

FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

WIFI+BT Module

MODEL NUMBER: WKCT2PM2511

REPORT NUMBER: 4792297651-RF-3

ISSUE DATE: July 27, 2026

FCC ID: 2AC23-WKCT2P

Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	July 27, 2026	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 C63.10-2020, Clause 6.2	FCC Part 15.207	Pass
Conducted Output Power	ANSI C63.10-2020, Clause 11.9.2.3.1	FCC Part 15.247 (b)(3)	Pass
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2020, Clause 11.8.1&6.9.3	FCC Part 15.247 (a)(2)	Pass
Power Spectral Density	ANSI C63.10-2020, Clause 11.10.5	FCC Part 15.247 (e)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2020, Clause 11.11	FCC Part 15.247(d)	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2020, Clause 11.12	FCC Part 15.247 (d) FCC Part 15.205/15.209	Pass
Duty Cycle	ANSI C63.10-2020, Clause 11.6	None; for reporting purposes only.	Pass

Note:

1. This report is also performed according to ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024 standards.

*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 <FCC 47 CFR PART 15 SUBPART C> when <Simple Acceptance> decision rule is applied. Decision rule for statement of conformity: The measurement uncertainty is not taken into account for statement of conformity.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD
Address: No.6,Qiaoguang Road,Chenjiang Street,Zhongkai High-tech Zone,Huizhou,Guangdong,China

Manufacturer Information

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD
Address: No.6,Qiaoguang Road,Chenjiang Street,Zhongkai High-tech Zone,Huizhou,Guangdong,China

EUT Information

EUT Name: WIFI+BT Module
Model: WKCT2PM2511
Brand: GSD
Sample Received Date: June 25, 2026
Sample Status: Normal
Sample ID: 9888832
Date of Tested: June 25, 2026 to July 27, 2026

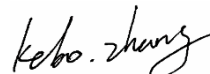
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR PART 15 SUBPART C	Pass

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2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC 47 CFR PART 15 SUBPART C , KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, FCC 47 CFR Part 2, ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024.

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.: C-20202, G-20240, R-20248 and T-20202) 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 E, the VCCI registration No. is G-20240 and R-20248 Shielding Room F, the VCCI registration No. is C-20202 and T-20202
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Note 1:

All tests measurement facilities use to collect the measurement data are located at Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China.

Note 2:

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.

Note 3:

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)	4.36 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.47 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 26 GHz)	5.65 dB (1 GHz ~ 18 GHz)
	4.73 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.	

Remark: For Radiated Emission measurements (200 MHz - 18 GHz), the EUT support table is made of Expanded Polystyrene (EPS). This material is characterized by a low dielectric constant, as recognized in CISPR 16-1-4, to minimize its influence on field strength measurements. This influence has been considered in the uncertainty budget.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	WIFI+BT Module
Model	WKCT2PM2511

Frequency Range:	2412 MHz to 2462 MHz
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Radio Technology:	IEEE 802.11b/g/n HT20/n HT40
Normal Test Voltage:	DC 5V

5.2. CHANNEL LIST

Channel List For Bandwidth=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	/	/

Channel List For Bandwidth=40 MHz							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447	/	/

5.3. MAXIMUM POWER

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)
b	2412 ~ 2462	1-11[11]	15.19
g	2412 ~ 2462	1-11[11]	15.40
n HT20	2412 ~ 2462	1-11[11]	17.63
n HT40	2422 ~ 2452	3-9[7]	17.44

Note:

- Maximum conducted output power = measured value + cable loss (provided by UL) + cable loss (provided by UL)
- Maximum EIRP = maximum conducted output power + antenna gain

5.4. TEST CHANNEL CONFIGURATION

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
g	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT20	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT40	CH 3(Low Channel), CH 6(MID Channel), CH 9(High Channel)	2422 MHz, 2437 MHz, 2452 MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		QA Tool					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	0	16	15.5	15.5	/		
	1	16.5	16.5	16.5			
802.11g	0	16	16	16			
	1	17	17	17			
802.11n HT20	0	17	16.5	16.5			
	1	17	16.5	16.5			
802.11n HT40	0	/			16.5	16.5	16.5
	1	/			16.5	16.5	16.5

5.6. 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
802.11n HT40 mode: MCS0

802.11b/g only support SISO mode.
802.11n HT20/HT40 support SISO and MIMO mode.

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

Conducted output power, power spectral density tests separately on each port with all supported SISO & MIMO port combinations.

Conducted bandedge and spurious emissions tests were performed with SISO mode, as this port was found to have the worst case in terms of power settings amongst all supported possible SISO & MIMO port combinations.

Radiated emissions tests were performed with the MIMO modes. These were found to be the worst modulation scheme with regards to emissions after preliminary investigations and, as this mode emits the highest conducted output power level, it was deemed to be the worst case.

The EUT support Cyclic Shift Diversity(CDD), Space Time Coding(STBC), Spatial Division Multiplexing(SDM) modes. They use the same conducted power per chain in any given mode, so we only chose the worst case mode CDD for final testing.

Based on ANSI C63.10-2020 section 5.6.2.2(b), for Harmonics and Spurious Emissions, all modes have been tested, only the worst-case power mode and worst-case PSD mode of OFDM 802.11n HT20 and DSS 802.11b were recorded in the report.

5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
0	2412-2462	PCB Antenna	1.48
1	2412-2462	PCB Antenna	1.12

Note: The antenna gain is provided by client.

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following method.

For output power measurements:

Directional gain= G_{ANT} + Array Gain = 1.48 dBi

G_{ANT} : equal to the gain of the antenna having the highest gain

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:

Directional gain= G_{ANT} + Array Gain = 4.49 dBi

Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

N_{ANT} : number of transmit antennas

N_{SS} : number of spatial streams, The worst case directional gain will occur when $N_{SS} = 1$

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒ 1TX, 2RX	ANT 0 or ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒ 1TX, 2RX	ANT 0 or ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒ 2TX, 2RX	ANT 0 and ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT40	☒ 2TX, 2RX	ANT 0 and ANT 1 can be used as transmitting/receiving antenna.
Note: 1.BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)		

5.8. SUPPORT UNITS FOR SYSTEM TEST

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	E42-80	R303U5AG
2	UART	/	/	/
3	AC Adaptor	Lenovo	ADLX65YCC3D	Input: AC 100-240V, 1.8A, 50-60Hz Output: DC 20V, 3.25A, 65.0W Max

I/O CABLES

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

ACCESSORIES

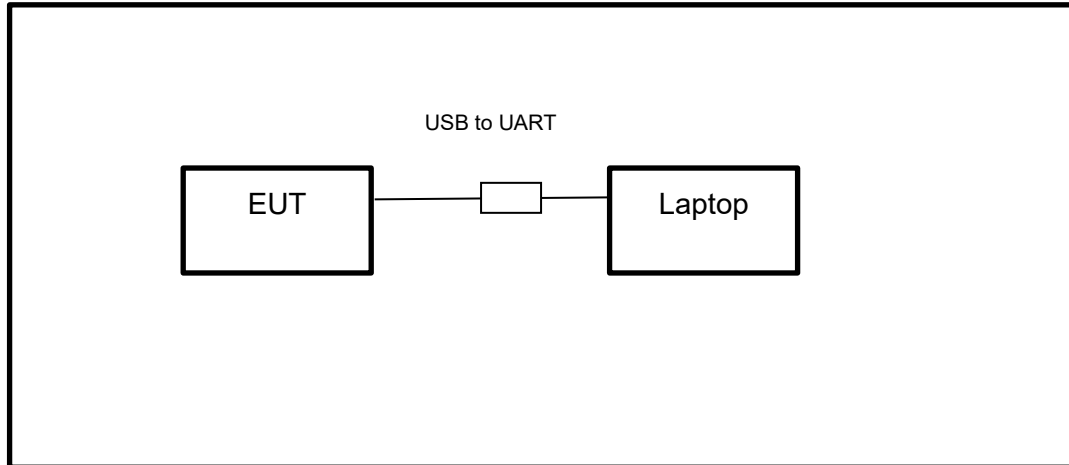
Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

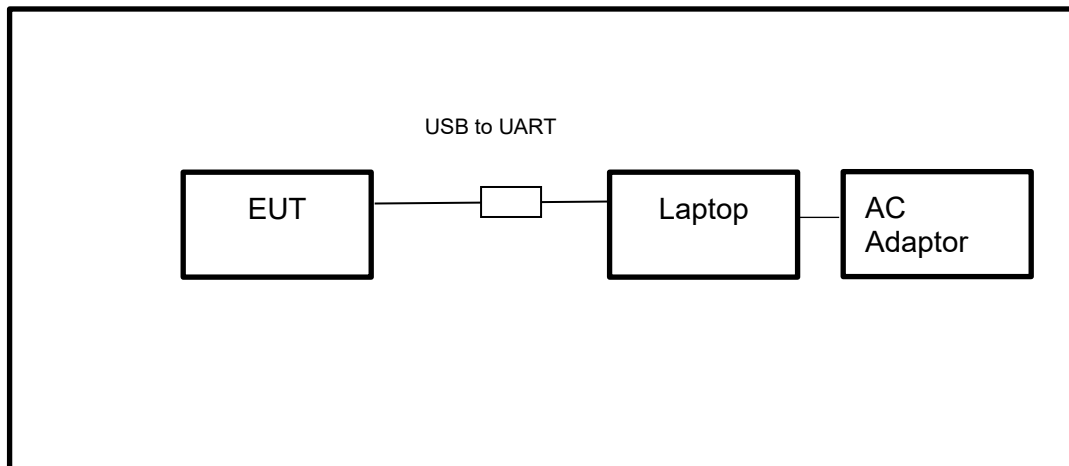
The EUT can work in engineering mode with a software through a Laptop.

SETUP DIAGRAM FOR TESTS

For Others:



For AC Power Line Conducted Emission:



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	Dec.26,2025	Dec.25,2026
Vector Signal Generator	R&S	SMBV100A	261637	Sep.12, 2025	Sep.11, 2026
Signal Generator	R&S	SMB100A	178553	Sep.12, 2025	Sep.11, 2026
Signal Analyzer	R&S	FSV40	101118	Sep.12, 2025	Sep.11, 2026
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
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.12, 2025	Sep.11, 2026
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Sep.12, 2025	Sep.11, 2026
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Sep.12, 2025	Sep.11, 2026
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Sep.12, 2025	Sep.11, 2026
DC power supply	TSSTAKASAGO	ZX-400L	409150160137	Sep.12, 2025	Sep.11, 2026
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Sep.12, 2025	Sep.11, 2026
Attenuator	Aglient	8495B	2814a12853	Sep.12, 2025	Sep.11, 2026
RF Control Unit	Tonscend	JS0806-2	23B80620666	Dec.26,2025	Dec.25,2026
Software					
Description	Manufacturer	Name			Version
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System			V3.2.22

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Sep.12, 2025	Sep.11, 2026
Two-Line V-Network	R&S	ENV216	101983	Sep.12, 2025	Sep.11, 2026
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Sep.12, 2025	Sep.11, 2026
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	Sep.12, 2025	Sep.11, 2026
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	June 28, 2024	June.27 2027
Preamplifier	HP	8447D	2944A09099	Sep.12, 2025	Sep.11, 2026
EMI Measurement Receiver	R&S	ESR26	101377	Sep.12, 2025	Sep.11, 2026
Horn Antenna	TDK	HRN-0118	130940	Dec.10, 2024	Dec.11, 2027
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Sep.12, 2025	Sep.11, 2026
Horn Antenna	Schwarzbeck	BBHA9170	697	Jun 30, 2024	Jun 29, 2027
Preamplifier	TDK	PA-02-2	TRS-307-00003	Sep.12, 2025	Sep.11, 2026
Preamplifier	TDK	PA-02-3	TRS-308-00002	Sep.12, 2025	Sep.11, 2026
Loop antenna	Schwarzbeck	1519B	00008	Dec.09, 2024	Dec.08, 2027
High Pass Filter	Wi	WHKX10-2700-3000-18000-40SS	23	Sep.12, 2025	Sep.11, 2026
Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4	Sep.12, 2025	Sep.11, 2026
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	Sep.16, 2025	Sep.15, 2026
Barometer	Yiyi	Baro	N/A	Sep.19, 2025	Sep.18, 2026
Attenuator	Agilent	8495B	2814a12853	Sep.12, 2025	Sep.11, 2026

7. ANTENNA PORT TEST RESULTS

7.1. CONDUCTED OUTPUT POWER

LIMITS

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

TEST PROCEDURE

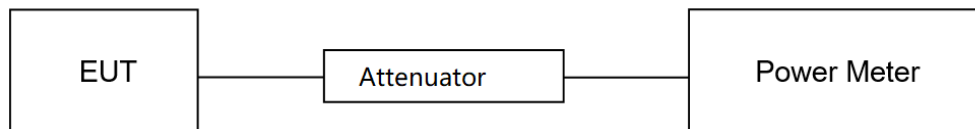
Refer to ANSI C63.10-2020 clause 11.9.2.3.1.

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	25.5°C	Relative Humidity	65.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5V

TEST DATE / ENGINEER

Test Date	July 7, 2026	Test By	Niki Zhu
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TEST RESULTS

Please refer to section "Test Data" - Appendix C

7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

FCC 47 CFR Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 47 CFR 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

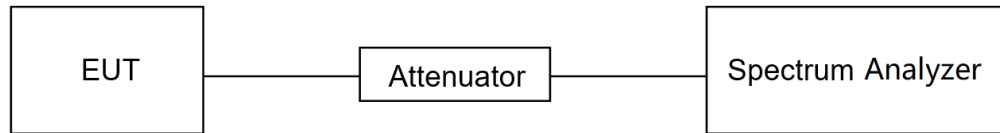
Refer to ANSI C63.10-2020 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the spectrum analyzer 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: 1 % to 5 % of the OBW but not less than 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	25.5℃	Relative Humidity	65.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5V

TEST DATE / ENGINEER

Test Date	July 7, 2026	Test By	Niki Zhu
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TEST RESULTS

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

7.3. POWER SPECTRAL DENSITY

LIMITS

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

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.10.5.

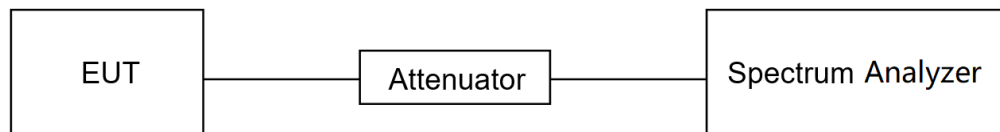
Connect the EUT to the spectrum analyzer and use the following settings:

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	$> 1.5 \times \text{OBW bandwidth}$
Trace	Employ trace averaging(rms)mode over a minimum of 100 traces
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	25.5°C	Relative Humidity	65.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5V

TEST DATE / ENGINEER

Test Date	July 7, 2026	Test By	Niki Zhu
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TEST RESULTS

Please refer to section "Test Data" - Appendix D

7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

LIMITS

FCC 47 CFR Part15 (15.247) Subpart C		
Section	Test Item	Limit
FCC 47 CFR §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 C63.10-2020 clause 11.11.

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

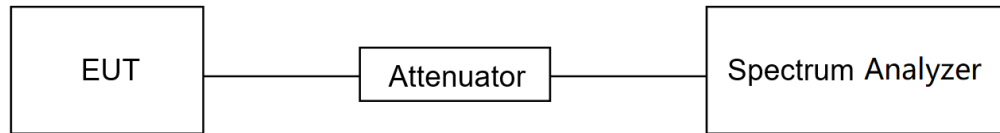
Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	$\geq 1.5 \times \text{DTS bandwidth}$
Trace	Max hold
Sweep time	No faster than coupled (auto) time

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	No faster than coupled (auto) time

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	25.5℃	Relative Humidity	65.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5V

TEST DATE / ENGINEER

Test Date	July 7, 2026	Test By	Niki Zhu
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TEST RESULTS

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

7.5. DUTY CYCLE

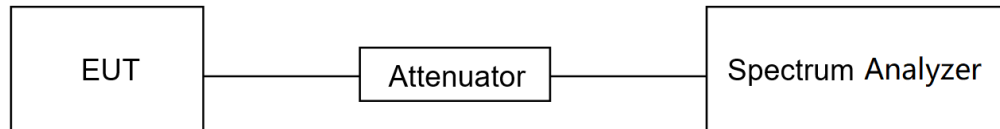
LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5°C	Relative Humidity	65.2%
Atmosphere Pressure	101kPa	Test Voltage	DC 5V

TEST DATE / ENGINEER

Test Date	July 7, 2026	Test By	Niki Zhu
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TEST RESULTS

Please refer to section "Test Data" - Appendix G

8. RADIATED TEST RESULTS

LIMITS

Please refer to FCC 47 CFR §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 47 CFR §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 analyzer

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 C63.10-2020 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 analyzer

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

1. The testing follows the guidelines in ANSI C63.10-2020 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.

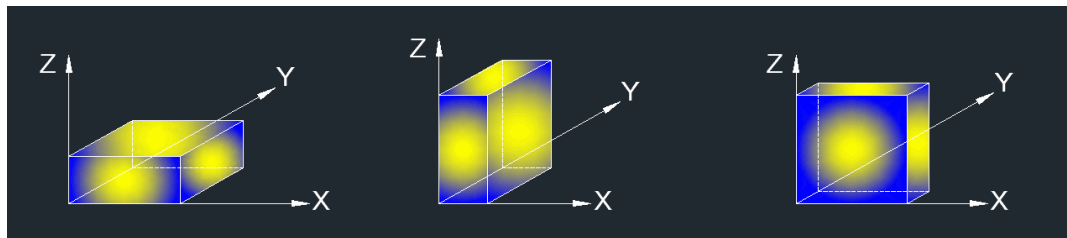
Above 1 GHz

The setting of the spectrum analyzer

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 C63.10-2020 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 Restricted Bandedge:

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. PK=Peak: Peak detector.
4. AV=Average: 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. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes have been tested, but only the worst data was recorded in the report.
9. We have verified that the test result of band edge on adjacent channels were better than Low channel and High channel, so only the worst data of low channel and high channel were recorded in this report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):

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 have been tested, but only the worst data was recorded in the report.
5. $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}[120\pi] = \text{dBuV/m} - 51.5$

For Radiate Spurious Emission (30 MHz ~ 1 GHz):

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

For Radiate Spurious Emission (1 GHz ~ 3 GHz):

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 have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (3 GHz ~ 18 GHz):

Note:

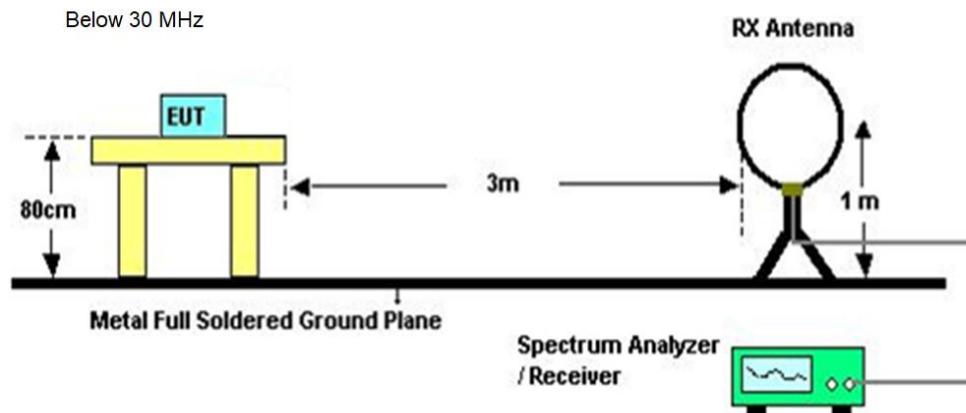
1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please 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 have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (18 GHz ~ 26 GHz):

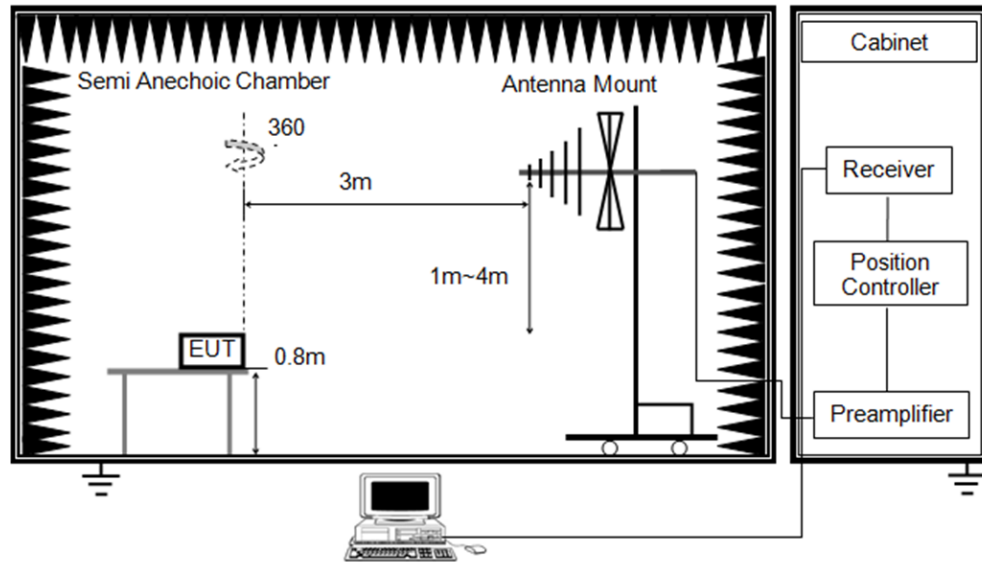
Note:

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 have been tested, but only the worst data was recorded in the report.

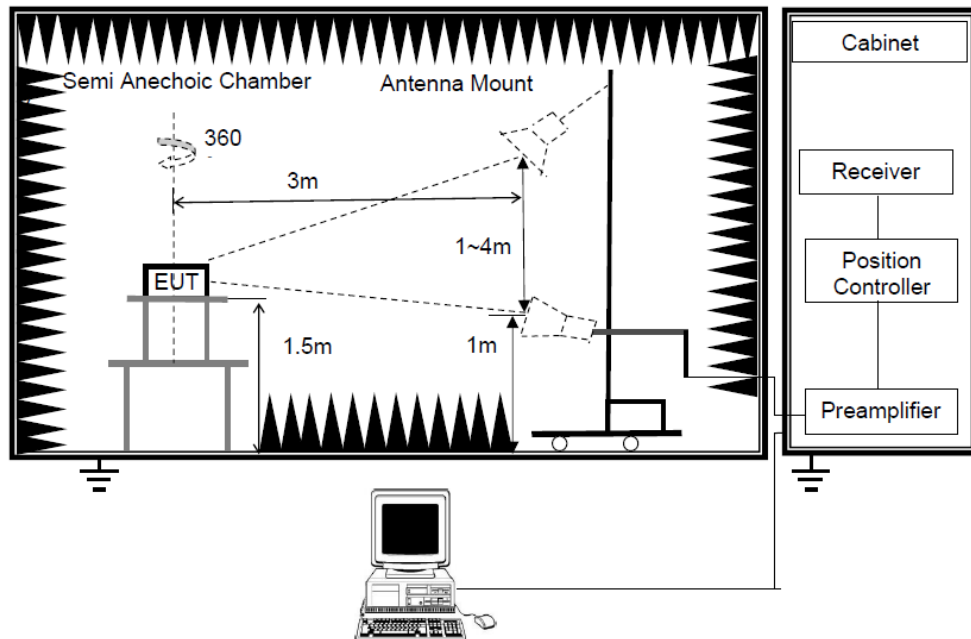
TEST SETUP



Below 1 GHz and above 30 MHz



Above 1GHz



TEST ENVIRONMENT

Temperature	22.1℃	Relative Humidity	61.2%
Atmosphere Pressure	101kPa	Test Voltage	

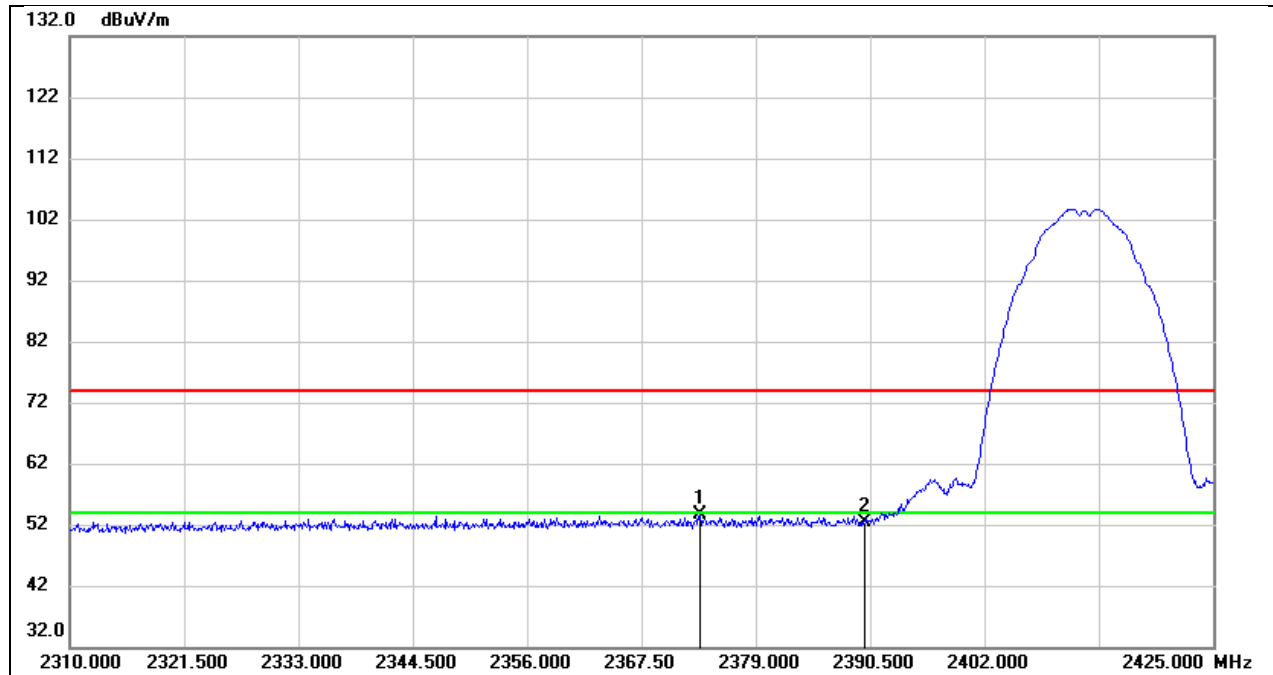
TEST DATE / ENGINEER

Test Date	July 13, 2026	Test By	Mason Wang
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TEST RESULTS

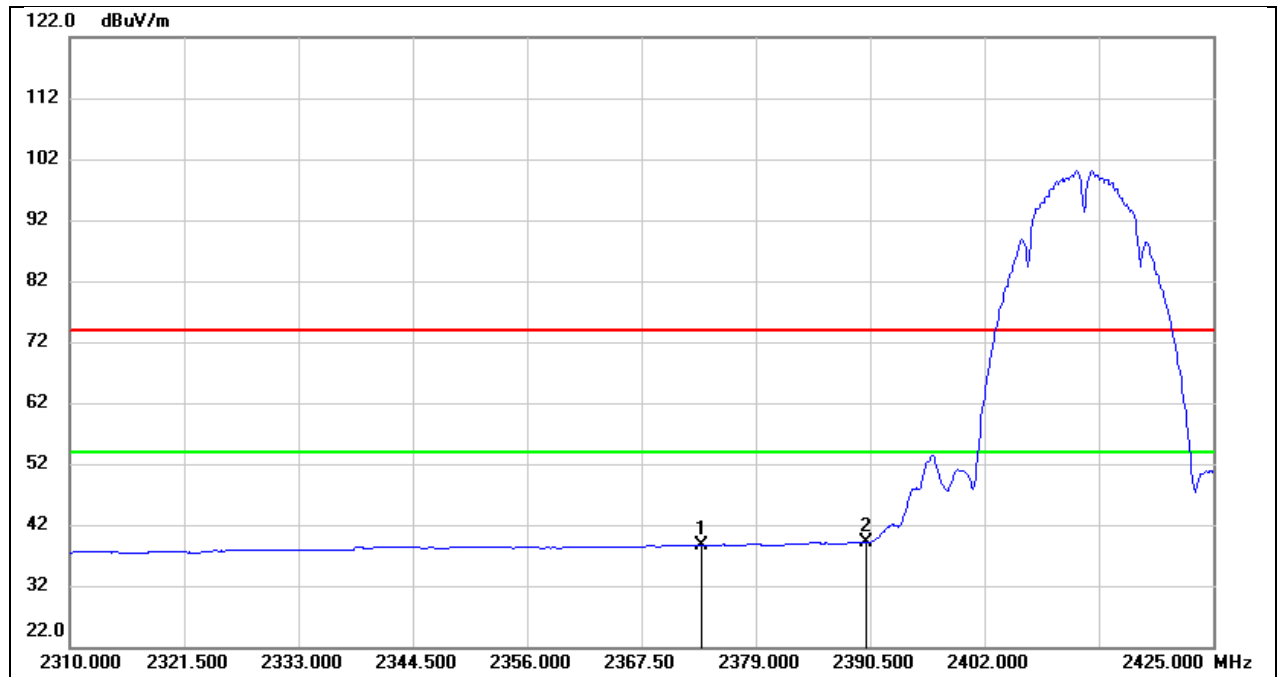
8.1. RESTRICTED BANDEDGE

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



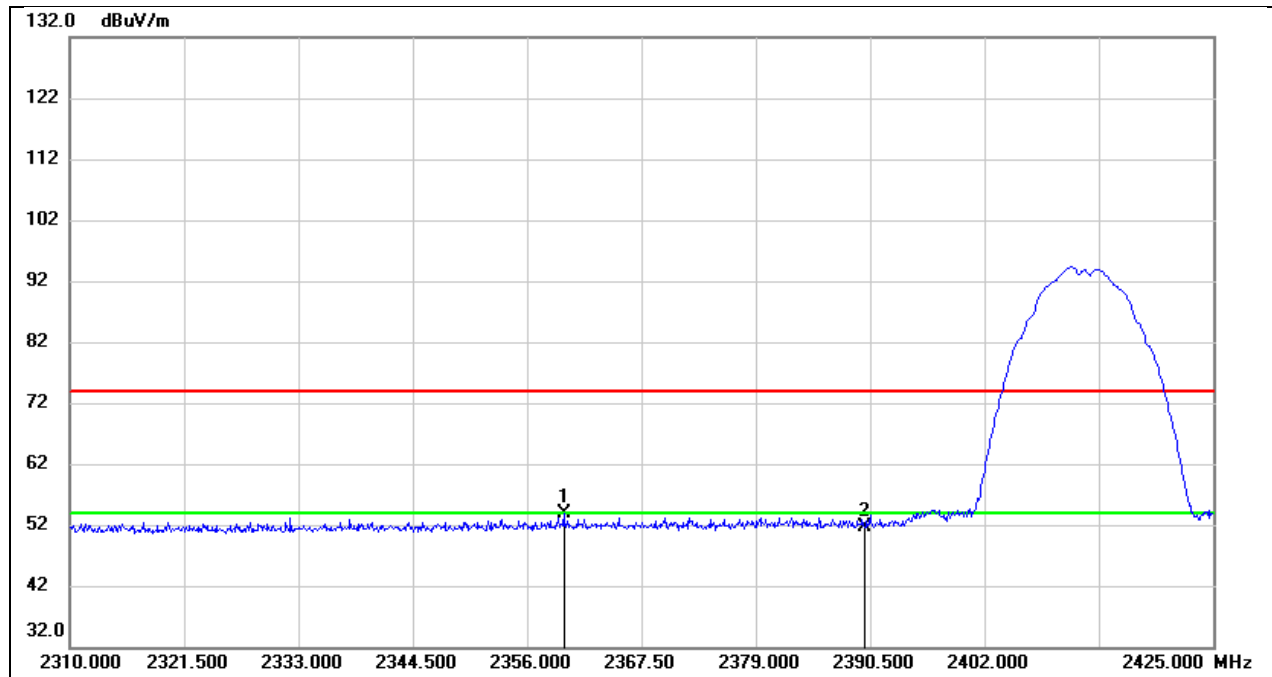
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.365	21.67	31.91	53.58	74.00	-20.42	peak
2	2390.000	20.33	31.99	52.32	74.00	-21.68	peak

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



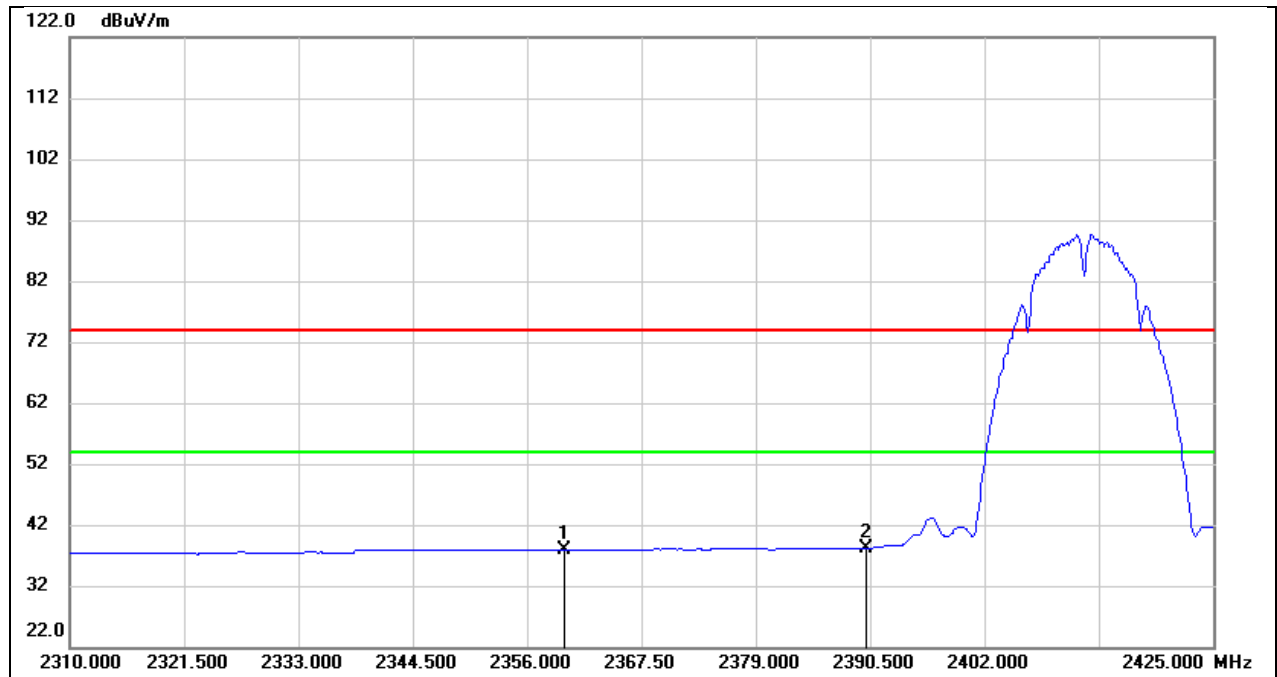
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.365	6.76	31.91	38.67	54.00	-15.33	AVG
2	2390.000	7.06	31.99	39.05	54.00	-14.95	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



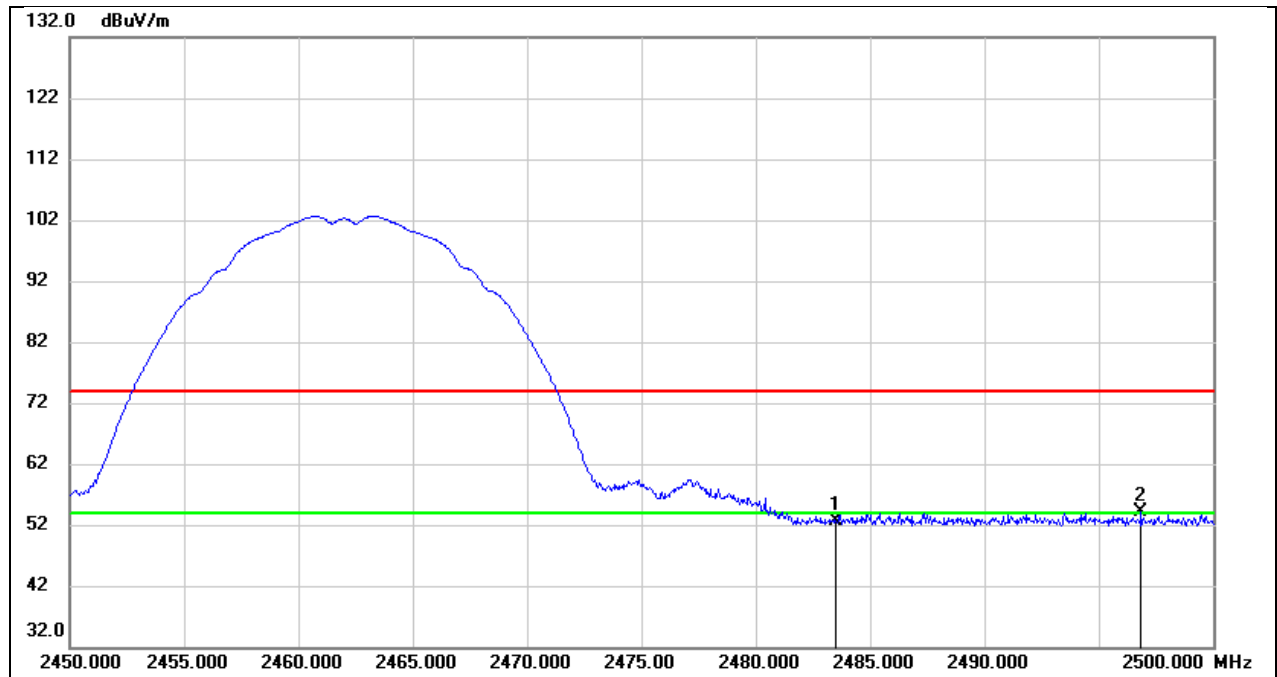
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2359.680	21.97	31.84	53.81	74.00	-20.19	peak
2	2390.000	19.52	31.99	51.51	74.00	-22.49	peak

Test Mode:	802.11b AV	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



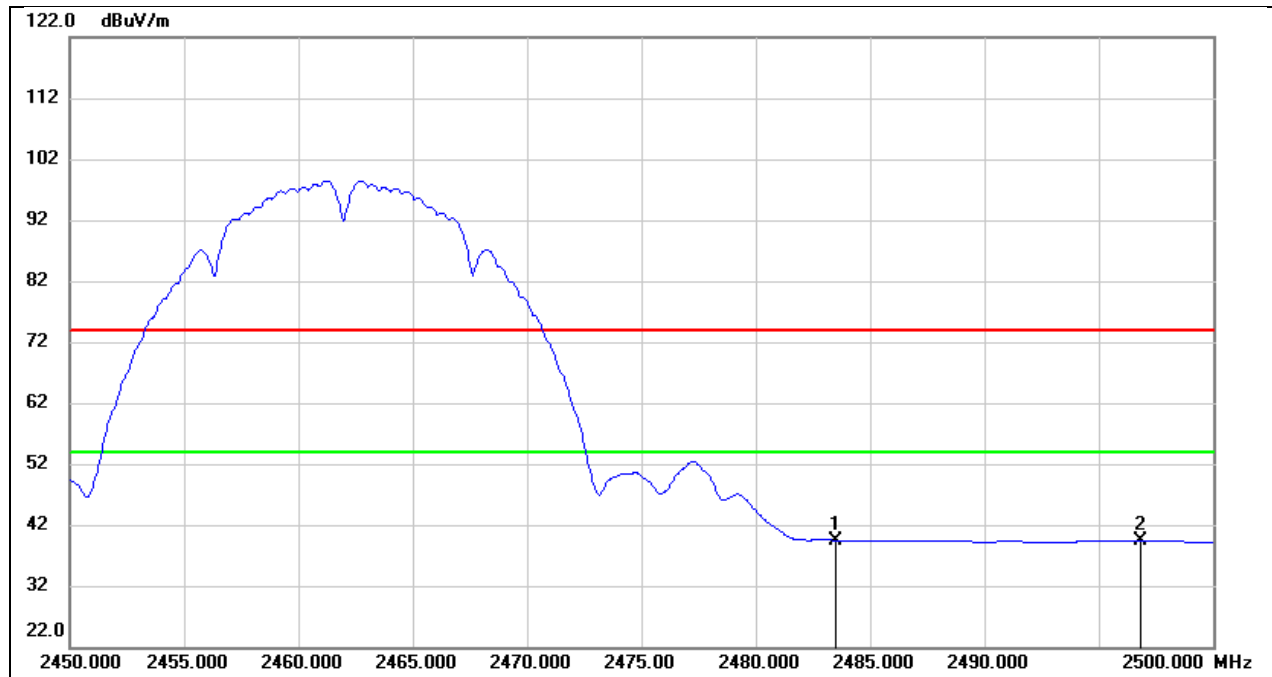
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2359.680	6.01	31.84	37.85	54.00	-16.15	AVG
2	2390.000	6.21	31.99	38.20	54.00	-15.80	AVG

Test Mode:	802.11b PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



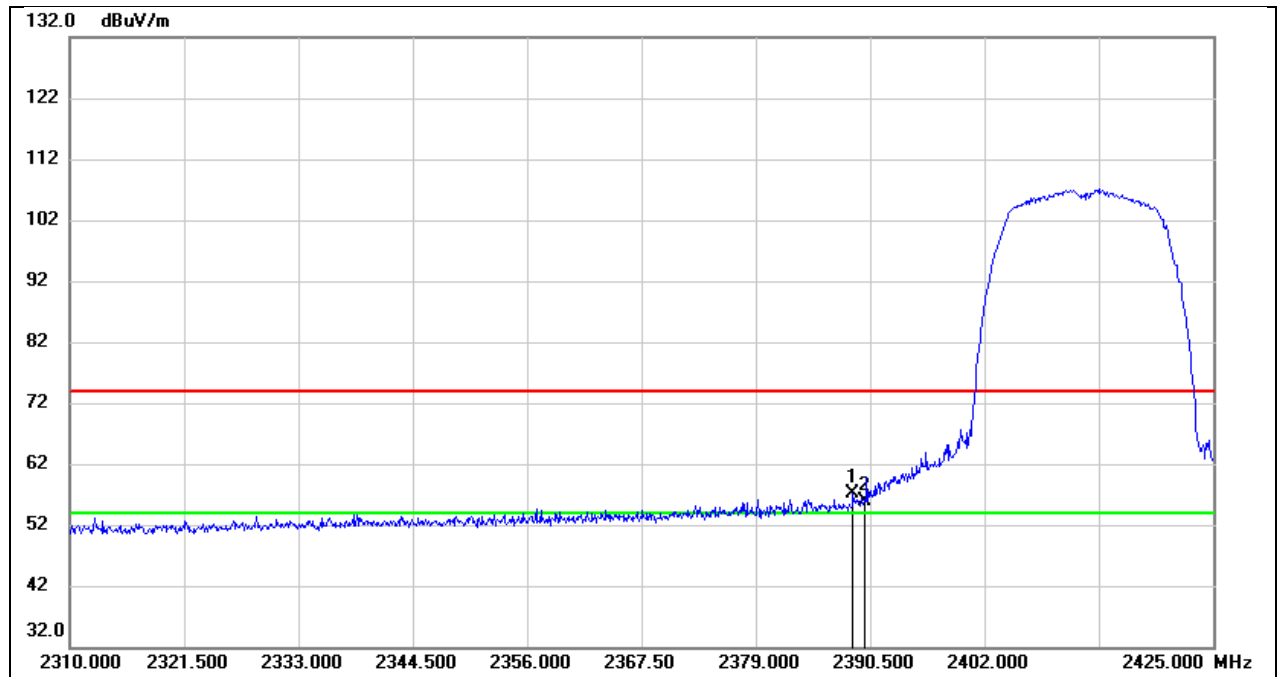
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	20.36	32.35	52.71	74.00	-21.29	peak
2	2496.850	21.63	32.40	54.03	74.00	-19.97	peak

Test Mode:	802.11b AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



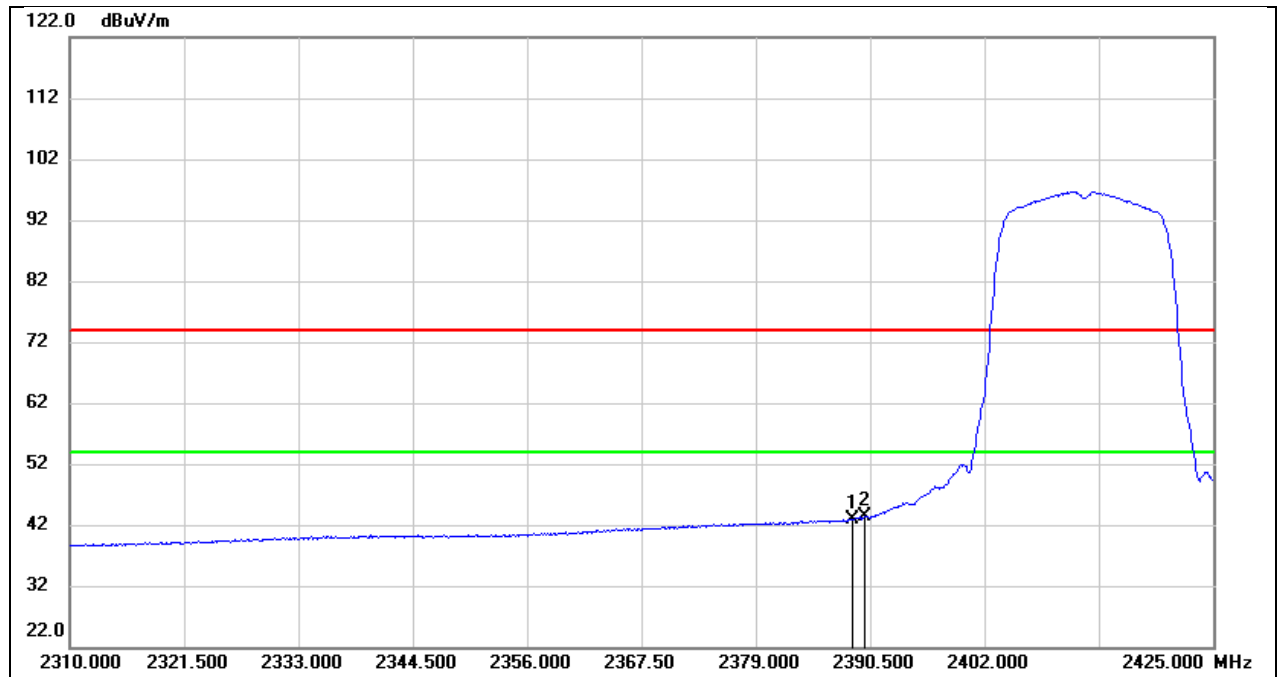
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	7.14	32.35	39.49	54.00	-14.51	AVG
2	2496.850	6.88	32.40	39.28	54.00	-14.72	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



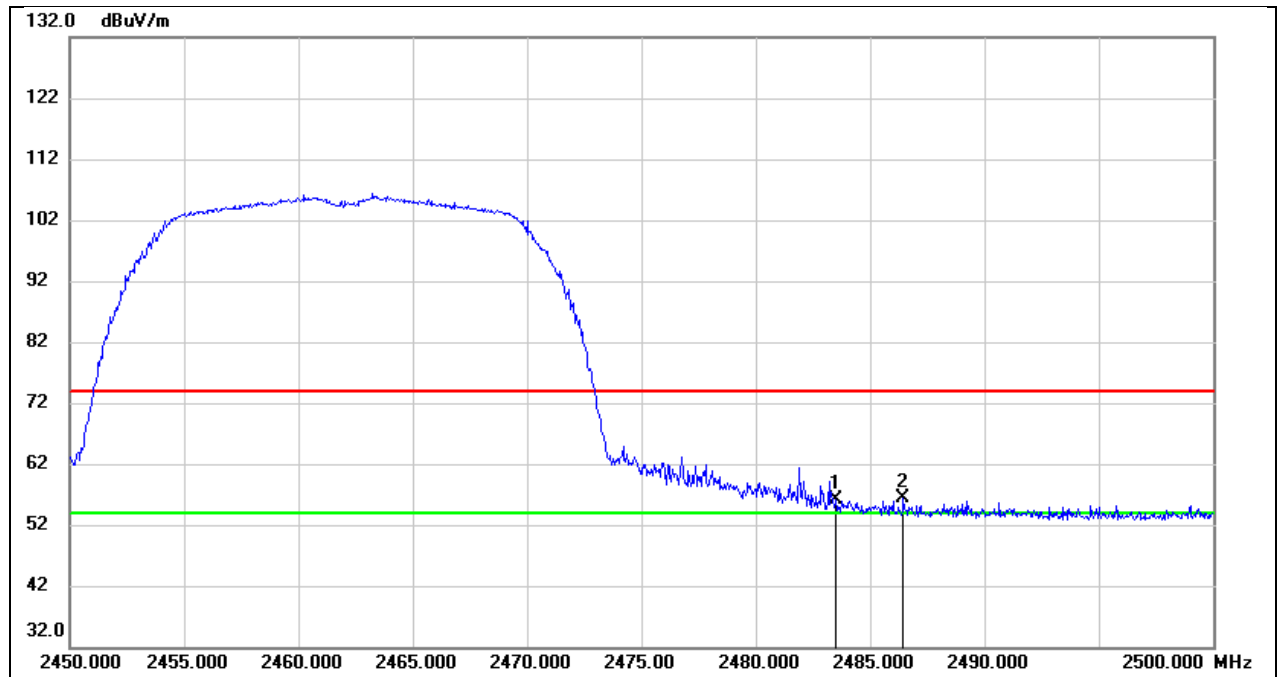
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.775	25.19	31.98	57.17	74.00	-16.83	peak
2	2390.000	23.88	31.99	55.87	74.00	-18.13	peak

Test Mode:	802.11g AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



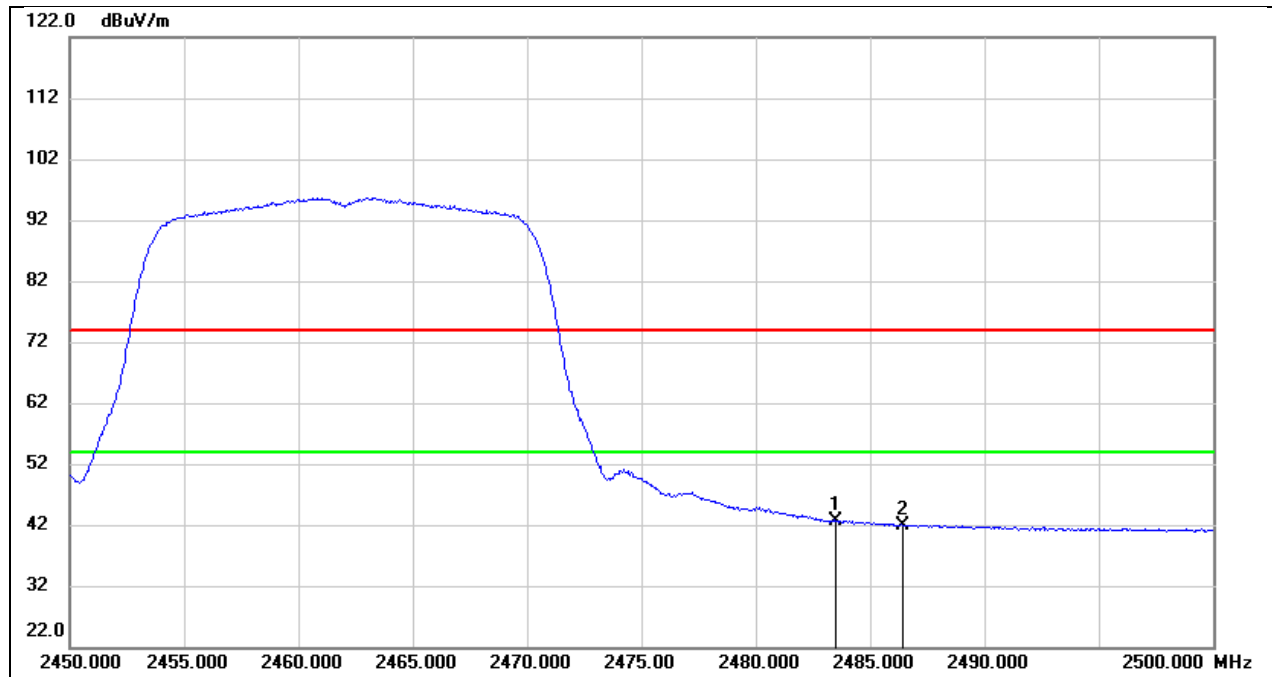
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.775	10.97	31.98	42.95	54.00	-11.05	AVG
2	2390.000	11.29	31.99	43.28	54.00	-10.72	AVG

Test Mode:	802.11g PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



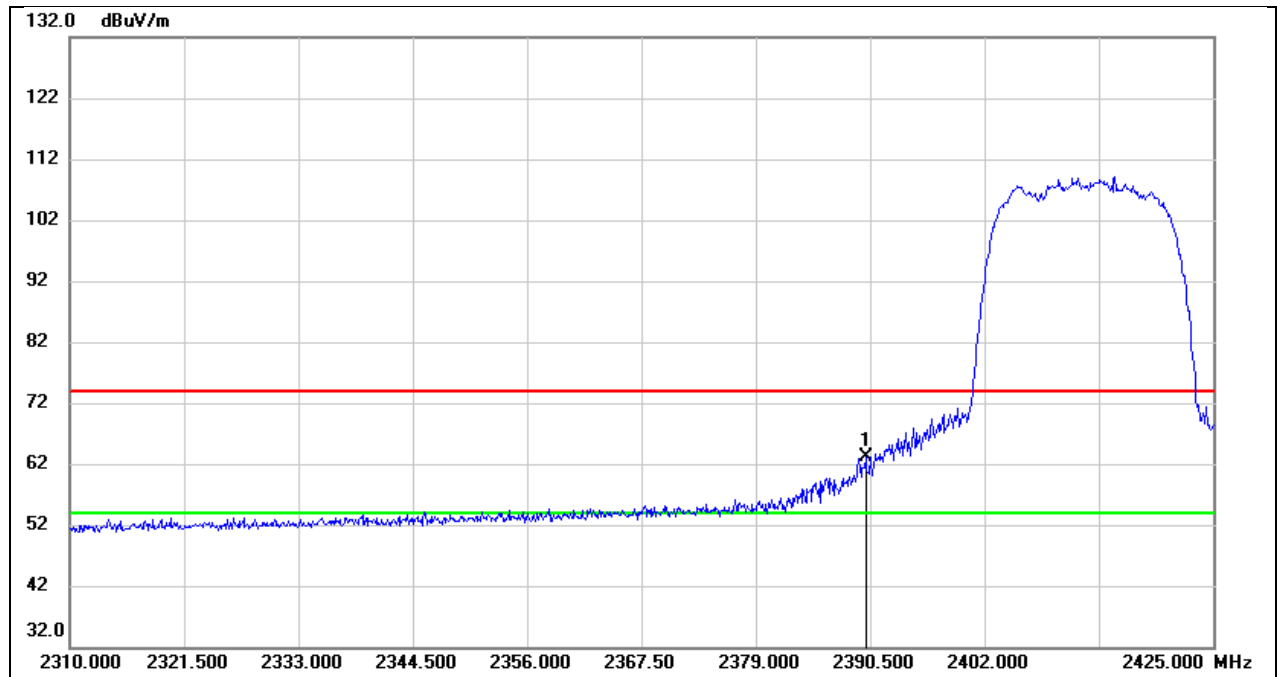
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	23.84	32.35	56.19	74.00	-17.81	peak
2	2486.450	23.92	32.36	56.28	74.00	-17.72	peak

Test Mode:	802.11g AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



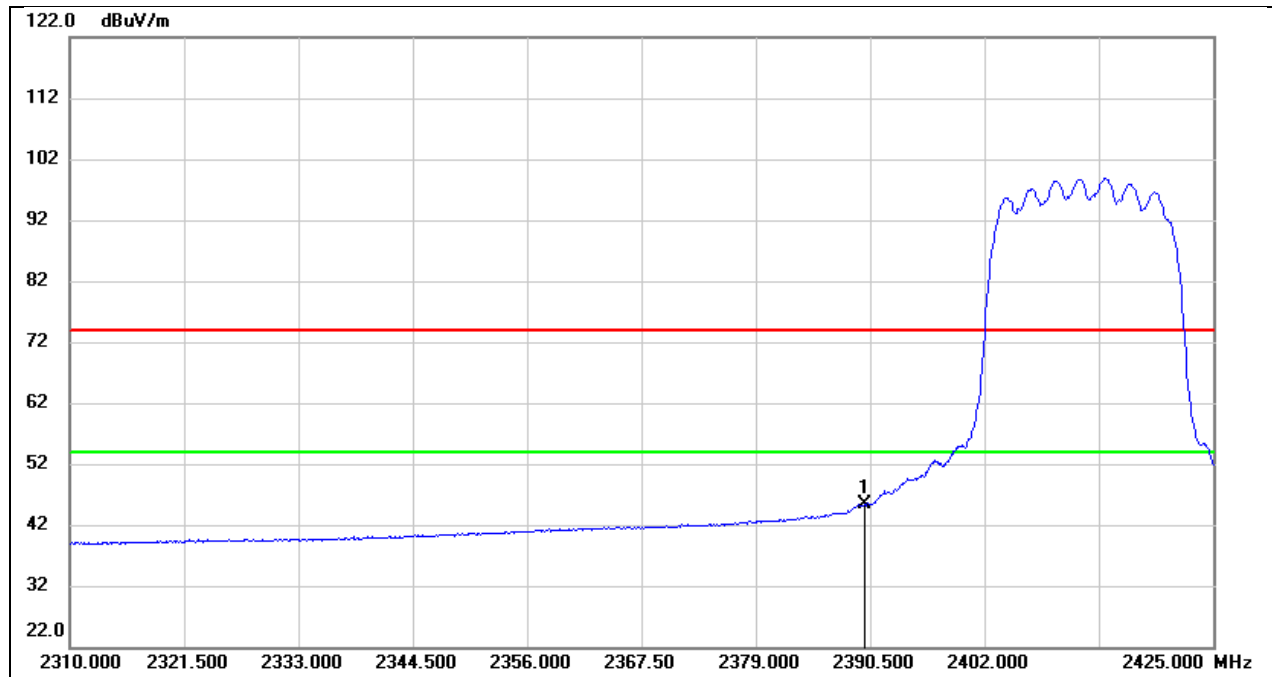
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	10.17	32.35	42.52	54.00	-11.48	AVG
2	2486.450	9.52	32.36	41.88	54.00	-12.12	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



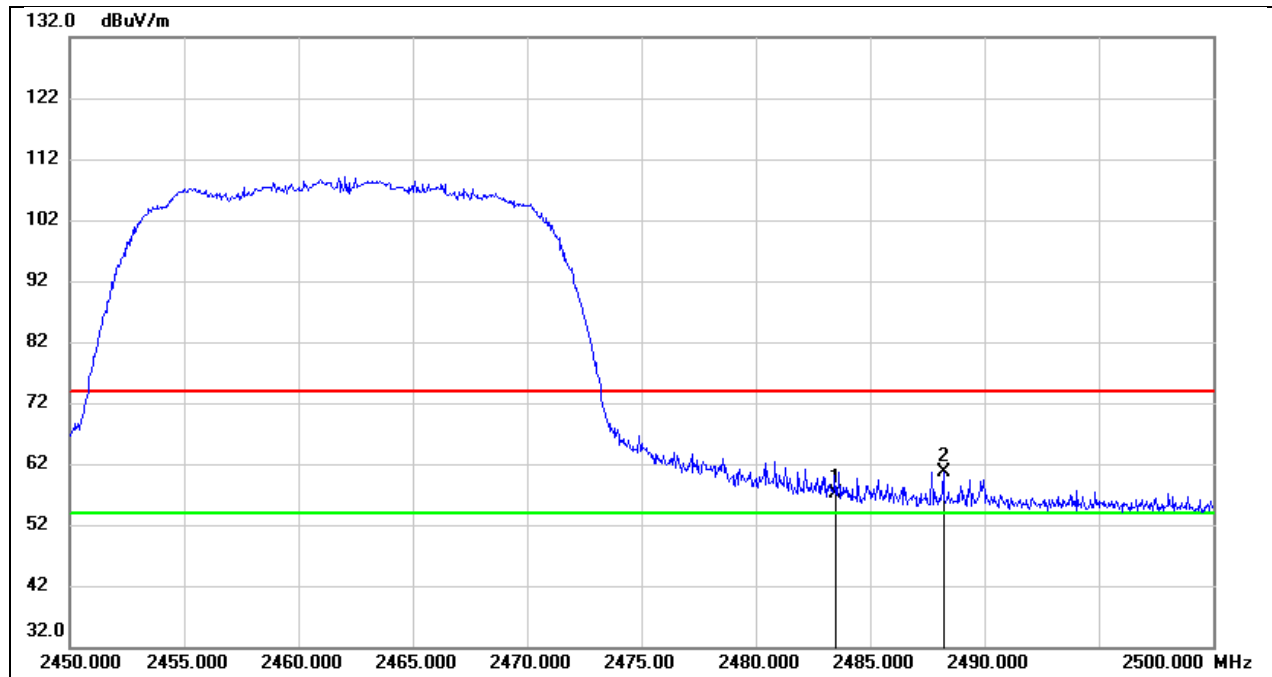
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	31.17	31.99	63.16	74.00	-10.84	peak

Test Mode:	802.11n HT20 AV	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



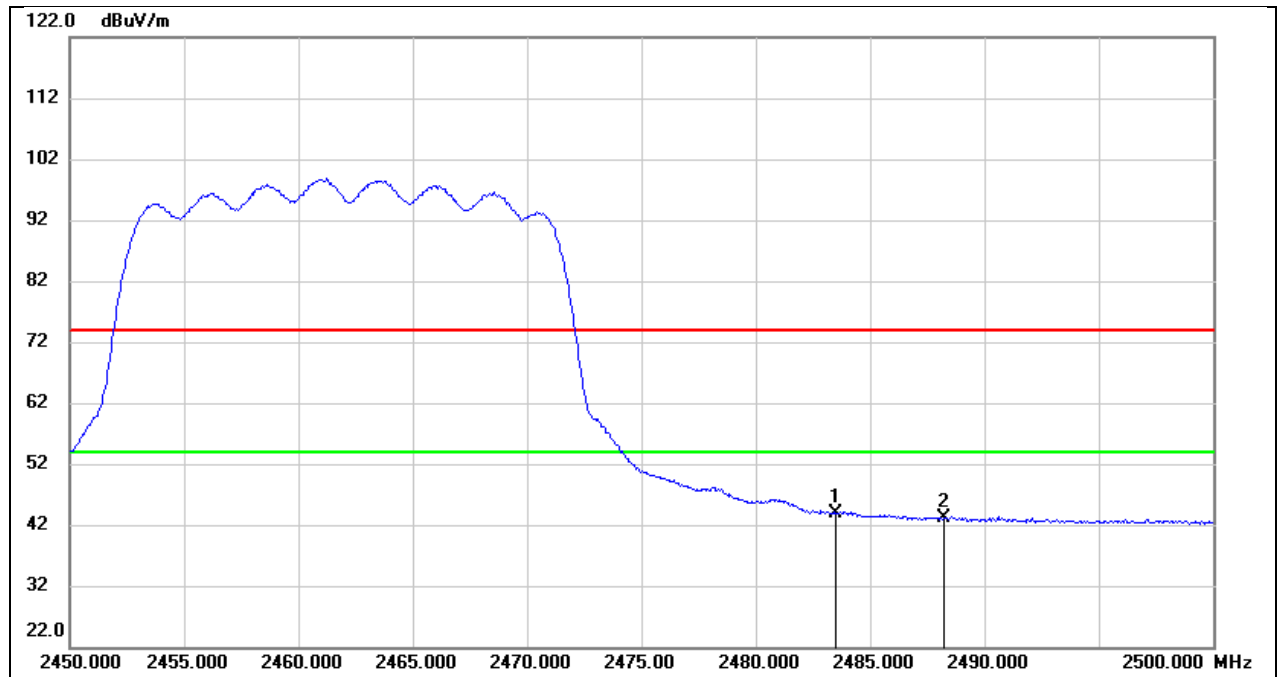
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	13.35	31.99	45.34	54.00	-8.66	AVG

Test Mode:	802.11n HT20 PK	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



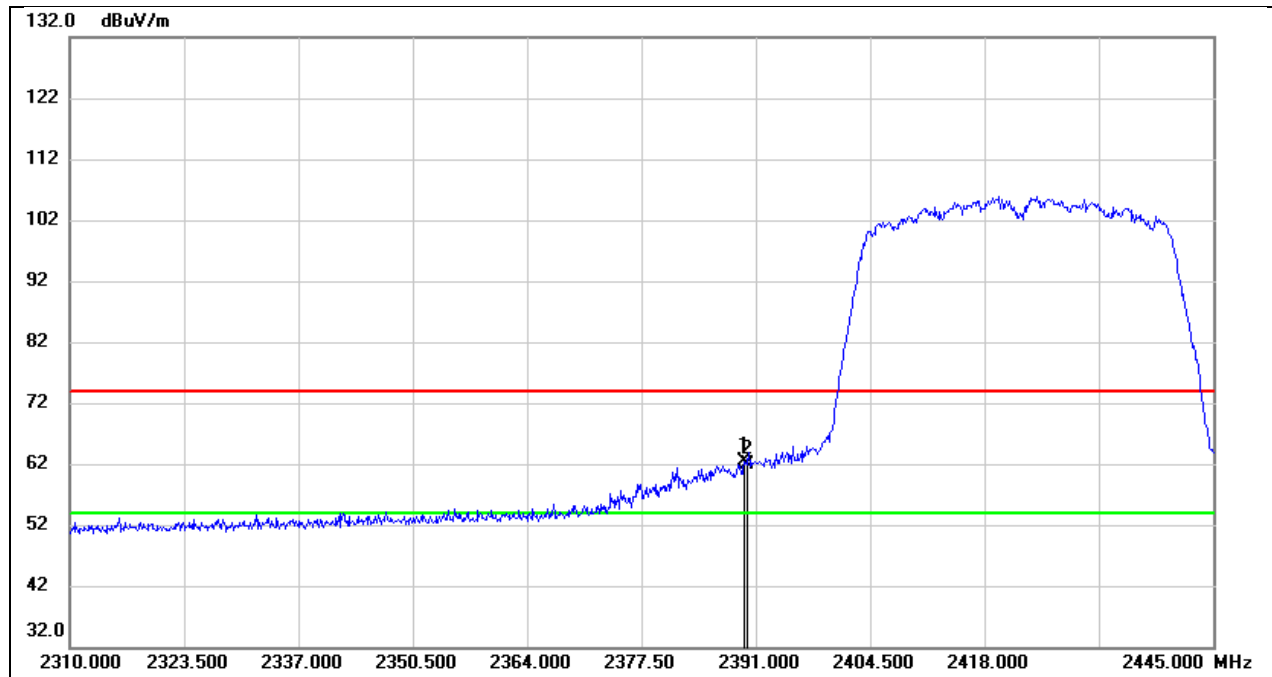
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	24.89	32.35	57.24	74.00	-16.76	peak
2	2488.200	28.30	32.36	60.66	74.00	-13.34	peak

Test Mode:	802.11n HT20 AV	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



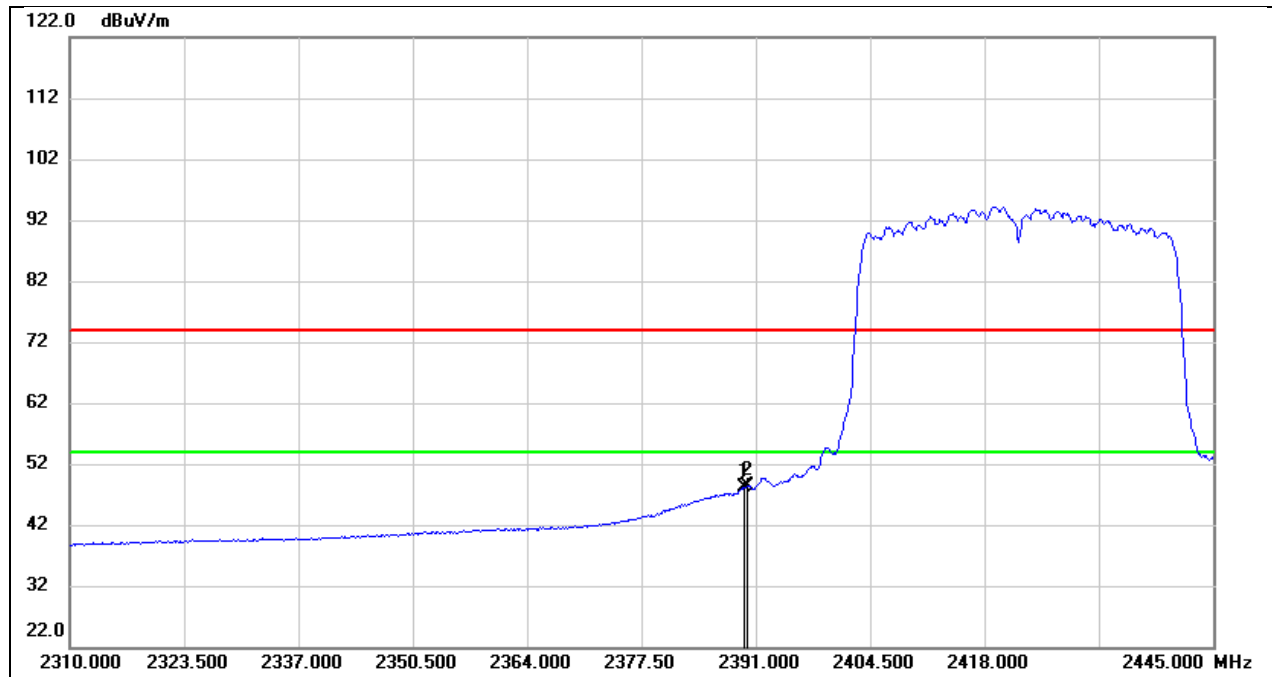
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	11.60	32.35	43.95	54.00	-10.05	AVG
2	2488.200	10.83	32.36	43.19	54.00	-10.81	AVG

Test Mode:	802.11n HT40 PK	Frequency(MHz):	2422
Polarity:	Horizontal	Test Voltage:	DC 5V



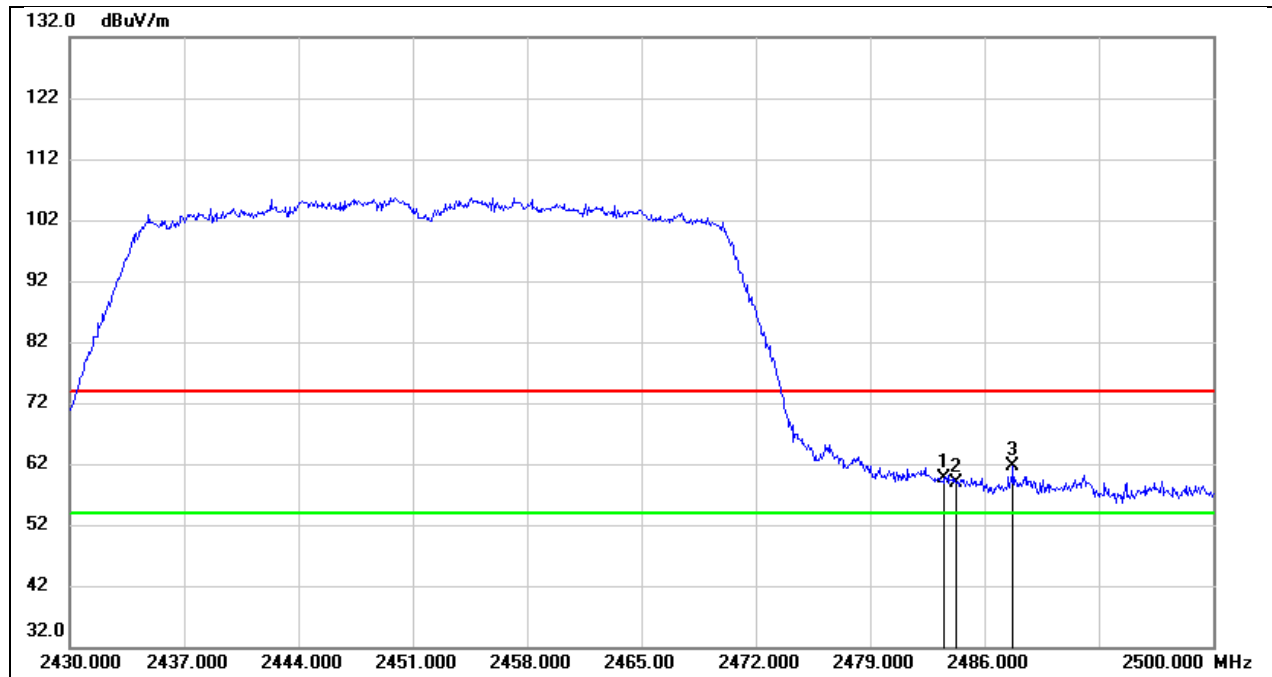
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.650	30.51	31.99	62.50	74.00	-11.50	peak
2	2390.000	29.77	31.99	61.76	74.00	-12.24	peak

Test Mode:	802.11n HT40 AV	Frequency(MHz):	2422
Polarity:	Horizontal	Test Voltage:	DC 5V



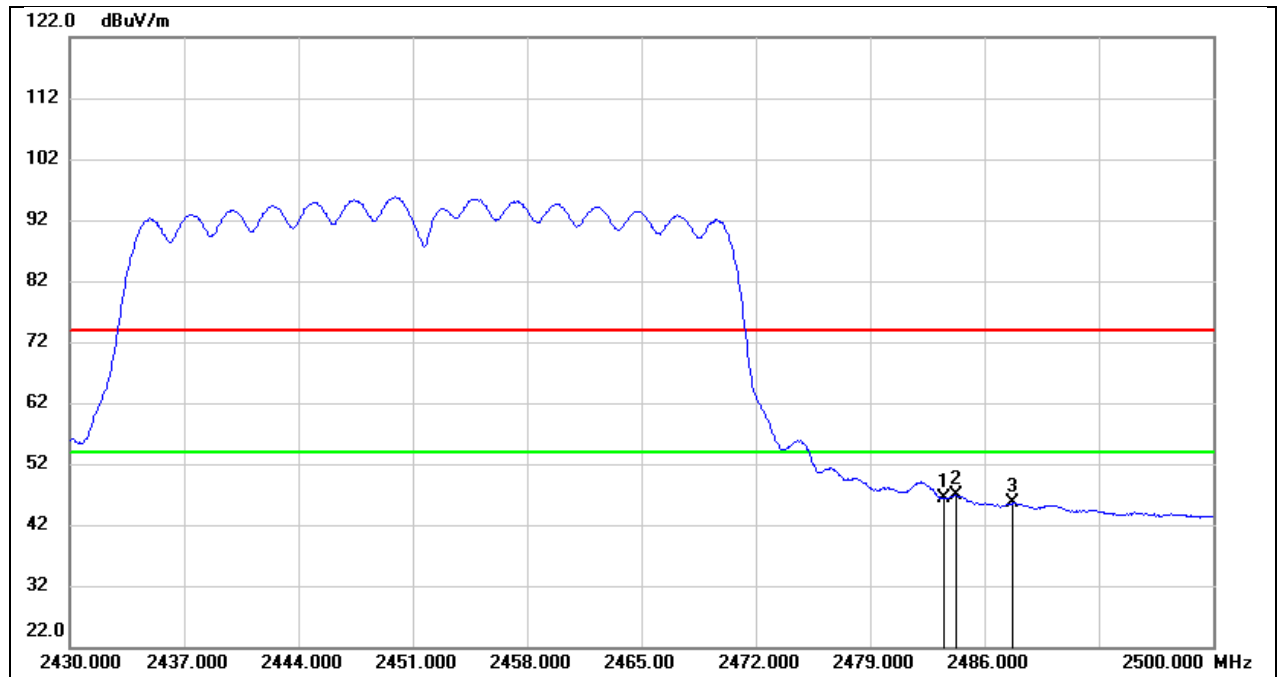
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.650	16.17	31.99	48.16	54.00	-5.84	AVG
2	2390.000	16.32	31.99	48.31	54.00	-5.69	AVG

Test Mode:	802.11n HT40 PK	Frequency(MHz):	2452
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	27.21	32.35	59.56	74.00	-14.44	peak
2	2484.250	26.62	32.35	58.97	74.00	-15.03	peak
3	2487.750	29.16	32.36	61.52	74.00	-12.48	peak

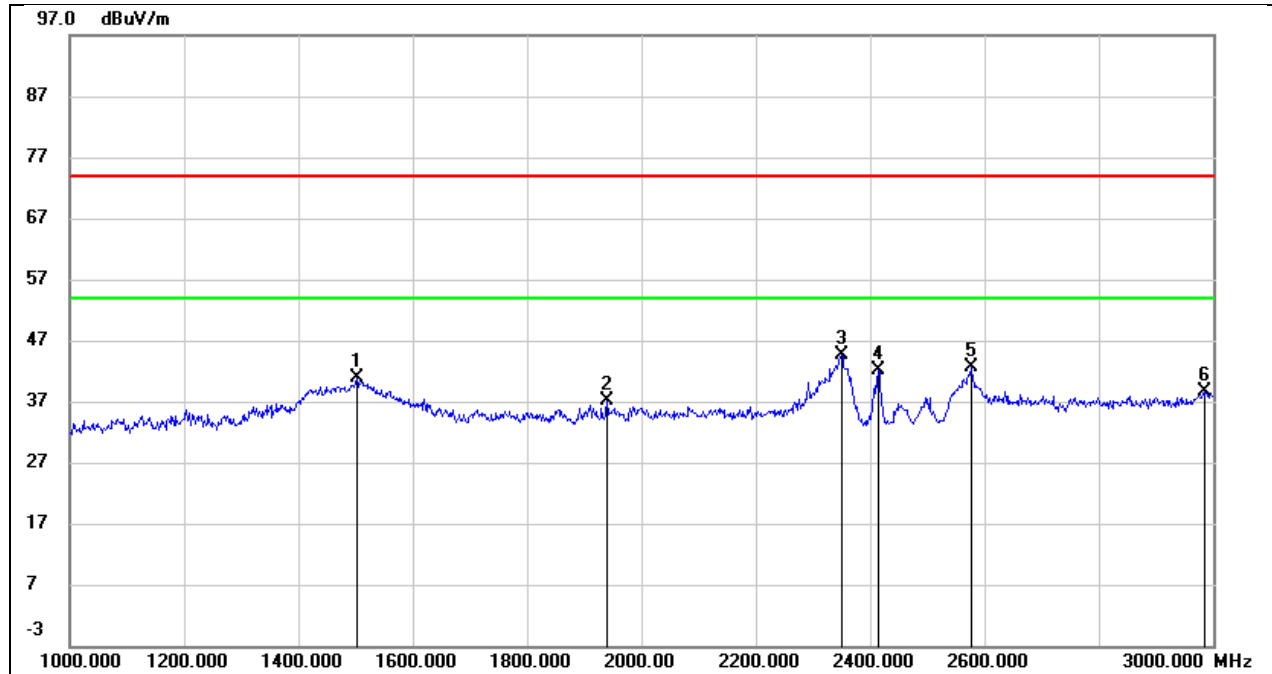
Test Mode:	802.11n HT40 AV	Frequency(MHz):	2452
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	14.10	32.35	46.45	54.00	-7.55	AVG
2	2484.250	14.49	32.35	46.84	54.00	-7.16	AVG
3	2487.750	13.25	32.36	45.61	54.00	-8.39	AVG

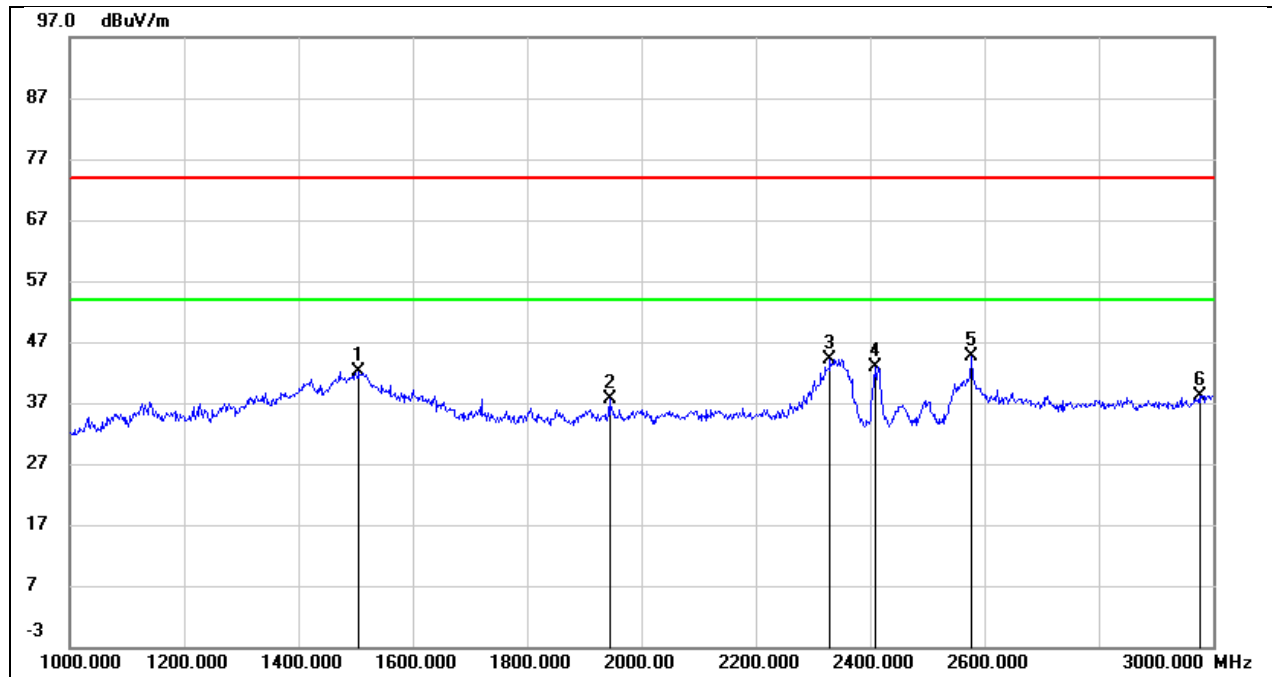
8.2. SPURIOUS EMISSIONS(1 GHZ~3 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



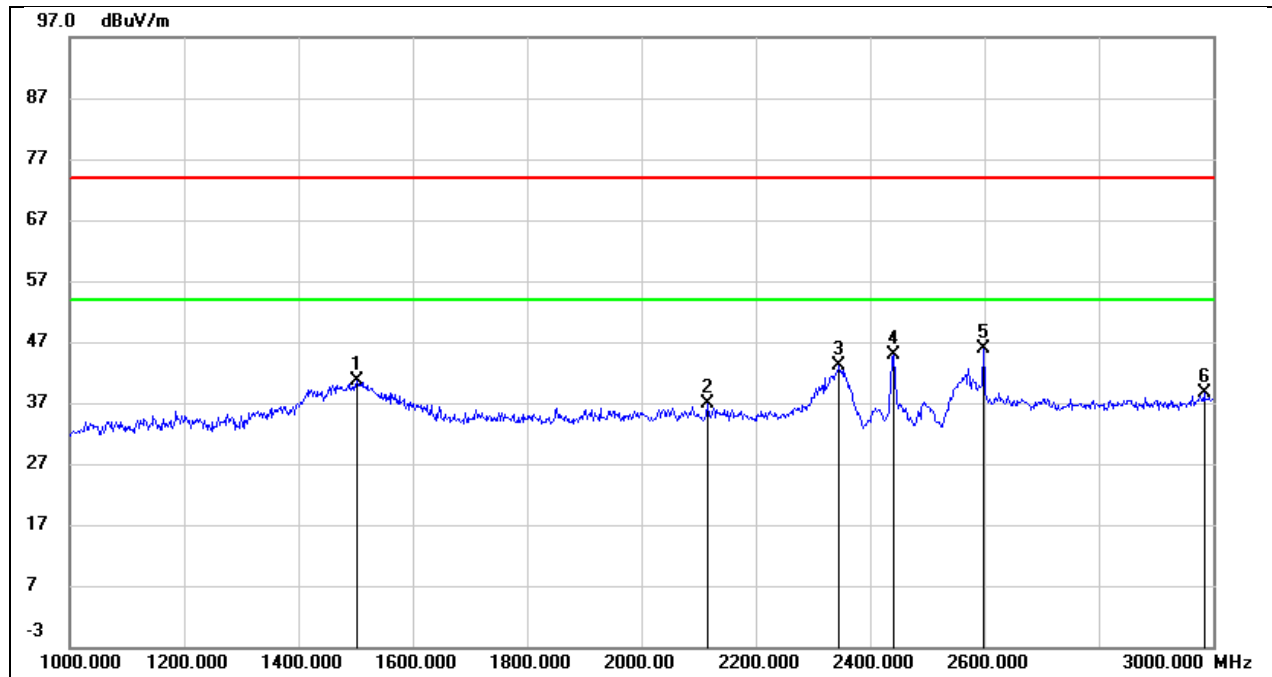
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1502.000	52.52	-11.64	40.88	74.00	-33.12	peak
2	1940.000	47.21	-9.98	37.23	74.00	-36.77	peak
3	2350.000	53.40	-8.78	44.62	74.00	-29.38	peak
4	2412.000	50.46	-8.39	42.07	/	/	fundamental
5	2576.000	50.18	-7.63	42.55	74.00	-31.45	peak
6	2984.000	44.68	-6.11	38.57	74.00	-35.43	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



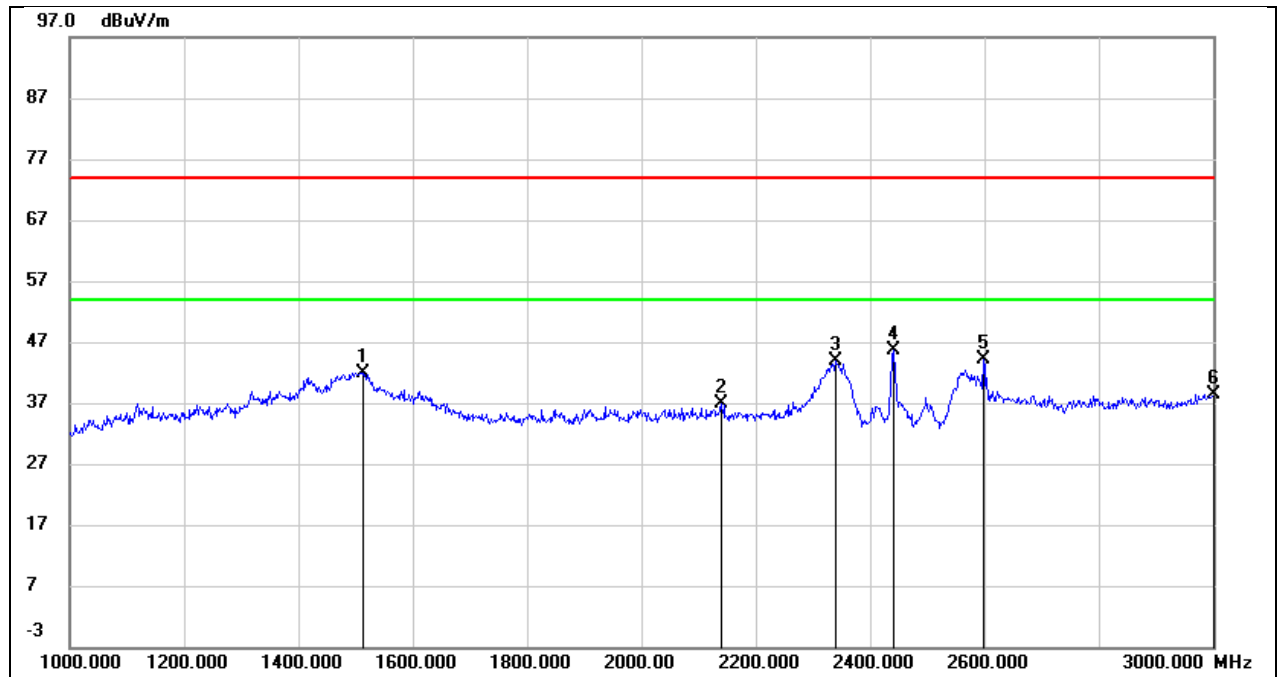
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1506.000	53.65	-11.62	42.03	74.00	-31.97	peak
2	1944.000	47.59	-9.96	37.63	74.00	-36.37	peak
3	2330.000	53.07	-8.90	44.17	74.00	-29.83	peak
4	2412.000	51.37	-8.43	42.94	/	/	fundamental
5	2578.000	52.20	-7.63	44.57	74.00	-29.43	peak
6	2976.000	44.37	-6.13	38.24	74.00	-35.76	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 5V



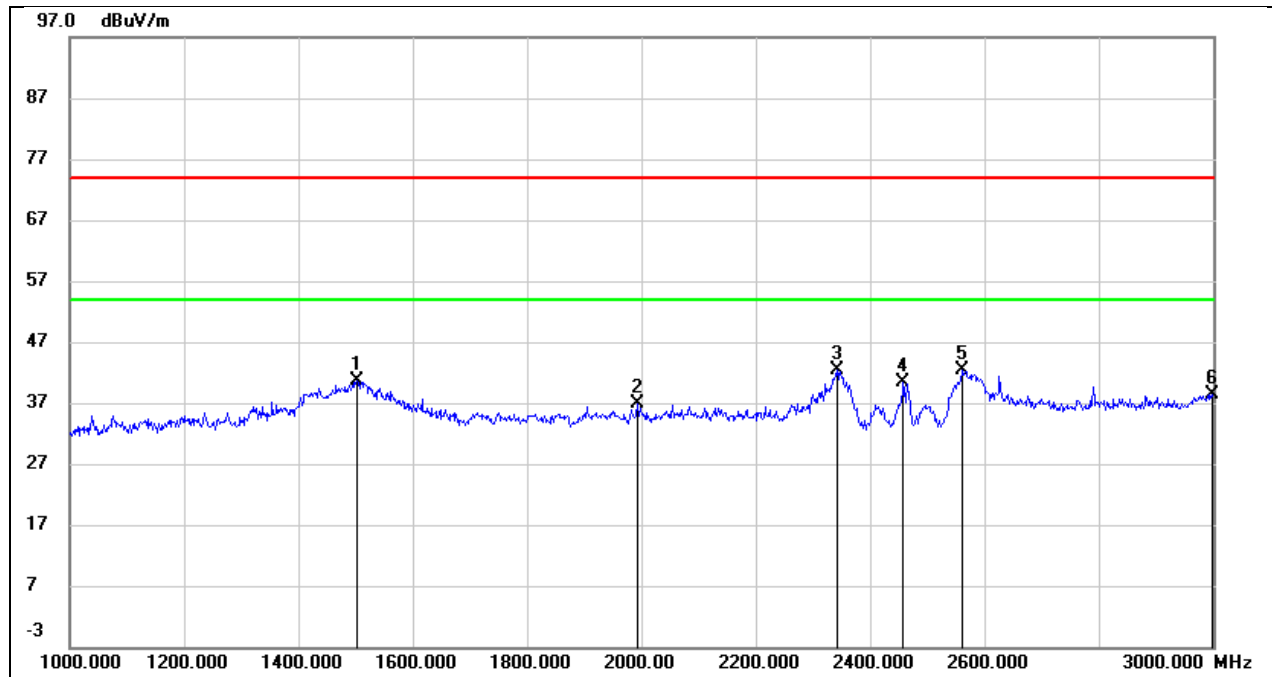
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1502.000	52.21	-11.64	40.57	74.00	-33.43	peak
2	2116.000	46.68	-9.71	36.97	74.00	-37.03	peak
3	2346.000	51.98	-8.80	43.18	74.00	-30.82	peak
4	2437.000	53.22	-8.26	44.96	/	/	fundamental
5	2598.000	53.32	-7.53	45.79	74.00	-28.21	peak
6	2984.000	44.76	-6.11	38.65	74.00	-35.35	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 5V



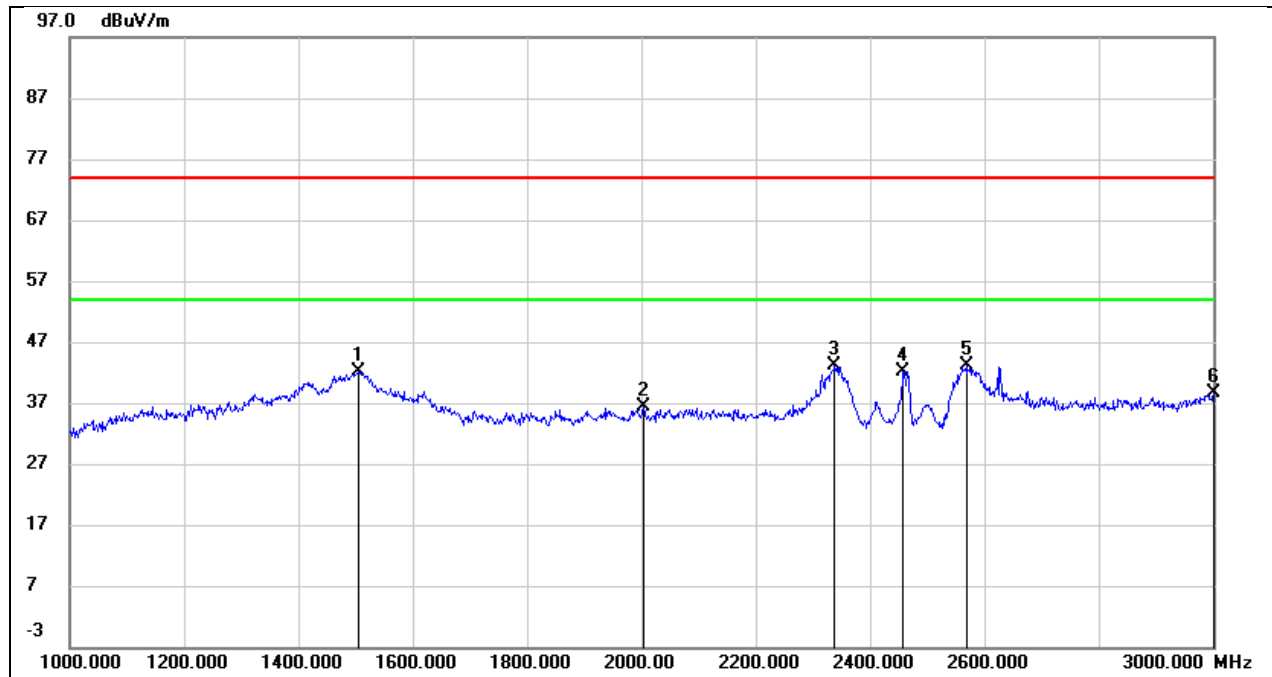
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1514.000	53.48	-11.59	41.89	74.00	-32.11	peak
2	2140.000	46.57	-9.71	36.86	74.00	-37.14	peak
3	2340.000	52.72	-8.83	43.89	74.00	-30.11	peak
4	2437.000	53.81	-8.27	45.54	/	/	fundamental
5	2598.000	51.74	-7.53	44.21	74.00	-29.79	peak
6	3000.000	44.54	-6.04	38.50	74.00	-35.50	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1502.000	52.15	-11.64	40.51	74.00	-33.49	peak
2	1992.000	46.55	-9.74	36.81	74.00	-37.19	peak
3	2342.000	51.24	-8.82	42.42	74.00	-31.58	peak
4	2462.000	48.47	-8.18	40.29	/	/	fundamental
5	2562.000	50.18	-7.70	42.48	74.00	-31.52	peak
6	2998.000	44.44	-6.04	38.40	74.00	-35.60	peak

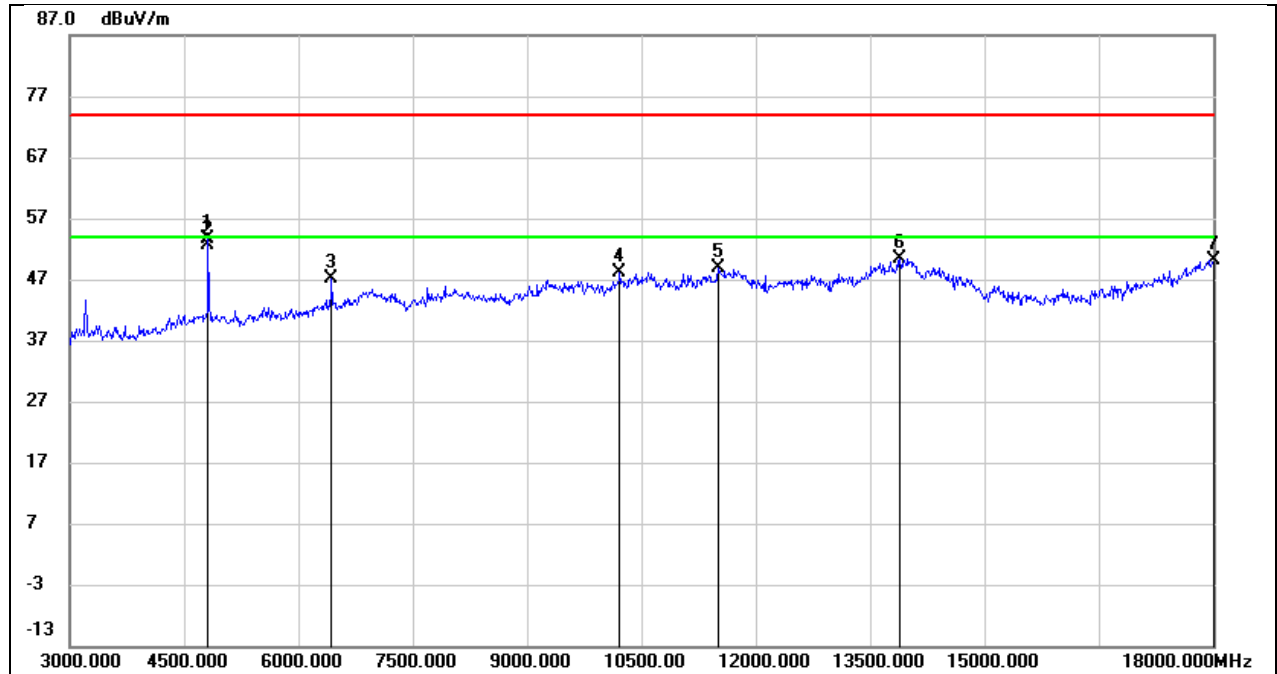
Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1504.000	53.63	-11.62	42.01	74.00	-31.99	peak
2	2004.000	46.12	-9.71	36.41	74.00	-37.59	peak
3	2338.000	52.00	-8.85	43.15	74.00	-30.85	peak
4	2462.000	50.28	-8.18	42.10	/	/	fundamental
5	2568.000	50.88	-7.68	43.20	74.00	-30.80	peak
6	3000.000	44.79	-6.04	38.75	74.00	-35.25	peak

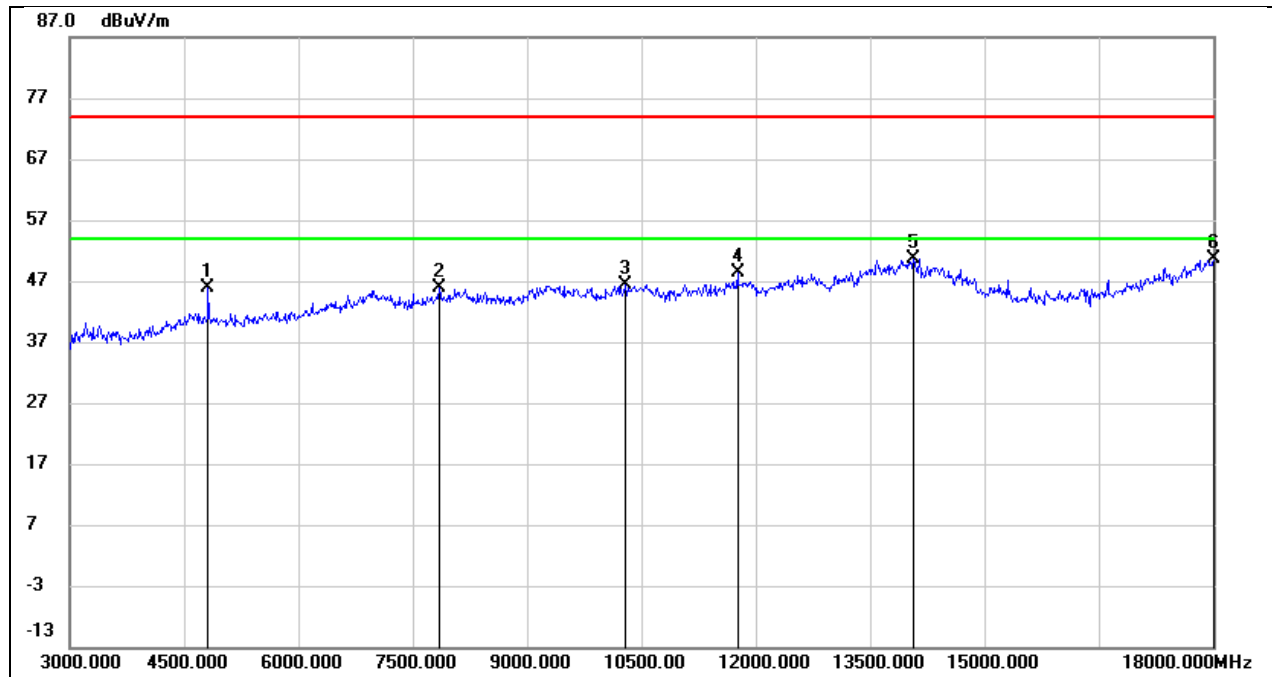
8.3. SPURIOUS EMISSIONS(3 GHZ~18 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



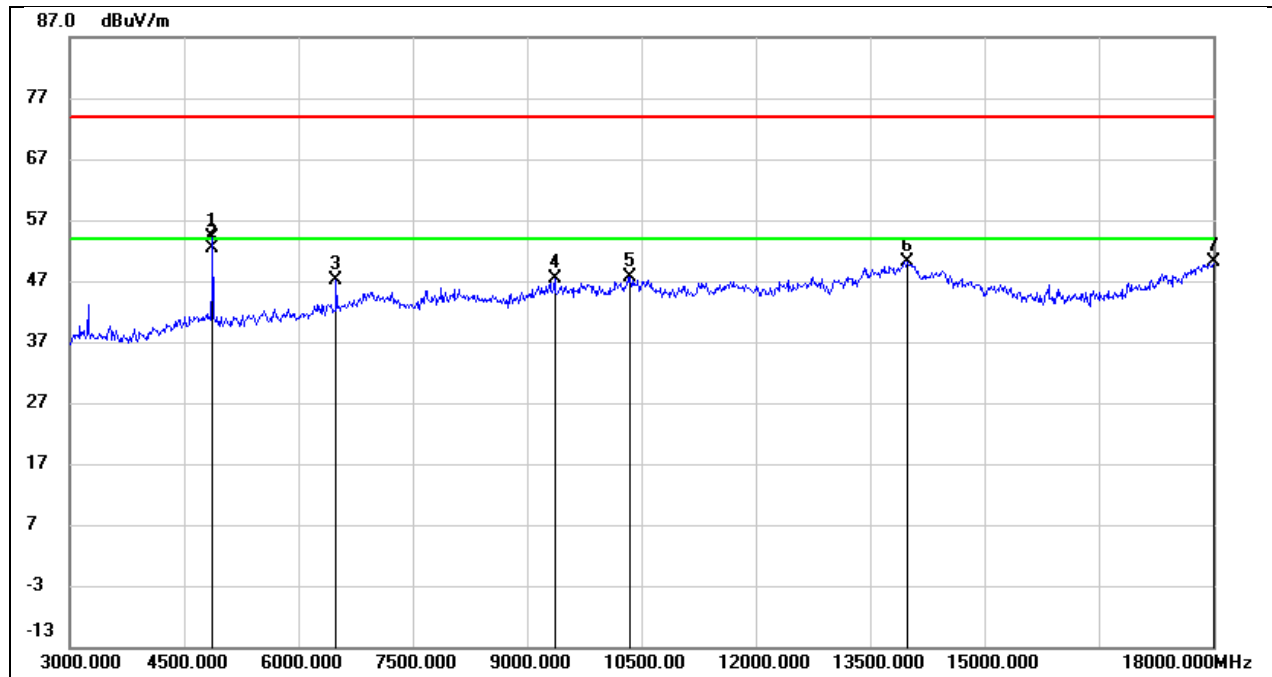
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	53.53	0.22	53.75	74.00	-20.25	peak
2	4815.000	52.44	0.22	52.66	54.00	-1.34	AVG
3	6435.000	42.80	4.25	47.05	74.00	-26.95	peak
4	10215.000	34.70	13.31	48.01	74.00	-25.99	peak
5	11505.000	32.11	16.84	48.95	74.00	-25.05	peak
6	13890.000	26.84	23.64	50.48	74.00	-23.52	peak
7	18000.000	22.20	27.98	50.18	74.00	-23.82	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



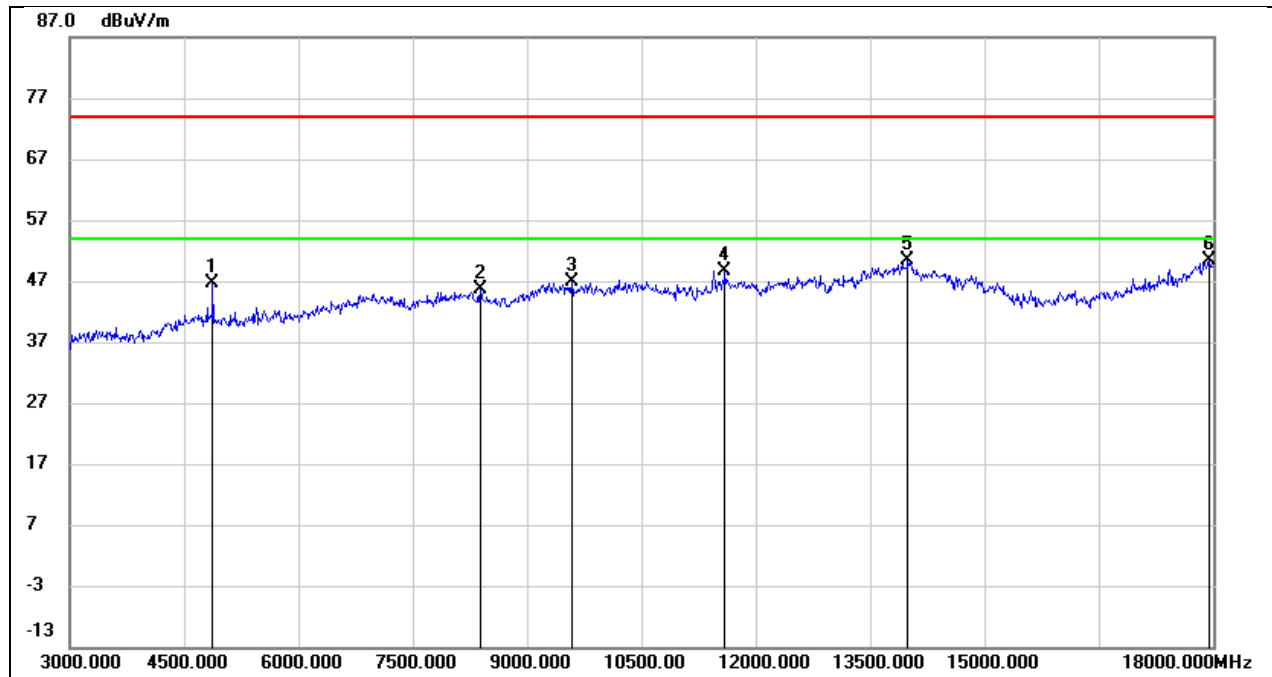
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	45.74	0.22	45.96	74.00	-28.04	peak
2	7845.000	38.36	7.58	45.94	74.00	-28.06	peak
3	10290.000	32.78	13.49	46.27	74.00	-27.73	peak
4	11760.000	30.78	17.62	48.40	74.00	-25.60	peak
5	14070.000	27.08	23.65	50.73	74.00	-23.27	peak
6	18000.000	22.63	27.98	50.61	74.00	-23.39	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 5V



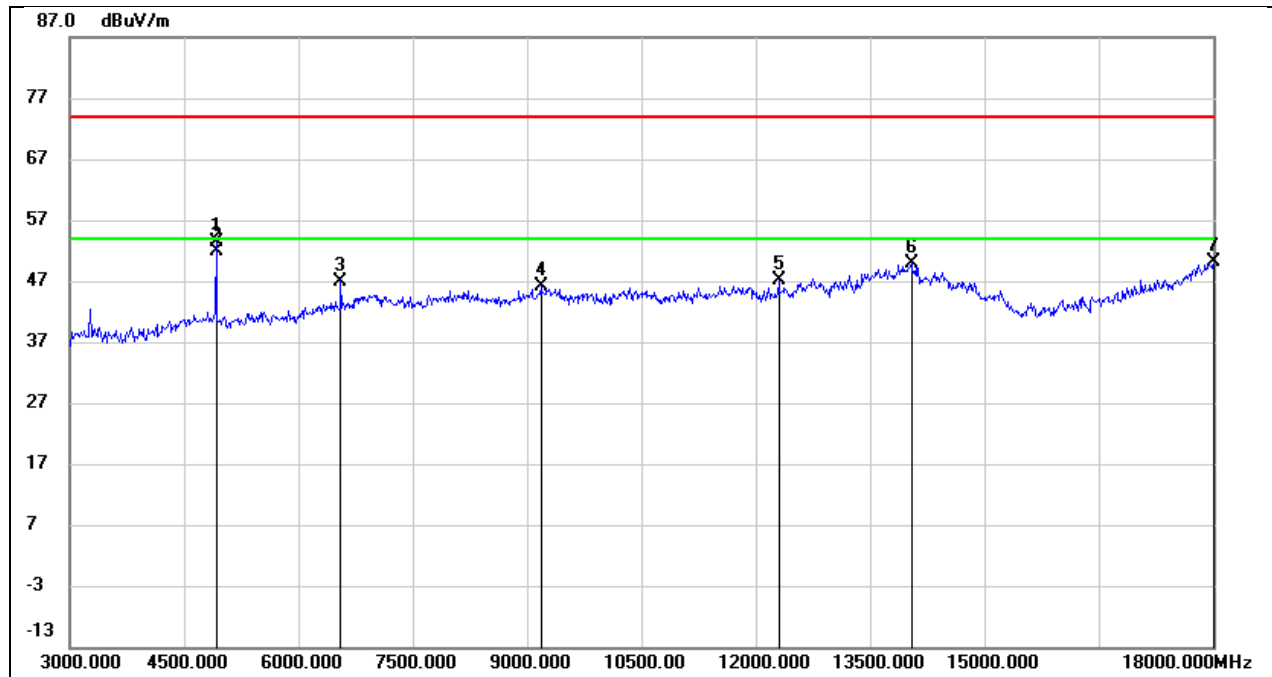
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	53.85	0.35	54.20	74.00	-19.80	peak
2	4875.000	52.00	0.35	52.35	54.00	-1.65	AVG
3	6495.000	42.78	4.46	47.24	74.00	-26.76	peak
4	9360.000	36.70	10.63	47.33	74.00	-26.67	peak
5	10350.000	33.99	13.64	47.63	74.00	-26.37	peak
6	13995.000	26.11	24.04	50.15	74.00	-23.85	peak
7	18000.000	22.12	27.98	50.10	74.00	-23.90	peak

Test Mode:	802.11b	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 5V



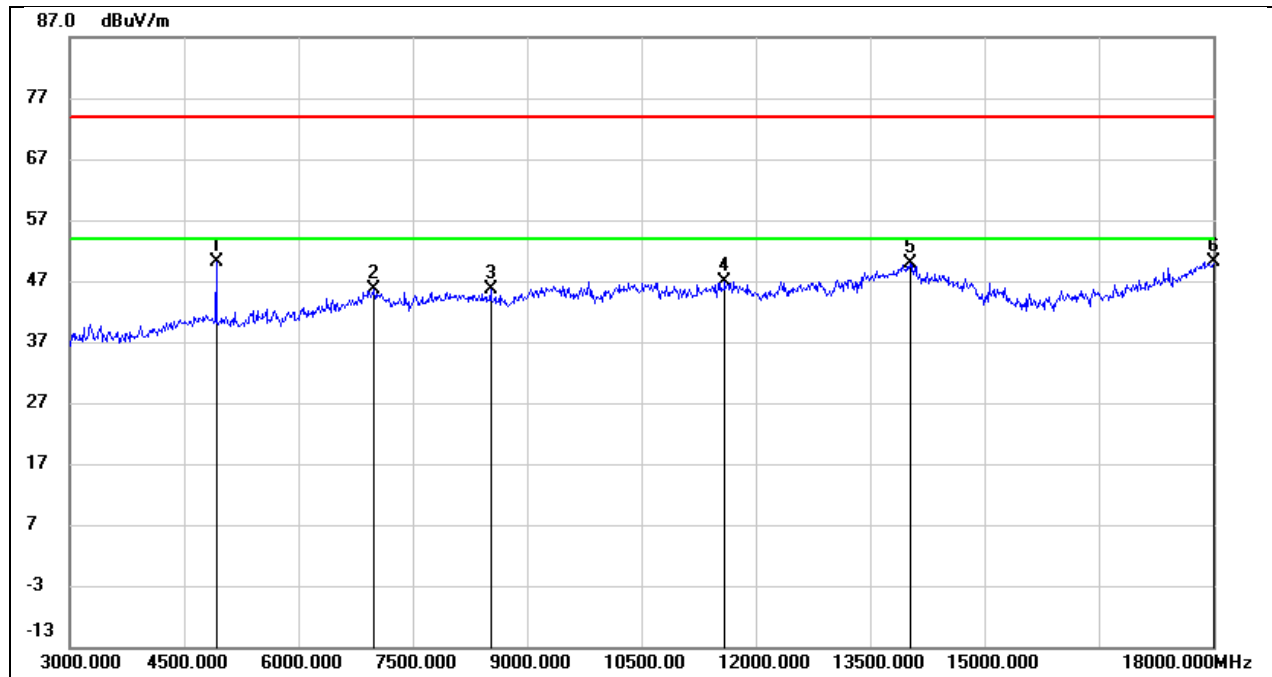
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	46.40	0.35	46.75	74.00	-27.25	peak
2	8385.000	37.50	8.17	45.67	74.00	-28.33	peak
3	9585.000	35.57	11.30	46.87	74.00	-27.13	peak
4	11595.000	31.60	17.13	48.73	74.00	-25.27	peak
5	13995.000	26.41	24.04	50.45	74.00	-23.55	peak
6	17940.000	22.66	27.61	50.27	74.00	-23.73	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



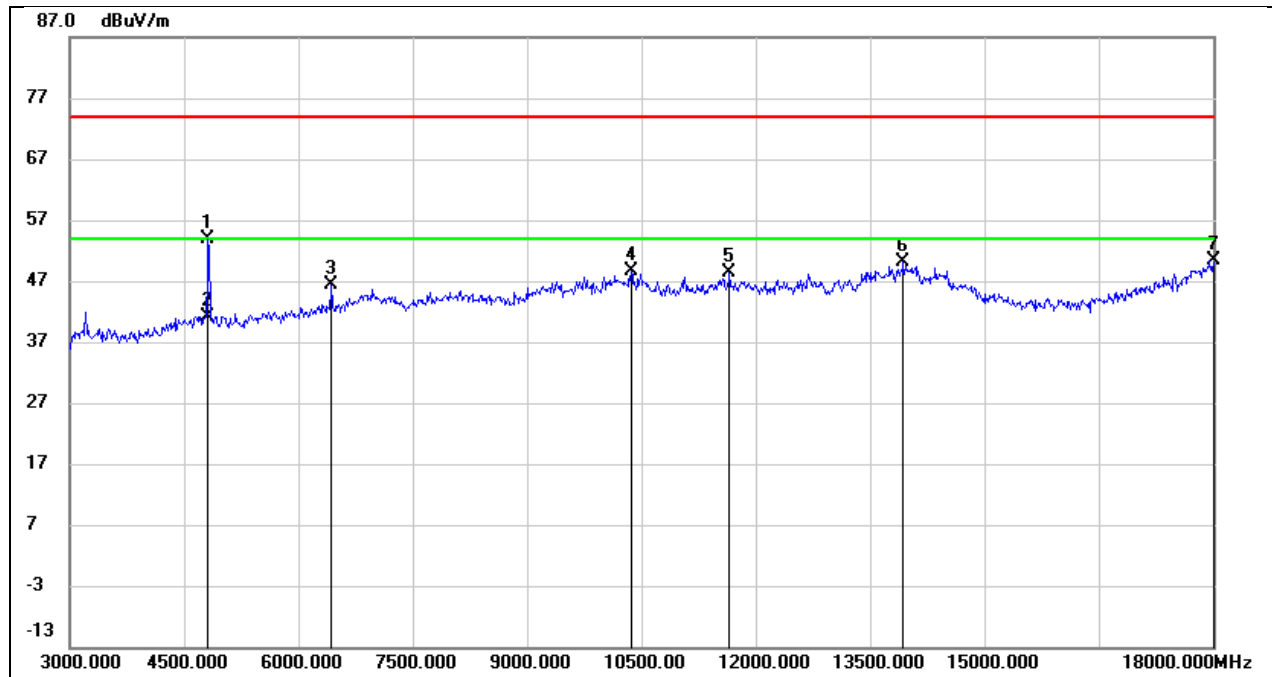
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	53.02	0.45	53.47	74.00	-20.53	peak
2	4920.000	51.34	0.45	51.79	54.00	-2.21	AVG
3	6555.000	42.37	4.63	47.00	74.00	-27.00	peak
4	9180.000	36.10	10.03	46.13	74.00	-27.87	peak
5	12300.000	28.36	18.84	47.20	74.00	-26.80	peak
6	14040.000	26.00	23.83	49.83	74.00	-24.17	peak
7	18000.000	22.23	27.98	50.21	74.00	-23.79	peak

Test Mode:	802.11b	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 5V



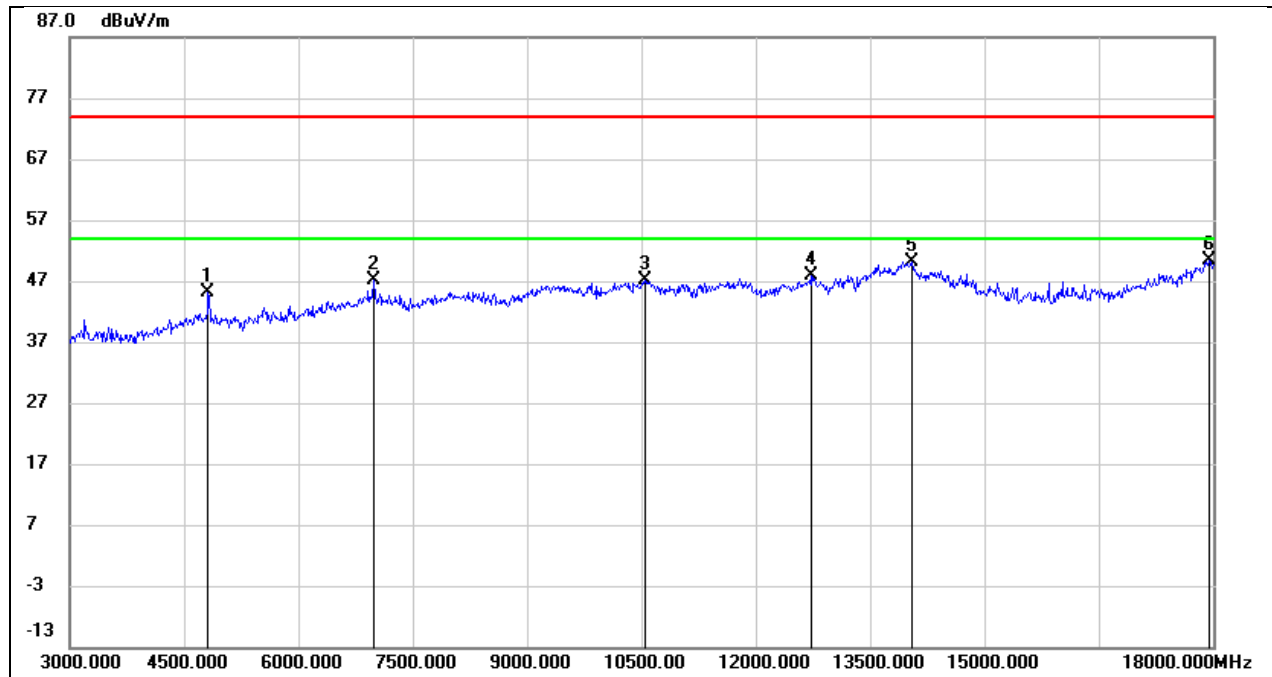
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	49.71	0.45	50.16	74.00	-23.84	peak
2	6990.000	39.62	5.97	45.59	74.00	-28.41	peak
3	8520.000	37.31	8.37	45.68	74.00	-28.32	peak
4	11595.000	29.74	17.13	46.87	74.00	-27.13	peak
5	14025.000	26.04	23.92	49.96	74.00	-24.04	peak
6	18000.000	22.12	27.98	50.10	74.00	-23.90	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



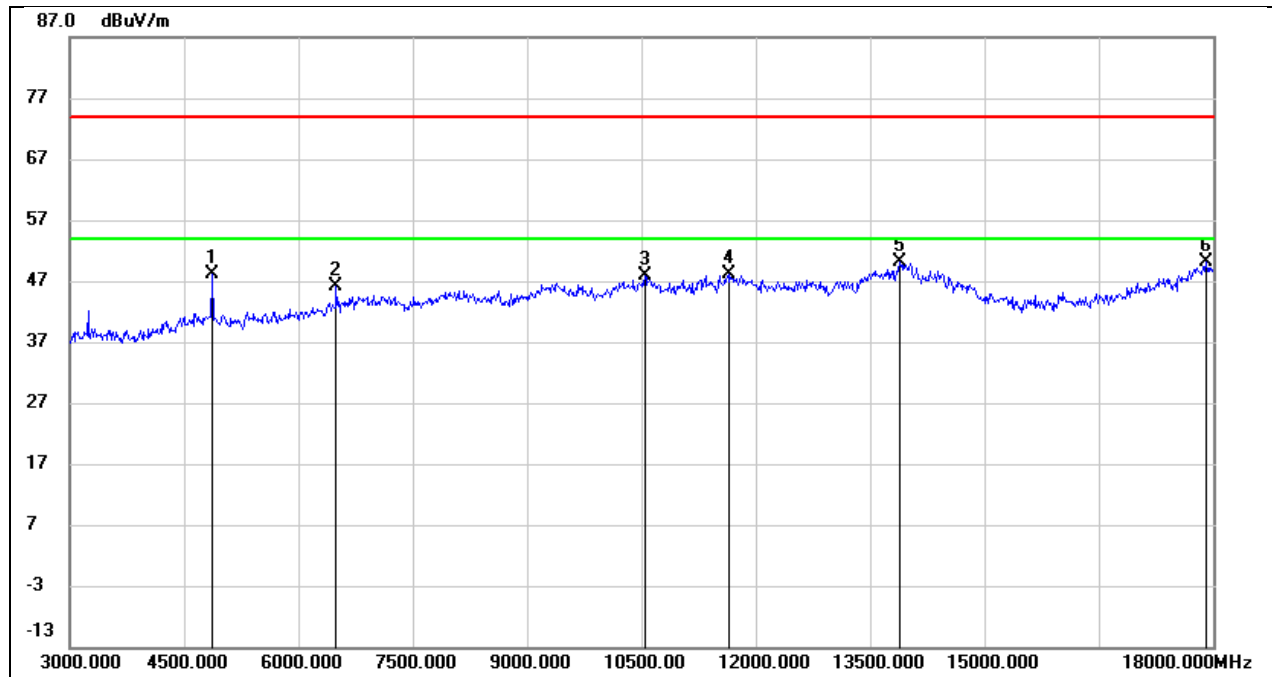
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	53.77	0.22	53.99	74.00	-20.01	peak
2	4815.000	40.85	0.22	41.07	54.00	-12.93	AVG
3	6435.000	42.01	4.25	46.26	74.00	-27.74	peak
4	10365.000	34.87	13.68	48.55	74.00	-25.45	peak
5	11655.000	30.96	17.32	48.28	74.00	-25.72	peak
6	13935.000	26.29	23.81	50.10	74.00	-23.90	peak
7	18000.000	22.41	27.98	50.39	74.00	-23.61	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



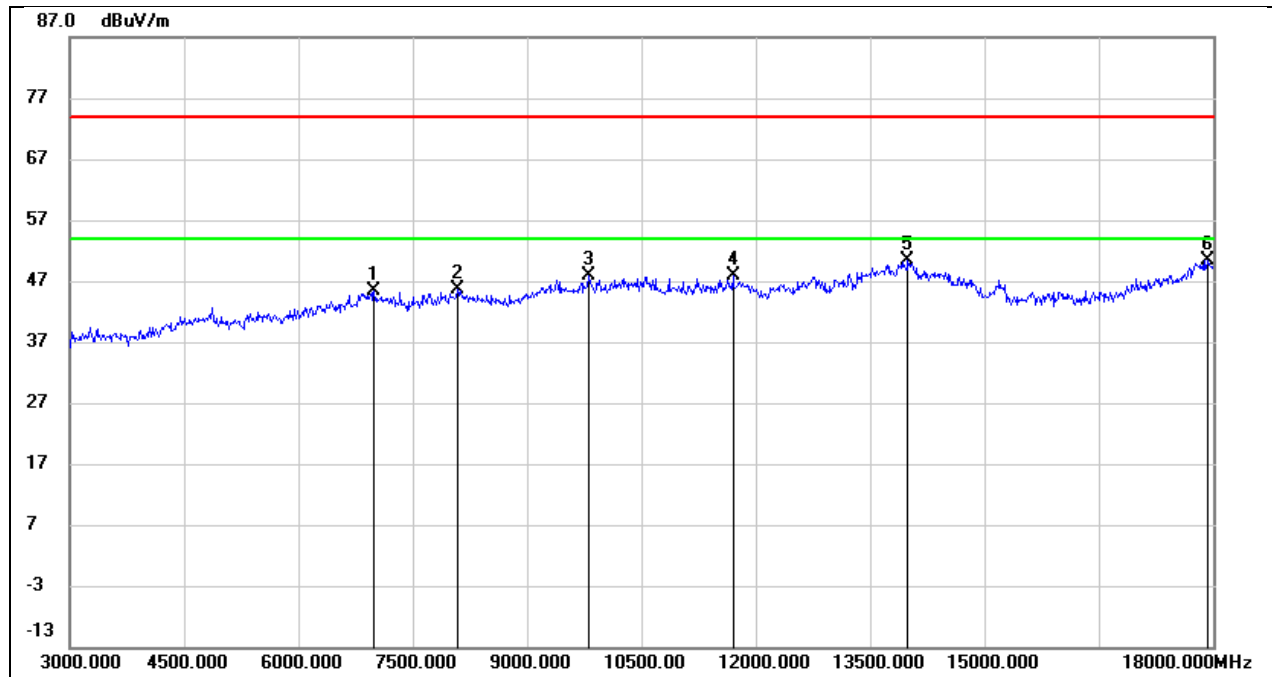
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4815.000	44.83	0.22	45.05	74.00	-28.95	peak
2	6990.000	41.07	5.97	47.04	74.00	-26.96	peak
3	10545.000	32.90	14.16	47.06	74.00	-26.94	peak
4	12720.000	28.41	19.38	47.79	74.00	-26.21	peak
5	14040.000	26.32	23.83	50.15	74.00	-23.85	peak
6	17940.000	22.73	27.61	50.34	74.00	-23.66	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Horizontal	Test Voltage:	DC 5V



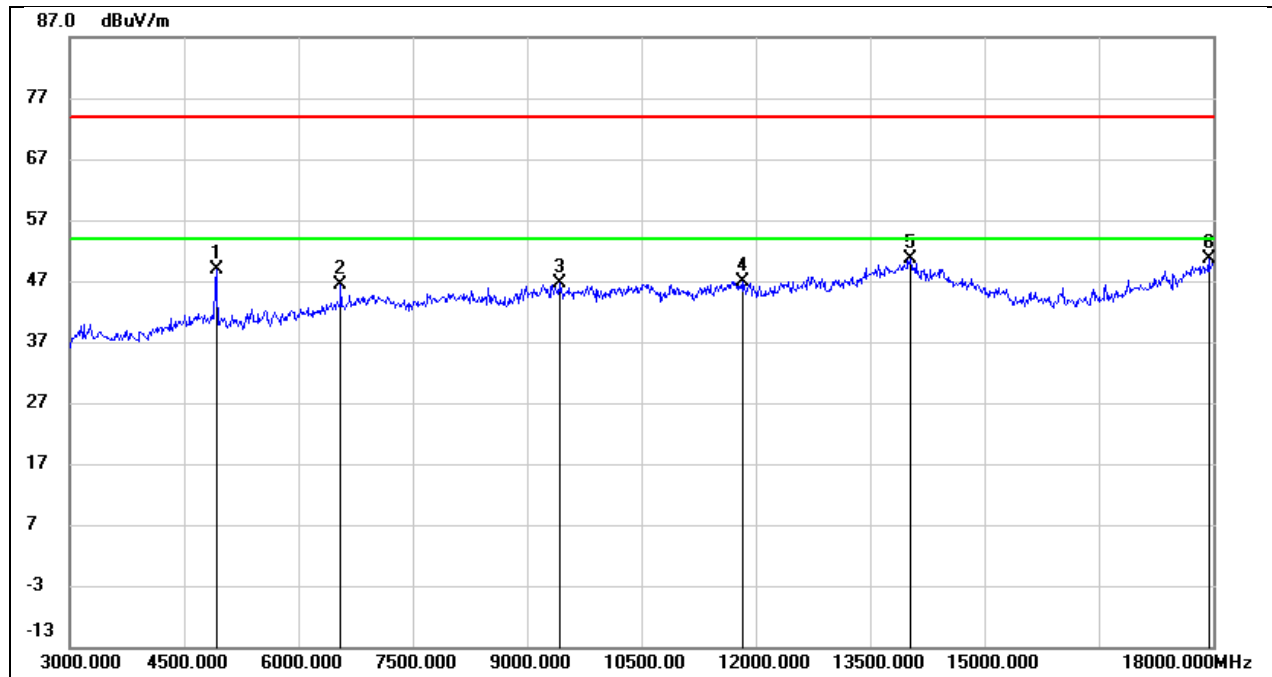
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	47.86	0.35	48.21	74.00	-25.79	peak
2	6495.000	41.68	4.46	46.14	74.00	-27.86	peak
3	10545.000	33.62	14.16	47.78	74.00	-26.22	peak
4	11640.000	30.92	17.27	48.19	74.00	-25.81	peak
5	13890.000	26.41	23.64	50.05	74.00	-23.95	peak
6	17910.000	22.68	27.41	50.09	74.00	-23.91	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2437
Polarity:	Vertical	Test Voltage:	DC 5V



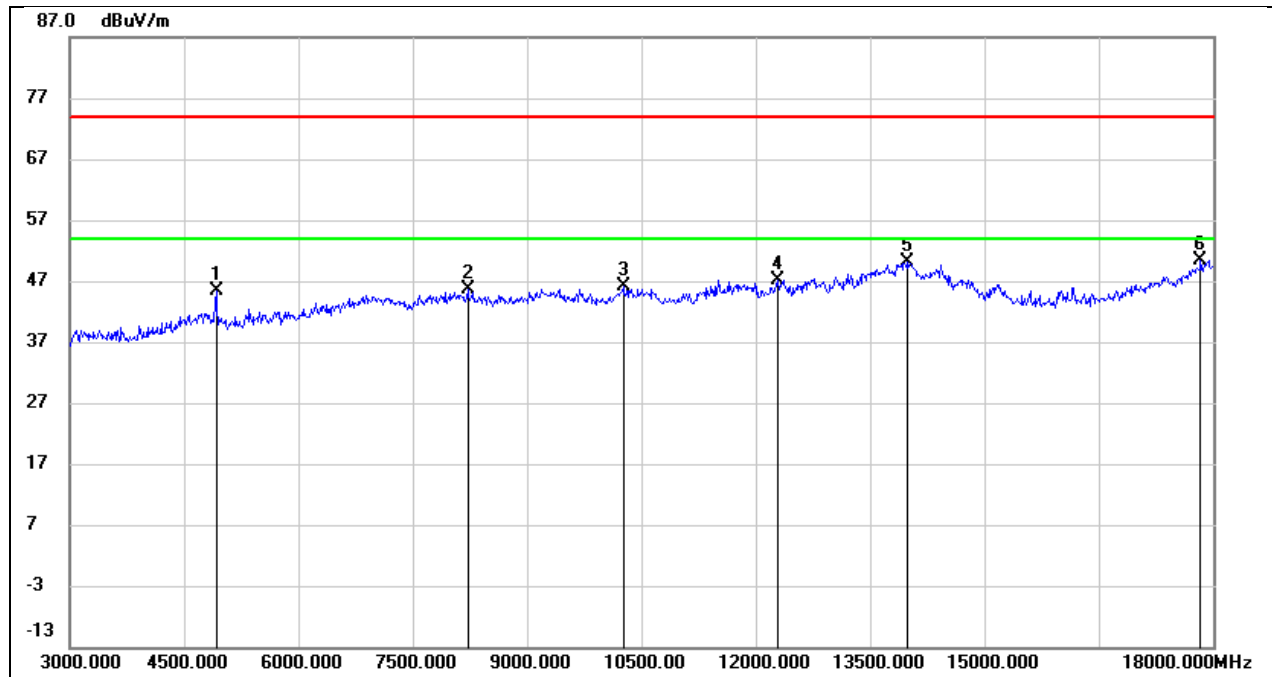
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6990.000	39.40	5.97	45.37	74.00	-28.63	peak
2	8085.000	37.68	8.01	45.69	74.00	-28.31	peak
3	9810.000	35.51	12.26	47.77	74.00	-26.23	peak
4	11700.000	30.35	17.44	47.79	74.00	-26.21	peak
5	13995.000	26.40	24.04	50.44	74.00	-23.56	peak
6	17925.000	22.95	27.50	50.45	74.00	-23.55	peak

Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	48.50	0.45	48.95	74.00	-25.05	peak
2	6555.000	41.70	4.63	46.33	74.00	-27.67	peak
3	9420.000	35.87	10.83	46.70	74.00	-27.30	peak
4	11835.000	29.13	17.84	46.97	74.00	-27.03	peak
5	14025.000	26.81	23.92	50.73	74.00	-23.27	peak
6	17940.000	22.91	27.61	50.52	74.00	-23.48	peak

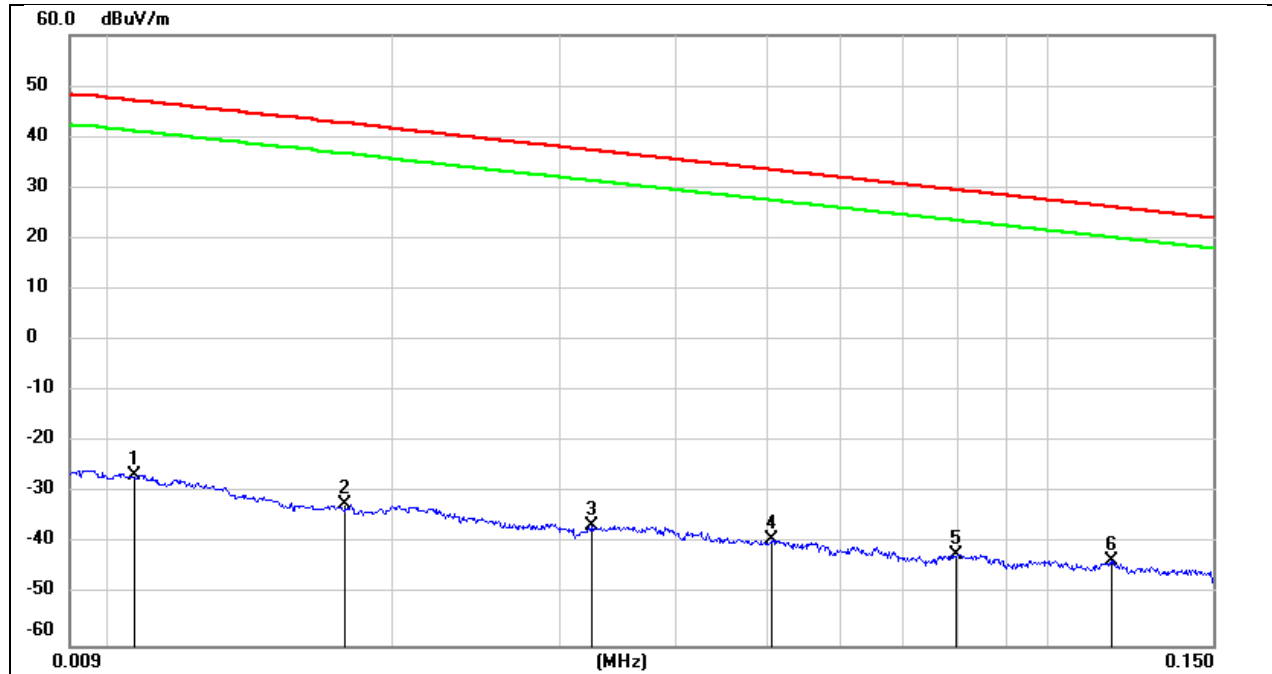
Test Mode:	802.11n HT20	Frequency(MHz):	2462
Polarity:	Vertical	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	44.89	0.45	45.34	74.00	-28.66	peak
2	8220.000	37.50	8.08	45.58	74.00	-28.42	peak
3	10260.000	32.75	13.41	46.16	74.00	-27.84	peak
4	12285.000	28.40	18.83	47.23	74.00	-26.77	peak
5	13995.000	26.02	24.04	50.06	74.00	-23.94	peak
6	17835.000	23.42	26.94	50.36	74.00	-23.64	peak

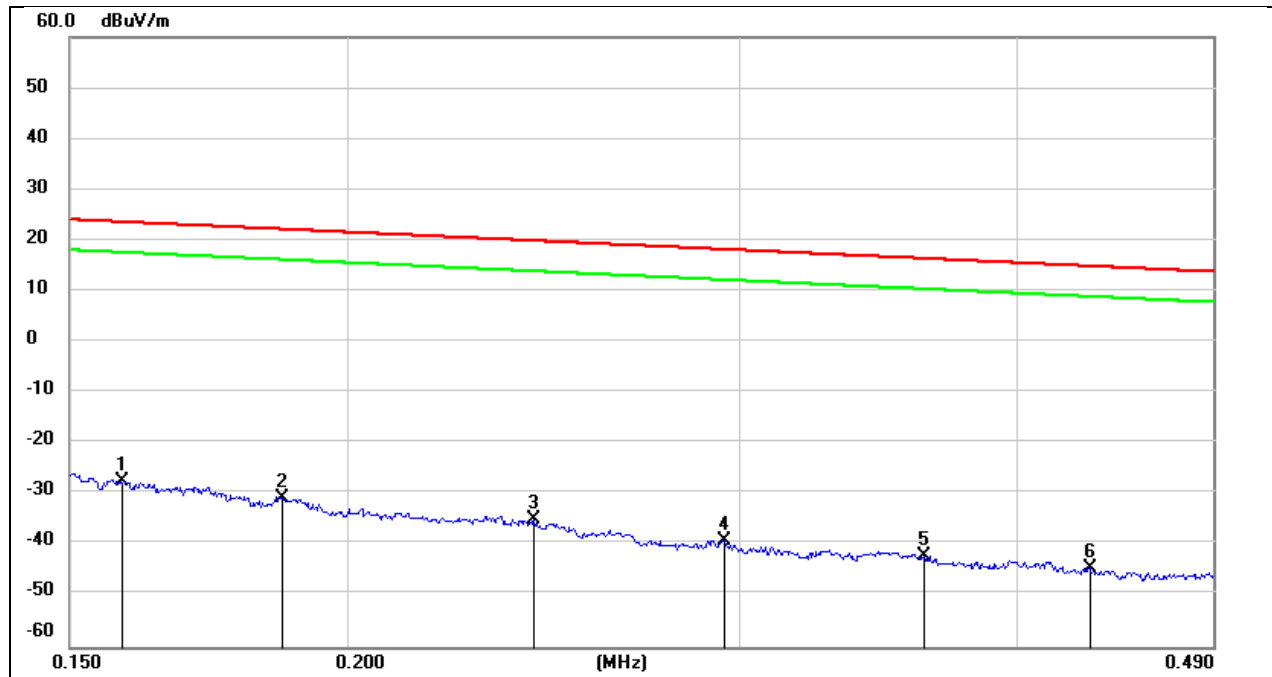
8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



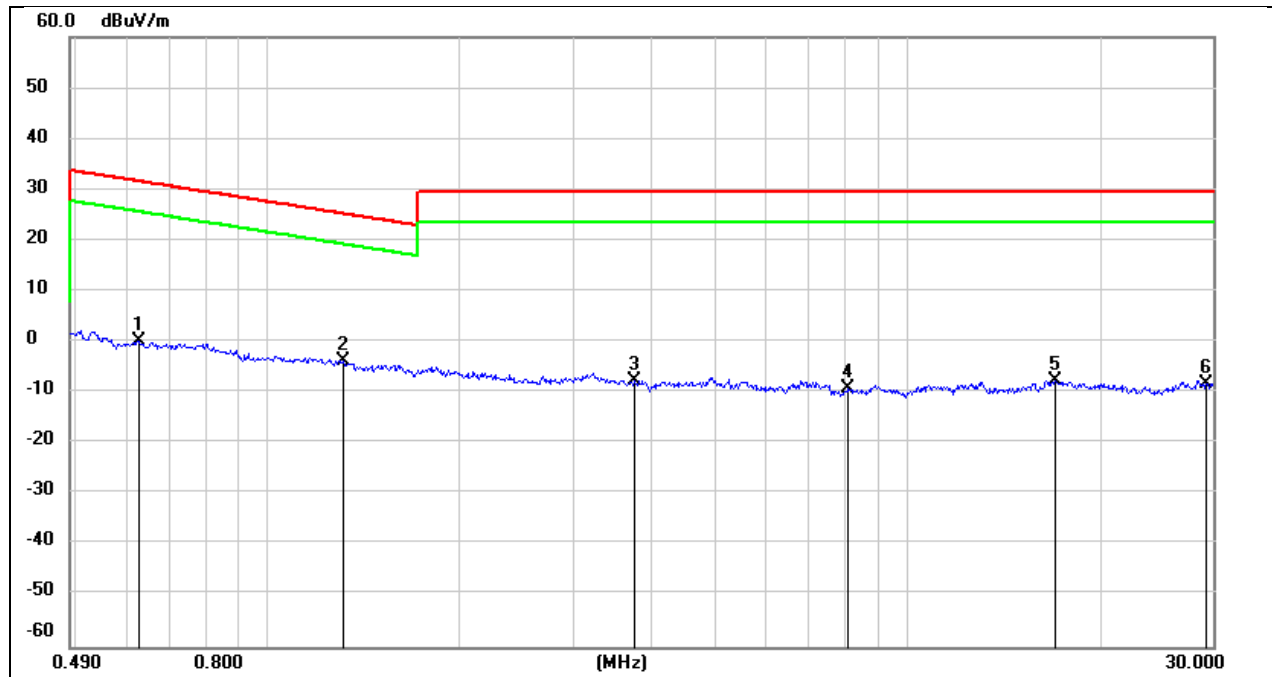
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0106	74.88	-101.39	-26.51	47.09	-73.60	peak
2	0.0177	69.12	-101.35	-32.23	42.64	-74.87	peak
3	0.0325	64.99	-101.40	-36.41	37.36	-73.77	peak
4	0.0507	62.31	-101.48	-39.17	33.50	-72.67	peak
5	0.0796	59.53	-101.63	-42.10	29.58	-71.68	peak
6	0.1170	58.35	-101.74	-43.39	26.24	-69.63	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1585	74.22	-101.65	-27.43	23.60	-51.03	peak
2	0.1869	71.04	-101.70	-30.66	22.17	-52.83	peak
3	0.2426	66.82	-101.79	-34.97	19.90	-54.87	peak
4	0.2953	62.63	-101.85	-39.22	18.20	-57.42	peak
5	0.3634	59.82	-101.93	-42.11	16.39	-58.50	peak
6	0.4314	57.47	-101.99	-44.52	14.90	-59.42	peak

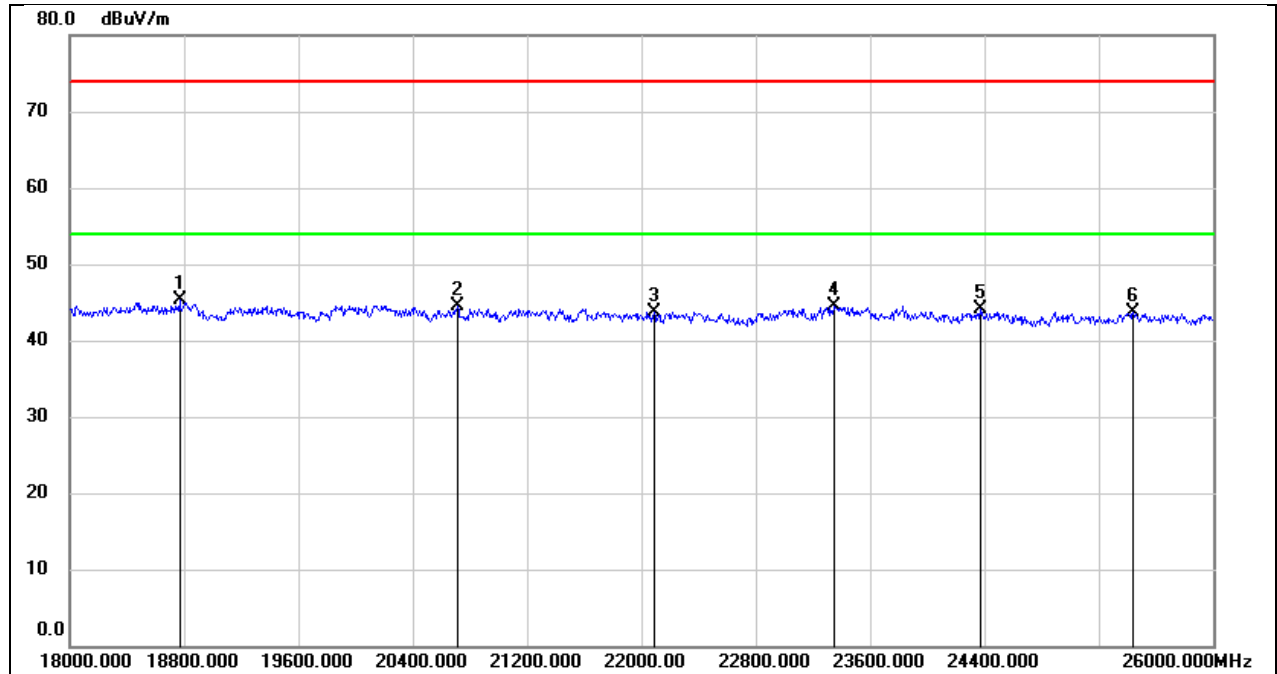
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.6298	62.17	-62.09	0.08	31.62	-31.54	peak
2	1.3099	58.41	-62.14	-3.73	25.26	-28.99	peak
3	3.7406	53.80	-61.40	-7.60	29.54	-37.14	peak
4	8.1036	51.79	-61.07	-9.28	29.54	-38.82	peak
5	17.0152	53.27	-60.94	-7.67	29.54	-37.21	peak
6	29.3213	51.80	-60.02	-8.22	29.54	-37.76	peak

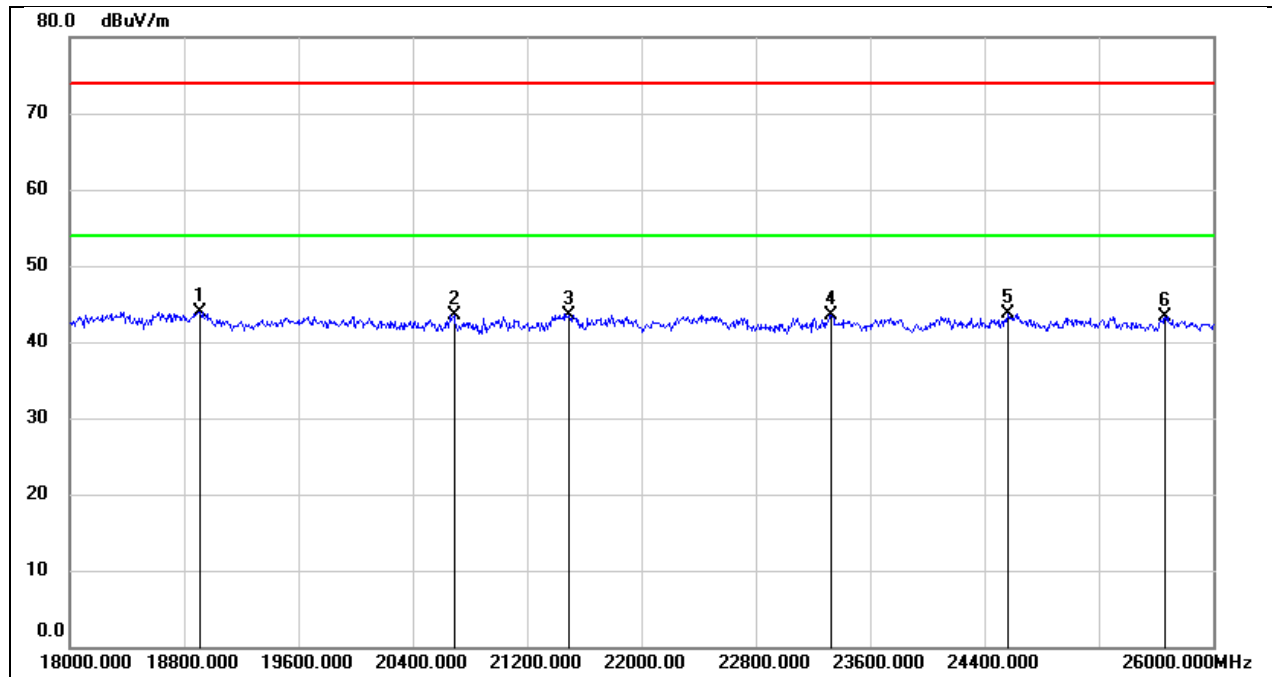
8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18768.000	50.64	-5.41	45.23	74.00	-28.77	peak
2	20712.000	49.57	-5.16	44.41	74.00	-29.59	peak
3	22088.000	48.16	-4.39	43.77	74.00	-30.23	peak
4	23344.000	47.73	-3.29	44.44	74.00	-29.56	peak
5	24368.000	46.75	-2.60	44.15	74.00	-29.85	peak
6	25440.000	45.41	-1.75	43.66	74.00	-30.34	peak

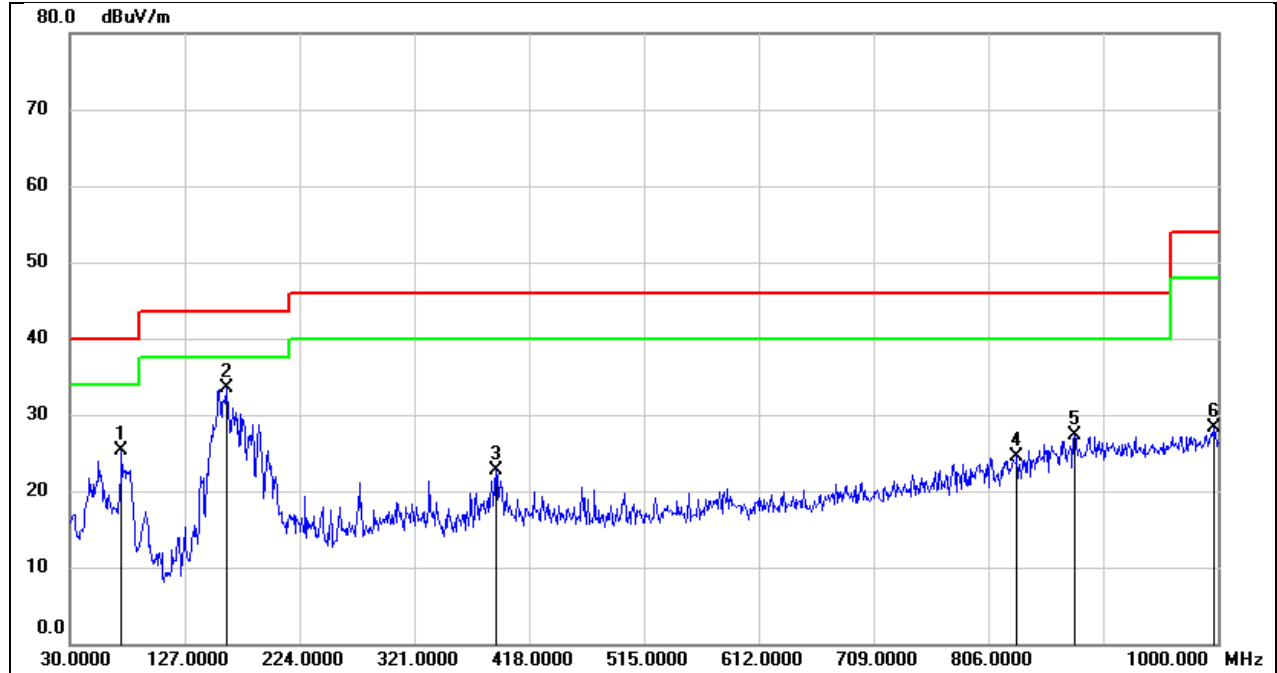
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18912.000	49.24	-5.30	43.94	74.00	-30.06	peak
2	20688.000	48.68	-5.16	43.52	74.00	-30.48	peak
3	21496.000	48.20	-4.69	43.51	74.00	-30.49	peak
4	23328.000	46.87	-3.29	43.58	74.00	-30.42	peak
5	24568.000	46.10	-2.33	43.77	74.00	-30.23	peak
6	25664.000	44.39	-1.01	43.38	74.00	-30.62	peak

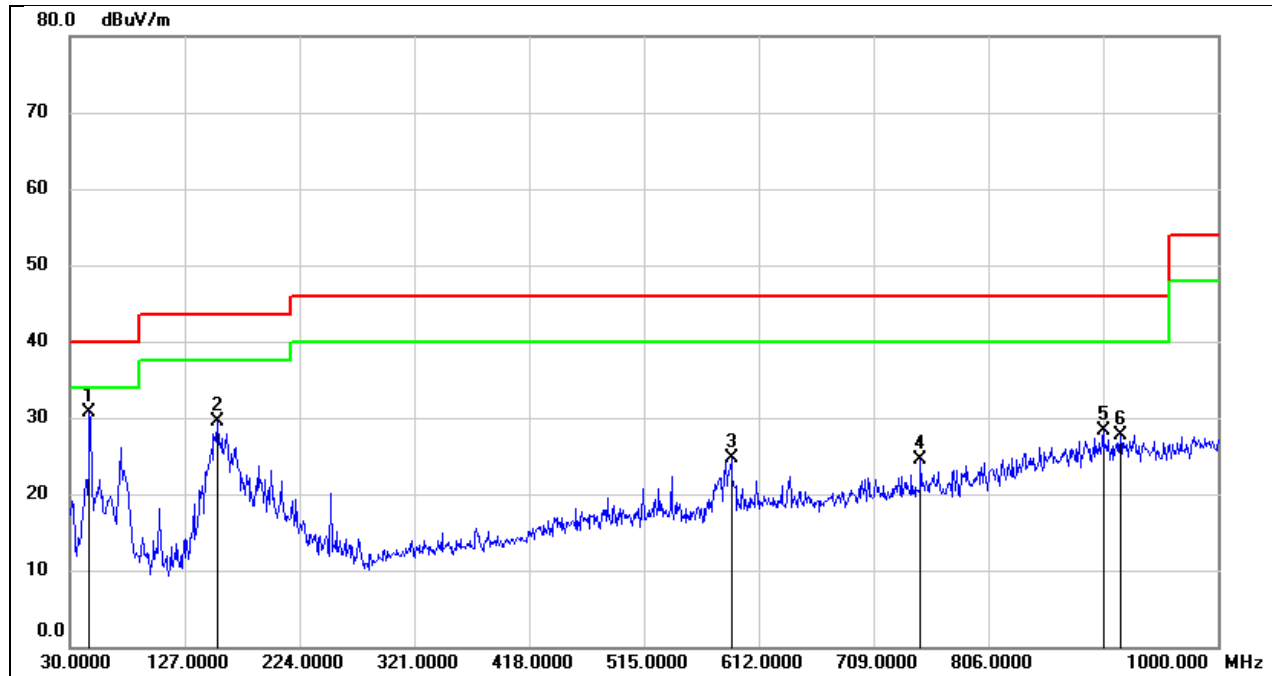
8.6. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	73.6500	40.87	-15.66	25.21	40.00	-14.79	peak
2	161.9200	46.28	-12.75	33.53	43.50	-9.97	peak
3	389.8700	32.37	-9.59	22.78	46.00	-23.22	peak
4	830.2500	26.46	-1.86	24.60	46.00	-21.40	peak
5	878.7500	28.17	-0.83	27.34	46.00	-18.66	peak
6	996.1200	28.08	0.25	28.33	54.00	-25.67	peak

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 5V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	46.4900	45.74	-15.11	30.63	40.00	-9.37	peak
2	154.1600	42.69	-13.27	29.42	43.50	-14.08	peak
3	588.7199	30.37	-5.76	24.61	46.00	-21.39	peak
4	748.7700	27.95	-3.41	24.54	46.00	-21.46	peak
5	903.0000	28.86	-0.53	28.33	46.00	-17.67	peak
6	917.5500	28.12	-0.50	27.62	46.00	-18.38	peak

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 FCC 47 CFR §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

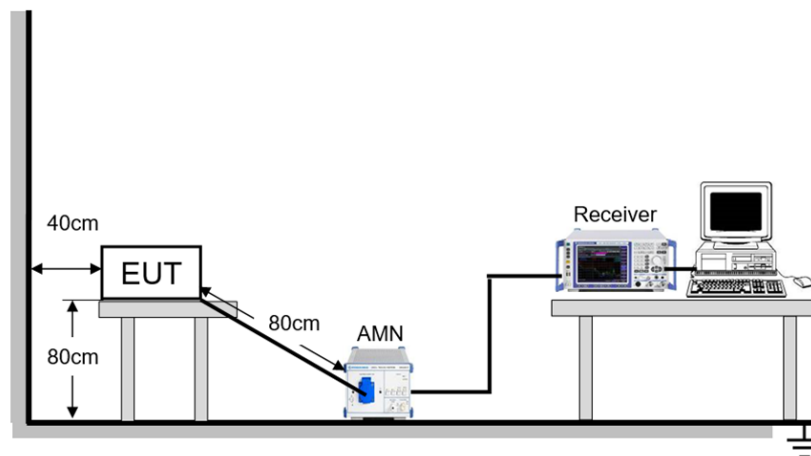
*Decreases with the logarithm of the frequency.

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 C63.10-2020. 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

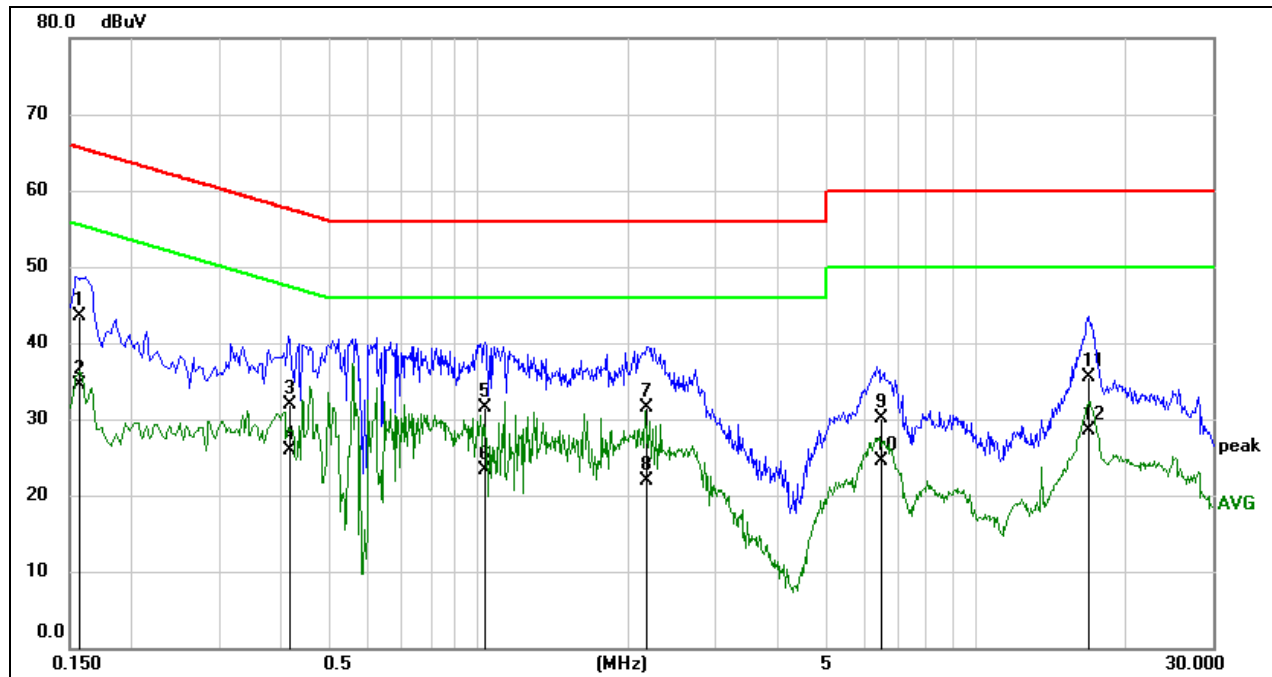
Temperature	24.2°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60Hz

TEST DATE / ENGINEER

Test Date	July 24, 2026	Test By	Kevin Zhang
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TEST RESULTS

Test Mode:	802.11b	Frequency(MHz):	2412
Line:	Line		



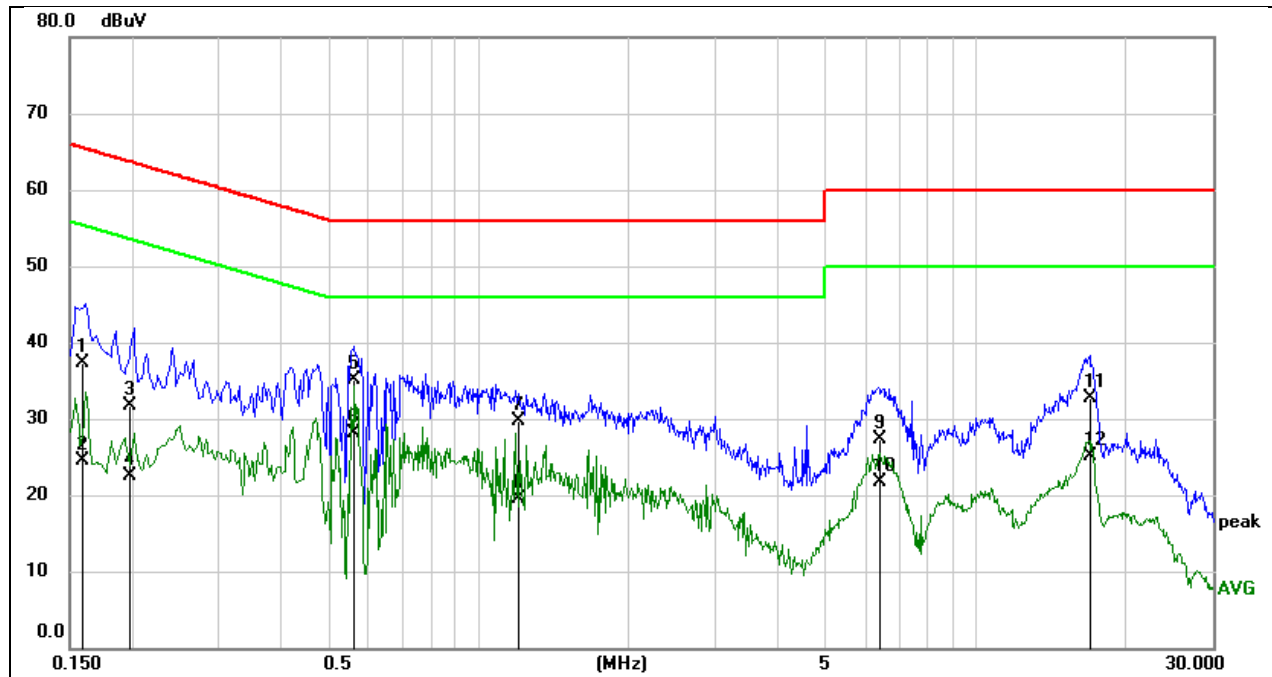
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1567	33.79	9.81	43.60	65.64	-22.04	QP
2	0.1567	24.74	9.81	34.55	55.64	-21.09	AVG
3	0.4160	22.20	9.71	31.91	57.53	-25.62	QP
4	0.4160	16.16	9.71	25.87	47.53	-21.66	AVG
5	1.0299	21.83	9.73	31.56	56.00	-24.44	QP
6	1.0299	13.49	9.73	23.22	46.00	-22.78	AVG
7	2.1668	21.68	9.75	31.43	56.00	-24.57	QP
8	2.1668	12.12	9.75	21.87	46.00	-24.13	AVG
9	6.4274	20.27	9.83	30.10	60.00	-29.90	QP
10	6.4274	14.74	9.83	24.57	50.00	-25.43	AVG
11	16.9265	25.62	9.84	35.46	60.00	-24.54	QP
12	16.9265	18.62	9.84	28.46	50.00	-21.54	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:	802.11b	Frequency(MHz):	2412
Line:	Neutral		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1585	27.75	9.54	37.29	65.54	-28.25	QP
2	0.1585	15.03	9.54	24.57	55.54	-30.97	AVG
3	0.1982	22.22	9.54	31.76	63.69	-31.93	QP
4	0.1982	12.88	9.54	22.42	53.69	-31.27	AVG
5	0.5617	25.50	9.64	35.14	56.00	-20.86	QP
6	0.5617	18.56	9.64	28.20	46.00	-17.80	AVG
7	1.2026	20.22	9.53	29.75	56.00	-26.25	QP
8	1.2026	10.02	9.53	19.55	46.00	-26.45	AVG
9	6.3957	17.70	9.65	27.35	60.00	-32.65	QP
10	6.3957	12.12	9.65	21.77	50.00	-28.23	AVG
11	16.9490	22.83	9.78	32.61	60.00	-27.39	QP
12	16.9490	15.42	9.78	25.20	50.00	-24.80	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.

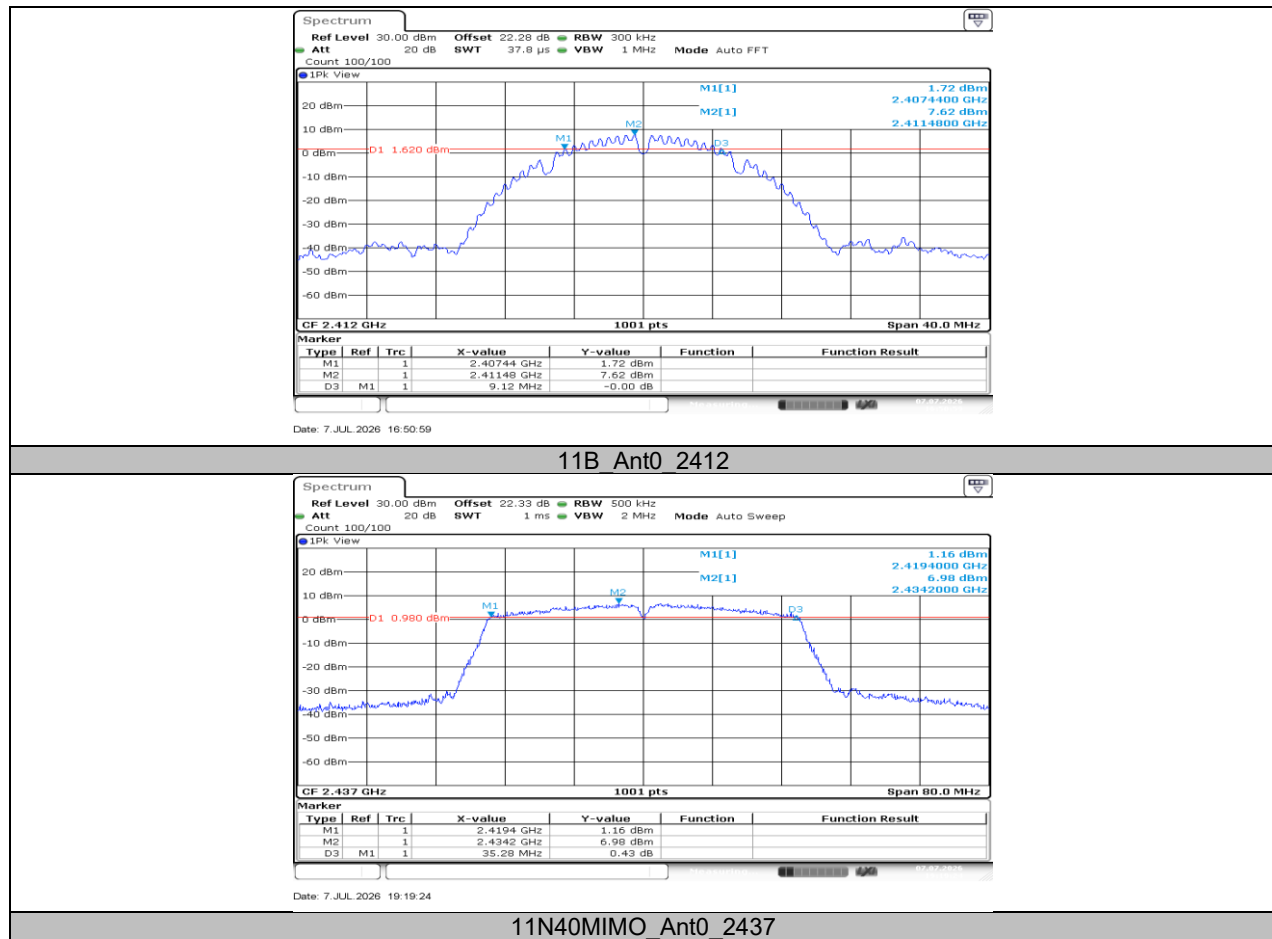
11. TEST DATA

11.1. APPENDIX A: DTS BANDWIDTH

11.1.1. Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant0	2412	9.12	2407.44	2416.56	≥ 0.5	PASS
	Ant1	2412	9.12	2407.44	2416.56	≥ 0.5	PASS
	Ant0	2437	9.12	2432.44	2441.56	≥ 0.5	PASS
	Ant1	2437	9.12	2432.44	2441.56	≥ 0.5	PASS
	Ant0	2462	9.12	2457.44	2466.56	≥ 0.5	PASS
	Ant1	2462	9.12	2457.44	2466.56	≥ 0.5	PASS
11G	Ant0	2412	16.08	2403.96	2420.04	≥ 0.5	PASS
	Ant1	2412	16.28	2403.84	2420.12	≥ 0.5	PASS
	Ant0	2437	16.12	2428.92	2445.04	≥ 0.5	PASS
	Ant1	2437	16.04	2429.00	2445.04	≥ 0.5	PASS
	Ant0	2462	15.96	2454.04	2470.00	≥ 0.5	PASS
	Ant1	2462	16.00	2454.04	2470.04	≥ 0.5	PASS
11N20MIMO	Ant0	2412	17.00	2403.40	2420.40	≥ 0.5	PASS
	Ant1	2412	16.64	2403.64	2420.28	≥ 0.5	PASS
	Ant0	2437	17.12	2428.48	2445.60	≥ 0.5	PASS
	Ant1	2437	17.40	2428.32	2445.72	≥ 0.5	PASS
	Ant0	2462	17.12	2453.56	2470.68	≥ 0.5	PASS
	Ant1	2462	17.48	2453.28	2470.76	≥ 0.5	PASS
11N40MIMO	Ant0	2422	35.92	2404.16	2440.08	≥ 0.5	PASS
	Ant1	2422	35.36	2404.32	2439.68	≥ 0.5	PASS
	Ant0	2437	35.28	2419.40	2454.68	≥ 0.5	PASS
	Ant1	2437	35.44	2419.32	2454.76	≥ 0.5	PASS
	Ant0	2452	36.00	2434.08	2470.08	≥ 0.5	PASS
	Ant1	2452	35.04	2434.56	2469.60	≥ 0.5	PASS

11.1.2. Test Graphs



Note:

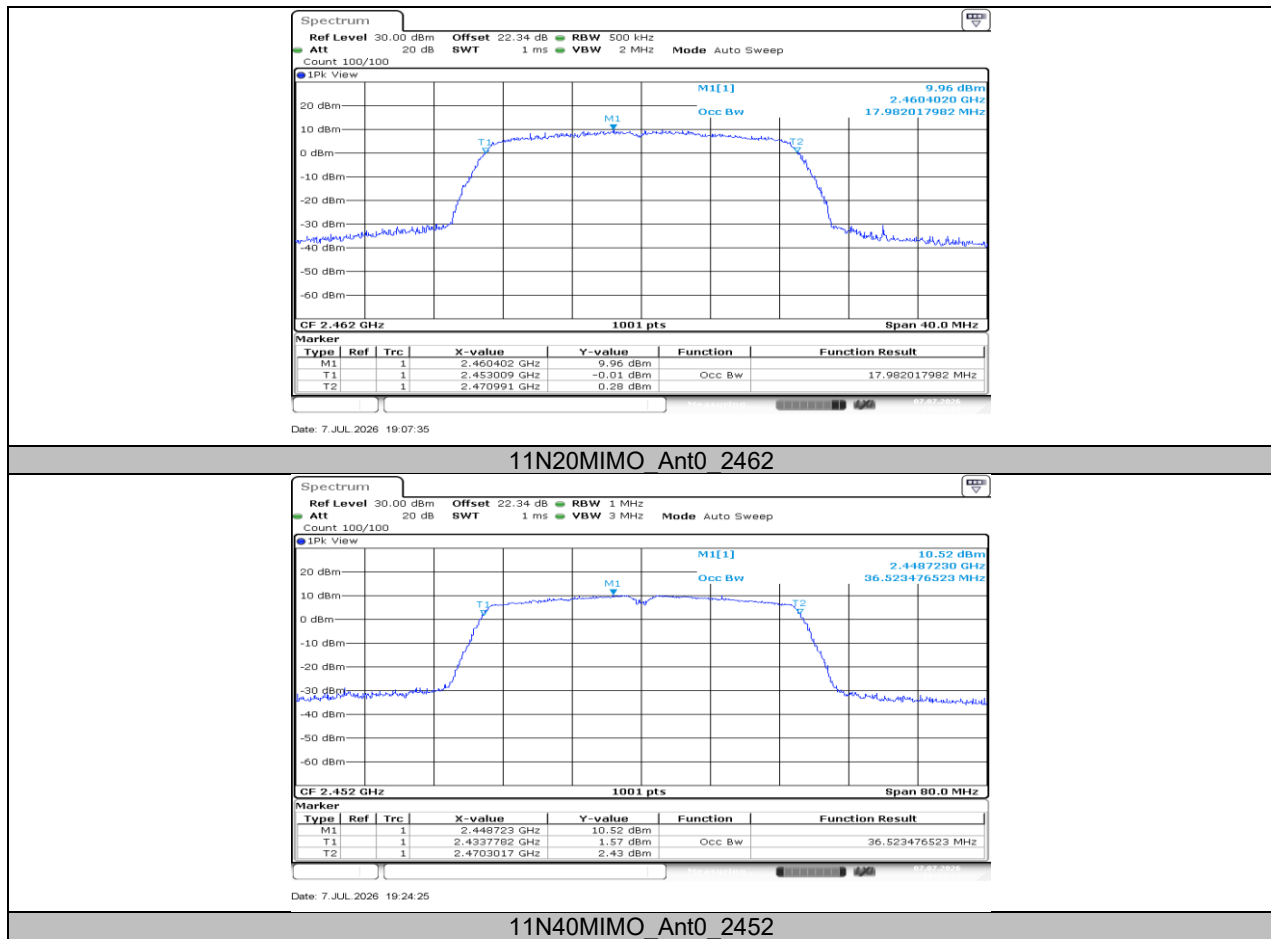
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 300kHz is used in 802.11b/g/n HT20 modes.
3. RBW setting to 500kHz is used in 802.11n HT40 mode.

11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

11.2.1. Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant0	2412	13.387	2405.3267	2418.7133	PASS
	Ant1	2412	13.387	2405.3267	2418.7133	PASS
	Ant0	2437	13.387	2430.3267	2443.7133	PASS
	Ant1	2437	13.387	2430.3267	2443.7133	PASS
	Ant0	2462	13.427	2455.2867	2468.7133	PASS
	Ant1	2462	13.387	2455.3267	2468.7133	PASS
11G	Ant0	2412	17.183	2403.4486	2420.6314	PASS
	Ant1	2412	17.183	2403.4086	2420.5914	PASS
	Ant0	2437	17.183	2428.4486	2445.6314	PASS
	Ant1	2437	17.223	2428.4086	2445.6314	PASS
	Ant0	2462	17.143	2453.4486	2470.5914	PASS
	Ant1	2462	17.143	2453.4885	2470.6314	PASS
11N20MIMO	Ant0	2412	17.942	2403.0490	2420.9910	PASS
	Ant1	2412	17.782	2403.1289	2420.9111	PASS
	Ant0	2437	18.022	2428.0090	2446.0310	PASS
	Ant1	2437	17.782	2428.1289	2445.9111	PASS
	Ant0	2462	17.982	2453.0090	2470.9910	PASS
	Ant1	2462	17.782	2453.1289	2470.9111	PASS
11N40MIMO	Ant0	2422	36.364	2403.8581	2440.2218	PASS
	Ant1	2422	36.444	2403.8581	2440.3017	PASS
	Ant0	2437	36.364	2418.8581	2455.2218	PASS
	Ant1	2437	36.204	2418.9381	2455.1419	PASS
	Ant0	2452	36.523	2433.7782	2470.3017	PASS
	Ant1	2452	36.364	2433.8581	2470.2218	PASS

11.2.2. Test Graphs



Note:

1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 500kHz is used in 802.11b/g/n HT20 modes.
3. RBW setting to 1MHz is used in 802.11n HT40 mode.

11.3. APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER

11.3.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	2412	15.16	≤30.00	PASS
	Ant1	2412	14.86	≤30.00	PASS
	Ant0	2437	15.17	≤30.00	PASS
	Ant1	2437	15.19	≤30.00	PASS
	Ant0	2462	15.00	≤30.00	PASS
	Ant1	2462	15.15	≤30.00	PASS
11G	Ant0	2412	15.15	≤30.00	PASS
	Ant1	2412	15.25	≤30.00	PASS
	Ant0	2437	15.16	≤30.00	PASS
	Ant1	2437	15.26	≤30.00	PASS
	Ant0	2462	15.19	≤30.00	PASS
	Ant1	2462	15.40	≤30.00	PASS
11N20MIMO	Ant0	2412	15.01	≤30.00	PASS
	Ant1	2412	14.18	≤30.00	PASS
	total	2412	17.63	≤30.00	PASS
	Ant0	2437	14.65	≤30.00	PASS
	Ant1	2437	13.70	≤30.00	PASS
	total	2437	17.21	≤30.00	PASS
	Ant0	2462	14.89	≤30.00	PASS
	Ant1	2462	13.97	≤30.00	PASS
	total	2462	17.46	≤30.00	PASS
11N40MIMO	Ant0	2422	14.53	≤30.00	PASS
	Ant1	2422	13.78	≤30.00	PASS
	total	2422	17.18	≤30.00	PASS
	Ant0	2437	14.69	≤30.00	PASS
	Ant1	2437	14.01	≤30.00	PASS
	total	2437	17.37	≤30.00	PASS
	Ant0	2452	14.80	≤30.00	PASS
	Ant1	2452	14.02	≤30.00	PASS
	total	2452	17.44	≤30.00	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

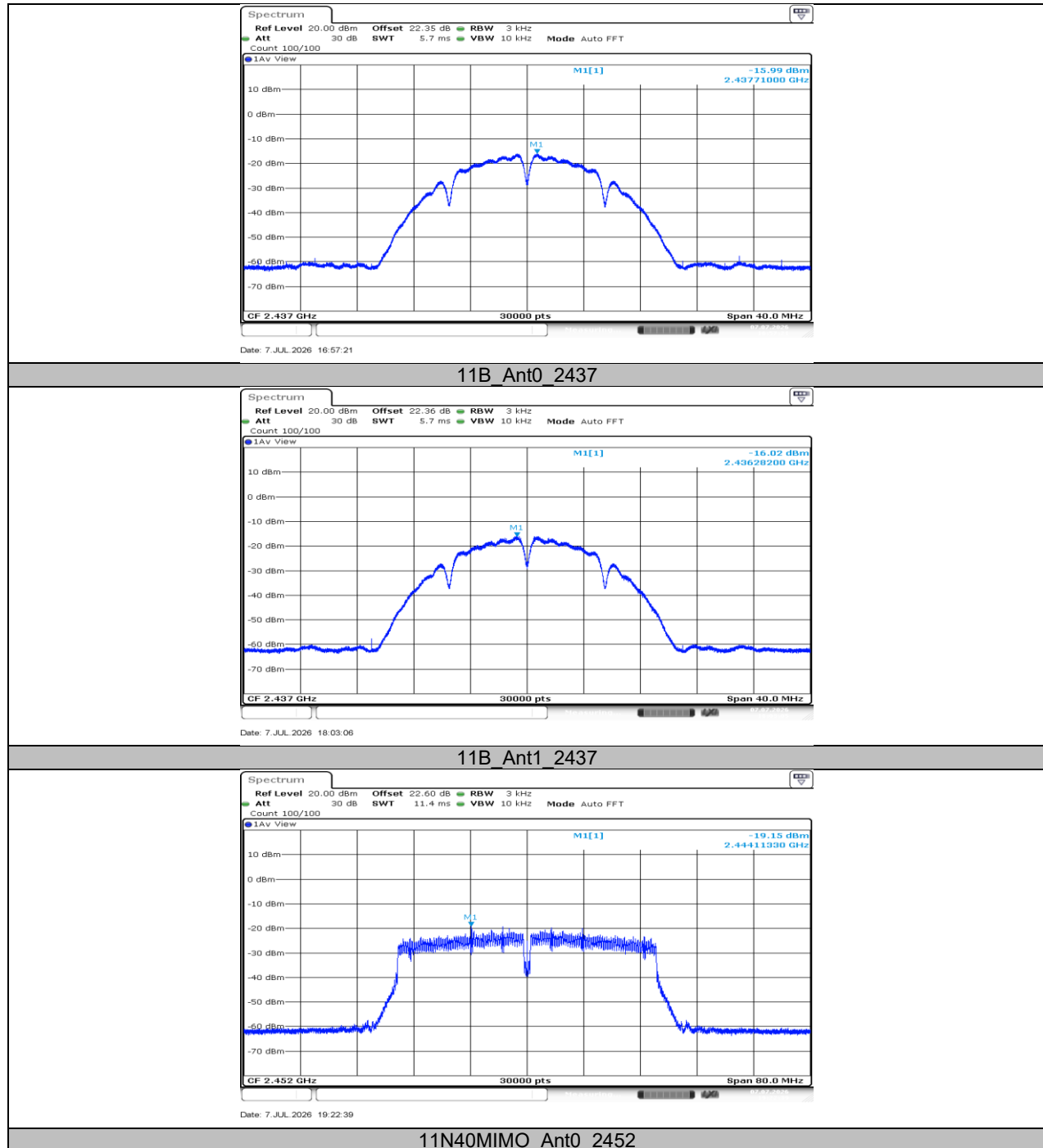
11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY

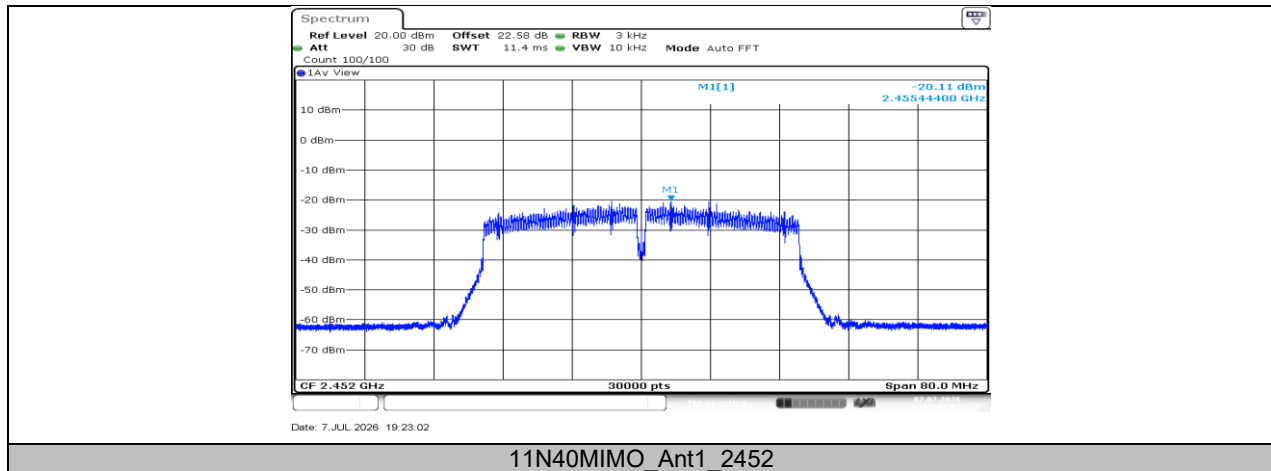
11.4.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-16.06	≤8.00	PASS
	Ant1	2412	-16.24	≤8.00	PASS
	Ant0	2437	-15.99	≤8.00	PASS
	Ant1	2437	-16.02	≤8.00	PASS
	Ant0	2462	-16.19	≤8.00	PASS
	Ant1	2462	-16.15	≤8.00	PASS
11G	Ant0	2412	-17.63	≤8.00	PASS
	Ant1	2412	-17.46	≤8.00	PASS
	Ant0	2437	-17.47	≤8.00	PASS
	Ant1	2437	-17.41	≤8.00	PASS
	Ant0	2462	-17.72	≤8.00	PASS
	Ant1	2462	-17.49	≤8.00	PASS
11N20MIMO	Ant0	2412	-17.94	≤8.00	PASS
	Ant1	2412	-18.47	≤8.00	PASS
	total	2412	-15.19	≤8.00	PASS
	Ant0	2437	-18.20	≤8.00	PASS
	Ant1	2437	-18.74	≤8.00	PASS
	total	2437	-15.45	≤8.00	PASS
	Ant0	2462	-18.08	≤8.00	PASS
	Ant1	2462	-18.24	≤8.00	PASS
11N40MIMO	total	2462	-15.15	≤8.00	PASS
	Ant0	2422	-19.77	≤8.00	PASS
	Ant1	2422	-20.62	≤8.00	PASS
	total	2422	-17.16	≤8.00	PASS
	Ant0	2437	-19.72	≤8.00	PASS
	Ant1	2437	-20.18	≤8.00	PASS
	total	2437	-16.93	≤8.00	PASS
	Ant0	2452	-19.15	≤8.00	PASS
	Ant1	2452	-20.11	≤8.00	PASS
	total	2452	-16.59	≤8.00	PASS

Note: 1. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

11.4.2. Test Graphs





Note:

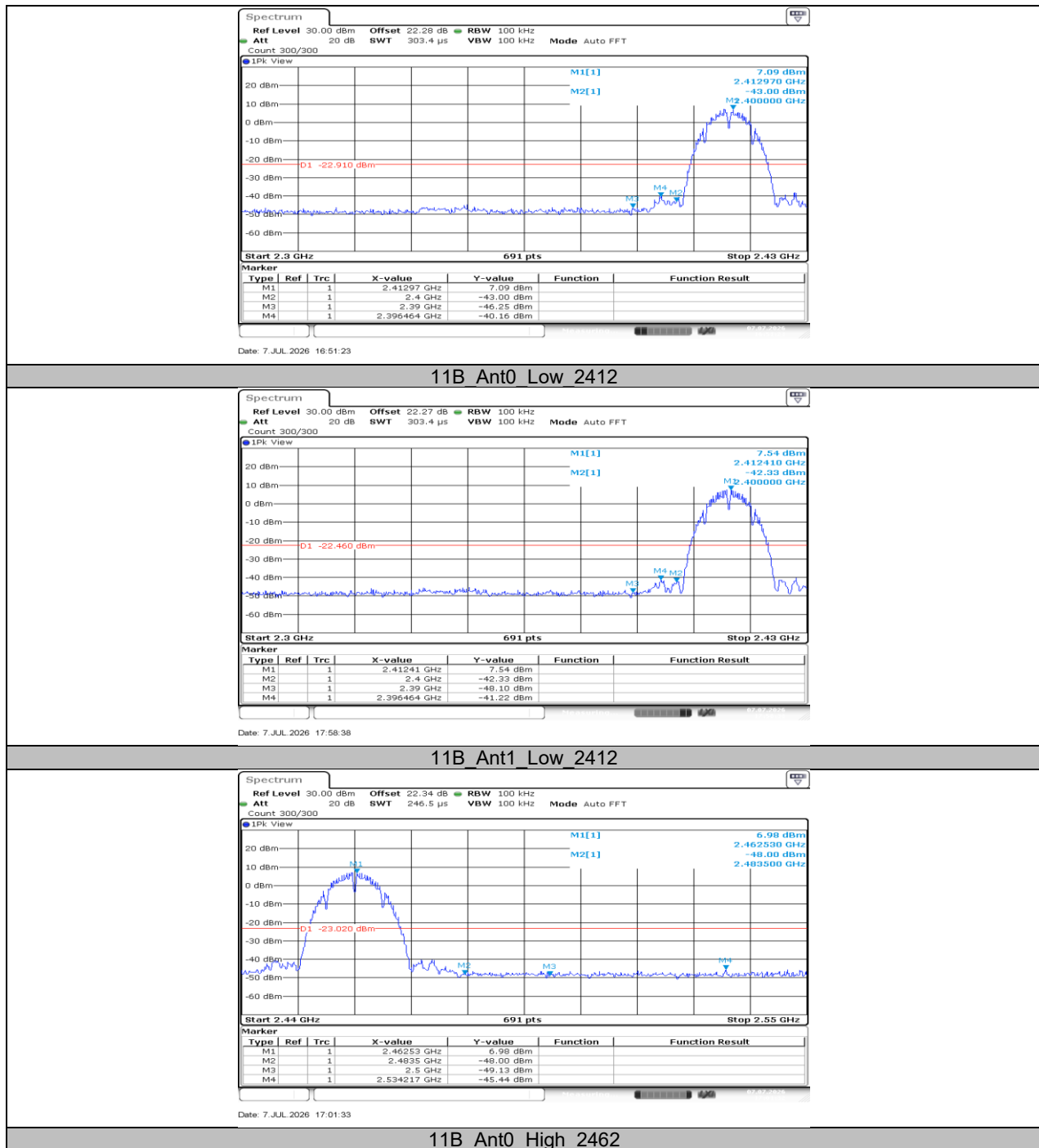
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. For all modes, RBW setting to 3kHz is used on PSD measurement.
3. Span is set to 40MHz for 802.11b/g/n HT20 modes.
4. Span is set to 80MHz for 802.11n HT40 modes.

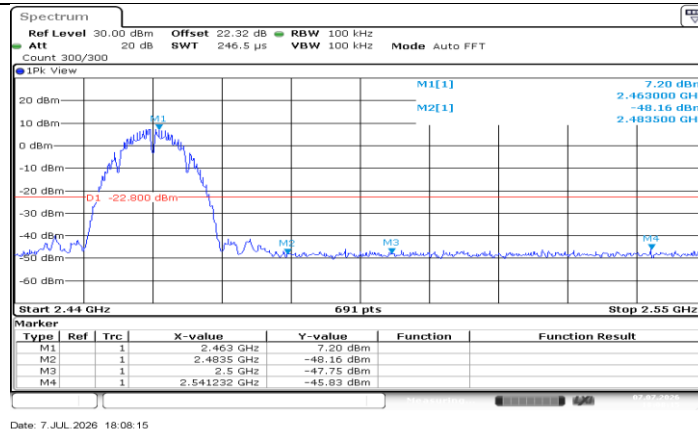
11.5. APPENDIX E: BAND EDGE MEASUREMENTS

11.5.1. Test Result

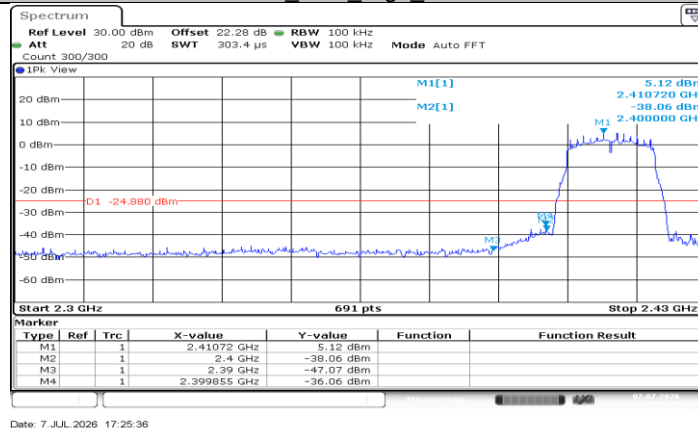
Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	Low	2412	7.09	-40.16	≤-22.91	PASS
	Ant1	Low	2412	7.54	-41.22	≤-22.46	PASS
	Ant0	High	2462	6.98	-45.44	≤-23.02	PASS
	Ant1	High	2462	7.20	-45.83	≤-22.8	PASS
11G	Ant0	Low	2412	5.12	-36.06	≤-24.88	PASS
	Ant1	Low	2412	4.40	-39.07	≤-25.6	PASS
	Ant0	High	2462	5.46	-44.74	≤-24.54	PASS
	Ant1	High	2462	5.56	-45.2	≤-24.44	PASS
11N20MIMO	Ant0	Low	2412	4.74	-37.13	≤-25.26	PASS
	Ant1	Low	2412	4.41	-39.68	≤-25.59	PASS
	Ant0	High	2462	5.04	-44.81	≤-24.96	PASS
	Ant1	High	2462	4.32	-45.6	≤-25.68	PASS
11N40MIMO	Ant0	Low	2422	2.05	-35.05	≤-27.95	PASS
	Ant1	Low	2422	1.20	-37.51	≤-28.8	PASS
	Ant0	High	2452	2.36	-41.01	≤-27.64	PASS
	Ant1	High	2452	1.65	-44.59	≤-28.35	PASS

11.5.2. Test Graphs

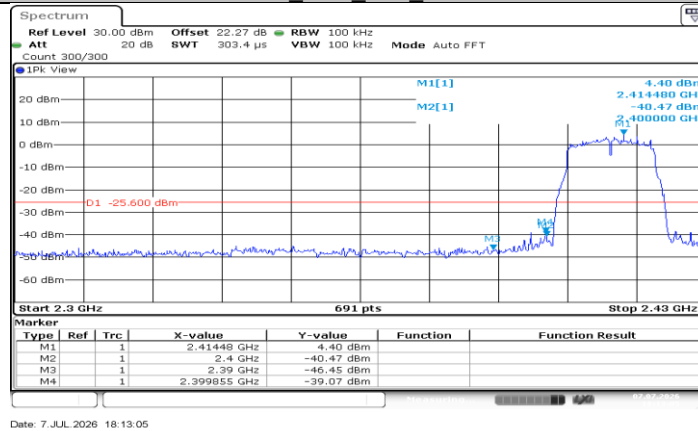




11B Ant1 High 2462



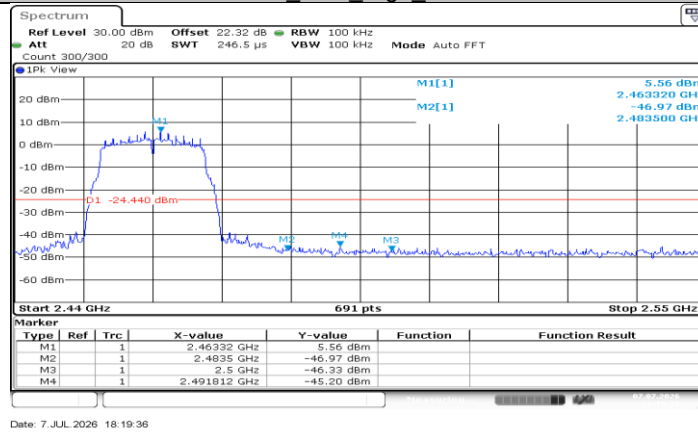
11G Ant0 Low 2412



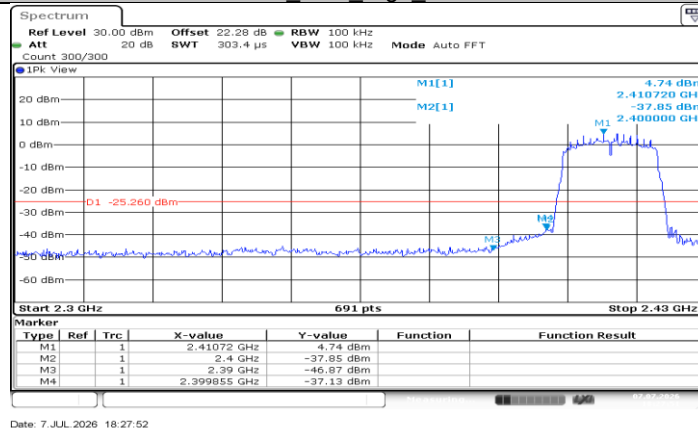
11G Ant1 Low 2412



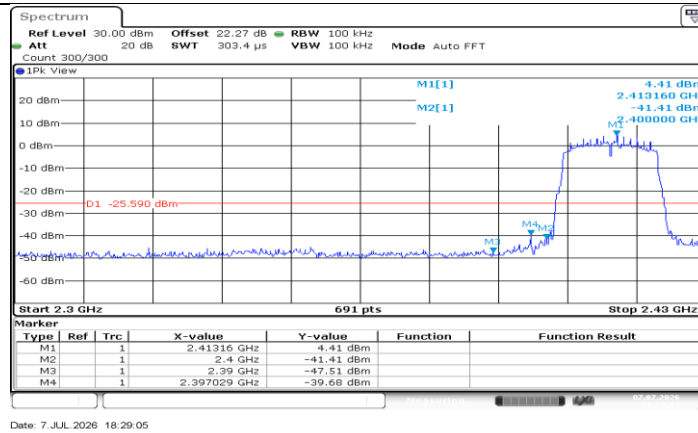
11G_Ant0_High_2462



11G_Ant1_High_2462



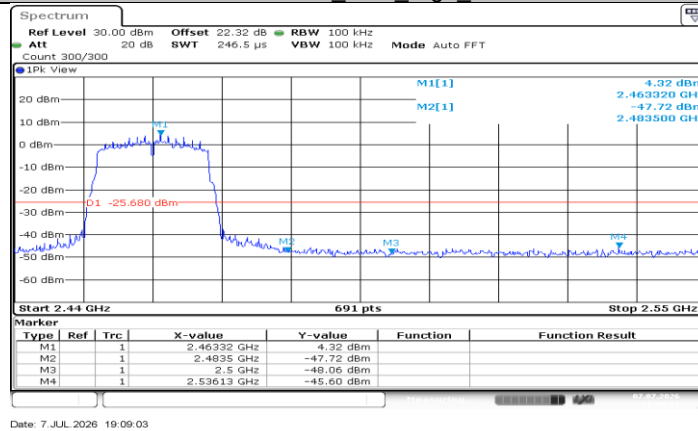
11N20MIMO_Ant0_Low_2412



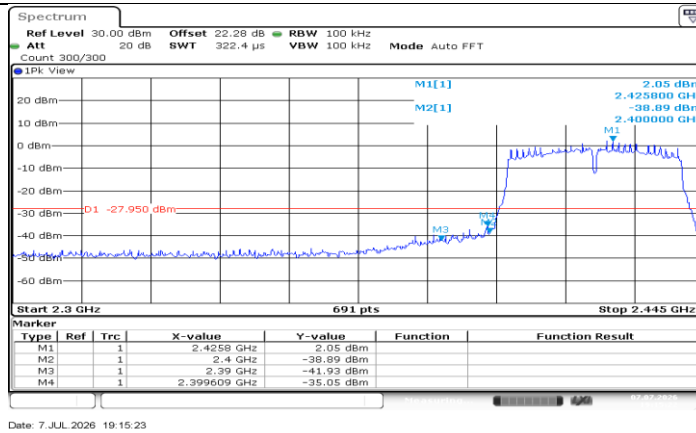
11N20MIMO_Ant1_Low_2412



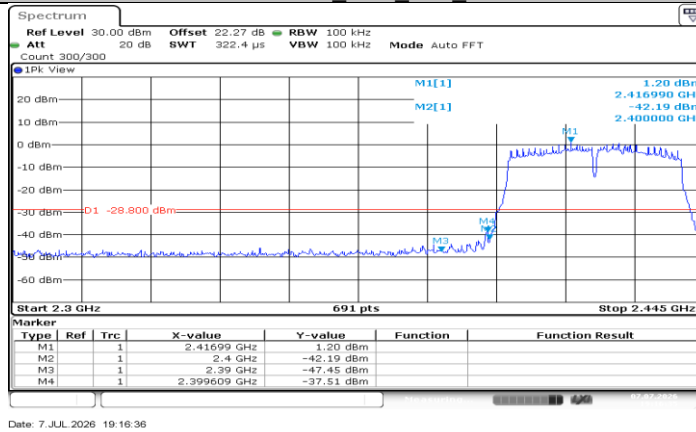
11N20MIMO_Ant0_High_2462



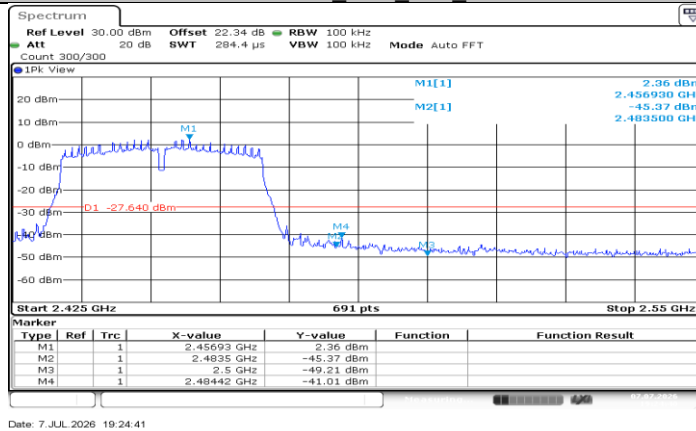
11N20MIMO_Ant1_High_2462



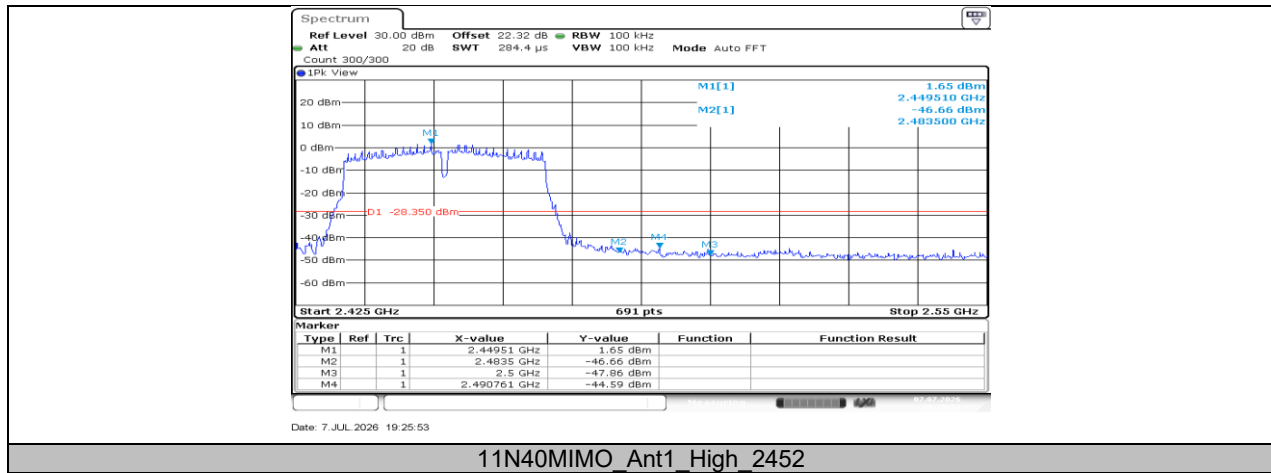
11N40MIMO_Ant0_Low_2422



11N40MIMO_Ant1_Low_2422



11N40MIMO_Ant0_High_2452



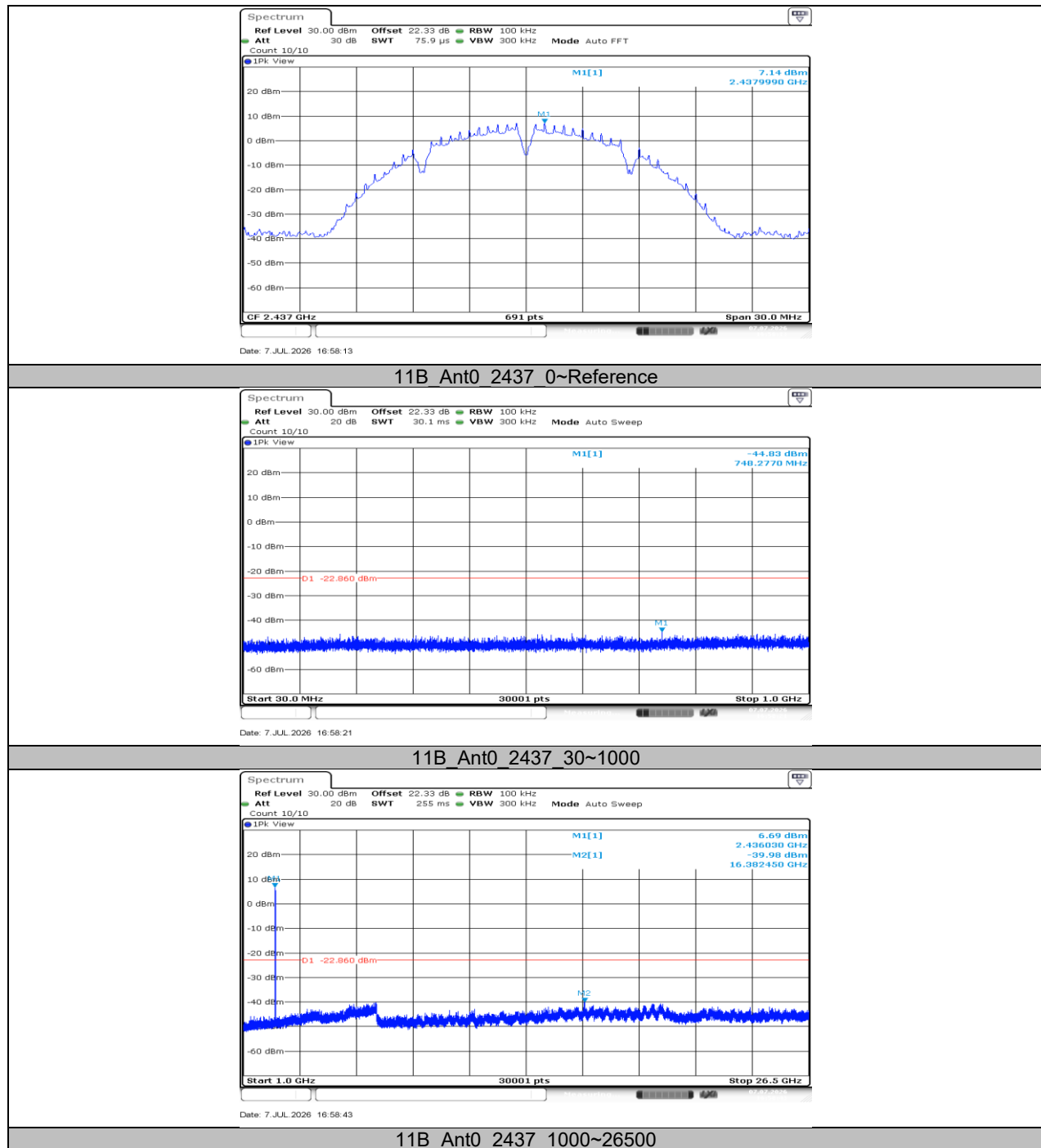
11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION

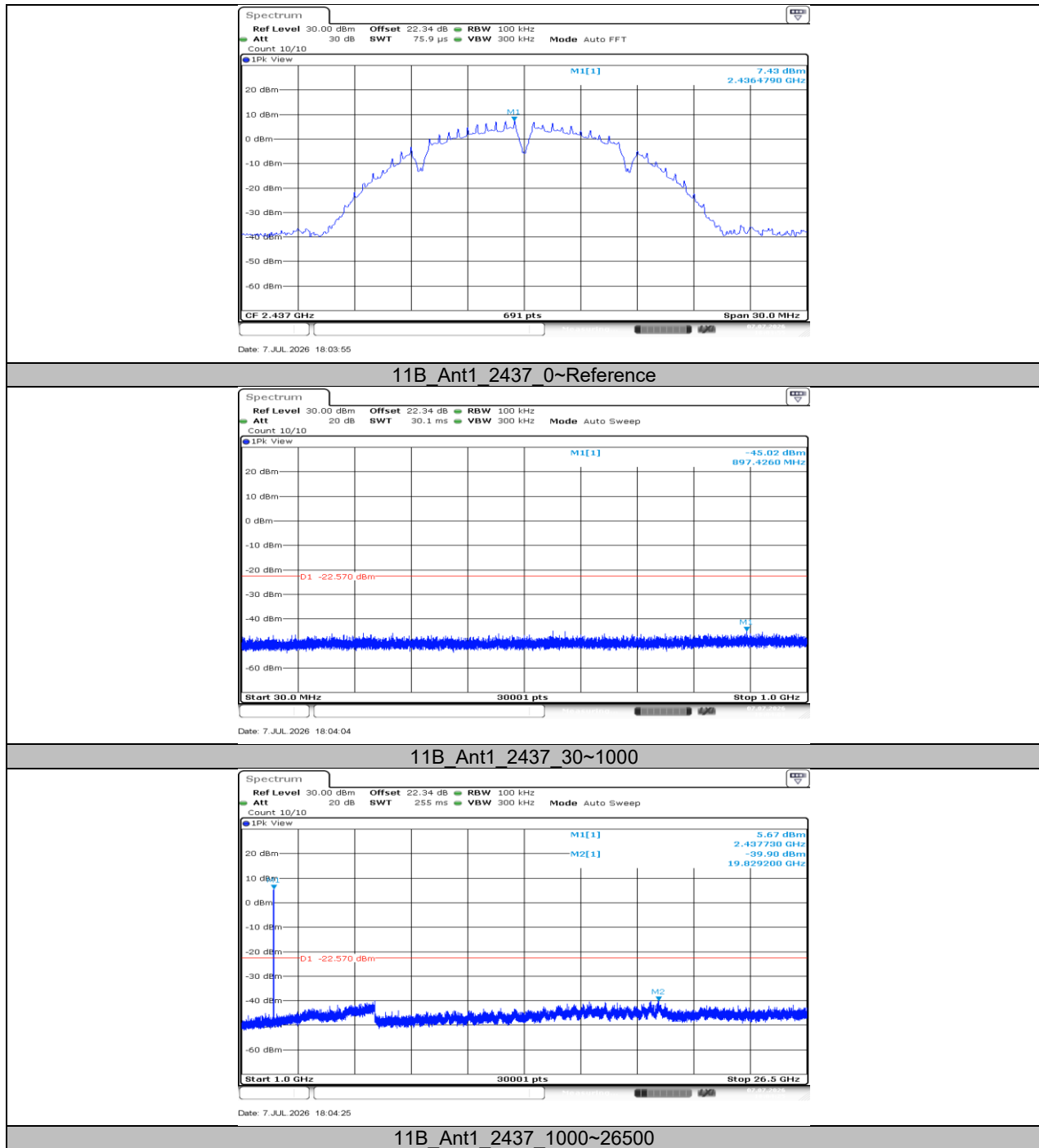
11.6.1. Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	Reference	7.23	---	PASS
			30~1000	-45.24	≤-22.77	PASS
			1000~26500	-40.52	≤-22.77	PASS
	Ant1	2412	Reference	7.31	---	PASS
			30~1000	-45.24	≤-22.69	PASS
			1000~26500	-39.88	≤-22.69	PASS
	Ant0	2437	Reference	7.14	---	PASS
			30~1000	-44.83	≤-22.86	PASS
			1000~26500	-39.98	≤-22.86	PASS
	Ant1	2437	Reference	7.43	---	PASS
			30~1000	-45.02	≤-22.57	PASS
			1000~26500	-39.9	≤-22.57	PASS
	Ant0	2462	Reference	7.12	---	PASS
			30~1000	-45.29	≤-22.88	PASS
			1000~26500	-39.74	≤-22.88	PASS
	Ant1	2462	Reference	7.39	---	PASS
			30~1000	-45.08	≤-22.61	PASS
			1000~26500	-40.1	≤-22.61	PASS
11G	Ant0	2412	Reference	3.11	---	PASS
			30~1000	-44.9	≤-26.89	PASS
			1000~26500	-40.08	≤-26.89	PASS
	Ant1	2412	Reference	5.38	---	PASS
			30~1000	-45.48	≤-24.62	PASS
			1000~26500	-40.05	≤-24.62	PASS
	Ant0	2437	Reference	5.34	---	PASS
			30~1000	-44.34	≤-24.66	PASS
			1000~26500	-40.02	≤-24.66	PASS
	Ant1	2437	Reference	5.60	---	PASS
			30~1000	-45.35	≤-24.4	PASS
			1000~26500	-39.75	≤-24.4	PASS
	Ant0	2462	Reference	5.48	---	PASS
			30~1000	-44.72	≤-24.52	PASS
			1000~26500	-39.99	≤-24.52	PASS
	Ant1	2462	Reference	5.72	---	PASS
			30~1000	-45.32	≤-24.28	PASS
			1000~26500	-39.28	≤-24.28	PASS
11N20MIMO	Ant0	2412	Reference	5.26	---	PASS
			30~1000	-44.88	≤-24.74	PASS
			1000~26500	-40.06	≤-24.74	PASS
	Ant1	2412	Reference	4.46	---	PASS
			30~1000	-45.41	≤-25.54	PASS
			1000~26500	-40.31	≤-25.54	PASS
	Ant0	2437	Reference	4.94	---	PASS
			30~1000	-45.55	≤-25.06	PASS
			1000~26500	-39.72	≤-25.06	PASS
	Ant1	2437	Reference	4.04	---	PASS
			30~1000	-44.49	≤-25.96	PASS
			1000~26500	-39.28	≤-25.96	PASS
	Ant0	2462	Reference	4.92	---	PASS
			30~1000	-45.09	≤-25.08	PASS
			1000~26500	-40.42	≤-25.08	PASS
	Ant1	2462	Reference	4.32	---	PASS
			30~1000	-45.28	≤-25.68	PASS
			1000~26500	-39.85	≤-25.68	PASS
11N40MIMO	Ant0	2422	Reference	2.41	---	PASS

			30~1000	-44.09	≤ -27.59	PASS
			1000~26500	-40.19	≤ -27.59	PASS
	Ant1	2422	Reference	1.37	---	PASS
			30~1000	-45.29	≤ -28.63	PASS
			1000~26500	-40.52	≤ -28.63	PASS
	Ant0	2437	Reference	2.37	---	PASS
			30~1000	-44.87	≤ -27.63	PASS
			1000~26500	-39.96	≤ -27.63	PASS
	Ant1	2437	Reference	1.96	---	PASS
			30~1000	-45.3	≤ -28.04	PASS
			1000~26500	-39.99	≤ -28.04	PASS
	Ant0	2452	Reference	2.26	---	PASS
			30~1000	-45.27	≤ -27.74	PASS
			1000~26500	-40.2	≤ -27.74	PASS
	Ant1	2452	Reference	1.75	---	PASS
			30~1000	-45.37	≤ -28.25	PASS
			1000~26500	-38.92	≤ -28.25	PASS

11.6.2. Test Graphs





Note:

1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 100kHz is used in all modes on Conducted Spurious Emission test.

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	8.37	8.41	0.9952	99.52	0.02	0.12	0.01
11G	1.39	1.43	0.9720	97.20	0.12	0.72	1
11N20MIMO	1.29	1.34	0.9627	96.27	0.17	0.78	1
11N40MIMO	0.65	0.69	0.9420	94.20	0.26	1.54	2

Note:

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

Where: x is Duty Cycle (Linear)

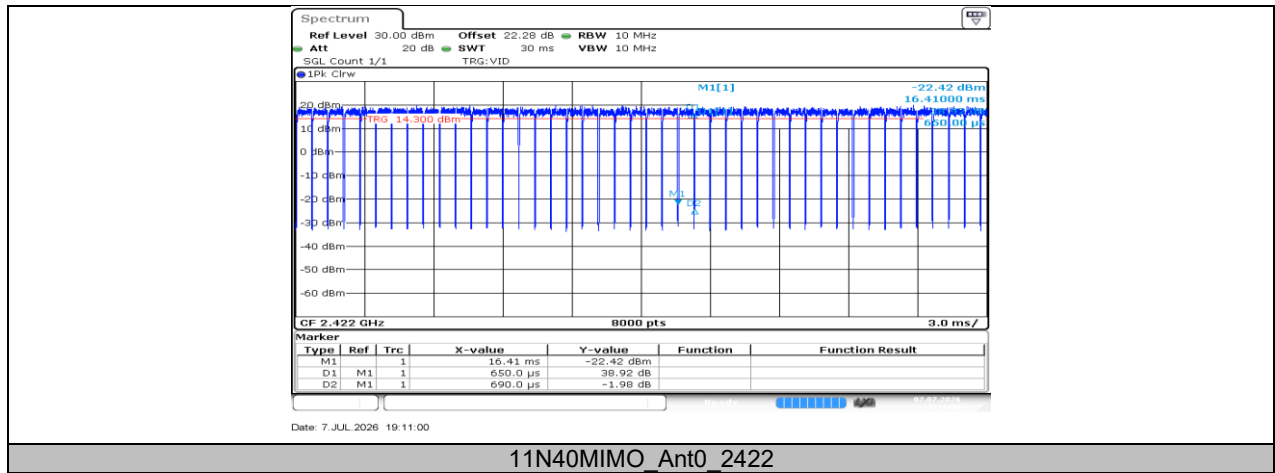
Where: T is On Time

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

If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW $\leq$ RBW/100 (i.e., 10 kHz) but not less than 10 Hz.

11.7.2. Test Graphs





END OF REPORT