



## RADIO TEST REPORT

|                         |   |                                                                                                                                                                                                                                                      |
|-------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant               | : | Tonly Technology Co., Ltd.                                                                                                                                                                                                                           |
| Address of Applicant    | : | Section 37, Zhongkai High-tech Development Zone,<br>Huizhou City, Guangdong Province, P.R. China                                                                                                                                                     |
| Manufacturer            | : | Tonly Technology Co., Ltd.                                                                                                                                                                                                                           |
| Address of Manufacturer | : | Section 37, Zhongkai High-tech Development Zone,<br>Huizhou City, Guangdong Province, P.R. China                                                                                                                                                     |
| Equipment under Test    | : | Home Hub Link                                                                                                                                                                                                                                        |
| Model No.               | : | HHL-001                                                                                                                                                                                                                                              |
| FCC ID                  | : | ZVAOH000039                                                                                                                                                                                                                                          |
| IC                      | : | 9976A-OH000039                                                                                                                                                                                                                                       |
| Test Standard(s)        | : | FCC Rules and Regulations Part 15 Subpart C,<br>ANSI C63.10-2020+Cor.1-2023,<br>RSS-247 Issue 4 July 24, 2025,<br>RSS-Gen Issue 5, Apr. 2018, Amendment 2<br>(February 2021),<br>ANSI C63.10-2020+Cor.1-2023+C63.10a-<br>2024+Errata to C63.10a-2024 |
| Report No.              | : | DDT-RE26060910-2E02                                                                                                                                                                                                                                  |
| Issue Date              | : | 2026/07/02                                                                                                                                                                                                                                           |
| Issue By                | : | Guangdong Dongdian Testing Service Co., Ltd.<br>Unit 2, Building 1, No. 17, Zongbu 2nd Road,<br>Songshan Lake Park, Dongguan, Guangdong, China,<br>523808                                                                                            |

# REPORT

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Test Report Declare

|                         |   |                                                                                               |
|-------------------------|---|-----------------------------------------------------------------------------------------------|
| Applicant               | : | Tonly Technology Co., Ltd.                                                                    |
| Address of Applicant    | : | Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, P.R. China |
| Equipment under Test    | : | Home Hub Link                                                                                 |
| Model No.               | : | HHL-001                                                                                       |
| Manufacturer            | : | Tonly Technology Co., Ltd.                                                                    |
| Address of Manufacturer | : | Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, P.R. China |

Test Standard Used:  
FCC Rules and Regulations Part 15 Subpart C,  
ANSI C63.10-2020+Cor.1-2023,  
RSS-247 Issue 4 July 24, 2025,  
RSS-Gen Issue 5, Apr. 2018, Amendment 2 (February 2021),  
ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024

We Declare:  
The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

|                  |                     |               |                         |
|------------------|---------------------|---------------|-------------------------|
| Report No.:      | DDT-RE26060910-2E02 |               |                         |
| Date of Receipt: | 2026/06/10          | Date of Test: | 2026/06/10 - 2026/06/30 |

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Created: Chen Ziqin                                                                 | Reviewed: Bobo Chen                                                                 | Approved: Ella Gong                                                                   |
|  |  |  |
| 2026/06/27                                                                          | 2026/07/02                                                                          | 2026/07/02                                                                            |

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

| Version | Revision Content | Issue Date | Approved  |
|---------|------------------|------------|-----------|
| V0      | Initial issue    | 2026/07/02 | Ella Gong |
|         |                  |            |           |

## 1. Summary of Test Results

| No. | Test Parameter                   | Clause No.                                                                                                                          | Condition | Result |
|-----|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|
| 1   | 6 dB Bandwidth and 99% Bandwidth | 47 CFR Part 15 15.247(a)(2), RSS-247 clause 6.3.1(a), RSS-Gen clause 6.7                                                            | /         | Pass   |
| 2   | Peak Output Power                | 47 CFR Part 15 15.247(b)(3), RSS-247 clause 6.3.2                                                                                   | /         | Pass   |
| 3   | Power Spectral Density           | 47 CFR Part 15 15.247(e), RSS-247 clause 6.3.1(b)                                                                                   | /         | Pass   |
| 4   | RF Conducted Spurious Emissions  | 47 CFR Part 15 15.247(d), RSS-247 clause 6.6                                                                                        | /         | Pass   |
| 5   | Radiated Emission                | 47 CFR Part 15 15.205, 47 CFR Part 15 15.209, 47 CFR Part 15 15.247(d), RSS-247 clause 6.6, RSS-Gen clause 8.9, RSS-Gen clause 8.10 | /         | Pass   |
| 6   | Band Edge Compliance             | 47 CFR Part 15 15.205, 47 CFR Part 15 15.209, 47 CFR Part 15 15.247(d), RSS-247 clause 6.6, RSS-Gen clause 8.9, RSS-Gen clause 8.10 | /         | Pass   |
| 7   | Power Line Conducted Emissions   | 47 CFR Part 15 15.207(a), RSS-Gen clause 8.8                                                                                        | /         | Pass   |
| 8   | Antenna Requirement              | 47 CFR Part 15 15.203, RSS-Gen clause 6.8                                                                                           | /         | Pass   |

Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.

## 2. General Test Information

### 2.1. Description of EUT

|                            |                                               |
|----------------------------|-----------------------------------------------|
| EUT Name                   | : Home Hub Link                               |
| Model Number               | : HHL-001                                     |
| Difference of model number | : /                                           |
| EUT Function Description   | : Please reference user manual of this device |
| Power Supply               | : DC 5V from USB port or external AC adapter  |
| Antenna Type               | : Metal antenna                               |
| Max Antenna Gain(dBi)      | : 1.84                                        |

|                     |                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio Technology    | : IEEE 802.11b/g/n/ax                                                                                                                                                                                                |
| Operation frequency | : IEEE 802.11b: 2412MHz to 2462MHz<br>IEEE 802.11g: 2412MHz to 2462MHz<br>IEEE 802.11n HT20: 2412MHz to 2462MHz<br>IEEE 802.11n HT40: 2422MHz to 2452MHz<br>IEEE 802.11ax HE20: 2412MHz to 2462MHz                   |
| Modulation          | : IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)<br>IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11ax: OFDM, OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK) |

| Channel information |                 |    |                 |    |                 |
|---------------------|-----------------|----|-----------------|----|-----------------|
| CH                  | Frequency (MHz) | CH | Frequency (MHz) | CH | Frequency (MHz) |
| 1                   | 2412            | 5  | 2432            | 9  | 2452            |
| 2                   | 2417            | 6  | 2437            | 10 | 2457            |
| 3                   | 2422            | 7  | 2442            | 11 | 2462            |
| 4                   | 2427            | 8  | 2447            | /  | /               |

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

### 2.2. Accessories of EUT

| Accessories              | Manufacturer | Model number | Description |
|--------------------------|--------------|--------------|-------------|
| USB-C to USB-A converter | Harman       | N/A          | N/A         |

## 2.3. Block diagram of EUT configuration for test



## 2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: EspRFTTestTool\_v5.71\_Manual.exe

The test software was used to control EUT work in Continuous Tx mode and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5dB (According to the manufacturer's claims)

| Tested mode, Tx Power Setting, Data rate, Channel, and Frequency                                                                    |                  |   |                                   |              |                    |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------|---|-----------------------------------|--------------|--------------------|
| Tested mode                                                                                                                         | Tx Power Setting |   | Data rate<br>(Mbps)<br>(see Note) | Test Channel | Frequency<br>(MHz) |
|                                                                                                                                     | ANT1             | / |                                   |              |                    |
| IEEE 802.11b                                                                                                                        | 4                | / | 1                                 | LCH: CH1     | 2412               |
|                                                                                                                                     | 4                | / | 1                                 | MCH: CH6     | 2437               |
|                                                                                                                                     | 4                | / | 1                                 | HCH: CH11    | 2462               |
| IEEE 802.11g                                                                                                                        | 8                | / | 6                                 | LCH: CH1     | 2412               |
|                                                                                                                                     | 8                | / | 6                                 | MCH: CH6     | 2437               |
|                                                                                                                                     | 8                | / | 6                                 | HCH: CH11    | 2462               |
| IEEE 802.11n<br>HT20                                                                                                                | 12               | / | MCS 0                             | LCH: CH1     | 2412               |
|                                                                                                                                     | 12               | / | MCS 0                             | MCH: CH6     | 2437               |
|                                                                                                                                     | 12               | / | MCS 0                             | HCH: CH11    | 2462               |
| IEEE 802.11n<br>HT40                                                                                                                | 20               | / | MCS 0                             | LCH: CH3     | 2422               |
|                                                                                                                                     | 20               | / | MCS 0                             | MCH: CH6     | 2437               |
|                                                                                                                                     | 20               | / | MCS 0                             | HCH: CH9     | 2452               |
| IEEE 802.11ax<br>HE20                                                                                                               | 12               | / | MCS 0                             | LCH: CH1     | 2412               |
|                                                                                                                                     | 12               | / | MCS 0                             | MCH: CH6     | 2437               |
|                                                                                                                                     | 12               | / | MCS 0                             | HCH: CH11    | 2462               |
| Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test. |                  |   |                                   |              |                    |

## 2.5. Deviations of test standard

No deviation.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

|                    |                  |
|--------------------|------------------|
| Temperature range: | +15°C to +35 °C  |
| Humidity range:    | 20% to 75%       |
| Pressure range:    | 86 kPa to106 kPa |

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

## 2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com).

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

## 2.8. Measurement uncertainty

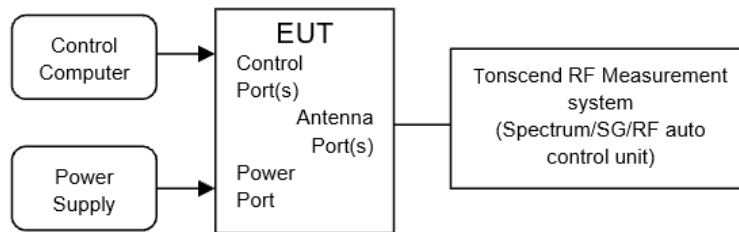
| Test Item                                                                                                                                     | Uncertainty                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Bandwidth                                                                                                                                     | 1.9%                                              |
| Peak Output Power (Conducted) (Spectrum analyzer)                                                                                             | 0.98 dB                                           |
| Peak Output Power (Conducted) (Power Sensor)                                                                                                  | 1.18 dB                                           |
| Power Spectral Density (Base EIRP)                                                                                                            | 1.51 dB                                           |
| Power Spectral Density (Spectrum analyzer)                                                                                                    | 0.98 dB                                           |
| Frequencies Stability                                                                                                                         | 1.9 kHz                                           |
| Conducted spurious emissions                                                                                                                  | 1.21 dB ( $9\text{ kHz} \leq f < 7\text{ GHz}$ ); |
|                                                                                                                                               | 3.31 dB ( $7\text{ GHz} \leq f < 40\text{ GHz}$ ) |
| Uncertainty for radio frequency (RBW < 20 kHz)                                                                                                | $5.5 \times 10^{-8}$                              |
| Time                                                                                                                                          | 0.11%                                             |
| Temperature                                                                                                                                   | 0.3 °C                                            |
| Humidity                                                                                                                                      | 2 %                                               |
| Uncertainty for Radiation Emission test<br>(9 kHz – 30 MHz)                                                                                   | 3.44 dB                                           |
| Uncertainty for Radiation Emission test<br>(30 MHz - 1 GHz)                                                                                   | 4.28 dB (Antenna Polarize: V)                     |
|                                                                                                                                               | 4.14 dB (Antenna Polarize: H)                     |
| Uncertainty for Radiation Emission test<br>(1 GHz - 40 GHz)                                                                                   | 4.22 dB (1 - 6 GHz)                               |
|                                                                                                                                               | 4.52 dB (6 GHz - 18 GHz)                          |
|                                                                                                                                               | 4.58 dB (18 GHz - 40 GHz)                         |
| Uncertainty for Power line conduction emission test                                                                                           | 3.32dB (150KHz-30MHz)                             |
|                                                                                                                                               | 3.72dB (9KHz-150KHz)                              |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. |                                                   |

### 3. Equipment Used During Conductive Test

| Equipment                                                                        | Manufacturer | Model No.   | Serial Number | Due Date   |
|----------------------------------------------------------------------------------|--------------|-------------|---------------|------------|
| <input checked="" type="checkbox"/> RF Connected Test (RF Measurement System 4#) |              |             |               |            |
| Signal &Spectrum Analyzer                                                        | R&S          | FSV3044     | 101173        | 2027/02/28 |
| Wideband Radio Communication Tester                                              | R&S          | CMW500      | 168801        | 2027/02/28 |
| MXG Vector Signal Generator                                                      | Agilent      | N5182A      | MY48180737    | 2026/08/28 |
| PSG Vector Signal Generator                                                      | Agilent      | E8267D      | US49060192    | 2026/08/10 |
| RF Control Unit                                                                  | Tonscend     | JS0806-2    | 21I8060485    | 2027/02/28 |
| TEMP&HUMI Programmable Chamber                                                   | ZHIXIANG     | ZXGDJS-150L | ZX170110-A    | 2027/02/28 |
| Test Software                                                                    | Tonscend     | JS1120-3    | V3.6.21       | N/A        |

## 4. 6dB Bandwidth

### 4.1. Block diagram of test setup



### 4.2. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz

### 4.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.8.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for 6 dB Bandwidth:

|                |                              |
|----------------|------------------------------|
| RBW:           | 100 kHz                      |
| VBW:           | $\geq [3 \times \text{RBW}]$ |
| Detector Mode: | peak                         |
| Sweep time:    | auto                         |
| Trace mode     | max hold                     |

Allow the trace to stabilize, measure the 6 dB bandwidth of signal, and record the results in the report

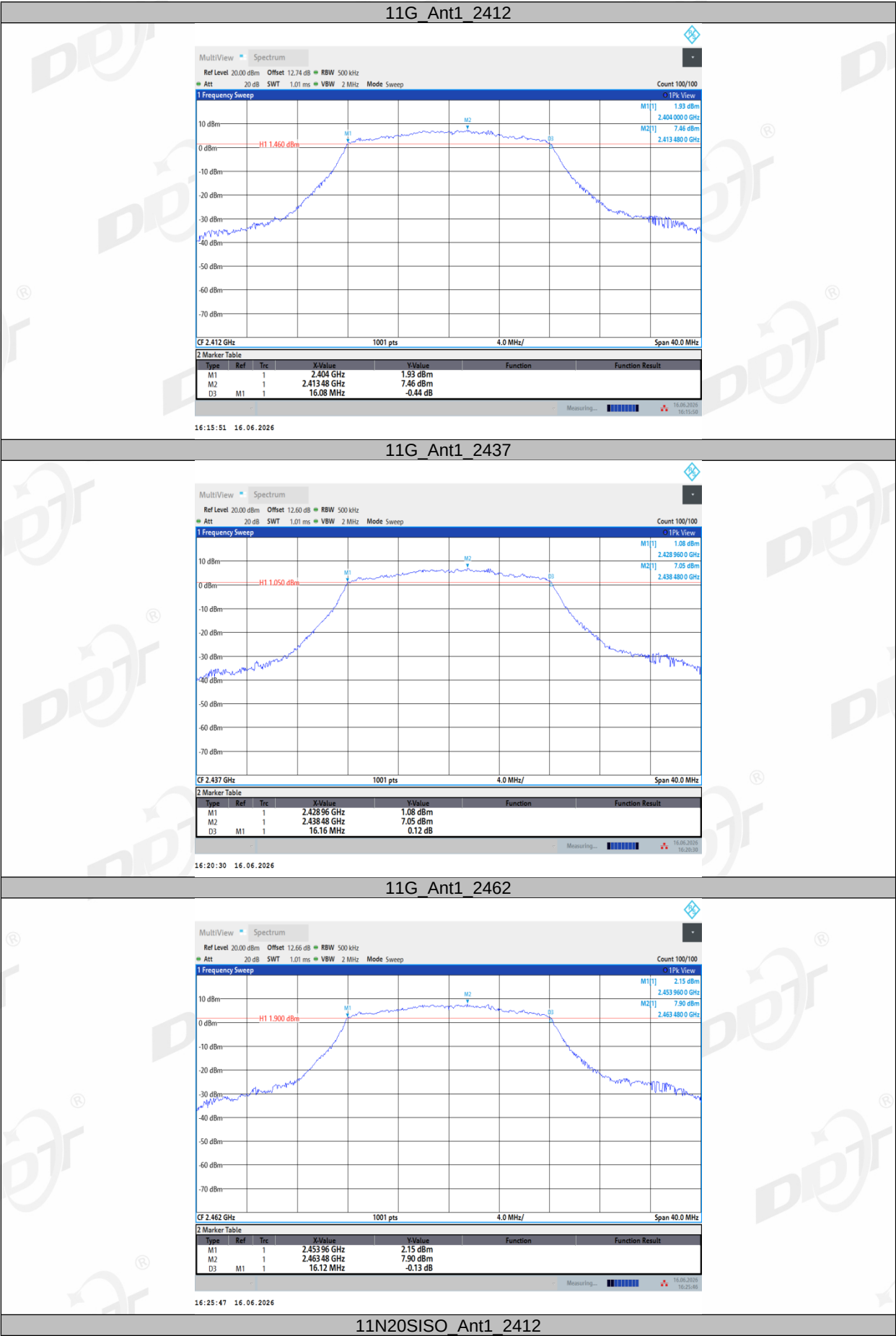
4.4. Test result

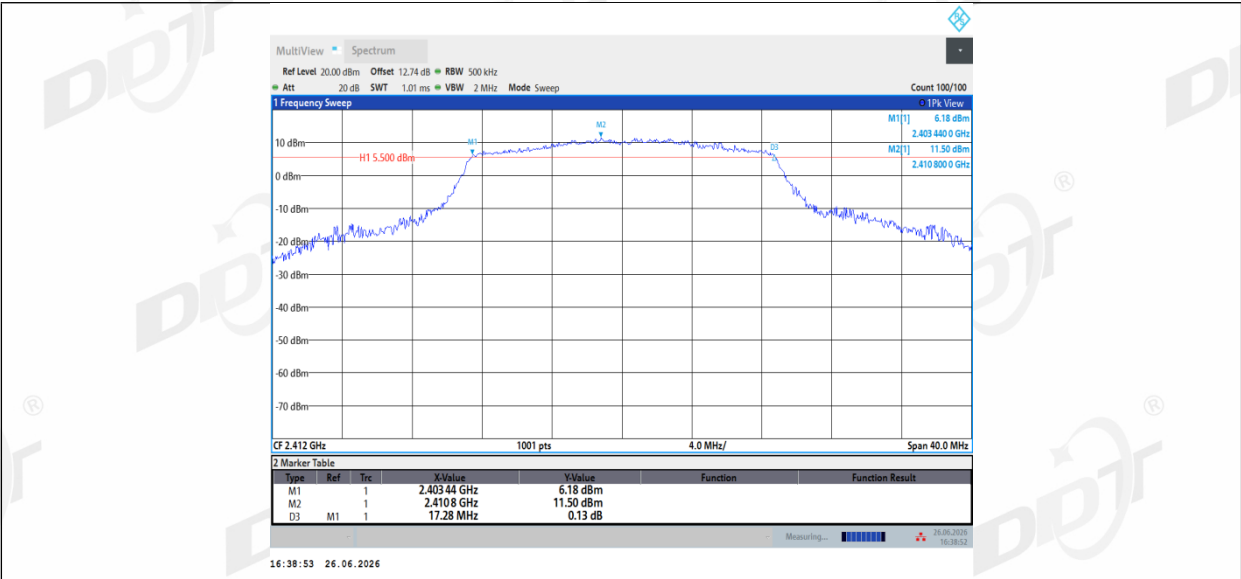
|                    |               |                |                          |
|--------------------|---------------|----------------|--------------------------|
| Test Engineer:     | Zora Zhang    | Test Site:     | RF Measurement System 4# |
| Ambient Condition: | 28.1℃,31.3%RH | Test Date:     | 2026.06.16-2026.06.26    |
| Test Power Supply: | DC3.3V        | Sample Number: | S26060910-001            |

| Test Mode  | Antenna | Frequency [MHz] | DTS BW [MHz] | FL [MHz] | FH [MHz] | Limit [MHz] | Verdict |
|------------|---------|-----------------|--------------|----------|----------|-------------|---------|
| 11B        | Ant1    | 2412            | 8.96         | 2407.48  | 2416.44  | 0.5         | PASS    |
|            |         | 2437            | 9.04         | 2432.48  | 2441.52  | 0.5         | PASS    |
|            |         | 2462            | 8.96         | 2457.48  | 2466.44  | 0.5         | PASS    |
| 11G        | Ant1    | 2412            | 16.08        | 2404.00  | 2420.08  | 0.5         | PASS    |
|            |         | 2437            | 16.16        | 2428.96  | 2445.12  | 0.5         | PASS    |
|            |         | 2462            | 16.12        | 2453.96  | 2470.08  | 0.5         | PASS    |
| 11N20SISO  | Ant1    | 2412            | 17.28        | 2403.44  | 2420.72  | 0.5         | PASS    |
|            |         | 2437            | 17.28        | 2428.48  | 2445.76  | 0.5         | PASS    |
|            |         | 2462            | 17.32        | 2453.40  | 2470.72  | 0.5         | PASS    |
| 11N40SISO  | Ant1    | 2422            | 35.20        | 2404.72  | 2439.92  | 0.5         | PASS    |
|            |         | 2437            | 34.08        | 2420.60  | 2454.68  | 0.5         | PASS    |
|            |         | 2452            | 34.56        | 2434.96  | 2469.52  | 0.5         | PASS    |
| 11AX20SISO | Ant1    | 2412            | 18.80        | 2402.72  | 2421.52  | 0.5         | PASS    |
|            |         | 2437            | 18.76        | 2427.76  | 2446.52  | 0.5         | PASS    |
|            |         | 2462            | 18.80        | 2452.72  | 2471.52  | 0.5         | PASS    |

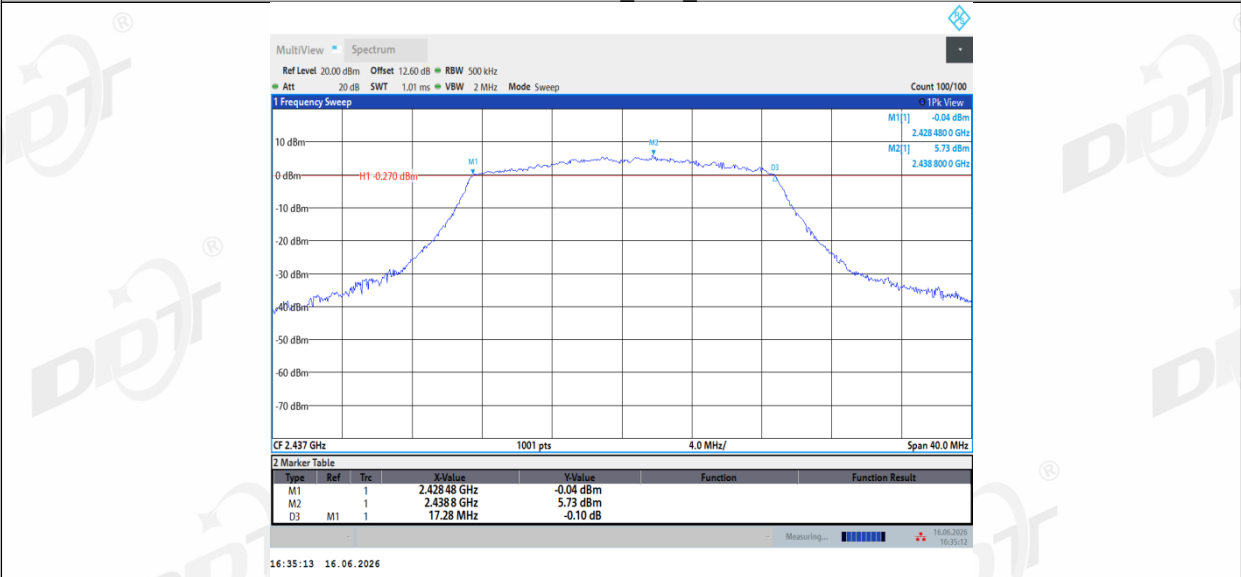
4.5. Test graphs



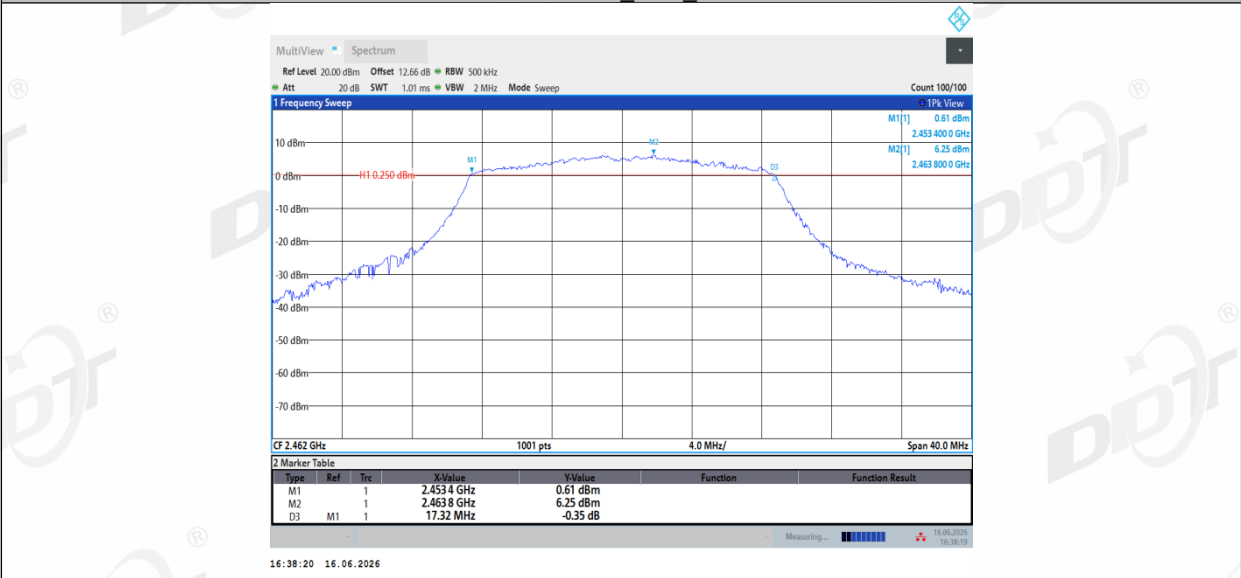




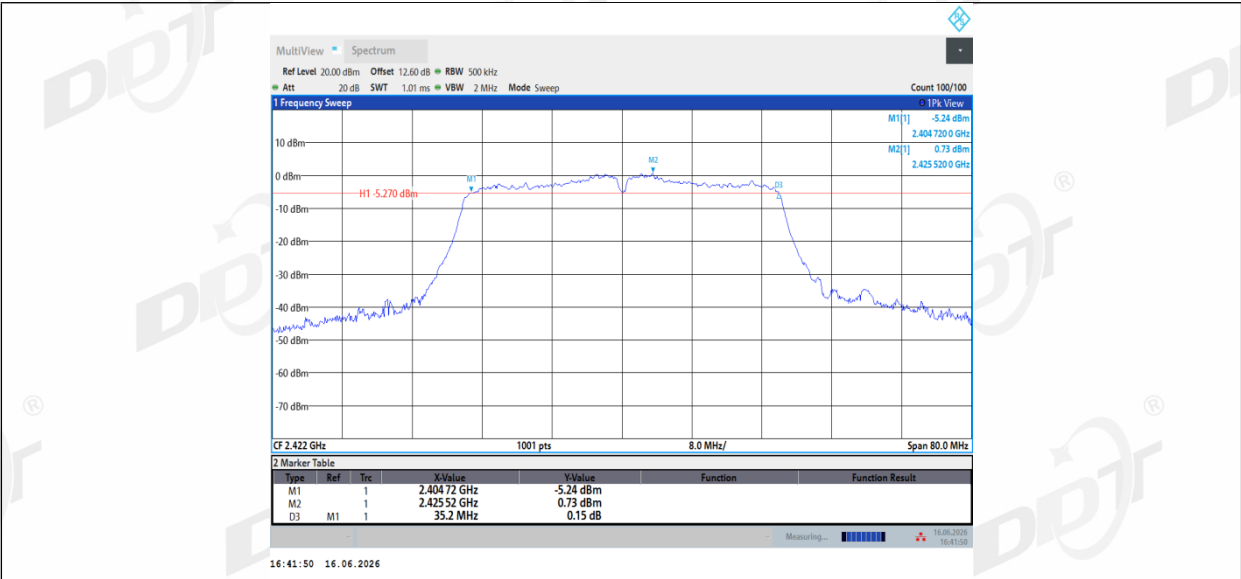
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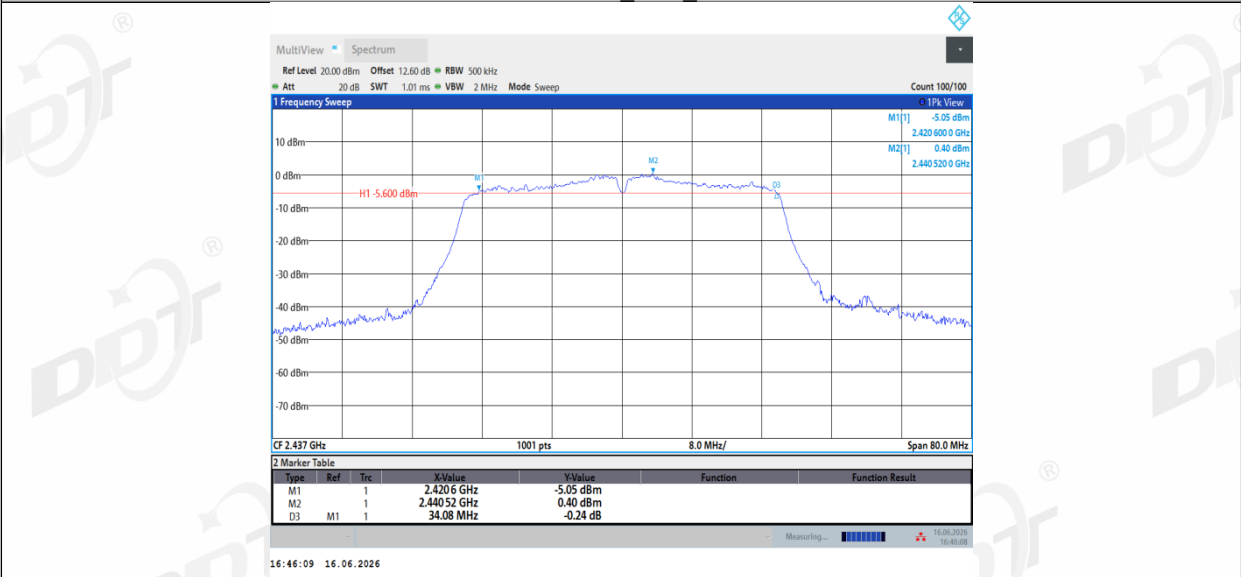
11N20SISO\_Ant1\_2462



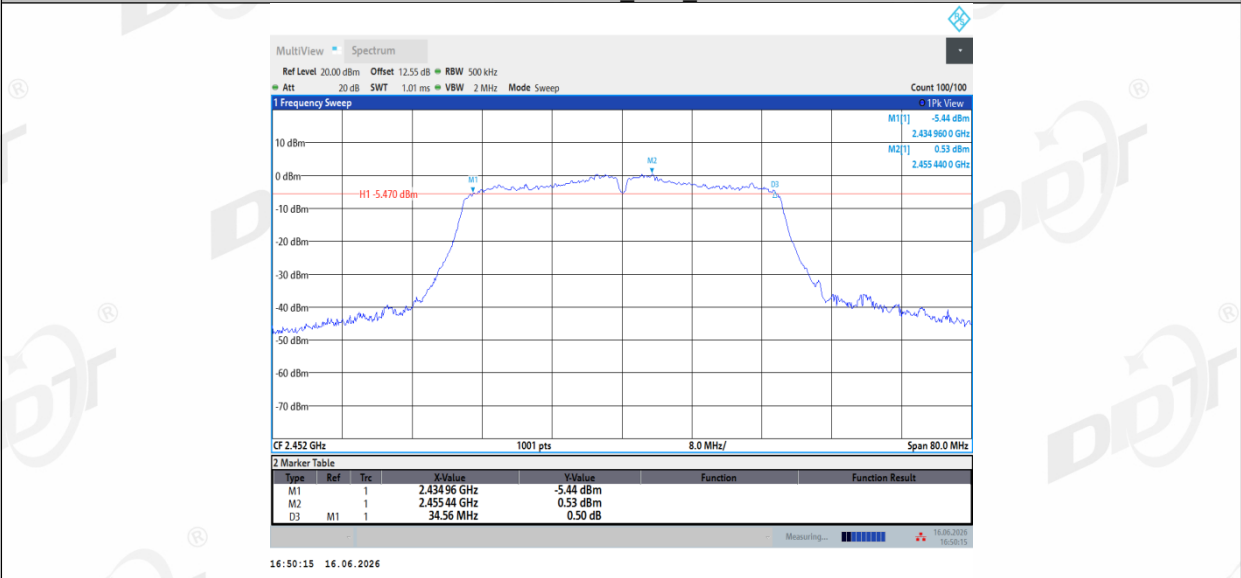
11N40SISO\_Ant1\_2422



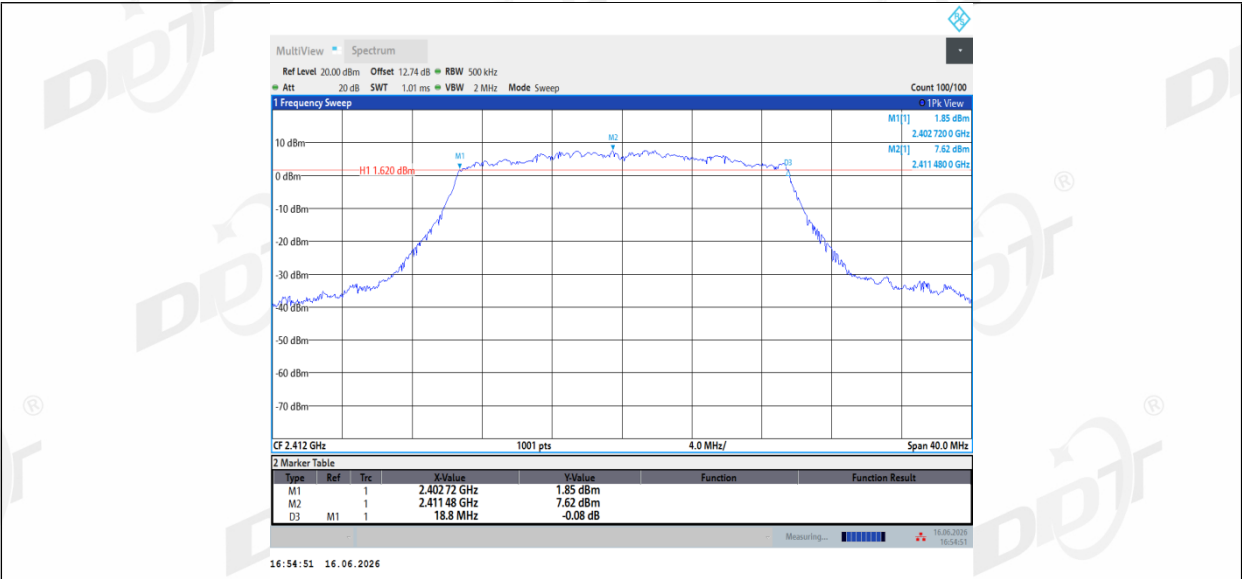
11N40SISO\_Ant1\_2437



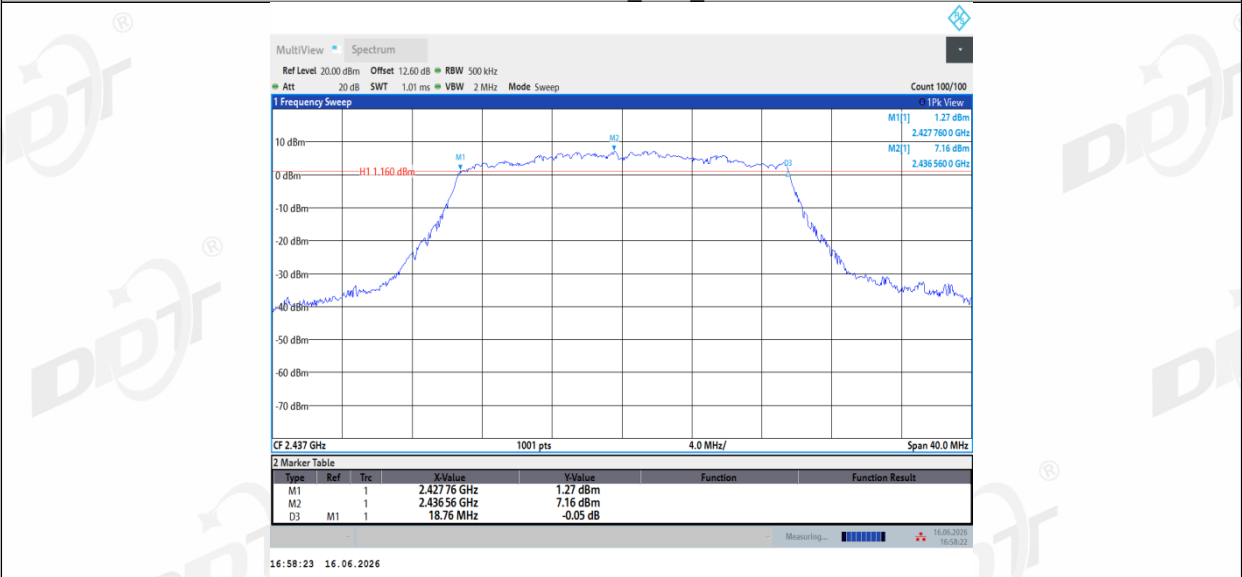
11N40SISO\_Ant1\_2452



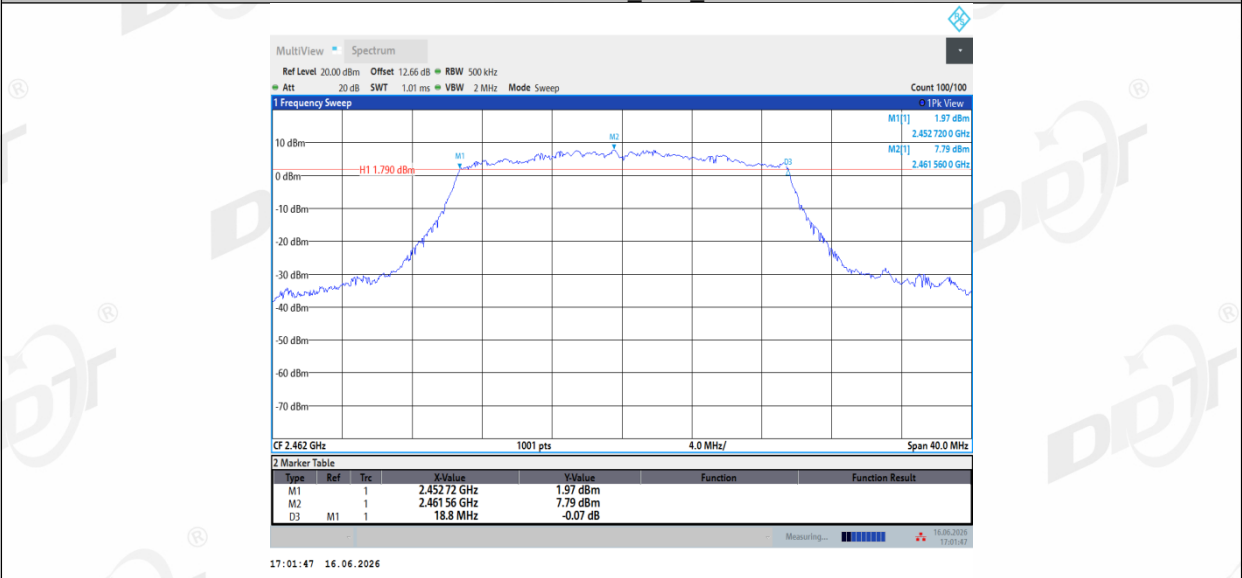
11AX20SISO\_Ant1\_2412



11AX20SISO\_Ant1\_2437

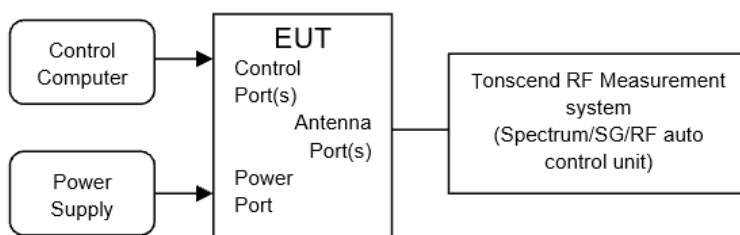


11AX20SISO\_Ant1\_2462



## 5. 99% Bandwidth

### 5.1. Block diagram of test setup



### 5.2. Limits

Just for Report.

### 5.3. Test procedure

- (1) The test according to ANSI C63.10 clause 6.9.3.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for the 99% Bandwidth:

|                |                                         |
|----------------|-----------------------------------------|
| RBW:           | 1% to 5% of the OBW                     |
| VBW:           | approximately three times RBW           |
| Span:          | between 1.5 times and 5.0 times the OBW |
| Detector Mode: | peak                                    |
| Sweep time:    | auto                                    |
| Trace mode     | max hold                                |

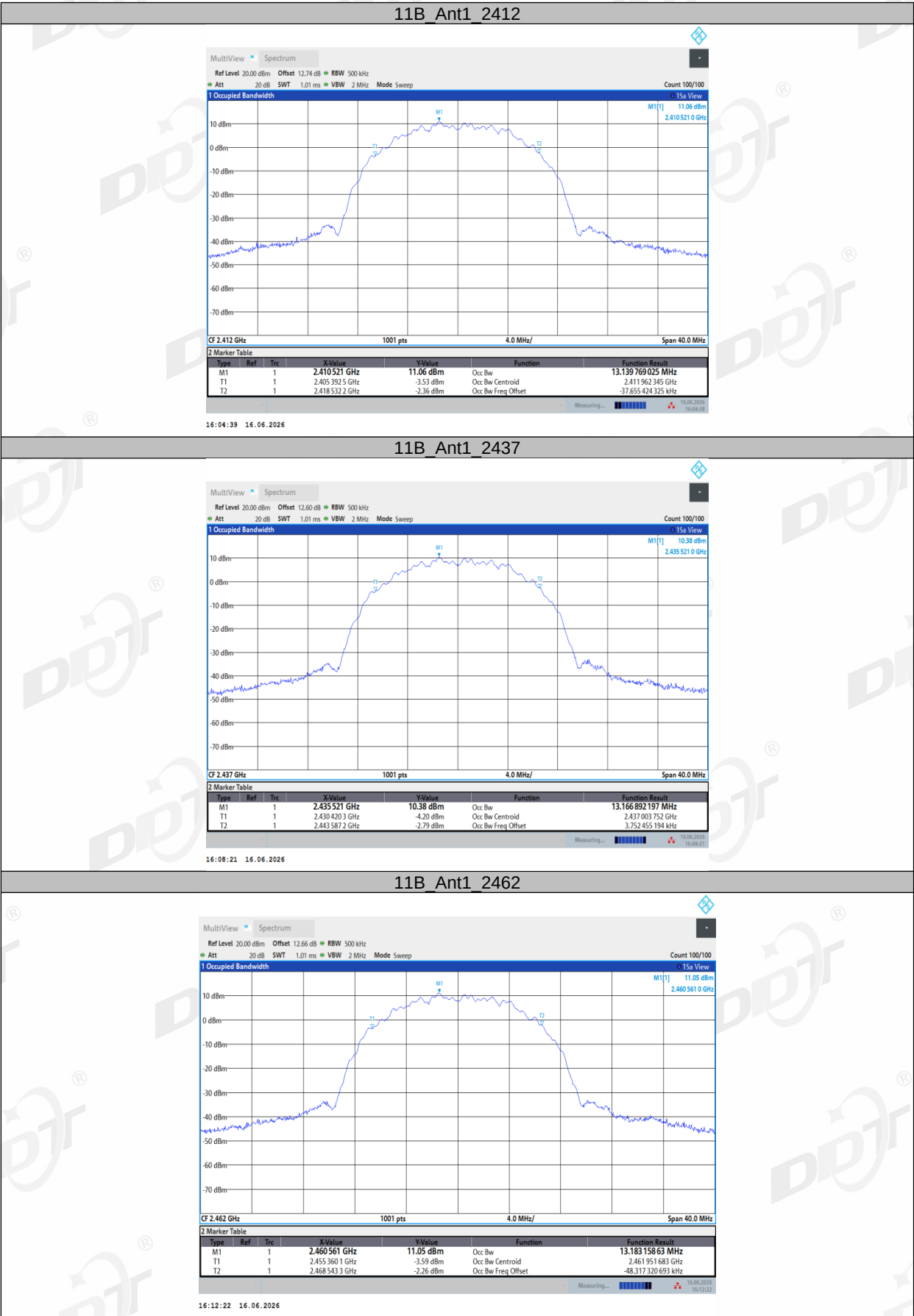
Allow the trace to stabilize, measure the 99% bandwidth of signal, and record the results in the report.

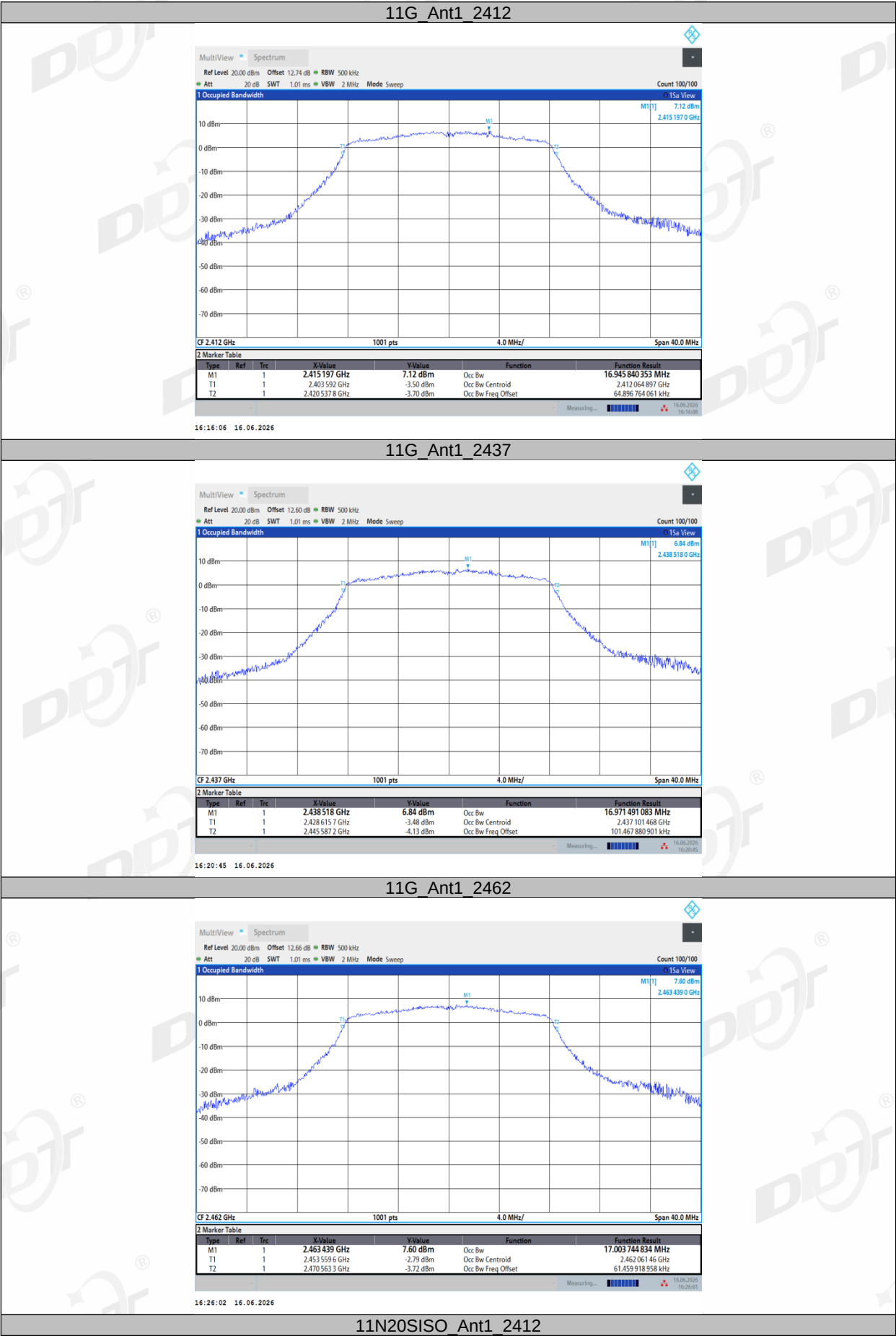
5.4. Test result

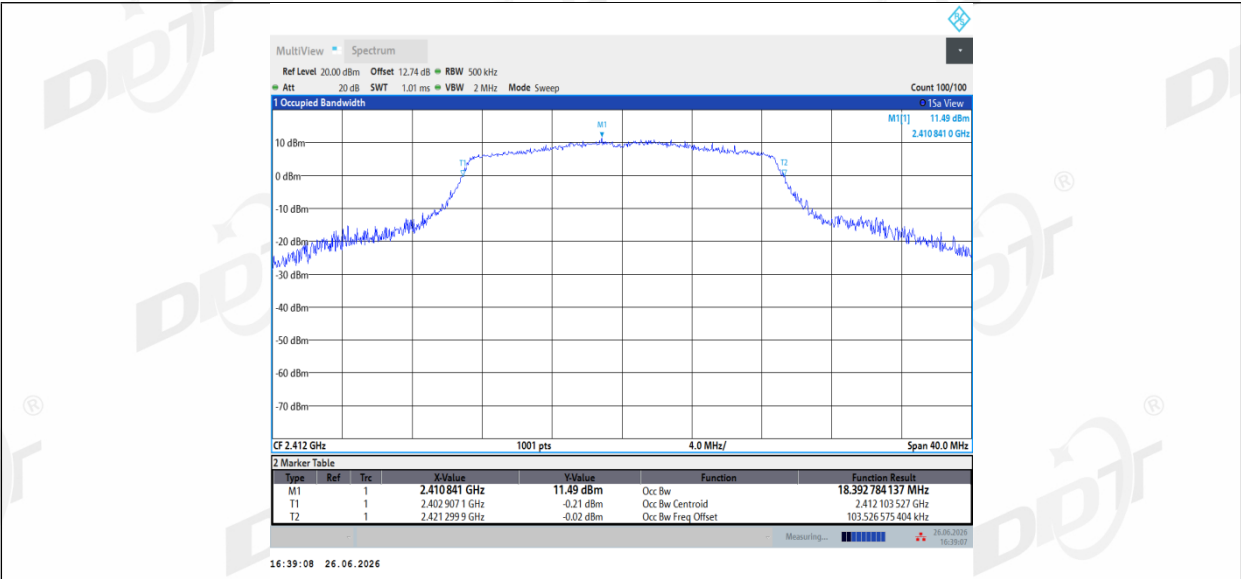
|                    |               |                |                          |
|--------------------|---------------|----------------|--------------------------|
| Test Engineer:     | Zora Zhang    | Test Site:     | RF Measurement System 4# |
| Ambient Condition: | 28.1℃,31.3%RH | Test Date:     | 2026.06.16-2026.06.26    |
| Test Power Supply: | DC3.3V        | Sample Number: | S26060910-001            |

| TestMode   | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|------------|---------|------------------------|-----------|-----------|-----------|------------|---------|
| 11B        | Ant1    | 2412                   | 13.140    | 2405.3925 | 2418.5322 | ---        | ---     |
|            |         | 2437                   | 13.167    | 2430.4203 | 2443.5872 | ---        | ---     |
|            |         | 2462                   | 13.183    | 2455.3601 | 2468.5433 | ---        | ---     |
| 11G        | Ant1    | 2412                   | 16.946    | 2403.5920 | 2420.5378 | ---        | ---     |
|            |         | 2437                   | 16.971    | 2428.6157 | 2445.5872 | ---        | ---     |
|            |         | 2462                   | 17.004    | 2453.5596 | 2470.5633 | ---        | ---     |
| 11N20SISO  | Ant1    | 2412                   | 18.393    | 2402.9071 | 2421.2999 | ---        | ---     |
|            |         | 2437                   | 18.009    | 2428.0991 | 2446.1080 | ---        | ---     |
|            |         | 2462                   | 18.004    | 2453.0533 | 2471.0573 | ---        | ---     |
| 11N40SISO  | Ant1    | 2422                   | 36.184    | 2403.9613 | 2440.1452 | ---        | ---     |
|            |         | 2437                   | 36.111    | 2419.0268 | 2455.1380 | ---        | ---     |
|            |         | 2452                   | 36.040    | 2434.0274 | 2470.0676 | ---        | ---     |
| 11AX20SISO | Ant1    | 2412                   | 18.979    | 2402.5522 | 2421.5309 | ---        | ---     |
|            |         | 2437                   | 18.947    | 2427.5903 | 2446.5376 | ---        | ---     |
|            |         | 2462                   | 18.954    | 2452.5649 | 2471.5190 | ---        | ---     |

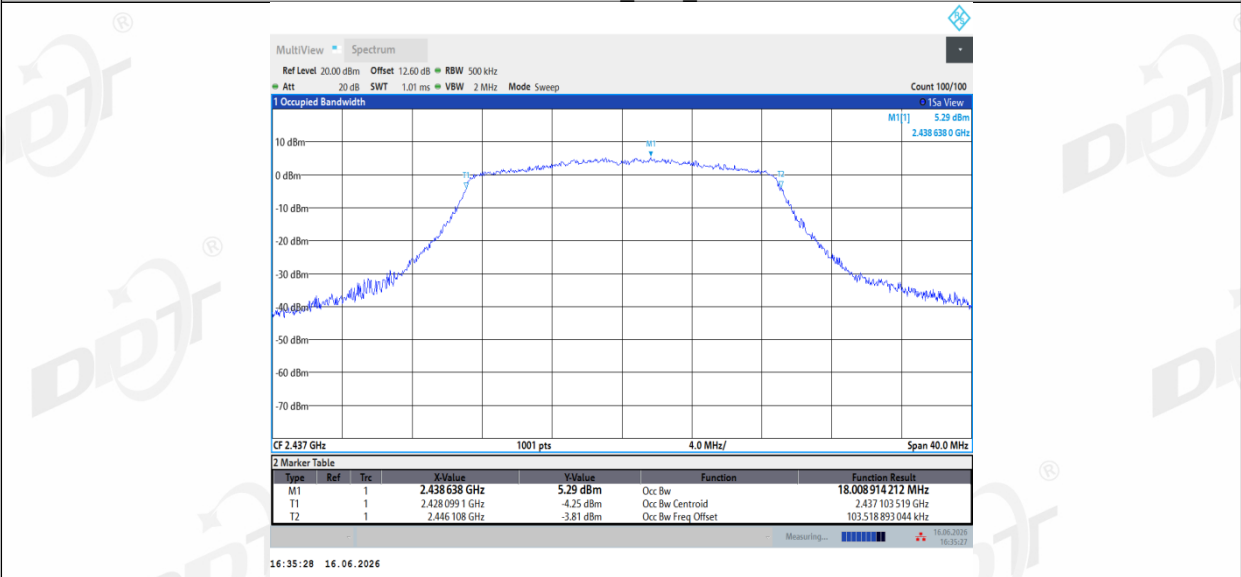
5.5. Test graphs



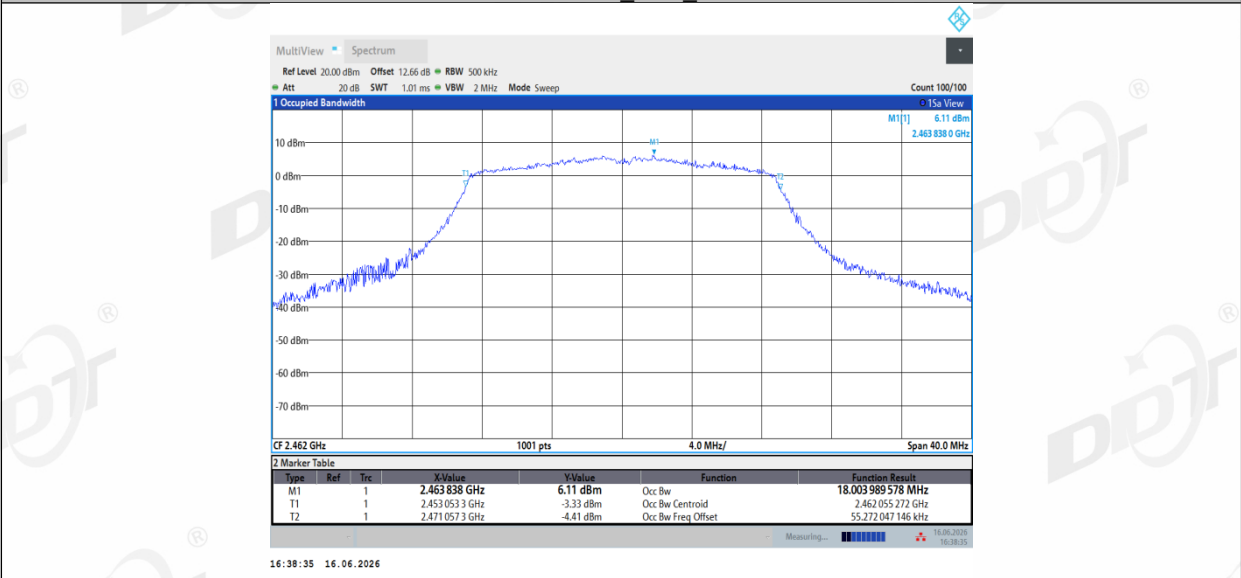




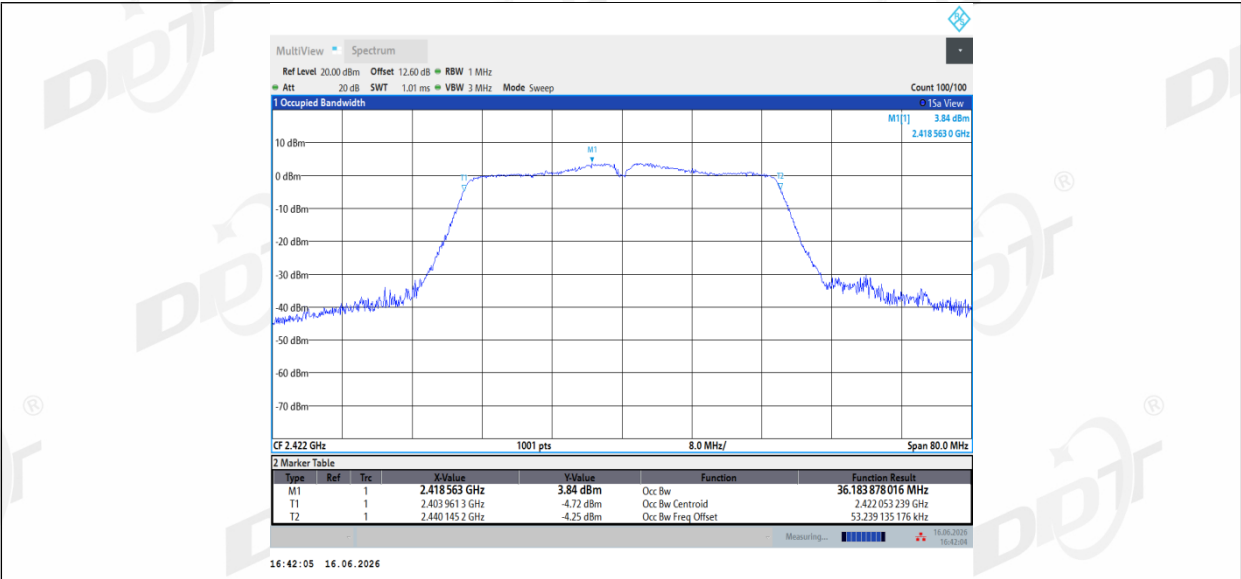
11N20SISO\_Ant1\_2437



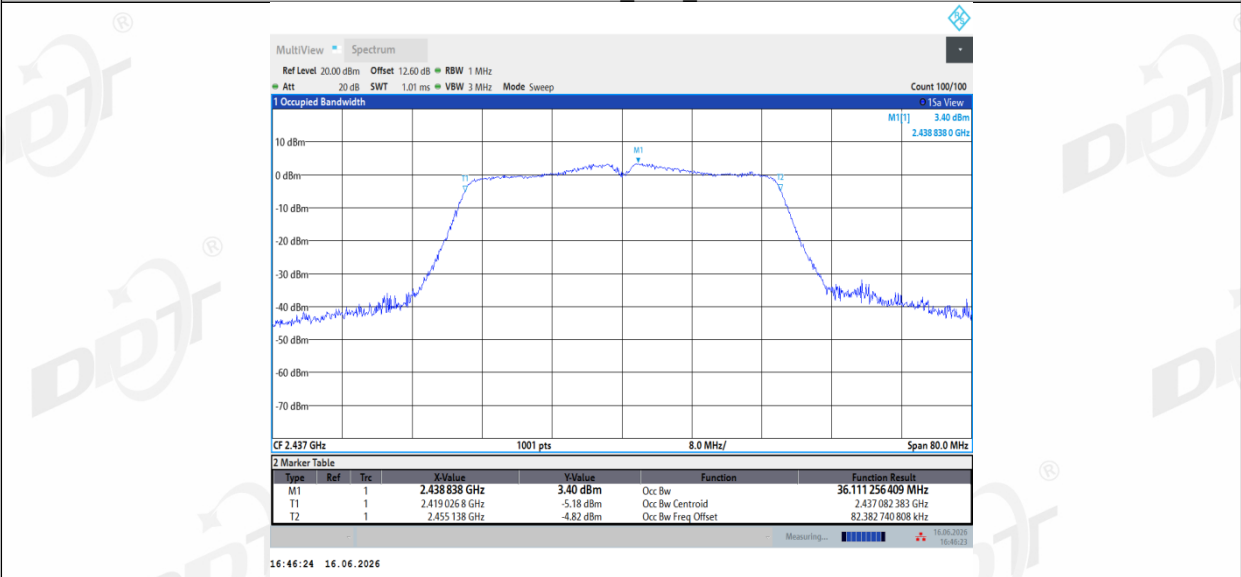
11N20SISO\_Ant1\_2462



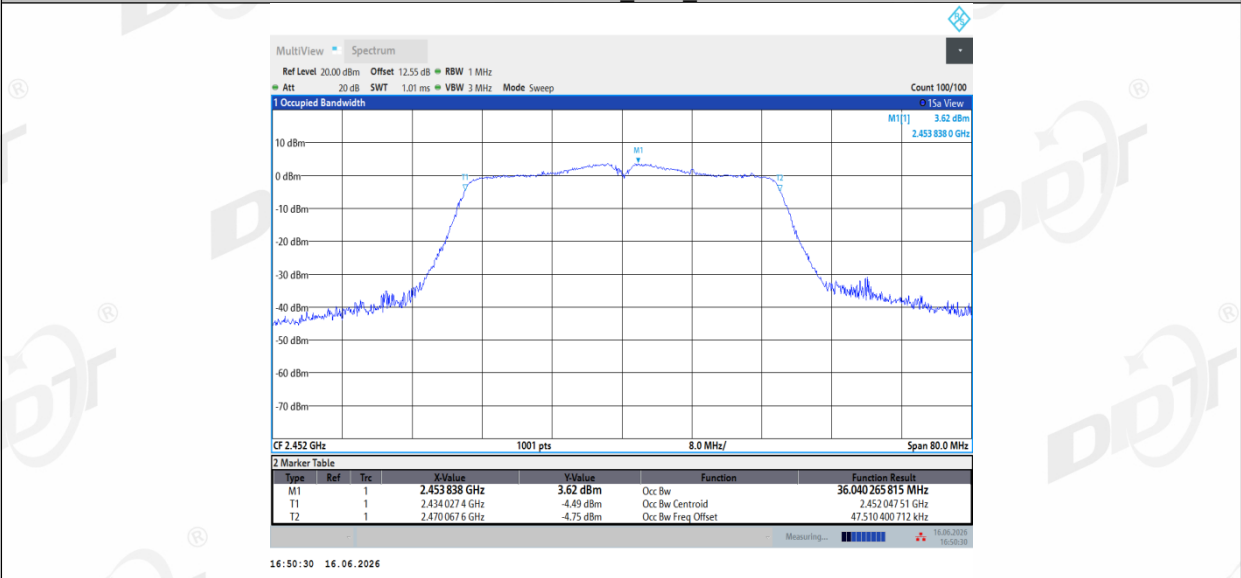
11N40SISO\_Ant1\_2422



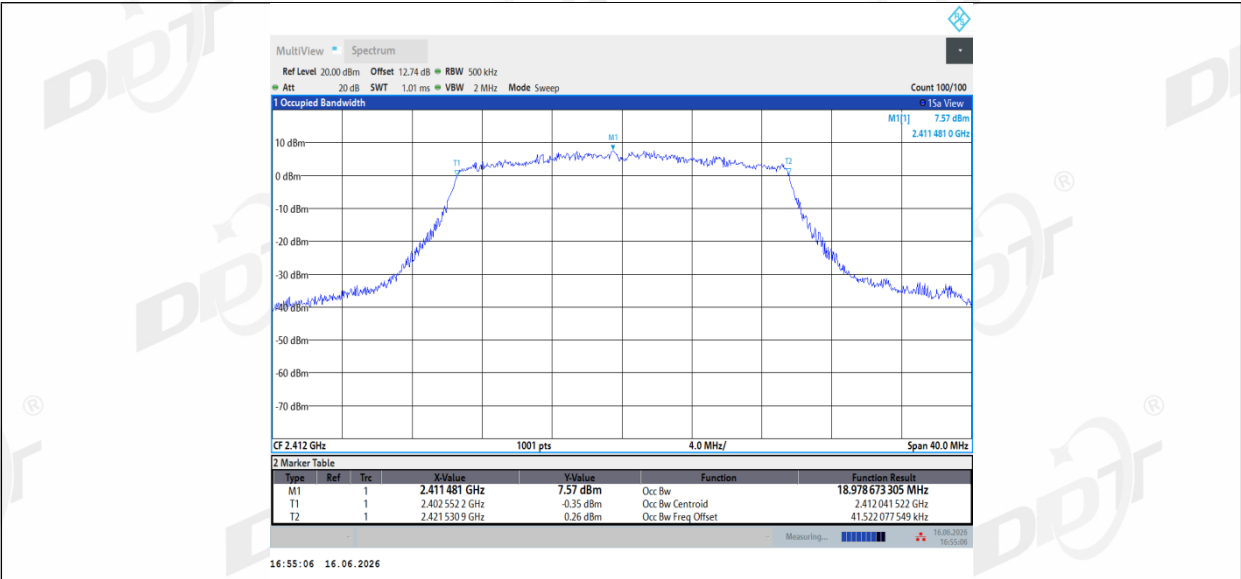
11N40SISO\_Ant1\_2437



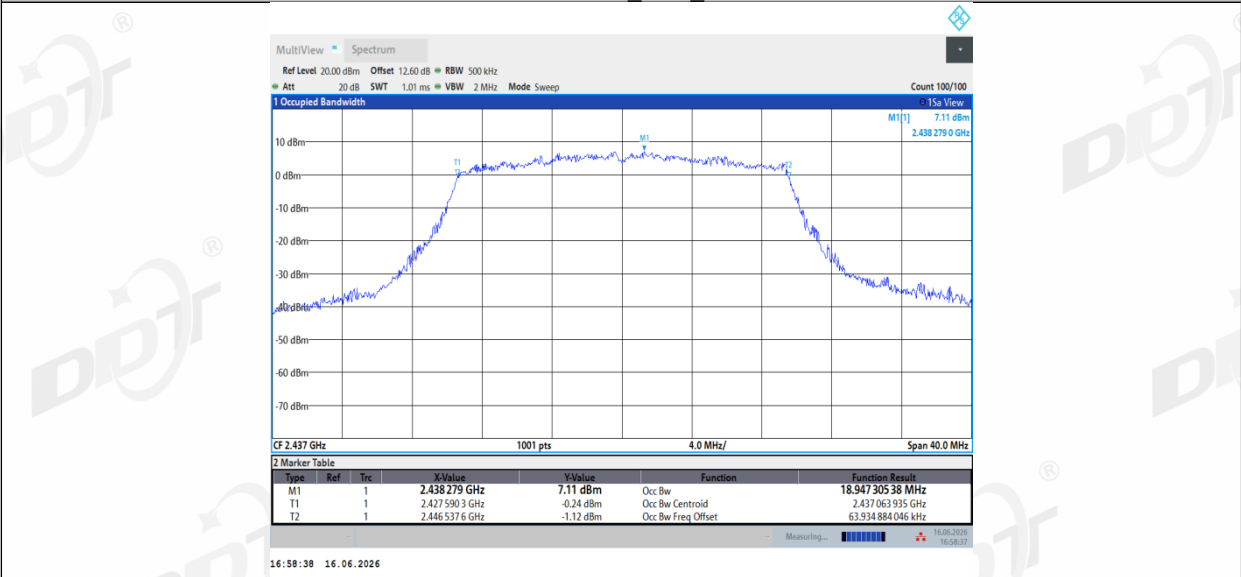
11N40SISO\_Ant1\_2452



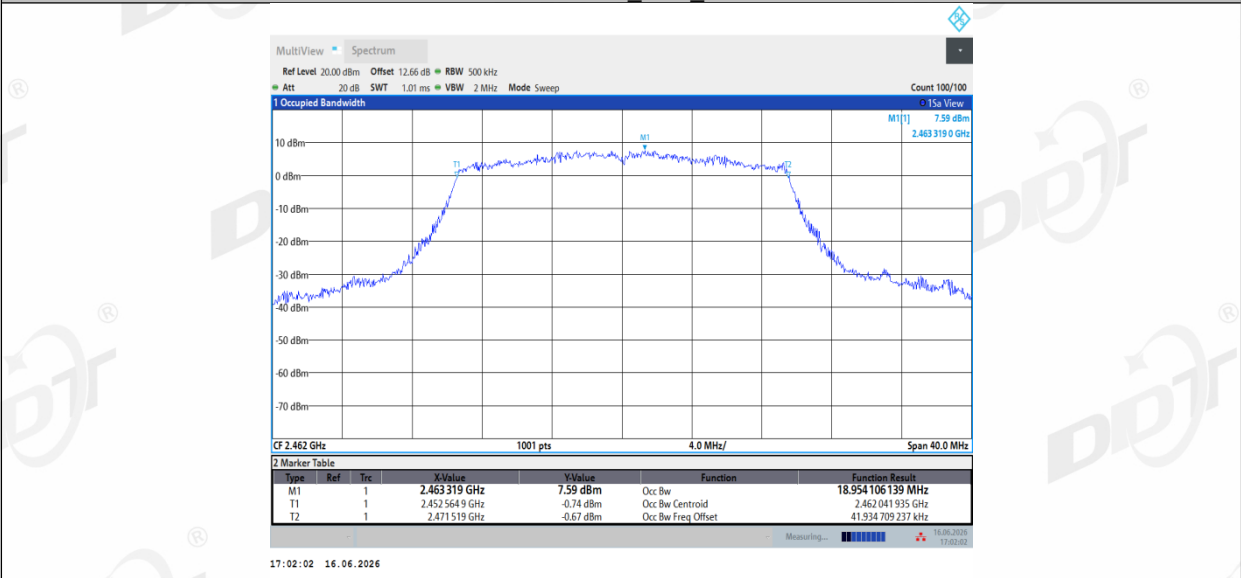
11AX20SISO\_Ant1\_2412



11AX20SISO\_Ant1\_2437

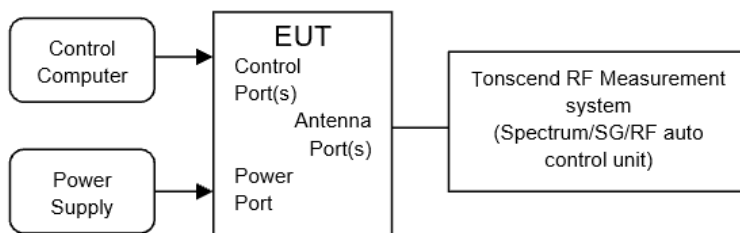


11AX20SISO\_Ant1\_2462



## 6. Conducted Output Power

### 6.1. Block diagram of test setup



### 6.2. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 6.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.9.2.3.
- (2) Connect EUT's antenna output to RF power meter by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously, If the transmitter does not transmit continuously, measure the duty cycle, D, of the transmitter output signal.
- (4) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- (5) Adjust the measurement in dBm by adding  $[10 \log (1 / D)]$ , where D is the duty cycle.
- (6) Record the RF average power of each antenna port.

6.4. Test result average

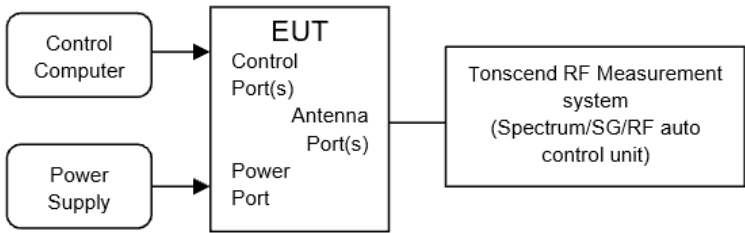
|                    |               |                |                          |
|--------------------|---------------|----------------|--------------------------|
| Test Engineer:     | Zora Zhang    | Test Site:     | RF Measurement System 4# |
| Ambient Condition: | 28.1℃,31.3%RH | Test Date:     | 2026.06.16-2026.06.26    |
| Test Power Supply: | DC3.3V        | Sample Number: | S26060910-001            |

| Test Mode  | Antenna | Frequency [MHz] | Average power [dBm] | Duty Cycle [%] | DC Factor [dB] | Result [dBm] | Limit [dBm] | EIRP [dBm] | EIRP Limit [dBm] | Verdict |
|------------|---------|-----------------|---------------------|----------------|----------------|--------------|-------------|------------|------------------|---------|
| 11B        | Ant1    | 2412            | 14.31               | 100.00         | 0.00           | 14.31        | ≤30.00      | 16.15      | ≤36.00           | PASS    |
|            |         | 2437            | 13.76               | 100.00         | 0.00           | 13.76        | ≤30.00      | 15.60      | ≤36.00           | PASS    |
|            |         | 2462            | 14.15               | 100.00         | 0.00           | 14.15        | ≤30.00      | 15.99      | ≤36.00           | PASS    |
| 11G        | Ant1    | 2412            | 12.23               | 99.28          | 0.03           | 12.26        | ≤30.00      | 14.10      | ≤36.00           | PASS    |
|            |         | 2437            | 11.80               | 99.46          | 0.02           | 11.82        | ≤30.00      | 13.66      | ≤36.00           | PASS    |
|            |         | 2462            | 12.39               | 99.46          | 0.02           | 12.41        | ≤30.00      | 14.25      | ≤36.00           | PASS    |
| 11N20SISO  | Ant1    | 2412            | 11.27               | 99.61          | 0.02           | 11.29        | ≤30.00      | 13.13      | ≤36.00           | PASS    |
|            |         | 2437            | 10.82               | 99.41          | 0.03           | 10.85        | ≤30.00      | 12.69      | ≤36.00           | PASS    |
|            |         | 2462            | 11.24               | 99.61          | 0.02           | 11.26        | ≤30.00      | 13.10      | ≤36.00           | PASS    |
| 11N40SISO  | Ant1    | 2422            | 9.08                | 98.80          | 0.05           | 9.13         | ≤30.00      | 10.97      | ≤36.00           | PASS    |
|            |         | 2437            | 8.38                | 98.80          | 0.05           | 8.43         | ≤30.00      | 10.27      | ≤36.00           | PASS    |
|            |         | 2452            | 8.51                | 98.80          | 0.05           | 8.56         | ≤30.00      | 10.40      | ≤36.00           | PASS    |
| 11AX20SISO | Ant1    | 2412            | 11.18               | 99.23          | 0.03           | 11.21        | ≤30.00      | 13.05      | ≤36.00           | PASS    |
|            |         | 2437            | 10.69               | 99.49          | 0.02           | 10.71        | ≤30.00      | 12.55      | ≤36.00           | PASS    |
|            |         | 2462            | 11.12               | 99.23          | 0.03           | 11.15        | ≤30.00      | 12.99      | ≤36.00           | PASS    |

Note: EIRP (dBm)=Conducted Output Power (dBm)+ Antenna Gain (dBi)

7. Power Spectral Density

7.1. Block diagram of test setup



7.2. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.10.5.
- (2) Connect EUT’s antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for Power Spectral Density measurement:

|                  |                                                    |
|------------------|----------------------------------------------------|
| Center frequency | DTS Channel center frequency                       |
| RBW:             | $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$ |
| VBW:             | $\geq 3\text{RBW}$                                 |
| Span             | 1.5 times the DTS bandwidth                        |
| Detector Mode:   | RMS                                                |
| Sweep time:      | auto                                               |
| Trace mode       | max hold                                           |
|                  | Employ trace averaging (rms)                       |
| Trace            | mode over a minimum of 100 traces.                 |

- (5) Add  $[10 \log (1 / D)]$ , where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.
- If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

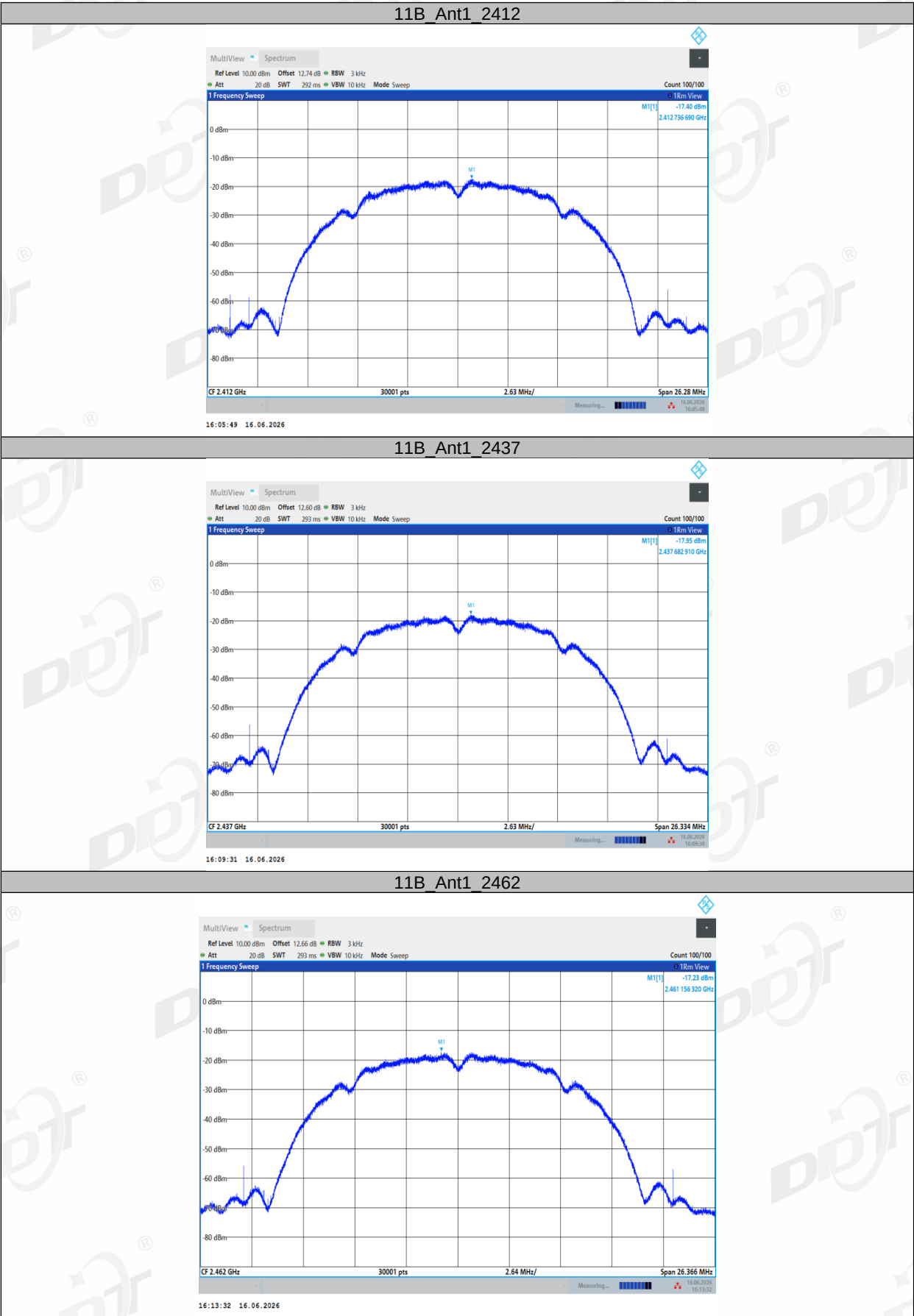
7.4. Test result

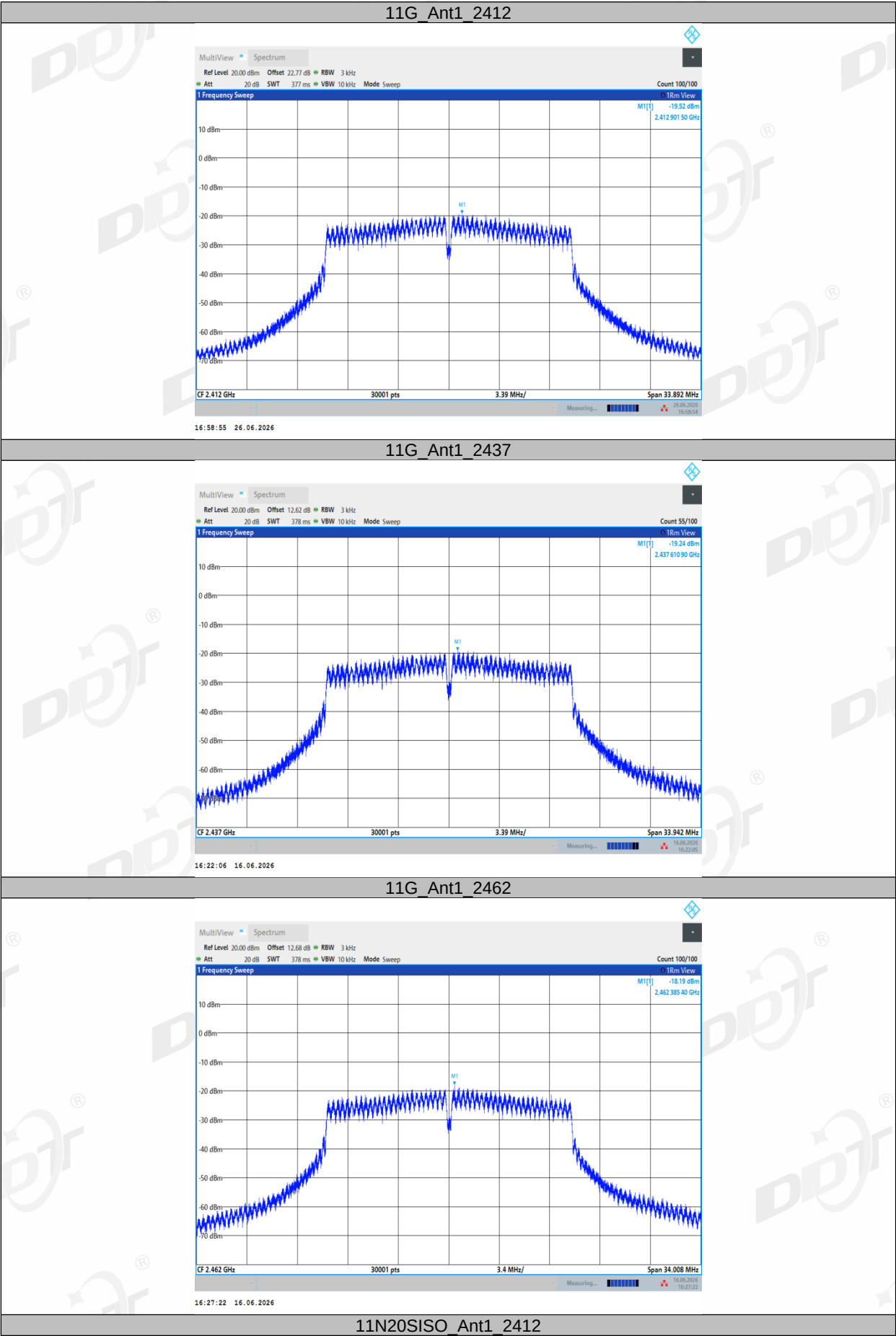
|                    |               |                |                          |
|--------------------|---------------|----------------|--------------------------|
| Test Engineer:     | Zora Zhang    | Test Site:     | RF Measurement System 4# |
| Ambient Condition: | 28.1℃,31.3%RH | Test Date:     | 2026.06.16-2026.06.26    |
| Test Power Supply: | DC3.3V        | Sample Number: | S26060910-001            |

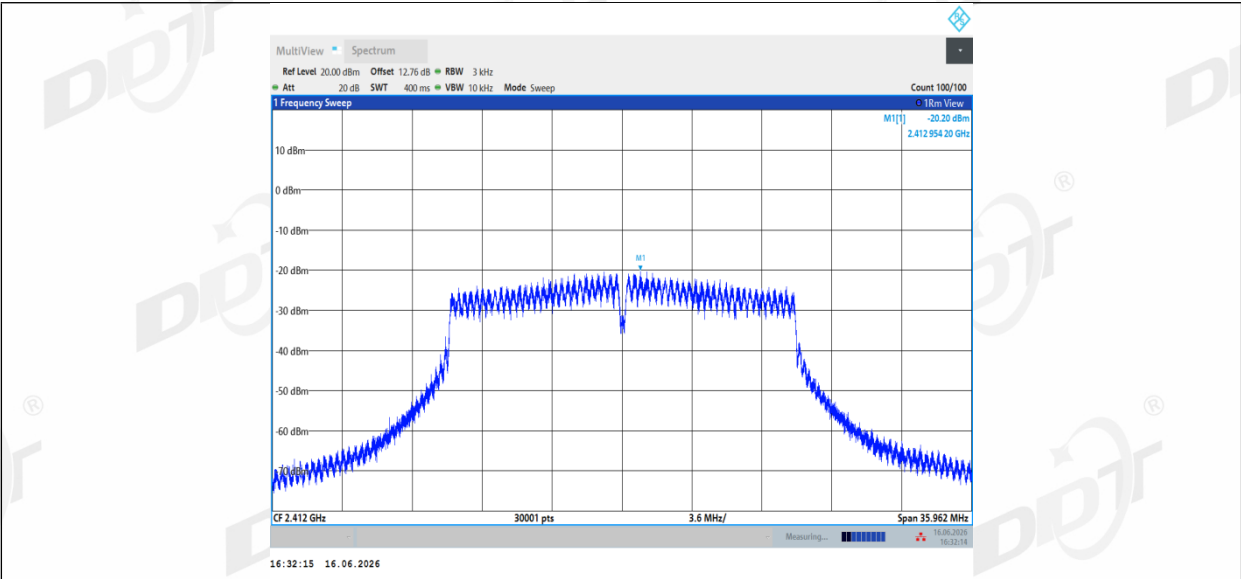
| Test Mode  | Antenna | Frequency [MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|------------|---------|-----------------|----------------------|-----------------|---------|
| 11B        | Ant1    | 2412            | -17.40               | ≤8.00           | PASS    |
|            |         | 2437            | -17.95               | ≤8.00           | PASS    |
|            |         | 2462            | -17.23               | ≤8.00           | PASS    |
| 11G        | Ant1    | 2412            | -19.52               | ≤8.00           | PASS    |
|            |         | 2437            | -19.24               | ≤8.00           | PASS    |
|            |         | 2462            | -18.19               | ≤8.00           | PASS    |
| 11N20SISO  | Ant1    | 2412            | -20.20               | ≤8.00           | PASS    |
|            |         | 2437            | -20.92               | ≤8.00           | PASS    |
|            |         | 2462            | -20.22               | ≤8.00           | PASS    |
| 11N40SISO  | Ant1    | 2422            | -24.61               | ≤8.00           | PASS    |
|            |         | 2437            | -25.55               | ≤8.00           | PASS    |
|            |         | 2452            | -25.21               | ≤8.00           | PASS    |
| 11AX20SISO | Ant1    | 2412            | -21.02               | ≤8.00           | PASS    |
|            |         | 2437            | -21.53               | ≤8.00           | PASS    |
|            |         | 2462            | -21.26               | ≤8.00           | PASS    |

Note: The Duty Cycle Factor is compensated in the graph.

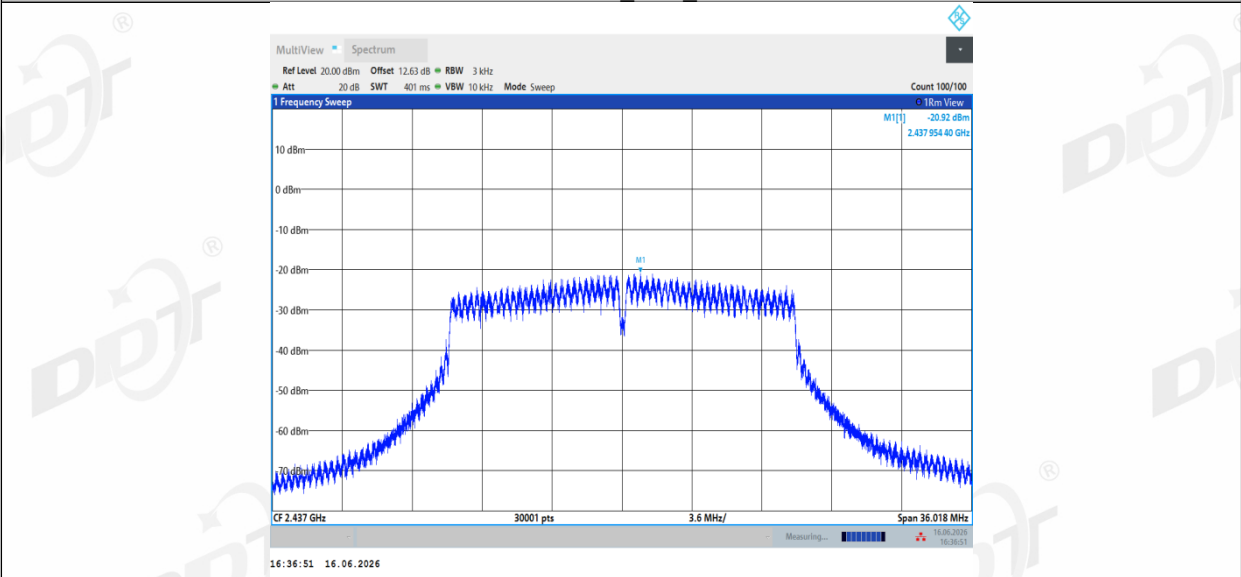
7.5. Test graphs



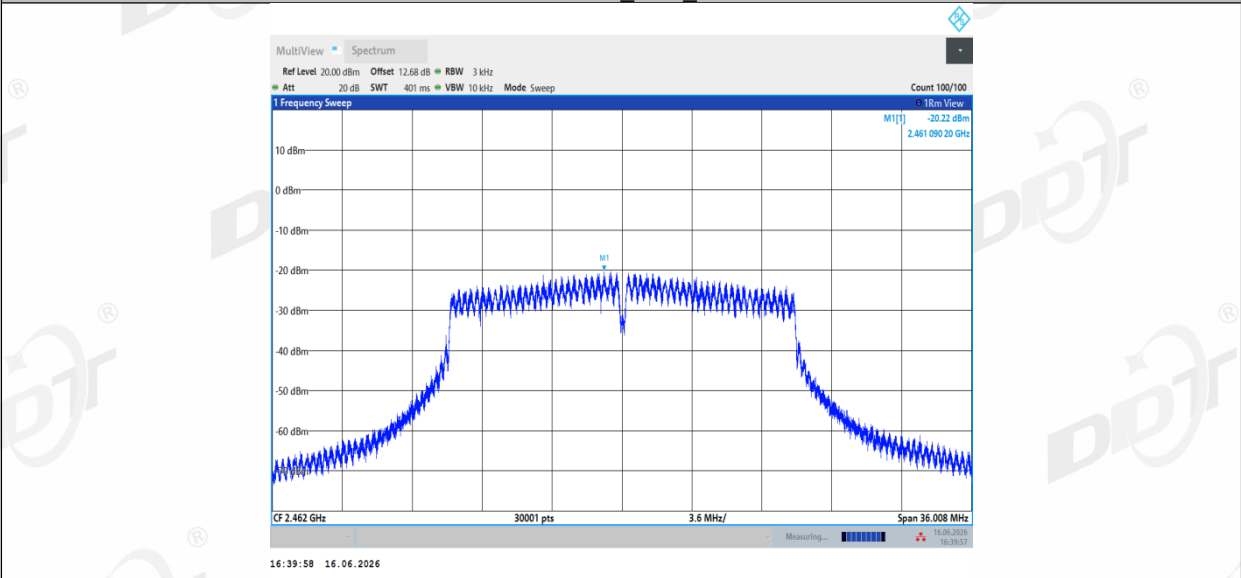




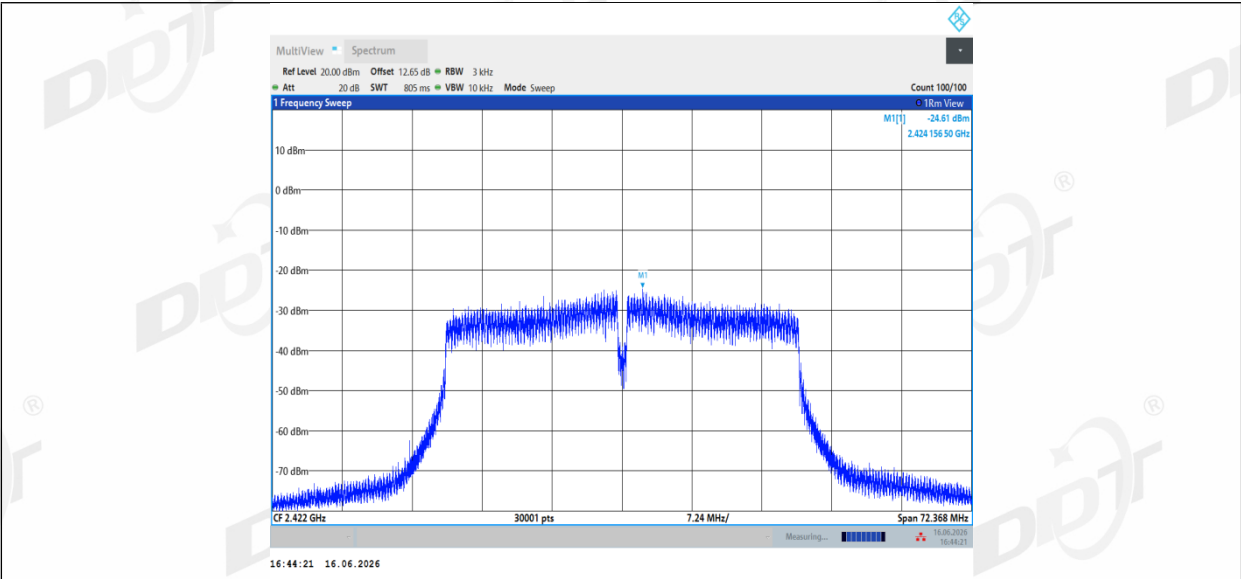
11N20SISO\_Ant1\_2437



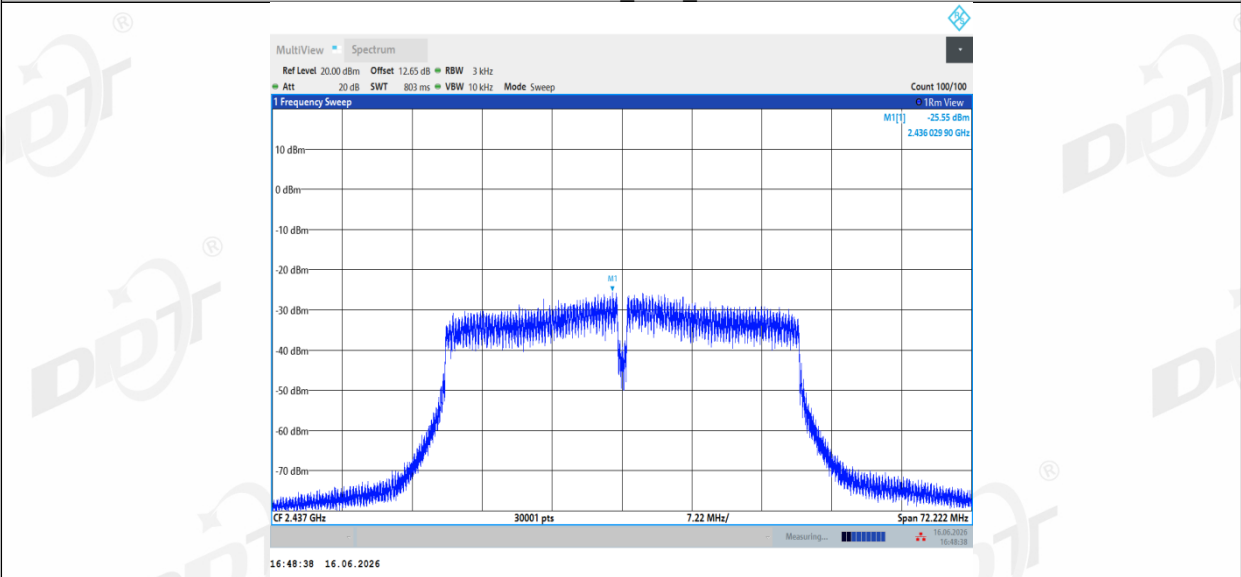
11N20SISO\_Ant1\_2462



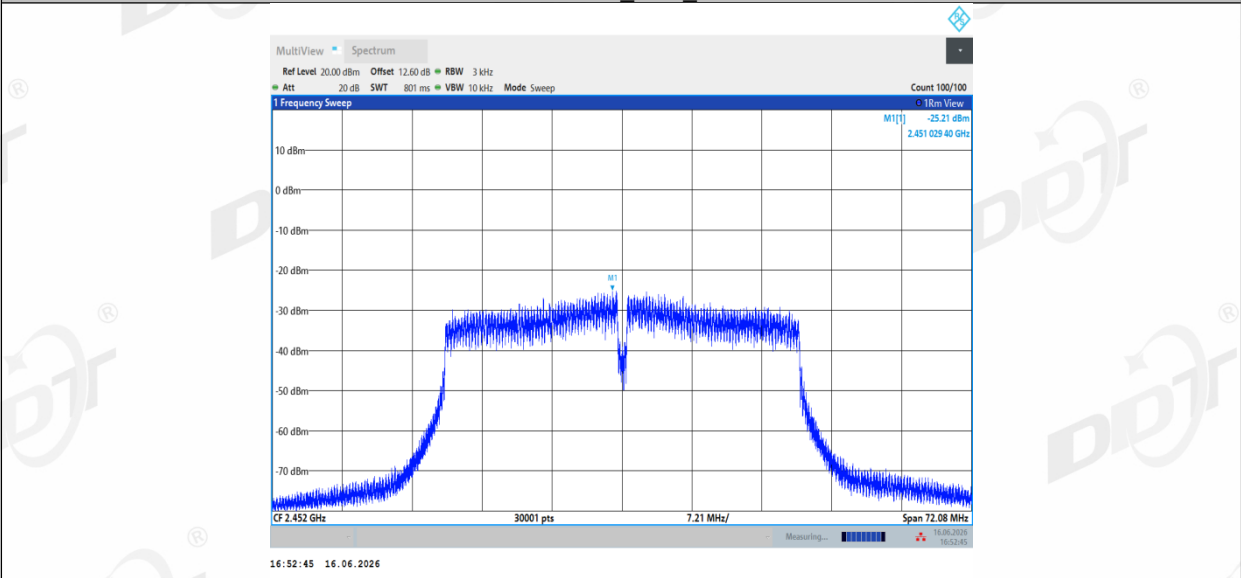
11N40SISO\_Ant1\_2422



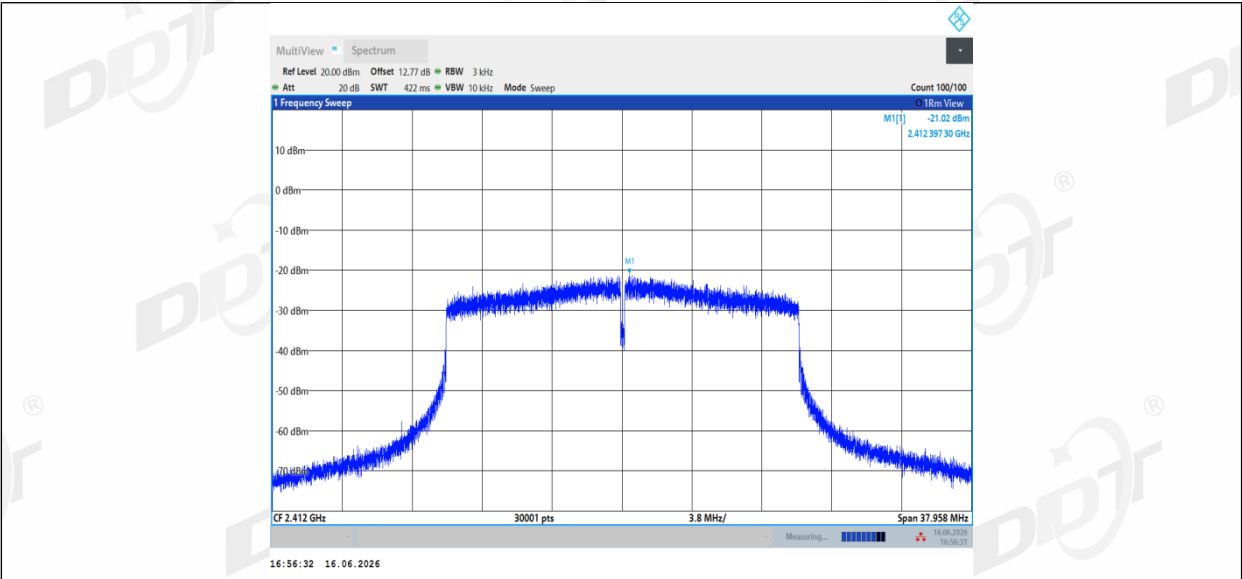
11N40SISO\_Ant1\_2437



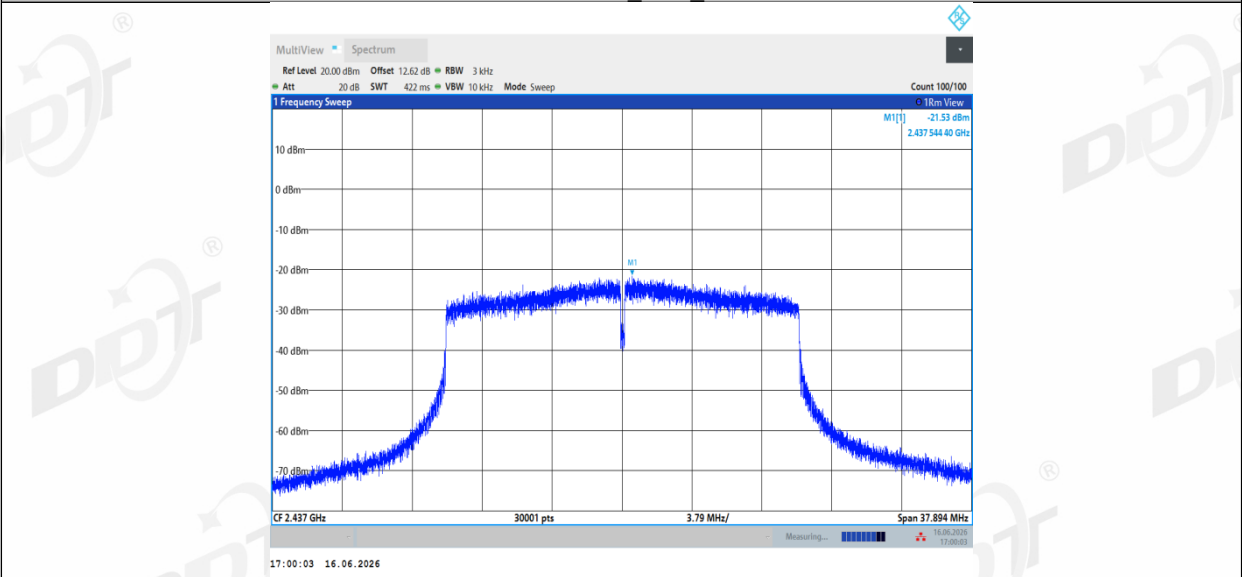
11N40SISO\_Ant1\_2452



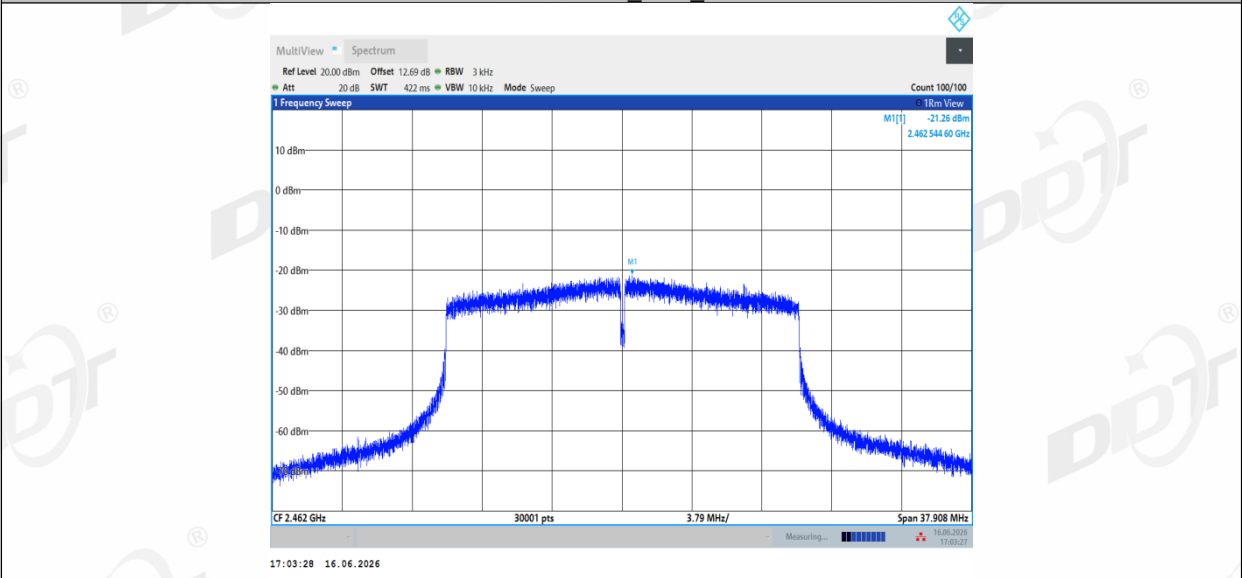
11AX20SISO\_Ant1\_2412



11AX20SISO\_Ant1\_2437

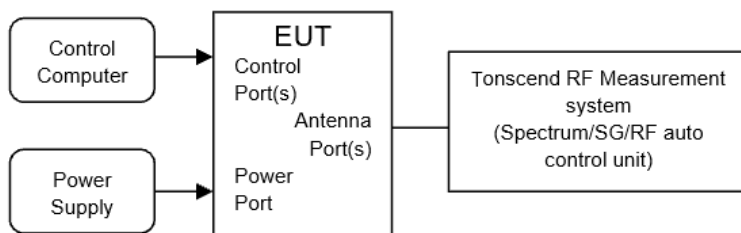


11AX20SISO\_Ant1\_2462



## 8. Band Edge Compliance (Conducted Method)

### 8.1. Block diagram of test setup



### 8.2. Limits

In any 100 kHz 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 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

### 8.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Establish a reference level by using the following procedure:

|                |                                          |
|----------------|------------------------------------------|
| RBW:           | 100 kHz                                  |
| VBW:           | 300 kHz                                  |
| Span           | Encompass frequency range to be measured |
| Detector Mode: | Peak                                     |
| Sweep time:    | auto                                     |
| Trace mode     | Max hold                                 |

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

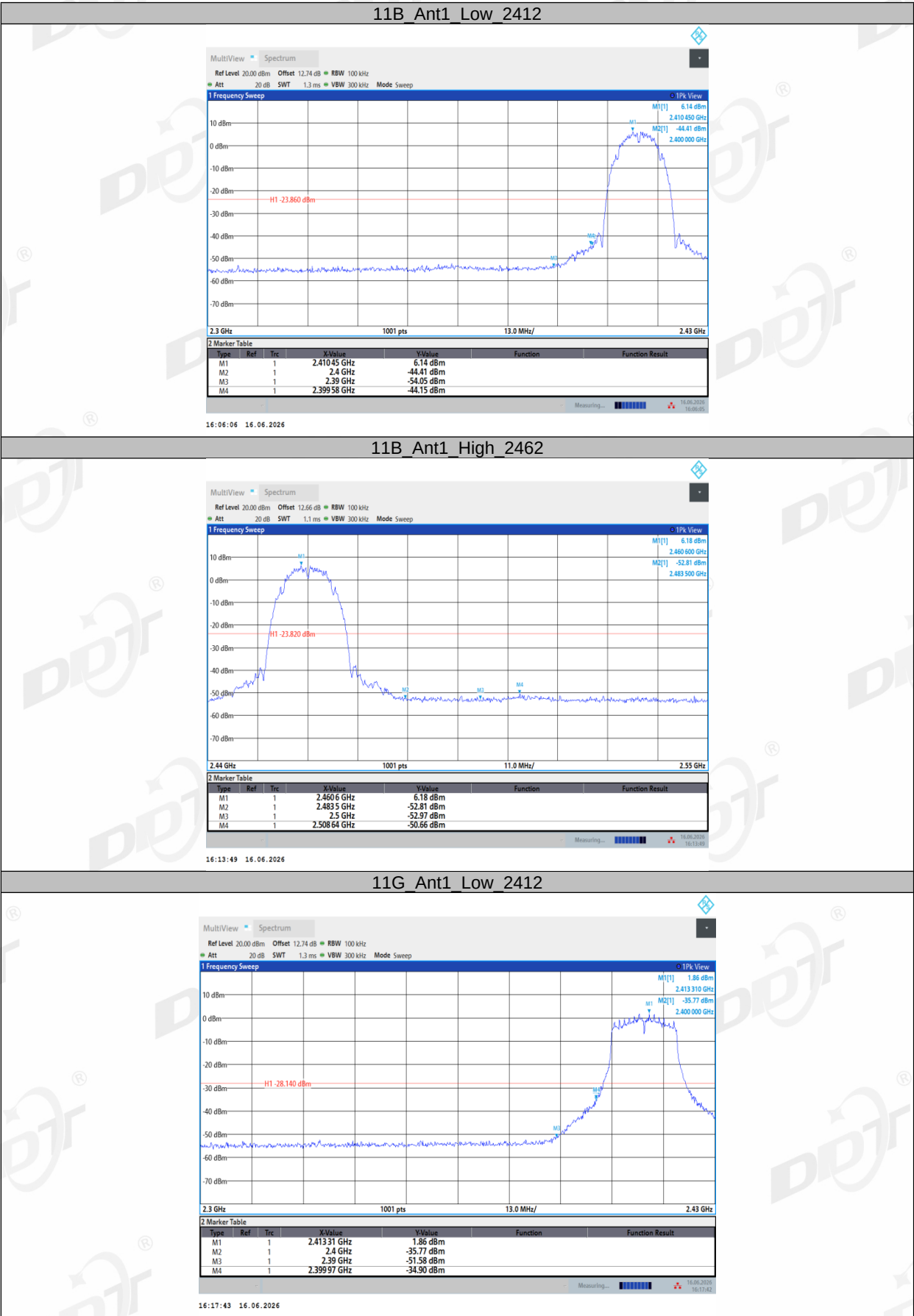
Then mark the maximum amplitude of all unwanted emissions outside of the authorized frequency band.

8.4. Test result

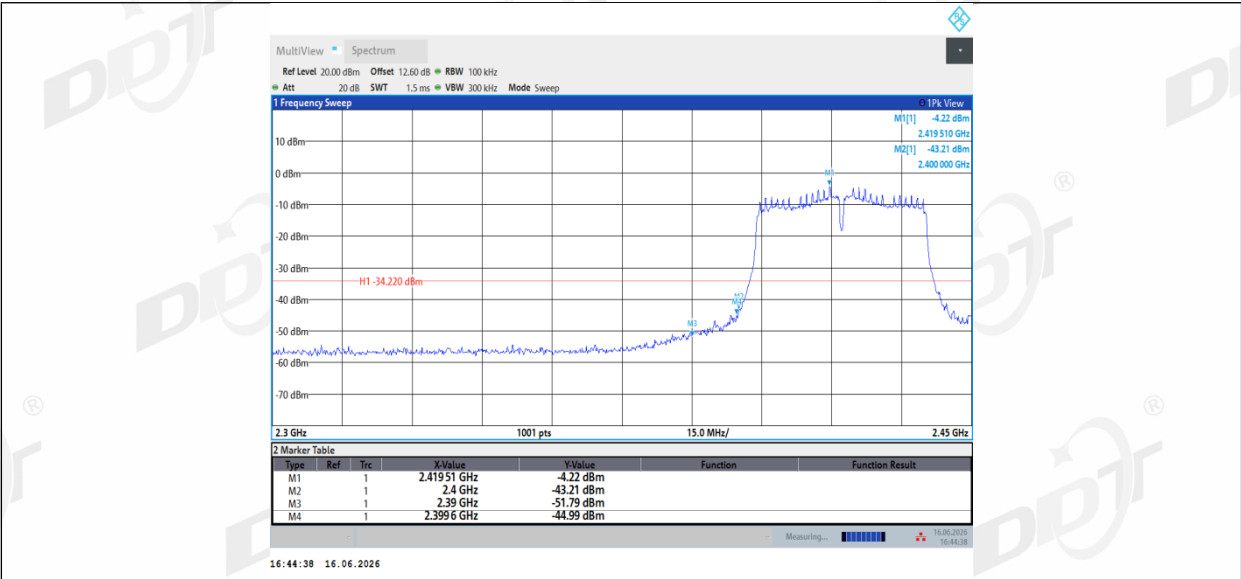
|                    |               |                |                          |
|--------------------|---------------|----------------|--------------------------|
| Test Engineer:     | Zora Zhang    | Test Site:     | RF Measurement System 4# |
| Ambient Condition: | 28.1℃,31.3%RH | Test Date:     | 2026.06.16-2026.06.26    |
| Test Power Supply: | DC3.3V        | Sample Number: | S26060910-001            |

| EUT Set Mode | CH or Frequency | Result(dBm) | EUT Set Mode | CH or Frequency | Result (dBm) |
|--------------|-----------------|-------------|--------------|-----------------|--------------|
| 11b          | CH1             | Pass        | 11g          | CH1             | Pass         |
|              | CH11            | Pass        |              | CH11            | Pass         |
| 11n HT 20    | CH1             | Pass        | 11n HT 40    | CH3             | Pass         |
|              | CH11            | Pass        |              | CH9             | Pass         |
| 11ax HE 20   | CH1             | Pass        | /            | /               | /            |
|              | CH11            | Pass        |              | /               | /            |

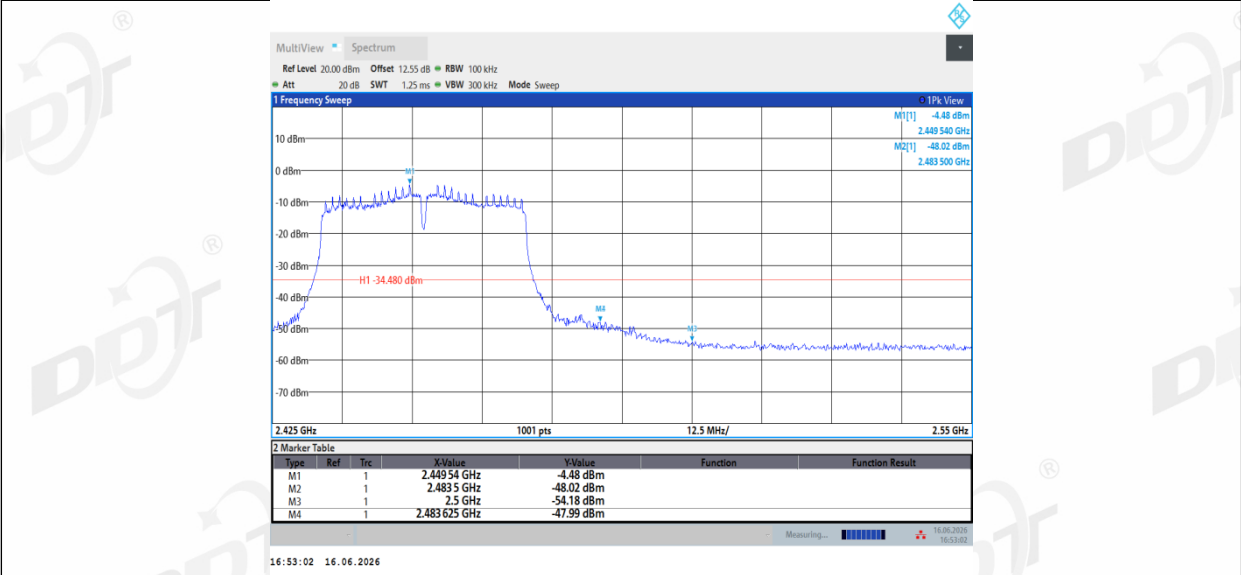
8.5. Test graphs



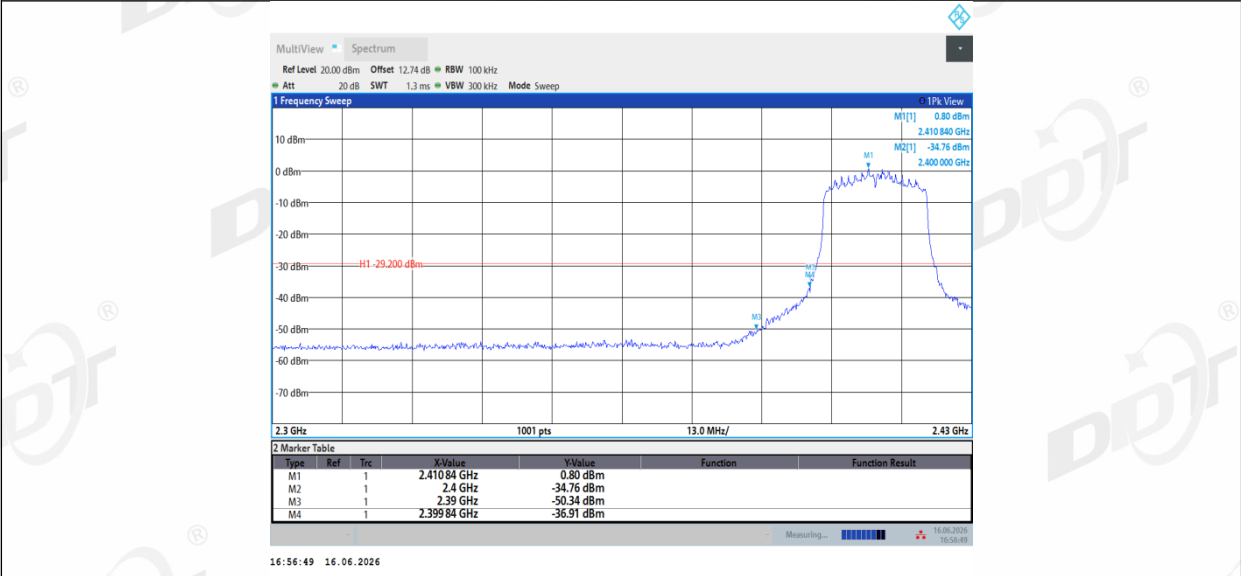




11N40SISO\_Ant1\_High\_2452



11AX20SISO\_Ant1\_Low\_2412



11AX20SISO\_Ant1\_High\_2462