## 8.6 TEST RESULT

| Mode | Frequency (MHz) | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|
| b | 2412 | 12.27 | 30 | Pass |
| b | 2437 | 11.44 | 30 | Pass |
| b | 2462 | 11.46 | 30 | Pass |
| g | 2412 | 12.22 | 30 | Pass |
| g | 2437 | 12.17 | 30 | Pass |
| g | 2462 | 12.20 | 30 | Pass |
| n20 | 2412 | 13.02 | 30 | Pass |
| n20 | 2437 | 12.19 | 30 | Pass |
| n20 | 2462 | 12.26 | 30 | Pass |

## 9. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

| | |
|---|---|
| Test Requirement: | FCC Part15 C Section 15.247 (d) |
| Test Method: | KDB558074 D0115.247 Meas Guidancev05r02 |

### 9.1 APPLICABLE STANDARD

in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in 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, In addition, radiated emissions which fall in the restricted bands, as defined in§15.205(a), must also comply with the radiated emission limits specified in15.209(a).

### 9.2 TEST PROCEDURE

Reference level measurement
Establish a reference level by using the following procedure:
a) Set instrument center frequency to DTS channel center frequency.
b) Set the span to ≥ 1.5 times the DTS bandwidth.
c) Set the RBW = 100 kHz.
d) Set the VBW ≥ [3 × RBW].
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum PSD level.
Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

Emission level measurement
Establish an emission level by using the following procedure:
a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz.
c) Set the VBW ≥ [3 × RBW].
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude level.
Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

### 9.3 DEVIATION FROM STANDARD

No deviation.

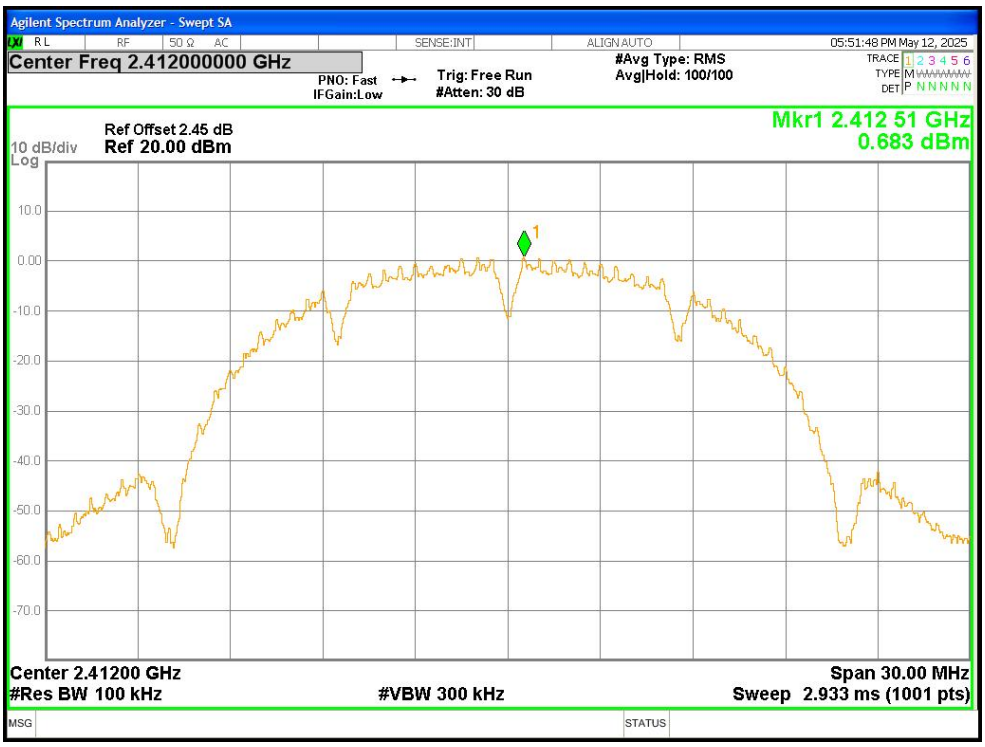
### 9.4 TEST SETUP

## 9.5 EUT OPERATION CONDITIONS

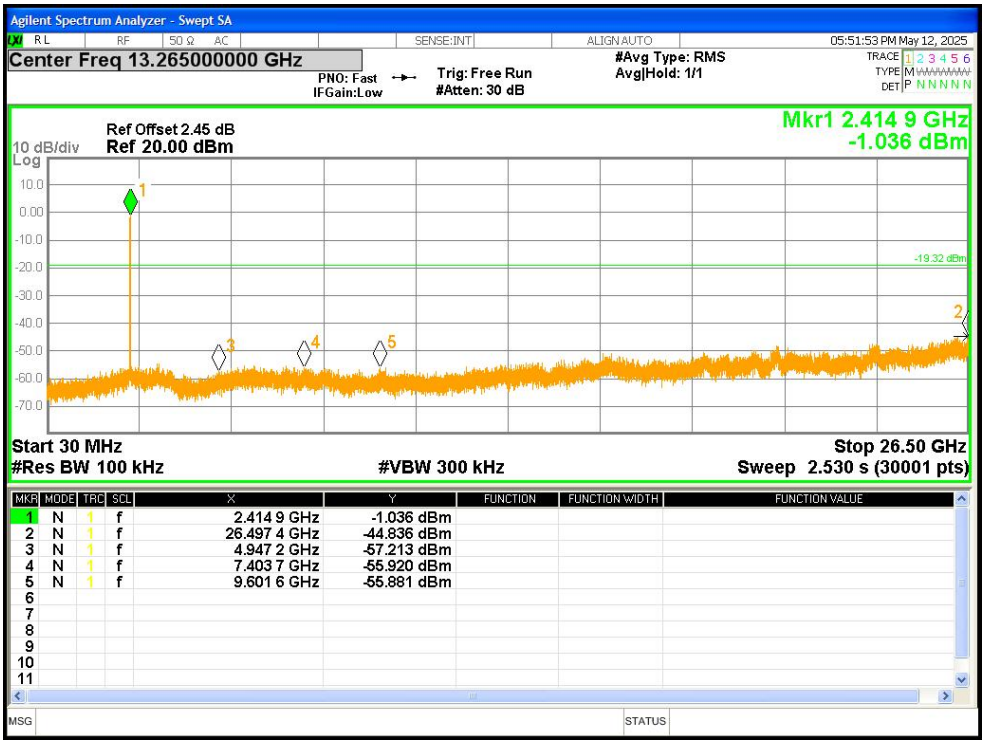
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

## 9.6 TEST RESULTS

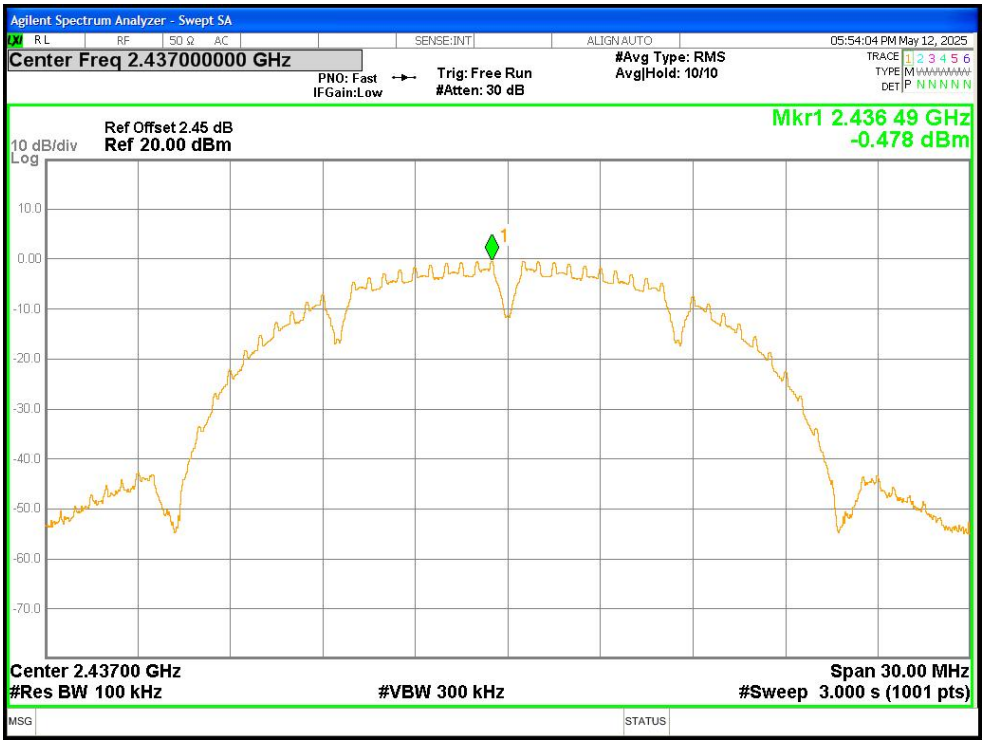
| Mode | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|---|---|---|---|---|
| b | 2412 | -45.51 | -20 | Pass |
| b | 2437 | -44.78 | -20 | Pass |
| b | 2462 | -44.31 | -20 | Pass |
| g | 2412 | -40.07 | -20 | Pass |
| g | 2437 | -40.32 | -20 | Pass |
| g | 2462 | -39.21 | -20 | Pass |
| n20 | 2412 | -40.18 | -20 | Pass |
| n20 | 2437 | -39.52 | -20 | Pass |
| n20 | 2462 | -38.77 | -20 | Pass |



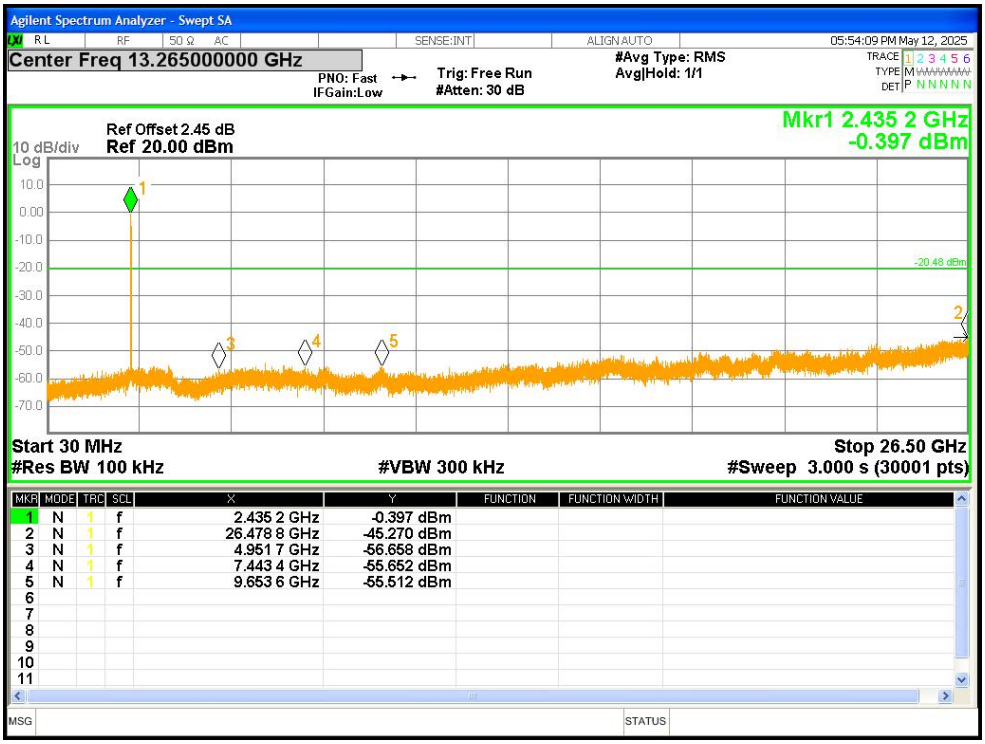

Tx. Spurious NVNT b 2412MHz Ant1 Ref



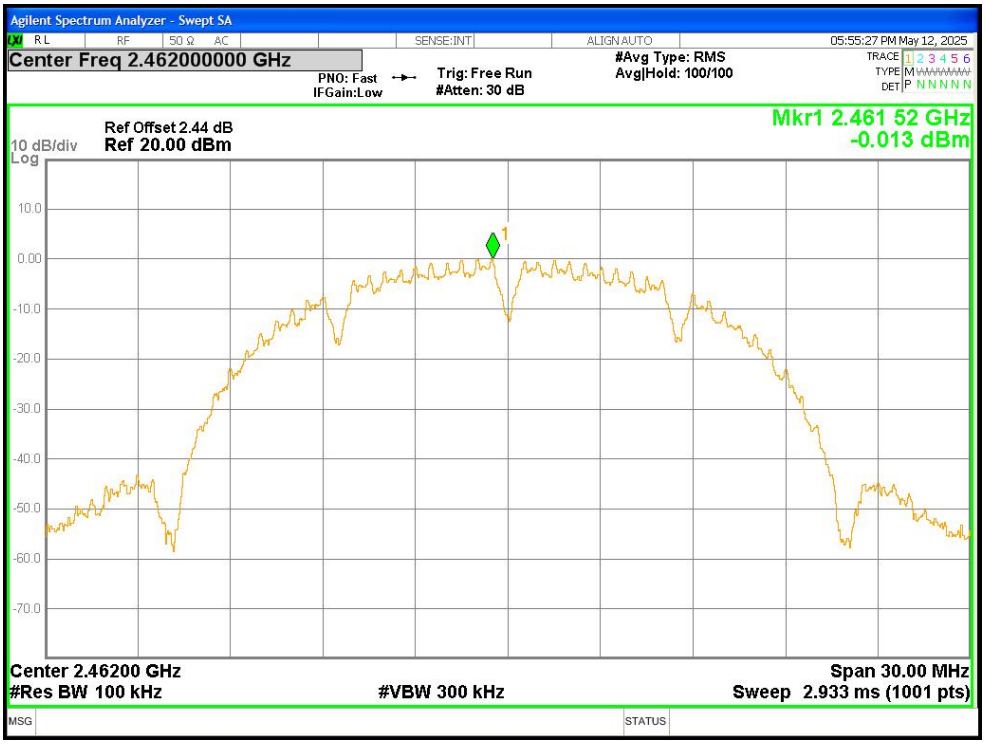

Tx. Spurious NVNT b 2412MHz Ant1 Emission



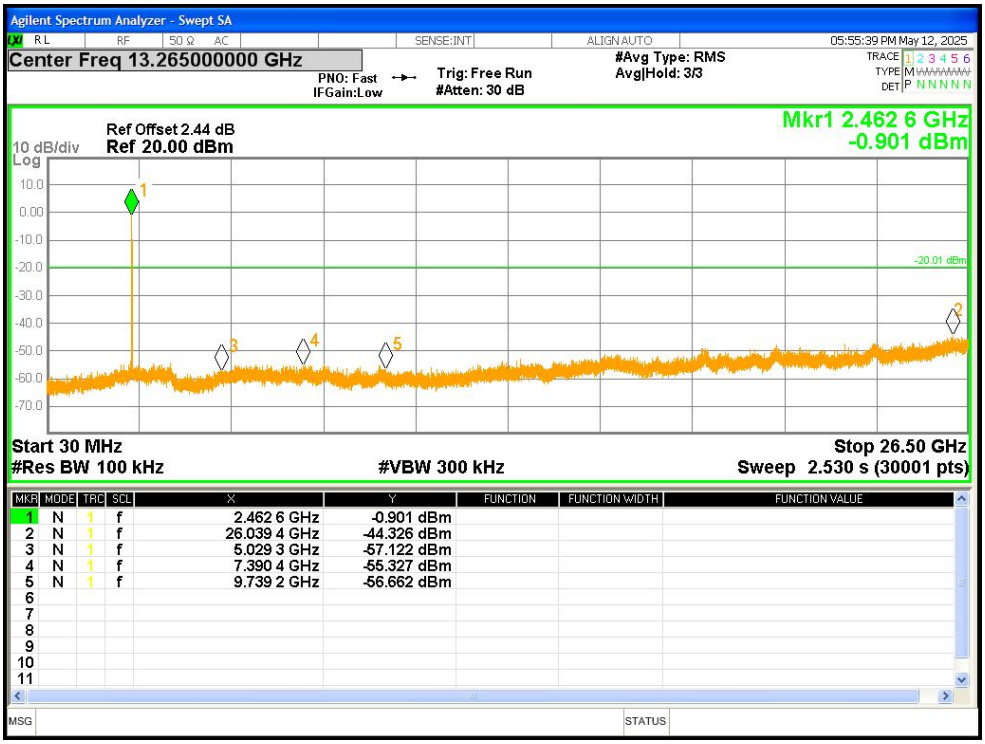

Tx. Spurious NVNT b 2437MHz Ant1 Ref



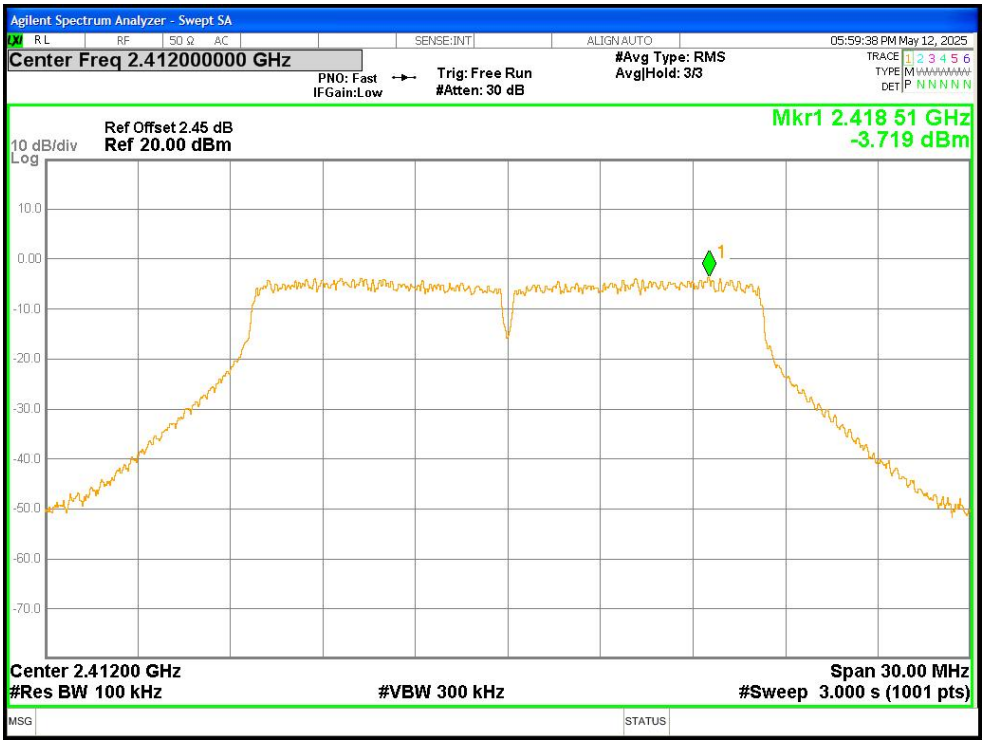

Tx. Spurious NVNT b 2437MHz Ant1 Emission



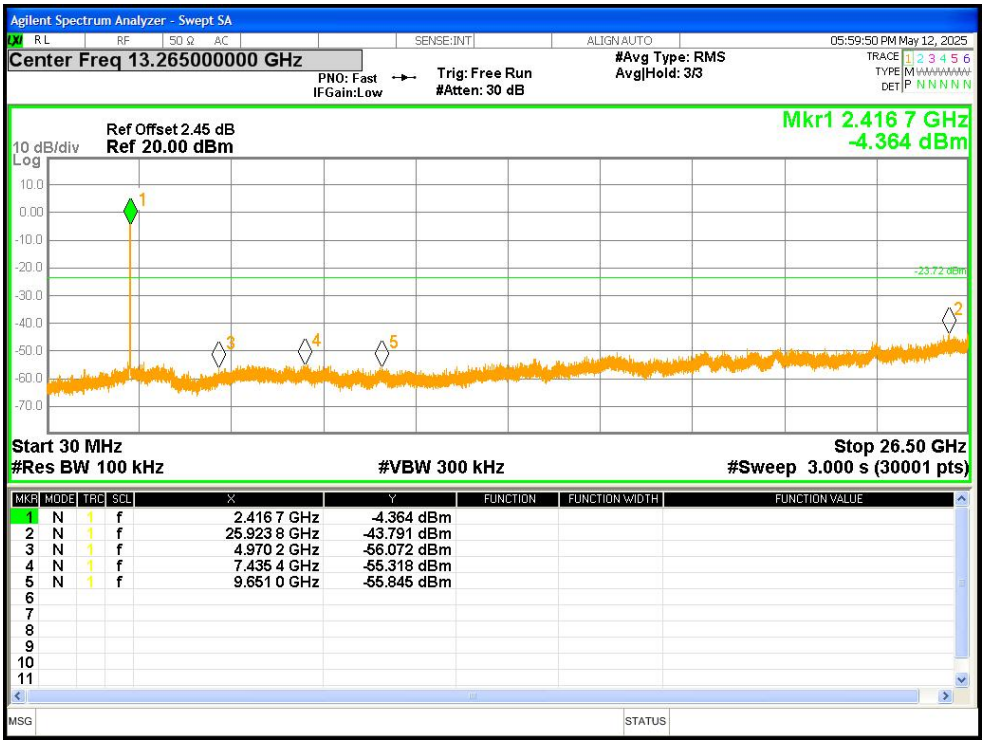

Tx. Spurious NVNT b 2462MHz Ant1 Ref




Tx. Spurious NVNT b 2462MHz Ant1 Emission




Tx. Spurious NVNT g 2412MHz Ant1 Ref

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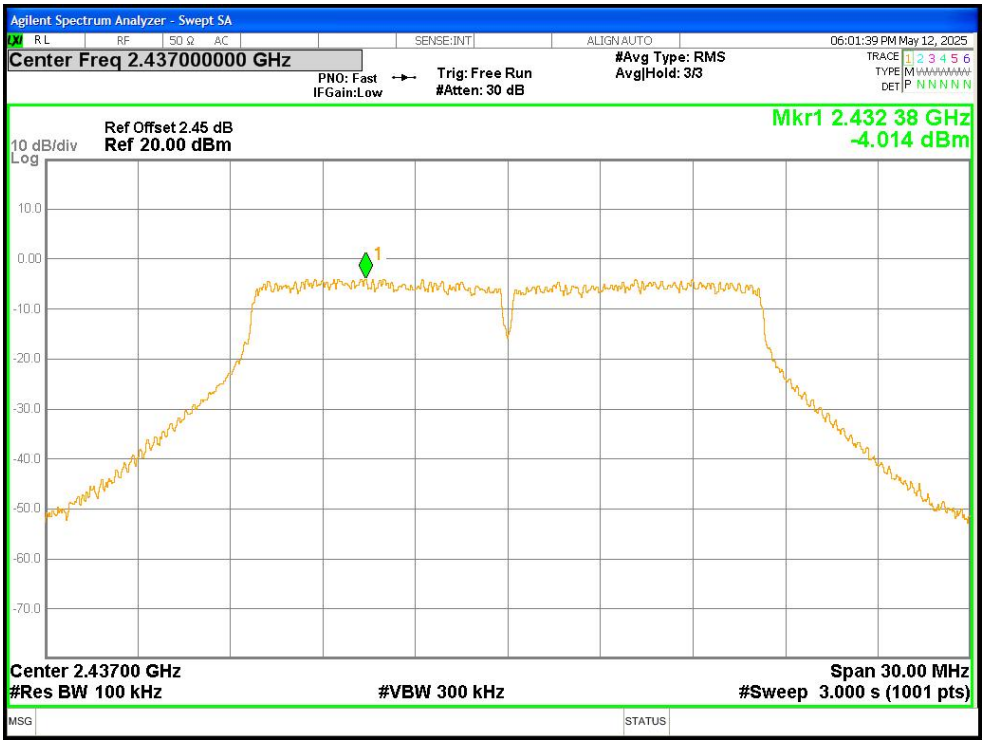


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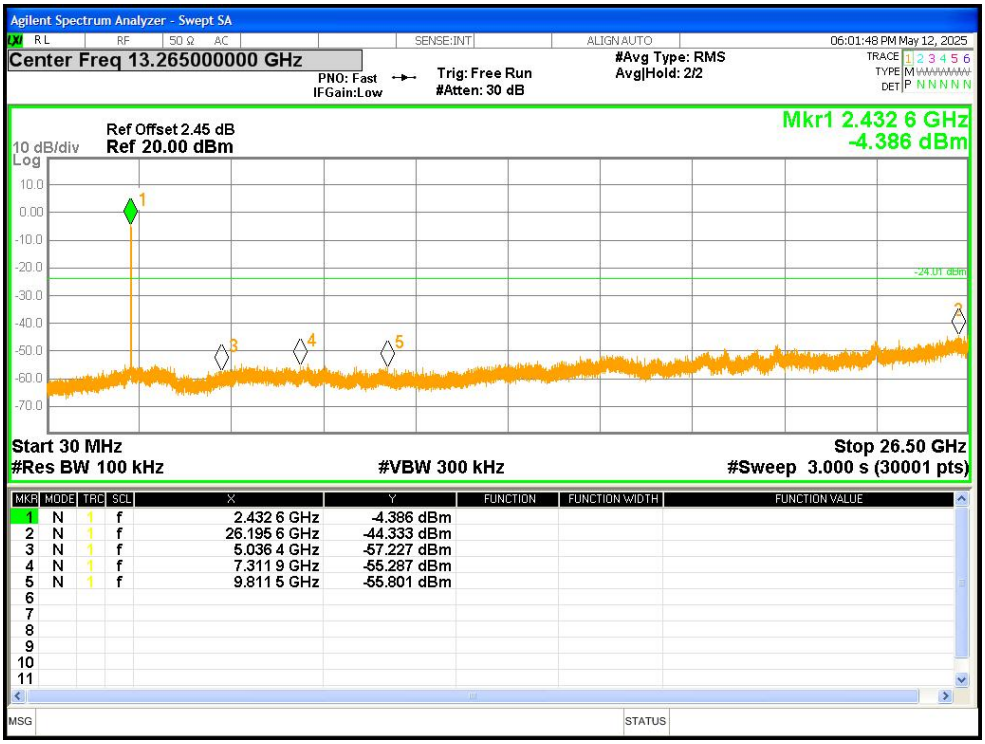
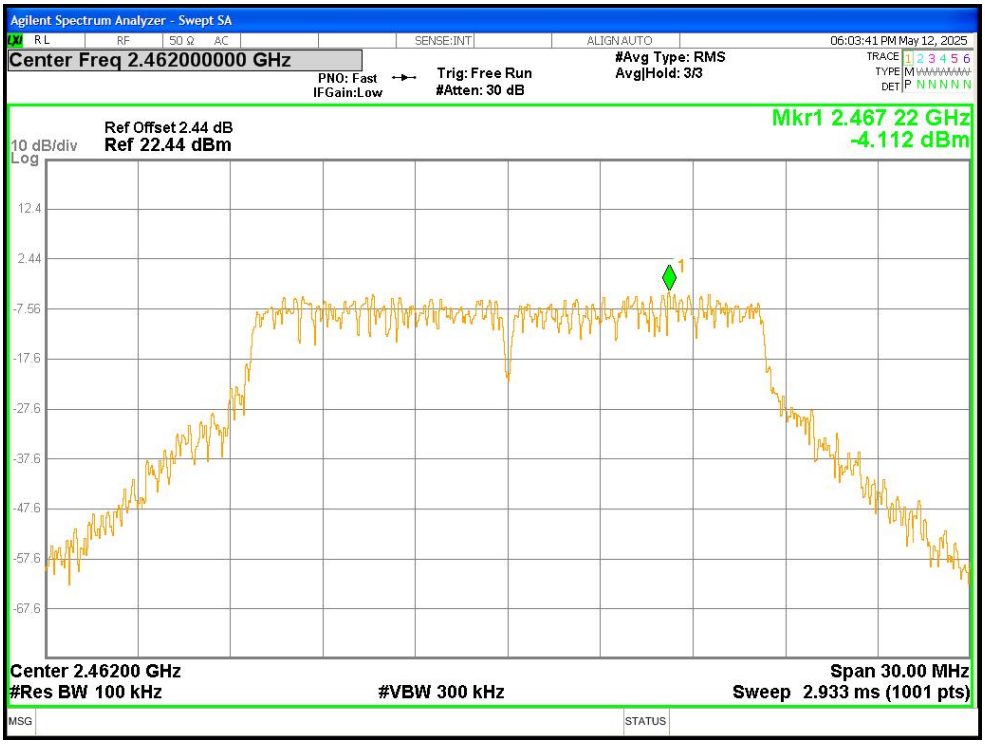
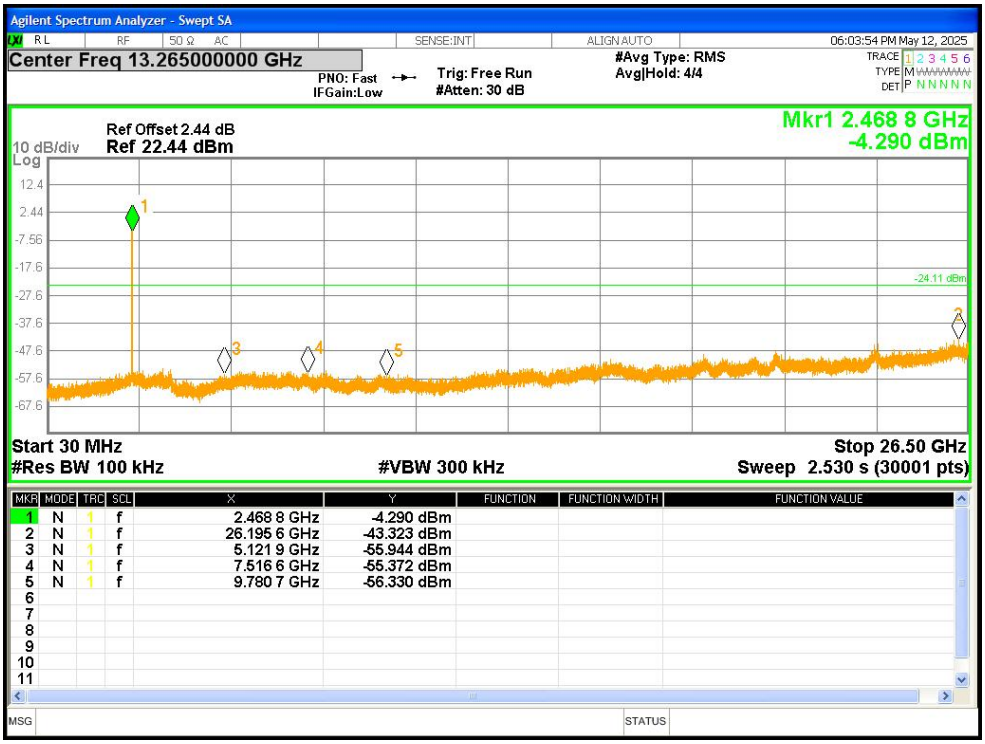


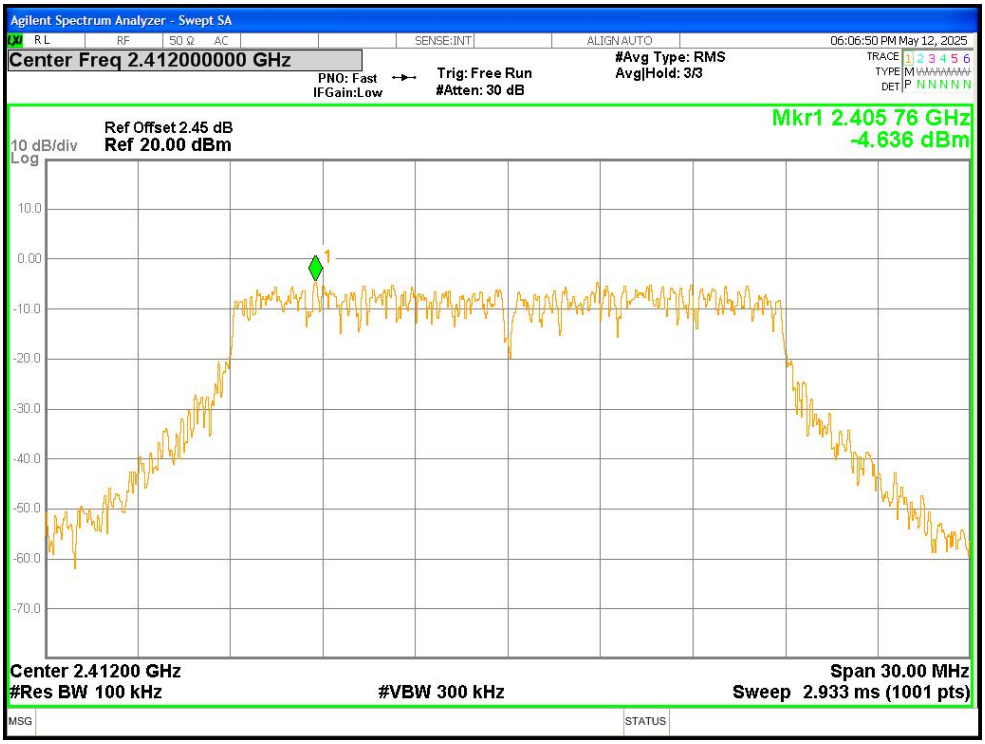

Tx. Spurious NVNT g 2437MHz Ant1 Emission



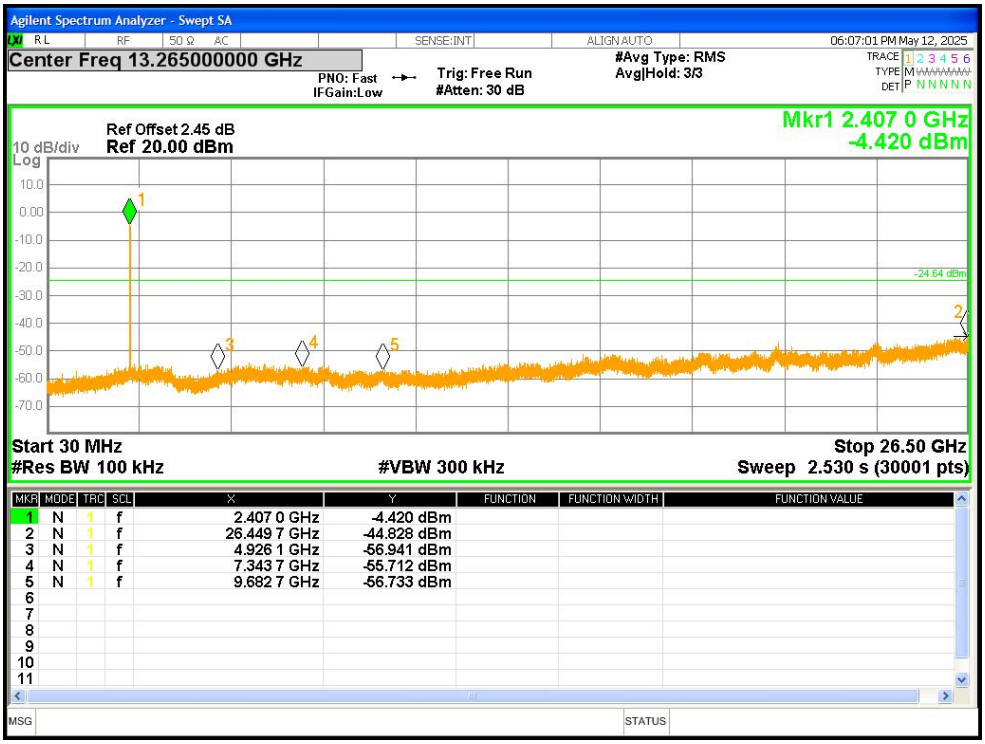

Tx. Spurious NVNT g 2462MHz Ant1 Ref




Tx. Spurious NVNT g 2462MHz Ant1 Emission




Tx. Spurious NVNT n20 2412MHz Ant1 Ref

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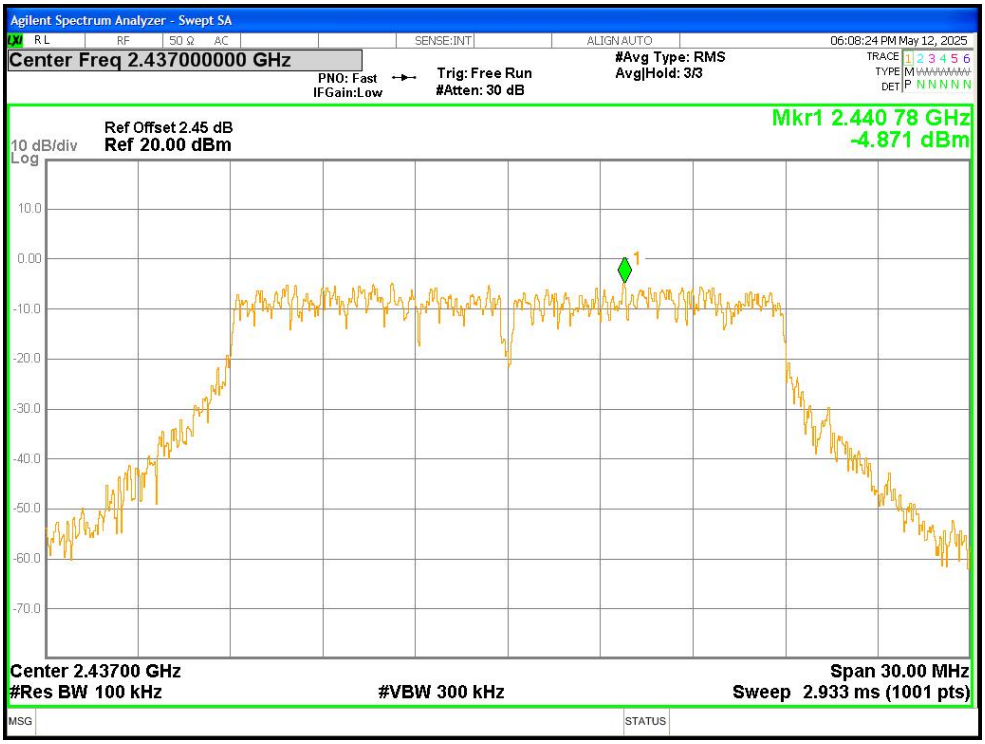
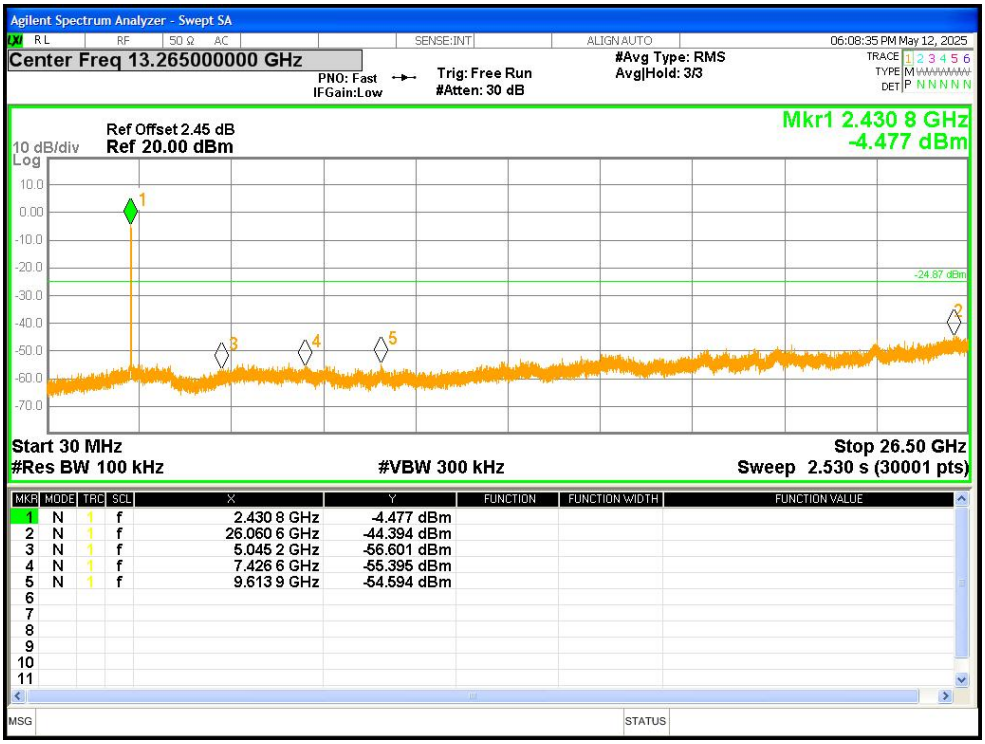
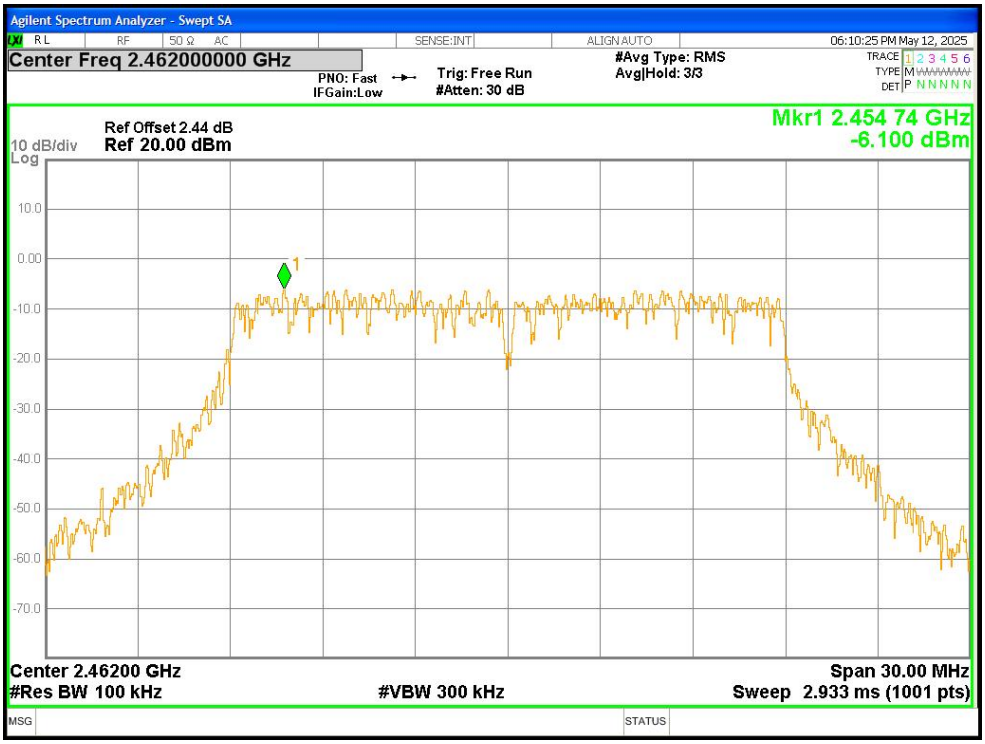


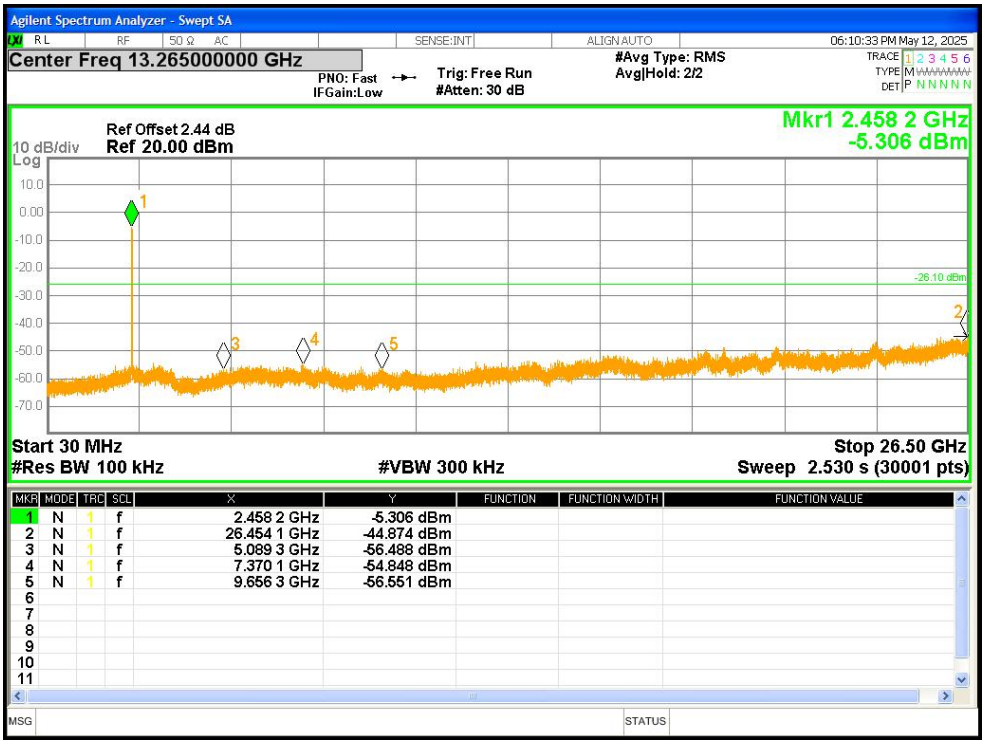

Tx. Spurious NVNT n20 2437MHz Ant1 Ref




Tx. Spurious NVNT n20 2437MHz Ant1 Emission

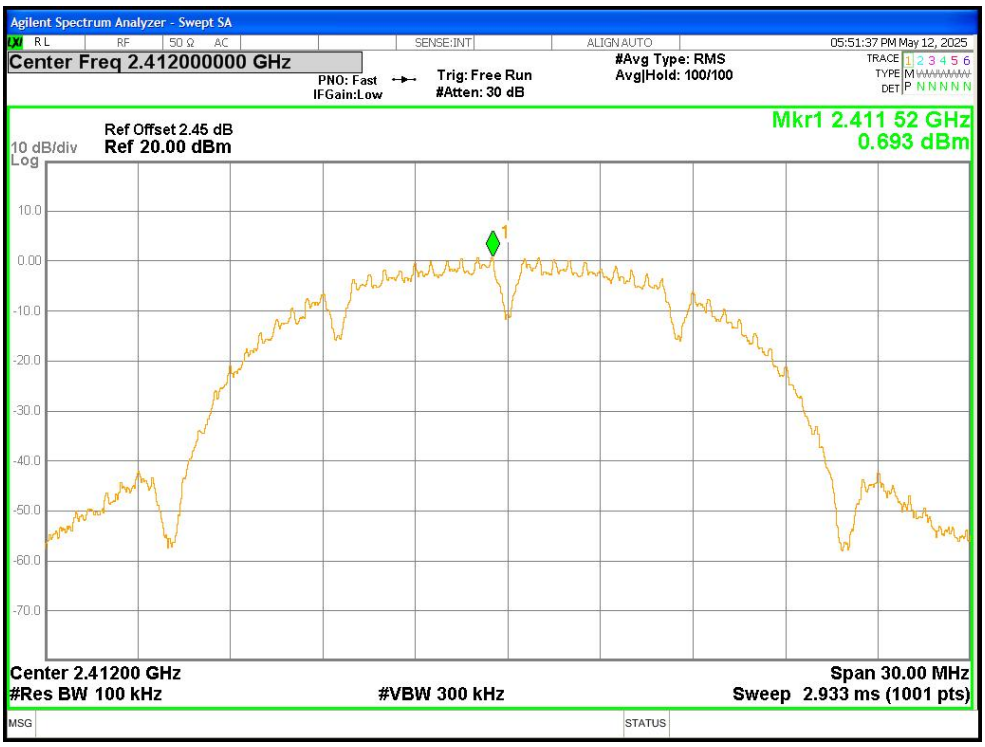



Tx. Spurious NVNT n20 2462MHz Ant1 Ref

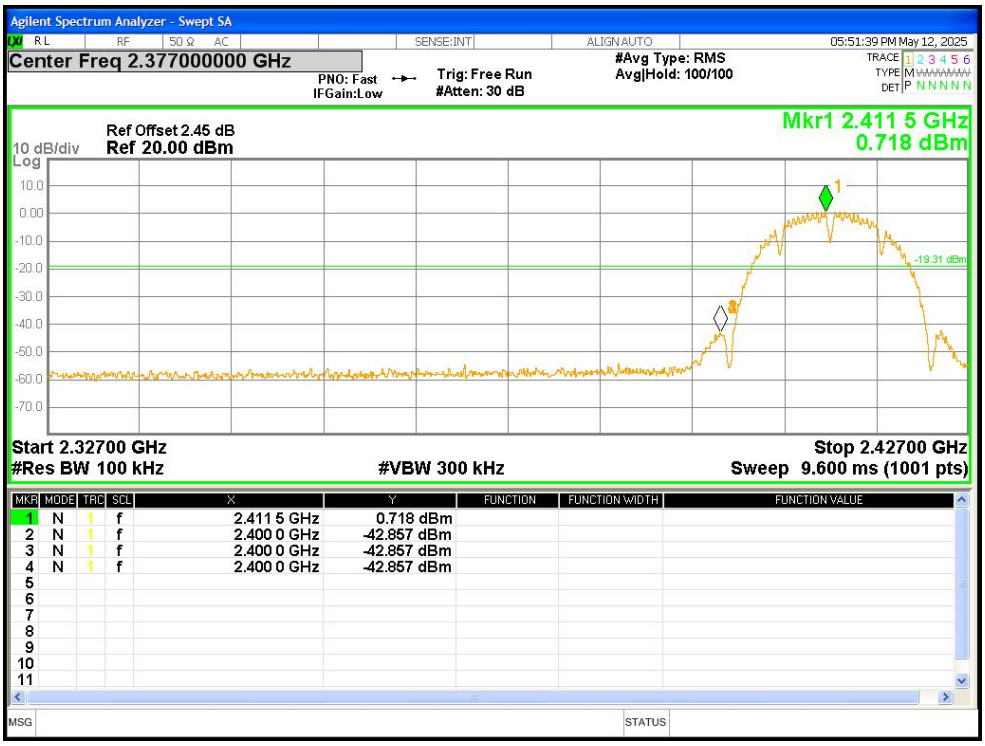



Tx. Spurious NVNT n20 2462MHz Ant1 Emission

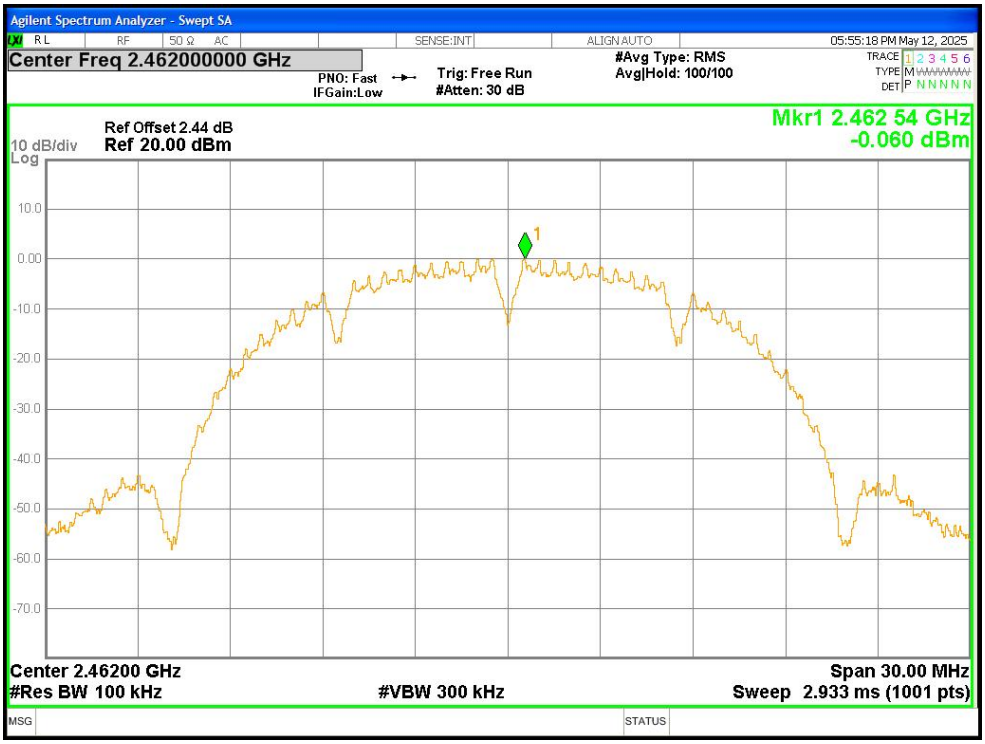
| Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | -43.54 | -20 | Pass |
| b | 2462 | Ant1 | -56.87 | -20 | Pass |
| g | 2412 | Ant1 | -35.81 | -20 | Pass |
| g | 2462 | Ant1 | -51.70 | -20 | Pass |
| n20 | 2412 | Ant1 | -36.18 | -20 | Pass |
| n20 | 2462 | Ant1 | -50.57 | -20 | Pass |



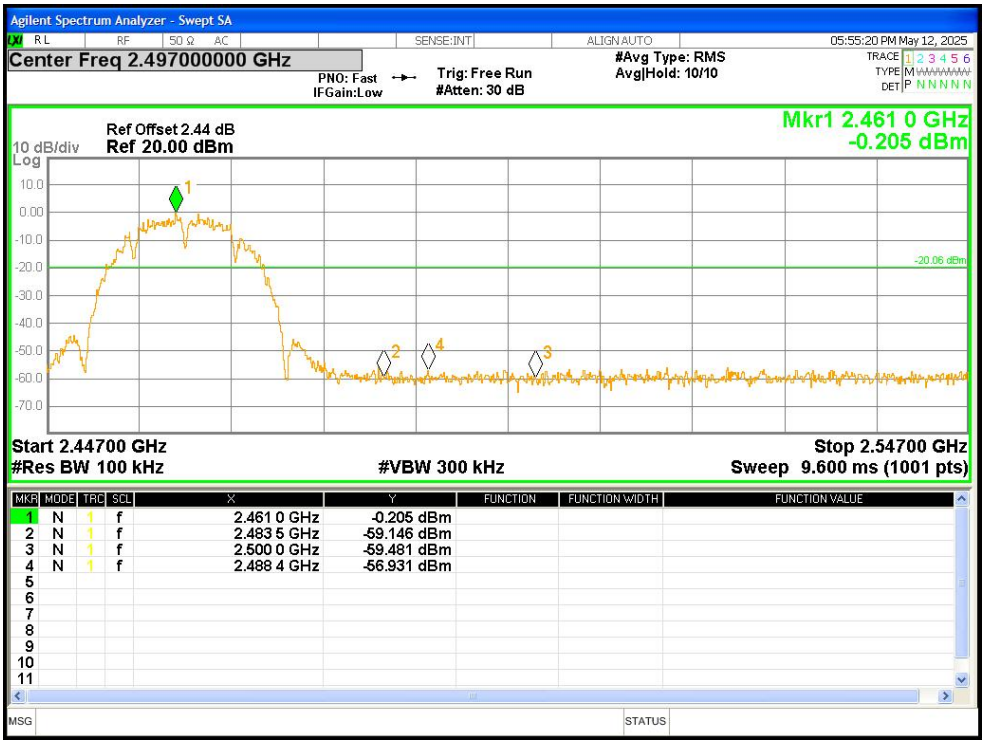

Band Edge NVNT b 2412MHz Ant1 Ref



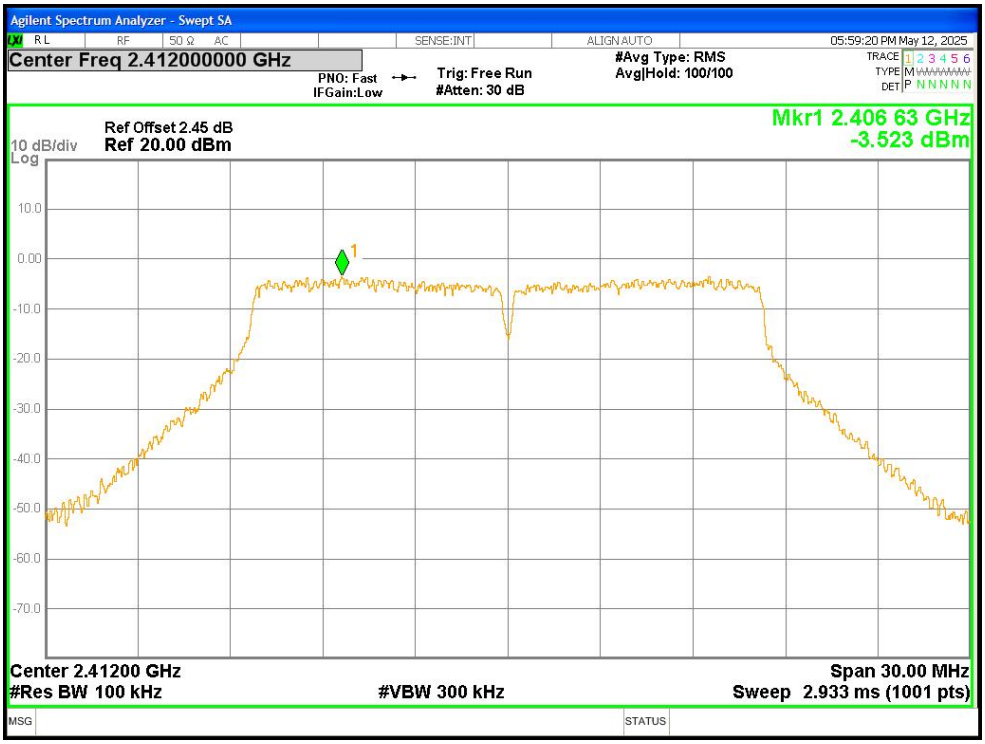

Band Edge NVNT b 2412MHz Ant1 Emission



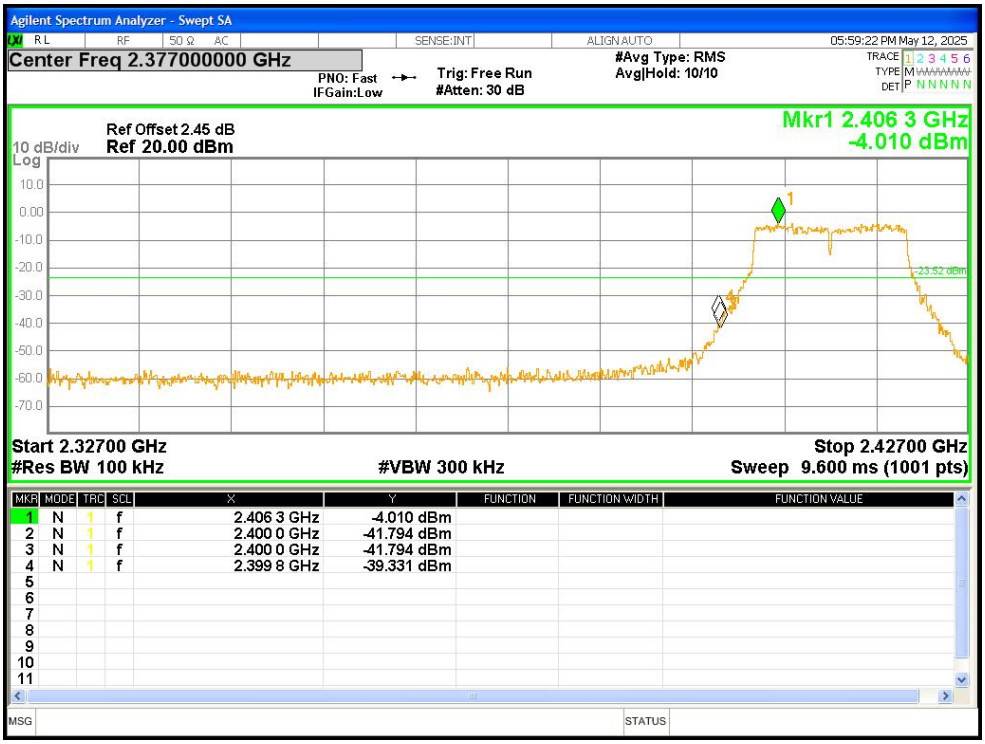

Band Edge NVNT b 2462MHz Ant1 Ref



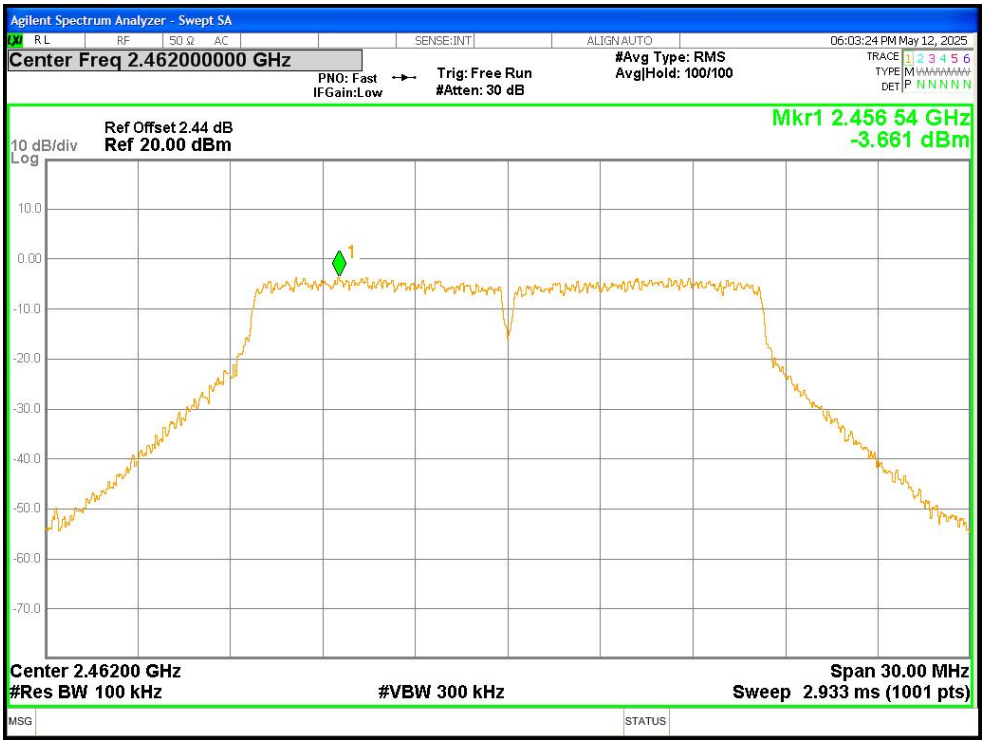

Band Edge NVNT b 2462MHz Ant1 Emission



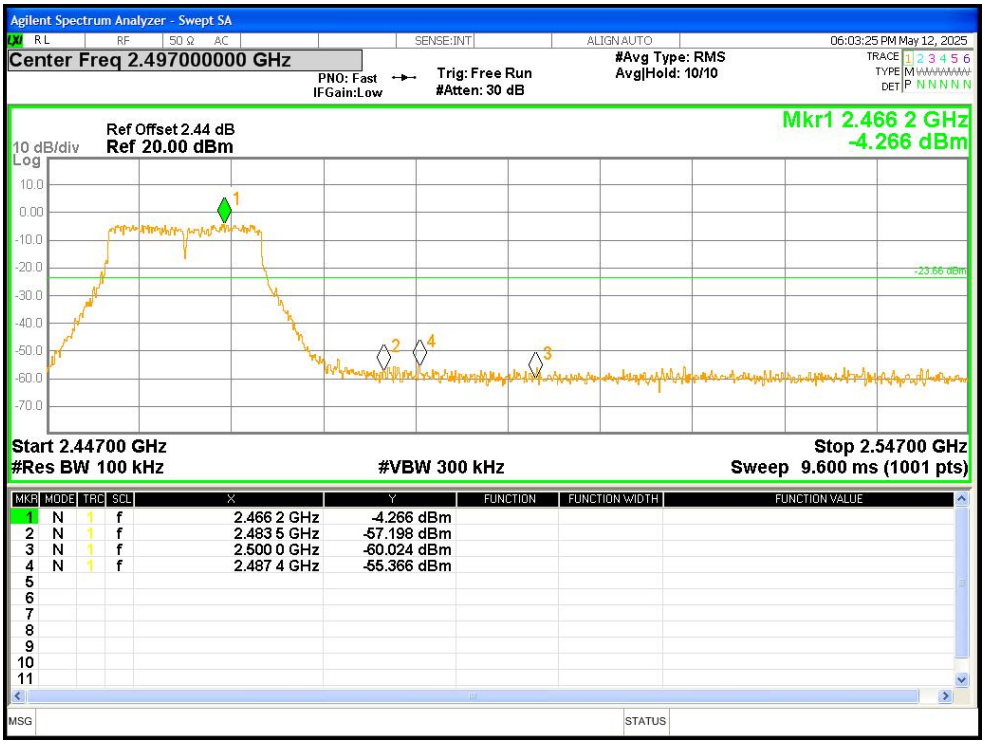

Band Edge NVNT g 2412MHz Ant1 Ref



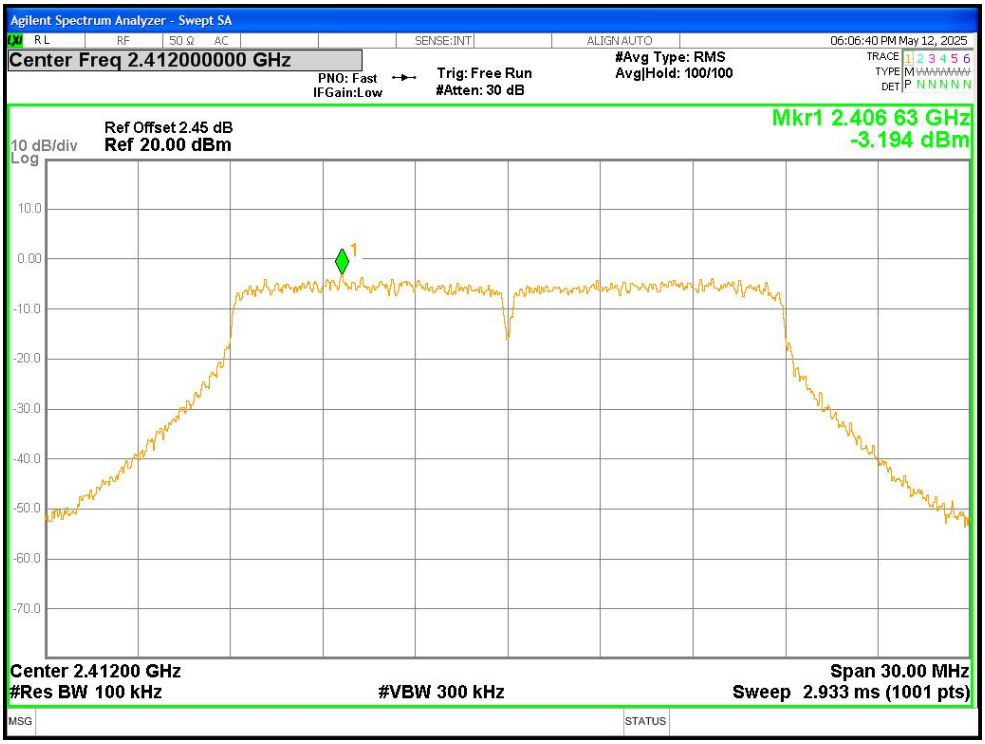

Band Edge NVNT g 2412MHz Ant1 Emission



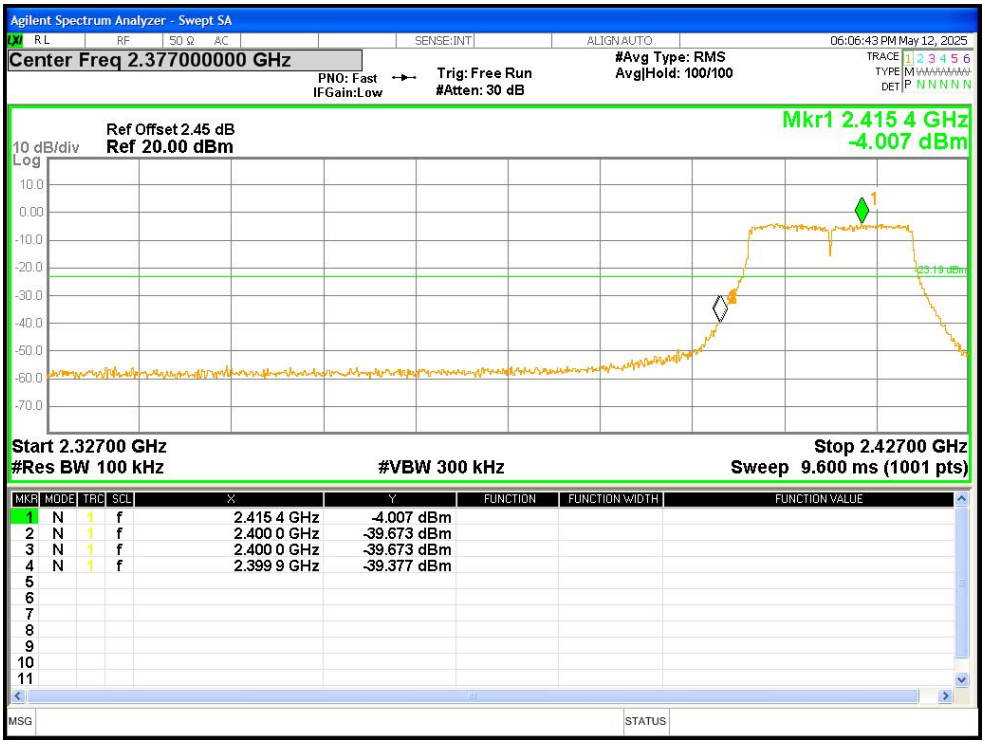

Band Edge NVNT g 2462MHz Ant1 Ref



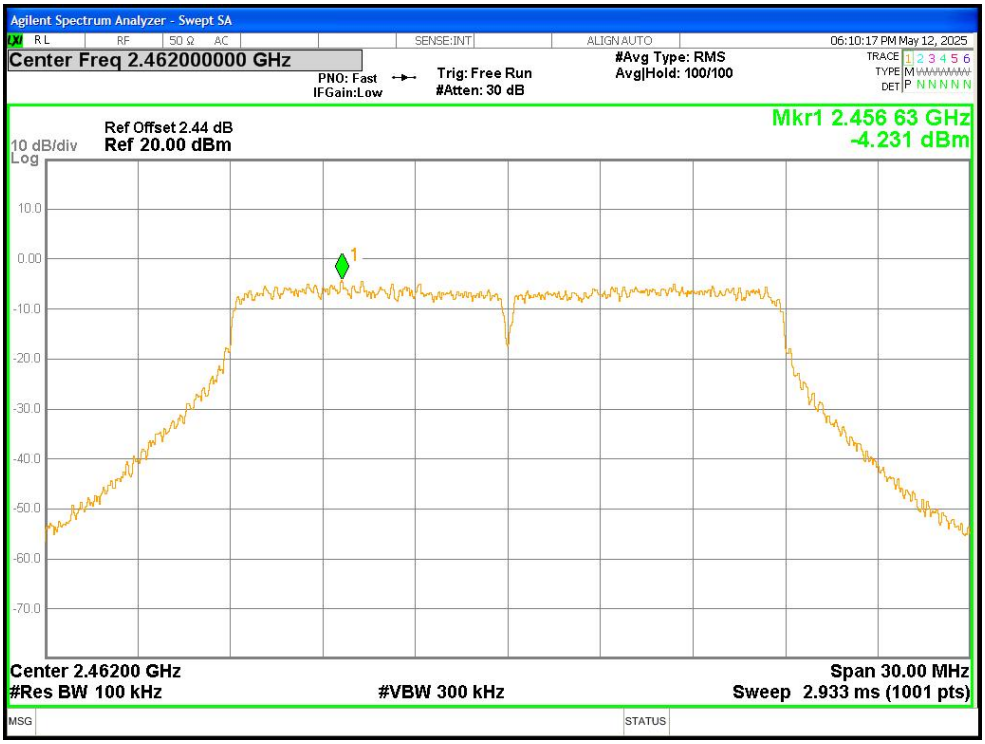

Band Edge NVNT g 2462MHz Ant1 Emission



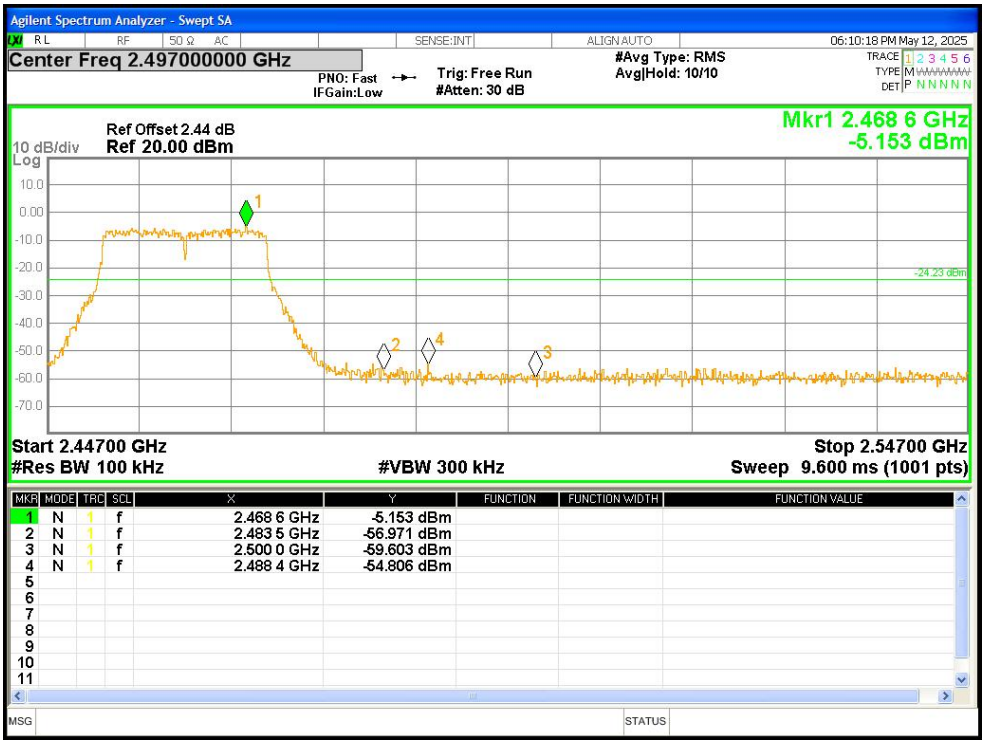

Band Edge NVNT n20 2412MHz Ant1 Ref




Band Edge NVNT n20 2412MHz Ant1 Emission




Band Edge NVNT n20 2462MHz Ant1 Ref




Band Edge NVNT n20 2462MHz Ant1 Emission

## 10. ANTENNA REQUIREMENT

| Standard requirement: | FCC Part15 C Section 15.203 /247(c) |
|---|---|
| 15.203 requirement:<br>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.<br>15.247(c) (1)(i) requirement:<br>(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. | |
| EUT Antenna: | |
| The WIFI 2.4G antenna is Ceramic Antenna, the best case gain for the antenna is +0.31dBi, reference to the appendix II for details | |

## 10. TEST SETUP PHOTO

Reference to the appendix I for details.

## 11. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

**※※※※※ END OF REPORT ※※※※※**