中认信通
CHINA CERTIFICATION ICT CO.,LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **SHENZHEN ELECTRON TECHNOLOGY CO.,LTD.**

Address: Bld.2,Yingfeng Industrial Zone,Tantou Community, Songgang Street,Baoan, Shenzhen,China.

FCC ID: **2ABC5-E0044**

Product Name: **Android Tablet**

Model Number: **WF3205T**

Standard(s): **47 CFR Part 15, Subpart E(15.407)**
ANSI C63.10-2013
KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: **CR230957008-00D**

Date Of Issue: **2023/11/20**

Reviewed By: **Calvin Chen**

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, 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. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230957008-00D	Original Report	2023/11/20

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	Android Tablet
EUT Model:	WF3205T
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20/ax hew20) 5190-5230 MHz(802.11n ht40/ac vht40/ax hew40) 5210 MHz(802.11ac vht80/ax hew80) 5745-5825 MHz (802.11a/n ht20/ac vht20/ax hew20) 5755-5795 MHz(802.11n ht40/ac vht40/ax hew40) 5775 MHz(802.11ac vht80/ax hew80)
Maximum Average Output Power (Conducted):	15.87dBm in 5150-5250 MHz Band 20.59dBm in 5725-5850 MHz Band
Modulation Type:	802.11a/n/ac/ax: OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM
Rated Input Voltage:	DC 12V from adapter
Serial Number:	2BS8-1
EUT Received Date:	2023/9/27
EUT Received Status:	Good

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20/ax hew20:

5150-5250MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
36	5180	149	5745
40	5200	153	5765
44	5220	157	5785
48	5240	161	5805
/	/	165	5825
Per section 15.31(m), the below frequencies were performed the test as below:			
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11n ht40/ac vht40/ax hew40:

5150-5250MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
38	5190	151	5755
46	5230	159	5795
Per section 15.31(m), the below frequencies were performed the test as below:			
38	5190	151	5755
46	5230	159	5795

For 802.11ac vht80/ax hew80:

5150-5250MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
42	5210	155	5775
Per section 15.31(m), the below frequencies were performed the test as below:			
42	5210	155	5775

1.1.3 Antenna Information Detail▲:

Antenna Chain	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
1	Integral	50	5150-5850	2.48dBi
2	Integral	50	5150-5850	2.58dBi

The Method of §15.203 Compliance:

☒Antenna was permanently attached to the unit.

☐Antenna use a unique type of connector to attach to the EUT.

☐Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

1.1.4 Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
Adapter	SHENZHEN FUJIA APPLIANCE CO.,LTD.	FJ-SW20171205000	Input: AC 100-240V~50/60Hz, 1.5A Output: DC 12.0V, 5.0A, 60.0W

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.
Equipment Modifications:	No
EUT Exercise Software:	cmd.exe

The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:

5150-5250 MHz Band:

Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5180	6Mbps	13
	Middle	5200	6Mbps	13
	Highest	5240	6Mbps	13
802.11ac vht20	Lowest	5180	MCS8	13
	Middle	5200	MCS8	13
	Highest	5240	MCS8	13
802.11ac vht40	Lowest	5190	MCS8	11
	Highest	5230	MCS8	11
802.11ac vht80	Middle	5210	MCS8	11
802.11ax hew20	Lowest	5180	MCS8	12
	Middle	5200	MCS8	12
	Highest	5240	MCS8	12
802.11ax hew40	Lowest	5190	MCS8	11
	Highest	5230	MCS8	11
802.11ax hew80	Middle	5210	MCS8	11

5725-5850 MHz Band:

Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5745	6Mbps	16
	Middle	5785	6Mbps	16
	Highest	5825	6Mbps	16
802.11ac vht20	Lowest	5745	MCS8	16
	Middle	5785	MCS8	16
	Highest	5825	MCS8	16
802.11ac vht40	Lowest	5755	MCS8	16
	Highest	5795	MCS8	16
802.11ac vht80	Middle	5775	MCS8	15
802.11ax hew20	Lowest	5745	MCS8	16
	Middle	5785	MCS8	16
	Highest	5825	MCS8	16
802.11ax hew40	Lowest	5755	MCS8	15
	Highest	5795	MCS8	15
802.11ax hew80	Middle	5775	MCS8	13

Note:
1. The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80/ax hew20/hew40/hew80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.
2. For 802.11 ax mode, the device not support partial RU mode.
3. The device supports SISO/MIMO in all modes, per pretest, MIMO mode was the worst mode and reported for all modes.
4. The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.

1.2.2 Support Equipment List and Details

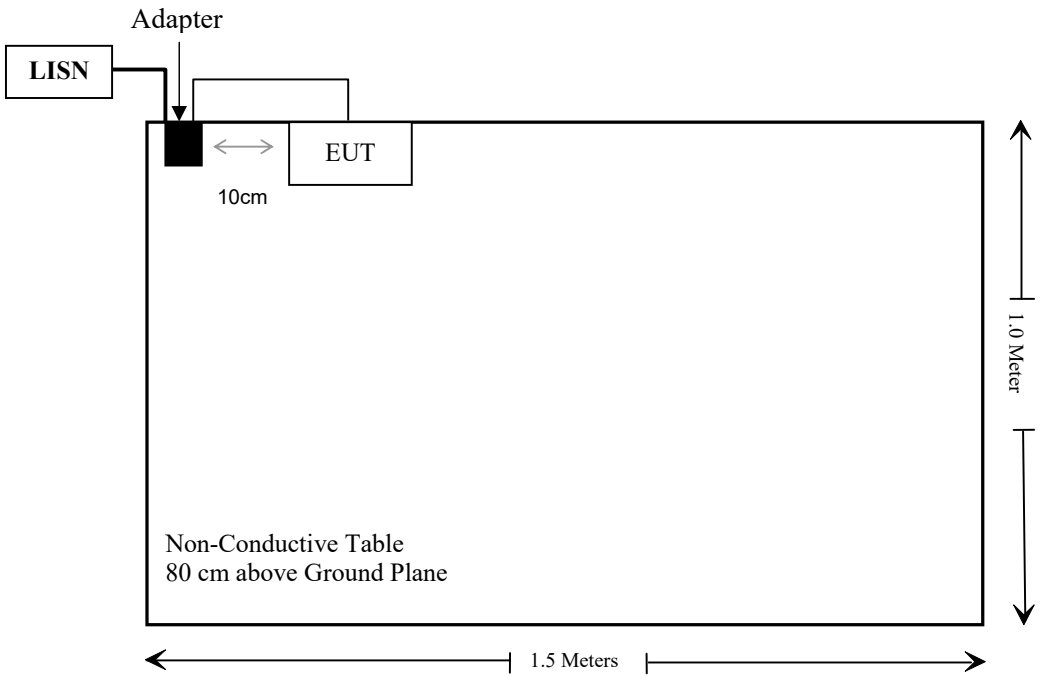
Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

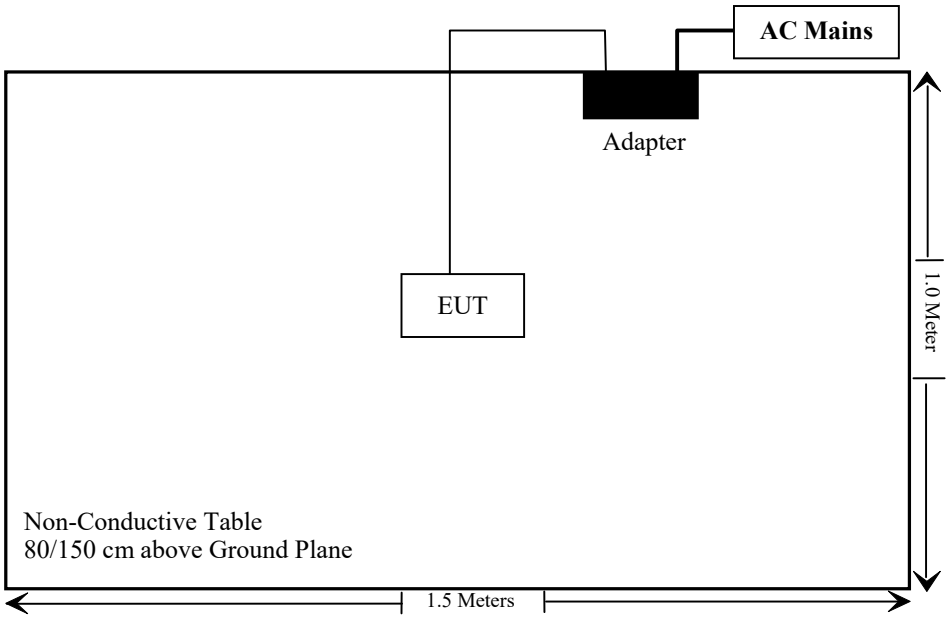
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
AC Cable	No	No	1	Adapter	LISN
DC Cable	No	No	1	Adapter	EUT

1.2.4 Block Diagram of Test Setup

AC Line Conducted Emissions:



Spurious emissions:



1.3 Measurement Uncertainty

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

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
§15.207(a)	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b)	Radiated Spurious Emissions	Compliant
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407(a)	Maximum Conducted Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
FCC§15.407 (g)	Frequency Stability	Compliant
FCC§15.407 (c)	Automatically discontinue transmission	Compliant
§15.203	Antenna Requirement	Compliant
§1.1307	RF Exposure Evaluation	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator 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, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

	Conducted limit (dBμV)	
Frequency of emission (MHz)	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.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

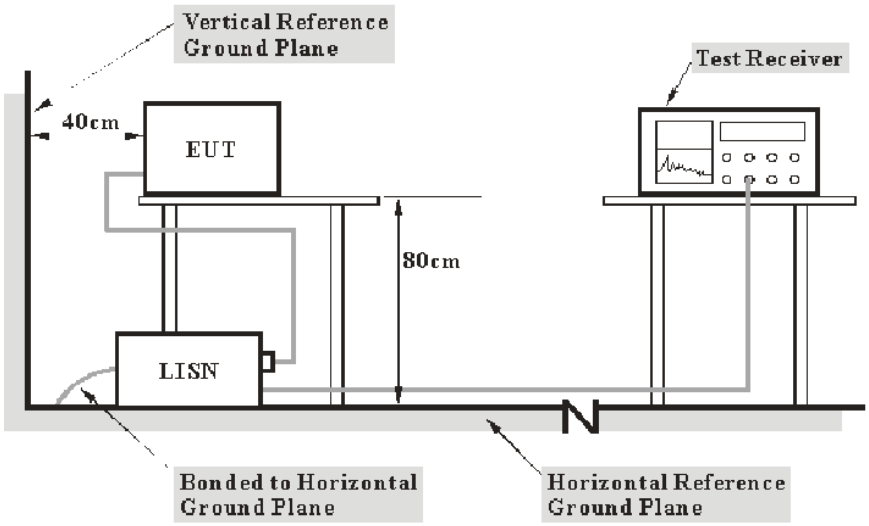
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtainig their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 EUT Setup



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

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.3 EMI Test Receiver Setup

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

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

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor
Factor = attenuation caused by cable loss + voltage division factor of AMN

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiation Spurious Emissions

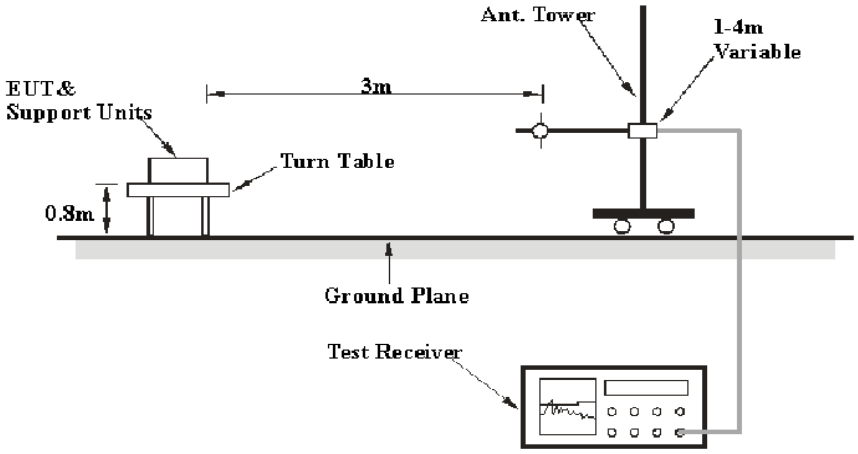
3.2.1 Applicable Standard

FCC §15.407 (b);

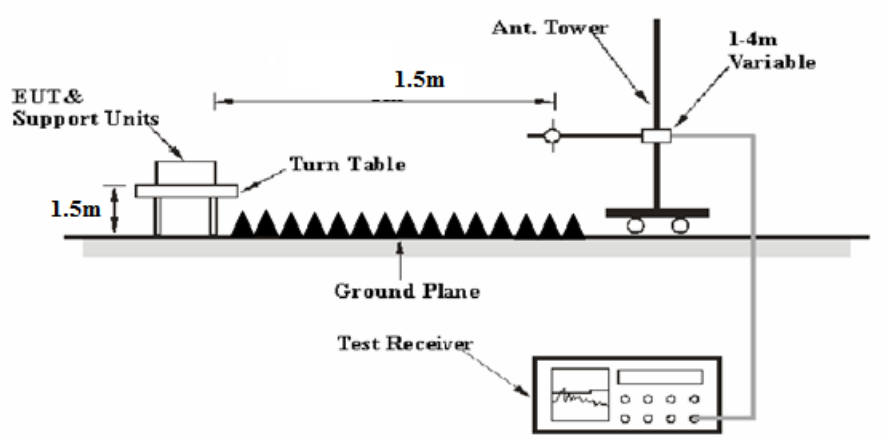
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 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 solely in the 5.725-5.850 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.
(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.
(8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
(9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.
(10) The provisions of § 15.205 apply to intentional radiators operating under this section.
(11) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.
(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

3.2.2 EUT Setup

Below 1GHz:



1-40 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, 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.

The spacing between the peripherals was 10 cm.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

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

30MHz-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 40GHz:

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

Note: T 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.

3.2.4 Test Procedure

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

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m
Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.02 dB

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

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:
Result = Reading + Factor

For 1GHz-40GHz
Result = Reading + Factor-Distance extrapolation Factor

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

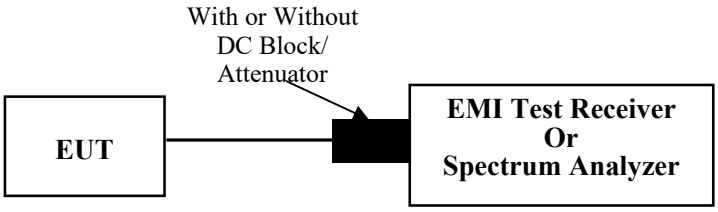
3.3 Emission Bandwidth

3.3.1 Applicable Standard

FCC §15.407 (a),(h)
(h)(2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

FCC §15.407 (e)
Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.3.2 EUT Setup



3.3.3 Test Procedure

26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = peak.
d) Trace mode = max hold
e) Measure the maximum width of the emission that is 26 dB down from the 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 approximately 1%.

6 dB emission bandwidth:

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

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

99% Occupied Bandwidth:

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

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.
The following procedure shall be used for measuring 99% power bandwidth:
a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
d) Step a) through step c) might require iteration to adjust within the specified range.
e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

3.4 Maximum Conducted Output Power

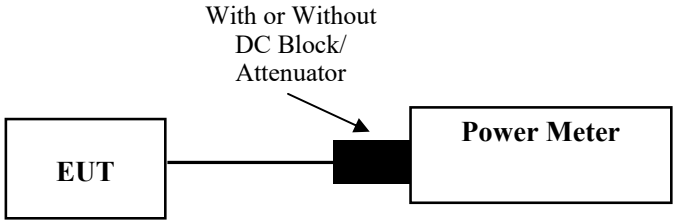
3.4.1 Applicable Standard

FCC §15.407(a) (1)(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. 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.

FCC §15.407(a) (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 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.

FCC §15.407(a) (3)(i)
For the band 5.725-5.850 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.

3.4.2 EUT Setup



3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 12.3.3.2

Method PM-G is measurement using a gated RF average power meter.
Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.5 Maximum Power Spectral Density

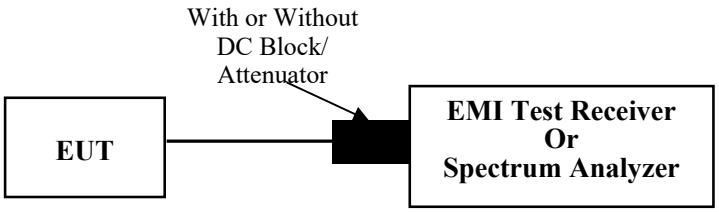
3.5.1 Applicable Standard

FCC §15.407(a) (1)(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. 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.

FCC §15.407(a) (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 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.

FCC §15.407(a) (3)(i)
For the band 5.725-5.850 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.

3.5.2 EUT Setup



3.5.3 Test Procedure

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

Duty cycle ≥98%

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

Duty cycle <98%, duty cycle variations are less than ±2%

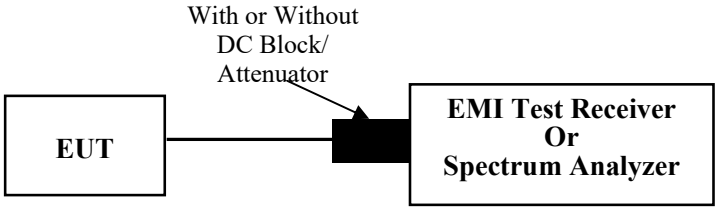
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

Duty cycle <98%, duty cycle variations exceed ±2%

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

3.7 Duty Cycle

3.7.1 EUT Setup



3.7.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
1) Set the center frequency of the instrument to the center frequency of the transmission.
2) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.
3) Set VBW ≥ RBW. Set detector = peak or average.
4) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if T ≤ 16.7 μs.)

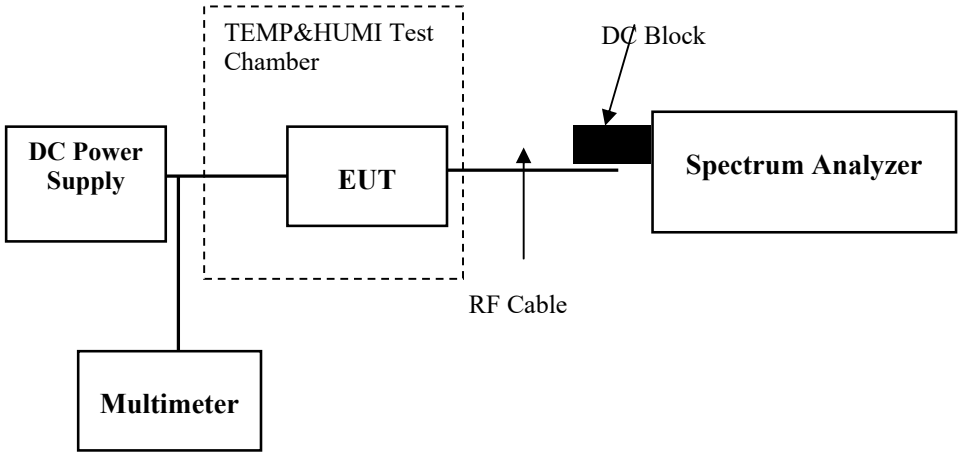
3.8 Frequency Stability

3.8.1 Applicable Standard

FCC §15.407(g)

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.

3.8.2 EUT Setup



3.8.3 Test Procedure

According to ANSI C63.10-2013 Section 6.8

3.9 Frequency Stability

3.9.1 Applicable Standard

FCC §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

3.9.2 Judgement

The manufacturer declared while the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission▲.

3.10 Antenna Requirement

3.10.1 Applicable Standard

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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. 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.

3.10.2 Judgment

Result: Compliant. Please refer to the Antenna Information detail in Section 1.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2BS8-2	Test Date:	2023/10/18
Test Site:	CE	Test Mode:	Transmitting(maximum output power mode 802.11 ax hew20 5745MHz)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	26.1	Relative Humidity: (%)	52	ATM Pressure: (kPa)	101

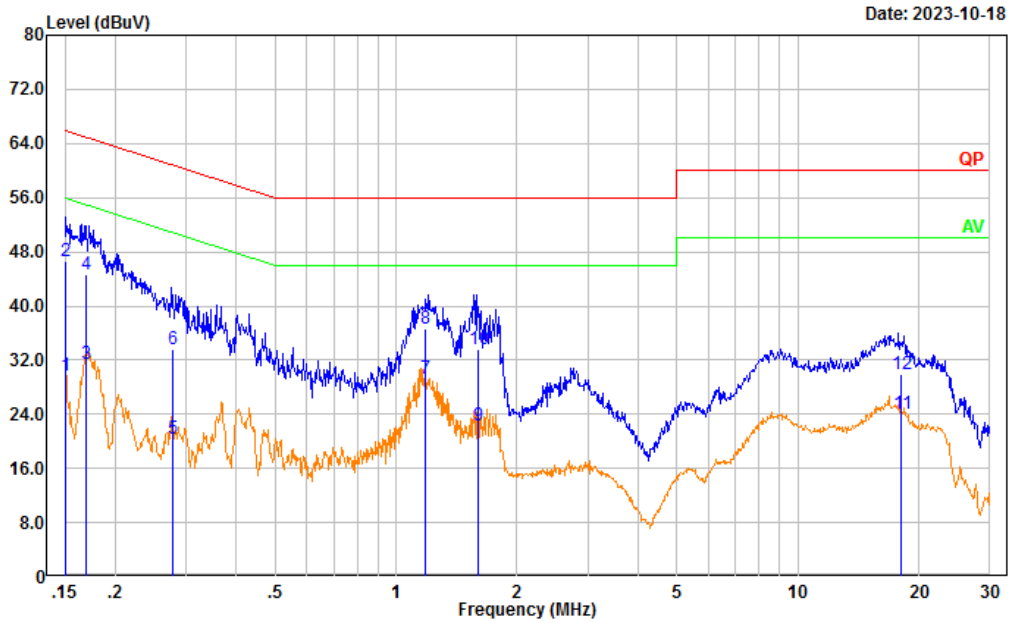
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2023/03/31	2024/03/30
R&S	EMI Test Receiver	ESR3	102726	2023/03/31	2024/03/30
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/08/06	2024/08/05
Audix	Test Software	E3	190306 (V9)	N/A	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

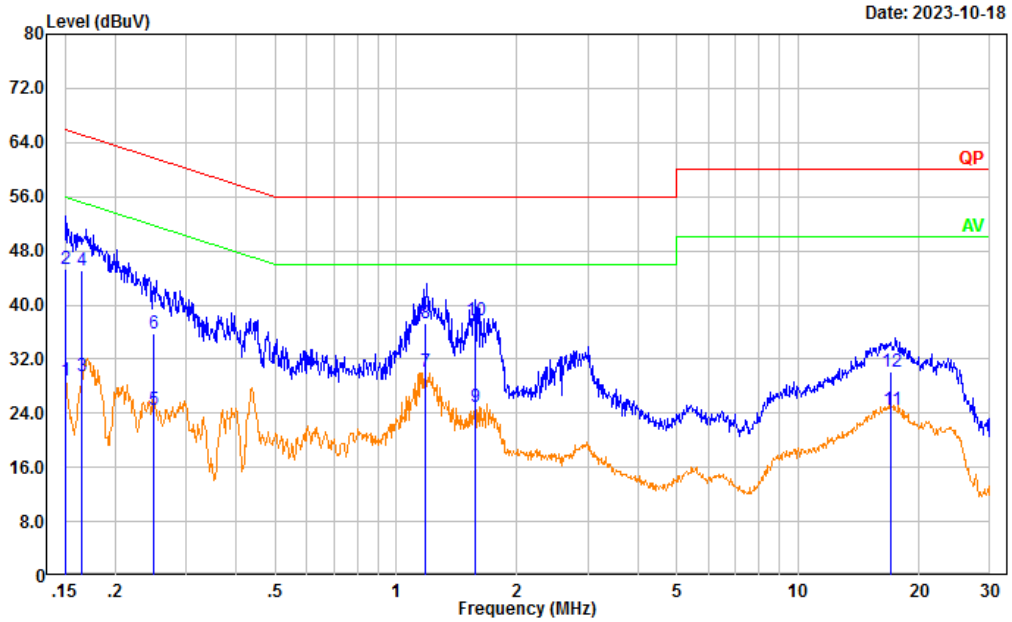
Test Data:

Project No.: CR230957008-RF
Tester: David Huang
Port: Line
Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.150	20.05	9.61	29.66	55.98	26.32	Average
2	0.150	36.91	9.61	46.52	65.98	19.46	QP
3	0.169	21.88	9.61	31.49	55.00	23.51	Average
4	0.169	35.04	9.61	44.65	65.00	20.35	QP
5	0.278	10.79	9.61	20.40	50.89	30.49	Average
6	0.278	24.09	9.61	33.70	60.89	27.19	QP
7	1.180	19.67	9.62	29.29	46.00	16.71	Average
8	1.180	27.03	9.62	36.65	56.00	19.35	QP
9	1.602	12.78	9.63	22.41	46.00	23.59	Average
10	1.602	23.87	9.63	33.50	56.00	22.50	QP
11	18.083	14.32	9.75	24.07	50.00	25.93	Average
12	18.083	20.11	9.75	29.86	60.00	30.14	QP

Project No.: CR230957008-RF
Tester: David Huang
Port: neutral
Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.150	19.23	9.61	28.84	55.98	27.14	Average
2	0.150	35.79	9.61	45.40	65.98	20.58	QP
3	0.166	19.79	9.61	29.40	55.17	25.77	Average
4	0.166	35.43	9.61	45.04	65.17	20.13	QP
5	0.250	14.80	9.61	24.41	51.75	27.34	Average
6	0.250	26.17	9.61	35.78	61.75	25.97	QP
7	1.181	20.50	9.62	30.12	46.00	15.88	Average
8	1.181	27.68	9.62	37.30	56.00	18.70	QP
9	1.577	15.39	9.63	25.02	46.00	20.98	Average
10	1.577	28.16	9.63	37.79	56.00	18.21	QP
11	17.068	14.78	9.69	24.47	50.00	25.53	Average
12	17.068	20.50	9.69	30.19	60.00	29.81	QP

4.2 Radiation Spurious Emissions

Serial Number:	2BS8-2, 2BS8-3	Test Date:	2023/10/14~ 2023/10/27
Test Site:	966-2, 966-1	Test Mode:	Transmitting
Tester:	Jeff Luo, Tao Zhu	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	26~26.3	Relative Humidity: (%)	55~67	ATM Pressure: (kPa)	100.5~100.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
EMCO	Passive Loop Antenna	6512	9706-1209	2023/2/15	2026/2/14
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2025/2/23
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
Audix	Test Software	E3	201021 (V9)	N/A	N/A
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
E-Microwave	Band Rejection Filter	5150-5850MHz	OE01902423	2023/8/6	2024/8/5
Mini Circuits	High Pass Filter	VHF-6010+	31119	2023/8/6	2024/8/5
PASTERNACK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

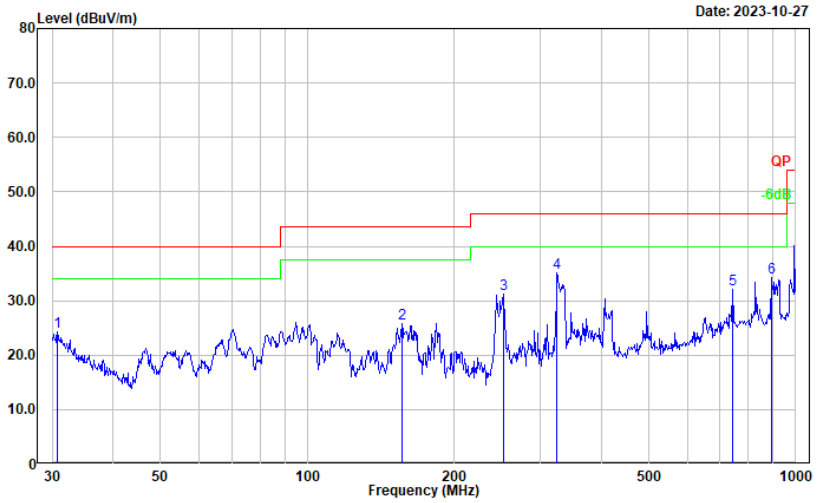
Please refer to the below table and plots.

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

For 9kHz-30MHz range, the spurious emissions were investigated attenuated more than 20 dB below the permissible value is not required to be report.

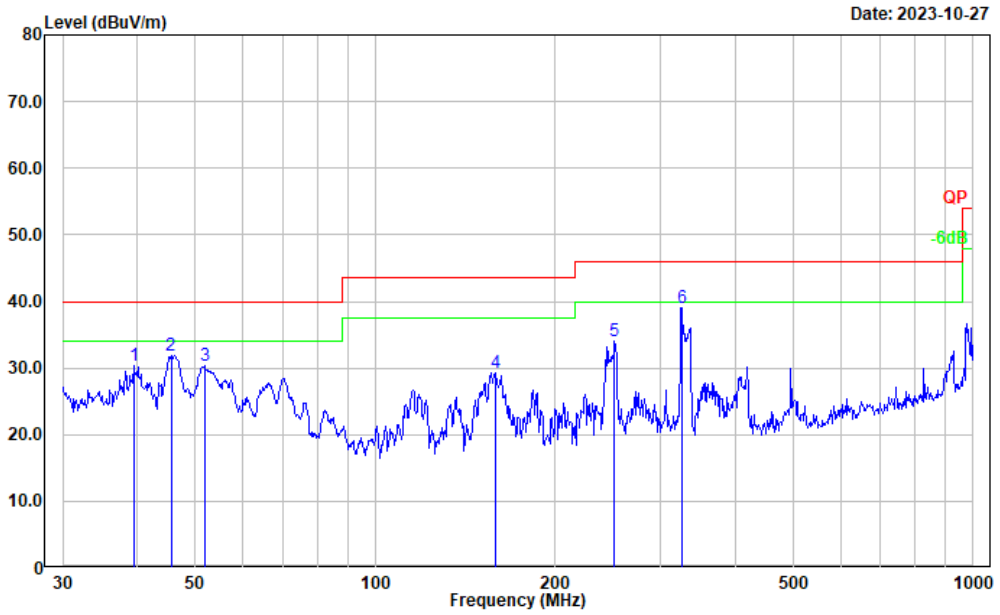
1) 30MHz-1GHz: (maximum output power mode 802.11 ax hew20 5745MHz)

Project No.: CR230957008-RF
Tester: Jeff Luo
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.745	28.70	-4.36	24.34	40.00	15.66	Peak
2	155.910	37.79	-11.94	25.85	43.50	17.65	Peak
3	252.063	44.33	-13.08	31.25	46.00	14.75	Peak
4	324.456	45.58	-10.41	35.17	46.00	10.83	Peak
5	744.866	35.15	-3.01	32.14	46.00	13.86	Peak
6	890.728	35.26	-1.06	34.20	46.00	11.80	Peak

Project No.: CR230957008-RF
Tester: Jeff Luo
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39.437	41.43	-10.98	30.45	40.00	9.55	Peak
2	45.535	46.40	-14.53	31.87	40.00	8.13	Peak
3	51.843	47.39	-17.10	30.29	40.00	9.71	Peak
4	159.225	41.22	-11.96	29.26	43.50	14.24	Peak
5	251.180	47.09	-13.13	33.96	46.00	12.04	Peak
6	325.596	49.47	-10.36	39.11	46.00	6.89	Peak

2) 1GHz-40GHz:

5150-5250MHz
802.11aMode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	33.66	PK	H	32.83	66.49	74.00	7.51
5150.000	17.15	AV	H	32.83	49.98	54.00	4.02
5150.000	32.78	PK	V	32.83	65.61	74.00	8.39
5150.000	16.59	AV	V	32.83	49.42	54.00	4.58
10360.000	34.32	PK	H	14.45	48.77	68.20	19.43
10360.000	34.61	PK	V	14.45	49.06	68.20	19.14
Middle Channel: 5200 MHz							
10400.000	35.03	PK	H	14.52	49.55	68.20	18.65
10400.000	34.69	PK	V	14.52	49.21	68.20	18.99
High Channel: 5240 MHz							
5350.000	33.69	PK	H	32.70	66.39	74.00	7.61
5350.000	17.42	AV	H	32.70	50.12	54.00	3.88
5350.000	34.24	PK	V	32.70	66.94	74.00	7.06
5350.000	17.36	AV	V	32.70	50.06	54.00	3.94
10480.000	35.41	PK	H	14.40	49.81	68.20	18.39
10480.000	35.63	PK	V	14.40	50.03	68.20	18.17

802.11AC20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	30.55	PK	H	32.83	63.38	74.00	10.62
5150.000	17.18	AV	H	32.83	50.01	54.00	3.99
5150.000	30.76	PK	V	32.83	63.59	74.00	10.41
5150.000	17.97	AV	V	32.83	50.80	54.00	3.20
10360.000	34.88	PK	H	14.45	49.33	68.20	18.87
10360.000	34.20	PK	V	14.45	48.65	68.20	19.55
Middle Channel: 5200 MHz							
10400.000	35.13	PK	H	14.52	49.65	68.20	18.55
10400.000	34.65	PK	V	14.52	49.17	68.20	19.03
High Channel: 5240 MHz							
5350.000	30.89	PK	H	32.70	63.59	74.00	10.41
5350.000	17.22	AV	H	32.70	49.92	54.00	4.08
5350.000	30.34	PK	V	32.70	63.04	74.00	10.96
5350.000	17.15	AV	V	32.70	49.85	54.00	4.15
10480.000	35.48	PK	H	14.40	49.88	68.20	18.32
10480.000	35.86	PK	V	14.40	50.26	68.20	17.94

802.11AC40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5150.000	31.00	PK	H	32.83	63.83	74.00	10.17
5150.000	17.26	AV	H	32.83	50.09	54.00	3.91
5150.000	30.85	PK	V	32.83	63.68	74.00	10.32
5150.000	17.03	AV	V	32.83	49.86	54.00	4.14
10380.000	34.99	PK	H	14.49	49.48	68.20	18.72
10380.000	34.75	PK	V	14.49	49.24	68.20	18.96
High Channel: 5230 MHz							
5350.000	30.52	PK	H	32.70	63.22	74.00	10.78
5350.000	16.75	AV	H	32.70	49.45	54.00	4.55
5350.000	30.39	PK	V	32.70	63.09	74.00	10.91
5350.000	16.60	AV	V	32.70	49.30	54.00	4.70
10460.000	35.76	PK	H	14.43	50.19	68.20	18.01
10460.000	35.52	PK	V	14.43	49.95	68.20	18.25

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5150.000	30.62	PK	H	32.83	63.45	74.00	10.55
5150.000	17.78	AV	H	32.83	50.61	54.00	3.39
5150.000	30.49	PK	V	32.83	63.32	74.00	10.68
5150.000	17.57	AV	V	32.83	50.40	54.00	3.60
5350.000	30.85	PK	H	32.70	63.55	74.00	10.45
5350.000	17.92	AV	H	32.70	50.62	54.00	3.38
5350.000	30.71	PK	V	32.70	63.41	74.00	10.59
5350.000	17.78	AV	V	32.70	50.48	54.00	3.52
10420.000	35.06	PK	H	14.49	49.55	68.20	18.65
10420.000	34.81	PK	V	14.49	49.30	68.20	18.90

802.11AX20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	37.58	PK	H	32.83	70.41	74.00	3.59
5150.000	17.10	AV	H	32.83	49.93	54.00	4.07
5150.000	37.35	PK	V	32.83	70.18	74.00	3.82
5150.000	16.86	AV	V	32.83	49.69	54.00	4.31
10360.000	35.29	PK	H	14.45	49.74	68.20	18.46
10360.000	34.84	PK	V	14.45	49.29	68.20	18.91
Middle Channel: 5200 MHz							
10400.000	35.41	PK	H	14.52	49.93	68.20	18.27
10400.000	35.08	PK	V	14.52	49.60	68.20	18.60
High Channel: 5240 MHz							
5350.000	30.44	PK	H	32.70	63.14	74.00	10.86
5350.000	16.62	AV	H	32.70	49.32	54.00	4.68
5350.000	30.30	PK	V	32.70	63.00	74.00	11.00
5350.000	17.49	AV	V	32.70	50.19	54.00	3.81
10480.000	35.68	PK	H	14.40	50.08	68.20	18.12
10480.000	35.29	PK	V	14.40	49.69	68.20	18.51

802.11AX 40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5150.000	35.48	PK	H	32.83	68.31	74.00	5.69
5150.000	17.81	AV	H	32.83	50.64	54.00	3.36
5150.000	35.25	PK	V	32.83	68.08	74.00	5.92
5150.000	17.62	AV	V	32.83	50.45	54.00	3.55
10380.000	35.35	PK	H	14.49	49.84	68.20	18.36
10380.000	35.12	PK	V	14.49	49.61	68.20	18.59
High Channel: 5230 MHz							
5350.000	30.86	PK	H	32.70	63.56	74.00	10.44
5350.000	16.64	AV	H	32.70	49.34	54.00	4.66
5350.000	30.68	PK	V	32.70	63.38	74.00	10.62
5350.000	16.49	AV	V	32.70	49.19	54.00	4.81
10460.000	35.75	PK	H	14.43	50.18	68.20	18.02
10460.000	35.42	PK	V	14.43	49.85	68.20	18.35

802.11aX 80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5150.000	35.78	PK	H	32.83	68.61	74.00	5.39
5150.000	18.13	AV	H	32.83	50.96	54.00	3.04
5150.000	35.56	PK	V	32.83	68.39	74.00	5.61
5150.000	17.91	AV	V	32.83	50.74	54.00	3.26
5350.000	36.29	PK	H	32.70	68.99	74.00	5.01
5350.000	17.85	AV	H	32.70	50.55	54.00	3.45
5350.000	36.14	PK	V	32.70	68.84	74.00	5.16
5350.000	17.71	AV	V	32.70	50.41	54.00	3.59
10420.000	35.00	PK	H	14.49	49.49	68.20	18.71
10420.000	34.79	PK	V	14.49	49.28	68.20	18.92

5725-5850MHz

802.11a Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	35.71	PK	H	15.47	51.18	74.00	22.82
11490.000	22.57	AV	H	15.47	38.04	54.00	15.96
11490.000	36.01	PK	V	15.47	51.48	74.00	22.52
11490.000	23.64	AV	V	15.47	39.11	54.00	14.89
Middle Channel: 5785 MHz							
11570.000	34.67	PK	H	15.69	50.36	74.00	23.64
11570.000	23.32	AV	H	15.69	39.01	54.00	14.99
11570.000	35.44	PK	V	15.69	51.13	74.00	22.87
11570.000	23.10	AV	V	15.69	38.79	54.00	15.21
High Channel: 5825 MHz							
11650.000	34.61	PK	H	16.02	50.63	74.00	23.37
11650.000	23.01	AV	H	16.02	39.03	54.00	14.97
11650.000	35.38	PK	V	16.02	51.40	74.00	22.60
11650.000	22.96	AV	V	16.02	38.98	54.00	15.02

802.11AC20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	34.10	PK	H	15.47	49.57	74.00	24.43
11490.000	22.16	AV	H	15.47	37.63	54.00	16.37
11490.000	33.85	PK	V	15.47	49.32	74.00	24.68
11490.000	21.97	AV	V	15.47	37.44	54.00	16.56
Middle Channel: 5785 MHz							
11570.000	34.41	PK	H	15.69	50.10	74.00	23.90
11570.000	22.52	AV	H	15.69	38.21	54.00	15.79
11570.000	34.20	PK	V	15.69	49.89	74.00	24.11
11570.000	22.26	AV	V	15.69	37.95	54.00	16.05
High Channel: 5825 MHz							
11650.000	34.35	PK	H	16.02	50.37	74.00	23.63
11650.000	22.46	AV	H	16.02	38.48	54.00	15.52
11650.000	34.12	PK	V	16.02	50.14	74.00	23.86
11650.000	22.23	AV	V	16.02	38.25	54.00	15.75

802.11AC40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	34.29	PK	H	15.46	49.75	74.00	24.25
11510.000	22.87	AV	H	15.46	38.33	54.00	15.67
11510.000	34.06	PK	V	15.46	49.52	74.00	24.48
11510.000	22.65	AV	V	15.46	38.11	54.00	15.89
High Channel: 5795 MHz							
11590.000	34.38	PK	H	15.76	50.14	74.00	23.86
11590.000	22.57	AV	H	15.76	38.33	54.00	15.67
11590.000	34.15	PK	V	15.76	49.91	74.00	24.09
11590.000	22.30	AV	V	15.76	38.06	54.00	15.94

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
11550.000	34.47	PK	H	15.61	50.08	74.00	23.92
11550.000	22.95	AV	H	15.61	38.56	54.00	15.44
11550.000	34.24	PK	V	15.61	49.85	74.00	24.15
11550.000	22.72	AV	V	15.61	38.33	54.00	15.67

802.11AX20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	34.68	PK	H	15.47	50.15	74.00	23.85
11490.000	20.25	AV	H	15.47	35.72	54.00	18.28
11490.000	34.43	PK	V	15.47	49.90	74.00	24.10
11490.000	20.00	AV	V	15.47	35.47	54.00	18.53
Middle Channel: 5785 MHz							
11570.000	34.96	PK	H	15.69	50.65	74.00	23.35
11570.000	20.55	AV	H	15.69	36.24	54.00	17.76
11570.000	34.74	PK	V	15.69	50.43	74.00	23.57
11570.000	20.33	AV	V	15.69	36.02	54.00	17.98
High Channel: 5825 MHz							
11650.000	34.92	PK	H	16.02	50.94	74.00	23.06
11650.000	20.50	AV	H	16.02	36.52	54.00	17.48
11650.000	34.69	PK	V	16.02	50.71	74.00	23.29
11650.000	20.27	AV	V	16.02	36.29	54.00	17.71

802.11AX40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	34.60	PK	H	15.46	50.06	74.00	23.94
11510.000	20.17	AV	H	15.46	35.63	54.00	18.37
11510.000	34.38	PK	V	15.46	49.84	74.00	24.16
11510.000	19.96	AV	V	15.46	35.42	54.00	18.58
High Channel: 5795 MHz							
11590.000	34.28	PK	H	15.76	50.04	74.00	23.96
11590.000	19.92	AV	H	15.76	35.68	54.00	18.32
11590.000	34.06	PK	V	15.76	49.82	74.00	24.18
11590.000	19.69	AV	V	15.76	35.45	54.00	18.55

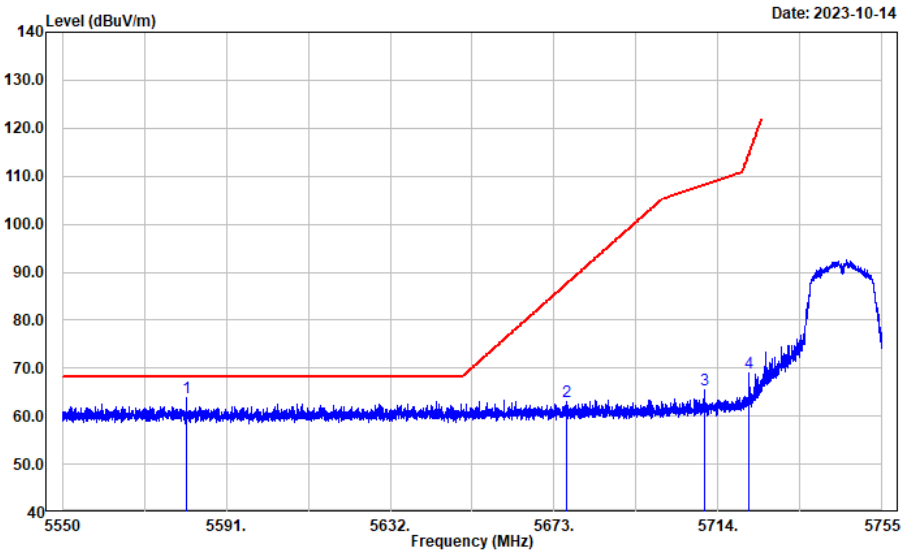
802.11aX80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
11550.000	34.25	PK	H	15.61	49.86	74.00	24.14
11550.000	20.34	AV	H	15.61	35.95	54.00	18.05
11550.000	34.01	PK	V	15.61	49.62	74.00	24.38
11550.000	20.09	AV	V	15.61	35.70	54.00	18.30

Worst Test plots for Band Edge Measurements (Radiated)

802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

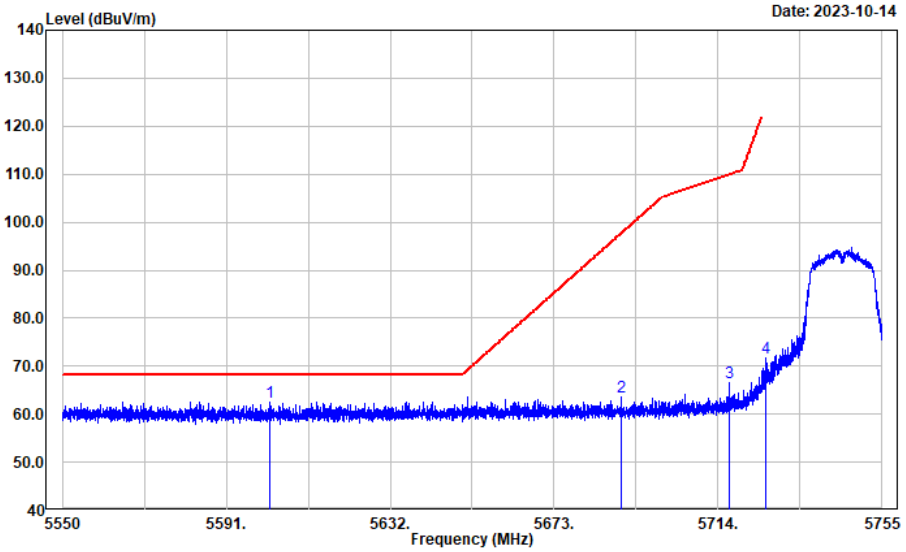
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5580.961	31.15	32.81	63.96	68.20	4.24	Peak
2	5676.018	29.99	32.99	62.98	87.49	24.51	Peak
3	5710.711	32.40	33.03	65.43	108.20	42.77	Peak
4	5721.824	36.07	33.03	69.10	114.96	45.86	Peak

802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

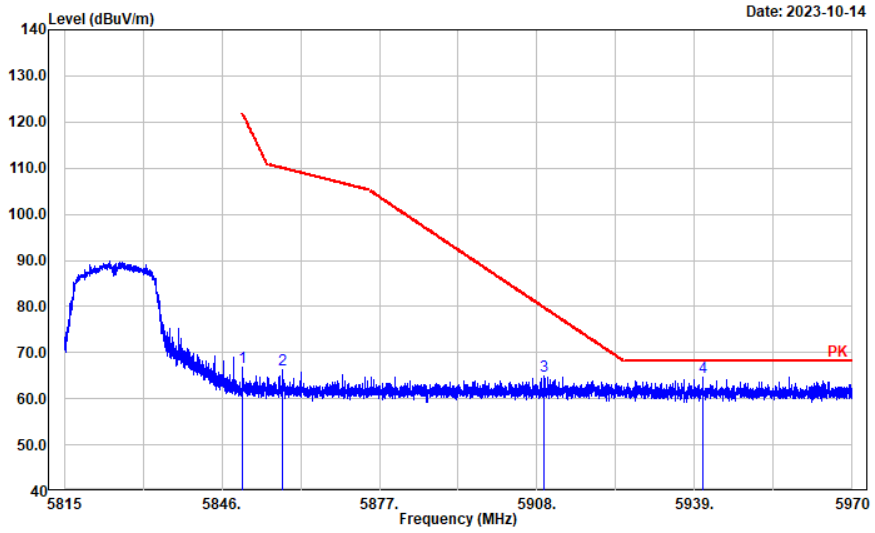
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5601.793	29.72	32.81	62.53	68.20	5.67	Peak
2	5689.879	30.62	33.01	63.63	97.74	34.11	Peak
3	5716.657	33.63	33.03	66.66	109.87	43.21	Peak
4	5725.761	38.74	33.03	71.77	68.20	-3.57	Peak

802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

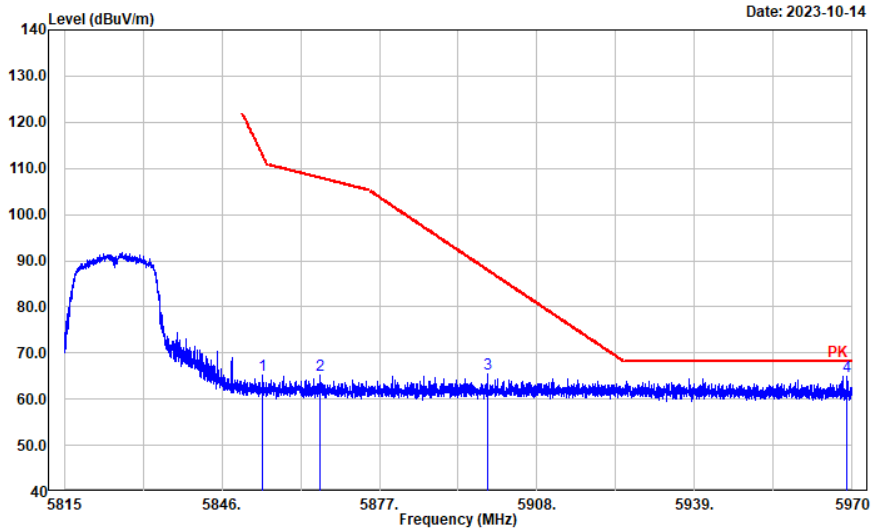
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.099	33.77	33.19	66.96	121.97	55.01	Peak
2	5858.037	33.18	33.23	66.41	109.95	43.54	Peak
3	5909.290	31.60	33.46	65.06	79.79	14.73	Peak
4	5940.544	31.23	33.46	64.69	68.20	3.51	Peak

802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

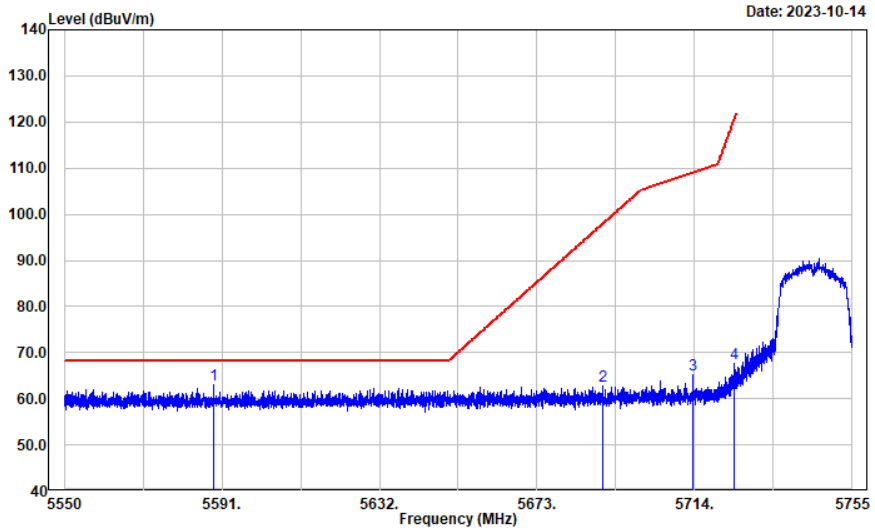
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5853.913	32.11	33.22	65.33	113.28	47.95	Peak
2	5865.292	31.99	33.27	65.26	107.92	42.66	Peak
3	5898.189	31.93	33.46	65.39	88.00	22.61	Peak
4	5968.853	31.43	33.53	64.96	68.20	3.24	Peak

802.11ac20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

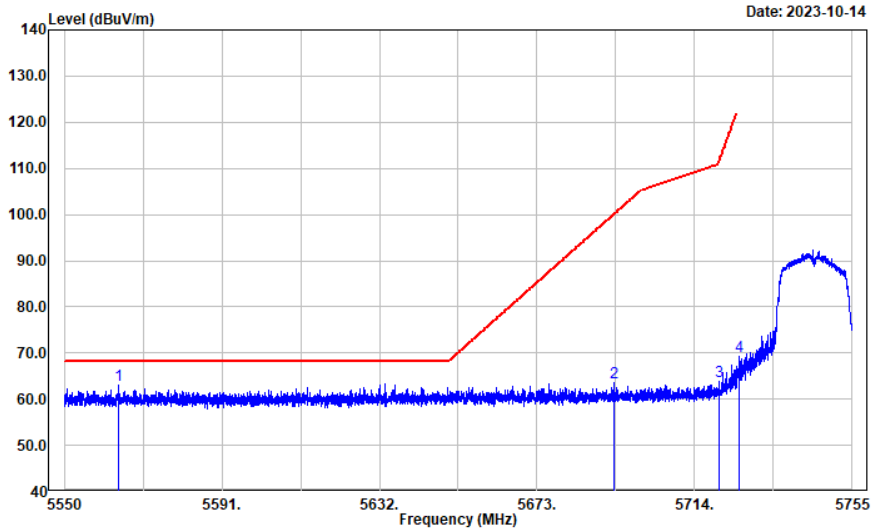
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5588.876	30.18	32.81	62.99	68.20	5.21	Peak
2	5690.207	29.72	33.01	62.73	97.98	35.25	Peak
3	5713.582	32.21	33.03	65.24	109.00	43.76	Peak
4	5724.162	34.58	33.03	67.61	120.29	52.68	Peak

802.11ac20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

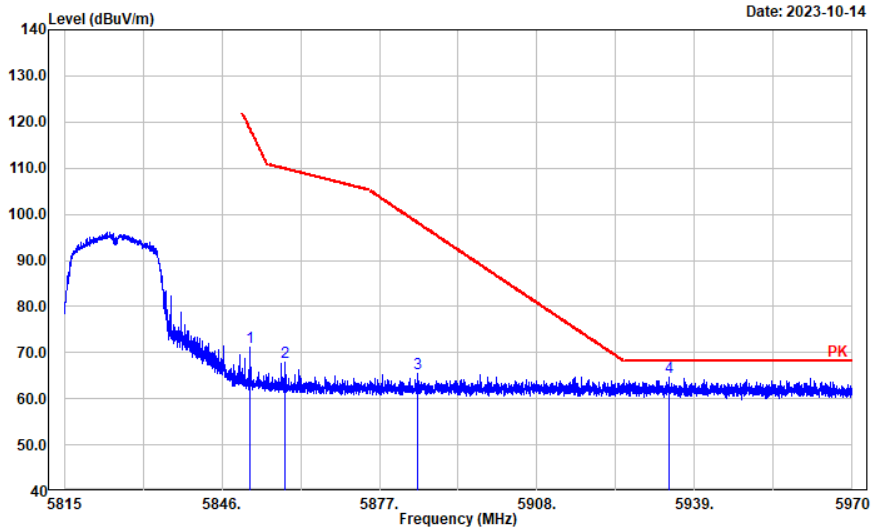
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5564.107	30.29	32.80	63.09	68.20	5.11	Peak
2	5693.160	30.55	33.02	63.57	100.16	36.59	Peak
3	5720.307	30.90	33.03	63.93	111.50	47.57	Peak
4	5725.597	36.20	33.03	69.23	68.20	-1.03	Peak

802.11ac20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

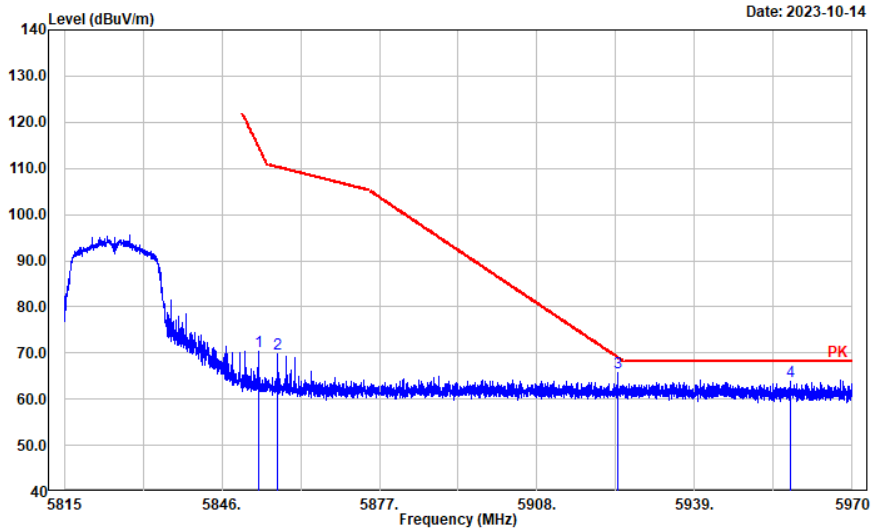
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5851.618	37.86	33.20	71.06	118.51	47.45	Peak
2	5858.439	34.58	33.23	67.81	109.84	42.03	Peak
3	5884.547	31.95	33.39	65.34	98.11	32.77	Peak
4	5933.940	31.09	33.46	64.55	68.20	3.65	Peak

802.11ac20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

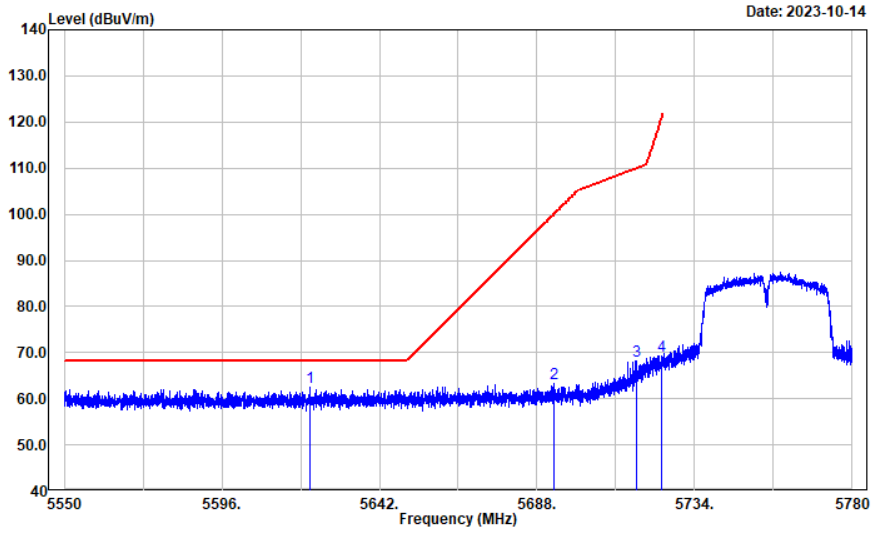
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5853.138	37.28	33.21	70.49	115.04	44.55	Peak
2	5857.044	36.45	33.23	69.68	110.23	40.55	Peak
3	5923.770	32.30	33.47	65.77	69.11	3.34	Peak
4	5957.752	30.43	33.49	63.92	68.20	4.28	Peak

802.11ac40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**

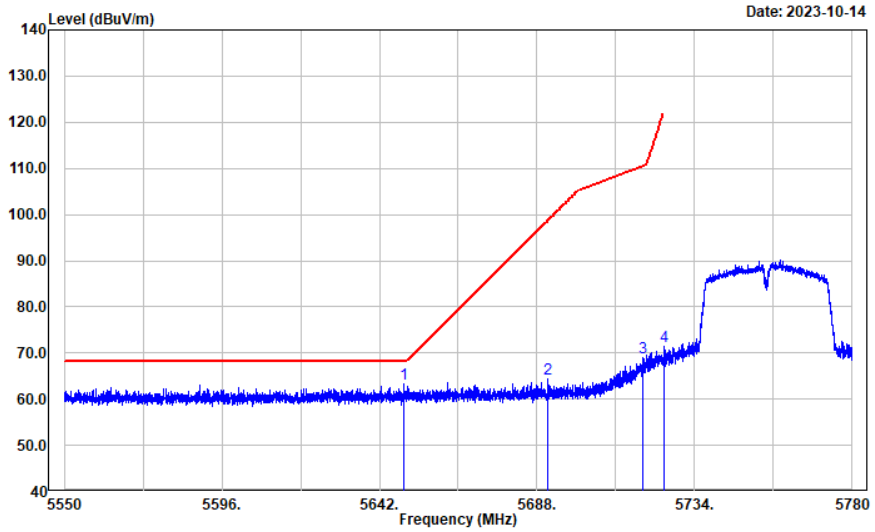
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5621.774	29.59	32.87	62.46	68.20	5.74	Peak
2	5692.905	30.29	33.02	63.31	99.97	36.66	Peak
3	5716.967	35.07	33.03	68.10	109.95	41.85	Peak
4	5724.283	36.31	33.03	69.34	120.57	51.23	Peak

802.11ac40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**

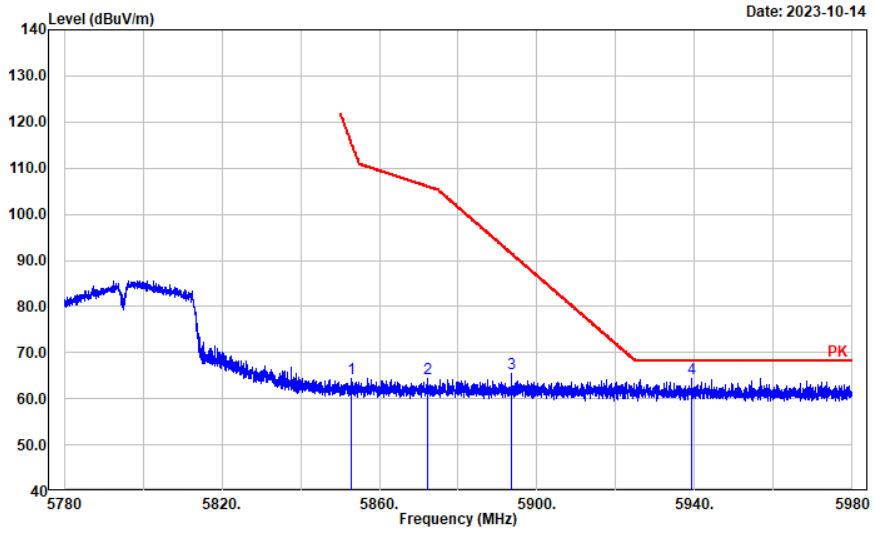
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5649.058	30.32	32.95	63.27	68.20	4.93	Peak
2	5691.110	31.29	33.02	64.31	98.65	34.34	Peak
3	5718.946	36.00	33.03	69.03	110.51	41.48	Peak
4	5724.973	38.29	33.03	71.32	122.14	50.82	Peak

802.11ac40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Horizontal**

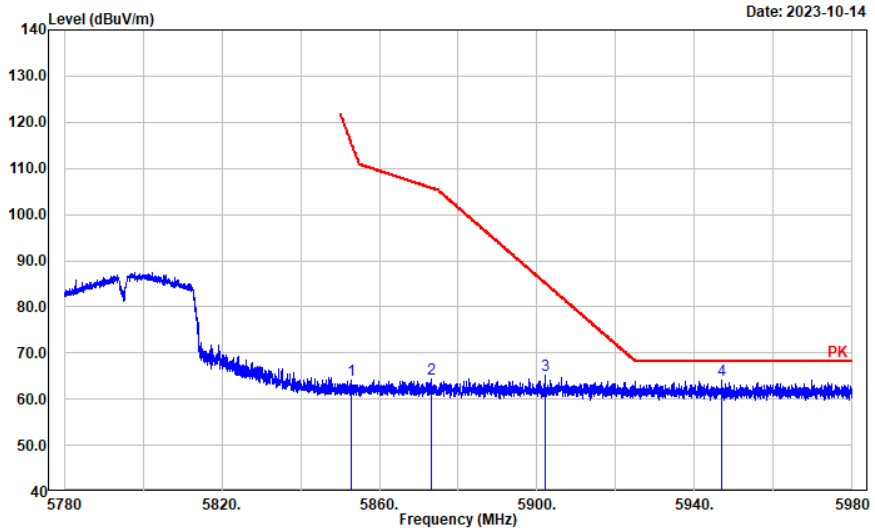
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.814	31.18	33.20	64.38	115.78	51.40	Peak
2	5872.338	31.12	33.32	64.44	105.94	41.50	Peak
3	5893.423	31.91	33.43	65.34	91.53	26.19	Peak
4	5939.272	31.01	33.46	64.47	68.20	3.73	Peak

802.11ac40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Vertical**

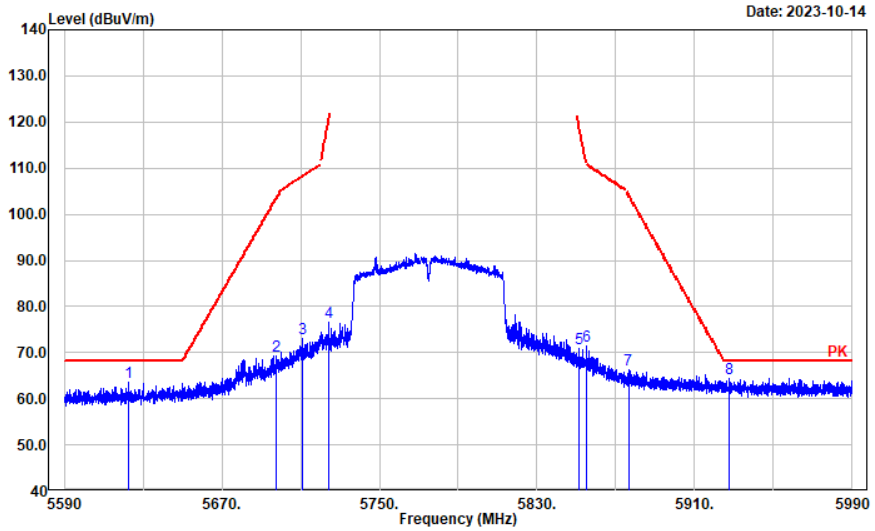
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.734	31.02	33.20	64.22	115.96	51.74	Peak
2	5873.179	30.95	33.32	64.27	105.71	41.44	Peak
3	5901.984	31.66	33.47	65.13	85.19	20.06	Peak
4	5946.914	30.57	33.47	64.04	68.20	4.16	Peak

802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**

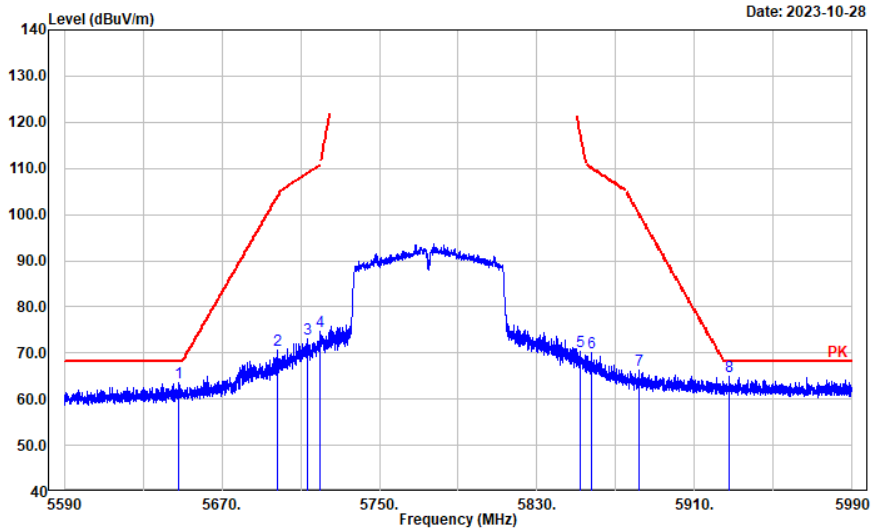
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5622.646	30.65	32.88	63.53	68.20	4.67	Peak
2	5697.702	36.29	33.03	69.32	103.51	34.19	Peak
3	5710.904	39.97	33.03	73.00	108.26	35.26	Peak
4	5724.347	43.66	33.03	76.69	120.71	44.02	Peak
5	5851.492	37.61	33.20	70.81	118.80	47.99	Peak
6	5855.253	38.20	33.22	71.42	110.73	39.31	Peak
7	5876.377	32.83	33.34	66.17	104.18	38.01	Peak
8	5927.748	30.98	33.46	64.44	68.20	3.76	Peak

802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**

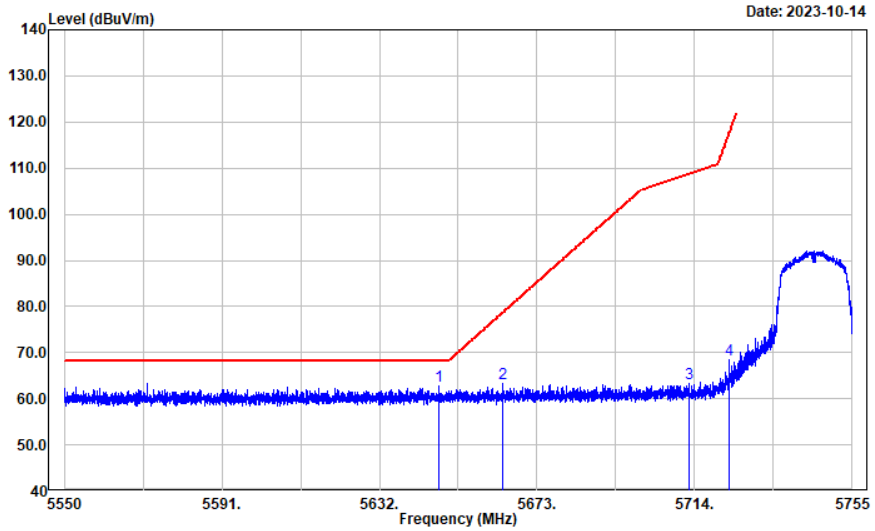
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5647.771	30.70	32.95	63.65	68.20	4.55	Peak
2	5698.501	37.63	33.03	70.66	104.10	33.44	Peak
3	5713.305	39.98	33.03	73.01	108.93	35.92	Peak
4	5720.026	41.69	33.03	74.72	110.86	36.14	Peak
5	5851.972	37.29	33.20	70.49	117.70	47.21	Peak
6	5857.733	36.79	33.23	70.02	110.03	40.01	Peak
7	5881.738	32.81	33.37	66.18	100.20	34.02	Peak
8	5927.268	31.40	33.46	64.86	68.20	3.34	Peak

802.11ax20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

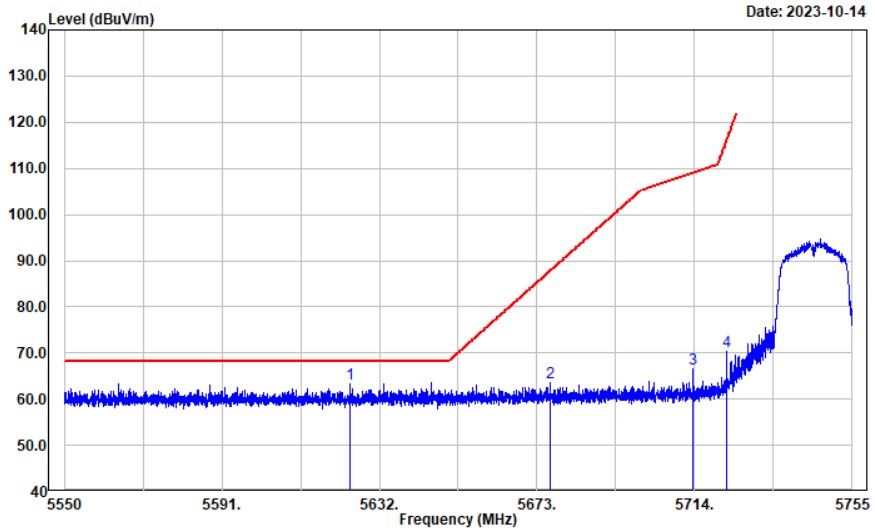
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5647.559	29.73	32.95	62.68	68.20	5.52	Peak
2	5663.962	30.35	32.97	63.32	78.56	15.24	Peak
3	5712.434	30.27	33.03	63.30	108.68	45.38	Peak
4	5722.891	35.44	33.03	68.47	117.39	48.92	Peak

802.11ax20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

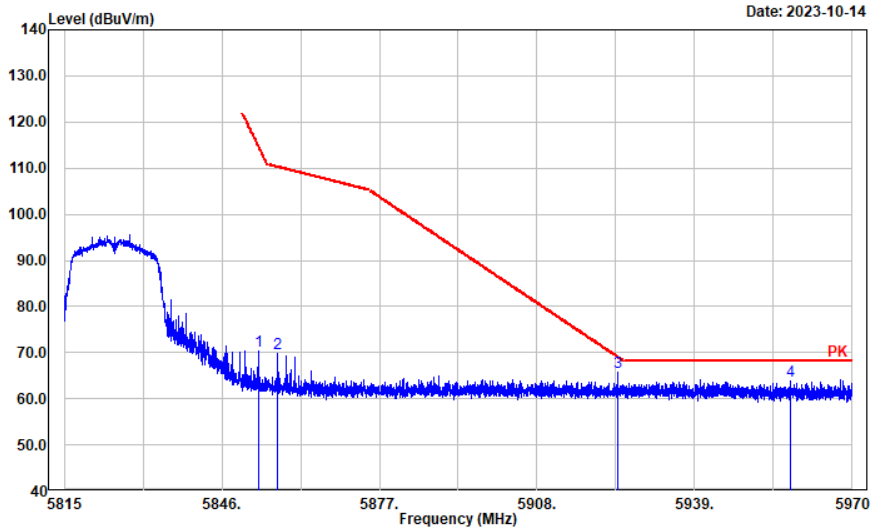
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5624.307	30.49	32.88	63.37	68.20	4.83	Peak
2	5676.305	30.67	32.99	63.66	87.71	24.05	Peak
3	5713.623	33.43	33.03	66.46	109.02	42.56	Peak
4	5722.234	37.22	33.03	70.25	115.90	45.65	Peak

802.11ax20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

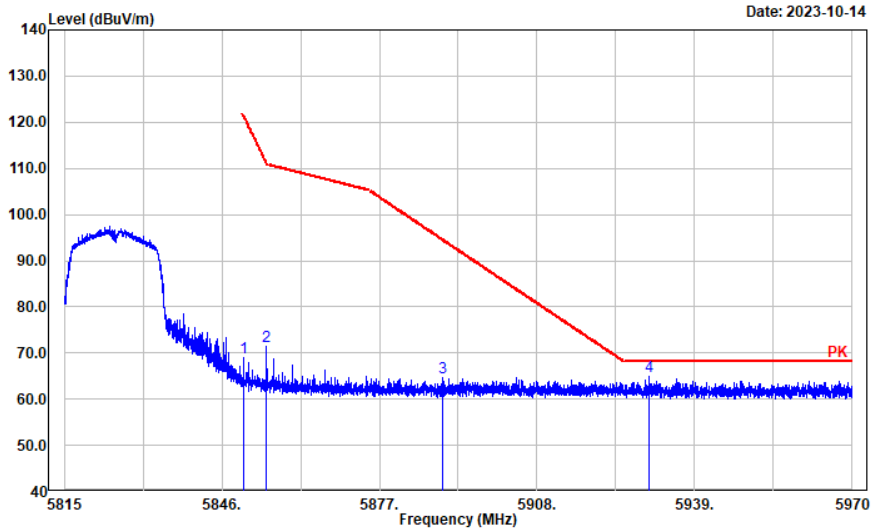
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5853.138	37.28	33.21	70.49	115.04	44.55	Peak
2	5857.044	36.45	33.23	69.68	110.23	40.55	Peak
3	5923.770	32.30	33.47	65.77	69.11	3.34	Peak
4	5957.752	30.43	33.49	63.92	68.20	4.28	Peak

802.11ax20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

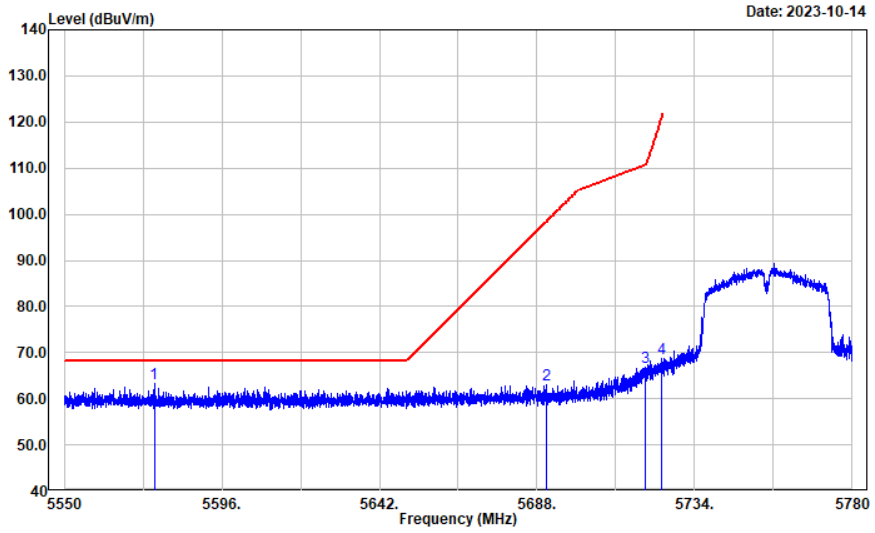
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.223	35.70	33.19	68.89	121.69	52.80	Peak
2	5854.843	38.22	33.22	71.44	111.16	39.72	Peak
3	5889.508	31.20	33.41	64.61	94.43	29.82	Peak
4	5930.033	31.52	33.47	64.99	68.20	3.21	Peak

802.11ax40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**

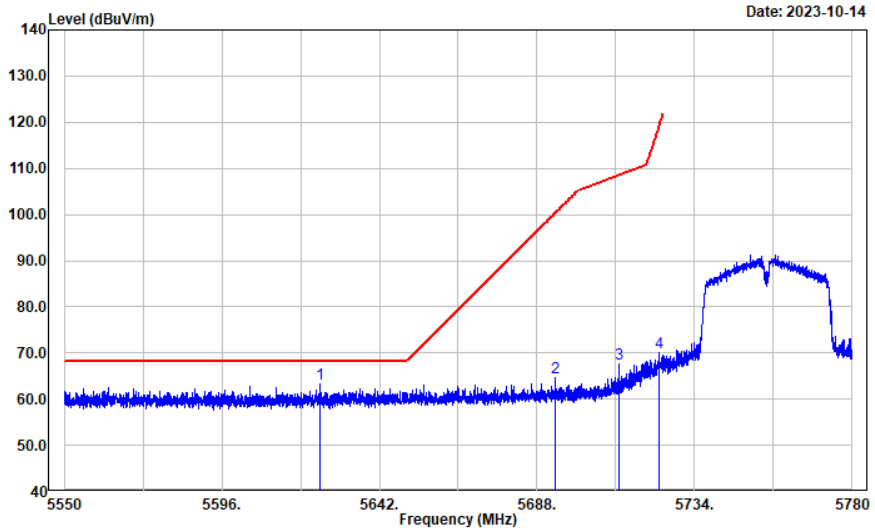
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5576.271	30.43	32.80	63.23	68.20	4.97	Peak
2	5690.696	30.13	33.02	63.15	98.34	35.19	Peak
3	5719.544	33.93	33.03	66.96	110.67	43.71	Peak
4	5724.467	35.71	33.03	68.74	120.98	52.24	Peak

802.11ax40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**

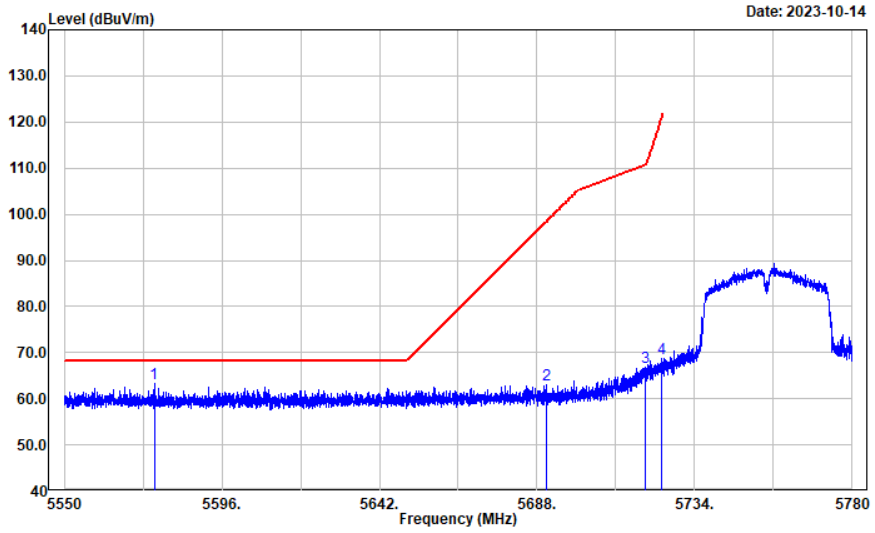
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5624.627	30.39	32.88	63.27	68.20	4.93	Peak
2	5693.411	31.54	33.02	64.56	100.34	35.78	Peak
3	5711.814	34.62	33.03	67.65	108.51	40.86	Peak
4	5723.639	37.03	33.03	70.06	119.10	49.04	Peak

802.11ax40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**

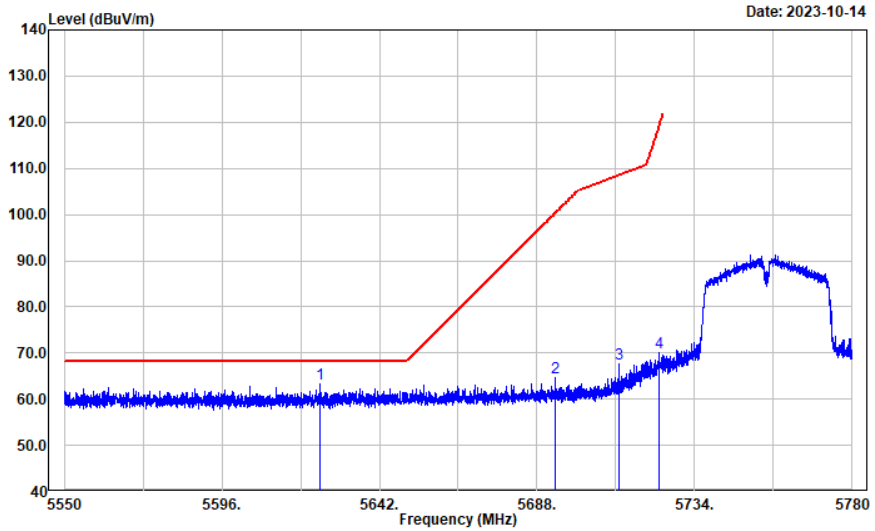
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5576.271	30.43	32.80	63.23	68.20	4.97	Peak
2	5690.696	30.13	33.02	63.15	98.34	35.19	Peak
3	5719.544	33.93	33.03	66.96	110.67	43.71	Peak
4	5724.467	35.71	33.03	68.74	120.98	52.24	Peak

802.11ax40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**

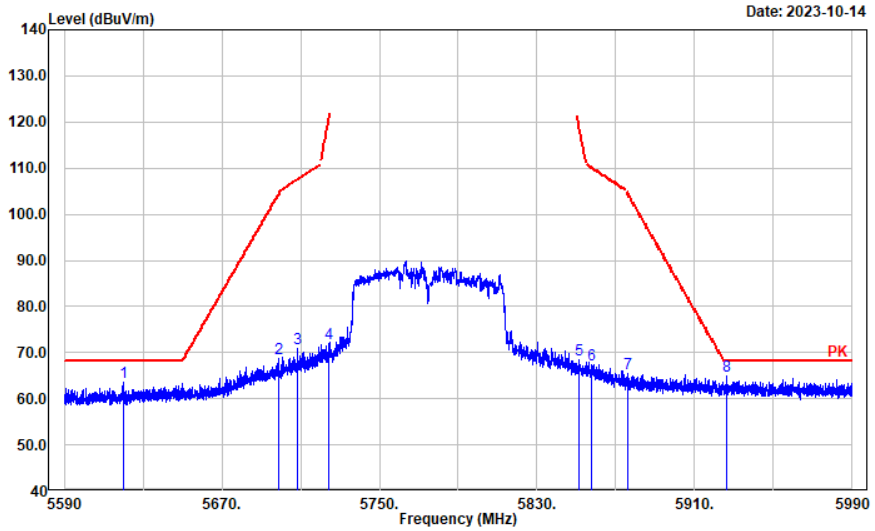
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5624.627	30.39	32.88	63.27	68.20	4.93	Peak
2	5693.411	31.54	33.02	64.56	100.34	35.78	Peak
3	5711.814	34.62	33.03	67.65	108.51	40.86	Peak
4	5723.639	37.03	33.03	70.06	119.10	49.04	Peak

802.11ax80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**

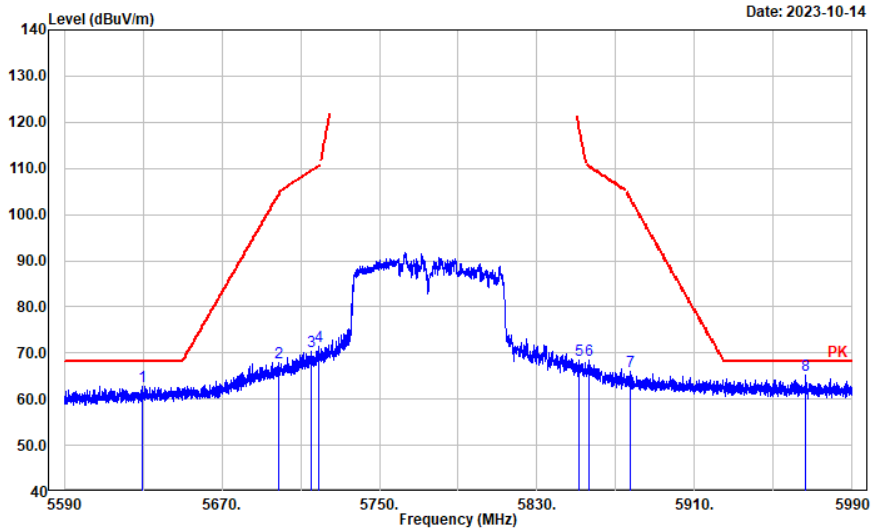
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5620.166	30.80	32.86	63.66	68.20	4.54	Peak
2	5698.982	35.75	33.03	68.78	104.45	35.67	Peak
3	5708.583	37.97	33.03	71.00	107.61	36.61	Peak
4	5724.187	38.89	33.03	71.92	120.35	48.43	Peak
5	5851.252	35.33	33.20	68.53	119.34	50.81	Peak
6	5857.414	34.27	33.23	67.50	110.12	42.62	Peak
7	5875.817	32.16	33.33	65.49	104.59	39.10	Peak
8	5926.067	31.39	33.46	64.85	68.20	3.35	Peak

802.11ax80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**

Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:

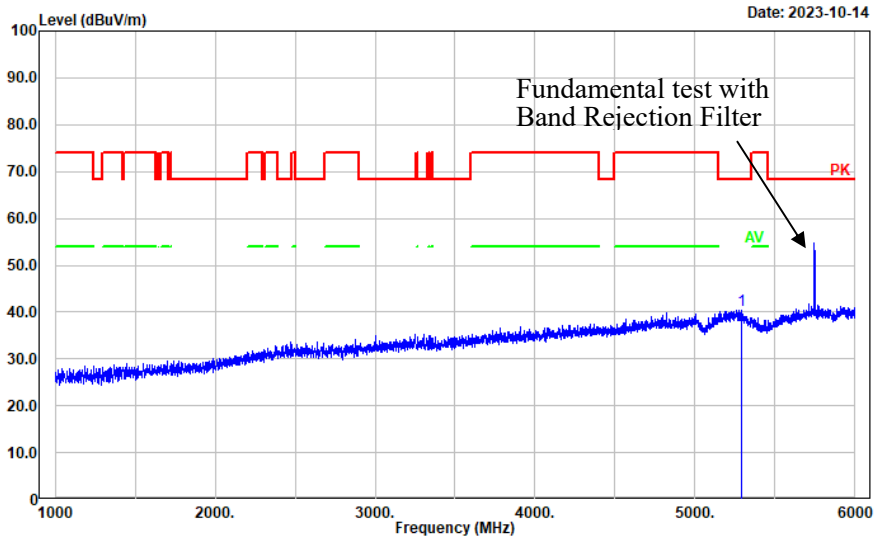


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5629.768	29.99	32.90	62.89	68.20	5.31	Peak
2	5699.062	35.01	33.03	68.04	104.51	36.47	Peak
3	5715.545	37.37	33.03	70.40	109.55	39.15	Peak
4	5718.986	38.34	33.03	71.37	110.52	39.15	Peak
5	5851.412	35.16	33.20	68.36	118.98	50.62	Peak
6	5856.533	35.27	33.23	68.50	110.37	41.87	Peak
7	5877.098	32.79	33.34	66.13	103.64	37.51	Peak
8	5966.155	31.66	33.52	65.18	68.20	3.02	Peak

Listed with the worst harmonic margin test plot (802.11a 5745MHz)

	Horizontal
1-6GHz	

Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: horizontal
Note:

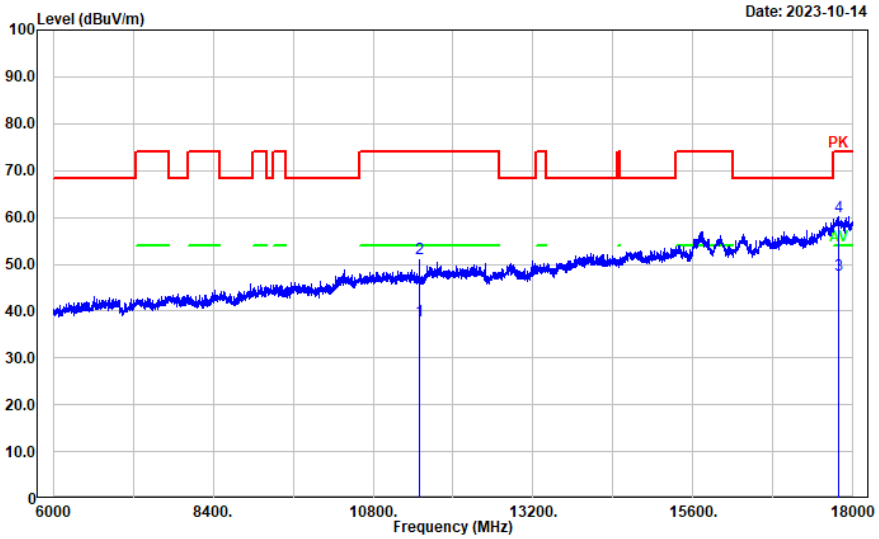


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5286.857	34.49	5.90	40.39	68.20	27.81	Peak

Horizontal

6-18GHz

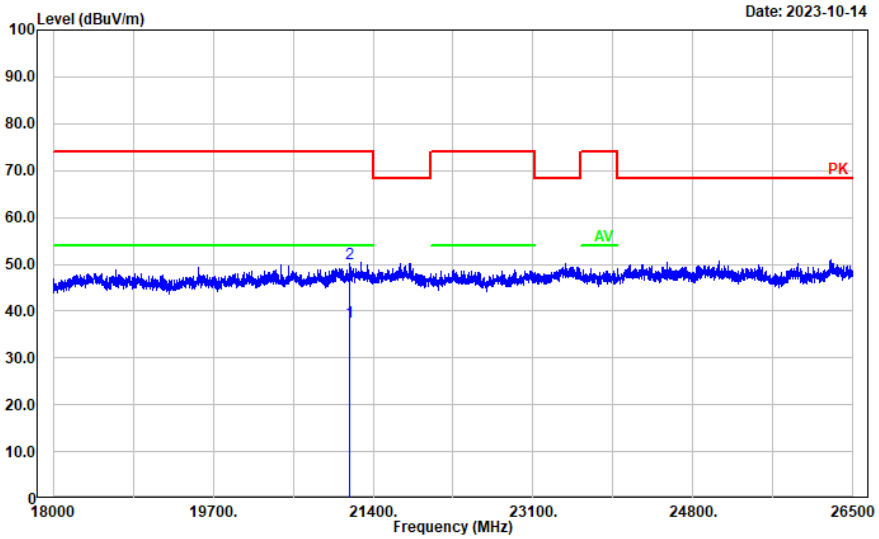
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11490.000	22.57	15.47	38.04	54.00	15.96	Average
2	11490.000	35.71	15.47	51.18	74.00	22.82	Peak
3	17779.160	22.12	25.52	47.64	54.00	6.36	Average
4	17779.160	34.51	25.52	60.03	74.00	13.97	Peak

Horizontal	
18-26.5GHz	

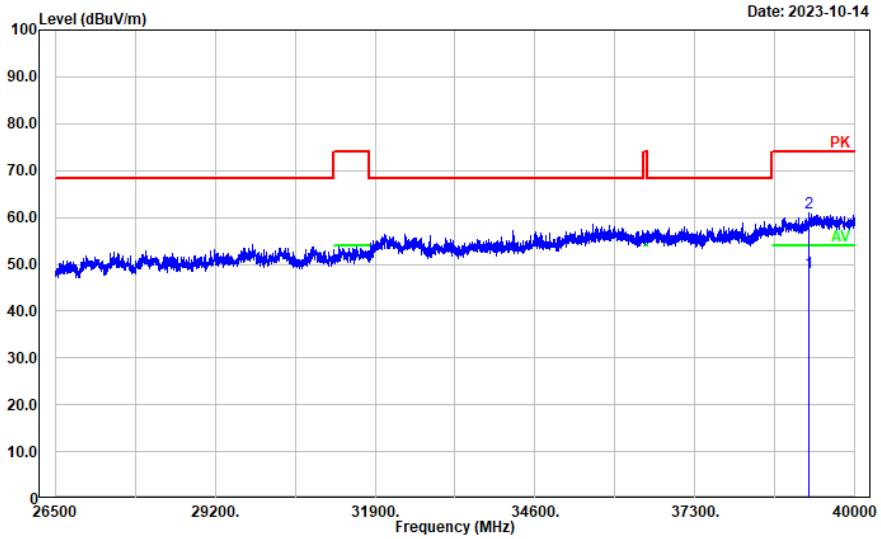
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



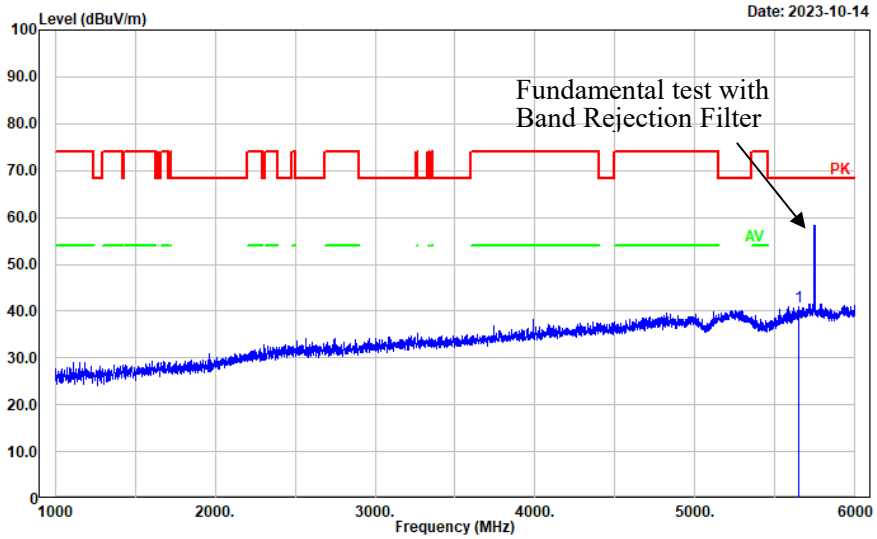
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	21150.730	38.80	-1.26	37.54	54.00	16.46	Average
2	21150.730	51.39	-1.26	50.13	74.00	23.87	Peak

Horizontal	
26.5-40GHz	

Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39224.950	38.04	10.21	48.25	54.00	5.75	Average
2	39224.950	50.79	10.21	61.00	74.00	13.00	Peak

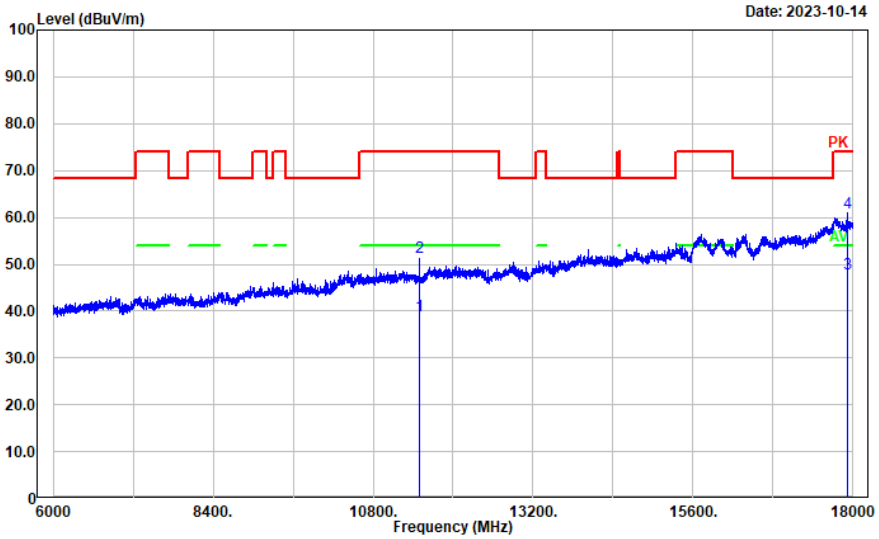
Vertical	
1-6GHz	Project No.: CR230957008-RF Tester: Tao Zhu Polarization: vertical Note: 

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5643.929	34.63	6.27	40.90	68.20	27.30	Peak

Vertical

6-18GHz

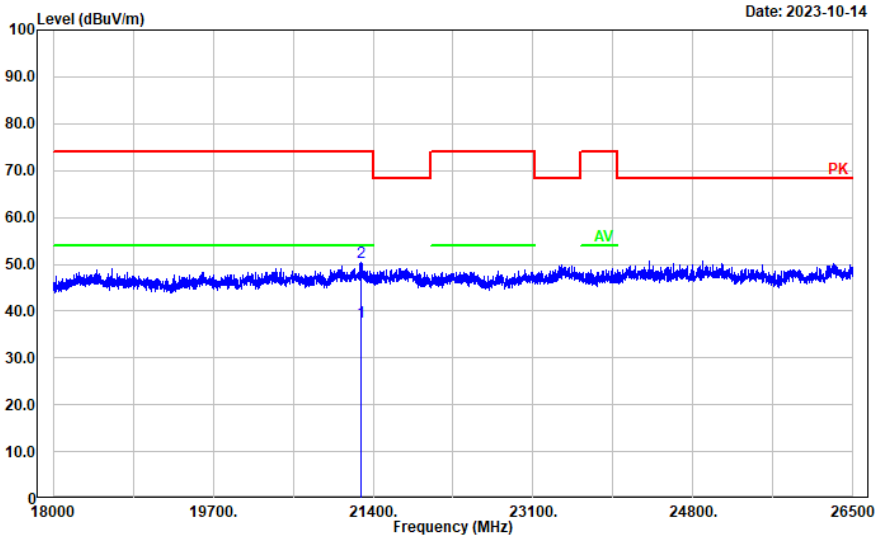
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11490.000	23.64	15.47	39.11	54.00	14.89	Average
2	11490.000	36.01	15.47	51.48	74.00	22.52	Peak
3	17913.580	21.80	26.22	48.02	54.00	5.98	Average
4	17913.580	34.74	26.22	60.96	74.00	13.04	Peak

Vertical	
18-26.5GHz	

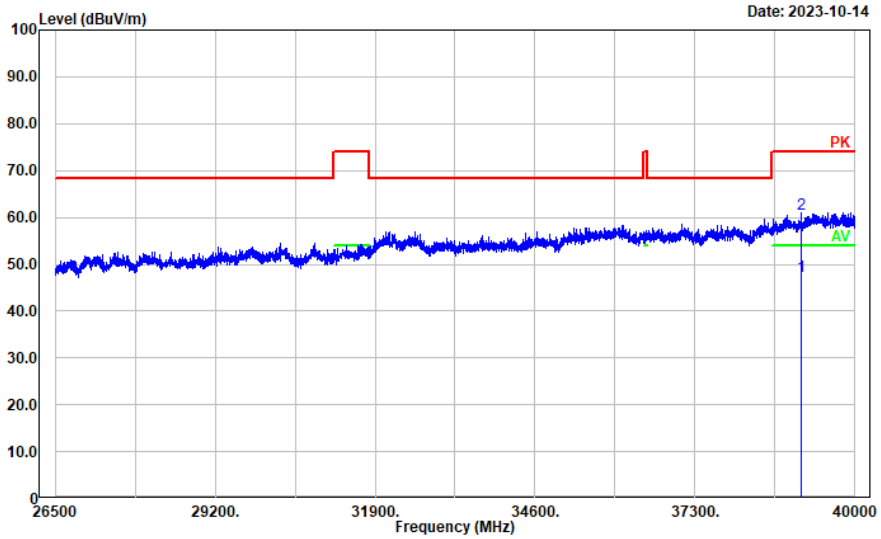
Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	21278.260	38.84	-1.20	37.64	54.00	16.36	Average
2	21278.260	51.49	-1.20	50.29	74.00	23.71	Peak

Vertical	
26.5-40GHz	

Project No.: CR230957008-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39084.520	37.17	10.38	47.55	54.00	6.45	Average
2	39084.520	50.46	10.38	60.84	74.00	13.16	Peak

4.3 Emission Bandwidth:

Serial Number:	2BS8-1	Test Date:	2023/10/24-2023/10/25
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.9-26.5	Relative Humidity: (%)	60-62	ATM Pressure: (kPa)	101-101.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	**Test Frequency (MHz)**	**26 dB Bandwidth (MHz)**		**99% Occupied Bandwidth (MHz)**	
		ANT 1	**ANT 2**	**ANT 1**	**ANT 2**
802.11a	5180	21.480	21.360	16.743	16.743
	5200	21.480	21.440	16.743	16.743
	5240	21.520	21.360	16.743	16.743
802.11ac vht20	5180	24.360	21.840	18.222	18.022
	5200	21.720	21.720	18.022	18.022
	5240	21.880	21.840	18.102	18.022
802.11ac vht40	5190	40.480	40.480	36.444	36.444
	5230	40.480	40.400	36.603	36.603
802.11ac vht80	5210	82.560	82.400	76.084	75.924
802.11ax hew20	5180	22.320	21.560	19.021	18.941
	5200	21.760	21.560	19.021	18.981
	5240	22.320	21.520	18.941	19.021
802.11ax hew40	5190	40.640	40.320	37.642	37.562
	5230	40.560	40.400	37.562	37.562
802.11ax hew80	5210	82.720	82.560	77.363	77.363

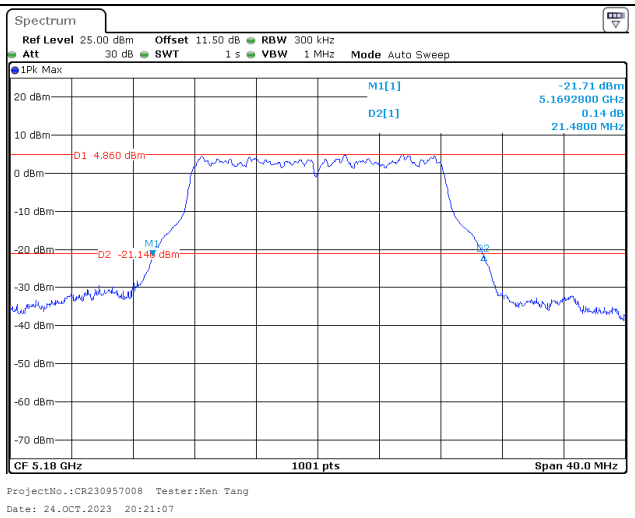
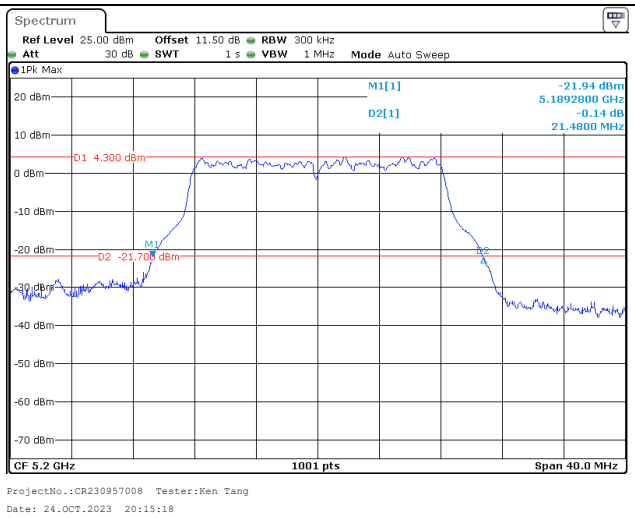
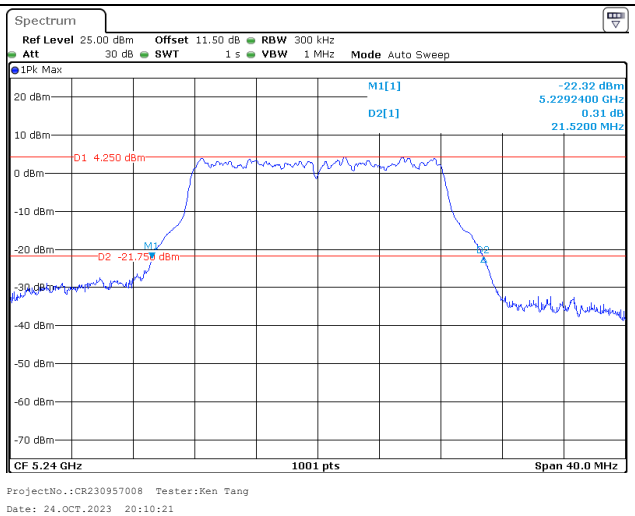
Note:
The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

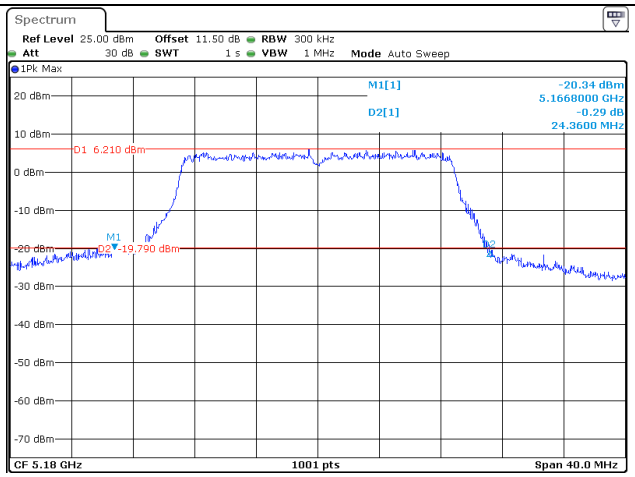
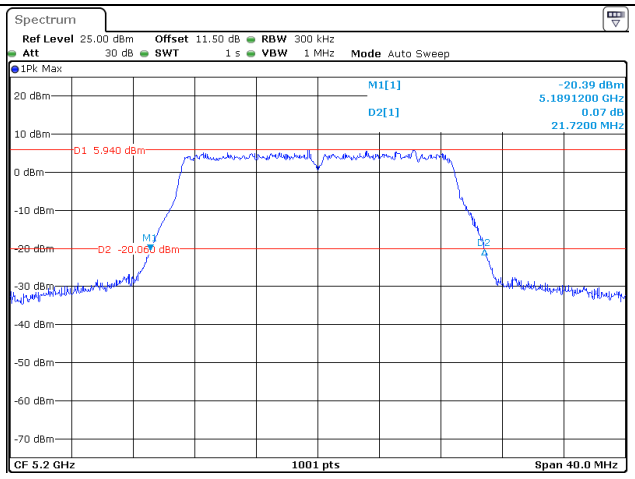
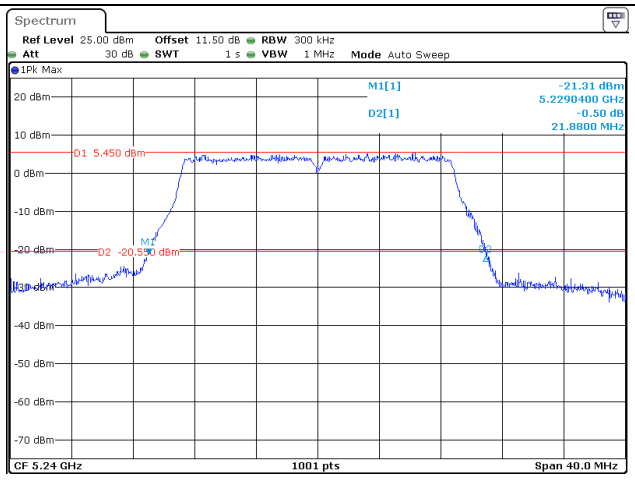
5725-5850 MHz:

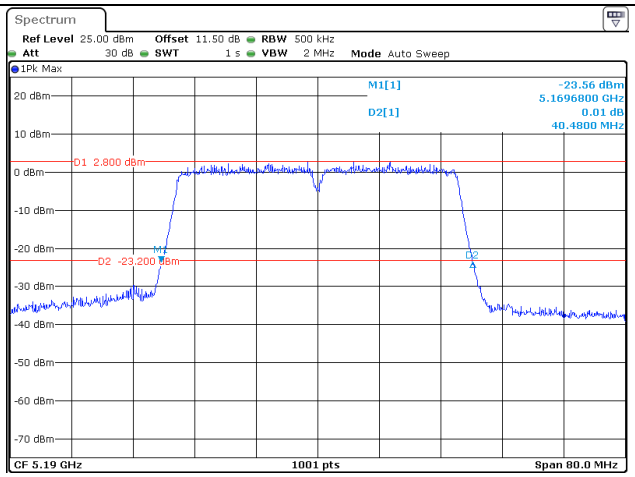
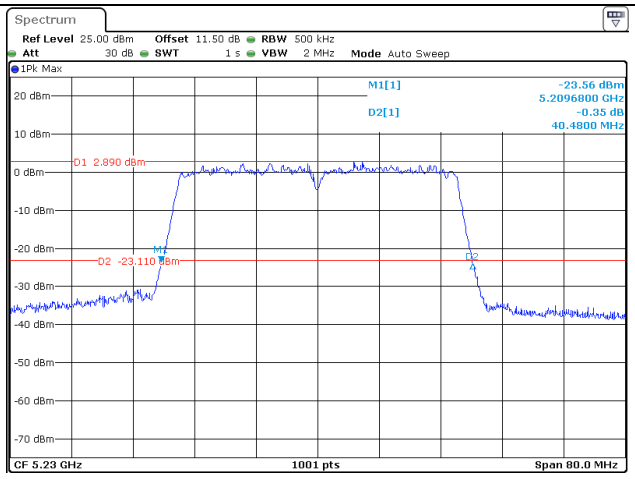
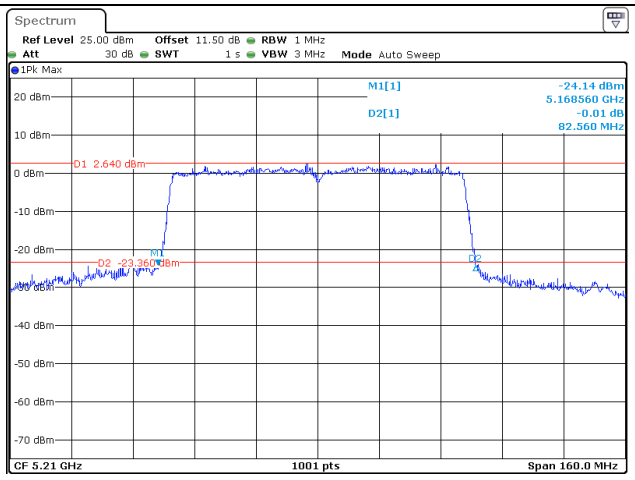
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)		99% Occupied Bandwidth (MHz)	
		ANT 1	ANT 2	ANT 1	ANT 2
802.11a	5745	16.400	16.440	21.578	17.063
	5785	16.080	16.440	22.018	17.303
	5825	16.360	16.440	20.739	18.022
802.11ac vht20	5745	17.760	17.840	22.697	18.422
	5785	17.840	17.840	18.541	18.541
	5825	17.800	17.800	21.219	18.262
802.11ac vht40	5755	36.640	36.640	42.438	36.923
	5795	36.640	36.640	44.276	37.323
802.11ac vht80	5775	76.560	76.560	76.883	76.244
802.11ax hew20	5745	18.640	18.760	24.885	19.860
	5785	18.560	18.080	23.936	19.301
	5825	18.640	17.960	22.657	19.421
802.11ax hew40	5755	37.760	37.680	41.319	37.962
	5795	37.600	37.120	43.716	38.201
802.11ax hew80	5775	77.880	77.400	77.682	77.682

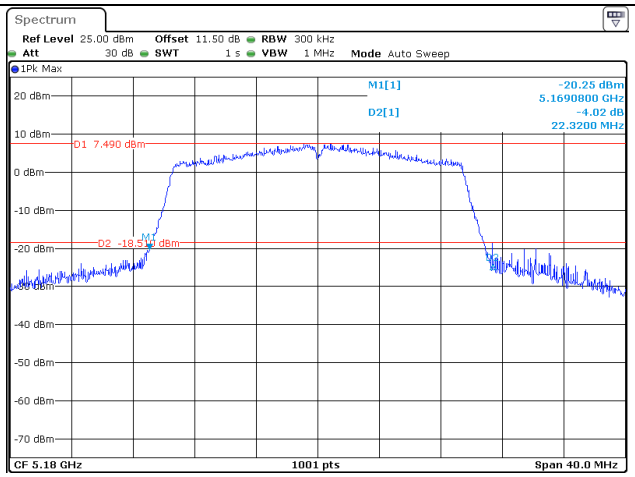
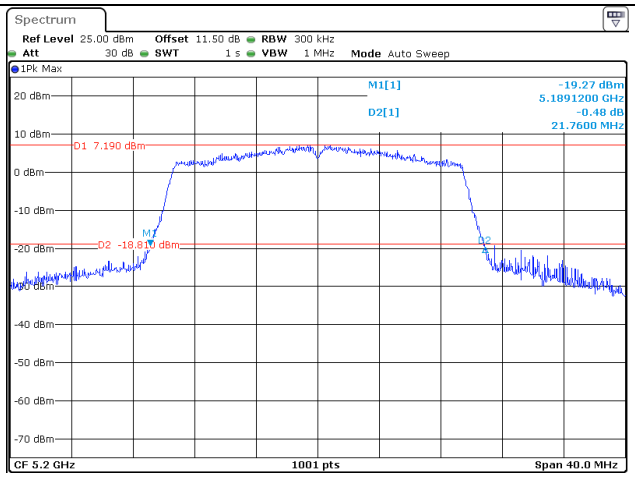
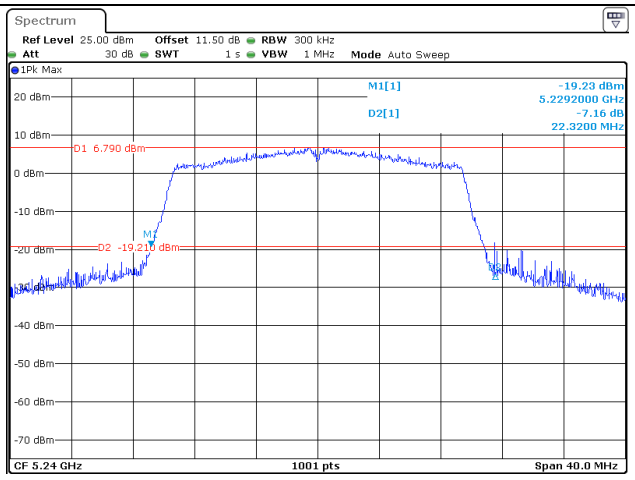
Note:
6dB Emission Bandwidth Limit: ≥0.5 MHz
The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

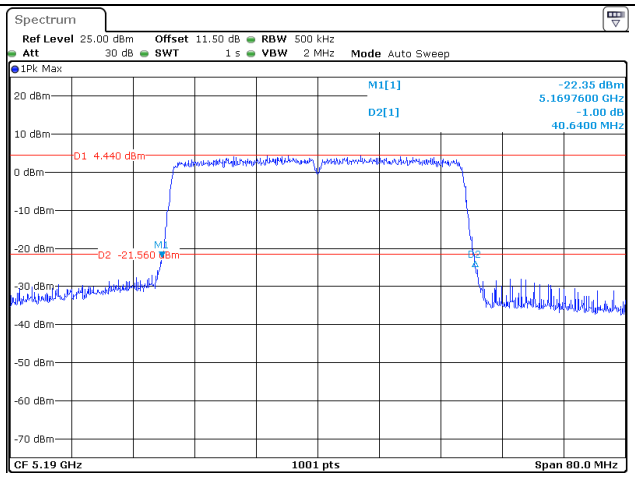
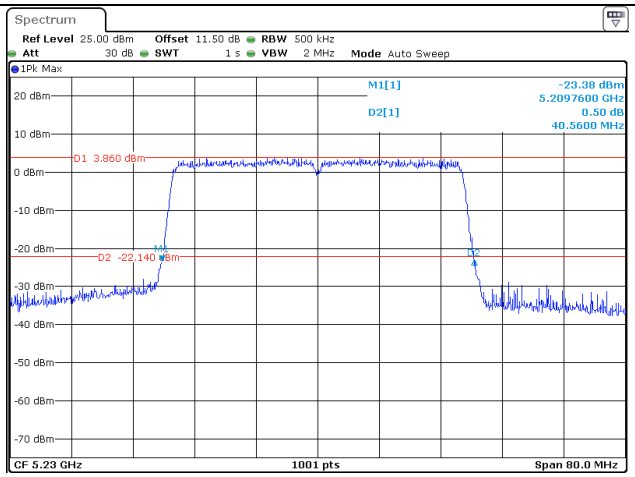
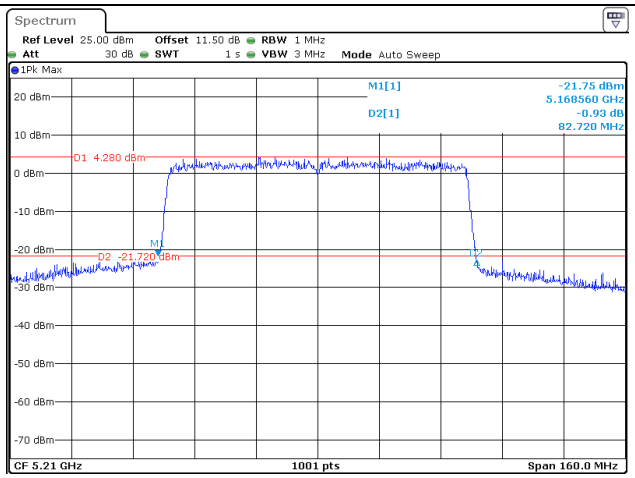
ANT 1:
5150-5250MHz:

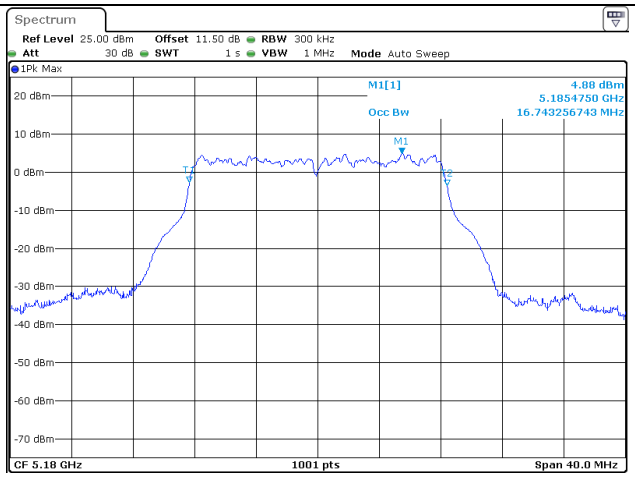
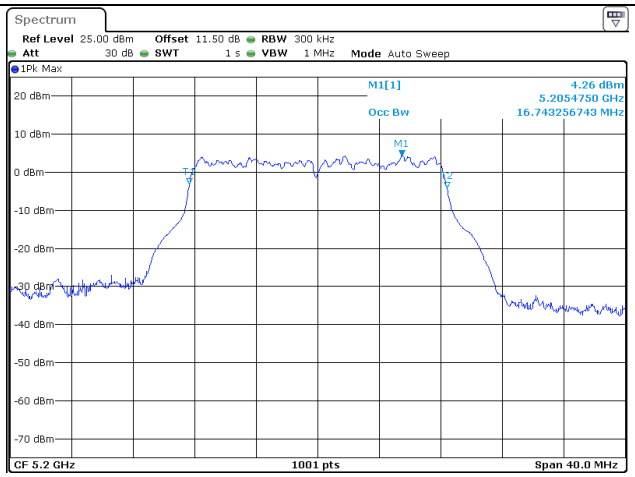
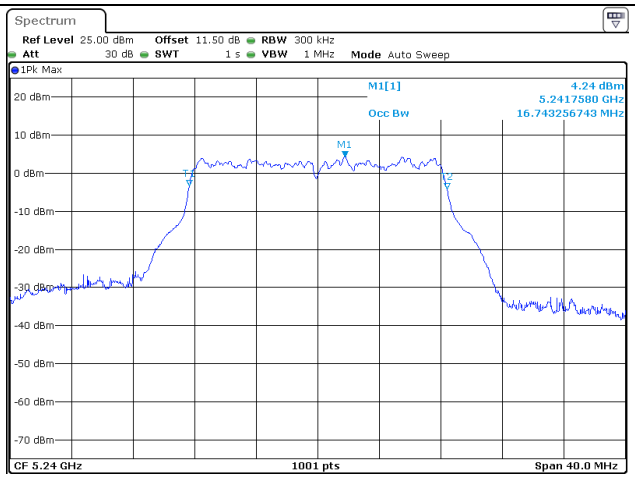
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

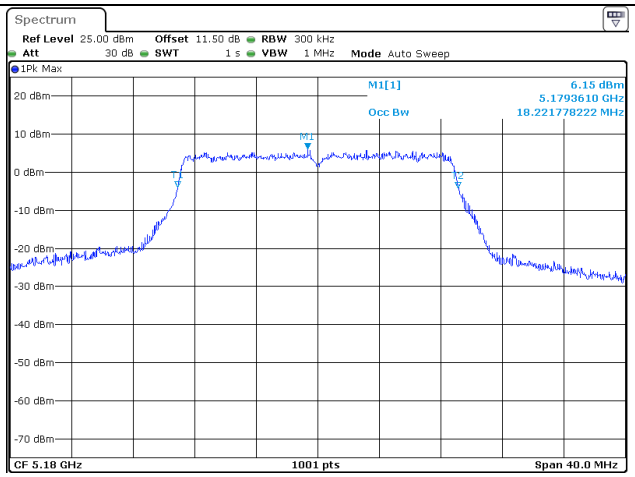
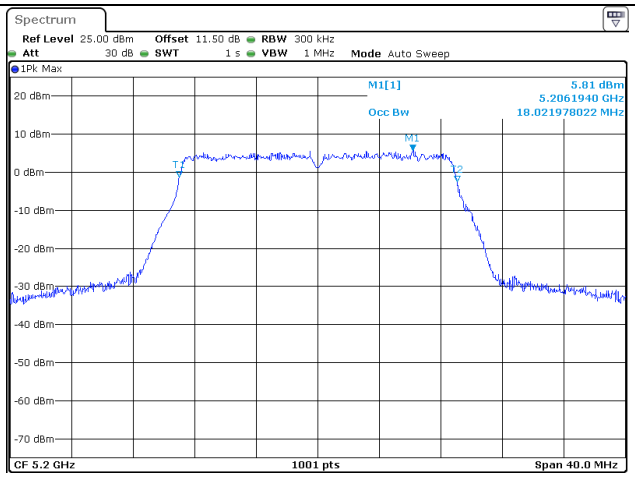
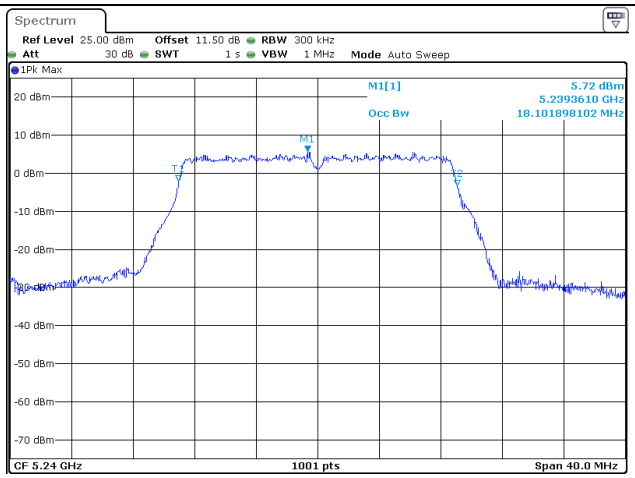
26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

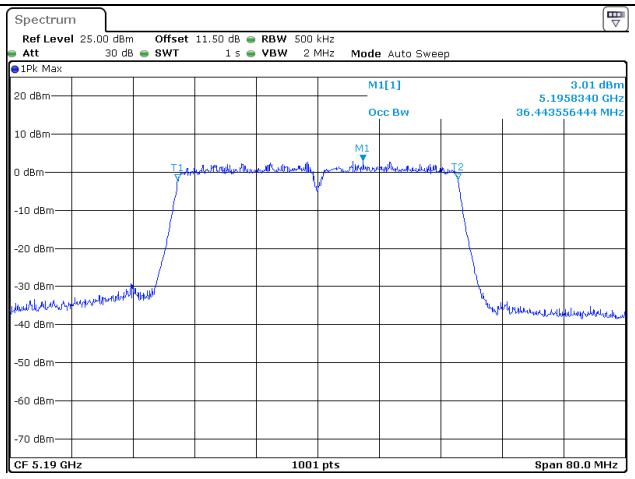
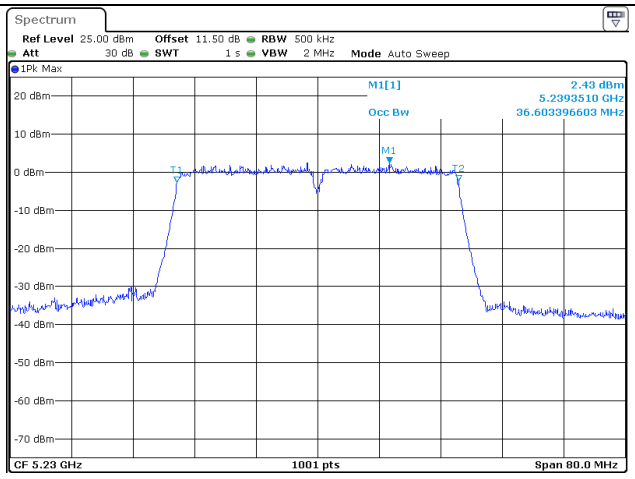
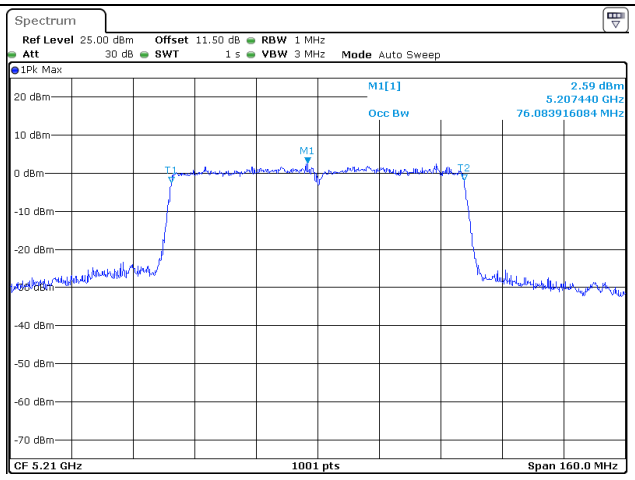
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

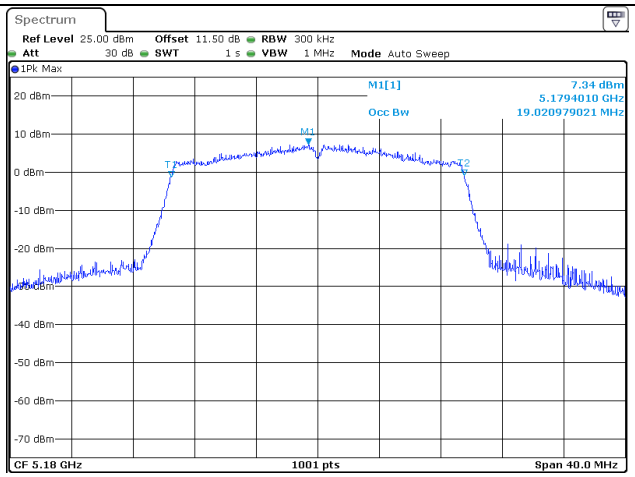
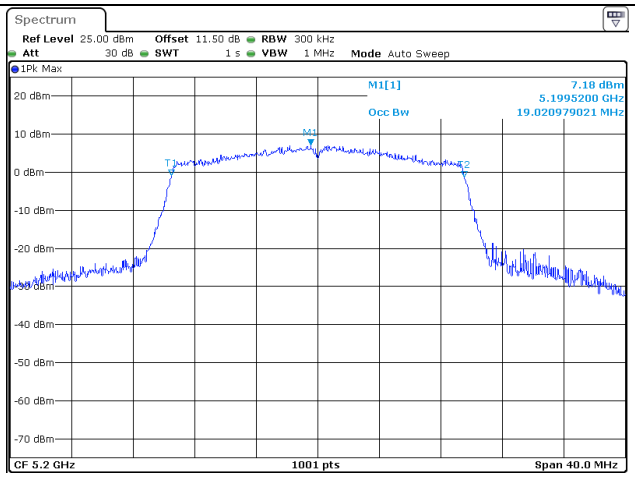
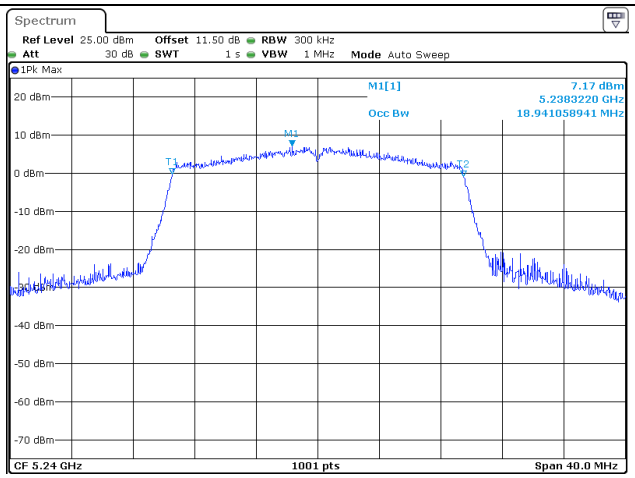
26dB Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

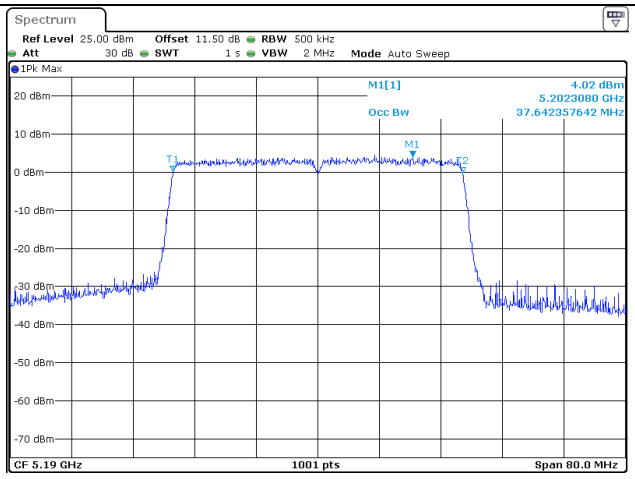
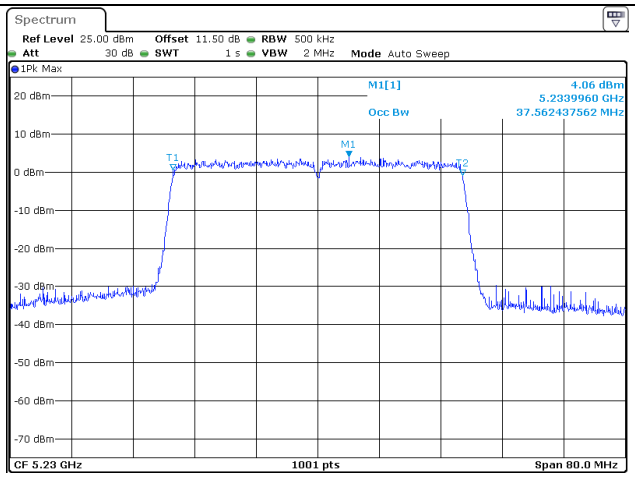
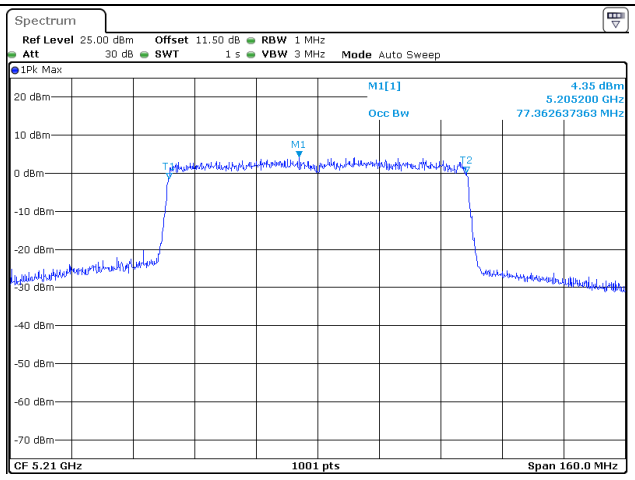
26dB Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

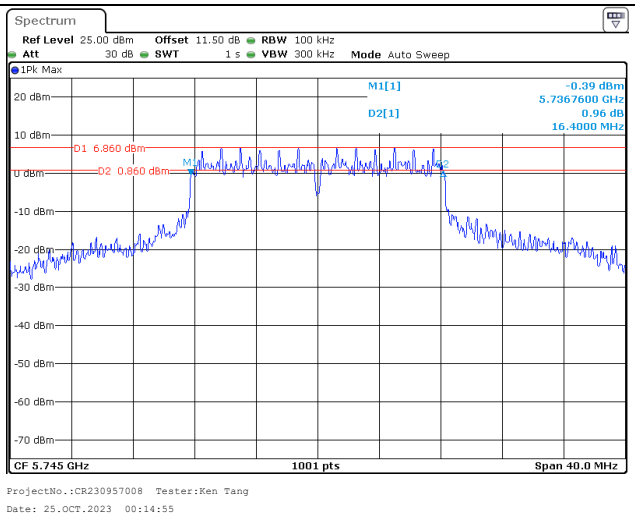
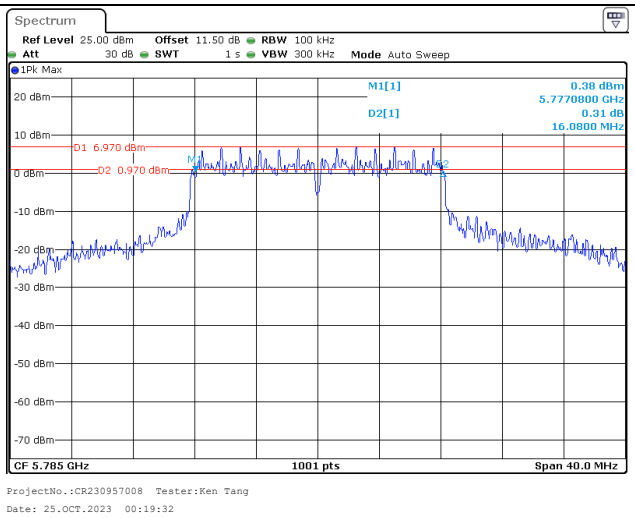
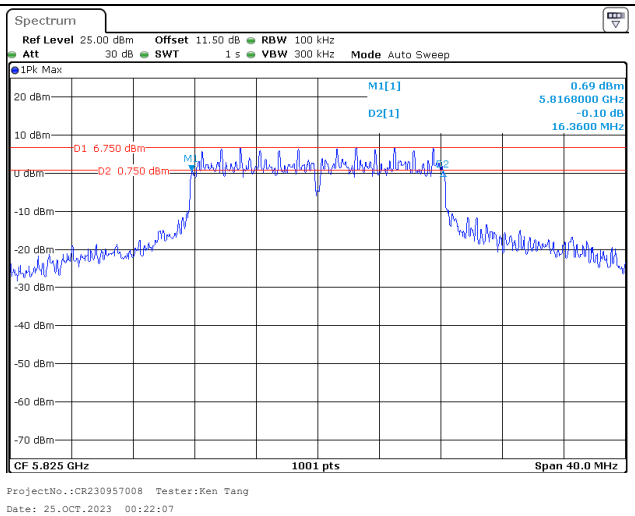
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

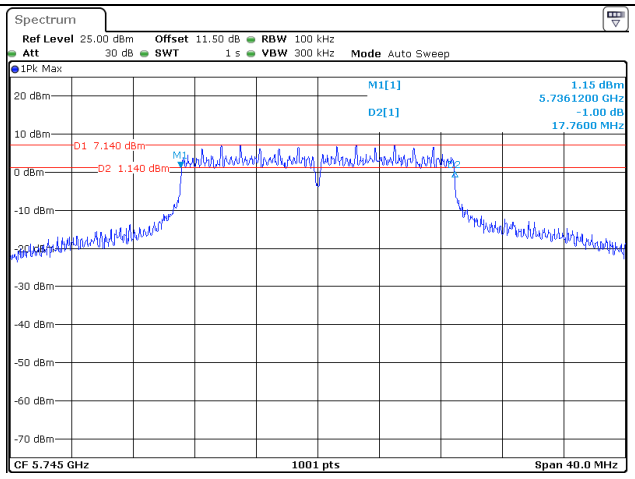
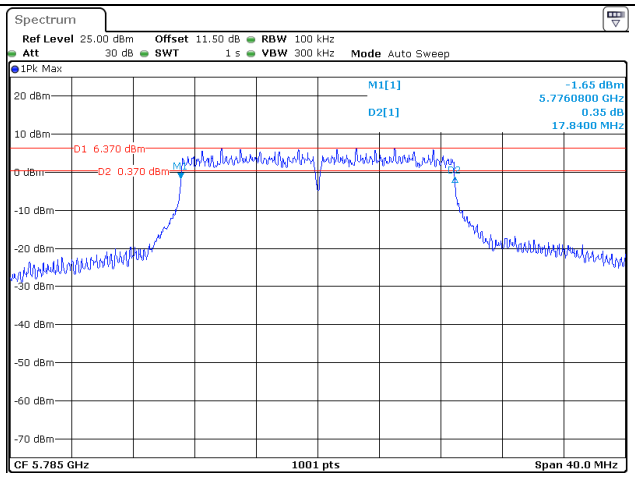
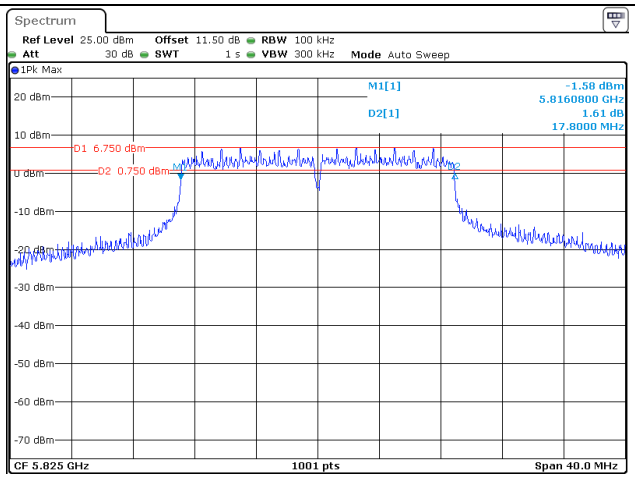
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

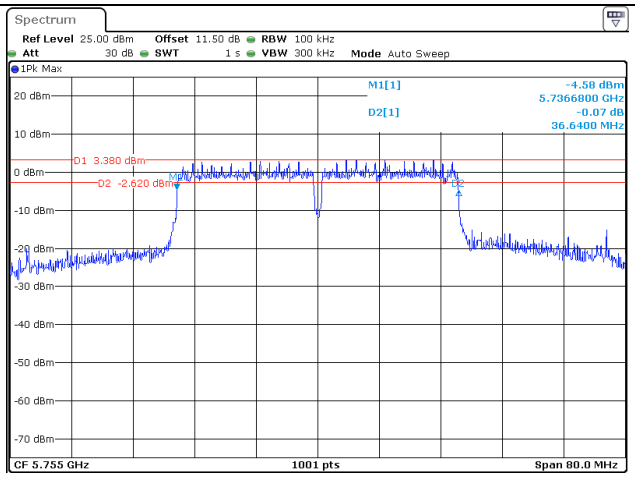
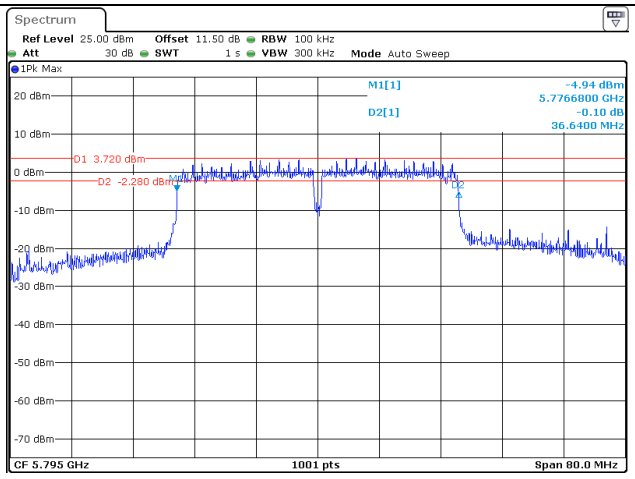
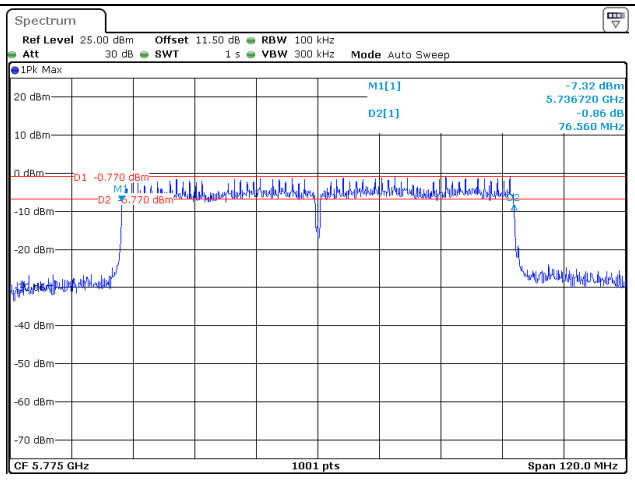
99% Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

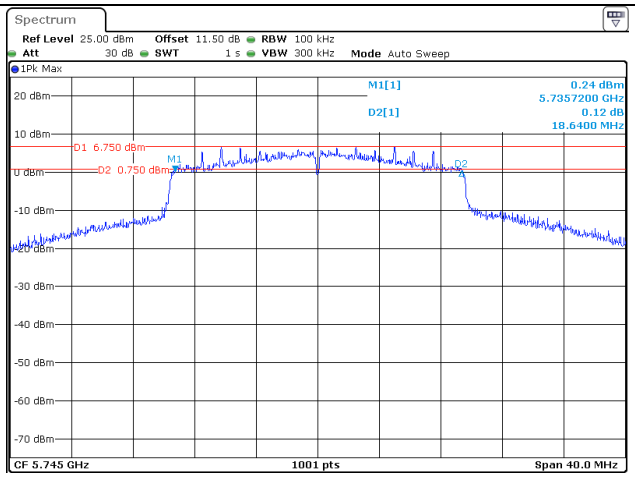
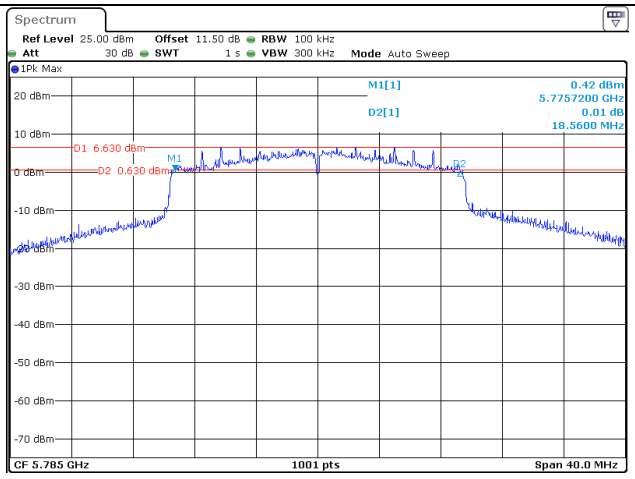
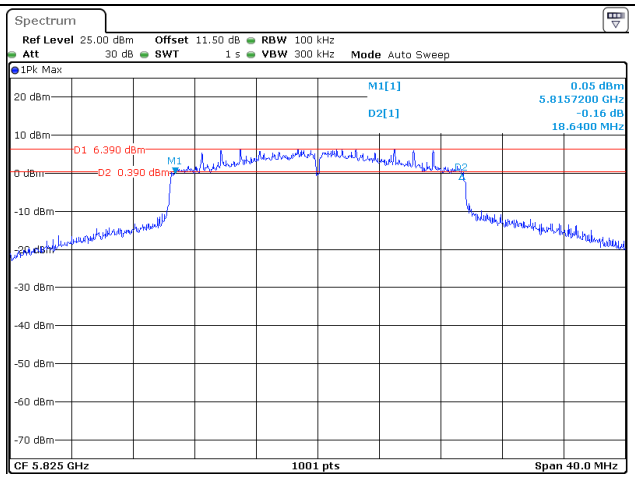
99% Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

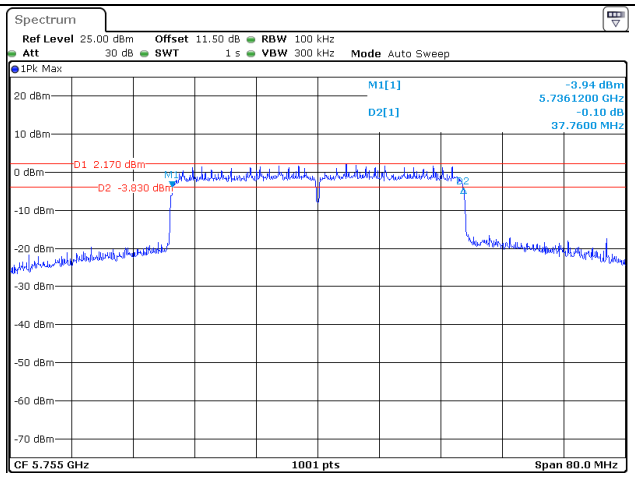
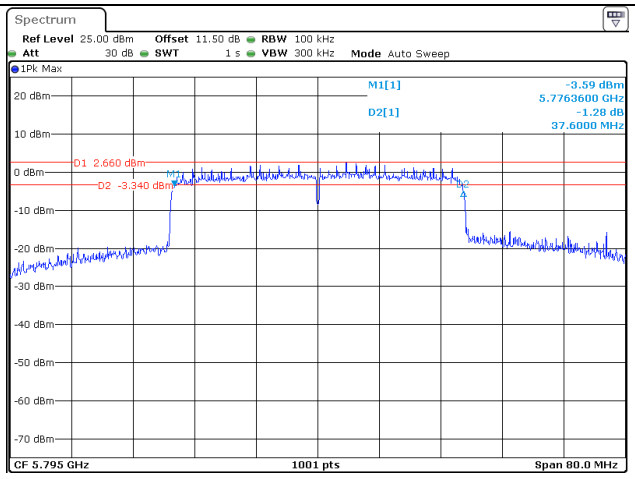
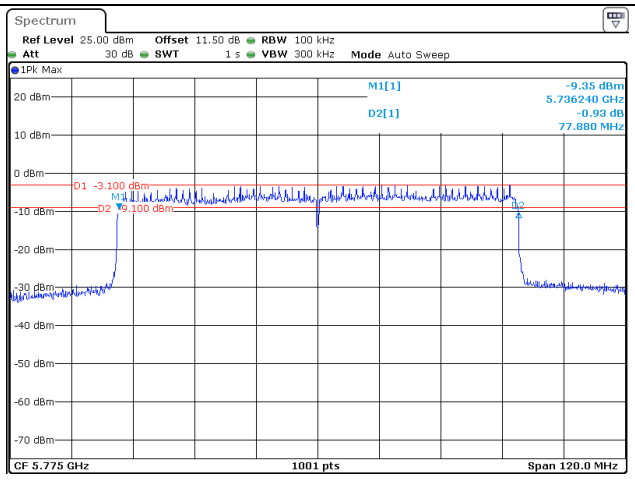
5725-5850MHz:

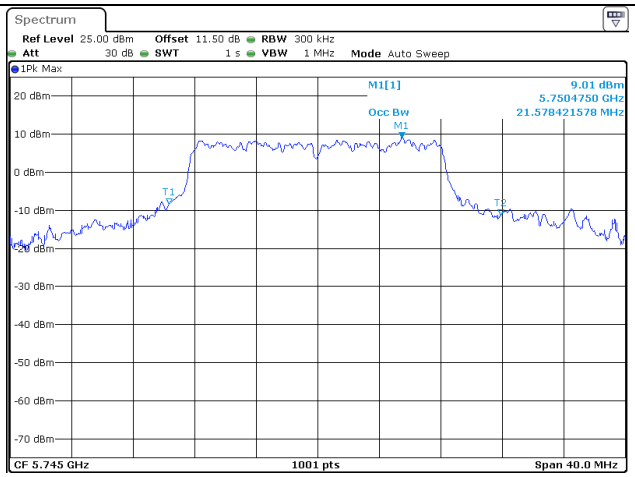
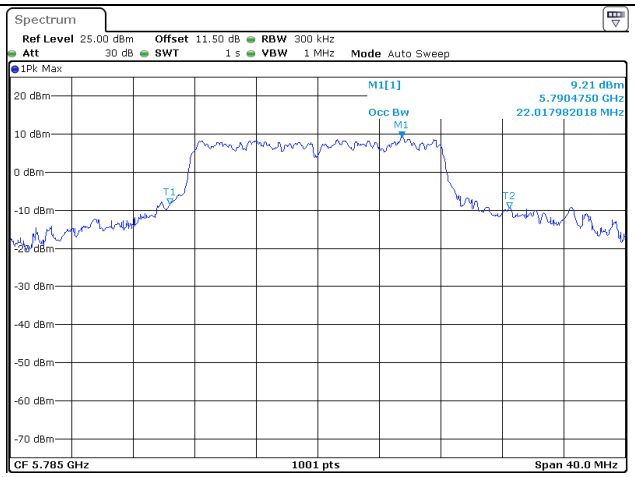
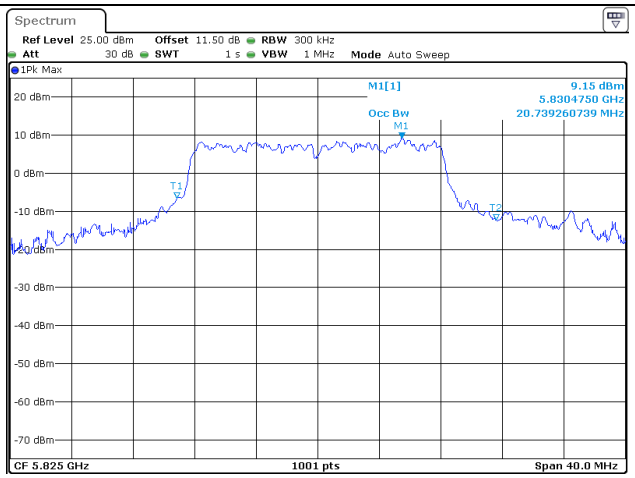
6dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

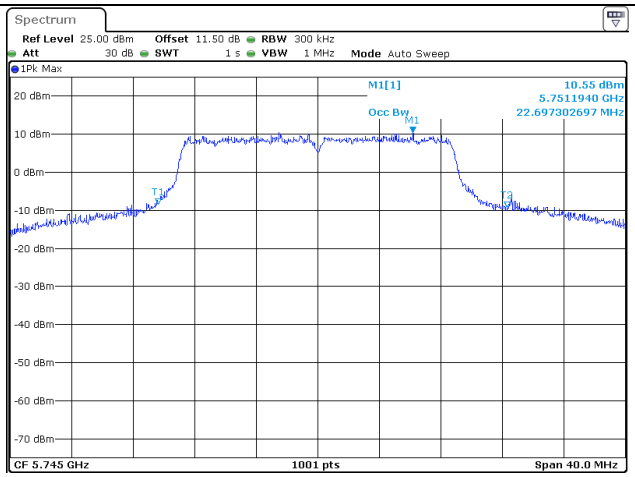
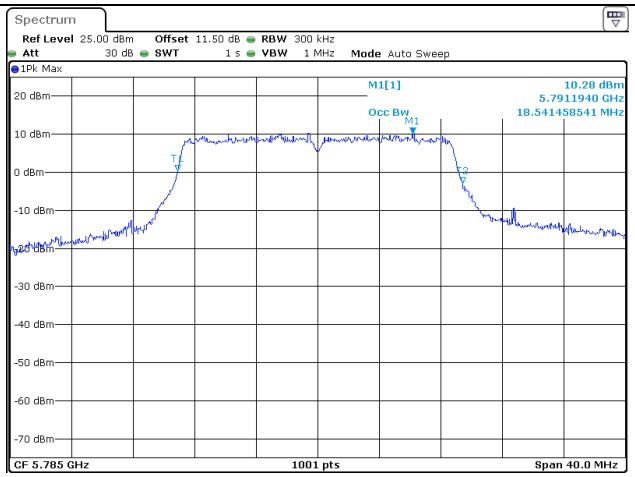
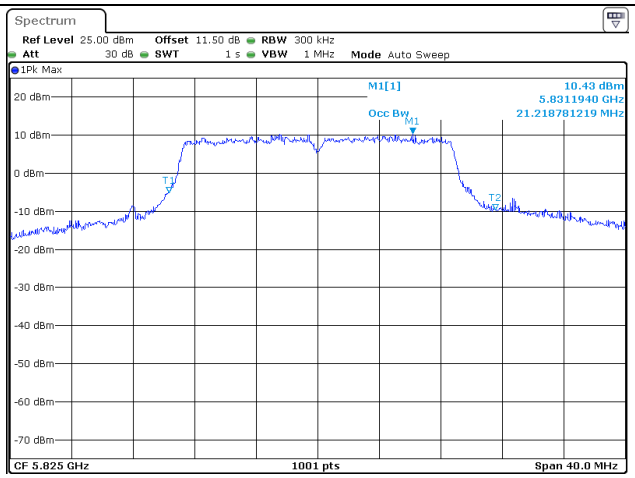
6dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

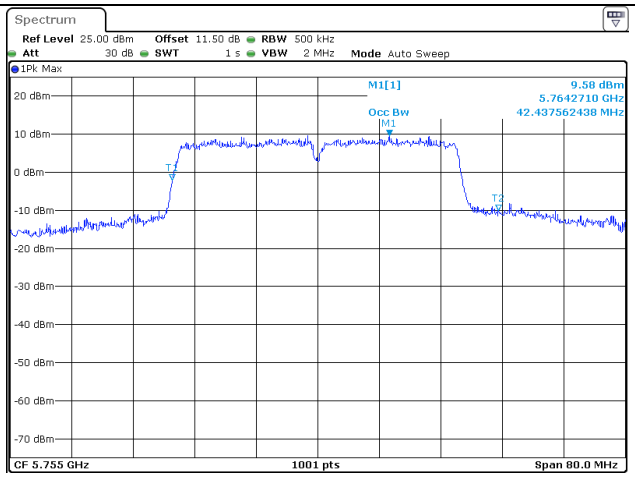
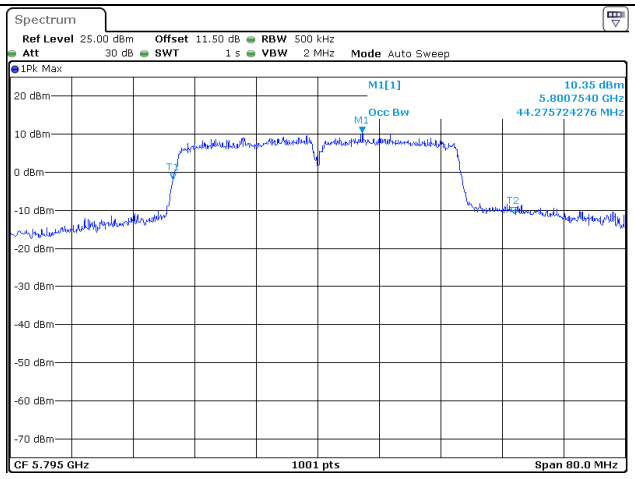
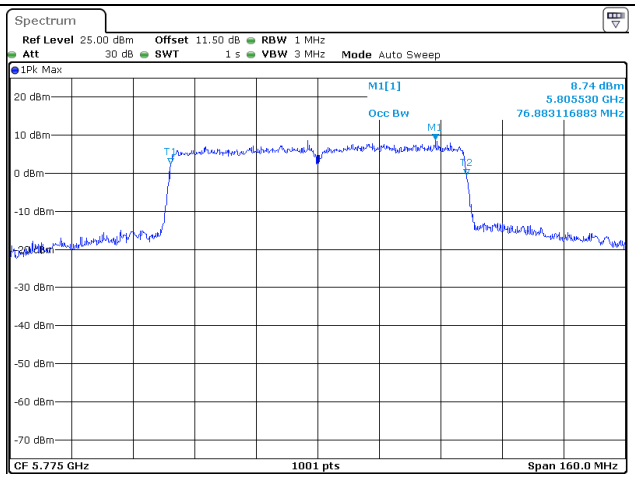
6dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

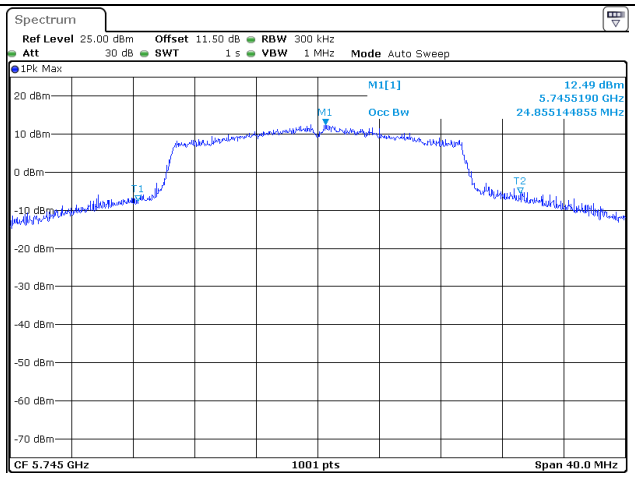
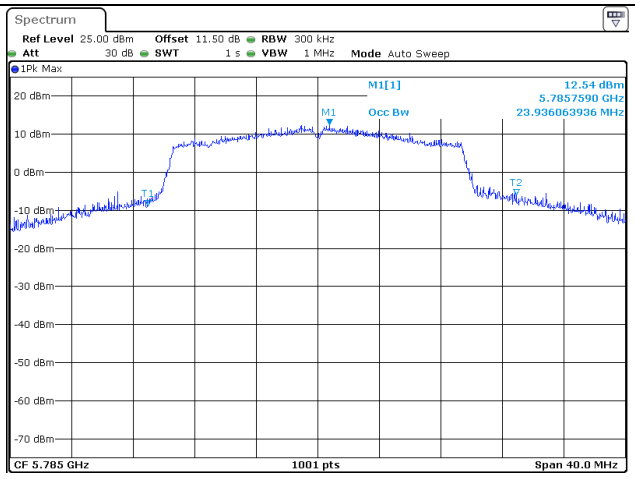
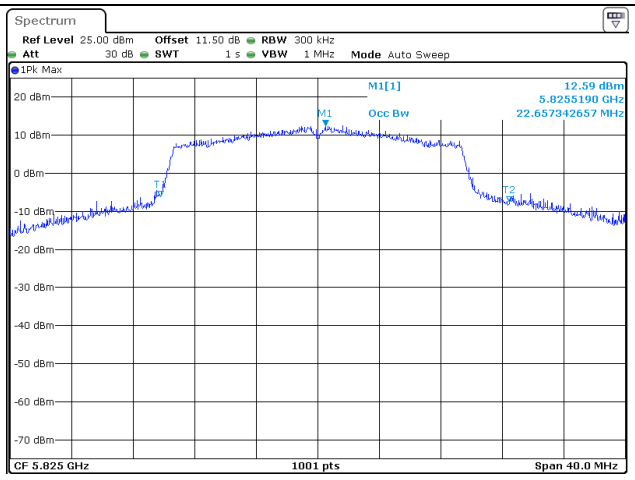
6dB Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

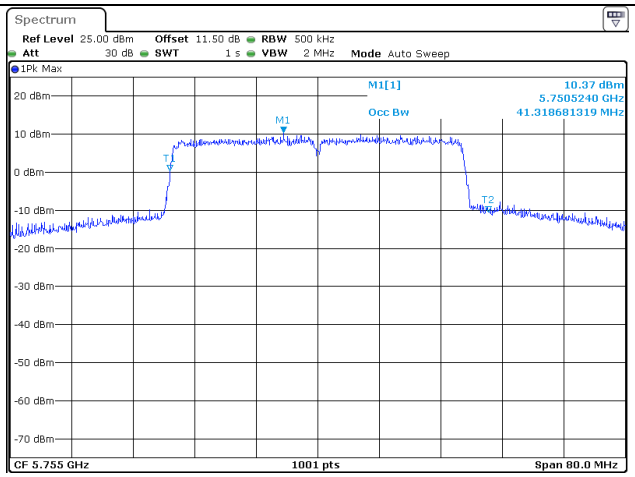
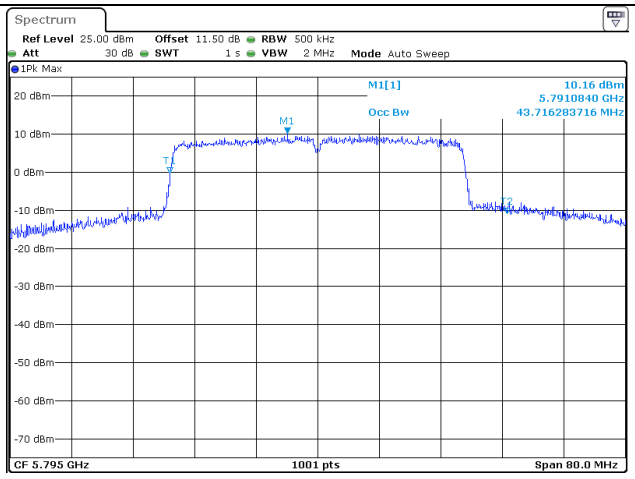
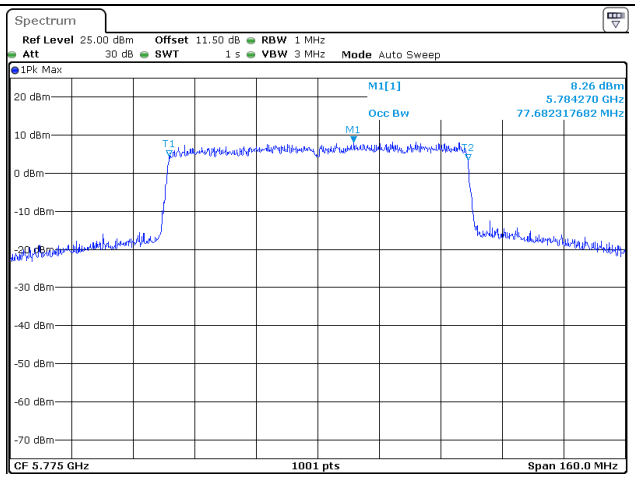
6dB Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

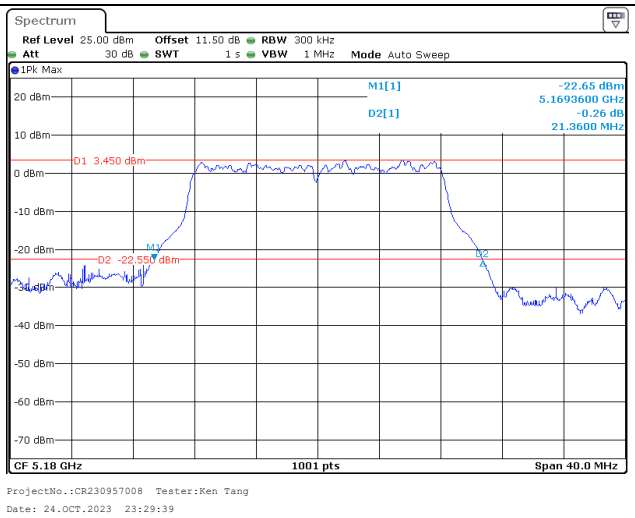
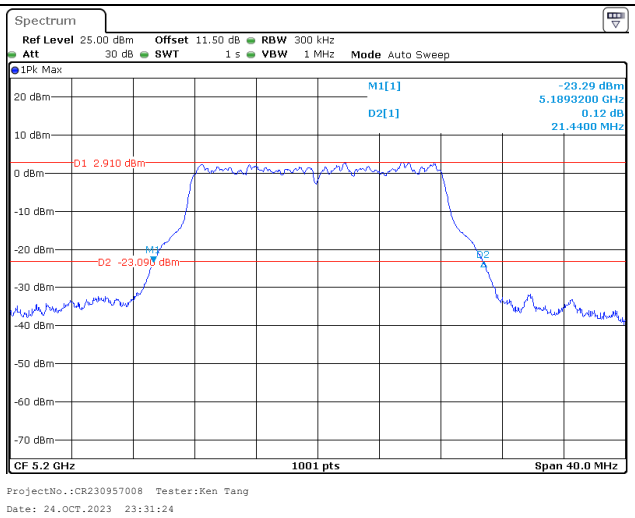
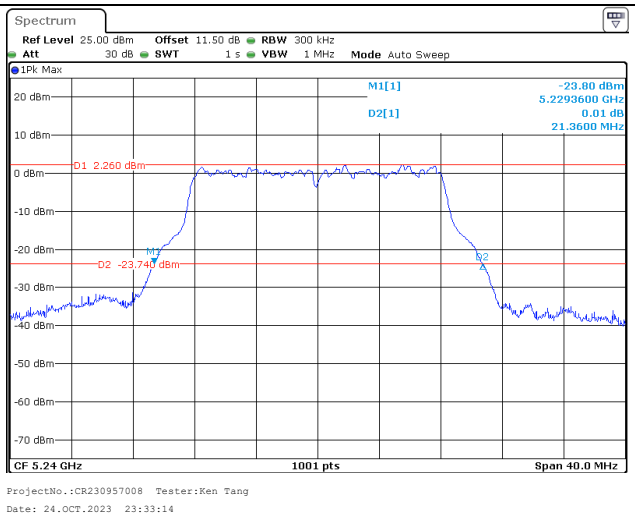
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

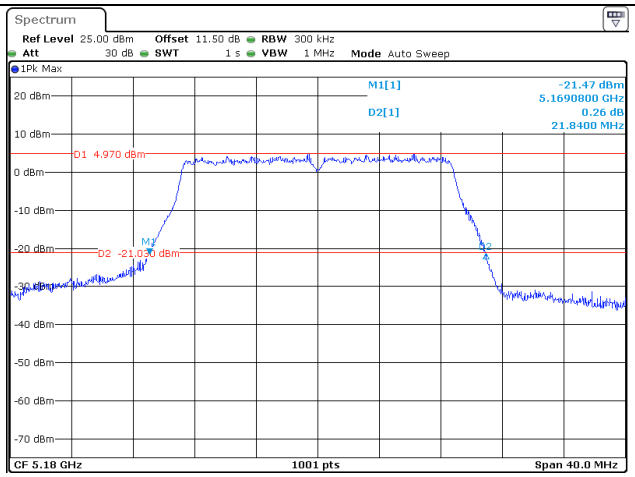
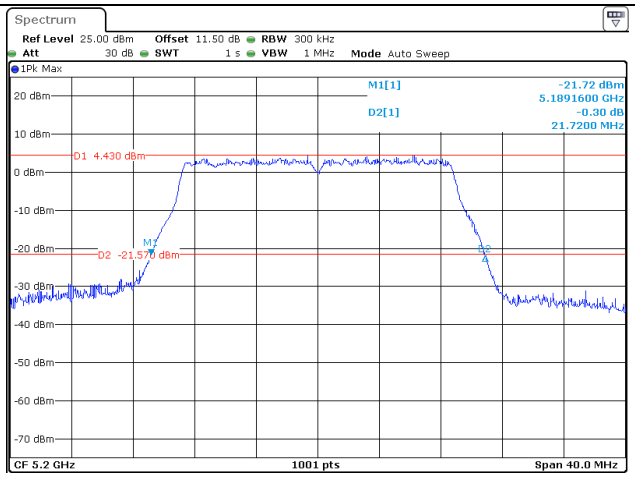
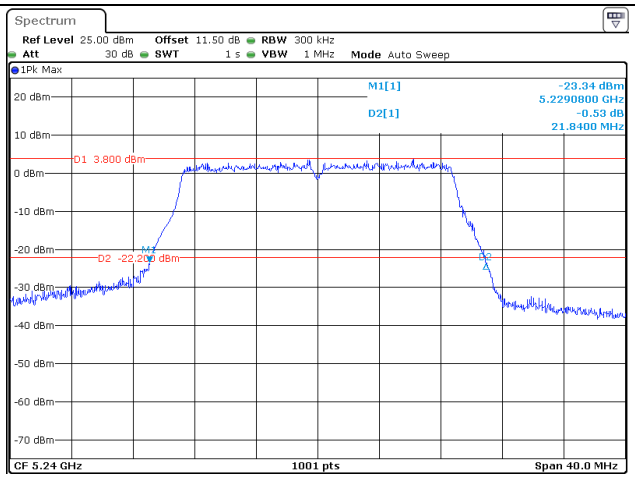
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

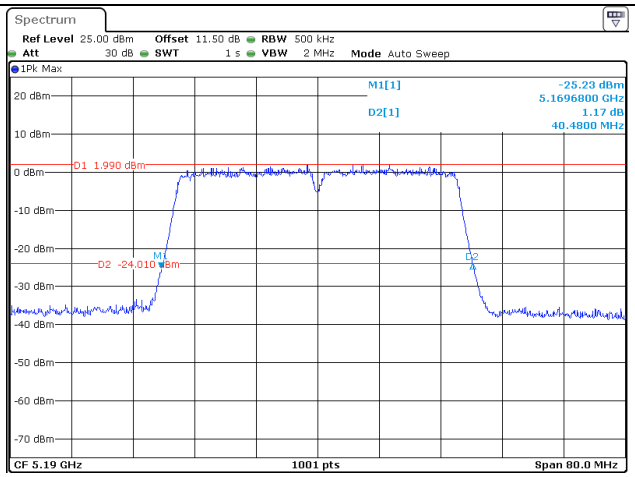
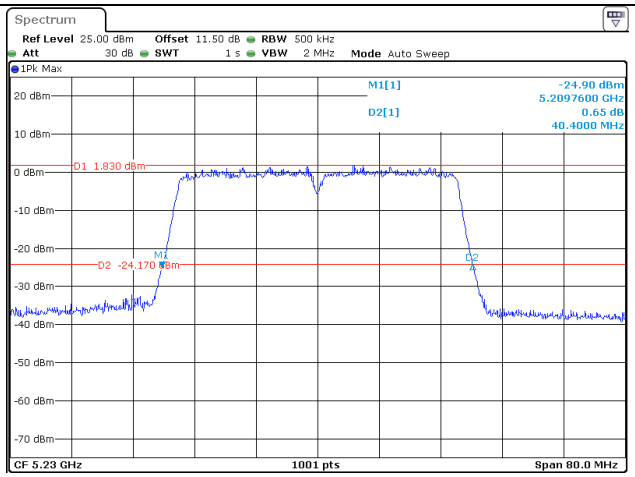
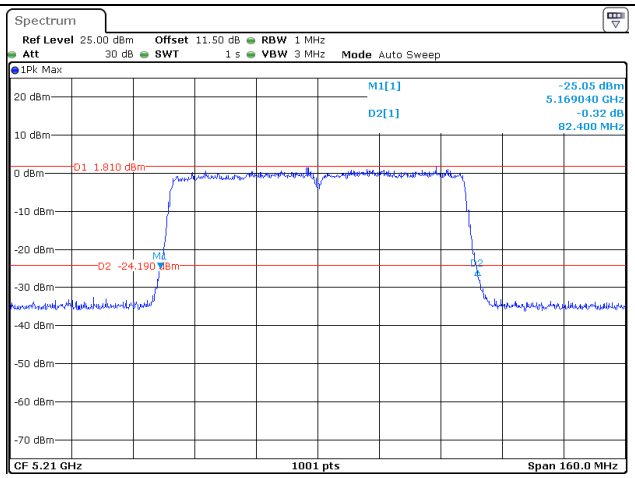
99% Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

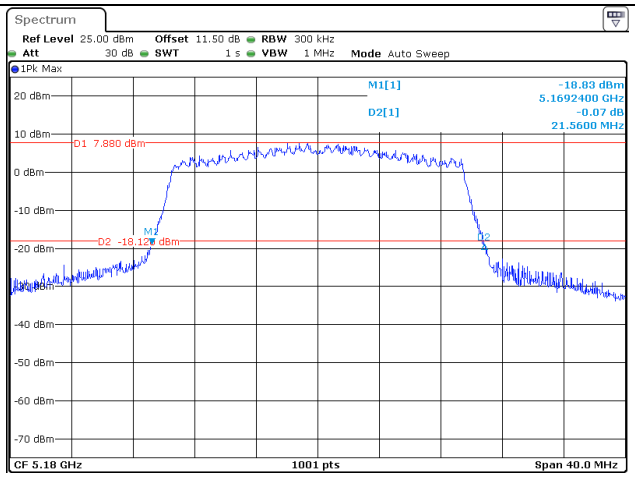
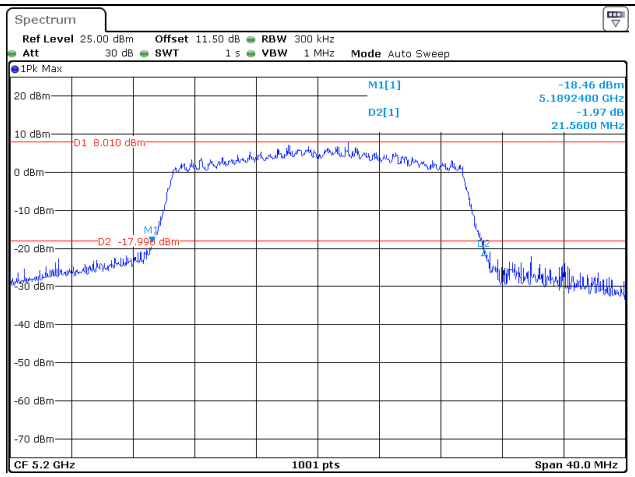
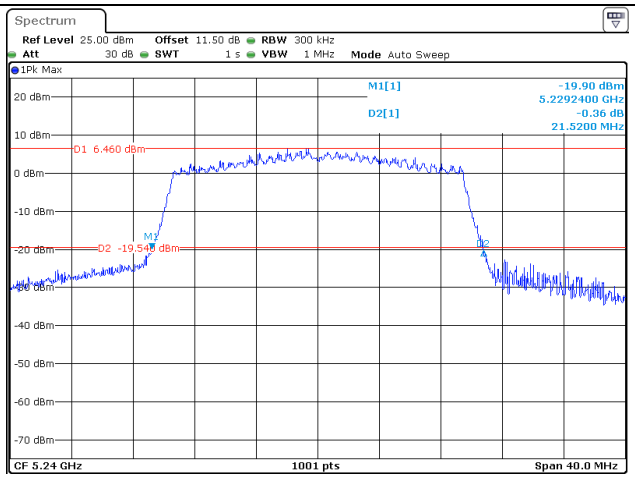
99% Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

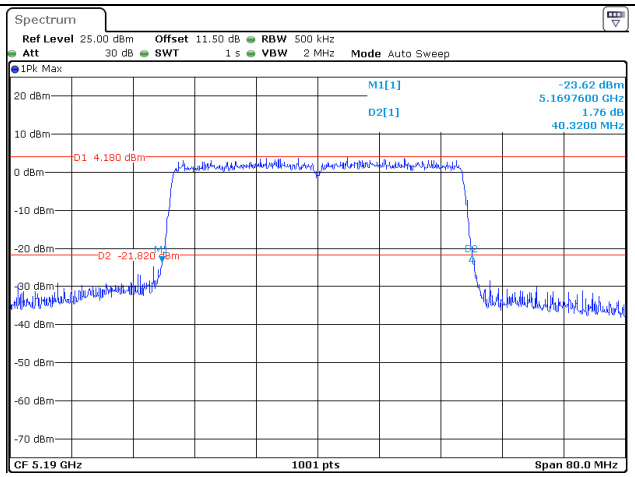
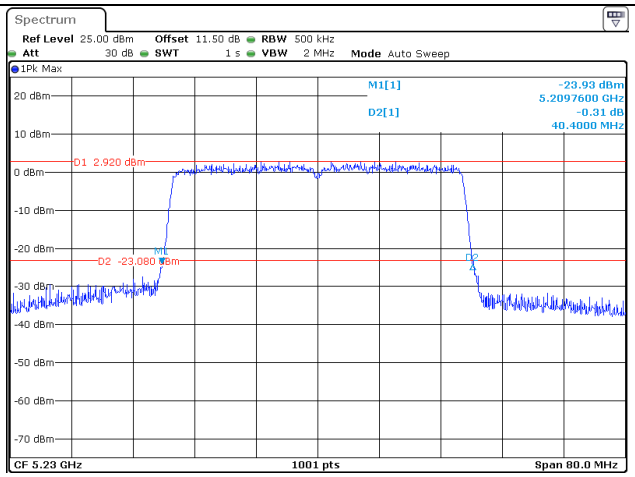
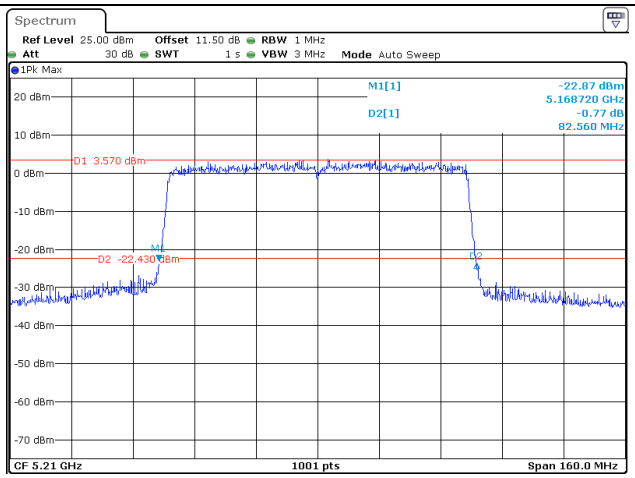
ANT 2:
5150-5250MHz:

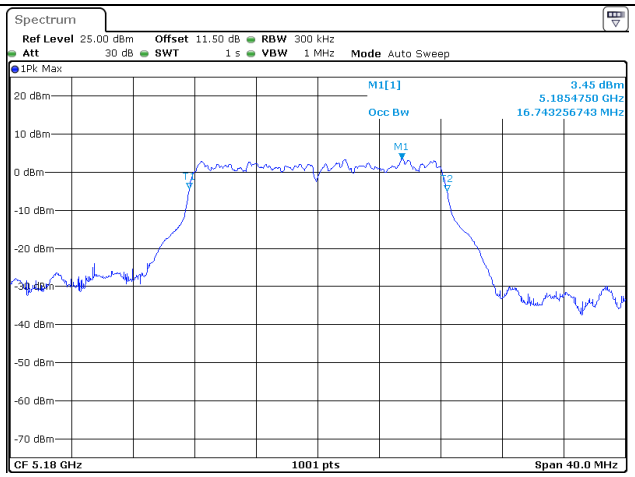
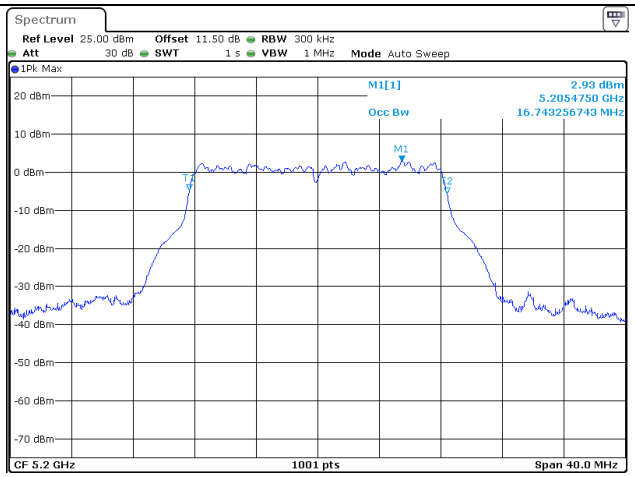
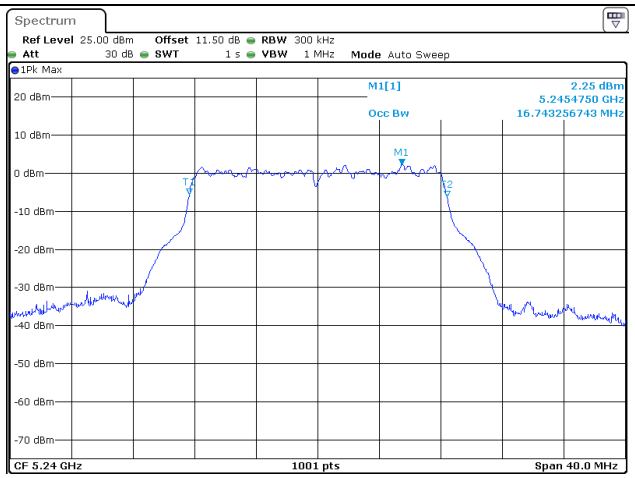
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

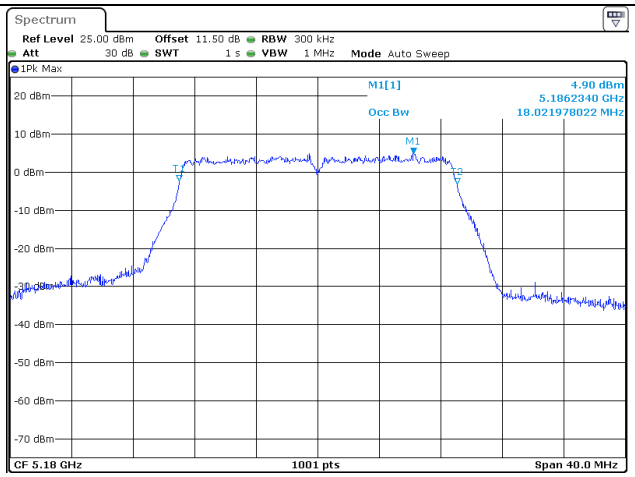
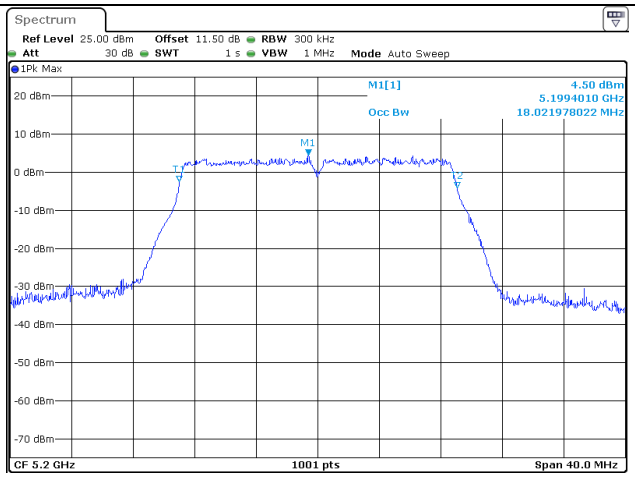
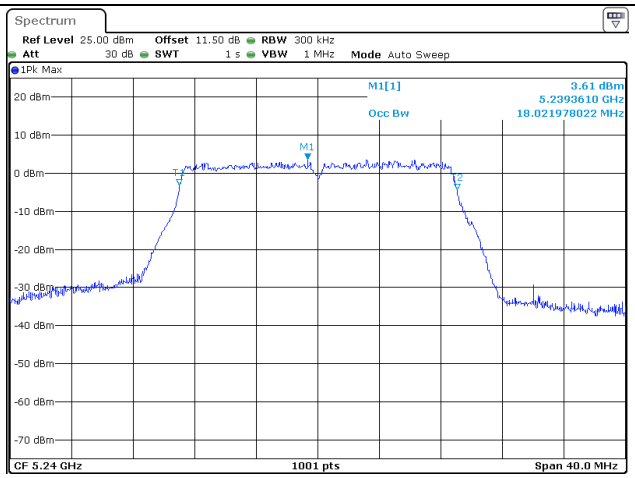
26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

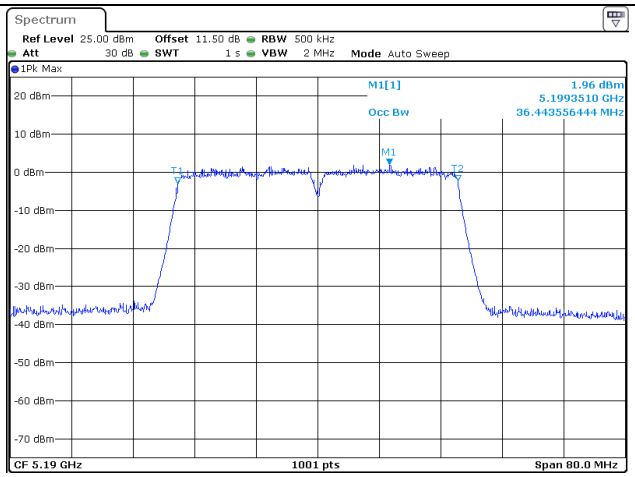
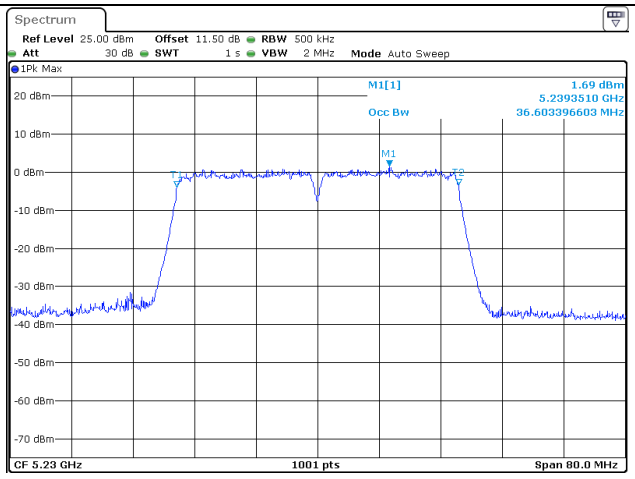
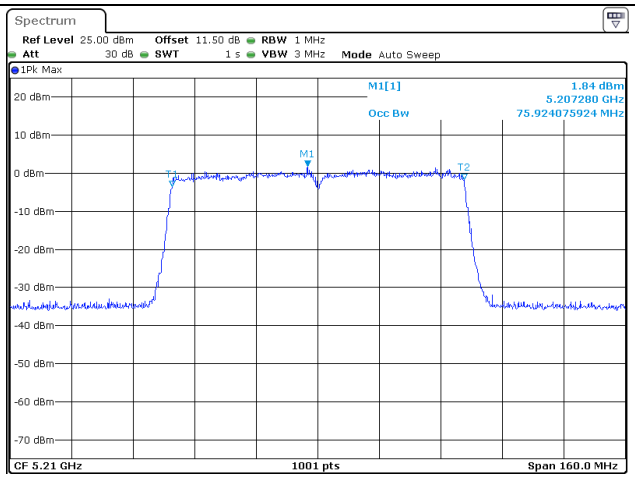
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

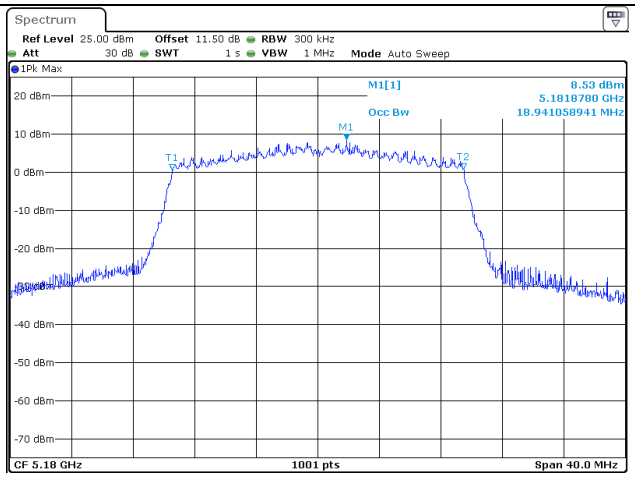
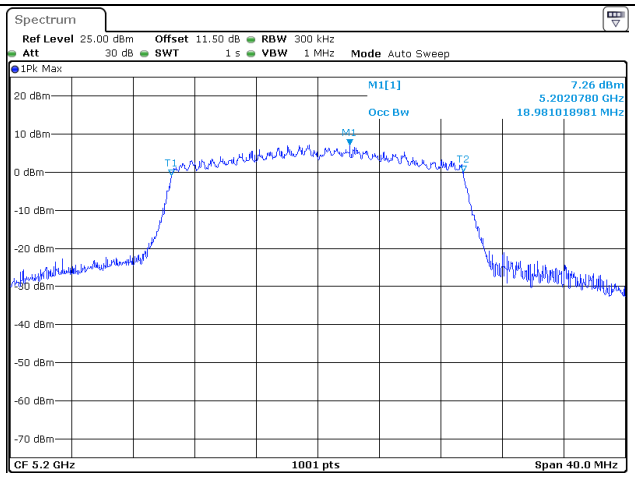
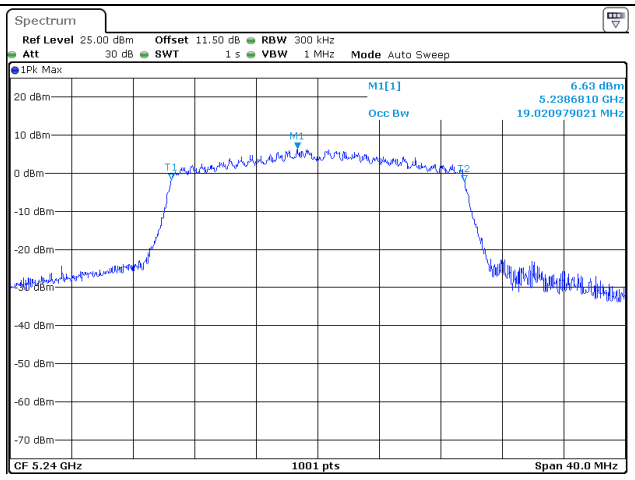
26dB Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

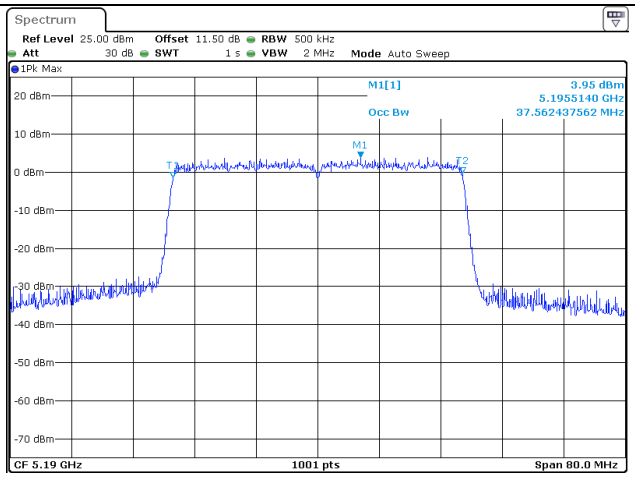
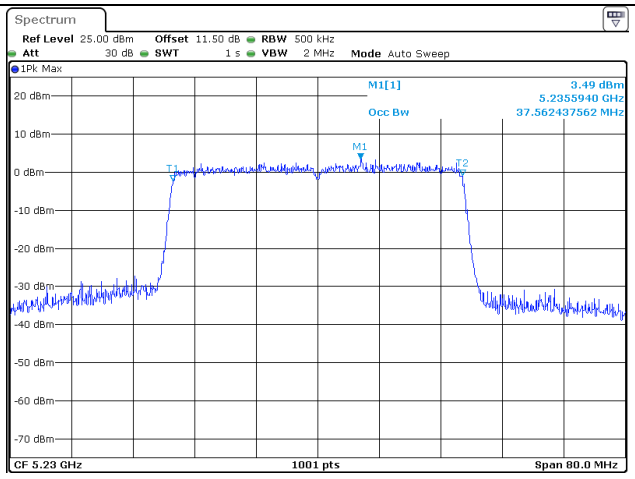
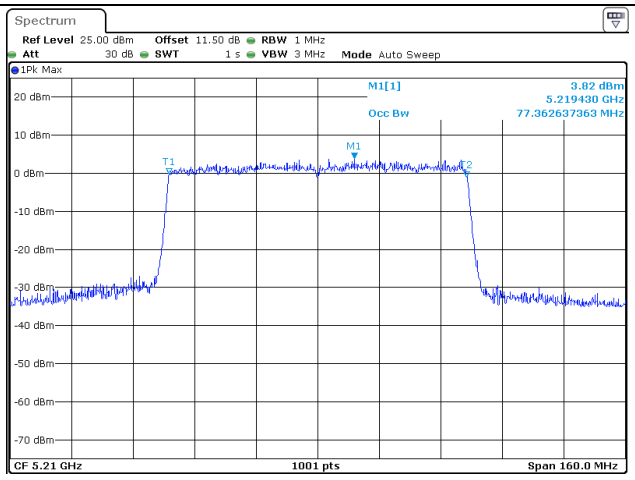
26dB Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

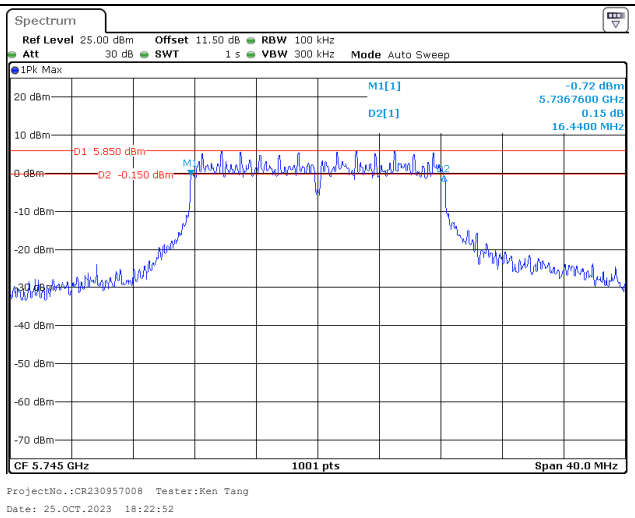
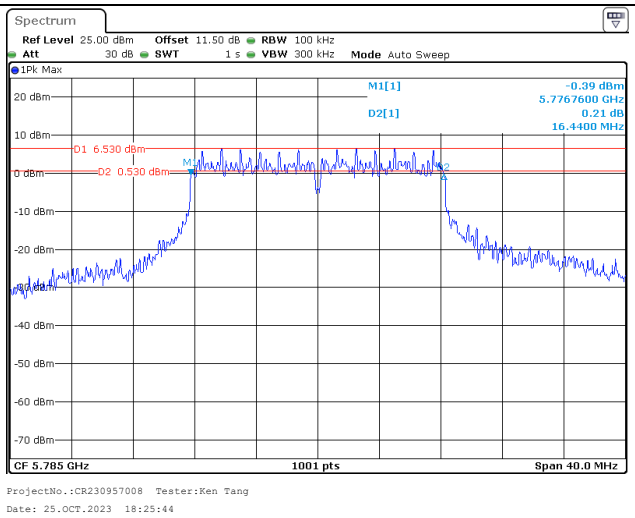
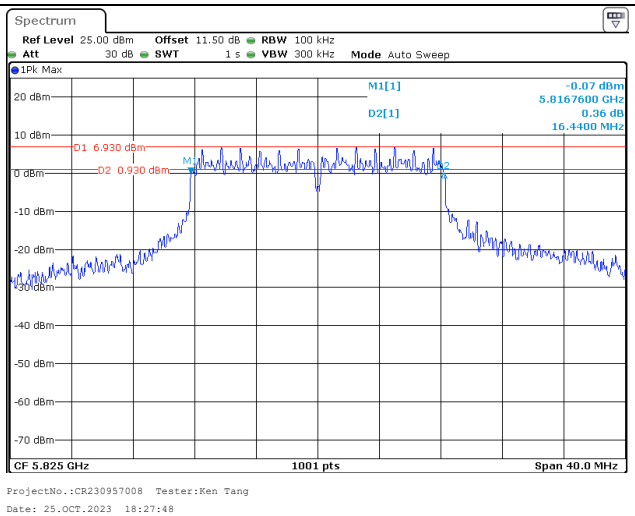
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

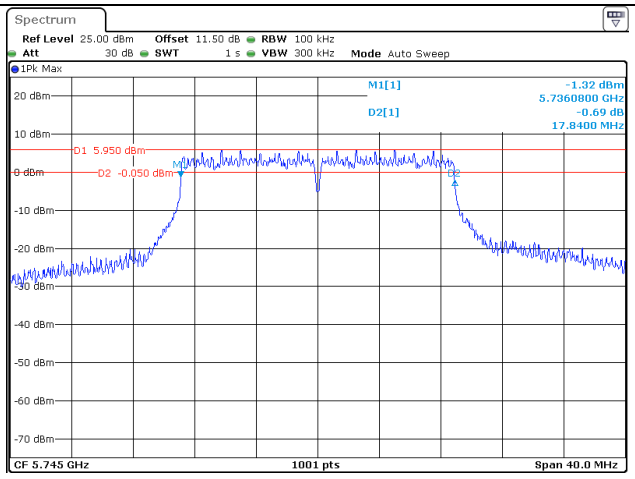
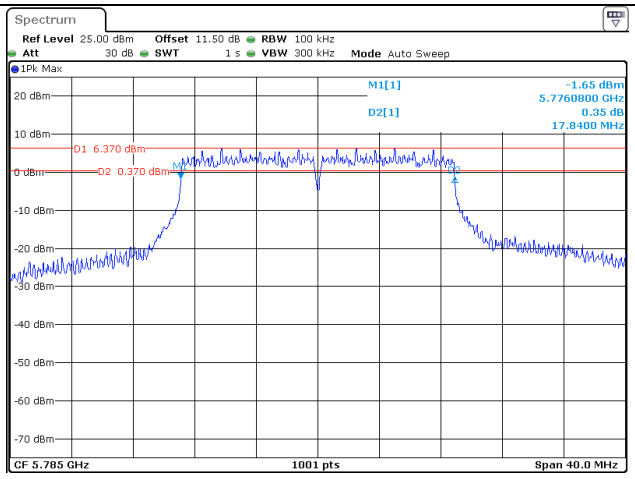
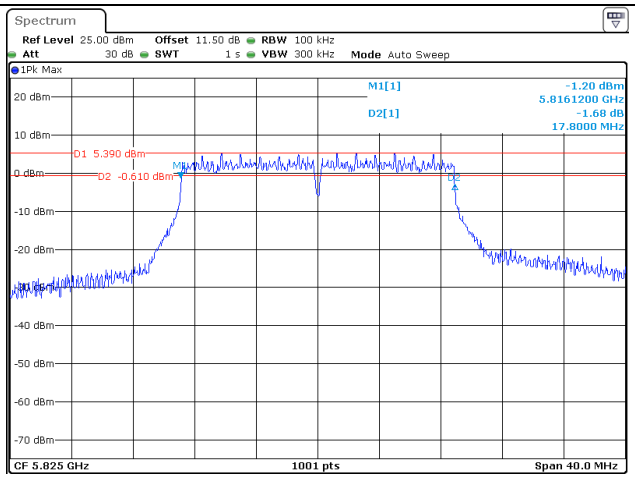
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

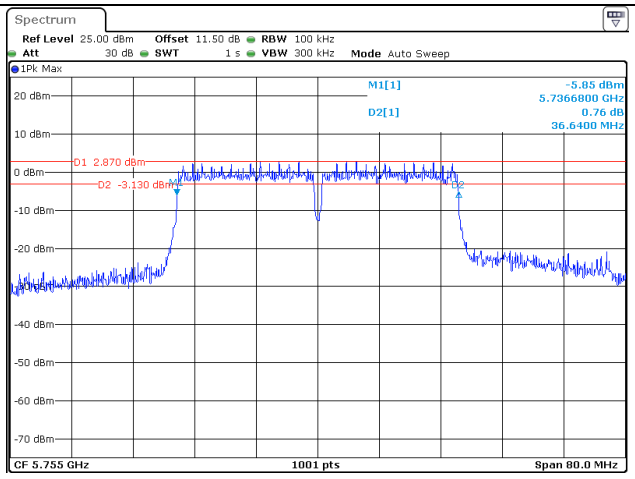
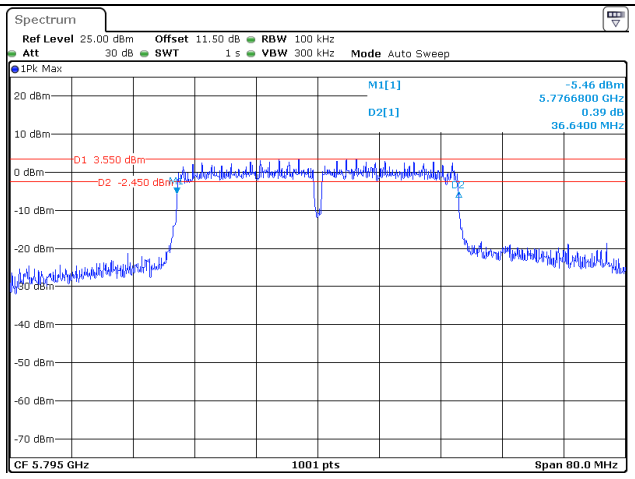
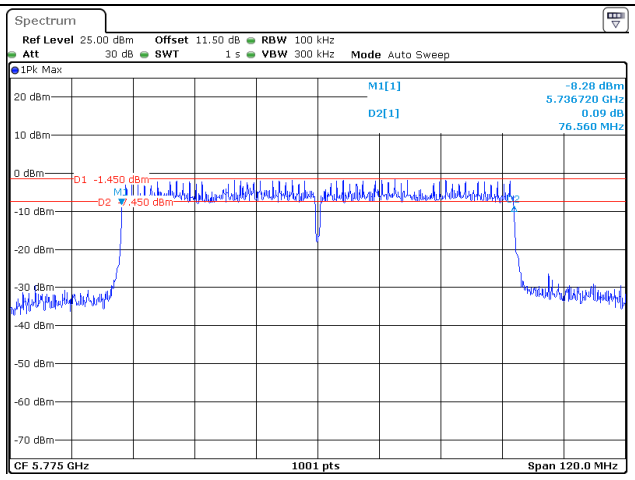
99% Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

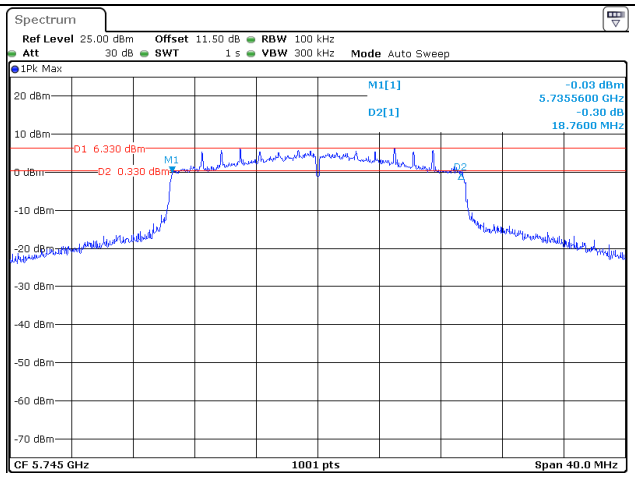
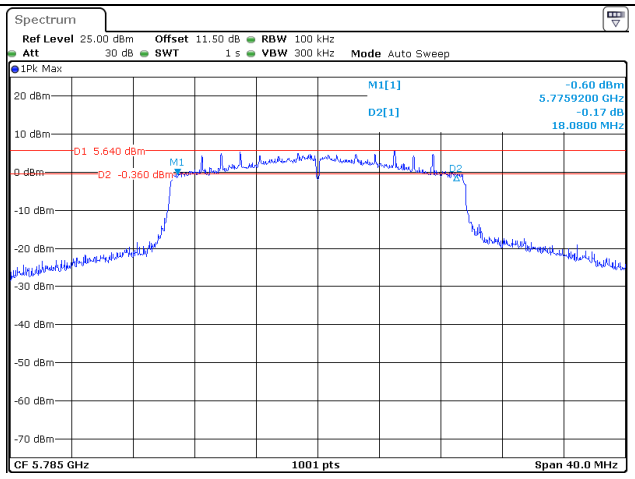
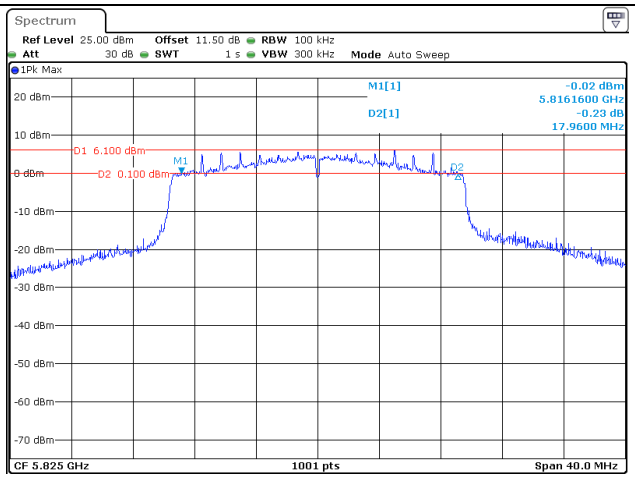
99% Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

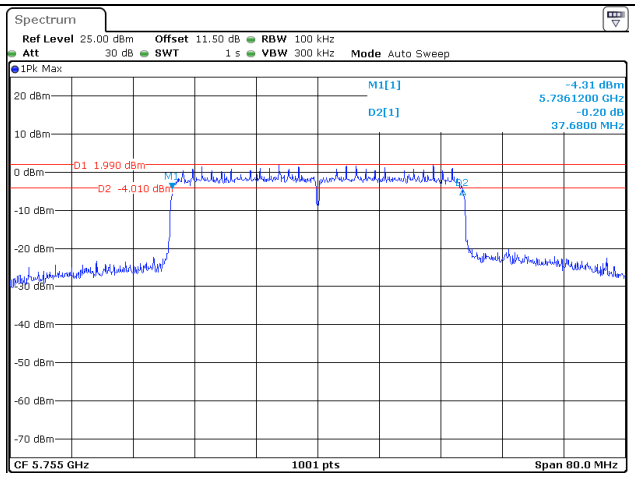
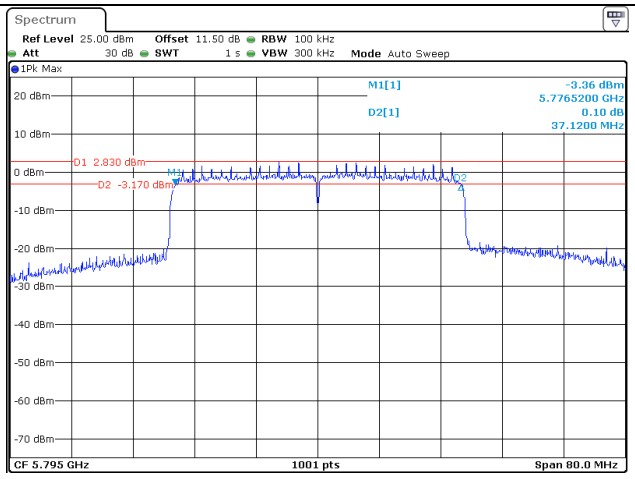
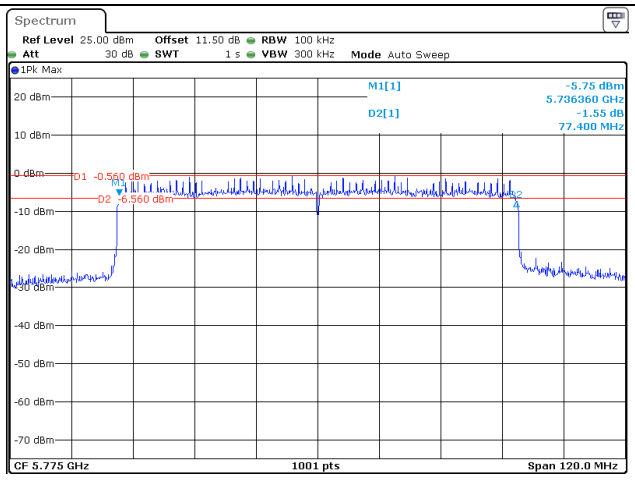
5725-5850MHz:

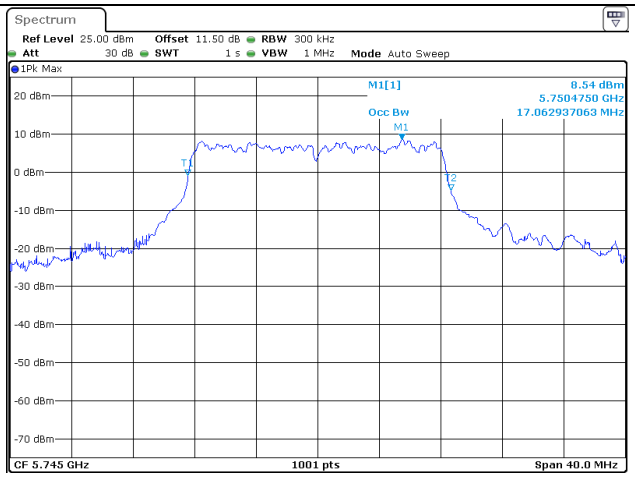
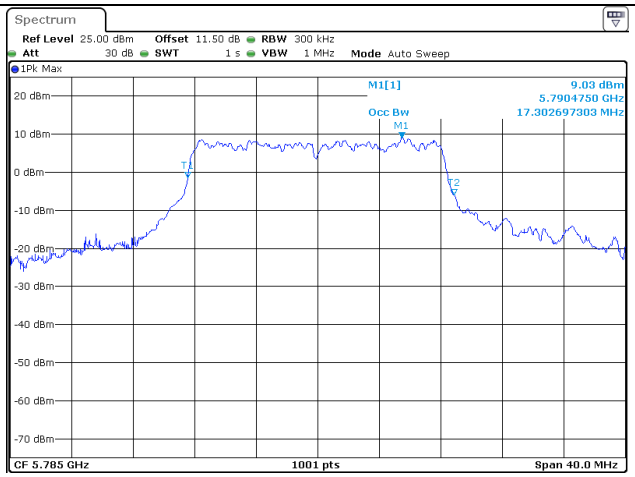
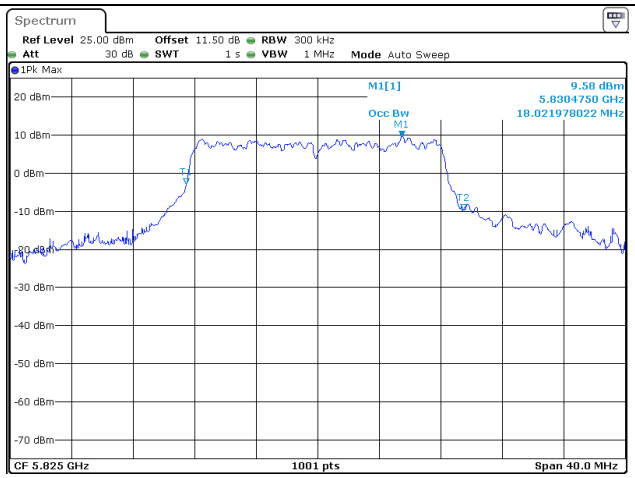
6dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

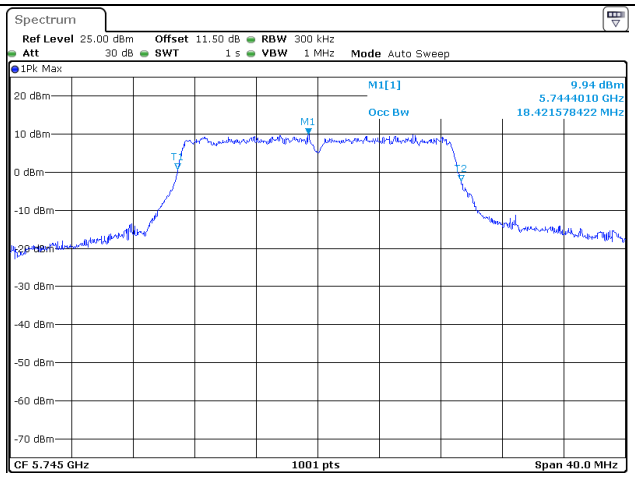
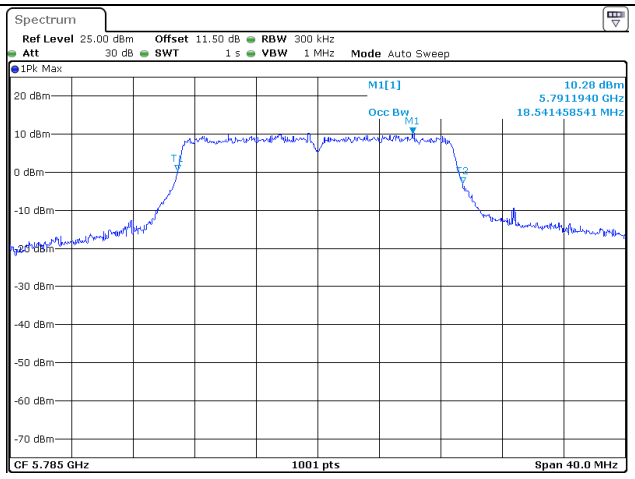
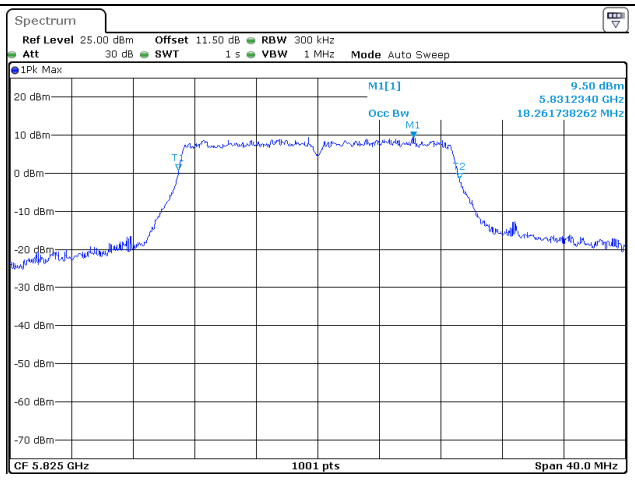
6dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

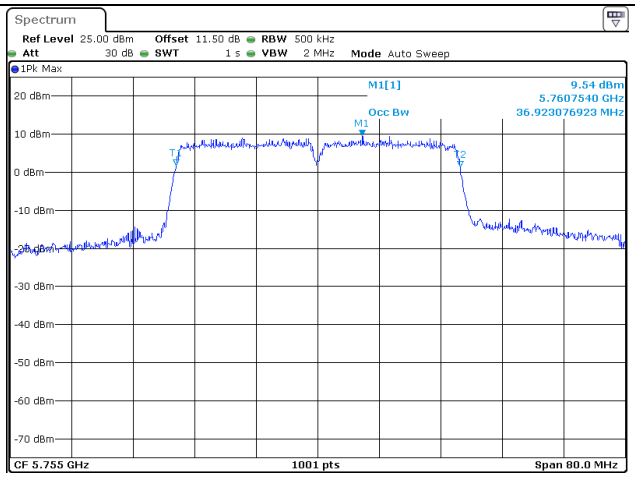
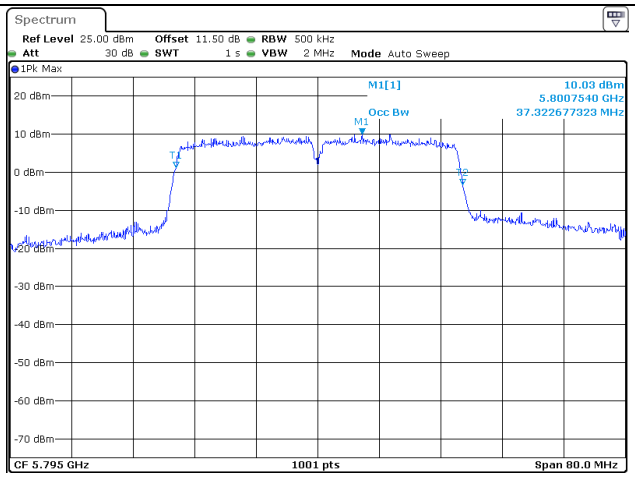
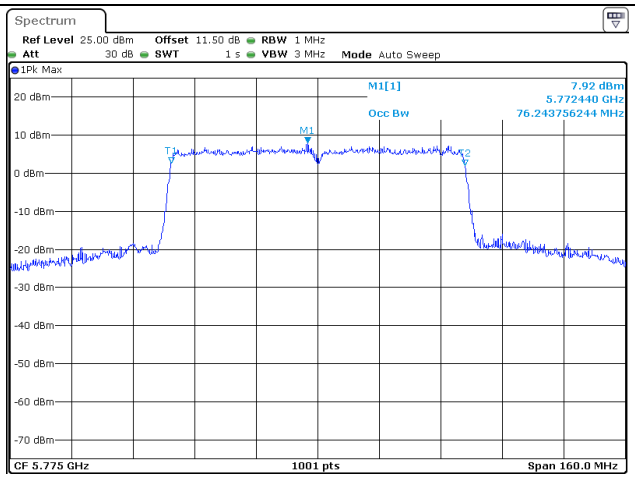
6dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

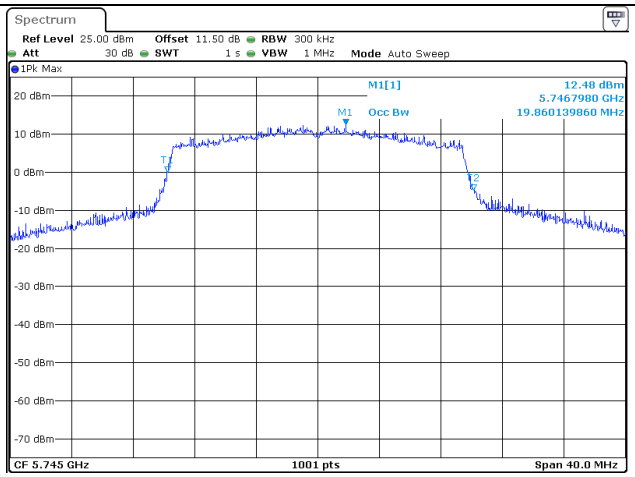
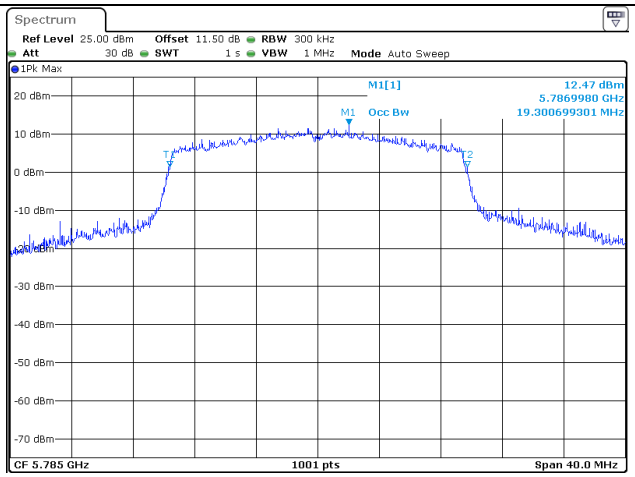
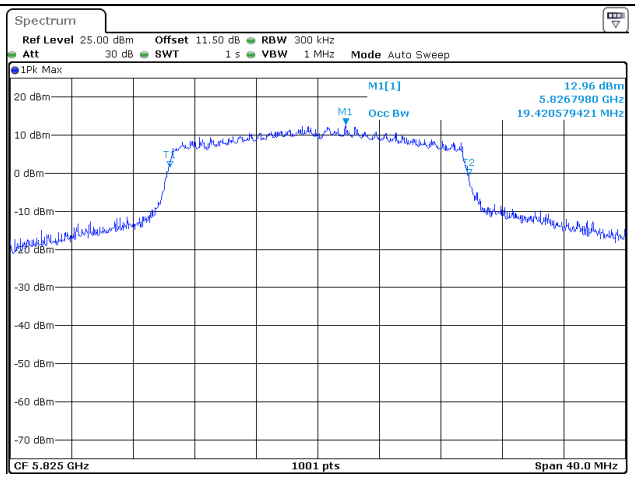
6dB Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

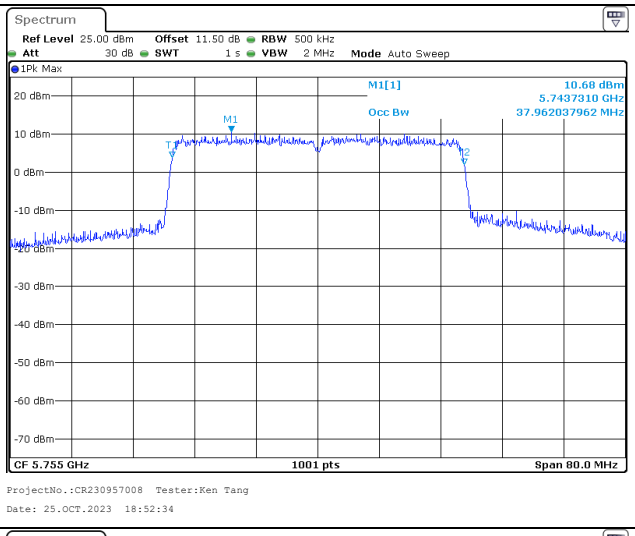
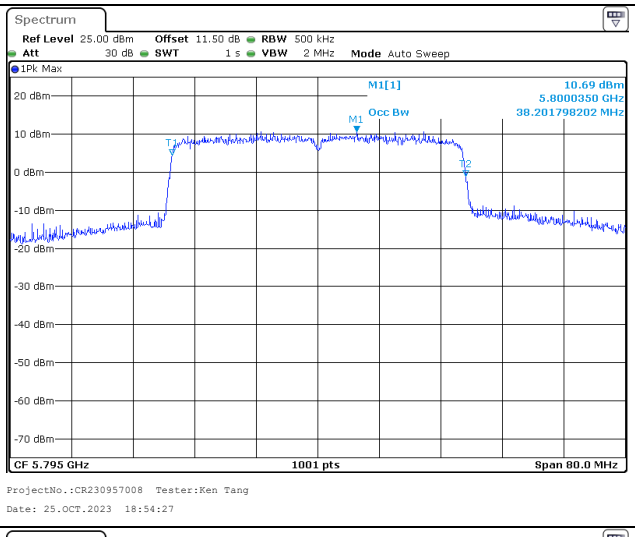
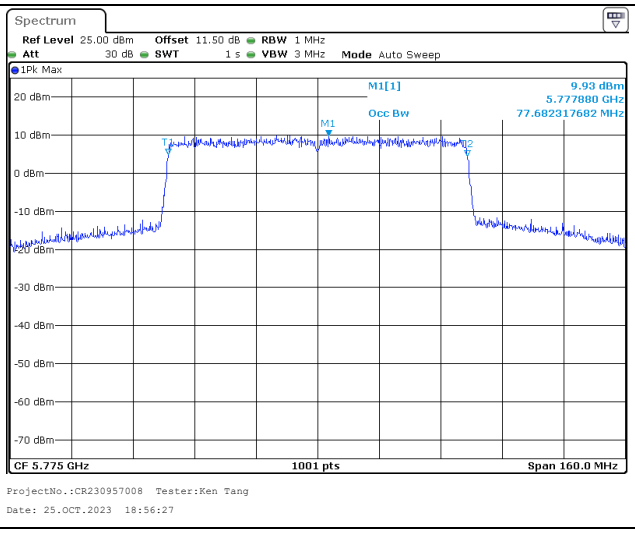
6dB Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

99% Emission Bandwidth	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

99% Emission Bandwidth	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

4.4 Maximum Conducted Output Power:

Serial Number:	2BS8-1	Test Date:	2023/10/24-2023/10/25
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.9-26.5	Relative Humidity: (%)	60-62	ATM Pressure: (kPa)	101-101.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/8/4	2024/8/3
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	13.47	12.14	15.87	24
	5200	13.12	11.63	15.45	24
	5240	13.02	10.9	15.10	24
802.11ac vht20	5180	13.26	12.11	15.73	24
	5200	13.01	11.68	15.41	24
	5240	12.82	10.87	14.96	24
802.11ac vht40	5190	10.45	9.22	12.89	24
	5230	10.2	9.3	12.78	24
802.11ac vht80	5210	10.22	9.21	12.75	24
802.11ax hew20	5180	12.26	12.05	15.17	24
	5200	11.95	11.36	14.68	24
	5240	11.74	10.64	14.24	24
802.11ax hew40	5190	10.96	9.86	13.46	24
	5230	10.53	9.11	12.89	24
802.11ax hew80	5210	10.04	9.37	12.73	24

Note: The device is a client device.
The duty cycle factor has been calculated into the test data.
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leqslant 4$

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	15.85	15.29	18.59	30
	5785	15.92	15.57	18.76	30
	5825	15.84	16.04	18.95	30
802.11ac vht20	5745	15.63	15.1	18.38	30
	5785	15.73	15.42	18.59	30
	5825	15.65	14.53	18.14	30
802.11ac vht40	5755	14.17	13.82	17.01	30
	5795	14.22	14.22	17.23	30
802.11ac vht80	5775	12.01	11.37	14.71	30
802.11ax hew20	5745	17.6	17.56	20.59	30
	5785	17.68	16.71	20.23	30
	5825	17.69	17.26	20.49	30
802.11ax hew40	5755	16.48	16.28	19.39	30
	5795	16.48	16.78	19.64	30
802.11ax hew80	5775	15.23	15.97	18.63	30

Note: The duty cycle factor has been calculated into the test data.
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leqslant 4$

4.5 Maximum power spectral density:

Serial Number:	2BS8-1	Test Date:	2023/10/24-2023/11/01
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.9-26.5	Relative Humidity: (%)	60-62	ATM Pressure: (kPa)	101-101.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023-04-18	2024-04-17
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Maximum Power Spectral Density (dBm/MHz)	
		Chain 0	Chain 1		Total	Limit
802.11a	5180	0.66	-0.58	1.96	5.05	11
	5200	0.33	-1.19	1.96	4.61	11
	5240	0.09	-2.7	1.96	3.89	11
802.11ac vht20	5180	-0.16	-1.09	2.22	4.63	11
	5200	-0.11	-2.24	2.22	4.18	11
	5240	-0.44	-2.4	2.22	3.92	11
802.11ac vht40	5190	-6.43	-7.54	3.30	-0.64	11
	5230	-6.76	-7.82	3.30	-0.95	11
802.11ac vht80	5210	-10.62	-11.32	4.09	-3.86	11
802.11ax hew20	5180	1.43	1.25	/	4.35	11
	5200	1.63	0.5	/	4.11	11
	5240	1.34	0.8	/	4.09	11
802.11ax hew40	5190	-3.32	-4.87	/	-1.02	11
	5230	-4.09	-5.55	/	-1.75	11
802.11ax hew80	5210	-7.69	-8.21	0.10	-4.83	11

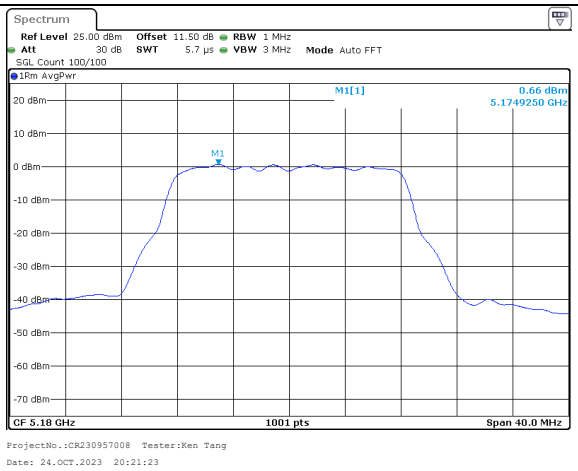
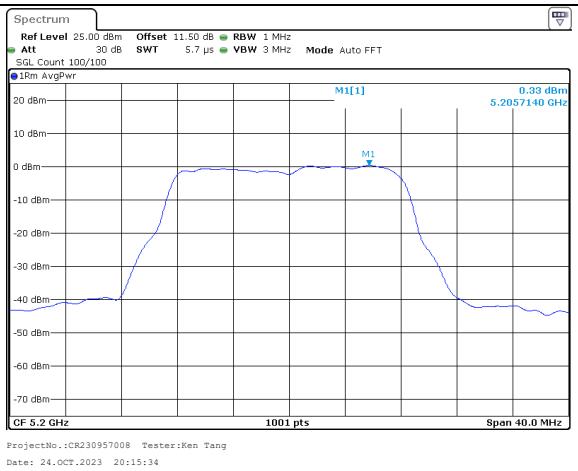
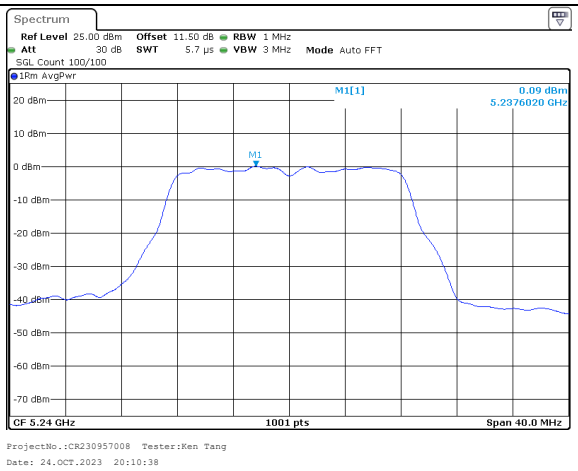
Note: The device is a client device.
For duty cycle>98%, Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.
For duty cycle<98% and constant duty cycle, Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:Array Gain = 10 log(N_{ANT}/N_{SS}) dB
Use the highest gain of the two antenna for calculate, Directional Gain= G_{ANT} + Array Gain=2.58dBi+3dB=5.58dBi

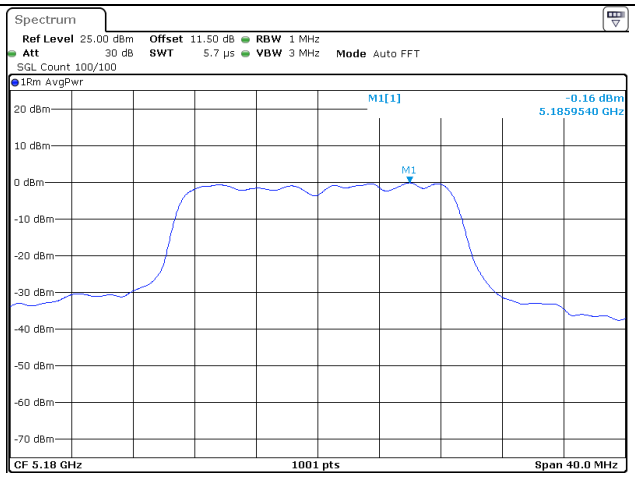
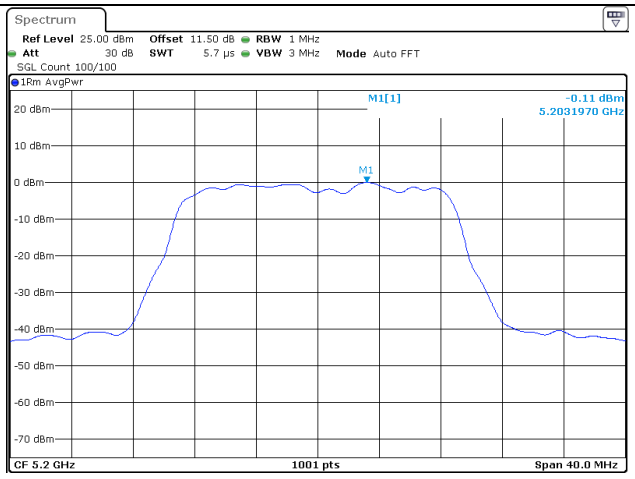
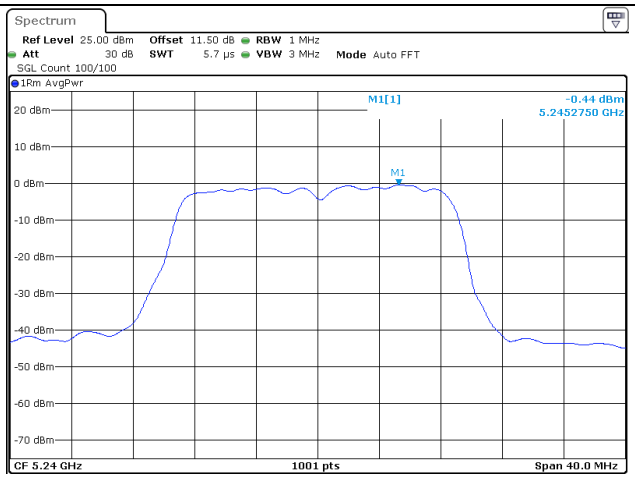
5725-5850 MHz:

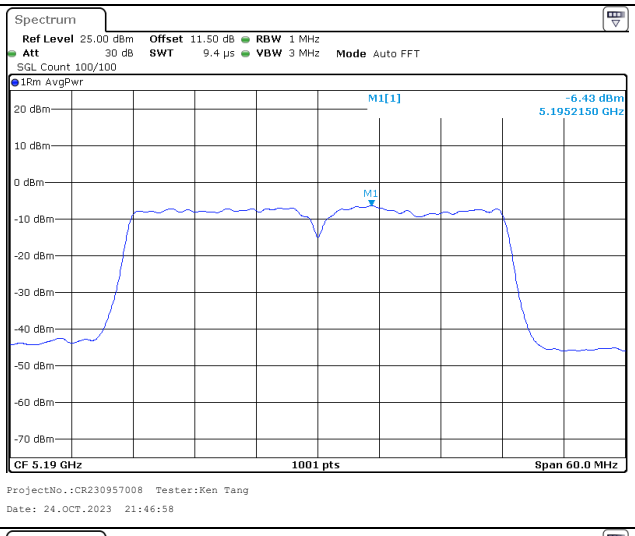
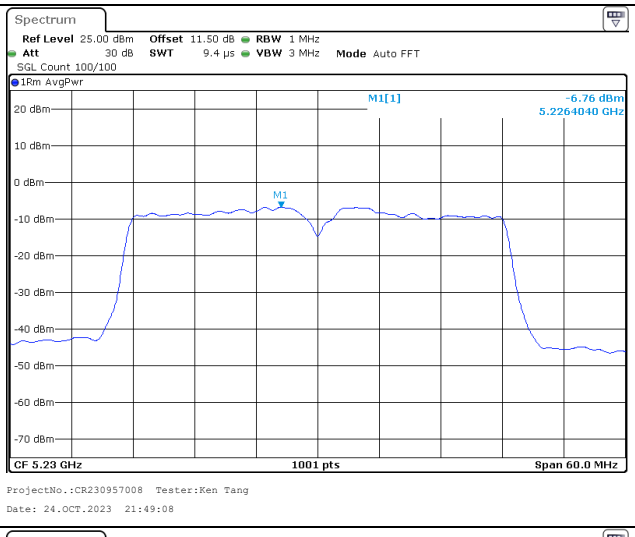
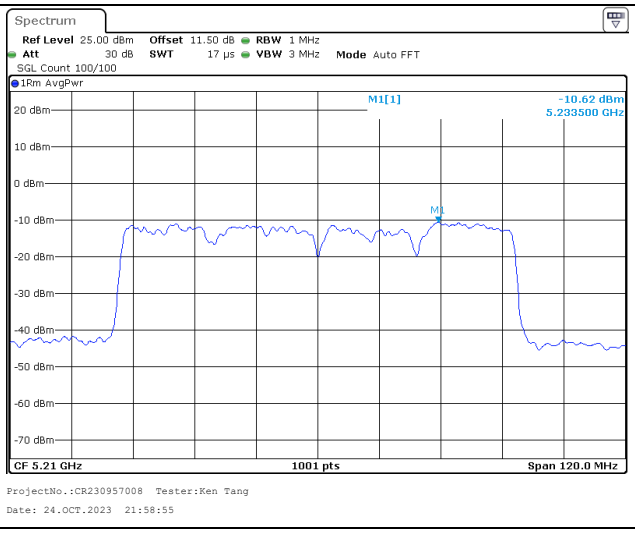
Test Modes	Test Frequency (MHz)	Reading (dBm/500kHz)		Duty cycle factor (dB)	Maximum Power Spectral Density (dBm/500kHz)	
		Chain 0	Chain 1		Total	Limit
802.11a	5745	1.22	1.58	1.96	6.37	30
	5785	1.81	2.01	1.96	6.88	30
	5825	2.44	2.53	1.96	7.46	30
802.11ac vht20	5180	1.36	1.73	2.22	6.78	30
	5785	2.23	1.47	2.22	7.10	30
	5240	1.63	0.73	2.22	6.43	30
802.11ac vht40	5190	-2.73	-2.47	3.30	3.71	30
	5230	-2.32	-2.48	3.30	3.91	30
802.11ac vht80	5210	-5.82	-7.75	4.09	0.42	30
802.11ax hew20	5180	4.15	3.85	/	7.01	30
	5200	4.38	3.74	/	7.08	30
	5240	4.73	4.54	/	7.65	30
802.11ax hew40	5190	-1.16	-1.23	/	1.82	30
	5230	-0.4	-0.38	/	2.62	30
802.11ax hew80	5210	-6.21	-4.18	0.10	-1.97	30

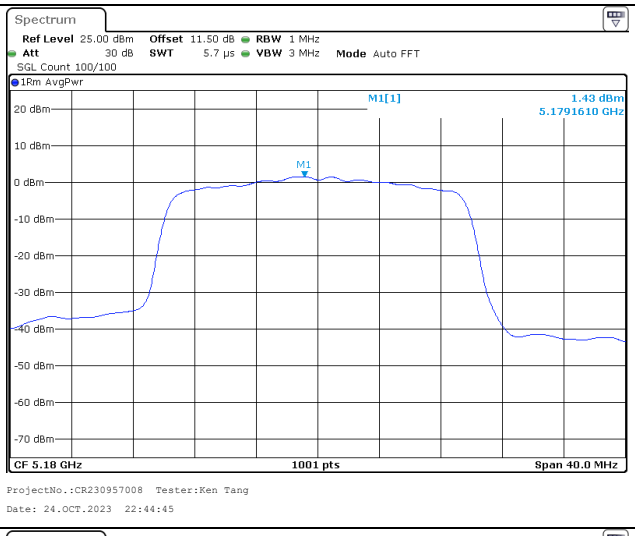
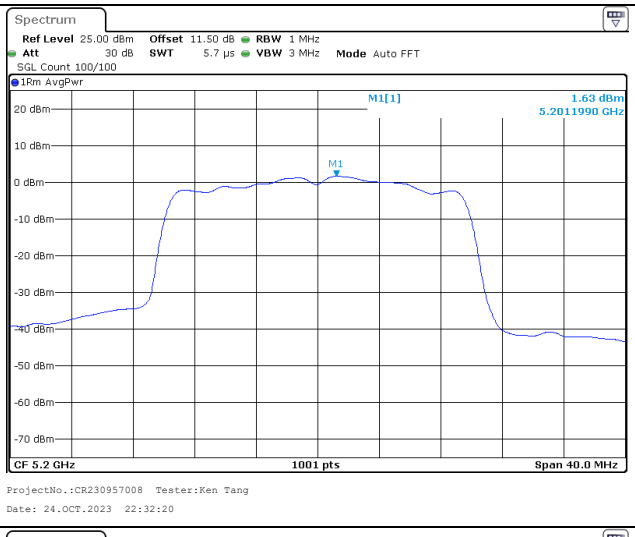
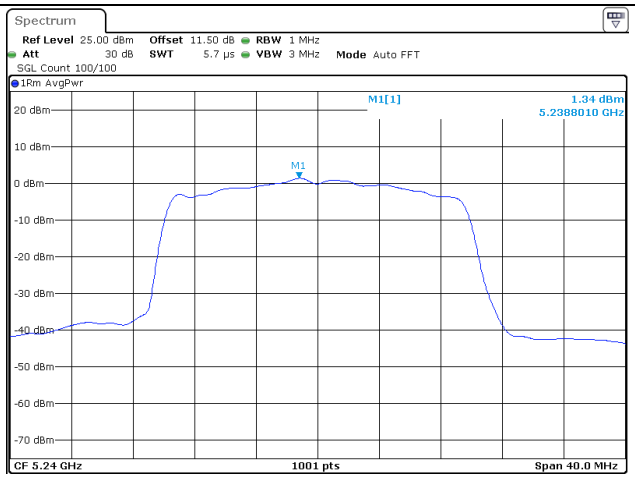
Note:
For duty cycle>98%, Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.
For duty cycle<98% and constant duty cycle, Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:Array Gain = 10 log(N_{ANT}/N_{SS}) dB
Use the highest gain of the two antenna for calculate, Directional Gain= G_{ANT} + Array Gain=2.58dBi+3dB=5.58dBi

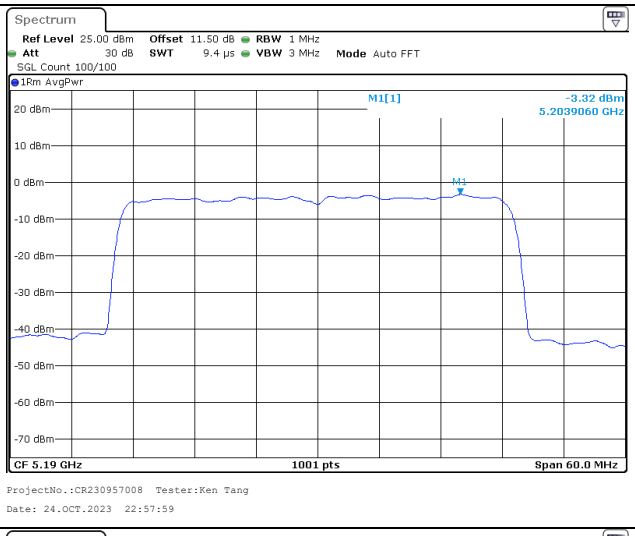
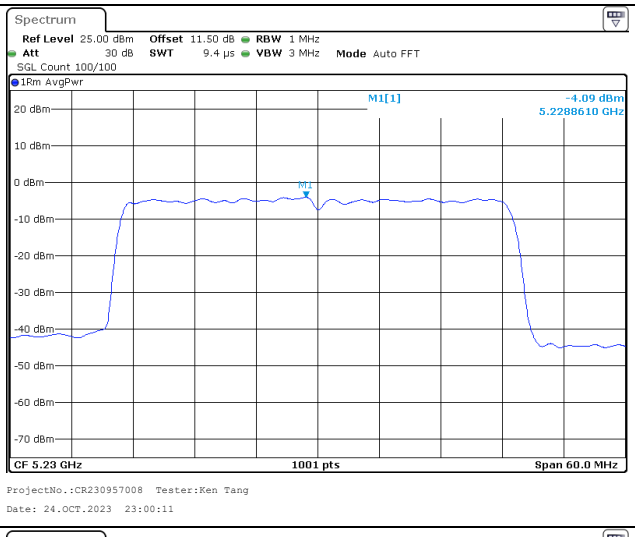
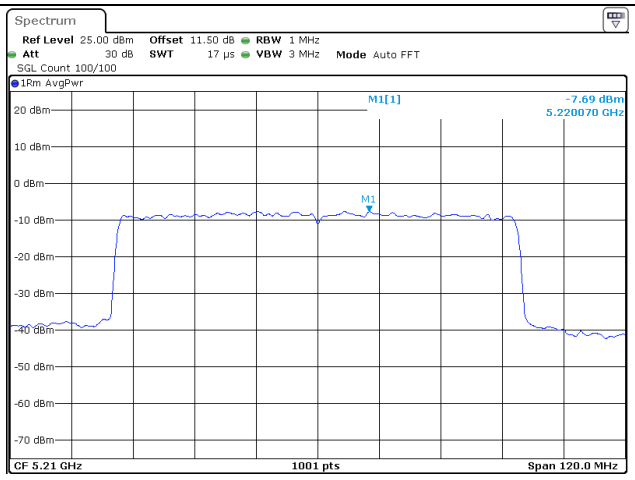
5150-5250MHz (ANT1):

Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

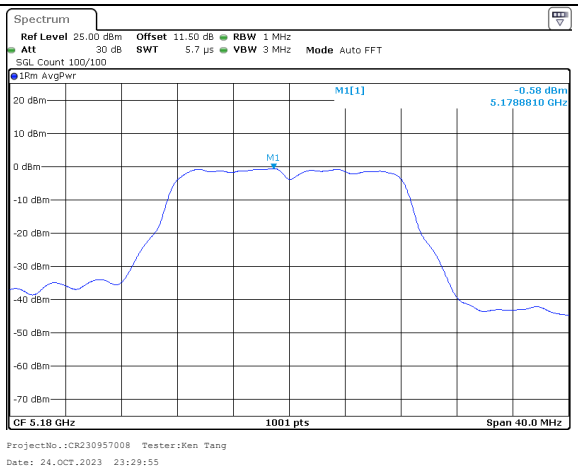
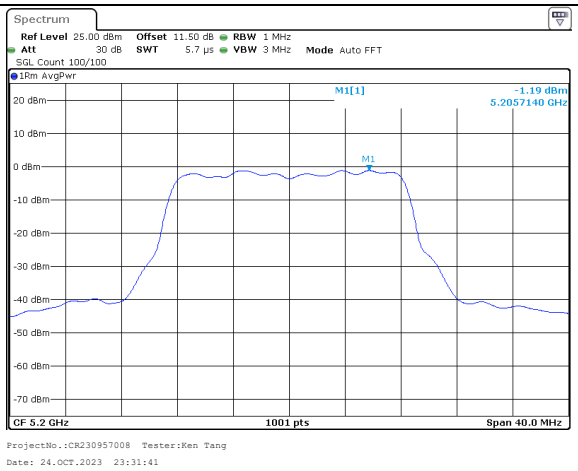
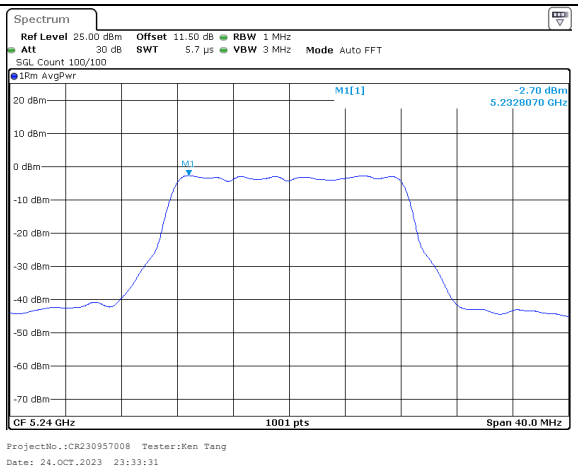
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

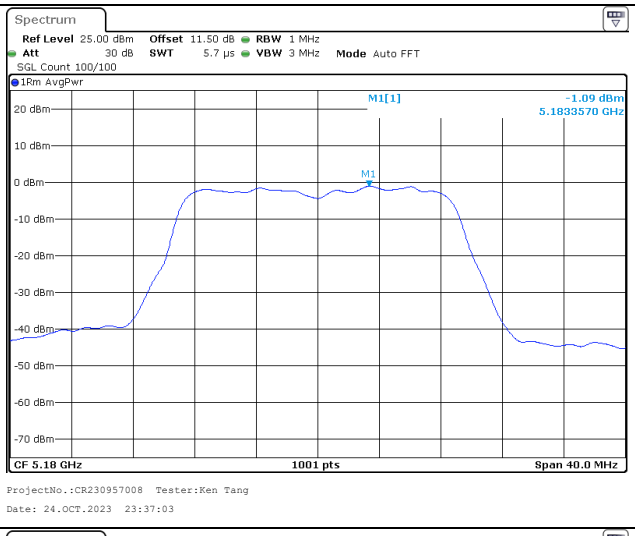
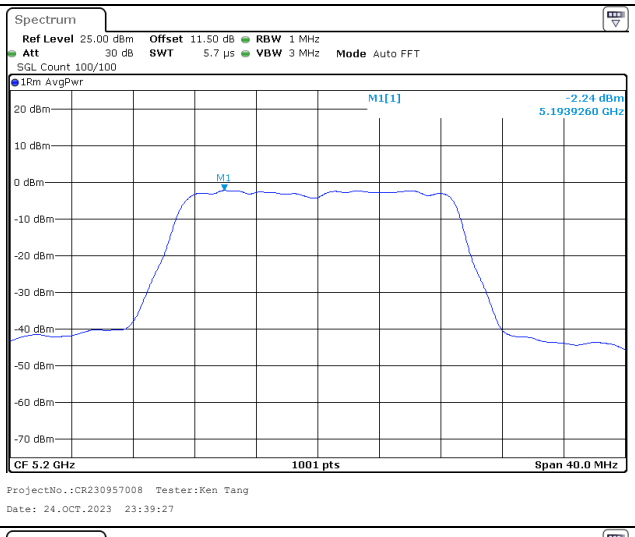
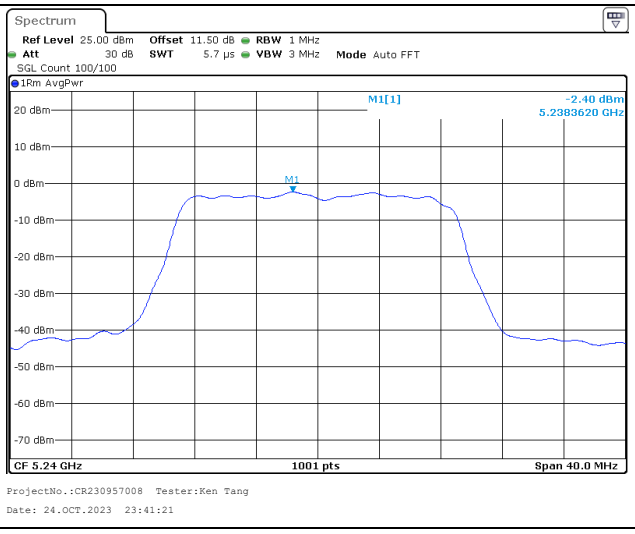
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

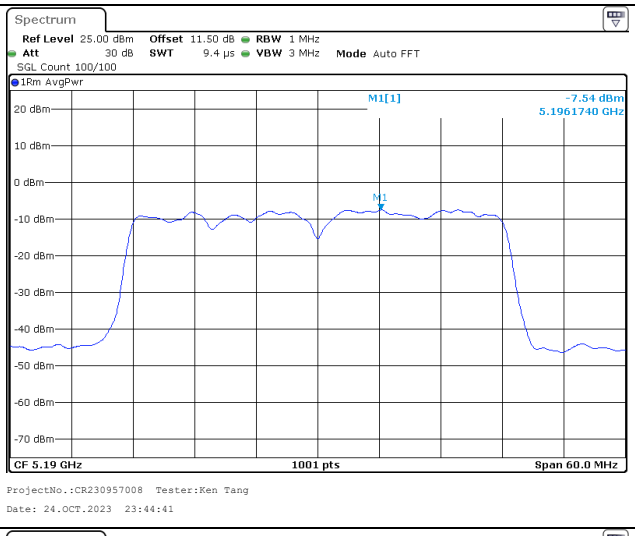
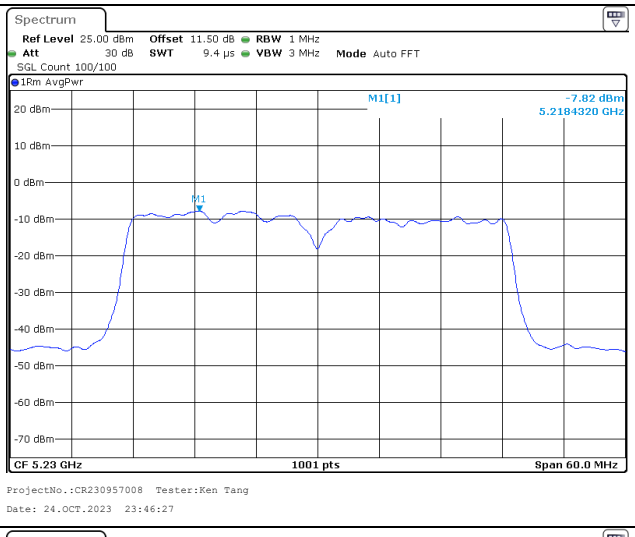
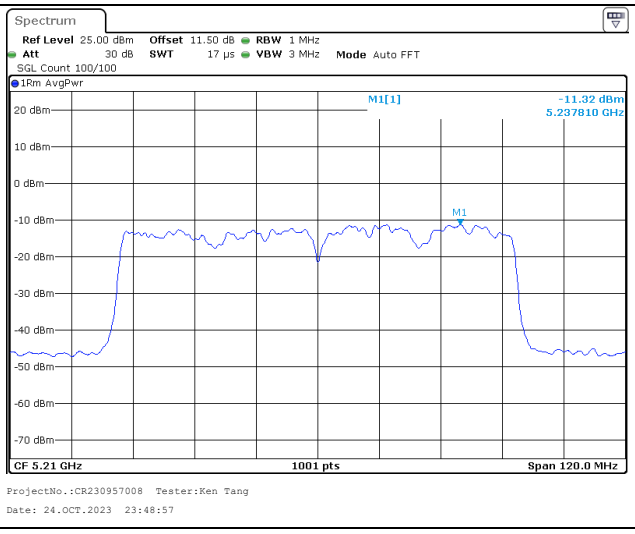
Maximum power spectral density	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

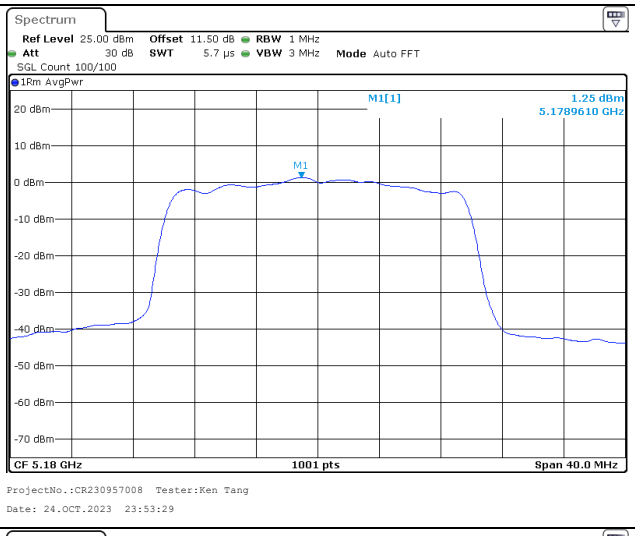
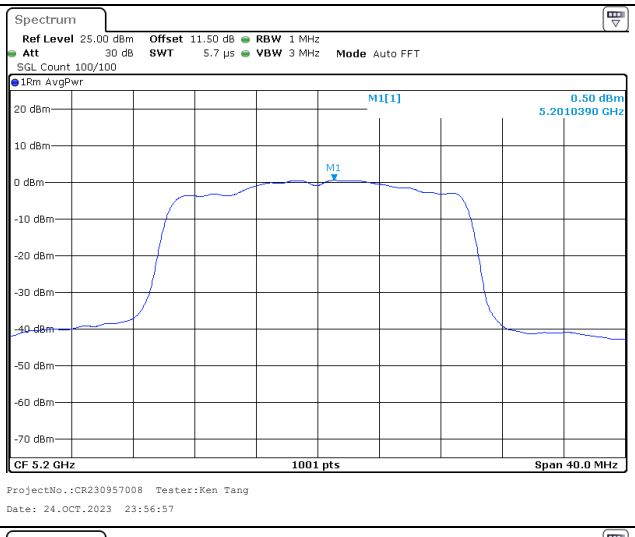
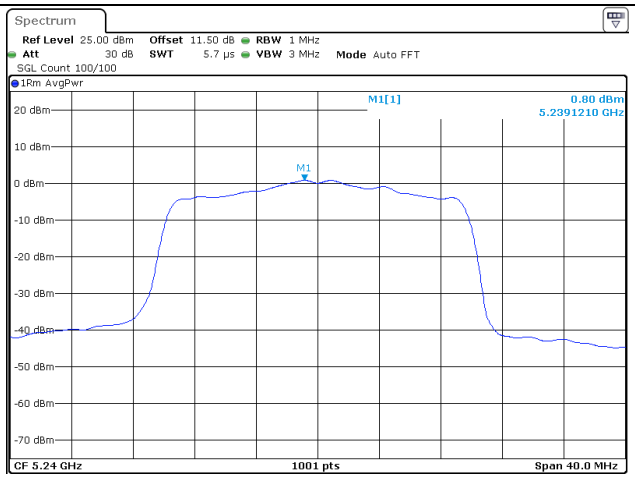
Maximum power spectral density	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

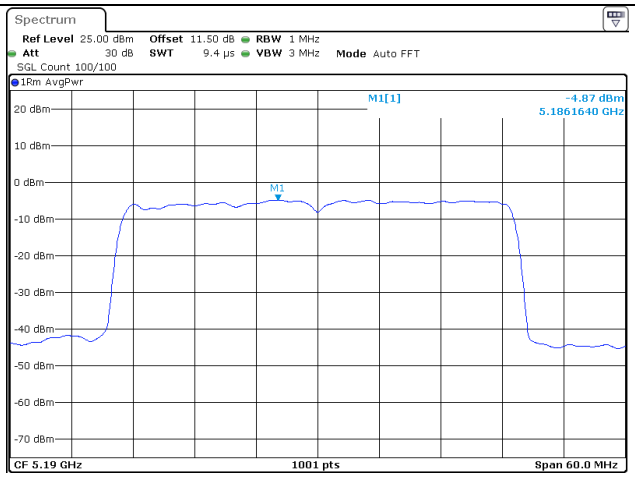
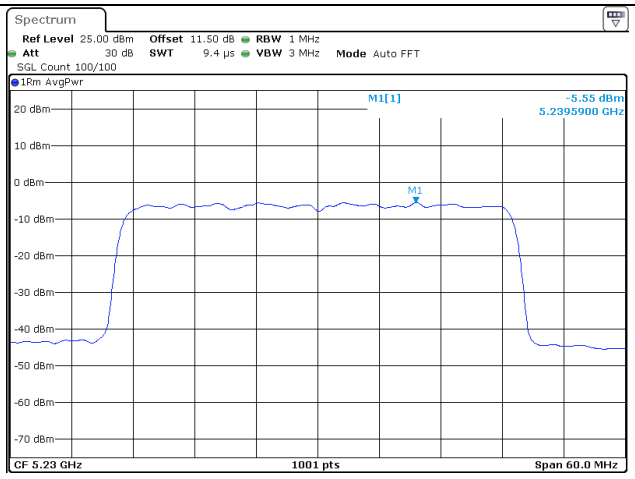
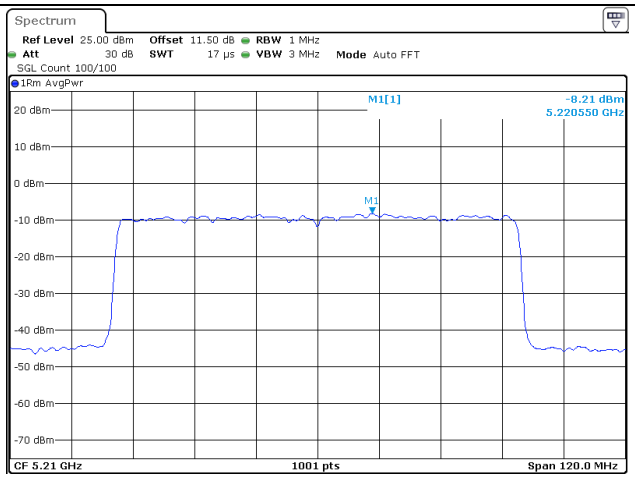
5150-5250MHz (ANT2):

Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

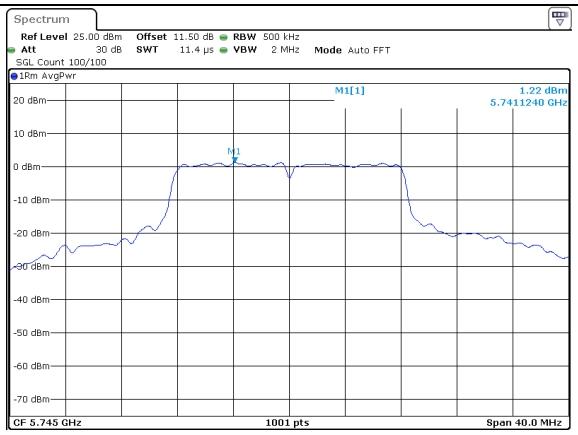
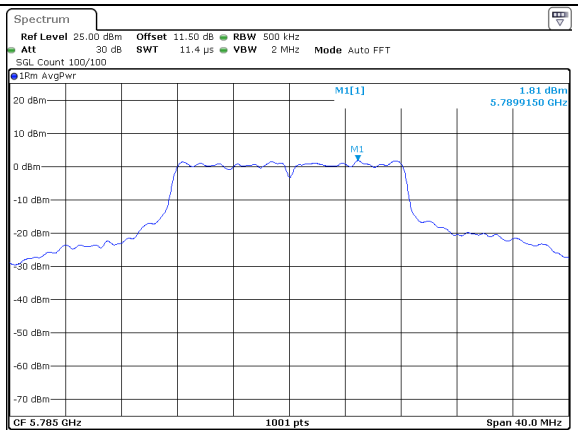
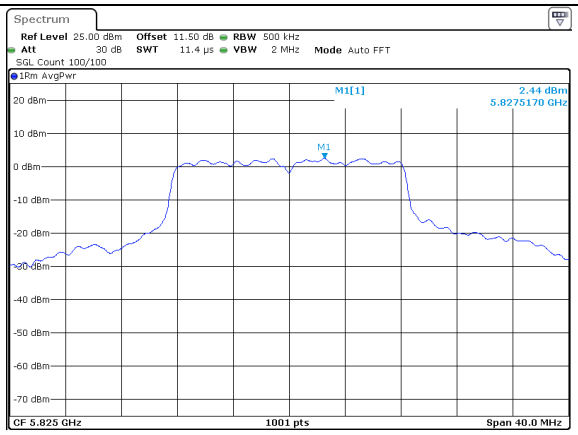
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

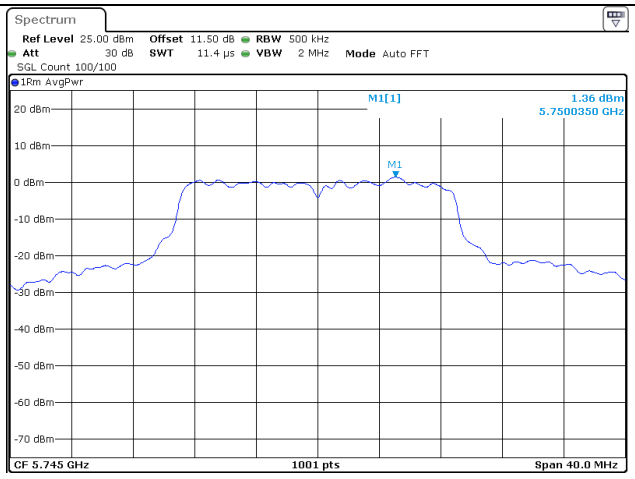
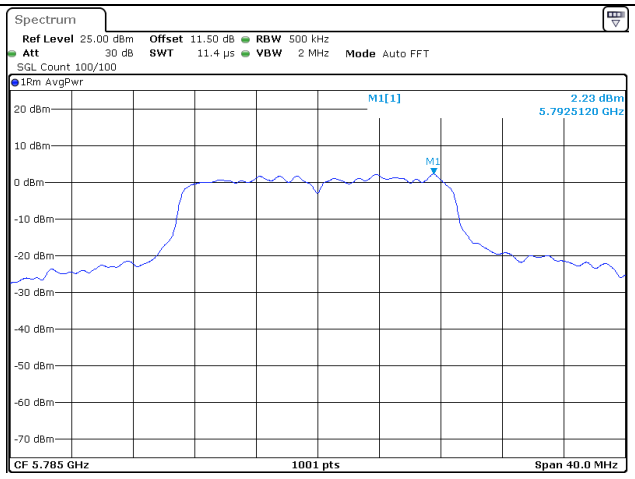
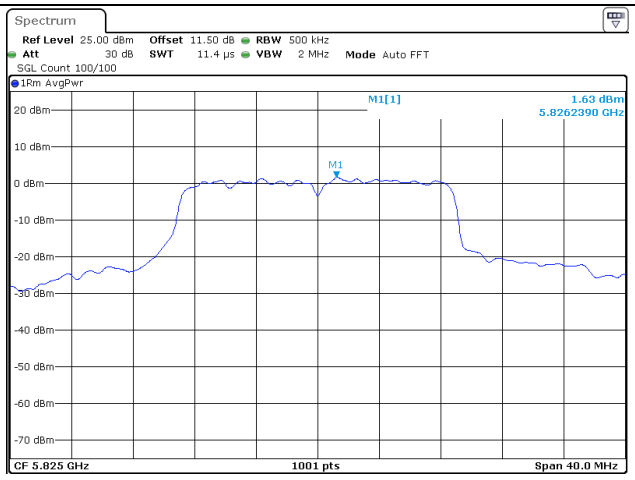
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

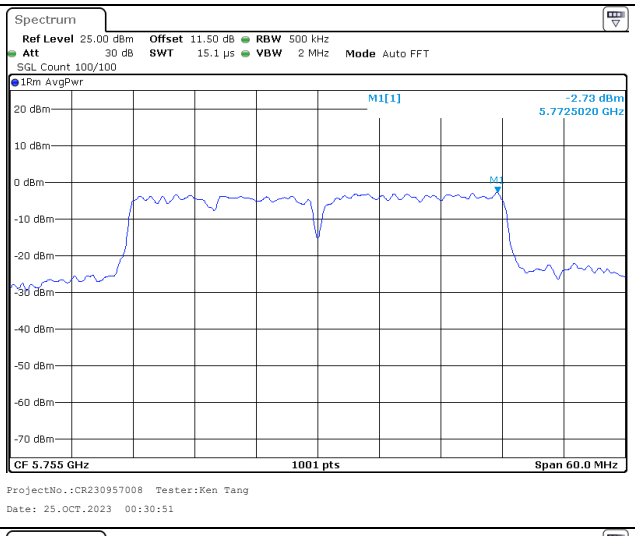
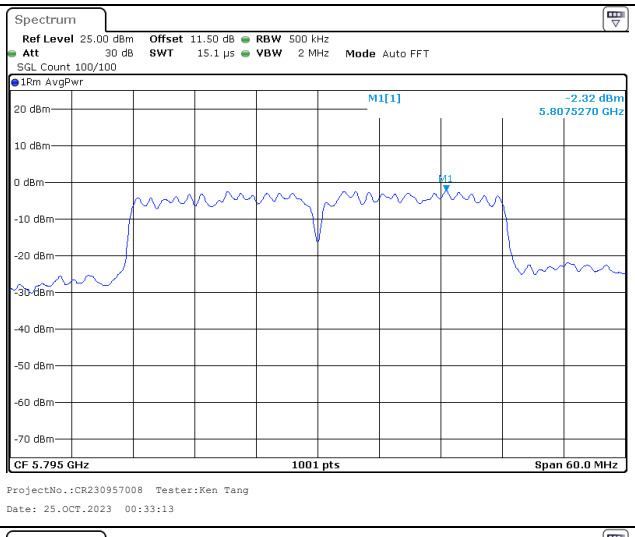
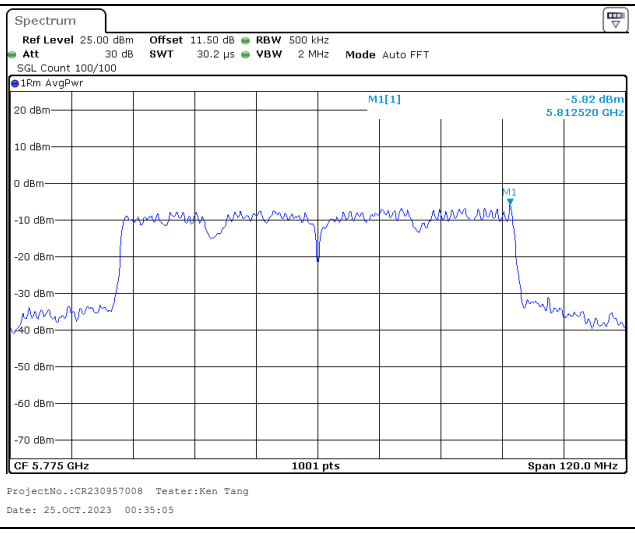
Maximum power spectral density	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

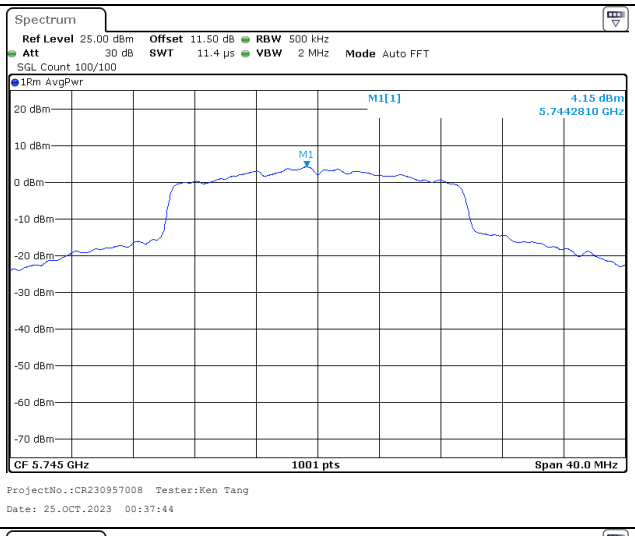
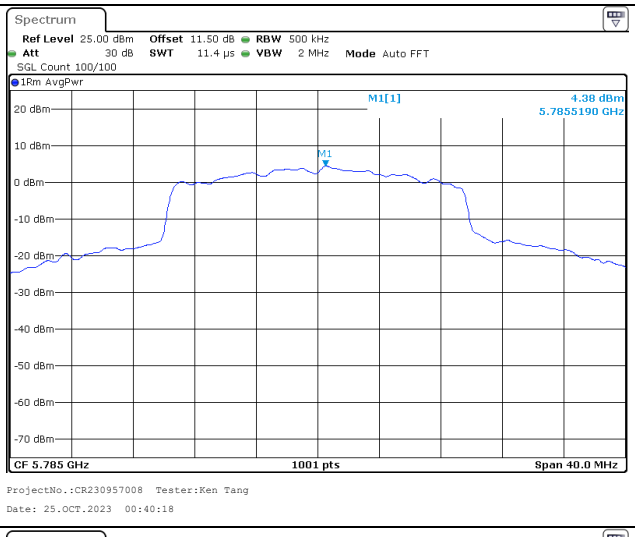
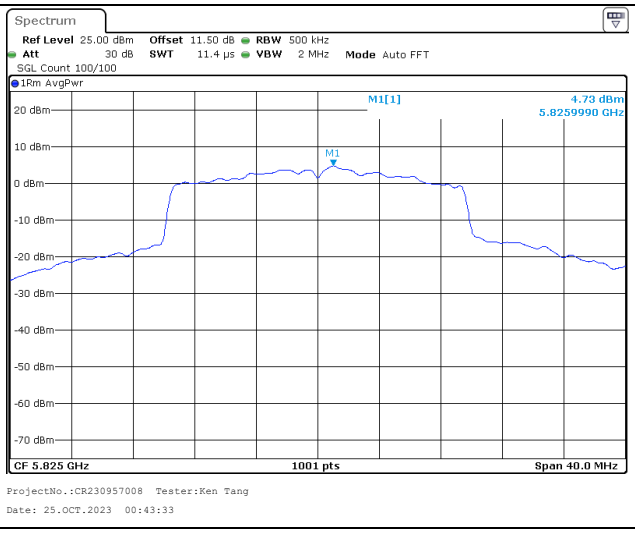
Maximum power spectral density	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

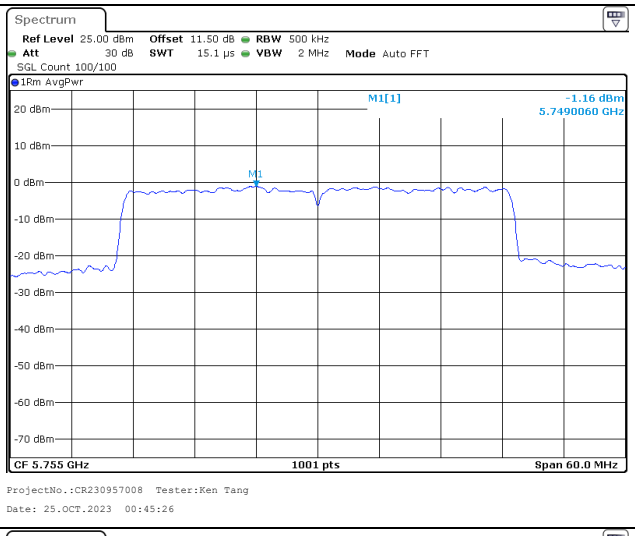
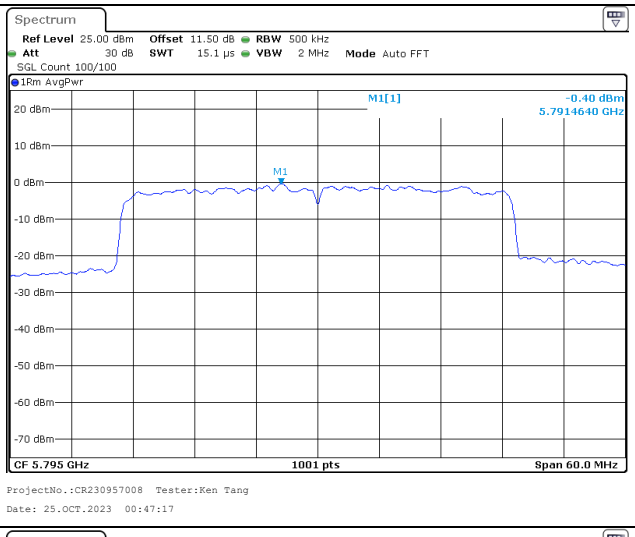
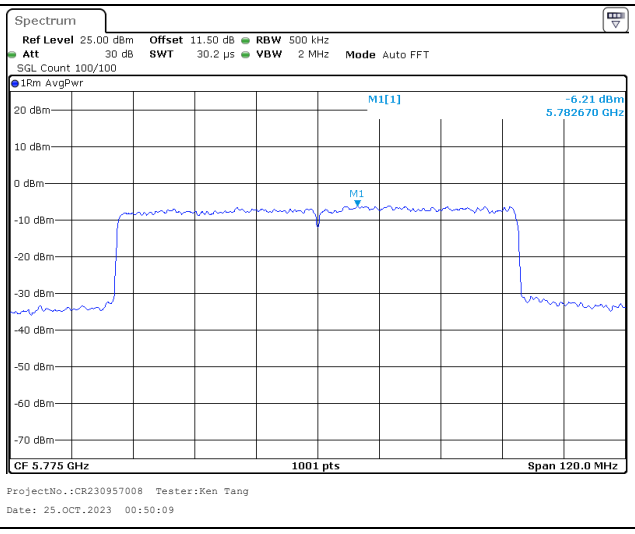
5725-5850MHz (ANT1):

Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

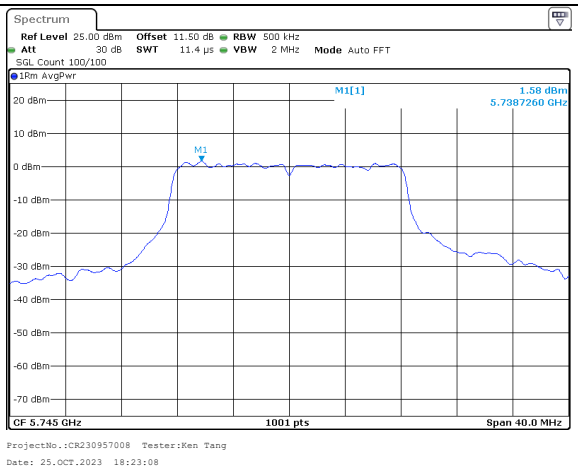
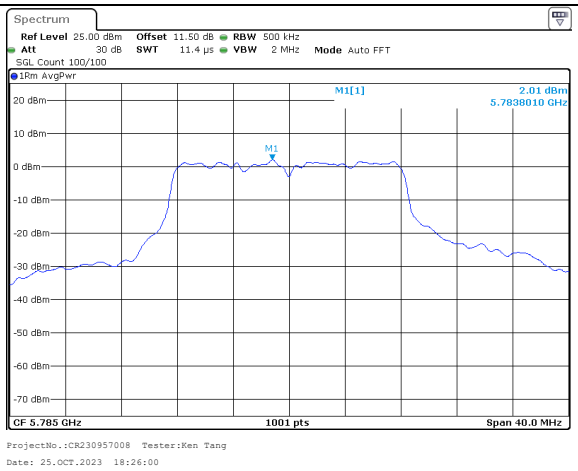
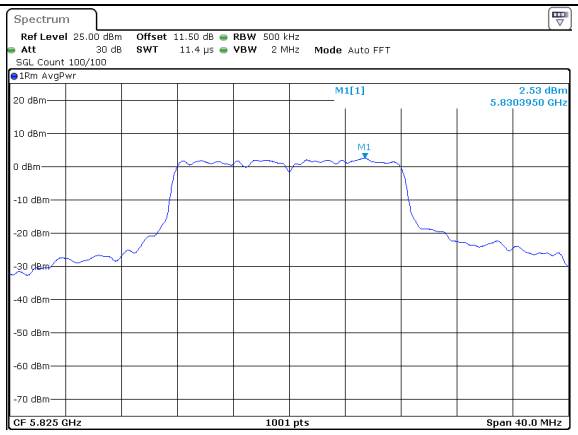
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

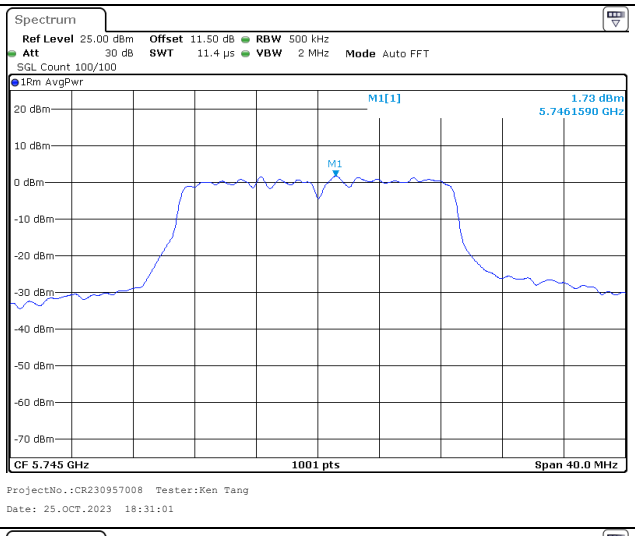
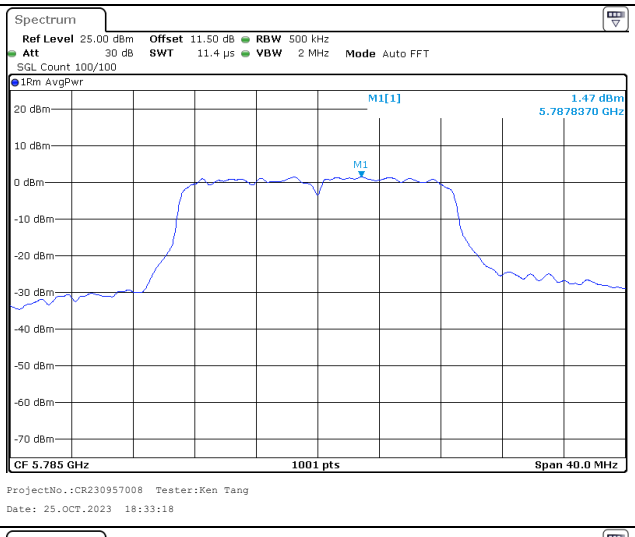
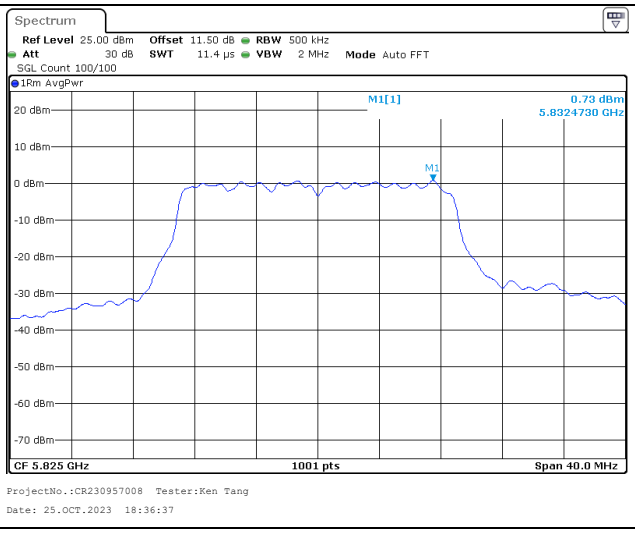
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

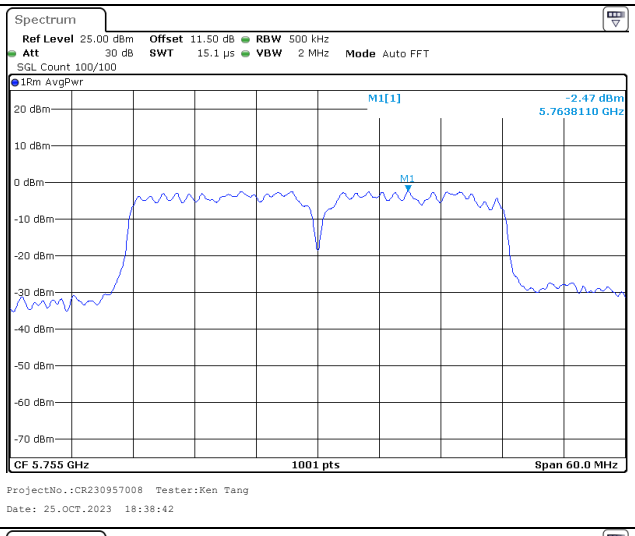
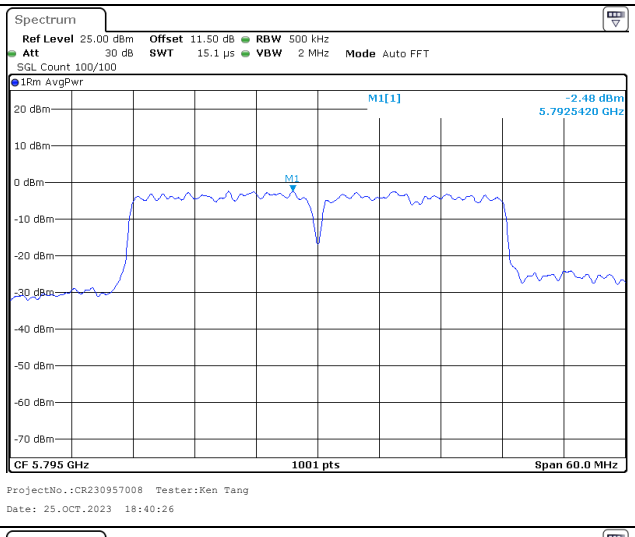
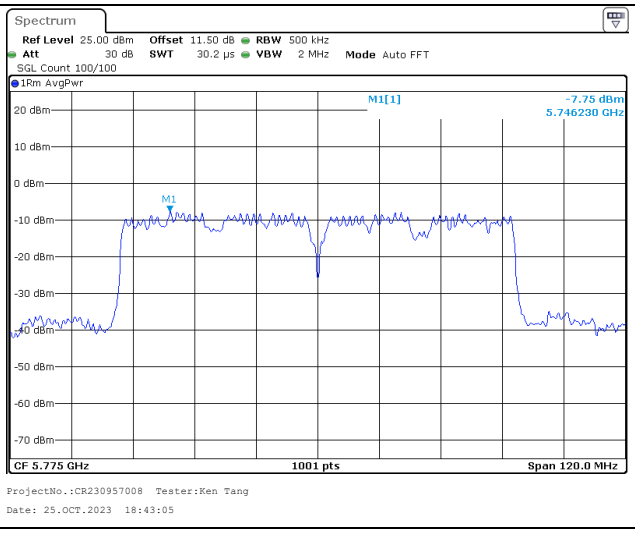
Maximum power spectral density	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

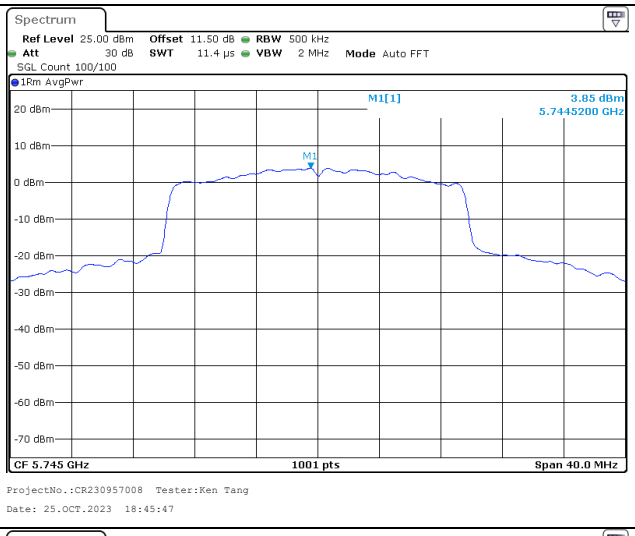
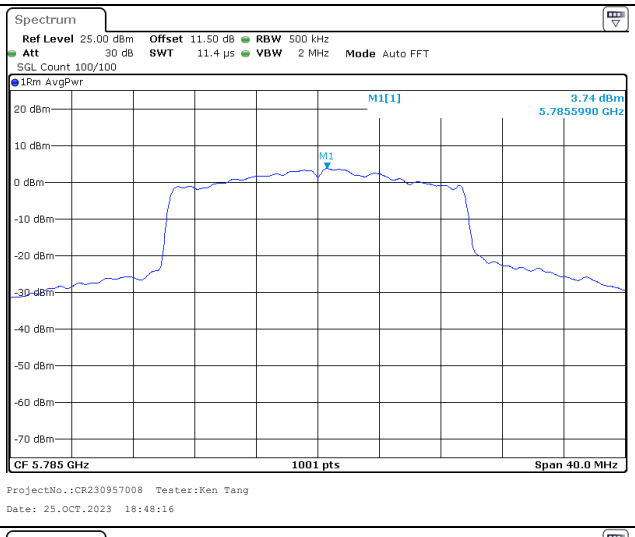
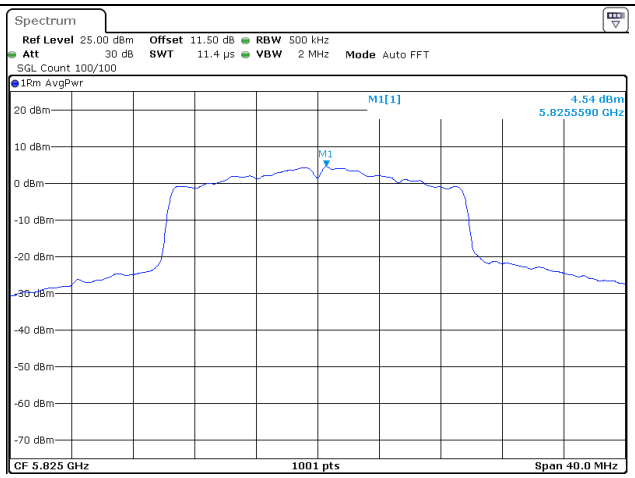
Maximum power spectral density	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

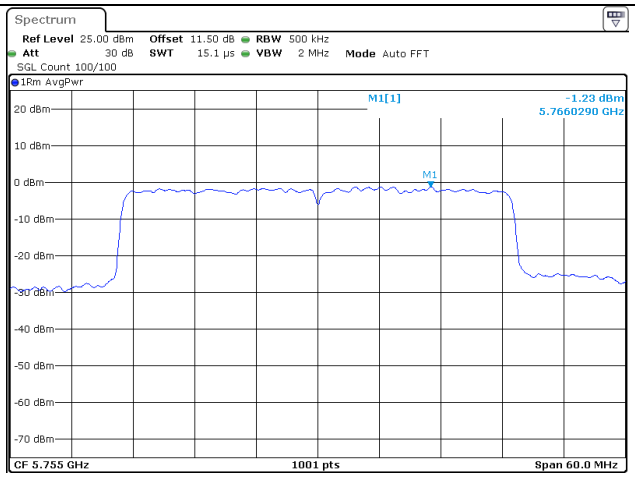
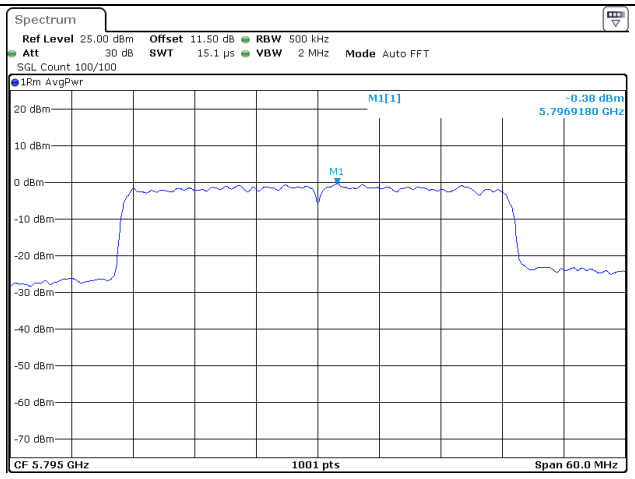
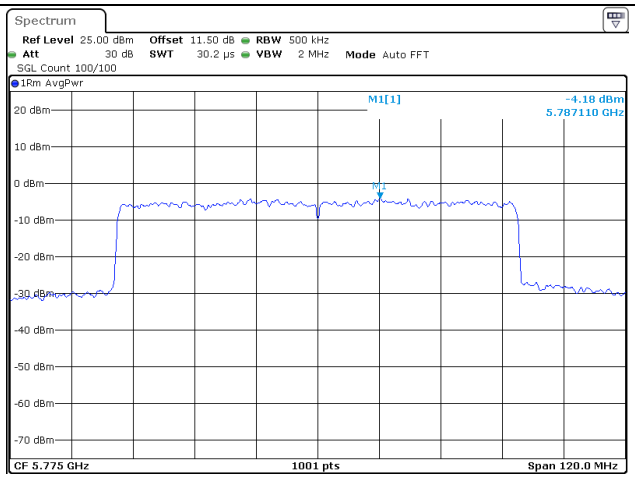
5725-5850MHz (ANT2):

Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80	

Maximum power spectral density	
802.11ax hew20 Lowest Channel	
802.11ax hew20 Middle Channel	
802.11ax hew20 Highest Channel	

Maximum power spectral density	
802.11ax hew40 Lowest Channel	
802.11ax hew40 Highest Channel	
802.11ax hew80	

4.6 Duty Cycle:

Serial Number:	2BS8-1	Test Date:	2023/10/24
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	N/A

Environmental Conditions:					
Temperature: (℃)	25.9-26.5	Relative Humidity: (%)	60-62	ATM Pressure: (kPa)	101-101.2

Test Equipment List and Details:

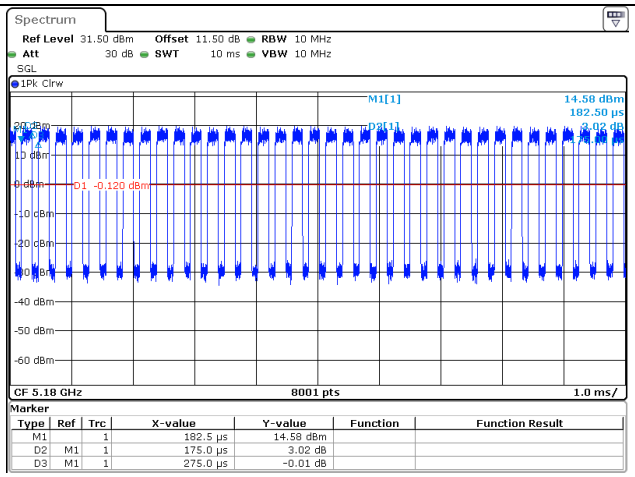
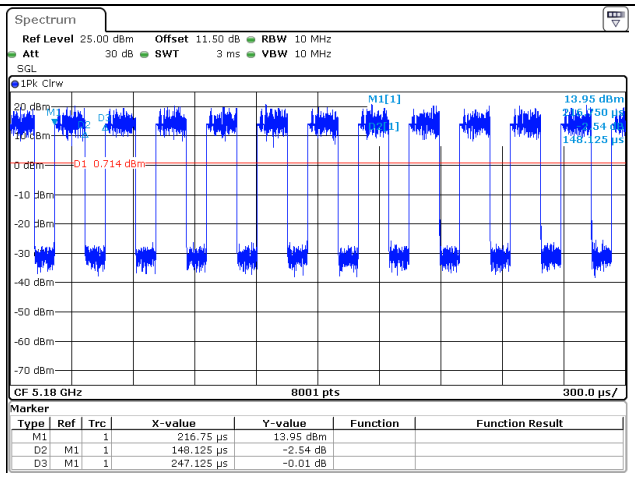
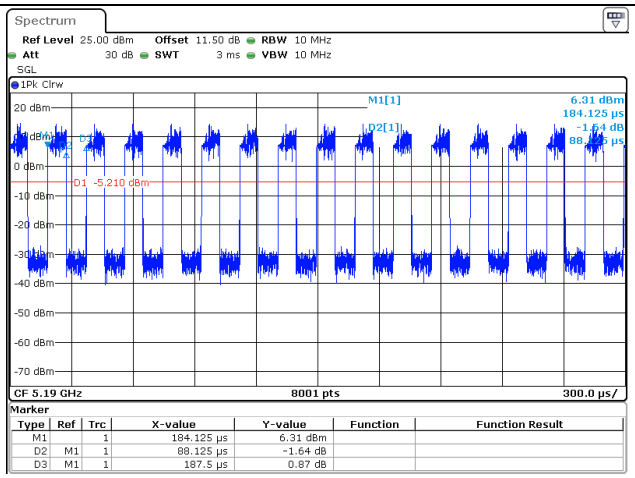
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023-04-18	2024-04-17
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

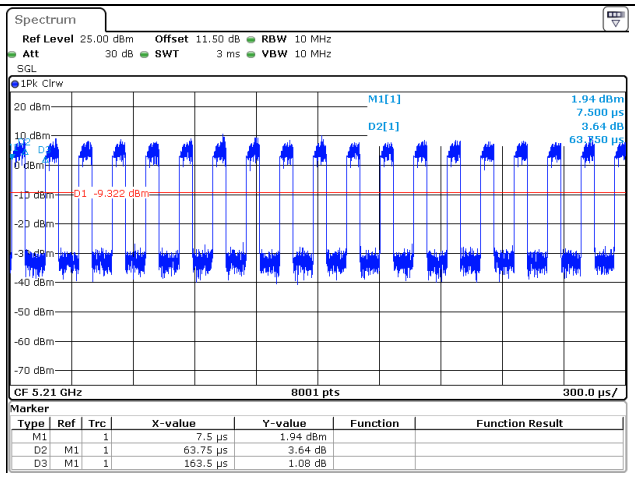
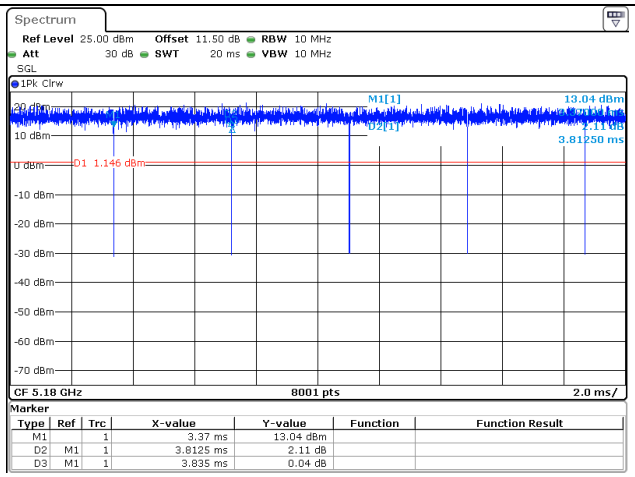
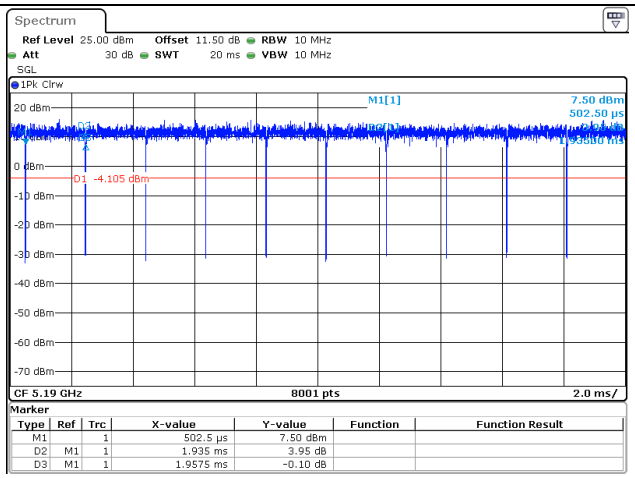
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

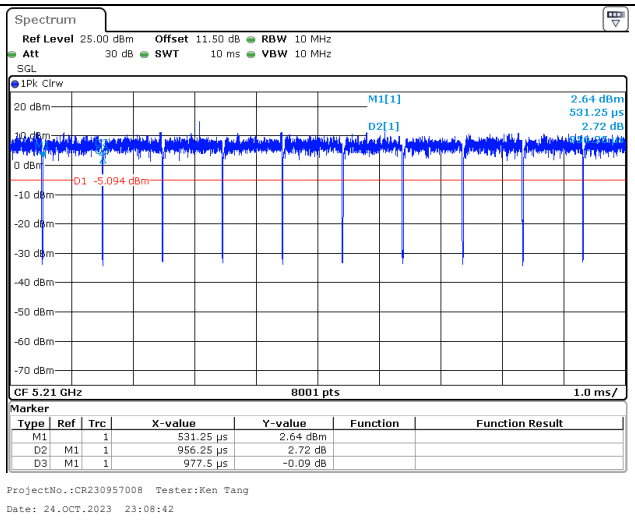
Test Data:

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Cycle Factor (dB)	VBW Setting (Hz)
802.11a	0.175	0.275	63.64	5714	1.96	10000
802.11ac vht20	0.148	0.247	59.92	6757	2.22	10000
802.11ac vht40	0.088	0.188	46.81	11364	3.30	20000
802.11ac vht80	0.064	0.164	39.02	15625	4.09	20000
802.11ax hew20	3.813	3.835	99.43	/	/	
802.11ax hew40	1.935	1.958	98.83	/	/	
802.11ax hew80	0.956	0.978	97.75	1046	0.10	2000

Duty Cycle

802.11a	
802.11ac vht20	
802.11ac vht40	

Duty Cycle	
802.11ac vht80	
802.11ax hew20	
802.11ax hew40	

Duty Cycle	
802.11ax hew80	

4.7 Frequency Stability:

Serial Number:	2BS8-1	Test Date:	2023/11/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Ken Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	22.6	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023-04-18	2024-04-17
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11a	-20	102	5171.5433	5150.000	5248.8891	5250.000
	20	102	5172.0431	5150.000	5249.7985	5250.000
	50	102	5171.8376	5150.000	5248.9618	5250.000
	-20	120	5172.0762	5150.000	5249.1432	5250.000
	20	120	5171.2848	5150.000	5248.7880	5250.000
	50	120	5172.1908	5150.000	5249.3478	5250.000
	-20	138	5172.1946	5150.000	5248.9993	5250.000
	20	138	5172.3351	5150.000	5249.6187	5250.000
	50	138	5171.3699	5150.000	5249.3669	5250.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11n ht20	-20	102	5170.5092	5150.000	5249.4110	5250.000
	20	102	5170.3688	5150.000	5249.1962	5250.000
	50	102	5170.1376	5150.000	5249.8290	5250.000
	-20	120	5169.9957	5150.000	5249.6593	5250.000
	20	120	5170.0324	5150.000	5248.9890	5250.000
	50	120	5170.1891	5150.000	5249.2448	5250.000
	-20	138	5170.1071	5150.000	5249.3737	5250.000
	20	138	5170.1915	5150.000	5249.0250	5250.000
	50	138	5170.4412	5150.000	5249.6317	5250.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11n ht40	-20	102	5171.6932	5150.000	5248.4449	5250.000
	20	102	5171.6291	5150.000	5248.4928	5250.000
	50	102	5171.6429	5150.000	5248.3952	5250.000
	-20	120	5171.5763	5150.000	5248.4553	5250.000
	20	120	5171.5220	5150.000	5248.3065	5250.000
	50	120	5171.5426	5150.000	5248.5256	5250.000
	-20	138	5171.6325	5150.000	5248.5239	5250.000
	20	138	5171.5981	5150.000	5248.5160	5250.000
	50	138	5171.7354	5150.000	5248.3408	5250.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11ac vht80	-20	102	5172.2597	5150.000	5247.8890	5250.000
	20	102	5172.2243	5150.000	5247.7967	5250.000
	50	102	5172.2480	5150.000	5247.6911	5250.000
	-20	120	5172.4045	5150.000	5247.7193	5250.000
	20	120	5172.3098	5150.000	5247.6864	5250.000
	50	120	5172.2048	5150.000	5247.8021	5250.000
	-20	138	5172.1595	5150.000	5247.7965	5250.000
	20	138	5172.4173	5150.000	5247.8661	5250.000
	50	138	5172.3041	5150.000	5247.8307	5250.000
					Result:	**Pass**

5725-5850 MHz:

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11a	-20	102	5735.5625	5725.000	5834.9792	5850.000
	20	102	5735.5553	5725.000	5834.7643	5850.000
	50	102	5735.4880	5725.000	5834.7994	5850.000
	-20	120	5735.4558	5725.000	5834.8375	5850.000
	20	120	5735.4321	5725.000	5834.7824	5850.000
	50	120	5735.5367	5725.000	5834.8910	5850.000
	-20	138	5735.4908	5725.000	5834.9136	5850.000
	20	138	5735.3652	5725.000	5834.8086	5850.000
	50	138	5735.6298	5725.000	5834.9631	5850.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11n ht20	-20	102	5734.4147	5725.000	5834.8444	5850.000
	20	102	5734.4919	5725.000	5834.9348	5850.000
	50	102	5734.3441	5725.000	5834.9521	5850.000
	-20	120	5734.5373	5725.000	5834.9807	5850.000
	20	120	5734.4880	5725.000	5834.9157	5850.000
	50	120	5734.3473	5725.000	5835.0266	5850.000
	-20	138	5734.4581	5725.000	5834.9917	5850.000
	20	138	5734.5528	5725.000	5835.0482	5850.000
	50	138	5734.4561	5725.000	5834.8852	5850.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11n ht40	-20	102	5735.9425	5725.000	5814.2918	5850.000
	20	102	5736.0833	5725.000	5814.3129	5850.000
	50	102	5735.9568	5725.000	5814.4596	5850.000
	-20	120	5736.0424	5725.000	5814.4468	5850.000
	20	120	5735.9051	5725.000	5814.2593	5850.000
	50	120	5736.0422	5725.000	5814.3552	5850.000
	-20	138	5735.9966	5725.000	5814.1803	5850.000
	20	138	5736.1013	5725.000	5814.2295	5850.000
	50	138	5735.9577	5725.000	5814.4218	5850.000
					Result:	**Pass**

Test Channel:	Lowest for Lower Edge, Highest for Upper Edge					
Test Mode:	Temperature (℃)	Voltage (V_{AC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
802.11ac vht80	-20	102	5736.8491	5725.000	5813.7176	5850.000
	20	102	5736.9069	5725.000	5813.6019	5850.000
	50	102	5736.8367	5725.000	5813.6217	5850.000
	-20	120	5736.7547	5725.000	5813.5851	5850.000
	20	120	5736.8356	5725.000	5813.5923	5850.000
	50	120	5736.7337	5725.000	5813.6981	5850.000
	-20	138	5736.7073	5725.000	5813.6295	5850.000
	20	138	5736.9319	5725.000	5813.7274	5850.000
	50	138	5736.7108	5725.000	5813.5932	5850.000
					Result:	**Pass**

5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

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

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

5.1.2 Measurement Result

Operation Modes	Frequency (MHz)	λ/2π (mm)	Distance (mm)	Exemption ERP		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	MPE-Based Exemption
				(mW)	(dBm)				
BDR/EDR	2402-2480	19.88	200	768	28.85	11.5	2.26	11.61	Compliant
BLE	2402-2480	19.88	200	768	28.85	8.0	2.26	8.11	Compliant
2.4G WLAN	2412-2462	19.80	200	768	28.85	26.0	2.29	26.14	Compliant
5.2G WLAN	5180-5240	9.22	200	768	28.85	16.0	2.58	16.43	Compliant
5.8G WLAN	5745-5825	8.31	200	768	28.85	21.0	2.58	21.43	Compliant

Note:
The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.
The BDR/EDR, BLE, WLAN 2.4G and 5G can`t transmission simultaneously.

Result: The device compliant the MPE-Based Exemption at 20cm distances.

6. EUT PHOTOGRAPHS

Please refer to the attachment CR230957008-EXP EUT EXTERNAL PHOTOGRAPHS and CR230957008-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230957008-00D-TSP TEST SETUP PHOTOGRAPHS.

===== END OF REPORT =====