TEST REPORT

Applicant Name:	Shenzhen Topwise Communication Co., Ltd
Address:	Floor5, Shengtang Mansion East Block, Tairan 9thRd, Futian District, Shenzhen, Guangdong, P.R.China
Report Number:	2601P34009E-RF-00C
FCC ID:	2BBKD-SK210

Test Standard (s)

FCC PART 15.247

Sample Description

Product Type:	Kiosk
Model No.:	SK210
Multiple Model(s) No.:	SK-210
Trade Mark:	TOPWISE
Date Received:	2026-02-02
Issue Date:	2026-04-03

Test Result:	Pass▲

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Allen. Bai

Allen Bai
RF Engineer

Approved By:

Nancy Wang

Nancy Wang
RF Supervisor

Note: The information marked# is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2601P34009E-RF-00C	Original Report	2026-04-03

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Kiosk
Tested Model	SK210
Multiple Model(s)	SK-210
Frequency Range	802.11b/g/n20: 2412~2462MHz 802.11n40: 2422~2452MHz
Maximum Conducted Output Peak Power	21.41dBm
Modulation Technique	DSSS, OFDM
Antenna Specification#	6.19dBi (provided by the applicant)
Voltage Range	DC 12V from adapter
Sample serial number	3GV6-1 for AC Line Conducted Emissions and Radiated Emissions Test 3GV6-6 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Model: TPQ-229C120300UW01 Input: 100-240V~50/60Hz 1.2A Output: 12.0V⎓3.0A
Note: The Multiple models are electrically identical with the test model except for different national markets. Please refer to the declaration letter# for more detail, which was provided by manufacturer.	

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		52.29kHz(k=1.96, 95% level of confidence)
RF output power, conducted		1.57dB(k=1.96, 95% level of confidence)
Power Spectral Density		2.09dB(k=1.96, 95% level of confidence)
Conducted Spurious Emission		2.48dB(k=1.96, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz~150 kHz	3.46dB(k=2, 95% level of confidence)
	150 kHz ~30MHz	3.72dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~30MHz	3.66dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Horizontal)	5.10dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Vertical)	6.28dB(k=2, 95% level of confidence)
	1GHz - 6GHz	6.18dB(k=2, 95% level of confidence)
	6GHz - 18GHz	6.62dB(k=2, 95% level of confidence)
	18GHz - 40GHz	6.66dB(k=2, 95% level of confidence)
Temperature		±0.4℃
Humidity		±2%
Supply voltages		DC±0.4%;AC±1%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, test firm registration No.: 715558, the FCC Designation No.: CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For 2.4GHz Wi-Fi mode, total 11 channels are provided to testing:

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

802.11b, 802.11g, 802.11n-HT20 mode was tested with Channel 1, 6 and 11.
802.11n-HT40 mode was tested with Channel 3, 6 and 9.

EUT Exercise Software

Exercise Software#		Engineering mode		
Mode	Data rate	Power Level#		
		Low Channel	Middle Channel	High Channel
802.11b	1Mbps	17	17	17
802.11g	6Mbps	16	16	16
802.11n20	MCS0	16	16	16
802.11n40	MCS0	14	14	14
Note: The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the power and PSD across all data rates bandwidths, and modulations.				

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

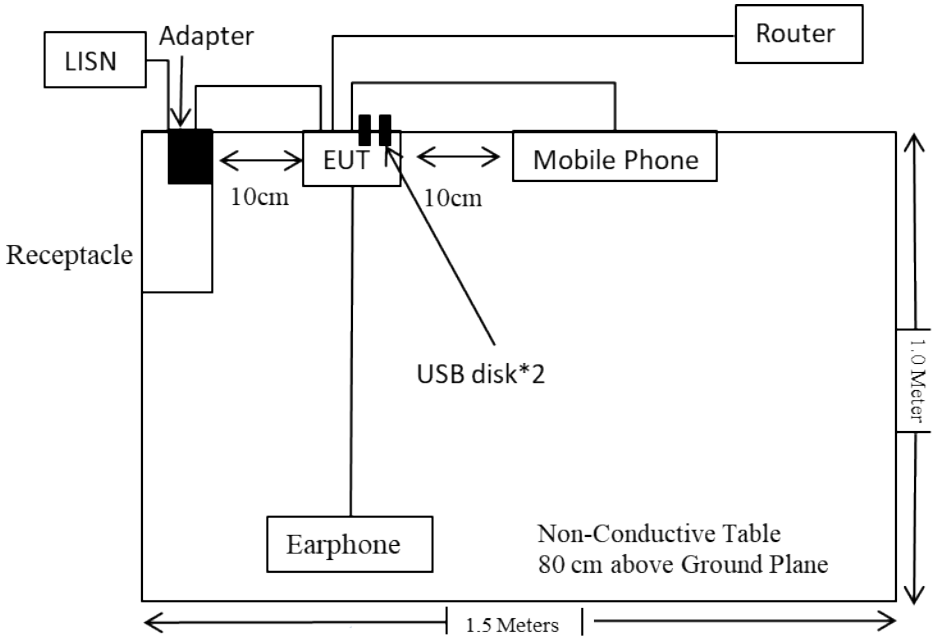
Manufacturer	Description	Model	Serial Number
OUPU	Receptacle	PDU-OP1606K	6971041358020
Meizu	Mobile phone	18x	Unknown
Sandisk	U disk	CZ73-64G	Unknown
Philips	U disk	11UA-M-01	Unknown
CRDC	Earphone	YXEJ-01Z	Unknown
HIKVISION	Router	DS-3WR03	10021642429

External I/O Cable

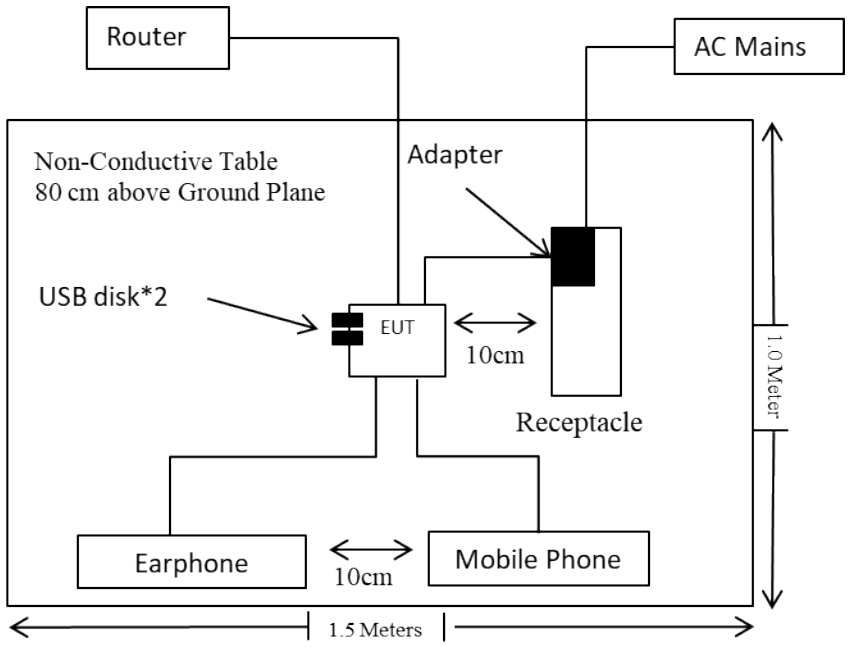
Cable Description	Length (m)	From Port	To
Unshielded Un-detachable AC cable	1.2	Receptacle	LISN/AC Mains
Unshielded Un-detachable DC cable	1.5	EUT	Adapter
Unshielded Detachable Audio cable	1.0	EUT	Earphone
Unshielded Detachable USB cable	1.5	EUT	Mobile phone
Unshielded Detachable RJ45 cable	10.0	EUT	Router

Block Diagram of Test Setup

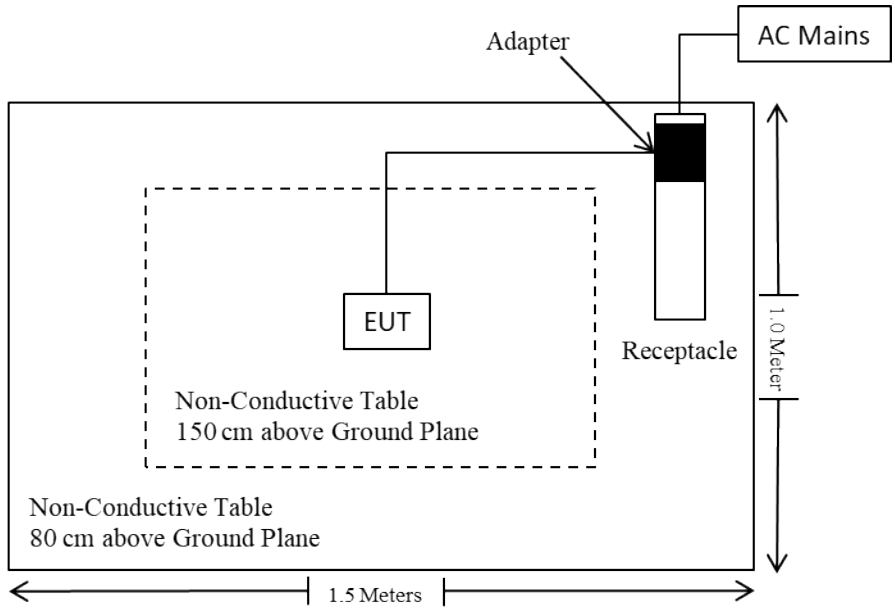
For Conducted Emissions:



For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



SUMMARY OF TEST RESULTS

Test Rules	Description of Test	Result
FCC §1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207 (a)	AC Line Conducted Emissions	Compliant
FCC §15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
FCC §15.247 (a)(2)	6 dB Emission Bandwidth & 99% Occupied Bandwidth	Compliant
FCC §15.247(b)(3)	Maximum Conducted Output Power	Compliant
FCC §15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
FCC §15.247(d)	Conducted Spurious Emission	Compliant
FCC §15.247(e)	Power Spectral Density	Compliant
C63.10 §11.6	Duty Cycle	/

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2025/09/01	2026/08/31
Rohde & Schwarz	LISN	ENV216	101613	2025/09/18	2026/09/17
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/09/18	2026/09/17
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/09/18	2026/09/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
Sonoma instrument	Pre-amplifier	310N	186238	2025/09/08	2026/09/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Chamber A Cable	Cable A3	Cable A3	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A4	Cable A4	2025/09/08	2026/09/07
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Chamber A Cable	Cable A2	Cable A2	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A1	Cable A1	2025/09/08	2026/09/07
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
TDK	Chamber	Chamber A	2#	2023/07/12	2026/07/11
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2025/09/01	2026/08/31
A.H.System	Preamplifier	PAM-0118P	489	2025/09/08	2026/09/07
Schwarzbeck	Horn Antenna	BBHA9120D (1201)	1143	2023/07/26	2026/07/25
JD	Filter Switch Unit	DT7220FSU	DS79906	2025/08/12	2026/08/11
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2025/08/12	2026/08/11
Unknown	Chamber B Cable	Cable B1	Cable B1	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B2	Cable B2	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B3	Cable B3	2025/09/08	2026/09/07
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/09/08	2026/09/07
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Unknown	Chamber B Cable	Cable B4	Cable B4	2025/09/17	2026/09/16
Unknown	Chamber B Cable	Cable B5	Cable B5	2025/09/17	2026/09/16
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
TDK	Chamber	Chamber B	1#	2023/07/14	2026/07/13

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	102259	2025/09/01	2026/08/31
ANRITSU	Microwave peak power sensor	MA24418A	12622	2025/04/29	2026/04/28
Unknown	10dB Attenuator	Unknown	F-03-EM190	2025/06/26	2026/06/25
Micro-Tronics	RF Cable	8082135	W1113	2025/06/26	2026/06/25
JD	JD Auto Test System	NA	1.0.0.3769	NCR	NCR

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

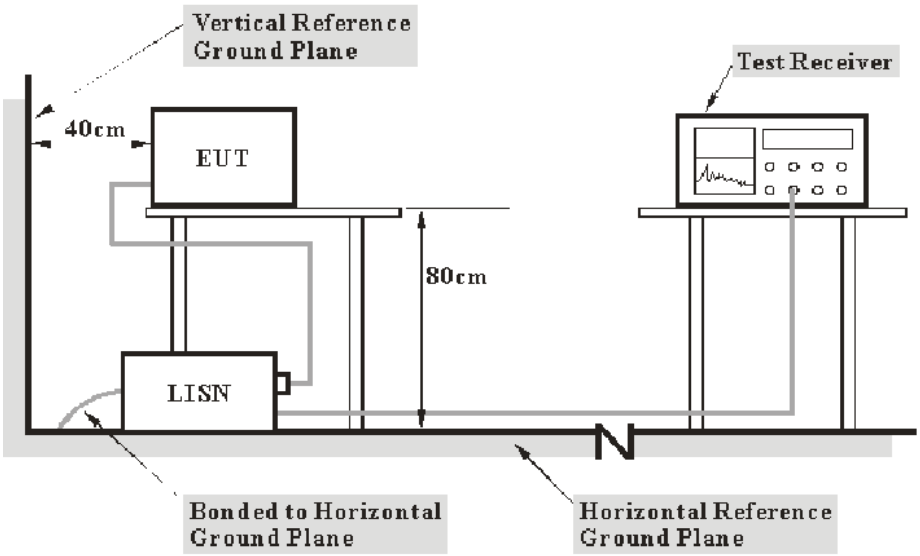
REQUIREMENTS AND TEST PROCEDURES

AC Line Conducted Emissions

Applicable Standard

FCC§15.207

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

The "**Over Limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Over Limit = level – Limit
Level= reading level+ Factor

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

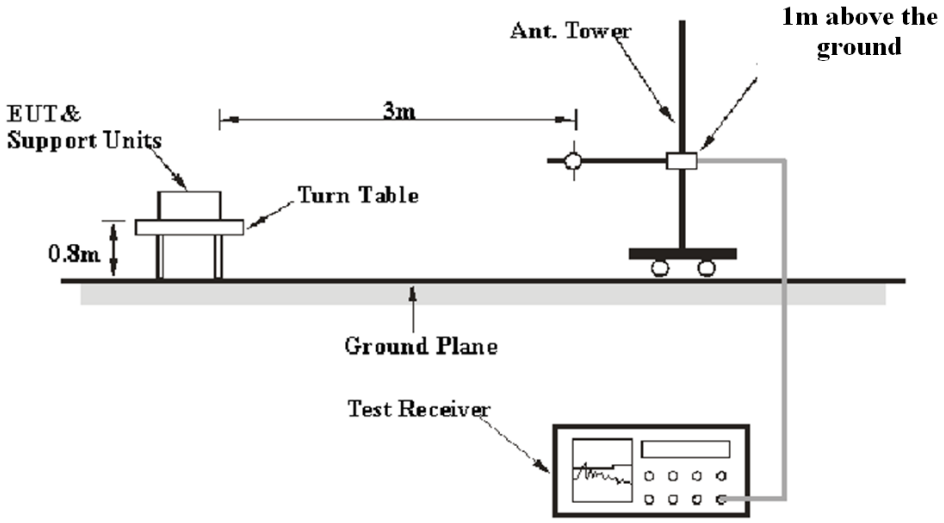
Spurious Emissions

Applicable Standard

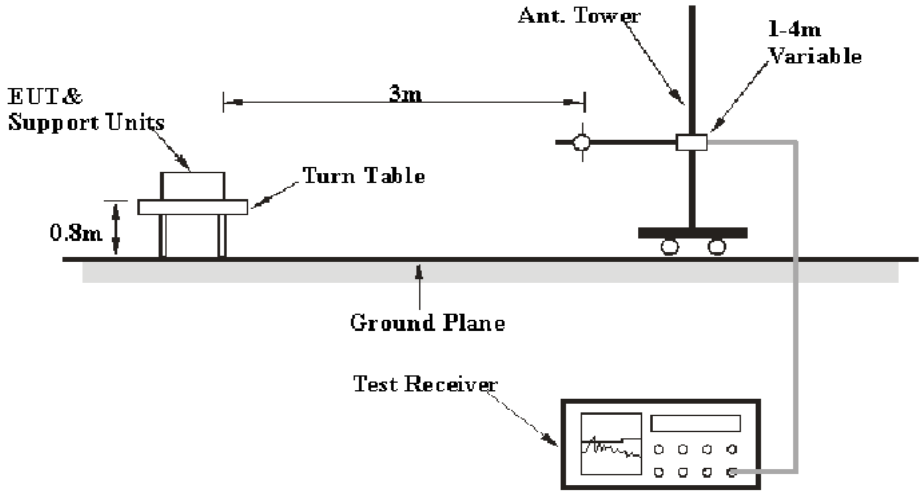
FCC §15.247 (d); §15.209; §15.205;

EUT Setup

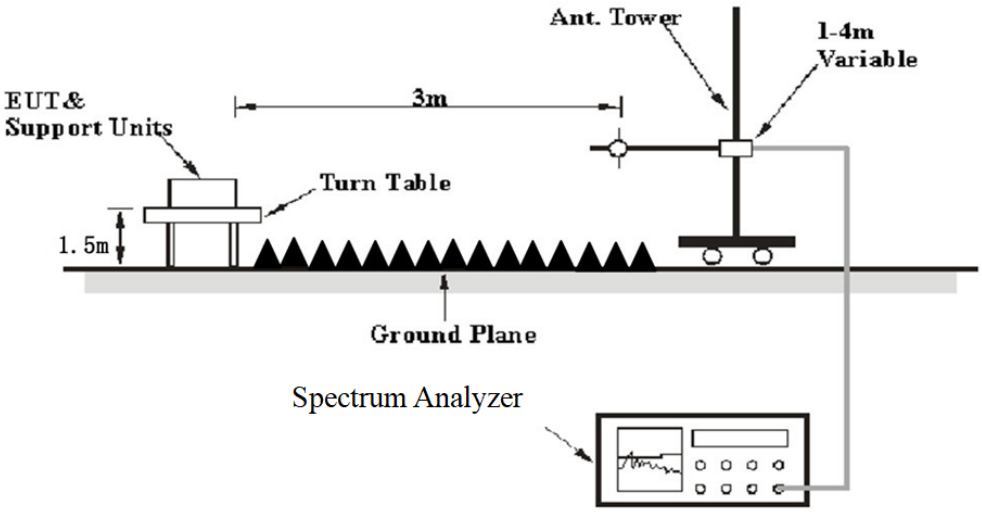
9 kHz-30MHz:



30MHz-1GHz:



Above 1GHz:



The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9 kHz-1GHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	Peak
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	Peak
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	Peak

1-25GHz:
Pre-scan

Measurement	Duty cycle	RBW	Video B/W	Detector
PK	Any	1MHz	3 MHz	Peak
AV	>98%	1MHz	1 kHz	Peak
	<98%	1MHz	>1/Ton, not less than 1kHz	Peak

Final measurement for emission identified during pre-scan

Measurement	Duty cycle	RBW	Video B/W	Detector
PK	Any	1MHz	3 MHz	Peak
AV	>98%	1MHz	10 Hz	Peak
	<98%	1MHz	≥1/Ton	Peak

Note: Ton is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

All emissions under the average limit and under the noise floor have not recorded in the report.

Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

Factor = Antenna Factor + Cable Loss - Amplifier Gain

The "**Over Limit/Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

Over Limit/Margin = Level/Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

6 dB Emission Bandwidth & 99% Occupied Bandwidth

Applicable Standard

According to FCC §15.247(a) (2)
Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

Test Method: ANSI C63.10-2020 Clause 11.8.1 & Clause 6.9.3

The steps for the first option are as follows:

a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.

b) Set the VBW ⩾ [3 × RBW].

c) Detector = peak.

d) Trace mode = max-hold.

e) Sweep = No faster than coupled (auto) time.

f) Allow the trace to stabilize.

g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the "−6 dB down amplitude". If a marker is below this "−6 dB down amplitude" value, then it shall be as close as possible to this value.

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.6.2.

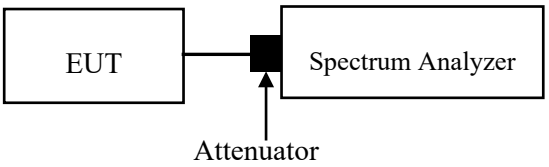
d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Note: Offset (10.5dB) = Attenuator (10dB) + Cable loss (0.5dB)

Maximum Conducted Output Power

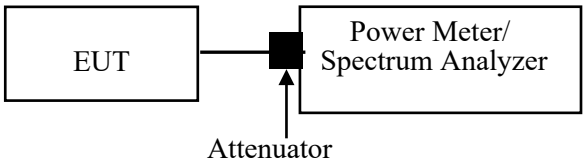
Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

Test method: ANSI C63.10-2020 clause 11.9.1.2 for peak power method or clause 11.9.2.3.2 for average power method.

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Note 1: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss
Note 2: Offset (10.5dB) = Attenuator (10dB) + Cable loss (0.5dB)

100 kHz Bandwidth of Frequency Band Edge

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

Test Method: ANSI C63.10-2020 Clause 11.11.3

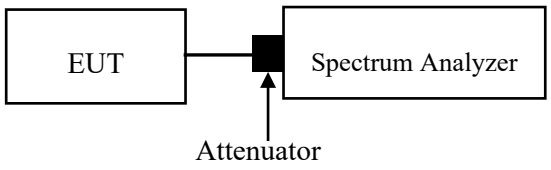
Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.

NOTE—the number of points can also be increased for large spans to retain frequency resolution

b) Set the RBW = 100 kHz.
c) Set the VBW ⩾ [3 × RBW].
d) Detector = peak.
e) Sweep time = No faster than coupled (auto) time.
f) Trace mode = max-hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude 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. Report the three highest emissions relative to the limit.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable loss (0.5dB)

Conducted Spurious Emission

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

Test Method: ANSI C63.10-2020 Clause 11.11.3

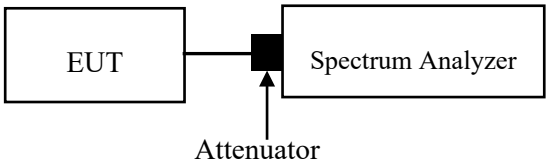
Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.

NOTE—the number of points can also be increased for large spans to retain frequency resolution

b) Set the RBW = 100 kHz.
c) Set the VBW ≥ [3 × RBW].
d) Detector = peak.
e) Sweep time = No faster than coupled (auto) time.
f) Trace mode = max-hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude 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. Report the three highest emissions relative to the limit.



Note 1: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the worst case cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss
Note 2: Offset (12.5dB) = Attenuator (10dB) + Cable loss (2.5dB)

Power Spectral Density

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

Test Method: ANSI C63.10-2020 Clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

a) Set analyzer center frequency to DTS channel center frequency.

b) Set the span >1.5 times the DTS bandwidth.

c) Set the RBW to 3 kHz ≤ RBW ≤ 100 kHz.

d) Set the VBW ≥ [3 × RBW].

e) Detector = peak.

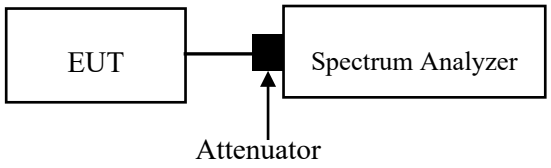
f) Sweep time = No faster than coupled (auto) time.

g) Trace mode = max-hold.

h) Allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum amplitude level within the RBW.

j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.



Note 1: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss
Note 2: Offset (10.5dB) = Attenuator (10dB) + Cable loss (0.5dB)

Duty Cycle

Test Procedure

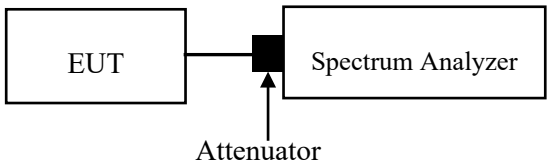
According to ANSI C63.10-2020 Section 11.6

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

a) A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.

b) The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

1) Set the center frequency of the instrument to the center frequency of the transmission.
2) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.
3) Set VBW ≥ RBW. Set detector = peak or average.
4) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if T ≤ 16.7 μs.)



Note: Offset (10.5dB) = Attenuator (10dB) + Cable loss (0.5dB)

ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Antenna Connector Construction

The EUT has one internal antenna arrangement, which was permanently attached, the antenna gain# is 6.19dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant

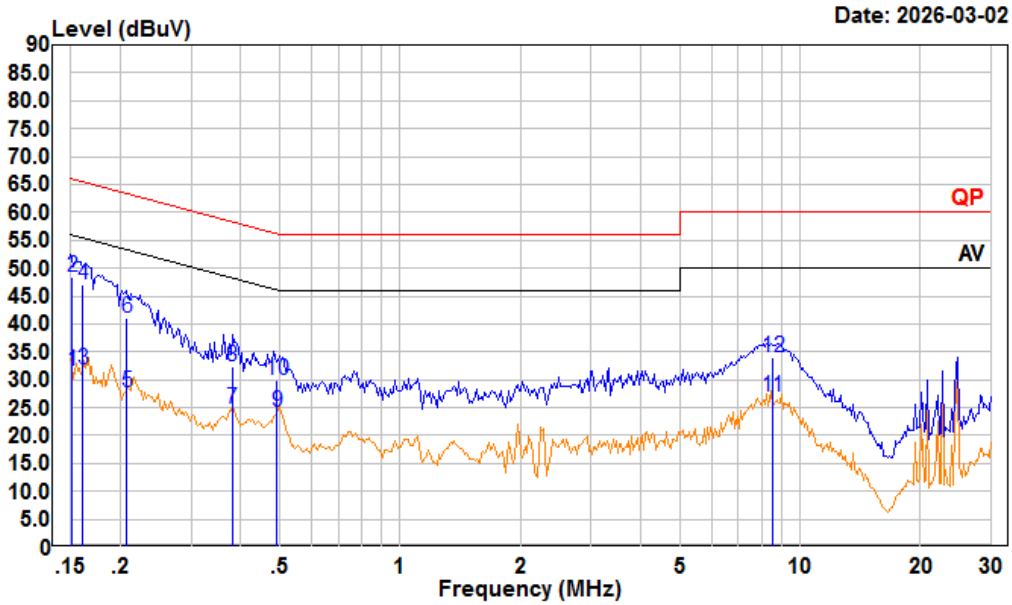
TEST DATA AND RESULTS

AC Line Conducted Emissions

Environmental Conditions

Temperature (°C)	22.1	**Relative Humidity (%)**	49
ATM Pressure (kPa)	100.4	**Test engineer**	Macy Shi
Test date	2026/3/2		
EUT operation mode	Transmitting (Maximum output power mode, 802.11g 2437MHz)		

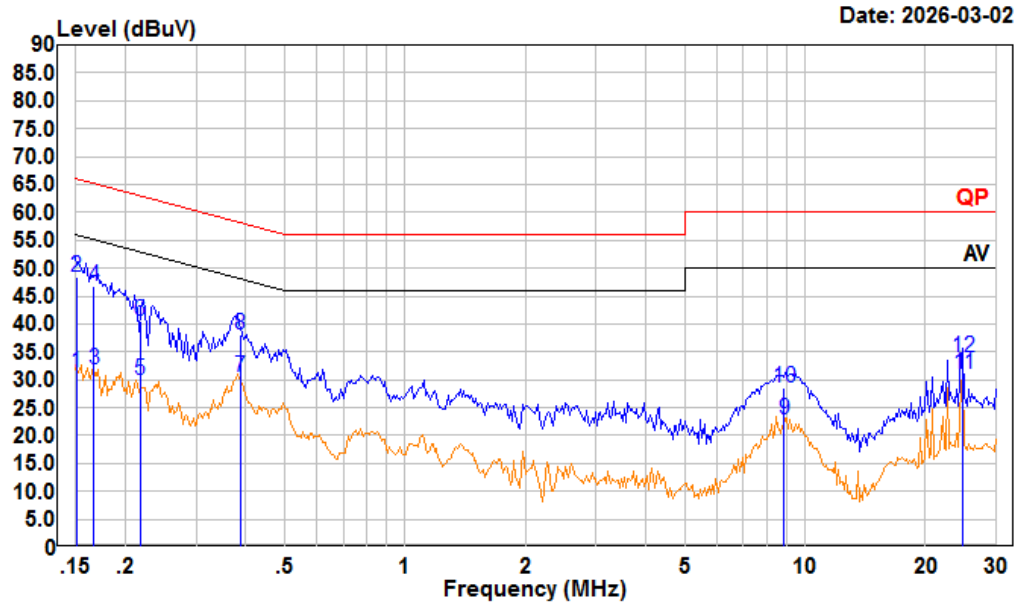
AC 120V 60 Hz, Line



Condition: Line
Project : 2601P34009E-RF
tester : Macy.shi Note:2.4G WIFI Transmitting
Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.151	11.88	31.60	9.70	10.02	55.94	-24.34	Average
2	0.151	28.59	48.31	9.70	10.02	65.94	-17.63	QP
3	0.161	12.08	31.80	9.70	10.02	55.40	-23.60	Average
4	0.161	27.27	46.99	9.70	10.02	65.40	-18.41	QP
5	0.207	7.96	27.69	9.70	10.03	53.32	-25.63	Average
6	0.207	21.32	41.05	9.70	10.03	63.32	-22.27	QP
7	0.381	5.09	24.89	9.77	10.03	48.26	-23.37	Average
8	0.381	12.69	32.49	9.77	10.03	58.26	-25.77	QP
9	0.491	4.45	24.28	9.80	10.03	46.15	-21.87	Average
10	0.491	10.08	29.91	9.80	10.03	56.15	-26.24	QP
11	8.511	6.70	26.91	9.90	10.31	50.00	-23.09	Average
12	8.511	13.83	34.04	9.90	10.31	60.00	-25.96	QP

AC 120V 60 Hz, Neutral



Condition: neutral
Project : 2601P34009E-RF
tester : Macy.shi Note:2.4G WIFI Transmitting
Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.151	11.55	31.17	9.60	10.02	55.96	-24.79	Average
2	0.151	28.72	48.34	9.60	10.02	65.96	-17.62	QP
3	0.166	12.08	31.70	9.60	10.02	55.14	-23.44	Average
4	0.166	27.19	46.81	9.60	10.02	65.14	-18.33	QP
5	0.217	10.38	30.01	9.60	10.03	52.91	-22.90	Average
6	0.217	20.88	40.51	9.60	10.03	62.91	-22.40	QP
7	0.387	10.88	30.51	9.60	10.03	48.12	-17.61	Average
8	0.387	18.43	38.06	9.60	10.03	58.12	-20.06	QP
9	8.857	2.82	22.83	9.70	10.31	50.00	-27.17	Average
10	8.857	8.66	28.67	9.70	10.31	60.00	-31.33	QP
11	24.837	10.77	30.95	9.70	10.48	50.00	-19.05	Average
12	24.837	13.95	34.13	9.70	10.48	60.00	-25.87	QP

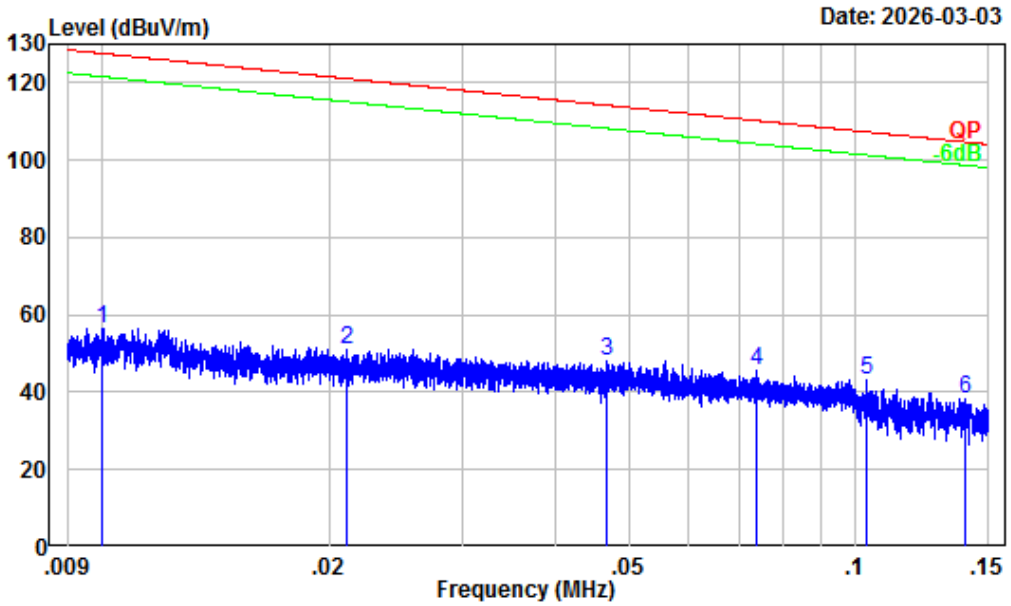
Spurious Emissions

Environmental Conditions

Temperature (°C)	21.6-23.8	**Relative Humidity (%)**	39-48
ATM Pressure (kPa):	100.2-101.5	**Test engineer:**	Anson Su& Zenos Qiao
Test date:	2026/02/25-2026/03/03		
EUT operation mode:	Below 1GHz: Transmitting (Maximum output power mode, 802.11g 2437MHz) Above 1GHz: Transmitting		
Note:	1. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded. 2. For the radiated spurious emission below 30MHz, When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded. 3. After pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation were recorded.		

Below 1GHz:

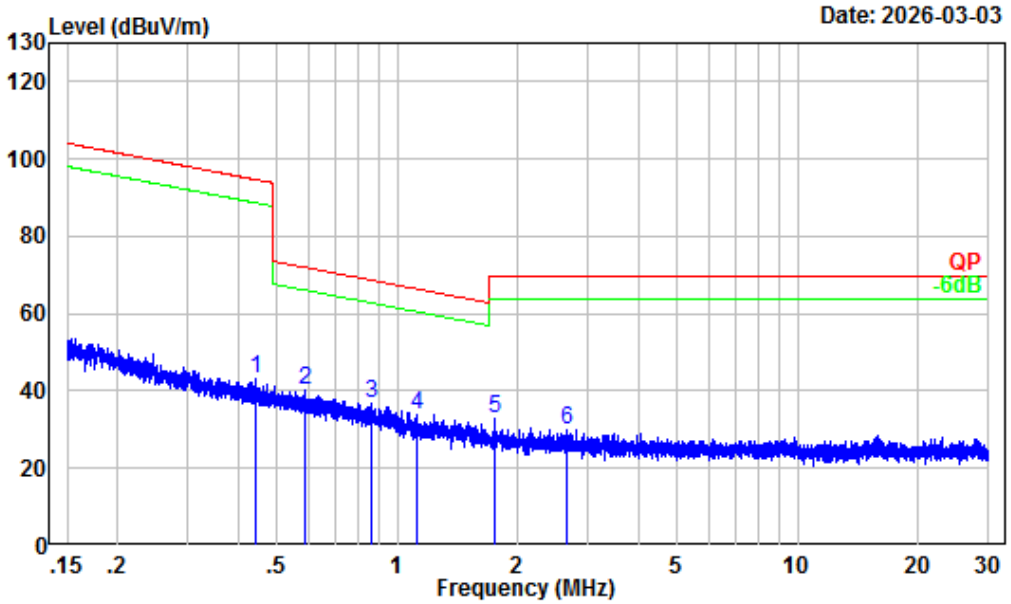
9kHz-150kHz



Site : Chamber A
Condition : 3m
Project Number : 2601P34009E-RF
Test Mode : 2.4G WIFI Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.29	24.37	56.66	127.58	-70.92	Peak
2	0.021	30.19	20.99	51.18	121.12	-69.94	Peak
3	0.047	26.73	21.22	47.95	114.20	-66.25	Peak
4	0.074	24.03	21.66	45.69	110.25	-64.56	Peak
5	0.104	21.79	21.30	43.09	107.31	-64.22	Peak
6	0.140	19.66	18.77	38.43	104.70	-66.27	Peak

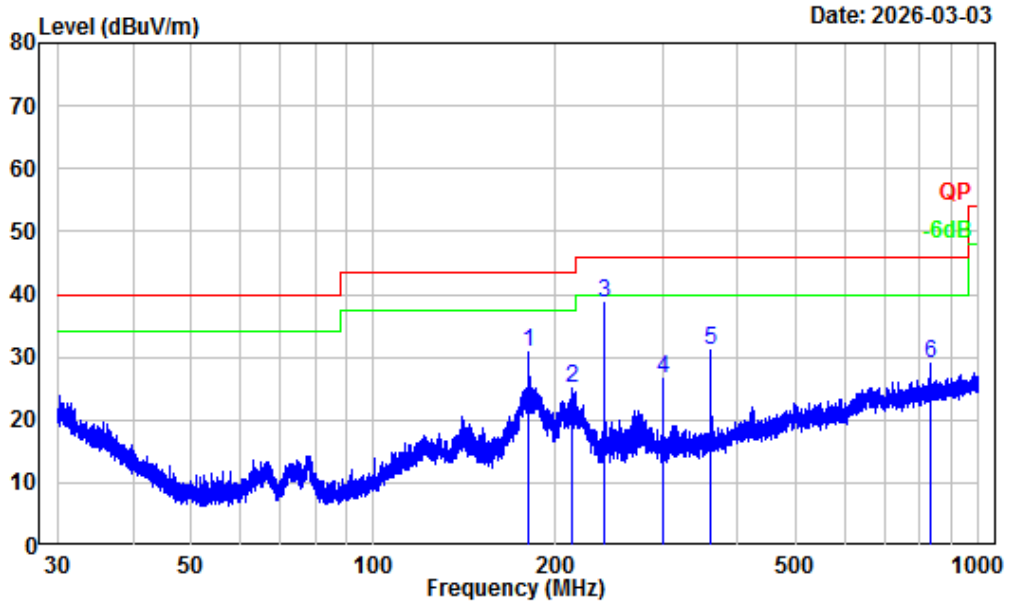
150kHz-30MHz



Site : Chamber A
Condition : 3m
Project Number : 2601P34009E-RF
Test Mode : 2.4G WIFI Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.442	7.51	35.57	43.08	94.70	-51.62	Peak
2	0.590	5.29	34.83	40.12	72.16	-32.04	Peak
3	0.858	2.26	34.45	36.71	68.83	-32.12	Peak
4	1.122	0.86	33.14	34.00	66.45	-32.45	Peak
5	1.760	-0.93	33.72	32.79	69.54	-36.75	Peak
6	2.657	-1.96	32.05	30.09	69.54	-39.45	Peak

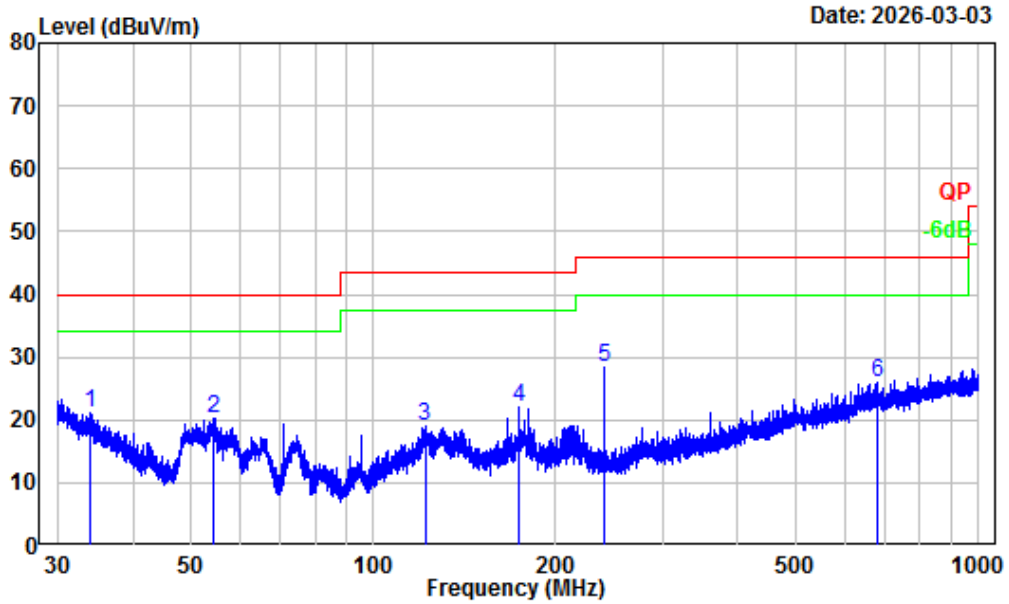
30MHz-1GHz_Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2601P34009E-RF
Test Mode : 2.4G WIFI Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	180.81	-13.94	44.62	30.68	43.50	-12.82	Peak
2	212.27	-14.44	39.38	24.94	43.50	-18.56	Peak
3	241.04	-13.71	52.49	38.78	46.00	-7.22	Peak
4	301.29	-11.57	38.18	26.61	46.00	-19.39	Peak
5	361.56	-10.25	41.30	31.05	46.00	-14.95	Peak
6	833.68	-2.32	31.21	28.89	46.00	-17.11	Peak

30MHz-1GHz_Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2601P34009E-RF
Test Mode : 2.4G WIFI Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	34.11	-8.29	29.49	21.20	40.00	-18.80	Peak
2	54.19	-18.38	38.70	20.32	40.00	-19.68	Peak
3	121.60	-11.67	30.75	19.08	43.50	-24.42	Peak
4	174.12	-13.68	35.60	21.92	43.50	-21.58	Peak
5	241.04	-13.71	42.07	28.36	46.00	-17.64	Peak
6	681.45	-3.77	29.62	25.85	46.00	-20.15	Peak

Above 1GHz:

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11b							
Low Channel							
4824	60.09	PK	H	-7.8	52.29	74	-21.71
4824	61.61	PK	V	-7.8	53.81	74	-20.19
Middle Channel							
4874	58.86	PK	H	-7.68	51.18	74	-22.82
4874	60.32	PK	V	-7.68	52.64	74	-21.36
High Channel							
4924	60.78	PK	H	-7.62	53.16	74	-20.84
4924	62.25	PK	V	-7.62	54.63	74	-19.37
4924	58.53	AV	V	-7.62	50.91	54	-3.09
802.11g							
Low Channel							
4824	55.12	PK	H	-7.8	47.32	74	-26.68
4824	56.25	PK	V	-7.8	48.45	74	-25.55
Middle Channel							
4874	54.74	PK	H	-7.68	47.06	74	-26.94
4874	55.83	PK	V	-7.68	48.15	74	-25.85
High Channel							
4924	55.67	PK	H	-7.62	48.05	74	-25.95
4924	56.78	PK	V	-7.62	49.16	74	-24.84
802.11n20							
Low Channel							
4824	54.98	PK	H	-7.8	47.18	74	-26.82
4824	56.09	PK	V	-7.8	48.29	74	-25.71
Middle Channel							
4874	54.57	PK	H	-7.68	46.89	74	-27.11
4874	55.7	PK	V	-7.68	48.02	74	-25.98
High Channel							
4924	55.51	PK	H	-7.62	47.89	74	-26.11
4924	56.63	PK	V	-7.62	49.01	74	-24.99

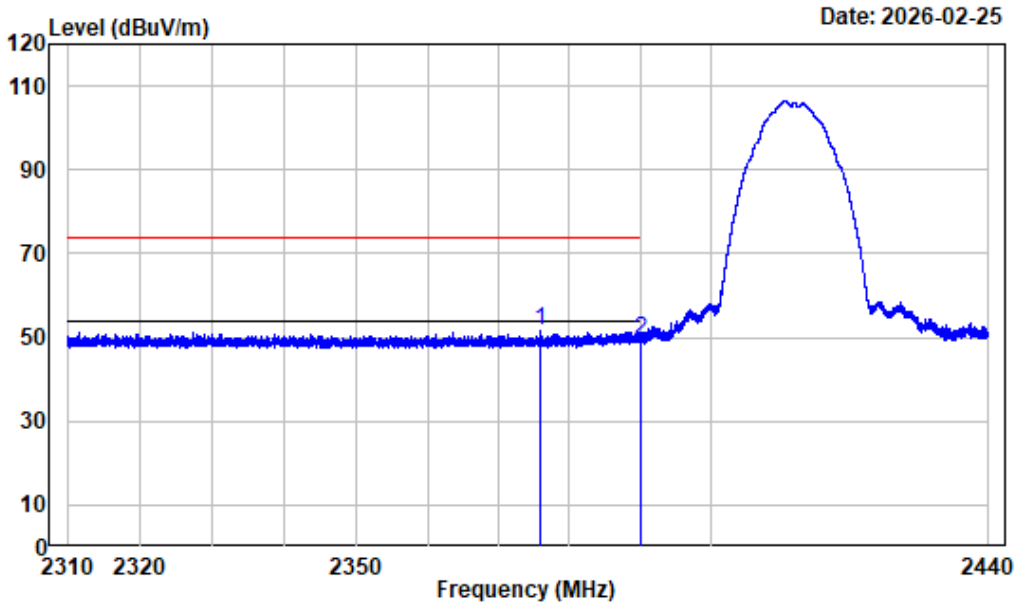
Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11n40							
Low Channel							
4844	53.15	PK	H	-7.78	45.37	74	-28.63
4844	54.01	PK	V	-7.78	46.23	74	-27.77
Middle Channel							
4874	52.83	PK	H	-7.68	45.15	74	-28.85
4874	53.67	PK	V	-7.68	45.99	74	-28.01
High Channel							
4904	53.48	PK	H	-7.6	45.88	74	-28.12
4904	54.32	PK	V	-7.6	46.72	74	-27.28

Note:
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Corrected. Amplitude - Limit
The other spurious emission which is in the noise floor level was not recorded.
The test result of peak was less than the limit of average, so just peak values were recorded.

Test plots

Band Edge

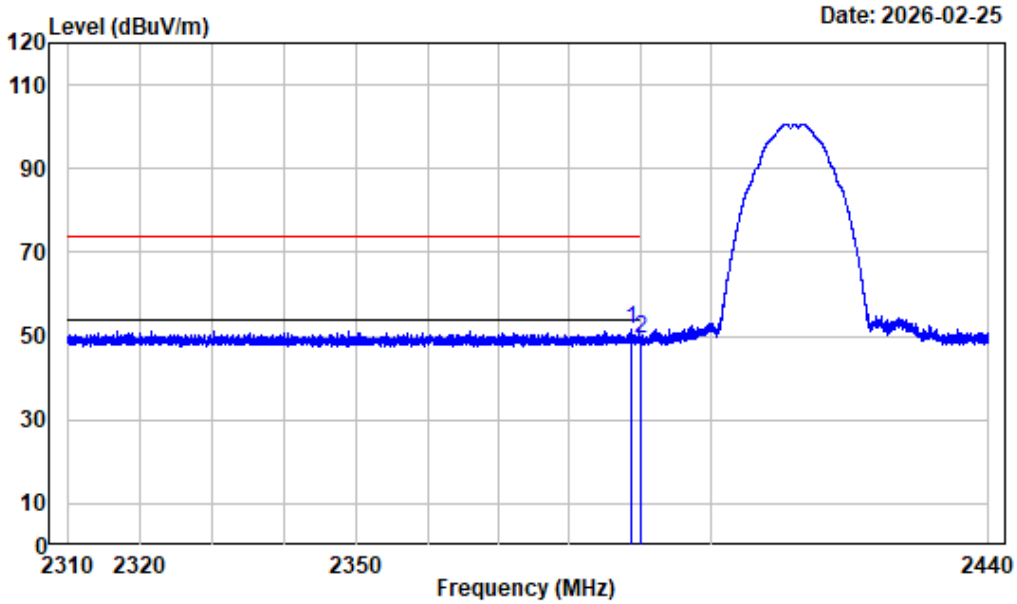
Left Band edge Horizontal 802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2375.877	-10.94	62.63	51.69	74.00	-22.31	Peak
2	2390.000	-10.97	60.34	49.37	74.00	-24.63	Peak

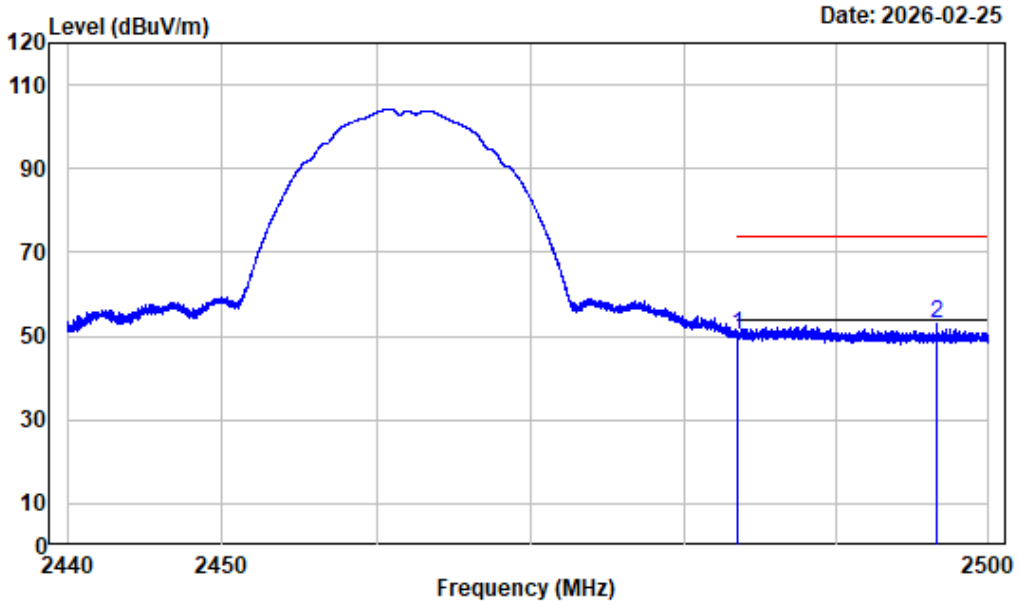
Left Band edge_Vertical_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2388.877	-10.96	62.76	51.80	74.00	-22.20	Peak
2	2390.000	-10.97	60.38	49.41	74.00	-24.59	Peak

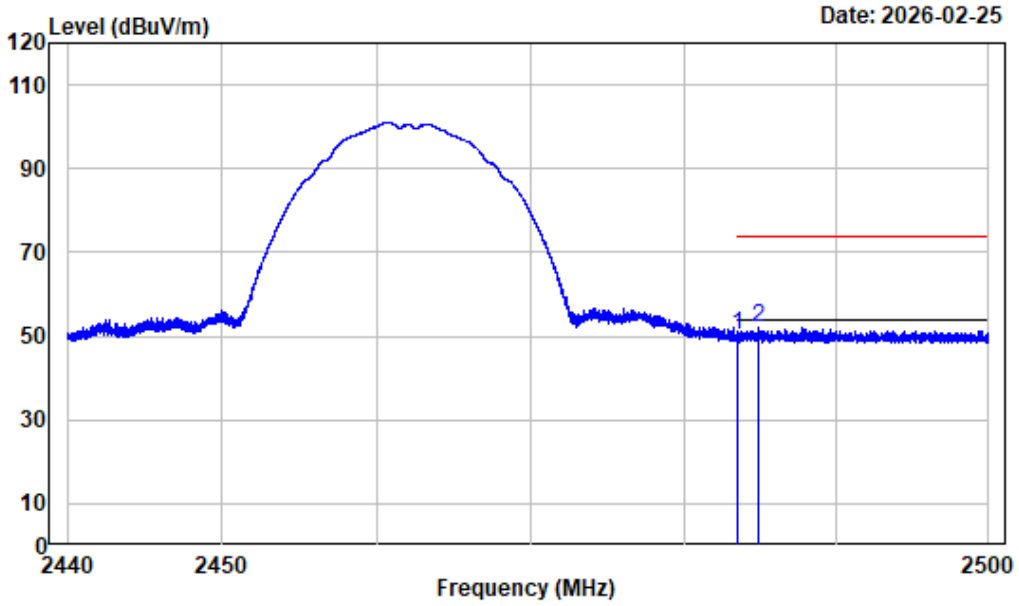
Right Band edge_Horizontal_802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	61.03	50.10	74.00	-23.90	Peak
2	2496.633	-10.94	63.83	52.89	74.00	-21.11	Peak

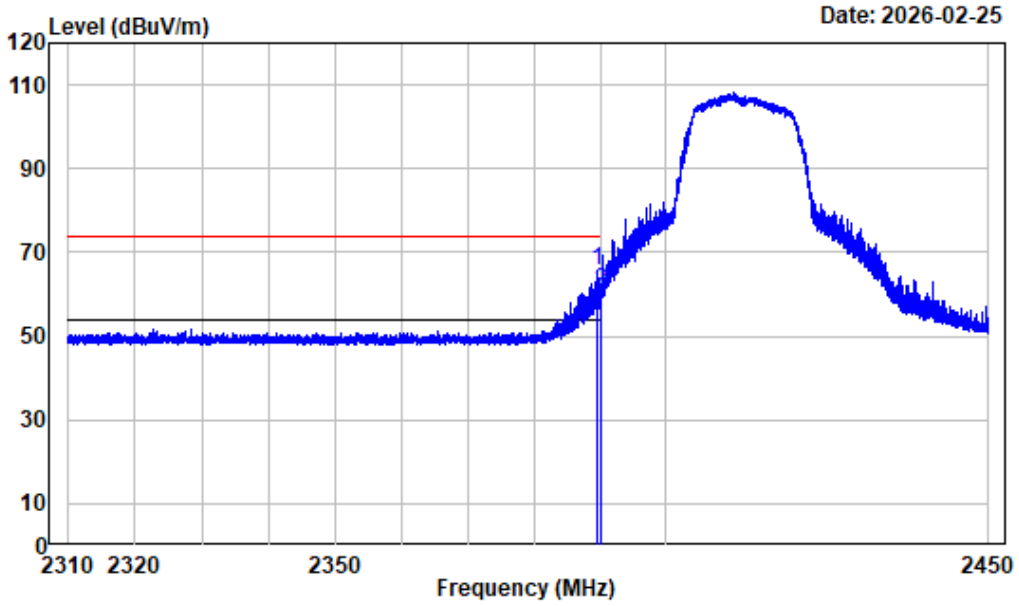
Right Band edge_Vertical_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	61.27	50.34	74.00	-23.66	Peak
2	2484.880	-10.93	62.93	52.00	74.00	-22.00	Peak

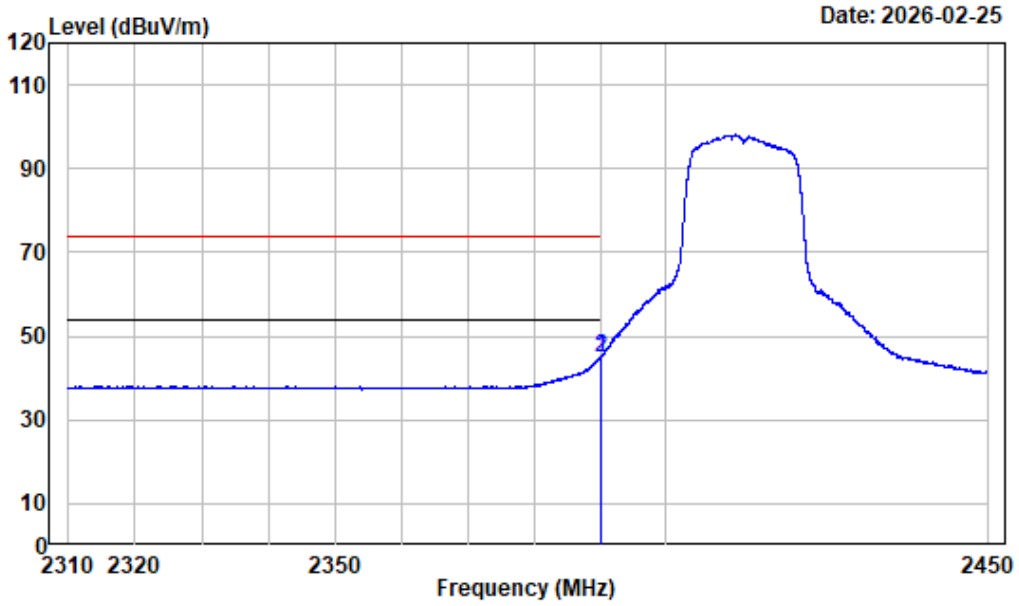
Left Band edge_Horizontal_Peak_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.643	-10.96	76.65	65.69	74.00	-8.31	Peak
2	2390.000	-10.97	71.63	60.66	74.00	-13.34	Peak

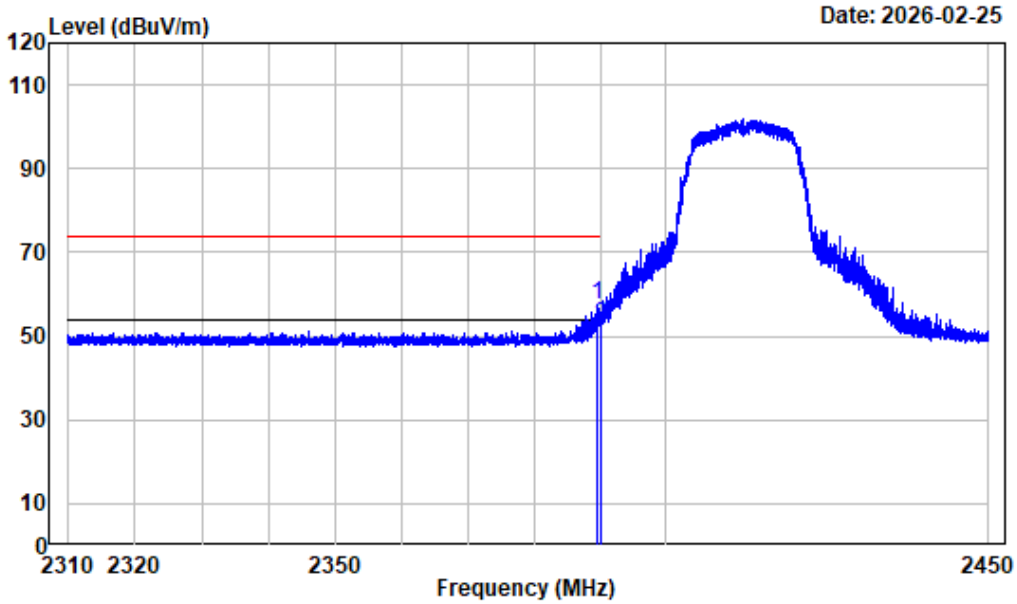
Left Band edge_Horizontal_Average_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.975	-10.97	55.91	44.94	54.00	-9.06	Average
2	2390.000	-10.97	55.84	44.87	54.00	-9.13	Average

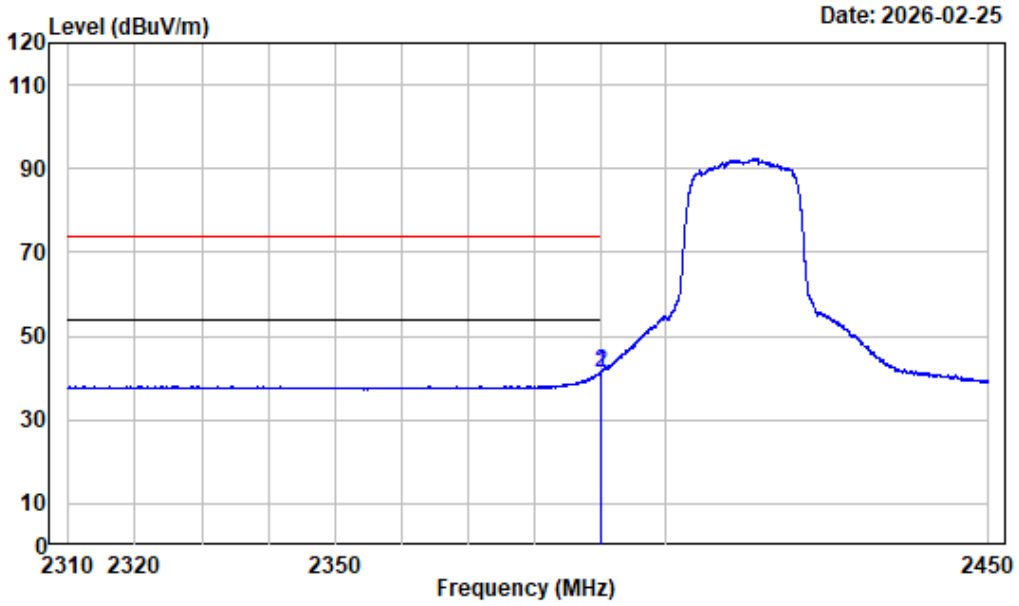
Left Band edge_Vertical_Peak_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.450	-10.96	68.68	57.72	74.00	-16.28	Peak
2	2390.000	-10.97	63.47	52.50	74.00	-21.50	Peak

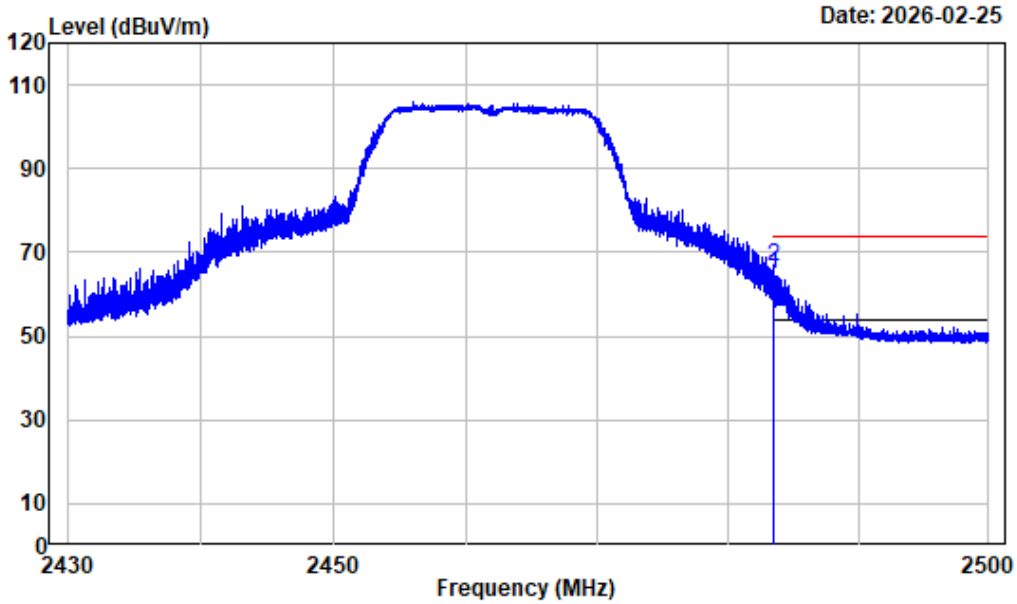
Left Band edge_Vertical_Average_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.992	-10.97	52.35	41.38	54.00	-12.62	Average
2	2390.000	-10.97	52.28	41.31	54.00	-12.69	Average

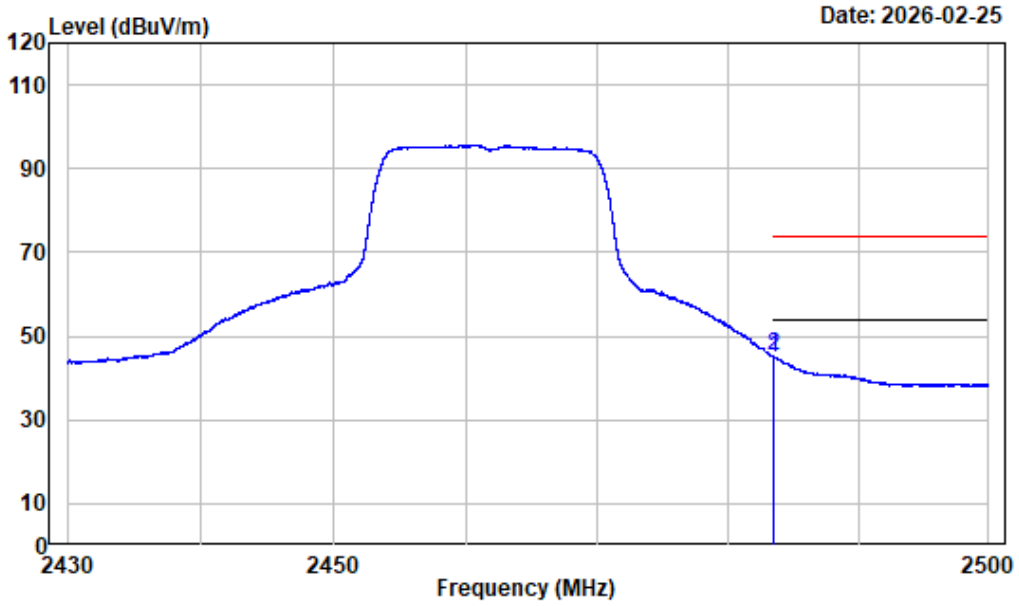
Right Band edge_Horizontal_Peak_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	75.64	64.71	74.00	-9.29	Peak
2	2483.506	-10.93	77.68	66.75	74.00	-7.25	Peak

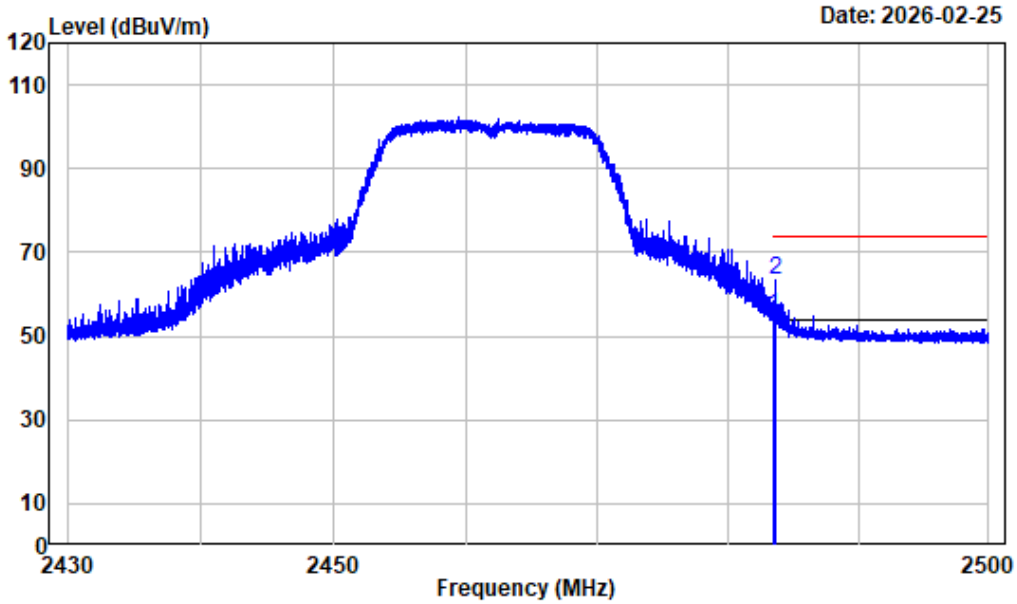
Right Band edge_Horizontal_Average_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	55.97	45.04	54.00	-8.96	Average
2	2483.541	-10.93	56.03	45.10	54.00	-8.90	Average

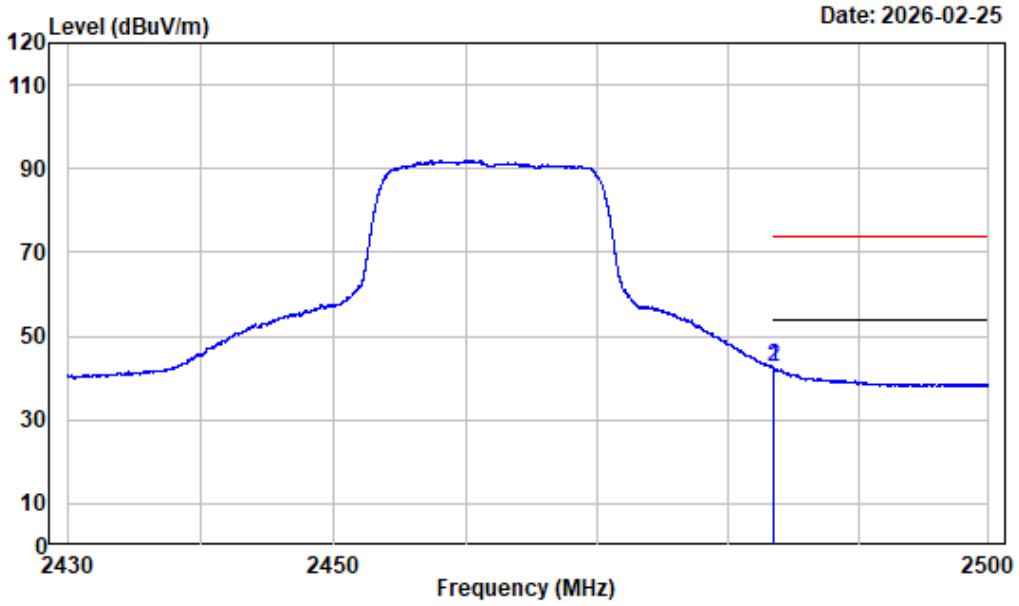
Right Band edge_Vertical_Peak_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	65.74	54.81	74.00	-19.19	Peak
2	2483.673	-10.93	74.28	63.35	74.00	-10.65	Peak

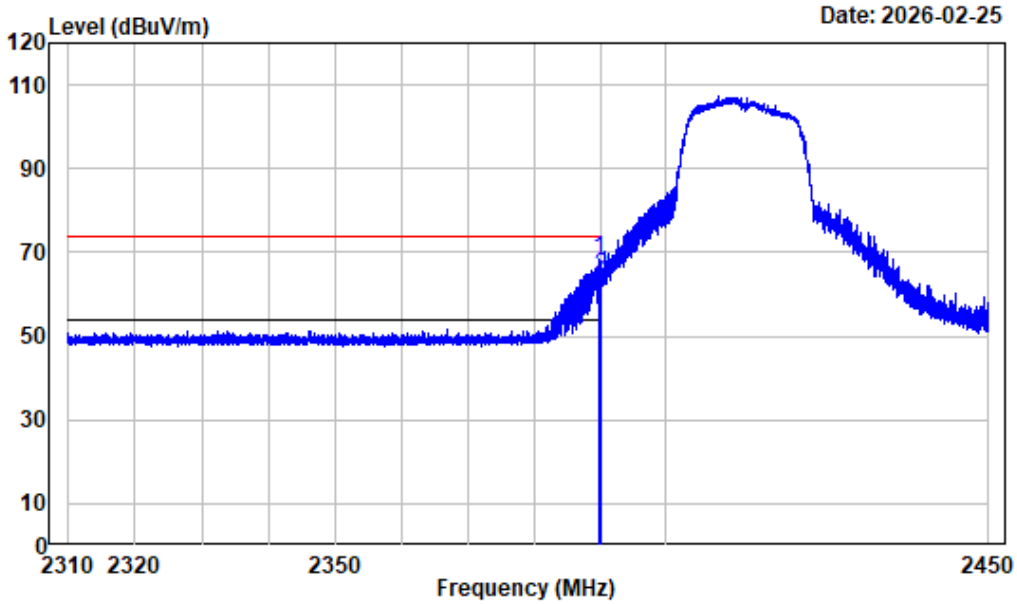
Right Band edge_Vertical_Average_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	53.36	42.43	54.00	-11.57	Average
2	2483.508	-10.93	53.44	42.51	54.00	-11.49	Average

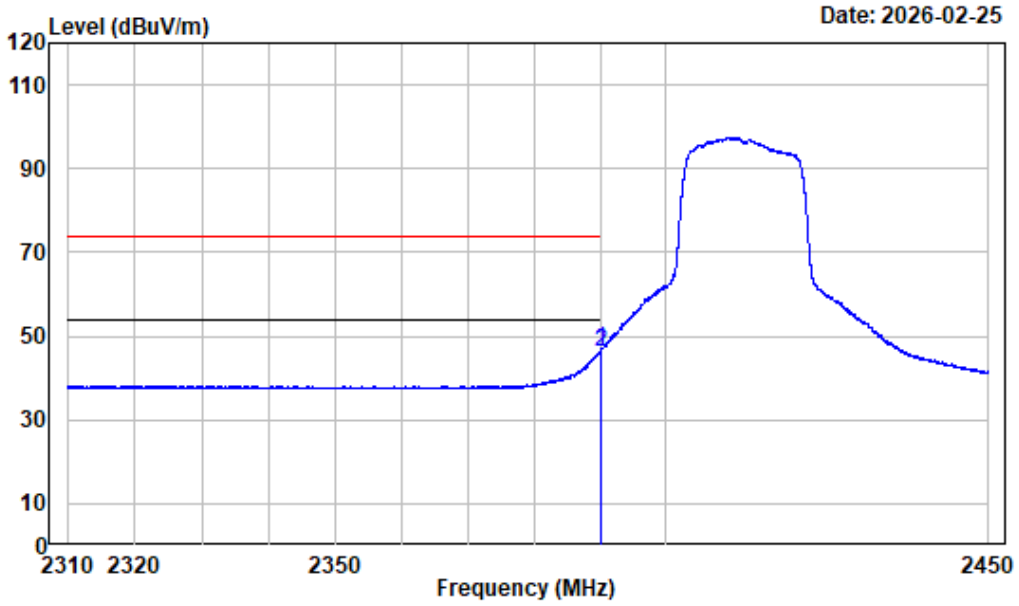
Left Band edge_Horizontal_Peak_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.800	-10.97	79.22	68.25	74.00	-5.75	Peak
2	2390.000	-10.97	75.44	64.47	74.00	-9.53	Peak

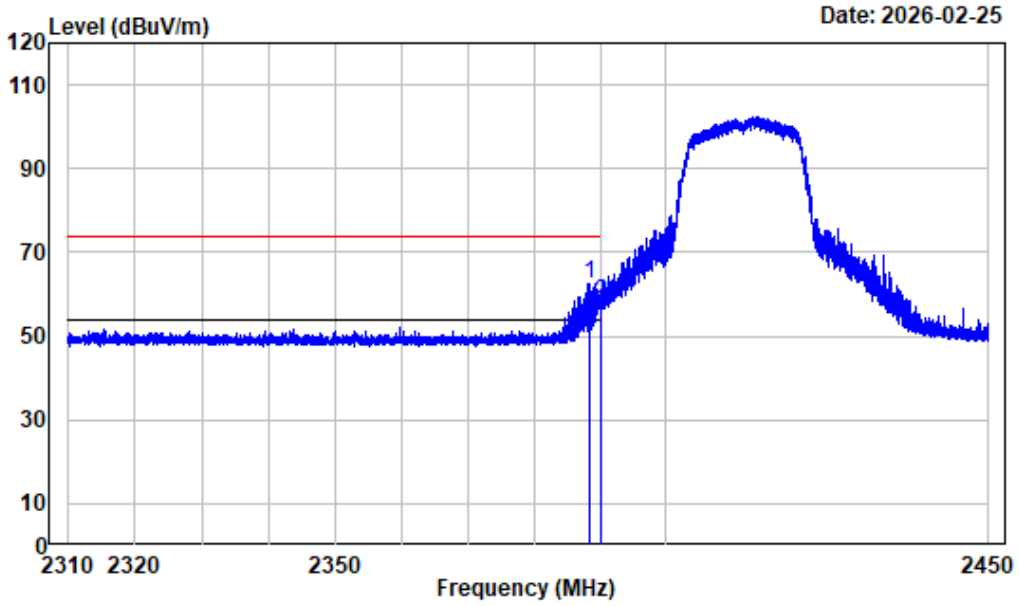
Left Band edge_Horizontal_Average_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.975	-10.97	57.40	46.43	54.00	-7.57	Average
2	2390.000	-10.97	57.35	46.38	54.00	-7.62	Average

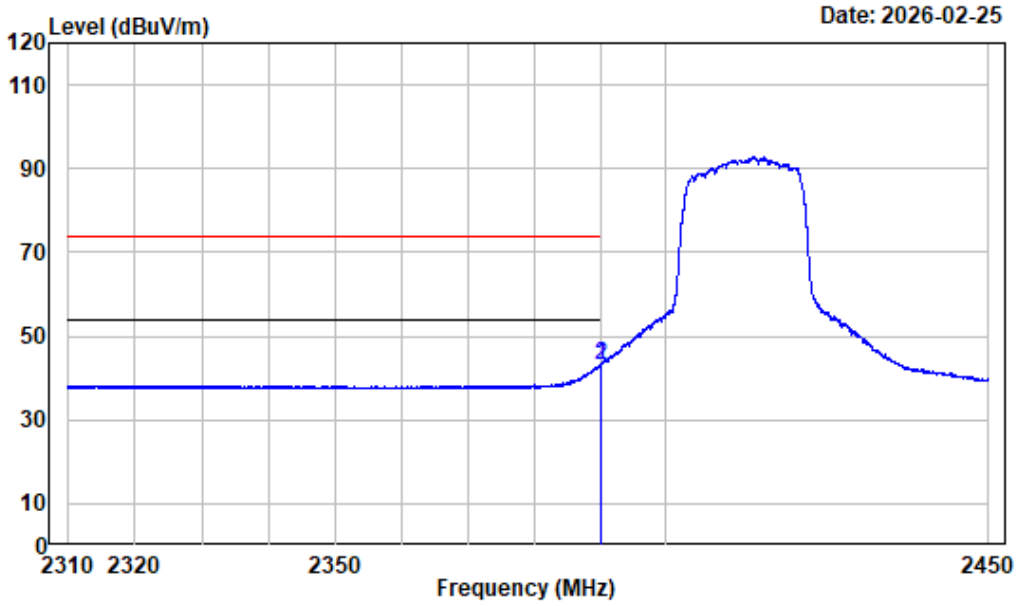
Left Band edge_Vertical_Peak_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2388.330	-10.96	73.64	62.68	74.00	-11.32	Peak
2	2390.000	-10.97	68.88	57.91	74.00	-16.09	Peak

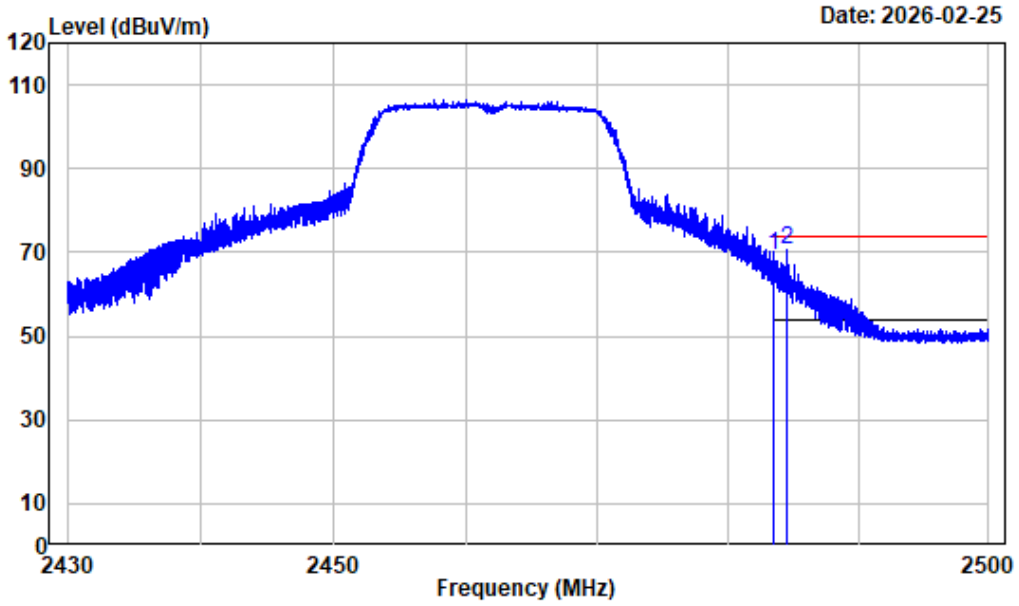
Left Band edge_Vertical_Average_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2412

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.992	-10.97	54.00	43.03	54.00	-10.97	Average
2	2390.000	-10.97	53.93	42.96	54.00	-11.04	Average

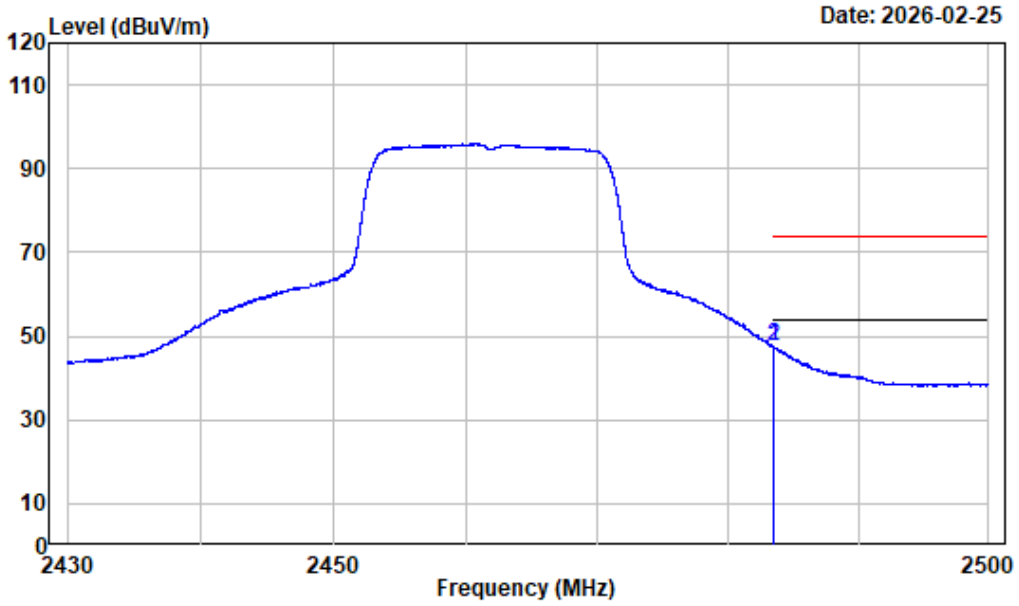
Right Band edge_Horizontal_Peak_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	80.13	69.20	74.00	-4.80	Peak
2	2484.451	-10.93	81.44	70.51	74.00	-3.49	Peak

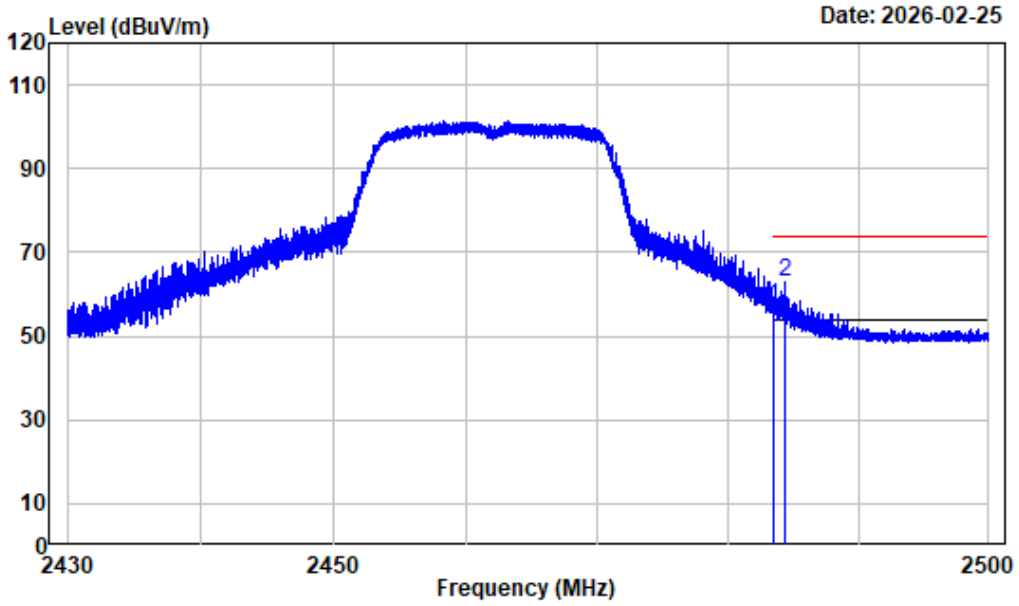
Right Band edge_Horizontal_Average_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	58.27	47.34	54.00	-6.66	Average
2	2483.510	-10.93	58.34	47.41	54.00	-6.59	Average

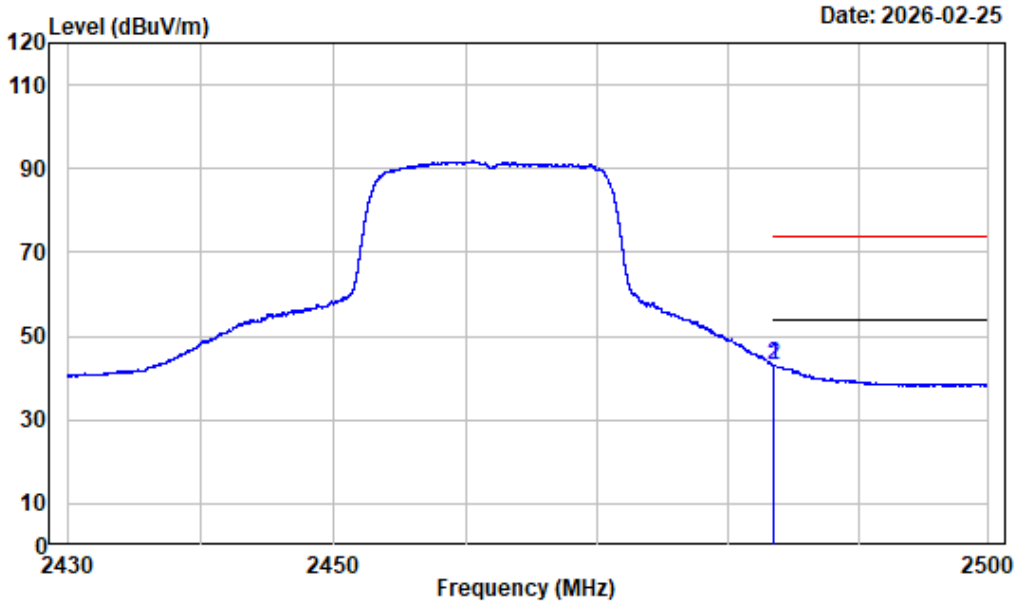
Right Band edge_Vertical_Peak_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	68.10	57.17	74.00	-16.83	Peak
2	2484.425	-10.93	74.06	63.13	74.00	-10.87	Peak

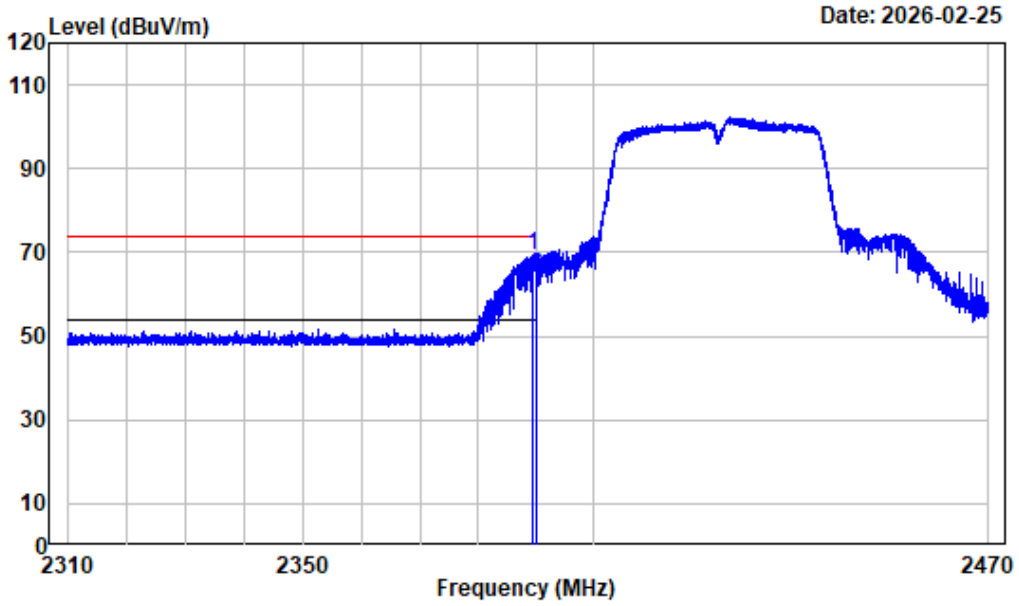
Right Band edge_Vertical_Average_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	54.04	43.11	54.00	-10.89	Average
2	2483.506	-10.93	54.12	43.19	54.00	-10.81	Average

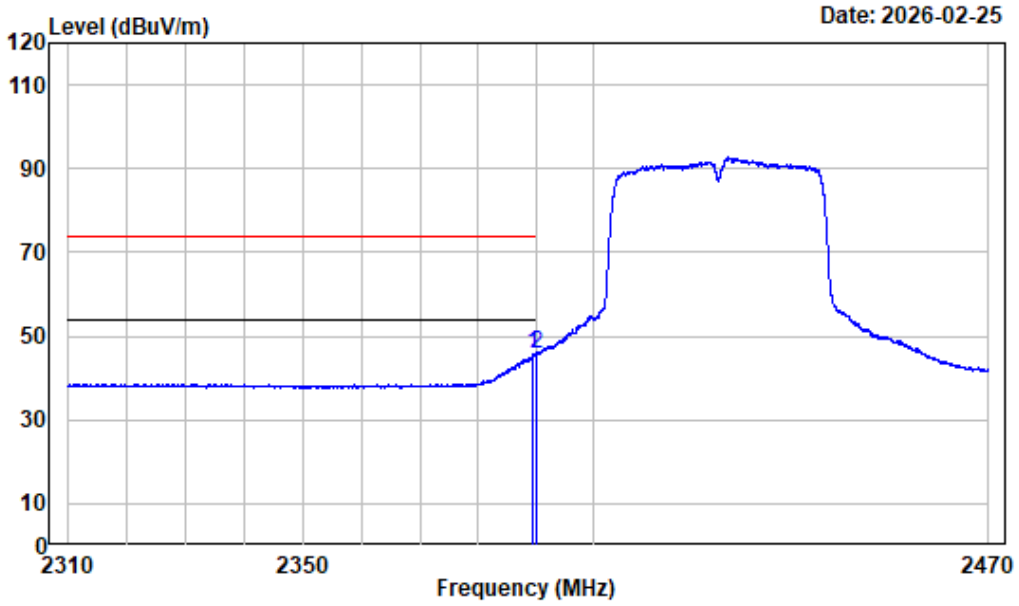
Left Band edge_Horizontal_Peak_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2422

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.480	-10.96	80.41	69.45	74.00	-4.55	Peak
2	2390.000	-10.97	75.42	64.45	74.00	-9.55	Peak

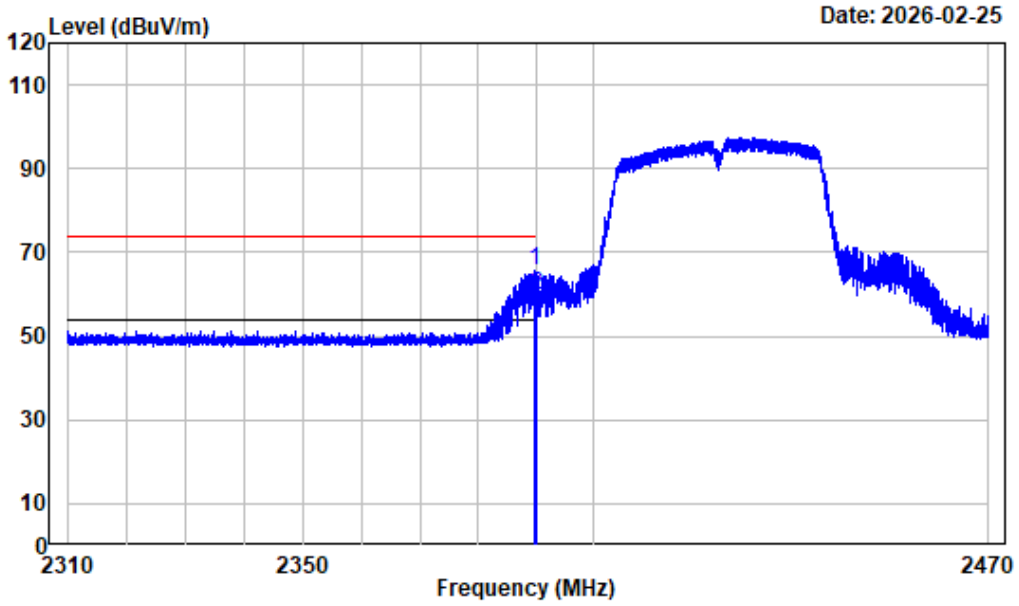
Left Band edge_Horizontal_Average_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2422

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.620	-10.96	56.92	45.96	54.00	-8.04	Average
2	2390.000	-10.97	56.75	45.78	54.00	-8.22	Average

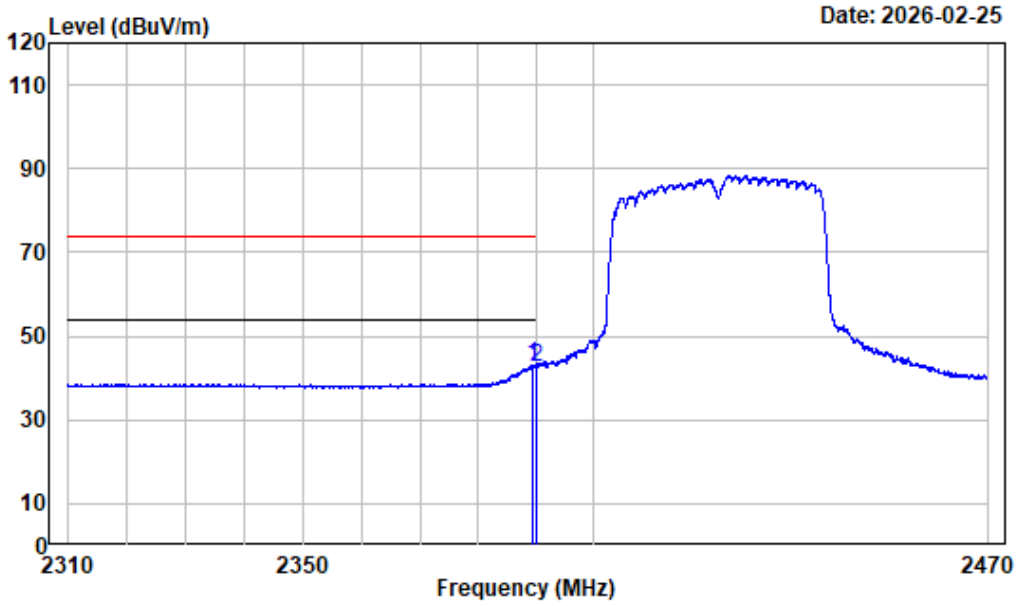
Left Band edge_Vertical_Peak_802.11n-HT40



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2422

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.780	-10.97	76.46	65.49	74.00	-8.51	Peak
2	2390.000	-10.97	70.69	59.72	74.00	-14.28	Peak

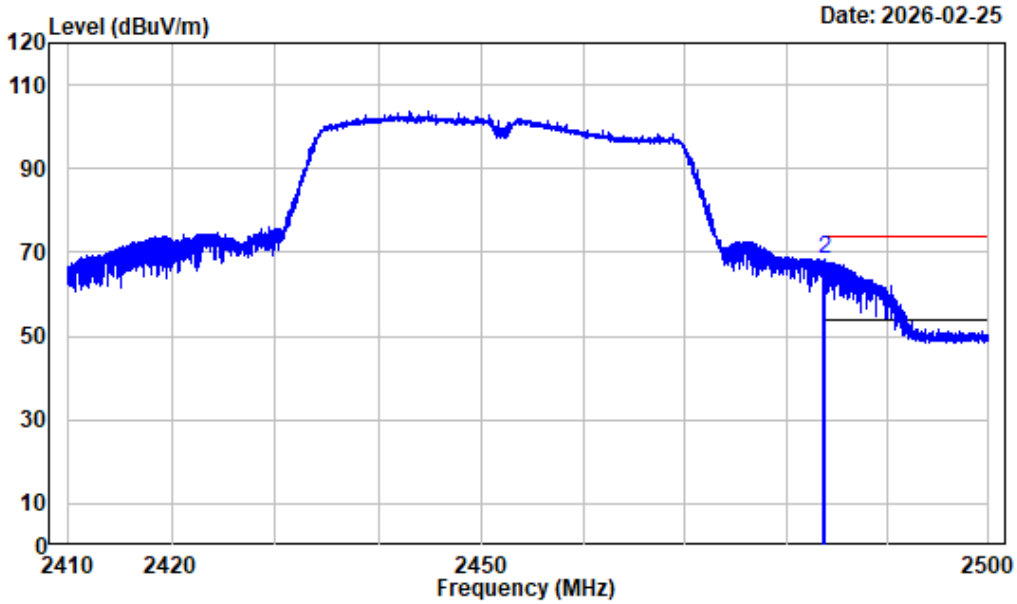
Left Band edge_Vertical_Average_802.11n-HT40



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2422

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2389.640	-10.96	54.08	43.12	54.00	-10.88	Average
2	2390.000	-10.97	53.76	42.79	54.00	-11.21	Average

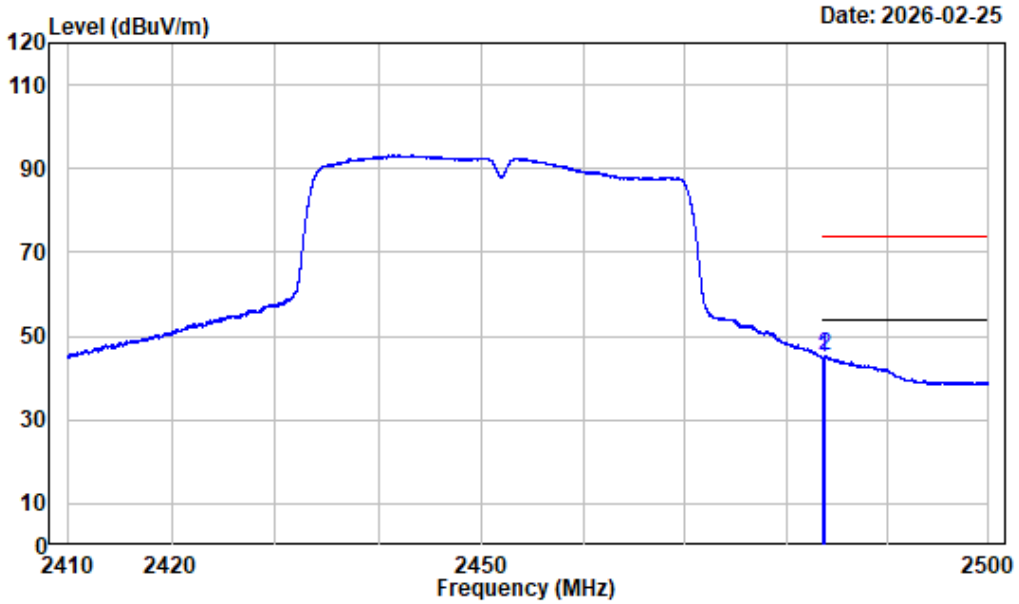
Right Band edge_Horizontal_Peak_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	74.08	63.15	74.00	-10.85	Peak
2	2483.699	-10.93	79.13	68.20	74.00	-5.80	Peak

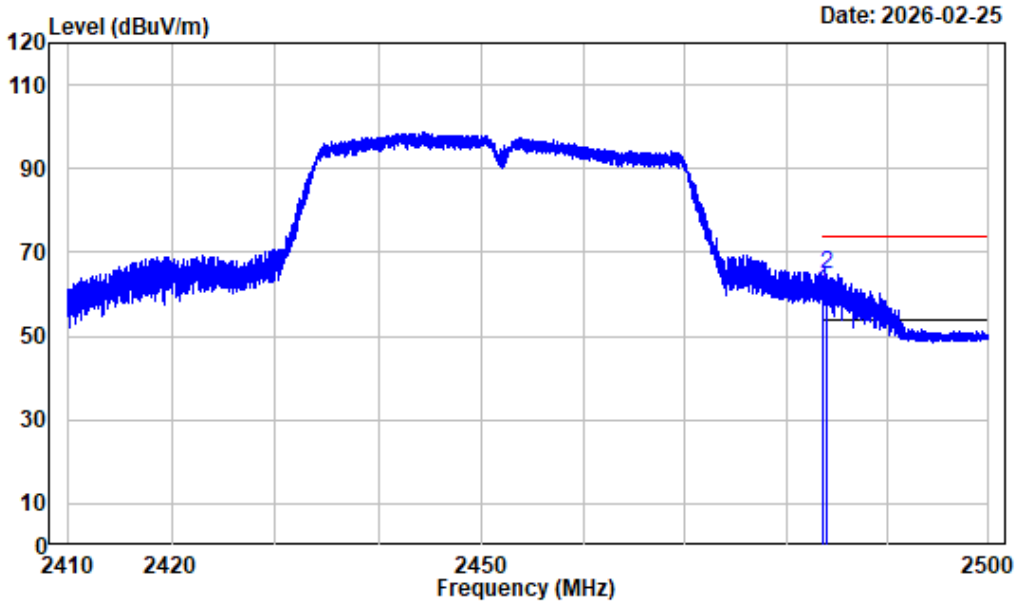
Right Band edge_Horizontal_Average_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	55.93	45.00	54.00	-9.00	Average
2	2483.721	-10.93	56.06	45.13	54.00	-8.87	Average

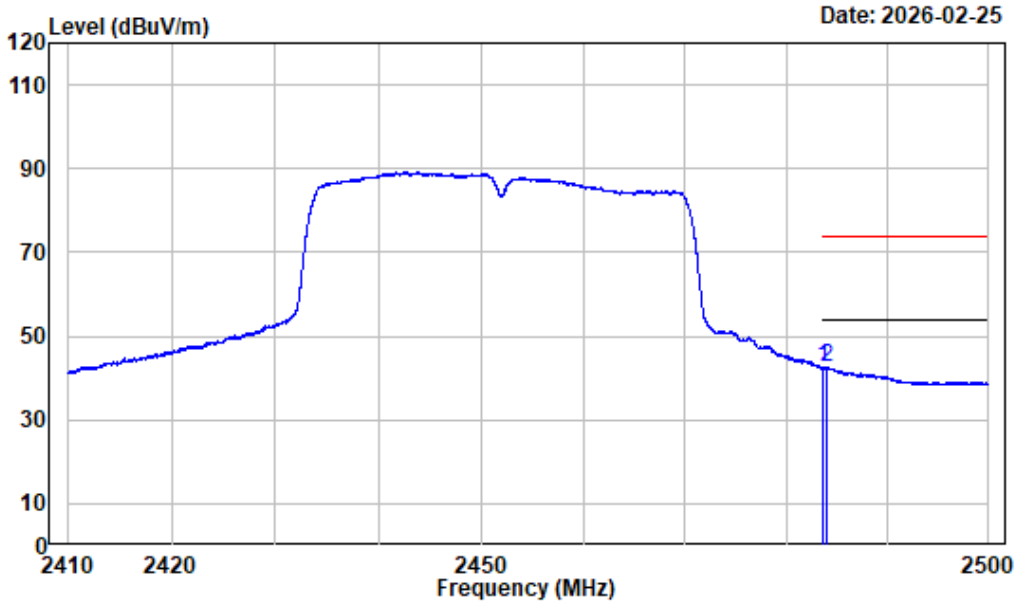
Right Band edge_Vertical_Peak_802.11n-HT40



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	71.39	60.46	74.00	-13.54	Peak
2	2483.879	-10.93	75.67	64.74	74.00	-9.26	Peak

Right Band edge_Vertical_Average_802.11n-HT40

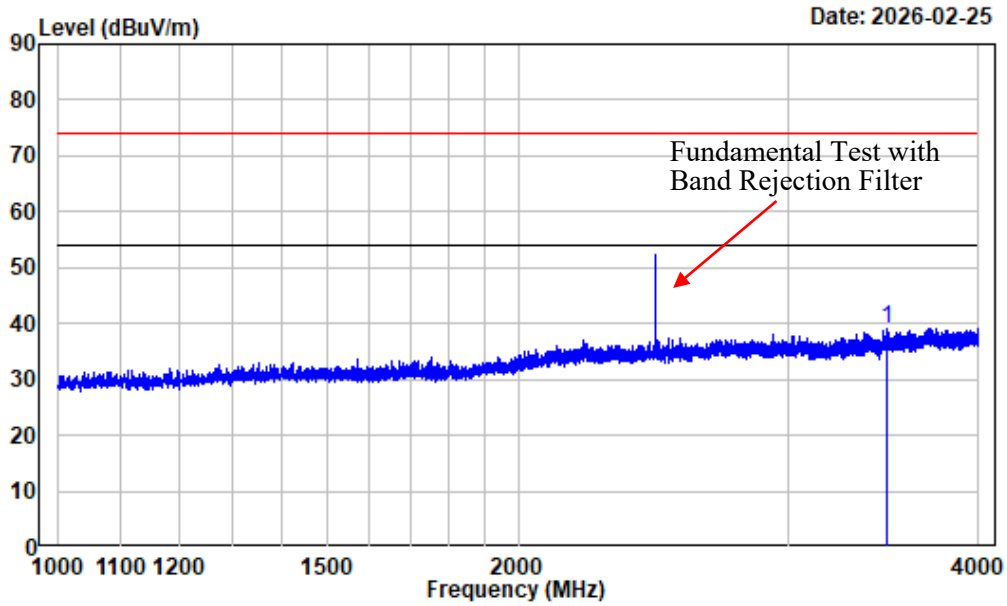


Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.93	53.29	42.36	54.00	-11.64	Average
2	2483.991	-10.93	53.49	42.56	54.00	-11.44	Average

1-18GHz (Listed with the worst case test plot)

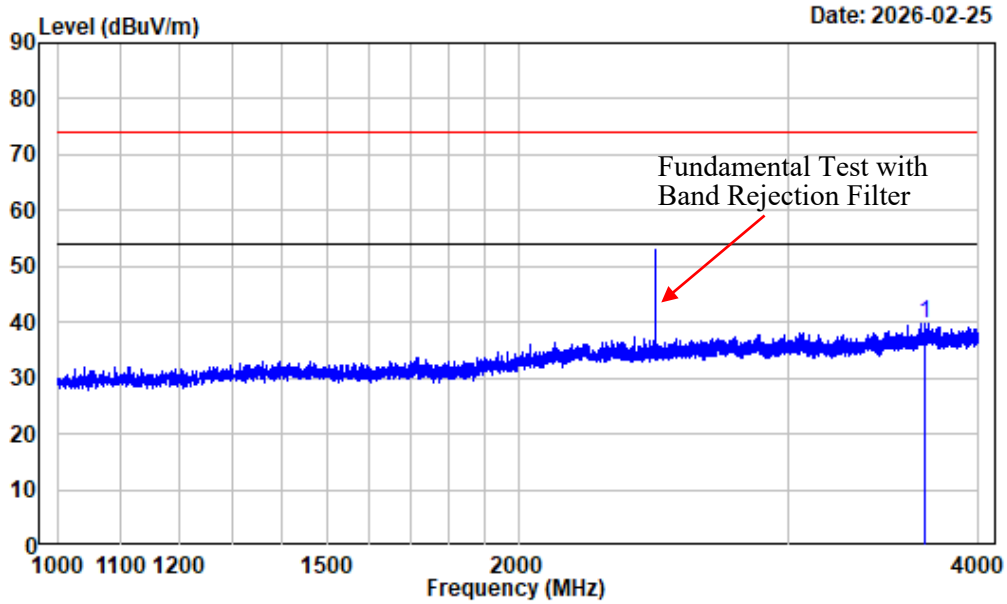
1-4GHz Horizontal 802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3482.875	-9.22	48.27	39.05	74.00	-34.95	Peak

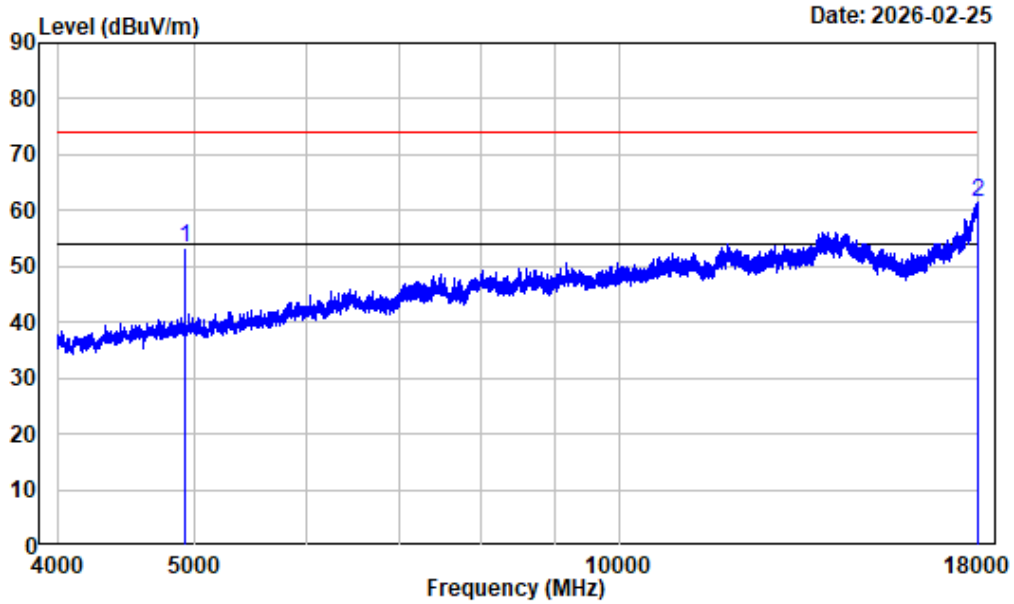
1-4GHz_Vertical_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3685.750	-8.60	48.42	39.82	74.00	-34.18	Peak

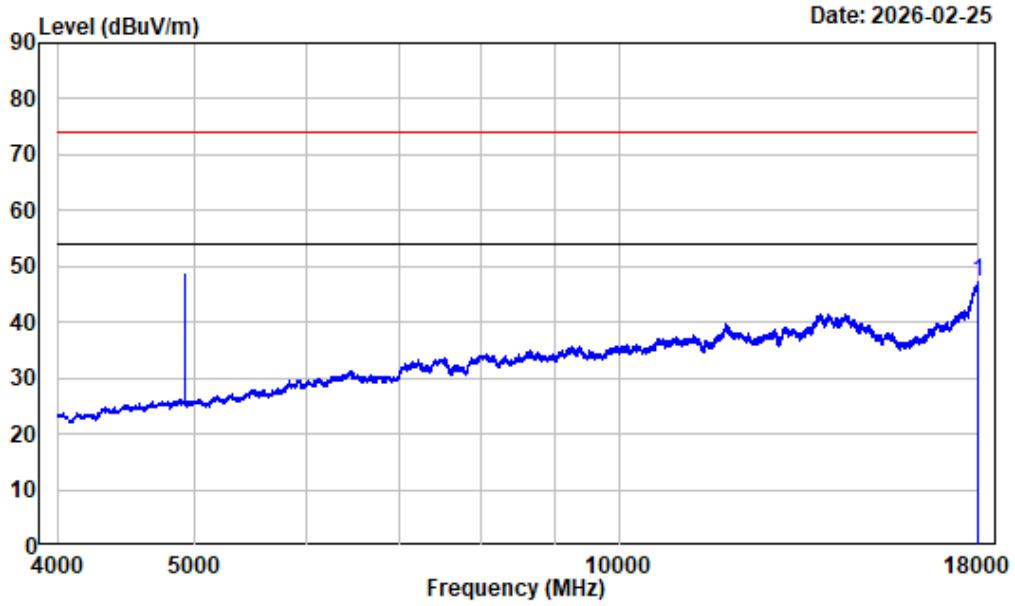
4-18GHz_Horizontal_Peak_802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	60.78	53.16	74.00	-20.84	Peak
2	17980.750	13.17	48.46	61.63	74.00	-12.37	Peak

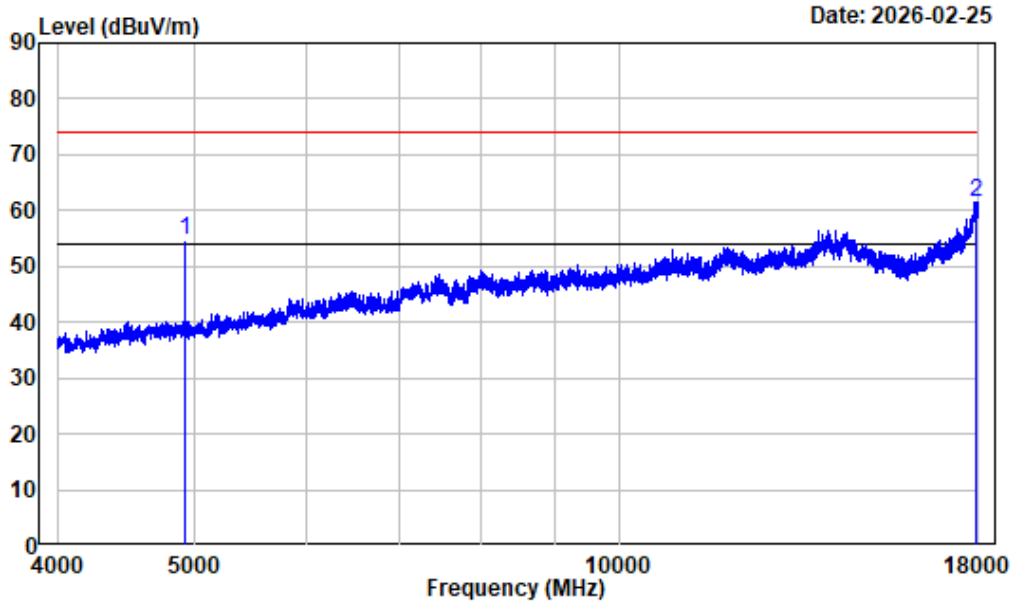
4-18GHz_Horizontal_Average_802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.630	13.25	33.86	47.11	54.00	-6.89	Average

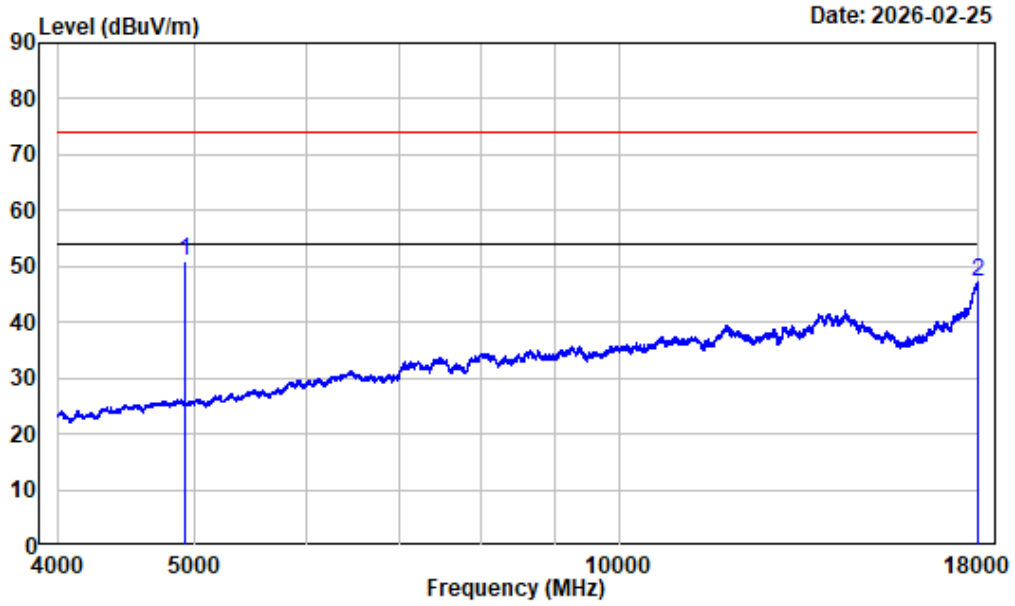
4-18GHz_Vertical_Peak_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	62.25	54.63	74.00	-19.37	Peak
2	17930.000	12.91	48.60	61.51	74.00	-12.49	Peak

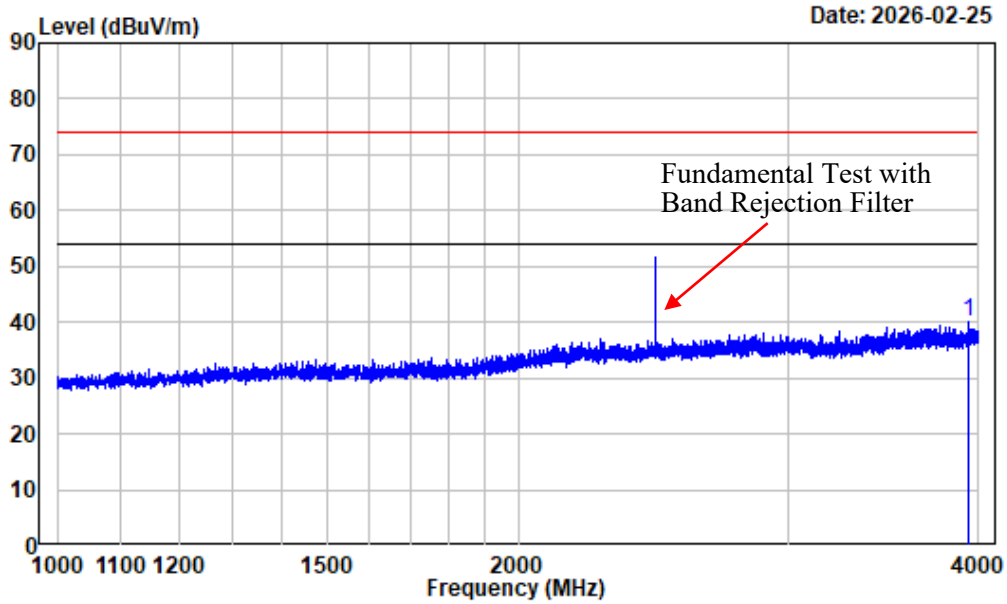
4-18GHz_Vertical_Average_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	58.53	50.91	54.00	-3.09	Average
2	17979.000	13.15	34.21	47.36	54.00	-6.64	Average

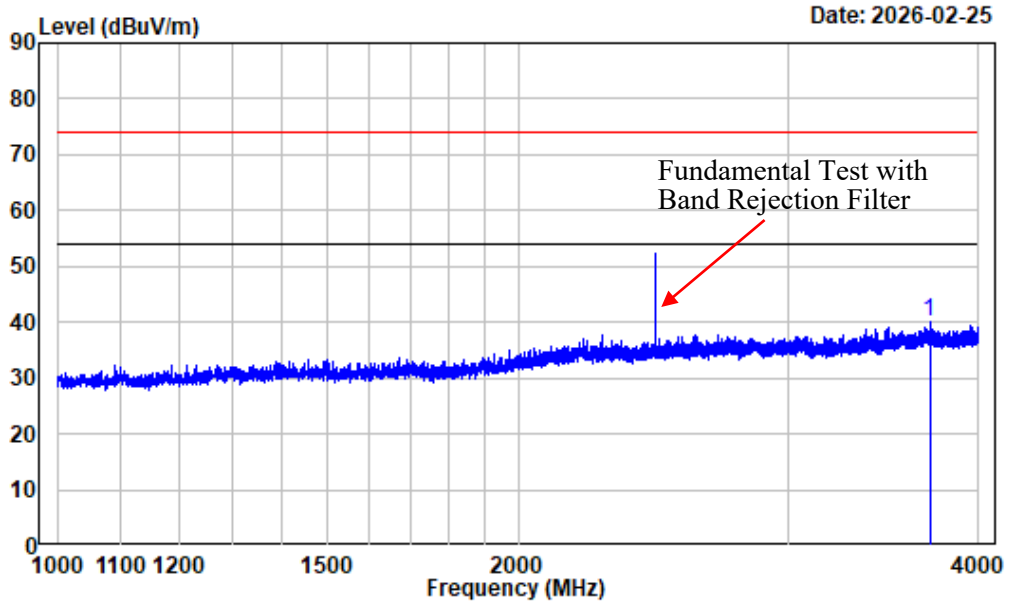
1-4GHz_Horizontal_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3942.625	-8.38	48.36	39.98	74.00	-34.02	Peak

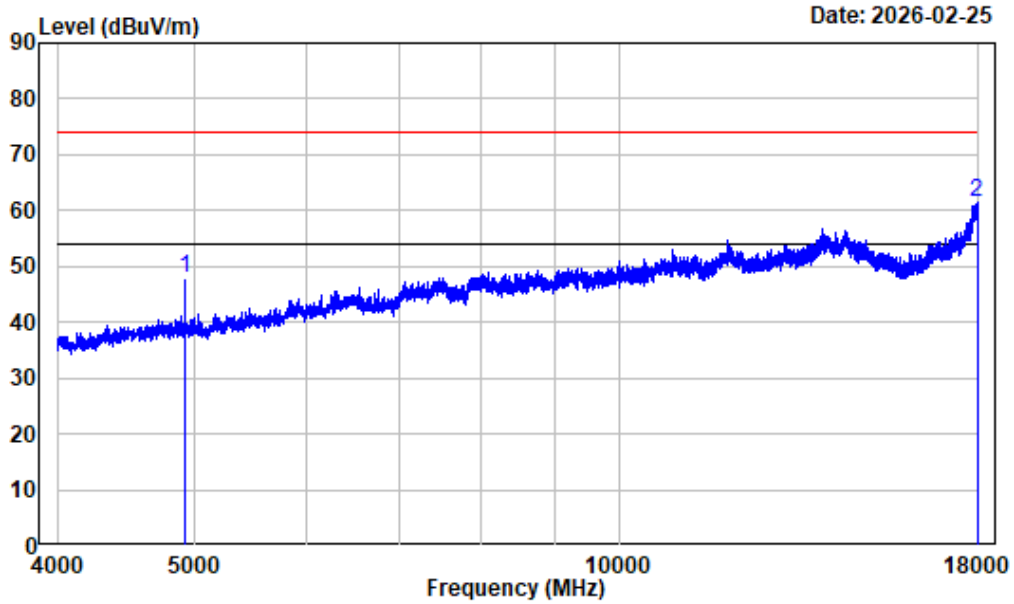
1-4GHz_Vertical_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3716.500	-8.58	48.61	40.03	74.00	-33.97	Peak

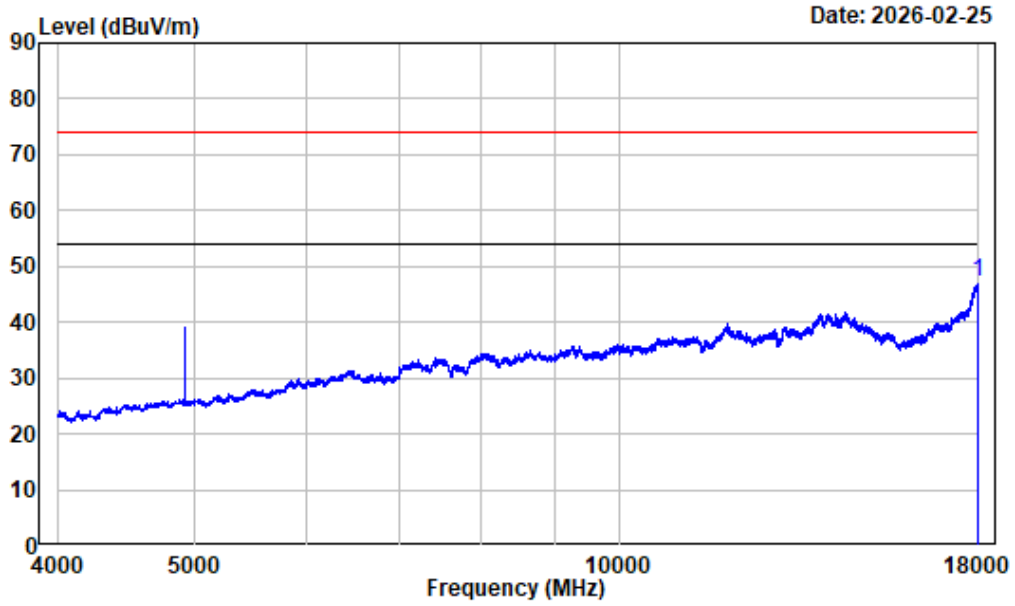
4-18GHz_Horizontal_Peak_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	55.67	48.05	74.00	-25.95	Peak
2	17958.000	13.05	48.40	61.45	74.00	-12.55	Peak

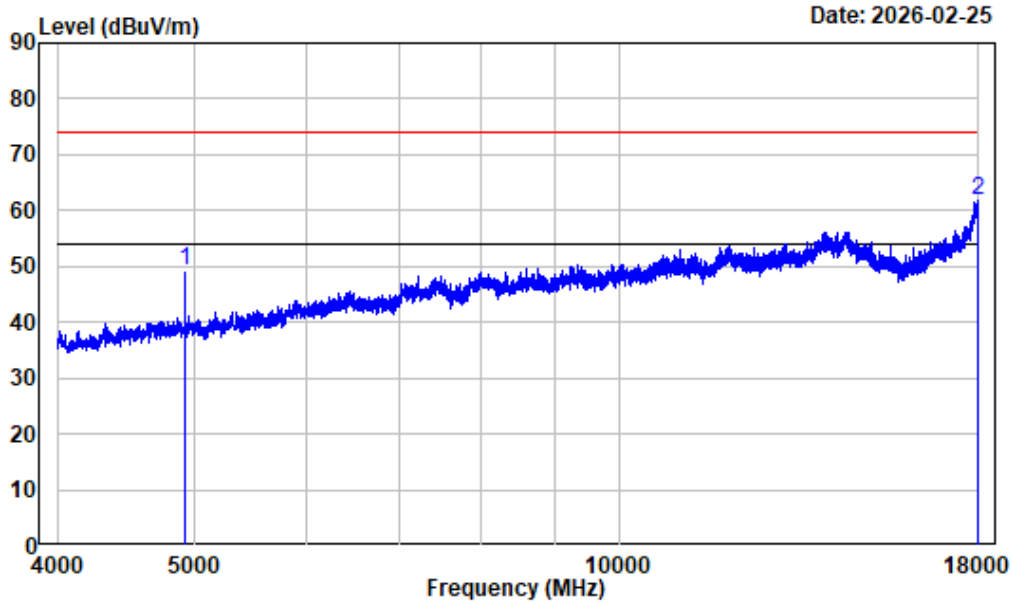
4-18GHz_Horizontal_Average_802.11g



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.630	13.26	33.96	47.22	54.00	-6.78	Average

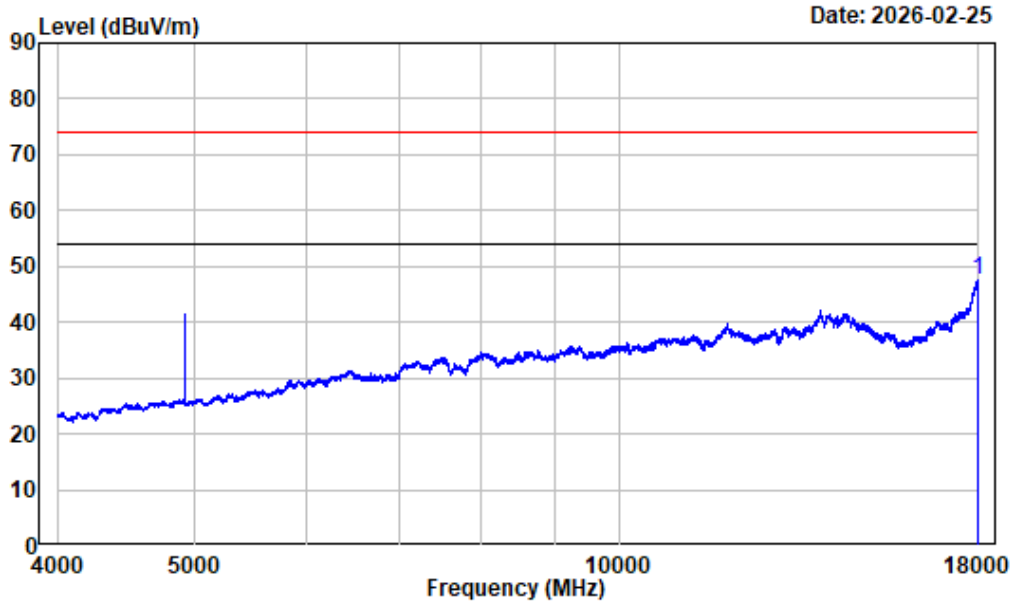
4-18GHz_Vertical_Peak_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	56.78	49.16	74.00	-24.84	Peak
2	17996.500	13.25	48.53	61.78	74.00	-12.22	Peak

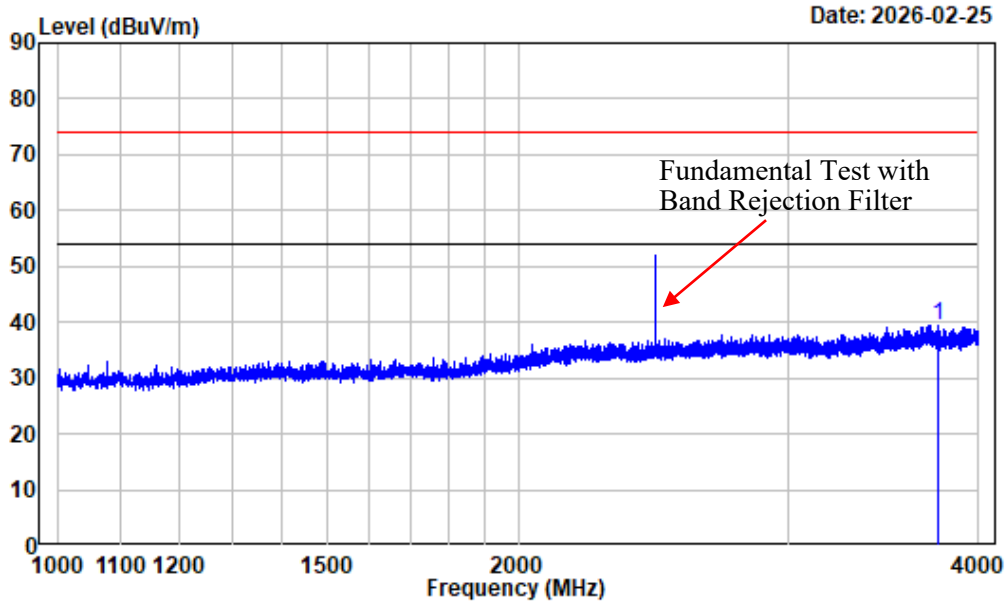
4-18GHz_Vertical_Average_802.11g



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.250	13.25	34.28	47.53	54.00	-6.47	Average

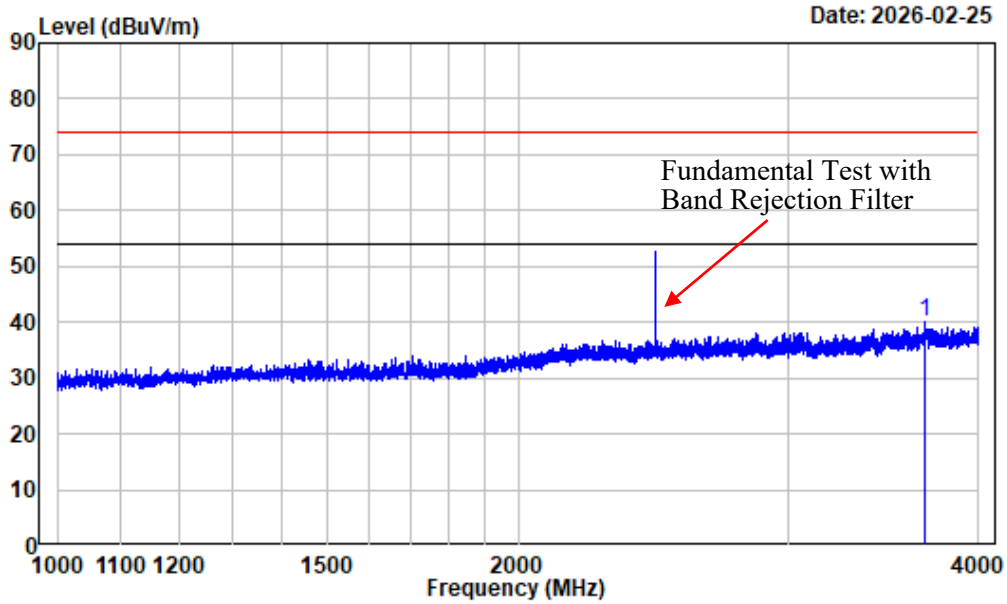
1-4GHz_Horizontal_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3765.250	-8.81	48.33	39.52	74.00	-34.48	Peak

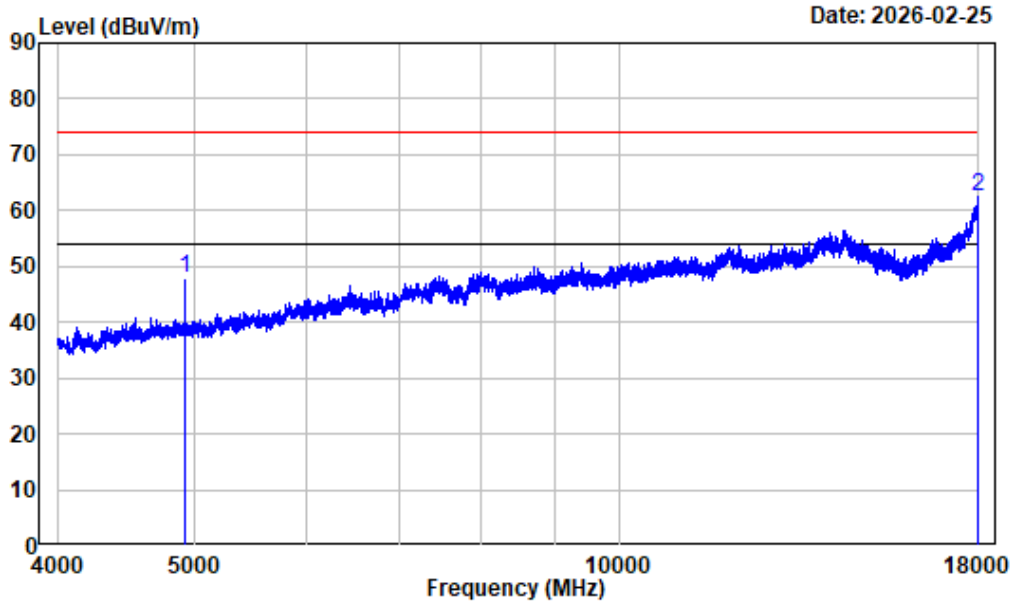
1-4GHz_Vertical_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3692.875	-8.54	48.52	39.98	74.00	-34.02	Peak

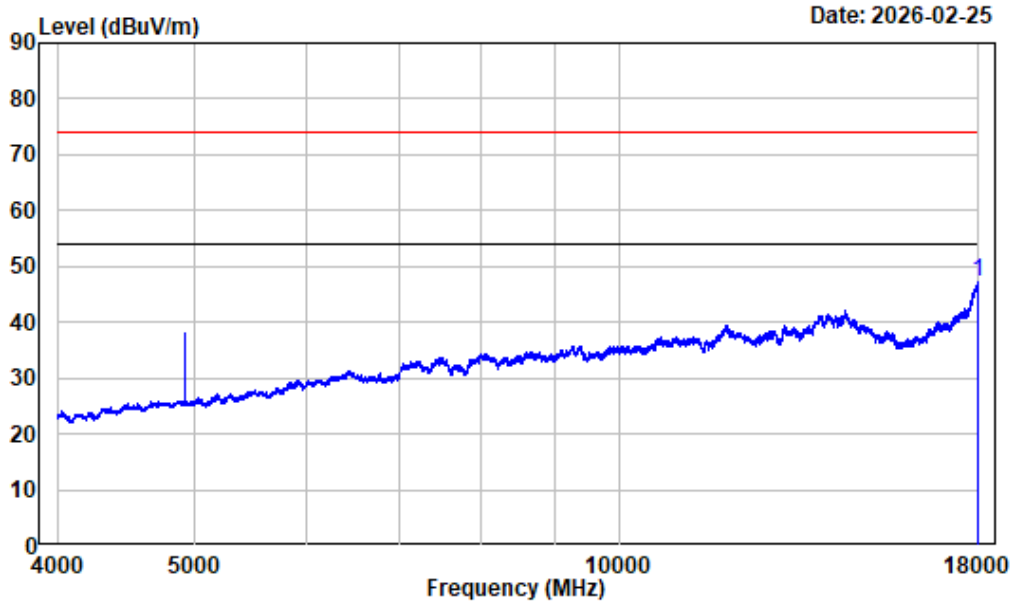
4-18GHz_Horizontal_Peak_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	55.51	47.89	74.00	-26.11	Peak
2	17998.250	13.25	49.18	62.43	74.00	-11.57	Peak

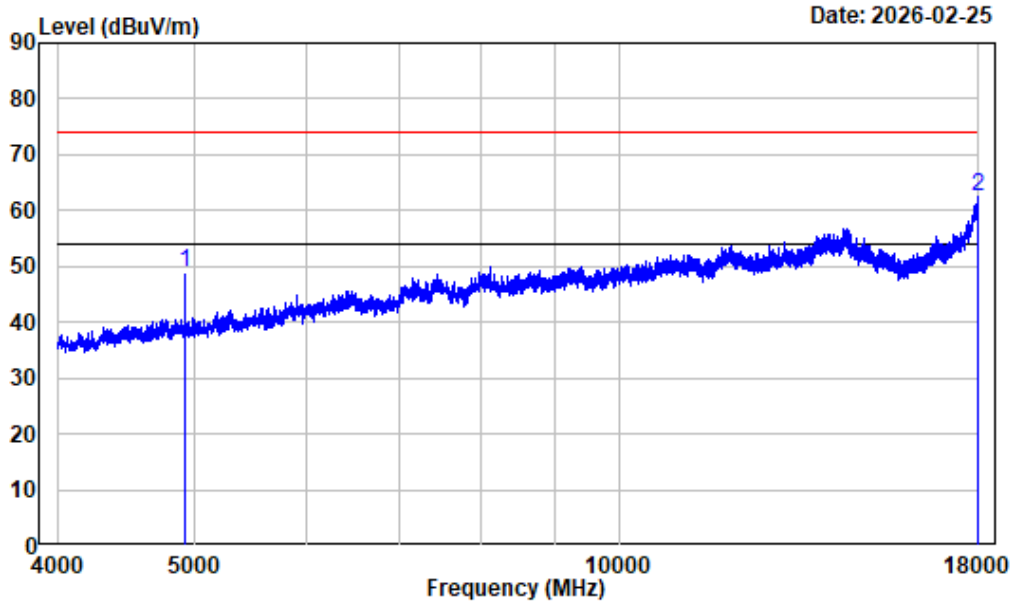
4-18GHz_Horizontal_Average_802.11n-HT20



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17979.000	13.15	34.03	47.18	54.00	-6.82	Average

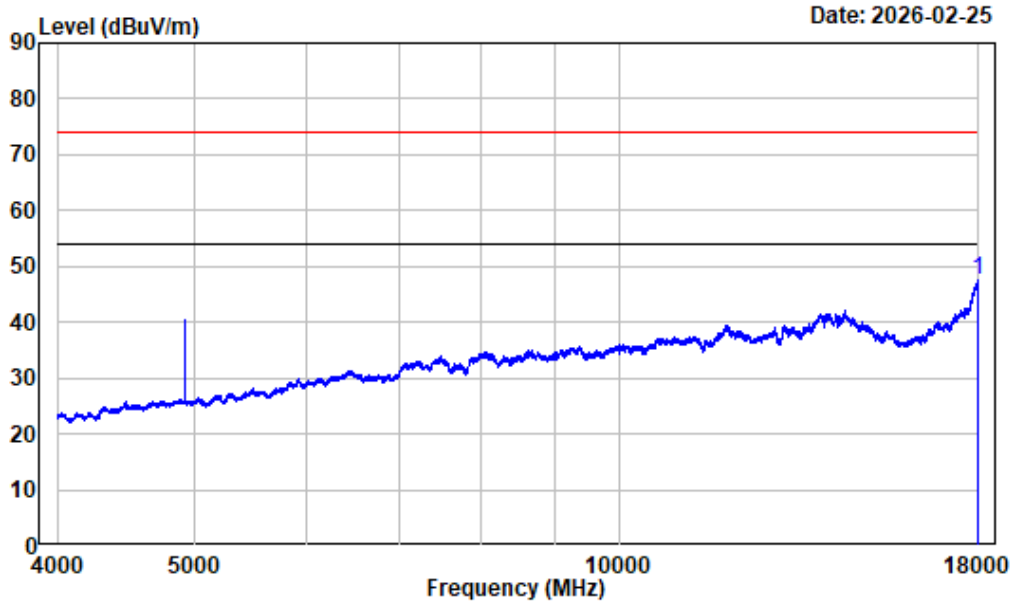
4-18GHz_Vertical_Peak_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4924.000	-7.62	56.63	49.01	74.00	-24.99	Peak
2	17973.750	13.13	49.21	62.34	74.00	-11.66	Peak

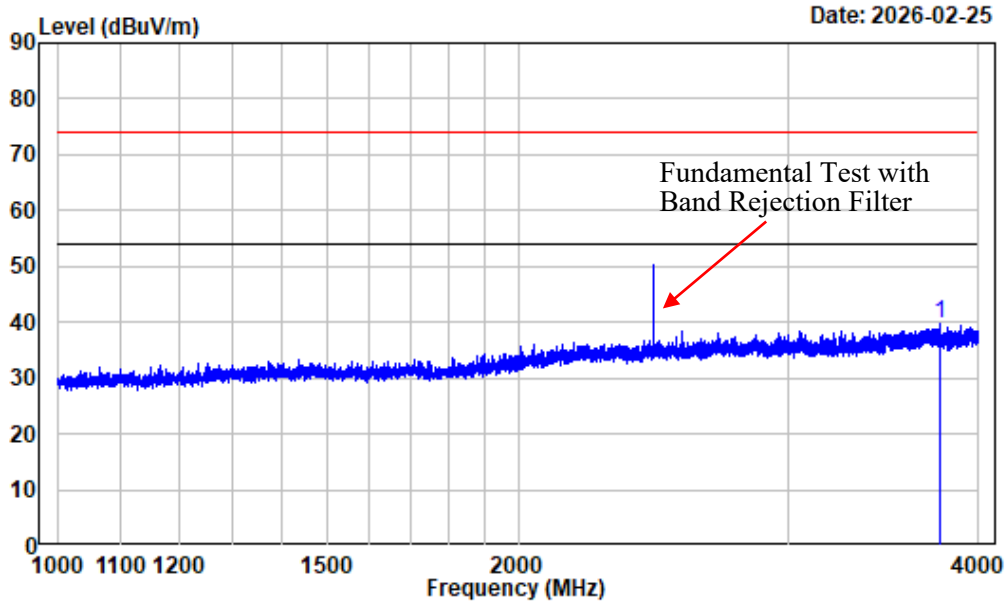
4-18GHz_Vertical_Average_802.11n-HT20



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17982.500	13.17	34.43	47.60	54.00	-6.40	Average

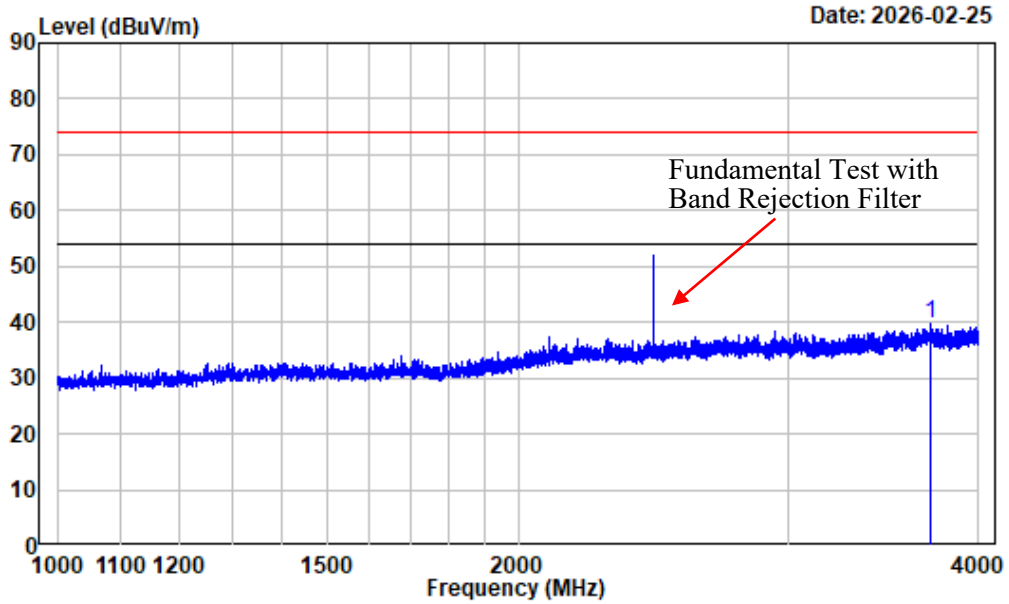
1-4GHz_Horizontal_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3779.125	-8.85	48.62	39.77	74.00	-34.23	Peak

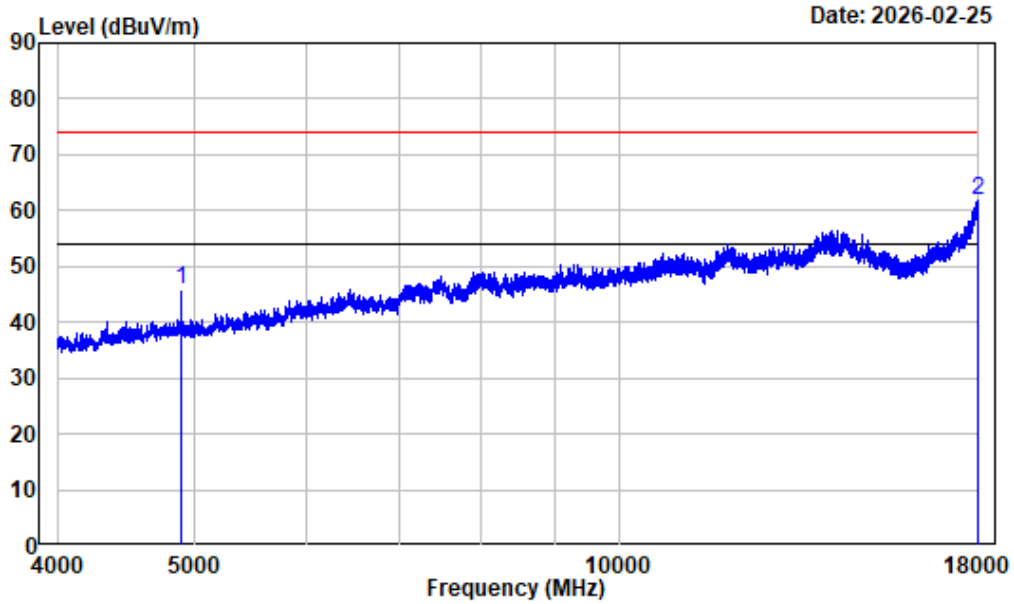
1-4GHz_Vertical_802.11n-HT40



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3721.375	-8.60	48.37	39.77	74.00	-34.23	Peak

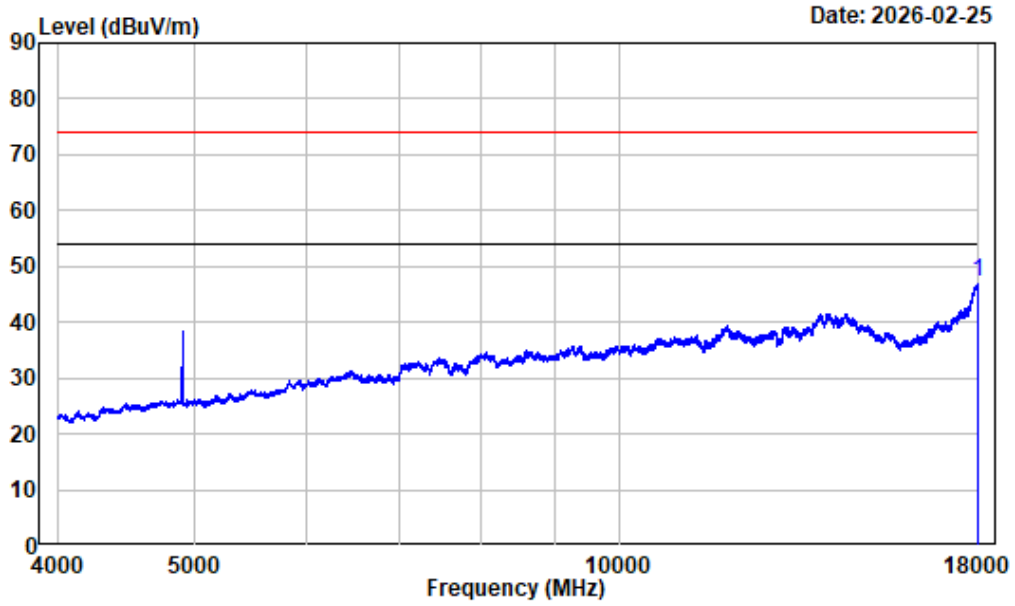
4-18GHz_Horizontal_Peak_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4904.000	-7.60	53.48	45.88	74.00	-28.12	Peak
2	17975.500	13.14	48.79	61.93	74.00	-12.07	Peak

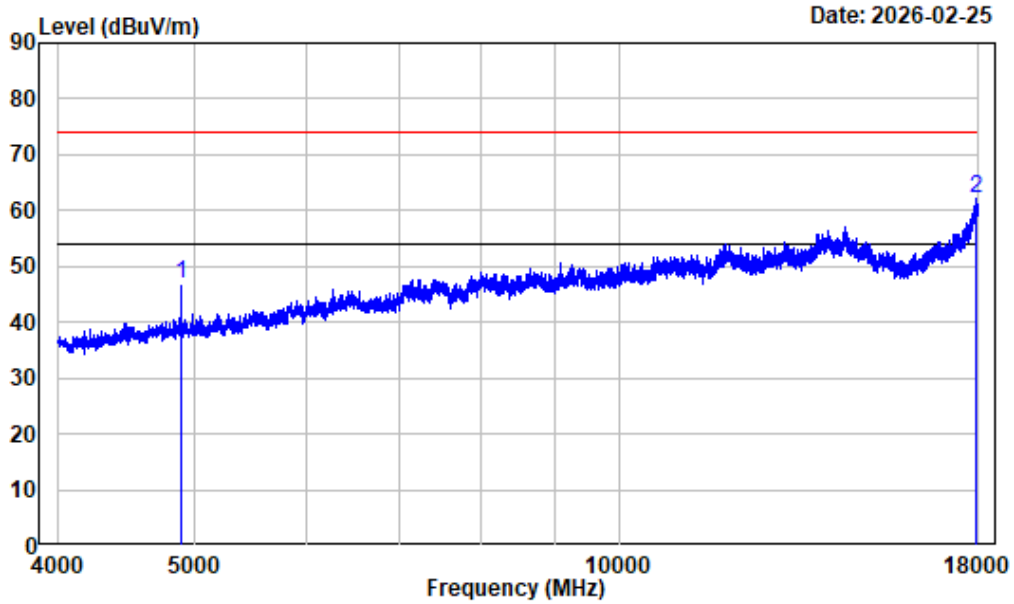
4-18GHz_Horizontal_Average_802.11n-HT40



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.250	13.26	33.99	47.25	54.00	-6.75	Average

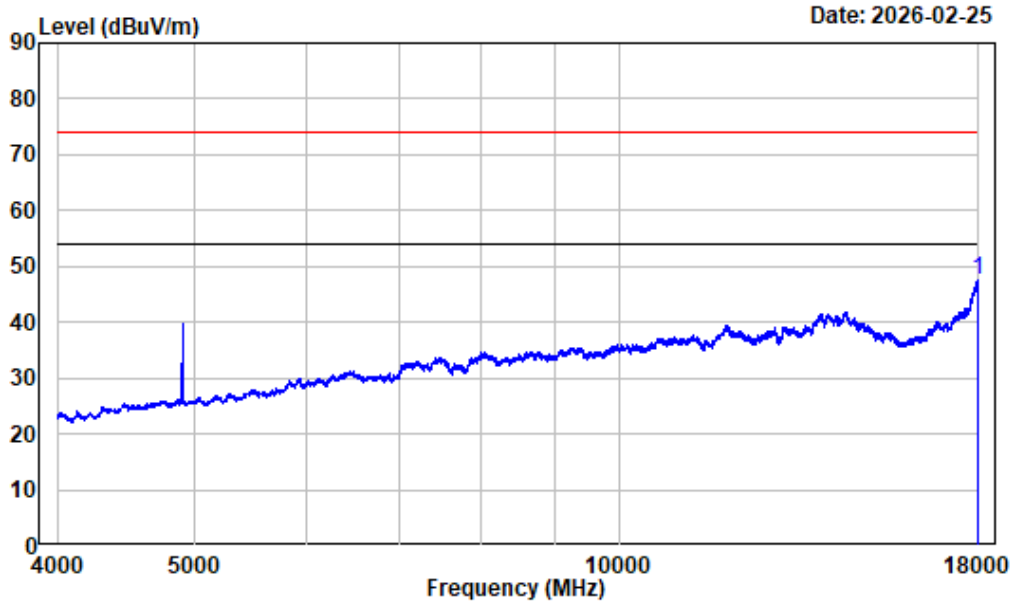
4-18GHz_Vertical_Peak_802.11n-HT40



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4904.000	-7.60	54.32	46.72	74.00	-27.28	Peak
2	17937.000	12.94	49.20	62.14	74.00	-11.86	Peak

4-18GHz_Vertical_Average_802.11n-HT40

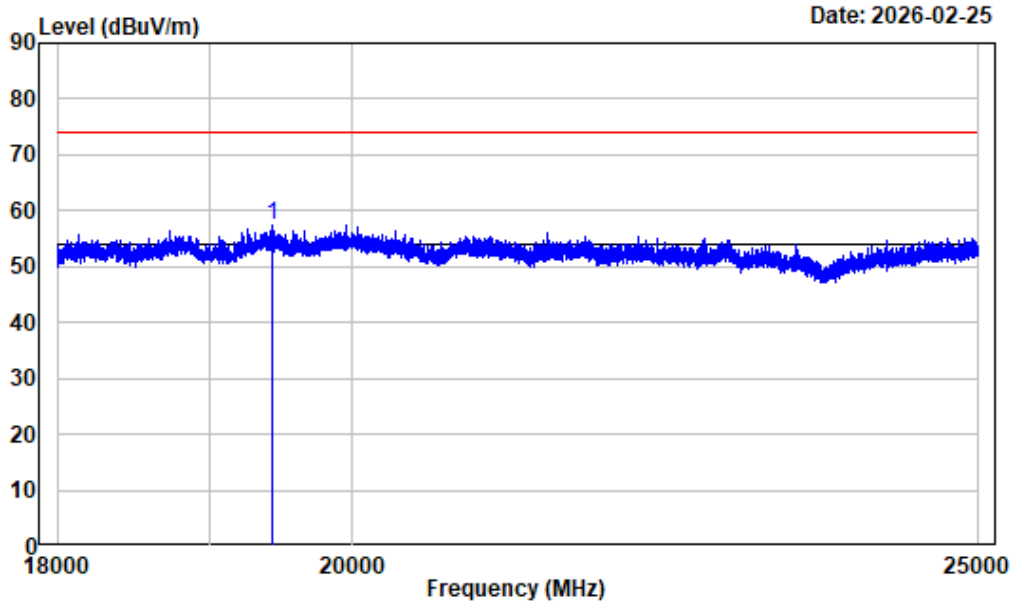


Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17984.250	13.18	34.30	47.48	54.00	-6.52	Average

18-25GHz (Only Listed with the worst harmonic margin test plot)

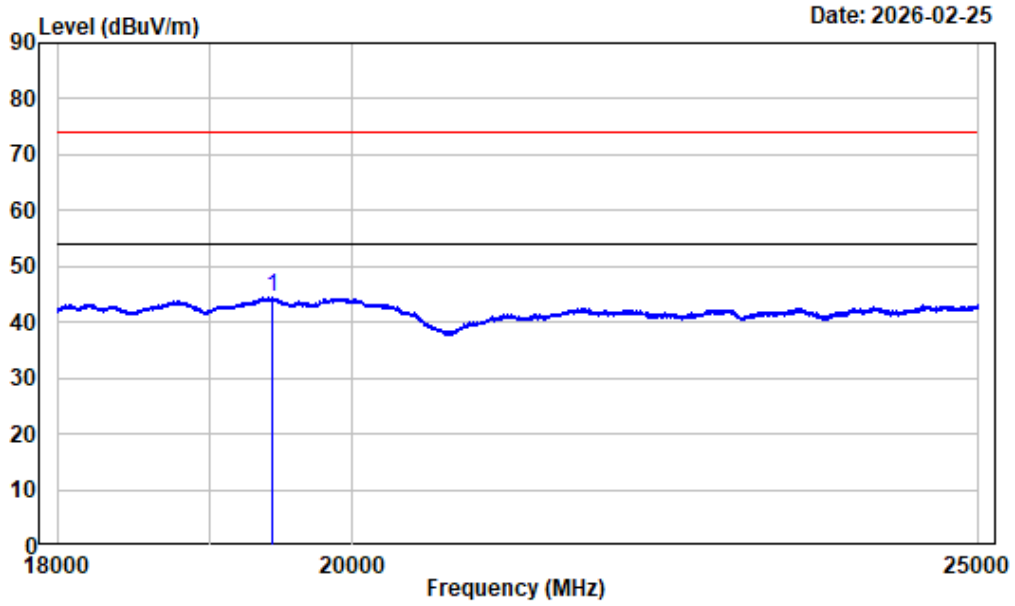
18-25GHz_Horizontal_Peak_802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19429.750	17.32	40.20	57.52	74.00	-16.48	Peak

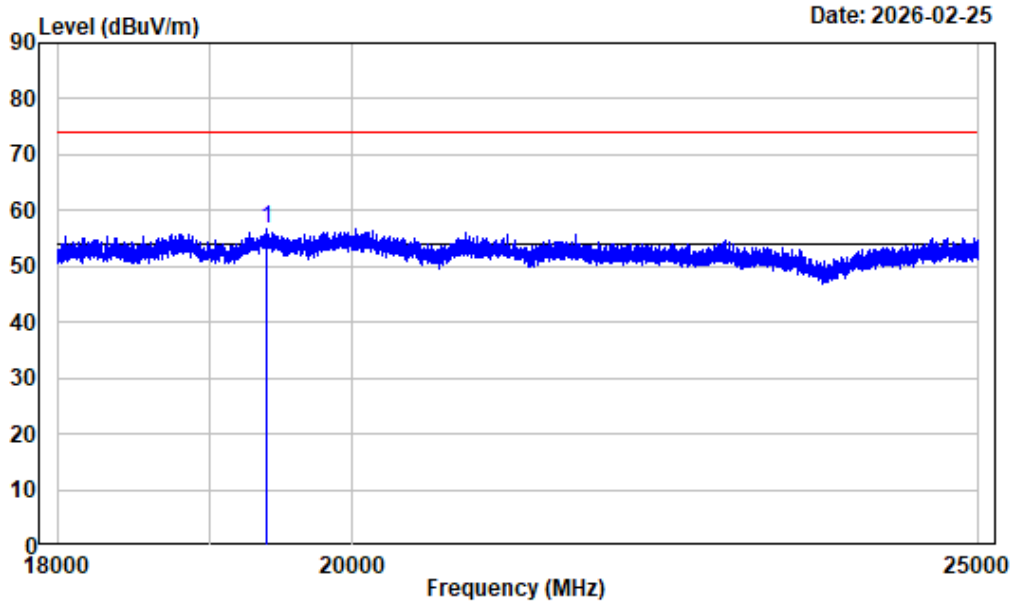
18-25GHz_Horizontal_Average_802.11b



Condition : Horizontal
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19430.630	17.32	27.16	44.48	54.00	-9.52	Average

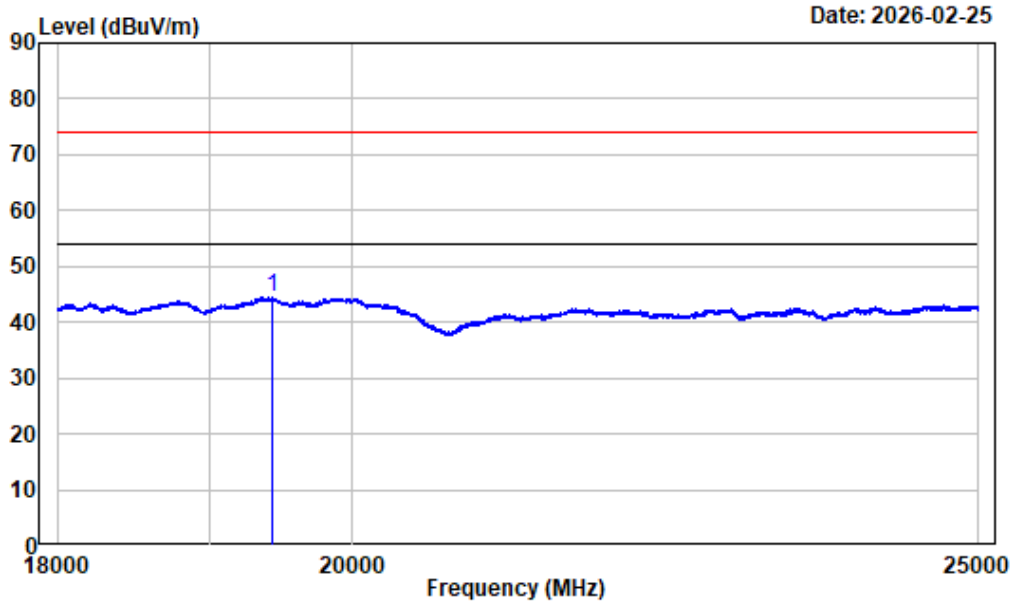
18-25GHz_Vertical_Peak_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19391.250	17.31	39.34	56.65	74.00	-17.35	Peak

18-25GHz_Vertical_Peak_Average_802.11b



Condition : Vertical
Project No. : 2601P34009E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-b-2462

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19430.630	17.32	27.16	44.48	54.00	-9.52	Average

RF Conducted data

Test Information:

Sample No.:	3GV6-6	Test Date:	2026/03/07
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ethan Bu	Test Result:	Pass

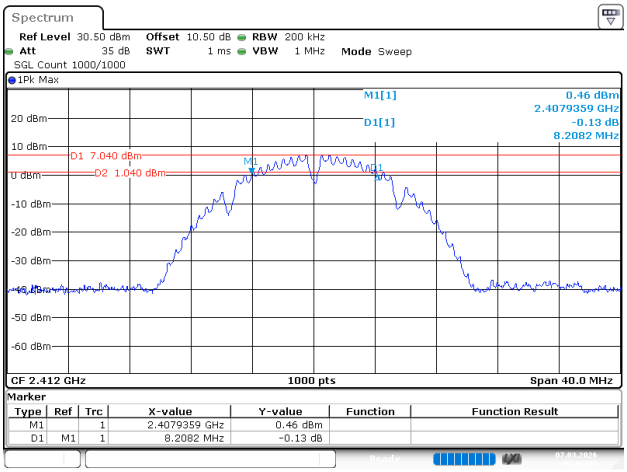
Environmental Conditions:

Temperature: (°C)	24.1	Relative Humidity: (%)	47	ATM Pressure: (kPa)	101.2

6dB Emission Bandwidth

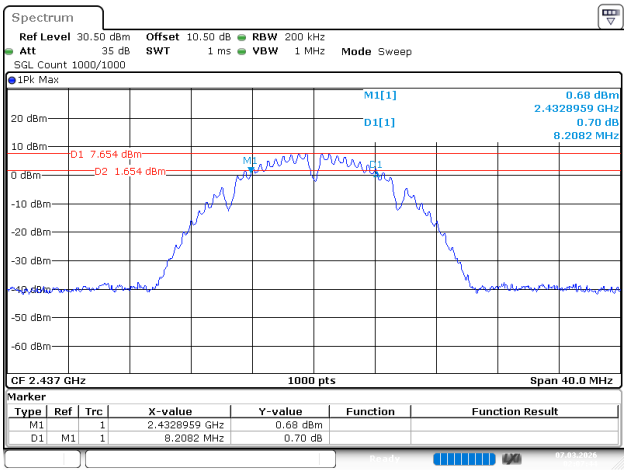
Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11b	2412	8.208	≥0.5	Pass
	2437	8.208	≥0.5	Pass
	2462	8.248	≥0.5	Pass
802.11g	2412	15.616	≥0.5	Pass
	2437	16.016	≥0.5	Pass
	2462	16.096	≥0.5	Pass
802.11n20	2412	16.697	≥0.5	Pass
	2437	17.217	≥0.5	Pass
	2462	17.337	≥0.5	Pass
802.11n40	2422	32.673	≥0.5	Pass
	2437	35.395	≥0.5	Pass
	2452	**36.036**	≥0.5	Pass

802.11b_2412MHz



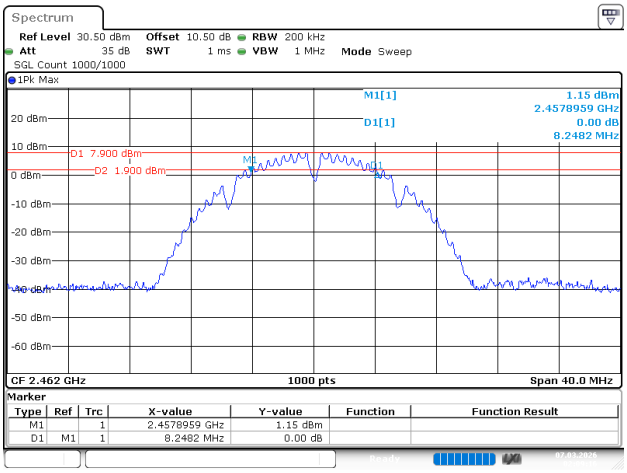
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:05:48

802.11b_2437MHz



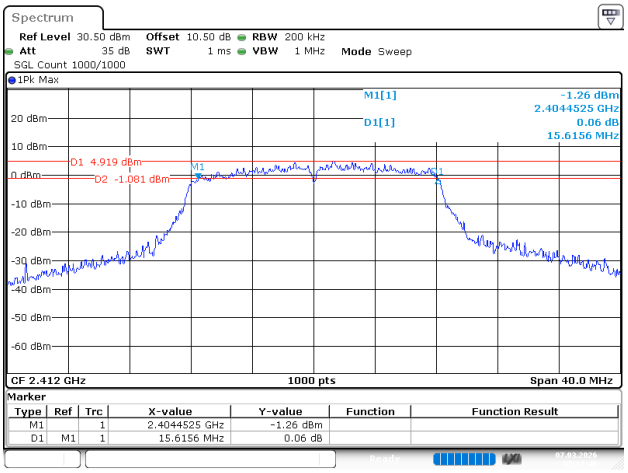
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:07:44

802.11b_2462MHz



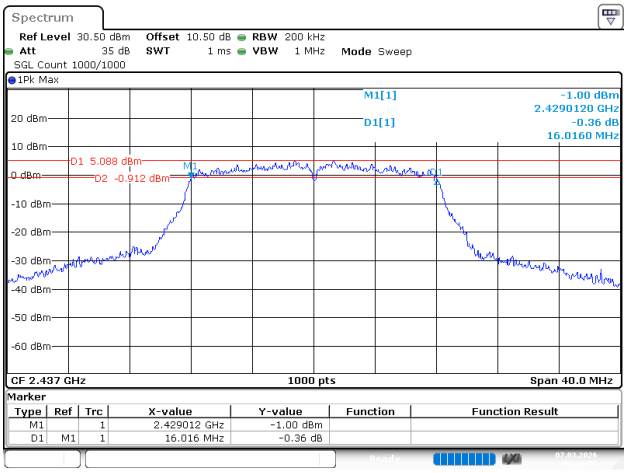
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:09:16

802.11g_2412MHz



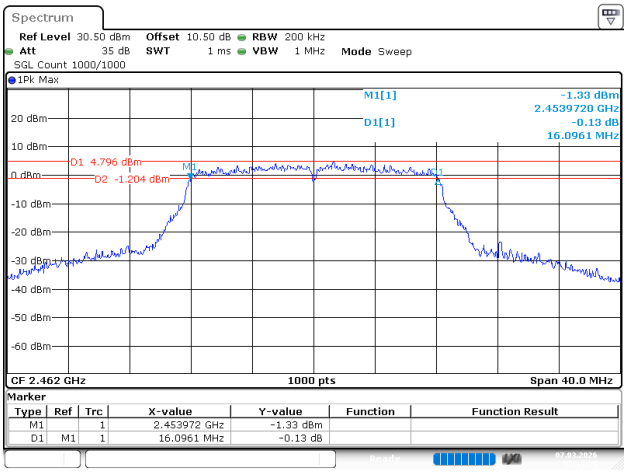
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:11:46

802.11g_2437MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:13:50

802.11g_2462MHz



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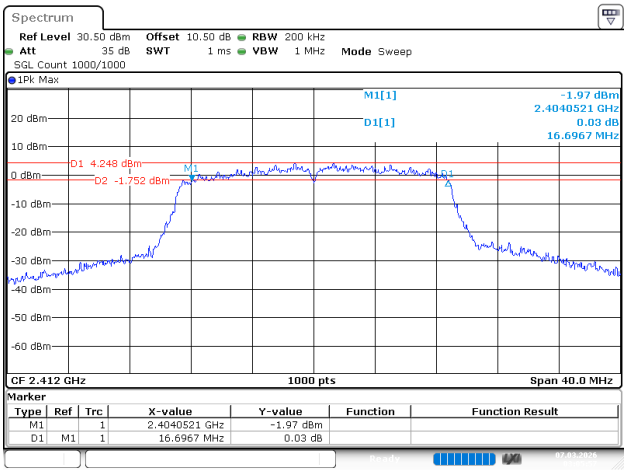
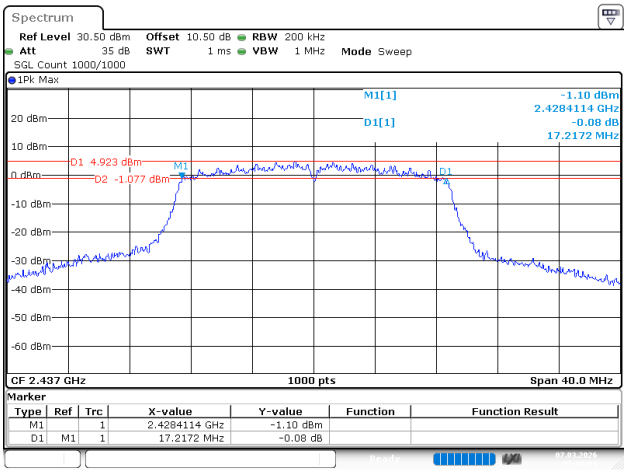
Date: 7.MAR.2026 02:15:39

802.11n20_2412MHz



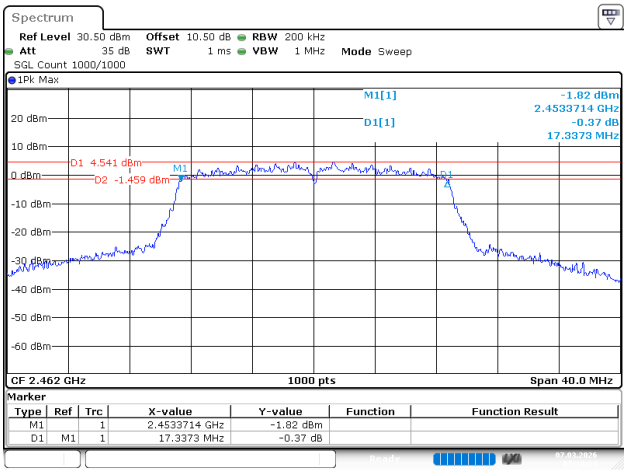
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:05:57

802.11n20_2437MHz



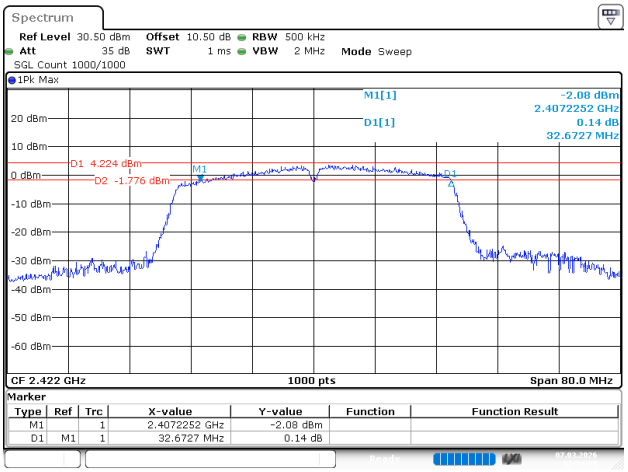
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:08:01

802.11n20_2462MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:10:34

802.11n40_2422MHz



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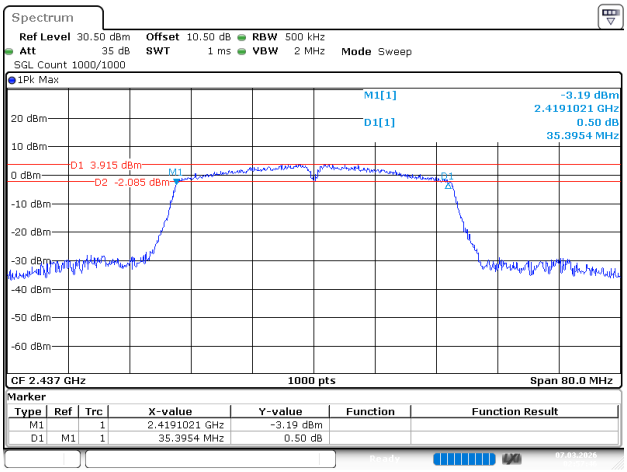
802.11n40_2437MHz



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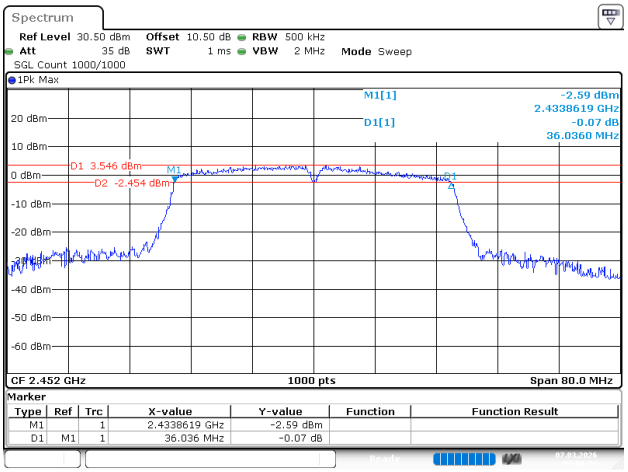
Date: 7.MAR.2026 02:57:46

802.11n40_2452MHz

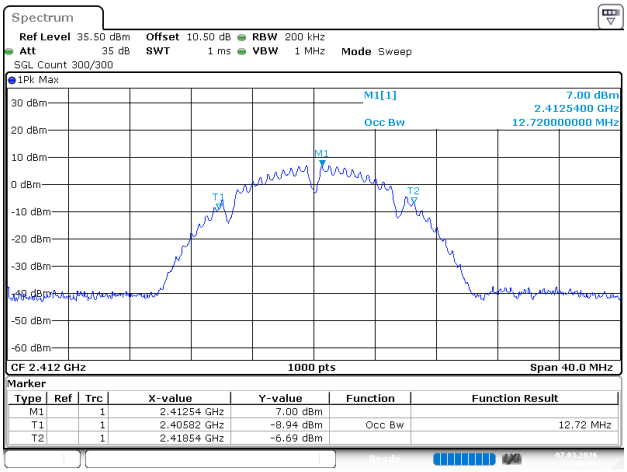


ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:00:30

99% Occupied Bandwidth

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11b	2412	12.720
	2437	12.760
	2462	12.960
802.11g	2412	16.520
	2437	16.400
	2462	16.520
802.11n20	2412	17.600
	2437	17.560
	2462	17.640
802.11n40	2422	35.920
	2437	35.920
	2452	**36.240**

802.11b_2412MHz



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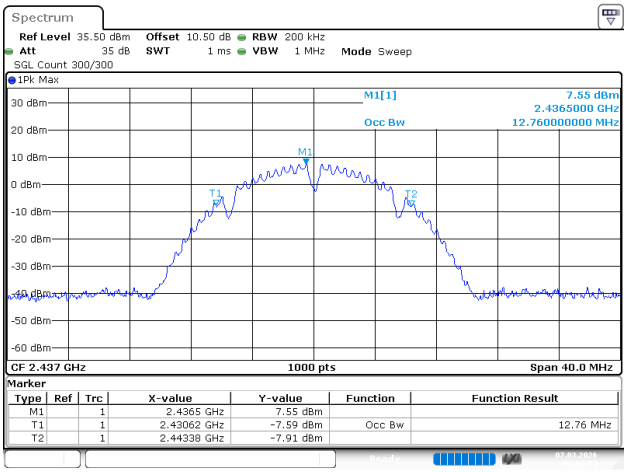
Date: 7.MAR.2026 02:06:00

802.11b_2437MHz



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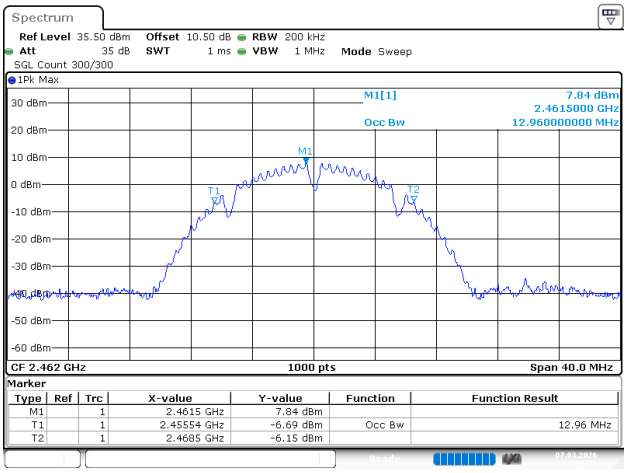
Date: 7.MAR.2026 02:07:54

802.11b_2462MHz



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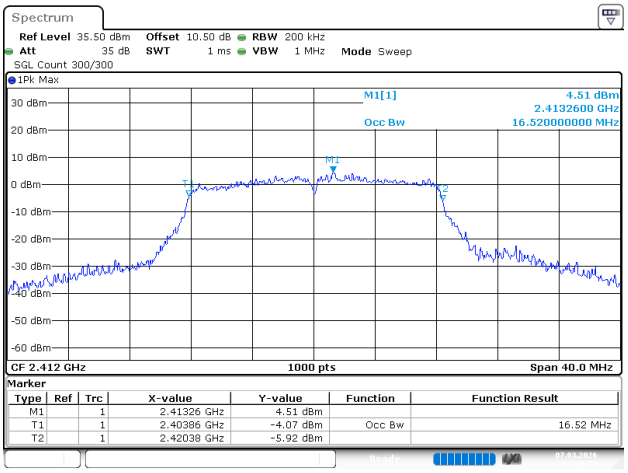
Date: 7.MAR.2026 02:09:27

802.11g_2412MHz



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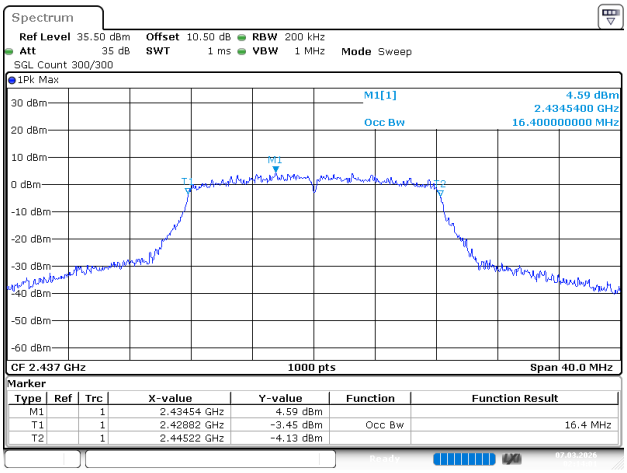
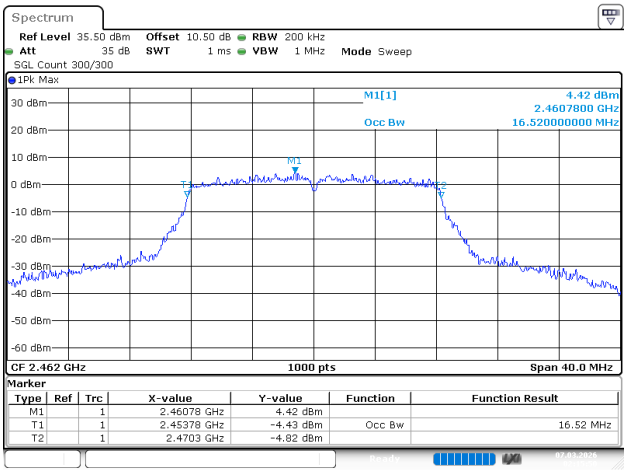
Date: 7.MAR.2026 02:11:57

802.11g_2437MHz



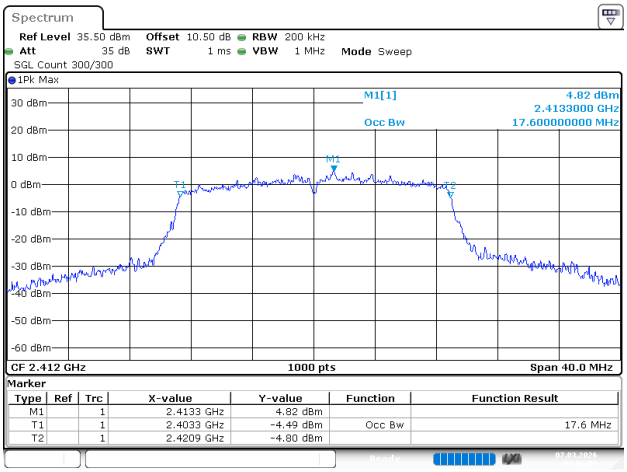
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:14:01

802.11g_2462MHz



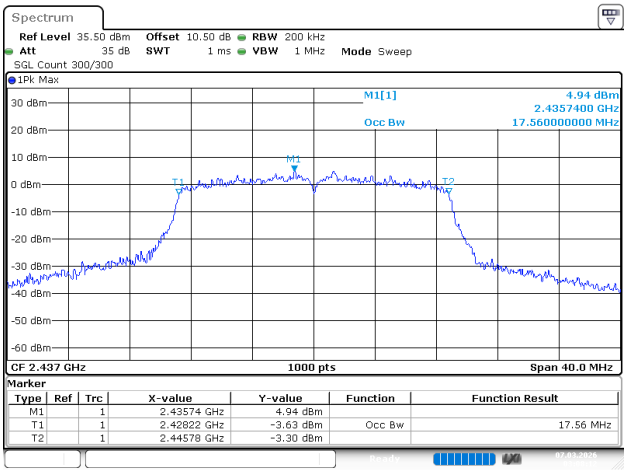
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:15:50

802.11n20_2412MHz



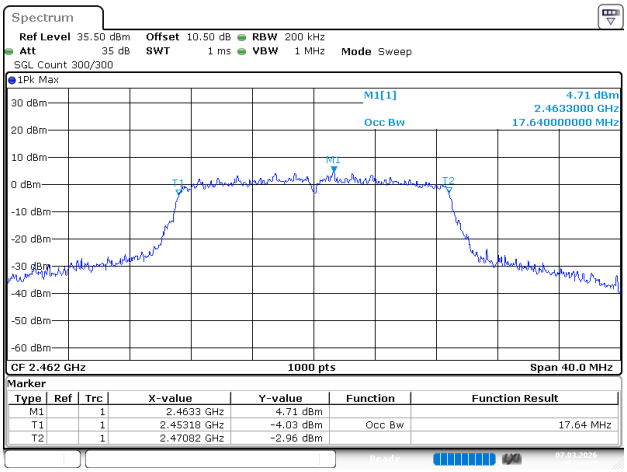
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:06:09

802.11n20_2437MHz



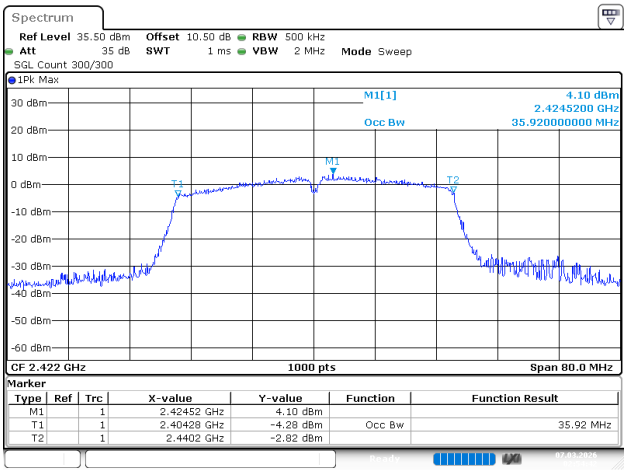
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:08:12

802.11n20_2462MHz



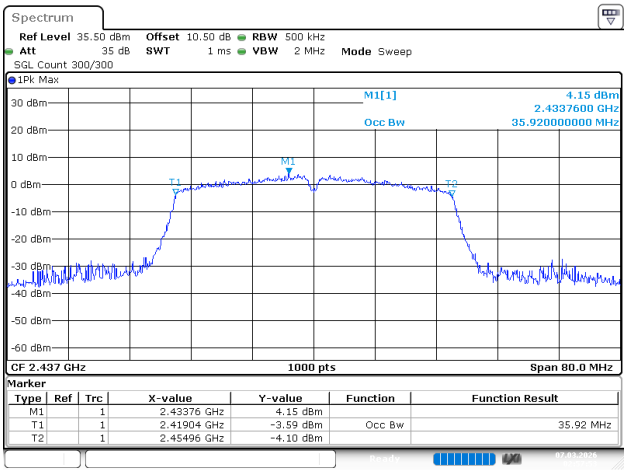
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:10:44

802.11n40_2422MHz



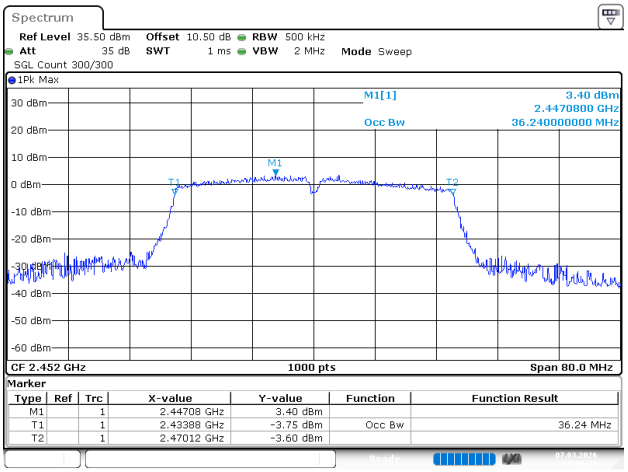
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:54:42

802.11n40_2437MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:57:53

802.11n40_2452MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:00:41

Maximum Conducted Output Power

Mode	Test Frequency (MHz)	Peak Output Power(dBm)	Limit (dBm)	Verdict
802.11b	2412	17.69	29.81	Pass
	2437	18.23	29.81	Pass
	2462	18.60	29.81	Pass
802.11g	2412	20.96	29.81	Pass
	2437	**21.41**	29.81	Pass
	2462	21.20	29.81	Pass
802.11n20	2412	20.86	29.81	Pass
	2437	21.22	29.81	Pass
	2462	21.16	29.81	Pass
802.11n40	2422	19.43	29.81	Pass
	2437	19.58	29.81	Pass
	2452	19.67	29.81	Pass

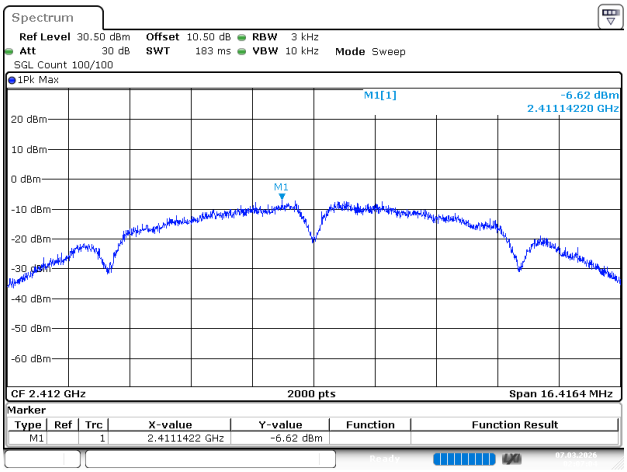
Note: The antenna gain is 6.19dBi>6dBi, so the limit is reduced by (6.19-6) dB.

Power Spectral Density

Mode	Test Frequency (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
802.11b	2412	-6.62	7.81	Pass
	2437	-6.46	7.81	Pass
	2462	**-6.24**	7.81	Pass
802.11g	2412	-10.37	7.81	Pass
	2437	-9.10	7.81	Pass
	2462	-10.34	7.81	Pass
802.11n20	2412	-10.49	7.81	Pass
	2437	-9.69	7.81	Pass
	2462	-10.72	7.81	Pass
802.11n40	2422	-14.31	7.81	Pass
	2437	-13.73	7.81	Pass
	2452	-15.16	7.81	Pass

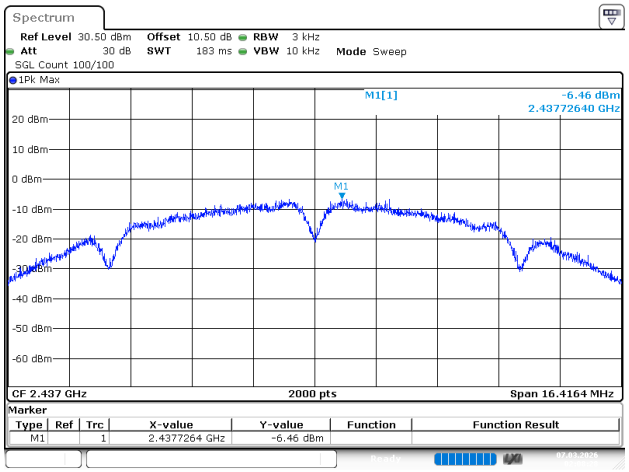
Note: The antenna gain is 6.19dBi>6dBi, so the limit is reduced by (6.19-6) dB.

802.11b_2412MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:07:04

802.11b_2437MHz



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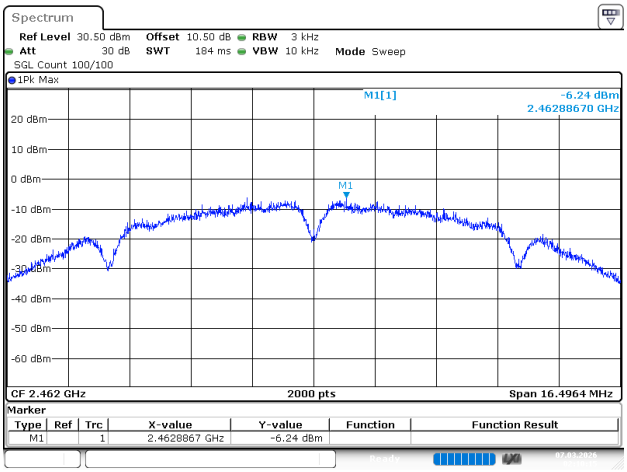
802.11b_2462MHz



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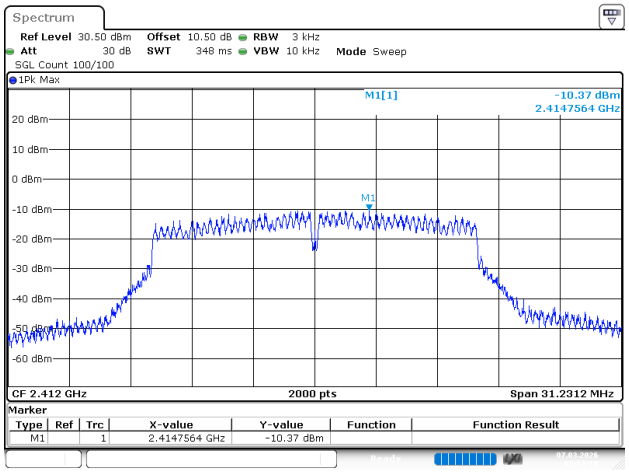
802.11g_2412MHz



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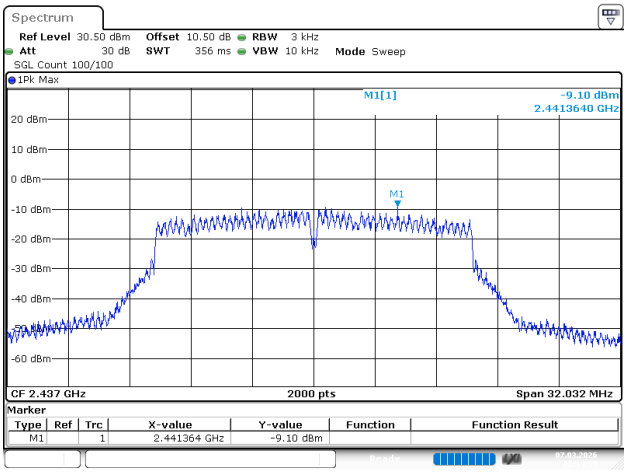
Date: 7.MAR.2026 02:13:10

802.11g_2437MHz



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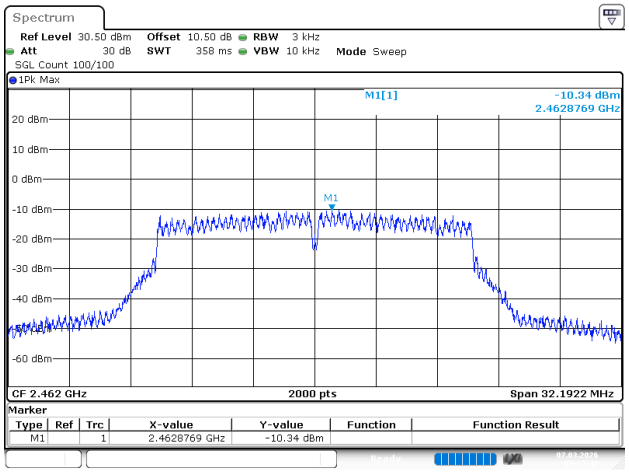
Date: 7.MAR.2026 02:14:59

802.11g_2462MHz



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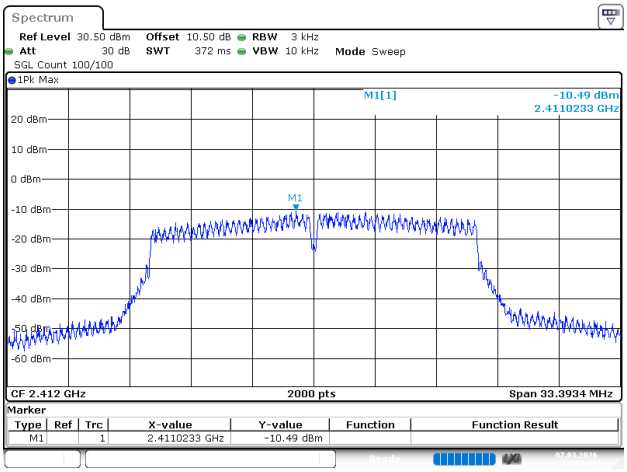
802.11n20_2412MHz



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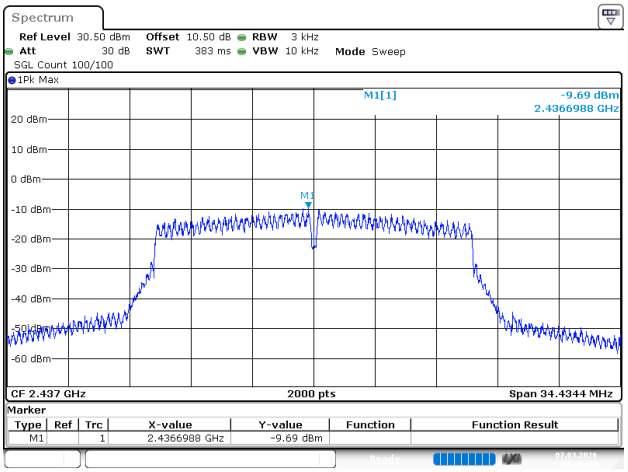
802.11n20_2437MHz



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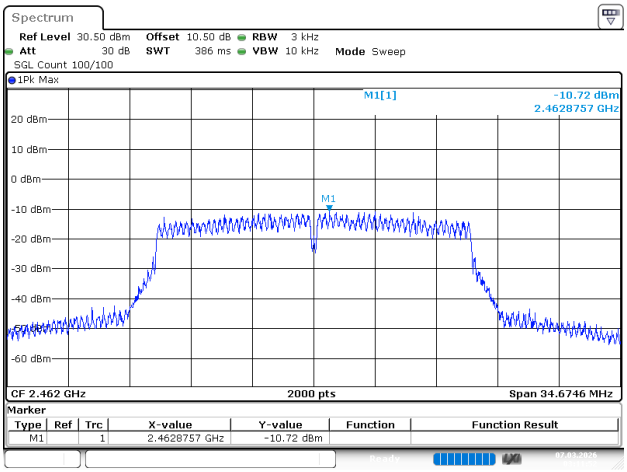
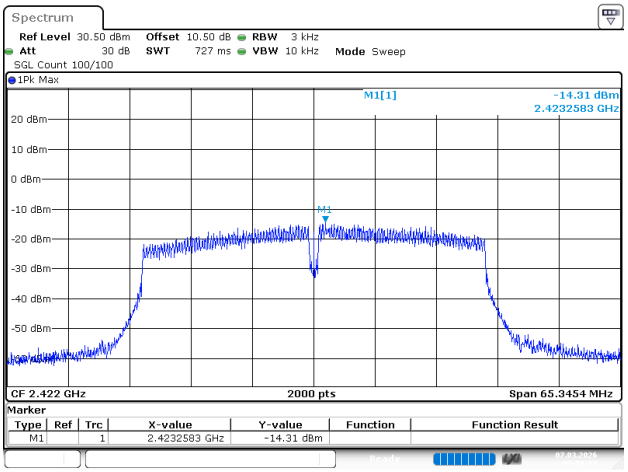
Date: 7.MAR.2026 03:09:47

802.11n20_2462MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:11:52

802.11n40_2422MHz



ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:56:33

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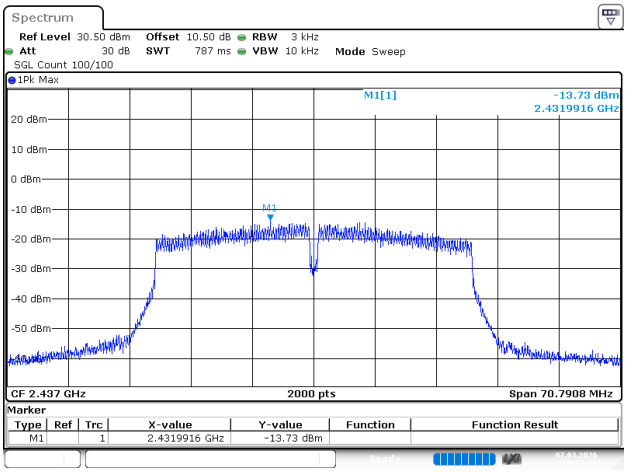

ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:59:38

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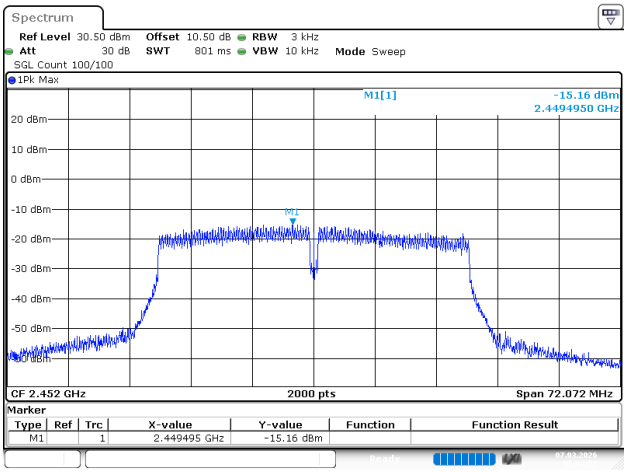

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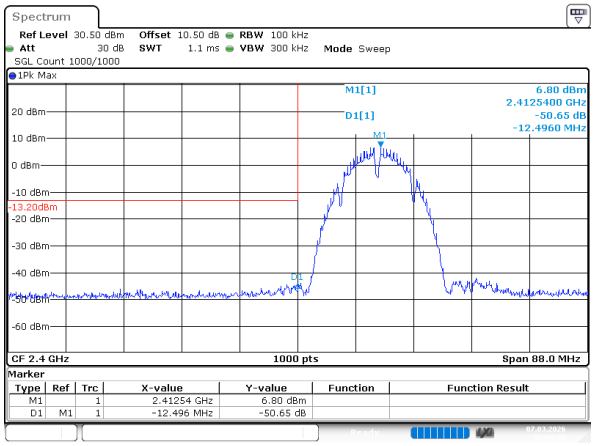
Date: 7.MAR.2026 03:02:52

100 kHz Bandwidth of Frequency Band Edge

802.11b_2412MHz



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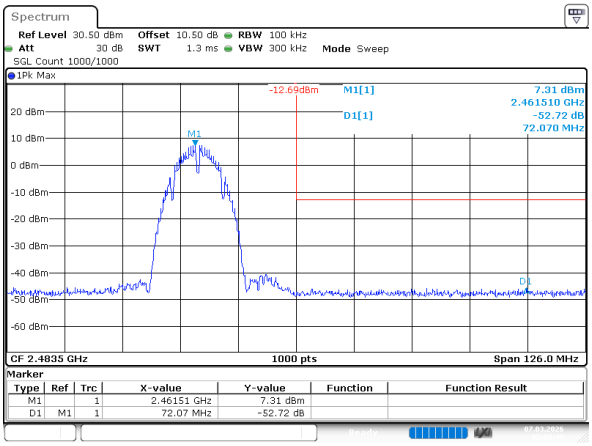
Date: 7.MAR.2026 02:06:38

802.11b_2462MHz



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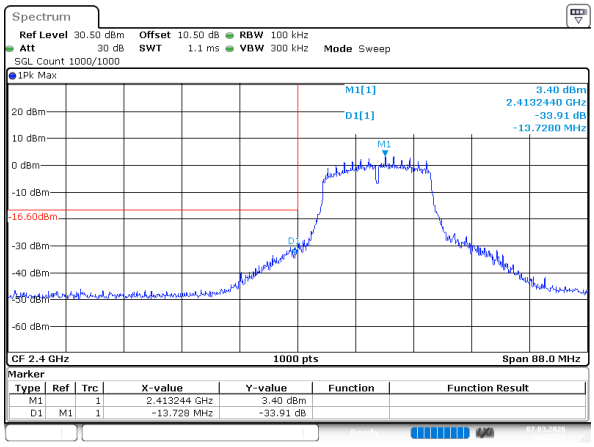
802.11g_2412MHz



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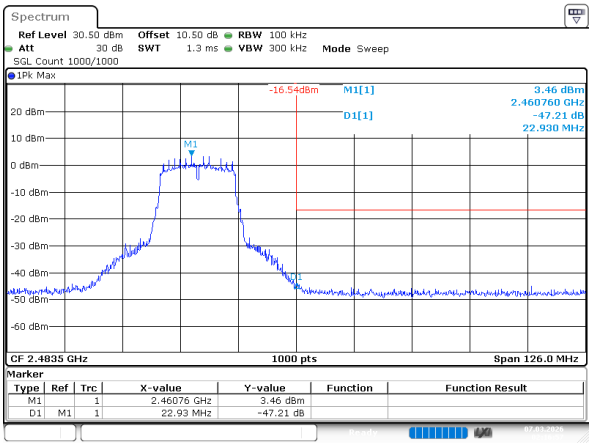
802.11g_2462MHz



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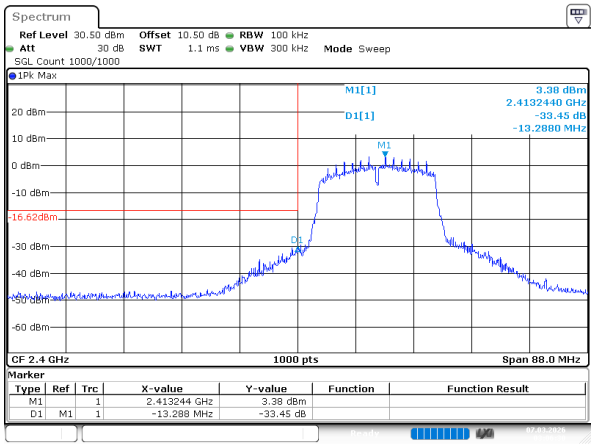
802.11n20_2412MHz



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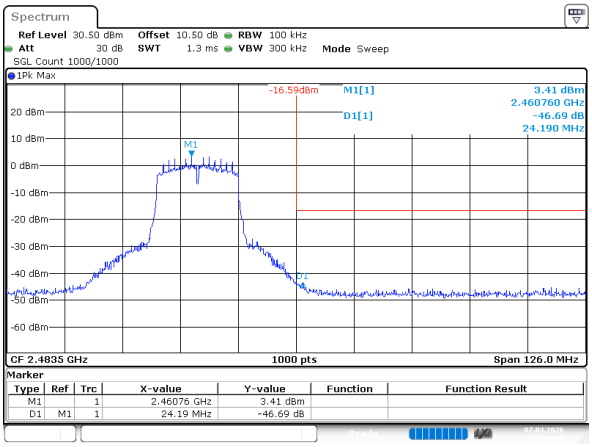
802.11n20_2462MHz



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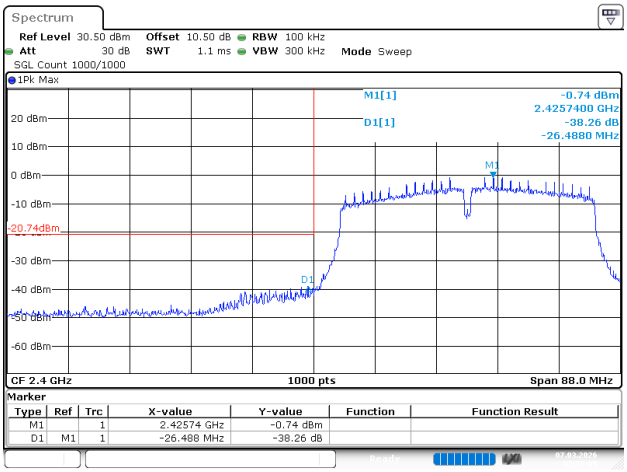
Date: 7.MAR.2026 03:11:04

802.11n40_2422MHz



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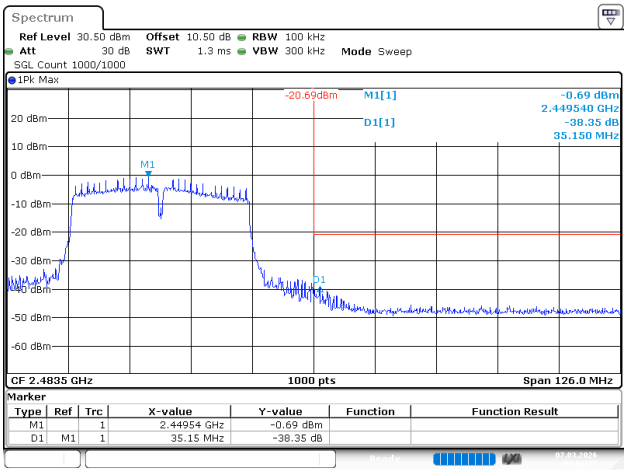
802.11n40_2452MHz



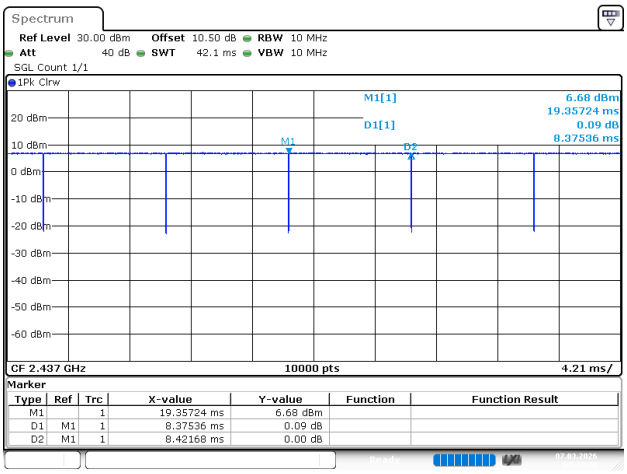
ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 03:01:15

Duty Cycle

Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
802.11b	2437	**8.375**	8.422	99.44	/	/	0.010
802.11g	2437	1.392	1.437	96.87	0.14	718	1
802.11n20	2437	1.300	1.345	96.65	0.15	769	1
802.11n40	2437	0.648	0.692	93.64	0.29	1543	2

Duty Cycle = Ton/(Ton+Toff)*100%

802.11b_2437MHz



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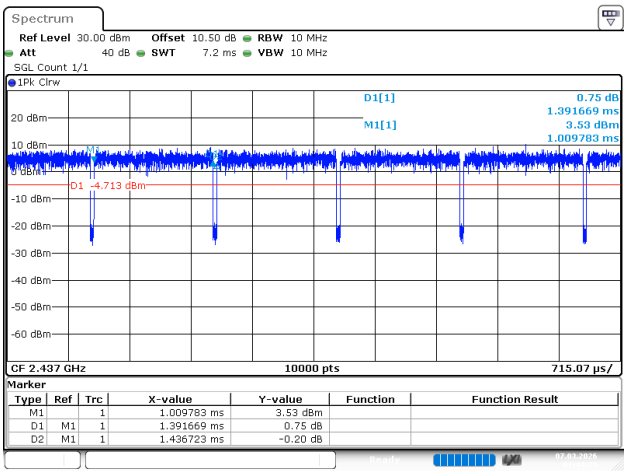
802.11g_2437MHz



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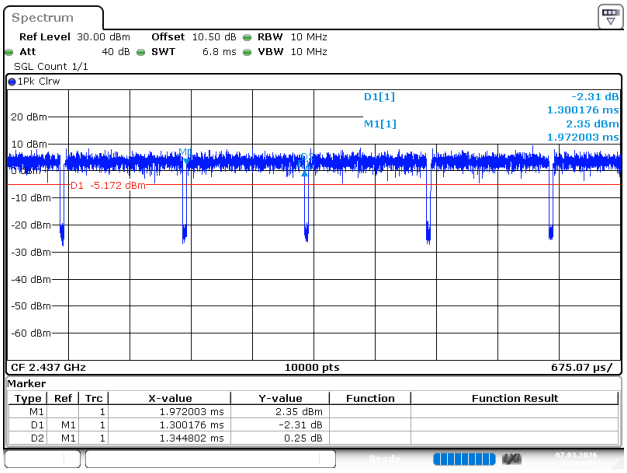
Date: 7.MAR.2026 01:44:25

802.11n20_2437MHz



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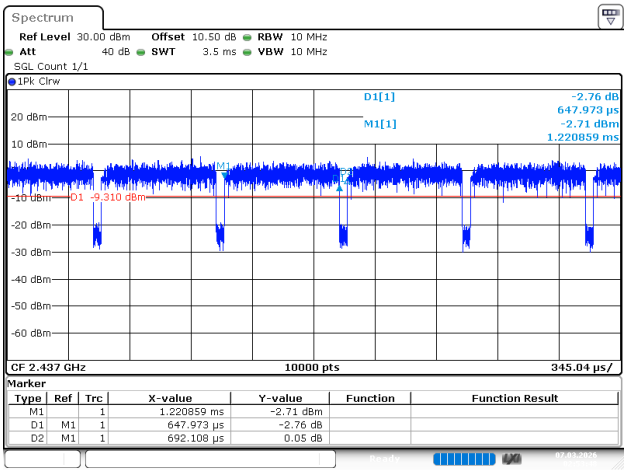
802.11n40_2437MHz



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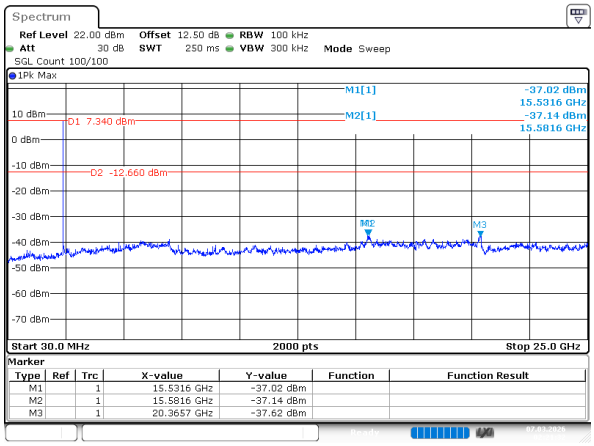
Date: 7.MAR.2026 02:53:48

Conducted Spurious Emission

802.11b_2412MHz



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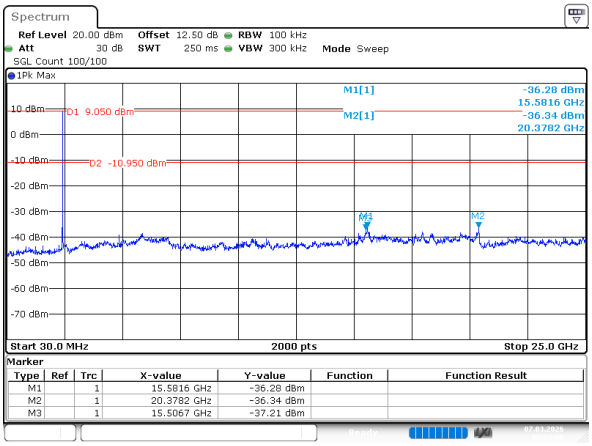
802.11b_2437MHz



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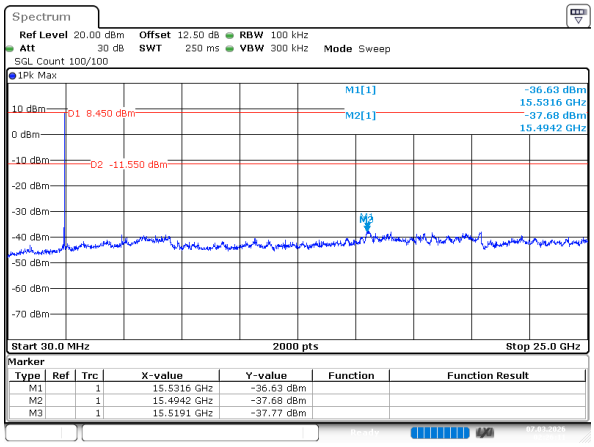
Date: 7.MAR.2026 02:24:00

802.11b_2462MHz



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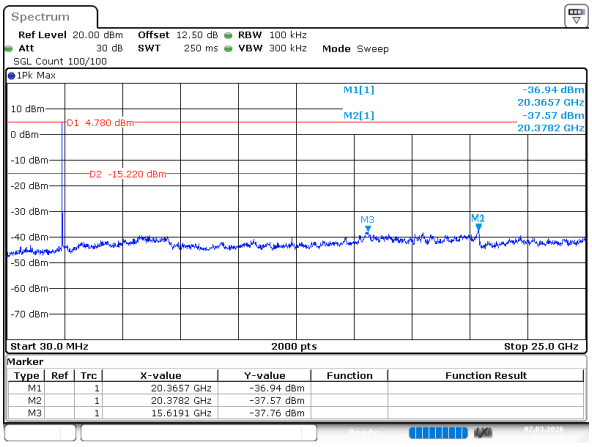
802.11g_2412MHz



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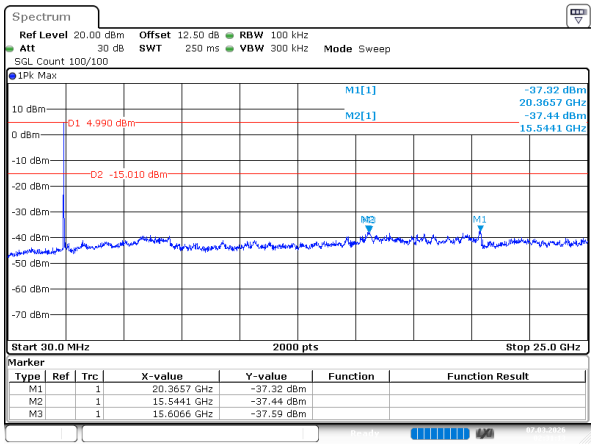
802.11g_2437MHz



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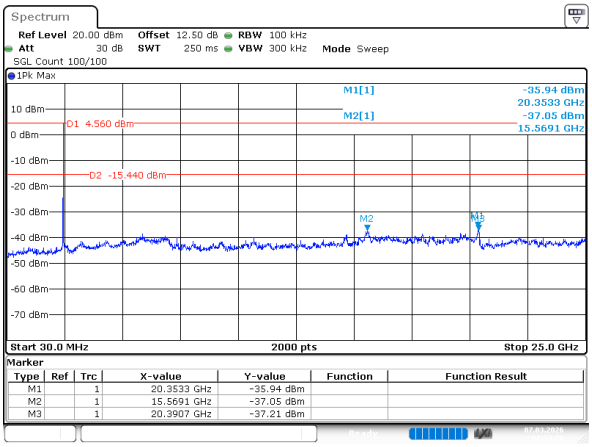
802.11g_2462MHz



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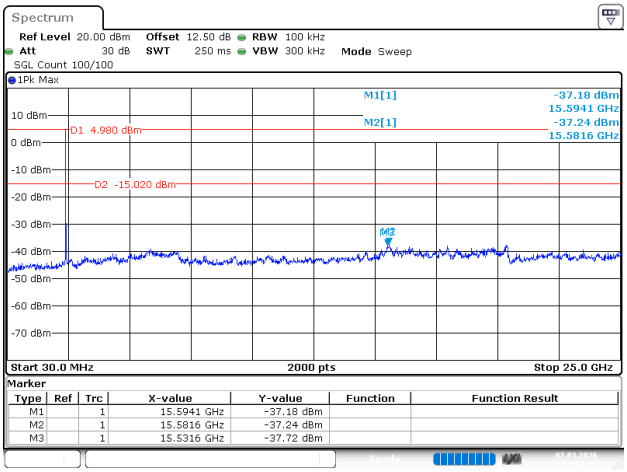
802.11n20_2412MHz



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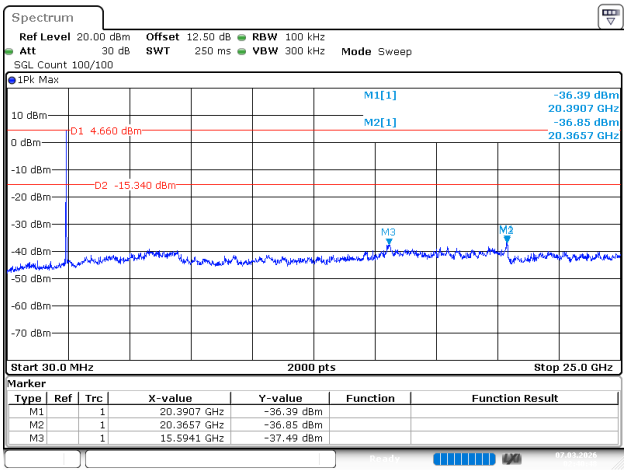

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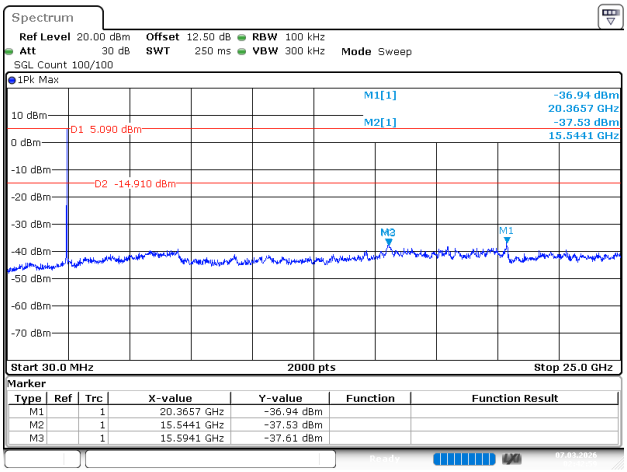

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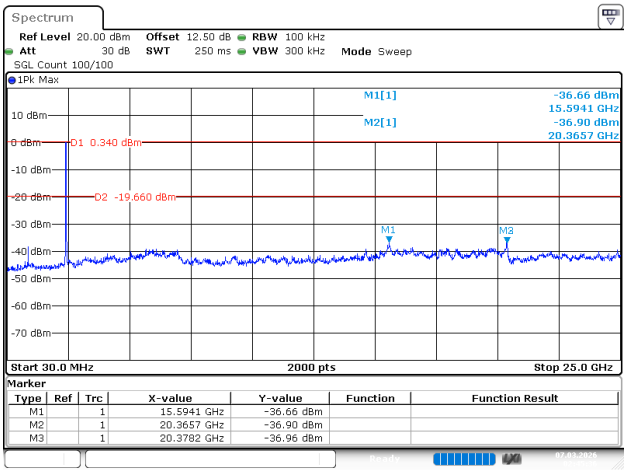

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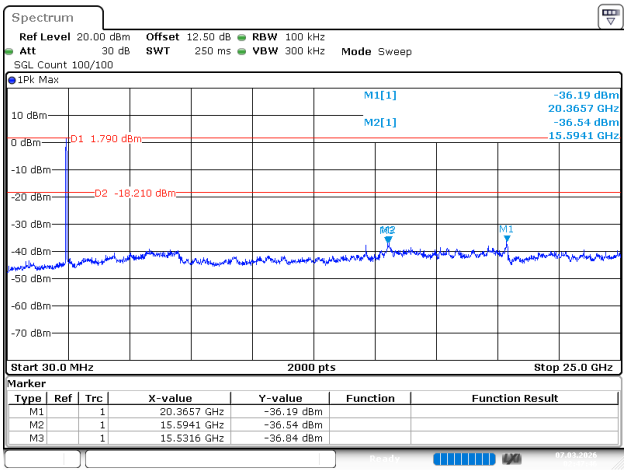

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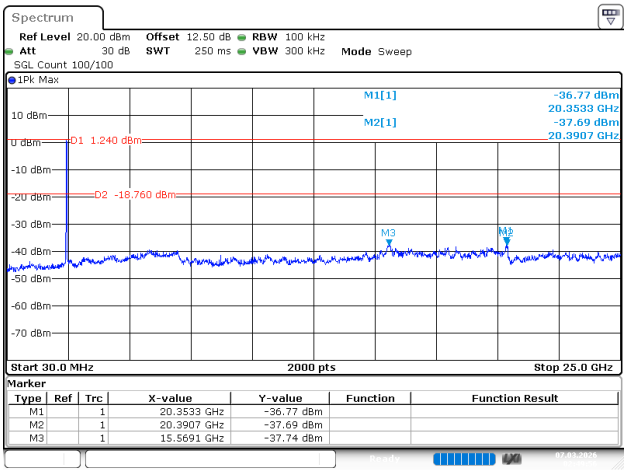

ProjectNo.:2601P34009E-RF Tester:Ethan Bu
Date: 7.MAR.2026 02:49:56

RF EXPOSURE EVALUATION

MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm²)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Result

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

For worst case:

Mode	Frequency (MHz)	Antenna Gain#		Max Tune-up Power#		Evaluation Distance (cm)	Power Density (mW/cm²)	MPE Limit (mW/cm²)
		(dBi)	(numeric)	(dBm)	(mW)			
BT	2402-2480	6.19	4.16	12.0	15.85	20	0.0131	1
BLE	2402-2480	6.19	4.16	-2.0	0.63	20	0.0005	1
2.4G Wi-Fi	2412-2462	6.19	4.16	22.0	158.49	20	0.1312	1
5.2G Wi-Fi	5180-5240	4.04	2.54	10.5	11.22	20	0.0057	1
5.3G Wi-Fi	5260-5320	4.04	2.54	10.5	11.22	20	0.0057	1
5.6G Wi-Fi	5500-5720	1.41	1.38	12.5	17.78	20	0.0049	1
5.8G Wi-Fi	5745-5825	3.20	2.09	13.0	19.95	20	0.0083	1
GSM850	824-849	-2.52	0.56	32.5	1778.28	20	0.1981	0.549
PCS1900	1850-1910	-0.20	0.95	30.0	1000.00	20	0.1890	1
WCDMA B2	1850-1910	-0.20	0.95	23.5	223.87	20	0.0423	1
WCDMA B5	824-849	-2.52	0.56	23.5	223.87	20	0.0249	0.549
LTE B2	1850-1910	-0.20	0.95	23.0	199.53	20	0.0377	1
LTE B5	824-849	-2.52	0.56	23.0	199.53	20	0.0222	0.549
LTE B7	2500-2570	2.19	1.66	23.0	199.53	20	0.0659	1

Note:
1) The tune up conducted power and antenna gain was declared by the applicant.
2) The BT and 5G Wi-Fi can simultaneous transmitting, BT/5G and 2.4G Wi-Fi cannot simultaneous transmitting.

Mode	Maximum E-Field (dBuV/m@3m)	Maximum EIRP		Evaluation Distance (cm)	Power Density (mW/cm²)	MPE Limit (mW/cm²)
		(dBm)	(mW)			
NFC	70.15	-25.05	0.0031	20	0.00000062	0.979

Note: EIRP = E-Field – 95.2 @3m

Simultaneous transmitting consideration (worst case):

The ratio= $MPE_{2.4G\ Wi\text{-}Fi}$/limit+MPE_{GSM850}/limit+ MPE_{NFC}/limit
=0.1312/1+0.1981/0.549+0.00000062/0.979=0.492<1.0

So simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant.

EUT PHOTOGRAPHS

Please refer to the attachment 2601P34009E-RF-EXP External photo and 2601P34009E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2601P34009E-RF-TSPA Test Setup photo.

******* END OF REPORT *******