

# TEST REPORT

Applicant Name: M&M Electronics, S.A.  
Address: Cocosolito, Colon Free Zone, Main Entrance Warehouse 10D and 11D, Colon Panama  
Report Number: 2501P28089E-RF-00D  
FCC ID: 2BLU9-QA27R5

**Test Standard (s)**  
FCC PART 15.407

## Sample Description

Product Type: ALL IN ONE PC  
Model No.: QA27R5GW16256W  
Multiple Model(s) No.: N/A  
Trade Mark: COMPAQ  
Date Received: 2025-01-23  
Issue Date: 2025-03-11

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

**Prepared and Checked By:**

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Jim Cheng  
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	2501P28089E-RF-00D	Original Report	2025-03-11

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

<b>Frequency Range</b>	5150-5250MHz; 5725-5850MHz
<b>Mode</b>	802.11a/n20/n40/ac20/ac40/ac80
<b>Maximum Conducted Average Output Power</b>	5150-5250MHz: 15.22dBm; 5725-5850MHz: 13.82dBm
<b>Modulation Technique</b>	OFDM
<b>Antenna Specification<sup>#</sup></b>	3.52dBi (provided by the applicant)
<b>Voltage Range</b>	DC 19V from Adapter
<b>Sample serial number</b>	2Y1M-1 for Conducted and Radiated Emissions Test 2Y1M-18 for RF Conducted Test (Assigned by BACL, Shenzhen)
<b>Sample/EUT Status</b>	Good condition
<b>Adapter Information</b>	Model: SOY-1900474 Input: AC100-240V, 50/60Hz, 1.8A MAX Output: DC19.0V, 4.74A, 96.06W

### Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

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		109.2kHz(k=2, 95% level of confidence)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
Power Spectral Density		0.90dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz - 30MHz	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.73dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.34dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.40dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.64dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%

*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, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a/ac20 mode: channel 36, 40, 48 were tested;

For 802.11ac40 mode: channel 38, 46 were tested;

For 802.11ac80 mode, channel 42 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/ac20 mode: channel 149, 157, 165 were tested;

For 802.11ac40 mode: channel 151, 159 were tested;

For 802.11ac80 mode, channel 155 was tested.

### EUT Exercise Software

Exercise Software <sup>#</sup>	MPTool		
5150-5250 MHz Band			
Mode	Test Channels	Data rate	Power Level <sup>#</sup>
802.11a	Low	6Mbps	53
	Middle	6Mbps	53
	High	6Mbps	53
802.11ac-VHT20	Low	MCS0	53
	Middle	MCS0	53
	High	MCS0	53
802.11ac-VHT40	Low	MCS0	47
	High	MCS0	47
802.11ac-VHT80	Middle	MCS0	45

<b>5725-5850 MHz Band</b>			
Mode	Test Channels	Data rate	Power Level <sup>#</sup>
802.11a	Low	6Mbps	53
	Middle	6Mbps	53
	High	6Mbps	53
802.11ac-VHT20	Low	MCS0	53
	Middle	MCS0	53
	High	MCS0	53
802.11ac-VHT40	Low	MCS0	53
	High	MCS0	53
802.11ac-VHT80	Middle	MCS0	50
Note: 1. The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the average power and PSD across all data rates bandwidths, and modulations. 2. The n20/n40 mode was reduced test as identical parameter with ac20/ac40 mode.			

**Special Accessories**

No special accessory.

**Equipment Modifications**

No modification was made to the EUT tested.

**Support Equipment List and Details**

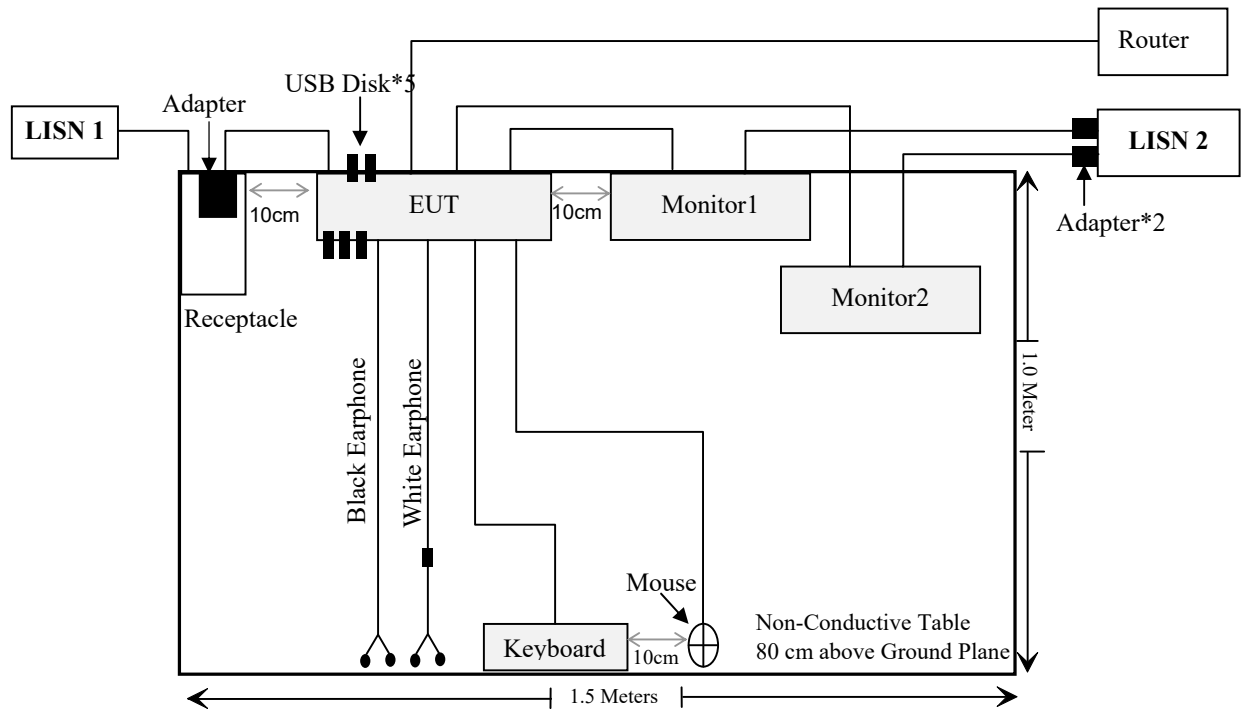
Manufacturer	Description	Model	Serial Number
Redmi	Monitor1	RMMNT238NF	6971041358020
Redmi	Monitor2	A22FAB-RA	DL0ZCS1
Unknown	Adapter*2	AD-0241200200CN-1	Unknown
Xiaomi	Router	Mi router 4A	Unknown
Unknown	Black Earphone	Unknown	Unknown
Unknown	White Earphone	Unknown	Unknown
Unknown	USB Disk*5	Unknown	Unknown

**External I/O Cable**

Cable Description	Length (m)	From Port	To
Shielded Un-detachable DC cable	1.5	EUT	Adapter
Un-shielded Detachable AC cable	1.5	Adapter	LISN1/AC Mains
Un-shielded Un-detachable Audio cable*2	1.2	EUT	Earphone
Un-shielded Un-detachable USB cable	1.5	EUT	Mouse
Un-shielded Un-detachable USB cable	1.5	EUT	Keyboard
Un-shielded Detachable HDMI cable	2.0	EUT	Monitor1
Un-shielded Detachable VGA cable	2.0	EUT	Monitor2
Un-Shielding Un-Detachable DC Cable*2	1.5	Adapter	Monitor
Un-shielded Detachable RJ45 cable	5.0	EUT	Router

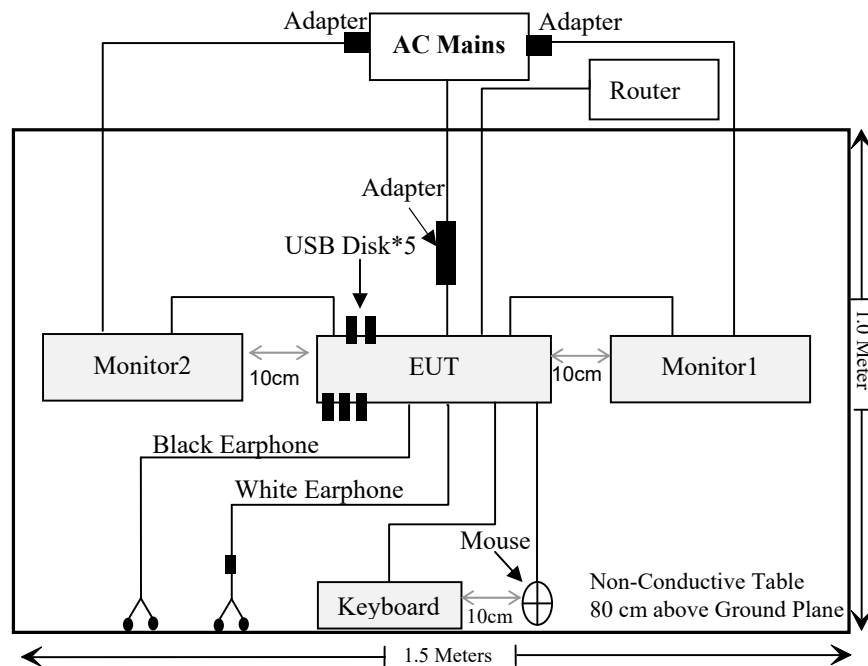
## Block Diagram of Test Setup

For Conducted Emissions:

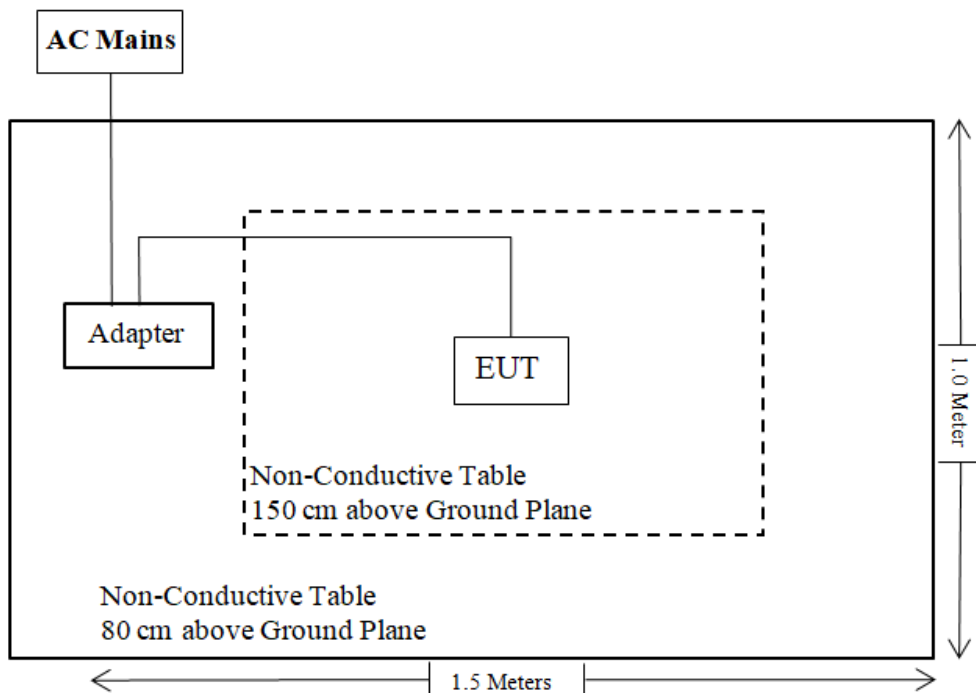




For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



**SUMMARY OF TEST RESULTS**

<b>FCC Rules</b>	<b>Description of Test</b>	<b>Result</b>
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207(a)	AC Line Conducted Emissions	Compliant
FCC §15.205, §15.209, §15.407(b)	Undesirable Emission& Restricted Bands	Compliant
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407 (a)	Maximum Conducted Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Not Applicable
C63.10 §11.6	Duty Cycle	Compliant
FCC§1.1307 (b) (3) & §2.1091	MPE-Based Exemption	Compliant

Not Applicable: The EUT supports 5150-5250MHz and 5725-5850MHz bands only.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/12/04	2025/12/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2024/05/21	2025/05/20
Rohde & Schwarz	LISN	ENV216	101613	2024/12/04	2025/12/03
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2024/05/21	2025/05/20
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
<b>Radiated Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310N	186238	2024/05/21	2025/05/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber Cable 1	F-03-EM236	2024/06/18	2025/06/17
Unknown	Cable	XH500C	J-10M-A	2024/06/18	2025/06/17
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
A.H.System	Preamplifier	PAM-0118P	489	2024/11/15	2025/11/14
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	0735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
Unknown	RF Cable	XH750A-N	J-10M	2024/12/06	2025/12/05
JD	Filter Switch Unit	DT7220FSU	DS79906	2024/09/09	2025/09/08
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2024/09/09	2025/09/08
A.H.System	Pre-amplifier	PAM-1840VH	190	2024/06/18	2025/06/17
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/12/18	2025/12/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV40-N	102259	2024/12/04	2025/12/03
ANRITSU	Microwave peak power sensor	MA24418A	12622	2024/05/21	2025/05/20
Unknown	10dB Attenuator	Unknown	F-03-EM014	2024/06/27	2025/06/26

**\* 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).

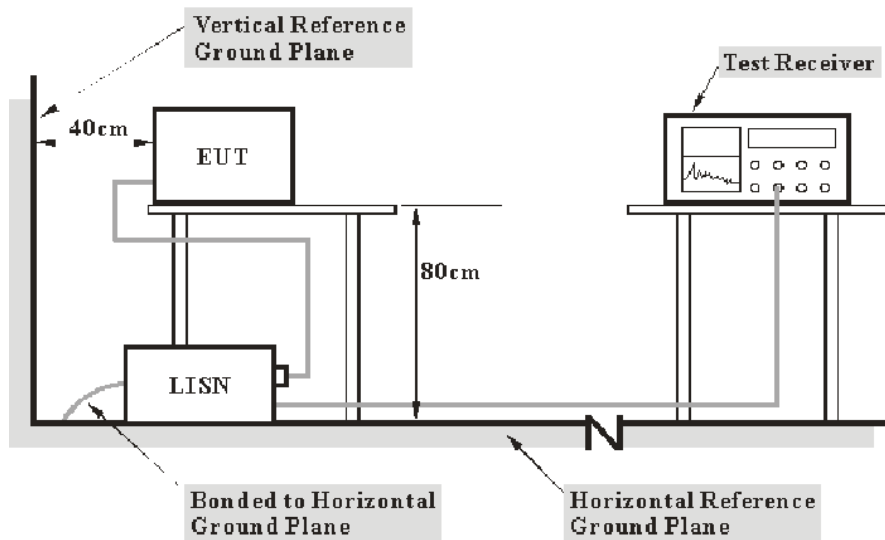
## REQUIREMENTS AND TEST PROCEDURES

### 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 C63.10-2013 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	IF B/W
150 kHz – 30 MHz	9 kHz

#### Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

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

All 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:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

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 calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

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

## Undesirable Emission

### Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

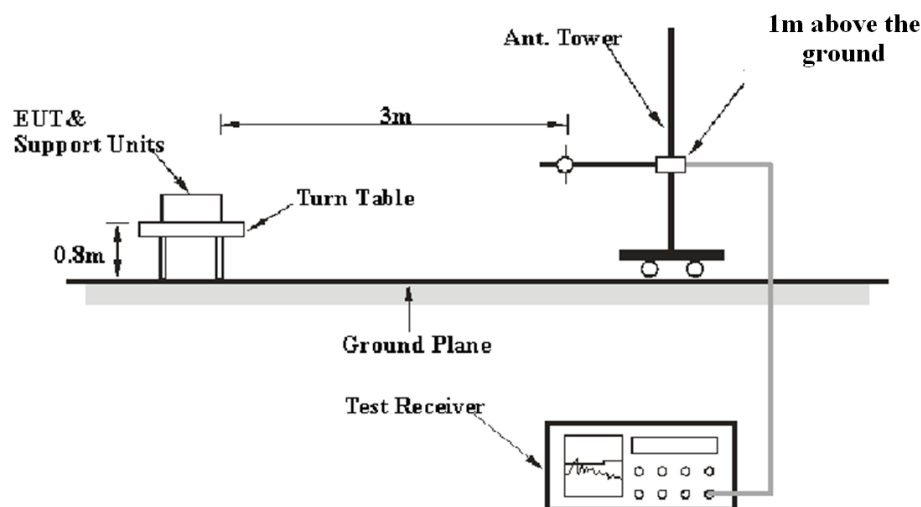
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

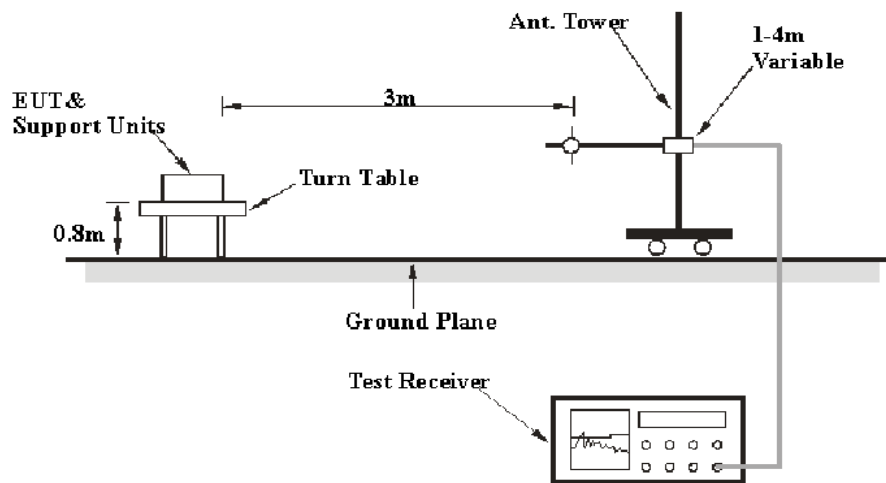
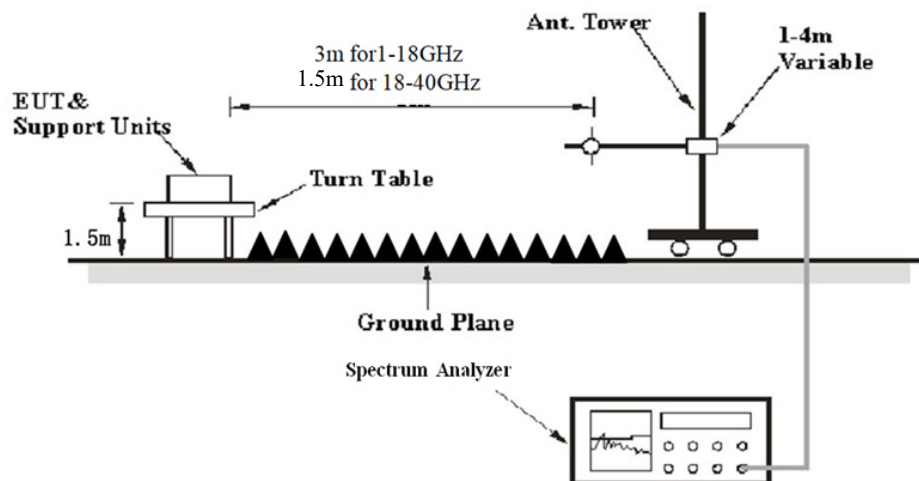
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) All emissions shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

### EUT Setup

9 kHz-30MHz:



**30MHz-1GHz:****Above 1 GHz:**

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.



## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 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
9 kHz – 150 kHz	/	/	200 Hz	QP
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	PK

1-40GHz:

Pre-scan

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
AV	>98%	1MHz	5 kHz
	<98%	1MHz	≥1/Ton

Final measurement for emission identified during pre-scan

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

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

### Radiated Spurious Emission

During the radiated emission test, the adapter was connected to the AC floor outlet.

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

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\text{SpecLimit}} = E_{\text{Meas}} + 20 \log \left( \frac{d_{\text{Meas}}}{d_{\text{SpecLimit}}} \right)$$

where

$E_{\text{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dB $\mu$ V/m
$E_{\text{Meas}}$	is the field strength of the emission at the measurement distance, in dB $\mu$ V/m
$d_{\text{Meas}}$	is the measurement distance, in m
$d_{\text{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is  $20 \cdot \log(1/3) = -6.0$  dB, for 18-40GHz range, the limit of 1.5m distance was added by 6.0dB from limit of 3m to compared with the result measurement at 1.5m distance.

#### 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:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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:

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit}; \text{Margin} = \text{Limit} - \text{Corrected Amplitude} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

## 26 dB & 6dB Emission Bandwidth

### Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### Test Procedure

According to KDB789033 D02 section II.C and section II.D

#### 1. Emission Bandwidth (EBW)

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### 2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

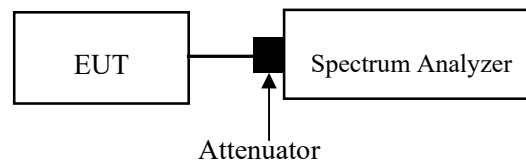
#### 3. 99% Occupied Bandwidth:

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

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 approximately 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  $[10 \log (\text{OBW}/\text{RBW})]$  below the reference level. Specific guidance is given in 4.1.5.2.
- 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 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).



## Conducted Transmitter Output Power

### Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

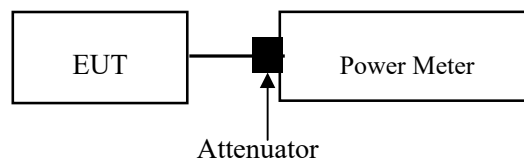
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method PM-G should be applied

- a. Place the EUT on a bench and set it in transmitting mode.
- b. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.



Note: 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 added with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

## Power Spectral Density

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

## Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Duty cycle  $\geq 98\%$

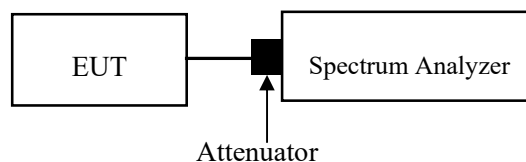
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

Duty cycle  $< 98\%$ , duty cycle variations are less than  $\pm 2\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

Duty cycle  $< 98\%$ , duty cycle variations exceed  $\pm 2\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.



Note: 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 added with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

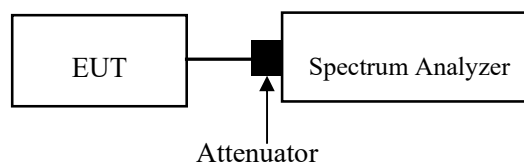
## Duty Cycle

### Test Procedure

According to ANSI C63.10-2013 Section 12.2

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  $RBW \geq OBW$  if possible; otherwise, set RBW to the largest available value.
- 3) Set  $VBW \geq RBW$ . 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  $T \leq 16.7 \mu s$ .)



## **ANTENNA REQUIREMENT**

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### **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 an internal antenna arrangement, which was permanently attached, the antenna gain<sup>#</sup> is 3.52dBi, fulfill the requirement of this section. Please refer to the EUT photos.

**Result: Compliant**

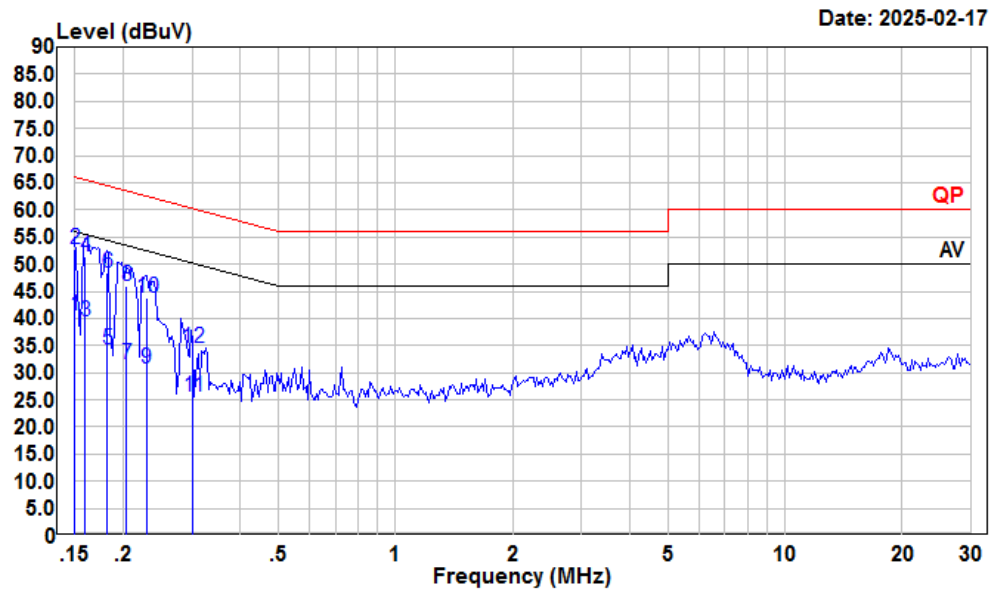


## TEST DATA AND RESULTS

### Conducted Emissions

<b>Temperature (°C)</b>	24.6	<b>Relative Humidity (%)</b>	48
<b>ATM Pressure (kPa)</b>	101.3	<b>Test engineer</b>	Macy Shi
<b>Test date</b>	2025/02/17		
<b>EUT operation mode</b>	Transmitting (Maximum output power mode, 802.11ac-VHT20 5200MHz)		

AC 120V 60 Hz, Line



Condition: Line

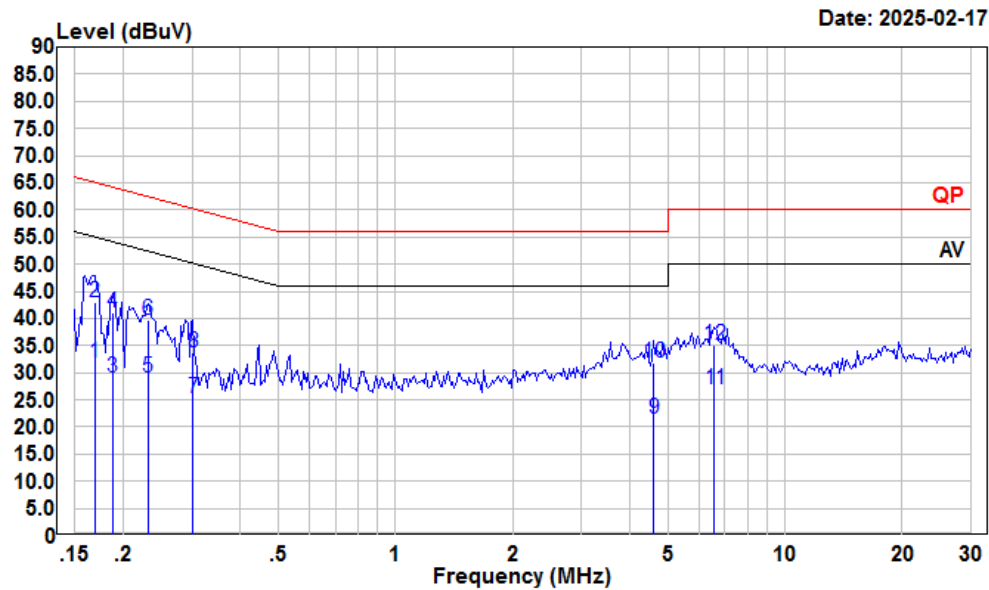
Project : 2501P28089E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.150	19.90	40.43	10.40	10.13	56.00	-15.57	Average
2	0.150	32.20	52.73	10.40	10.13	66.00	-13.27	QP
3	0.160	18.86	39.45	10.47	10.12	55.47	-16.02	Average
4	0.160	30.78	51.37	10.47	10.12	65.47	-14.10	QP
5	0.182	13.50	34.20	10.60	10.10	54.42	-20.22	Average
6	0.182	27.70	48.40	10.60	10.10	64.42	-16.02	QP
7	0.204	10.86	31.65	10.70	10.09	53.45	-21.80	Average
8	0.204	25.11	45.90	10.70	10.09	63.45	-17.55	QP
9	0.229	10.00	30.75	10.67	10.08	52.48	-21.73	Average
10	0.229	23.10	43.85	10.67	10.08	62.48	-18.63	QP
11	0.302	4.98	25.70	10.61	10.11	50.19	-24.49	Average
12	0.302	13.84	34.56	10.61	10.11	60.19	-25.63	QP

AC 120V 60 Hz, Neutral



Condition: Neutral

Project : 2501P28089E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

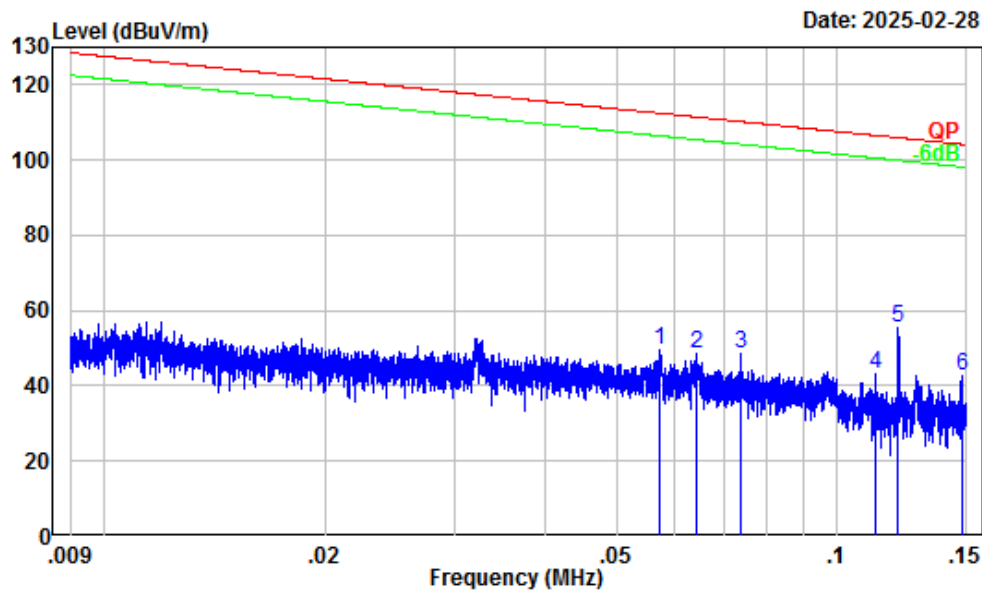
	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.169	11.16	31.82	10.56	10.10	55.03	-23.21	Average
2	0.169	22.27	42.93	10.56	10.10	65.03	-22.10	QP
3	0.187	8.20	29.00	10.71	10.09	54.15	-25.15	Average
4	0.187	20.20	41.00	10.71	10.09	64.15	-23.15	QP
5	0.232	8.33	29.16	10.75	10.08	52.39	-23.23	Average
6	0.232	18.97	39.80	10.75	10.08	62.39	-22.59	QP
7	0.302	4.53	25.31	10.67	10.11	50.19	-24.88	Average
8	0.302	13.00	33.78	10.67	10.11	60.19	-26.41	QP
9	4.598	0.50	21.59	10.90	10.19	46.00	-24.41	Average
10	4.598	10.85	31.94	10.90	10.19	56.00	-24.06	QP
11	6.592	6.01	26.84	10.64	10.19	50.00	-23.16	Average
12	6.592	14.20	35.03	10.64	10.19	60.00	-24.97	QP

**Undesirable Emission**

<b>Temperature (°C)</b>	24.1-25.5	<b>Relative Humidity (%)</b>	39-53
<b>ATM Pressure (kPa):</b>	101.1-101.5	<b>Test engineer:</b>	Alex Yan & Zenos Qiao
<b>Test date:</b>	2025/02/16-2025/02/28		
<b>EUT operation mode:</b>	Below 1GHz: Transmitting(Maximum output power mode, 802.11ac20 5200MHz) Above 1GHz: Transmitting		
<b>Note:</b>	1. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded. 2. When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.		

Below 1GHz:

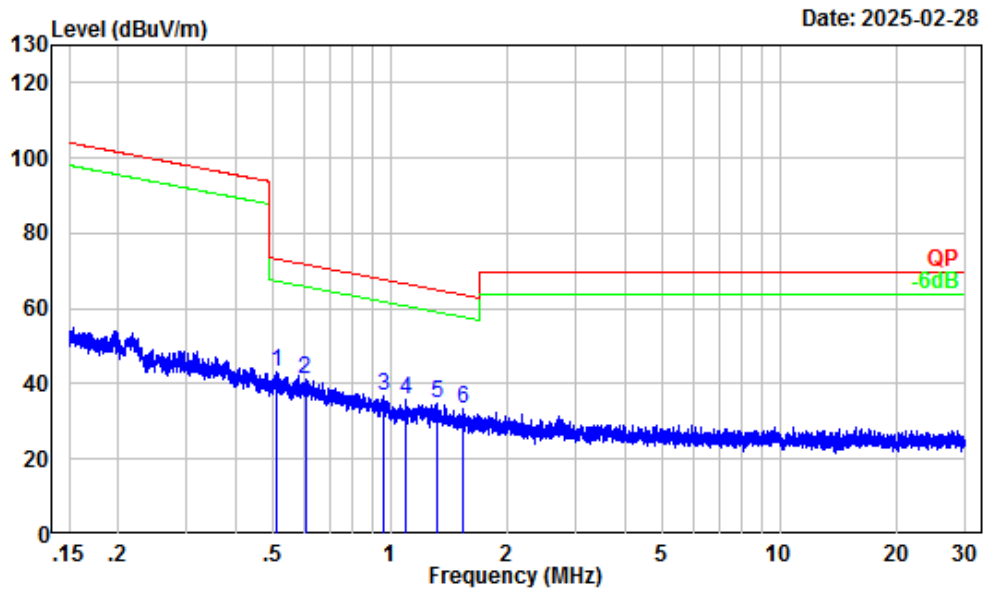
9kHz-150kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501P28089E-RF  
Test Mode : 5G WIFI Transmitting  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.06	25.68	23.89	49.57	112.45	-62.88	Peak
2	0.06	24.96	23.45	48.41	111.43	-63.02	Peak
3	0.07	24.00	24.50	48.50	110.22	-61.72	Peak
4	0.11	21.25	21.93	43.18	106.57	-63.39	Peak
5	0.12	20.76	34.82	55.58	105.94	-50.36	Peak
6	0.15	19.19	23.57	42.76	104.22	-61.46	Peak

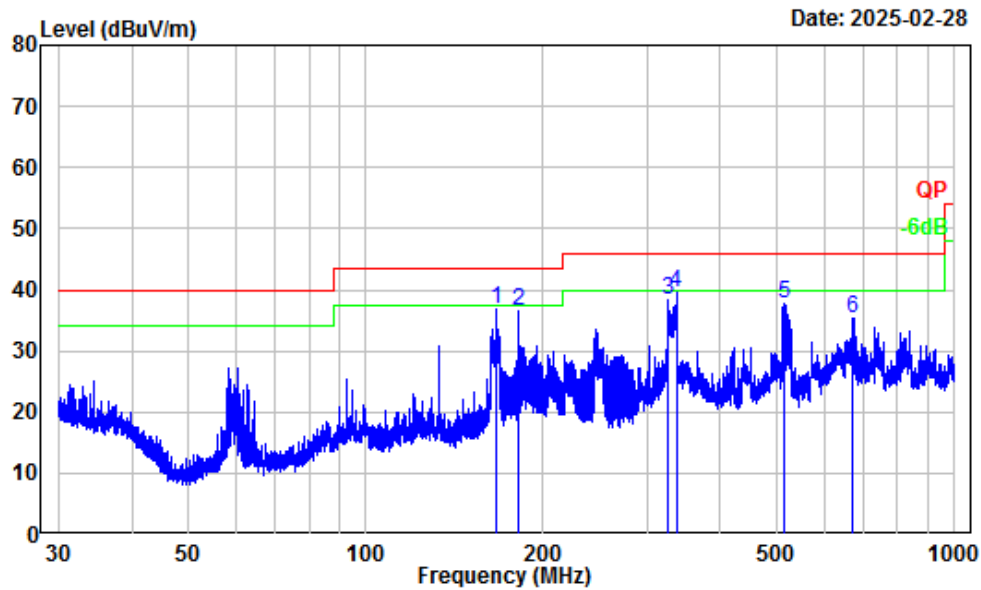
## 150kHz-30MHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501P28089E-RF  
Test Mode : 5G WIFI Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.51	6.25	36.83	43.08	73.40	-30.32	Peak
2	0.61	5.10	36.00	41.10	71.93	-30.83	Peak
3	0.97	1.46	35.44	36.90	67.79	-30.89	Peak
4	1.09	0.94	34.67	35.61	66.68	-31.07	Peak
5	1.32	0.29	34.63	34.92	64.98	-30.06	Peak
6	1.54	-0.32	33.82	33.50	63.63	-30.13	Peak

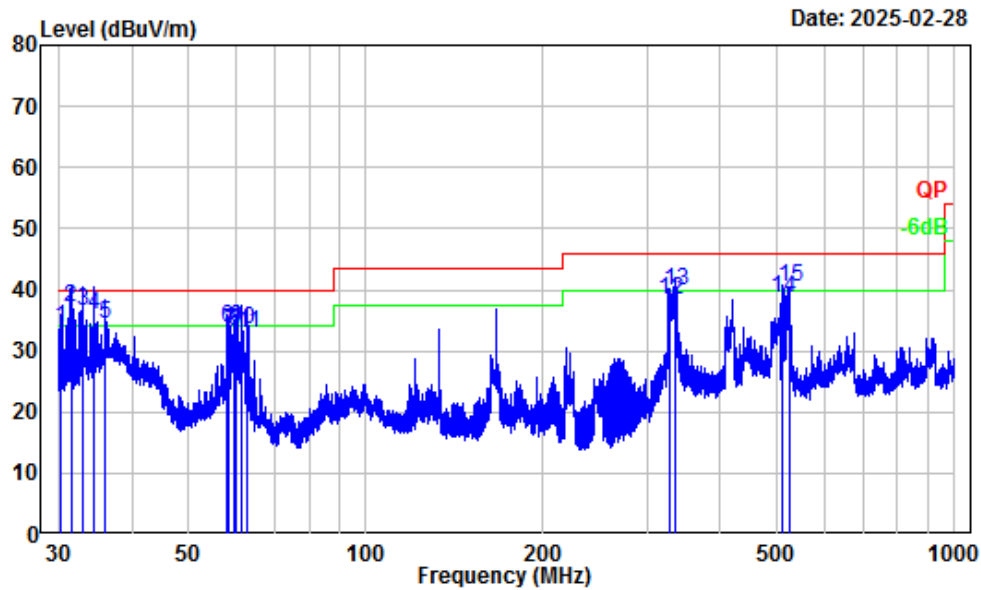
## 30MHz-1GHz\_Horizontal



Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501P28089E-RF  
Test Mode : 5G WIFI Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	166.14	-12.92	49.62	36.70	43.50	-6.80	Peak
2	181.52	-13.77	50.27	36.50	43.50	-7.00	Peak
3	326.45	-10.68	48.92	38.24	46.00	-7.76	Peak
4	336.62	-10.49	50.07	39.58	46.00	-6.42	Peak
5	514.99	-5.88	43.63	37.75	46.00	-8.25	Peak
6	673.14	-3.83	39.24	35.41	46.00	-10.59	Peak

## 30MHz-1GHz\_Vertical



Site : Chamber A  
 Condition : 3m Vertical  
 Project Number : 2501P28089E-RF  
 Test Mode : 5G WIFI Transmitting  
 Detector: Peak RBW/VBW: 100/300kHz  
 Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.36	-6.14	40.04	33.90	40.00	-6.10	QP
2	31.51	-6.79	43.81	37.02	40.00	-2.98	QP
3	33.01	-7.59	44.21	36.62	40.00	-3.38	QP
4	34.52	-8.60	44.50	35.90	40.00	-4.10	QP
5	36.02	-9.49	43.89	34.40	40.00	-5.60	QP
6	58.15	-18.22	52.12	33.90	40.00	-6.10	QP
7	58.51	-18.22	51.52	33.30	40.00	-6.70	QP
8	59.70	-18.15	51.22	33.07	40.00	-6.93	QP
9	60.25	-18.12	52.00	33.88	40.00	-6.12	QP
10	61.53	-18.11	51.60	33.49	40.00	-6.51	QP
11	63.01	-18.11	50.91	32.80	40.00	-7.20	QP
12	328.89	-10.66	48.87	38.21	46.00	-7.79	QP
13	335.89	-10.51	50.31	39.80	46.00	-6.20	QP
14	510.71	-5.78	44.49	38.71	46.00	-7.29	QP
15	525.71	-5.80	46.30	40.50	46.00	-5.50	QP



**Above 1GHz:****5150-5250 MHz**

Frequency (MHz)	Reading (dBμV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
<b>802.11a</b>							
Low Channel							
10360.00	56.28	PK	H	2.53	58.81	68.2	-9.39
10360.00	56.83	PK	V	2.53	59.36	68.2	-8.84
Middle Channel							
10400.00	55.12	PK	H	2.55	57.67	68.2	-10.53
10400.00	55.67	PK	V	2.55	58.22	68.2	-9.98
High Channel							
10480.00	53.99	PK	H	2.25	56.24	68.2	-11.96
10480.00	54.54	PK	V	2.25	56.79	68.2	-11.41
<b>802.11ac20</b>							
Low Channel							
10360.00	55.94	PK	H	2.53	58.47	68.2	-9.73
10360.00	56.45	PK	V	2.53	58.98	68.2	-9.22
Middle Channel							
10400.00	55.26	PK	H	2.55	57.81	68.2	-10.39
10400.00	55.78	PK	V	2.55	58.33	68.2	-9.87
High Channel							
10480.00	54.48	PK	H	2.25	56.73	68.2	-11.47
10480.00	55.01	PK	V	2.25	57.26	68.2	-10.94
<b>802.11ac40</b>							
Low Channel							
10380.00	53.14	PK	H	2.54	55.68	68.2	-12.52
10380.00	53.66	PK	V	2.54	56.2	68.2	-12.00
High Channel							
10460.00	52.57	PK	H	2.32	54.89	68.2	-13.31
10460.00	53.12	PK	V	2.32	55.44	68.2	-12.76
<b>802.11ac80</b>							
Middle Channel							
10420.00	52.05	PK	H	2.48	54.53	68.2	-13.67
10420.00	52.61	PK	V	2.48	55.09	68.2	-13.11

**5725-5850MHz**

Frequency (MHz)	Reading (dBμV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
<b>802.11a</b>							
Low Channel							
11490.00	55.27	PK	H	3.54	58.81	74	-15.19
11490.00	43.15	AV	H	3.54	46.69	54	-7.31
11490.00	56.69	PK	V	3.54	60.23	74	-13.77
11490.00	43.98	AV	V	3.54	47.52	54	-6.48
Middle Channel							
11570.00	54.36	PK	H	3.3	57.66	74	-16.34
11570.00	42.18	AV	H	3.3	45.48	54	-8.52
11570.00	55.77	PK	V	3.3	59.07	74	-14.93
11570.00	43.01	AV	V	3.3	46.31	54	-7.69
High Channel							
11650.00	53.75	PK	H	3.42	57.17	74	-16.83
11650.00	41.02	AV	H	3.42	44.44	54	-9.56
11650.00	55.18	PK	V	3.42	58.6	74	-15.40
11650.00	41.84	AV	V	3.42	45.26	54	-8.74
<b>802.11ac20</b>							
Low Channel							
11490.00	55.52	PK	H	3.54	59.06	74	-14.94
11490.00	42.83	AV	H	3.54	46.37	54	-7.63
11490.00	56.95	PK	V	3.54	60.49	74	-13.51
11490.00	43.69	AV	V	3.54	47.23	54	-6.77
Middle Channel							
11570.00	54.65	PK	H	3.3	57.95	74	-16.05
11570.00	41.89	AV	H	3.3	45.19	54	-8.81
11570.00	56.07	PK	V	3.3	59.37	74	-14.63
11570.00	42.7	AV	V	3.3	46	54	-8.00
High Channel							
11650.00	53.84	PK	H	3.42	57.26	74	-16.74
11650.00	40.91	AV	H	3.42	44.33	54	-9.67
11650.00	55.39	PK	V	3.42	58.81	74	-15.19
11650.00	41.72	AV	V	3.42	45.14	54	-8.86

Frequency (MHz)	Reading (dBμV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
<b>802.11ac40</b>							
Low Channel							
11510.00	54.57	PK	H	3.53	58.1	74	-15.90
11510.00	42.32	AV	H	3.53	45.85	54	-8.15
11510.00	55.89	PK	V	3.53	59.42	74	-14.58
11510.00	43.16	AV	V	3.53	46.69	54	-7.31
High Channel							
11590.00	53.17	PK	H	3.21	56.38	74	-17.62
11590.00	40.63	AV	H	3.21	43.84	54	-10.16
11590.00	54.58	PK	V	3.21	57.79	74	-16.21
11590.00	41.45	AV	V	3.21	44.66	54	-9.34
<b>802.11ac80</b>							
Middle Channel							
11550.00	51.67	PK	H	3.37	55.04	74	-18.96
11550.00	40.45	AV	H	3.37	43.82	54	-10.18
11550.00	52.96	PK	V	3.37	56.33	74	-17.67
11550.00	41.29	AV	V	3.37	44.66	54	-9.34

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

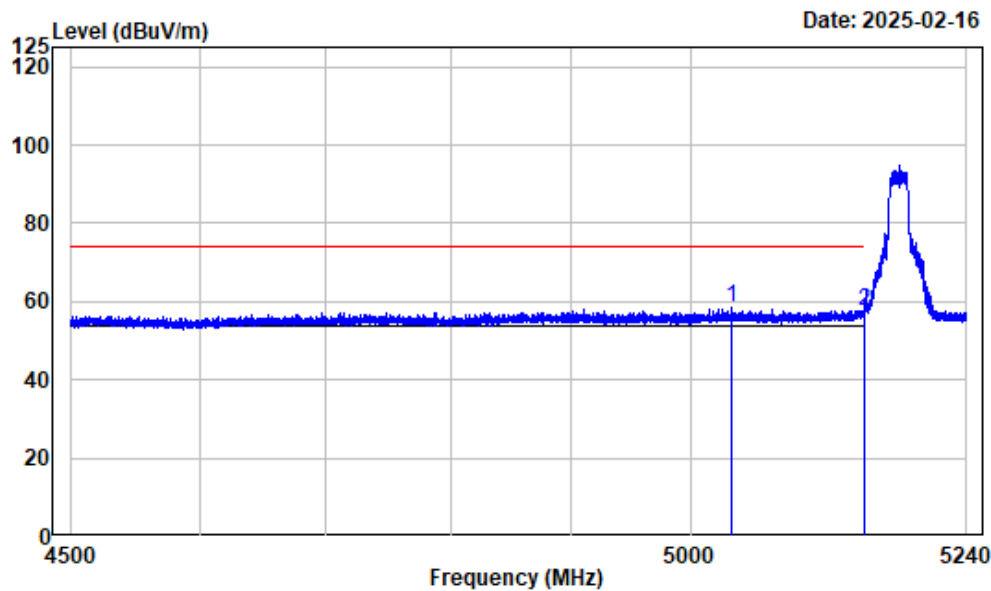
Corrected Amplitude = Factor + Reading

Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

Test plots:

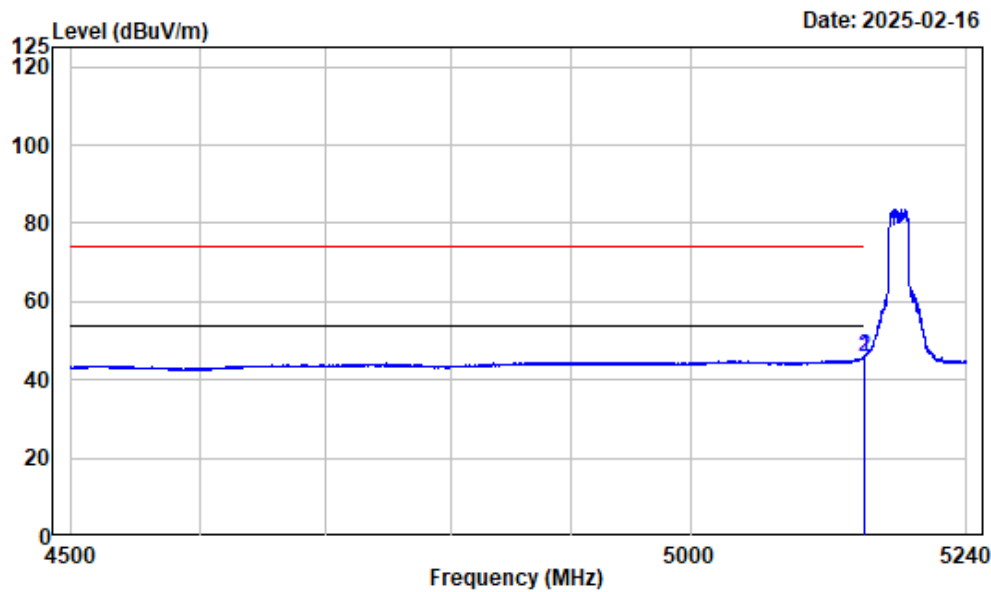
Left Band edge\_Horizontal\_Peak\_802.11a\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	5035.549	-7.31	65.83	58.52	74.00	-15.48 Peak
2	5150.000	-7.46	65.04	57.58	74.00	-16.42 Peak

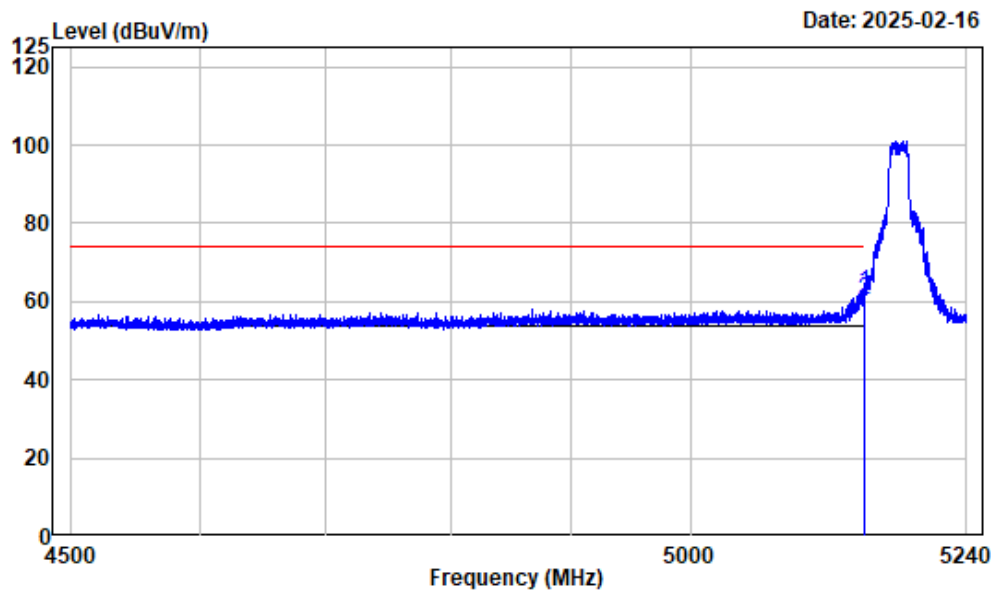
Left Band edge\_Horizontal\_Average\_802.11a\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.801	-7.46	53.38	45.92	54.00	-8.08 Average
2	5150.000	-7.46	53.29	45.83	54.00	-8.17 Average

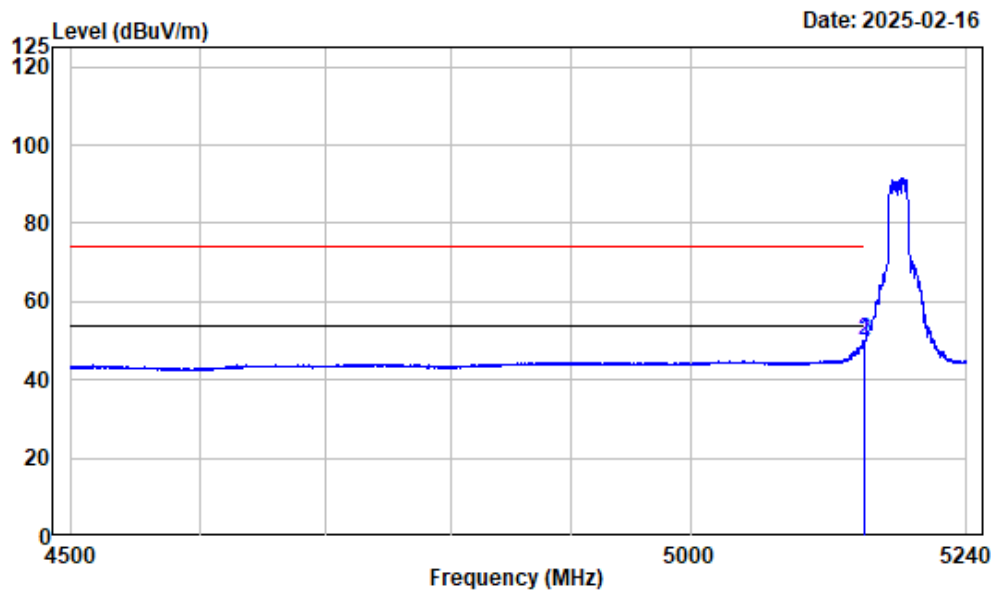
Left Band edge\_Vertical\_Peak\_802.11a\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.750	-7.46	69.69	62.23	74.00	-11.77 Peak
2	5150.000	-7.46	67.85	60.39	74.00	-13.61 Peak

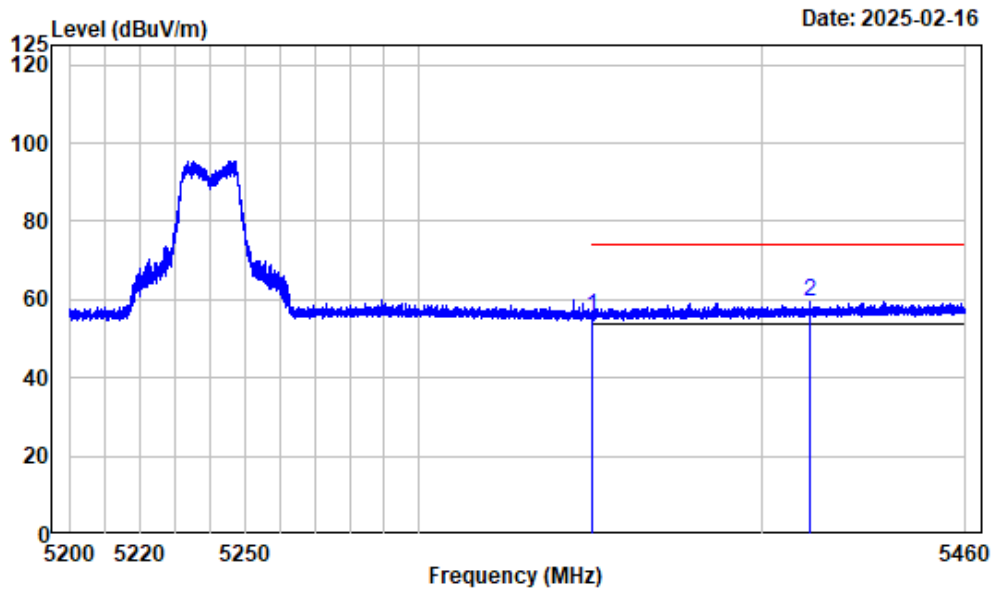
Left Band edge\_Vertical\_Average\_802.11a\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.986	-7.46	57.59	50.13	54.00	-3.87 Average
2	5150.000	-7.46	57.47	50.01	54.00	-3.99 Average

Right Band edge\_Horizontal\_Peak\_802.11a\_5240MHz

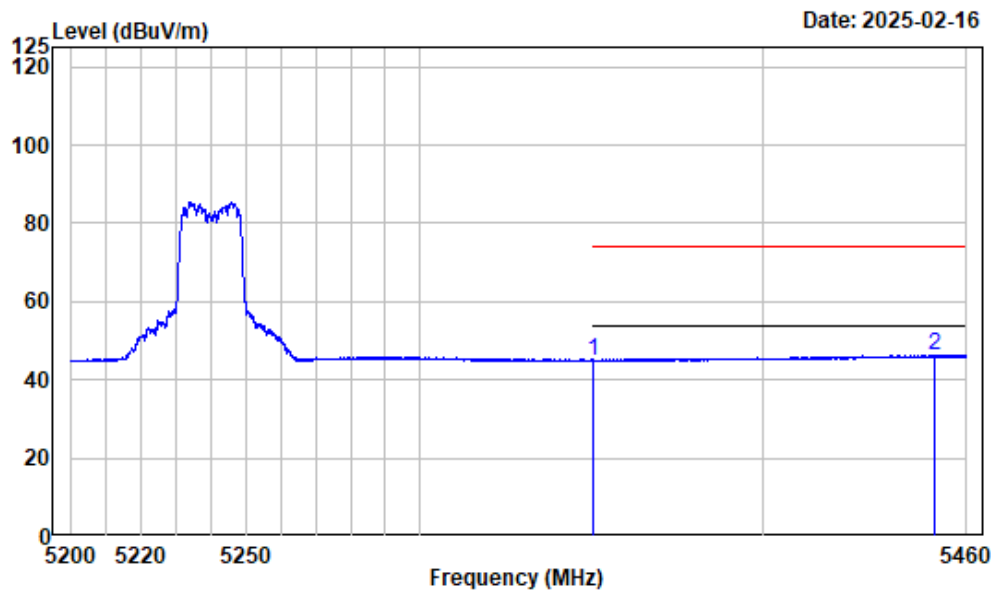


Condition : Horizontal  
 Project No. : 2501P28089E-RF  
 Tester : Zenos Qiao  
 Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
 Note : 5GWiFi-Band1-A-5240

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	62.44	55.70	74.00	-18.30	Peak
2	5413.714	-6.51	65.84	59.33	74.00	-14.67	Peak



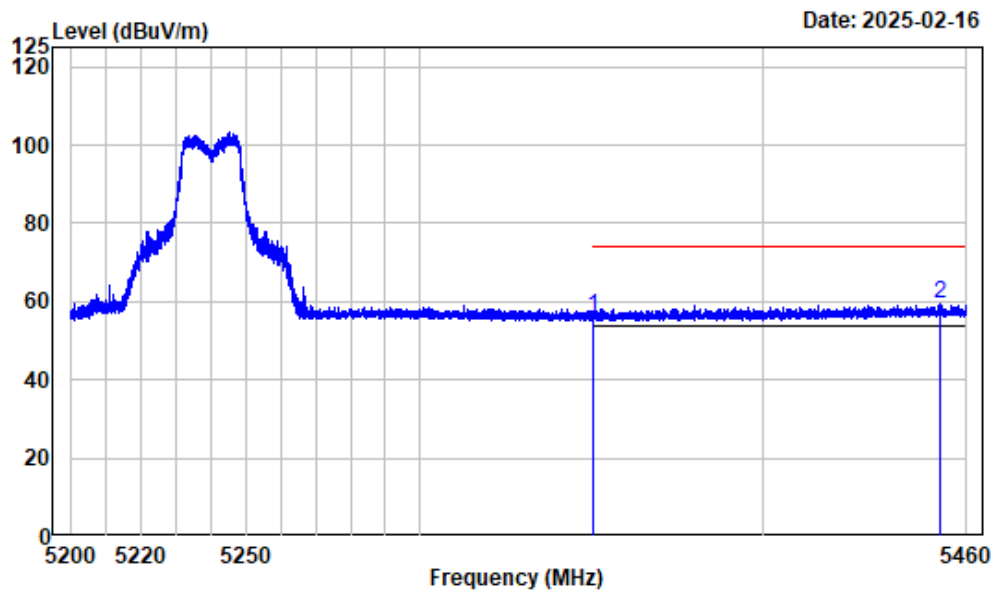
Right Band edge\_Horizontal\_Average\_802.11a\_5240MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5240

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	51.59	44.85	54.00	-9.15	Average
2 5450.606	-6.32	52.62	46.30	54.00	-7.70	Average

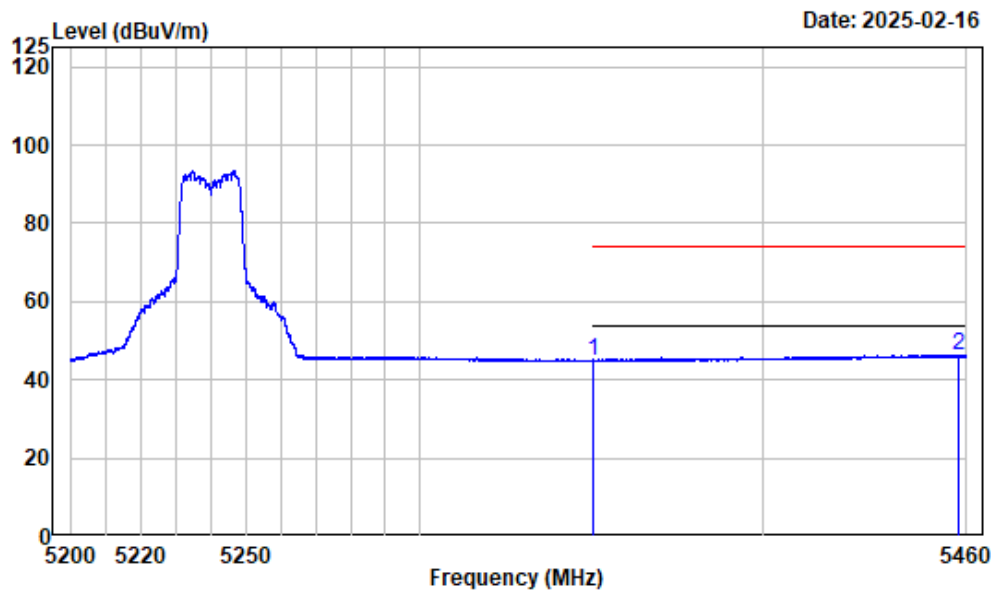
Right Band edge\_Vertical\_Peak\_802.11a\_5240MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5240

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	62.77	56.03	74.00	-17.97	Peak
2 5452.427	-6.32	65.67	59.35	74.00	-14.65	Peak

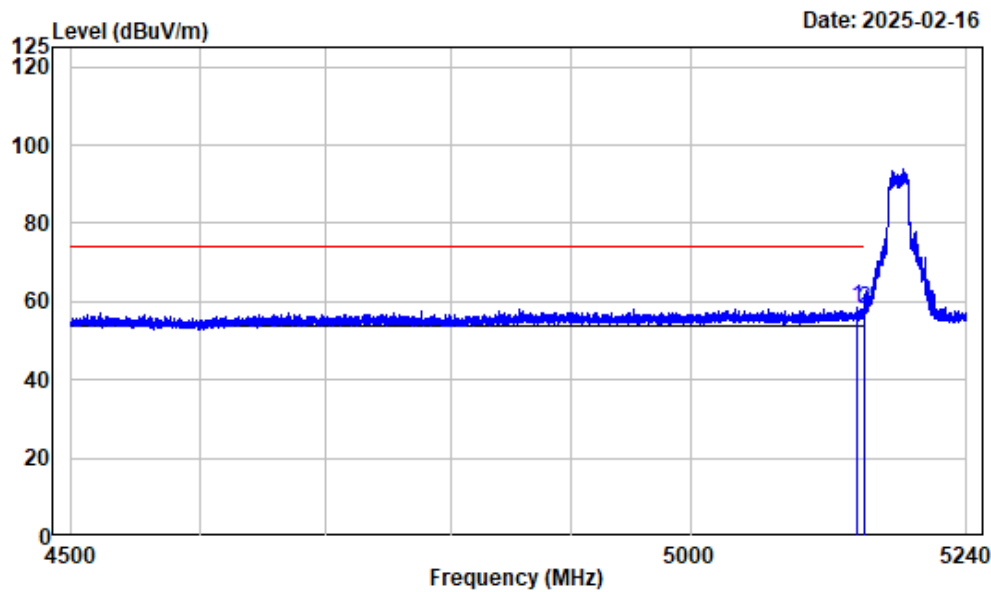
Right Band edge\_Vertical\_Average\_802.11a\_5240MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5240

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	51.50	44.76	54.00	-9.24 Average
2	5457.822	-6.29	52.60	46.31	54.00	-7.69 Average

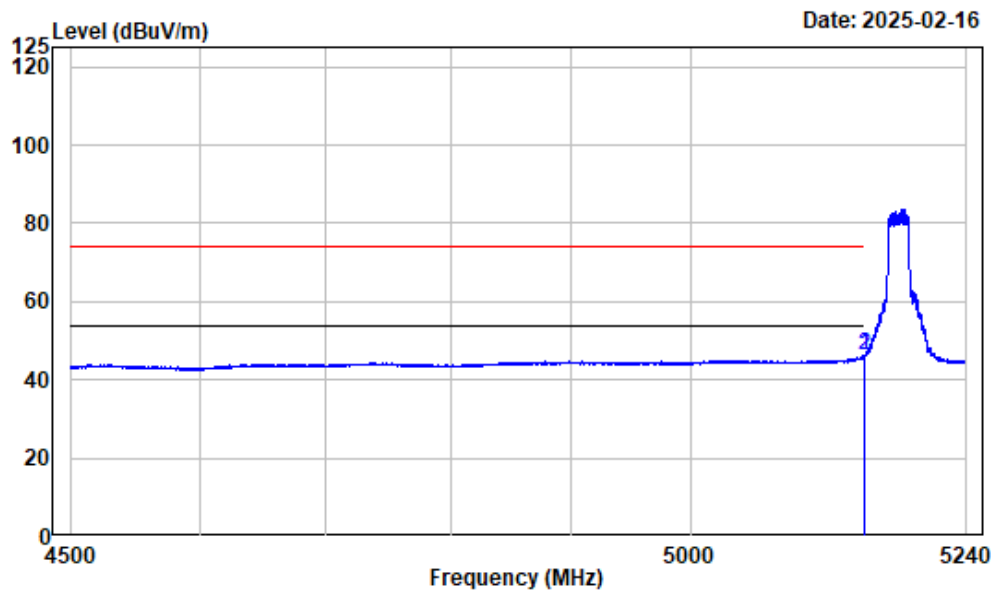
Left Band edge\_Horizontal\_Peak\_802.11ac-VHT20\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5142.863	-7.46	66.10	58.64	74.00	-15.36 Peak
2	5150.000	-7.46	65.34	57.88	74.00	-16.12 Peak

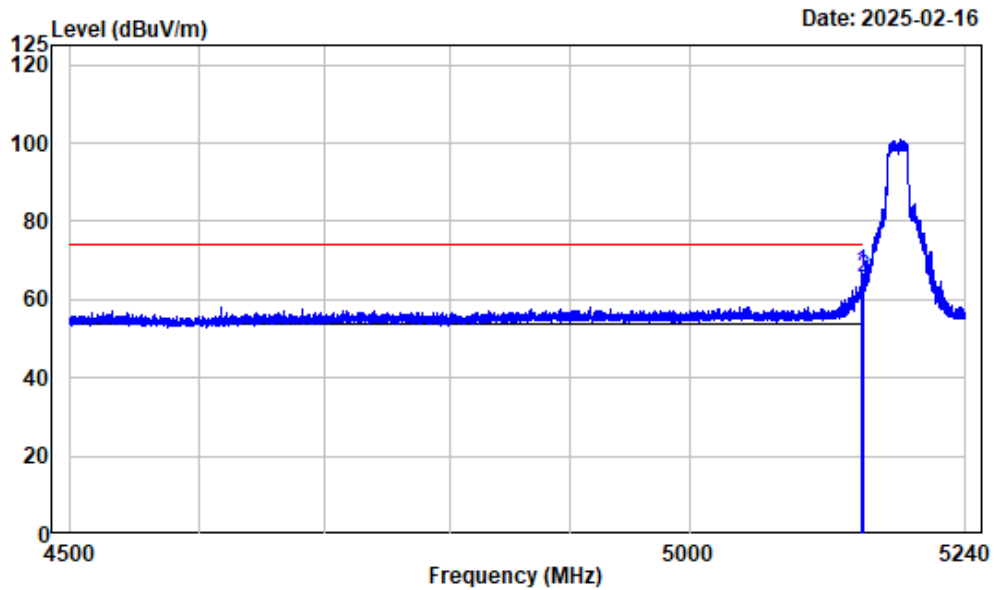
Left Band edge\_Horizontal\_Average\_802.11ac-VHT20\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.616	-7.46	53.86	46.40	54.00	-7.60 Average
2	5150.000	-7.46	53.49	46.03	54.00	-7.97 Average

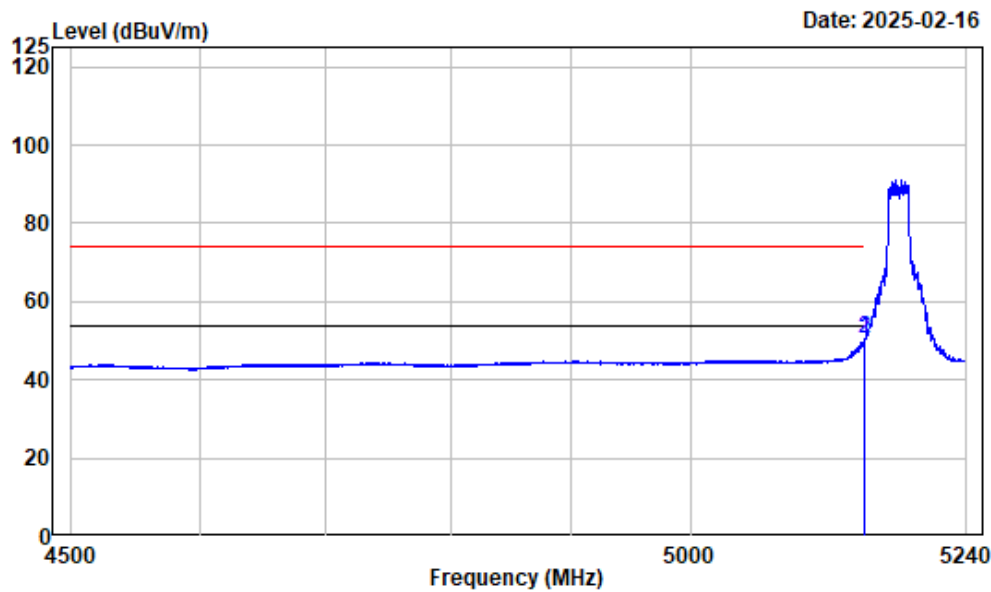
Left Band edge\_Vertical\_Peak\_802.11ac-VHT20\_5180MHz



Condition : Vertical  
 Project No. : 2501P28089E-RF  
 Tester : Zenos Qiao  
 Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
 Note : 5GWiFi-Band1-AC20-5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5148.321	-7.46	74.33	66.87	74.00	-7.13	Peak
2	5150.000	-7.46	73.11	65.65	74.00	-8.35	Peak

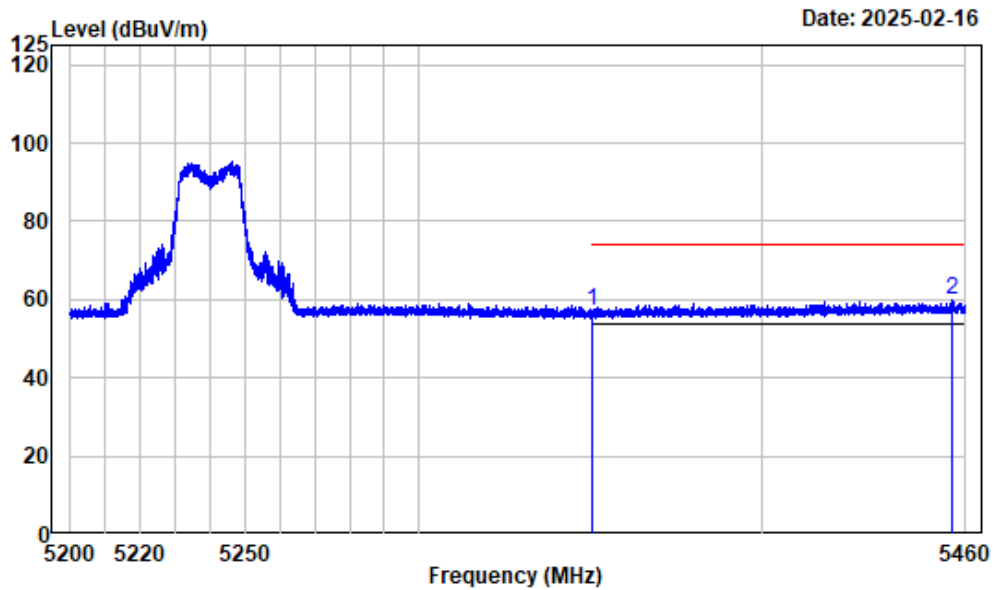
Left Band edge\_Vertical\_Average\_802.11ac-VHT20\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.825	-7.46	58.08	50.62	54.00	-3.38 Average
2	5150.000	-7.46	57.96	50.50	54.00	-3.50 Average

## Right Band edge\_Horizontal\_Peak\_802.11ac-VHT20\_5240MHz

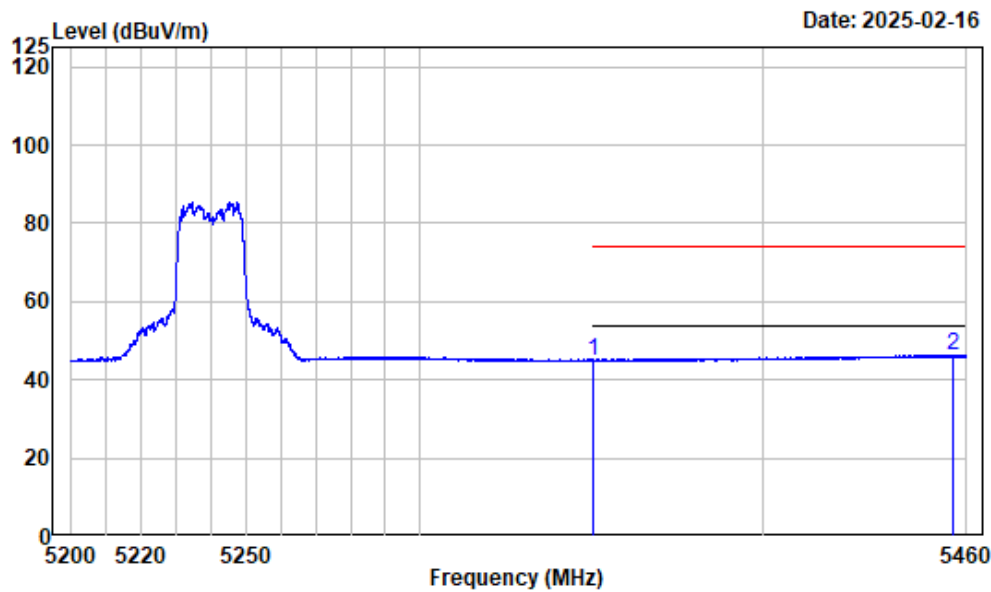


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5240

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	63.73	56.99	74.00	-17.01	Peak
2 5456.197	-6.31	66.03	59.72	74.00	-14.28	Peak



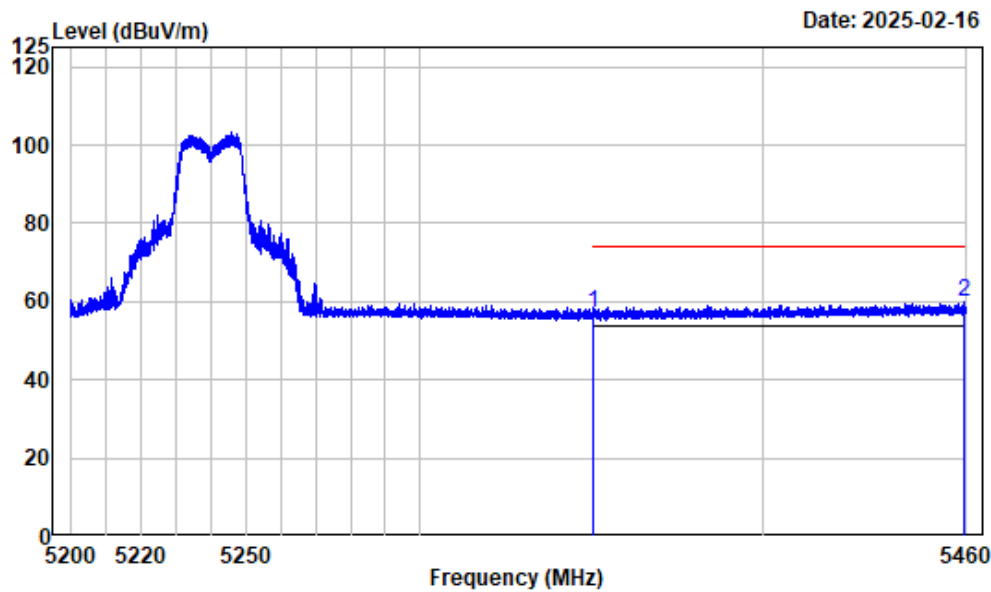
Right Band edge\_Horizontal\_Average\_802.11ac-VHT20\_5240MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5240

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	51.66	44.92	54.00	-9.08	Average
2 5455.807	-6.31	52.63	46.32	54.00	-7.68	Average

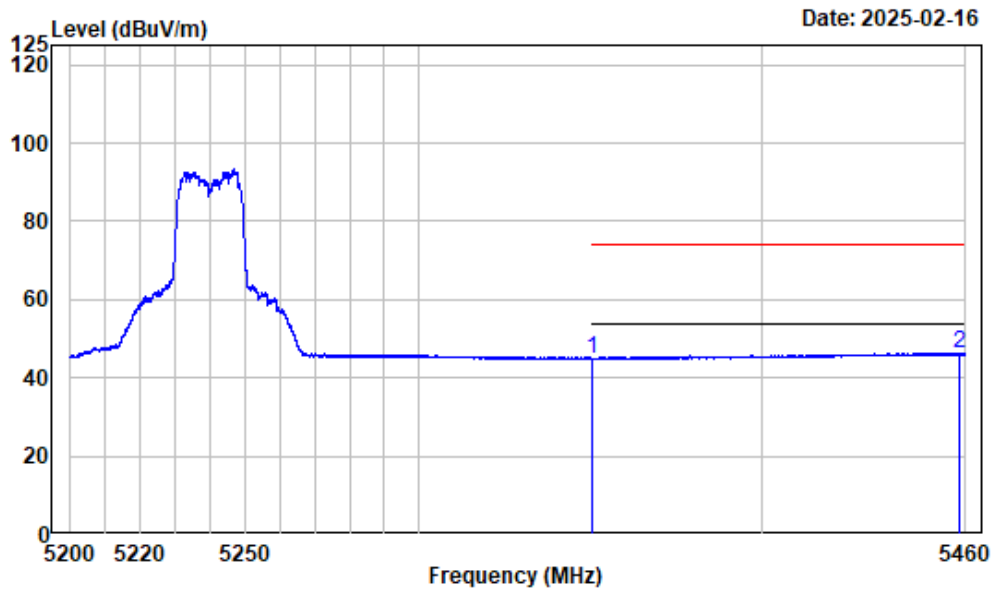
Right Band edge\_Vertical\_Peak\_802.11ac-VHT20\_5240MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5240

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	63.67	56.93	74.00	-17.07 Peak
2	5459.480	-6.29	65.98	59.69	74.00	-14.31 Peak

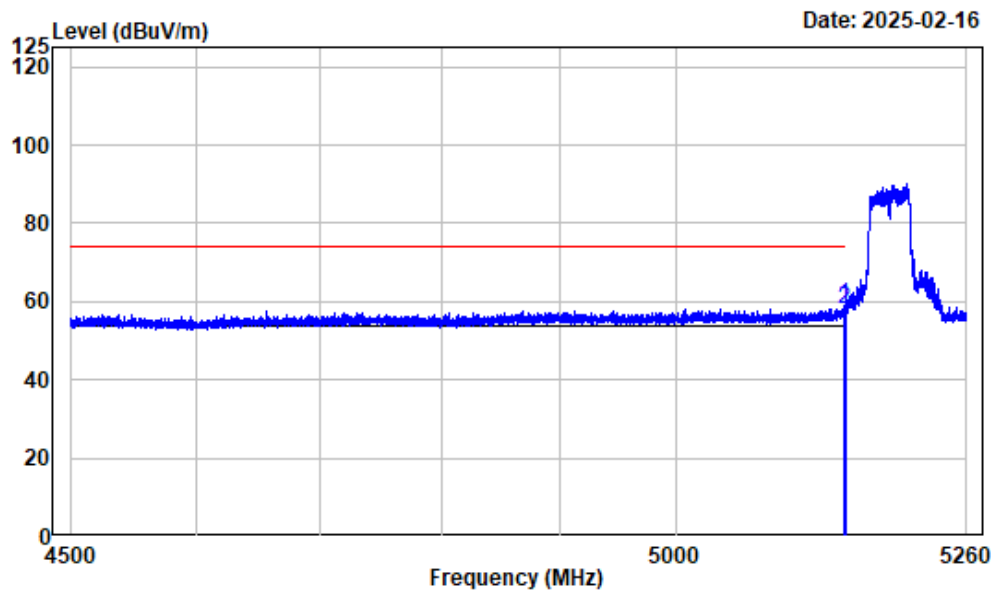
Right Band edge\_Vertical\_Average\_802.11ac-VHT20\_5240MHz



Condition : Vertical  
 Project No. : 2501P28089E-RF  
 Tester : Zenos Qiao  
 Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
 Note : 5GWiFi-Band1-AC20-5240

	Freq	Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	51.59	44.85	54.00	-9.15	Average
2	5458.050	-6.29	52.64	46.35	54.00	-7.65	Average

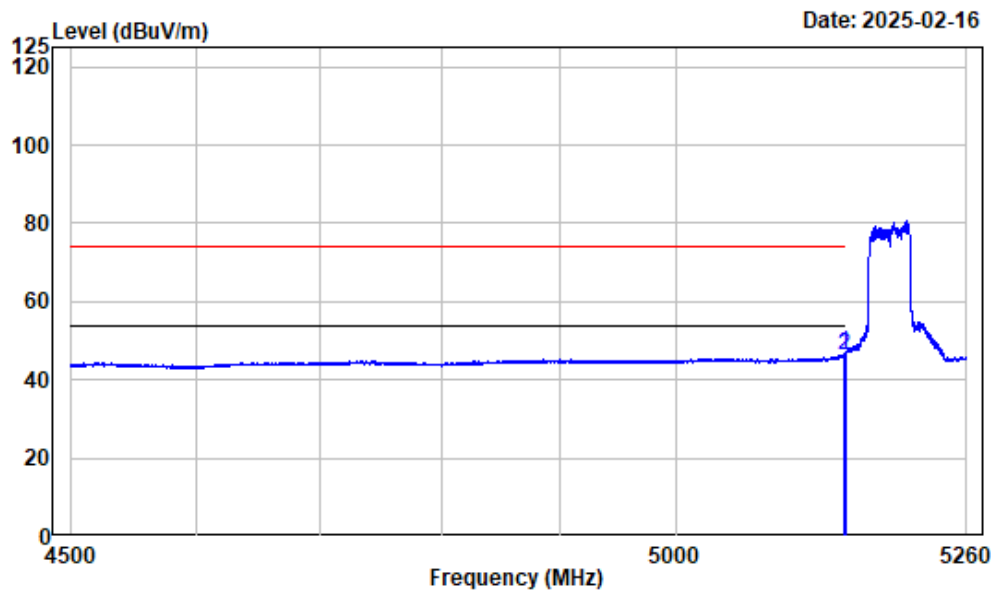
Left Band edge\_Horizontal\_Peak\_802.11ac-VHT40\_5190MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.406	-7.46	66.54	59.08	74.00	-14.92 Peak
2	5150.000	-7.46	65.67	58.21	74.00	-15.79 Peak

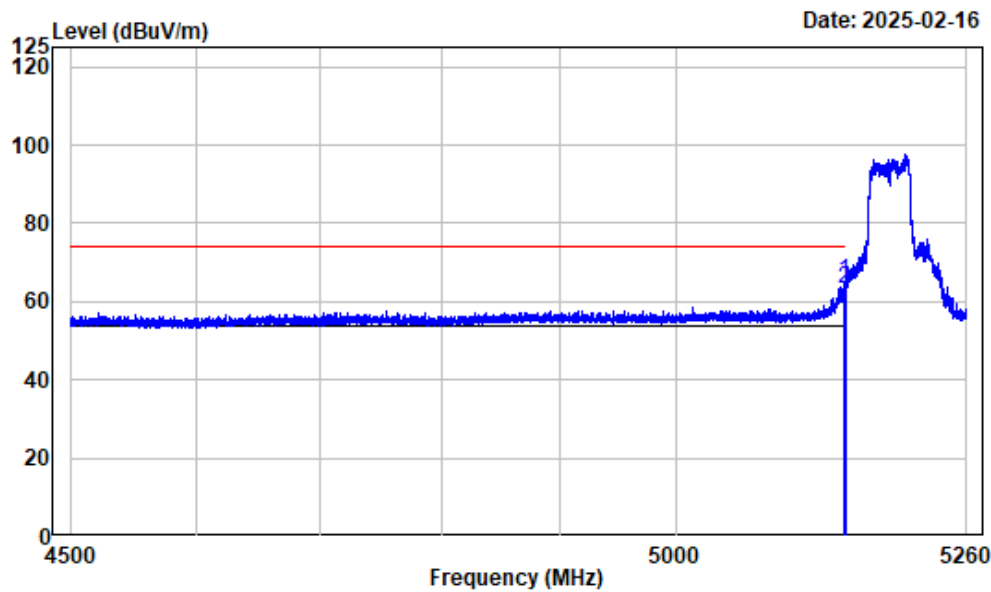
Left Band edge\_Horizontal\_Average\_802.11ac-VHT40\_5190MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.501	-7.46	54.22	46.76	54.00	-7.24 Average
2	5150.000	-7.46	53.81	46.35	54.00	-7.65 Average

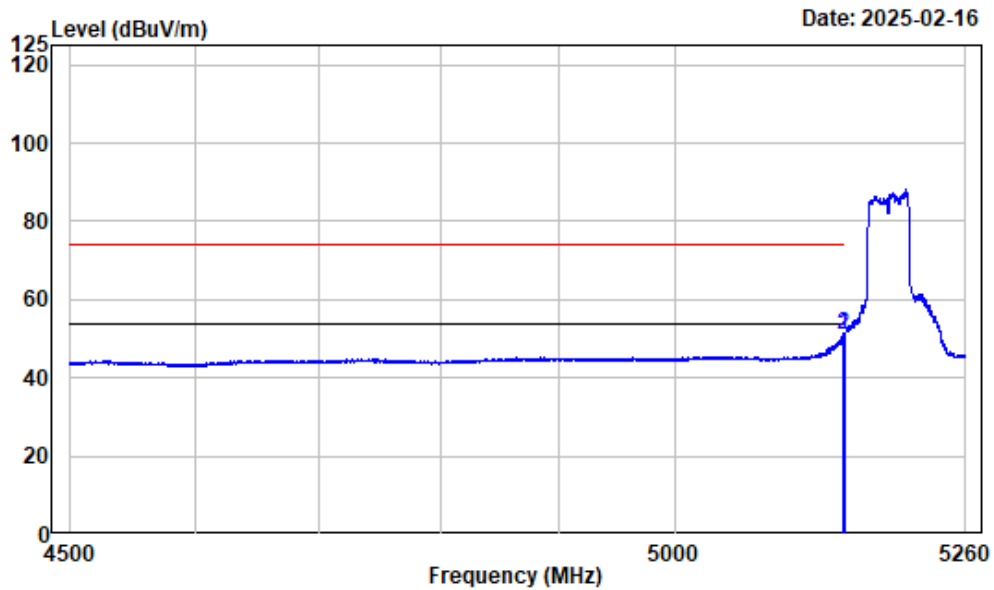
Left Band edge\_Vertical\_Peak\_802.11ac-VHT40\_5190MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.881	-7.46	72.70	65.24	74.00	-8.76 Peak
2	5150.000	-7.46	70.75	63.29	74.00	-10.71 Peak

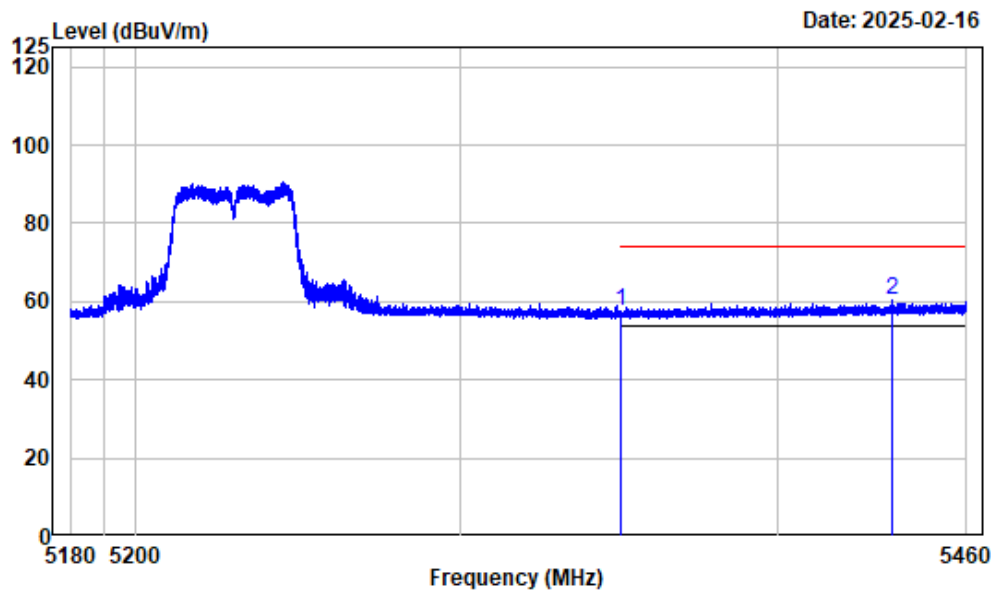
Left Band edge\_Vertical\_Average\_802.11ac-VHT40\_5190MHz



Condition : Vertical  
 Project No. : 2501P28089E-RF  
 Tester : Zenos Qiao  
 Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
 Note : 5GWiFi-Band1-AC40-5190

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.881	-7.46	58.45	50.99	54.00	-3.01	Average
2	5150.000	-7.46	58.31	50.85	54.00	-3.15	Average

Right Band edge\_Horizontal\_Peak\_802.11ac-VHT40\_5230MHz

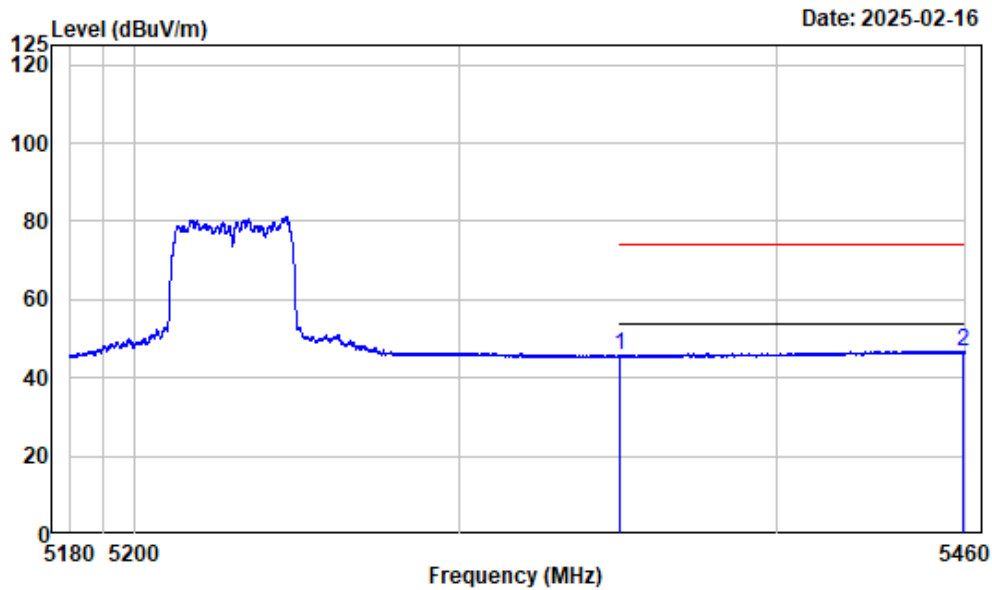


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5230

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	64.07	57.33	74.00	-16.67 Peak
2	5436.057	-6.40	66.55	60.15	74.00	-13.85 Peak



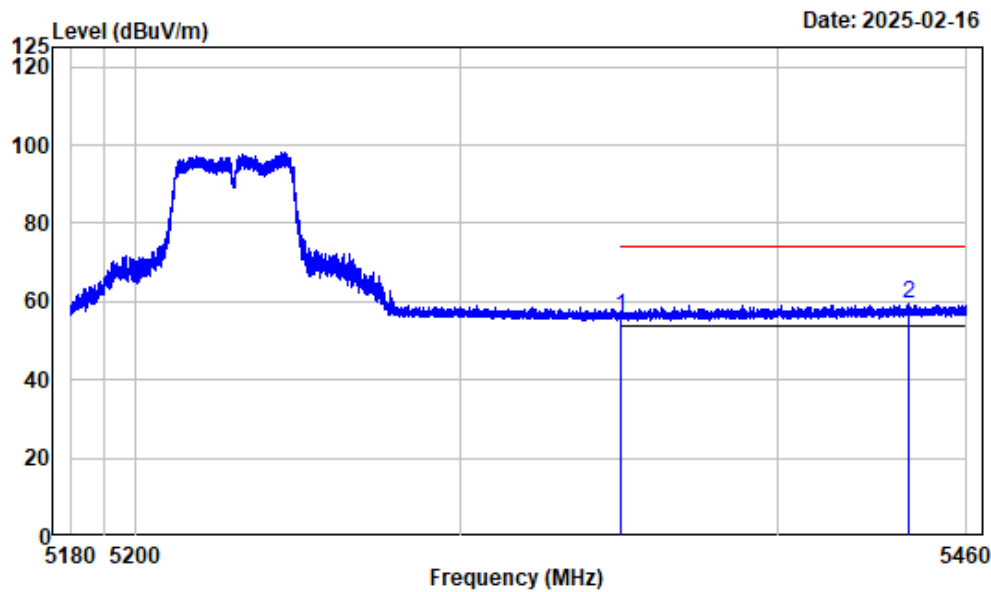
## Right Band edge\_Horizontal\_Average\_802.11ac-VHT40\_5230MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5230

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5350.000	-6.74	52.34	45.60	54.00	-8.40	Average
2	5459.265	-6.29	53.18	46.89	54.00	-7.11	Average

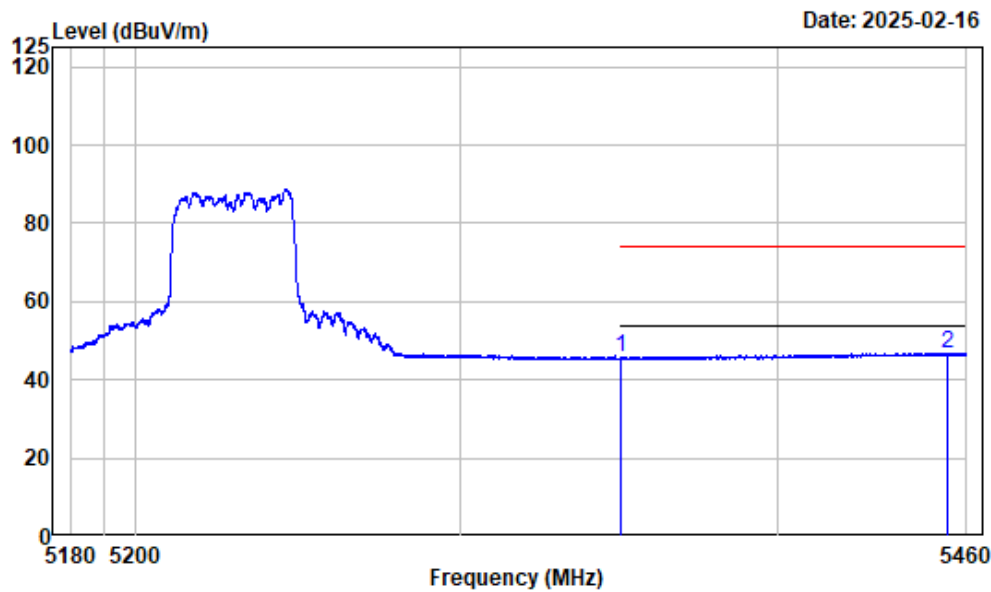
Right Band edge\_Vertical\_Peak\_802.11ac-VHT40\_5230MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5230

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	62.91	56.17	74.00	-17.83	Peak
2 5441.763	-6.38	65.60	59.22	74.00	-14.78	Peak

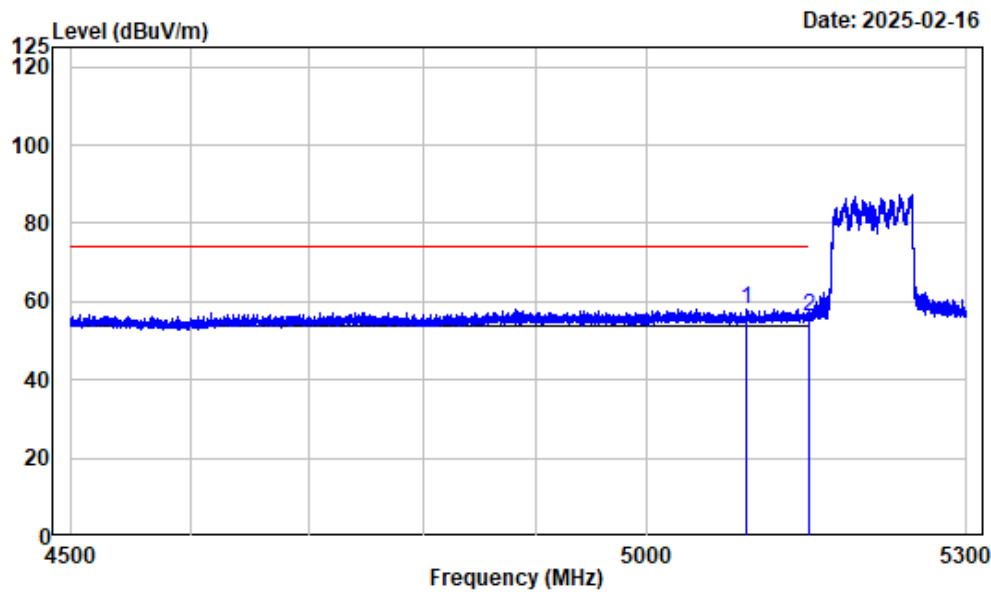
Right Band edge\_Vertical\_Average\_802.11ac-VHT40\_5230MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5230

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	52.27	45.53	54.00	-8.47	Average
2 5453.804	-6.31	53.19	46.88	54.00	-7.12	Average

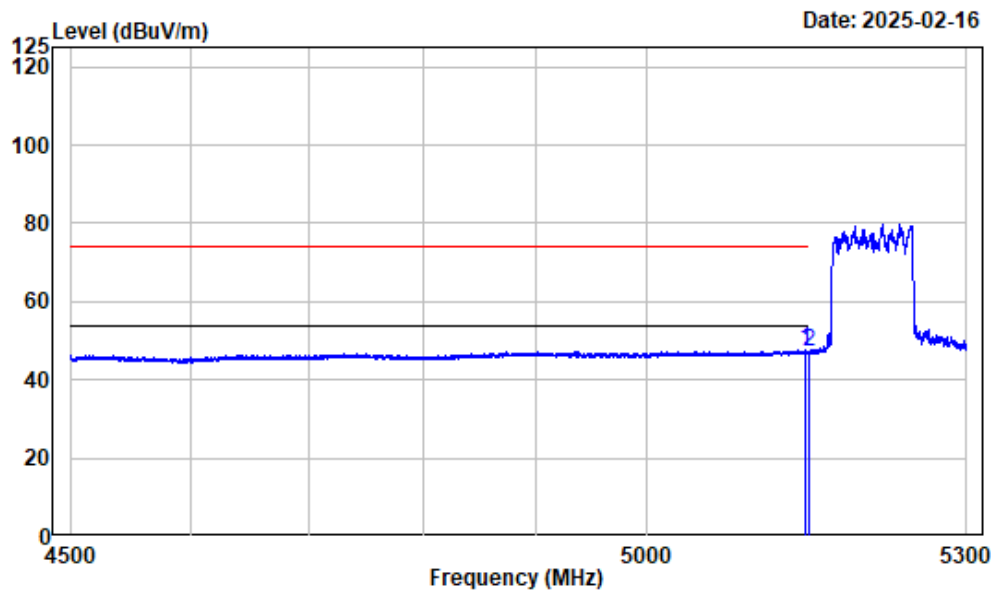
Left Band edge\_Horizontal\_Peak\_802.11ac-VHT80\_5210MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5091.074	-7.44	65.58	58.14	74.00	-15.86 Peak
2	5150.000	-7.46	63.58	56.12	74.00	-17.88 Peak

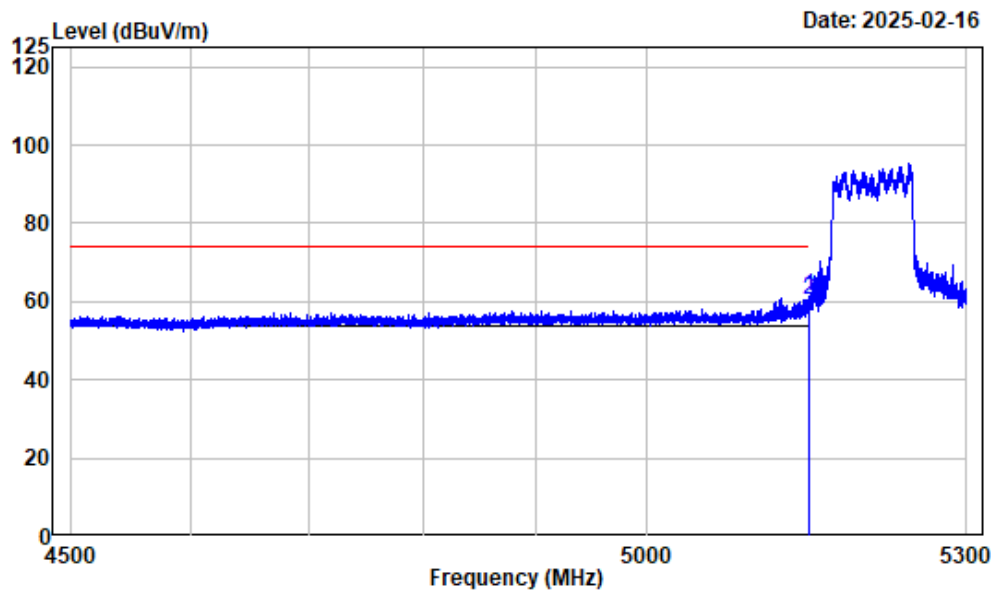
Left Band edge\_Horizontal\_Average\_802.11ac-VHT80\_5210MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5146.381	-7.46	55.11	47.65	54.00	-6.35 Average
2	5150.000	-7.46	54.39	46.93	54.00	-7.07 Average

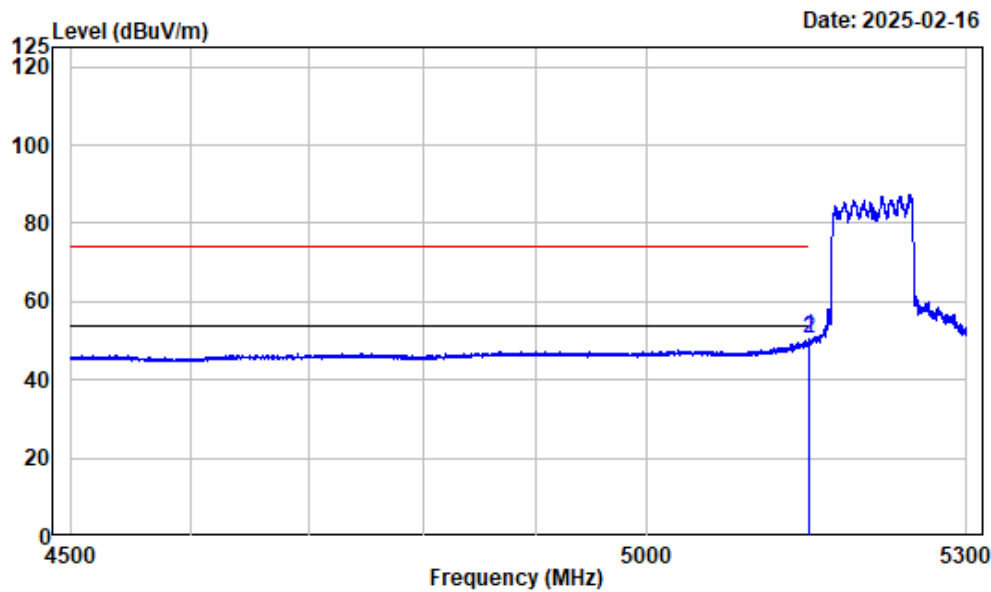
Left Band edge\_Vertical\_Peak\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.681	-7.46	68.80	61.34	74.00	-12.66 Peak
2	5150.000	-7.46	67.65	60.19	74.00	-13.81 Peak

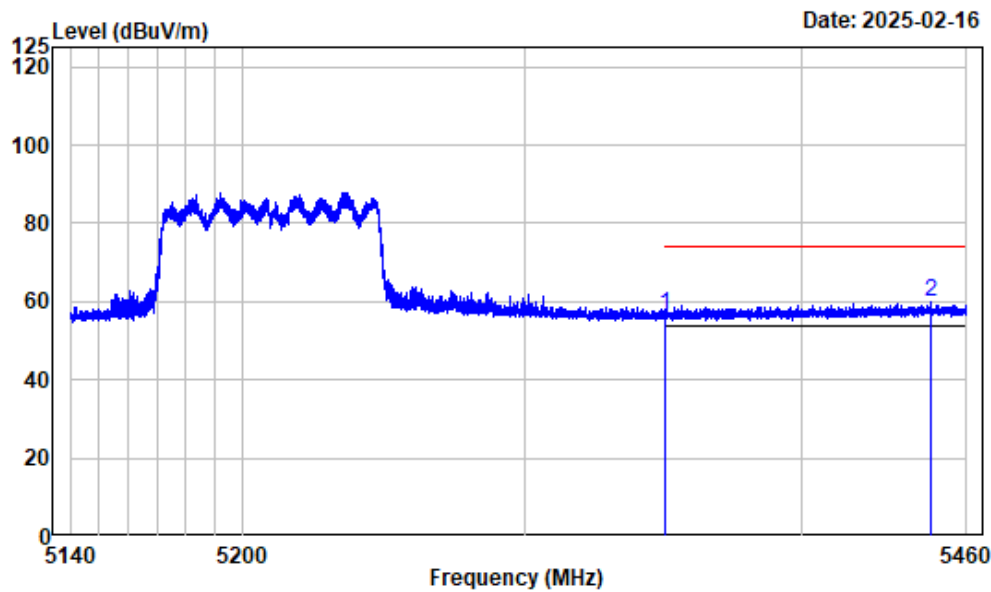
Left Band edge\_Vertical\_Average\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.681	-7.46	58.22	50.76	54.00	-3.24 Average
2	5150.000	-7.46	57.93	50.47	54.00	-3.53 Average

Right Band edge\_Horizontal\_Peak\_802.11ac-VHT80\_5210MHz

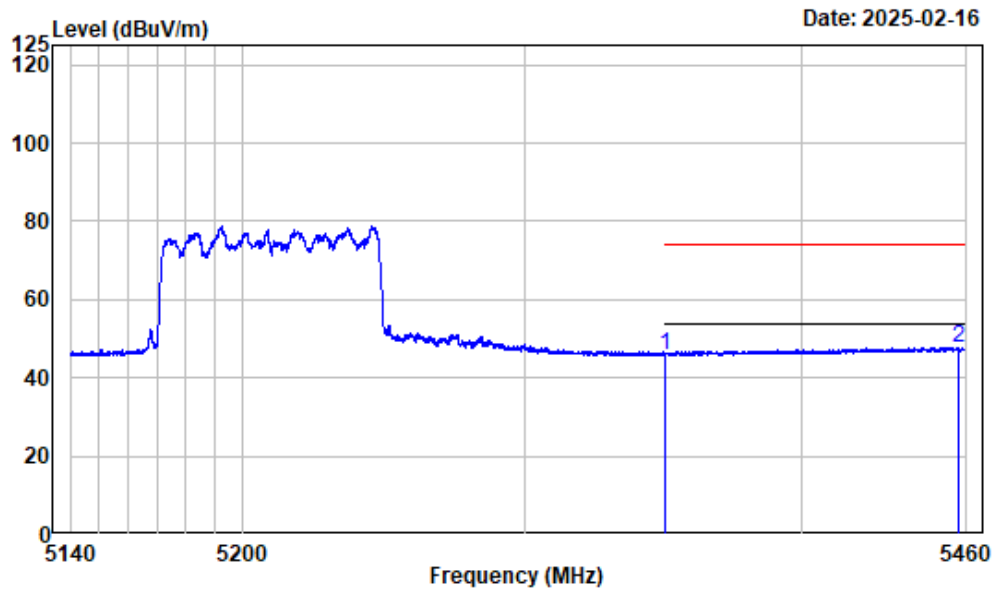


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	63.20	56.46	74.00	-17.54	Peak
2 5446.958	-6.35	66.21	59.86	74.00	-14.14	Peak



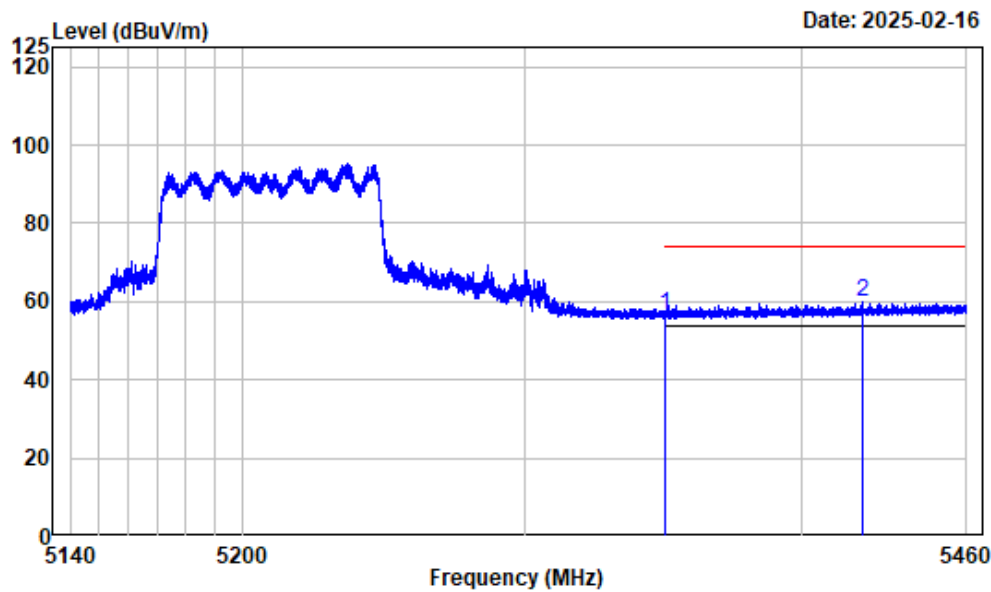
## Right Band edge\_Horizontal\_Average\_802.11ac-VHT80\_5210MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	52.52	45.78	54.00	-8.22	Average
2 5457.320	-6.31	54.13	47.82	54.00	-6.18	Average

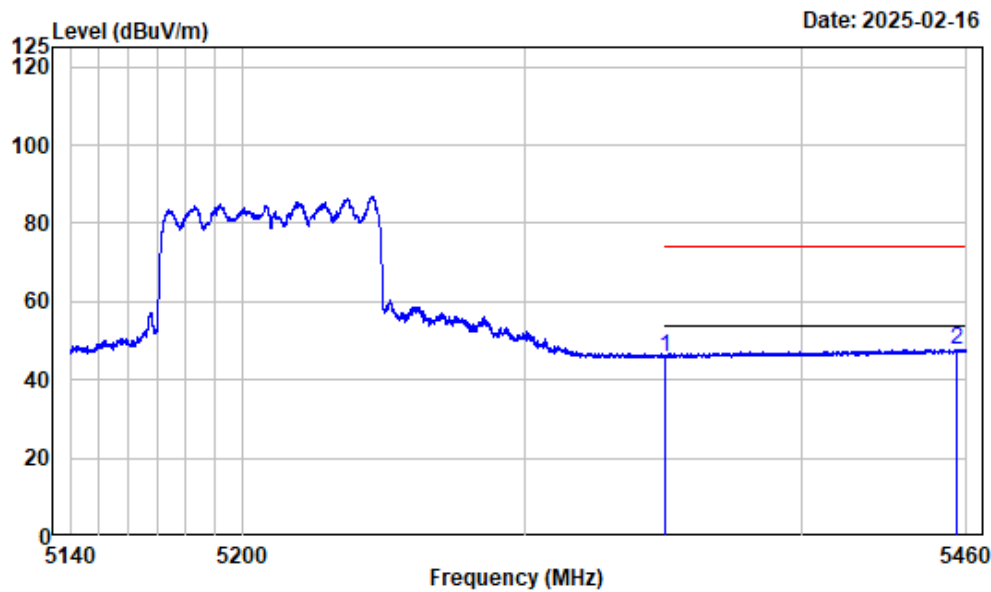
Right Band edge\_Vertical\_Peak\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	63.45	56.71	74.00	-17.29	Peak
2 5422.115	-6.48	66.53	60.05	74.00	-13.95	Peak

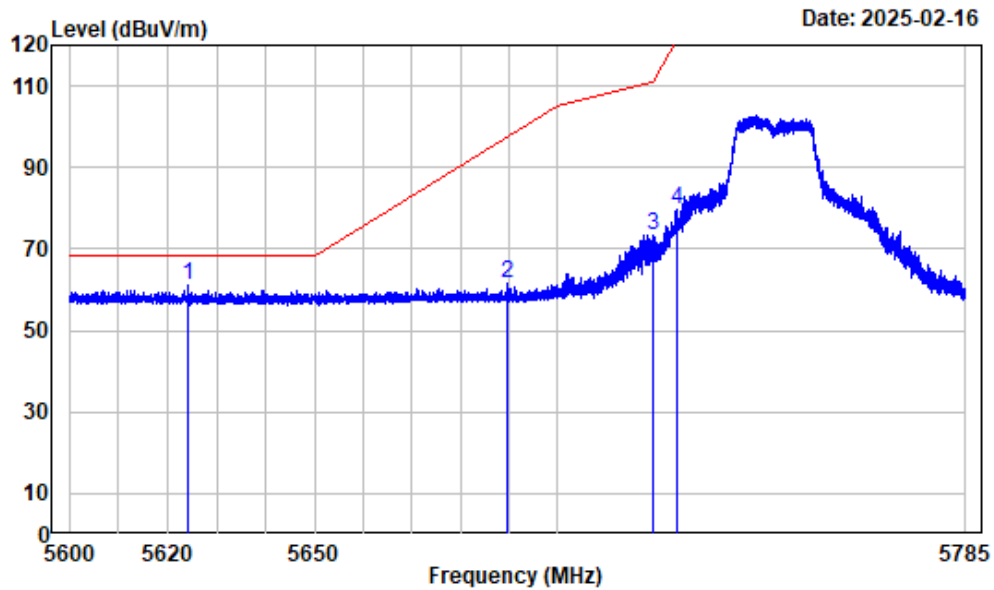
Right Band edge\_Vertical\_Average\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5350.000	-6.74	52.71	45.97	54.00	-8.03	Average
2 5456.720	-6.31	54.10	47.79	54.00	-6.21	Average

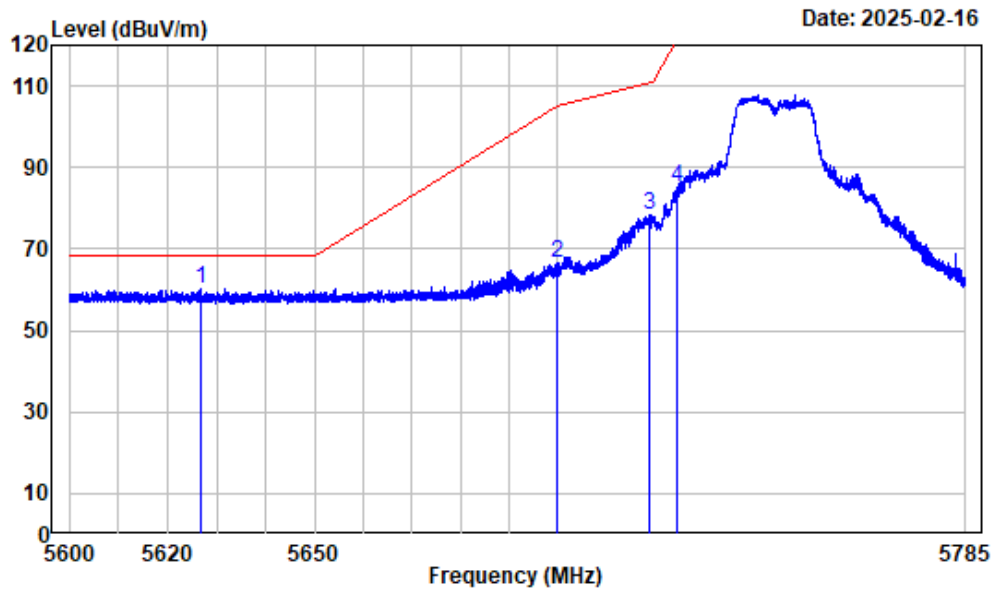
## Left Band edge\_Horizontal\_802.11a\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5624.261	-6.05	67.18	61.13	68.20	-7.07	Peak
2	5689.713	-5.75	67.42	61.67	97.61	-35.94	Peak
3	5719.664	-5.54	79.01	73.47	110.71	-37.24	Peak
4	5724.868	-5.49	85.38	79.89	121.90	-42.01	Peak

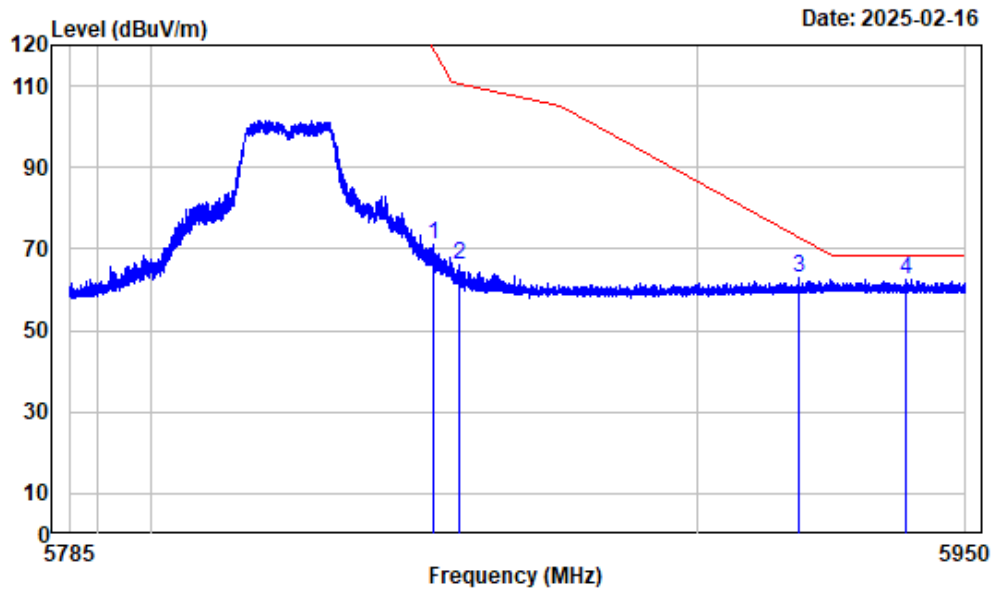
## Left Band edge\_Vertical\_802.11a\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5626.944	-6.01	66.09	60.08	68.20	-8.12 Peak
2	5699.889	-5.71	72.28	66.57	105.12	-38.55 Peak
3	5718.993	-5.54	84.07	78.53	110.52	-31.99 Peak
4	5724.775	-5.49	90.75	85.26	121.69	-36.43 Peak

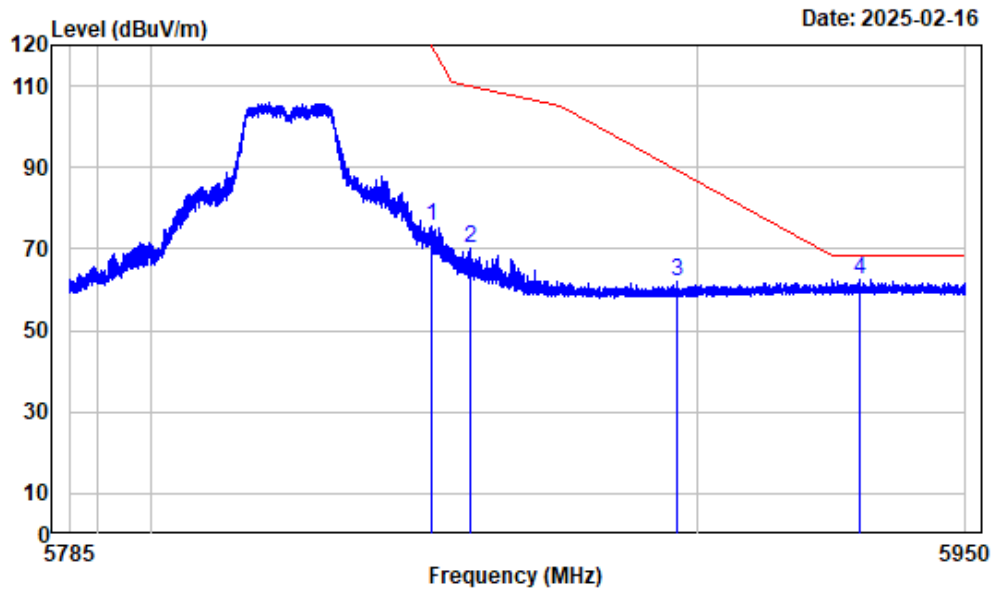
## Right Band edge\_Horizontal\_802.11a\_5825MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5825

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5851.503	-4.66	75.84	71.18	118.77	-47.59	Peak
2	5856.207	-4.66	70.72	66.06	110.46	-44.40	Peak
3	5918.976	-4.45	67.24	62.79	72.64	-9.85	Peak
4	5938.820	-4.45	67.11	62.66	68.20	-5.54	Peak

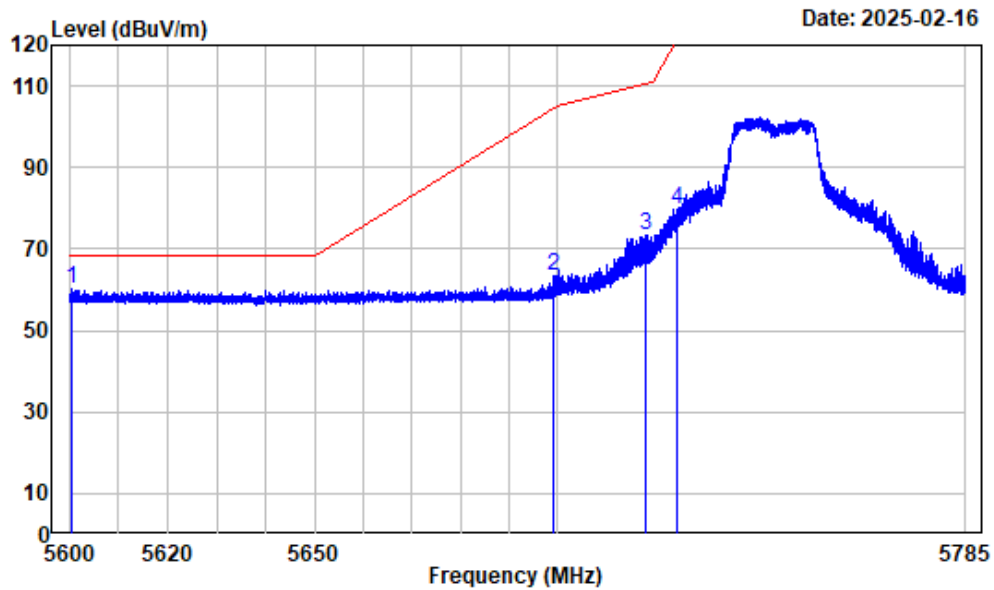
## Right Band edge\_Vertical\_802.11a\_5825MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5825

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5851.132	-4.68	80.53	75.85	119.62	-43.77	Peak
2	5858.125	-4.65	74.67	70.02	109.92	-39.90	Peak
3	5896.348	-4.47	66.71	62.24	89.36	-27.12	Peak
4	5930.259	-4.45	67.05	62.60	68.20	-5.60	Peak

## Left Band edge\_Horizontal\_802.11ac-VHT20\_5745MHz

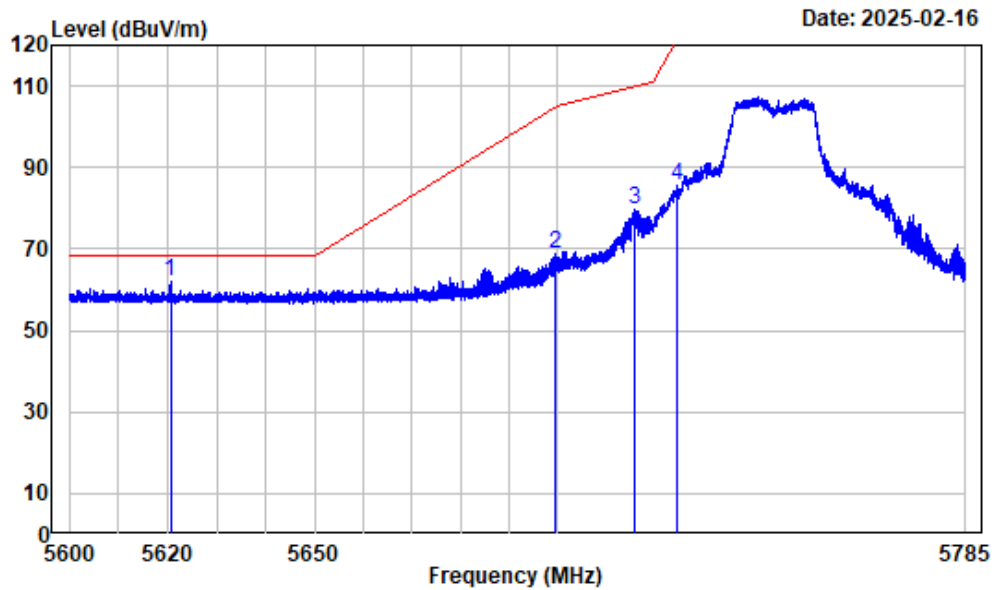


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5600.625	-6.21	66.30	60.09	68.20	-8.11	Peak
2	5699.288	-5.71	69.12	63.41	104.68	-41.27	Peak
3	5718.369	-5.54	78.83	73.29	110.34	-37.05	Peak
4	5724.798	-5.49	85.35	79.86	121.74	-41.88	Peak



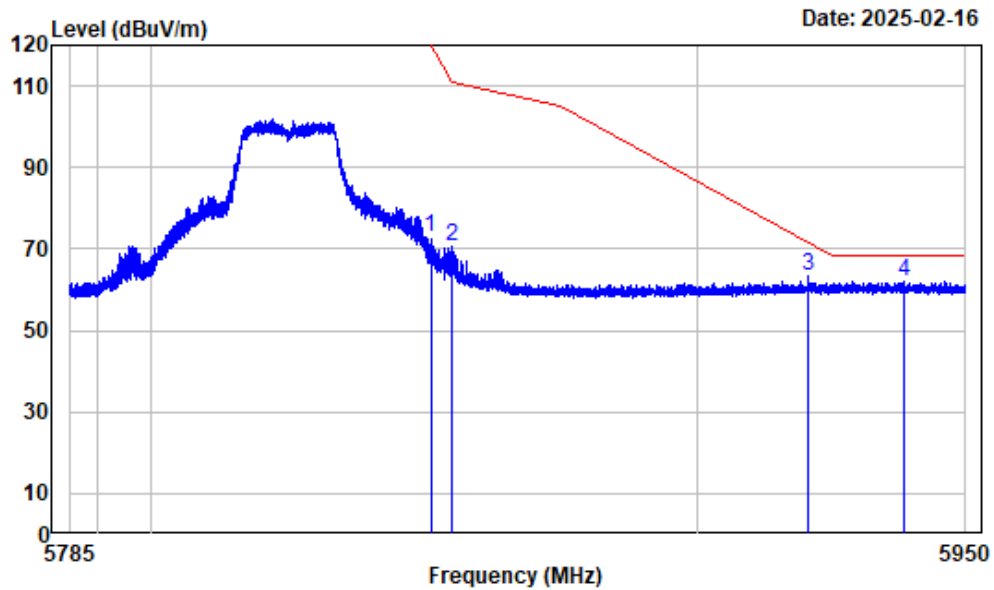
## Left Band edge\_Vertical\_802.11ac-VHT20\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5620.584	-6.07	67.98	61.91	68.20	-6.29	Peak
2	5699.565	-5.71	74.69	68.98	104.88	-35.90	Peak
3	5716.148	-5.57	85.29	79.72	109.72	-30.00	Peak
4	5724.914	-5.49	91.13	85.64	122.00	-36.36	Peak

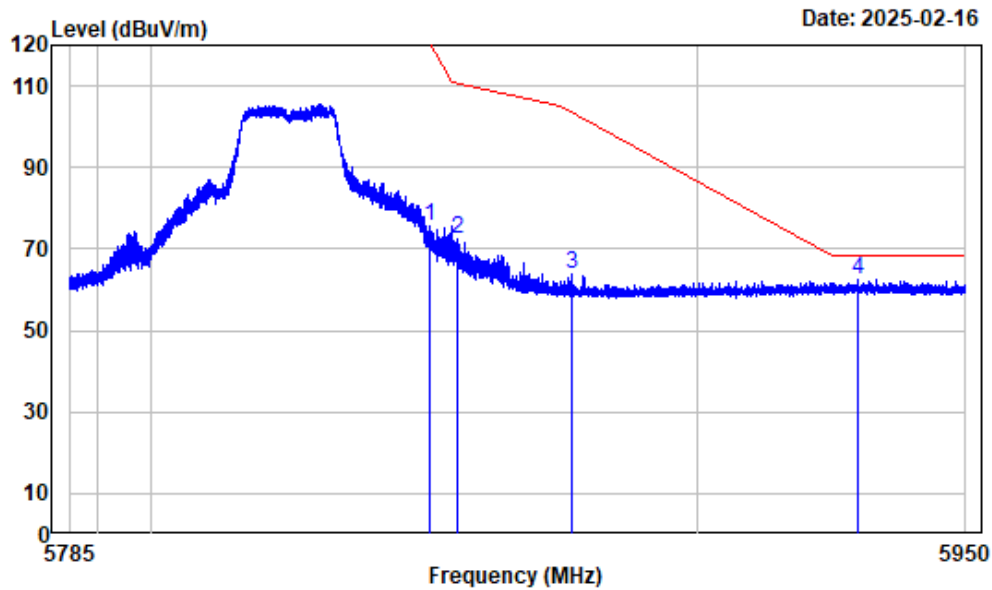
## Right Band edge\_Horizontal\_802.11ac-VHT20\_5825MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5825

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5850.977	-4.68	77.56	72.88	155.20	-82.32	Peak
2	5855.010	-4.66	75.20	70.54	110.80	-40.26	Peak
3	5920.564	-4.45	67.65	63.20	71.47	-8.27	Peak
4	5938.614	-4.45	66.32	61.87	68.20	-6.33	Peak

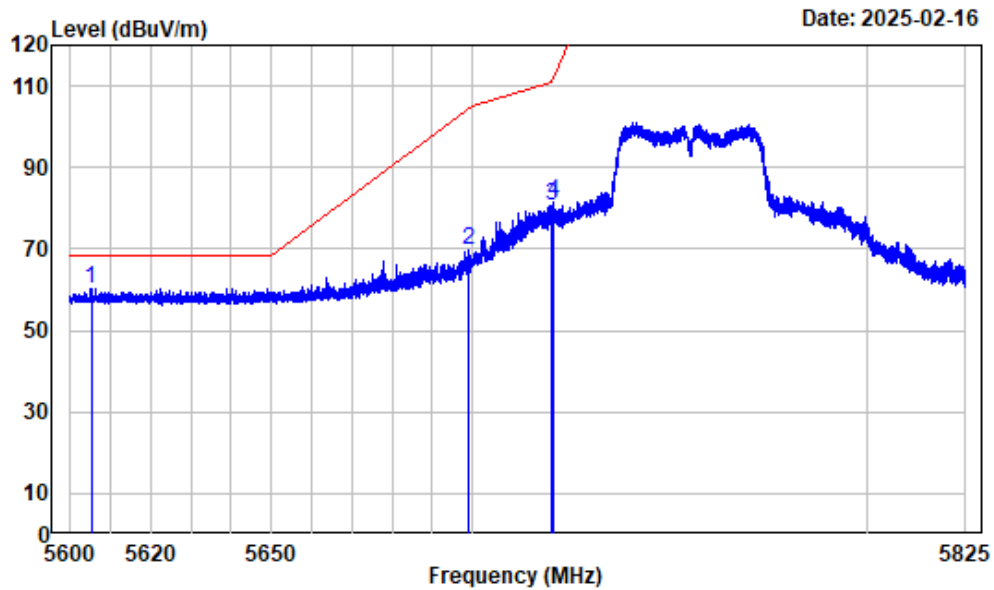
## Right Band edge\_Vertical\_802.11ac-VHT20\_5825MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5825

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5850.864	-4.68	80.52	75.84	120.23	-44.39	Peak
2	5855.938	-4.66	76.91	72.25	110.54	-38.29	Peak
3	5876.999	-4.56	68.58	64.02	103.71	-39.69	Peak
4	5929.888	-4.45	66.85	62.40	68.20	-5.80	Peak

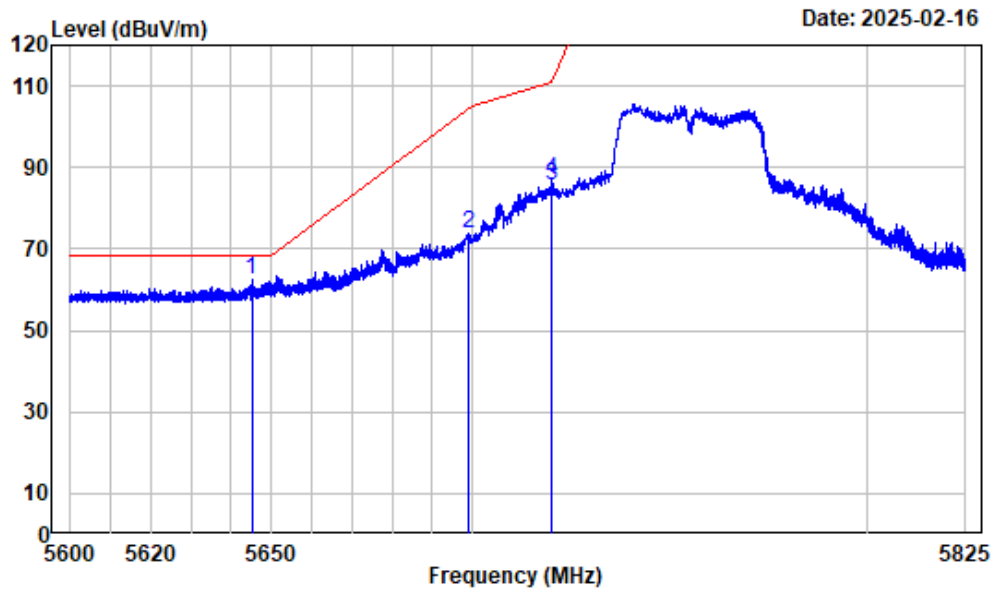
## Left Band edge\_Horizontal\_802.11ac-VHT40\_5755MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5605.373	-6.17	66.58	60.41	68.20	-7.79	Peak
2	5699.153	-5.72	75.64	69.92	104.58	-34.66	Peak
3	5719.799	-5.54	86.29	80.75	110.74	-29.99	Peak
4	5720.277	-5.53	87.26	81.73	111.43	-29.70	Peak

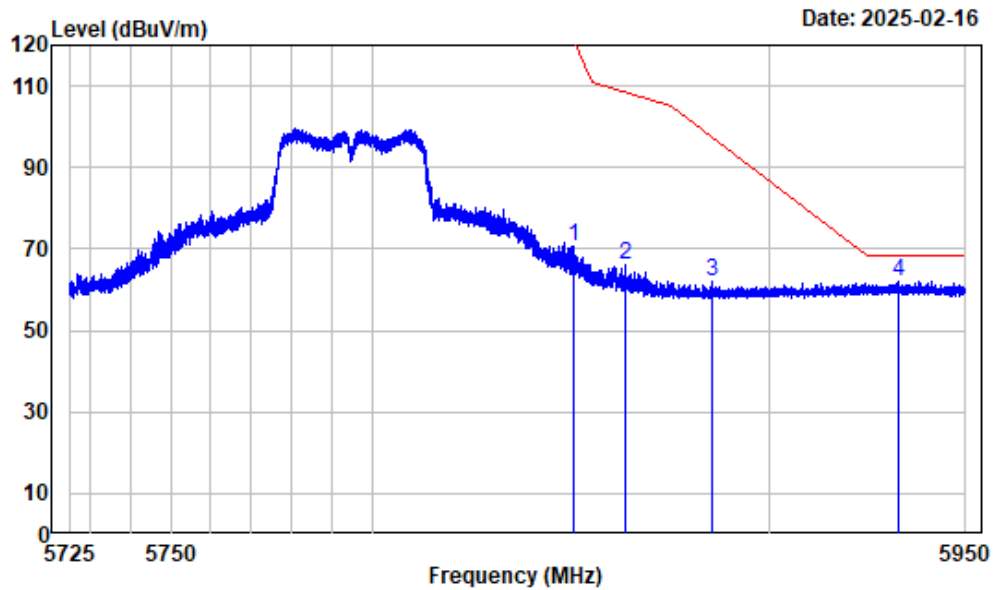
## Left Band edge\_Vertical\_802.11ac-VHT40\_5755MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5645.062	-5.90	68.34	62.44	68.20	-5.76	Peak
2	5699.181	-5.72	79.56	73.84	104.60	-30.76	Peak
3	5719.884	-5.53	90.98	85.45	110.77	-25.32	Peak
4	5720.193	-5.53	92.29	86.76	111.24	-24.48	Peak

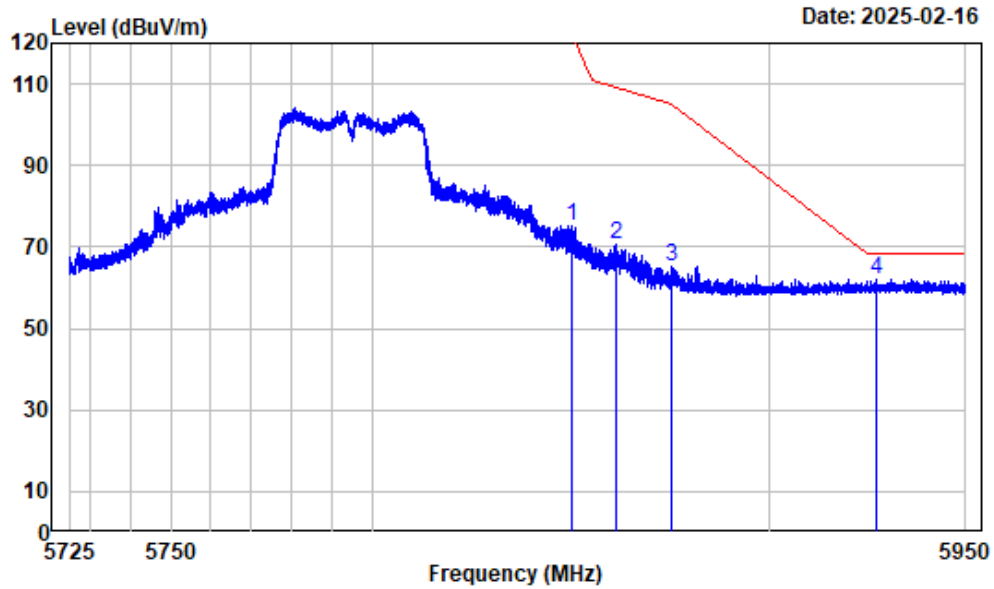
## Right Band edge\_Horizontal\_802.11ac-VHT40\_5795MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5795

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5850.538	-4.68	75.46	70.78	120.97	-50.19 Peak
2	5863.449	-4.62	70.60	65.98	108.43	-42.45 Peak
3	5885.473	-4.53	66.73	62.20	97.42	-35.22 Peak
4	5932.842	-4.45	66.51	62.06	68.20	-6.14 Peak

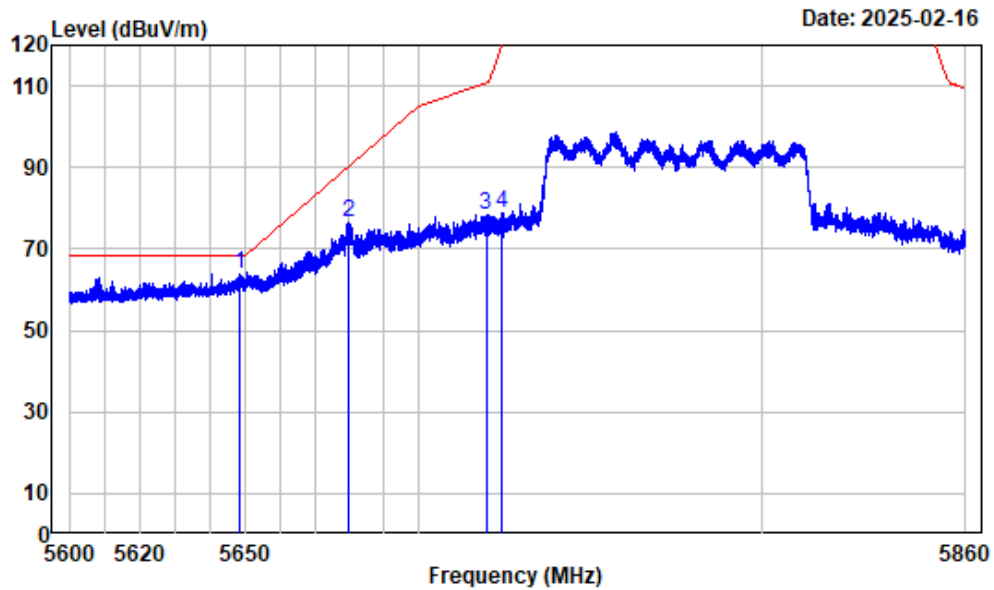
## Right Band edge\_Vertical\_802.11ac-VHT40\_5795MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5795

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5850.200	-4.68	79.83	75.15	121.74	-46.59	Peak
2	5861.086	-4.63	75.26	70.63	109.09	-38.46	Peak
3	5875.122	-4.57	70.00	65.43	105.11	-39.68	Peak
4	5927.441	-4.45	66.47	62.02	68.20	-6.18	Peak

## Left Band edge\_Horizontal\_802.11ac-VHT80\_5775MHz

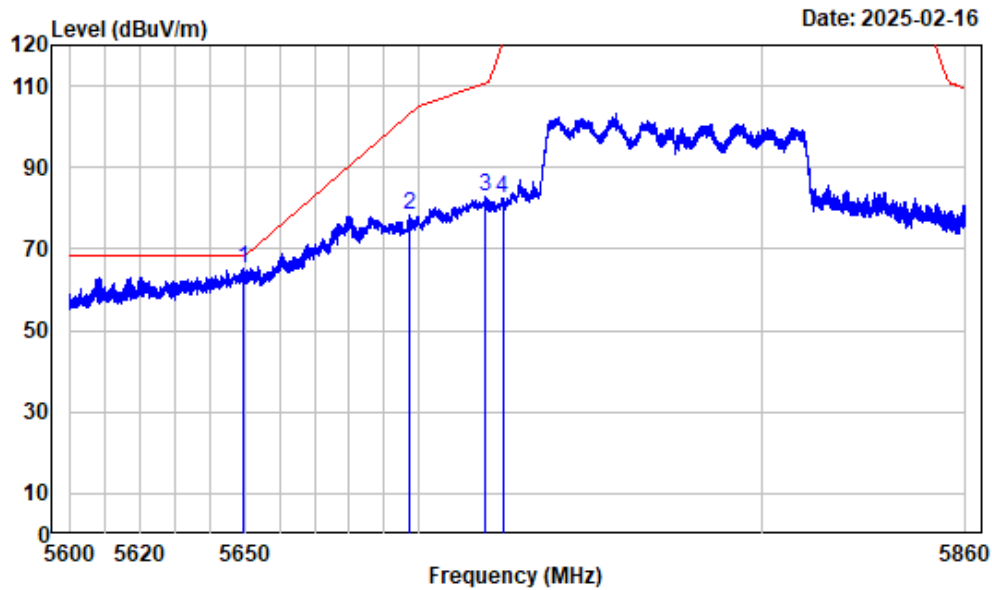


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5648.626	-5.87	69.94	64.07	68.20	-4.13	Peak
2	5679.928	-5.77	82.45	76.68	90.39	-13.71	Peak
3	5719.453	-5.54	83.79	78.25	110.65	-32.40	Peak
4	5724.230	-5.49	84.41	78.92	120.45	-41.53	Peak



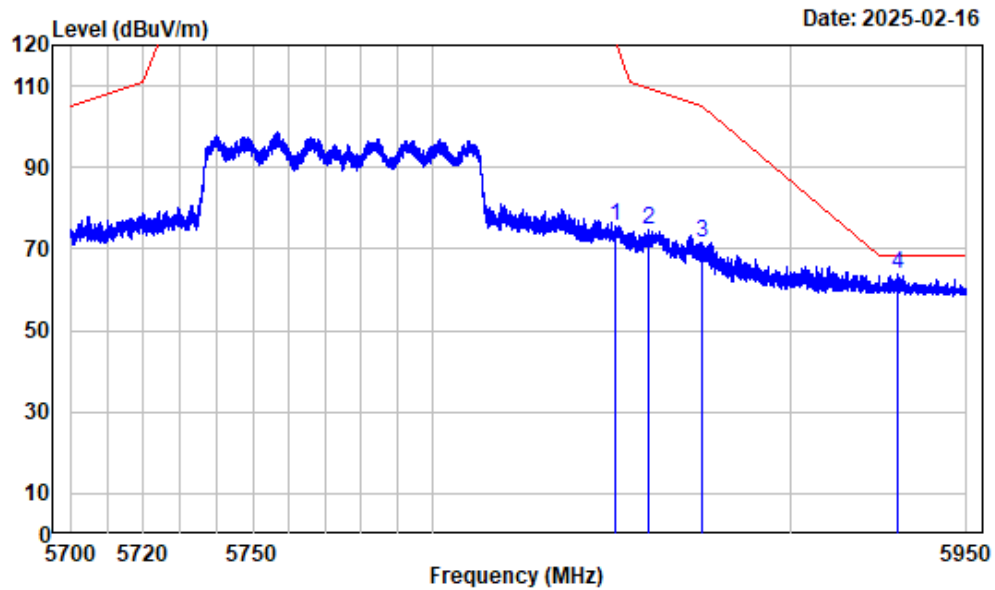
## Left Band edge\_Vertical\_802.11ac-VHT80\_5775MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5649.569	-5.86	71.00	65.14	68.20	-3.06	Peak
2	5697.285	-5.72	83.87	78.15	103.20	-25.05	Peak
3	5719.420	-5.54	88.42	82.88	110.64	-27.76	Peak
4	5724.263	-5.49	87.92	82.43	120.52	-38.09	Peak

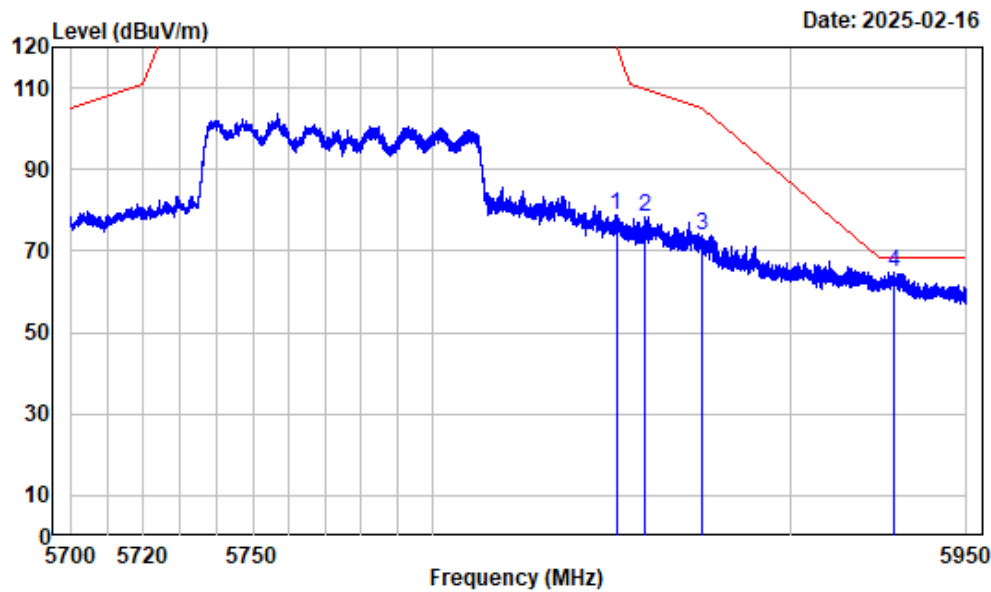
## Right Band edge\_Horizontal\_802.11ac-VHT80\_5775MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5850.925	-4.68	80.46	75.78	120.09	-44.31	Peak
2	5860.051	-4.63	79.20	74.57	109.38	-34.81	Peak
3	5874.991	-4.56	76.07	71.51	105.20	-33.69	Peak
4	5930.341	-4.45	68.51	64.06	68.20	-4.14	Peak

Right Band edge\_Vertical\_802.11ac-VHT80\_5775MHz

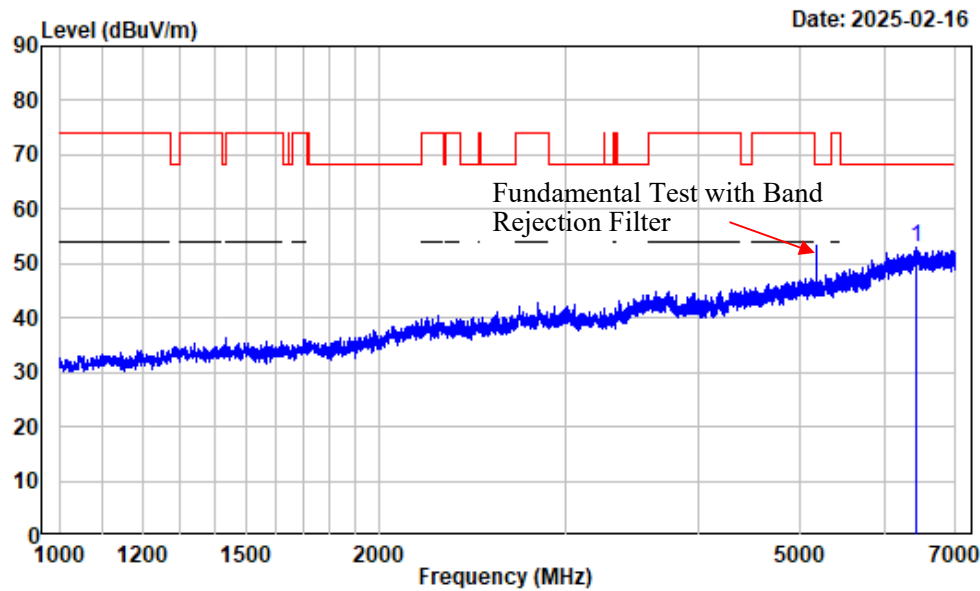


Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5851.019	-4.68	83.61	78.93	119.88	-40.95 Peak
2	5859.208	-4.63	83.08	78.45	109.62	-31.17 Peak
3	5875.178	-4.57	78.57	74.00	105.07	-31.07 Peak
4	5929.498	-4.45	69.24	64.79	68.20	-3.41 Peak

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

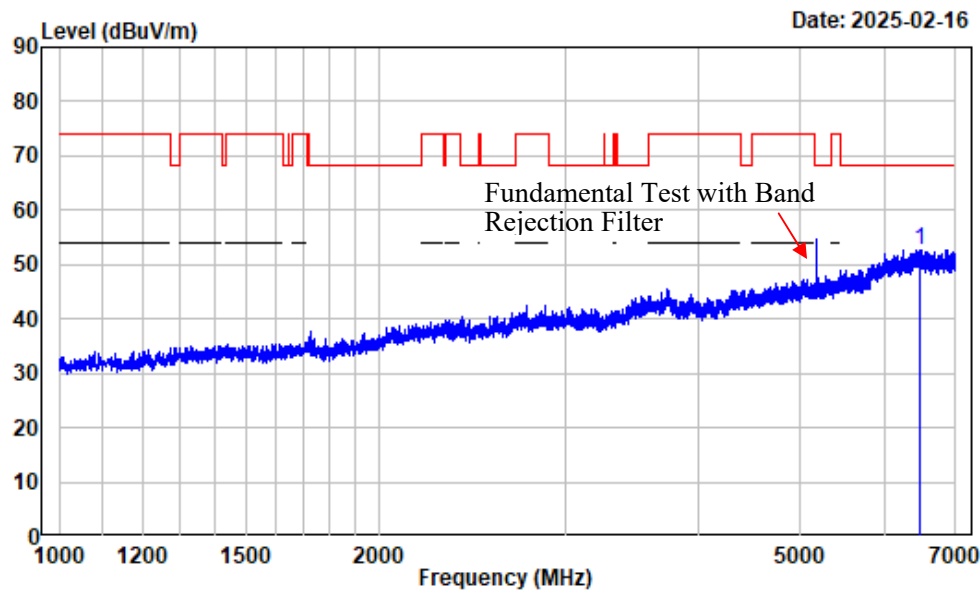
1-7GHz\_Horizontal\_802.11a\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6432.929	-2.88	55.95	53.07	68.20	-15.13	Peak

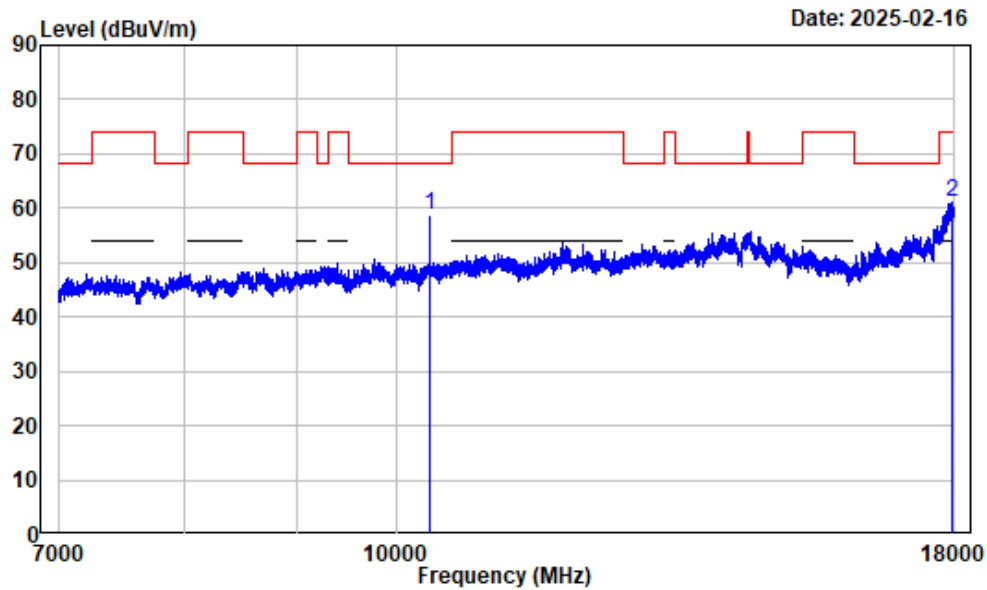
1-7GHz\_Vertical\_802.11a\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6480.935	-2.92	55.66	52.74	68.20	-15.46	Peak

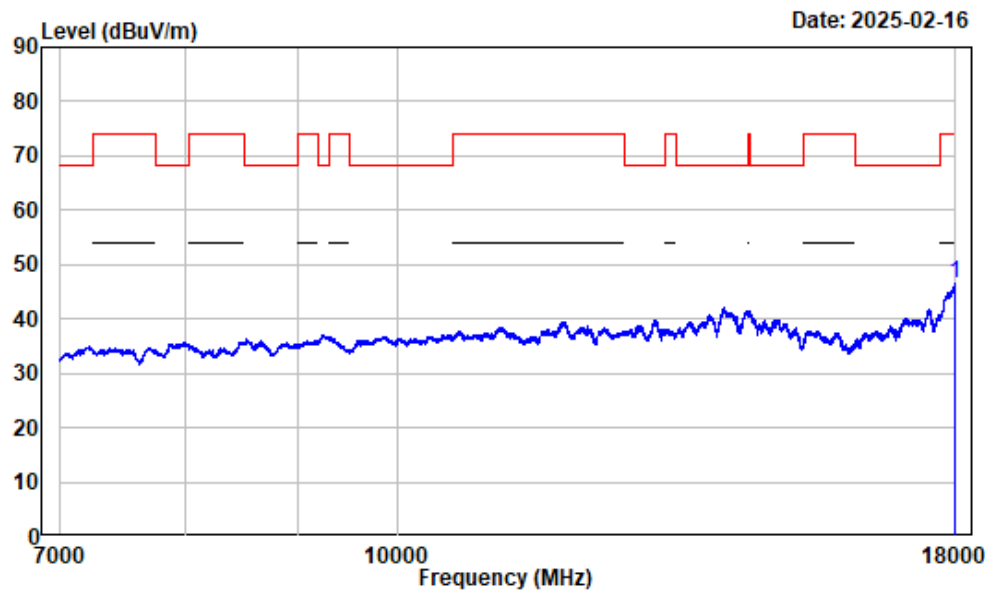
## 7-18GHz\_Horizontal\_Peak\_802.11a\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10360.000	2.53	56.28	58.81	68.20	-9.39	Peak
2	17971.120	13.06	47.95	61.01	74.00	-12.99	Peak

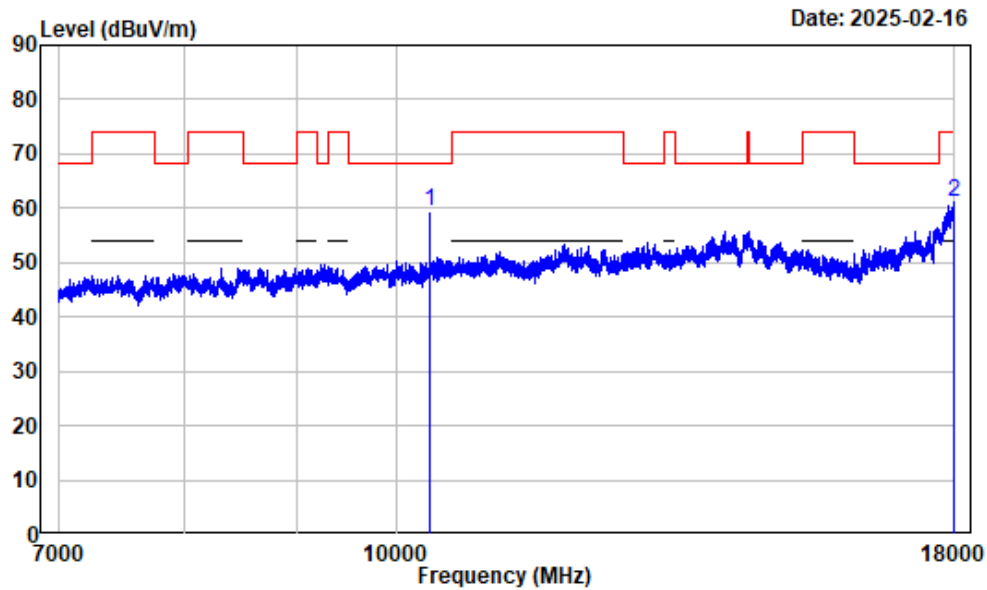
7-18GHz\_Horizontal\_Average\_802.11a\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17989.000	13.14	33.45	46.59	54.00	-7.41	Average

## 7-18GHz\_Vertical\_Peak\_802.11a\_5180MHz

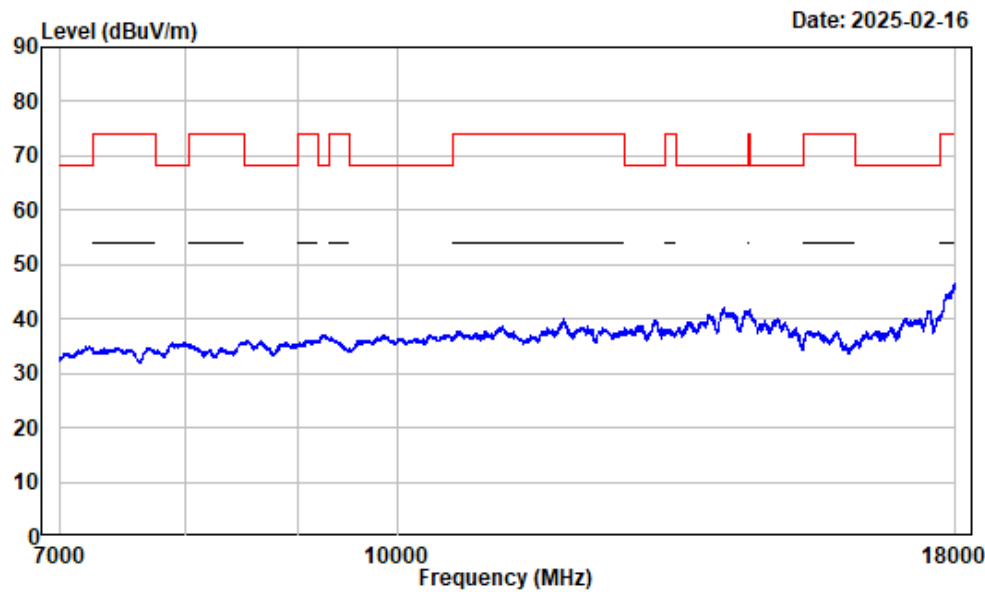


Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10360.000	2.53	56.83	59.36	68.20	-8.84	Peak
2	17997.250	13.19	47.88	61.07	74.00	-12.93	Peak



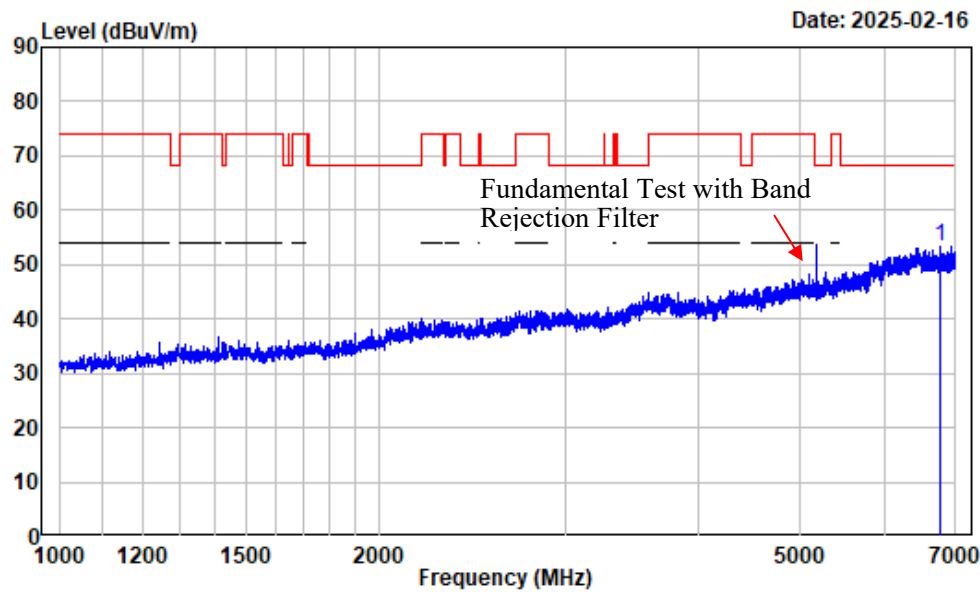
7-18GHz\_Vertical\_Average\_802.11a\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-A-5180

Freq	Factor	Read		Limit	Over	Remark
		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 18000.000	13.20	33.65	46.85	54.00	-7.15	Average

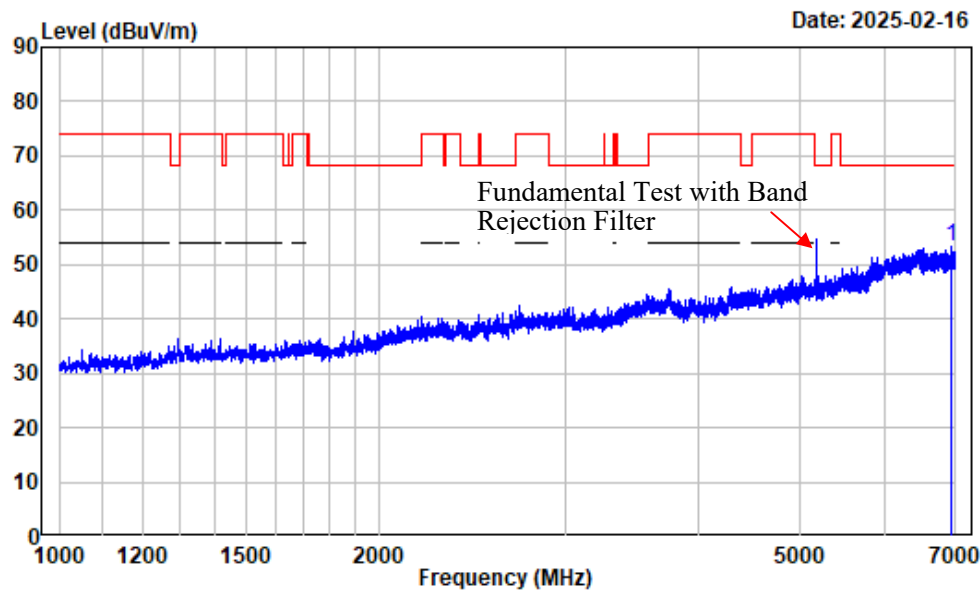
1-7GHz\_Horizontal\_802.11ac-VHT20\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6761.470	-3.24	56.46	53.22	68.20	-14.98	Peak

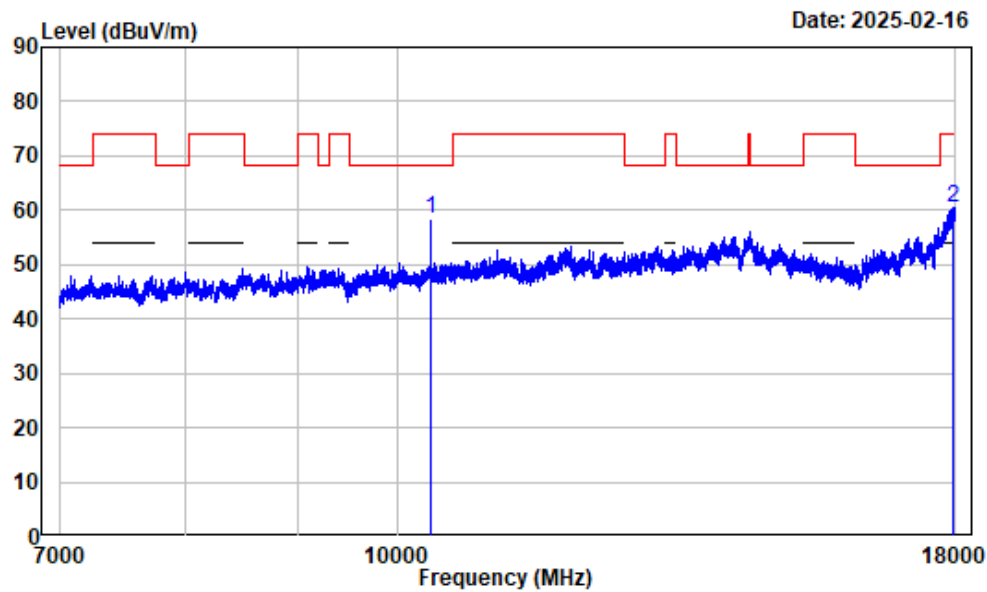
1-7GHz\_Vertical\_802.11ac-VHT20\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6933.242	-2.84	56.26	53.42	68.20	-14.78	Peak

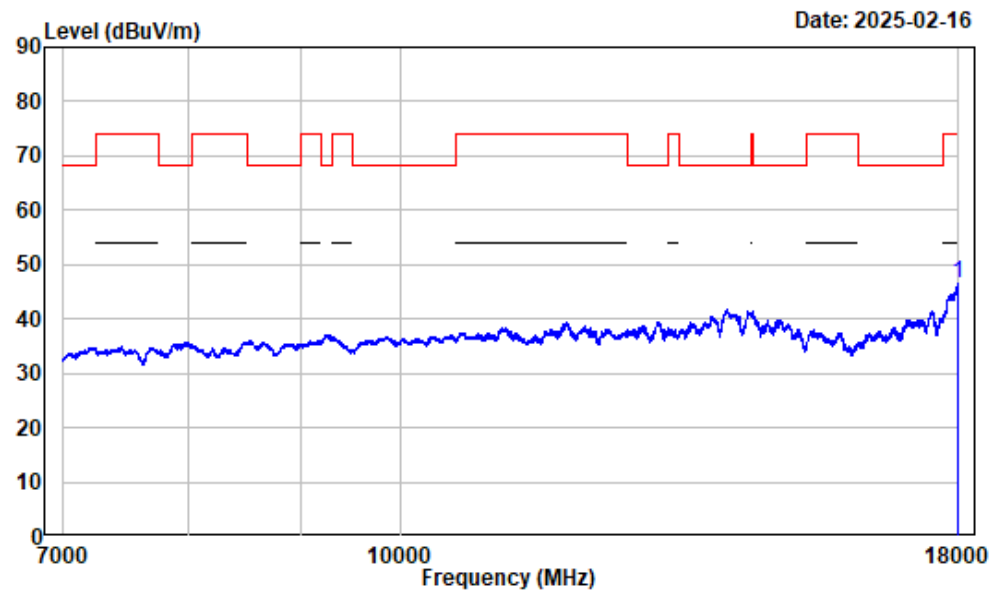
7-18GHz\_Horizontal\_Peak\_802.11ac-VHT20\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 10360.000	2.53	55.94	58.47	68.20	-9.73	Peak
2 17953.240	12.97	47.57	60.54	74.00	-13.46	Peak

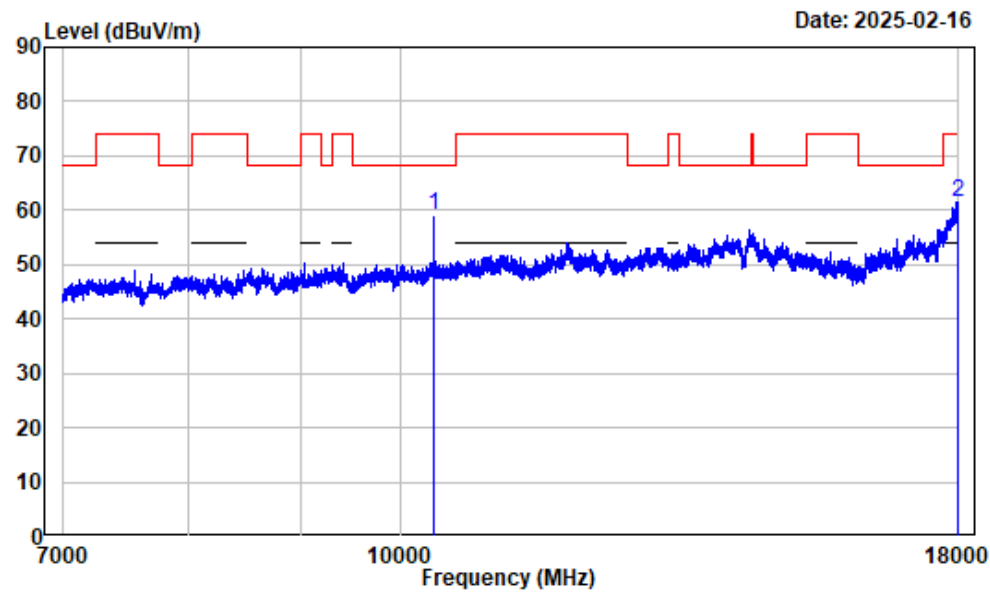
7-18GHz\_Horizontal\_Average\_802.11ac-VHT20\_5180MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17995.880	13.18	33.34	46.52	54.00	-7.48	Average

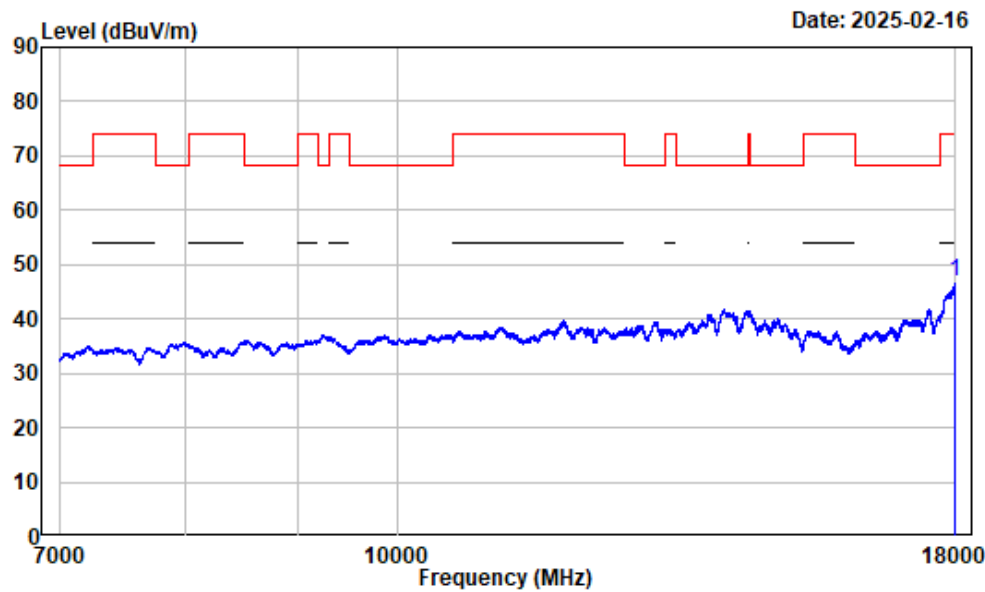
7-18GHz\_Vertical\_Peak\_802.11ac-VHT20\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10360.000	2.53	56.45	58.98	68.20	-9.22	Peak
2	17986.250	13.12	48.36	61.48	74.00	-12.52	Peak

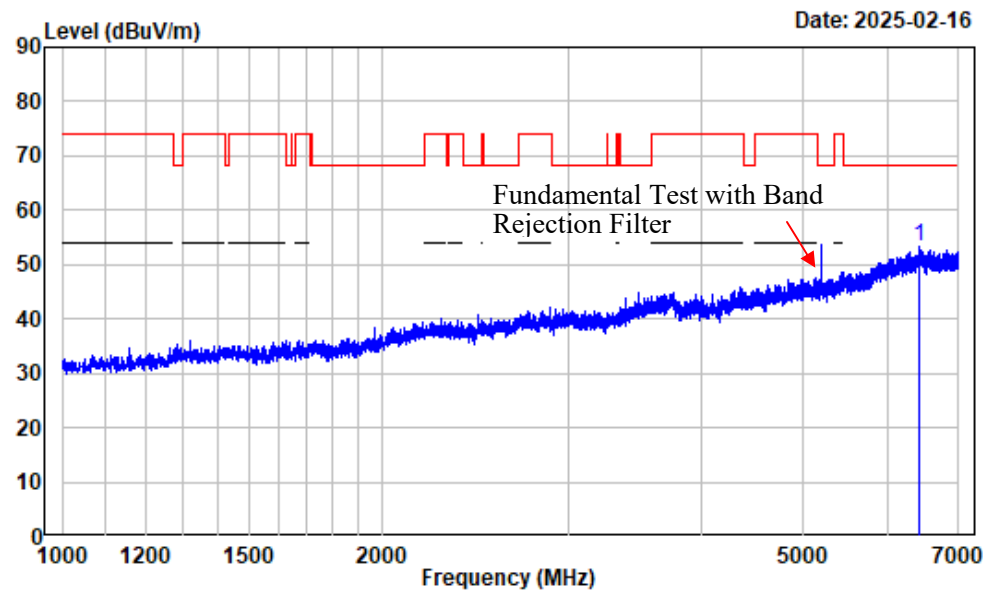
7-18GHz\_Vertical\_Average\_802.11ac-VHT20\_5180MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band1-AC20-5180

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.630	13.19	33.55	46.74	54.00	-7.26	Average

1-7GHz\_Horizontal\_802.11ac-VHT40\_5190MHz

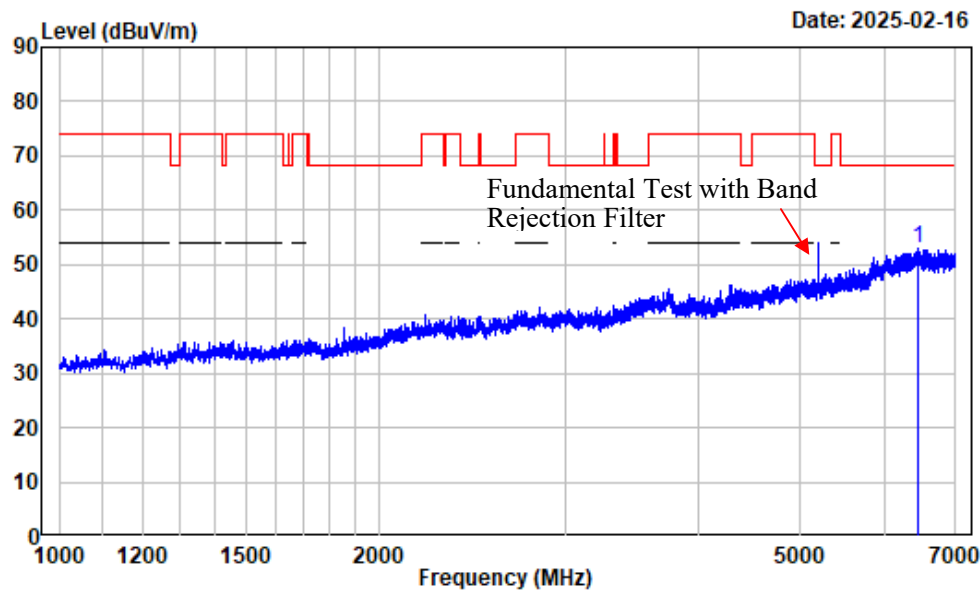


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

Freq		Factor	Read Level	Level	Limit	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6435.930	-2.88	56.22	53.34	68.20	-14.86	Peak



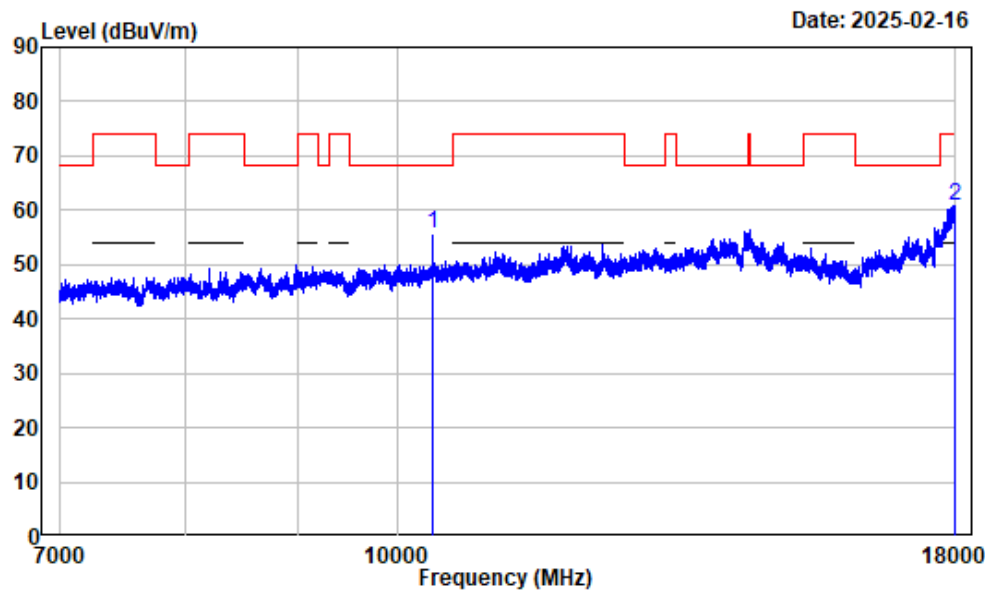
1-7GHz\_Vertical\_802.11ac-VHT40\_5190MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6453.932	-2.88	56.01	53.13	68.20	-15.07 Peak

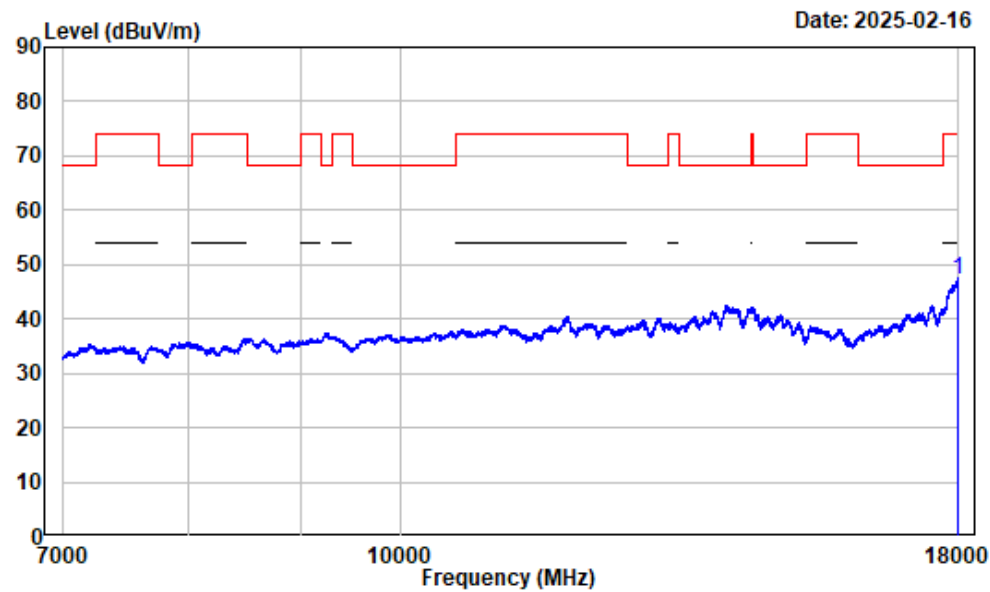
7-18GHz\_Horizontal\_Peak\_802.11ac-VHT40\_5190MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10380.000	2.54	53.14	55.68	68.20	-12.52	Peak
2	17993.130	13.17	47.65	60.82	74.00	-13.18	Peak

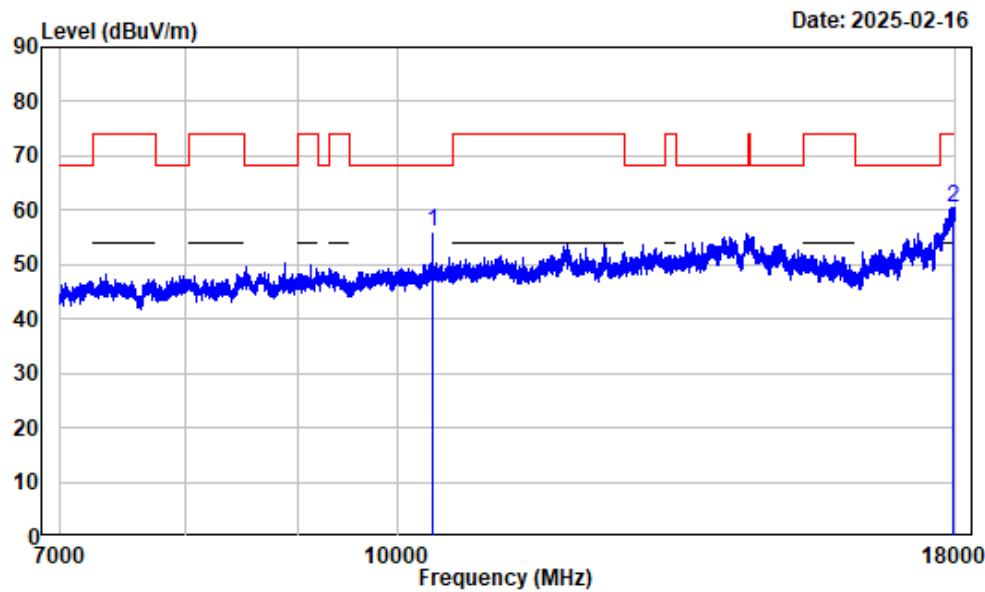
7-18GHz\_Horizontal\_Average\_802.11ac-VHT40\_5190MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17993.130	13.17	34.15	47.32	54.00	-6.68	Average

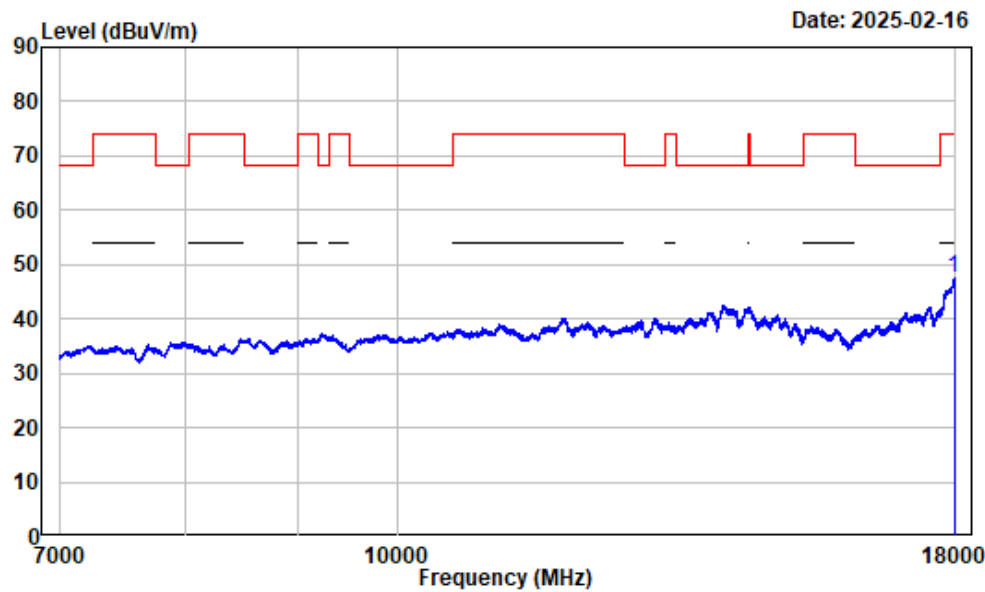
7-18GHz\_Vertical\_Peak\_802.11ac-VHT40\_5190MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

Freq		Factor	Read Level	Level	Limit	Over	Remark
					Line	Limit	
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10380.000	2.54	53.66	56.20	68.20	-12.00	Peak
2	17968.370	13.05	47.36	60.41	74.00	-13.59	Peak

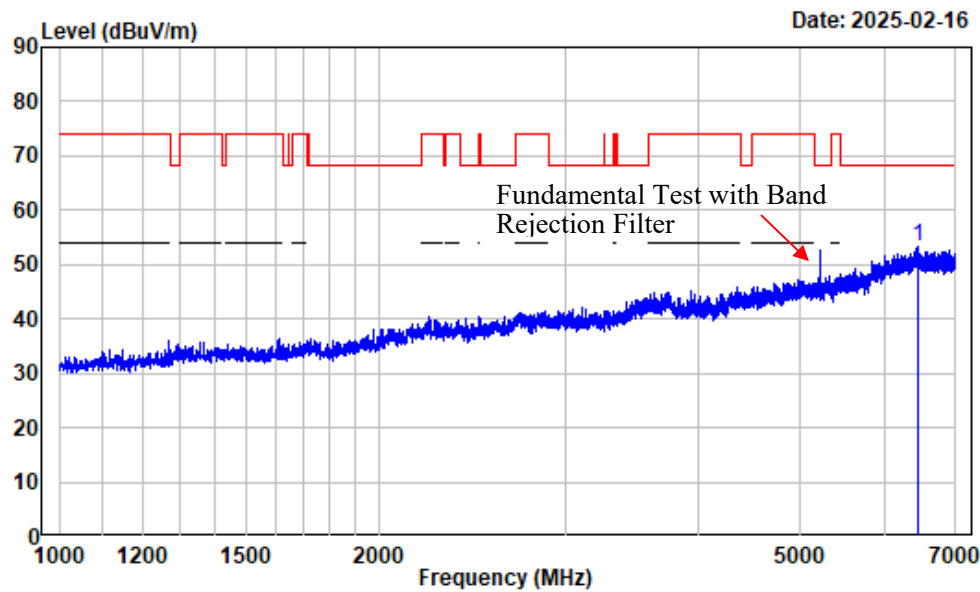
7-18GHz\_Vertical\_Average\_802.11ac-VHT40\_5190MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band1-AC40-5190

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17973.870	13.08	34.37	47.45	54.00	-6.55	Average

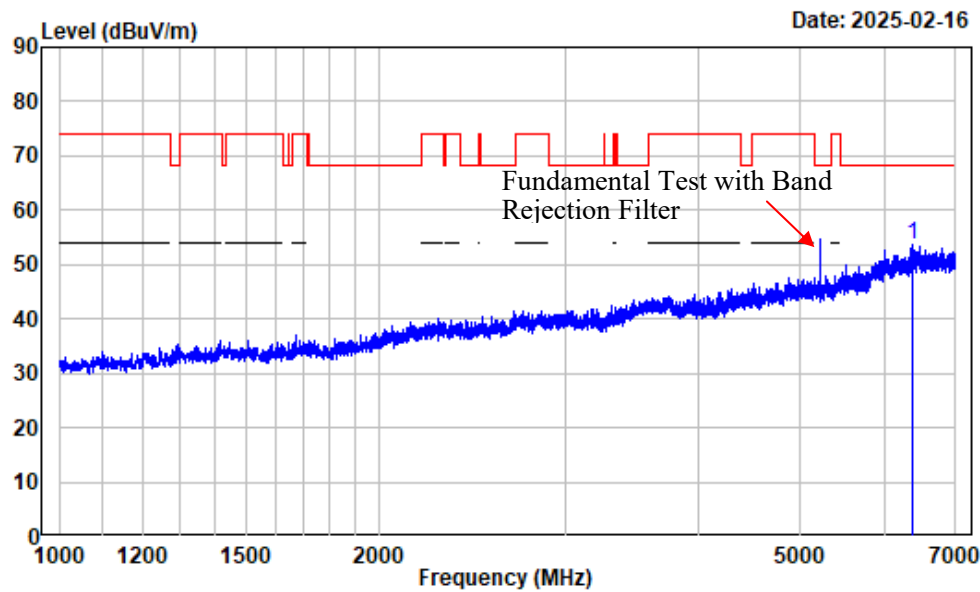
1-7GHz\_Horizontal\_802.11ac-VHT80\_5210MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6452.432	-2.88	56.14	53.26	68.20	-14.94	Peak

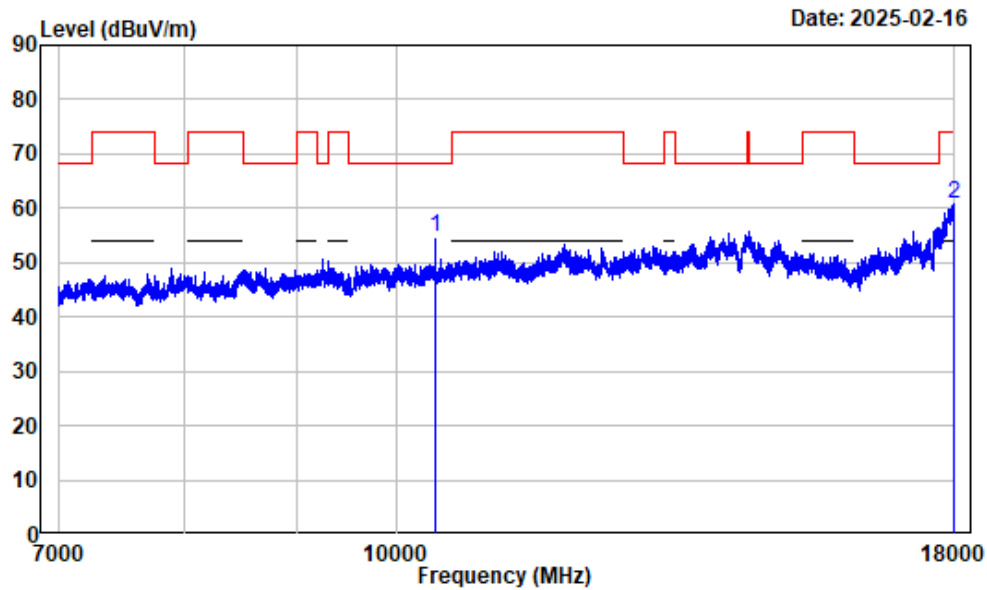
1-7GHz\_Vertical\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6385.673	-3.03	56.69	53.66	68.20	-14.54	Peak

## 7-18GHz\_Horizontal\_Peak\_802.11ac-VHT80\_5210MHz

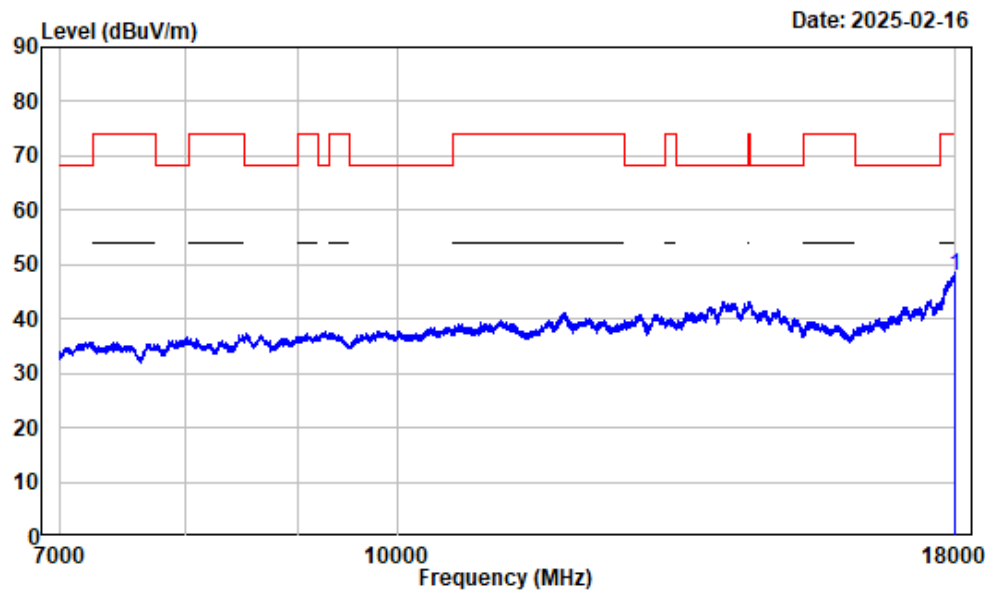


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

Freq		Factor	Read Level	Level	Limit	Over	Remark
			dBuV	dBuV/m	dBuV/m	Limit	
MHz		dB/m				dB	
1 10420.000		2.48	52.05	54.53	68.20	-13.67	Peak
2 17976.620		13.09	47.77	60.86	74.00	-13.14	Peak



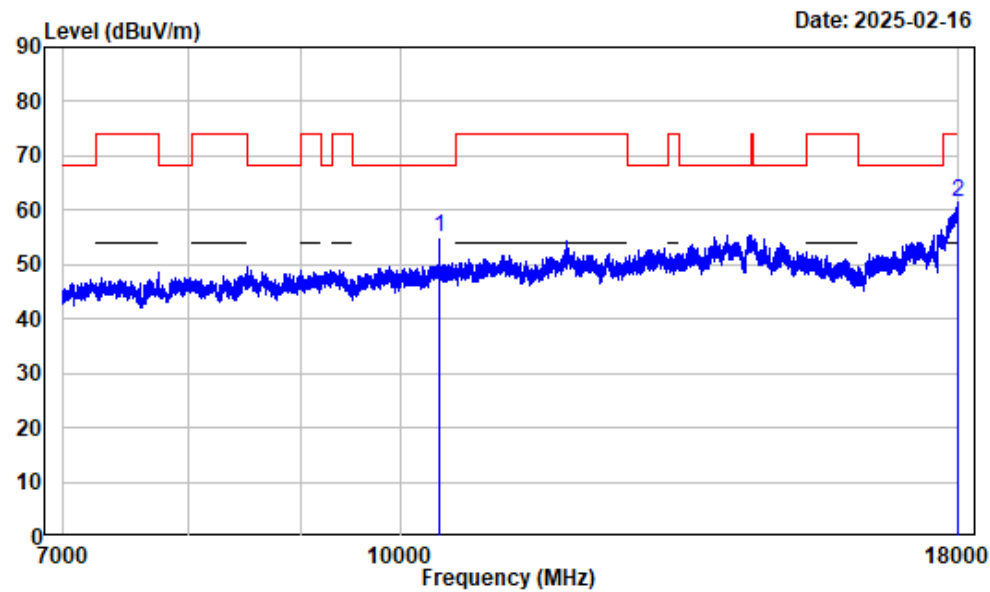
7-18GHz\_Horizontal\_Average\_802.11ac-VHT80\_5210MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

Freq	Factor	Read		Limit	Over	Remark
		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17991.750	13.16	34.67	47.83	54.00	-6.17	Average

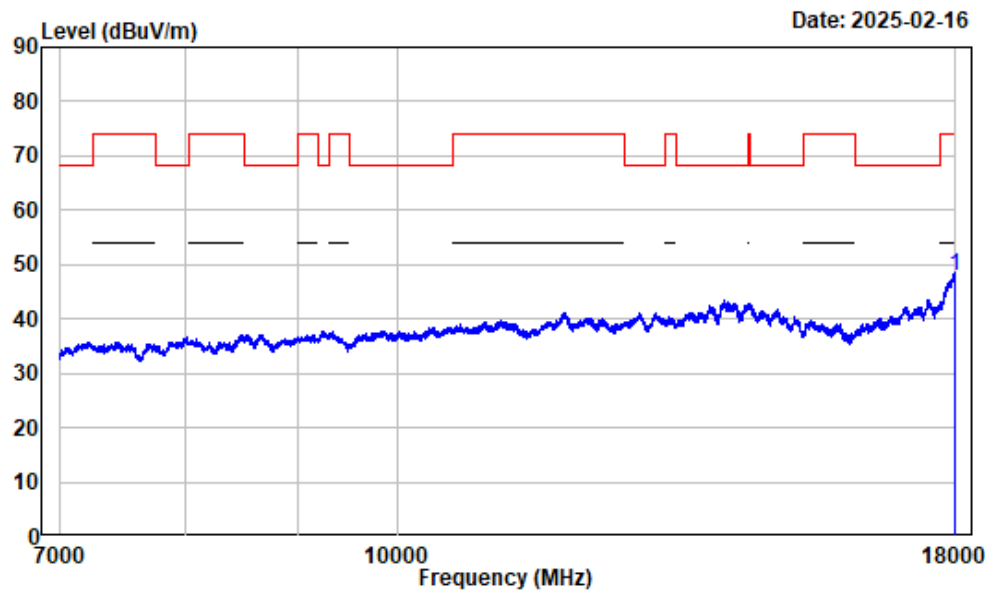
7-18GHz\_Vertical\_Peak\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10420.000	2.48	52.61	55.09	68.20	-13.11	Peak
2	17984.870	13.12	48.31	61.43	74.00	-12.57	Peak

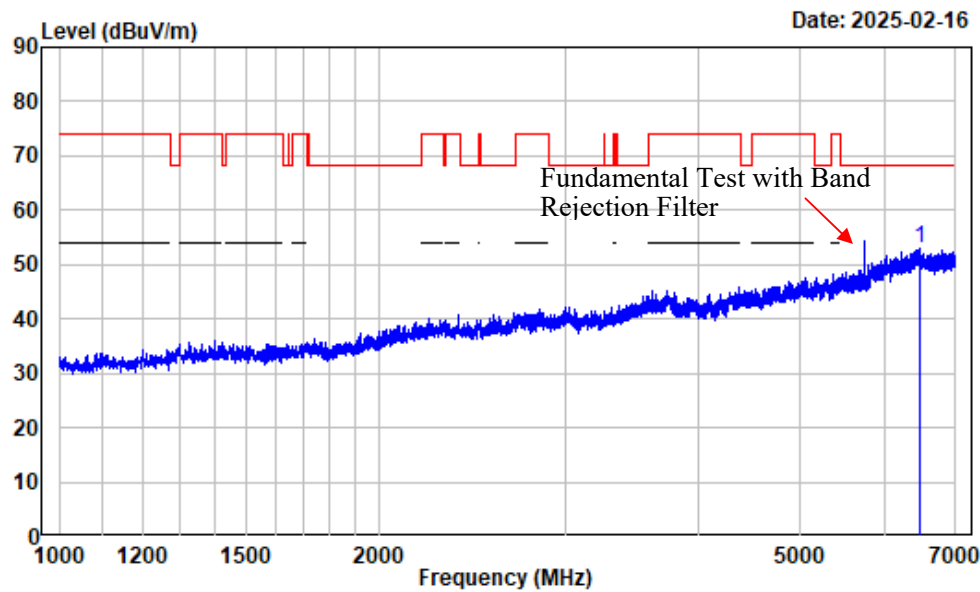
7-18GHz\_Vertical\_Average\_802.11ac-VHT80\_5210MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band1-AC80-5210

Freq		Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17993.130		13.17	34.78	47.95	54.00	-6.05	Average

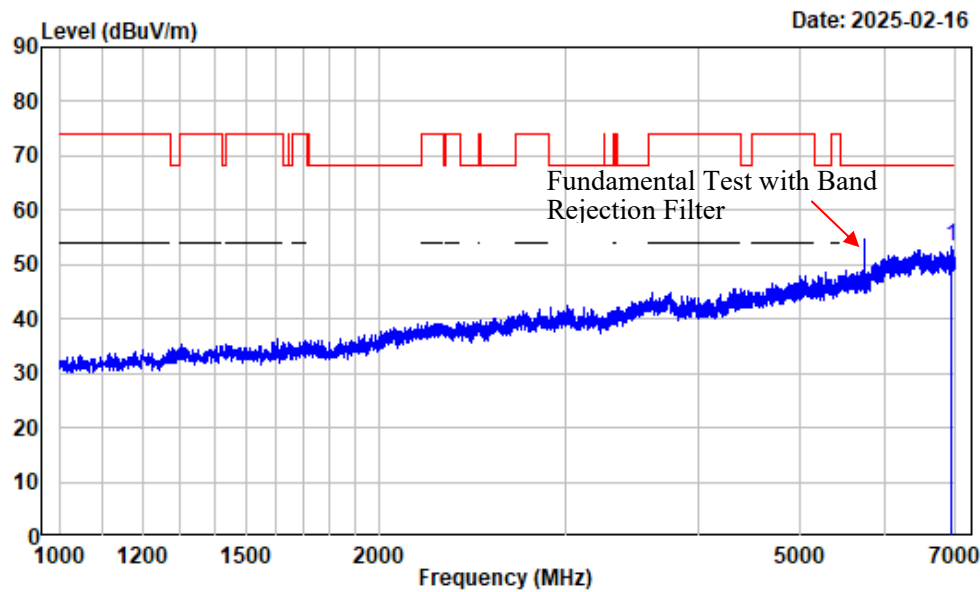
1-7GHz\_Horizontal\_802.11a\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6474.184	-2.91	56.00	53.09	68.20	-15.11	Peak

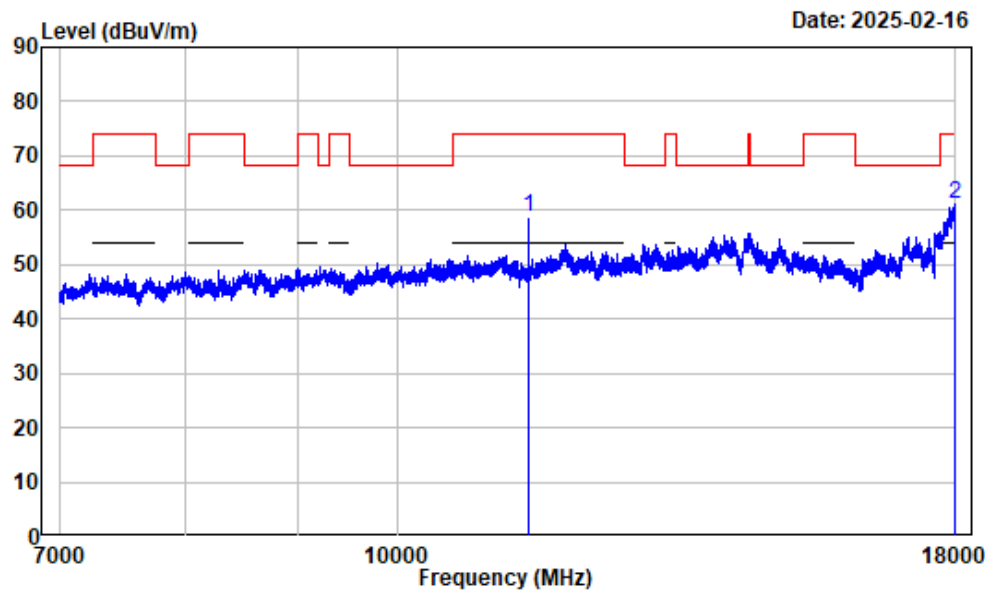
1-7GHz\_Vertical\_802.11a\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6930.991	-2.86	56.29	53.43	68.20	-14.77	Peak

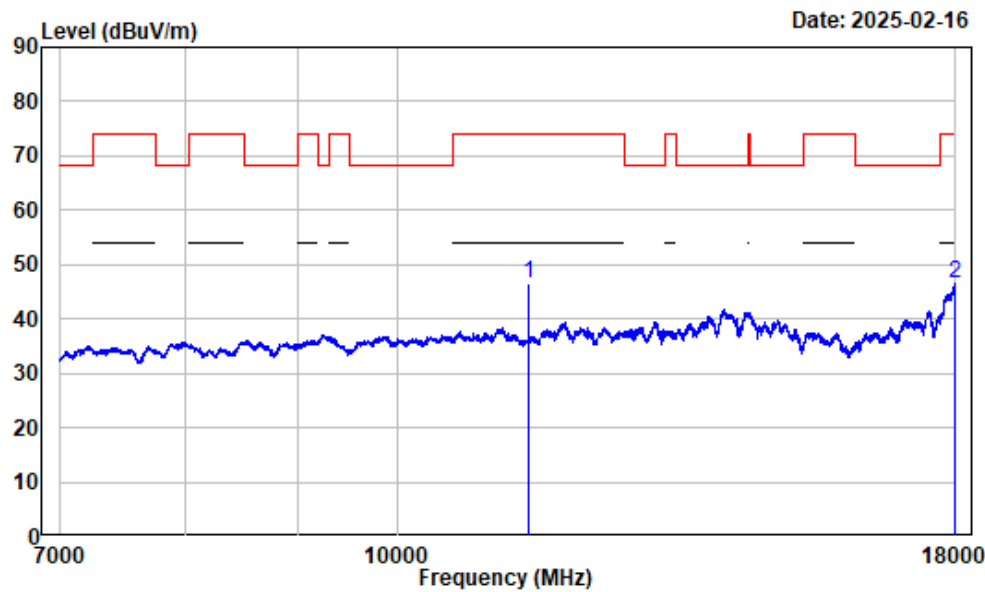
7-18GHz\_Horizontal\_Peak\_802.11a\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11490.000	3.54	55.27	58.81	74.00	-15.19	Peak
2	17989.000	13.14	47.94	61.08	74.00	-12.92	Peak

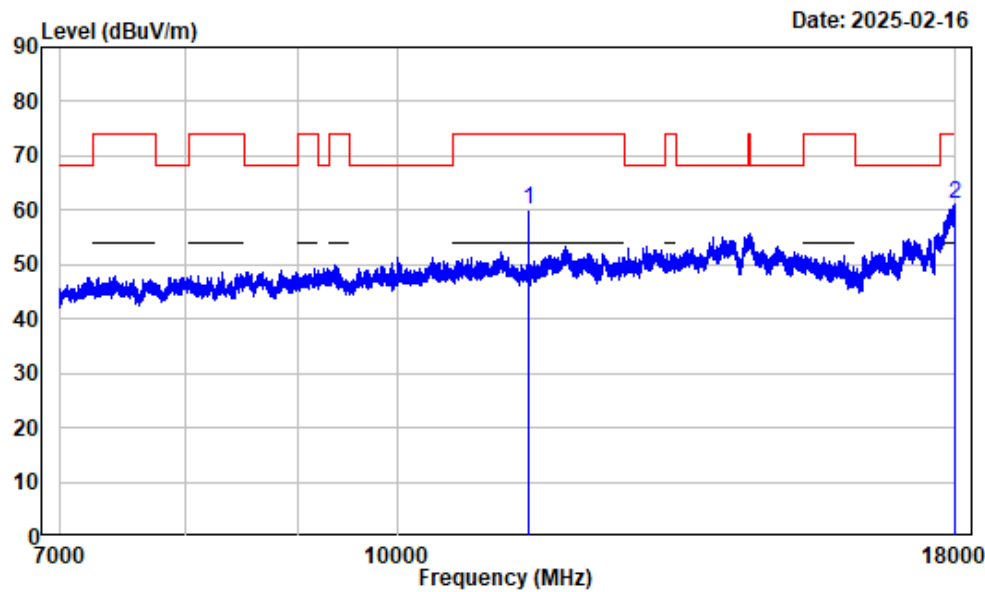
7-18GHz\_Horizontal\_Average\_802.11a\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11490.000	3.54	43.15	46.69	54.00	-7.31	Average
2	17998.630	13.19	33.31	46.50	54.00	-7.50	Average

7-18GHz\_Vetical\_Peak\_802.11a\_5745MHz

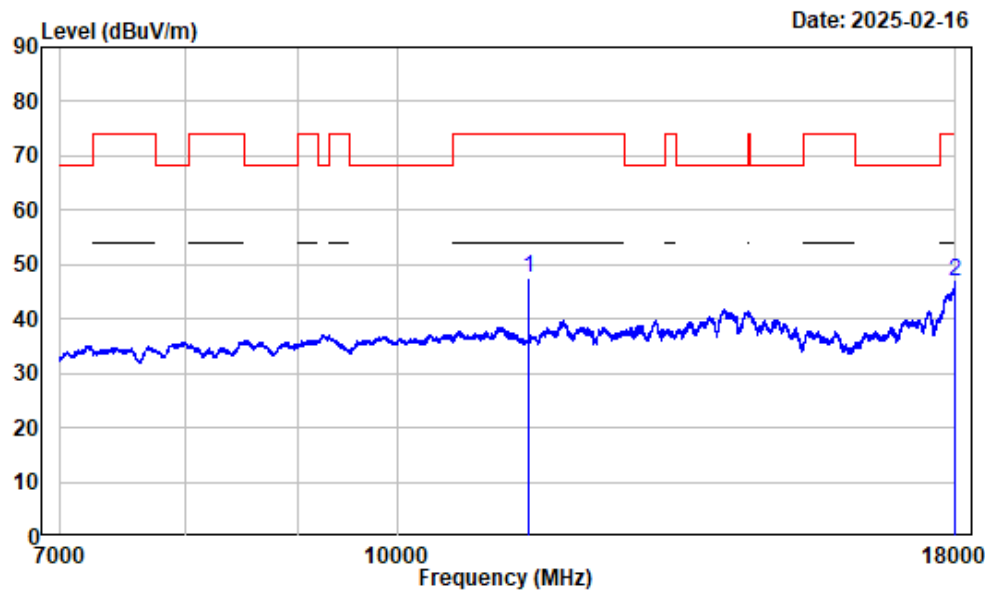


Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11490.000	3.54	56.69	60.23	74.00	-13.77	Peak
2	17994.500	13.17	47.87	61.04	74.00	-12.96	Peak



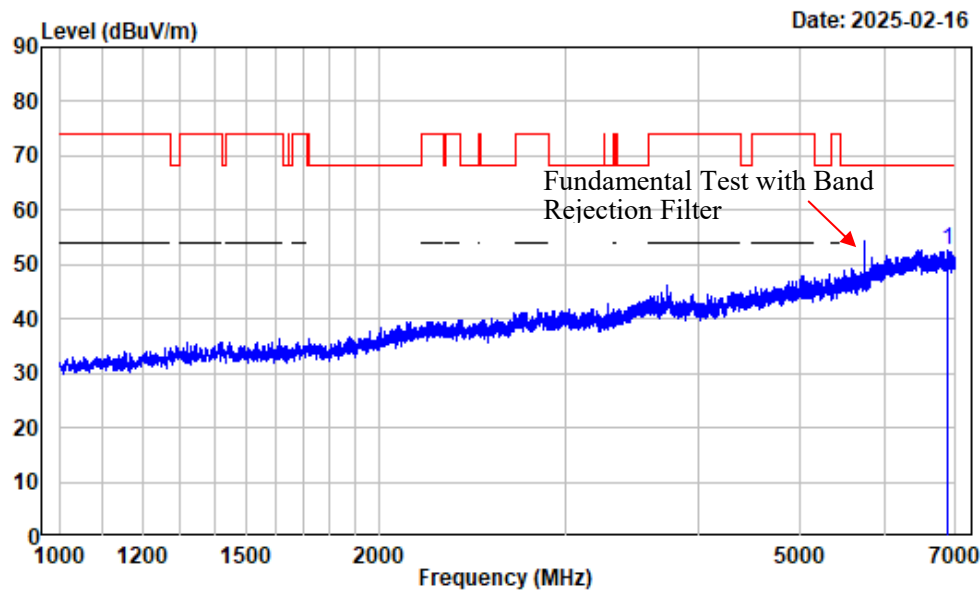
7-18GHz\_Vertical\_Average\_802.11a\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11490.000	3.54	43.98	47.52	54.00	-6.48	Average
2 17989.000	13.14	33.58	46.72	54.00	-7.28	Average

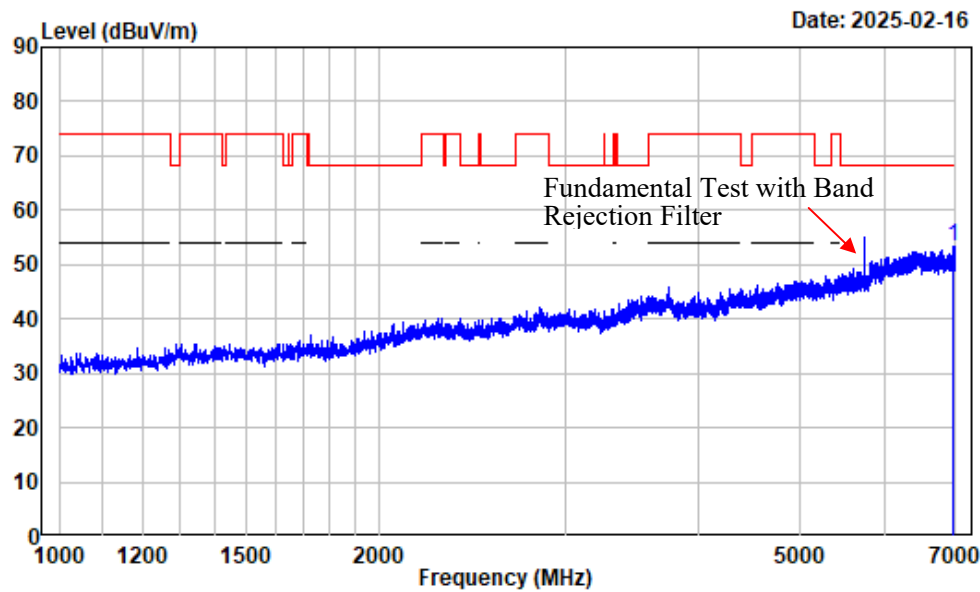
1-7GHz\_Horizontal\_802.11ac-VHT20\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

Freq		Factor	Read Level	Level	Limit	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6880.735	-3.12	55.79	52.67	68.20	-15.53	Peak

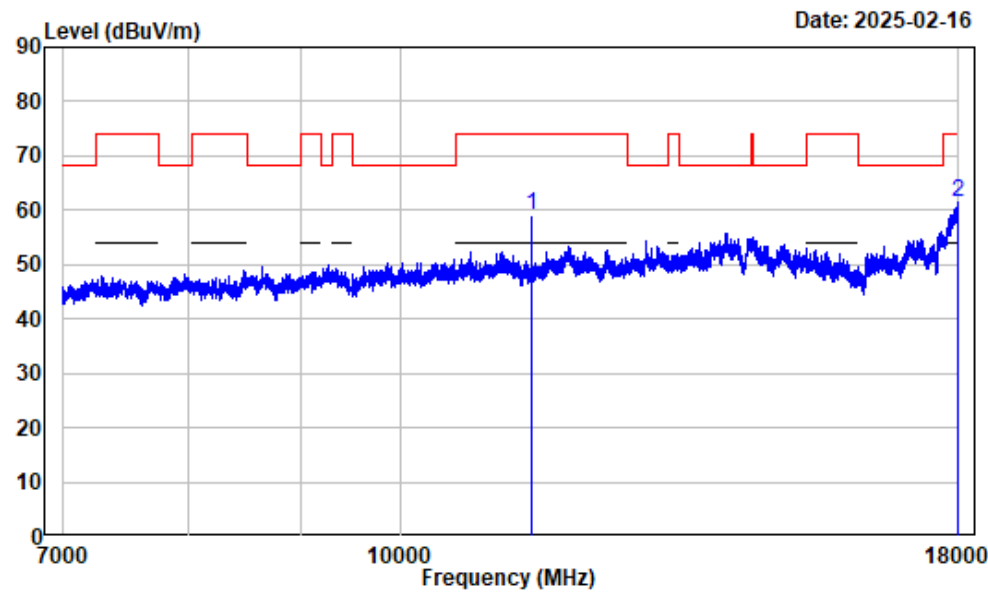
1-7GHz\_Vertical\_802.11ac-VHT20\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6974.497	-2.82	56.26	53.44	68.20	-14.76	Peak

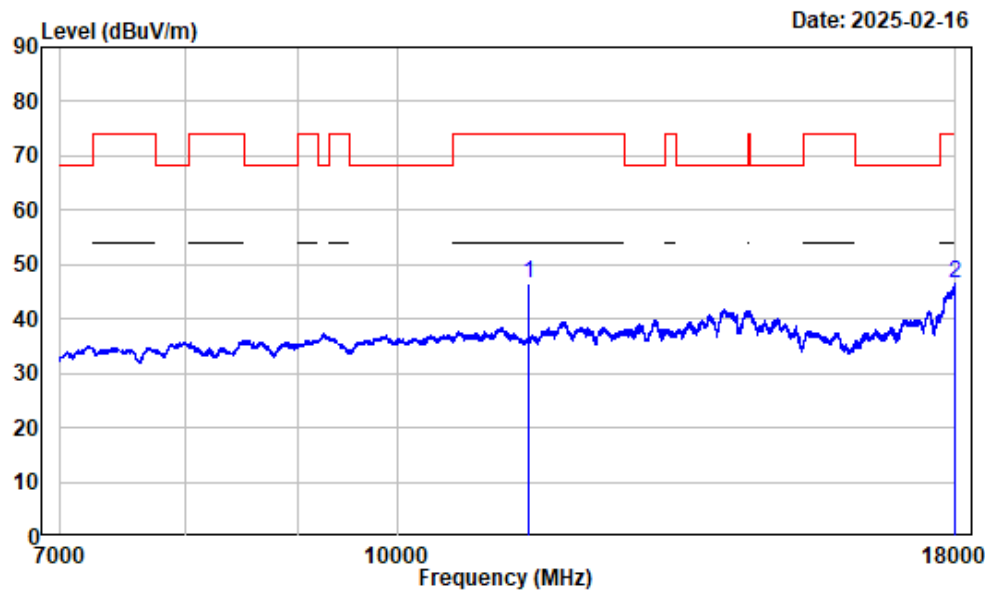
7-18GHz\_Horizontal\_Peak\_802.11ac-VHT20\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11490.000	3.54	55.52	59.06	74.00	-14.94	Peak
2 17993.130	13.17	48.39	61.56	74.00	-12.44	Peak

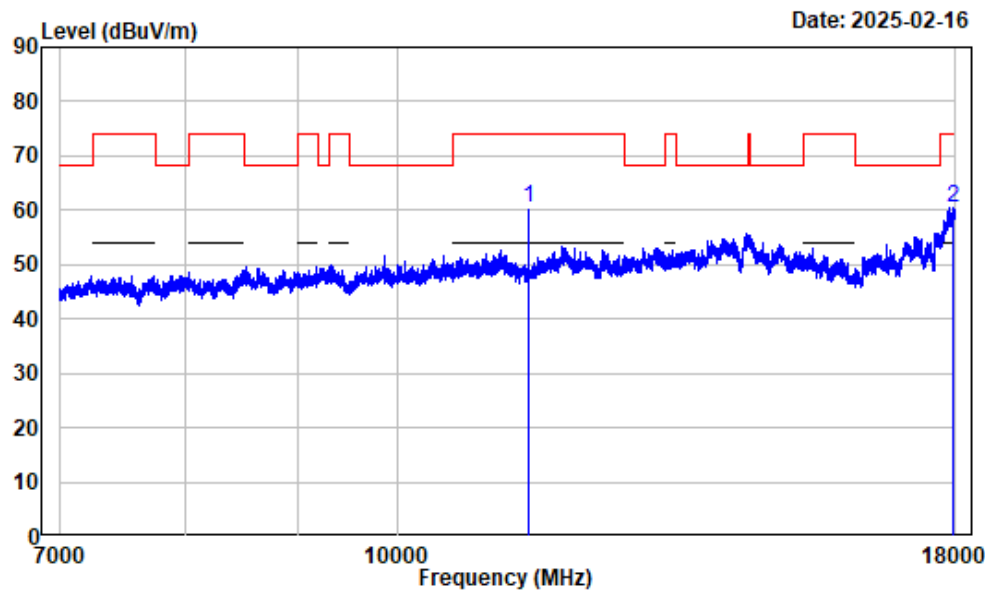
7-18GHz\_Horizontal\_Average\_802.11ac-VHT20\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11490.000	3.54	42.83	46.37	54.00	-7.63	Average
2	17998.630	13.19	33.25	46.44	54.00	-7.56	Average

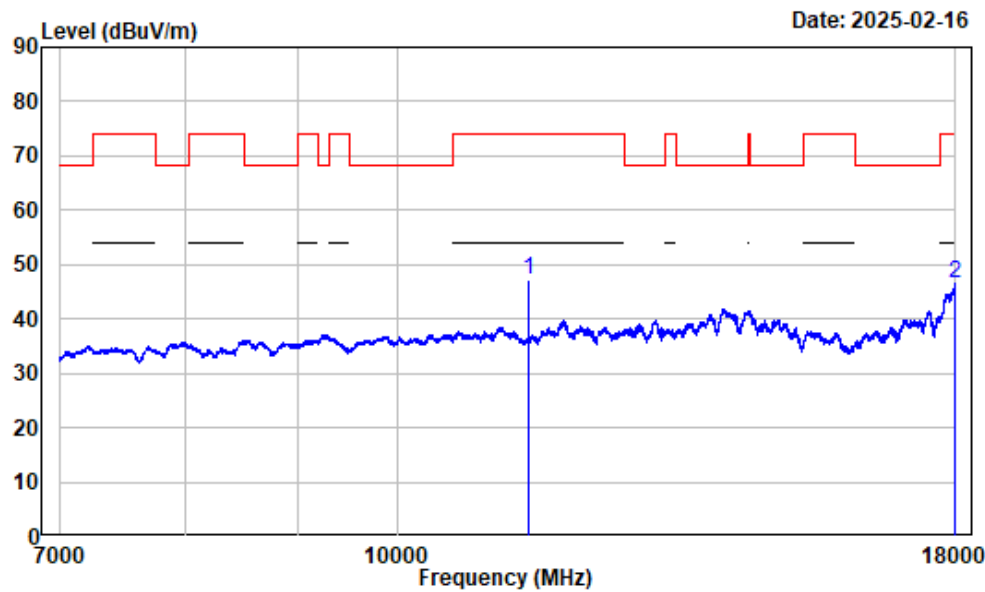
7-18GHz\_Vertical\_Peak\_802.11ac-VHT20\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

		Read		Limit	Over	Remark
Freq		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11490.000	3.54	56.95	60.49	74.00	-13.51	Peak
2 17971.120	13.06	47.52	60.58	74.00	-13.42	Peak

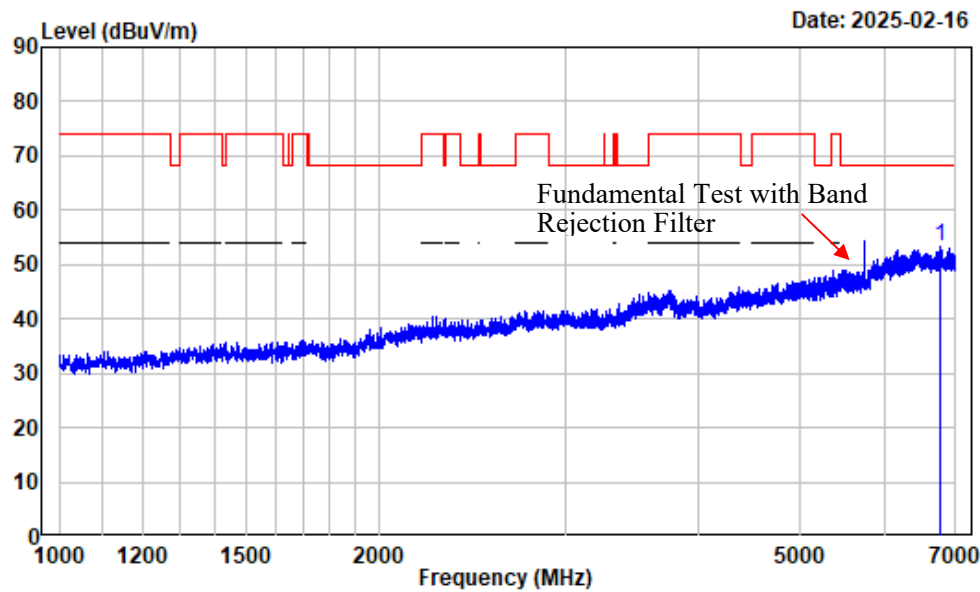
7-18GHz\_Vertical\_Average\_802.11ac-VHT20\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi-Band4-AC20-5745

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11490.000	3.54	43.69	47.23	54.00	-6.77	Average
2 17991.750	13.16	33.50	46.66	54.00	-7.34	Average

1-7GHz\_Horizontal\_802.11ac-VHT40\_5755MHz

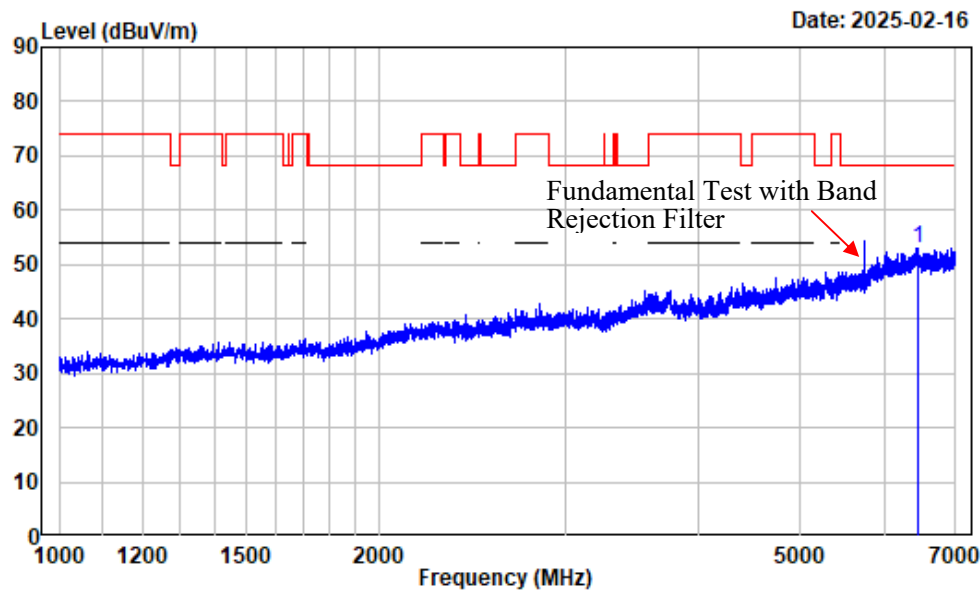


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 6776.472	-3.29	56.59	53.30	68.20	-14.90	Peak



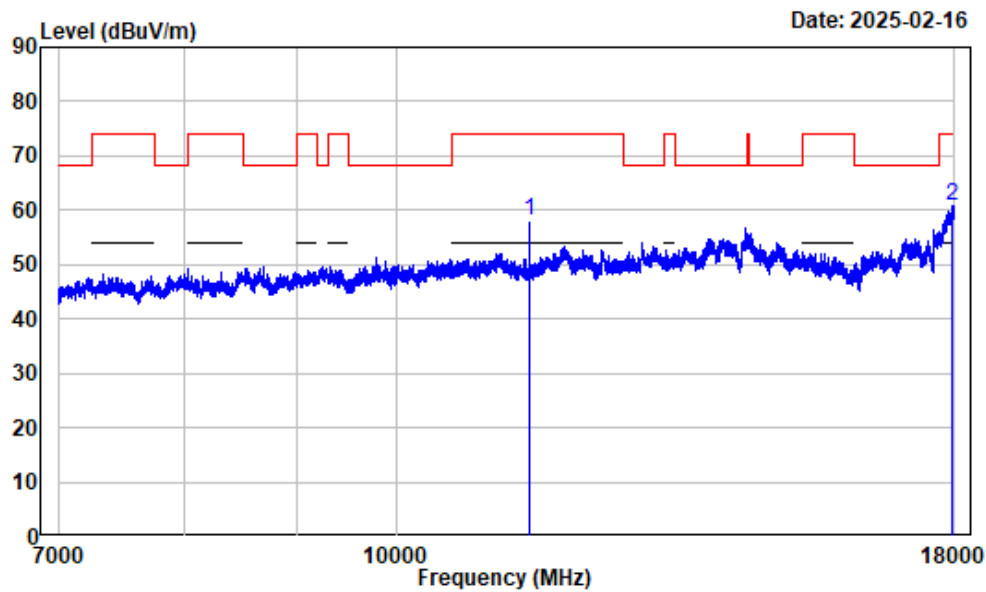
1-7GHz\_Vertical\_802.11ac-VHT40\_5755MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6453.182	-2.88	55.89	53.01	68.20	-15.19	Peak

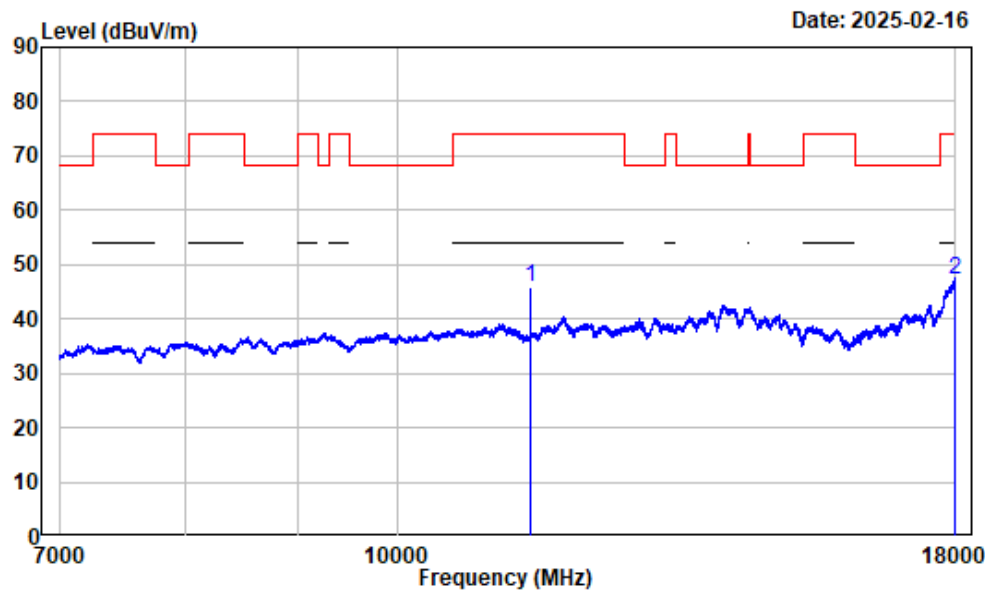
7-18GHz\_Horizontal\_Peak\_802.11ac-VHT40\_5755MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11510.000	3.53	54.57	58.10	74.00	-15.90	Peak
2 17965.620	13.03	47.87	60.90	74.00	-13.10	Peak

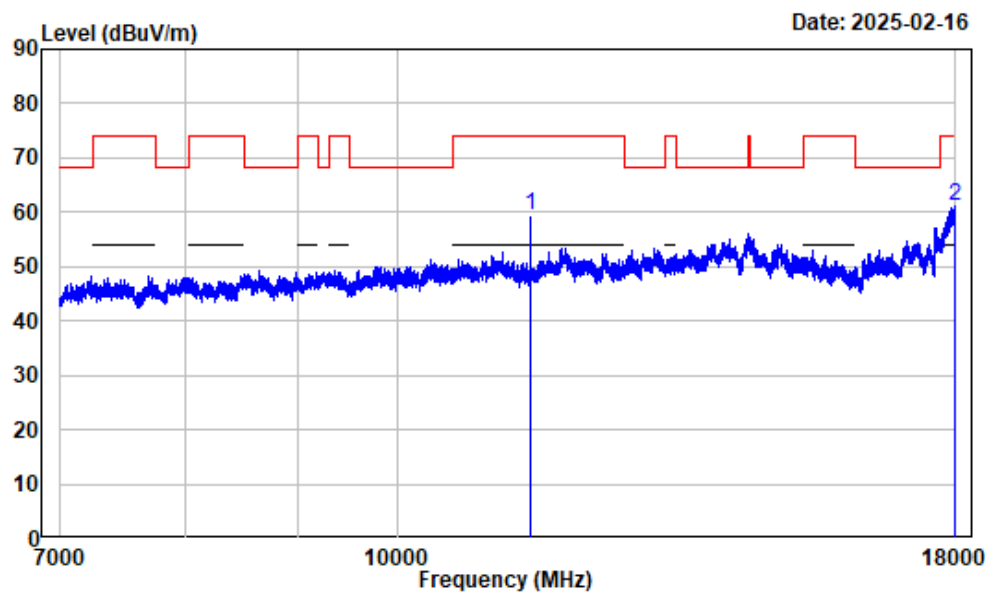
7-18GHz\_Horizontal\_Average\_802.11ac-VHT40\_5755MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11510.000	3.53	42.32	45.85	54.00	-8.15	Average
2 17998.250	13.20	34.13	47.33	54.00	-6.67	Average

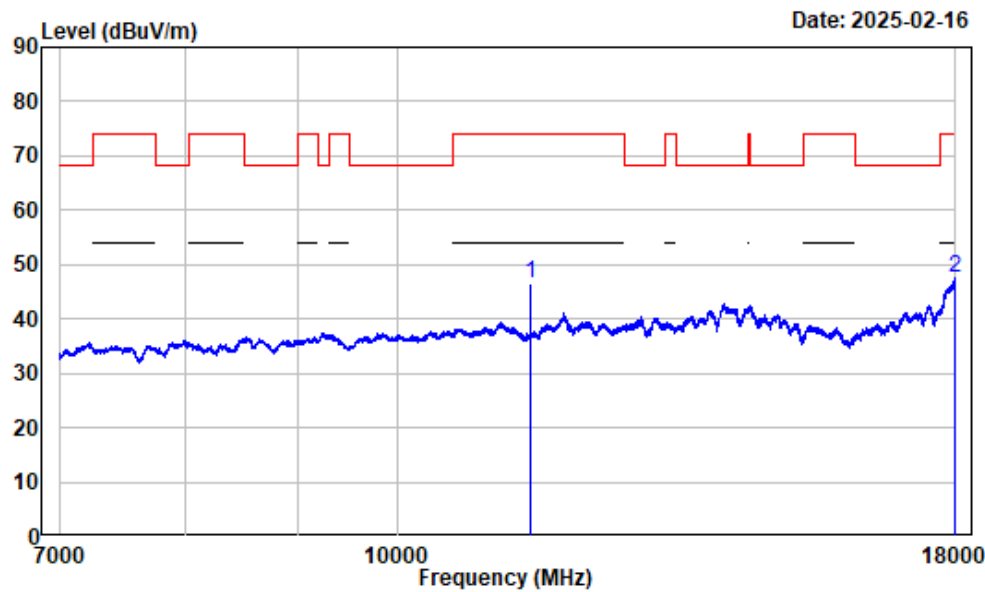
7-18GHz\_Vertical\_Peak\_802.11ac-VHT40\_5755MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11510.000	3.53	55.89	59.42	74.00	-14.58	Peak
2	17995.880	13.18	48.04	61.22	74.00	-12.78	Peak

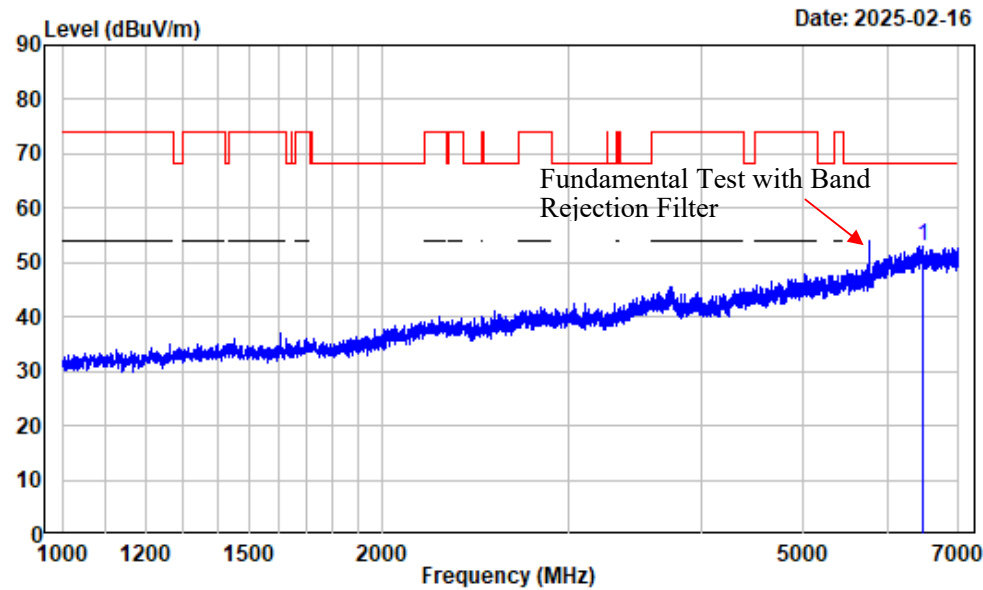
7-18GHz\_Vertical\_Average\_802.11ac-VHT40\_5755MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak  
Note : 5GWiFi-Band4-AC40-5755

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11510.000	3.53	43.16	46.69	54.00	-7.31	Average
2 17995.880	13.18	34.30	47.48	54.00	-6.52	Average

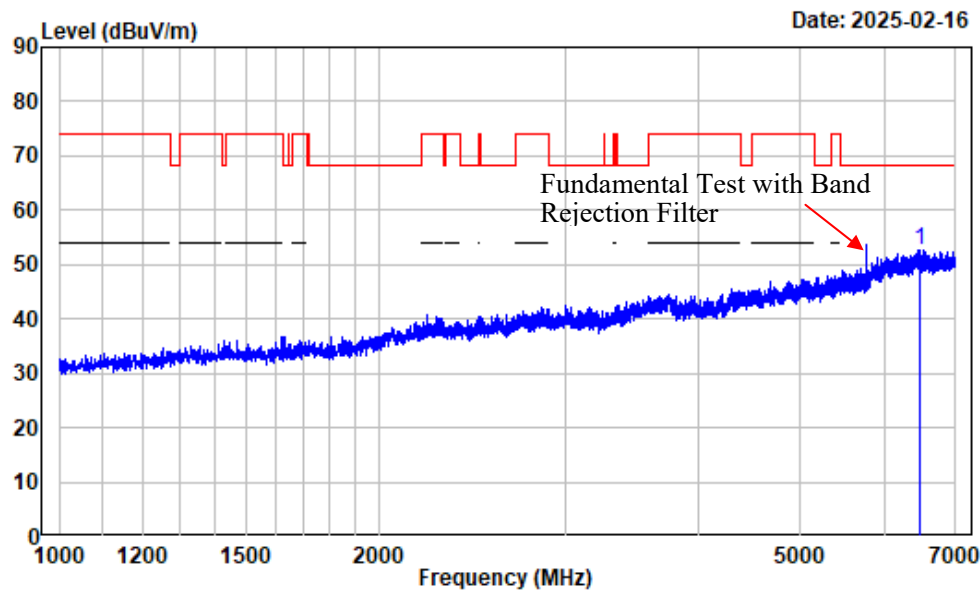
1-7GHz\_Horizontal\_802.11ac-VHT80\_5775MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6471.184	-2.90	55.84	52.94	68.20	-15.26 Peak

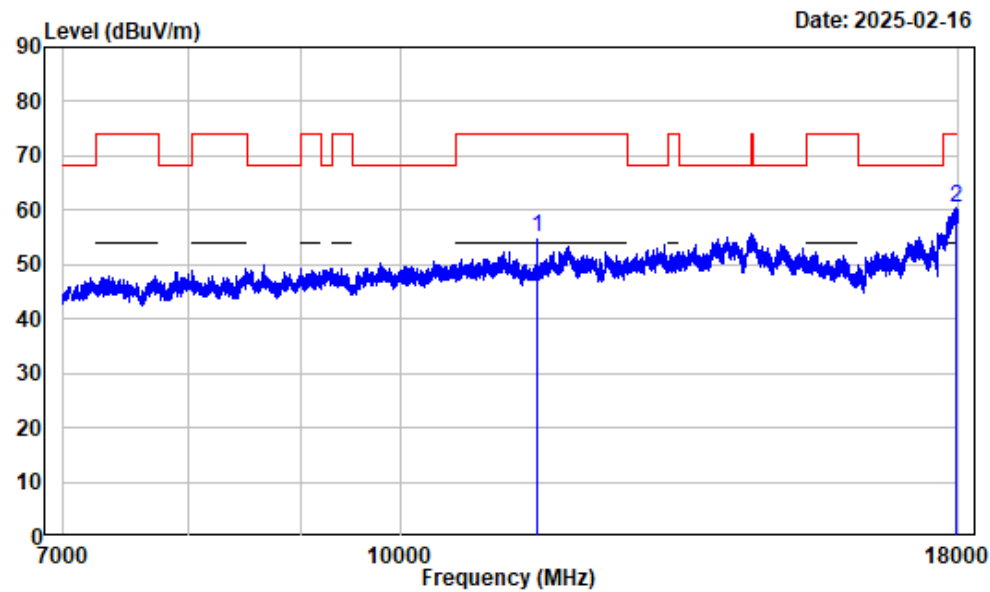
1-7GHz\_Vertical\_802.11ac-VHT80\_5775MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6474.184	-2.91	55.57	52.66	68.20	-15.54	Peak

7-18GHz\_Horizontal\_Peak\_802.11ac-VHT80\_5775MHz

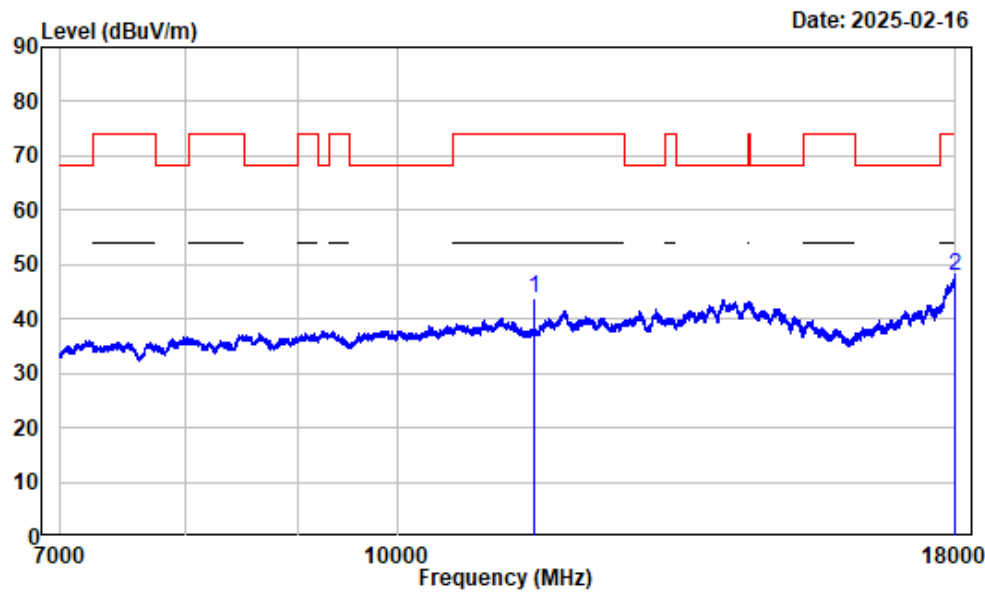


Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz			dBuV	dBuV/m	dBuV/m	Limit	
1	11550.000	3.37	51.67	55.04	74.00	-18.96	Peak
2	17960.120	13.00	47.46	60.46	74.00	-13.54	Peak



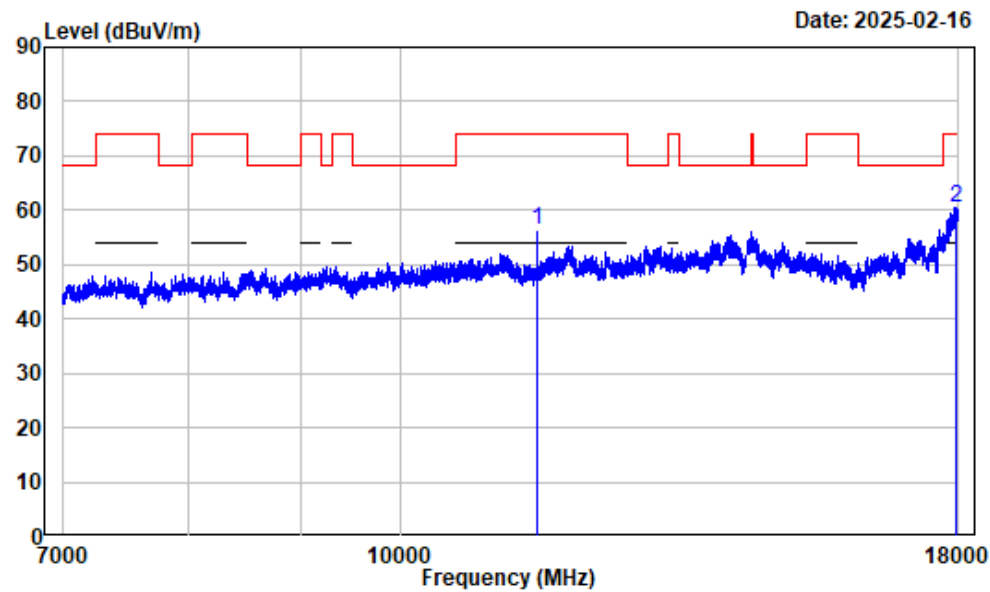
7-18GHz\_Horizontal\_Average\_802.11ac-VHT80\_5775MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11550.000	3.37	40.45	43.82	54.00	-10.18	Average
2 17991.750	13.16	34.60	47.76	54.00	-6.24	Average

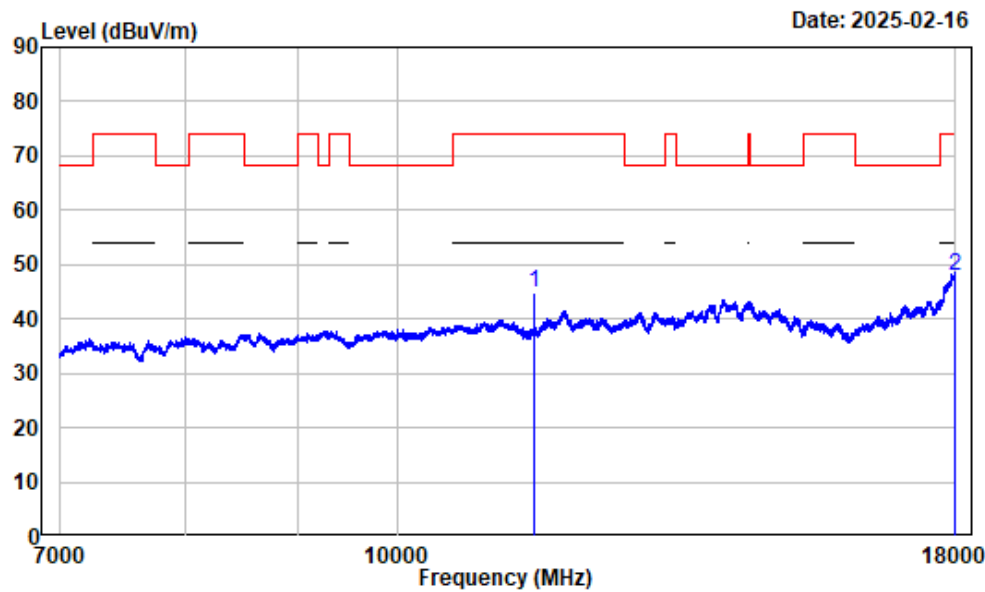
7-18GHz\_Vertical\_Peak\_802.11ac-VHT80\_5775MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	11550.000	3.37	52.96	56.33	74.00	-17.67	Peak
2	17949.120	12.95	47.62	60.57	74.00	-13.43	Peak

7-18GHz\_Vertical\_Average\_802.11ac-VHT80\_5775MHz

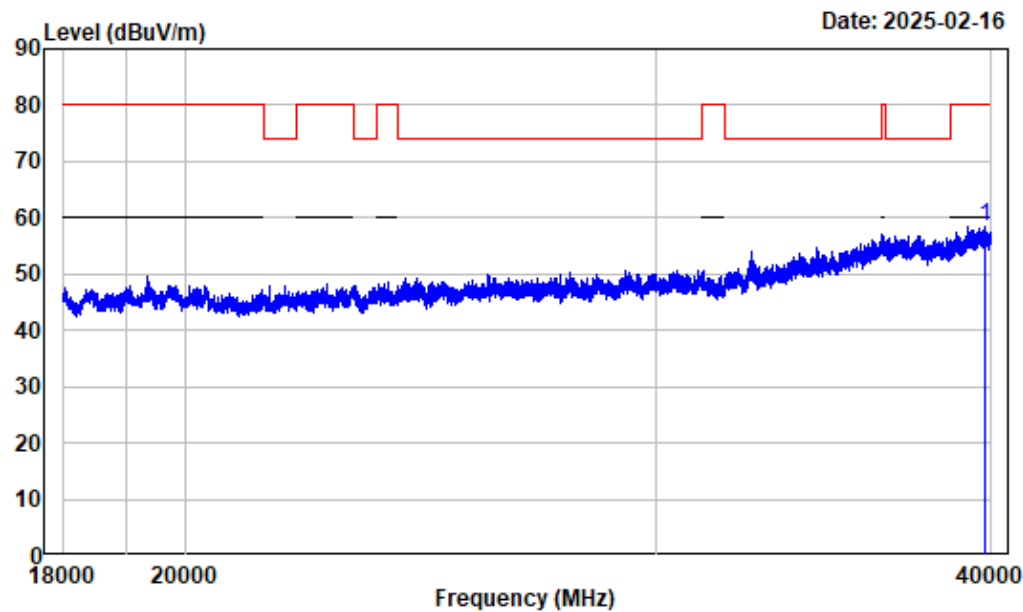


Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Average reading:RBW:1MHz VBW:5kHz Detector:Peak  
Note : 5GWiFi-Band4-AC80-5775

		Read		Limit	Over	Remark
Freq	Factor	Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 11550.000	3.37	41.29	44.66	54.00	-9.34	Average
2 17984.870	13.12	34.86	47.98	54.00	-6.02	Average

18-40GHz (Only with worst case margin mode plot):

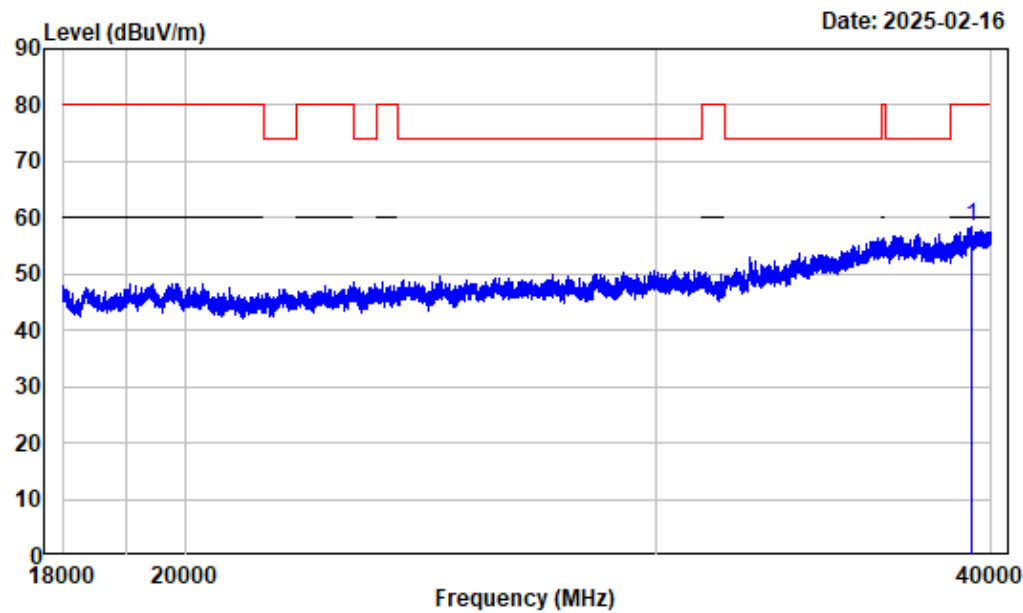
18-40GHz\_Horizontal\_802.11a\_5745MHz



Condition : Horizontal  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39766.220	22.54	35.81	58.35	80.00	-21.65	Peak

18-40GHz\_Vertical\_802.11a\_5745MHz



Condition : Vertical  
Project No. : 2501P28089E-RF  
Tester : Zenos Qiao  
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi-Band4-A-5745

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39323.410	22.66	35.86	58.52	80.00	-21.48	Peak

**RF Conducted data****Emission Bandwidth****Test Information:**

<b>Sample No.:</b>	2Y1M-18	<b>Test Date:</b>	2025/02/17~2025/03/06
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Cheeb Huang	<b>Test Result:</b>	Pass

**Environmental Conditions:**

<b>Temperature:</b> (°C)	24.5-25.7	<b>Relative Humidity:</b> (%)	44-57	<b>ATM Pressure:</b> (kPa)	100.8-101.5
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**Test Data:****26dB Emission Bandwidth****5150-5250MHz**

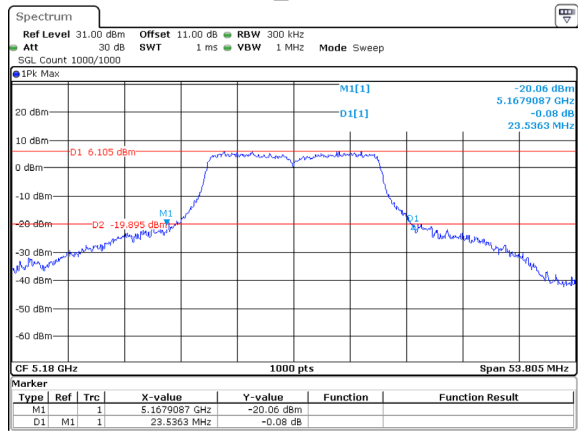
Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5180	23.536
	5200	23.267
	5240	24.290
802.11ac20	5180	23.916
	5200	23.957
	5240	22.403
802.11ac40	5190	44.044
	5230	44.244
802.11ac80	5210	<b>83.884</b>

**6dB Emission Bandwidth****5725-5850MHz**

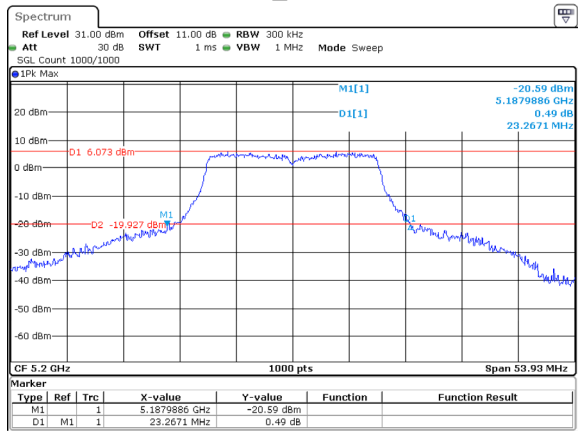
Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5745	16.466
	5785	16.416
	5825	16.416
802.11ac20	5745	17.668
	5785	17.417
	5825	17.317
802.11ac40	5755	35.836
	5795	35.636
802.11ac80	5775	<b>75.475</b>

5150-5250MHz

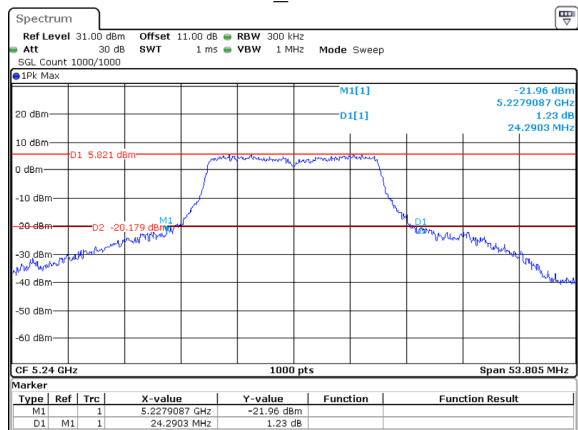
802.11a\_5180MHz



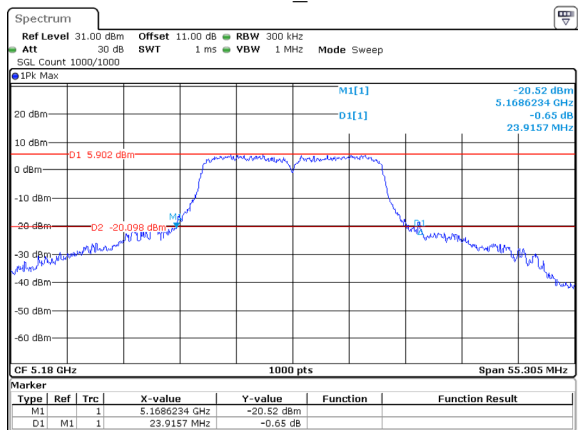
802.11a\_5200MHz



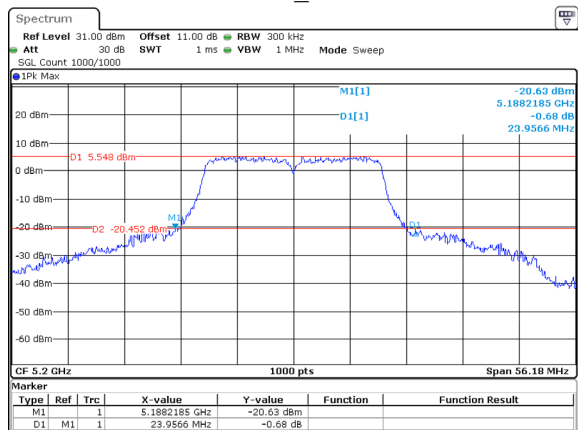
802.11a\_5240MHz



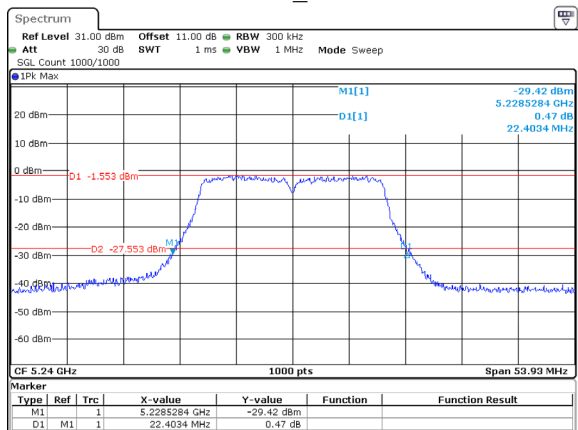
802.11ac20\_5180MHz



802.11ac20\_5200MHz

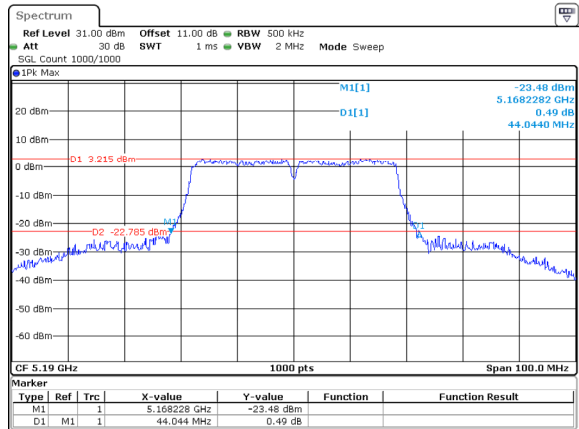


802.11ac20\_5240MHz



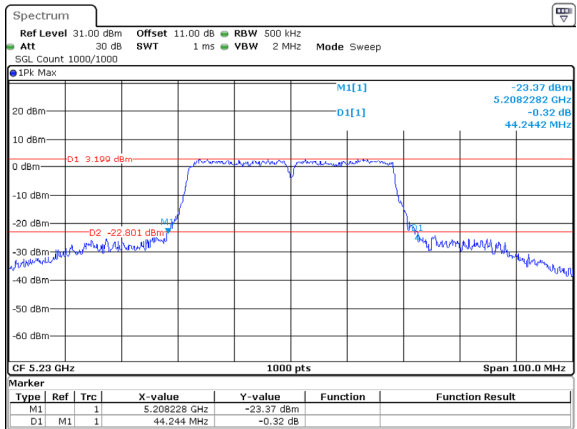


802.11ac40\_5190MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:03:46

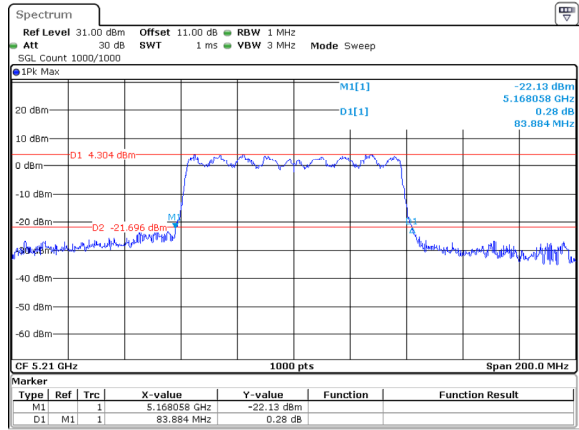
802.11ac40\_5230MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:05:06

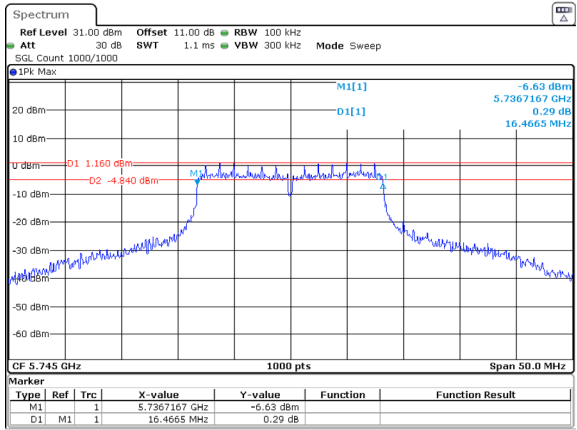
5725-5850MHz

802.11ac80\_5210MHz



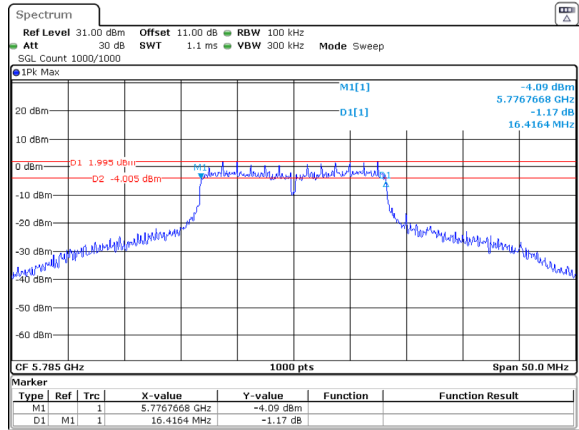
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:07:13

802.11a\_5745MHz



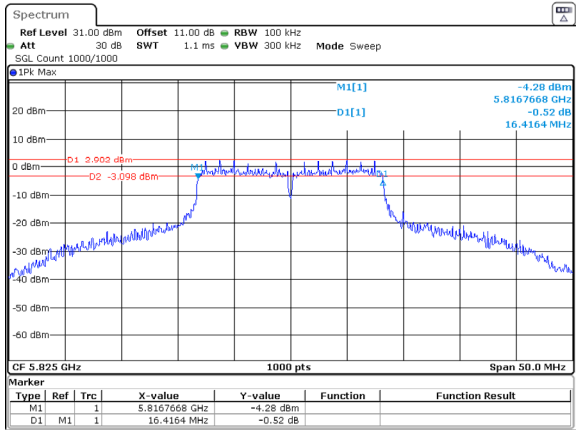
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:32:48

802.11a\_5785MHz



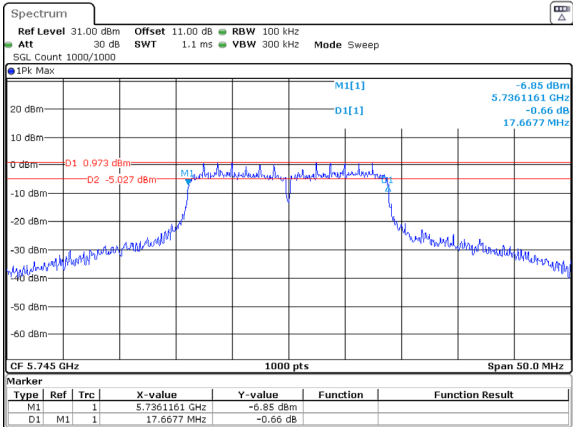
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:34:02

802.11a\_5825MHz



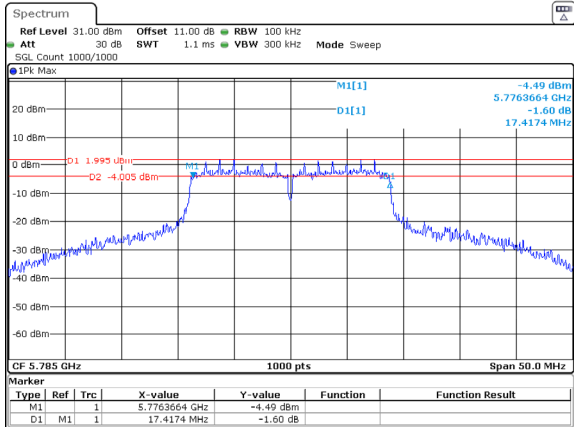
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:34:55

802.11ac20\_5745MHz



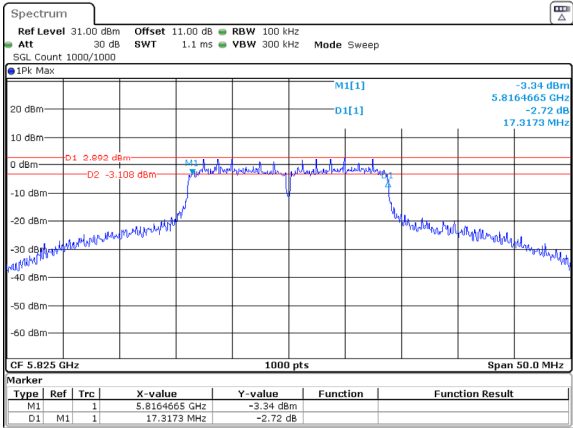
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Date: 6.MAR.2025 19:36:54

802.11ac20\_5785MHz



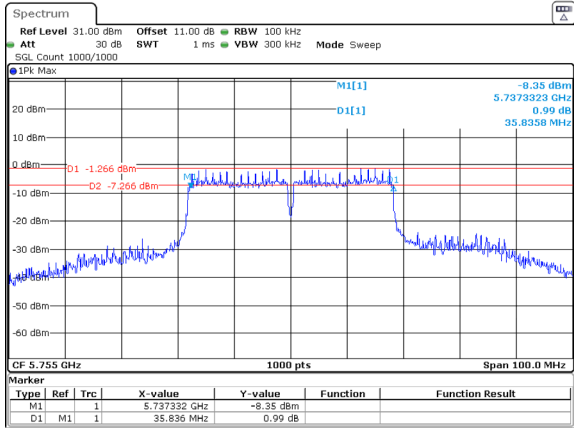
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:38:27

802.11ac20\_5825MHz



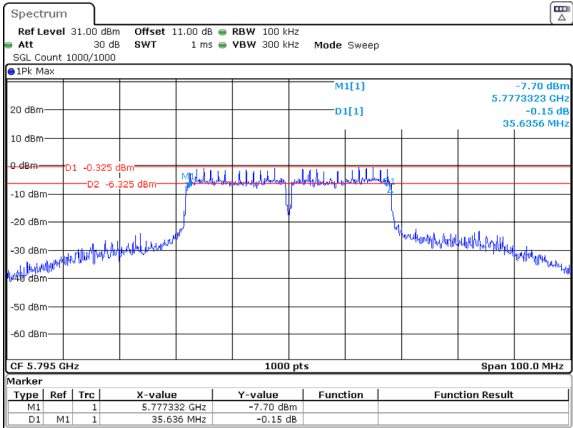
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:39:20

802.11ac40\_5755MHz



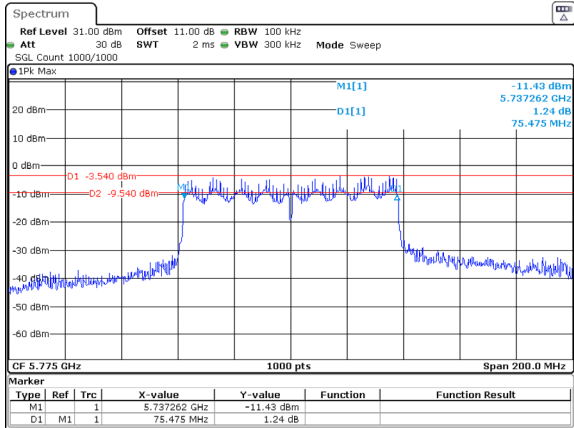
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:40:53

802.11ac40\_5795MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:41:55

802.11ac80\_5775MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:43:28

**99% Occupied Bandwidth****Test Information:**

<b>Sample No.:</b>	2Y1M-18	<b>Test Date:</b>	2025/02/17
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Cheeb Huang	<b>Test Result:</b>	N/A

**Environmental Conditions:**

<b>Temperature:</b> (°C)	24.5-24.9	<b>Relative Humidity:</b> (%)	44-47	<b>ATM Pressure:</b> (kPa)	101.3-101.5
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**Test Data:****5150-5250MHz**

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5180	16.700
	5200	16.700
	5240	16.750
802.11ac20	5180	17.800
	5200	17.850
	5240	17.800
802.11ac40	5190	36.800
	5230	36.800
802.11ac80	5210	<b>76.200</b>

**Note:**

The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

**5725-5850MHz**

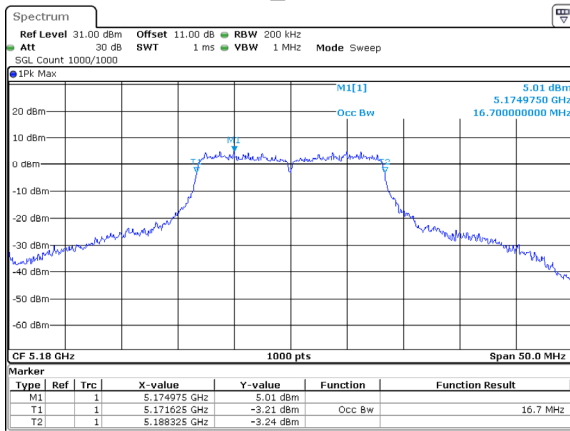
Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5745	17.200
	5785	18.150
	5825	18.950
802.11ac20	5745	18
	5785	18.500
	5825	19.400
802.11ac40	5755	37.400
	5795	39.500
802.11ac80	5775	<b>76.600</b>

**Note:**

The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

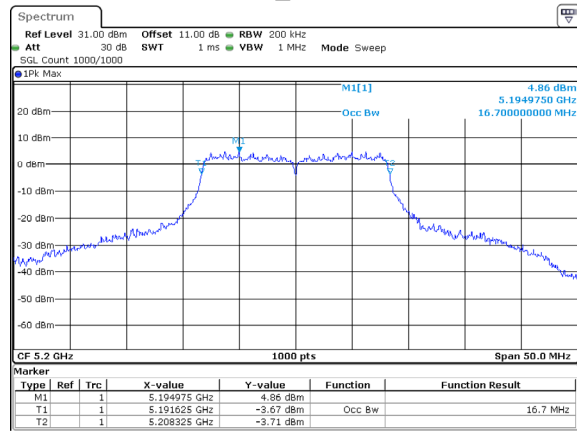
## 5150-5250MHz

## 802.11a\_5180MHz



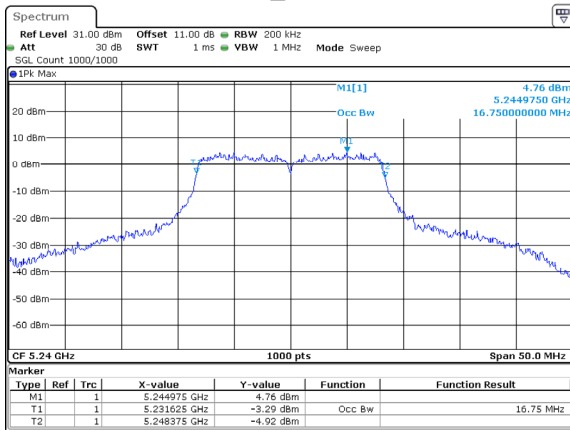
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:38:36

## 802.11a\_5200MHz



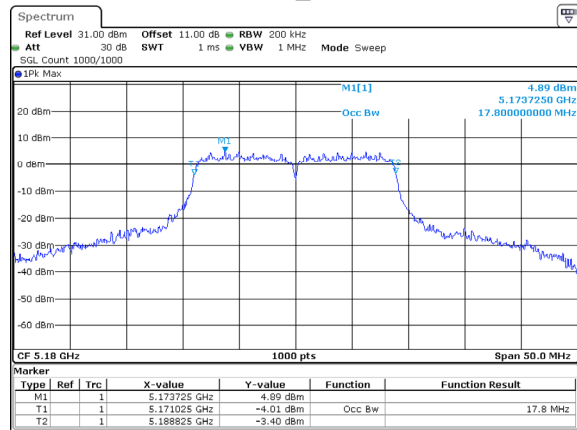
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:41:18

## 802.11a\_5240MHz



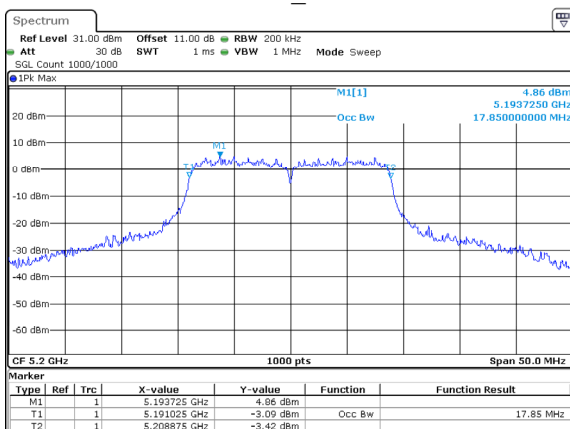
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:44:09

## 802.11ac20\_5180MHz



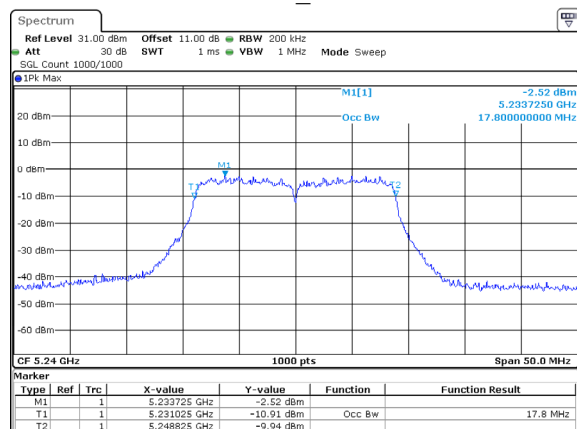
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Date: 17.FEB.2025 13:46:41

## 802.11ac20\_5200MHz



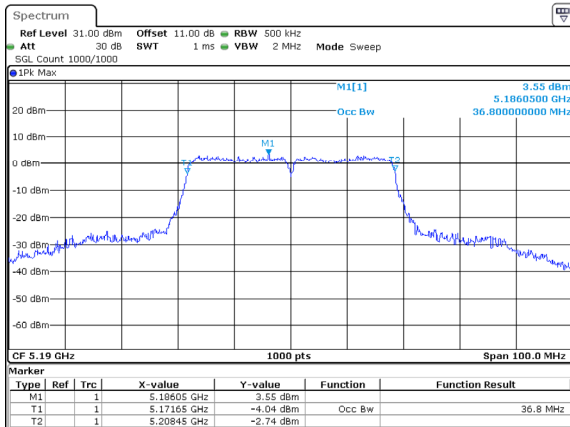
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:49:38

## 802.11ac20\_5240MHz



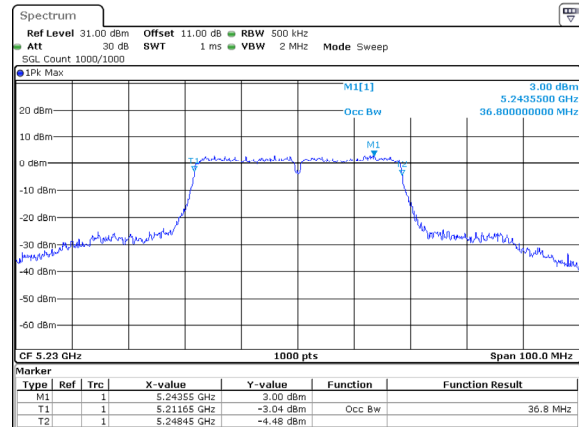
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:52:24

## 802.11ac40\_5190MHz



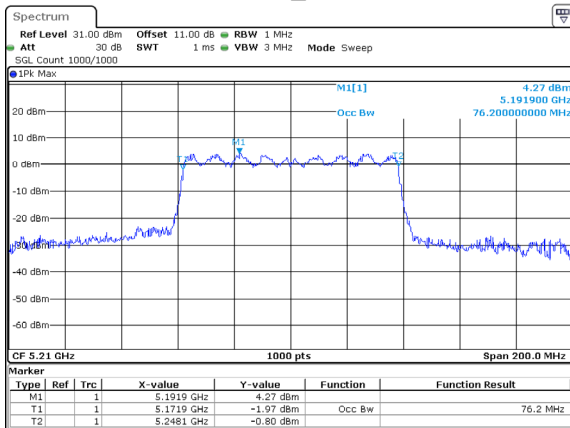
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:04:10

## 802.11ac40\_5230MHz



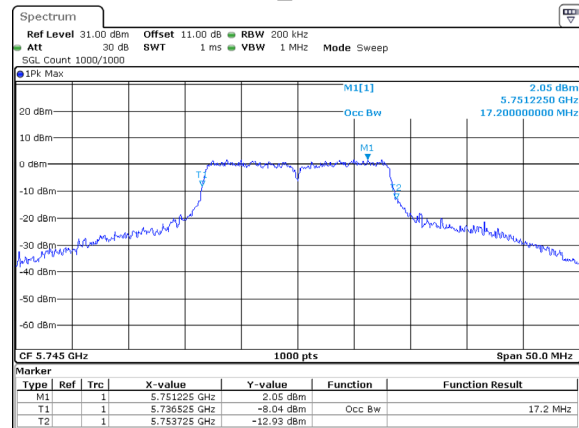
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:05:40

## 802.11ac80\_5210MHz



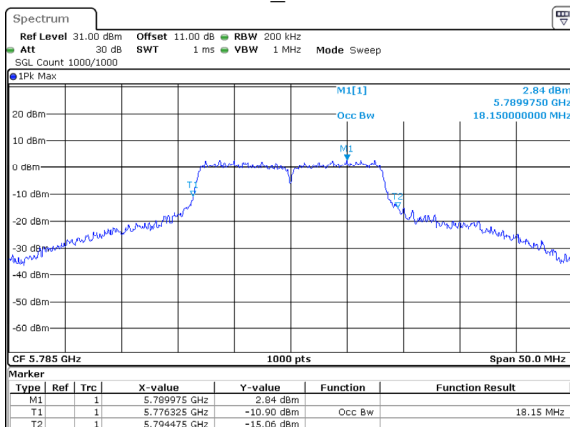
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:07:41

## 802.11a\_5745MHz



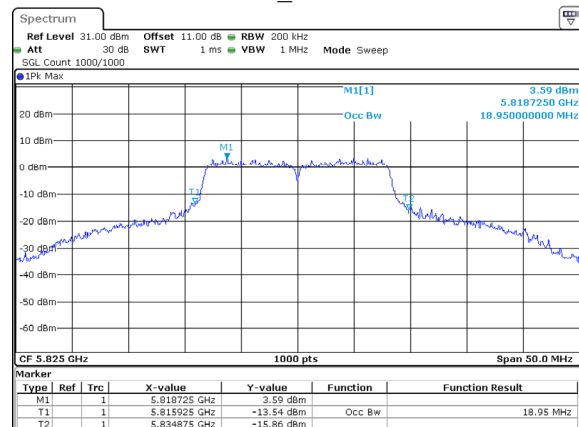
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Date: 17.FEB.2025 14:13:16

## 802.11a\_5785MHz



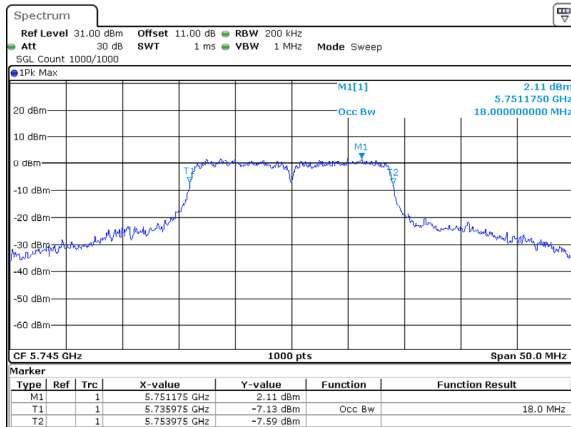
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:35:53

## 802.11a\_5825MHz



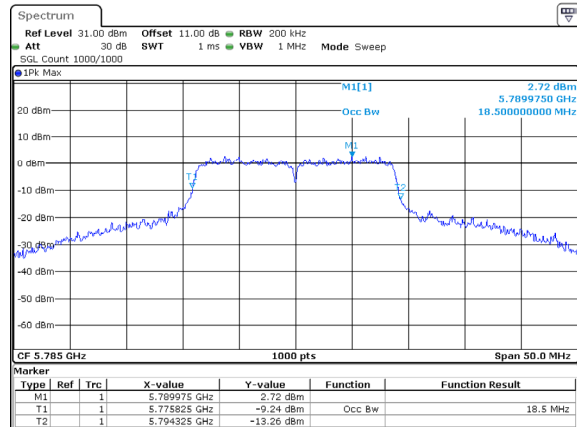
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:39:33

## 802.11ac20\_5745MHz



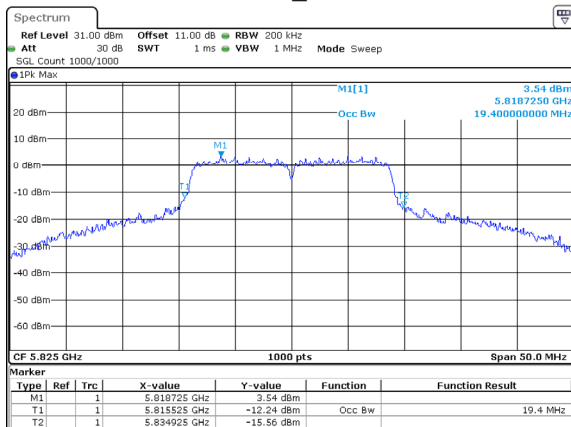
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Date: 17.FEB.2025 14:47:15

## 802.11ac20\_5785MHz



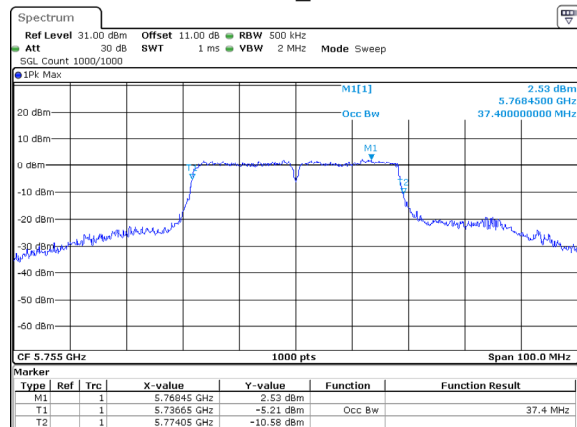
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:51:08

## 802.11ac20\_5825MHz



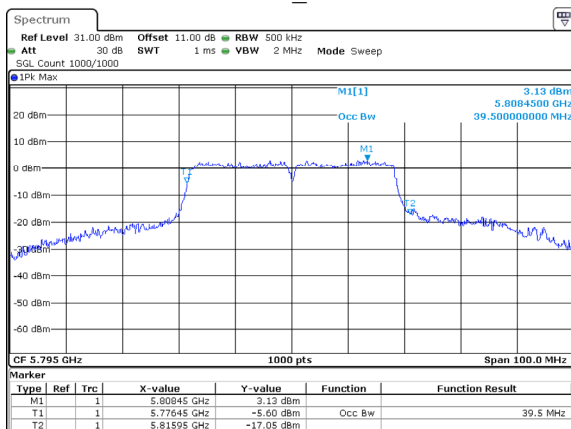
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:53:28

## 802.11ac40\_5755MHz



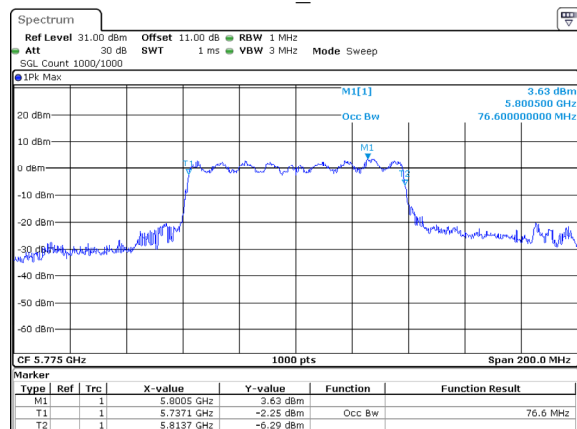
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:59:43

## 802.11ac40\_5795MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 15:01:19

## 802.11ac80\_5775MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 15:11:05

**Maximum Conducted Output Power****Test Information:**

<b>Sample No.:</b>	2Y1M-18	<b>Test Date:</b>	2025/02/17
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Cheeb Huang	<b>Test Result:</b>	Pass

**Environmental Conditions:**

<b>Temperature: (°C)</b>	24.5-24.9	<b>Relative Humidity: (%)</b>	44-47	<b>ATM Pressure: (kPa)</b>	101.3-101.5
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**Test Data:****5150-5250MHz**

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5180	15.00	24	Pass
	5200	14.98	24	Pass
	5240	14.36	24	Pass
802.11ac20	5180	15.16	24	Pass
	5200	<b>15.22</b>	24	Pass
	5240	15.11	24	Pass
802.11ac40	5190	13.62	24	Pass
	5230	13.17	24	Pass
802.11ac80	5210	12.15	24	Pass

**5725-5850MHz**

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5745	12.32	30	Pass
	5785	13.08	30	Pass
	5825	13.60	30	Pass
802.11ac20	5745	12.35	30	Pass
	5785	13.53	30	Pass
	5825	<b>13.82</b>	30	Pass
802.11ac40	5755	12.38	30	Pass
	5795	12.94	30	Pass
802.11ac80	5775	11.60	30	Pass

**Note:****The EUT is a client device.**

Power Spectral Density

Test Information:

Sample No.:	2Y1M-18	Test Date:	2025/02/17~2025/03/06
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-25.7	Relative Humidity: (%)	44-57	ATM Pressure: (kPa)	100.8-101.5
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**Test Data:****5150-5250MHz**

Mode	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor(dB)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11a	5180	1.78	2.41	4.19	11	Pass
	5200	1.80	2.41	4.21	11	Pass
	5240	1.81	2.41	<b>4.22</b>	11	Pass
802.11ac20	5180	1.43	2.53	3.96	11	Pass
	5200	1.34	2.53	3.87	11	Pass
	5240	1.26	2.53	3.79	11	Pass
802.11ac40	5190	-4.12	4.13	0.01	11	Pass
	5230	-5.16	4.13	-1.03	11	Pass
802.11ac80	5210	-8.02	6.22	-1.80	11	Pass

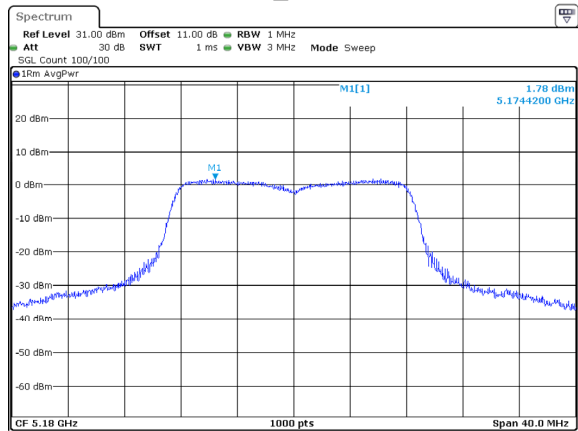
**5725-5850MHz**

Mode	Test Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor(dB)	Result (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
802.11a	5745	-3.53	2.41	-1.12	30	Pass
	5785	-2.40	2.41	0.01	30	Pass
	5825	-2.12	2.41	<b>0.29</b>	30	Pass
802.11ac20	5745	-3.97	2.53	-1.44	30	Pass
	5785	-3.12	2.53	-0.59	30	Pass
	5825	-2.56	2.53	-0.03	30	Pass
802.11ac40	5755	-8.73	4.13	-4.60	30	Pass
	5795	-7.74	4.13	-3.61	30	Pass
802.11ac80	5775	-12.38	6.22	-6.16	30	Pass

**Result = Reading + Duty Cycle Factor**

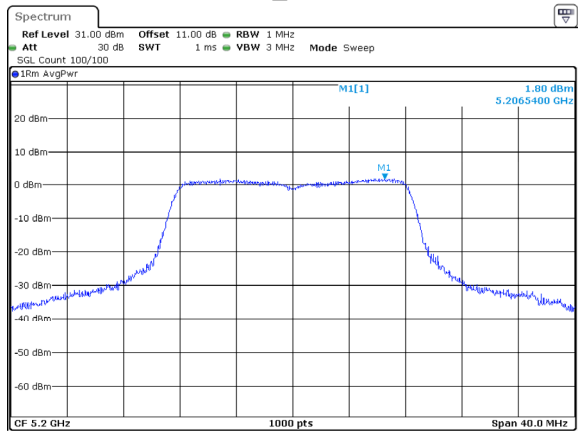
5150-5250MHz

802.11a\_5180MHz



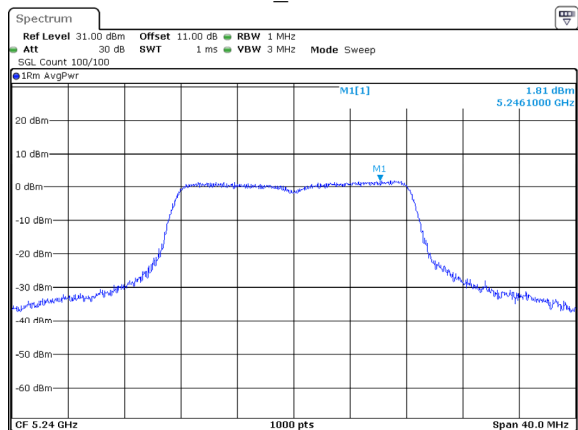
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:38:53

802.11a\_5200MHz



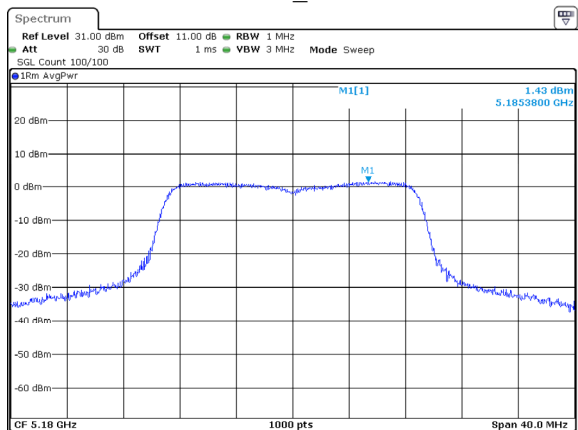
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:41:34

802.11a\_5240MHz



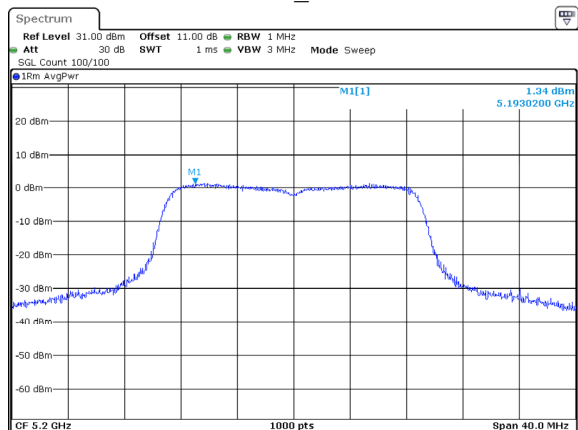
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:44:24

802.11ac20\_5180MHz



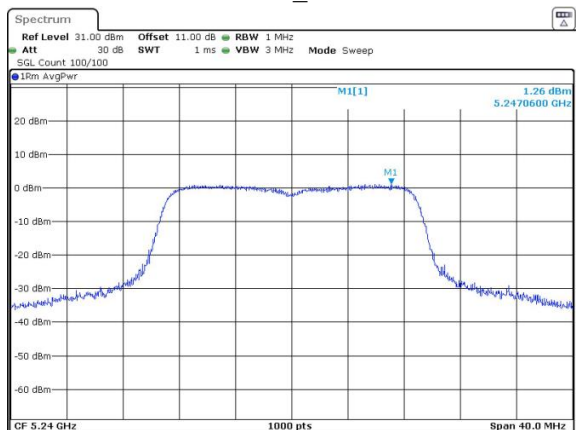
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Date: 17.FEB.2025 13:46:17

802.11ac20\_5200MHz



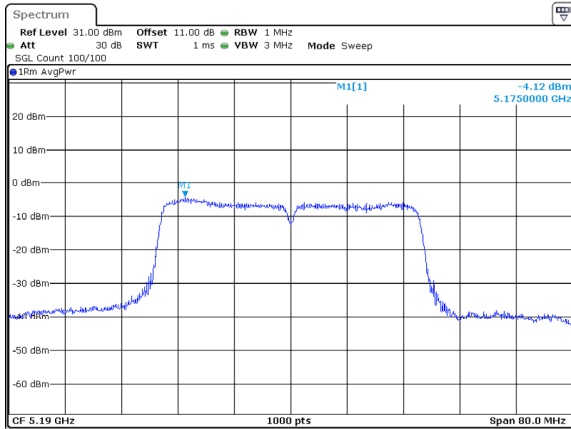
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 13:49:54

802.11ac20\_5240MHz



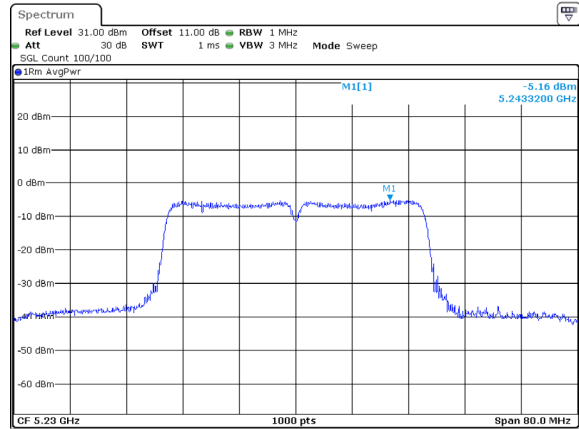
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 6.MAR.2025 19:56:30

## 802.11ac40\_5190MHz



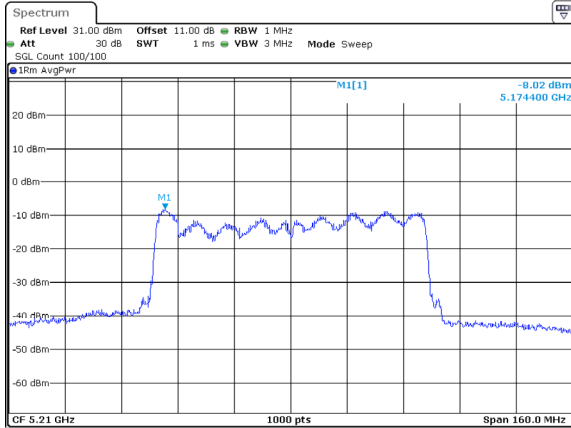
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:04:27

## 802.11ac40\_5230MHz



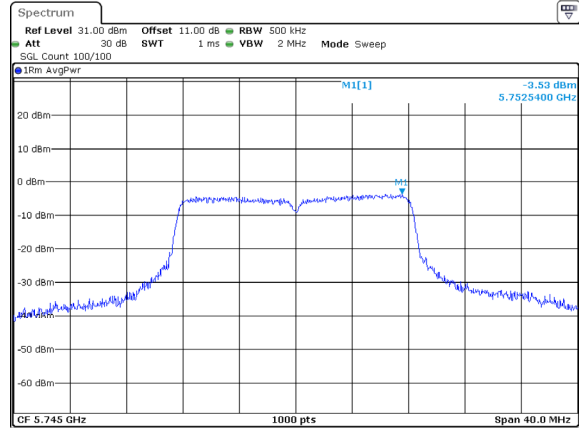
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:05:57

## 802.11ac80\_5210MHz



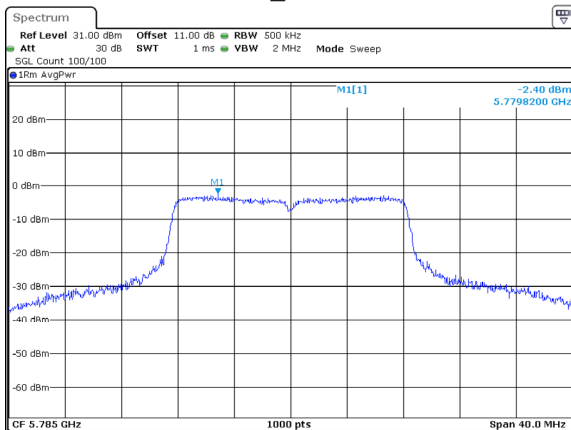
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:07:58

## 802.11a\_5745MHz



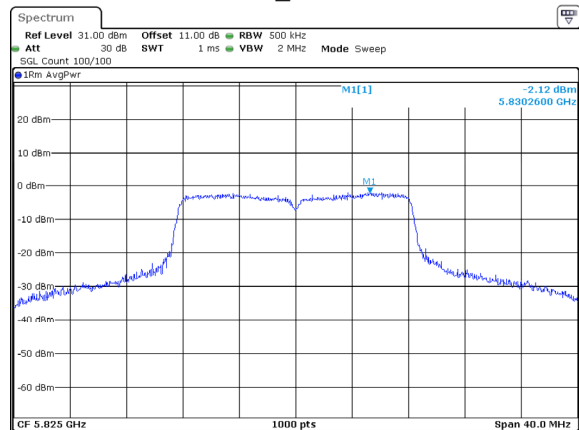
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:33:32

## 802.11a\_5785MHz



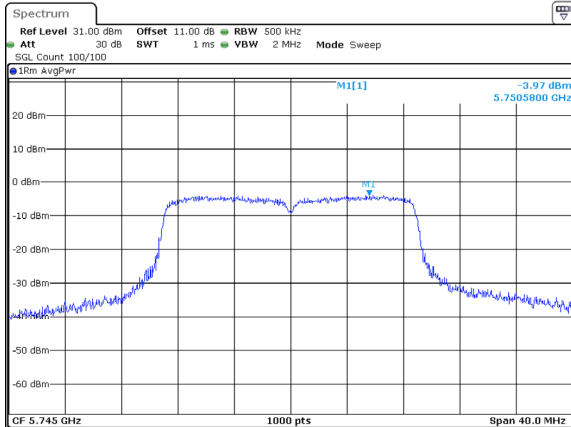
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:36:09

## 802.11a\_5825MHz



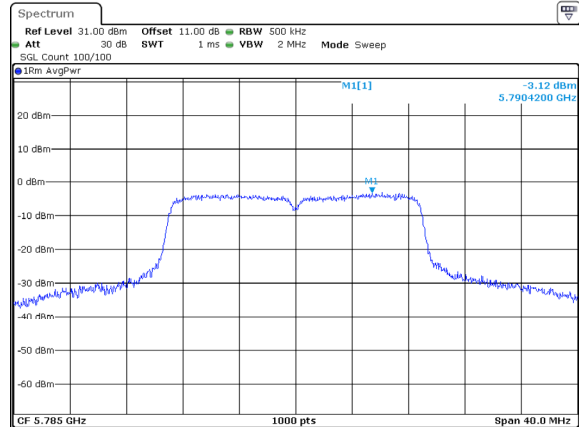
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Date: 17.FEB.2025 14:39:49

802.11ac20\_5745MHz



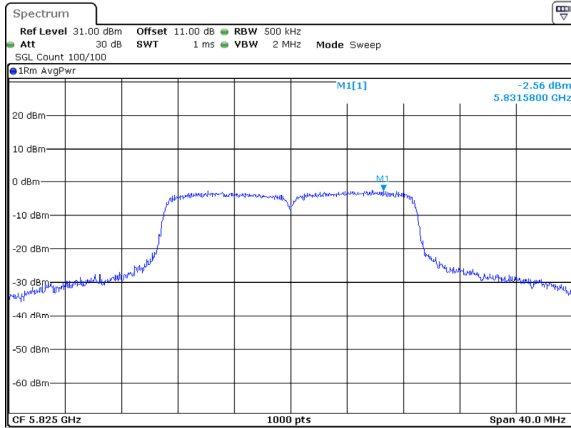
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:47:31

802.11ac20\_5785MHz



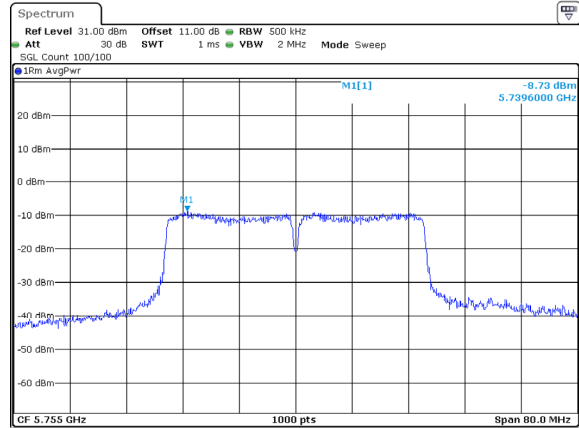
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:51:24

802.11ac20\_5825MHz



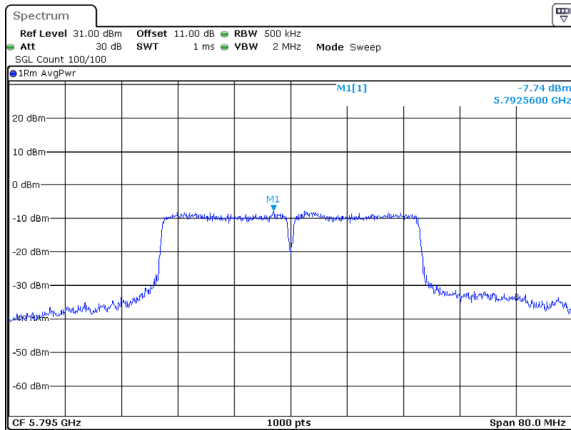
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:53:44

802.11ac40\_5755MHz



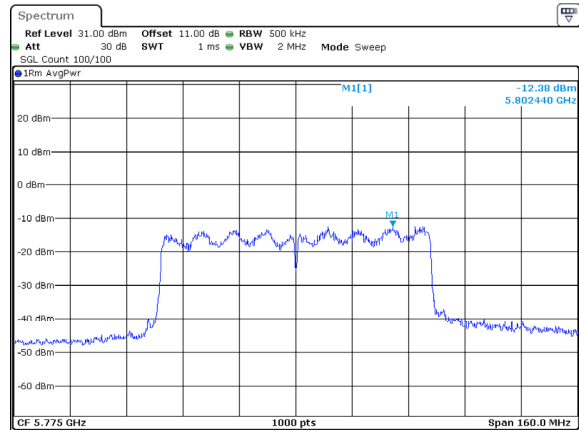
ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 14:59:59

802.11ac40\_5795MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 15:01:36

802.11ac80\_5775MHz



ProjectNo.:2501P28089E-RF Tester:Cheeb Huang  
Date: 17.FEB.2025 15:11:23

**Duty Cycle****Test Information:**

<b>Sample No.:</b>	2Y1M-18	<b>Test Date:</b>	2025/02/19
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Cheeb Huang	<b>Test Result:</b>	N/A

**Environmental Conditions:**

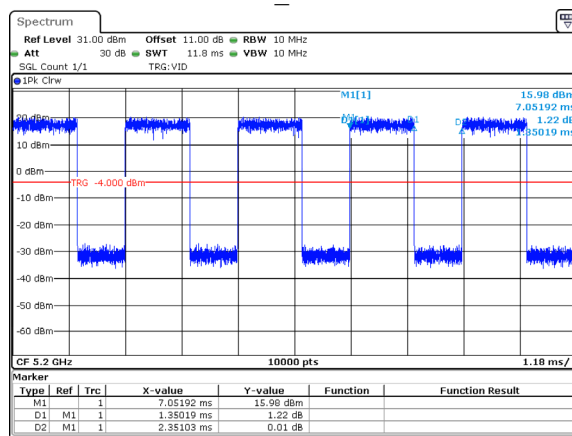
<b>Temperature:</b> (°C)	24.5-24.9	<b>Relative Humidity:</b> (%)	44-47	<b>ATM Pressure:</b> (kPa)	101.3-101.5
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## Test Data:

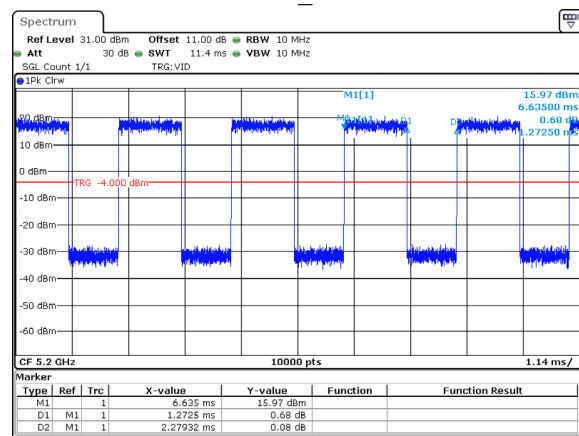
Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
802.11a	5200	1.350	2.351	57.42	2.41	741	1
802.11ac20	5200	1.273	2.279	55.86	2.53	786	1
802.11ac40	5190	0.630	1.630	38.65	4.13	1587	2
802.11ac80	5210	0.313	1.311	23.87	6.22	3195	5

$$\text{Duty Cycle} = \text{Ton}/(\text{Ton}+\text{Toff}) * 100\%$$

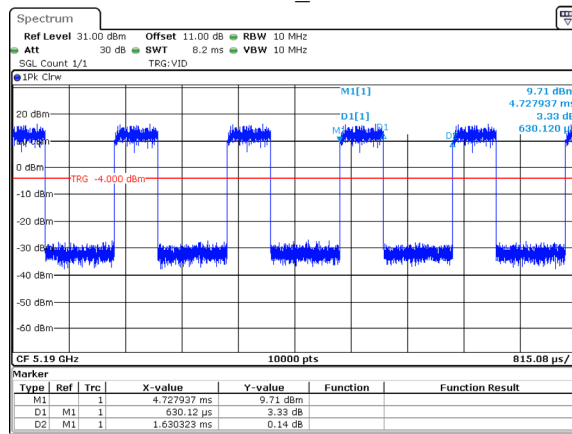
802.11a\_5200MHz



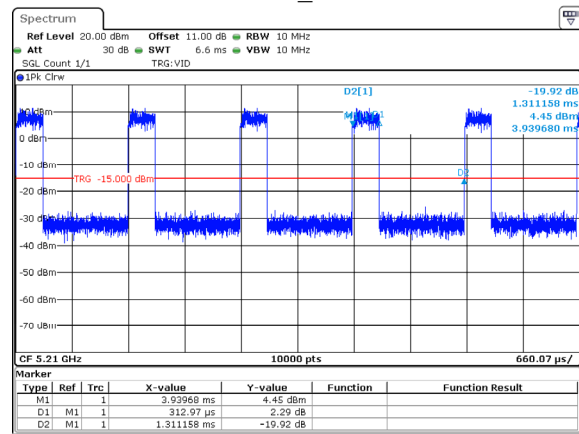
802.11ac20\_5200MHz



802.11ac40\_5190MHz



802.11ac80\_5210MHz





## RF EXPOSURE EVALUATION

### MPE-Based Exemption

#### Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$ .
1.34-30	$3,450 R^2/f^2$ .
30-300	$3.83 R^2$ .
300-1,500	$0.0128 R^2 f$ .
1,500-100,000	$19.2 R^2$ .

R is the minimum separation distance in meters

f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

**Result**

Mode	Frequency (MHz)	Tune up conducted power <sup>#</sup> (dBm)	Antenna Gain <sup>#</sup>		ERP		Evaluation Distance (m)	ERP Limit (W)
			(dBi)	(dBd)	(dBm)	(W)		
BT	2402-2480	7.5	1.99	-0.16	7.34	0.005	0.2	0.768
BLE	2402-2480	3.5	1.99	-0.16	3.34	0.002	0.2	0.768
2.4G Wi-Fi	2412-2462	22.0	1.99	-0.16	21.84	0.153	0.2	0.768
5G Wi-Fi	5150-5250	15.5	3.52	1.37	16.87	0.049	0.2	0.768
	5725-5850	14.0	3.52	1.37	15.37	0.034	0.2	0.768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.  
 2. The BT, 2.4G Wi-Fi and 5G Wi-Fi cannot transmit at same time.  
 3. 0dBd=2.15dBi

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 2501P28089E-RF External photo and 2501P28089E-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2501P28089E-RFB Test Setup photo.

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