

FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

APTIVPORT SERVICES, S.A.

Truck Infotainment Unit

Model No.: Service Entertainment Module 2.5

FCC ID: LTQVTSEMNR

Prepared for : APTIVPORT SERVICES, S.A.
Rua Max Grundig, N^o 1 4705-820 Braga Portugal

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Date of Test : Jun.28~Jul.25, 2022
Date of Report : Sep.15, 2022

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TEST REPORT

Applicant : APTIVPORT SERVICES, S.A.
Manufacturer : APTIV Services Deutschland GmbH
Product : Truck Infotainment Unit
FCC ID : LTQVTSEMNR
(A) Model No. : Service Entertainment Module 2.5
(B) Test Voltage : DC 12V

Tested for comply with:
FCC CFR 47 Part 15 Subpart C

Test procedure used:
ANSI C63.10: 2020
KDB 558074 D01v05

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to single evaluation of one sample of above mentioned product and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jun.28~Jul.25, 2022 Report of date: Sep.15, 2022

Prepared by : Mia Zhao Reviewed by : Sunny Lu
Mia Zhao / Assistant Sunny Lu / Manager

 信華科技(深圳)有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: David Jin
David Jin / Deputy General Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

| EMISSION | | |
|-------------------------------|--|---------|
| Description of Test Item | Standard | Results |
| Power Line Conducted Emission | FCC Part 15: 15.207 | N/A |
| Radiated Emission | FCC Part 15: 15.209 FCC Part 15: 15.205 | PASS |
| Band Edge Compliance | FCC Part 15: 15.247(d) | PASS |
| Conducted spurious emissions | FCC Part 15: 15.247(d) | PASS |
| 6dB Bandwidth | FCC Part 15: 15.247(a)(2) | PASS |
| Peak Output Power | FCC Part 15: 15.247(b)(3) | PASS |
| Power Spectral Density | FCC Part 15: 15.247(e) | PASS |
| Antenna requirement | FCC Part 15: 15.203 | PASS |

N/A is an abbreviation for Not Applicable.

Note: Measurement uncertainty affection to the result is considered, the EUT is technically compliant with standard requirements.

2. GENERAL INFORMATION

2.1. Description of Equipment Under Test

| | |
|---|---|
| Applicant | APTIVPORT SERVICES, S.A. |
| Applicant Address | Rua Max Grundig, N° 1 4705-820 Braga Portugal |
| Manufacturer | APTIV Services Deutschland GmbH |
| Manufacturer Address | Am Technologiepark 1 42119 Wuppertal Germany |
| Product | Truck Infotainment Unit |
| Model No. | Service Entertainment Module 2.5 |
| FCC ID | LTQVTSEMNR |
| Sample Type | Prototype production |
| Date of Receipt | Jun.21, 2022 |
| Date of Test | Jun.28~Jul.25, 2022 |
| Remark: This report only for WIFI 2.4GHz. | |

2.2.Feature of Equipment Under Test

| Product Feature & Specification | |
|---------------------------------|--|
| Product | Truck Infotainment Unit |
| Model No. | Service Entertainment Module 2.5 |
| Radio | IEEE802.11 a/b/g/n/ac |
| Power Source | <input type="checkbox"/> Commercial Power AC 100 ~ 240V |
| | <input checked="" type="checkbox"/> External Power Source DC 12V |
| | <input type="checkbox"/> Lithium battery DC V, mAh |
| | <input type="checkbox"/> UM battery DC V |
| Bluetooth | |
| Radio | BDR +EDR |
| Frequency Range | 2402-2480MHz |
| Type of Modulation | GFSK, $\pi/4$ DQPSK, 8DPSK |
| Data Rate | 1Mbps, 2Mbps, 3Mbps |
| Quantity of Channels | 79 |
| Channel Separation | 1MHz |
| 2.4GHz Wi-Fi | |
| Support Modes | 802.11b/g/n20/n40 |
| Frequency Range | 2412-2462MHz |
| Type of Modulation | 802.11b(DSSS): CCK, QPSK, BPSK; 802.11g/n(OFDM): 64QAM,16QAM, QPSK, BPSK |
| Data Rate | 802.11b: 1/2/5.5/11 Mbps; 802.11g: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 300Mbps |
| Channel Separation | 5MHz |
| 5GHz Wi-Fi | |
| Support Modes | 802.11a/n20/n40/ac20/ac40/ac80 |
| Frequency Range | 5180-5240MHz, 5745-5825MHz |
| Type of Modulation | 802.11a/n (OFDM): QPSK, BPSK, 16QAM, 64QAM 802.11ac (OFDM): QPSK, BPSK, 16QAM, 64QAM,256QAM |
| Data Rate | 802.11a: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 300Mbps; 802.11ac: up to 867Mbps |
| Channel Separation | 5MHz |

| Antenna System | |
|-------------------|--|
| Type of Antenna | Internal Chip Antenna |
| Antenna Number | 2 (ANT 1 and ANT 2) |
| Operation Modes | SISO and MIMO mode supported |
| Antenna Peak Gain | Bluetooth Peak Gain: 2.23dBi WiFi 2.4GHz (2400-2483.5MHz) Peak Gain: 2.23dBi. WiFi 5GHz Peak Gain: 2.79dBi |

2.3. Tested Supporting System Details

| No. | Description | ACS No. | Manufacturer | Model | Serial Number |
|-----|-------------|--|--------------|-------|---------------|
| 1. | Notebook | N/A | DELL | PP09S | N/A |
| | | Power Cord(3C): Unshielded, Detachable, 1.8m Power Adapter: Manufacturer: DELL, M/N: LA65NS1-00 Cable: Unshielded, Detachable, 4.0m(Bond one ferrite core) | | | |

2.4. Block diagram of connection between the EUT and simulators



(EUT: Truck Infotainment Unit)

2.5. Test Information

A special test software (Dut labtool, V2.0.0.95) was used to control EUT work in Continuous TX mode(The duty cycle of the test signal is 100%), and select test channel, wireless mode and data rate.

| Tested mode, channel, and data rate information | | | |
|---|----------------------------|-------------|-----------------|
| Mode | data rate (Mbps)(see Note) | Channel | Frequency (MHz) |
| IEEE 802.11b | 1 | Low :CH1 | 2412 |
| | 1 | Middle: CH6 | 2437 |
| | 1 | High: CH11 | 2462 |
| IEEE 802.11g | 6 | Low :CH1 | 2412 |
| | 6 | Middle: CH6 | 2437 |
| | 6 | High: CH11 | 2462 |
| IEEE 802.11n HT20 | MCS0 | Low :CH1 | 2412 |
| | MCS0 | Middle: CH6 | 2437 |
| | MCS0 | High: CH11 | 2462 |
| IEEE 802.11n HT40 | MCS0 | Low :CH3 | 2422 |
| | MCS0 | Middle: CH6 | 2437 |
| | MCS0 | High: CH9 | 2452 |

Note: 1. According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

Note: 2. This is MIMO 2*2 device for 2.4GHz band, test compliance with KDB 662911 D01, The radiated emission and band edge tested with two antenna transmit simultaneously for 11n mode. 11b/g mode support SISO, Choose antenna which has the maximum power for the test.

2.6. Test Facility

Site Description
Name of Firm

: Audix Technology (Shenzhen) Co., Ltd.
No. 6, Kefeng Road, Science & Technology Park,
Nanshan District , Shenzhen, Guangdong, China

EMC Lab.

- : Certificated by ISED, Canada
Company Number: 5183A
CAB identifier: CN0034
Valid Date: Mar.31, 2023
- : Certificated by FCC, USA
Designation No.: CN5022
Valid Date: Mar.31, 2023
- : Accredited by NVLAP, USA
NVLAP Code: 200372-0
Valid Date: Mar.31, 2023

2.7. Measurement Uncertainty (95% confidence levels, k=2)

| Test Item | Uncertainty |
|---|-----------------------------------|
| Uncertainty for Radiation Emission test in 3m chamber | 3.4dB(30~200MHz, Polarization: H) |
| | 3.6dB(30~200MHz, Polarization: V) |
| | 3.0dB(200M~1GHz, Polarization: H) |
| | 3.2dB(200M~1GHz, Polarization: V) |
| Uncertainty for Radiation Emission test in 3m chamber(1GHz-25GHz) | 4.6dB(1~6GHz, Distance: 3m) |
| | 4.8dB(6~25GHz, Distance: 3m) |
| Uncertainty for Radiated Spurious Emission test in RF chamber | 3.7dB(30MHz~1000MHz) |
| | 3.3dB(1~26.5GHz) |
| Uncertainty for Conduction Spurious emission test | 2.0dB |
| Uncertainty for Output power test | 0.8dB |
| Uncertainty for Bandwidth test | 83kHz |
| Uncertainty for DC power test | 1% |
| Uncertainty for test site temperature and humidity | 0.6°C |
| | 3% |

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (c) of FCC Part 15 section 15.207, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

4. RADIATED EMISSION TEST

4.1. Test Equipments

4.1.1. For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|---------------------------|-----------------|-------------|------------|-----------|---------------|
| 1. | 3#Chamber(NSA) | AUDIX | N/A | N/A | May.02,22 | 1 Year |
| 2. | 3#Chamber(SE) | AUDIX | N/A | N/A | May.17,18 | 5 Year |
| 3. | Signal Analyzer | Rohde & Schwarz | FSV30 | 103670 | Oct.09,21 | 1 Year |
| 4. | Tri-log-Broadband Antenna | SCHWARZBECK | VULB 9168 | 710 | Dec.13,21 | 1 Year |
| 5. | NSA Cable | HUBER+SUHNER | CFD400NL-LW | No.3 | Oct.09,21 | 1 Year |
| 6. | Coaxial Switch | Anritsu | MP59B | 6201397223 | Apr.06,22 | 1 Year |
| 7. | EMI Test Receiver | Rohde & Schwarz | ESR7 | 101547 | Apr.06,22 | 1 Year |
| 8. | Amplifier | HP | 8447D | 2944A11159 | Apr.06,22 | 1 Year |
| 9. | Test Software | AUDIX | e3 | 6.100913a | N/A | N/A |

Note: N/A means Not applicable.

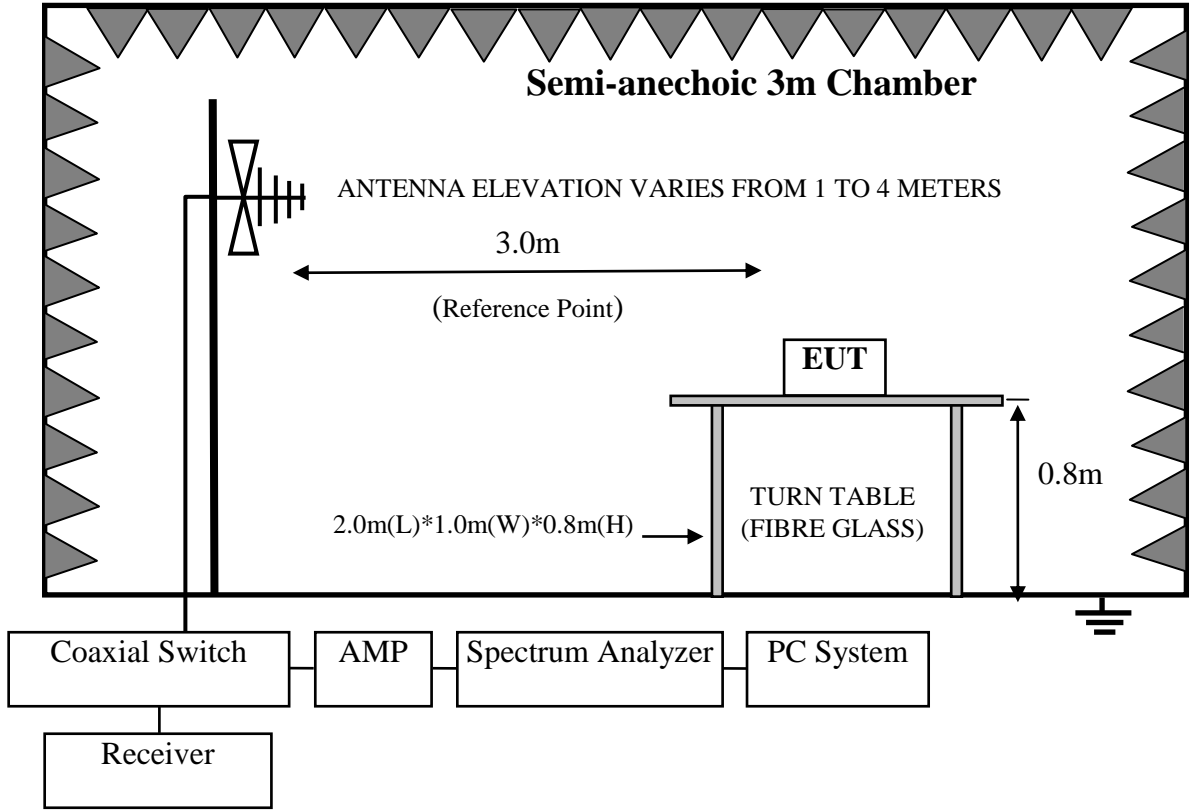
4.1.2. For frequency range 1GHz~25GHz (In 3m Anechoic Chamber)

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|------------------|-----------------|--------------------|-------------|-----------|---------------|
| 1. | 3#Chamber(Svswr) | AUDIX | N/A | N/A | Apr.14,22 | 1 Year |
| 2. | 3#Chamber(SE) | AUDIX | N/A | N/A | May.17,18 | 5 Year |
| 3. | Signal Analyzer | Rohde & Schwarz | FSV30 | 103670 | Oct.09,21 | 1 Year |
| 4. | Amplifier | Agilent | 83017A | MY53270084 | Oct.09,21 | 1 Year |
| 5. | RF Cable | EMCI | EMC104-SM-SM-15000 | 190407 | Jul.01,22 | 1 Year |
| 6. | Test Software | AUDIX | e3 | 6.100913a | N/A | N/A |
| 7. | Horn Antenna | ETC | MCTD 1209 | DRH15F03006 | Jul.26,21 | 1 Year |

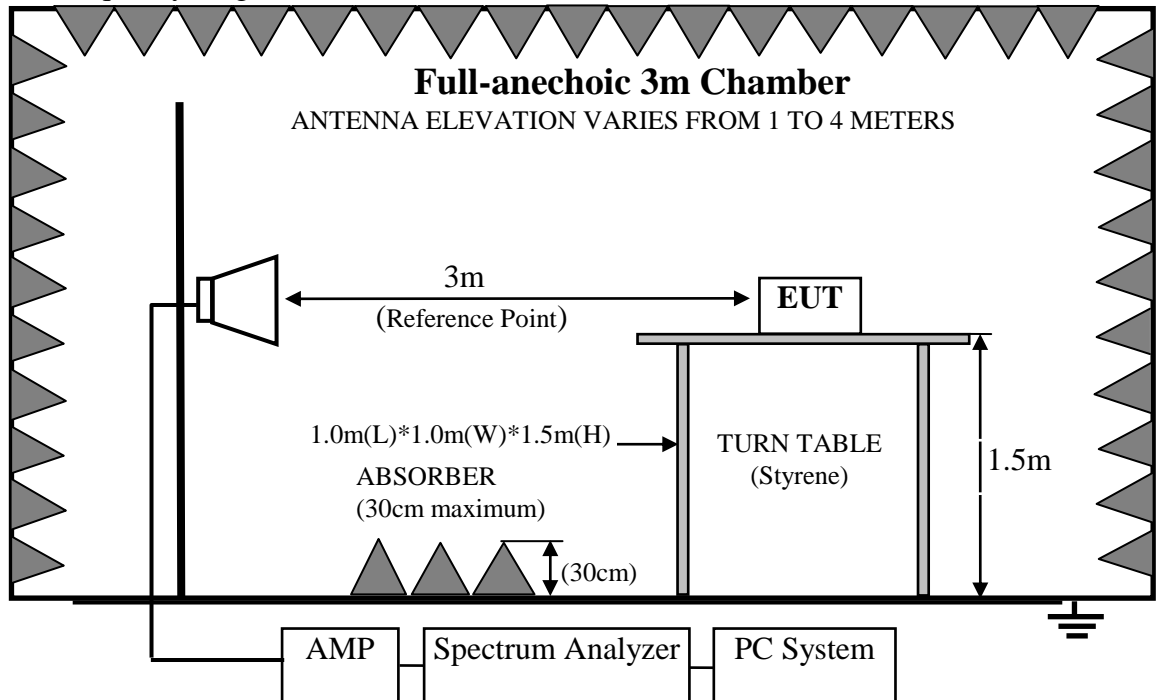
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3. Radiated Emission Limits

4.3.1. 15.247&209 limits

| FREQUENCY MHz | DISTANCE Meters | FIELD STRENGTHS LIMIT | |
|------------------|--------------------|---|----------|
| | | μV/m | dB(μV)/m |
| 30 ~ 88 | 3 | 100 | 40.0 |
| 88 ~ 216 | 3 | 150 | 43.5 |
| 216 ~ 960 | 3 | 200 | 46.0 |
| 960 ~ 1000 | 3 | 500 | 54.0 |
| Above 1000 | 3 | 74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average) | |

- Remark : (1) Emission Level (dBμV/m) = Reading (Receiver) (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB)
Emission Level (dBμV/m) = Reading (Spectrum) (dBμV) + Antenna Factor (dB/m) – Amp Factor (dB) + Cable Loss (dB)(above 1000MHz)
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2. 15.205 Restricted bands of operation

| MHz | MHz | MHz | GHz |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2690 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | (²) |

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4. EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.4.1. Truck Infotainment Unit (EUT)

Model No. : Service Entertainment Module 2.5
Serial No. : N/A

4.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2. Turn on the power of all equipments.
- 4.5.3. Let EUT work in Tx(WiFi 2.4GHz) mode

4.6. Test Procedure

Frequency below 30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horn antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

4.7. Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note 1: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

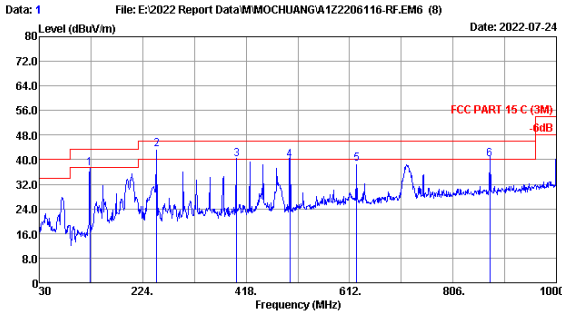
Note 2: The emissions (9kHz~30MHz) not reported for there is no emission be found.

Duty cycle

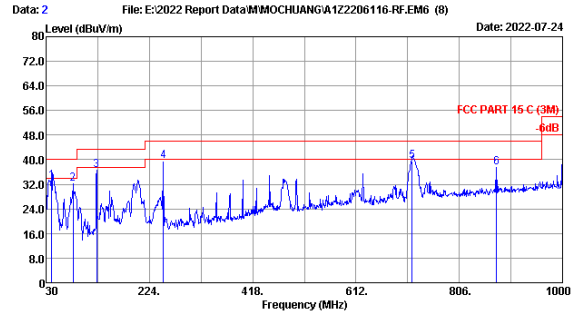


Note: The duty cycle of the test signal is $\geq 98\%$.

Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 1
 Dis. / Ant. : 3m 2021 VULB9168-710 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C (3M) Engineer : Abel
 Env. / Ins. : 23.3°C/53%
 Test Mode : WIFI2.4G TX



Site no. : 3m Chamber Data no. : 2
 Dis. / Ant. : 3m 2021 VULB9168-710 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C (3M) Engineer : Abel
 Env. / Ins. : 23.3°C/53%
 Test Mode : WIFI2.4G TX

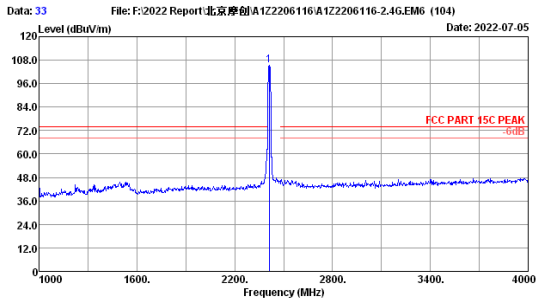
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-------------------------|-----------------|-------------|--------|
| 1 | 125.010 | 17.10 | 1.12 | 19.00 | 37.22 | 43.50 | 6.28 | QP |
| 2 | 249.995 | 18.30 | 1.57 | 23.60 | 43.47 | 46.00 | 2.53 | QP |
| 3 | 399.998 | 22.10 | 2.02 | 16.10 | 40.22 | 46.00 | 5.78 | QP |
| 4 | 500.000 | 23.90 | 2.34 | 13.50 | 39.74 | 46.00 | 6.26 | QP |
| 5 | 625.000 | 26.15 | 2.64 | 9.99 | 38.78 | 46.00 | 7.22 | QP |
| 6 | 874.941 | 28.85 | 3.28 | 8.00 | 40.13 | 46.00 | 5.87 | QP |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-------------------------|-----------------|-------------|--------|
| 1 | 40.998 | 20.30 | 0.71 | 12.00 | 33.01 | 40.00 | 6.99 | QP |
| 2 | 80.440 | 15.40 | 0.85 | 15.95 | 32.20 | 40.00 | 7.80 | QP |
| 3 | 125.060 | 17.10 | 1.12 | 18.46 | 36.68 | 43.50 | 6.82 | QP |
| 4 | 250.004 | 18.30 | 1.57 | 19.80 | 39.67 | 46.00 | 6.33 | QP |
| 5 | 717.700 | 27.28 | 2.85 | 9.30 | 39.43 | 46.00 | 6.57 | QP |
| 6 | 875.840 | 28.86 | 3.28 | 5.21 | 37.35 | 46.00 | 8.65 | QP |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

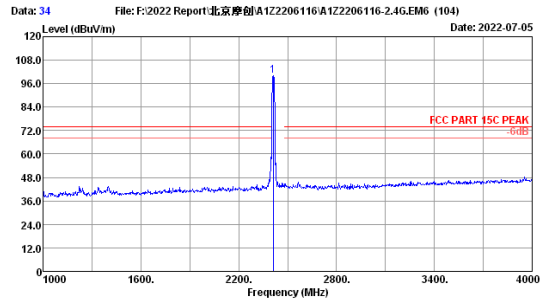
Frequency: 1GHz~18GHz



Data: 33 File: F:\2022 Report\北京摩创\A1Z2206116\A1Z2206116-2.4G.EM6 (104) Date: 2022-07-05
 Site no. : 3m Chamber Data no. : 33
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 108.86 | 35.24 | 105.21 | 72.00 | 33.21 | Peak |

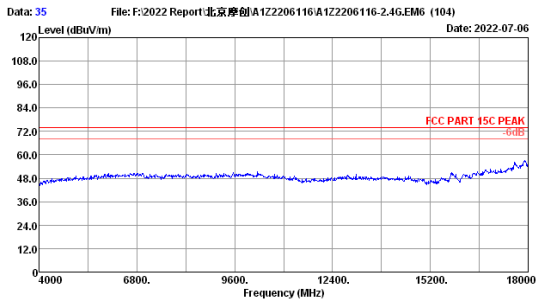
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



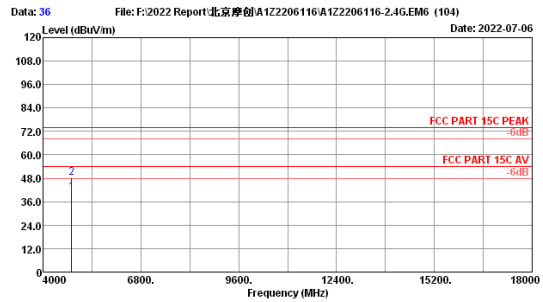
Data: 34 File: F:\2022 Report\北京摩创\A1Z2206116\A1Z2206116-2.4G.EM6 (104) Date: 2022-07-05
 Site no. : 3m Chamber Data no. : 34
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 103.75 | 35.24 | 100.10 | 72.00 | 28.10 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



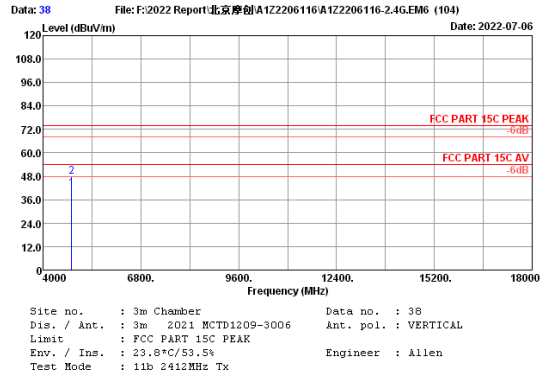
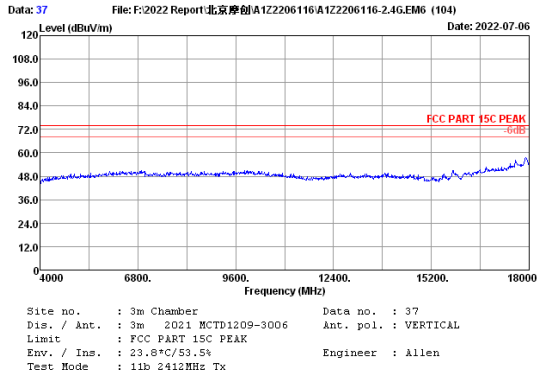
Data: 35 File: F:\2022 Report\北京摩创\A1Z2206116\A1Z2206116-2.4G.EM6 (104) Date: 2022-07-06
 Site no. : 3m Chamber Data no. : 35
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx



Data: 36 File: F:\2022 Report\北京摩创\A1Z2206116\A1Z2206116-2.4G.EM6 (104) Date: 2022-07-06
 Site no. : 3m Chamber Data no. : 36
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx

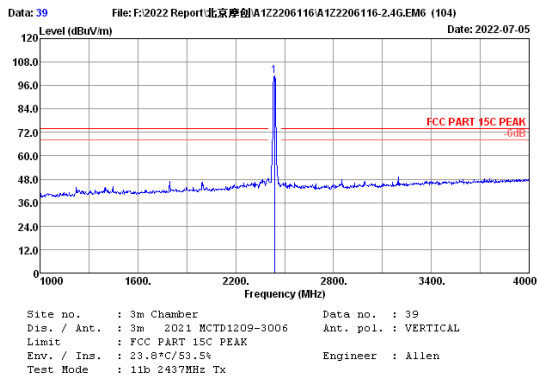
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 37.62 | 34.46 | 40.85 | 54.00 | 13.15 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 45.11 | 34.46 | 48.34 | 74.00 | 25.66 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



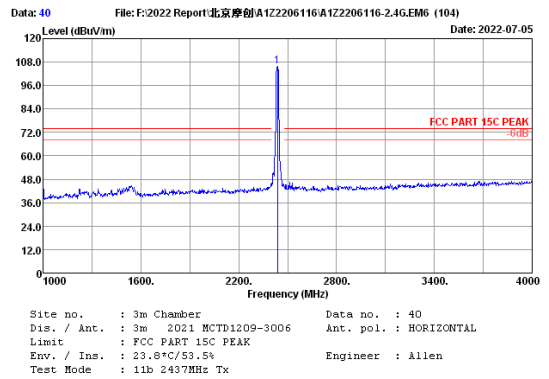
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 38.34 | 34.46 | 41.57 | 54.00 | 12.43 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 44.51 | 34.46 | 47.74 | 74.00 | 26.26 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



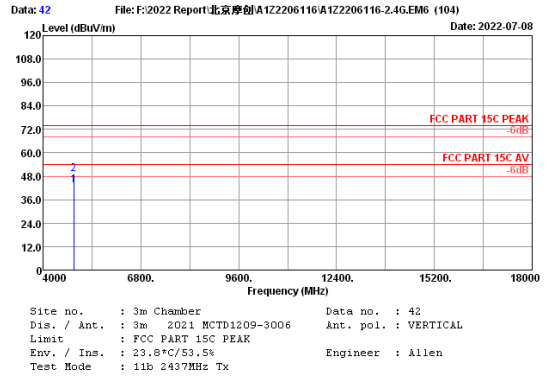
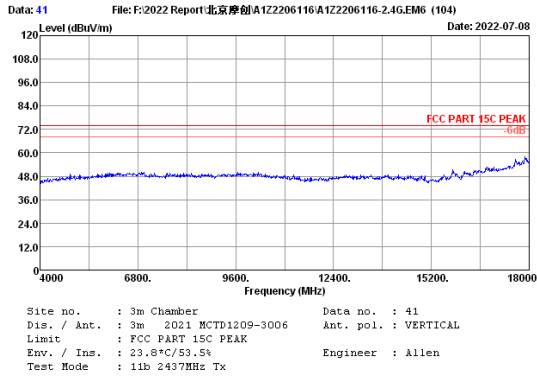
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 104.71 | 35.24 | 101.15 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



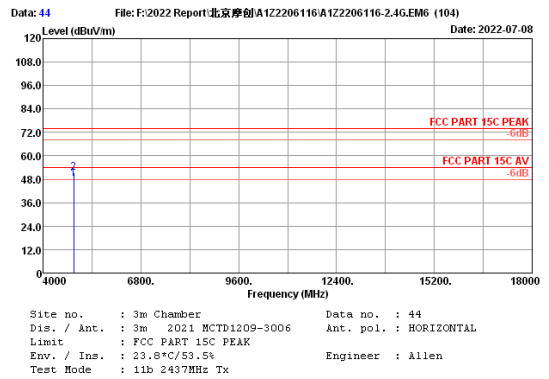
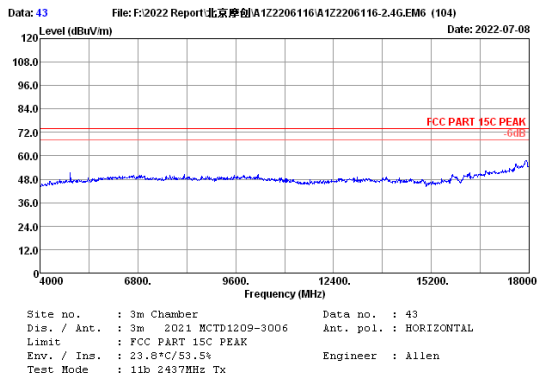
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 109.57 | 35.24 | 106.01 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



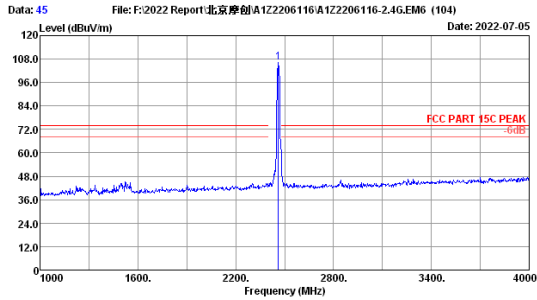
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 40.08 | 34.47 | 43.35 | 54.00 | 10.65 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 46.00 | 34.47 | 49.27 | 74.00 | 24.73 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 45.05 | 34.47 | 48.32 | 54.00 | 5.68 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 48.10 | 34.47 | 51.37 | 74.00 | 22.63 | Peak |

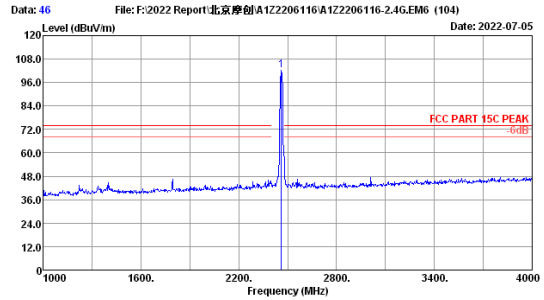
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 45
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 109.72 | 35.25 | 106.20 | ----- | ----- | Peak |

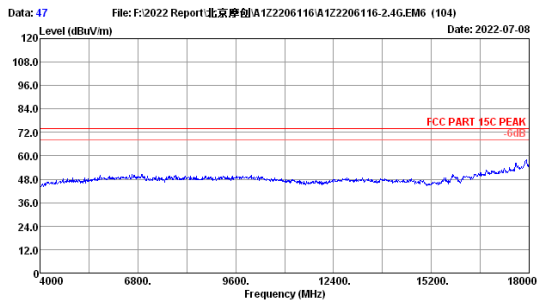
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



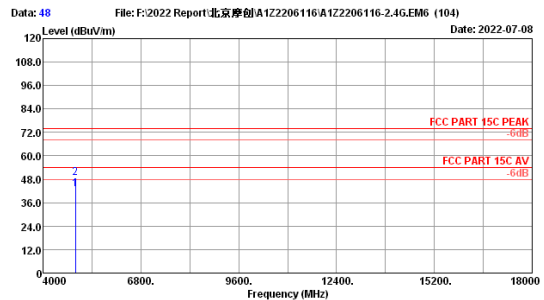
Site no. : 3m Chamber Data no. : 46
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 105.70 | 35.25 | 102.18 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



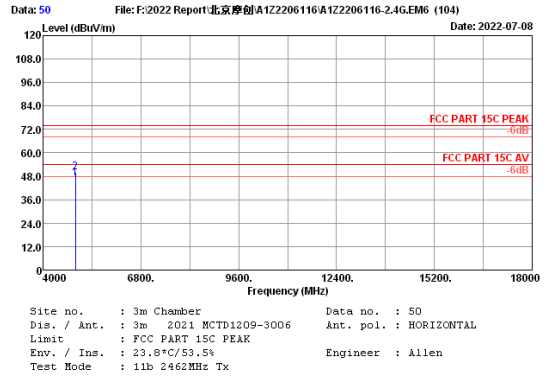
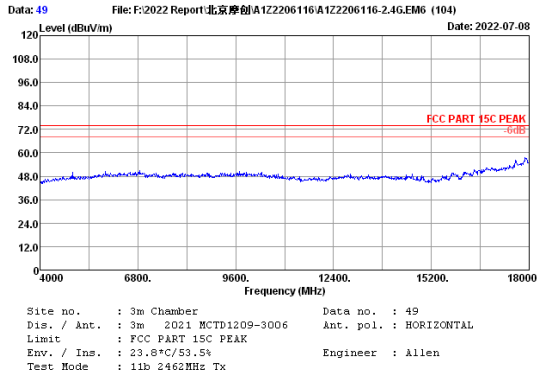
Site no. : 3m Chamber Data no. : 47
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx



Site no. : 3m Chamber Data no. : 48
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

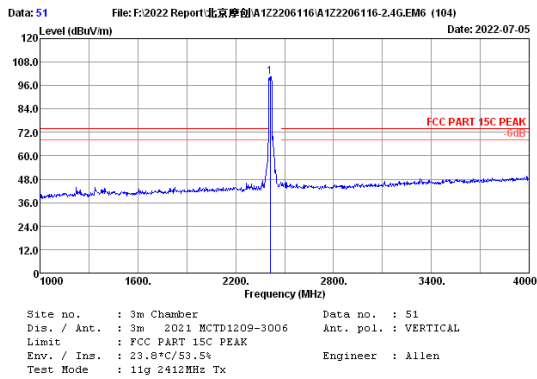
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 39.62 | 34.48 | 42.93 | 54.00 | 11.07 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 45.31 | 34.48 | 48.62 | 74.00 | 25.38 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



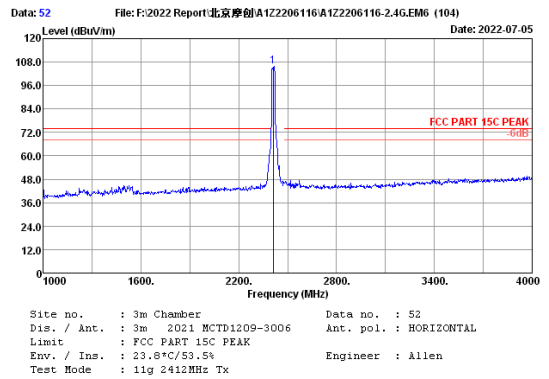
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 43.70 | 34.48 | 47.01 | 54.00 | 6.99 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 46.66 | 34.48 | 49.97 | 74.00 | 24.03 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



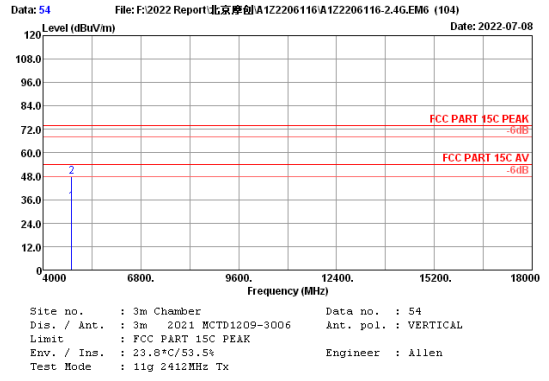
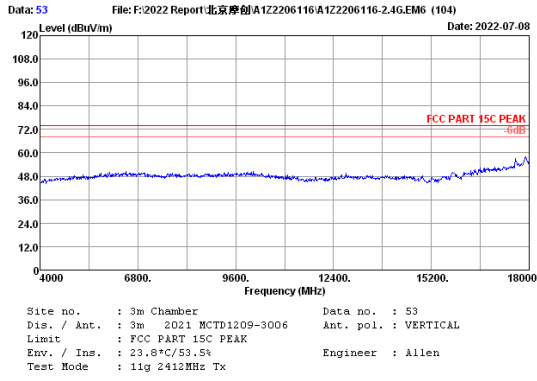
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 104.02 | 35.24 | 100.37 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



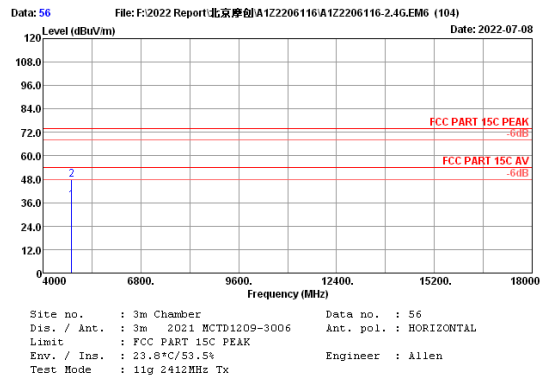
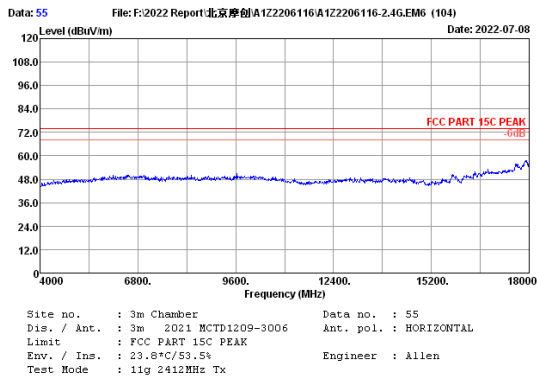
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 109.42 | 35.24 | 105.77 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



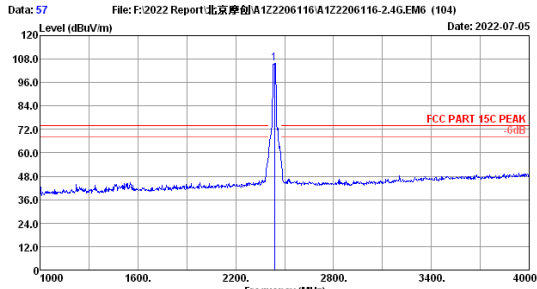
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 31.92 | 34.46 | 35.15 | 54.00 | 18.85 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 44.44 | 34.46 | 47.67 | 74.00 | 26.33 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 33.98 | 34.46 | 37.21 | 54.00 | 16.79 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 44.76 | 34.46 | 47.99 | 74.00 | 26.01 | Peak |

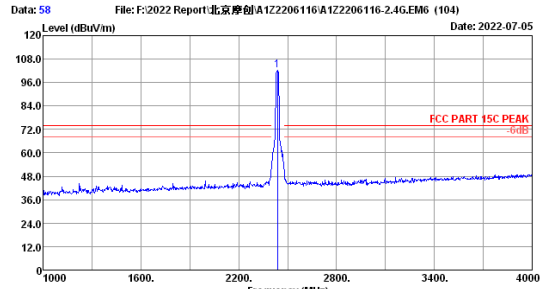
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 57
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 109.35 | 35.24 | 105.79 | 72.00 | 33.79 | Peak |

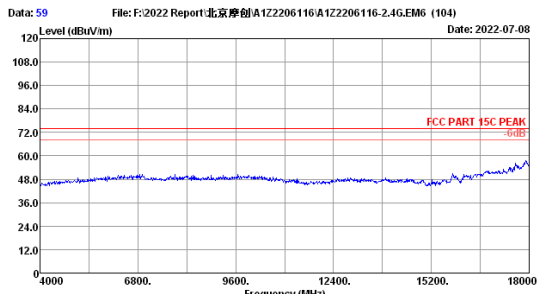
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



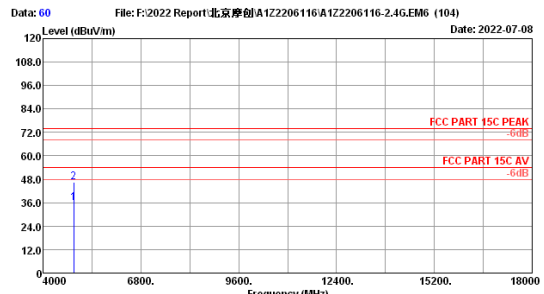
Site no. : 3m Chamber Data no. : 58
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 105.68 | 35.24 | 102.12 | 72.00 | 30.12 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



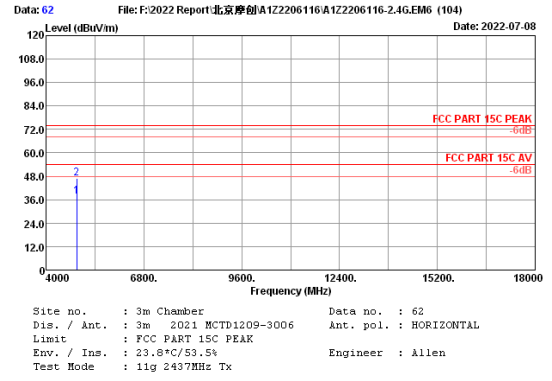
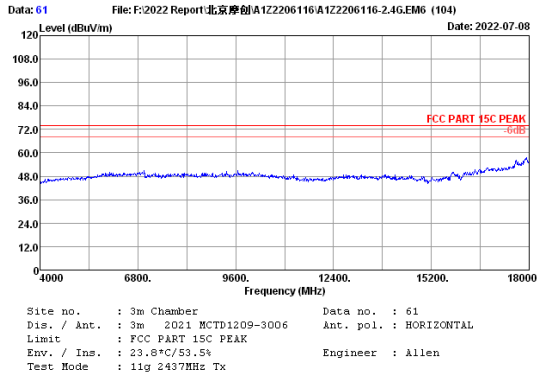
Site no. : 3m Chamber Data no. : 59
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx



Site no. : 3m Chamber Data no. : 60
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

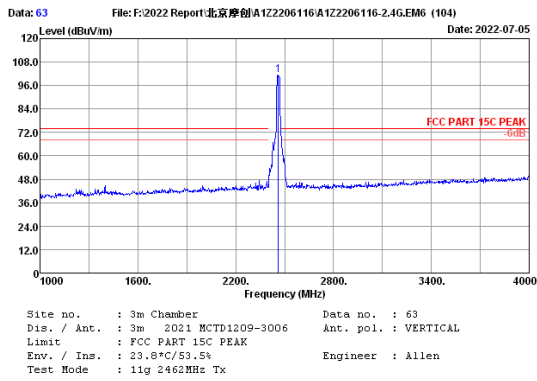
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 32.38 | 34.47 | 35.65 | 54.00 | 18.35 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 43.28 | 34.47 | 46.55 | 74.00 | 27.45 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



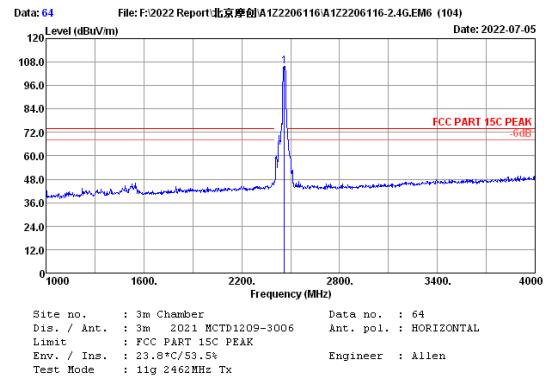
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 34.37 | 34.47 | 57.64 | 54.00 | 16.36 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 43.58 | 34.47 | 46.85 | 74.00 | 27.15 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



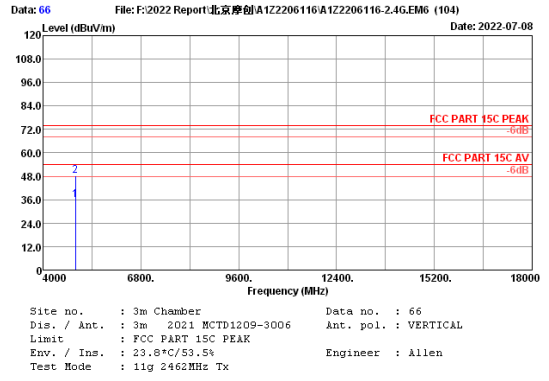
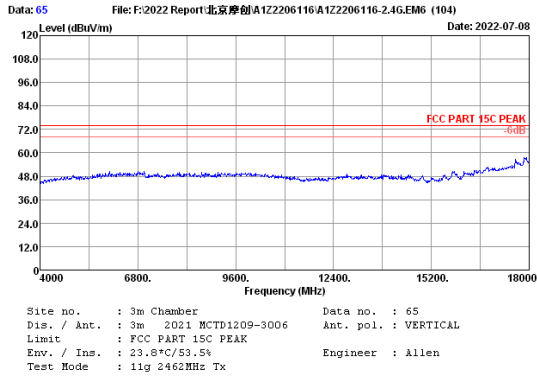
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 104.83 | 35.25 | 101.31 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



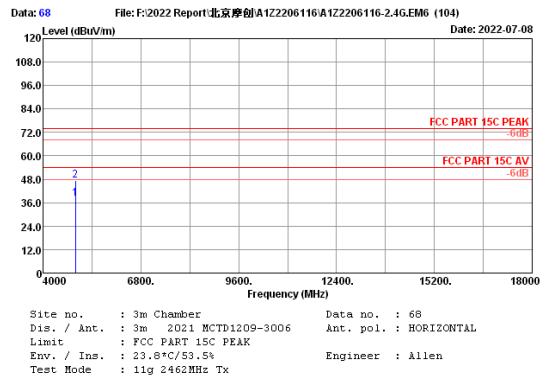
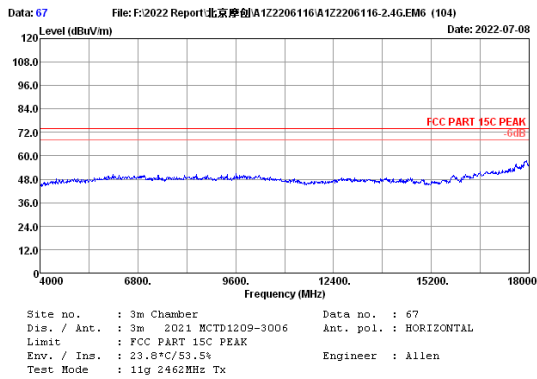
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 109.45 | 35.25 | 105.93 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



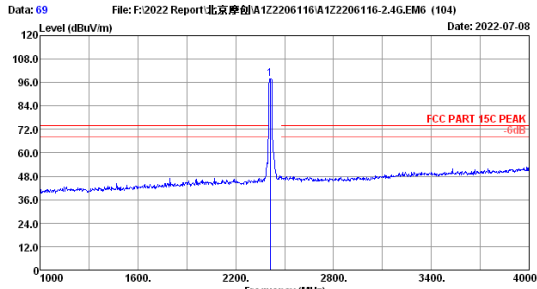
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 32.51 | 34.48 | 35.82 | 54.00 | 18.18 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 44.77 | 34.48 | 48.08 | 74.00 | 25.92 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 34.80 | 34.48 | 38.11 | 54.00 | 15.89 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 43.86 | 34.48 | 47.17 | 74.00 | 26.83 | Peak |

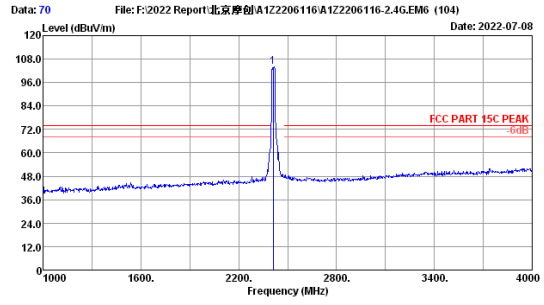
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 69
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 101.63 | 35.24 | 97.98 | 72.00 | 25.98 | Peak |

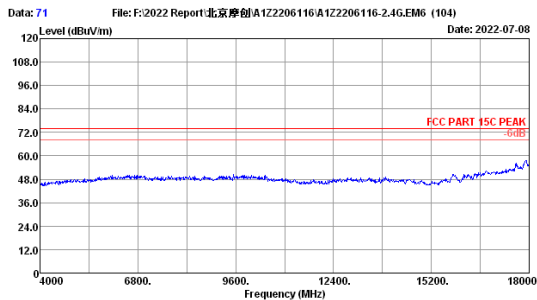
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



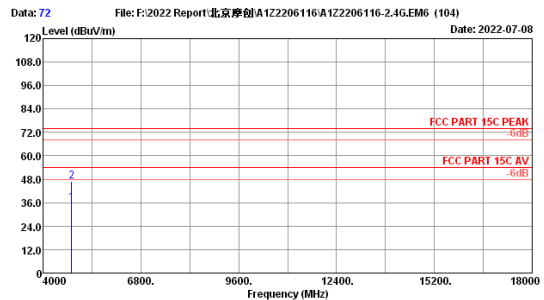
Site no. : 3m Chamber Data no. : 70
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx

| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2412.00 | 27.93 | 3.66 | 107.86 | 35.24 | 104.21 | 72.00 | 32.21 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



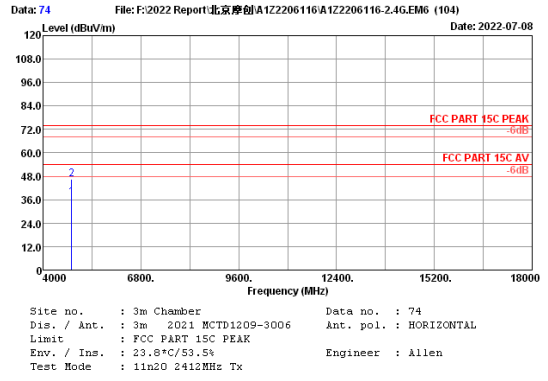
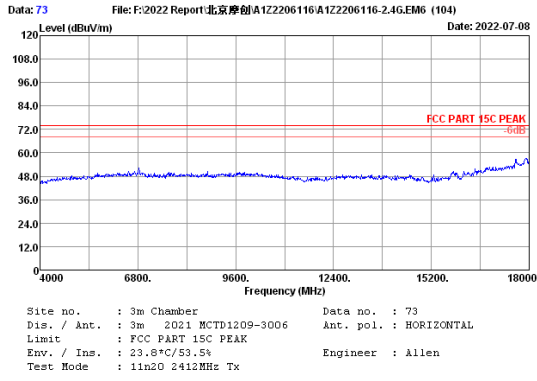
Site no. : 3m Chamber Data no. : 71
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx



Site no. : 3m Chamber Data no. : 72
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx

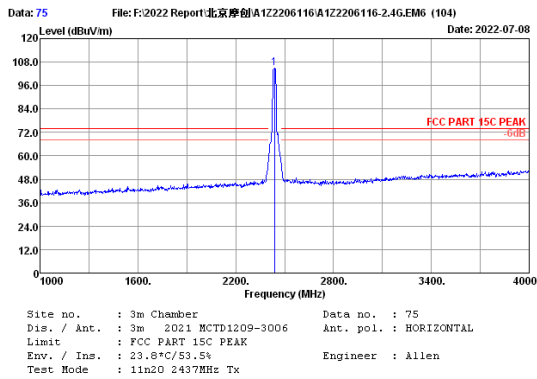
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 32.45 | 34.46 | 35.68 | 54.00 | 18.32 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 43.84 | 34.46 | 47.07 | 74.00 | 26.93 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



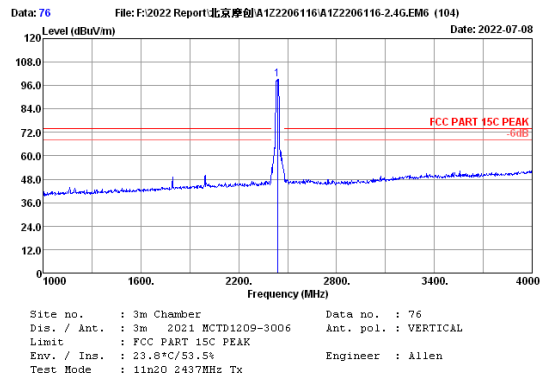
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4824.00 | 32.70 | 4.99 | 33.86 | 34.46 | 37.09 | 54.00 | 16.91 | Average |
| 2 | 4824.00 | 32.70 | 4.99 | 43.37 | 34.46 | 46.60 | 74.00 | 27.40 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



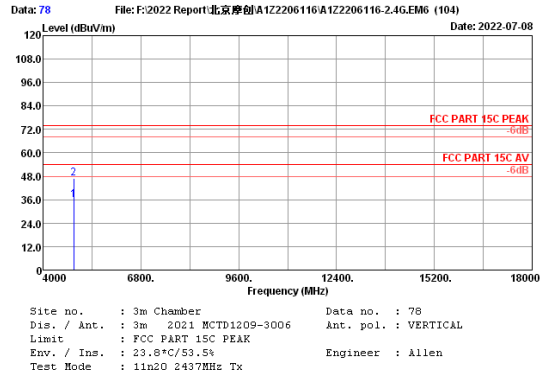
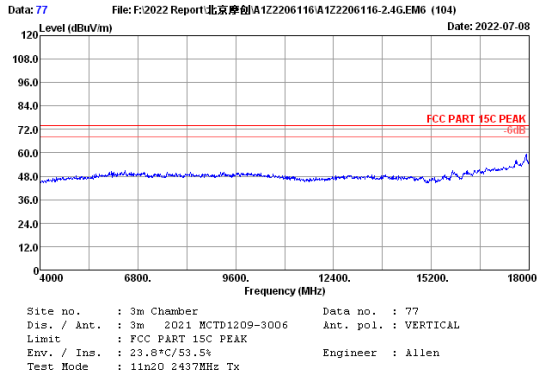
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 108.68 | 35.24 | 105.12 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



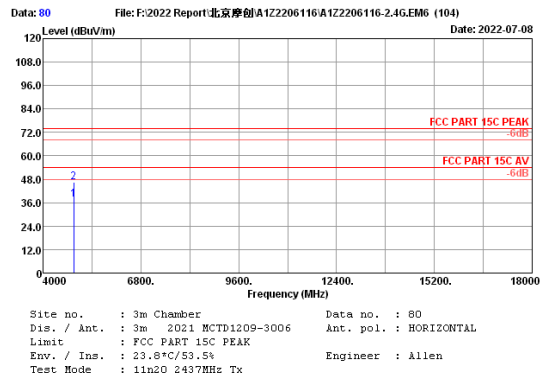
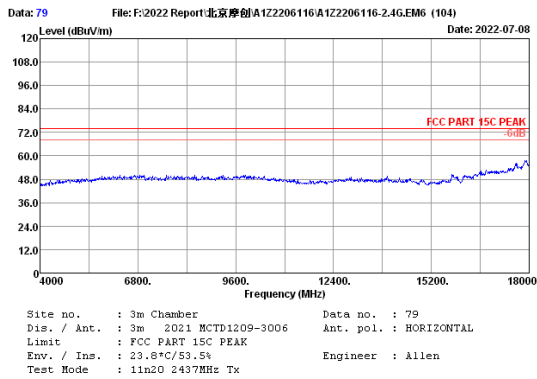
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 102.84 | 35.24 | 99.28 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



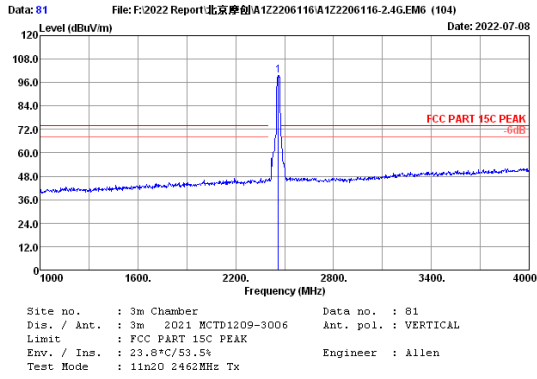
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 32.50 | 34.47 | 35.77 | 54.00 | 18.23 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 43.58 | 34.47 | 46.95 | 74.00 | 27.15 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



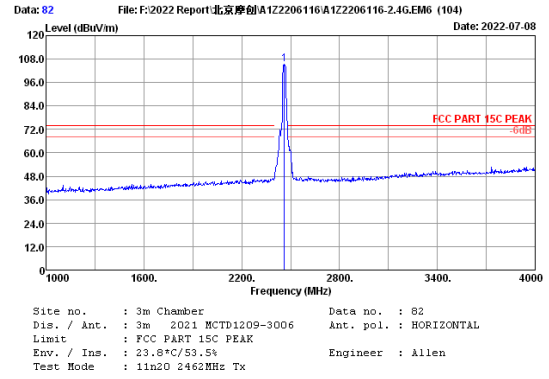
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 34.49 | 34.47 | 37.76 | 54.00 | 16.24 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 43.42 | 34.47 | 46.69 | 74.00 | 27.31 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



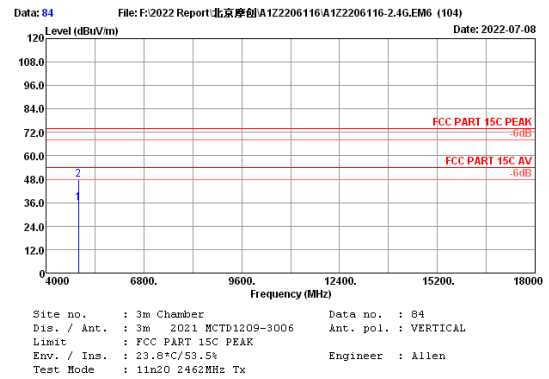
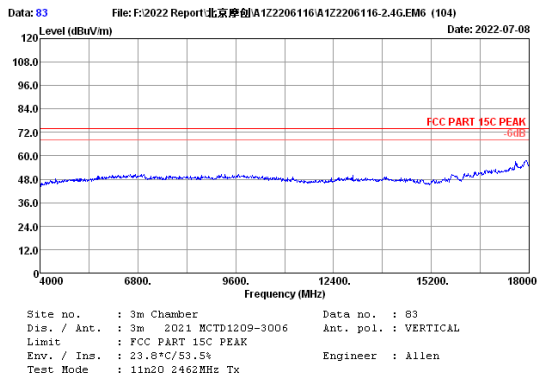
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 102.98 | 35.25 | 99.46 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



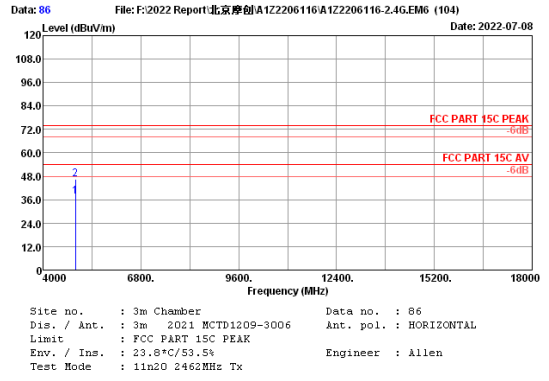
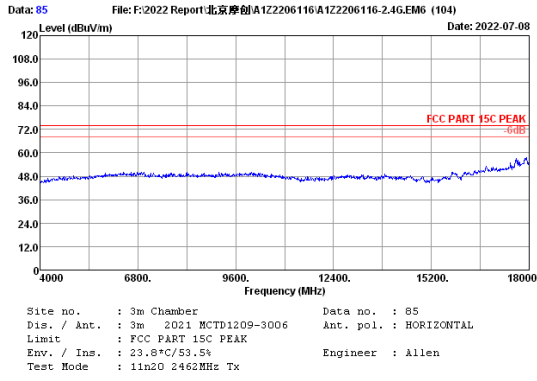
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2462.00 | 28.03 | 3.70 | 108.84 | 35.25 | 105.32 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



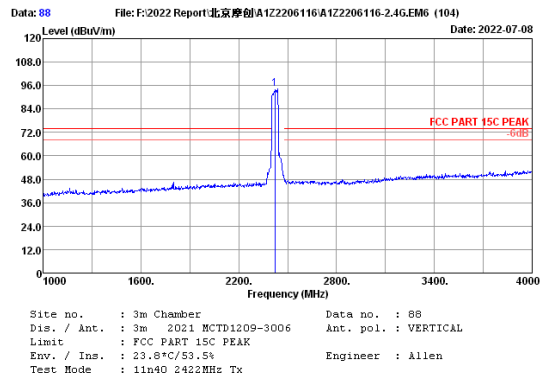
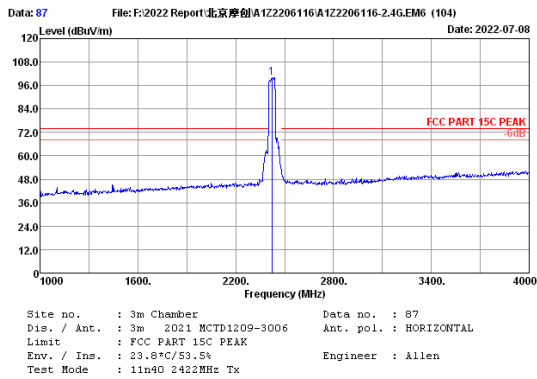
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 32.56 | 34.48 | 35.87 | 54.00 | 18.13 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 44.42 | 34.48 | 47.73 | 74.00 | 26.27 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4924.00 | 32.76 | 5.03 | 34.26 | 34.48 | 37.57 | 54.00 | 16.43 | Average |
| 2 | 4924.00 | 32.76 | 5.03 | 43.36 | 34.48 | 46.67 | 74.00 | 27.33 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

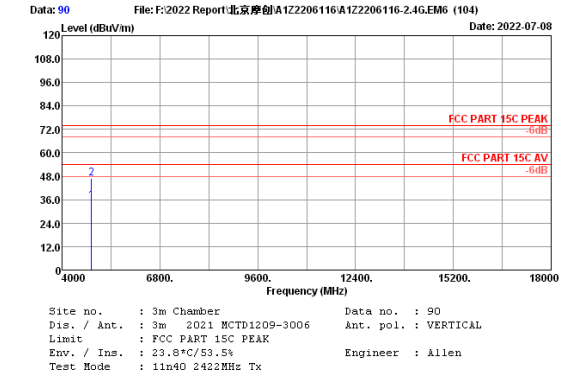
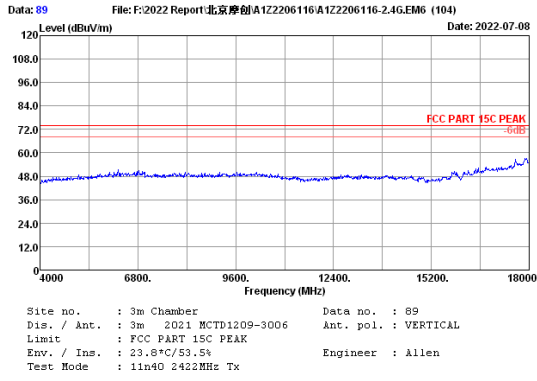


| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2422.00 | 27.96 | 3.67 | 103.75 | 35.24 | 100.14 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

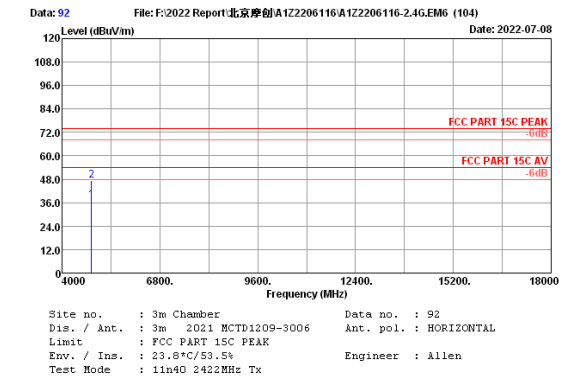
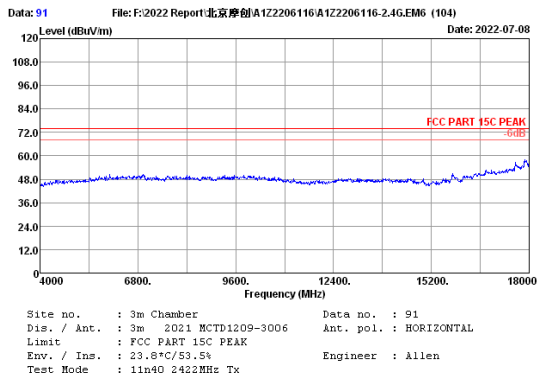
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2422.00 | 27.96 | 3.67 | 97.76 | 35.24 | 94.15 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



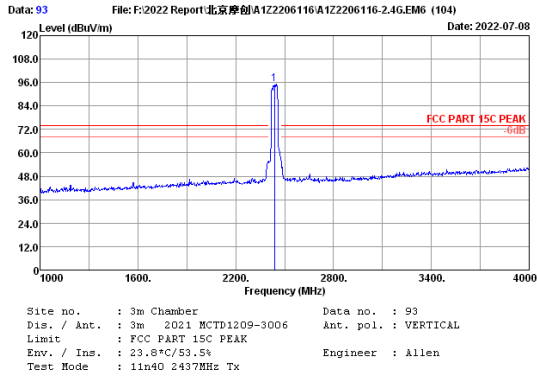
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4844.00 | 32.71 | 4.99 | 32.03 | 34.47 | 35.26 | 54.00 | 18.74 | Average |
| 2 | 4844.00 | 32.71 | 4.99 | 43.68 | 34.47 | 46.91 | 74.00 | 27.09 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



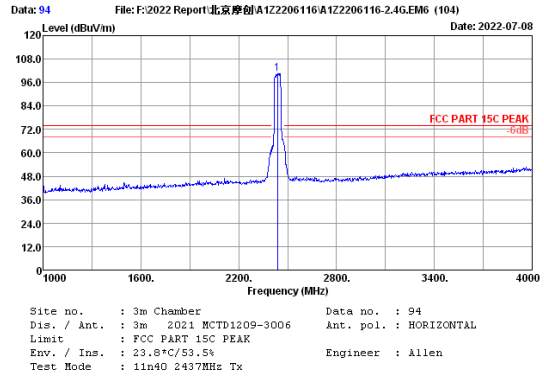
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4844.00 | 32.71 | 4.99 | 33.94 | 34.47 | 37.17 | 54.00 | 16.83 | Average |
| 2 | 4844.00 | 32.71 | 4.99 | 44.37 | 34.47 | 47.60 | 74.00 | 26.40 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



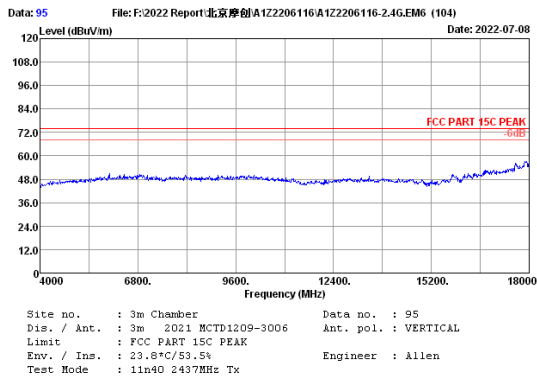
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 98.89 | 35.24 | 95.33 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



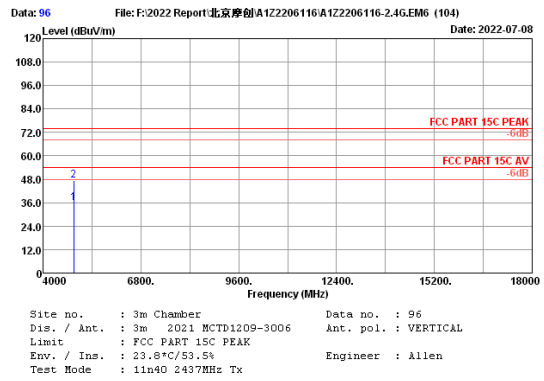
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2437.00 | 28.00 | 3.68 | 104.29 | 35.24 | 100.73 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



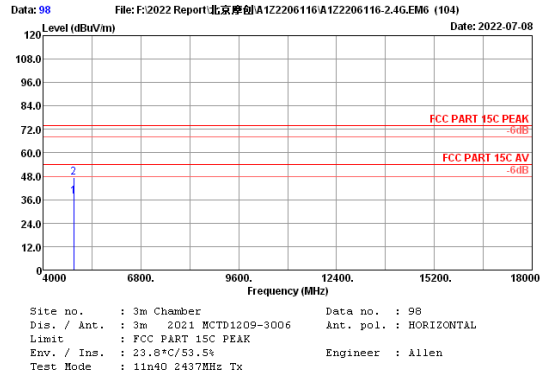
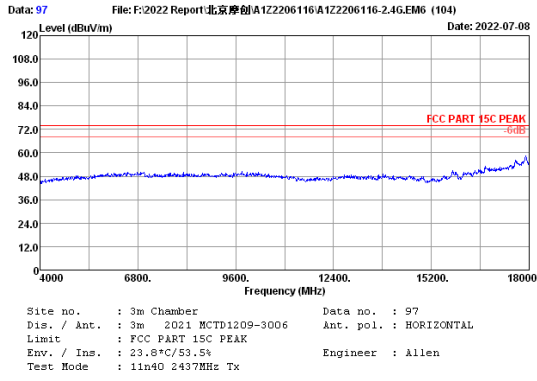
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 32.55 | 34.47 | 35.82 | 54.00 | 18.18 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 44.33 | 34.47 | 47.60 | 74.00 | 26.40 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



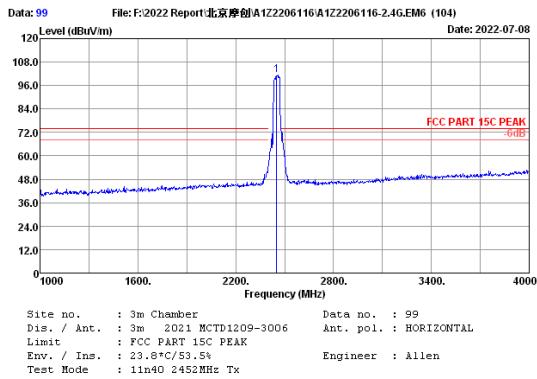
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 32.55 | 34.47 | 35.82 | 54.00 | 18.18 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 44.33 | 34.47 | 47.60 | 74.00 | 26.40 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



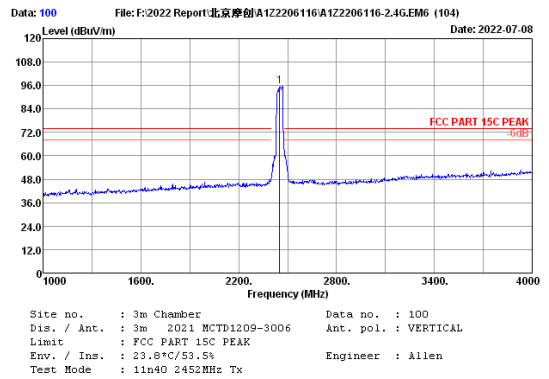
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4874.00 | 32.73 | 5.01 | 34.44 | 34.47 | 37.71 | 54.00 | 16.29 | Average |
| 2 | 4874.00 | 32.73 | 5.01 | 43.96 | 34.47 | 47.23 | 74.00 | 26.77 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



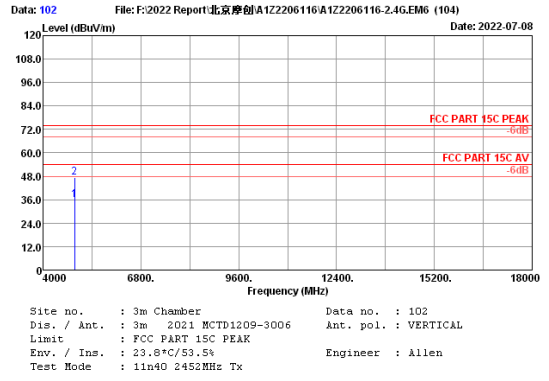
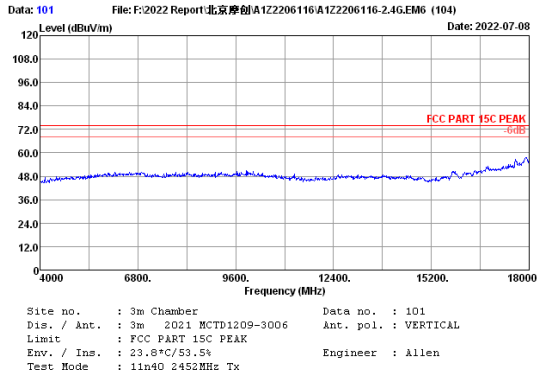
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2452.00 | 28.00 | 3.68 | 105.13 | 35.25 | 101.56 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



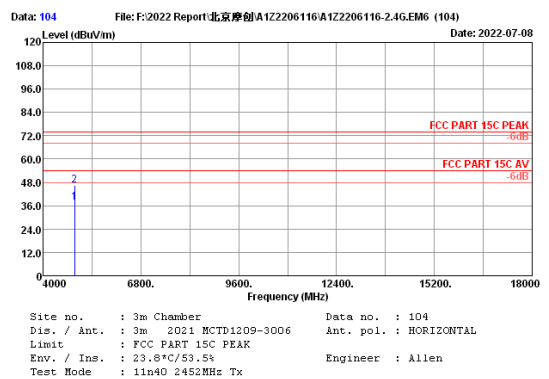
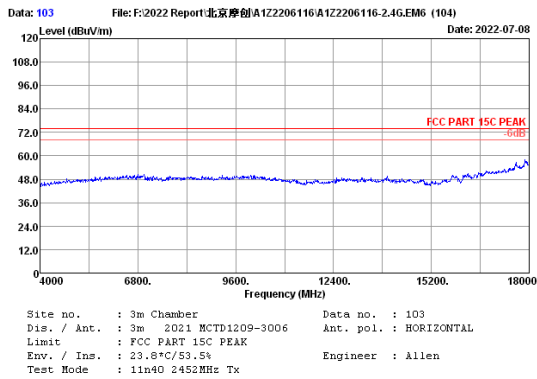
| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|--------|
| 1 | 2452.00 | 28.00 | 3.68 | 99.09 | 35.25 | 95.52 | ----- | ----- | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4904.00 | 32.75 | 5.01 | 32.44 | 34.48 | 35.72 | 54.00 | 18.28 | Average |
| 2 | 4904.00 | 32.75 | 5.01 | 44.09 | 34.48 | 47.37 | 74.00 | 26.63 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



| No. | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Amp factor (dB) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|-----|-------------|--------------------|-----------------|----------------|-----------------|-------------------------|-----------------|-------------|---------|
| 1 | 4904.00 | 32.75 | 5.01 | 34.33 | 34.48 | 37.61 | 54.00 | 16.39 | Average |
| 2 | 4904.00 | 32.75 | 5.01 | 43.34 | 34.48 | 46.62 | 74.00 | 27.38 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1. Test Equipments

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|---------------------|--------------|--------------|------------|-----------|---------------|
| 1. | PXA Signal Analyzer | Agilent | N9030A | MY51380221 | Apr.07,22 | 1 Year |
| 2. | RF Cable | HUBER+SUHNER | SUCOFLEX-106 | 505238/6 | Apr.06,22 | 1 Year |

5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30dB instead of 20dB.

5.3. Test Procedure

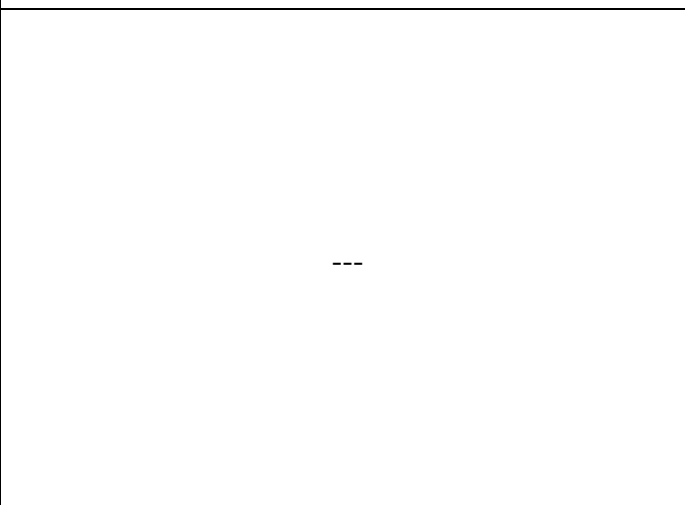
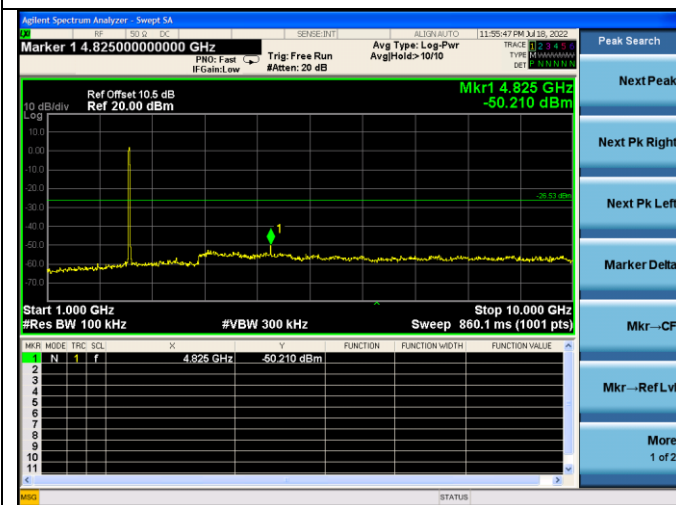
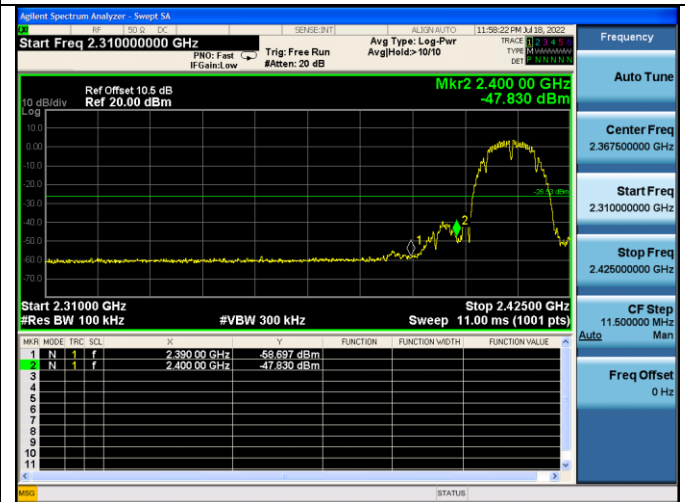
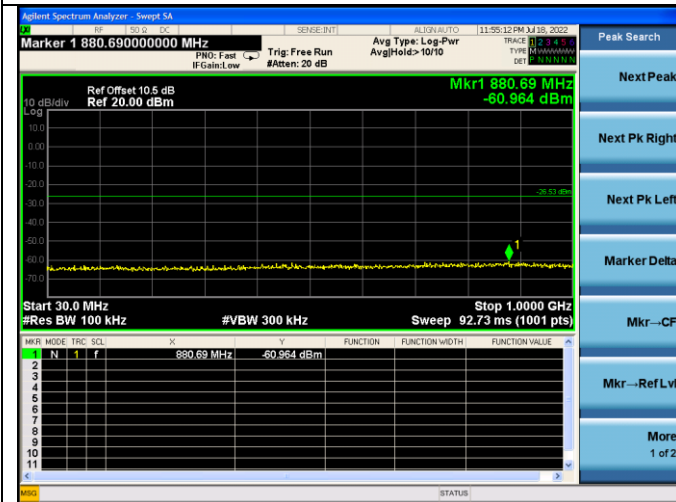
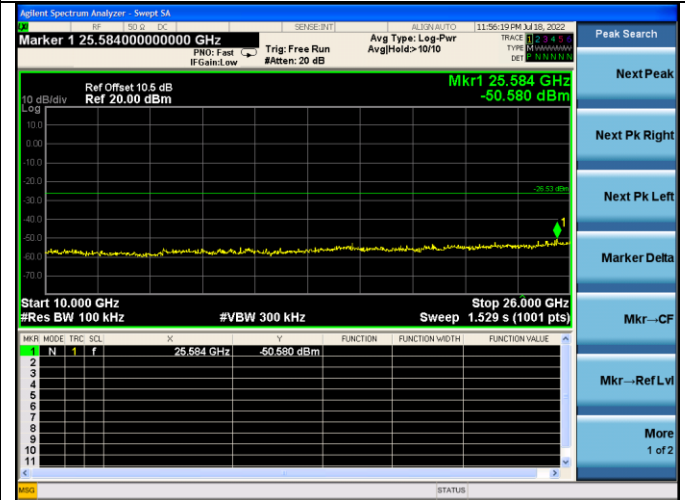
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions with peak detector.

5.4. Test result

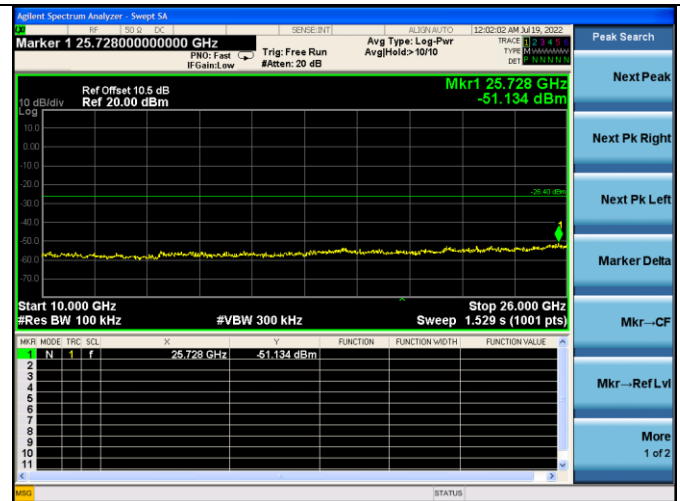
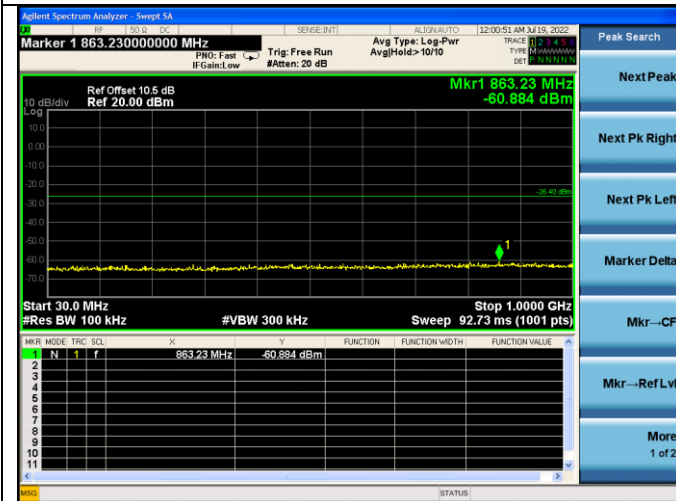
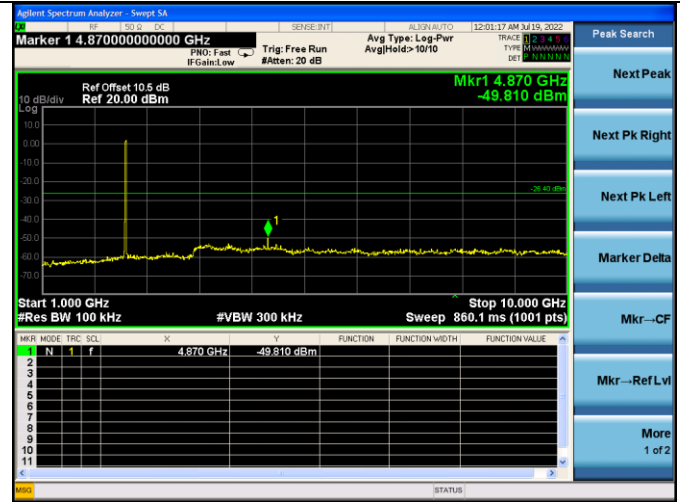
PASS (The testing data was attached in the next pages.)

ANT1

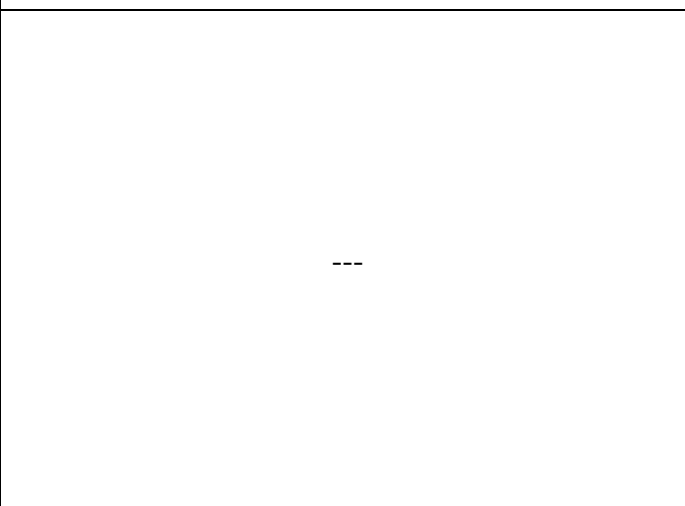
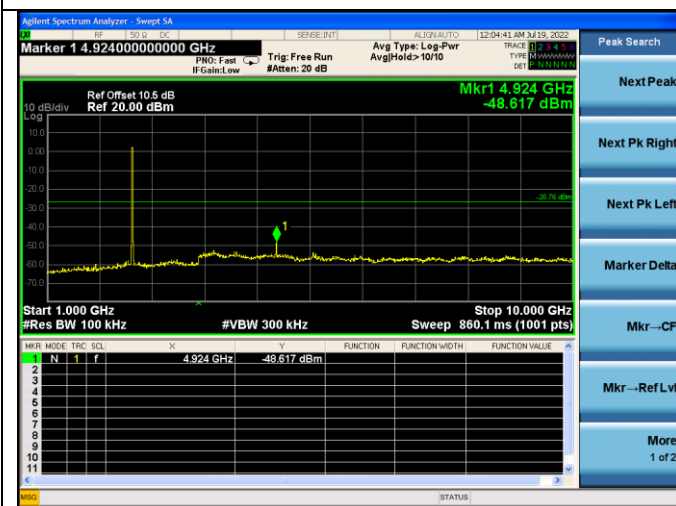
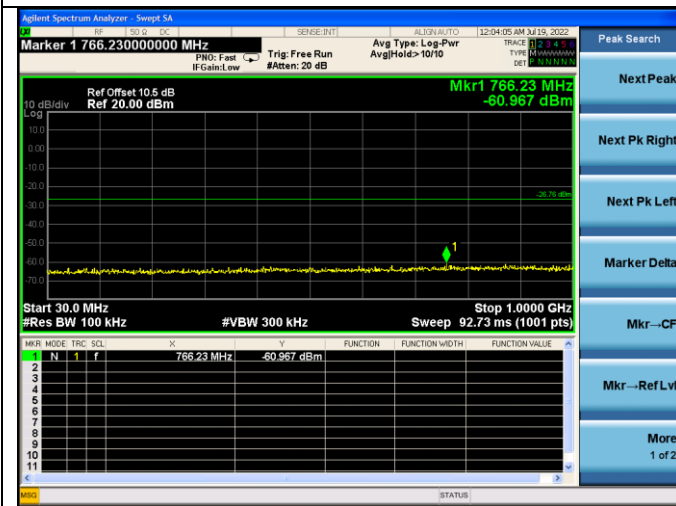
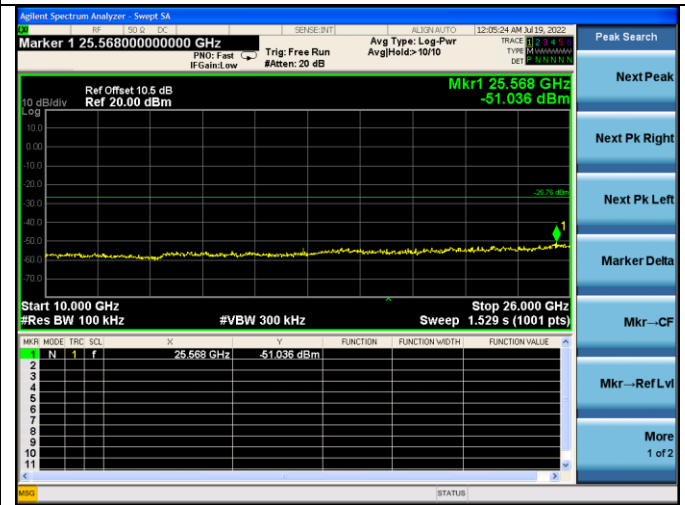
Test Mode: IEEE 802.11b
 Test CH1: 2412MHz



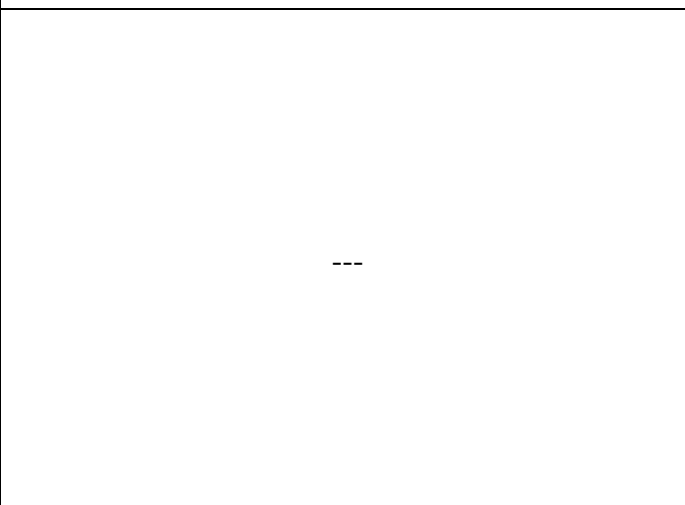
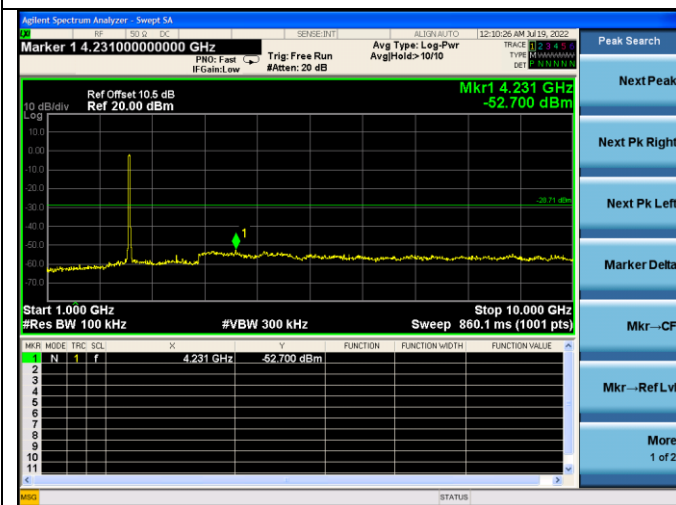
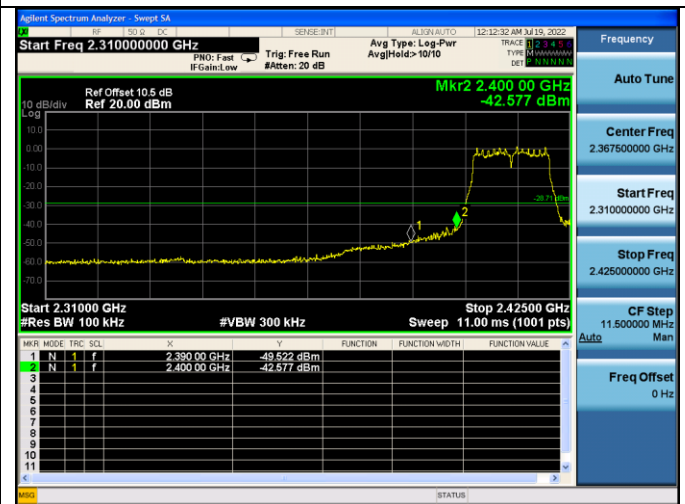
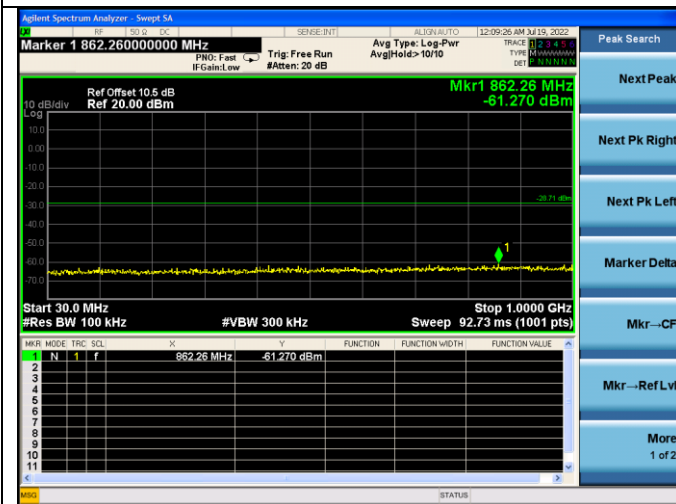
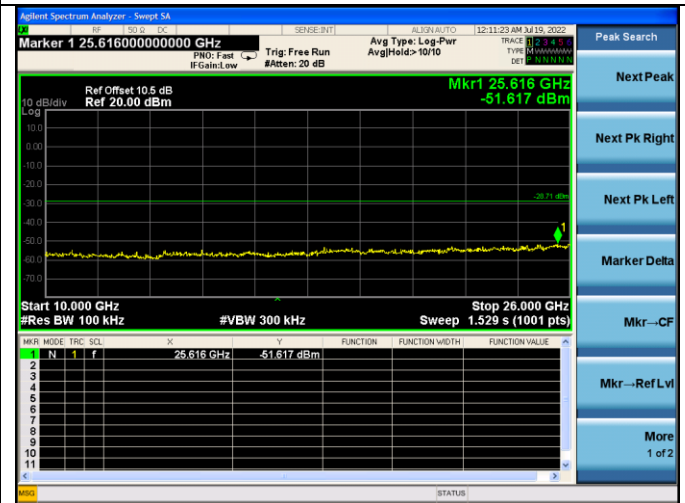
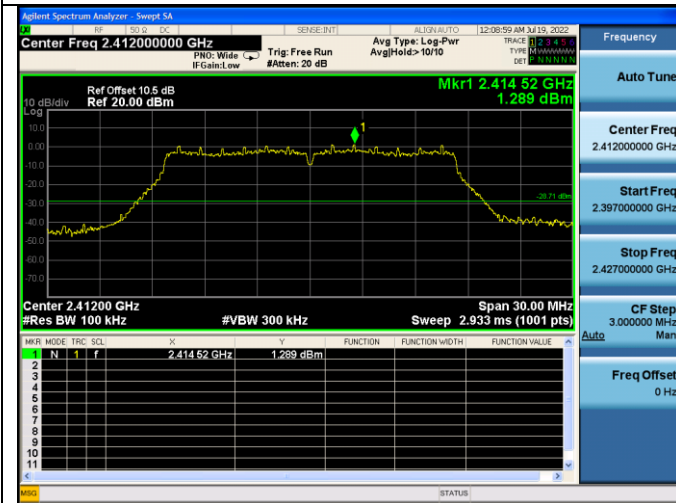
Test CH6: 2437MHz



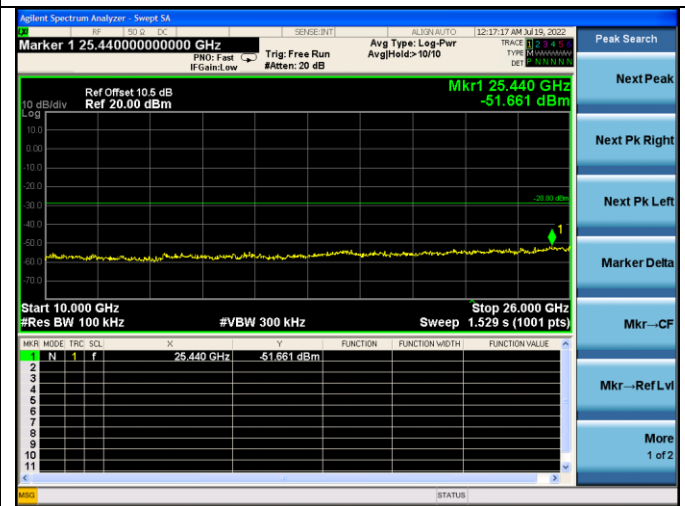
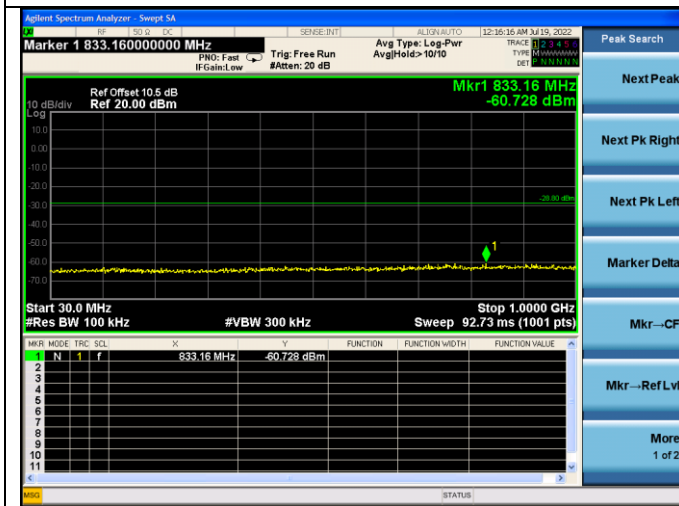
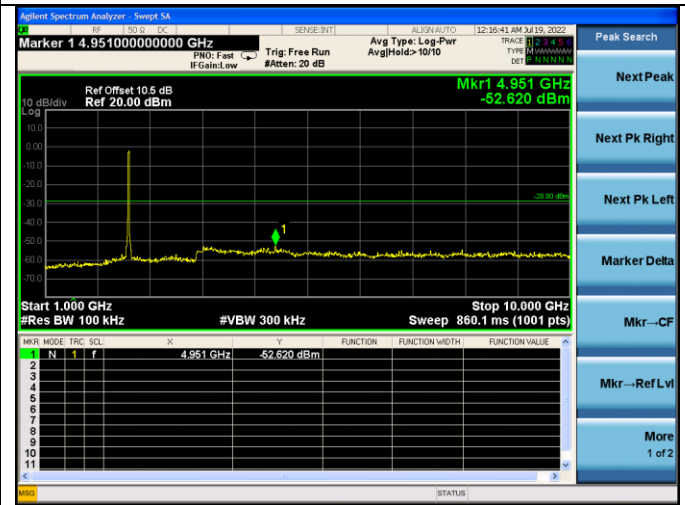
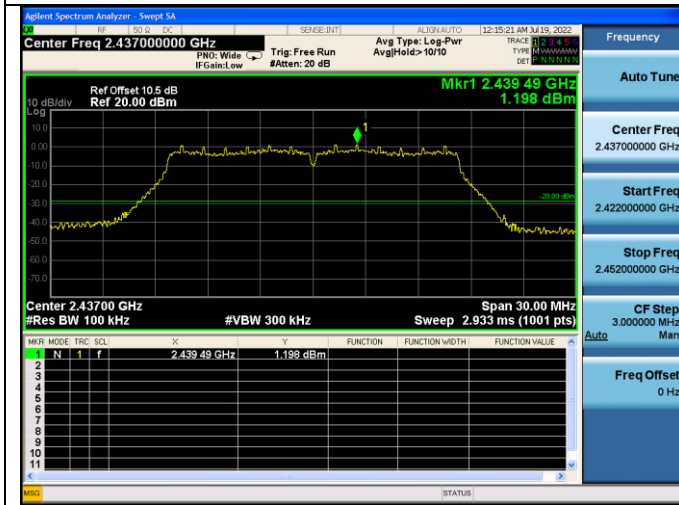
Test CH11: 2462MHz



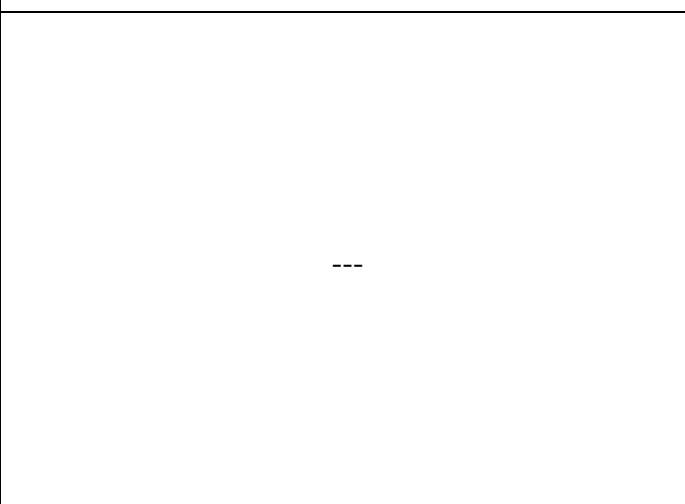
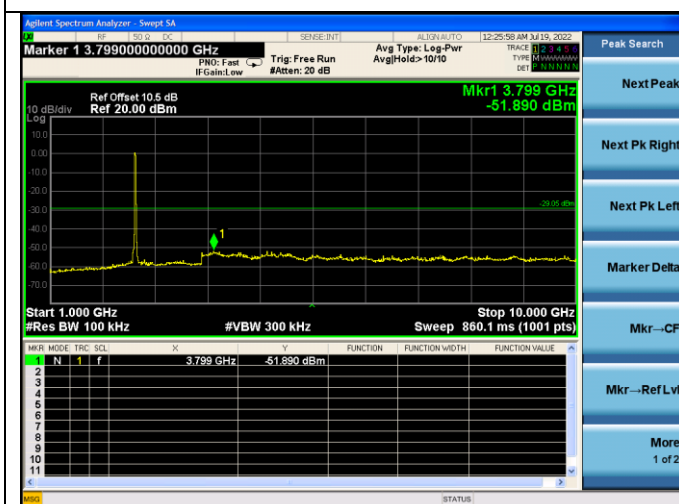
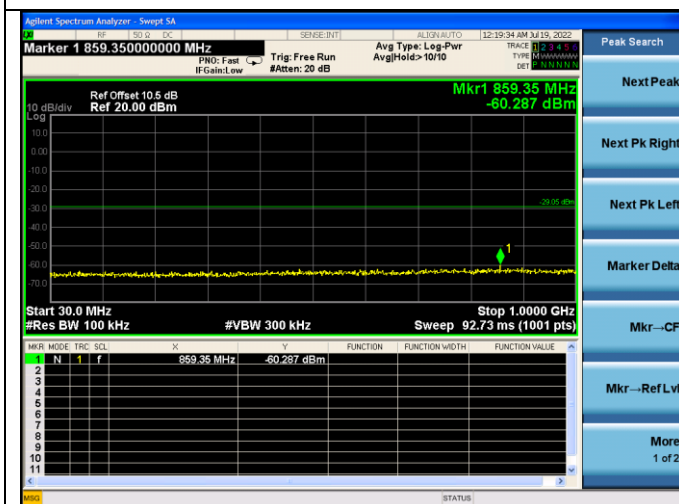
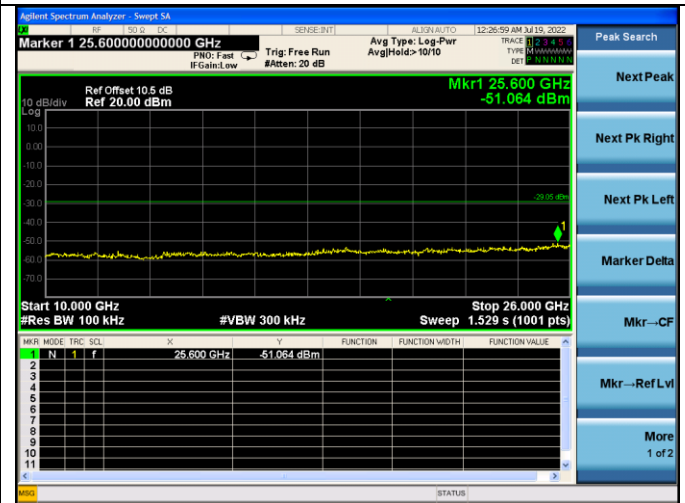
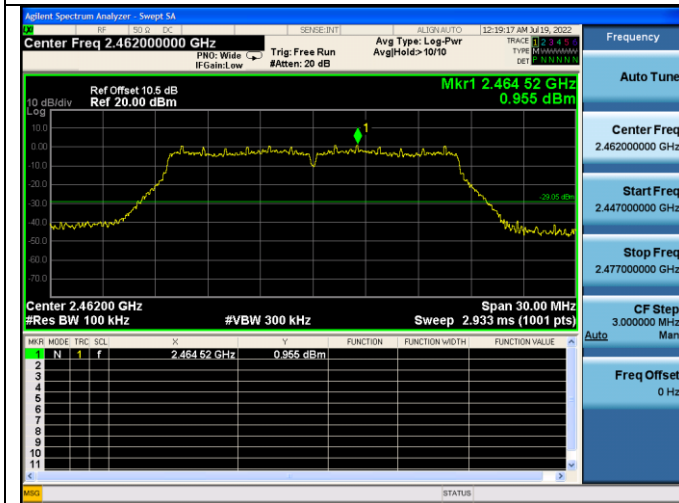
Test Mode: IEEE 802.11g
 Test CH1: 2412MHz



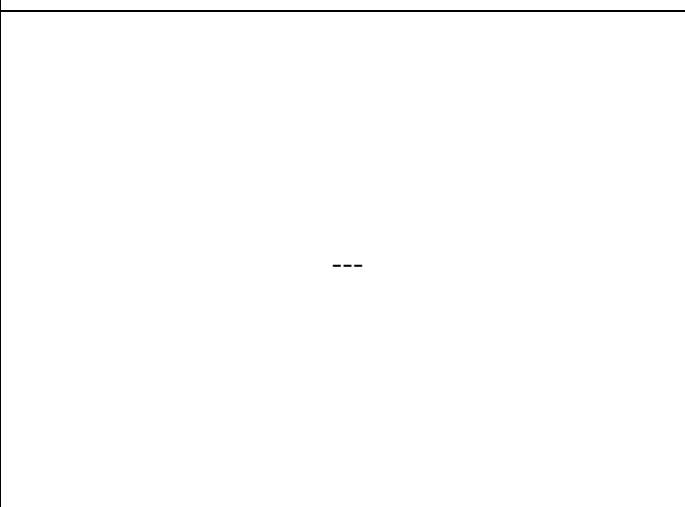
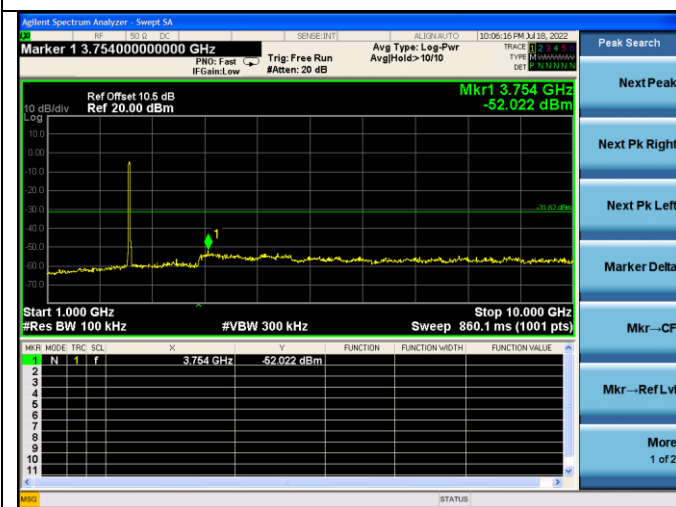
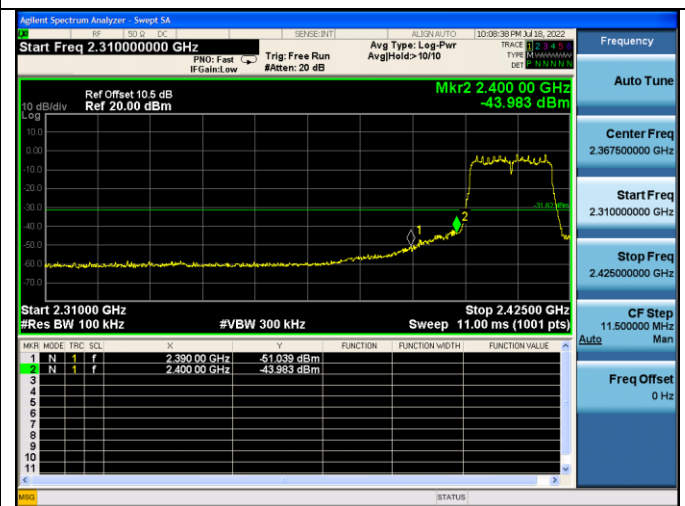
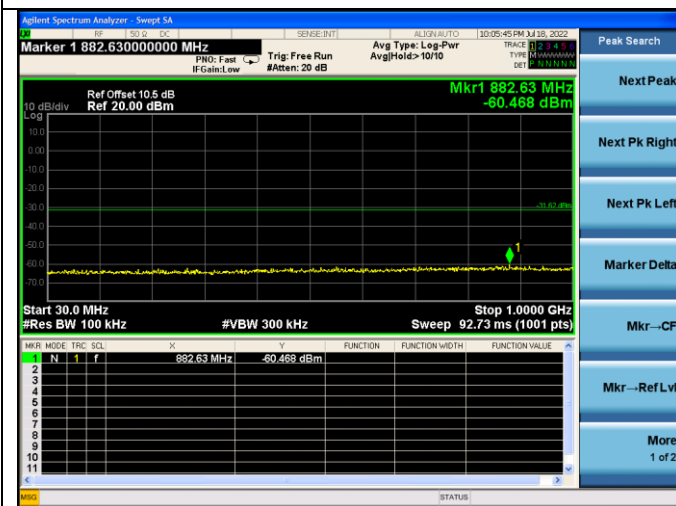
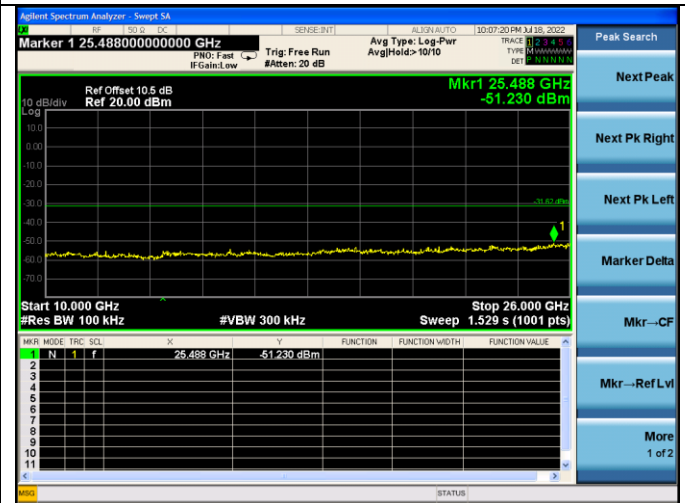
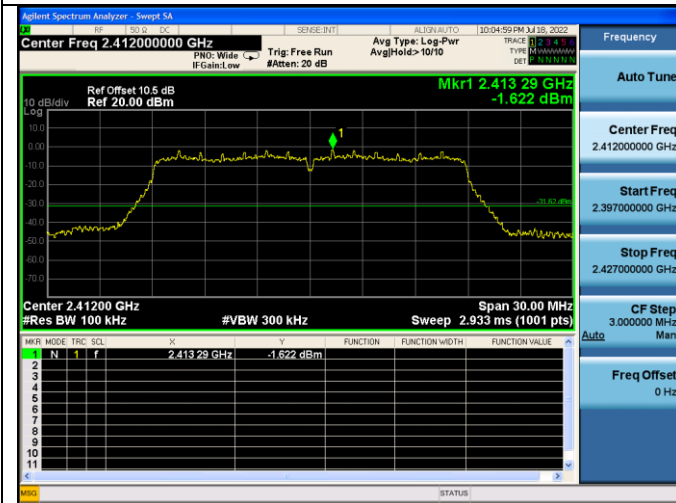
Test CH6: 2437MHz



Test CH11: 2462MHz



Test Mode: IEEE 802.11n HT20
 Test CH1: 2412MHz



Test CH6: 2437MHz

