

# TEST REPORT

Applicant Name: Shenzhen Topwise Communication Co.,Ltd  
Address: Floor5,Shengtang Mansion East Block,Tairan 9thRd, Futian District, Shenzhen, Guangdong, P.R.China  
Report Number: 2501T13375E-RF-00B  
FCC ID: 2BBKD-PR800W

**Test Standard (s)**

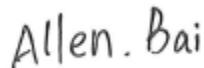
FCC PART 15.407

**Sample Description**

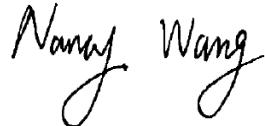
Product Type: Mini Thermal Printer  
Model No.: PR800  
Multiple Model(s) No.: N/A  
Trade Mark: TOPWISE  
Date Received: 2025/07/24  
Issue Date: 2025/08/11

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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**Approved By:**

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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	2501T13375E-RF-00B	Original Report	2025/08/11

## GENERAL INFORMATION

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

<b>Frequency Range</b>	5150-5250MHz; 5725-5850MHz
<b>Mode</b>	802.11a/n20/n40
<b>Maximum Conducted Average Output Power</b>	5150-5250MHz: 15.01dBm; 5725-5850MHz: 13.00dBm
<b>Modulation Technique</b>	OFDM
<b>Antenna Specification<sup>#</sup></b>	5150-5250MHz: 4.07dBi ; 5725-5850MHz: 2.07dBi (provided by the applicant)
<b>Voltage Range</b>	DC 24V from adapter
<b>Sample serial number</b>	37CC-6 for Conducted and Radiated Emissions Test 37CC-8 for RF Conducted Test (Assigned by BACL, Shenzhen)
<b>Sample/EUT Status</b>	Good condition
<b>Adapter Information</b>	Model: ADP-60D24 Input: 100-240V~50/60Hz 1.5A MAX Output: +24V, 2.5A

### 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 C63.10-2020, 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, 6 channels are provided to testing:

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

For 802.11a/n20 mode: channel 36, 40, 48 were tested;

For 802.11n40 mode: channel 38, 46 were tested;

For 5725-5850MHz Band, 7 channels are provided to testing:

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

For 802.11a/n20 mode: channel 149, 157, 165 were tested;

For 802.11n40 mode: channel 151, 159 were tested;

### EUT Exercise Software

Exercise Software <sup>#</sup>	SSCOM5.13.1			
<b>5150-5250 MHz Band</b>				
Mode	Test Channels	Test Frequency (MHz)	Data rate	Power Level <sup>#</sup>
802.11a	Low	5180	6Mbps	15
	Middle	5200	6Mbps	15
	High	5240	6Mbps	15
802.11n-HT20	Low	5180	MCS0	15
	Middle	5200	MCS0	15
	High	5240	MCS0	15
802.11n-HT40	Low	5190	MCS0	9
	High	5230	MCS0	9

<b>5725-5850 MHz Band</b>				
<b>Mode</b>	<b>Test Channels</b>	<b>Test Frequency (MHz)</b>	<b>Data rate</b>	<b>Power Level<sup>#</sup></b>
802.11a	Low	5745	6Mbps	15
	Middle	5785	6Mbps	15
	High	5825	6Mbps	15
802.11n-HT20	Low	5745	MCS0	15
	Middle	5785	MCS0	15
	High	5825	MCS0	15
802.11n-HT40	Low	5755	MCS0	15
	High	5795	MCS0	15

Note: The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the power and PSD across all data rates bandwidths, and modulations.

### Special Accessories

No special accessory.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

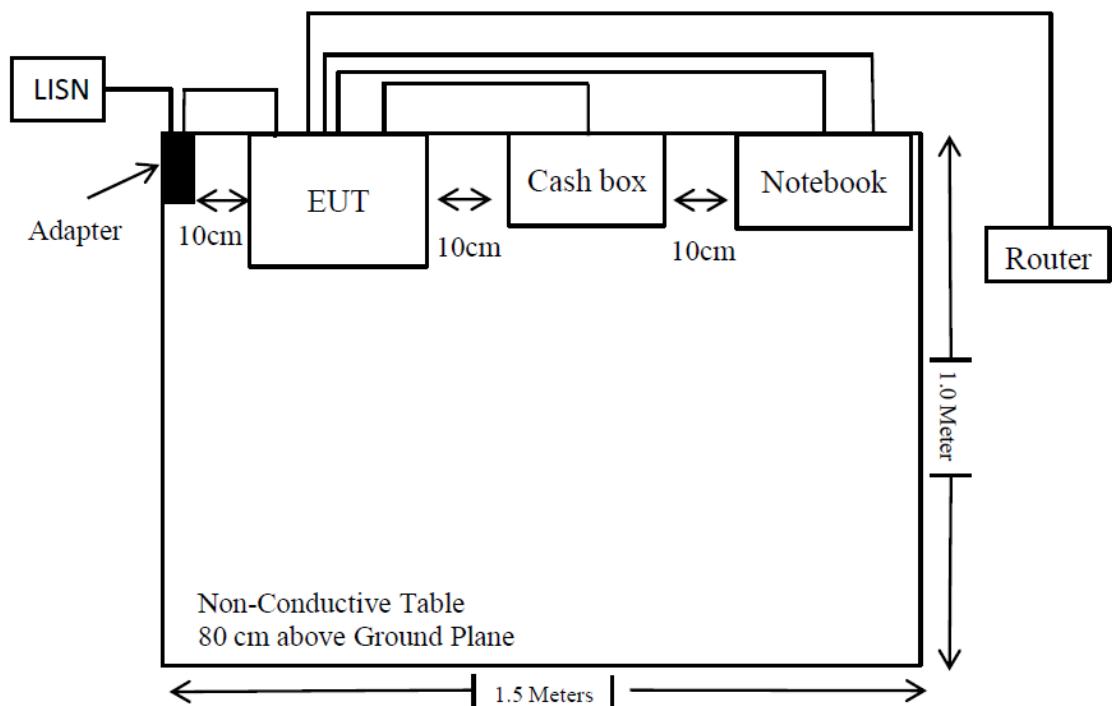
<b>Manufacturer</b>	<b>Description</b>	<b>Model</b>	<b>Serial Number</b>
OUPU	Receptacle	PDU-OP1606K	6971041358020
DELL	Notebook	Latitude 7280	B0CB5M2
Radix	Cash box	Unknown	Unknown
HIKVISION	Router	DS-3WR03	10021642429

### External I/O Cable

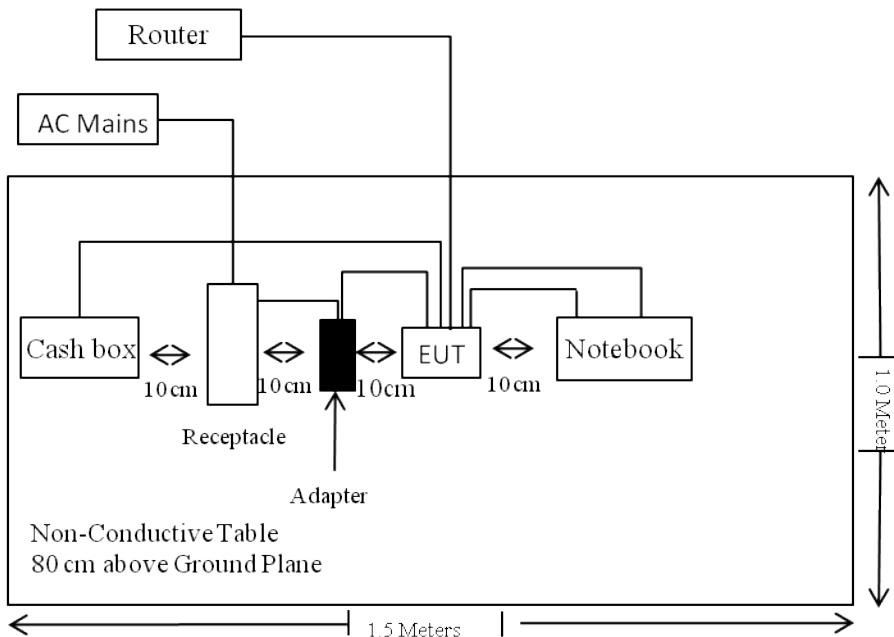
<b>Cable Description</b>	<b>Length (m)</b>	<b>From Port</b>	<b>To</b>
Unshielded Un-detachable AC cable	1.2	Receptacle	AC Mains
Unshielded Detachable AC cable	1.2	LISN/Receptacle	Adapter
Unshielded Un-detachable DC cable	1.2	EUT	Adapter
Unshielded Detachable VGA cable	1.5	EUT	Notebook
Unshielded Detachable USB cable	1.2	EUT	Notebook
Unshielded Detachable RJ12 cable	0.5	EUT	Cash box
Unshielded Detachable RJ45 cable	3.0	EUT	Router

### Block Diagram of Test Setup

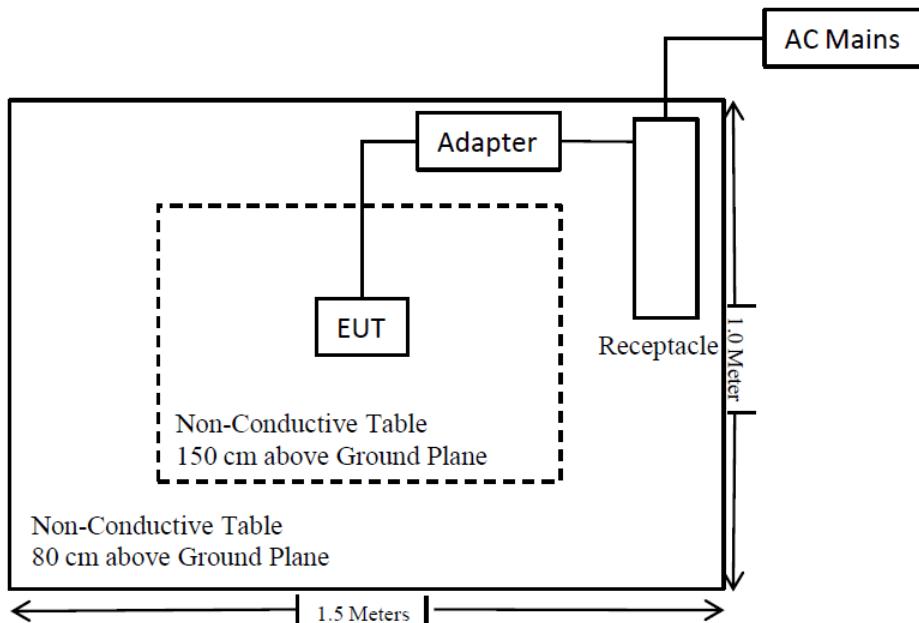
For Conducted Emissions:



For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



## SUMMARY OF TEST RESULTS

Test Rules	Description of Test	Result
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207(a)	Conducted Emissions	Compliant
FCC §15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
FCC §15.407(a) (e)	Emission Bandwidth & 99% Occupied Bandwidth	Compliant
FCC §15.407(a)	Conducted Transmitter Output Power	Compliant
FCC §15.407 (a)	Power Spectral Density	Compliant
FCC §15.407 (h)	Transmit Power Control (TPC)	Not Applicable
FCC §15.407 (h)	Dynamic Frequency Selection (DFS)	Not Applicable
C63.10 §11.6	Duty Cycle	/
FCC §1.1307 (b) & §2.1091	MPE-Based Exemption	Compliant

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

## 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	LISN	ENV216	101613	2024/12/04	2025/12/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/04/29	2026/04/28
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/04/29	2026/04/28
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	2025/04/29	2026/04/28
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	XH500C	J-10M-A	2025/04/29	2026/04/28
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2025/03/26	2026/03/25
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	2025/04/29	2026/04/28
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
<b>RF Conducted Test</b>					
Rohde&Schwarz	Spectrum Analyzer	FSV40-N	102259	2024/12/04	2025/12/03
ANRITSU	Microwave peak power sensor	MA24418A	12622	2025/04/29	2026/04/28
Unknown	10dB Attenuator	Unknown	F-03-EM190	2025/06/26	2026/06/25

**\* 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).

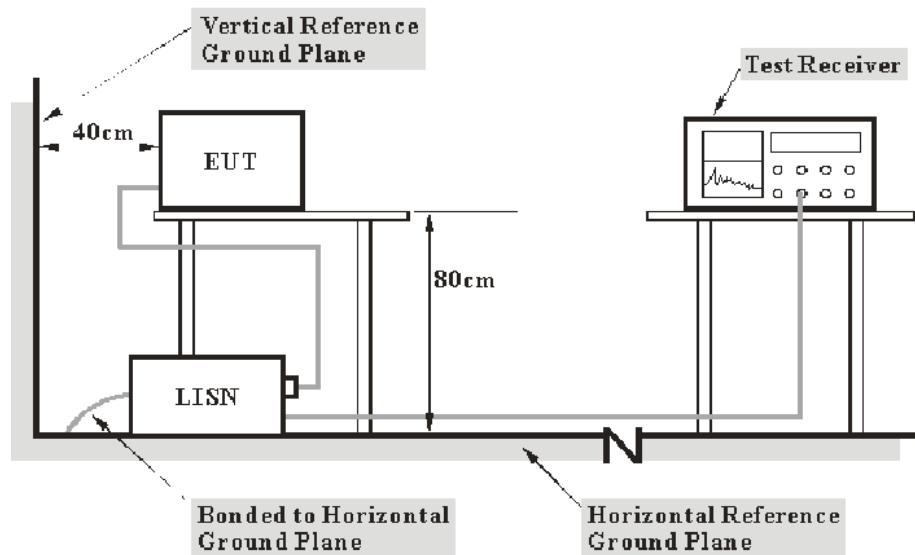
## REQUIREMENTS AND TEST PROCEDURES

### 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 C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

#### EMI Test Receiver Setup

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

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

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

#### Test Procedure

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:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

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;

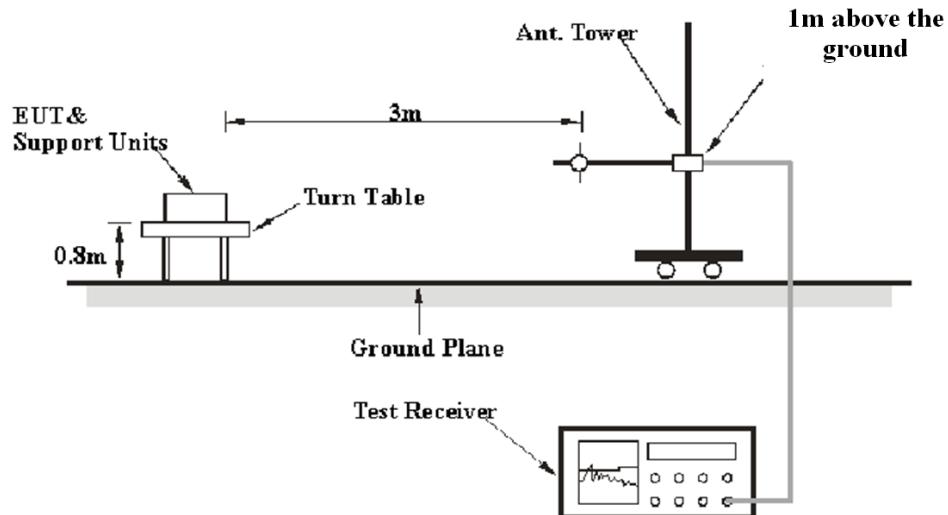
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

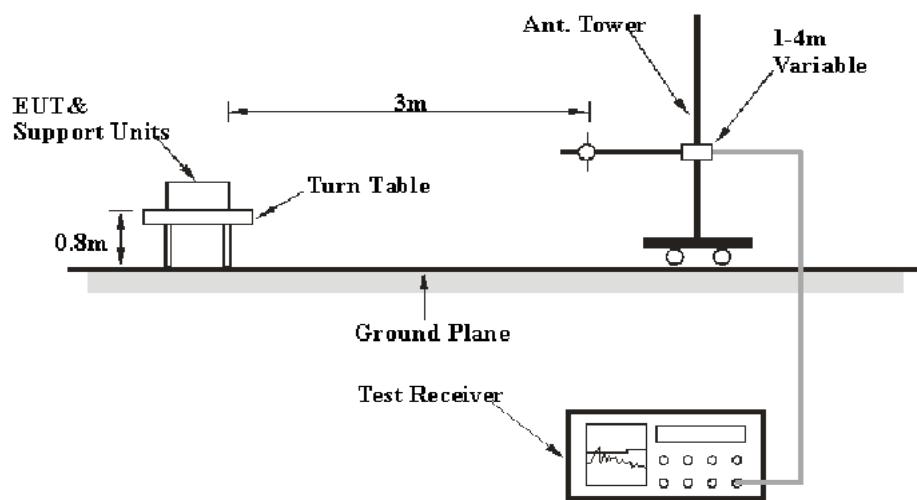
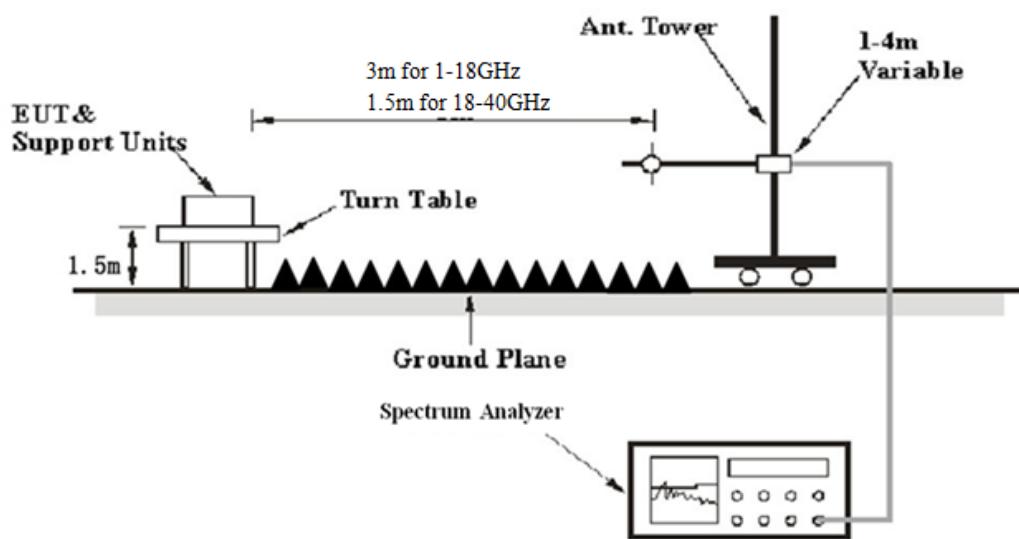
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (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 C63.10-2020 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	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	Peak
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	Peak
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	Peak

1-40GHz:

Pre-scan

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

Final measurement for emission identified during pre-scan

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

Note: Ton is minimum transmission duration

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

## Test Procedure

### 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 C63.10-2020,9.2.1: For field strength measurements made at other than the distance specified by the limit, 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)

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

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  $20 * \log(1.5/3) = -6.0$  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:

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

## Emission Bandwidth & 99% Occupied 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 ANSI C63.10-2020 Section 12.5.1 & 12.5.2 & 12.5.3

#### 12.5.1 Emission bandwidth for the band 5.725 GHz to 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 = No faster than coupled (auto) time.
- 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.

#### 12.5.2 Emission bandwidth for all other bands

The procedure for this method is as follows:

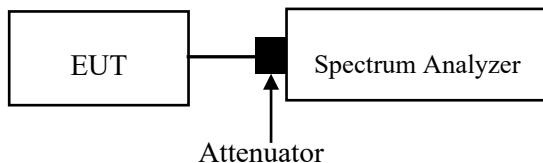
- a) Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- b) Set the VBW  $>$  RBW.
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission.  
Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

### 12.5.3 Occupied bandwidth

See 6.9.3 for the measurement procedure for OBW.

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

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (\text{OBW}/\text{RBW})]$  below the reference level. Specific guidance is given in 4.1.6.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



## 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.

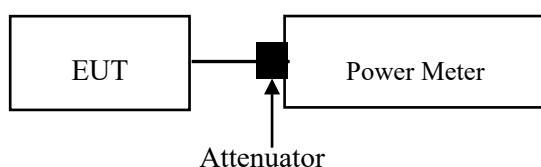
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall 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 ANSI C63.10-2020 Section 12.4.3.2 Method PM-G

- 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 add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

## Power Spectral Density

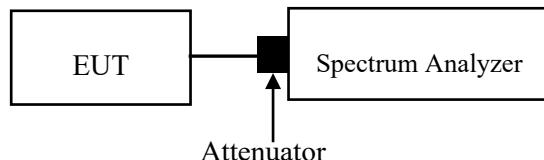
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting 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 ANSI C63.10-2020 Clause 12.6 Method SA-2 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 add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

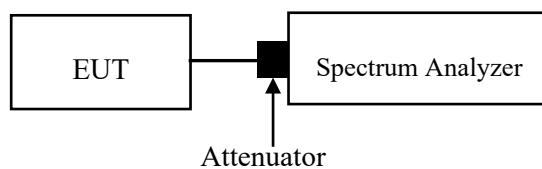
## Duty Cycle

### Test Procedure

According to ANSI C63.10-2020 Section 12.2

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

- a) A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.
- b) The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
  - 1) Set the center frequency of the instrument to the center frequency of the transmission.
  - 2) Set  $RBW \geq OBW$  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

### Applicable Standard

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

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

### Antenna Connector Construction

The EUT has one internal antenna arrangement for 5G Wi-Fi which was permanently attached. Please refer to the EUT photos.

Type	Antenna Gain <sup>#</sup>	Impedance	Frequency Range
PIFA	4.07dBi	50Ω	5150-5250MHz
PIFA	2.07dBi	50Ω	5725-5850MHz

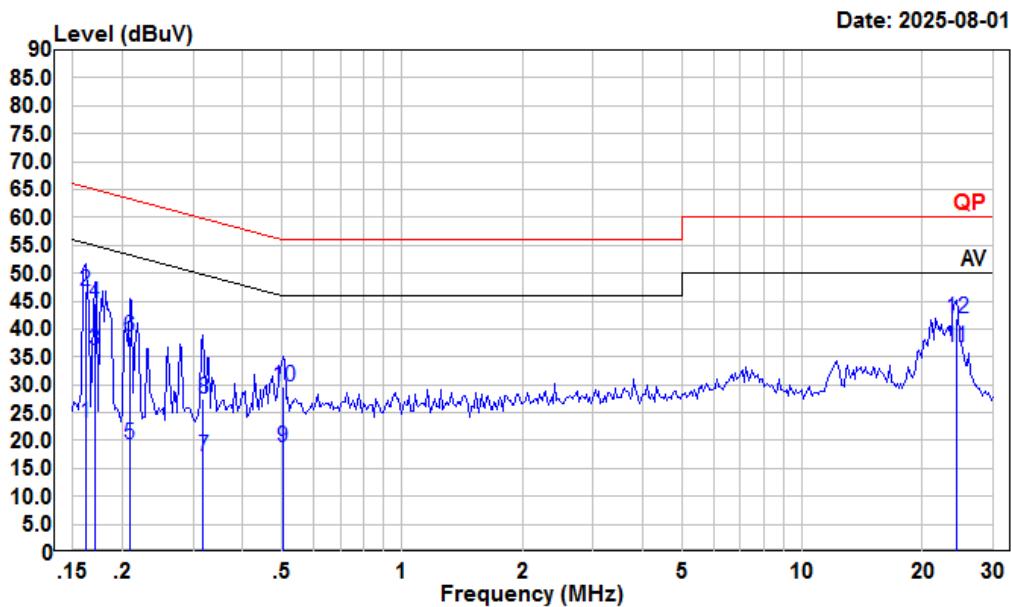
**Result: Compliant**

## TEST DATA AND RESULTS

### Conducted Emissions

Temperature (°C)	25.5	Relative Humidity (%)	71
ATM Pressure (kPa)	99.6	Test engineer	Macy.shi
Test date	2025/08/01		
EUT operation mode	Transmitting (Maximum output power mode, 802.11n-HT20 5240MHz)		

AC 120V 60 Hz, Line



Condition: Line

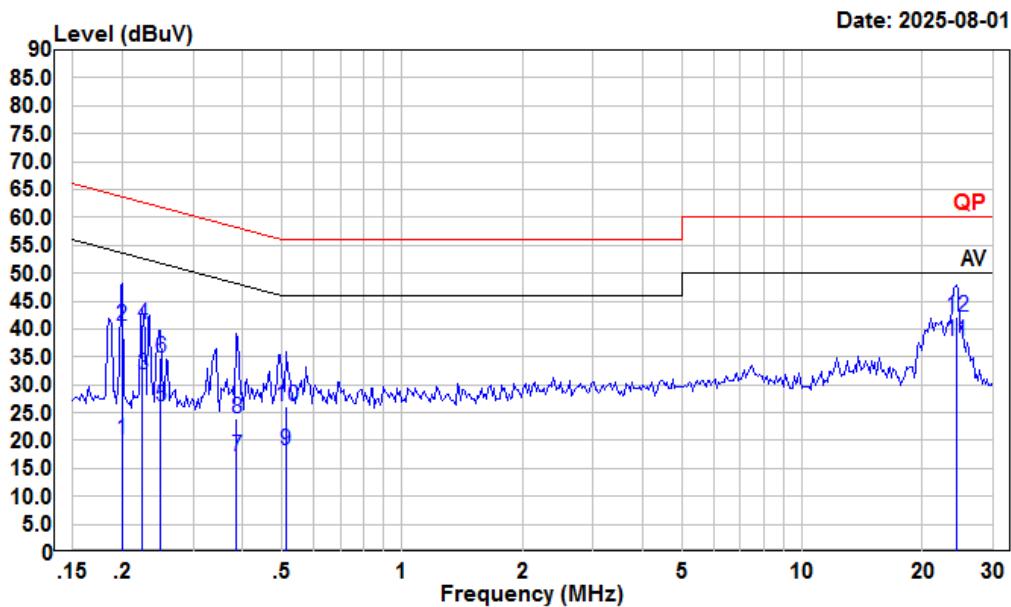
Project : 2501T13375E-RF

tester : Macy.shi Note: 5G WIFI Transmitting

Setting : RBW:9kHz

Freq	Read		LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV					
1	0.162	2.75	23.05	10.12	10.18	55.38	-32.33 Average
2	0.162	26.46	46.76	10.12	10.18	65.38	-18.62 QP
3	0.170	15.80	36.06	10.07	10.19	54.94	-18.88 Average
4	0.170	24.26	44.52	10.07	10.19	64.94	-20.42 QP
5	0.208	-0.75	19.37	9.93	10.19	53.27	-33.90 Average
6	0.208	18.43	38.55	9.93	10.19	63.27	-24.72 QP
7	0.318	-3.38	17.01	10.20	10.19	49.75	-32.74 Average
8	0.318	7.03	27.42	10.20	10.19	59.75	-32.33 QP
9	0.502	-1.84	18.84	10.50	10.18	46.00	-27.16 Average
10	0.502	8.92	29.60	10.50	10.18	56.00	-26.40 QP
11	24.271	16.00	36.61	10.35	10.26	50.00	-13.39 Average
12	24.271	21.34	41.95	10.35	10.26	60.00	-18.05 QP

AC 120V 60 Hz, Neutral



Condition: Neutral

Project : 2501T13375E-RF

tester : Macy.shi Note: 5G WIFI Transmitting

Setting : RBW:9kHz

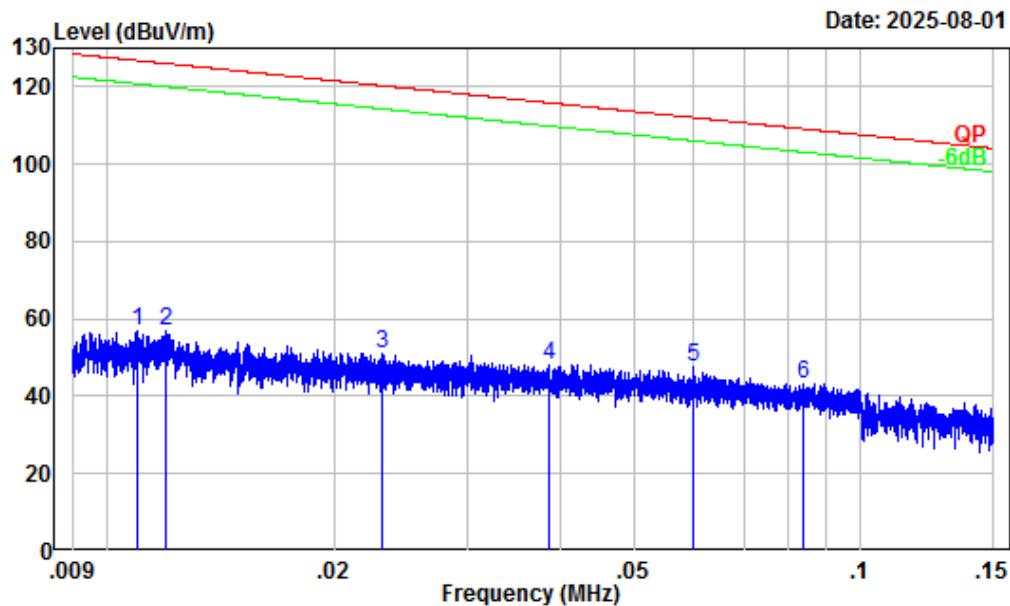
Freq	Read		LISN	Cable	Limit	Over	Remark
	MHz	dBuV					
1	0.200	-0.23	20.06	10.10	10.19	53.62	-33.56 Average
2	0.200	20.12	40.41	10.10	10.19	63.62	-23.21 QP
3	0.224	11.41	31.76	10.16	10.19	52.66	-20.90 Average
4	0.224	20.57	40.92	10.16	10.19	62.66	-21.74 QP
5	0.249	5.60	26.02	10.22	10.20	51.78	-25.76 Average
6	0.249	14.33	34.75	10.22	10.20	61.78	-27.03 QP
7	0.385	-3.40	17.27	10.46	10.21	48.17	-30.90 Average
8	0.385	3.28	23.95	10.46	10.21	58.17	-34.22 QP
9	0.513	-2.47	18.31	10.59	10.19	46.00	-27.69 Average
10	0.513	5.46	26.24	10.59	10.19	56.00	-29.76 QP
11	24.271	17.37	37.93	10.30	10.26	50.00	-12.07 Average
12	24.271	21.71	42.27	10.30	10.26	60.00	-17.73 QP

## Undesirable Emission

<b>Temperature (°C)</b>	23.9-24.7	<b>Relative Humidity (%)</b>	44-49
<b>ATM Pressure (kPa):</b>	100.6	<b>Test engineer:</b>	Alex Yan & Iye Wang
<b>Test date:</b>	2025/07/31~2025/08/01		
<b>EUT operation mode:</b>	Below 1GHz: Transmitting((Maximum output power mode, 802.11n20 5240MHz) Above 1GHz: Transmitting		
<b>Note:</b>	<ol style="list-style-type: none"><li>1. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded.</li><li>2. For the radiated spurious emission below 1GHz, When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.</li></ol>		

**Below 1GHz:**

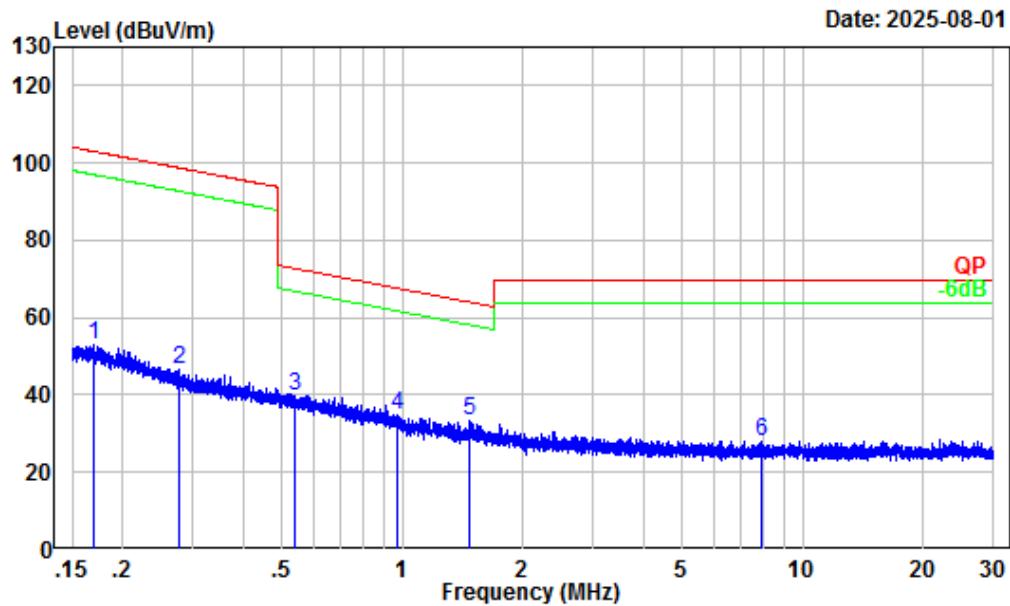
9kHz-150kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501T13375E-RF  
Test Mode : 5G Transmitting  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Alex Yan

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	0.011	32.12	24.82	56.94	126.82	-69.88	Peak
2	0.012	31.92	24.97	56.89	126.02	-69.13	Peak
3	0.023	29.80	21.11	50.91	120.30	-69.39	Peak
4	0.039	27.60	20.66	48.26	115.88	-67.62	Peak
5	0.060	25.40	22.22	47.62	112.04	-64.42	Peak
6	0.084	23.13	20.09	43.22	109.13	-65.91	Peak

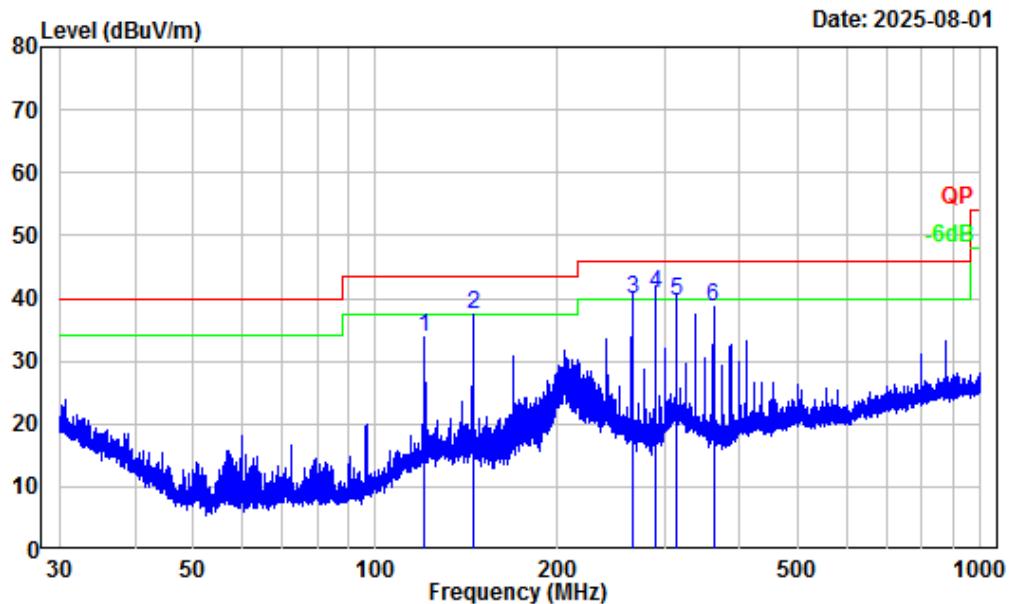
150kHz-30MHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501T13375E-RF  
Test Mode : 5G Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Alex Yan

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
		MHz	dB/m	dBuV	dBuV/m	dB
1	0.169	17.91	34.91	52.82	103.03	-50.21 Peak
2	0.277	11.57	35.08	46.65	98.76	-52.11 Peak
3	0.541	5.89	33.94	39.83	72.92	-33.09 Peak
4	0.970	1.43	33.24	34.67	67.75	-33.08 Peak
5	1.467	-0.11	33.42	33.31	64.07	-30.76 Peak
6	7.872	-2.99	31.02	28.03	69.54	-41.51 Peak

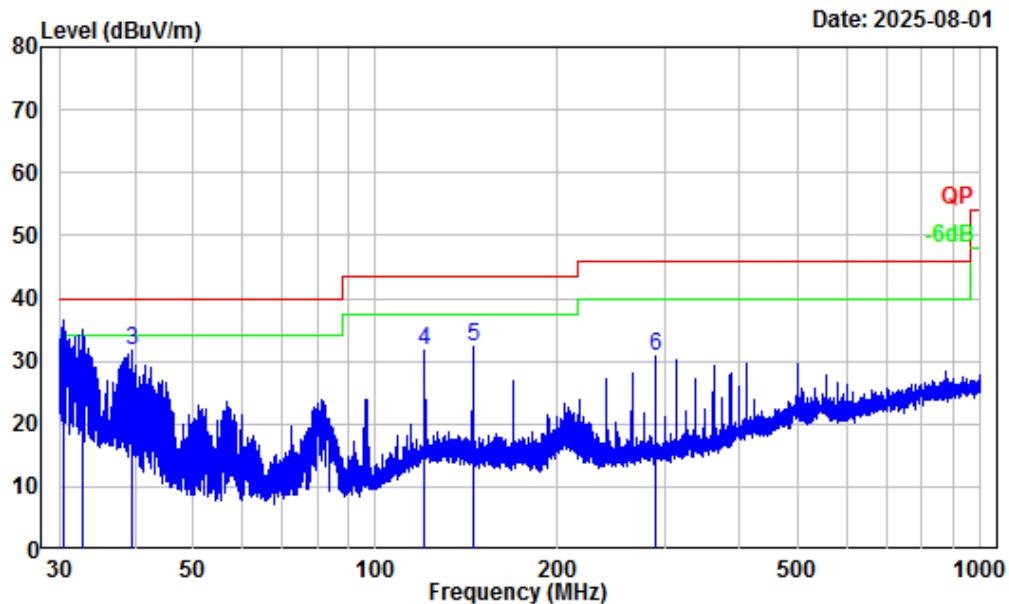
## 30MHz-1GHz\_Horizontal



Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501T13375E-RF  
Test Mode : 5G Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Alex Yan

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	120.65	-11.39	45.28	33.89	43.50	-9.61	Peak
2	144.78	-12.18	49.67	37.49	43.50	-6.01	Peak
3	265.44	-12.22	52.19	39.97	46.00	-6.03	QP
4	289.51	-11.22	51.90	40.68	46.00	-5.32	QP
5	313.69	-10.97	50.41	39.44	46.00	-6.56	QP
6	361.87	-9.81	48.31	38.50	46.00	-7.50	Peak

## 30MHz-1GHz\_Verical



Site : Chamber A  
Condition : 3m Vertical  
Project Number : 2501T13375E-RF  
Test Mode : 5G Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Alex Yan

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
		MHz	dB/m	dBuV	dBuV/m	dB
1	30.50	-6.22	33.20	26.98	40.00	-13.02 QP
2	32.86	-7.51	32.40	24.89	40.00	-15.11 QP
3	39.56	-12.06	43.84	31.78	40.00	-8.22 Peak
4	120.65	-11.39	42.94	31.55	43.50	-11.95 Peak
5	144.78	-12.18	44.34	32.16	43.50	-11.34 Peak
6	289.51	-11.22	42.03	30.81	46.00	-15.19 Peak

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

Frequency (MHz)	Reading (dB $\mu$ V)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
<b>802.11a</b>							
Low Channel							
10360	57.89	PK	H	2.53	60.42	68.2	-7.78
10360	57.54	PK	V	2.53	60.07	68.2	-8.13
Middle Channel							
10400	59.38	PK	H	2.55	61.93	68.2	-6.27
10400	59.00	PK	V	2.55	61.55	68.2	-6.65
High Channel							
10480	59.43	PK	H	2.25	61.68	68.2	-6.52
10480	59.22	PK	V	2.25	61.47	68.2	-6.73
<b>802.11n20</b>							
Low Channel							
10360	58.05	PK	H	2.53	60.58	68.2	-7.62
10360	58.23	PK	V	2.53	60.76	68.2	-7.44
Middle Channel							
10400	58.38	PK	H	2.55	60.93	68.2	-7.27
10400	58.93	PK	V	2.55	61.48	68.2	-6.72
High Channel							
10480	59.42	PK	H	2.25	61.67	68.2	-6.53
10480	59.27	PK	V	2.25	61.52	68.2	-6.68
<b>802.11n40</b>							
Low Channel							
10380	54.26	PK	H	2.54	56.80	68.2	-11.40
10380	53.71	PK	V	2.54	56.25	68.2	-11.95
High Channel							
10460	54.50	PK	H	2.32	56.82	68.2	-11.38
10460	54.87	PK	V	2.32	57.19	68.2	-11.01

**5725-5850MHz**

Frequency (MHz)	Reading (dB $\mu$ V)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
<b>802.11a</b>							
Low Channel							
11490	56.74	PK	H	3.54	60.28	74	-13.72
11490	43.33	AV	H	3.54	46.87	54	-7.13
11490	58.83	PK	V	3.54	62.37	74	-11.63
11490	45.59	AV	V	3.54	49.13	54	-4.87
Middle Channel							
11570	56.98	PK	H	3.30	60.28	74	-13.72
11570	43.46	AV	H	3.30	46.76	54	-7.24
11570	59.20	PK	V	3.30	62.50	74	-11.50
11570	45.98	AV	V	3.30	49.28	54	-4.72
High Channel							
11650	58.55	PK	H	3.43	61.98	74	-12.02
11650	44.88	AV	H	3.43	48.31	54	-5.69
11650	60.59	PK	V	3.43	64.02	74	-9.98
11650	47.45	AV	V	3.43	50.88	54	-3.12
<b>802.11n20</b>							
Low Channel							
11490	56.18	PK	H	3.54	59.72	74	-14.28
11490	42.92	AV	H	3.54	46.46	54	-7.54
11490	59.46	PK	V	3.54	63.00	74	-11.00
11490	45.11	AV	V	3.54	48.65	54	-5.35
Middle Channel							
11570	57.28	PK	H	3.30	60.58	74	-13.42
11570	43.18	AV	H	3.30	46.48	54	-7.52
11570	60.53	PK	V	3.30	63.83	74	-10.17
11570	45.66	AV	V	3.30	48.96	54	-5.04
High Channel							
11650	59.19	PK	H	3.43	62.62	74	-11.38
11650	44.56	AV	H	3.43	47.99	54	-6.01
11650	62.20	PK	V	3.43	65.63	74	-8.37
11650	47.53	AV	V	3.43	50.96	54	-3.04

Frequency (MHz)	Reading (dB $\mu$ V)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
<b>802.11n40</b>							
Low Channel							
11510	55.71	PK	H	3.53	59.24	74	-14.76
11510	42.97	AV	H	3.53	46.50	54	-7.50
11510	57.44	PK	V	3.53	60.97	74	-13.03
11510	44.60	AV	V	3.53	48.13	54	-5.87
High Channel							
11590	56.11	PK	H	3.21	59.32	74	-14.68
11590	43.24	AV	H	3.21	46.45	54	-7.55
11590	59.48	PK	V	3.21	62.69	74	-11.31
11590	46.43	AV	V	3.21	49.64	54	-4.36

Note:

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

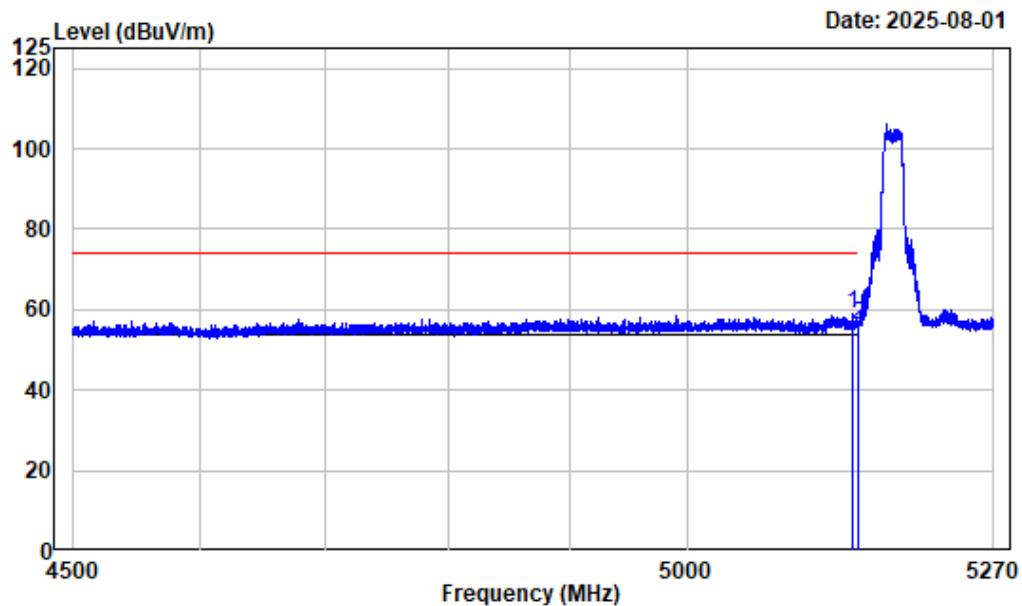
Corrected Amplitude = Factor + Reading

Margin = Corrected. Amplitude - Limit

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

**Test plots:****Band Edge**

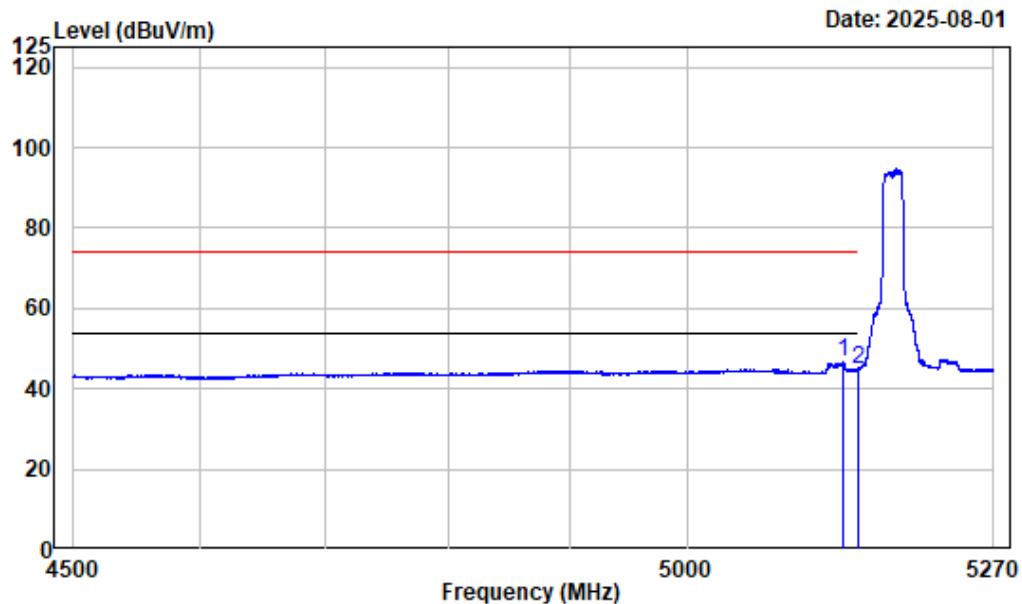
Left Band edge \_ Horizontal \_ Peak \_ 802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5143.800	-7.46	66.19	58.73	74.00	-15.27	Peak
2	5150.000	-7.46	63.76	56.30	74.00	-17.70	Peak

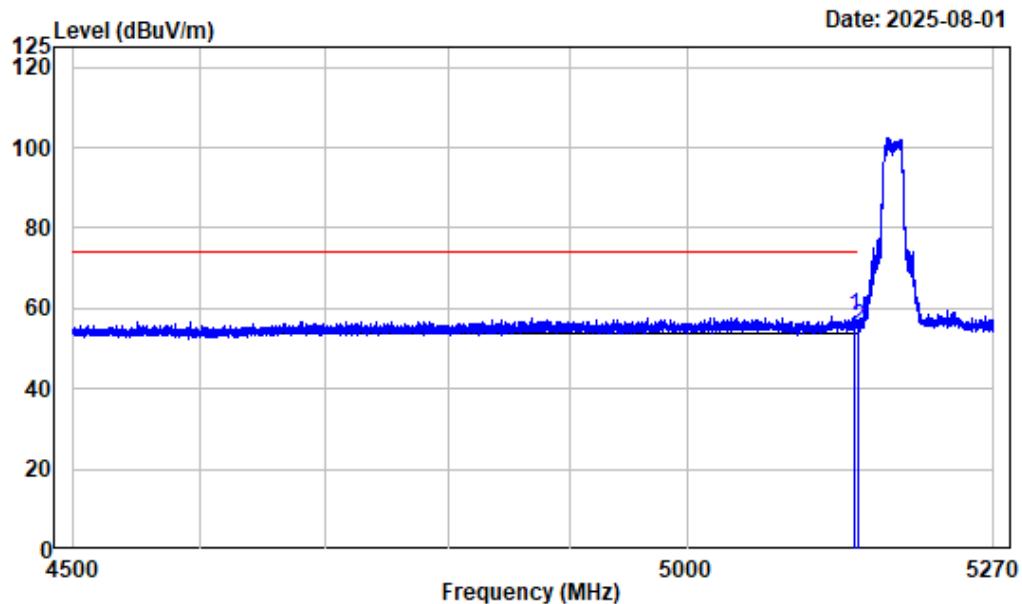
## Left Band edge\_Horizontal\_Average\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5136.292	-7.46	53.98	46.52	54.00	-7.48	Average
2	5150.000	-7.46	52.49	45.03	54.00	-8.97	Average

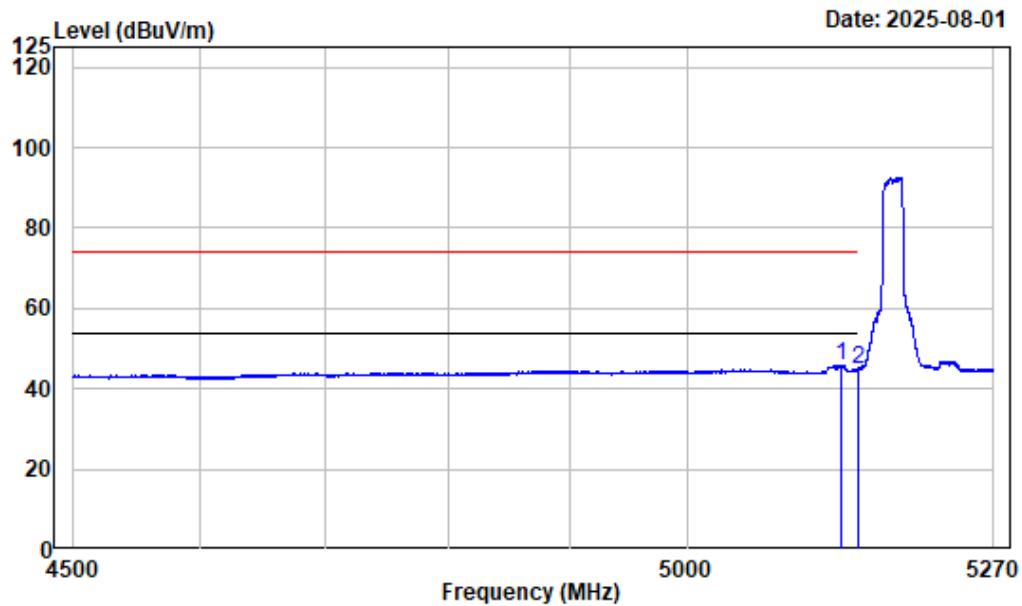
## Left Band edge\_Vertical\_Peak\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5146.111	-7.46	65.70	58.24	74.00	-15.76	Peak
2	5150.000	-7.46	62.54	55.08	74.00	-18.92	Peak

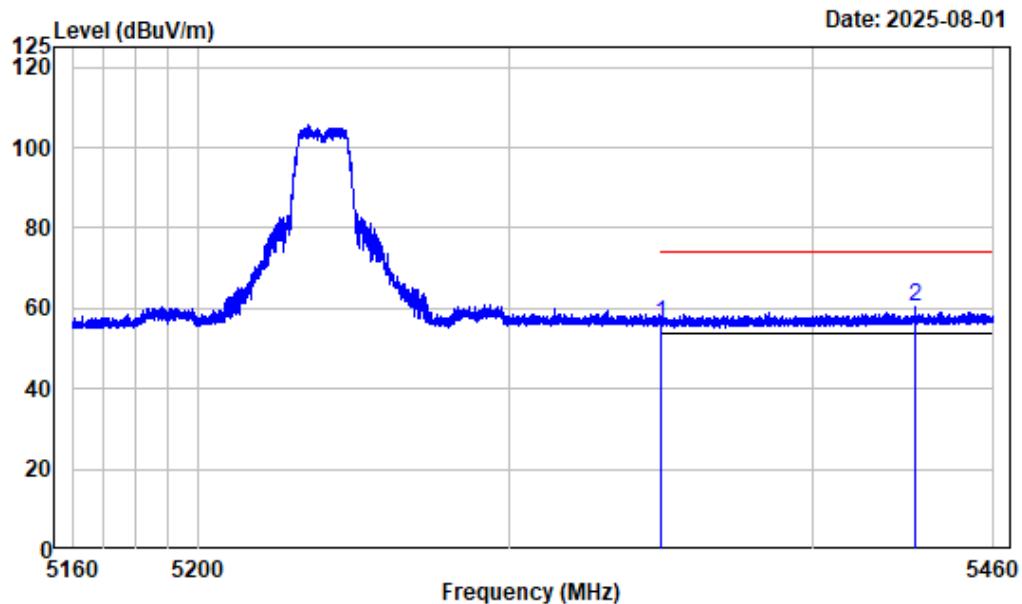
## Left Band edge\_Vertical\_Average\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5133.885	-7.47	53.21	45.74	54.00	-8.26	Average
2	5150.000	-7.46	52.22	44.76	54.00	-9.24	Average

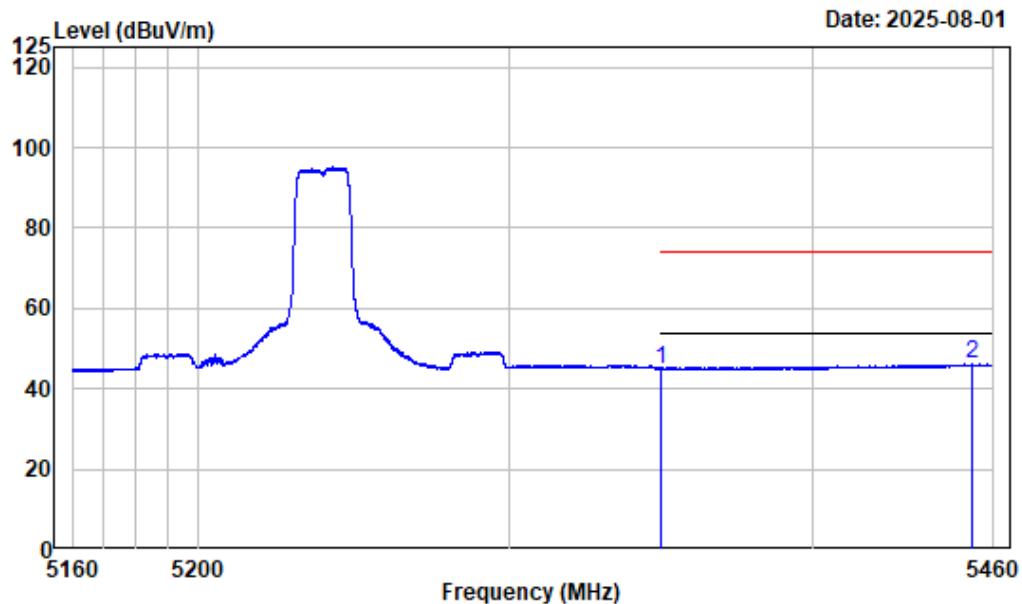
## Right Band edge\_Horizontal\_Peak\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	62.66	55.92	74.00	-18.08	Peak
2	5433.897	-6.41	66.63	60.22	74.00	-13.78	Peak

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



Condition : Horizontal

Project No. : 2501T13375E-RF

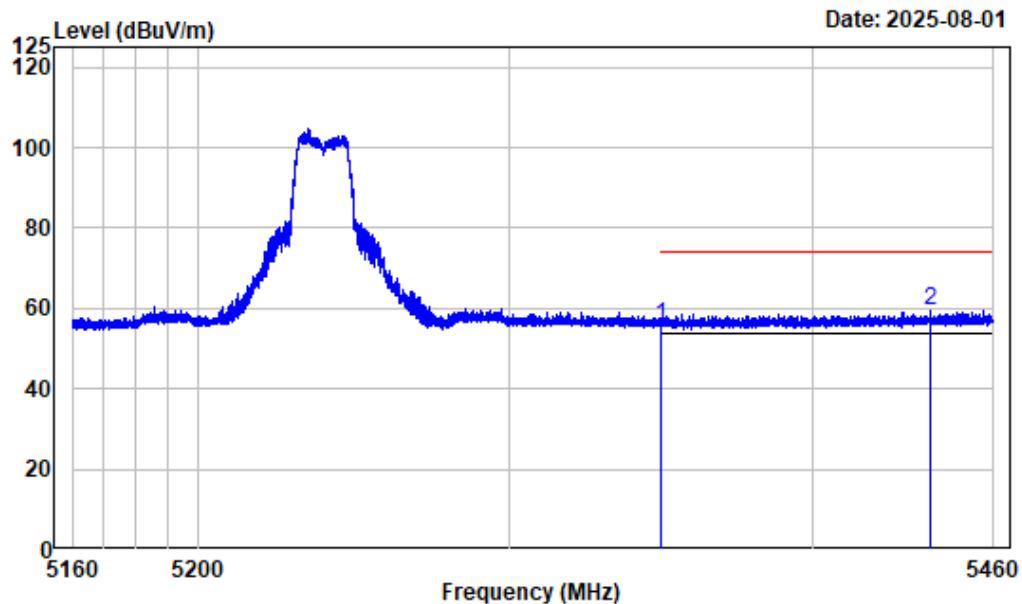
Tester : Iye Wang

Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak

Note : 5GWiFi\_B1\_A\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.67	44.93	54.00	-9.07	Average
2	5453.062	-6.31	52.43	46.12	54.00	-7.88	Average

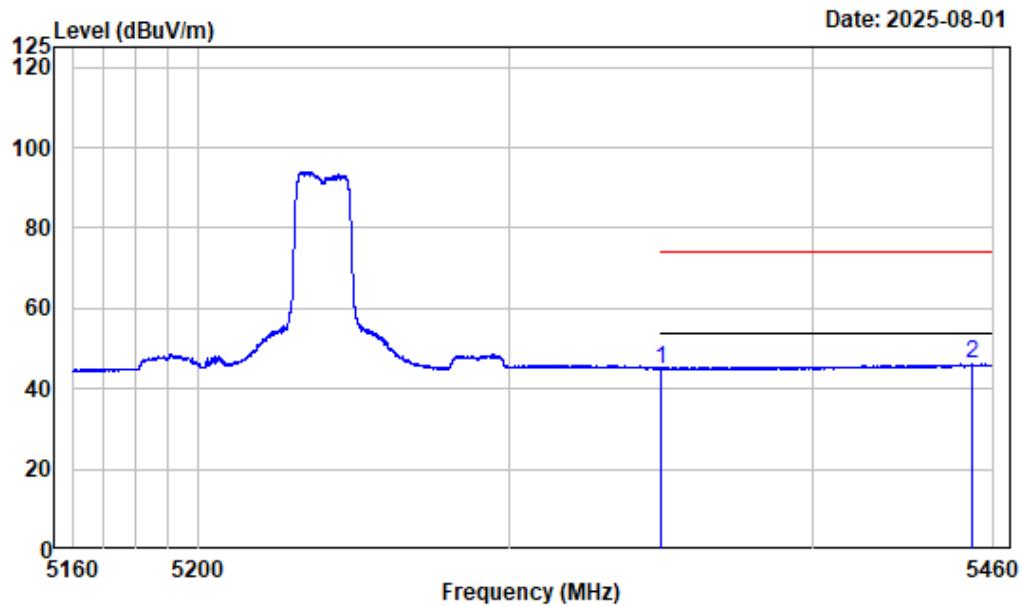
## Right Band edge\_Vertical\_Peak\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	62.46	55.72	74.00	-18.28	Peak
2	5438.660	-6.38	65.79	59.41	74.00	-14.59	Peak

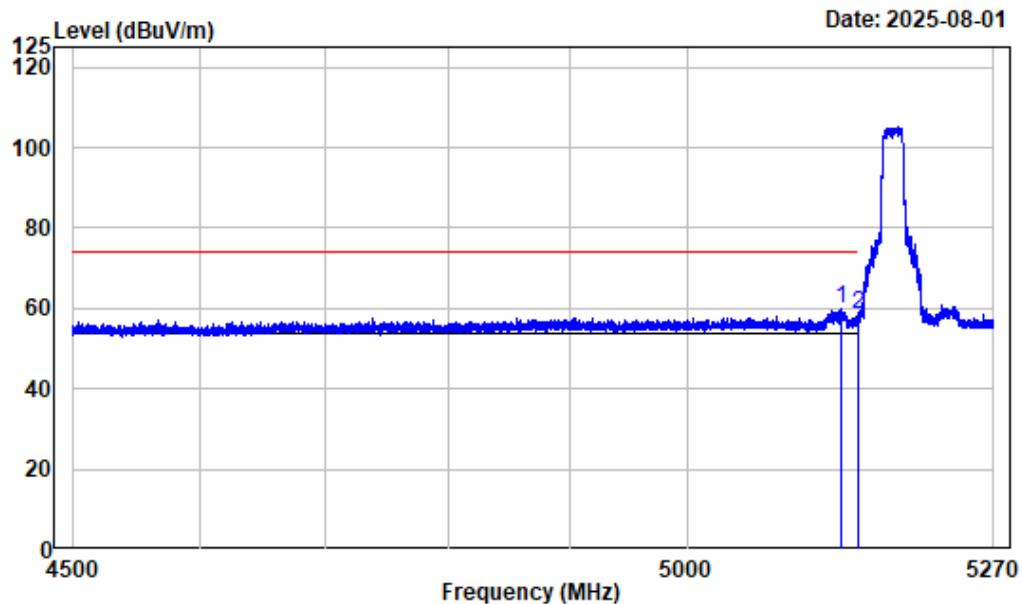
## Right Band edge\_Vertical\_Average\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.66	44.92	54.00	-9.08	Average
2	5452.762	-6.31	52.33	46.02	54.00	-7.98	Average

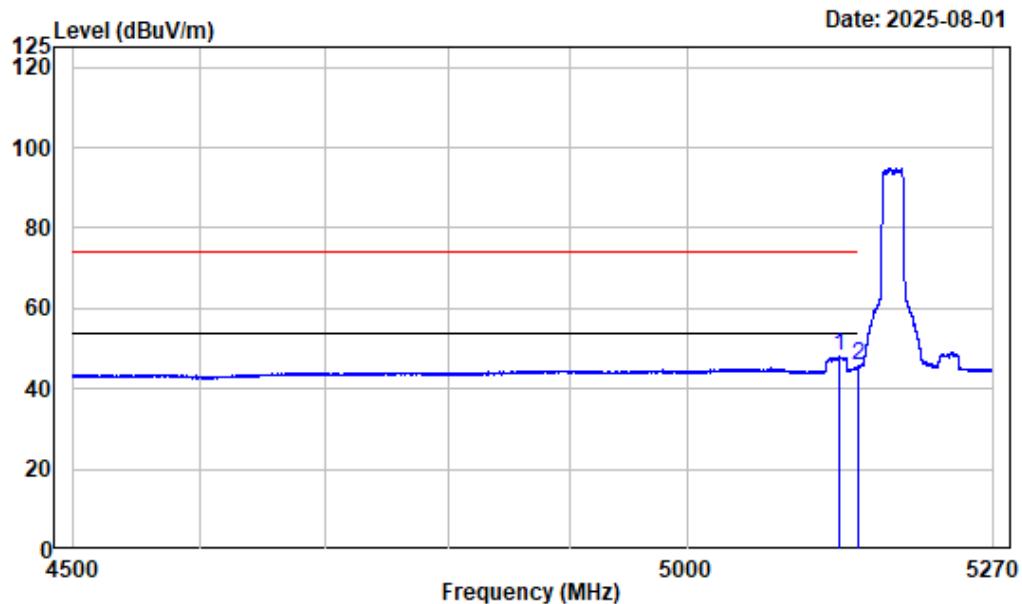
## Left Band edge\_Horizontal\_Peak\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5134.944	-7.46	67.27	59.81	74.00	-14.19	Peak
2	5150.000	-7.46	66.07	58.61	74.00	-15.39	Peak

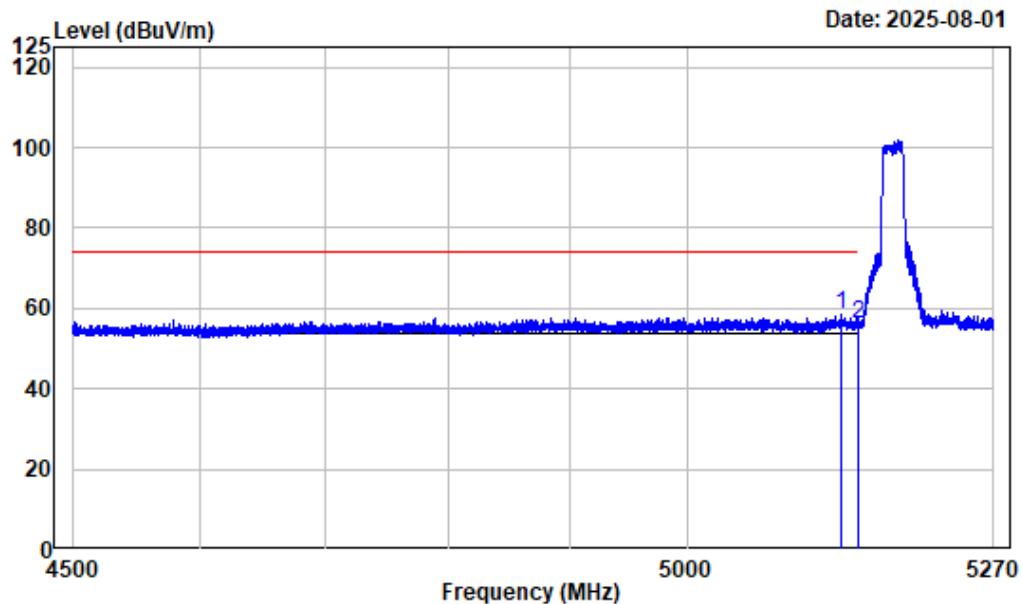
## Left Band edge\_Horizontal\_Average\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5132.923	-7.47	55.65	48.18	54.00	-5.82	Average
2	5150.000	-7.46	53.02	45.56	54.00	-8.44	Average

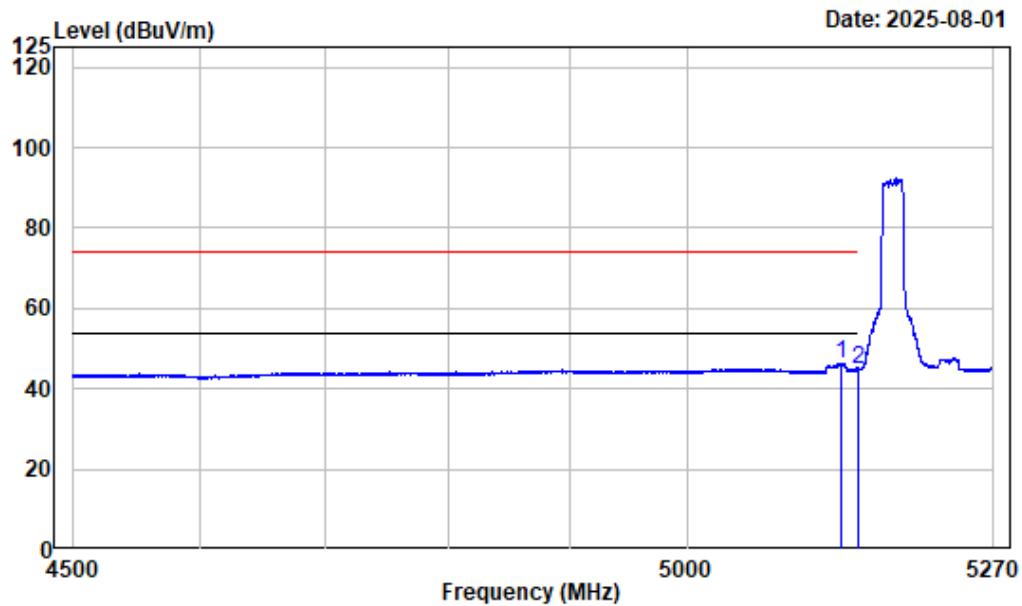
## Left Band edge\_Vertical\_Peak\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Ivey Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5134.463	-7.47	65.89	58.42	74.00	-15.58	Peak
2	5150.000	-7.46	63.60	56.14	74.00	-17.86	Peak

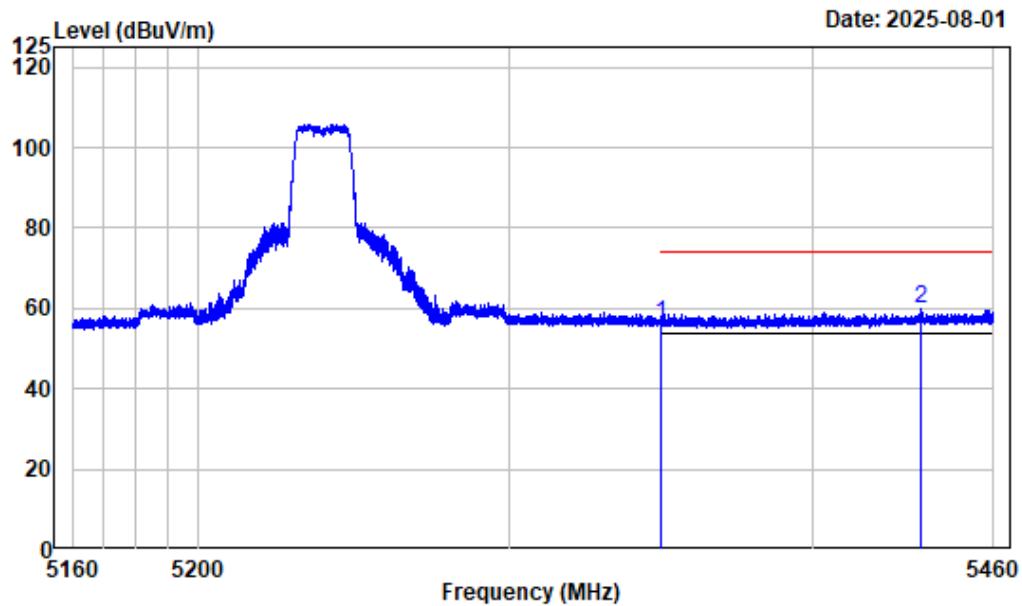
## Left Band edge\_Vertical\_Average\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5180

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5134.078	-7.47	53.86	46.39	54.00	-7.61	Average
2	5150.000	-7.46	52.29	44.83	54.00	-9.17	Average

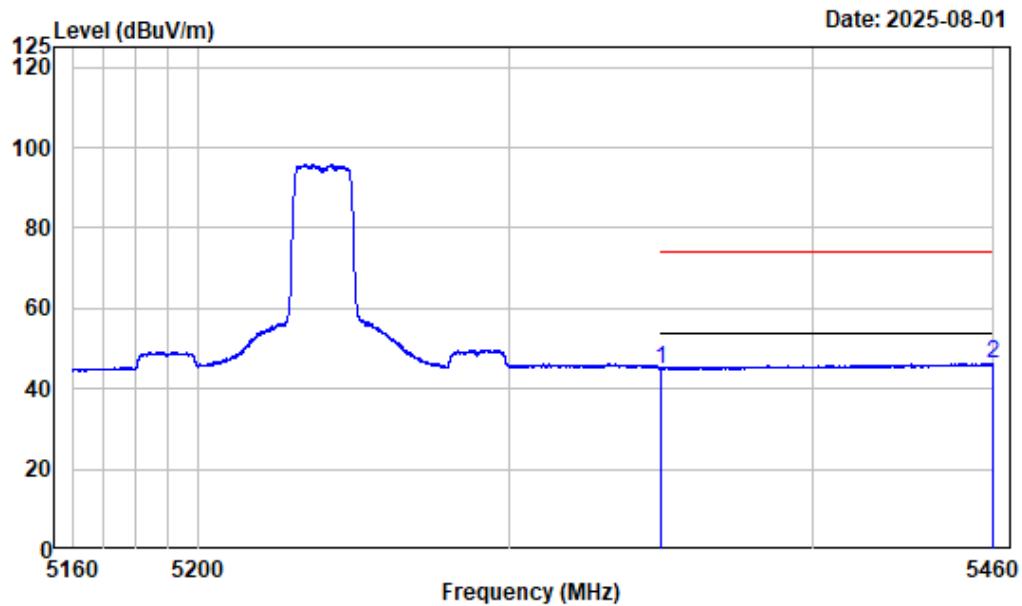
## Right Band edge\_Horizontal\_Peak\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	62.91	56.17	74.00	-17.83	Peak
2	5436.035	-6.40	66.37	59.97	74.00	-14.03	Peak

## Right Band edge\_Horizontal\_Average\_802.11n-HT20



Condition : Horizontal

Project No. : 2501T13375E-RF

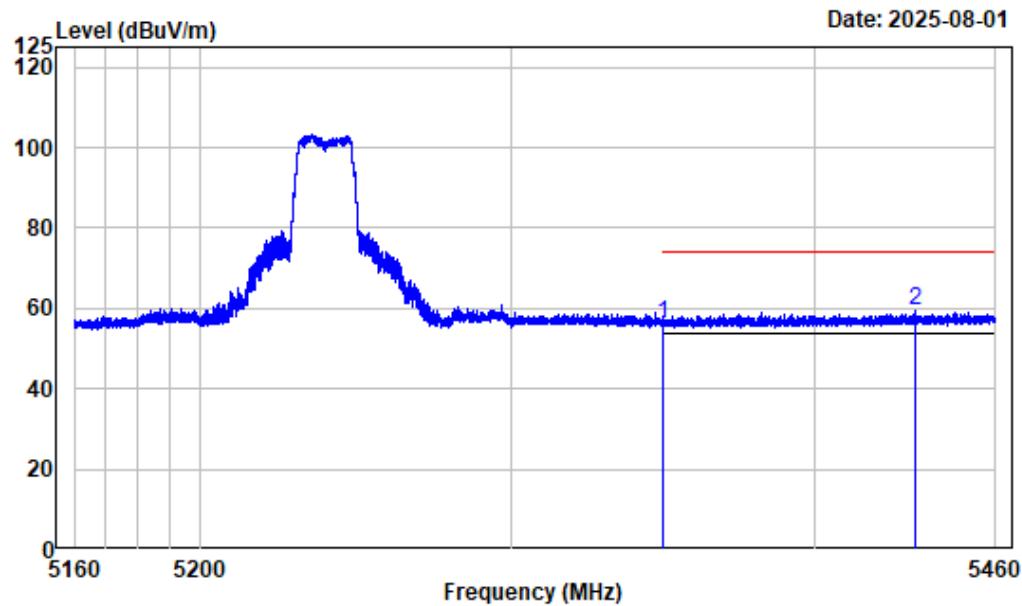
Tester : Iye Wang

Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak

Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.71	44.97	54.00	-9.03	Average
2	5459.550	-6.29	52.58	46.29	54.00	-7.71	Average

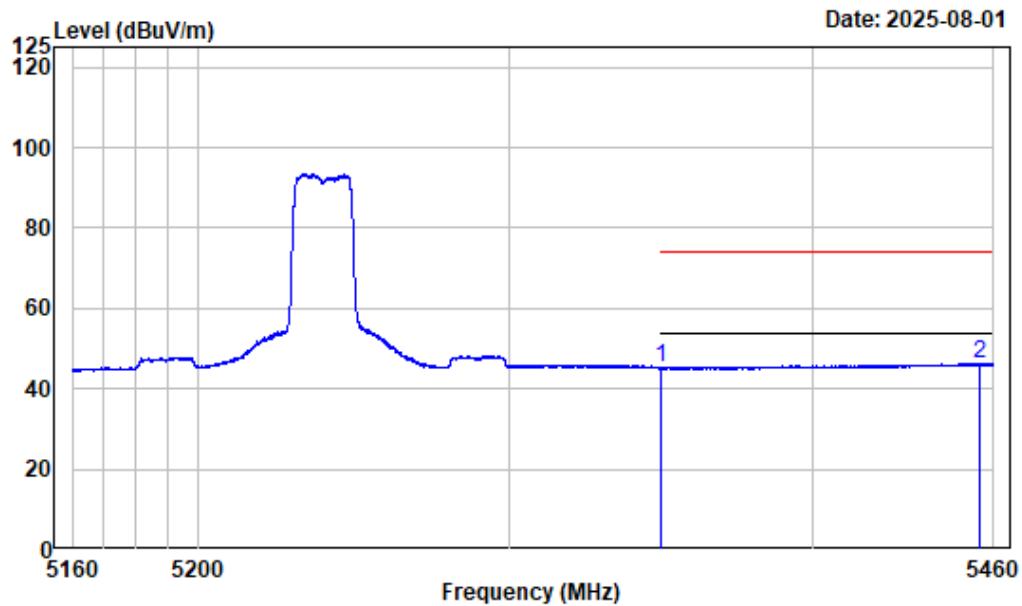
## Right Band edge\_Vertical\_Peak\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	62.89	56.15	74.00	-17.85	Peak
2	5433.259	-6.41	65.72	59.31	74.00	-14.69	Peak

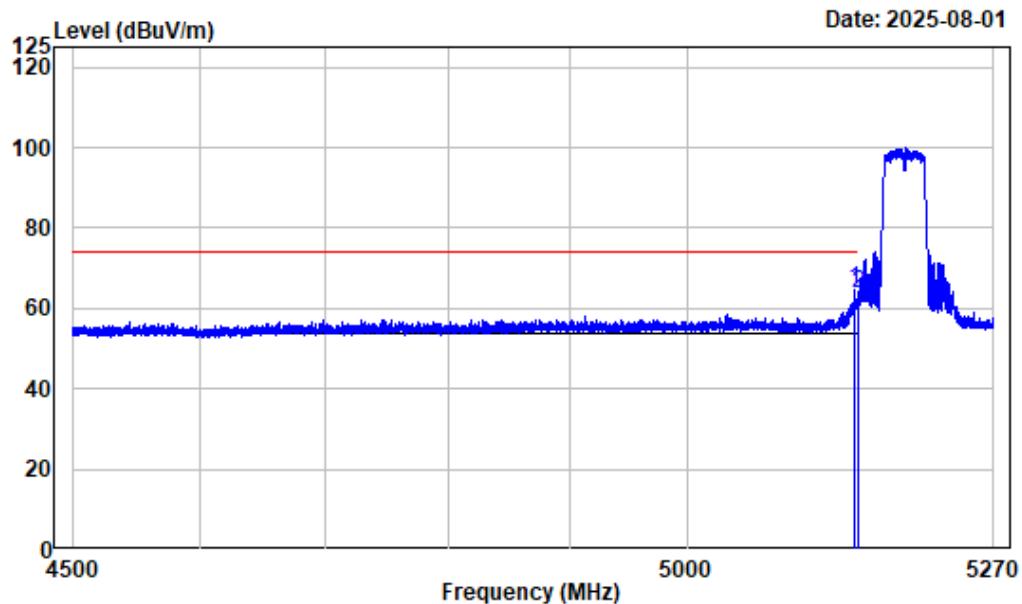
## Right Band edge\_Vertical\_Average\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.97	45.23	54.00	-8.77	Average
2	5455.687	-6.31	52.61	46.30	54.00	-7.70	Average

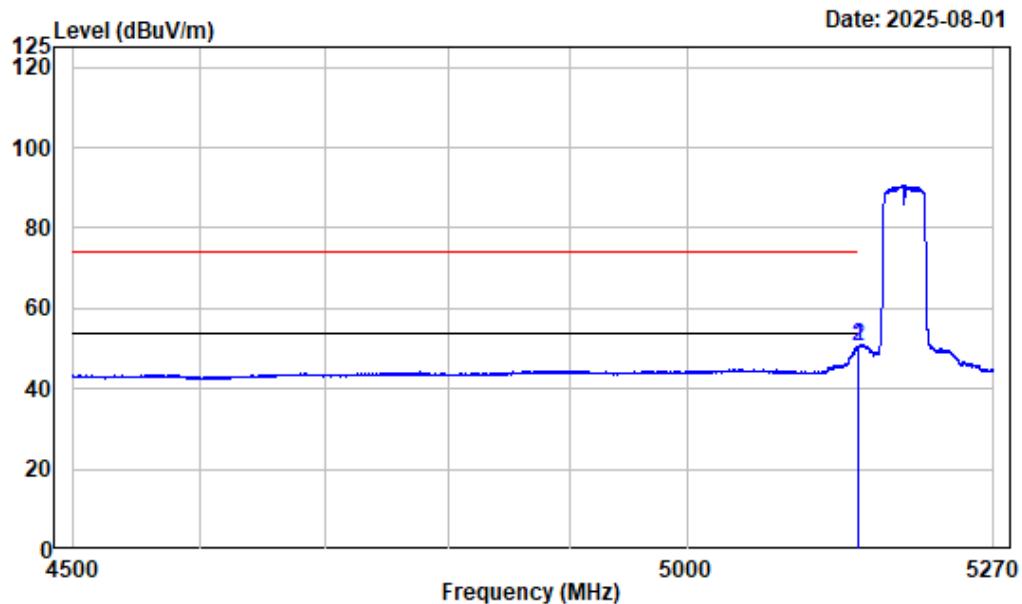
## Left Band edge\_Horizontal\_Peak\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5190

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5146.399	-7.46	71.87	64.41	74.00	-9.59	Peak
2	5150.000	-7.46	71.34	63.88	74.00	-10.12	Peak

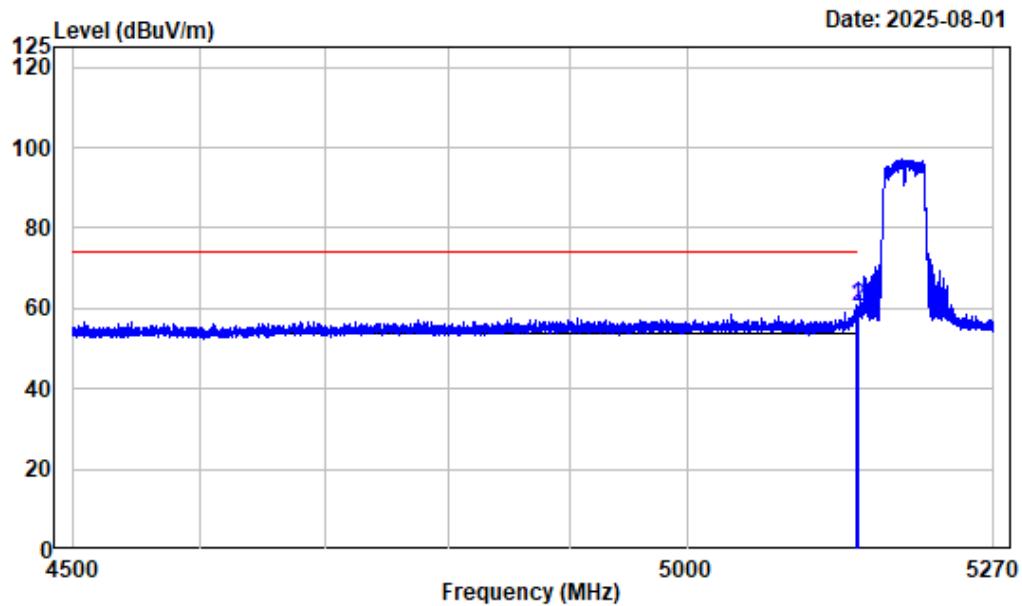
## Left Band edge\_Horizontal\_Average\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5190

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5149.769	-7.46	58.16	50.70	54.00	-3.30	Average
2	5150.000	-7.46	58.02	50.56	54.00	-3.44	Average

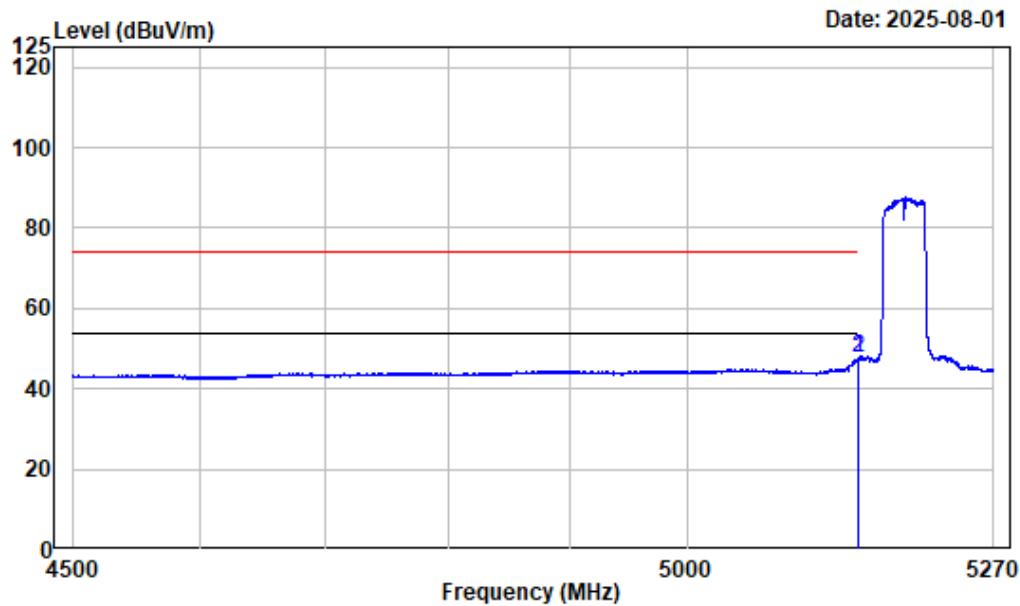
## Left Band edge\_Vertical\_Peak\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5190

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5147.843	-7.46	68.24	60.78	74.00	-13.22	Peak
2	5150.000	-7.46	67.83	60.37	74.00	-13.63	Peak

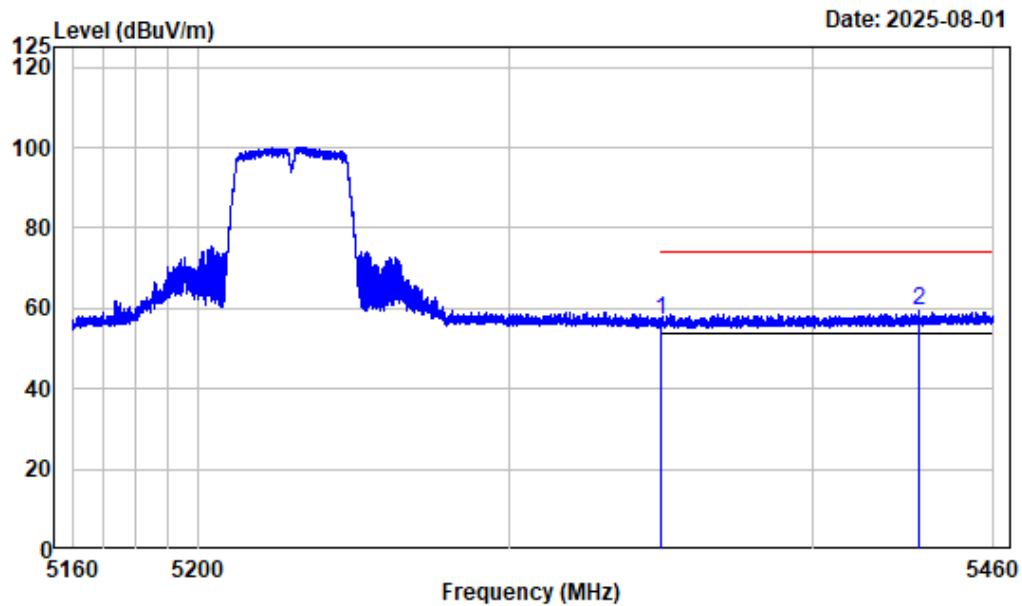
## Left Band edge\_Vertical\_Average\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5190

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5149.672	-7.46	55.06	47.60	54.00	-6.40	Average
2	5150.000	-7.46	55.02	47.56	54.00	-6.44	Average

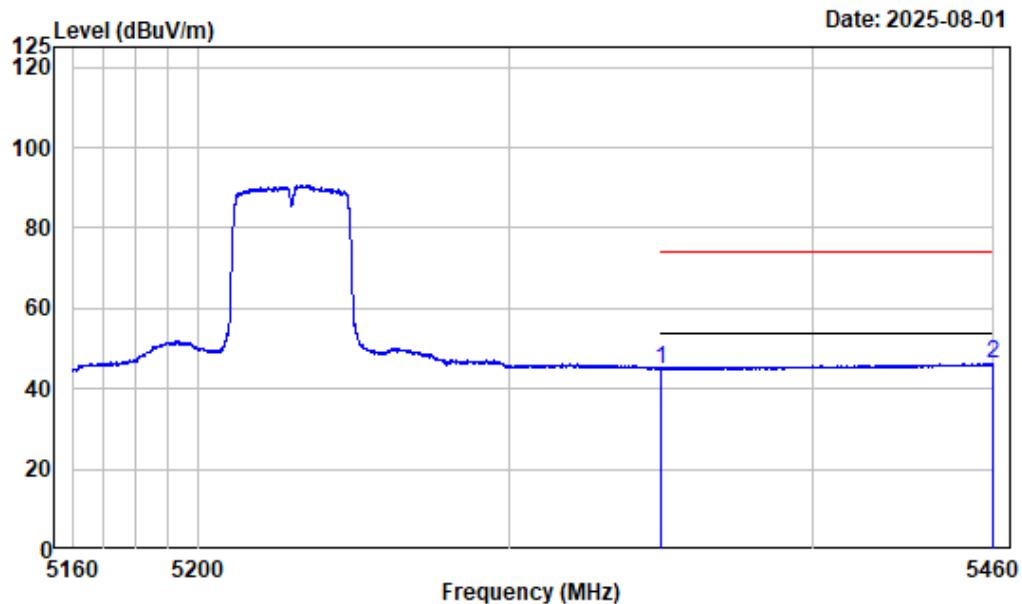
## Right Band edge\_Horizontal\_Peak\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	63.77	57.03	74.00	-16.97	Peak
2	5435.209	-6.40	65.76	59.36	74.00	-14.64	Peak

## Right Band edge\_Horizontal\_Average\_802.11n-HT40



Condition : Horizontal

Project No. : 2501T13375E-RF

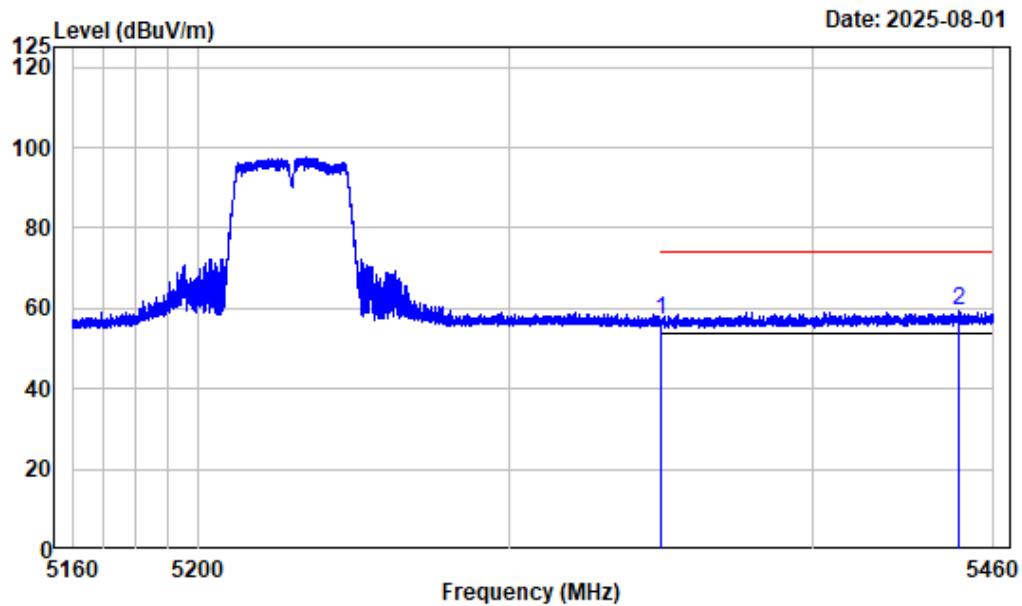
Tester : Iye Wang

Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak

Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.77	45.03	54.00	-8.97	Average
2	5459.550	-6.29	52.52	46.23	54.00	-7.77	Average

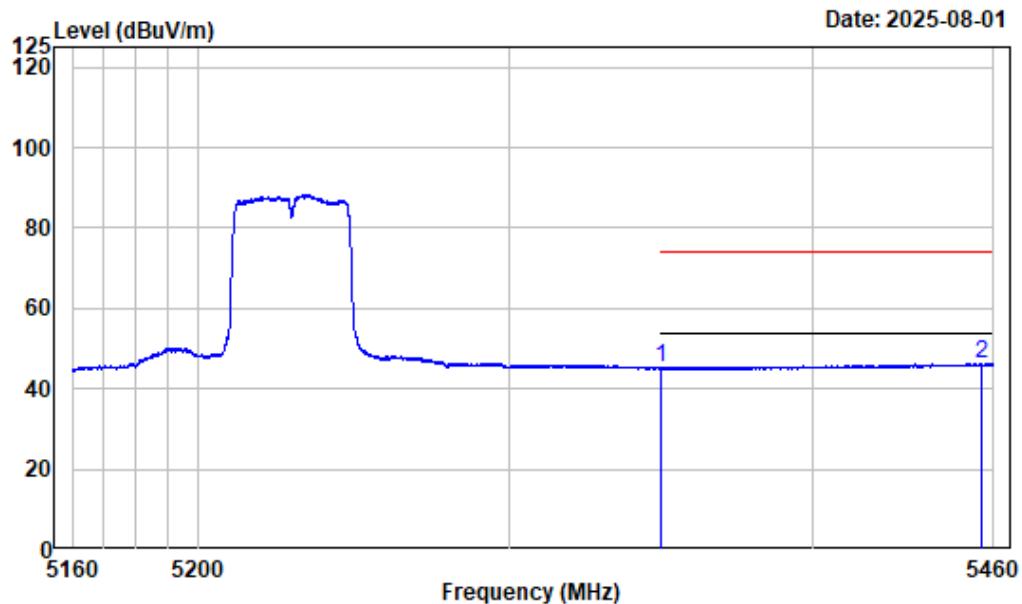
## Right Band edge\_Vertical\_Peak\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	63.82	57.08	74.00	-16.92	Peak
2	5448.224	-6.33	65.92	59.59	74.00	-14.41	Peak

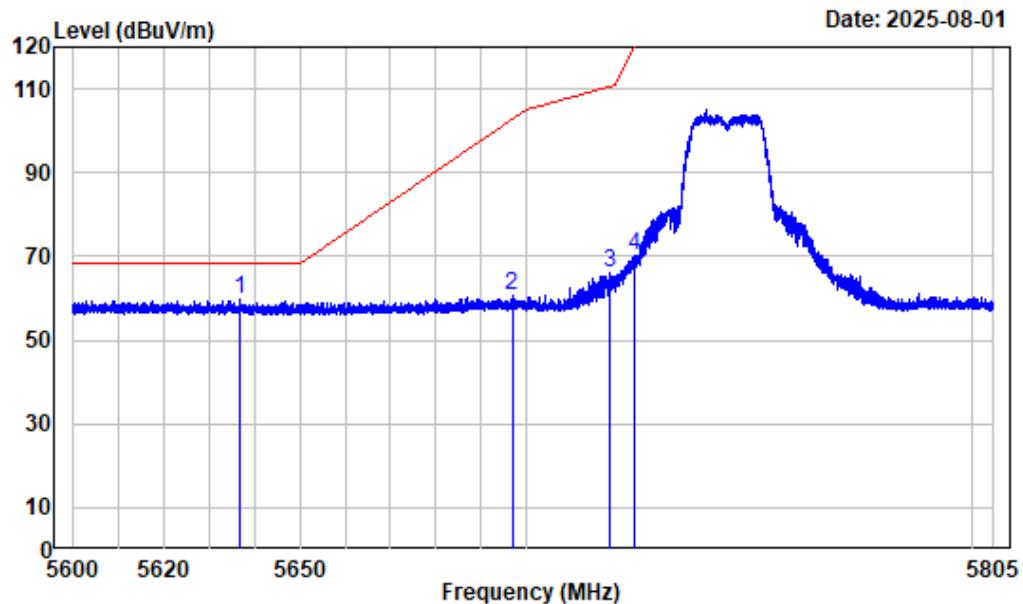
## Right Band edge\_Vertical\_Average\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	5350.000	-6.74	51.89	45.15	54.00	-8.85	Average
2	5456.212	-6.31	52.55	46.24	54.00	-7.76	Average

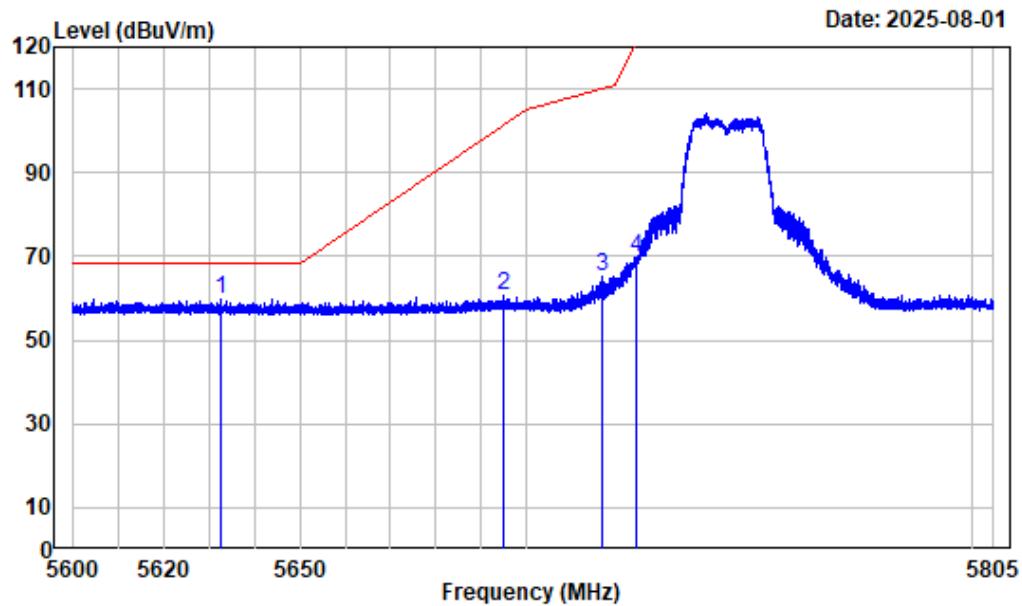
## Left Band edge\_Horizontal\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5745

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5636.854	-5.96	65.75	59.79	68.20	-8.41	Peak
2	5696.952	-5.72	66.29	60.57	102.95	-42.38	Peak
3	5718.787	-5.54	71.70	66.16	110.46	-44.30	Peak
4	5724.168	-5.49	75.74	70.25	120.30	-50.05	Peak

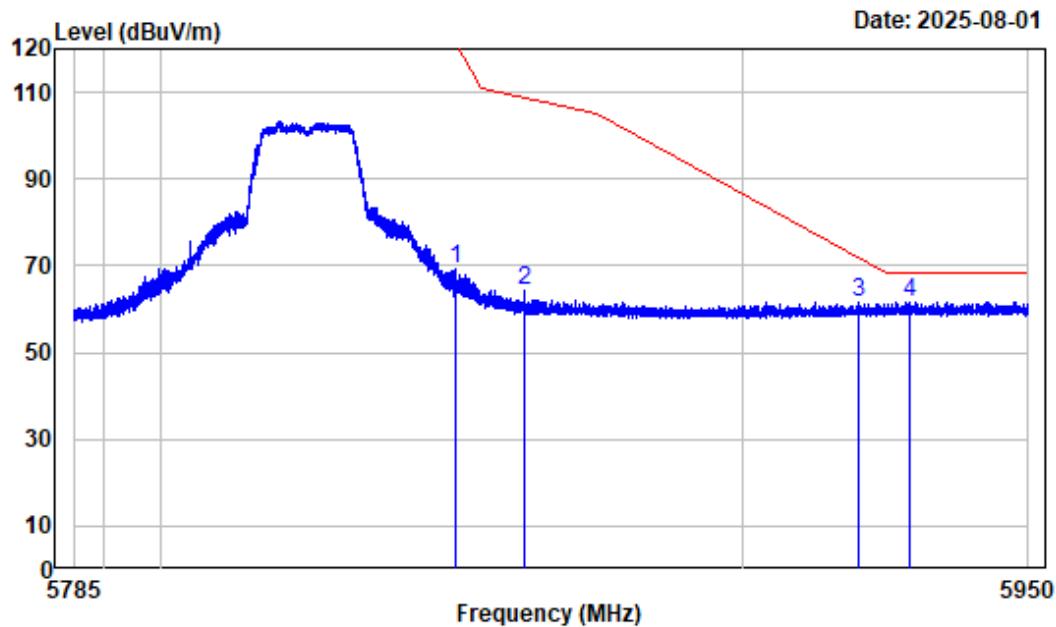
## Left Band edge\_Vertical\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Ivey Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5745

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5632.497	-5.99	65.80	59.81	68.20	-8.39	Peak
2	5695.106	-5.73	66.49	60.76	101.59	-40.83	Peak
3	5717.019	-5.56	70.92	65.36	109.97	-44.61	Peak
4	5724.758	-5.49	75.40	69.91	121.65	-51.74	Peak

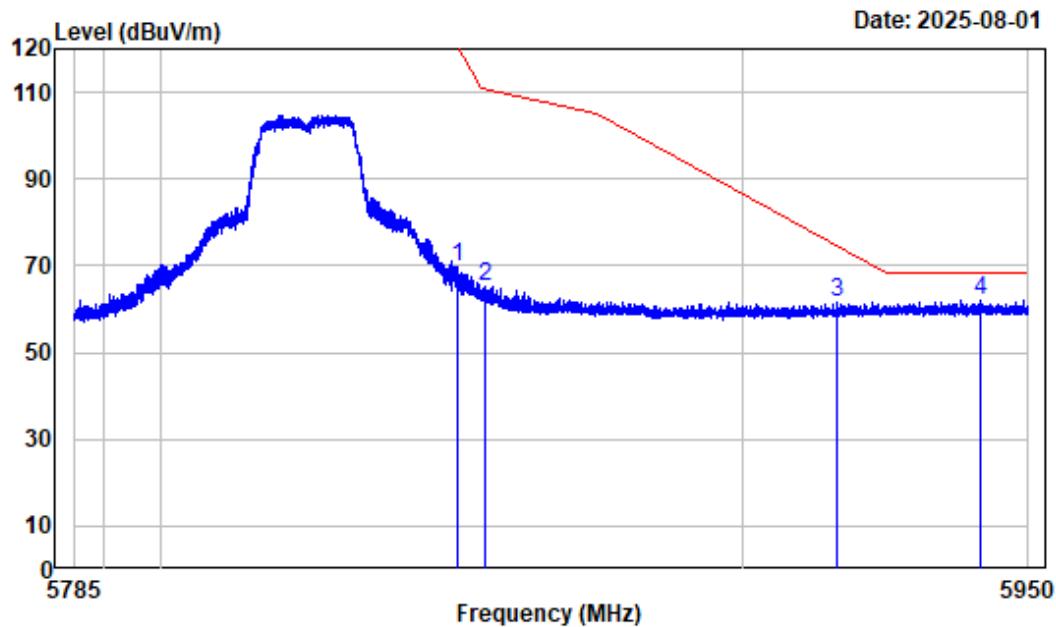
## Right Band edge\_Horizontal\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	5850.472	-4.68	74.13	69.45	121.12	-51.67 Peak
2	5862.250	-4.62	69.10	64.48	108.77	-44.29 Peak
3	5920.234	-4.45	66.22	61.77	71.71	-9.94 Peak
4	5929.146	-4.45	66.24	61.79	68.20	-6.41 Peak

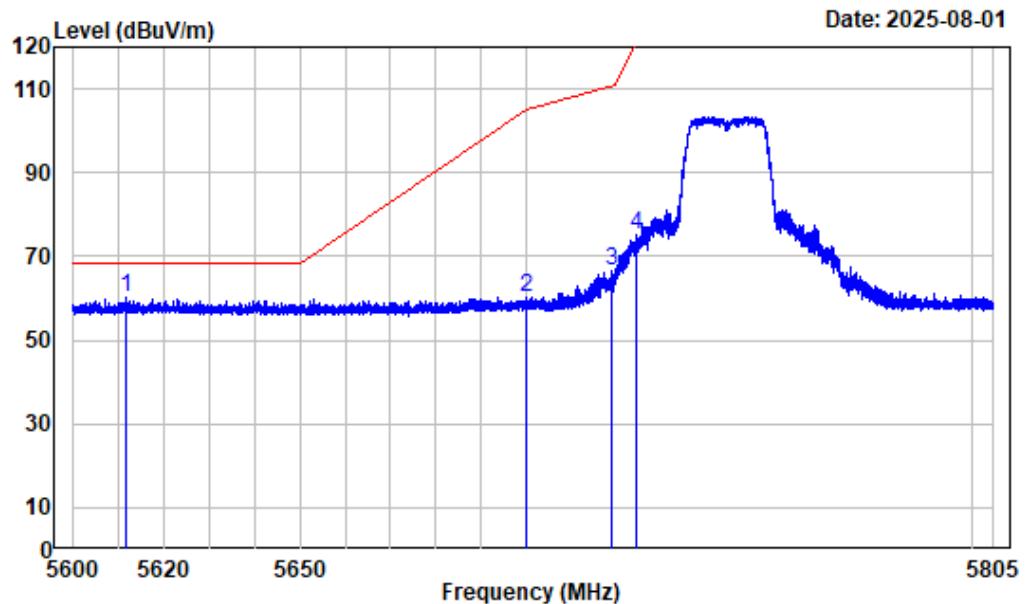
## Right Band edge\_Vertical\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	5850.761	-4.68	74.45	69.77	120.46	-50.69 Peak
2	5855.484	-4.66	70.02	65.36	110.66	-45.30 Peak
3	5916.521	-4.46	66.19	61.73	74.45	-12.72 Peak
4	5941.522	-4.44	66.54	62.10	68.20	-6.10 Peak

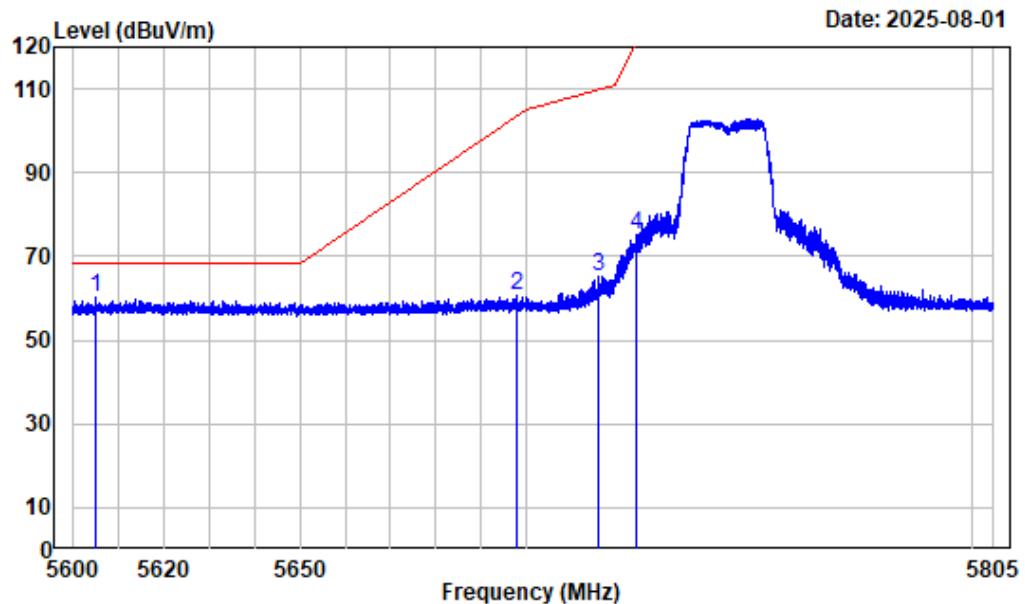
## Left Band edge\_Horizontal\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5745

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	
1	5611.866	-6.14	66.38	60.24	68.20	-7.96	Peak
2	5699.976	-5.71	65.83	60.12	105.18	-45.06	Peak
3	5719.222	-5.54	71.91	66.37	110.58	-44.21	Peak
4	5724.476	-5.49	80.51	75.02	121.01	-45.99	Peak

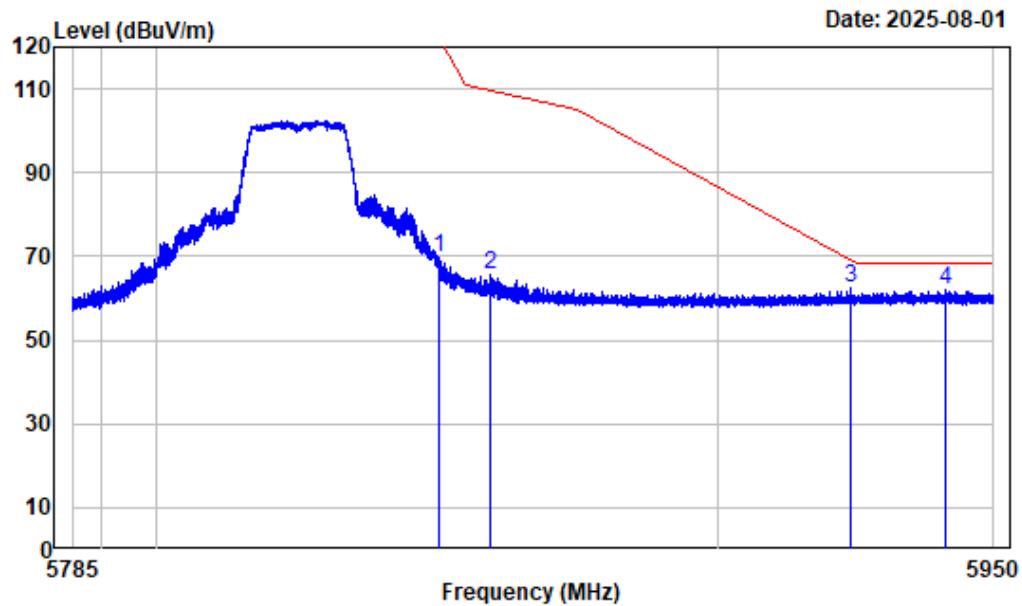
## Left Band edge\_Vertical\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5745

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5604.998	-6.18	66.49	60.31	68.20	-7.89	Peak
2	5698.105	-5.73	66.24	60.51	103.80	-43.29	Peak
3	5716.352	-5.57	70.76	65.19	109.78	-44.59	Peak
4	5724.784	-5.49	80.69	75.20	121.71	-46.51	Peak

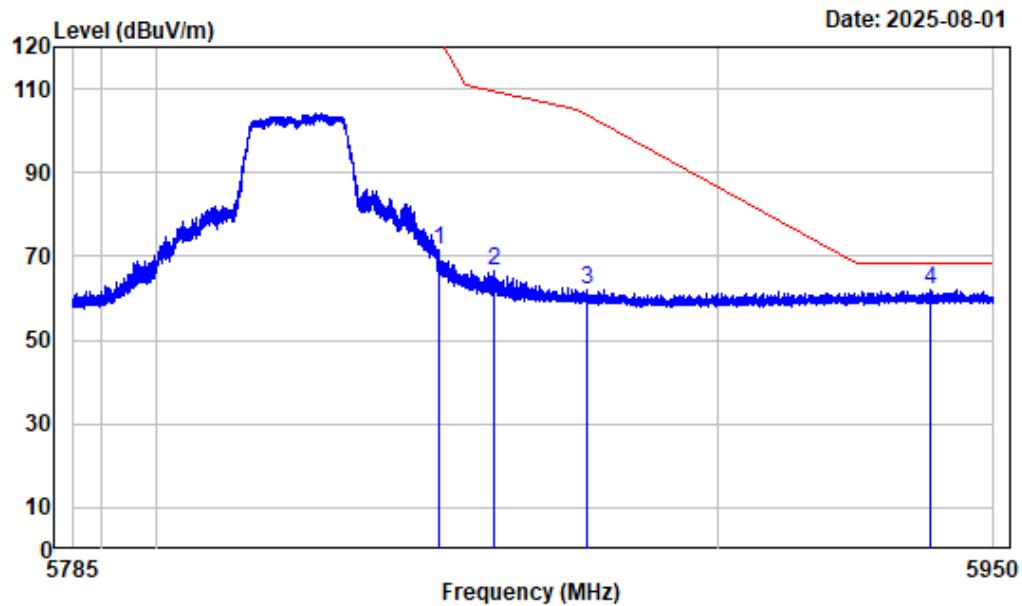
## Right Band edge\_Horizontal\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	
1	5850.080	-4.68	74.40	69.72	122.02	-52.30	Peak
2	5859.156	-4.63	70.41	65.78	109.63	-43.85	Peak
3	5924.009	-4.45	66.82	62.37	68.93	-6.56	Peak
4	5941.254	-4.44	66.25	61.81	68.20	-6.39	Peak

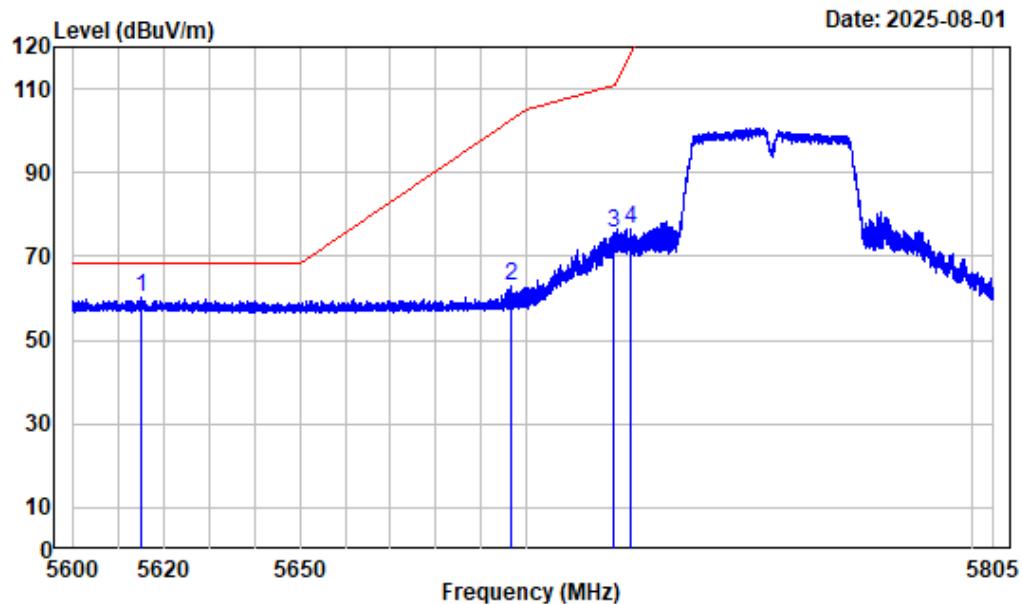
## Right Band edge\_Vertical\_Peak\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	
1	5849.998	-4.68	76.06	71.38	155.20	-83.82	Peak
2	5859.981	-4.63	71.21	66.58	109.40	-42.82	Peak
3	5876.566	-4.56	66.41	61.85	104.04	-42.19	Peak
4	5938.531	-4.45	66.35	61.90	68.20	-6.30	Peak

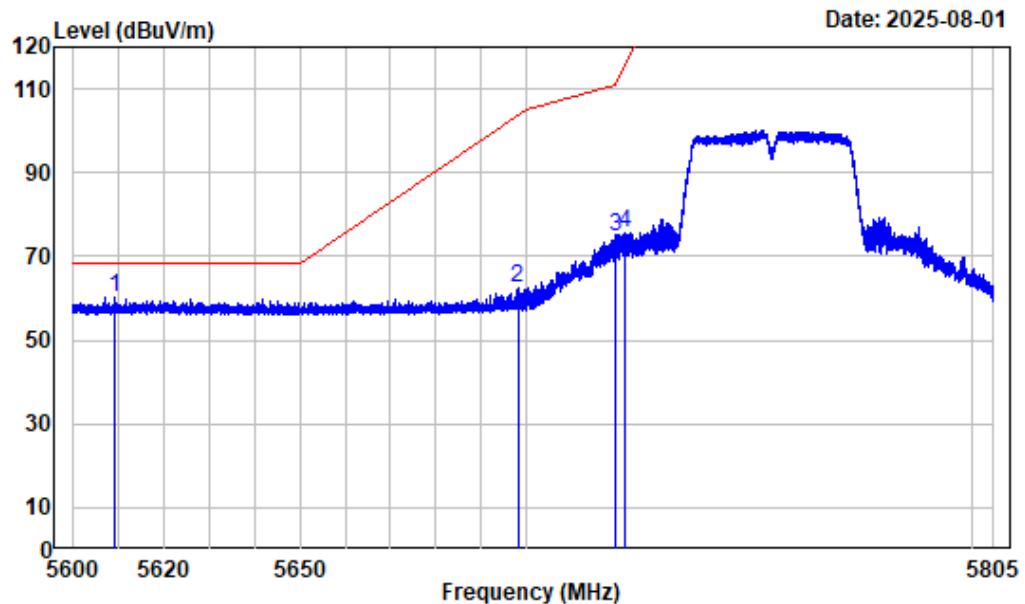
## Left Band edge\_Horizontal\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5755

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5615.249	-6.11	66.12	60.01	68.20	-8.19	Peak
2	5696.926	-5.72	68.63	62.91	102.93	-40.02	Peak
3	5719.709	-5.54	81.17	75.63	110.72	-35.09	Peak
4	5723.220	-5.50	82.15	76.65	118.14	-41.49	Peak

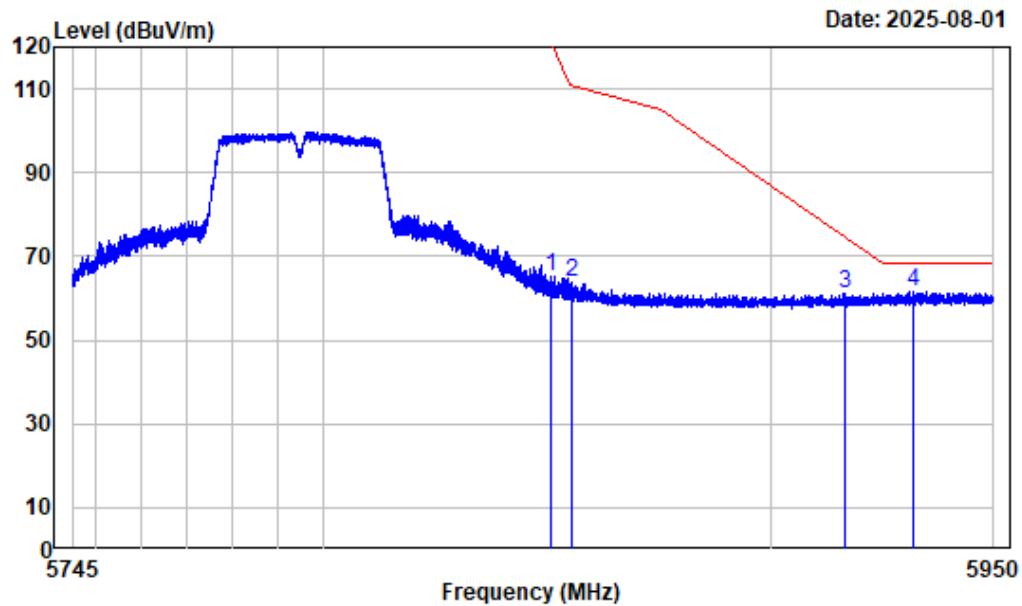
## Left Band edge\_Vertical\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5755

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5609.406	-6.14	66.48	60.34	68.20	-7.86	Peak
2	5698.208	-5.73	68.03	62.30	103.88	-41.58	Peak
3	5719.863	-5.53	80.10	74.57	110.76	-36.19	Peak
4	5722.144	-5.51	81.09	75.58	115.69	-40.11	Peak

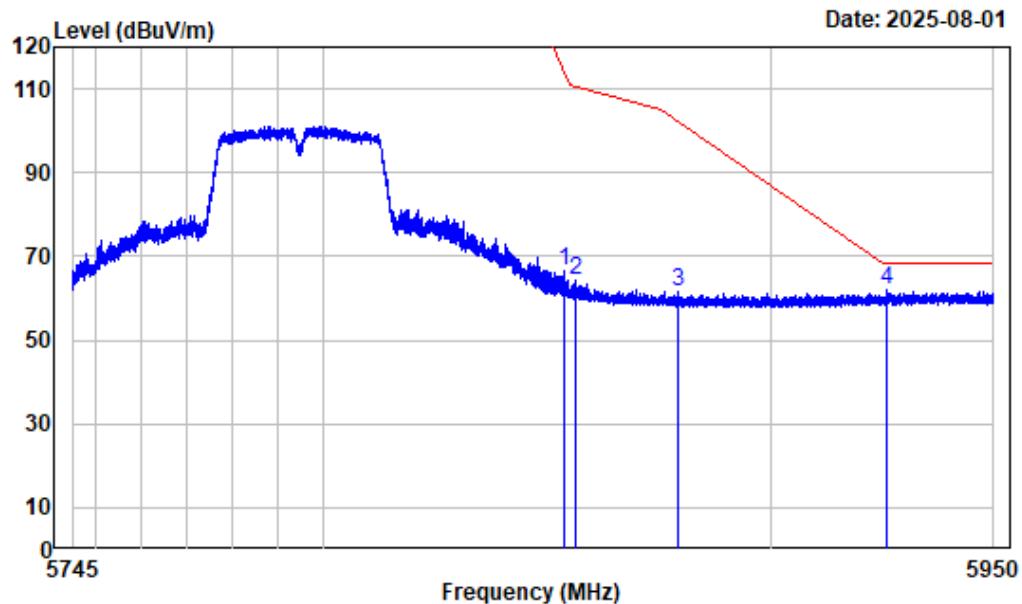
## Right Band edge\_Horizontal\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	
1	5850.614	-4.68	69.69	65.01	120.80	-55.79	Peak
2	5855.278	-4.66	68.56	63.90	110.72	-46.82	Peak
3	5916.401	-4.46	65.72	61.26	74.54	-13.28	Peak
4	5931.778	-4.44	66.22	61.78	68.20	-6.42	Peak

## Right Band edge\_Vertical\_Peak\_802.11n-HT40

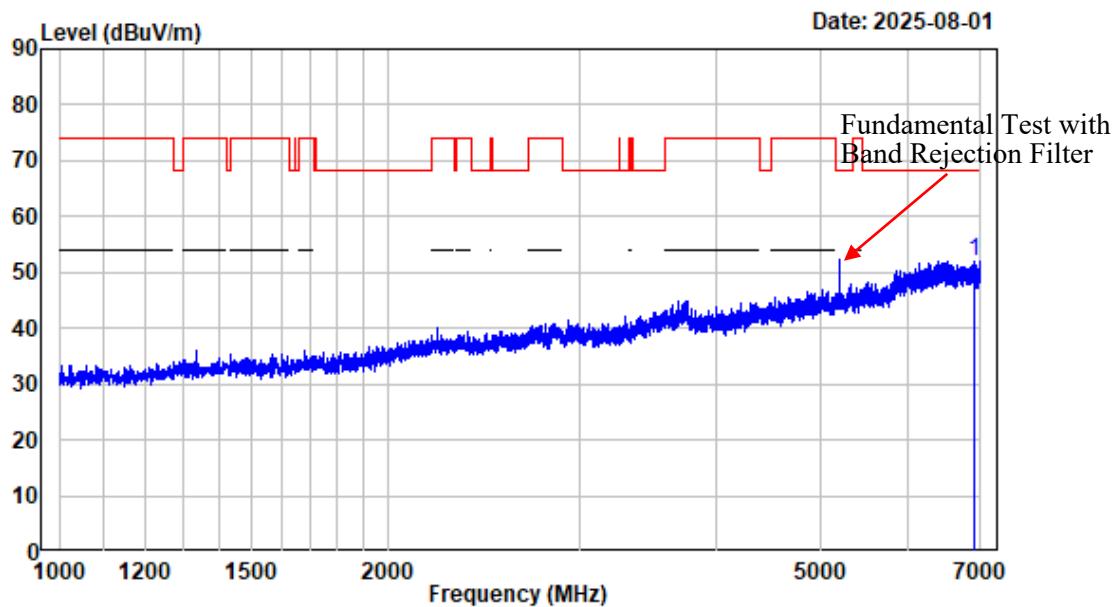


Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	Line	Limit
1	5853.382	-4.66	71.07	66.41	114.49	-48.08	Peak
2	5856.201	-4.66	68.87	64.21	110.46	-46.25	Peak
3	5878.882	-4.55	66.32	61.77	102.32	-40.55	Peak
4	5926.038	-4.45	66.26	61.81	68.20	-6.39	Peak

**5150-5250MHz:****1-18GHz (Listed with the worst harmonic margin test plot)**

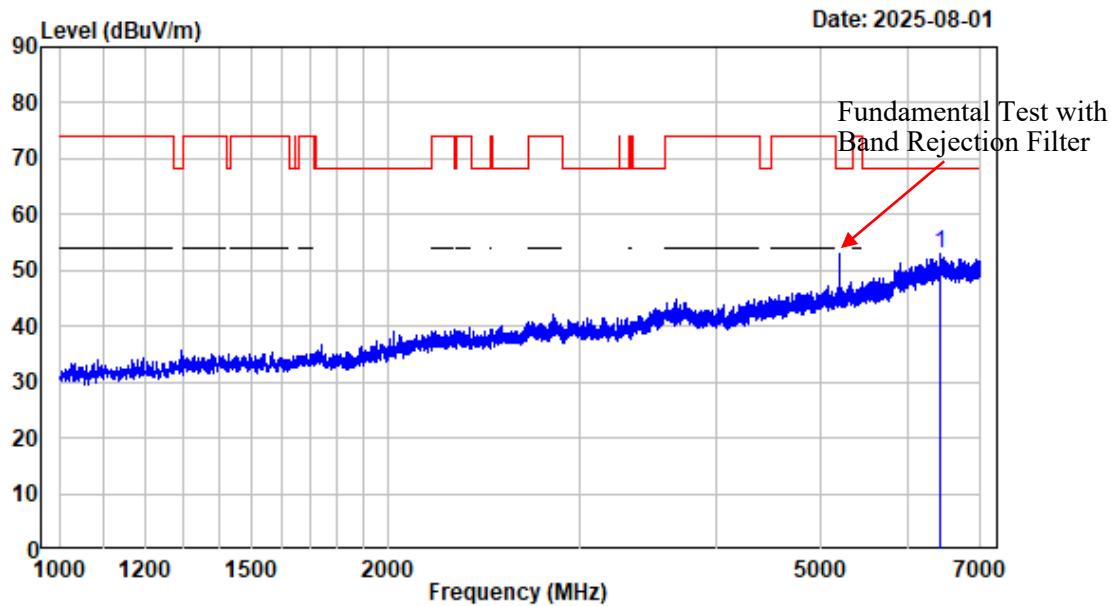
1-7GHz\_Horizontal\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	6915.989	-2.99	55.05	52.06	68.20	-16.14	Peak

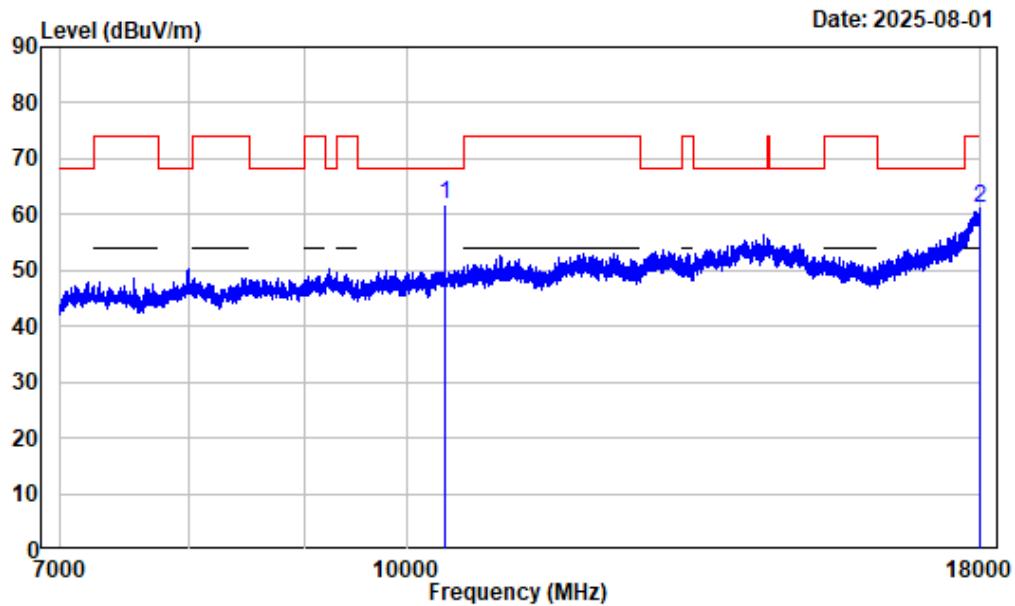
## 1-7GHz\_Vertical\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq Factor	MHz	Read Level		Limit Level		Over Line Limit	Remark
		dB/m	dBuV	dBuV/m	dBuV/m		
1	6426.178	-2.88	55.78	52.90	68.20	-15.30	Peak

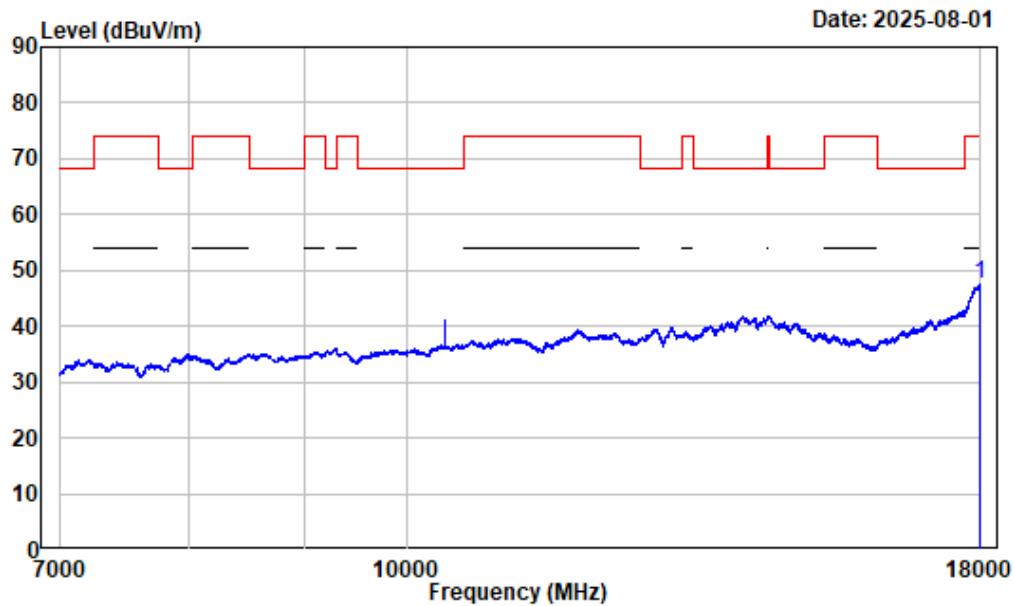
## 7-18GHz\_Horizontal\_Peak\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	10400.000	2.55	59.38	61.93	68.20	-6.27	Peak
2	17984.870	13.12	48.02	61.14	74.00	-12.86	Peak

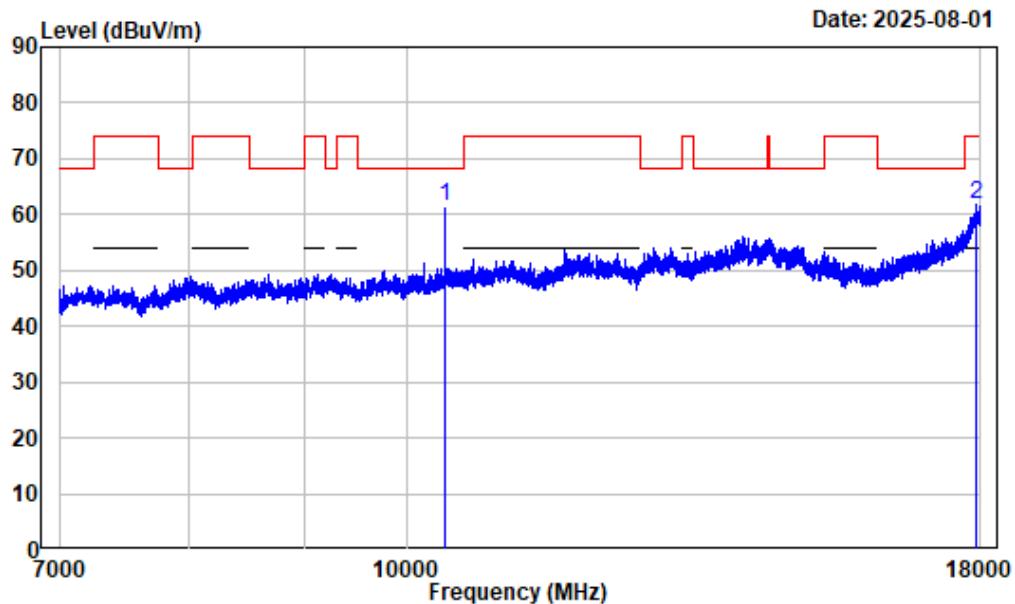
## 7-18GHz\_Horizontal\_Average\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	17982.120	13.10	34.31	47.41	54.00	-6.59	Average

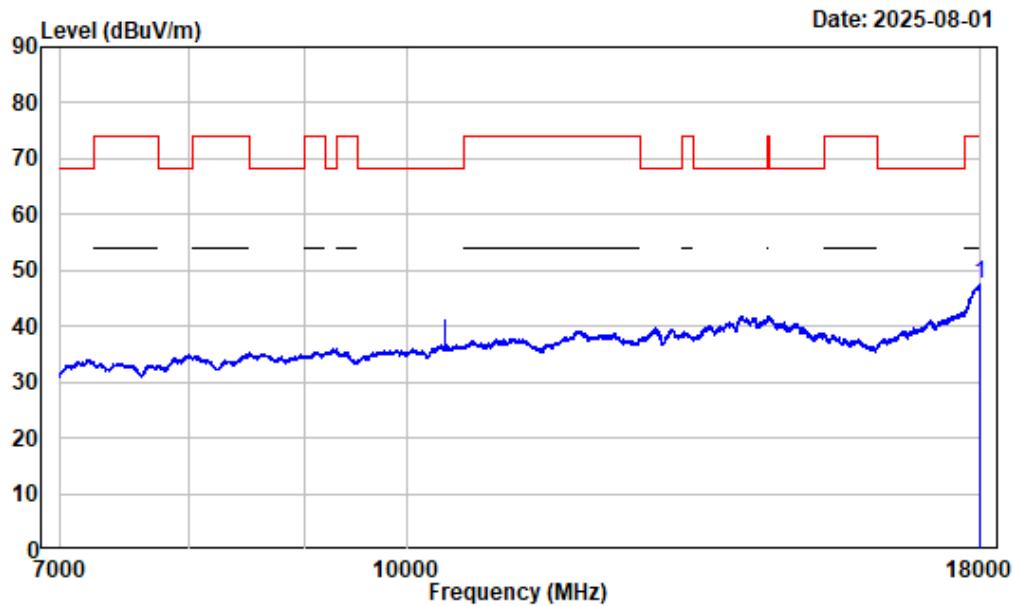
## 7-18GHz\_Vertical\_Peak\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	10400.000	2.55	59.00	61.55	68.20	-6.65	Peak
2	17920.240	12.80	49.14	61.94	74.00	-12.06	Peak

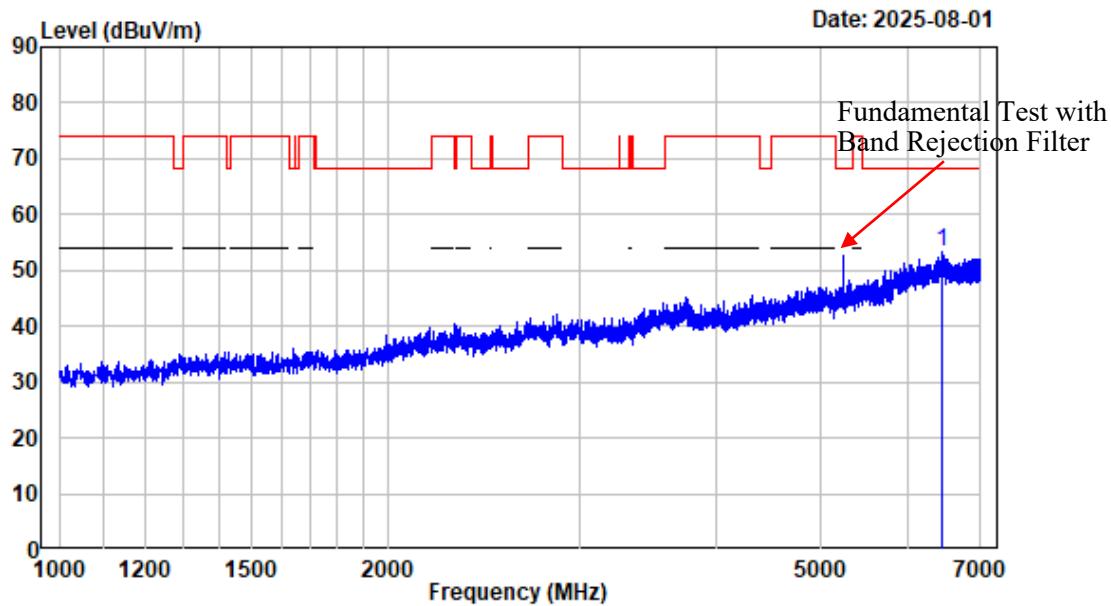
## 7-18GHz\_Vertical\_Average\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	17998.630	13.19	34.28	47.47	54.00	-6.53	Average

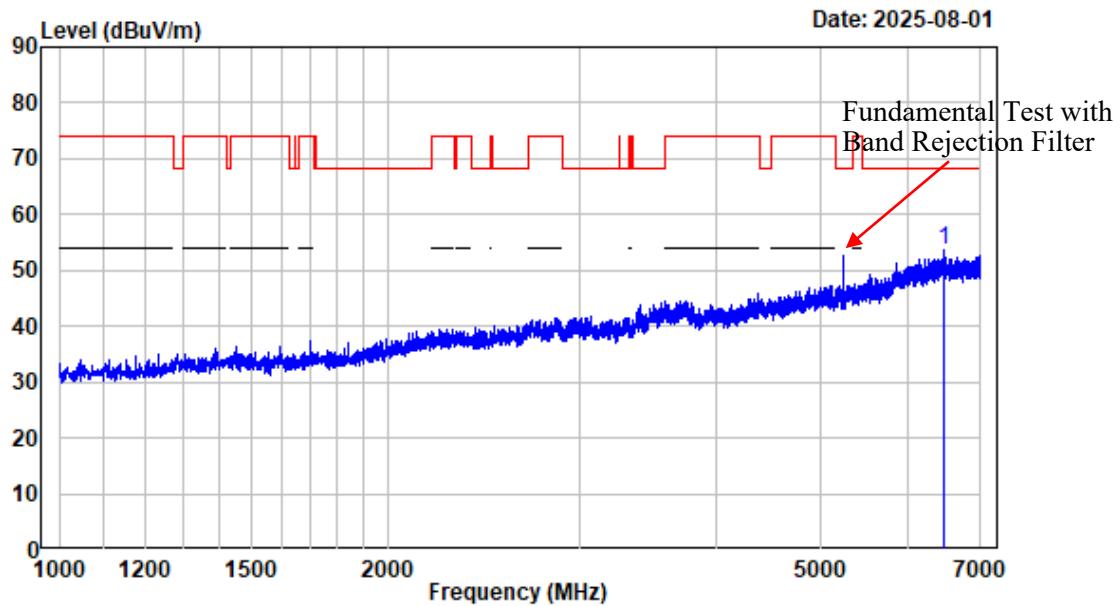
## 1-7GHz\_Horizontal\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq Factor	MHz	Read Level		Limit Level		Over Line	Limit	Remark
		dB/m	dBuV	dBuV/m	dBuV/m			
1	6456.932	-2.88	56.23	53.35	68.20	-14.85	Peak	

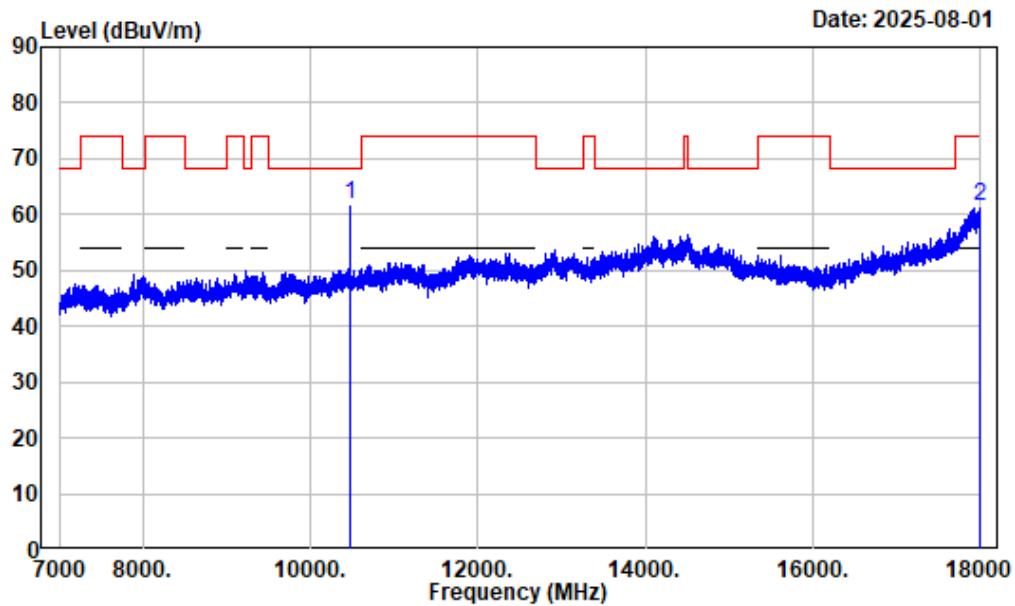
## 1-7GHz\_Vertical\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	6483.936	-2.93	56.47	53.54	68.20	-14.66	Peak

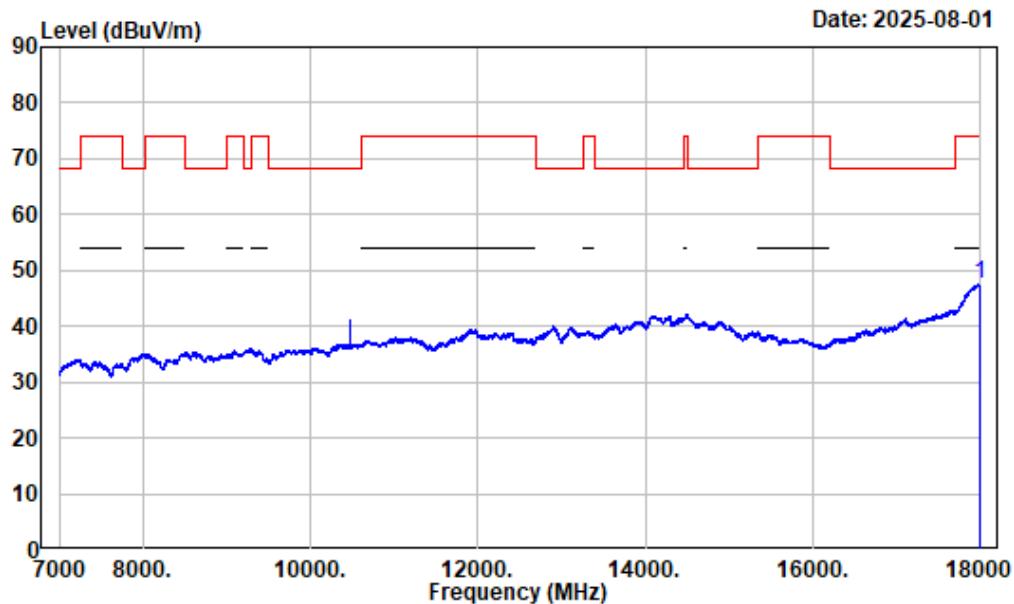
## 7-18GHz\_Horizontal\_Peak\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	10480.000	2.25	59.42	61.67	68.20	-6.53	Peak
2	18000.000	13.20	48.17	61.37	74.00	-12.63	Peak

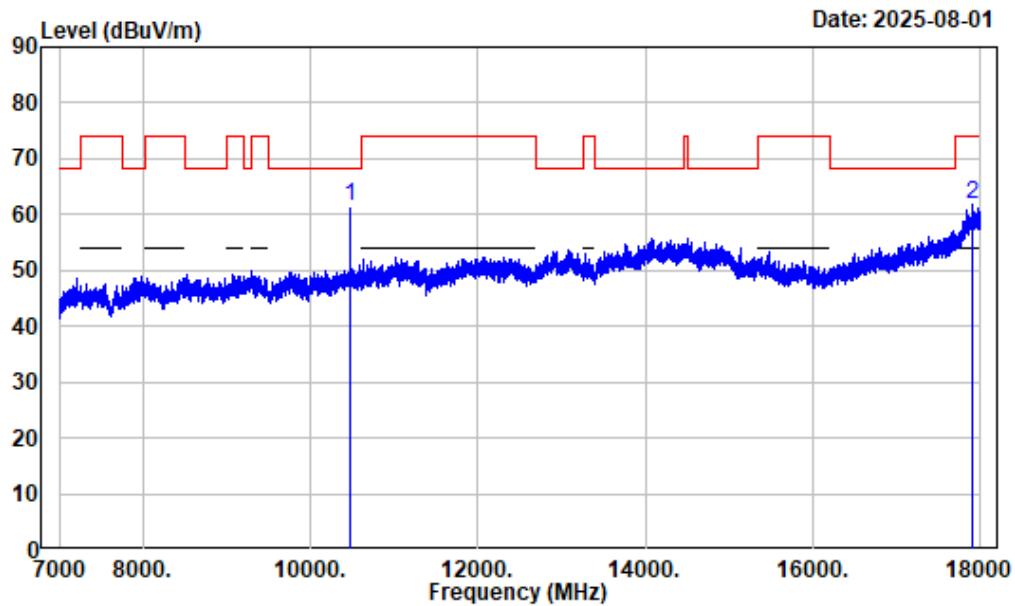
## 7-18GHz\_Horizontal\_Average\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq MHz	Factor	Read		Limit		Over Limit	Remark
		Level	Level	Line	Line		
18000.000	1	13.20	34.51	47.71	54.00	-6.29	Average

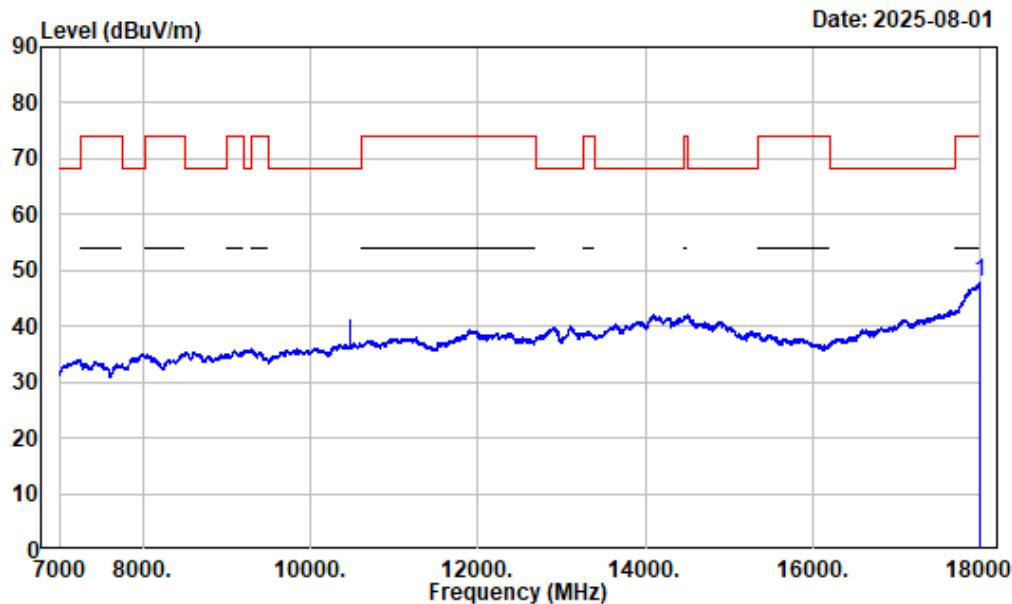
## 7-18GHz\_Vertical\_Peak\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Ivey Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	10480.000	2.25	59.27	61.52	68.20	-6.68	Peak
2	17900.990	12.71	48.97	61.68	74.00	-12.32	Peak

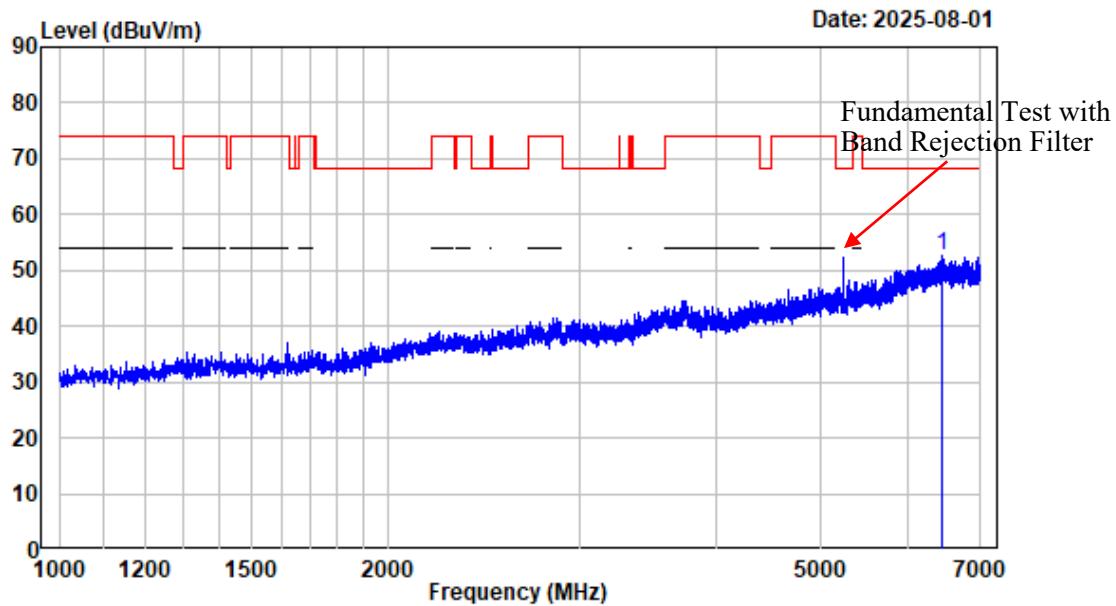
## 7-18GHz\_Vertical\_Average\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N20\_5240

Freq MHz	Factor	Read		Limit		Over Limit	Remark
		Level dB/m	Level dB <sub>uV</sub>	Line dB <sub>uV/m</sub>	Line dB <sub>uV/m</sub>		
17998.630	13.19	34.60	47.79	54.00	54.00	-6.21	Average

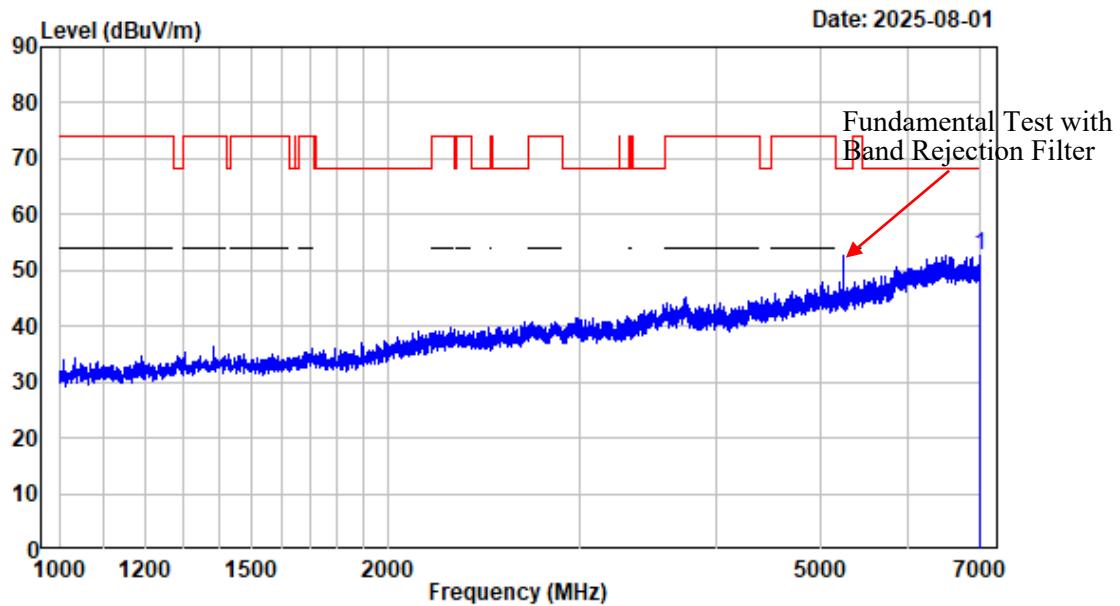
## 1-7GHz\_Horizontal\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	6444.931	-2.87	55.52	52.65	68.20	-15.55	Peak

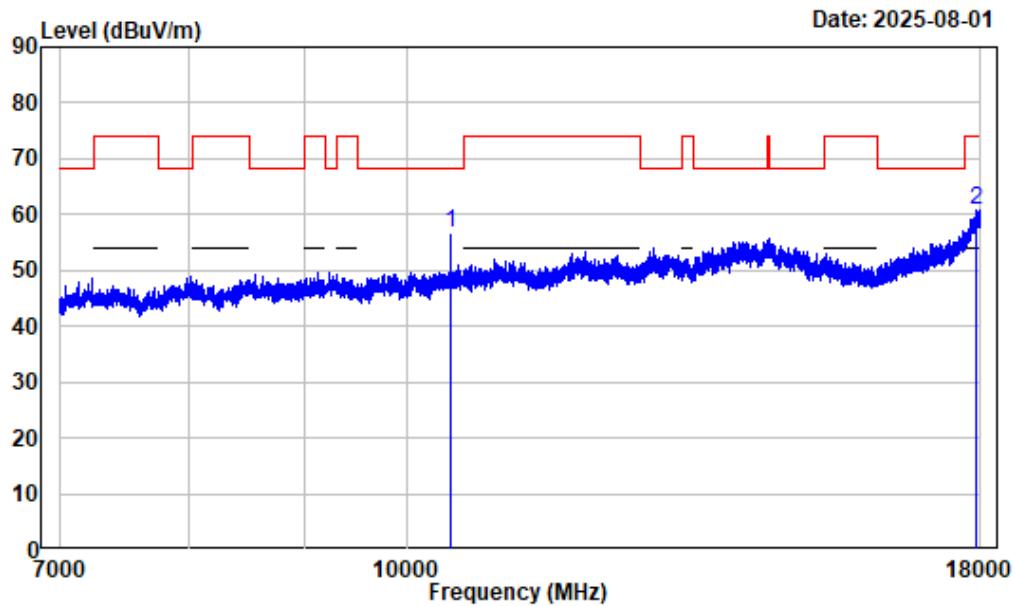
## 1-7GHz\_Vertical\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq Factor	MHz	Read Level		Limit Level		Over Line Limit	Remark
		dB/m	dBuV	dBuV/m	dBuV/m		
1	6994.750	-2.92	55.52	52.60	68.20	-15.60	Peak

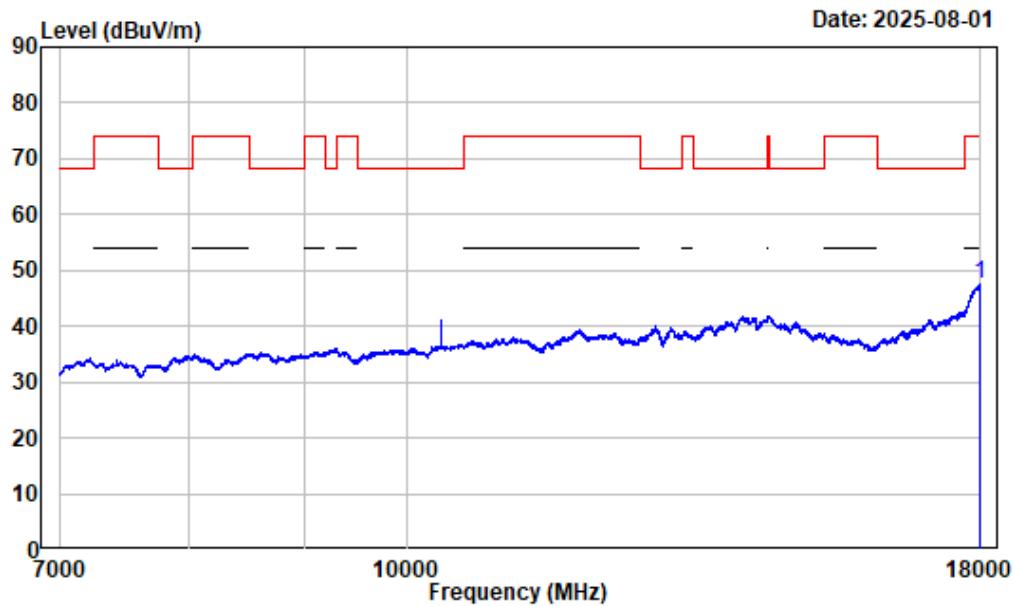
## 7-18GHz\_Horizontal\_Peak\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Ivey Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	10460.000	2.32	54.50	56.82	68.20	-11.38	Peak
2	17922.990	12.81	48.10	60.91	74.00	-13.09	Peak

## 7-18GHz\_Horizontal\_Average\_802.11n-HT40



Condition : Horizontal

Project No. : 2501T13375E-RF

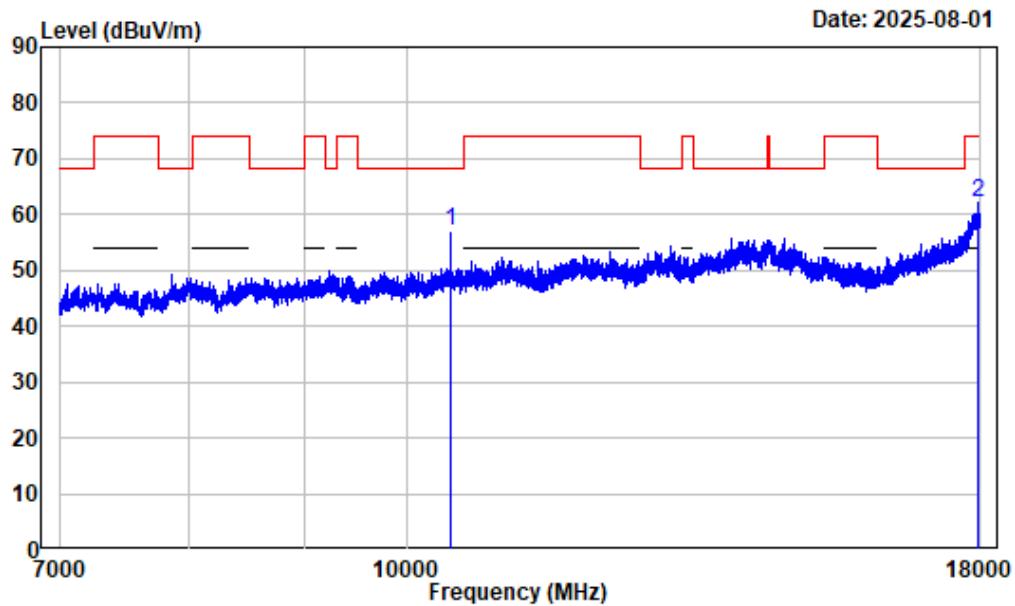
Tester : IVE Wang

Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak

Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Limit	Remark
		Level	Level	Line	Line			
MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>	dB <sub>uV/m</sub>	dB			
1 17995.880	13.18	34.40	47.58	54.00	-6.42	Average		

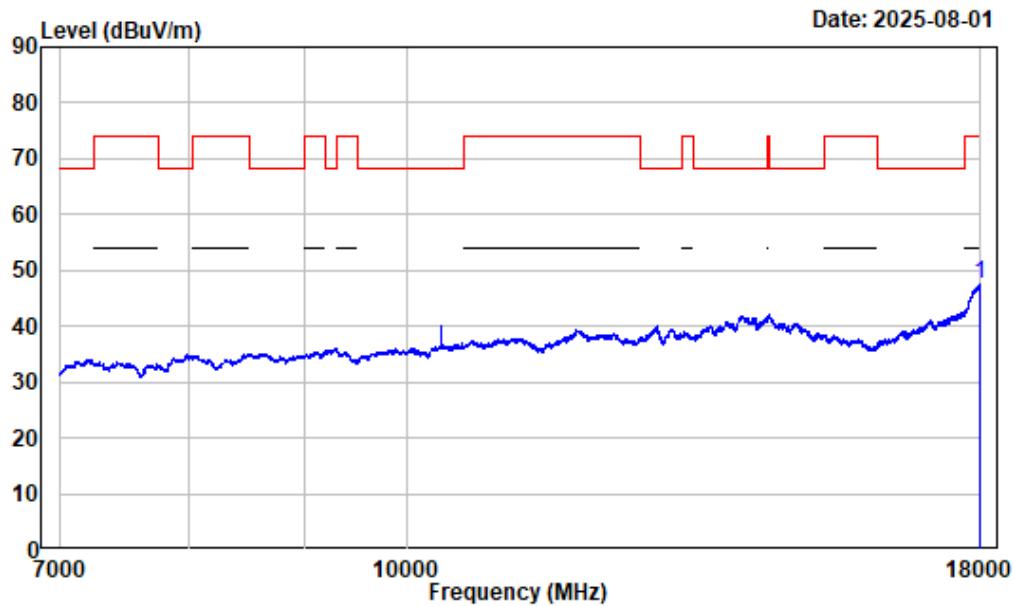
## 7-18GHz\_Vertical\_Peak\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Ivey Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	10460.000	2.32	54.87	57.19	68.20	-11.01	Peak
2	17951.870	12.96	49.09	62.05	74.00	-11.95	Peak

## 7-18GHz\_Vertical\_Average\_802.11n-HT40

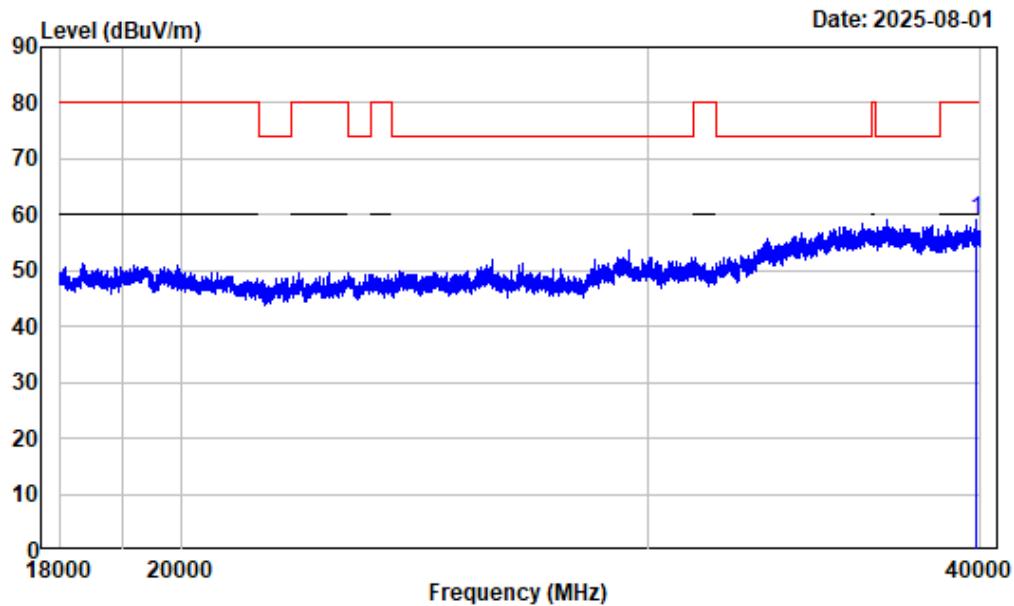


Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B1\_N40\_5230

Freq MHz	Factor	Read		Limit		Over Limit	Remark
		dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>	dB <sub>uV/m</sub>		
17989.000	1	13.14	34.30	47.44	54.00	-6.56	Average

**18-40GHz (Only Listed with the worst harmonic margin test plot)**

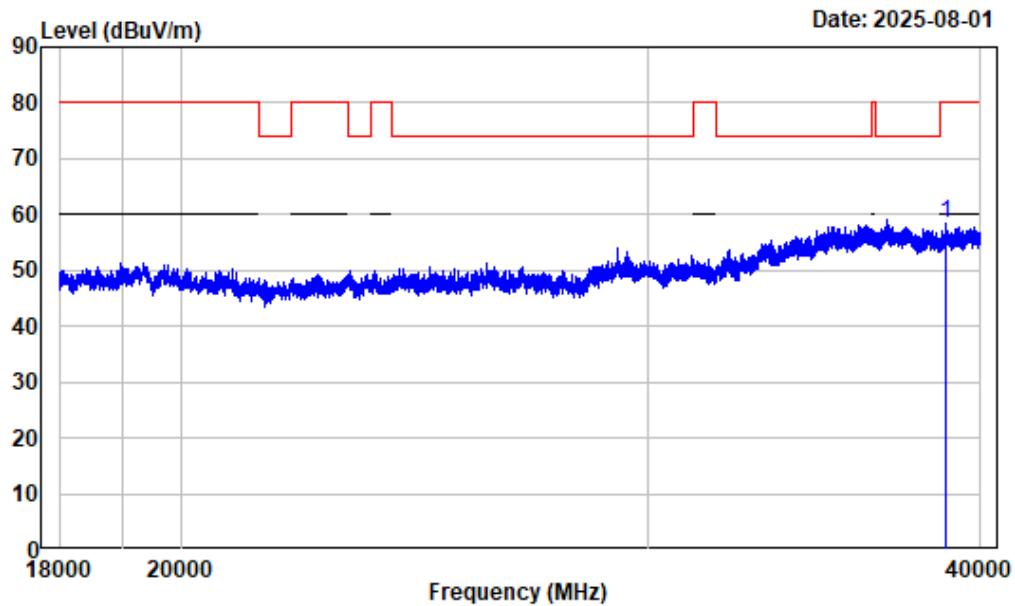
18-40GHz\_Horizontal\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	39837.730	22.27	36.91	59.18	80.00 -20.82 peak

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



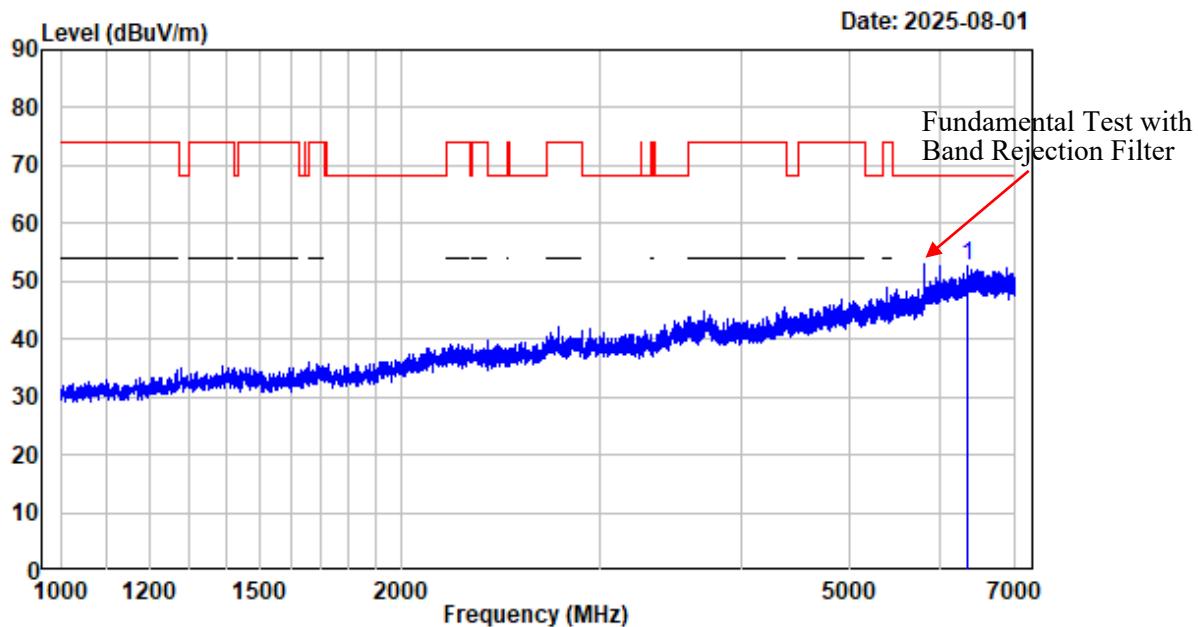
Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B1\_A\_5200

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	38833.860	22.24	36.06	58.30	80.00	-21.70	Peak

## 5725-5850MHz:

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

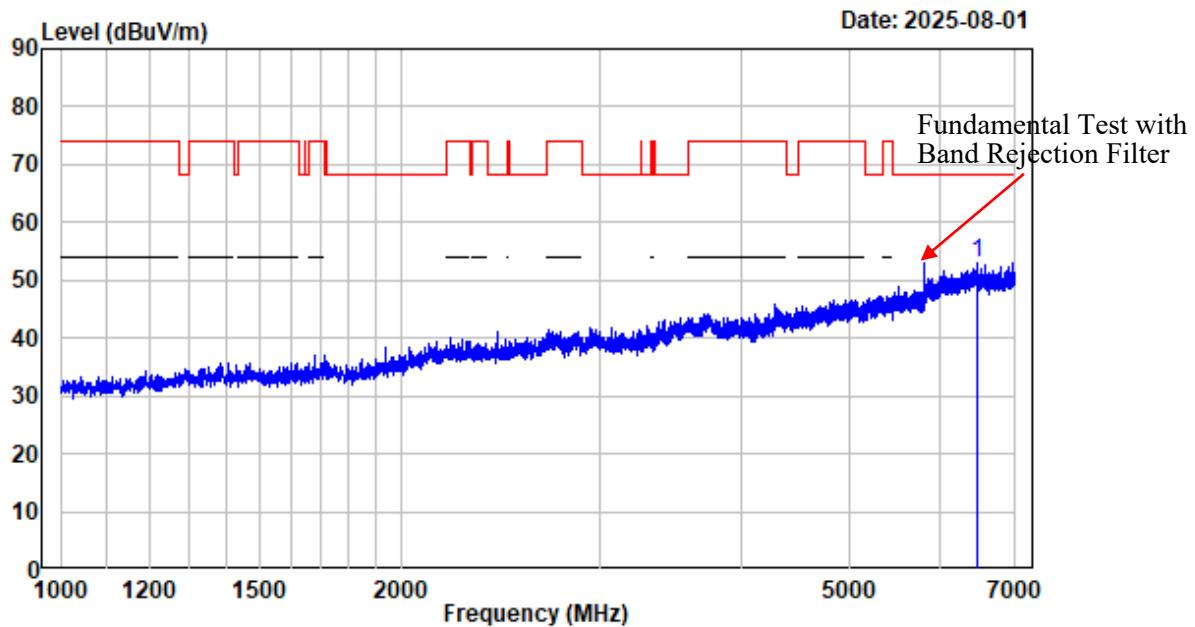
1-7GHz Horizontal 802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi B4 A 5825

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6356.419	-3.30	56.00	52.70	68.20	-15.50	Peak

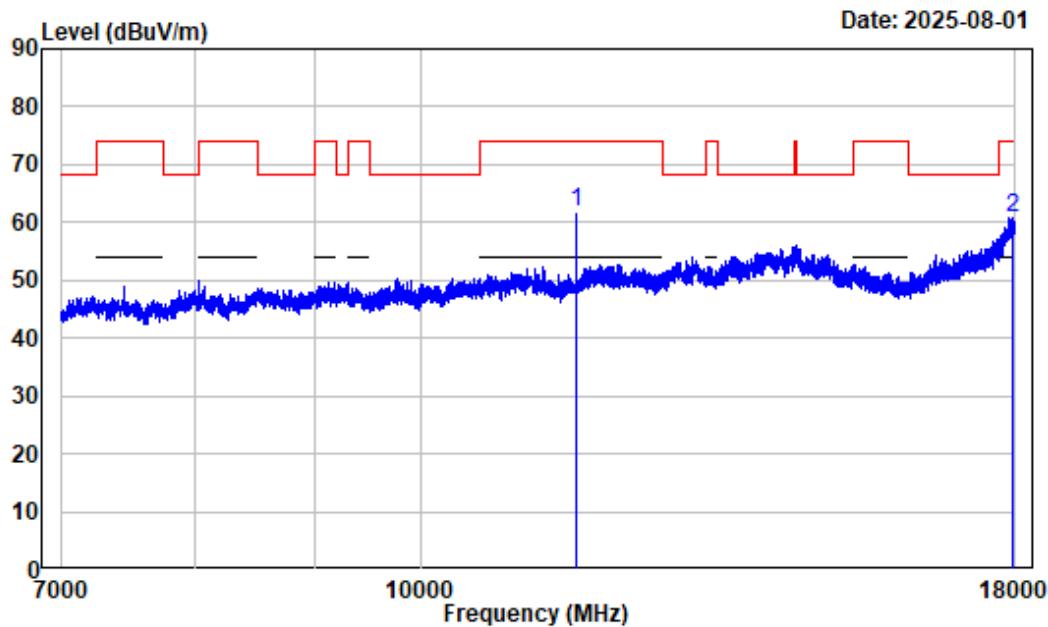
## 1-7GHz\_Vertical\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1		6474.184	-2.91	55.91	53.00	68.20	-15.20 Peak

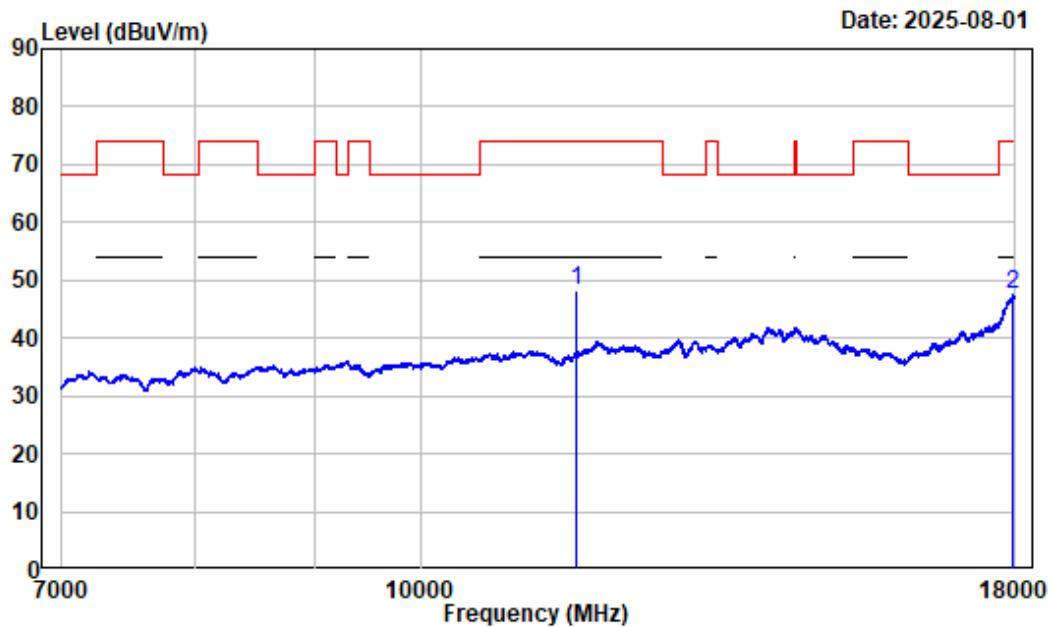
## 7-18GHz\_Horizontal\_Peak\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
1	11650.000	3.43	58.55	61.98	74.00	-12.02	Peak
2	17940.870	12.91	48.02	60.93	74.00	-13.07	Peak

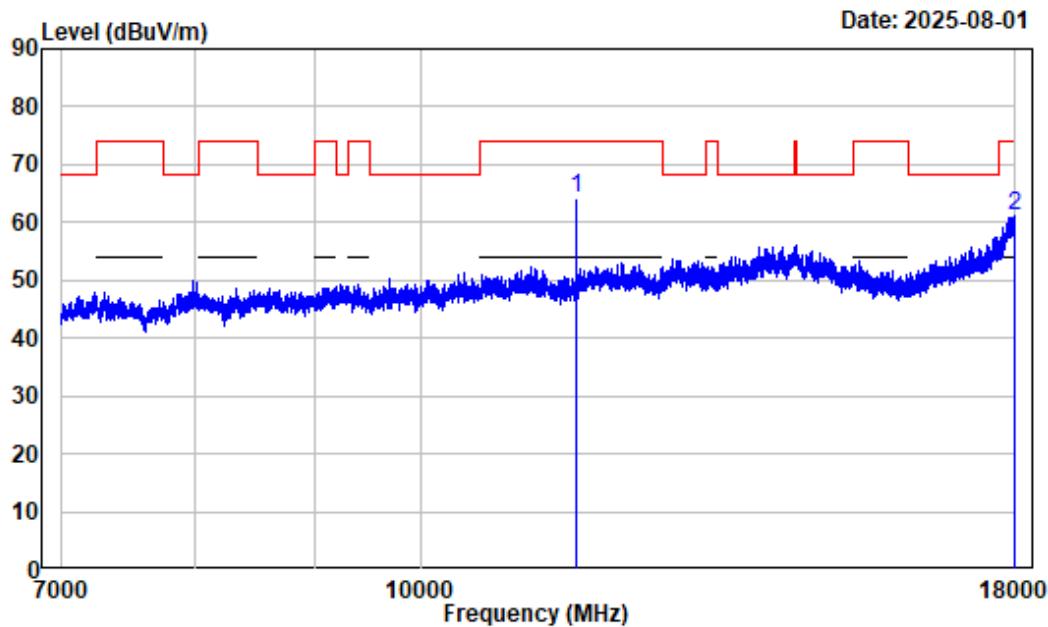
## 7-18GHz\_Horizontal\_Average\_802.11a



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
1	11650.000	3.43	44.88	48.31	54.00	-5.69	Average
2	17969.750	13.06	34.34	47.40	54.00	-6.60	Average

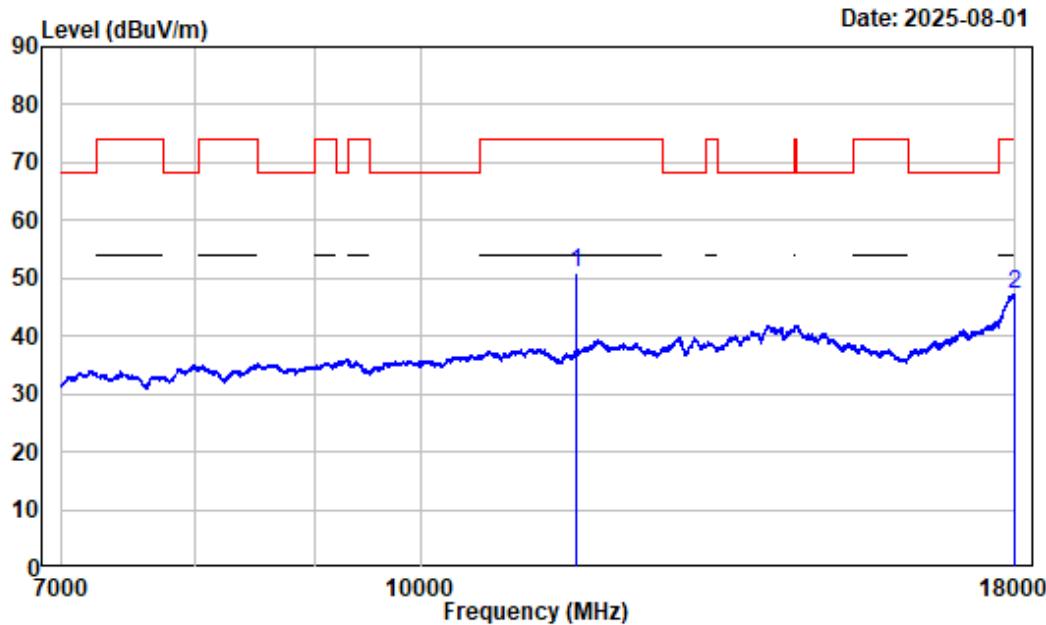
## 7-18GHz\_Vertical\_Peak\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	11650.000	3.43	60.59	64.02	74.00	-9.98	Peak
2	17993.130	13.17	48.01	61.18	74.00	-12.82	Peak

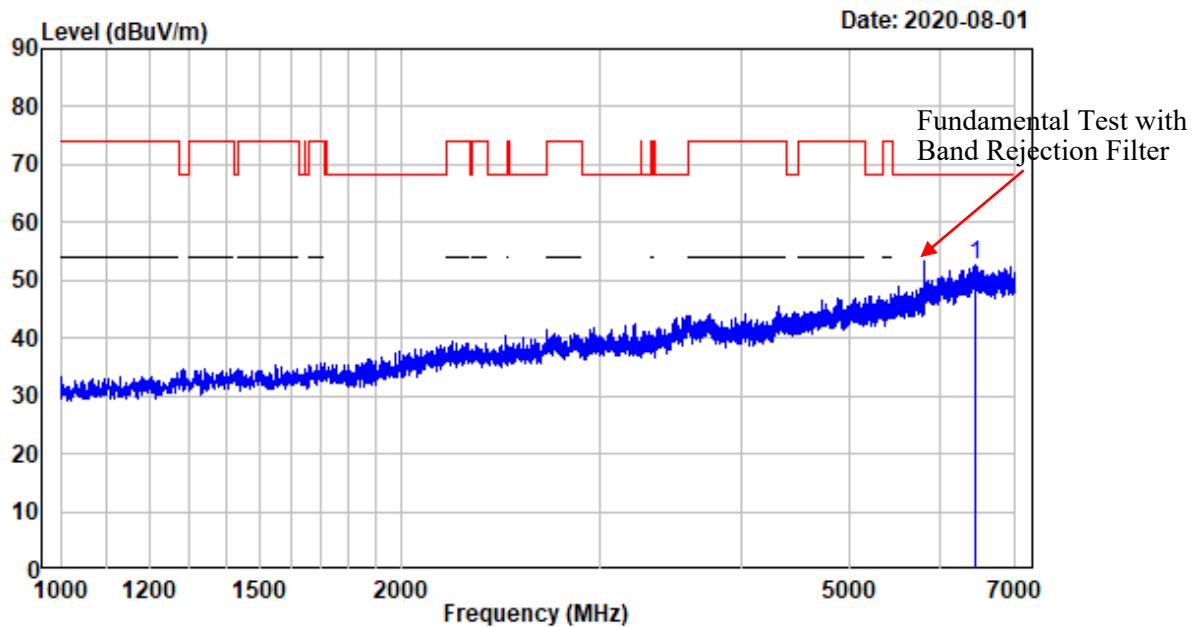
## 7-18GHz\_Vertical\_Average\_802.11a



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_A\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	11650.000	3.43	47.45	50.88	54.00	-3.12	Average
2	17991.750	13.16	34.19	47.35	54.00	-6.65	Average

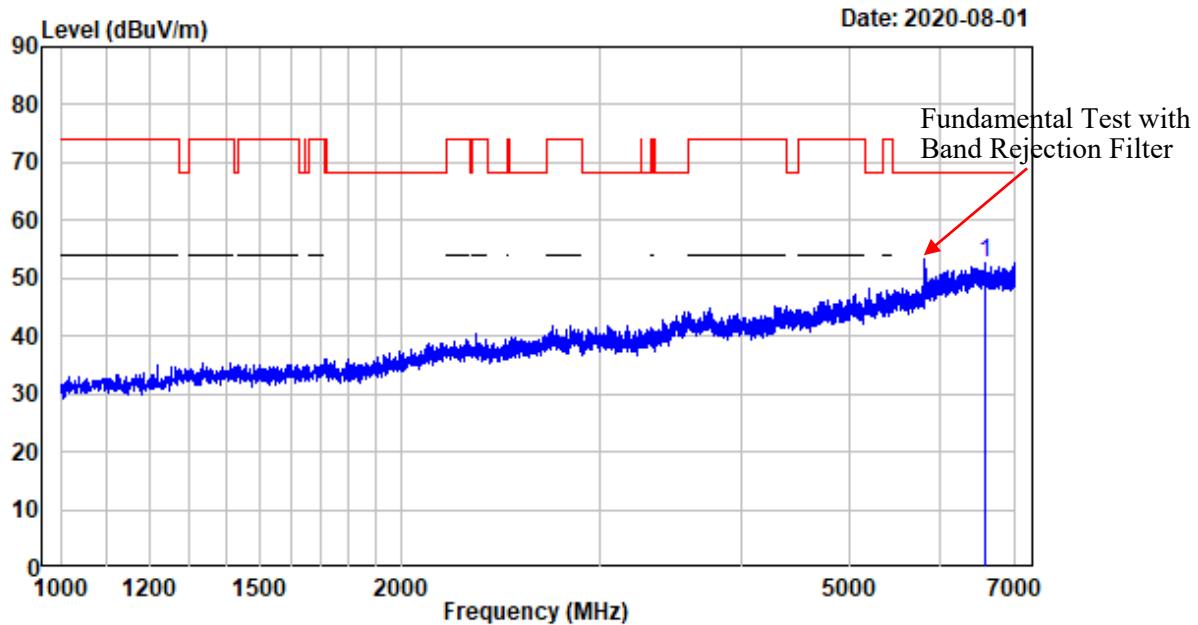
## 1-7GHz\_Horizontal\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	6451.682	-2.88	55.64	52.76	68.20 -15.44 Peak

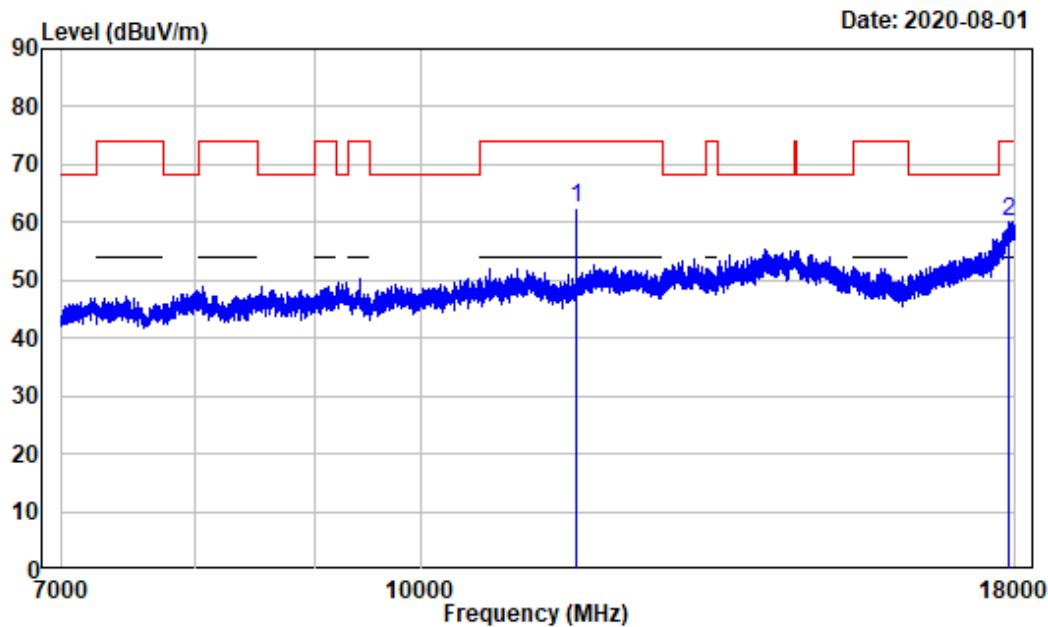
## 1-7GHz\_Vertical\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	6576.197	-3.09	55.64	52.55	68.20 -15.65 Peak

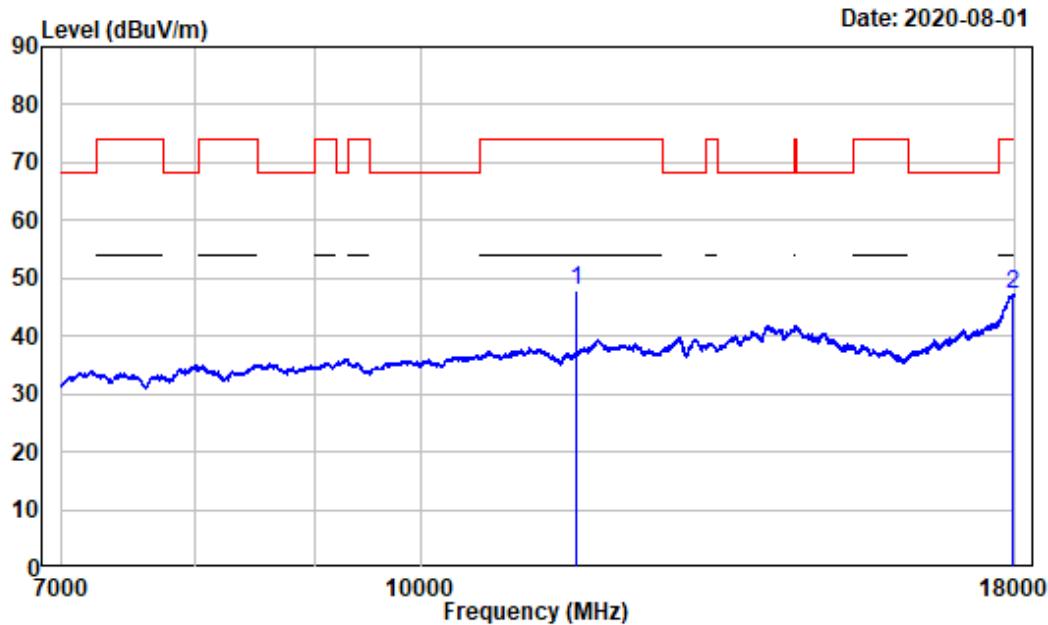
## 7-18GHz\_Horizontal\_Peak\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
11650.000		3.43	59.19	62.62	74.00	-11.38	Peak
17894.110		12.60	47.60	60.20	74.00	-13.80	Peak

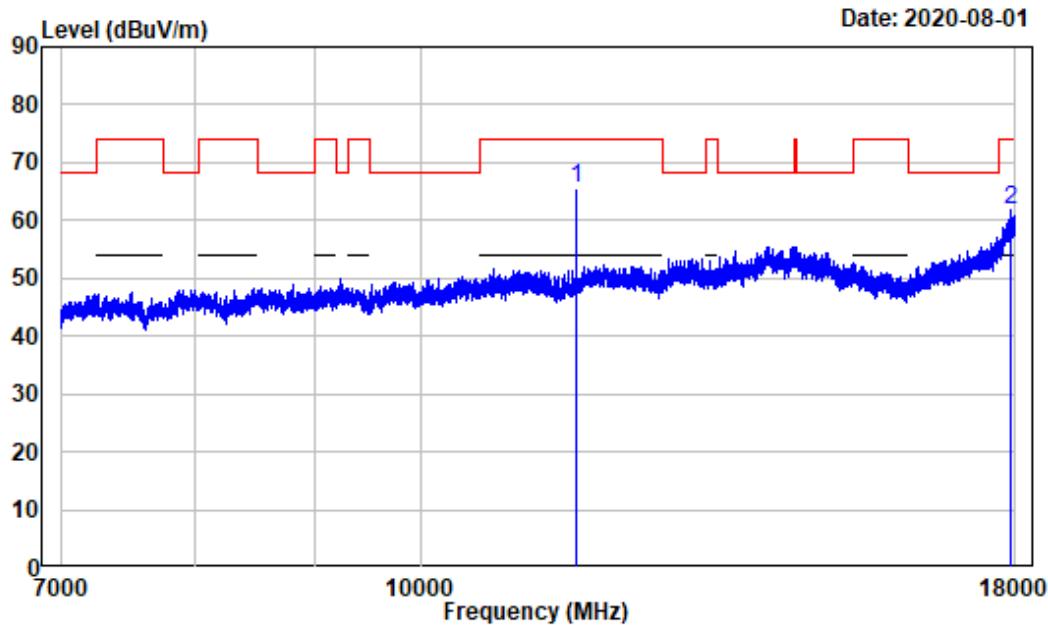
## 7-18GHz\_Horizontal\_Average\_802.11n-HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
1	11650.000	3.43	44.56	47.99	54.00	-6.01	Average
2	17953.240	12.97	34.32	47.29	54.00	-6.71	Average

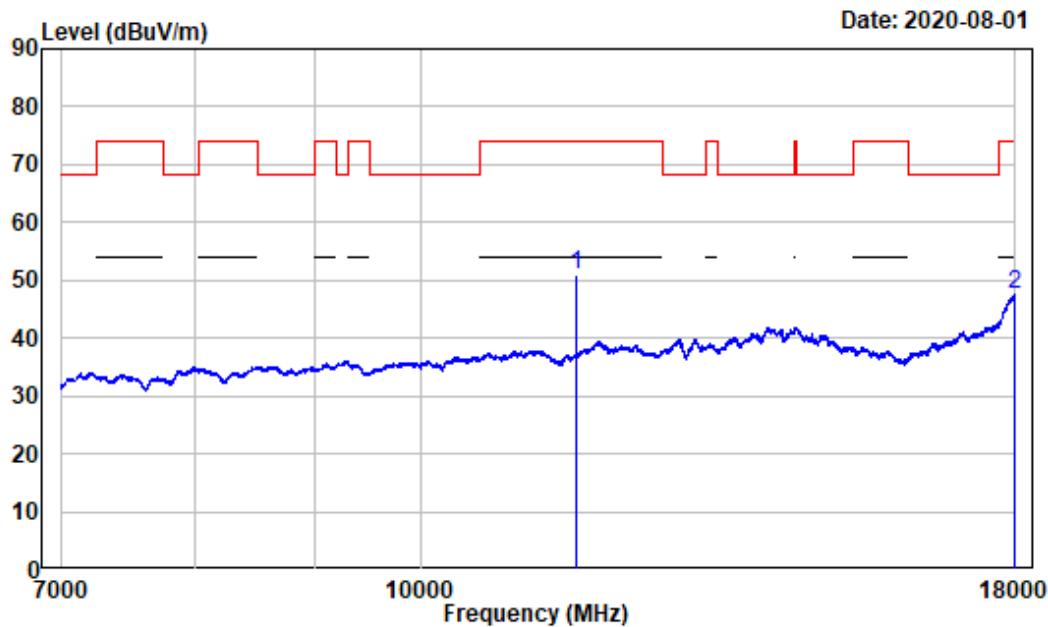
## 7-18GHz\_Vertical\_Peak\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
11650.000	3.43	62.20	65.63	74.00	-8.37 Peak
17909.240	12.75	49.07	61.82	74.00	-12.18 Peak

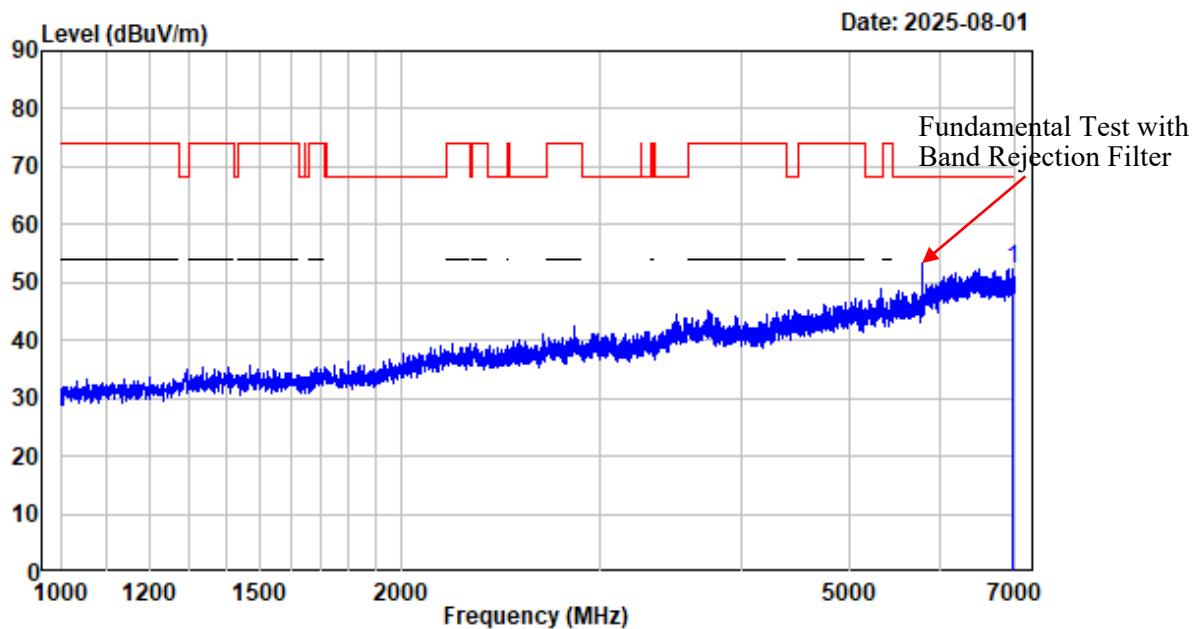
## 7-18GHz\_Vertical\_Average\_802.11n-HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
1	11650.000	3.43	47.53	50.96	54.00	-3.04	Average
2	17995.880	13.18	34.28	47.46	54.00	-6.54	Average

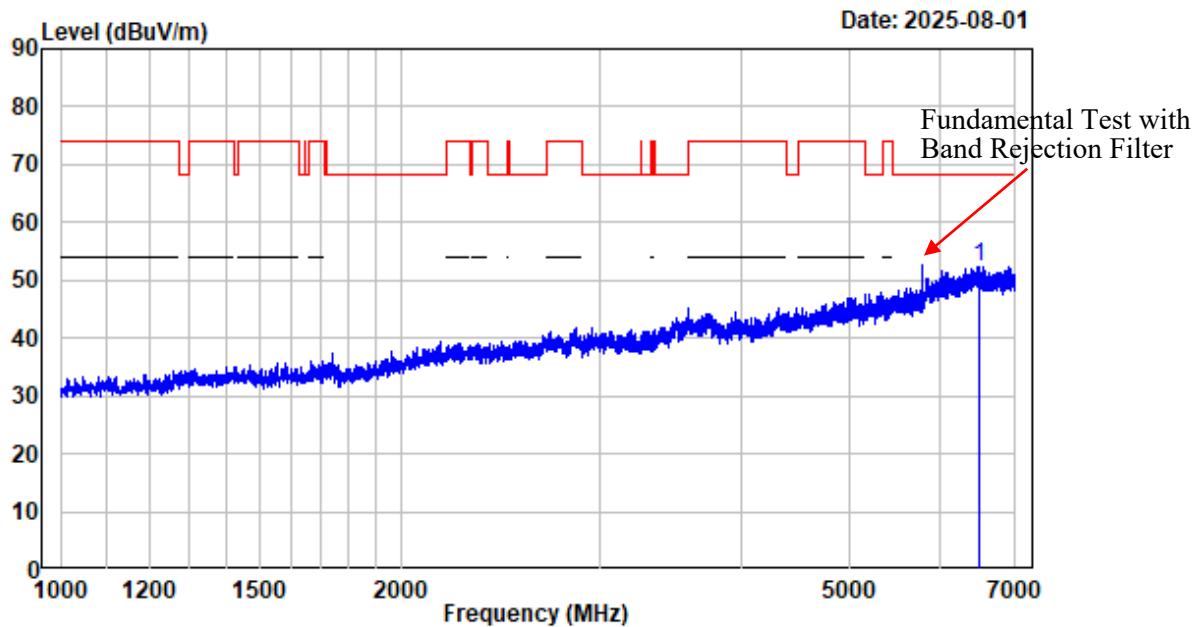
## 1-7GHz\_Horizontal\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark						
1	6953.494	MHz	-2.71	dB/m	54.90	dBuV	52.19	dBuV/m	68.20	dBuV/m	-16.01	dB	Peak

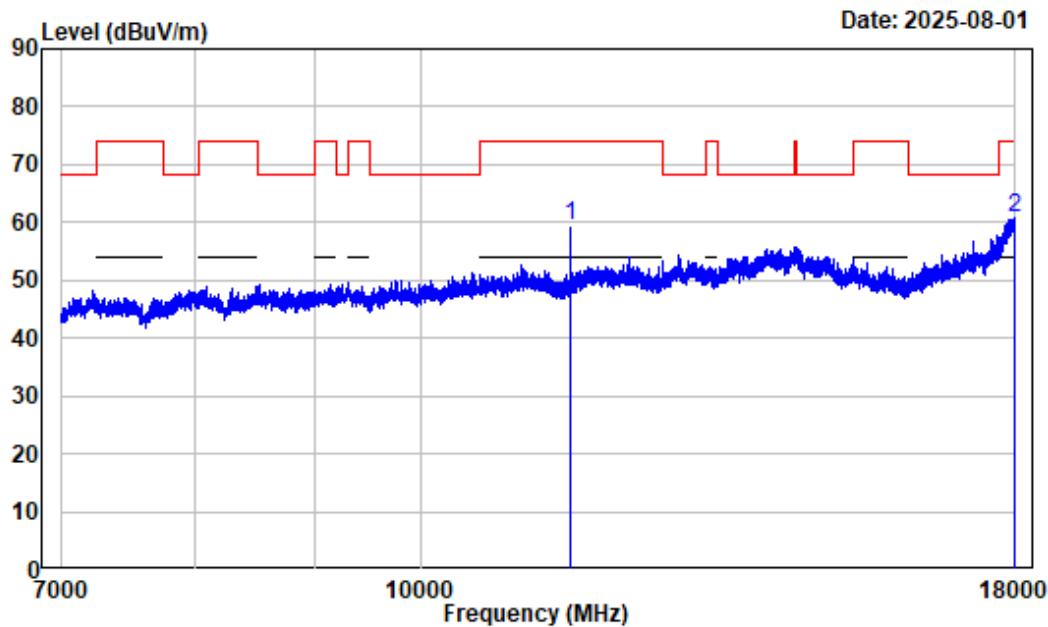
## 1-7GHz\_Vertical\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	6503.438	-2.95	55.37	52.42	68.20 -15.78 Peak

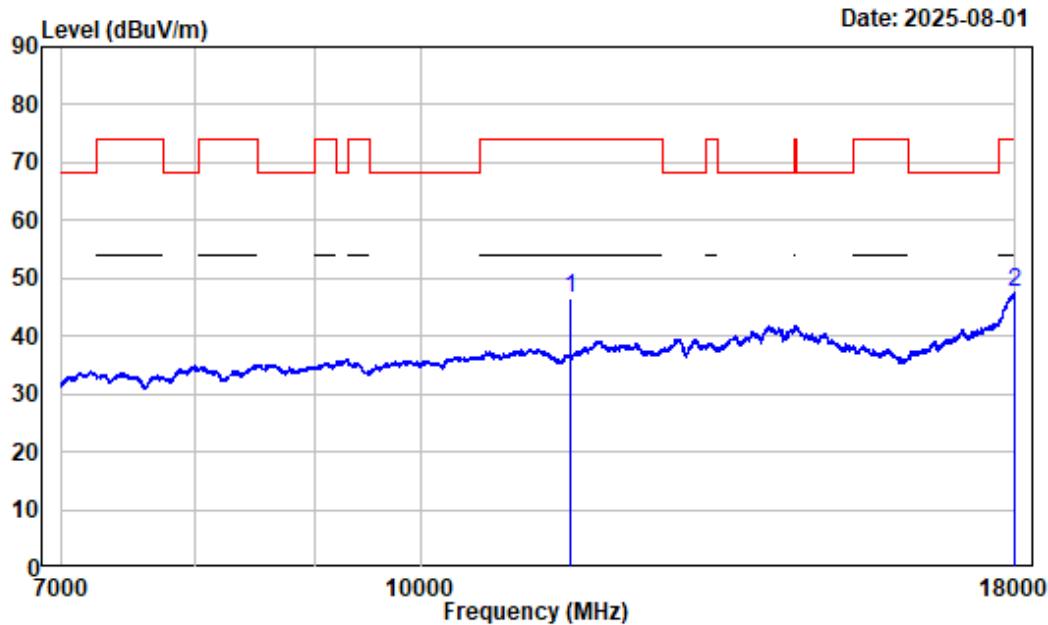
## 7-18GHz\_Horizontal\_Peak\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Limit		
1	11590.000	3.21	56.11	59.32	74.00	-14.68	Peak
2	17989.000	13.14	47.57	60.71	74.00	-13.29	Peak

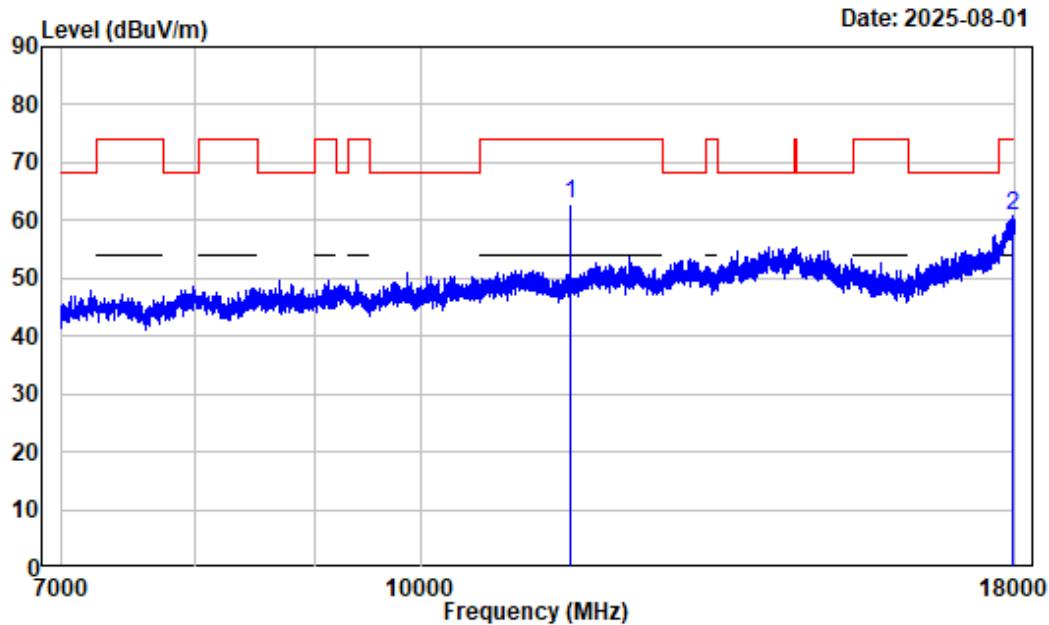
## 7-18GHz\_Horizontal\_Average\_802.11n-HT40



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1 11590.000	3.21	43.24	46.45	54.00	-7.55 Average
2 17995.880	13.18	34.26	47.44	54.00	-6.56 Average

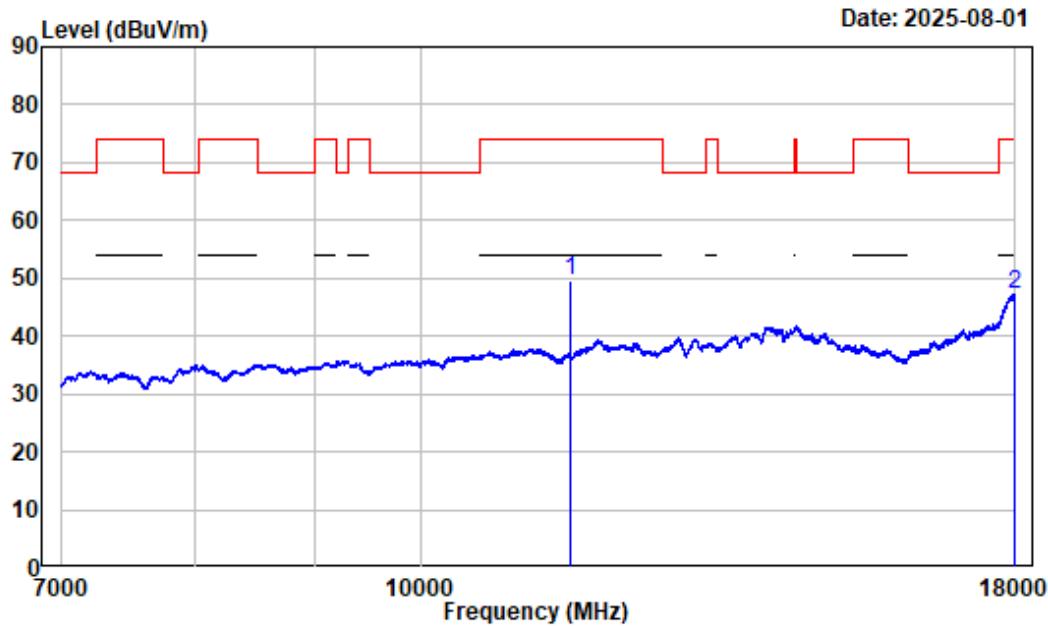
## 7-18GHz\_Vertical\_Peak\_802.11n-HT40



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
11590.000	3.21	59.48	62.69	74.00	-11.31 Peak
17960.120	13.00	47.78	60.78	74.00	-13.22 Peak

## 7-18GHz\_Vertical\_Average\_802.11n-HT40

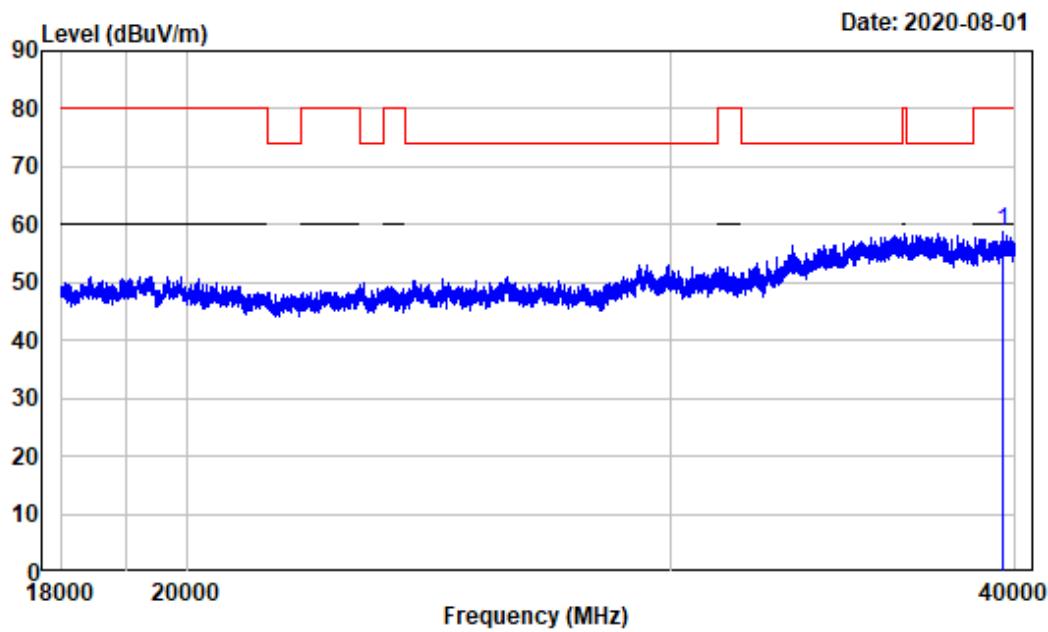


Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak  
Note : 5GWiFi\_B4\_N40\_5795

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1 11590.000	3.21	46.43	49.64	54.00	-4.36 Average
2 17995.880	13.18	34.07	47.25	54.00	-6.75 Average

**18-40GHz (Only Listed with the worst harmonic margin test plot)**

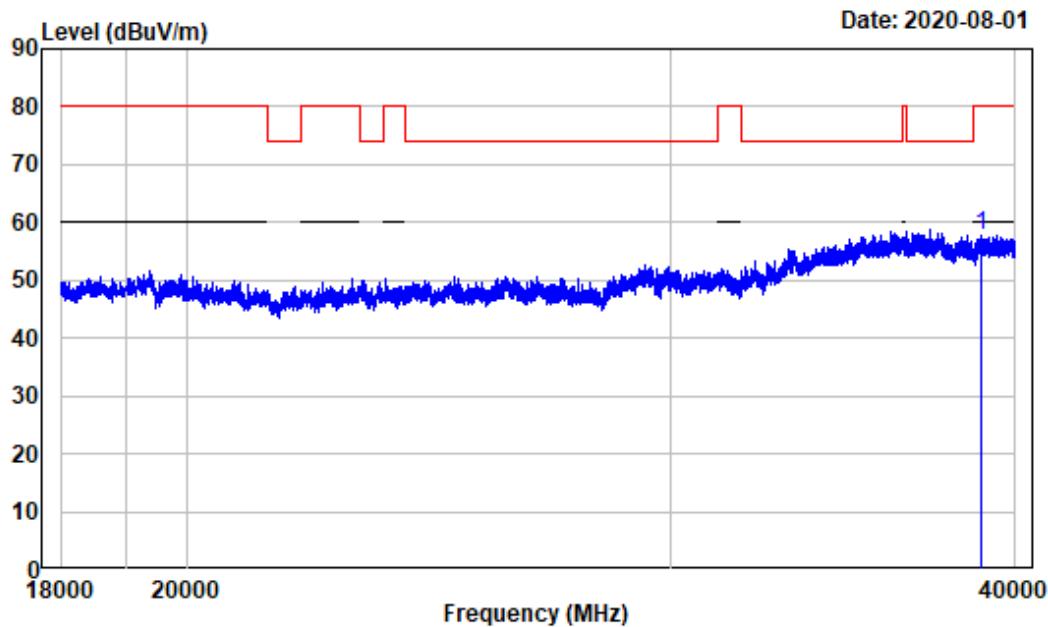
18-40GHz\_Horizontal\_802.11n HT20



Condition : Horizontal  
Project No. : 2501T13375E-RF  
Tester : Iye Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	39592.950	22.25	36.40	58.65	80.00	-21.35	peak

## 18-40GHz\_Vertical\_802.11n HT20



Condition : Vertical  
Project No. : 2501T13375E-RF  
Tester : IVE Wang  
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak  
Note : 5GWiFi\_B4\_N20\_5825

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	38888.860	22.24	35.58	57.82	80.00 -22.18 Peak

**Emission Bandwidth****Test Information:**

<b>Sample No.:</b>	37CC-8	<b>Test Date:</b>	2025/08/03
<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)	25.9	<b>Relative Humidity:</b> (%)	56	<b>ATM Pressure:</b> (kPa)	101.3
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**Test Data:****26dB Emission Bandwidth****5150-5250MHz**

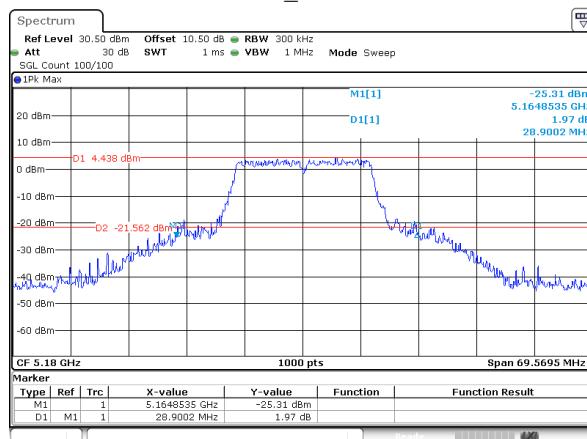
<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>Result (MHz)</b>
802.11a	5180	28.900
	5200	28.834
	5240	29.741
802.11n20	5180	26.744
	5200	29.220
	5240	28.229
802.11n40	5190	41.141
	5230	<b>51.307</b>

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

<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>Result (MHz)</b>	<b>Limit (MHz)</b>	<b>Verdict</b>
802.11a	5745	16.416	0.5	Pass
	5785	16.416	0.5	Pass
	5825	16.416	0.5	Pass
802.11n20	5745	17.718	0.5	Pass
	5785	17.668	0.5	Pass
	5825	17.718	0.5	Pass
802.11n40	5755	35.235	0.5	Pass
	5795	<b>35.536</b>	0.5	Pass

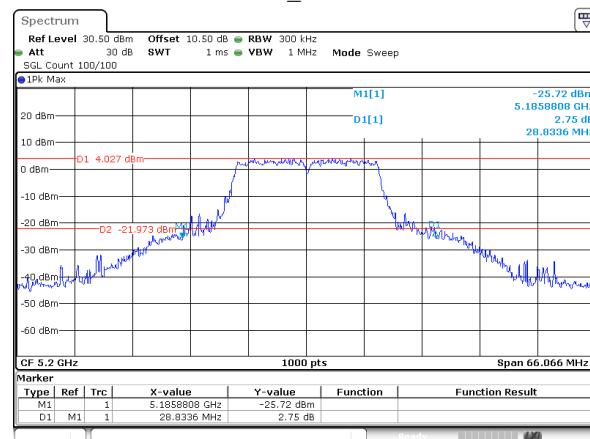
## 5150-5250MHz

## 802.11a\_5180MHz



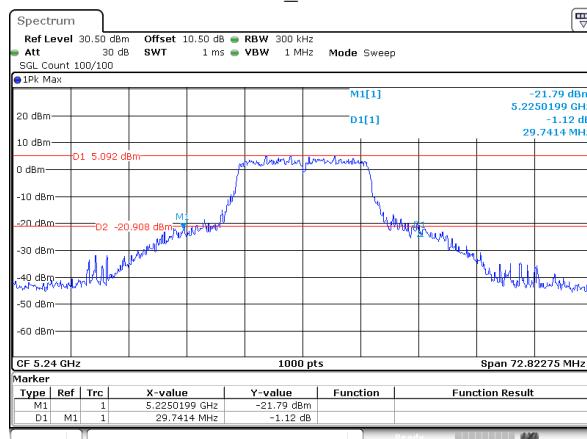
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:33:02

## 802.11a\_5200MHz



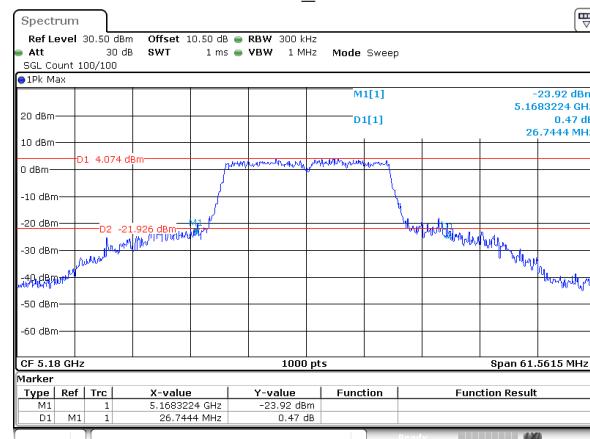
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:36:02

## 802.11a\_5240MHz



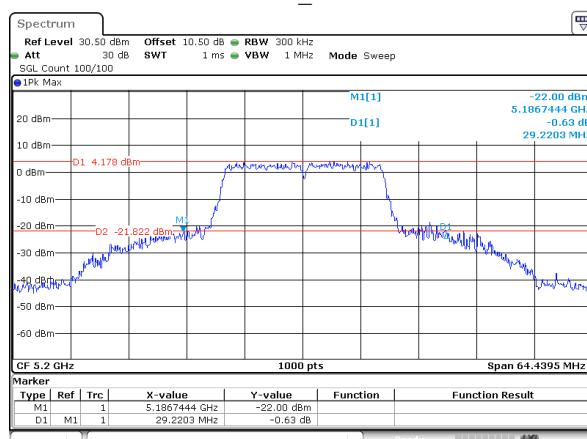
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:38:52

## 802.11n20\_5180MHz



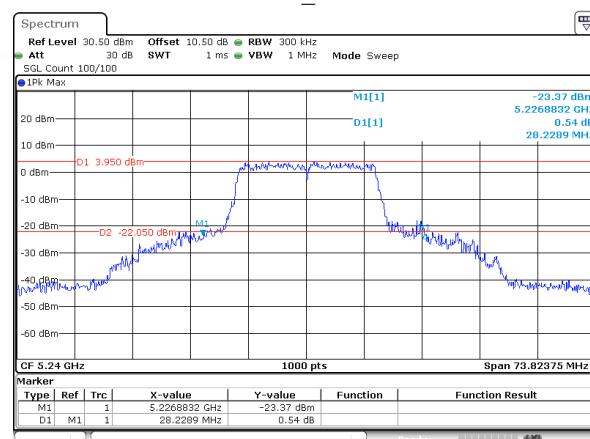
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:00:10

## 802.11n20\_5200MHz



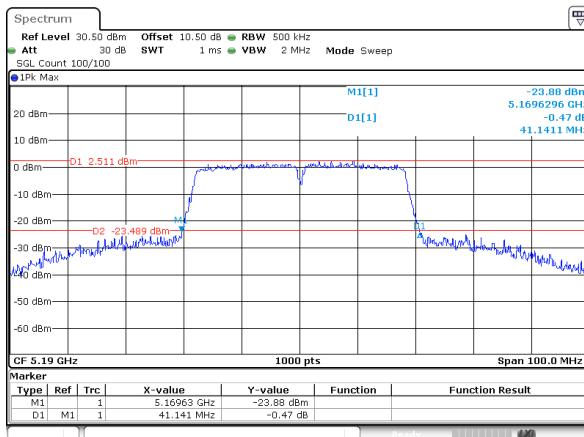
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:02:03

## 802.11n20\_5240MHz

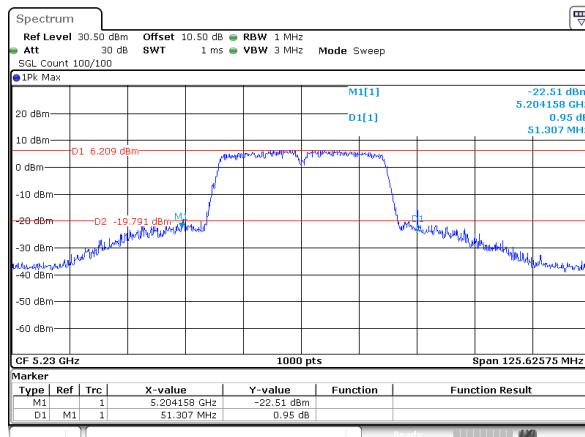


ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:04:31

## 802.11n40\_5190MHz

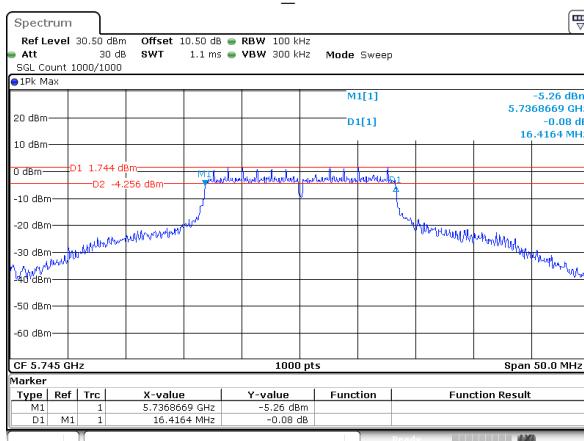


## 802.11n40\_5230MHz

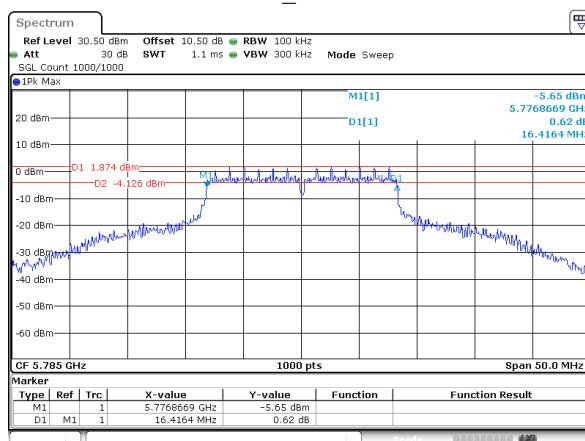


## 5725-5850MHz

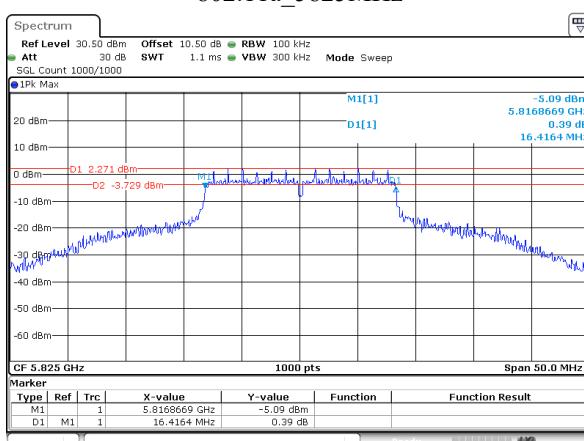
## 802.11a\_5745MHz



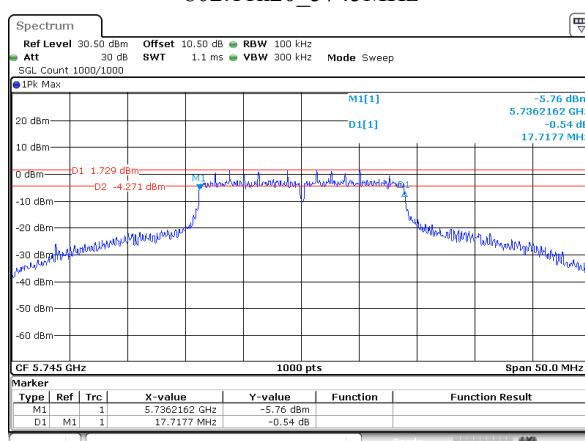
## 802.11a\_5785MHz



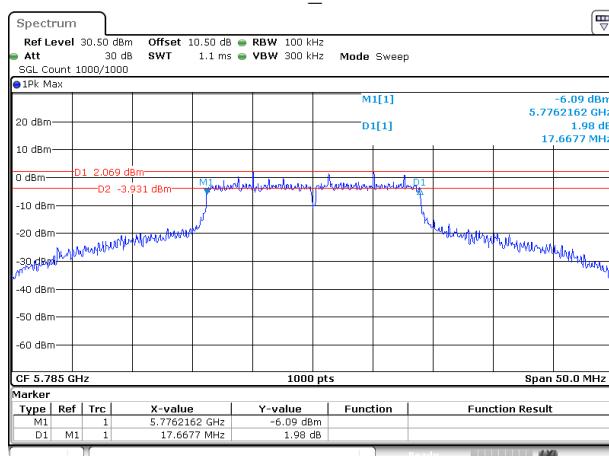
## 802.11a\_5825MHz



## 802.11n20\_5745MHz

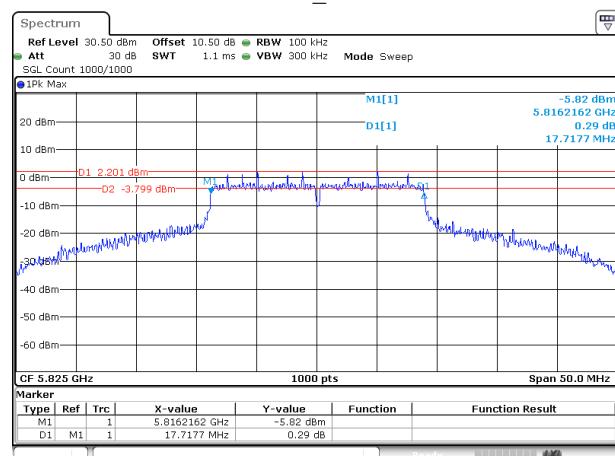


## 802.11n20\_5785MHz



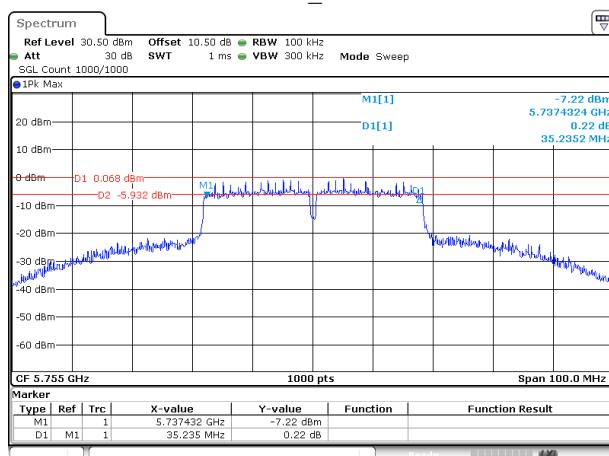
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
 Date: 3.AUG.2025 20:18:11

## 802.11n20\_5825MHz



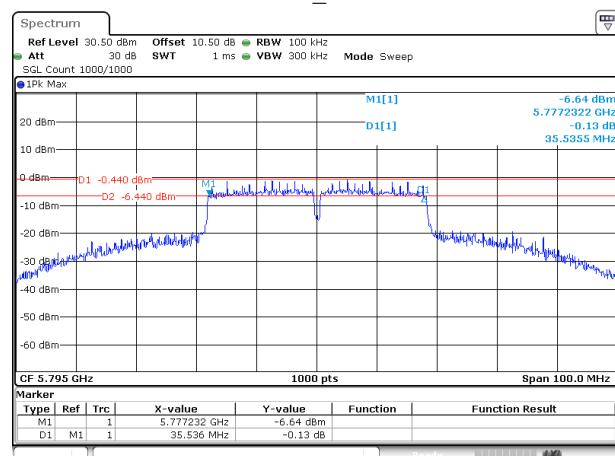
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
 Date: 3.AUG.2025 20:19:09

## 802.11n40\_5755MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
 Date: 3.AUG.2025 20:19:53

## 802.11n40\_5795MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
 Date: 3.AUG.2025 20:20:23

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

<b>Sample No.:</b>	37CC-8	<b>Test Date:</b>	2025/08/03~2025/08/08
<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)	25.9-26.2	<b>Relative Humidity:</b> (%)	56-59	<b>ATM Pressure:</b> (kPa)	101.3
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**Test Data:****5150-5250MHz**

<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>99% OBW (MHz)</b>
802.11a	5180	17.150
	5200	17.200
	5240	17.450
802.11n20	5180	18.100
	5200	18.150
	5240	18.350
802.11n40	5190	<b>36.600</b>
	5230	<b>36.600</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**

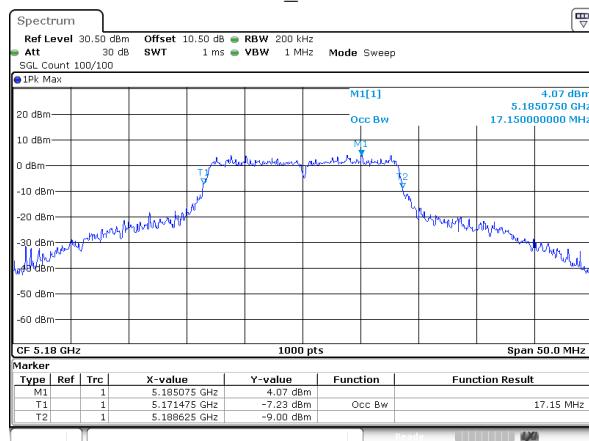
<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>99% OBW (MHz)</b>
802.11a	5745	17.150
	5785	17.550
	5825	17.800
802.11n20	5745	18.700
	5785	19.150
	5825	19.100
802.11n40	5755	<b>38.300</b>
	5795	38.200

**Note:**

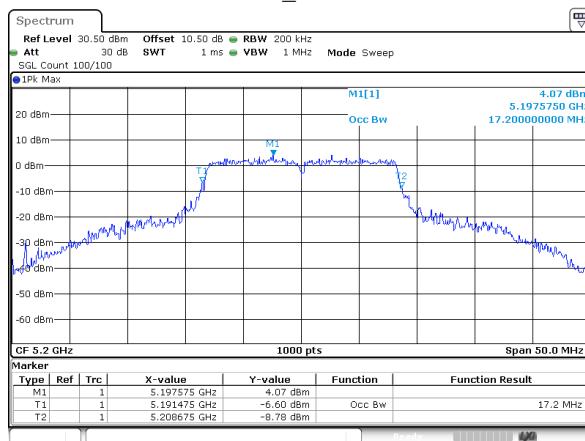
The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

## 5150-5250MHz

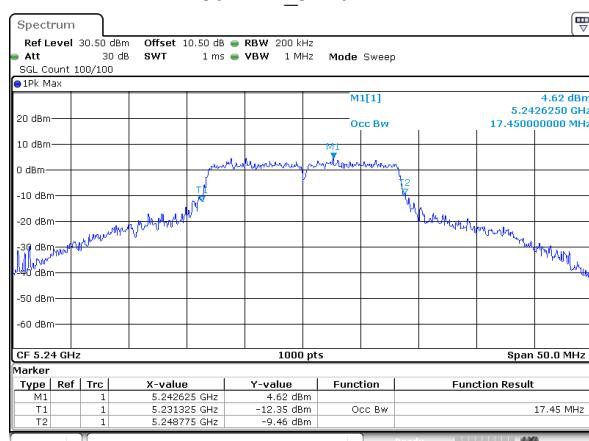
## 802.11a\_5180MHz



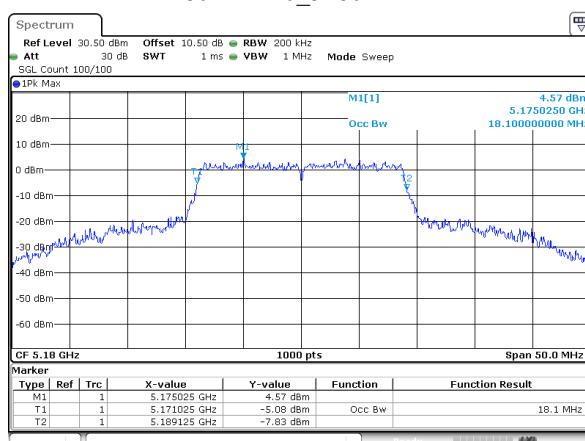
## 802.11a\_5200MHz



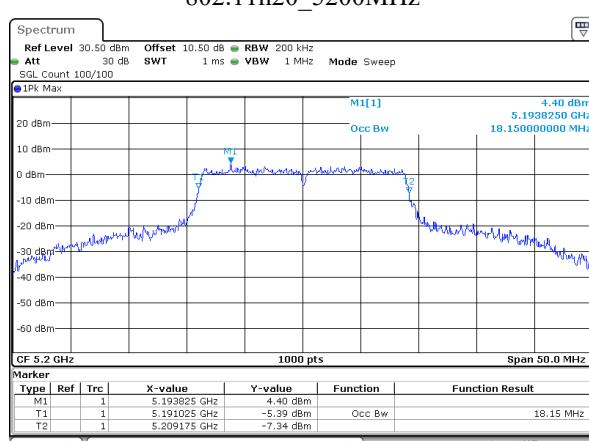
## 802.11a\_5240MHz



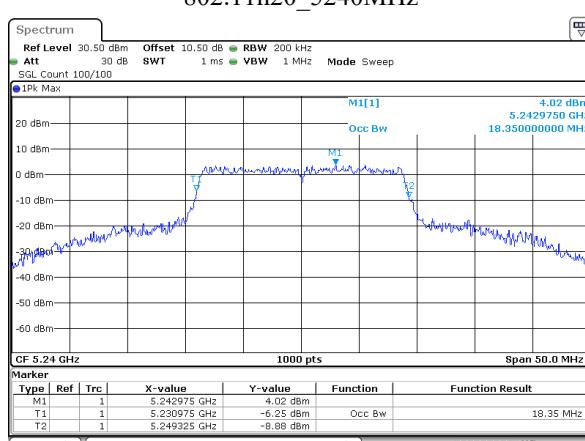
## 802.11n20\_5180MHz



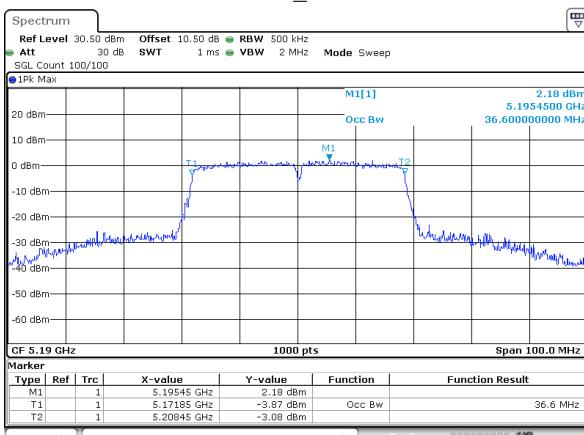
## 802.11n20\_5200MHz



## 802.11n20\_5240MHz

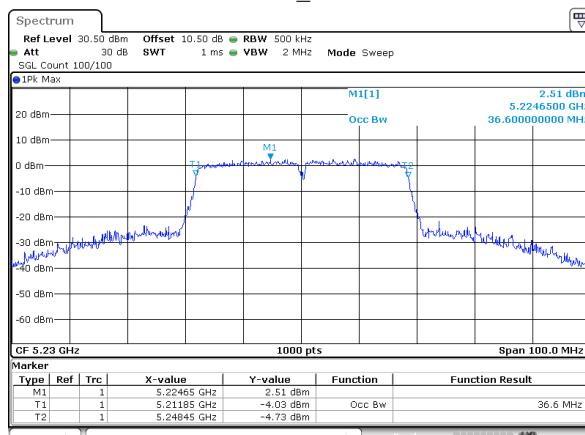


## 802.11n40\_5190MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:05:33

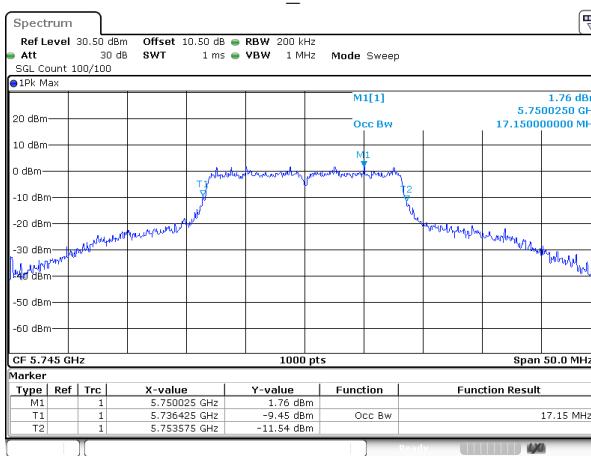
## 802.11n40\_5230MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:06:30

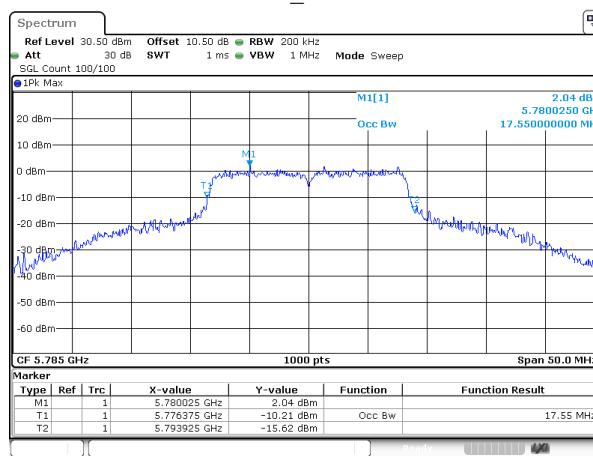
## 5725-5850MHz

## 802.11a\_5745MHz



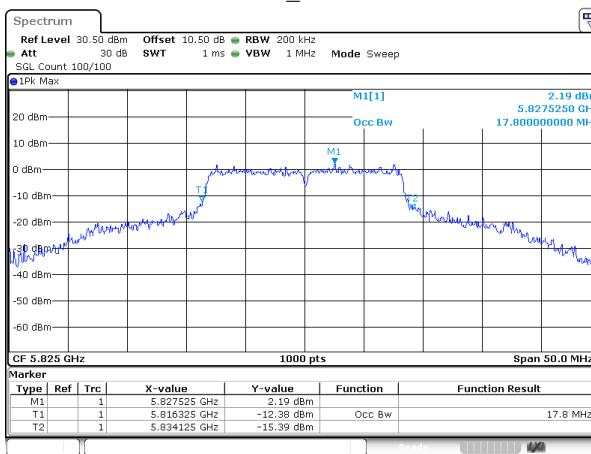
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:22:19

## 802.11a\_5785MHz



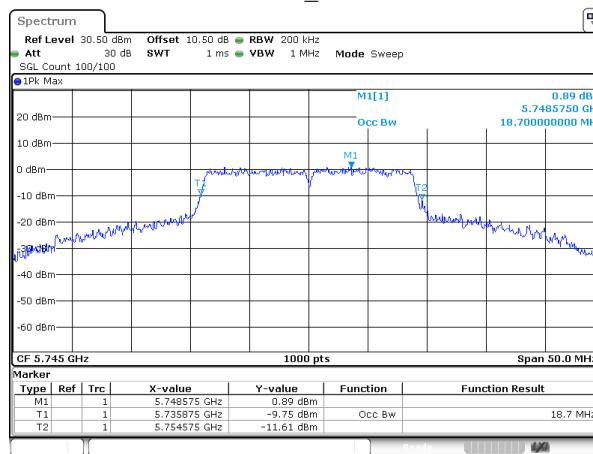
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:23:02

## 802.11a\_5825MHz



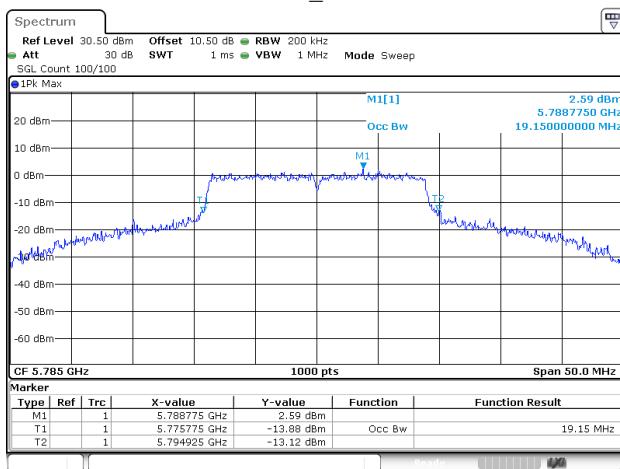
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:23:51

## 802.11n20\_5745MHz



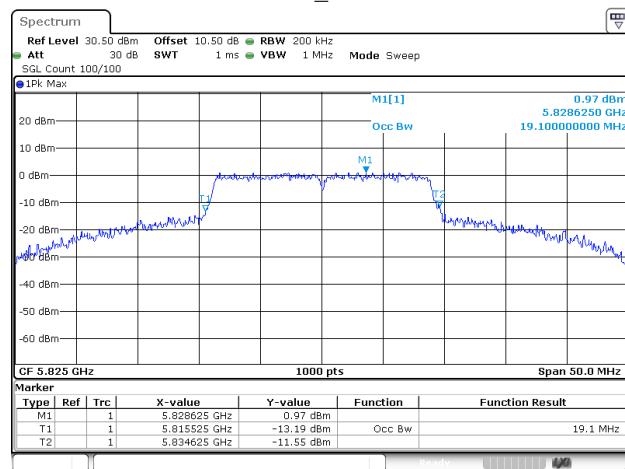
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:24:43

## 802.11n20\_5785MHz



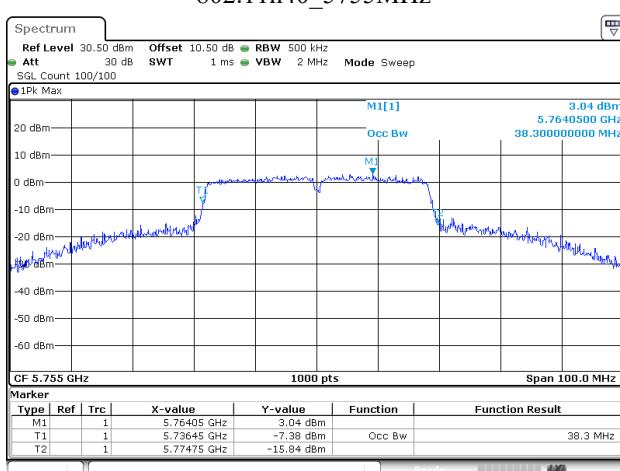
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:25:46

## 802.11n20\_5825MHz



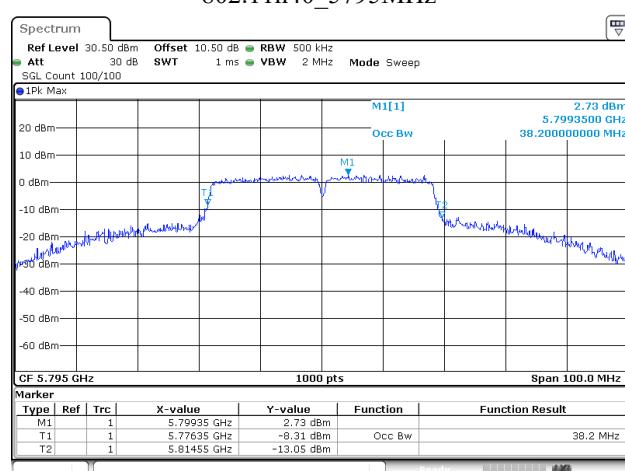
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:26:35

## 802.11n40\_5755MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:27:50

## 802.11n40\_5795MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 8.AUG.2025 15:34:27

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

<b>Sample No.:</b>	37CC-8	<b>Test Date:</b>	2025/08/03
<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)	25.9	<b>Relative Humidity:</b> (%)	56	<b>ATM Pressure:</b> (kPa)	101.3
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**Test Data:****5150-5250MHz**

<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>Average Output Power(dBm)</b>	<b>Limit (dBm)</b>	<b>Verdict</b>
802.11a	5180	14.37	24	Pass
	5200	14.59	24	Pass
	5240	14.99	24	Pass
802.11n20	5180	14.69	24	Pass
	5200	14.71	24	Pass
	5240	<b>15.01</b>	24	Pass
802.11n40	5190	12.42	24	Pass
	5230	12.83	24	Pass

**5725-5850MHz**

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5745	12.55	30	Pass
	5785	12.68	30	Pass
	5825	12.77	30	Pass
802.11n20	5745	12.57	30	Pass
	5785	12.67	30	Pass
	5825	12.75	30	Pass
802.11n40	5755	12.96	30	Pass
	5795	<b>13.0</b>	30	Pass

**Power Spectral Density****Test Information:**

<b>Sample No.:</b>	37CC-8	<b>Test Date:</b>	2025/08/03
<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)	25.9	<b>Relative Humidity:</b> (%)	56	<b>ATM Pressure:</b> (kPa)	101.3
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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	3.43	/	3.43	11	Pass
	5200	3.39	/	3.39	11	Pass
	5240	3.91	/	<b>3.91</b>	11	Pass
802.11n20	5180	3.38	/	3.38	11	Pass
	5200	3.24	/	3.24	11	Pass
	5240	3.67	/	3.67	11	Pass
802.11n40	5190	-1.93	/	-1.93	11	Pass
	5230	-1.41	/	-1.41	11	Pass

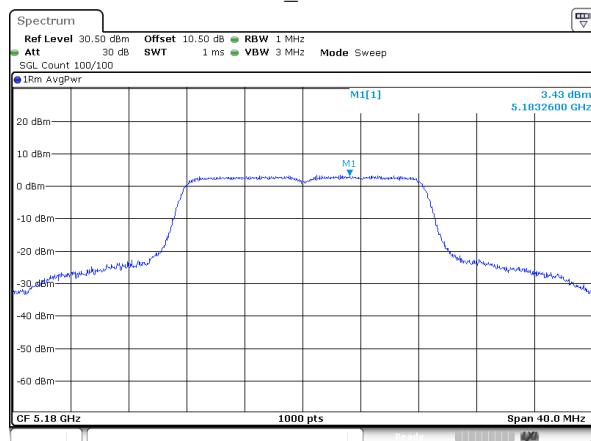
**5725-5850MHz**

Mode	Test Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor(dB)	Result (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
802.11a	5745	-1.19	/	-1.19	30	Pass
	5785	-1.10	/	<b>-1.10</b>	30	Pass
	5825	-1.33	/	-1.33	30	Pass
802.11n20	5745	-1.73	/	-1.73	30	Pass
	5785	-1.57	/	-1.57	30	Pass
	5825	-1.52	/	-1.52	30	Pass
802.11n40	5755	-4.03	/	-4.03	30	Pass
	5795	-3.84	/	-3.84	30	Pass

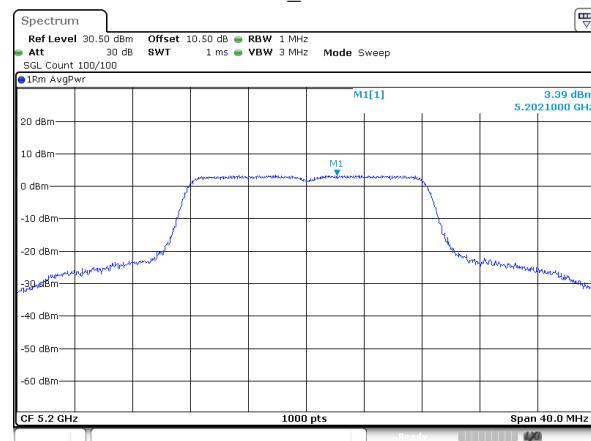
**Result = Reading + Duty Cycle Factor**

## 5150-5250MHz

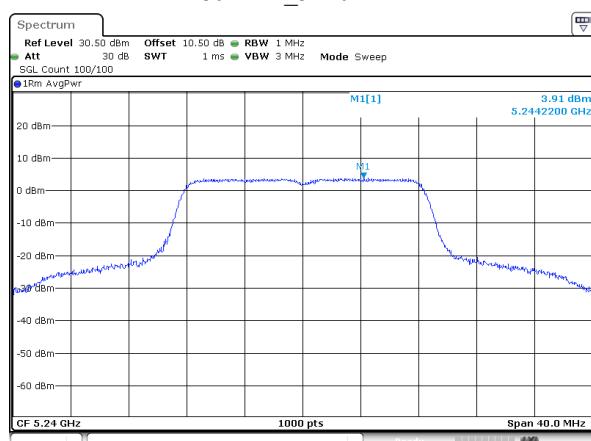
## 802.11a\_5180MHz



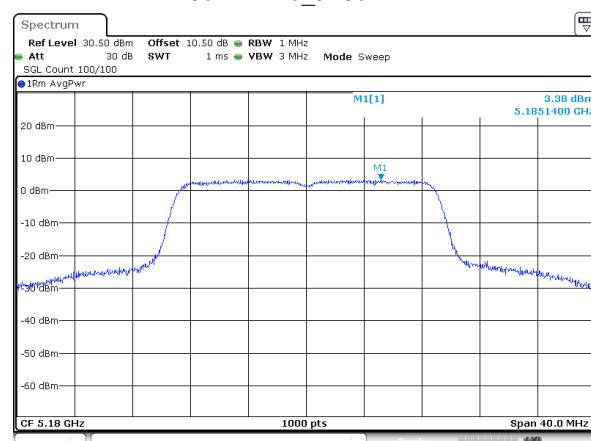
## 802.11a\_5200MHz



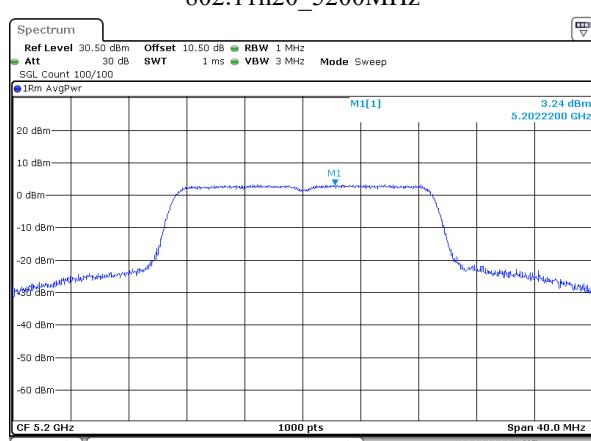
## 802.11a\_5240MHz



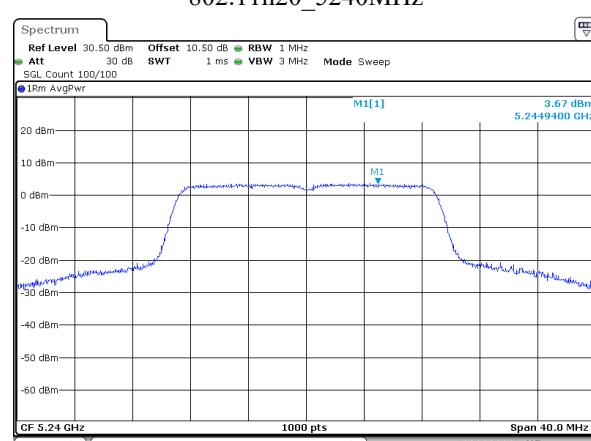
## 802.11n20\_5180MHz



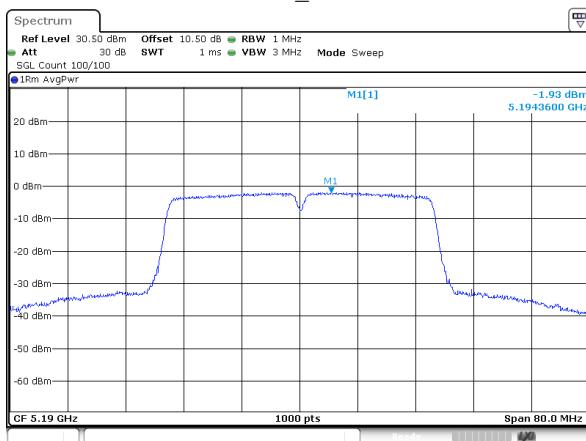
## 802.11n20\_5200MHz



## 802.11n20\_5240MHz

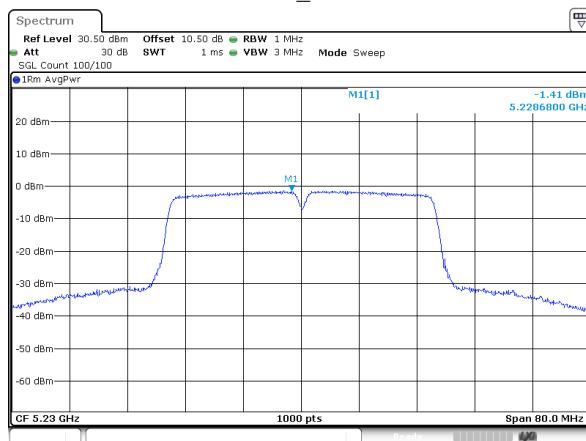


## 802.11n40\_5190MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:05:50

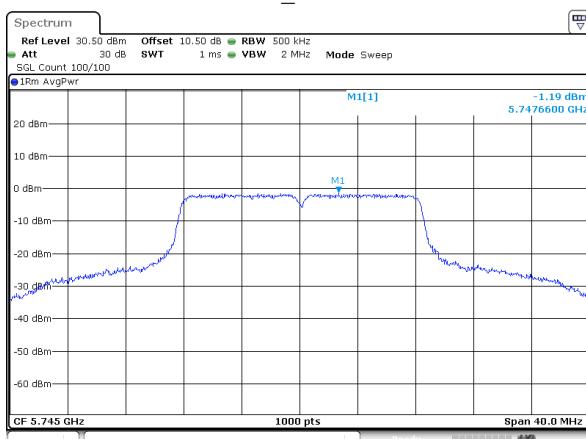
## 802.11n40\_5230MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:06:48

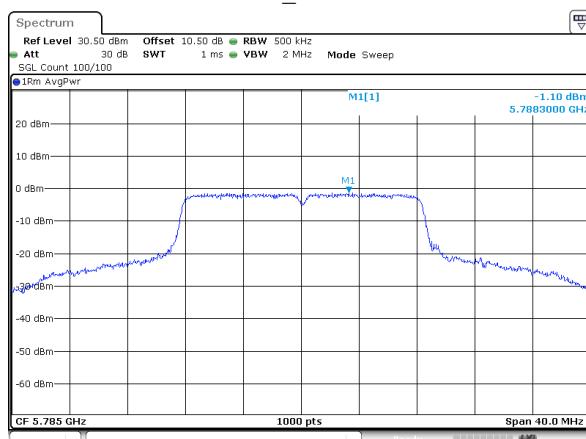
## 5725-5850MHz

## 802.11a\_5745MHz



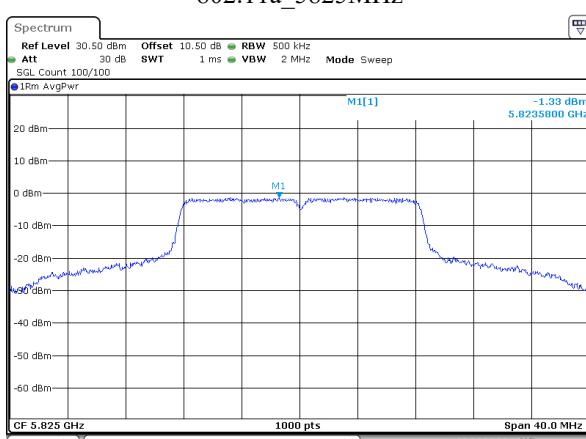
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:39:49

## 802.11a\_5785MHz



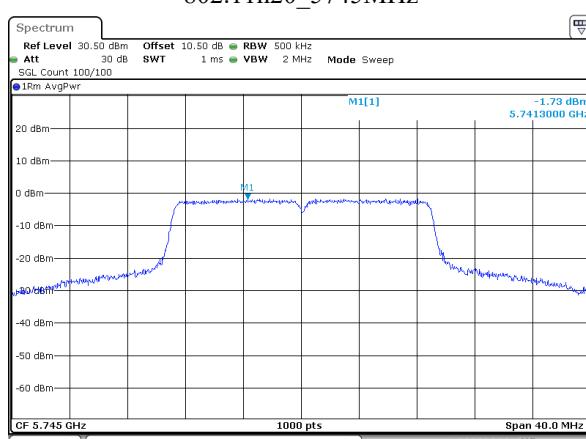
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:40:49

## 802.11a\_5825MHz



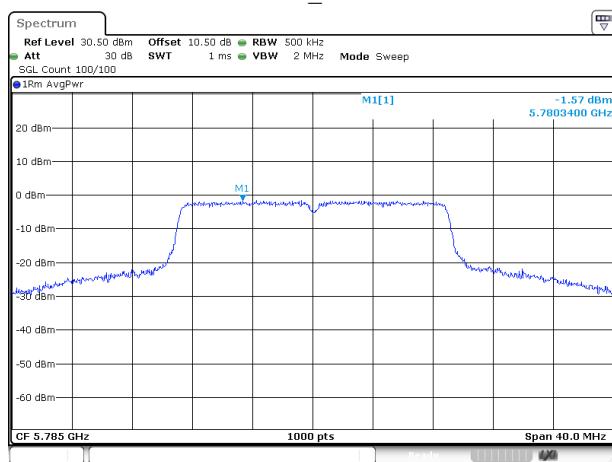
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:41:47

## 802.11n20\_5745MHz



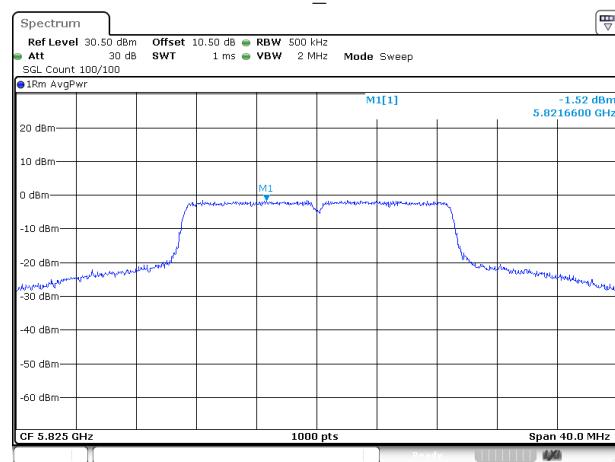
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:48:46

## 802.11n20\_5785MHz



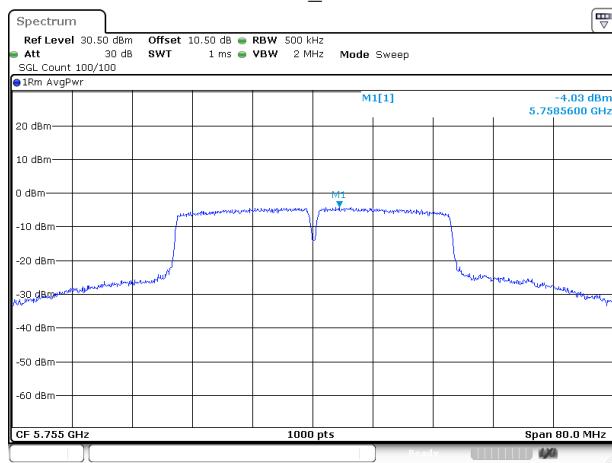
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:49:54

## 802.11n20\_5825MHz



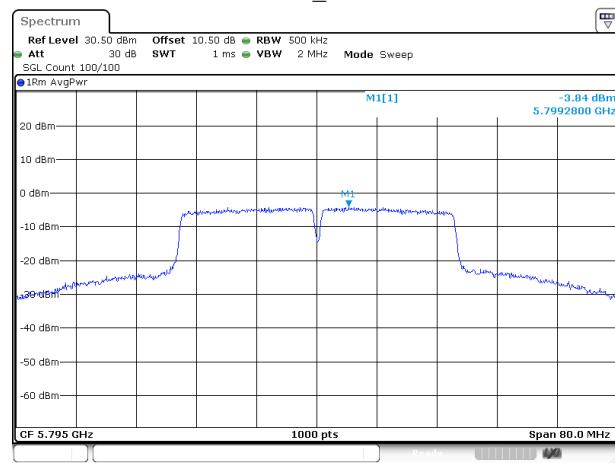
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:51:00

## 802.11n40\_5755MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:08:02

## 802.11n40\_5795MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 20:09:05

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

<b>Sample No.:</b>	37CC-8	<b>Test Date:</b>	2025/08/03
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Cheeb Huang	<b>Test Result:</b>	Pass

**Environmental Conditions:**

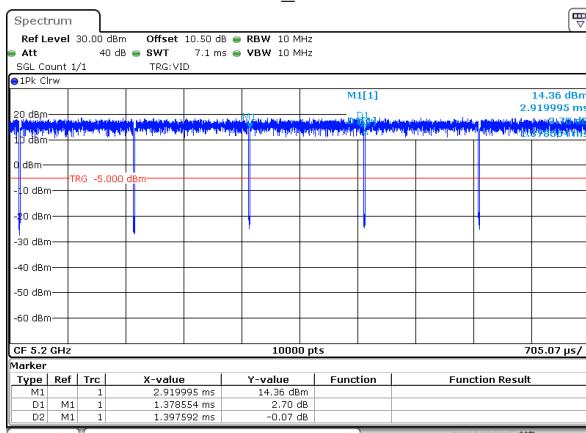
<b>Temperature:</b> (°C)	25.9	<b>Relative Humidity:</b> (%)	56	<b>ATM Pressure:</b> (kPa)	101.3
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**Test Data:**

<b>Mode</b>	<b>Test Frequency (MHz)</b>	<b>Ton (ms)</b>	<b>Ton+Toff (ms)</b>	<b>Duty Cycle (%)</b>	<b>Duty Cycle Factor(dB)</b>	<b>1/Ton (Hz)</b>	<b>VBW Setting (kHz)</b>
802.11a	5200	1.379	1.398	98.64	/	/	1
802.11n20	5200	<b>5.070</b>	5.093	99.55	/	/	1
802.11n40	5190	2.457	2.477	99.19	/	/	1

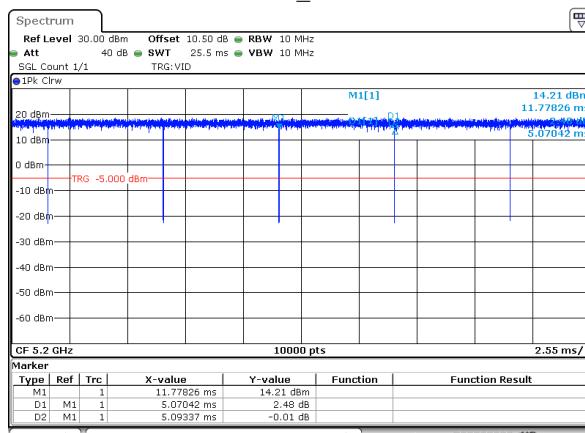
**Duty Cycle = Ton/(Ton+Toff)\*100%**

## 802.11a\_5200MHz



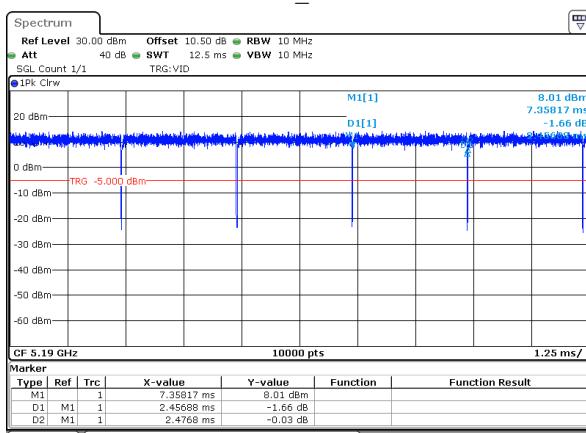
ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:19:33

## 802.11n20\_5200MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:20:13

## 802.11n40\_5190MHz



ProjectNo.:2501T13375E-RF Tester:Cheeb Huang  
Date: 3.AUG.2025 19:21:09

## 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 <sup>2</sup> .
1.34-30	3,450 R <sup>2</sup> /f <sup>2</sup> .
30-300	3.83 R <sup>2</sup> .
300-1,500	0.0128 R <sup>2</sup> f.
1,500-100,000	19.2R <sup>2</sup> .

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 (mW)
			(dBi)	(dBd)	(dBm)	(mW)		
2.4G Wi-Fi	2412-2462	22.5	6.22	4.07	26.57	453.94	0.2	768
5.2G Wi-Fi	5180-5240	15.5	4.07	1.92	17.42	55.21	0.2	768
5.8G Wi-Fi	5745-5825	13.5	2.07	-0.08	13.42	21.98	0.2	768

Note:

- 1) The tune up conducted power and antenna gain was declared by the applicant.
- 2) The 2.4G and 5G Wi-Fi can transmit at same time.

Simultaneous transmitting consideration (worst case):

The ratio=  $ERP_{2.4G}/limit + ERP_{5.2G}/limit = 453.94/768 + 55.21/768 = 0.663 < 1.0$

So simultaneous exposure is compliant.

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

**Result: Compliant**

## **EUT PHOTOGRAPHS**

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Please refer to the attachment 2501T13375E-RF External photo and 2501T13375E-RF Internal photo.

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## TEST SETUP PHOTOGRAPHS

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Please refer to the attachment 2501T13375E-RF-00B Test Setup photo.

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