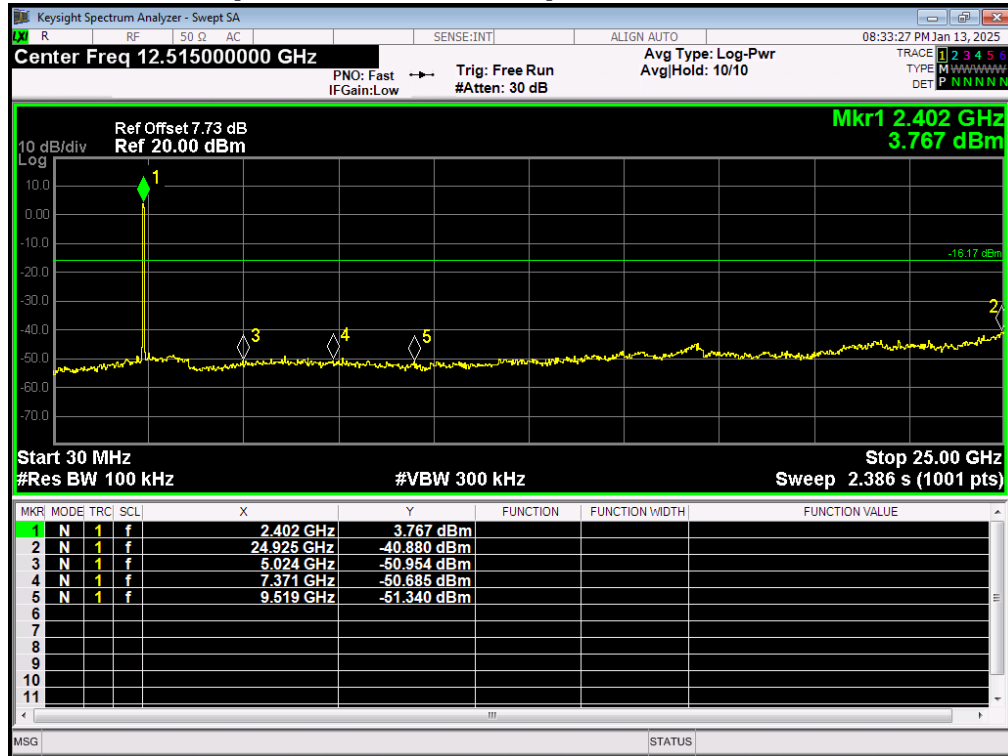
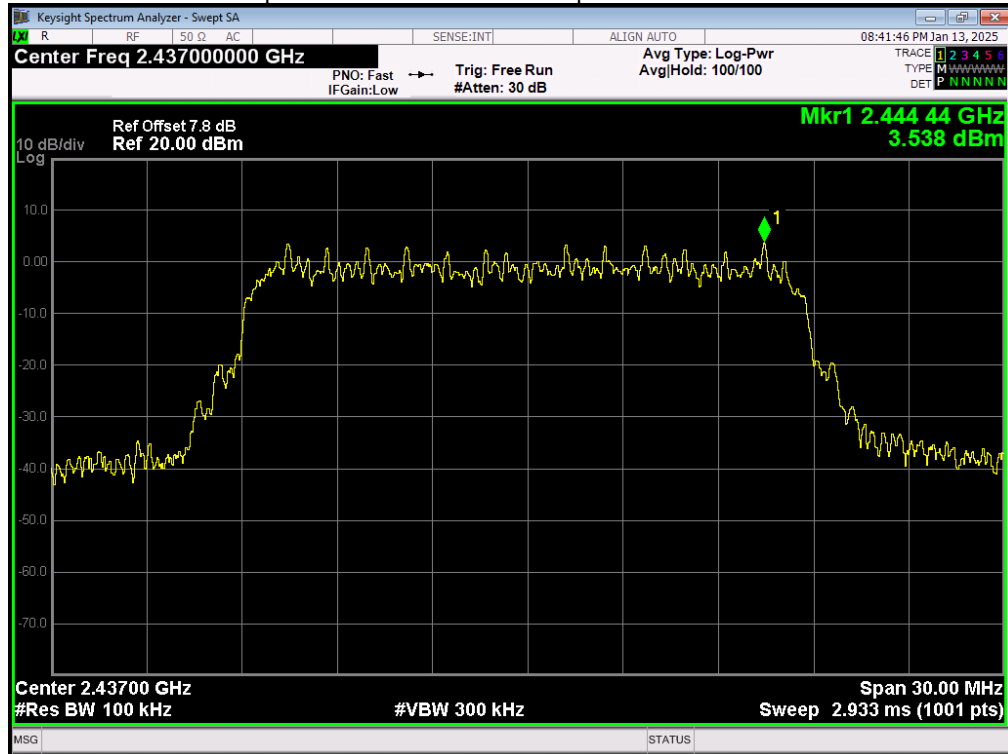


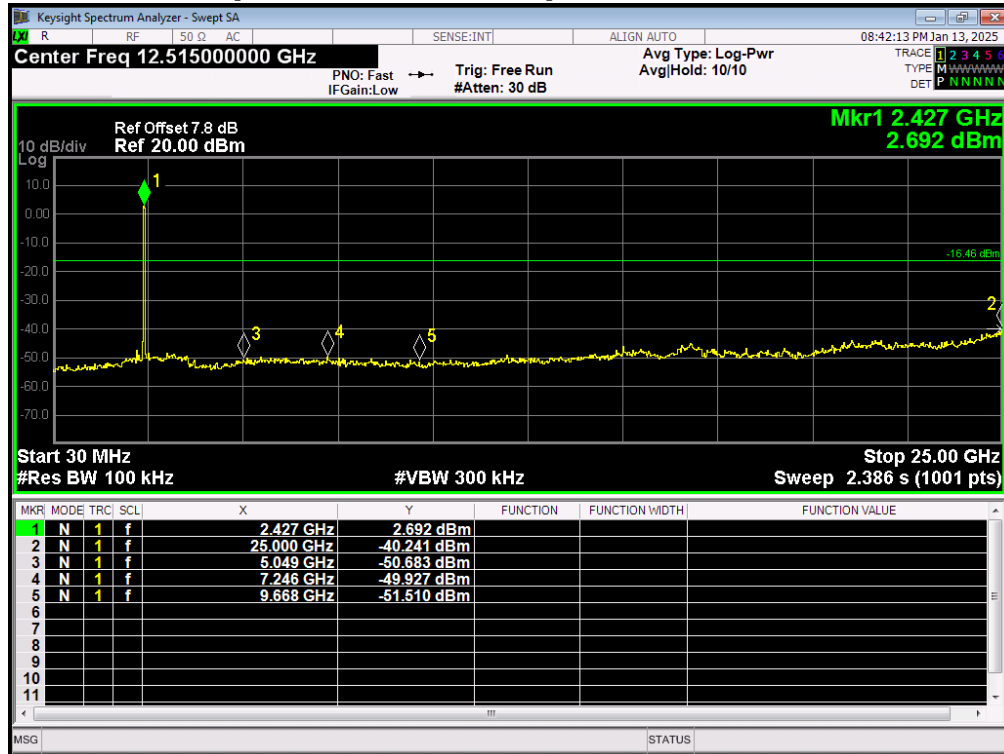
Tx. Spurious NVNT 802.11b 1Mbps 2412MHz Ant1 Emission



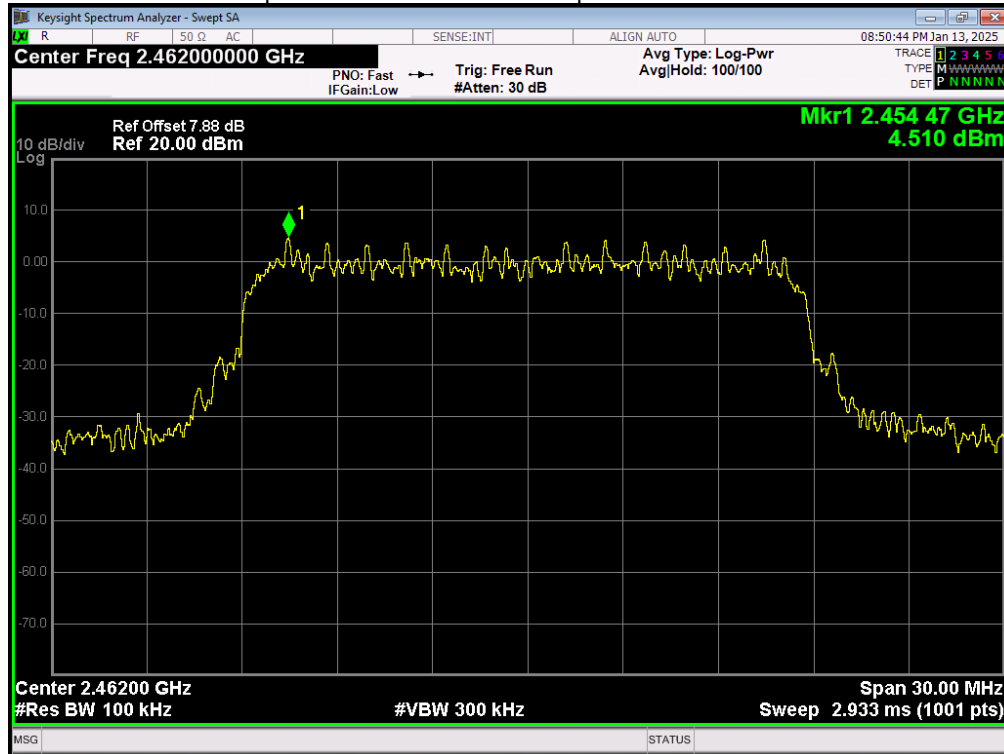
Tx. Spurious NVNT 802.11b 1Mbps 2437MHz Ant1 Ref



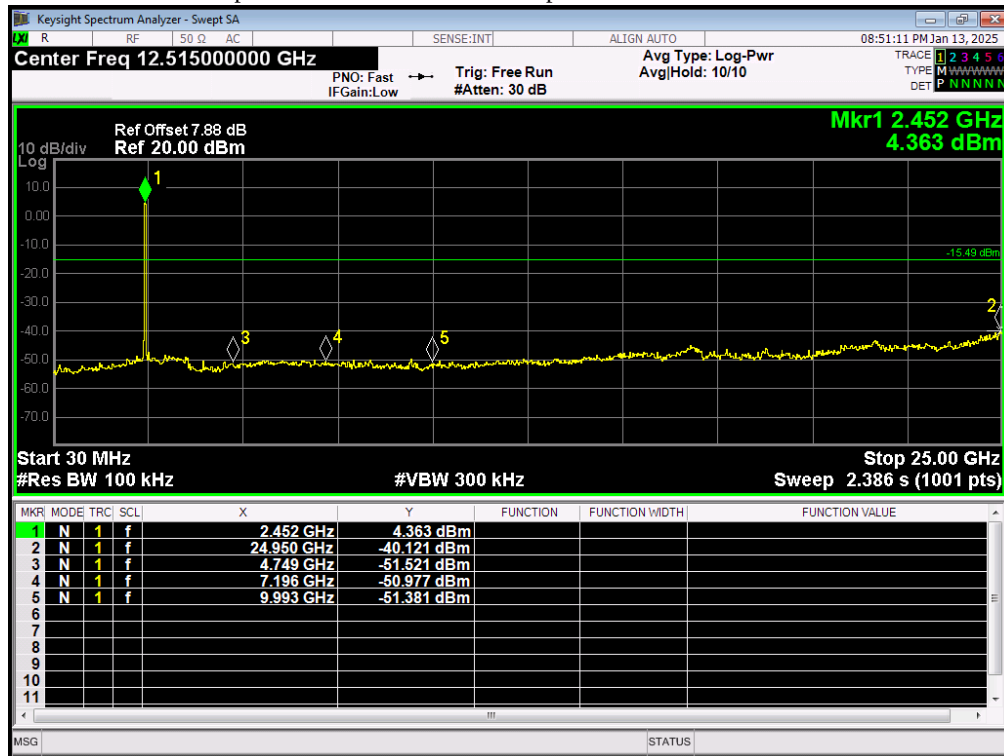
Tx. Spurious NVNT 802.11b 1Mbps 2437MHz Ant1 Emission



Tx. Spurious NVNT 802.11b 1Mbps 2462MHz Ant1 Ref

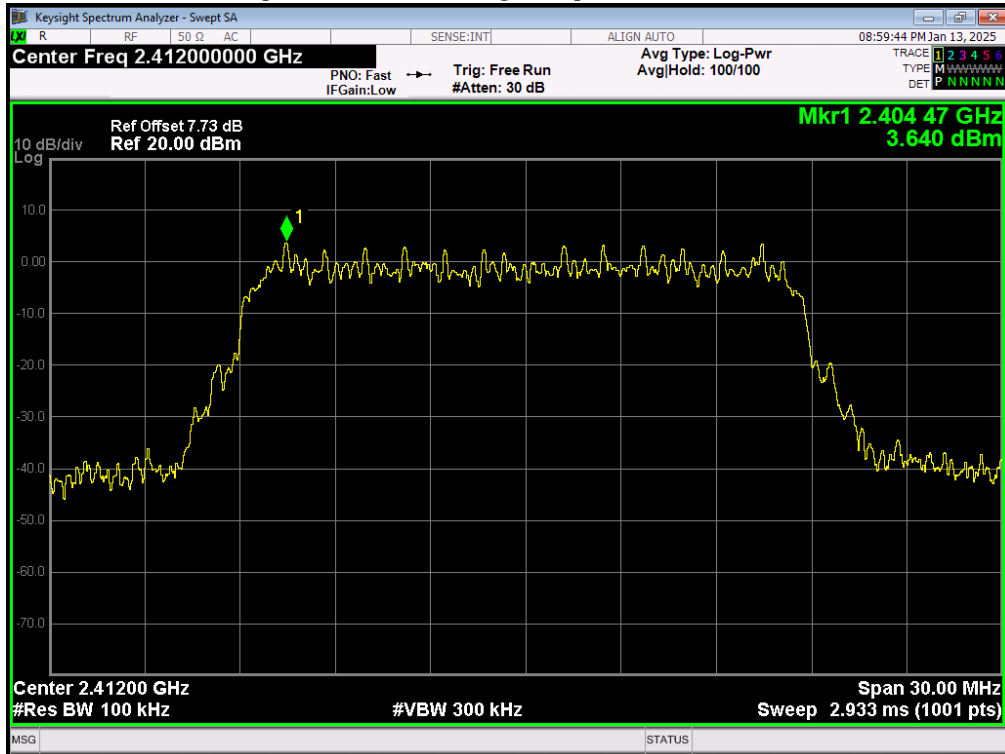


Tx. Spurious NVNT 802.11b 1Mbps 2462MHz Ant1 Emission

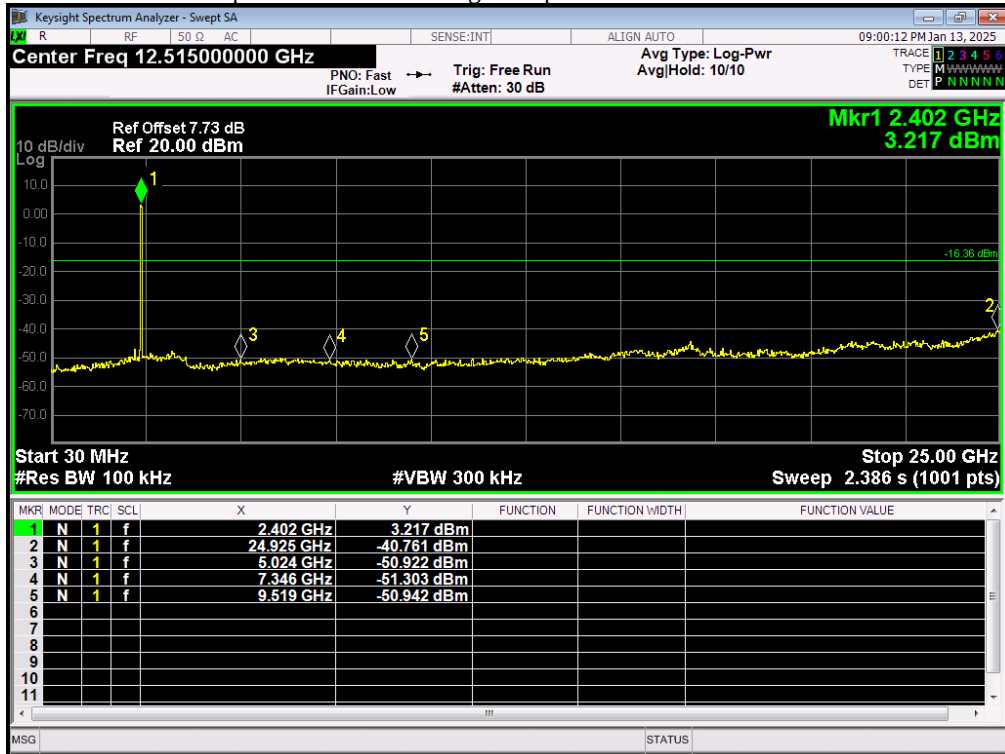


| Condition | Mode             | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------------------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 802.11g<br>6Mbps | 2412            | Ant 1   | -44.4           | -30         | Pass    |
| NVNT      | 802.11g<br>6Mbps | 2437            | Ant 1   | -43.266         | -30         | Pass    |
| NVNT      | 802.11g<br>6Mbps | 2462            | Ant 1   | -45.706         | -30         | Pass    |

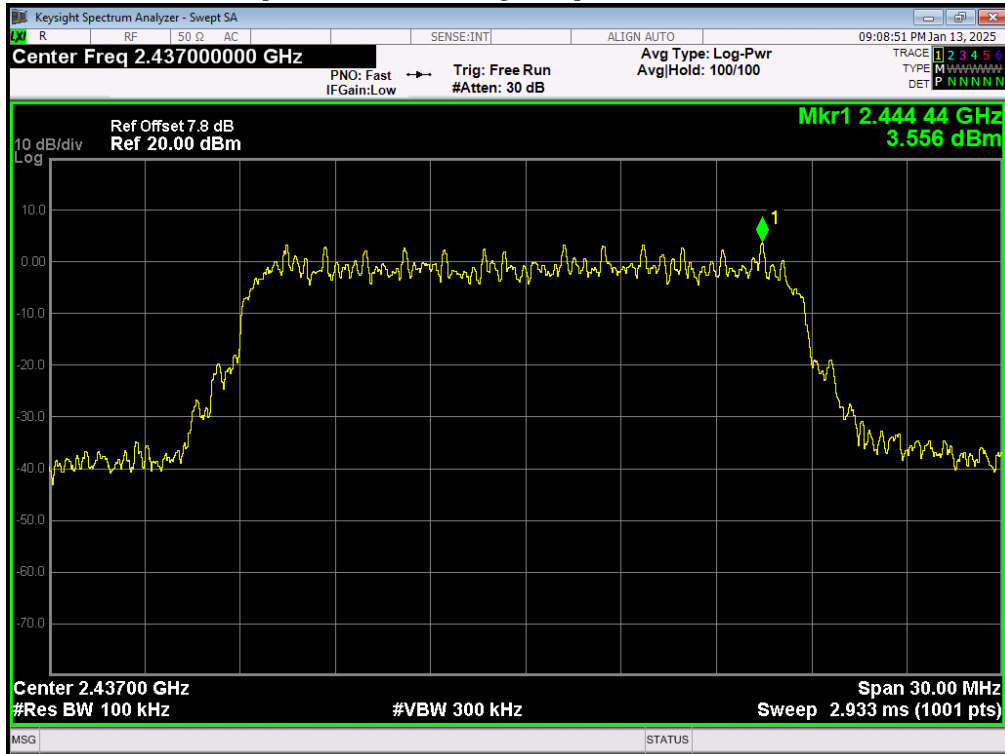
Tx. Spurious NVNT 802.11g 6Mbps 2412MHz Ant1 Ref



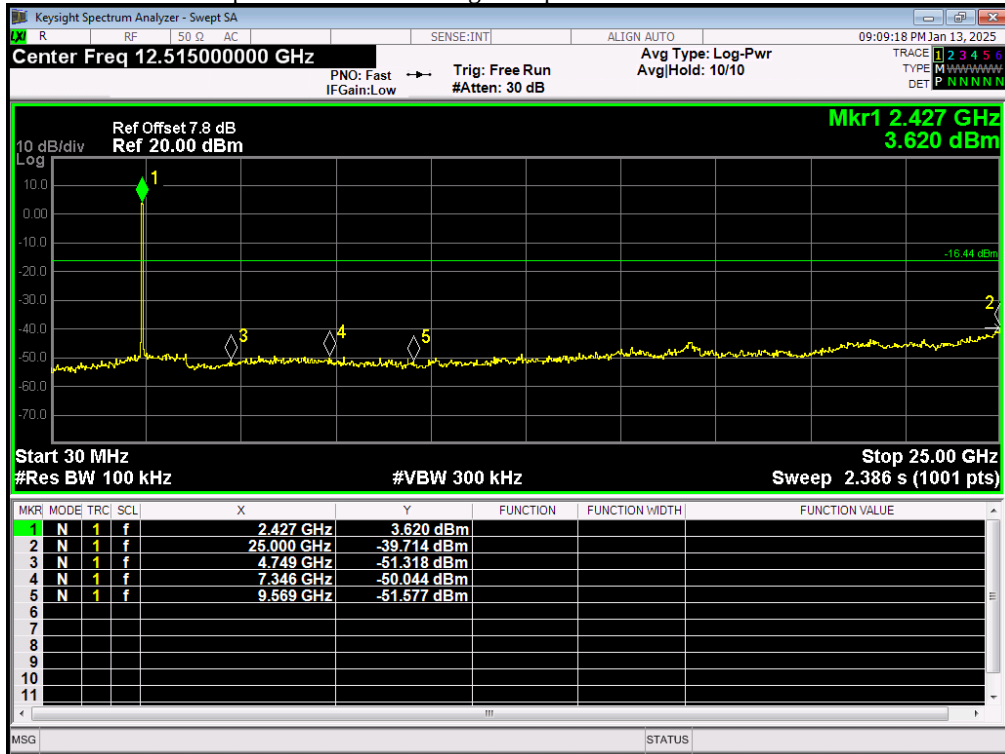
Tx. Spurious NVNT 802.11g 6Mbps 2412MHz Ant1 Emission



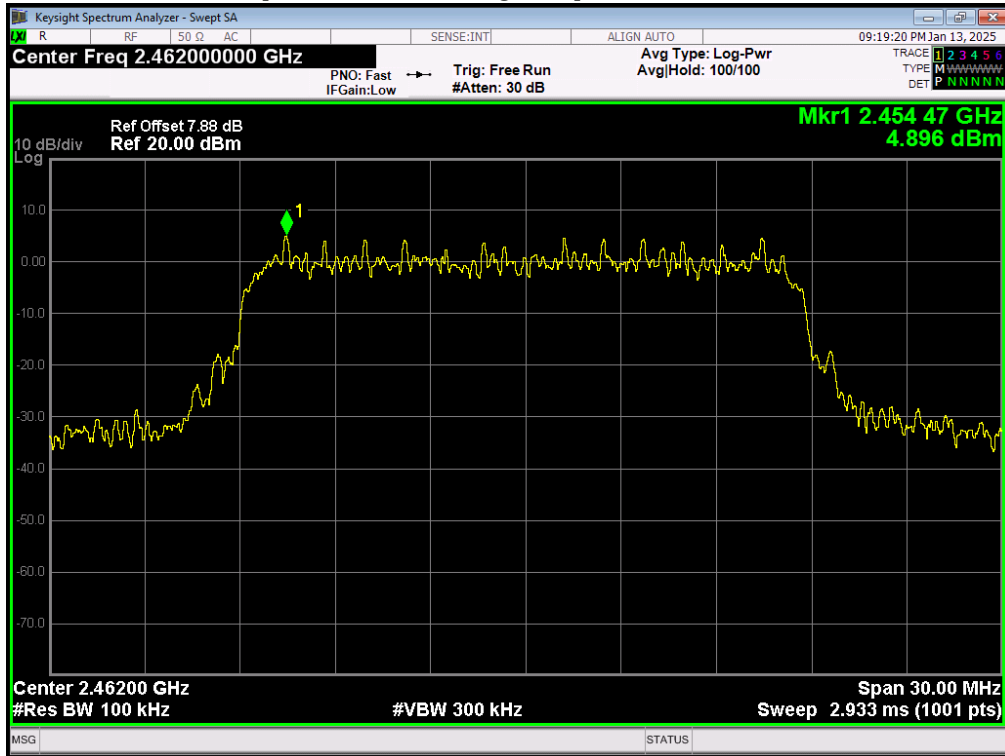
Tx. Spurious NVNT 802.11g 6Mbps 2437MHz Ant1 Ref



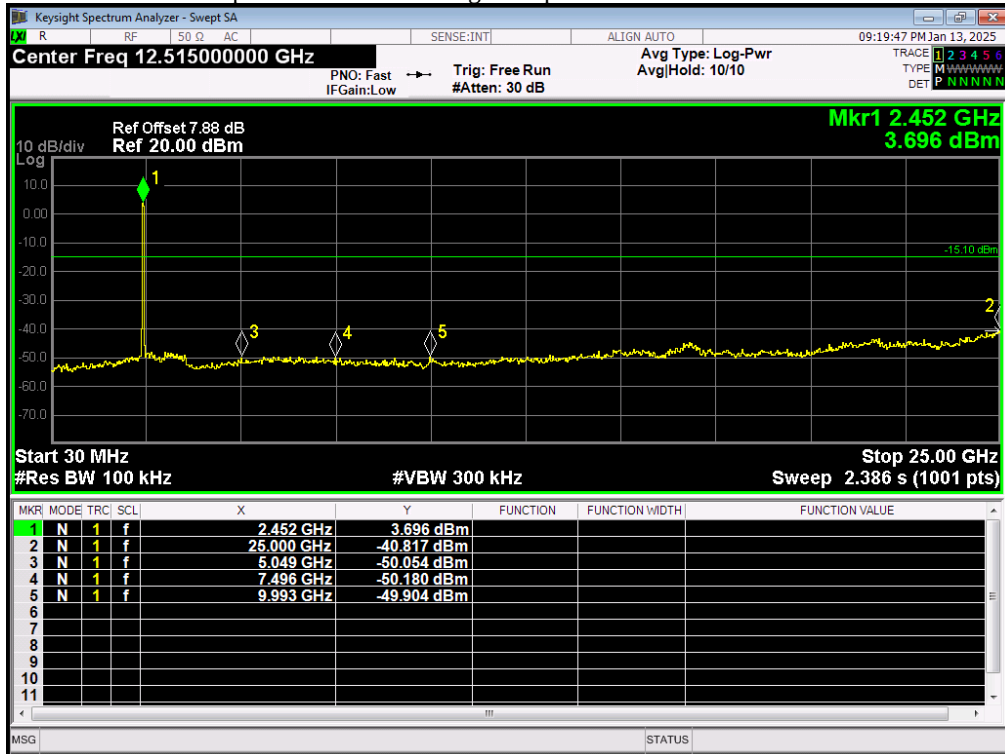
Tx. Spurious NVNT 802.11g 6Mbps 2437MHz Ant1 Emission



Tx. Spurious NVNT 802.11g 6Mbps 2462MHz Ant1 Ref

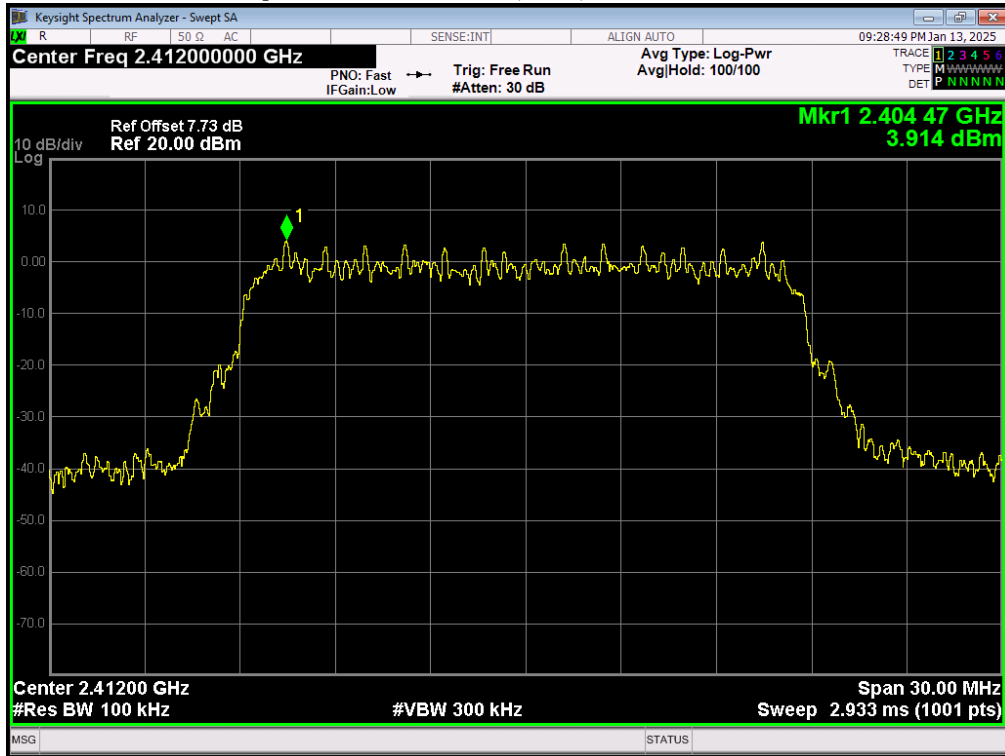


Tx. Spurious NVNT 802.11g 6Mbps 2462MHz Ant1 Emission

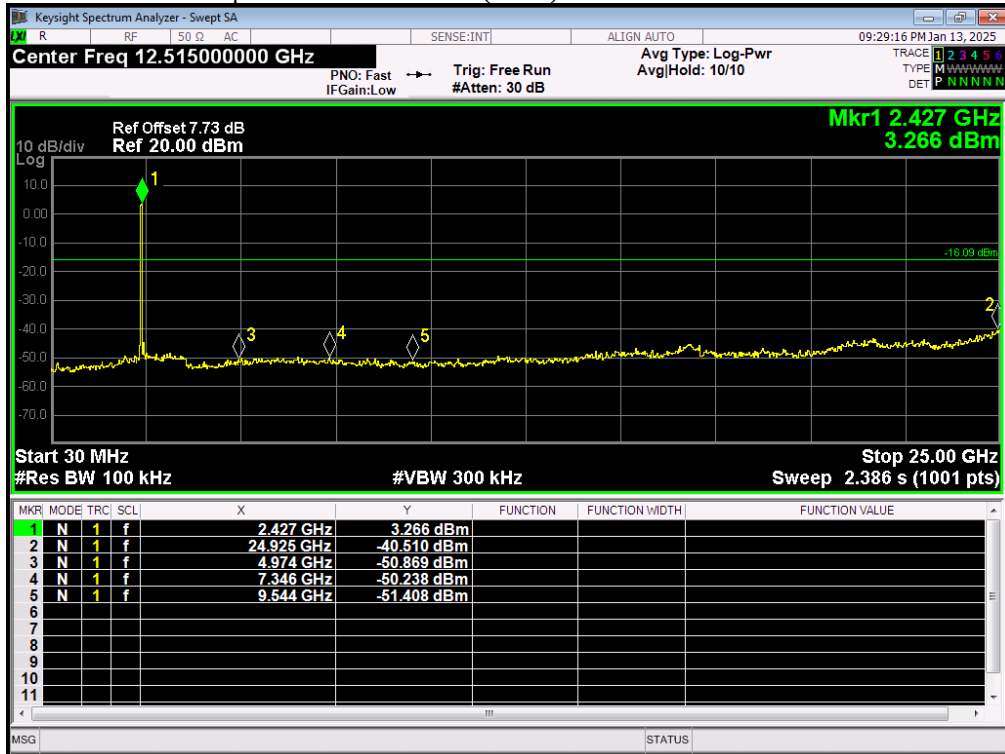


| Condition | Mode          | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|---------------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 802.11n(HT20) | 2412            | Ant 1   | -44.424         | -30         | Pass    |
| NVNT      | 802.11n(HT20) | 2437            | Ant 1   | -44.033         | -30         | Pass    |
| NVNT      | 802.11n(HT20) | 2462            | Ant 1   | -45.543         | -30         | Pass    |

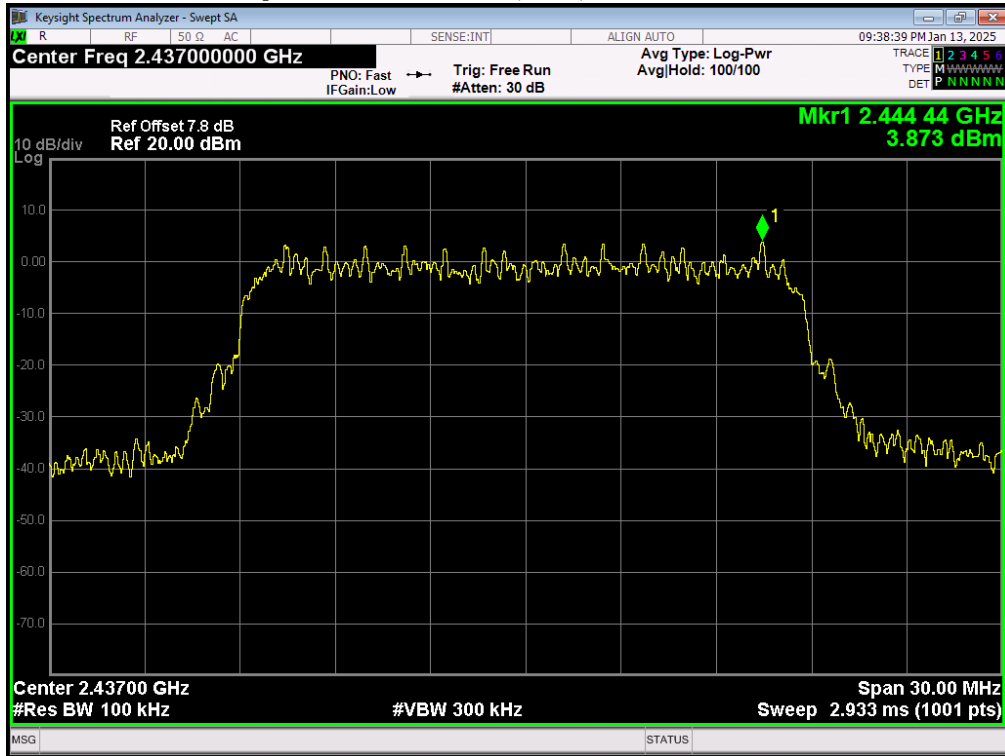
Tx. Spurious NVNT 802.11n(HT20) 2412MHz Ant1 Ref



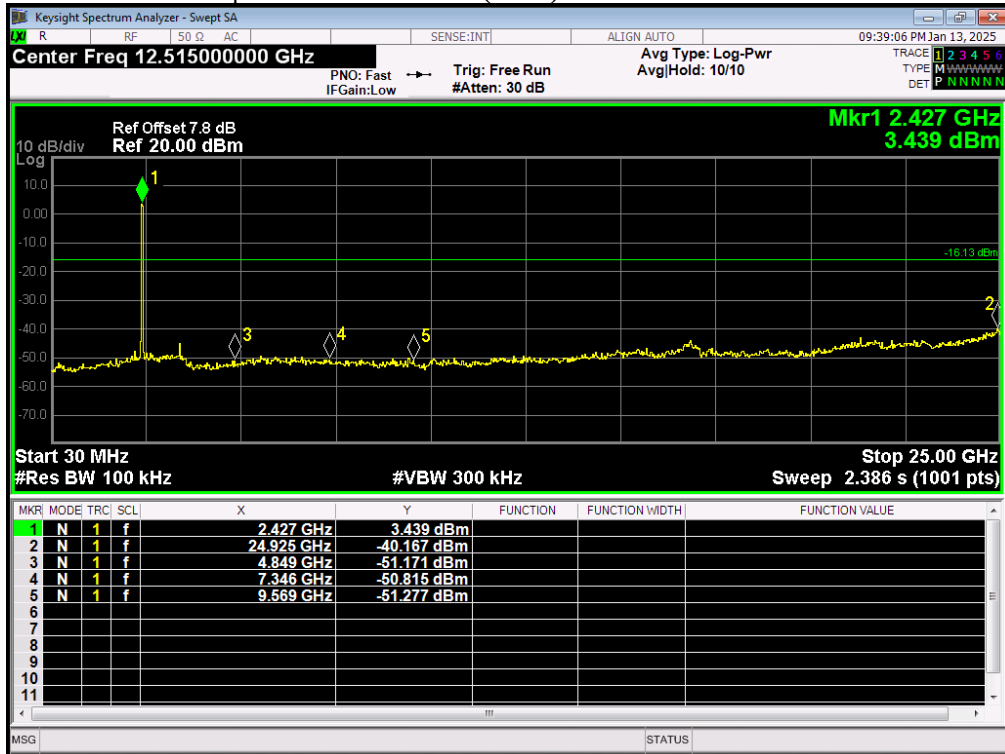
Tx. Spurious NVNT 802.11n(HT20) 2412MHz Ant1 Emission



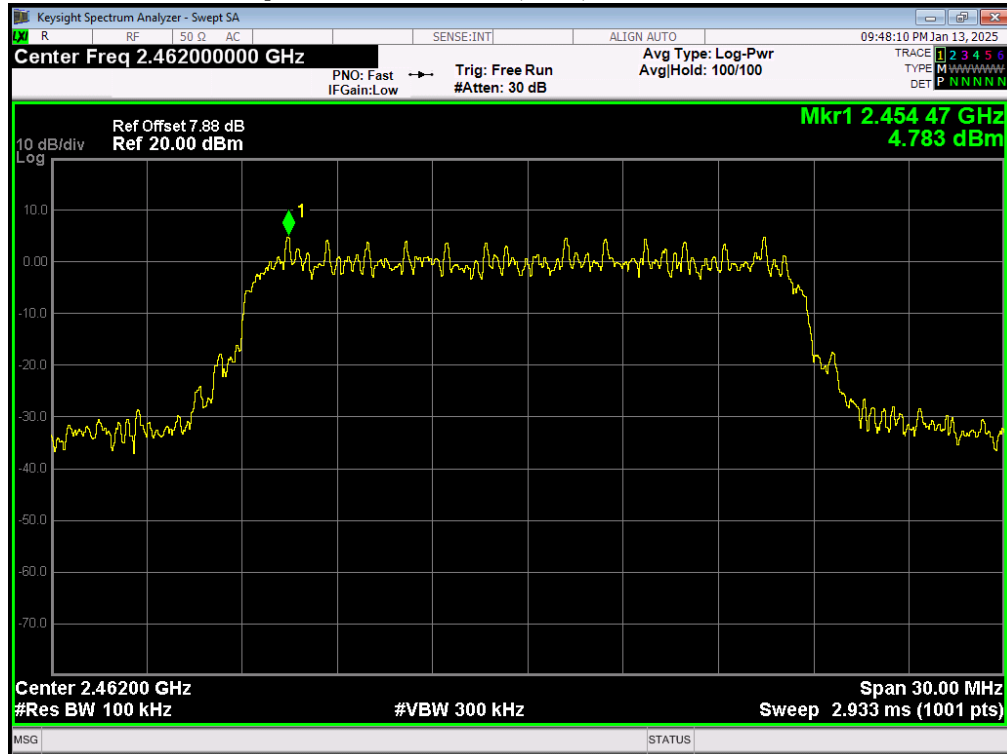
Tx. Spurious NVNT 802.11n(HT20) 2437MHz Ant1 Ref



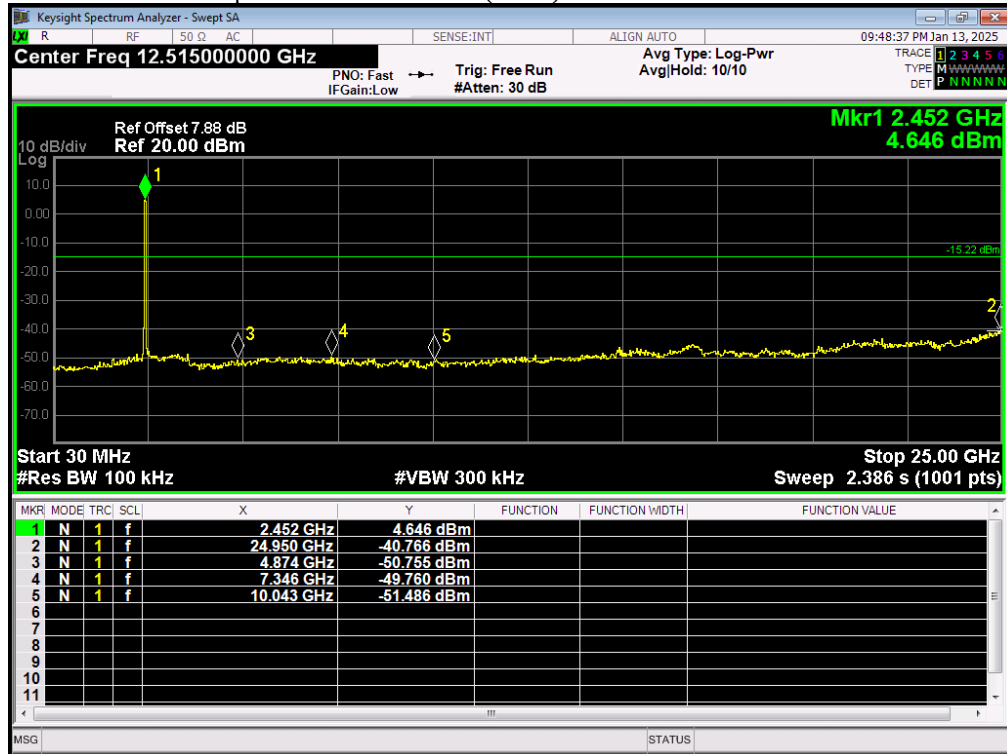
Tx. Spurious NVNT 802.11n(HT20) 2437MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 2462MHz Ant1 Ref



Tx. Spurious NVNT 802.11n(HT20) 2462MHz Ant1 Emission

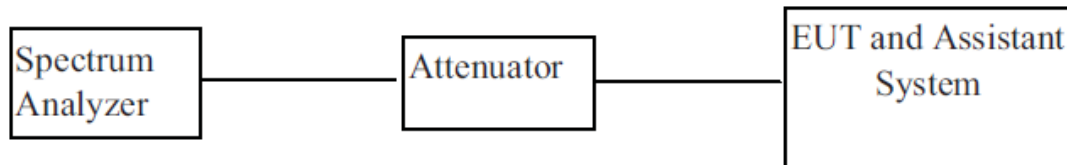


## 9. Conducted Output Power Spectral Density

### 9.1. Test equipment

| Item | Equipment           | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|------|---------------------|--------------|-----------|------------|------------|---------------|
| 1    | MXA Signal Analyzer | KEYSIGHT     | N9020A    | MY54510476 | 2024/05/14 | 1 Year        |

### 9.2. Block diagram of test setup



### 9.3. Limit

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.

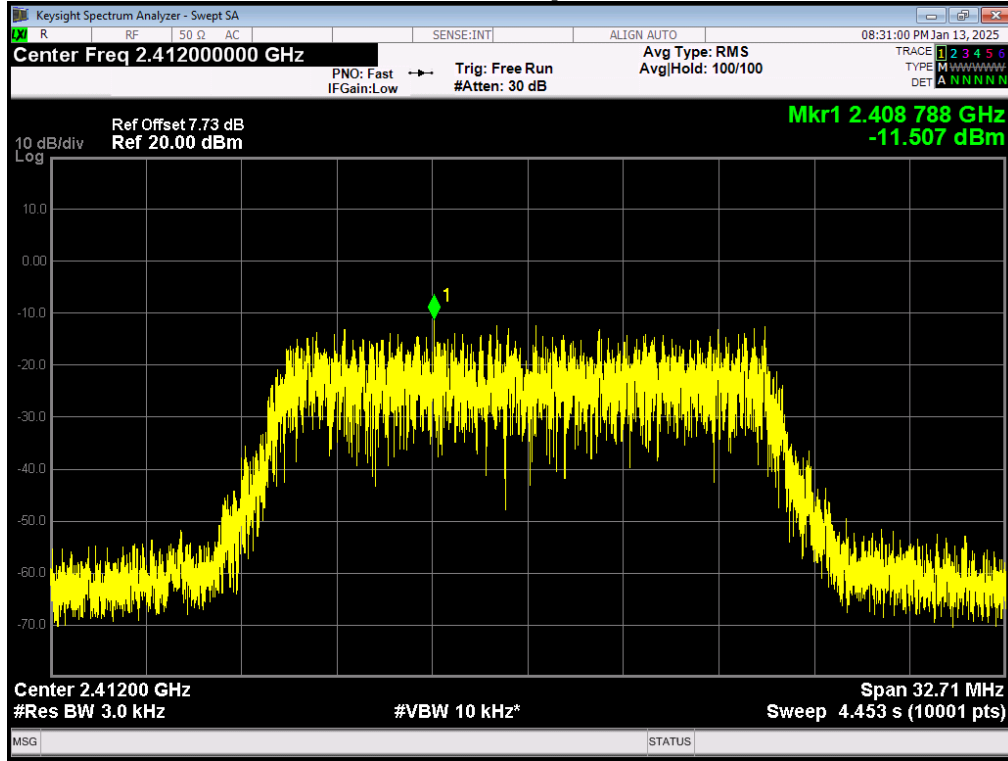
### 9.4. Test Procedure

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

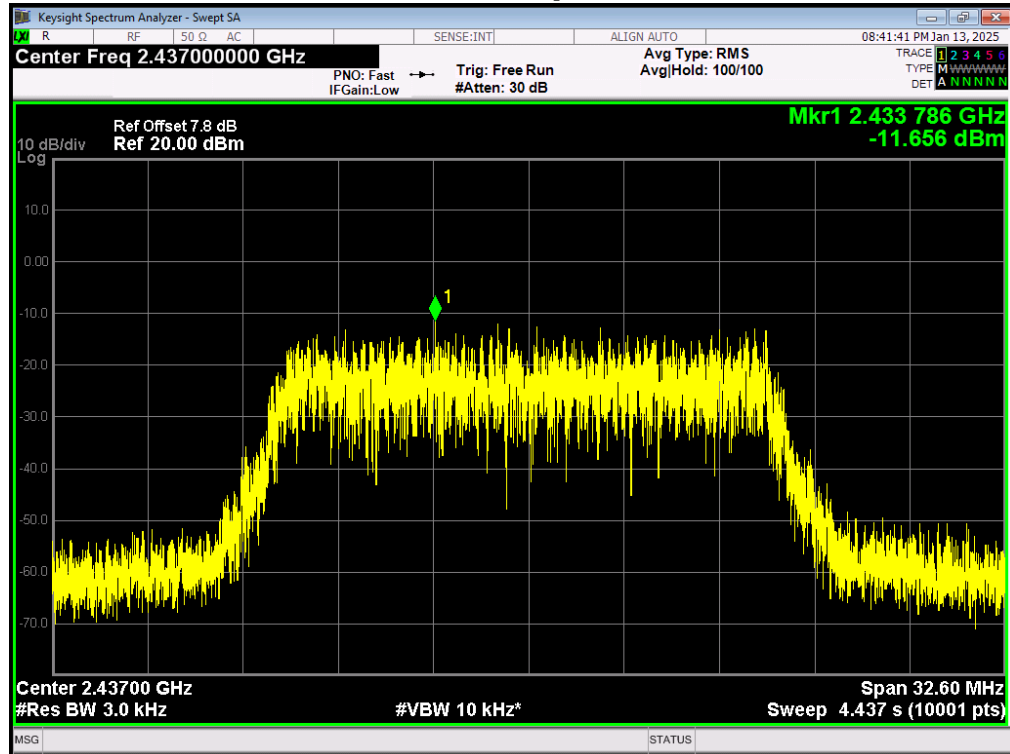
## 9.5. Test result

| Condition | Mode          | Frequency (MHz) | Antenna | Max PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|---------------|-----------------|---------|--------------------|------------------|---------|
| NVNT      | 802.11b 1Mbps | 2412            | Ant 1   | -11.507            | 8                | Pass    |
| NVNT      | 802.11b 1Mbps | 2437            | Ant 1   | -11.656            | 8                | Pass    |
| NVNT      | 802.11b 1Mbps | 2462            | Ant 1   | -11.114            | 8                | Pass    |

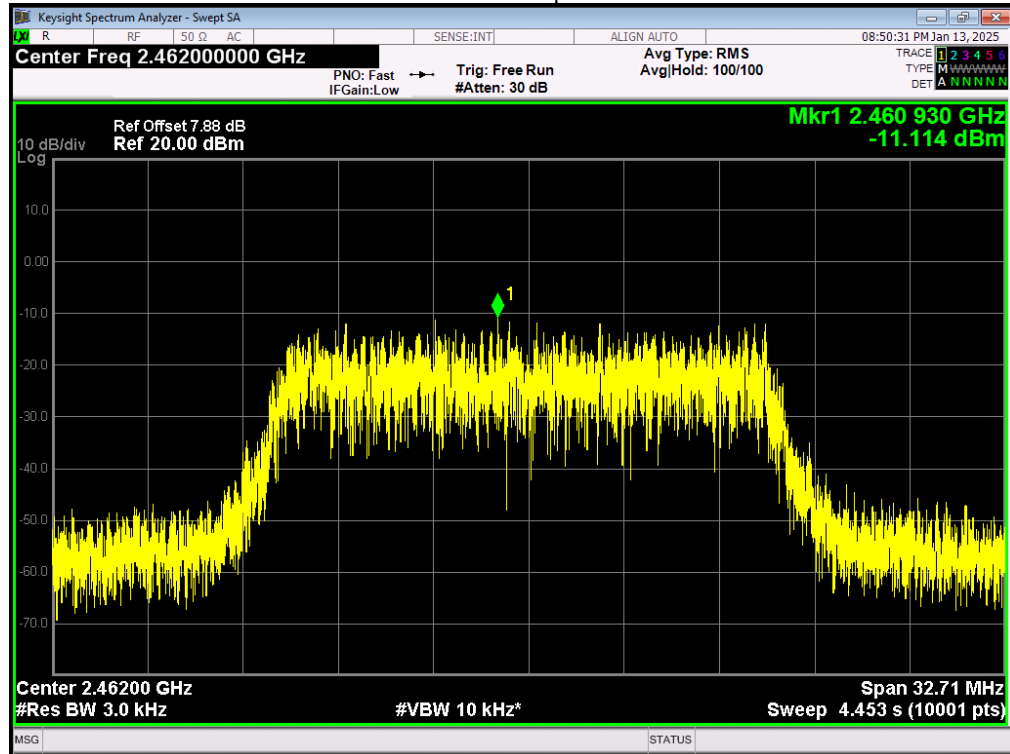
PSD NVNT 802.11b 1Mbps 2412MHz Ant1



PSD NVNT 802.11b 1Mbps 2437MHz Ant1

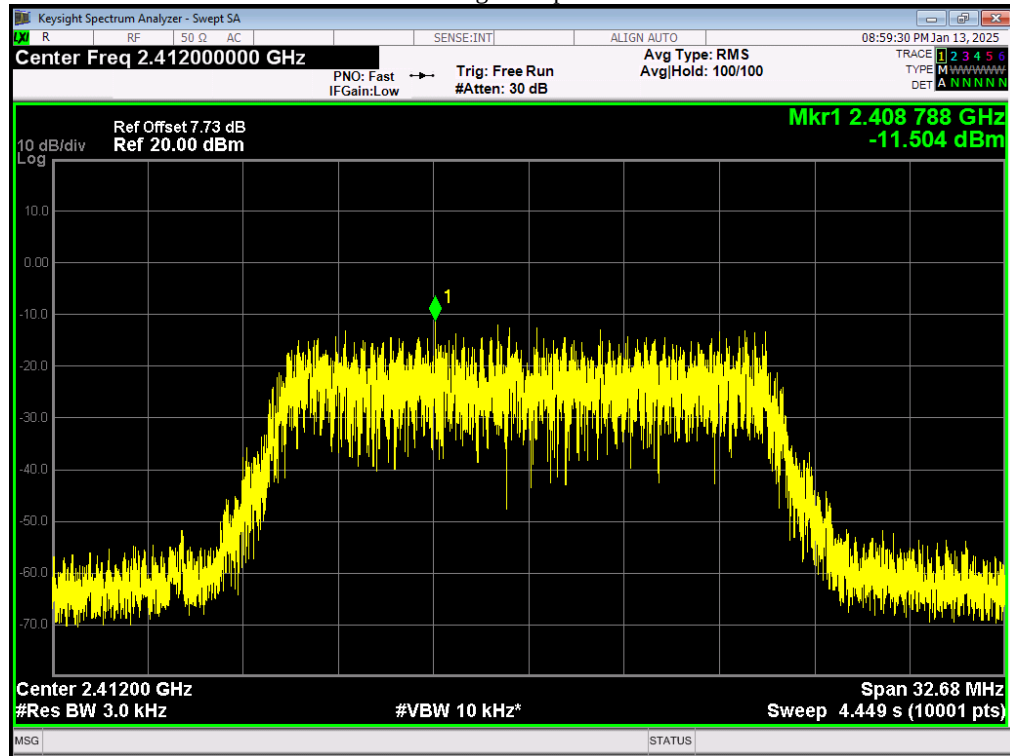


PSD NVNT 802.11b 1Mbps 2462MHz Ant1

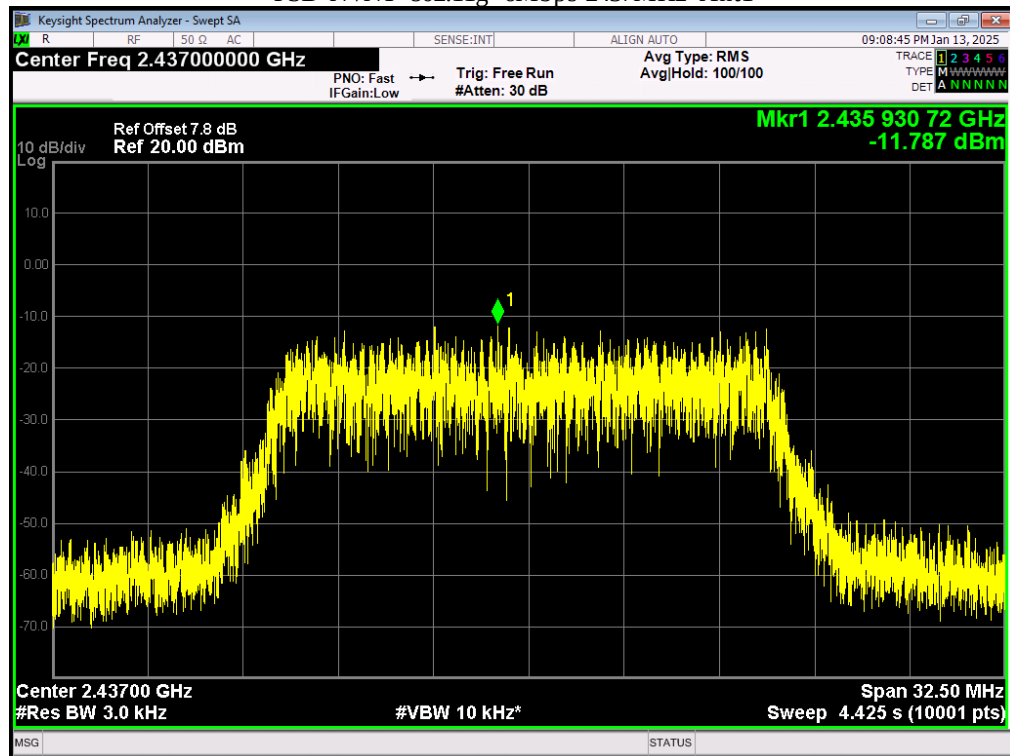


| Condition | Mode          | Frequency (MHz) | Antenna | Max PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|---------------|-----------------|---------|--------------------|------------------|---------|
| NVNT      | 802.11g 6Mbps | 2412            | Ant 1   | -11.504            | 8                | Pass    |
| NVNT      | 802.11g 6Mbps | 2437            | Ant 1   | -11.787            | 8                | Pass    |
| NVNT      | 802.11g 6Mbps | 2462            | Ant 1   | -10.364            | 8                | Pass    |

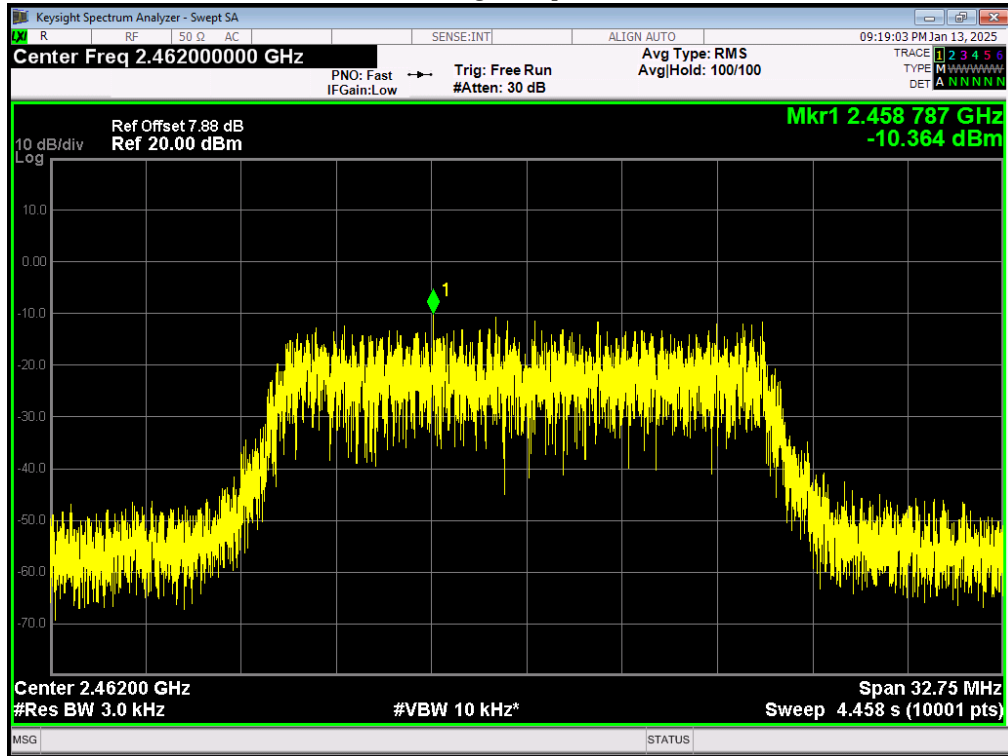
PSD NVNT 802.11g 6Mbps 2412MHz Ant1



PSD NVNT 802.11g 6Mbps 2437MHz Ant1

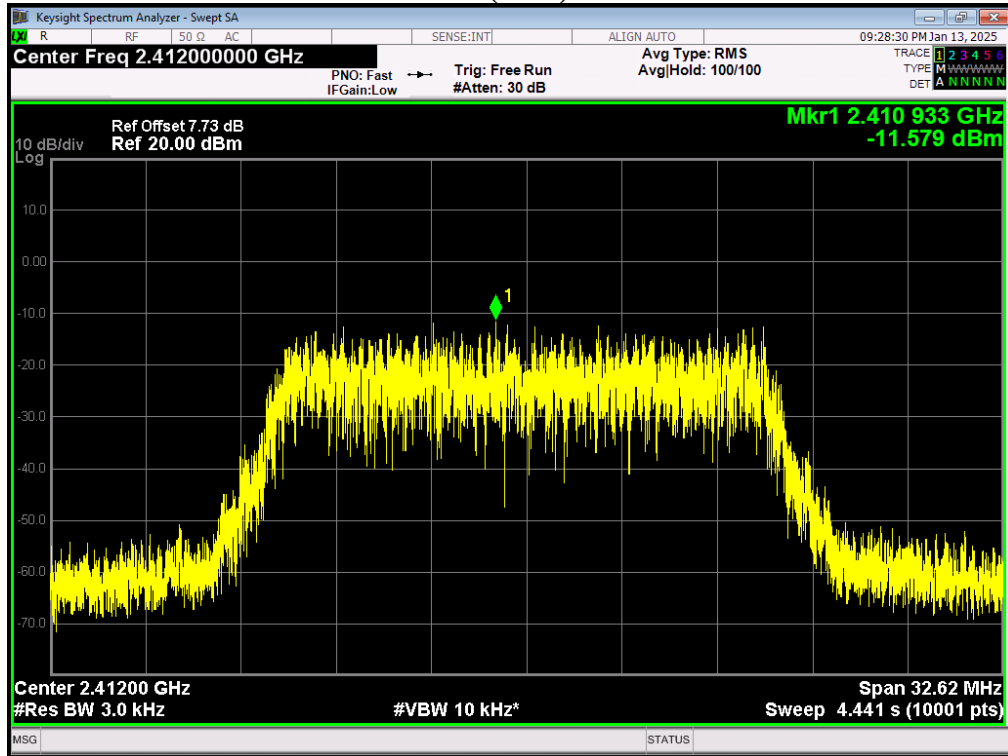


PSD NVNT 802.11g 6Mbps 2462MHz Ant1

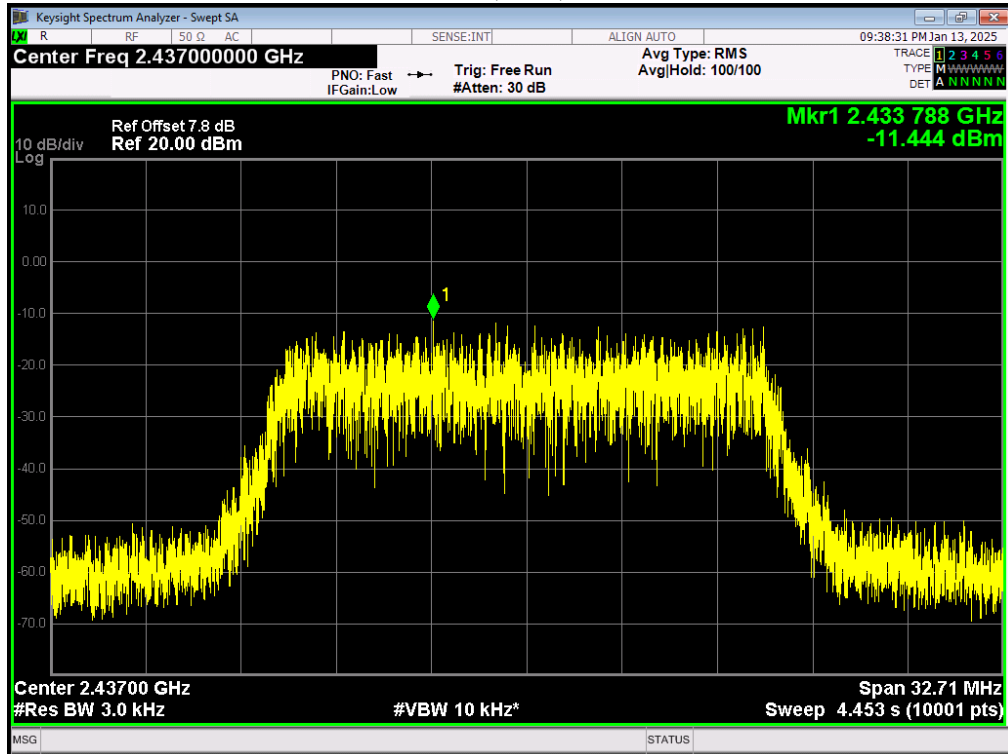


| Condition | Mode          | Frequency (MHz) | Antenna | Max PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|---------------|-----------------|---------|--------------------|------------------|---------|
| NVNT      | 802.11n(HT20) | 2412            | Ant 1   | -11.579            | 8                | Pass    |
| NVNT      | 802.11n(HT20) | 2437            | Ant 1   | -11.444            | 8                | Pass    |
| NVNT      | 802.11n(HT20) | 2462            | Ant 1   | -10.359            | 8                | Pass    |

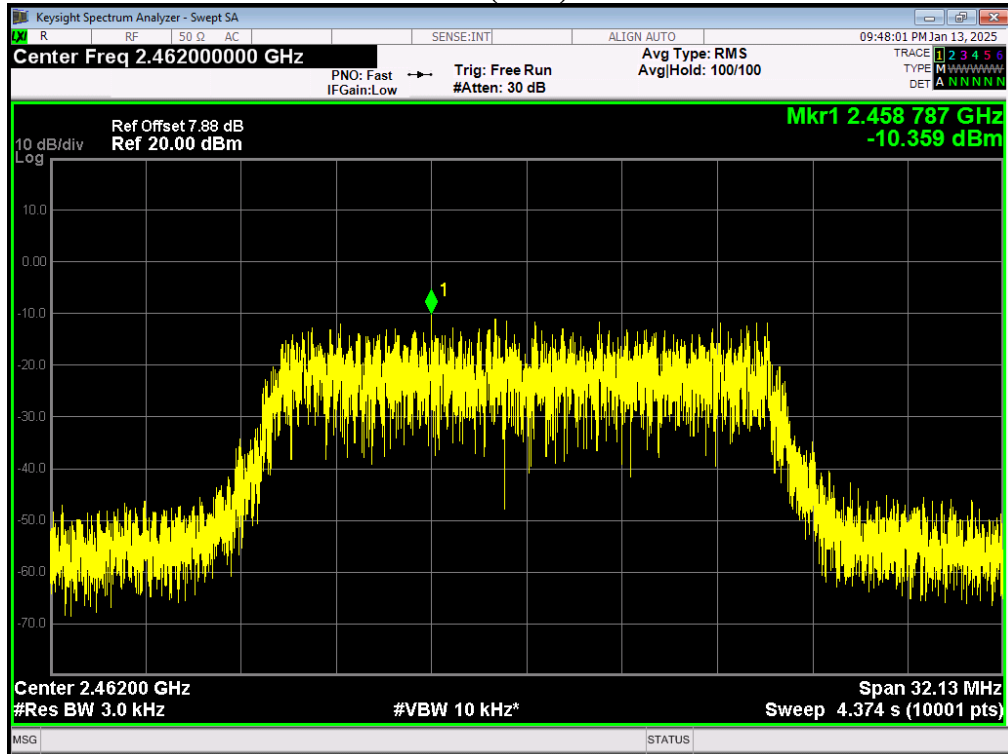
PSD NVNT 802.11n(HT20) 2412MHz Ant1



PSD NVNT 802.11n(HT20) 2437MHz Ant1



PSD NVNT 802.11n(HT20) 2462MHz Ant1



## 10. Antenna Requirement

### 10.1. Standard requirement

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

### 10.2. EUT Antenna

The antenna is Integral Antenna and no consideration of replacement. Antenna gain is Maximum 2.21dBi from 2.4GHz to 2.5GHz.

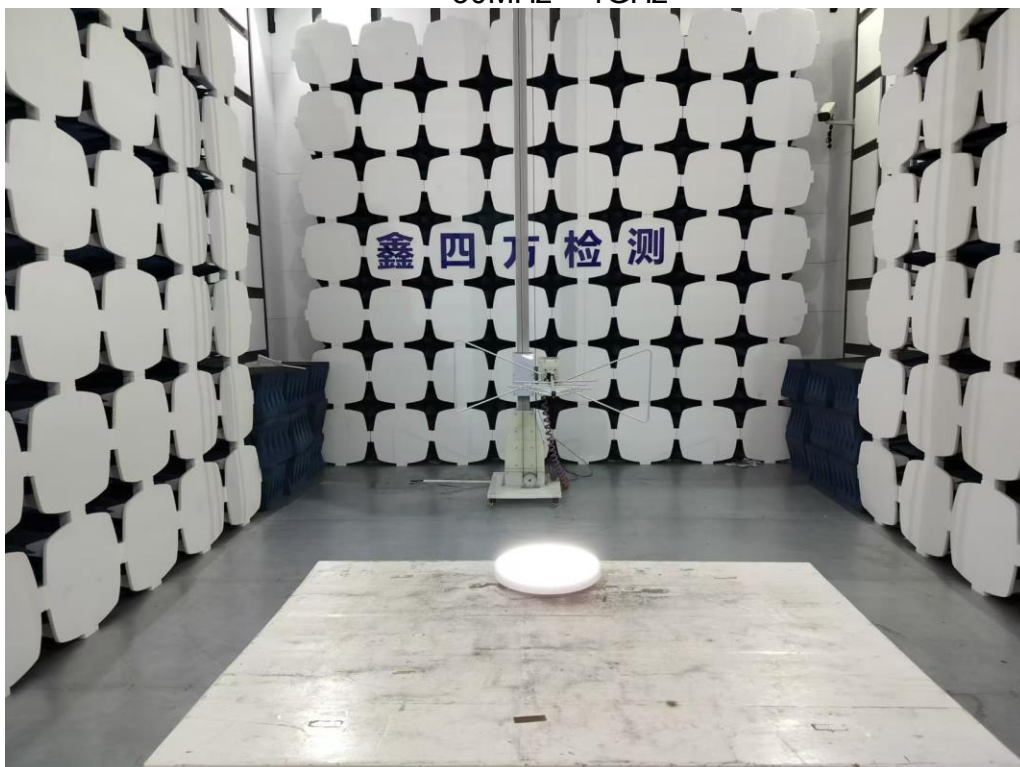
## 11. Test setup photograph

### 11.1. Photos of power line conducted emission test



### 11.2. Photos of radiated emission test

30MHz – 1GHz

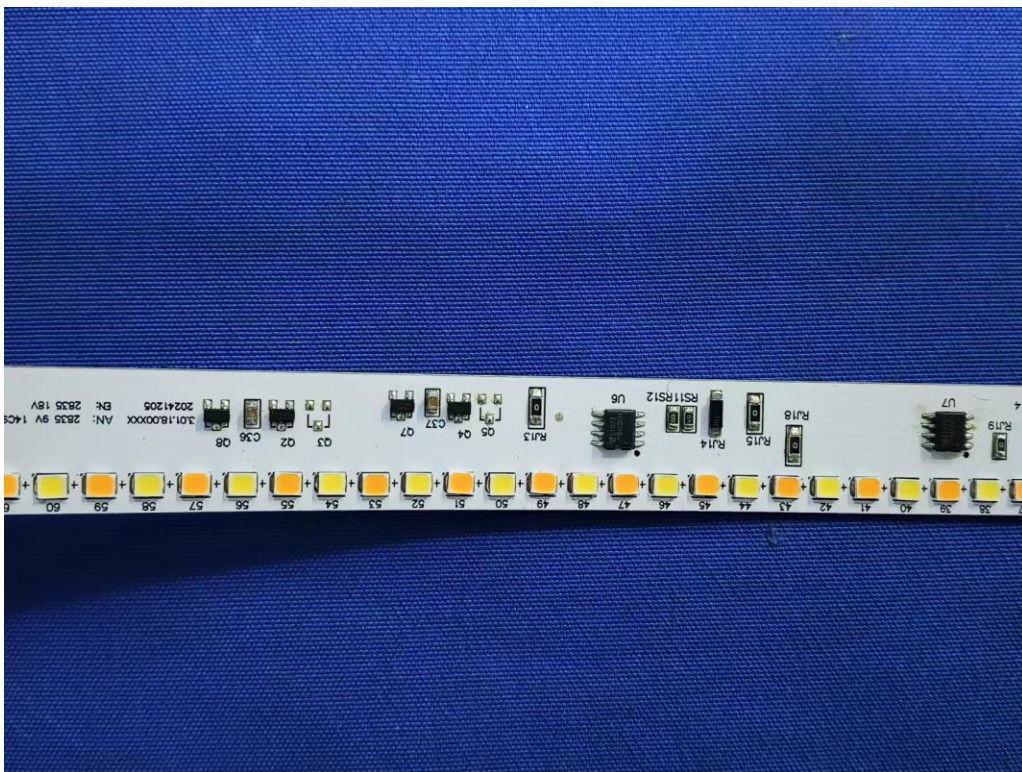
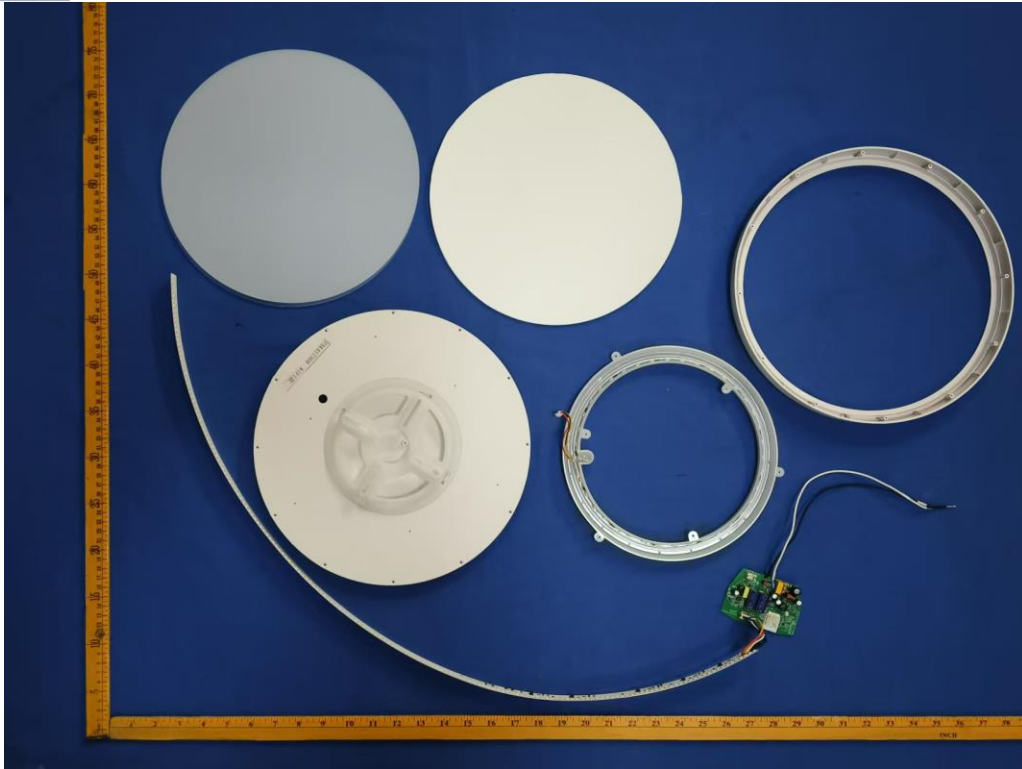


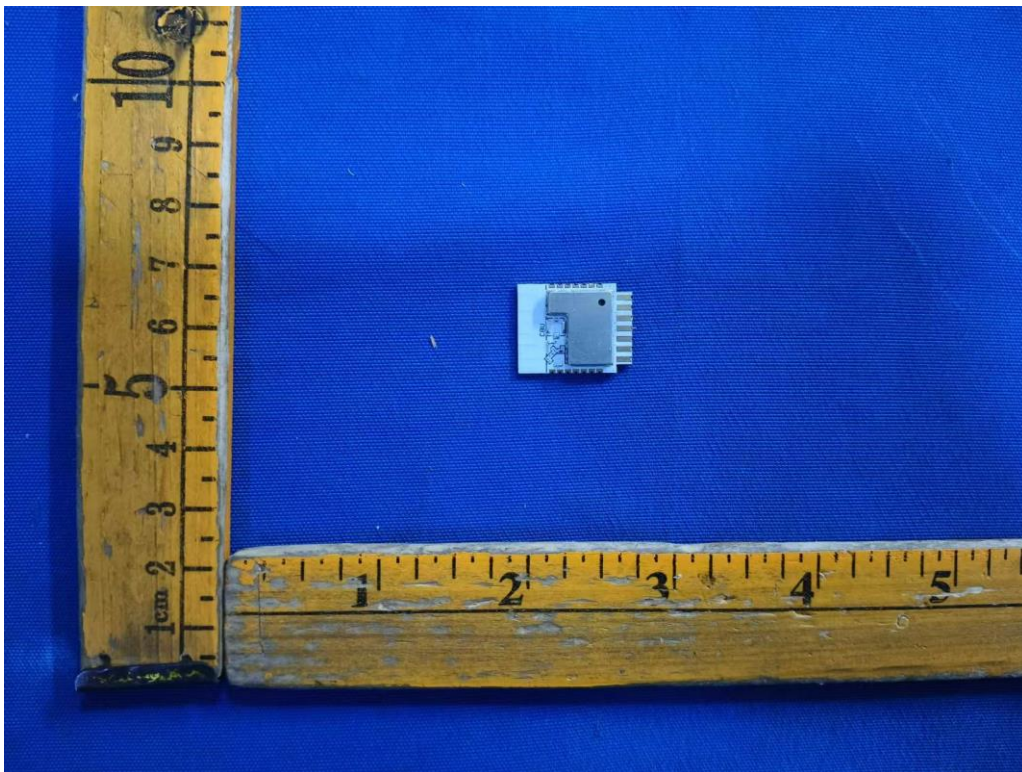
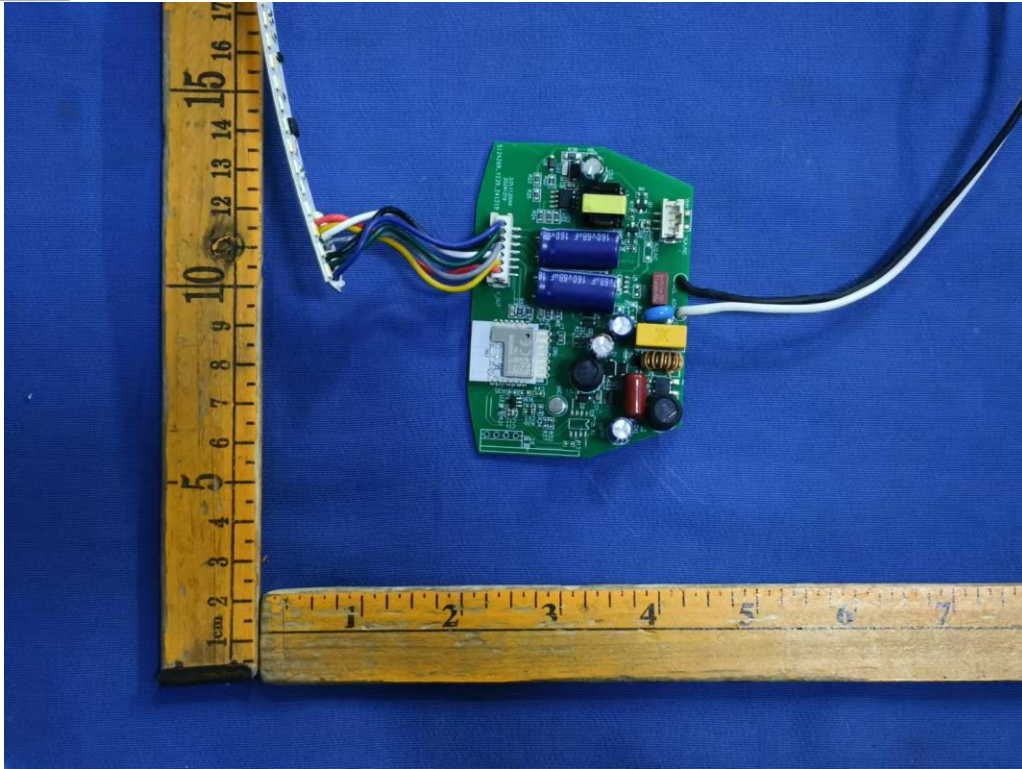
Above 1GHz

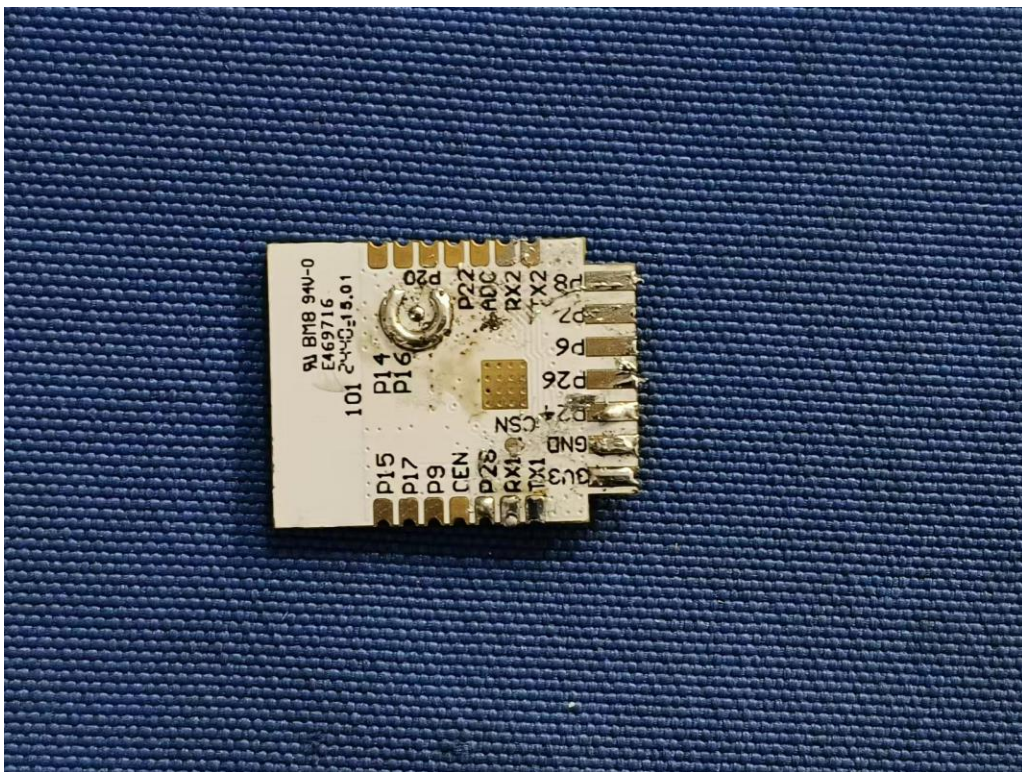
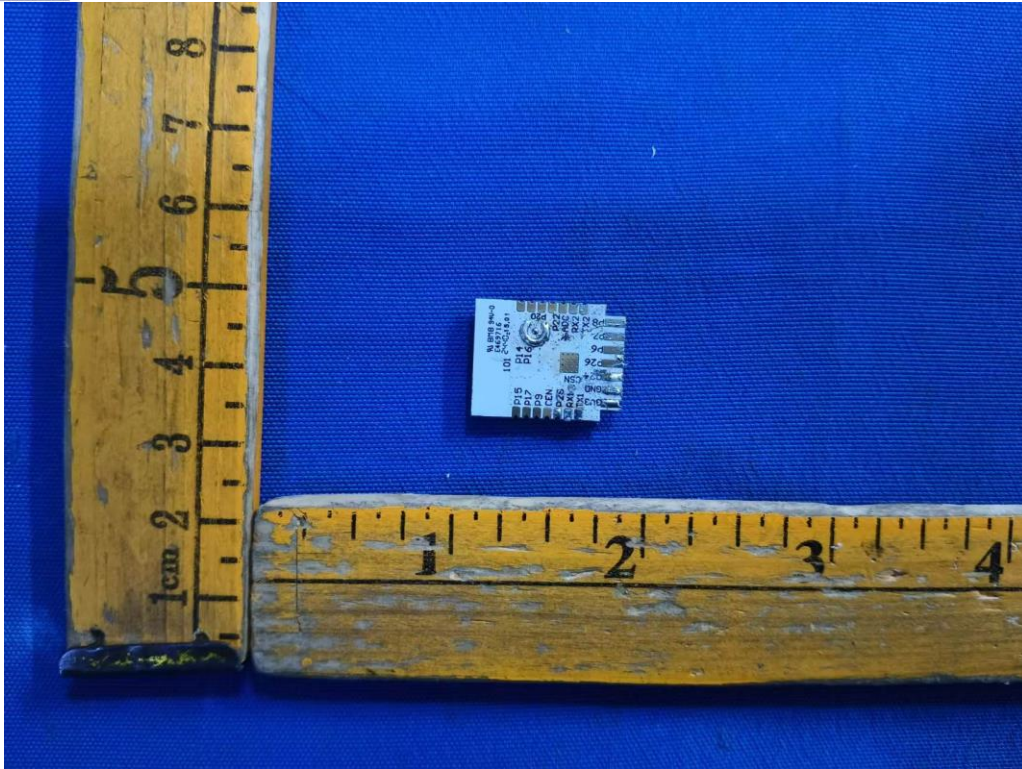


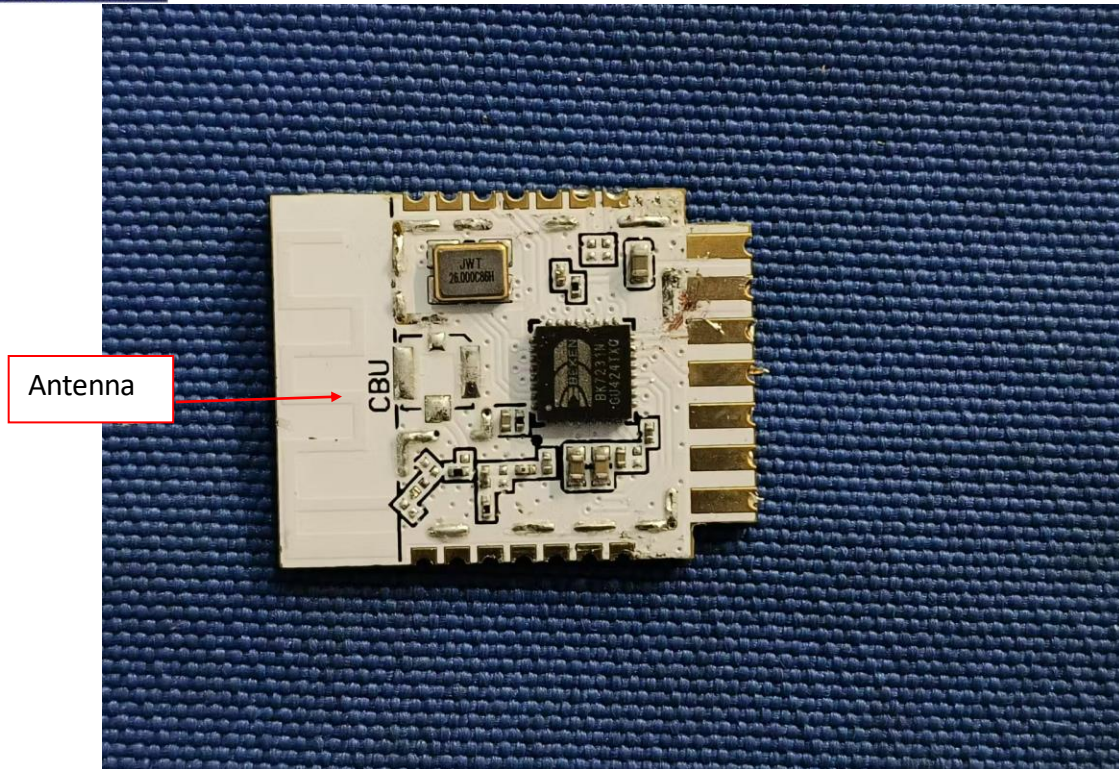
## 12. Photos of the EUT











**-END OF REPORT--**