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

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **Grandstream Networks, Inc.**

Address: 126 Brookline Ave., 3rd Floor Boston, MA 02215, USA

FCC ID: **YZZGWN7665**
IC: **11964A-GWN7665**
HVIN: **GWN7665**

Product Name: **802.11ax Tri-Band Wi-Fi 6E Access Point**

Standard(s): **47 CFR Part 15, Subpart E(15.407)**
RSS-247 Issue 3, August 2023
RSS-Gen, Issue 5, February 2021 Amendment 2
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: **CR230955399-00E**

Date Of Issue: **2023/12/01**

Reviewed By: **Calvin Chen**

Title: RF Engineer

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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

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230955399-00E	Original Report	2023/12/01

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	802.11ax Tri-Band Wi-Fi 6E Access Point
EUT Model:	GWN7665
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20/ax he20) 5190-5230 MHz(802.11n ht40/ac vht40/ax he40) 5210 MHz(802.11ac vht80/ax he80) 5260-5320 MHz (802.11a/n ht20/ac vht20/ax he20) 5270-5310 MHz(802.11n ht40/ac vht40/ax he40) 5290 MHz(802.11ac vht80/ax he80) 5250MHz(802.11ac vht160/ax he160) 5500-5720 MHz (802.11a/n ht20/ac vht20/ax he20) 5510-5710 MHz(802.11n ht40/ac vht40/ax he40) 5530-5690 MHz(802.11ac vht80/ax he80) 5570MHz(802.11ac vht160/ax he160) 5745-5825 MHz (802.11a/n ht20/ac vht20/ax he20) 5755-5795 MHz(802.11n ht40/ac vht40/ax he40) 5775 MHz(802.11ac vht80/ax he80)
Maximum Average Conducted Output Power (FCC):	27.57dBm (5150-5250 MHz) 21.71dBm (5250-5350 MHz) 21.72dBm (5470-5725 MHz) 27.11dBm (5725-5850 MHz)
Maximum Average Conducted Output Power (IC):	15.07dBm (5150-5250 MHz) 17.69dBm (5250-5350 MHz) 21.72dBm (5470-5725 MHz) 27.11dBm (5725-5850 MHz)
Modulation Type:	802.11a/n/ac:OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM 802.11ax: OFDMA- BPSK, QPSK, 16QAM, 64QAM,256QAM,1024QAM
Rated Input Voltage:	POE 48V
Serial Number:	RE/CE:2BI1-1;RF: 2BI1-2
EUT Received Date:	2023/9/20
EUT Received Status:	Good
Note: 5600-5650 MHz was disabled by software in Canada Market.	

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20/ax he20:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
36	5180	52	5260	100	5500	149	5745
40	5200	56	5280	104	5520	153	5765
44	5220	60	5300	108	5540	157	5785
48	5240	64	5320	112	5560	161	5805
/	/	/	/	116	5580	165	5825
/	/	/	/	120*	5600	/	/
/	/	/	/	124*	5620	/	/
/	/	/	/	128*	5640	/	/
/	/	/	/	132	5660	/	/
/	/	/	/	136	5680	/	/
/	/	/	/	140	5700	/	/
Note: the channels mark with * were in the range of 5600-5650 MHz disabled by software in Canada Market.							
Per section 15.31(m)/RSS-Gen, the below frequencies were performed the test as below:							
36	5180	52	5260	100	5500	149	5745
40	5200	56	5280	116	5580	157	5785
48	5240	64	5320	140	5700	165	5825

For 802.11n ht40/ac vht40/ax he40:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
38	5190	54	5270	102	5510	151	5755
46	5230	62	5310	110	5550	159	5795
/	/	/	/	118*	5590	/	/
/	/	/	/	126*	5630	/	/
/	/	/	/	134	5670	/	/
Note: the channels mark with * were in the range of 5600-5650 MHz disabled by software in Canada Market.							
Per section 15.31(m)/RSS-Gen, the below frequencies were performed the test as below:							
38	5190	54	5270	102	5510	151	5755
46	5230	62	5310	110	5550	159	5795
/	/	/	/	134	5670	/	/

For 802.11ac vht80/ax hew80:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
42	**5210**	**58**	**5290**	**106**	**5530**	**155**	**5775**
/	/	/	/	**122**	**5610***	/	/
Note: the channels mark with * were in the range of 5600-5650 MHz disabled by software in Canada Market.							
Per section 15.31(m), the above in bold frequencies were performed the test.							

For 802.11ac vht160/ax hew160:

5150-5250MHz Band~5250-5350 MHz Band		5470-5725MHz Band	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
50	**5250**	**114**	**5570***
Note: the channels mark with * were in the range of 5600-5650 MHz disabled by software in Canada Market.			
Per section 15.31(m), the above in bold frequencies were performed the test.			

1.1.3 Antenna Information Detail▲:

Antenna	Antenna Type	input impedance (Ohm)	Frequency Range (MHz)	Antenna Gain (dBi)
Chain 0	PIFA	50	5150-5850	5.26
Chain 1	PIFA	50	5150-5850	5.26

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:

No.

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:	RTL8852A MP Toolkit.exe
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:	

5150-5250 MHz Band(FCC):					
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting**	
				Chain 0	**Chain 1**
802.11a	Lowest	5180	6Mbps	21	21
	Middle	5200	6Mbps	24	24
	Highest	5240	6Mbps	24	24
802.11ac vht20	Lowest	5180	MCS0	21	21
	Middle	5200	MCS0	22	23
	Highest	5240	MCS0	23	23
802.11ac vht40	Lowest	5190	MCS0	20	20
	Highest	5230	MCS0	24	24
802.11ac vht80	Middle	5210	MCS0	20	20
802.11ax he20	Lowest	5180	MCS0	20	20
	Middle	5200	MCS0	23	24
	Highest	5240	MCS0	23	24
802.11ax he40	Lowest	5190	MCS0	19	19
	Highest	5230	MCS0	24	24
802.11ax he80	Middle	5210	MCS0	20	20

5150-5250 MHz Band(IC):					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5180	6Mbps	17	16
	Middle	5200	6Mbps	17	16
	Highest	5240	6Mbps	16	15
802.11ac vht20	Lowest	5180	MCS0	11	11
	Middle	5200	MCS0	11	11
	Highest	5240	MCS0	11	10
802.11ac vht40	Lowest	5190	MCS0	16	13
	Highest	5230	MCS0	16	13
802.11ac vht80	Middle	5210	MCS0	13	13
802.11ax he20	Lowest	5180	MCS0	10	10
	Middle	5200	MCS0	11	11
	Highest	5240	MCS0	10	10
802.11ax he40	Lowest	5190	MCS0	13	13
	Highest	5230	MCS0	12	12
802.11ax he80	Middle	5210	MCS0	13	13
5250-5350 MHz Band(FCC):					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5260	6Mbps	19	19
	Middle	5280	6Mbps	19	19
	Highest	5320	6Mbps	19	20
802.11ac vht20	Lowest	5260	MCS0	16	17
	Middle	5280	MCS0	17	17
	Highest	5320	MCS0	17	17
802.11ac vht40	Lowest	5270	MCS0	18	19
	Highest	5310	MCS0	19	19
802.11ac vht80	Middle	5290	MCS0	20	20
802.11ax he20	Lowest	5260	MCS0	17	18
	Middle	5280	MCS0	17	17
	Highest	5320	MCS0	18	18
802.11ax he40	Lowest	5270	MCS0	19	19
	Highest	5310	MCS0	20	20
802.11ax he80	Middle	5290	MCS0	19	19
802.11ac vht160	Middle	5250	MCS0	16	16
802.11ax he160	Middle	5250	MCS0	16	16

5250-5350 MHz Band(IC):					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5260	6Mbps	18	18
	Middle	5280	6Mbps	18	18
	Highest	5320	6Mbps	19	19
802.11ac vht20	Lowest	5260	MCS0	12	12
	Middle	5280	MCS0	12	13
	Highest	5320	MCS0	14	13
802.11ac vht40	Lowest	5270	MCS0	12	11
	Highest	5310	MCS0	13	12
802.11ac vht80	Middle	5290	MCS0	12	12
802.11ax he20	Lowest	5260	MCS0	11	12
	Middle	5280	MCS0	12	12
	Highest	5320	MCS0	13	13
802.11ax he40	Lowest	5270	MCS0	12	11
	Highest	5310	MCS0	13	12
802.11ax he80	Middle	5290	MCS0	13	12
802.11ac vht160	Middle	5250	MCS0	12	11
802.11ax he160	Middle	5250	MCS0	11	12

5470-5725 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5500	6Mbps	20	19
	Middle	5580	6Mbps	20	20
	Highest	5700	6Mbps	21	21
802.11ac vht20	Lowest	5500	MCS0	17	17
	Middle	5580	MCS0	17	18
	Highest	5700	MCS0	20	20
802.11ac vht40	Lowest	5510	MCS0	18	18
	Middle	5550	MCS0	20	20
	Highest	5670	MCS0	20	20
802.11ac vht80	Lowest	5530	MCS0	19	19
	Highest	5610	MCS0	21	21
802.11ax he20	Lowest	5500	MCS0	17	17
	Middle	5580	MCS0	17	19
	Highest	5700	MCS0	19	19
802.11ax he40	Lowest	5510	MCS0	18	18
	Middle	5550	MCS0	20	20
	Highest	5670	MCS0	20	20
802.11ax he80	Lowest	5530	MCS0	18	18
	Highest	5610	MCS0	21	21
802.11ac vht160	Middle	5570	MCS0	18	18
802.11ax he160	Middle	5570	MCS0	18	18

5725-5850 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5745	6Mbps	24	24
	Middle	5785	6Mbps	24	24
	Highest	5825	6Mbps	24	24
802.11ac vht20	Lowest	5745	MCS0	24	24
	Middle	5785	MCS0	24	24
	Highest	5825	MCS0	24	24
802.11ac vht40	Lowest	5755	MCS0	24	24
	Highest	5795	MCS0	24	24
802.11ac vht80	Middle	5775	MCS0	22	22
802.11ax he20	Lowest	5745	MCS0	24	24
	Middle	5785	MCS0	24	24
	Highest	5825	MCS0	24	24
802.11ax he40	Lowest	5755	MCS0	24	24
	Highest	5795	MCS0	24	24
802.11ax he80	Middle	5775	MCS0	22	22

Note:
1. 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.
2. The device supports SISO in all modes, and MIMO 2T2R in 802.11n/ax modes, per pretest, 2T2R mode was the worst mode and reported for 802.11n/ax modes.
3. The device support Beamforming and non-beamforming mode for MIMO, per pretest, Beamforming mode was the worst mode and reported for MIMO.
4. for 802.11ax mode, the device not support partial RU mode.

1.2.2 Support Equipment List and Details

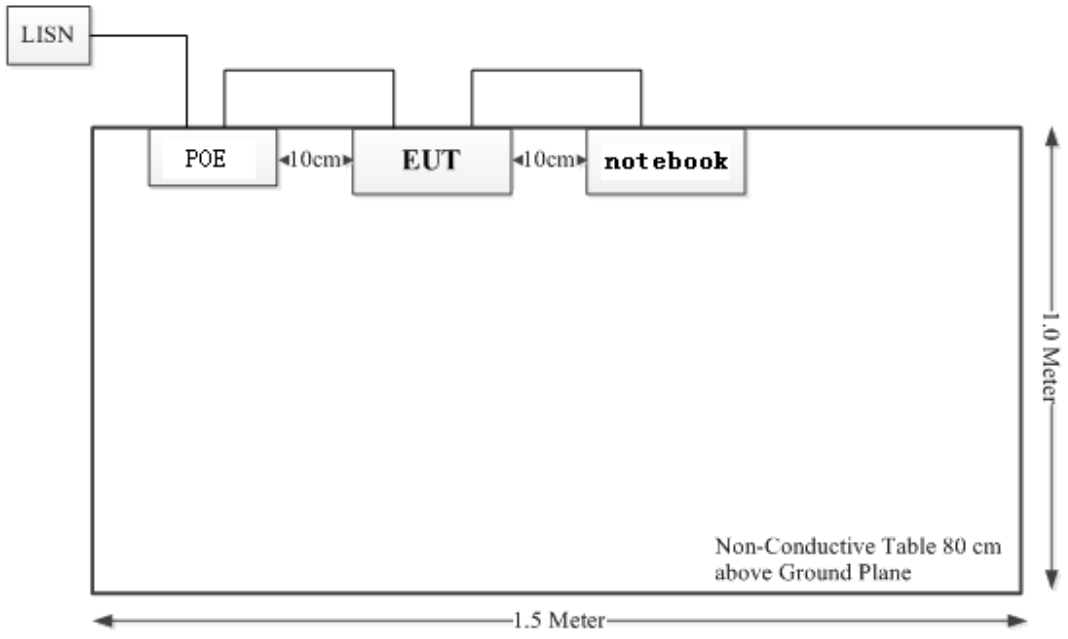
Manufacturer	Description	Model	Serial Number
DELL	Notebook	E6410	GYXJ3 A00 JSD2
DIGITAL	POE	G0720-480-050	3TV4E338182

1.2.3 Support Cable List and Details

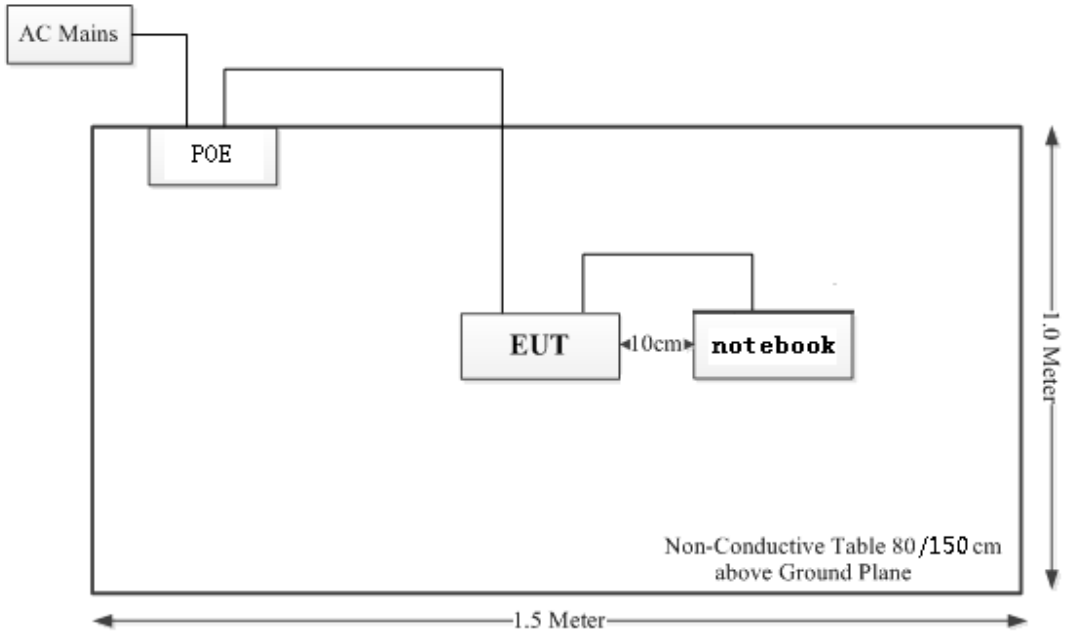
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45 Cable	NO	NO	1	POE	EUT
RJ45 Cable	NO	NO	1	Notebook	EUT

1.2.4Block 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) RSS-Gen Clause 8.8	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b) RSS-247 Clause 6.2	Undesirable Emission& Restricted Bands	Compliant
RSS-247 Clause 6.2.1.2	26dB attenuated below the channel power	Compliant
FCC§15.407(a) (e) RSS-247 Clause 6.2 RSS-Gen Clause 6.7	Emission Bandwidth	Compliant
FCC§15.407(a) RSS-247 Clause 6.2	Maximum Conducted Output Power	Compliant
FCC§15.407 (a) RSS-247 Clause 6.2	Power Spectral Density	Compliant
§15.203 RSS-Gen Clause 6.8	Antenna Requirement	Compliant
RSS-247 Clause 6.4	Additional requirements	Compliant
FCC §2.1091	Maximum Permissible exposure	Compliant
RSS-102 §4	Exposure Limits	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.

RSS-Gen Clause 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μH / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.
For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the

boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 – AC power-line conducted emissions limits

Frequency (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56[1]	56 to 46[1]
0.5 – 5	56	46
5 – 30	60	50

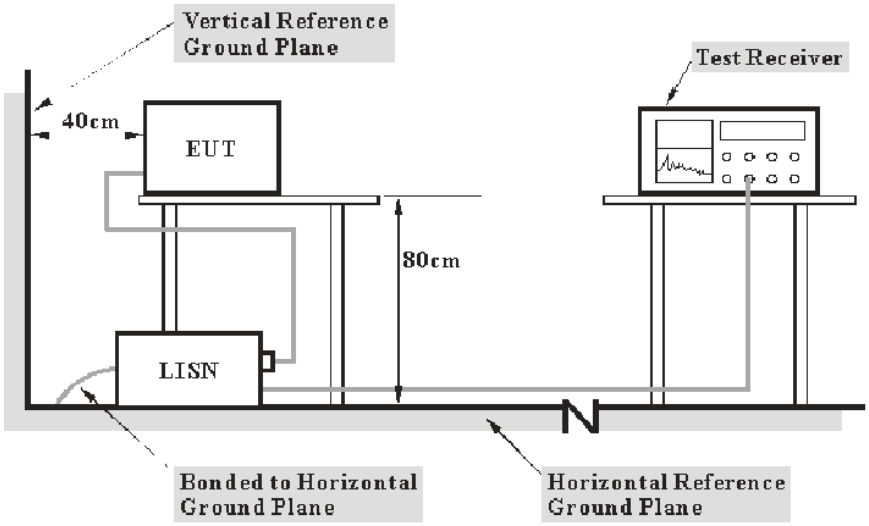
Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:

(a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.

(b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

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,RSS-Gen 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 30MHz.

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.

Frequency band 5150-5250 MHz:

RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency band 5250-5350 MHz:

RSS-247 Clause 6.2.2.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency bands 5470-5600 MHz and 5650-5725 MHz:

RSS-247 Clause 6.2.3.2

Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

Frequency band 5725-5850 MHz

RSS-247 Clause 6.2.4.2

Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.
Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.
Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:
a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;

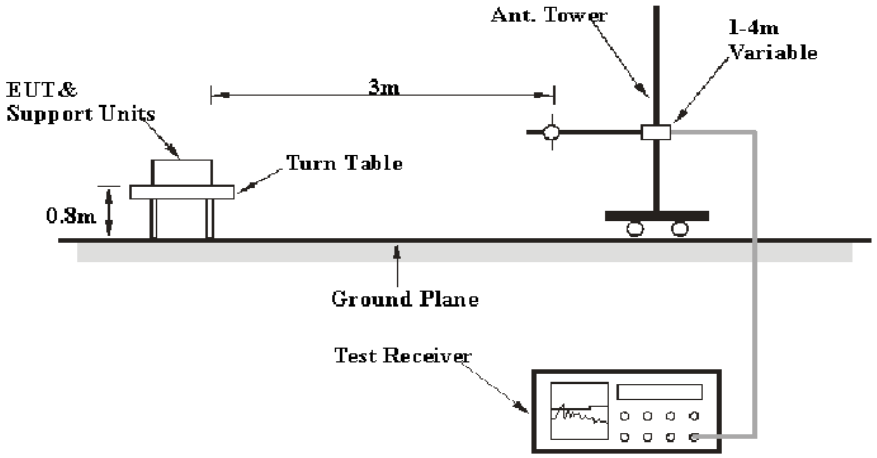
b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;

c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and

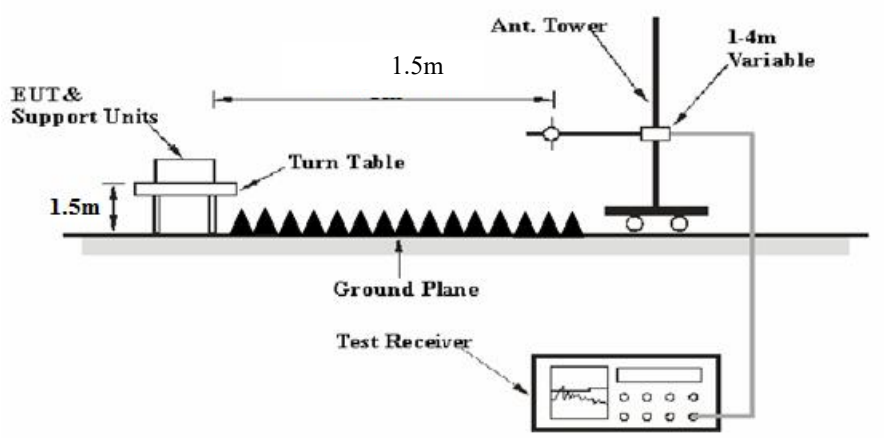
d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

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, RSS-247, RSS-Gen limits.

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

The spacing between the peripherals was 10cm.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

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

9 kHz-30MHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	200 Hz	1 kHz	/	QP
150 kHz – 30 MHz	9 kHz	30 kHz	/	QP

30-1000MHz:

Detector	RBW	Video B/W	IF B/W
QP	100 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

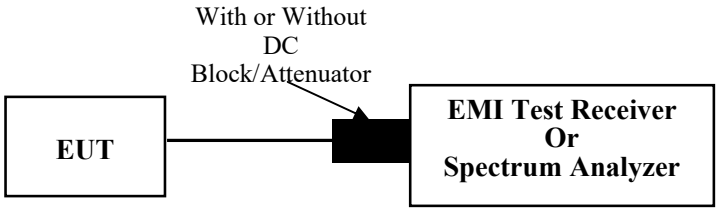
3.3 26dBattenuated below the channel power:

3.3.1 Applicable Standard

RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

3.3.2 EUT Setup



3.3.3 Test Procedure

a) Set RBW = 1%~5% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = RMS.
d) Trace mode = Average
e) Measure the emission attenuated below the channel power

3.4 Emission Bandwidth:

3.4.1 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.

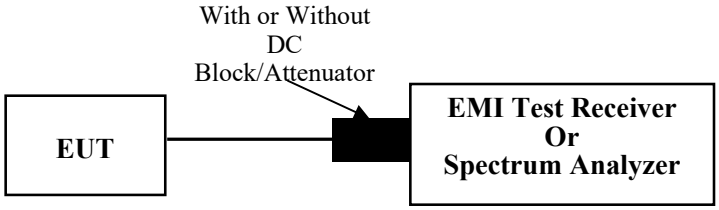
RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

RSS-247 Clause 6.2.4.1

For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

3.4.2 EUT Setup



3.4.3 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 measurementas needed until the RBW/EBW ratio is approximately 1%.

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 maybe reported in addition to the plot(s).

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.

3.5 Maximum Conducted Output Power:

3.5.1 Applicable Standard

FCC §15.407(a) (1)

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

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.

RSS-247 Clause 6.2.1.1

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 $\log_{10}$B, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

RSS-247 Clause 6.2.2.1

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.3.1

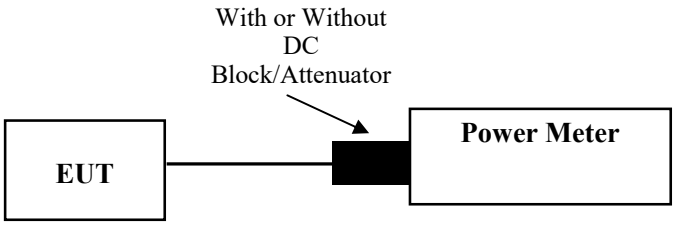
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.4.1

The maximum conducted output power shall not exceed 1 W. The output 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 output 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 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-multipoint3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

3.5.2 EUT Setup



3.5.3 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.

3.6 Maximum power spectral density:

3.6.1 Applicable Standard

FCC §15.407(a) (1)

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

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.

RSS-247 Clause 6.2.1.1

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 $\log_{10}$B, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

RSS-247 Clause 6.2.2.1

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.3.1

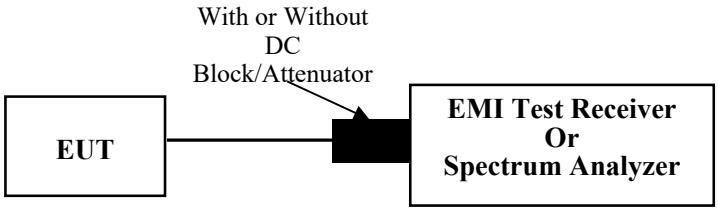
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.4.1

The maximum conducted output power shall not exceed 1 W. The output 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 output 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 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[3] systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

3.6.2 EUT Setup



3.6.3 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%

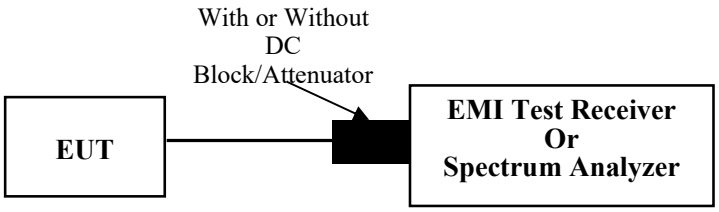
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

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 Antenna Requirement

3.8.1 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.

RSS-GEN Clause 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent is otropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).
When measurements at the antenna port are used to determine the RF output power, the effective gain of the device’s antenna shall be stated, based on a measurement or on data from the antenna’s manufacturer.
The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.
For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:
This radio transmitter [enter the device’s ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

3.8.2 Judgment

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

3.9 Additional requirement

3.9.1 Applicable Standard

According to RSS-247 Clause 6.4 Additional requirement

The following requirements shall apply:

a) The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure. A description on how this is done shall accompany the application for equipment certification. Note that this is not intended to prohibit transmission of control or signalling information or the use of repetitive codes where required by the technology.

b) All LE-LAN devices must contain security features to protect against modification of software by unauthorized parties.

Manufacturers must implement security features in any digitally modulated devices capable of operating in any of the frequency ranges within the 5 GHz band, so that third parties are not able to reprogram the device to operate outside the parameters for which the device was certified. The software must prevent the user from operating the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved for the device. Manufacturers may use various means, including the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements and must describe the methods in their application for equipment certification.

Manufacturers must take steps to ensure that DFS functionality cannot be disabled by the operator of the LE-LAN device.

c) The user manual for LE-LAN devices shall contain instructions related to the restrictions mentioned in the above sections, namely that:

i. the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;[4]

ii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

iii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and

iv. where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

3.9.2 Judgment

RSS-247 Clause 6.4 a):

The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure. Please refer to the declaration

RSS-247 Clause 6.4 b):

The devices must contain security features to protect against modification of software by unauthorized parties. Please refer to the declaration

RSS-247 Clause 6.4 c):

i). The device operates on 5150-5250MHz is only for indoor use.

ii). The device has no detachable antennas.

iii). The device has no detachable antennas.

iv). The EIRP of the 5250-5350MHz for ISED is less than the 200mW.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2BI1-1	Test Date:	2023/09/23
Test Site:	CE	Test Mode:	Transmitting maximum output power mode(802.11ax he40 5230MHz)
Tester:	David Huang	Test Result:	Pass

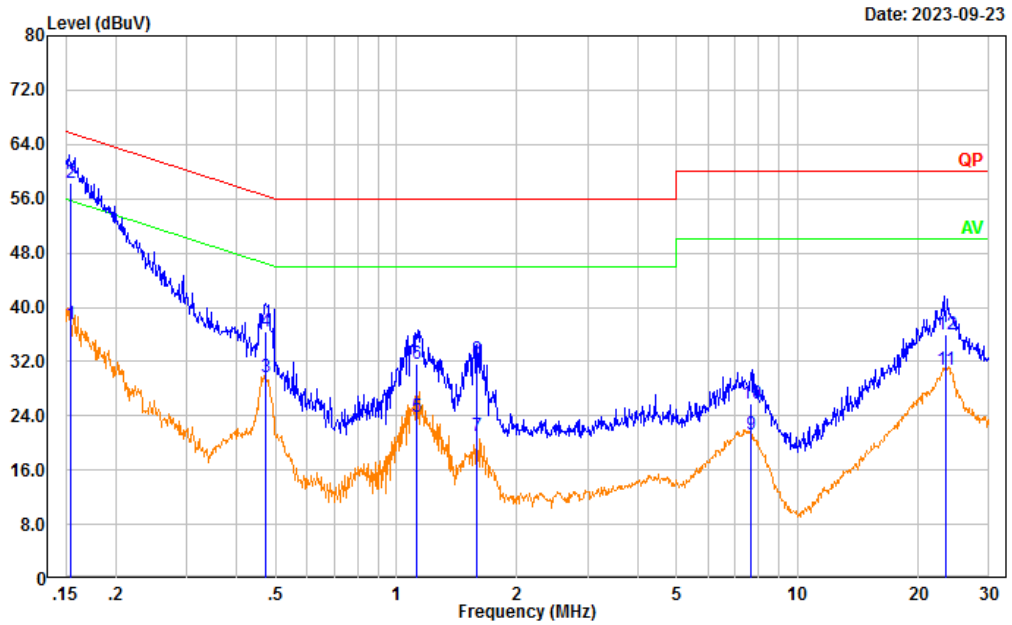
Environmental Conditions:					
Temperature: (℃)	26.4	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	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

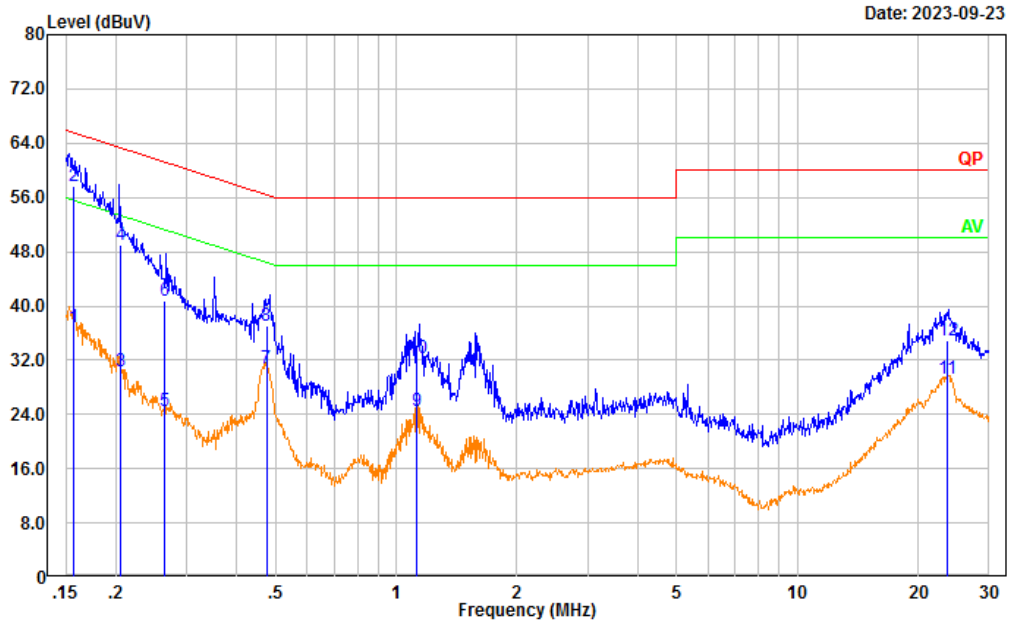
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Project No.: CR230955399-RF
Tester: David Huang
Port: Line
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.154	27.95	9.61	37.56	55.76	18.20	Average
2	0.154	48.73	9.61	58.34	65.76	7.42	QP
3	0.471	20.01	9.61	29.62	46.49	16.87	Average
4	0.471	26.92	9.61	36.53	56.49	19.96	QP
5	1.124	14.17	9.62	23.79	46.00	22.21	Average
6	1.124	22.01	9.62	31.63	56.00	24.37	QP
7	1.587	11.31	9.63	20.94	46.00	25.06	Average
8	1.587	22.58	9.63	32.21	56.00	23.79	QP
9	7.626	11.59	9.67	21.26	50.00	28.74	Average
10	7.626	16.08	9.67	25.75	60.00	34.25	QP
11	23.360	20.95	9.81	30.76	50.00	19.24	Average
12	23.360	26.24	9.81	36.05	60.00	23.95	QP

Project No.: CR230955399-RF
Tester: David Huang
Port: neutral
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.157	27.29	9.61	36.90	55.62	18.72	Average
2	0.157	48.06	9.61	57.67	65.62	7.95	QP
3	0.206	20.77	9.61	30.38	53.35	22.97	Average
4	0.206	39.37	9.61	48.98	63.35	14.37	QP
5	0.264	14.84	9.61	24.45	51.30	26.85	Average
6	0.264	31.07	9.61	40.68	61.30	20.62	QP
7	0.475	21.20	9.61	30.81	46.43	15.62	Average
8	0.475	27.50	9.61	37.11	56.43	19.32	QP
9	1.121	14.84	9.62	24.46	46.00	21.54	Average
10	1.121	22.78	9.62	32.40	56.00	23.60	QP
11	23.560	19.54	9.75	29.29	50.00	20.71	Average
12	23.560	25.13	9.75	34.88	60.00	25.12	QP

4.2 Radiation Spurious Emissions

Serial Number:	2BI1-1		Test Date:	Below 1G: 2023/11/27 Above 1G: 2023/10/17-2023/11/05	
Test Site:	966-1, 966-2		Test Mode:	Transmitting	
Tester:	Carl Xue, Coco Tian, Mack Huang		Test Result:	Pass	
Environmental Conditions:					
Temperature: (℃)	24.6~25.5	Relative Humidity: (%)	45~61	ATM Pressure: (kPa)	100.8~101.3

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Below 1G					
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
BACL	Loop Antenna	1313-1P	3092721	2023/11/9	2026/11/8
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
Above 1G					
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2026/2/21
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).*

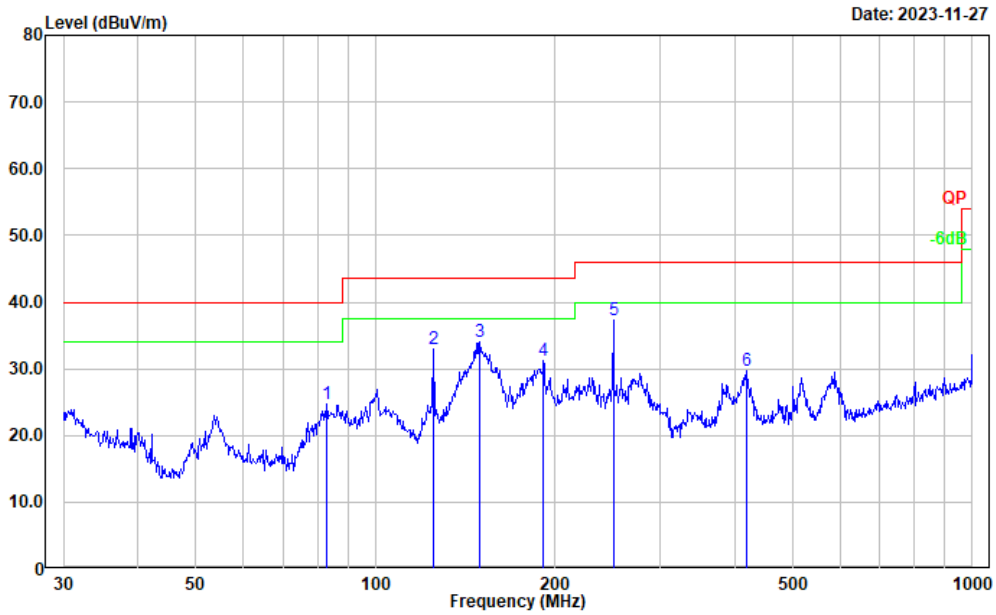
Test Data:

After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.
For 9kHz-30MHz, The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

1) 30MHz-1GHz

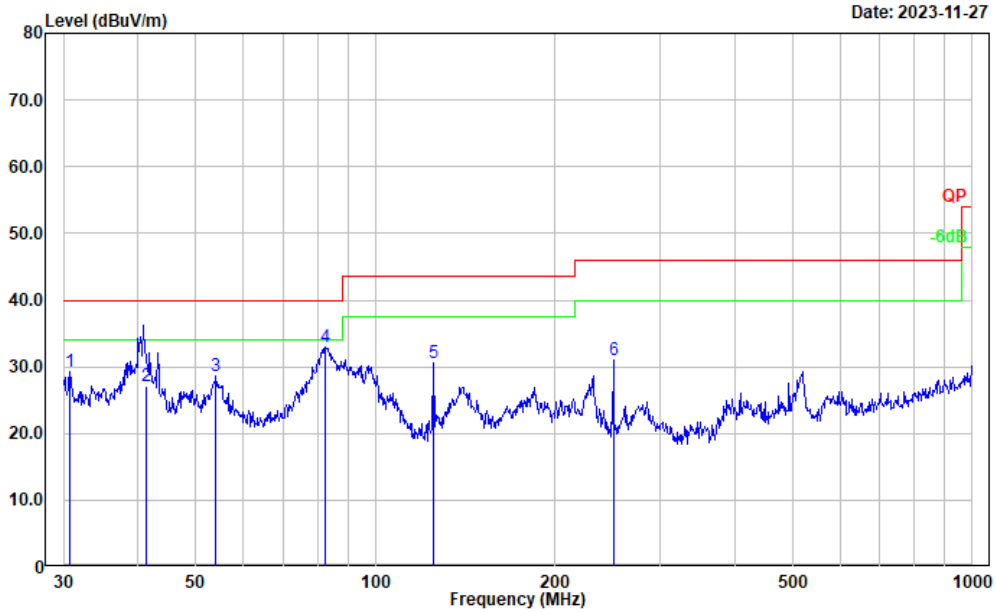
5150-5250MHz 802.11ax he40 5190MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5150-5250MHz 802.11ax he40 5190MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	82.648	42.00	-17.28	24.72	40.00	15.28	Peak
2	125.007	44.29	-11.31	32.98	43.50	10.52	Peak
3	149.486	45.86	-11.90	33.96	43.50	9.54	Peak
4	191.074	44.55	-13.30	31.25	43.50	12.25	Peak
5	250.301	50.42	-13.18	37.24	46.00	8.76	Peak
6	417.641	37.64	-8.02	29.62	46.00	16.38	Peak

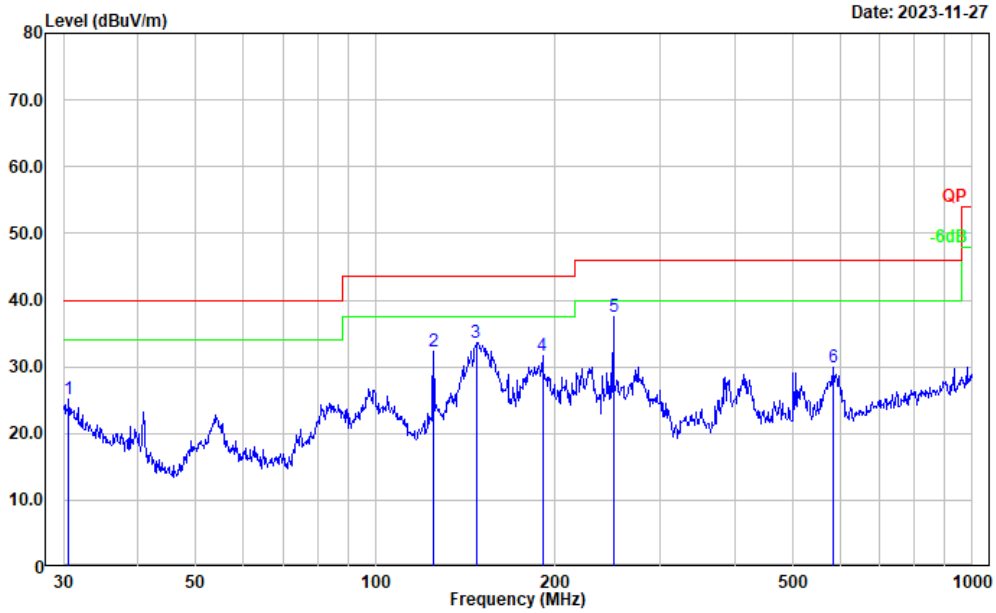
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5150-5250MHz 802.11ax he40 5190MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.745	33.67	-4.36	29.31	40.00	10.69	Peak
2	41.342	39.18	-12.17	27.01	40.00	12.99	QP
3	54.071	45.72	-17.16	28.56	40.00	11.44	Peak
4	82.359	50.22	-17.31	32.91	40.00	7.09	Peak
5	125.007	41.98	-11.31	30.67	43.50	12.83	Peak
6	250.301	44.21	-13.18	31.03	46.00	14.97	Peak

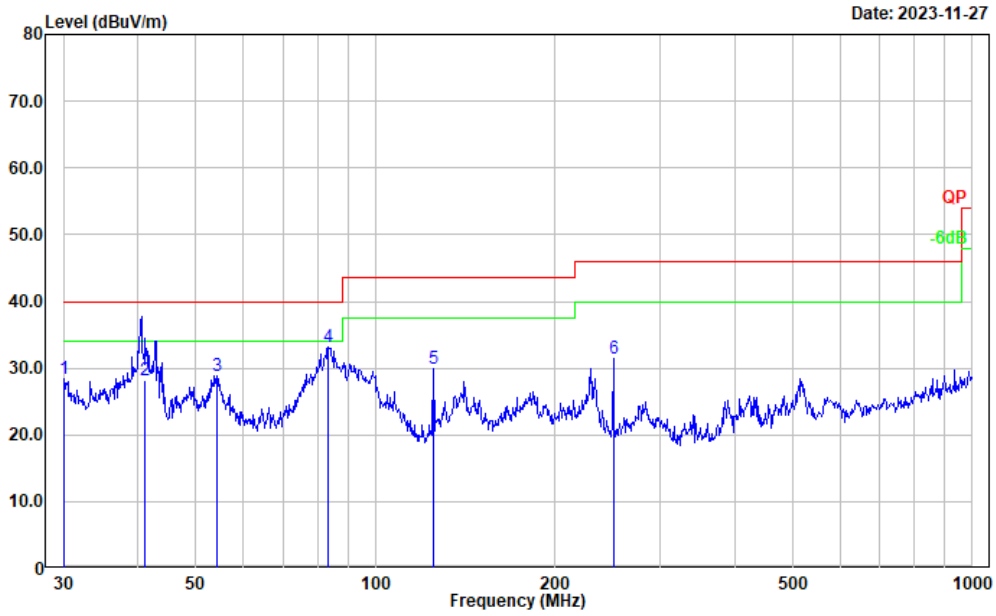
5150-5250MHz 802.11ax he40 5230MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5150-5250MHz 802.11ax he40 5230MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	29.33	-4.28	25.05	40.00	14.95	Peak
2	125.007	43.62	-11.31	32.31	43.50	11.19	Peak
3	147.404	45.54	-11.89	33.65	43.50	9.85	Peak
4	190.405	44.96	-13.41	31.55	43.50	11.95	Peak
5	250.301	50.67	-13.18	37.49	46.00	8.51	Peak
6	584.790	35.42	-5.44	29.98	46.00	16.02	Peak

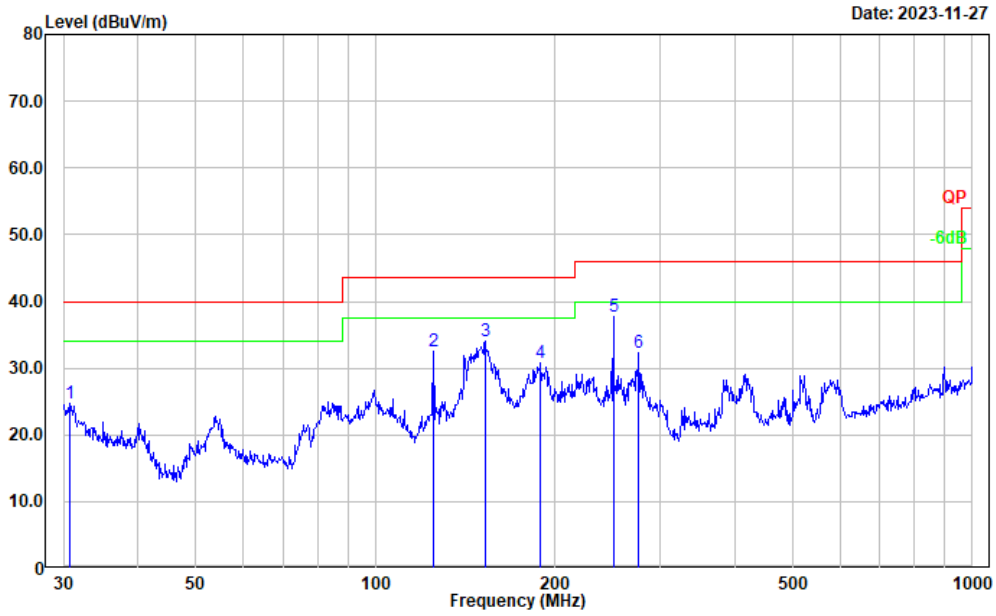
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5150-5250MHz 802.11ax he40 5230MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.105	32.31	-3.88	28.43	40.00	11.57	Peak
2	40.985	40.17	-11.98	28.19	40.00	11.81	QP
3	54.261	46.10	-17.17	28.93	40.00	11.07	Peak
4	83.230	50.46	-17.23	33.23	40.00	6.77	Peak
5	125.007	41.30	-11.31	29.99	43.50	13.51	Peak
6	250.301	44.62	-13.18	31.44	46.00	14.56	Peak

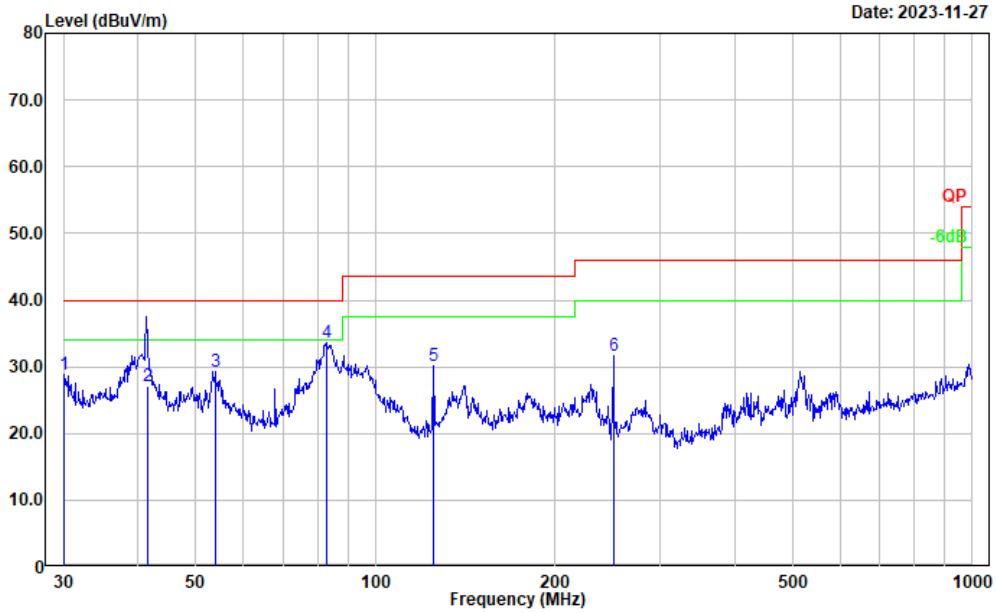
5250-5350MHz 802.11ax he40 5270MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5250-5350MHz 802.11ax he40 5270MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.745	28.99	-4.36	24.63	40.00	15.37	Peak
2	125.007	43.78	-11.31	32.47	43.50	11.03	Peak
3	152.664	45.95	-11.92	34.03	43.50	9.47	Peak
4	189.074	44.20	-13.47	30.73	43.50	12.77	Peak
5	250.301	50.82	-13.18	37.64	46.00	8.36	Peak
6	276.124	44.10	-11.89	32.21	46.00	13.79	Peak

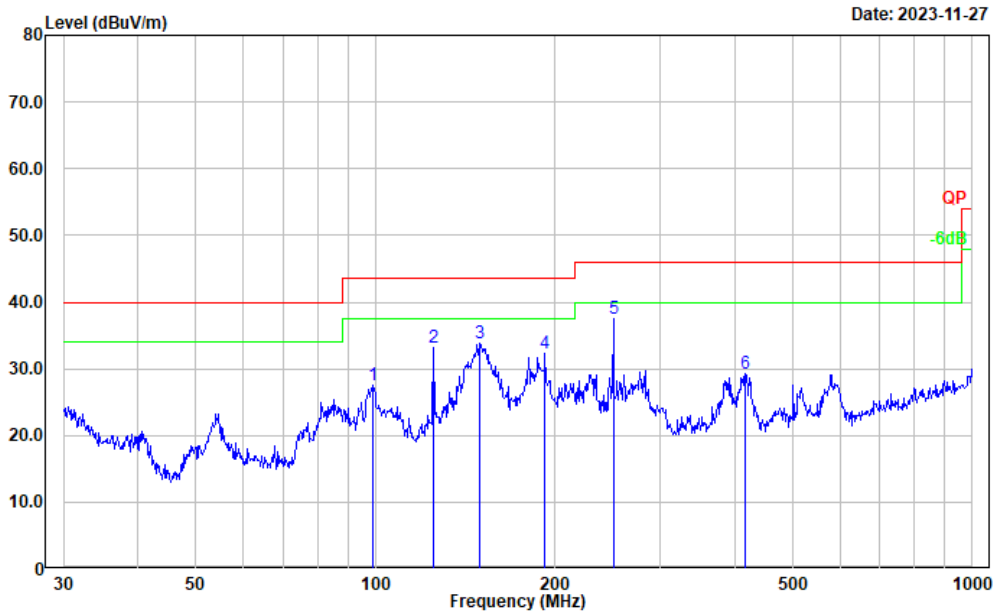
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5250-5350MHz 802.11ax he40 5270MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.105	32.69	-3.88	28.81	40.00	11.19	Peak
2	41.425	39.33	-12.22	27.11	40.00	12.89	QP
3	53.882	46.49	-17.16	29.33	40.00	10.67	Peak
4	82.938	50.86	-17.23	33.63	40.00	6.37	Peak
5	125.007	41.44	-11.31	30.13	43.50	13.37	Peak
6	250.301	44.87	-13.18	31.69	46.00	14.31	Peak

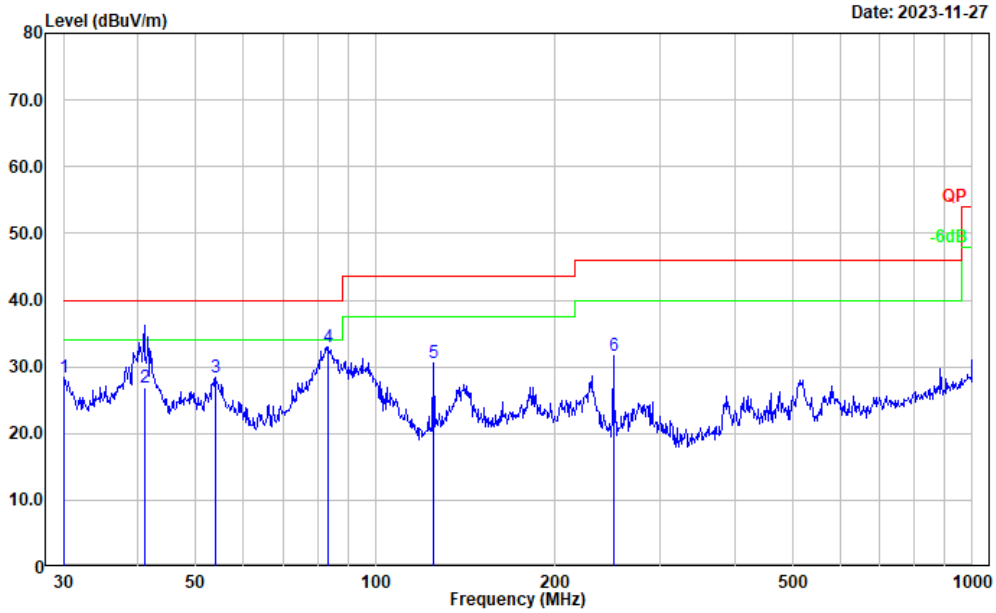
5250-5350MHz 802.11ax he40 5310MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5250-5350MHz 802.11ax he40 5310MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	98.833	42.17	-14.59	27.58	43.50	15.92	Peak
2	125.007	44.49	-11.31	33.18	43.50	10.32	Peak
3	149.486	45.64	-11.90	33.74	43.50	9.76	Peak
4	192.419	45.40	-13.13	32.27	43.50	11.23	Peak
5	250.301	50.79	-13.18	37.61	46.00	8.39	Peak
6	416.179	37.45	-8.10	29.35	46.00	16.65	Peak

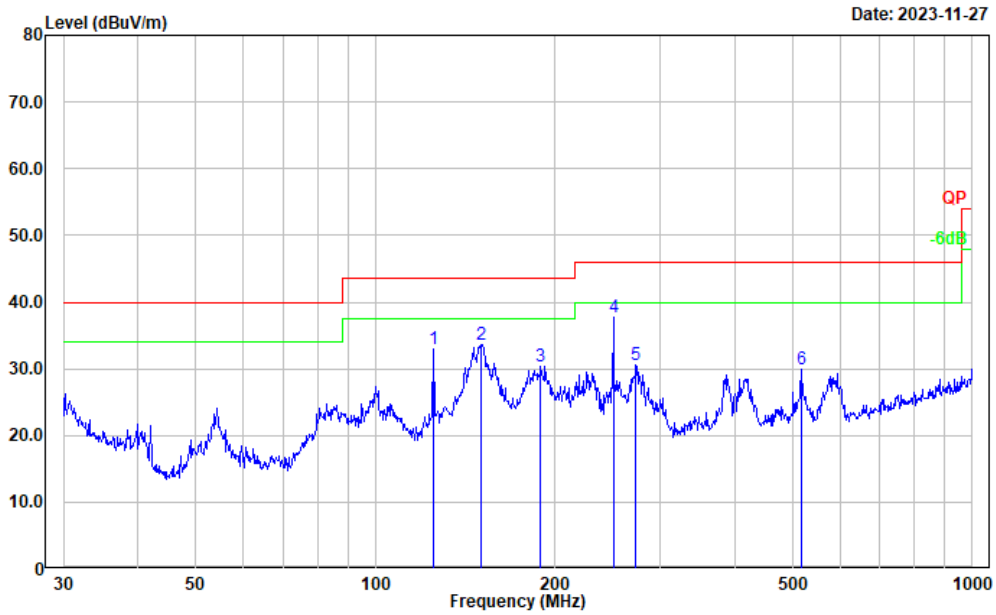
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5250-5350MHz 802.11ax he40 5310MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.000	32.27	-3.80	28.47	40.00	11.53	Peak
2	40.972	38.96	-11.97	26.99	40.00	13.01	QP
3	53.882	45.64	-17.16	28.48	40.00	11.52	Peak
4	83.230	50.29	-17.23	33.06	40.00	6.94	Peak
5	125.007	41.97	-11.31	30.66	43.50	12.84	Peak
6	250.301	44.86	-13.18	31.68	46.00	14.32	Peak

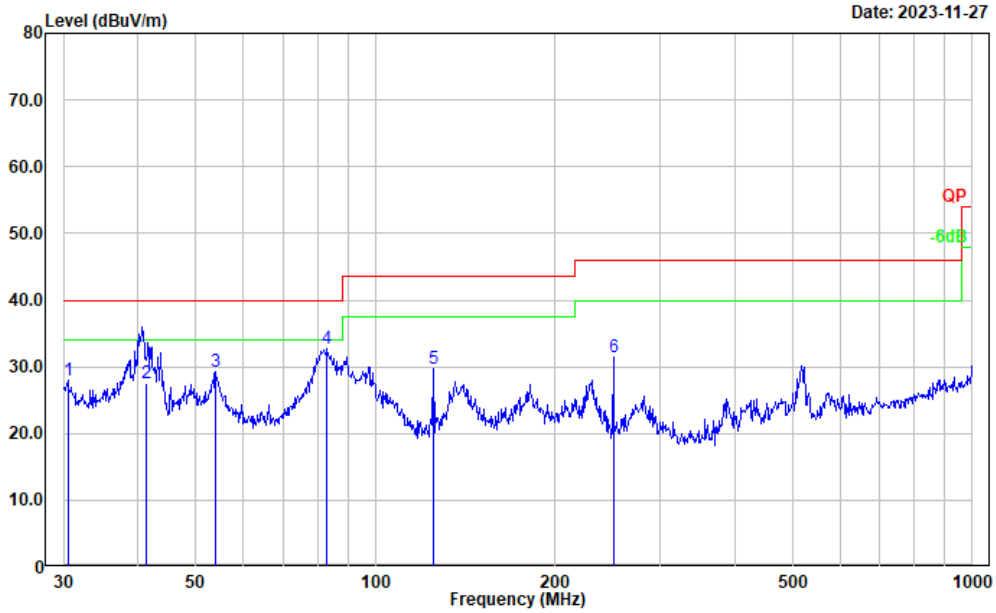
5470-5725MHz 802.11ac vht80 5530MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5470-5725MHz 802.11ac vht80 5530MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	125.007	44.36	-11.31	33.05	43.50	10.45	Peak
2	150.538	45.58	-11.93	33.65	43.50	9.85	Peak
3	189.074	43.78	-13.47	30.31	43.50	13.19	Peak
4	250.301	50.84	-13.18	37.66	46.00	8.34	Peak
5	273.234	42.65	-12.02	30.63	46.00	15.37	Peak
6	517.248	35.70	-5.83	29.87	46.00	16.13	Peak

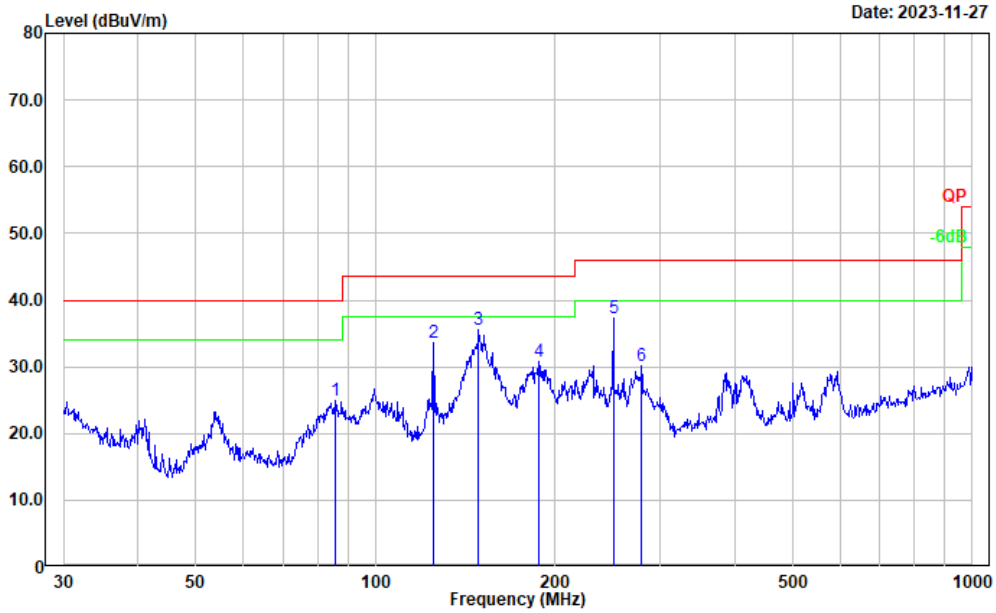
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5470-5725MHz 802.11ac vht80 5530MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	32.10	-4.20	27.90	40.00	12.10	Peak
2	41.302	39.63	-12.15	27.48	40.00	12.52	QP
3	53.882	46.48	-17.16	29.32	40.00	10.68	Peak
4	82.938	49.93	-17.23	32.70	40.00	7.30	Peak
5	125.007	40.94	-11.31	29.63	43.50	13.87	Peak
6	250.301	44.55	-13.18	31.37	46.00	14.63	Peak

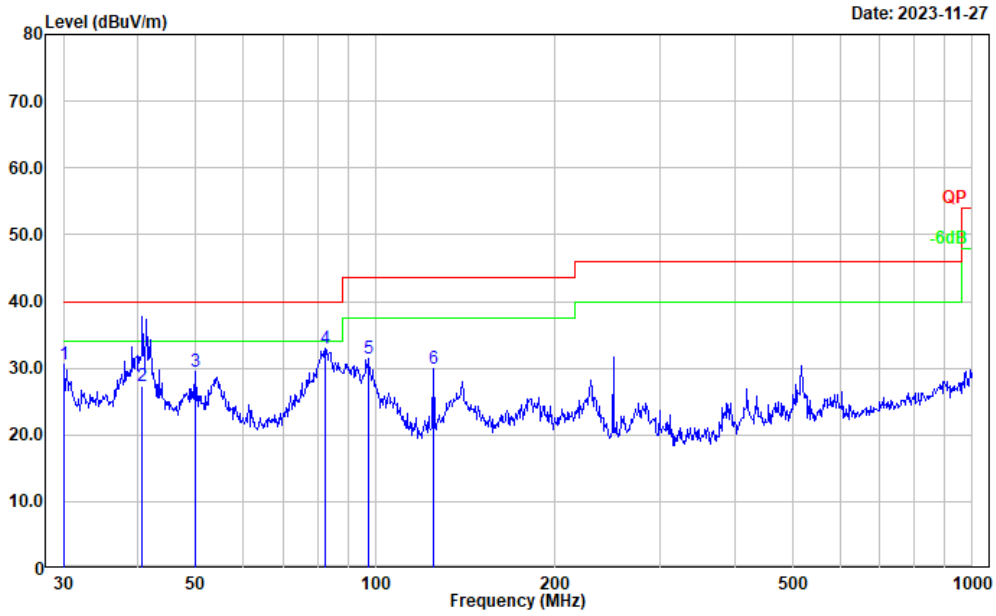
5470-5725MHz 802.11ac vht80 5610MHz

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5470-5725MHz 802.11ac vht80 5610MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	85.598	42.17	-17.15	25.02	40.00	14.98	Peak
2	125.007	44.82	-11.31	33.51	43.50	9.99	Peak
3	148.963	47.47	-11.90	35.57	43.50	7.93	Peak
4	187.753	44.34	-13.51	30.83	43.50	12.67	Peak
5	250.301	50.52	-13.18	37.34	46.00	8.66	Peak
6	279.044	41.96	-11.75	30.21	46.00	15.79	Peak

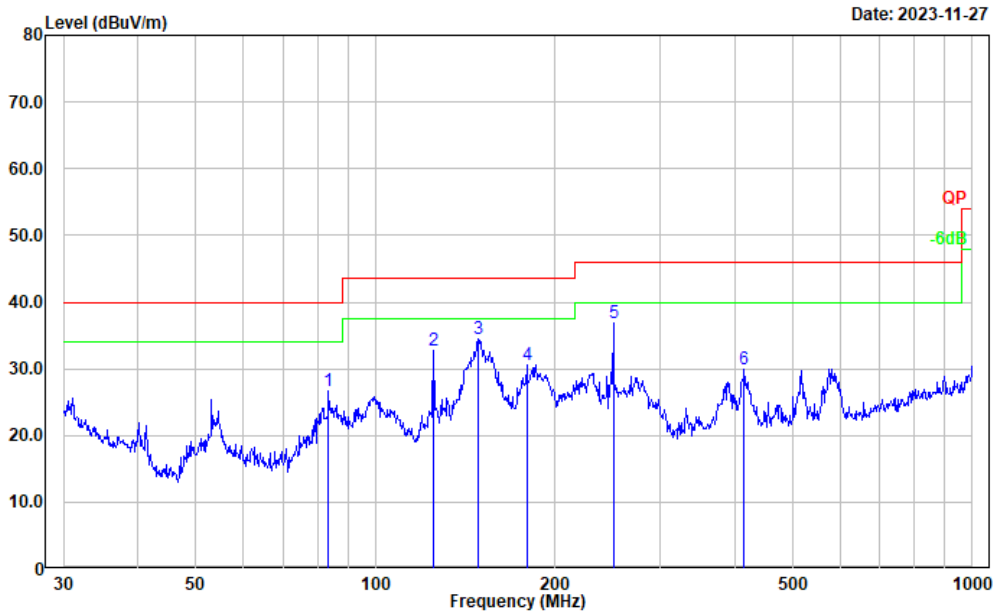
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5470-5725MHz 802.11ac vht80 5610MHz)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.000	34.29	-3.80	30.49	40.00	9.51	Peak
2	40.702	39.18	-11.82	27.36	40.00	12.64	QP
3	49.881	46.41	-16.99	29.42	40.00	10.58	Peak
4	82.359	50.26	-17.31	32.95	40.00	7.05	Peak
5	97.456	46.29	-14.94	31.35	43.50	12.15	Peak
6	125.007	41.23	-11.31	29.92	43.50	13.58	Peak

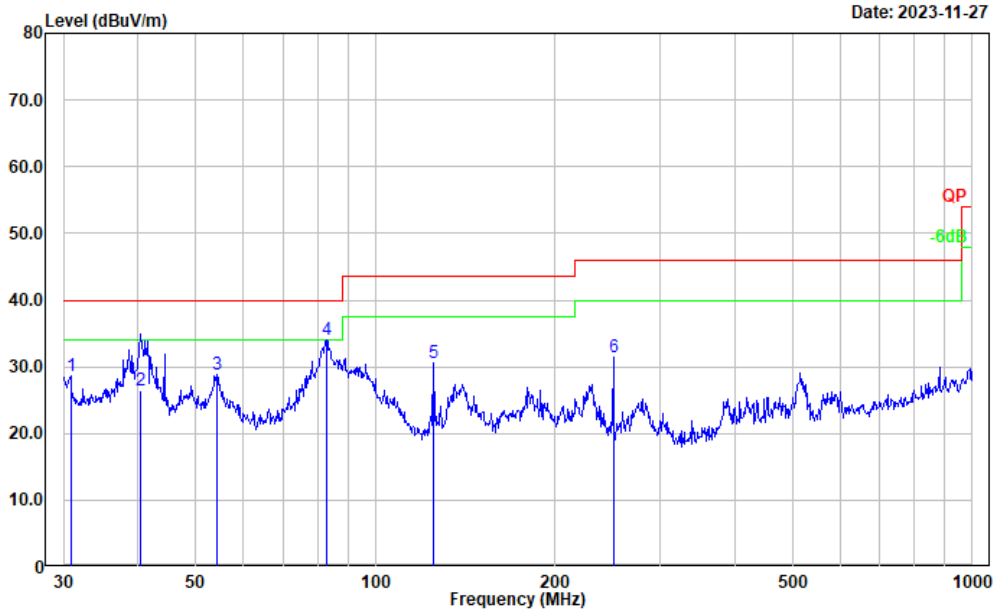
5725-5850MHz 802.11ax he20
Low channel

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11ax he20 Low Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	83.522	44.01	-17.24	26.77	40.00	13.23	Peak
2	125.007	44.04	-11.31	32.73	43.50	10.77	Peak
3	148.441	46.43	-11.90	34.53	43.50	8.97	Peak
4	179.386	44.05	-13.50	30.55	43.50	12.95	Peak
5	250.301	50.00	-13.18	36.82	46.00	9.18	Peak
6	414.722	38.14	-8.16	29.98	46.00	16.02	Peak

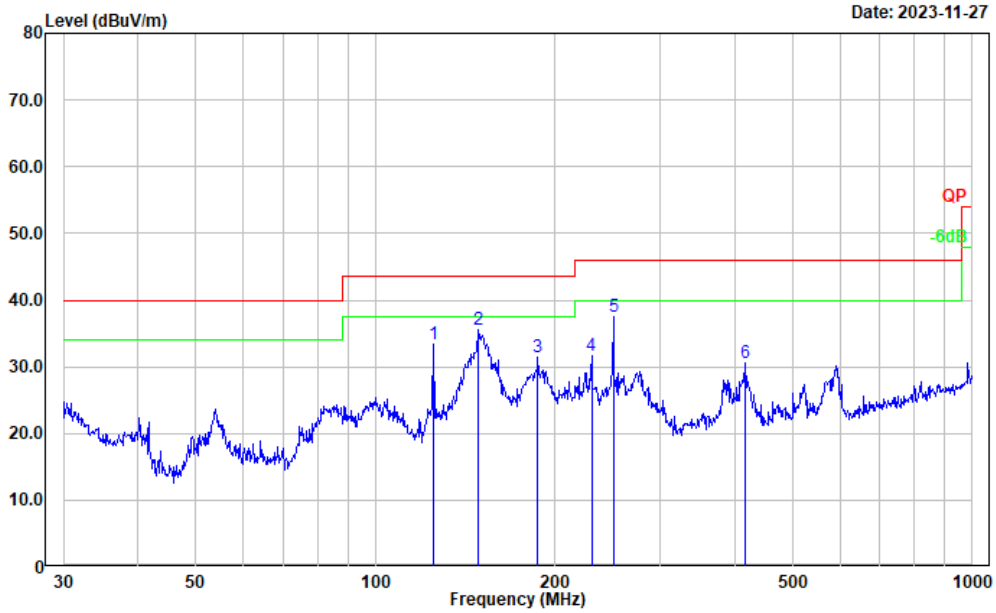
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11ax he20 Low Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	33.00	-4.45	28.55	40.00	11.45	Peak
2	40.424	38.06	-11.66	26.40	40.00	13.60	QP
3	54.261	46.02	-17.17	28.85	40.00	11.15	Peak
4	82.648	51.23	-17.28	33.95	40.00	6.05	Peak
5	125.007	41.94	-11.31	30.63	43.50	12.87	Peak
6	250.301	44.60	-13.18	31.42	46.00	14.58	Peak

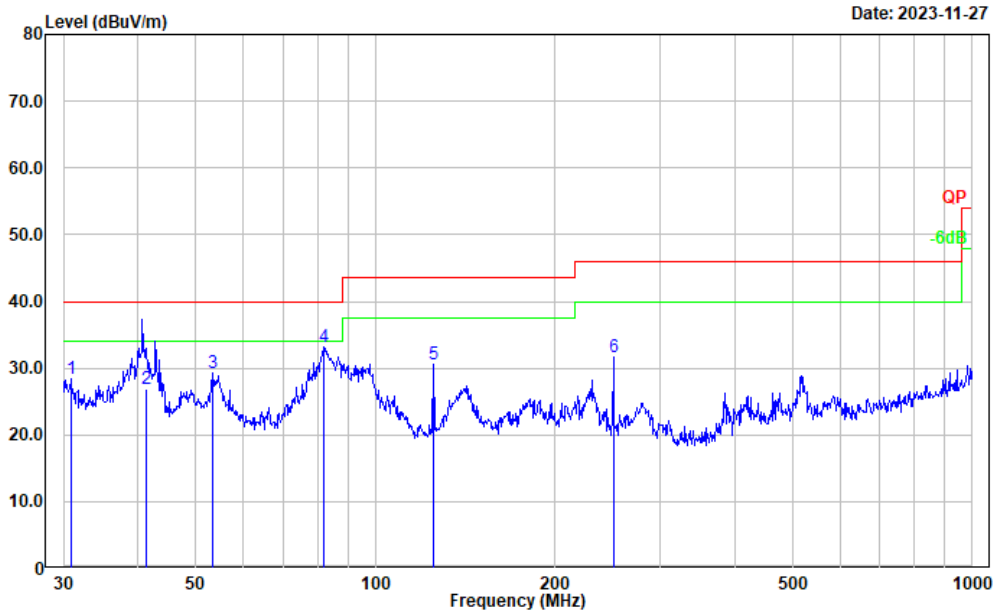
Middle channel

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11ax he20 Middle Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	125.007	44.75	-11.31	33.44	43.50	10.06	Peak
2	148.963	47.37	-11.90	35.47	43.50	8.03	Peak
3	187.096	44.96	-13.54	31.42	43.50	12.08	Peak
4	230.099	44.69	-13.05	31.64	46.00	14.36	Peak
5	250.301	50.76	-13.18	37.58	46.00	8.42	Peak
6	416.179	38.74	-8.10	30.64	46.00	15.36	Peak

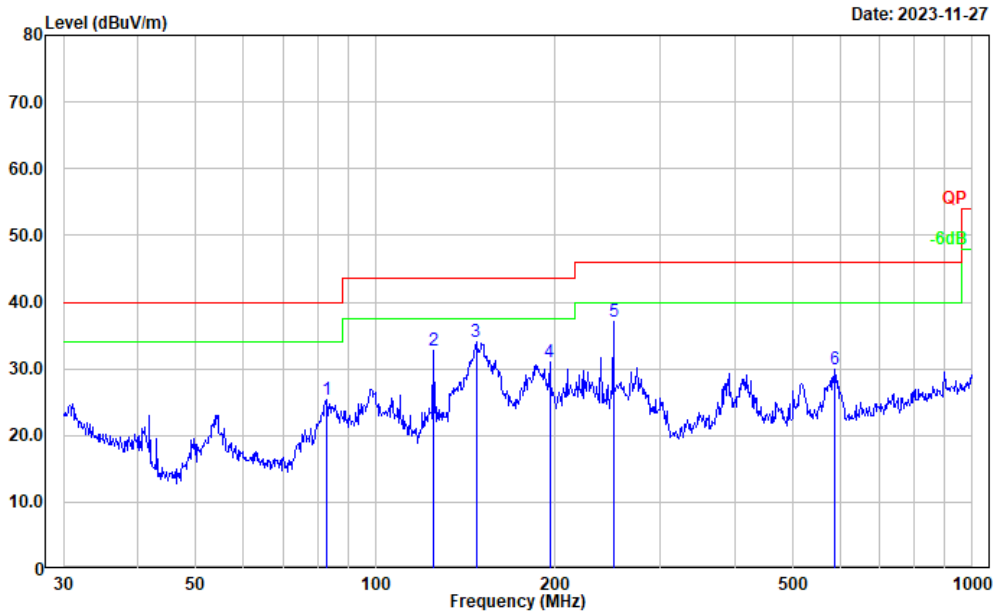
Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11ax he20 Middle Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	32.77	-4.45	28.32	40.00	11.68	Peak
2	41.325	39.11	-12.17	26.94	40.00	13.06	QP
3	53.318	46.34	-17.14	29.20	40.00	10.80	Peak
4	82.071	50.56	-17.35	33.21	40.00	6.79	Peak
5	125.007	41.82	-11.31	30.51	43.50	12.99	Peak
6	250.301	44.73	-13.18	31.55	46.00	14.45	Peak

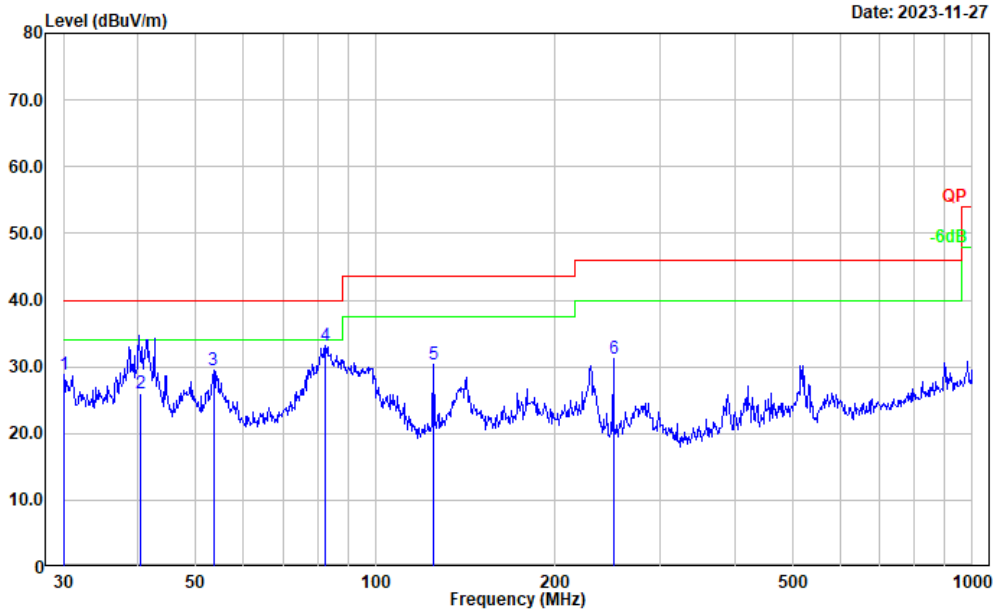
High channel

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11ax he20 High Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	82.938	42.53	-17.23	25.30	40.00	14.70	Peak
2	125.007	44.14	-11.31	32.83	43.50	10.67	Peak
3	147.404	45.90	-11.89	34.01	43.50	9.49	Peak
4	195.822	43.59	-12.68	30.91	43.50	12.59	Peak
5	250.301	50.18	-13.18	37.00	46.00	9.00	Peak
6	588.905	35.30	-5.34	29.96	46.00	16.04	Peak

Project No.: CR230955399-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11ax he20 High Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.105	32.78	-3.88	28.90	40.00	11.10	Peak
2	40.420	37.70	-11.66	26.04	40.00	13.96	QP
3	53.505	46.72	-17.15	29.57	40.00	10.43	Peak
4	82.359	50.44	-17.31	33.13	40.00	6.87	Peak
5	125.007	41.77	-11.31	30.46	43.50	13.04	Peak
6	250.301	44.46	-13.18	31.28	46.00	14.72	Peak

2) 1GHz-40GHz:

5150-5250MHz:

802.11a Mode Chain 0:

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	29.77	PK	H	32.83	62.60	74.00	11.40
5150.000	16.19	AV	H	32.83	49.02	54.00	4.98
5150.000	30.10	PK	V	32.83	62.93	74.00	11.07
5150.000	17.60	AV	V	32.83	50.43	54.00	3.57
10360.000	34.82	PK	H	14.45	49.27	68.20	18.93
10360.000	35.94	PK	V	14.45	50.39	68.20	17.81
Middle Channel: 5200 MHz							
10400.000	33.64	PK	H	14.52	48.16	68.20	20.04
10400.000	34.02	PK	V	14.52	48.54	68.20	19.66
High Channel: 5240 MHz							
5350.000	30.89	PK	H	32.70	63.59	74.00	10.41
5350.000	16.13	AV	H	32.70	48.83	54.00	5.17
5350.000	30.52	PK	V	32.70	63.22	74.00	10.78
5350.000	16.21	AV	V	32.70	48.91	54.00	5.09
10480.000	32.93	PK	H	14.40	47.33	68.20	20.87
10480.000	33.19	PK	V	14.40	47.59	68.20	20.61

802.11a Mode Chain 1:

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	29.76	PK	H	32.83	62.59	74.00	11.41
5150.000	17.09	AV	H	32.83	49.92	54.00	4.08
5150.000	30.00	PK	V	32.83	62.83	74.00	11.17
5150.000	17.67	AV	V	32.83	50.50	54.00	3.50
10360.000	34.63	PK	H	14.45	49.08	68.20	19.12
10360.000	35.50	PK	V	14.45	49.95	68.20	18.25
Middle Channel: 5200 MHz							
10400.000	35.26	PK	H	14.52	49.78	68.20	18.42
10400.000	35.92	PK	V	14.52	50.44	68.20	17.76
High Channel: 5240 MHz							
5350.000	30.02	PK	H	32.70	62.72	74.00	11.28
5350.000	16.39	AV	H	32.70	49.09	54.00	4.91
5350.000	30.34	PK	V	32.70	63.04	74.00	10.96
5350.000	16.93	AV	V	32.70	49.63	54.00	4.37
10480.000	35.53	PK	H	14.40	49.93	68.20	18.27
10480.000	37.09	PK	V	14.40	51.49	68.20	16.71

802.11ac vht20 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	30.82	PK	H	32.83	63.65	74.00	10.35
5150.000	18.16	AV	H	32.83	50.99	54.00	3.01
5150.000	30.26	PK	V	32.83	63.09	74.00	10.91
5150.000	17.60	AV	V	32.83	50.43	54.00	3.57
10360.000	36.53	PK	H	14.45	50.98	68.20	17.22
10360.000	37.81	PK	V	14.45	52.26	68.20	15.94
Middle Channel: 5200 MHz							
10400.000	36.43	PK	H	14.52	50.95	68.20	17.25
10400.000	37.48	PK	V	14.52	52.00	68.20	16.20
High Channel: 5240 MHz							
5350.000	30.26	PK	H	32.70	62.96	74.00	11.04
5350.000	16.31	AV	H	32.70	49.01	54.00	4.99
5350.000	30.60	PK	V	32.70	63.30	74.00	10.70
5350.000	16.89	AV	V	32.70	49.59	54.00	4.41
10480.000	36.27	PK	H	14.40	50.67	68.20	17.53
10480.000	37.12	PK	V	14.40	51.52	68.20	16.68

802.11ac vht40 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	30.52	PK	H	32.83	63.35	74.00	10.65
5150.000	16.46	AV	H	32.83	49.29	54.00	4.71
5150.000	30.56	PK	V	32.83	63.39	74.00	10.61
5150.000	17.59	AV	V	32.83	50.42	54.00	3.58
10380.000	34.55	PK	H	14.49	49.04	68.20	19.16
10380.000	36.28	PK	V	14.49	50.77	68.20	17.43
High Channel: 5230 MHz							
5350.000	29.90	PK	H	32.70	62.60	74.00	11.40
5350.000	15.81	AV	H	32.70	48.51	54.00	5.49
5350.000	30.49	PK	V	32.70	63.19	74.00	10.81
5350.000	16.08	AV	V	32.70	48.78	54.00	5.22
10460.000	35.40	PK	H	14.43	49.83	68.20	18.37
10460.000	35.49	PK	V	14.43	49.92	68.20	18.28

802.11ac vht80 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	30.22	PK	H	32.83	63.05	74.00	10.95
5150.000	16.50	AV	H	32.83	49.33	54.00	4.67
5150.000	29.91	PK	V	32.83	62.74	74.00	11.26
5150.000	17.82	AV	V	32.83	50.65	54.00	3.35
5350.000	30.72	PK	H	32.70	63.42	74.00	10.58
5350.000	16.95	AV	H	32.70	49.65	54.00	4.35
5350.000	30.86	PK	V	32.70	63.56	74.00	10.44
5350.000	16.76	AV	V	32.70	49.46	54.00	4.54
10420.000	34.85	PK	H	14.49	49.34	68.20	18.86
10420.000	35.81	PK	V	14.49	50.30	68.20	17.90

802.11ac vht160 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5250 MHz							
5150.000	31.23	PK	H	32.83	64.06	74.00	9.94
5150.000	17.97	AV	H	32.83	50.80	54.00	3.20
5150.000	31.56	PK	V	32.83	64.39	74.00	9.61
5150.000	18.15	AV	V	32.83	50.98	54.00	3.02
5350.000	30.81	PK	H	32.70	63.51	74.00	10.49
5350.000	17.22	AV	H	32.70	49.92	54.00	4.08
5350.000	31.08	PK	V	32.70	63.78	74.00	10.22
5350.000	17.60	AV	V	32.70	50.30	54.00	3.70
10500.000	35.12	PK	H	14.37	49.49	68.20	18.71
10500.000	35.00	PK	V	14.37	49.37	68.20	18.83

802.11ax he20 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	30.65	PK	H	32.83	63.48	74.00	10.52
5150.000	16.22	AV	H	32.83	49.05	54.00	4.95
5150.000	30.23	PK	V	32.83	63.06	74.00	10.94
5150.000	16.82	AV	V	32.83	49.65	54.00	4.35
10360.000	37.45	PK	H	14.45	51.90	68.20	16.30
10360.000	38.36	PK	V	14.45	52.81	68.20	15.39
Middle Channel: 5200 MHz							
10400.000	36.65	PK	H	14.52	51.17	68.20	17.03
10400.000	37.71	PK	V	14.52	52.23	68.20	15.97
High Channel: 5240 MHz							
5350.000	30.24	PK	H	32.70	62.94	74.00	11.06
5350.000	16.33	AV	H	32.70	49.03	54.00	4.97
5350.000	30.71	PK	V	32.70	63.41	74.00	10.59
5350.000	16.42	AV	V	32.70	49.12	54.00	4.88
10480.000	35.98	PK	H	14.40	50.38	68.20	17.82
10480.000	36.59	PK	V	14.40	50.99	68.20	17.21

802.11ax he40 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	30.66	PK	H	32.83	63.49	74.00	10.51
5150.000	16.82	AV	H	32.83	49.65	54.00	4.35
5150.000	29.86	PK	V	32.83	62.69	74.00	11.31
5150.000	17.29	AV	V	32.83	50.12	54.00	3.88
10380.000	35.97	PK	H	14.49	50.46	68.20	17.74
10380.000	36.75	PK	V	14.49	51.24	68.20	16.96
High Channel: 5230 MHz							
5350.000	30.71	PK	H	32.70	63.41	74.00	10.59
5350.000	15.79	AV	H	32.70	48.49	54.00	5.51
5350.000	29.78	PK	V	32.70	62.48	74.00	11.52
5350.000	16.10	AV	V	32.70	48.80	54.00	5.20
10460.000	34.95	PK	H	14.43	49.38	68.20	18.82
10460.000	35.21	PK	V	14.43	49.64	68.20	18.56

802.11ax he80 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	29.68	PK	H	32.83	62.51	74.00	11.49
5150.000	17.46	AV	H	32.83	50.29	54.00	3.71
5150.000	30.18	PK	V	32.83	63.01	74.00	10.99
5150.000	18.06	AV	V	32.83	50.89	54.00	3.11
5350.000	30.84	PK	H	32.70	63.54	74.00	10.46
5350.000	16.92	AV	H	32.70	49.62	54.00	4.38
5350.000	30.75	PK	V	32.70	63.45	74.00	10.55
5350.000	16.59	AV	V	32.70	49.29	54.00	4.71
10420.000	34.66	PK	H	14.49	49.15	68.20	19.05
10420.000	35.81	PK	V	14.49	50.30	68.20	17.90

802.11ax he160 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5250 MHz							
5150.000	29.59	PK	H	32.83	62.42	74.00	11.58
5150.000	17.21	AV	H	32.83	50.04	54.00	3.96
5150.000	30.10	PK	V	32.83	62.93	74.00	11.07
5150.000	18.05	AV	V	32.83	50.88	54.00	3.12
5350.000	31.21	PK	H	32.70	63.91	74.00	10.09
5350.000	17.36	AV	H	32.70	50.06	54.00	3.94
5350.000	31.44	PK	V	32.70	64.14	74.00	9.86
5350.000	17.53	AV	V	32.70	50.23	54.00	3.77
10500.000	35.15	PK	H	14.37	49.52	68.20	18.68
10500.000	35.26	PK	V	14.37	49.63	68.20	18.57

5250-5350MHz:

802.11a Mode Chain 0:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
5150.000	30.06	PK	H	32.83	62.89	74.00	11.11
5150.000	16.03	AV	H	32.83	48.86	54.00	5.14
5150.000	30.57	PK	V	32.83	63.40	74.00	10.60
5150.000	16.29	AV	V	32.83	49.12	54.00	4.88
10520.000	34.98	PK	H	14.51	49.49	68.20	18.71
10520.000	34.93	PK	V	14.51	49.44	68.20	18.76
Middle Channel: 5280 MHz							
10560.000	35.36	PK	H	14.79	50.15	68.20	18.05
10560.000	35.05	PK	V	14.79	49.84	68.20	18.36
High Channel: 5320 MHz							
5350.000	30.42	PK	H	32.70	63.12	74.00	10.88
5350.000	16.26	AV	H	32.70	48.96	54.00	5.04
5350.000	31.14	PK	V	32.70	63.84	74.00	10.16
5350.000	17.05	AV	V	32.70	49.75	54.00	4.25
10640.000	35.36	PK	H	15.11	50.47	74.00	23.53
10640.000	22.69	AV	H	15.11	37.80	54.00	16.20
10640.000	35.38	PK	V	15.11	50.49	74.00	23.51
10640.000	23.54	AV	V	15.11	38.65	54.00	15.35

802.11a Mode Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
5150.000	30.20	PK	H	32.83	63.03	74.00	10.97
5150.000	16.02	AV	H	32.83	48.85	54.00	5.15
5150.000	30.57	PK	V	32.83	63.40	74.00	10.60
5150.000	16.53	AV	V	32.83	49.36	54.00	4.64
10520.000	36.03	PK	H	14.51	50.54	68.20	17.66
10520.000	36.78	PK	V	14.51	51.29	68.20	16.91
Middle Channel: 5280 MHz							
10560.000	36.01	PK	H	14.79	50.80	68.20	17.40
10560.000	36.55	PK	V	14.79	51.34	68.20	16.86
High Channel: 5320 MHz							
5350.000	30.42	PK	H	32.70	63.12	74.00	10.88
5350.000	16.14	AV	H	32.70	48.84	54.00	5.16
5350.000	30.53	PK	V	32.70	63.23	74.00	10.77
5350.000	16.39	AV	V	32.70	49.09	54.00	4.91
10640.000	34.83	PK	H	15.11	49.94	74.00	24.06
10640.000	22.76	AV	H	15.11	37.87	54.00	16.13
10640.000	35.69	PK	V	15.11	50.80	74.00	23.20
10640.000	22.38	AV	V	15.11	37.49	54.00	16.51

802.11ac vht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
5150.000	30.25	PK	H	32.83	63.08	74.00	10.92
5150.000	16.02	AV	H	32.83	48.85	54.00	5.15
5150.000	30.67	PK	V	32.83	63.50	74.00	10.50
5150.000	16.46	AV	V	32.83	49.29	54.00	4.71
10520.000	35.90	PK	H	14.51	50.41	68.20	17.79
10520.000	37.01	PK	V	14.51	51.52	68.20	16.68
Middle Channel: 5280 MHz							
10560.000	36.73	PK	H	14.79	51.52	68.20	16.68
10560.000	37.58	PK	V	14.79	52.37	68.20	15.83
High Channel: 5320 MHz							
5350.000	30.31	PK	H	32.70	63.01	74.00	10.99
5350.000	17.10	AV	H	32.70	49.80	54.00	4.20
5350.000	30.86	PK	V	32.70	63.56	74.00	10.44
5350.000	17.52	AV	V	32.70	50.22	54.00	3.78
10640.000	38.21	PK	H	15.11	53.32	74.00	20.68
10640.000	25.61	AV	H	15.11	40.72	54.00	13.28
10640.000	39.14	PK	V	15.11	54.25	74.00	19.75
10640.000	25.84	AV	V	15.11	40.95	54.00	13.05

802.11ac vht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5270 MHz							
5150.000	30.08	PK	H	32.83	62.91	74.00	11.09
5150.000	16.03	AV	H	32.83	48.86	54.00	5.14
5150.000	30.25	PK	V	32.83	63.08	74.00	10.92
5150.000	16.26	AV	V	32.83	49.09	54.00	4.91
10540.000	34.92	PK	H	14.66	49.58	68.20	18.62
10540.000	35.95	PK	V	14.66	50.61	68.20	17.59
High Channel: 5310 MHz							
5350.000	29.80	PK	H	32.70	62.50	74.00	11.50
5350.000	16.75	AV	H	32.70	49.45	54.00	4.55
5350.000	30.86	PK	V	32.70	63.56	74.00	10.44
5350.000	16.39	AV	V	32.70	49.09	54.00	4.91
10620.000	35.53	PK	H	15.09	50.62	74.00	23.38
10620.000	23.61	AV	H	15.09	38.70	54.00	15.30
10620.000	36.75	PK	V	15.09	51.84	74.00	22.16
10620.000	23.74	AV	V	15.09	38.83	54.00	15.17

802.11ac vht80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5290 MHz							
5150.000	30.21	PK	H	32.83	63.04	74.00	10.96
5150.000	16.06	AV	H	32.83	48.89	54.00	5.11
5150.000	30.42	PK	V	32.83	63.25	74.00	10.75
5150.000	16.30	AV	V	32.83	49.13	54.00	4.87
5350.000	29.20	PK	H	32.70	61.90	74.00	12.10
5350.000	16.28	AV	H	32.70	48.98	54.00	5.02
5350.000	30.03	PK	V	32.70	62.73	74.00	11.27
5350.000	16.92	AV	V	32.70	49.62	54.00	4.38
10580.000	35.41	PK	H	14.94	50.35	68.20	17.85
10580.000	36.19	PK	V	14.94	51.13	68.20	17.07

802.11ax he20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
5150.000	30.33	PK	H	32.83	63.16	74.00	10.84
5150.000	16.35	AV	H	32.83	49.18	54.00	4.82
5150.000	30.69	PK	V	32.83	63.52	74.00	10.48
5150.000	16.90	AV	V	32.83	49.73	54.00	4.27
10520.000	35.71	PK	H	14.51	50.22	68.20	17.98
10520.000	36.55	PK	V	14.51	51.06	68.20	17.14
Middle Channel: 5280 MHz							
10560.000	36.72	PK	H	14.79	51.51	68.20	16.69
10560.000	37.86	PK	V	14.79	52.65	68.20	15.55
High Channel: 5320 MHz							
5350.000	30.32	PK	H	32.70	63.02	74.00	10.98
5350.000	18.11	AV	H	32.70	50.81	54.00	3.19
5350.000	31.90	PK	V	32.70	64.60	74.00	9.40
5350.000	18.26	AV	V	32.70	50.96	54.00	3.04
10640.000	37.45	PK	H	15.11	52.56	74.00	21.44
10640.000	24.51	AV	H	15.11	39.62	54.00	14.38
10640.000	38.80	PK	V	15.11	53.91	74.00	20.09
10640.000	25.62	AV	V	15.11	40.73	54.00	13.27

802.11ax he40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5270 MHz							
5150.000	30.29	PK	H	32.83	63.12	74.00	10.88
5150.000	16.25	AV	H	32.83	49.08	54.00	4.92
5150.000	30.07	PK	V	32.83	62.90	74.00	11.10
5150.000	16.83	AV	V	32.83	49.66	54.00	4.34
10540.000	35.20	PK	H	14.66	49.86	68.20	18.34
10540.000	35.92	PK	V	14.66	50.58	68.20	17.62
High Channel: 5310 MHz							
5350.000	35.50	PK	H	32.70	68.20	74.00	5.80
5350.000	18.13	AV	H	32.70	50.83	54.00	3.17
5350.000	36.79	PK	V	32.70	69.49	74.00	4.51
5350.000	18.25	AV	V	32.70	50.95	54.00	3.05
10620.000	34.90	PK	H	15.09	49.99	74.00	24.01
10620.000	22.77	AV	H	15.09	37.86	54.00	16.14
10620.000	36.54	PK	V	15.09	51.63	74.00	22.37
10620.000	23.61	AV	V	15.09	38.70	54.00	15.30

802.11ax he80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5290 MHz							
5150.000	30.33	PK	H	32.83	63.16	74.00	10.84
5150.000	16.10	AV	H	32.83	48.93	54.00	5.07
5150.000	30.68	PK	V	32.83	63.51	74.00	10.49
5150.000	16.46	AV	V	32.83	49.29	54.00	4.71
5350.000	29.33	PK	H	32.70	62.03	74.00	11.97
5350.000	16.09	AV	H	32.70	48.79	54.00	5.21
5350.000	29.75	PK	V	32.70	62.45	74.00	11.55
5350.000	16.22	AV	V	32.70	48.92	54.00	5.08
10580.000	34.98	PK	H	14.94	49.92	68.20	18.28
10580.000	35.30	PK	V	14.94	50.24	68.20	17.96

5470-5725MHz

802.11a Mode Chain 0:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500 MHz							
5470.000	30.49	PK	H	32.62	63.11	68.20	5.09
5470.000	32.06	PK	V	32.62	64.68	68.20	3.52
11000.000	35.51	PK	H	15.51	51.02	74.00	22.98
11000.000	22.01	AV	H	15.51	37.52	54.00	16.48
11000.000	35.74	PK	V	15.51	51.25	74.00	22.75
11000.000	22.43	AV	V	15.51	37.94	54.00	16.06
Middle Channel: 5580 MHz							
11160.000	35.95	PK	H	15.36	51.31	74.00	22.69
11160.000	22.32	AV	H	15.36	37.68	54.00	16.32
11160.000	36.27	PK	V	15.36	51.63	74.00	22.37
11160.000	23.50	AV	V	15.36	38.86	54.00	15.14
High Channel: 5700 MHz							
5725.000	31.63	PK	H	33.03	64.66	68.20	3.54
5725.000	32.14	PK	V	33.03	65.17	68.20	3.03
11400.000	35.05	PK	H	15.89	50.94	74.00	23.06
11400.000	21.18	AV	H	15.89	37.07	54.00	16.93
11400.000	35.72	PK	V	15.89	51.61	74.00	22.39
11400.000	22.84	AV	V	15.89	38.73	54.00	15.27

802.11a Mode Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500 MHz							
5470.000	30.09	PK	H	32.62	62.71	68.20	5.49
5470.000	30.03	PK	V	32.62	62.65	68.20	5.55
11000.000	34.52	PK	H	15.51	50.03	74.00	23.97
11000.000	22.99	AV	H	15.51	38.50	54.00	15.50
11000.000	34.24	PK	V	15.51	49.75	74.00	24.25
11000.000	22.98	AV	V	15.51	38.49	54.00	15.51
Middle Channel: 5580 MHz							
11160.000	34.84	PK	H	15.36	50.20	74.00	23.80
11160.000	22.09	AV	H	15.36	37.45	54.00	16.55
11160.000	34.61	PK	V	15.36	49.97	74.00	24.03
11160.000	22.47	AV	V	15.36	37.83	54.00	16.17
High Channel: 5700 MHz							
5725.000	30.29	PK	H	33.03	63.32	68.20	4.88
5725.000	30.85	PK	V	33.03	63.88	68.20	4.32
11400.000	34.96	PK	H	15.89	50.85	74.00	23.15
11400.000	22.82	AV	H	15.89	38.71	54.00	15.29
11400.000	34.19	PK	V	15.89	50.08	74.00	23.92
11400.000	22.73	AV	V	15.89	38.62	54.00	15.38

802.11ac vht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500 MHz							
5470.000	31.39	PK	H	32.62	64.01	68.20	4.19
5470.000	32.03	PK	V	32.62	64.65	68.20	3.55
11000.000	36.20	PK	H	15.51	51.71	74.00	22.29
11000.000	23.28	AV	H	15.51	38.79	54.00	15.21
11000.000	36.41	PK	V	15.51	51.92	74.00	22.08
11000.000	24.09	AV	V	15.51	39.60	54.00	14.40
Middle Channel: 5580 MHz							
11160.000	37.37	PK	H	15.36	52.73	74.00	21.27
11160.000	23.90	AV	H	15.36	39.26	54.00	14.74
11160.000	37.81	PK	V	15.36	53.17	74.00	20.83
11160.000	25.04	AV	V	15.36	40.40	54.00	13.60
High Channel: 5700 MHz							
5725.000	31.90	PK	H	33.03	64.93	68.20	3.27
5725.000	32.14	PK	V	33.03	65.17	68.20	3.03
11400.000	36.95	PK	H	15.89	52.84	74.00	21.16
11400.000	23.76	AV	H	15.89	39.65	54.00	14.35
11400.000	37.21	PK	V	15.89	53.10	74.00	20.90
11400.000	24.83	AV	V	15.89	40.72	54.00	13.28

802.11ac vht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5510 MHz							
5470.000	31.41	PK	H	32.62	64.03	68.20	4.17
5470.000	31.50	PK	V	32.62	64.12	68.20	4.08
11020.000	34.44	PK	H	15.50	49.94	74.00	24.06
11020.000	22.64	AV	H	15.50	38.14	54.00	15.86
11020.000	34.65	PK	V	15.50	50.15	74.00	23.85
11020.000	22.33	AV	V	15.50	37.83	54.00	16.17
Middle Channel: 5550 MHz							
11100.000	34.89	PK	H	15.45	50.34	74.00	23.66
11100.000	22.02	AV	H	15.45	37.47	54.00	16.53
11100.000	34.36	PK	V	15.45	49.81	74.00	24.19
11100.000	22.63	AV	V	15.45	38.08	54.00	15.92
High Channel: 5670 MHz							
5725.000	30.01	PK	H	33.03	63.04	68.20	5.16
5725.000	30.08	PK	V	33.03	63.11	68.20	5.09
11340.000	34.30	PK	H	15.84	50.14	74.00	23.86
11340.000	22.11	AV	H	15.84	37.95	54.00	16.05
11340.000	34.59	PK	V	15.84	50.43	74.00	23.57
11340.000	22.87	AV	V	15.84	38.71	54.00	15.29

802.11ac vht80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5530 MHz							
5470.000	31.39	PK	H	32.62	64.01	68.20	4.19
5470.000	31.55	PK	V	32.62	64.17	68.20	4.03
11060.000	34.54	PK	H	15.47	50.01	74.00	23.99
11060.000	22.61	AV	H	15.47	38.08	54.00	15.92
11060.000	34.90	PK	V	15.47	50.37	74.00	23.63
11060.000	22.99	AV	V	15.47	38.46	54.00	15.54
High Channel: 5610 MHz							
5725.000	31.79	PK	H	33.03	64.82	68.20	3.38
5725.000	32.08	PK	V	33.03	65.11	68.20	3.09
11220.000	34.00	PK	H	15.41	49.41	74.00	24.59
11220.000	22.81	AV	H	15.41	38.22	54.00	15.78
11220.000	34.68	PK	V	15.41	50.09	74.00	23.91
11220.000	22.26	AV	V	15.41	37.67	54.00	16.33

802.11ac vht160 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5570 MHz							
5470.000	30.72	PK	H	32.62	63.34	68.20	4.86
5470.000	31.19	PK	V	32.62	63.81	68.20	4.39
5725.000	30.19	PK	H	33.03	63.22	68.20	4.98
5725.000	30.98	PK	V	33.03	64.01	68.20	4.19
11140.000	33.81	PK	H	15.40	49.21	74.00	24.79
11140.000	22.38	AV	H	15.40	37.78	54.00	16.22
11140.000	34.97	PK	V	15.40	50.37	74.00	23.63
11140.000	22.57	AV	V	15.40	37.97	54.00	16.03

802.11ax he20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500 MHz							
5470.000	32.32	PK	H	32.62	64.94	68.20	3.26
5470.000	32.51	PK	V	32.62	65.13	68.20	3.07
11000.000	33.43	PK	H	15.51	48.94	74.00	25.06
11000.000	23.23	AV	H	15.51	38.74	54.00	15.26
11000.000	33.76	PK	V	15.51	49.27	74.00	24.73
11000.000	24.29	AV	V	15.51	39.80	54.00	14.20
Middle Channel: 5580 MHz							
11160.000	34.94	PK	H	15.36	50.30	74.00	23.70
11160.000	24.00	AV	H	15.36	39.36	54.00	14.64
11160.000	35.39	PK	V	15.36	50.75	74.00	23.25
11160.000	24.93	AV	V	15.36	40.29	54.00	13.71
High Channel: 5620 MHz							
5725.000	30.32	PK	H	33.03	63.35	68.20	4.85
5725.000	32.05	PK	V	33.03	65.08	68.20	3.12
High Channel: 5700 MHz							
5725.000	30.32	PK	H	33.03	63.35	68.20	4.85
5725.000	30.95	PK	V	33.03	63.98	68.20	4.22
11400.000	36.03	PK	H	15.89	51.92	74.00	22.08
11400.000	24.64	AV	H	15.89	40.53	54.00	13.47
11400.000	36.75	PK	V	15.89	52.64	74.00	21.36
11400.000	25.17	AV	V	15.89	41.06	54.00	12.94

802.11ax he40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5510 MHz							
5470.000	30.73	PK	H	32.62	63.35	68.20	4.85
5470.000	31.28	PK	V	32.62	63.90	68.20	4.30
11020.000	34.53	PK	H	15.50	50.03	74.00	23.97
11020.000	22.45	AV	H	15.50	37.95	54.00	16.05
11020.000	34.70	PK	V	15.50	50.20	74.00	23.80
11020.000	22.11	AV	V	15.50	37.61	54.00	16.39
Middle Channel: 5550 MHz							
11100.000	34.14	PK	H	15.45	49.59	74.00	24.41
11100.000	22.55	AV	H	15.45	38.00	54.00	16.00
11100.000	34.63	PK	V	15.45	50.08	74.00	23.92
11100.000	22.61	AV	V	15.45	38.06	54.00	15.94
High Channel: 5670 MHz							
5725.000	25.91	PK	H	33.03	58.94	68.20	9.26
5725.000	26.68	PK	V	33.03	59.71	68.20	8.49
11340.000	34.49	PK	H	15.84	50.33	74.00	23.67
11340.000	22.40	AV	H	15.84	38.24	54.00	15.76
11340.000	35.18	PK	V	15.84	51.02	74.00	22.98
11340.000	22.89	AV	V	15.84	38.73	54.00	15.27

802.11ax he80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5530 MHz							
5470.000	30.78	PK	H	32.62	63.40	68.20	4.80
5470.000	31.21	PK	V	32.62	63.83	68.20	4.37
11060.000	34.47	PK	H	15.47	49.94	74.00	24.06
11060.000	22.59	AV	H	15.47	38.06	54.00	15.94
11060.000	34.13	PK	V	15.47	49.60	74.00	24.40
11060.000	22.00	AV	V	15.47	37.47	54.00	16.53
High Channel: 5610 MHz							
5725.000	30.89	PK	H	33.03	63.92	68.20	4.28
5725.000	30.97	PK	V	33.03	64.00	68.20	4.20
11220.000	32.88	PK	H	15.41	48.29	74.00	25.71
11220.000	22.79	AV	H	15.41	38.20	54.00	15.80
11220.000	34.51	PK	V	15.41	49.92	74.00	24.08
11220.000	22.96	AV	V	15.41	38.37	54.00	15.63

802.11ax he160 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5570 MHz							
5470.000	32.41	PK	H	32.62	65.03	68.20	3.17
5470.000	32.50	PK	V	32.62	65.12	68.20	3.08
5725.000	30.43	PK	H	33.03	63.46	68.20	4.74
5725.000	30.91	PK	V	33.03	63.94	68.20	4.26
11140.000	34.45	PK	H	15.40	49.85	74.00	24.15
11140.000	22.38	AV	H	15.40	37.78	54.00	16.22
11140.000	35.04	PK	V	15.40	50.44	74.00	23.56
11140.000	22.97	AV	V	15.40	38.37	54.00	15.63

5725-5850MHz

802.11a Mode Chain 0:

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	35.66	PK	H	15.47	51.13	74.00	22.87
11490.000	22.55	AV	H	15.47	38.02	54.00	15.98
11490.000	35.98	PK	V	15.47	51.45	74.00	22.55
11490.000	23.19	AV	V	15.47	38.66	54.00	15.34
Middle Channel: 5785 MHz							
11570.000	35.21	PK	H	15.69	50.90	74.00	23.10
11570.000	22.99	AV	H	15.69	38.68	54.00	15.32
11570.000	35.76	PK	V	15.69	51.45	74.00	22.55
11570.000	22.63	AV	V	15.69	38.32	54.00	15.68
High Channel: 5825 MHz							
11650.000	34.46	PK	H	16.02	50.48	74.00	23.52
11650.000	22.55	AV	H	16.02	38.57	54.00	15.43
11650.000	35.13	PK	V	16.02	51.15	74.00	22.85
11650.000	22.91	AV	V	16.02	38.93	54.00	15.07

802.11a Mode Chain 1:

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	34.60	PK	H	15.47	50.07	74.00	23.93
11490.000	22.67	AV	H	15.47	38.14	54.00	15.86
11490.000	35.15	PK	V	15.47	50.62	74.00	23.38
11490.000	22.86	AV	V	15.47	38.33	54.00	15.67
Middle Channel: 5785 MHz							
11570.000	34.66	PK	H	15.69	50.35	74.00	23.65
11570.000	22.81	AV	H	15.69	38.50	54.00	15.50
11570.000	35.27	PK	V	15.69	50.96	74.00	23.04
11570.000	22.89	AV	V	15.69	38.58	54.00	15.42
High Channel: 5825 MHz							
11650.000	34.30	PK	H	16.02	50.32	74.00	23.68
11650.000	22.13	AV	H	16.02	38.15	54.00	15.85
11650.000	35.01	PK	V	16.02	51.03	74.00	22.97
11650.000	22.52	AV	V	16.02	38.54	54.00	15.46

802.11ac vht20 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	36.44	PK	H	15.47	51.91	74.00	22.09
11490.000	24.57	AV	H	15.47	40.04	54.00	13.96
11490.000	36.53	PK	V	15.47	52.00	74.00	22.00
11490.000	24.66	AV	V	15.47	40.13	54.00	13.87
Middle Channel: 5785 MHz							
11570.000	36.83	PK	H	15.69	52.52	74.00	21.48
11570.000	25.20	AV	H	15.69	40.89	54.00	13.11
11570.000	37.69	PK	V	15.69	53.38	74.00	20.62
11570.000	25.82	AV	V	15.69	41.51	54.00	12.49
High Channel: 5825 MHz							
11650.000	37.29	PK	H	16.02	53.31	74.00	20.69
11650.000	25.41	AV	H	16.02	41.43	54.00	12.57
11650.000	37.82	PK	V	16.02	53.84	74.00	20.16
11650.000	25.60	AV	V	16.02	41.62	54.00	12.38

802.11ac vht40 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	34.55	PK	H	15.46	50.01	74.00	23.99
11510.000	23.04	AV	H	15.46	38.50	54.00	15.50
11510.000	35.28	PK	V	15.46	50.74	74.00	23.26
11510.000	23.59	AV	V	15.46	39.05	54.00	14.95
High Channel: 5795 MHz							
11590.000	35.46	PK	H	15.76	51.22	74.00	22.78
11590.000	22.78	AV	H	15.76	38.54	54.00	15.46
11590.000	35.54	PK	V	15.76	51.30	74.00	22.70
11590.000	22.93	AV	V	15.76	38.69	54.00	15.31

802.11ac vht80 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	34.73	PK	H	15.61	50.34	74.00	23.66
11550.000	22.74	AV	H	15.61	38.35	54.00	15.65
11550.000	35.20	PK	V	15.61	50.81	74.00	23.19
11550.000	22.81	AV	V	15.61	38.42	54.00	15.58

802.11ax he20 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	34.24	PK	H	15.47	49.71	74.00	24.29
11490.000	22.22	AV	H	15.47	37.69	54.00	16.31
11490.000	33.67	PK	V	15.47	49.14	74.00	24.86
11490.000	22.66	AV	V	15.47	38.13	54.00	15.87
Middle Channel: 5785 MHz							
11570.000	34.67	PK	H	15.69	50.36	74.00	23.64
11570.000	22.31	AV	H	15.69	38.00	54.00	16.00
11570.000	34.35	PK	V	15.69	50.04	74.00	23.96
11570.000	22.73	AV	V	15.69	38.42	54.00	15.58
High Channel: 5825 MHz							
11650.000	34.49	PK	H	16.02	50.51	74.00	23.49
11650.000	22.81	AV	H	16.02	38.83	54.00	15.17
11650.000	34.20	PK	V	16.02	50.22	74.00	23.78
11650.000	22.33	AV	V	16.02	38.35	54.00	15.65

802.11ax he40 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	35.25	PK	H	15.46	50.71	74.00	23.29
11510.000	22.84	AV	H	15.46	38.30	54.00	15.70
11510.000	35.69	PK	V	15.46	51.15	74.00	22.85
11510.000	23.31	AV	V	15.46	38.77	54.00	15.23
High Channel: 5795 MHz							
11590.000	34.79	PK	H	15.76	50.55	74.00	23.45
11590.000	22.06	AV	H	15.76	37.82	54.00	16.18
11590.000	35.03	PK	V	15.76	50.79	74.00	23.21
11590.000	22.75	AV	V	15.76	38.51	54.00	15.49

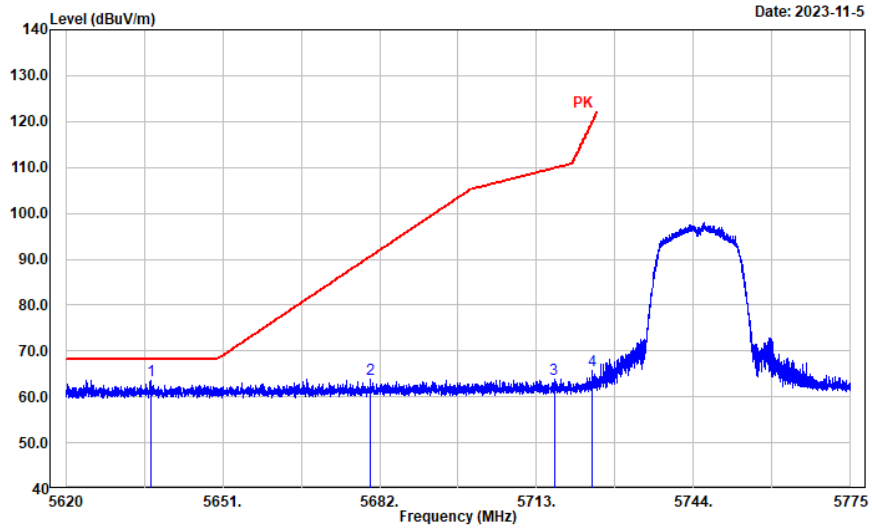
802.11ax he80 Mode:

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	35.49	PK	H	15.61	51.10	74.00	22.90
11550.000	22.14	AV	H	15.61	37.75	54.00	16.25
11550.000	35.73	PK	V	15.61	51.34	74.00	22.66
11550.000	22.92	AV	V	15.61	38.53	54.00	15.47

Test plots for Band Edge Measurements (Radiated)

802.11a_Chain 0			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

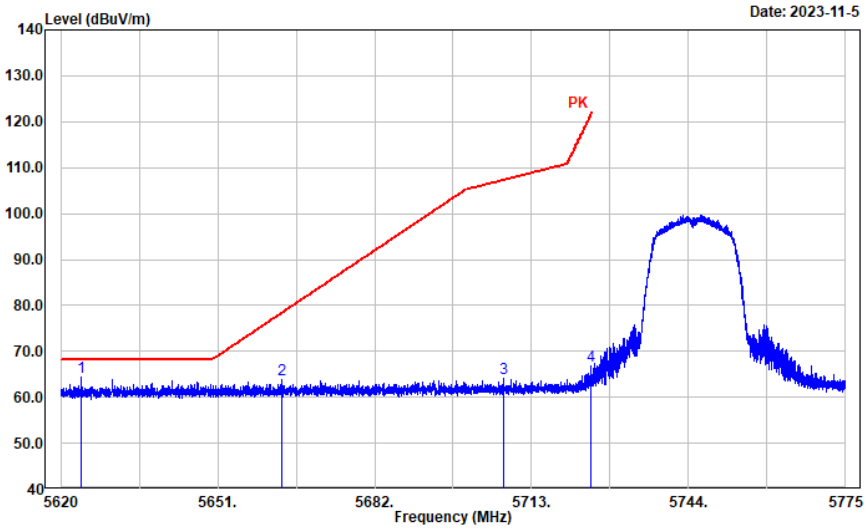
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5636.836	30.72	32.91	63.63	68.20	4.57	Peak
2	5680.245	30.98	33.00	63.98	90.62	26.64	Peak
3	5716.460	30.78	33.03	63.81	109.81	46.00	Peak
4	5723.933	32.79	33.03	65.82	119.77	53.95	Peak

802.11a_Chain 0			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

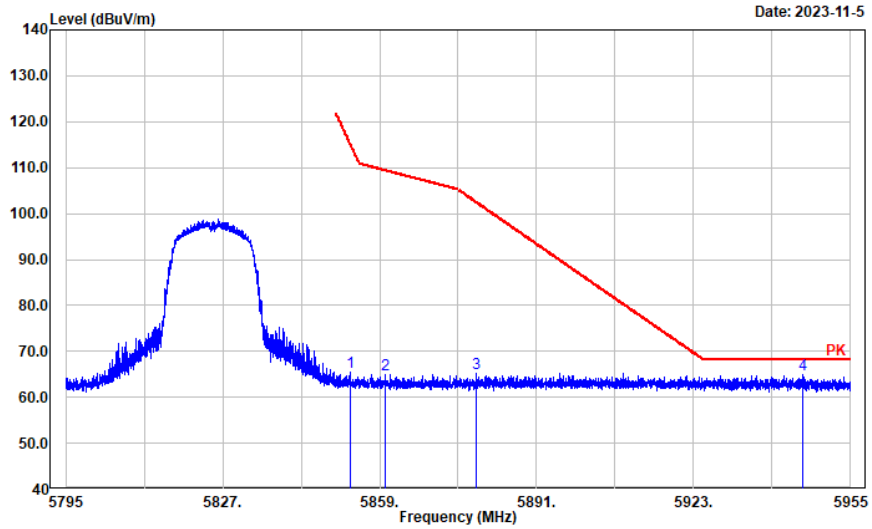
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5624.124	31.51	32.88	64.39	68.20	3.81	Peak
2	5663.657	30.79	32.97	63.76	78.34	14.58	Peak
3	5707.438	30.99	33.03	64.02	107.28	43.26	Peak
4	5724.770	33.67	33.03	66.70	121.68	54.98	Peak

802.11a_Chain 0			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

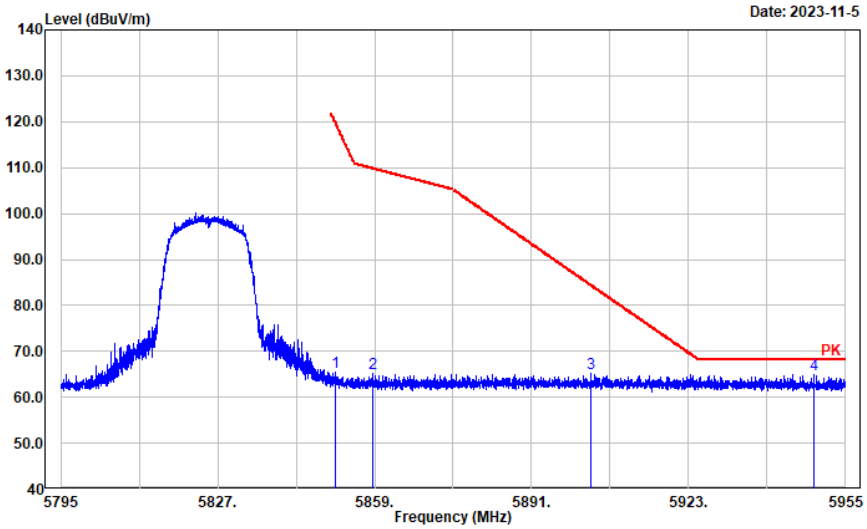
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5853.028	32.23	33.20	65.43	115.30	49.87	Peak
2	5860.101	31.64	33.25	64.89	109.37	44.48	Peak
3	5878.793	31.98	33.36	65.34	102.38	37.04	Peak
4	5945.174	31.40	33.46	64.86	68.20	3.34	Peak

802.11a_Chain 0			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

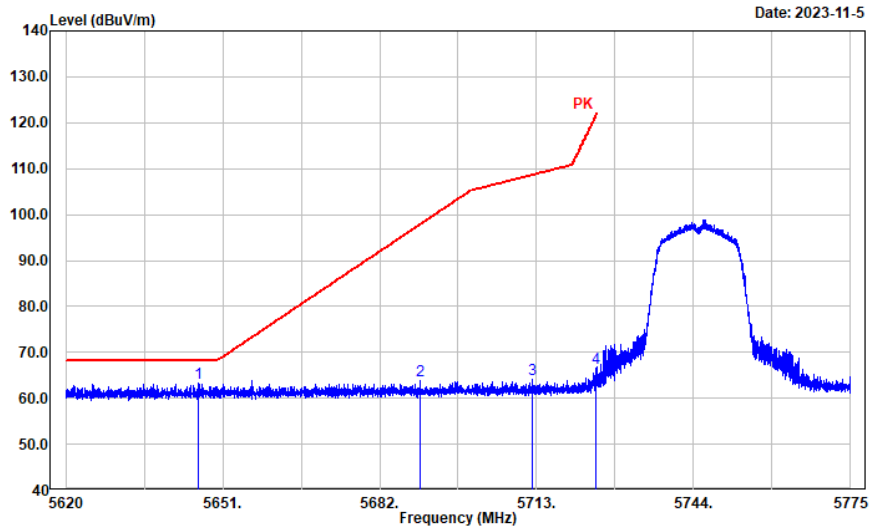
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5851.043	32.19	33.19	65.38	119.82	54.44	Peak
2	5858.500	31.95	33.23	65.18	109.82	44.64	Peak
3	5903.021	31.79	33.46	65.25	84.43	19.18	Peak
4	5948.503	31.53	33.46	64.99	68.20	3.21	Peak

802.11a_Chain 1			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

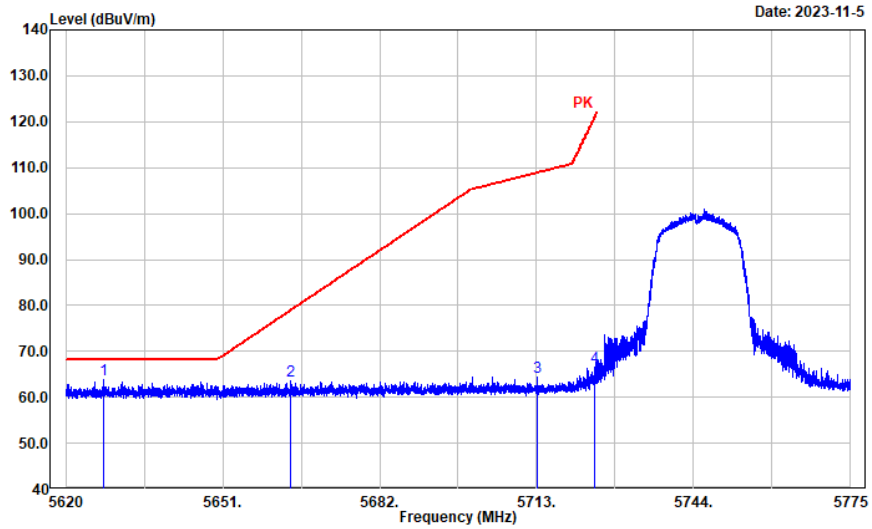
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5646.200	30.36	32.94	63.30	68.20	4.90	Peak
2	5689.919	30.88	33.01	63.89	97.77	33.88	Peak
3	5712.244	31.10	33.03	64.13	108.63	44.50	Peak
4	5724.708	33.51	33.03	66.54	121.53	54.99	Peak

802.11a_Chain 1			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

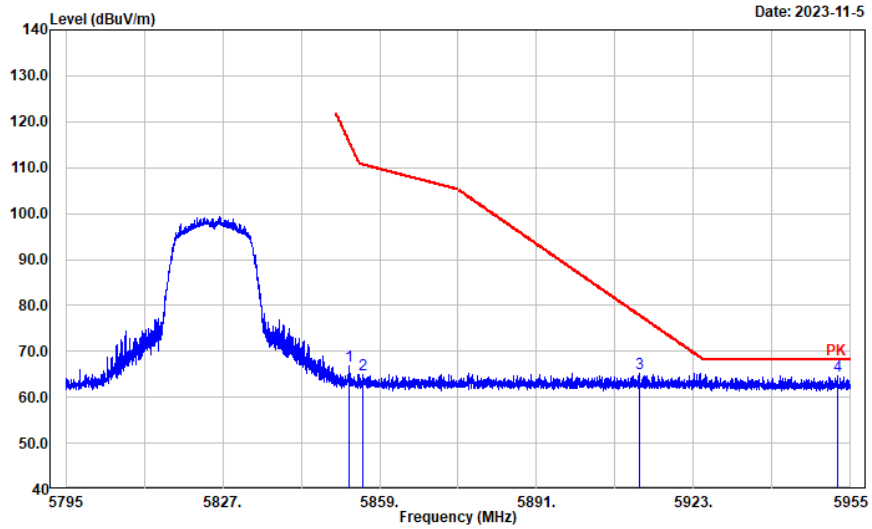
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5627.597	30.94	32.88	63.82	68.20	4.38	Peak
2	5664.370	30.73	32.97	63.70	78.87	15.17	Peak
3	5713.174	31.34	33.03	64.37	108.89	44.52	Peak
4	5724.367	33.41	33.03	66.44	120.76	54.32	Peak

802.11a_Chain 1			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

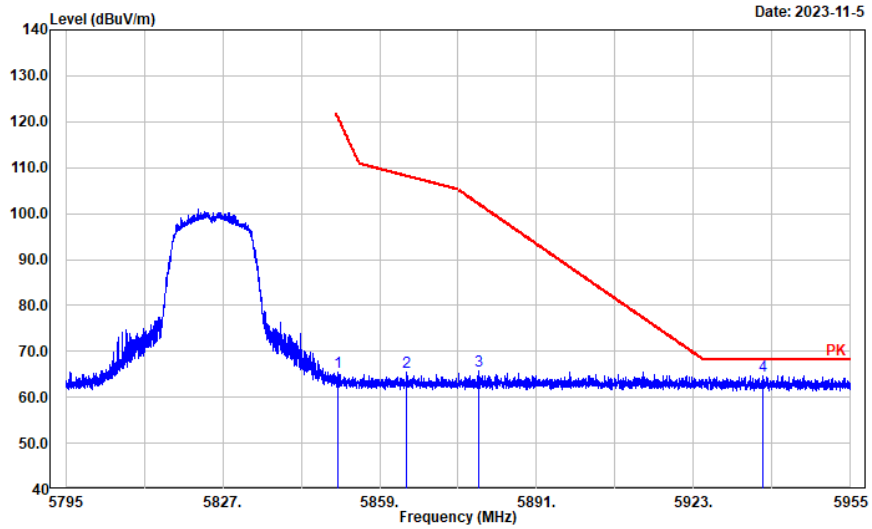
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.771	33.61	33.20	66.81	115.88	49.07	Peak
2	5855.556	31.78	33.22	65.00	110.64	45.64	Peak
3	5911.983	31.76	33.47	65.23	77.80	12.57	Peak
4	5952.375	31.22	33.46	64.68	68.20	3.52	Peak

802.11a_Chain 1			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

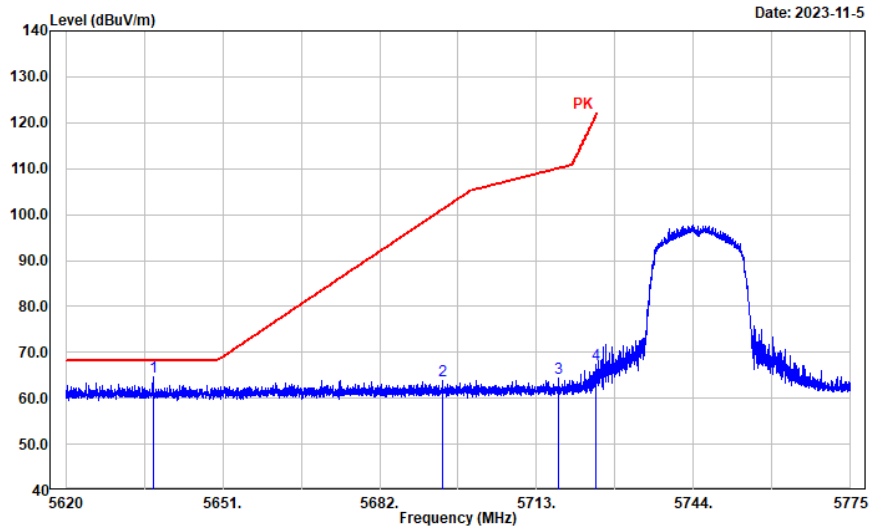
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.499	32.34	33.19	65.53	121.06	55.53	Peak
2	5864.486	32.34	33.27	65.61	108.14	42.53	Peak
3	5879.209	32.51	33.36	65.87	102.07	36.20	Peak
4	5937.076	31.27	33.46	64.73	68.20	3.47	Peak

802.11ac vht20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

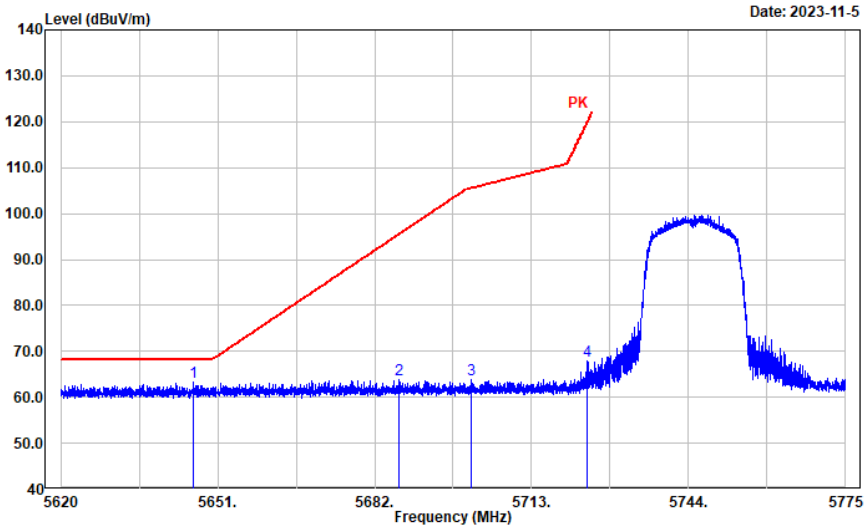
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5637.363	31.68	32.91	64.59	68.20	3.61	Peak
2	5694.446	30.89	33.02	63.91	101.11	37.20	Peak
3	5717.297	31.34	33.03	64.37	110.04	45.67	Peak
4	5724.801	34.31	33.03	67.34	121.75	54.41	Peak

802.11ac vht20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

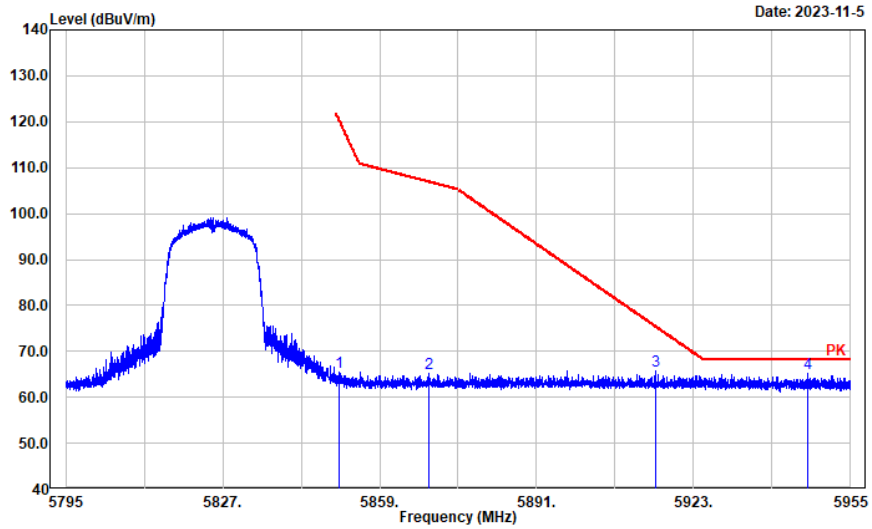
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5646.169	30.36	32.94	63.30	68.20	4.90	Peak
2	5686.850	30.80	33.01	63.81	95.50	31.69	Peak
3	5701.143	30.90	33.03	63.93	105.52	41.59	Peak
4	5723.871	34.96	33.03	67.99	119.63	51.64	Peak

802.11ac vht20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

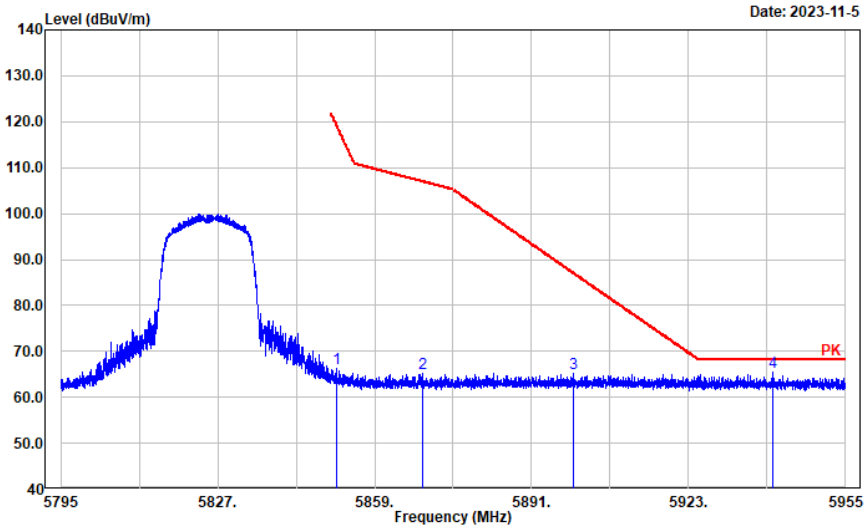
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.755	32.22	33.19	65.41	120.48	55.07	Peak
2	5868.935	31.94	33.30	65.24	106.90	41.66	Peak
3	5915.184	32.41	33.46	65.87	75.44	9.57	Peak
4	5946.294	31.64	33.46	65.10	68.20	3.10	Peak

802.11ac vht20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

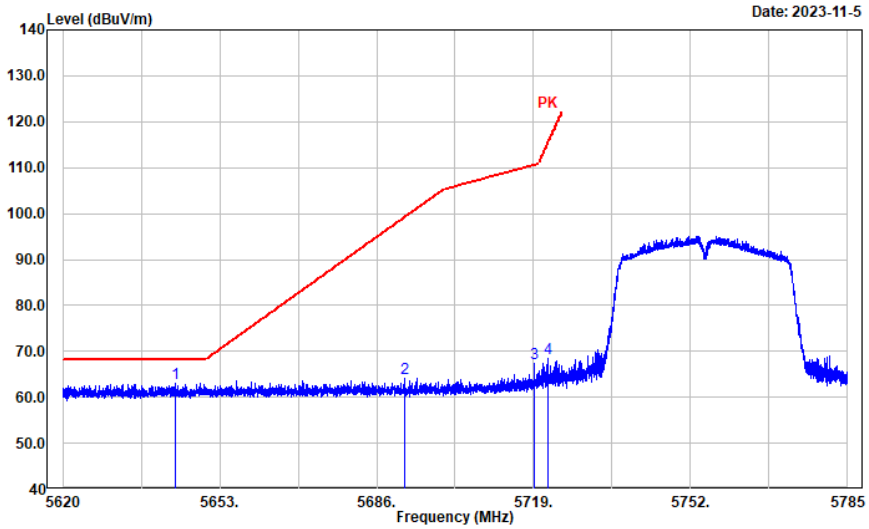
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5851.203	33.07	33.19	66.26	119.46	53.20	Peak
2	5868.679	31.87	33.29	65.16	106.97	41.81	Peak
3	5899.405	31.87	33.47	65.34	87.10	21.76	Peak
4	5940.117	31.91	33.46	65.37	68.20	2.83	Peak

802.11ac vht40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**

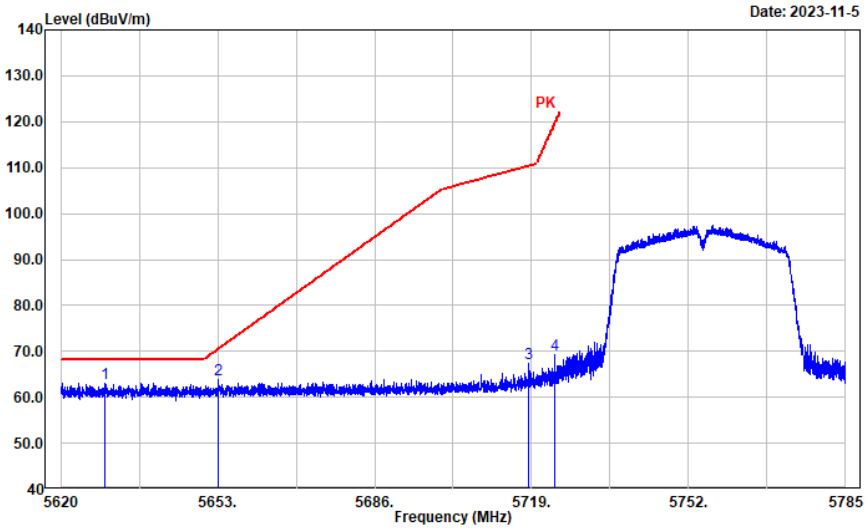
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5643.633	30.08	32.93	63.01	68.20	5.19	Peak
2	5691.987	31.17	33.02	64.19	99.29	35.10	Peak
3	5719.119	34.23	33.03	67.26	110.55	43.29	Peak
4	5722.057	35.35	33.03	68.38	115.49	47.11	Peak

802.11ac vht40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**

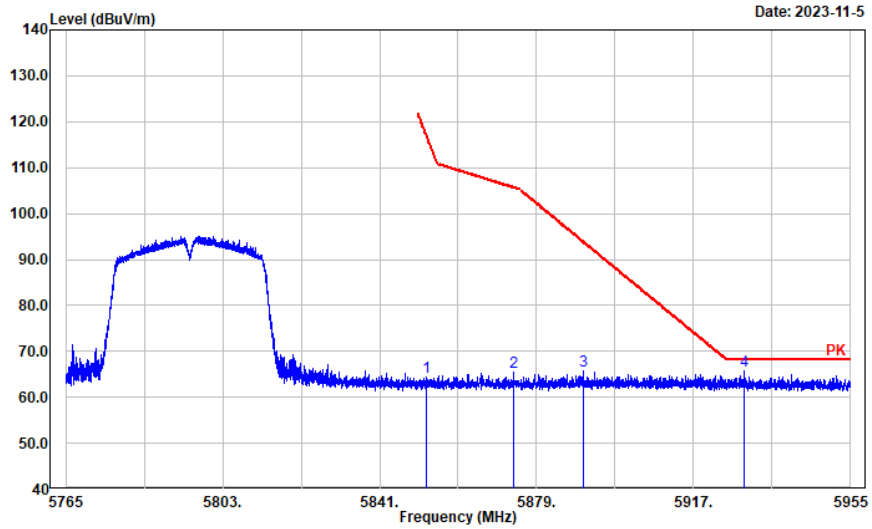
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5629.341	30.21	32.90	63.11	68.20	5.09	Peak
2	5653.238	30.83	32.96	63.79	70.61	6.82	Peak
3	5718.327	34.33	33.03	67.36	110.33	42.97	Peak
4	5723.773	36.11	33.03	69.14	119.40	50.26	Peak

802.11ac vht40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Horizontal**

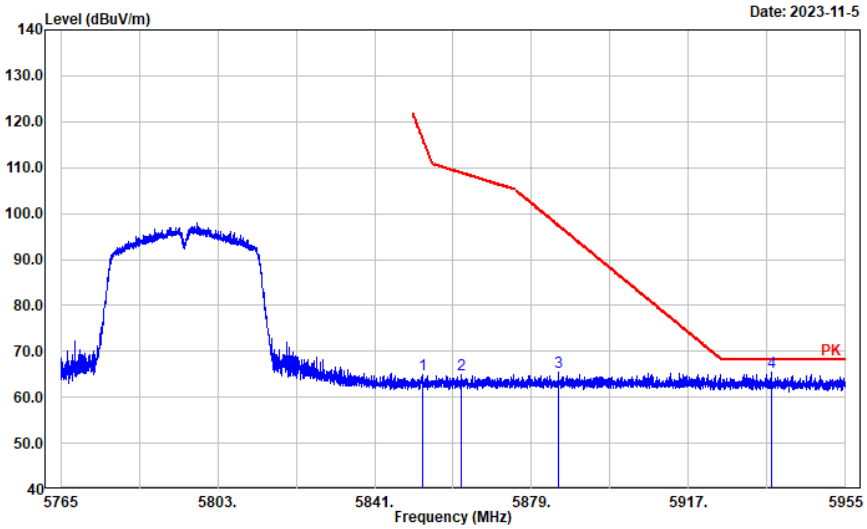
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.456	31.23	33.20	64.43	116.60	52.17	Peak
2	5873.397	32.04	33.32	65.36	105.65	40.29	Peak
3	5890.235	32.27	33.41	65.68	93.89	28.21	Peak
4	5929.269	32.14	33.47	65.61	68.20	2.59	Peak

802.11ac vht40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Vertical**

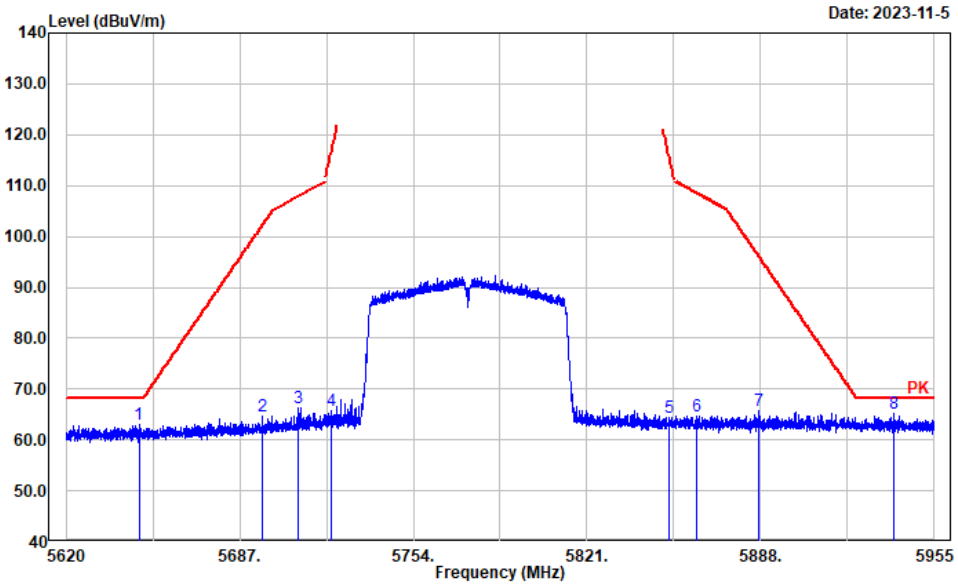
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.494	31.71	33.20	64.91	116.51	51.60	Peak
2	5861.996	31.67	33.26	64.93	108.84	43.91	Peak
3	5885.484	32.12	33.39	65.51	97.42	31.91	Peak
4	5937.022	31.93	33.46	65.39	68.20	2.81	Peak

802.11ac vht80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**

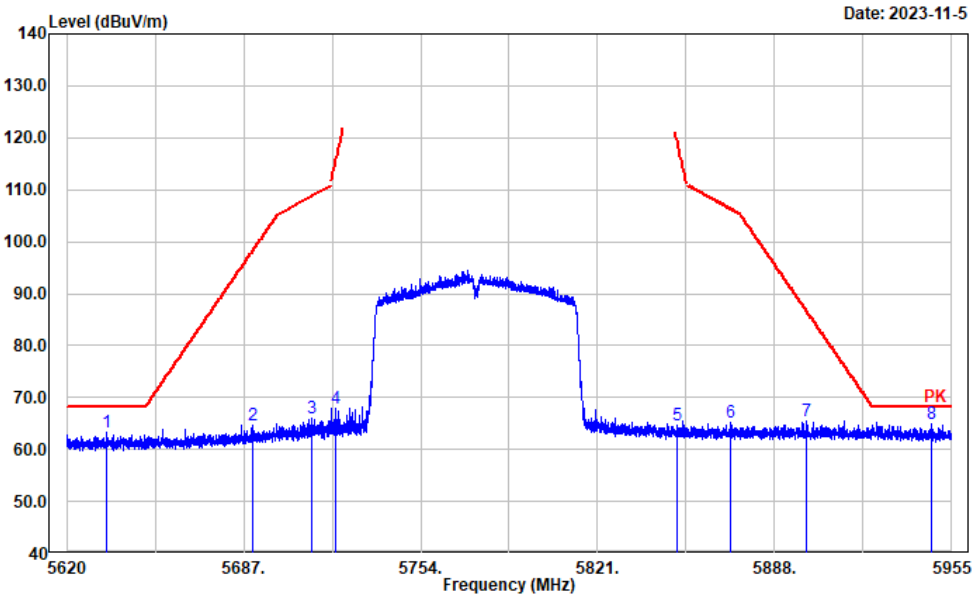
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5648.146	30.01	32.95	62.96	68.20	5.24	Peak
2	5695.591	31.60	33.02	64.62	101.95	37.33	Peak
3	5709.597	33.39	33.03	66.42	107.89	41.47	Peak
4	5722.463	32.72	33.03	65.75	116.42	50.67	Peak
5	5852.805	31.13	33.20	64.33	115.80	51.47	Peak
6	5863.527	31.51	33.26	64.77	108.41	43.64	Peak
7	5887.048	32.22	33.40	65.62	96.26	30.64	Peak
8	5939.587	31.86	33.46	65.32	68.20	2.88	Peak

802.11ac vht80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**

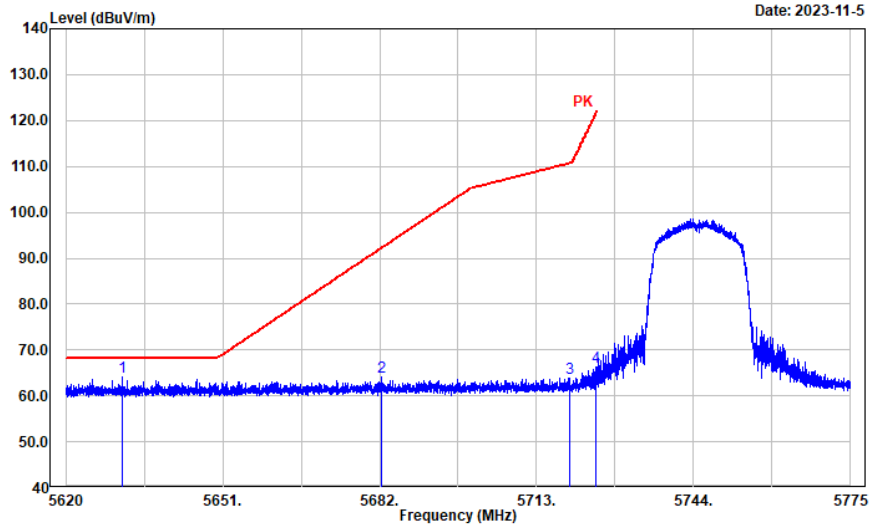
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5635.011	30.34	32.91	63.25	68.20	4.95	Peak
2	5690.632	31.64	33.02	64.66	98.29	33.63	Peak
3	5712.612	32.85	33.03	65.88	108.73	42.85	Peak
4	5721.995	35.01	33.03	68.04	115.35	47.31	Peak
5	5851.129	31.45	33.19	64.64	119.62	54.98	Peak
6	5871.166	31.93	33.30	65.23	106.27	41.04	Peak
7	5900.183	31.95	33.47	65.42	86.53	21.11	Peak
8	5947.562	31.38	33.46	64.84	68.20	3.36	Peak

802.11ax he20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**

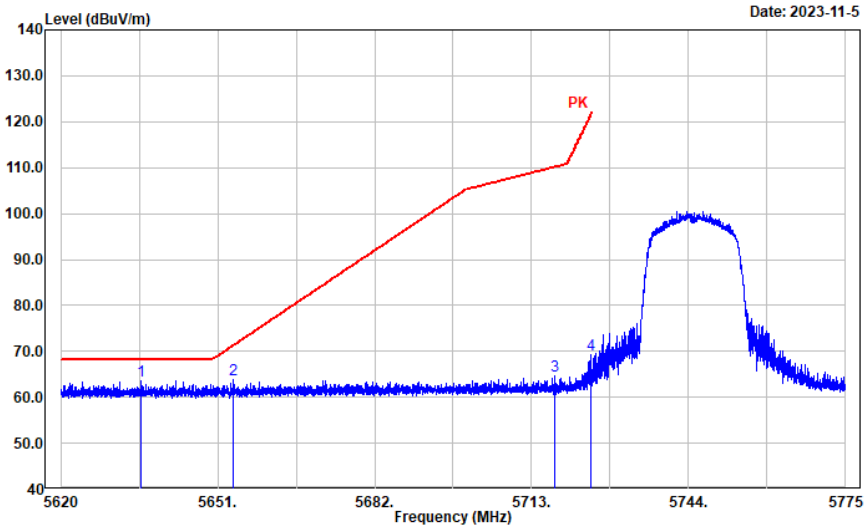
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5631.131	31.23	32.90	64.13	68.20	4.07	Peak
2	5682.354	31.13	33.00	64.13	92.18	28.05	Peak
3	5719.499	30.92	33.03	63.95	110.66	46.71	Peak
4	5724.584	33.15	33.03	66.18	121.25	55.07	Peak

802.11ax he20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**

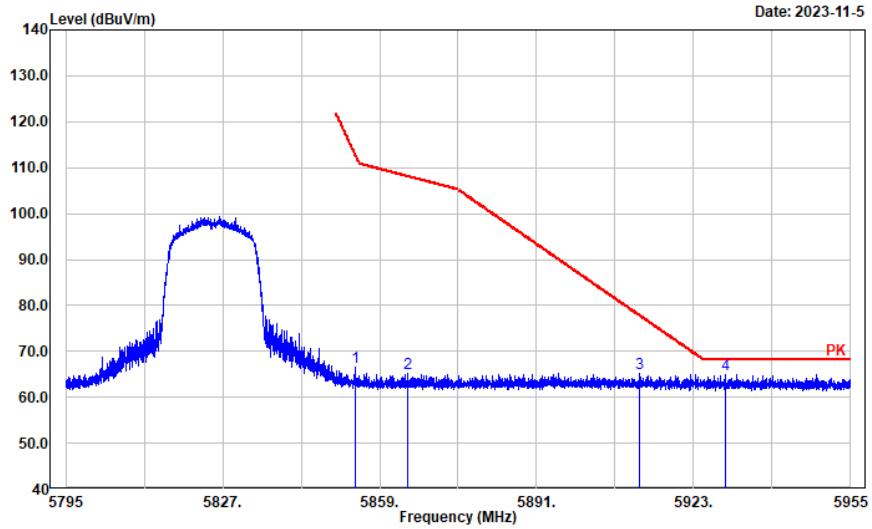
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5635.875	30.62	32.91	63.53	68.20	4.67	Peak
2	5654.138	31.00	32.96	63.96	71.27	7.31	Peak
3	5717.483	31.68	33.03	64.71	110.10	45.39	Peak
4	5724.708	36.31	33.03	69.34	121.53	52.19	Peak

802.11ax he20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**

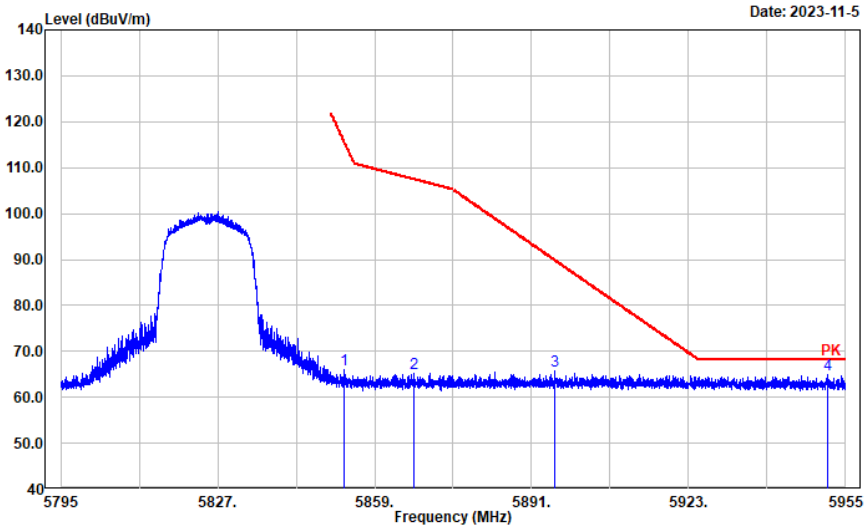
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5854.084	33.46	33.22	66.68	112.89	46.21	Peak
2	5864.646	31.86	33.27	65.13	108.10	42.97	Peak
3	5911.983	31.84	33.47	65.31	77.80	12.49	Peak
4	5929.587	31.56	33.47	65.03	68.20	3.17	Peak

802.11ax he20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

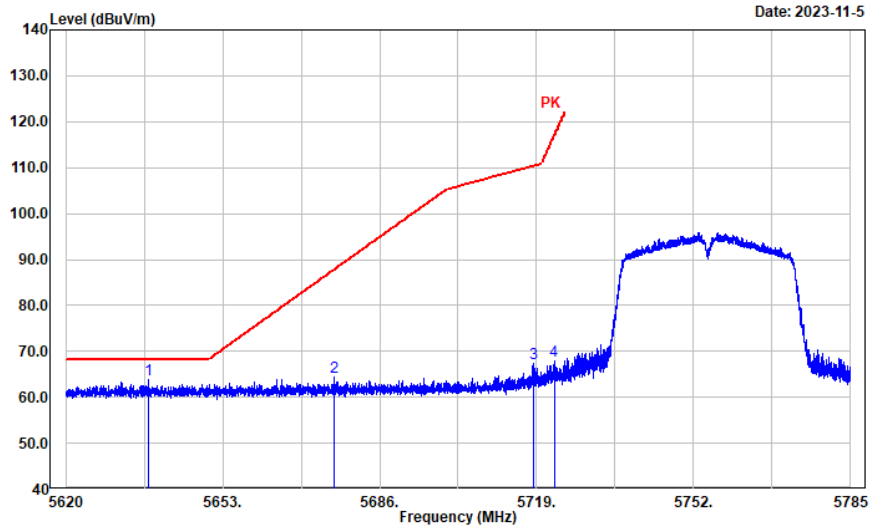
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.804	32.87	33.20	66.07	115.81	49.74	Peak
2	5867.110	31.94	33.29	65.23	107.41	42.18	Peak
3	5895.628	32.27	33.44	65.71	89.90	24.19	Peak
4	5951.255	31.38	33.46	64.84	68.20	3.36	Peak

802.11ax he40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**

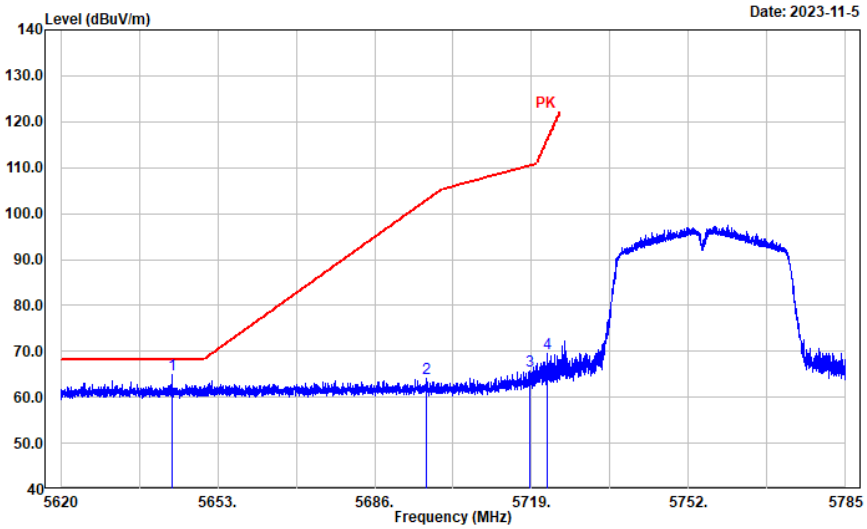
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5637.526	30.96	32.92	63.88	68.20	4.32	Peak
2	5676.375	31.31	32.99	64.30	87.76	23.46	Peak
3	5718.426	34.33	33.03	67.36	110.36	43.00	Peak
4	5722.684	34.84	33.03	67.87	116.92	49.05	Peak

802.11ax he40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**

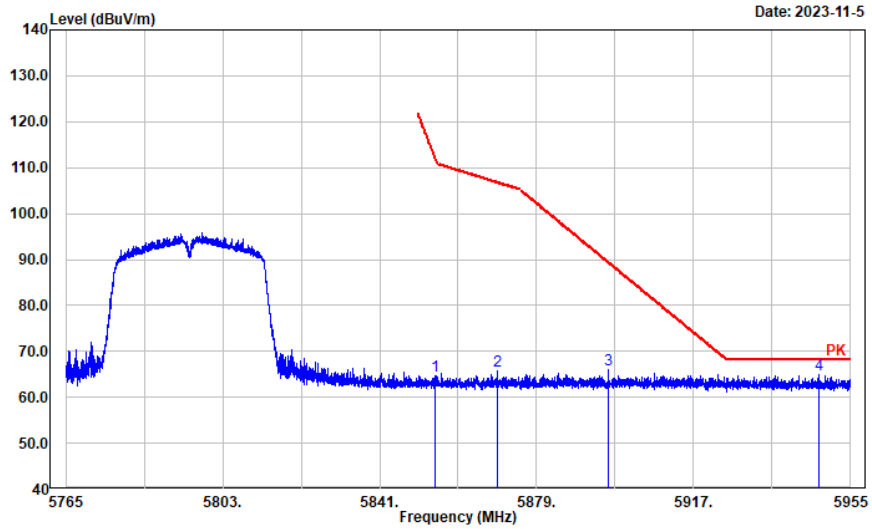
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5643.402	31.89	32.93	64.82	68.20	3.38	Peak
2	5696.839	31.08	33.02	64.10	102.87	38.77	Peak
3	5718.690	32.62	33.03	65.65	110.43	44.78	Peak
4	5722.387	36.43	33.03	69.46	116.24	46.78	Peak

802.11ax he40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Horizontal**

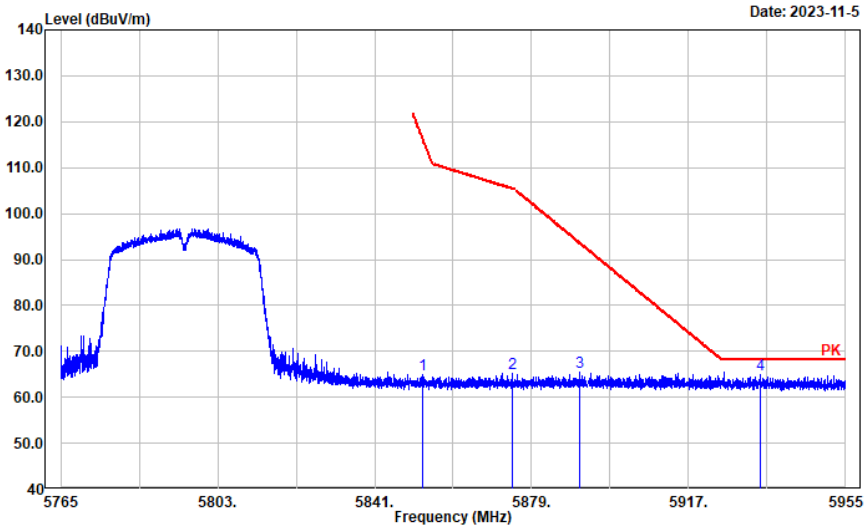
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5854.508	31.34	33.22	64.56	111.92	47.36	Peak
2	5869.369	32.55	33.30	65.85	106.77	40.92	Peak
3	5896.316	32.67	33.45	66.12	89.39	23.27	Peak
4	5947.475	31.45	33.46	64.91	68.20	3.29	Peak

802.11ax he40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Vertical**

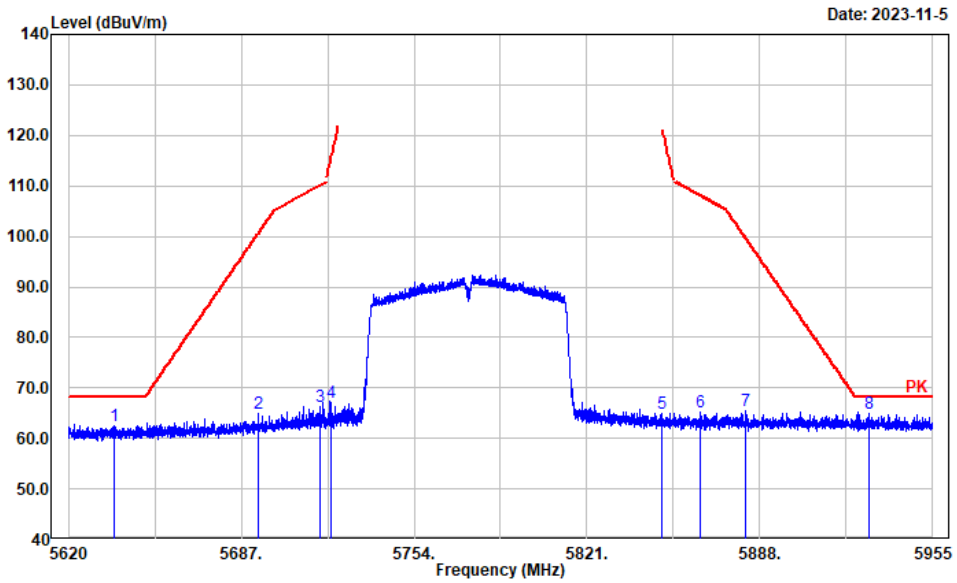
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.684	31.68	33.20	64.88	116.08	51.20	Peak
2	5874.196	31.96	33.33	65.29	105.42	40.13	Peak
3	5890.729	32.17	33.42	65.59	93.53	27.94	Peak
4	5934.438	31.34	33.47	64.81	68.20	3.39	Peak

802.11ax he80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**

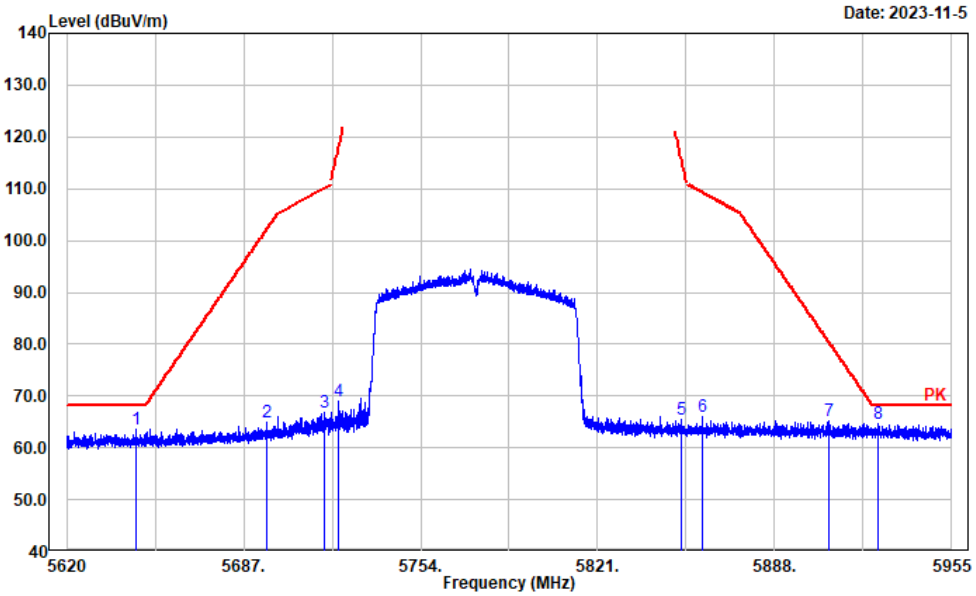
Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5637.558	29.49	32.92	62.41	68.20	5.79	Peak
2	5693.648	31.81	33.02	64.83	100.52	35.69	Peak
3	5717.438	33.32	33.03	66.35	110.08	43.73	Peak
4	5721.592	34.01	33.03	67.04	114.43	47.39	Peak
5	5850.258	31.68	33.19	64.87	121.61	56.74	Peak
6	5865.135	31.83	33.27	65.10	107.96	42.86	Peak
7	5882.291	32.03	33.37	65.40	99.79	34.39	Peak
8	5930.138	31.53	33.47	65.00	68.20	3.20	Peak

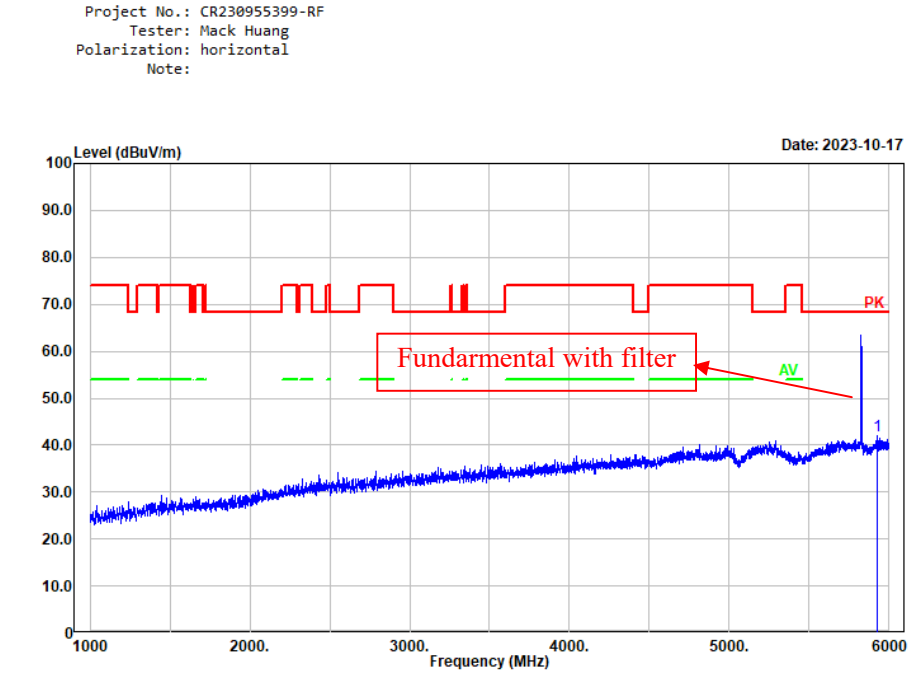
802.11ax he80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**

Project No.: CR230955399-RF
Tester: Coco Tian
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5646.403	30.64	32.94	63.58	68.20	4.62	Peak
2	5695.725	31.96	33.02	64.98	102.05	37.07	Peak
3	5717.772	33.68	33.03	66.71	110.18	43.47	Peak
4	5722.731	35.89	33.03	68.92	117.03	48.11	Peak
5	5852.737	32.25	33.20	65.45	115.96	50.51	Peak
6	5860.779	32.76	33.25	66.01	109.18	43.17	Peak
7	5908.292	31.72	33.47	65.19	80.53	15.34	Peak
8	5927.391	31.19	33.46	64.65	68.20	3.55	Peak

Listed with the worst harmonic margin test plot (802.11ac vht20 5825MHz)

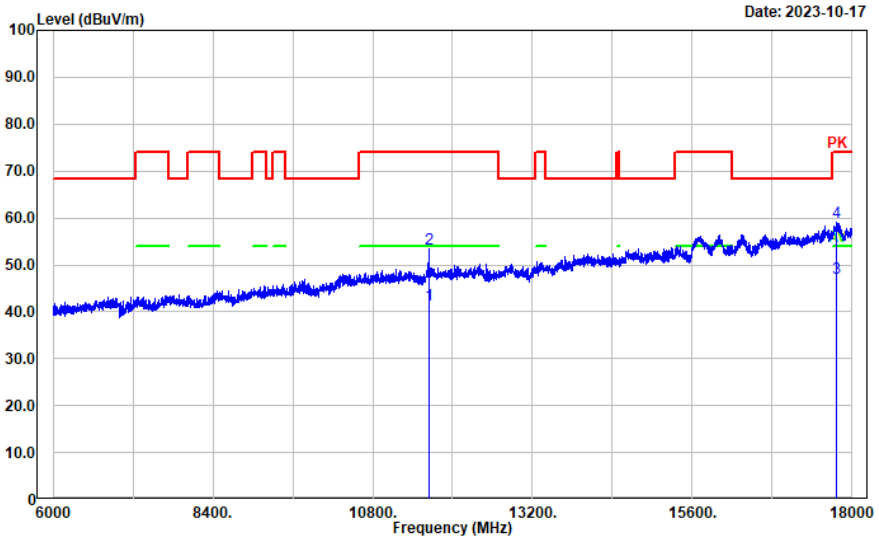
Horizontal	
1-6GHz	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5921.984	35.08	7.01	42.09	68.20	26.11	Peak

Horizontal

6-18GHz

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: horizontal
Note:

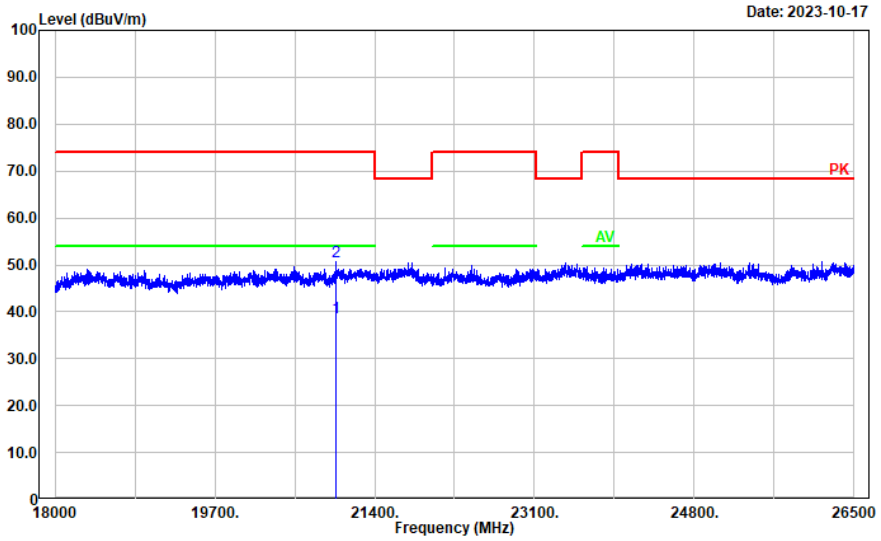


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11650.000	25.41	16.02	41.43	54.00	12.57	Average
2	11650.000	37.29	16.02	53.31	74.00	20.69	Peak
3	17762.350	21.79	25.46	47.25	54.00	6.75	Average
4	17762.350	33.72	25.46	59.18	74.00	14.82	Peak

Horizontal

18-26.5GHz

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: Horizontal
Note:

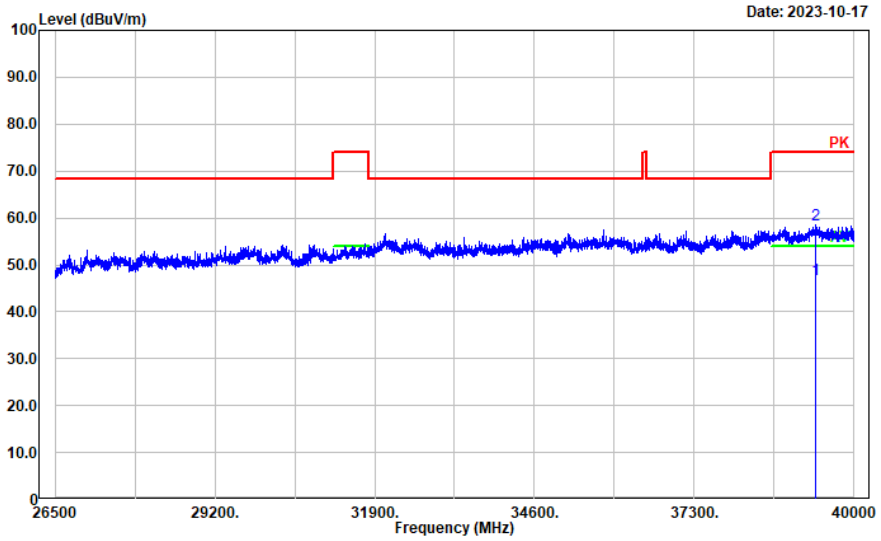


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	20987.500	40.14	-1.45	38.69	54.00	15.31	Average
2	20987.500	52.12	-1.45	50.67	74.00	23.33	Peak

Horizontal

26.5-40GHz

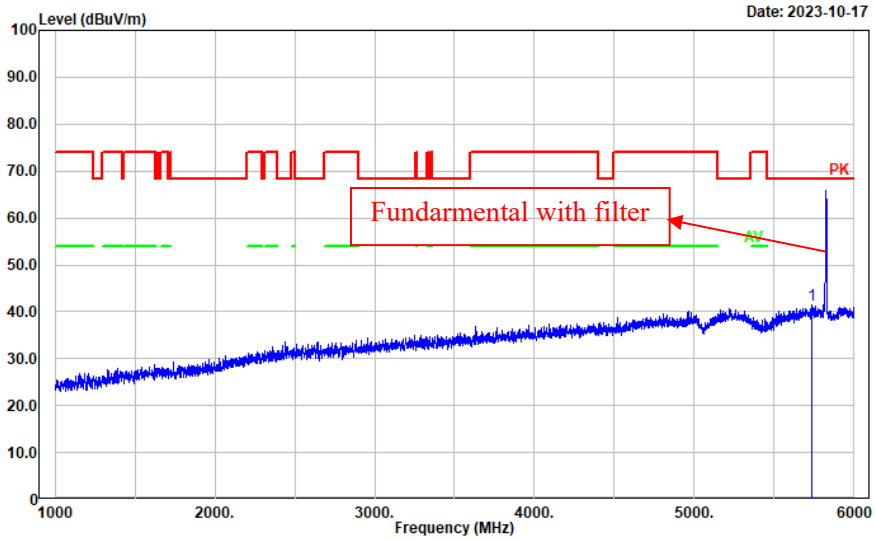
Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39349.170	36.60	10.18	46.78	54.00	7.22	Average
2	39349.170	48.32	10.18	58.50	74.00	15.50	Peak

Vertical	
1-18GHz	

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: vertical
Note:

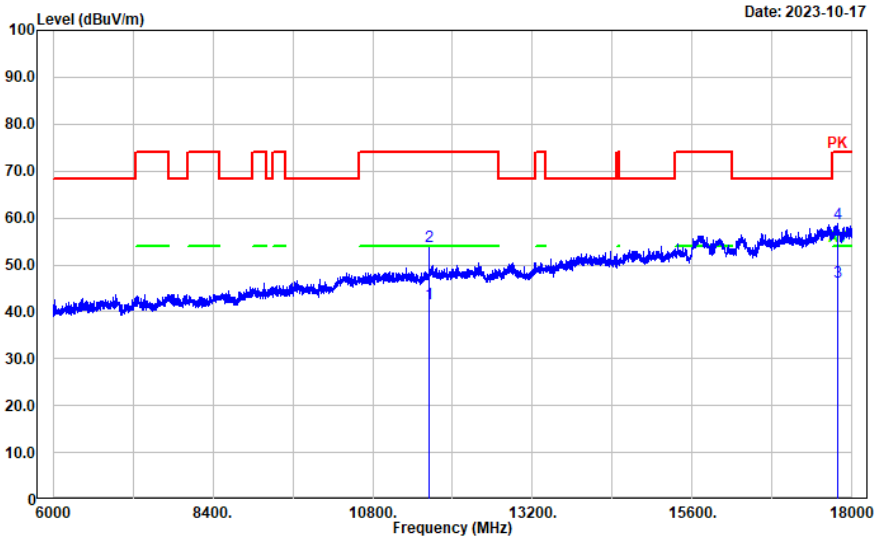


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5731.946	34.86	6.56	41.42	68.20	26.78	Peak

Vertical

6-18GHz

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: vertical
Note:

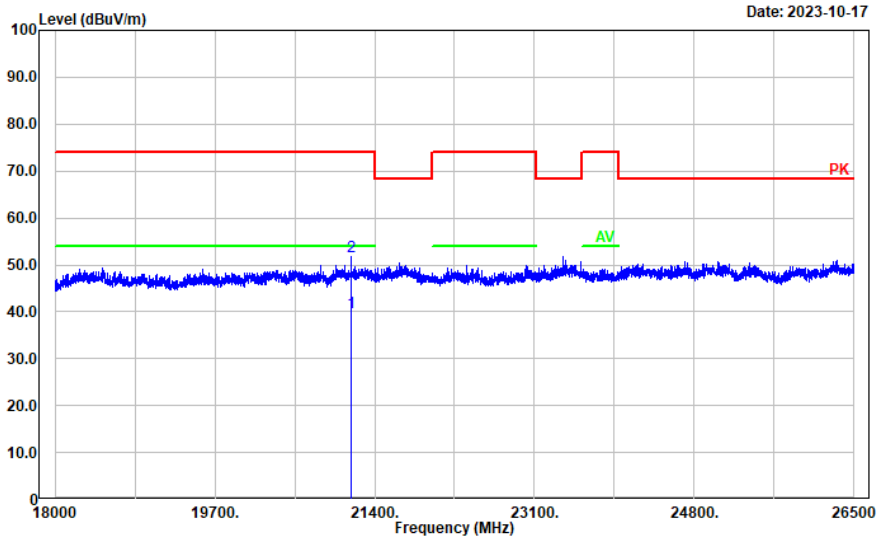


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11650.000	25.60	16.02	41.62	54.00	12.38	Average
2	11650.000	37.82	16.02	53.84	74.00	20.16	Peak
3	17783.960	20.69	25.54	46.23	54.00	7.77	Average
4	17783.960	33.29	25.54	58.83	74.00	15.17	Peak

Vertical

18-26.5GHz

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: vertical
Note:

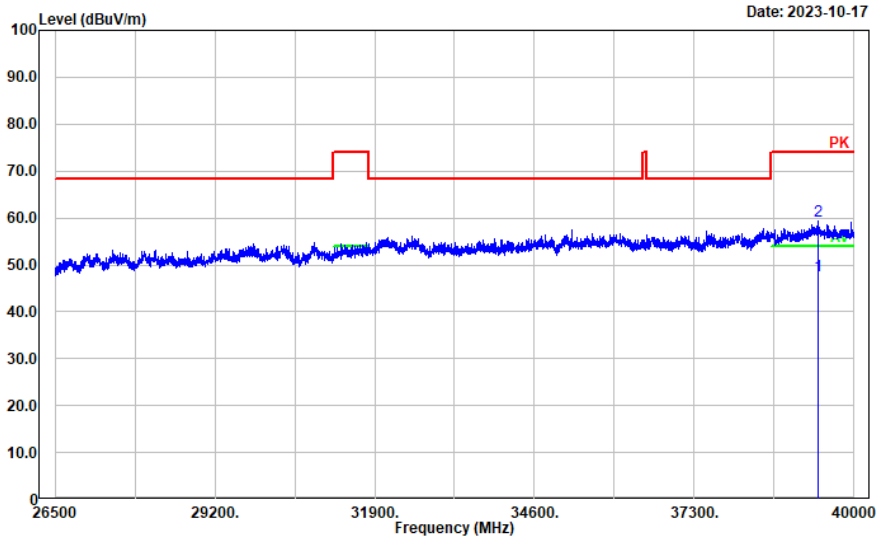


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	21150.730	41.04	-1.26	39.78	54.00	14.22	Average
2	21150.730	53.05	-1.26	51.79	74.00	22.21	Peak

Vertical

26.5-40GHz

Project No.: CR230955399-RF
Tester: Mack Huang
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39397.780	37.47	10.18	47.65	54.00	6.35	Average
2	39397.780	49.04	10.18	59.22	74.00	14.78	Peak

4.3 26dB attenuated below the channel power

Serial Number:	2BI1-2	Test Date:	2023/11/30~2023/12/1
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25~26.5	Relative Humidity: (%)	50~53	ATM Pressure: (kPa)	101

Test Equipment List and Details:

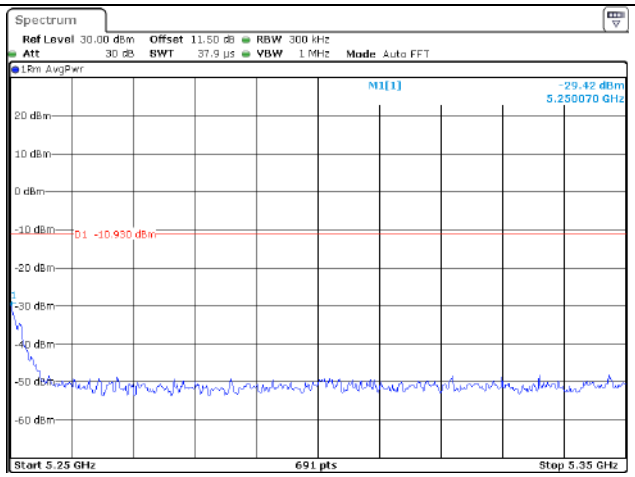
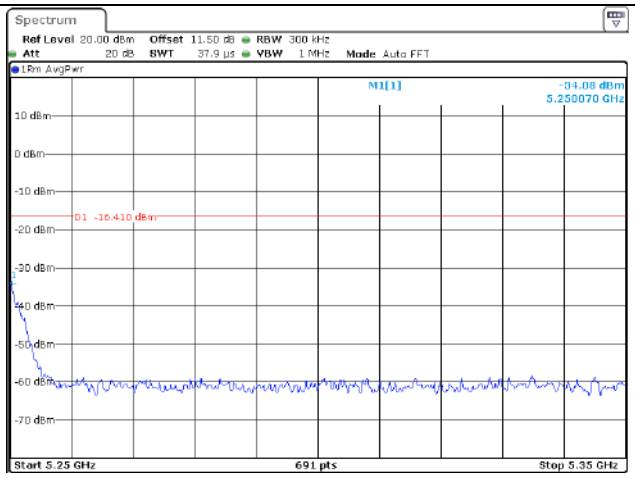
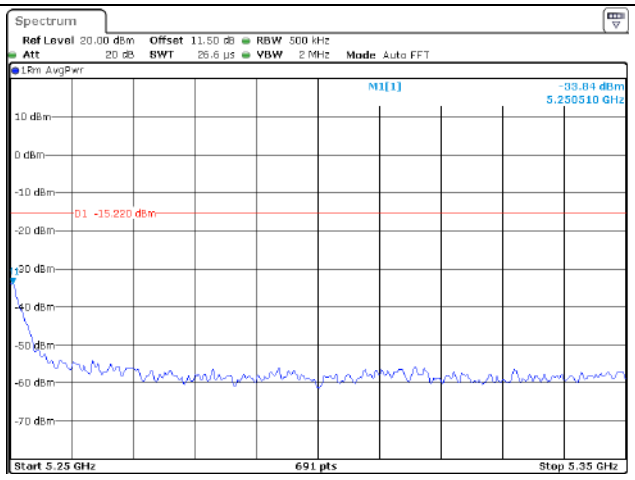
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A

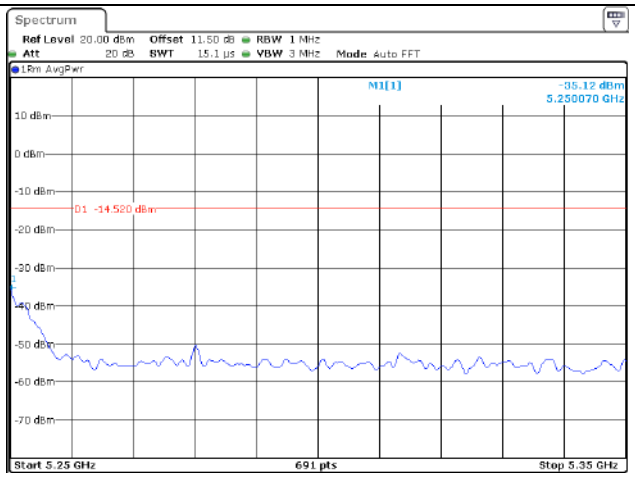
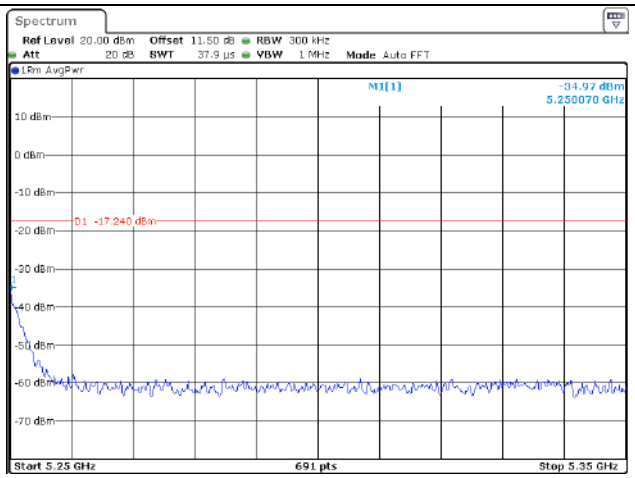
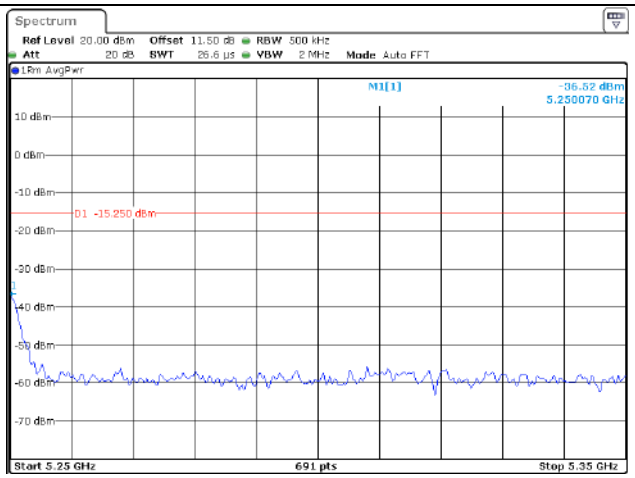
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

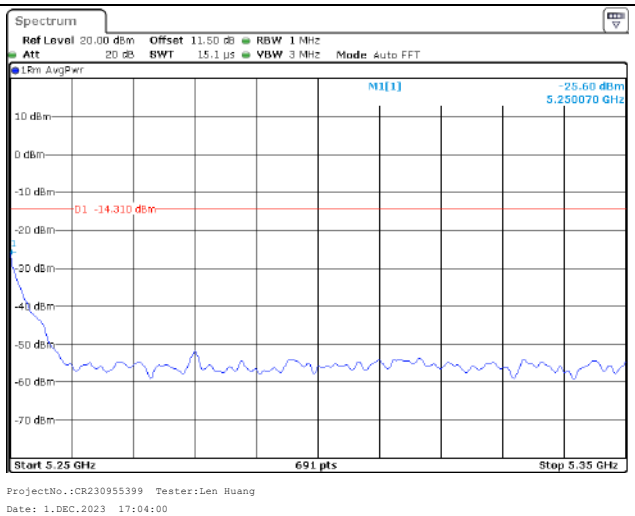
Test Data:

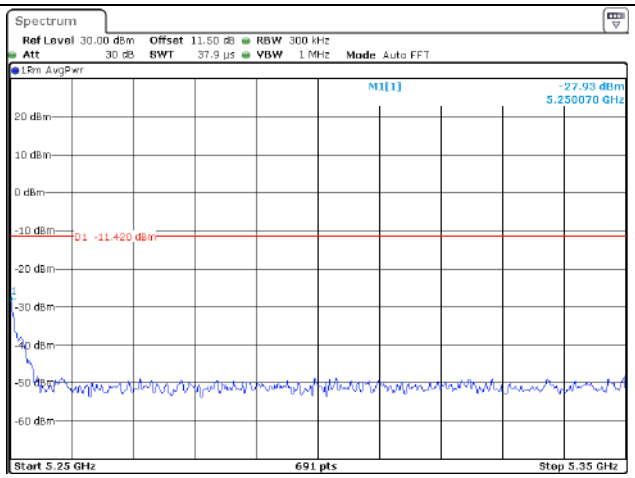
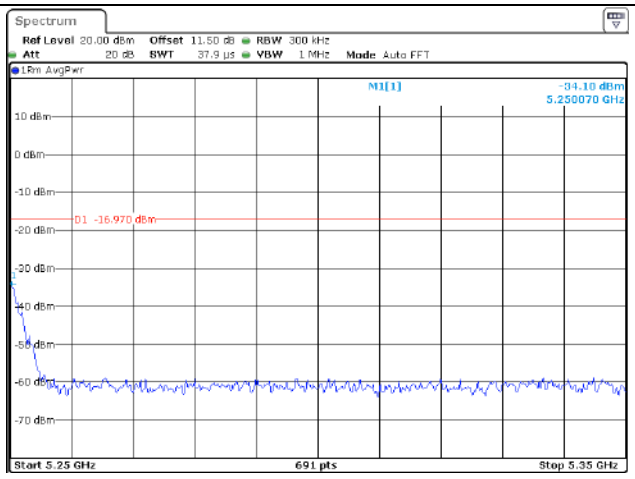
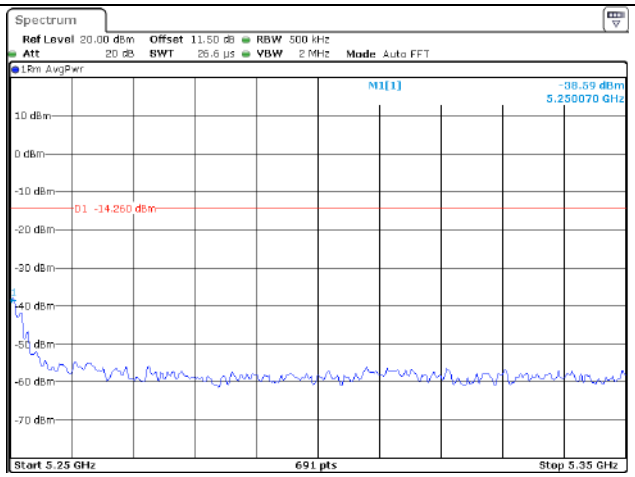
Note: For the operation band 5150-5250MHz, any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz.

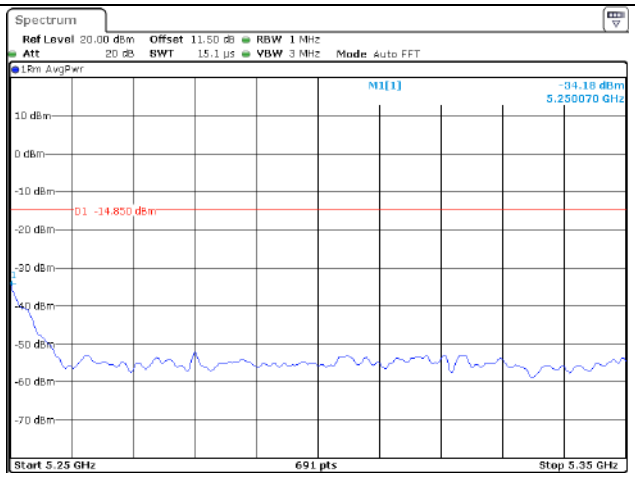
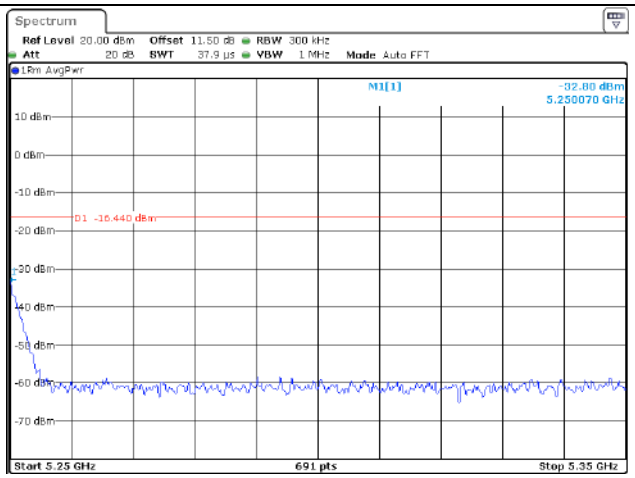
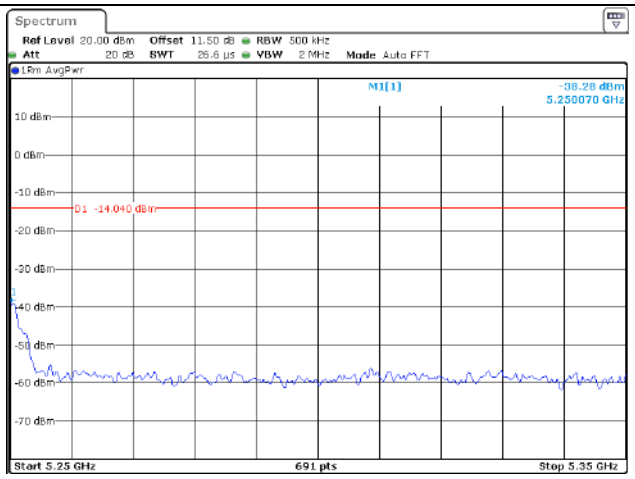
As the high channel is closest to the 5250-5350MHz, so only high channel of each mode was tested.

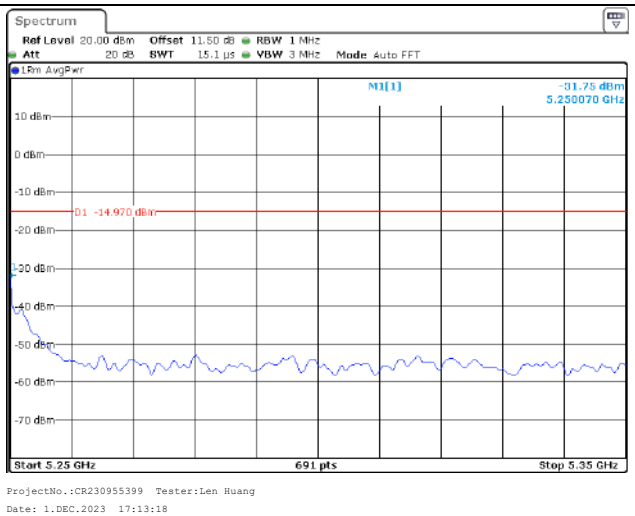
Chain 0	
802.11a	
802.11ac vht20	
802.11ac vht40	

802.11ac vht80	
802.11ax he20	
802.11ax he40	

802.11 ax he80	

Chain 1	
802.11a	
802.11ac vht20	
802.11ac vht40	

802.11ac vht80	
802.11ax he20	
802.11ax he40	

802.11 ax he80	

4.4 Emission Bandwidth

Serial Number:	2BI1-2	Test Date:	2023/10/8-2023/10/10
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	24.9-25.5	Relative Humidity: (%)	50-56	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	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)
802.11a	5180	19.92	16.34
	5200	20	16.3
	5240	19.96	16.3
802.11ac vht20	5180	20.04	16.34
	5200	20.08	16.34
	5240	19.84	16.38
802.11ac vht40	5190	40.08	35.96
	5230	40.48	35.88
802.11ac vht80	5210	82.56	74.97
802.11ax he20	5180	21.2	18.86
	5200	21.08	18.78
	5240	21	18.82
802.11ax he40	5190	40.4	37.56
	5230	40.48	37.48
802.11ax he80	5210	82.24	76.88
Note: Test only was performed at Chain 0.			

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260	19.88	16.3
	5280	19.92	16.3
	5320	19.72	16.34
802.11ac vht20	5260	19.72	16.34
	5280	19.72	16.34
	5320	20	16.34
802.11ac vht40	5270	40.32	35.88
	5310	40.08	35.8
802.11ac vht80	5290	81.44	74.65
802.11ax he20	5260	21.04	18.82
	5280	21.12	18.86
	5320	21.04	18.86
802.11ax he40	5270	40.56	37.48
	5310	40.56	37.56
802.11ax he80	5290	81.6	76.56
802.11ac vht160	5250	164.4	153.05
802.11ax he160	5250	164.8	155.04
Note: Test only was performed at Chain 0.			

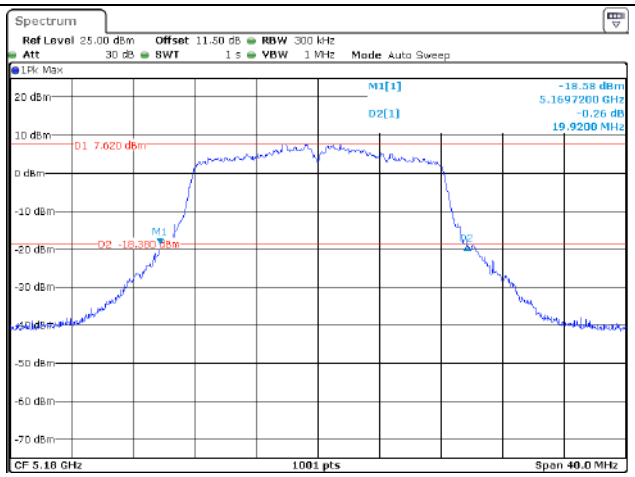
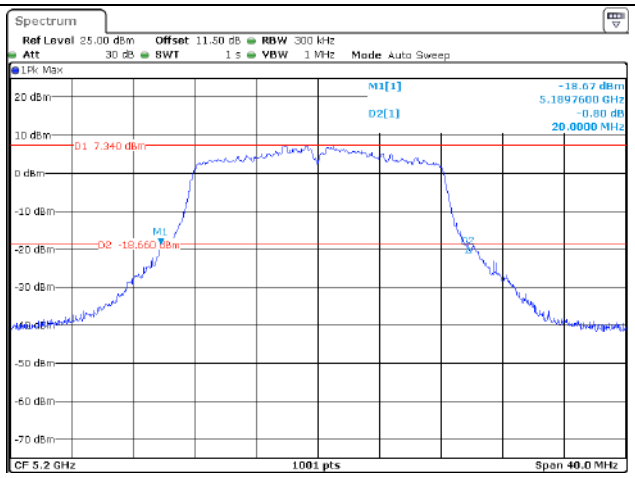
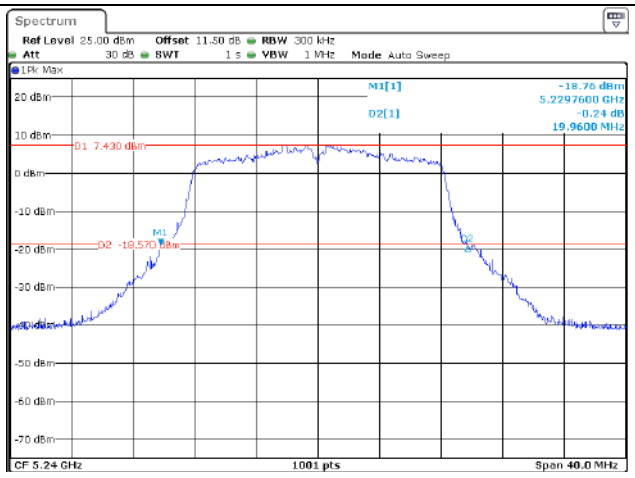
5470-5725 MHz:

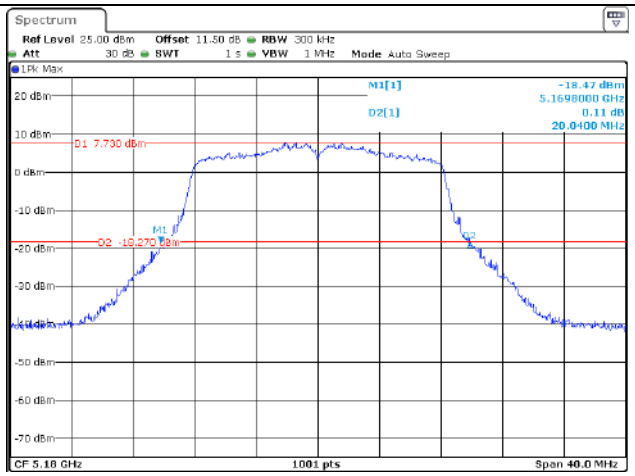
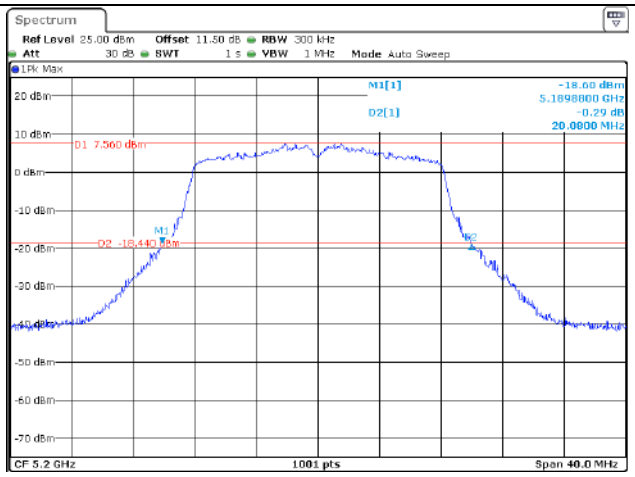
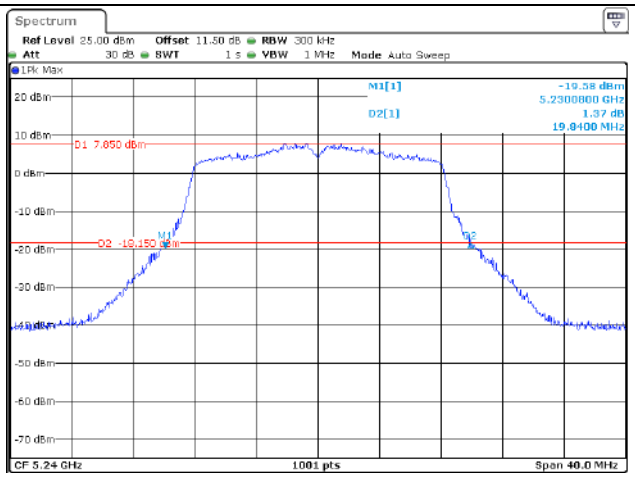
Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5500	19.96	16.3
	5580	20.08	16.3
	5700	20.08	16.3
802.11ac vht20	5500	20.16	16.34
	5580	20.12	16.3
	5700	20.2	16.34
802.11ac vht40	5510	40.24	35.96
	5550	40.24	35.96
	5670	40.08	35.88
802.11ac vht80	5530	81.76	74.97
	5610	81.44	74.97
802.11ax he20	5500	21.08	18.86
	5580	20.76	18.86
	5700	21	18.86
802.11ax he40	5510	40.64	37.56
	5550	40.56	37.56
	5670	40.64	37.56
802.11ax he80	5530	81.92	76.72
	5610	81.76	76.88
802.11ac vht160	5570	165.2	153.05
802.11ax he160	5570	165.6	155.04
Note: Test only was performed at Chain 0.			

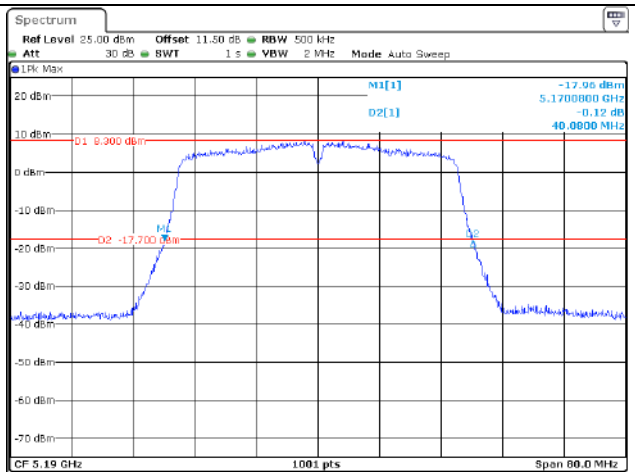
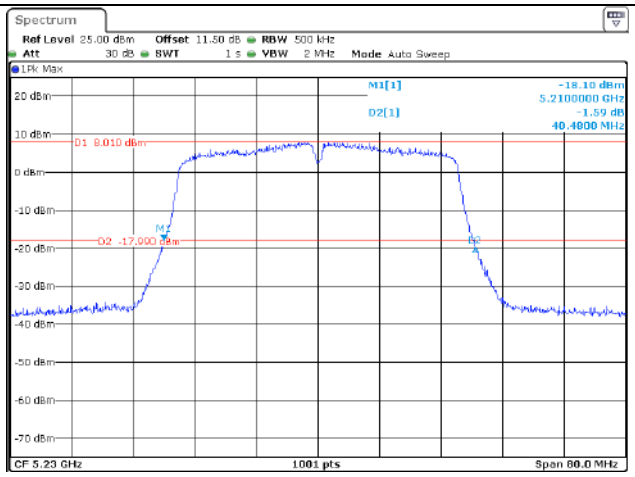
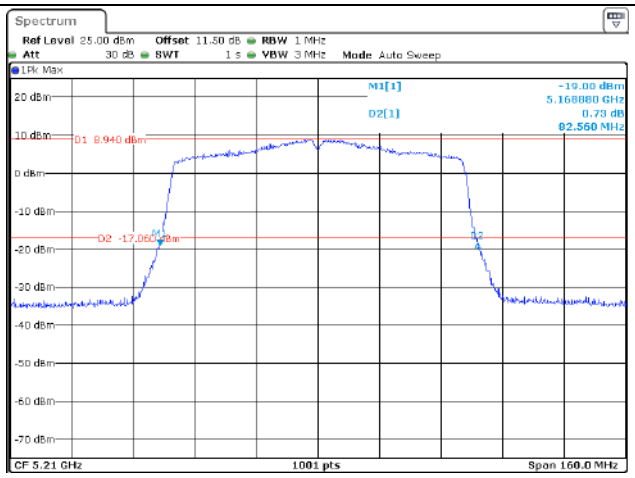
5725-5850 MHz:

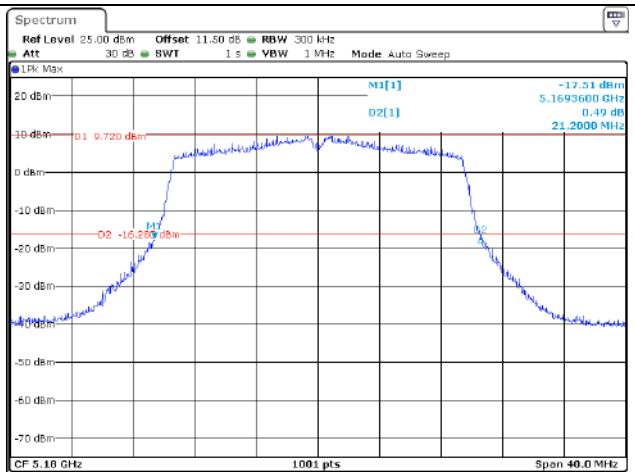
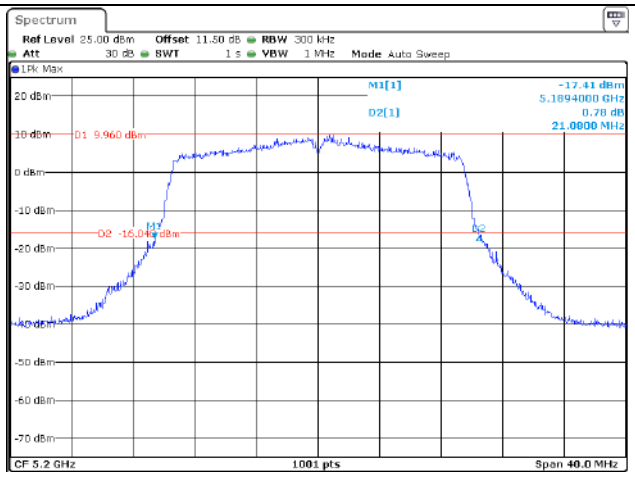
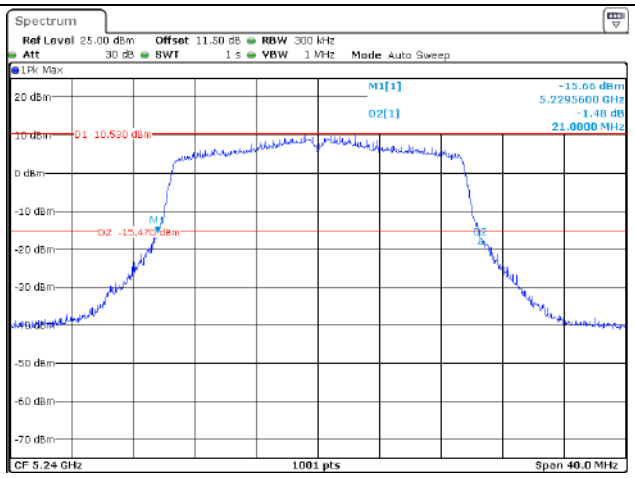
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	15.2	16.34
	5785	15.2	16.34
	5825	15.2	16.3
802.11ac vht20	5745	15.2	16.34
	5785	15.2	16.38
	5825	15.2	16.34
802.11ac vht40	5755	34	35.96
	5795	35.12	35.88
802.11ac vht80	5775	66.6	74.81
802.11ax he20	5745	16.16	18.82
	5785	16.08	18.86
	5825	16.72	18.78
802.11ax he40	5755	35.76	37.56
	5795	36.24	37.48
802.11ax he80	5775	74.16	76.56
Note: 6dB Emission Bandwidth Limit: ⩾0.5 MHz Test only was performed at Chain 0.			

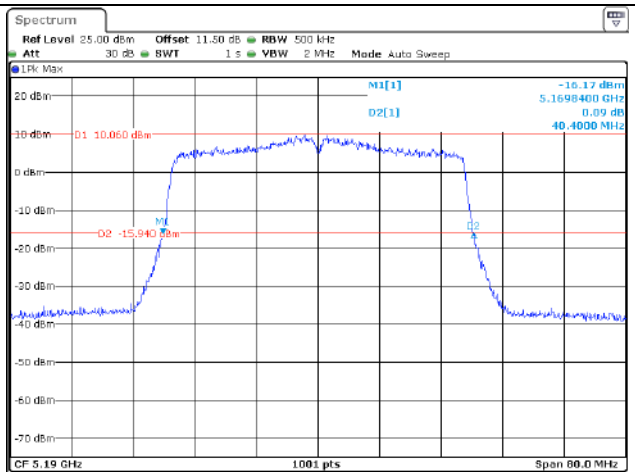
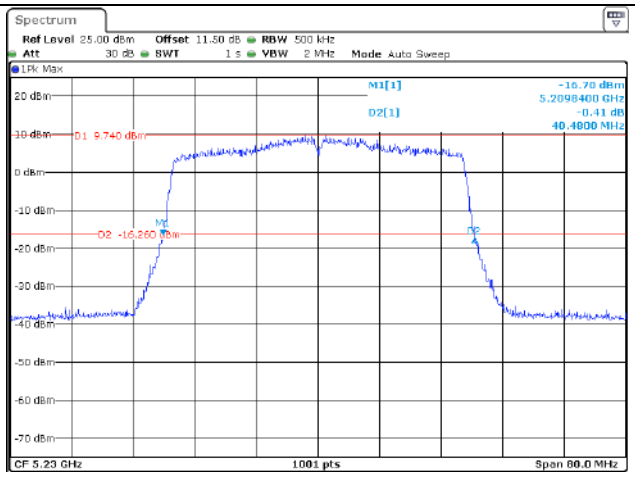
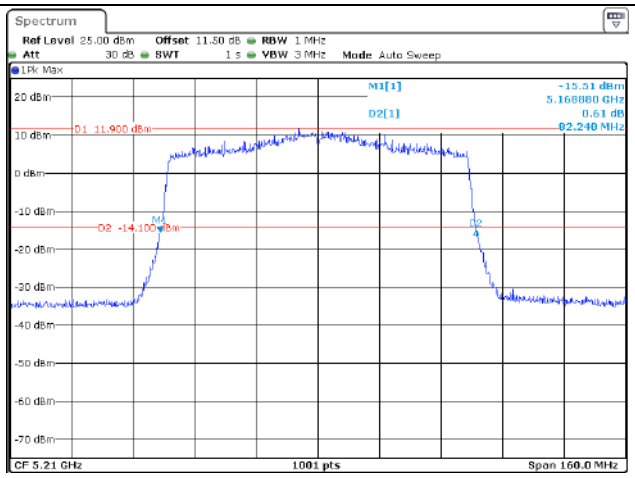
5150-5250MHz:

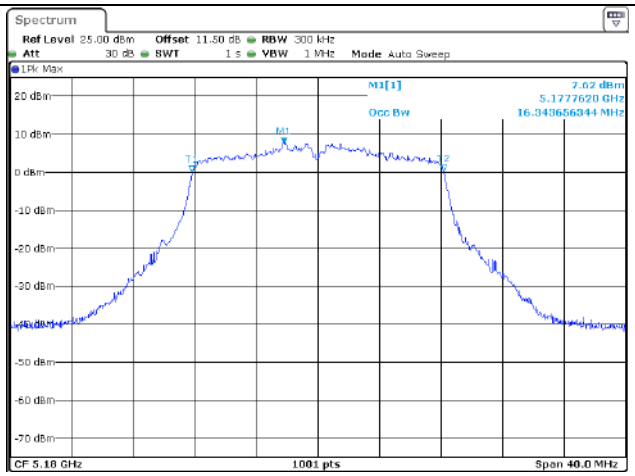
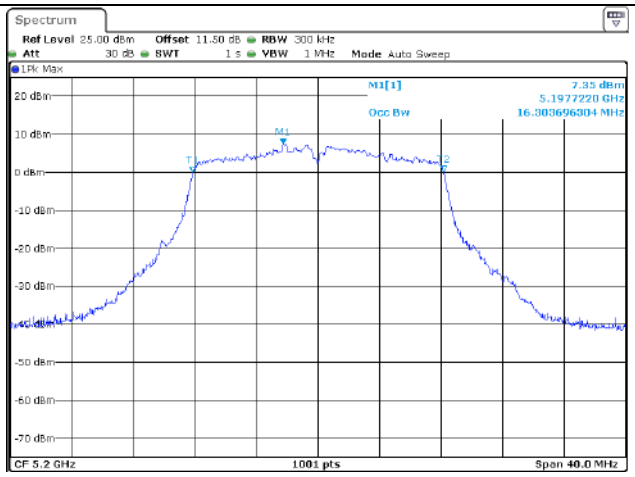
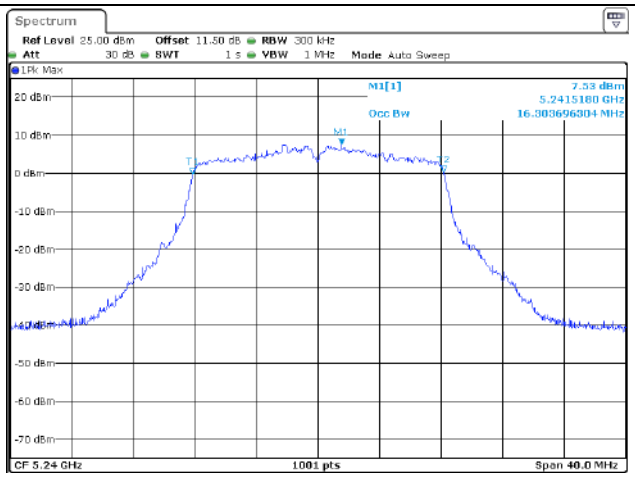
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

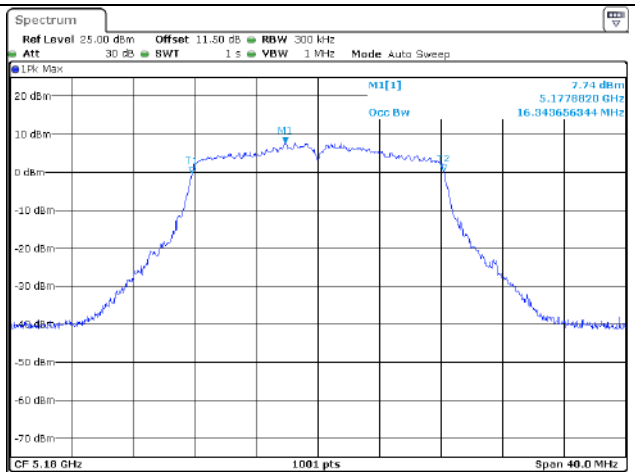
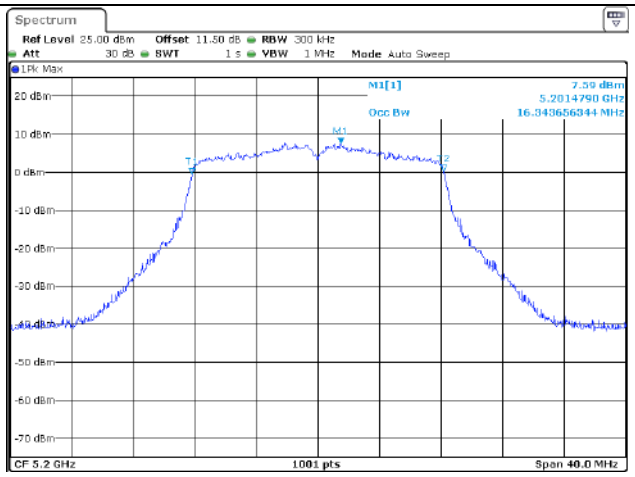
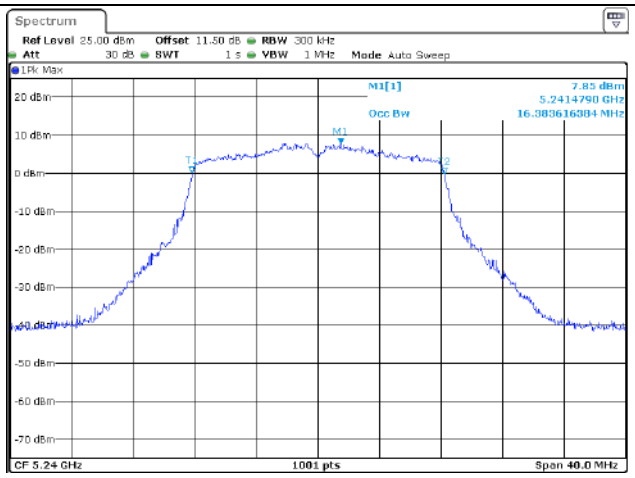
26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

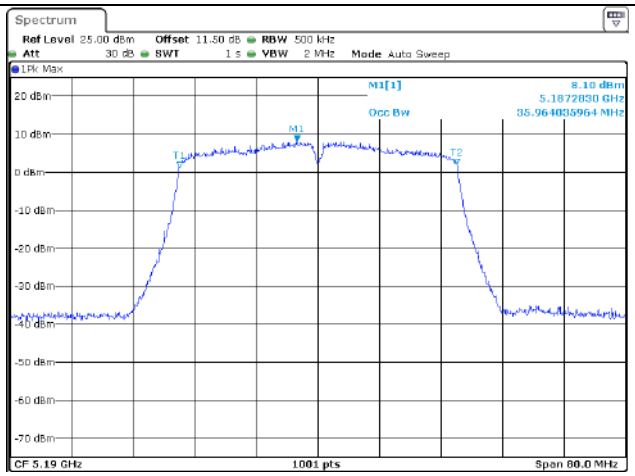
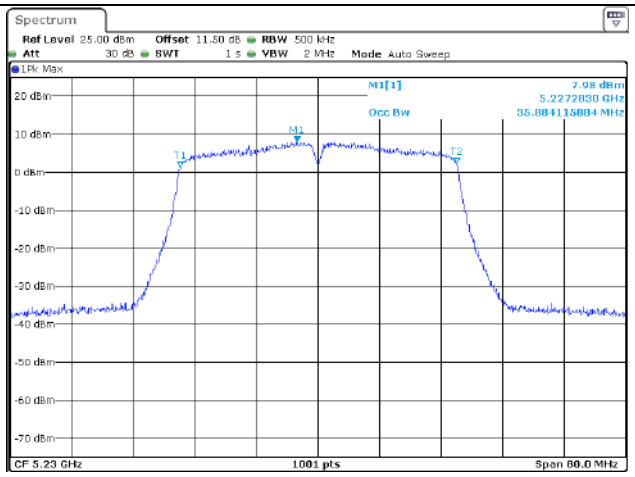
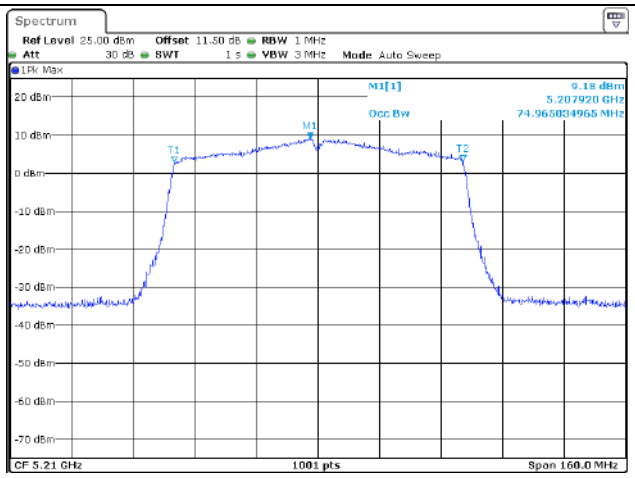
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

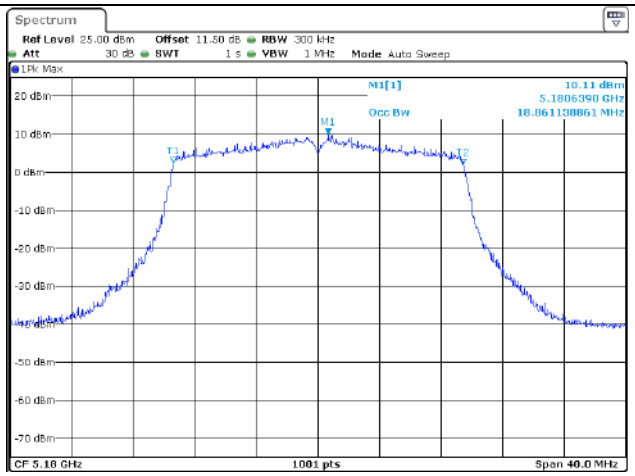
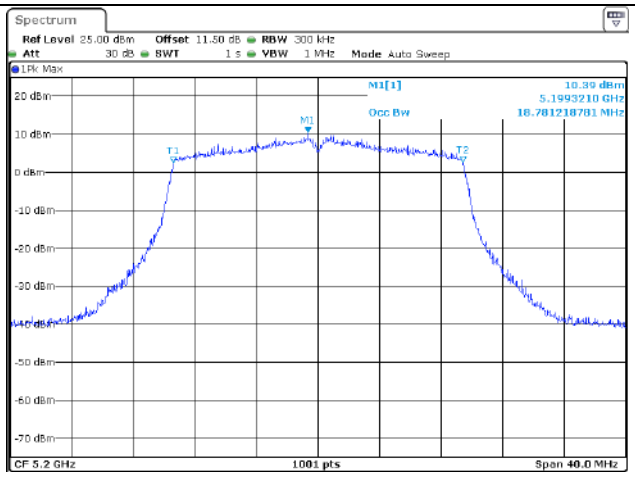
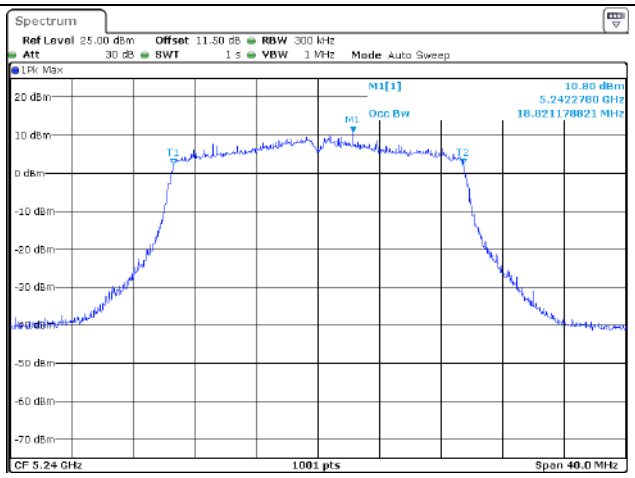
26dB Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

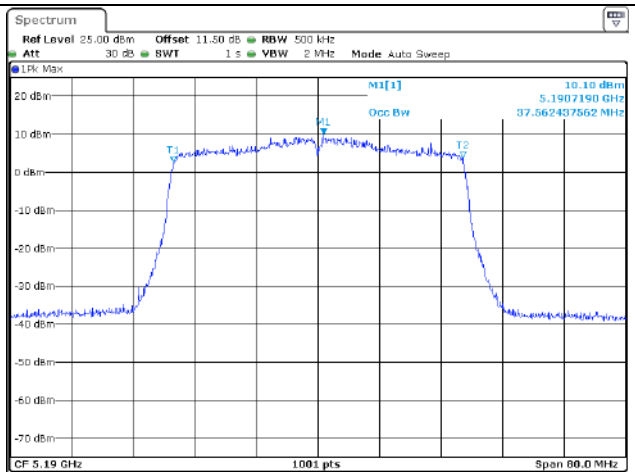
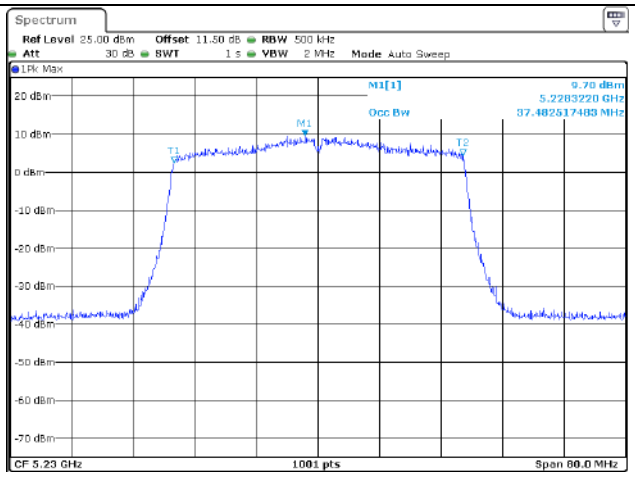
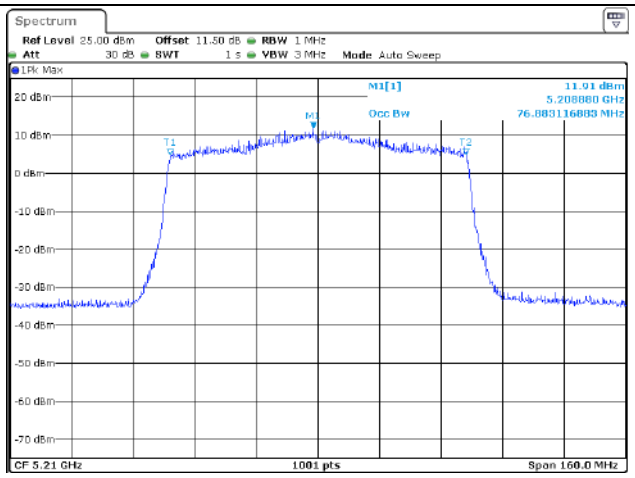
26dB Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

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

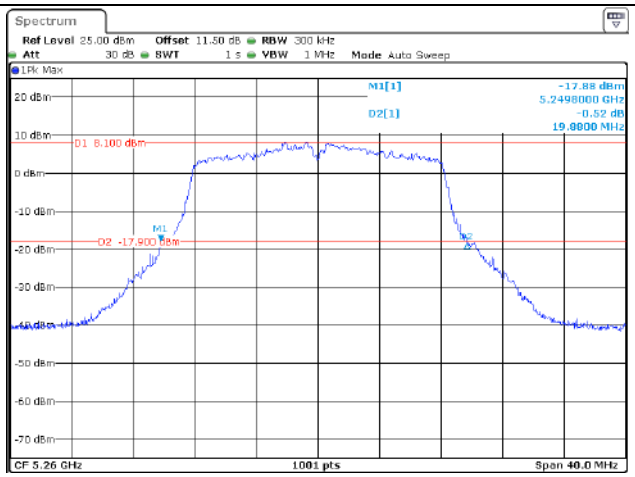
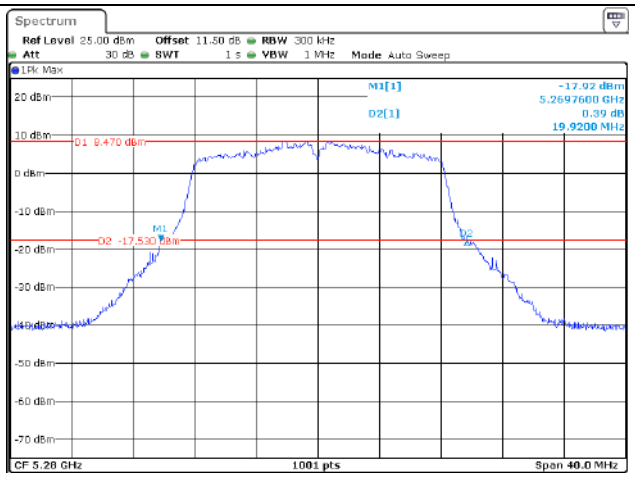
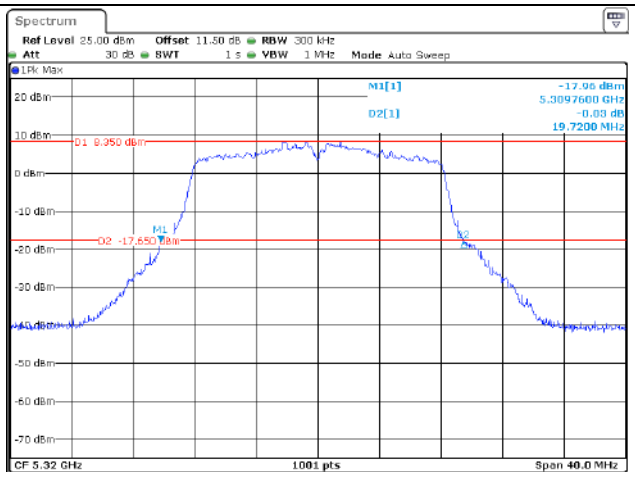
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

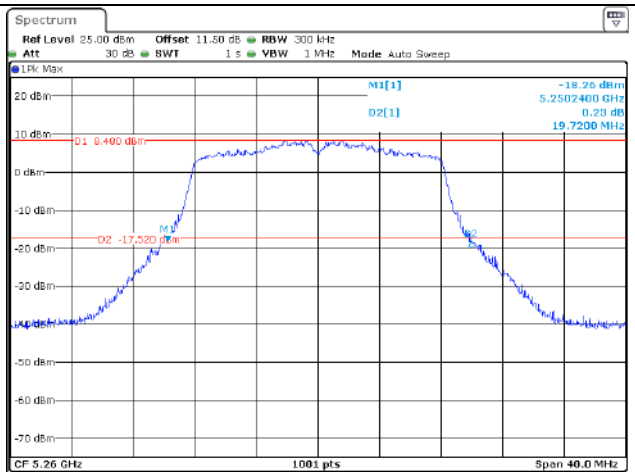
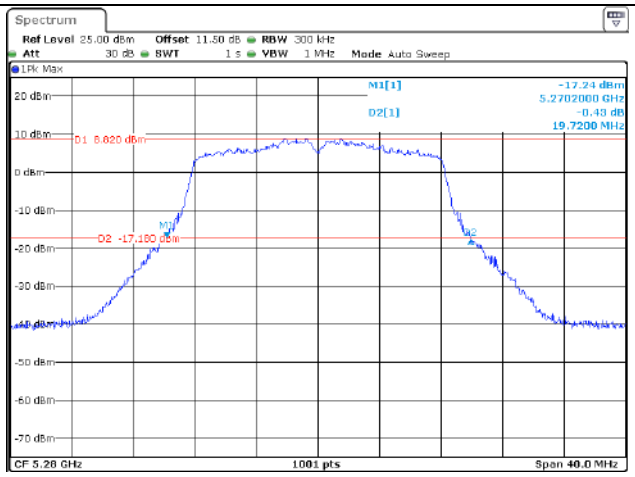
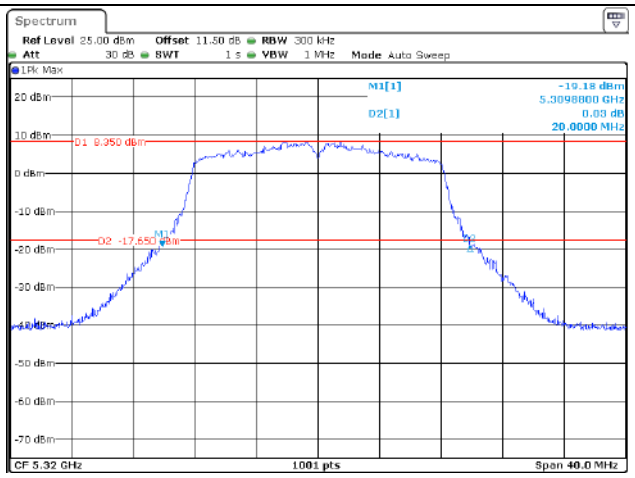
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

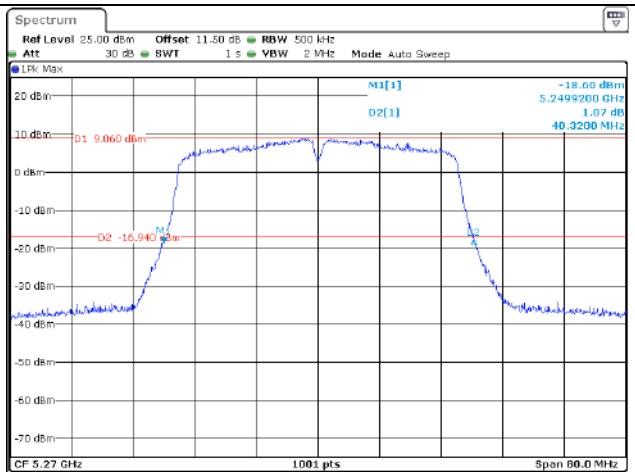
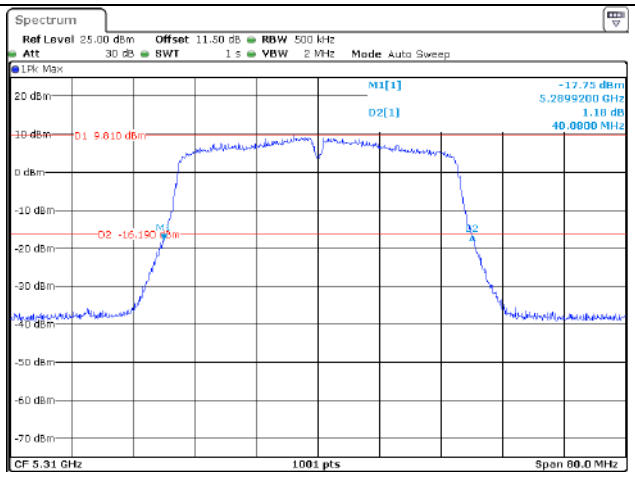
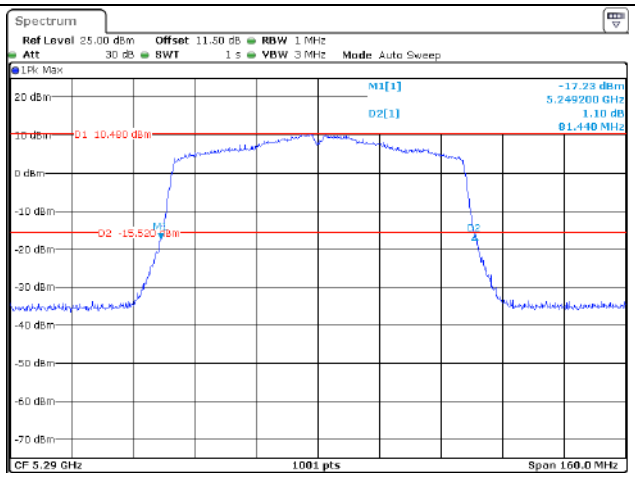
99% Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

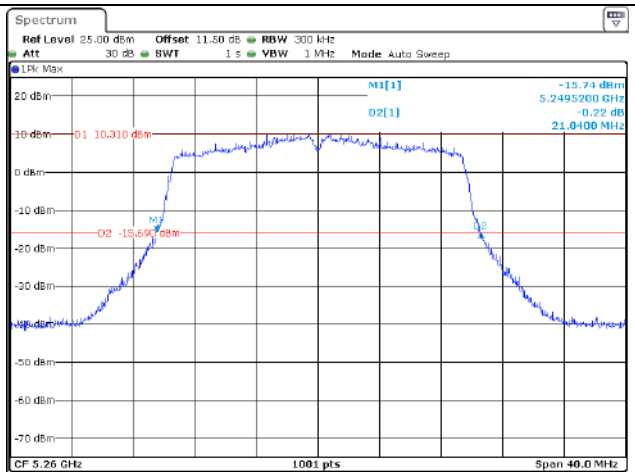
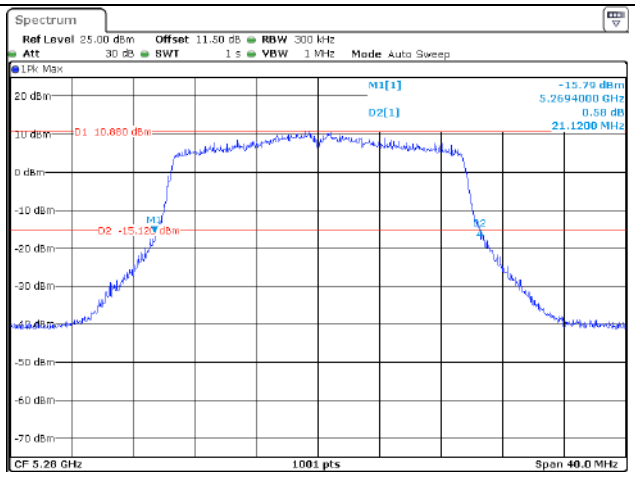
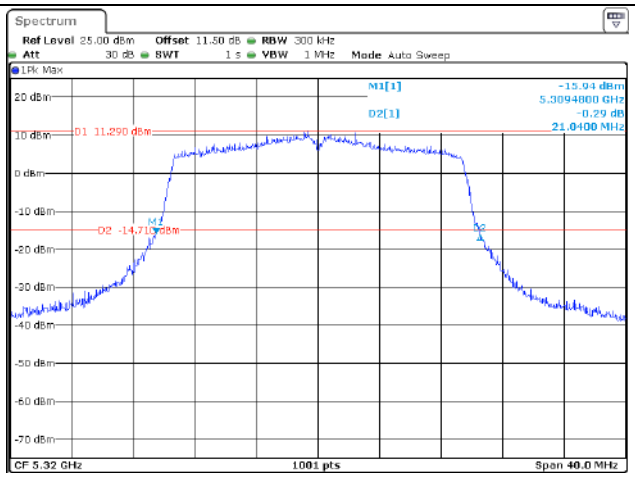
99% Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

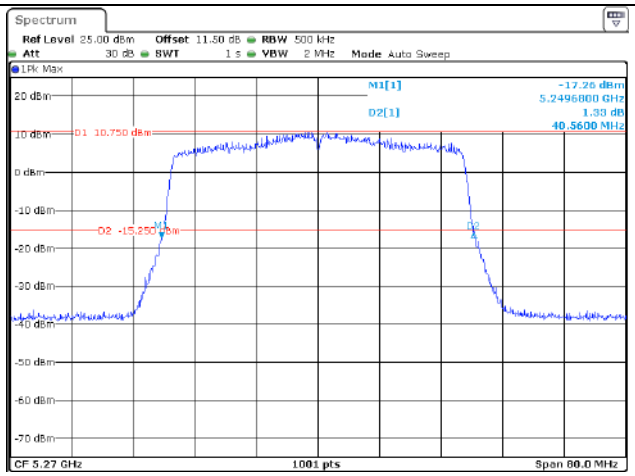
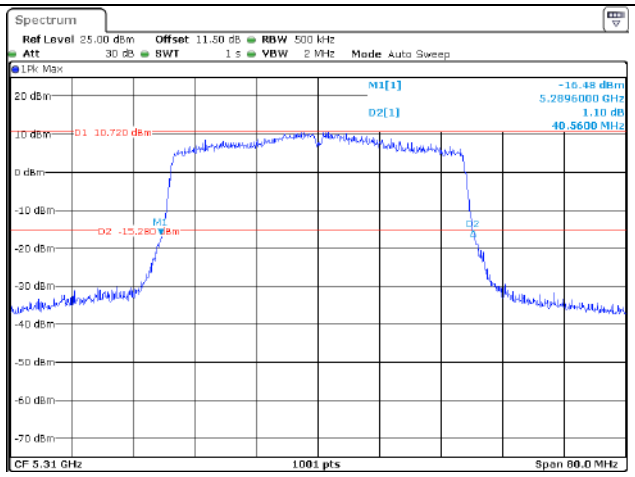
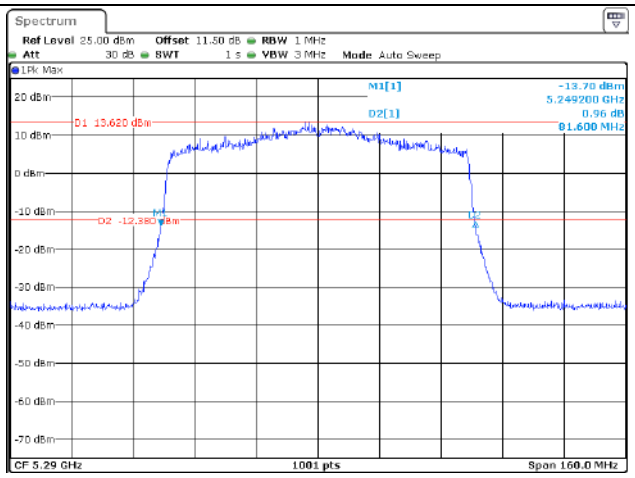
5250-5350MHz:

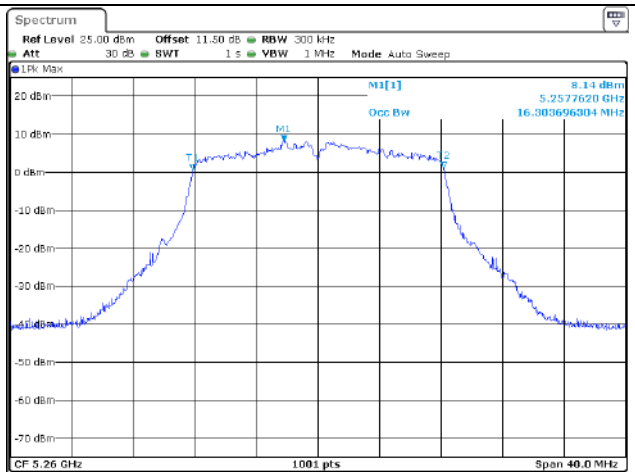
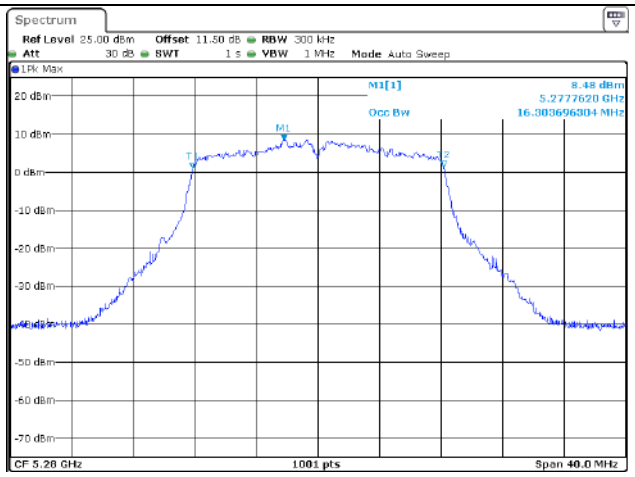
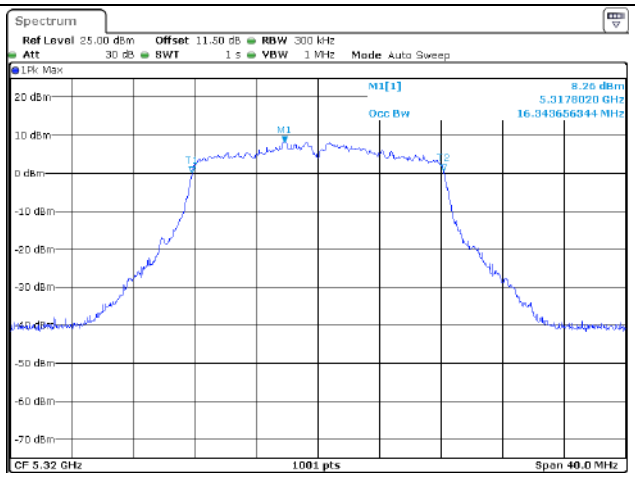
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

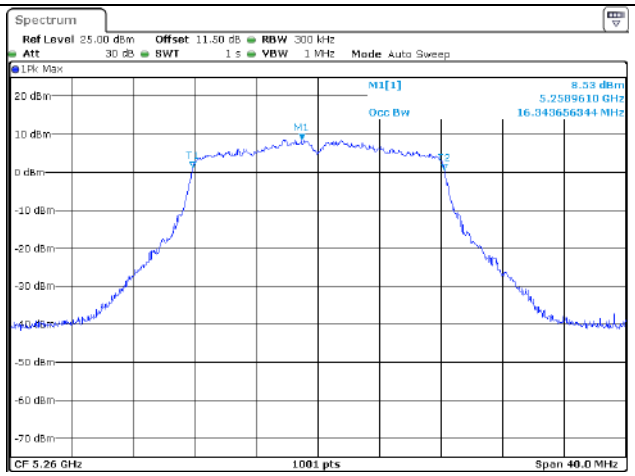
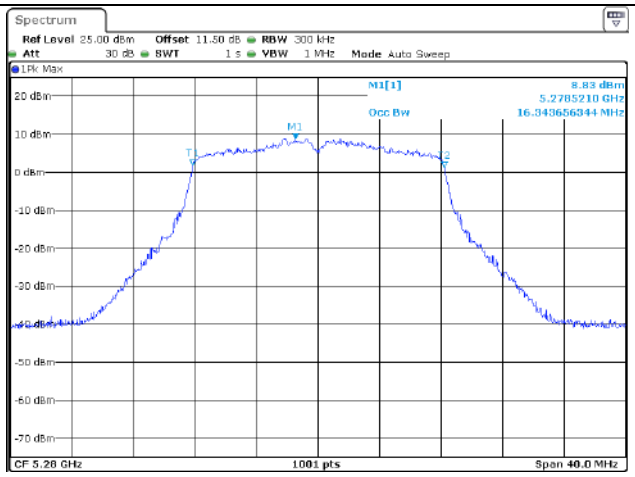
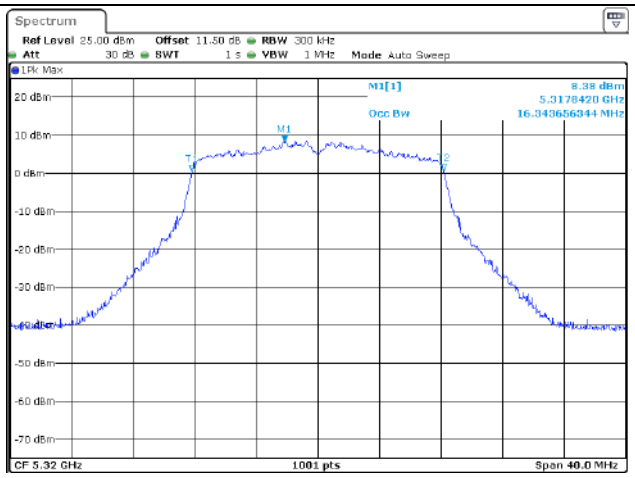
26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

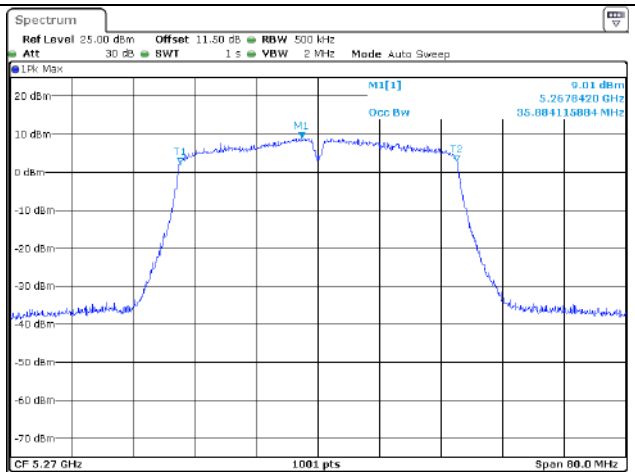
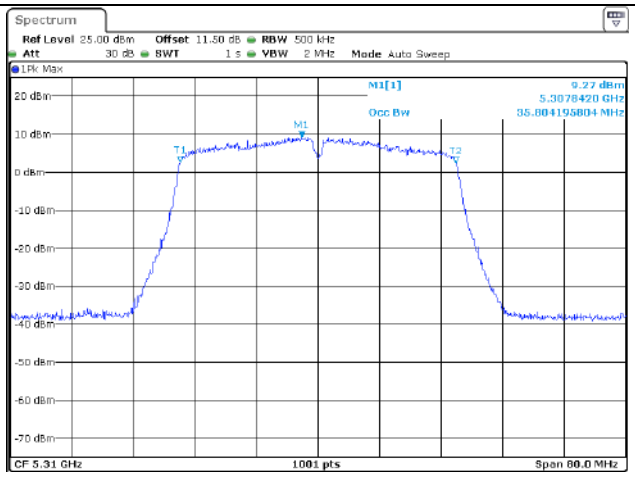
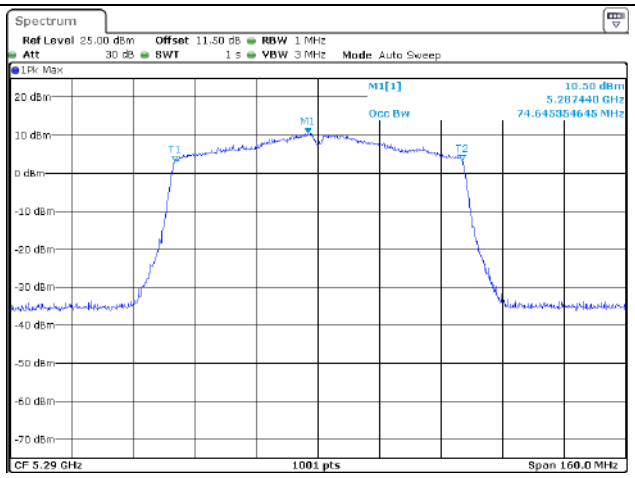
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

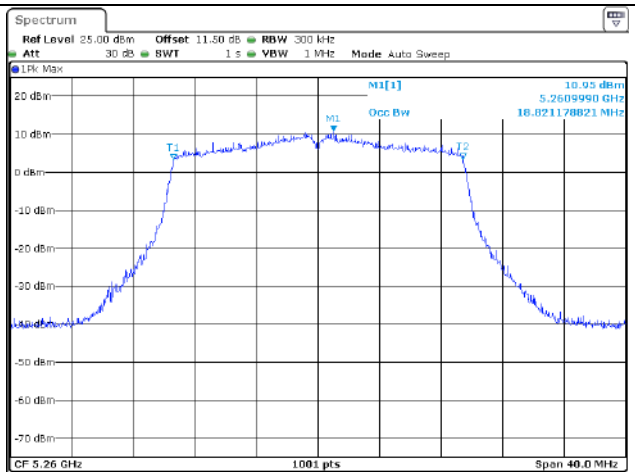
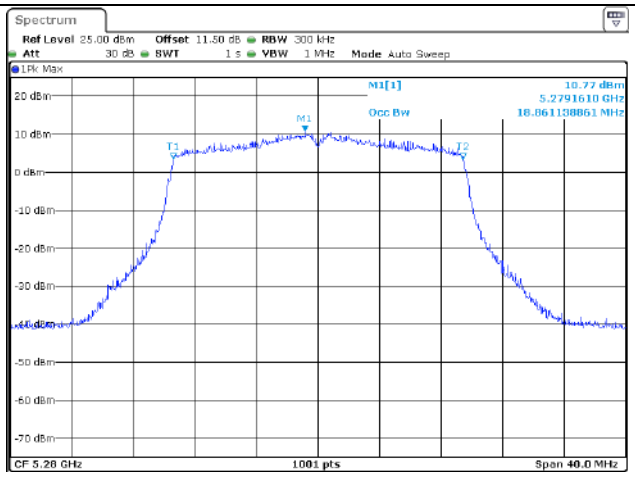
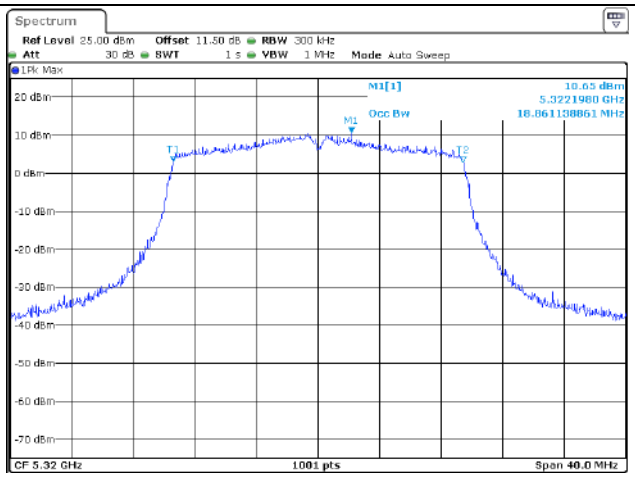
26dB Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

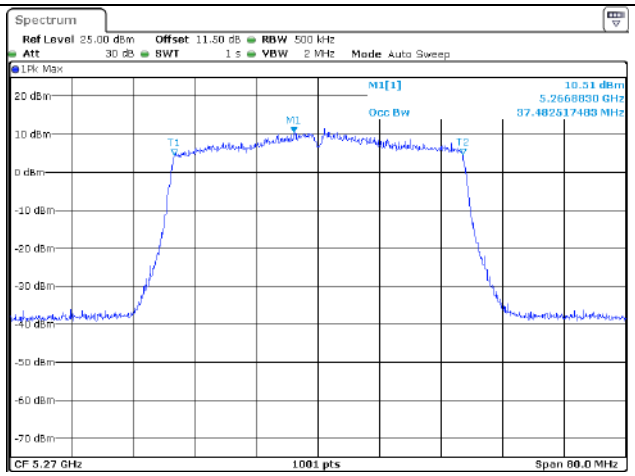
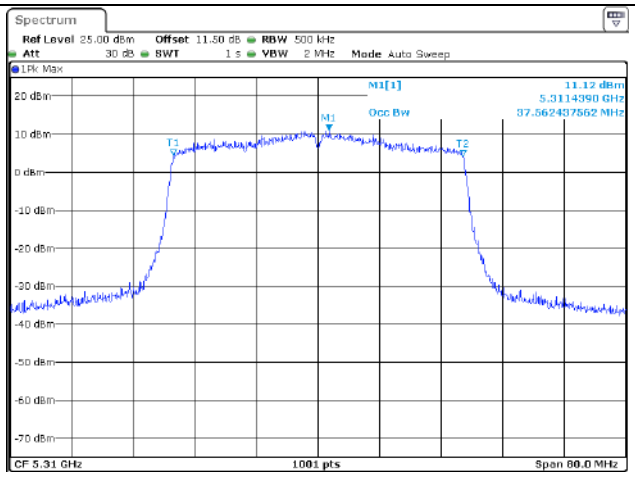
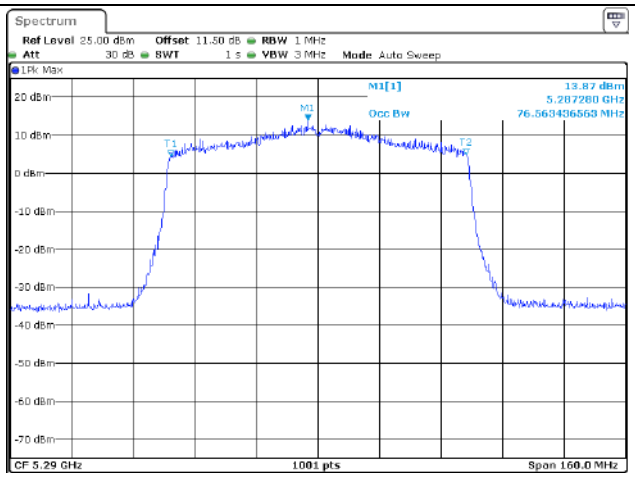
26dB Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

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

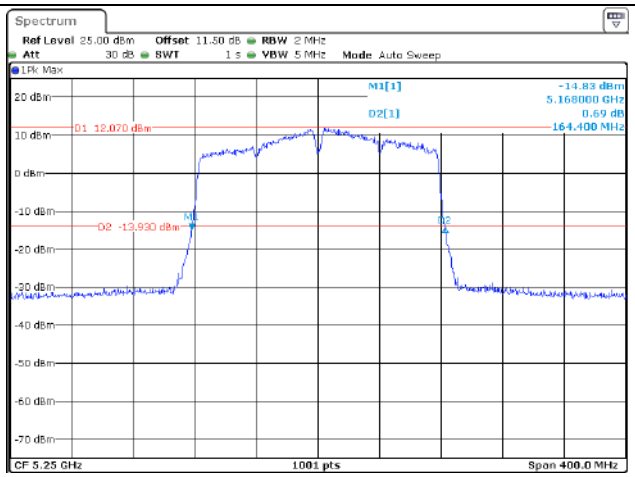
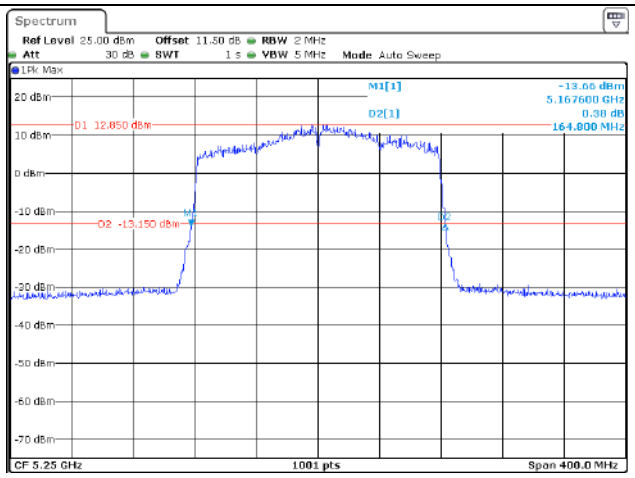
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

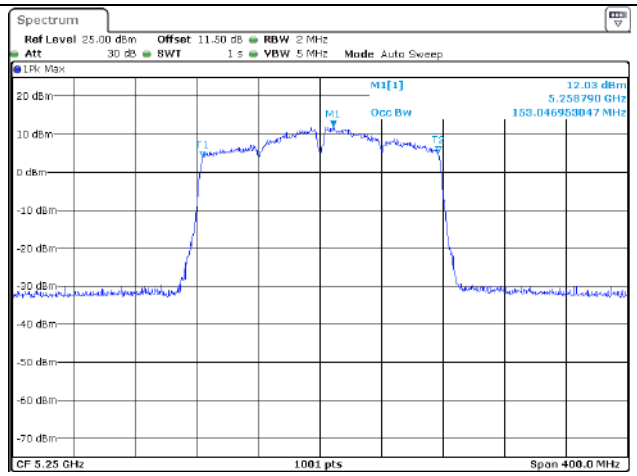
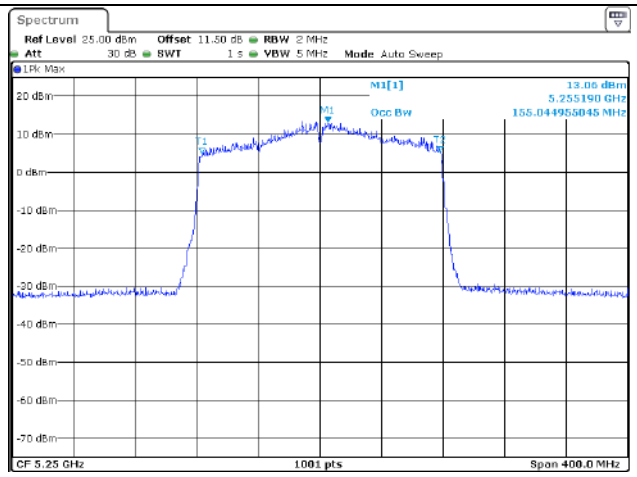
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

99% Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

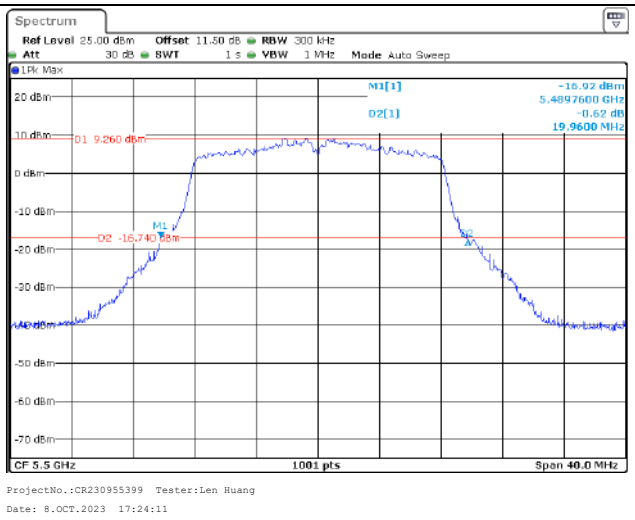
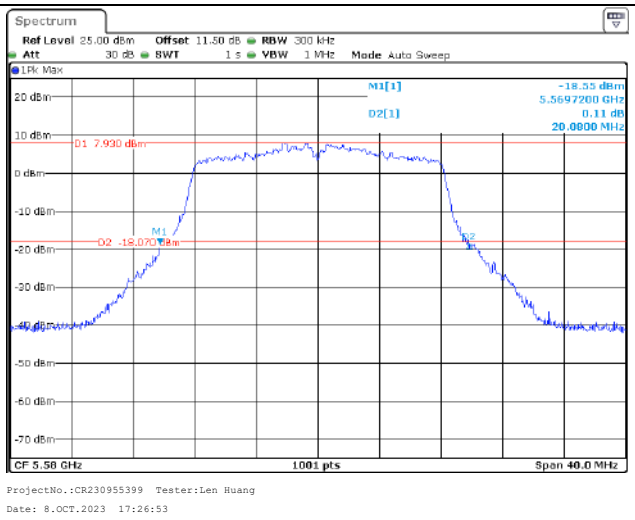
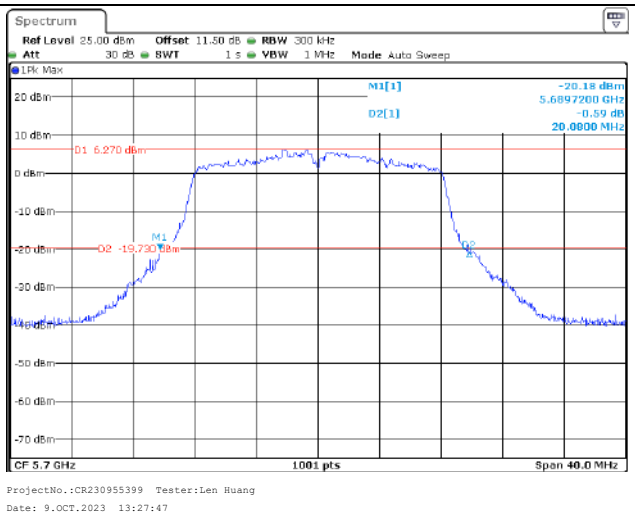
99% Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

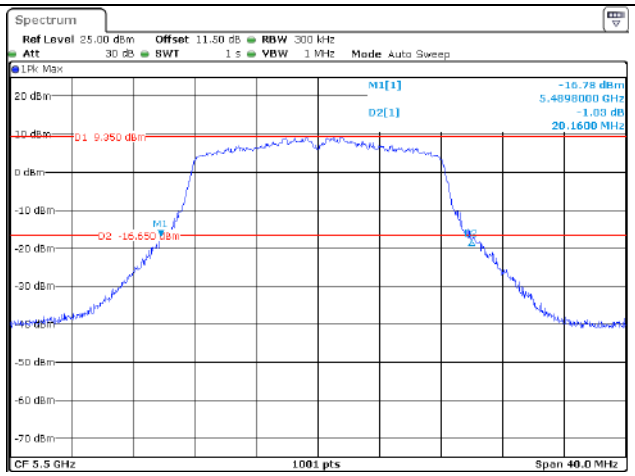
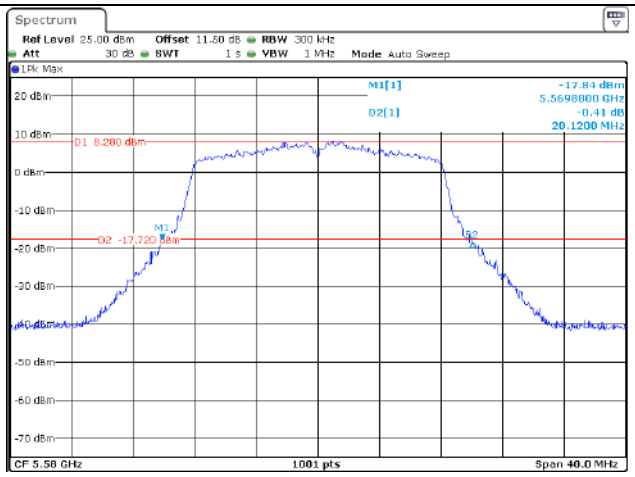
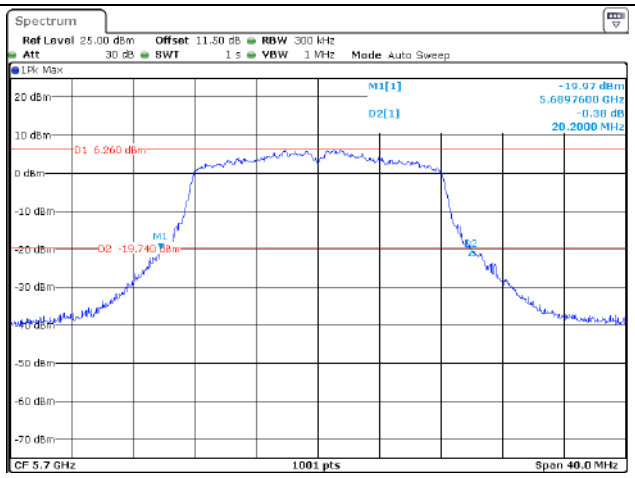
5150-5250 MHz &5250-5350 MHz:

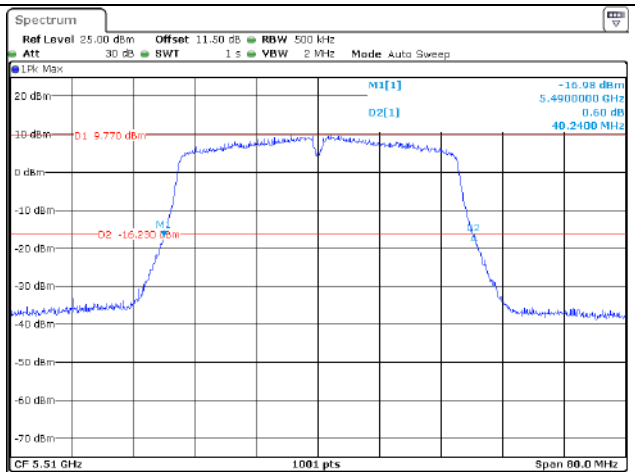
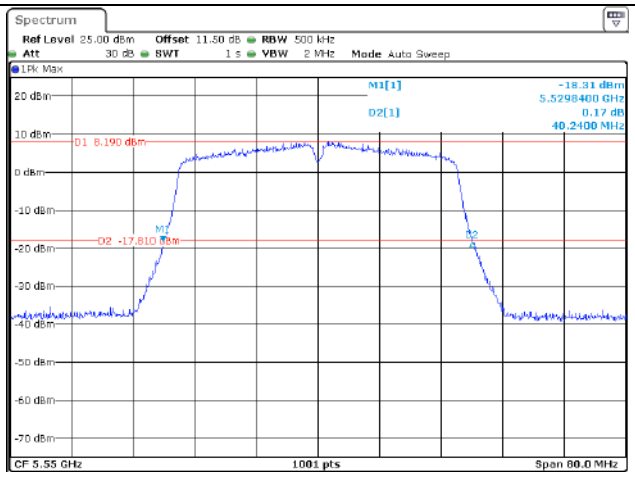
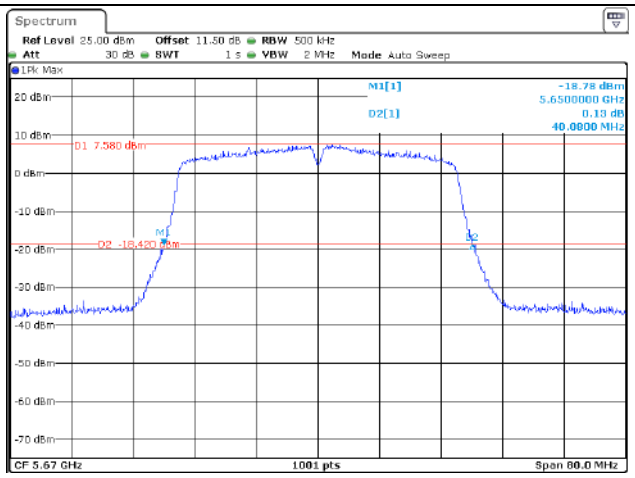
26dB Emission Bandwidth	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

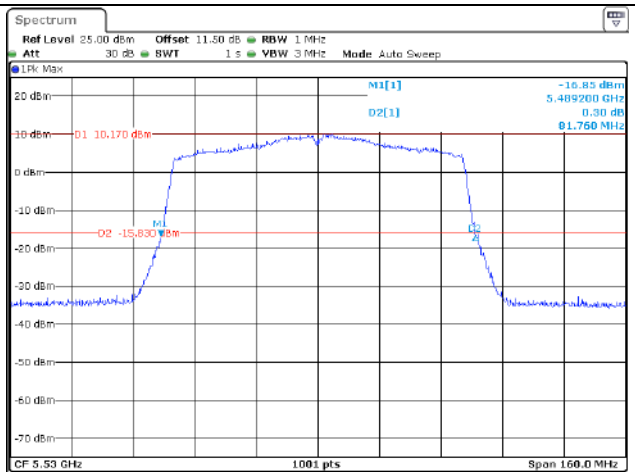
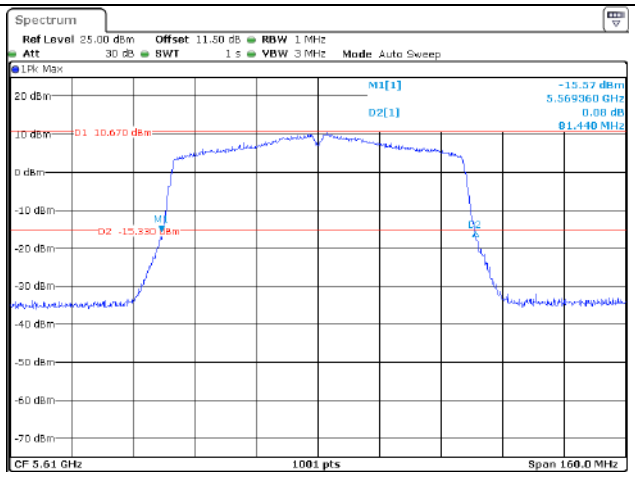
99% Emission Bandwidth	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

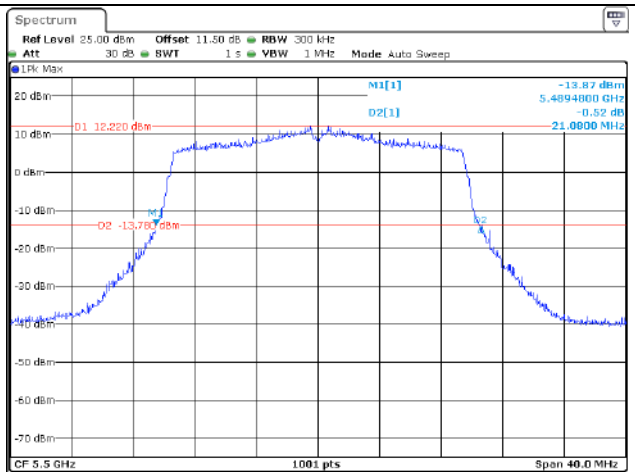
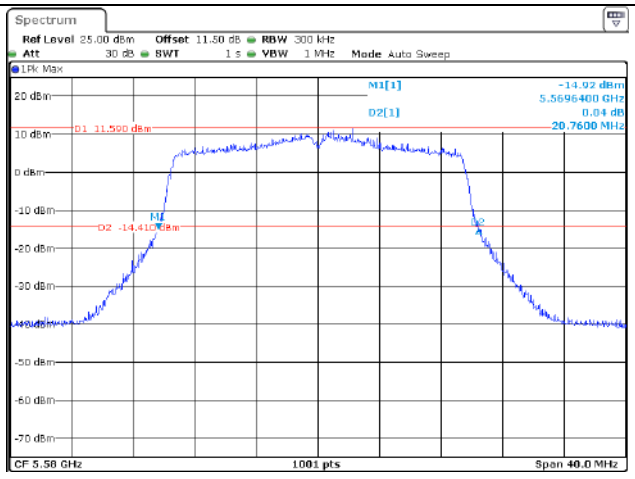
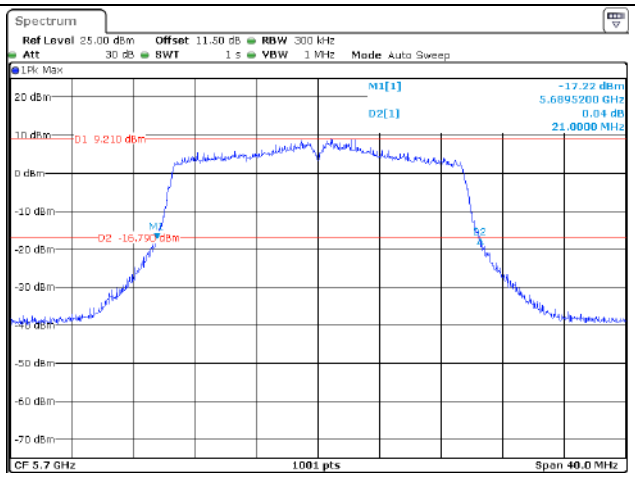
5470-5725 MHz:

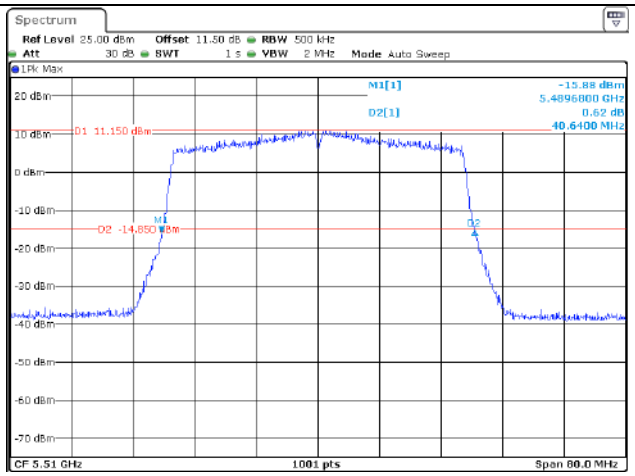
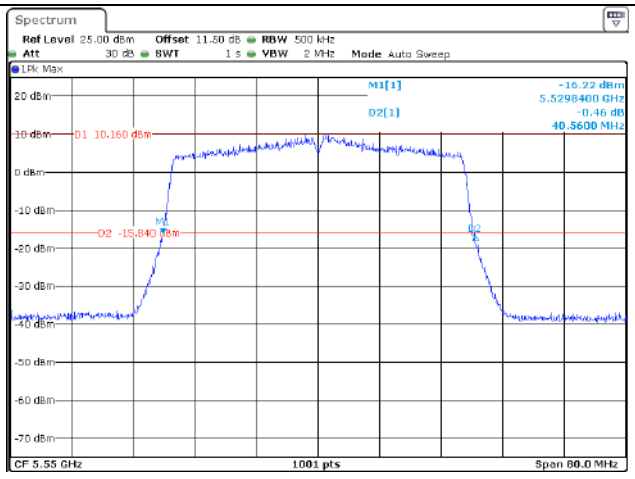
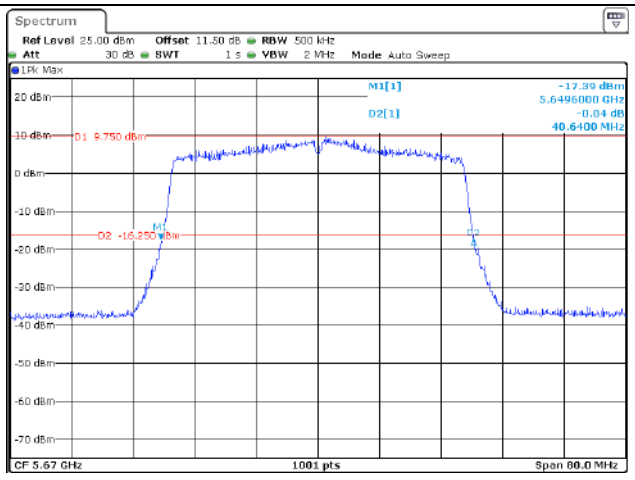
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

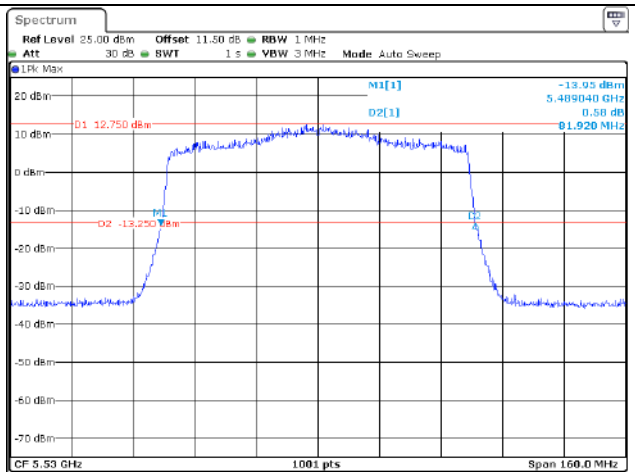
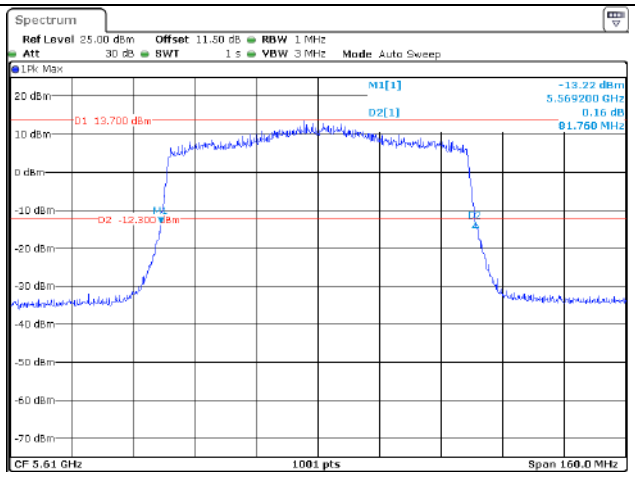
26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

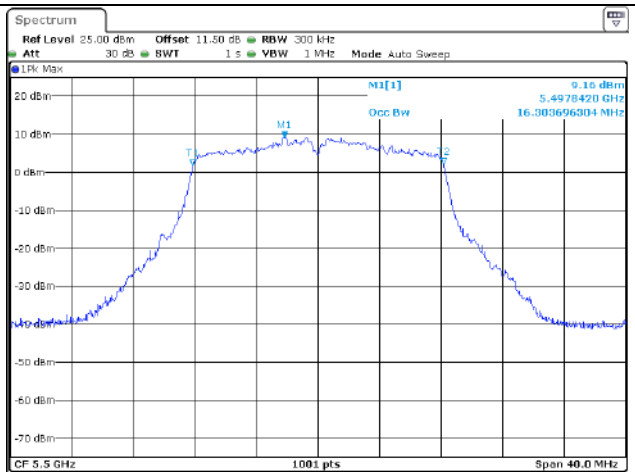
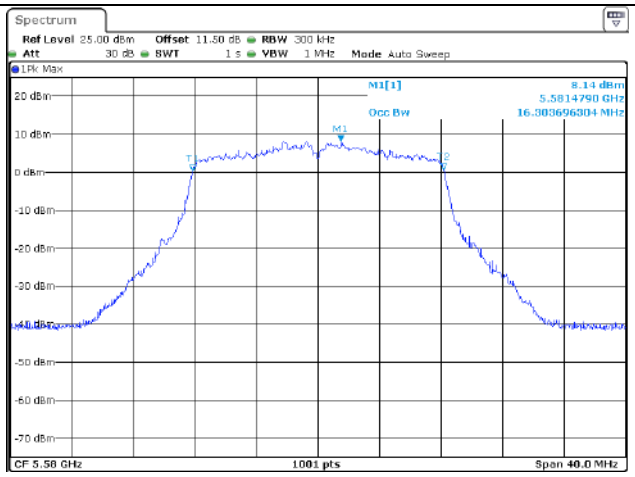
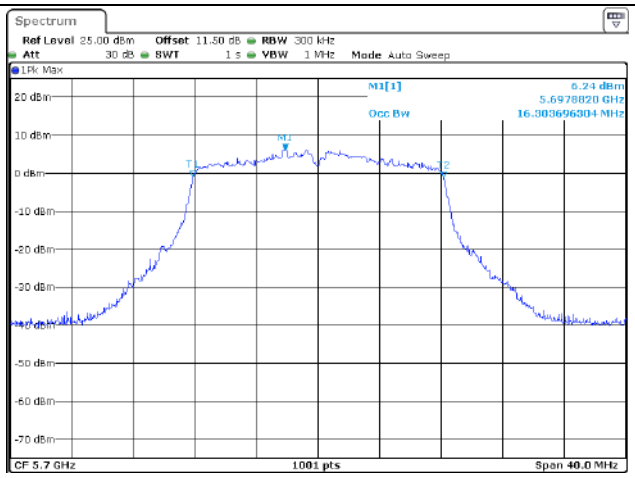
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

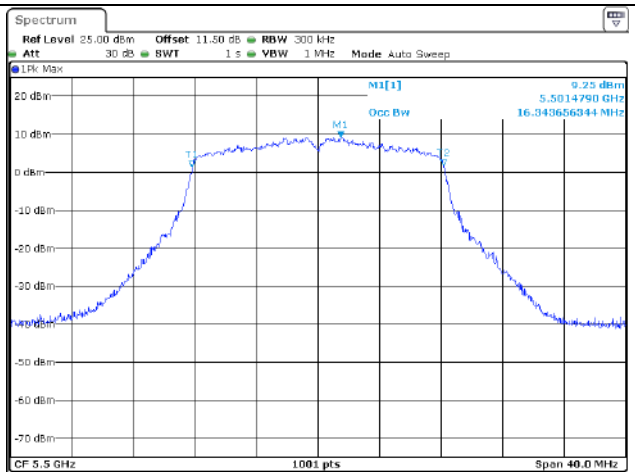
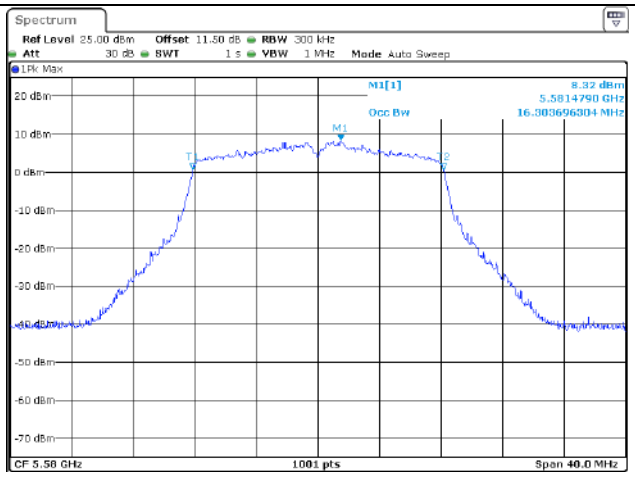
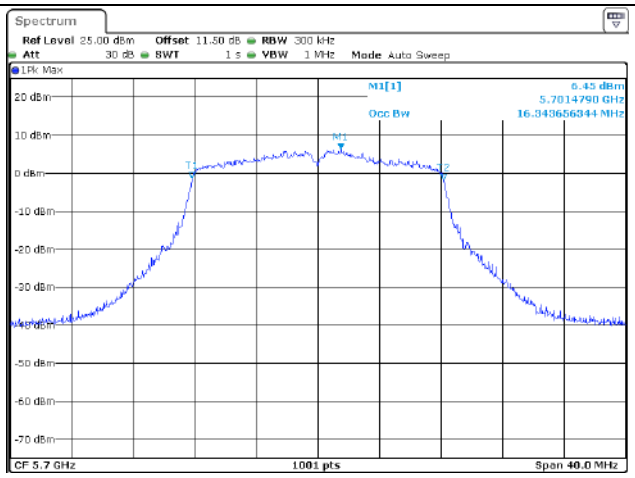
26dB Emission Bandwidth	
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	

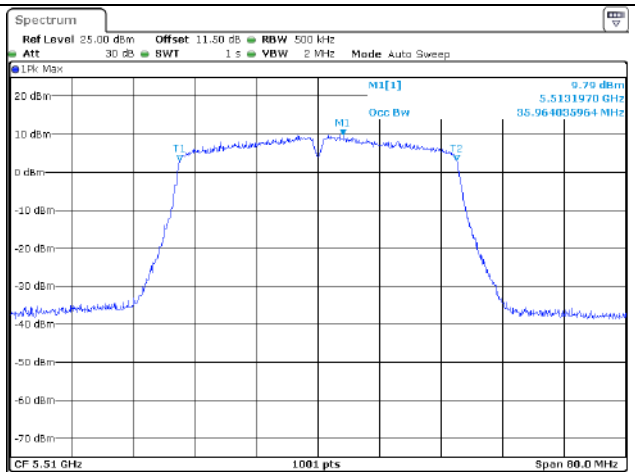
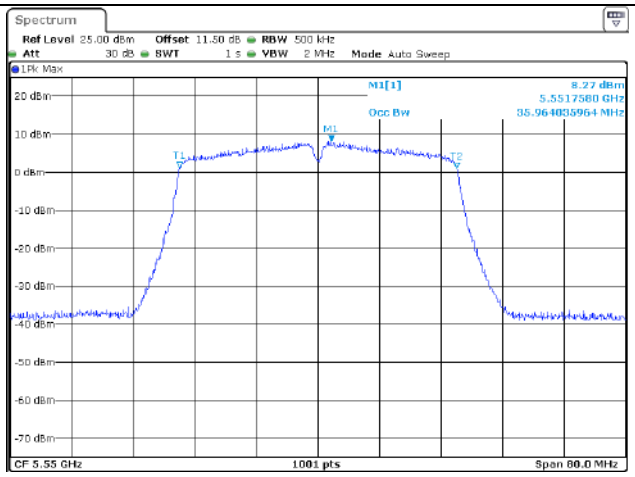
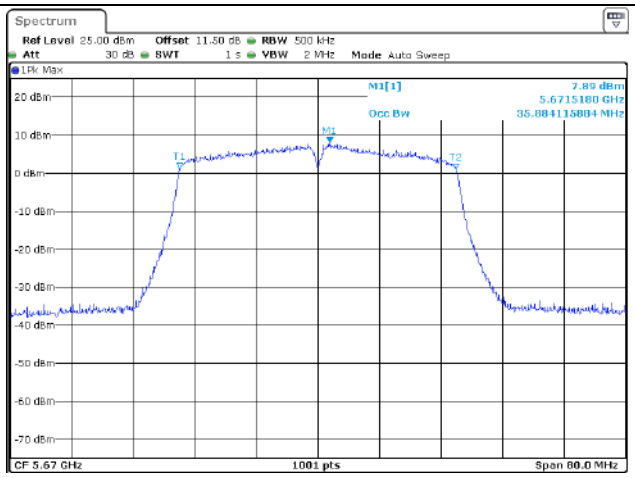
26dB Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

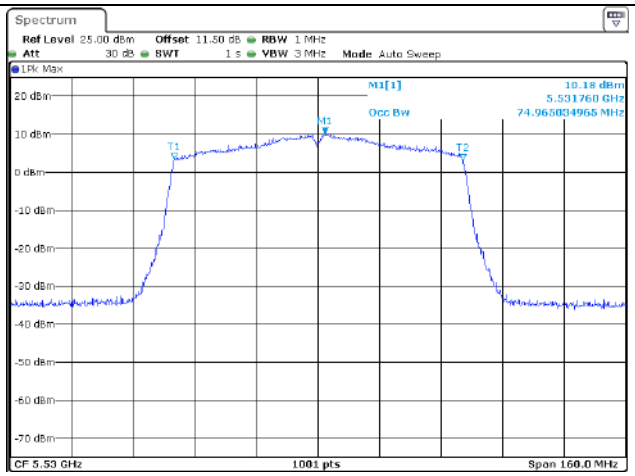
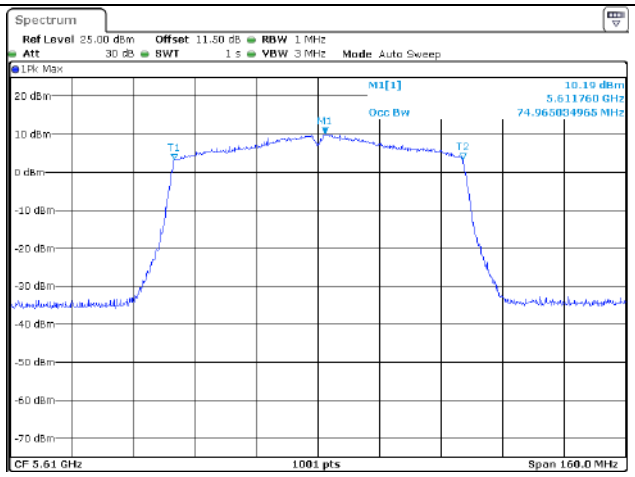
26dB Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Middle Channel	
802.11ax he40 Highest Channel	

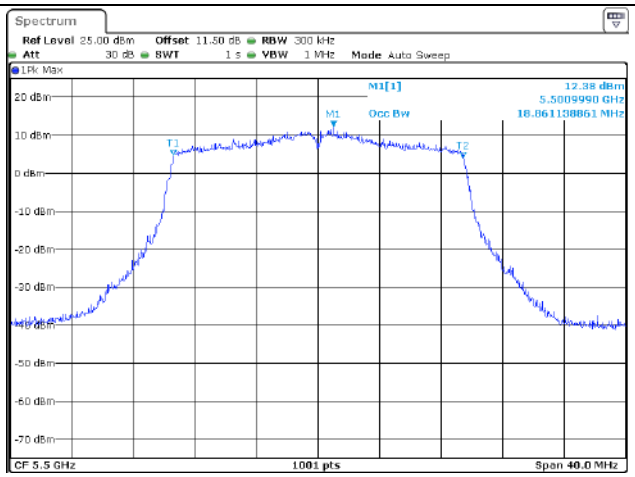
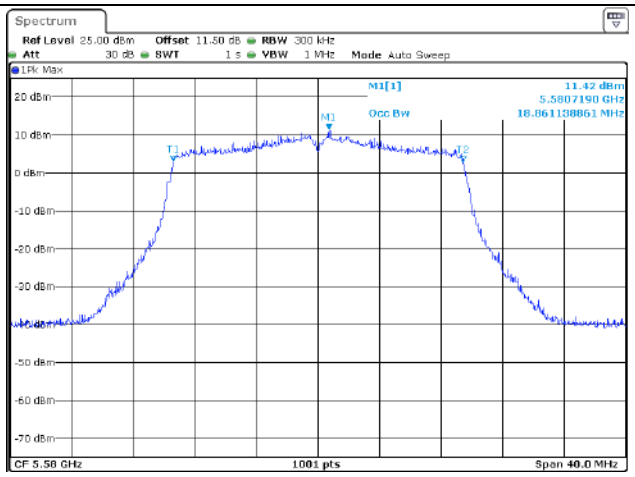
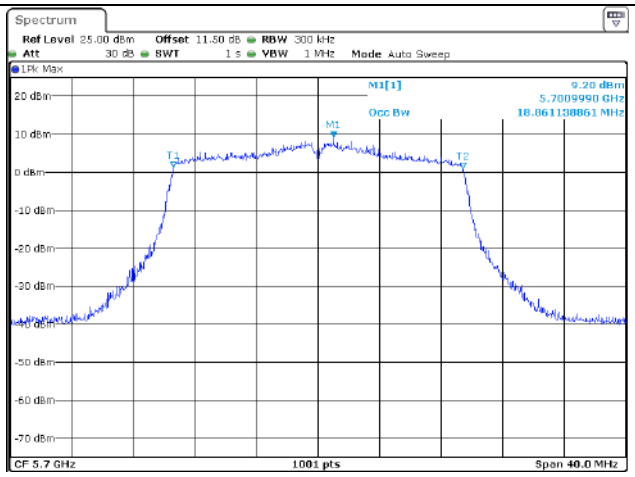
26dB Emission Bandwidth	
802.11ax he80 Lowest Channel	
802.11ax he80 Highest Channel	

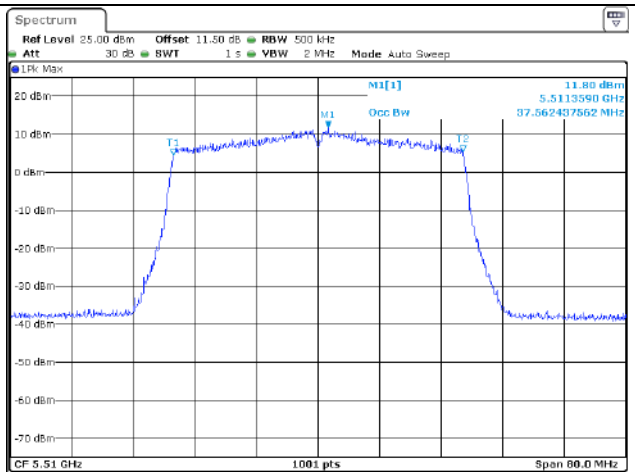
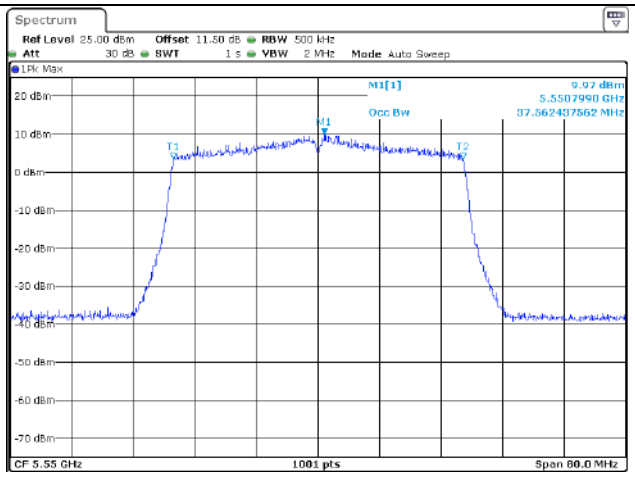
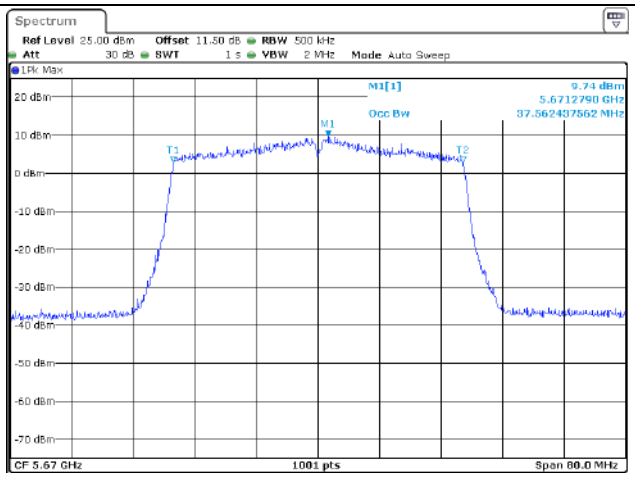
99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

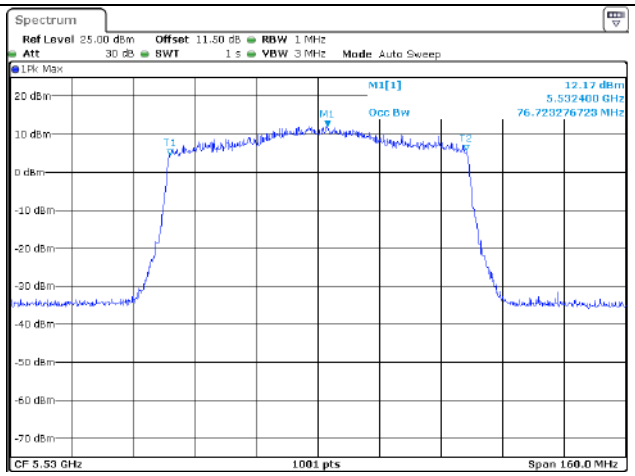
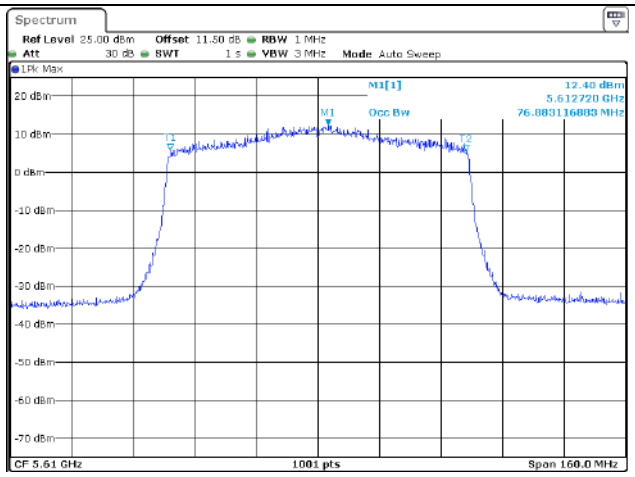
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

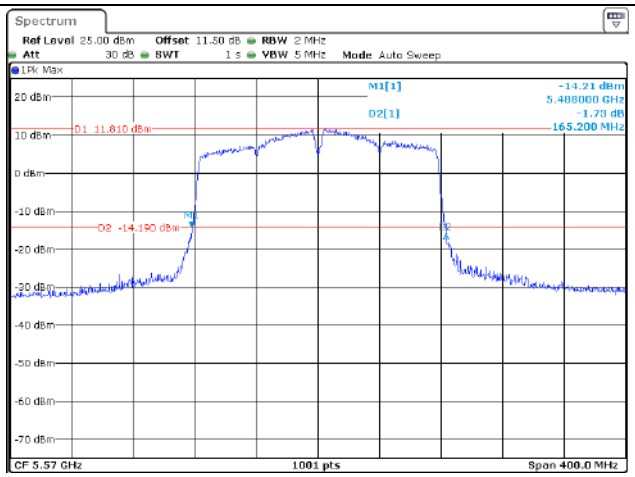
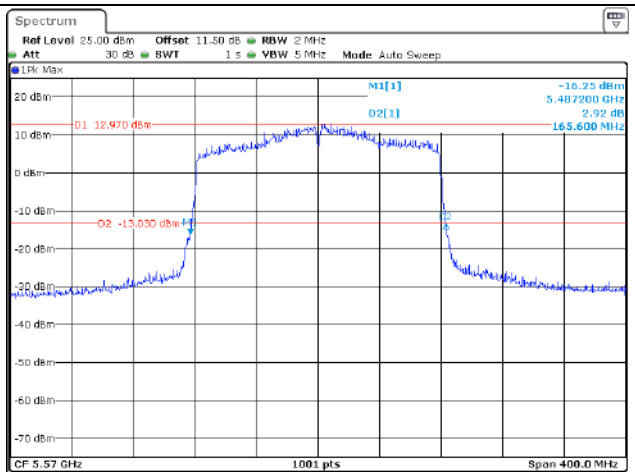
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

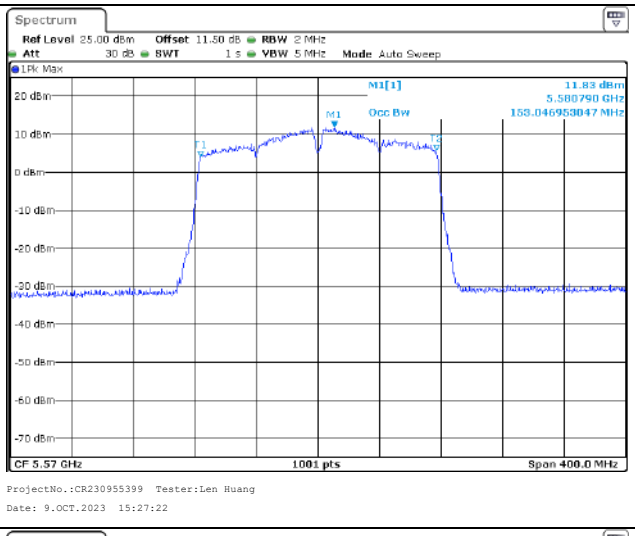
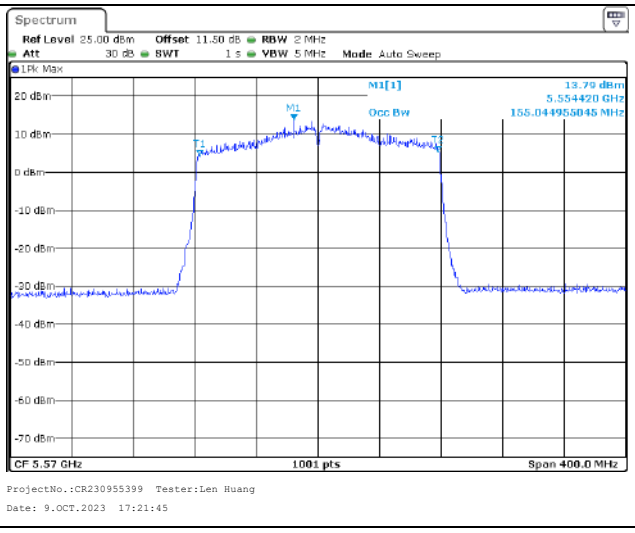
99% Emission Bandwidth	
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	

99% Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

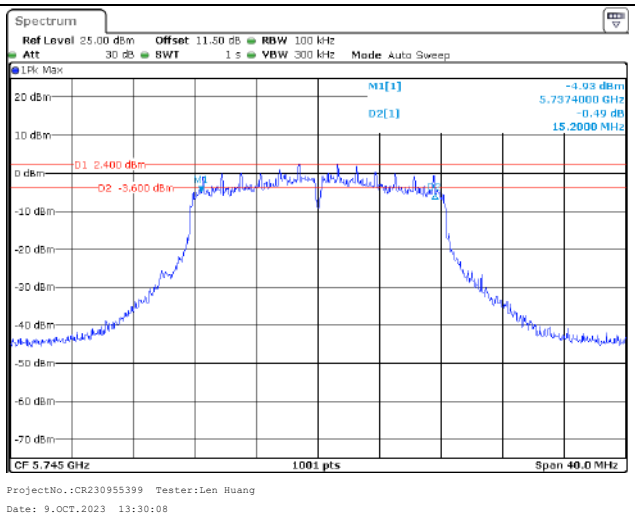
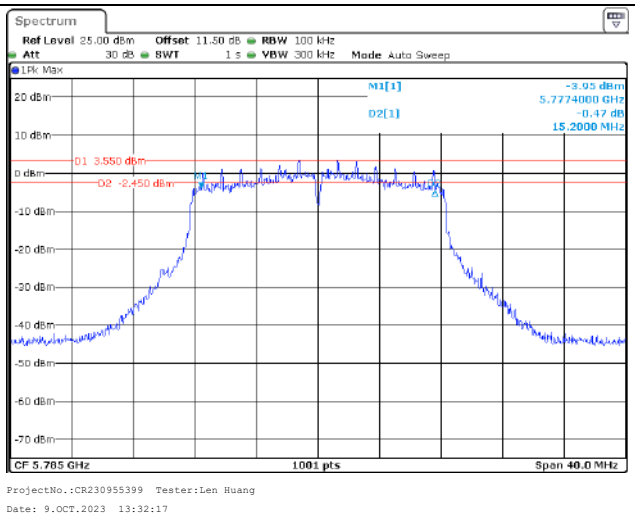
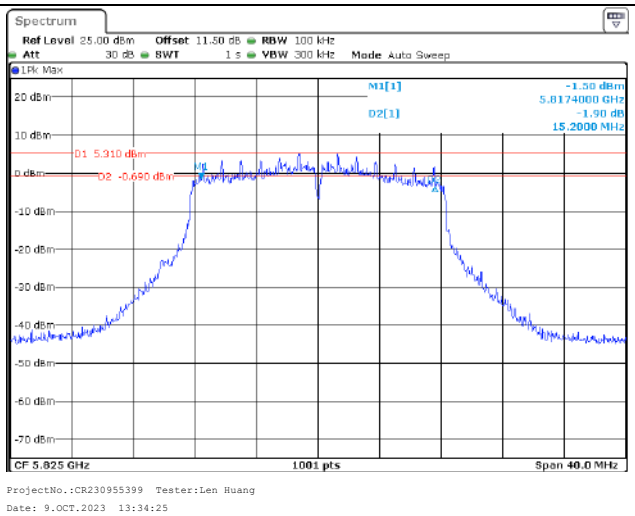
99% Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Middle Channel	
802.11ax he40 Highest Channel	

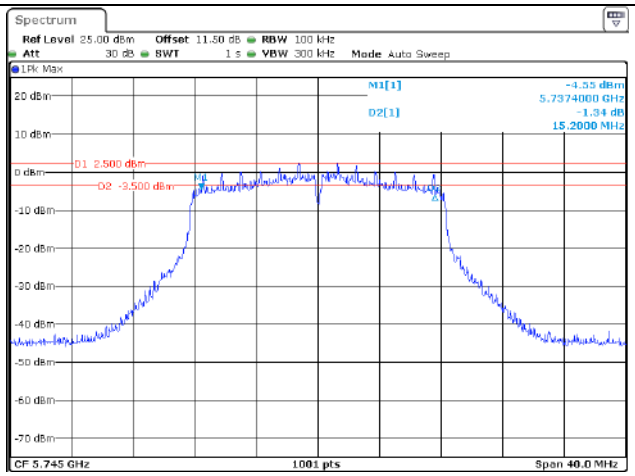
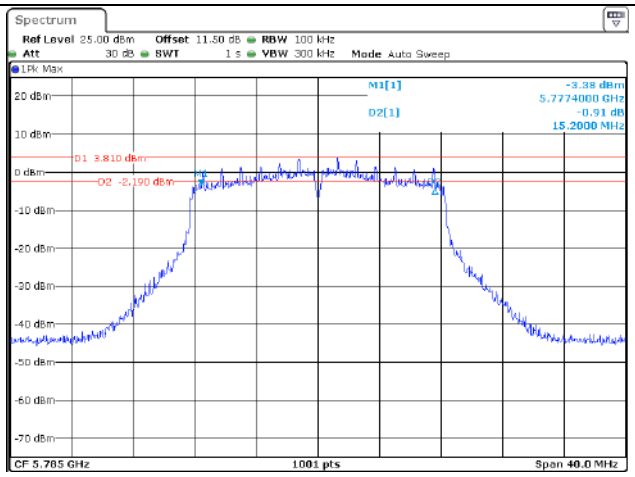
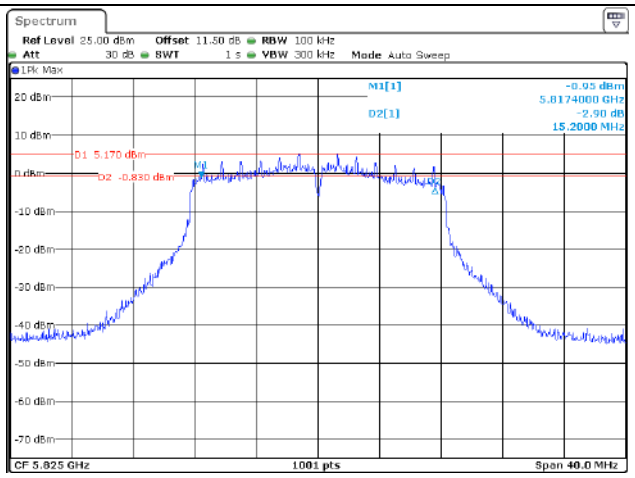
99% Emission Bandwidth	
802.11ax he80 Lowest Channel	
802.11ax he80 Highest Channel	

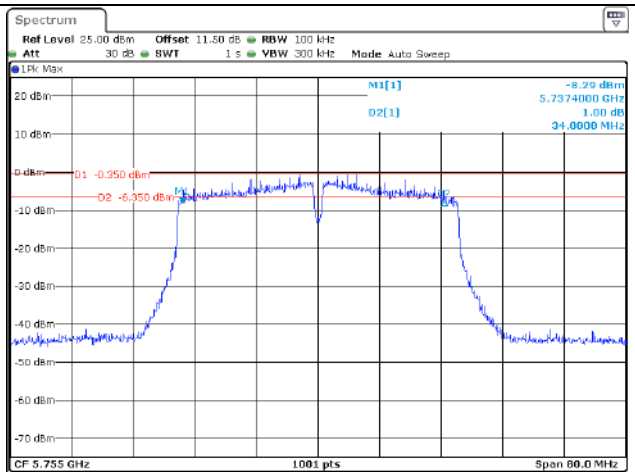
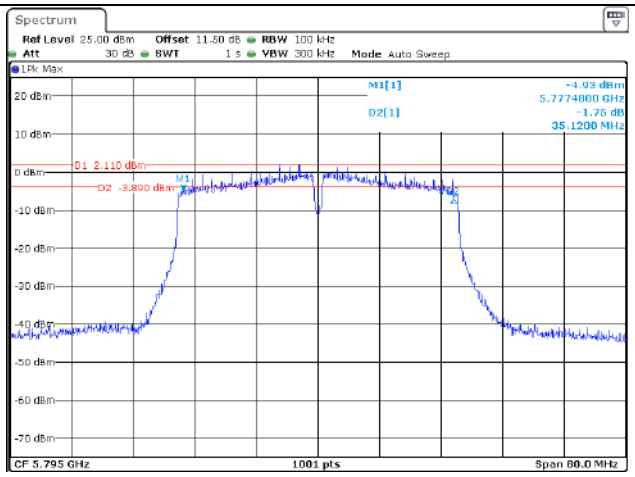
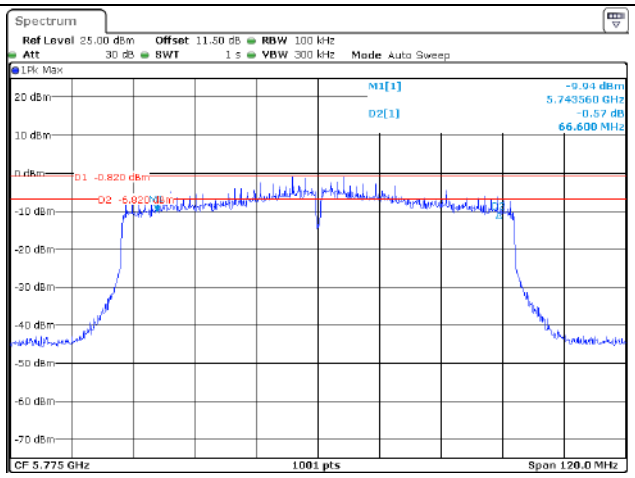
26dB Emission Bandwidth	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

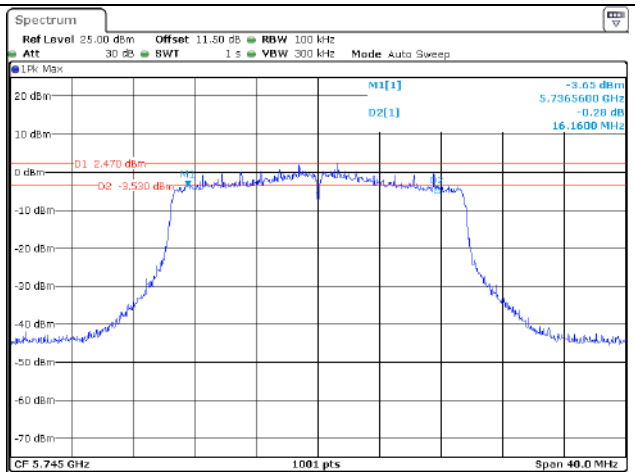
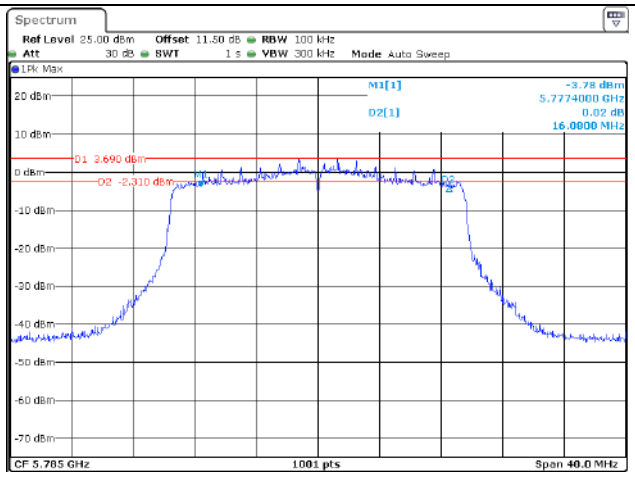
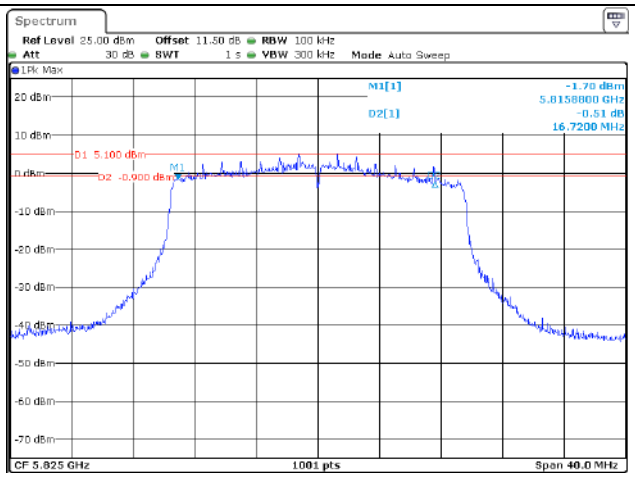
99% Emission Bandwidth	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

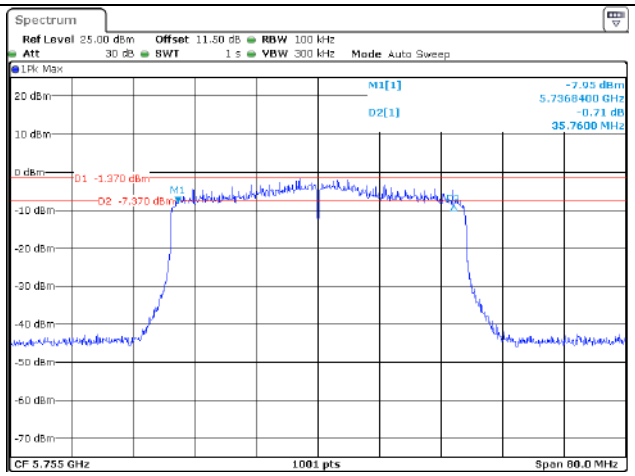
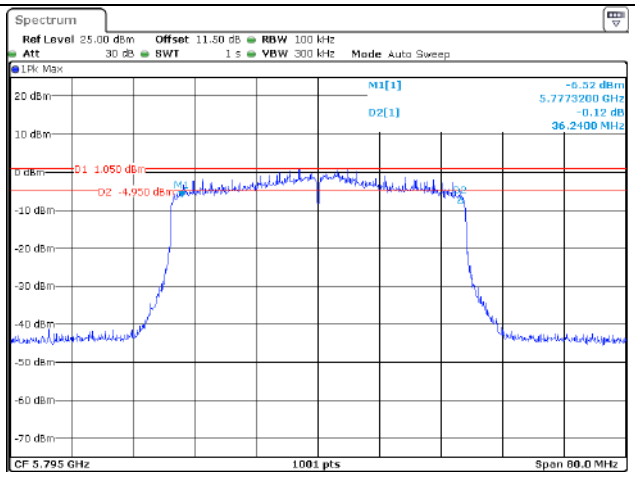
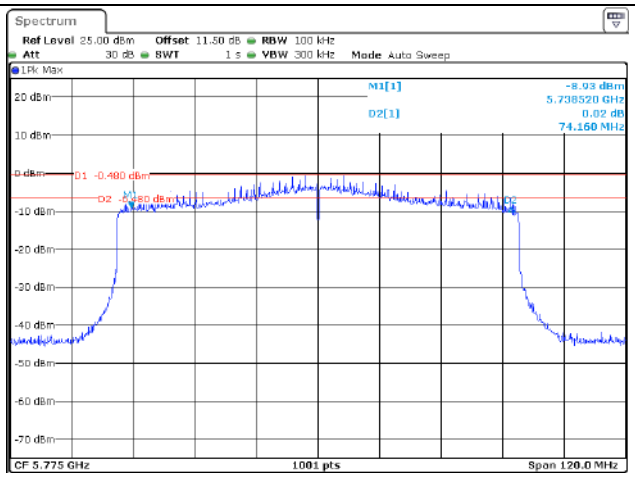
5725-5850MHz:

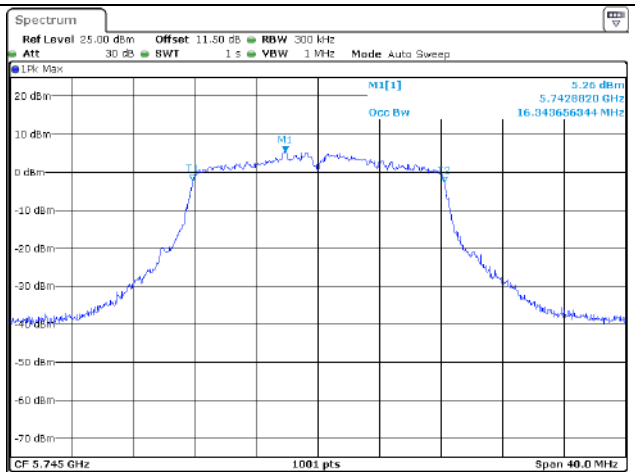
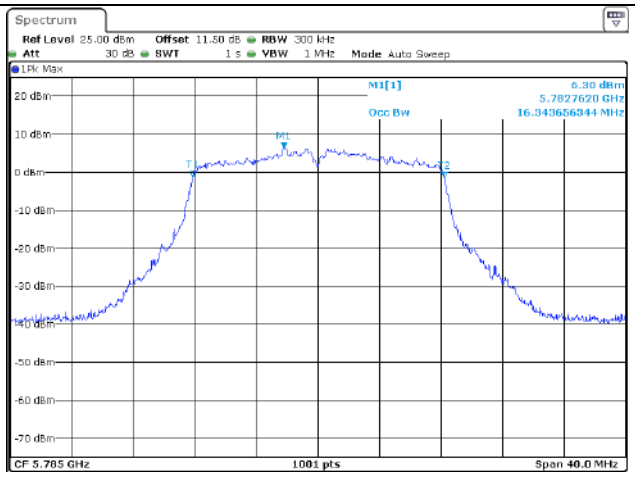
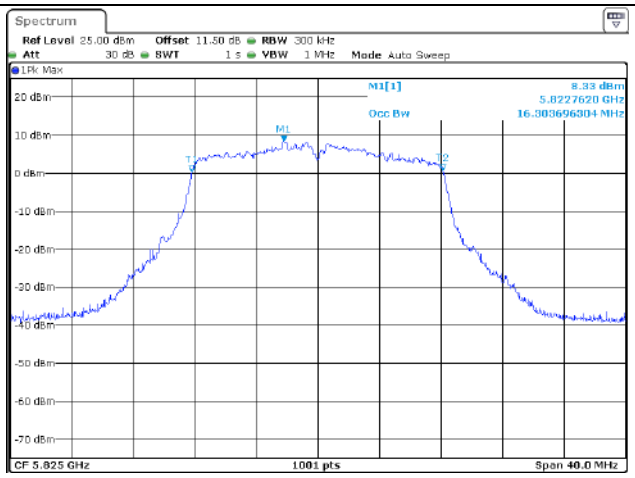
6dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

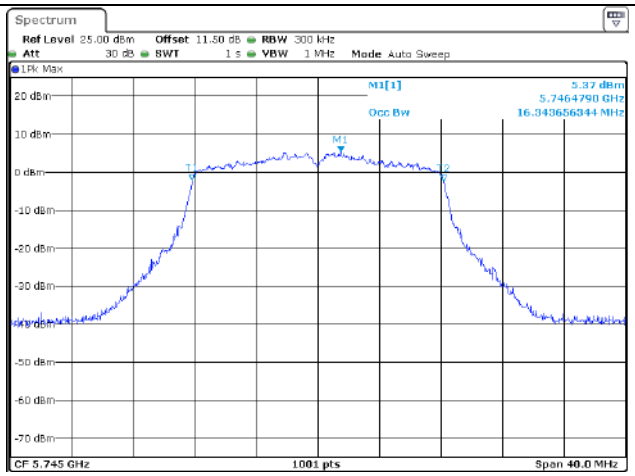
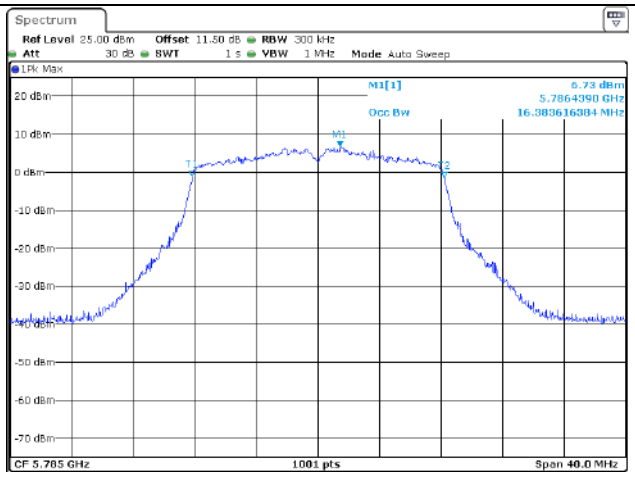
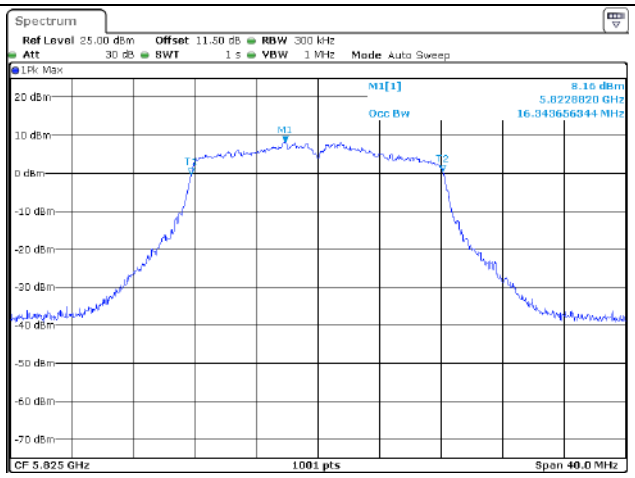
6dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

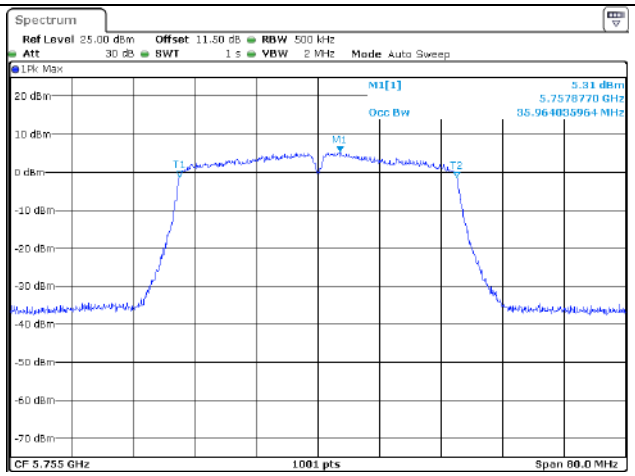
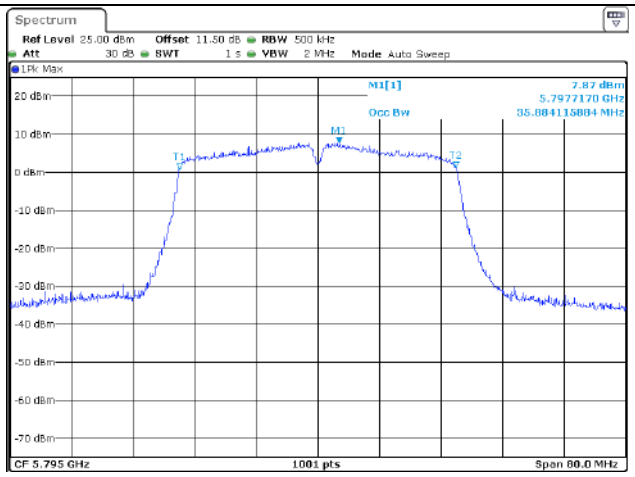
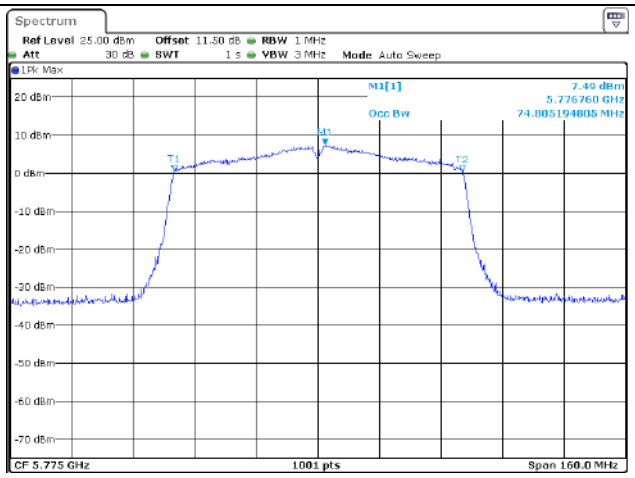
6dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

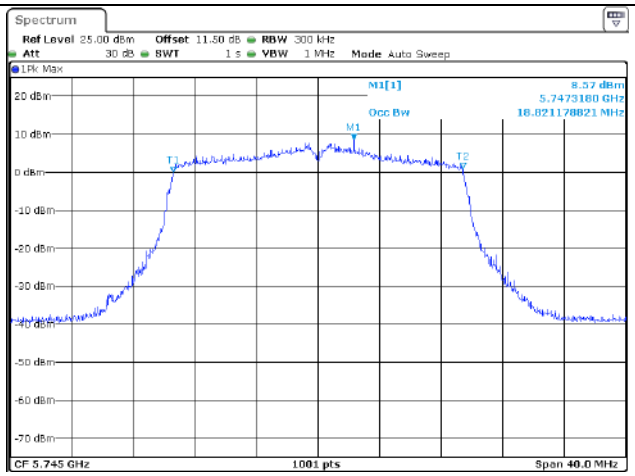
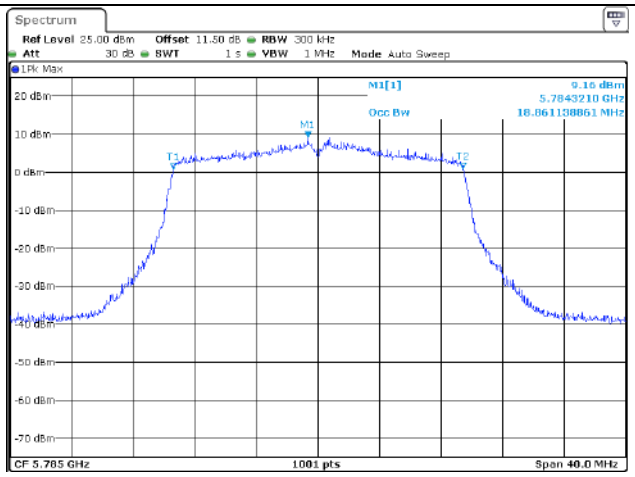
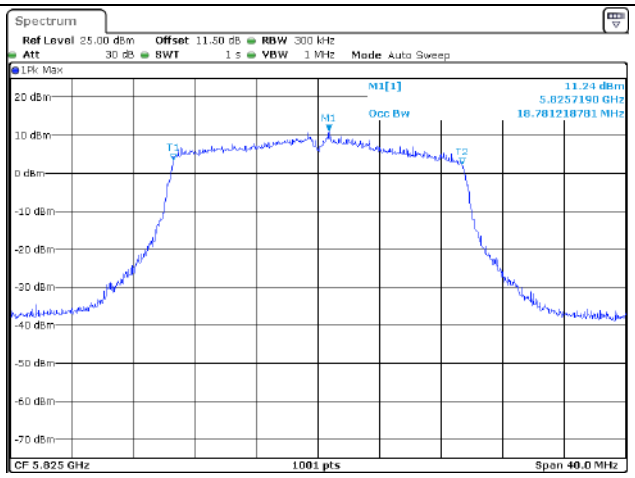
6dB Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

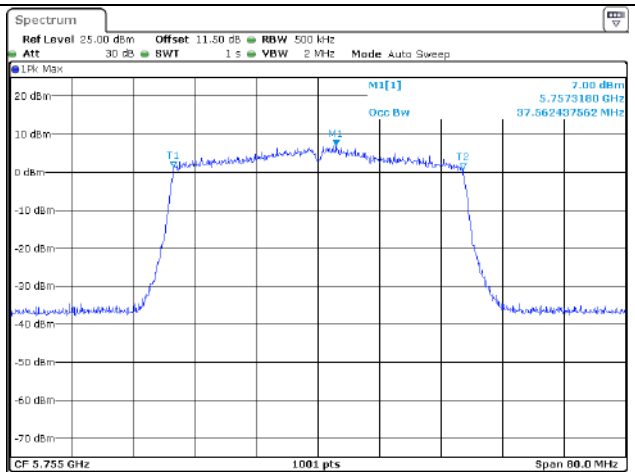
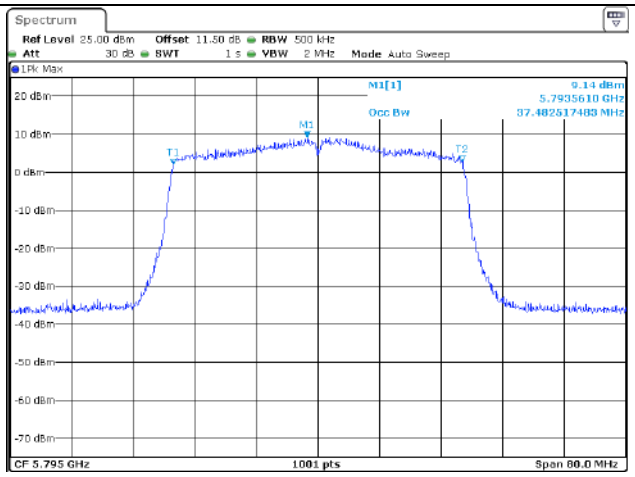
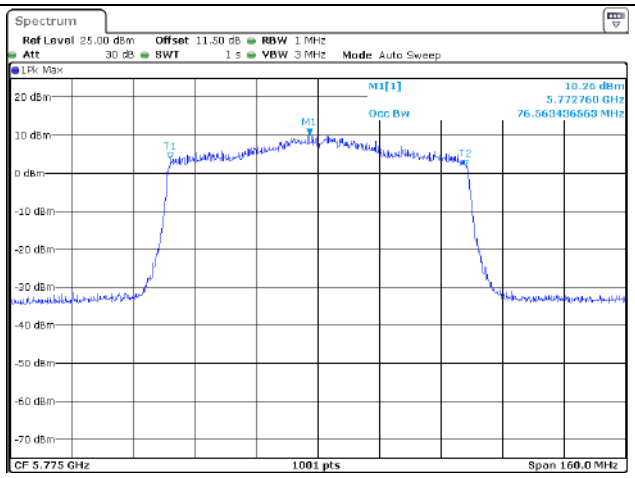
6dB Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

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 Middle Channel	

99% Emission Bandwidth	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

99% Emission Bandwidth	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

4.5 Maximum Conducted Output Power

Serial Number:	2BI1-2	Test Date:	2023/11/9-2023/11/25
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	24.9-26.1	Relative Humidity: (%)	50-56	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/8/4	2024/8/3
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3

** 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 (FCC):

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	20.55	20.50	/	30
	5200	23.94	24.15	/	30
	5240	24.06	24.5	/	30
802.11ac vht20	5180	19.98	20.01	23.01	27.74
	5200	21.38	21.72	24.56	27.74
	5240	21.41	21.91	24.68	27.74
802.11ac vht40	5190	19.6	19.45	22.54	27.74
	5230	24.29	24.45	27.38	27.74
802.11ac vht80	5210	18.87	18.42	21.66	27.74
802.11ax he20	5180	19.09	19.08	22.10	27.74
	5200	22.19	22.55	25.38	27.74
	5240	22.35	22.7	25.54	27.74
802.11ax he40	5190	18.3	18.12	21.22	27.74
	5230	24.96	24.11	27.57	27.74
802.11ax he80	5210	18.81	18.31	21.58	27.74
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB					
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi
Note: The device is an indoor AP.					

5150-5250 MHz (ISED):

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			EIRP (dBm)	EIRP Limit (dBm)
		Chain 0	Chain 1	Total		
802.11a	5180	14.64	14.93	/	20.19	22.13
	5200	14.63	14.41	/	19.89	22.12
	5240	15.07	14.58	/	20.33	22.12
802.11ac vht20	5180	9.16	9.16	12.17	20.43	22.13
	5200	8.73	8.69	11.72	19.98	22.13
	5240	9.59	9.03	12.33	20.59	22.14
802.11ac vht40	5190	11.34	10.99	14.18	22.44	23.00
	5230	10.78	11.74	14.30	22.56	23.00
802.11ac vht80	5210	11.48	11.15	14.33	22.59	23.00
802.11ax he20	5180	8.33	8.69	11.52	19.78	22.76
	5200	9.34	9.26	12.31	20.57	22.74
	5240	8.76	9.56	12.19	20.45	22.75
802.11ax he40	5190	11.33	11.17	14.26	22.52	23.00
	5230	10.75	11.96	14.41	22.67	23.00
802.11ax he80	5210	11.69	11.03	14.38	22.64	23.00

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

Note: The device is an indoor AP.

5250-5350 MHz (FCC):

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			Limit (dBm)
		Chain 0	Chain 1	Total	
802.11a	5260	18.58	17.92	/	24.00
	5280	18.58	18.11	/	24.00
	5320	18.75	18.75	/	24.00
802.11ac vht20	5260	15.34	15.63	18.50	21.74
	5280	16.3	15.84	19.09	21.74
	5320	16.43	15.55	19.02	21.74
802.11ac vht40	5270	18.04	18.11	21.09	21.74
	5310	18.26	17.57	20.94	21.74
802.11ac vht80	5290	18.05	18.49	21.29	21.74
802.11ax he20	5260	16.12	16.39	19.27	21.74
	5280	16.36	15.73	19.07	21.74
	5320	16.23	15.92	19.09	21.74
802.11ax he40	5270	18.64	18.76	21.71	21.74
	5310	18.39	18.45	21.43	21.74
802.11ax he80	5290	18.64	18.27	21.47	21.74
802.11ac he160	5250	15.73	15.16	18.46	21.74
802.11ax he160	5250	15.62	15.1	18.38	21.74
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB					

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5250-5350 MHz (ISED):

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)				EIRP (dBm)	EIRP Limit (dBm)
		Chain 0	Chain 1	Total	Limit		
802.11a	5260	17.4	17.67	/	23.12	22.93	29.12
	5280	16.96	17.69	/	23.12	22.95	29.12
	5320	17.37	17.21	/	23.13	22.63	29.13
802.11ac vht20	5260	11.19	11.65	14.44	23.13	22.70	29.13
	5280	10.54	11.84	14.25	23.13	22.51	29.13
	5320	12.18	11.03	14.65	23.13	22.91	29.13
802.11ac vht40	5270	11.75	11.26	14.52	24.00	22.78	30.00
	5310	11.98	11.17	14.60	24.00	22.86	30.00
802.11ac vht80	5290	10.9	11.59	14.27	24.00	22.53	30.00
802.11ax he20	5260	10.42	12.02	14.30	23.75	22.56	29.75
	5280	11.05	11.39	14.23	23.76	22.49	29.76
	5320	11.57	11.42	14.51	23.76	22.77	29.76
802.11ax he40	5270	11.83	11.3	14.58	24.00	22.84	30.00
	5310	11.99	11.13	14.59	24.00	22.85	30.00
802.11ax he80	5290	11.92	11.5	14.73	24.00	22.99	30.00
802.11ac he160	5250	12.04	11.03	14.57	24.00	22.83	30.00
802.11ax he160	5250	11.1	12.12	14.65	24.00	22.91	30.00

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)					EIRP (dBm)	EIRP Limit (dBm)
		Chain 0	Chain 1	Total	FCC Limit	IC Limit		
802.11a	5500	18.48	18.07	/	24.00	23.12	23.74	29.12
	5580	18.51	18.06	/	24.00	23.12	23.77	29.12
	5700	17.46	18.22	/	24.00	23.12	23.48	29.12
802.11ac vht20	5500	15.18	15.63	18.42	21.74	23.13	26.68	29.13
	5580	15.83	15.63	18.74	21.74	23.12	27.00	29.12
	5700	15.6	16.54	19.11	21.74	23.13	27.37	29.13
802.11ac vht40	5510	17.3	17.29	20.31	21.74	24.00	28.57	30.00
	5550	18.16	18.77	21.49	21.74	24.00	29.75	30.00
	5670	17.83	18.68	21.29	21.74	24.00	29.55	30.00
802.11ac vht80	5530	17.45	18.01	20.75	21.74	24.00	29.01	30.00
	5610	18.46	18.95	21.72	21.74	24.00	29.98	30.00
802.11ax he20	5500	16.14	15.59	18.88	21.74	23.76	27.14	29.76
	5580	16.25	15.66	18.98	21.74	23.76	27.24	29.76
	5700	16.09	15.78	18.95	21.74	23.76	27.21	29.76
802.11ax he40	5510	18.7	18.33	21.53	21.74	24.00	29.79	30.00
	5550	18.42	18.64	21.54	21.74	24.00	29.80	30.00
	5670	17.92	18.62	21.29	21.74	24.00	29.55	30.00
802.11ax he80	5530	17.9	17.69	20.81	21.74	24.00	29.07	30.00
	5610	18.34	18.9	21.64	21.74	24.00	29.90	30.00
802.11ac he160	5570	17.86	17.23	20.57	21.74	24.00	28.83	30.00
802.11ax he160	5570	18.04	17.38	20.73	21.74	24.00	28.99	30.00

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	25.3	25.44	/	30.00
	5785	24.89	24.4	/	30.00
	5825	23.79	24.56	/	30.00
802.11ac vht20	5745	23.76	24.24	27.02	27.74
	5785	23.91	23.51	26.72	27.74
	5825	22.74	23.41	26.10	27.74
802.11ac vht40	5755	21.5	22.23	24.89	27.74
	5795	24.13	23.89	27.02	27.74
802.11ac vht80	5775	19.26	19.15	22.22	27.74
802.11ax he20	5745	24.1	24.09	27.11	27.74
	5785	24.01	23.34	26.70	27.74
	5825	23.05	23.4	26.24	27.74
802.11ax he40	5755	21.32	22.12	24.75	27.74
	5795	24.05	23.79	26.93	27.74
802.11ax he80	5775	19.23	19.35	22.30	27.74
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB					
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

4.6 Maximum power spectral density

Serial Number:	2BI1-2	Test Date:	2023/10/13-2023/11/27
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	24.9-26.1	Relative Humidity: (%)	50-54	ATM Pressure: (kPa)	101

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	102259	2023/04/18	2024/04/17
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	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 (FCC):

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	10.91	10.3	/	17
	5200	13.85	14.09	/	17
	5240	14.06	14.31	/	17
802.11ac vht20	5180	10.31	9.59	12.98	14.74
	5200	11.25	10.68	13.98	14.74
	5240	11.46	11.73	14.61	14.74
802.11ac vht40	5190	6.51	6.21	9.37	14.74
	5230	11.48	11.48	14.49	14.74
802.11ac vht80	5210	3.27	2.87	6.08	14.74
802.11ax he20	5180	8.4	7.85	11.14	14.74
	5200	11.01	12.07	14.58	14.74
	5240	11.81	11.59	14.71	14.74
802.11ax he40	5190	5.25	4.99	8.13	14.74
	5230	11.84	11.05	14.47	14.74
802.11ax he80	5210	3.82	2.62	6.27	14.74

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

The device is an Indoor AP.

Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5150-5250 MHz (ISED):

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			EIRP (dBm/MHz)	EIRP Limit (dBm/MHz)
		Chain 0	Chain 1	Total		
802.11a	5180	4.53	4.59	/	9.85	10
	5200	4.48	4.38	/	9.74	10
	5240	4.6	4.03	/	9.86	10
802.11ac vht20	5180	-1.31	-1.37	1.67	9.93	10
	5200	-1.79	-1.47	1.38	9.64	10
	5240	-1.32	-1.27	1.72	9.98	10
802.11ac vht40	5190	-1.38	-2.09	1.29	9.55	10
	5230	-1.86	-1.37	1.40	9.66	10
802.11ac vht80	5210	-3.68	-4.23	-0.94	7.32	10
802.11ax he20	5180	-1.63	-1.67	1.36	9.62	10
	5200	-1.73	-1.71	1.29	9.55	10
	5240	-2.15	-1	1.47	9.73	10
802.11ax he40	5190	-1.86	-1.85	1.16	9.42	10
	5230	-2.39	-1.3	1.20	9.46	10
802.11ax he80	5210	-4.07	-4.36	-1.20	7.06	10

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

The device is an Indoor AP.

Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.

Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5250-5350MHz(FCC):

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			FCC Limit (dBm/MHz)
		Chain 0	Chain 1	Total	
802.11a	5260	8.2	8.14	/	11
	5280	8.6	8.44	/	11
	5320	8.51	8.22	/	11
802.11ac vht20	5260	4.93	5.88	8.44	8.74
	5280	5.74	5.52	8.64	8.74
	5320	5.62	5.22	8.43	8.74
802.11ac vht40	5270	5.14	4.88	8.02	8.74
	5310	5.16	5.12	8.15	8.74
802.11ac vht80	5290	4.38	4.08	7.24	8.74
802.11ax he20	5260	5.33	5.45	8.40	8.74
	5280	5.77	5.36	8.58	8.74
	5320	5.95	5.16	8.58	8.74
802.11ax he40	5270	5.5	5.9	8.71	8.74
	5310	5.53	5.26	8.41	8.74
802.11ax he80	5290	3.25	3.07	6.17	8.74
802.11ac vht160	5250	-1.48	-2.32	1.13	8.74
802.11ax he160	5250	-1.26	-2.08	1.36	8.74
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.					
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5250-5350MHz(IC):

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			IC Limit (dBm/MHz)
		Chain 0	Chain 1	Total	
802.11a	5260	7.44	7.46	/	11
	5280	6.58	7.46	/	11
	5320	7.33	7.73	/	11
802.11ac vht20	5260	0.93	1.41	4.19	11
	5280	0.25	1.84	4.13	11
	5320	1.81	0.63	4.27	11
802.11ac vht40	5270	-1.12	-1.55	1.68	11
	5310	-0.79	-2.11	1.61	11
802.11ac vht80	5290	-4.73	-3.62	-1.13	11
802.11ax he20	5260	-0.54	2.48	4.24	11
	5280	0.7	0.56	3.64	11
	5320	0.69	1.08	3.90	11
802.11ax he40	5270	-1.21	-1.5	1.66	11
	5310	-1	-1.89	1.59	11
802.11ax he80	5290	-3.32	-4.38	-0.81	11
802.11ac vht160	5250	-5.95	-7.16	-3.50	11
802.11ax he160	5250	-6.94	-5.69	-3.26	11
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.					
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			FCC Limit (dBm/MHz)	IC Limit (dBm/MHz)
		Chain 0	Chain 1	Total		
802.11a	5500	8.4	8.4	/	11	11
	5580	8.44	8.12	/	11	11
	5700	7.42	8.33	/	11	11
802.11ac vht20	5500	5.49	5.12	8.32	8.74	11
	5580	5.57	4.95	8.28	8.74	11
	5700	5.26	6.01	8.66	8.74	11
802.11ac vht40	5510	4.6	4.46	7.54	8.74	11
	5550	5.25	5.28	8.28	8.74	11
	5670	5.36	5.49	8.44	8.74	11
802.11ac vht80	5530	3.44	3.54	6.50	8.74	11
	5610	5.53	4.78	8.18	8.74	11
802.11ax he20	5500	5.25	5.79	8.54	8.74	11
	5580	5.98	5.34	8.68	8.74	11
	5700	5.34	5.11	8.24	8.74	11
802.11ax he40	5510	5.8	5.43	8.63	8.74	11
	5550	5.39	5.71	8.56	8.74	11
	5670	5.53	5.22	8.39	8.74	11
802.11ax he80	5530	2.78	2.8	5.80	8.74	11
	5610	5.72	4.8	8.29	8.74	11
802.11ac vht160	5570	0.42	-0.51	2.99	8.74	11
802.11ax he160	5570	-0.07	-1.07	2.47	8.74	11

Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB

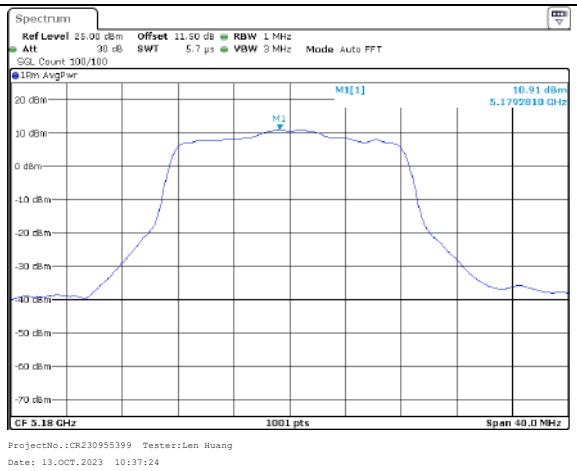
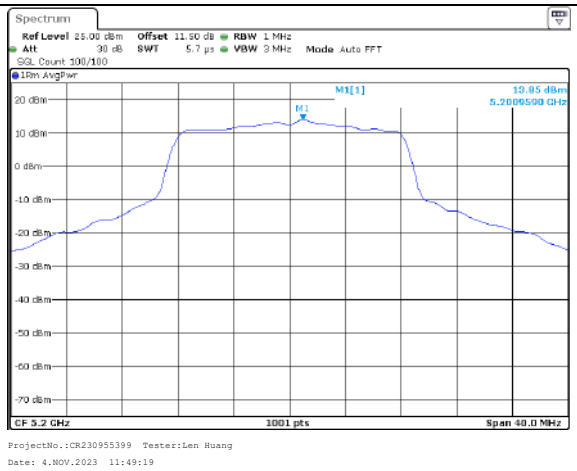
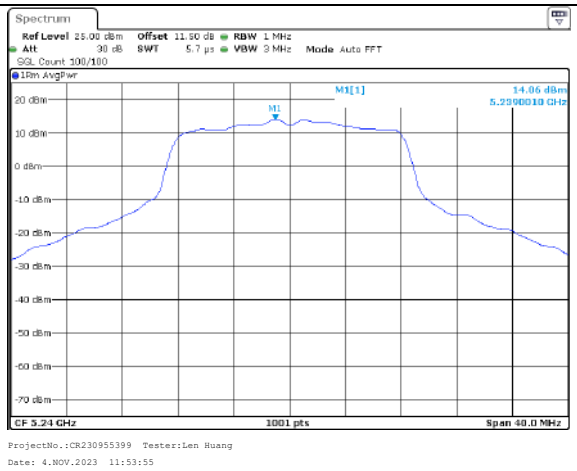
Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.

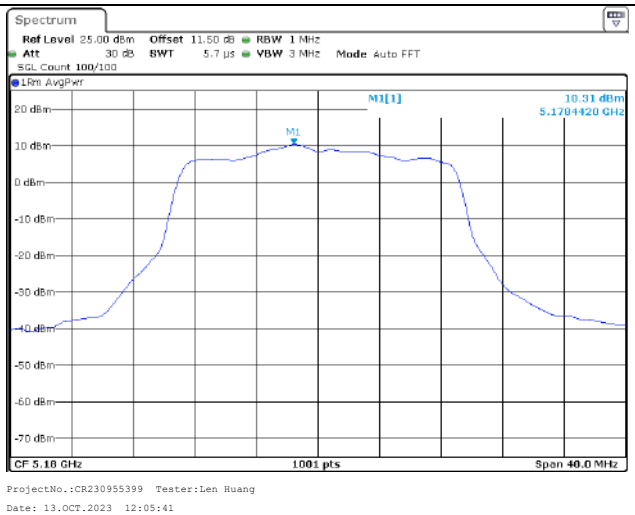
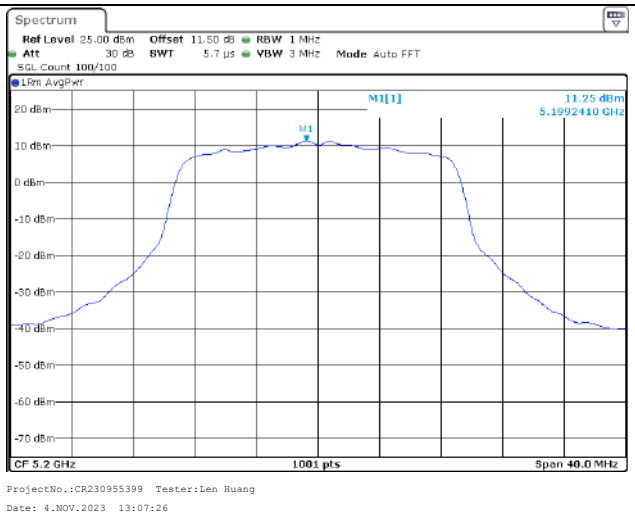
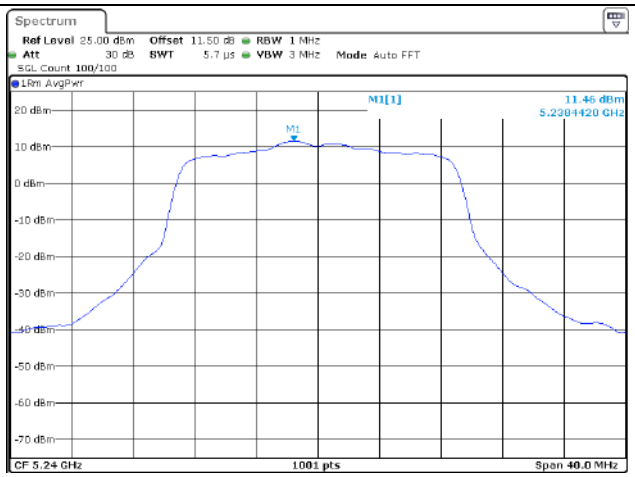
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

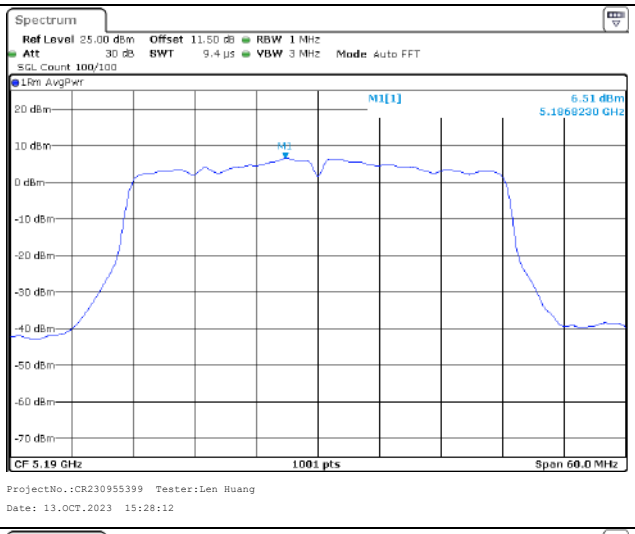
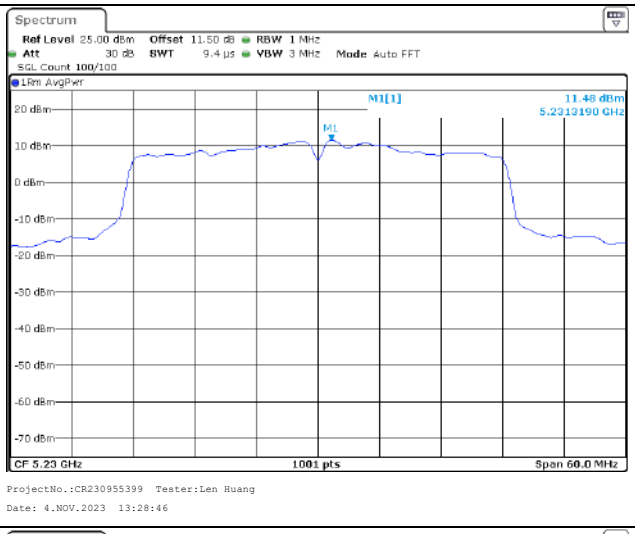
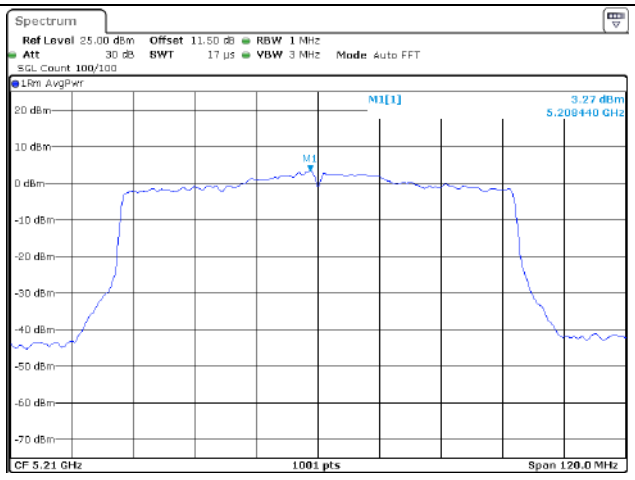
5725-5850 MHz:

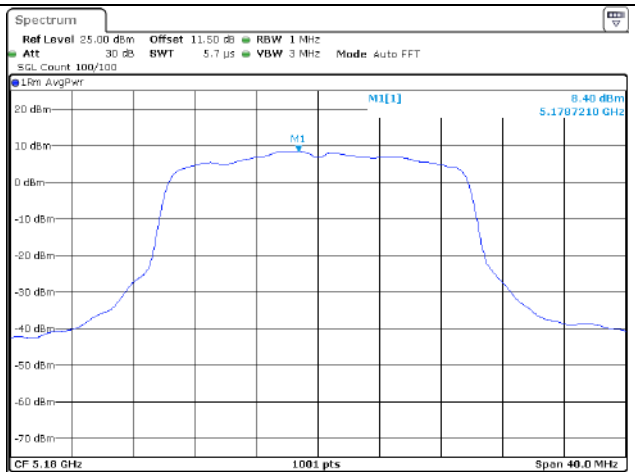
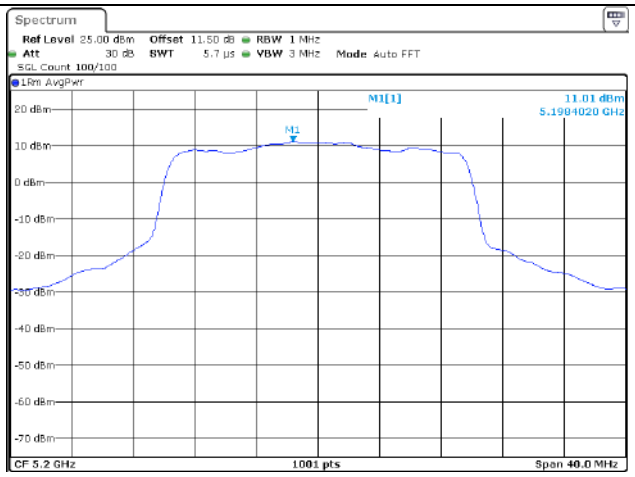
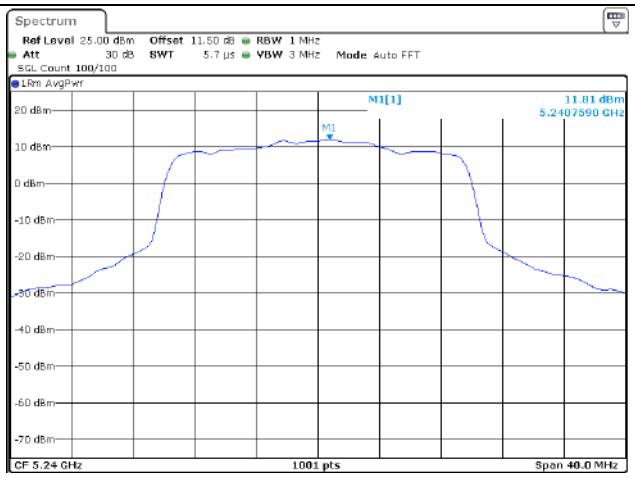
Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/500kHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	12.3	12.54	/	30
	5785	11.78	11.44	/	30
	5825	11.11	11.23	/	30
802.11ac vht20	5745	10.02	10.77	13.42	27.74
	5785	10.81	10.05	13.46	27.74
	5825	9.47	10.3	12.92	27.74
802.11ac vht40	5755	5.36	6.55	9.01	27.74
	5795	8.9	7.81	11.40	27.74
802.11ac vht80	5775	0.84	1.21	4.04	27.74
802.11ax he20	5745	10.18	10.41	13.31	27.74
	5785	10.5	9.83	13.19	27.74
	5825	9.72	10.57	13.18	27.74
802.11ax he40	5755	5.3	6.49	8.95	27.74
	5795	8.78	8.36	11.59	27.74
802.11ax he80	5775	0.85	1.18	4.03	27.74
Note: The device employed Beam-forming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.					
Antenna Gain:	5.26	dBi	Directional gain:	8.26	dBi

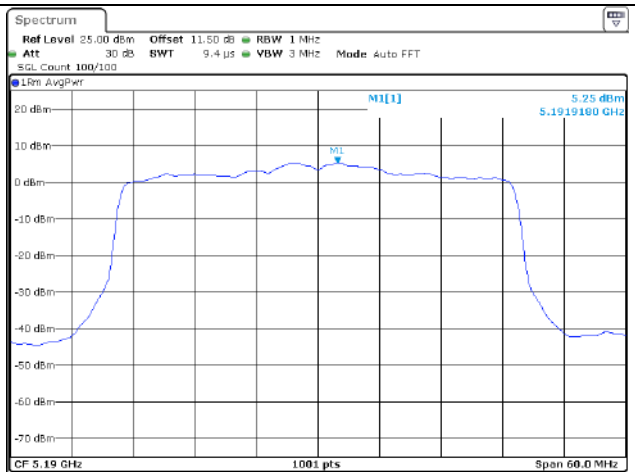
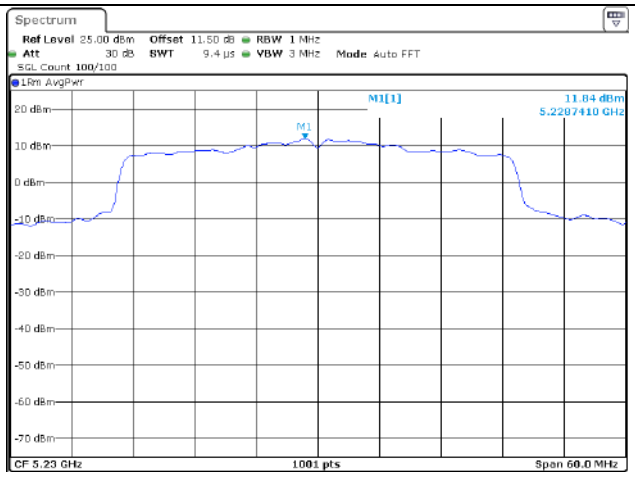
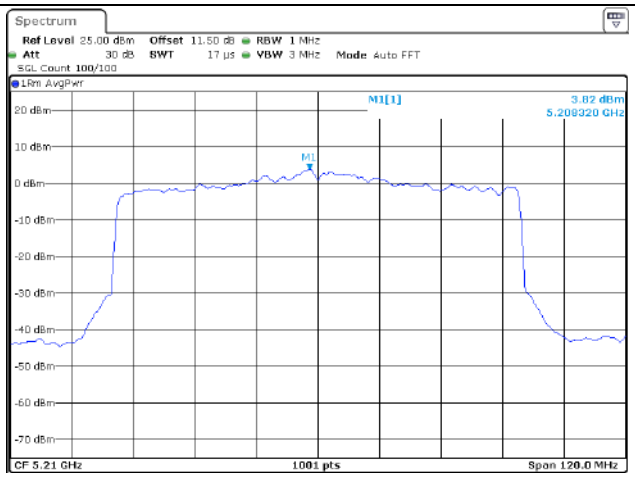
Chain 0:
5150-5250MHz (FCC):

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

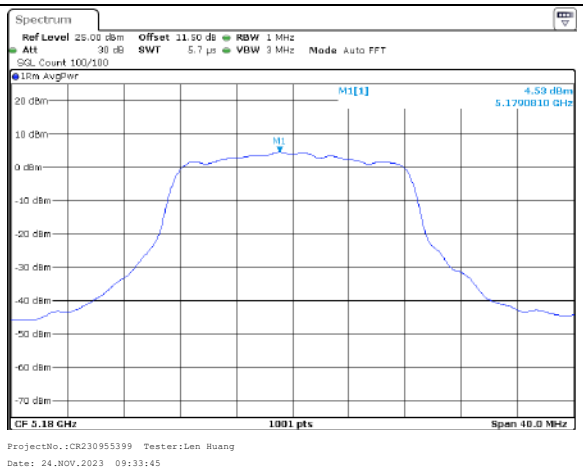
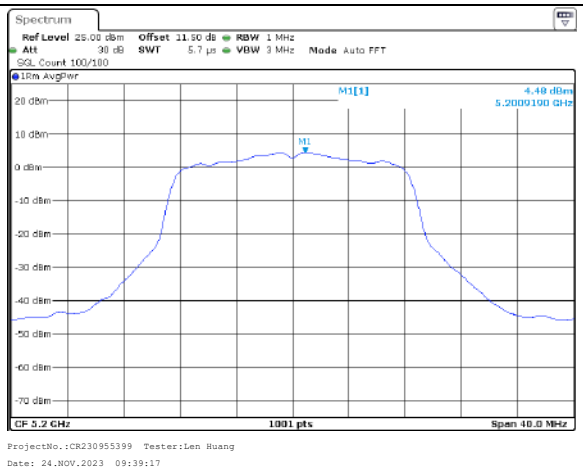
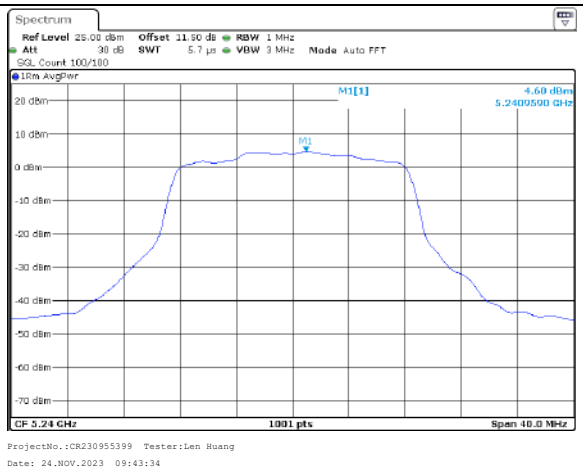
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

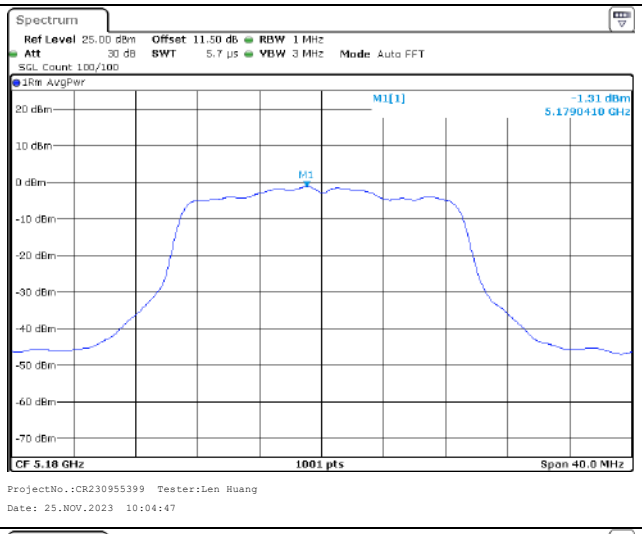
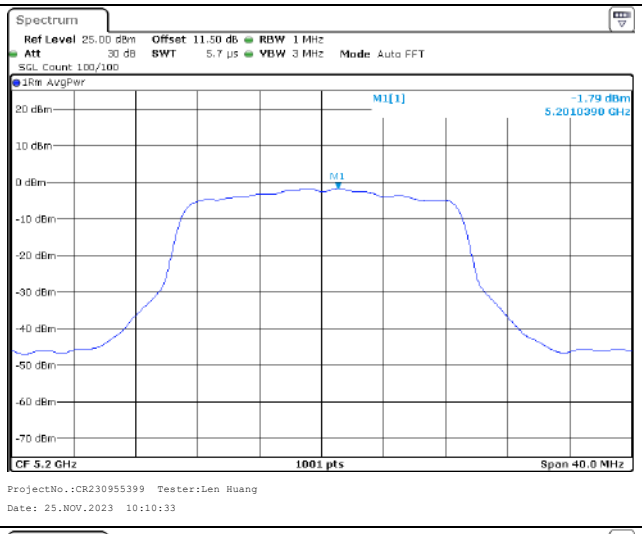
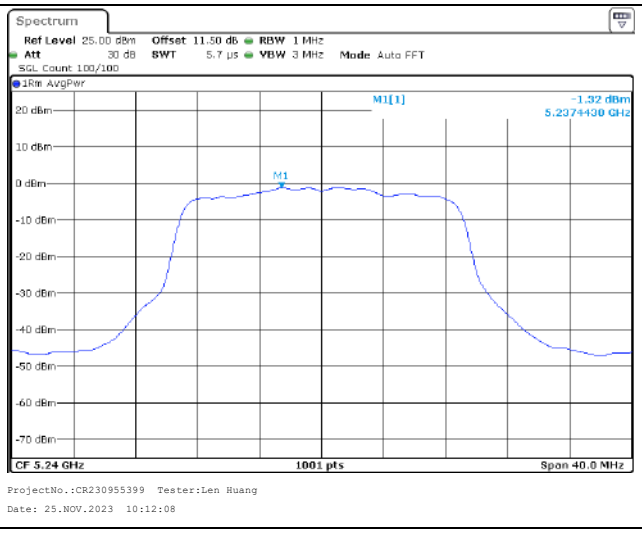
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

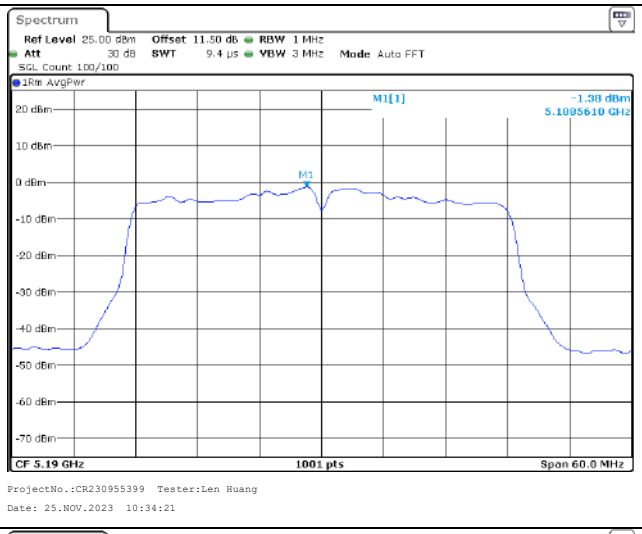
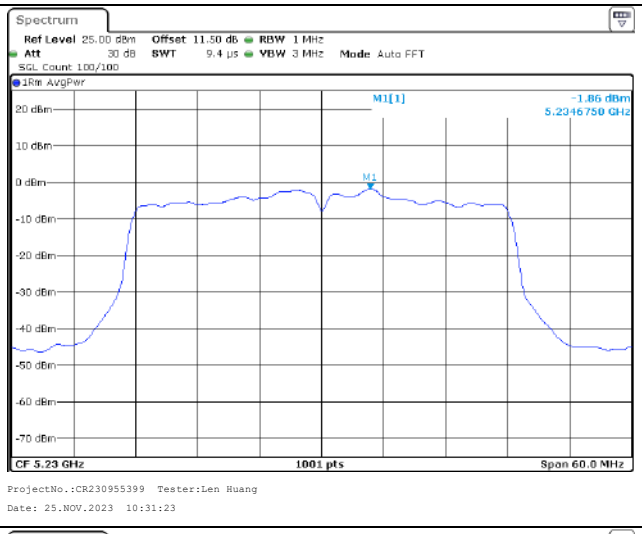
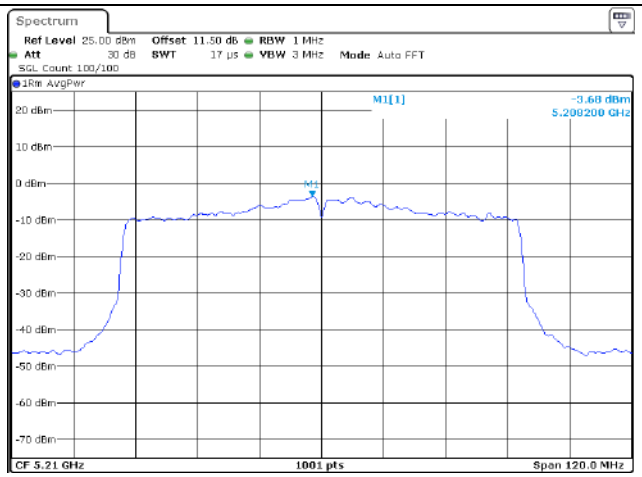
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

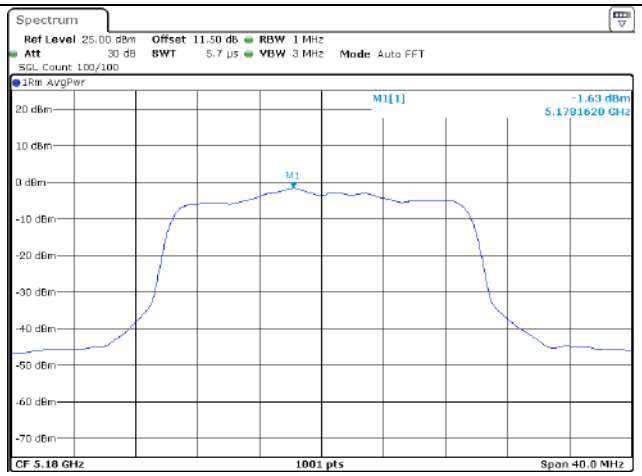
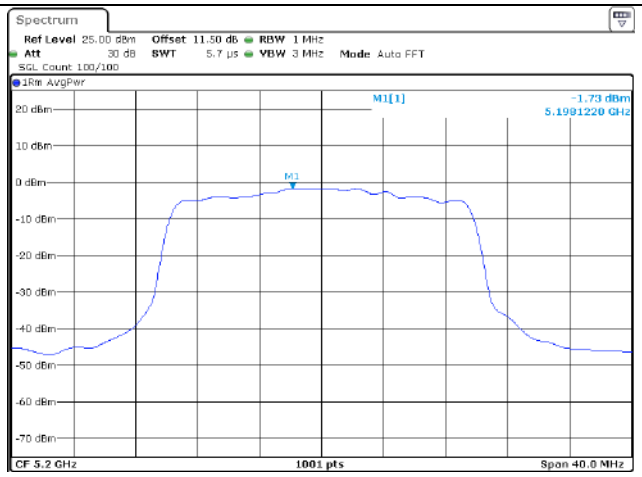
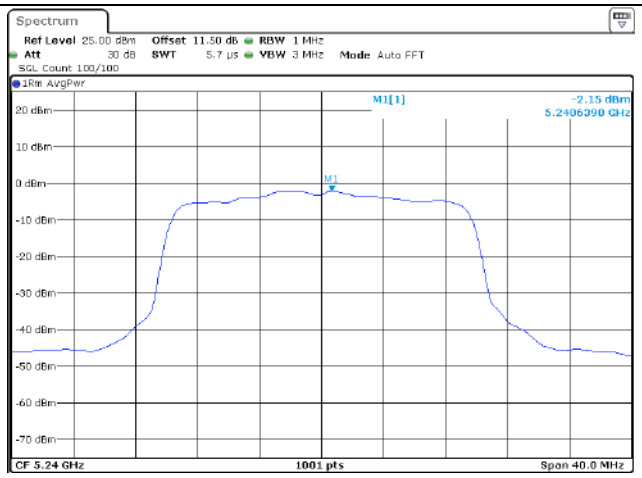
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

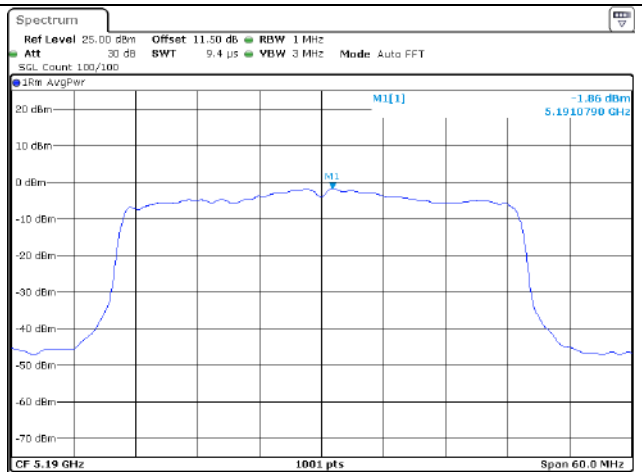
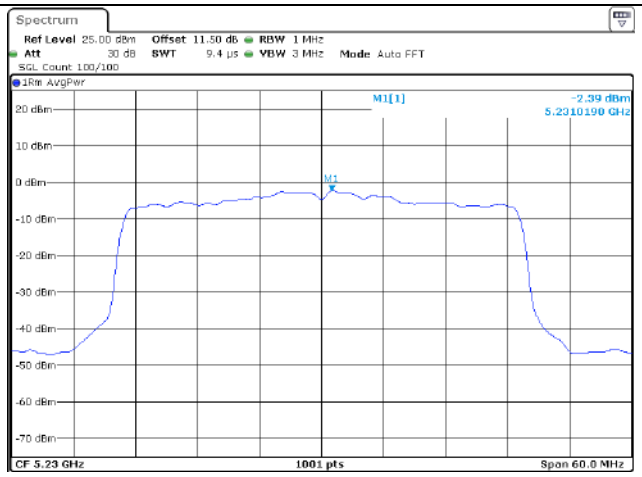
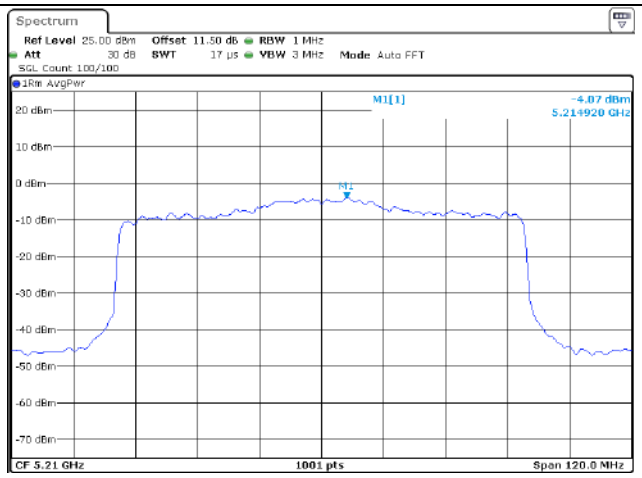
5150-5250MHz (IC):

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

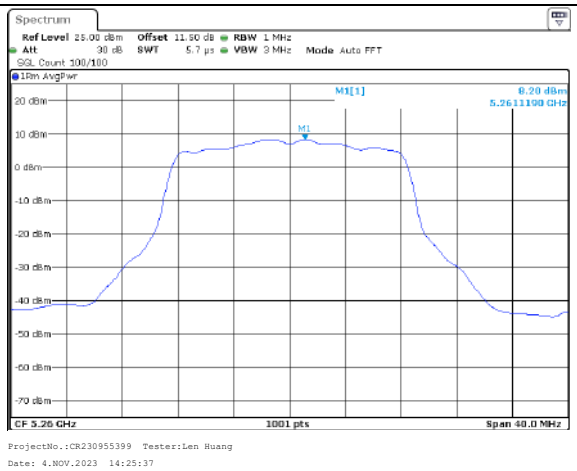
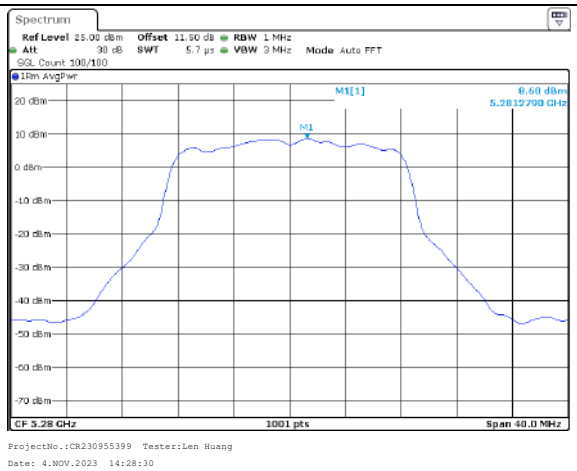
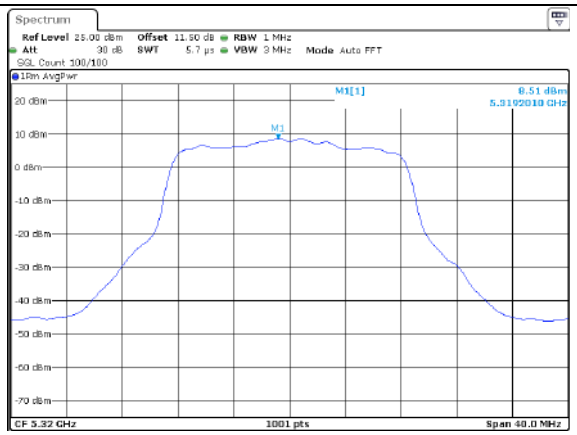
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

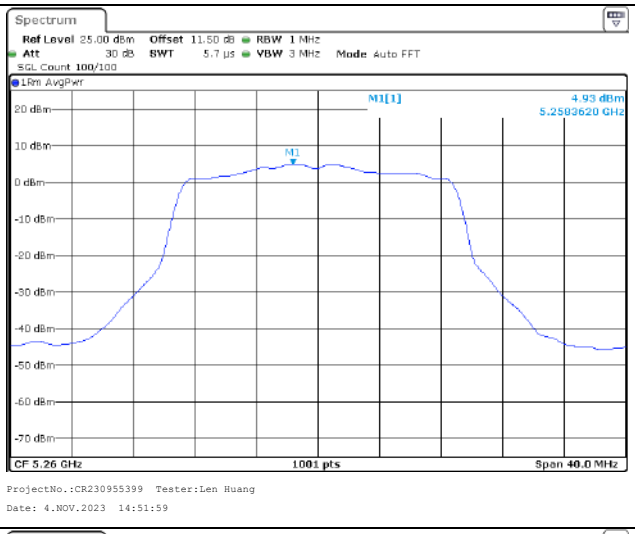
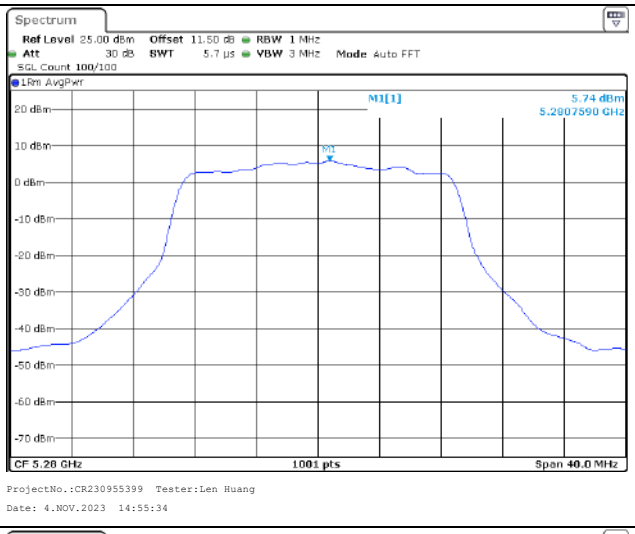
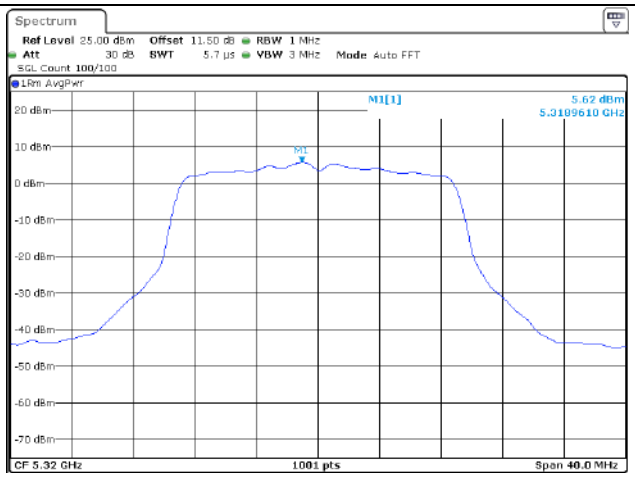
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

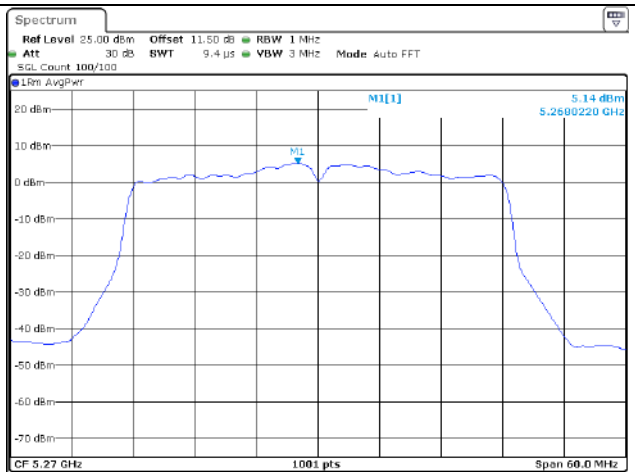
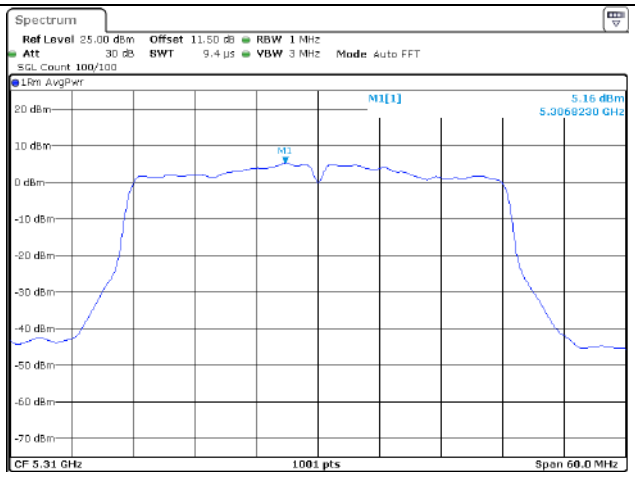
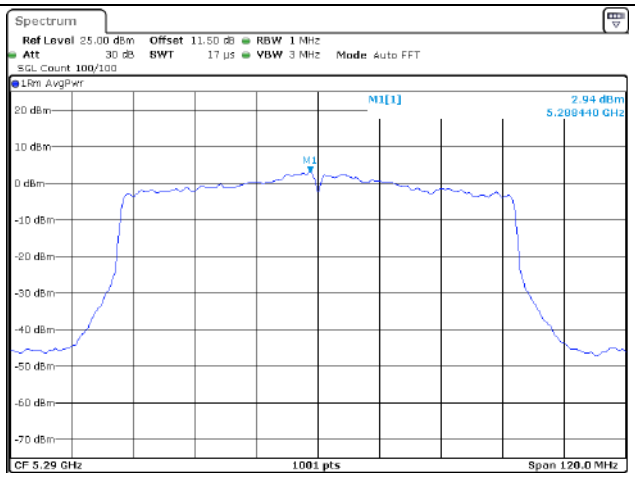
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

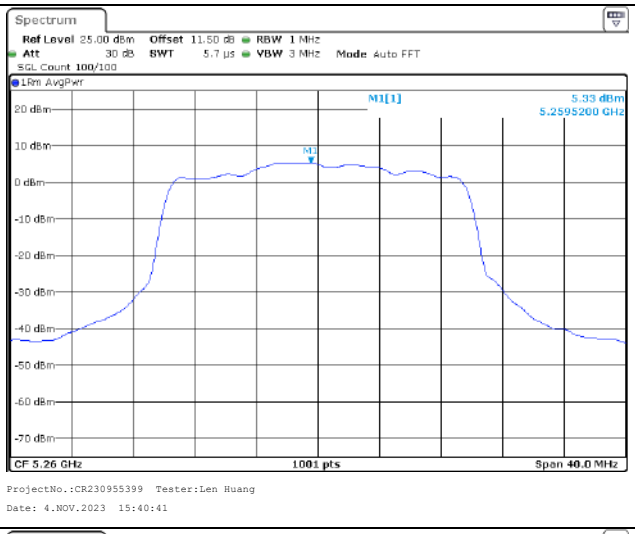
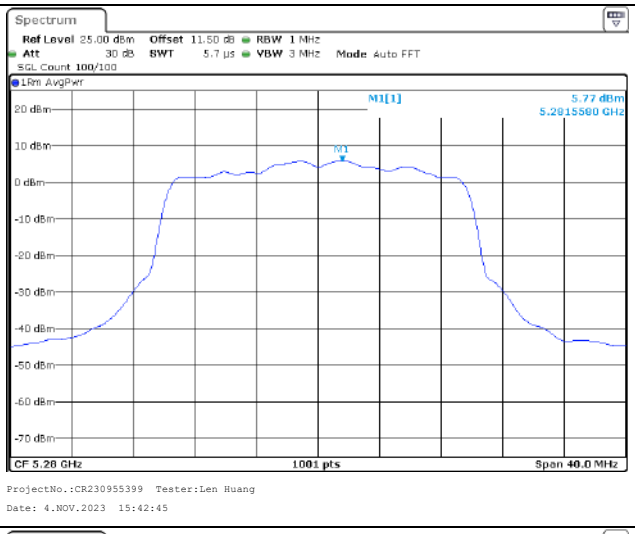
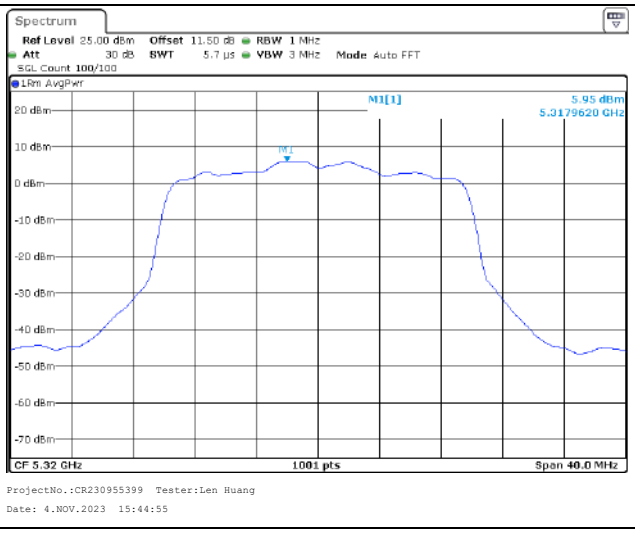
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

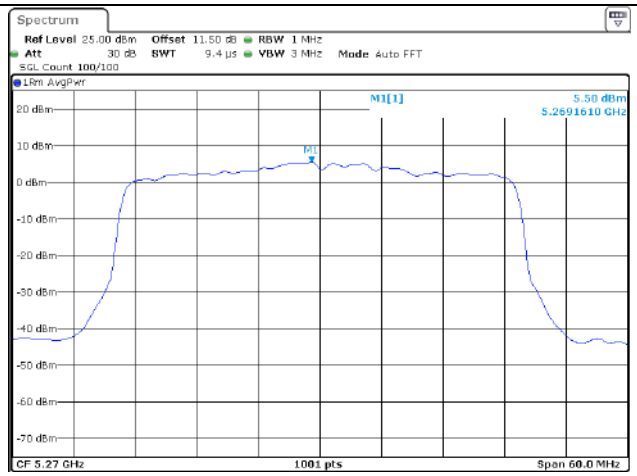
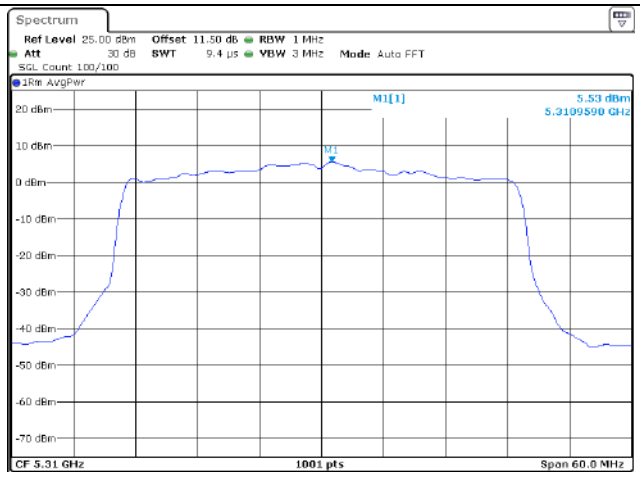
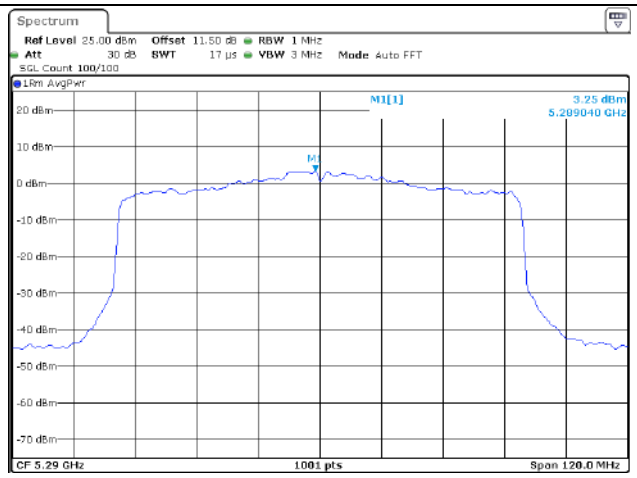
5250-5350MHz (FCC):

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

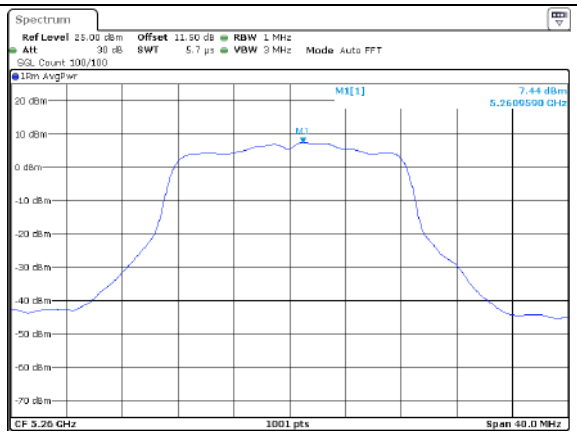
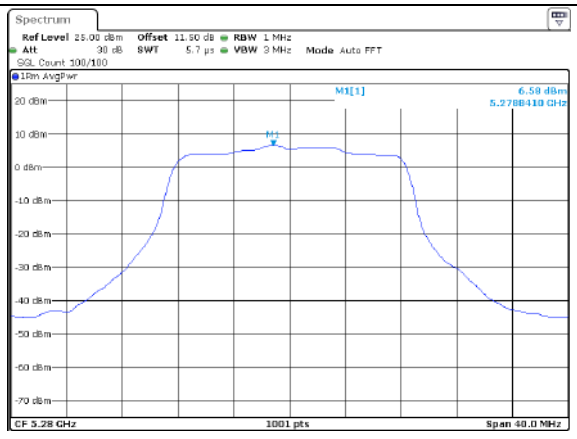
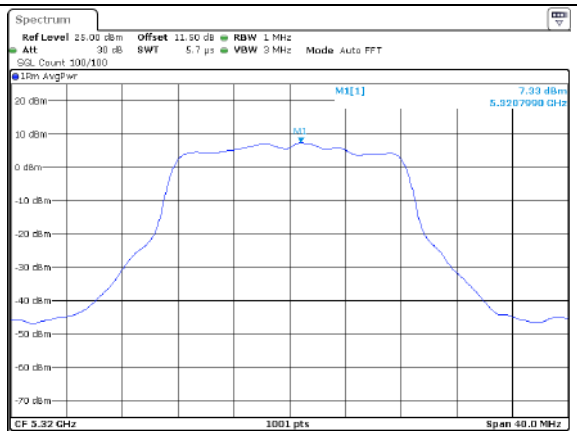
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

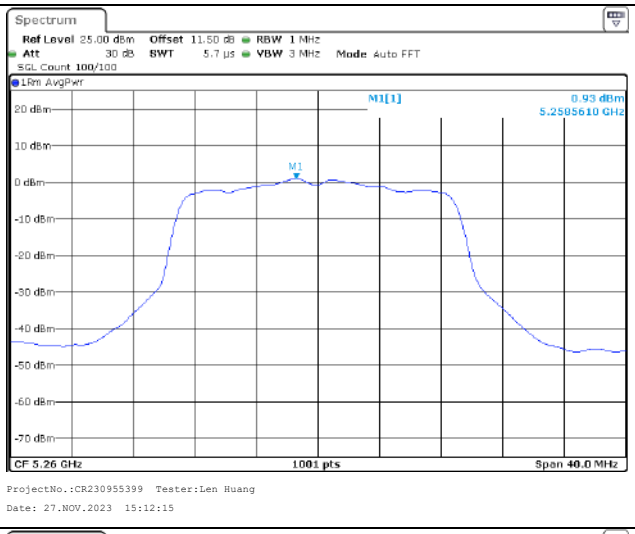
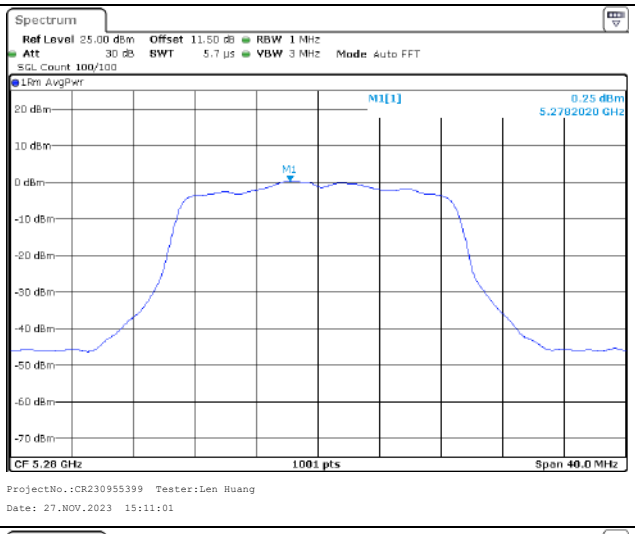
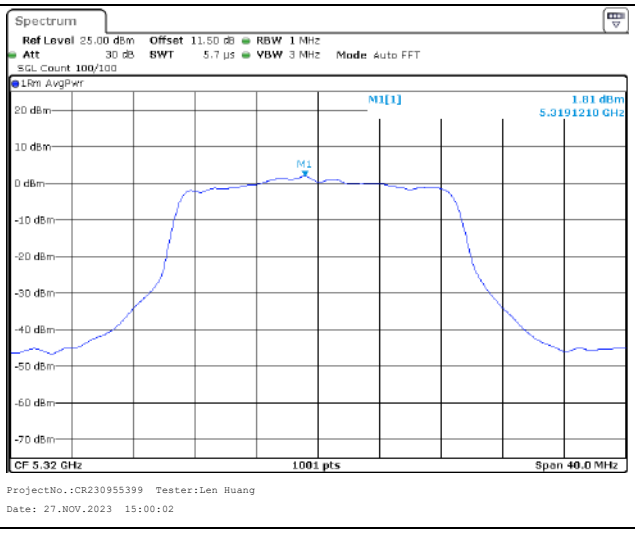
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

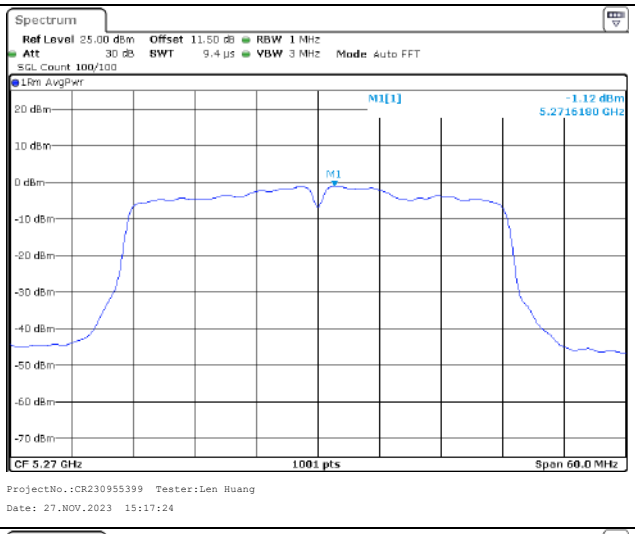
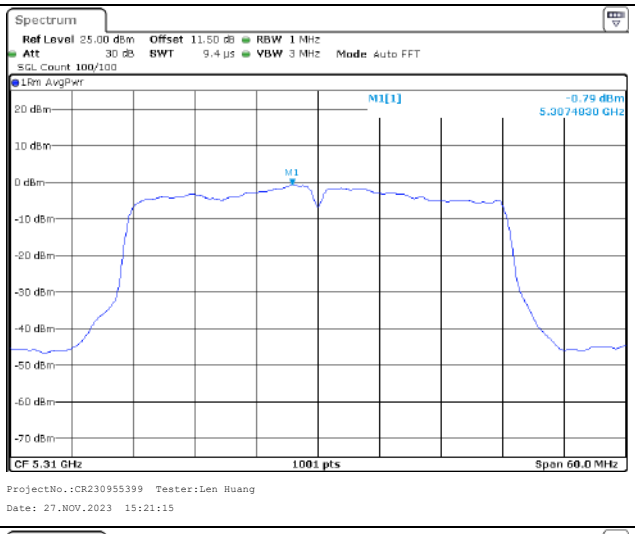
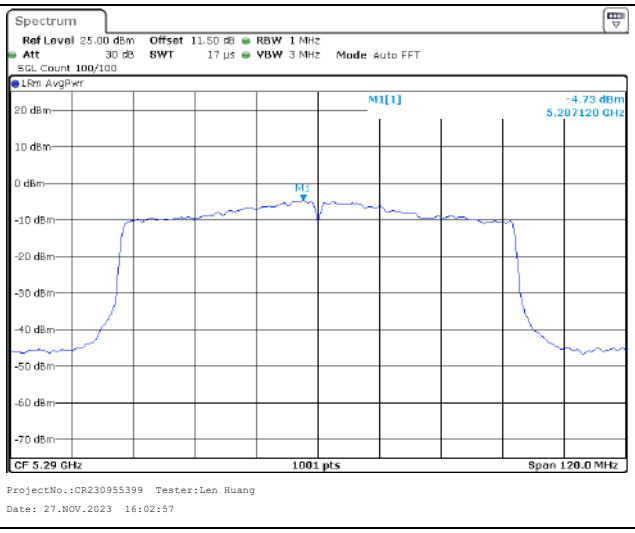
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

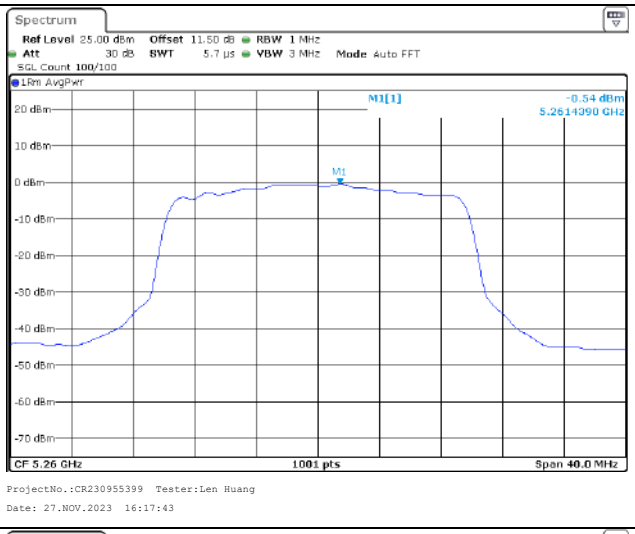
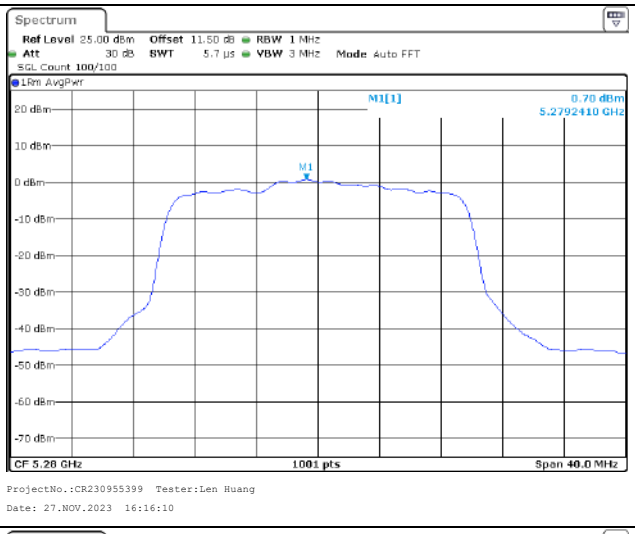
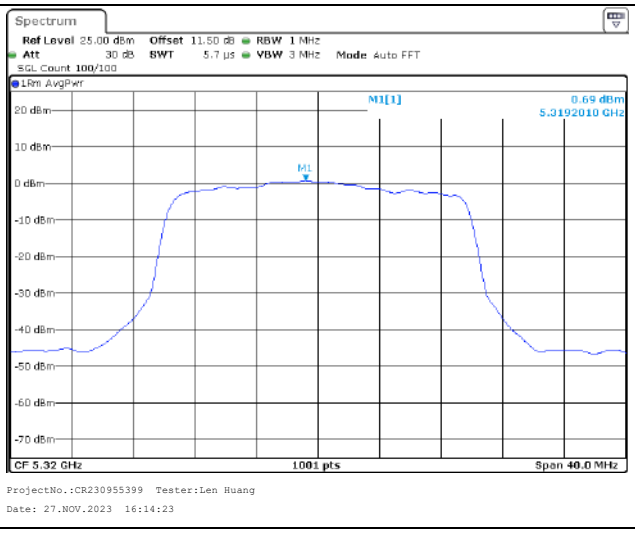
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

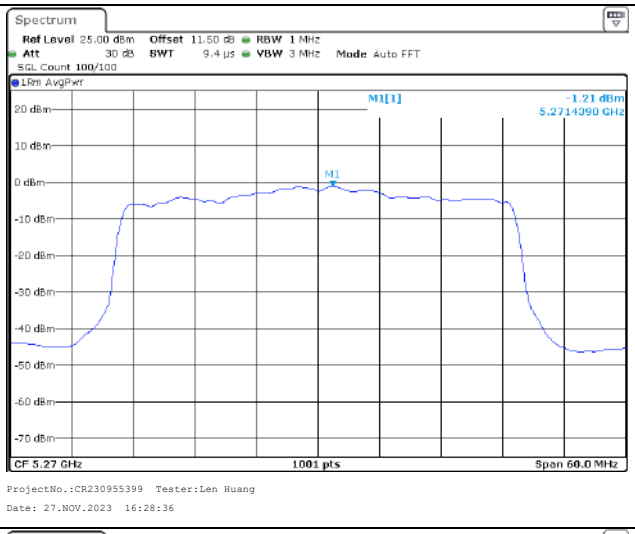
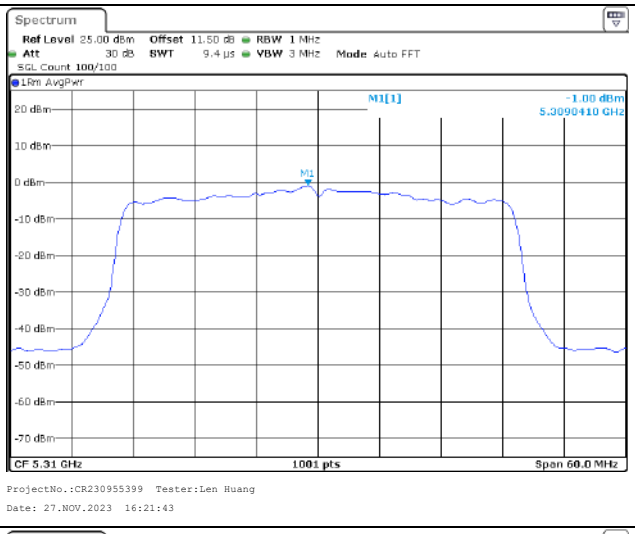
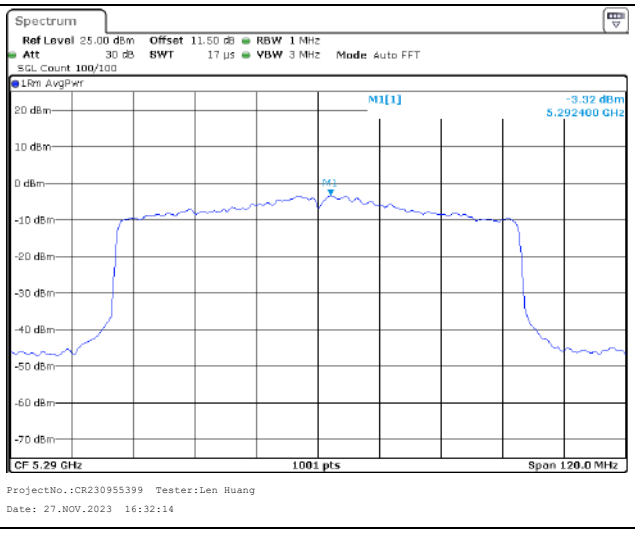
5250-5350 MHz (IC):

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

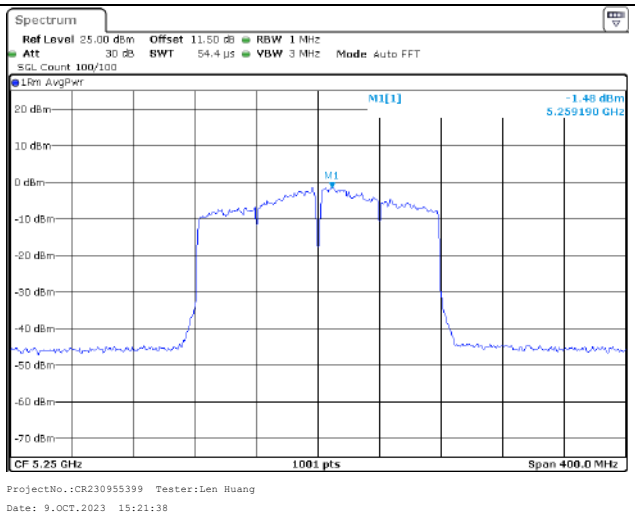
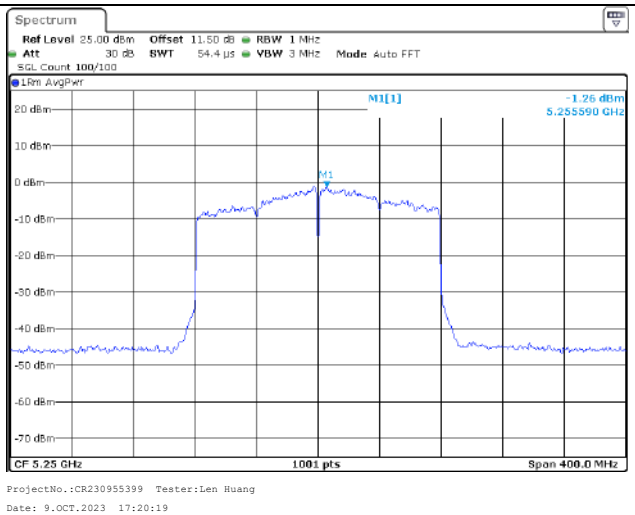
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

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

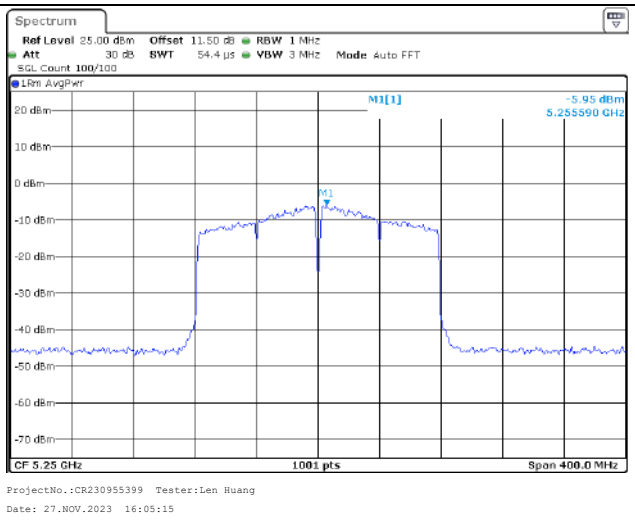
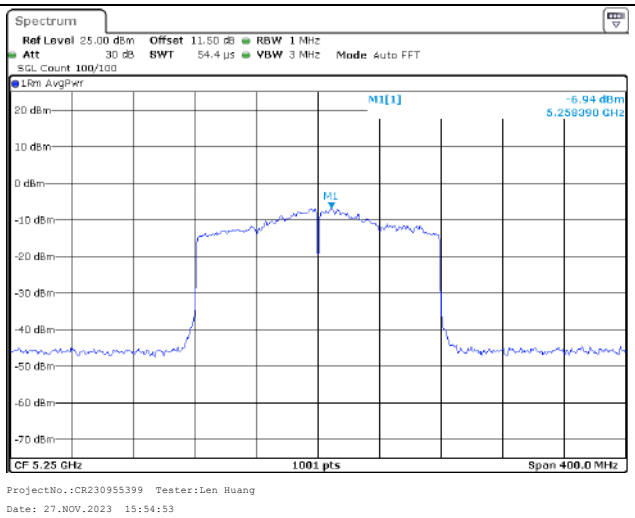
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

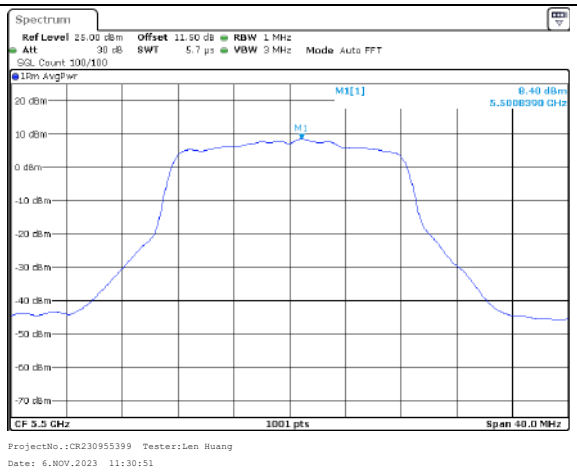
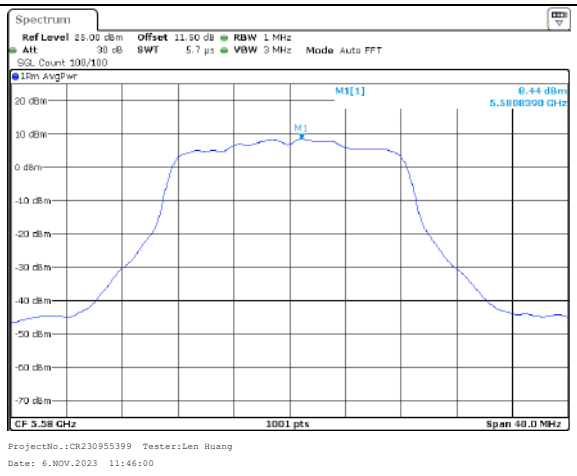
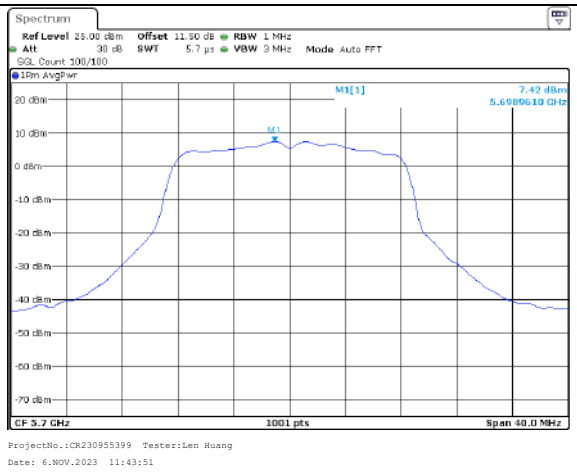
5150-5250 MHz &5250-5350 MHz (FCC):

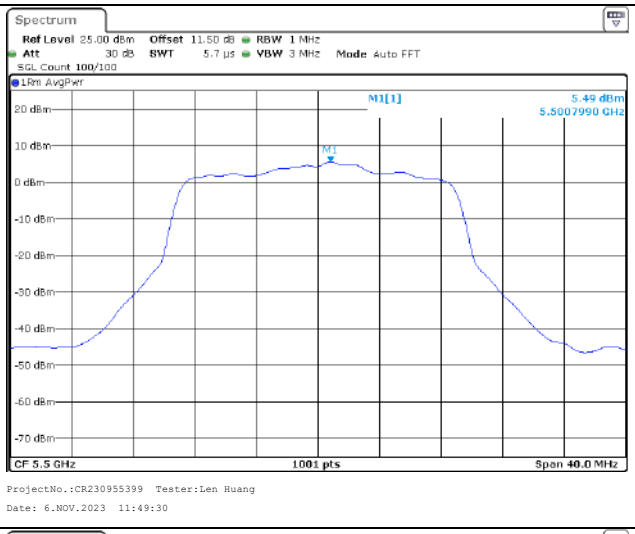
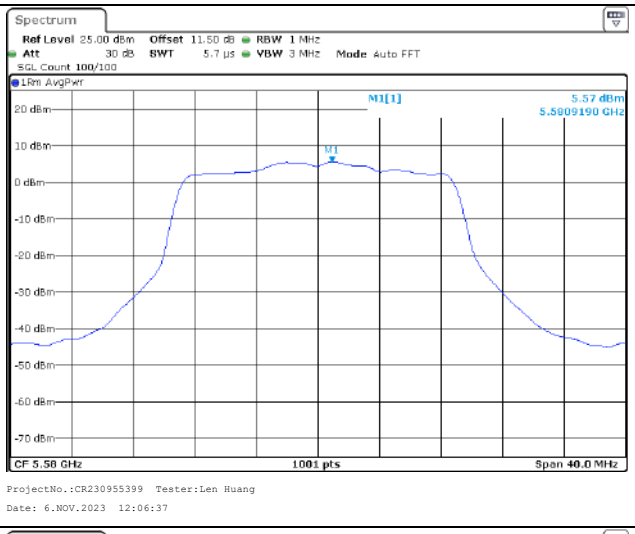
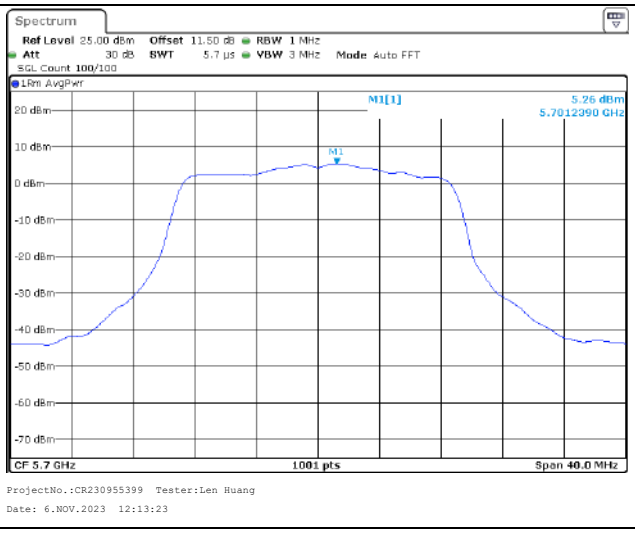
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

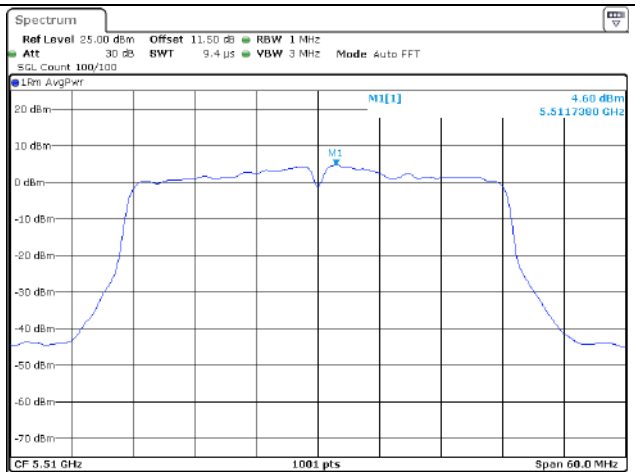
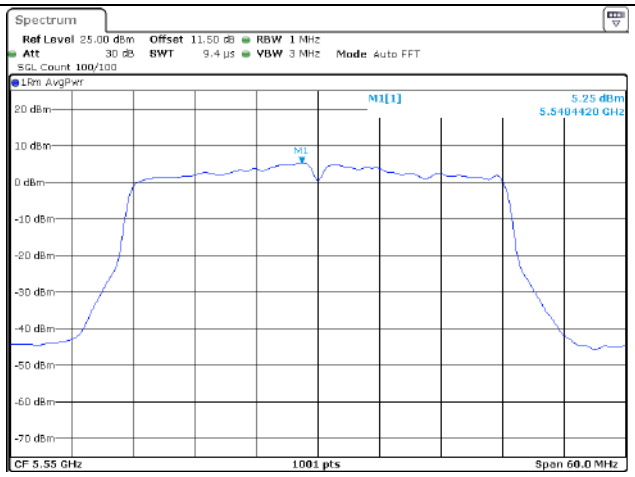
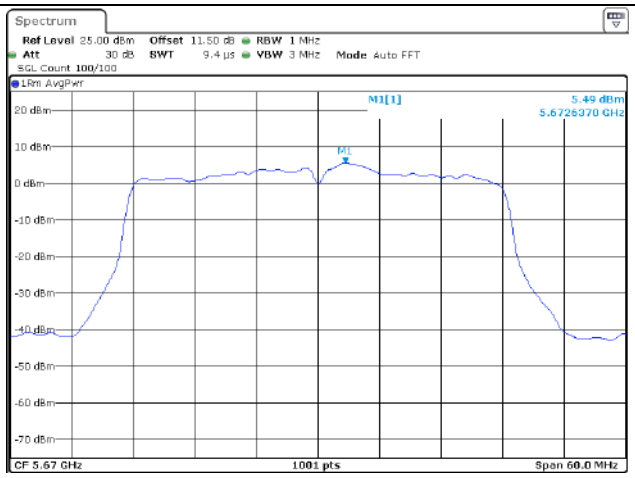
5150-5250 MHz &5250-5350 MHz (ISED):

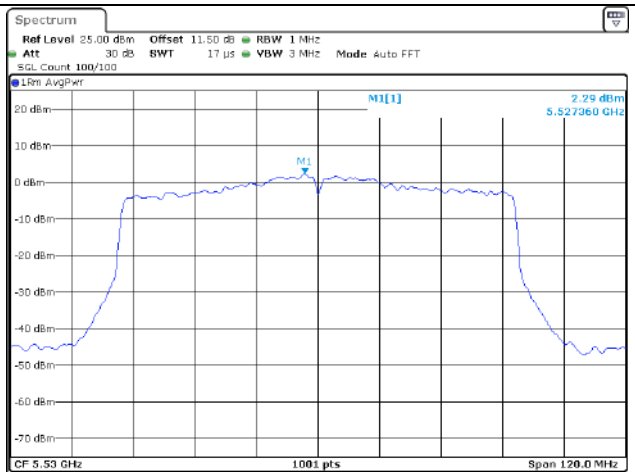
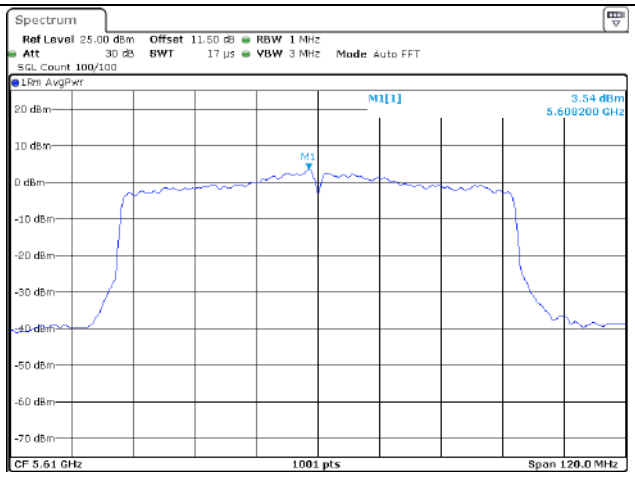
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

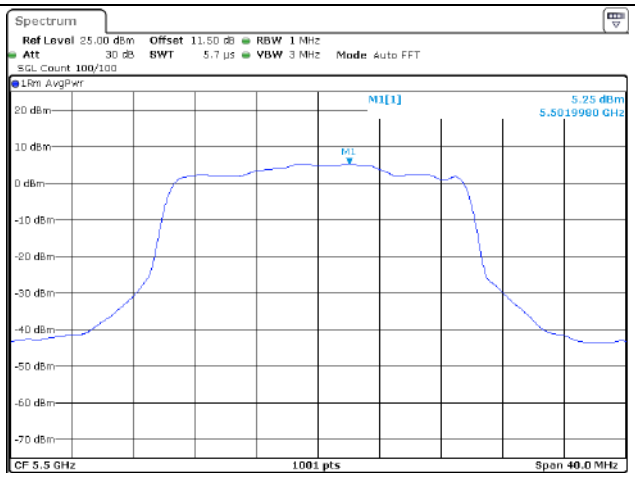
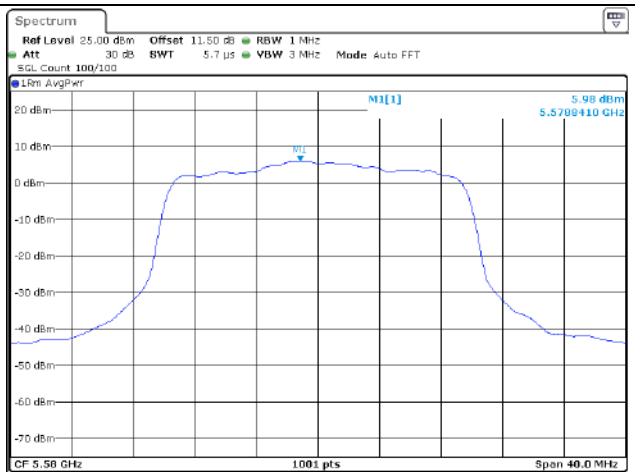
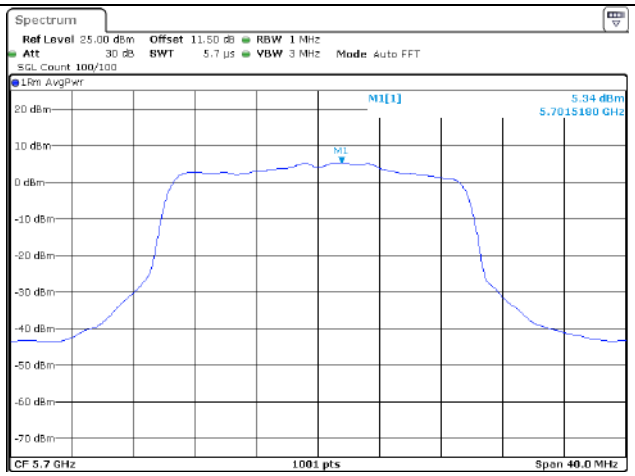
5470-5725 MHz:

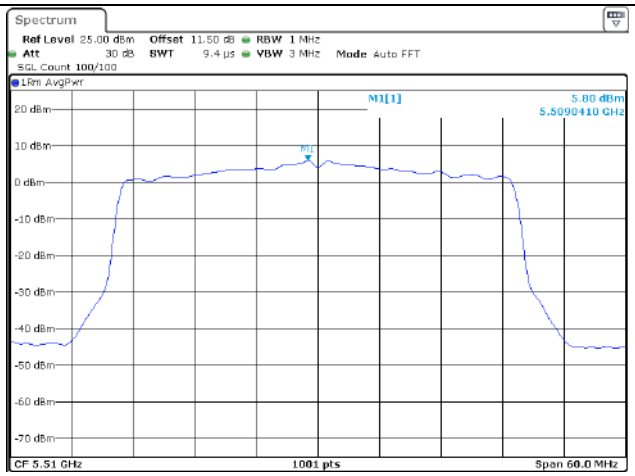
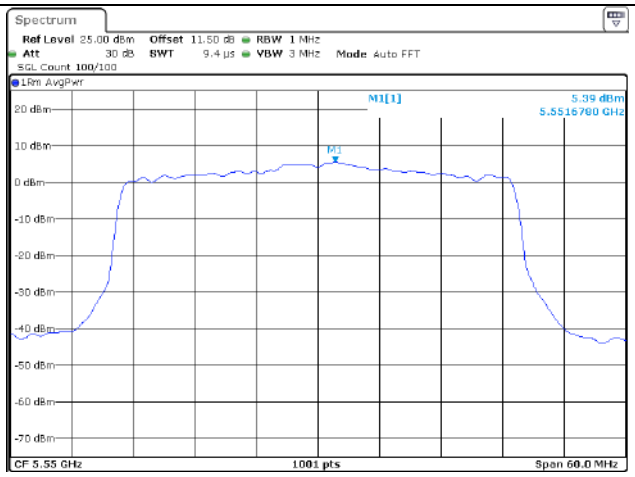
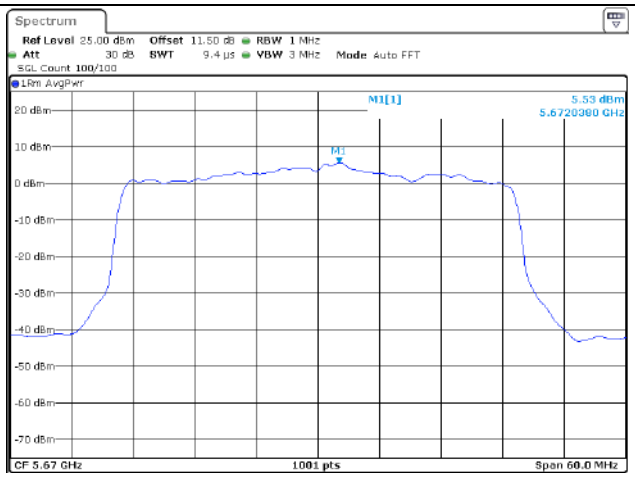
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

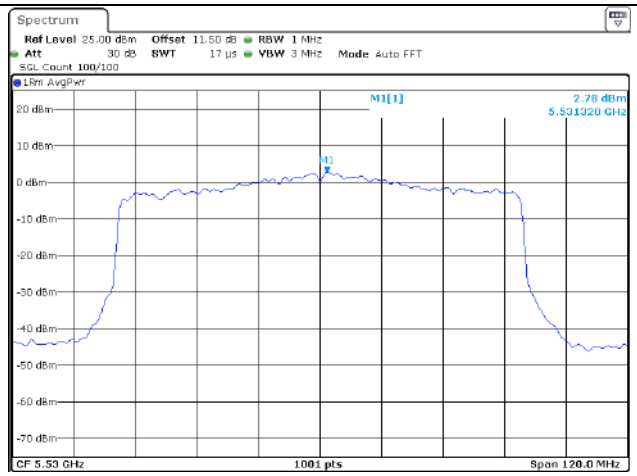
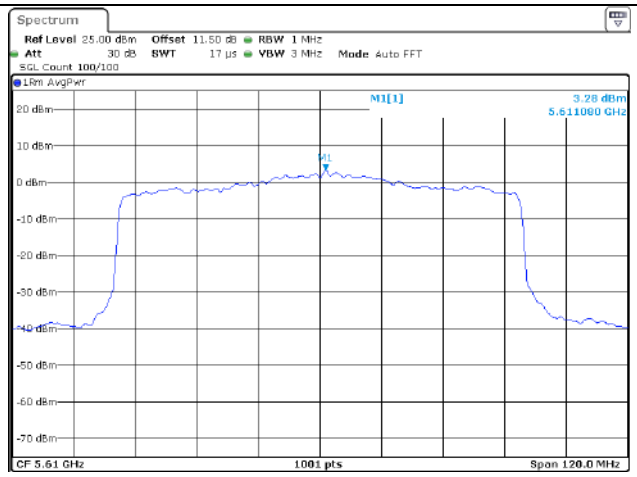
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

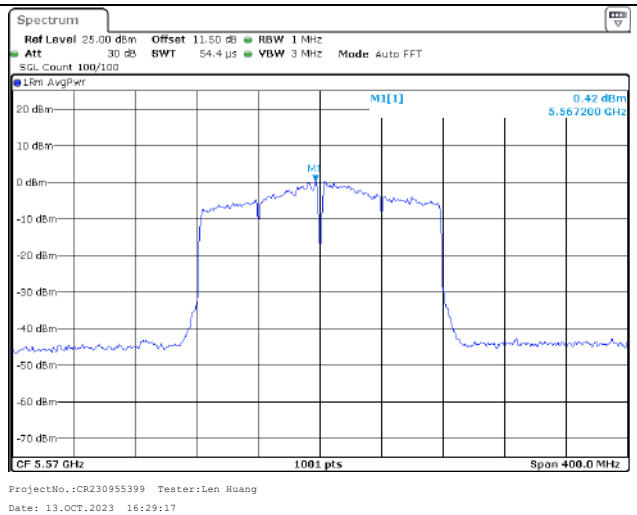
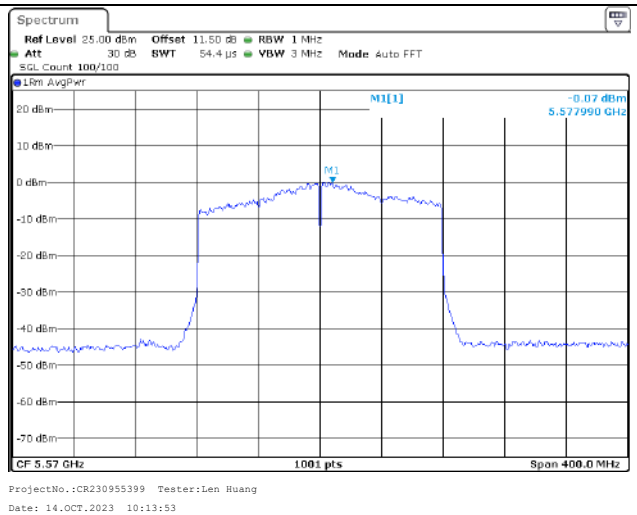
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

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

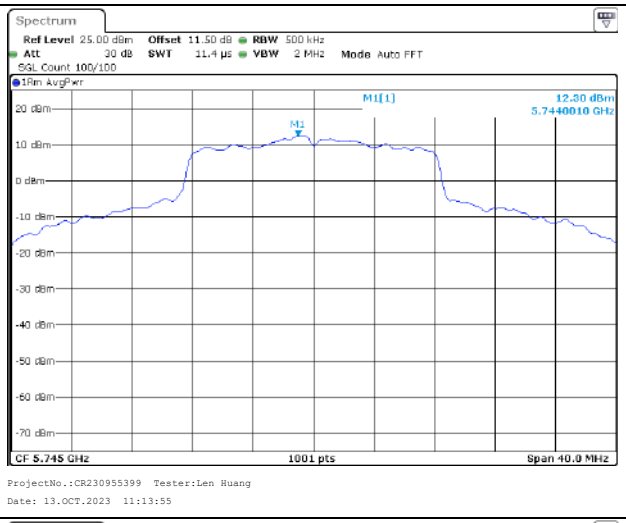
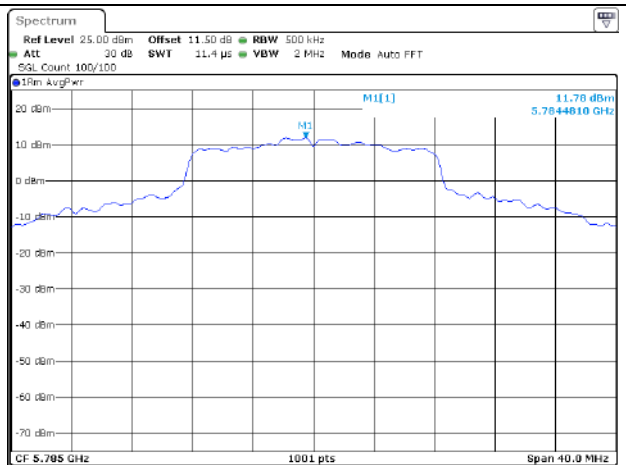
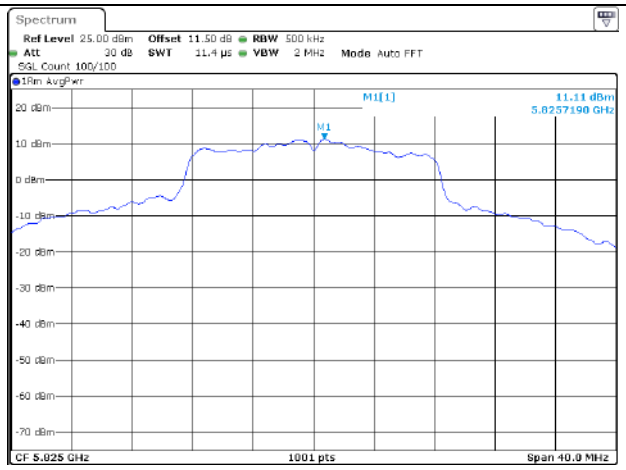
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

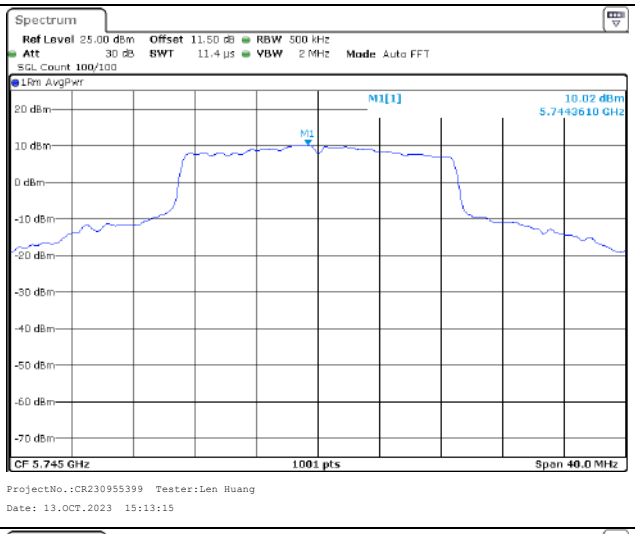
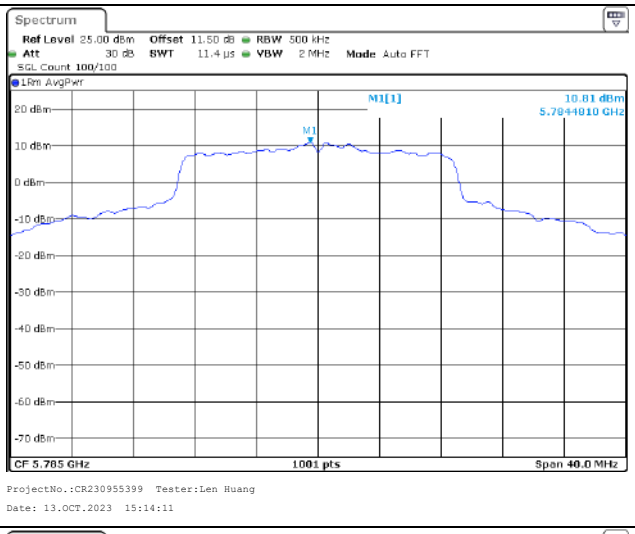
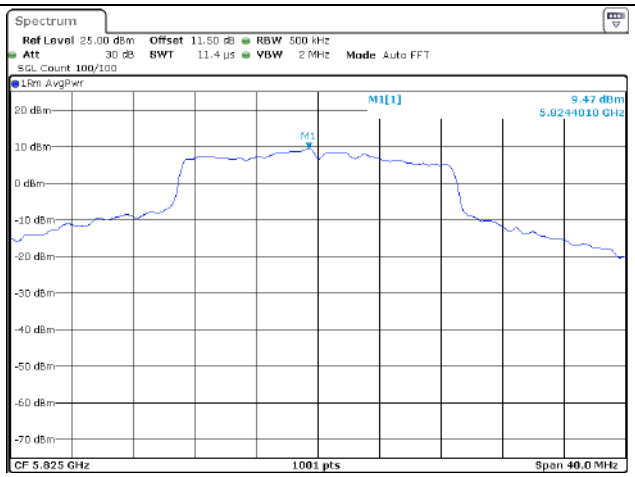
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Middle Channel	
802.11ax he40 Highest Channel	

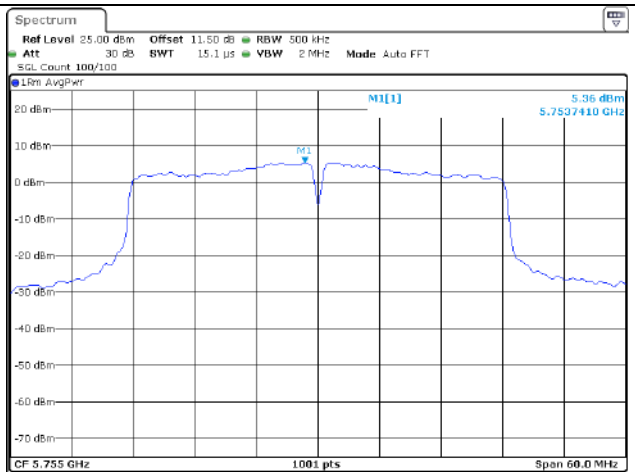
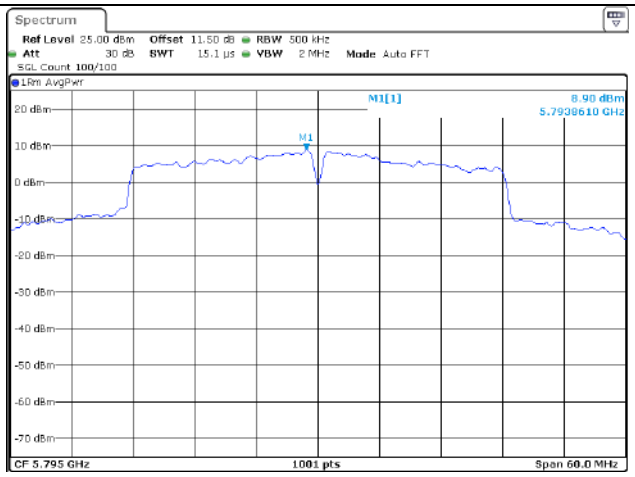
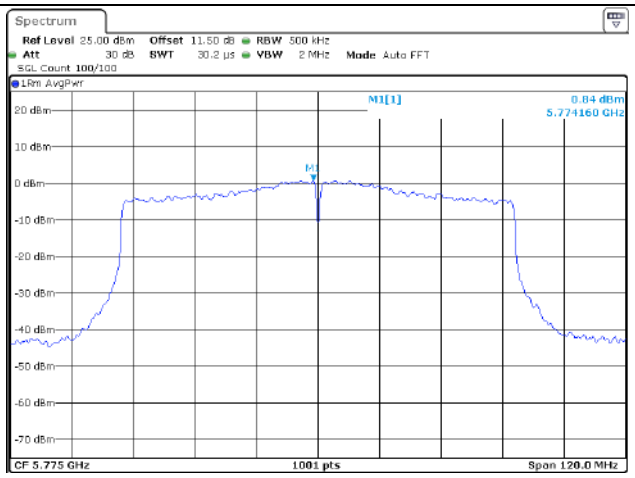
Maximum power spectral density	
802.11ax he80 Lowest Channel	
802.11ax he80 Highest Channel	

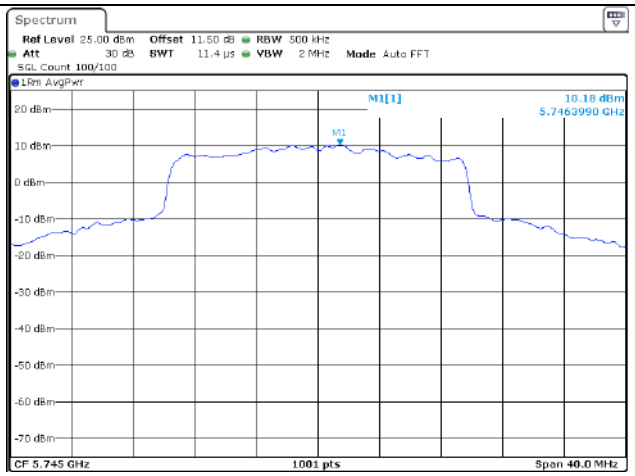
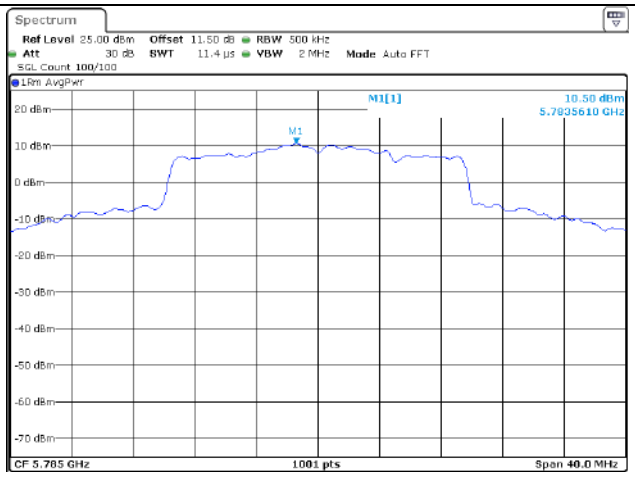
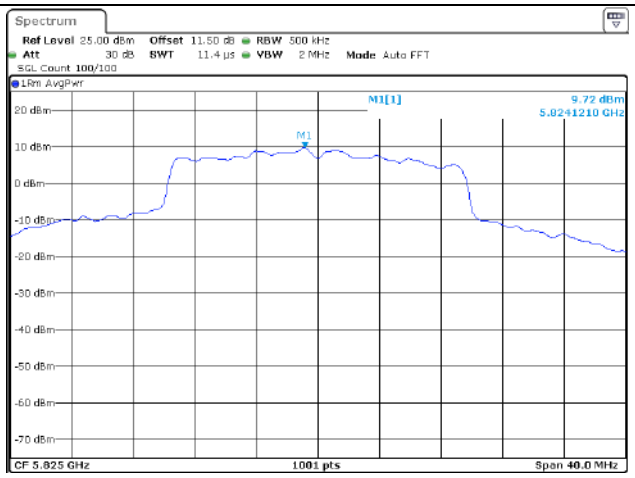
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

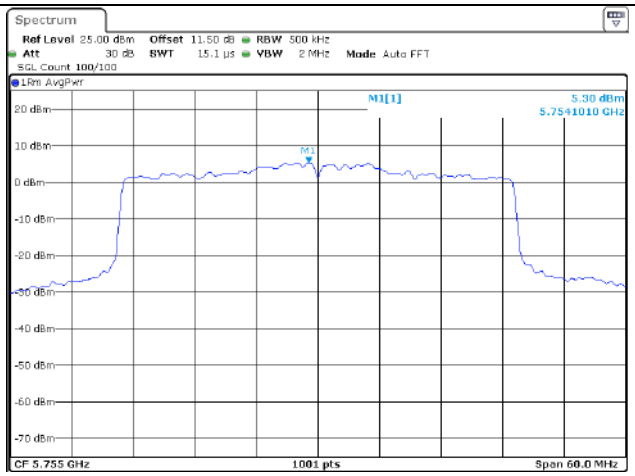
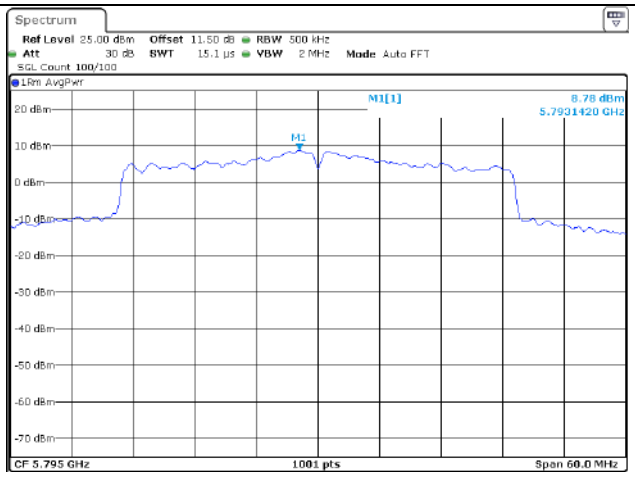
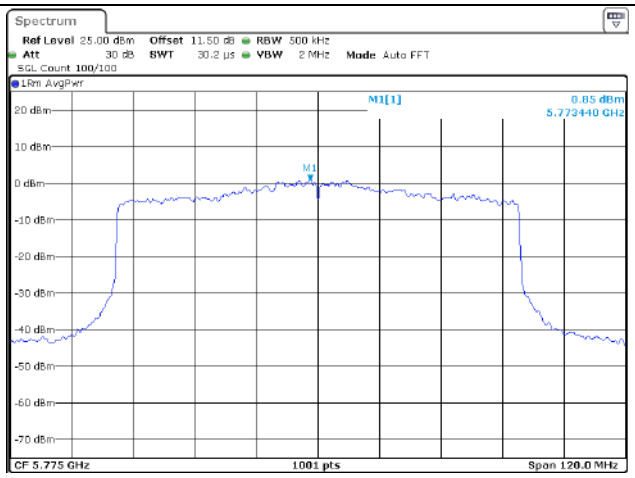
5725-5850MHz

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

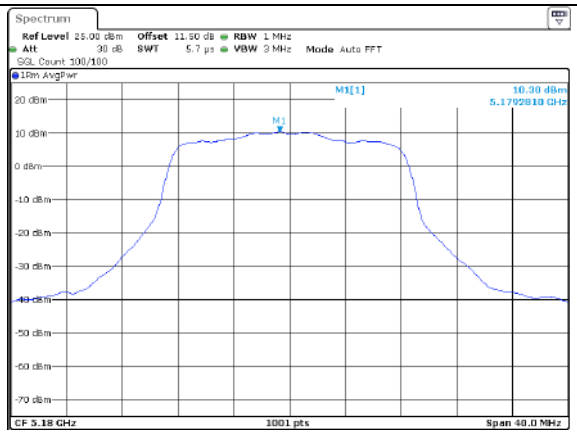
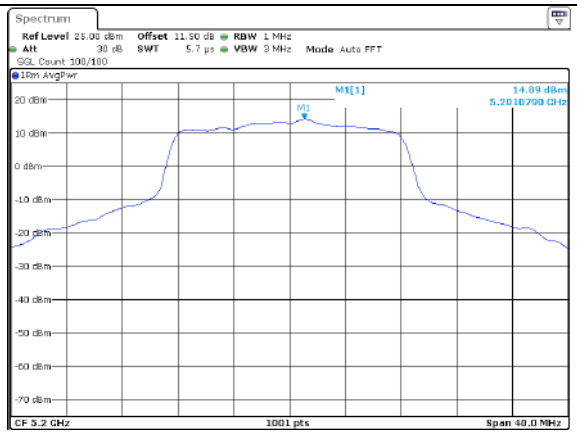
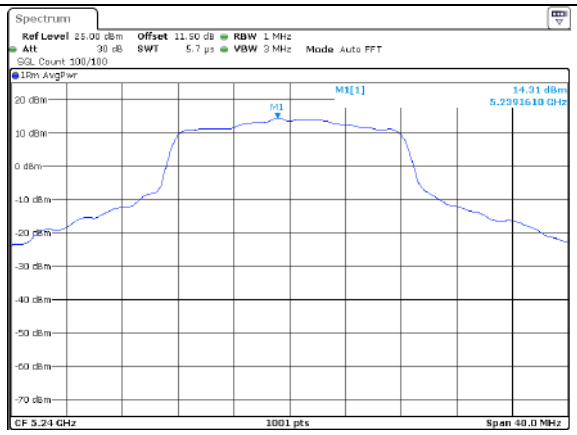
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

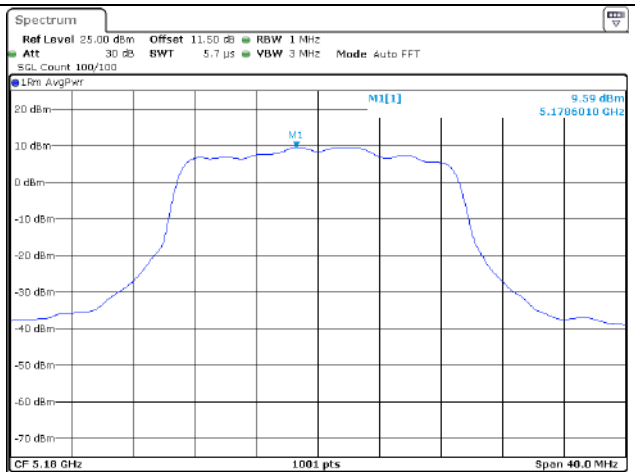
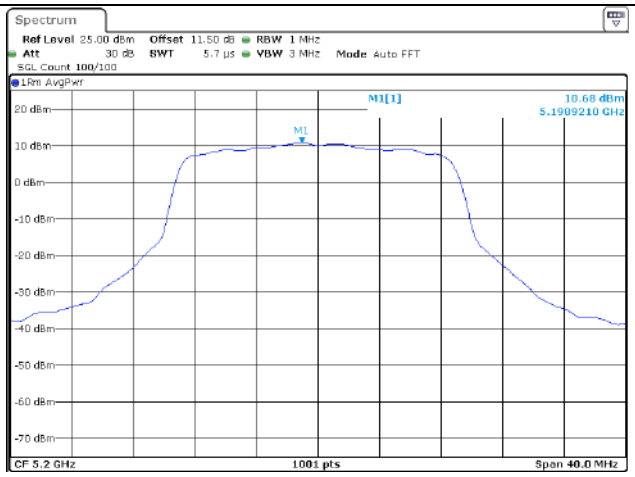
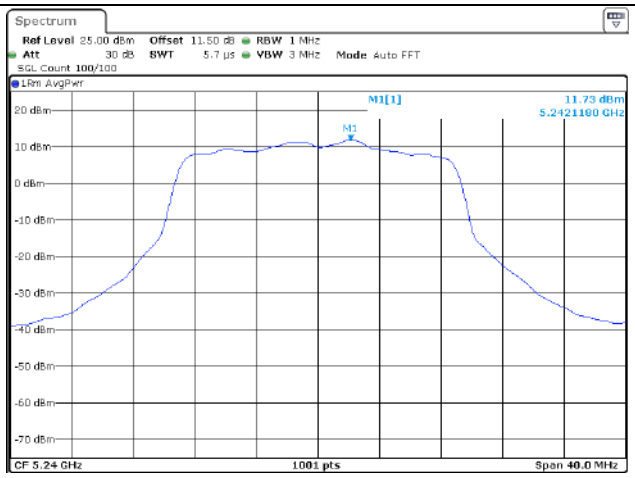
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

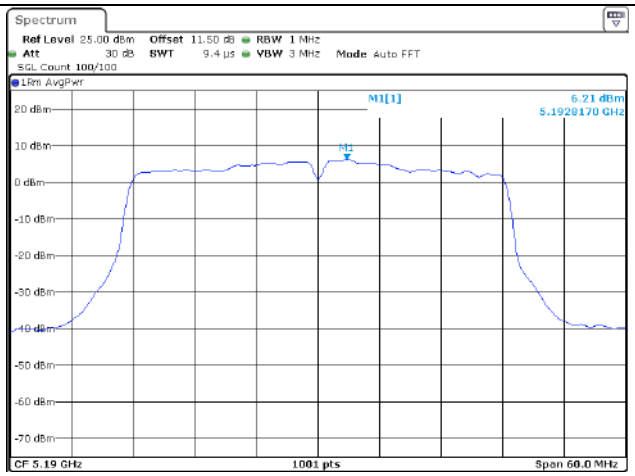
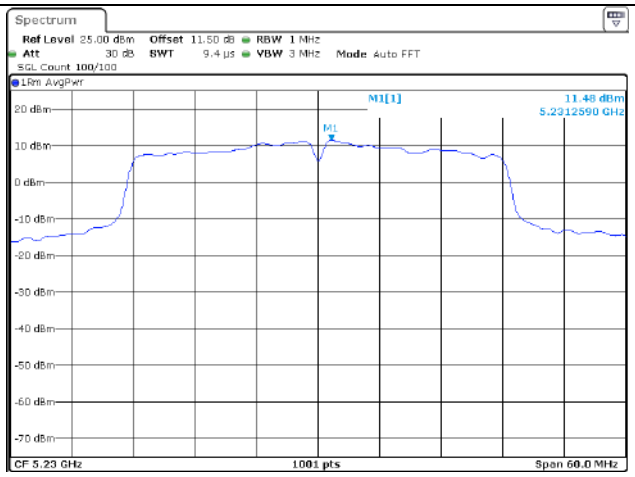
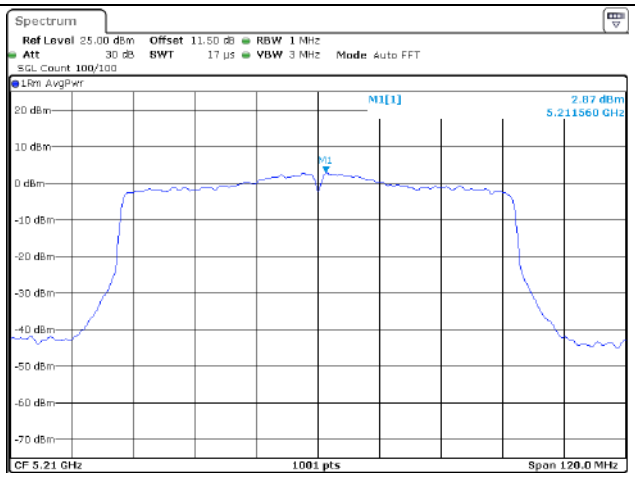
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

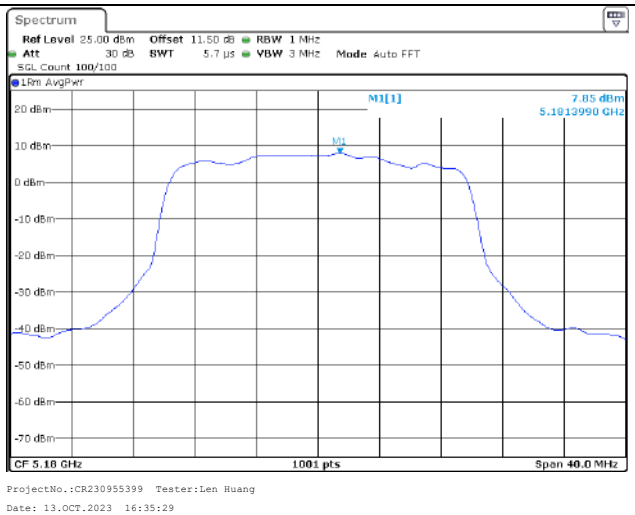
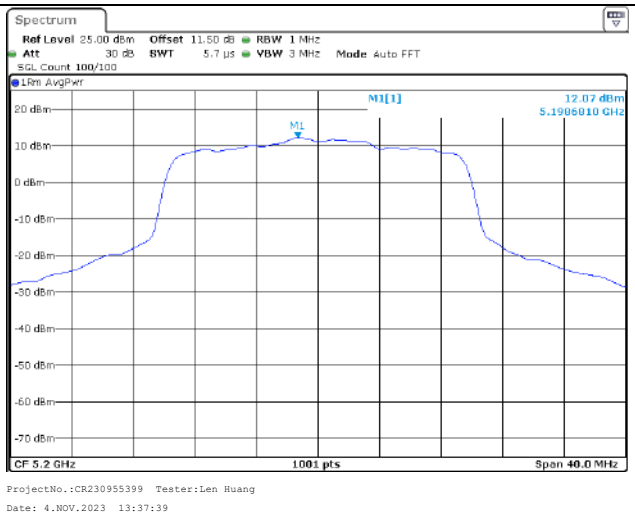
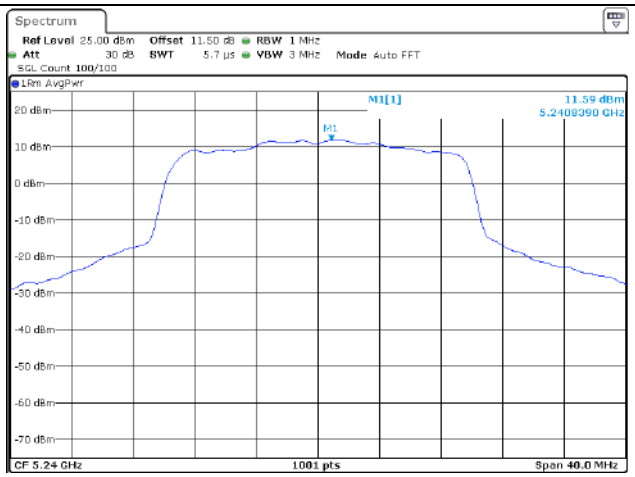
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

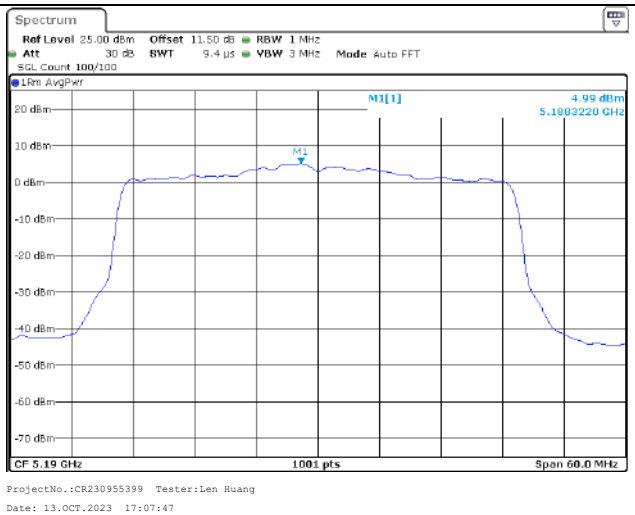
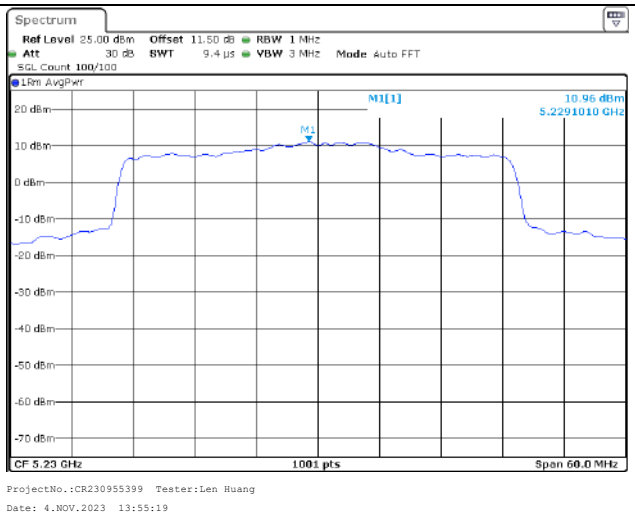
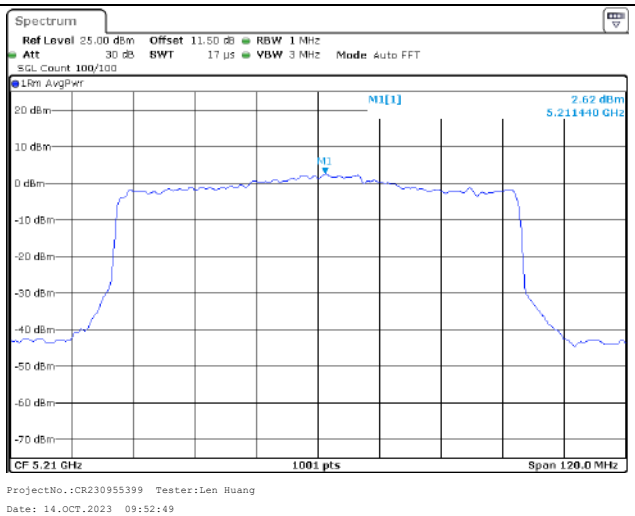
Chain 1:
5150-5250MHz (FCC):

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

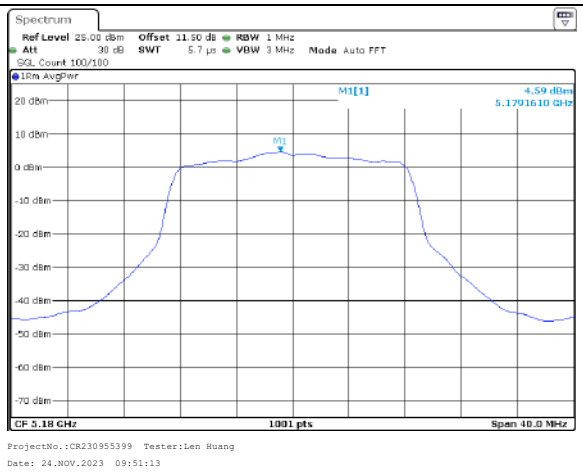
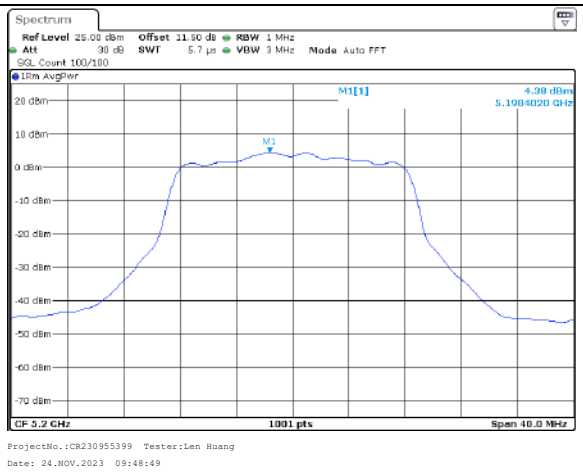
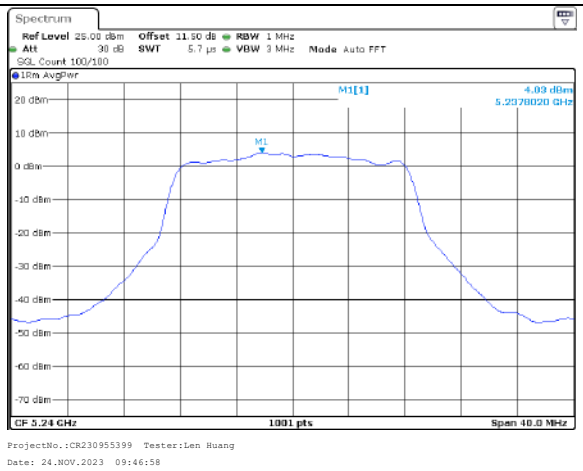
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

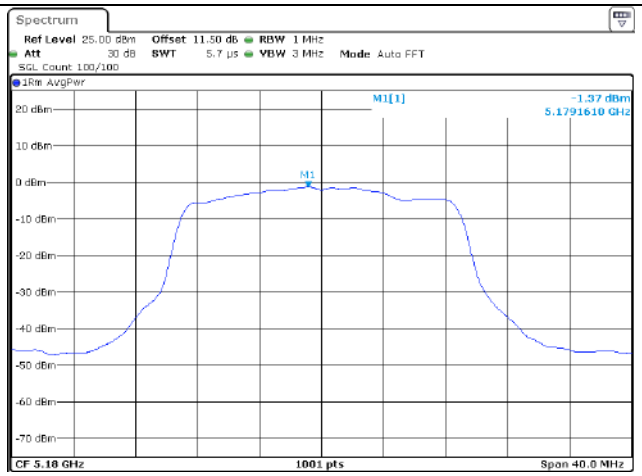
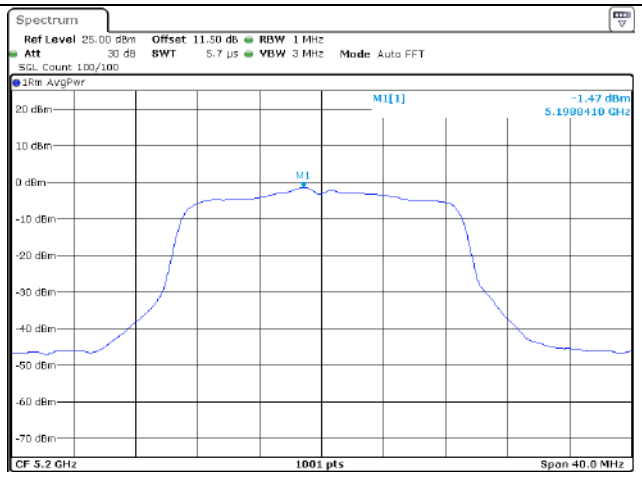
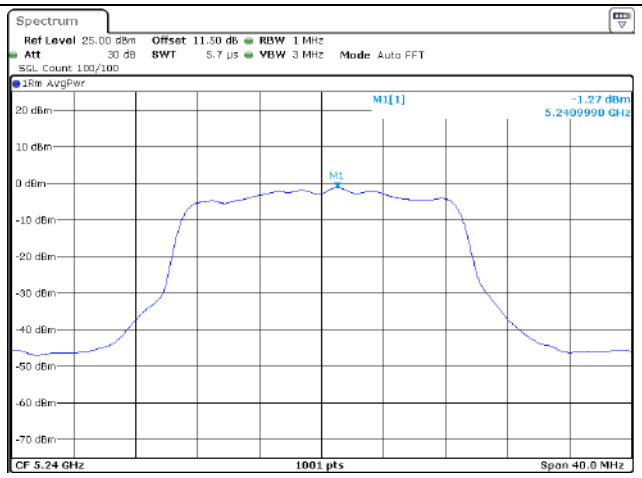
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

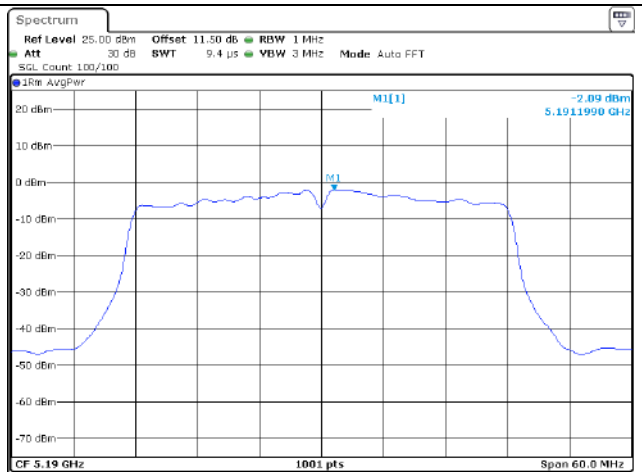
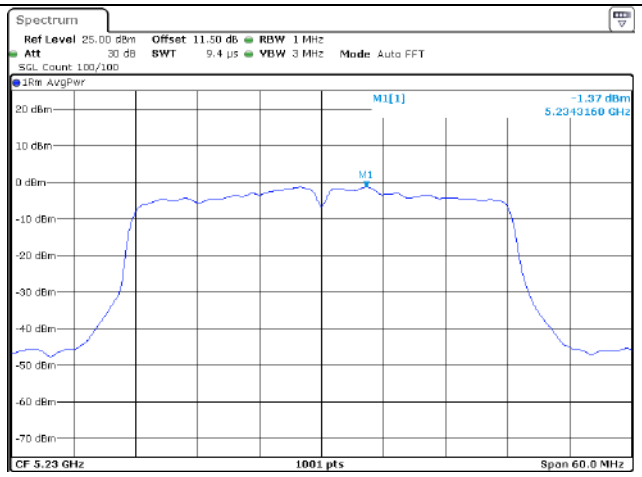
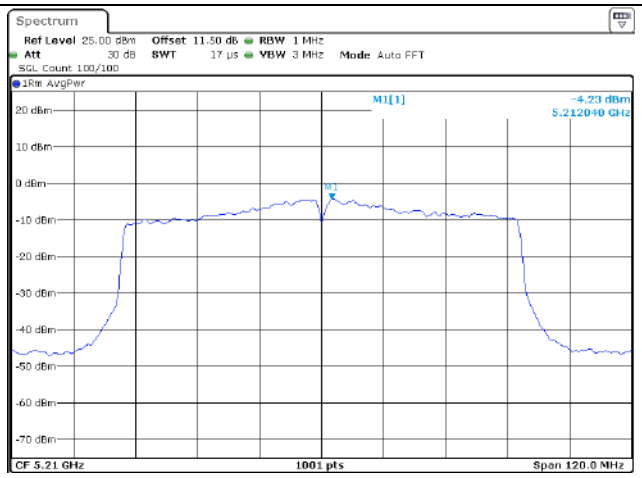
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

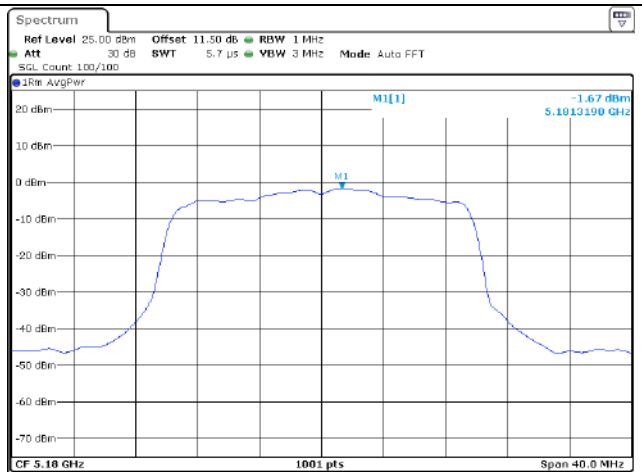
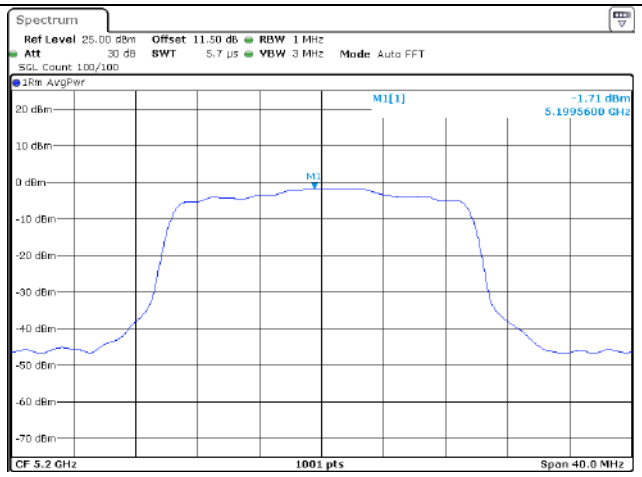
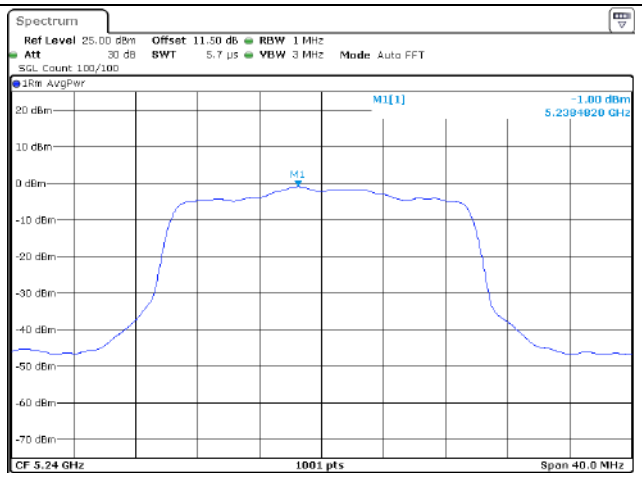
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

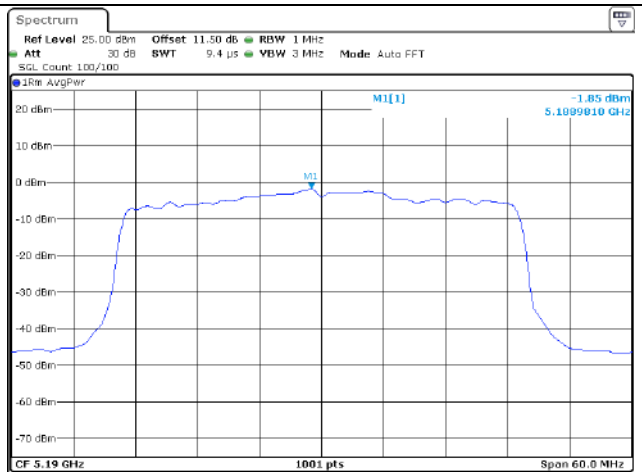
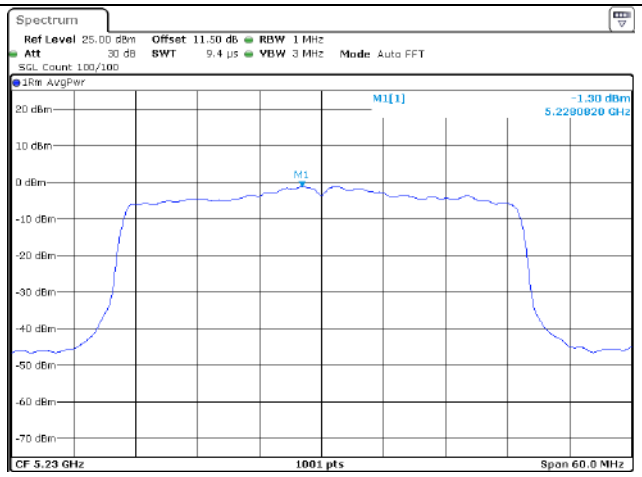
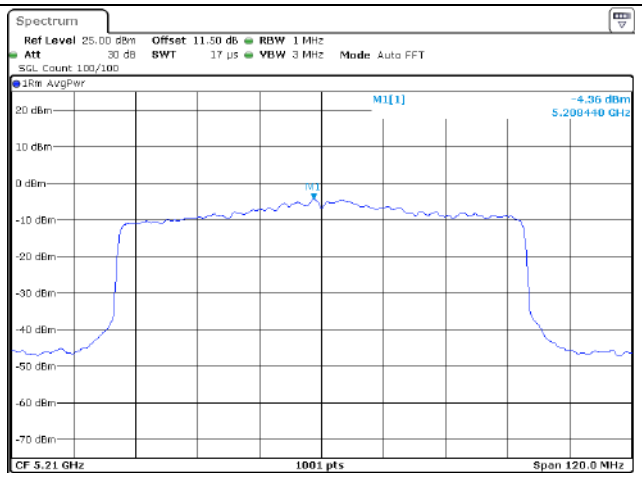
5150-5250MHz (ISED):

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

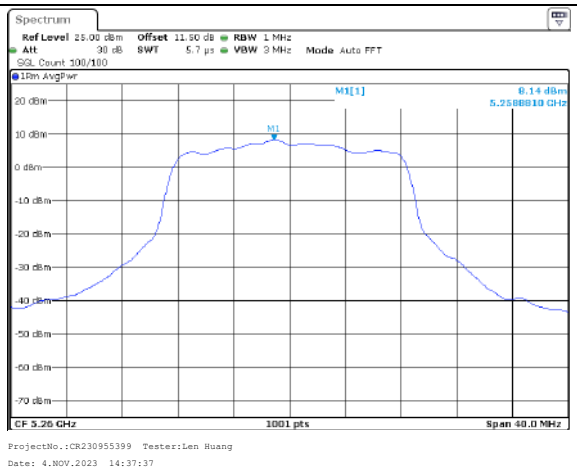
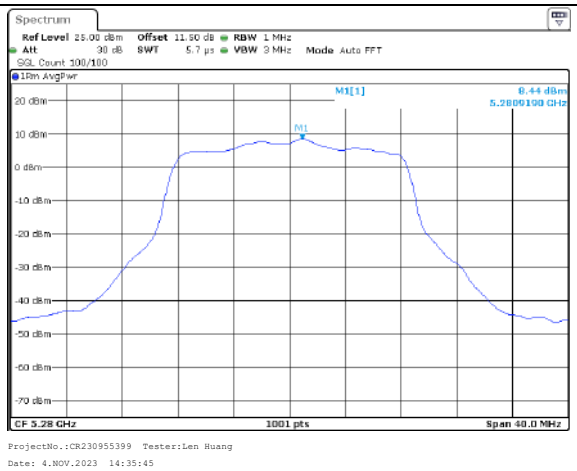
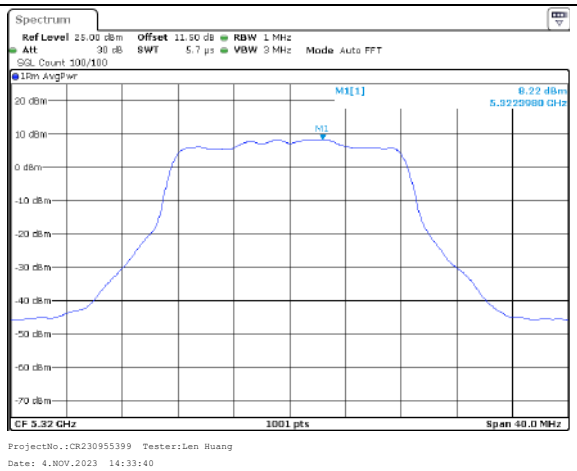
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

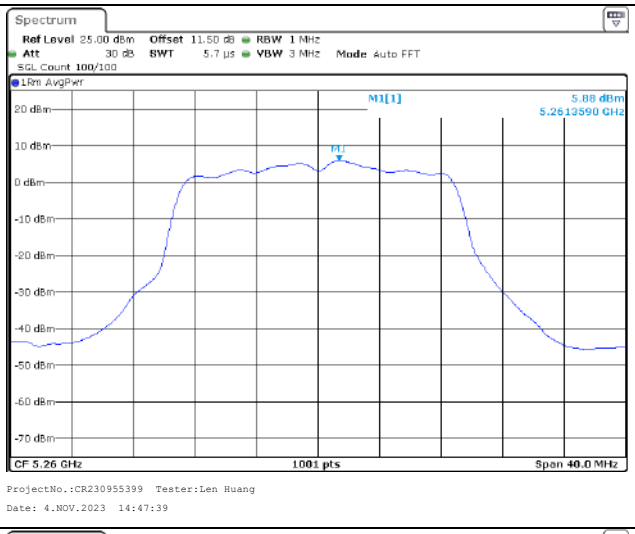
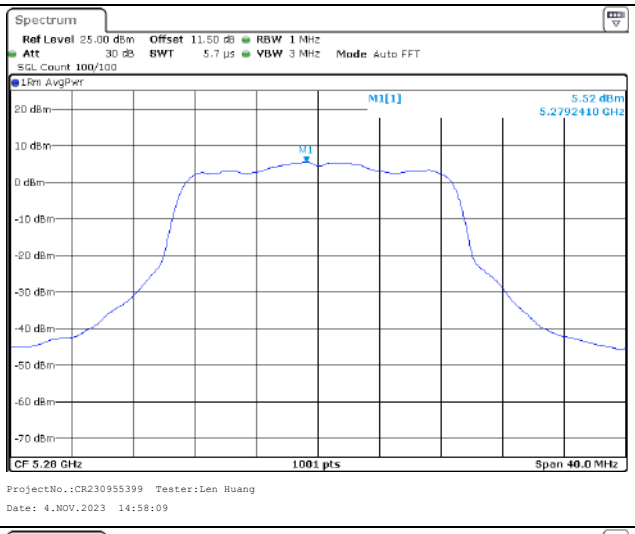
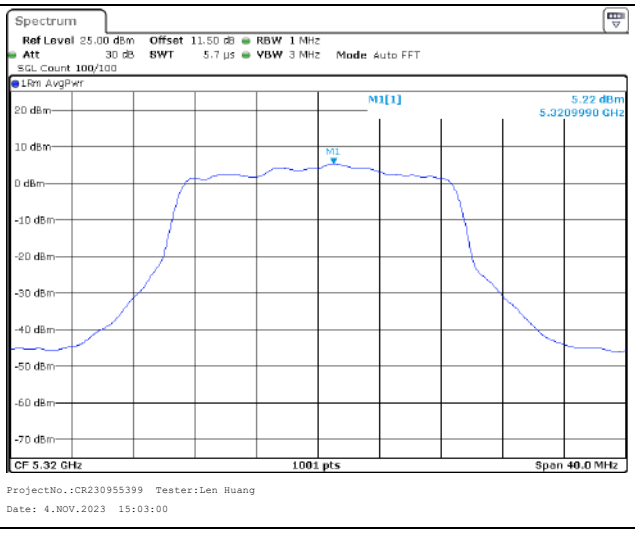
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

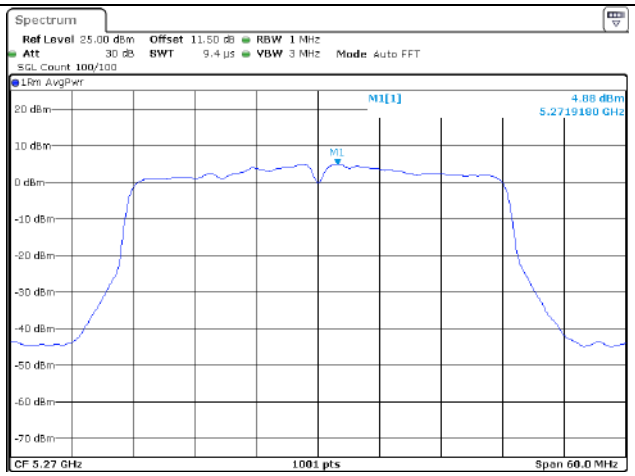
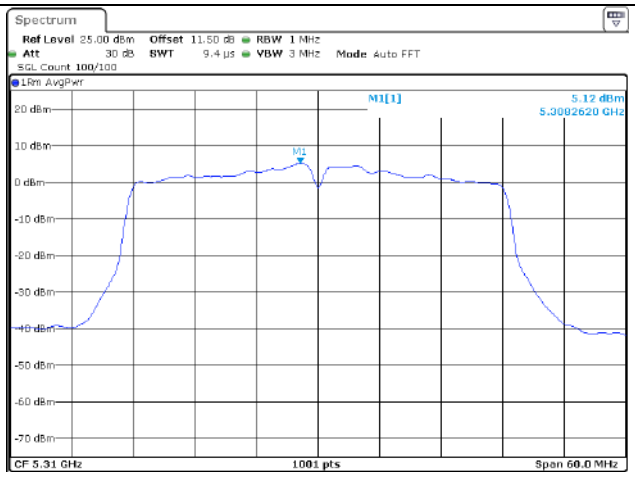
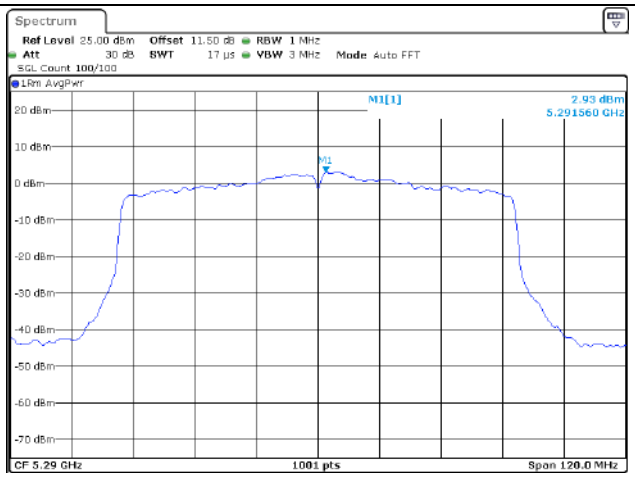
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

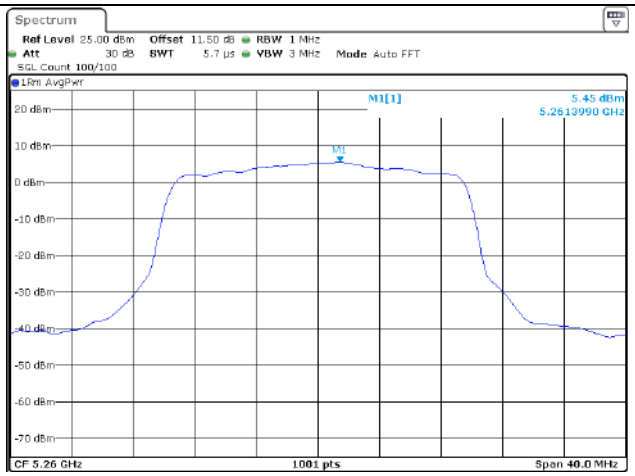
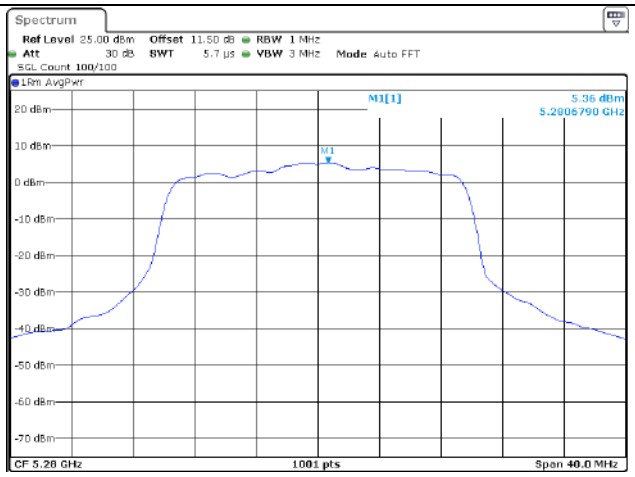
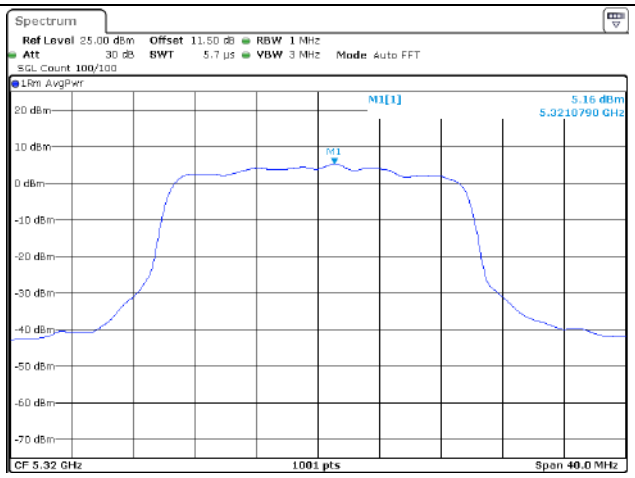
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

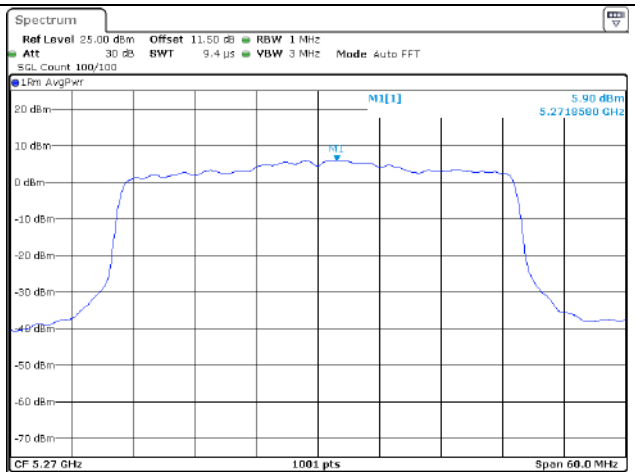
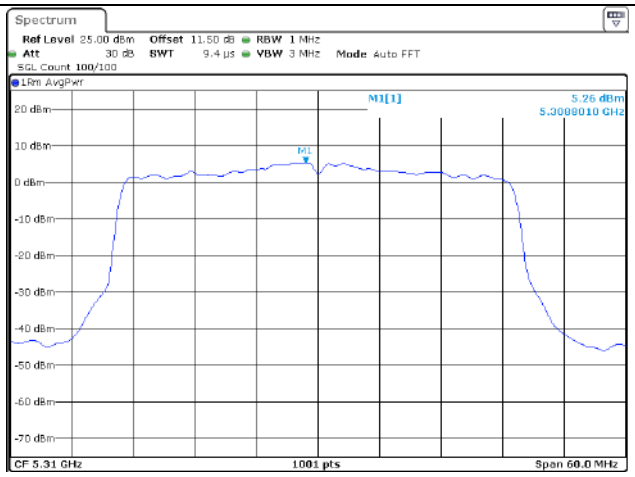
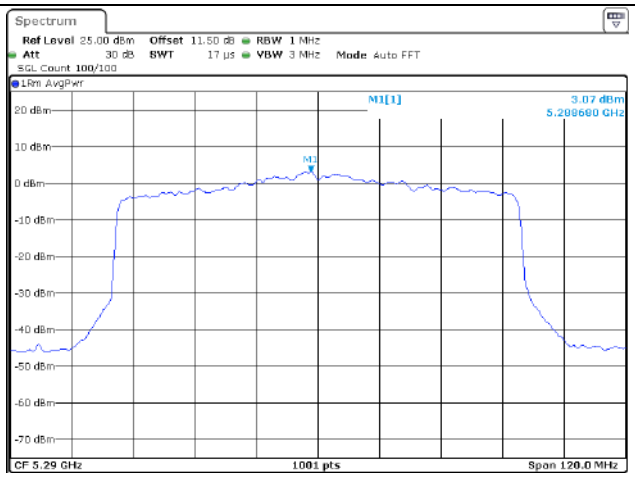
5250-5350MHz (FCC):

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

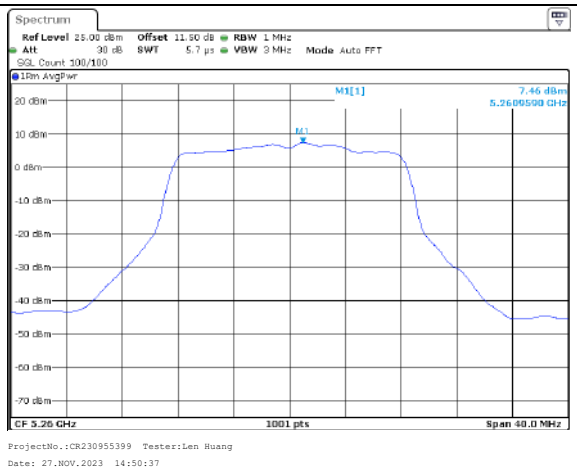
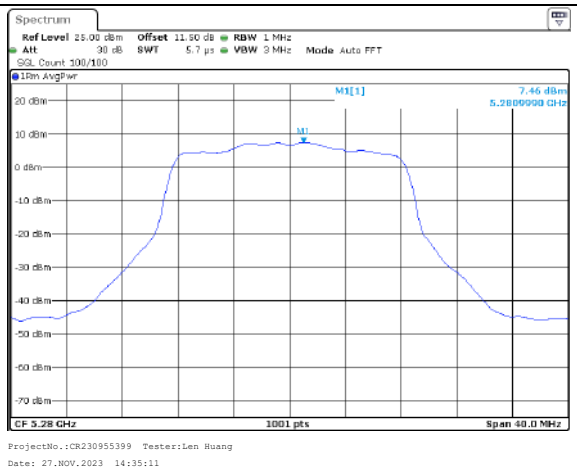
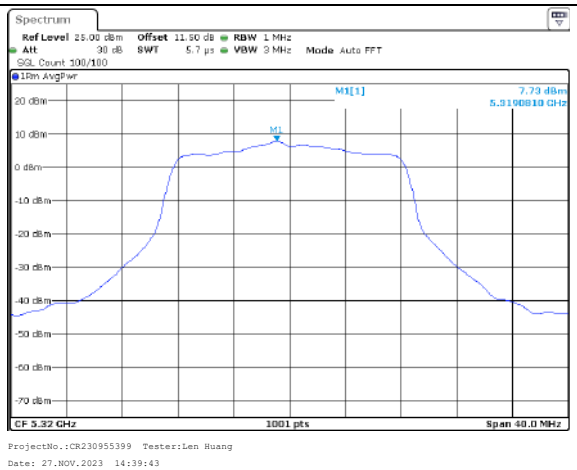
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

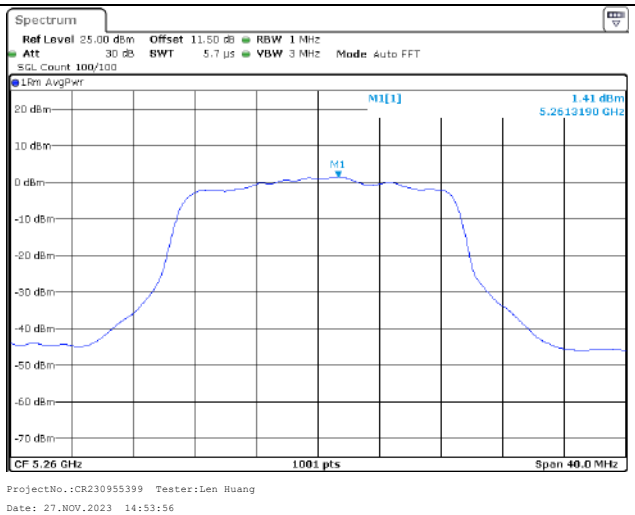
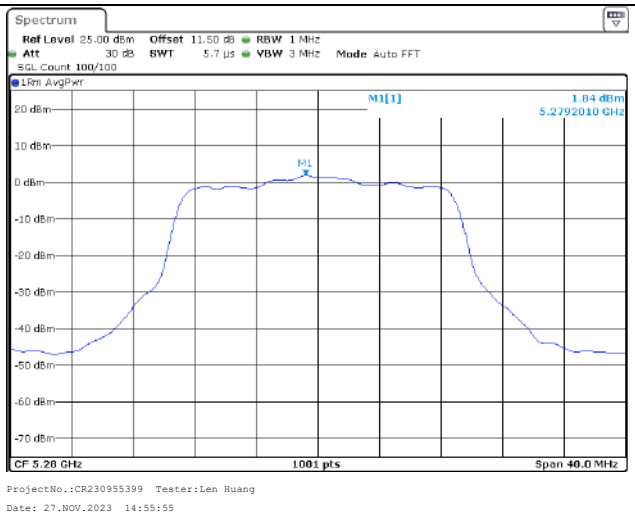
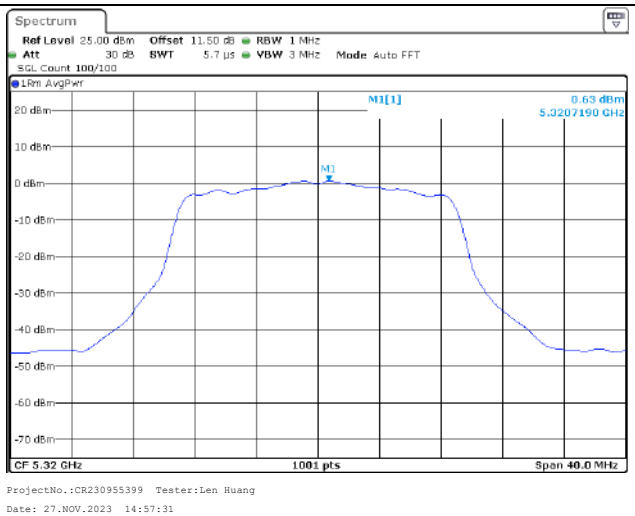
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

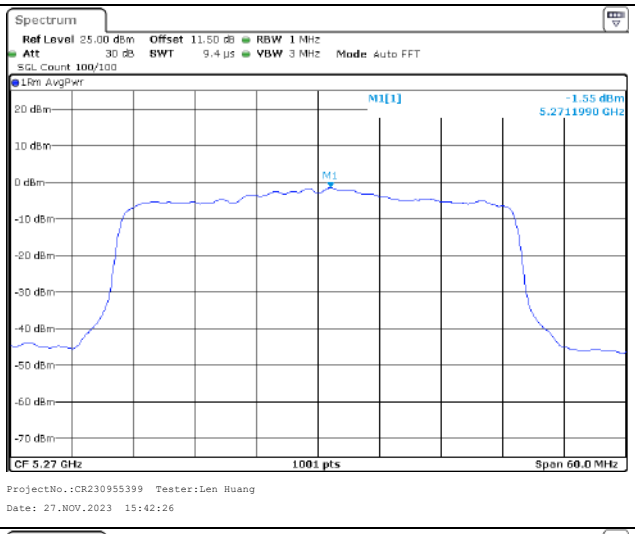
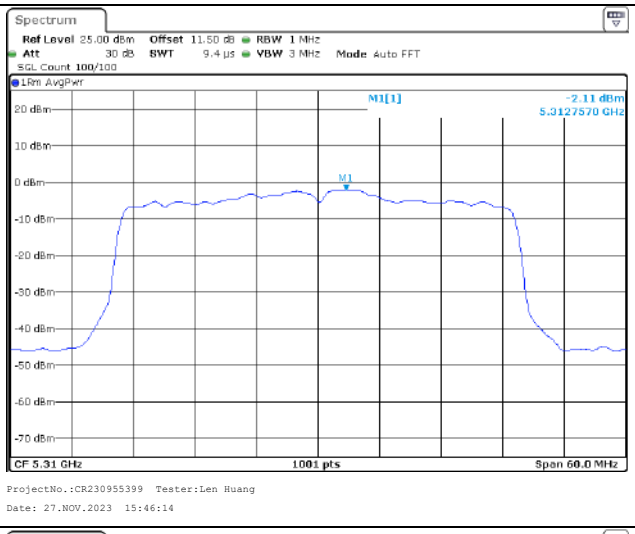
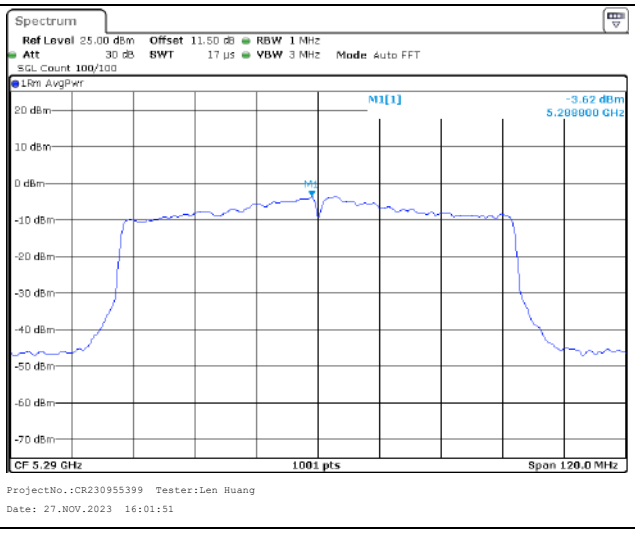
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

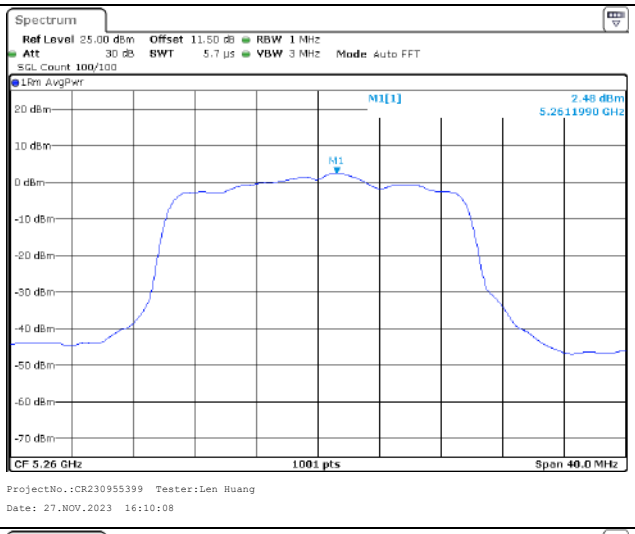
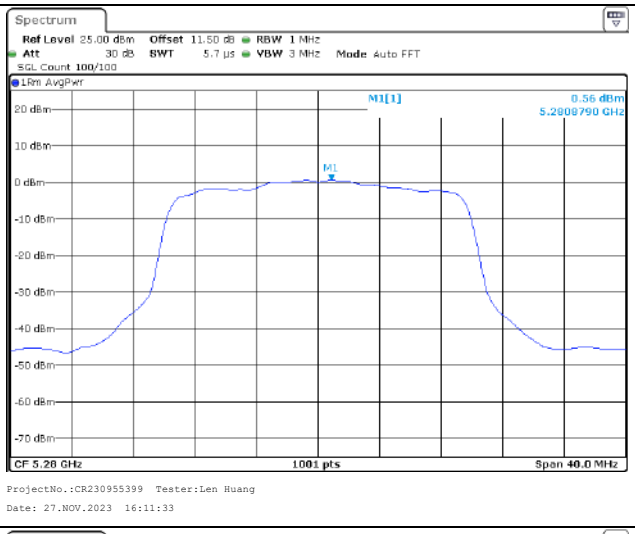
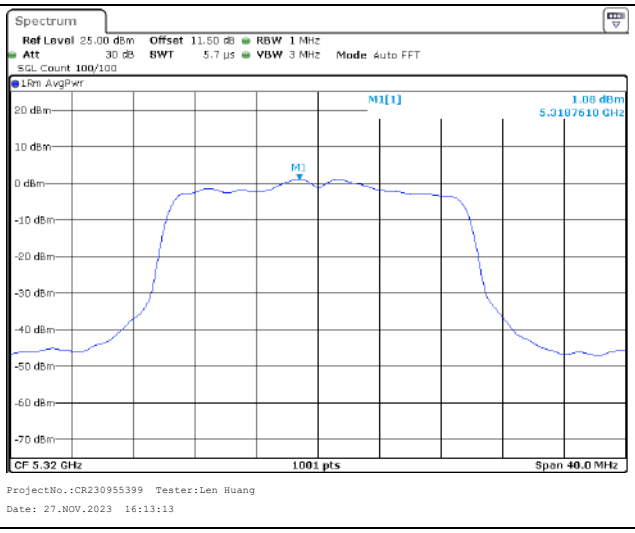
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

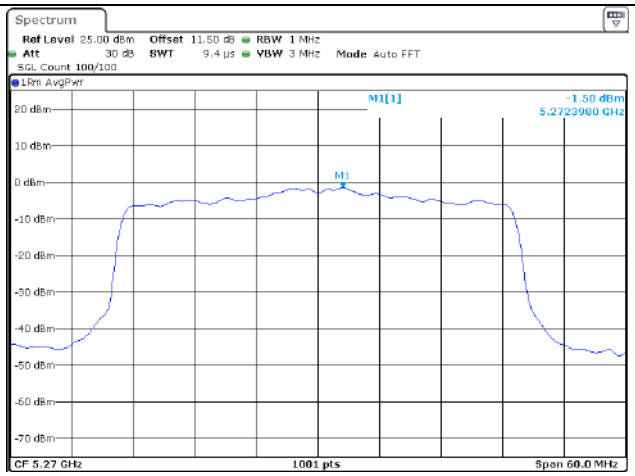
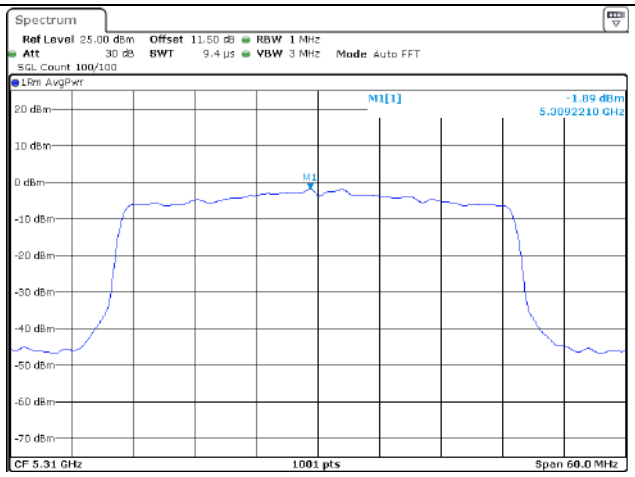
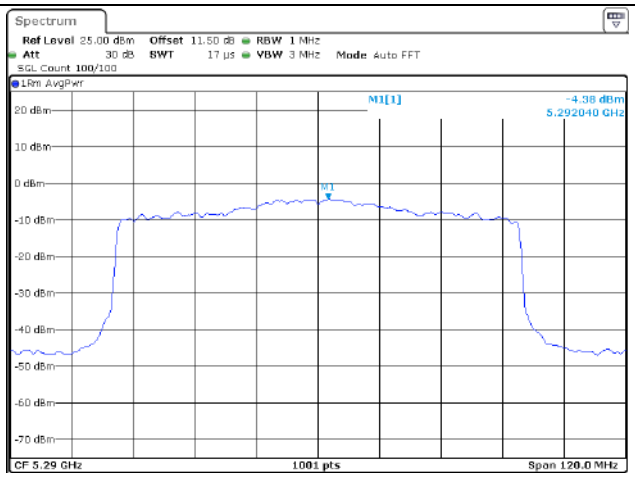
5250-5350 MHz (ISED):

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

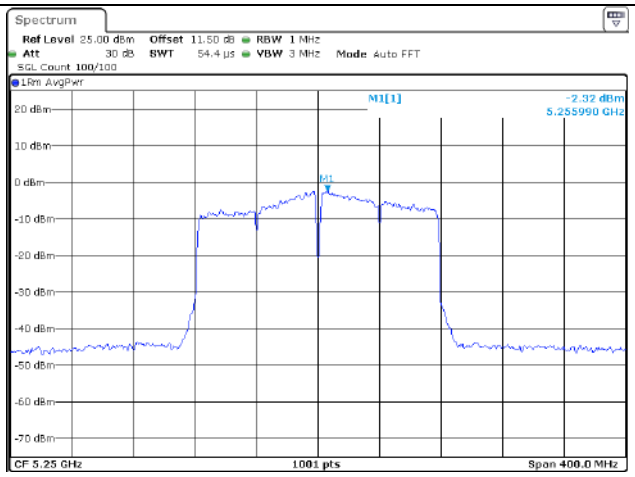
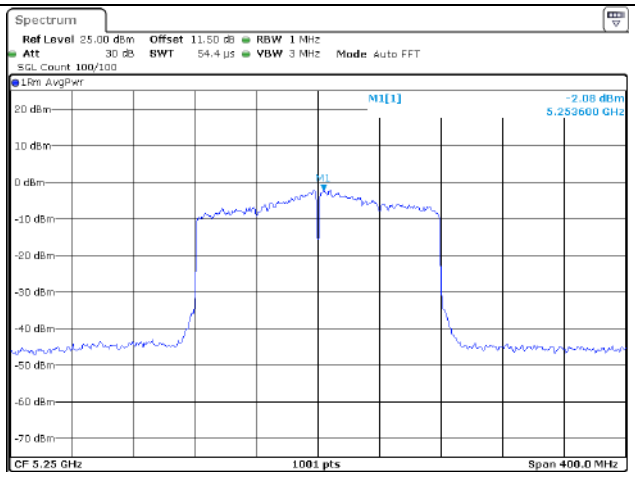
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

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

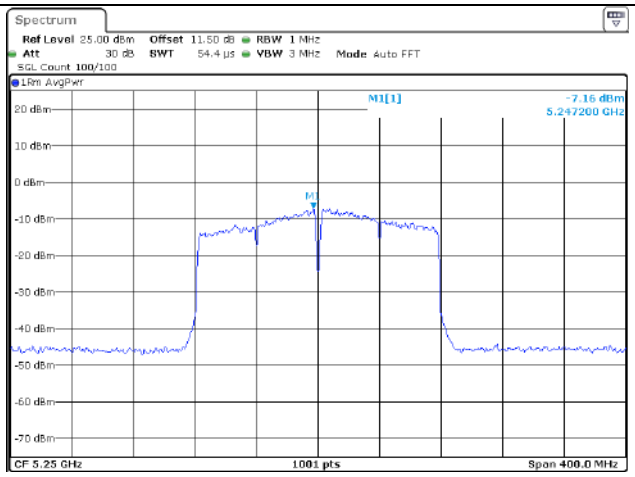
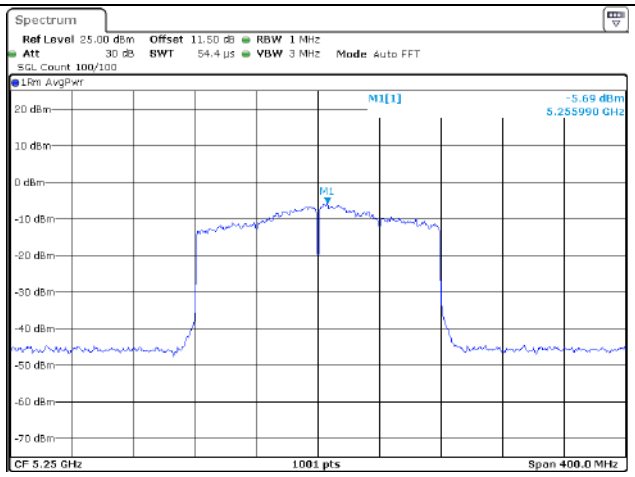
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

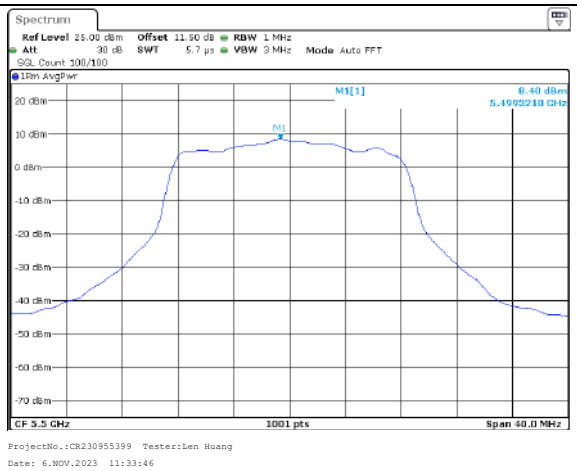
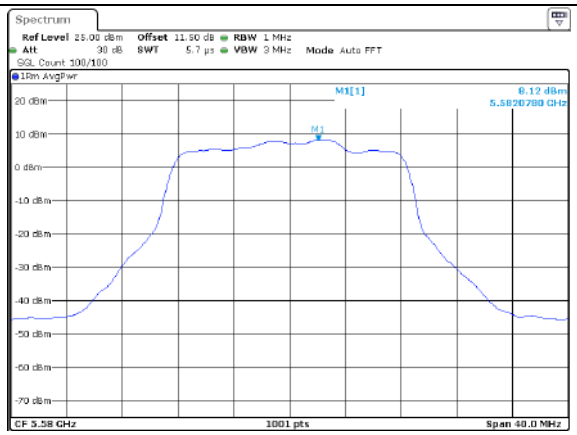
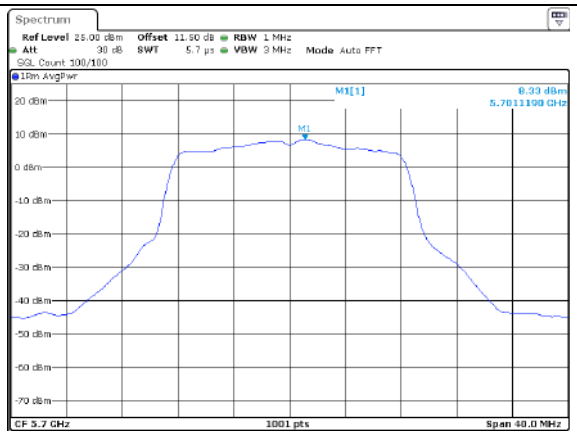
5150-5250 MHz &5250-5350 MHz (FCC):

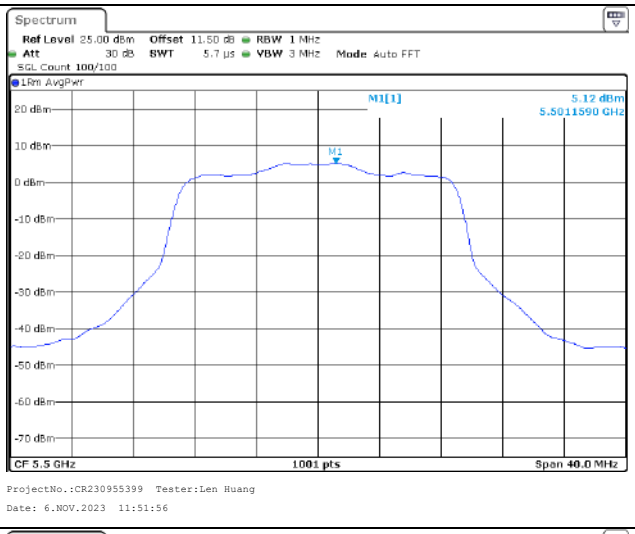
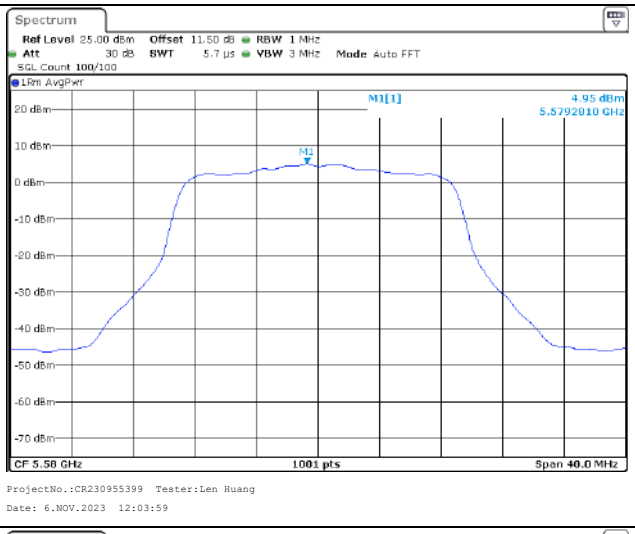
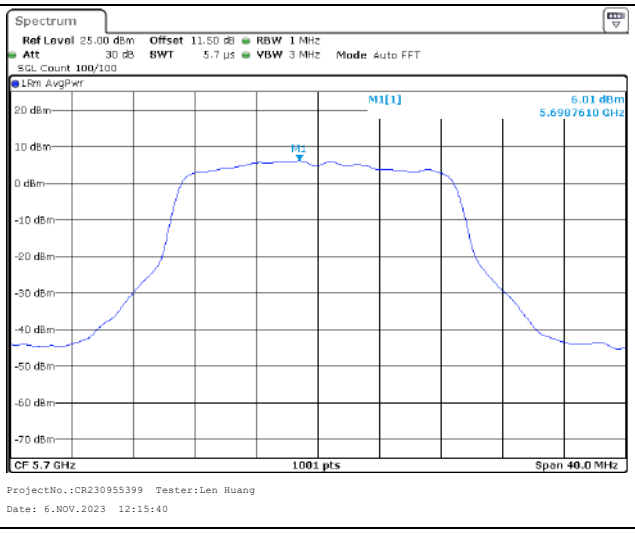
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

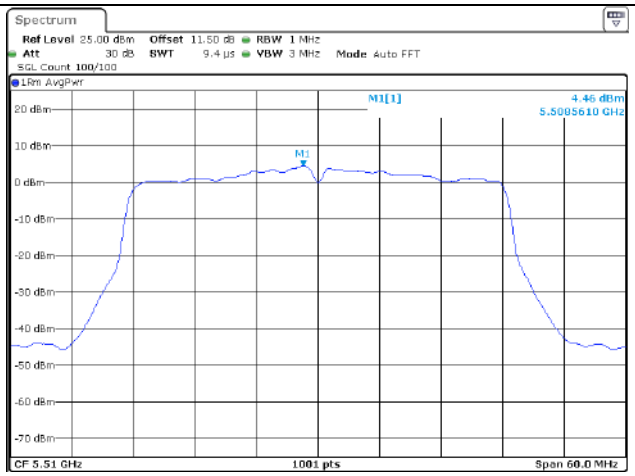
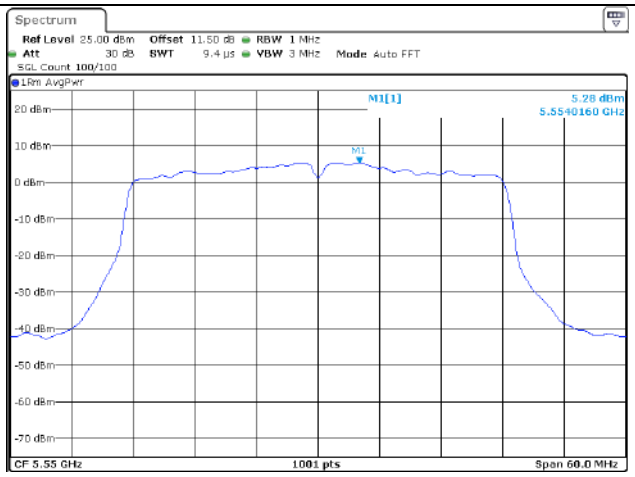
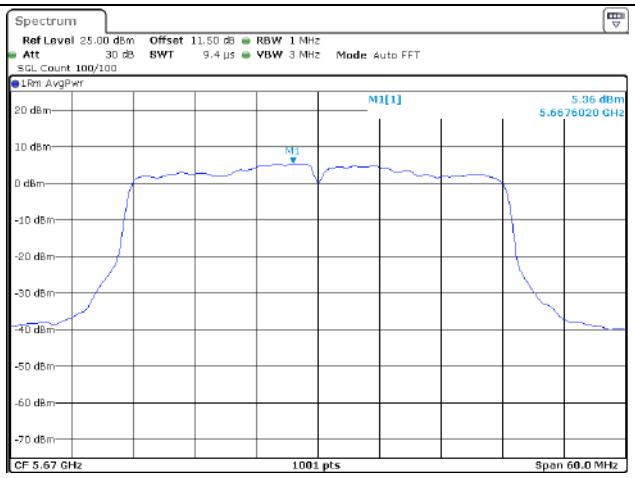
5150-5250 MHz &5250-5350 MHz (ISED):

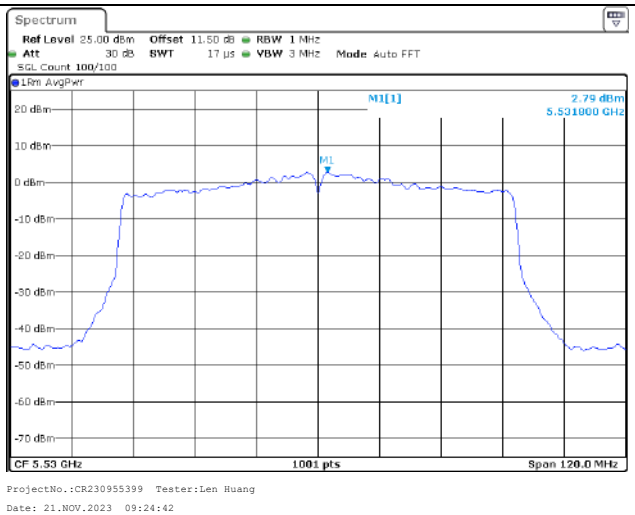
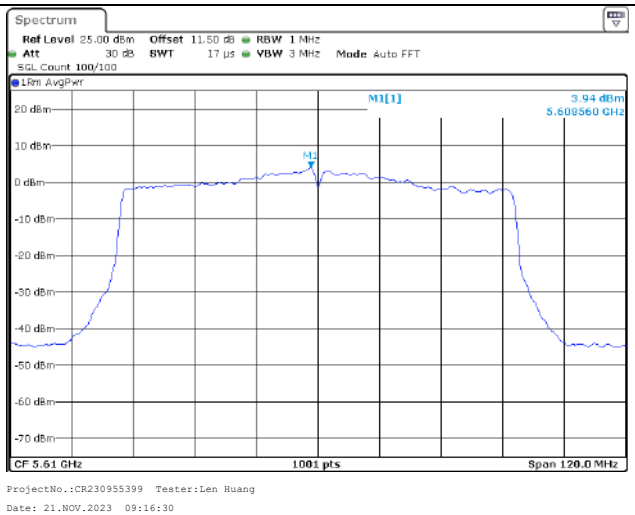
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

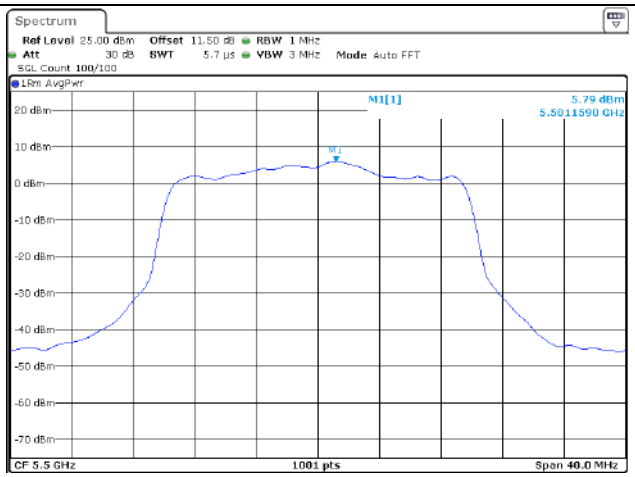
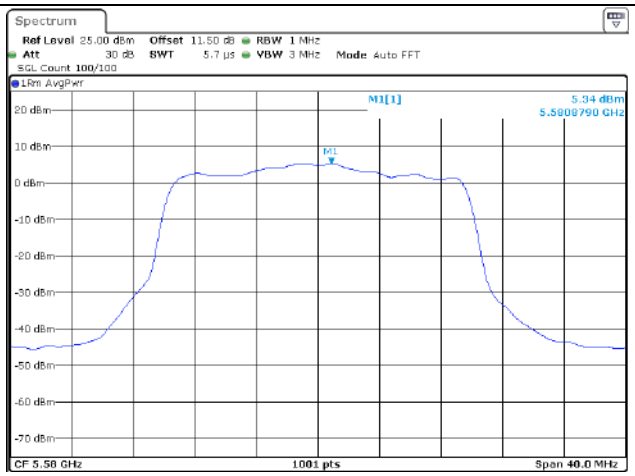
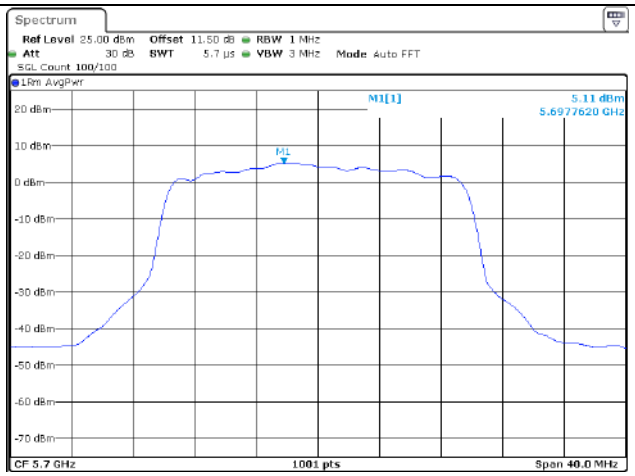
5470-5725 MHz:

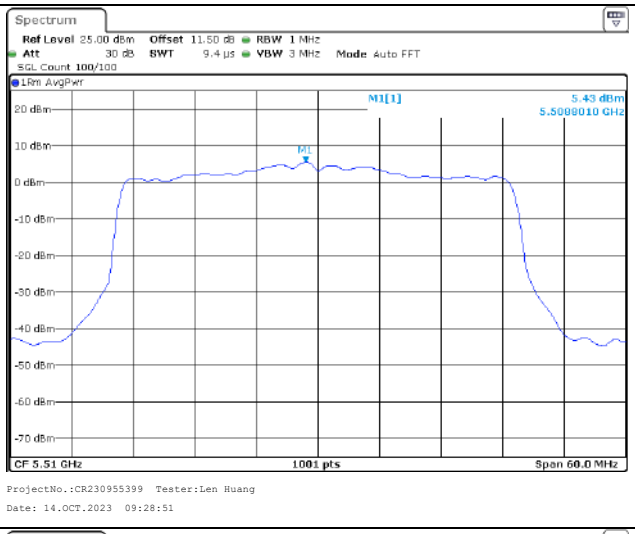
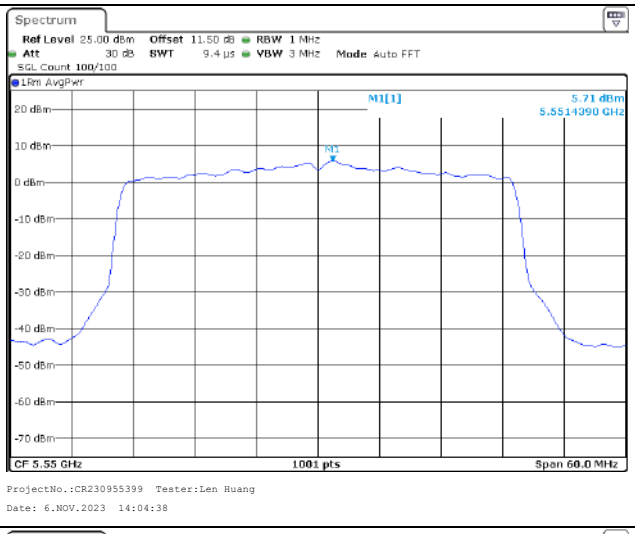
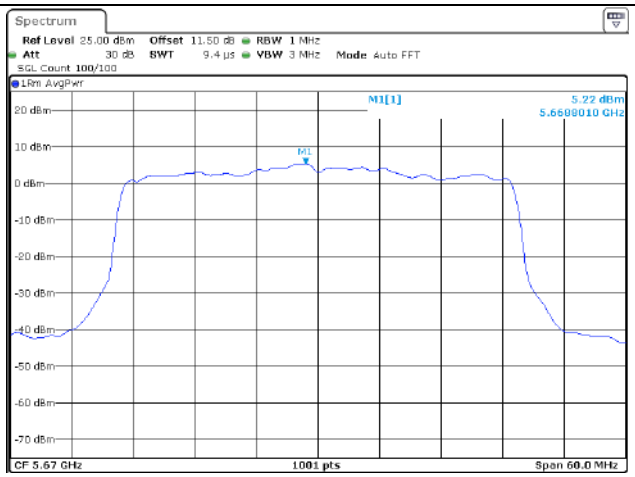
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

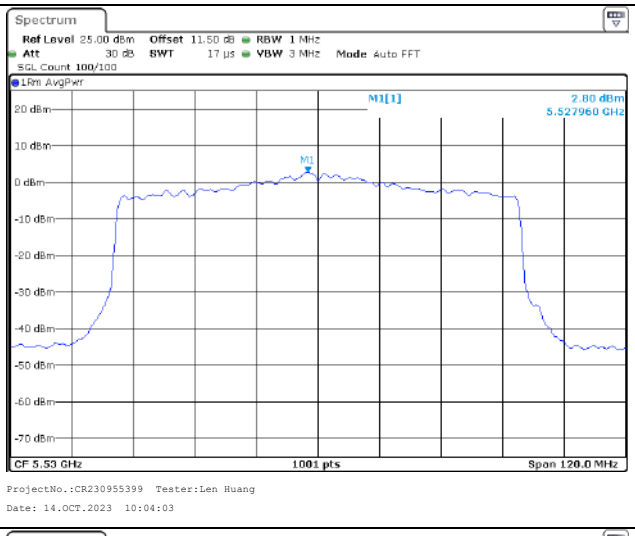
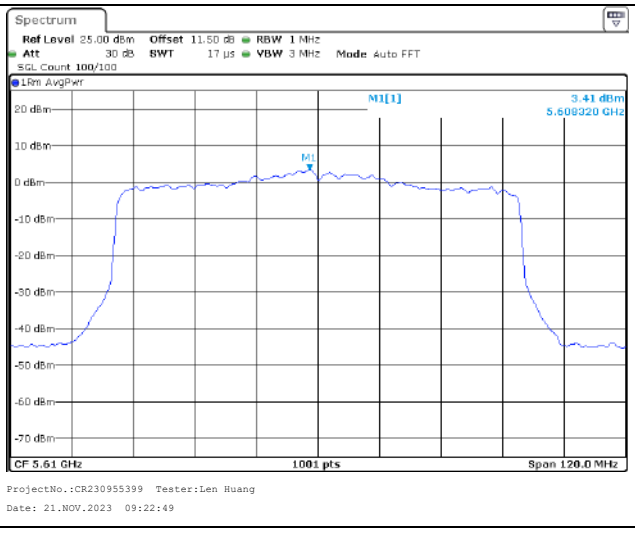
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

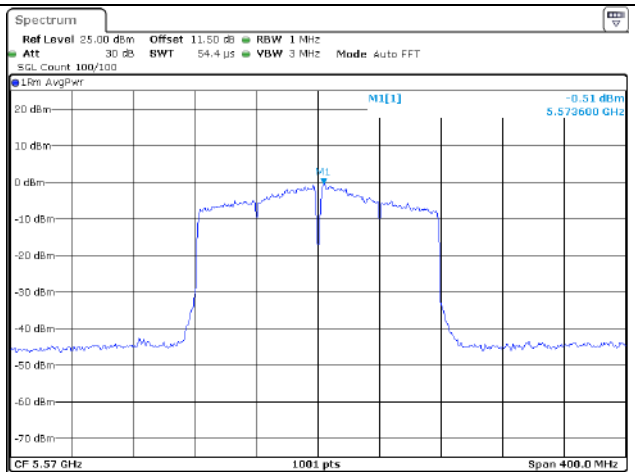
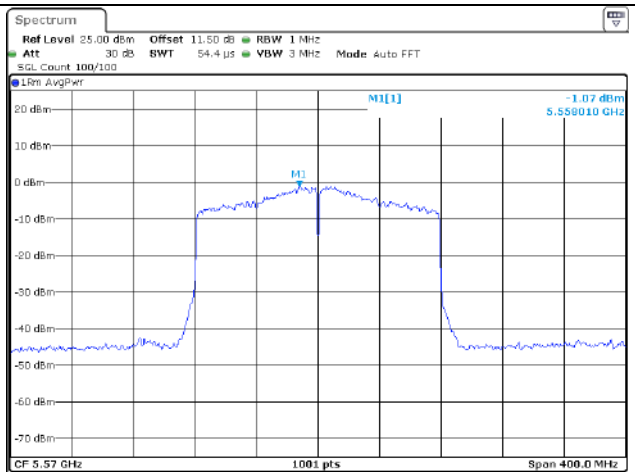
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

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

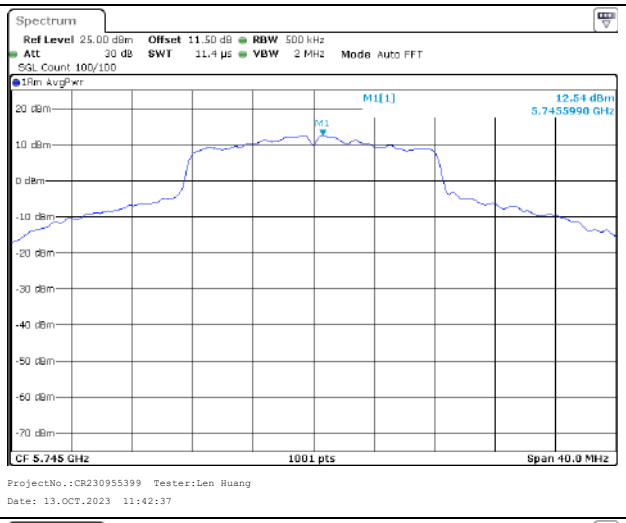
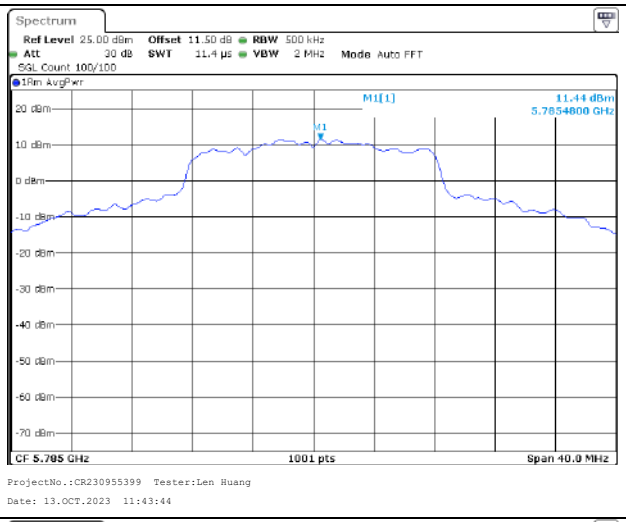
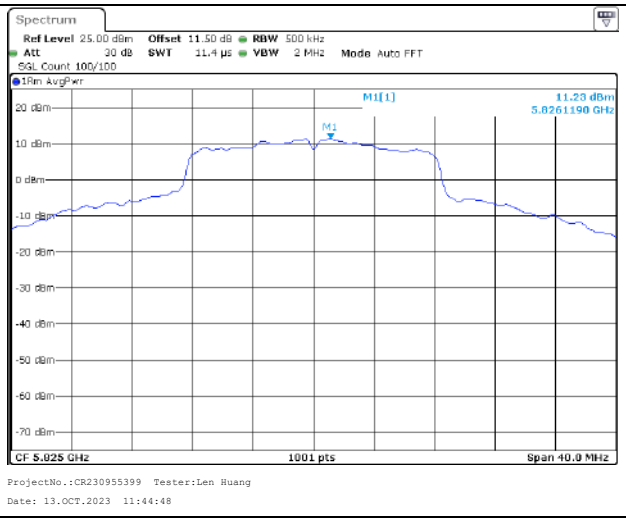
Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

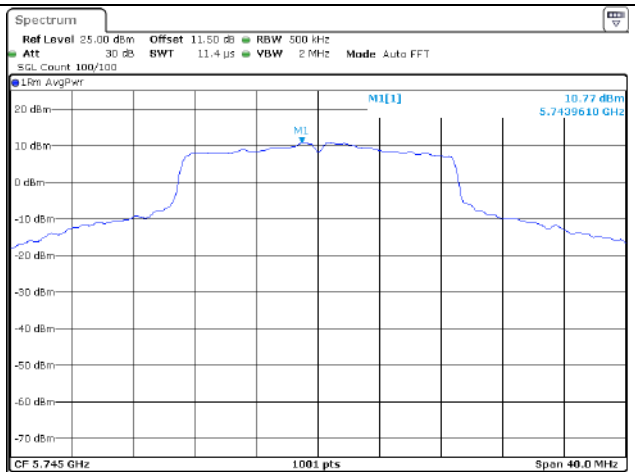
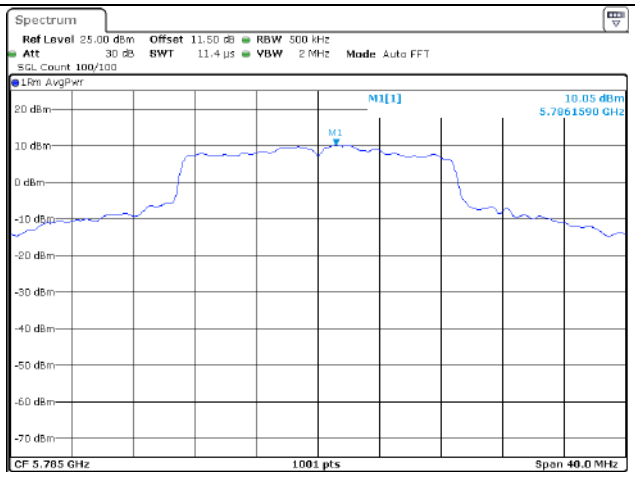
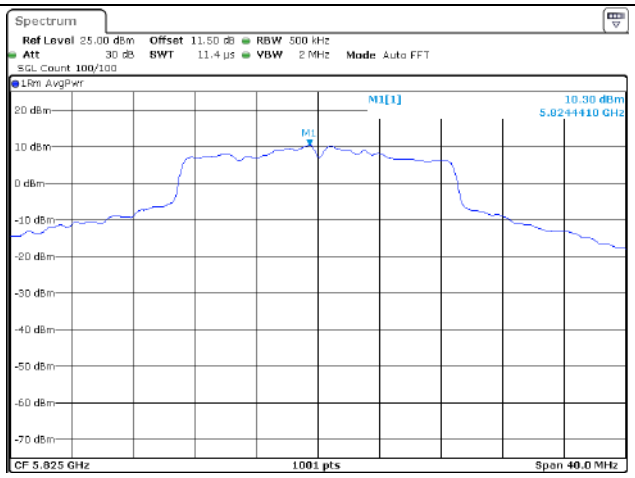
Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Middle Channel	
802.11ax he40 Highest Channel	

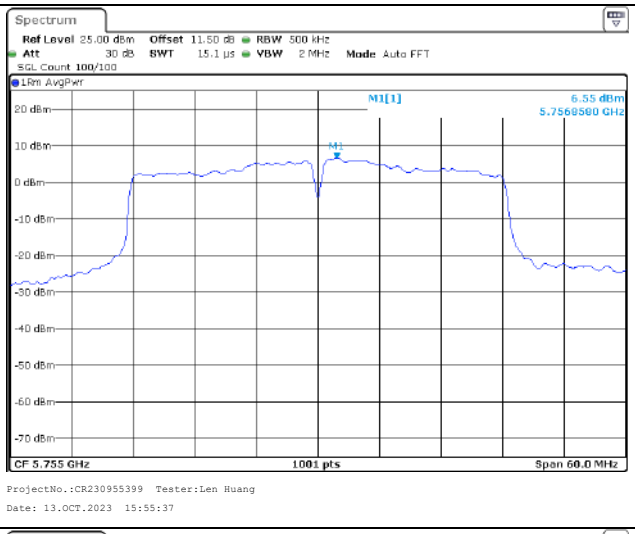
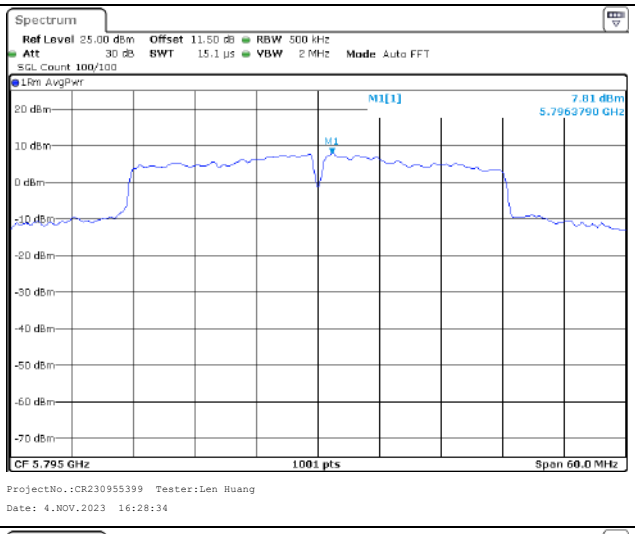
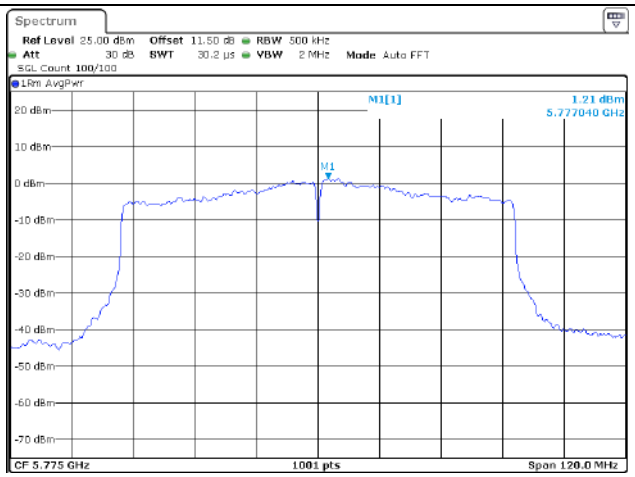
Maximum power spectral density	
802.11ax he80 Lowest Channel	
802.11ax he80 Highest Channel	

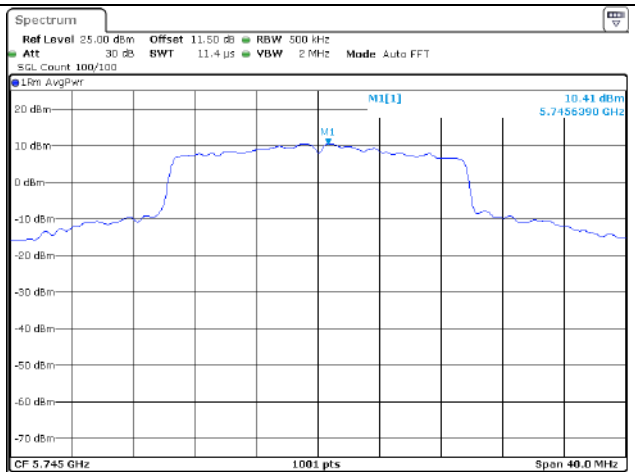
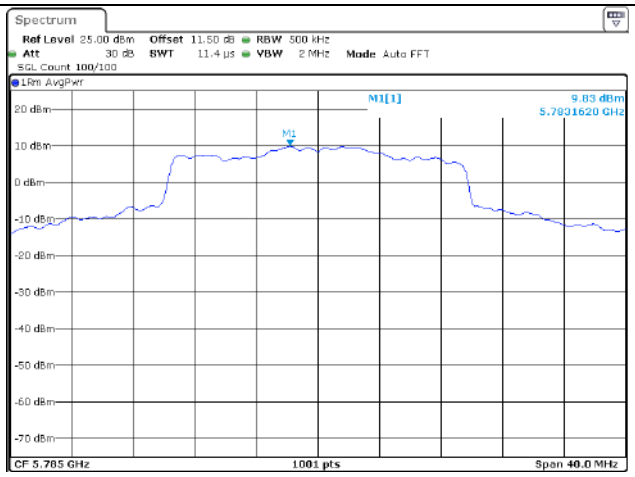
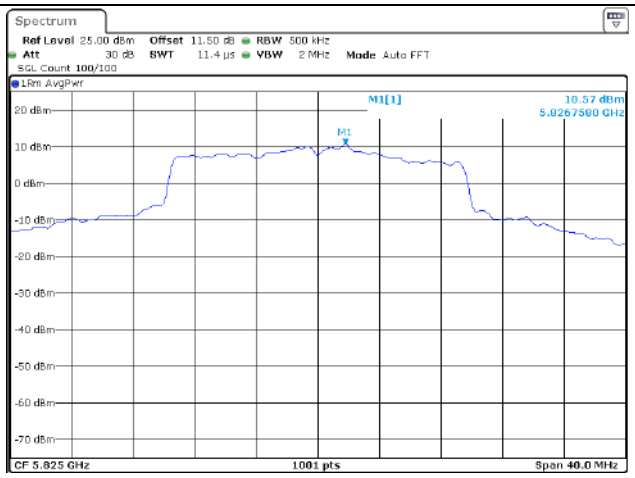
Maximum power spectral density	
802.11ac vht160 Middle Channel	
802.11ax he160 Middle Channel	

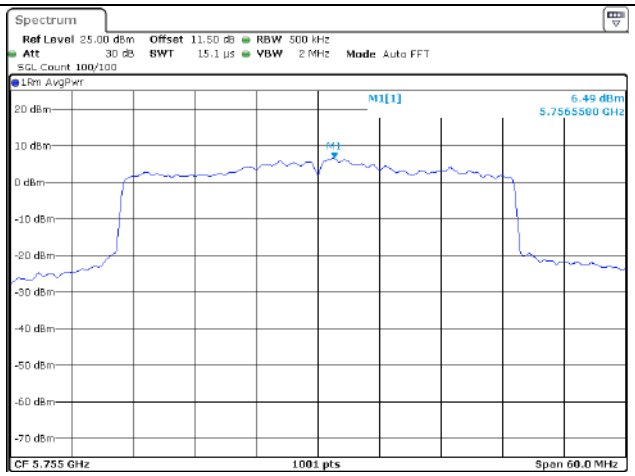
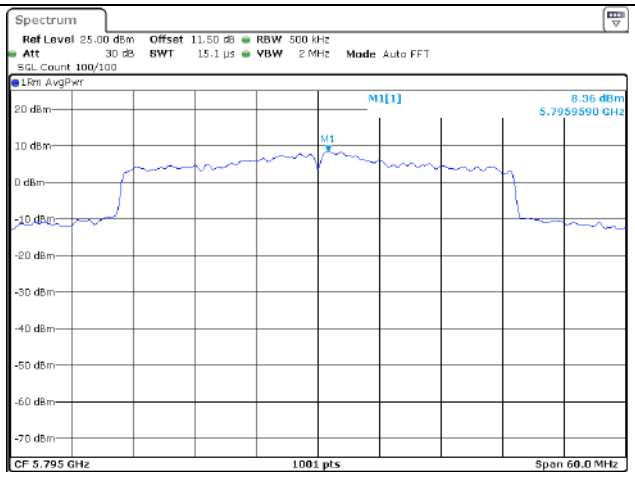
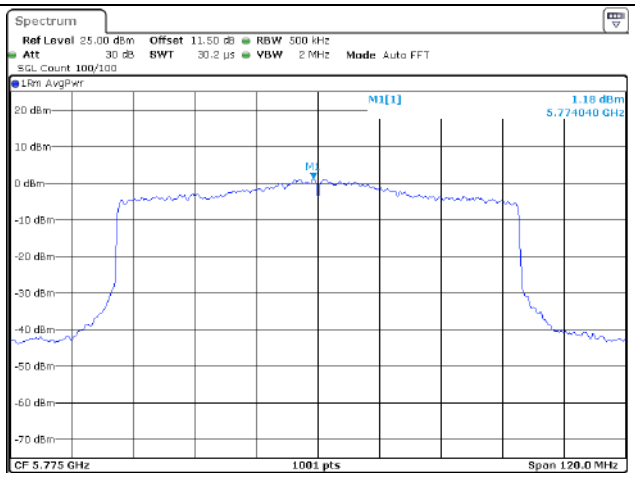
5725-5850MHz

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 Middle Channel	

Maximum power spectral density	
802.11ax he20 Lowest Channel	
802.11ax he20 Middle Channel	
802.11ax he20 Highest Channel	

Maximum power spectral density	
802.11ax he40 Lowest Channel	
802.11ax he40 Highest Channel	
802.11ax he80 Middle Channel	

4.7 Duty Cycle

Serial Number:	2BI1-2	Test Date:	2023/11/26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	N/A

Environmental Conditions:					
Temperature: (℃)	26.1	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101

Test Equipment List and Details:

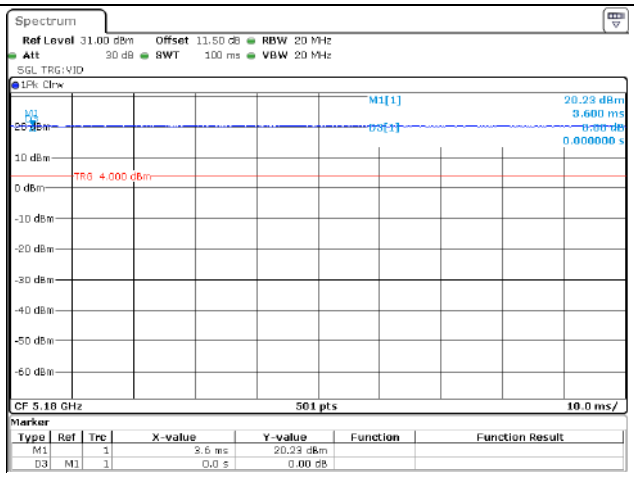
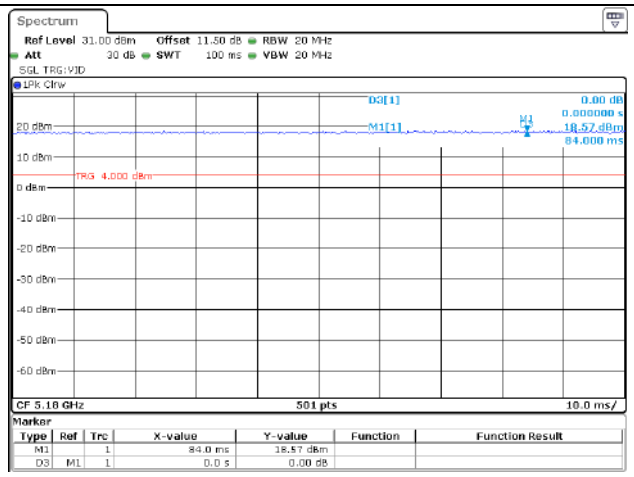
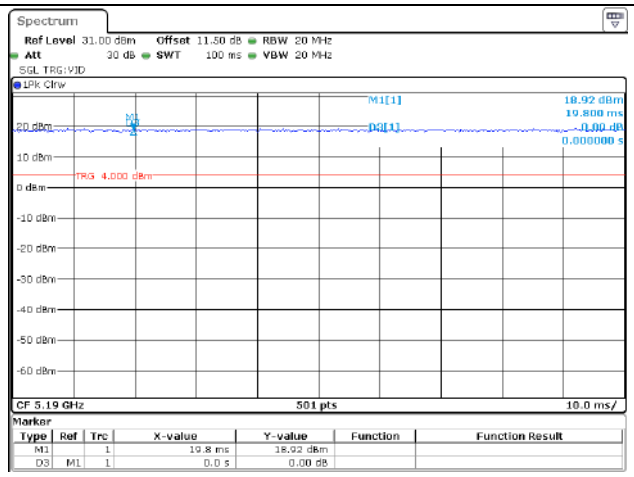
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	102259	2023/04/18	2024/04/17
zhuoxiang	Coaxial Cable	SMA-178	211003	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A

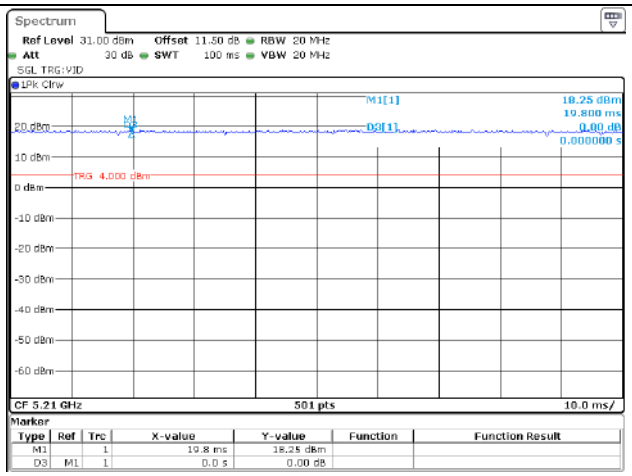
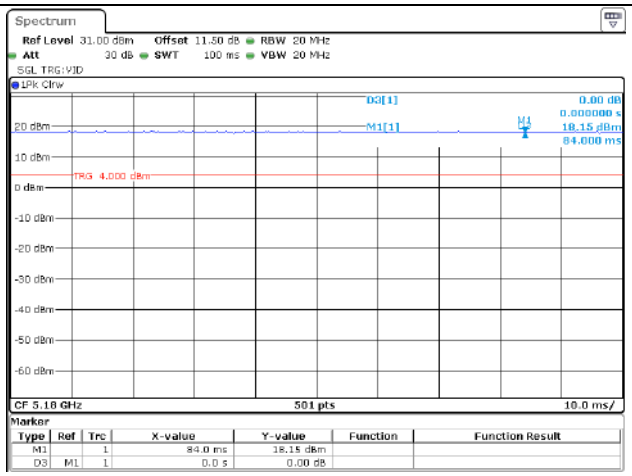
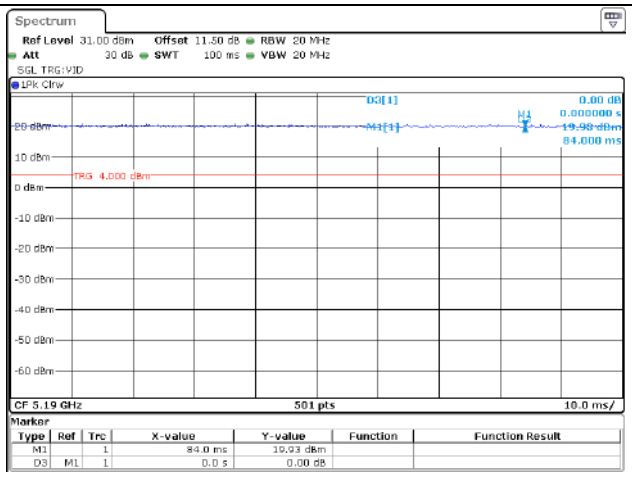
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

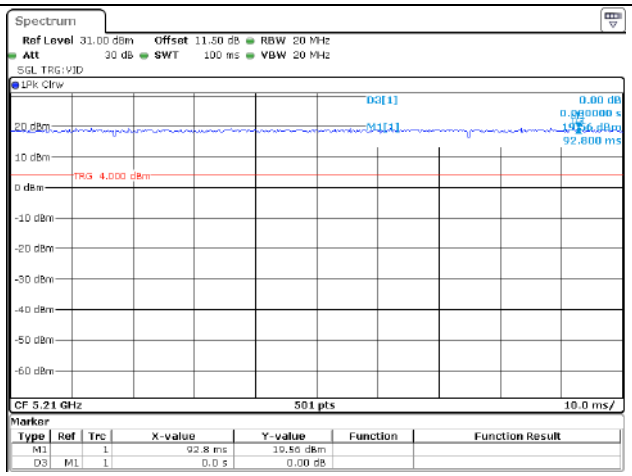
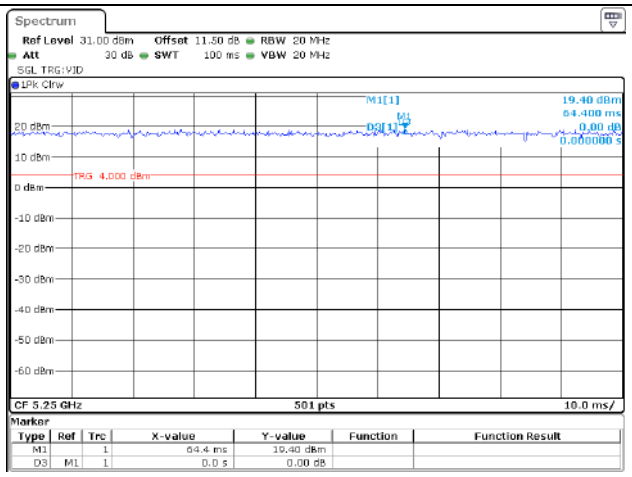
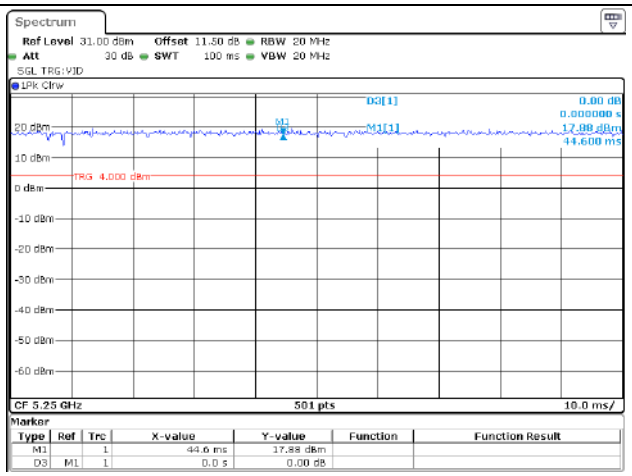
Test Data:

Test Modes	Ton (ms)	Ton+off (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	VBW Setting (Hz)
802.11a	100	100	100.00	0	10
802.11ac vht20	100	100	100.00	0	10
802.11ac vht40	100	100	100.00	0	10
802.11ac vht80	100	100	100.00	0	10
802.11ax he20	100	100	100.00	0	10
802.11ax he40	100	100	100.00	0	10
802.11ax he80	100	100	100.00	0	10
802.11ac vht160	100	100	100.00	0	10
802.11ax he160	100	100	100.00	0	10

Note: Test at the Chain 0.

Duty Cycle	
802.11a	
802.11ac vht20	
802.11ac vht40	

Duty Cycle	
802.11ac vht80	
802.11ax he20	
802.11ax he40	

Duty Cycle	
802.11 ax he80	
802.11ac vht160	
802.11ax he160	

5. RF EXPOSURE EVALUATION

5.1 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

5.1.1 Applicable Standard

According to subpart 1.1307 (b)(1), 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (Minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

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

5.1.2 Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW).
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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

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

Mode	Frequency (MHz)	Tune Up Conducted Power (dBm)	Antenna Gain (dBi) (Note 2)	Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
Bluetooth	2402-2480	14.5	4.45	32	0.006	1.0
BLE	2402-2480	14.0	4.45	32	0.005	1.0
2.4G Wi-Fi	2412-2462	25.0	7.15	32	0.128	1.0
5G Wi-Fi	5180-5240	27.6	8.26	32	0.300	1.0
	5260-5320	21.73	8.26	32	0.078	1.0
	5500-5700	21.73	8.26	32	0.078	1.0
	5745-5825	27.2	8.26	32	0.273	1.0
6G Wi-Fi	5955-6145	16.0	7.55	32	0.018	1.0
	6435-6515	16.0	7.55	32	0.018	1.0
	6535-6855	16.0	7.55	32	0.018	1.0
	6875-7115	16.0	7.55	32	0.018	1.0

Note:

1) The tune up conducted power was declared by the applicant.

2) For the Wi-Fi mode, the antenna gain would be the directional gain.

3) The Bluetooth, 2.4G Wi-Fi, 5G Wi-Fi and 6G Wi-Fi can transmit simultaneously.

The ratio=$MPE_{Bluetooth}$/limit+$MPE_{2.4G\ Wi\text{-}Fi}$/limit+$MPE_{5G\ Wi\text{-}Fi}$/limit +$MPE_{6G\ Wi\text{-}Fi}$/limit
=0.006+0.128+0.300+0.018=0.452＜1.0, simultaneous exposure is not required.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 32cm from nearby persons.

Result: Compliance

5.2 RSS-102 § 4 –Exposure Limits

5.2.1 Applicable Standard

According to RSS-102 § 4:

Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)

Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m^2)	Reference Period (minutes)
0.003-10[21]	83	90	-	Instantaneous˙
0.1-10	-	0.73/ f	-	6¨
1.1-10	87/ $f^{0.5}$	-	-	6¨
10-20	27.46	0.0728	-2	6
20-48	58.07/ $f^{0.25}$	0.1540/ $f^{0.25}$	8.944/ $f^{0.5}$	6
48-300	22.06	0.05852	1.291	6
300-6000	3.142 $f^{0.3417}$	0.008335 $f^{0.3417}$	0.02619 $f^{0.6834}$	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	616000/ $f^{1.2}$
150000-300000	0.158 $f^{0.5}$	4.21 x 10^{-4} $f^{0.5}$	6.67 x 10^{-5} f	616000/f

Note: f is frequency in MHz.
˙ Based on nerve stimulation (NS).
¨ Based on specific absorption rate (SAR).

5.2.2 Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. W/m^2)
P = power input to the antenna (in appropriate units, e.g., W).
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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

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

Mode	Frequency (MHz)	Tune Up Conducted Power (dBm)	Antenna Gain (dBi) (Note 2)	Evaluation Distance (m)	Power Density (W/m^2)	MPE Limit (W/m^2)
Bluetooth	2402-2480	14.5	4.45	0.32	0.061	5.351
BLE	2402-2480	14.0	4.45	0.32	0.054	5.351
2.4G Wi-Fi	2412-2462	25.0	7.15	0.32	1.276	5.366
5G Wi-Fi	5180-5240	27.6	8.26	0.32	2.997	9.047
	5260-5320	21.73	8.26	0.32	0.776	9.142
	5500-5700	21.73	8.26	0.32	0.776	9.425
	5745-5825	27.2	8.26	0.32	2.733	9.710
6G Wi-Fi	5955-6145	16.0	7.55	0.32	0.176	9.952
	6435-6515	16.0	7.55	0.32	0.176	10.493
	6535-6855	16.0	7.55	0.32	0.176	10.604
	6875-7115	16.0	7.55	0.32	0.176	10.978

Note:

1) The tune up conducted power was declared by the applicant.

2) For the Wi-Fi mode, the antenna gain would be the directional gain.

3) The Bluetooth, 2.4G Wi-Fi, 5G Wi-Fi and 6G Wi-Fi can transmit simultaneously.

The ratio=$MPE_{Bluetooth}$/limit+$MPE_{2.4G\ Wi\text{-}Fi}$/limit+$MPE_{5G\ Wi\text{-}Fi}$/limit +$MPE_{6G\ Wi\text{-}Fi}$/limit
=0.061/5.351+1.276/5.366+2.997/9.047+0.176/9.952=0.598＜1.0, simultaneous exposure is not required.

To maintain compliance with the ISEDC's RF exposure guidelines, place the equipment at least 32cm from nearby persons.

6. EUT PHOTOGRAPHS

Please refer to the attachment CR230955399-EXP EUT EXTERNAL PHOTOGRAPHS and CR230955399-INP EUT INTERNAL PHOTOGRAPHS.

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230955399-00E-TSP TEST SETUP PHOTOGRAPHS.

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