



# RF Test Report

**Applicant:** NETPRISMA INC.

**Address:** 1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES

**Product:** 5G Sub-6 GHz Smart Module with Wi-Fi 6E & Bluetooth

**Model No.:** SUD500-LD

**Brand Name:** Vrileg

**FCC ID:** 2BEY3SUD500LDA

**Standards:** FCC CFR47 Part 15E

**Report No.:** PD20250035-R3F

**Issue Date:** 2025/06/20

**Test Result:** PASS \*

\* Testing performed at Hefei Panwin Technology Co., Ltd. on the above equipment indicates the product meets the requirements of the relevant standards.

**Reviewed By:** Jerry Zhang

**Approved By:** Alec Yang

## Hefei Panwin Technology Co., Ltd.

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**Revision History**

Report No.	Version	Description	Issue Date	Note
PD20250035-R3F	1	Initial Report	2025/06/20	Valid

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## Summary of Test Results

No.	Test Case	FCC Rules	Verdict
1	Occupied Bandwidth Measurement	15.407(e)	PASS
2	Maximum Conducted Output Power Measurement	15.407(a)	PASS
3	Power Spectral Density Measurement	15.407(a)	PASS
4	Unwanted Emissions Measurement	15.407(b)	PASS
5	AC Conducted Emission Measurement	15.207	NA
6	Antenna Requirements	15.203 & 15.407(a)	PASS
7	Frequency Stability <sup>Note1</sup>	15.407(g)	NA

Date of Testing: 2025/03/14 to 2025/06/19

Date of Sample Received: 2025/03/10

- We, Hefei Panwin Technology Co., Ltd., would like to declare that the tested sample has been evaluated in accordance with the procedures given in applied standard(s) in **Section 2.3** of this report and shown compliance with the applicable technical standards.
- All indications of PASS/FAIL in this report are based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

**Note1:** Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

## 1 General Information

### 1.1 Notes of the Test Report

This report is invalid without signature of auditor and approver or with any alterations. The report shall not be partially reproduced without written approval of the testing company. Entrusted test results are only responsible for incoming samples. If there is any objection to the testing report, it shall be raised to the testing company within 15 days from the date of receiving the report. In the test results, "NA" means "not applicable", and the test items marked with "Δ" are subcontracted projects.

### 1.2 Test Facility

#### A2LA (Certificate Number: 6849.01)

Hefei Panwin Technology Co., Ltd. has been accredited by American Association for Laboratory Accreditation to perform measurement.

#### FCC (Designation Number: CN1361, Test Firm Registration Number: 473156)

Hefei Panwin Technology Co., Ltd. has been accredited on the US Federal Communications Commission list of test facilities recognized to perform measurements.

### 1.3 Testing Laboratory

Company Name	Hefei Panwin Technology Co., Ltd.
Address	Floor 1, Zone E, Plant 2#, Mingzhu Industrial Park, No.106 Chuangxin Avenue, High-tech Zone, Hefei City, Anhui Province, China
Telephone	+86-0551-63811775
Post Code	230031

## 2 General Description of Equipment under Test

### 2.1 Details of Application

<b>Applicant</b>	NETPRISMA INC.
<b>Applicant Address</b>	1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES
<b>Manufacturer</b>	NETPRISMA INC.
<b>Manufacturer Address</b>	1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES

### 2.2 General Information

<b>Product</b>	5G Sub-6 GHz Smart Module with Wi-Fi 6E & Bluetooth	
<b>Model</b>	SUD500-LD	
<b>SN</b>	Conducted: P1Y24GH23000046 Radiated: P1Y24AV340000022 & P1Y24AV340000102	
<b>Hardware Version</b>	R1.0	
<b>Software Version</b>	SUD500LDPA0301	
<b>Antenna Type</b>	External Antenna	
<b>Max. Conducted Power</b>	Wi-Fi 5G: 20.14dBm	
<b>WLAN Mode Supported:</b>	802.11a 802.11n 20M/40M 802.11ac 20M/40M/80M 802.11ax 20M/40M/80M/160M	
<b>Antenna Gain</b>	5150MHz to 5250MHz: -0.70dBi(Ant1),-0.70dBi(Ant2) 5250MHz to 5350MHz: -0.80dBi(Ant1),-0.80dBi(Ant2) 5470MHz to 5725MHz: -1.20dBi(Ant1),-1.20dBi(Ant2) 5725MHz to 5850MHz: -1.50dBi(Ant1),-1.50dBi(Ant2)	
<b>Smart System</b>	<input checked="" type="checkbox"/> SISO	802.11a/n/ac/ax
	<input checked="" type="checkbox"/> MIMO	802.11n/ac/ax
	<input checked="" type="checkbox"/> CDD	802.11a
<b>Test Band</b>	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz) U-NII-3(5725MHz-5850MHz)	
<b>Operating voltage</b>	Typical 4.0Vdc	
<b>Modulation Type</b>	802.11a/n/ac/ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM	

<b>Use Conditions:</b>	Indoor
------------------------	--------

**Remark:** The declared of product specification for EUT and/or Antenna presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

## 2.3 Application Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart E
- FCC KDB 789033 D02 General UN II Test Procedures New Rules v02r01
- ANSI C63.10-2013

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

## 3 Test Condition

### 3.1 Test Configuration

#### Test mode

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). The worst cases were recorded in this report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes (Z, X, Y axis), receiver antenna polarization (horizontal and vertical), the worst emission was found in Z position and the worst case was recorded. This report presents the data for the worst polarity.

Test Mode	Data Rate(Mbps)
802.11a_CDD	6
802.11n 20M_MIMO	MCS0
802.11n 40M_MIMO	MCS0
802.11ac 20M_MIMO	MCS0
802.11ac 40M_MIMO	MCS0
802.11ac 80M_MIMO	MCS0
802.11ax 20M_MIMO	MCS0
802.11ax 40M_MIMO	MCS0
802.11ax 80M_MIMO	MCS0
802.11ax 160M_MIMO	MCS0

**Directional gain calculations**

According to KDB 662911 D01Multiple Transmitter Output v02r01 2)f(i):

If all antennas have the same gain, Directional gain =  $G_{ANT}$  + Array Gain,

- For power spectral density (PSD) measurements on all devices,

Array Gain =  $10 \log(N_{ANT}/NSS=1)$  dB.

- For power measurements on IEEE 802.11 devices.

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

Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

Array Gain =  $5 \log(N_{ANT}/NSS)$  dB or 3 dB, whichever is less, for 20-MHz channel widths with  $N_{ANT} \geq 5$ .

**The Power and PSD limit should be modified if the directional gain of EUT is over 6dBi.**

Operation Band (MHz)	Antenna1 Gain(dBi)	Antenna2 Gain(dBi)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit Reduction (dBm)	PSD Limit Reduction (dBm)
5150 to 5250	-0.70	-0.70	-0.70	2.31	0	0
5250 to 5350	-0.80	-0.80	-0.80	2.21	0	0
5470 to 5725	-1.20	-1.20	-1.20	1.81	0	0
5725 to 5850	-1.50	-1.50	-1.50	1.51	0	0

### 3.2 Wireless Technology and Frequency Range

Wireless Technology	Bandwidth		Channel	Frequency
Wi-Fi	U-NII-1	20MHz	36	5180 MHz
			40	5200 MHz
			44	5220 MHz
			48	5240 MHz
		40MHz	38	5190 MHz
			46	5230 MHz
		80MHz	42	5210 MHz
	U-NII-2A	20MHz	52	5260 MHz
			56	5280 MHz
			60	5300 MHz
			64	5320 MHz
		40MHz	54	5270 MHz
			62	5310 MHz
		80MHz	58	5290 MHz
		160MHz	50	5250 MHz
Wi-Fi	U-NII-2C	20MHz	100	5500 MHz
			104	5520 MHz
			108	5540 MHz
			112	5560 MHz
			116	5580 MHz
			120	5600 MHz
			124	5620 MHz
			128	5640 MHz
			132	5660 MHz
			136	5680 MHz
			140	5700 MHz
		40MHz	144	5720 MHz
			102	5510 MHz
			110	5550 MHz
			118	5590 MHz
			126	5630 MHz
			134	5670 MHz
	80MHz	80MHz	142	5710 MHz
			106	5530 MHz
			122	5610 MHz
			138	5690 MHz



# Test Report

Report No.: PD20250035-R3F  
Report Version: 01

U-NII-3	160MHz	114	5570 MHz
	20MHz	149	5745 MHz
		153	5765 MHz
		157	5785 MHz
	40MHz	161	5805 MHz
		165	5825 MHz
		151	5755 MHz
	80MHz	159	5795 MHz
		155	5775 MHz
Does this device support TPC function?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Does this device support TDWR band?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No

### 3.3 Equipment List

**Conducted**

Instrument	Manufacturer	Model	Asset No.	Cal. Interval	Cal. Due Date
Spectrum Analyzer	KEYSIGHT	N9020B	PWC0048	1 Year	2025/09/11
RF Control Unit	Tonseced	JS0806-2	PWC0055	/	/
DC Power	Keysight	E3640A	PWC0046	1 Year	2025/09/12
Shielded Chamber	Maorui	MR543	PWC0041	3 Years	2026/08/26
Test Software	Tonseced	JS1120-3 V3.2.22	/	/	/

**Radiated**

Instrument	Manufacturer	Model	Asset No.	Cal. Interval	Cal. Due Date
EMI Test Receiver	R&S	ESR7	PWB0023	1 Year	2025/09/11
Spectrum Analyzer	R&S	FSV3044	PWB0024	1 Year	2025/09/11
Loop Antenna	R&S	HFH2-Z2E	PWB0026	1 Year	2025/09/13
TRILOG Broadband Antenna	Schwarzbeck	VULB9162	PWB0029	1 Year	2025/09/09
Double-Ridged Guide Antenna	ETS-Lindgren	3117	PWB0031	1 Year	2025/09/26
k Type Horn Antenna	Steatite Antennas	QMS-00880	PWB0035	1 Year	2025/09/08
Pre-Amplifier	R&S	SCU40F1	PWB0036	1 Year	2025/09/11
Pre-Amplifier	COM-MW	DLNA8	PWB0094	1 Year	2025/09/11
Pre-Amplifier	R&S	SCU18F	PWB0034	1 Year	2025/09/11
Pre-Amplifier	R&S	OSP220 (OSP-B155G)	PWB0042	1 Year	2025/09/11
Anechoic Chamber	ETS.LINDGREN	Fact 3-2m	PWB0003	3 Years	2026/06/05
Test Software	Tonscend	JS32 V5.0.0	/	/	/

### 3.4 Support Equipment List

Equipment	Manufacturer	Description	Model	Serial Number
EVB	NETPRISMA	/	Q1-C0129	D1Y24E94G000263 D1Y24E94G000241
RF cable	/	2.4G:0.5dB; 5G:1dB	/	/
Adapter	Dong Guan City GangQi Electronic Co.,Ltd	AC to DC power supply to EVB	GQ36-120300-AX	/
Antenna	NETPRISMA	Wi-Fi &BT Antenna	NPEBT038WFA	/

### 3.5 Test Uncertainty

No.	Parameter	Uncertainty
1	Emission Bandwidth	1.9%
2	Occupied channel bandwidth	1.9%
3	Min emission bandwidth	1.9%
4	Duty Cycle	0.11%
5	Maximum Conduct Output Power	1.18 dB
6	Power Spectral Density	0.98 dB
7	Unwanted Emissions Measurement	9kHz-7GHz: 1.21dB 7GHz-40GHz: 3.31dB
8	Radiated Band Edges and Spurious Emission	Below 1GHz: 4.88 dB Above 1GHz: 5.06 dB
9	Temperature	3 °C
10	Humidity	1.3 %
11	Supply voltages	0.006 V

## 4 Test Items Description

### Ambient condition

#### Shielded Chamber

Temperature [°C]	20.7 to 26.1
Humidity [%RH]	31 to 57
Pressure [kPa]	100.2 to 104.1

#### Anechoic Chamber

Temperature [°C]	20.3 to 25.6
Humidity [%RH]	38 to 55
Pressure [kPa]	99.6 to 101.5

## 4.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

### 4.1.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

The minimum 6 dB bandwidth shall be at least 500 kHz

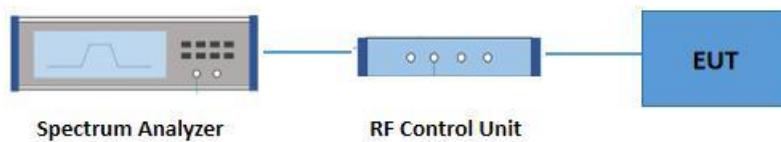
26dB and 99% Occupied bandwidth are reporting only.

### 4.1.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

### 4.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01Section C)  
Emission bandwidth.
2. For 6dB BW, Set RBW = 100kHz.  
For 26dB BW, Set RBW = approximately 1% of the emission bandwidth.  
For 99% OBW, Set RBW = 1% to 5% of the OBW.
3. For 26dB BW. Set the VBW > RBW.  
For 6dB BW & 99% OBW. Set the VBW  $\geq 3 \times$  RBW
4. Detector = Peak.
5. Trace mode = max hold
6. 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 analyzer, Readjust RBW and repeat measurements needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1% to 5% of the OBW and set the Video bandwidth (VBW)  $\geq 3^* RBW$ .
8. Measure and record the results in the test report.

**4.1.4 Test Setup****4.1.5 Test Results**

See ANNEX A.1.

## 4.2 Maximum Conducted Output Power Measurement

### 4.2.1 Limit of Maximum Conducted Output Power

#### <FCC 14 -30 CFR 15.407>

For the band 5.15–5.25 GHz.

- (i) For an outdoor 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. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- (ii) 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. 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.
- (iii) For fixed point-to-point access points 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. Fixed point-to-point U–NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. 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.
- (iv) 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. 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.
- (2) 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. 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.
- (3) For the band 5.725–5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. 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.

#### 4.2.2 Measuring Instruments

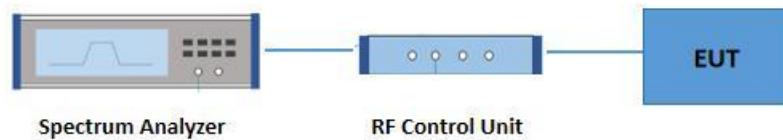
The measuring equipment is listed in the section 3.3 of this test report.

#### 4.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

1. Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW  $\geq$  3 MHz.
4. Number of points in sweep  $\geq 2 \times$  span / RBW. (This ensures that bin-to-bin spacing is  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)
5. Sweep time = auto.
6. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
7. If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle  $\geq$  98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
8. Trace average at least 100 traces in power averaging (rms) mode.
9. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

**4.2.4 Test Setup****4.2.5 Test Result of Maximum Conducted Output Power**

Please refer to ANNEX A.2.

## 4.3 Power Spectral Density Measurement

### 4.3.1 Limit of Power Spectral Density

#### Rule FCC Part 15.407(a)(1)/ Part 15.407(a)(2)/Part 15.407(a)(3)

For an indoor access point operating in the band 5.15–5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.25-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm inany 500-kHz band.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rulesv02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified forthe U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed toshow compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 4.3.2 Measuring Instruments

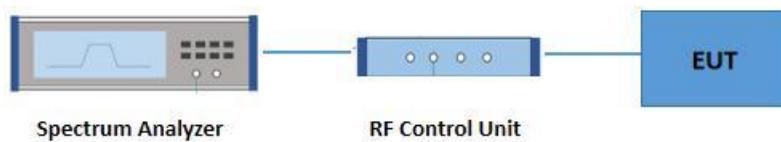
The measuring equipment is listed in the section 3.3 of this test report.

### 4.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01Section F) Maximum power spectral density.

1. Measure the duty cycle.
2. Set span to encompass the entire emission bandwidth (EBW) of the signal.
3. Set RBW  $\geq 1/T$ , where T is defined in II.B.I.a).
4. Set VBW  $\geq 3$  RBW.
5. If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log (500 \text{ kHz}/\text{RBW})$  to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
6. If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10 \log (1\text{MHz}/\text{RBW})$  to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
7. Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

## 4.3.4 Test Setup



## 4.3.5 Test Result of Power Spectral Density

Please refer to ANNEX A.3.

## 4.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

### 4.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5725 MHz band: all emissions outside of the 5470-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(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 15.6dBm/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.

(2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30-88	100	3
88 -216	150	3
216 - 960	200	3
Above 960	500	3

EIRP (dBm)	Field Strength at 3m (dB $\mu$ V/m)
- 27	68.2

**Note:** The following formula is used to convert the EIRP to field strength.

$$\text{EIRP} = \text{E}_{\text{Meas}} + 20\log(\text{d}_{\text{Meas}}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

$\text{E}_{\text{Meas}}$  is the field strength of the emission at the measurement distance, in dB $\mu$ V/m

$\text{d}_{\text{Meas}}$  is the measurement distance, in m

#### 4.4.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

#### 4.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW= 1 MHz
- VBW  $\geq$  3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

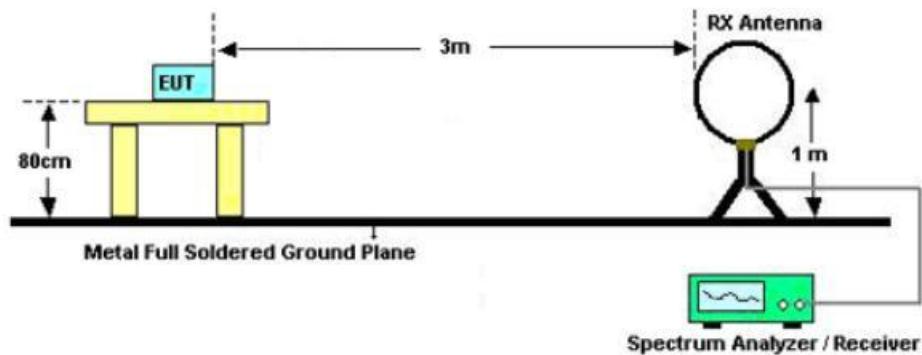
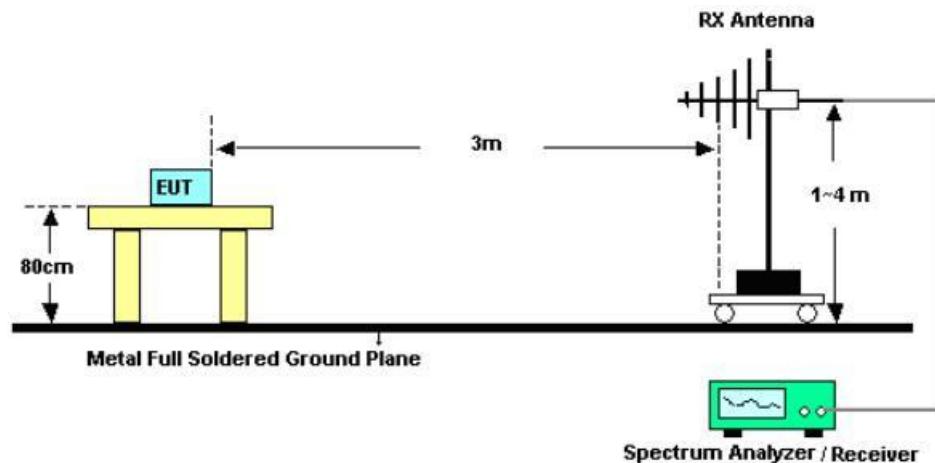
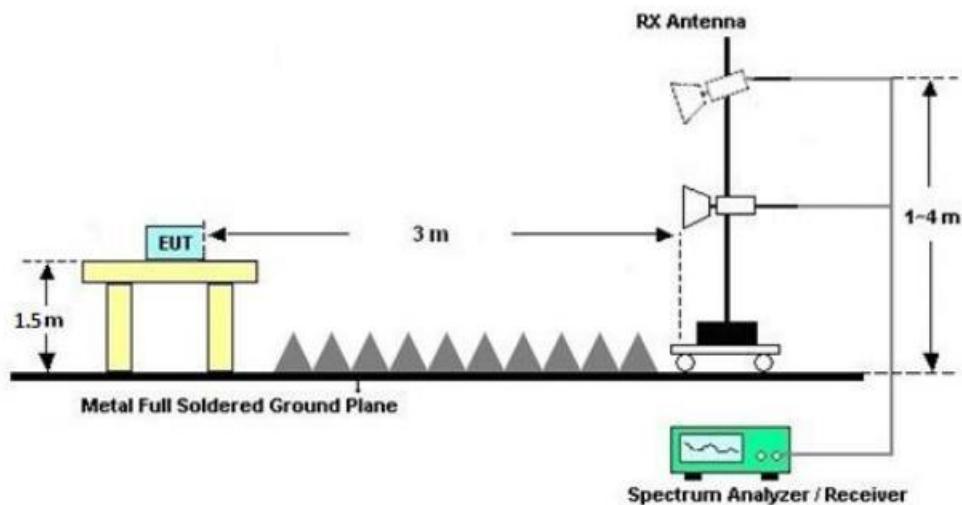
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent
- VBW  $\geq$  1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- 4.. The antenna is a broadband antenna and its height is adjusted between one meter and four.

meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.

5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

**4.4.4 Test Setup****For radiated emissions below 30MHz****For radiated emissions from 30MHz to 1GHz****For radiated emissions above 1GHz**

**4.4.5 Test Results of Radiated Spurious Emissions (9 kHz - 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

**4.4.6 Test Result of Radiated Spurious at Band Edges**

Please refer to ANNEX B.1.

**4.4.7 Test Result of Radiated Spurious Emissions (30MHz - 10th Harmonic or 40GHz whichever is lower)**

Please refer to ANNEX B.1

**4.4.8 Duty Cycle**

Please refer to ANNEX A.4.

## 4.5 AC Conducted Emission Measurement

### 4.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Decreases with the logarithm of the frequency.

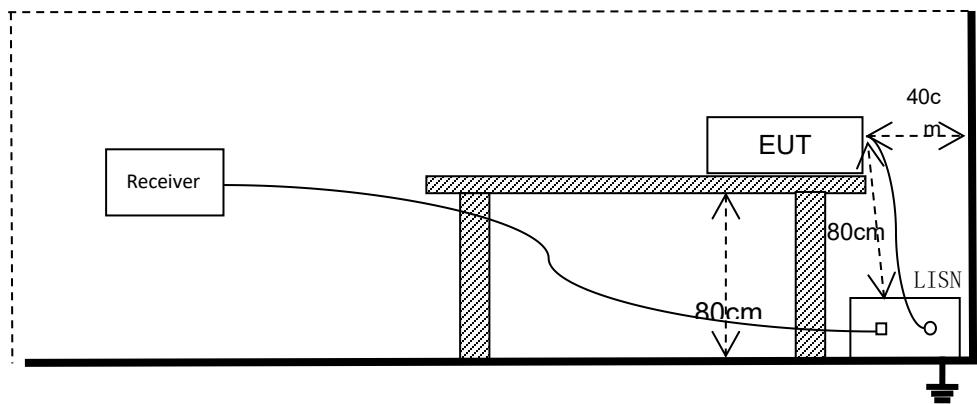
### 4.5.2 Measuring Instruments

The section 3.3 of List of Measuring Equipment of this test report is used for test.

### 4.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth =9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

#### 4.5.4 Test Setup



#### 4.5.5 Uncertainty Measurement

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT. The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

CASE	Uncertainty
Continuous Emission (AC port)	2.92 dB

#### 4.5.6 Test Result

**Remark:** The product is DC powered, this test item is not applicable.

## 4.6 Antenna Requirements

### 4.6.1 Standard Applicable

15.203 requirement: 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, 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.

15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 4.6.2 Antenna Anti-Replacement Construction

The antenna is External on the main PCB and no consideration of replacement. The best case gain of the antenna is -0.70dBi.

----- THE END -----

## ANNEX A: Test Results of Conducted Test

### A.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

#### Test Result\_26dB Bandwidth

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	19.840	5170.120	5189.960	---	---
11A-CDD	Ant2	5180	18.960	5170.560	5189.520	---	---
11A-CDD	Ant1	5220	19.960	5209.720	5229.680	---	---
11A-CDD	Ant2	5220	19.200	5210.400	5229.600	---	---
11A-CDD	Ant1	5240	19.680	5229.880	5249.560	---	---
11A-CDD	Ant2	5240	19.160	5230.360	5249.520	---	---
11A-CDD	Ant1	5260	19.440	5250.240	5269.680	---	---
11A-CDD	Ant2	5260	19.160	5250.360	5269.520	---	---
11A-CDD	Ant1	5300	19.120	5290.480	5309.600	---	---
11A-CDD	Ant2	5300	19.120	5290.320	5309.440	---	---
11A-CDD	Ant1	5320	19.280	5310.240	5329.520	---	---
11A-CDD	Ant2	5320	19.240	5310.240	5329.480	---	---
11A-CDD	Ant1	5500	19.120	5490.320	5509.440	---	---
11A-CDD	Ant2	5500	19.080	5490.400	5509.480	---	---
11A-CDD	Ant1	5580	19.160	5570.320	5589.480	---	---
11A-CDD	Ant2	5580	19.320	5570.320	5589.640	---	---
11A-CDD	Ant1	5700	18.960	5690.560	5709.520	---	---
11A-CDD	Ant2	5700	18.880	5690.600	5709.480	---	---
11A-CDD	Ant1	5720	19.200	5710.280	5729.480	---	---
11A-CDD	Ant2	5720	18.960	5710.600	5729.560	---	---
11A-CDD	Ant1	5720_UNII-2C	14.72	5710.280	5725	---	---
11A-CDD	Ant2	5720_UNII-2C	14.4	5710.600	5725	---	---
11A-CDD	Ant1	5720_UNII-3	4.48	5725	5729.480	---	---
11A-CDD	Ant2	5720_UNII-3	4.56	5725	5729.560	---	---
11A-CDD	Ant1	5745	19.080	5735.400	5754.480	---	---
11A-CDD	Ant2	5745	19.200	5735.320	5754.520	---	---
11A-CDD	Ant1	5785	19.000	5775.480	5794.480	---	---
11A-CDD	Ant2	5785	18.920	5775.640	5794.560	---	---
11A-CDD	Ant1	5825	19.120	5815.400	5834.520	---	---
11A-CDD	Ant2	5825	19.200	5815.320	5834.520	---	---
11N20MIMO	Ant1	5180	20.200	5169.760	5189.960	---	---
11N20MIMO	Ant2	5180	20.240	5169.960	5190.200	---	---
11N20MIMO	Ant1	5220	20.160	5209.920	5230.080	---	---

11N20MIMO	Ant2	5220	20.160	5210.040	5230.200	---	---
11N20MIMO	Ant1	5240	20.040	5230.040	5250.080	---	---
11N20MIMO	Ant2	5240	19.840	5230.080	5249.920	---	---
11N20MIMO	Ant1	5260	20.040	5250.000	5270.040	---	---
11N20MIMO	Ant2	5260	20.040	5250.000	5270.040	---	---
11N20MIMO	Ant1	5300	20.240	5289.880	5310.120	---	---
11N20MIMO	Ant2	5300	20.160	5289.840	5310.000	---	---
11N20MIMO	Ant1	5320	20.160	5309.760	5329.920	---	---
11N20MIMO	Ant2	5320	20.080	5309.960	5330.040	---	---
11N20MIMO	Ant1	5500	19.840	5490.080	5509.920	---	---
11N20MIMO	Ant2	5500	20.160	5489.920	5510.080	---	---
11N20MIMO	Ant1	5580	20.000	5570.000	5590.000	---	---
11N20MIMO	Ant2	5580	19.960	5570.000	5589.960	---	---
11N20MIMO	Ant1	5700	20.200	5690.120	5710.320	---	---
11N20MIMO	Ant2	5700	20.160	5690.000	5710.160	---	---
11N20MIMO	Ant1	5720	20.080	5709.800	5729.880	---	---
11N20MIMO	Ant2	5720	20.000	5710.040	5730.040	---	---
11N20MIMO	Ant1	5720_UNII-2C	15.2	5709.800	5725	---	---
11N20MIMO	Ant2	5720_UNII-2C	14.96	5710.040	5725	---	---
11N20MIMO	Ant1	5720_UNII-3	4.88	5725	5729.880	---	---
11N20MIMO	Ant2	5720_UNII-3	5.04	5725	5730.040	---	---
11N20MIMO	Ant1	5745	20.000	5735.040	5755.040	---	---
11N20MIMO	Ant2	5745	20.320	5734.720	5755.040	---	---
11N20MIMO	Ant1	5785	19.840	5775.120	5794.960	---	---
11N20MIMO	Ant2	5785	20.120	5774.880	5795.000	---	---
11N20MIMO	Ant1	5825	20.200	5814.920	5835.120	---	---
11N20MIMO	Ant2	5825	20.280	5814.720	5835.000	---	---
11N40MIMO	Ant1	5190	39.200	5170.640	5209.840	---	---
11N40MIMO	Ant2	5190	39.280	5170.400	5209.680	---	---
11N40MIMO	Ant1	5230	39.600	5210.160	5249.760	---	---
11N40MIMO	Ant2	5230	39.120	5210.400	5249.520	---	---
11N40MIMO	Ant1	5270	39.600	5250.160	5289.760	---	---
11N40MIMO	Ant2	5270	39.680	5250.240	5289.920	---	---
11N40MIMO	Ant1	5310	39.200	5290.480	5329.680	---	---
11N40MIMO	Ant2	5310	39.200	5290.480	5329.680	---	---
11N40MIMO	Ant1	5510	39.360	5490.320	5529.680	---	---
11N40MIMO	Ant2	5510	39.840	5490.320	5530.160	---	---
11N40MIMO	Ant1	5550	39.440	5530.320	5569.760	---	---
11N40MIMO	Ant2	5550	39.280	5530.400	5569.680	---	---

11N40MIMO	Ant1	5670	39.520	5650.240	5689.760	---	---
11N40MIMO	Ant2	5670	40.000	5650.080	5690.080	---	---
11N40MIMO	Ant1	5710	39.360	5690.400	5729.760	---	---
11N40MIMO	Ant2	5710	39.040	5690.400	5729.440	---	---
11N40MIMO	Ant1	5710_UNII-2C	34.6	5690.400	5725	---	---
11N40MIMO	Ant2	5710_UNII-2C	34.6	5690.400	5725	---	---
11N40MIMO	Ant1	5710_UNII-3	4.76	5725	5729.760	---	---
11N40MIMO	Ant2	5710_UNII-3	4.44	5725	5729.440	---	---
11N40MIMO	Ant1	5755	39.360	5735.400	5774.760	---	---
11N40MIMO	Ant2	5755	39.120	5735.400	5774.520	---	---
11N40MIMO	Ant1	5795	39.280	5775.400	5814.680	---	---
11N40MIMO	Ant2	5795	39.600	5775.080	5814.680	---	---
11AC20MIMO	Ant1	5180	19.880	5170.040	5189.920	---	---
11AC20MIMO	Ant2	5180	20.320	5169.920	5190.240	---	---
11AC20MIMO	Ant1	5220	19.760	5210.080	5229.840	---	---
11AC20MIMO	Ant2	5220	19.880	5210.080	5229.960	---	---
11AC20MIMO	Ant1	5240	20.280	5229.800	5250.080	---	---
11AC20MIMO	Ant2	5240	20.120	5229.880	5250.000	---	---
11AC20MIMO	Ant1	5260	20.160	5249.760	5269.920	---	---
11AC20MIMO	Ant2	5260	20.160	5249.880	5270.040	---	---
11AC20MIMO	Ant1	5300	20.160	5289.800	5309.960	---	---
11AC20MIMO	Ant2	5300	19.880	5290.040	5309.920	---	---
11AC20MIMO	Ant1	5320	20.320	5309.920	5330.240	---	---
11AC20MIMO	Ant2	5320	20.120	5309.920	5330.040	---	---
11AC20MIMO	Ant1	5500	20.120	5490.000	5510.120	---	---
11AC20MIMO	Ant2	5500	20.040	5490.000	5510.040	---	---
11AC20MIMO	Ant1	5580	19.960	5570.000	5589.960	---	---
11AC20MIMO	Ant2	5580	19.880	5570.120	5590.000	---	---
11AC20MIMO	Ant1	5700	20.080	5689.800	5709.880	---	---
11AC20MIMO	Ant2	5700	20.200	5689.880	5710.080	---	---
11AC20MIMO	Ant1	5720	19.960	5709.920	5729.880	---	---
11AC20MIMO	Ant2	5720	20.160	5709.960	5730.120	---	---
11AC20MIMO	Ant1	5720_UNII-2C	15.08	5709.920	5725	---	---
11AC20MIMO	Ant2	5720_UNII-2C	15.04	5709.960	5725	---	---
11AC20MIMO	Ant1	5720_UNII-3	4.88	5725	5729.880	---	---
11AC20MIMO	Ant2	5720_UNII-3	5.12	5725	5730.120	---	---
11AC20MIMO	Ant1	5745	20.160	5734.960	5755.120	---	---
11AC20MIMO	Ant2	5745	19.880	5735.040	5754.920	---	---
11AC20MIMO	Ant1	5785	20.200	5774.920	5795.120	---	---

11AC20MIMO	Ant2	5785	19.840	5775.120	5794.960	---	---
11AC20MIMO	Ant1	5825	20.000	5814.960	5834.960	---	---
11AC20MIMO	Ant2	5825	20.360	5814.800	5835.160	---	---
11AC40MIMO	Ant1	5190	39.280	5170.400	5209.680	---	---
11AC40MIMO	Ant2	5190	38.960	5170.640	5209.600	---	---
11AC40MIMO	Ant1	5230	39.520	5210.080	5249.600	---	---
11AC40MIMO	Ant2	5230	39.520	5210.400	5249.920	---	---
11AC40MIMO	Ant1	5270	39.360	5250.240	5289.600	---	---
11AC40MIMO	Ant2	5270	39.360	5250.320	5289.680	---	---
11AC40MIMO	Ant1	5310	39.280	5290.240	5329.520	---	---
11AC40MIMO	Ant2	5310	39.200	5290.320	5329.520	---	---
11AC40MIMO	Ant1	5510	39.600	5490.080	5529.680	---	---
11AC40MIMO	Ant2	5510	39.360	5490.240	5529.600	---	---
11AC40MIMO	Ant1	5550	39.280	5530.400	5569.680	---	---
11AC40MIMO	Ant2	5550	39.280	5530.480	5569.760	---	---
11AC40MIMO	Ant1	5670	39.280	5650.320	5689.600	---	---
11AC40MIMO	Ant2	5670	39.520	5650.320	5689.840	---	---
11AC40MIMO	Ant1	5710	39.440	5690.240	5729.680	---	---
11AC40MIMO	Ant2	5710	39.040	5690.480	5729.520	---	---
11AC40MIMO	Ant1	5710_UNII-2C	34.76	5690.240	5725	---	---
11AC40MIMO	Ant2	5710_UNII-2C	34.52	5690.480	5725	---	---
11AC40MIMO	Ant1	5710_UNII-3	4.68	5725	5729.680	---	---
11AC40MIMO	Ant2	5710_UNII-3	4.52	5725	5729.520	---	---
11AC40MIMO	Ant1	5755	39.280	5735.400	5774.680	---	---
11AC40MIMO	Ant2	5755	39.120	5735.480	5774.600	---	---
11AC40MIMO	Ant1	5795	39.280	5775.320	5814.600	---	---
11AC40MIMO	Ant2	5795	39.520	5775.160	5814.680	---	---
11AC80MIMO	Ant1	5210	80.960	5169.520	5250.480	---	---
11AC80MIMO	Ant2	5210	81.280	5169.520	5250.800	---	---
11AC80MIMO	Ant1	5290	82.240	5248.400	5330.640	---	---
11AC80MIMO	Ant2	5290	80.800	5249.680	5330.480	---	---
11AC80MIMO	Ant1	5530	82.080	5489.520	5571.600	---	---
11AC80MIMO	Ant2	5530	80.800	5490.000	5570.800	---	---
11AC80MIMO	Ant1	5610	81.440	5569.520	5650.960	---	---
11AC80MIMO	Ant2	5610	81.120	5569.520	5650.640	---	---
11AC80MIMO	Ant1	5690	81.760	5649.200	5730.960	---	---
11AC80MIMO	Ant2	5690	81.280	5649.360	5730.640	---	---
11AC80MIMO	Ant1	5690_UNII-2C	75.8	5649.200	5725	---	---
11AC80MIMO	Ant2	5690_UNII-2C	75.64	5649.360	5725	---	---

11AC80MIMO	Ant1	5690_UNII-3	5.96	5725	5730.960	---	---
11AC80MIMO	Ant2	5690_UNII-3	5.64	5725	5730.640	---	---
11AC80MIMO	Ant1	5775	81.600	5734.200	5815.800	---	---
11AC80MIMO	Ant2	5775	80.640	5734.840	5815.480	---	---
11AX20MIMO	Ant1	5180	20.360	5169.880	5190.240	---	---
11AX20MIMO	Ant2	5180	20.800	5169.480	5190.280	---	---
11AX20MIMO	Ant1	5220	20.520	5209.720	5230.240	---	---
11AX20MIMO	Ant2	5220	20.520	5209.840	5230.360	---	---
11AX20MIMO	Ant1	5240	20.880	5229.360	5250.240	---	---
11AX20MIMO	Ant2	5240	20.720	5229.600	5250.320	---	---
11AX20MIMO	Ant1	5260	20.640	5249.600	5270.240	---	---
11AX20MIMO	Ant2	5260	20.720	5249.680	5270.400	---	---
11AX20MIMO	Ant1	5300	20.440	5289.800	5310.240	---	---
11AX20MIMO	Ant2	5300	20.600	5289.680	5310.280	---	---
11AX20MIMO	Ant1	5320	20.920	5309.560	5330.480	---	---
11AX20MIMO	Ant2	5320	20.480	5309.760	5330.240	---	---
11AX20MIMO	Ant1	5500	20.800	5489.560	5510.360	---	---
11AX20MIMO	Ant2	5500	20.880	5489.560	5510.440	---	---
11AX20MIMO	Ant1	5580	20.520	5569.800	5590.320	---	---
11AX20MIMO	Ant2	5580	20.920	5569.560	5590.480	---	---
11AX20MIMO	Ant1	5700	20.920	5689.560	5710.480	---	---
11AX20MIMO	Ant2	5700	20.400	5689.760	5710.160	---	---
11AX20MIMO	Ant1	5720	20.680	5709.720	5730.400	---	---
11AX20MIMO	Ant2	5720	20.800	5709.640	5730.440	---	---
11AX20MIMO	Ant1	5720_UNII-2C	15.28	5709.720	5725	---	---
11AX20MIMO	Ant2	5720_UNII-2C	15.36	5709.640	5725	---	---
11AX20MIMO	Ant1	5720_UNII-3	5.4	5725	5730.400	---	---
11AX20MIMO	Ant2	5720_UNII-3	5.44	5725	5730.440	---	---
11AX20MIMO	Ant1	5745	20.520	5734.760	5755.280	---	---
11AX20MIMO	Ant2	5745	20.600	5734.560	5755.160	---	---
11AX20MIMO	Ant1	5785	20.800	5774.640	5795.440	---	---
11AX20MIMO	Ant2	5785	20.640	5774.600	5795.240	---	---
11AX20MIMO	Ant1	5825	20.960	5814.480	5835.440	---	---
11AX20MIMO	Ant2	5825	21.040	5814.520	5835.560	---	---
11AX40MIMO	Ant1	5190	40.240	5169.920	5210.160	---	---
11AX40MIMO	Ant2	5190	39.920	5170.240	5210.160	---	---
11AX40MIMO	Ant1	5230	40.240	5209.920	5250.160	---	---
11AX40MIMO	Ant2	5230	40.480	5209.600	5250.080	---	---
11AX40MIMO	Ant1	5270	40.080	5249.920	5290.000	---	---

11AX40MIMO	Ant2	5270	40.320	5249.840	5290.160	---	---
11AX40MIMO	Ant1	5310	40.480	5289.920	5330.400	---	---
11AX40MIMO	Ant2	5310	40.160	5290.000	5330.160	---	---
11AX40MIMO	Ant1	5510	39.920	5489.920	5529.840	---	---
11AX40MIMO	Ant2	5510	40.160	5489.760	5529.920	---	---
11AX40MIMO	Ant1	5550	40.720	5529.440	5570.160	---	---
11AX40MIMO	Ant2	5550	40.560	5529.520	5570.080	---	---
11AX40MIMO	Ant1	5670	40.320	5649.840	5690.160	---	---
11AX40MIMO	Ant2	5670	39.920	5650.000	5689.920	---	---
11AX40MIMO	Ant1	5710	40.080	5690.080	5730.160	---	---
11AX40MIMO	Ant2	5710	40.560	5689.920	5730.480	---	---
11AX40MIMO	Ant1	5710_UNII-2C	34.92	5690.080	5725	---	---
11AX40MIMO	Ant2	5710_UNII-2C	35.08	5689.920	5725	---	---
11AX40MIMO	Ant1	5710_UNII-3	5.16	5725	5730.160	---	---
11AX40MIMO	Ant2	5710_UNII-3	5.48	5725	5730.480	---	---
11AX40MIMO	Ant1	5755	40.320	5735.000	5775.320	---	---
11AX40MIMO	Ant2	5755	40.640	5734.920	5775.560	---	---
11AX40MIMO	Ant1	5795	40.400	5774.840	5815.240	---	---
11AX40MIMO	Ant2	5795	40.240	5775.000	5815.240	---	---
11AX80MIMO	Ant1	5210	81.280	5169.520	5250.800	---	---
11AX80MIMO	Ant2	5210	82.720	5168.720	5251.440	---	---
11AX80MIMO	Ant1	5290	80.960	5249.520	5330.480	---	---
11AX80MIMO	Ant2	5290	81.440	5249.680	5331.120	---	---
11AX80MIMO	Ant1	5530	81.920	5488.720	5570.640	---	---
11AX80MIMO	Ant2	5530	81.280	5489.680	5570.960	---	---
11AX80MIMO	Ant1	5610	82.080	5568.880	5650.960	---	---
11AX80MIMO	Ant2	5610	82.080	5569.040	5651.120	---	---
11AX80MIMO	Ant1	5690	81.440	5649.360	5730.800	---	---
11AX80MIMO	Ant2	5690	82.080	5648.880	5730.960	---	---
11AX80MIMO	Ant1	5690_UNII-2C	75.64	5649.360	5725	---	---
11AX80MIMO	Ant2	5690_UNII-2C	76.12	5648.880	5725	---	---
11AX80MIMO	Ant1	5690_UNII-3	5.8	5725	5730.800	---	---
11AX80MIMO	Ant2	5690_UNII-3	5.96	5725	5730.960	---	---
11AX80MIMO	Ant1	5775	81.920	5734.200	5816.120	---	---
11AX80MIMO	Ant2	5775	81.440	5734.520	5815.960	---	---
11AX160MIMO	Ant1	5250	165.440	5167.440	5332.880	---	---
11AX160MIMO	Ant2	5250	162.880	5169.040	5331.920	---	---
11AX160MIMO	Ant1	5250_UNII-1	82.56	5167.440	5250	---	---
11AX160MIMO	Ant2	5250_UNII-1	80.96	5169.040	5250	---	---

11AX160MIMO	Ant1	5250_UNII-2A	82.88	5250	5332.880	---	---
11AX160MIMO	Ant2	5250_UNII-2A	81.92	5250	5331.920	---	---
11AX160MIMO	Ant1	5570	163.520	5488.400	5651.920	---	---
11AX160MIMO	Ant2	5570	163.200	5488.080	5651.280	---	---

**Test Result\_26dB Bandwidth for AX Part RU**

Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	26db BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20MIMO	Ant1	5180	26Tone	RU0	16.520	5168.640	5185.160	---	---
11AX20MIMO	Ant2	5180	26Tone	RU0	20.280	5168.840	5189.120	---	---
11AX20MIMO	Ant1	5180	52Tone	RU37	20.800	5168.160	5188.960	---	---
11AX20MIMO	Ant2	5180	52Tone	RU37	15.480	5169.000	5184.480	---	---
11AX20MIMO	Ant1	5180	106Tone	RU53	20.680	5168.120	5188.800	---	---
11AX20MIMO	Ant2	5180	106Tone	RU53	18.200	5169.080	5187.280	---	---
11AX20MIMO	Ant1	5220	26Tone	RU4	18.120	5211.000	5229.120	---	---
11AX20MIMO	Ant2	5220	26Tone	RU4	18.200	5210.960	5229.160	---	---
11AX20MIMO	Ant1	5220	52Tone	RU39	15.480	5211.560	5227.040	---	---
11AX20MIMO	Ant2	5220	52Tone	RU39	17.840	5211.600	5229.440	---	---
11AX20MIMO	Ant1	5220	106Tone	RU53	19.240	5208.920	5228.160	---	---
11AX20MIMO	Ant2	5220	106Tone	RU53	16.320	5208.680	5225.000	---	---
11AX20MIMO	Ant1	5240	26Tone	RU8	20.400	5230.520	5250.920	---	---
11AX20MIMO	Ant2	5240	26Tone	RU8	20.080	5230.760	5250.840	---	---
11AX20MIMO	Ant1	5240	52Tone	RU40	20.680	5230.400	5251.080	---	---
11AX20MIMO	Ant2	5240	52Tone	RU40	18.880	5231.920	5250.800	---	---
11AX20MIMO	Ant1	5240	106Tone	RU54	20.720	5230.280	5251.000	---	---
11AX20MIMO	Ant2	5240	106Tone	RU54	19.880	5231.560	5251.440	---	---
11AX20MIMO	Ant1	5260	26Tone	RU0	8.960	5248.840	5257.800	---	---
11AX20MIMO	Ant2	5260	26Tone	RU0	19.760	5248.280	5268.040	---	---
11AX20MIMO	Ant1	5260	52Tone	RU37	21.440	5248.160	5269.600	---	---
11AX20MIMO	Ant2	5260	52Tone	RU37	20.600	5248.680	5269.280	---	---
11AX20MIMO	Ant1	5260	106Tone	RU53	16.840	5248.240	5265.080	---	---
11AX20MIMO	Ant2	5260	106Tone	RU53	16.560	5248.440	5265.000	---	---
11AX20MIMO	Ant1	5300	26Tone	RU4	15.360	5294.000	5309.360	---	---
11AX20MIMO	Ant2	5300	26Tone	RU4	18.240	5290.960	5309.200	---	---
11AX20MIMO	Ant1	5300	52Tone	RU39	16.200	5291.680	5307.880	---	---
11AX20MIMO	Ant2	5300	52Tone	RU39	17.720	5291.840	5309.560	---	---
11AX20MIMO	Ant1	5300	106Tone	RU53	20.840	5289.000	5309.840	---	---
11AX20MIMO	Ant2	5300	106Tone	RU53	19.480	5288.800	5308.280	---	---
11AX20MIMO	Ant1	5320	26Tone	RU8	18.160	5312.560	5330.720	---	---

11AX20MIMO	Ant2	5320	26Tone	RU8	19.720	5311.040	5330.760	---	---
11AX20MIMO	Ant1	5320	52Tone	RU40	21.760	5309.760	5331.520	---	---
11AX20MIMO	Ant2	5320	52Tone	RU40	20.280	5310.800	5331.080	---	---
11AX20MIMO	Ant1	5320	106Tone	RU54	21.120	5310.000	5331.120	---	---
11AX20MIMO	Ant2	5320	106Tone	RU54	20.280	5310.760	5331.040	---	---
11AX20MIMO	Ant1	5500	26Tone	RU0	15.840	5488.920	5504.760	---	---
11AX20MIMO	Ant2	5500	26Tone	RU0	19.120	5488.840	5507.960	---	---
11AX20MIMO	Ant1	5500	52Tone	RU37	16.240	5487.960	5504.200	---	---
11AX20MIMO	Ant2	5500	52Tone	RU37	18.760	5488.920	5507.680	---	---
11AX20MIMO	Ant1	5500	106Tone	RU53	21.680	5488.600	5510.280	---	---
11AX20MIMO	Ant2	5500	106Tone	RU53	18.840	5488.800	5507.640	---	---
11AX20MIMO	Ant1	5580	26Tone	RU4	14.280	5572.080	5586.360	---	---
11AX20MIMO	Ant2	5580	26Tone	RU4	15.520	5571.600	5587.120	---	---
11AX20MIMO	Ant1	5580	52Tone	RU39	18.520	5570.360	5588.880	---	---
11AX20MIMO	Ant2	5580	52Tone	RU39	14.440	5571.080	5585.520	---	---
11AX20MIMO	Ant1	5580	106Tone	RU53	20.720	5568.920	5589.640	---	---
11AX20MIMO	Ant2	5580	106Tone	RU53	20.480	5569.000	5589.480	---	---
11AX20MIMO	Ant1	5700	26Tone	RU8	20.040	5690.560	5710.600	---	---
11AX20MIMO	Ant2	5700	26Tone	RU8	17.200	5693.920	5711.120	---	---
11AX20MIMO	Ant1	5700	52Tone	RU40	20.280	5690.760	5711.040	---	---
11AX20MIMO	Ant2	5700	52Tone	RU40	19.280	5692.200	5711.480	---	---
11AX20MIMO	Ant1	5700	106Tone	RU54	16.960	5693.880	5710.840	---	---
11AX20MIMO	Ant2	5700	106Tone	RU54	19.120	5691.760	5710.880	---	---
11AX20MIMO	Ant1	5745	26Tone	RU0	20.520	5733.760	5754.280	---	---
11AX20MIMO	Ant2	5745	26Tone	RU0	18.560	5734.040	5752.600	---	---
11AX20MIMO	Ant1	5745	52Tone	RU37	20.720	5733.520	5754.240	---	---
11AX20MIMO	Ant2	5745	52Tone	RU37	19.680	5733.440	5753.120	---	---
11AX20MIMO	Ant1	5745	106Tone	RU53	17.600	5734.040	5751.640	---	---
11AX20MIMO	Ant2	5745	106Tone	RU53	21.400	5733.520	5754.920	---	---
11AX20MIMO	Ant1	5785	26Tone	RU4	16.760	5776.320	5793.080	---	---
11AX20MIMO	Ant2	5785	26Tone	RU4	13.600	5775.840	5789.440	---	---
11AX20MIMO	Ant1	5785	52Tone	RU39	18.440	5775.520	5793.960	---	---
11AX20MIMO	Ant2	5785	52Tone	RU39	18.720	5775.880	5794.600	---	---
11AX20MIMO	Ant1	5785	106Tone	RU53	21.240	5773.840	5795.080	---	---
11AX20MIMO	Ant2	5785	106Tone	RU53	20.200	5773.840	5794.040	---	---
11AX20MIMO	Ant1	5825	26Tone	RU8	18.200	5817.840	5836.040	---	---
11AX20MIMO	Ant2	5825	26Tone	RU8	17.440	5818.440	5835.880	---	---
11AX20MIMO	Ant1	5825	52Tone	RU40	20.720	5815.360	5836.080	---	---
11AX20MIMO	Ant2	5825	52Tone	RU40	18.840	5817.000	5835.840	---	---

11AX20MIMO	Ant1	5825	106Tone	RU54	20.760	5815.160	5835.920	---	---
11AX20MIMO	Ant2	5825	106Tone	RU54	20.520	5815.560	5836.080	---	---
11AX40MIMO	Ant1	5190	242Tone	RU61	41.280	5168.960	5210.240	---	---
11AX40MIMO	Ant2	5190	242Tone	RU61	40.800	5168.640	5209.440	---	---
11AX40MIMO	Ant1	5230	242Tone	RU62	42.720	5209.360	5252.080	---	---
11AX40MIMO	Ant2	5230	242Tone	RU62	39.920	5211.280	5251.200	---	---
11AX40MIMO	Ant1	5270	242Tone	RU61	41.040	5248.640	5289.680	---	---
11AX40MIMO	Ant2	5270	242Tone	RU61	40.480	5248.240	5288.720	---	---
11AX40MIMO	Ant1	5310	242Tone	RU62	40.080	5291.360	5331.440	---	---
11AX40MIMO	Ant2	5310	242Tone	RU62	40.560	5290.720	5331.280	---	---
11AX40MIMO	Ant1	5510	242Tone	RU61	40.320	5488.080	5528.400	---	---
11AX40MIMO	Ant2	5510	242Tone	RU61	37.200	5488.800	5526.000	---	---
11AX40MIMO	Ant1	5550	242Tone	RU62	36.080	5535.760	5571.840	---	---
11AX40MIMO	Ant2	5550	242Tone	RU62	38.400	5533.040	5571.440	---	---
11AX40MIMO	Ant1	5670	242Tone	RU62	42.000	5650.080	5692.080	---	---
11AX40MIMO	Ant2	5670	242Tone	RU62	31.760	5660.400	5692.160	---	---
11AX40MIMO	Ant1	5755	242Tone	RU61	40.880	5733.720	5774.600	---	---
11AX40MIMO	Ant2	5755	242Tone	RU61	40.240	5734.040	5774.280	---	---
11AX40MIMO	Ant1	5795	242Tone	RU62	42.080	5774.760	5816.840	---	---
11AX40MIMO	Ant2	5795	242Tone	RU62	39.440	5776.920	5816.360	---	---
11AX80MIMO	Ant1	5210	484Tone	RU65	84.960	5167.120	5252.080	---	---
11AX80MIMO	Ant2	5210	484Tone	RU65	83.840	5165.520	5249.360	---	---
11AX80MIMO	Ant1	5290	484Tone	RU66	83.680	5249.200	5332.880	---	---
11AX80MIMO	Ant2	5290	484Tone	RU66	84.160	5249.360	5333.520	---	---
11AX80MIMO	Ant1	5530	484Tone	RU65	83.840	5485.520	5569.360	---	---
11AX80MIMO	Ant2	5530	484Tone	RU65	80.960	5486.640	5567.600	---	---
11AX80MIMO	Ant1	5610	484Tone	RU66	81.600	5571.120	5652.720	---	---
11AX80MIMO	Ant2	5610	484Tone	RU66	83.840	5570.000	5653.840	---	---
11AX80MIMO	Ant1	5775	484Tone	RU66	84.160	5734.360	5818.520	---	---
11AX80MIMO	Ant2	5775	484Tone	RU66	82.240	5735.480	5817.720	---	---
11AX160MIMO	Ant1	5250	996Tone	RU67	166.080	5165.840	5331.920	---	---
11AX160MIMO	Ant2	5250	996Tone	RU67	164.480	5165.200	5329.680	---	---
11AX160MIMO	Ant1	5250_UNII-1	996Tone	RU67	84.16	5165.840	5250	---	---
11AX160MIMO	Ant2	5250_UNII-1	996Tone	RU67	84.8	5165.200	5250	---	---
11AX160MIMO	Ant2	5250_UNII-2A	996Tone	RU67	79.68	5250	5329.680	---	---
11AX160MIMO	Ant1	5250_UNII-2A	996Tone	RU67	81.92	5250	5331.920	---	---
11AX160MIMO	Ant1	5570	996Tone	RU68	164.800	5490.000	5654.800	---	---
11AX160MIMO	Ant2	5570	996Tone	RU68	165.440	5489.360	5654.800	---	---

**Test Result\_6dB Bandwidth****U-NII-3**

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
11A-CDD	Ant2	5745	16.320	5736.840	5753.160	0.5	PASS
11A-CDD	Ant1	5785	16.320	5776.840	5793.160	0.5	PASS
11A-CDD	Ant2	5785	16.320	5776.800	5793.120	0.5	PASS
11A-CDD	Ant1	5825	16.360	5816.800	5833.160	0.5	PASS
11A-CDD	Ant2	5825	16.360	5816.800	5833.160	0.5	PASS
11N20MIMO	Ant1	5745	17.320	5736.440	5753.760	0.5	PASS
11N20MIMO	Ant2	5745	17.560	5736.200	5753.760	0.5	PASS
11N20MIMO	Ant1	5785	17.560	5776.200	5793.760	0.5	PASS
11N20MIMO	Ant2	5785	17.160	5776.200	5793.360	0.5	PASS
11N20MIMO	Ant1	5825	17.560	5816.200	5833.760	0.5	PASS
11N20MIMO	Ant2	5825	17.640	5816.160	5833.800	0.5	PASS
11N40MIMO	Ant1	5755	36.320	5736.840	5773.160	0.5	PASS
11N40MIMO	Ant2	5755	36.240	5736.840	5773.080	0.5	PASS
11N40MIMO	Ant1	5795	36.080	5777.080	5813.160	0.5	PASS
11N40MIMO	Ant2	5795	36.080	5777.080	5813.160	0.5	PASS
11AC20MIMO	Ant1	5745	17.560	5736.200	5753.760	0.5	PASS
11AC20MIMO	Ant2	5745	17.600	5736.200	5753.800	0.5	PASS
11AC20MIMO	Ant1	5785	17.640	5776.160	5793.800	0.5	PASS
11AC20MIMO	Ant2	5785	17.600	5776.200	5793.800	0.5	PASS
11AC20MIMO	Ant1	5825	17.560	5816.200	5833.760	0.5	PASS
11AC20MIMO	Ant2	5825	17.560	5816.200	5833.760	0.5	PASS
11AC40MIMO	Ant1	5755	36.400	5736.760	5773.160	0.5	PASS
11AC40MIMO	Ant2	5755	36.000	5736.840	5772.840	0.5	PASS
11AC40MIMO	Ant1	5795	35.600	5777.480	5813.080	0.5	PASS
11AC40MIMO	Ant2	5795	35.680	5776.840	5812.520	0.5	PASS
11AC80MIMO	Ant1	5775	75.520	5737.560	5813.080	0.5	PASS
11AC80MIMO	Ant2	5775	74.880	5737.560	5812.440	0.5	PASS
11AX20MIMO	Ant1	5745	18.720	5735.680	5754.400	0.5	PASS
11AX20MIMO	Ant2	5745	18.680	5735.640	5754.320	0.5	PASS
11AX20MIMO	Ant1	5785	18.840	5775.600	5794.440	0.5	PASS
11AX20MIMO	Ant2	5785	18.800	5775.520	5794.320	0.5	PASS
11AX20MIMO	Ant1	5825	18.840	5815.520	5834.360	0.5	PASS
11AX20MIMO	Ant2	5825	17.920	5816.160	5834.080	0.5	PASS
11AX40MIMO	Ant1	5755	37.280	5736.600	5773.880	0.5	PASS
11AX40MIMO	Ant2	5755	37.680	5736.040	5773.720	0.5	PASS

11AX40MIMO	Ant1	5795	37.680	5776.280	5813.960	0.5	PASS
11AX40MIMO	Ant2	5795	37.760	5776.200	5813.960	0.5	PASS
11AX80MIMO	Ant1	5775	76.640	5736.920	5813.560	0.5	PASS
11AX80MIMO	Ant2	5775	76.960	5736.920	5813.880	0.5	PASS

**Test Result\_99% Bandwidth**

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	16.552	5171.7044	5188.2564	---	---
11A-CDD	Ant2	5180	16.490	5171.7509	5188.2409	---	---
11A-CDD	Ant1	5220	16.493	5211.7435	5228.2365	---	---
11A-CDD	Ant2	5220	16.478	5211.7672	5228.2452	---	---
11A-CDD	Ant1	5240	16.511	5231.7233	5248.2343	---	---
11A-CDD	Ant2	5240	16.528	5231.7252	5248.2532	---	---
11A-CDD	Ant1	5260	16.495	5251.7180	5268.2130	---	---
11A-CDD	Ant2	5260	16.474	5251.7415	5268.2155	---	---
11A-CDD	Ant1	5300	16.520	5291.7079	5308.2279	---	---
11A-CDD	Ant2	5300	16.481	5291.7304	5308.2114	---	---
11A-CDD	Ant1	5320	16.521	5311.7264	5328.2474	---	---
11A-CDD	Ant2	5320	16.554	5311.7008	5328.2548	---	---
11A-CDD	Ant1	5500	16.517	5491.7367	5508.2537	---	---
11A-CDD	Ant2	5500	16.511	5491.7421	5508.2531	---	---
11A-CDD	Ant1	5580	16.546	5571.7261	5588.2721	---	---
11A-CDD	Ant2	5580	16.464	5571.7542	5588.2182	---	---
11A-CDD	Ant1	5700	16.502	5691.7476	5708.2496	---	---
11A-CDD	Ant2	5700	16.457	5691.7746	5708.2316	---	---
11A-CDD	Ant1	5720	16.518	5711.7287	5728.2467	---	---
11A-CDD	Ant2	5720	16.487	5711.7163	5728.2033	---	---
11A-CDD	Ant1	5720_UNII-2C	13.271	5711.7287	5725	---	---
11A-CDD	Ant2	5720_UNII-2C	13.284	5711.7163	5725	---	---
11A-CDD	Ant1	5720_UNII-3	3.247	5725	5728.2467	---	---
11A-CDD	Ant2	5720_UNII-3	3.203	5725	5728.2033	---	---
11A-CDD	Ant1	5745	16.510	5736.7519	5753.2619	---	---
11A-CDD	Ant2	5745	16.448	5736.7522	5753.2002	---	---
11A-CDD	Ant1	5785	16.490	5776.7586	5793.2486	---	---
11A-CDD	Ant2	5785	16.521	5776.7446	5793.2656	---	---
11A-CDD	Ant1	5825	16.518	5816.7361	5833.2541	---	---
11A-CDD	Ant2	5825	16.460	5816.7720	5833.2320	---	---
11N20MIMO	Ant1	5180	17.721	5171.1581	5188.8791	---	---
11N20MIMO	Ant2	5180	17.652	5171.1907	5188.8427	---	---

11N20MIMO	Ant1	5220	17.642	5211.1413	5228.7833	---	---
11N20MIMO	Ant2	5220	17.667	5211.1752	5228.8422	---	---
11N20MIMO	Ant1	5240	17.653	5231.1229	5248.7759	---	---
11N20MIMO	Ant2	5240	17.769	5231.1268	5248.8958	---	---
11N20MIMO	Ant1	5260	17.691	5251.1294	5268.8204	---	---
11N20MIMO	Ant2	5260	17.671	5251.1699	5268.8409	---	---
11N20MIMO	Ant1	5300	17.597	5291.1958	5308.7928	---	---
11N20MIMO	Ant2	5300	17.660	5291.1711	5308.8311	---	---
11N20MIMO	Ant1	5320	17.673	5311.1492	5328.8222	---	---
11N20MIMO	Ant2	5320	17.713	5311.1348	5328.8478	---	---
11N20MIMO	Ant1	5500	17.661	5491.1475	5508.8085	---	---
11N20MIMO	Ant2	5500	17.711	5491.1462	5508.8572	---	---
11N20MIMO	Ant1	5580	17.597	5571.1812	5588.7782	---	---
11N20MIMO	Ant2	5580	17.687	5571.1513	5588.8383	---	---
11N20MIMO	Ant1	5700	17.609	5691.1617	5708.7707	---	---
11N20MIMO	Ant2	5700	17.699	5691.1557	5708.8547	---	---
11N20MIMO	Ant1	5720	17.635	5711.1789	5728.8139	---	---
11N20MIMO	Ant2	5720	17.652	5711.1639	5728.8159	---	---
11N20MIMO	Ant1	5720_UNII-2C	13.821	5711.1789	5725	---	---
11N20MIMO	Ant2	5720_UNII-2C	13.836	5711.1639	5725	---	---
11N20MIMO	Ant1	5720_UNII-3	3.814	5725	5728.8139	---	---
11N20MIMO	Ant2	5720_UNII-3	3.816	5725	5728.8159	---	---
11N20MIMO	Ant1	5745	17.620	5736.1601	5753.7801	---	---
11N20MIMO	Ant2	5745	17.666	5736.1408	5753.8068	---	---
11N20MIMO	Ant1	5785	17.661	5776.1653	5793.8263	---	---
11N20MIMO	Ant2	5785	17.685	5776.1495	5793.8345	---	---
11N20MIMO	Ant1	5825	17.656	5816.1487	5833.8047	---	---
11N20MIMO	Ant2	5825	17.671	5816.1583	5833.8293	---	---
11N40MIMO	Ant1	5190	36.160	5171.9201	5208.0801	---	---
11N40MIMO	Ant2	5190	36.128	5171.9726	5208.1006	---	---
11N40MIMO	Ant1	5230	36.187	5211.9145	5248.1015	---	---
11N40MIMO	Ant2	5230	36.174	5211.9431	5248.1171	---	---
11N40MIMO	Ant1	5270	36.110	5251.8961	5288.0061	---	---
11N40MIMO	Ant2	5270	36.220	5251.9250	5288.1450	---	---
11N40MIMO	Ant1	5310	36.172	5291.9073	5328.0793	---	---
11N40MIMO	Ant2	5310	36.275	5291.9026	5328.1776	---	---
11N40MIMO	Ant1	5510	36.211	5491.8681	5528.0791	---	---
11N40MIMO	Ant2	5510	36.161	5491.8770	5528.0380	---	---
11N40MIMO	Ant1	5550	36.146	5531.9738	5568.1198	---	---

11N40MIMO	Ant2	5550	36.256	5531.8887	5568.1447	---	---
11N40MIMO	Ant1	5670	36.171	5651.9045	5688.0755	---	---
11N40MIMO	Ant2	5670	36.282	5651.8534	5688.1354	---	---
11N40MIMO	Ant1	5710	36.104	5692.0124	5728.1164	---	---
11N40MIMO	Ant2	5710	36.145	5691.9223	5728.0673	---	---
11N40MIMO	Ant1	5710_UNII-2C	32.988	5692.0124	5725	---	---
11N40MIMO	Ant2	5710_UNII-2C	33.078	5691.9223	5725	---	---
11N40MIMO	Ant1	5710_UNII-3	3.116	5725	5728.1164	---	---
11N40MIMO	Ant2	5710_UNII-3	3.067	5725	5728.0673	---	---
11N40MIMO	Ant1	5755	36.216	5736.9042	5773.1202	---	---
11N40MIMO	Ant2	5755	36.228	5736.8787	5773.1067	---	---
11N40MIMO	Ant1	5795	36.214	5776.9010	5813.1150	---	---
11N40MIMO	Ant2	5795	36.141	5776.8998	5813.0408	---	---
11AC20MIMO	Ant1	5180	17.695	5171.1429	5188.8379	---	---
11AC20MIMO	Ant2	5180	17.641	5171.1868	5188.8278	---	---
11AC20MIMO	Ant1	5220	17.690	5211.1274	5228.8174	---	---
11AC20MIMO	Ant2	5220	17.659	5211.1520	5228.8110	---	---
11AC20MIMO	Ant1	5240	17.650	5231.1306	5248.7806	---	---
11AC20MIMO	Ant2	5240	17.699	5231.1519	5248.8509	---	---
11AC20MIMO	Ant1	5260	17.652	5251.1600	5268.8120	---	---
11AC20MIMO	Ant2	5260	17.666	5251.1524	5268.8184	---	---
11AC20MIMO	Ant1	5300	17.635	5291.1875	5308.8225	---	---
11AC20MIMO	Ant2	5300	17.727	5291.1275	5308.8545	---	---
11AC20MIMO	Ant1	5320	17.629	5311.1911	5328.8201	---	---
11AC20MIMO	Ant2	5320	17.711	5311.1458	5328.8568	---	---
11AC20MIMO	Ant1	5500	17.624	5491.1823	5508.8063	---	---
11AC20MIMO	Ant2	5500	17.687	5491.1415	5508.8285	---	---
11AC20MIMO	Ant1	5580	17.702	5571.1145	5588.8165	---	---
11AC20MIMO	Ant2	5580	17.661	5571.1580	5588.8190	---	---
11AC20MIMO	Ant1	5700	17.652	5691.1507	5708.8027	---	---
11AC20MIMO	Ant2	5700	17.665	5691.1348	5708.7998	---	---
11AC20MIMO	Ant1	5720	17.649	5711.1787	5728.8277	---	---
11AC20MIMO	Ant2	5720	17.667	5711.1370	5728.8040	---	---
11AC20MIMO	Ant1	5720_UNII-2C	13.821	5711.1787	5725	---	---
11AC20MIMO	Ant2	5720_UNII-2C	13.863	5711.1370	5725	---	---
11AC20MIMO	Ant1	5720_UNII-3	3.828	5725	5728.8277	---	---
11AC20MIMO	Ant2	5720_UNII-3	3.804	5725	5728.8040	---	---
11AC20MIMO	Ant1	5745	17.659	5736.1568	5753.8158	---	---
11AC20MIMO	Ant2	5745	17.628	5736.1672	5753.7952	---	---

11AC20MIMO	Ant1	5785	17.704	5776.1753	5793.8793	---	---
11AC20MIMO	Ant2	5785	17.697	5776.1370	5793.8340	---	---
11AC20MIMO	Ant1	5825	17.613	5816.1813	5833.7943	---	---
11AC20MIMO	Ant2	5825	17.741	5816.0908	5833.8318	---	---
11AC40MIMO	Ant1	5190	36.191	5171.9010	5208.0920	---	---
11AC40MIMO	Ant2	5190	36.220	5171.9376	5208.1576	---	---
11AC40MIMO	Ant1	5230	36.121	5211.8986	5248.0196	---	---
11AC40MIMO	Ant2	5230	36.194	5211.9165	5248.1105	---	---
11AC40MIMO	Ant1	5270	36.153	5251.8774	5288.0304	---	---
11AC40MIMO	Ant2	5270	36.188	5251.9112	5288.0992	---	---
11AC40MIMO	Ant1	5310	36.212	5291.8782	5328.0902	---	---
11AC40MIMO	Ant2	5310	36.168	5291.9425	5328.1105	---	---
11AC40MIMO	Ant1	5510	36.154	5491.9393	5528.0933	---	---
11AC40MIMO	Ant2	5510	36.177	5491.9471	5528.1241	---	---
11AC40MIMO	Ant1	5550	36.230	5531.8872	5568.1172	---	---
11AC40MIMO	Ant2	5550	36.178	5531.9020	5568.0800	---	---
11AC40MIMO	Ant1	5670	36.144	5651.8847	5688.0287	---	---
11AC40MIMO	Ant2	5670	36.250	5651.8986	5688.1486	---	---
11AC40MIMO	Ant1	5710	36.196	5691.8854	5728.0814	---	---
11AC40MIMO	Ant2	5710	36.225	5691.9202	5728.1452	---	---
11AC40MIMO	Ant1	5710_UNII-2C	33.115	5691.8854	5725	---	---
11AC40MIMO	Ant2	5710_UNII-2C	33.08	5691.9202	5725	---	---
11AC40MIMO	Ant1	5710_UNII-3	3.081	5725	5728.0814	---	---
11AC40MIMO	Ant2	5710_UNII-3	3.145	5725	5728.1452	---	---
11AC40MIMO	Ant1	5755	36.238	5736.8950	5773.1330	---	---
11AC40MIMO	Ant2	5755	36.193	5736.9039	5773.0969	---	---
11AC40MIMO	Ant1	5795	36.234	5776.8961	5813.1301	---	---
11AC40MIMO	Ant2	5795	36.312	5776.8270	5813.1390	---	---
11AC80MIMO	Ant1	5210	75.457	5172.3277	5247.7847	---	---
11AC80MIMO	Ant2	5210	75.626	5172.3018	5247.9278	---	---
11AC80MIMO	Ant1	5290	75.859	5251.9957	5327.8547	---	---
11AC80MIMO	Ant2	5290	75.660	5252.1031	5327.7631	---	---
11AC80MIMO	Ant1	5530	75.664	5492.0747	5567.7387	---	---
11AC80MIMO	Ant2	5530	76.040	5492.1009	5568.1409	---	---
11AC80MIMO	Ant1	5610	75.701	5572.2779	5647.9789	---	---
11AC80MIMO	Ant2	5610	75.782	5572.2228	5648.0048	---	---
11AC80MIMO	Ant1	5690	75.619	5652.2223	5727.8413	---	---
11AC80MIMO	Ant2	5690	76.003	5652.0858	5728.0888	---	---
11AC80MIMO	Ant1	5690_UNII-2C	72.778	5652.2223	5725	---	---

11AC80MIMO	Ant2	5690_UNII-2C	72.914	5652.0858	5725	---	---
11AC80MIMO	Ant1	5690_UNII-3	2.841	5725	5727.8413	---	---
11AC80MIMO	Ant2	5690_UNII-3	3.089	5725	5728.0888	---	---
11AC80MIMO	Ant1	5775	75.733	5737.1264	5812.8594	---	---
11AC80MIMO	Ant2	5775	75.705	5737.2105	5812.9155	---	---
11AX20MIMO	Ant1	5180	18.978	5170.5213	5189.4993	---	---
11AX20MIMO	Ant2	5180	18.968	5170.5224	5189.4904	---	---
11AX20MIMO	Ant1	5220	18.996	5210.5048	5229.5008	---	---
11AX20MIMO	Ant2	5220	19.030	5210.4822	5229.5122	---	---
11AX20MIMO	Ant1	5240	18.999	5230.5036	5249.5026	---	---
11AX20MIMO	Ant2	5240	18.939	5230.5348	5249.4738	---	---
11AX20MIMO	Ant1	5260	18.969	5250.4852	5269.4542	---	---
11AX20MIMO	Ant2	5260	18.991	5250.5066	5269.4976	---	---
11AX20MIMO	Ant1	5300	18.910	5290.5613	5309.4713	---	---
11AX20MIMO	Ant2	5300	18.992	5290.5165	5309.5085	---	---
11AX20MIMO	Ant1	5320	18.965	5310.5422	5329.5072	---	---
11AX20MIMO	Ant2	5320	18.949	5310.5231	5329.4721	---	---
11AX20MIMO	Ant1	5500	19.000	5490.5159	5509.5159	---	---
11AX20MIMO	Ant2	5500	18.982	5490.5315	5509.5135	---	---
11AX20MIMO	Ant1	5580	18.974	5570.5216	5589.4956	---	---
11AX20MIMO	Ant2	5580	18.965	5570.5167	5589.4817	---	---
11AX20MIMO	Ant1	5700	18.978	5690.4893	5709.4673	---	---
11AX20MIMO	Ant2	5700	18.955	5690.5404	5709.4954	---	---
11AX20MIMO	Ant1	5720	18.940	5710.5014	5729.4414	---	---
11AX20MIMO	Ant2	5720	18.931	5710.5296	5729.4606	---	---
11AX20MIMO	Ant1	5720_UNII-2C	14.499	5710.5014	5725	---	---
11AX20MIMO	Ant2	5720_UNII-2C	14.47	5710.5296	5725	---	---
11AX20MIMO	Ant1	5720_UNII-3	4.441	5725	5729.4414	---	---
11AX20MIMO	Ant2	5720_UNII-3	4.461	5725	5729.4606	---	---
11AX20MIMO	Ant1	5745	18.955	5735.4841	5754.4391	---	---
11AX20MIMO	Ant2	5745	19.063	5735.4214	5754.4844	---	---
11AX20MIMO	Ant1	5785	18.963	5775.5496	5794.5126	---	---
11AX20MIMO	Ant2	5785	18.926	5775.5209	5794.4469	---	---
11AX20MIMO	Ant1	5825	18.907	5815.5544	5834.4614	---	---
11AX20MIMO	Ant2	5825	19.024	5815.5010	5834.5250	---	---
11AX40MIMO	Ant1	5190	37.877	5171.0274	5208.9044	---	---
11AX40MIMO	Ant2	5190	37.849	5171.1285	5208.9775	---	---
11AX40MIMO	Ant1	5230	37.809	5211.0540	5248.8630	---	---
11AX40MIMO	Ant2	5230	37.799	5211.1430	5248.9420	---	---

11AX40MIMO	Ant1	5270	37.872	5251.0369	5288.9089	---	---
11AX40MIMO	Ant2	5270	37.829	5251.1235	5288.9525	---	---
11AX40MIMO	Ant1	5310	37.788	5291.1485	5328.9365	---	---
11AX40MIMO	Ant2	5310	37.841	5291.0593	5328.9003	---	---
11AX40MIMO	Ant1	5510	37.972	5490.9615	5528.9335	---	---
11AX40MIMO	Ant2	5510	38.000	5491.0047	5529.0047	---	---
11AX40MIMO	Ant1	5550	37.882	5531.0409	5568.9229	---	---
11AX40MIMO	Ant2	5550	37.752	5531.1044	5568.8564	---	---
11AX40MIMO	Ant1	5670	37.823	5651.1369	5688.9599	---	---
11AX40MIMO	Ant2	5670	37.876	5651.0632	5688.9392	---	---
11AX40MIMO	Ant1	5710	37.739	5691.1272	5728.8662	---	---
11AX40MIMO	Ant2	5710	37.960	5691.0582	5729.0182	---	---
11AX40MIMO	Ant1	5710_UNII-2C	33.873	5691.1272	5725	---	---
11AX40MIMO	Ant2	5710_UNII-2C	33.942	5691.0582	5725	---	---
11AX40MIMO	Ant1	5710_UNII-3	3.866	5725	5728.8662	---	---
11AX40MIMO	Ant2	5710_UNII-3	4.018	5725	5729.0182	---	---
11AX40MIMO	Ant1	5755	37.806	5736.0950	5773.9010	---	---
11AX40MIMO	Ant2	5755	37.797	5736.1164	5773.9134	---	---
11AX40MIMO	Ant1	5795	37.725	5776.1449	5813.8699	---	---
11AX40MIMO	Ant2	5795	37.872	5776.0215	5813.8935	---	---
11AX80MIMO	Ant1	5210	77.520	5171.2860	5248.8060	---	---
11AX80MIMO	Ant2	5210	77.366	5171.4982	5248.8642	---	---
11AX80MIMO	Ant1	5290	77.383	5251.2976	5328.6806	---	---
11AX80MIMO	Ant2	5290	77.353	5251.4324	5328.7854	---	---
11AX80MIMO	Ant1	5530	77.198	5491.3446	5568.5426	---	---
11AX80MIMO	Ant2	5530	77.357	5491.3926	5568.7496	---	---
11AX80MIMO	Ant1	5610	77.416	5571.4105	5648.8265	---	---
11AX80MIMO	Ant2	5610	77.454	5571.3207	5648.7747	---	---
11AX80MIMO	Ant1	5690	77.343	5651.2868	5728.6298	---	---
11AX80MIMO	Ant2	5690	77.273	5651.4535	5728.7265	---	---
11AX80MIMO	Ant1	5690_UNII-2C	73.713	5651.2868	5725	---	---
11AX80MIMO	Ant2	5690_UNII-2C	73.547	5651.4535	5725	---	---
11AX80MIMO	Ant1	5690_UNII-3	3.63	5725	5728.6298	---	---
11AX80MIMO	Ant2	5690_UNII-3	3.726	5725	5728.7265	---	---
11AX80MIMO	Ant1	5775	77.308	5736.4109	5813.7189	---	---
11AX80MIMO	Ant2	5775	77.037	5736.3814	5813.4184	---	---
11AX160MIMO	Ant1	5250	156.85	5171.7369	5328.5869	---	---
11AX160MIMO	Ant2	5250	156.36	5172.3544	5328.7144	---	---
11AX160MIMO	Ant1	5250_UNII-1	78.263	5171.7369	5250	---	---

11AX160MIMO	Ant2	5250_UNII-1	77.646	5172.3544	5250	---	---
11AX160MIMO	Ant1	5250_UNII-2A	78.587	5250	5328.5869	---	---
11AX160MIMO	Ant2	5250_UNII-2A	78.714	5250	5328.7144	---	---
11AX160MIMO	Ant1	5570	156.69	5491.7992	5648.4892	---	---
11AX160MIMO	Ant2	5570	156.60	5492.0292	5648.6292	---	---

## Test Graphs

### 26dB Occupied Bandwidth

