

| TX 802.11b Mode |                     |                          |        |
|-----------------|---------------------|--------------------------|--------|
| Frequency (MHz) | 6dB Bandwidth (MHz) | Channel Separation (kHz) | Result |
| 2412            | 9.110               | $\geq 500$               | PASS   |
| 2437            | 9.107               | $\geq 500$               | PASS   |
| 2462            | 9.096               | $\geq 500$               | PASS   |

CH01: 2412MHz



CH06: 2437MHz

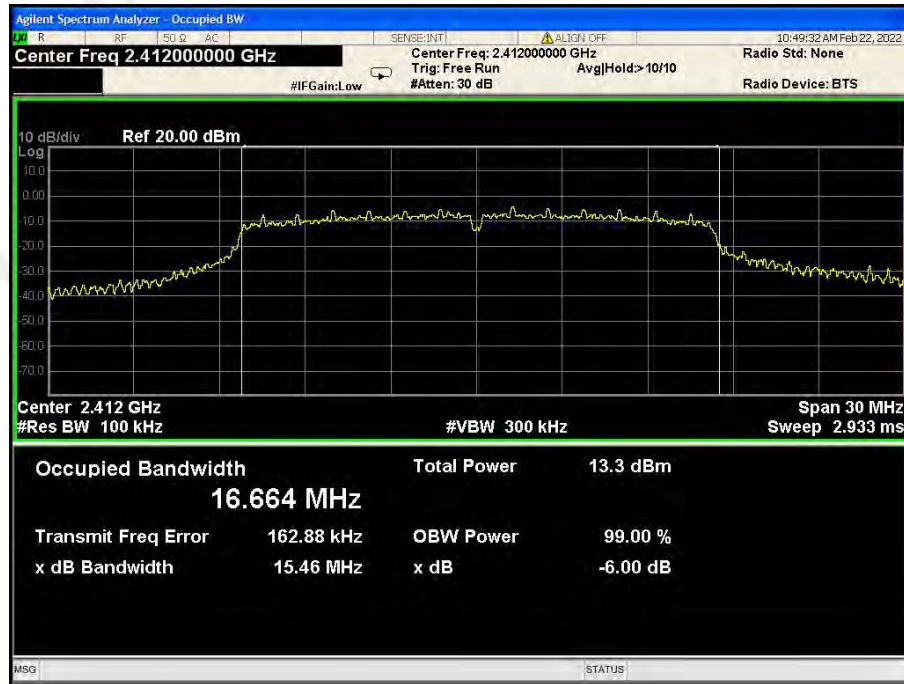


CH11: 2462MHz



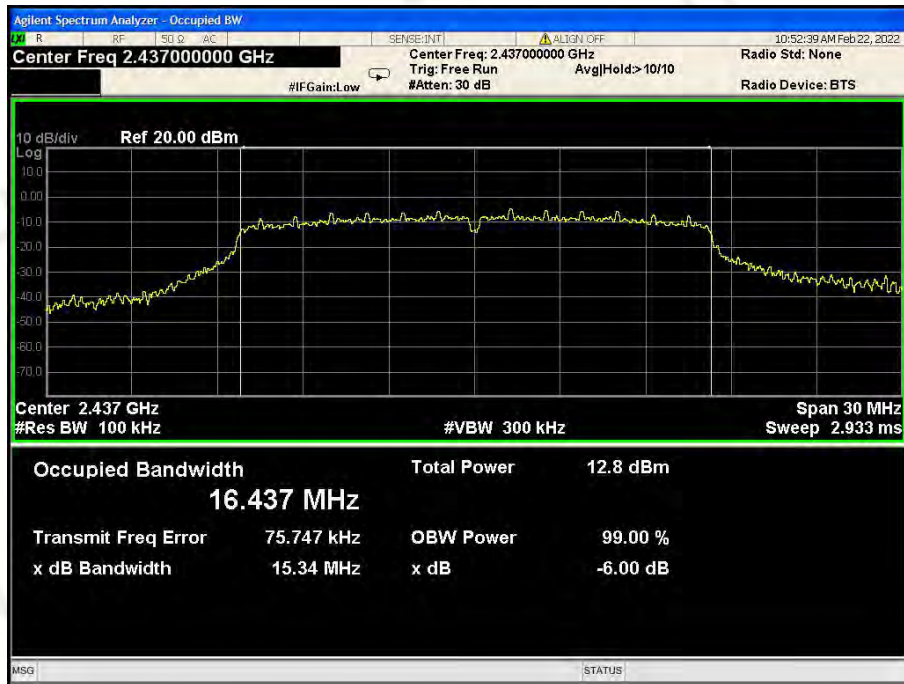
| TX 802.11g Mode |                     |                          |        |
|-----------------|---------------------|--------------------------|--------|
| Frequency (MHz) | 6dB Bandwidth (MHz) | Channel Separation (kHz) | Result |
| 2412            | 15.46               | $\geq 500$               | PASS   |
| 2437            | 15.34               | $\geq 500$               | PASS   |
| 2462            | 15.33               | $\geq 500$               | PASS   |

CH01: 2412MHz

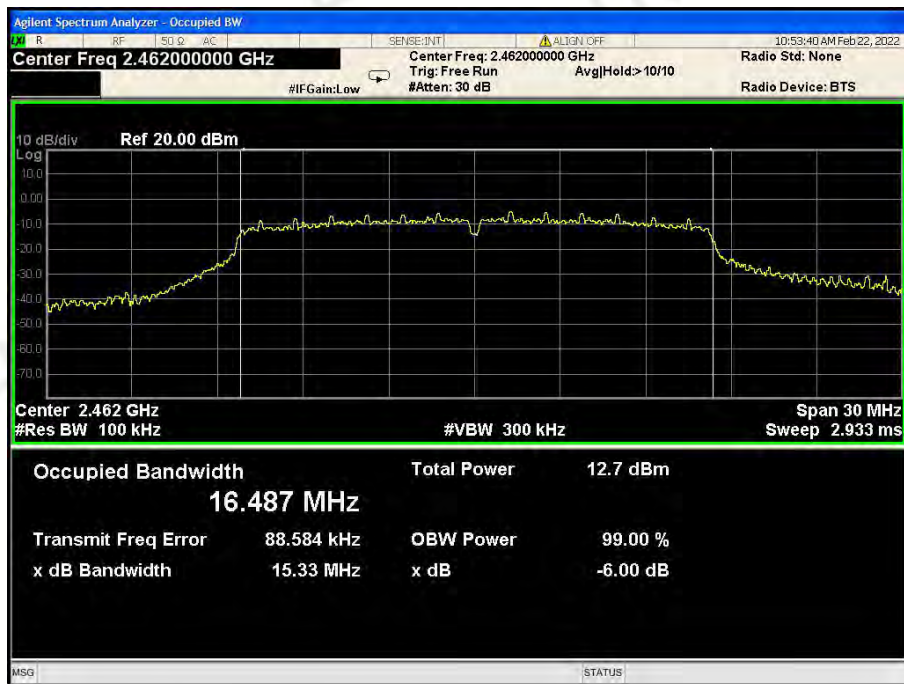




CH06: 2437MHz

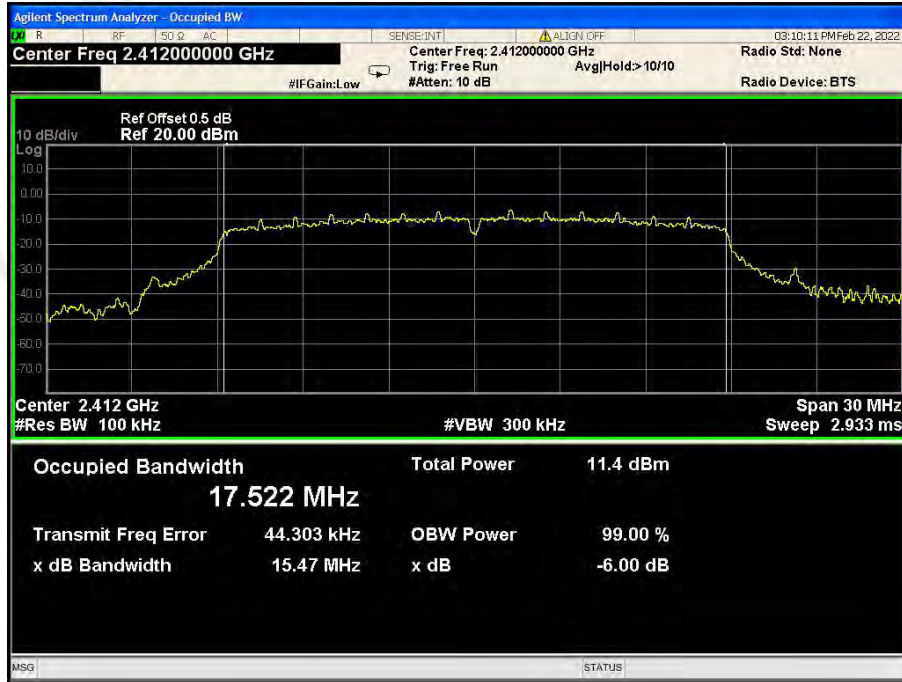


CH11: 2462MHz

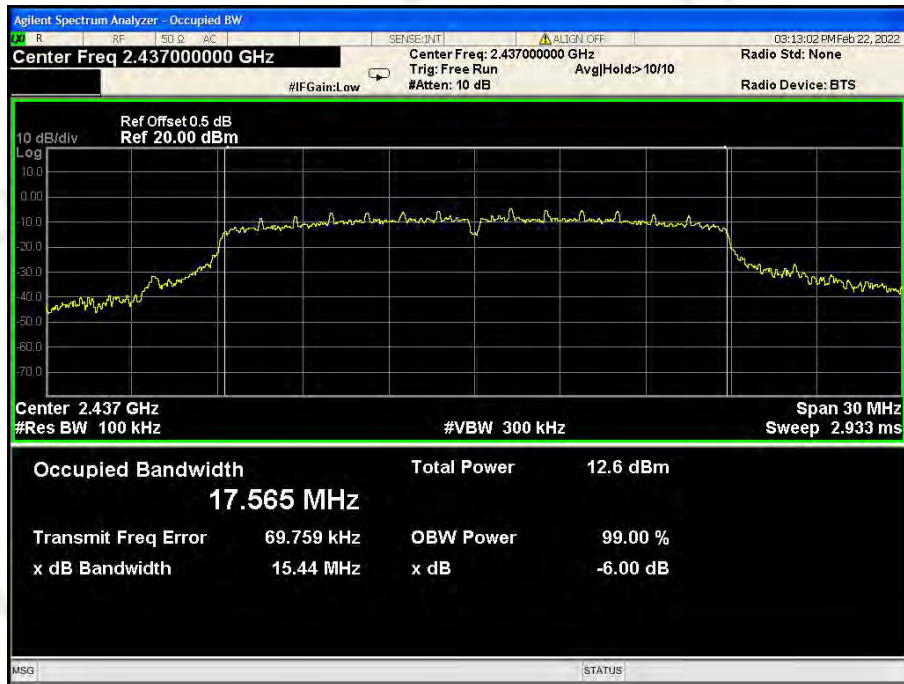


| TX 802.11n/HT20 Mode |                     |                          |        |
|----------------------|---------------------|--------------------------|--------|
| Frequency (MHz)      | 6dB Bandwidth (MHz) | Channel Separation (kHz) | Result |
| 2412                 | 15.47               | >=500                    | PASS   |
| 2437                 | 15.44               | >=500                    | PASS   |
| 2462                 | 15.34               | >=500                    | PASS   |

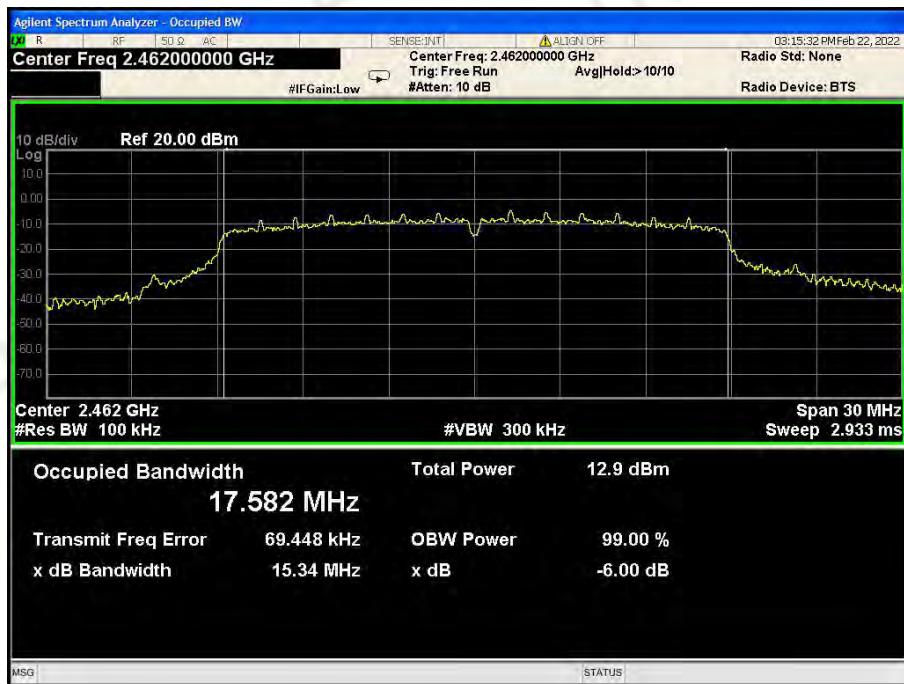
CH01: 2412MHz



CH06: 2437MHz



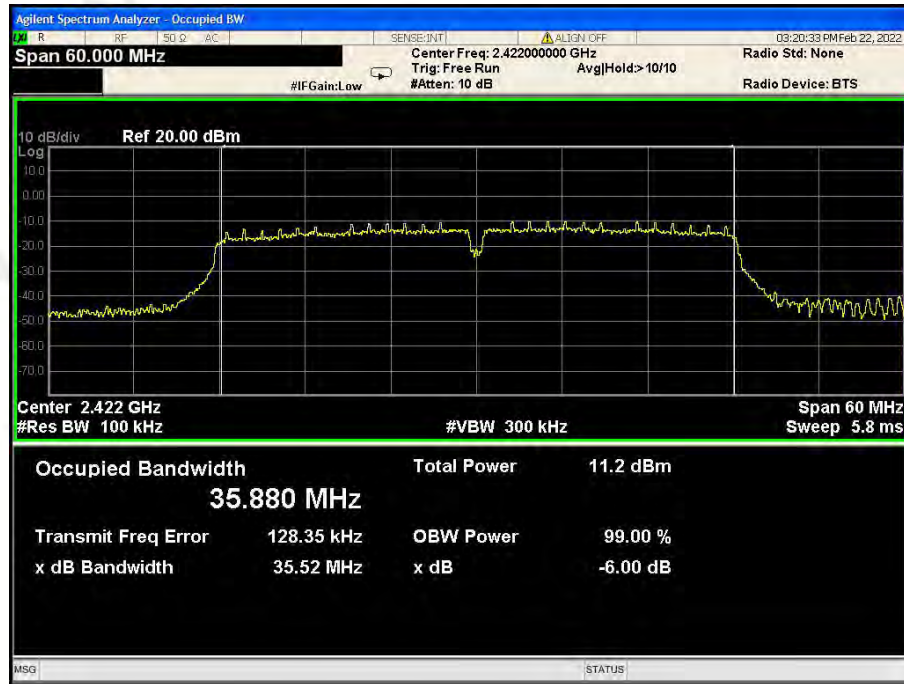
CH11: 2462MHz



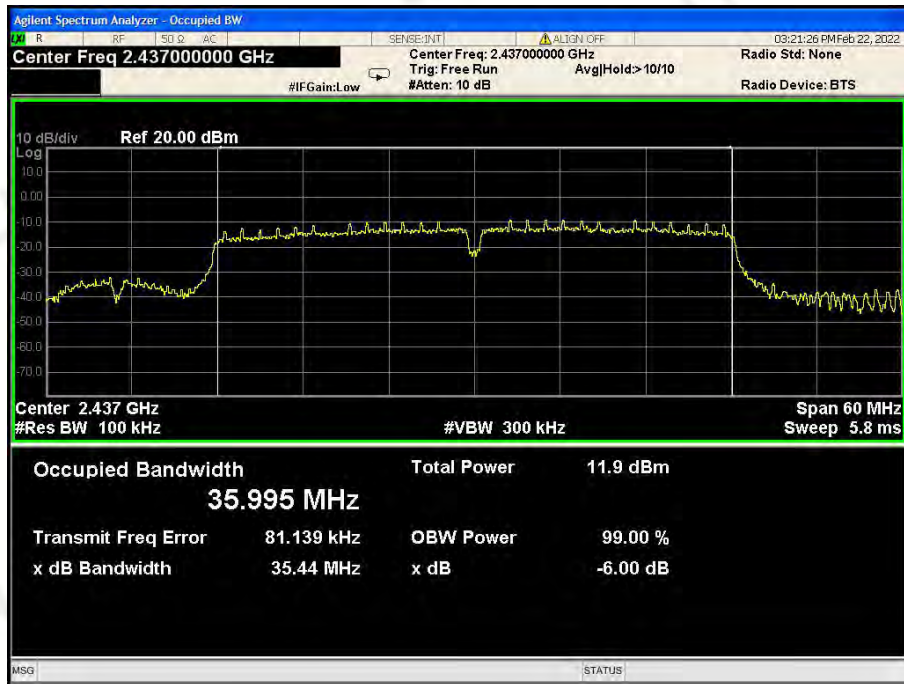


| TX 802.11n/HT40 Mode |                     |                          |        |
|----------------------|---------------------|--------------------------|--------|
| Frequency (MHz)      | 6dB Bandwidth (MHz) | Channel Separation (kHz) | Result |
| 2422                 | 35.52               | $\geq 500$               | PASS   |
| 2437                 | 35.44               | $\geq 500$               | PASS   |
| 2452                 | 35.33               | $\geq 500$               | PASS   |

CH03: 2422MHz



CH06: 2437MHz



CH09: 2452MHz





## 6 POWER SPECTRAL DENSITY

### 6.1 TEST LIMIT

| FCC Part15(15.247), Subpart C |                        |                     |                       |        |
|-------------------------------|------------------------|---------------------|-----------------------|--------|
| Section                       | Test Item              | Limit               | Frequency Range (MHz) | Result |
| 15.247                        | Power Spectral Density | 8 dBm (in any 3kHz) | 2400-2483.5           | PASS   |

### 6.2 TEST PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as normal operation.
3. Based on FCC Part15 C Section 15.247: RBW=3kHz, VBW=10kHz.
4. The useful radiated emission from the EUT was detected by the spectrum analyzer with peak detector.

### 6.3 EQUIPMENT USED

Same as Radiated Emission Measurement.

### 6.4 TEST RESULT

PASS

| TX 802.11b Mode |                          |                  |        |
|-----------------|--------------------------|------------------|--------|
| Frequency (MHz) | Power Density (dBm/3kHz) | Limit (dBm/3kHz) | Result |
| 2412            | -9.530                   | 8                | PASS   |
| 2437            | -9.813                   | 8                | PASS   |
| 2462            | -10.631                  | 8                | PASS   |

CH01: 2412MHz



CH06: 2437MHz



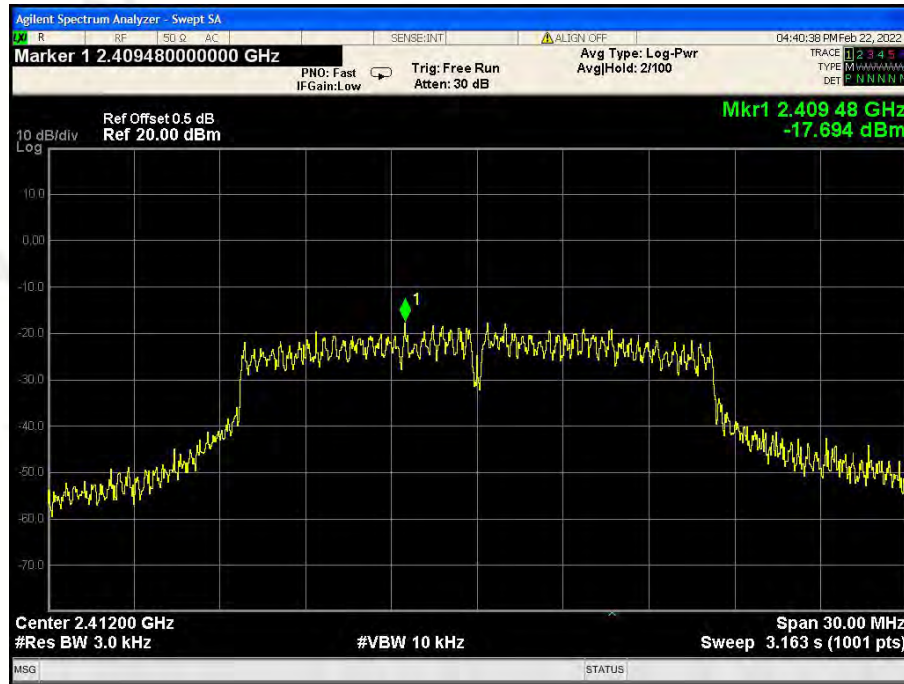
CH11: 2462MHz



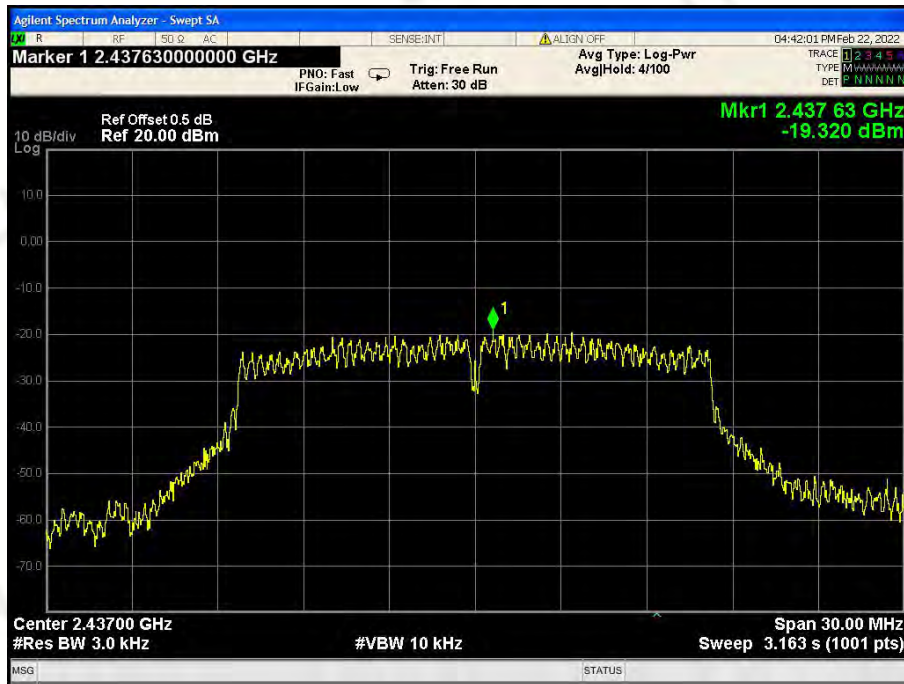


| TX 802.11g Mode |                          |                  |        |
|-----------------|--------------------------|------------------|--------|
| Frequency (MHz) | Power Density (dBm/3kHz) | Limit (dBm/3kHz) | Result |
| 2412            | -17.694                  | 8                | PASS   |
| 2437            | -19.320                  | 8                | PASS   |
| 2462            | -19.138                  | 8                | PASS   |

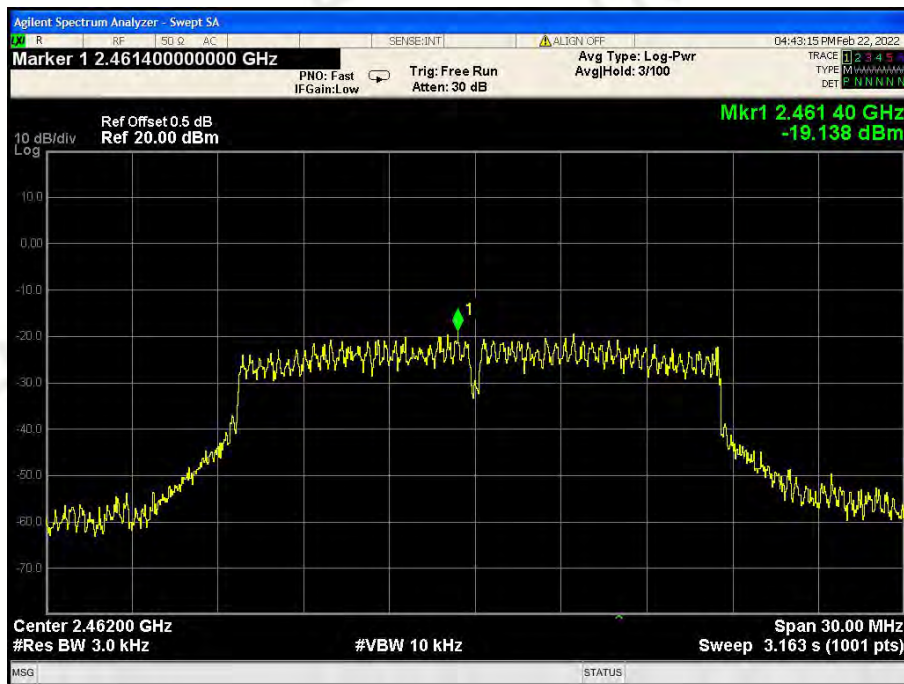
CH01: 2412MHz



CH06: 2437MHz

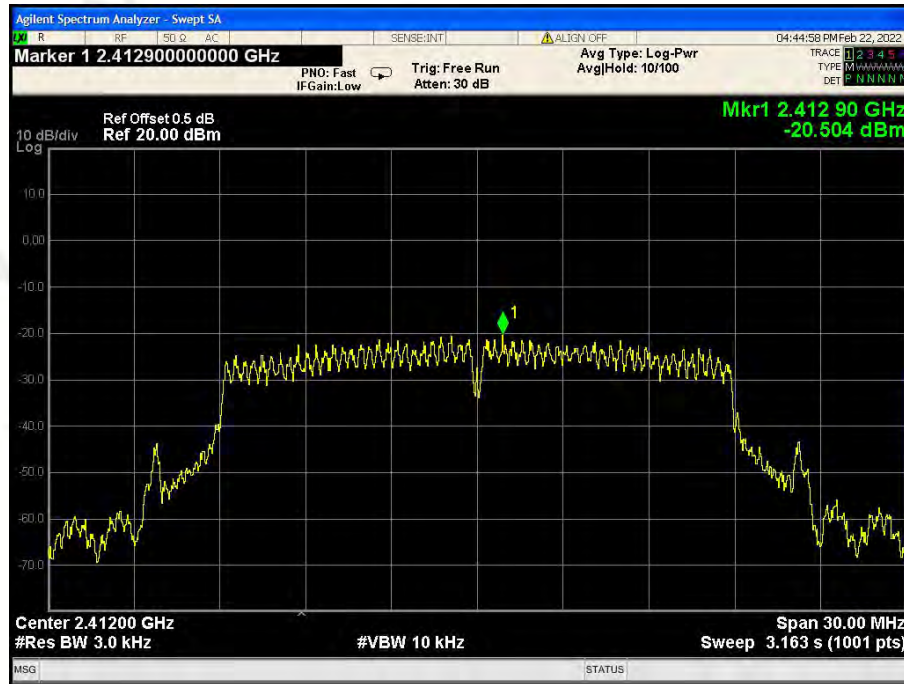


CH11: 2462MHz



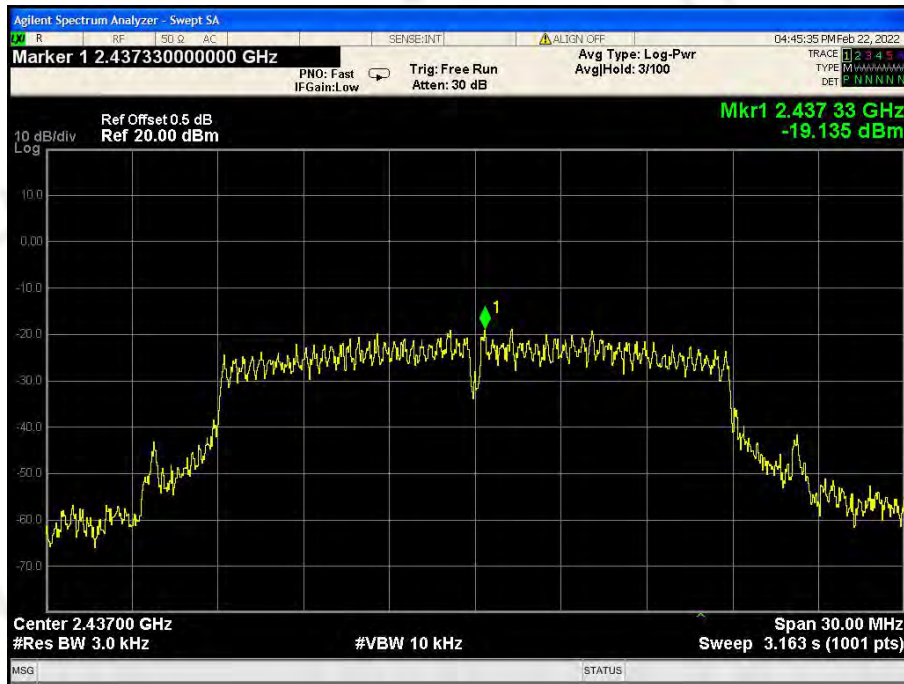
| TX 802.11n/HT20 Mode |                          |                  |        |
|----------------------|--------------------------|------------------|--------|
| Frequency (MHz)      | Power Density (dBm/3kHz) | Limit (dBm/3kHz) | Result |
| 2412                 | -20.504                  | 8                | PASS   |
| 2437                 | -19.135                  | 8                | PASS   |
| 2462                 | -16.515                  | 8                | PASS   |

CH01: 2412MHz

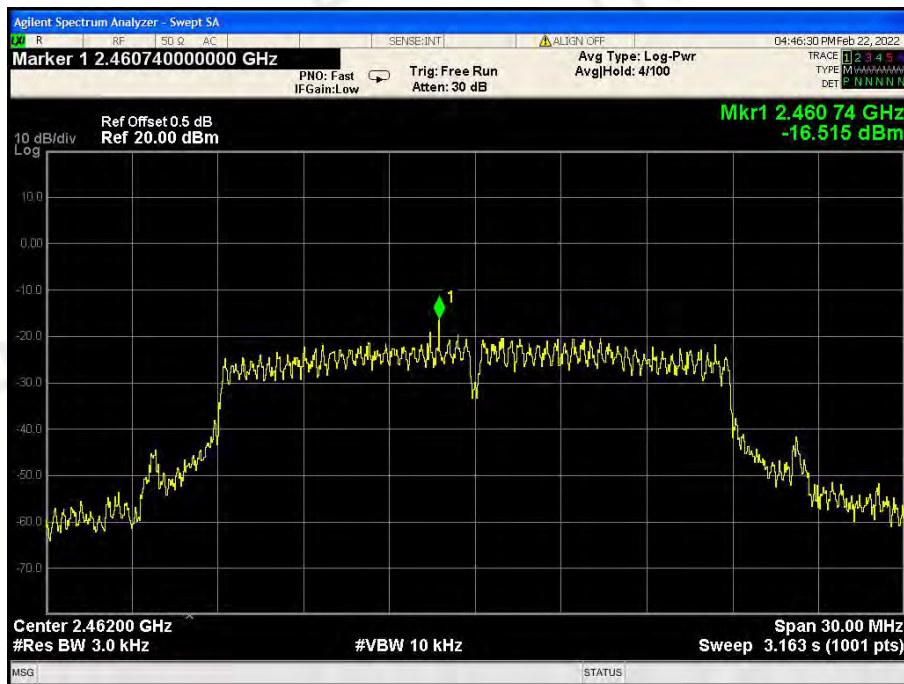




CH06: 2437MHz

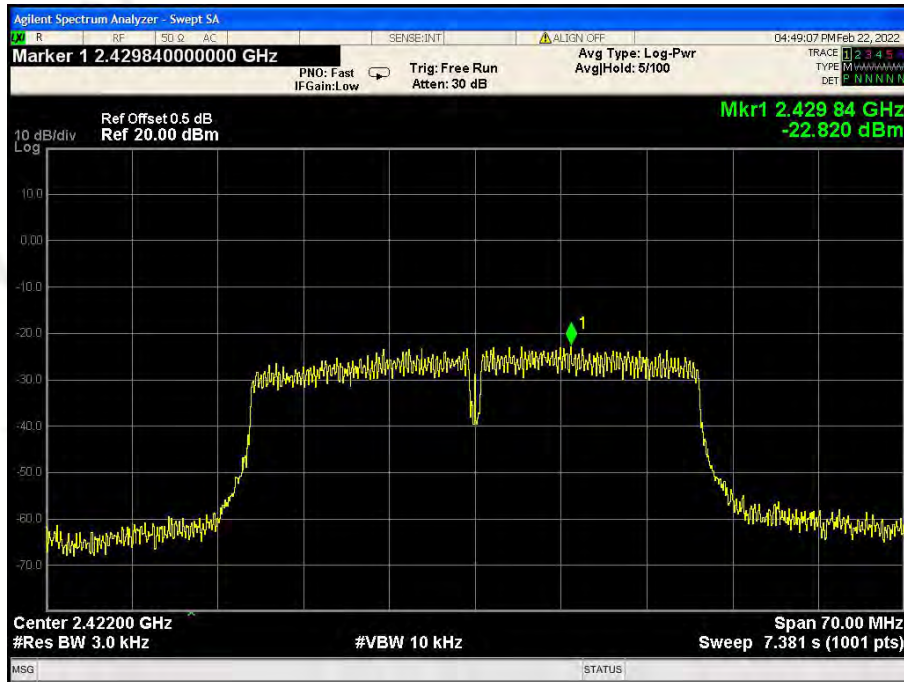


CH11: 2462MHz

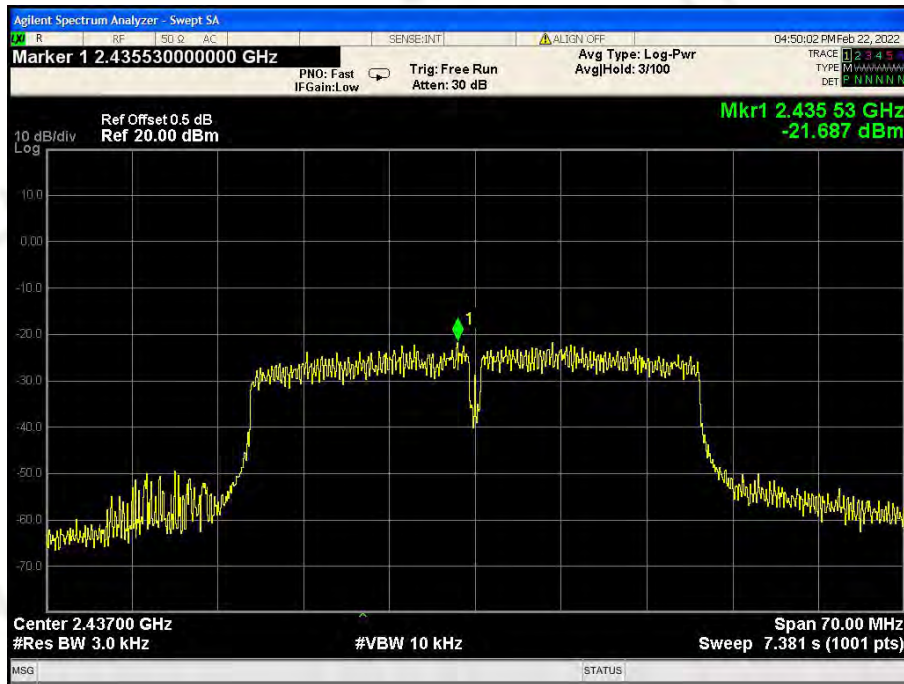


| TX 802.11n/HT40 Mode |                          |                  |        |
|----------------------|--------------------------|------------------|--------|
| Frequency (MHz)      | Power Density (dBm/3kHz) | Limit (dBm/3kHz) | Result |
| 2422                 | -22.820                  | 8                | PASS   |
| 2437                 | -21.687                  | 8                | PASS   |
| 2452                 | -19.918                  | 8                | PASS   |

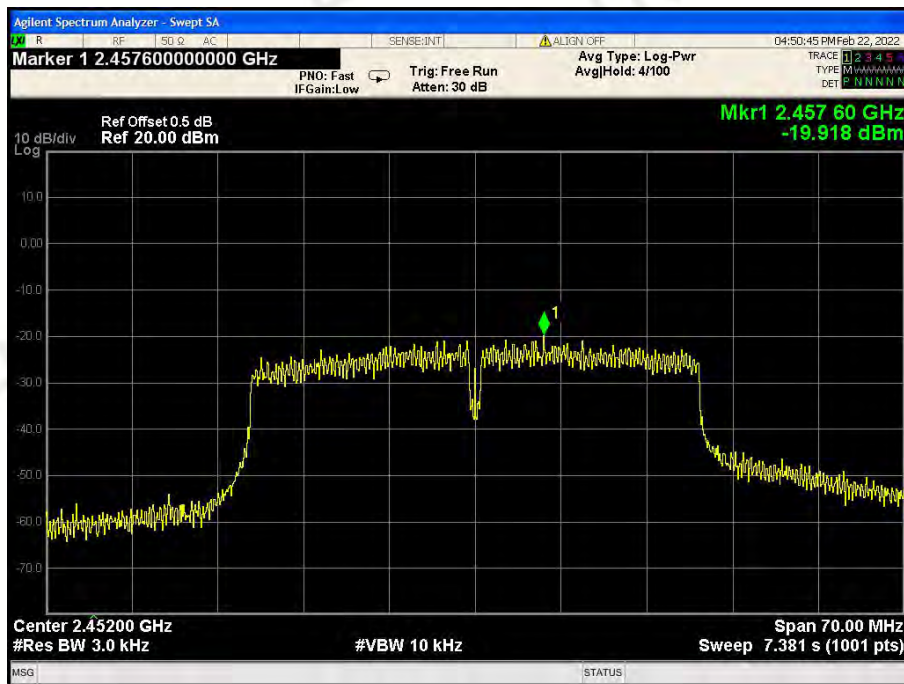
CH03: 2422MHz



CH06: 2437MHz



CH09: 2452MHz





## 7 PEAK OUTPUT POWER

### 7.1 TEST LIMIT

| FCC Part15(15.247), Subpart C |                   |                 |                       |        |
|-------------------------------|-------------------|-----------------|-----------------------|--------|
| Section                       | Test Item         | Limit           | Frequency Range (MHz) | Result |
| 15.247(b)(3)                  | Peak Output Power | 1 watt or 30dBm | 2400-2483.5           | PASS   |

### 7.2 TEST PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. The EUT was directly connected to the Power meter.

### 7.3 EQUIPMENT USED

Same as Radiated Emission Measurement.

### 7.4 TEST RESULT

PASS

| Test Mode    | Frequency (MHz) | Maximum Peak Conducted Output Power (dBm) | LIMIT (dBm) |
|--------------|-----------------|-------------------------------------------|-------------|
| 802.11b      | 2412            | 12.75                                     | 30          |
|              | 2437            | 12.69                                     | 30          |
|              | 2462            | 12.71                                     | 30          |
| 802.11g      | 2412            | 12.33                                     | 30          |
|              | 2437            | 12.27                                     | 30          |
|              | 2462            | 12.28                                     | 30          |
| 802.11n/HT20 | 2412            | 11.56                                     | 30          |
|              | 2437            | 11.47                                     | 30          |
|              | 2462            | 11.55                                     | 30          |
| 802.11n/HT40 | 2422            | 10.78                                     | 30          |
|              | 2437            | 10.69                                     | 30          |
|              | 2452            | 10.62                                     | 30          |

## 8 OUT OF BAND EMISSIONS

### 8.1 TEST LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

### 8.2 TEST SETUP



### 8.3 TEST PROCEDURE

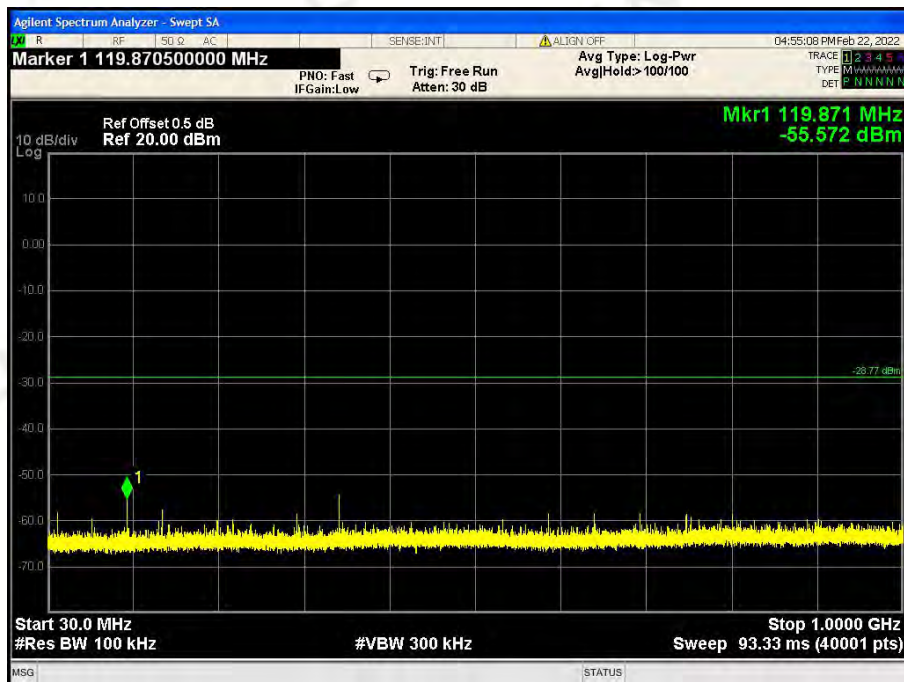
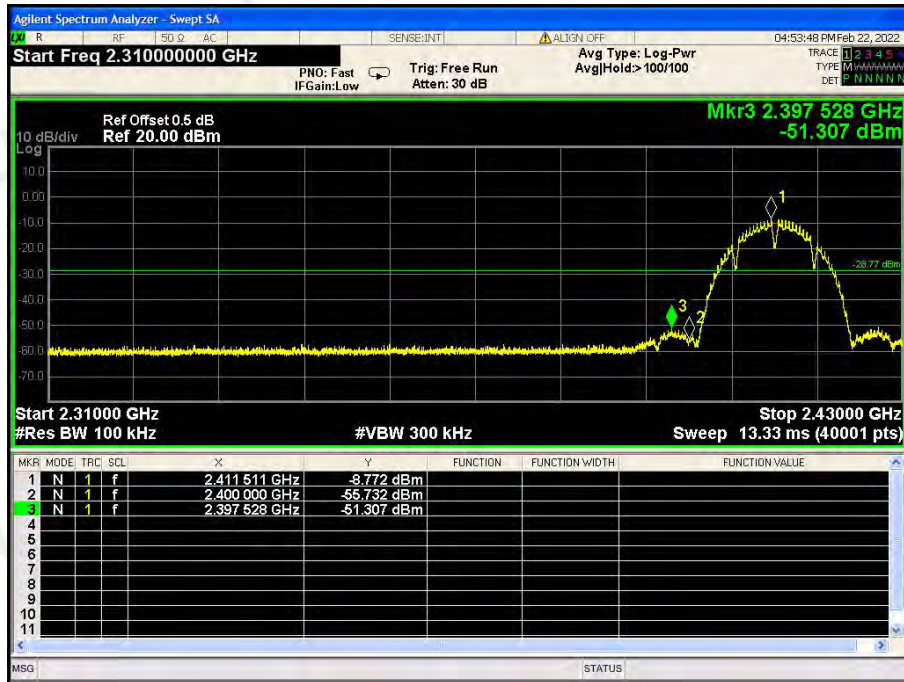
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as TX operation and connect directly to the spectrum analyzer.
3. Based on FCC Part15 C Section 15.247: RBW=100kHz, VBW=300kHz.
4. Set detected by the spectrum analyzer with peak detector.

### 8.4 TEST RESULT

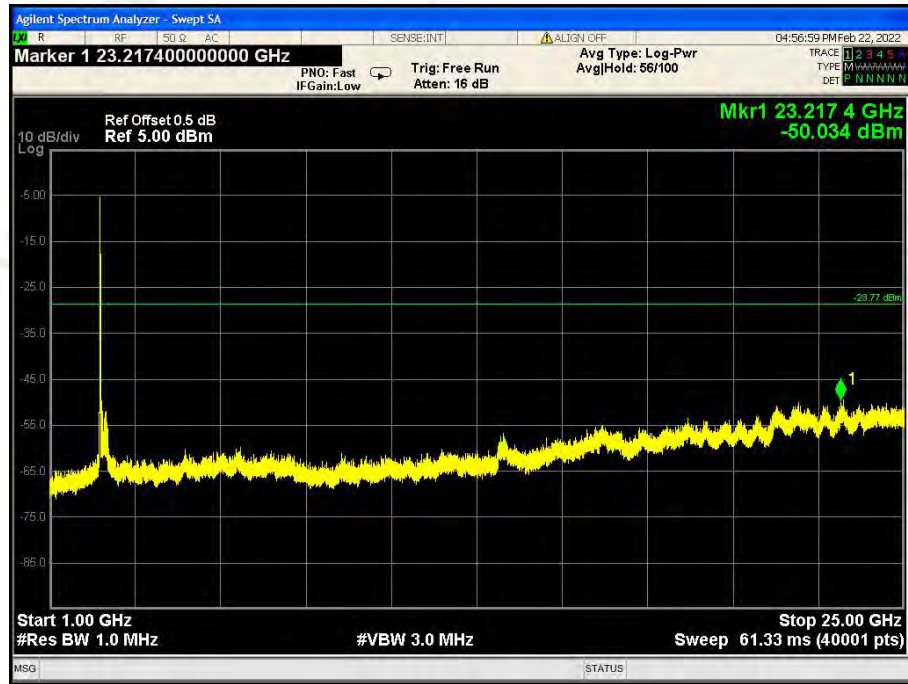
PASS

TX 802.11b Mode:

CH01: 2412MHz

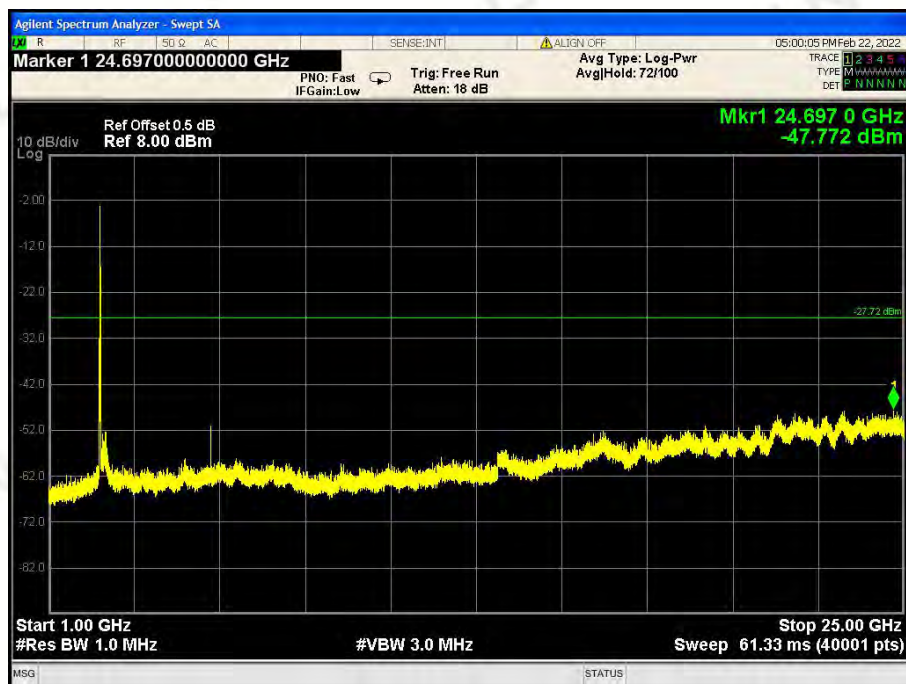
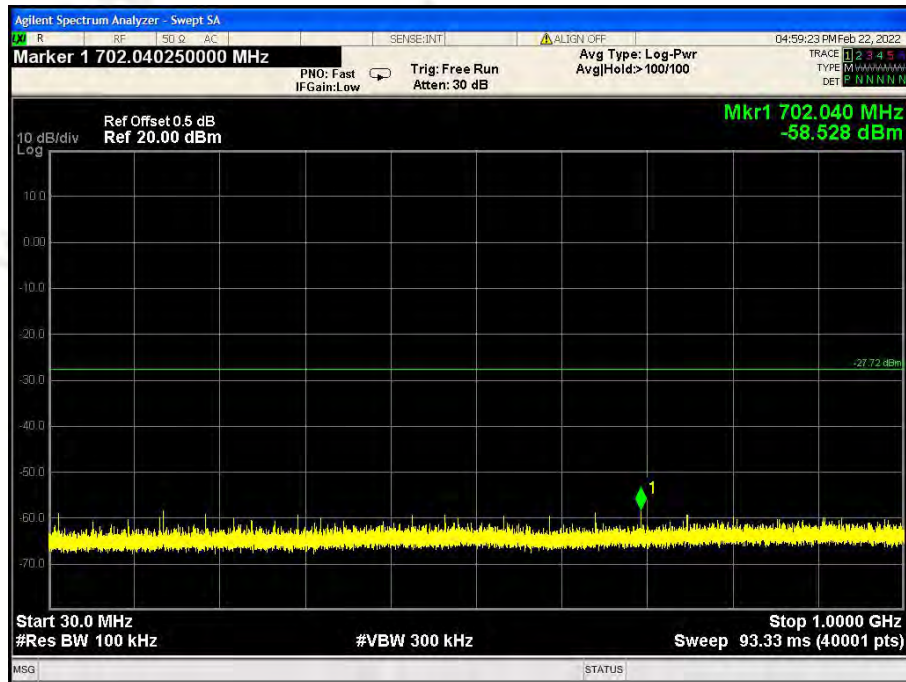






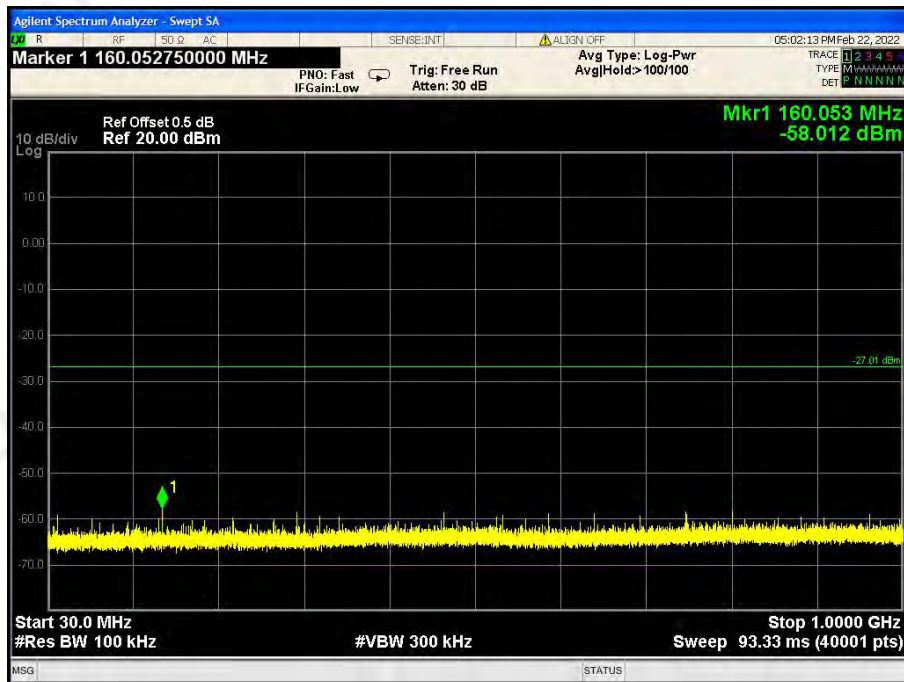
CH06: 2437MHz



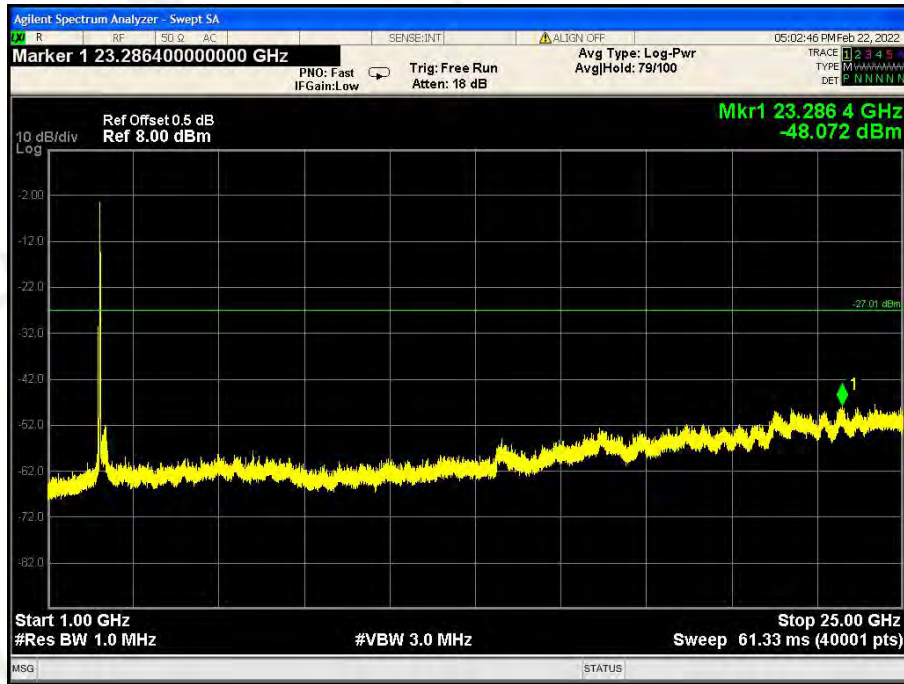




CH11: 2462MHz

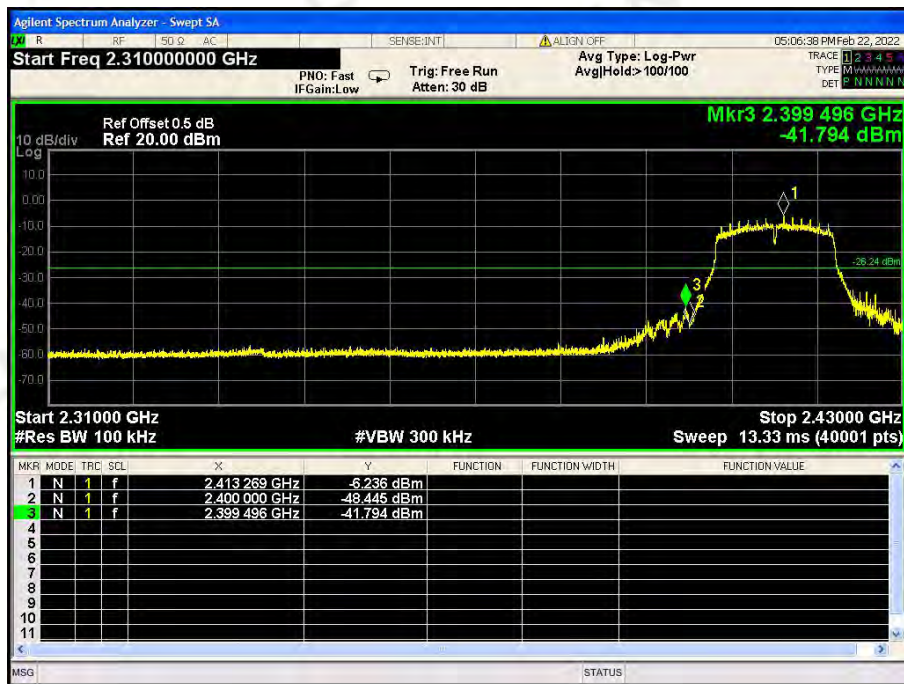


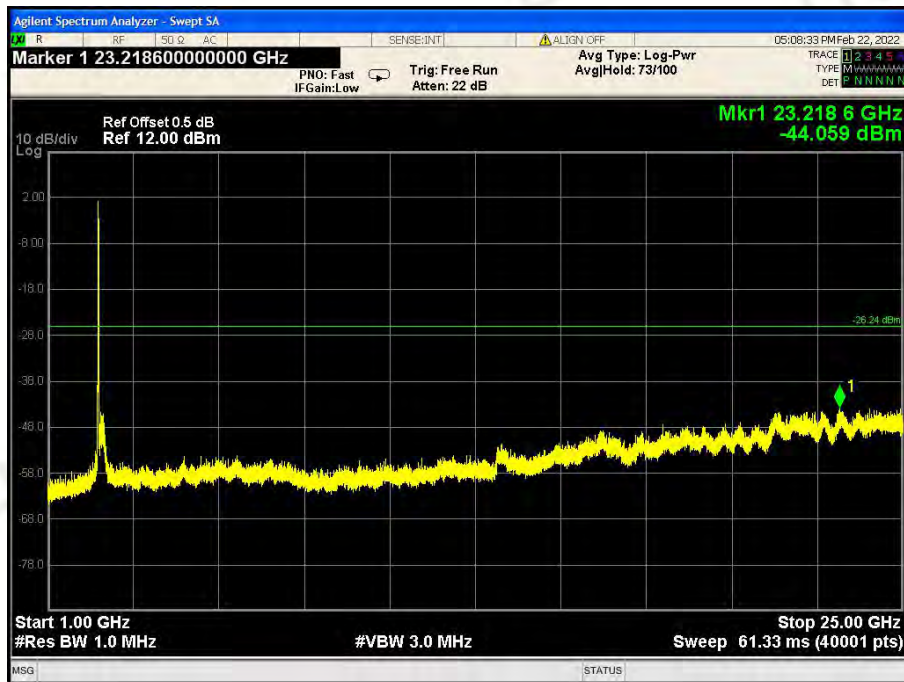
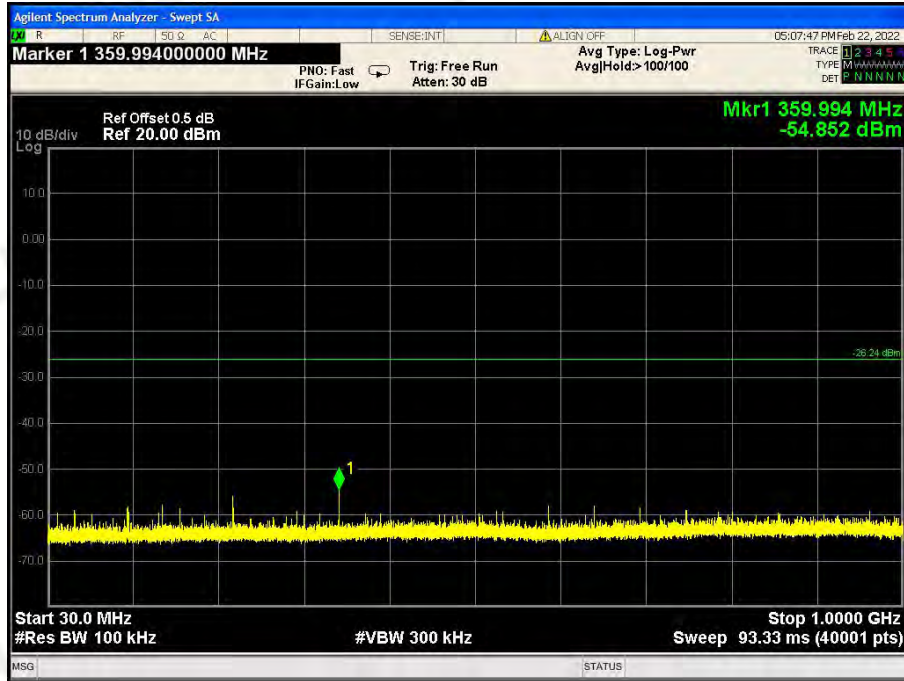




TX 802.11g Mode:

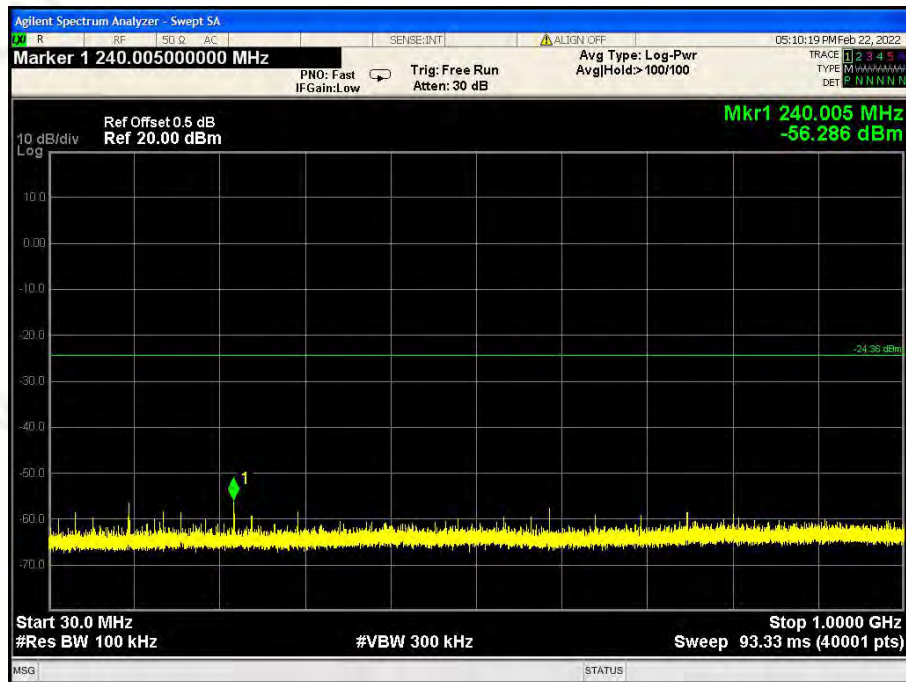
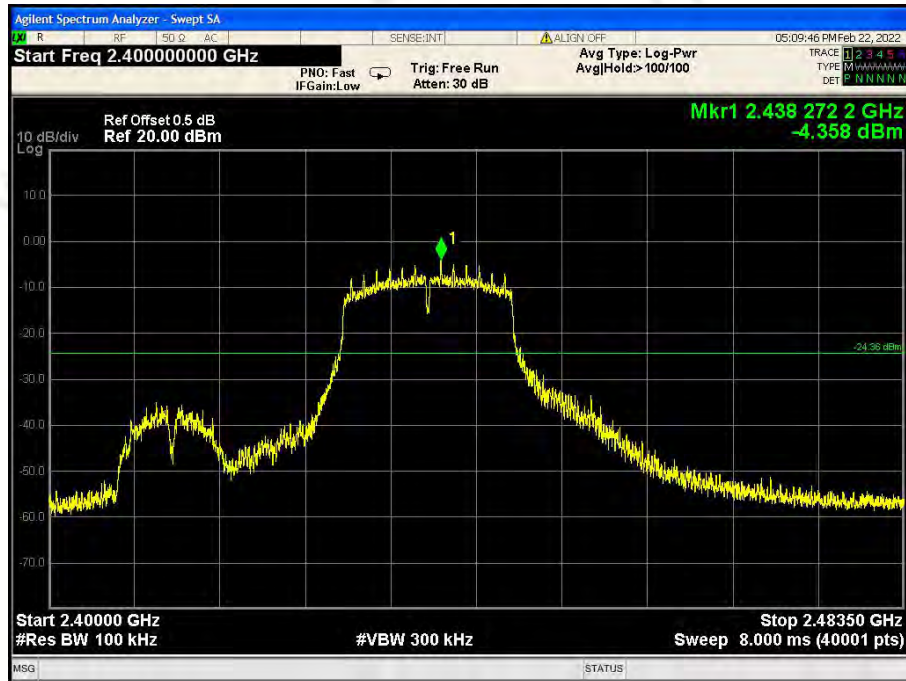
CH01: 2412MHz



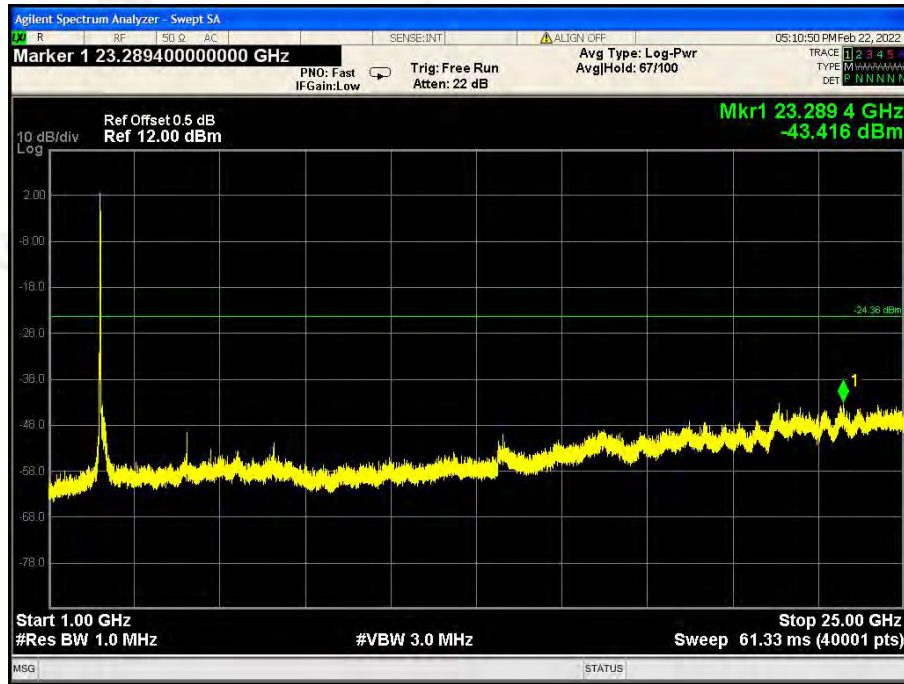




CH06: 2437MHz

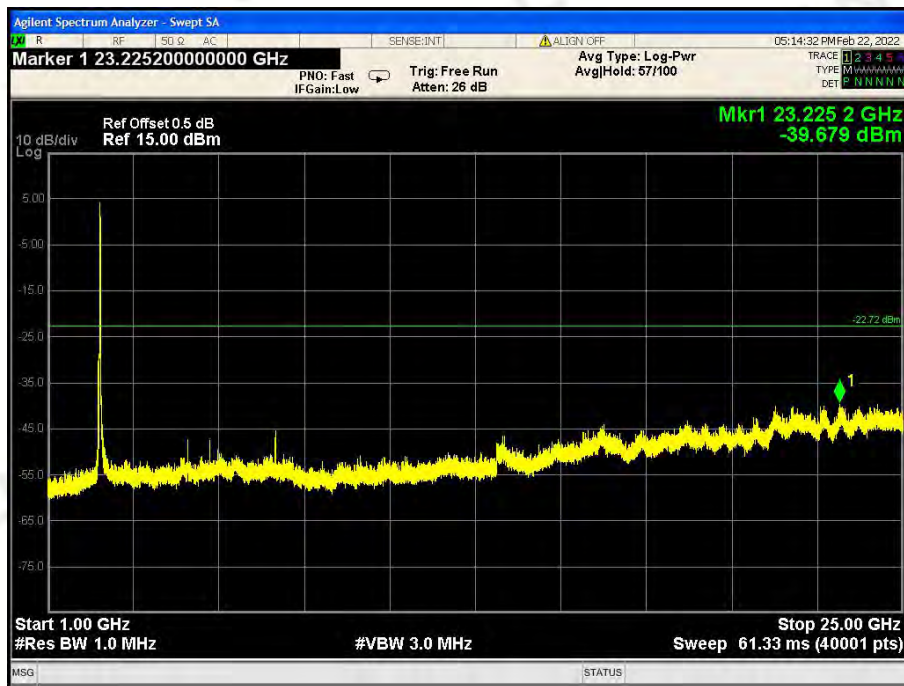
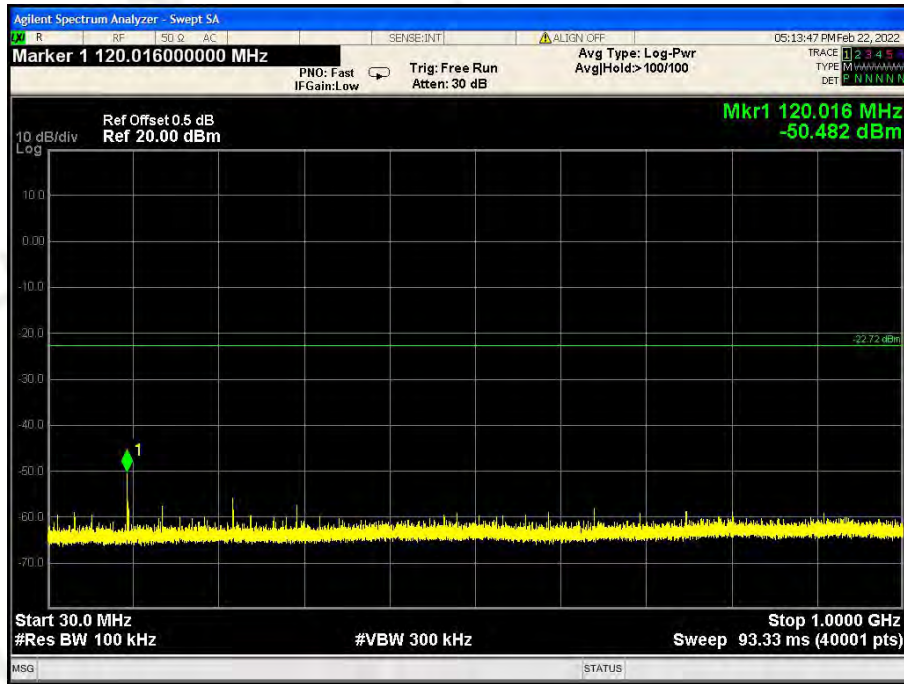






CH11: 2462MHz

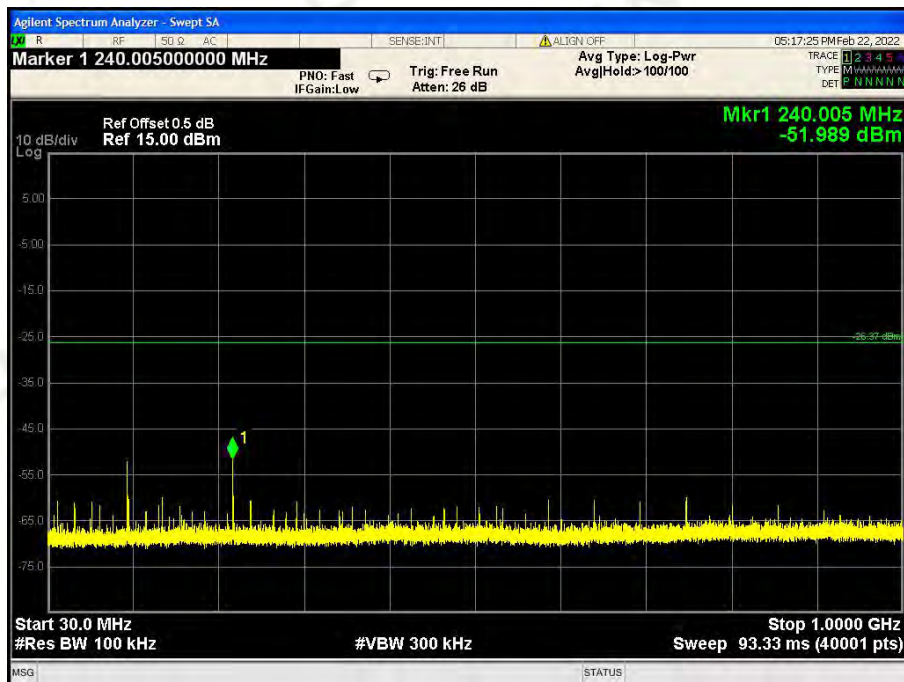




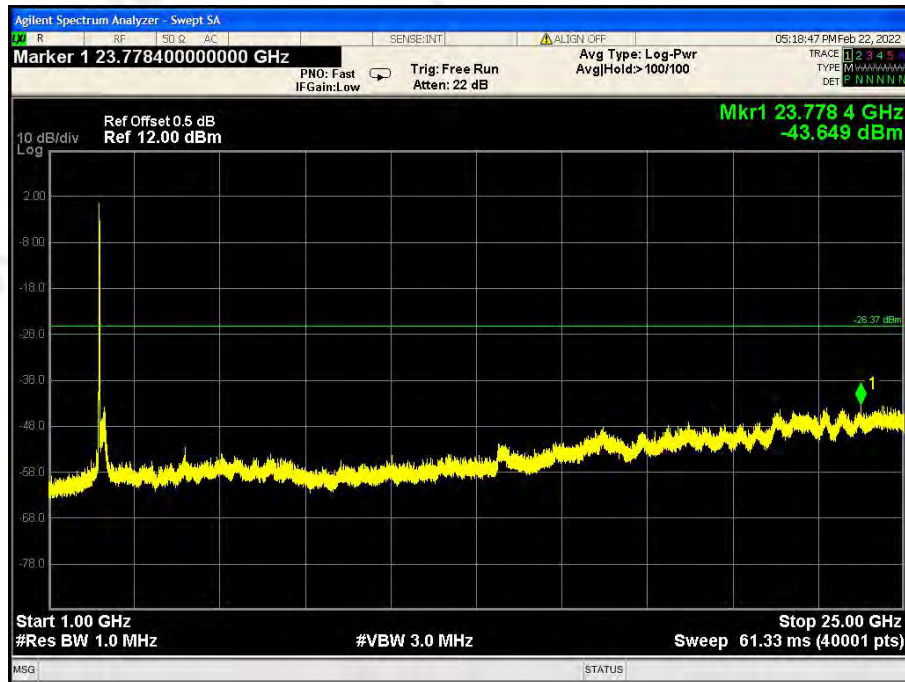


TX 802.11n/HT20 Mode:

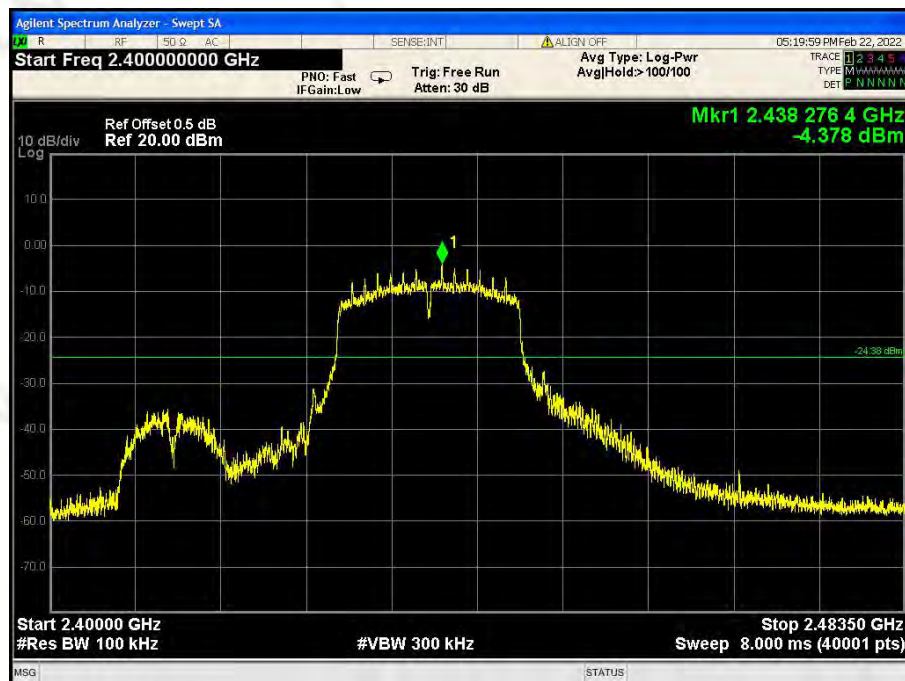
CH01: 2412MHz

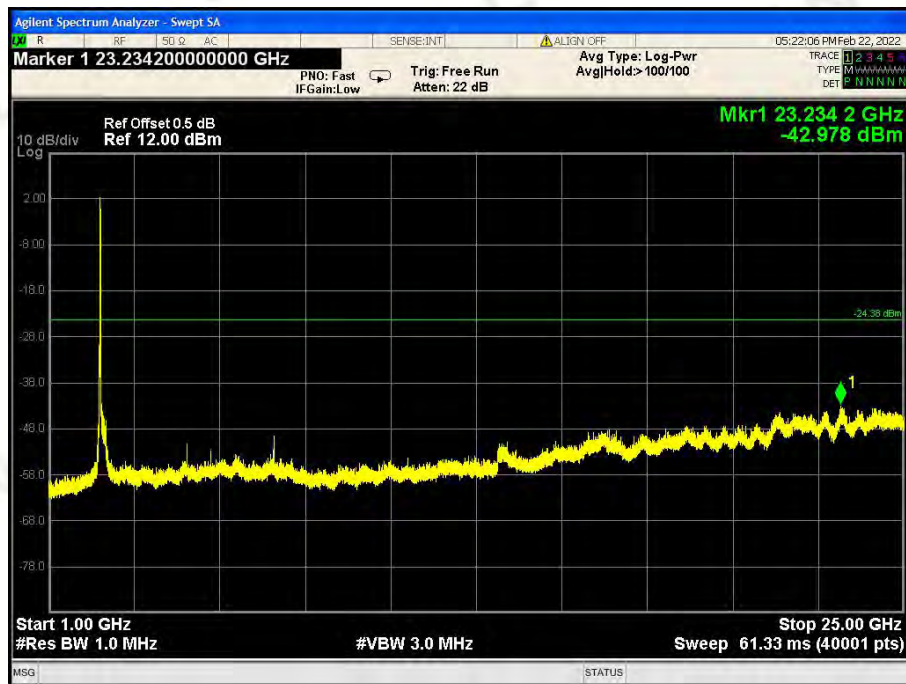
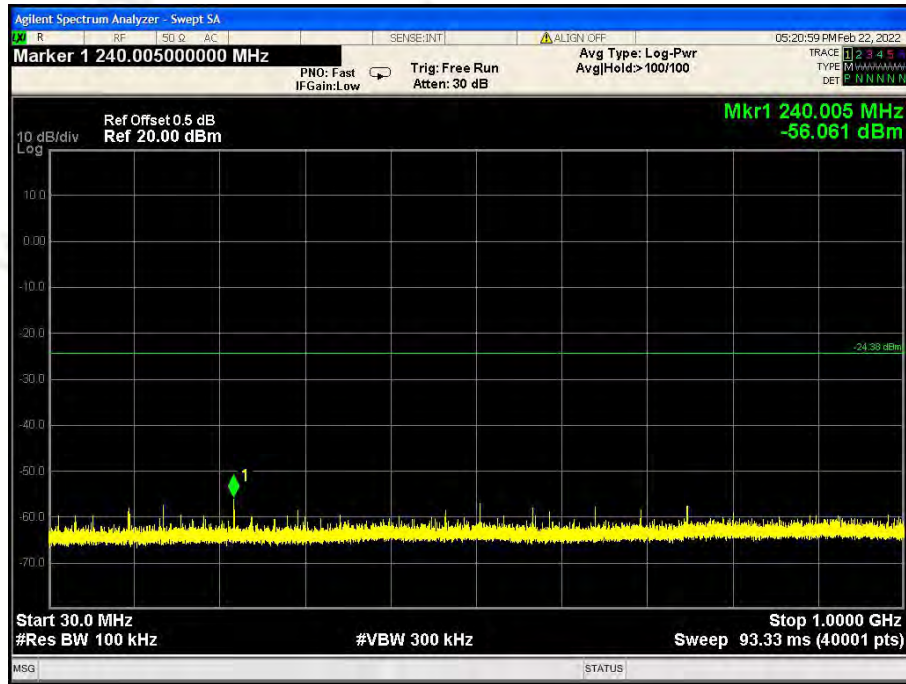






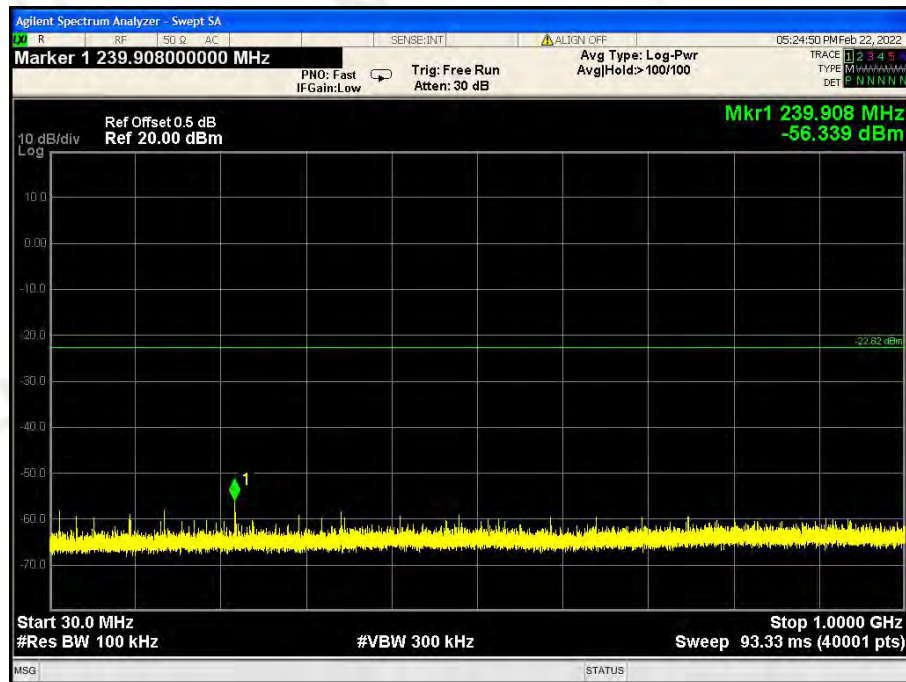
CH06: 2437MHz



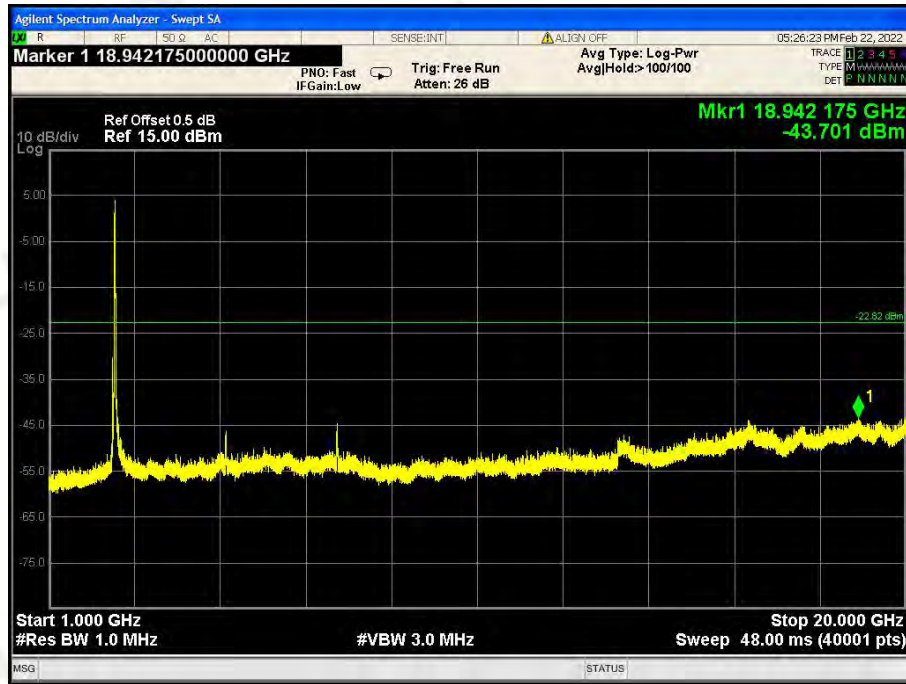




CH11: 2462MHz

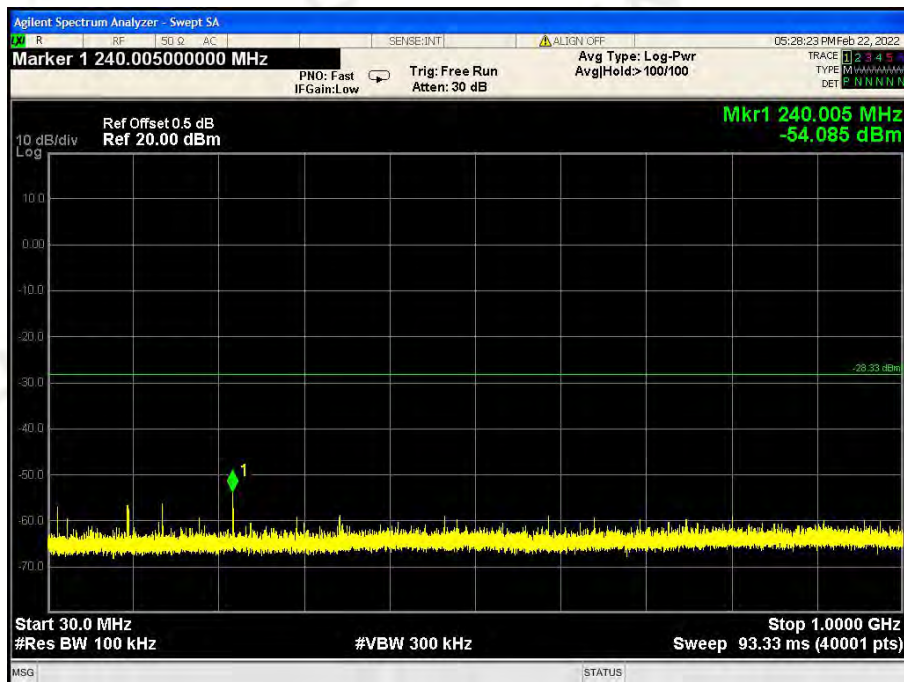


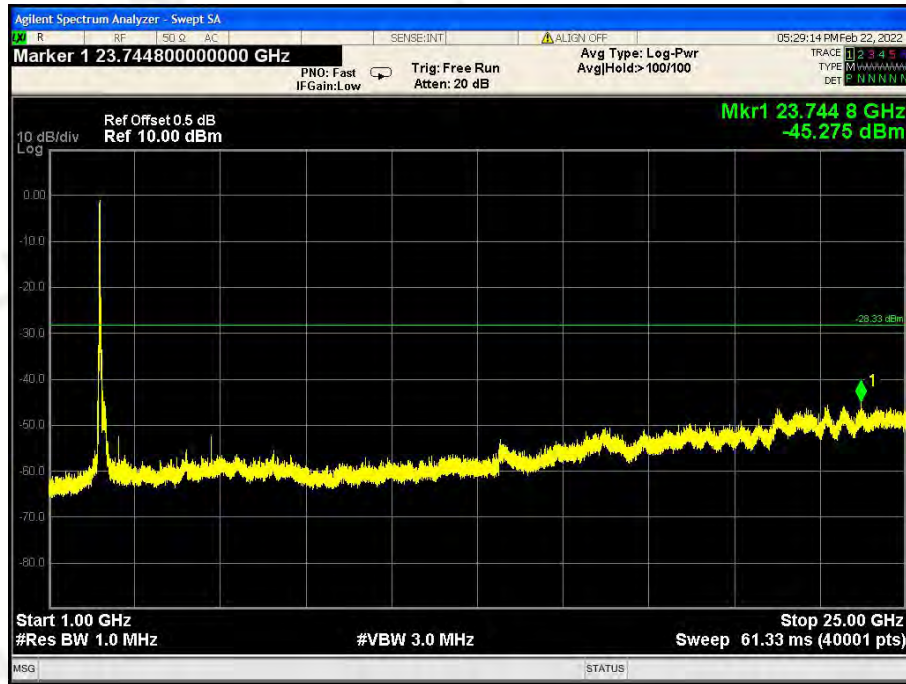




TX 802.11n/HT40 Mode:

CH03: 2422MHz

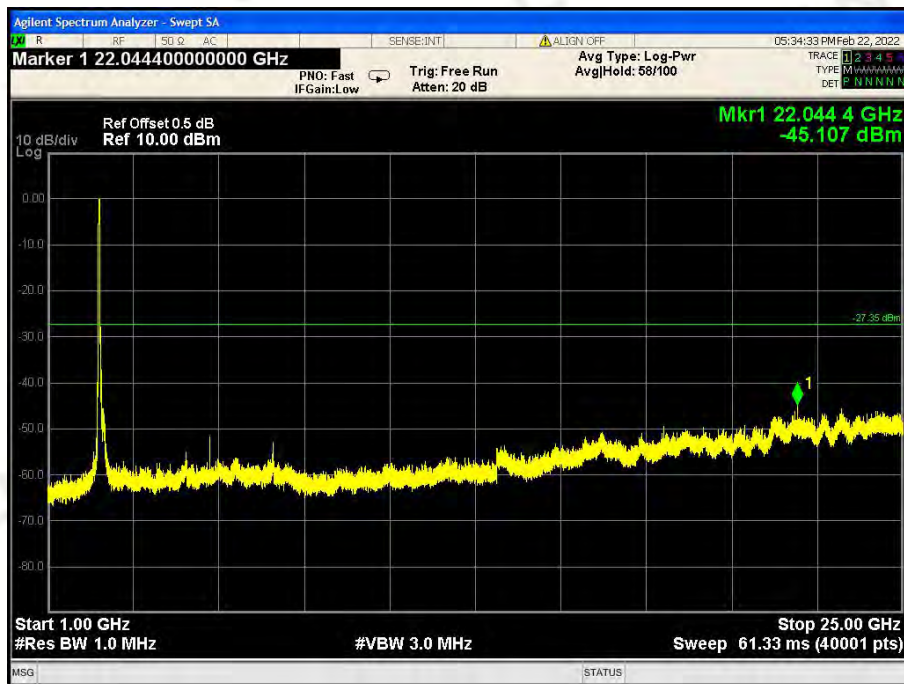
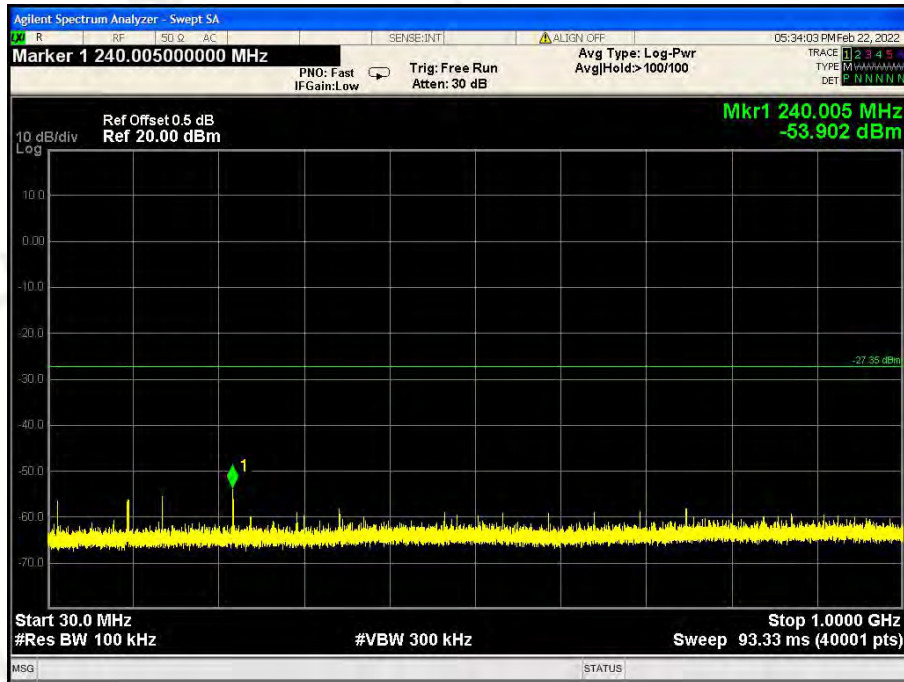




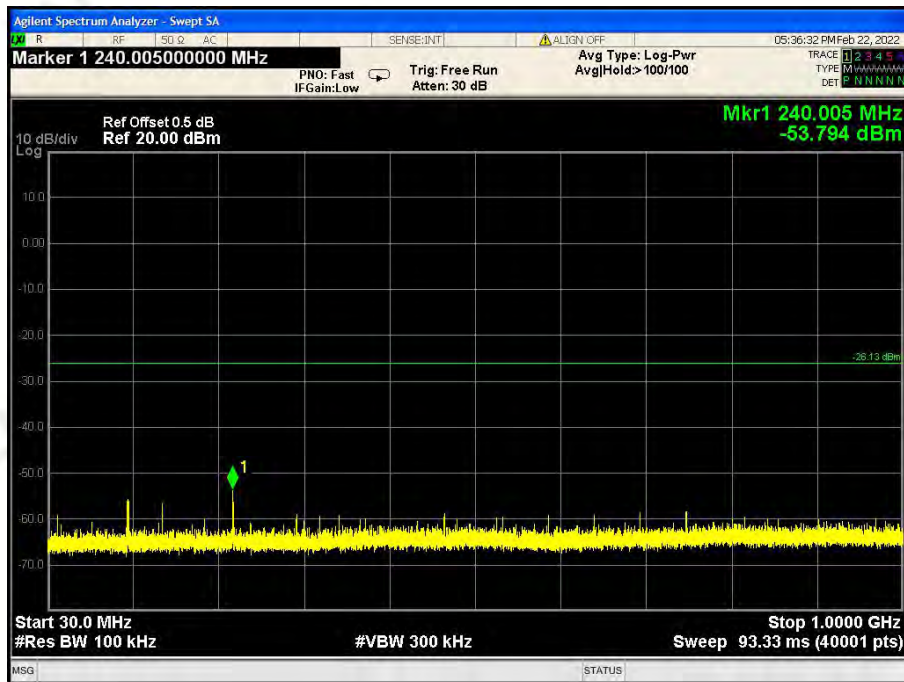
CH06: 2437MHz

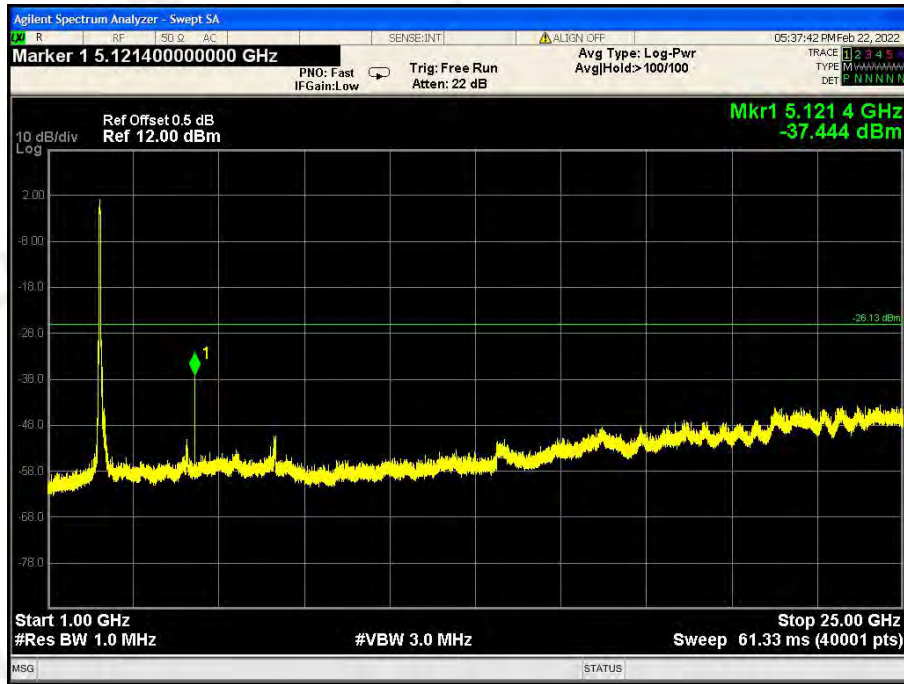






CH09: 2452MHz







## 9 ANTENNA REQUIREMENT

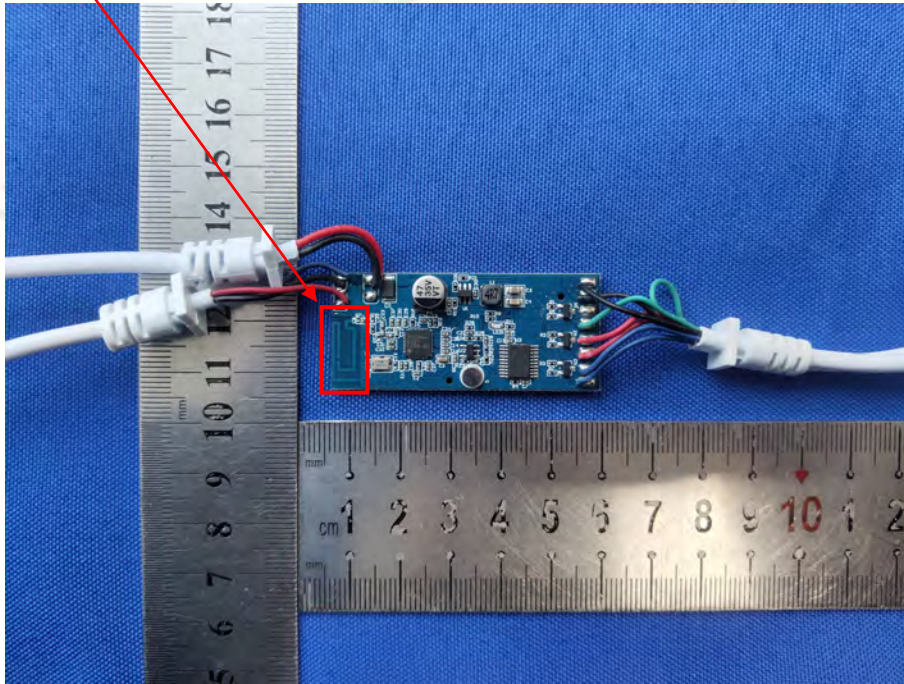
### Standard Applicable:

For intentional device, according to FCC 47 CFR Section 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.

### Antenna Connected Construction

The antenna used in this product is a PCB Antenna, The directional gains of antenna used for transmitting is 0dBi.

### ANTENNA:



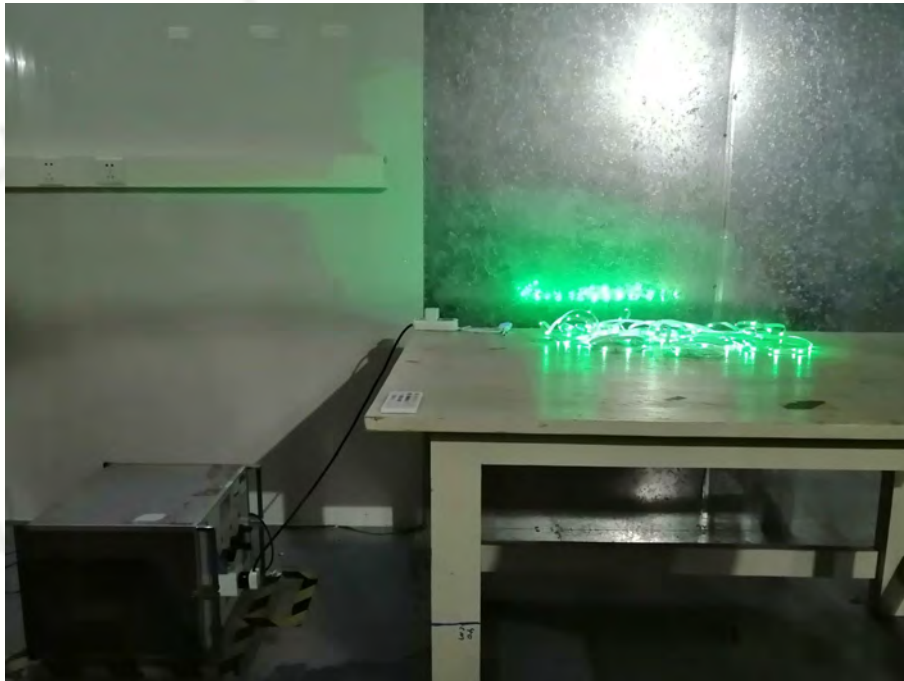
## 10 PHOTO OF TEST

### 10.1 RADIATED EMISSION





## 10.2 CONDUCTED EMISSION



\*\*\*End of Report\*\*\*