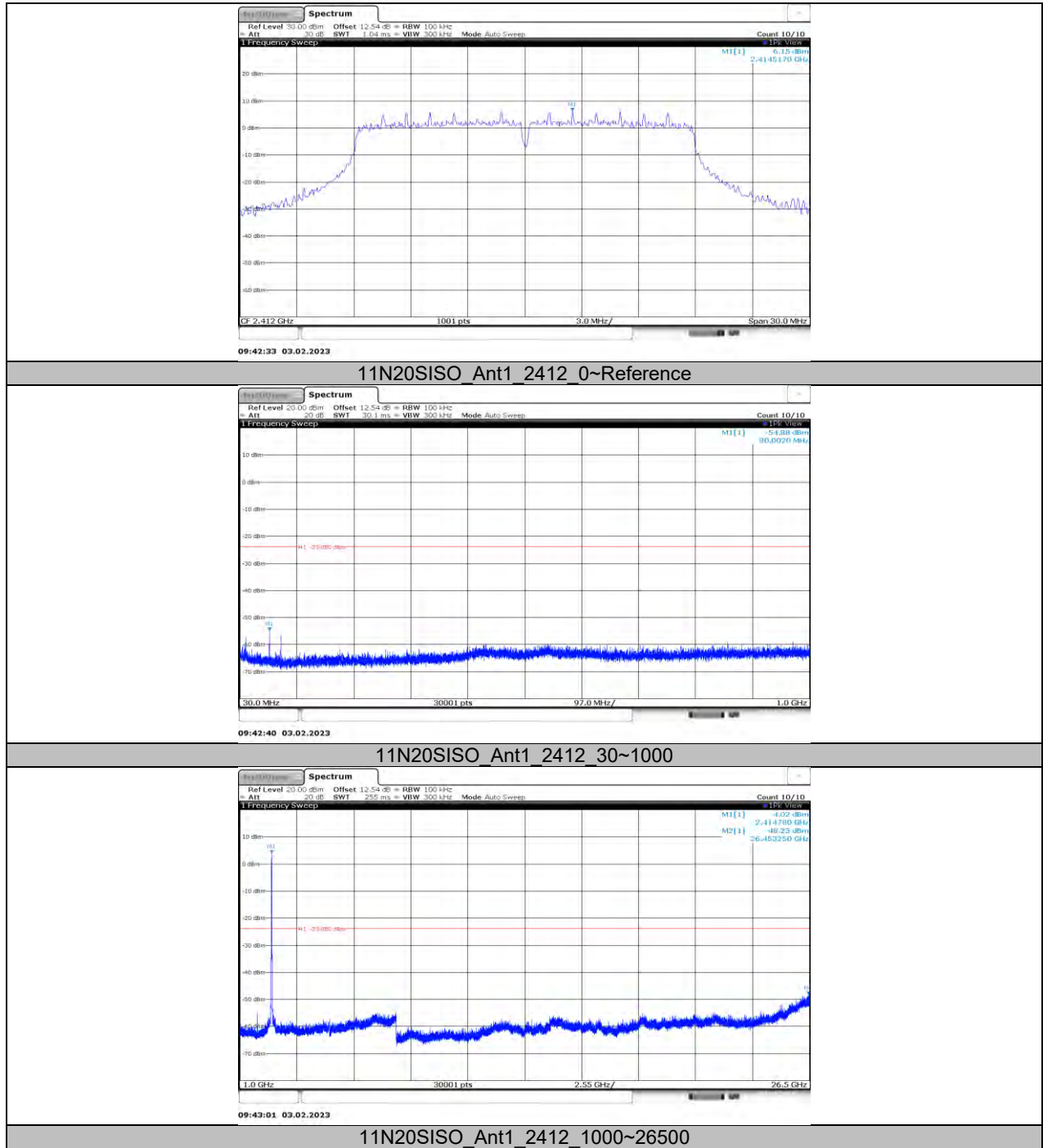


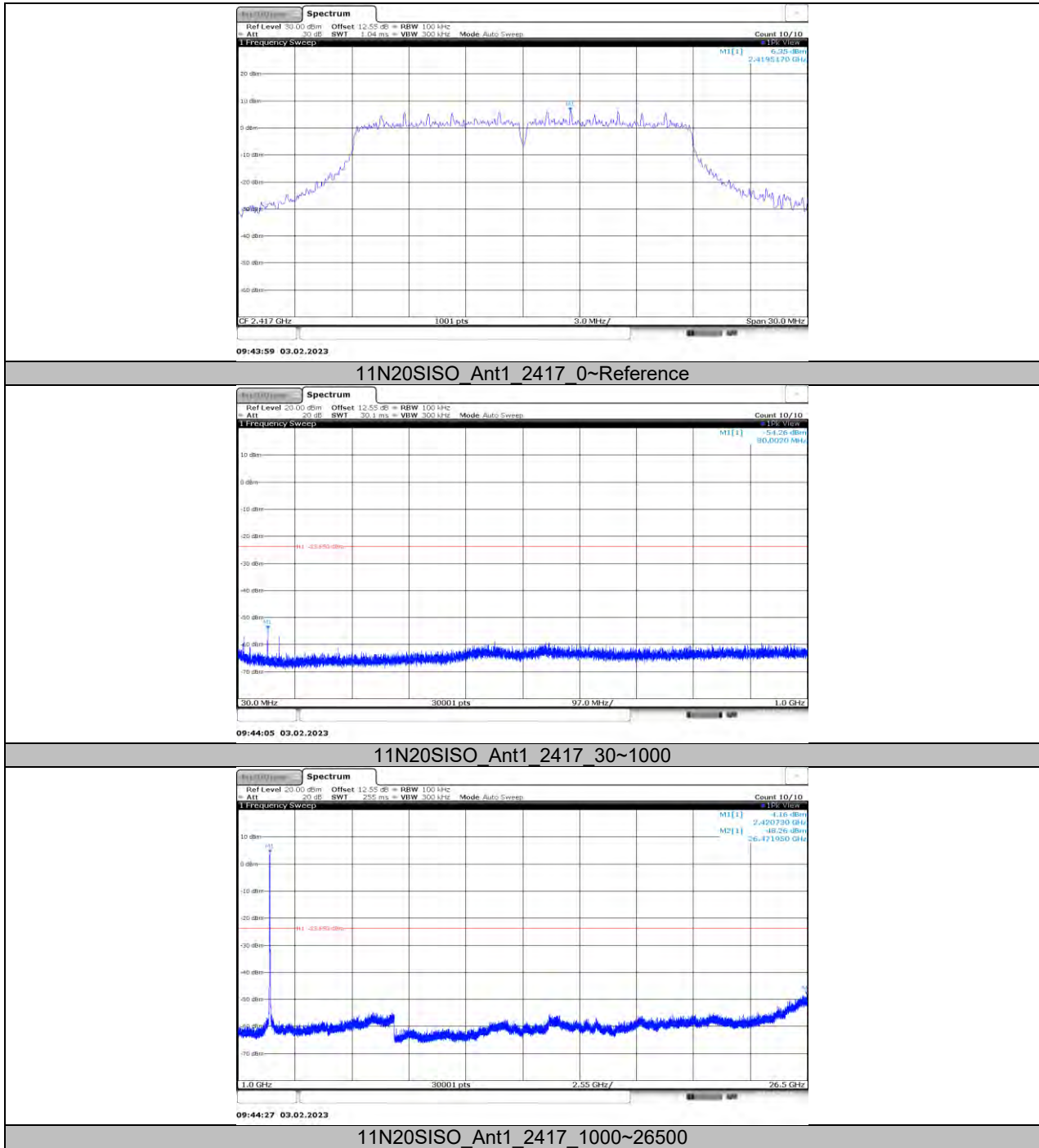


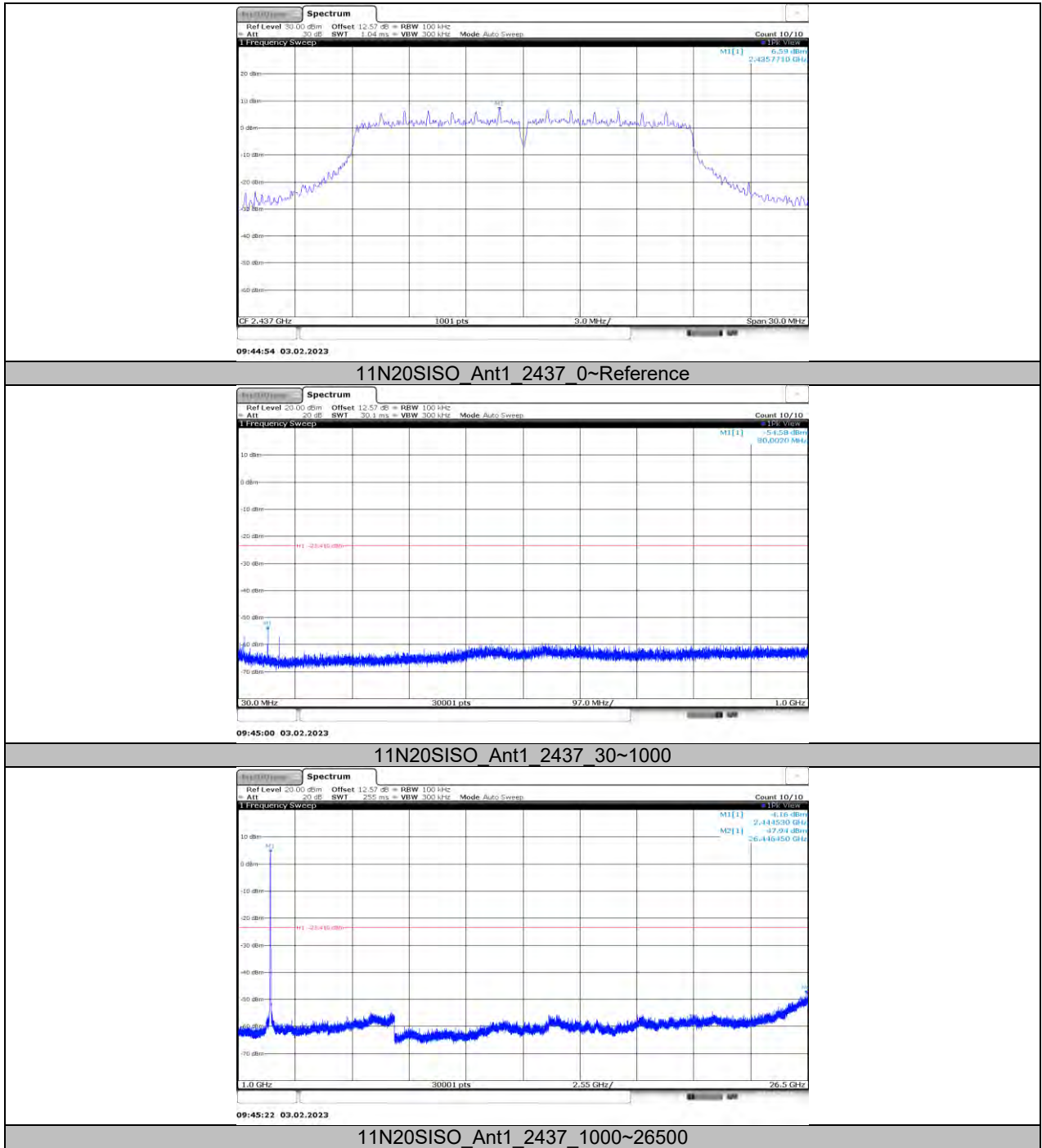


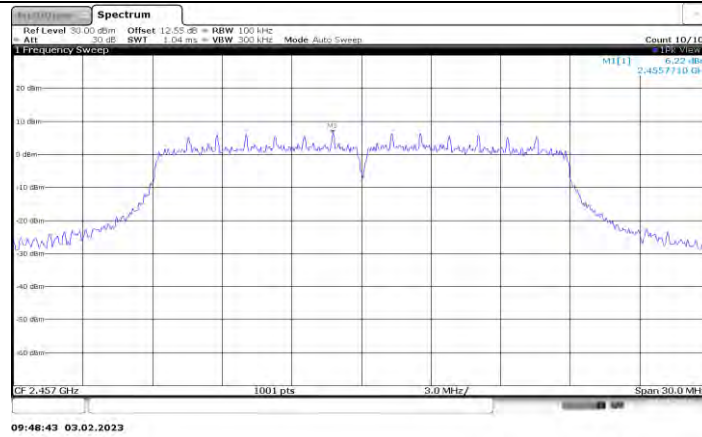




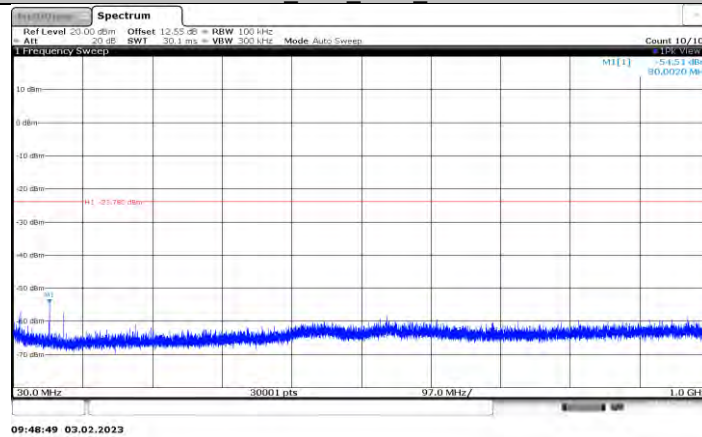




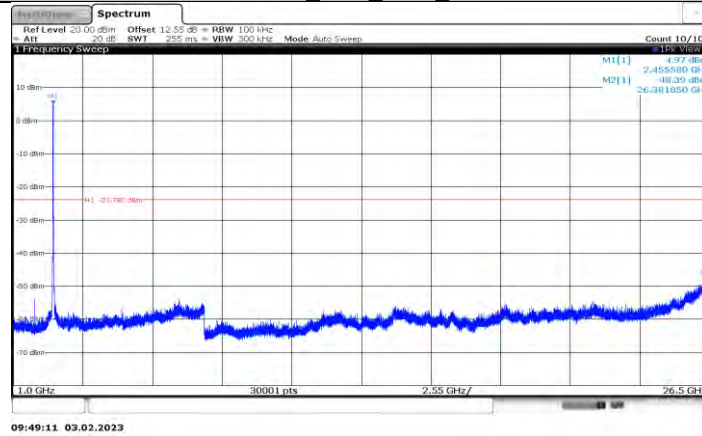




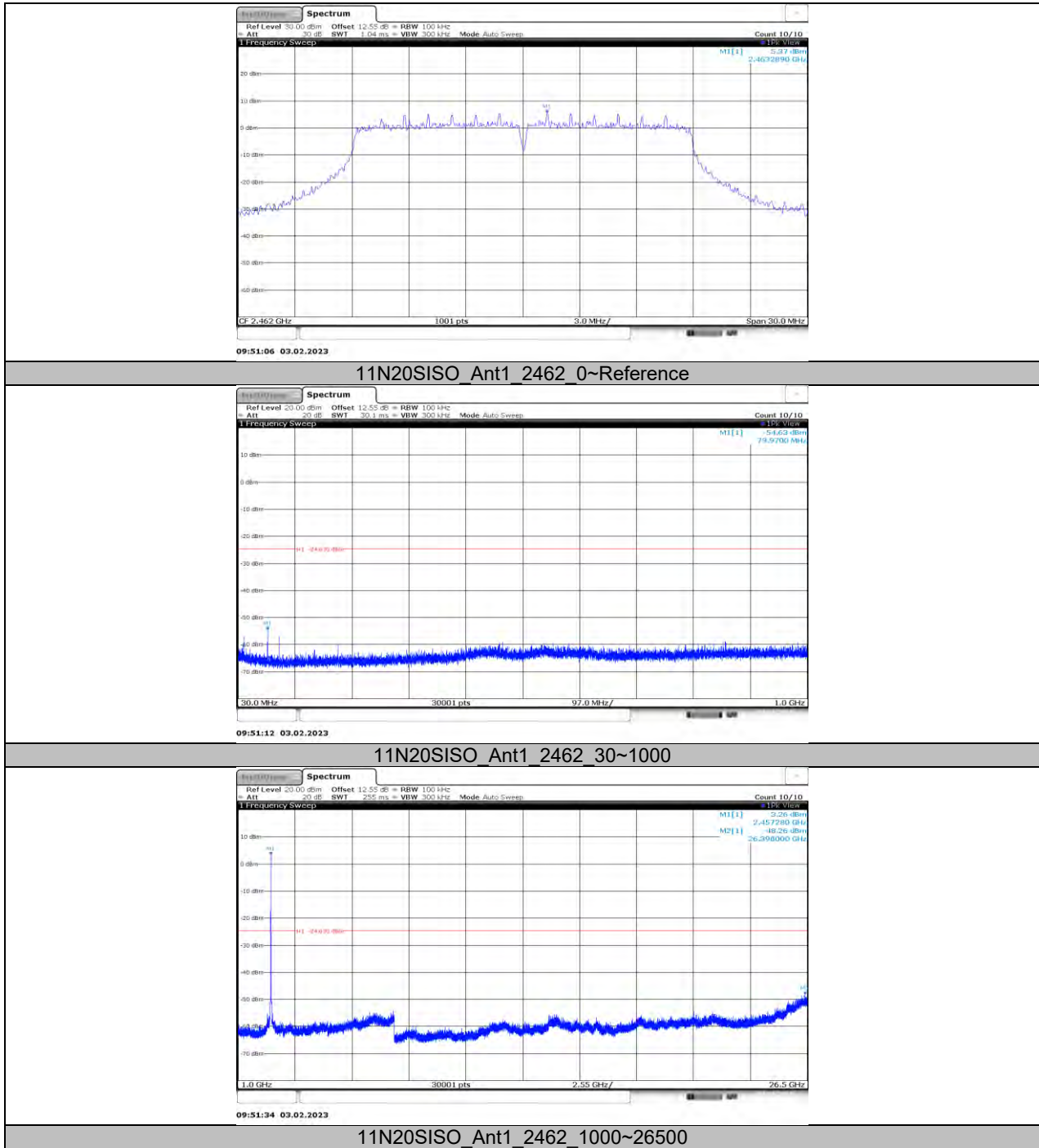
11N20SISO_Ant1_2457_0~Reference



11N20SISO_Ant1_2457_30~1000



11N20SISO_Ant1_2457_1000~26500



**11.7. APPENDIX G: DUTY CYCLE****11.7.1. Test Result**

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11B	12.38	12.51	0.9896	98.96	0.05	0.08	0.01
11G	2.05	2.18	0.9404	94.04	0.27	0.49	1
11N20SISO	1.91	2.04	0.9363	93.63	0.29	0.52	1

Note:

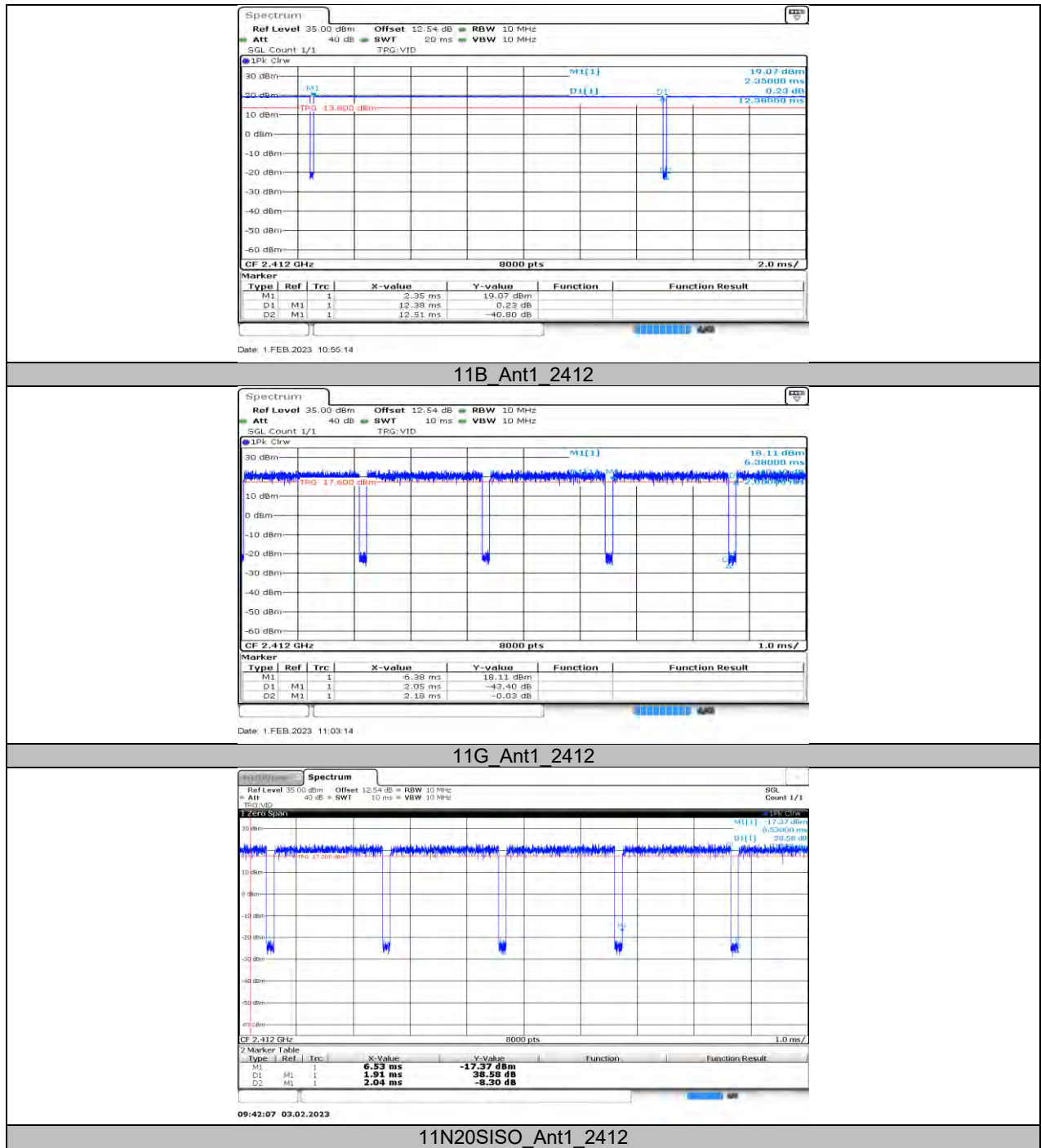
Duty Cycle Correction Factor= $10\log(1/x)$.

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

11.7.2. Test Graphs



END OF REPORT