



# TEST REPORT

**Applicant:** Evolve 3 Holdings Pty Ltd

Address: PO BOX 6222, NARRAWEENA, NSW, Australia

**FCC ID:** 2AWLG-T3P116V1

**Product Name:** Laptop

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

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

**Report Number:** CR231061450-00D

**Date Of Issue:** 2024/1/12

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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.

## Declarations

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## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR231061450-00D	Original Report	2024/1/12

## 1. GENERAL INFORMATION

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

#### 1.1.1 General:

<b>EUT Name:</b>	Laptop
<b>EUT Model:</b>	T3P116V1
<b>Trade Name:</b>	
<b>Operation Frequency:</b>	<p><b>U-NII-1:</b>            5180-5240 MHz (802.11a/n ht20/ac vht20/ax hew20)            5190-5230 MHz (802.11n ht40/ac vht40/ax hew40)            5210 MHz (802.11ac vht80/ax hew80)</p> <p><b>U-NII-2A:</b>            5260-5320 MHz (802.11a/n ht20/ac vht20/ax hew20)            52700-5310 MHz (802.11n ht40/ac vht40/ax hew40)            5290 MHz (802.11ac vht80/ax hew80)</p> <p><b>U-NII-2C:</b>            5500-5720 MHz (802.11a/n ht20/ac vht20/ax hew20)            5510-5710 MHz (802.11n ht40/ac vht40/ax hew40)            5530-5690 MHz (802.11ac vht80/ax hew80)</p> <p><b>U-NII-3:</b>            5745-5825 MHz (802.11a/n ht20/ac vht20/ax hew20)            5755-5795 MHz (802.11n ht40/ac vht40/ax hew40)            5775 MHz (802.11ac vht80/ax hew80)</p>
<b>Maximum Average Output Power (Conducted):</b>	14.18dBm (5150-5250 MHz) 14.20dBm (5250-5350 MHz) 13.98dBm (5470-5725 MHz) 14.06dBm (5725-5850 MHz)
<b>Modulation Type:</b>	802.11a/n/ac: OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
<b>Rated Input Voltage:</b>	DC 20V from AC/DC Adapter (Type-C) or DC 20V from AC/DC Adapter (DC IN) or DC 7.6V from Built-in Battery
<b>Serial Number:</b>	2CHV-1 (for Emissions Test) 2CHV-2 (for RF Conducted Test)
<b>EUT Received Date:</b>	2023/10/23
<b>EUT Received Status:</b>	Good

*Note:*

1. EUT has two external ports that can support power input, namely DC IN and Type-C. Please refer to the EUT external photos and product manual for details. The manufacturer declares that two input ports cannot input power simultaneously.
2. These two power input ports of product were evaluated in the CR231061450-00A report for the AC Line Conducted Emissions Test and Radiation Spurious Emissions Test. The report showed that powered from DC IN had worse emissions in AC Line Conducted Emissions Test and Radiation Spurious Emissions Test. Therefore, only the test results of product equipped with worst case adapter are reflected in this report.

**1.1.2 Operation Frequency Detail:  
For 802.11a/n ht20/ac vht20/ ax hew20:**

<b>5150-5250MHz Band</b>		<b>5250-5350 MHz Band</b>		<b>5470-5725 MHz Band</b>		<b>5725-5850MHz Band</b>	
<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>
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
/	/	/	/	132	5660	/	/
/	/	/	/	136	5680	/	/
/	/	/	/	140	5700	/	/
/	/	/	/	144	5720	/	/

Per section 15.31(m), the below frequencies were performed the test:

<b>Test Channel</b>	<b>Test Frequency (MHz)</b>			
	<b>5150-5250MHz Band</b>	<b>5250-5350 MHz Band</b>	<b>5470-5725 MHz Band</b>	<b>5725-5850MHz Band</b>
Lowest	5180	5260	5500	5745
Middle	5200	5280	5580	5785
Highest	5240	5320	5700	5825
Additional	/	/	5720	/

**For 802.11n ht40/ac vht40/ ax hew40:**

<b>5150-5250MHz Band</b>		<b>5250-5350 MHz Band</b>		<b>5470-5725 MHz Band</b>		<b>5725-5850MHz Band</b>	
<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Channel</b>	<b>Frequency (MHz)</b>
38	5190	54	5270	102	5510	151	5755
46	5230	62	5310	110	5550	159	5795
/	/	/	/	134	5670	/	/
/	/	/	/	142	5710	/	/

Per section 15.31(m), the below frequencies were performed the test:

<b>Test Channel</b>	<b>Test Frequency (MHz)</b>			
	<b>5150-5250MHz Band</b>	<b>5250-5350 MHz Band</b>	<b>5470-5725 MHz Band</b>	<b>5725-5850MHz Band</b>
Lowest	5190	5270	5510	5755
Middle	/	/	5550	/
Highest	5230	5310	5670	5795
Additional	/	/	5710	/

**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	/	/
/	/	/	/	138	5690	/	/

Per section 15.31(m), the below frequencies were performed the test:

Test Channel	Test Frequency (MHz)			
	5150-5250MHz Band	5250-5350 MHz Band	5470-5725 MHz Band	5725-5850MHz Band
Lowest	/	/	5530	/
Middle	5210	5290	5610	5775
Highest	/	/	5690	/

**1.1.3 Antenna Information Detail▲:**

Antenna Chain	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
<b>Main Antenna</b> (Support WLAN)(Chain 1)	FPC	50	5.15-5.25GHz& 5.725~5.85GHz	3.52dBi
<b>AUX Antenna</b> (Support BT+WLAN) (Chain 0)	FPC	50	5.15-5.25GHz& 5.725~5.85GHz	3.55dBi

The Method of §15.203 Compliance:

- Antenna was permanently attached to the unit.
- Antenna use a unique type of connector to attach to the EUT.
- Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

**1.1.4 Accessory Information:**

Accessory Description	Manufacturer	Model	Parameters
AC/DC Adapter (Type-C)	Shenzhen Jihongda Power Co., Ltd.	JHD-AP045U-PD-BF502	<b>Input:</b> 100-240V~50/60Hz1.5A <b>Output:</b> 5V 3A/9V 3A/12V 3A /15V 3A/20V 2.25A

## 1.2 Description of Test Configuration

### 1.2.1 EUT Operation Condition

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

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

#### 5150-5250 MHz Band:

<b>Test Modes</b>	<b>Test Channels</b>	<b>Test Frequency</b>	<b>Data Rate</b>	<b>Power Level Setting</b>	
				<b>Chain 0</b>	<b>Chain 1</b>
802.11a	Lowest	5180	6Mbps	<b>13</b>	<b>13</b>
	Middle	5200	6Mbps	<b>13</b>	<b>13</b>
	Highest	5240	6Mbps	<b>13</b>	<b>13</b>
802.11n ht20	Lowest	5180	HT8	<b>10</b>	<b>10</b>
	Middle	5200	HT8	<b>10</b>	<b>10</b>
	Highest	5240	HT8	<b>10</b>	<b>10</b>
802.11n ht40	Lowest	5190	HT8	<b>10</b>	<b>10</b>
	Highest	5230	HT8	<b>10</b>	<b>10</b>
802.11ac vht80	Middle	5210	VHT8	<b>10</b>	<b>10</b>
802.11ax hew20	Lowest	5180	MCS8	<b>13</b>	<b>13</b>
	Middle	5200	MCS8	<b>13</b>	<b>13</b>
	Highest	5240	MCS8	<b>13</b>	<b>13</b>
802.11ax hew40	Lowest	5190	MCS8	<b>13</b>	<b>13</b>
	Highest	5230	MCS8	<b>13</b>	<b>13</b>
802.11ax hew80	Middle	5210	MCS8	<b>13</b>	<b>13</b>

#### 5250-5350 MHz Band:

<b>Test Modes</b>	<b>Test Channels</b>	<b>Test Frequency</b>	<b>Data Rate</b>	<b>Power Level Setting</b>	
				<b>Chain 0</b>	<b>Chain 1</b>
802.11a	Lowest	5260	6Mbps	<b>13</b>	<b>13</b>
	Middle	5280	6Mbps	<b>13</b>	<b>13</b>
	Highest	5320	6Mbps	<b>13</b>	<b>13</b>
802.11n ht20	Lowest	5260	HT8	<b>10</b>	<b>10</b>
	Middle	5280	HT8	<b>10</b>	<b>10</b>
	Highest	5320	HT8	<b>10</b>	<b>10</b>
802.11n ht40	Lowest	5270	HT8	<b>10</b>	<b>10</b>
	Highest	5310	HT8	<b>10</b>	<b>10</b>
802.11ac vht80	Middle	5290	VHT8	<b>10</b>	<b>10</b>
802.11ax hew20	Lowest	5260	MCS8	<b>13</b>	<b>13</b>
	Middle	5280	MCS8	<b>13</b>	<b>13</b>
	Highest	5320	MCS8	<b>13</b>	<b>13</b>
802.11ax hew40	Lowest	5270	MCS8	<b>13</b>	<b>13</b>
	Highest	5310	MCS8	<b>13</b>	<b>13</b>
802.11ax hew80	Middle	5290	MCS8	<b>13</b>	<b>13</b>

**5470-5725 MHz Band:**

Test Modes	Test Channels	Test Frequency	Data Rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5500	6Mbps	13	13
	Middle	5580	6Mbps	13	13
	Highest	5700	6Mbps	13	13
	Cross	5720	6Mbps	13	13
802.11n ht20	Lowest	5500	HT8	10	10
	Middle	5580	HT8	10	10
	Highest	5700	HT8	10	10
	Cross	5720	HT8	10	10
802.11n ht40	Lowest	5510	HT8	10	10
	Middle	5550	HT8	10	10
	Highest	5670	HT8	10	10
	Cross	5710	HT8	10	10
802.11ac vht80	Lowest	5530	VHT8	10	10
	Middle	5610	VHT8	10	10
	Highest	5690	VHT8	10	10
802.11ax hew20	Lowest	5500	MCS8	13	13
	Middle	5580	MCS8	13	13
	Highest	5700	MCS8	13	13
	Cross	5720	MCS8	13	13
802.11ax hew40	Lowest	5510	MCS8	13	13
	Middle	5550	MCS8	13	13
	Highest	5670	MCS8	13	13
	Cross	5710	MCS8	13	13
802.11ax hew80	Lowest	5530	MCS8	13	13
	Middle	5610	MCS8	13	13
	Highest	5690	MCS8	13	13

**5725-5850 MHz Band:**

Test Modes	Test Channels	Test Frequency	Data Rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5745	6Mbps	13	13
	Middle	5785	6Mbps	13	13
	Highest	5825	6Mbps	13	13
802.11n ht20	Lowest	5745	VHT8	10	10
	Middle	5785	VHT8	10	10
	Highest	5825	VHT8	10	10
802.11n ht40	Lowest	5755	VHT8	10	10
	Highest	5795	VHT8	10	10
802.11ac vht80	Middle	5775	VHT8	10	10
802.11ax hew20	Lowest	5745	MCS8	13	13
	Middle	5785	MCS8	13	13
	Highest	5825	MCS8	13	13

802.11ax hew40	Lowest	5755	MCS8	<b>13</b>	<b>13</b>
	Highest	5795	MCS8	<b>13</b>	<b>13</b>
802.11ax hew80	Middle	5775	MCS8	<b>13</b>	<b>13</b>

Note:

1. The system support 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80/ax hew20/ax hew40/ax hew80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.
2. 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.
3. The device supports SISO in all modes, and MIMO 2T2R in 802.11n/ac/ax modes, per pretest, 2T2R mode was the worst mode and reported for 802.11n/ac/ax modes.
4. For 802.11 ax mode, the device only supports full-RU.

### 1.2.2 Support Equipment List and Details

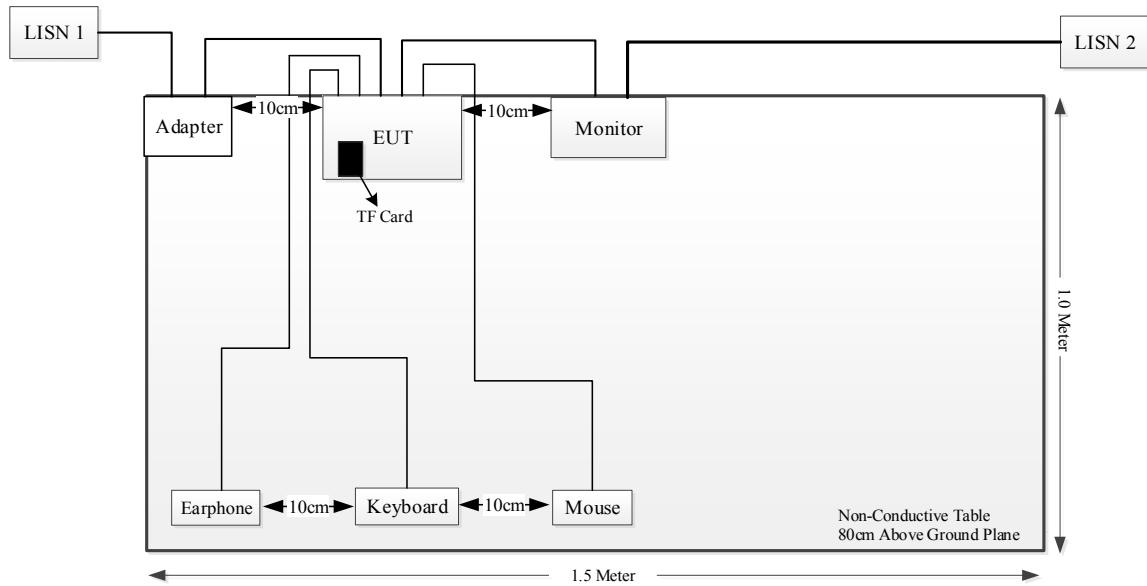
Manufacturer	Description	Model	Serial Number
PHILIPS	Monitor	24PFF5595/T3	XM2A2124000343
SanDisk	TF Card	16 GB	1183DRECV11N
Xinspower	AC/DC Adapter (DC IN)	A361-1203000D	Unknown
CLC	Earphone	Whiteview5.0	EP21107125
DongFeng	Phone	P3	UP3_BSGF187E000165
PHILIPS	Keyboard	SPT6234	K234210510746
PHILIPS	Mouse	SPT6234	C234210506222

### 1.2.3 Support Cable List and Details

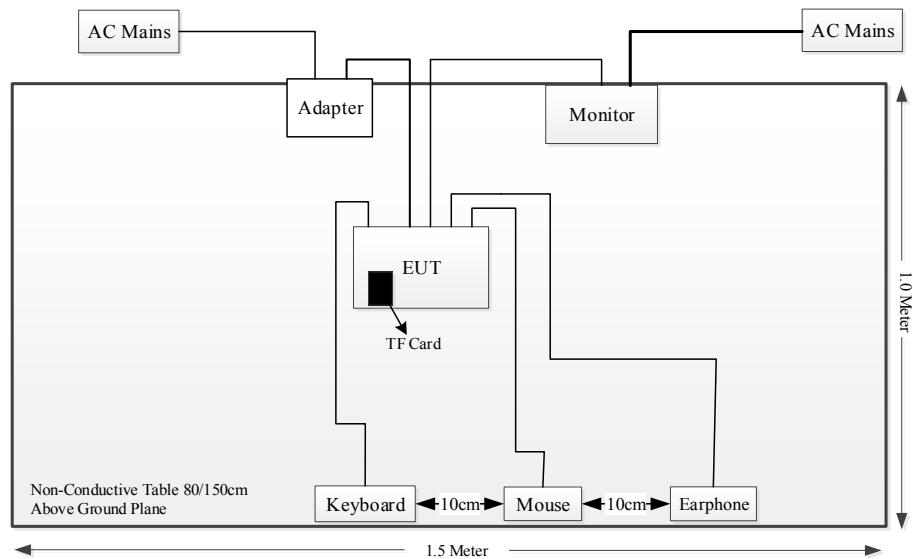
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Adapter DC Output Power Cable	no	no	2.0	AC/DC Adapter (DC IN)	EUT
AC Power Cable	no	no	1.0	AC/DC Adapter (DC IN)	LISN
Earphone Cable	no	no	1.5	EUT	Earphone
HDMI Cable	no	no	1.0	EUT	Monitor
Keyboard Cable	no	no	1.5	EUT	Keyboard
Mouse Cable	no	no	1.5	EUT	Mouse

### 1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Radiation 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	9kHz~30MHz: 4.12dB, 30MHz~200MHz: 4.15 dB, 200MHz~1GHz: 5.61 dB, 1GHz~6GHz: 5.14 dB, 6GHz~18GHz: 5.93 dB, 18GHz~26.5GHz: 5.47 dB, 26.5GHz~40GHz: 5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1°C
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
FCC§15.207(a)	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b)	Radiated Spurious Emissions	Compliant
FCC§15.407 (c)	Automatically Discontinue Transmission	Compliant*
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407(a)	Conducted Transmitter Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
FCC§15.407 (g)	Frequency Stability	Compliant**
FCC§15.203	Antenna Requirement	Compliant

**Note:**

**Compliant\*:** During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving, the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

**Compliant\*\*:** Grantee ensure that the product meets e-CFR Title 47 section 15.407(g) and KDB 789033 D02v02r01 frequency stability such that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 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  $\mu$ H/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.

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

\*Decreases with the logarithm of the frequency.

(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:

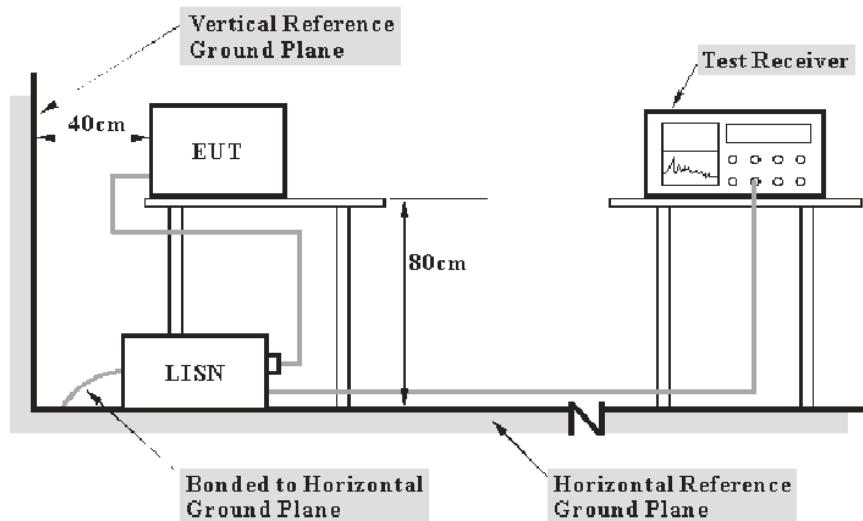
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000  $\mu$ V within the frequency band 535-1705 kHz, as measured using a 50  $\mu$ H/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, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

### 3.1.2 EUT Setup



**Note:**

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

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

The spacing between the peripherals was 10 cm.

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

### 3.1.3 EMI Test Receiver Setup

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

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

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

### 3.1.4 Test Procedure

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

### 3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

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

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

Margin = Limit – Result

### 3.2 Radiation Spurious Emissions

#### 3.2.1 Applicable Standard

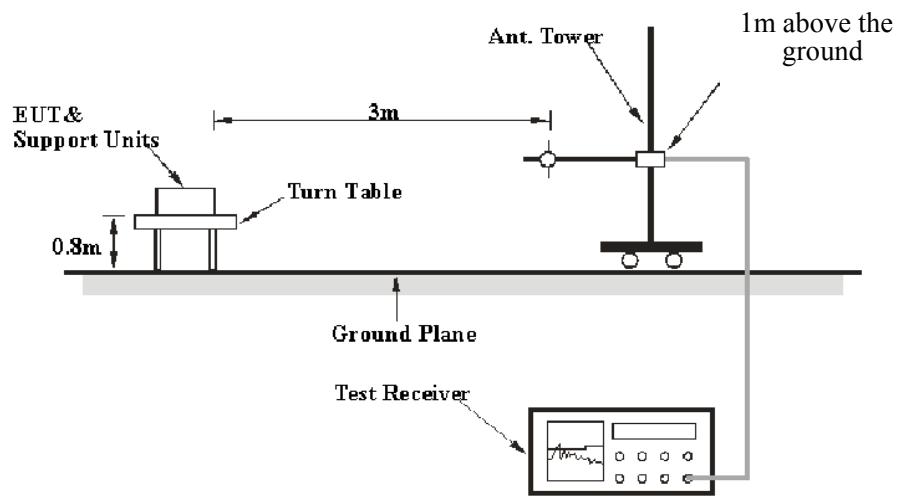
FCC §15.407 (b);

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

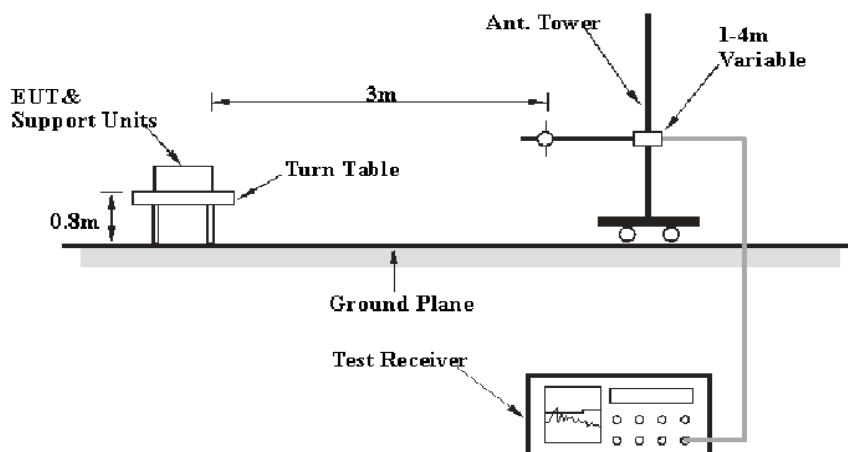
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (4) For transmitters operating solely in the 5.725-5.850 GHz band:
    - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
    - (ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.
  - (8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
  - (9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.
  - (10) The provisions of § 15.205 apply to intentional radiators operating under this section.
  - (11) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.
- (c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

### 3.2.2 EUT Setup

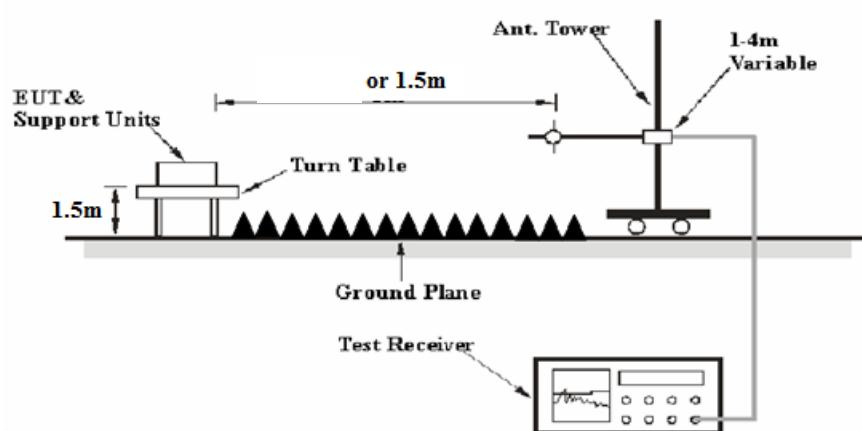
9kHz~30MHz:



30MHz~1GHz:



1-40 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, FCC 15.407 limits.

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

The spacing between the peripherals was 10 cm.

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

### 3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9kHz to 40 GHz.

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

9kHz-1000MHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	300 Hz	1 kHz	/	PK
	/	/	200 Hz	QP/AV
150 kHz – 30 MHz	10 kHz	30 kHz	/	PK
	/	/	9 kHz	QP/AV
30 MHz – 1000 MHz	100 kHz	300 kHz	/	PK
	/	/	120 kHz	QP

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 9 kHz-1 GHz, average detection modes for the frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as:  $E [dB\mu V/m] = EIRP [dBm] + 95.2$ , 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 = $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]})$  dB= 6.02 dB

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

### **3.2.5 Corrected Amplitude & Margin Calculation**

The basic equation is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:

Result = Reading + Factor

For 1GHz-40GHz

Result = Reading + Factor-Distance extrapolation Factor

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

Margin = Limit – Result

### 3.3 Emission Bandwidth

#### 3.3.1 Applicable Standard

FCC §15.407 (a)

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. 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.

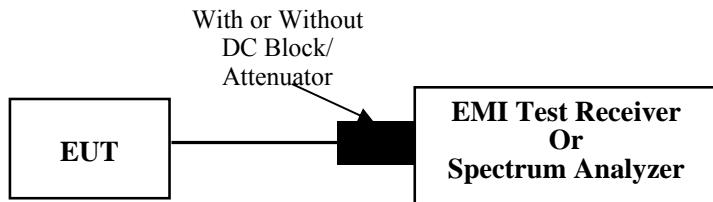
FCC §15.407 (e)

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.

FCC §15.407 (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.

#### 3.3.2 EUT Setup



#### 3.3.3 Test Procedure

##### 26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

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

**6 dB emission bandwidth:**

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

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

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

**99% Occupied Bandwidth:**

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

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

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

### 3.4 Maximum Conducted Output Power

#### 3.4.1 Applicable Standard

FCC §15.407(a) (1)

(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.

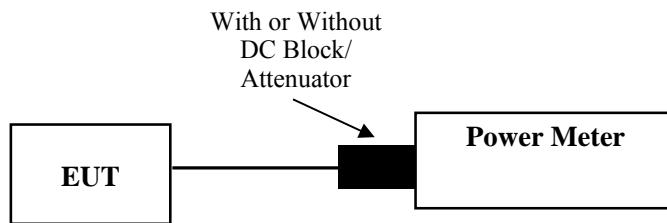
FCC §15.407(a) (2)

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  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### 3.4.2 EUT Setup



#### 3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 12.3.3.2

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

### 3.5 Maximum Power Spectral Density

#### 3.5.1 Applicable Standard

FCC §15.407(a) (1)

(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.

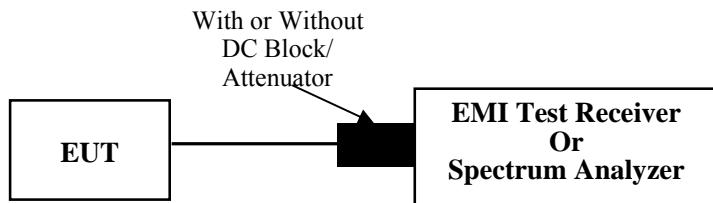
FCC §15.407(a) (2)

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  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### 3.5.2 EUT Setup



### **3.5.3 Test Procedure**

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

**Duty cycle  $\geq 98\%$**

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

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

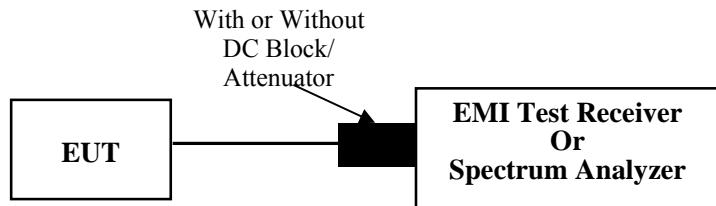
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

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

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

### 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  $\geq$  OBW if possible; otherwise, set RBW to the largest available value.
- 3) Set VBW  $\geq$  RBW. Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are  $> 50/T$  and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if  $T \leq 16.7 \mu\text{s}$ .)

### **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.

#### **3.8.2 Judgment**

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

## 4. Test DATA AND RESULTS

### 4.1 AC Line Conducted Emissions

Serial Number:	2CHV-1	Test Date:	2023/11/15
Test Site:	CE	Test Mode:	Transmitting
Tester:	David Huang	Test Result:	Pass

#### Environmental Conditions:

Temperature: (°C)	26.4	Relative Humidity: (%)	46	ATM Pressure: (kPa)	101.7
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#### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2023/3/31	2024/3/30
R&S	LISN	ENV216	101134	2023/3/31	2024/3/30
R&S	EMI Test Receiver	ESR3	102726	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/8/6	2024/8/5
Audix	Test Software	E3	190306 (V9)	N/A	N/A

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

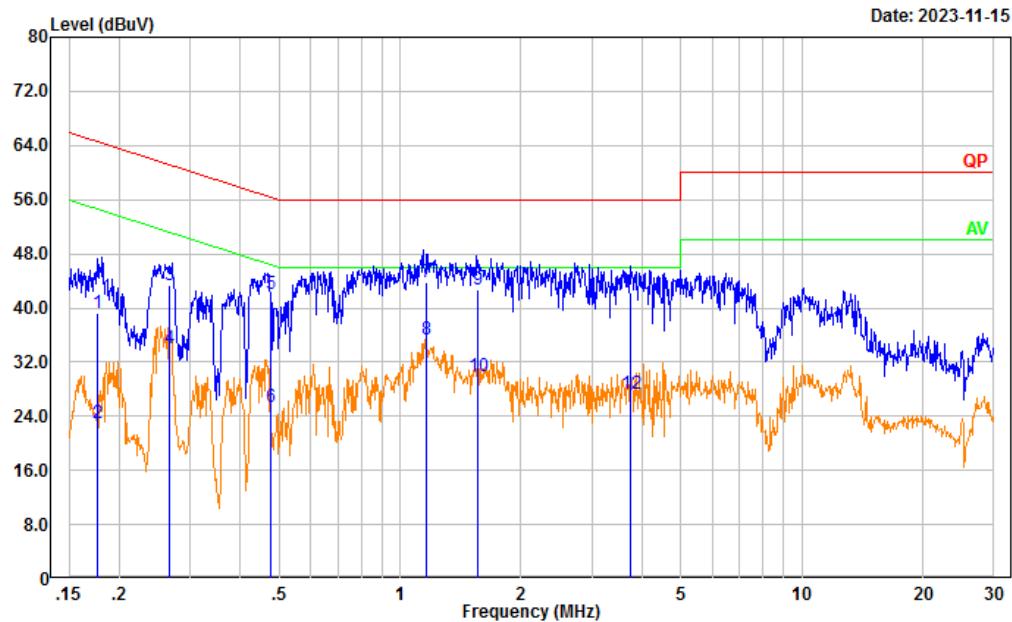
#### Test Data:

##### Note:

1. Powered from DC IN port was the worst.
2. Tested at Maximum output power mode: 802.11ax hew20, 5320MHz.

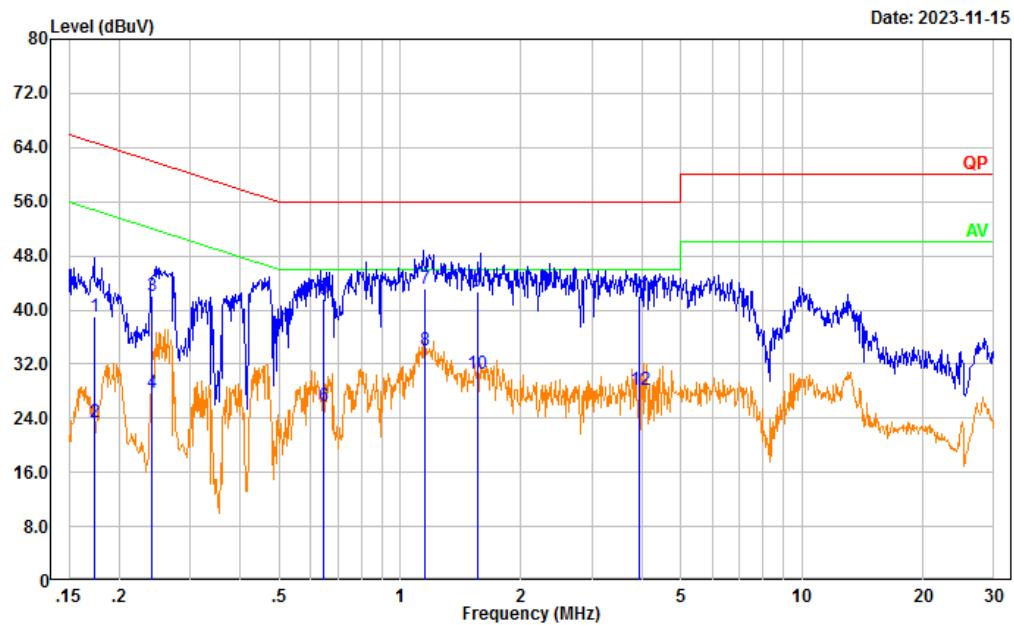
Please refer to the below plots.

Project No.: CR231061450-RF  
Tester: David Huang  
Port: Line  
Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB)	Result (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Detector
<hr/>							
1	0.177	29.66	9.61	39.27	64.64	25.37	QP
2	0.177	13.30	9.61	22.91	54.64	31.73	Average
3	0.267	33.78	9.61	43.39	61.21	17.82	QP
4	0.267	24.52	9.61	34.13	51.21	17.08	Average
5	0.475	32.42	9.61	42.03	56.42	14.39	QP
6	0.475	15.69	9.61	25.30	46.42	21.12	Average
7	1.167	34.09	9.62	43.71	56.00	12.29	QP
8	1.167	25.64	9.62	35.26	46.00	10.74	Average
9	1.561	32.99	9.63	42.62	56.00	13.38	QP
10	1.561	20.28	9.63	29.91	46.00	16.09	Average
11	3.735	32.63	9.65	42.28	56.00	13.72	QP
12	3.735	17.69	9.65	27.34	46.00	18.66	Average

Project No.: CR231061450-RF  
Tester: David Huang  
Port: neutral  
Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB)	Result (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Detector
1	0.173	29.36	9.61	38.97	64.79	25.82	QP
2	0.173	13.73	9.61	23.34	54.79	31.45	Average
3	0.241	32.43	9.61	42.04	62.05	20.01	QP
4	0.241	18.08	9.61	27.69	52.05	24.36	Average
5	0.648	32.08	9.62	41.70	56.00	14.30	QP
6	0.648	16.18	9.62	25.80	46.00	20.20	Average
7	1.154	33.58	9.62	43.20	56.00	12.80	QP
8	1.154	24.48	9.62	34.10	46.00	11.90	Average
9	1.554	33.11	9.63	42.74	56.00	13.26	QP
10	1.554	21.01	9.63	30.64	46.00	15.36	Average
11	3.924	32.51	9.65	42.16	56.00	13.84	QP
12	3.924	18.62	9.65	28.27	46.00	17.73	Average

## 4.2 Radiation Spurious Emissions

Serial Number:	2CHV-1	Test Date:	2023/11/15~2024/1/11
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Jeff Luo, Tao Zhu	Test Result:	Pass

### Environmental Conditions:

Temperature: (°C)	25.1~26.3	Relative Humidity: (%)	52~57	ATM Pressure: (kPa)	101.4~101.8
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### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Radiation Spurious Emissions Below 1GHz</b>					
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
BACL	Loop Antenna	1313-1P	3092721	2023/10/20	2026/10/19
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
<b>Radiation Spurious Emissions Above 1GHz</b>					
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	2023/11/8	2024/11/7
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 Y axes is below:

Please refer to the below table and plots.

**1) Radiation Spurious Emissions Test Data (9kHz~30MHz)**

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

**2) Radiation Spurious Emissions Test Data (30MHz-1GHz)**

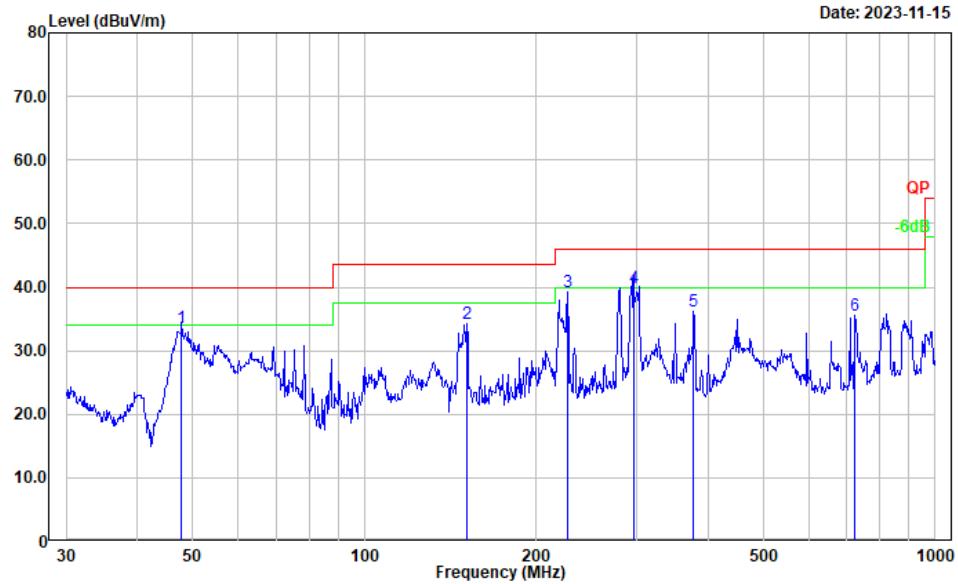
*Note:*

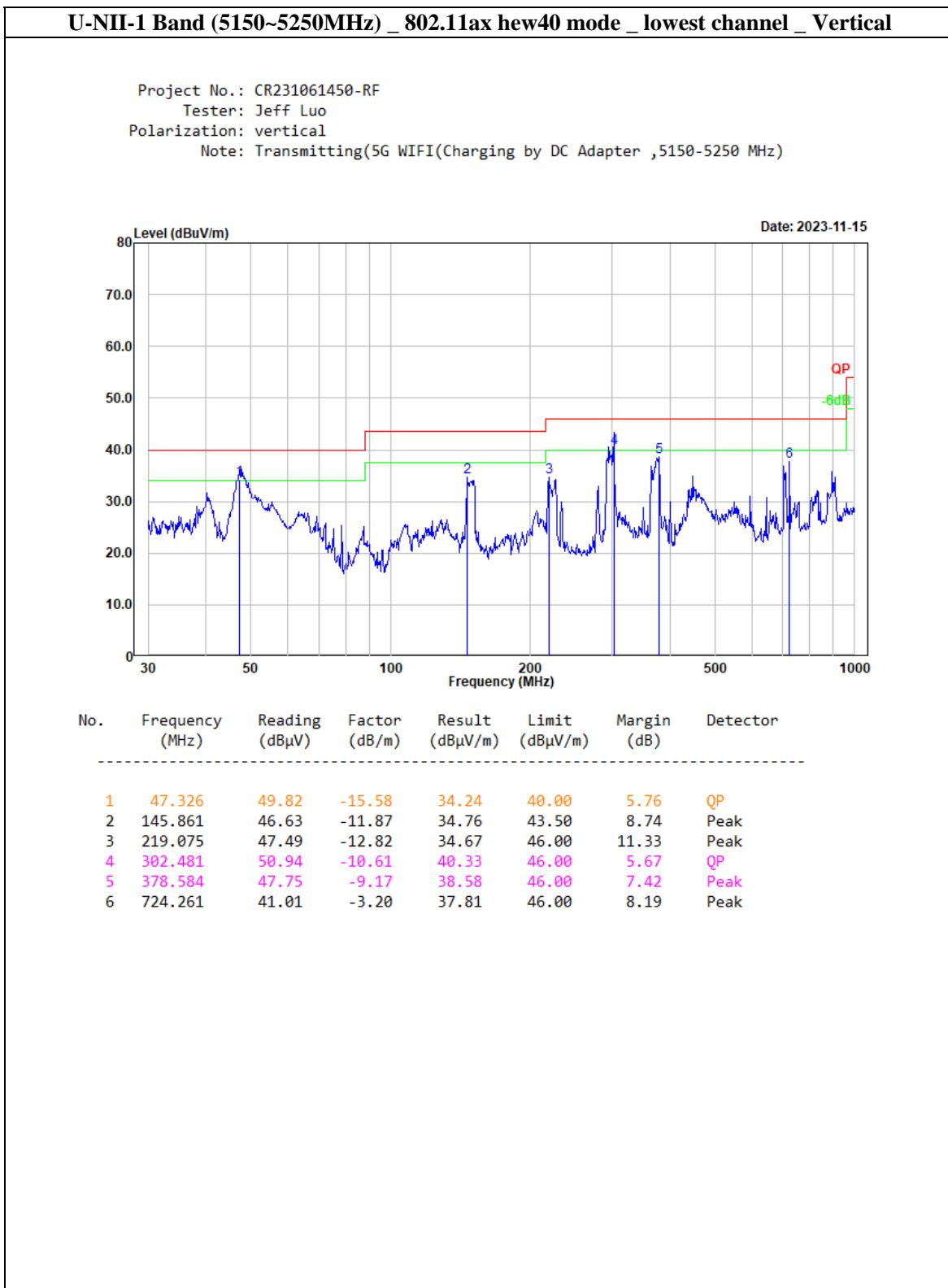
1. Powered from DC IN port was the worst.
2. Tested at Maximum output power mode:
  - 1) for U-NII-1 Band (5150~5250MHz): Tested at 802.11ax hew40 mode.
  - 2) for U-NII-2A Band (5250~5350MHz); U-NII-2C Band (5470~5725MHz); U-NII-3 Band (5725~5850MHz):  
Tested at 802.11ax hew20 mode.

Please refer to the below plots.

**U-NII-1 Band (5150~5250MHz) \_ 802.11ax hew40 mode \_ lowest channel \_ Horizontal**

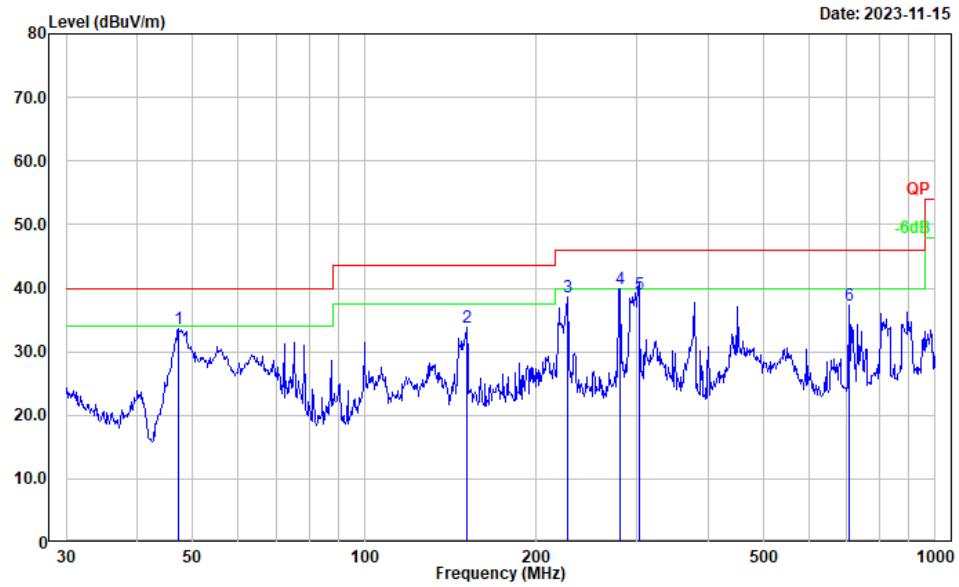
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5150-5250 MHz)



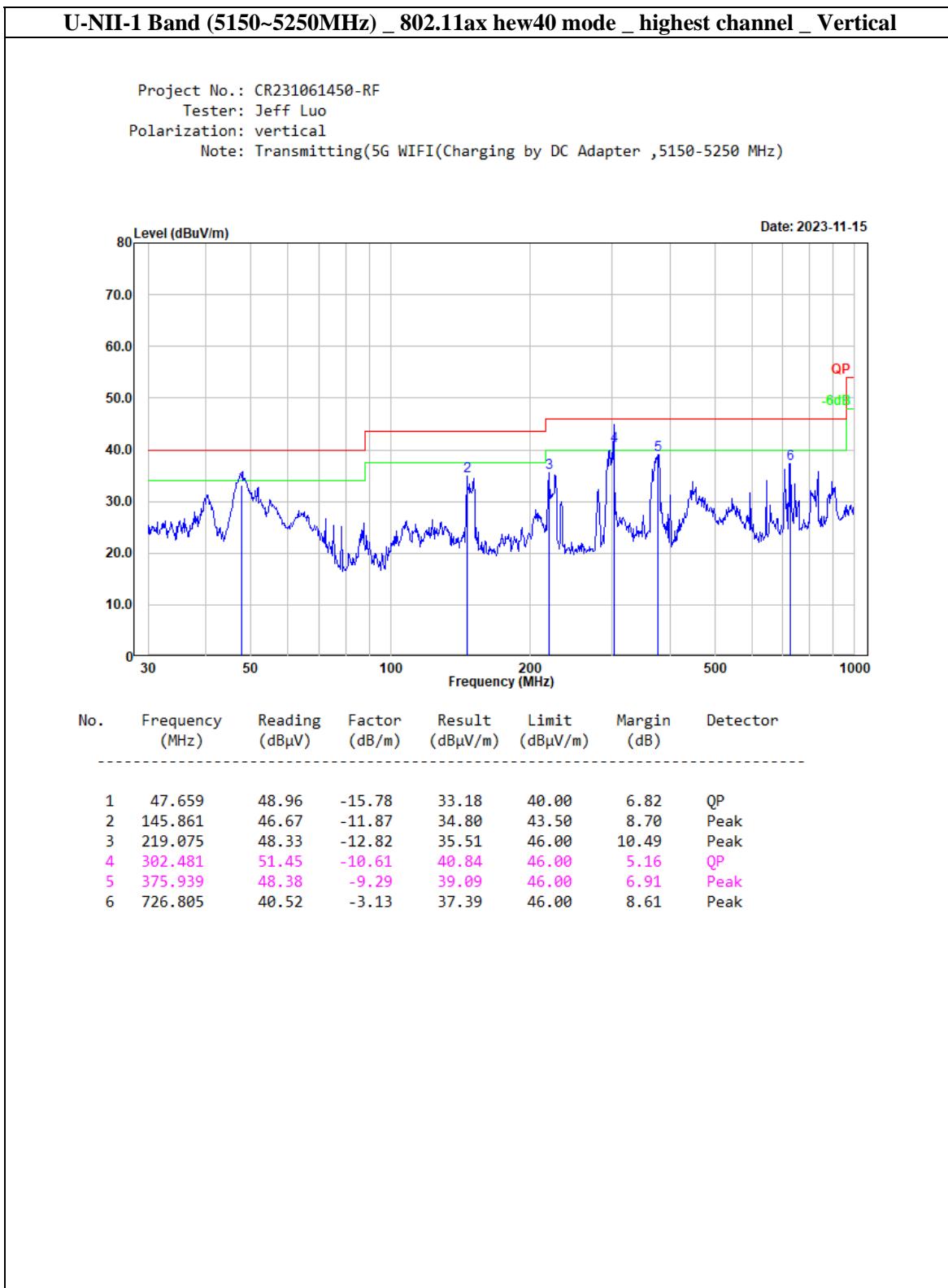


**U-NII-1 Band (5150~5250MHz) \_ 802.11ax hew40 mode \_ highest channel \_ Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5150-5250 MHz)

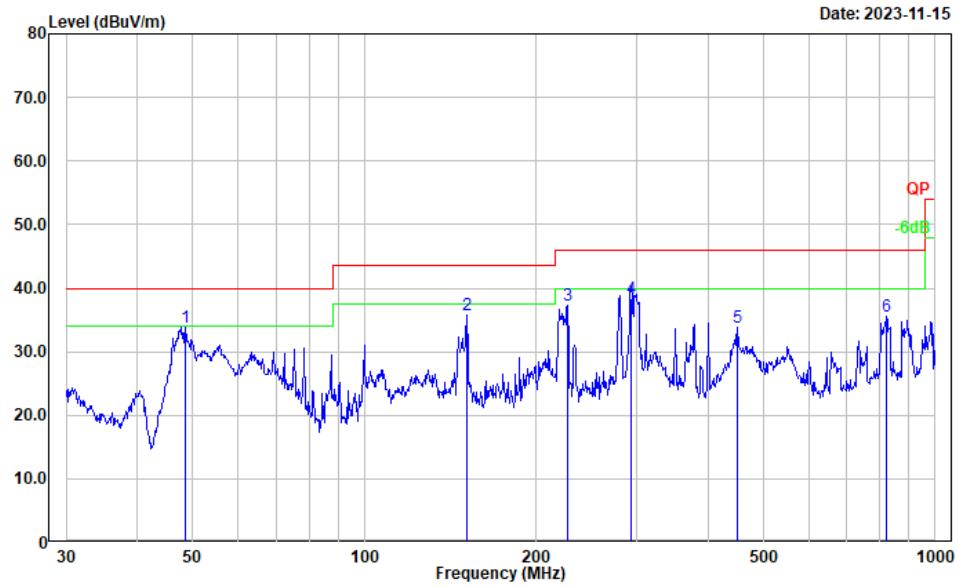


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.326	49.28	-15.58	33.70	40.00	6.30	Peak
2	151.067	45.87	-11.95	33.92	43.50	9.58	Peak
3	226.894	51.49	-12.97	38.52	46.00	7.48	Peak
4	281.008	51.54	-11.64	39.90	46.00	6.10	Peak
5	302.481	49.66	-10.61	39.05	46.00	6.95	QP
6	706.700	40.83	-3.59	37.24	46.00	8.76	Peak

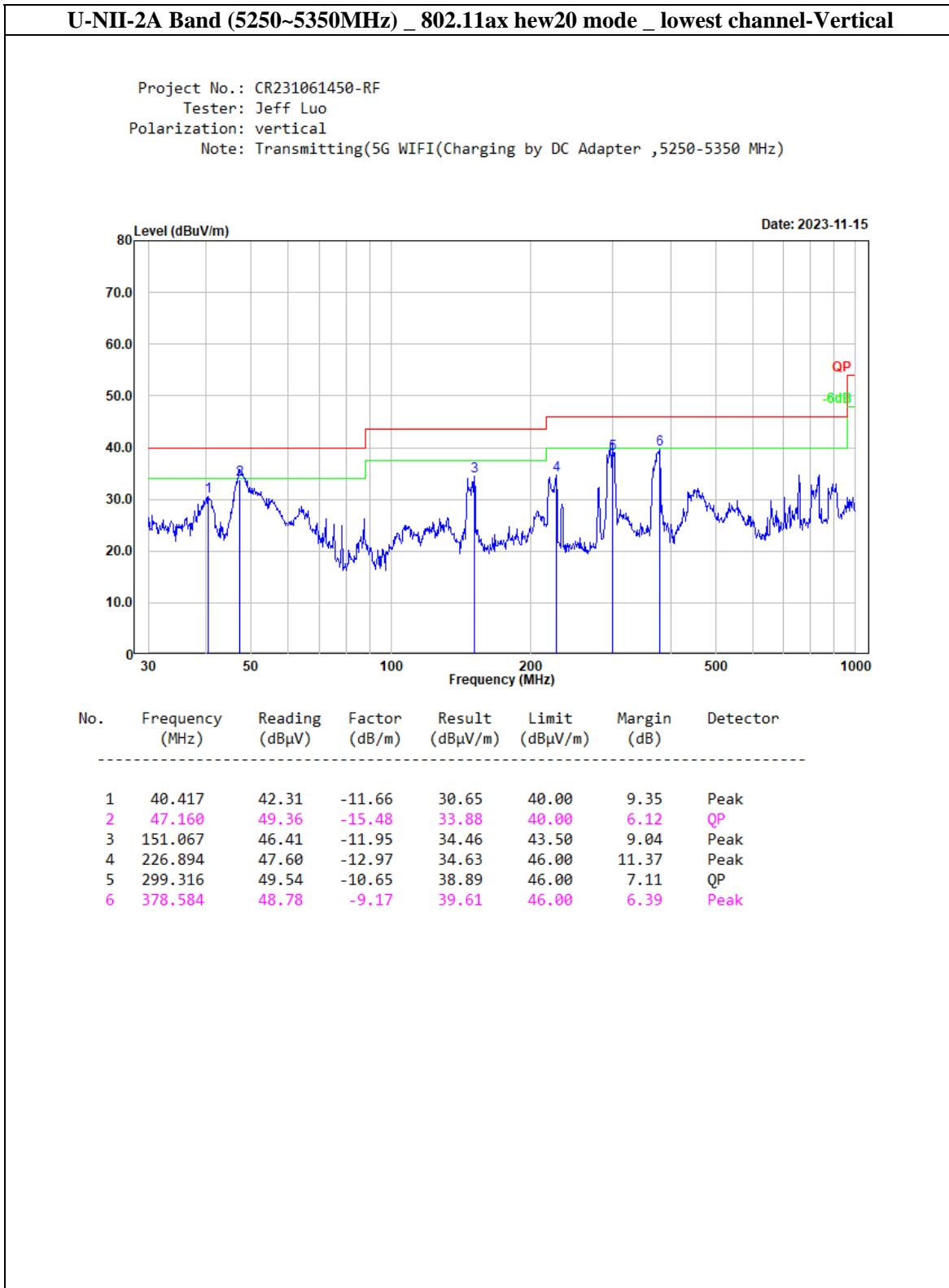


**U-NII-2A Band (5250~5350MHz) \_ 802.11ax hew20 mode \_ lowest channel-Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5250-5350 MHz)

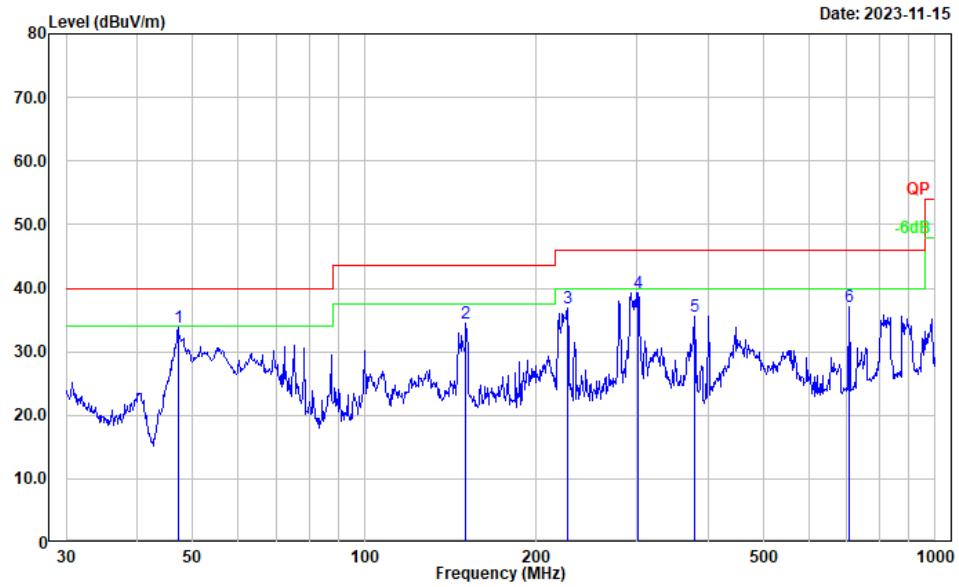


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	48.502	50.13	-16.24	33.89	40.00	6.11	Peak
2	151.067	47.80	-11.95	35.85	43.50	7.65	Peak
3	226.894	50.26	-12.97	37.29	46.00	8.71	Peak
4	293.084	49.26	-10.88	38.38	46.00	7.62	QP
5	451.135	40.83	-6.91	33.92	46.00	12.08	Peak
6	821.710	37.19	-1.71	35.48	46.00	10.52	Peak



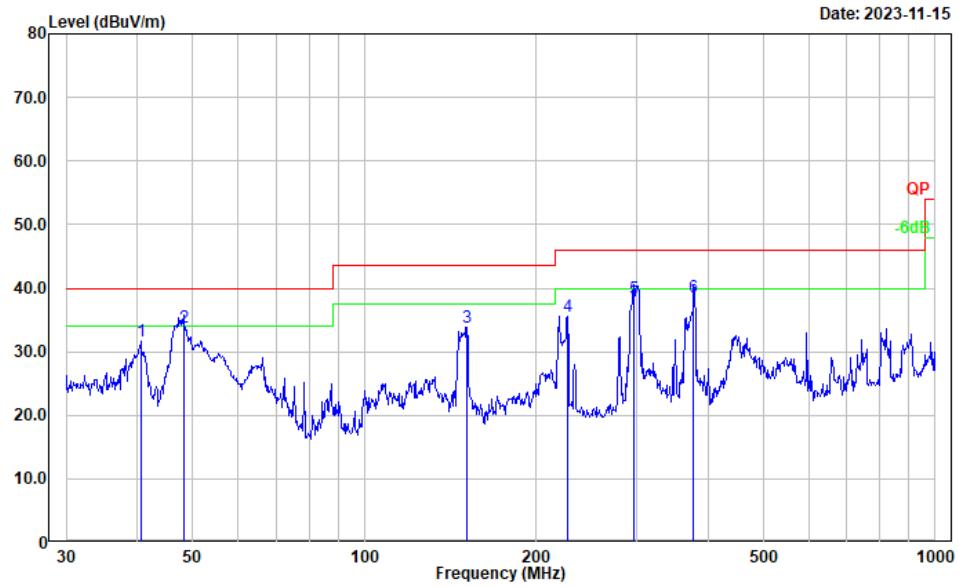
**U-NII-2A Band (5250~5350MHz) \_ 802.11ax hew20 mode \_ Middle Channel-Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5250-5350 MHz)



**U-NII-2A Band (5250~5350MHz) \_ 802.11ax hew20 mode \_ Middle Channel-Vertical**

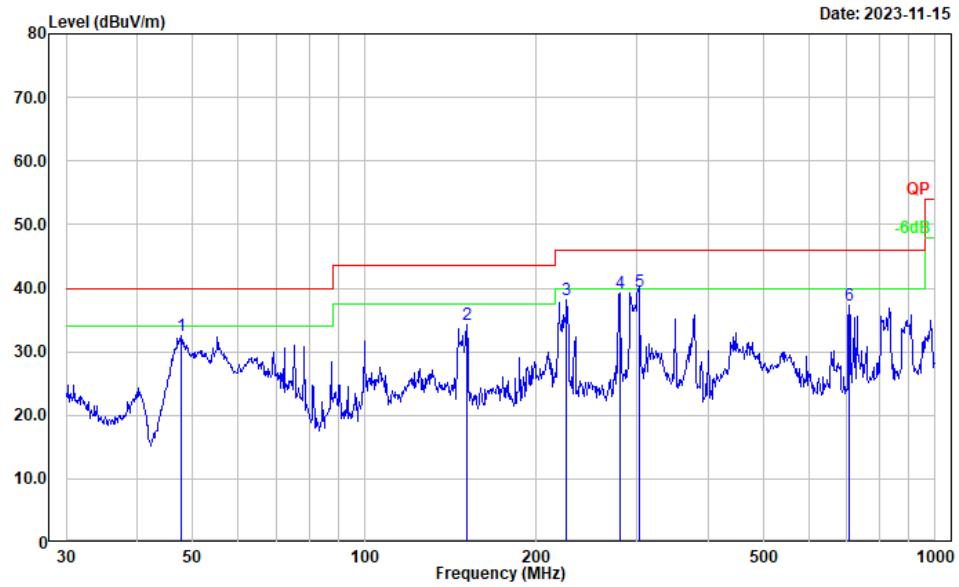
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: vertical  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5250-5350 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	40.559	43.35	-11.74	31.61	40.00	8.39	Peak
2	48.163	49.81	-16.06	33.75	40.00	6.25	QP
3	151.067	45.85	-11.95	33.90	43.50	9.60	Peak
4	226.894	48.56	-12.97	35.59	46.00	10.41	Peak
5	296.184	49.18	-10.74	38.44	46.00	7.56	QP
6	377.259	47.78	-9.22	38.56	46.00	7.44	QP

**U-NII-2A Band (5250~5350MHz) \_ 802.11ax hew20 mode \_ Highest Channel-Horizontal**

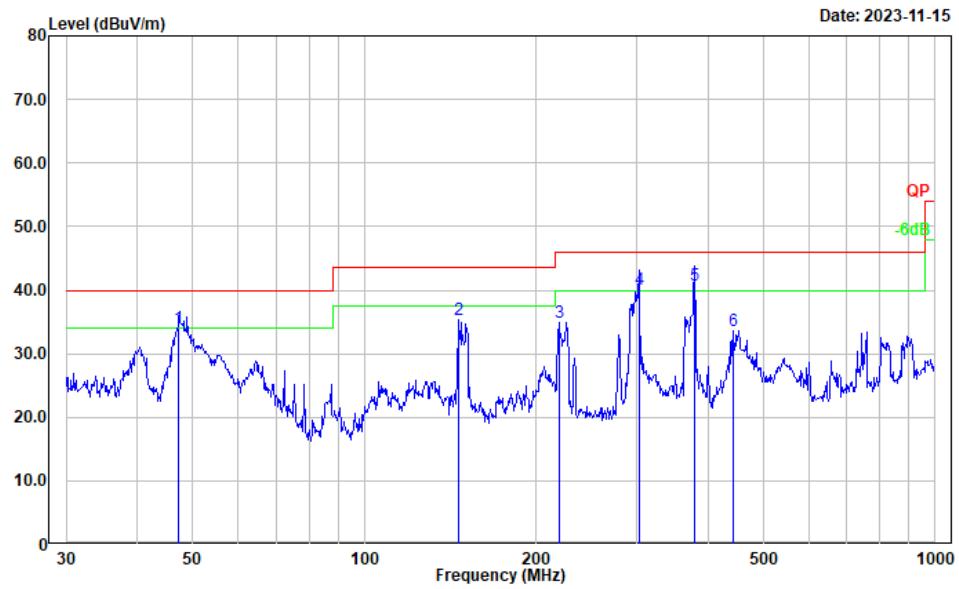
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5250-5350 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.826	48.43	-15.87	32.56	40.00	7.44	Peak
2	151.067	46.15	-11.95	34.20	43.50	9.30	Peak
3	226.099	51.08	-12.94	38.14	46.00	7.86	Peak
4	280.024	50.88	-11.70	39.18	46.00	6.82	Peak
5	302.481	49.97	-10.61	39.36	46.00	6.64	QP
6	706.700	40.79	-3.59	37.20	46.00	8.80	Peak

**U-NII-2A Band (5250~5350MHz) \_ 802.11ax hew20 mode \_ Highest Channel-Vertical**

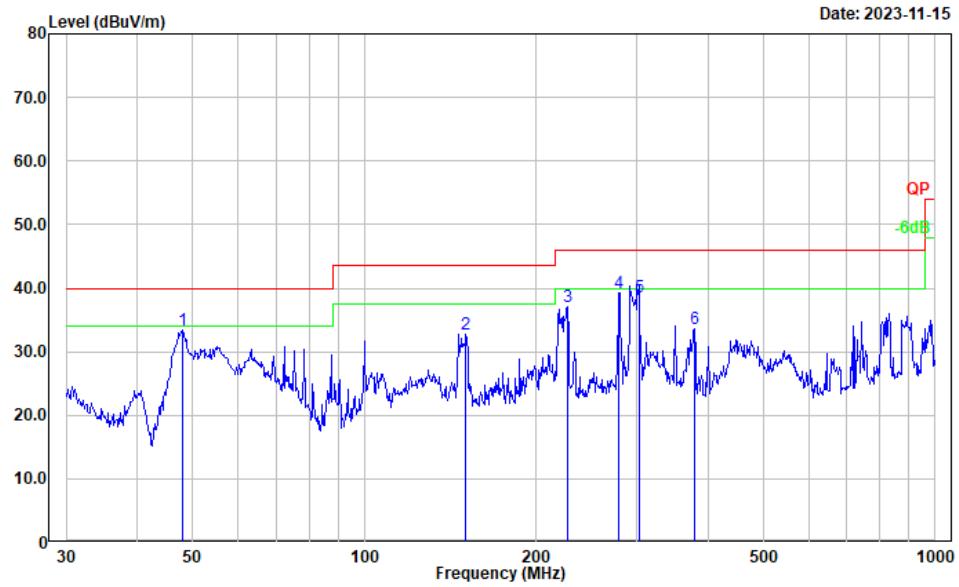
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: vertical  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5250-5350 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.326	49.59	-15.58	34.01	40.00	5.99	QP
2	145.861	47.13	-11.87	35.26	43.50	8.24	Peak
3	219.075	47.74	-12.82	34.92	46.00	11.08	Peak
4	302.481	50.72	-10.61	40.11	46.00	5.89	QP
5	378.584	49.99	-9.17	40.82	46.00	5.18	QP
6	441.743	40.93	-7.24	33.69	46.00	12.31	Peak

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Lowest Channel-Horizontal**

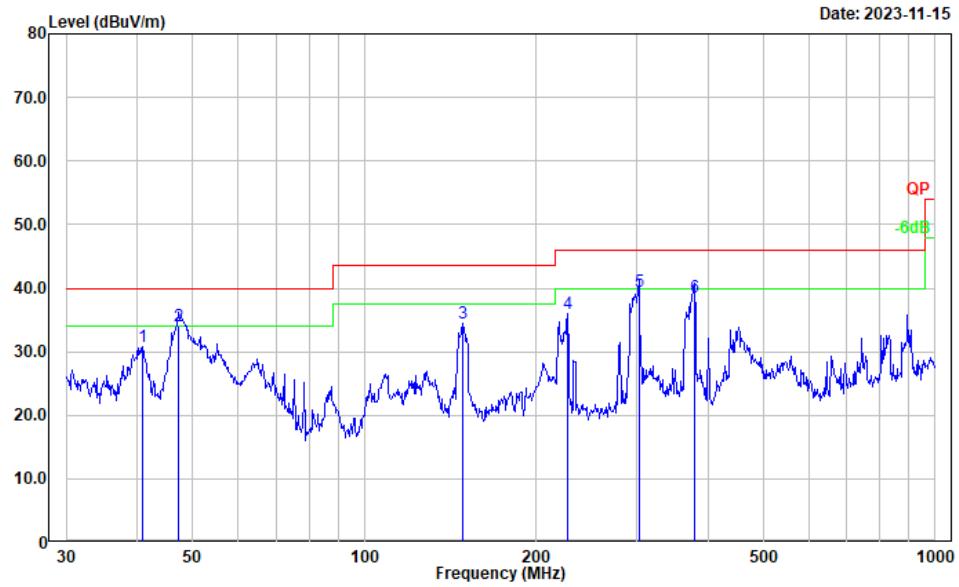
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.994	49.33	-15.97	33.36	40.00	6.64	Peak
2	150.538	44.57	-11.93	32.64	43.50	10.86	Peak
3	226.894	50.07	-12.97	37.10	46.00	8.90	Peak
4	279.044	51.05	-11.75	39.30	46.00	6.70	Peak
5	302.481	49.21	-10.61	38.60	46.00	7.40	QP
6	378.584	42.81	-9.17	33.64	46.00	12.36	Peak

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Lowest Channel-Vertical**

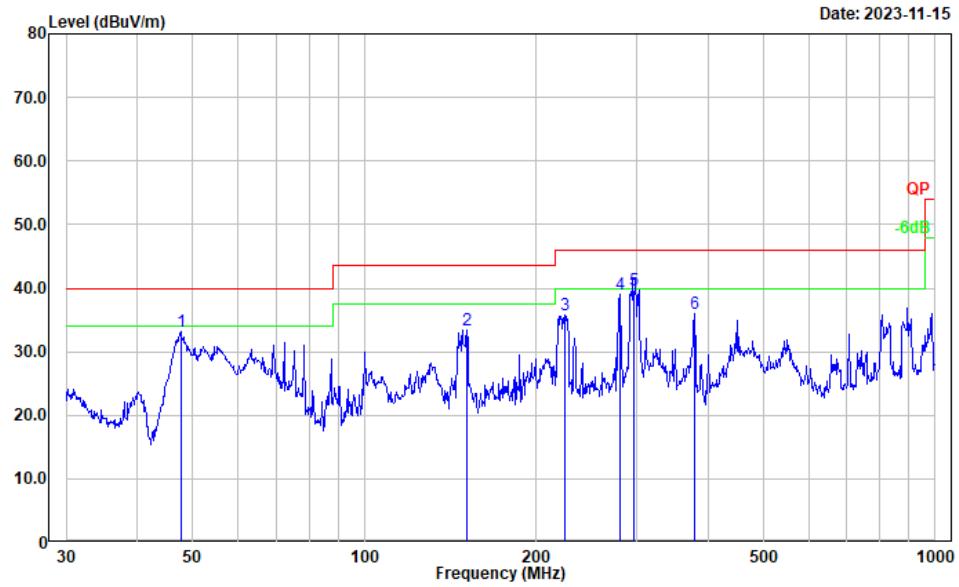
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: vertical  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	40.845	42.76	-11.90	30.86	40.00	9.14	Peak
2	47.160	49.60	-15.48	34.12	40.00	5.88	QP
3	148.441	46.32	-11.90	34.42	43.50	9.08	Peak
4	226.894	48.93	-12.97	35.96	46.00	10.04	Peak
5	302.481	50.03	-10.61	39.42	46.00	6.58	QP
6	378.584	47.86	-9.17	38.69	46.00	7.31	QP

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Middle Channel-Horizontal**

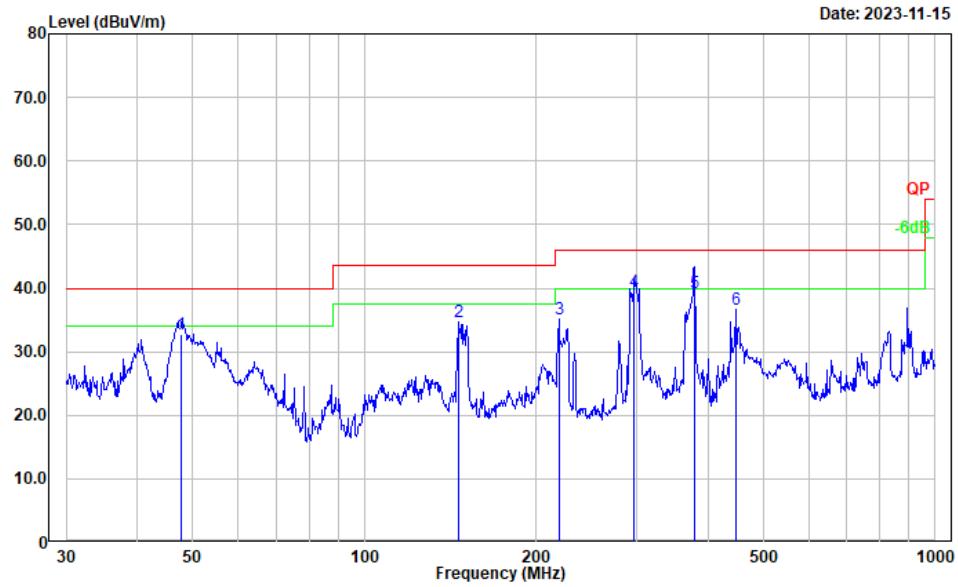
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.659	48.95	-15.78	33.17	40.00	6.83	Peak
2	151.067	45.43	-11.95	33.48	43.50	10.02	Peak
3	224.519	48.63	-12.90	35.73	46.00	10.27	Peak
4	281.008	50.72	-11.64	39.08	46.00	6.92	Peak
5	297.224	50.41	-10.71	39.70	46.00	6.30	QP
6	378.584	45.06	-9.17	35.89	46.00	10.11	Peak

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Middle Channel-Vertical**

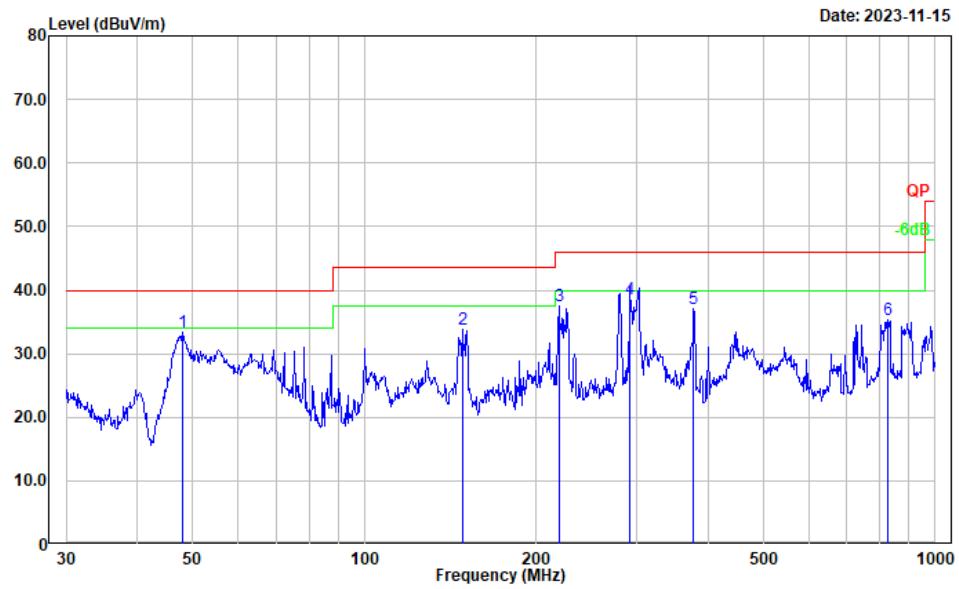
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: vertical  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.826	48.66	-15.87	32.79	40.00	7.21	QP
2	146.374	46.49	-11.88	34.61	43.50	8.89	Peak
3	219.075	47.87	-12.82	35.05	46.00	10.95	Peak
4	297.224	50.06	-10.71	39.35	46.00	6.65	QP
5	378.584	48.46	-9.17	39.29	46.00	6.71	QP
6	446.414	43.62	-7.08	36.54	46.00	9.46	Peak

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Highest Channel-Horizontal**

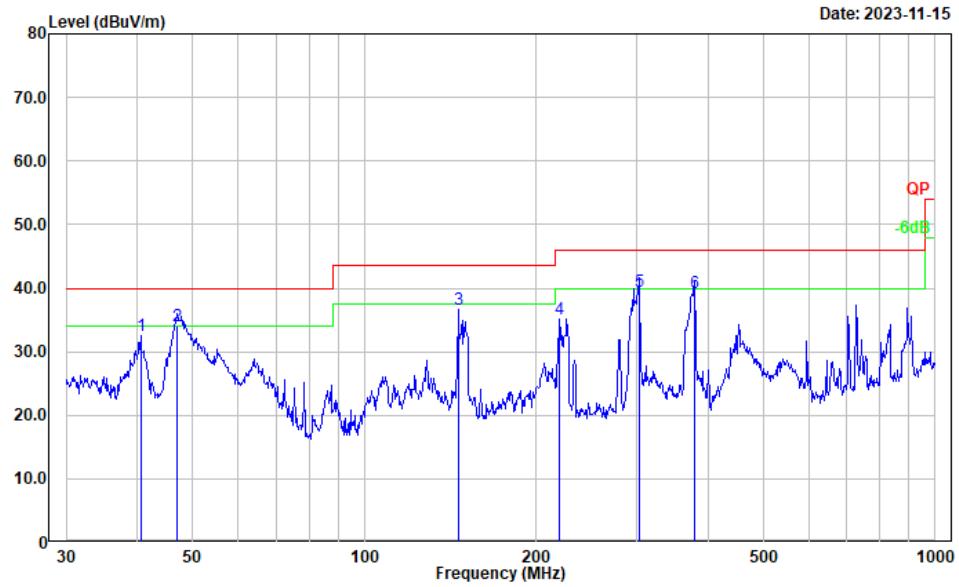
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.994	49.39	-15.97	33.42	40.00	6.58	Peak
2	148.441	45.62	-11.90	33.72	43.50	9.78	Peak
3	219.075	50.25	-12.82	37.43	46.00	8.57	Peak
4	292.058	49.56	-10.95	38.61	46.00	7.39	QP
5	377.259	46.19	-9.22	36.97	46.00	9.03	Peak
6	824.597	36.90	-1.65	35.25	46.00	10.75	Peak

**U-NII-2C Band (5470~5725MHz) \_ 802.11ax hew20 mode \_ Highest Channel-Vertical**

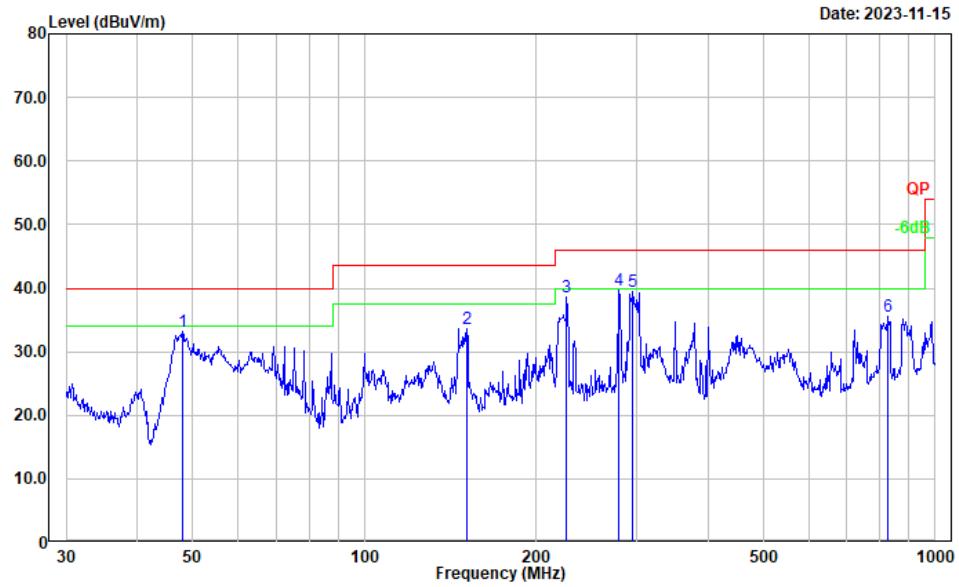
Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: vertical  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5470-5725 MHz)



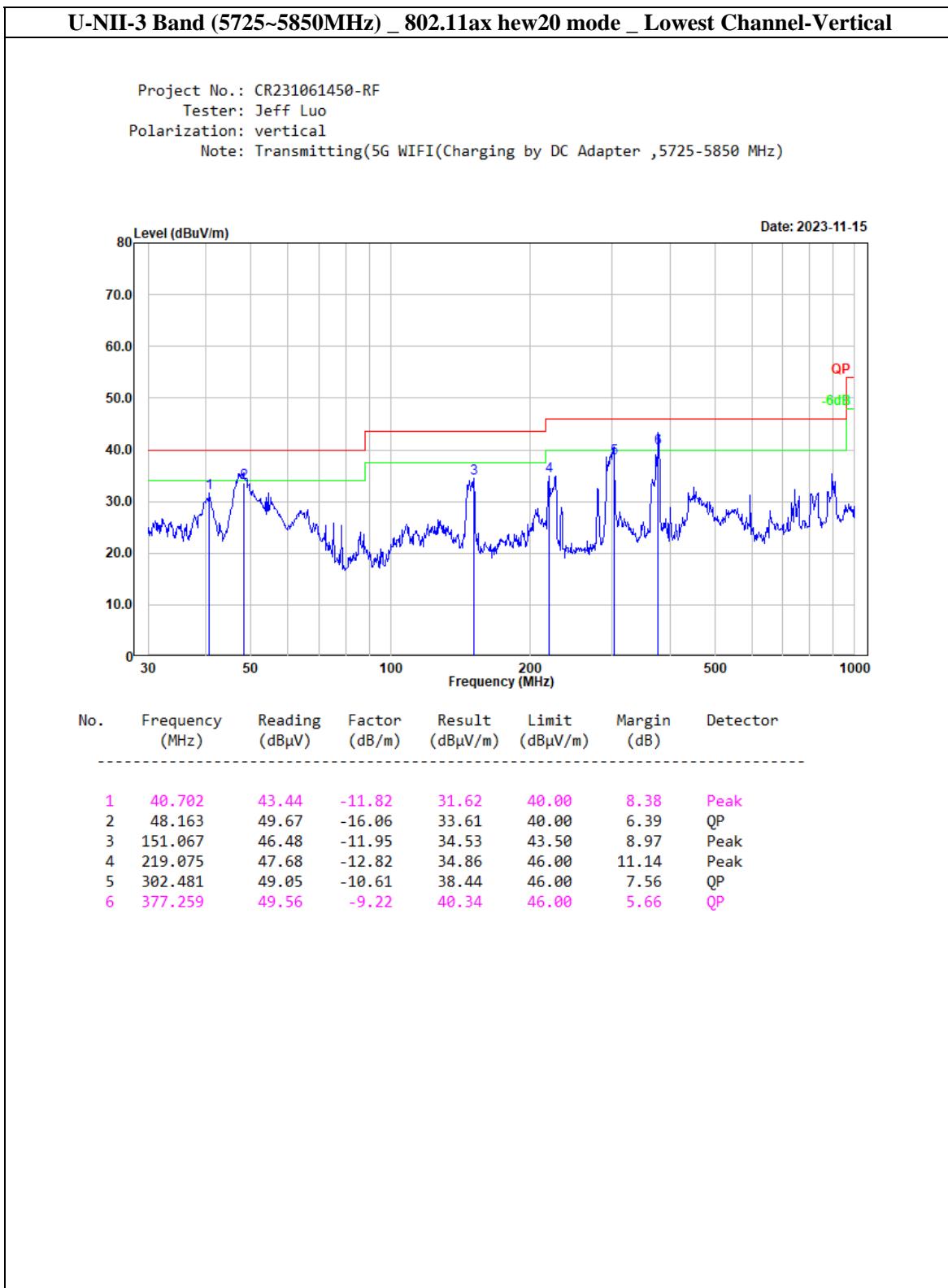
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	40.559	44.32	-11.74	32.58	40.00	7.42	Peak
2	46.830	49.33	-15.29	34.04	40.00	5.96	QP
3	145.861	48.58	-11.87	36.71	43.50	6.79	Peak
4	219.845	48.06	-12.86	35.20	46.00	10.80	Peak
5	302.481	50.13	-10.61	39.52	46.00	6.48	QP
6	378.584	48.43	-9.17	39.26	46.00	6.74	QP

**U-NII-3 Band (5725~5850MHz) \_ 802.11ax hew20 mode \_ Lowest Channel-Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5725-5850 MHz)

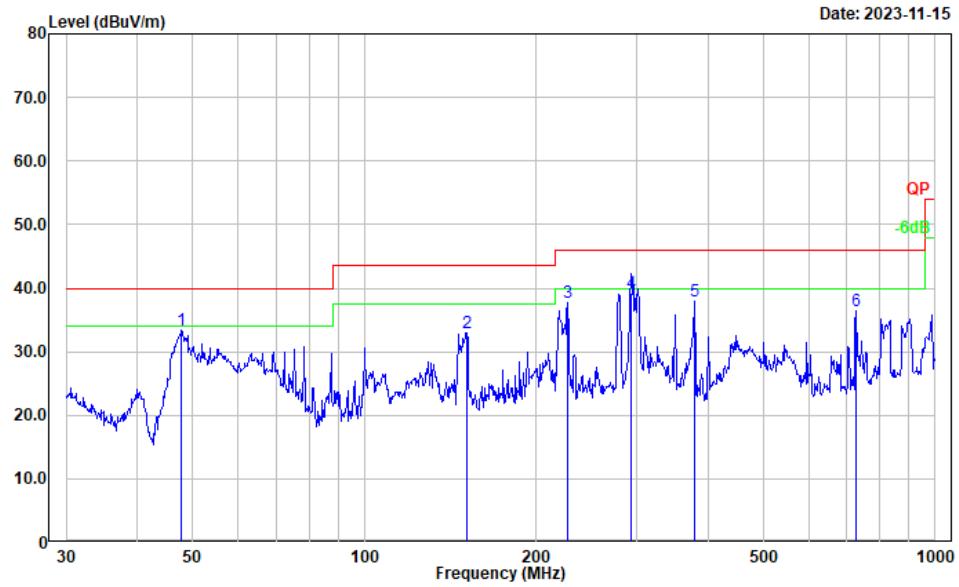


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.994	49.24	-15.97	33.27	40.00	6.73	Peak
2	151.067	45.59	-11.95	33.64	43.50	9.86	Peak
3	226.099	51.50	-12.94	38.56	46.00	7.44	Peak
4	279.044	51.40	-11.75	39.65	46.00	6.35	Peak
5	295.147	50.20	-10.77	39.43	46.00	6.57	Peak
6	827.493	37.19	-1.67	35.52	46.00	10.48	Peak

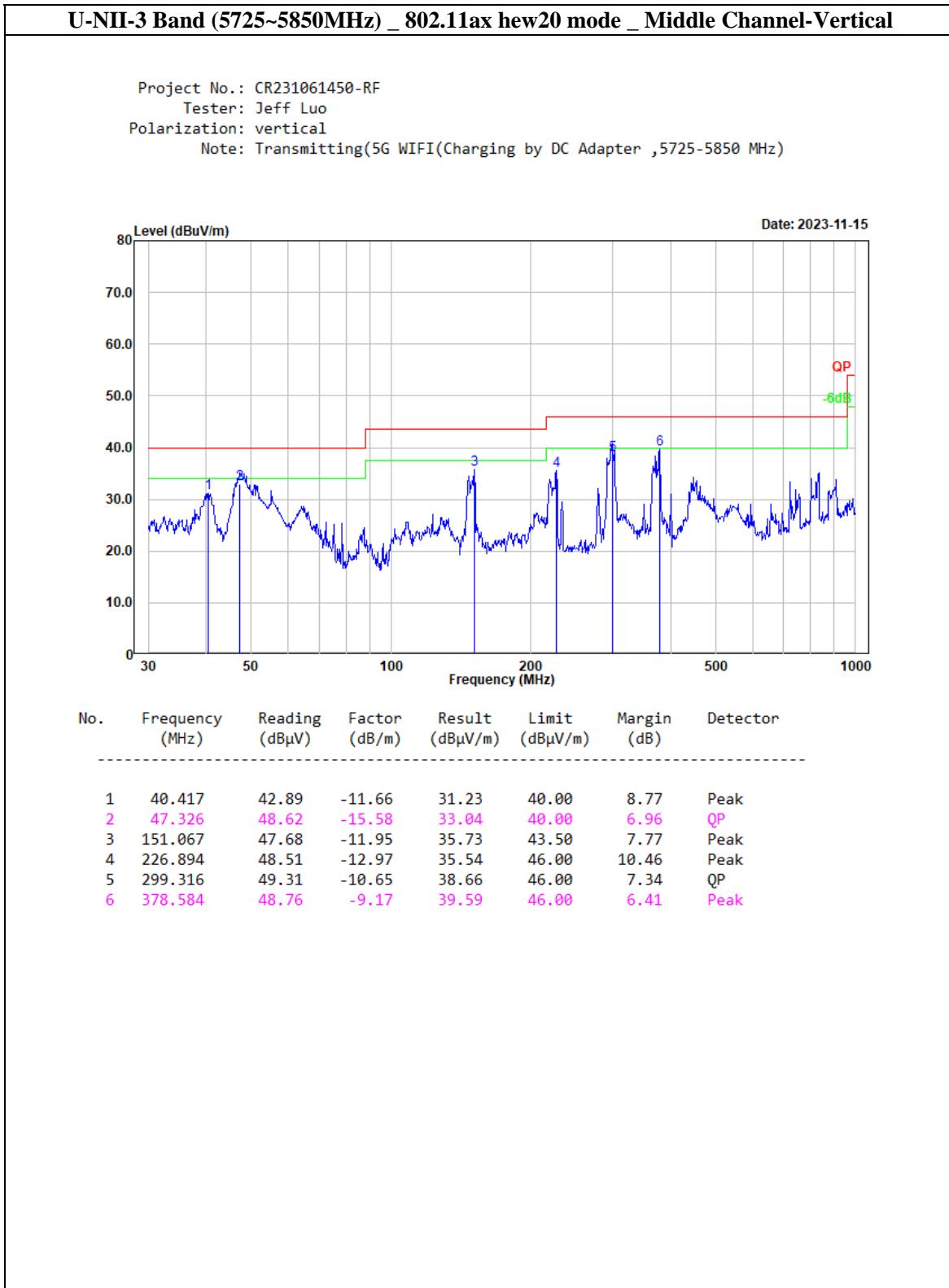


**U-NII-3 Band (5725~5850MHz) \_ 802.11ax hew20 mode \_ Middle Channel-Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5725-5850 MHz)

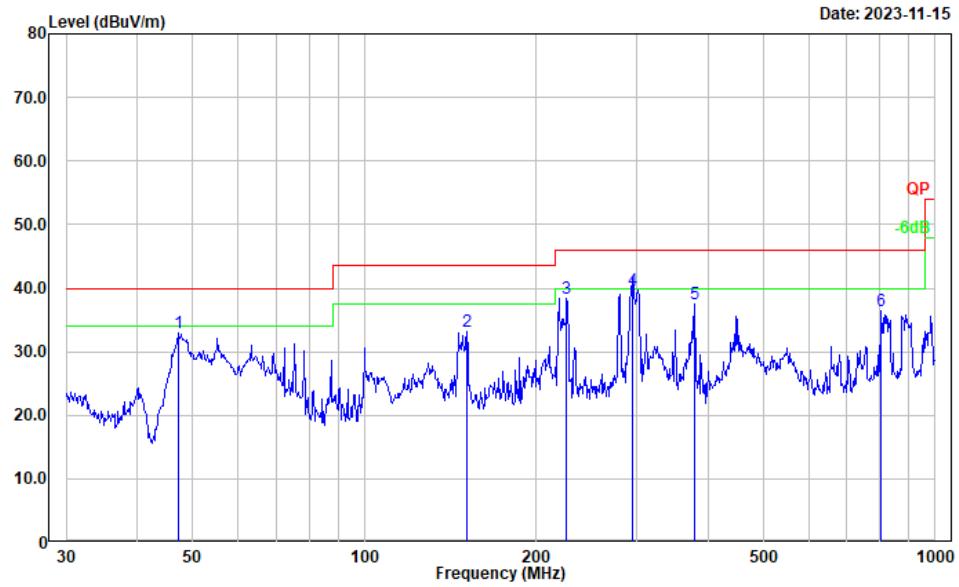


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.826	49.33	-15.87	33.46	40.00	6.54	Peak
2	151.067	44.89	-11.95	32.94	43.50	10.56	Peak
3	226.894	50.71	-12.97	37.74	46.00	8.26	Peak
4	293.084	50.11	-10.88	39.23	46.00	6.77	QP
5	378.584	47.17	-9.17	38.00	46.00	8.00	Peak
6	726.805	39.47	-3.13	36.34	46.00	9.66	Peak

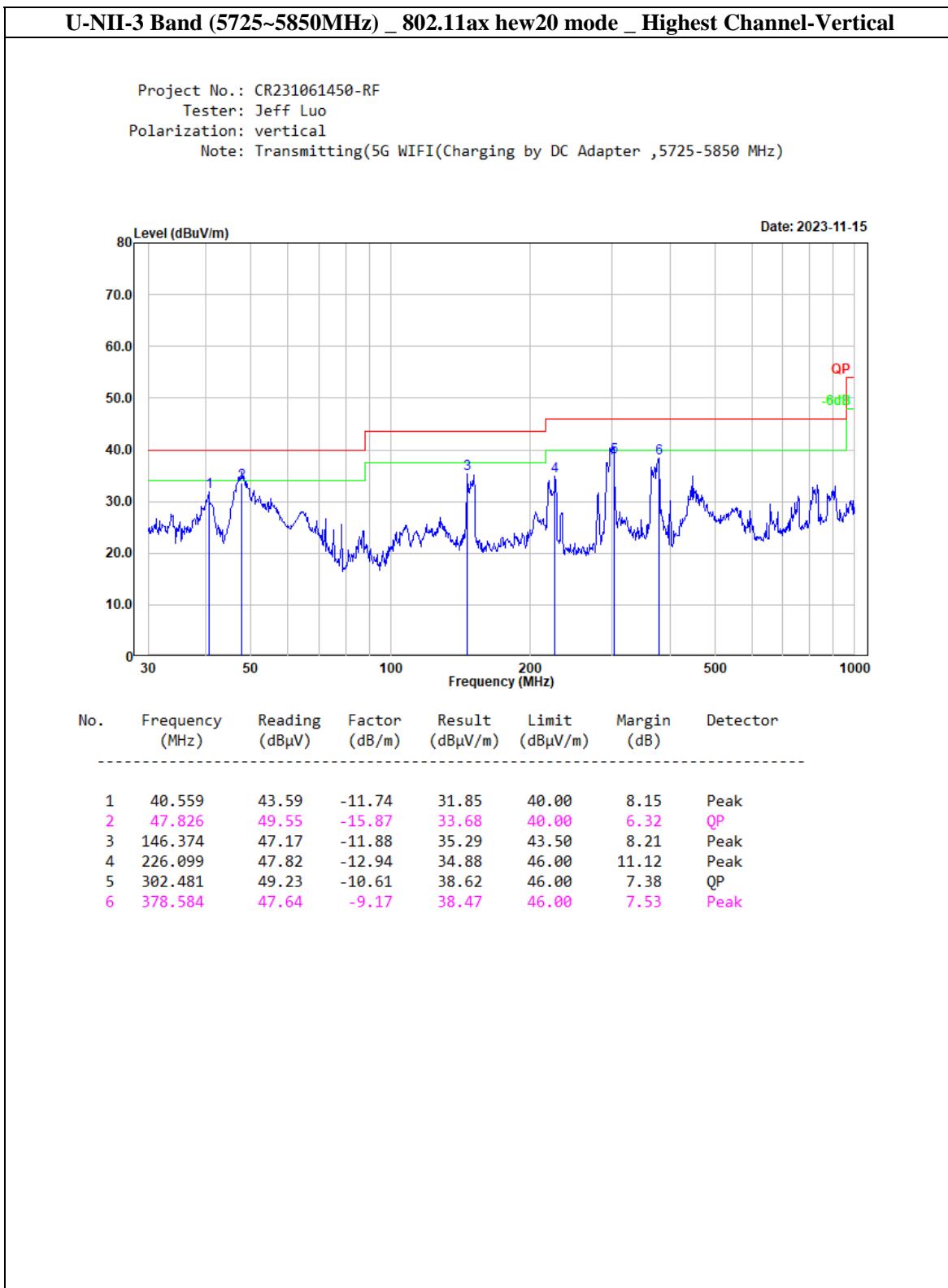


**U-NII-3 Band (5725~5850MHz) \_ 802.11ax hew20 mode \_ Highest Channel-Horizontal**

Project No.: CR231061450-RF  
Tester: Jeff Luo  
Polarization: horizontal  
Note: Transmitting(5G WIFI(Charging by DC Adapter ,5725-5850 MHz)



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	47.326	48.61	-15.58	33.03	40.00	6.97	Peak
2	151.067	45.05	-11.95	33.10	43.50	10.40	Peak
3	226.099	51.30	-12.94	38.36	46.00	7.64	Peak
4	295.147	50.44	-10.77	39.67	46.00	6.33	QP
5	378.584	46.64	-9.17	37.47	46.00	8.53	Peak
6	804.603	38.55	-2.14	36.41	46.00	9.59	Peak



**3) Radiation Spurious Emissions Test Data (1GHz-40GHz)***Note: Powered from Type-C port mode was performed to 1~40GHz Radiated Emission test.***5150-5250MHz:****802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	30.58	PK	H	32.83	63.41	74.00	10.59
5150.000	16.36	AV	H	32.83	49.19	54.00	4.81
5150.000	29.87	PK	V	32.83	62.70	74.00	11.30
5150.000	16.33	AV	V	32.83	49.16	54.00	4.84
10360.000	33.38	PK	H	14.45	47.83	68.20	20.37
10360.000	33.29	PK	V	14.45	47.74	68.20	20.46
15540.000	34.72	PK	H	18.60	53.32	74.00	20.68
15540.000	21.25	AV	H	18.60	39.85	54.00	14.15
15540.000	34.20	PK	V	18.60	52.80	74.00	21.20
15540.000	21.21	AV	V	18.60	39.81	54.00	14.19
Middle Channel: 5200 MHz							
10400.000	33.69	PK	H	14.52	48.21	68.20	19.99
10400.000	33.41	PK	V	14.52	47.93	68.20	20.27
15600.000	34.47	PK	H	18.69	53.16	74.00	20.84
15600.000	21.45	AV	H	18.69	40.14	54.00	13.86
15600.000	34.33	PK	V	18.69	53.02	74.00	20.98
15600.000	21.39	AV	V	18.69	40.08	54.00	13.92
High Channel: 5240 MHz							
5350.000	29.77	PK	H	32.70	62.47	74.00	11.53
5350.000	16.82	AV	H	32.70	49.52	54.00	4.48
5350.000	29.68	PK	V	32.70	62.38	74.00	11.62
5350.000	16.77	AV	V	32.70	49.47	54.00	4.53
10480.000	33.49	PK	H	14.40	47.89	68.20	20.31
10480.000	33.36	PK	V	14.40	47.76	68.20	20.44
15720.000	35.20	PK	H	18.80	54.00	74.00	20.00
15720.000	22.17	AV	H	18.80	40.97	54.00	13.03
15720.000	34.63	PK	V	18.80	53.43	74.00	20.57
15720.000	21.11	AV	V	18.80	39.91	54.00	14.09

**802.11a Mode Chain 1:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	29.84	PK	H	32.83	62.67	74.00	11.33
5150.000	16.78	AV	H	32.83	49.61	54.00	4.39
5150.000	29.66	PK	V	32.83	62.49	74.00	11.51
5150.000	16.58	AV	V	32.83	49.41	54.00	4.59
10360.000	34.25	PK	H	14.45	48.70	68.20	19.50
10360.000	34.12	PK	V	14.45	48.57	68.20	19.63
15540.000	34.36	PK	H	18.60	52.96	74.00	21.04
15540.000	21.52	AV	H	18.60	40.12	54.00	13.88
15540.000	34.23	PK	V	18.60	52.83	74.00	21.17
15540.000	21.09	AV	V	18.60	39.69	54.00	14.31
Middle Channel: 5200 MHz							
10400.000	34.69	PK	H	14.52	49.21	68.20	18.99
10400.000	34.56	PK	V	14.52	49.08	68.20	19.12
15600.000	35.20	PK	H	18.69	53.89	74.00	20.11
15600.000	22.15	AV	H	18.69	40.84	54.00	13.16
15600.000	34.82	PK	V	18.69	53.51	74.00	20.49
15600.000	21.74	AV	V	18.69	40.43	54.00	13.57
High Channel: 5240 MHz							
5350.000	30.20	PK	H	32.70	62.90	74.00	11.10
5350.000	16.41	AV	H	32.70	49.11	54.00	4.89
5350.000	29.69	PK	V	32.70	62.39	74.00	11.61
5350.000	16.48	AV	V	32.70	49.18	54.00	4.82
10480.000	34.52	PK	H	14.40	48.92	68.20	19.28
10480.000	34.10	PK	V	14.40	48.50	68.20	19.70
15720.000	34.45	PK	H	18.80	53.25	74.00	20.75
15720.000	21.23	AV	H	18.80	40.03	54.00	13.97
15720.000	34.28	PK	V	18.80	53.08	74.00	20.92
15720.000	21.21	AV	V	18.80	40.01	54.00	13.99

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	30.21	PK	H	32.83	63.04	74.00	10.96
5150.000	17.55	AV	H	32.83	50.38	54.00	3.62
5150.000	29.93	PK	V	32.83	62.76	74.00	11.24
5150.000	17.02	AV	V	32.83	49.85	54.00	4.15
10360.000	33.65	PK	H	14.45	48.10	68.20	20.10
10360.000	33.56	PK	V	14.45	48.01	68.20	20.19
15540.000	33.57	PK	H	18.60	52.17	74.00	21.83
15540.000	20.77	AV	H	18.60	39.37	54.00	14.63
15540.000	33.54	PK	V	18.60	52.14	74.00	21.86
15540.000	20.19	AV	V	18.60	38.79	54.00	15.21
Middle Channel: 5200 MHz							
10400.000	33.69	PK	H	14.52	48.21	68.20	19.99
10400.000	33.64	PK	V	14.52	48.16	68.20	20.04
15600.000	33.78	PK	H	18.69	52.47	74.00	21.53
15600.000	20.41	AV	H	18.69	39.10	54.00	14.90
15600.000	33.58	PK	V	18.69	52.27	74.00	21.73
15600.000	20.25	AV	V	18.69	38.94	54.00	15.06
High Channel: 5240 MHz							
5350.000	30.11	PK	H	32.70	62.81	74.00	11.19
5350.000	16.89	AV	H	32.70	49.59	54.00	4.41
5350.000	30.02	PK	V	32.70	62.72	74.00	11.28
5350.000	16.74	AV	V	32.70	49.44	54.00	4.56
10480.000	33.82	PK	H	14.40	48.22	68.20	19.98
10480.000	33.84	PK	V	14.40	48.24	68.20	19.96
15720.000	35.20	PK	H	18.80	54.00	74.00	20.00
15720.000	22.57	AV	H	18.80	41.37	54.00	12.63
15720.000	34.98	PK	V	18.80	53.78	74.00	20.22
15720.000	22.10	AV	V	18.80	40.90	54.00	13.10

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5190 MHz							
5150.000	30.21	PK	H	32.83	63.04	74.00	10.96
5150.000	16.84	AV	H	32.83	49.67	54.00	4.33
5150.000	29.94	PK	V	32.83	62.77	74.00	11.23
5150.000	16.67	AV	V	32.83	49.50	54.00	4.50
10380.000	33.58	PK	H	14.49	48.07	68.20	20.13
10380.000	33.25	PK	V	14.49	47.74	68.20	20.46
15570.000	33.49	PK	H	18.65	52.14	74.00	21.86
15570.000	20.77	AV	H	18.65	39.42	54.00	14.58
15570.000	33.19	PK	V	18.65	51.84	74.00	22.16
15570.000	20.37	AV	V	18.65	39.02	54.00	14.98
High Channel: 5230 MHz							
5350.000	30.79	PK	H	32.70	63.49	74.00	10.51
5350.000	17.12	AV	H	32.70	49.82	54.00	4.18
5350.000	30.02	PK	V	32.70	62.72	74.00	11.28
5350.000	16.86	AV	V	32.70	49.56	54.00	4.44
10460.000	33.90	PK	H	14.43	48.33	68.20	19.87
10460.000	33.86	PK	V	14.43	48.29	68.20	19.91
15690.000	35.17	PK	H	18.75	53.92	74.00	20.08
15690.000	21.65	AV	H	18.75	40.40	54.00	13.60
15690.000	34.79	PK	V	18.75	53.54	74.00	20.46
15690.000	21.22	AV	V	18.75	39.97	54.00	14.03

**802.11ac80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel: 5210 MHz							
5150.000	30.29	PK	H	32.83	63.12	74.00	10.88
5150.000	17.02	AV	H	32.83	49.85	54.00	4.15
5150.000	30.13	PK	V	32.83	62.96	74.00	11.04
5150.000	16.79	AV	V	32.83	49.62	54.00	4.38
5350.000	29.66	PK	H	32.70	62.36	74.00	11.64
5350.000	16.54	AV	H	32.70	49.24	54.00	4.76
5350.000	29.37	PK	V	32.70	62.07	74.00	11.93
5350.000	16.17	AV	V	32.70	48.87	54.00	5.13
10420.000	33.52	PK	H	14.49	48.01	68.20	20.19
10420.000	33.50	PK	V	14.49	47.99	68.20	20.21
15630.000	33.87	PK	H	18.71	52.58	74.00	21.42
15630.000	20.41	AV	H	18.71	39.12	54.00	14.88
15630.000	33.69	PK	V	18.71	52.40	74.00	21.60
15630.000	20.18	AV	V	18.71	38.89	54.00	15.11

**802.11ax hew20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	29.66	PK	H	32.83	62.49	74.00	11.51
5150.000	16.87	AV	H	32.83	49.70	54.00	4.30
5150.000	29.63	PK	V	32.83	62.46	74.00	11.54
5150.000	16.38	AV	V	32.83	49.21	54.00	4.79
10360.000	34.76	PK	H	14.45	49.21	68.20	18.99
10360.000	34.52	PK	V	14.45	48.97	68.20	19.23
15540.000	34.85	PK	H	18.60	53.45	74.00	20.55
15540.000	21.47	AV	H	18.60	40.07	54.00	13.93
15540.000	34.36	PK	V	18.60	52.96	74.00	21.04
15540.000	21.20	AV	V	18.60	39.80	54.00	14.20
Middle Channel: 5200 MHz							
10400.000	33.56	PK	H	14.52	48.08	68.20	20.12
10400.000	33.41	PK	V	14.52	47.93	68.20	20.27
15600.000	36.20	PK	H	18.69	54.89	74.00	19.11
15600.000	23.41	AV	H	18.69	42.10	54.00	11.90
15600.000	35.21	PK	V	18.69	53.90	74.00	20.10
15600.000	22.14	AV	V	18.69	40.83	54.00	13.17
High Channel: 5240 MHz							
5350.000	29.77	PK	H	32.70	62.47	74.00	11.53
5350.000	16.54	AV	H	32.70	49.24	54.00	4.76
5350.000	29.63	PK	V	32.70	62.33	74.00	11.67
5350.000	16.48	AV	V	32.70	49.18	54.00	4.82
10480.000	33.69	PK	H	14.40	48.09	68.20	20.11
10480.000	33.57	PK	V	14.40	47.97	68.20	20.23
15720.000	35.66	PK	H	18.80	54.46	74.00	19.54
15720.000	22.41	AV	H	18.80	41.21	54.00	12.79
15720.000	35.14	PK	V	18.80	53.94	74.00	20.06
15720.000	21.86	AV	V	18.80	40.66	54.00	13.34

**802.11ax hew40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5190 MHz							
5150.000	29.75	PK	H	32.83	62.58	74.00	11.42
5150.000	16.88	AV	H	32.83	49.71	54.00	4.29
5150.000	29.63	PK	V	32.83	62.46	74.00	11.54
5150.000	16.68	AV	V	32.83	49.51	54.00	4.49
10380.000	33.60	PK	H	14.49	48.09	68.20	20.11
10380.000	33.23	PK	V	14.49	47.72	68.20	20.48
15570.000	34.70	PK	H	18.65	53.35	74.00	20.65
15570.000	21.20	AV	H	18.65	39.85	54.00	14.15
15570.000	34.36	PK	V	18.65	53.01	74.00	20.99
15570.000	21.15	AV	V	18.65	39.80	54.00	14.20
High Channel: 5230 MHz							
5350.000	29.64	PK	H	32.70	62.34	74.00	11.66
5350.000	16.34	AV	H	32.70	49.04	54.00	4.96
5350.000	29.38	PK	V	32.70	62.08	74.00	11.92
5350.000	16.19	AV	V	32.70	48.89	54.00	5.11
10460.000	33.81	PK	H	14.43	48.24	68.20	19.96
10460.000	33.53	PK	V	14.43	47.96	68.20	20.24
15690.000	35.42	PK	H	18.75	54.17	74.00	19.83
15690.000	22.14	AV	H	18.75	40.89	54.00	13.11
15690.000	34.92	PK	V	18.75	53.67	74.00	20.33
15690.000	22.23	AV	V	18.75	40.98	54.00	13.02

**802.11ax hew80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel: 5210 MHz							
5150.000	30.68	PK	H	32.83	63.51	74.00	10.49
5150.000	16.65	AV	H	32.83	49.48	54.00	4.52
5150.000	29.77	PK	V	32.83	62.60	74.00	11.40
5150.000	16.48	AV	V	32.83	49.31	54.00	4.69
5350.000	29.64	PK	H	32.70	62.34	74.00	11.66
5350.000	16.58	AV	H	32.70	49.28	54.00	4.72
5350.000	29.46	PK	V	32.70	62.16	74.00	11.84
5350.000	16.39	AV	V	32.70	49.09	54.00	4.91
10420.000	34.63	PK	H	14.49	49.12	68.20	19.08
10420.000	34.28	PK	V	14.49	48.77	68.20	19.43
15630.000	35.36	PK	H	18.71	54.07	74.00	19.93
15630.000	22.41	AV	H	18.71	41.12	54.00	12.88
15630.000	35.21	PK	V	18.71	53.92	74.00	20.08
15630.000	21.39	AV	V	18.71	40.10	54.00	13.90

**5250-5350MHz:****802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5260	MHz		
5150.000	29.68	PK	H	32.83	62.51	74.00	11.49
5150.000	16.83	AV	H	32.83	49.66	54.00	4.34
5150.000	29.46	PK	V	32.83	62.29	74.00	11.71
5150.000	16.49	AV	V	32.83	49.32	54.00	4.68
10520.000	33.79	PK	H	14.51	48.30	68.20	19.90
10520.000	33.63	PK	V	14.51	48.14	68.20	20.06
15780.000	35.38	PK	H	18.90	54.28	74.00	19.72
15780.000	22.48	AV	H	18.90	41.38	54.00	12.62
15780.000	35.11	PK	V	18.90	54.01	74.00	19.99
15780.000	21.86	AV	V	18.90	40.76	54.00	13.24
Middle Channel:				5280	MHz		
10560.000	34.50	PK	H	14.79	49.29	68.20	18.91
10560.000	33.81	PK	V	14.79	48.60	68.20	19.60
15840.000	34.52	PK	H	19.10	53.62	74.00	20.38
15840.000	21.63	AV	H	19.10	40.73	54.00	13.27
15840.000	34.45	PK	V	19.10	53.55	74.00	20.45
15840.000	21.53	AV	V	19.10	40.63	54.00	13.37
High Channel:				5320	MHz		
5350.000	29.33	PK	H	32.70	62.03	74.00	11.97
5350.000	16.55	AV	H	32.70	49.25	54.00	4.75
5350.000	29.18	PK	V	32.70	61.88	74.00	12.12
5350.000	16.36	AV	V	32.70	49.06	54.00	4.94
10640.000	34.66	PK	H	15.11	49.77	74.00	24.23
10640.000	21.34	AV	H	15.11	36.45	54.00	17.55
10640.000	34.23	PK	V	15.11	49.34	74.00	24.66
10640.000	21.28	AV	V	15.11	36.39	54.00	17.61
15960.000	35.20	PK	H	19.22	54.42	74.00	19.58
15960.000	22.08	AV	H	19.22	41.30	54.00	12.70
15960.000	34.75	PK	V	19.22	53.97	74.00	20.03
15960.000	21.36	AV	V	19.22	40.58	54.00	13.42

**802.11a Mode Chain 1:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5260 MHz							
5150.000	29.82	PK	H	32.83	62.65	74.00	11.35
5150.000	16.78	AV	H	32.83	49.61	54.00	4.39
5150.000	29.63	PK	V	32.83	62.46	74.00	11.54
5150.000	16.55	AV	V	32.83	49.38	54.00	4.62
10520.000	35.17	PK	H	14.51	49.68	68.20	18.52
10520.000	34.93	PK	V	14.51	49.44	68.20	18.76
15780.000	34.55	PK	H	18.90	53.45	74.00	20.55
15780.000	21.50	AV	H	18.90	40.40	54.00	13.60
15780.000	34.66	PK	V	18.90	53.56	74.00	20.44
15780.000	21.42	AV	V	18.90	40.32	54.00	13.68
Middle Channel: 5280 MHz							
10560.000	34.52	PK	H	14.79	49.31	68.20	18.89
10560.000	33.81	PK	V	14.79	48.60	68.20	19.60
15840.000	33.65	PK	H	19.10	52.75	74.00	21.25
15840.000	20.89	AV	H	19.10	39.99	54.00	14.01
15840.000	34.23	PK	V	19.10	53.33	74.00	20.67
15840.000	20.41	AV	V	19.10	39.51	54.00	14.49
High Channel: 5320 MHz							
5350.000	30.32	PK	H	32.70	63.02	74.00	10.98
5350.000	16.86	AV	H	32.70	49.56	54.00	4.44
5350.000	30.20	PK	V	32.70	62.90	74.00	11.10
5350.000	16.77	AV	V	32.70	49.47	54.00	4.53
10640.000	34.58	PK	H	15.11	49.69	74.00	24.31
10640.000	21.41	AV	H	15.11	36.52	54.00	17.48
10640.000	34.23	PK	V	15.11	49.34	74.00	24.66
10640.000	21.39	AV	V	15.11	36.50	54.00	17.50
15960.000	34.83	PK	H	19.22	54.05	74.00	19.95
15960.000	21.74	AV	H	19.22	40.96	54.00	13.04
15960.000	33.76	PK	V	19.22	52.98	74.00	21.02
15960.000	21.05	AV	V	19.22	40.27	54.00	13.73

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5260 MHz							
5150.000	30.25	PK	H	32.83	63.08	74.00	10.92
5150.000	16.69	AV	H	32.83	49.52	54.00	4.48
5150.000	29.95	PK	V	32.83	62.78	74.00	11.22
5150.000	16.33	AV	V	32.83	49.16	54.00	4.84
10520.000	33.85	PK	H	14.51	48.36	68.20	19.84
10520.000	33.36	PK	V	14.51	47.87	68.20	20.33
15780.000	34.10	PK	H	18.90	53.00	74.00	21.00
15780.000	20.97	AV	H	18.90	39.87	54.00	14.13
15780.000	33.85	PK	V	18.90	52.75	74.00	21.25
15780.000	20.17	AV	V	18.90	39.07	54.00	14.93
Middle Channel: 5280 MHz							
10560.000	33.87	PK	H	14.79	48.66	68.20	19.54
10560.000	33.66	PK	V	14.79	48.45	68.20	19.75
15840.000	34.02	PK	H	19.10	53.12	74.00	20.88
15840.000	20.85	AV	H	19.10	39.95	54.00	14.05
15840.000	33.92	PK	V	19.10	53.02	74.00	20.98
15840.000	20.75	AV	V	19.10	39.85	54.00	14.15
High Channel: 5320 MHz							
5350.000	30.25	PK	H	32.70	62.95	74.00	11.05
5350.000	17.01	AV	H	32.70	49.71	54.00	4.29
5350.000	30.11	PK	V	32.70	62.81	74.00	11.19
5350.000	16.88	AV	V	32.70	49.58	54.00	4.42
10640.000	33.25	PK	H	15.11	48.36	74.00	25.64
10640.000	20.24	AV	H	15.11	35.35	54.00	18.65
10640.000	33.13	PK	V	15.11	48.24	74.00	25.76
10640.000	20.09	AV	V	15.11	35.20	54.00	18.80
15960.000	33.69	PK	H	19.22	52.91	74.00	21.09
15960.000	21.71	AV	H	19.22	40.93	54.00	13.07
15960.000	33.47	PK	V	19.22	52.69	74.00	21.31
15960.000	20.35	AV	V	19.22	39.57	54.00	14.43

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5270 MHz							
5150.000	28.96	PK	H	32.83	61.79	74.00	12.21
5150.000	15.69	AV	H	32.83	48.52	54.00	5.48
5150.000	28.77	PK	V	32.83	61.60	74.00	12.40
5150.000	15.68	AV	V	32.83	48.51	54.00	5.49
10540.000	33.52	PK	H	14.66	48.18	68.20	20.02
10540.000	33.50	PK	V	14.66	48.16	68.20	20.04
15810.000	34.25	PK	H	18.98	53.23	74.00	20.77
15810.000	21.52	AV	H	18.98	40.50	54.00	13.50
15810.000	34.10	PK	V	18.98	53.08	74.00	20.92
15810.000	21.22	AV	V	18.98	40.20	54.00	13.80
High Channel: 5310 MHz							
5350.000	29.68	PK	H	32.70	62.38	74.00	11.62
5350.000	16.55	AV	H	32.70	49.25	54.00	4.75
5350.000	29.30	PK	V	32.70	62.00	74.00	12.00
5350.000	16.32	AV	V	32.70	49.02	54.00	4.98
10620.000	34.21	PK	H	15.09	49.30	74.00	24.70
10620.000	21.20	AV	H	15.09	36.29	54.00	17.71
10620.000	33.68	PK	V	15.09	48.77	74.00	25.23
10620.000	20.52	AV	V	15.09	35.61	54.00	18.39
15930.000	33.69	PK	H	19.28	52.97	74.00	21.03
15930.000	20.45	AV	H	19.28	39.73	54.00	14.27
15930.000	33.28	PK	V	19.28	52.56	74.00	21.44
15930.000	20.41	AV	V	19.28	39.69	54.00	14.31

**802.11ac80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel:				5290	MHz		
5150.000	28.89	PK	H	32.83	61.72	74.00	12.28
5150.000	15.77	AV	H	32.83	48.60	54.00	5.40
5150.000	28.68	PK	V	32.83	61.51	74.00	12.49
5150.000	15.65	AV	V	32.83	48.48	54.00	5.52
5350.000	30.69	PK	H	32.70	63.39	74.00	10.61
5350.000	16.52	AV	H	32.70	49.22	54.00	4.78
5350.000	29.69	PK	V	32.70	62.39	74.00	11.61
5350.000	16.20	AV	V	32.70	48.90	54.00	5.10
10580.000	33.65	PK	H	14.94	48.59	68.20	19.61
10580.000	33.52	PK	V	14.94	48.46	68.20	19.74
15870.000	33.69	PK	H	19.21	52.90	74.00	21.10
15870.000	20.52	AV	H	19.21	39.73	54.00	14.27
15870.000	33.64	PK	V	19.21	52.85	74.00	21.15
15870.000	20.17	AV	V	19.21	39.38	54.00	14.62

**802.11ax hew20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5260 MHz							
5150.000	30.22	PK	H	32.83	63.05	74.00	10.95
5150.000	16.81	AV	H	32.83	49.64	54.00	4.36
5150.000	30.12	PK	V	32.83	62.95	74.00	11.05
5150.000	16.76	AV	V	32.83	49.59	54.00	4.41
10520.000	33.87	PK	H	14.51	48.38	68.20	19.82
10520.000	33.68	PK	V	14.51	48.19	68.20	20.01
15780.000	34.23	PK	H	18.90	53.13	74.00	20.87
15780.000	21.16	AV	H	18.90	40.06	54.00	13.94
15780.000	33.93	PK	V	18.90	52.83	74.00	21.17
15780.000	21.09	AV	V	18.90	39.99	54.00	14.01
Middle Channel: 5280 MHz							
10560.000	34.58	PK	H	14.79	49.37	68.20	18.83
10560.000	34.25	PK	V	14.79	49.04	68.20	19.16
15840.000	34.56	PK	H	19.10	53.66	74.00	20.34
15840.000	21.32	AV	H	19.10	40.42	54.00	13.58
15840.000	34.41	PK	V	19.10	53.51	74.00	20.49
15840.000	21.11	AV	V	19.10	40.21	54.00	13.79
High Channel: 5320 MHz							
5350.000	30.42	PK	H	32.70	63.12	74.00	10.88
5350.000	16.33	AV	H	32.70	49.03	54.00	4.97
5350.000	29.89	PK	V	32.70	62.59	74.00	11.41
5350.000	16.30	AV	V	32.70	49.00	54.00	5.00
10640.000	33.69	PK	H	15.11	48.80	74.00	25.20
10640.000	20.56	AV	H	15.11	35.67	54.00	18.33
10640.000	33.57	PK	V	15.11	48.68	74.00	25.32
10640.000	20.43	AV	V	15.11	35.54	54.00	18.46
15960.000	33.87	PK	H	19.22	53.09	74.00	20.91
15960.000	21.06	AV	H	19.22	40.28	54.00	13.72
15960.000	33.42	PK	V	19.22	52.64	74.00	21.36
15960.000	20.73	AV	V	19.22	39.95	54.00	14.05

**802.11ax hew40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5270 MHz							
5150.000	29.55	PK	H	32.83	62.38	74.00	11.62
5150.000	16.50	AV	H	32.83	49.33	54.00	4.67
5150.000	28.97	PK	V	32.83	61.80	74.00	12.20
5150.000	16.36	AV	V	32.83	49.19	54.00	4.81
10540.000	33.68	PK	H	14.66	48.34	68.20	19.86
10540.000	33.28	PK	V	14.66	47.94	68.20	20.26
15810.000	35.23	PK	H	18.98	54.21	74.00	19.79
15810.000	22.12	AV	H	18.98	41.10	54.00	12.90
15810.000	35.30	PK	V	18.98	54.28	74.00	19.72
15810.000	21.84	AV	V	18.98	40.82	54.00	13.18
High Channel: 5310 MHz							
5350.000	29.32	PK	H	32.70	62.02	74.00	11.98
5350.000	16.42	AV	H	32.70	49.12	54.00	4.88
5350.000	29.20	PK	V	32.70	61.90	74.00	12.10
5350.000	16.33	AV	V	32.70	49.03	54.00	4.97
10620.000	33.67	PK	H	15.09	48.76	74.00	25.24
10620.000	20.56	AV	H	15.09	35.65	54.00	18.35
10620.000	33.58	PK	V	15.09	48.67	74.00	25.33
10620.000	20.31	AV	V	15.09	35.40	54.00	18.60
15930.000	34.20	PK	H	19.28	53.48	74.00	20.52
15930.000	21.17	AV	H	19.28	40.45	54.00	13.55
15930.000	33.69	PK	V	19.28	52.97	74.00	21.03
15930.000	20.72	AV	V	19.28	40.00	54.00	14.00

**802.11ax hew80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel: 5290 MHz							
5150.000	29.69	PK	H	32.83	62.52	74.00	11.48
5150.000	16.33	AV	H	32.83	49.16	54.00	4.84
5150.000	28.93	PK	V	32.83	61.76	74.00	12.24
5150.000	16.30	AV	V	32.83	49.13	54.00	4.87
5350.000	30.20	PK	H	32.70	62.90	74.00	11.10
5350.000	16.23	AV	H	32.70	48.93	54.00	5.07
5350.000	30.11	PK	V	32.70	62.81	74.00	11.19
5350.000	13.10	AV	V	32.70	45.80	54.00	8.20
10580.000	33.86	PK	H	14.94	48.80	68.20	19.40
10580.000	33.65	PK	V	14.94	48.59	68.20	19.61
15870.000	33.78	PK	H	19.21	52.99	74.00	21.01
15870.000	20.61	AV	H	19.21	39.82	54.00	14.18
15870.000	33.46	PK	V	19.21	52.67	74.00	21.33
15870.000	21.36	AV	V	19.21	40.57	54.00	13.43

**5470-5725MHz****802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5500	MHz		
5470.000	30.52	PK	H	32.62	63.14	68.20	5.06
5470.000	30.36	PK	V	32.62	62.98	68.20	5.22
11000.000	33.31	PK	H	15.51	48.82	74.00	25.18
11000.000	20.55	AV	H	15.51	36.06	54.00	17.94
11000.000	33.03	PK	V	15.51	48.54	74.00	25.46
11000.000	20.15	AV	V	15.51	35.66	54.00	18.34
16500.000	35.02	PK	H	19.91	54.93	68.20	13.27
16500.000	34.77	PK	V	19.91	54.68	68.20	13.52
Middle Channel:				5580	MHz		
11160.000	33.35	PK	H	15.36	48.71	74.00	25.29
11160.000	20.72	AV	H	15.36	36.08	54.00	17.92
11160.000	33.29	PK	V	15.36	48.65	74.00	25.35
11160.000	20.51	AV	V	15.36	35.87	54.00	18.13
16740.000	35.51	PK	H	20.57	56.08	68.20	12.12
16740.000	35.29	PK	V	20.57	55.86	68.20	12.34
High Channel:				5700	MHz		
5725.000	30.11	PK	H	33.03	63.14	68.20	5.06
5725.000	29.42	PK	V	33.03	62.45	68.20	5.75
11400.000	33.68	PK	H	15.89	49.57	74.00	24.43
11400.000	20.55	AV	H	15.89	36.44	54.00	17.56
11400.000	33.63	PK	V	15.89	49.52	74.00	24.48
11400.000	20.41	AV	V	15.89	36.30	54.00	17.70
17100.000	34.68	PK	H	22.49	57.17	68.20	11.03
17100.000	34.45	PK	H	22.49	56.94	68.20	11.26

**802.11a Mode Chain 1:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5500 MHz							
5470.000	30.63	PK	H	32.62	63.25	68.20	4.95
5470.000	30.34	PK	V	32.62	62.96	68.20	5.24
11000.000	33.65	PK	H	15.51	49.16	74.00	24.84
11000.000	20.58	AV	H	15.51	36.09	54.00	17.91
11000.000	33.35	PK	V	15.51	48.86	74.00	25.14
11000.000	20.24	AV	V	15.51	35.75	54.00	18.25
16500.000	33.67	PK	H	19.91	53.58	68.20	14.62
16500.000	33.54	PK	V	19.91	53.45	68.20	14.75
Middle Channel: 5580 MHz							
11160.000	34.13	PK	H	15.36	49.49	74.00	24.51
11160.000	21.23	AV	H	15.36	36.59	54.00	17.41
11160.000	33.92	PK	V	15.36	49.28	74.00	24.72
11160.000	21.20	AV	V	15.36	36.56	54.00	17.44
16740.000	35.17	PK	H	20.57	55.74	68.20	12.46
16740.000	34.56	PK	V	20.57	55.13	68.20	13.07
High Channel: 5700 MHz							
5725.000	29.41	PK	H	33.03	62.44	68.20	5.76
5725.000	29.36	PK	V	33.03	62.39	68.20	5.81
11400.000	33.47	PK	H	15.89	49.36	74.00	24.64
11400.000	20.28	AV	H	15.89	36.17	54.00	17.83
11400.000	33.42	PK	V	15.89	49.31	74.00	24.69
11400.000	20.25	AV	V	15.89	36.14	54.00	17.86
17100.000	34.75	PK	H	22.49	57.24	68.20	10.96
17100.000	34.36	PK	H	22.49	56.85	68.20	11.35

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5500 MHz							
5470.000	29.93	PK	H	32.62	62.55	68.20	5.65
5470.000	29.81	PK	V	32.62	62.43	68.20	5.77
11000.000	33.64	PK	H	15.51	49.15	74.00	24.85
11000.000	20.64	AV	H	15.51	36.15	54.00	17.85
11000.000	33.14	PK	V	15.51	48.65	74.00	25.35
11000.000	20.55	AV	V	15.51	36.06	54.00	17.94
16500.000	33.80	PK	H	19.91	53.71	68.20	14.49
16500.000	33.72	PK	V	19.91	53.63	68.20	14.57
Middle Channel: 5580 MHz							
11160.000	33.87	PK	H	15.36	49.23	74.00	24.77
11160.000	20.74	AV	H	15.36	36.10	54.00	17.90
11160.000	33.82	PK	V	15.36	49.18	74.00	24.82
11160.000	20.49	AV	V	15.36	35.85	54.00	18.15
16740.000	34.20	PK	H	20.57	54.77	68.20	13.43
16740.000	33.97	PK	V	20.57	54.54	68.20	13.66
High Channel: 5700 MHz							
5725.000	30.11	PK	H	33.03	63.14	68.20	5.06
5725.000	30.02	PK	V	33.03	63.05	68.20	5.15
11400.000	33.56	PK	H	15.89	49.45	74.00	24.55
11400.000	20.44	AV	H	15.89	36.33	54.00	17.67
11400.000	33.23	PK	V	15.89	49.12	74.00	24.88
11400.000	20.19	AV	V	15.89	36.08	54.00	17.92
17100.000	33.69	PK	H	22.49	56.18	68.20	12.02
17100.000	33.63	PK	H	22.49	56.12	68.20	12.08

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5510 MHz							
5470.000	29.63	PK	H	32.62	62.25	68.20	5.95
5470.000	29.13	PK	V	32.62	61.75	68.20	6.45
11020.000	33.88	PK	H	15.50	49.38	74.00	24.62
11020.000	20.75	AV	H	15.50	36.25	54.00	17.75
11020.000	33.68	PK	V	15.50	49.18	74.00	24.82
11020.000	20.47	AV	V	15.50	35.97	54.00	18.03
16530.000	33.89	PK	H	20.16	54.05	68.20	14.15
16530.000	33.69	PK	V	20.16	53.85	68.20	14.35
Middle Channel: 5550 MHz							
11100.000	33.78	PK	H	15.45	49.23	74.00	24.77
11100.000	20.68	AV	H	15.45	36.13	54.00	17.87
11100.000	33.64	PK	V	15.45	49.09	74.00	24.91
11100.000	20.35	AV	V	15.45	35.80	54.00	18.20
16650.000	34.01	PK	H	20.65	54.66	68.20	13.54
16650.000	33.85	PK	V	20.65	54.50	68.20	13.70
High Channel: 5670 MHz							
5725.000	30.02	PK	H	33.03	63.05	68.20	5.15
5725.000	29.56	PK	V	33.03	62.59	68.20	5.61
11340.000	33.67	PK	H	15.84	49.51	74.00	24.49
11340.000	20.68	AV	H	15.84	36.52	54.00	17.48
11340.000	33.53	PK	V	15.84	49.37	74.00	24.63
11340.000	20.41	AV	V	15.84	36.25	54.00	17.75
17010.000	34.23	PK	H	22.10	56.33	68.20	11.87
17010.000	33.86	PK	H	22.10	55.96	68.20	12.24

**802.11ac80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5530 MHz							
5470.000	29.95	PK	H	32.62	62.57	68.20	5.63
5470.000	29.63	PK	V	32.62	62.25	68.20	5.95
11060.000	33.64	PK	H	15.47	49.11	74.00	24.89
11060.000	20.23	AV	H	15.47	35.70	54.00	18.30
11060.000	33.60	PK	V	15.47	49.07	74.00	24.93
11060.000	20.17	AV	V	15.47	35.64	54.00	18.36
16590.000	33.78	PK	H	20.66	54.44	68.20	13.76
16590.000	33.69	PK	V	20.66	54.35	68.20	13.85
High Channel: 5610 MHz							
5725.000	29.88	PK	H	33.03	62.91	68.20	5.29
5725.000	29.67	PK	V	33.03	62.70	68.20	5.50
11220.000	33.65	PK	H	15.41	49.06	74.00	24.94
11220.000	20.39	AV	H	15.41	35.80	54.00	18.20
11220.000	33.74	PK	V	15.41	49.15	74.00	24.85
11220.000	20.32	AV	V	15.41	35.73	54.00	18.27
16830.000	33.86	PK	H	20.92	54.78	68.20	13.42
16830.000	33.81	PK	H	20.92	54.73	68.20	13.47

**802.11ax hew20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5500 MHz							
5470.000	30.23	PK	H	32.62	62.85	68.20	5.35
5470.000	29.69	PK	V	32.62	62.31	68.20	5.89
11000.000	33.36	PK	H	15.51	48.87	74.00	25.13
11000.000	20.18	AV	H	15.51	35.69	54.00	18.31
11000.000	33.25	PK	V	15.51	48.76	74.00	25.24
11000.000	20.14	AV	V	15.51	35.65	54.00	18.35
16500.000	34.72	PK	H	19.91	54.63	68.20	13.57
16500.000	34.63	PK	V	19.91	54.54	68.20	13.66
Middle Channel: 5580 MHz							
11160.000	34.27	PK	H	15.36	49.63	74.00	24.37
11160.000	21.21	AV	H	15.36	36.57	54.00	17.43
11160.000	33.86	PK	V	15.36	49.22	74.00	24.78
11160.000	21.13	AV	V	15.36	36.49	54.00	17.51
16740.000	35.84	PK	H	20.57	56.41	68.20	11.79
16740.000	35.29	PK	V	20.57	55.86	68.20	12.34
High Channel: 5700 MHz							
5725.000	29.36	PK	H	33.03	62.39	68.20	5.81
5725.000	29.28	PK	V	33.03	62.31	68.20	5.89
11400.000	33.76	PK	H	15.89	49.65	74.00	24.35
11400.000	20.56	AV	H	15.89	36.45	54.00	17.55
11400.000	33.56	PK	V	15.89	49.45	74.00	24.55
11400.000	20.48	AV	V	15.89	36.37	54.00	17.63
17100.000	34.37	PK	H	22.49	56.86	68.20	11.34
17100.000	34.29	PK	H	22.49	56.78	68.20	11.42

**802.11ax hew40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5510 MHz							
5470.000	29.63	PK	H	32.62	62.25	68.20	5.95
5470.000	28.97	PK	V	32.62	61.59	68.20	6.61
11020.000	33.63	PK	H	15.50	49.13	74.00	24.87
11020.000	20.25	AV	H	15.50	35.75	54.00	18.25
11020.000	33.38	PK	V	15.50	48.88	74.00	25.12
11020.000	20.17	AV	V	15.50	35.67	54.00	18.33
16530.000	35.26	PK	H	20.16	55.42	68.20	12.78
16530.000	35.13	PK	V	20.16	55.29	68.20	12.91
Middle Channel: 5550 MHz							
11100.000	33.85	PK	H	15.45	49.30	74.00	24.70
11100.000	20.70	AV	H	15.45	36.15	54.00	17.85
11100.000	33.45	PK	V	15.45	48.90	74.00	25.10
11100.000	20.19	AV	V	15.45	35.64	54.00	18.36
16650.000	35.32	PK	H	20.65	55.97	68.20	12.23
16650.000	35.16	PK	V	20.65	55.81	68.20	12.39
High Channel: 5670 MHz							
5725.000	30.02	PK	H	33.03	63.05	68.20	5.15
5725.000	29.56	PK	V	33.03	62.59	68.20	5.61
11340.000	33.67	PK	H	15.84	49.51	74.00	24.49
11340.000	20.68	AV	H	15.84	36.52	54.00	17.48
11340.000	33.53	PK	V	15.84	49.37	74.00	24.63
11340.000	20.41	AV	V	15.84	36.25	54.00	17.75
17010.000	34.23	PK	H	22.10	56.33	68.20	11.87
17010.000	33.86	PK	H	22.10	55.96	68.20	12.24

**802.11ax hew80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5530 MHz							
5470.000	30.28	PK	H	32.62	62.90	68.20	5.30
5470.000	30.12	PK	V	32.62	62.74	68.20	5.46
11060.000	33.69	PK	H	15.47	49.16	74.00	24.84
11060.000	20.12	AV	H	15.47	35.59	54.00	18.41
11060.000	33.58	PK	V	15.47	49.05	74.00	24.95
11060.000	20.14	AV	V	15.47	35.61	54.00	18.39
16590.000	34.23	PK	H	20.66	54.89	68.20	13.31
16590.000	34.05	PK	V	20.66	54.71	68.20	13.49
High Channel: 5610 MHz							
5725.000	30.36	PK	H	33.03	63.39	68.20	4.81
5725.000	29.97	PK	V	33.03	63.00	68.20	5.20
11220.000	34.06	PK	H	15.41	49.47	74.00	24.53
11220.000	20.39	AV	H	15.41	35.80	54.00	18.20
11220.000	33.21	PK	V	15.41	48.62	74.00	25.38
11220.000	20.20	AV	V	15.41	35.61	54.00	18.39
16830.000	33.67	PK	H	20.92	54.59	68.20	13.61
16830.000	33.62	PK	H	20.92	54.54	68.20	13.66

**5725-5850MHz****802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5745	MHz		
11490.000	34.43	PK	H	15.47	49.90	74.00	24.10
11490.000	21.56	AV	H	15.47	37.03	54.00	16.97
11490.000	34.28	PK	V	15.47	49.75	74.00	24.25
11490.000	21.53	AV	V	15.47	37.00	54.00	17.00
17235.000	34.42	PK	H	22.69	57.11	68.20	11.09
17235.000	34.18	PK	V	22.69	56.87	68.20	11.33
Middle Channel:				5785	MHz		
11570.000	34.66	PK	H	15.69	50.35	74.00	23.65
11570.000	21.68	AV	H	15.69	37.37	54.00	16.63
11570.000	34.25	PK	V	15.69	49.94	74.00	24.06
11570.000	21.39	AV	V	15.69	37.08	54.00	16.92
17355.000	34.36	PK	H	23.33	57.69	68.20	10.51
17355.000	34.24	PK	V	23.33	57.57	68.20	10.63
High Channel:				5825	MHz		
11650.000	34.98	PK	H	16.02	51.00	74.00	23.00
11650.000	21.68	AV	H	16.02	37.70	54.00	16.30
11650.000	34.56	PK	V	16.02	50.58	74.00	23.42
11650.000	21.37	AV	V	16.02	37.39	54.00	16.61
17475.000	34.80	PK	H	23.87	58.67	68.20	9.53
17475.000	34.29	PK	V	23.87	58.16	68.20	10.04

**802.11a Mode Chain 1:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5745 MHz							
11490.000	34.69	PK	H	15.47	50.16	74.00	23.84
11490.000	21.27	AV	H	15.47	36.74	54.00	17.26
11490.000	33.86	PK	V	15.47	49.33	74.00	24.67
11490.000	21.10	AV	V	15.47	36.57	54.00	17.43
17235.000	34.25	PK	H	22.69	56.94	68.20	11.26
17235.000	34.16	PK	V	22.69	56.85	68.20	11.35
Middle Channel: 5785 MHz							
11570.000	34.72	PK	H	15.69	50.41	74.00	23.59
11570.000	21.41	AV	H	15.69	37.10	54.00	16.90
11570.000	34.23	PK	V	15.69	49.92	74.00	24.08
11570.000	21.08	AV	V	15.69	36.77	54.00	17.23
17355.000	34.33	PK	H	23.33	57.66	68.20	10.54
17355.000	34.21	PK	V	23.33	57.54	68.20	10.66
High Channel: 5825 MHz							
11650.000	34.79	PK	H	16.02	50.81	74.00	23.19
11650.000	21.25	AV	H	16.02	37.27	54.00	16.73
11650.000	34.36	PK	V	16.02	50.38	74.00	23.62
11650.000	21.23	AV	V	16.02	37.25	54.00	16.75
17475.000	34.71	PK	H	23.87	58.58	68.20	9.62
17475.000	34.62	PK	V	23.87	58.49	68.20	9.71

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5745 MHz							
11490.000	33.89	PK	H	15.47	49.36	74.00	24.64
11490.000	20.56	AV	H	15.47	36.03	54.00	17.97
11490.000	33.88	PK	V	15.47	49.35	74.00	24.65
11490.000	20.74	AV	V	15.47	36.21	54.00	17.79
17235.000	33.76	PK	H	22.69	56.45	68.20	11.75
17235.000	33.74	PK	V	22.69	56.43	68.20	11.77
Middle Channel: 5785 MHz							
11570.000	33.68	PK	H	15.69	49.37	74.00	24.63
11570.000	21.02	AV	H	15.69	36.71	54.00	17.29
11570.000	33.66	PK	V	15.69	49.35	74.00	24.65
11570.000	20.69	AV	V	15.69	36.38	54.00	17.62
17355.000	33.87	PK	H	23.33	57.20	68.20	11.00
17355.000	33.64	PK	V	23.33	56.97	68.20	11.23
High Channel: 5825 MHz							
11650.000	33.68	PK	H	16.02	49.70	74.00	24.30
11650.000	20.54	AV	H	16.02	36.56	54.00	17.44
11650.000	33.65	PK	V	16.02	49.67	74.00	24.33
11650.000	20.32	AV	V	16.02	36.34	54.00	17.66
17475.000	33.20	PK	H	23.87	57.07	68.20	11.13
17475.000	33.04	PK	V	23.87	56.91	68.20	11.29

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5755 MHz							
11510.000	33.83	PK	H	15.46	49.29	74.00	24.71
11510.000	20.68	AV	H	15.46	36.14	54.00	17.86
11510.000	33.78	PK	V	15.46	49.24	74.00	24.76
11510.000	20.53	AV	V	15.46	35.99	54.00	18.01
17265.000	33.85	PK	H	22.77	56.62	68.20	11.58
17265.000	33.10	PK	V	22.77	55.87	68.20	12.33
High Channel: 5795 MHz							
11590.000	33.82	PK	H	15.76	49.58	74.00	24.42
11590.000	20.77	AV	H	15.76	36.53	54.00	17.47
11590.000	33.80	PK	V	15.76	49.56	74.00	24.44
11590.000	20.56	AV	V	15.76	36.32	54.00	17.68
17385.000	33.74	PK	H	23.57	57.31	68.20	10.89
17385.000	33.58	PK	V	23.57	57.15	68.20	11.05

**802.11ac80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel: 5775 MHz							
11550.000	33.78	PK	H	15.61	49.39	74.00	24.61
11550.000	20.65	AV	H	15.61	36.26	54.00	17.74
11550.000	33.68	PK	V	15.61	49.29	74.00	24.71
11550.000	20.61	AV	V	15.61	36.22	54.00	17.78
17325.000	33.58	PK	H	23.09	56.67	68.20	11.53
17325.000	33.29	PK	V	23.09	56.38	68.20	11.82

**802.11ax hew20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5745 MHz							
11490.000	34.80	PK	H	15.47	50.27	74.00	23.73
11490.000	21.63	AV	H	15.47	37.10	54.00	16.90
11490.000	34.69	PK	V	15.47	50.16	74.00	23.84
11490.000	21.55	AV	V	15.47	37.02	54.00	16.98
17235.000	33.71	PK	H	22.69	56.40	68.20	11.80
17235.000	33.62	PK	V	22.69	56.31	68.20	11.89
Middle Channel: 5785 MHz							
11570.000	33.89	PK	H	15.69	49.58	74.00	24.42
11570.000	21.20	AV	H	15.69	36.89	54.00	17.11
11570.000	33.58	PK	V	15.69	49.27	74.00	24.73
11570.000	21.21	AV	V	15.69	36.90	54.00	17.10
17355.000	34.26	PK	H	23.33	57.59	68.20	10.61
17355.000	33.98	PK	V	23.33	57.31	68.20	10.89
High Channel: 5825 MHz							
11650.000	34.52	PK	H	16.02	50.54	74.00	23.46
11650.000	21.47	AV	H	16.02	37.49	54.00	16.51
11650.000	33.35	PK	V	16.02	49.37	74.00	24.63
11650.000	20.44	AV	V	16.02	36.46	54.00	17.54
17475.000	34.34	PK	H	23.87	58.21	68.20	9.99
17475.000	33.96	PK	V	23.87	57.83	68.20	10.37

**802.11ax hew40 Mode:**

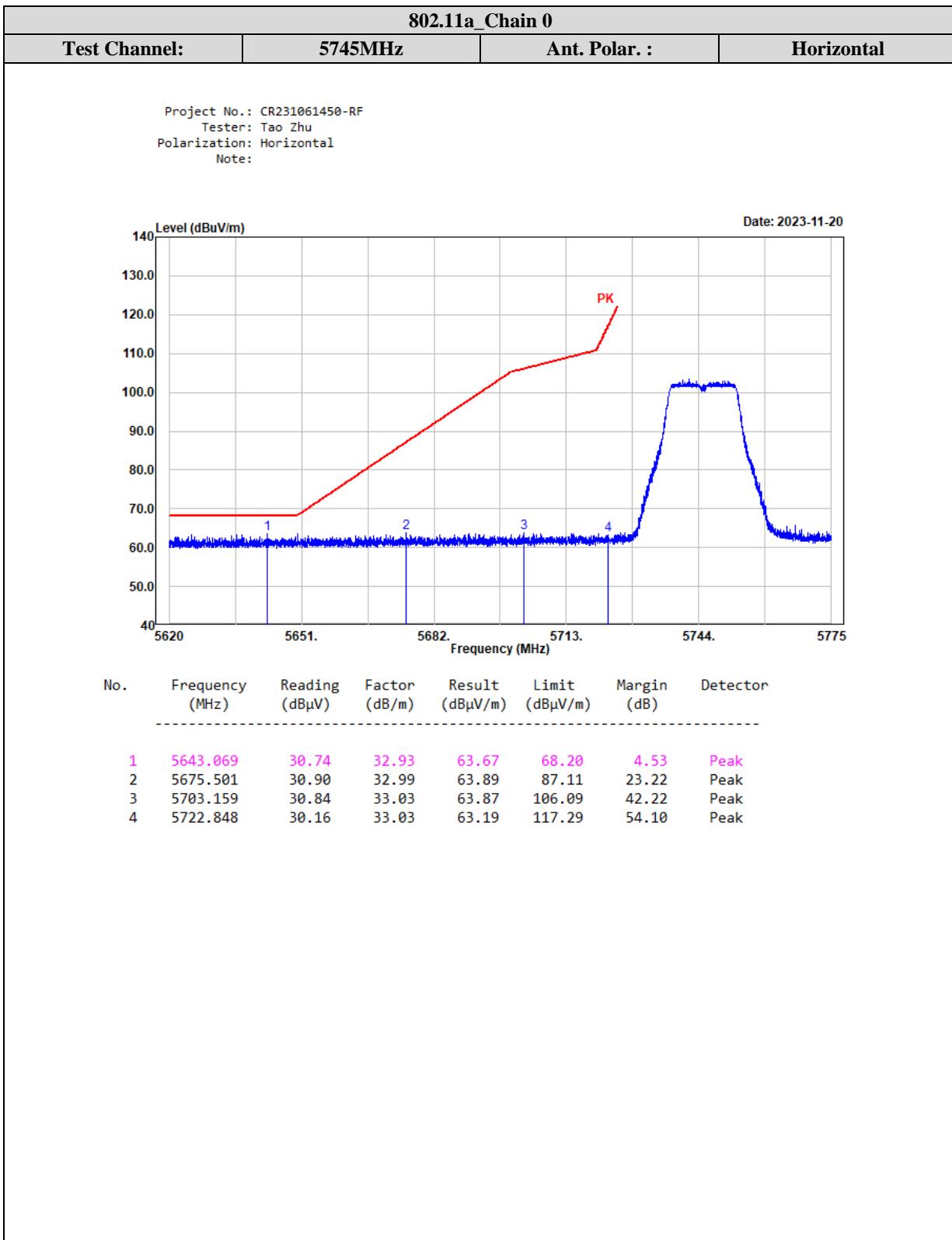
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5755 MHz							
11510.000	33.68	PK	H	15.46	49.14	74.00	24.86
11510.000	20.66	AV	H	15.46	36.12	54.00	17.88
11510.000	33.49	PK	V	15.46	48.95	74.00	25.05
11510.000	20.53	AV	V	15.46	35.99	54.00	18.01
17265.000	33.69	PK	H	22.77	56.46	68.20	11.74
17265.000	32.98	PK	V	22.77	55.75	68.20	12.45
High Channel: 5795 MHz							
11590.000	33.76	PK	H	15.76	49.52	74.00	24.48
11590.000	20.58	AV	H	15.76	36.34	54.00	17.66
11590.000	33.70	PK	V	15.76	49.46	74.00	24.54
11590.000	20.42	AV	V	15.76	36.18	54.00	17.82
17385.000	33.39	PK	H	23.57	56.96	68.20	11.24
17385.000	33.22	PK	V	23.57	56.79	68.20	11.41

**802.11ax hew80 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Middle Channel: 5775 MHz							
11550.000	33.67	PK	H	15.61	49.28	74.00	24.72
11550.000	20.50	AV	H	15.61	36.11	54.00	17.89
11550.000	33.26	PK	V	15.61	48.87	74.00	25.13
11550.000	20.28	AV	V	15.61	35.89	54.00	18.11
17325.000	33.30	PK	H	23.09	56.39	68.20	11.81
17325.000	32.96	PK	V	23.09	56.05	68.20	12.15

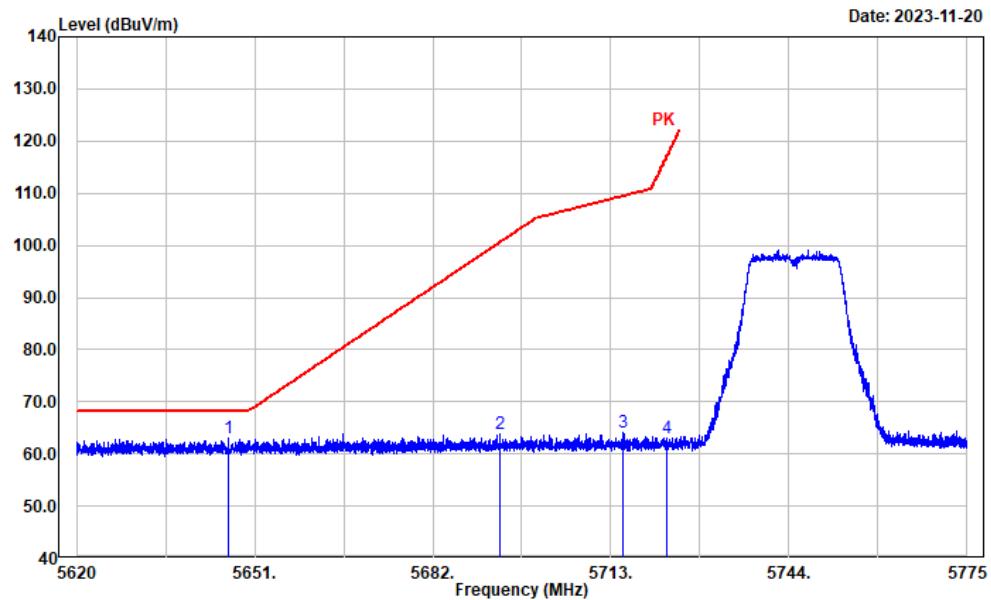
*Note:**Result = Reading + Factor- Distance extrapolation Factor**Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.02 dB*

#### 4) Test plots for Band Edge Measurements in 5745-5825 MHz Band (Radiated)

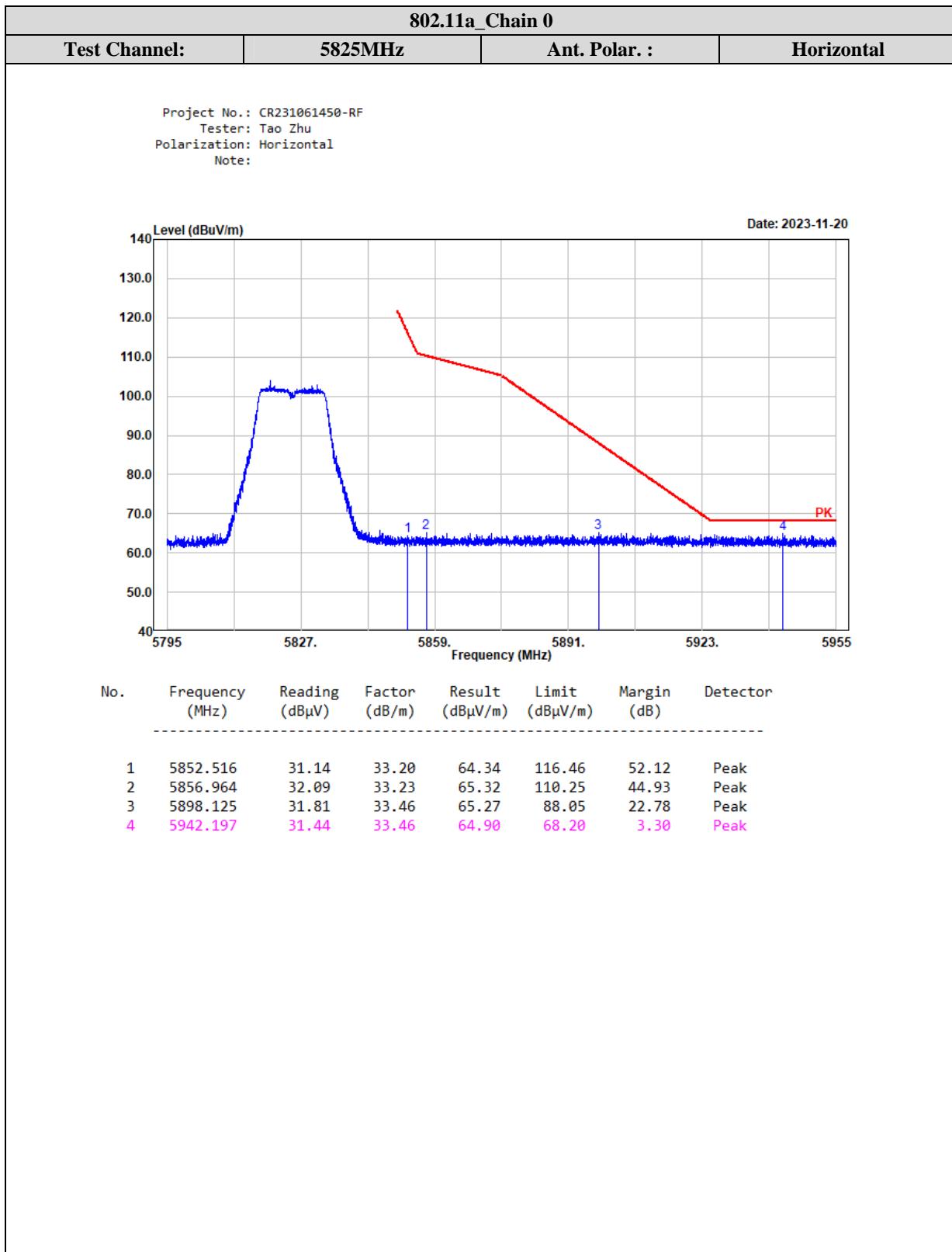


**802.11 a Chain 0****Test Channel: 5745MHz Ant. Polar.: Vertical**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:



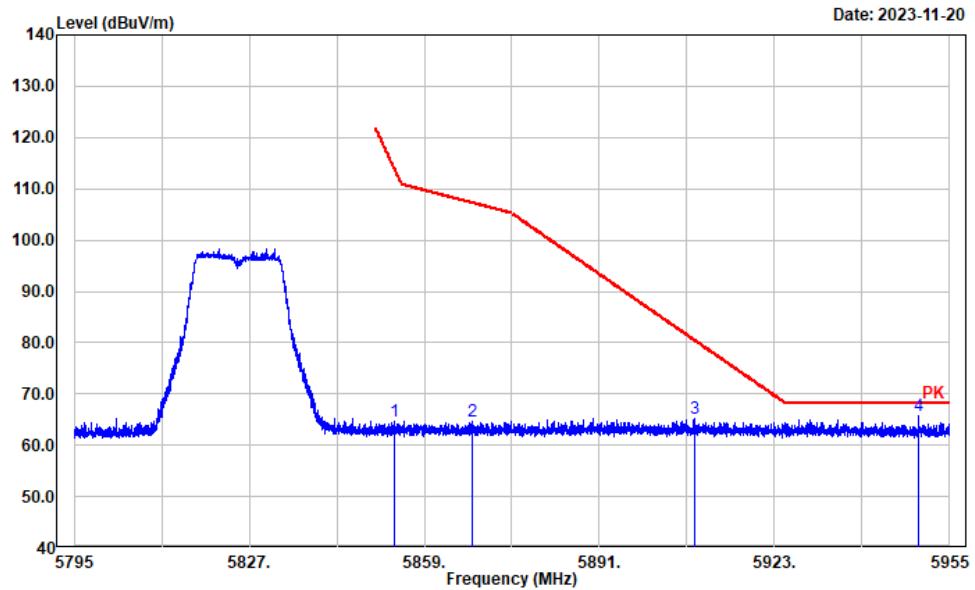
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
<hr/>							
1	5646.448	29.97	32.94	62.91	68.20	5.29	Peak
2	5693.671	30.85	33.02	63.87	100.53	36.66	Peak
3	5715.003	31.05	33.03	64.08	109.40	45.32	Peak
4	5722.692	30.14	33.03	63.17	116.94	53.77	Peak



**802.11 a Chain 0**

<b>Test Channel:</b>	<b>5825MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:

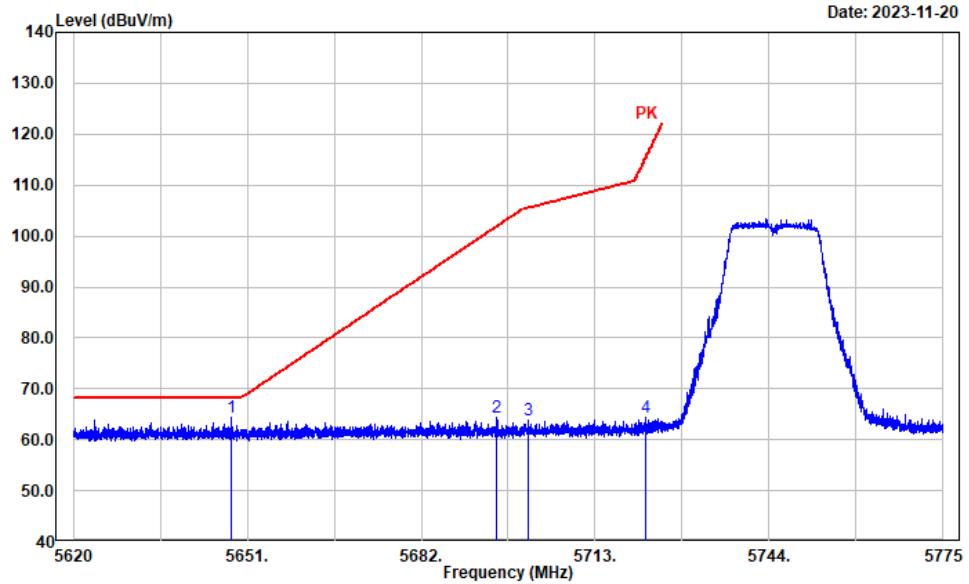


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5853.508	31.34	33.21	64.55	114.20	49.65	Peak
2	5867.750	31.39	33.29	64.68	107.23	42.55	Peak
3	5908.463	31.81	33.46	65.27	80.40	15.13	Peak
4	5949.271	32.31	33.46	65.77	68.20	2.43	Peak

**802.11a\_Chain 1**

<b>Test Channel:</b>	<b>5745MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:

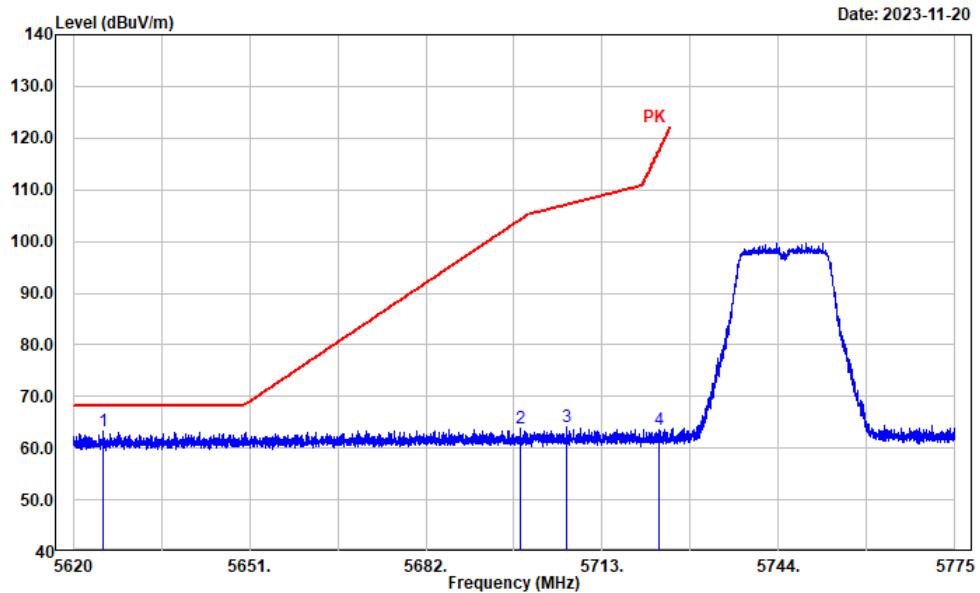


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
<hr/>							
1	5648.247	31.36	32.95	64.31	68.20	3.89	Peak
2	5695.438	31.40	33.02	64.42	101.84	37.42	Peak
3	5701.050	30.84	33.03	63.87	105.49	41.62	Peak
4	5721.979	31.23	33.03	64.26	115.31	51.05	Peak

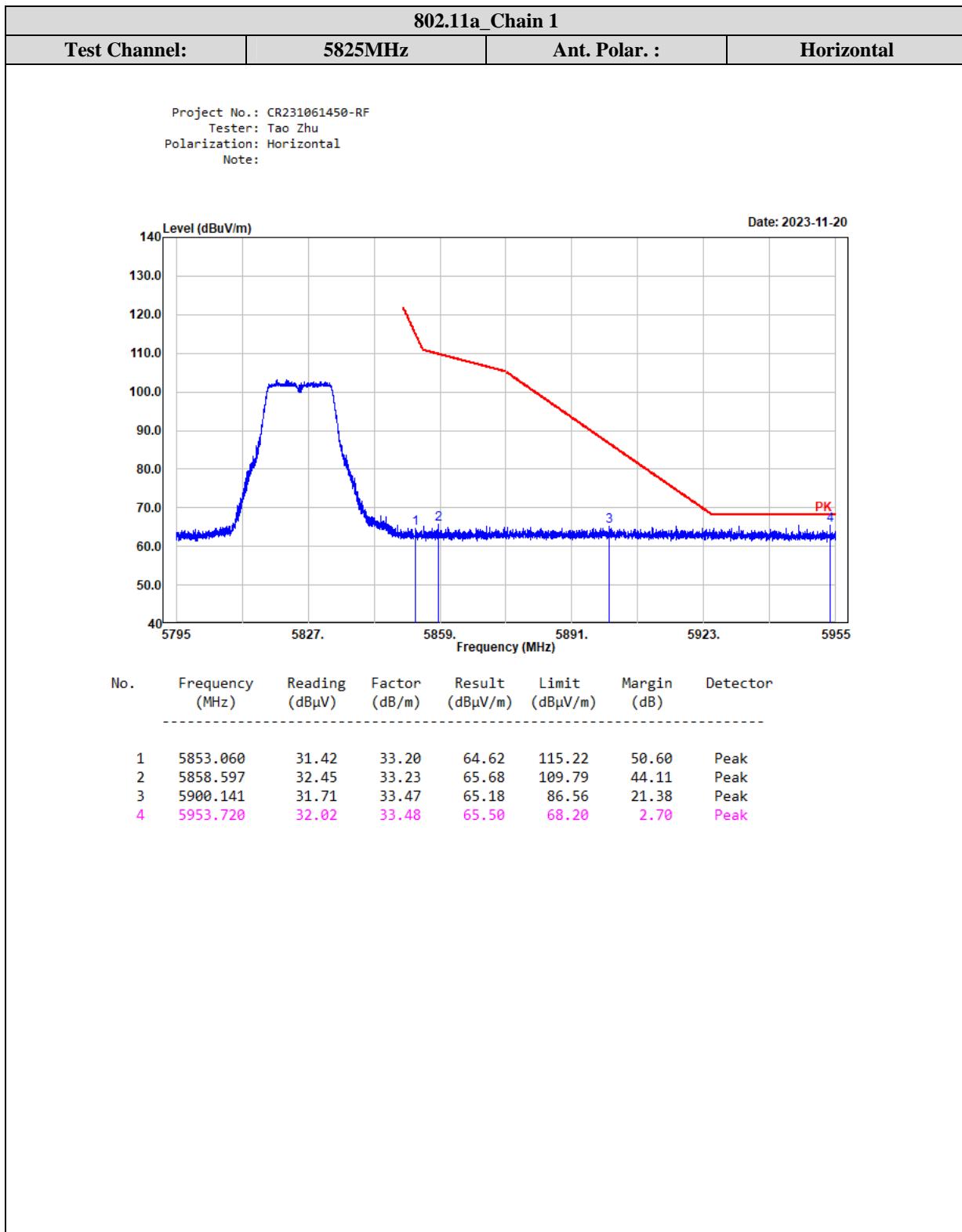
**802.11 a Chain 1**

<b>Test Channel:</b>	<b>5745MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:



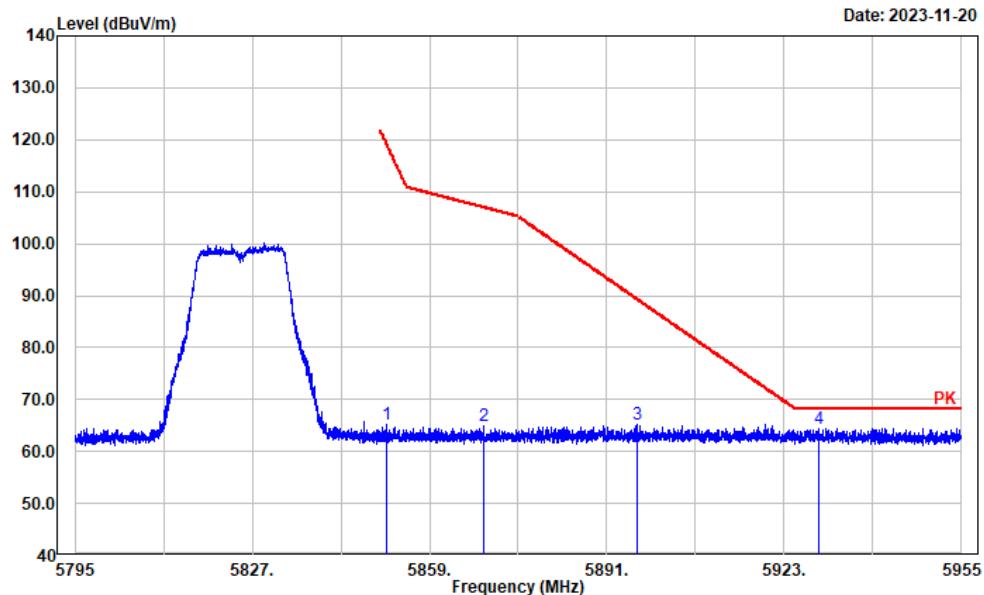
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5625.178	30.34	32.88	63.22	68.20	4.98	Peak
2	5698.632	30.79	33.03	63.82	104.19	40.37	Peak
3	5706.755	31.22	33.03	64.25	107.09	42.84	Peak
4	5722.972	30.64	33.03	63.67	117.58	53.91	Peak



**802.11 a Chain 1**

<b>Test Channel:</b>	<b>5825MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:

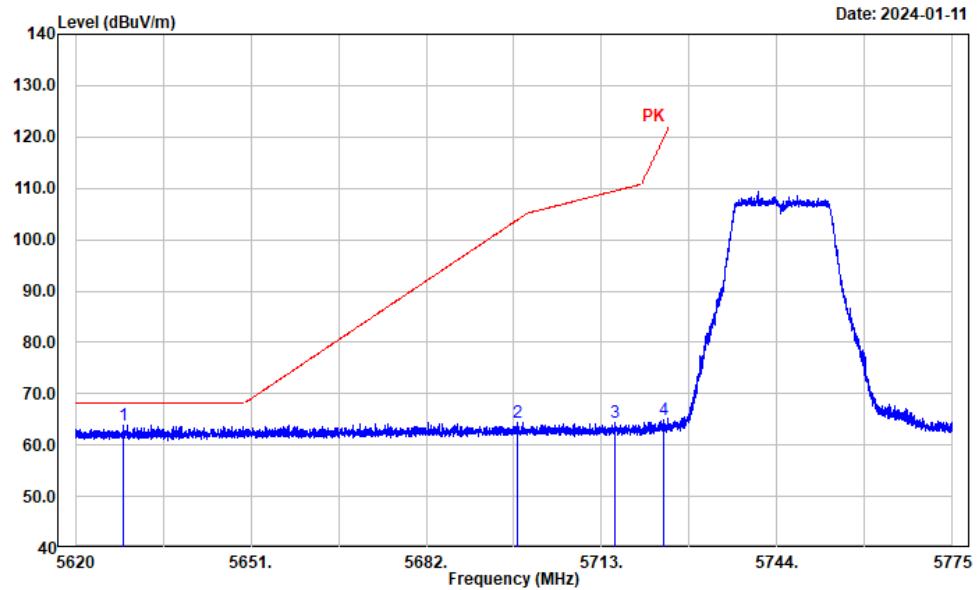


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5851.267	32.04	33.20	65.24	119.31	54.07	Peak
2	5868.807	31.50	33.30	64.80	106.93	42.13	Peak
3	5896.588	31.82	33.45	65.27	89.19	23.92	Peak
4	5929.331	31.02	33.47	64.49	68.20	3.71	Peak

**802.11n ht20 MIMO**

<b>Test Channel:</b>	<b>5745MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:

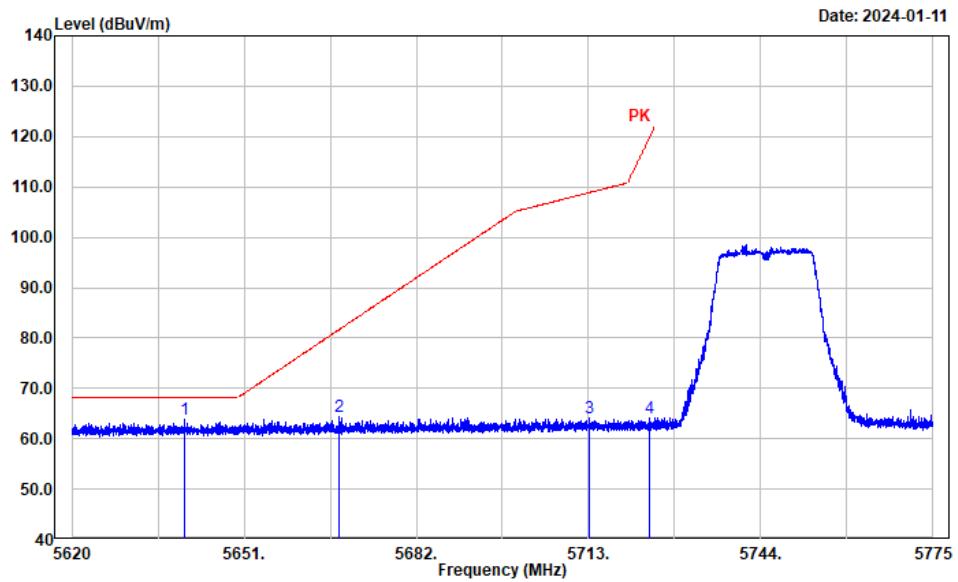


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5628.401	31.06	32.89	63.95	68.20	4.25	Peak
2	5698.058	31.36	33.03	64.39	103.77	39.38	Peak
3	5715.263	31.45	33.03	64.48	109.48	45.00	Peak
4	5724.036	31.82	33.03	64.85	120.00	55.15	Peak

**802.11n ht20 MIMO**

<b>Test Channel:</b>	<b>5745MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:

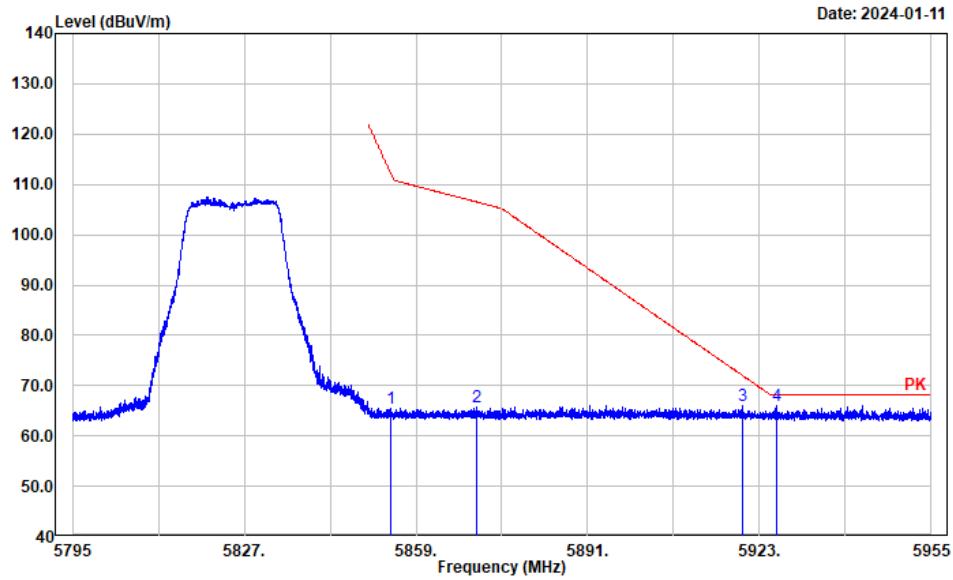


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
<hr/>							
1	5640.212	30.95	32.92	63.87	68.20	4.33	Peak
2	5668.205	31.36	32.98	64.34	81.71	17.37	Peak
3	5713.248	31.04	33.03	64.07	108.91	44.84	Peak
4	5724.036	31.05	33.03	64.08	120.00	55.92	Peak

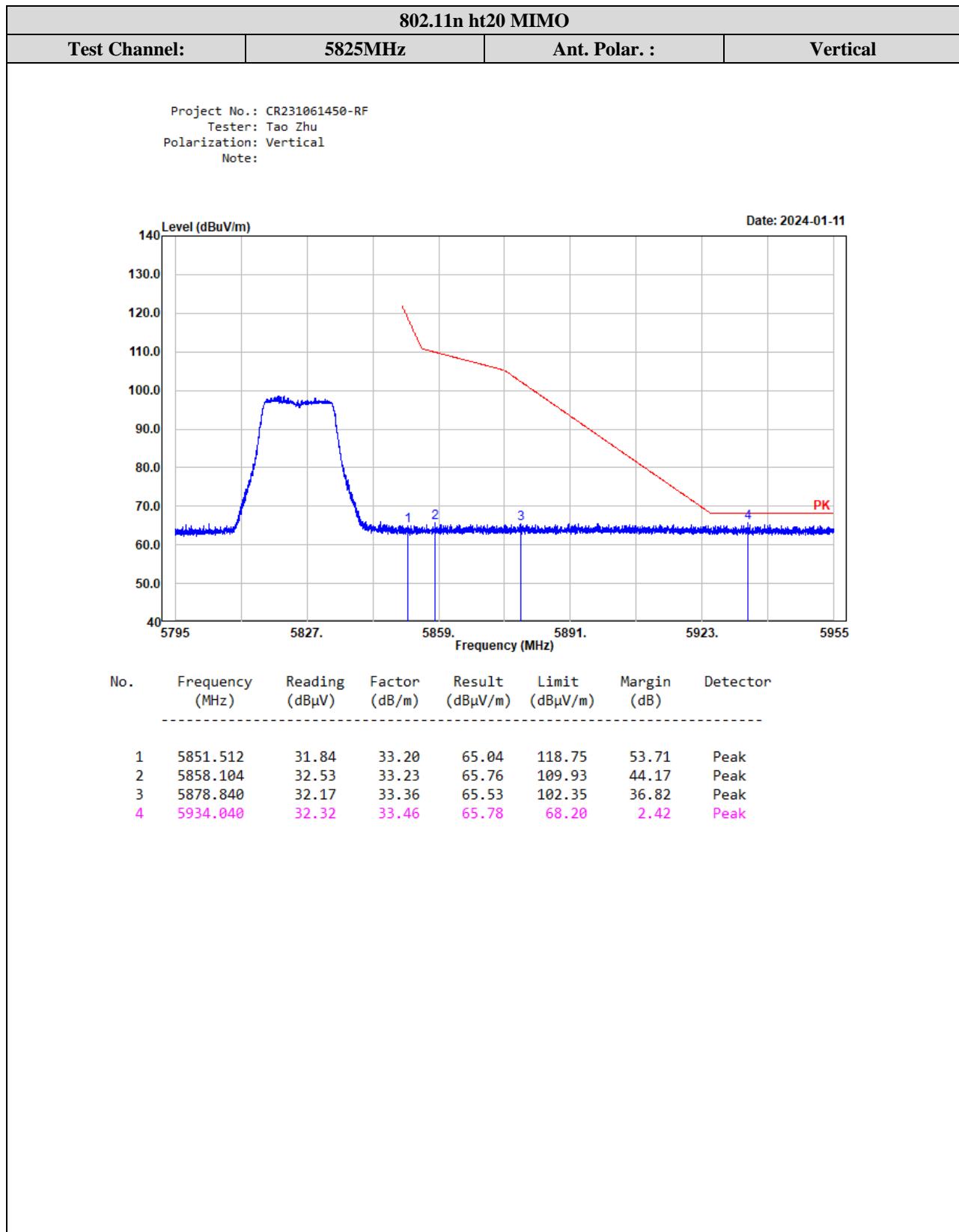
**802.11n ht20 MIMO**

<b>Test Channel:</b>	<b>5825MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:



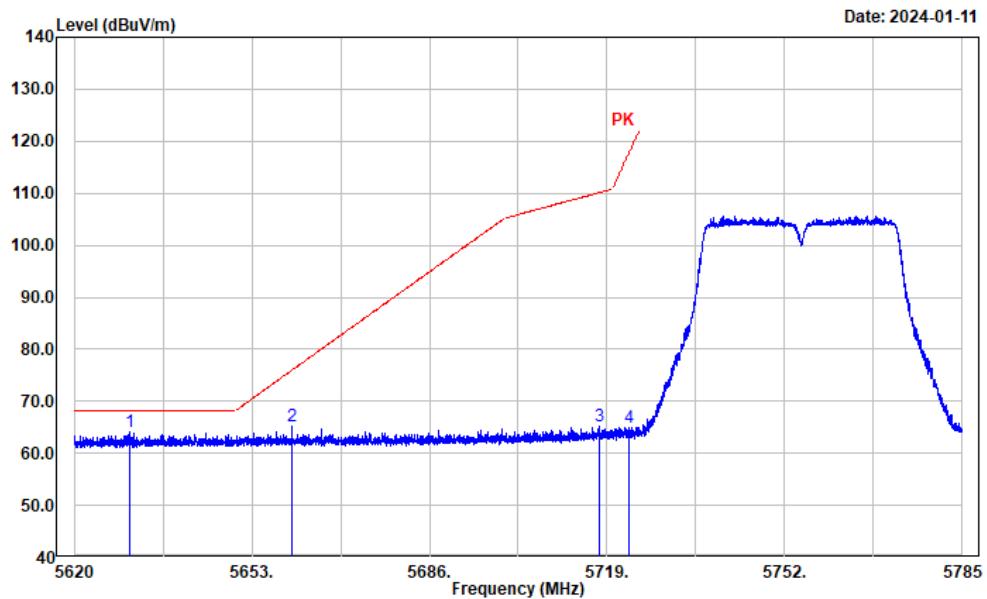
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
<hr/>							
1	5854.328	32.18	33.22	65.40	112.33	46.93	Peak
2	5870.296	32.39	33.30	65.69	106.52	40.83	Peak
3	5919.800	32.55	33.46	66.01	72.03	6.02	Peak
4	5926.104	32.58	33.46	66.04	68.20	2.16	Peak



**802.11n ht40 MIMO**

<b>Test Channel:</b>	<b>5755MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:

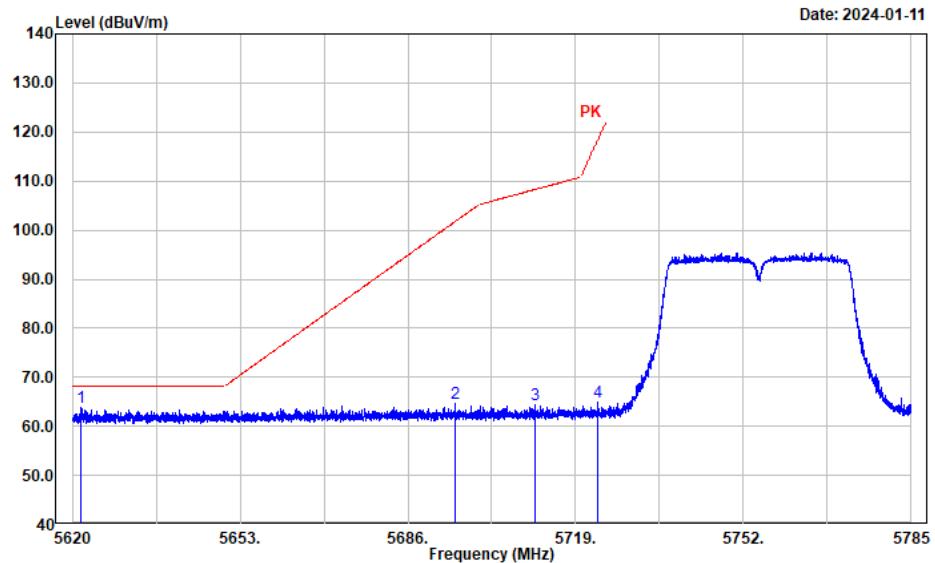


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5630.362	31.34	32.90	64.24	68.20	3.96	Peak
2	5660.458	32.22	32.97	65.19	75.97	10.78	Peak
3	5717.647	32.21	33.03	65.24	110.14	44.90	Peak
4	5723.059	31.89	33.03	64.92	117.78	52.86	Peak

**802.11n ht40 MIMO**

<b>Test Channel:</b>	<b>5755MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:

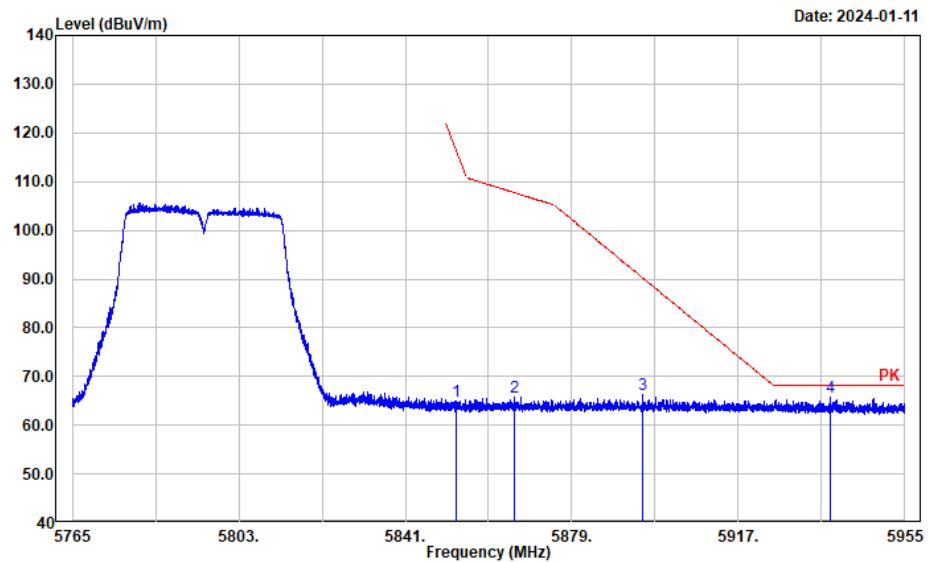


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
<hr/>							
1	5621.683	30.86	32.87	63.73	68.20	4.47	Peak
2	5695.240	31.56	33.02	64.58	101.69	37.11	Peak
3	5711.113	31.34	33.03	64.37	108.31	43.94	Peak
4	5723.455	31.92	33.03	64.95	118.68	53.73	Peak

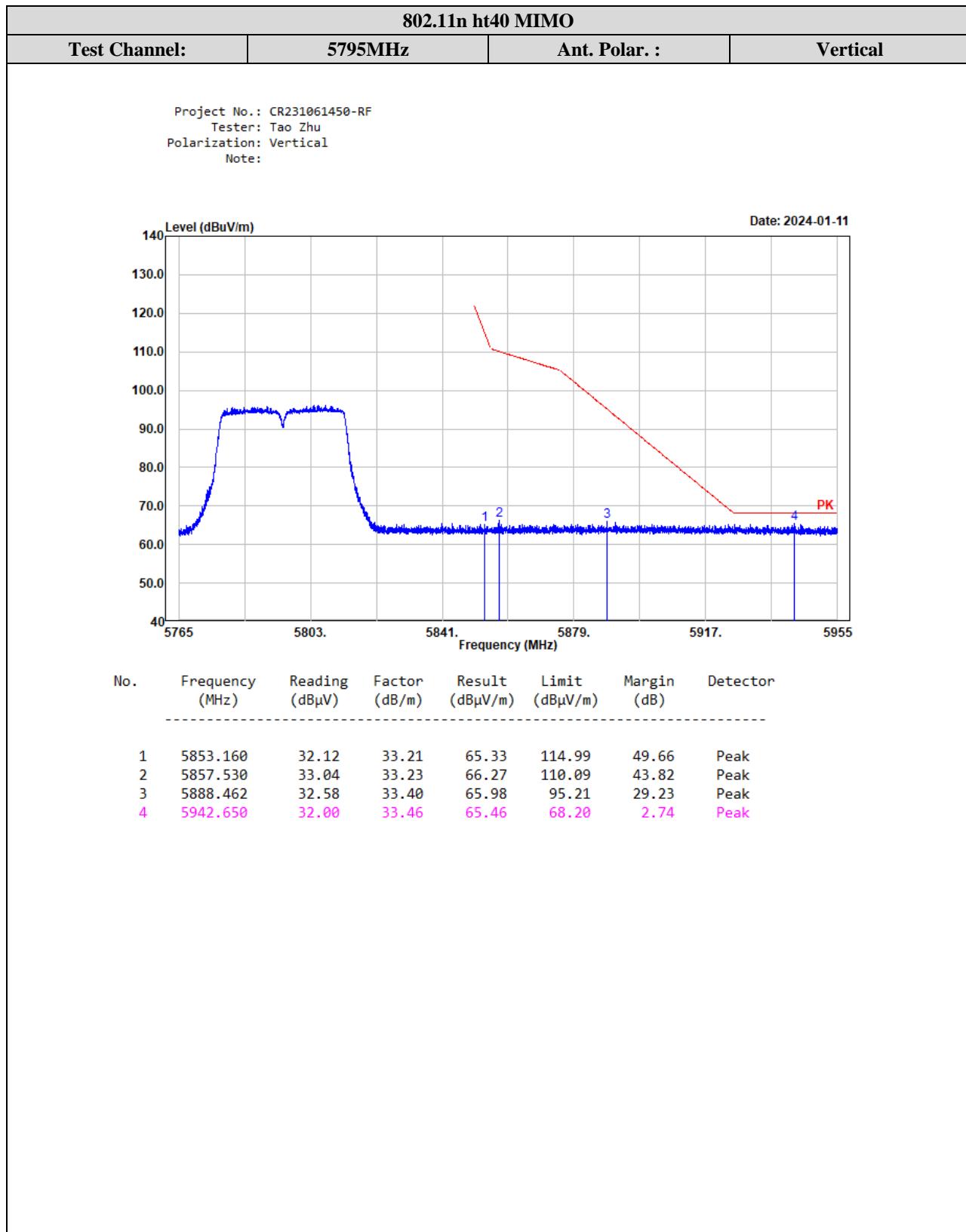
**802.11n ht40 MIMO**

<b>Test Channel:</b>	<b>5795MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:



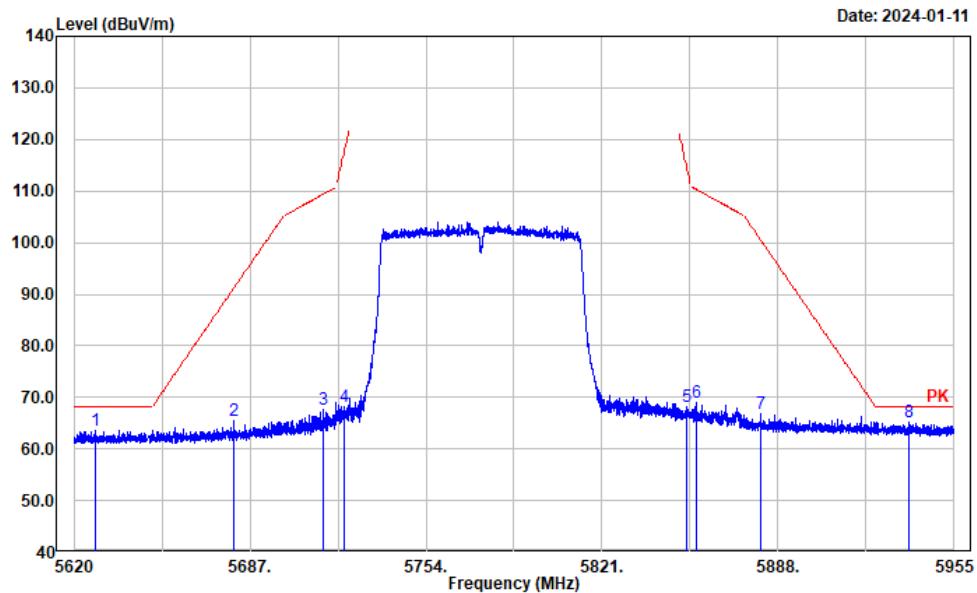
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5852.704	31.85	33.20	65.05	116.03	50.98	Peak
2	5865.852	32.48	33.28	65.76	107.76	42.00	Peak
3	5895.036	32.86	33.44	66.30	90.34	24.04	Peak
4	5938.014	32.39	33.46	65.85	68.20	2.35	Peak



**802.11ac vht80 MIMO**

<b>Test Channel:</b>	<b>5775MHz</b>	<b>Ant. Polar. :</b>	<b>Horizontal</b>
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Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:

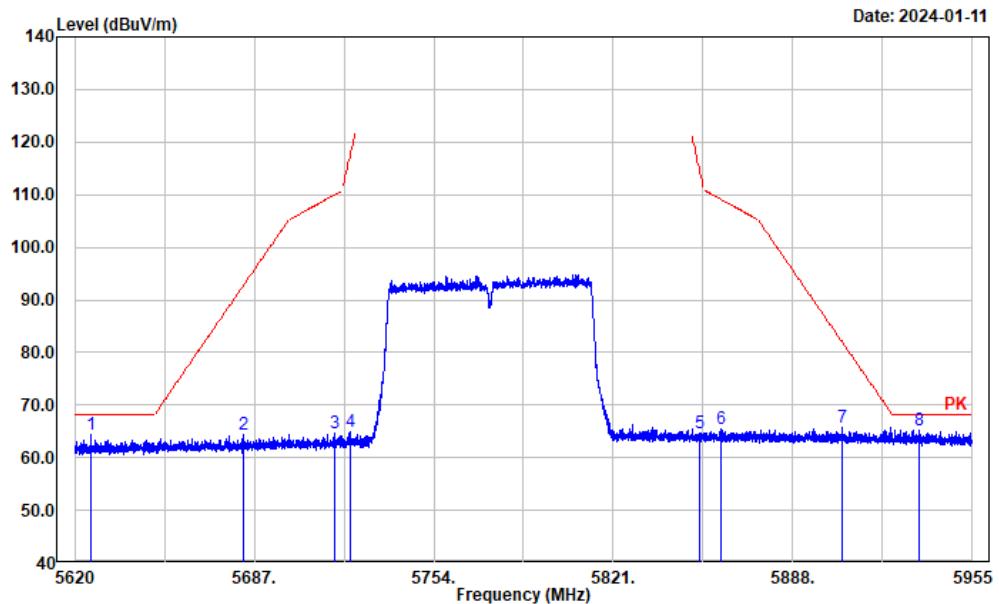


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5628.308	30.68	32.89	63.57	68.20	4.63	Peak
2	5680.970	32.46	33.00	65.46	91.16	25.70	Peak
3	5715.073	34.59	33.03	67.62	109.42	41.80	Peak
4	5722.912	35.25	33.03	68.28	117.44	49.16	Peak
5	5853.160	35.08	33.21	68.29	114.99	46.70	Peak
6	5856.711	35.65	33.23	68.88	110.32	41.44	Peak
7	5881.501	33.50	33.37	66.87	100.37	33.50	Peak
8	5937.647	31.73	33.46	65.19	68.20	3.01	Peak

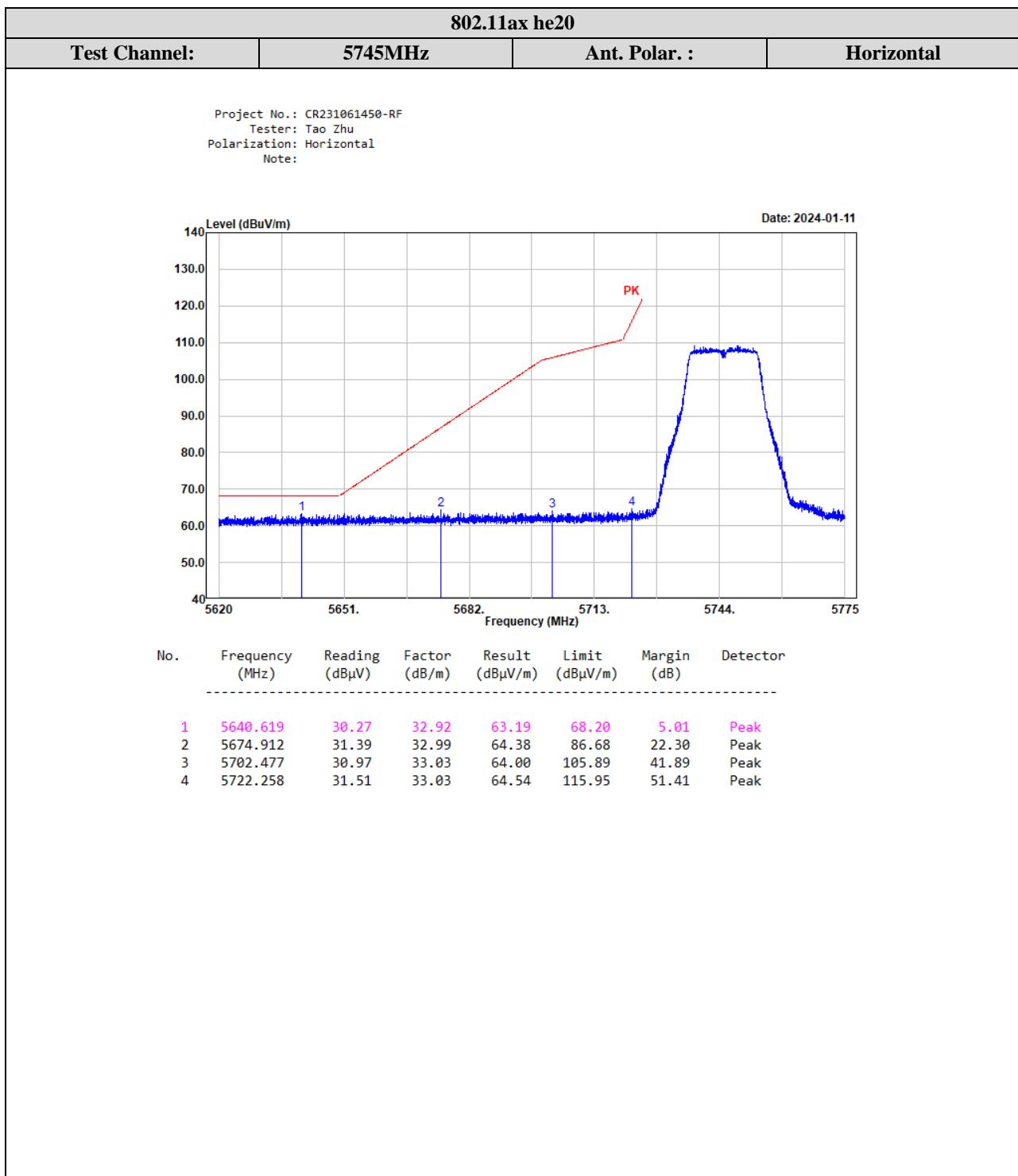
**802.11ac vht80 MIMO**

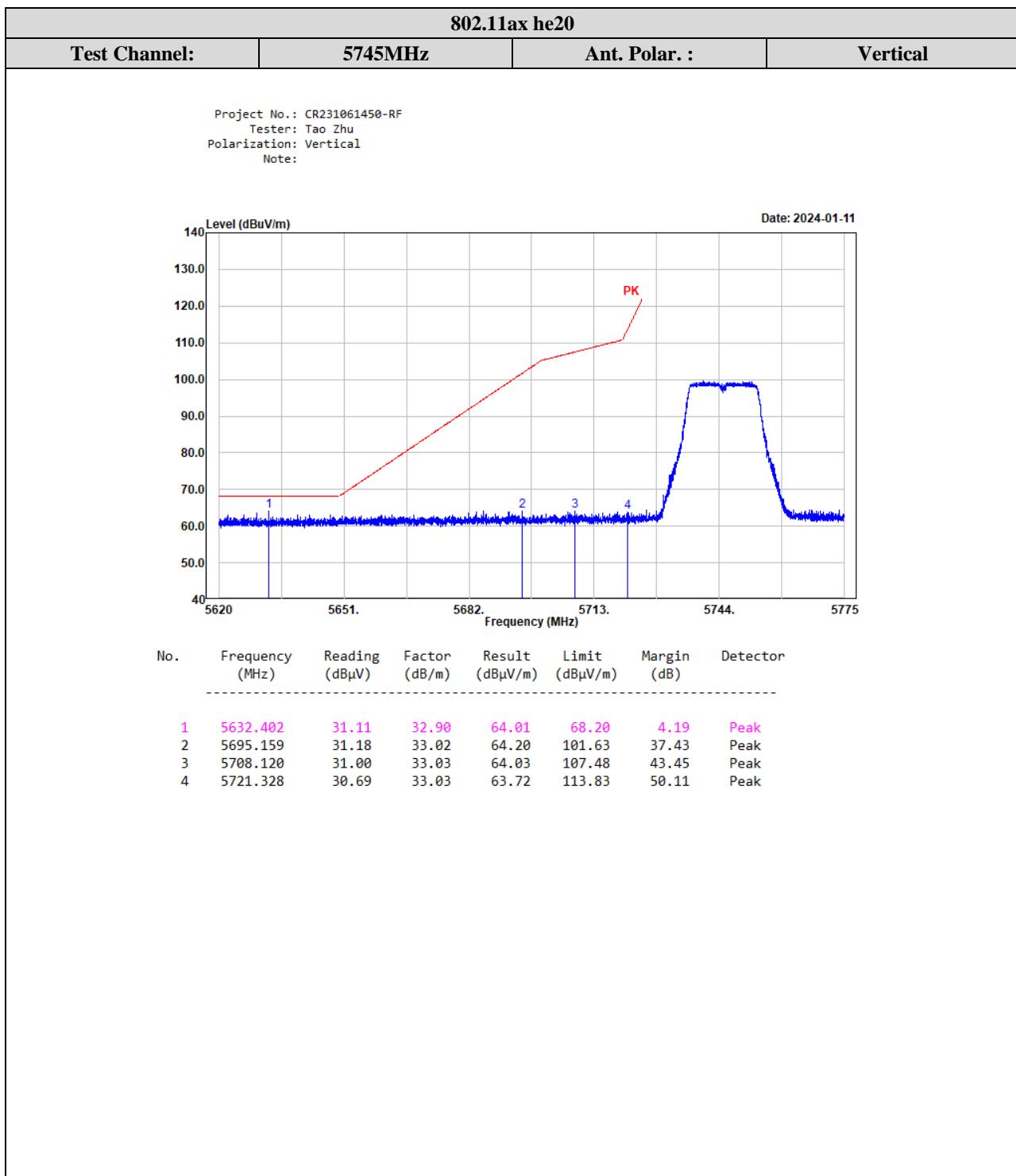
<b>Test Channel:</b>	<b>5775MHz</b>	<b>Ant. Polar. :</b>	<b>Vertical</b>
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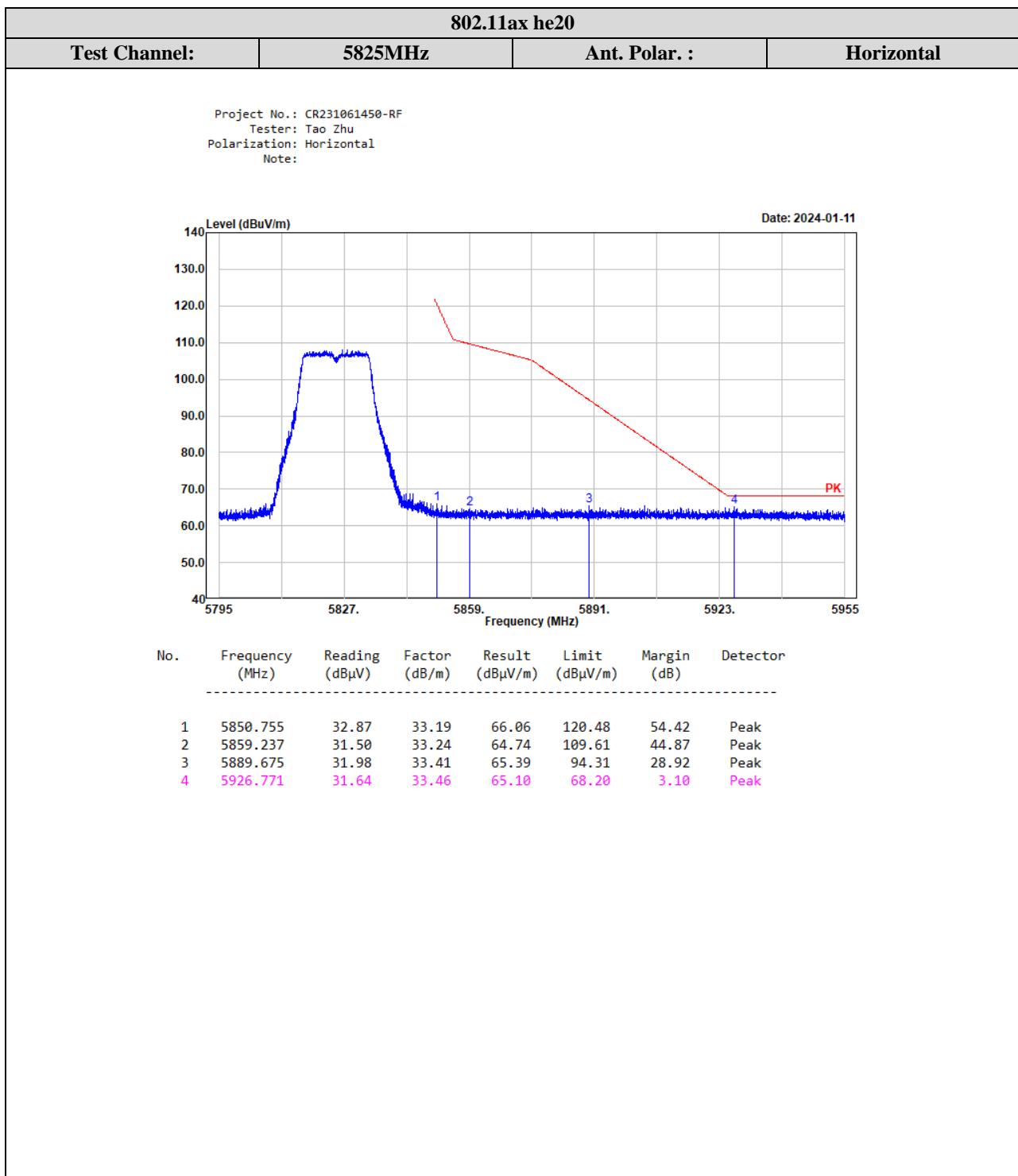
Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:

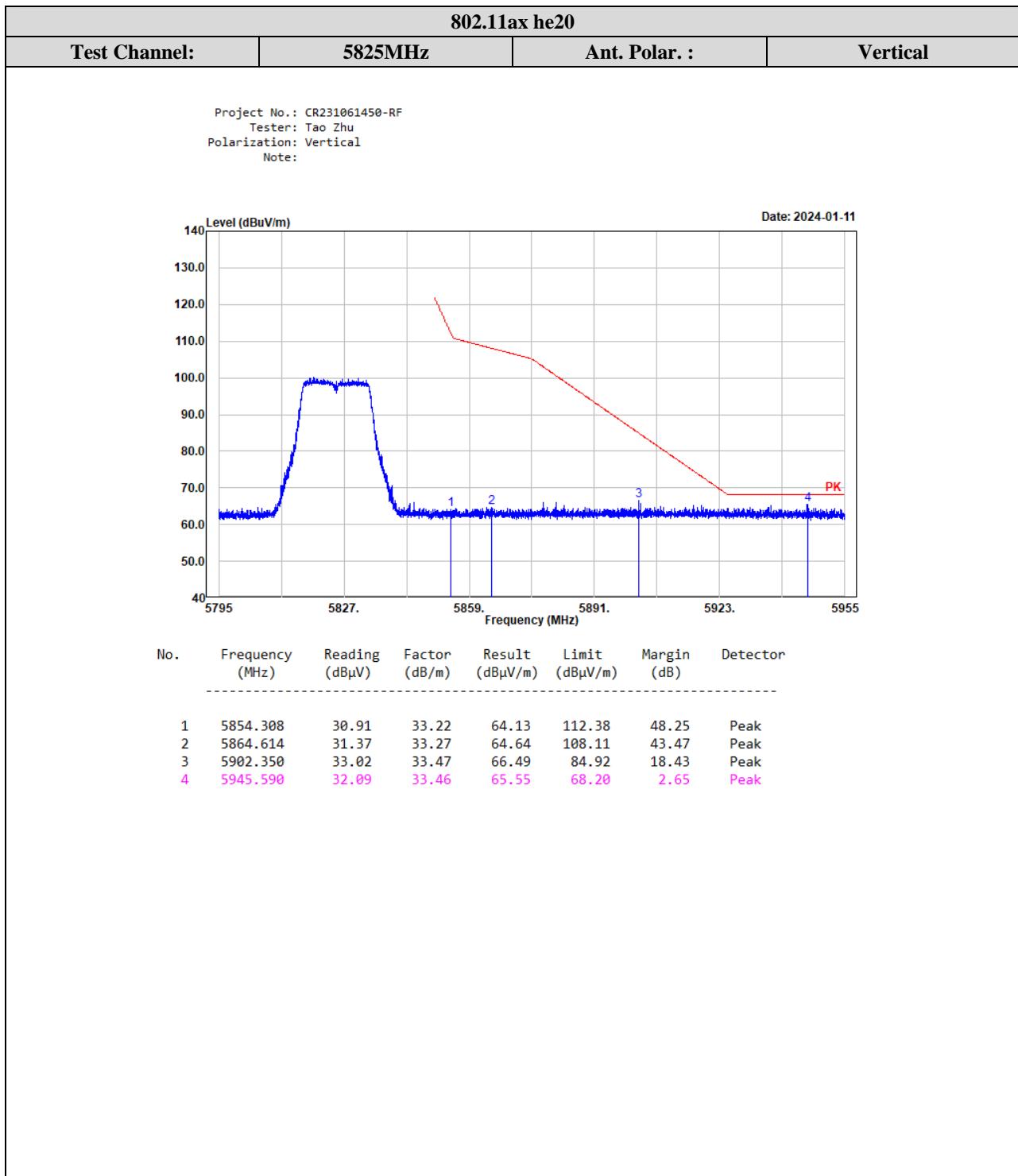


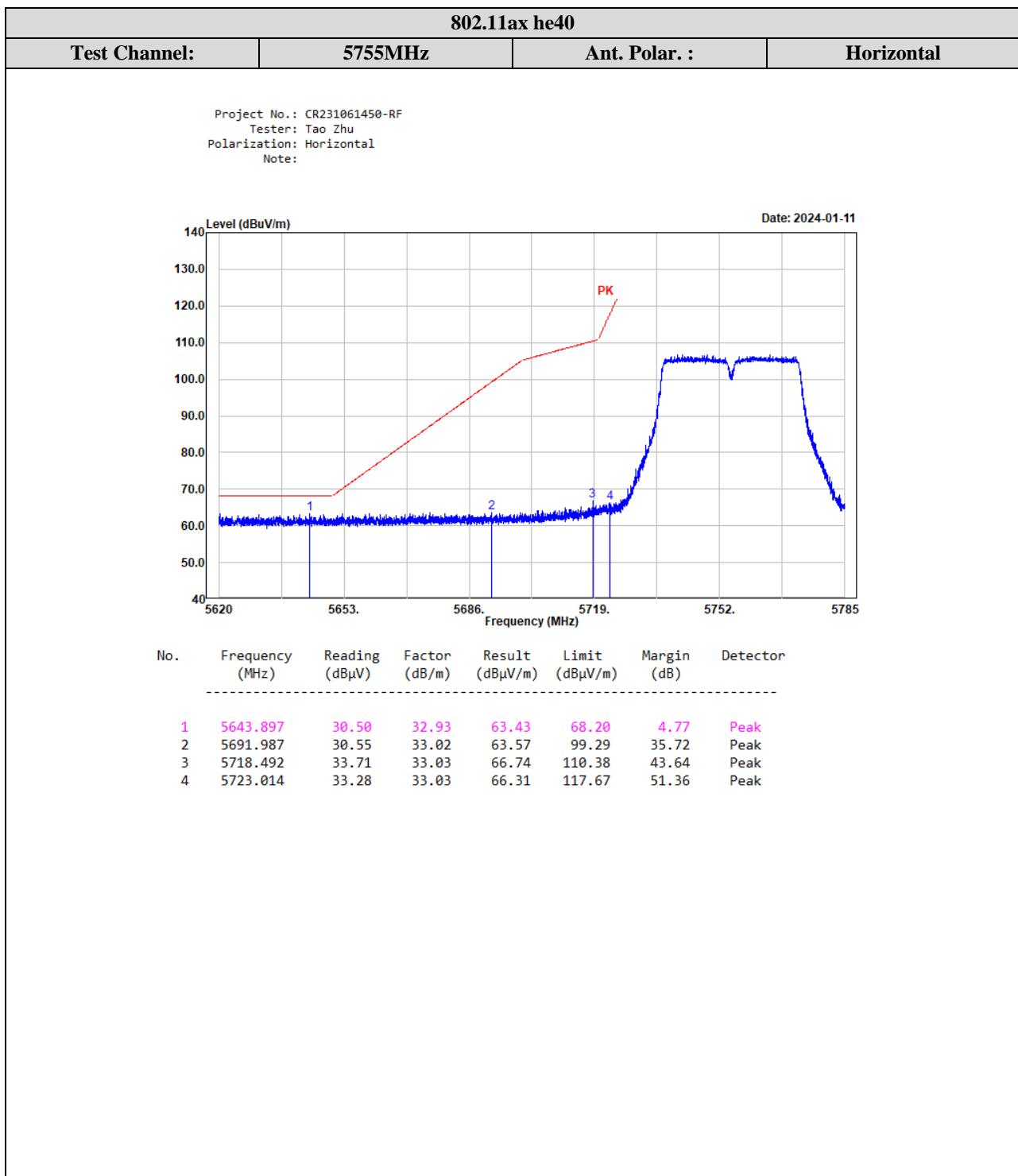
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5626.164	31.64	32.88	64.52	68.20	3.68	Peak
2	5683.181	31.26	33.00	64.26	92.79	28.53	Peak
3	5717.150	31.56	33.03	64.59	110.00	45.41	Peak
4	5723.046	31.87	33.03	64.90	117.75	52.85	Peak
5	5852.959	31.52	33.20	64.72	115.45	50.73	Peak
6	5861.401	32.08	33.26	65.34	109.01	43.67	Peak
7	5906.224	32.32	33.47	65.79	82.06	16.27	Peak
8	5934.967	31.83	33.47	65.30	68.20	2.90	Peak

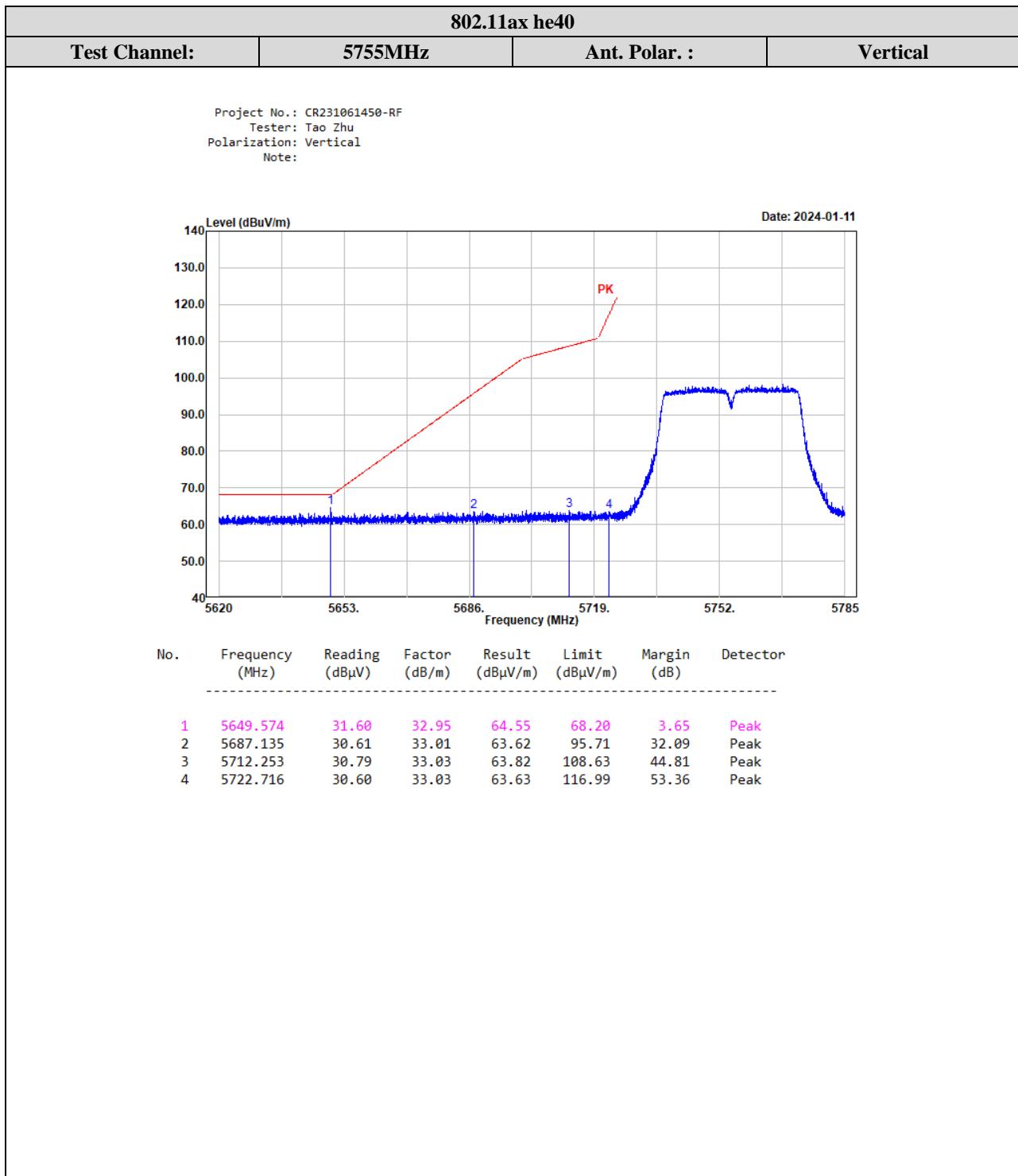


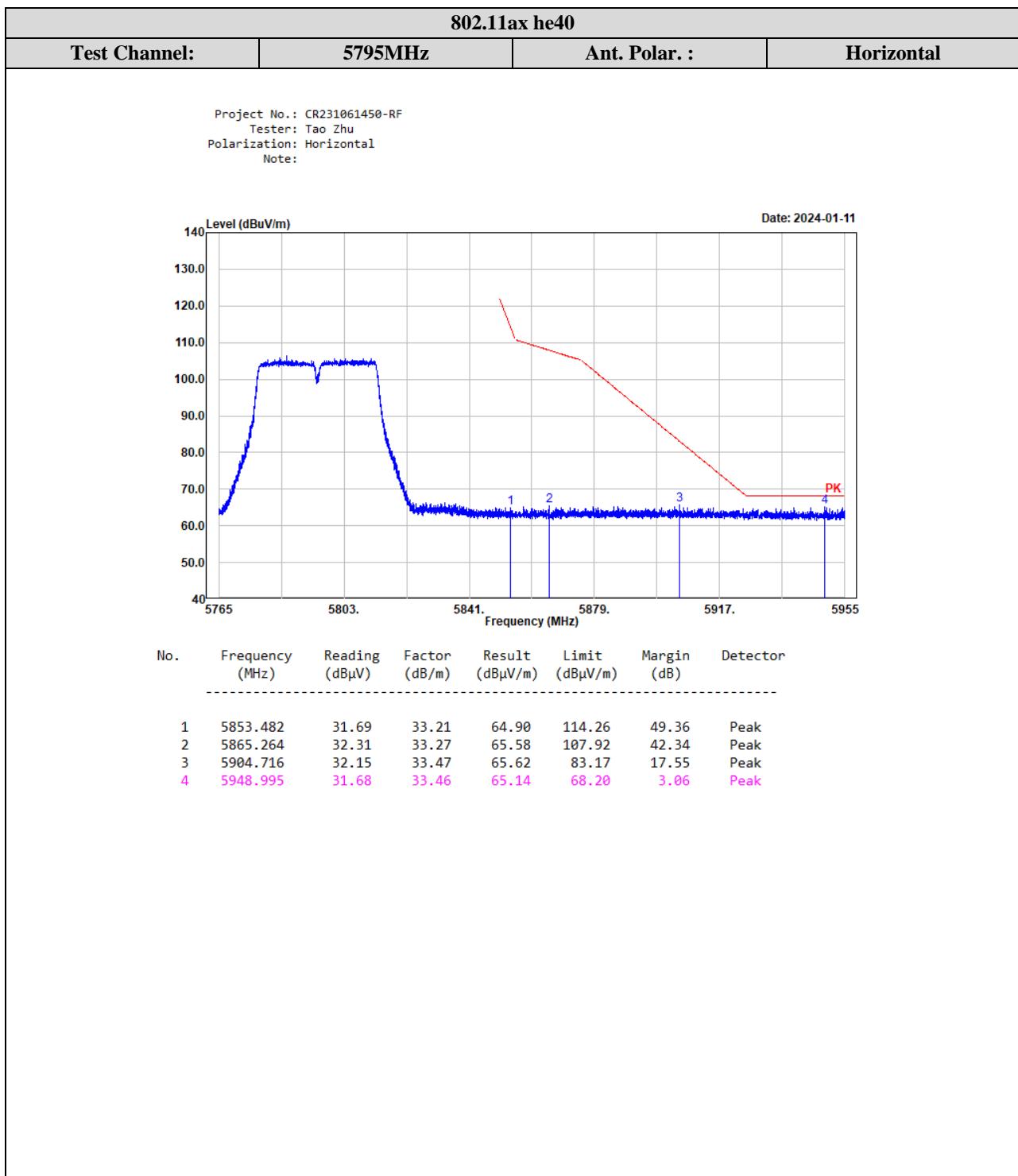


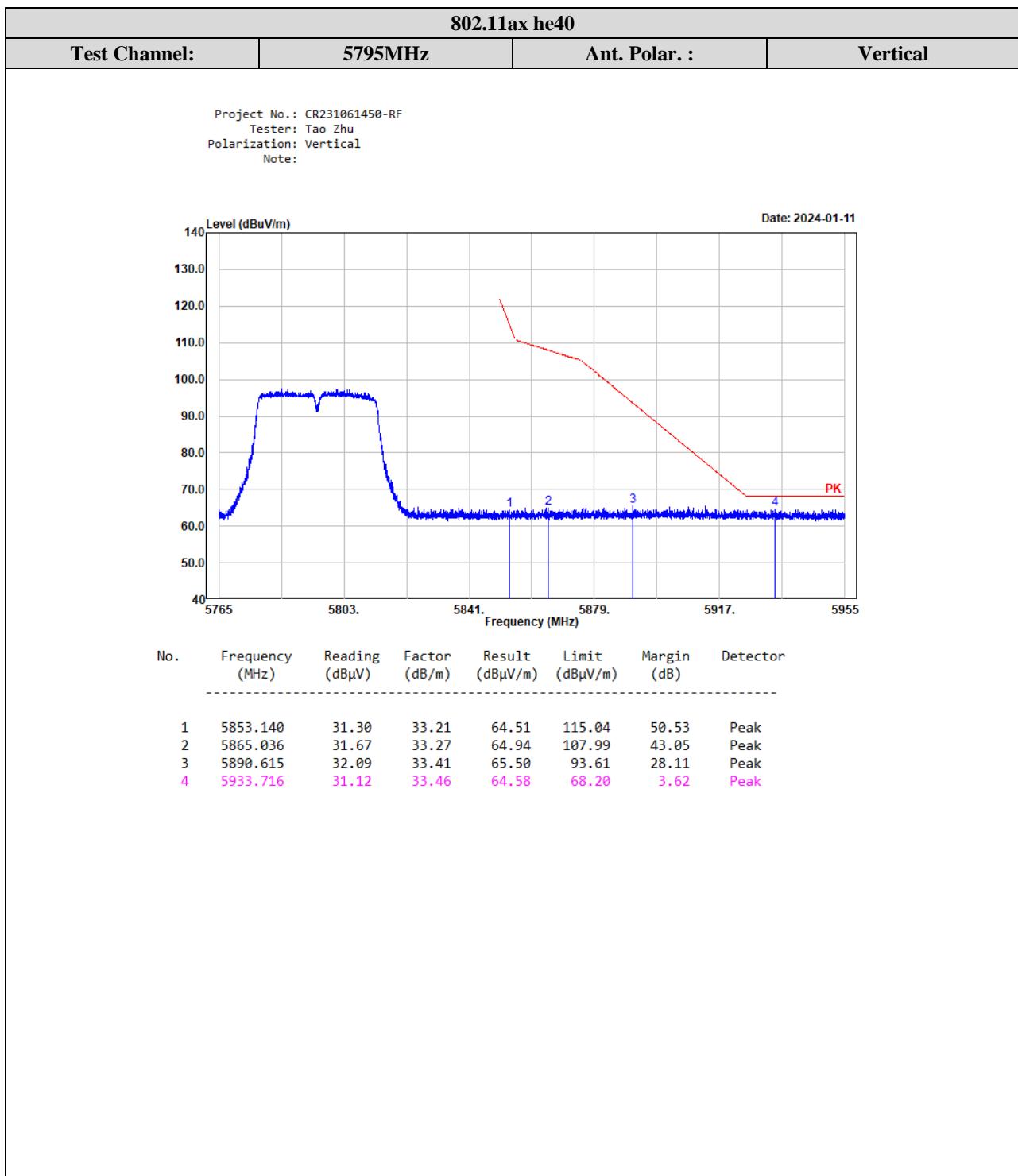


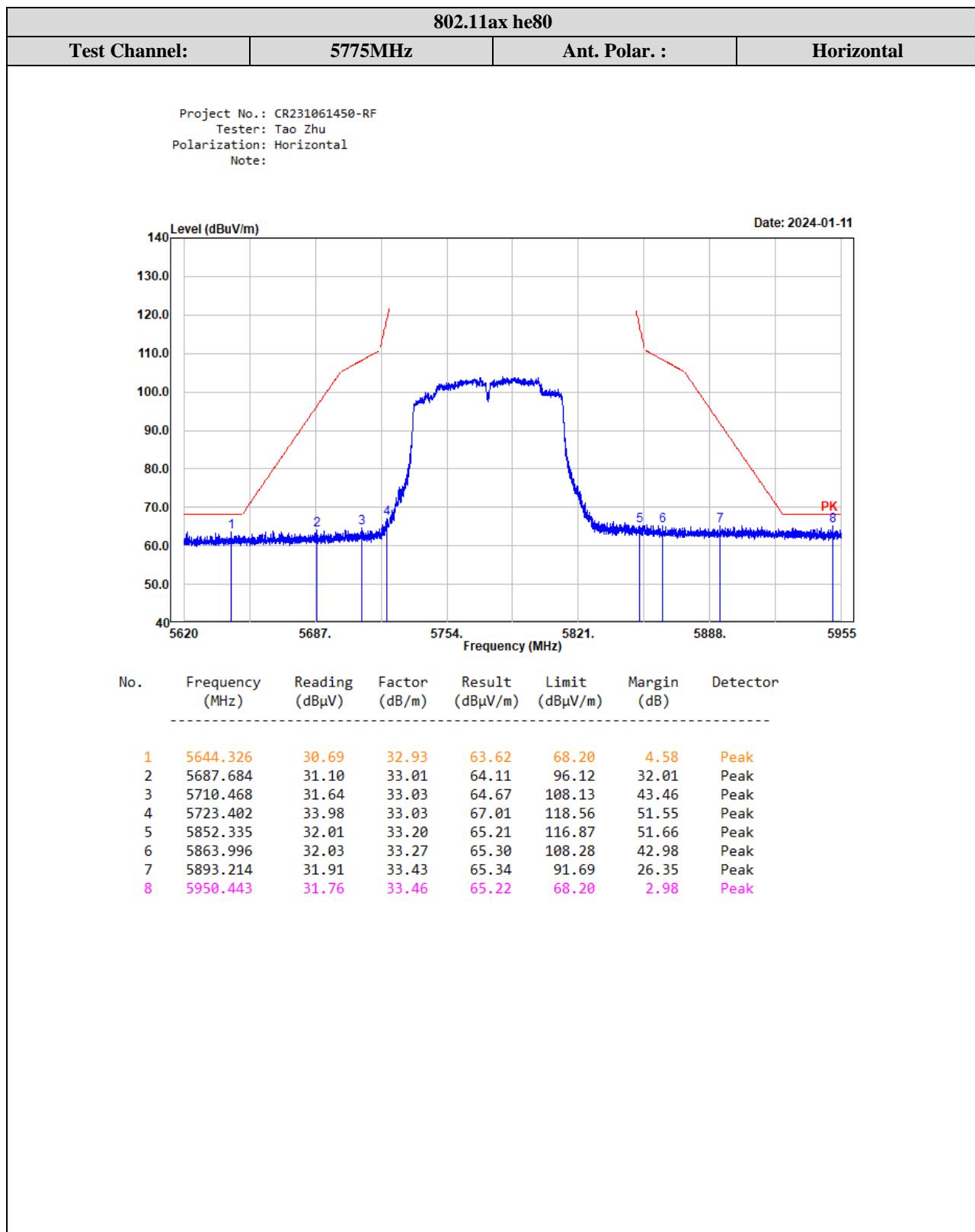


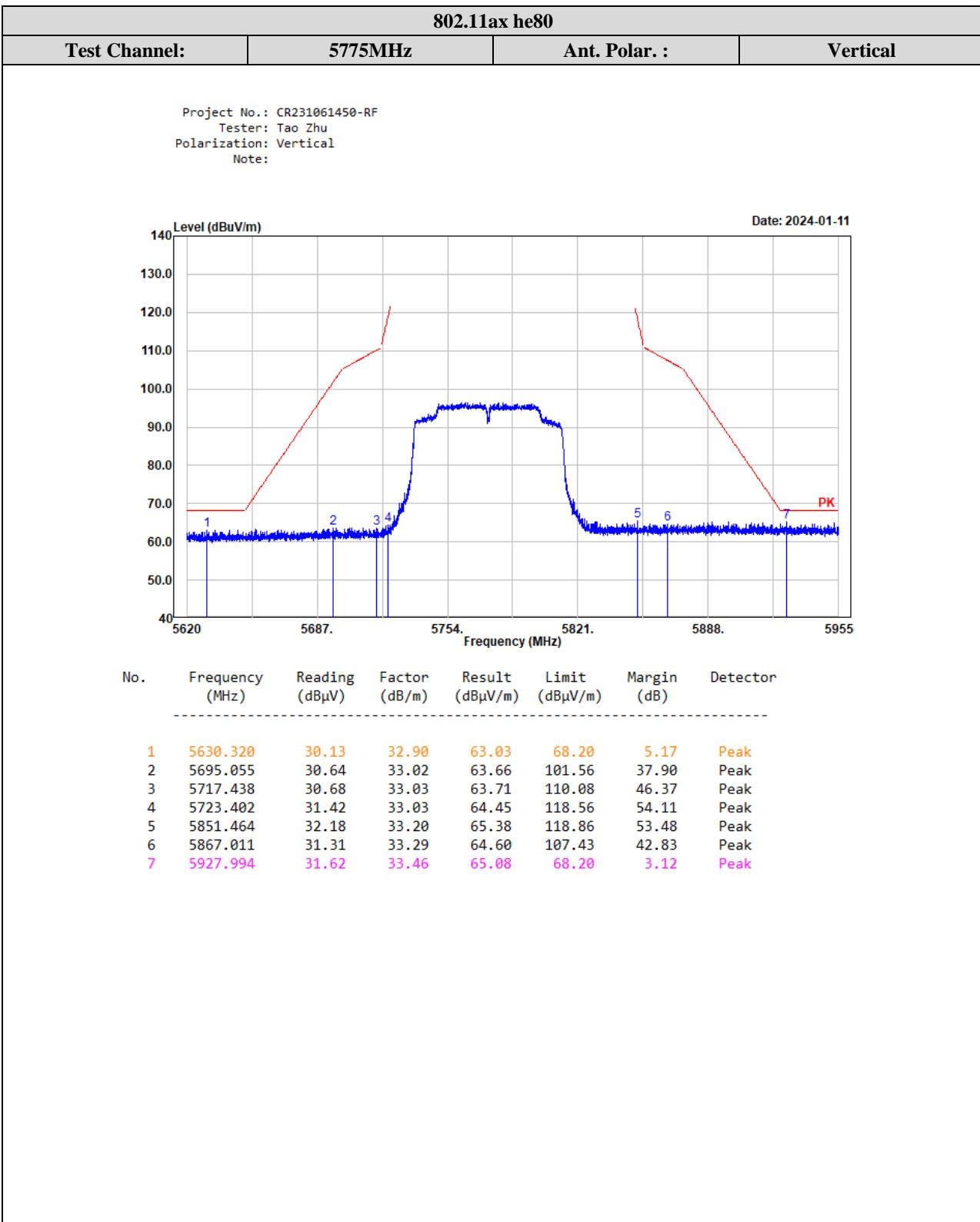






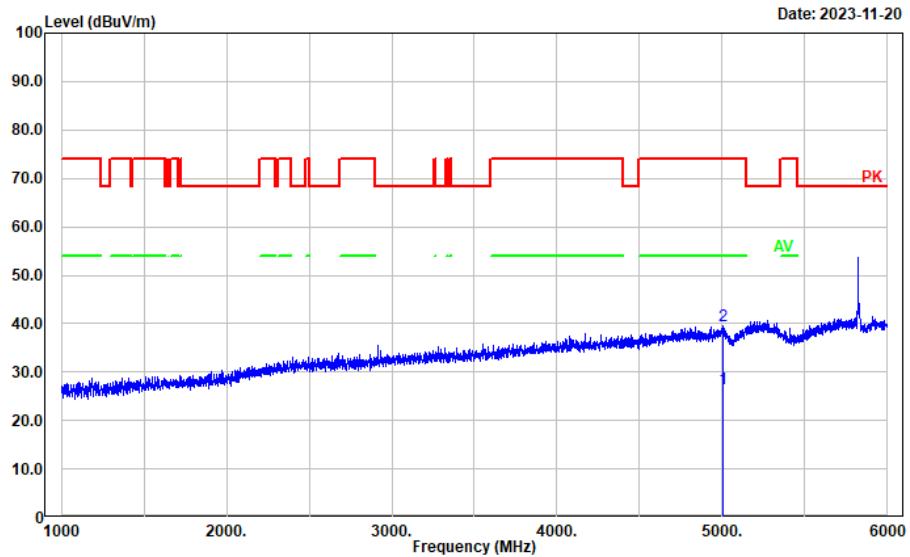






**5) Listed with the worst radiation spurious emissions margin test plots***(802.11a Mode Chain 0 5825MHz was the worst)***1-6GHz Horizontal**

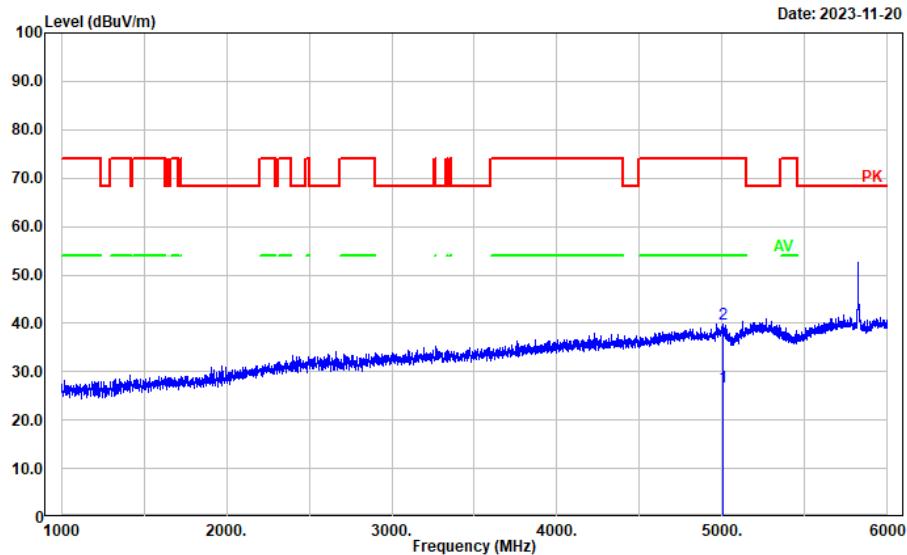
Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: horizontal  
Note:



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5005.801	20.90	5.76	26.66	54.00	27.34	Average
2	5005.801	33.93	5.76	39.69	74.00	34.31	Peak

**1-6GHz Vertical**

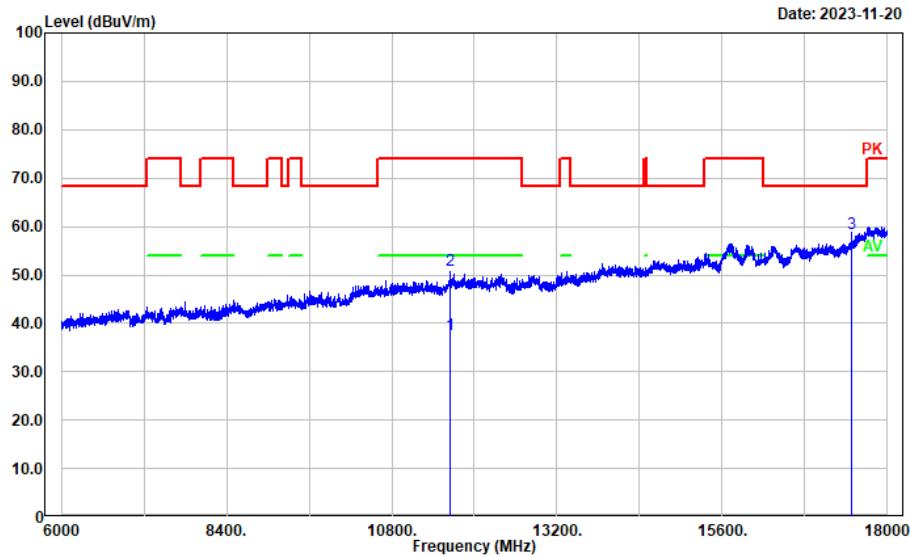
Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: vertical  
Note:



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	5001.800	20.97	5.77	26.74	54.00	27.26	Average
2	5001.800	34.18	5.77	39.95	74.00	34.05	Peak

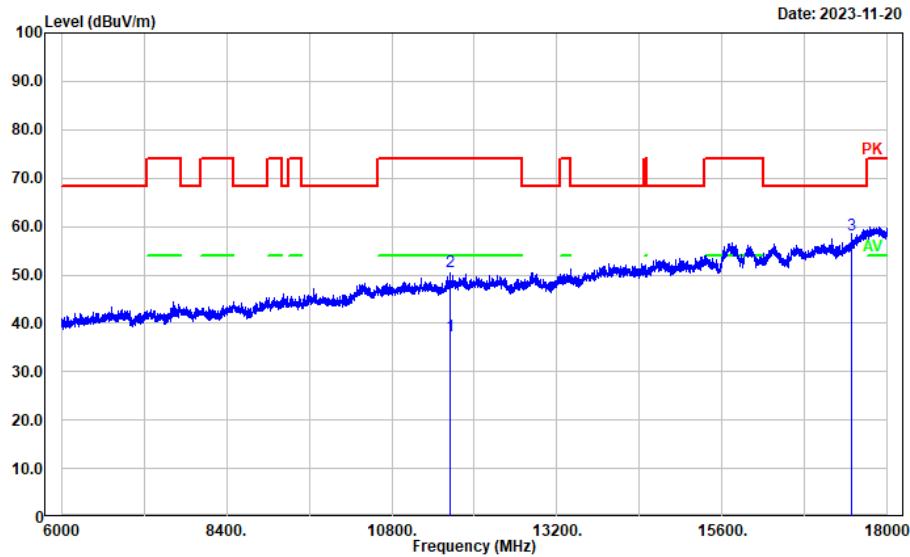
**6-18GHz Horizontal**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: horizontal  
Note:



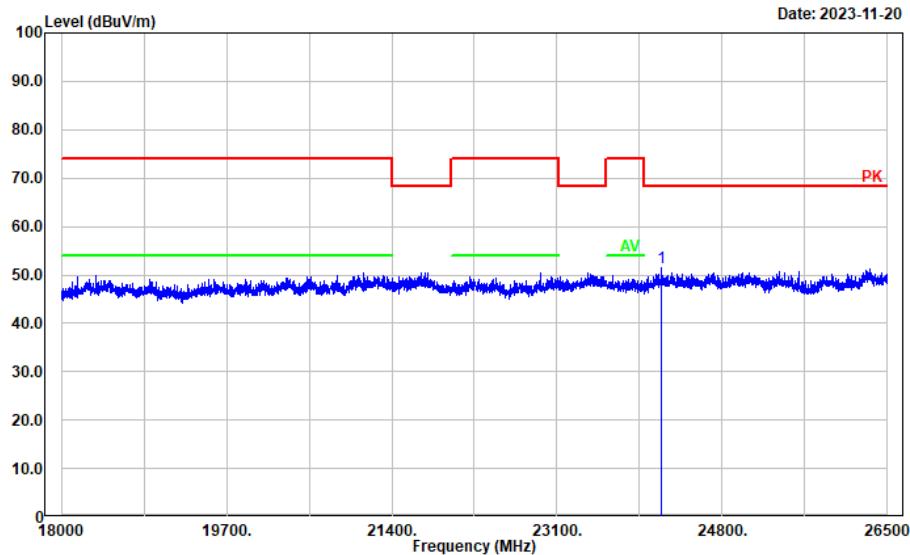
**6-18GHz Vertical**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: vertical  
Note:



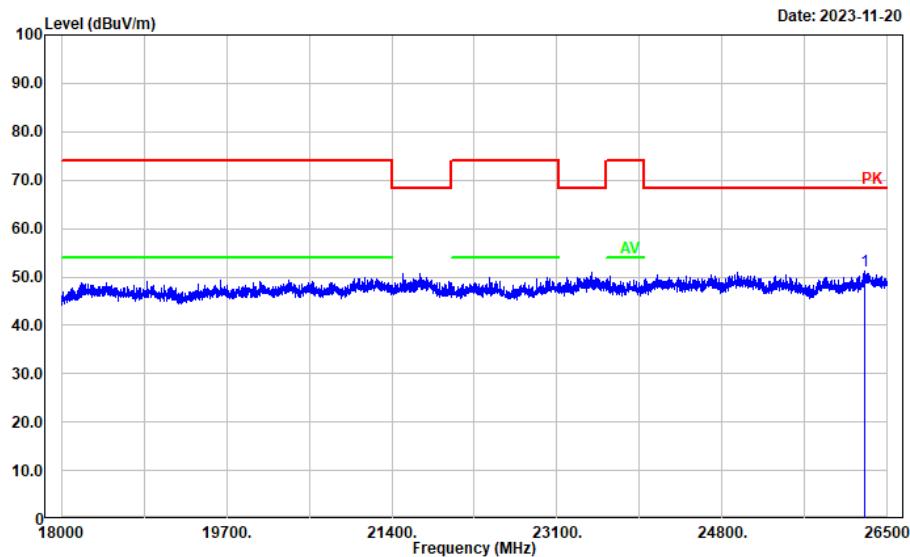
**18-26.5GHz Horizontal**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:



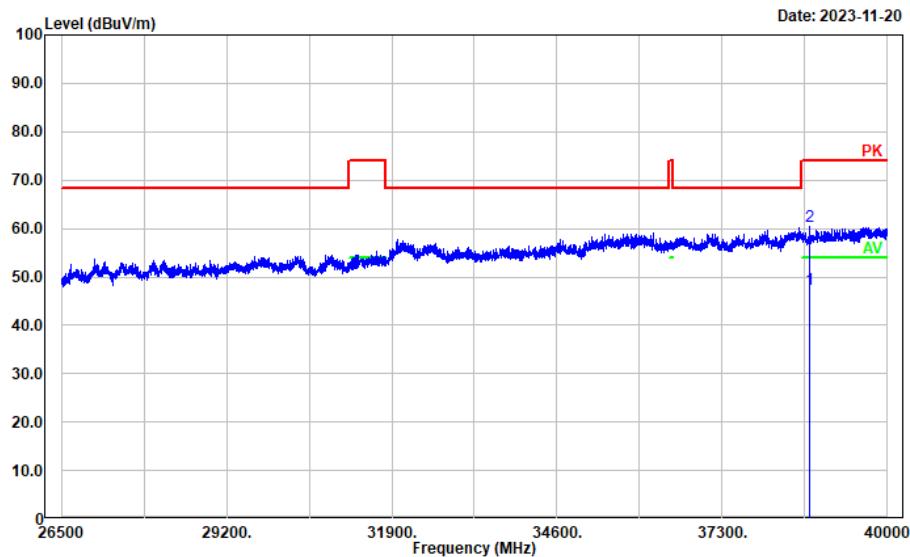
**18-26.5GHz Vertical**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: vertical  
Note:



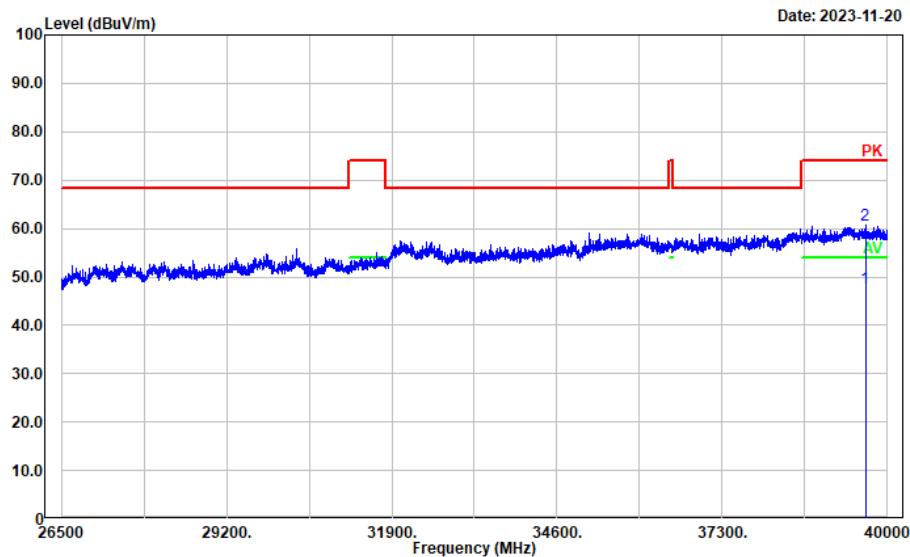
**26.5-40GHz Horizontal**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Horizontal  
Note:



**26.5-40GHz Vertical**

Project No.: CR231061450-RF  
Tester: Tao Zhu  
Polarization: Vertical  
Note:



### 4.3 Emission Bandwidth

Serial Number:	2CHV-2	Test Date:	2023/11/3-2024/1/9
Test Site:	RF	Test Mode:	Transmitting
Tester:	Arthur Su	Test Result:	Pass

<b>Environmental Conditions:</b>					
Temperature: (°C)	24.5-25.9	Relative Humidity: (%)	45-60	ATM Pressure: (kPa)	100.7-101.2

### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
R&S	Spectrum Analyzer	FSU26	100147	45016	45381

\* 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	24.08	16.96
	5200	23.68	16.88
	5240	23.76	16.88
802.11n ht20	5180	24.36	17.95
	5200	24.76	17.95
	5240	24.20	18.01
802.11n ht40	5190	43.75	36.28
	5230	43.79	36.28
802.11ac vht80	5210	84.36	76.15
802.11ax hew20	5180	22.56	19.12
	5200	22.56	19.12
	5240	22.32	19.12
802.11ax hew40	5190	41.28	38.08
	5230	41.60	38.08
802.11ax hew80	5210	84.48	77.76

**Note:**

1. Pre-scan all antennas, worst case (Chain 0) was reported.
2. The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth

**5250-5350 MHz:**

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260	24.08	16.96
	5280	23.92	16.88
	5320	23.68	16.96
802.11n ht20	5260	24.23	18.01
	5280	24.87	17.95
	5320	24.52	17.89
802.11n ht40	5270	43.63	36.28
	5310	43.32	36.15
802.11ac vht80	5290	84.26	76.15
802.11ax hew20	5260	22.16	19.04
	5280	22.56	19.12
	5320	22.56	19.12
802.11ax hew40	5270	41.44	38.08
	5310	41.60	37.92
802.11ax hew80	5290	84.48	77.44

**Note:**

I. Pre-scan all antennas, worst case (Chain 0) was reported.

**5470-5725 MHz:**

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5500	23.76	16.88
	5580	24.24	16.88
	5700	23.84	16.96
	5720	24.37	16.88
802.11n ht20	5500	24.44	18.01
	5580	24.20	18.01
	5700	24.47	17.95
	5720	24.15	18.01
802.11n ht40	5510	43.85	36.28
	5550	43.88	36.28
	5670	43.93	36.28
	5710	43.50	36.15
802.11ac vht80	5530	84.31	76.15
	5610	84.05	76.15
	5690	83.85	76.15
802.11ax hew20	5500	22.32	19.20
	5580	22.64	19.12
	5700	22.48	19.12
	5720	22.71	19.12

802.11ax hew40	5510	41.44	38.08
	5550	41.60	38.08
	5670	41.28	38.08
	5710	41.79	37.92
802.11ax hew80	5530	84.80	78.08
	5610	85.12	77.76
	5690	85.12	77.44

**Note:**

1. Pre-scan all antennas, worst case (Chain 0) was reported.

**5725-5850 MHz:**

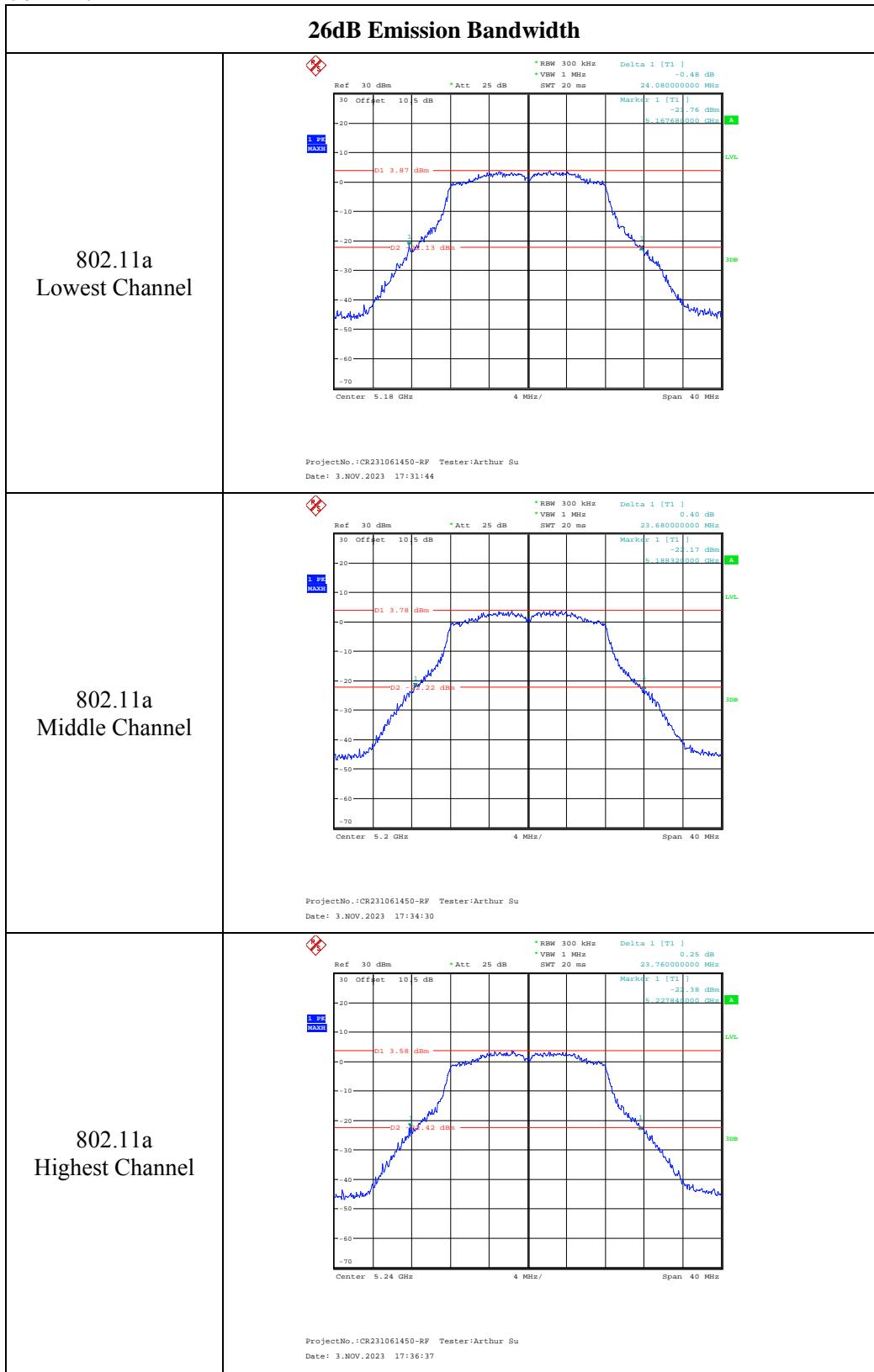
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	16.40	17.20
	5785	16.40	17.20
	5825	16.40	17.20
802.11n ht20	5745	17.79	18.33
	5785	17.69	18.33
	5825	17.82	18.27
802.11n ht40	5755	36.55	36.67
	5795	36.65	36.67
802.11ac vht80	5775	77.03	76.41
802.11ax hew20	5745	19.12	19.12
	5785	19.12	19.12
	5825	19.12	19.12
802.11ax hew40	5755	37.92	37.92
	5795	38.24	38.08
802.11ax hew80	5775	78.08	77.76

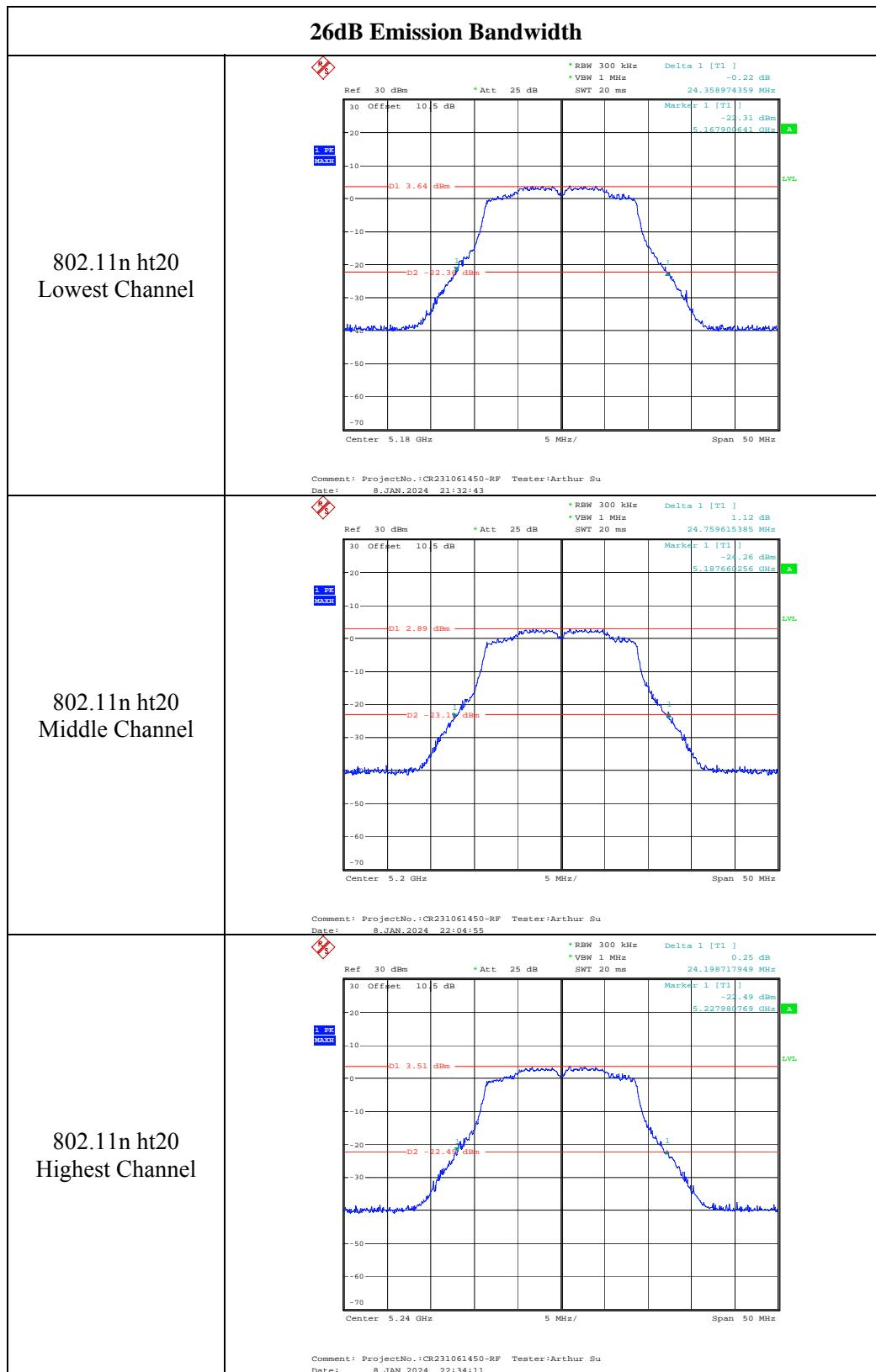
**Note:**

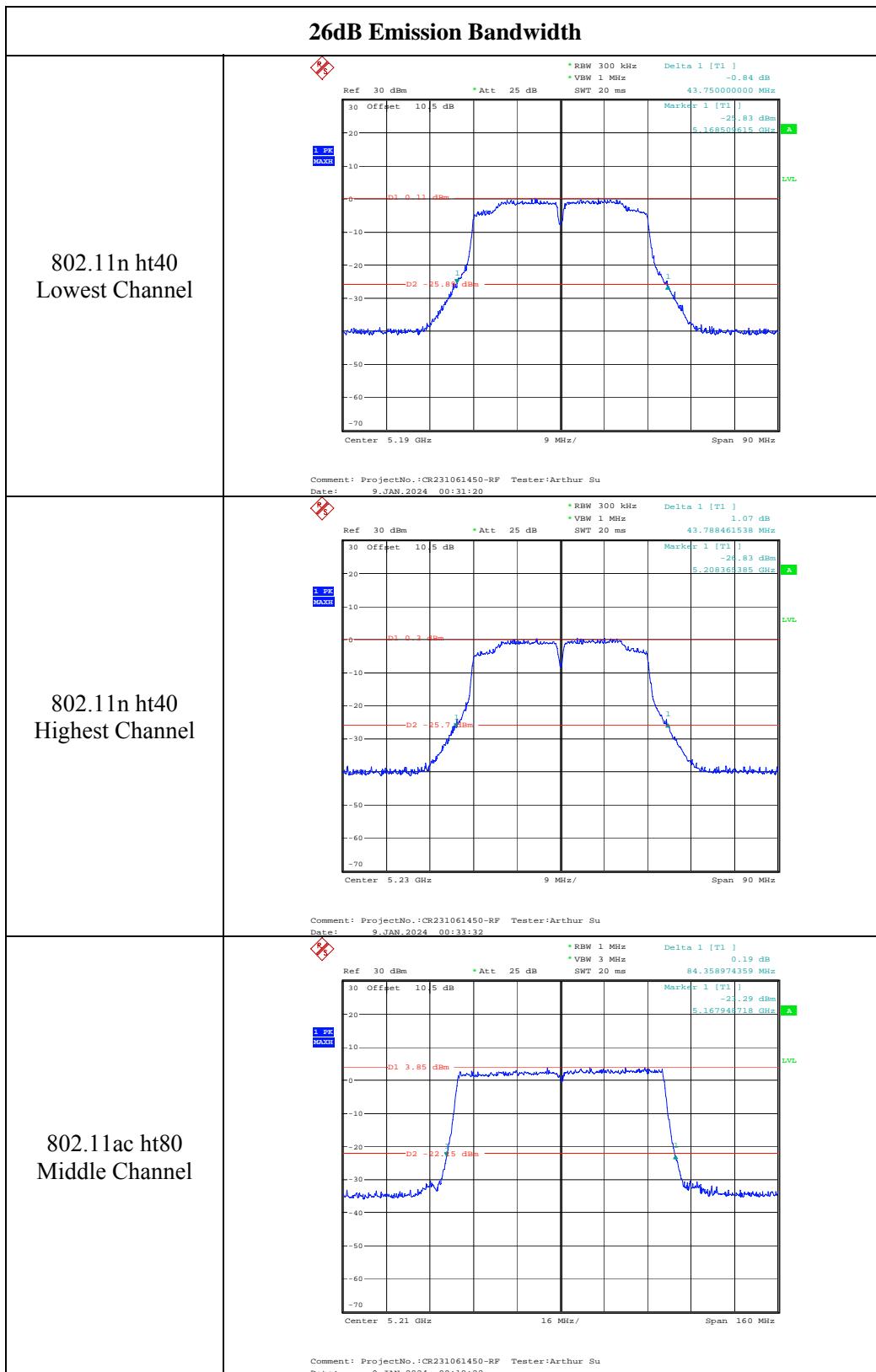
1. 6dB Emission Bandwidth Limit:  $\geq 0.5 \text{ MHz}$

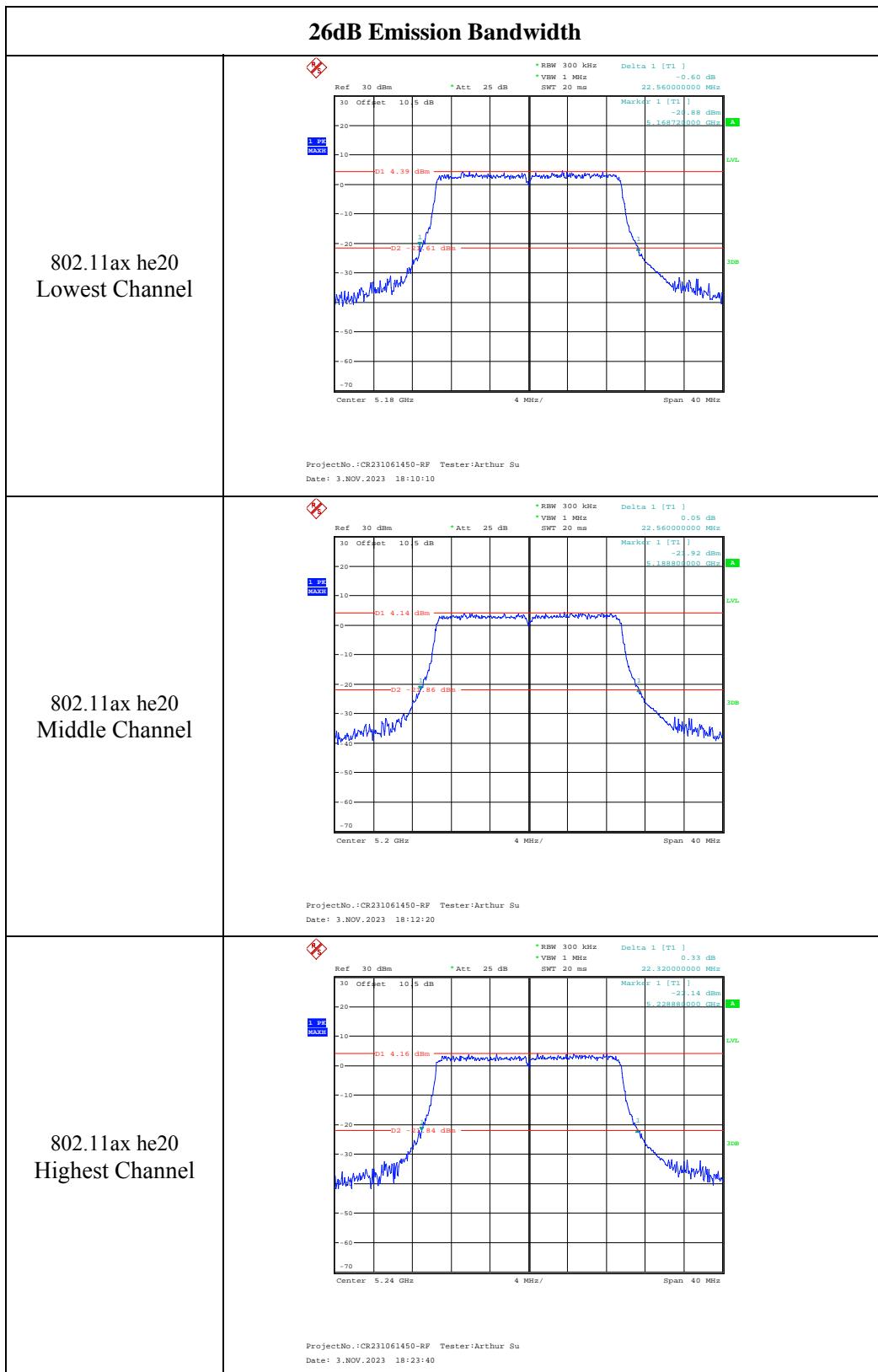
2. Pre-scan all antennas, worst case (Chain 0) was reported.

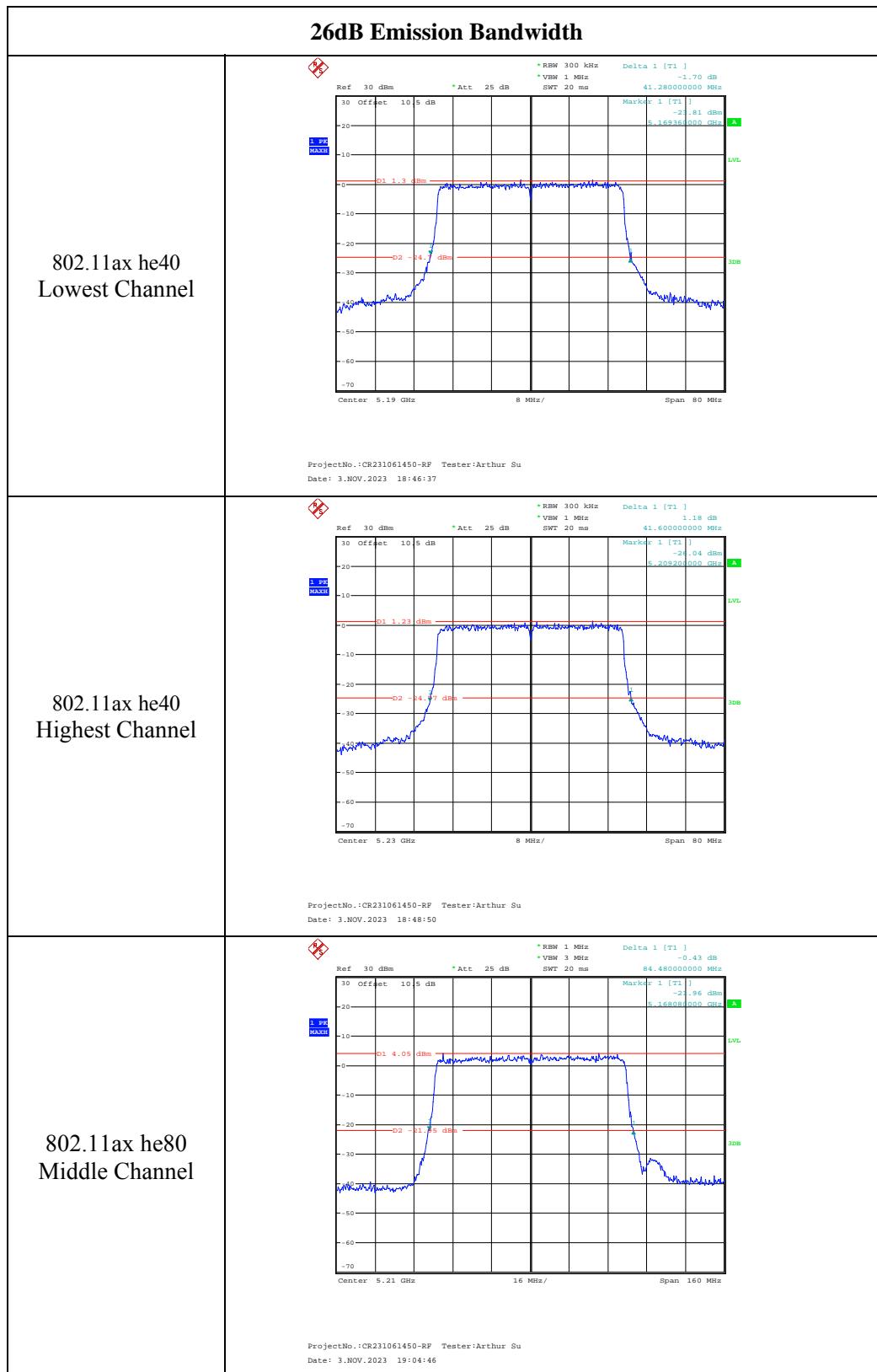
3. the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

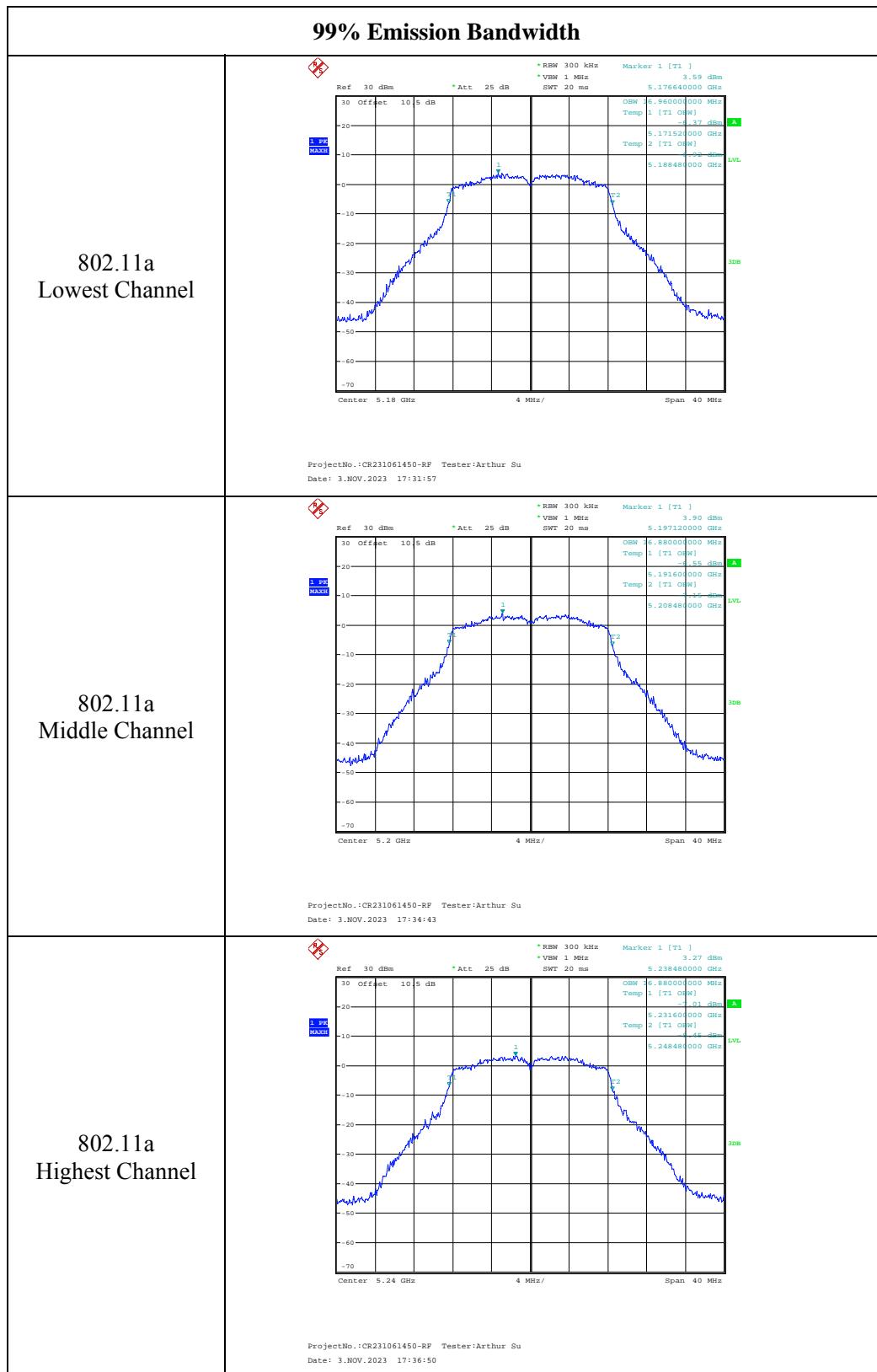
**5150-5250MHz:**

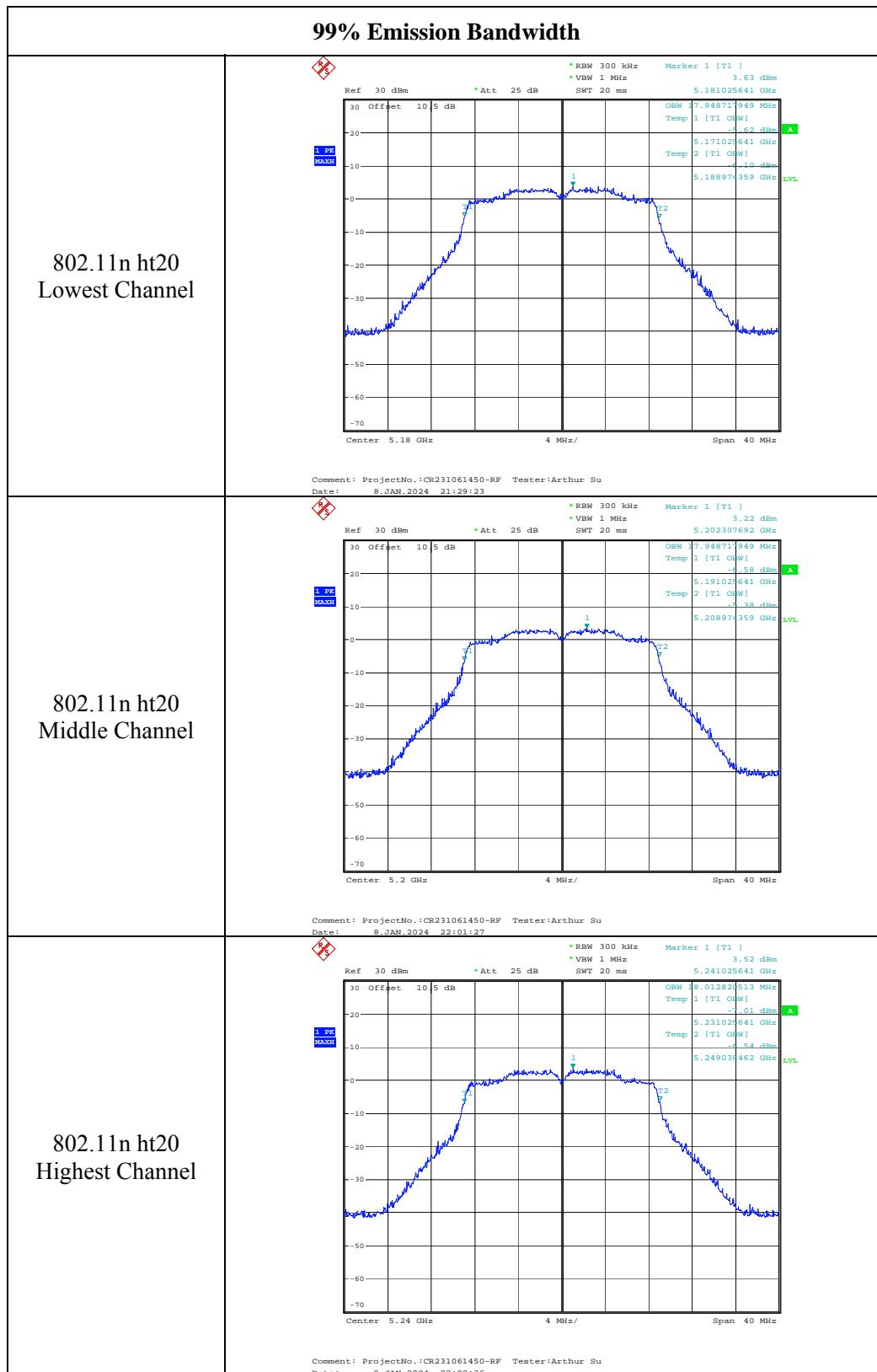


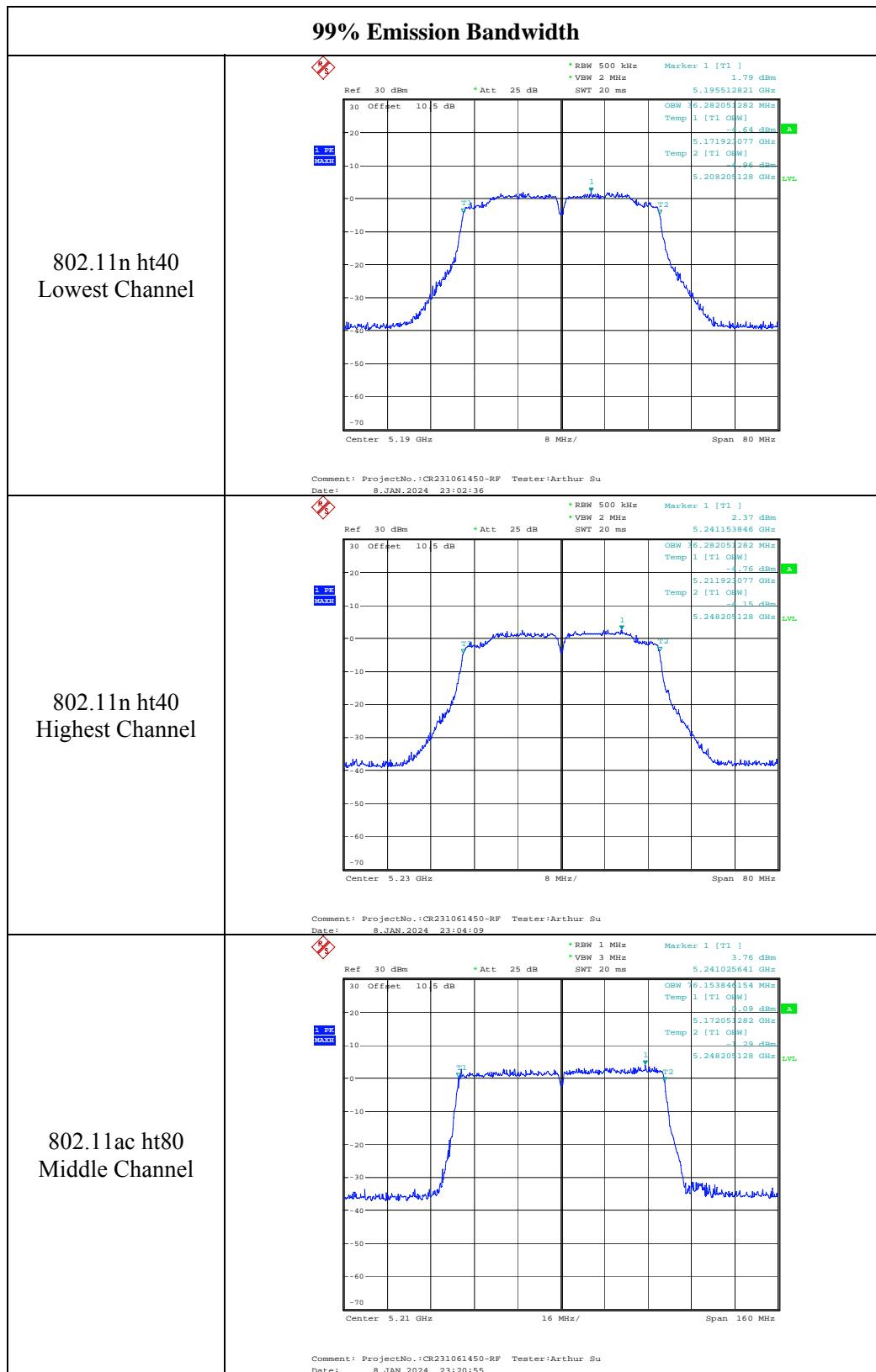


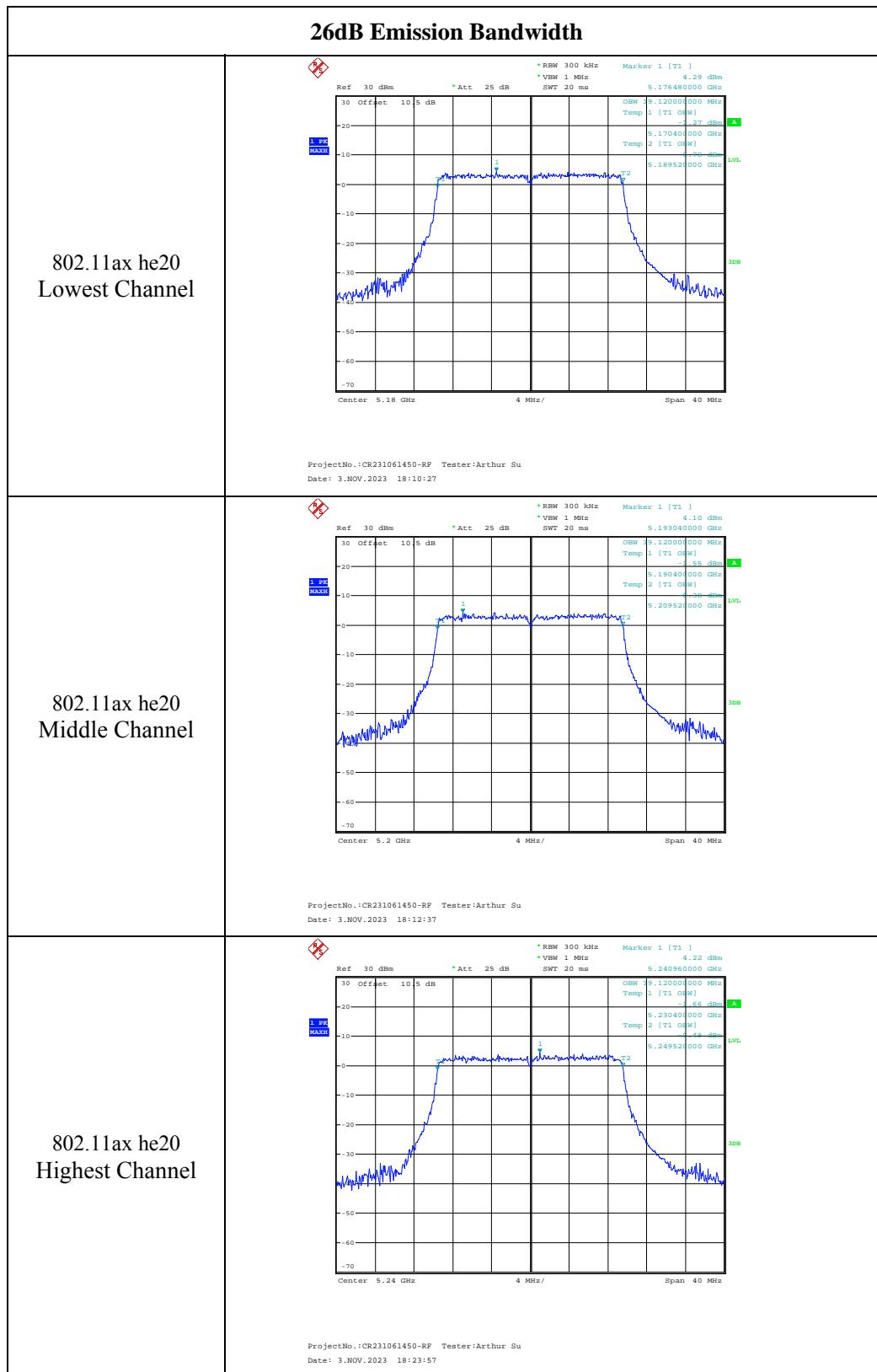


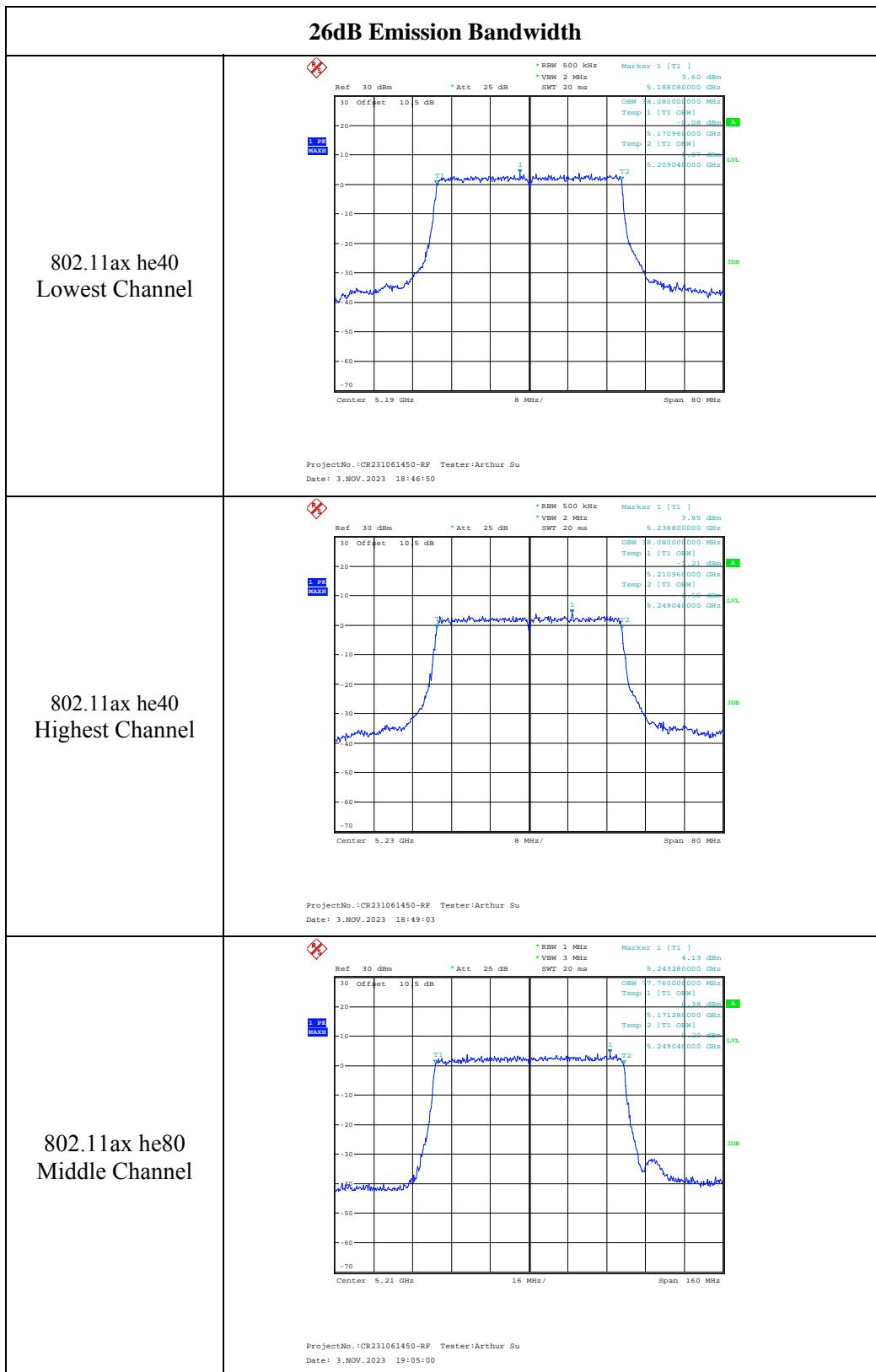


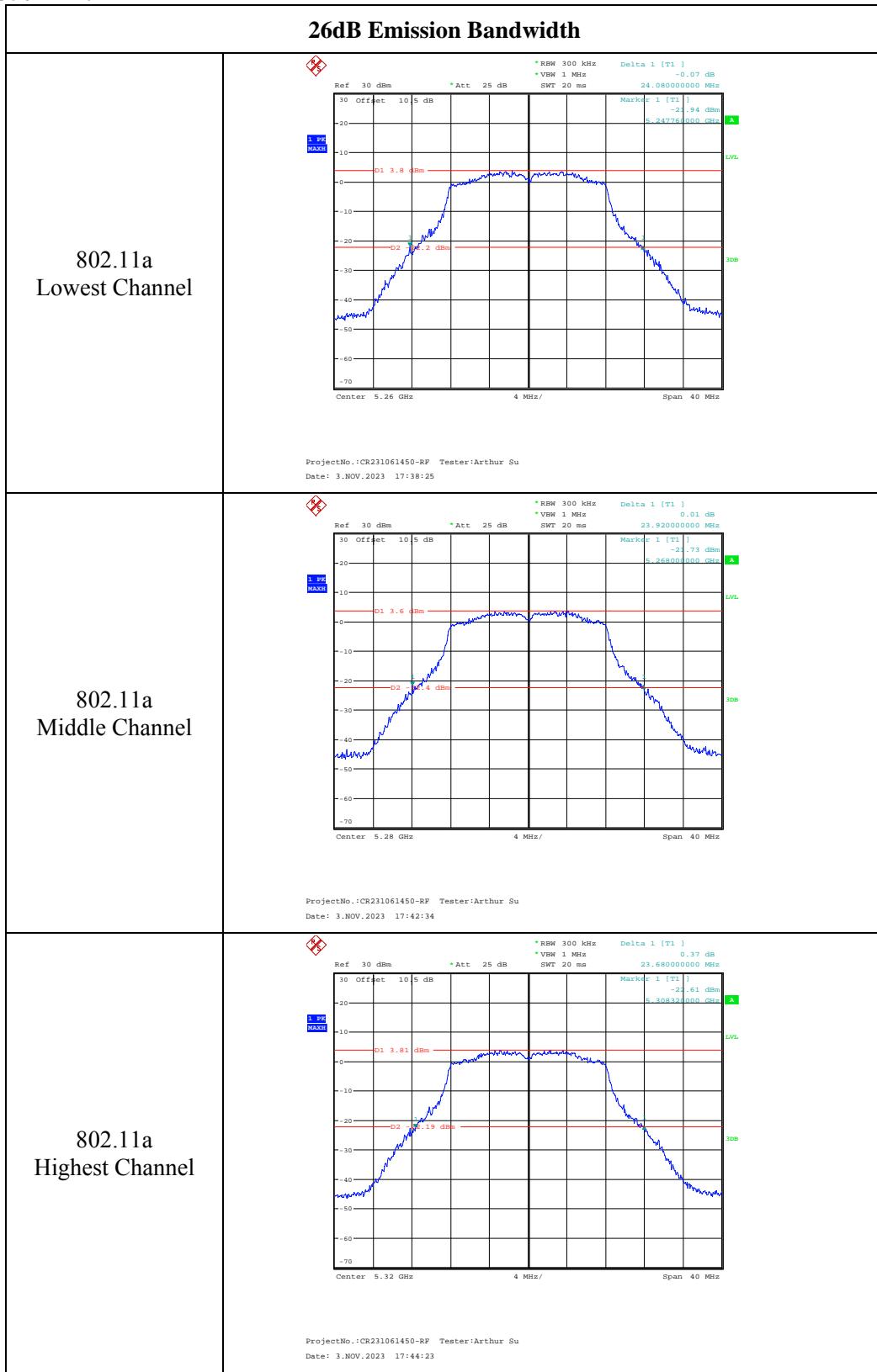


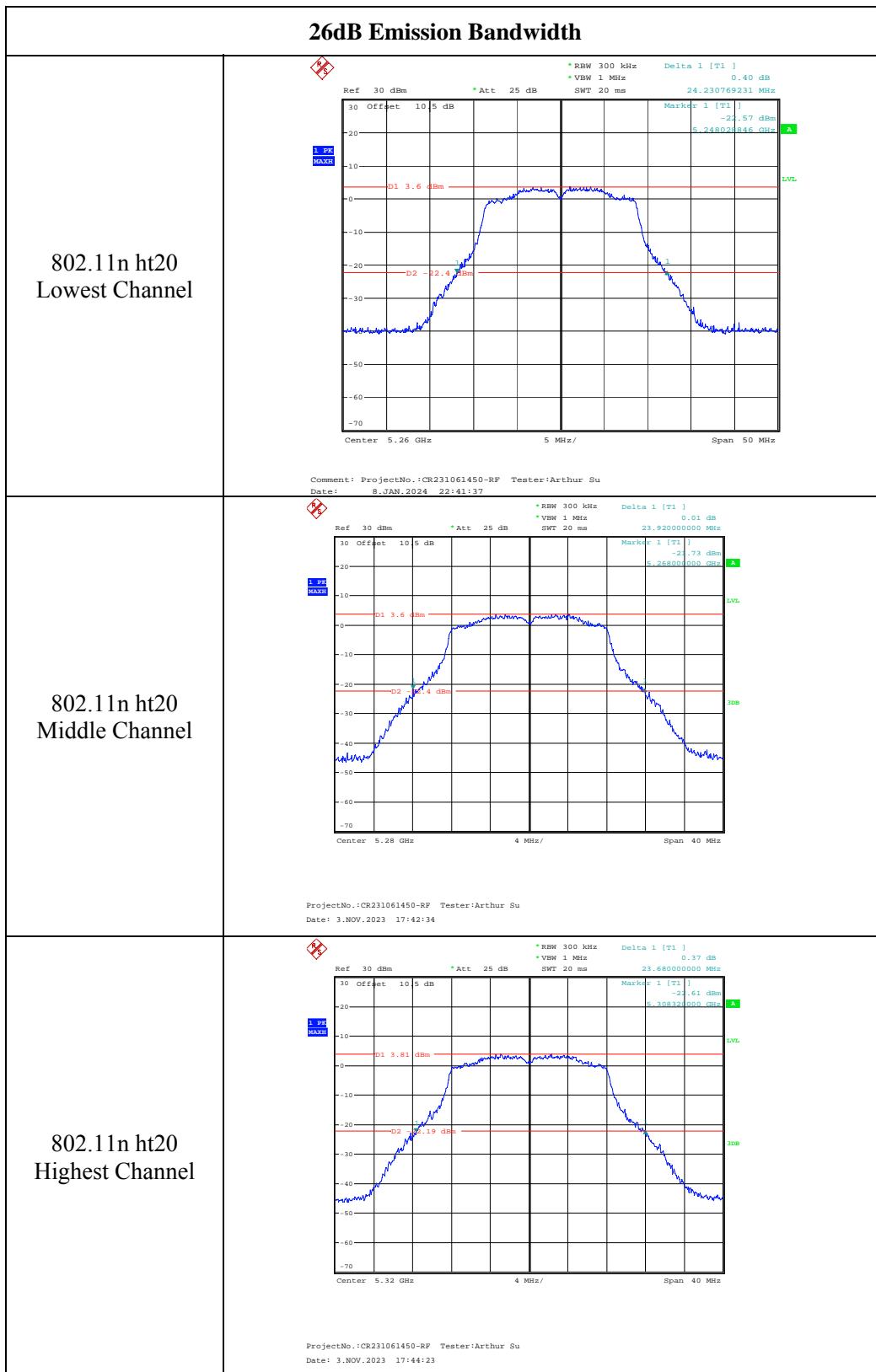


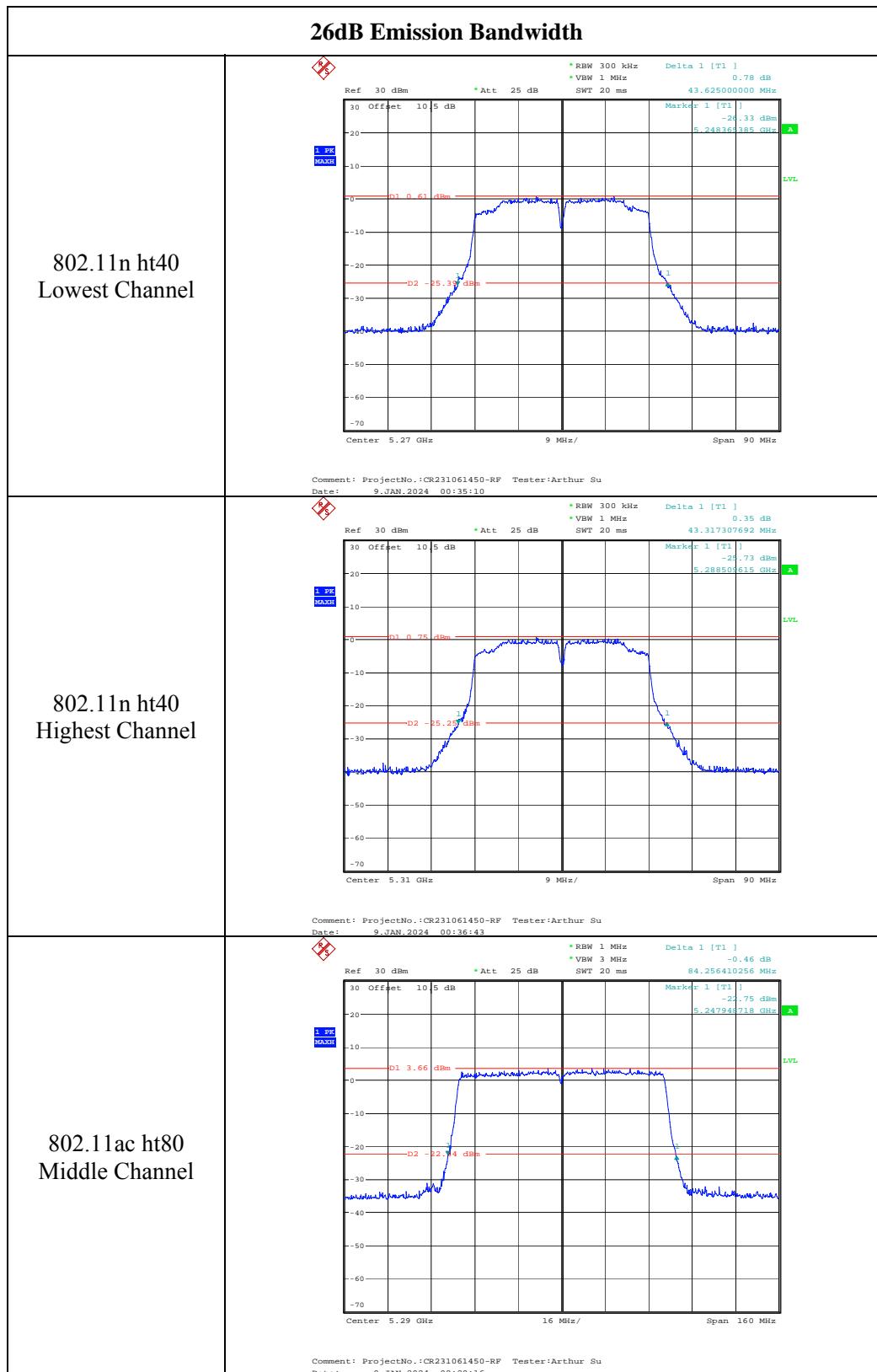


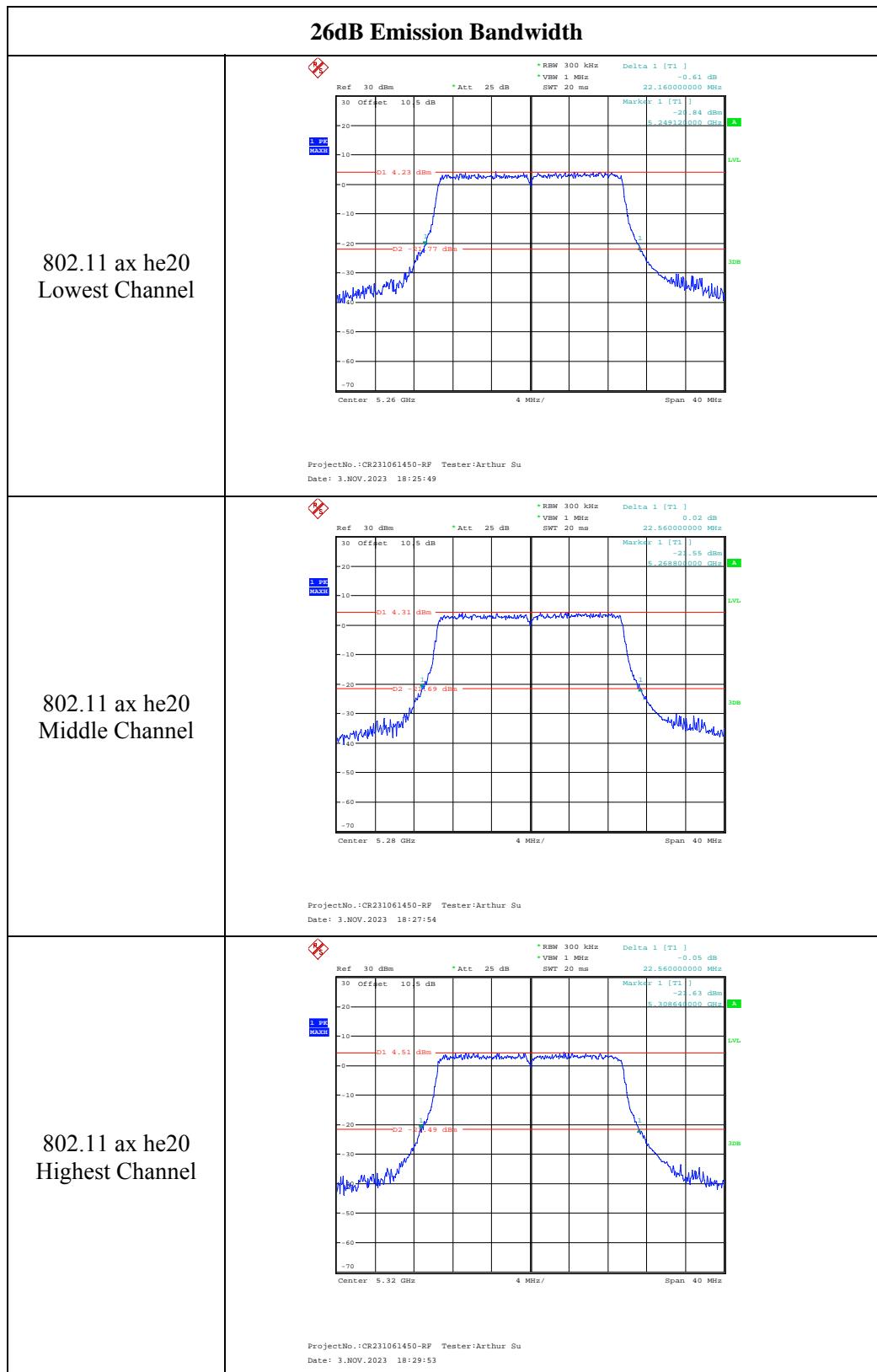


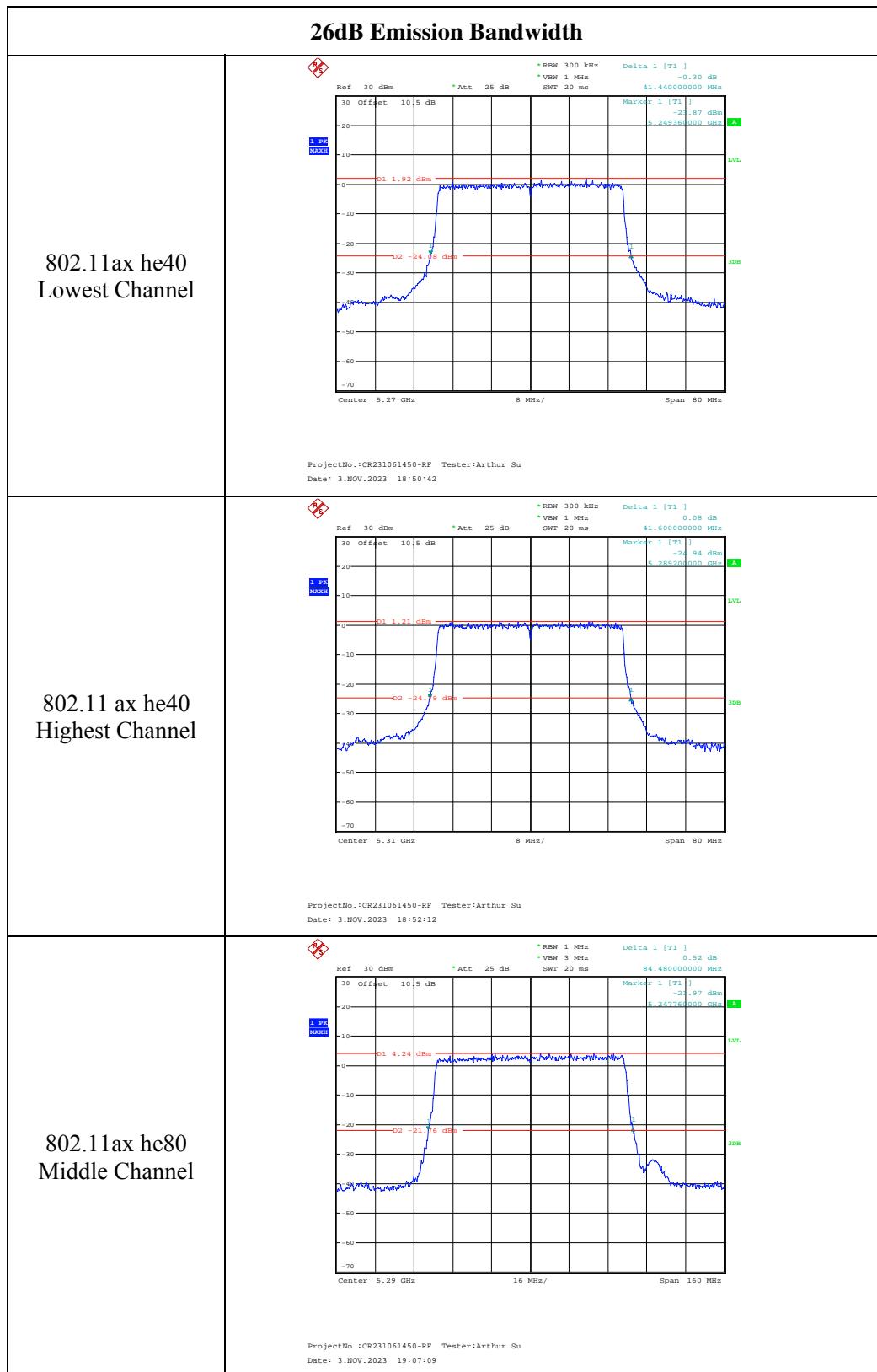


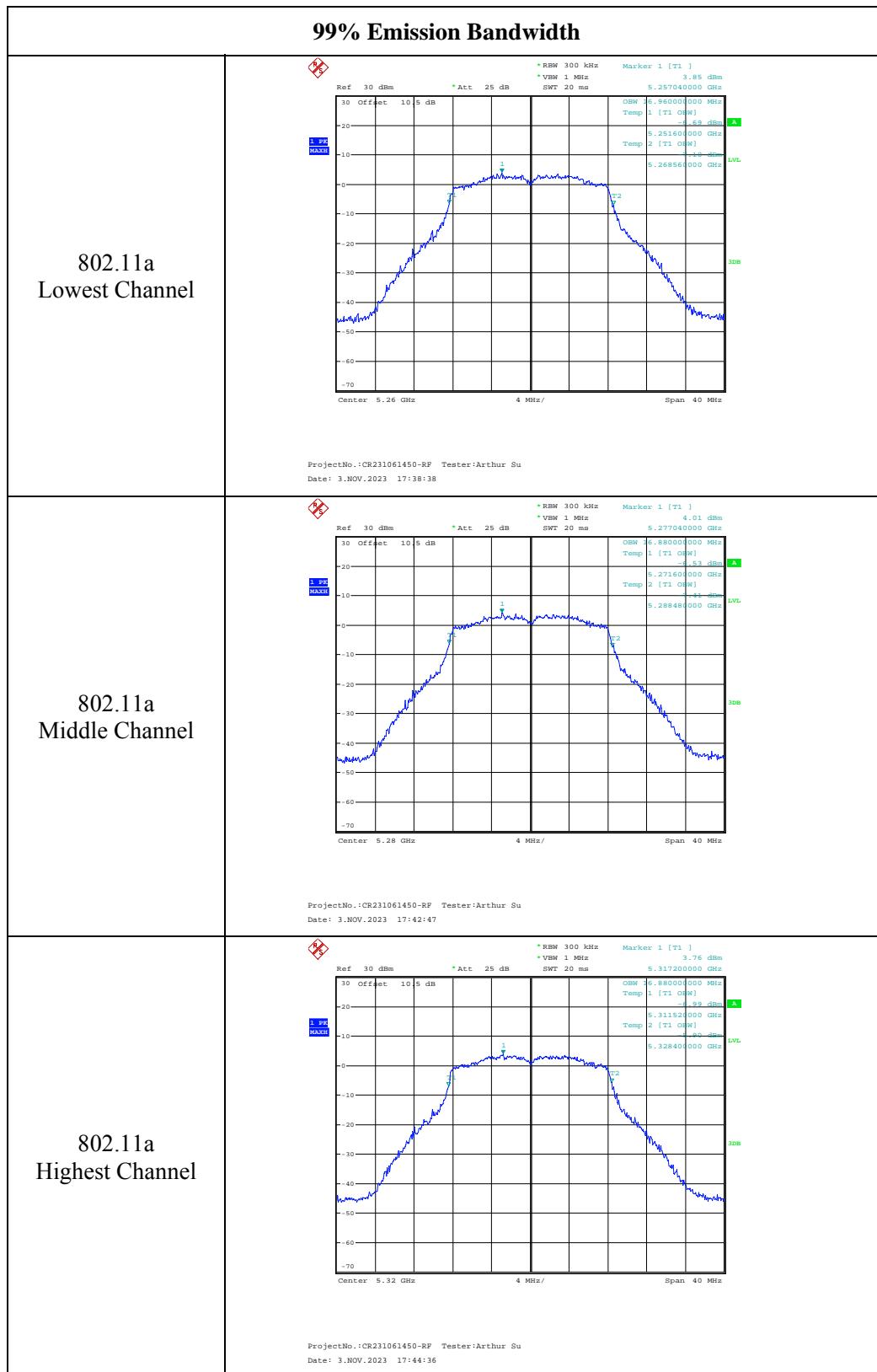
**5250-5350MHz:**

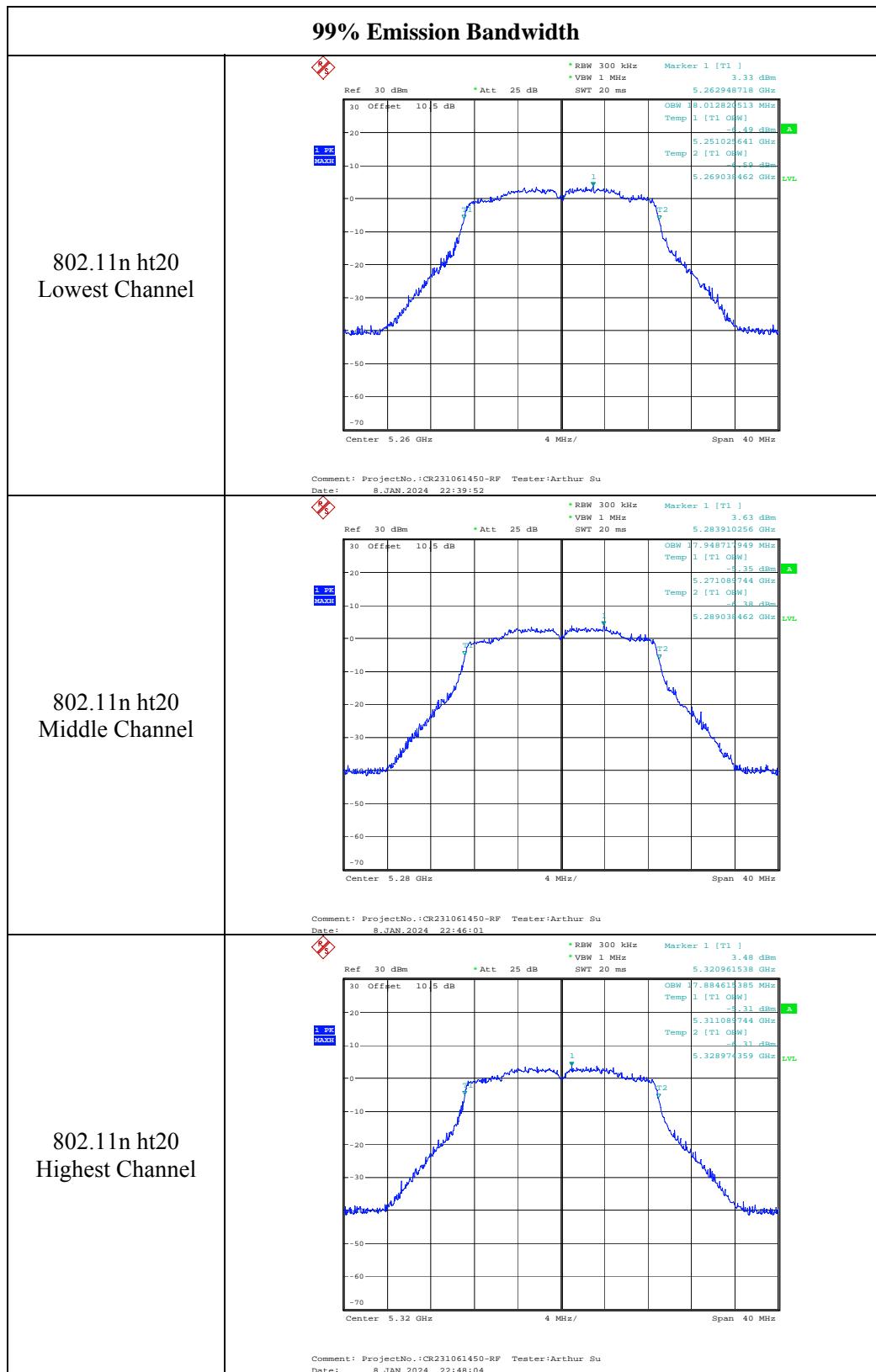


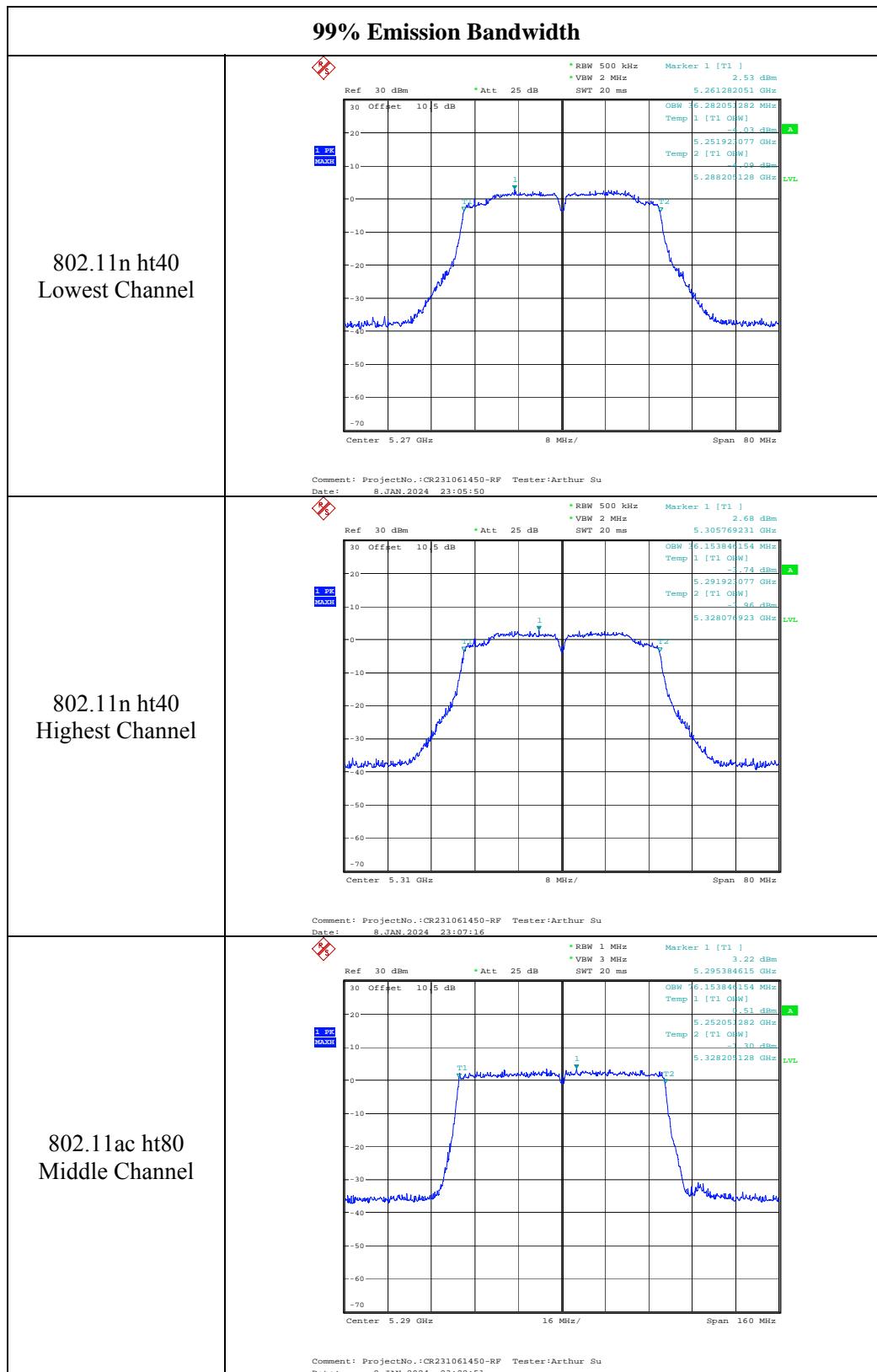


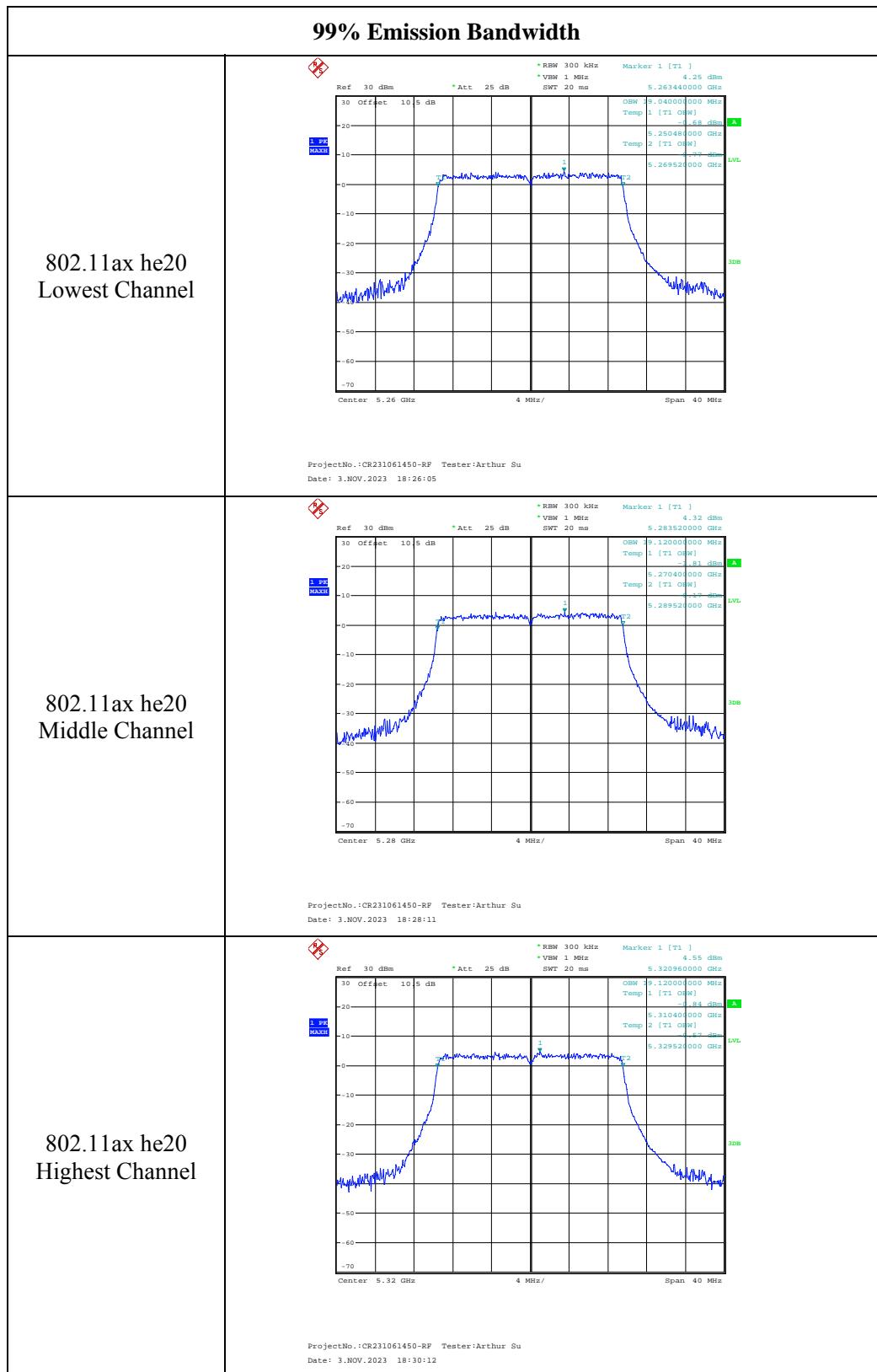


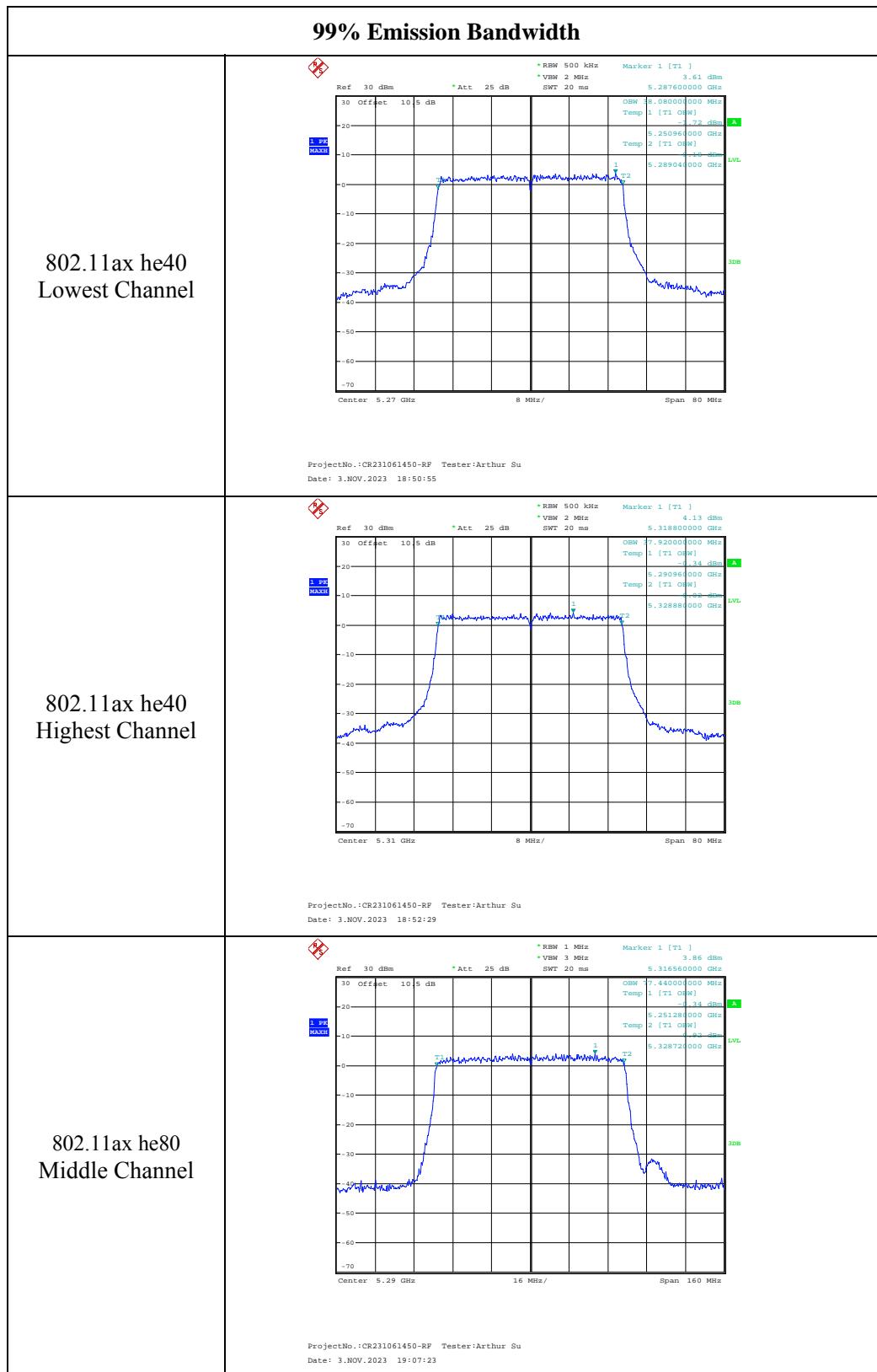


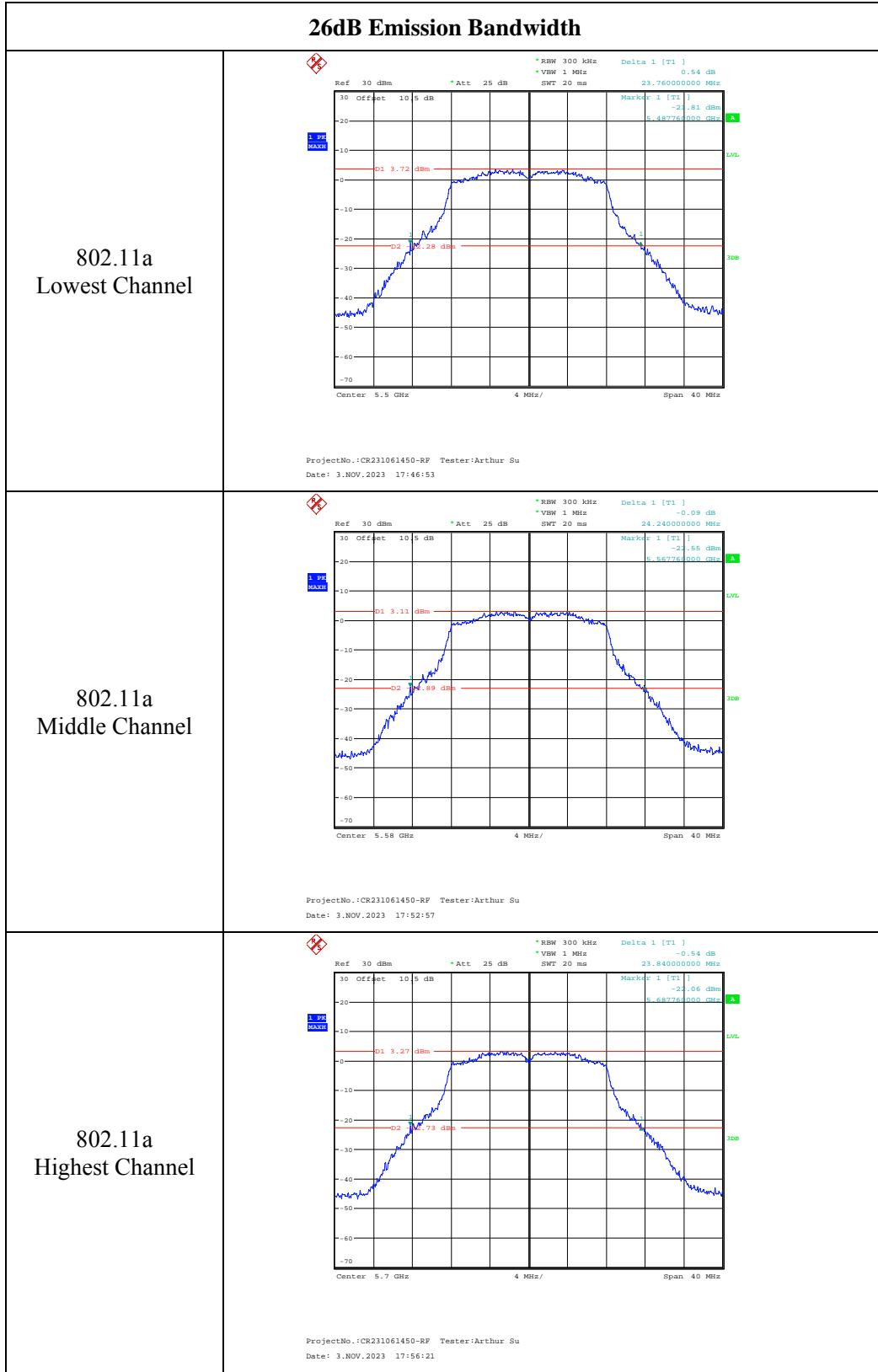




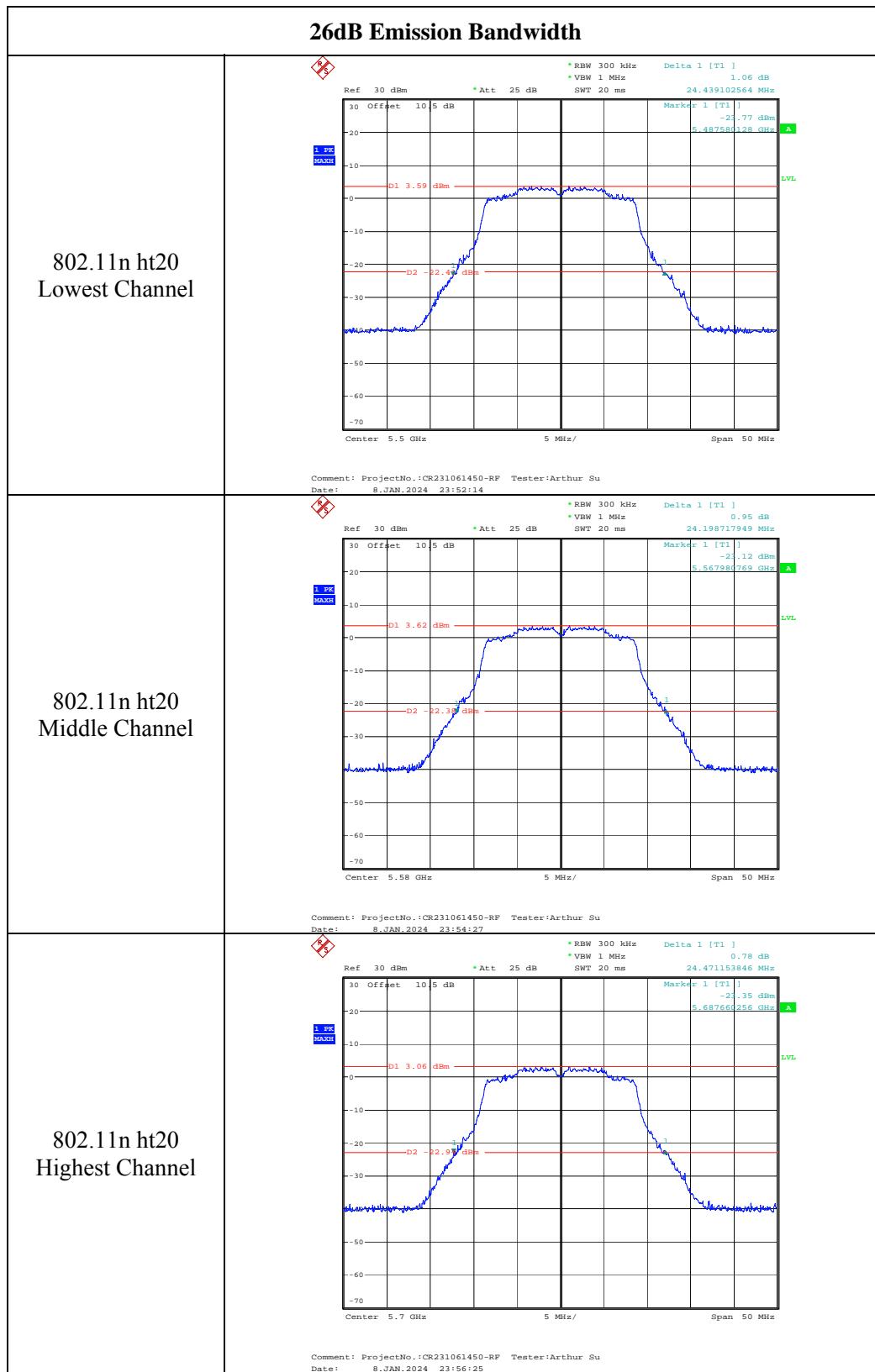


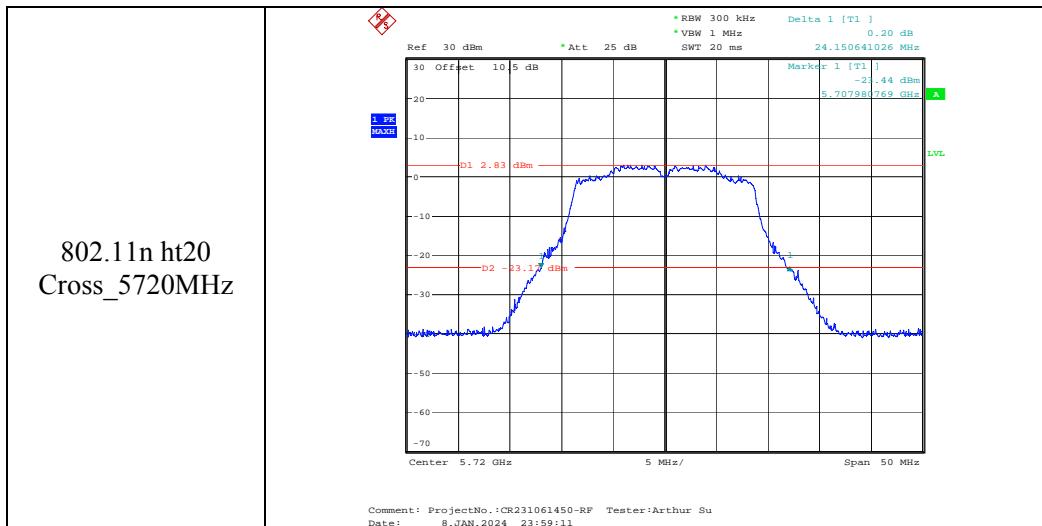


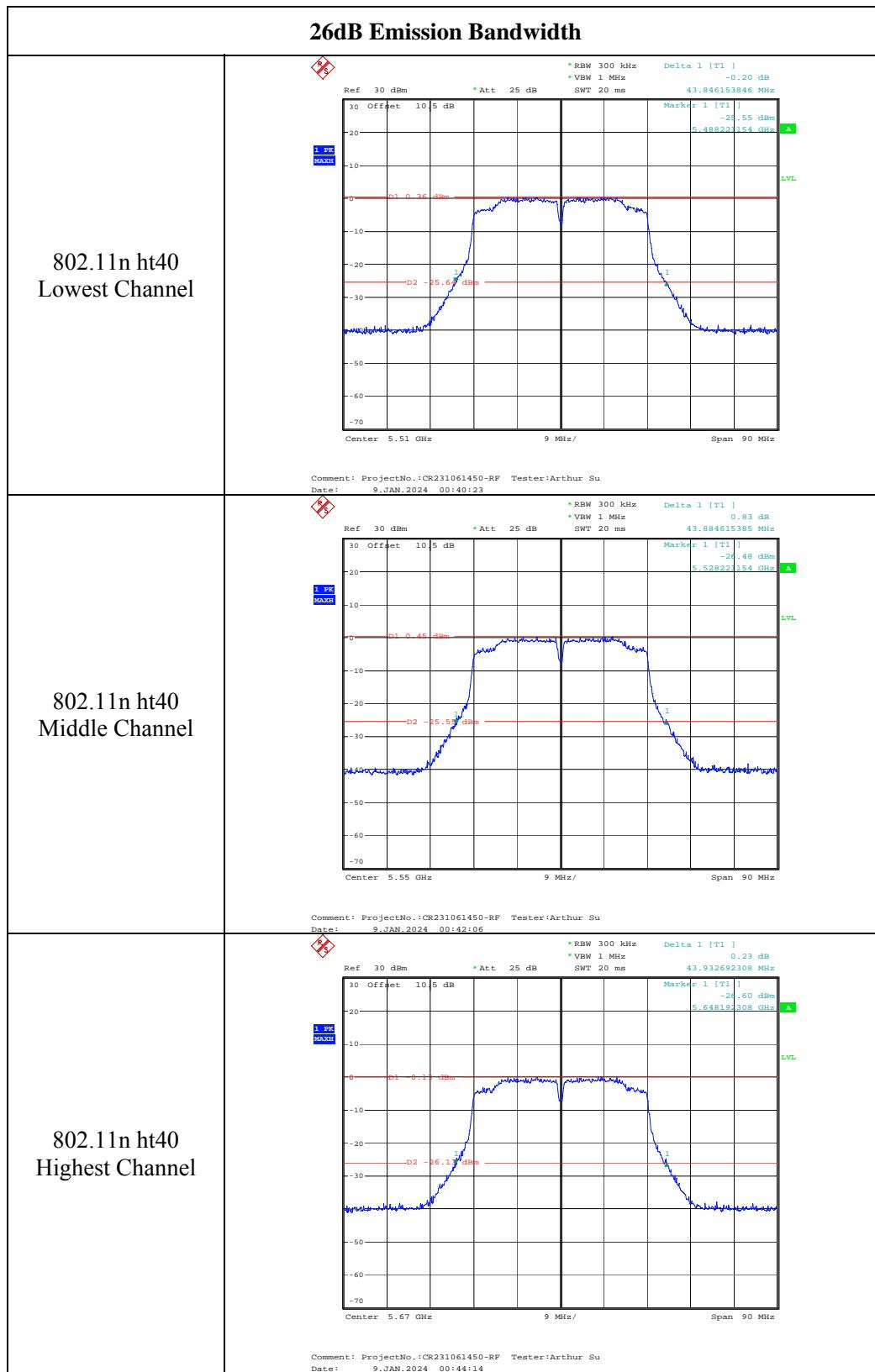


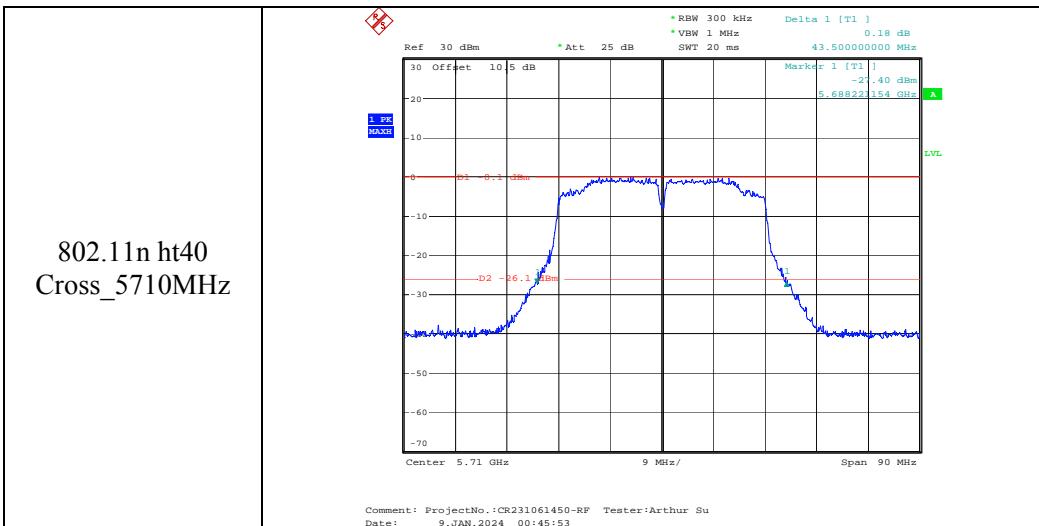
**5470-5725 MHz:**

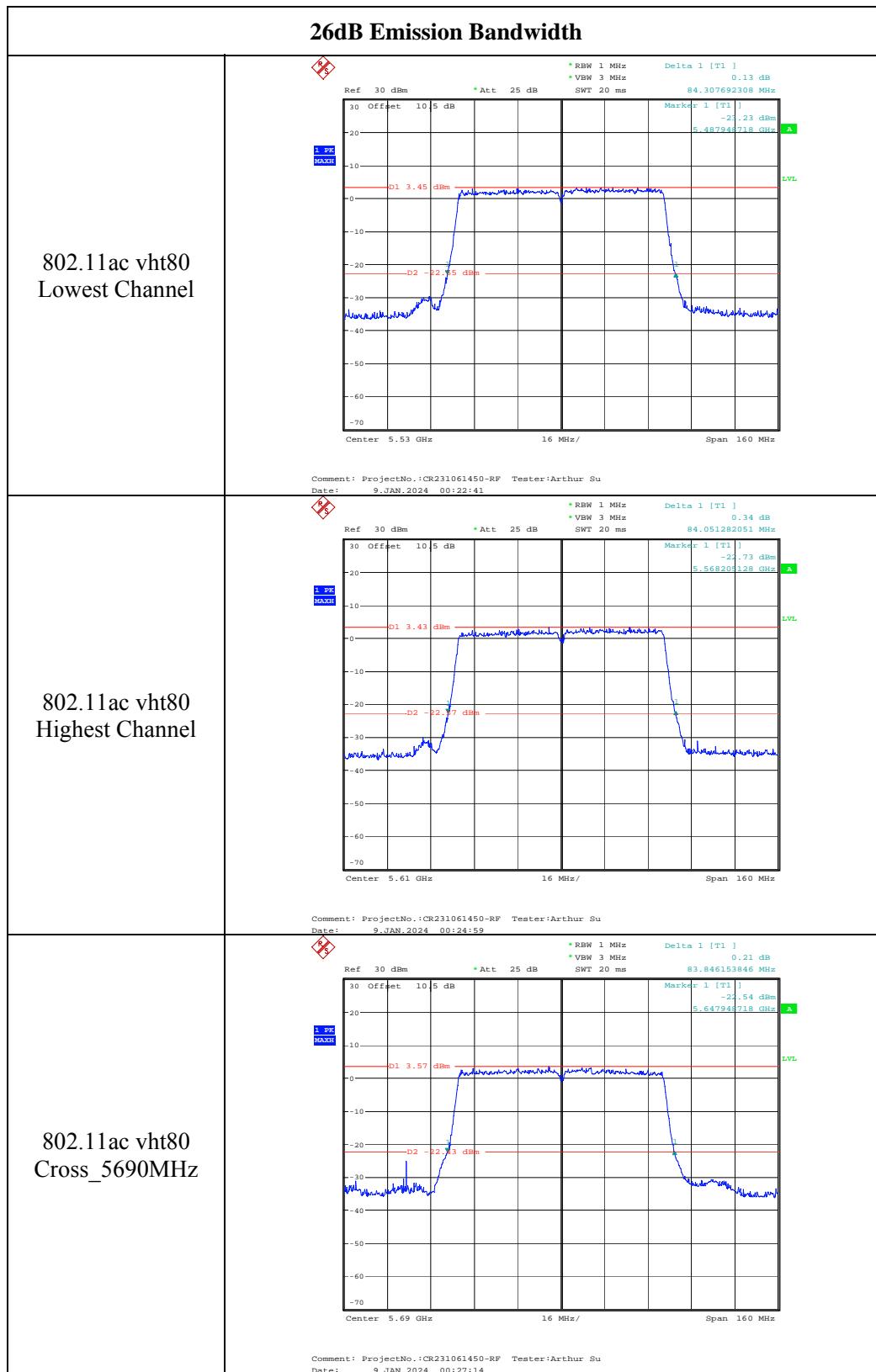


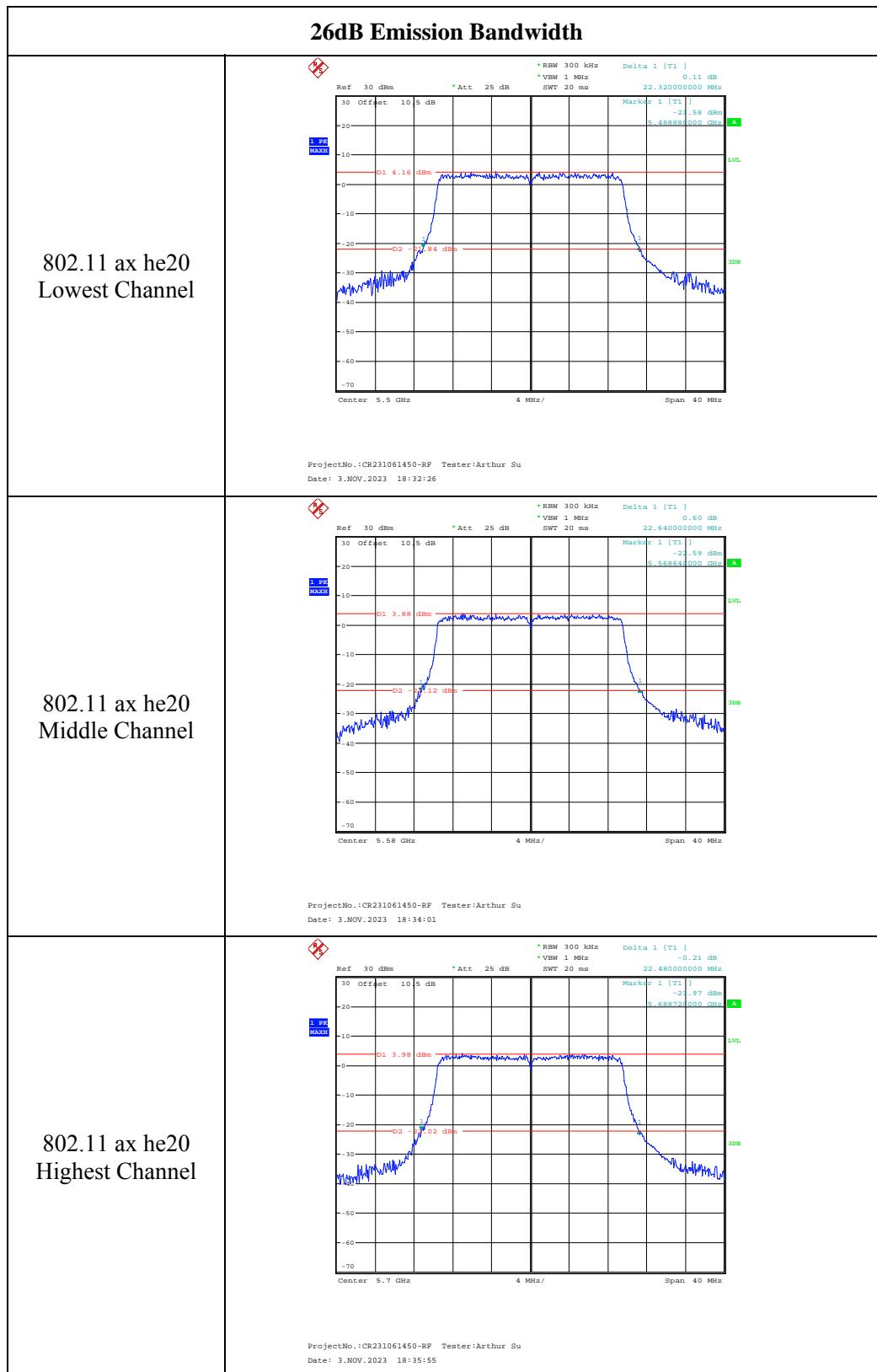


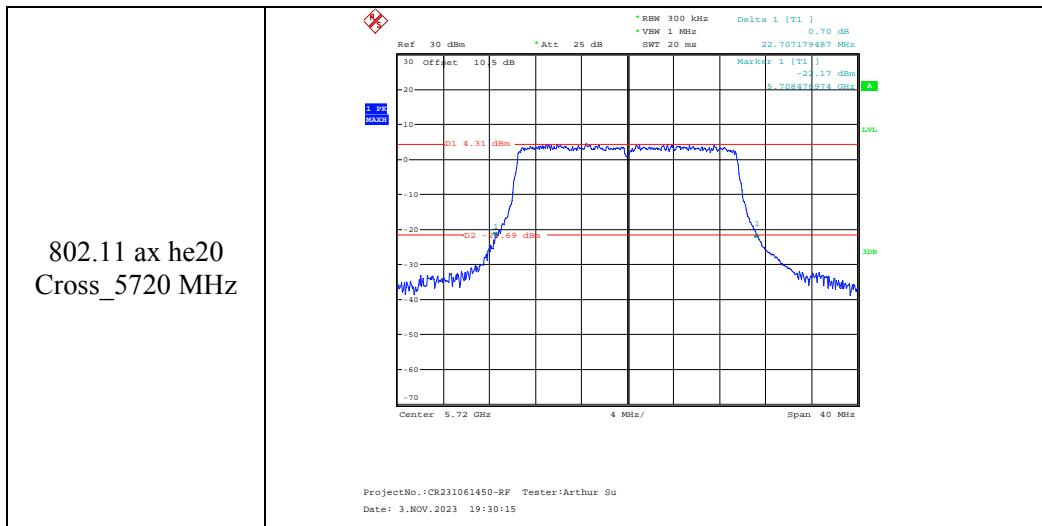


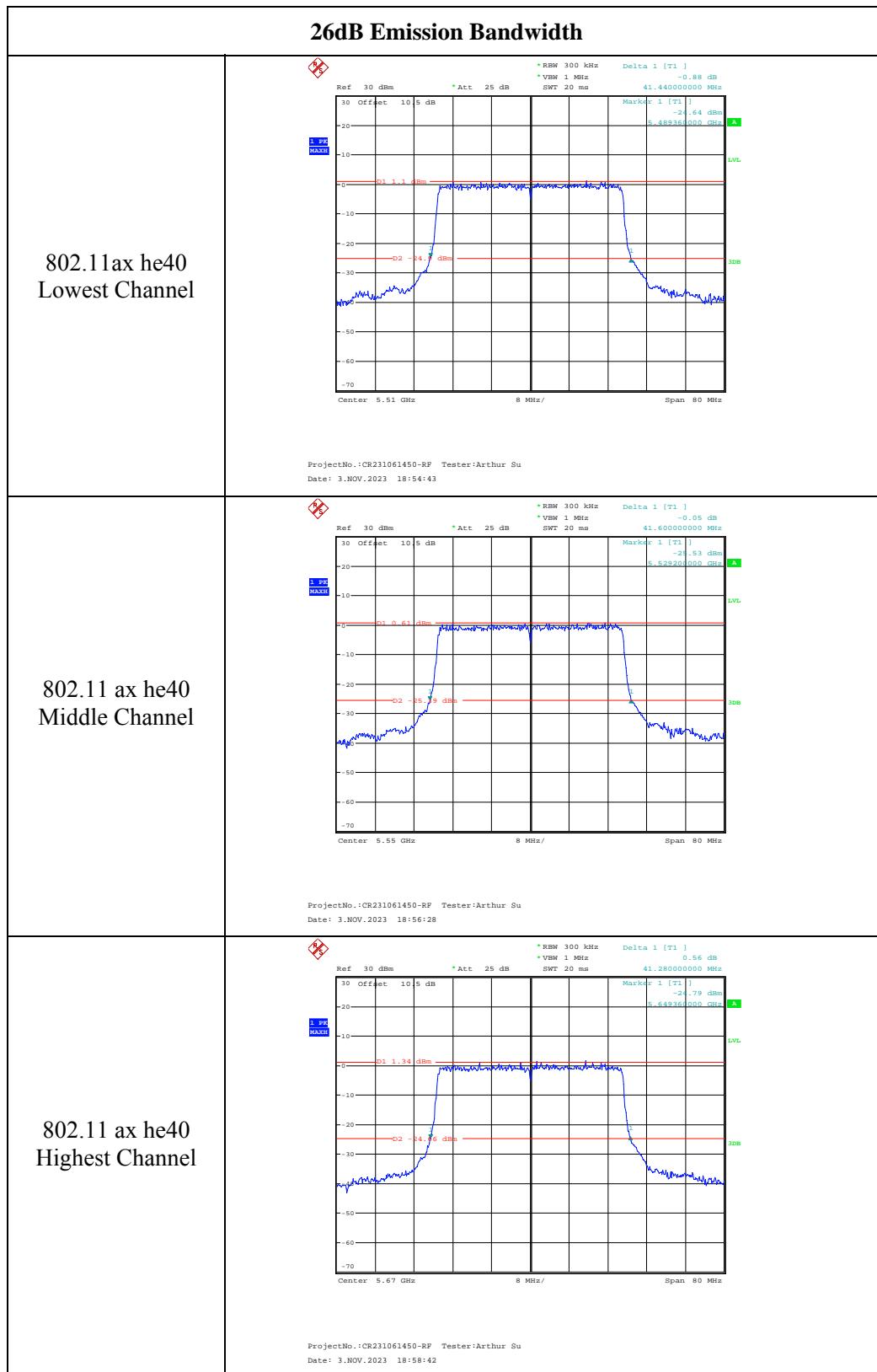




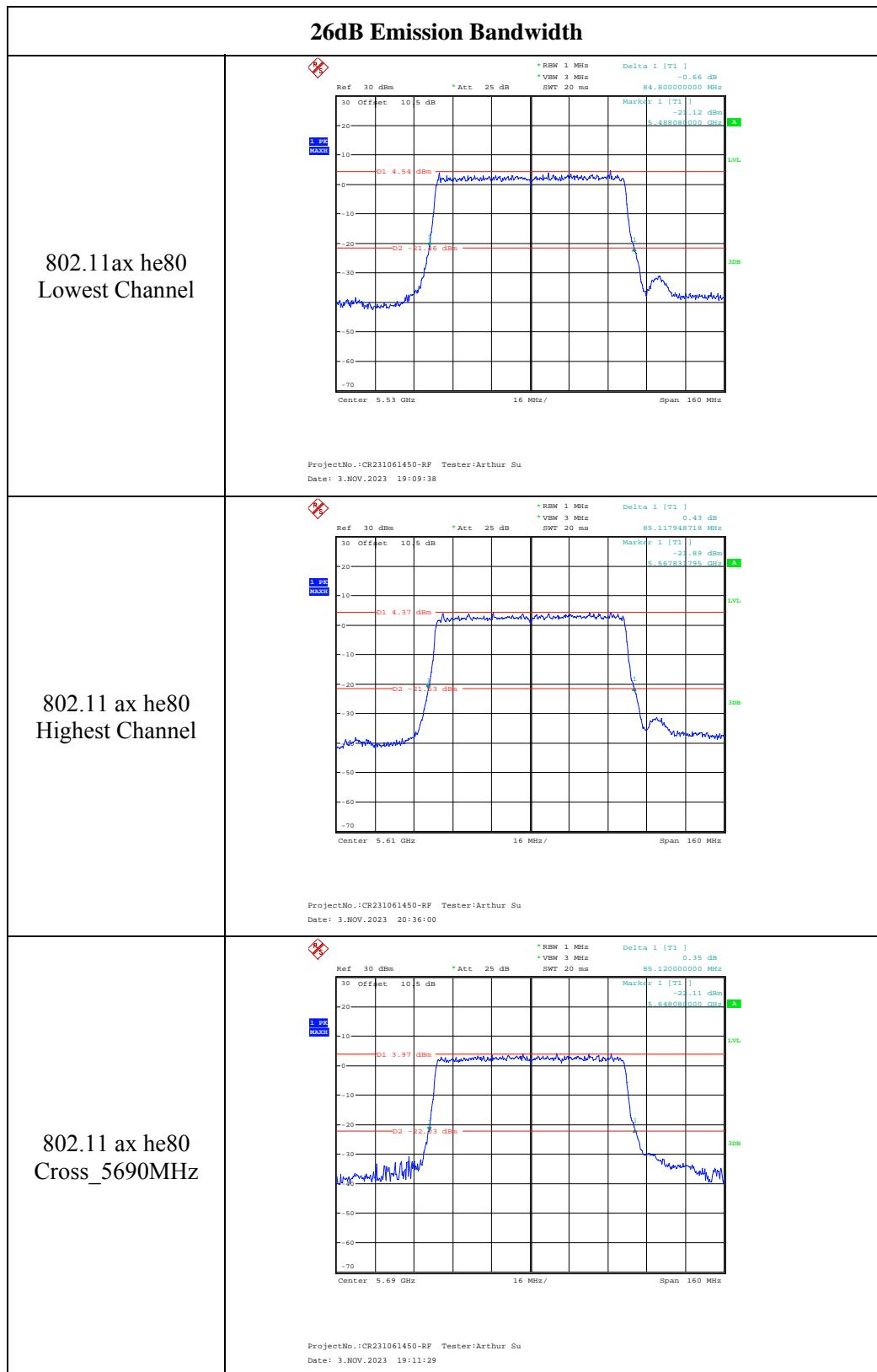


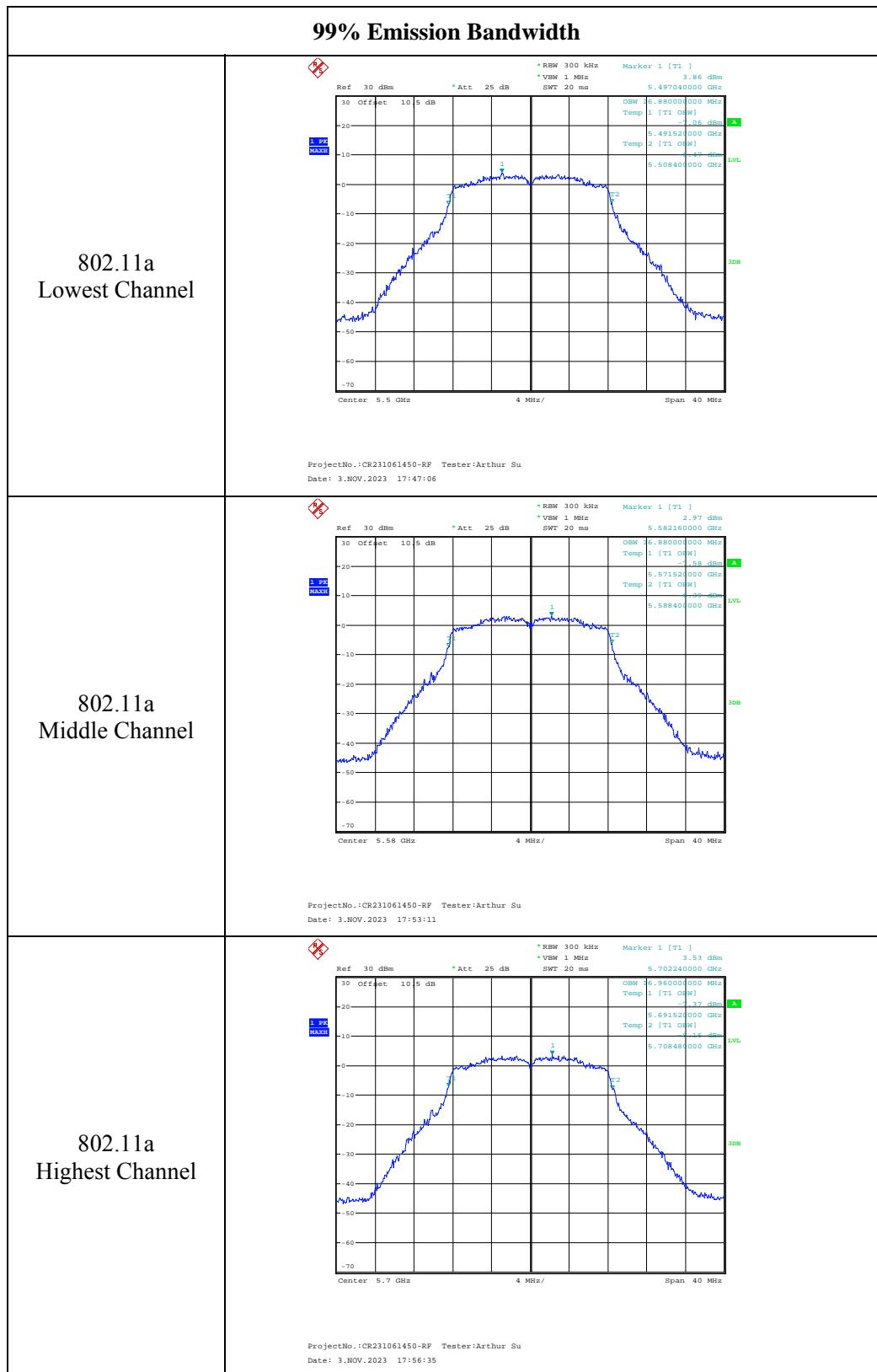




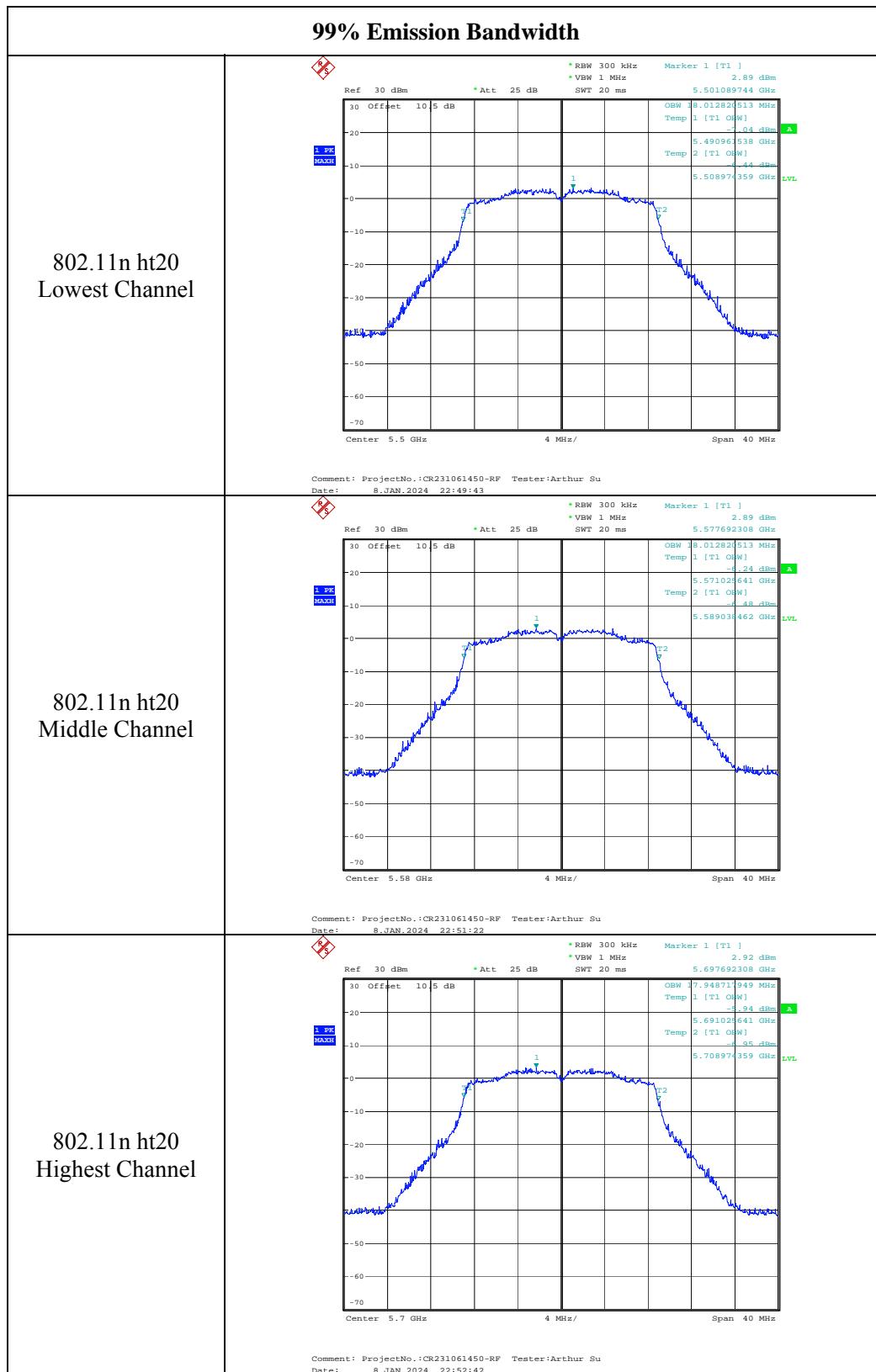


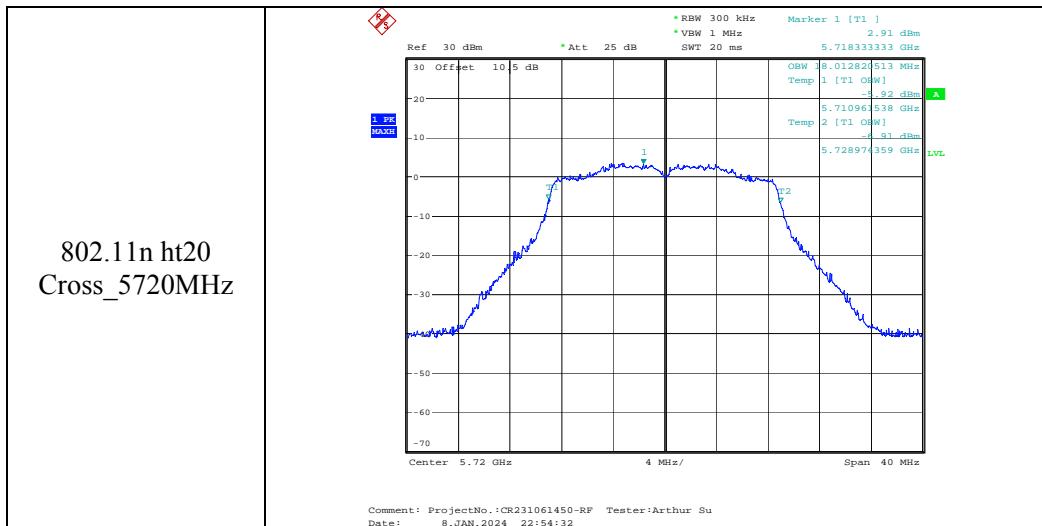


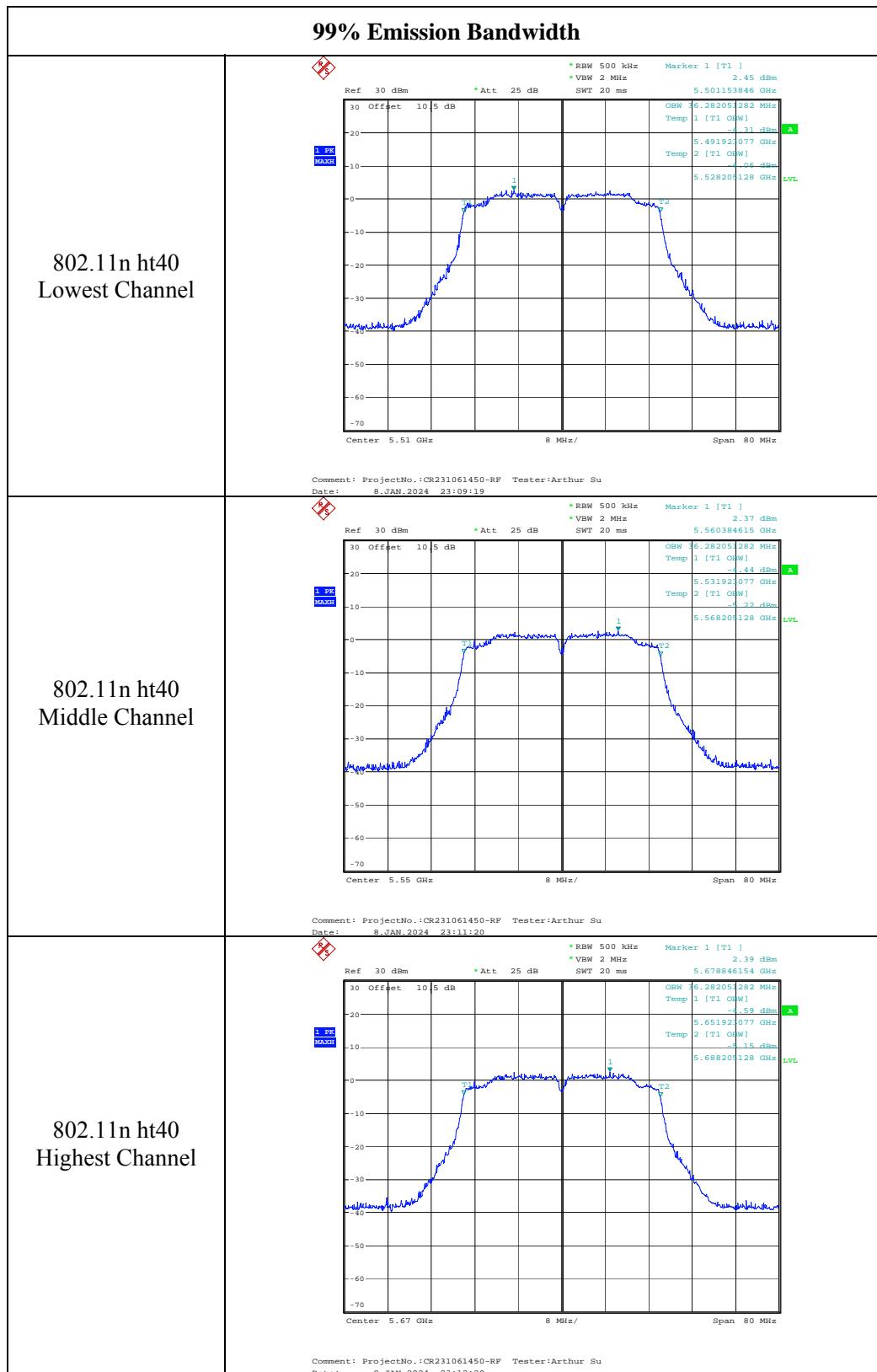


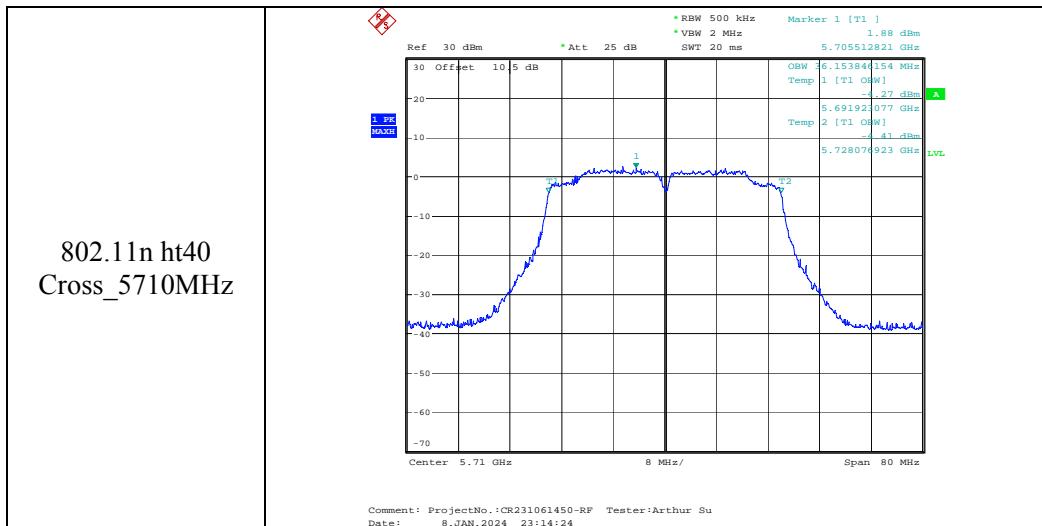


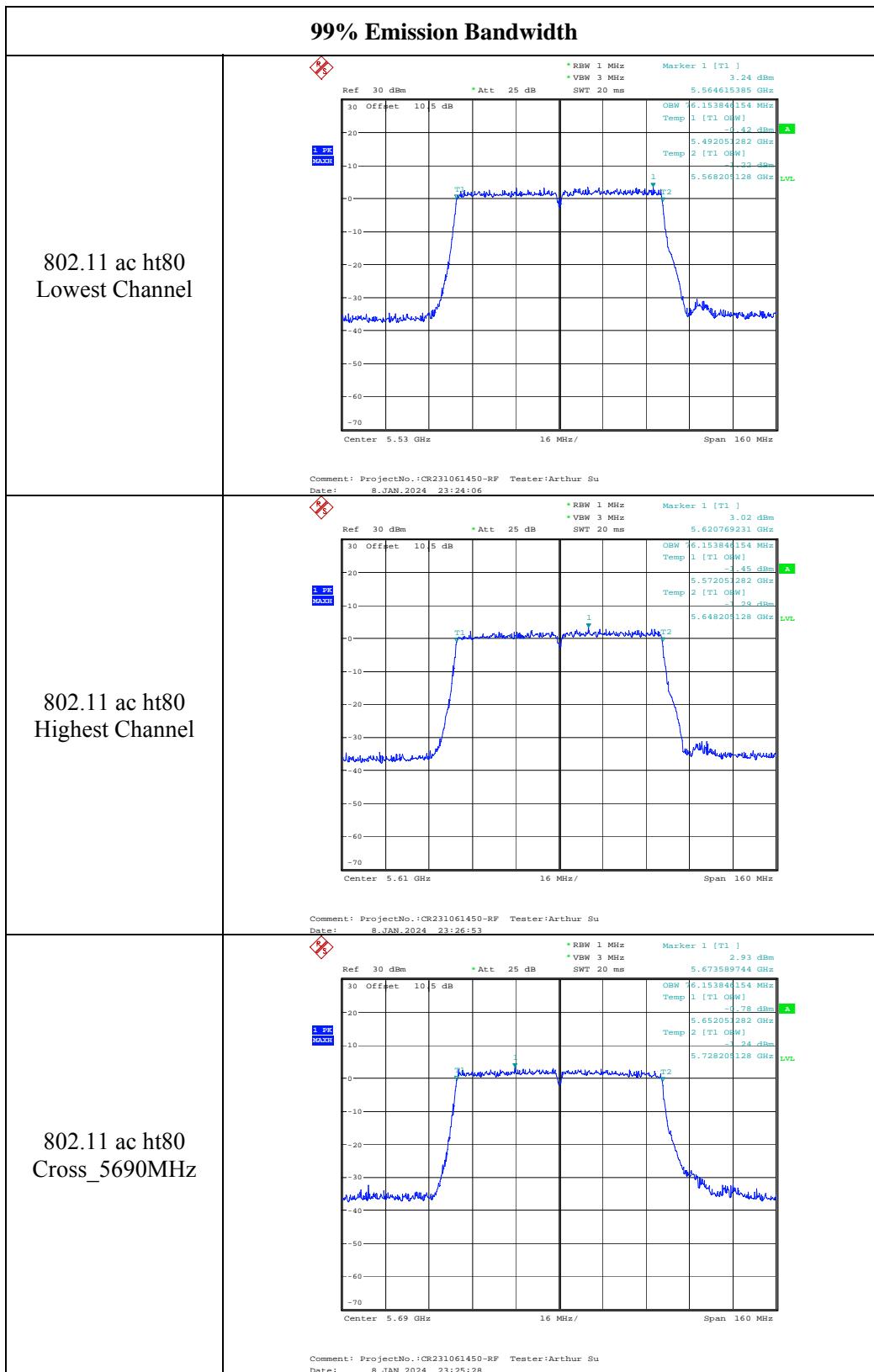


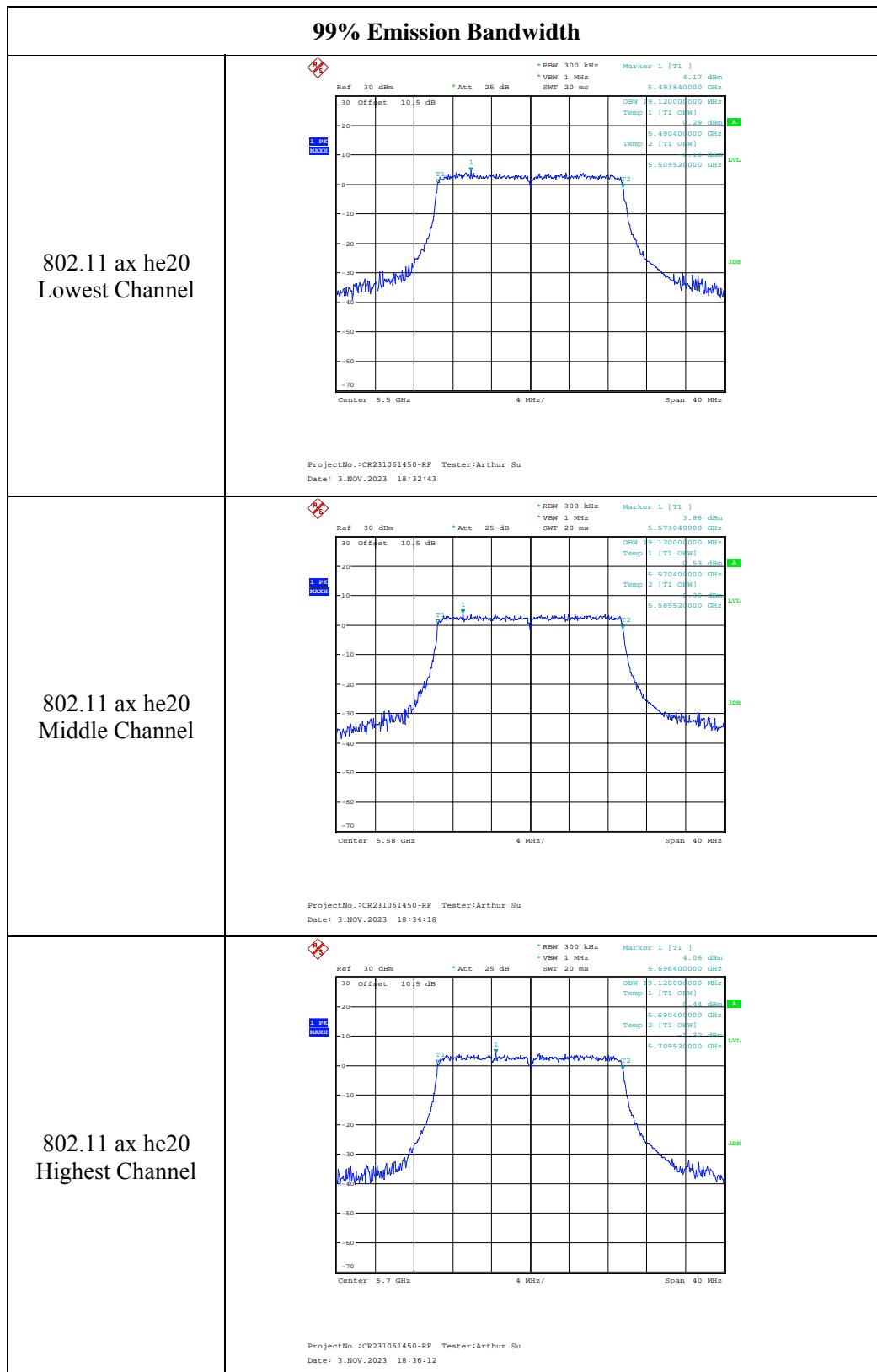


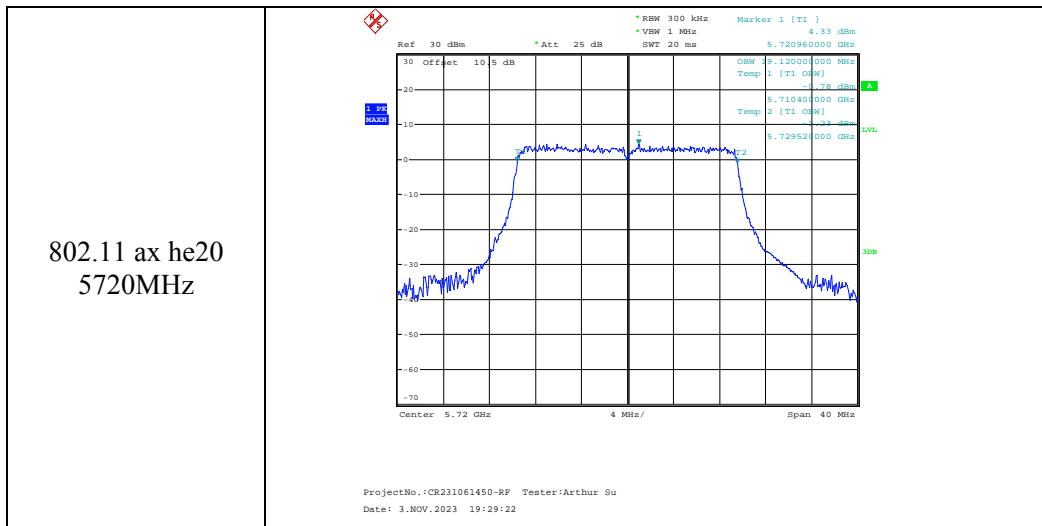


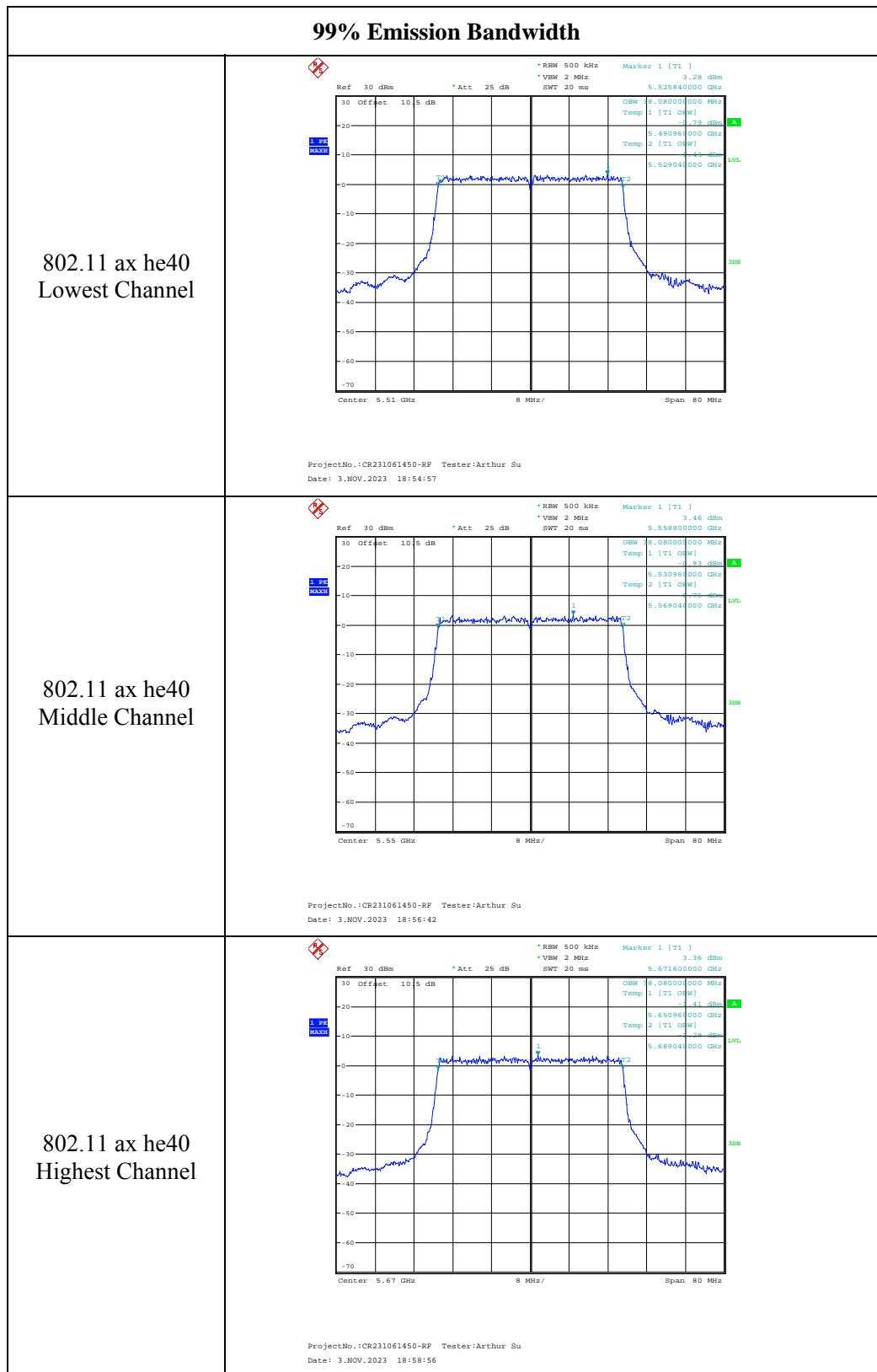


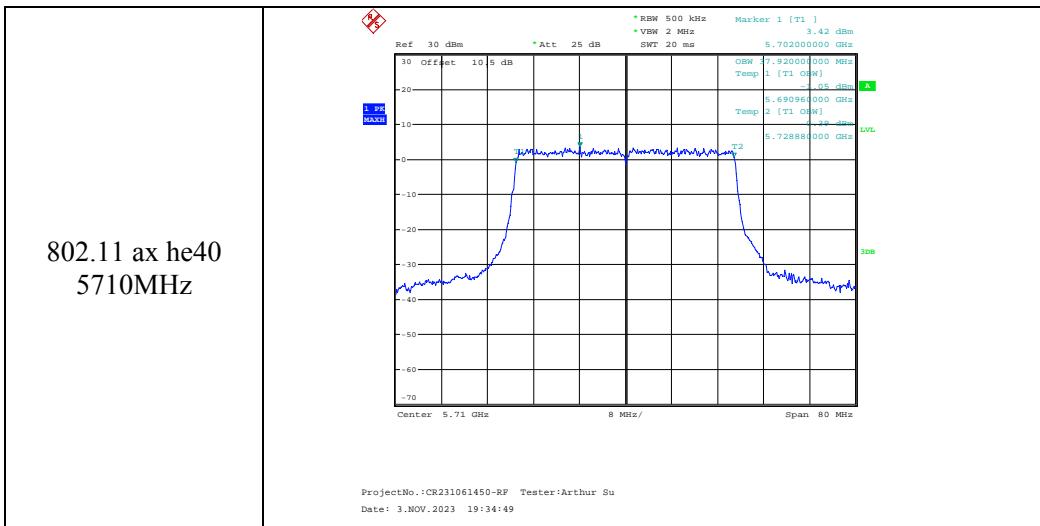


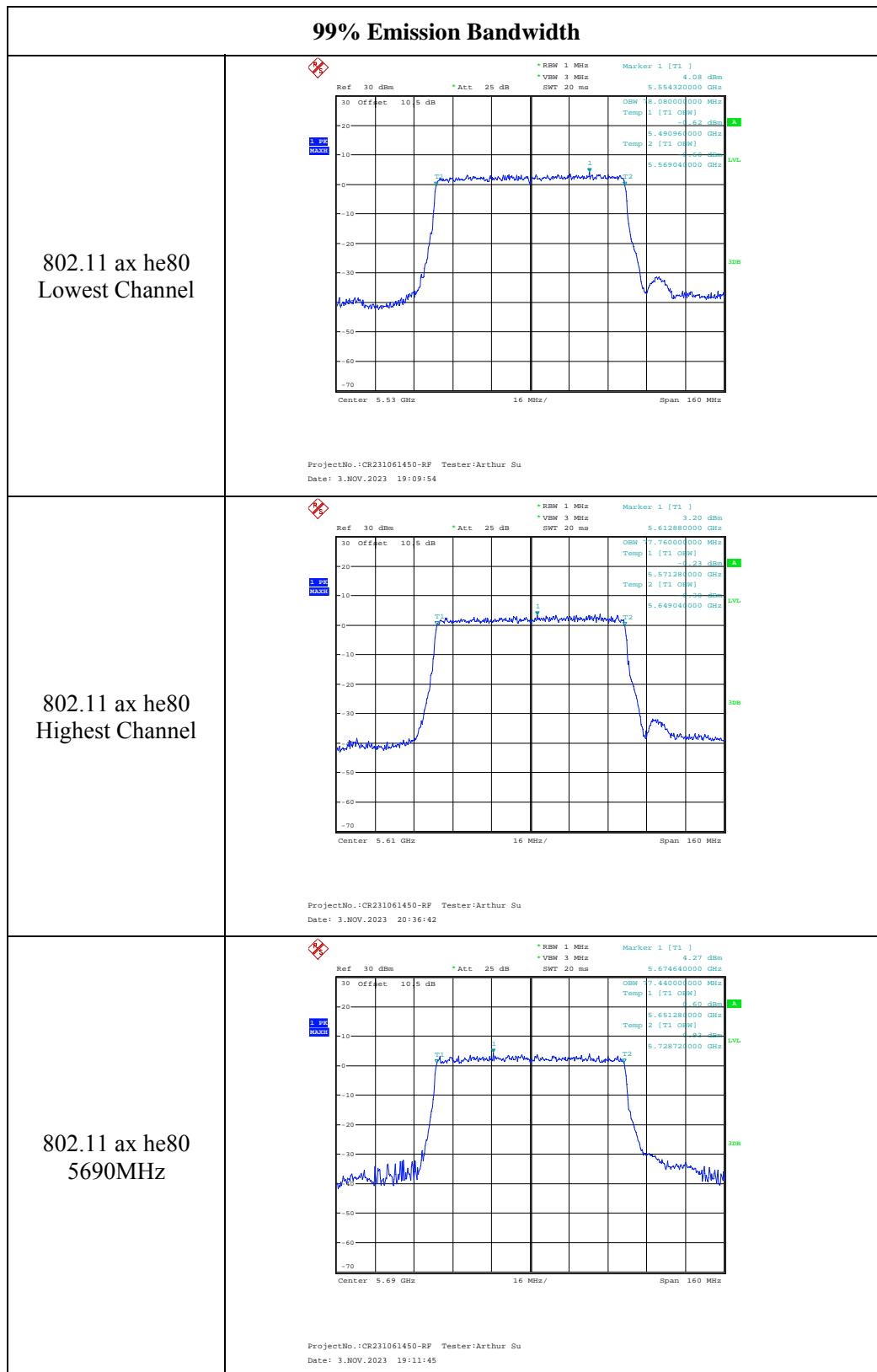


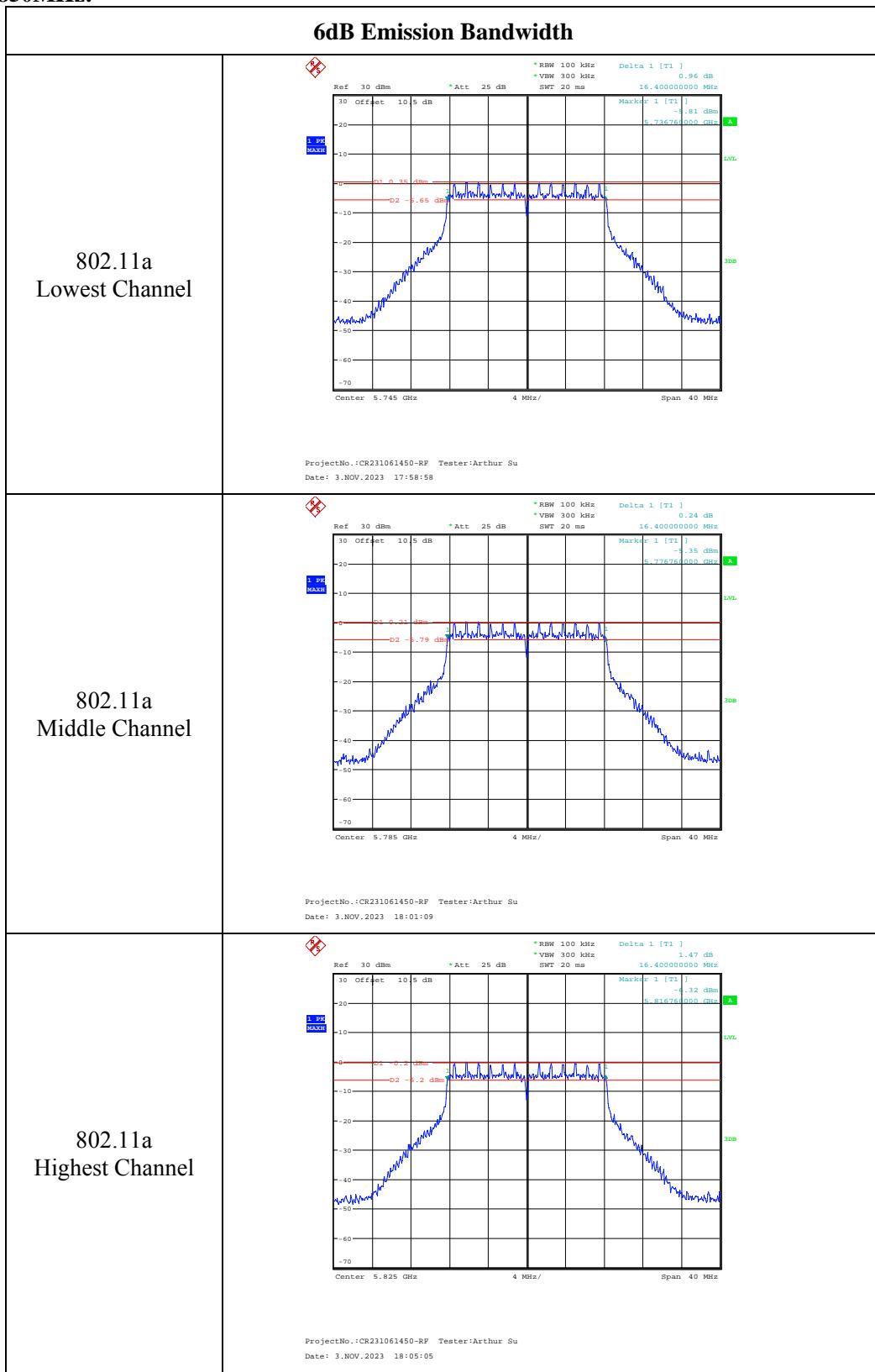


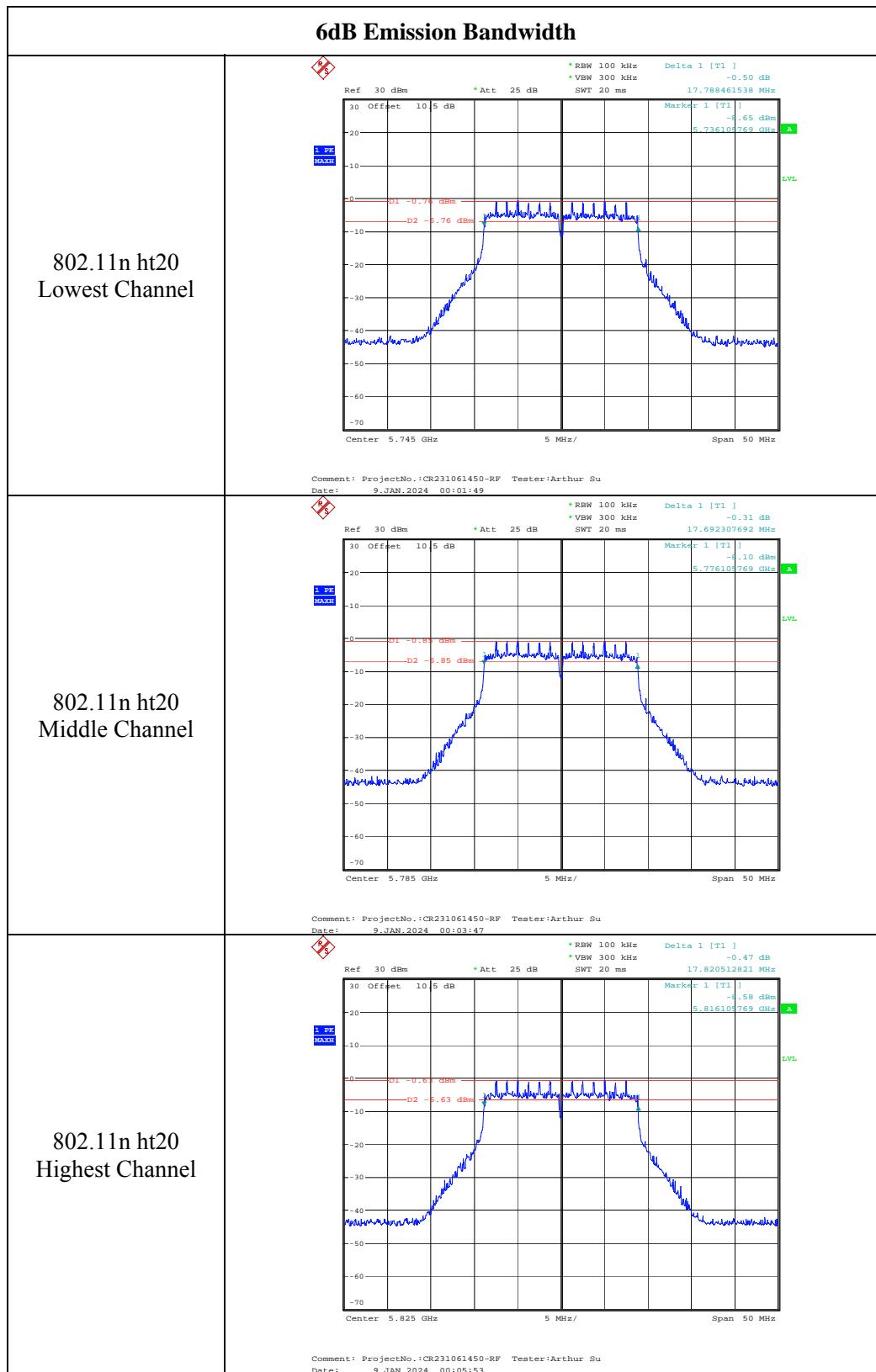


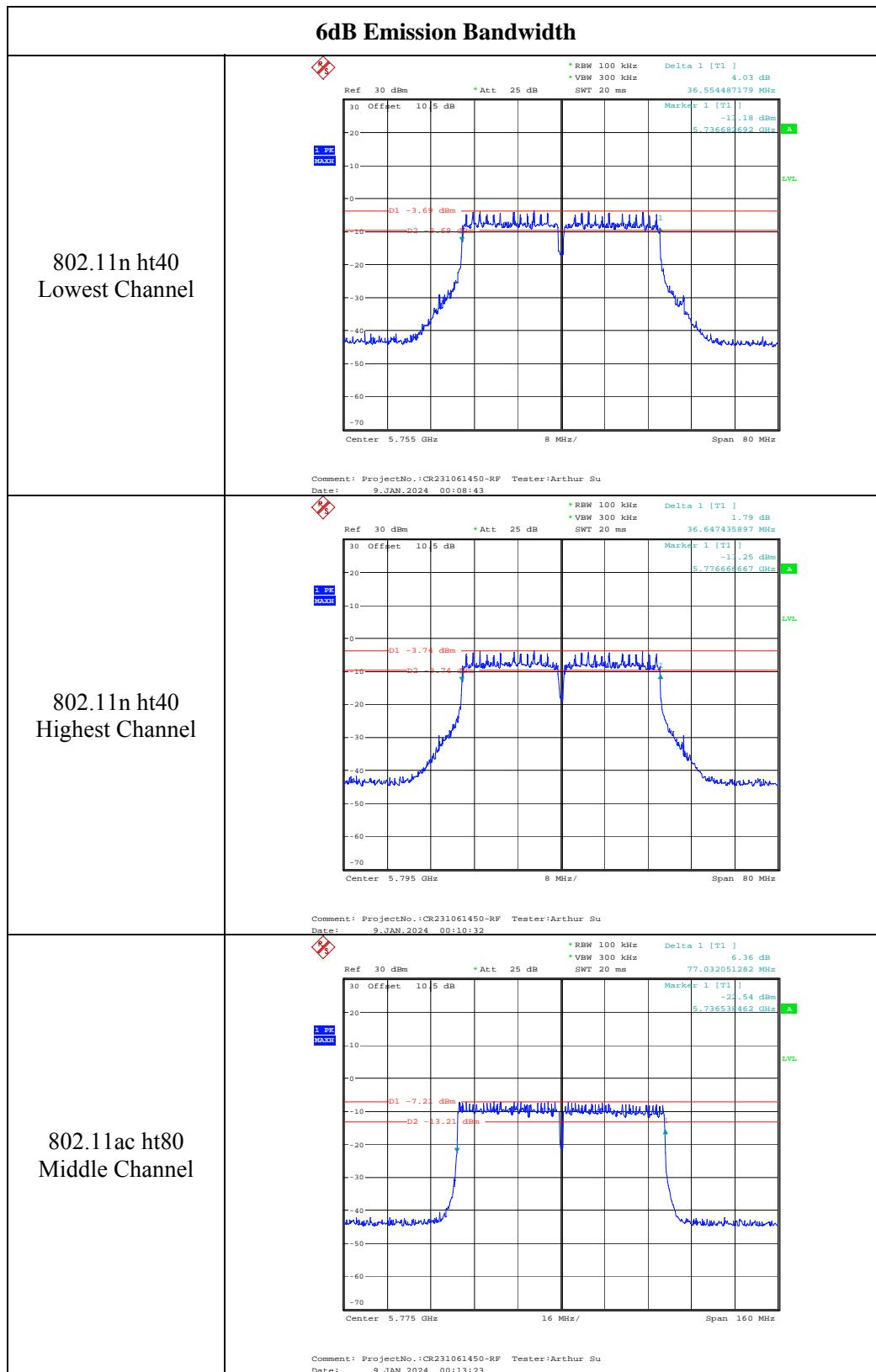


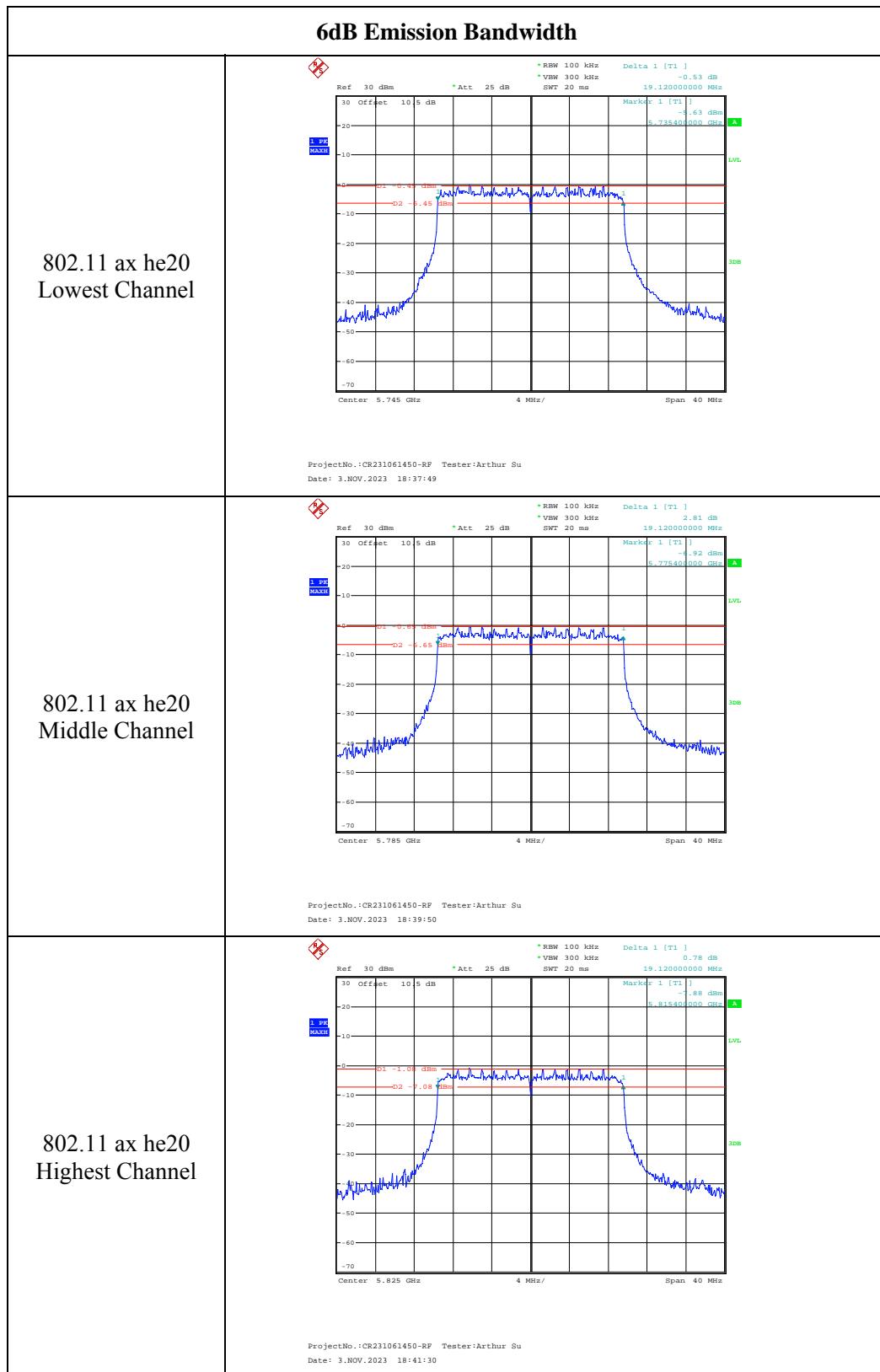


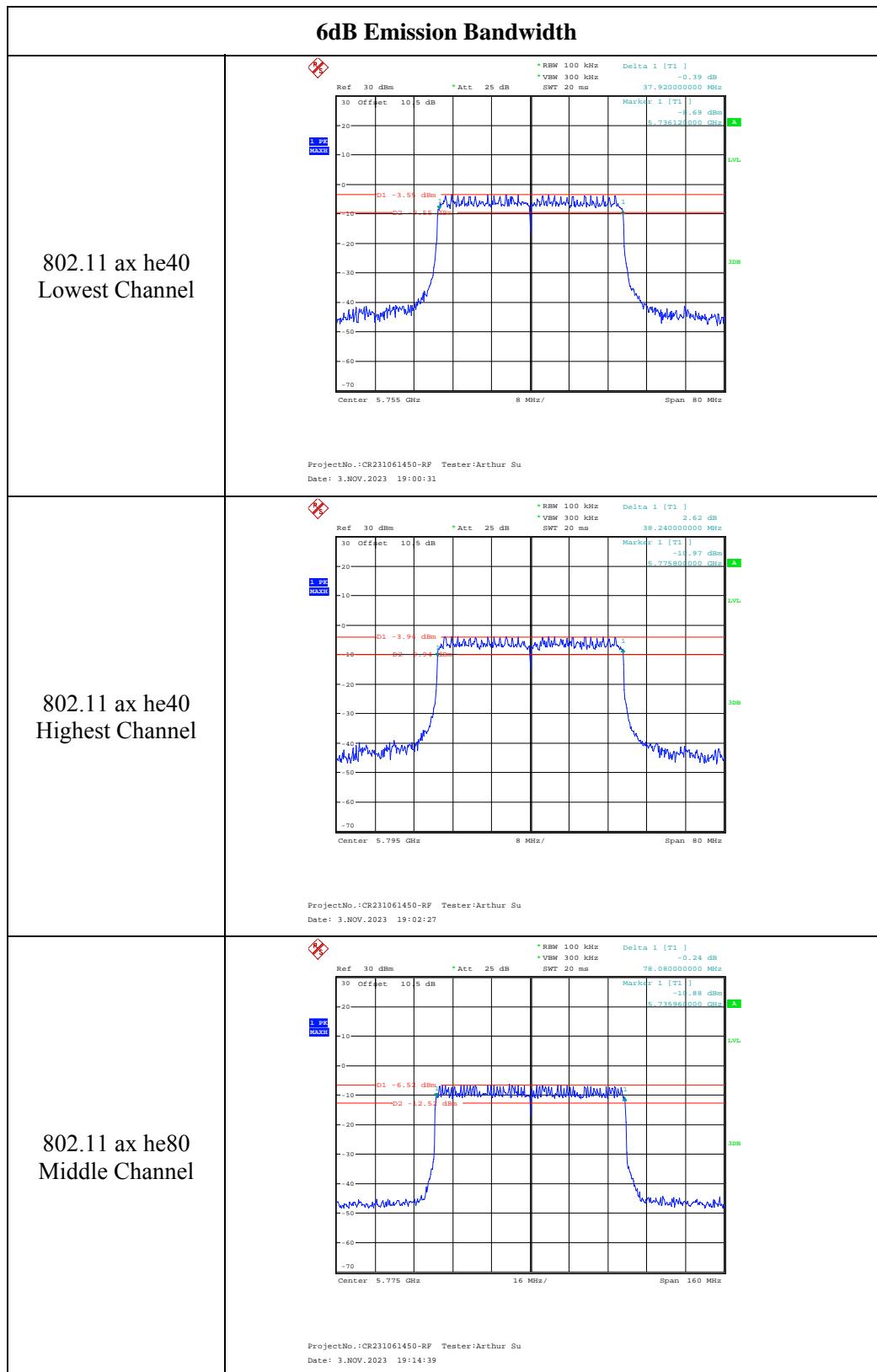


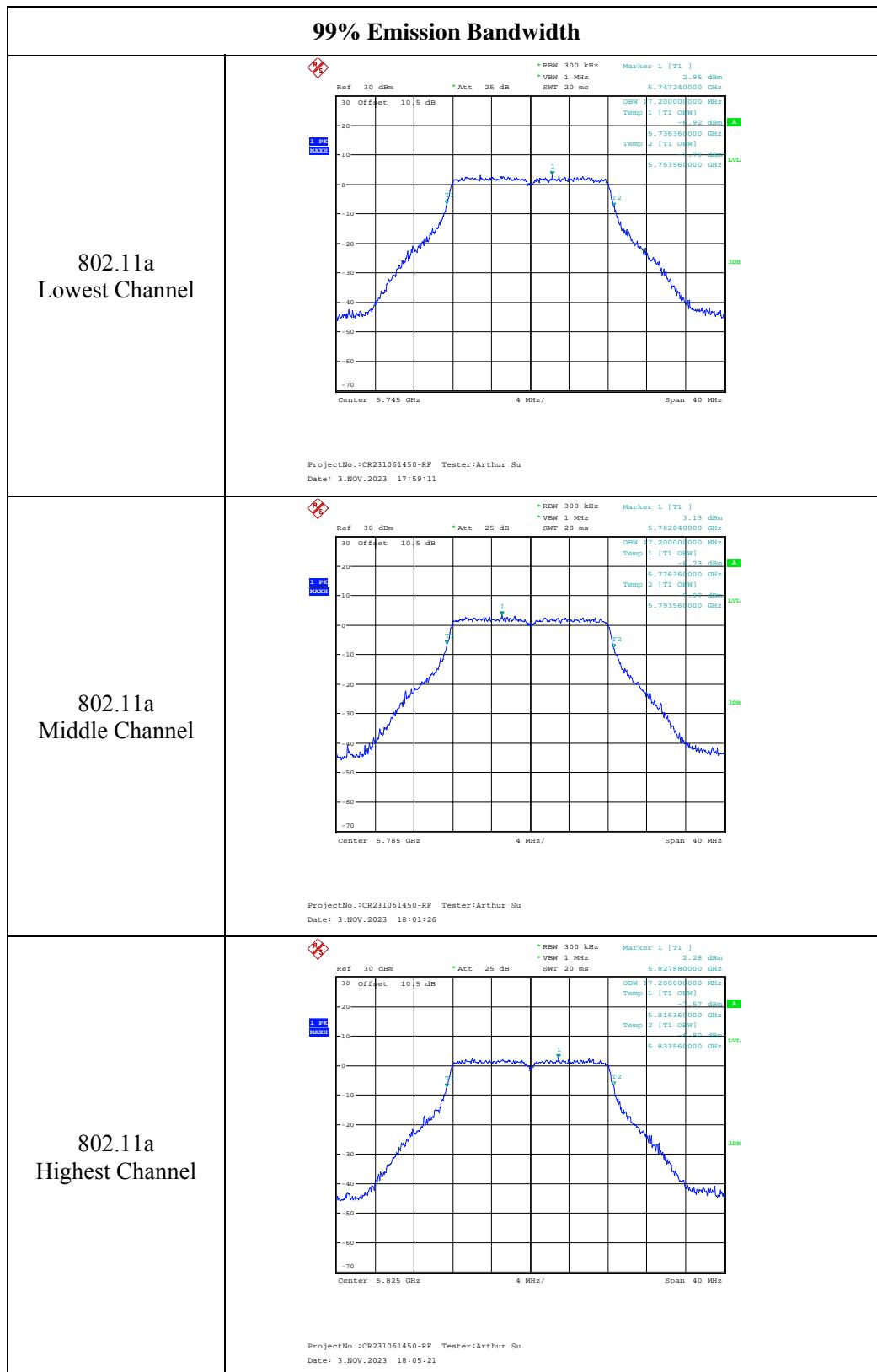
**5725-5850MHz:**

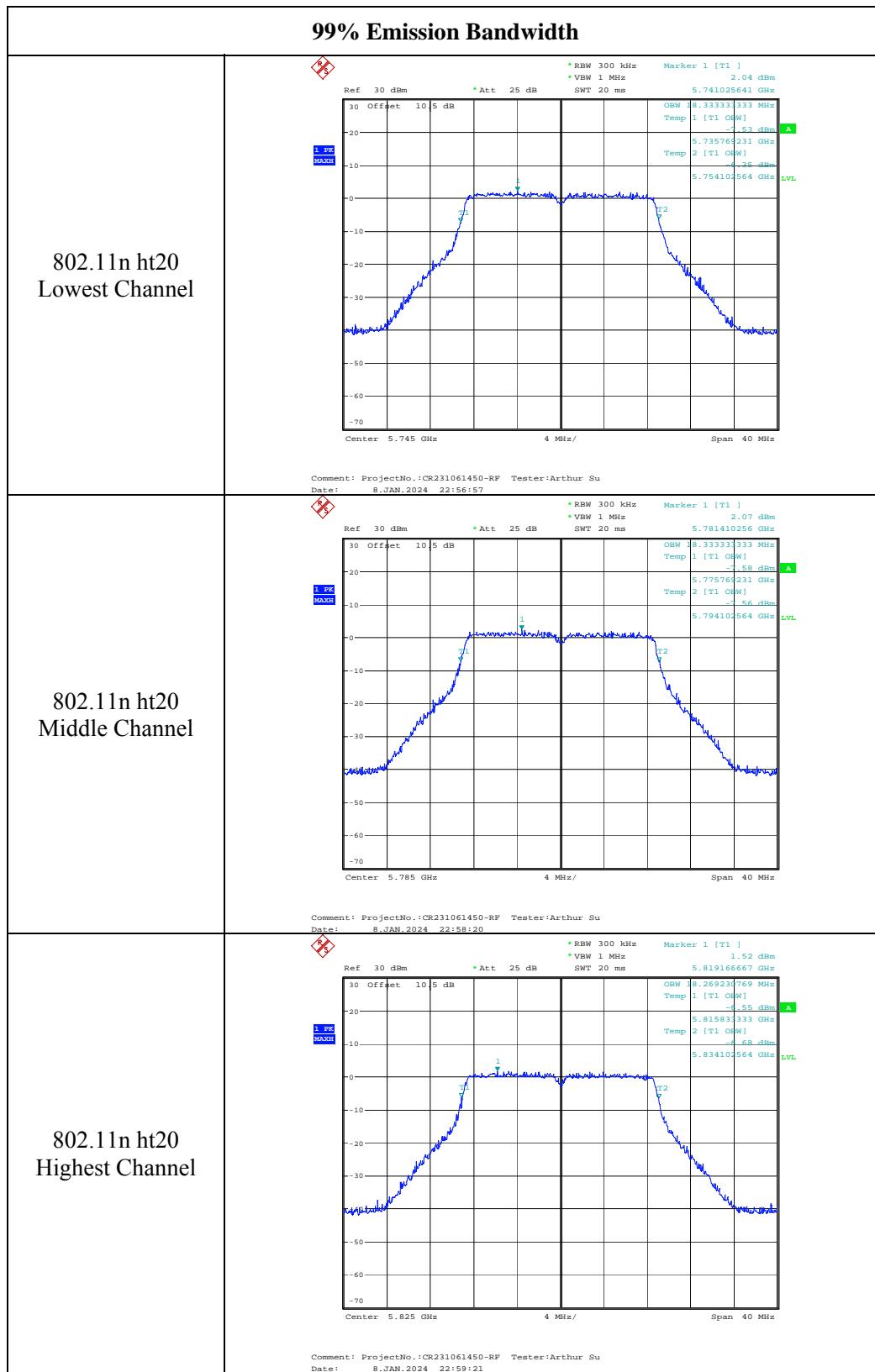


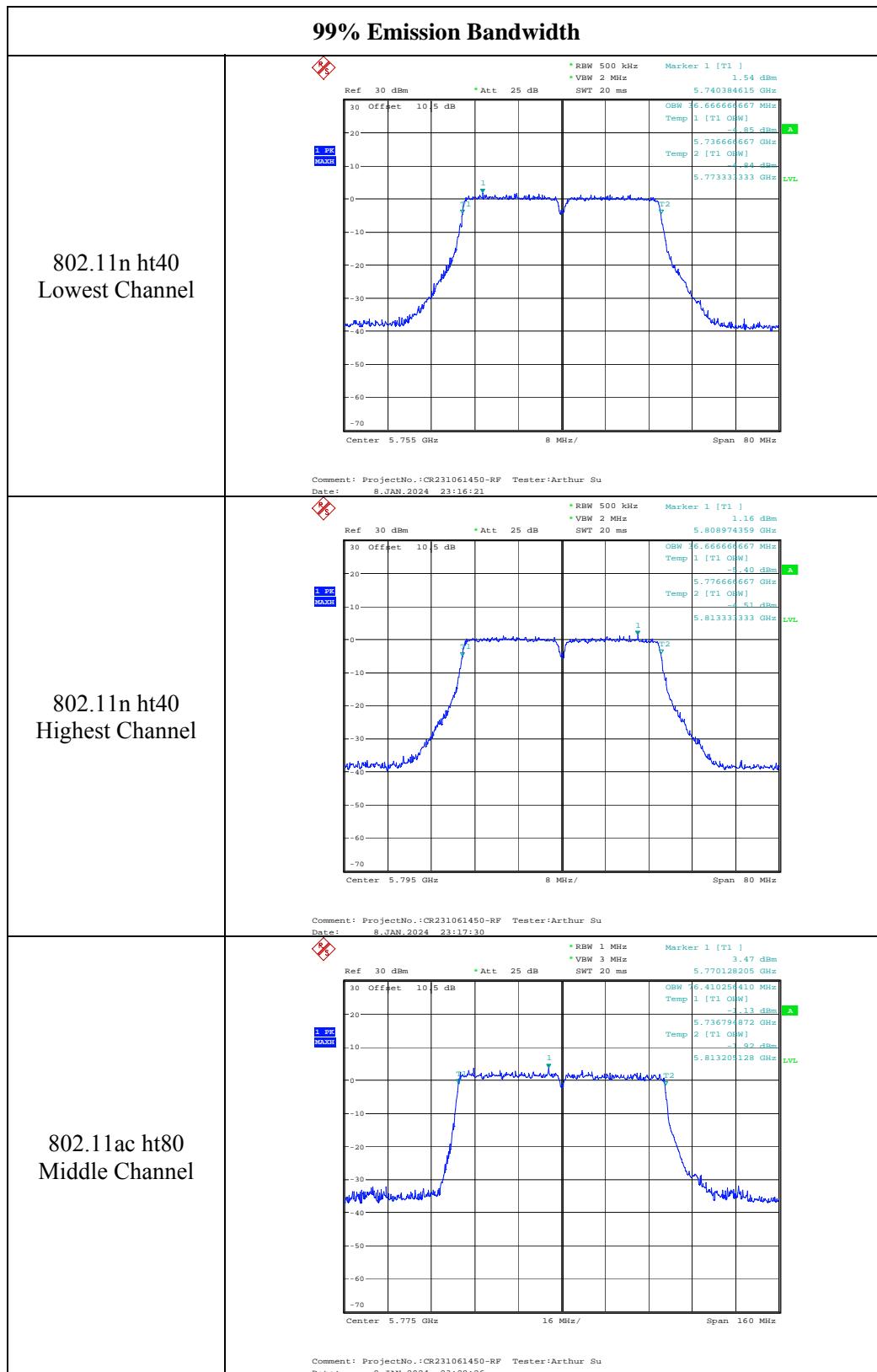


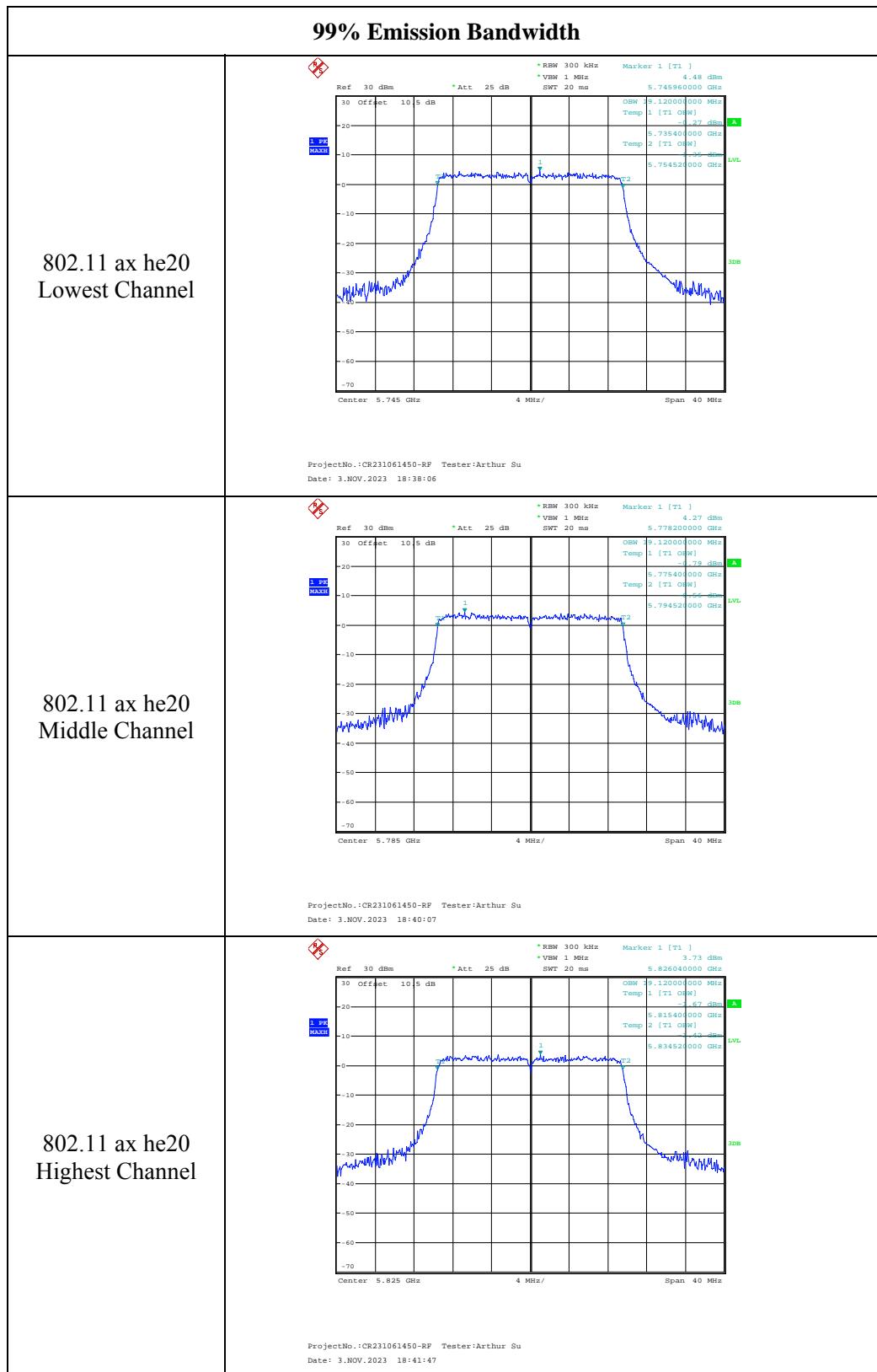


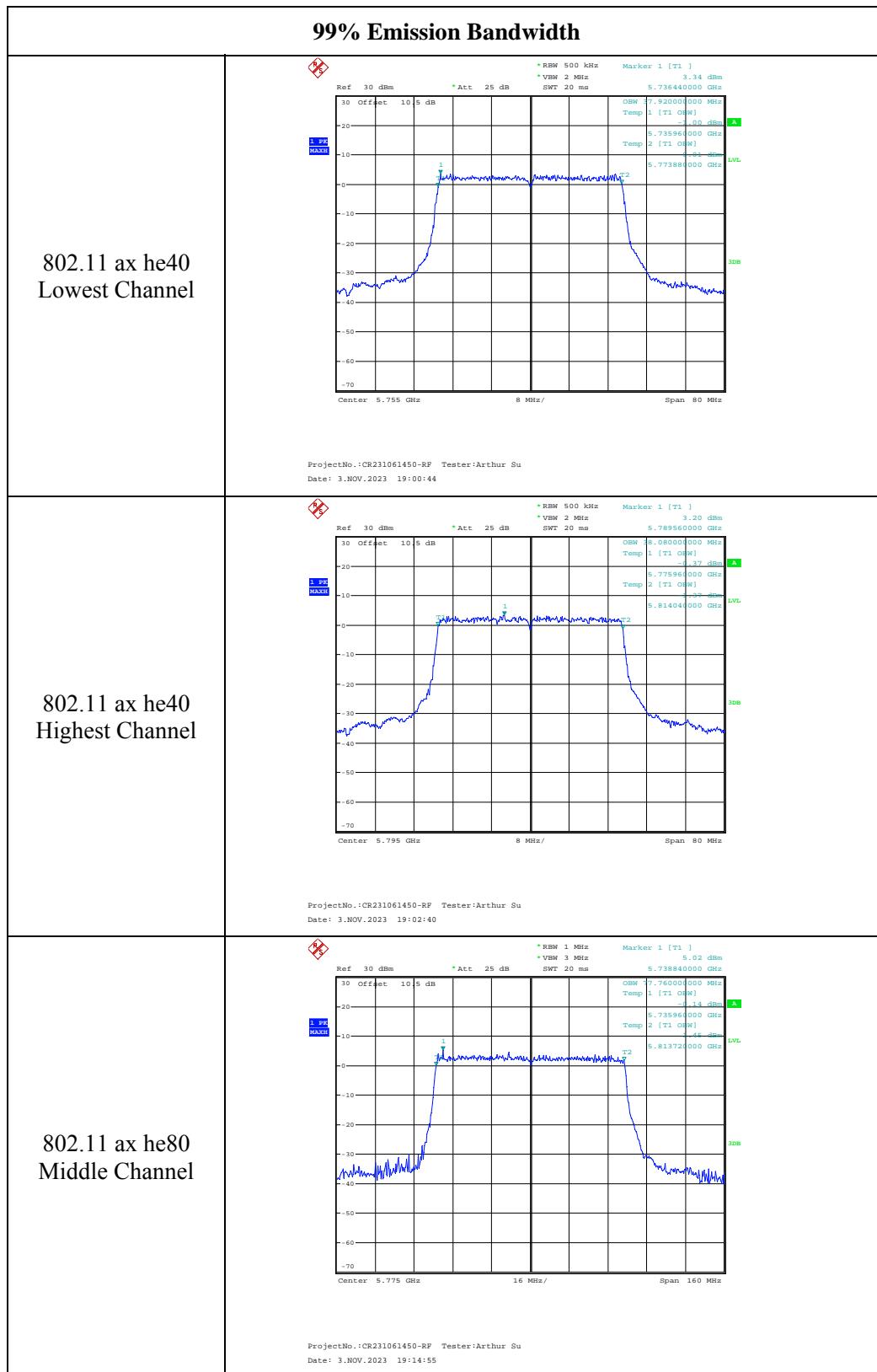












#### 4.4 Maximum Conducted Output Power

Serial Number:	2CHV-2	Test Date:	2023/11/3-2024/1/9
Test Site:	RF	Test Mode:	Transmitting
Tester:	Arthur Su	Test Result:	Pass

#### Environmental Conditions:

Temperature: (°C)	24.5-25.9	Relative Humidity: (%)	45-60	ATM Pressure: (kPa)	100.7-101.2
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#### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3
Anritsu	Pulse Power Sensor	MA2411A	10780	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:

##### Note:

1. The device is a client device.
2. The total Average output power =  $10 \log [(10^{\text{Chain 0 Average output power}/10}) + (10^{\text{Chain 1 Average output power}/10})]$
3. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

Directional gain =  $G_{\text{ANT MAX}} + \text{Array Gain} = 3.55 \text{ dBi} < 6 \text{ dBi}$ ;

So, the maximum output power limit for all bands does not need to be reduced.

**5150-5250 MHz:**

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	10.95	11.44	/	24
	5200	10.89	11.08	/	24
	5240	10.62	10.95	/	24
802.11n ht20	5180	10.97	10.95	13.97	24
	5200	10.78	10.89	13.85	24
	5240	10.74	11.28	14.03	24
802.11n ht40	5190	10.86	11.28	14.09	24
	5230	10.62	11.06	13.86	24
802.11ac vht80	5210	10.84	11.24	14.05	24
802.11ax hew20	5180	11.04	11.14	14.10	24
	5200	10.91	11.02	13.98	24
	5240	10.79	11.31	14.07	24
802.11ax hew40	5190	10.94	11.38	<b>14.18</b>	24
	5230	10.70	11.14	13.94	24
802.11ax hew80	5210	10.91	11.30	14.12	24

**5250-5350 MHz:**

Test Modes	Test Frequency(MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5260	10.81	10.91	/	24
	5280	10.92	10.71	/	24
	5320	11.05	11.17	/	24
802.11n ht20	5260	10.76	10.96	13.87	24
	5280	10.93	10.98	13.97	24
	5320	10.99	11.06	14.04	24
802.11n ht40	5270	10.81	11.22	14.03	24
	5310	10.95	11.13	14.05	24
802.11ac vht80	5290	10.99	11.03	14.02	24
802.11ax hew20	5260	10.94	11.11	14.04	24
	5280	11.03	11.14	14.10	24
	5320	11.16	11.21	<b>14.20</b>	24
802.11ax hew40	5270	10.88	11.27	14.09	24
	5310	11.01	11.16	14.10	24
802.11ax hew80	5290	11.03	11.04	14.05	24

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5500	10.64	10.77	/	24
	5580	10.37	10.62	/	24
	5700	10.64	10.83	/	24
	5720	10.80	10.80	/	24
802.11n ht20	5500	10.69	10.98	13.85	24
	5580	10.48	10.63	13.57	24
	5700	10.63	10.56	13.61	24
	5720	10.66	10.77	13.73	24
802.11n ht40	5510	10.40	11.09	13.77	24
	5550	10.41	10.60	13.52	24
	5670	10.44	10.39	13.43	24
	5710	10.41	10.36	13.40	24
802.11ac vht80	5530	10.68	10.84	13.77	24
	5610	10.63	10.59	13.62	24
	5690	10.60	10.74	13.68	24
802.11ax hew20	5500	10.75	11.17	<b>13.98</b>	24
	5580	10.50	10.74	13.63	24
	5700	10.72	10.61	13.68	24
	5720	10.78	10.88	13.84	24
802.11ax hew40	5510	10.58	11.24	13.93	24
	5550	10.54	10.75	13.66	24
	5670	10.51	10.43	13.48	24
	5710	10.45	10.45	13.46	24
802.11ax hew80	5530	10.70	11.01	13.87	24
	5610	10.67	10.72	13.71	24
	5690	10.68	10.78	13.74	24

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	10.61	10.65	/	30
	5785	10.50	10.71	/	30
	5825	10.11	10.41	/	30
802.11n ht20	5745	10.98	11.02	14.01	30
	5785	10.69	10.58	13.65	30
	5825	10.31	10.75	13.55	30
802.11n ht40	5755	10.74	10.67	13.72	30
	5795	10.40	10.50	13.46	30
802.11ac vht80	5775	10.73	10.52	13.64	30
802.11ax hew20	5745	10.99	11.10	<b>14.06</b>	30
	5785	10.85	10.59	13.73	30
	5825	10.42	10.92	13.69	30
802.11ax hew40	5755	10.86	10.73	13.81	30
	5795	10.59	10.67	13.64	30
802.11ax hew80	5775	10.90	10.61	13.77	30

#### 4.5 Maximum Power Spectral Density

Serial Number:	2CHV-2	Test Date:	2023/11/3-2024/1/9
Test Site:	RF	Test Mode:	Transmitting
Tester:	Arthur Su	Test Result:	Pass

<b>Environmental Conditions:</b>					
Temperature: (°C)	24.5-25.9	Relative Humidity: (%)	45-60	ATM Pressure: (kPa)	100.7-101.2

#### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
R&S	Spectrum Analyzer	FSU26	100147	2023/3/31	2024/3/30

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

#### Test Data:

Please refer to the below table and plots.

##### Note:

1. The device is a client device.
2. The Result Power Spectral Density for each Chain = Chain Power Spectral Density + duty cycle factor
3. The total Power Spectral Density =  $10 \log [(10^{\text{Chain 0 Power Spectral Density}/10}) + (10^{\text{Chain 1 Power Spectral Density}/10})] + \text{duty cycle factor}$
4. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on IEEE 802.11 devices, the Array Gain =  $10 \log (N_{\text{ANT}}/N_{\text{SS}}) \text{ dB}$ ; So, the Directional gain =  $G_{\text{ANT MAX}} + 10 \log (N_{\text{ANT}}/N_{\text{SS}}) = 3.55 + 10 \log (2/1) = 6.55 \text{ dBi} > 6 \text{ dBi}$ . So, the power spectral density (PSD) limit for MIMO Mode should be reduced:  
 1) for U-NII-1 Band (5150~5250MHz) *U-NII-2A Band (5250~5350MHz); U-NII-2C Band (5470~5725MHz)*: Maximum Power Spectral Density Limit =  $11 - (6.55 - 6) \text{ dBm/MHz} = 10.45 \text{ dBm/MHz}$   
 2) for *U-NII-3 Band (5725~5850MHz)*: Maximum Power Spectral Density Limit =  $30 - (6.55 - 6) \text{ dBm/MHz} = 29.45 \text{ dBm/MHz}$
5. for the Duty cycle <98%, and duty cycle variations are less than ±2%, KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 was performed to the PSD test.
6. for Duty cycle <98%, and duty cycle be considered to be constant (variations are less than ±2%), the duty cycle factor was added into the result.
7. The duty cycle factor refers to section 4.6.

**5150-5250 MHz:**

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)						Limit	
		Reading		Duty Factor (dB)	Result				
		Chain 0	Chain 1		Chain 0	Chain 1	Total		
802.11a	5180	-0.47	-0.23	1.07	0.60	0.84	/	11	
	5200	-0.54	-0.51	1.07	0.53	0.56	/	11	
	5240	-0.77	-0.73	1.07	0.30	0.34	/	11	
802.11n ht20	5180	-0.65	-0.59	0.56	/	/	2.95	10.45	
	5200	-0.55	-0.79	0.56	/	/	2.90	10.45	
	5240	-0.52	-0.65	0.56	/	/	2.98	10.45	
802.11n ht40	5190	-3.65	-3.85	0.54	/	/	-0.20	10.45	
	5230	-3.83	-4.12	0.54	/	/	-0.42	10.45	
802.11ac vht80	5210	-7.10	-7.49	0.55	/	/	-3.73	10.45	
802.11ax hew20	5180	-1.26	-1.38	0.69	/	/	2.38	10.45	
	5200	-1.40	-1.34	0.69	/	/	2.33	10.45	
	5240	-1.58	-1.24	0.69	/	/	2.29	10.45	
802.11ax hew40	5190	-4.63	-4.26	1.02	/	/	-0.41	10.45	
	5230	-4.79	-4.59	1.02	/	/	-0.66	10.45	
802.11ax hew80	5210	-7.79	-7.52	1.04	/	/	-3.60	10.45	

**5250-5350 MHz:**

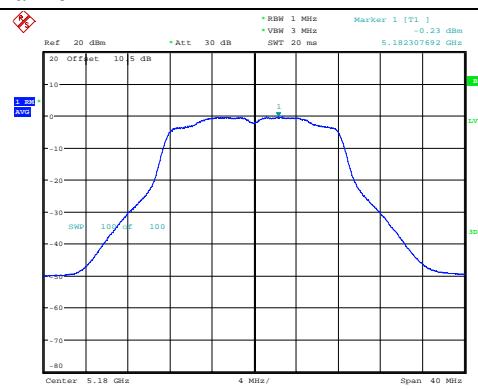
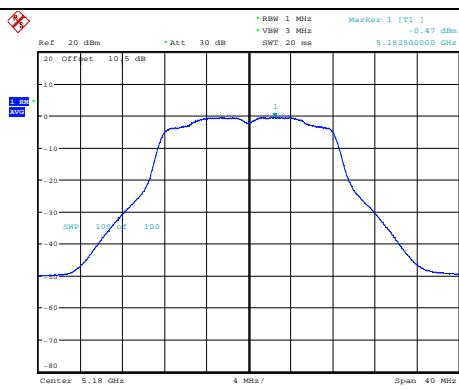
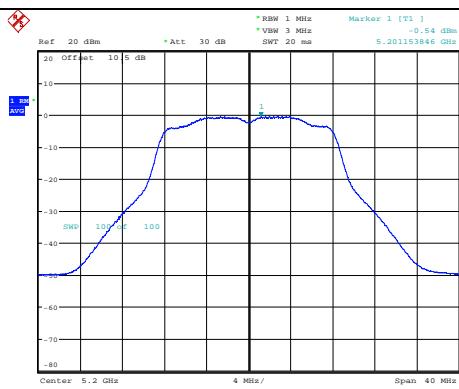
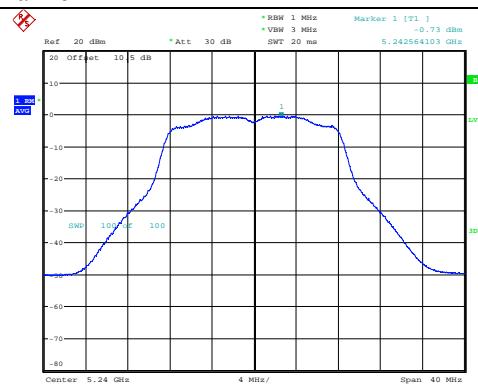
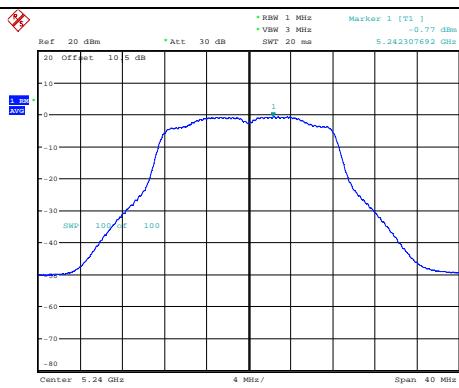
Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)						Limit	
		Reading		Duty Factor (dB)	Result				
		Chain 0	Chain 1		Chain 0	Chain 1	Total		
802.11a	5260	-0.53	-0.56	1.07	0.54	0.51	/	11	
	5280	-0.27	-0.52	1.07	0.80	0.55	/	11	
	5320	-0.29	-0.21	1.07	0.78	0.86	/	11	
802.11n ht20	5260	-0.51	-0.44	0.56	/	/	3.09	10.45	
	5280	-0.70	-0.55	0.56	/	/	2.94	10.45	
	5320	-0.57	-0.87	0.56	/	/	2.85	10.45	
802.11n ht40	5270	-3.63	-3.97	0.54	/	/	-0.25	10.45	
	5310	-3.76	-4.09	0.54	/	/	-0.37	10.45	
802.11ac vht80	5290	-7.49	-7.81	0.55	/	/	-4.08	10.45	
802.11ax hew20	5260	-1.38	-1.39	0.69	/	/	2.31	10.45	
	5280	-1.35	-1.49	0.69	/	/	2.28	10.45	
	5320	-1.12	-1.21	0.69	/	/	2.53	10.45	
802.11ax hew40	5270	-4.60	-4.48	1.02	/	/	-0.51	10.45	
	5310	-4.45	-4.60	1.02	/	/	-0.49	10.45	
802.11ax hew80	5290	-7.49	-7.61	1.04	/	/	-3.50	10.45	

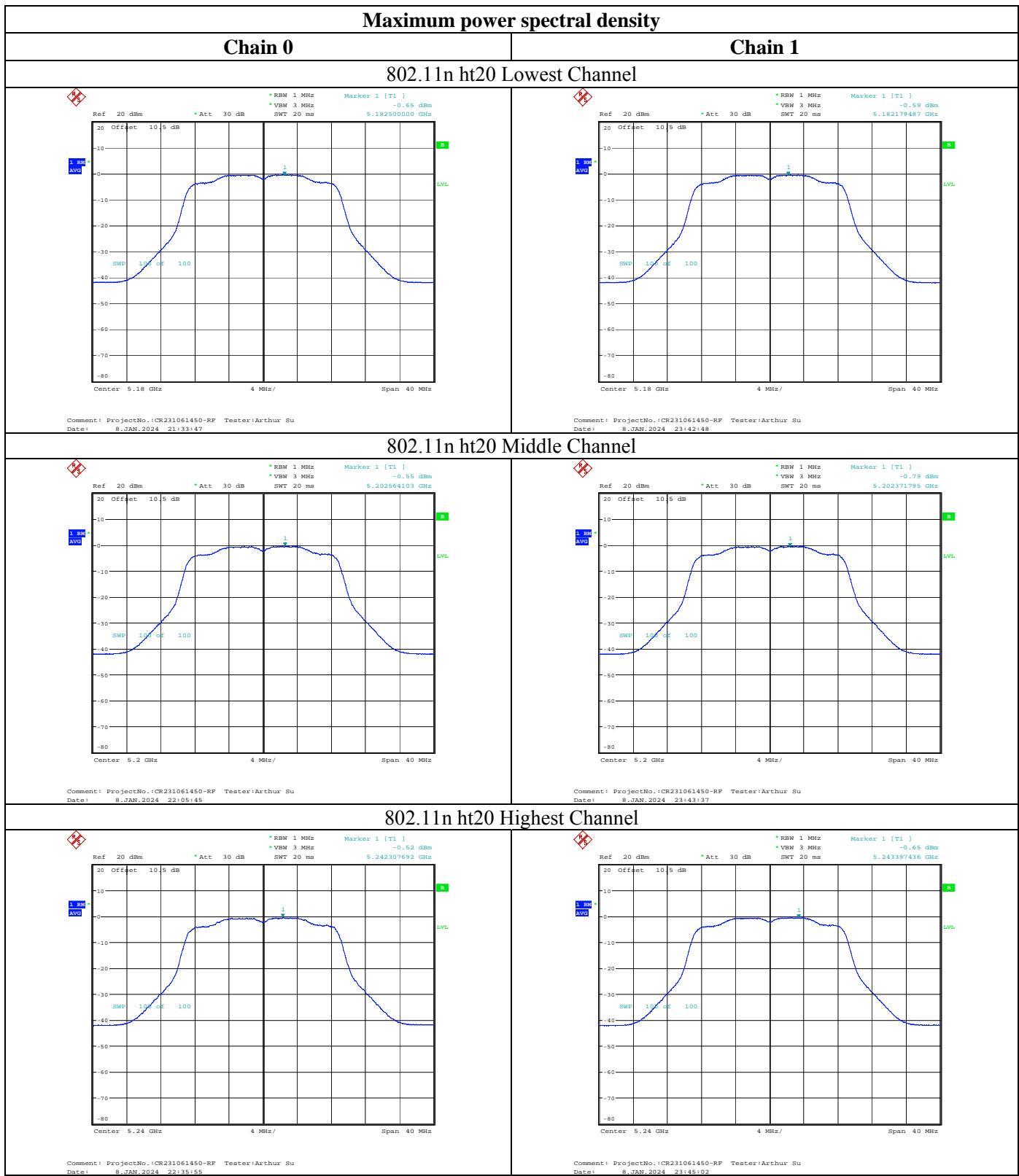
**5470-5725 MHz:**

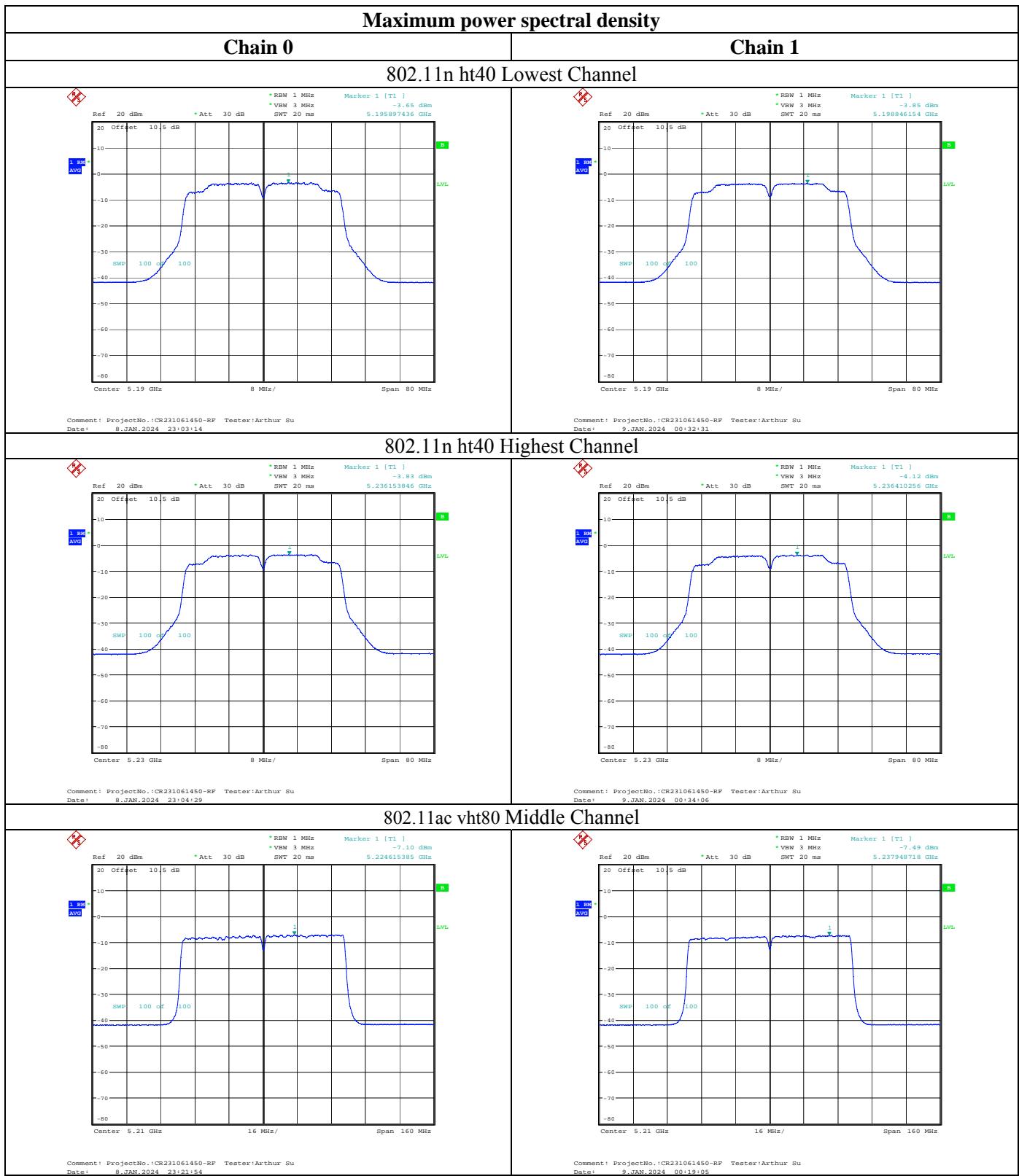
Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)						
		Reading		Duty Factor (dB)	Result			Limit
		Chain 0	Chain 1		Chain 0	Chain 1	Total	
802.11a	5500	-0.70	-0.65	1.07	0.37	0.42	/	11
	5580	-0.94	-0.85	1.07	0.13	0.22	/	11
	5700	-0.84	-0.85	1.07	0.23	0.22	/	11
	5720	-0.56	-0.74	1.07	0.51	0.33	/	11
802.11n ht20	5500	-0.97	-0.77	0.56	/	/	2.70	10.45
	5580	-1.15	-0.90	0.56	/	/	2.54	10.45
	5700	-0.95	-1.13	0.56	/	/	2.53	10.45
	5720	-0.88	-1.23	0.56	/	/	2.51	10.45
802.11n ht40	5510	-4.03	-4.17	0.54	/	/	-0.55	10.45
	5550	-3.88	-4.05	0.54	/	/	-0.42	10.45
	5670	-4.10	-4.39	0.54	/	/	-0.69	10.45
	5710	-4.15	-4.43	0.54	/	/	-0.74	10.45
802.11ac vht80	5530	-7.53	-7.73	0.55	/	/	-4.06	10.45
	5610	-7.98	-7.84	0.55	/	/	-4.35	10.45
	5690	-7.69	-8.30	0.55	/	/	-4.42	10.45
802.11ax hew20	5500	-1.46	-1.34	0.69	/	/	2.30	10.45
	5580	-1.80	-1.61	0.69	/	/	1.99	10.45
	5700	-1.58	-1.86	0.69	/	/	1.98	10.45
	5720	-1.46	-1.55	0.69	/	/	2.19	10.45
802.11ax hew40	5510	-5.06	-4.69	1.02	/	/	-0.84	10.45
	5550	-4.92	-4.82	1.02	/	/	-0.84	10.45
	5670	-4.98	-5.26	1.02	/	/	-1.09	10.45
	5710	-5.02	-5.07	1.02	/	/	-1.01	10.45
802.11ax hew80	5530	-8.00	-7.82	1.04	/	/	-3.86	10.45
	5610	-8.18	-8.18	1.04	/	/	-4.13	10.45
	5690	-7.78	-7.88	1.04	/	/	-3.78	10.45

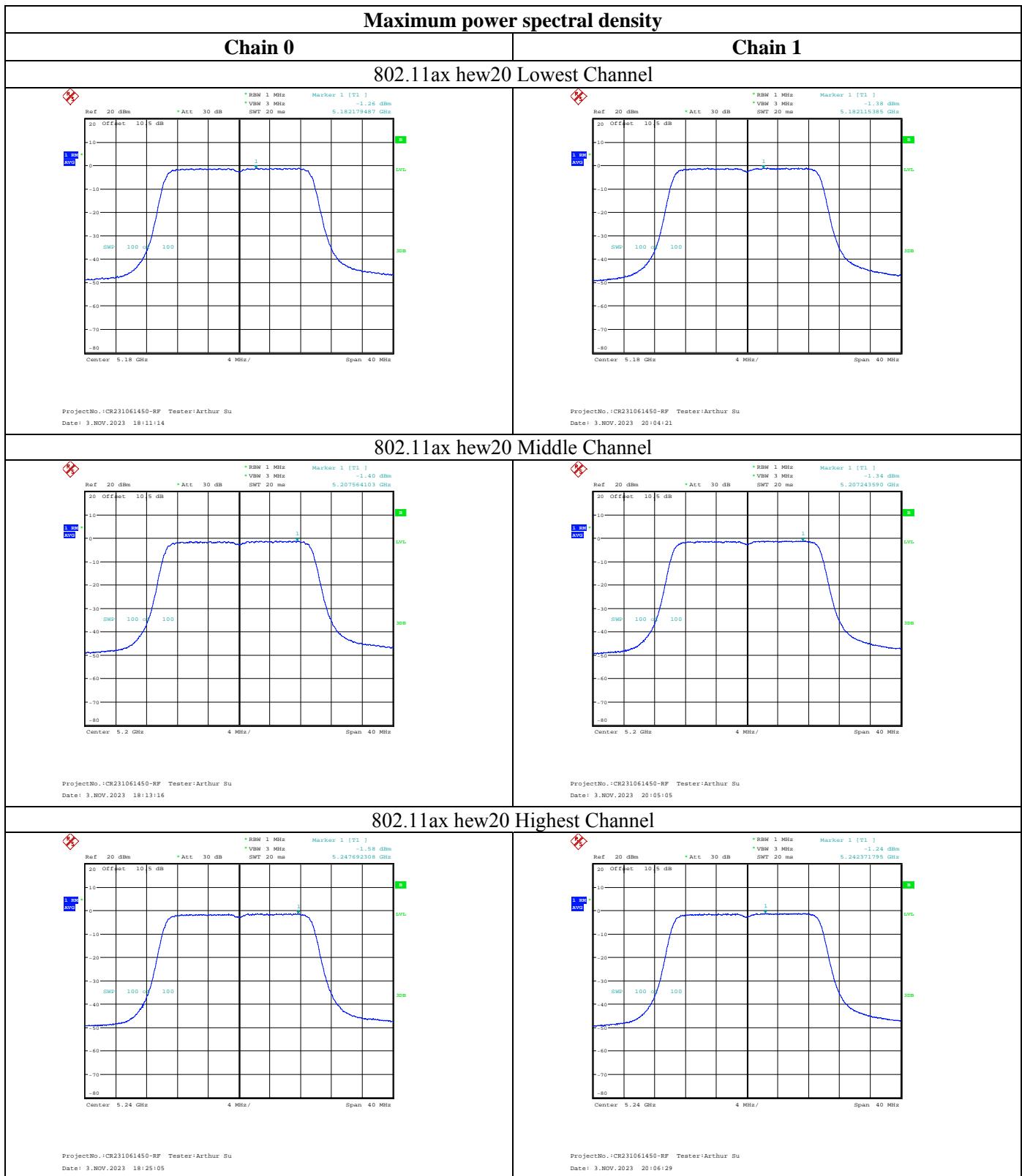
**5725-5850 MHz:**

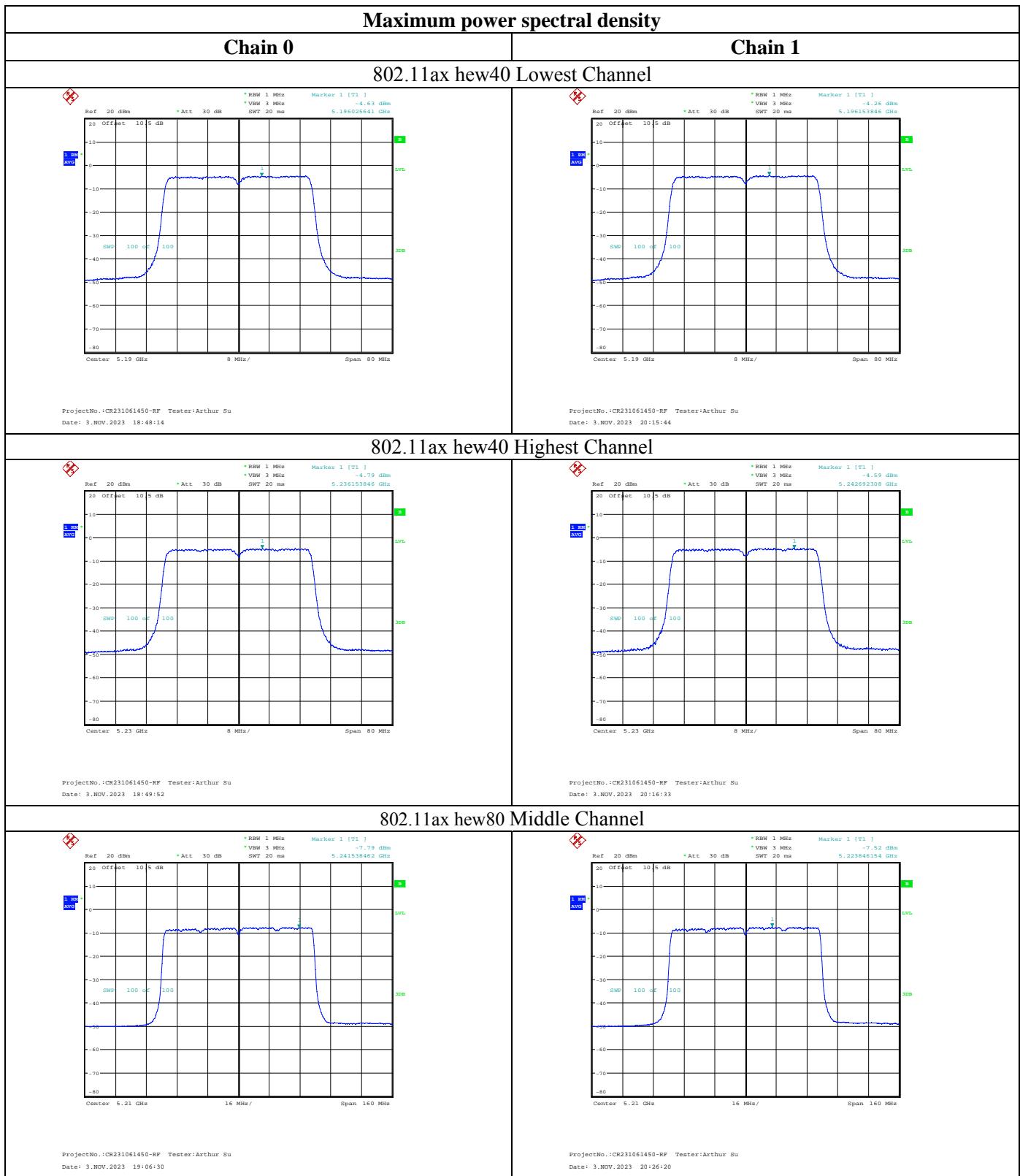
Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/500kHz)						Limit	
		Reading		Duty Factor (dB)	Result				
		Chain 0	Chain 1		Chain 0	Chain 1	Total		
802.11a	5745	-4.24	-4.31	1.07	-3.17	-3.24	/	30	
	5785	-4.46	-4.50	1.07	-3.39	-3.43	/	30	
	5825	-4.60	-4.50	1.07	-3.53	-3.43	/	30	
802.11n ht20	5745	-4.68	-5.33	0.56	/	/	-1.43	29.45	
	5785	-5.01	-5.25	0.56	/	/	-1.56	29.45	
	5825	-5.18	-5.13	0.56	/	/	-1.59	29.45	
802.11n ht40	5755	-7.72	-8.38	0.54	/	/	-4.49	29.45	
	5795	-8.00	-8.22	0.54	/	/	-4.56	29.45	
802.11ac vht80	5775	-11.47	-11.30	0.55	/	/	-7.82	29.45	
802.11ax hew20	5745	-4.08	-4.27	0.69	/	/	-0.48	29.45	
	5785	-4.06	-4.32	0.69	/	/	-0.49	29.45	
	5825	-4.58	-4.27	0.69	/	/	-0.72	29.45	
802.11ax hew40	5755	-7.43	-7.75	1.02	/	/	-3.56	29.45	
	5795	-7.66	-7.77	1.02	/	/	-3.68	29.45	
802.11ax hew80	5775	-10.65	-11.02	1.04	/	/	-6.78	29.45	

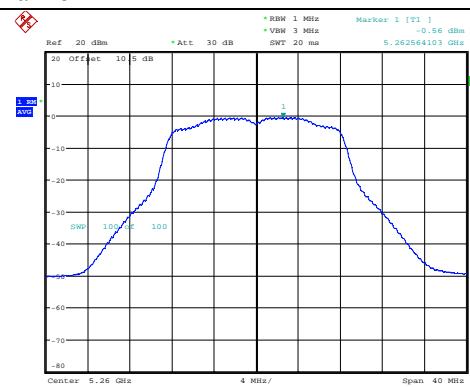
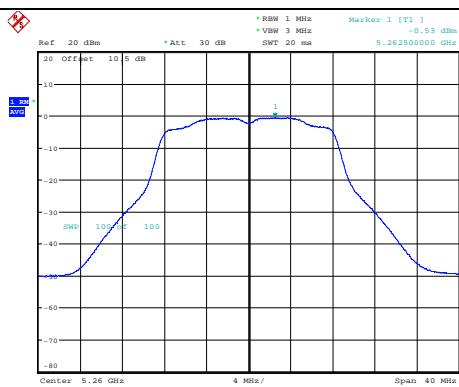
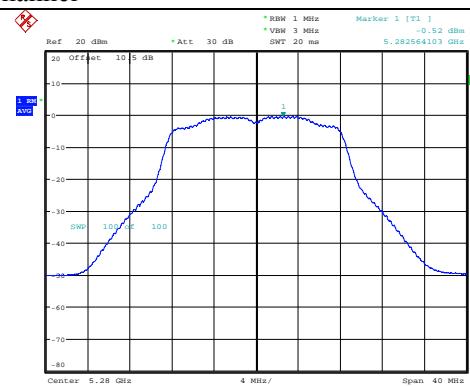
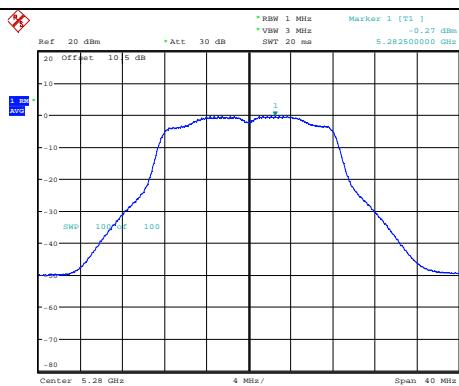
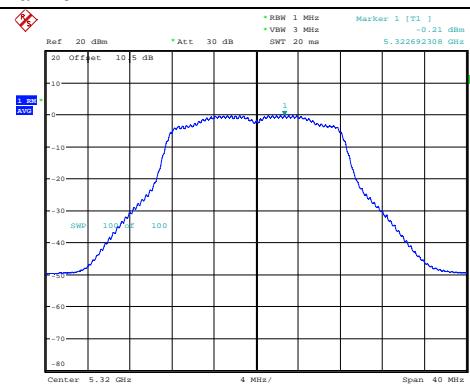
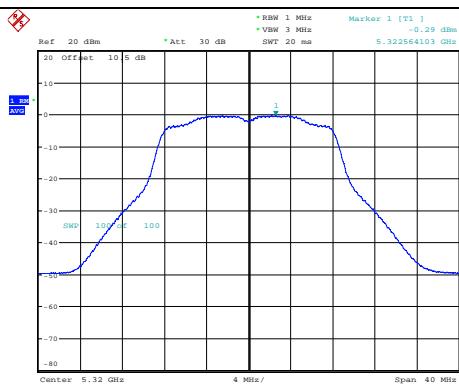
**5150-5250MHz:****Maximum power spectral density****Chain 0****Chain 1****802.11a Lowest Channel****802.11a Middle Channel****802.11a Highest Channel**

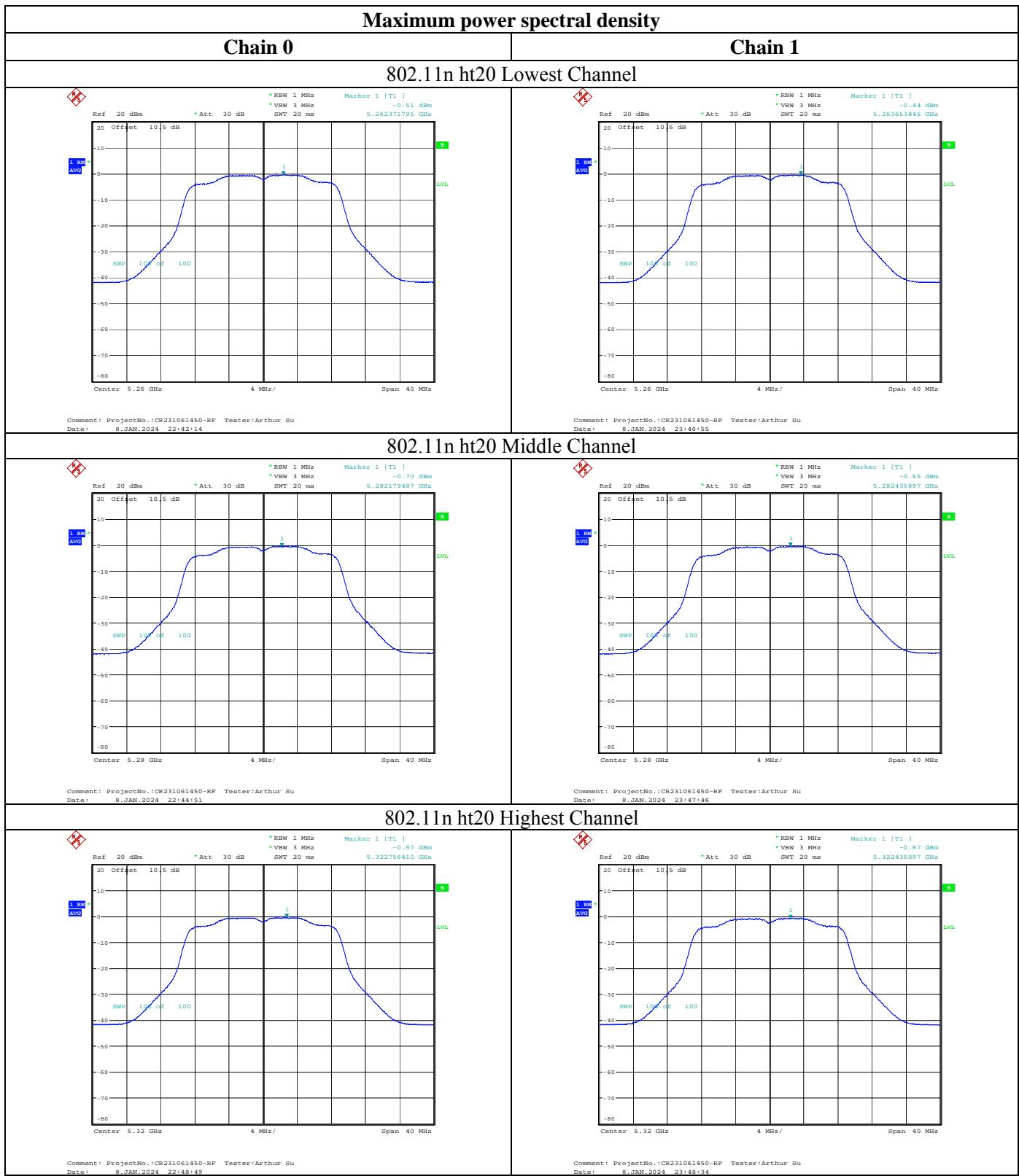


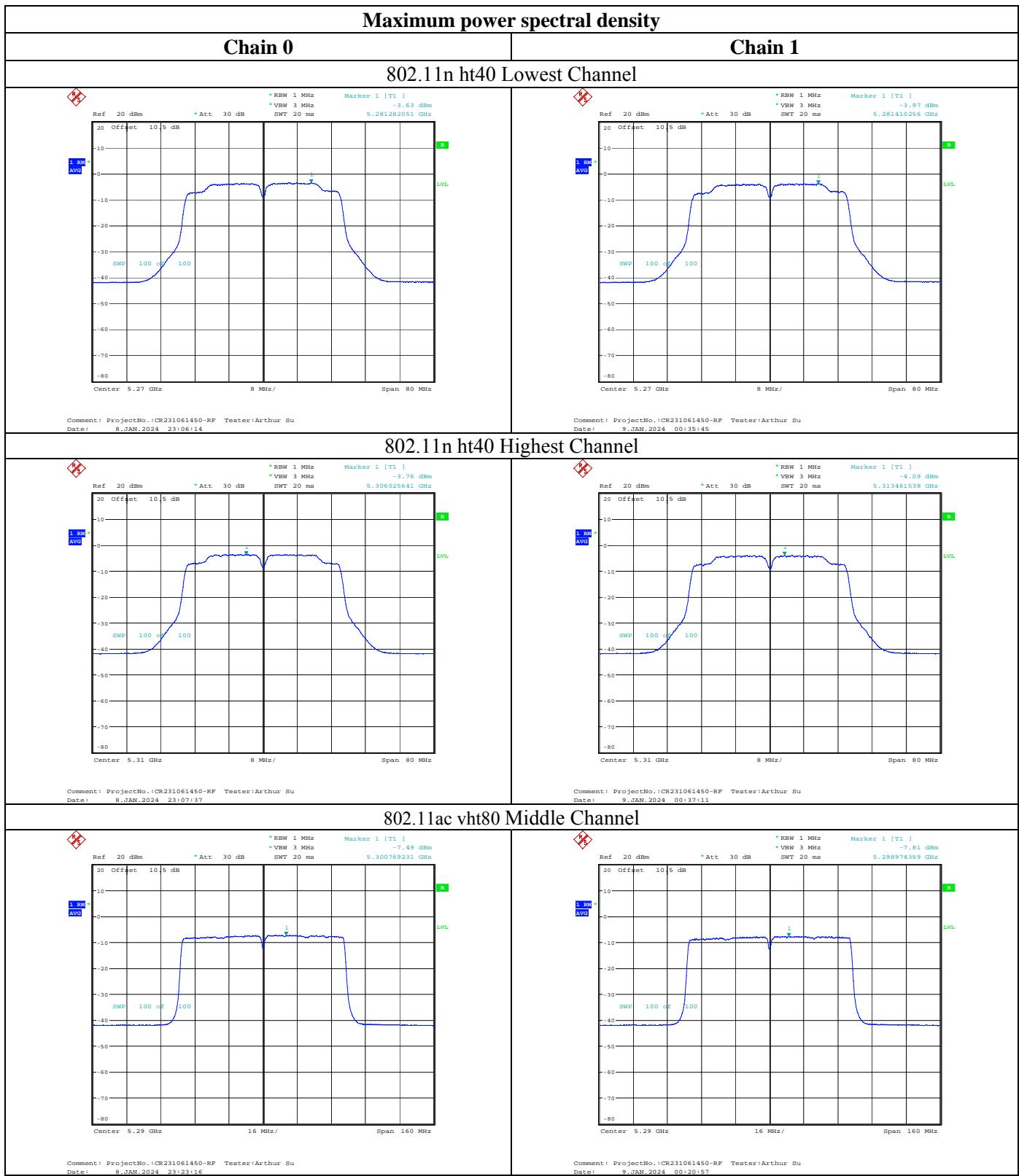


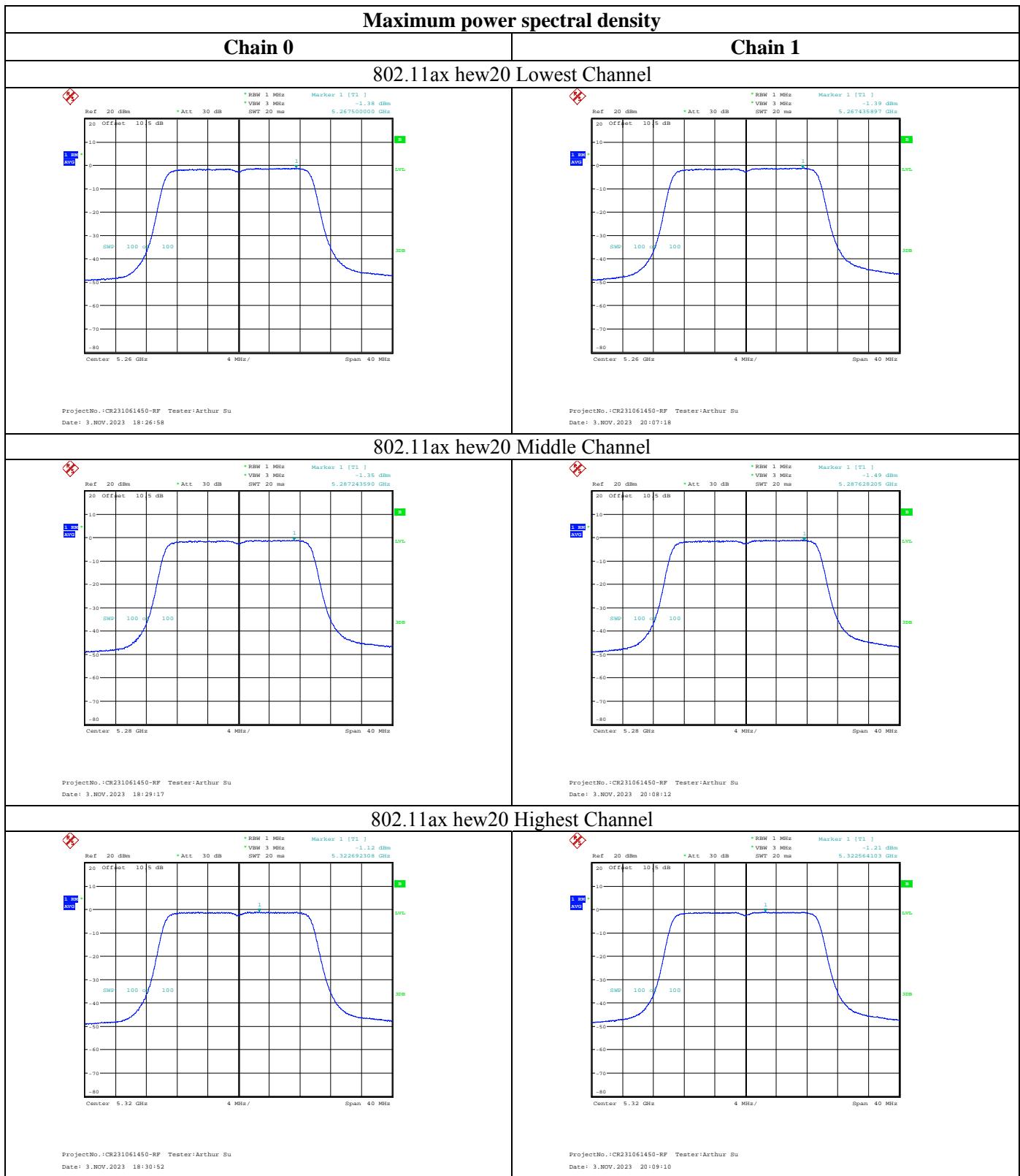


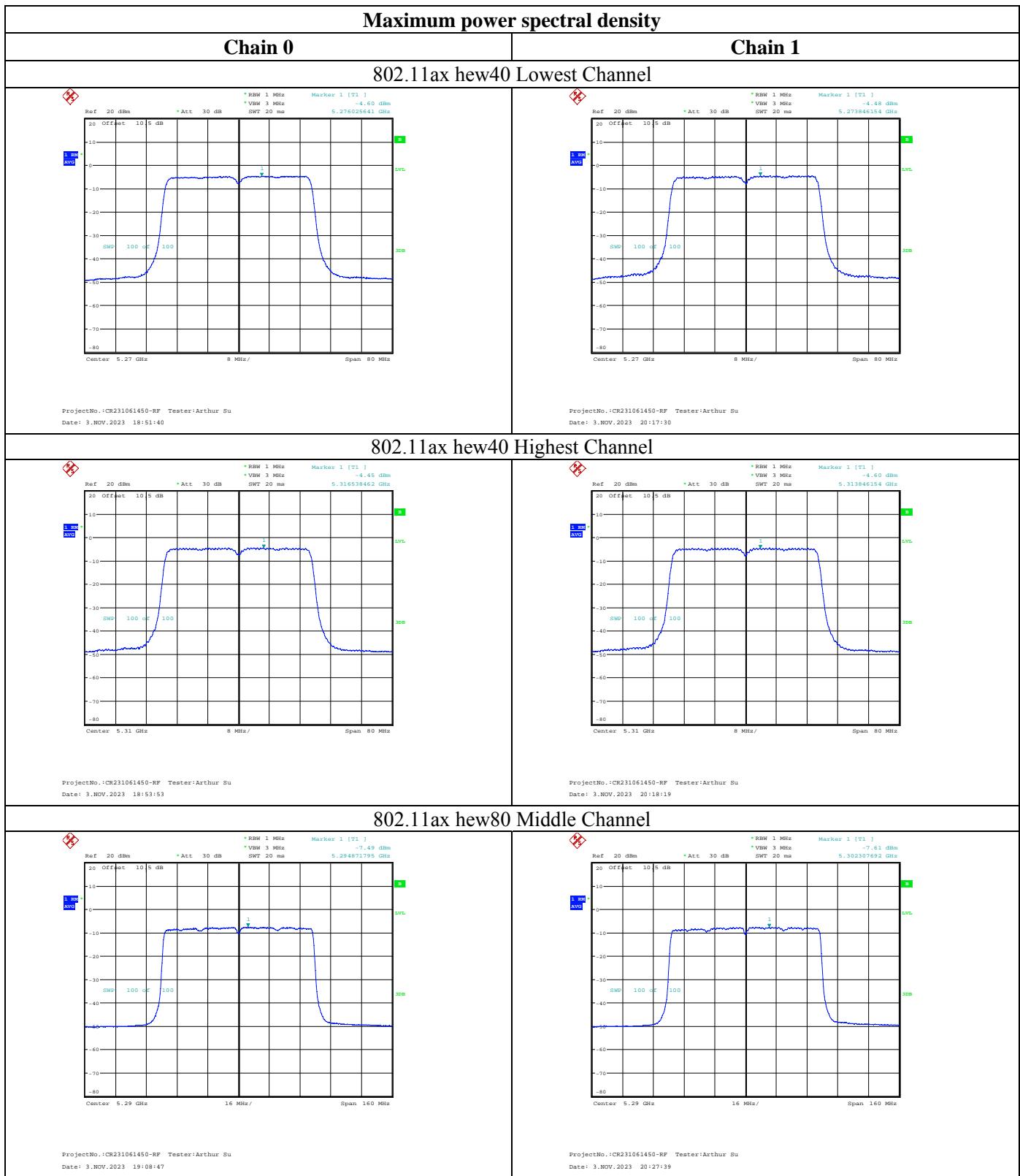


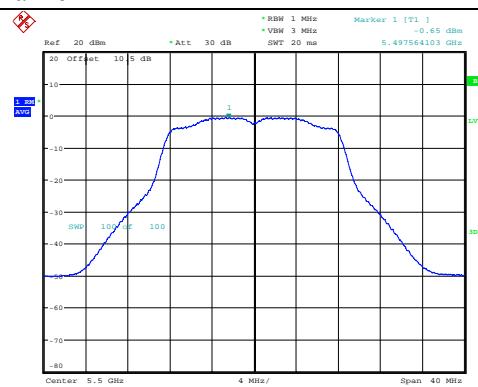
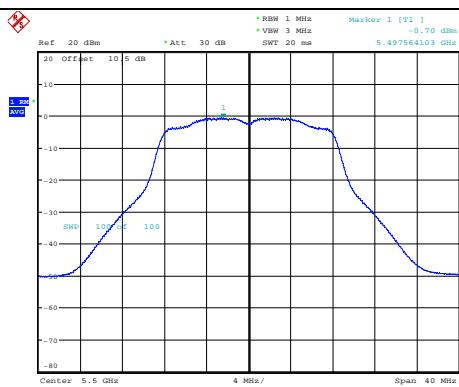
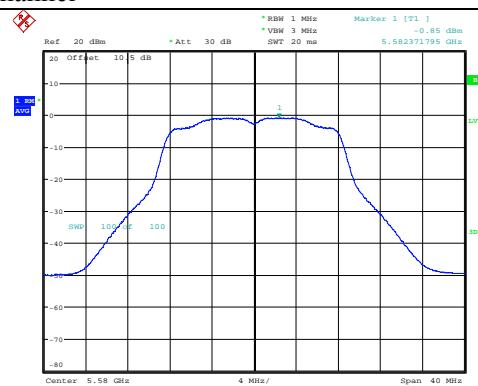
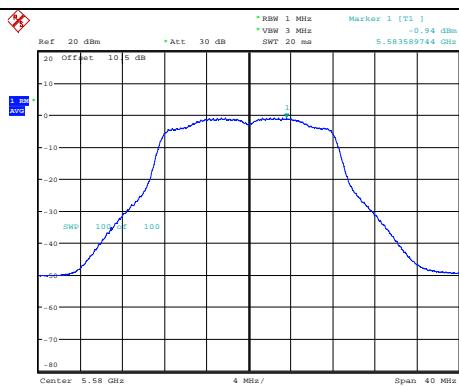
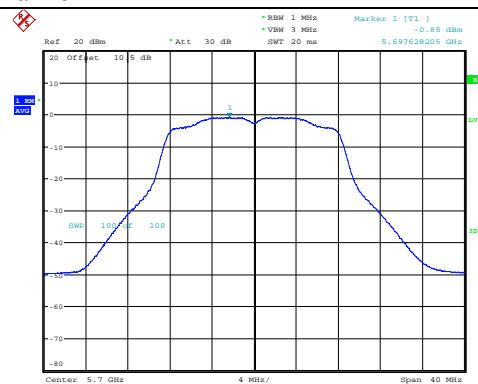
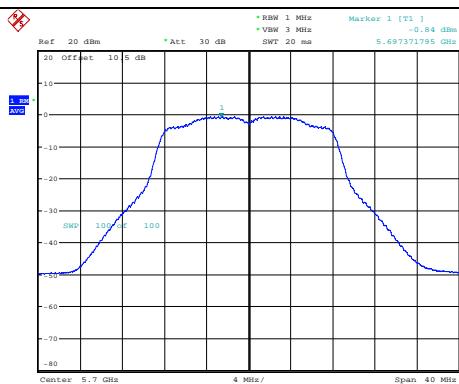
**5250-5350MHz:****Maximum power spectral density****Chain 0****Chain 1****802.11a Lowest Channel****802.11a Middle Channel****802.11a Highest Channel**

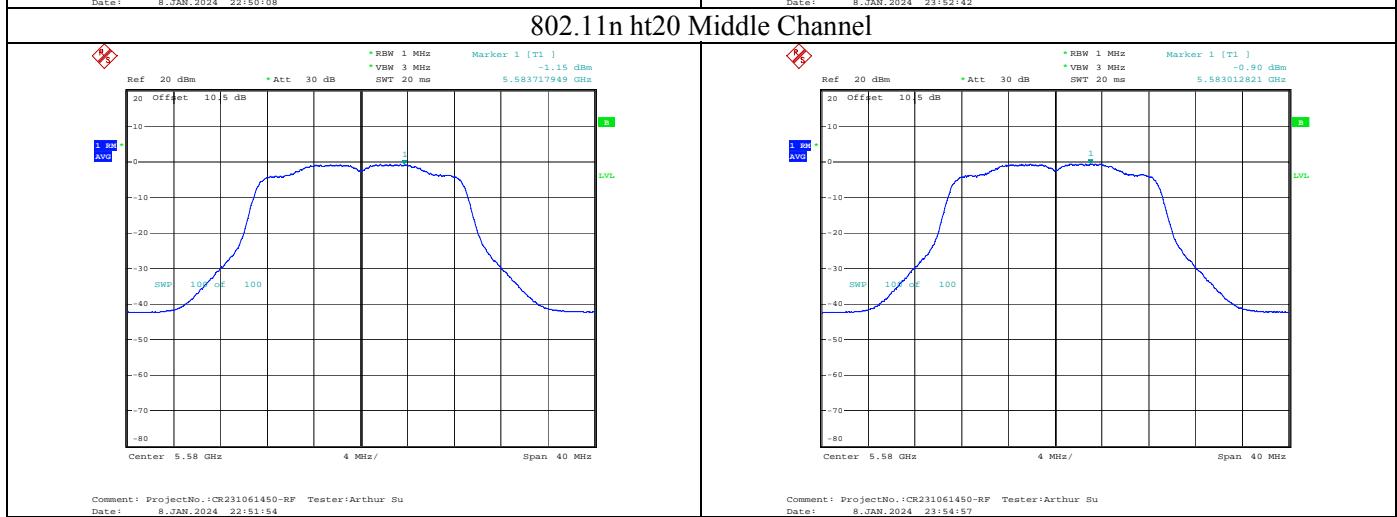
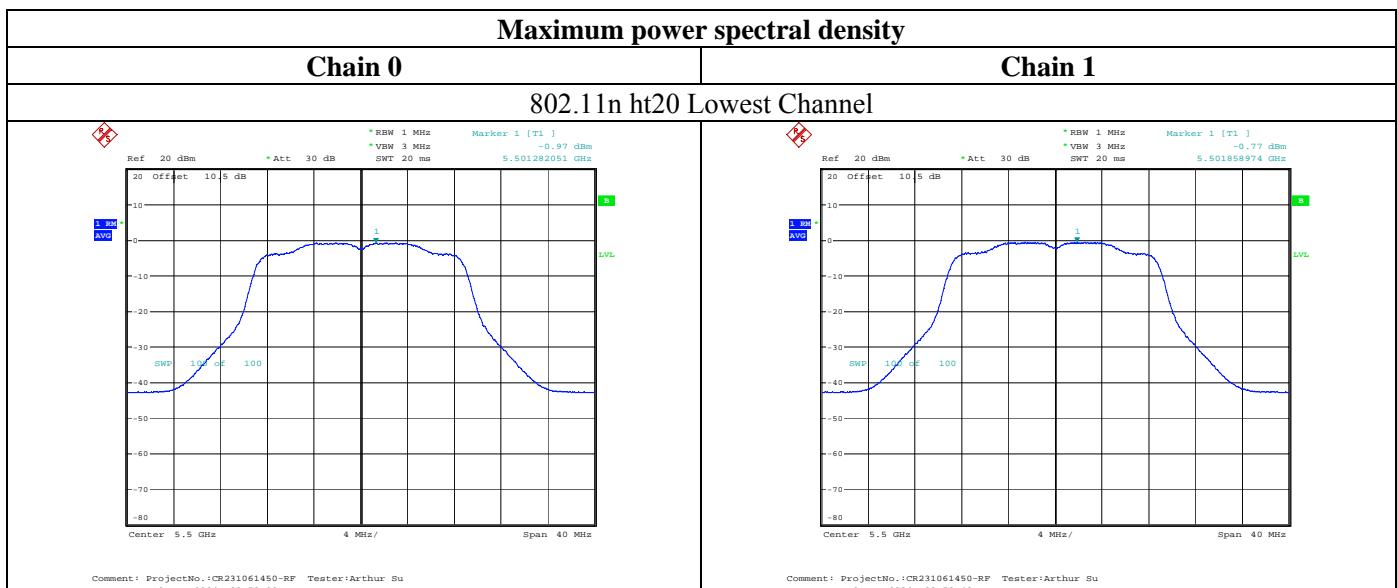
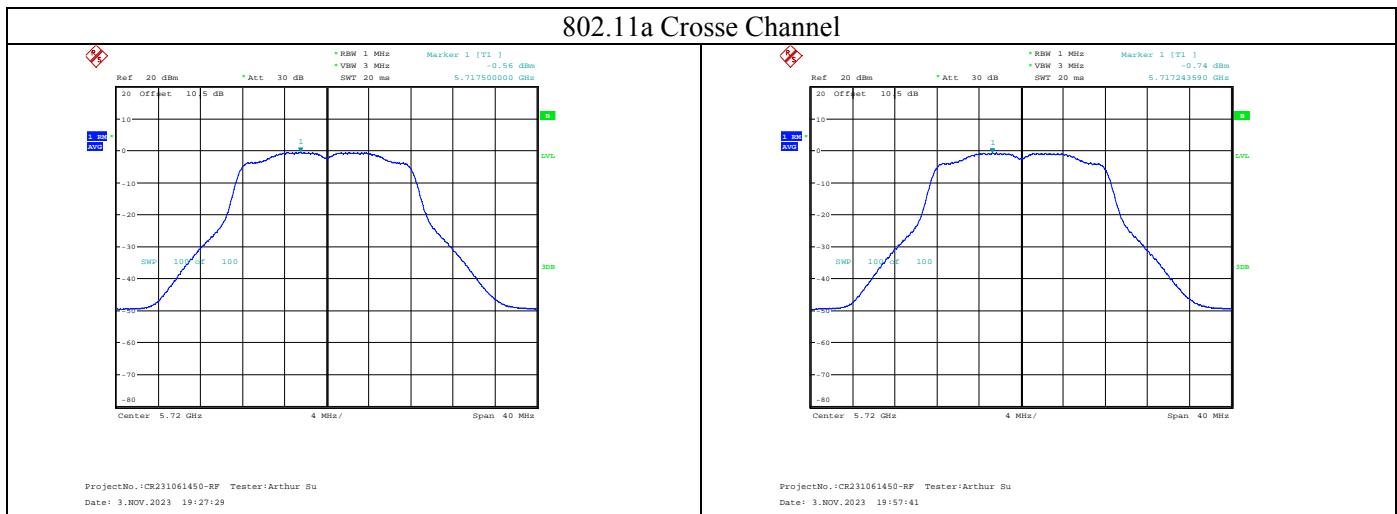


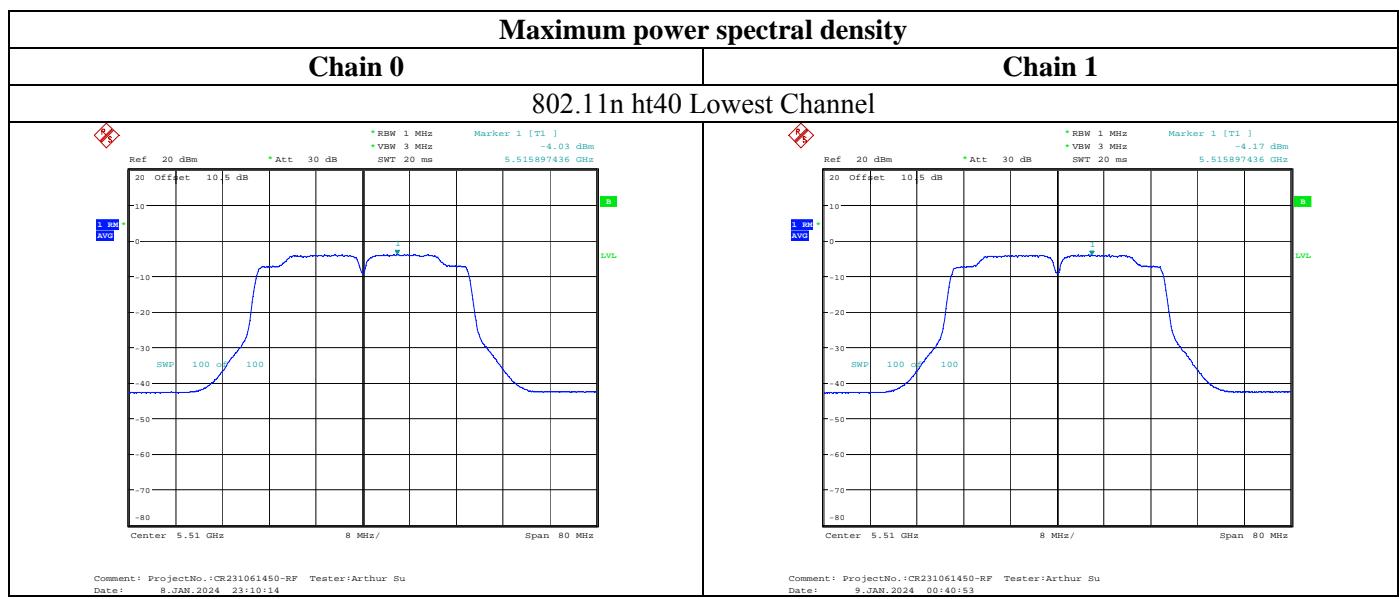
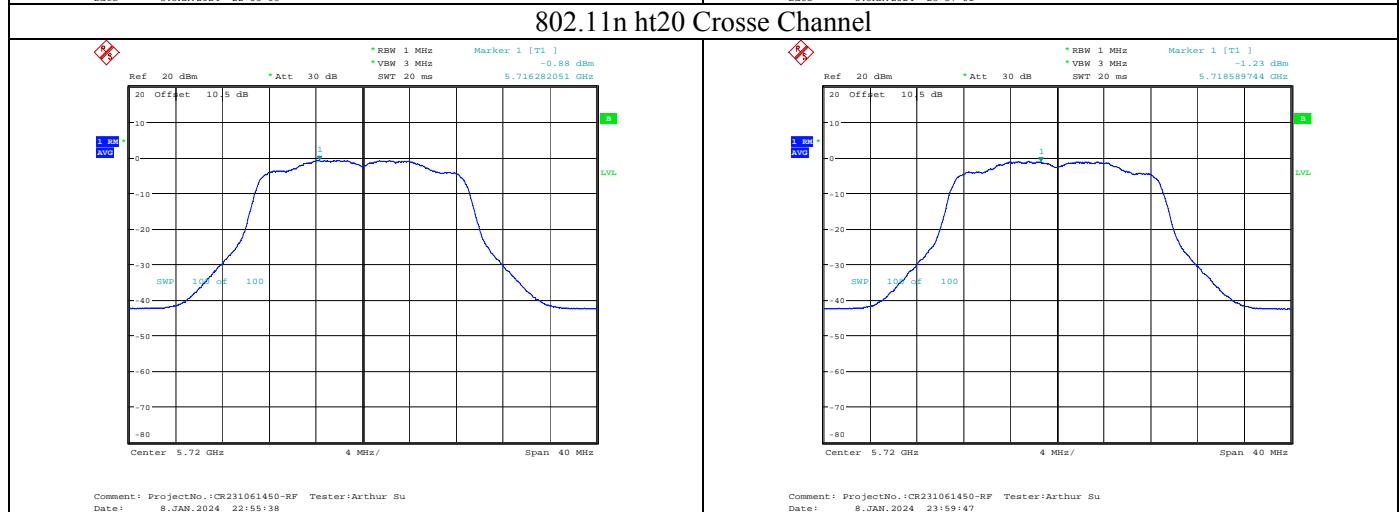
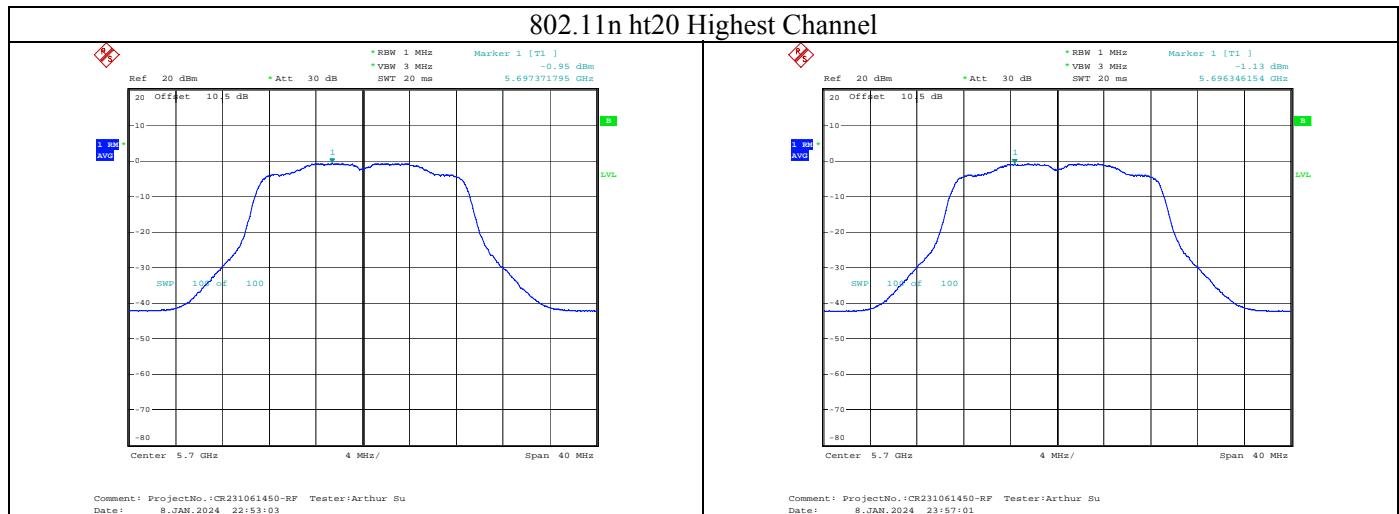




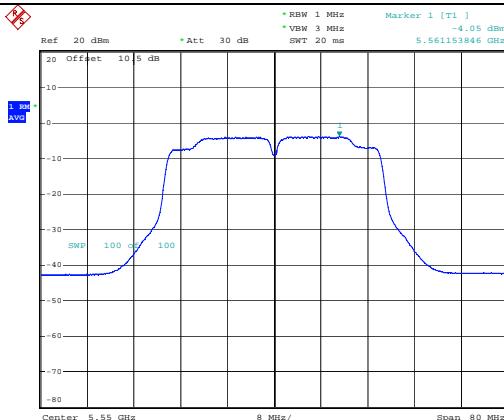
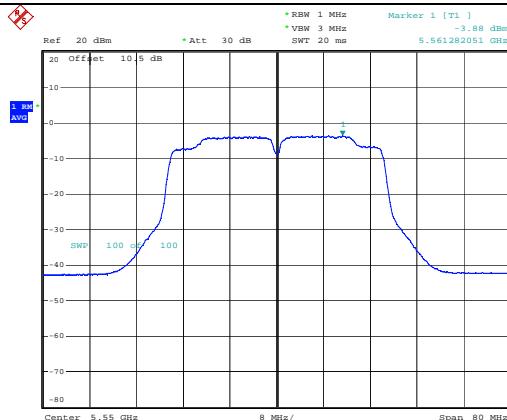


**5470-5725MHz:****Maximum power spectral density****Chain 0****Chain 1****802.11a Lowest Channel****802.11a Middle Channel****802.11a Highest Channel**

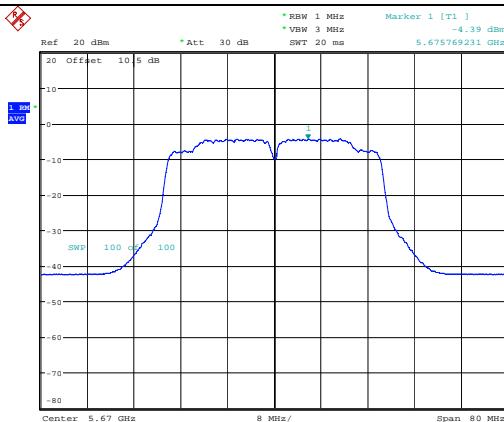
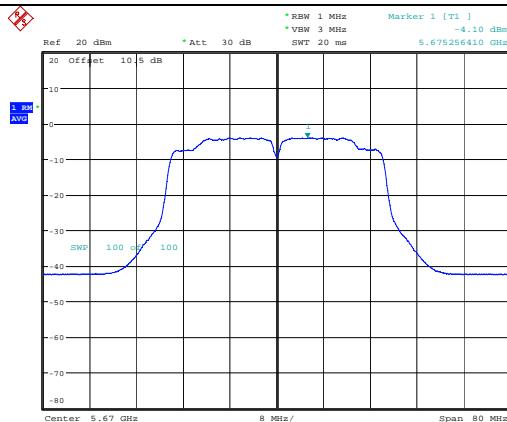




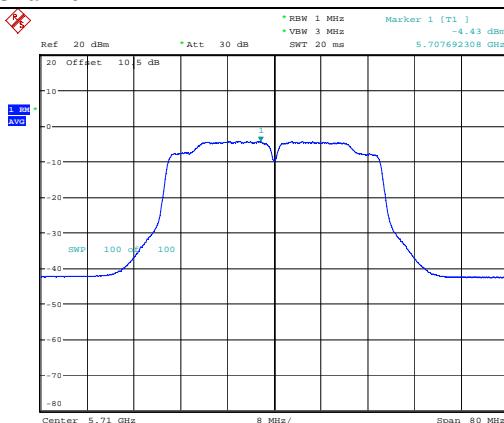
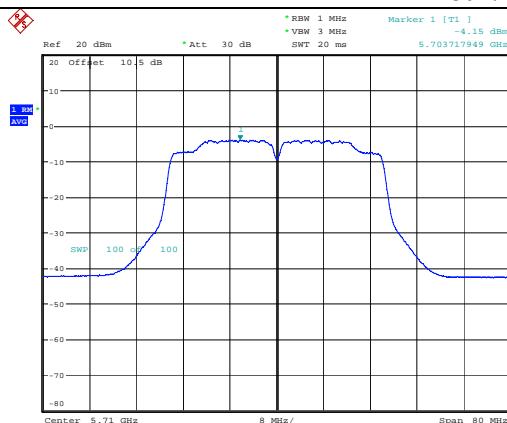
## 802.11n ht40 Middle Channel

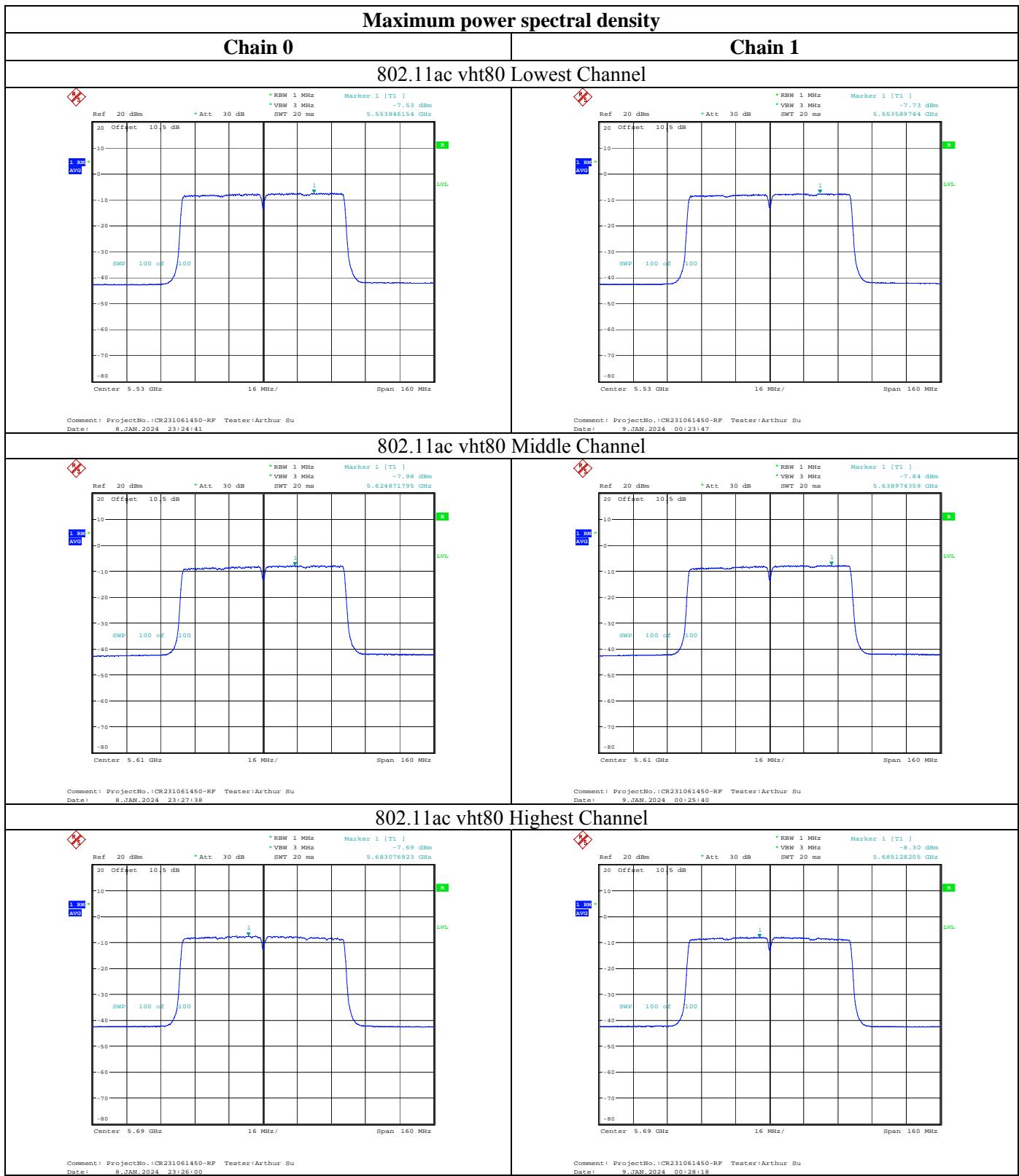


## 802.11n ht40 Highest Channel



## 802.11n ht40 Cross Channel

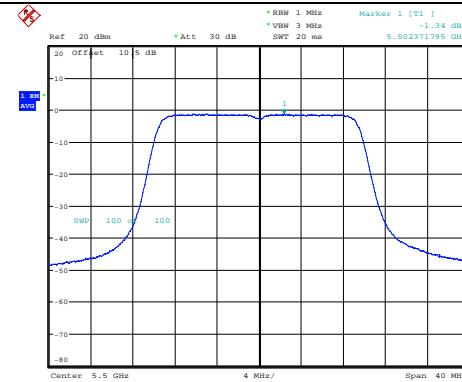
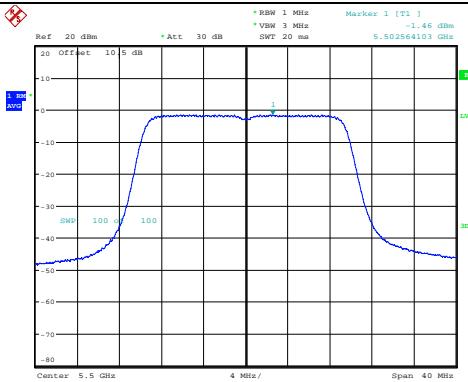




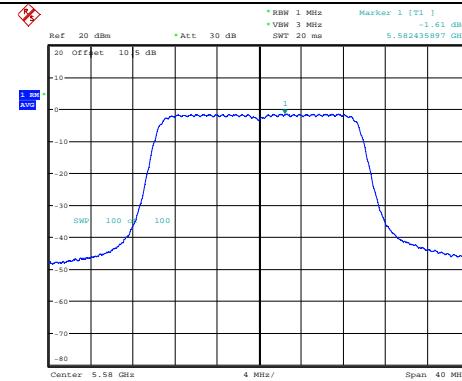
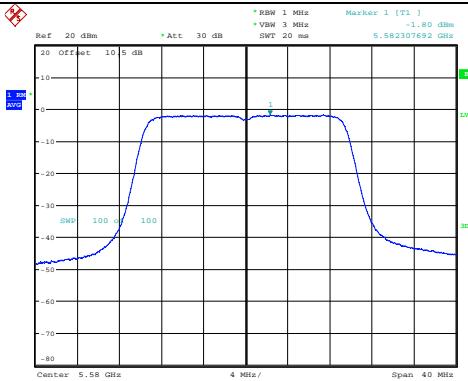
### Maximum power spectral density

**Chain 0****Chain 1**

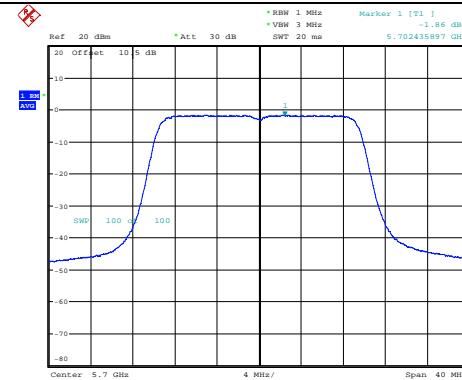
802.11ax hew20 Lowest Channel

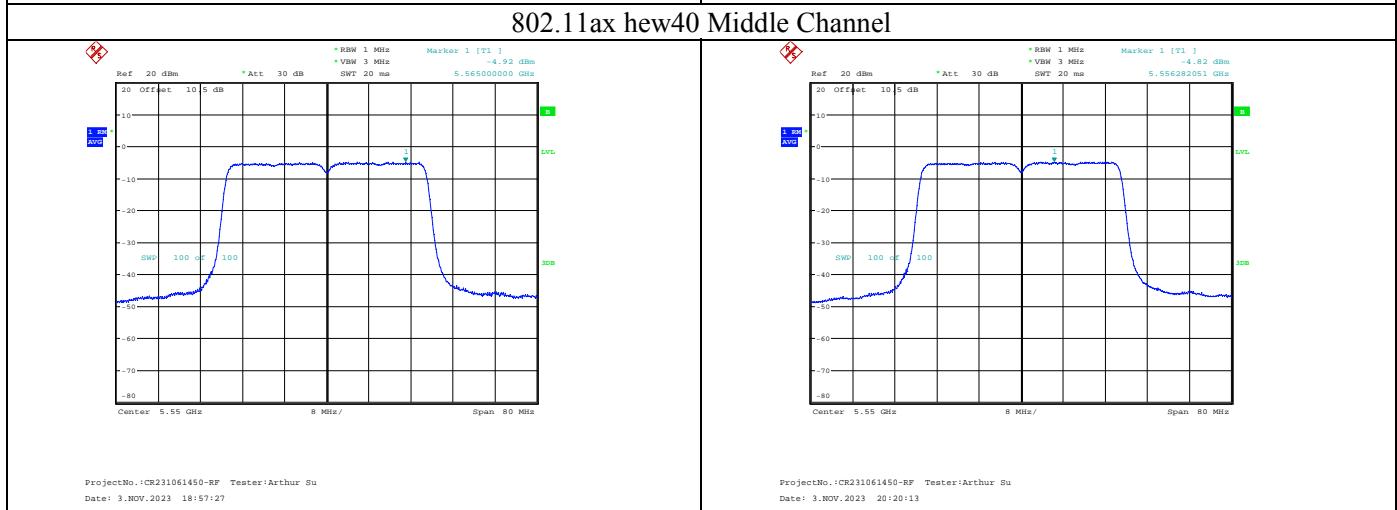
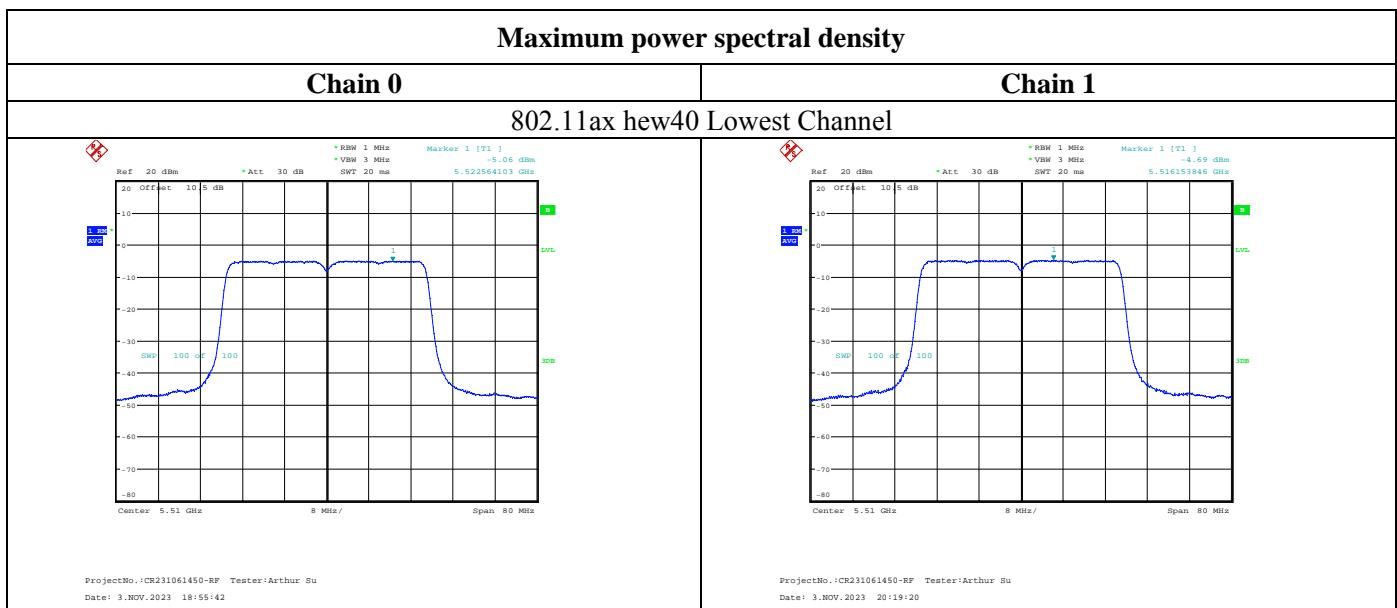
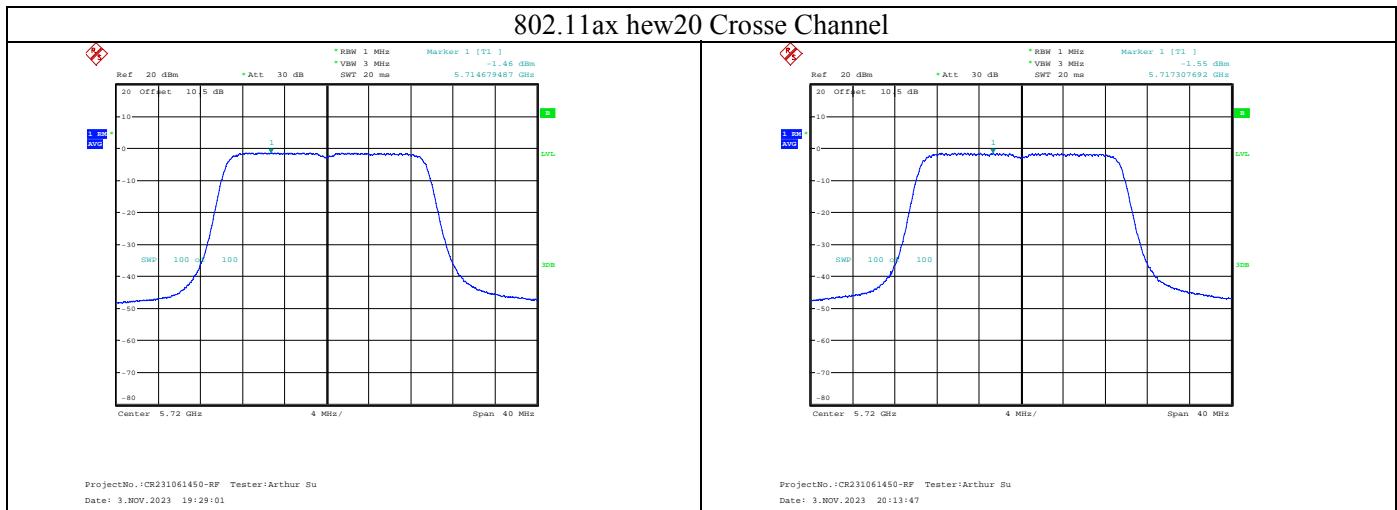


802.11ax hew20 Middle Channel

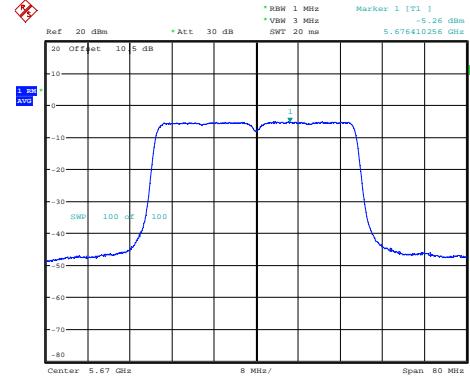
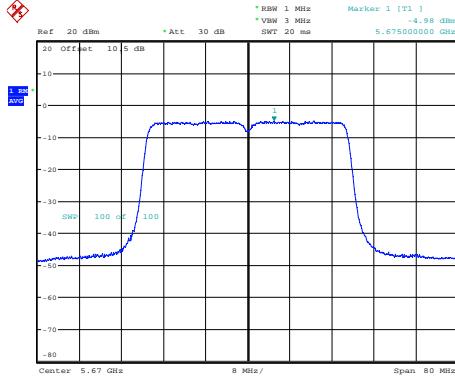


802.11ax hew20 Highest Channel





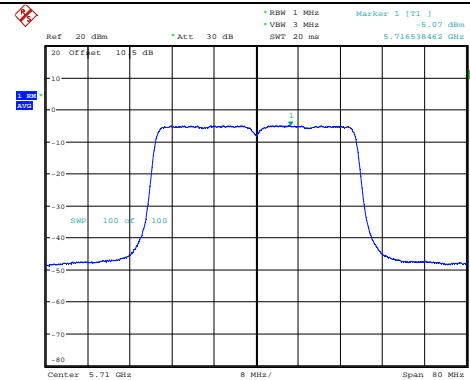
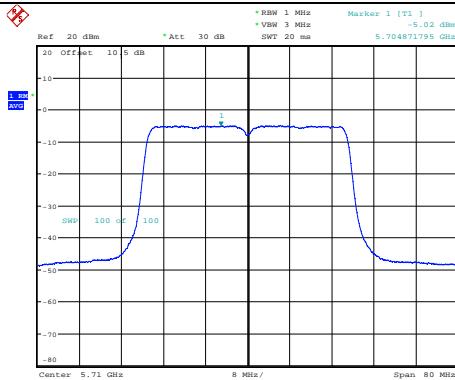
## 802.11ax hew40 Highest Channel



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Date: 3.NOV.2023 18:59:38

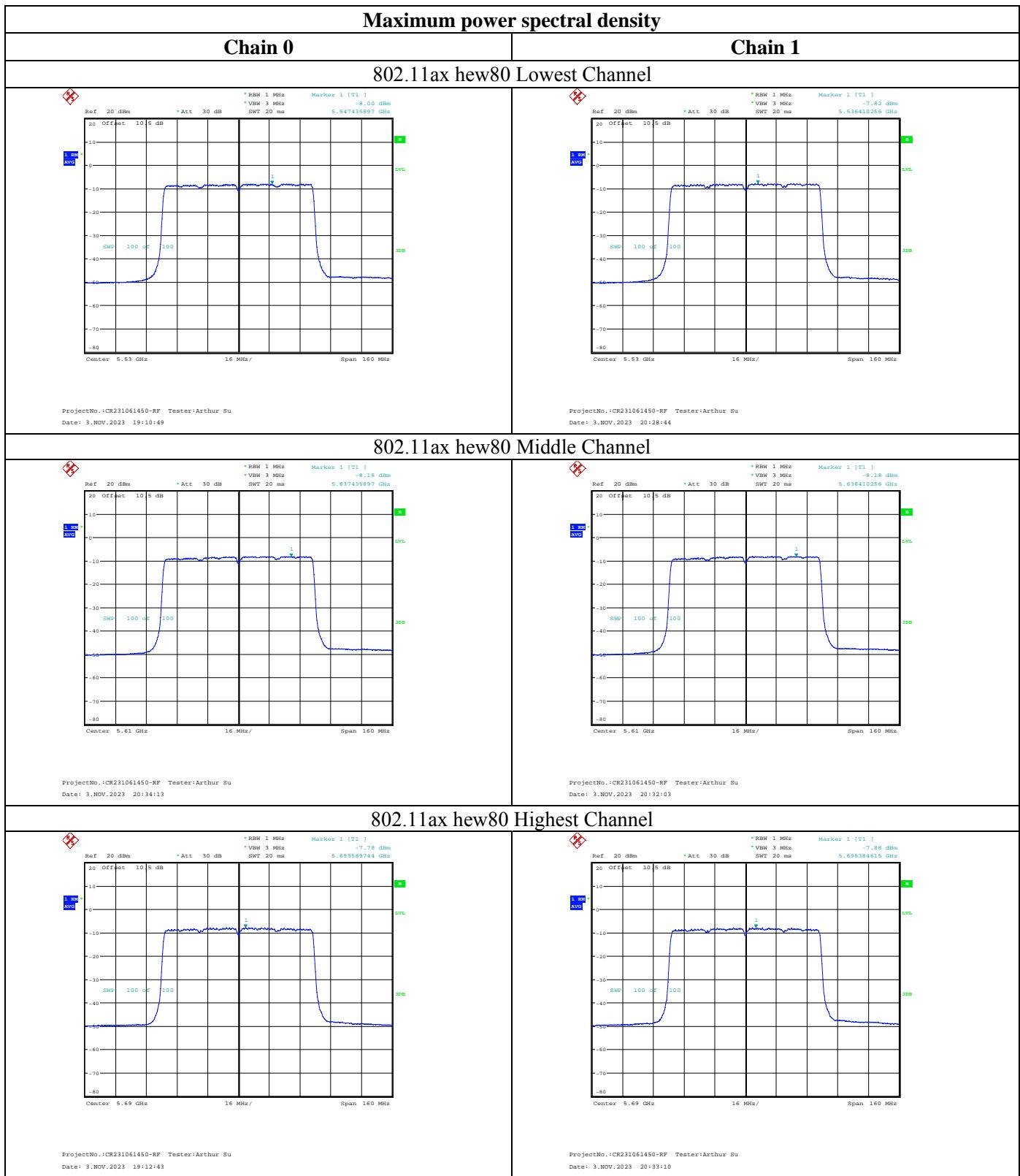
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Date: 3.NOV.2023 20:21:10

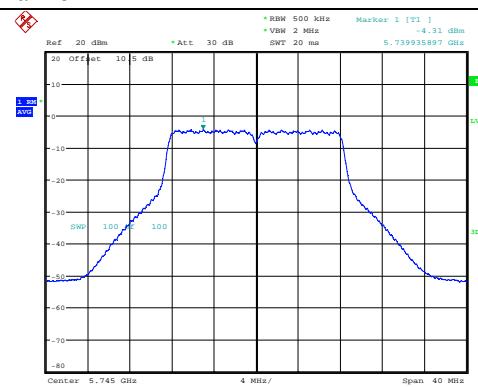
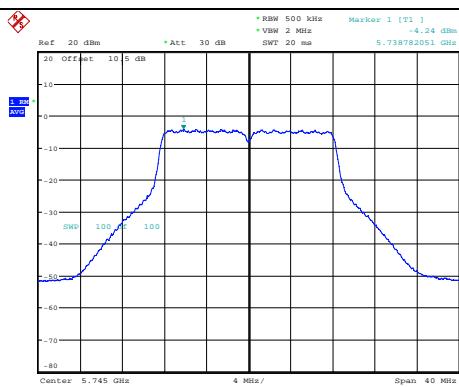
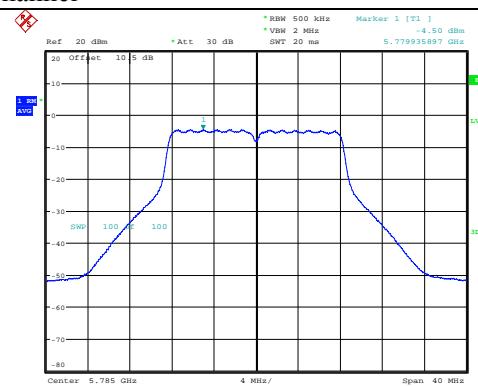
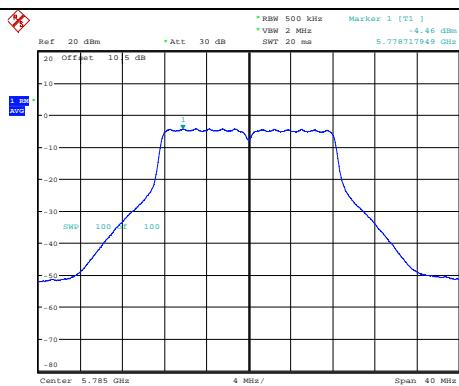
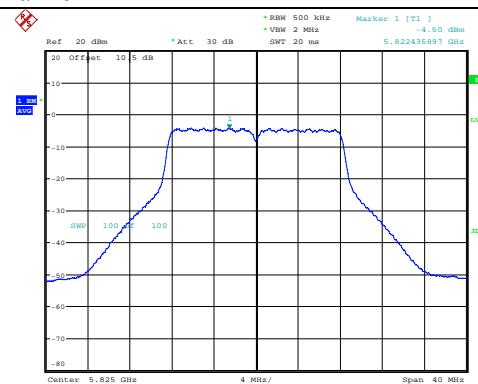
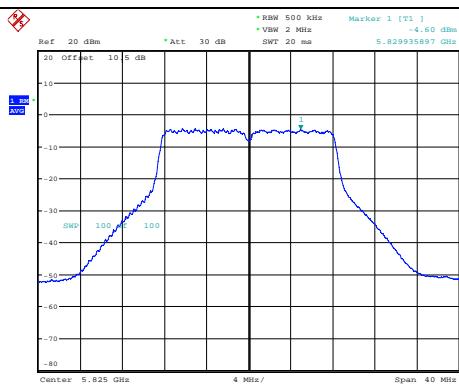
## 802.11ax hew40 Crosse Channel

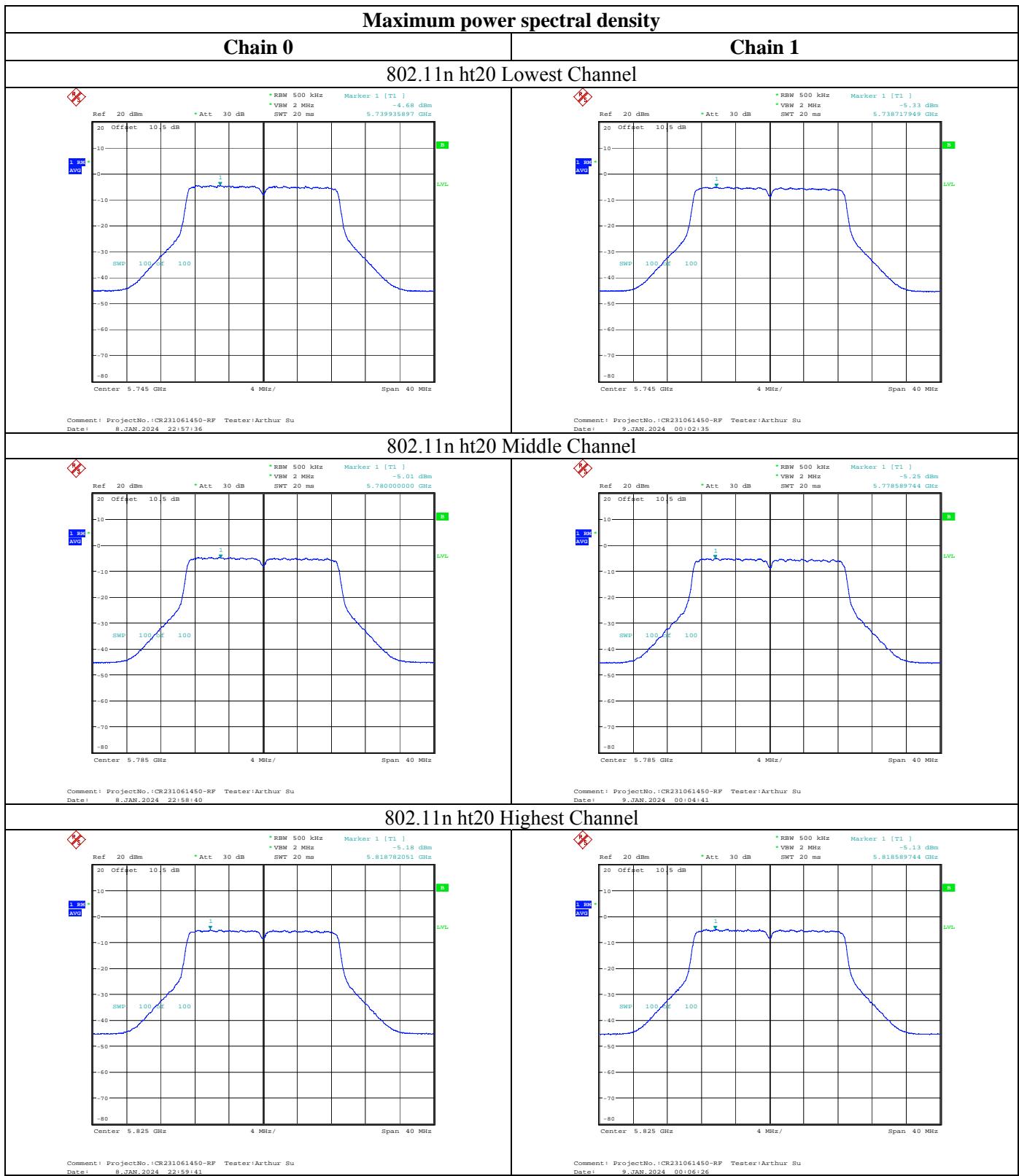


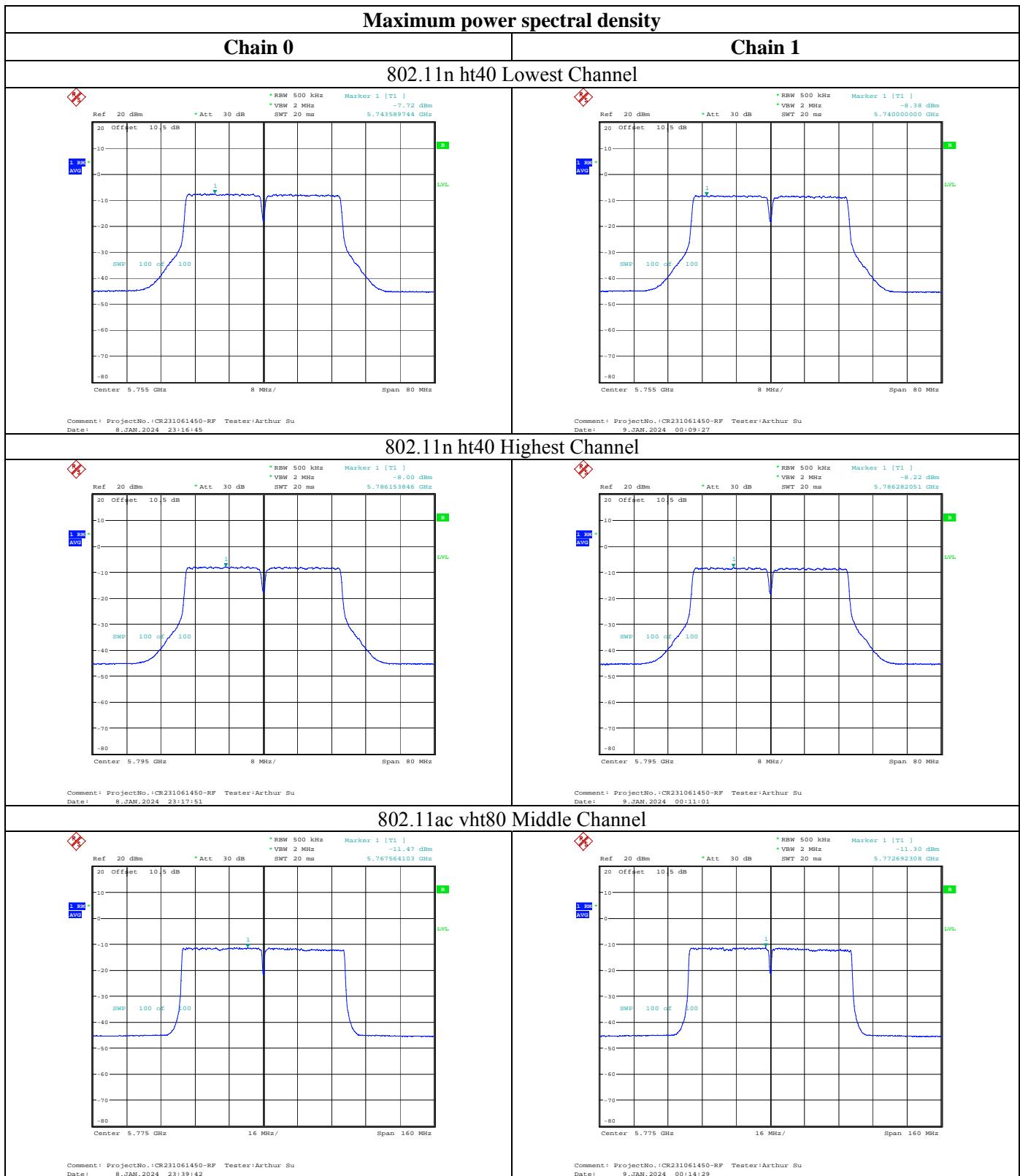
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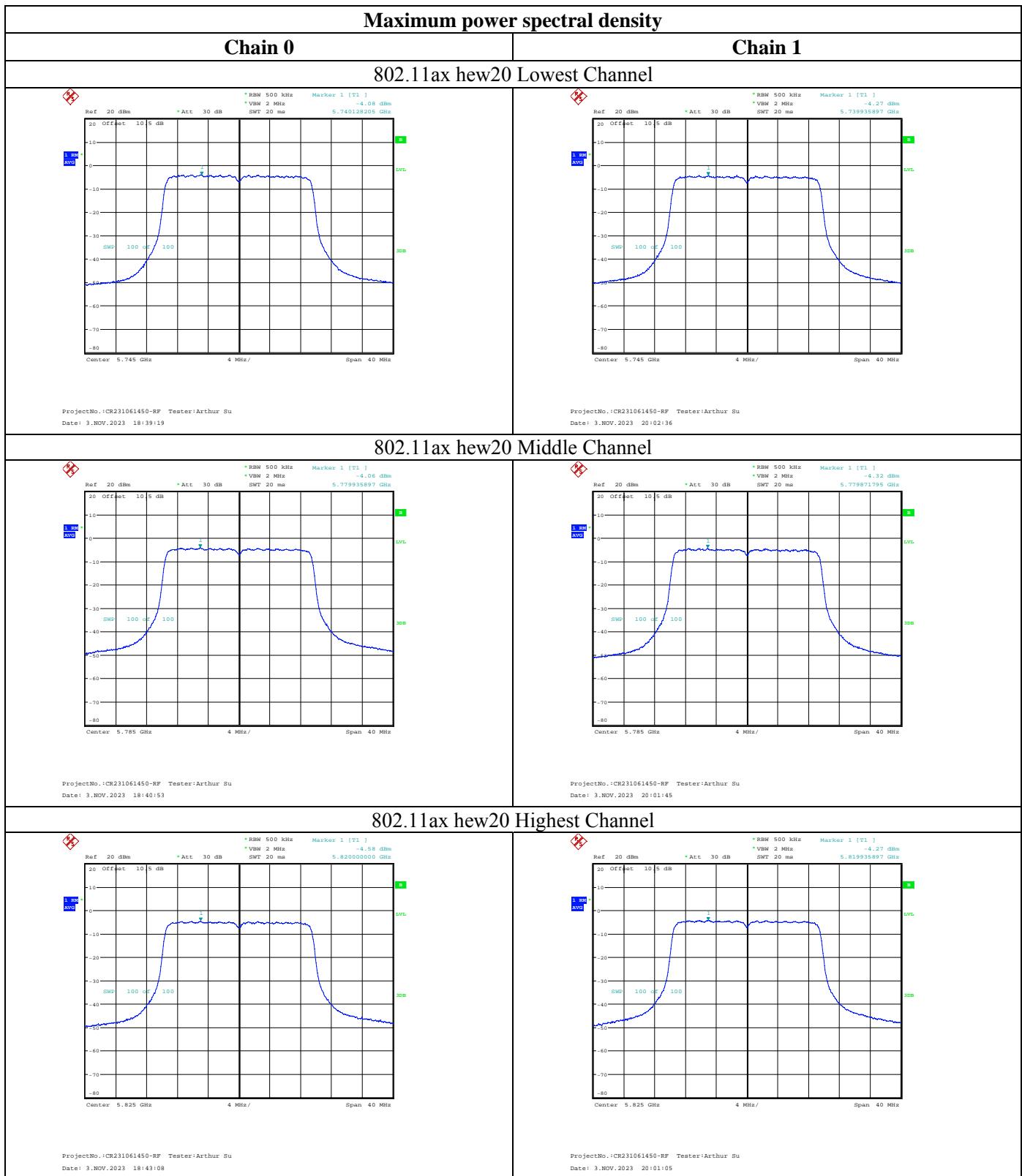
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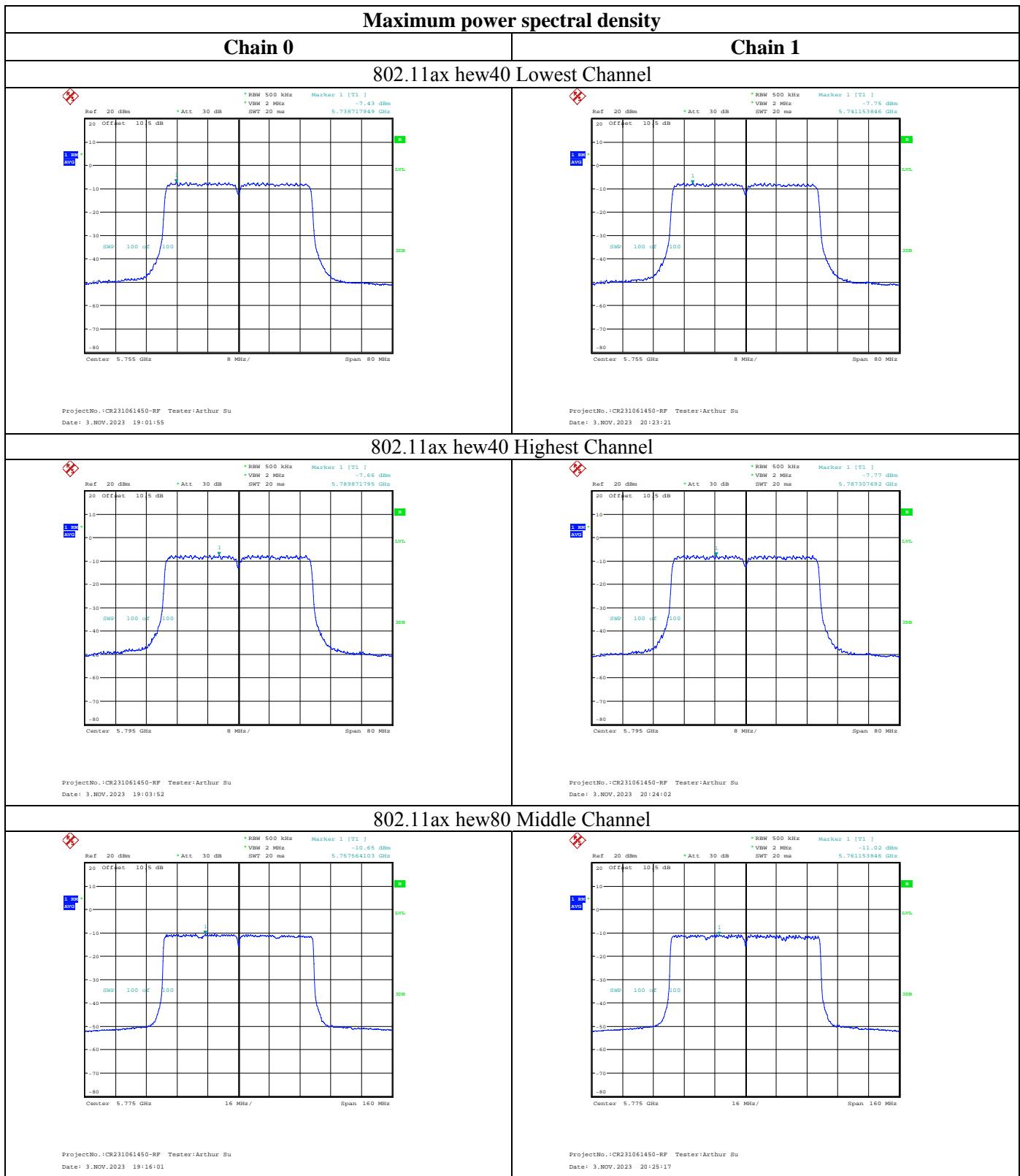


**5725-5850MHz****Maximum power spectral density****Chain 0****Chain 1****802.11a Lowest Channel****802.11a Middle Channel****802.11a Highest Channel**









**4.6 Duty Cycle**

Serial Number:	2CHV-2	Test Date:	2023/11/3-2024/1/8
Test Site:	RF	Test Mode:	Transmitting
Tester:	Arthur Su	Test Result:	N/A

**Environmental Conditions:**

Temperature: (°C)	24.5-25.9	Relative Humidity: (%)	45-60	ATM Pressure: (kPa)	100.7-101.4
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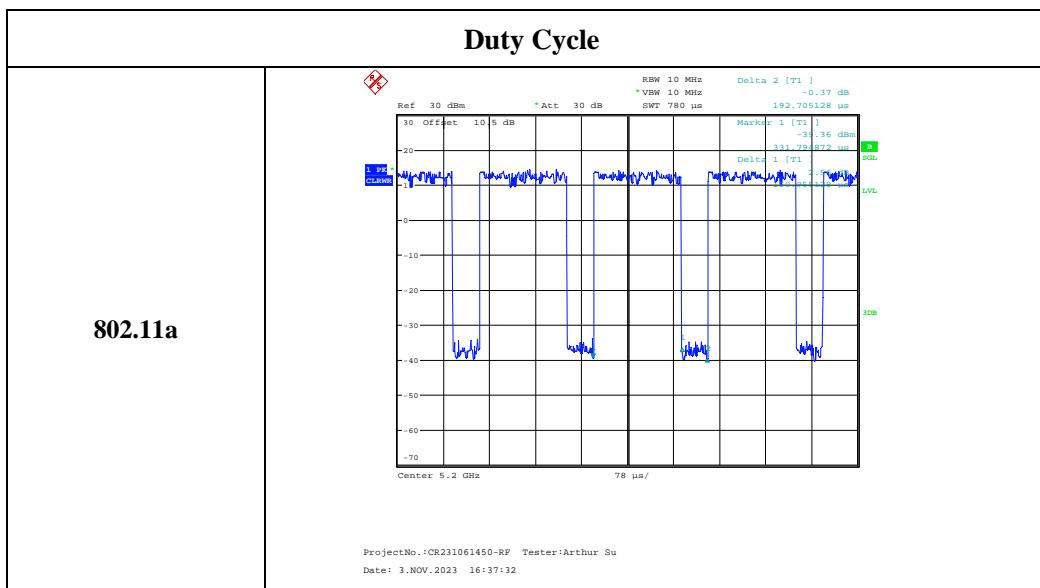
**Test Equipment List and Details:**

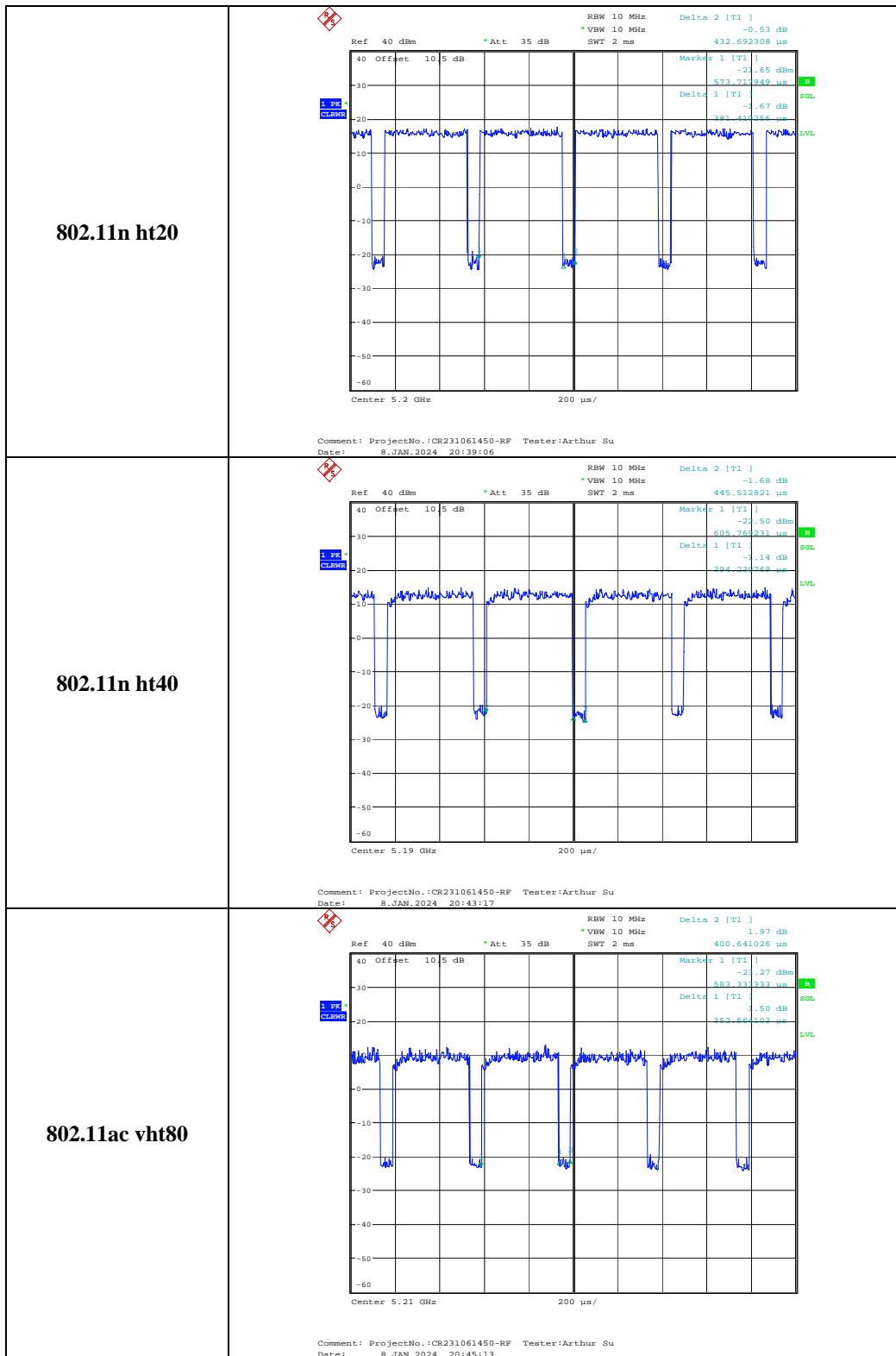
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
R&S	Spectrum Analyzer	FSU26	100147	2023/3/31	2024/3/30

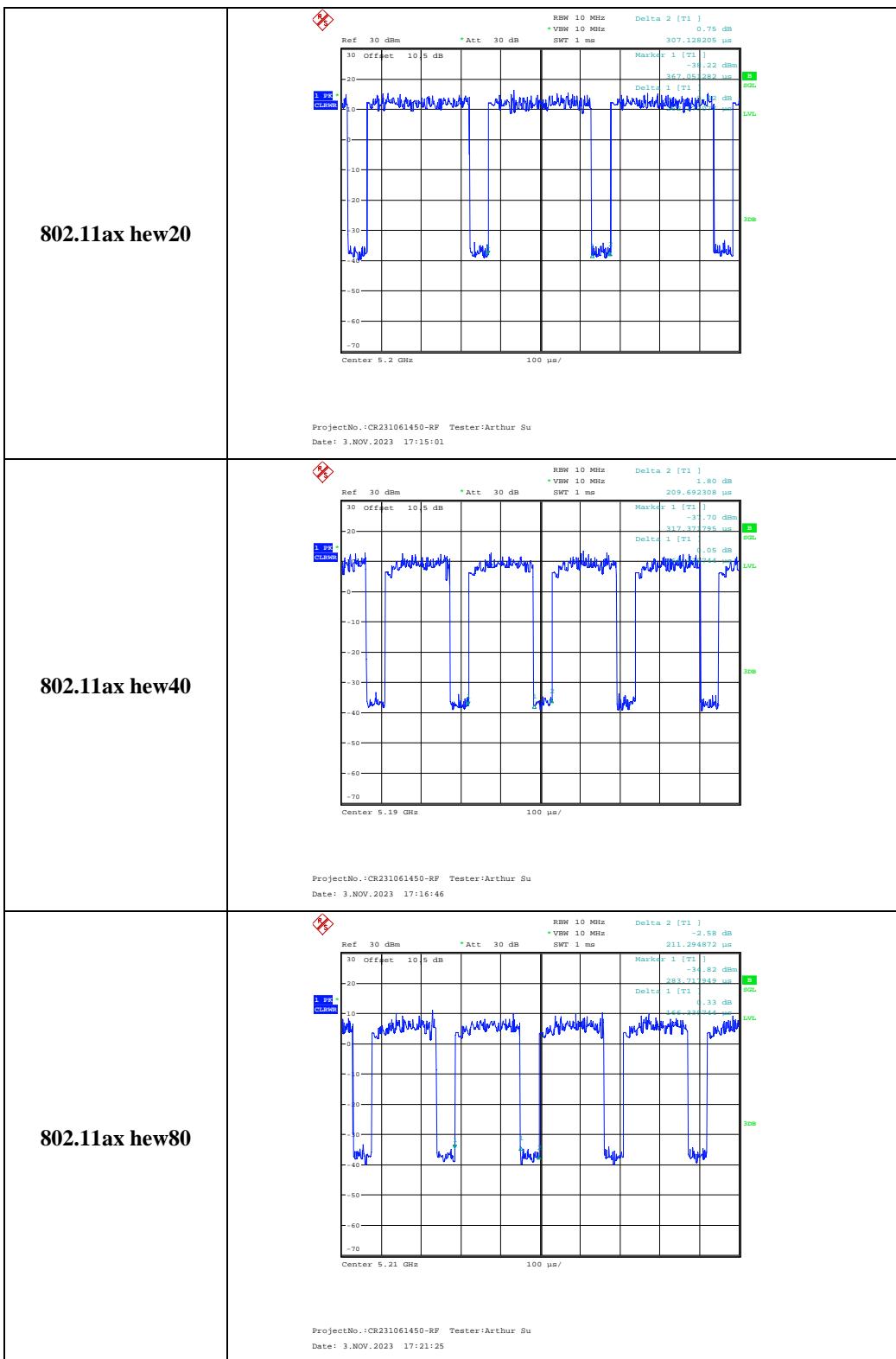
\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data:**

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Factor (dB)	VBW Setting (kHz)
802.11a	0.151	0.193	78.24	6623	1.07	10
802.11n ht20	0.381	0.433	87.99	2625	0.56	3
802.11n ht40	0.394	0.446	88.34	2538	0.54	3
802.11ac vht80	0.353	0.401	88.03	2833	0.55	3
802.11ax hew20	0.262	0.307	85.34	3817	0.69	5
802.11ax hew40	0.166	0.21	79.05	6024	1.02	10
802.11ax hew80	0.166	0.211	78.67	6024	1.04	10







## **5. EUT PHOTOGRAPHS**

Please refer to the attachment CR231061450-EXP EUT EXTERNAL PHOTOGRAPHS and  
CR231061450-INP EUT INTERNAL PHOTOGRAPHS

## **6. TEST SETUP PHOTOGRAPHS**

Please refer to the attachment CR231061450-00D-TSP TEST SETUP PHOTOGRAPHS.

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