

# TEST REPORT

Applicant Name: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.  
Address: No.666 Hu'an Rd. Huli District Xiamen City, Fujian, P.R. China  
Report Number: 2401S52962-RF-00  
FCC ID: T2C-MCORELITE

## Test Standard (s)

FCC PART 15.407

## Sample Description

Product Type: Mini-PC  
Model No.: MCore Lite  
Multiple Model(s) No.: N/A  
Trade Mark: Yealink  
Date Received: 2024/04/07  
Issue Date: 2024/05/23

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

## Prepared and Checked By:

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RF Engineer

## Approved By:

*Nancy Wang*

Nancy Wang  
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Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401S52962-RF-00	Original Report	2024/05/23

## GENERAL INFORMATION

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

Product	Mini-PC
Tested Model	MCore Lite
Multiple Model(s)	N/A
Frequency Range	5G Wi-Fi: 5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160
Maximum Conducted Average Output Power	5150-5250MHz: 15.56dBm 5250-5350MHz: 15.76dBm 5470-5725MHz: 15.68dBm 5725-5850MHz: 15.76dBm
Modulation Technique	OFDM, OFDMA
Antenna Specification <sup>#</sup>	ANT1:4.97dBi; ANT2: 4.94dBi (provided by the applicant)
Voltage Range	DC 19V from adapter
Sample serial number	2JJC-2 for Conducted and Radiated Emissions Test 2JJC-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Model:HKA09019047-6U Input: AC 100-240V~50/60Hz, 1.5A Output: DC 19.0V, 4.74A, 90.06W

### Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

**Measurement Uncertainty**

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF Frequency		213.55 Hz(k=2, 95% level of confidence)
RF output power, conducted		0.72 dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.75 dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.94dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.84dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz - 30MHz	3.30dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	4.48dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	4.55dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	4.85dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.05dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.35dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.44dB(k=2, 95% level of confidence)
18GHz - 40GHz	5.16dB(k=2, 95% level of confidence)	
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%

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

**Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

The device support 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160 mode, the n20/n40 mode was reduced test as identical parameter with ac20/ac40 mode.

For 5150-5350MHz Band, 15 channels are provided to test:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260
38	5190	54	5270
40	5200	56	5280
42	5210	58	5290
44	5220	60	5300
46	5230	62	5310
48	5240	64	5320
50	5250	/	/

5150-5250MHz Band,

For 802.11a/ac/ax20 mode: channel 36, 40, 48 were tested;

For 802.11ac/ax40 mode: channel 38, 46 were tested;

For 802.11ac/ax80 mode: channel 42 was tested.

5250-5350MHz Band,

For 802.11a/ac/ax20 mode: channel 52, 56, 64 were tested;

For 802.11ac/ax40 mode: channel 54, 62 were tested;

For 802.11ac/ax80 mode: channel 58 was tested.

Cross Channel, 802.11ac/ax160, channel 50 was tested

For 5470-5725MHz Band, 12 channels are provided to test:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	112	5560
102	5510	116	5580
104	5520	132	5660
106	5530	134	5670
108	5540	136	5680
110	5550	140	5700

For 802.11a/ac20 mode: channel 100, 116, 140 were tested;  
 For 802.11ac40 mode: channel 102, 110, 134 were tested;  
 For 802.11ac80 mode, channel 106 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/ac20 mode: channel 149, 157, 165 were tested;  
 For 802.11ac40 mode: channel 151, 159 were tested;  
 For 802.11ac80 mode: channel 155 was tested.



**EUT Exercise Software**

“DRTU”<sup>#</sup> software was used and power level as below. The software and power level was provided by the applicant. The device was tested with the worst case was performed as below:

<b>5150-5250 MHz Band:</b>					
<b>Test Modes</b>	<b>Test Channels</b>	<b>Test Frequency (MHz)</b>	<b>Data rate</b>	<b>Power Level Setting<sup>#</sup></b>	
				<b>ANT 1</b>	<b>ANT 2</b>
802.11a	Lowest	5180	6Mbps	10	10
	Middle	5200	6Mbps	10	10
	Highest	5240	6Mbps	10	10
802.11ac-VHT20	Lowest	5180	MCS0	5	5
	Middle	5200	MCS0	5	5
	Highest	5240	MCS0	5	5
802.11ac-VHT40	Lowest	5190	MCS0	10	10
	Highest	5230	MCS0	10	10
802.11ac-VHT80	Middle	5210	MCS0	10	10
802.11ac-VHT160	Middle	5250	MCS0	10	10
802.11ax-HE20	Lowest	5180	MCS0	5	5
	Middle	5200	MCS0	5	5
	Highest	5240	MCS0	5	5
802.11ax-HE40	Lowest	5190	MCS0	10	10
	Highest	5230	MCS0	10	10
802.11ax-HE80	Middle	5210	MCS0	10	10
802.11ax-HE160	Middle	5250	MCS0	10	10
<b>5250-5350 MHz Band:</b>					
<b>Test Modes</b>	<b>Test Channels</b>	<b>Test Frequency (MHz)</b>	<b>Data rate</b>	<b>Power Level Setting<sup>#</sup></b>	
				<b>ANT 1</b>	<b>ANT 2</b>
802.11a	Lowest	5260	6Mbps	10	10
	Middle	5280	6Mbps	10	10
	Highest	5320	6Mbps	10	10
802.11ac-VHT20	Lowest	5260	MCS0	10	10
	Middle	5280	MCS0	10	10
	Highest	5320	MCS0	10	10
802.11ac-VHT40	Lowest	5270	MCS0	10	10
	Highest	5310	MCS0	10	10
802.11ac-VHT80	Middle	5250	MCS0	10	10
802.11ax-HE20	Lowest	5260	MCS0	10	10
	Middle	5280	MCS0	10	10
	Highest	5320	MCS0	10	10
802.11ax-HE40	Lowest	5270	MCS0	10	10
	Highest	5310	MCS0	10	10
802.11ax-HE80	Middle	5290	MCS0	10	10

<b>5470-5725 MHz Band:</b>					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting <sup>#</sup>	
				ANT 1	ANT 2
802.11a	Lowest	5500	6Mbps	10	10
	Middle	5580	6Mbps	10	10
	Highest	5700	6Mbps	10	10
802.11ac-VHT20	Lowest	5500	MCS0	10	10
	Middle	5580	MCS0	10	10
	Highest	5700	MCS0	10	10
802.11ac-VHT40	Lowest	5510	MCS0	10	10
	Middle	5550	MCS0	10	10
	Highest	5670	MCS0	10	10
802.11ac-VHT80	Lowest	5530	MCS0	10	10
802.11ax-HE20	Lowest	5500	MCS0	10	10
	Middle	5580	MCS0	10	10
	Highest	5700	MCS0	10	10
802.11ax-HE40	Lowest	5510	MCS0	10	10
	Middle	5550	MCS0	10	10
	Highest	5670	MCS0	10	10
802.11ax-HE80	Lowest	5530	MCS0	10	10
<b>5725-5850 MHz Band:</b>					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting <sup>#</sup>	
				ANT 1	ANT 2
802.11a	Lowest	5745	6Mbps	10	10
	Middle	5785	6Mbps	10	10
	Highest	5825	6Mbps	10	10
802.11ac-VHT20	Lowest	5745	MCS0	10	10
	Middle	5785	MCS0	10	10
	Highest	5825	MCS0	10	10
802.11ac-VHT40	Lowest	5755	MCS0	10	10
	Highest	5795	MCS0	10	10
802.11ac-VHT80	Middle	5775	MCS0	10	10
802.11ax-HE20	Lowest	5745	MCS0	10	10
	Middle	5785	MCS0	10	10
	Highest	5825	MCS0	10	10
802.11ax-HE40	Lowest	5755	MCS0	10	10
	Highest	5795	MCS0	10	10
802.11ax-HE80	Middle	5775	MCS0	10	10

1. The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.  
 2. For 802.11 a mode, the device only support SISO mode.  
 3. For 802.11 n/ac/ax modes, the device support SISO and MIMO mode, the SISO and MIMO modes share the same power level setting under the same modulation. So the worst mode MIMO was selected to test.  
 4. For 802.11 ax mode, the device not support partial RU mode.

## Equipment Modifications

No modification was made to the EUT tested.

## Support Equipment List and Details

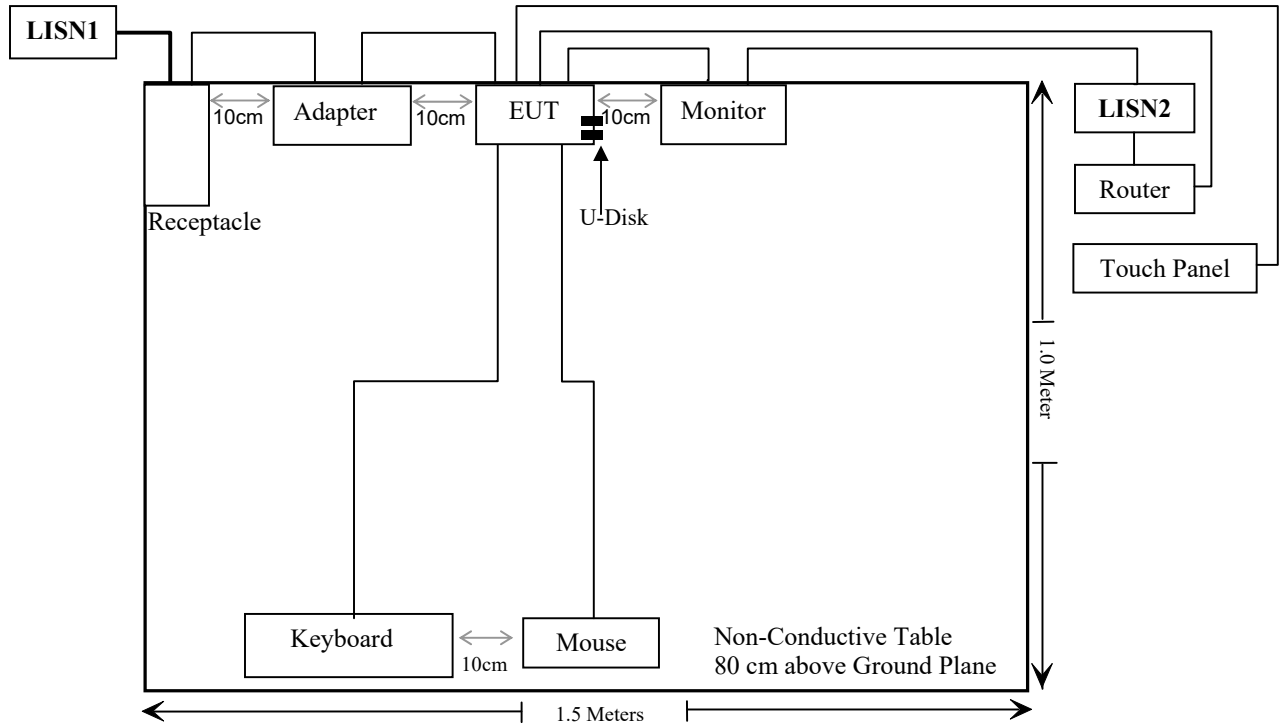
Manufacturer	Description	Model	Serial Number
Sandisk	U disk *2	Unknown	Unknown
NEWMEN	Keyboard	KM-201	Unknown
Rapoo	Mouse	N100	A2602N1200069844
Redmi	Monitor	A22FAB-RA	47366/206100029128
HIKVISION	Router	DS-3WR03	10021642429
Yealink	Touch Panel	M Touch plus	Unknown

## External I/O Cable

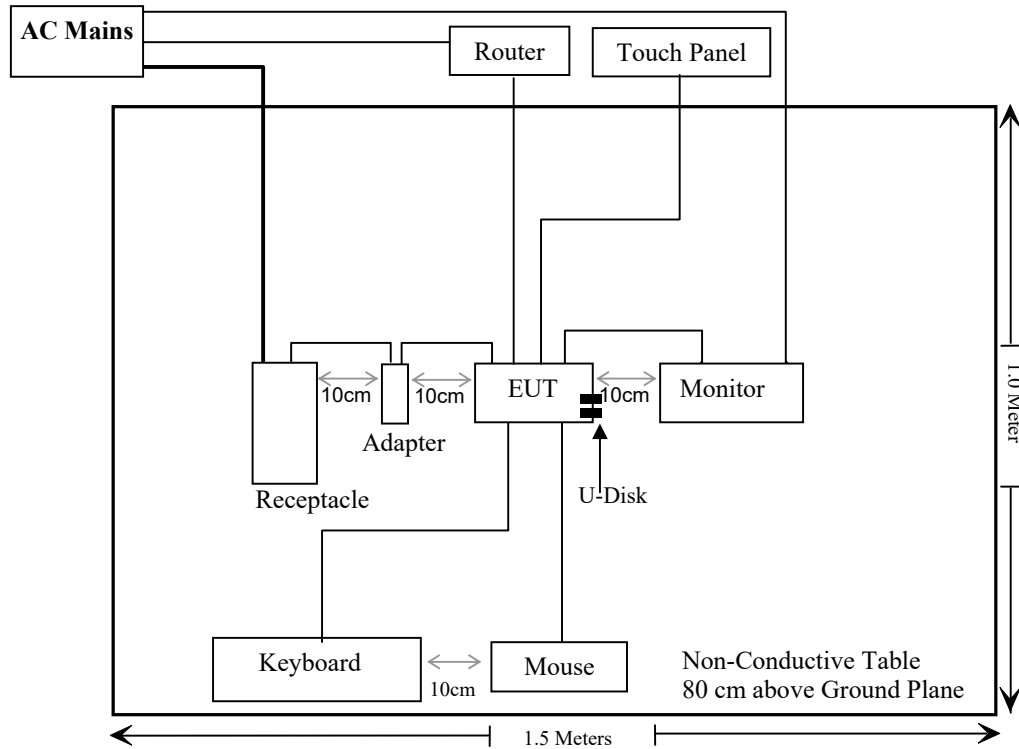
Cable Description	Length (m)	From Port	To
Unshielded un-detachable AC cable	1.2	LISN1/ AC Mains	Receptacle
Unshielded detachable AC cable	0.5	Receptacle	Adapter
Shielded Un-detachable DC cable	1.5	Adapter	EUT
Un-Shielded Un-detachable USB cable	1.5	Keyboard	EUT
Un-Shielded Un-detachable USB cable	1.2	Mouse	EUT
Shielded detachable HDMI cable	1.6	EUT	Monitor
Shielded detachable AC cable	2.0	LISN2/ AC Mains	Monitor
Shielded detachable RJ45 cable	5.0	EUT	Router
Unshielded detachable AC cable	1.2	LISN2/ AC Mains	Router
Shielded detachable RJ45 cable	5.0	EUT	Touch panel

### Block Diagram of Test Setup

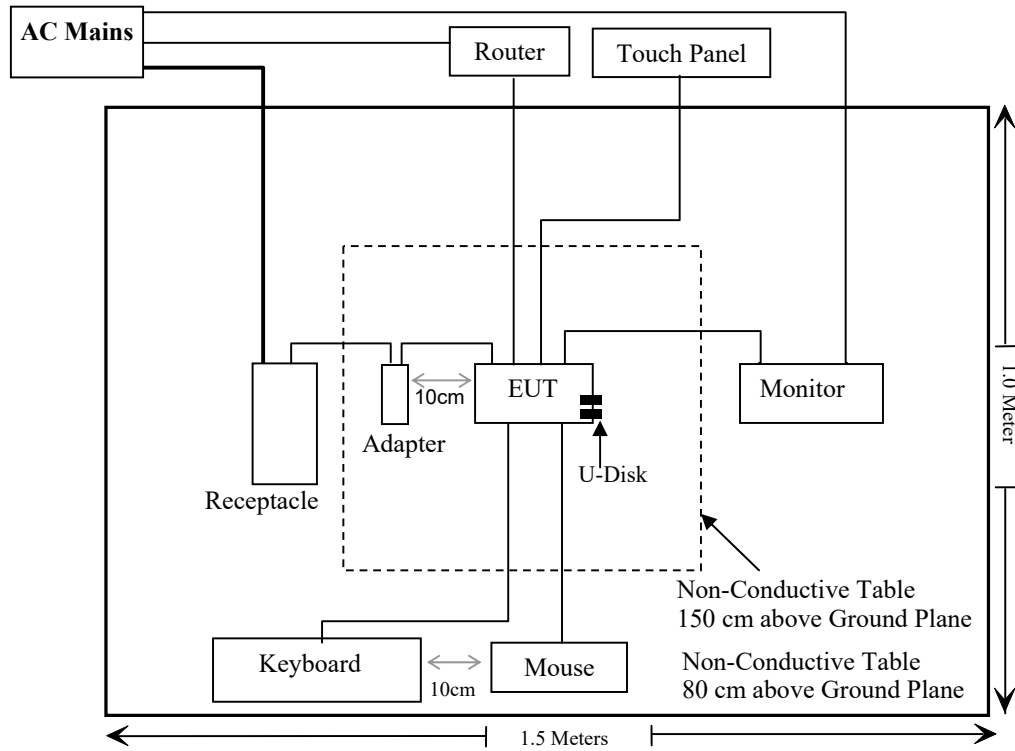
For Conducted Emissions:



Radiated Emissions (below 1GHz):



Radiated Emissions (above 1GHz):



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) & §2.1091	MPE-Based Exemption	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant*

Compliant\*: Please refer to the DFS report 2401S52962-RFC.

Not Applicable: The supplier declared that the equipment has no this function.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted Emissions Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/01/16	2025/01/15
Rohde & Schwarz	LISN	ENV216	101613	2024/01/16	2025/01/15
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2023/08/03	2024/08/02
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2023/08/03	2024/08/02
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
<b>Radiated Emissions Test</b>					
R&S	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310 N	186238	2023/06/08	2024/06/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
BACL	Active Loop Antenna	1313-1A	4031911	2024/03/21	2025/03/20
Unknown	Cable	Chamber Cable 1	F-03-EM236	2023/08/03	2024/08/02
Unknown	Cable	Chamber Cable 4	EC-007	2023/08/03	2024/08/02
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
COM-POWER	Pre-amplifier	PA-122	181919	2023/06/29	2024/06/28
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	0735	2023/10/08	2024/10/07
Unknown	RF Cable	UFA147	219661	2023/10/08	2024/10/07
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	NCR	NCR
SNSD	5G Band Reject filter	BSF5150-5850MN-0899-004	5G filter	2023/08/03	2024/08/02
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
A.H.System	Pre-amplifier	PAM-1840VH	190	2023/08/02	2024/08/01
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2023/08/03	2024/08/02

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>RF Conducted Test</b>					
Tonscend	RF control Unit	JS0806-2	19D8060154	2023/09/06	2024/09/05
ANRITSU	Microwave peak power sensor	MA24418A	12622	2023/08/08	2024/08/07
Narda	20dB Attenuator	99899	0107	2023/07/04	2024/07/03
Unknown	RF Cable	65475	01670515	2023/07/04	2024/07/03

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).



## FCC 1.1307 (B) & §2.1091- MPE-BASED EXEMPTION

### Applicable Standard

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

According to KDB 447498 D04 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power (ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

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

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

R is the minimum separation distance in meters

f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

**Result**

Mode	Frequency (MHz)	Tune up conducted power <sup>#</sup>	Antenna Gain <sup>#</sup>		ERP		Evaluation Distance (m)	ERP Limit (mW)
		(dBm)	(dBi)	(dBd)	(dBm)	(mW)		
BT	2402-2480	8.5	2.86	0.71	9.21	8.34	0.2	768
BLE	2402-2480	5.5	2.86	0.71	6.21	4.18	0.2	768
2.4G Wi-Fi	2412-2472	21.0	2.86	0.71	21.71	148.25	0.2	768
5.2G Wi-Fi	5180-5240	16.0	4.97	2.82	18.82	76.21	0.2	768
5.3G Wi-Fi	5260-5320	16.0	4.97	2.82	18.82	76.21	0.2	768
5.6G Wi-Fi	5500-5720	16.0	4.97	2.82	18.82	76.21	0.2	768
5.8G Wi-Fi	5745-5825	16.0	4.97	2.82	18.82	76.21	0.2	768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.  
 2. The BT, 2.4G Wi-Fi and 5G Wi-Fi can transmit at same time.  
 3. 0dBd=2.15dBi

Simultaneous transmitting consideration (worst case):

The ratio= $ERP_{BT}/limit + ERP_{2.4G\ Wi-Fi}/limit + ERP_{5G\ Wi-Fi}/limit = 8.34/768 + 148.25/768 + 76.21/768 = 0.303 < 1.0$ , so simultaneous exposure is compliant.

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

**Result: Compliant**

**FCC §15.203 - ANTENNA REQUIREMENT**

**Applicable Standard**

According to § 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

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

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Antenna Connector Construction**

The EUT has two internal antennas which was permanently attached, and the maximum antenna gain<sup>#</sup> as below table, fulfill the requirement of this section. Please refer to the EUT photos.

Antenna	Antenna Type	Antenna Gain <sup>#</sup>	Impedance	Frequency Range
ANT1	PCB	4.97dBi	50Ω	5150-5850MHz
ANT2	PCB	4.94dBi	50Ω	5150-5850MHz

**Result: Compliant**

**FCC §15.407 (b) (6) §15.207 (a) - CONDUCTED EMISSIONS**

**Applicable Standard**

FCC §15.207, §15.407(b) (6)

**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.

**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

**Test Procedure**

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Average detection mode.

## Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

## Test Data

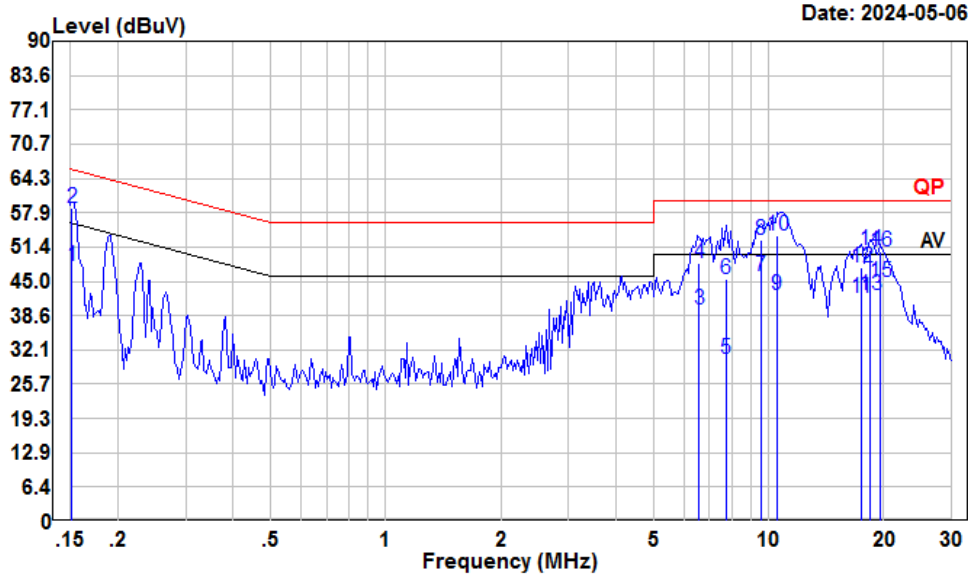
### Environmental Conditions

<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	70 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Macy Shi on 2024-05-06.*

*EUT operation mode: Transmitting (maximum output power mode, 802.11ac80 5775MHz)*

AC 120V/60 Hz, Line

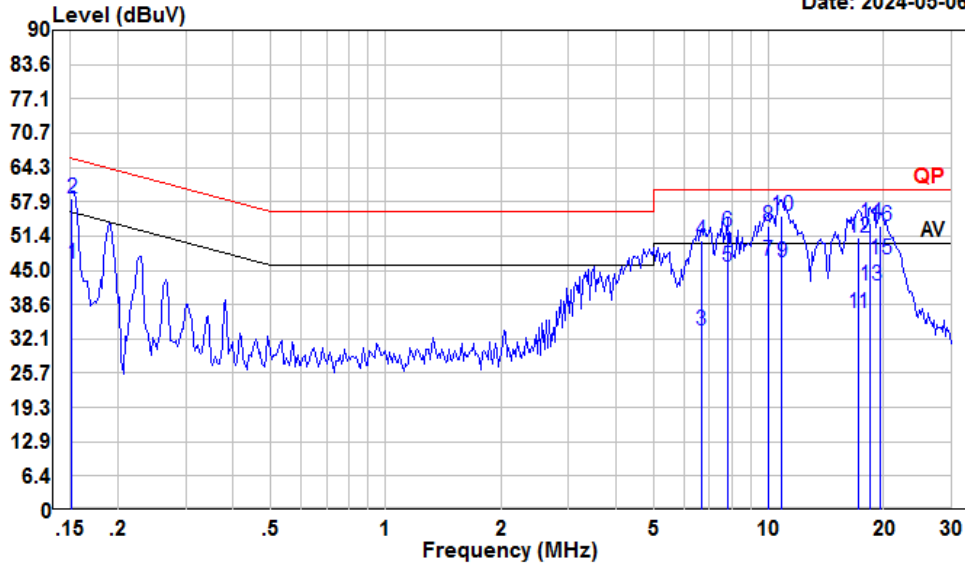


Condition: Line  
 Project : 2401S52962-RF  
 Tester : Macy shi  
 Note : 5G WIFI

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.15	26.83	47.88	10.90	10.15	55.91	-8.03	Average
2	0.15	37.60	58.65	10.90	10.15	65.91	-7.26	QP
3	6.59	18.90	39.60	10.48	10.22	50.00	-10.40	Average
4	6.59	27.60	48.30	10.48	10.22	60.00	-11.70	QP
5	7.73	9.80	30.56	10.53	10.23	50.00	-19.44	Average
6	7.73	24.60	45.36	10.53	10.23	60.00	-14.64	QP
7	9.55	25.10	45.94	10.59	10.25	50.00	-4.06	Average
8	9.55	31.80	52.64	10.59	10.25	60.00	-7.36	QP
9	10.51	21.53	42.37	10.60	10.24	50.00	-7.63	Average
10	10.51	32.63	53.47	10.60	10.24	60.00	-6.53	QP
11	17.47	20.90	41.76	10.76	10.10	50.00	-8.24	Average
12	17.47	26.80	47.66	10.76	10.10	60.00	-12.34	QP
13	18.43	21.40	42.32	10.81	10.11	50.00	-7.68	Average
14	18.43	30.00	50.92	10.81	10.11	60.00	-9.08	QP
15	19.64	23.90	44.89	10.88	10.11	50.00	-5.11	Average
16	19.64	29.60	50.59	10.88	10.11	60.00	-9.41	QP

AC 120V/60 Hz, Neutral

Date: 2024-05-06



Condition: Neutral  
 Project : 2401S52962-RF  
 Tester : Macy shi  
 Note : 5G WIFI

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.15	25.41	46.15	10.59	10.15	55.91	-9.76	Average
2	0.15	37.73	58.47	10.59	10.15	65.91	-7.44	QP
3	6.66	12.80	33.69	10.67	10.22	50.00	-16.31	Average
4	6.66	29.60	50.49	10.67	10.22	60.00	-9.51	QP
5	7.81	24.80	45.76	10.73	10.23	50.00	-4.24	Average
6	7.81	31.30	52.26	10.73	10.23	60.00	-7.74	QP
7	9.97	25.70	46.76	10.80	10.26	50.00	-3.24	Average
8	9.97	32.20	53.26	10.80	10.26	60.00	-6.74	QP
9	10.85	25.44	46.47	10.80	10.23	50.00	-3.53	Average
10	10.85	34.27	55.30	10.80	10.23	60.00	-4.70	QP
11	17.11	16.01	36.86	10.75	10.10	50.00	-13.14	Average
12	17.11	30.41	51.26	10.75	10.10	60.00	-8.74	QP
13	18.43	21.40	42.24	10.73	10.11	50.00	-7.76	Average
14	18.43	33.10	53.94	10.73	10.11	60.00	-6.06	QP
15	19.64	26.10	46.92	10.71	10.11	50.00	-3.08	Average
16	19.64	32.50	53.32	10.71	10.11	60.00	-6.68	QP

## §15.205 & §15.209 & §15.407(B) - UNDESIRABLE EMISSION

### Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

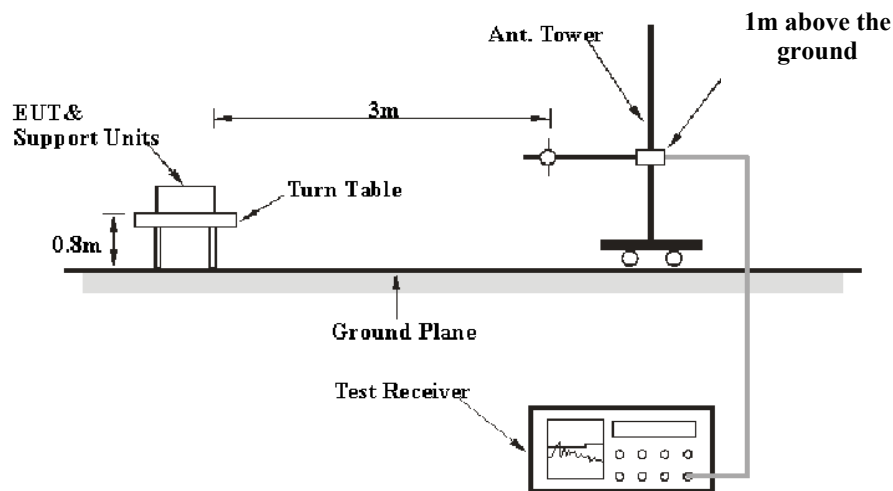
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

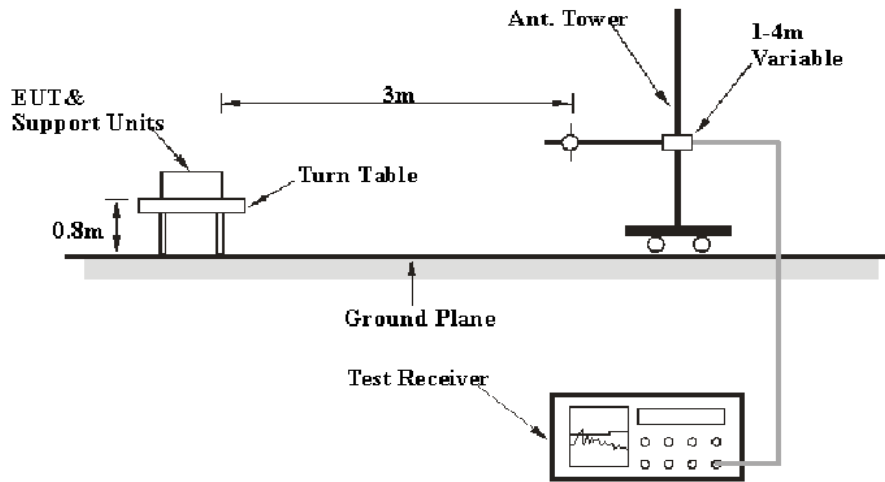
### EUT Setup

9 kHz-30MHz:

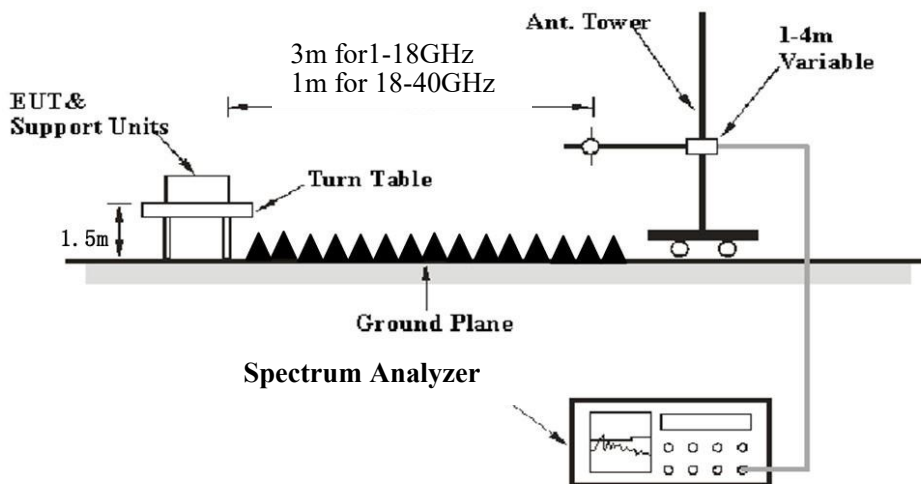




**30MHz-1GHz:**



**Above 1 GHz:**



The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

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

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

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

9 kHz-1GHz:

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

1-40GHz:

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

Note: Ton is minimum transmission duration

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

## Test Procedure

### Radiated Spurious Emission

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

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

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

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

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

where

- $E_{\text{SpecLimit}}$  is the field strength of the emission at the distance specified by the limit, in dB $\mu$ V/m
- $E_{\text{Meas}}$  is the field strength of the emission at the measurement distance, in dB $\mu$ V/m
- $d_{\text{Meas}}$  is the measurement distance, in m
- $d_{\text{SpecLimit}}$  is the distance specified by the limit, in m

So the extrapolation factor of 1m is  $20 \cdot \log(1/3) = -9.5$  dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

### Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

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

### Test Data

#### Environmental Conditions

<b>Temperature:</b>	22~25.3 °C
<b>Relative Humidity:</b>	50~54 %
<b>ATM Pressure:</b>	101.0 kPa

The testing was performed by Anson Su on 2024-04-29 for below 1GHz and Zenos Qiao on 2024-04-27 for above 1GHz.

EUT operation mode: Transmitting

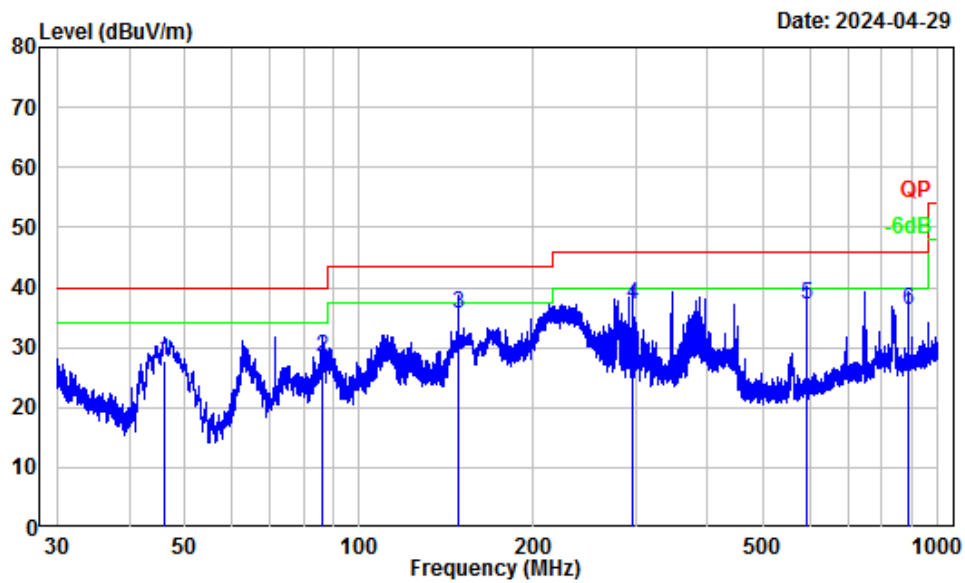
Note: Pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation was recorded.

**9 kHz-30MHz:** (maximum output power mode, 802.11ac80 5775MHz)

The amplitude of spurious emissions attenuated more than 20 dB below the limit was not recorded.

**30 MHz-1 GHz:** (maximum output power mode, 802.11ac80 5775MHz)

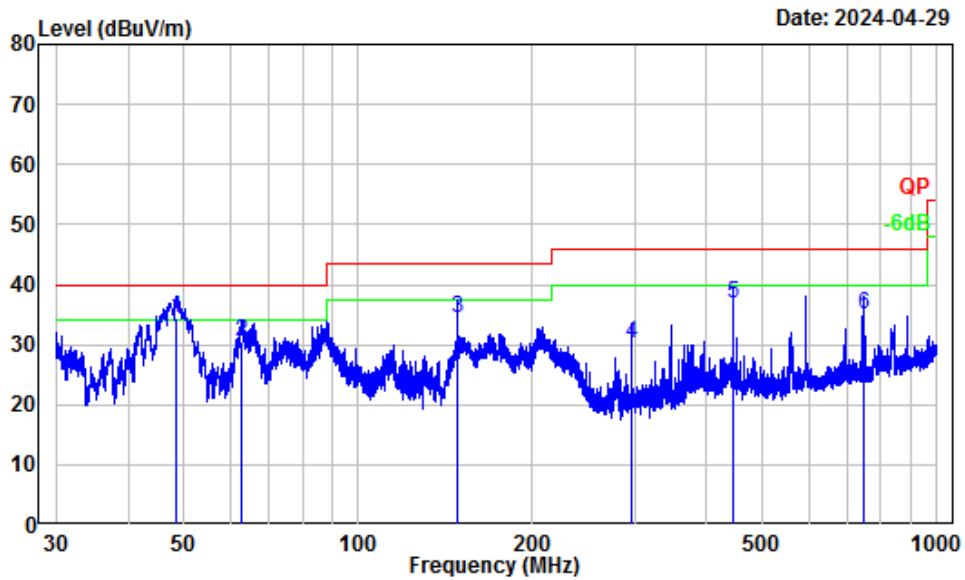
**Horizontal**



Site : Chamber A  
 Condition : 3m Horizontal  
 Project Number: 2401S52962-RF  
 Note : 5G WIFI  
 Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	46.08	-14.25	42.06	27.81	40.00	-12.19 QP
2	86.35	-16.62	44.98	28.36	40.00	-11.64 QP
3	148.44	-11.25	46.83	35.58	43.50	-7.92 QP
4	296.96	-10.08	47.14	37.06	46.00	-8.94 QP
5	594.09	-4.47	41.71	37.24	46.00	-8.76 QP
6	891.12	0.86	35.27	36.13	46.00	-9.87 QP

**Vertical**



Site : Chamber A  
 Condition : 3m Vertical  
 Project Number: 2401S52962-RF  
 Note : 5G WIFI  
 Tester : Anson Su

	Freq		Read		Limit	Over	Remark
	MHz	Factor	Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	48.54	-16.67	51.10	34.43	40.00	-5.57	QP
2	62.73	-17.52	48.06	30.54	40.00	-9.46	QP
3	148.51	-11.60	46.02	34.42	43.50	-9.08	QP
4	296.96	-10.48	40.81	30.33	46.00	-15.67	QP
5	445.44	-6.25	43.02	36.77	46.00	-9.23	QP
6	750.11	-2.17	37.29	35.12	46.00	-10.88	QP

**Above 1GHz:**

**5150-5250 MHz:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 1)</b>							
5180MHz							
5149.65	55.87	PK	H	2.71	58.58	74	-15.42
5149.65	42.63	AV	H	2.71	45.34	54	-8.66
5149.56	55.58	PK	V	2.71	58.29	74	-15.71
5149.56	42.45	AV	V	2.71	45.16	54	-8.84
10360.00	44.84	PK	H	13.07	57.91	68.2	-10.29
10360.00	45.05	PK	V	13.07	58.12	68.2	-10.08
5200MHz							
10400.00	45.16	PK	H	13.12	58.28	68.2	-9.92
10400.00	45.38	PK	V	13.12	58.50	68.2	-9.70
5240MHz							
5352.78	55.52	PK	H	3.07	58.59	74	-15.41
5352.78	41.85	AV	H	3.07	44.92	54	-9.08
5351.83	55.33	PK	V	3.07	58.40	74	-15.60
5351.83	41.64	AV	V	3.07	44.71	54	-9.29
10480.00	45.48	PK	H	13.07	58.55	68.2	-9.65
10480.00	45.67	PK	V	13.07	58.74	68.2	-9.46
<b>802.11a (ANT 2)</b>							
5180MHz							
5149.48	56.20	PK	H	2.71	58.91	74	-15.09
5149.48	42.86	AV	H	2.71	45.57	54	-8.43
5149.27	55.97	PK	V	2.71	58.68	74	-15.32
5149.27	42.63	AV	V	2.71	45.34	54	-8.66
10360.00	44.56	PK	H	13.07	57.63	68.2	-10.57
10360.00	44.71	PK	V	13.07	57.78	68.2	-10.42
5200MHz							
10400.00	44.87	PK	H	13.12	57.99	68.2	-10.21
10400.00	45.05	PK	V	13.12	58.17	68.2	-10.03
5240MHz							
5358.93	55.64	PK	H	3.07	58.71	74	-15.29
5358.93	41.98	AV	H	3.07	45.05	54	-8.95
5369.52	55.37	PK	V	3.07	58.44	74	-15.56
5369.52	41.72	AV	V	3.07	44.79	54	-9.21
10480.00	45.19	PK	H	13.07	58.26	68.2	-9.94
10480.00	45.36	PK	V	13.07	58.43	68.2	-9.77

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
<b>802.11ac20</b>							
5180MHz							
5149.39	56.27	PK	H	2.71	58.98	74	-15.02
5149.39	43.36	AV	H	2.71	46.07	54	-7.93
5148.98	55.95	PK	V	2.71	58.66	74	-15.34
5148.98	43.08	AV	V	2.71	45.79	54	-8.21
10360.00	44.67	PK	H	13.07	57.74	68.2	-10.46
10360.00	44.86	PK	V	13.07	57.93	68.2	-10.27
5200MHz							
10400.00	44.98	PK	H	13.12	58.10	68.2	-10.10
10400.00	45.19	PK	V	13.12	58.31	68.2	-9.89
5240MHz							
5434.61	55.35	PK	H	3.27	58.62	74	-15.38
5434.61	41.87	AV	H	3.27	45.14	54	-8.86
5427.82	55.09	PK	V	3.27	58.36	74	-15.64
5427.82	41.58	AV	V	3.27	44.85	54	-9.15
10480.00	45.32	PK	H	13.07	58.39	68.2	-9.81
10480.00	45.54	PK	V	13.07	58.61	68.2	-9.59
<b>802.11ac40</b>							
5190MHz							
5149.53	58.19	PK	H	2.71	60.90	74	-13.10
5149.53	46.32	AV	H	2.71	49.03	54	-4.97
5149.24	57.78	PK	V	2.71	60.49	74	-13.51
5149.24	45.87	AV	V	2.71	48.58	54	-5.42
10380.00	44.59	PK	H	13.09	57.68	68.2	-10.52
10380.00	44.64	PK	V	13.09	57.73	68.2	-10.47
5230MHz							
5455.46	55.43	PK	H	3.59	59.02	74	-14.98
5455.46	42.14	AV	H	3.59	45.73	54	-8.27
5436.57	55.22	PK	V	3.27	58.49	74	-15.51
5436.57	41.89	AV	V	3.27	45.16	54	-8.84
10460.00	45.05	PK	H	13.09	58.14	68.2	-10.06
10460.00	45.18	PK	V	13.09	58.27	68.2	-9.93

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac80</b>							
5210MHz							
5149.68	58.98	PK	H	2.71	61.69	74	-12.31
5149.68	47.15	AV	H	2.71	49.86	54	-4.14
5148.95	58.59	PK	V	2.71	61.30	74	-12.70
5148.95	46.66	AV	V	2.71	49.37	54	-4.63
5449.89	55.95	PK	H	3.27	59.22	74	-14.78
5449.89	42.72	AV	H	3.27	45.99	54	-8.01
5424.42	55.64	PK	V	3.27	58.91	74	-15.09
5424.42	42.46	AV	V	3.27	45.73	54	-8.27
10420.00	44.53	PK	H	13.12	57.65	68.2	-10.55
10420.00	44.68	PK	V	13.12	57.80	68.2	-10.40
<b>802.11ac160</b>							
5250MHz							
5149.57	58.71	PK	H	2.71	61.42	74	-12.58
5149.57	46.84	AV	H	2.71	49.55	54	-4.45
5149.78	57.96	PK	V	2.71	60.67	74	-13.33
5149.78	46.42	AV	V	2.71	49.13	54	-4.87
5353.36	62.38	PK	H	3.07	65.45	74	-8.55
5353.36	47.93	AV	H	3.07	51.00	54	-3.00
5351.45	61.71	PK	V	3.07	64.78	74	-9.22
5351.45	47.56	AV	V	3.07	50.63	54	-3.37
10500.00	44.39	PK	H	13.07	57.46	68.2	-10.74
10500.00	44.54	PK	V	13.07	57.61	68.2	-10.59



Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax20</b>							
5180MHz							
5148.75	55.13	PK	H	2.71	57.84	74	-16.16
5148.75	43.62	AV	H	2.71	46.33	54	-7.67
5149.83	55.37	PK	V	2.71	58.08	74	-15.92
5149.83	44.59	AV	V	2.71	47.30	54	-6.70
10360.00	44.73	PK	H	13.07	57.80	68.2	-10.40
10360.00	44.79	PK	V	13.07	57.86	68.2	-10.34
5200MHz							
10400.00	44.82	PK	H	13.12	57.94	68.2	-10.26
10400.00	44.73	PK	V	13.12	57.85	68.2	-10.35
5240MHz							
5353.92	55.19	PK	H	3.07	58.26	74	-15.74
5353.92	43.78	AV	H	3.07	46.85	54	-7.15
5454.98	55.74	PK	V	3.59	59.33	74	-14.67
5454.98	44.82	AV	V	3.59	48.41	54	-5.59
10480.00	44.92	PK	H	13.07	57.99	68.2	-10.21
10480.00	44.67	PK	V	13.07	57.74	68.2	-10.46
<b>802.11ax40</b>							
5190MHz							
5149.53	55.85	PK	H	2.71	58.56	74	-15.44
5149.53	44.32	AV	H	2.71	47.03	54	-6.97
5149.56	56.06	PK	V	2.71	58.77	74	-15.23
5149.56	44.57	AV	V	2.71	47.28	54	-6.72
10380.00	44.53	PK	H	13.09	57.62	68.2	-10.58
10380.00	44.34	PK	V	13.09	57.43	68.2	-10.77
5230MHz							
5446.07	55.23	PK	H	3.27	58.50	74	-15.50
5446.07	44.15	AV	H	3.27	47.42	54	-6.58
5392.58	55.82	PK	V	3.07	58.89	74	-15.11
5392.58	44.81	AV	V	3.07	47.88	54	-6.12
10460.00	45.17	PK	H	13.09	58.26	68.2	-9.94
10460.00	45.09	PK	V	13.09	58.18	68.2	-10.02

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax80</b>							
5210MHz							
5149.29	57.32	PK	H	2.71	60.03	74	-13.97
5149.29	44.68	AV	H	2.71	47.39	54	-6.61
5149.53	57.63	PK	V	2.71	60.34	74	-13.66
5149.53	44.76	AV	V	2.71	47.47	54	-6.53
5437.47	55.39	PK	H	3.27	58.66	74	-15.34
5437.47	44.78	AV	H	3.27	48.05	54	-5.95
5442.89	55.63	PK	V	3.27	58.90	74	-15.10
5442.89	45.64	AV	V	3.27	48.91	54	-5.09
10420.00	44.92	PK	H	13.12	58.04	68.2	-10.16
10420.00	45.23	PK	V	13.12	58.35	68.2	-9.85
<b>802.11ax160</b>							
5250MHz							
5148.65	58.36	PK	H	2.71	61.07	74	-12.93
5148.65	44.93	AV	H	2.71	47.64	54	-6.36
5149.43	57.41	PK	V	2.71	60.12	74	-13.88
5149.43	44.72	AV	V	2.71	47.43	54	-6.57
5355.65	60.13	PK	H	3.07	63.20	74	-10.80
5355.65	46.85	AV	H	3.07	49.92	54	-4.08
5386.23	61.01	PK	V	3.07	64.08	74	-9.92
5386.23	47.92	AV	V	3.07	50.99	54	-3.01
10500.00	45.08	PK	H	13.07	58.15	68.2	-10.05
10500.00	45.13	PK	V	13.07	58.20	68.2	-10.00

**5250-5350MHz:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 1)</b>							
5260MHz							
4750.69	55.15	PK	H	1.49	56.64	74	-17.36
4750.69	44.37	AV	H	1.49	45.86	54	-8.14
4731.87	55.63	PK	V	1.49	57.12	74	-16.88
4731.87	45.24	AV	V	1.49	46.73	54	-7.27
10520.00	45.67	PK	H	13.05	58.72	68.2	-9.48
10520.00	45.83	PK	V	13.05	58.88	68.2	-9.32
5280MHz							
10560.00	45.72	PK	H	13.02	58.74	68.2	-9.46
10560.00	45.85	PK	V	13.02	58.87	68.2	-9.33
5320MHz							
5443.54	54.36	PK	H	3.27	57.63	74	-16.37
5443.54	41.87	AV	H	3.27	45.14	54	-8.86
5417.43	55.29	PK	V	3.17	58.46	74	-15.54
5417.43	42.05	AV	V	3.17	45.22	54	-8.78
10640.00	45.84	PK	H	13.19	59.03	74	-14.97
10640.00	32.57	AV	H	13.19	45.76	54	-8.24
10640.00	45.82	PK	V	13.19	59.01	74	-14.99
10640.00	32.16	AV	V	13.19	45.35	54	-8.65
<b>802.11a (ANT 2)</b>							
5260MHz							
4630.28	55.24	PK	H	0.99	56.23	74	-17.77
4630.28	47.37	AV	H	0.99	48.36	54	-5.64
4687.66	55.63	PK	V	1.09	56.72	74	-17.28
4687.66	48.35	AV	V	1.09	49.44	54	-4.56
10520.00	44.62	PK	H	13.05	57.67	68.2	-10.53
10520.00	45.18	PK	V	13.05	58.23	68.2	-9.97
5280MHz							
10560.00	45.71	PK	H	13.02	58.73	68.2	-9.47
10560.00	45.29	PK	V	13.02	58.31	68.2	-9.89
5320MHz							
5385.28	55.31	PK	H	3.07	58.38	74	-15.62
5385.28	41.07	AV	H	3.07	44.14	54	-9.86
5350.83	55.82	PK	V	3.07	58.89	74	-15.11
5350.83	41.36	AV	V	3.07	44.43	54	-9.57
10640.00	46.21	PK	H	13.19	59.40	74	-14.60
10640.00	31.94	AV	H	13.19	45.13	54	-8.87
10640.00	45.35	PK	V	13.19	58.54	74	-15.46
10640.00	31.52	AV	V	13.19	44.71	54	-9.29

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac20</b>							
5260MHz							
4514.58	55.21	PK	H	1.19	56.40	74	-17.60
4514.58	43.29	AV	H	1.19	44.48	54	-9.52
5015.96	55.37	PK	V	2.97	58.34	74	-15.66
5015.96	44.83	AV	V	2.97	47.80	54	-6.20
10520.00	45.15	PK	H	13.05	58.20	68.2	-10.00
10520.00	45.47	PK	V	13.05	58.52	68.2	-9.68
5280MHz							
10560.00	45.67	PK	H	13.02	58.69	68.2	-9.51
10560.00	45.49	PK	V	13.02	58.51	68.2	-9.69
5320MHz							
5350.88	58.65	PK	H	3.07	61.72	74	-12.28
5350.88	45.09	AV	H	3.07	48.16	54	-5.84
5350.24	58.52	PK	V	3.07	61.59	74	-12.41
5350.24	44.46	AV	V	3.07	47.53	54	-6.47
10640.00	46.13	PK	H	13.19	59.32	74	-14.68
10640.00	32.46	AV	H	13.19	45.65	54	-8.35
10640.00	45.54	PK	V	13.19	58.73	74	-15.27
10640.00	32.05	AV	V	13.19	45.24	54	-8.76
<b>802.11ac40</b>							
5270MHz							
4616.17	55.15	PK	H	0.99	56.14	74	-17.86
4616.17	43.37	AV	H	0.99	44.36	54	-9.64
4640.63	55.63	PK	V	1.09	56.72	74	-17.28
4640.63	44.24	AV	V	1.09	45.33	54	-8.67
10540.00	45.05	PK	H	13.03	58.08	68.2	-10.12
10540.00	45.76	PK	V	13.03	58.79	68.2	-9.41
5310MHz							
5351.51	61.26	PK	H	3.07	64.33	74	-9.67
5351.51	46.55	AV	H	3.07	49.62	54	-4.38
5350.24	61.64	PK	V	3.07	64.71	74	-9.29
5350.24	47.84	AV	V	3.07	50.91	54	-3.09
10620.00	45.32	PK	H	13.09	58.41	74	-15.59
10620.00	32.26	AV	H	13.09	45.35	54	-8.65
10620.00	45.18	PK	V	13.09	58.27	74	-15.73
10620.00	32.07	AV	V	13.09	45.16	54	-8.84

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
<b>802.11ac80</b>							
5290MHz							
4507.05	55.24	PK	H	1.19	56.43	74	-17.57
4507.05	44.82	AV	H	1.19	46.01	54	-7.99
4515.52	55.63	PK	V	1.19	56.82	74	-17.18
4515.52	45.67	AV	V	1.19	46.86	54	-7.14
5350.08	61.17	PK	H	3.07	64.24	74	-9.76
5350.08	46.24	AV	H	3.07	49.31	54	-4.69
5350.24	62.05	PK	V	3.07	65.12	74	-8.88
5350.24	47.31	AV	V	3.07	50.38	54	-3.62
10580.00	45.36	PK	H	13.00	58.36	68.2	-9.84
10580.00	44.57	PK	V	13.00	57.57	68.2	-10.63

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax20</b>							
5260MHz							
5134.49	55.23	PK	H	2.77	58.00	74	-16.00
5134.49	44.25	AV	H	2.77	47.02	54	-6.98
5039.47	55.67	PK	V	2.97	58.64	74	-15.36
5039.47	44.76	AV	V	2.97	47.73	54	-6.27
10520.00	45.43	PK	H	13.05	58.48	68.2	-9.72
10520.00	44.92	PK	V	13.05	57.97	68.2	-10.23
5280MHz							
10560.00	45.37	PK	H	13.02	58.39	68.2	-9.81
10560.00	45.13	PK	V	13.02	58.15	68.2	-10.05
5320MHz							
5350.08	55.34	PK	H	3.07	58.41	74	-15.59
5350.08	44.25	AV	H	3.07	47.32	54	-6.68
5418.05	55.72	PK	V	3.17	58.89	74	-15.11
5418.05	44.78	AV	V	3.17	47.95	54	-6.05
10640.00	45.28	PK	H	13.19	58.47	74	-15.53
10640.00	32.07	AV	H	13.19	45.26	54	-8.74
10640.00	45.63	PK	V	13.19	58.82	74	-15.18
10640.00	32.45	AV	V	13.19	45.64	54	-8.36
<b>802.11ax40</b>							
5270MHz							
4687.93	55.22	PK	H	1.09	56.31	74	-17.69
4687.93	43.94	AV	H	1.09	45.03	54	-8.97
4690.44	55.45	PK	V	1.09	56.54	74	-17.46
4690.44	44.36	AV	V	1.09	45.45	54	-8.55
10540.00	45.25	PK	H	13.03	58.28	68.2	-9.92
10540.00	45.06	PK	V	13.03	58.09	68.2	-10.11
5310MHz							
5351.36	60.47	PK	H	3.07	63.54	74	-10.46
5351.36	46.83	AV	H	3.07	49.90	54	-4.10
5353.89	61.32	PK	V	3.07	64.39	74	-9.61
5353.89	47.75	AV	V	3.07	50.82	54	-3.18
10620.00	45.45	PK	H	13.09	58.54	74	-15.46
10620.00	32.38	AV	H	13.09	45.47	54	-8.53
10620.00	45.27	PK	V	13.09	58.36	74	-15.64
10620.00	32.19	AV	V	13.09	45.28	54	-8.72

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
<b>802.11ax80</b>							
5290MHz							
4924.57	55.34	PK	H	1.79	57.13	74	-16.87
4924.57	45.06	AV	H	1.79	46.85	54	-7.15
4945.68	55.72	PK	V	1.79	57.51	74	-16.49
4945.68	45.57	AV	V	1.79	47.36	54	-6.64
5350.86	60.78	PK	H	3.07	63.85	74	-10.15
5350.86	46.64	AV	H	3.07	49.71	54	-4.29
5350.21	61.89	PK	V	3.07	64.96	74	-9.04
5350.21	47.55	AV	V	3.07	50.62	54	-3.38
10580.00	45.27	PK	H	13.00	58.27	68.2	-9.93
10580.00	45.12	PK	V	13.00	58.12	68.2	-10.08

**5470-5725MHz:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 1)</b>							
5500MHz							
5467.81	55.64	PK	H	3.59	59.23	68.2	-8.97
5465.37	55.96	PK	V	3.59	59.55	68.2	-8.65
11000.00	45.15	PK	H	13.98	59.13	74	-14.87
11000.00	30.93	AV	H	13.98	44.91	54	-9.09
11000.00	45.32	PK	V	13.98	59.30	74	-14.70
11000.00	31.08	AV	V	13.98	45.06	54	-8.94
5580MHz							
11160.00	45.47	PK	H	13.62	59.09	74	-14.91
11160.00	31.51	AV	H	13.62	45.13	54	-8.87
11160.00	45.72	PK	V	13.62	59.34	74	-14.66
11160.00	31.69	AV	V	13.62	45.31	54	-8.69
5700MHz							
5735.04	55.73	PK	H	4.19	59.92	68.2	-8.28
5726.53	55.85	PK	V	4.09	59.94	68.2	-8.26
11400.00	45.86	PK	H	14.08	59.94	74	-14.06
11400.00	32.09	AV	H	14.08	46.17	54	-7.83
11400.00	46.04	PK	V	14.08	60.12	74	-13.88
11400.00	32.25	AV	V	14.08	46.33	54	-7.67



Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 2)</b>							
5500MHz							
5468.54	55.68	PK	H	3.69	59.37	68.2	-8.83
5465.06	55.84	PK	V	3.59	59.43	68.2	-8.77
11000.00	44.61	PK	H	13.98	58.59	74	-15.41
11000.00	30.88	AV	H	13.98	44.86	54	-9.14
11000.00	44.75	PK	V	13.98	58.73	74	-15.27
11000.00	30.97	AV	V	13.98	44.95	54	-9.05
5580MHz							
11160.00	45.04	PK	H	13.62	58.66	74	-15.34
11160.00	31.37	AV	H	13.62	44.99	54	-9.01
11160.00	45.18	PK	V	13.62	58.80	74	-15.20
11160.00	31.52	AV	V	13.62	45.14	54	-8.86
5700MHz							
5740.99	55.72	PK	H	4.19	59.91	68.2	-8.29
5728.23	55.91	PK	V	4.09	60.00	68.2	-8.20
11400.00	45.58	PK	H	14.08	59.66	74	-14.34
11400.00	31.91	AV	H	14.08	45.99	54	-8.01
11400.00	45.63	PK	V	14.08	59.71	74	-14.29
11400.00	32.06	AV	V	14.08	46.14	54	-7.86

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac20</b>							
5500MHz							
5468.16	58.41	PK	H	3.59	62.00	68.2	-6.20
5467.57	58.92	PK	V	3.59	62.51	68.2	-5.69
11000.00	44.54	PK	H	13.98	58.52	74	-15.48
11000.00	31.02	AV	H	13.98	45.00	54	-9.00
11000.00	44.75	PK	V	13.98	58.73	74	-15.27
11000.00	31.16	AV	V	13.98	45.14	54	-8.86
5580MHz							
11160.00	45.17	PK	H	13.62	58.79	74	-15.21
11160.00	31.45	AV	H	13.62	45.07	54	-8.93
11160.00	45.32	PK	V	13.62	58.94	74	-15.06
11160.00	31.59	AV	V	13.62	45.21	54	-8.79
5700MHz							
5725.21	60.39	PK	H	4.09	64.48	68.2	-3.72
5725.88	60.78	PK	V	4.09	64.87	68.2	-3.33
11400.00	45.76	PK	H	14.08	59.84	74	-14.16
11400.00	31.89	AV	H	14.08	45.97	54	-8.03
11400.00	45.94	PK	V	14.08	60.02	74	-13.98
11400.00	32.05	AV	V	14.08	46.13	54	-7.87

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac40</b>							
5510MHz							
5469.12	60.84	PK	H	3.69	64.53	68.2	-3.67
5467.89	61.37	PK	V	3.59	64.96	68.2	-3.24
11020.00	44.47	PK	H	13.89	58.36	74	-15.64
11020.00	31.05	AV	H	13.89	44.94	54	-9.06
11020.00	44.64	PK	V	13.89	58.53	74	-15.47
11020.00	31.18	AV	V	13.89	45.07	54	-8.93
5550MHz							
11100.00	44.85	PK	H	13.53	58.38	74	-15.62
11100.00	31.54	AV	H	13.53	45.07	54	-8.93
11100.00	45.03	PK	V	13.53	58.56	74	-15.44
11100.00	31.69	AV	V	13.53	45.22	54	-8.78
5670MHz							
5725.94	56.94	PK	H	4.09	61.03	68.2	-7.17
5725.56	57.25	PK	V	4.09	61.34	68.2	-6.86
11340.00	45.16	PK	H	13.99	59.15	74	-14.85
11340.00	32.07	AV	H	13.99	46.06	54	-7.94
11340.00	45.35	PK	V	13.99	59.34	74	-14.66
11340.00	32.22	AV	V	13.99	46.21	54	-7.79

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
<b>802.11ac80</b>							
5530MHz							
5469.64	60.58	PK	H	3.69	64.27	68.2	-3.93
5469.81	61.09	PK	V	3.69	64.78	68.2	-3.42
5744.25	54.42	PK	H	3.52	57.94	68.2	-10.26
5744.25	54.57	PK	V	3.52	58.09	68.2	-10.11
11060.00	44.53	PK	H	13.71	58.24	74	-15.76
11060.00	31.02	AV	H	13.71	44.73	54	-9.27
11060.00	44.69	PK	V	13.71	58.40	74	-15.60
11060.00	31.17	AV	V	13.71	44.88	54	-9.12

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax20</b>							
5500MHz							
5469.64	58.72	PK	H	3.69	62.41	68.2	-5.79
5469.25	59.19	PK	V	3.69	62.88	68.2	-5.32
11000.00	44.61	PK	H	13.98	58.59	74	-15.41
11000.00	31.06	AV	H	13.98	45.04	54	-8.96
11000.00	44.78	PK	V	13.98	58.76	74	-15.24
11000.00	31.19	AV	V	13.98	45.17	54	-8.83
5580MHz							
11160.00	45.05	PK	H	13.62	58.67	74	-15.33
11160.00	31.43	AV	H	13.62	45.05	54	-8.95
11160.00	45.21	PK	V	13.62	58.83	74	-15.17
11160.00	31.58	AV	V	13.62	45.20	54	-8.80
5700MHz							
5725.87	60.18	PK	H	4.09	64.27	68.2	-3.93
5725.48	60.63	PK	V	4.09	64.72	68.2	-3.48
11400.00	45.54	PK	H	14.08	59.62	74	-14.38
11400.00	31.81	AV	H	14.08	45.89	54	-8.11
11400.00	45.72	PK	V	14.08	59.80	74	-14.20
11400.00	31.97	AV	V	14.08	46.05	54	-7.95

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax40</b>							
5510MHz							
5466.65	60.75	PK	H	3.59	64.34	68.2	-3.86
5467.30	61.14	PK	V	3.59	64.73	68.2	-3.47
11020.00	44.35	PK	H	13.89	58.24	74	-15.76
11020.00	30.63	AV	H	13.89	44.52	54	-9.48
11020.00	44.54	PK	V	13.89	58.43	74	-15.57
11020.00	30.78	AV	V	13.89	44.67	54	-9.33
5550MHz							
11100.00	44.69	PK	H	13.53	58.22	74	-15.78
11100.00	31.12	AV	H	13.53	44.65	54	-9.35
11100.00	44.86	PK	V	13.53	58.39	74	-15.61
11100.00	31.27	AV	V	13.53	44.80	54	-9.20
5670MHz							
5726.14	57.05	PK	H	4.09	61.14	68.2	-7.06
5725.83	57.48	PK	V	4.09	61.57	68.2	-6.63
11340.00	45.07	PK	H	13.99	59.06	74	-14.94
11340.00	31.75	AV	H	13.99	45.74	54	-8.26
11340.00	45.24	PK	V	13.99	59.23	74	-14.77
11340.00	31.92	AV	V	13.99	45.91	54	-8.09

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax80</b>							
5530MHz							
5469.39	60.27	PK	H	3.69	63.96	68.2	-4.24
5469.54	60.84	PK	V	3.69	64.53	68.2	-3.67
5736.85	53.63	PK	H	3.5	57.13	68.2	-11.07
5736.85	54.14	PK	V	3.5	57.64	68.2	-10.56
11060.00	44.45	PK	H	13.71	58.16	74	-15.84
11060.00	31.11	AV	H	13.71	44.82	54	-9.18
11060.00	44.59	PK	V	13.71	58.30	74	-15.70
11060.00	31.28	AV	V	13.71	44.99	54	-9.01

**5725-5850 MHz:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 1)</b>							
5745MHz							
5633.90	55.17	PK	H	3.59	58.76	68.20	-9.44
5678.61	55.08	PK	H	3.69	58.77	105.20	-46.43
5709.48	54.73	PK	H	4.09	58.82	110.80	-51.98
5724.29	58.24	PK	H	4.09	62.33	122.20	-59.87
5627.53	55.32	PK	V	3.59	58.91	68.20	-9.29
5696.37	55.53	PK	V	3.79	59.32	105.20	-45.88
5714.69	55.11	PK	V	4.09	59.20	110.80	-51.60
5724.41	58.69	PK	V	4.09	62.78	122.20	-59.42
11490.00	44.38	PK	H	14.31	58.69	74	-15.31
11490.00	30.46	AV	H	14.31	44.77	54	-9.23
11490.00	44.59	PK	V	14.31	58.90	74	-15.10
11490.00	30.61	AV	V	14.31	44.92	54	-9.08
5785MHz							
11570.00	44.77	PK	H	14.05	58.82	74	-15.18
11570.00	30.89	AV	H	14.05	44.94	54	-9.06
11570.00	44.94	PK	V	14.05	58.99	74	-15.01
11570.00	31.08	AV	V	14.05	45.13	54	-8.87
5825MHz							
5853.30	55.53	PK	H	4.09	59.62	122.20	-62.58
5855.76	55.27	PK	H	4.09	59.36	110.80	-51.44
5915.92	55.18	PK	H	4.59	59.77	105.20	-45.43
5947.25	55.02	PK	H	4.69	59.71	68.20	-8.49
5851.96	56.05	PK	V	4.09	60.14	122.20	-62.06
5855.88	55.56	PK	V	4.09	59.65	110.80	-51.15
5901.75	55.21	PK	V	4.59	59.80	105.20	-45.40
5948.19	55.13	PK	V	4.69	59.82	68.20	-8.38
11650.00	45.19	PK	H	13.83	59.02	74	-14.98
11650.00	31.40	AV	H	13.83	45.23	54	-8.77
11650.00	45.35	PK	V	13.83	59.18	74	-14.82
11650.00	31.57	AV	V	13.83	45.40	54	-8.60



Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11a (ANT 2)</b>							
5745MHz							
5632.54	55.09	PK	H	3.59	58.68	68.20	-9.52
5699.27	55.15	PK	H	3.79	58.94	105.20	-46.26
5718.69	55.54	PK	H	4.09	59.63	110.80	-51.17
5724.35	60.88	PK	H	4.09	64.97	122.20	-57.23
5631.01	55.32	PK	V	3.59	58.91	68.20	-9.29
5668.13	55.49	PK	V	3.69	59.18	105.20	-46.02
5719.64	55.91	PK	V	4.09	60.00	110.80	-50.80
5724.57	61.24	PK	V	4.09	65.33	122.20	-56.87
11490.00	44.39	PK	H	14.31	58.70	74	-15.30
11490.00	30.41	AV	H	14.31	44.72	54	-9.28
11490.00	44.62	PK	V	14.31	58.93	74	-15.07
11490.00	30.58	AV	V	14.31	44.89	54	-9.11
5785MHz							
11570.00	44.83	PK	H	14.05	58.88	74	-15.12
11570.00	30.79	AV	H	14.05	44.84	54	-9.16
11570.00	45.01	PK	V	14.05	59.06	74	-14.94
11570.00	30.95	AV	V	14.05	45.00	54	-9.00
5825MHz							
5850.64	56.63	PK	H	4.09	60.72	122.20	-61.48
5857.39	55.32	PK	H	4.09	59.41	110.80	-51.39
5878.78	55.18	PK	H	4.19	59.37	105.20	-45.83
5925.81	55.27	PK	H	4.69	59.96	68.20	-8.24
5850.13	57.12	PK	V	4.09	61.21	122.20	-60.99
5867.61	55.87	PK	V	4.19	60.06	110.80	-50.74
5898.72	55.68	PK	V	4.19	59.87	105.20	-45.33
5934.04	55.46	PK	V	4.69	60.15	68.20	-8.05
11650.00	45.27	PK	H	13.83	59.10	74	-14.90
11650.00	31.44	AV	H	13.83	45.27	54	-8.73
11650.00	45.53	PK	V	13.83	59.36	74	-14.64
11650.00	31.62	AV	V	13.83	45.45	54	-8.55

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac20</b>							
5745MHz							
5649.52	55.32	PK	H	3.59	58.91	68.20	-9.29
5698.27	55.45	PK	H	3.79	59.24	105.20	-45.96
5719.60	58.97	PK	H	4.09	63.06	110.80	-47.74
5724.75	64.74	PK	H	4.09	68.83	122.20	-53.37
5627.39	55.64	PK	V	3.59	59.23	68.20	-8.97
5666.64	55.87	PK	V	3.69	59.56	105.20	-45.64
5717.93	59.36	PK	V	4.09	63.45	110.80	-47.35
5724.86	64.88	PK	V	4.09	68.97	122.20	-53.23
11490.00	44.25	PK	H	14.31	58.56	74	-15.44
11490.00	30.38	AV	H	14.31	44.69	54	-9.31
11490.00	44.44	PK	V	14.31	58.75	74	-15.25
11490.00	30.52	AV	V	14.31	44.83	54	-9.17
5785MHz							
11570.00	44.74	PK	H	14.05	58.79	74	-15.21
11570.00	30.89	AV	H	14.05	44.94	54	-9.06
11570.00	44.96	PK	V	14.05	59.01	74	-14.99
11570.00	31.07	AV	V	14.05	45.12	54	-8.88
5825MHz							
5850.16	68.57	PK	H	4.09	72.66	122.20	-49.54
5855.87	63.89	PK	H	4.09	67.98	110.80	-42.82
5880.69	55.61	PK	H	4.19	59.80	105.20	-45.40
5927.32	55.42	PK	H	4.69	60.11	68.20	-8.09
5850.01	69.43	PK	V	4.09	73.52	122.20	-48.68
5855.94	64.55	PK	V	4.09	68.64	110.80	-42.16
5890.18	55.89	PK	V	4.19	60.08	105.20	-45.12
5945.83	55.66	PK	V	4.69	60.35	68.20	-7.85
11650.00	45.21	PK	H	13.83	59.04	74	-14.96
11650.00	31.46	AV	H	13.83	45.29	54	-8.71
11650.00	45.39	PK	V	13.83	59.22	74	-14.78
11650.00	31.63	AV	V	13.83	45.46	54	-8.54

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac40</b>							
5755MHz							
5635.42	55.84	PK	H	3.59	59.43	68.20	-8.77
5699.75	60.02	PK	H	3.79	63.81	105.20	-41.39
5719.90	65.57	PK	H	4.09	69.66	110.80	-41.14
5720.69	66.66	PK	H	4.09	70.75	122.20	-51.45
5636.86	55.97	PK	V	4.09	60.06	68.20	-8.14
5699.37	60.64	PK	V	3.79	64.43	105.20	-40.77
5719.06	66.08	PK	V	4.09	70.17	110.80	-40.63
5723.11	67.19	PK	V	4.09	71.28	122.20	-50.92
11510.00	44.44	PK	H	14.29	58.73	74	-15.27
11510.00	30.87	AV	H	14.29	45.16	54	-8.84
11510.00	44.63	PK	V	14.29	58.92	74	-15.08
11510.00	31.05	AV	V	14.29	45.34	54	-8.66
5795MHz							
5852.84	61.47	PK	H	4.09	65.56	122.20	-56.64
5855.95	59.69	PK	H	4.09	63.78	110.80	-47.02
5878.43	56.91	PK	H	4.19	61.10	105.20	-44.10
5925.72	55.38	PK	H	4.69	60.07	68.20	-8.13
5852.64	62.36	PK	V	4.09	66.45	122.20	-55.75
5856.31	60.19	PK	V	4.09	64.28	110.80	-46.52
5875.96	57.45	PK	V	4.19	61.64	105.20	-43.56
5927.57	55.61	PK	V	4.69	60.30	68.20	-7.90
11590.00	45.46	PK	H	13.97	59.43	74	-14.57
11590.00	31.77	AV	H	13.97	45.74	54	-8.26
11590.00	45.68	PK	V	13.97	59.65	74	-14.35
11590.00	31.93	AV	V	13.97	45.90	54	-8.10

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ac80</b>							
5775MHz							
5625.28	55.54	PK	H	3.59	59.13	68.20	-9.07
5698.57	59.98	PK	H	3.79	63.77	105.20	-41.43
5719.45	62.37	PK	H	4.09	66.46	110.80	-44.34
5724.72	67.69	PK	H	4.09	71.78	122.20	-50.42
5620.75	55.83	PK	V	3.59	59.42	68.20	-8.78
5699.24	60.54	PK	V	3.79	64.33	105.20	-40.87
5711.69	62.95	PK	V	4.09	67.04	110.80	-43.76
5724.91	68.02	PK	V	4.09	72.11	122.20	-50.09
5850.91	64.78	PK	H	4.09	68.87	122.20	-53.33
5856.64	63.69	PK	H	4.09	67.78	110.80	-43.02
5878.82	57.93	PK	H	4.19	62.12	105.20	-43.08
5926.36	55.82	PK	H	4.69	60.51	68.20	-7.69
5854.95	65.65	PK	V	4.09	69.74	122.20	-52.46
5857.09	63.87	PK	V	4.09	67.96	110.80	-42.84
5877.21	58.56	PK	V	4.19	62.75	105.20	-42.45
5925.87	56.02	PK	V	4.69	60.71	68.20	-7.49
11550.00	45.36	PK	H	14.13	59.49	74	-14.51
11550.00	31.69	AV	H	14.13	45.82	54	-8.18
11550.00	45.21	PK	V	14.13	59.34	74	-14.66
11550.00	31.58	AV	V	14.13	45.71	54	-8.29

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax20</b>							
5745MHz							
5627.32	55.23	PK	H	3.59	58.82	68.20	-9.38
5699.57	55.48	PK	H	3.79	59.27	105.20	-45.93
5719.49	61.94	PK	H	4.09	66.03	110.80	-44.77
5724.18	66.87	PK	H	4.09	70.96	122.20	-51.24
5625.81	55.45	PK	V	3.59	59.04	68.20	-9.16
5667.76	55.82	PK	V	3.69	59.51	105.20	-45.69
5719.68	62.76	PK	V	4.09	66.85	110.80	-43.95
5724.93	67.54	PK	V	4.09	71.63	122.20	-50.57
11490.00	44.62	PK	H	14.31	58.93	74	-15.07
11490.00	30.53	AV	H	14.31	44.84	54	-9.16
11490.00	44.78	PK	V	14.31	59.09	74	-14.91
11490.00	30.69	AV	V	14.31	45.00	54	-9.00
5785MHz							
11570.00	45.15	PK	H	14.05	59.20	74	-14.80
11570.00	31.06	AV	H	14.05	45.11	54	-8.89
11570.00	45.32	PK	V	14.05	59.37	74	-14.63
11570.00	31.24	AV	V	14.05	45.29	54	-8.71
5825MHz							
5850.48	66.62	PK	H	4.09	70.71	122.20	-51.49
5857.21	58.57	PK	H	4.09	62.66	110.80	-48.14
5886.64	56.16	PK	H	4.19	60.35	105.20	-44.85
5927.39	55.33	PK	H	4.69	60.02	68.20	-8.18
5851.36	68.25	PK	V	4.09	72.34	122.20	-49.86
5855.83	59.37	PK	V	4.09	63.46	110.80	-47.34
5880.52	56.84	PK	V	4.19	61.03	105.20	-44.17
5925.75	55.56	PK	V	4.69	60.25	68.20	-7.95
11650.00	45.54	PK	H	13.83	59.37	74	-14.63
11650.00	31.48	AV	H	13.83	45.31	54	-8.69
11650.00	45.71	PK	V	13.83	59.54	74	-14.46
11650.00	31.63	AV	V	13.83	45.46	54	-8.54

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax40</b>							
5755MHz							
5624.39	55.64	PK	H	3.59	59.23	68.20	-8.97
5699.65	58.17	PK	H	3.79	61.96	105.20	-43.24
5719.27	63.82	PK	H	4.09	67.91	110.80	-42.89
5724.51	65.96	PK	H	4.09	70.05	122.20	-52.15
5620.36	55.89	PK	V	3.59	59.48	68.20	-8.72
5699.24	58.75	PK	V	3.79	62.54	105.20	-42.66
5718.28	64.98	PK	V	4.09	69.07	110.80	-41.73
5724.73	66.81	PK	V	4.09	70.90	122.20	-51.30
11510.00	44.81	PK	H	14.29	59.10	74	-14.90
11510.00	30.92	AV	H	14.29	45.21	54	-8.79
11510.00	44.64	PK	V	14.29	58.93	74	-15.07
11510.00	30.88	AV	V	14.29	45.17	54	-8.83
5795MHz							
5850.39	60.27	PK	H	4.09	64.36	122.20	-57.84
5855.86	59.45	PK	H	4.09	63.54	110.80	-47.26
5878.64	57.19	PK	H	4.19	61.38	105.20	-43.82
5925.75	55.51	PK	H	4.69	60.20	68.20	-8.00
5850.72	61.05	PK	V	4.09	65.14	122.20	-57.06
5856.19	59.94	PK	V	4.09	64.03	110.80	-46.77
5875.54	57.68	PK	V	4.19	61.87	105.20	-43.33
5926.25	55.73	PK	V	4.69	60.42	68.20	-7.78
11590.00	45.57	PK	H	13.97	59.54	74	-14.46
11590.00	31.82	AV	H	13.97	45.79	54	-8.21
11590.00	45.40	PK	V	13.97	59.37	74	-14.63
11590.00	31.71	AV	V	13.97	45.68	54	-8.32

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/AV					
<b>802.11ax80</b>							
5775MHz							
5624.86	55.69	PK	H	0.00	55.69	68.20	-12.51
5694.75	58.94	PK	H	0.00	58.94	105.20	-46.26
5719.17	64.18	PK	H	0.00	64.18	110.80	-46.62
5723.98	67.03	PK	H	0.00	67.03	122.20	-55.17
5625.63	55.96	PK	V	0.00	55.96	68.20	-12.24
5698.94	59.68	PK	V	0.00	59.68	105.20	-45.52
5719.52	65.05	PK	V	0.00	65.05	110.80	-45.75
5724.48	67.87	PK	V	0.00	67.87	122.20	-54.33
5851.75	62.13	PK	H	4.09	66.22	122.20	-55.98
5857.42	59.82	PK	H	4.09	63.91	110.80	-46.89
5875.96	57.05	PK	H	4.19	61.24	105.20	-43.96
5925.87	55.61	PK	H	4.69	60.30	68.20	-7.90
5850.93	62.97	PK	V	4.09	67.06	122.20	-55.14
5855.02	60.59	PK	V	4.09	64.68	110.80	-46.12
5876.41	57.86	PK	V	4.19	62.05	105.20	-43.15
5927.38	55.78	PK	V	4.69	60.47	68.20	-7.73
11550.00	45.43	PK	H	14.13	59.56	74	-14.44
11550.00	31.75	AV	H	14.13	45.88	54	-8.12
11550.00	45.27	PK	V	14.13	59.40	74	-14.60
11550.00	31.56	AV	V	14.13	45.69	54	-8.31

**Note:**

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

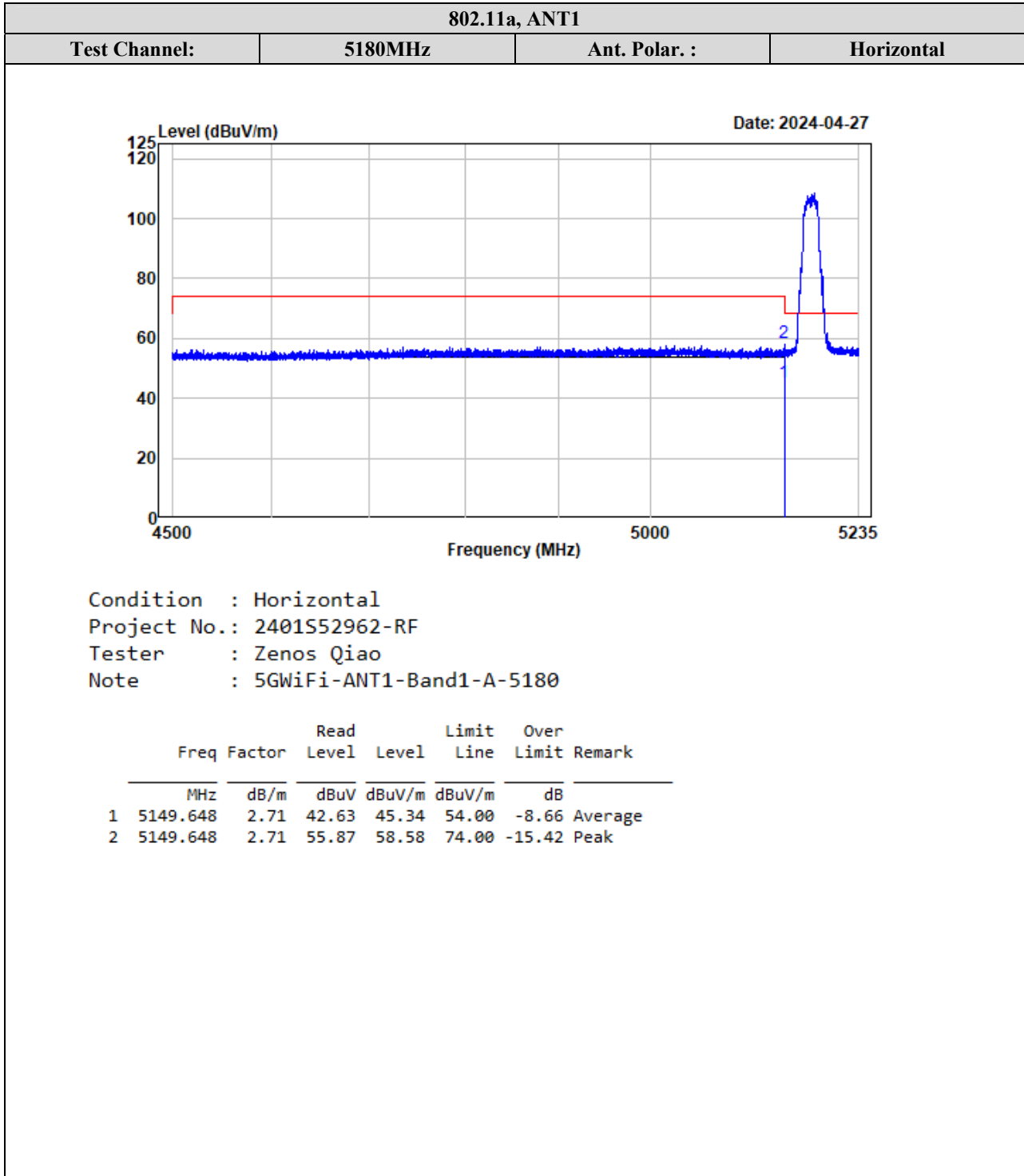
Corrected Amplitude = Factor + Reading

Margin = Corrected. Amplitude - Limit

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

**Test plots for Band Edge Measurements (Radiated)**

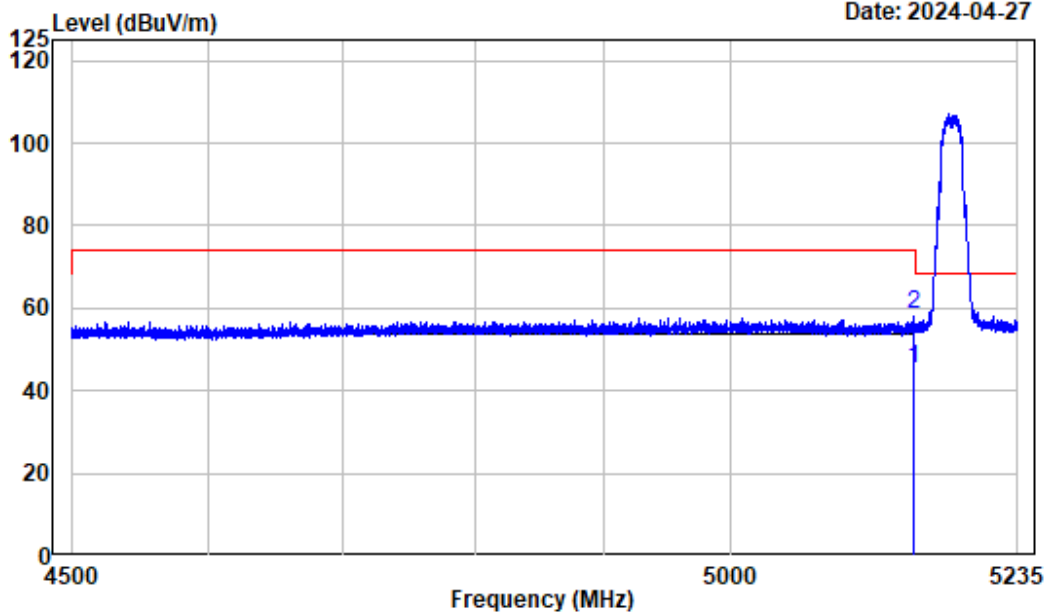
**5150-5250MHz:**





802.11a, ANT1

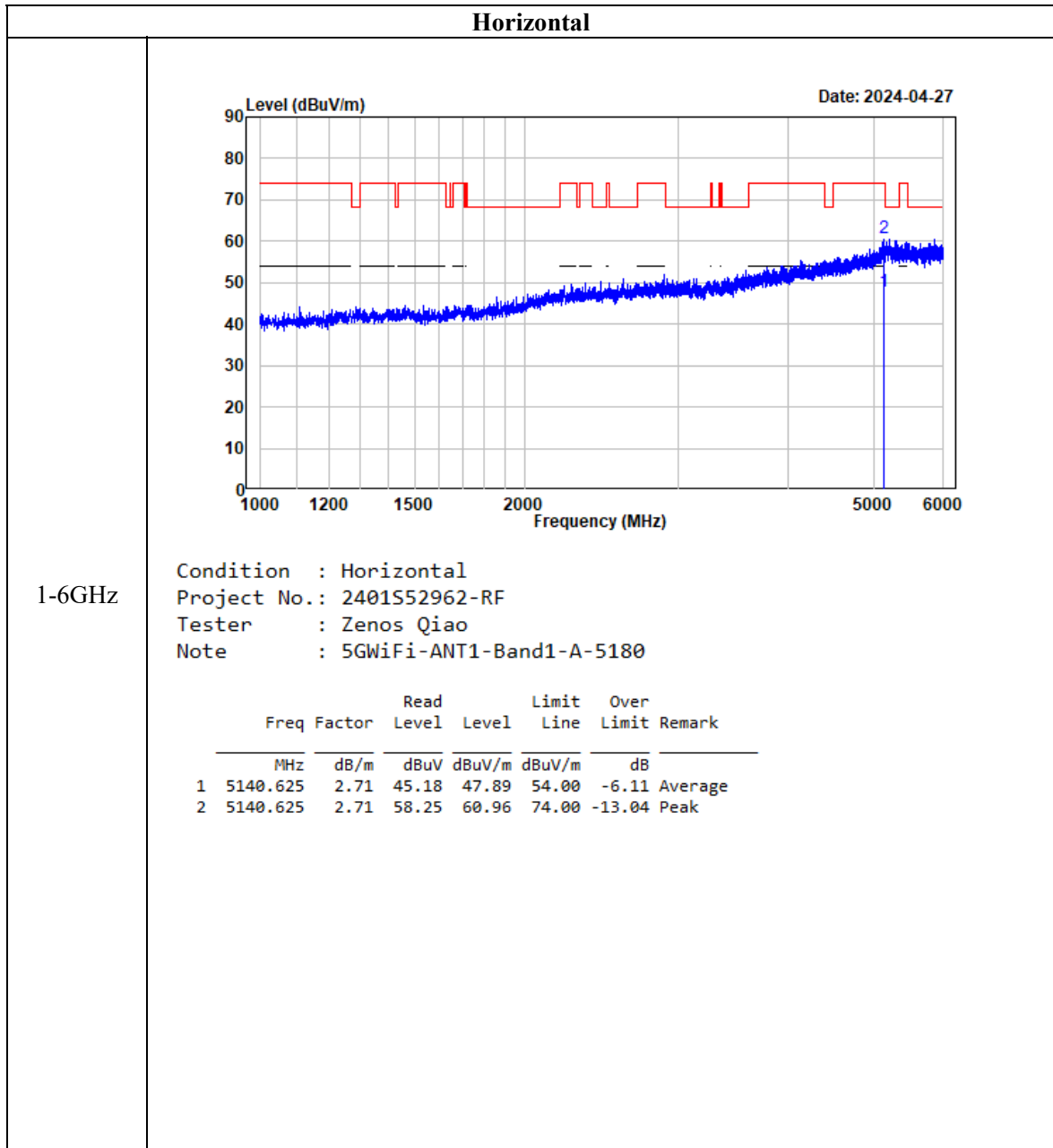
Test Channel: 5180MHz Ant. Polar.: Vertical



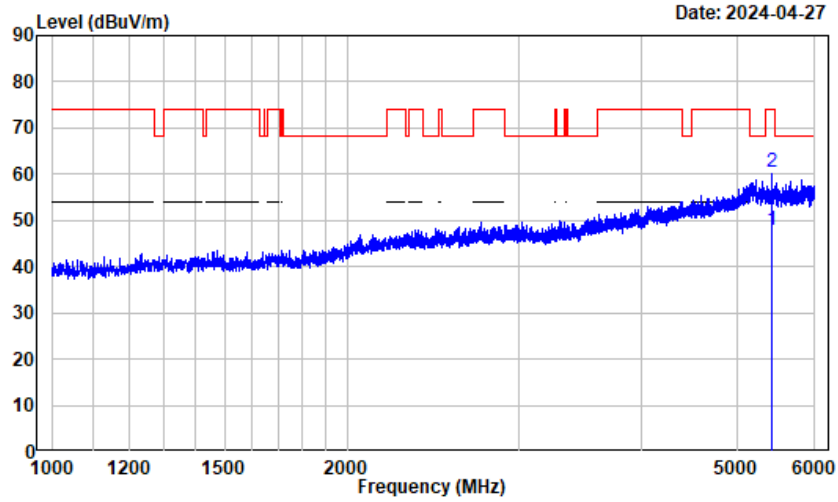
Condition : Vertical  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.556	2.71	42.45	45.16	54.00	-8.84	Average
2	5149.556	2.71	55.58	58.29	74.00	-15.71	Peak

**Test plots for Harmonic Measurement (802.11a, ANT1, 5180MHz)**



**Vertical**

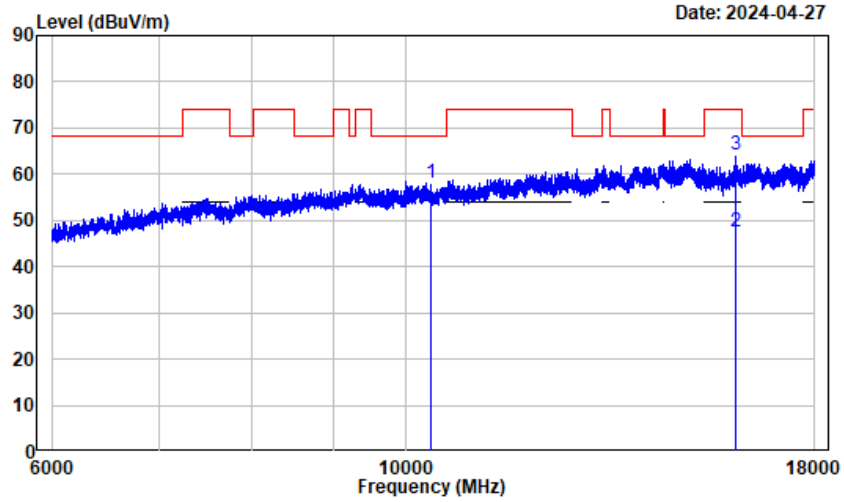


1-6GHz

Condition : Vertical  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Freq	Factor	Read Level	Read Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5430.625	3.04	44.69	47.73	54.00	-6.27	Average
2	5430.625	3.04	57.48	60.52	74.00	-13.48	Peak

**Horizontal**

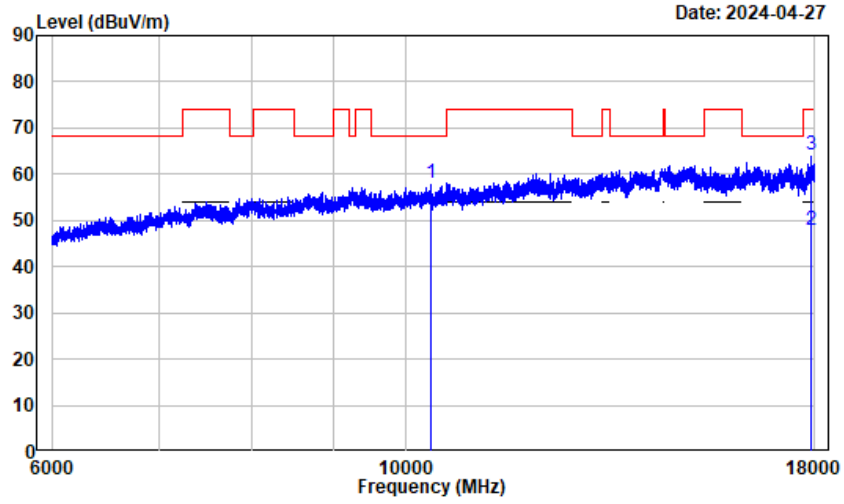


6-18GHz

Condition : Horizontal  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Read	Limit	Over				
Freq	Factor	Level	Level	Line			
MHz	dB/m	dBuV	dBuV/m	dBuV/m			
1	10360.000	13.07	44.84	57.91	68.20	-10.29	Peak
2	16062.000	13.77	33.92	47.69	54.00	-6.31	Average
3	16062.000	13.77	50.28	64.05	74.00	-9.95	Peak

Vertical

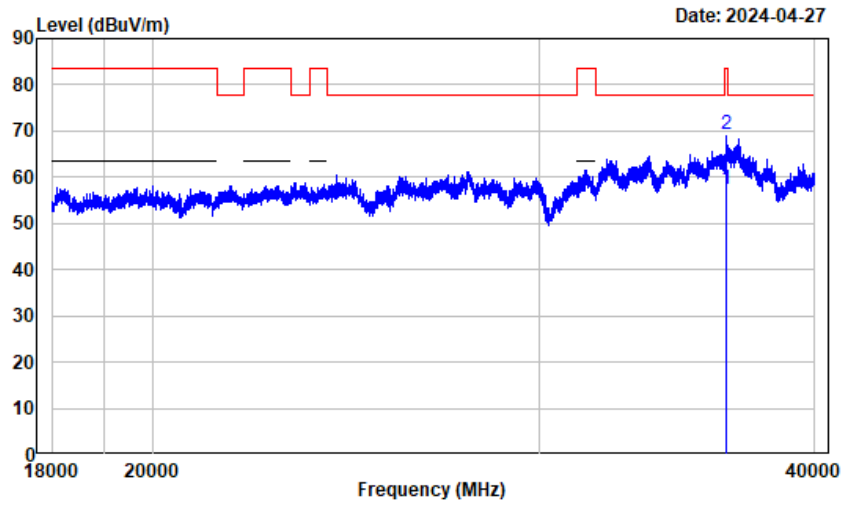


6-18GHz

Condition : Vertical  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Read	Limit	Over				
Freq	Factor	Level	Level	Line			
MHz	dB/m	dBuV	dBuV/m	dBuV/m			
1	10360.000	13.07	45.05	58.12	68.20	-10.08	Peak
2	17913.000	24.00	23.78	47.78	54.00	-6.22	Average
3	17913.000	24.00	40.36	64.36	74.00	-9.64	Peak

**Horizontal**



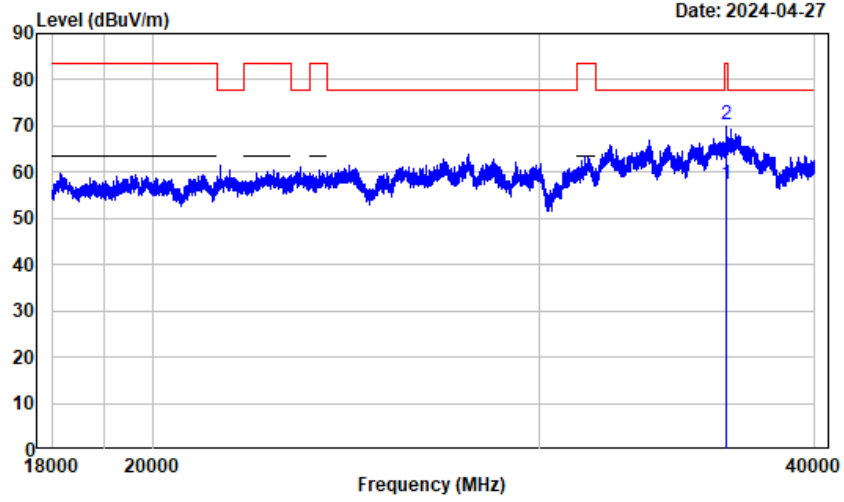
18-40GHz

Condition : Horizontal  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36475.650	25.30	31.95	57.25	63.50	-6.25	Average
2	36475.650	25.30	44.11	69.41	83.50	-14.09	Peak

**Vertical**

18-40GHz



Condition : Vertical  
 Project No.: 2401S52962-RF  
 Tester : Zenos Qiao  
 Note : 5GWiFi-ANT1-Band1-A-5180

	Read	Limit	Over				
Freq	Factor	Level	Level	Line			
MHz	dB/m	dBuV	dBuV/m	dBuV/m			
1	36488.960	25.36	32.00	57.36	63.50	-6.14	Average
2	36488.960	25.36	44.79	70.15	83.50	-13.35	Peak

## **FCC §15.407(a), (e) - 26 dB & 6dB EMISSION BANDWIDTH**

### **Applicable Standard**

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### **Test Procedure**

According to KDB789033 D02 section II.C and section II.D

#### **1. Emission Bandwidth (EBW)**

- 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 maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### **2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz**

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = 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.

#### **3. 99% Occupied Bandwidth:**

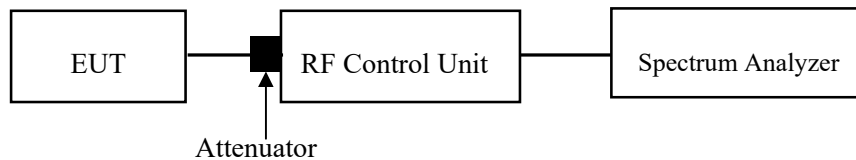
According to ANSI C63.10-2013 Section 12.4.2&6.9.3

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).



**Test Data**

**Environmental Conditions**

<b>Temperature:</b>	22~25 °C
<b>Relative Humidity:</b>	56~65 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Lee Li on 2024-04-26 and Tom Tan on 2024-05-15.*

*EUT operation mode: Transmitting*

***Test Result: Compliant. Please refer to the Appendix.***

## FCC §15.407(a) - CONDUCTED TRANSMITTER OUTPUT POWER

### Applicable Standard

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

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

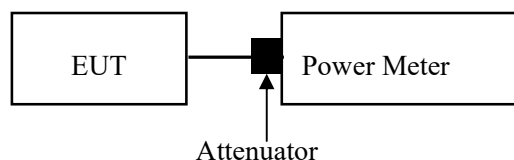
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method PM-G should be applied

- a. Place the EUT on a bench and set it in transmitting mode.
- b. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.



**Test Data****Environmental Conditions**

<b>Temperature:</b>	22~25 °C
<b>Relative Humidity:</b>	56~65 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Lee Li on 2024-04-26 and Tom Tan on 2024-05-16.*

*EUT operation mode: Transmitting*

***Test Result: Compliant. Please refer to the Appendix.***

## **FCC §15.407(a) - POWER SPECTRAL DENSITY**

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### **Test Procedure**

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

Duty cycle  $\geq 98\%$

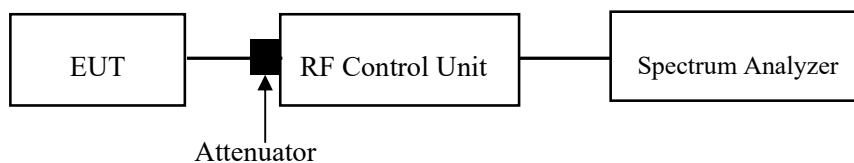
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

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.



**Test Data****Environmental Conditions**

<b>Temperature:</b>	22~25 °C
<b>Relative Humidity:</b>	56~65 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Lee Li on 2024-04-26 and Tom Tan on 2024-05-16.*

*EUT operation mode: Transmitting*

***Test Result: Compliant. Please refer to the Appendix.***

## **EUT PHOTOGRAPHS**

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Please refer to the attachment 2401S52962-RF External photo and 2401S52962-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2401S52962-RFB Test Setup photo.

**APPENDIX**

**Appendix A1: Emission Bandwidth**

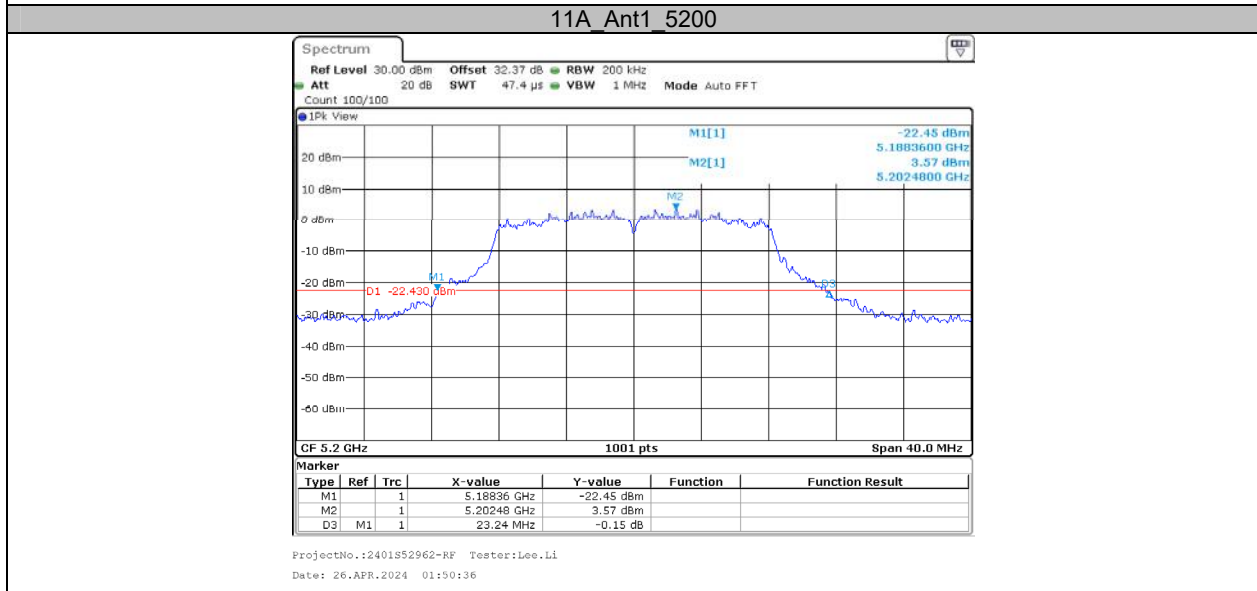
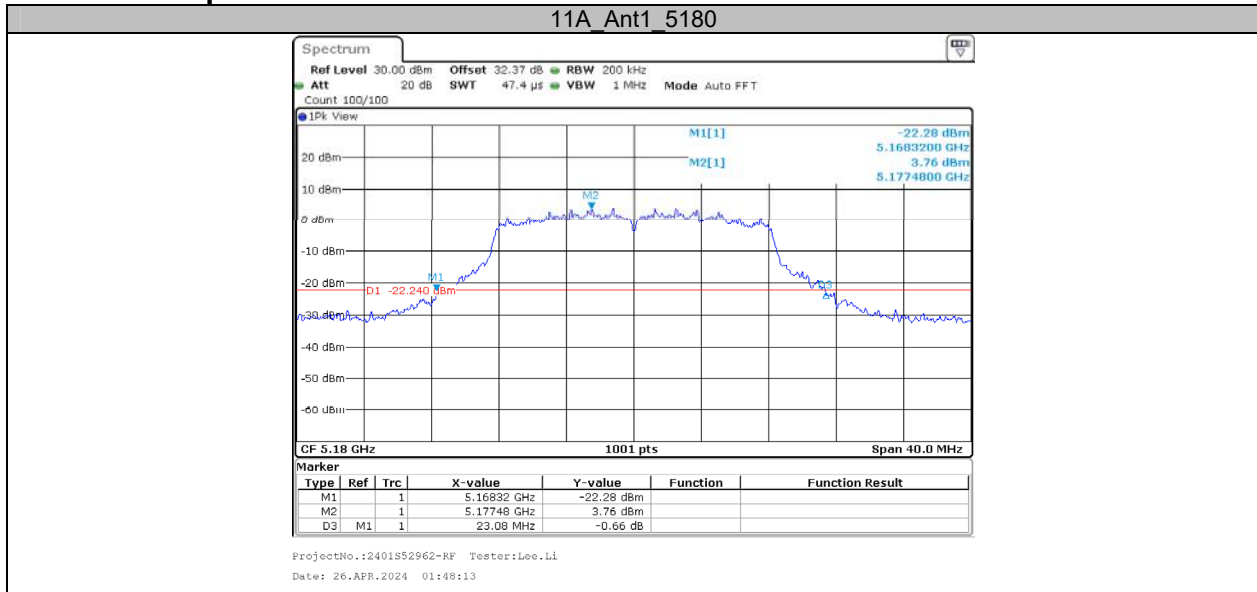
**Test Result**

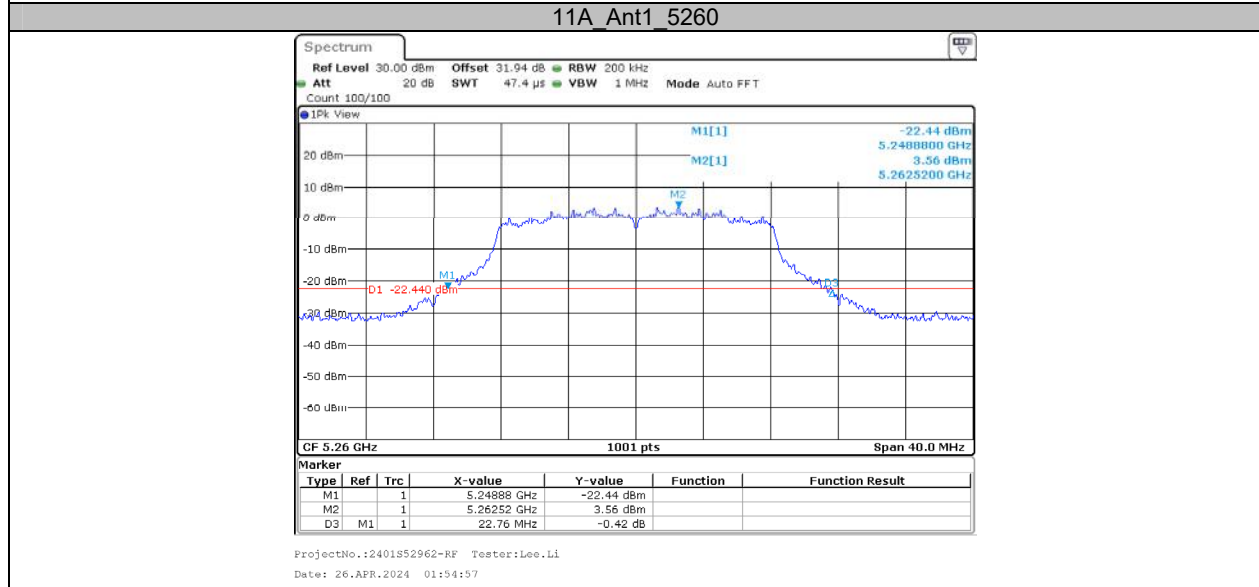
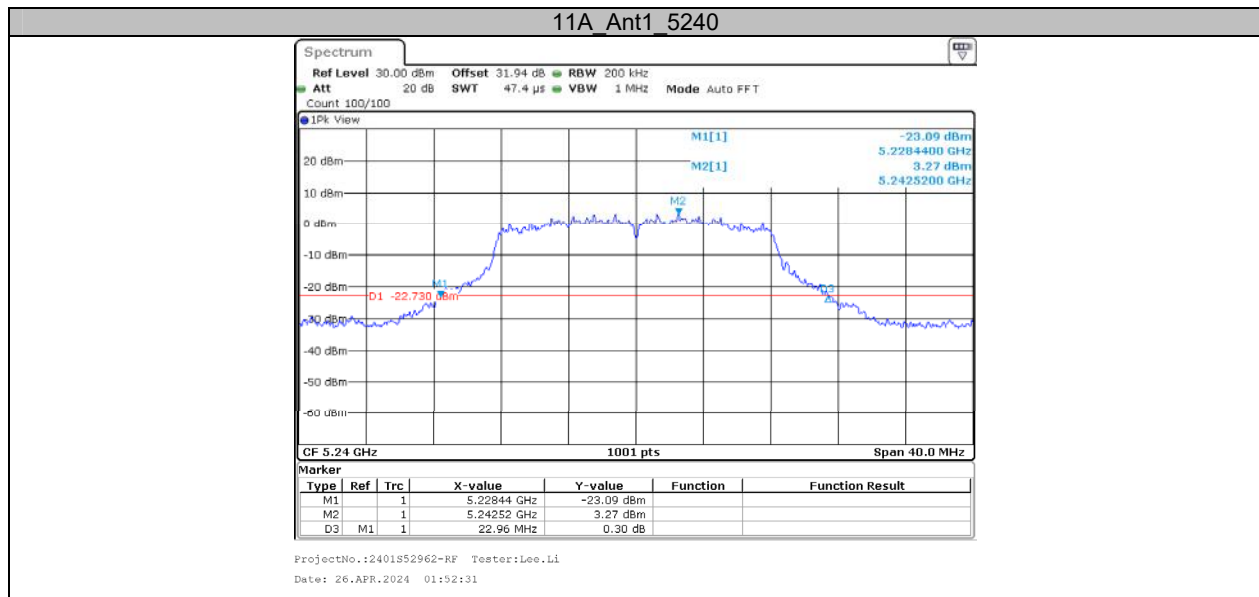
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.08	---	---
	Ant1	5200	23.24	---	---
	Ant1	5240	22.96	---	---
	Ant1	5260	22.76	---	---
	Ant1	5280	22.76	---	---
	Ant1	5320	22.96	---	---
	Ant1	5500	22.68	---	---
	Ant1	5580	23.04	---	---
11AC20MIMO	Ant1	5700	23.40	---	---
	Ant1	5180	23.04	---	---
	Ant1	5200	23.28	---	---
	Ant1	5240	23.12	---	---
	Ant1	5260	23.00	---	---
	Ant1	5280	23.36	---	---
	Ant1	5320	23.28	---	---
	Ant1	5500	23.00	---	---
11AC40MIMO	Ant1	5580	23.40	---	---
	Ant1	5700	23.36	---	---
	Ant1	5190	46.40	---	---
	Ant1	5230	45.44	---	---
	Ant1	5270	44.40	---	---
	Ant1	5310	46.08	---	---
11AC80MIMO	Ant1	5510	44.56	---	---
	Ant1	5550	47.20	---	---
	Ant1	5670	46.00	---	---
11AC160MIMO	Ant1	5210	85.28	---	---
	Ant1	5290	86.72	---	---
	Ant1	5530	85.76	---	---
11AX20MIMO	Ant1	5250	166.40	---	---
	Ant1	5250_UNII-1	81.92	---	---
	Ant1	5250_UNII-2A	84.48	---	---
11AX40MIMO	Ant1	5180	23.56	---	---
	Ant1	5200	23.44	---	---
	Ant1	5240	23.32	---	---
	Ant1	5260	23.12	---	---
	Ant1	5280	23.28	---	---
	Ant1	5320	23.28	---	---
	Ant1	5500	23.32	---	---
	Ant1	5580	22.92	---	---
11AX40MIMO	Ant1	5700	23.80	---	---
	Ant1	5190	42.96	---	---
	Ant1	5230	42.64	---	---
	Ant1	5270	45.52	---	---
	Ant1	5310	43.20	---	---
	Ant1	5510	44.24	---	---
11AX40MIMO	Ant1	5550	43.12	---	---
	Ant1	5670	43.52	---	---

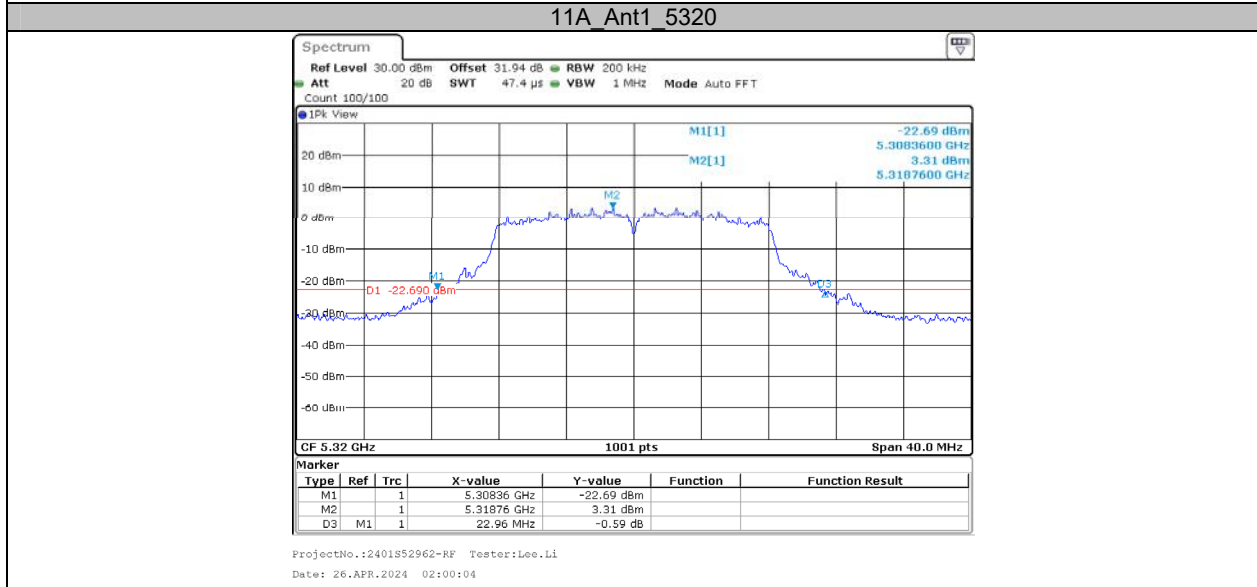
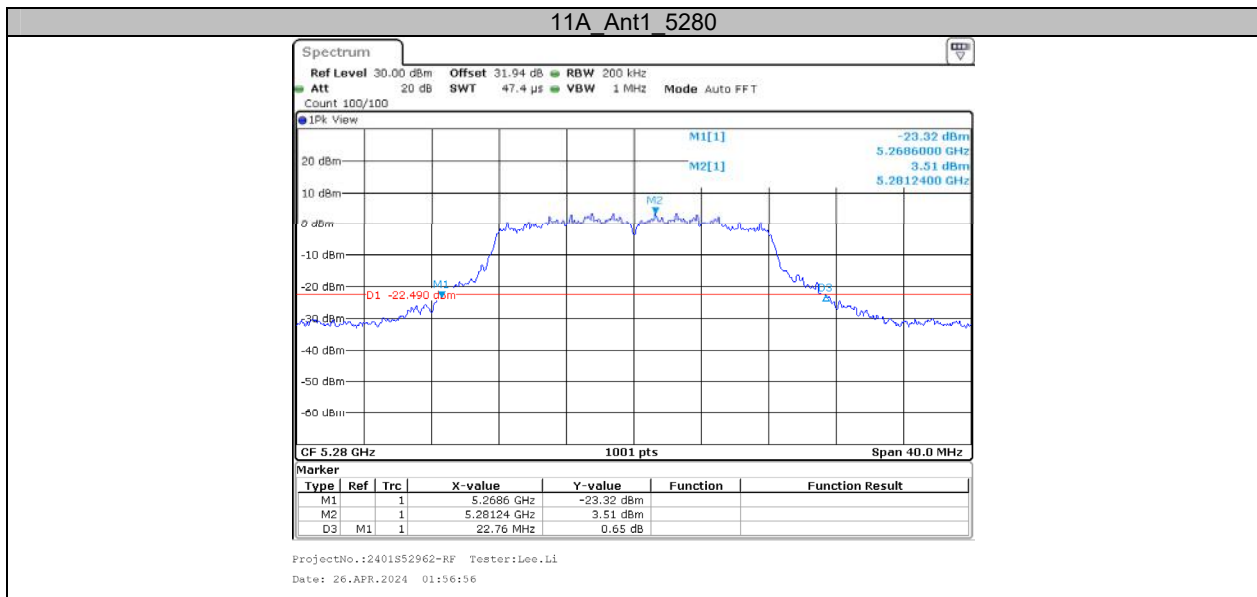


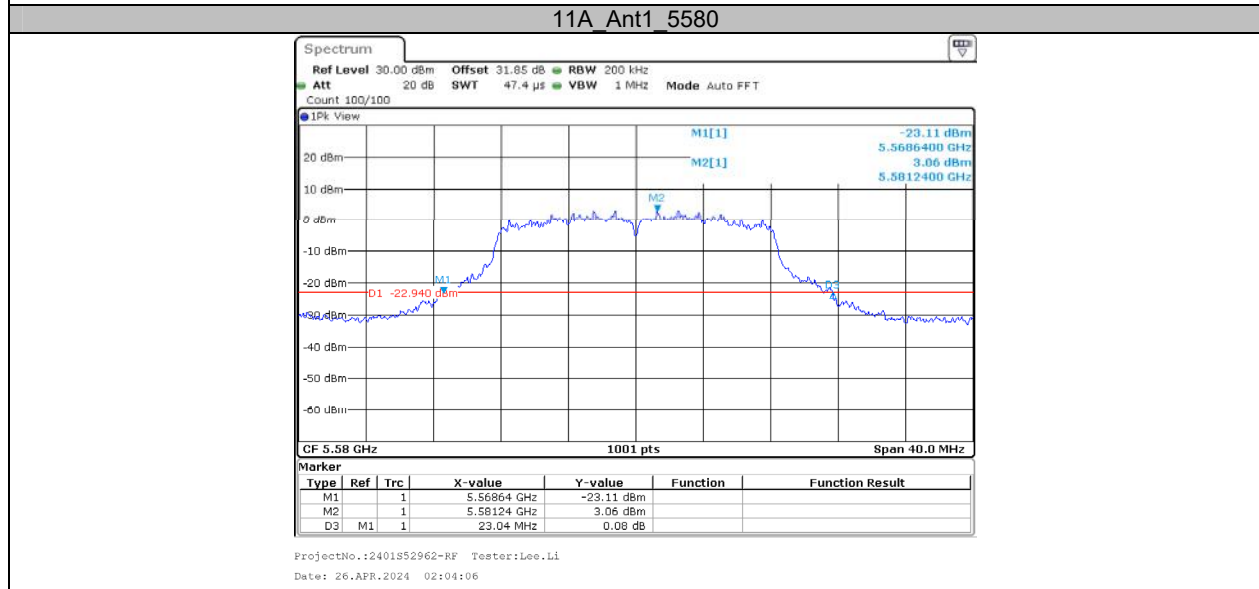
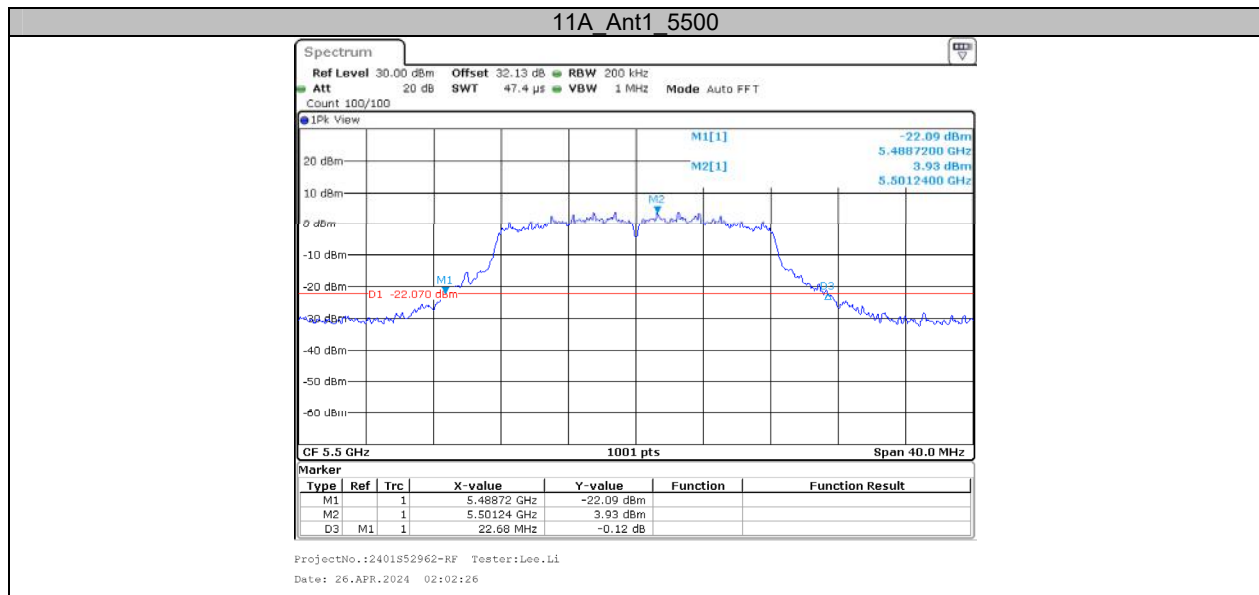
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	Limit[MHz]	Verdict
11AX80MIMO	Ant1	5210	83.36	---	---
	Ant1	5290	83.36	---	---
	Ant1	5530	83.04	---	---
11AX160MIMO	Ant1	5250	165.44	---	---
	Ant1	5250_UNII-1	81.92	---	---
	Ant1	5250_UNII-2A	83.52	---	---

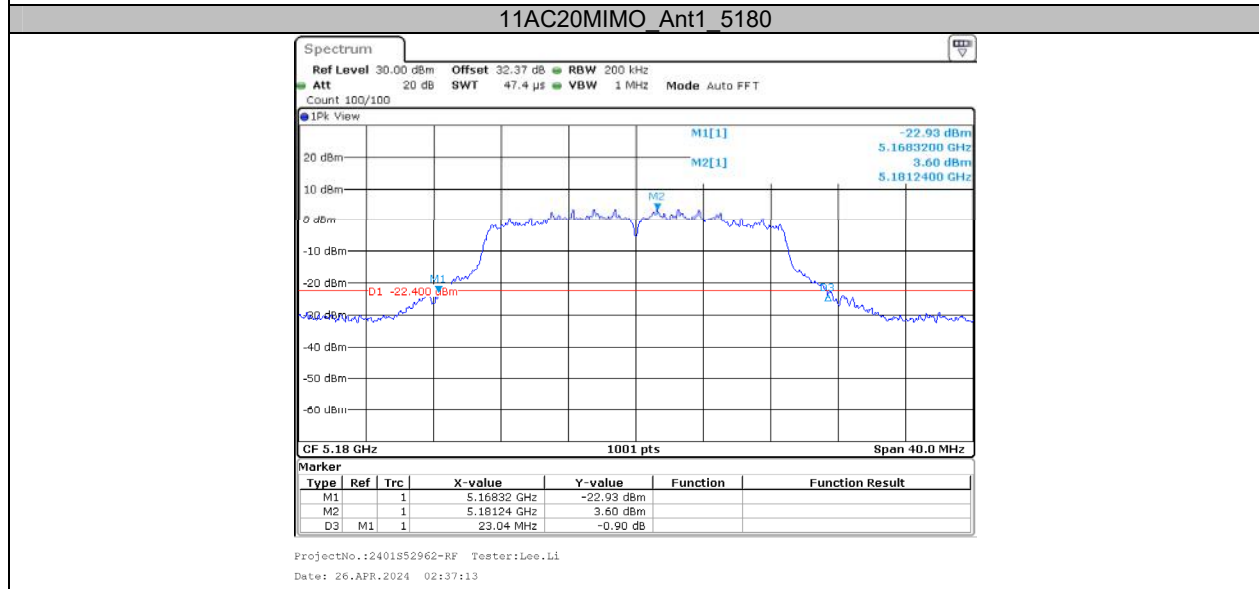
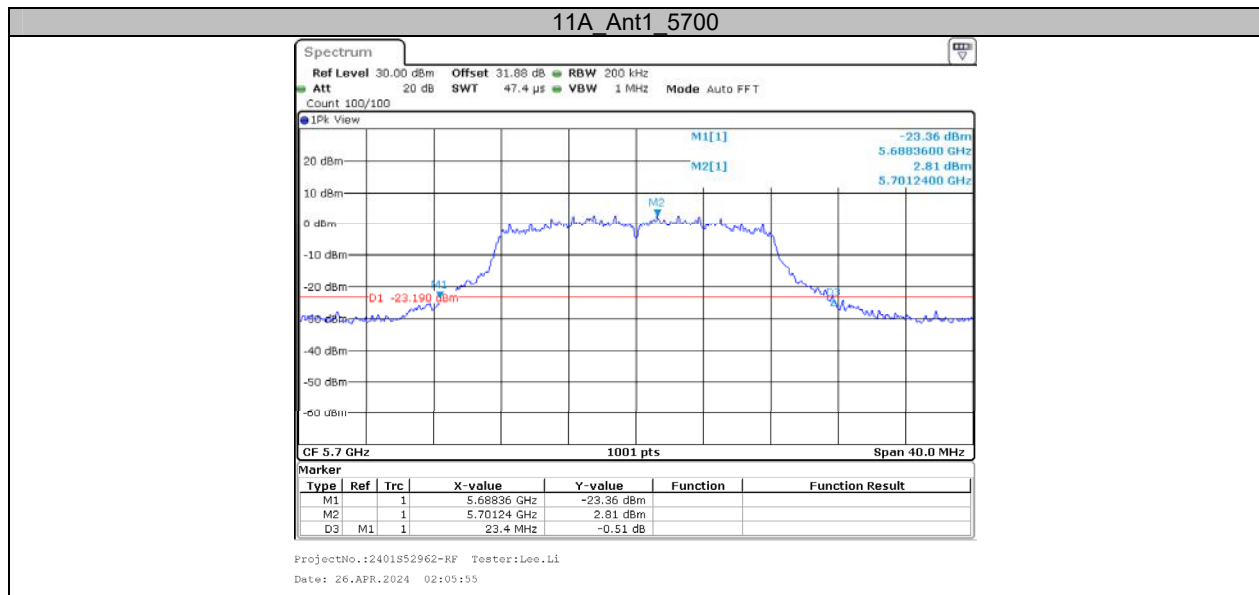
### Test Graphs

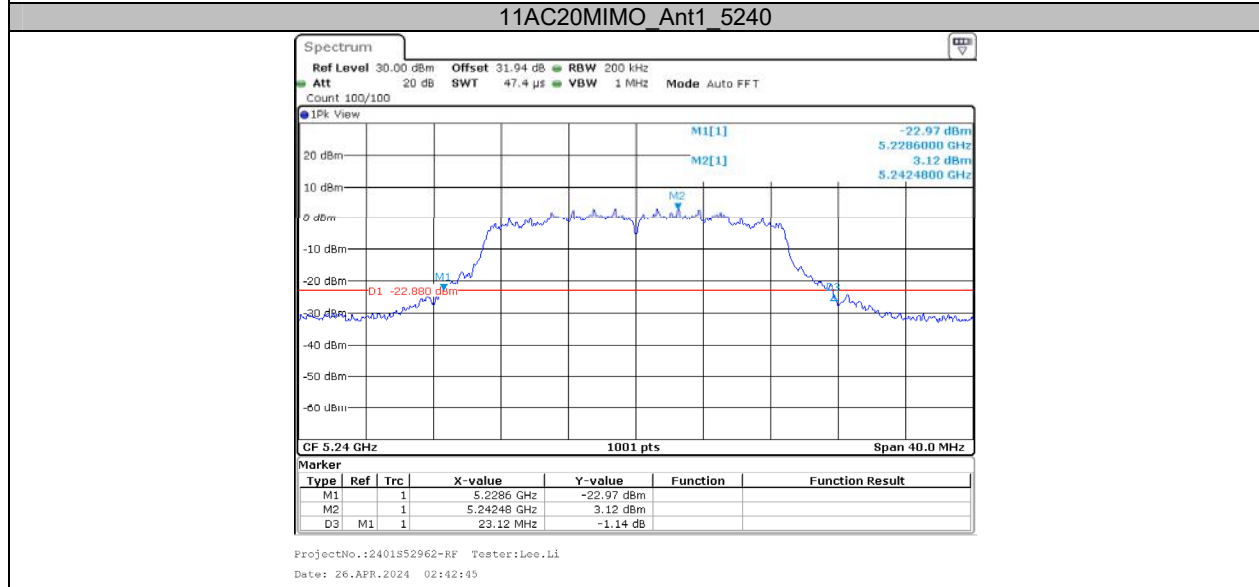
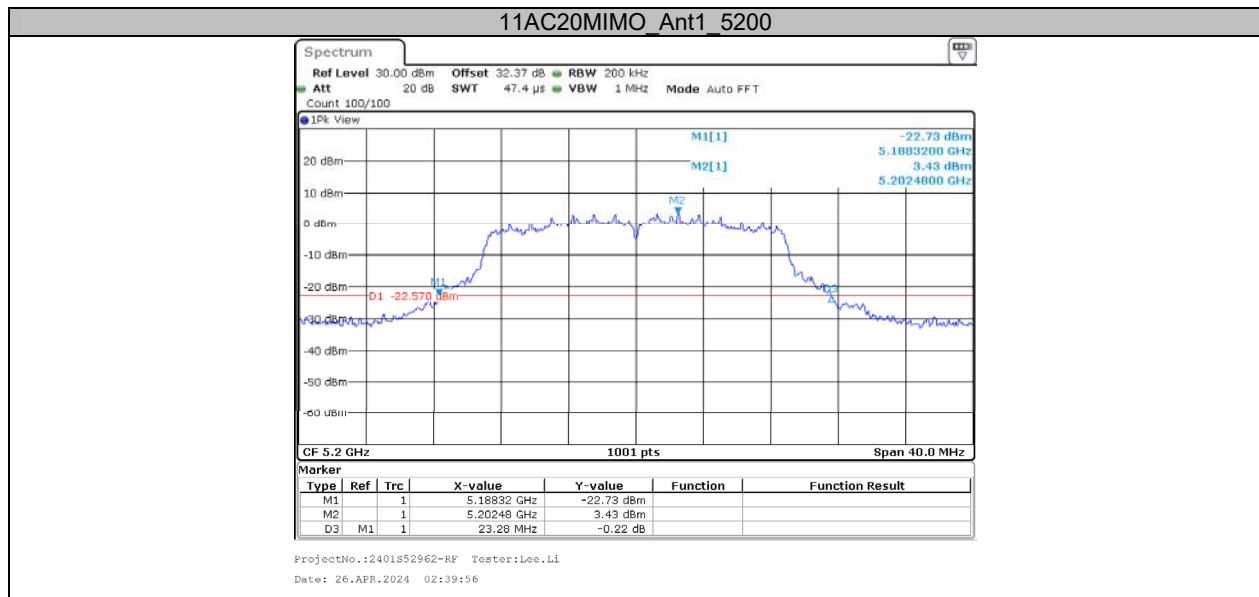


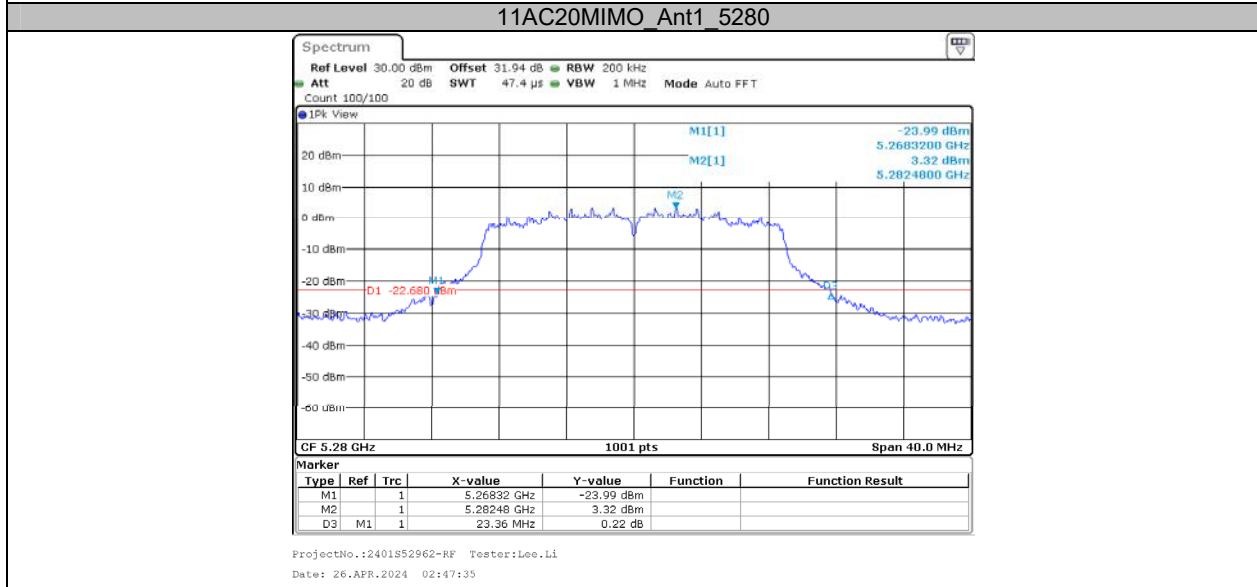
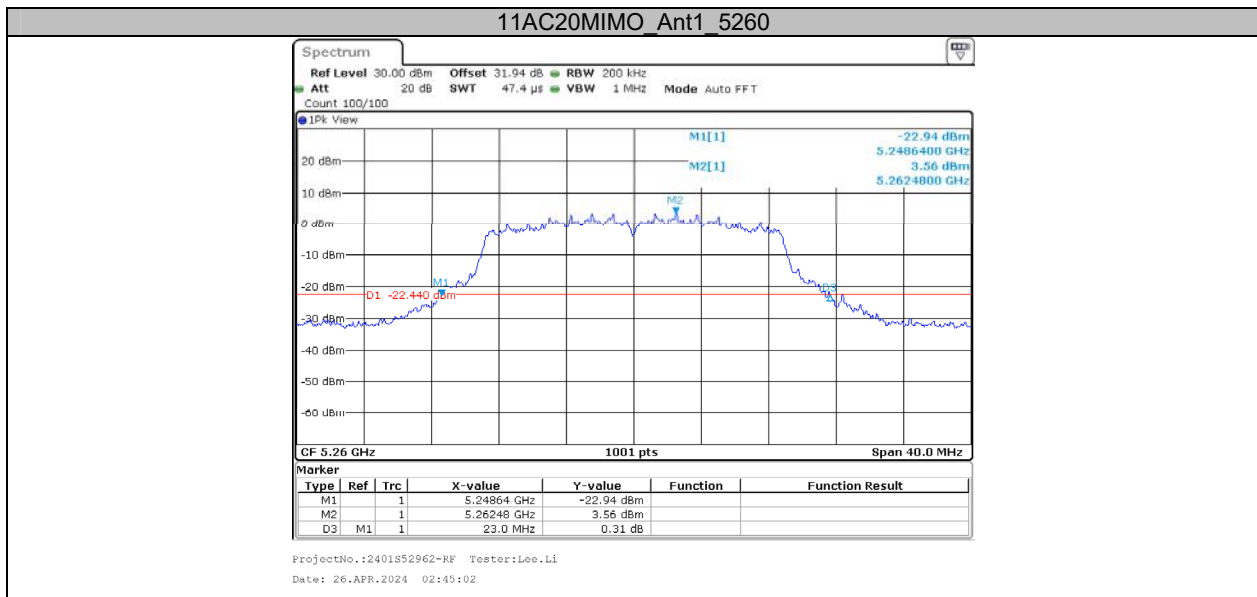




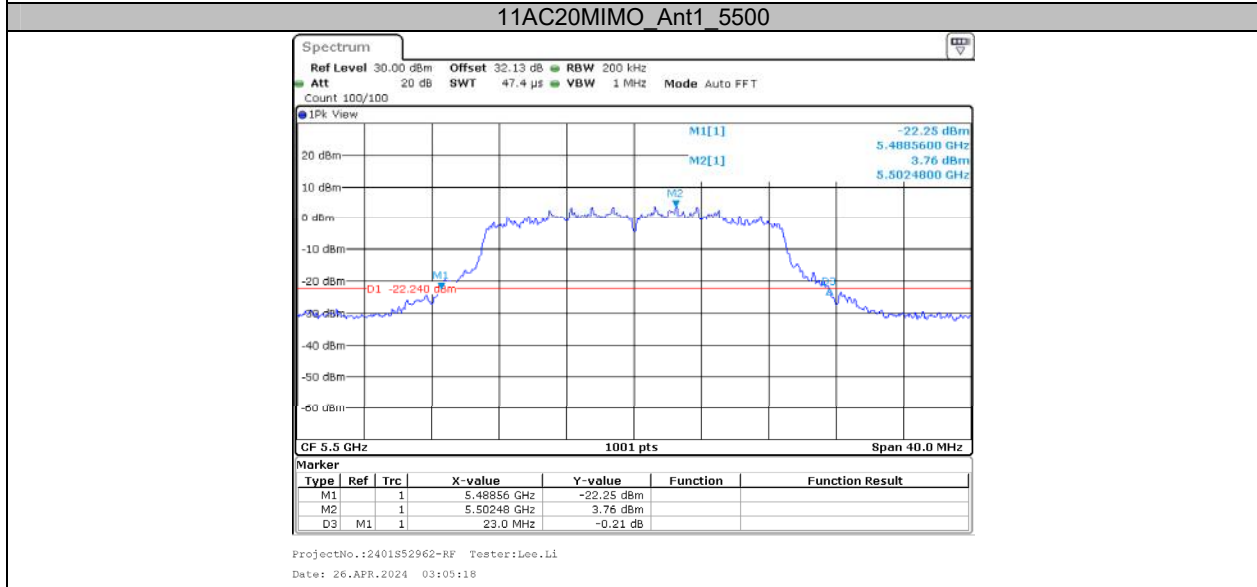
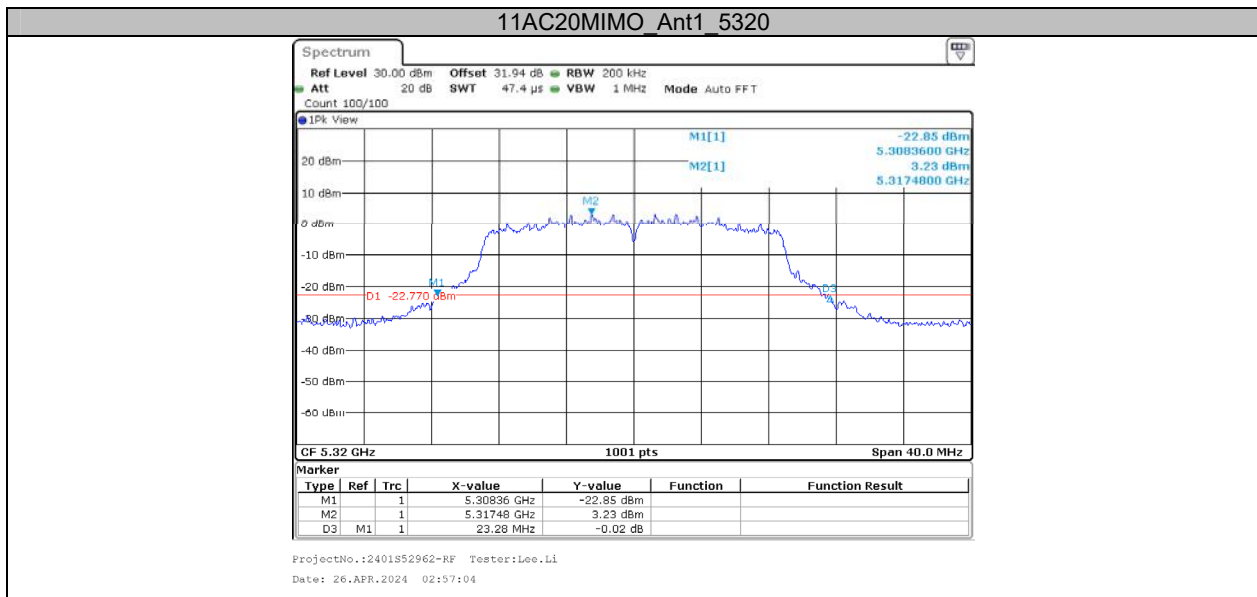


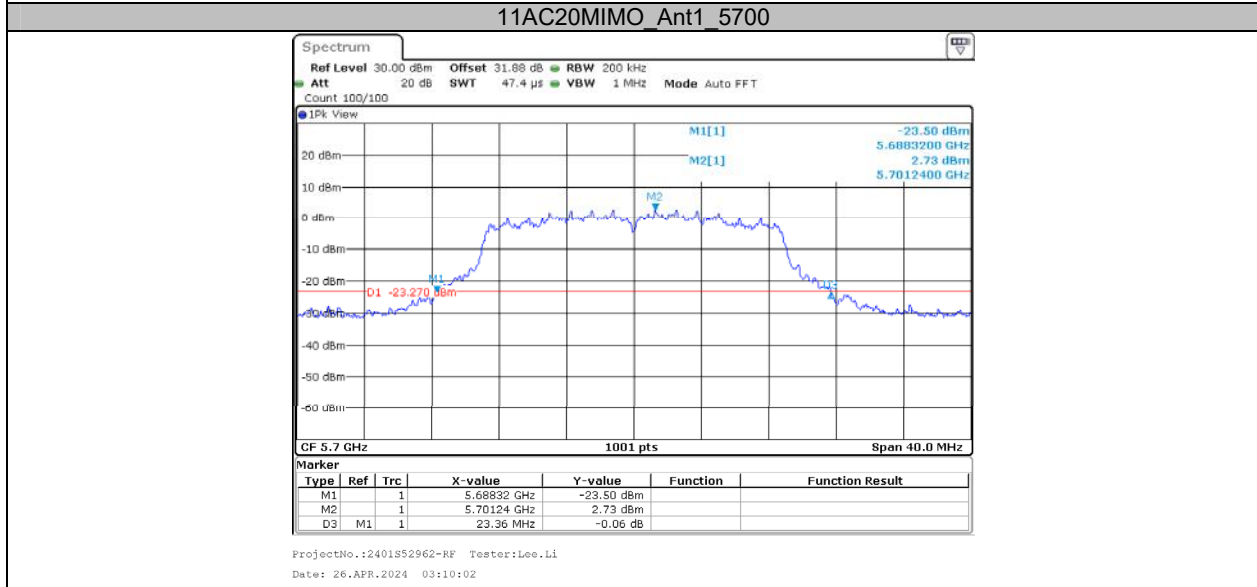
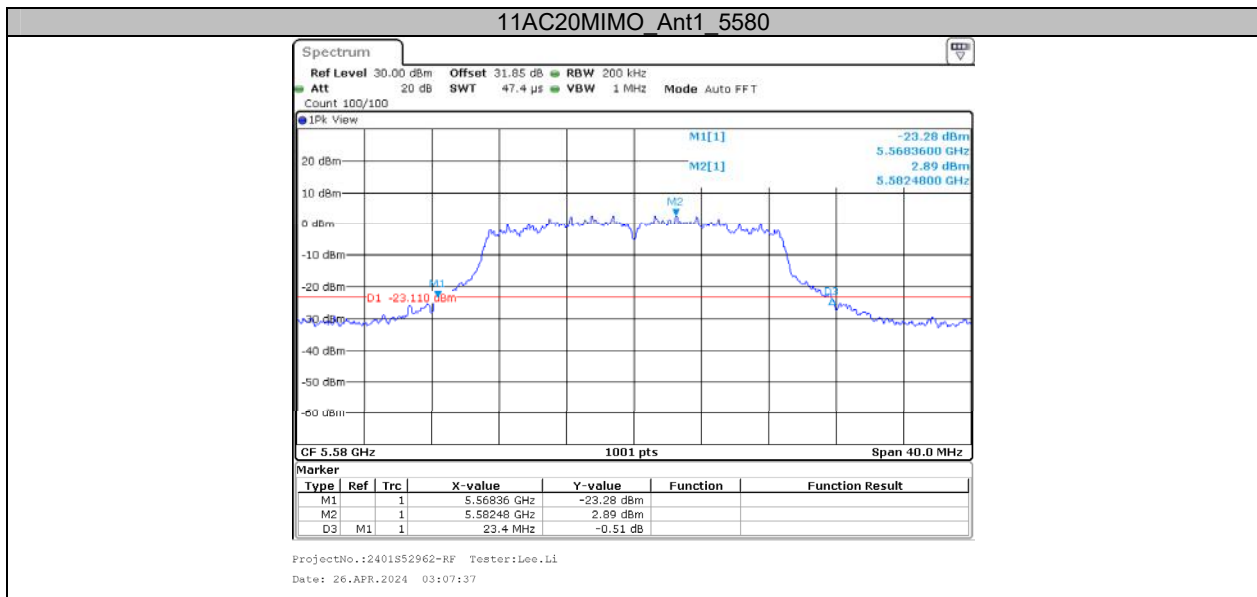


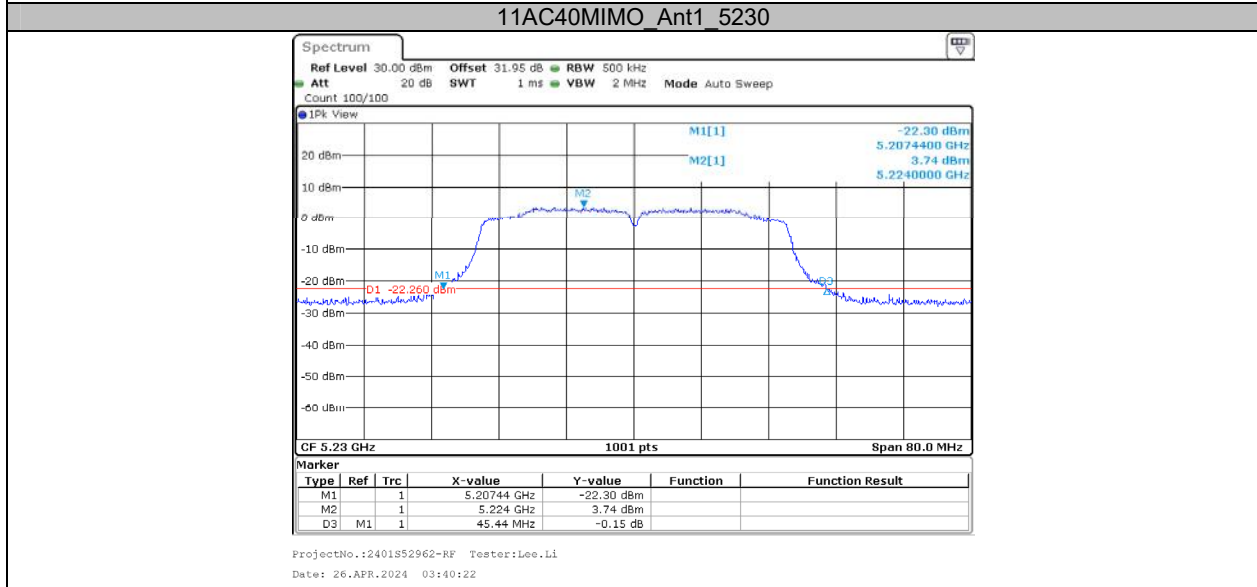
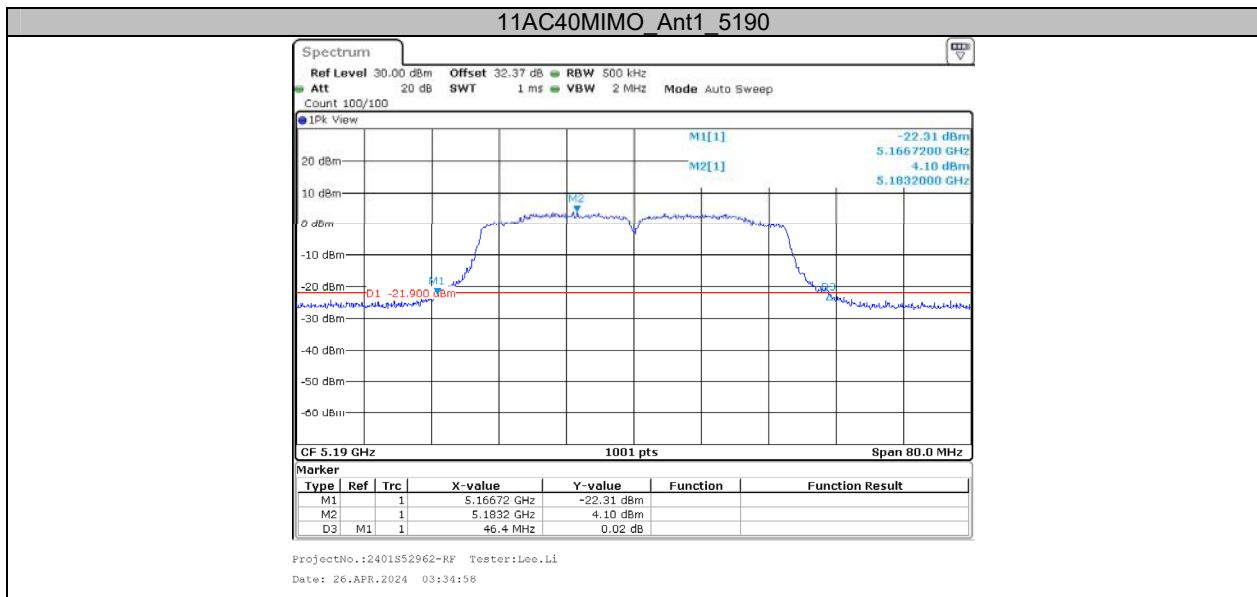


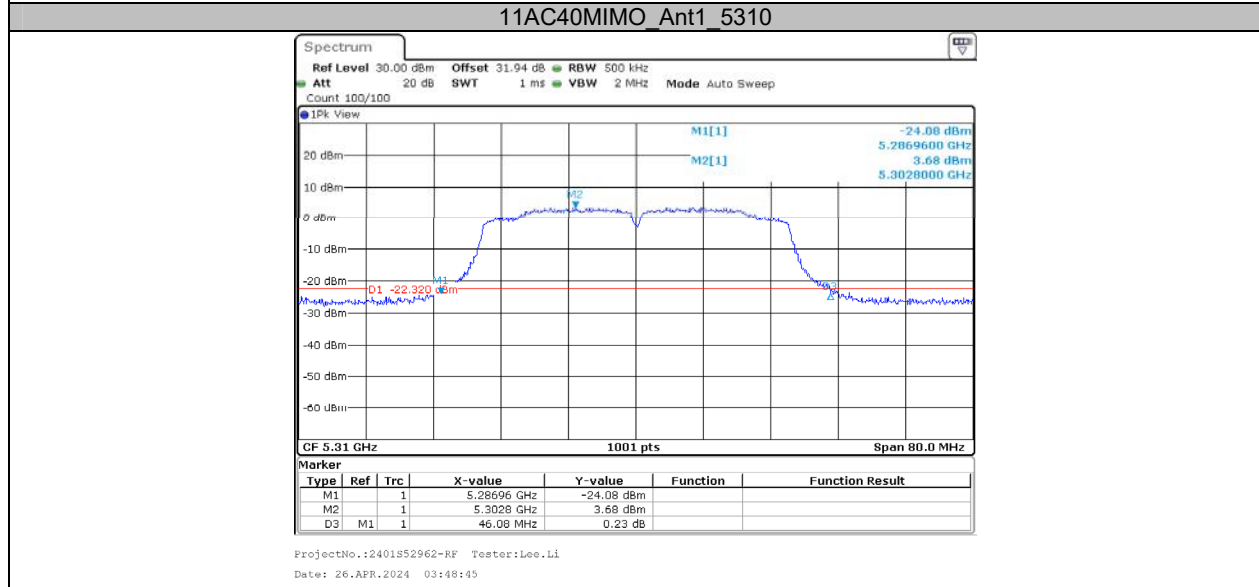
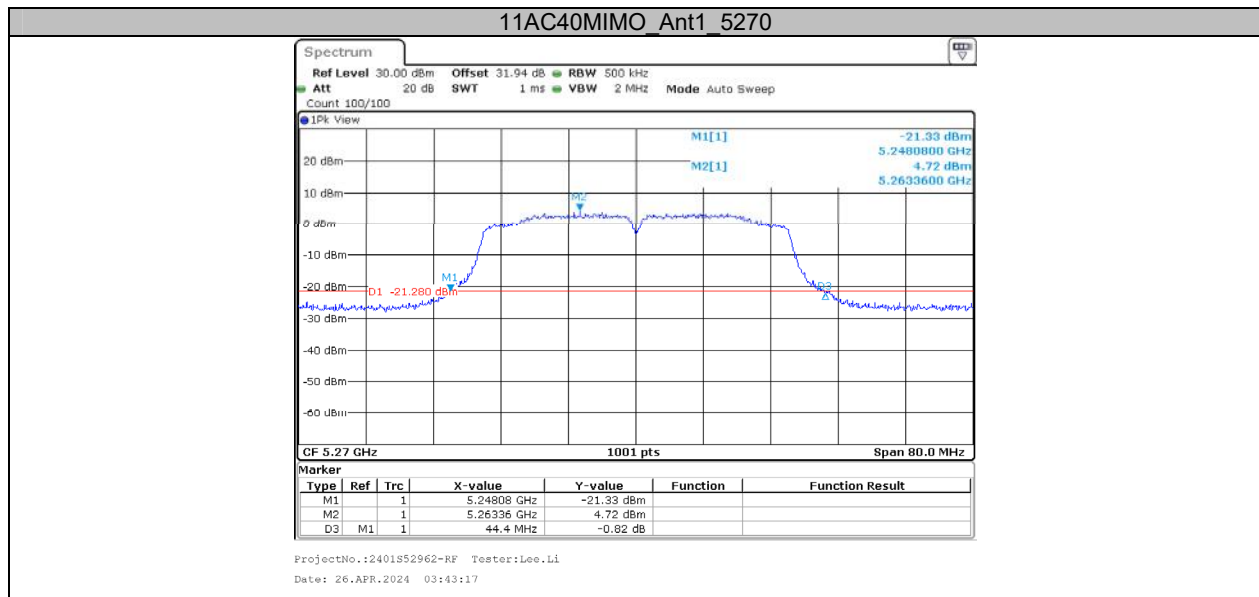


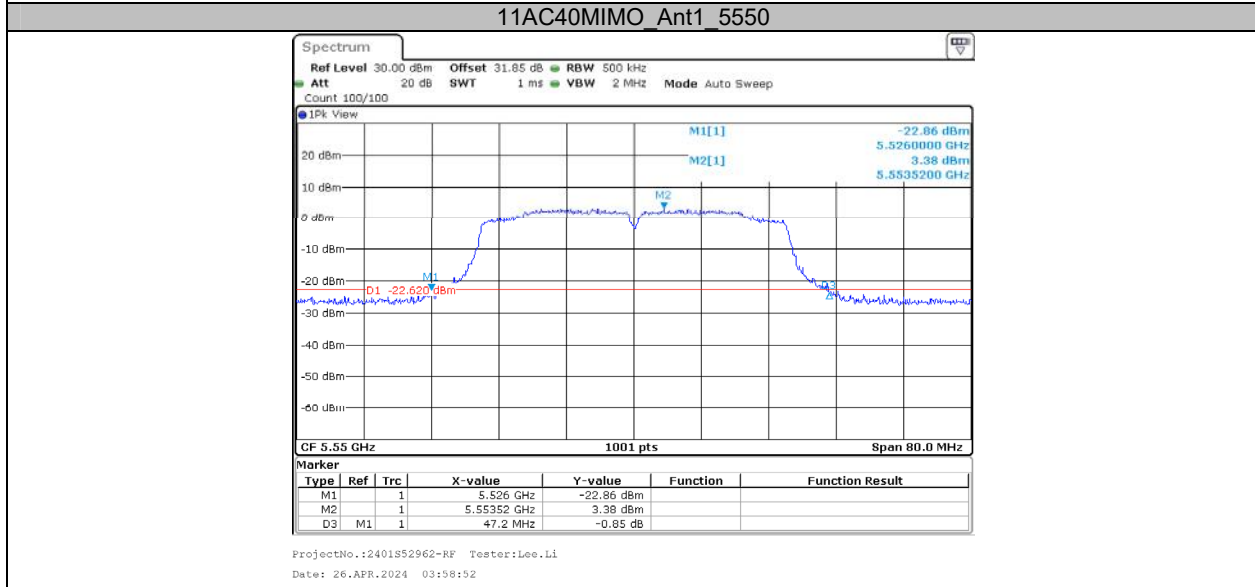
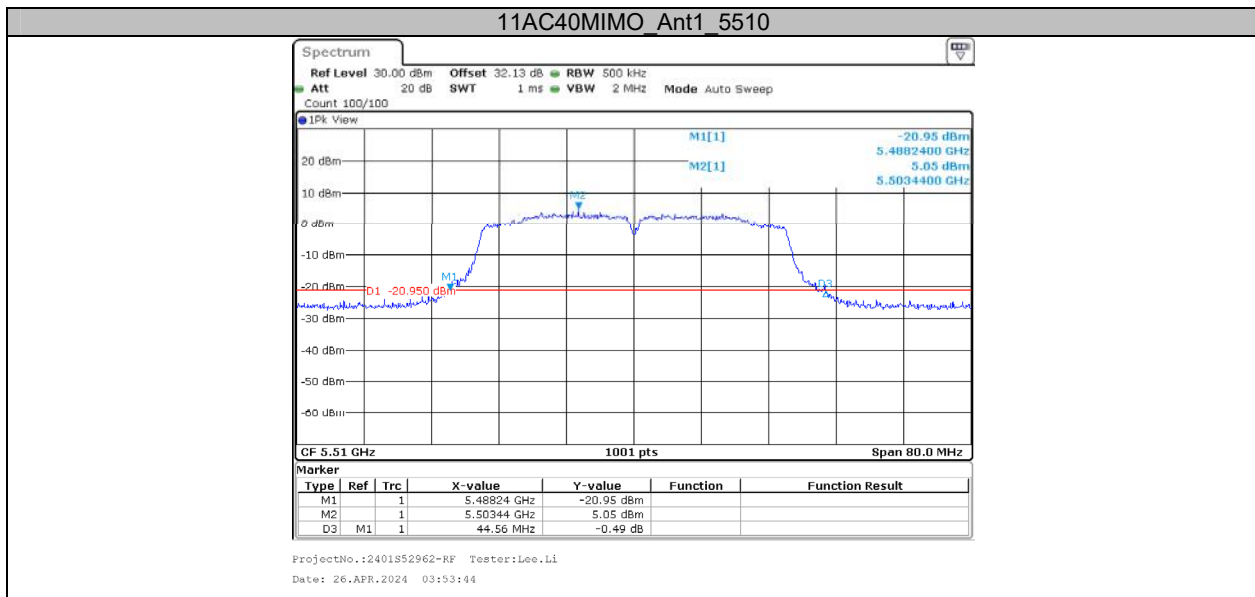


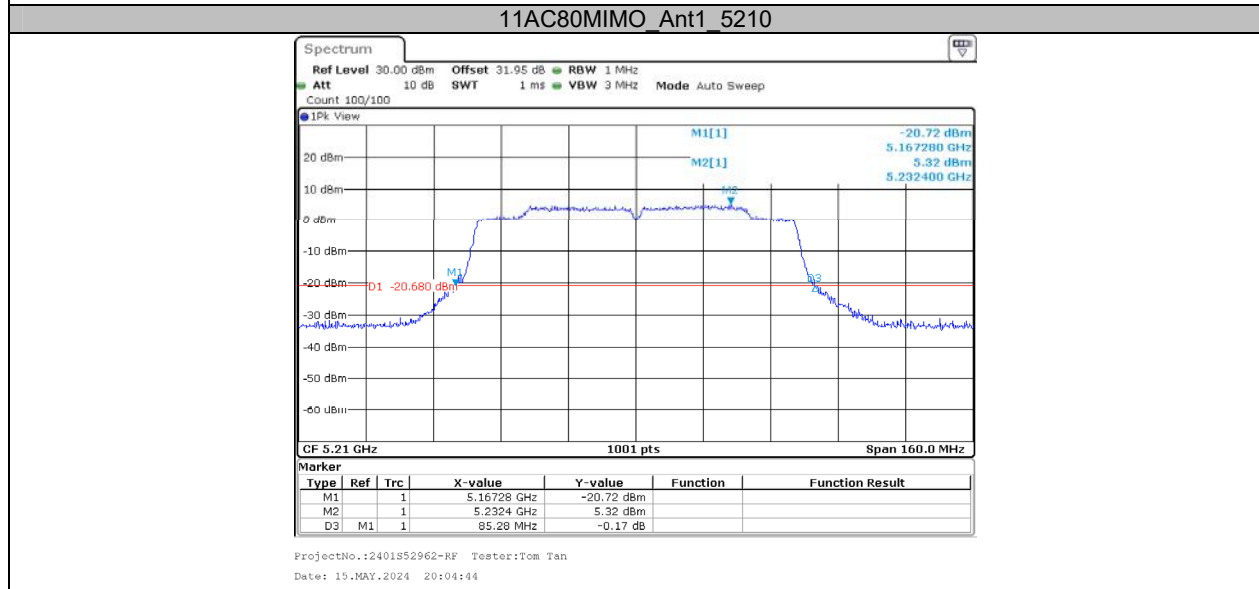
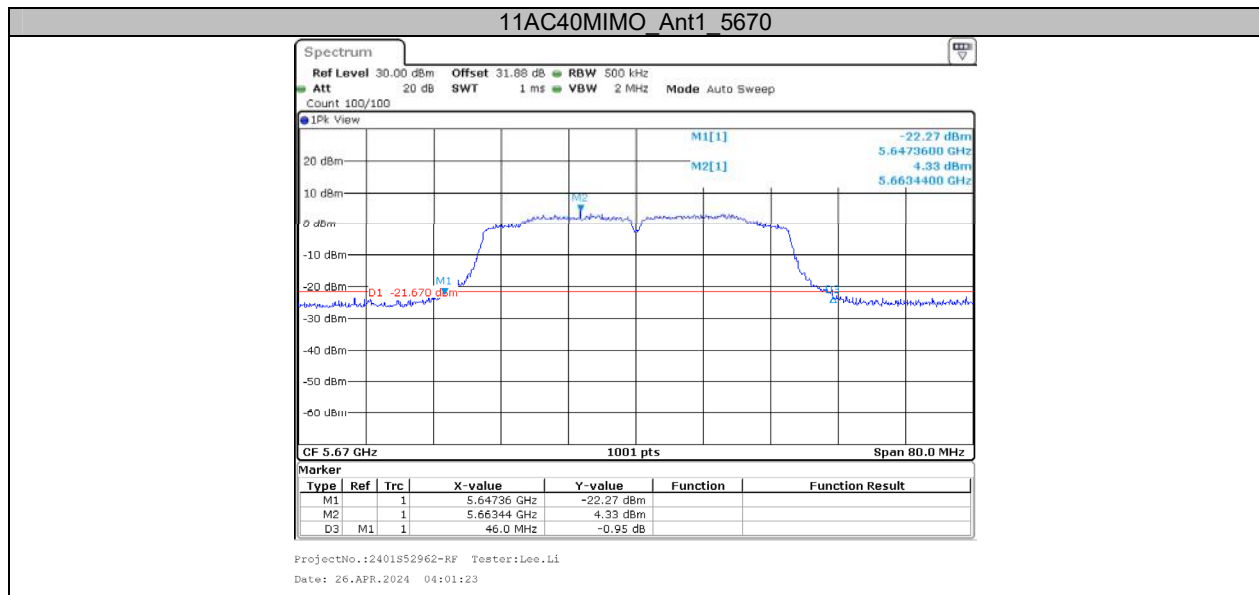


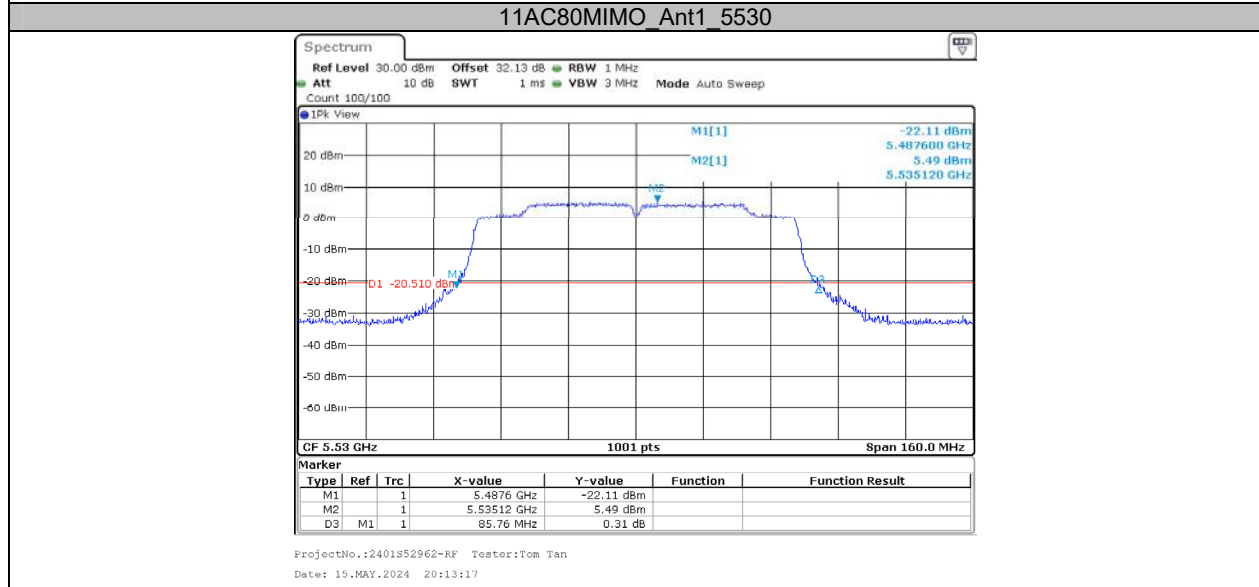
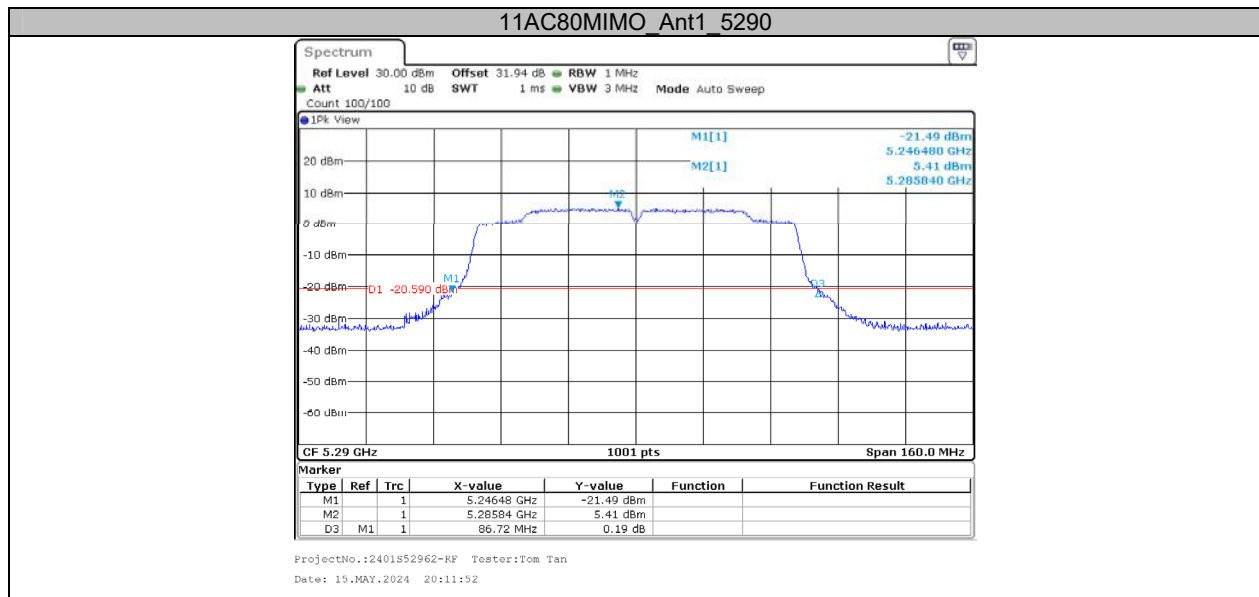


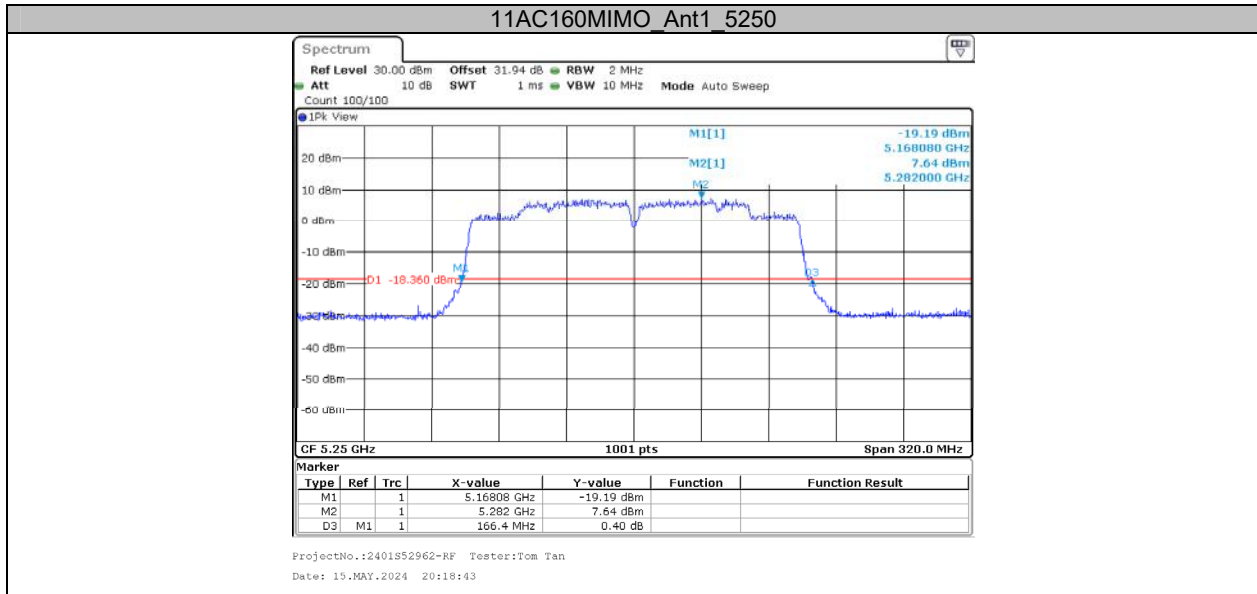




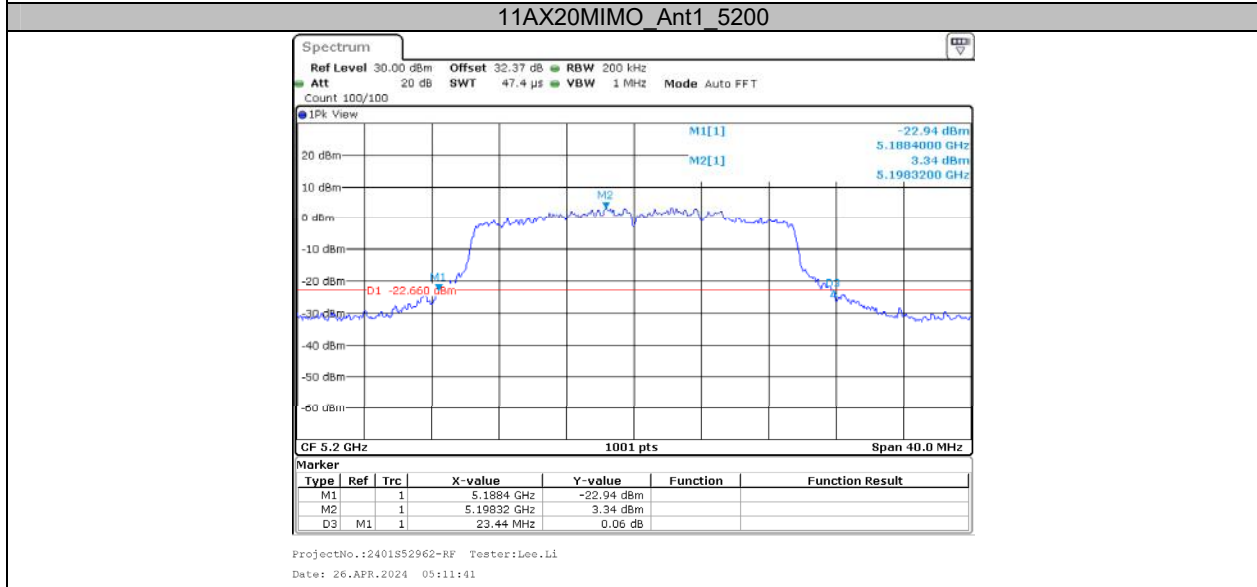
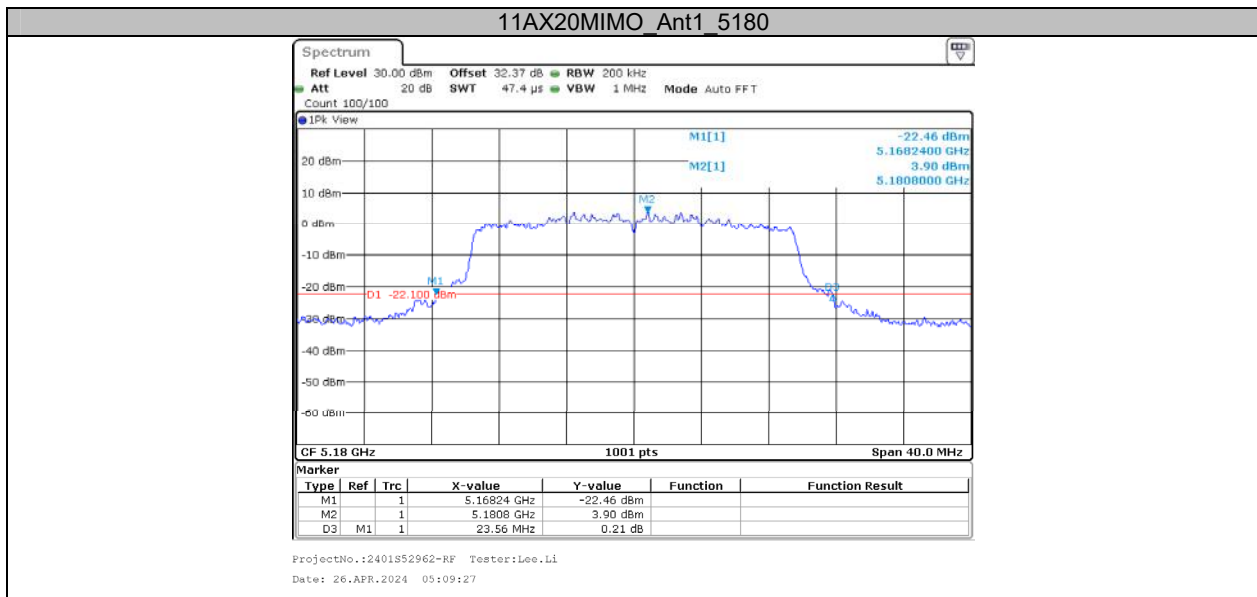


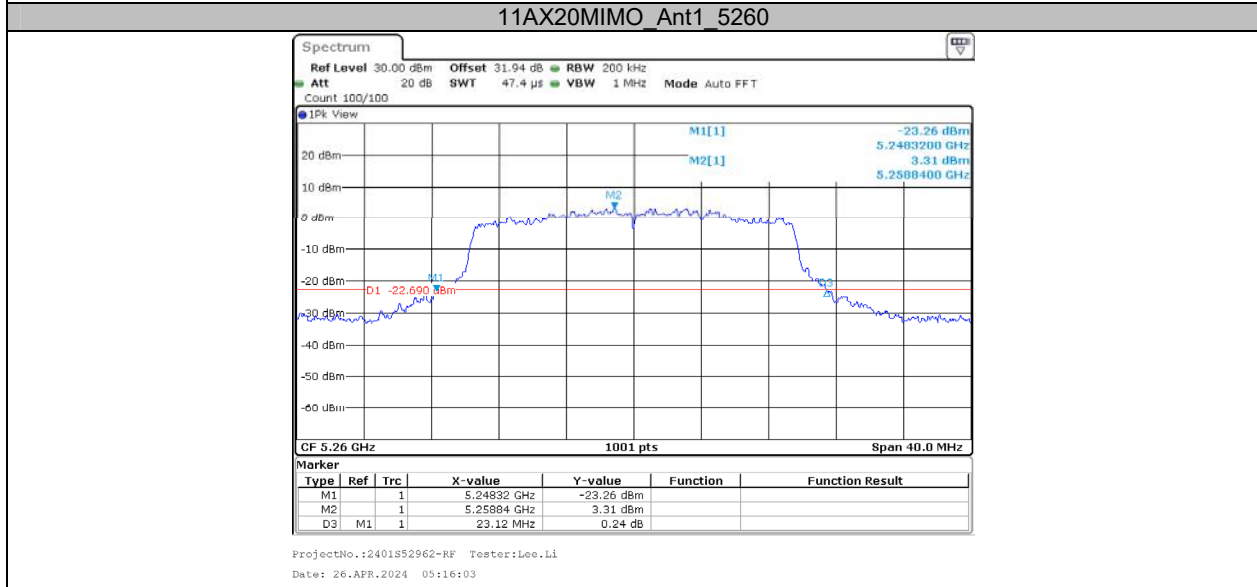
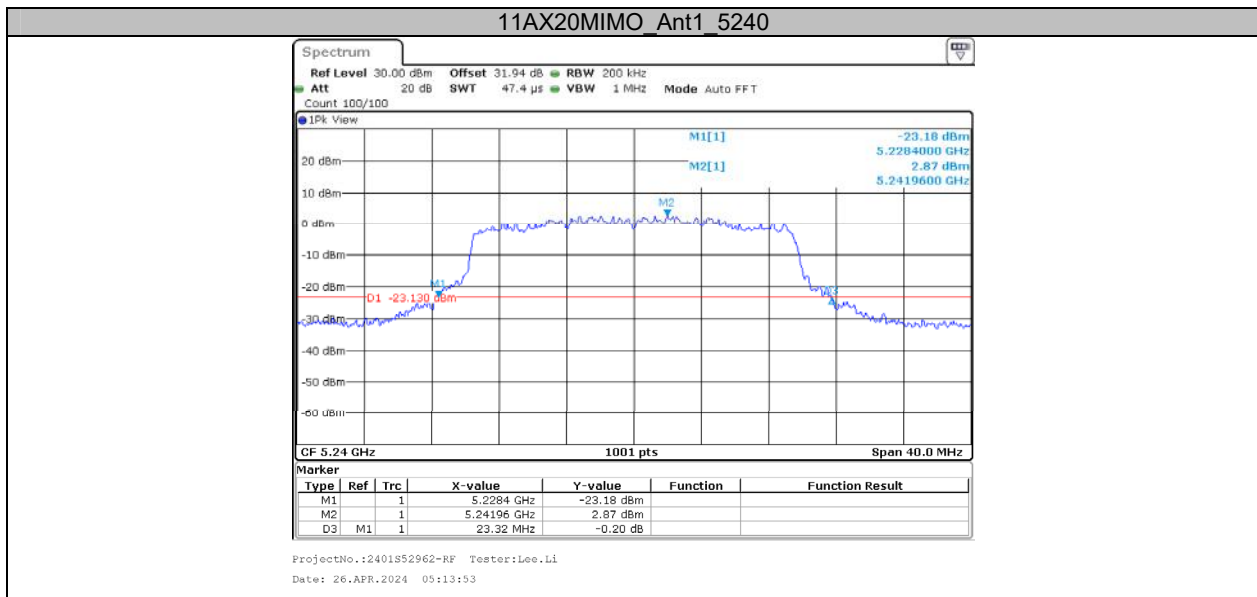


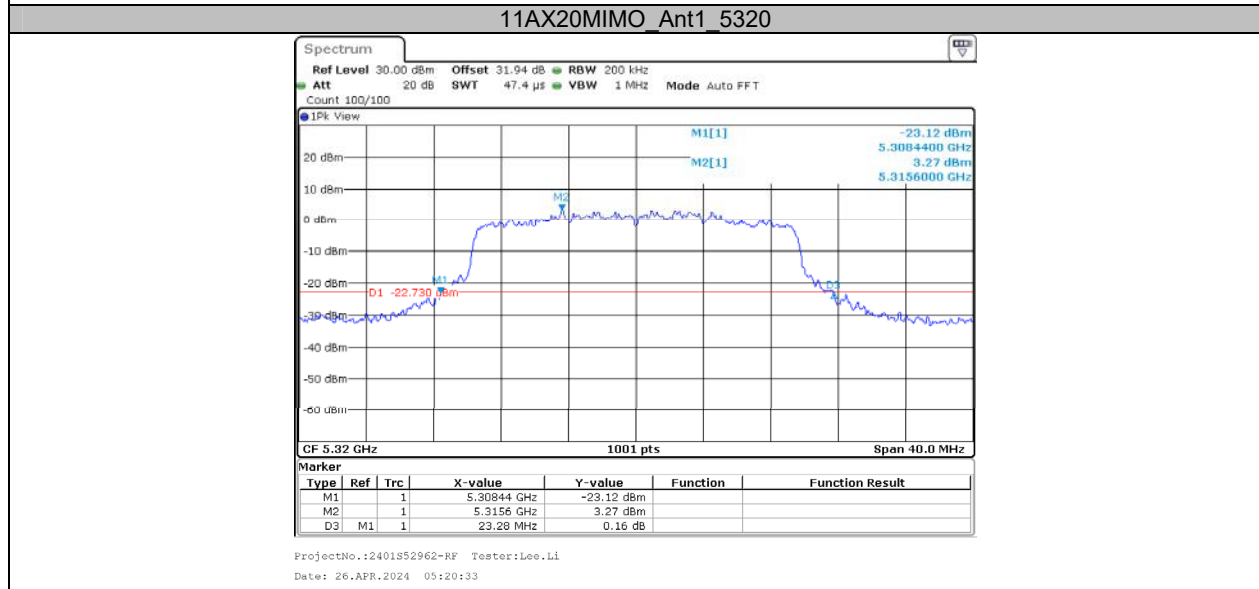
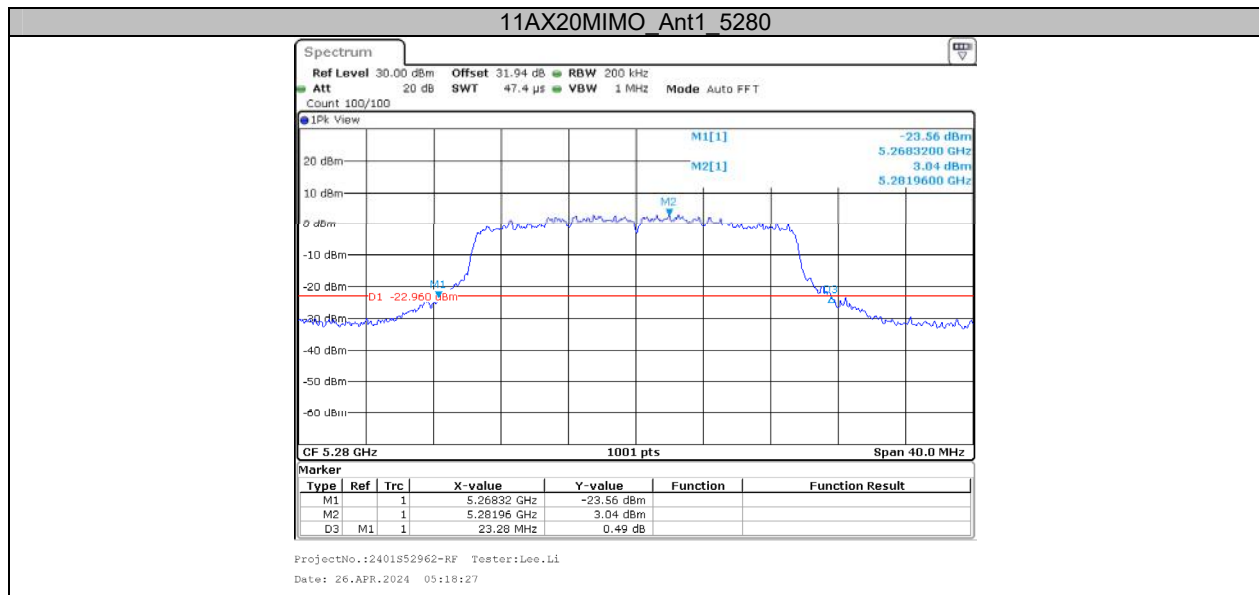


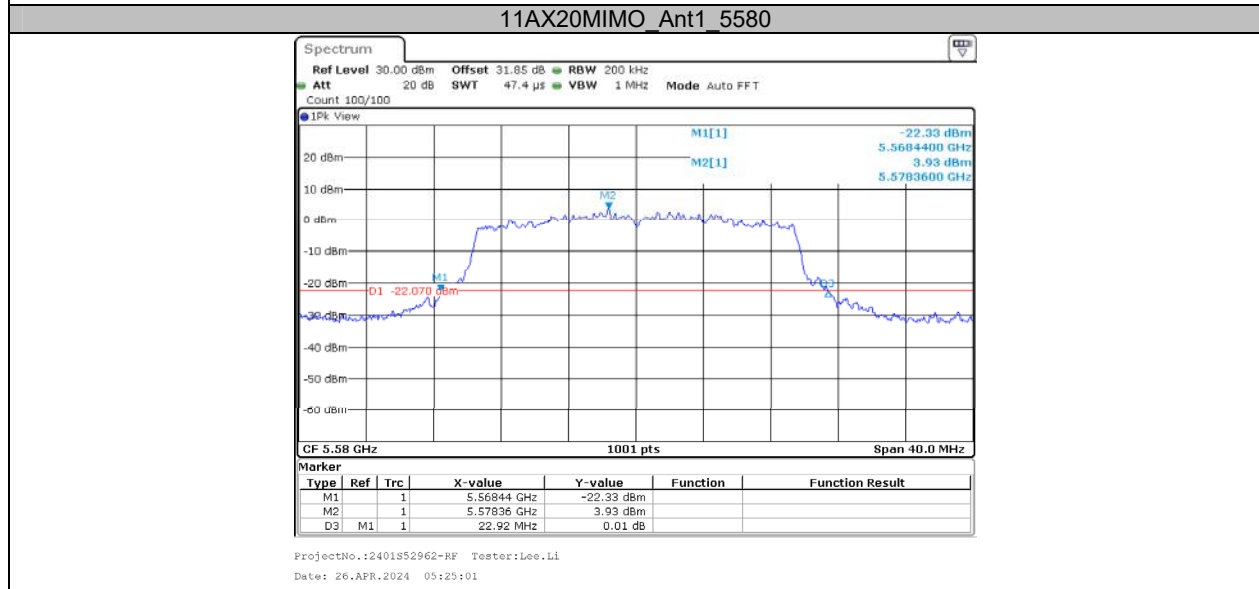
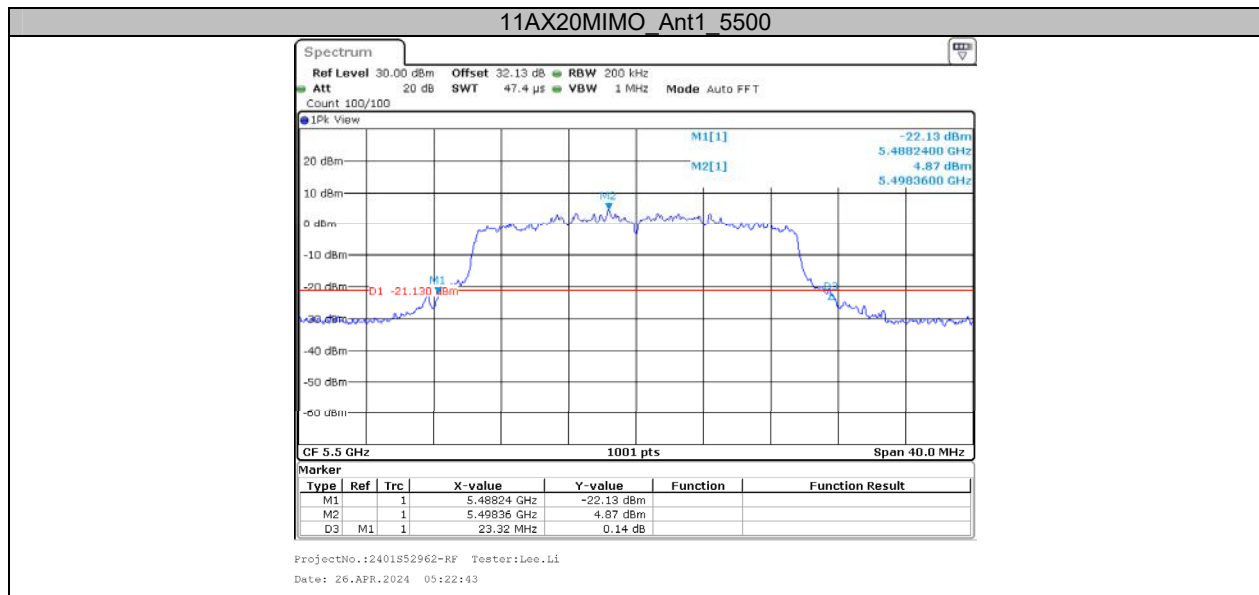


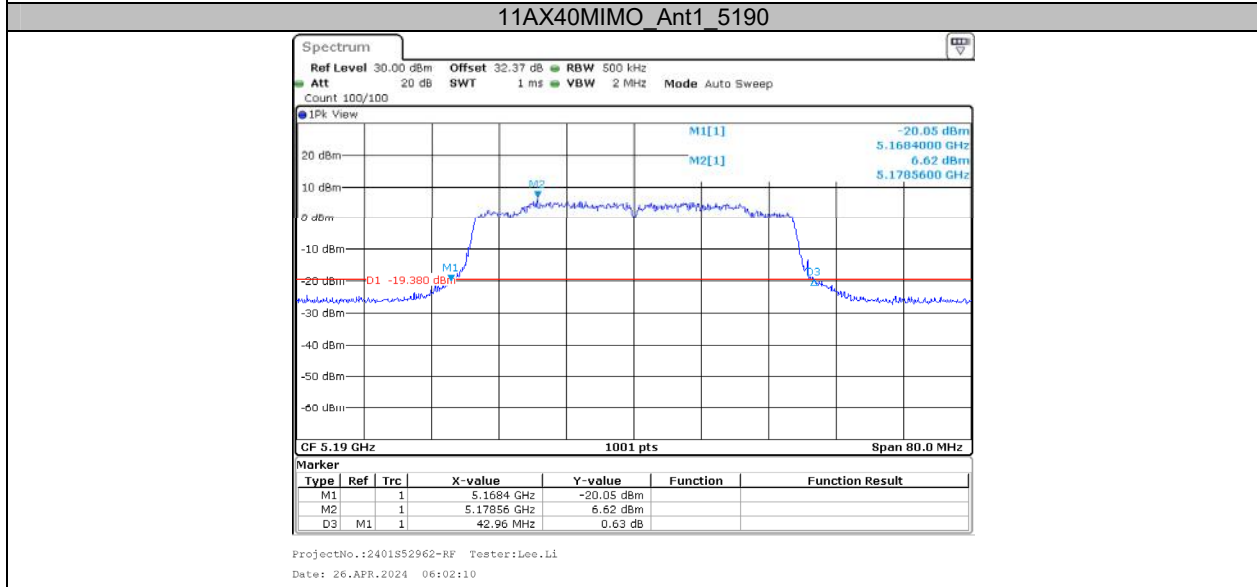
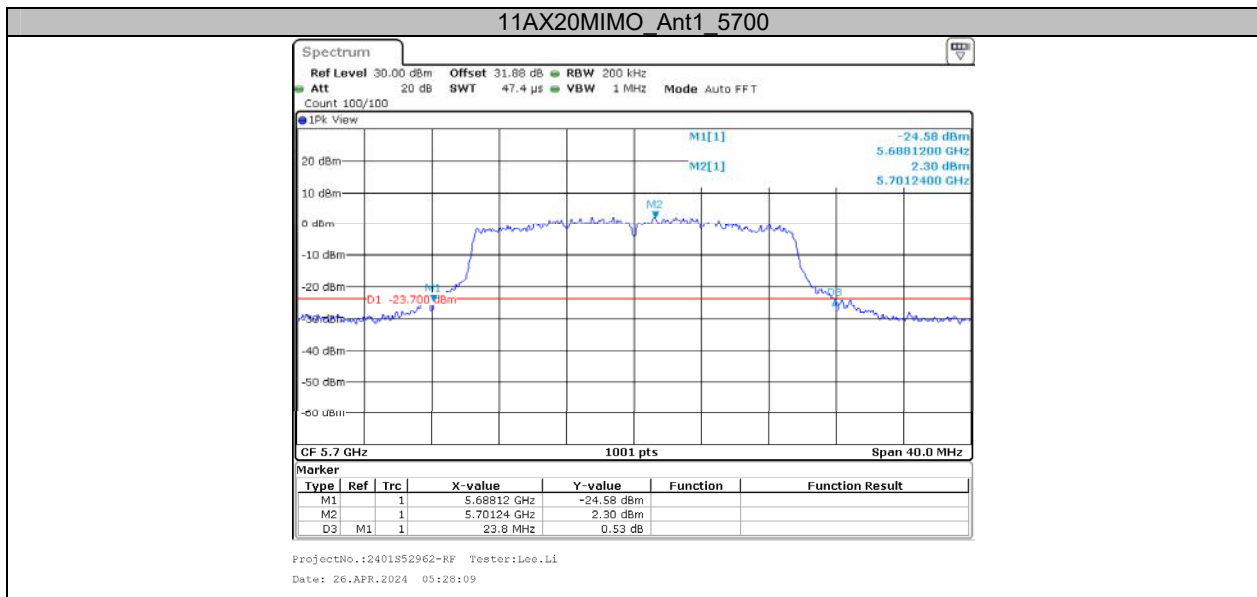


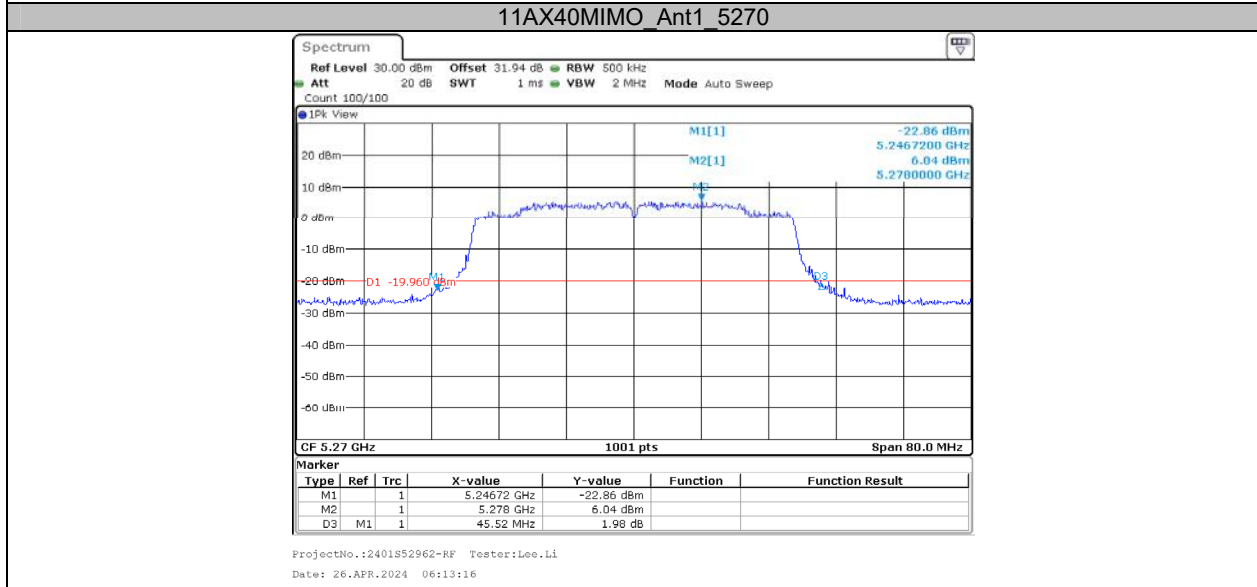
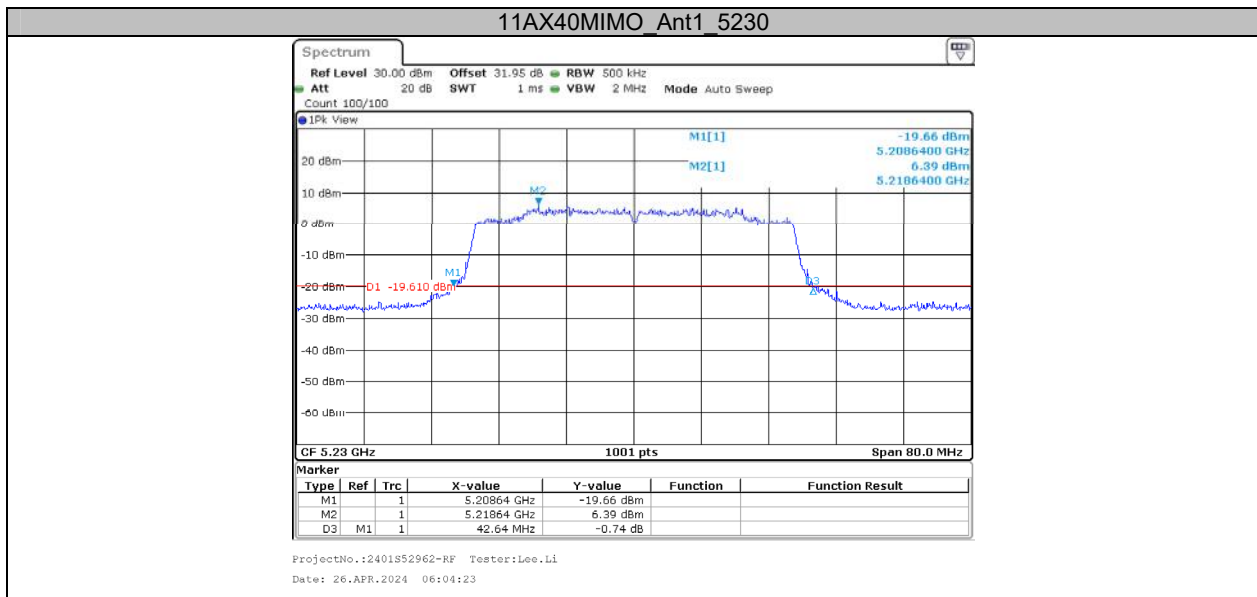


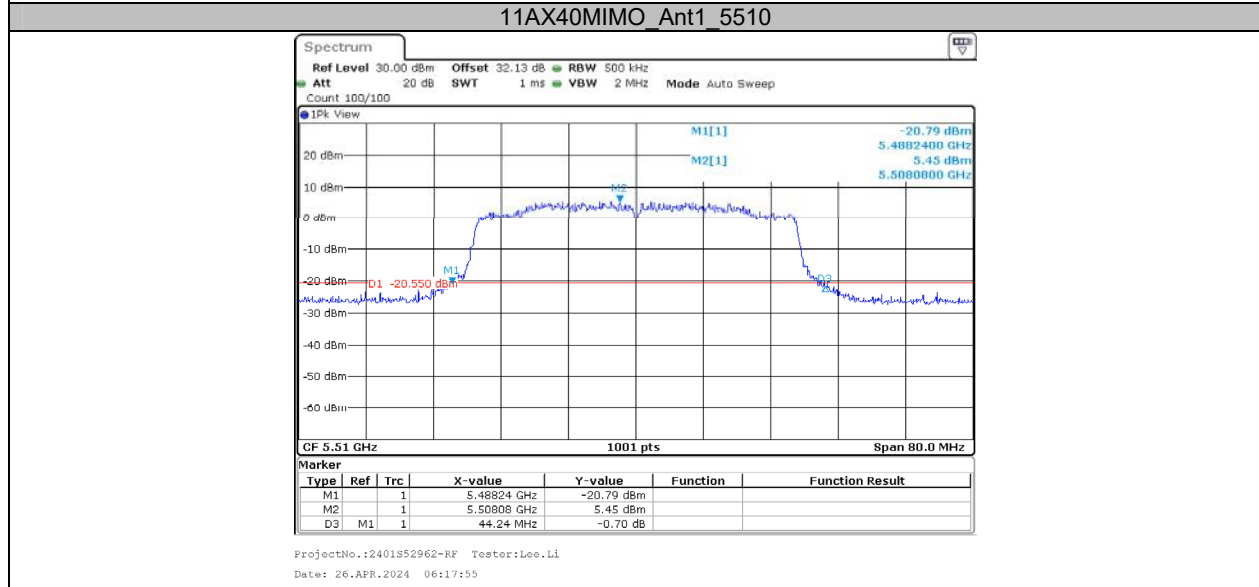
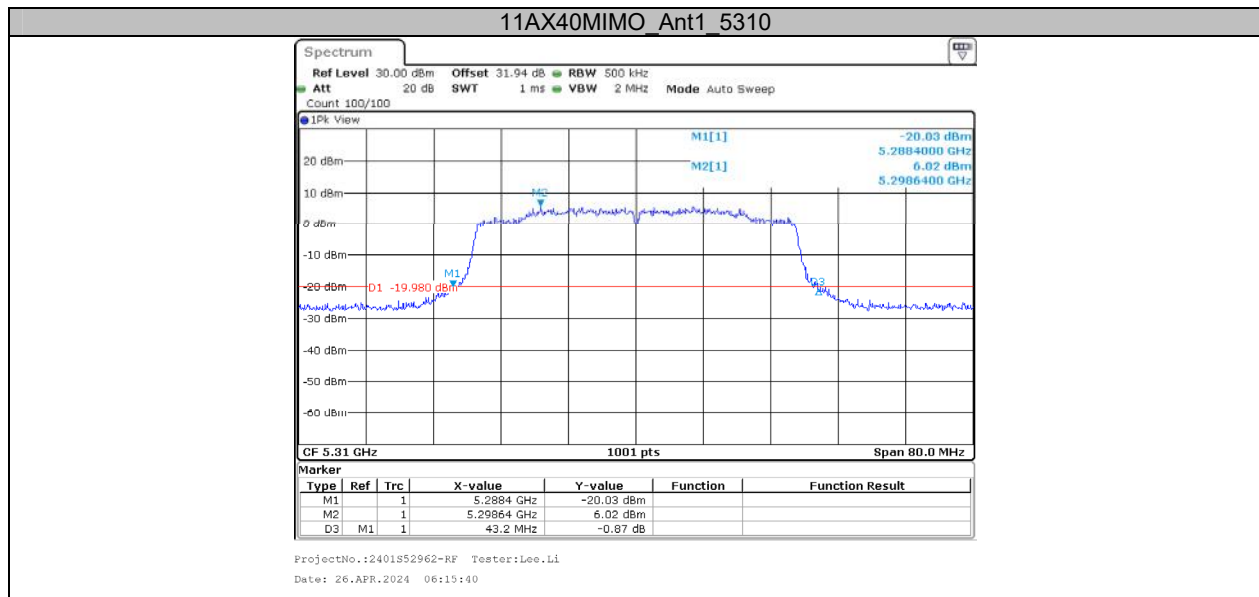


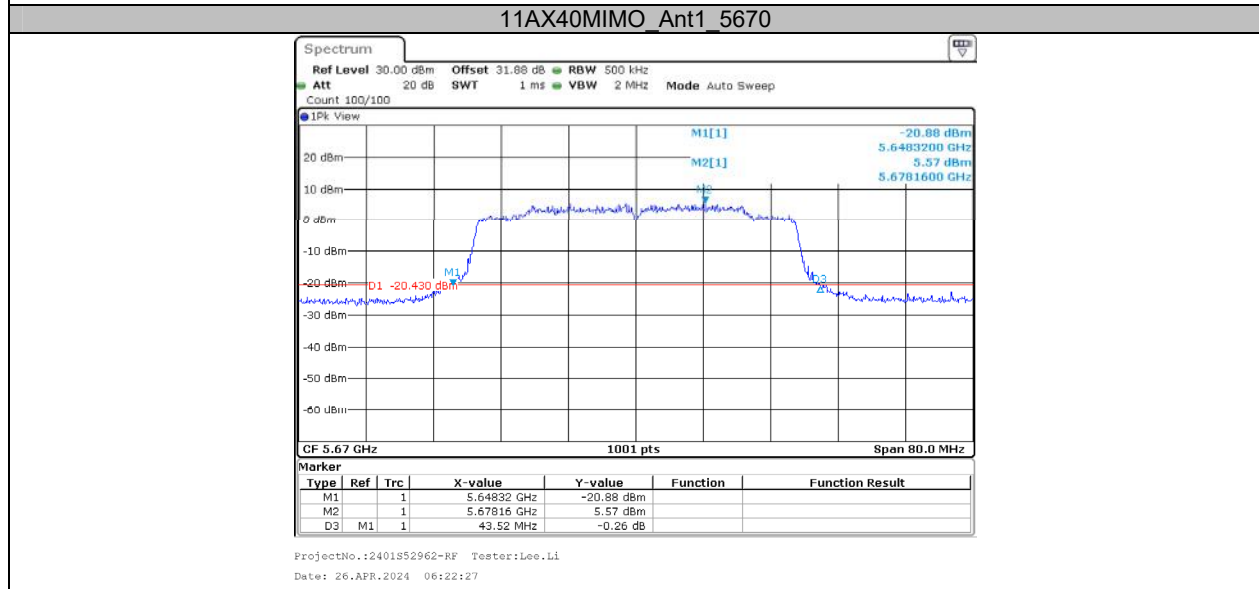
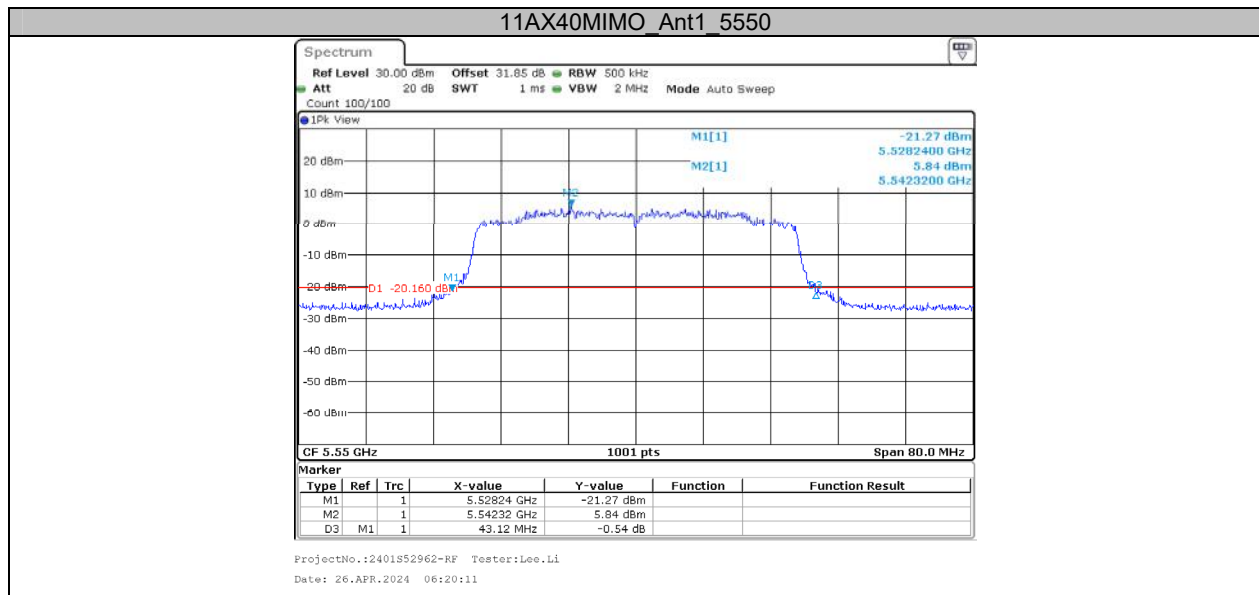




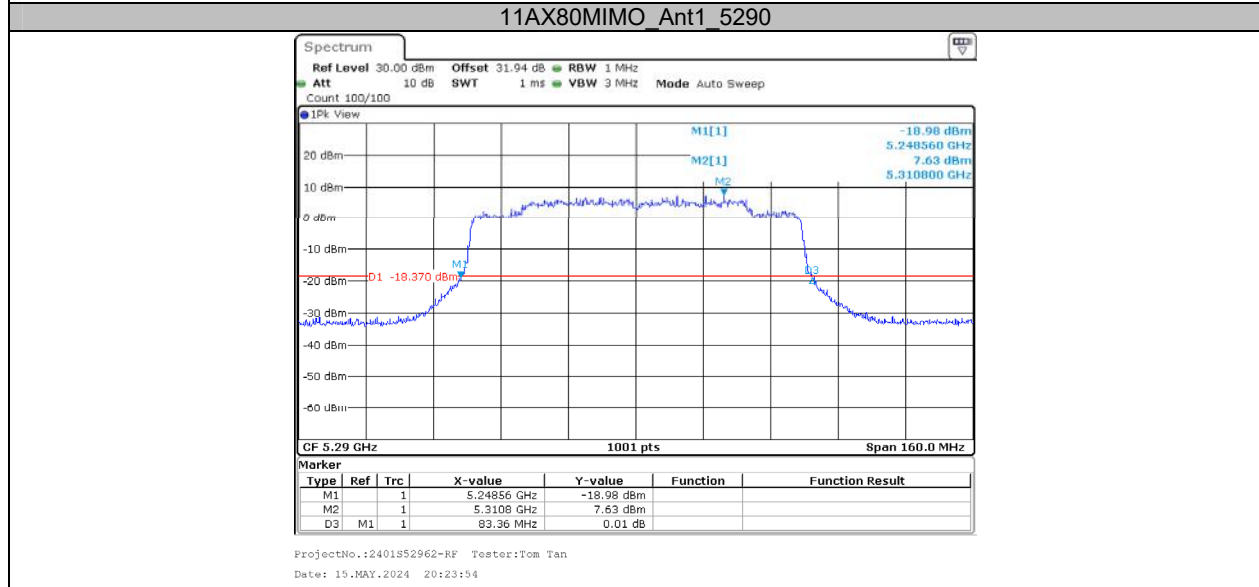
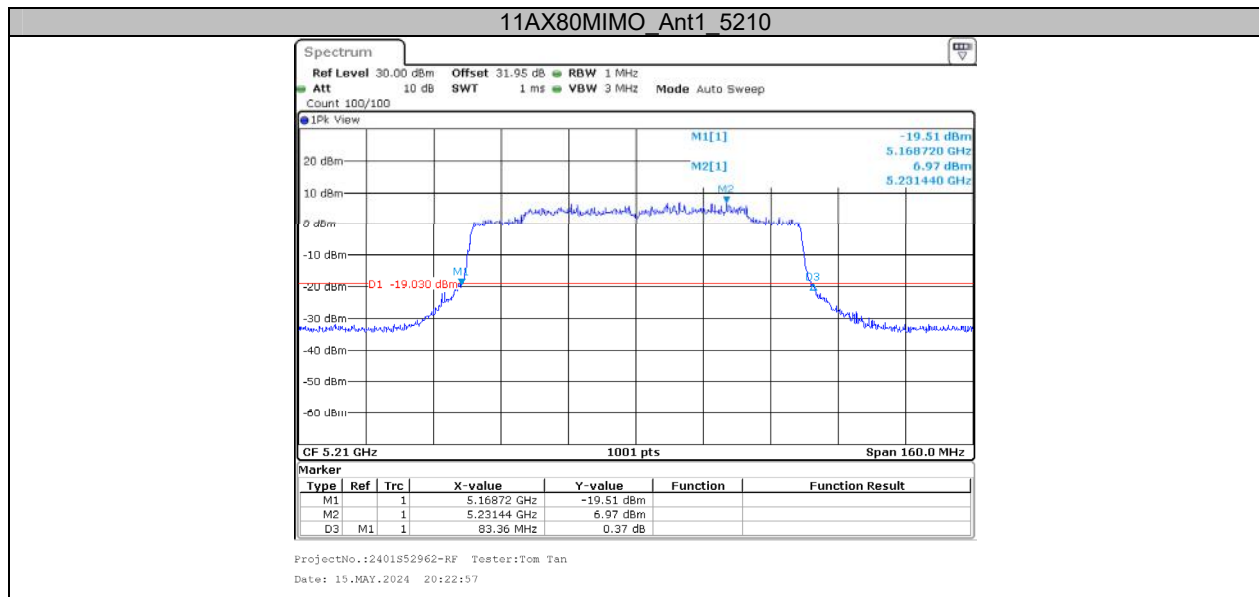


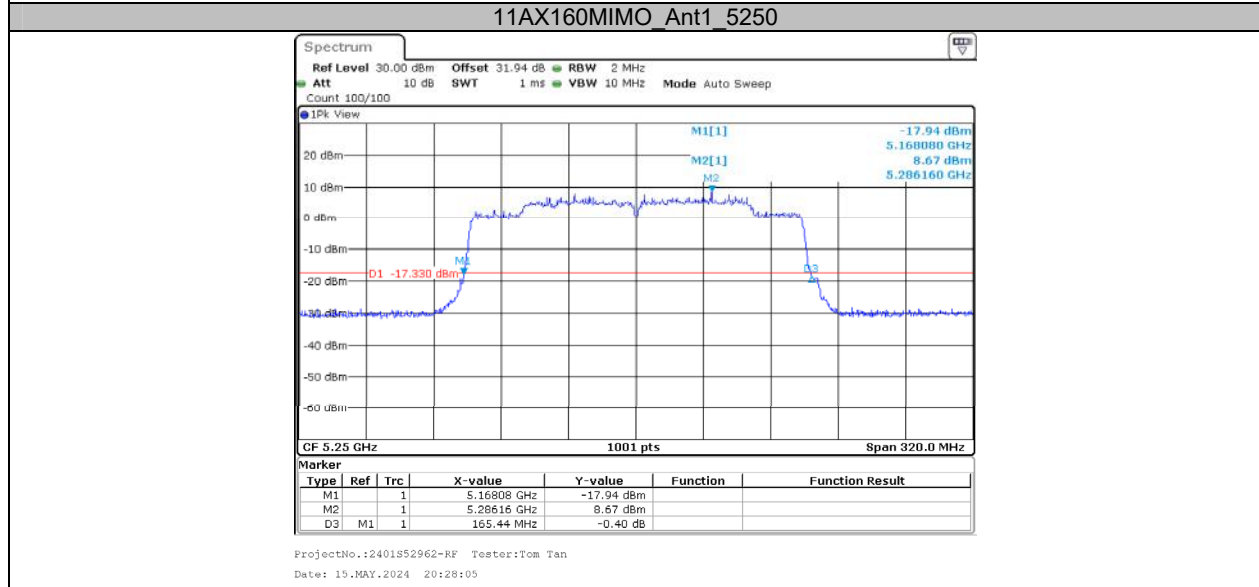
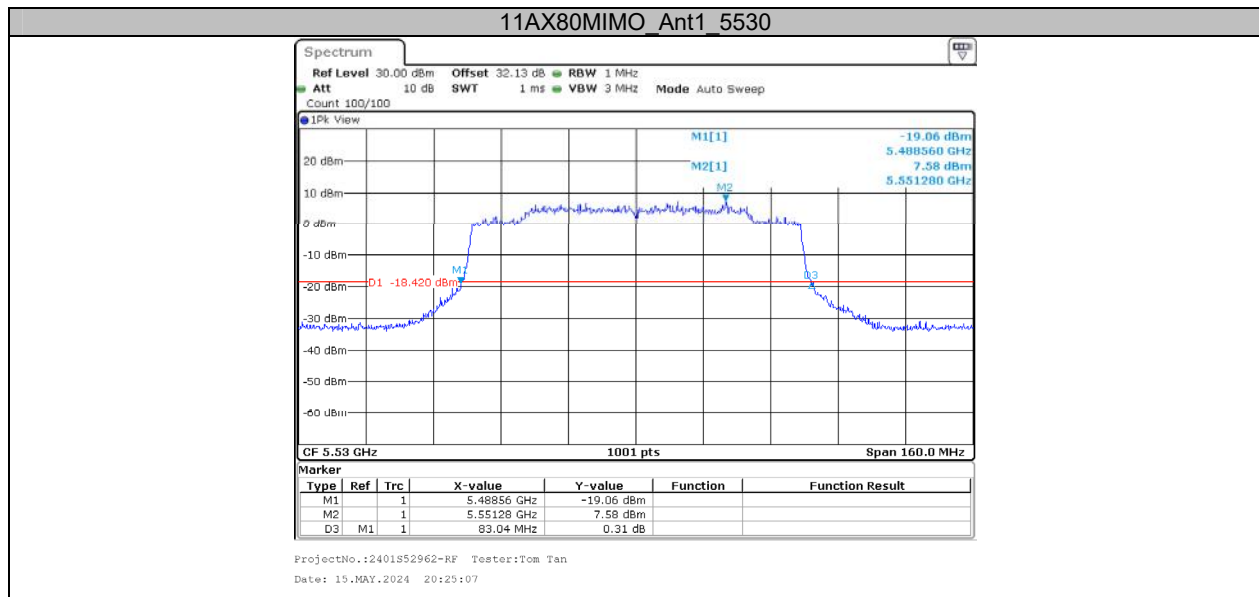












**Appendix A2: Occupied channel bandwidth**

**Test Result**

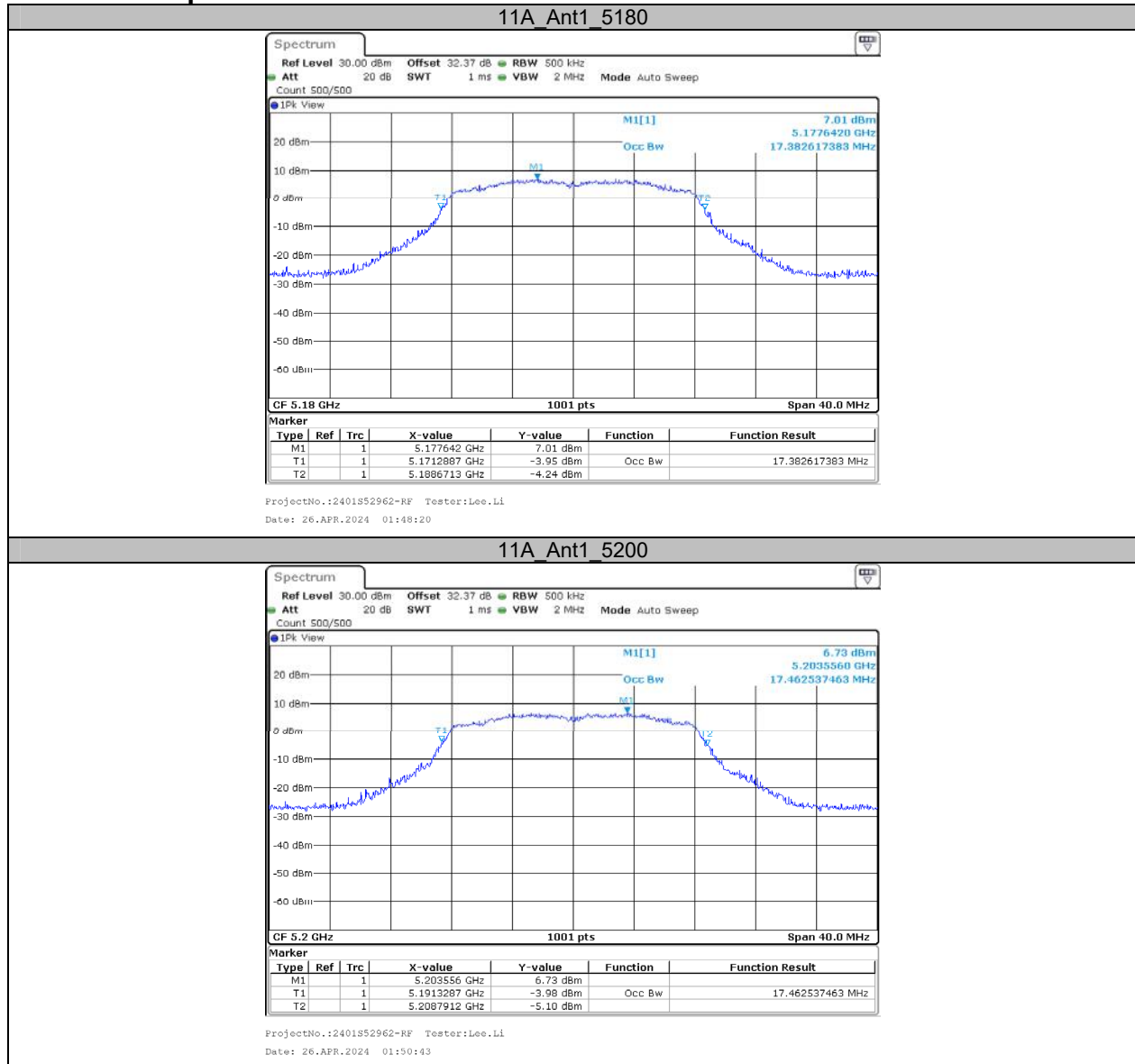
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.383	---	---
	Ant1	5200	17.463	---	---
	Ant1	5240	17.423	---	---
	Ant1	5260	17.343	---	---
	Ant1	5280	17.383	---	---
	Ant1	5320	17.423	---	---
	Ant1	5500	17.343	---	---
	Ant1	5580	17.383	---	---
	Ant1	5700	17.383	---	---
	Ant1	5745	17.862	---	---
	Ant1	5785	17.822	---	---
11AC20MIMO	Ant1	5825	17.742	---	---
	Ant1	5180	18.262	---	---
	Ant1	5200	18.422	---	---
	Ant1	5240	18.382	---	---
	Ant1	5260	18.302	---	---
	Ant1	5280	18.262	---	---
	Ant1	5320	18.302	---	---
	Ant1	5500	18.262	---	---
	Ant1	5580	18.302	---	---
	Ant1	5700	18.422	---	---
	Ant1	5745	18.821	---	---
11AC40MIMO	Ant1	5785	18.741	---	---
	Ant1	5825	18.661	---	---
	Ant1	5190	36.523	---	---
	Ant1	5230	36.444	---	---
	Ant1	5270	36.444	---	---
	Ant1	5310	36.444	---	---
	Ant1	5510	36.364	---	---
	Ant1	5550	36.444	---	---
11AC80MIMO	Ant1	5670	36.444	---	---
	Ant1	5755	37.243	---	---
	Ant1	5795	37.323	---	---
	Ant1	5210	75.764	---	---
11AC160MIMO	Ant1	5290	75.604	---	---
	Ant1	5530	75.764	---	---
	Ant1	5775	76.084	---	---
	Ant1	5250	156.004	---	---
11AC160MIMO	Ant1	5250 UNII-1	77.682	---	---
	Ant1	5250 UNII-2A	78.322	---	---

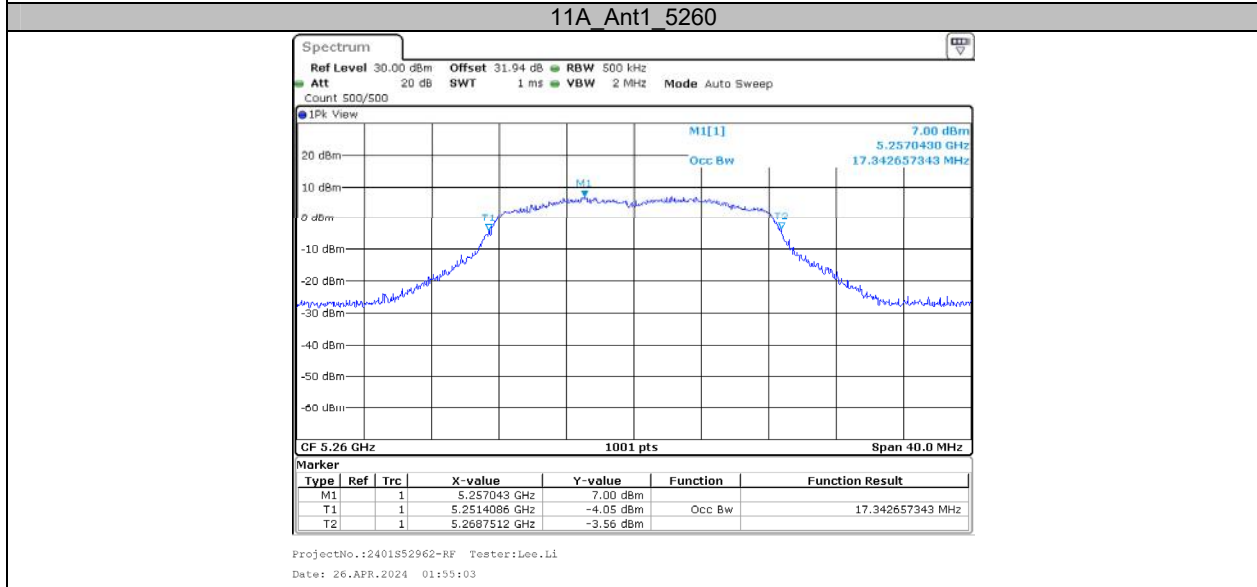
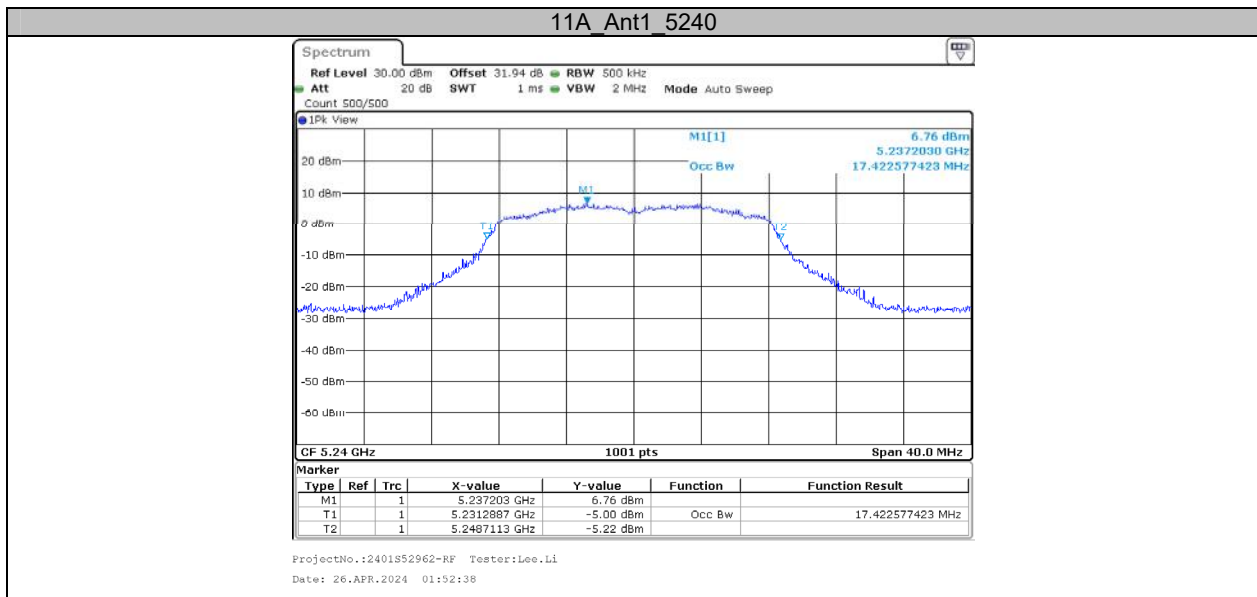
Note: For W52 (except for 802.11ac160/ax160) and W58 band, no transmitted signal in the 99% bandwidth extends into the U-NII-2A band and U-NII-2C band.

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	Limit[MHz]	Verdict
11AX20MIMO	Ant1	5180	19.061	---	---
	Ant1	5200	19.141	---	---
	Ant1	5240	19.141	---	---
	Ant1	5260	19.101	---	---
	Ant1	5280	19.061	---	---
	Ant1	5320	19.141	---	---
	Ant1	5500	19.061	---	---
	Ant1	5580	19.101	---	---
	Ant1	5700	19.141	---	---
	Ant1	5745	19.461	---	---
11AX40MIMO	Ant1	5785	19.381	---	---
	Ant1	5825	19.381	---	---
	Ant1	5190	37.882	---	---
	Ant1	5230	37.882	---	---
	Ant1	5270	37.802	---	---
	Ant1	5310	37.882	---	---
	Ant1	5510	37.802	---	---
	Ant1	5550	37.882	---	---
11AX80MIMO	Ant1	5670	37.802	---	---
	Ant1	5755	38.521	---	---
	Ant1	5795	38.601	---	---
	Ant1	5210	77.363	---	---
11AX160MIMO	Ant1	5290	77.203	---	---
	Ant1	5530	77.363	---	---
	Ant1	5775	77.682	---	---
11AX160MIMO	Ant1	5250	157.283	---	---
	Ant1	5250 UNII-1	78.322	---	---
	Ant1	5250 UNII-2A	78.961	---	---

Note: For W52 (except for 802.11ac160/ax160) and W58 band, no transmitted signal in the 99% bandwidth extends into the U-NII-2A band and U-NII-2C band.

### Test Graphs



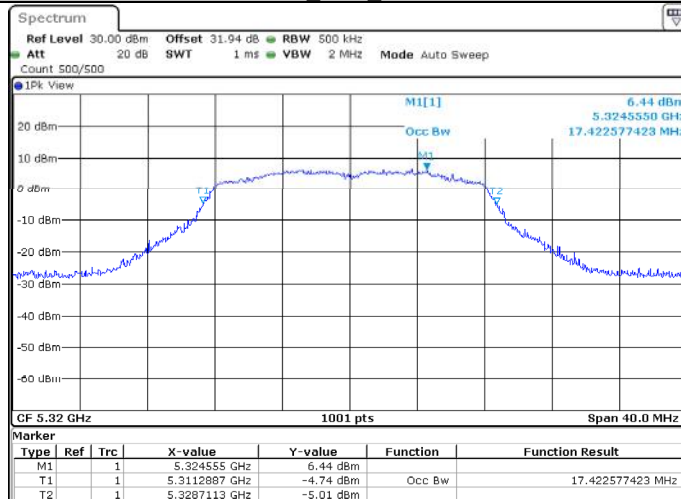


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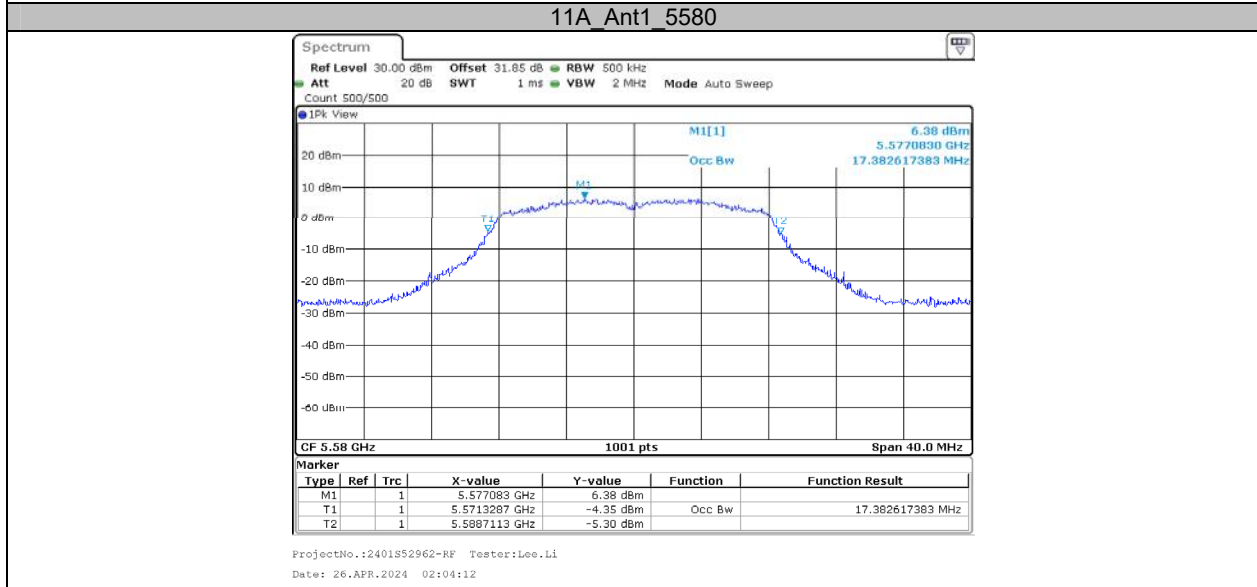
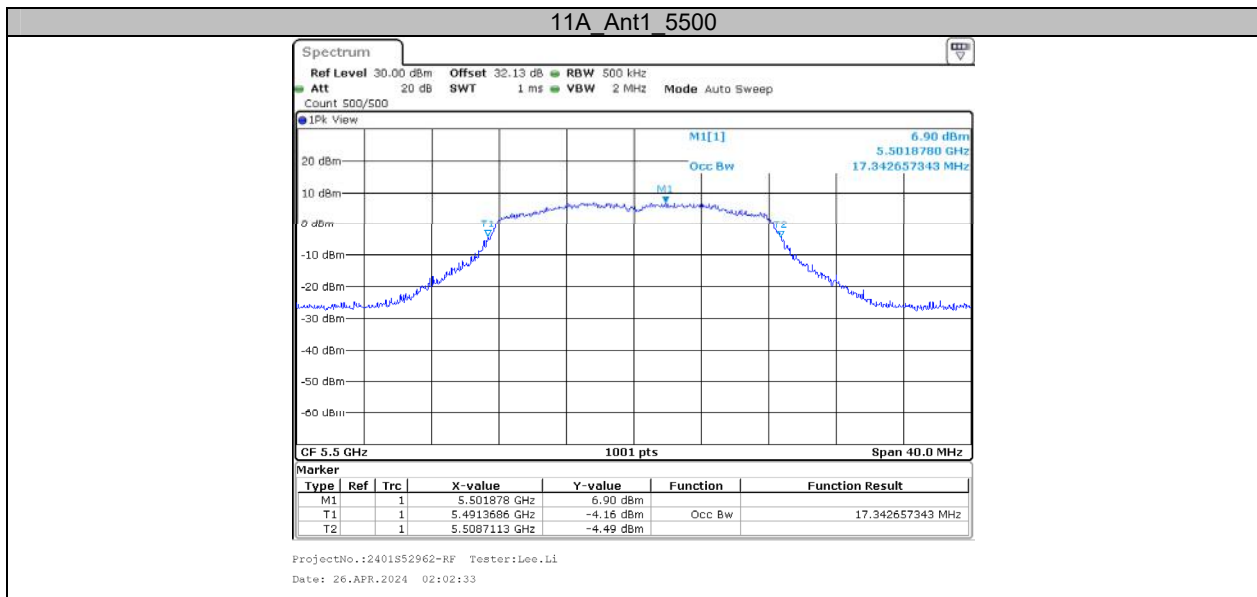


ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 01:57:03

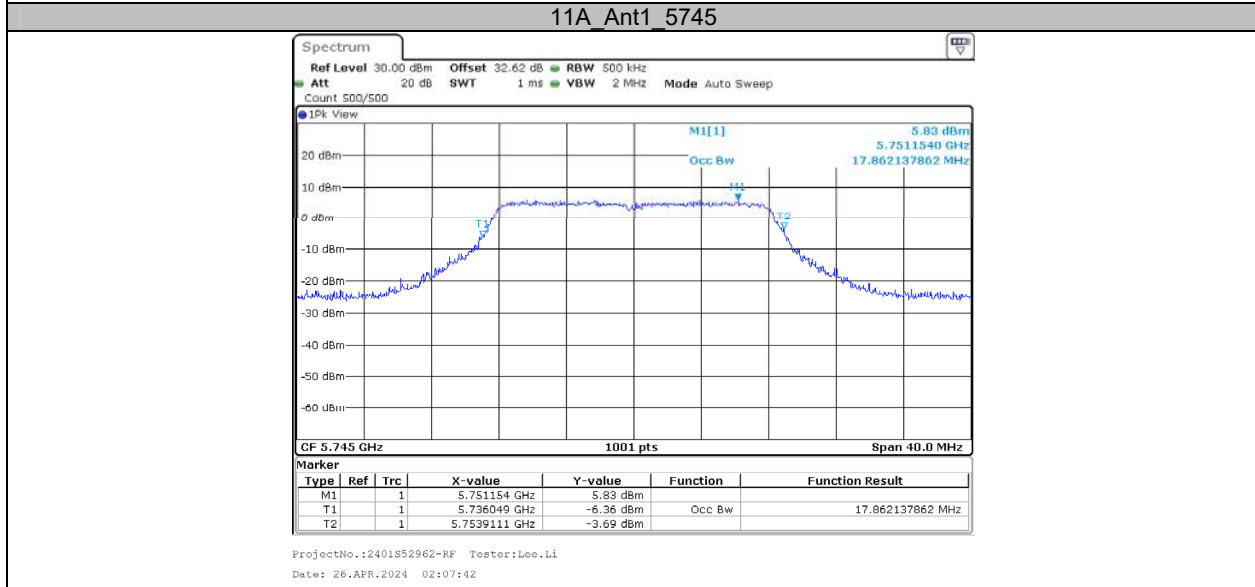
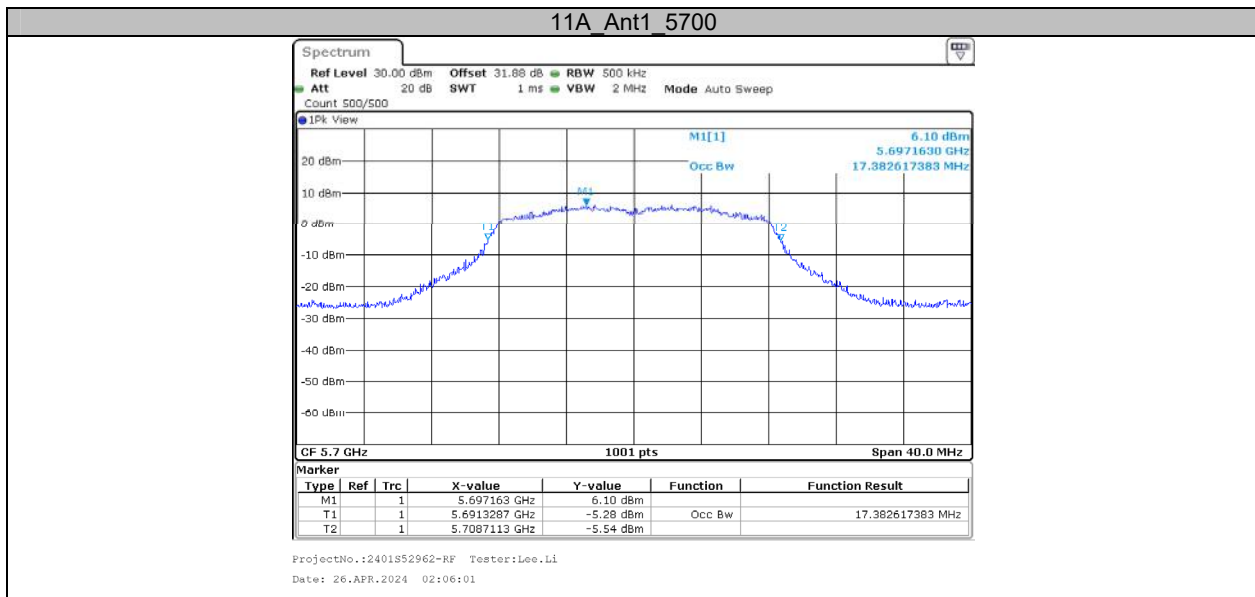
11A\_Ant1\_5320



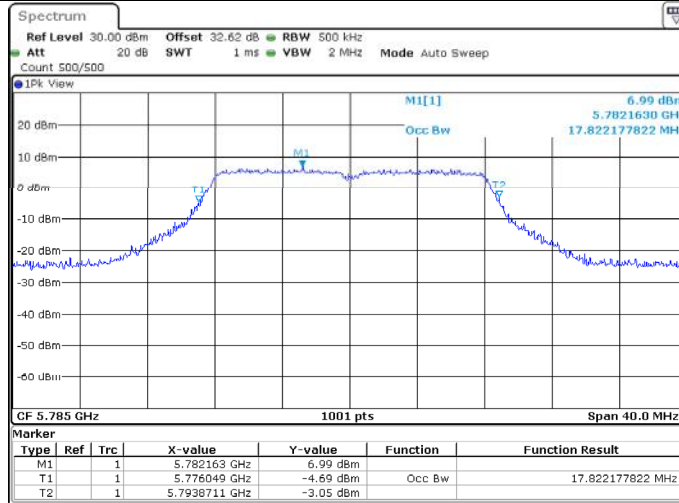
ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 02:00:11





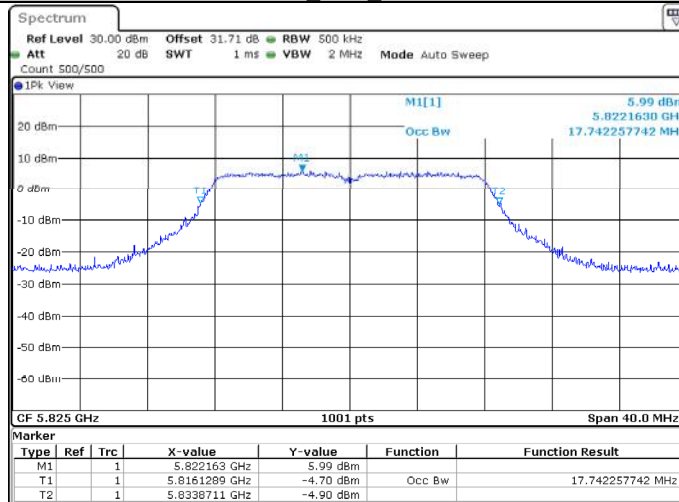


11A\_Ant1\_5785

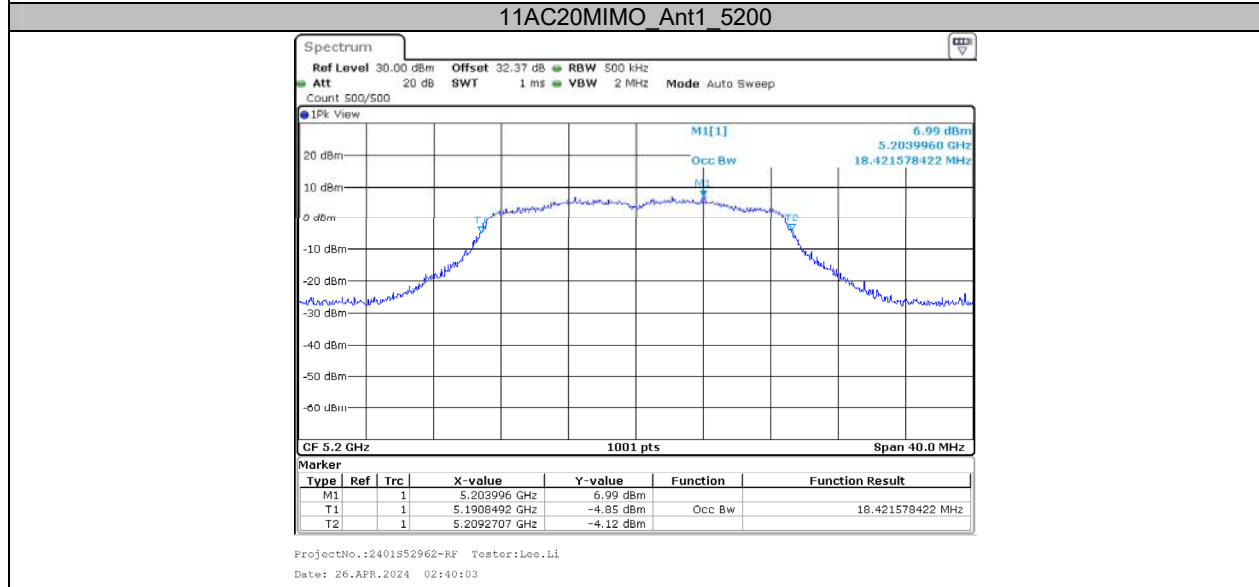
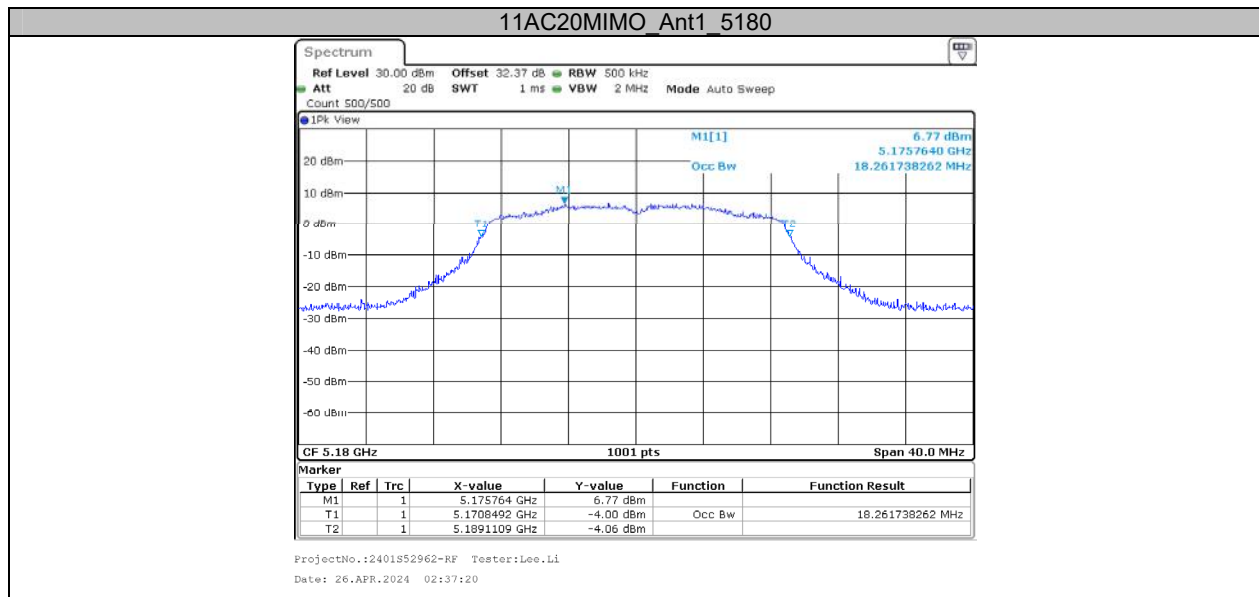


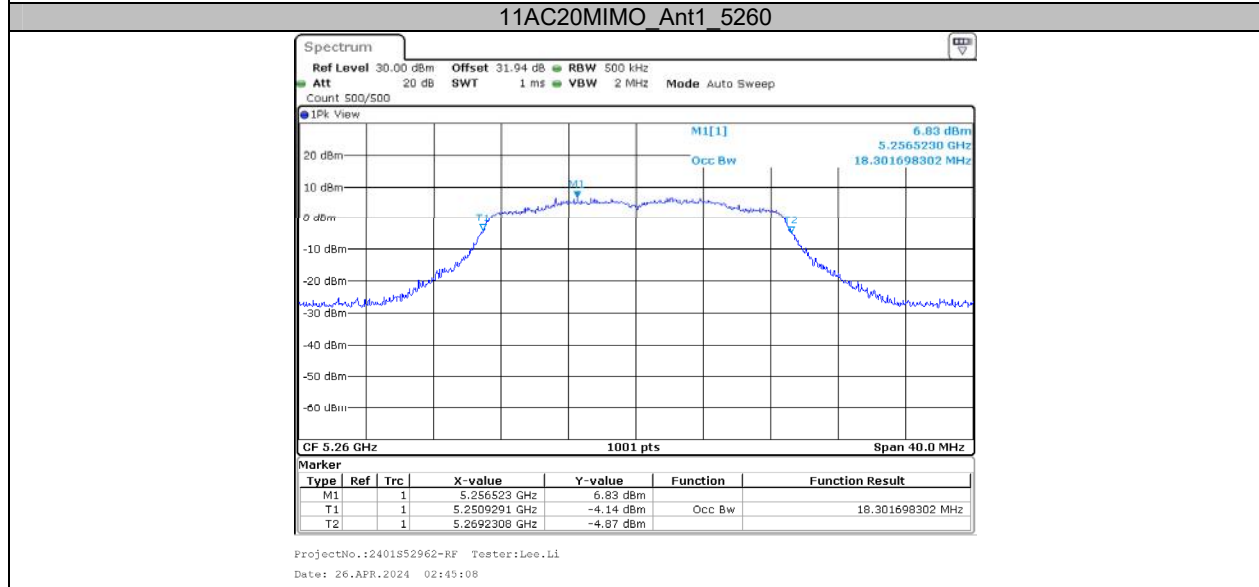
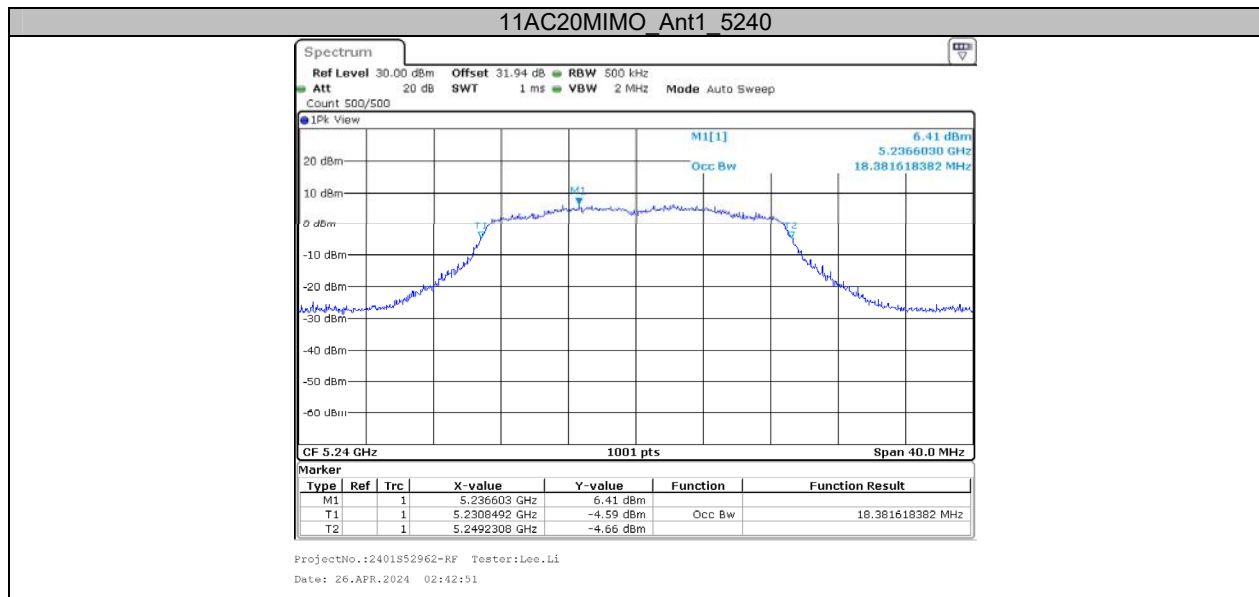
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11A\_Ant1\_5825

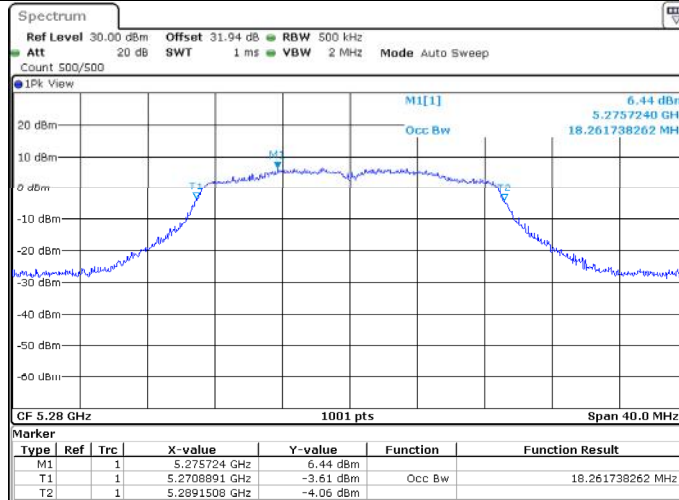


ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 02:10:43



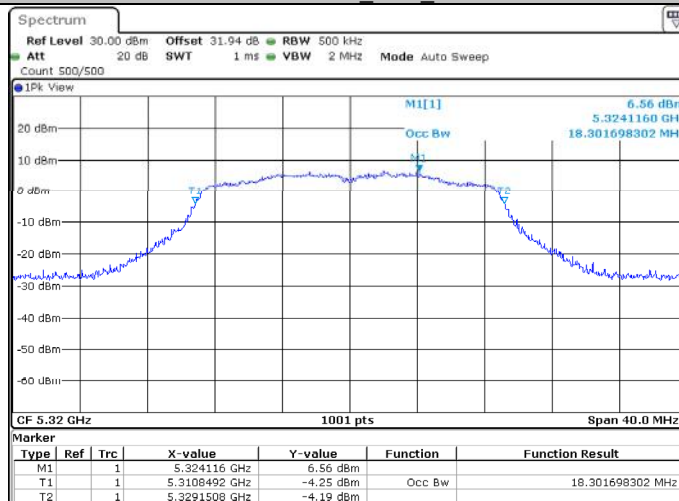


11AC20MIMO Ant1 5280



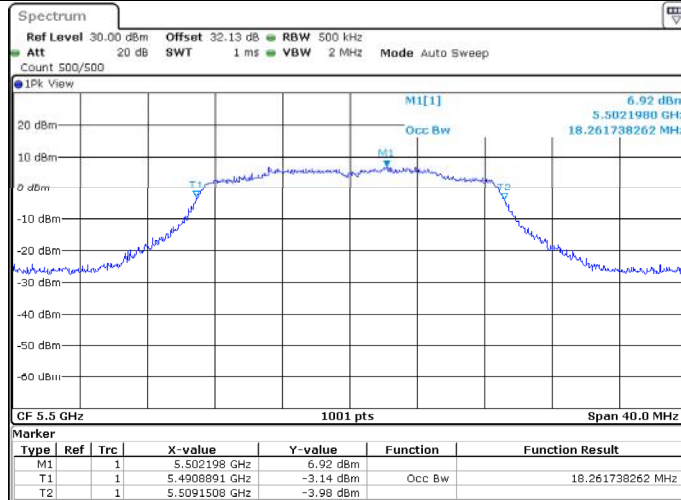
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 Date: 26.APR.2024 02:47:41

11AC20MIMO Ant1 5320



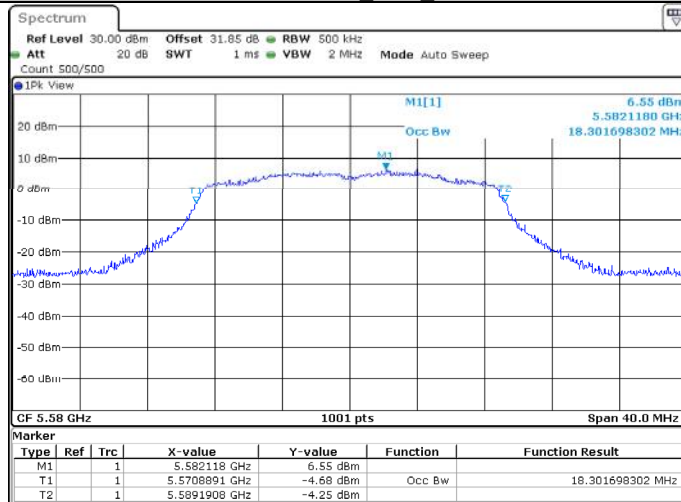
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 Date: 26.APR.2024 02:57:11

11AC20MIMO Ant1 5500

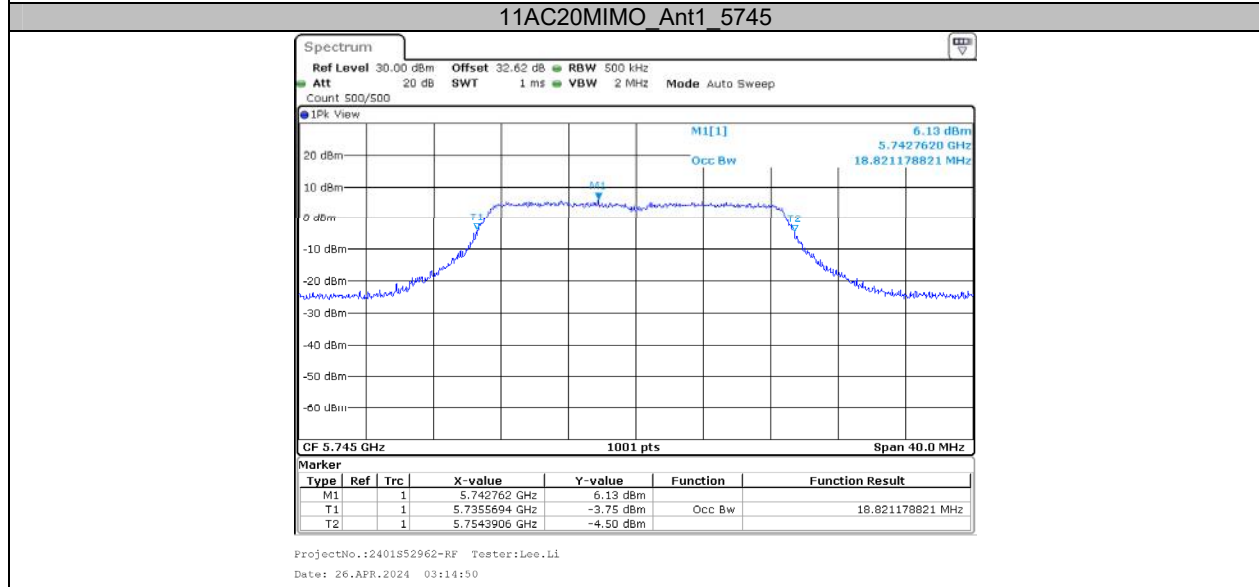
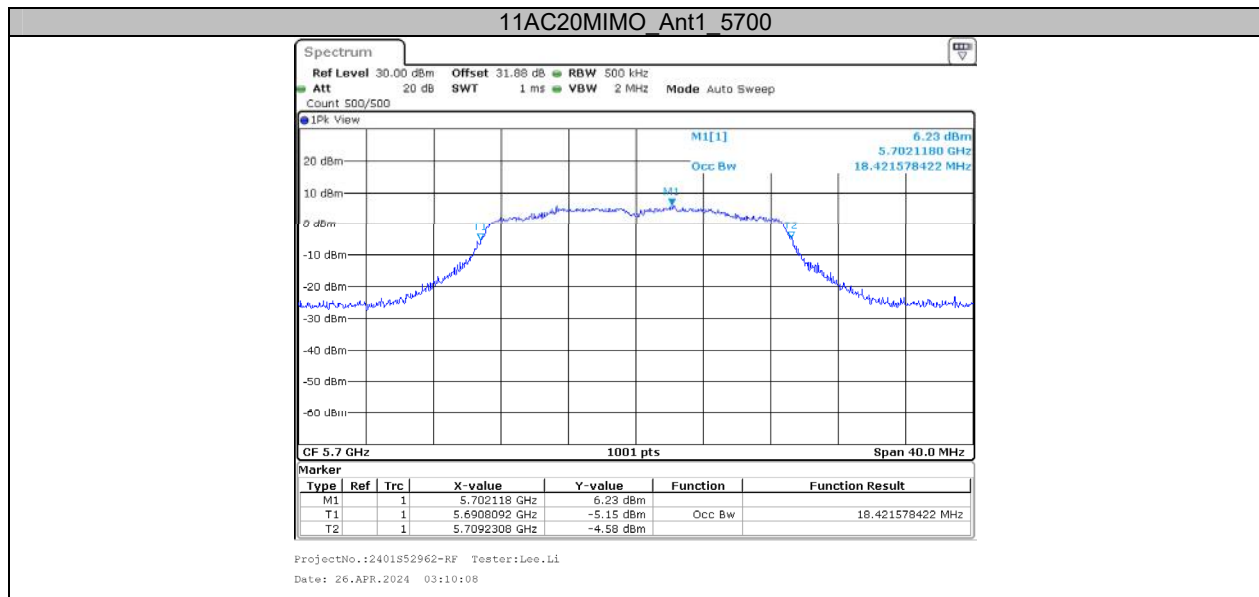


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Date: 26.APR.2024 03:05:24

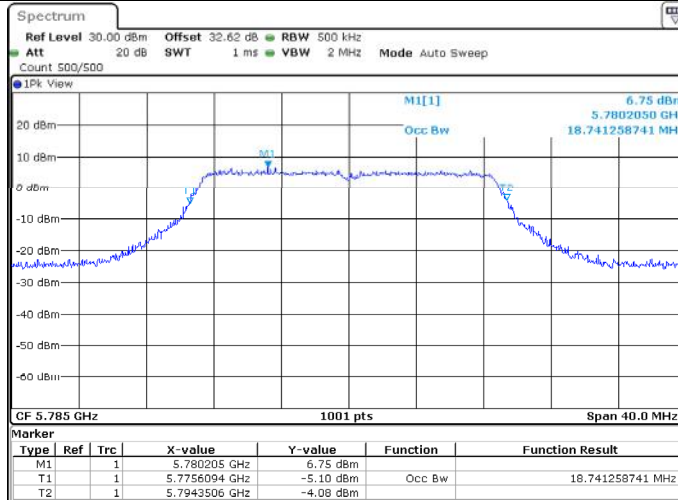
11AC20MIMO Ant1 5580



ProjectNo.:2401S52962-RF Tester:Lee.Li  
Date: 26.APR.2024 03:07:44

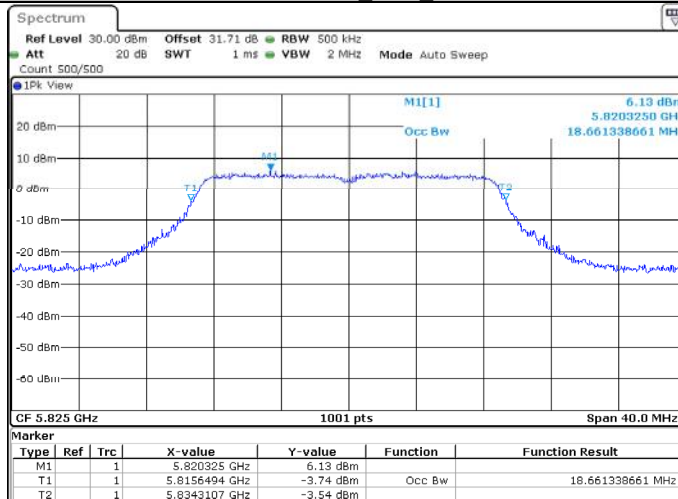


11AC20MIMO Ant1\_5785



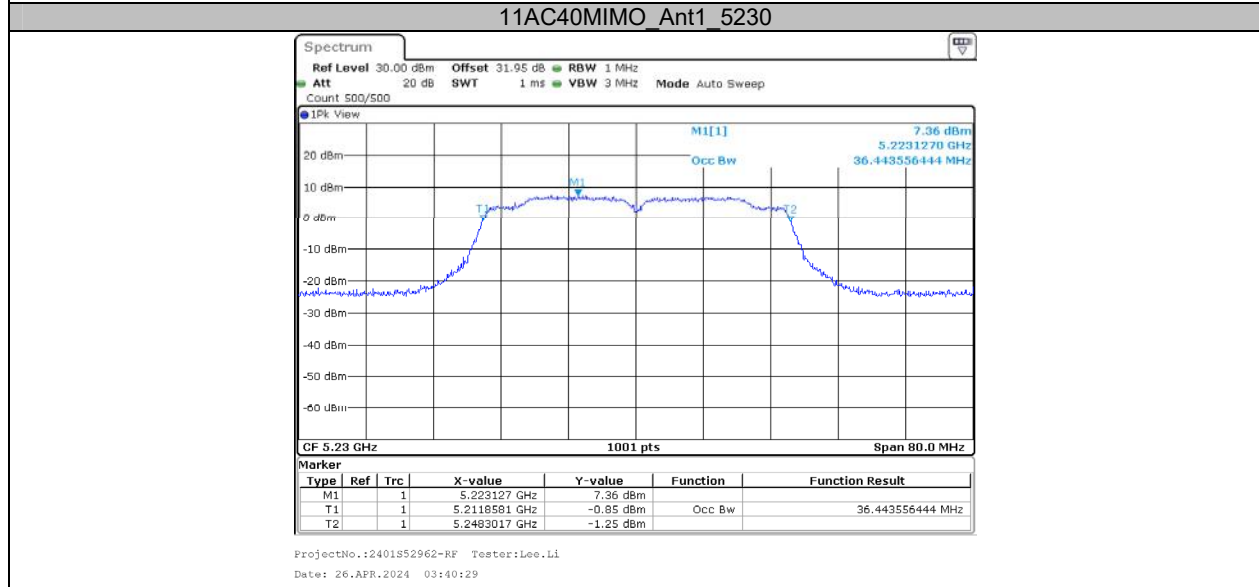
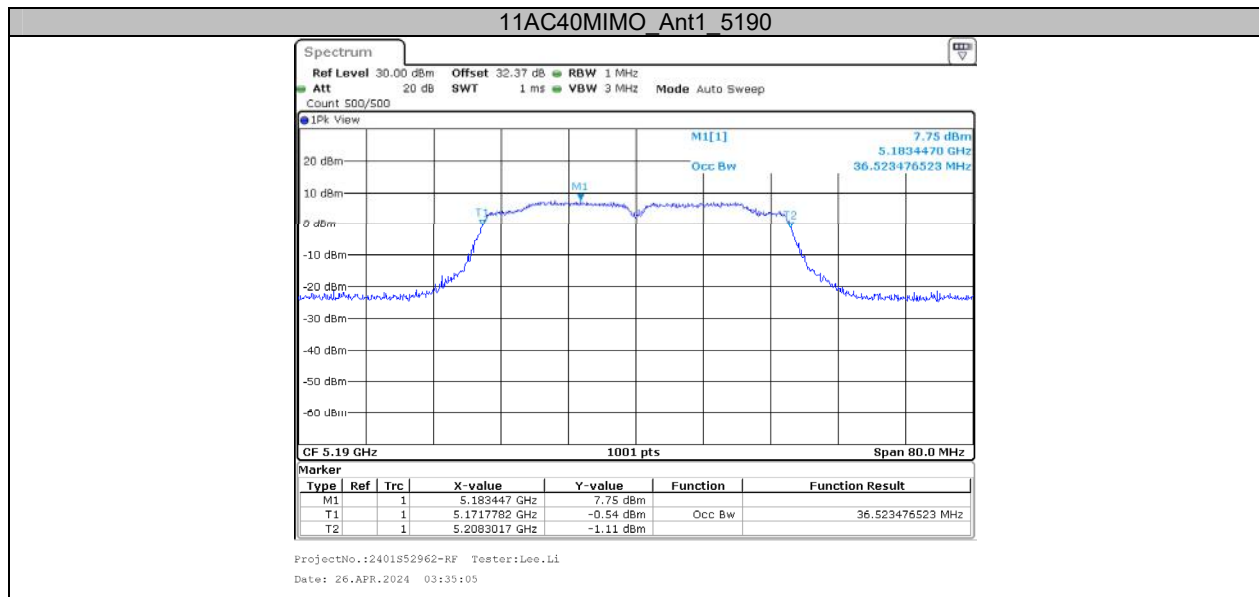
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 Date: 26.APR.2024 03:20:44

11AC20MIMO Ant1\_5825

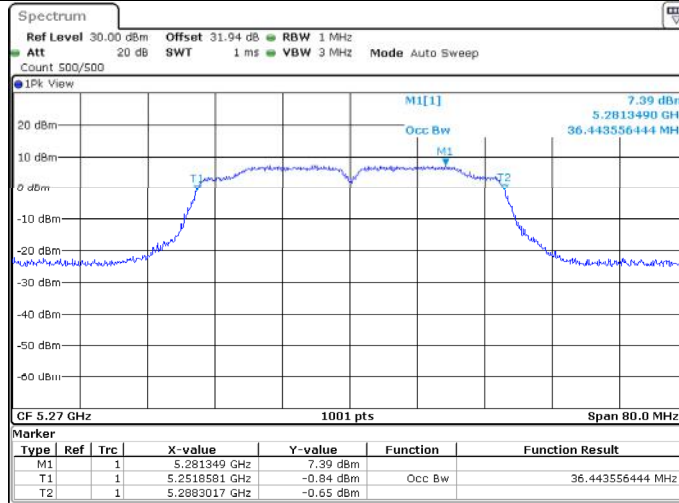


ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 03:28:01



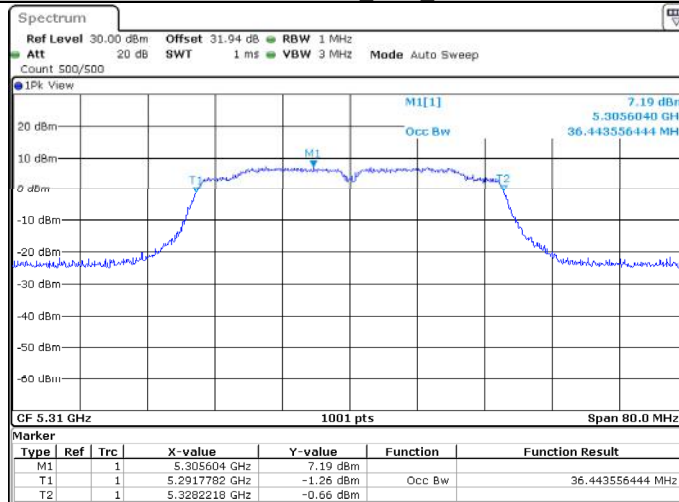


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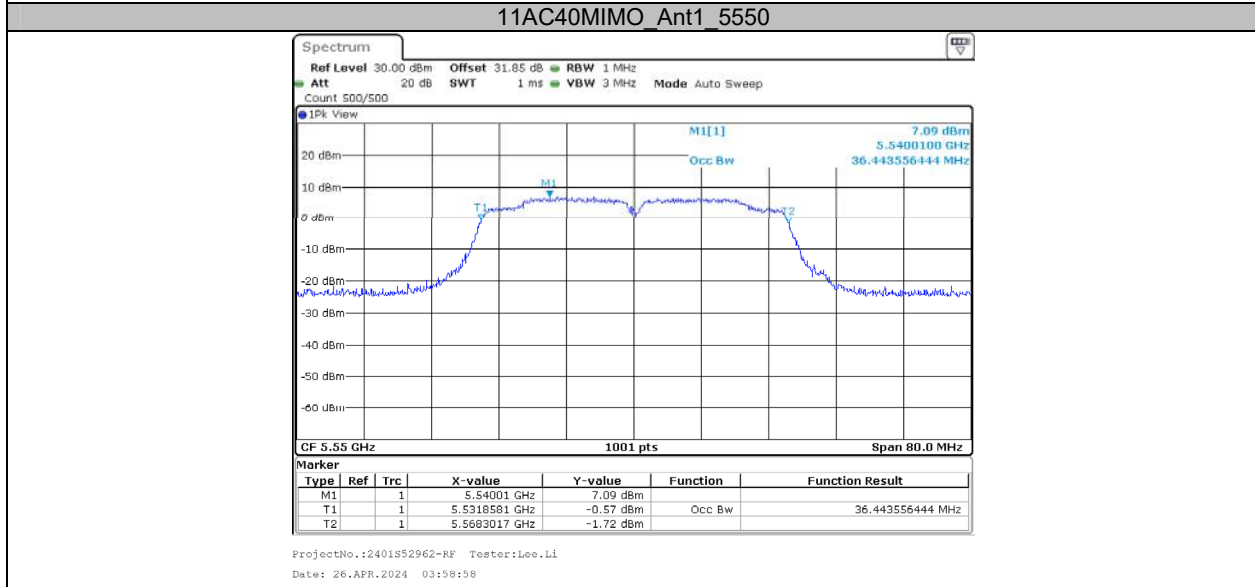
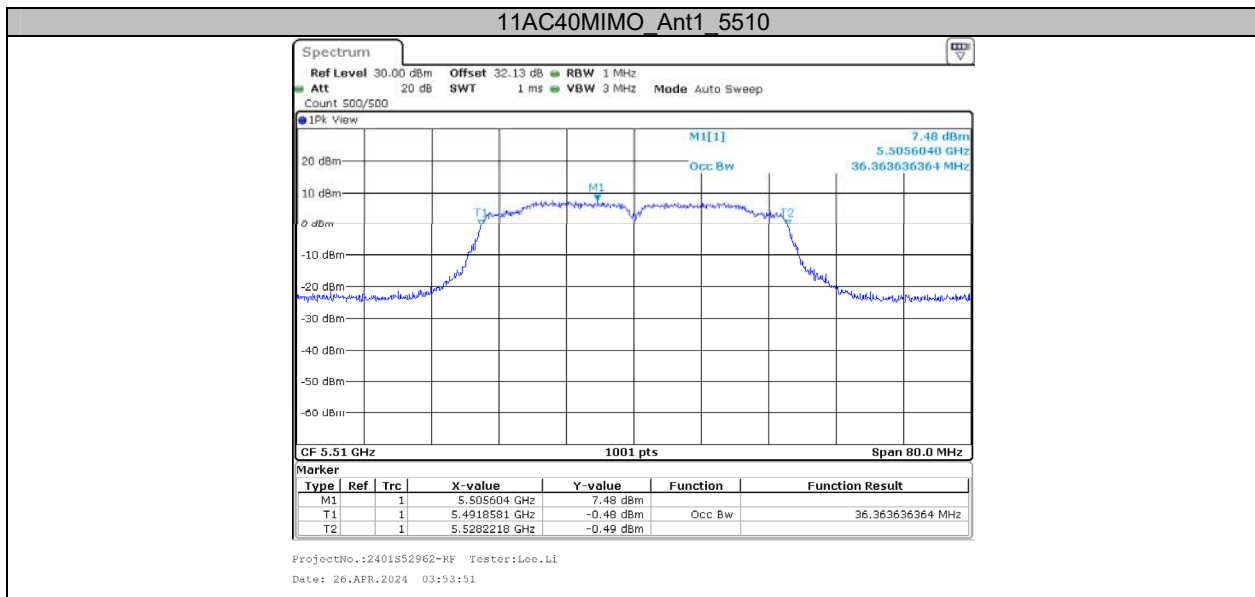


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 Date: 26.APR.2024 03:43:23

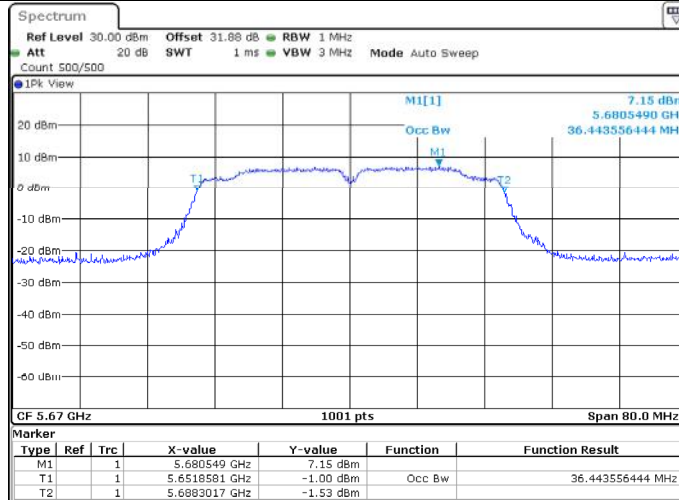
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 Date: 26.APR.2024 03:48:51

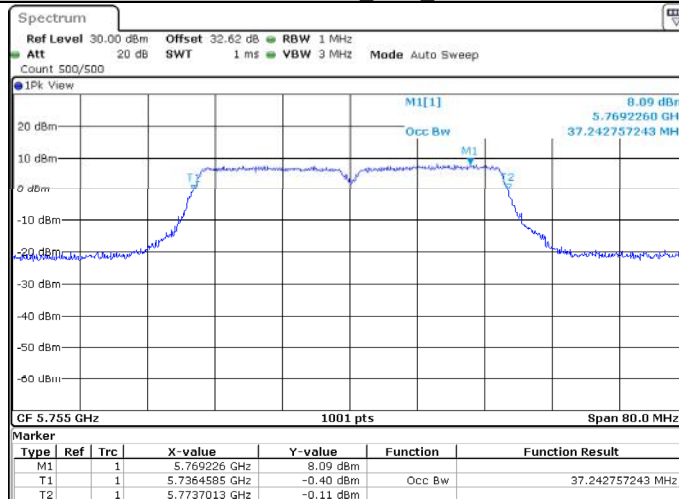


11AC40MIMO Ant1\_5670



ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 04:01:29

11AC40MIMO Ant1\_5755



ProjectNo.:2401S52962-RF Tester:Lee.Li  
 Date: 26.APR.2024 04:11:05

