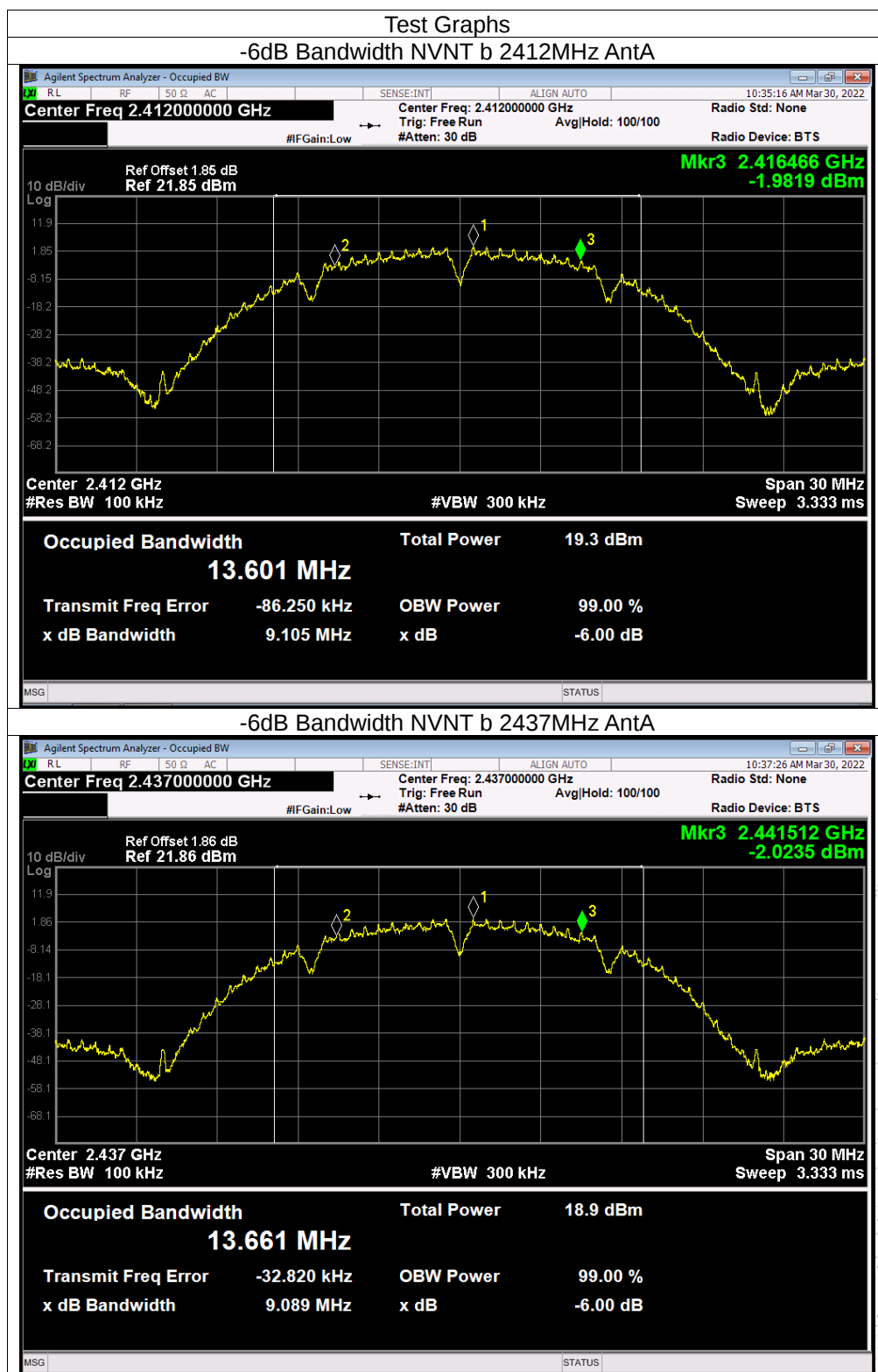


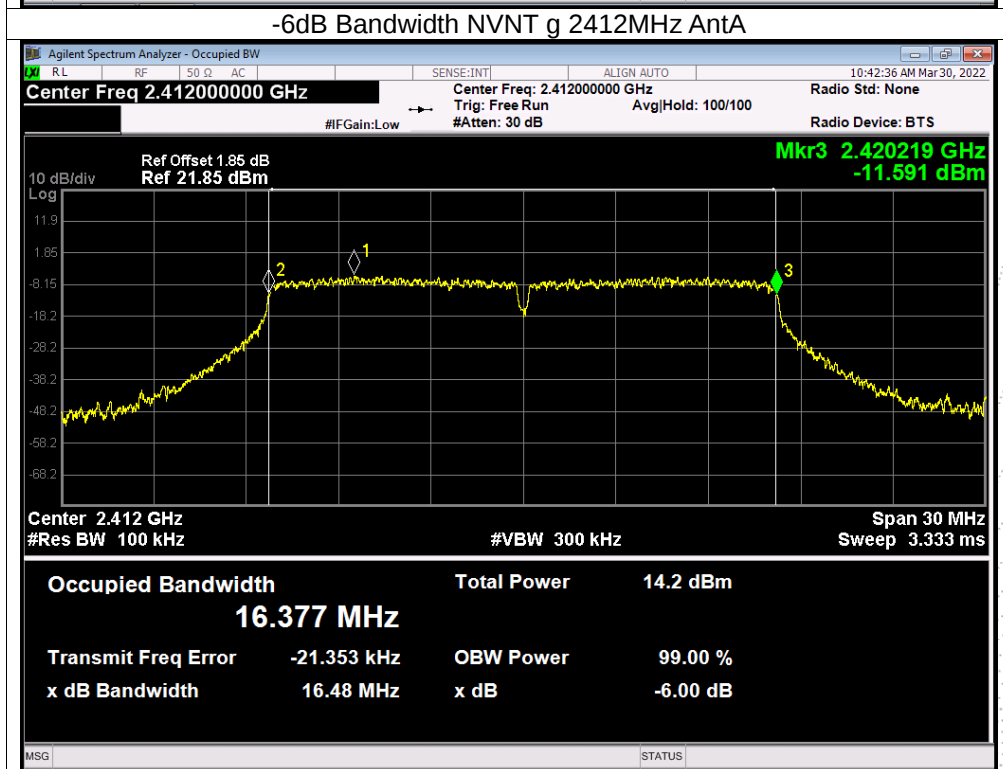
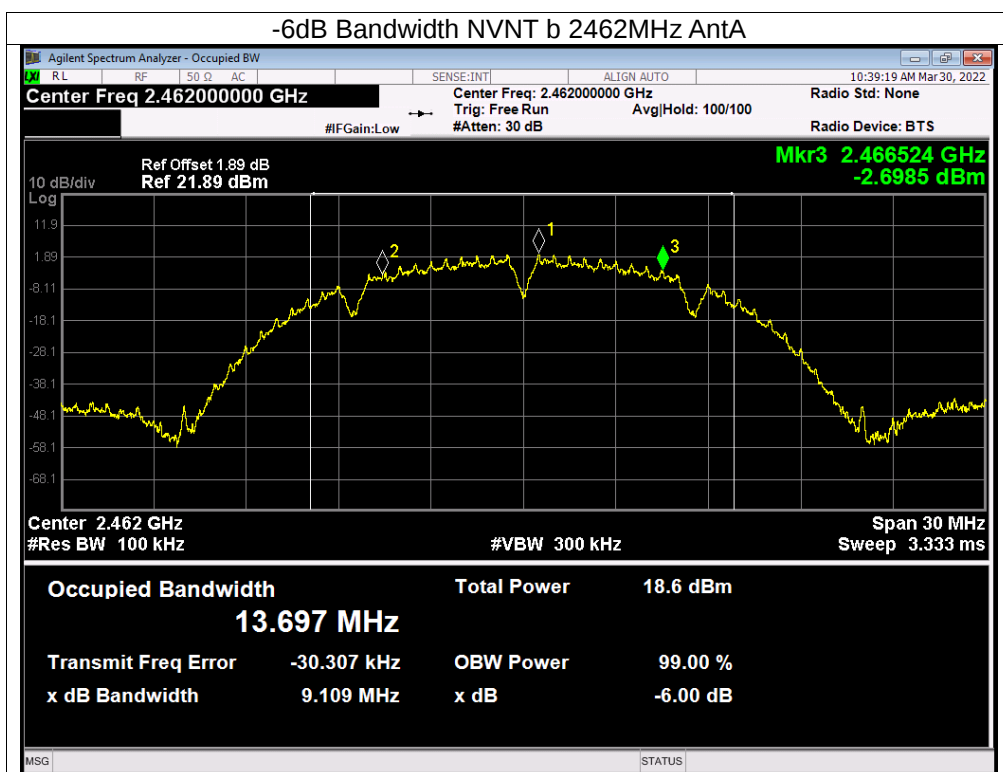
## 10.5 Test Result

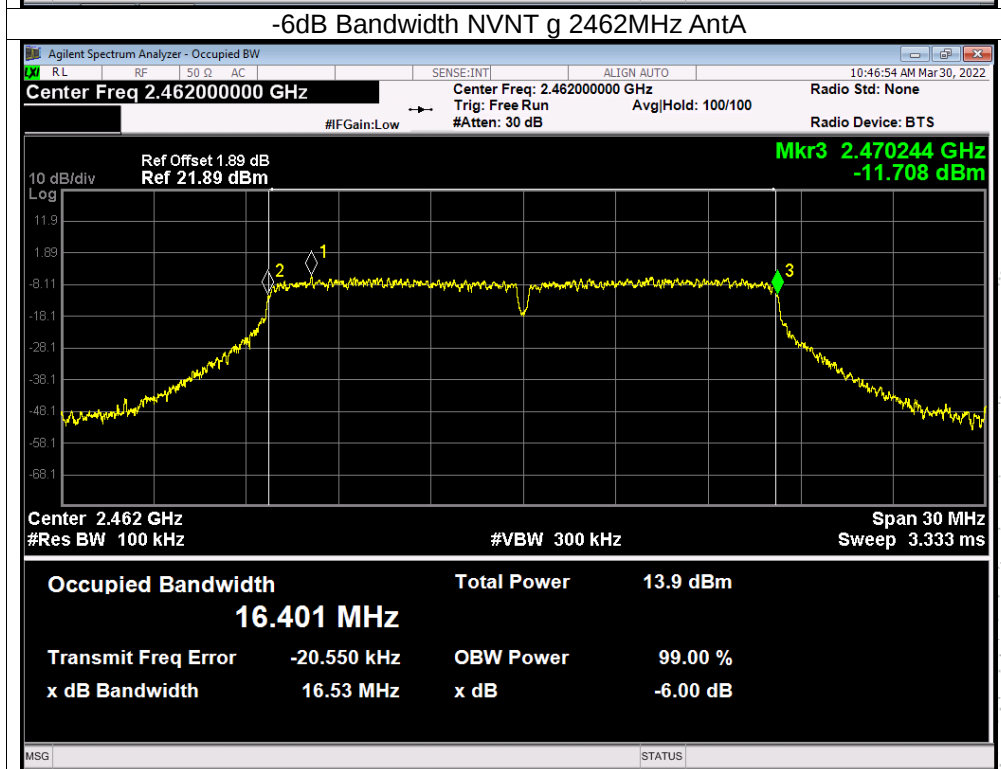
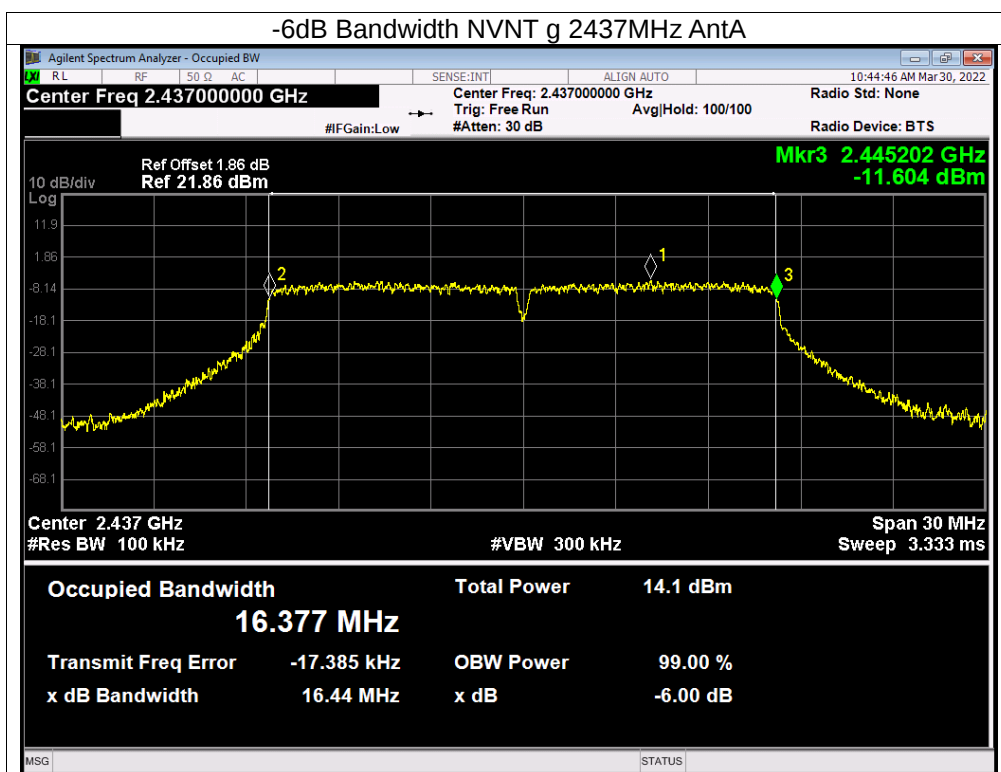
|              |        |                    |             |
|--------------|--------|--------------------|-------------|
| Temperature: | 26 °C  | Relative Humidity: | 54%         |
| Pressure:    | 101KPa | Test Voltage:      | AC120V/60Hz |

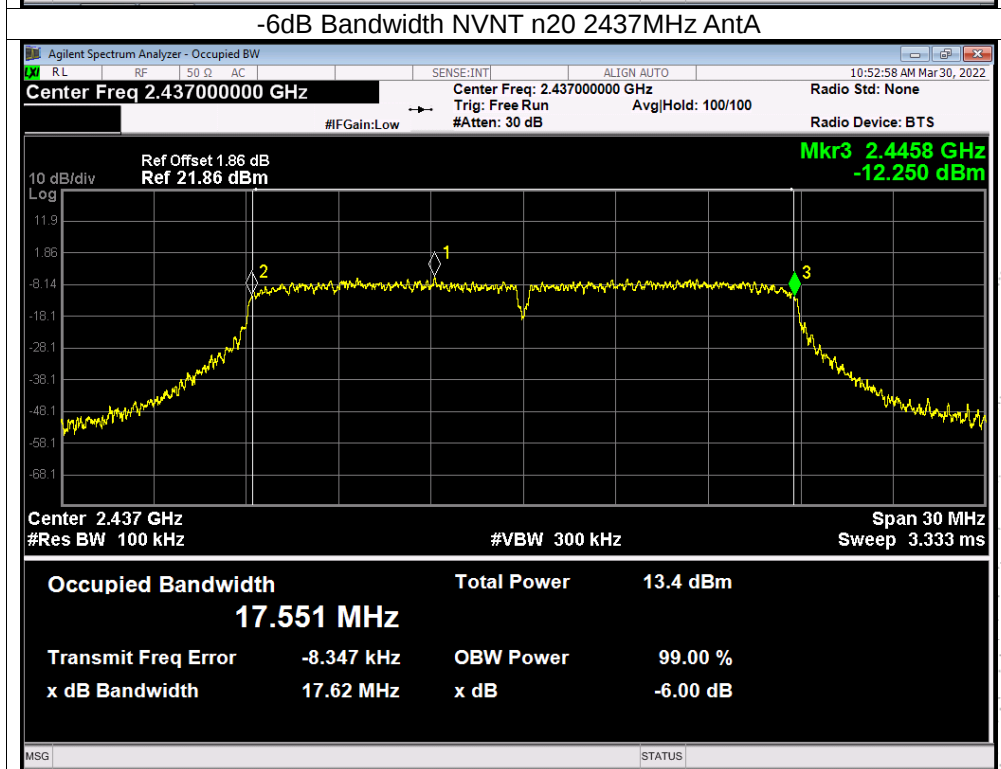
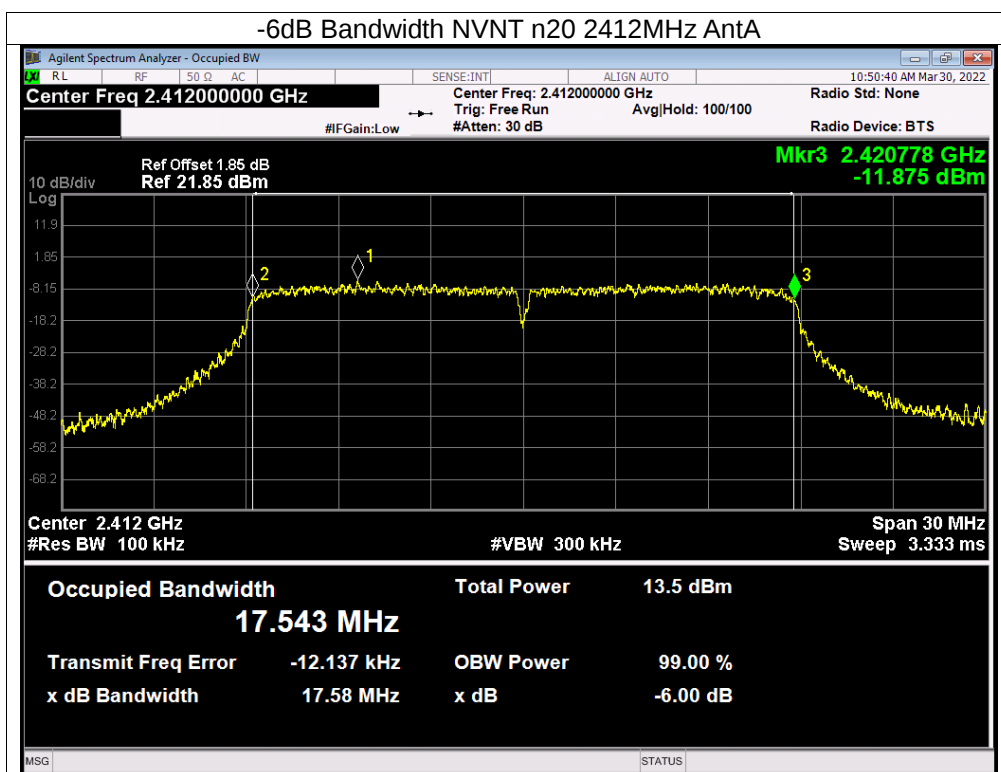
| Test Mode         | Frequency (MHz) | Ant. A<br>-6dB bandwidth (MHz) | Ant. B<br>-6dB bandwidth (MHz) | Limit (kHz) | Result |
|-------------------|-----------------|--------------------------------|--------------------------------|-------------|--------|
| TX b Mode         | 2412            | 9.105                          | 9.092                          | 500         | Pass   |
|                   | 2437            | 9.089                          | 9.067                          | 500         | Pass   |
|                   | 2462            | 9.109                          | 9.100                          | 500         | Pass   |
| TX g Mode         | 2412            | 16.481                         | 16.414                         | 500         | Pass   |
|                   | 2437            | 16.439                         | 16.432                         | 500         | Pass   |
|                   | 2462            | 16.528                         | 16.417                         | 500         | Pass   |
| TX n<br>Mode(20M) | 2412            | 17.581                         | 17.591                         | 500         | Pass   |
|                   | 2437            | 17.617                         | 17.604                         | 500         | Pass   |
|                   | 2462            | 17.610                         | 17.594                         | 500         | Pass   |
| TX n<br>Mode(40M) | 2422            | 36.394                         | 36.436                         | 500         | Pass   |
|                   | 2437            | 36.455                         | 36.418                         | 500         | Pass   |
|                   | 2452            | 36.467                         | 36.431                         | 500         | Pass   |

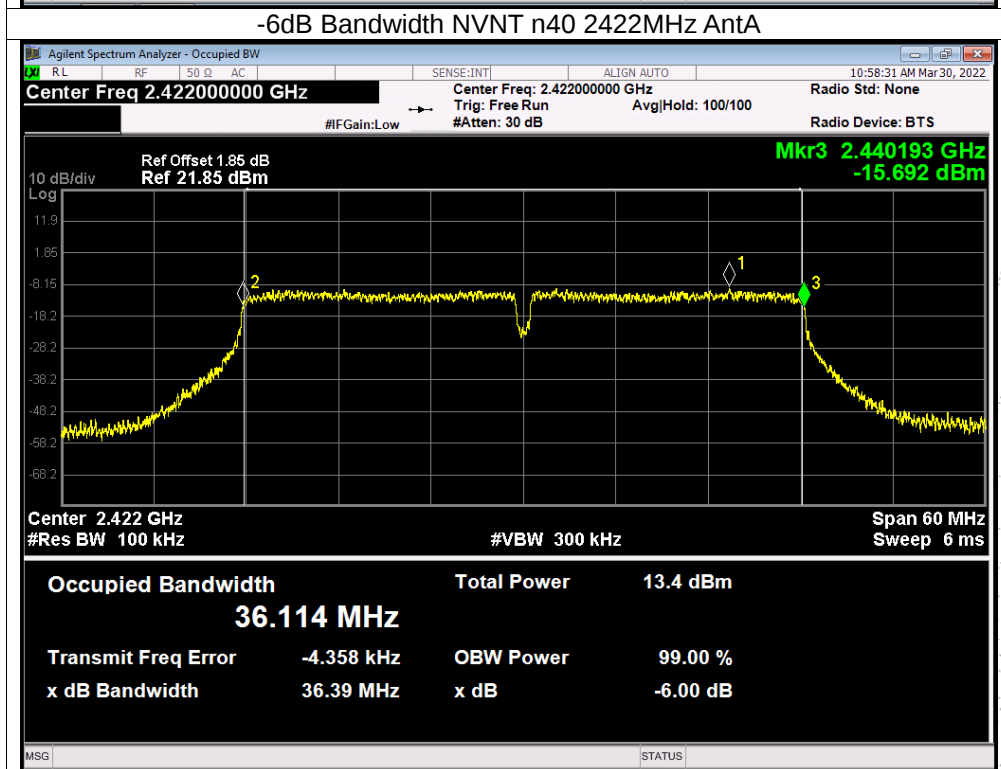
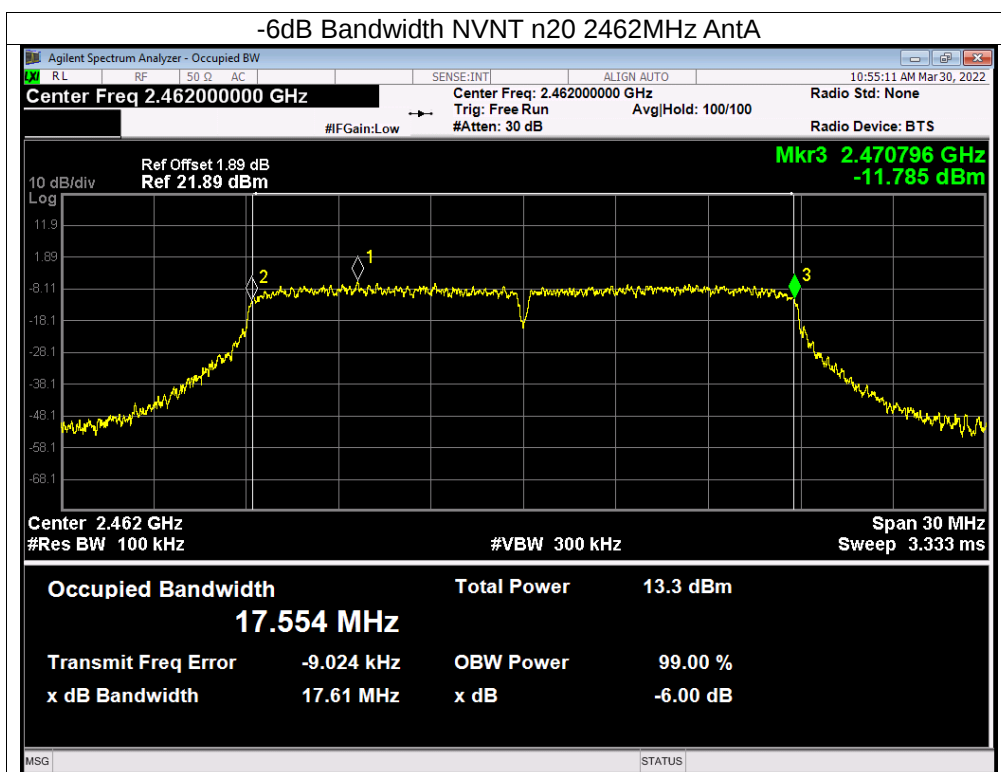
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

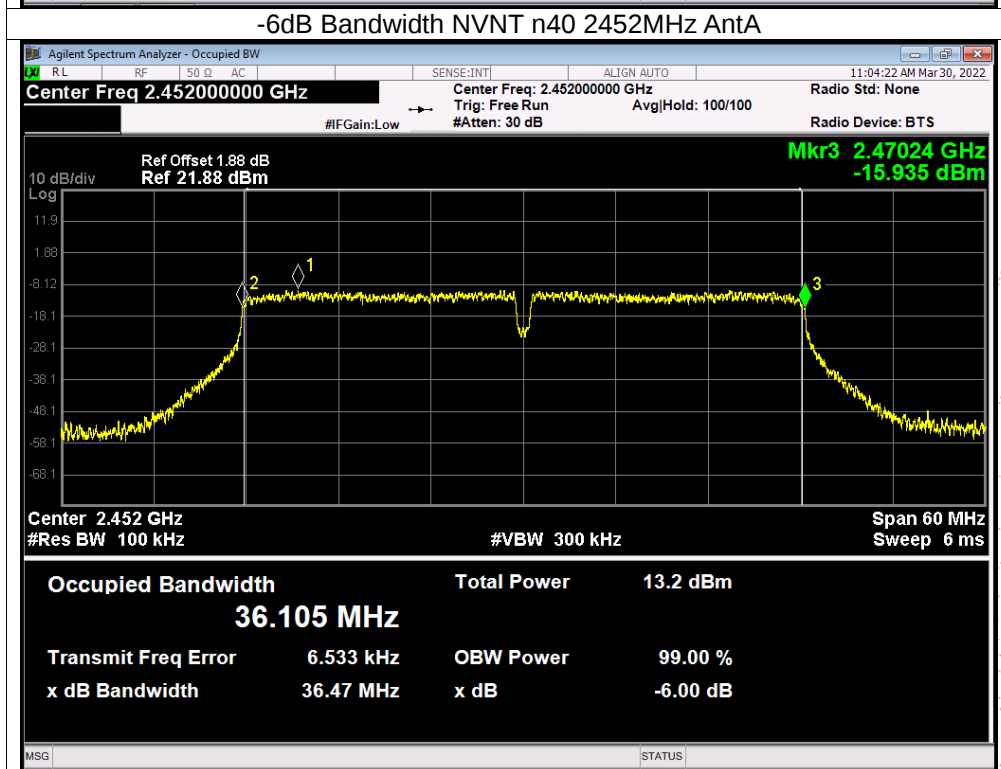
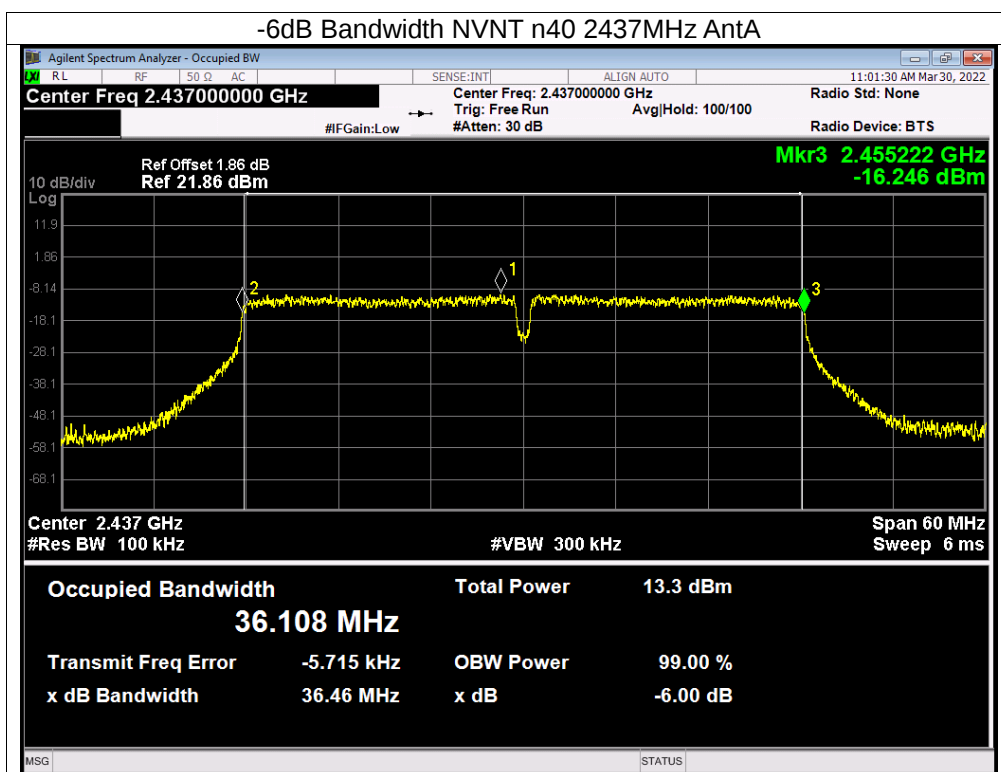












## 11. Peak Output Power Test

### 11.1 Block Diagram Of Test Setup



### 11.2 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   |

### 11.3 Test Procedure

- The EUT was directly connected to the Power meter

### 11.4 EUT Operating Conditions

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Note: Power Spectral Density(dBm)=Reading+Cable Loss

## 11.5 Test Result

|              |        |                    |             |
|--------------|--------|--------------------|-------------|
| Temperature: | 26 °C  | Relative Humidity: | 54%         |
| Pressure:    | 101KPa | Test Voltage:      | AC120V/60Hz |

| Test Mode | Frequency(MHz) | Ant A<br>Maximum<br>Conducted Output<br>Power(PK) (dBm) | Ant B<br>Maximum<br>Conducted Output<br>Power(PK) (dBm) | Total Power<br>Conducted<br>Output<br>Power(PK)<br>(dBm) | Limit (dBm) |
|-----------|----------------|---------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------|-------------|
| 802.11b   | 2412           | 14.50                                                   | 13.05                                                   | /                                                        | 30          |
|           | 2437           | 14.12                                                   | 12.95                                                   | /                                                        | 30          |
|           | 2462           | 13.73                                                   | 12.83                                                   | /                                                        | 30          |
| 802.11g   | 2412           | 13.18                                                   | 12.17                                                   | /                                                        | 30          |
|           | 2437           | 13.07                                                   | 12.20                                                   | /                                                        | 30          |
|           | 2462           | 12.90                                                   | 12.03                                                   | /                                                        | 30          |
| 802.11n20 | 2412           | 12.84                                                   | 11.41                                                   | 15.19                                                    | 30          |
|           | 2437           | 12.71                                                   | 11.21                                                   | 15.03                                                    | 30          |
|           | 2462           | 12.56                                                   | 11.10                                                   | 14.90                                                    | 30          |
| 802.11n40 | 2422           | 12.20                                                   | 10.37                                                   | 14.39                                                    | 30          |
|           | 2437           | 12.14                                                   | 10.31                                                   | 14.33                                                    | 30          |
|           | 2452           | 12.08                                                   | 10.34                                                   | 14.31                                                    | 30          |

## 12. 100 kHz Bandwidth Of Frequency Band Edge

### 12.1 Block Diagram Of Test Setup



### 12.2 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

### 12.3 Test Procedure

Using the following spectrum analyzer setting:

- a) Set the RBW = 100KHz.
- b) Set the VBW = 300KHz.
- c) Sweep time = auto couple.
- d) Detector function = peak.
- e) Trace mode = max hold.
- f) Allow trace to fully stabilize..

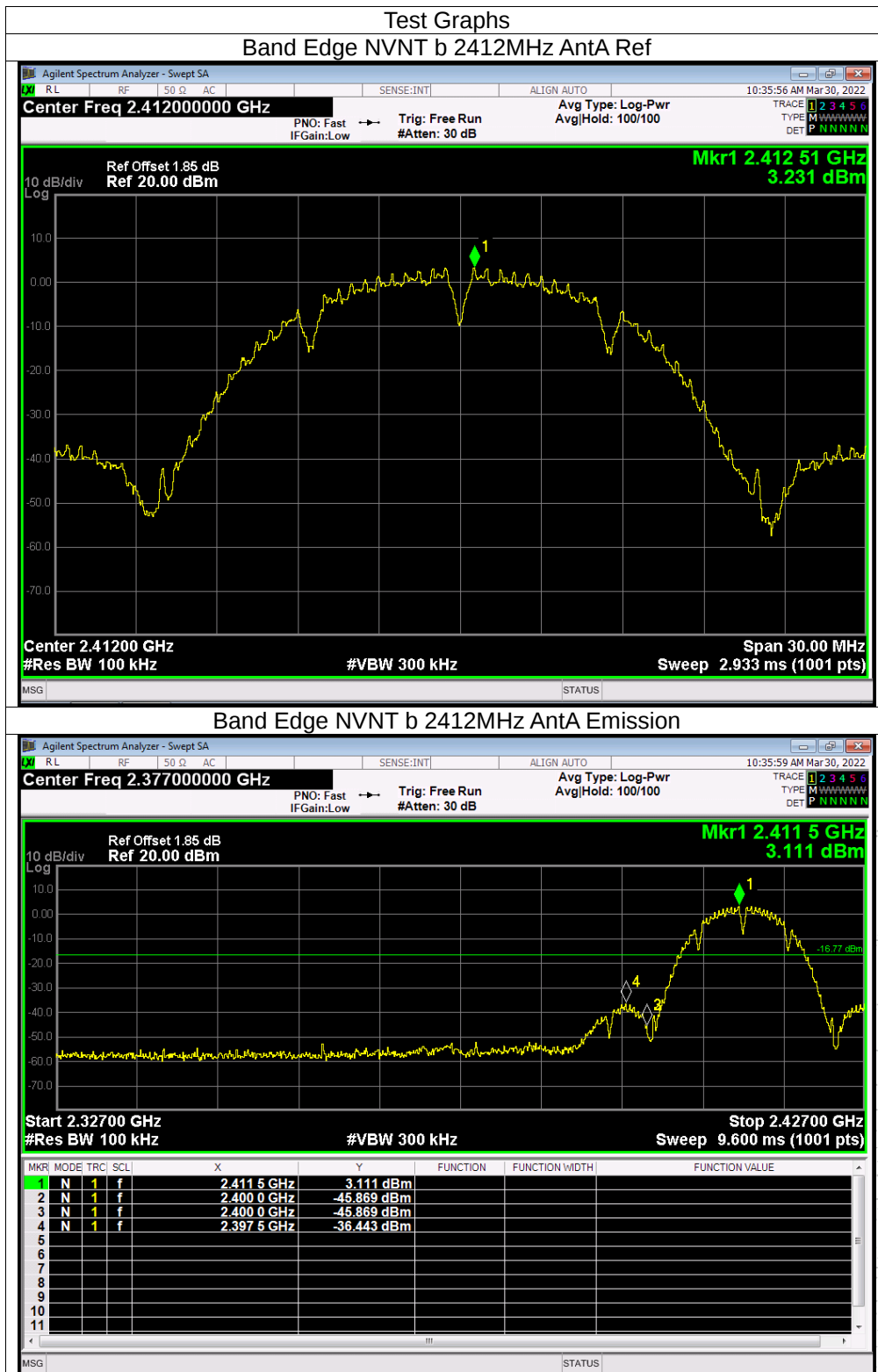
### 12.4 EUT Operating Conditions

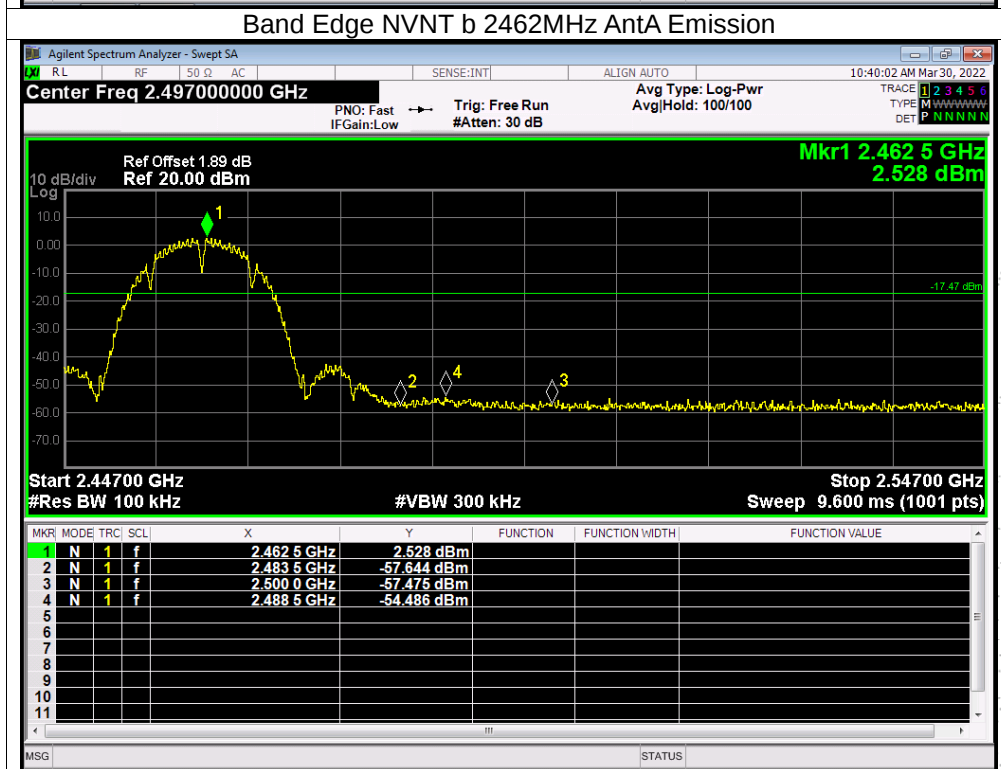
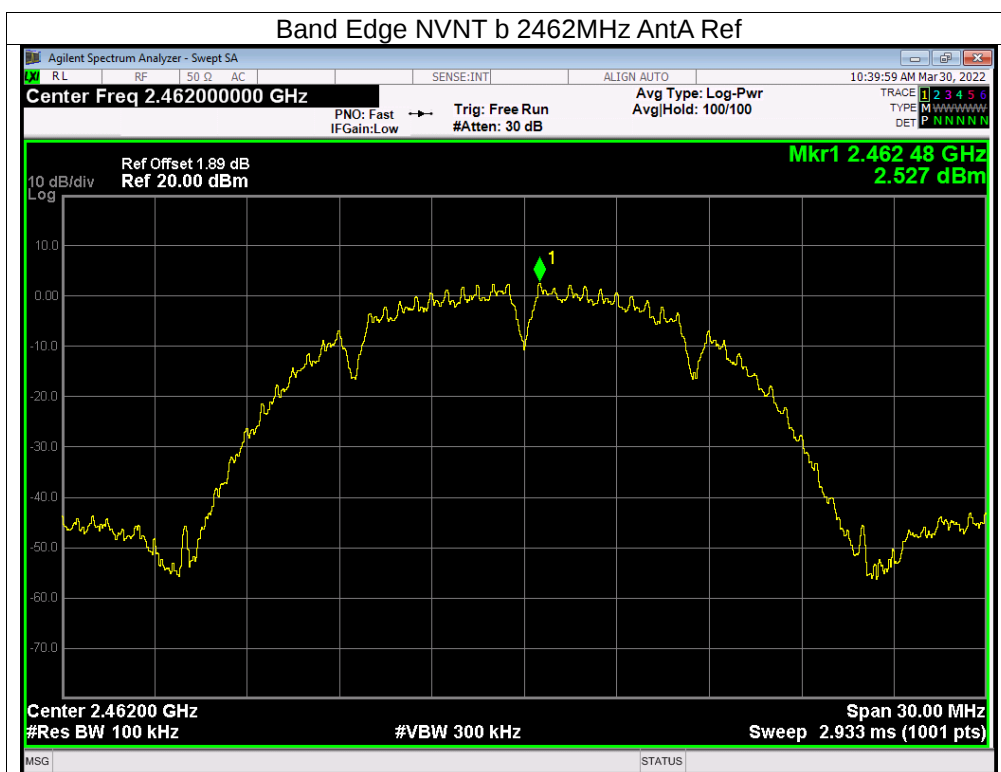
The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

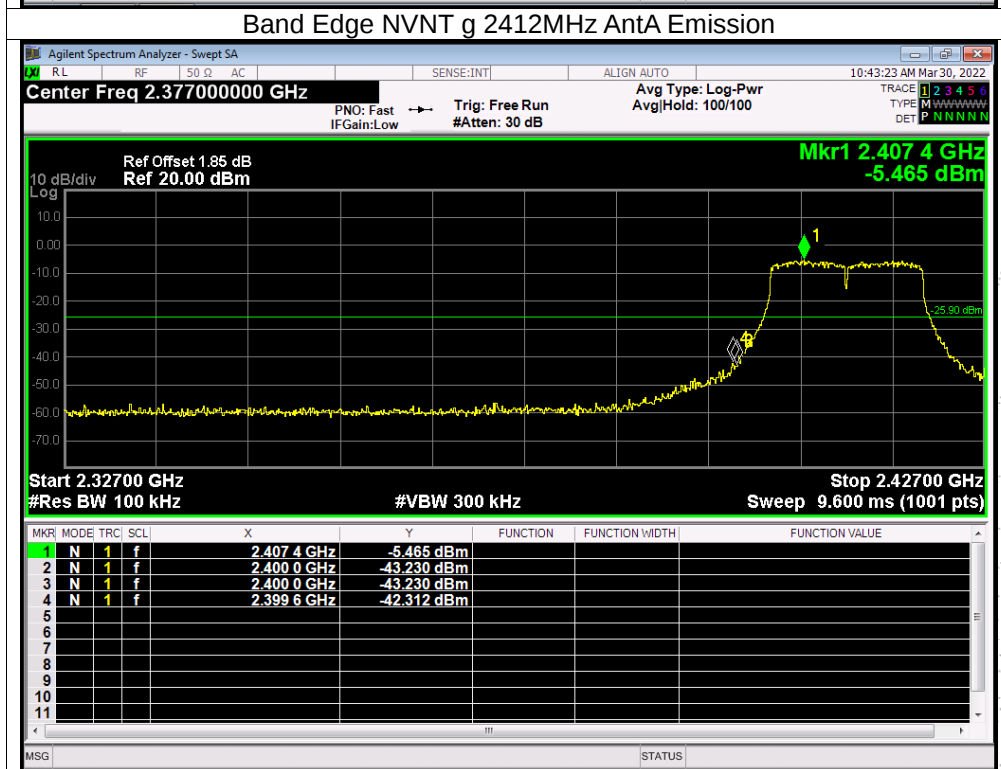
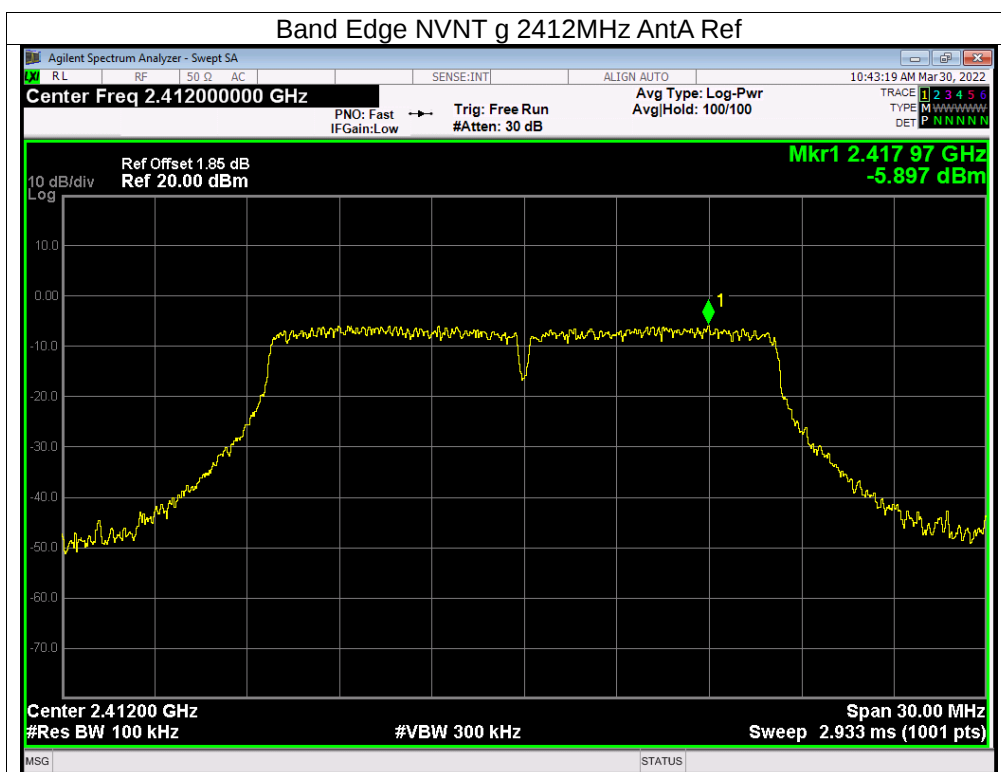
Note: Power Spectral Density(dBm)=Reading+Cable Loss

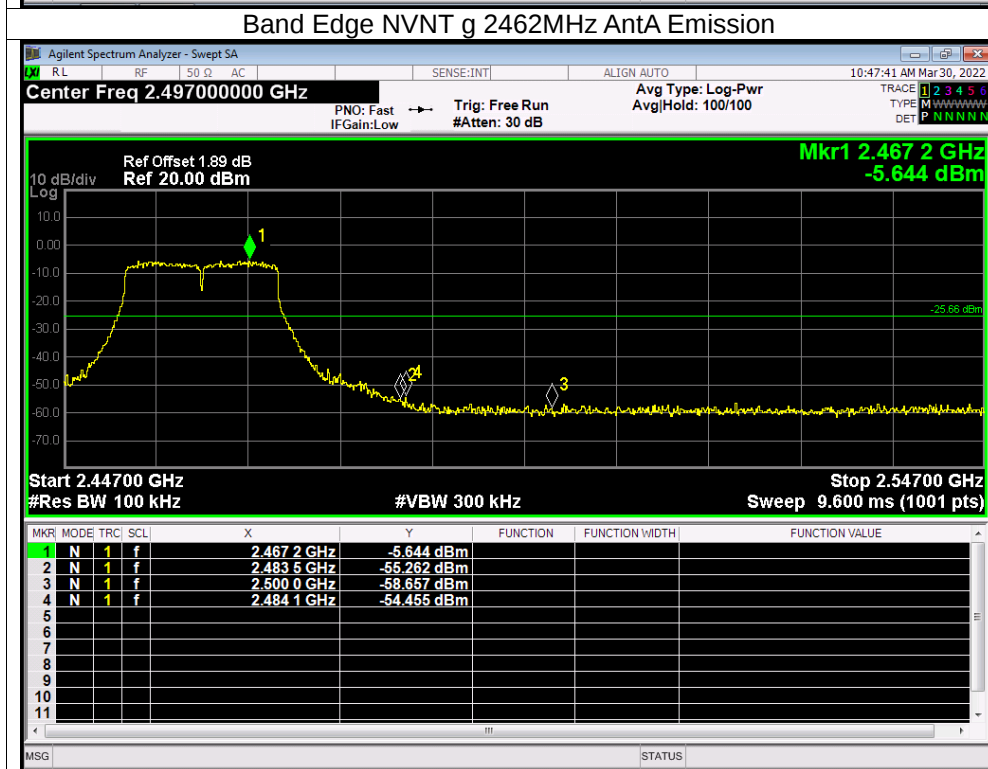
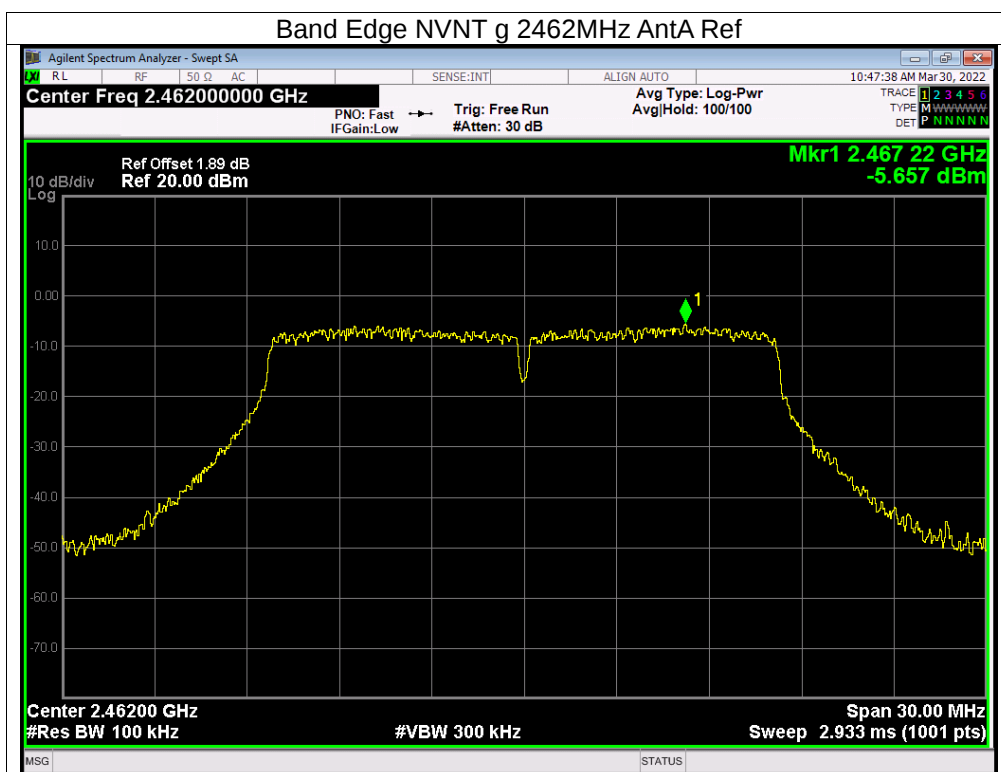
## 12.5 Test Result

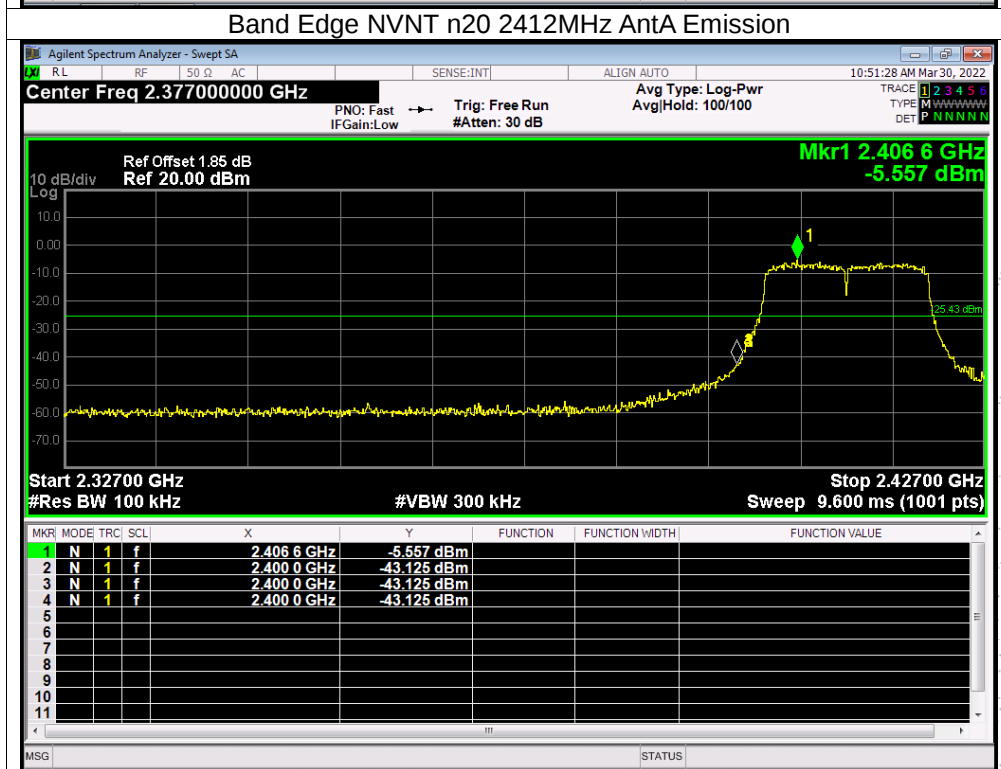
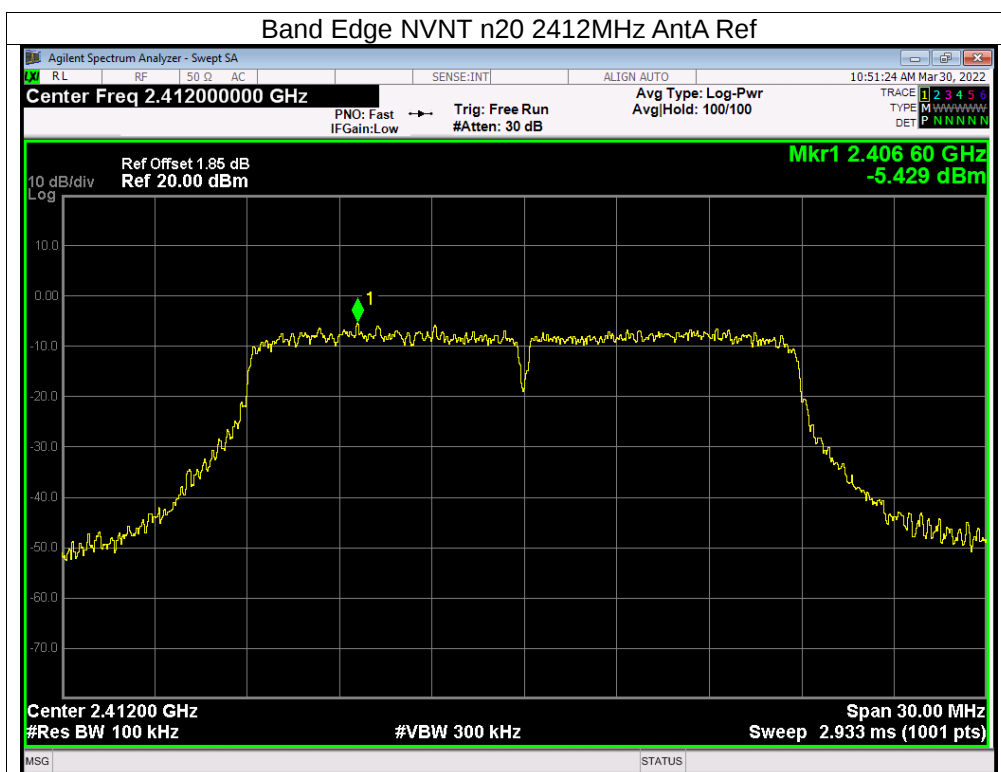
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

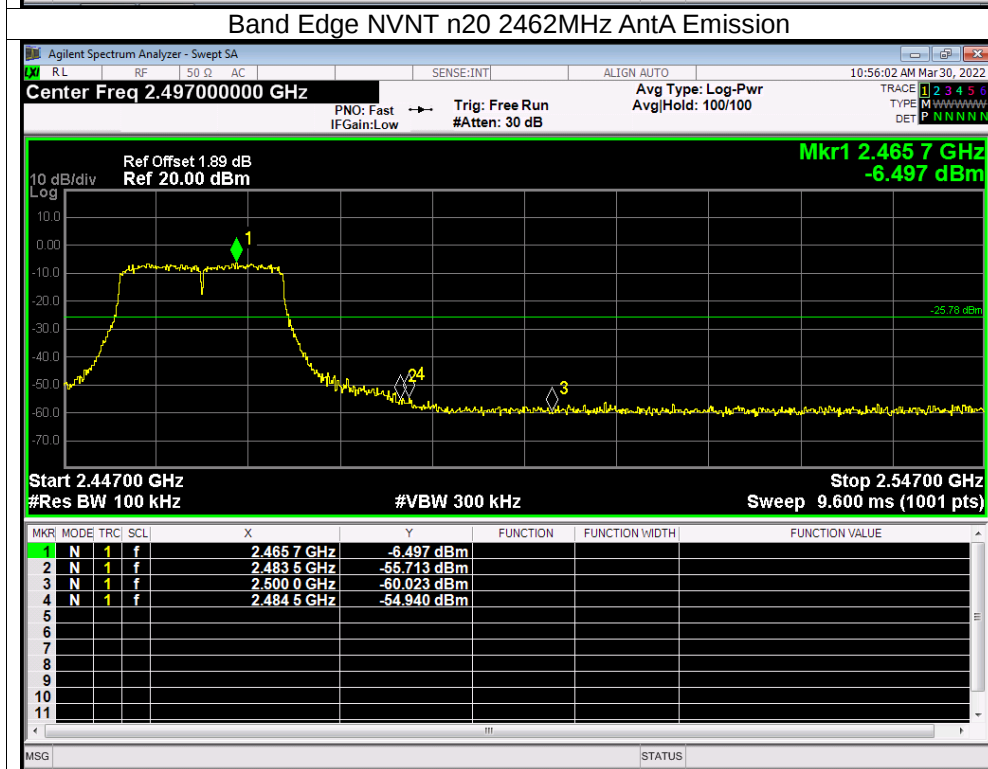
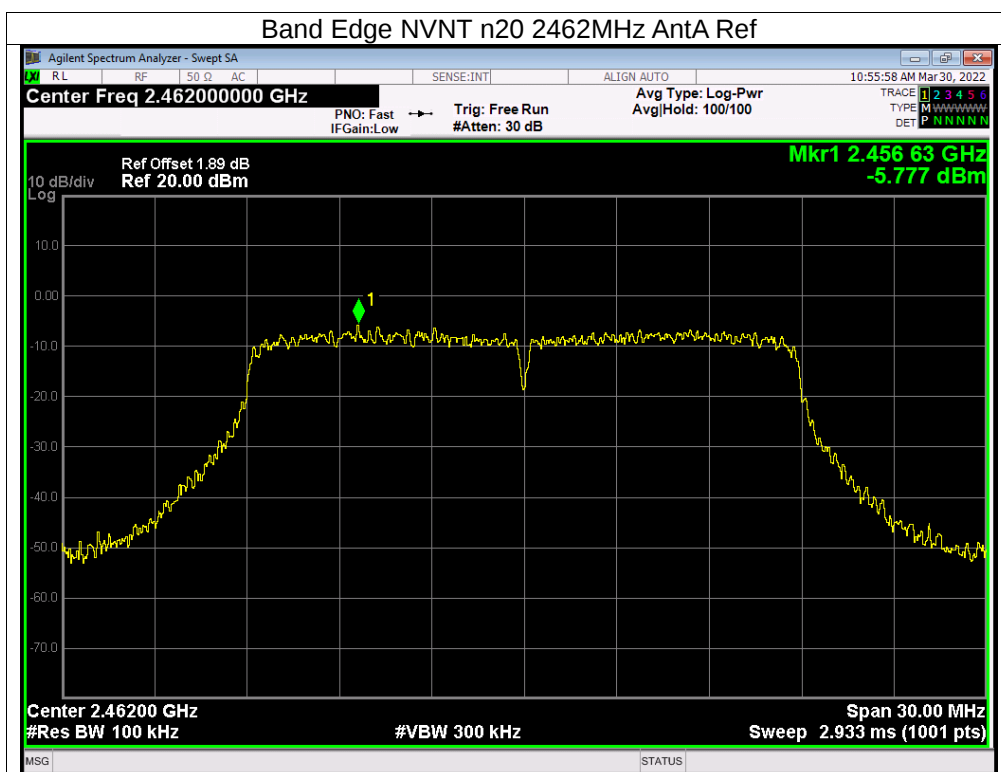


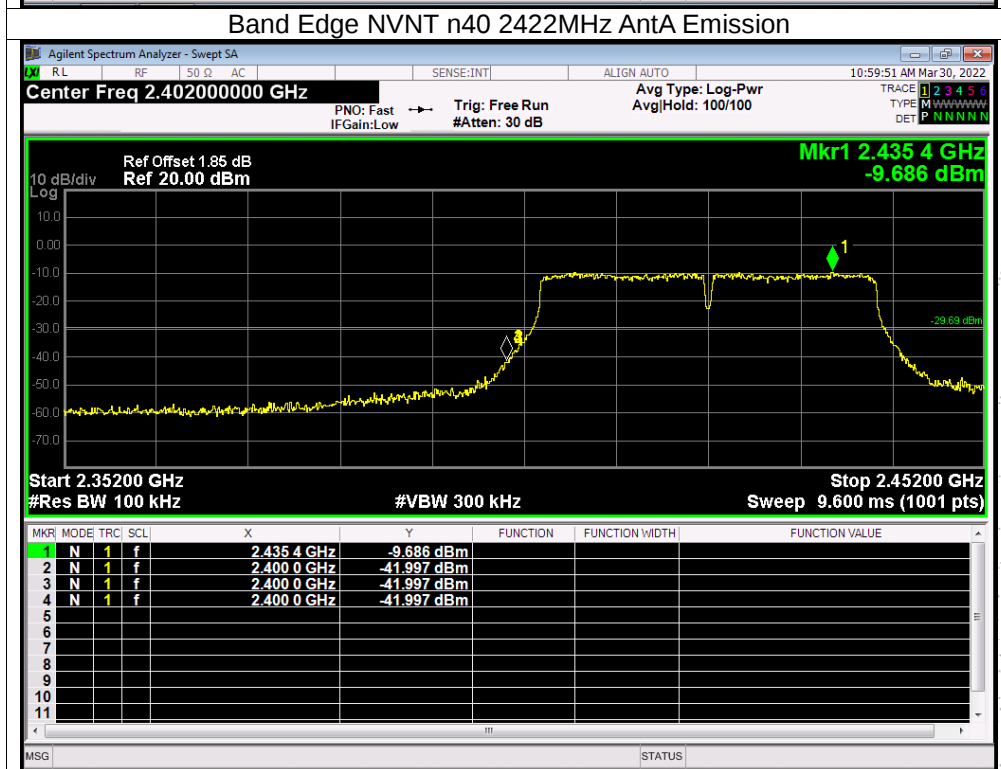
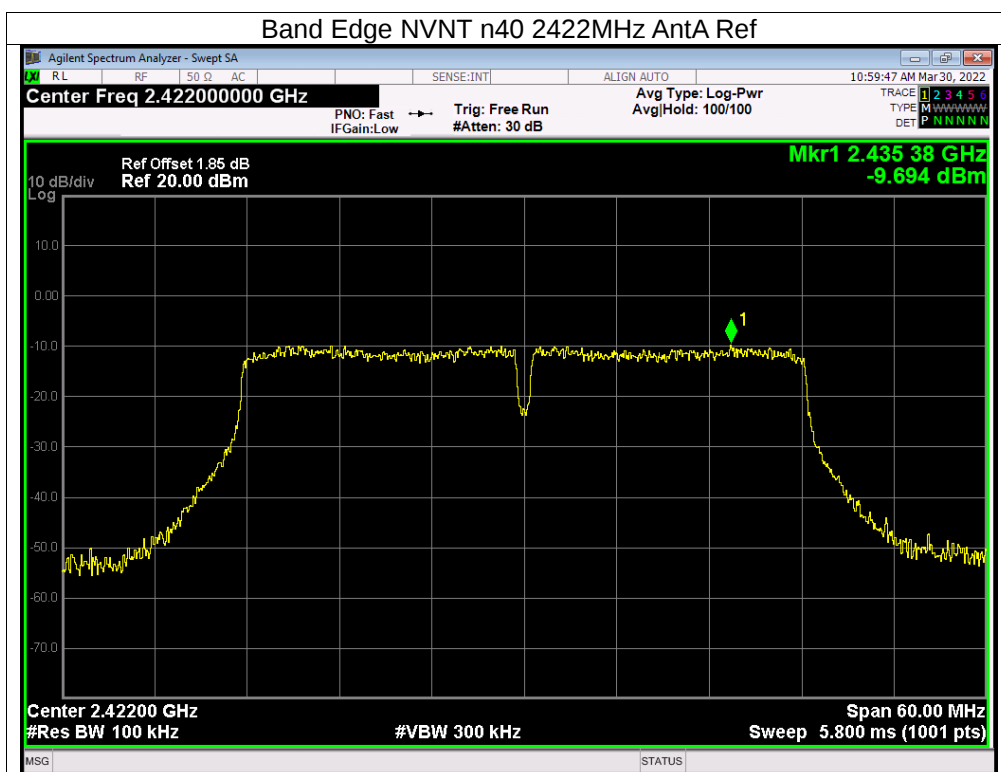


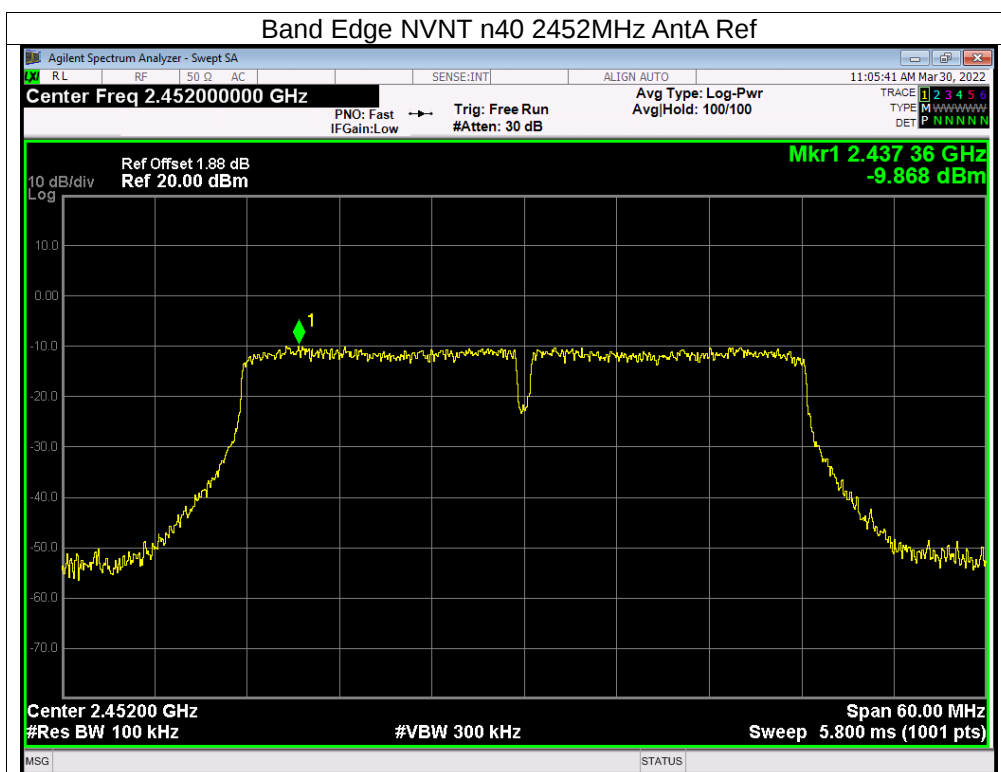


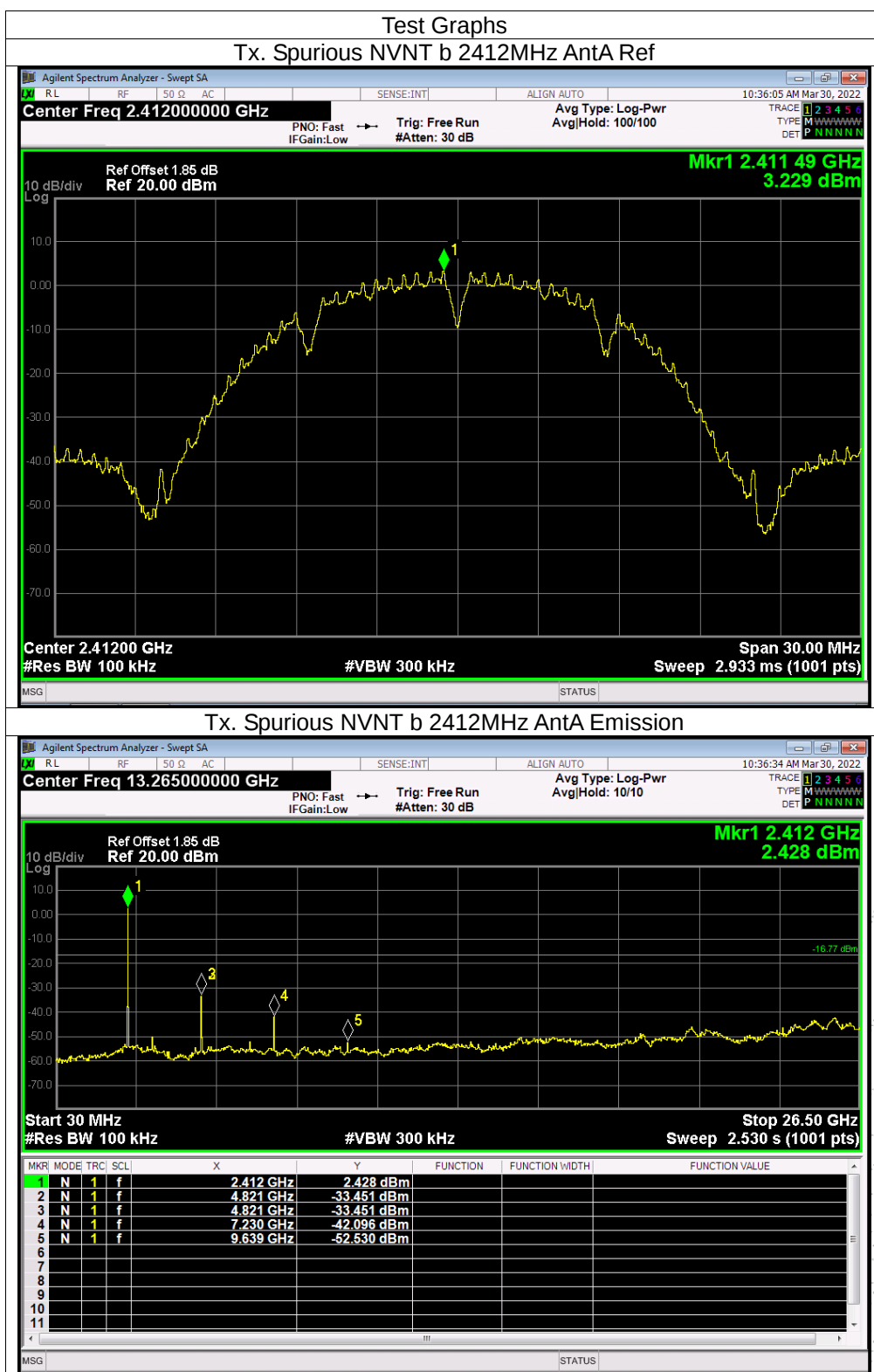


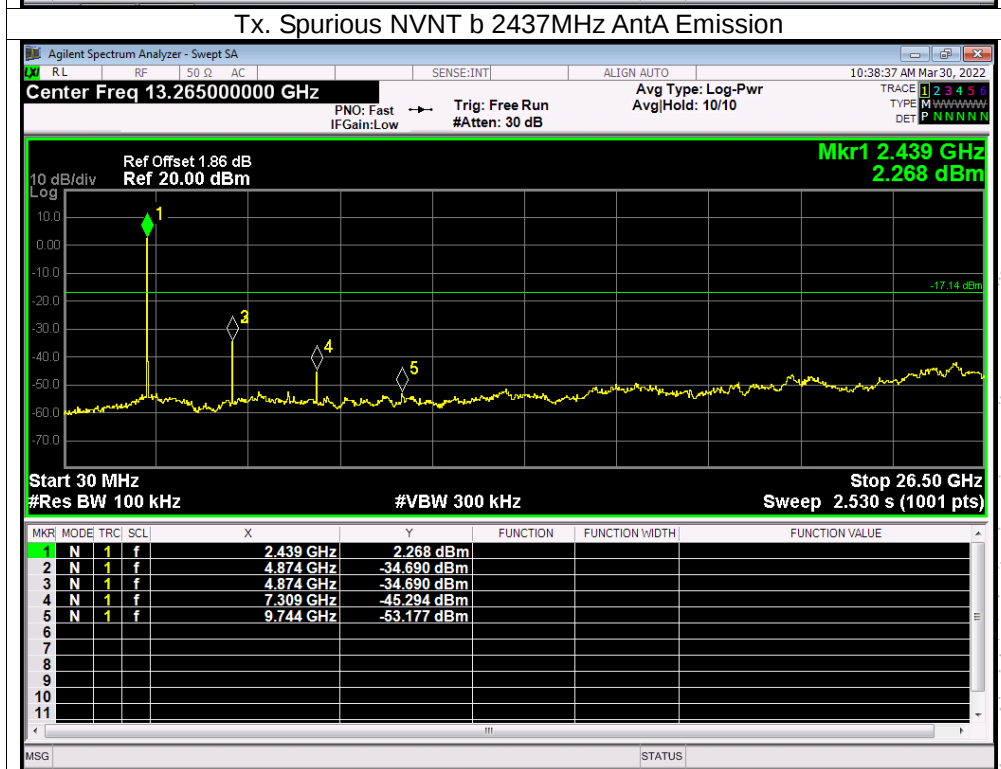
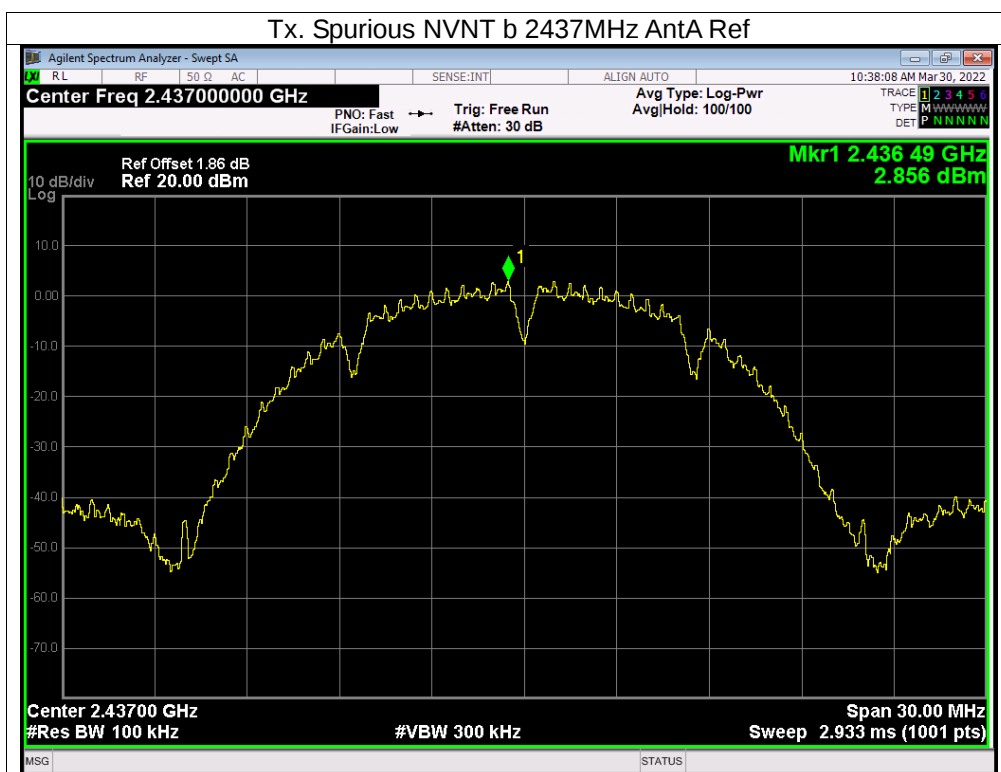


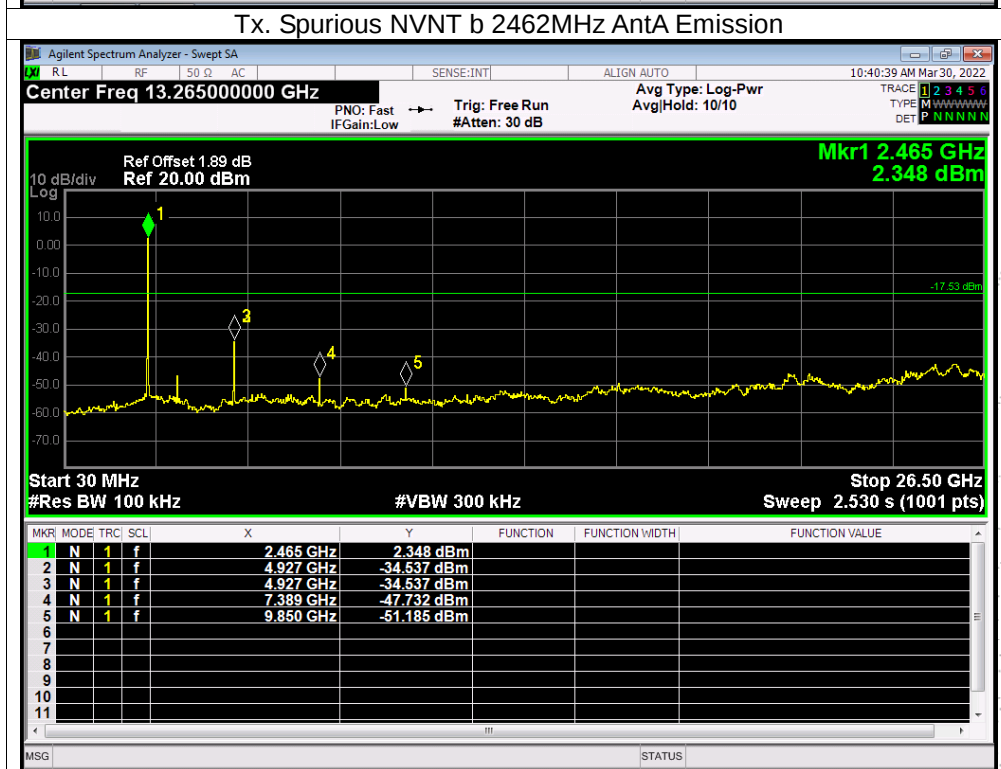
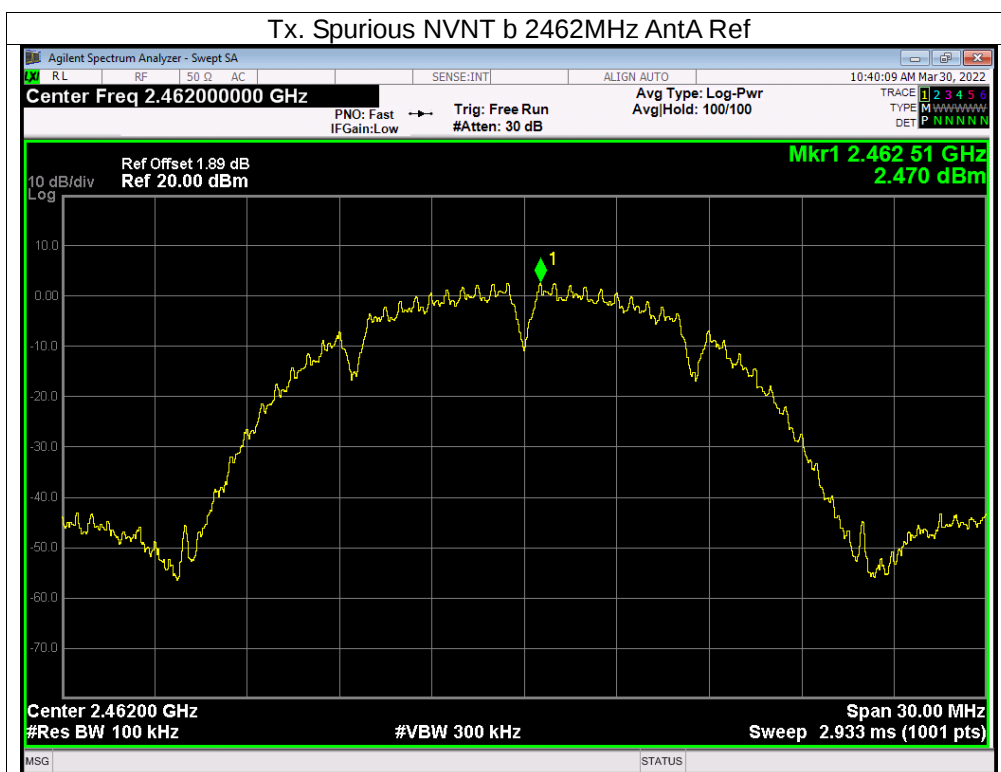


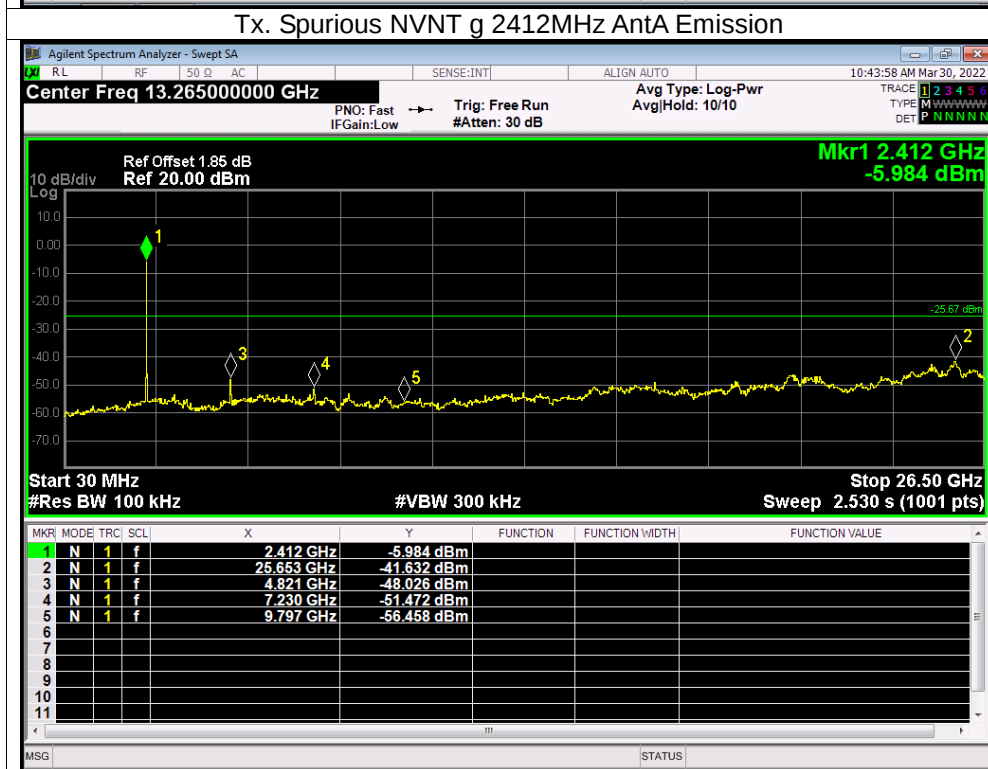
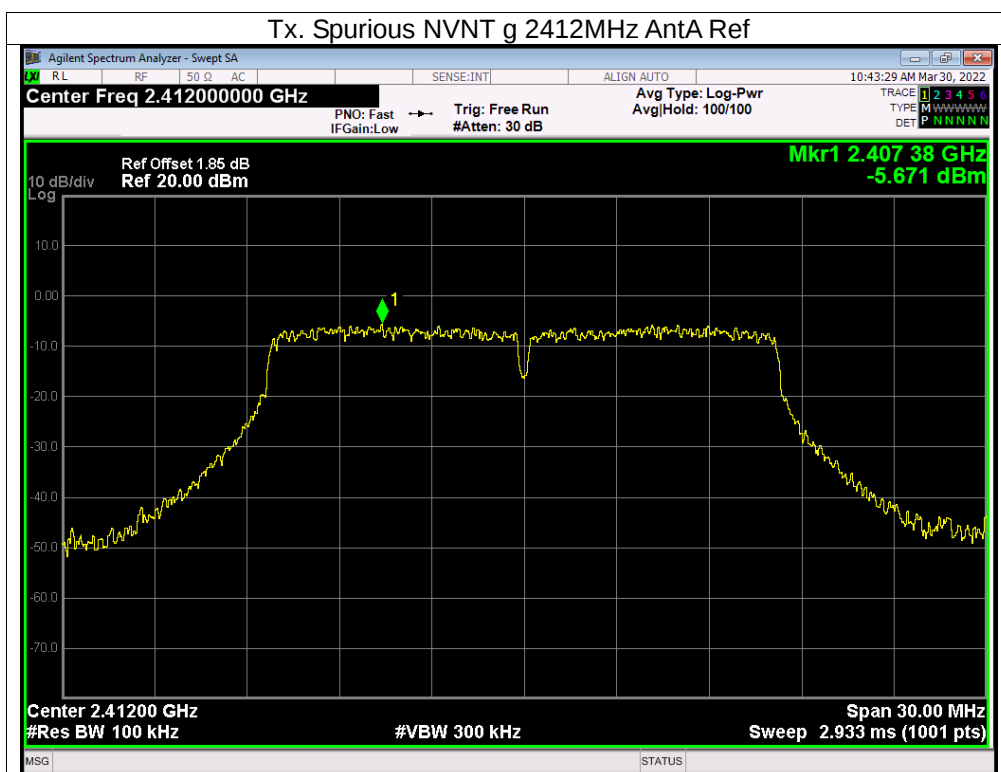


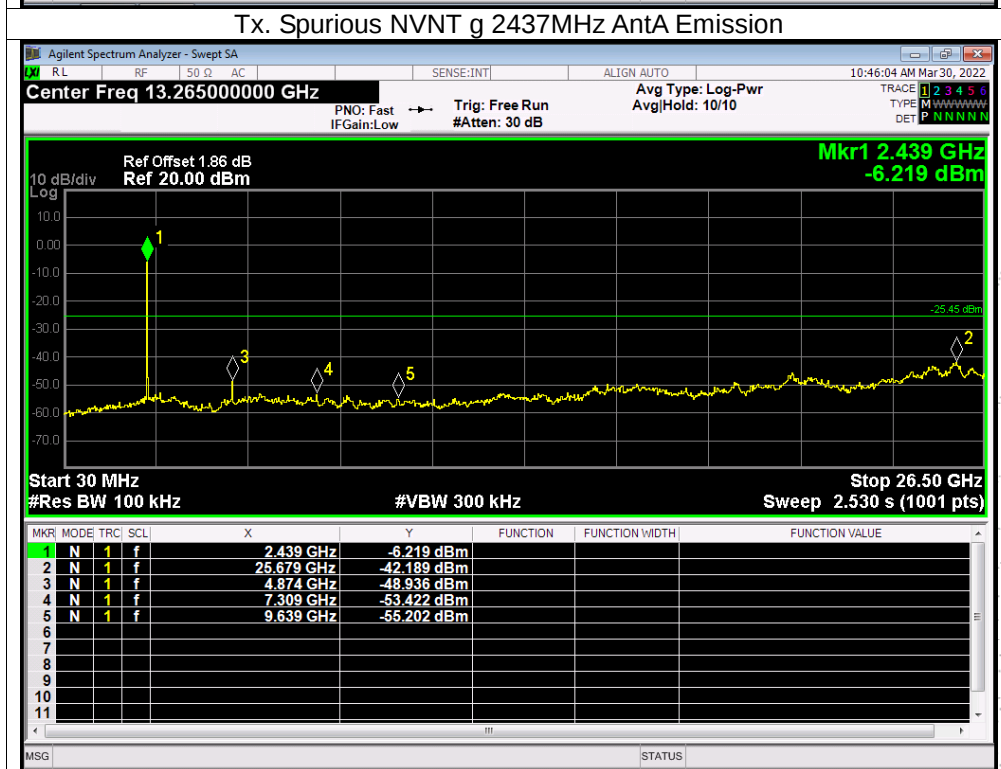
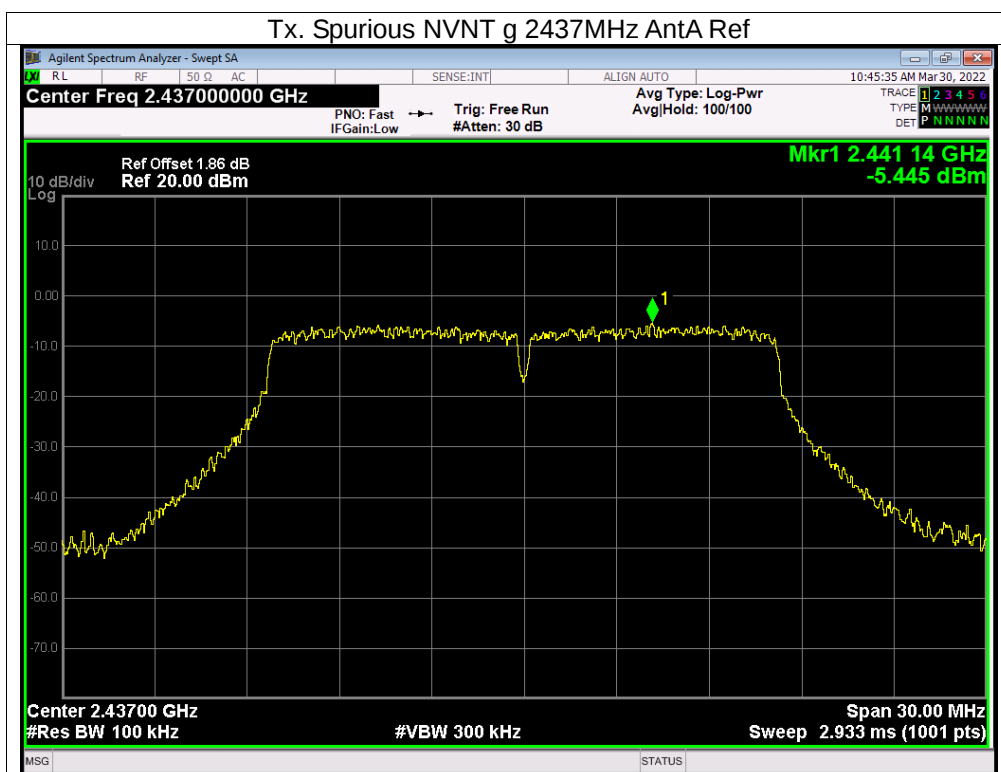


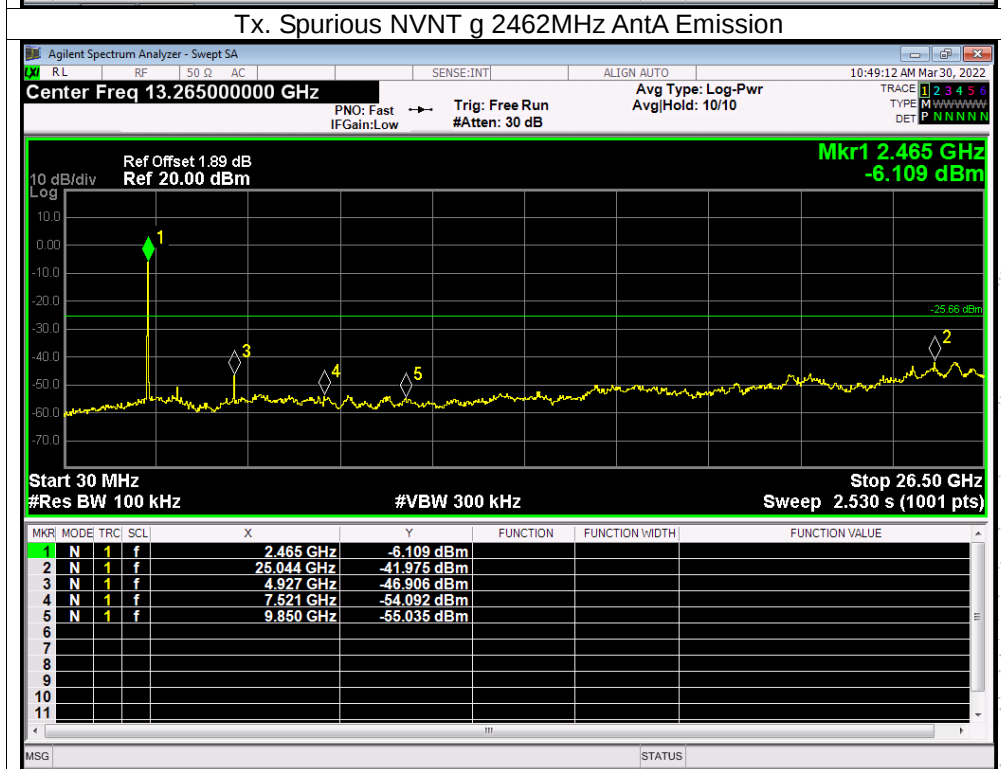
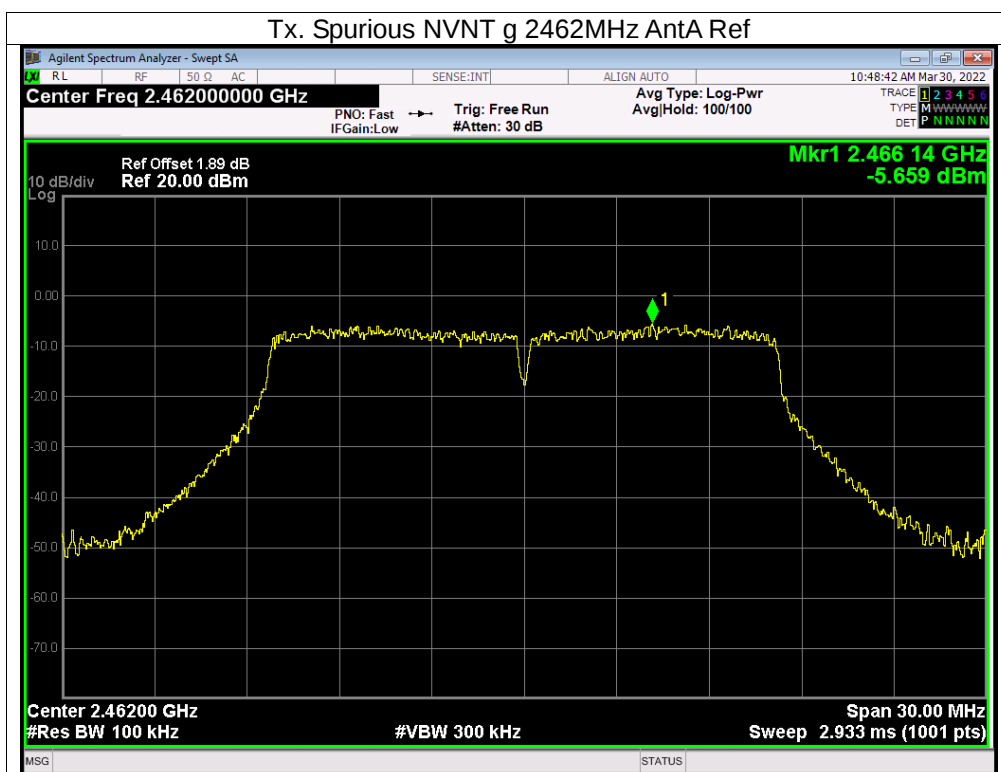


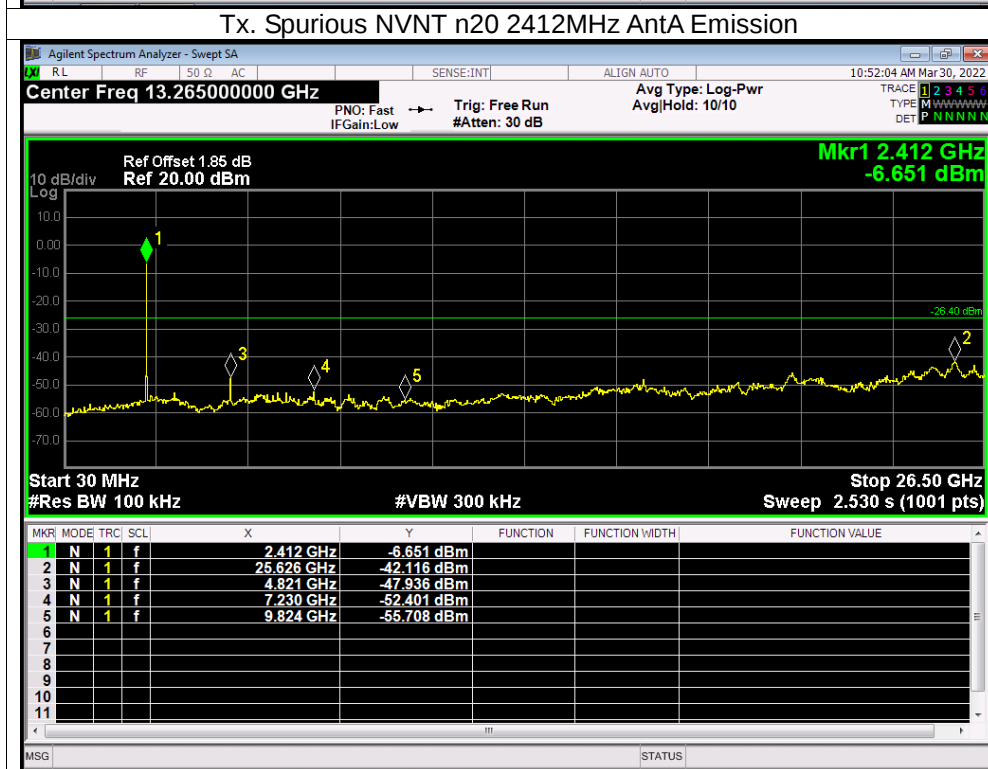
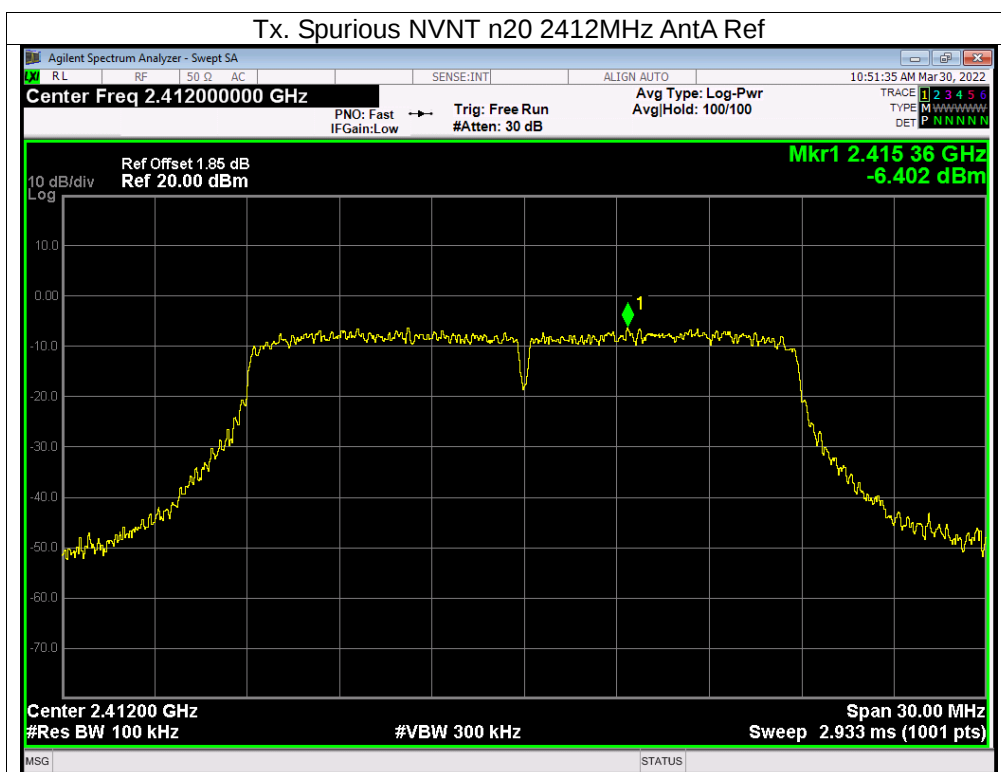


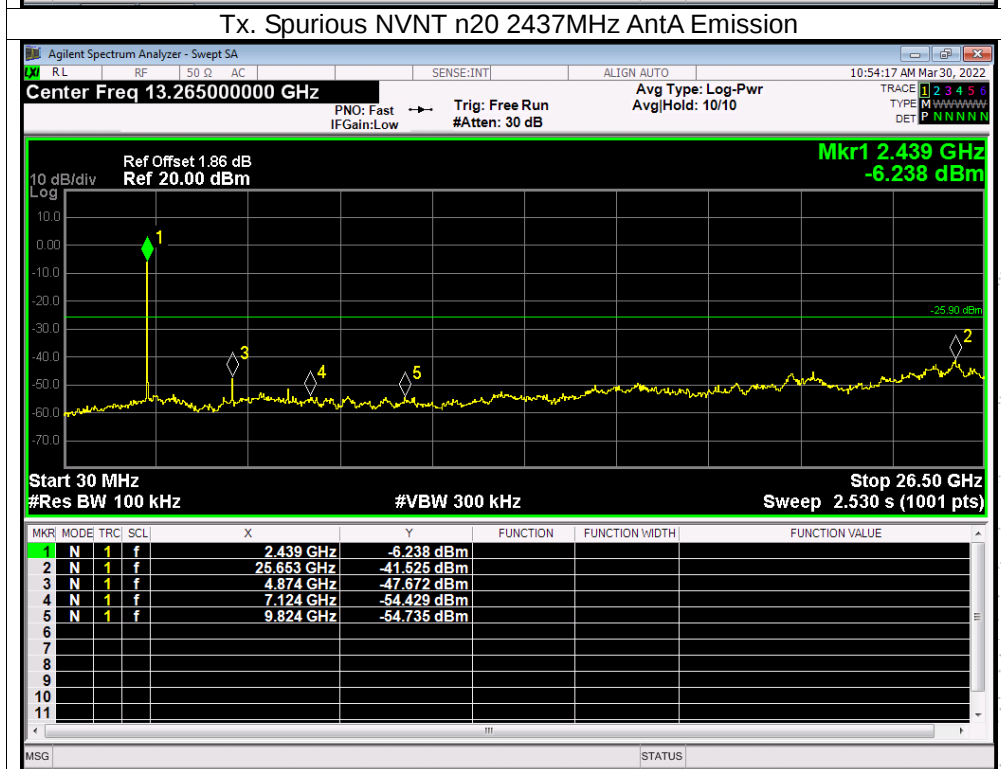
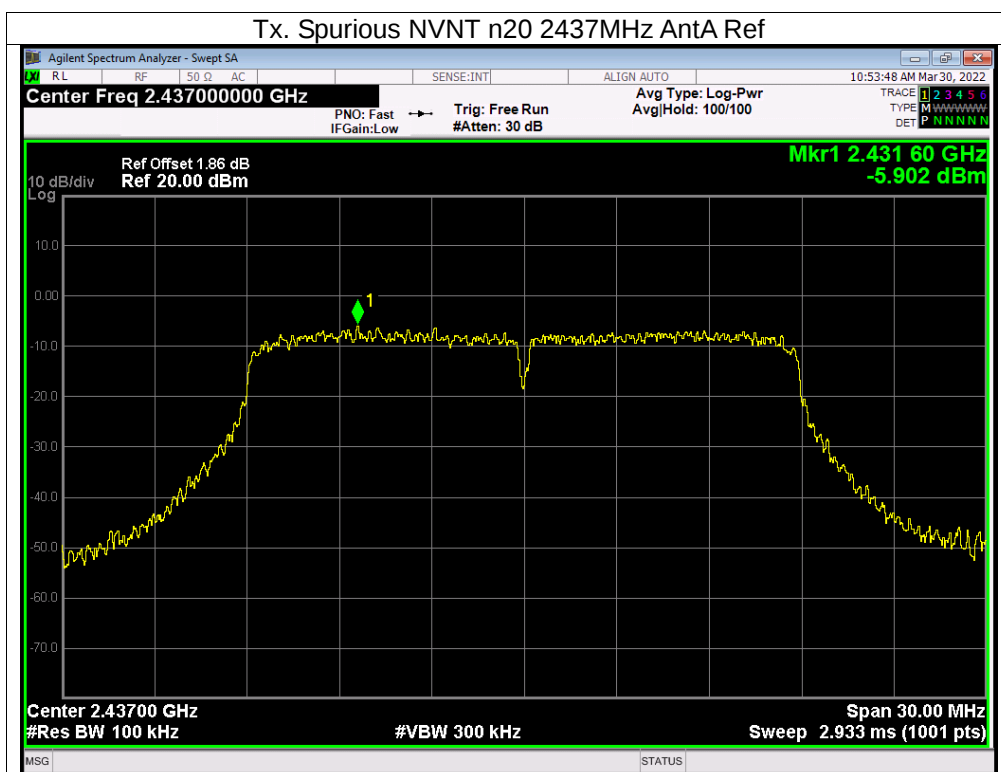


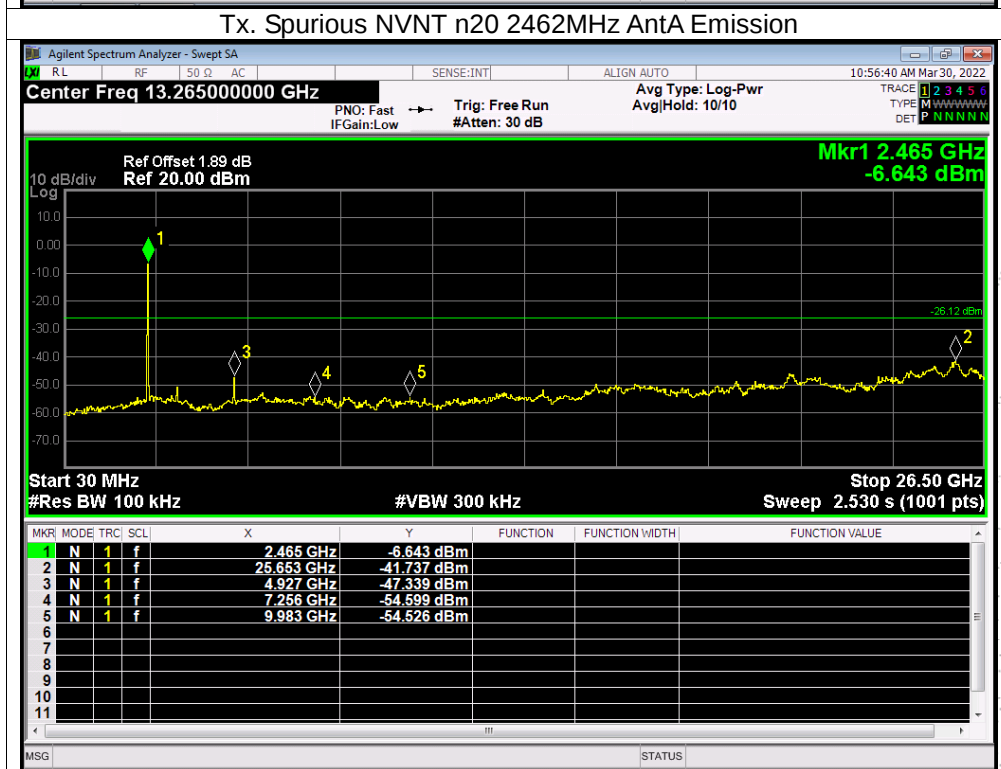
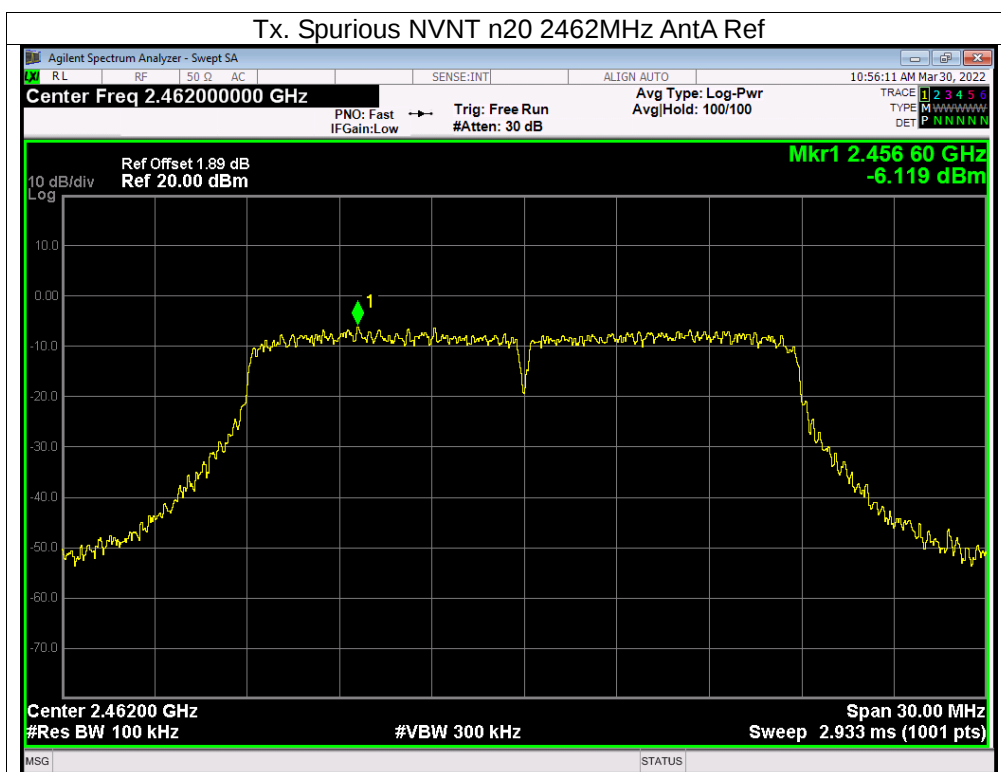


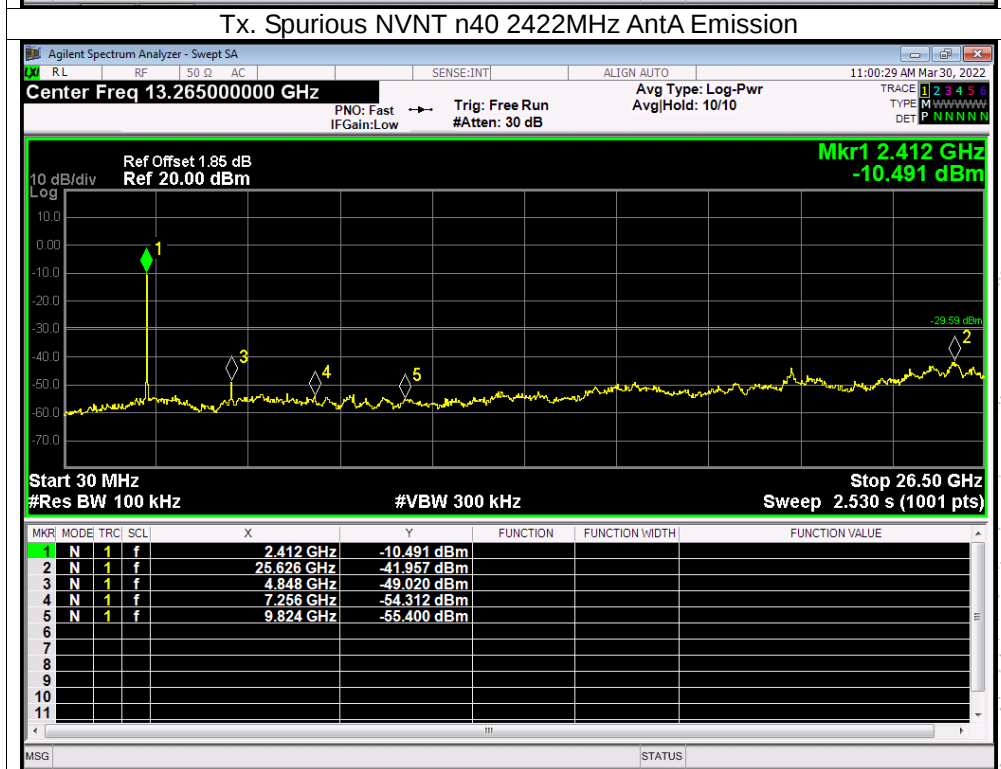
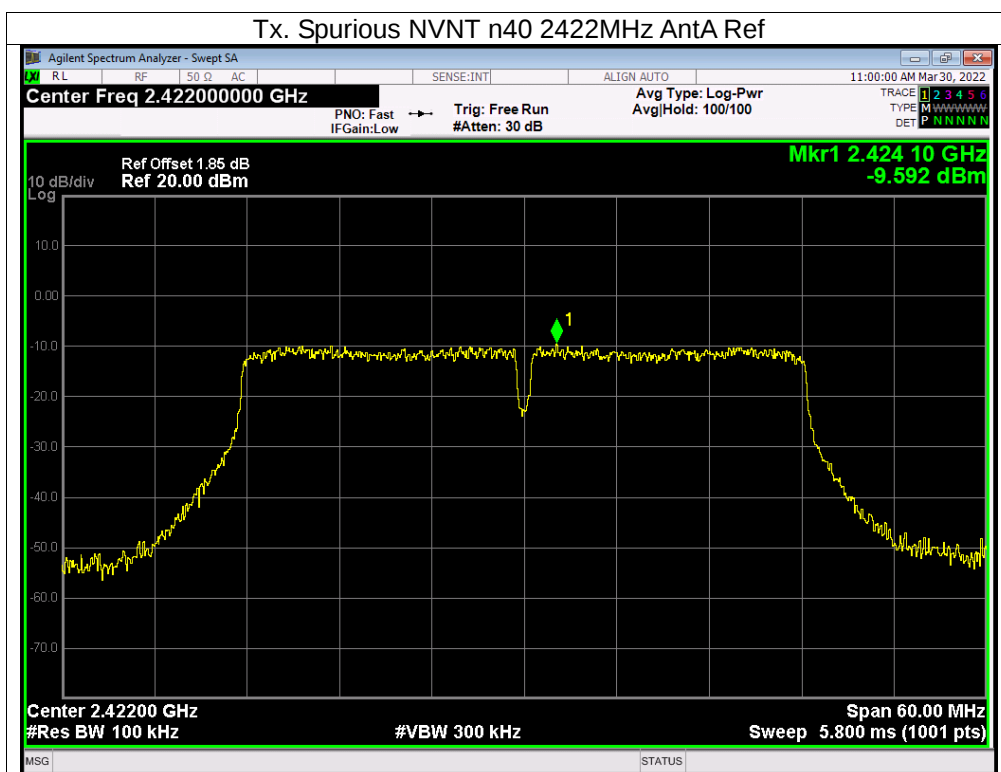




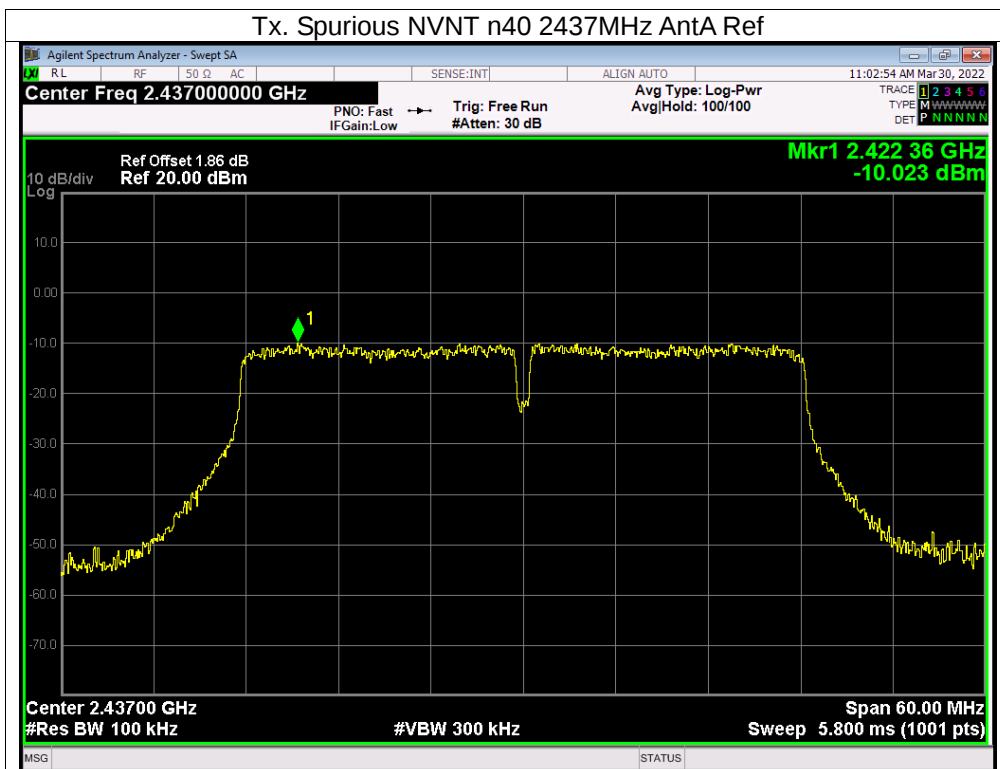




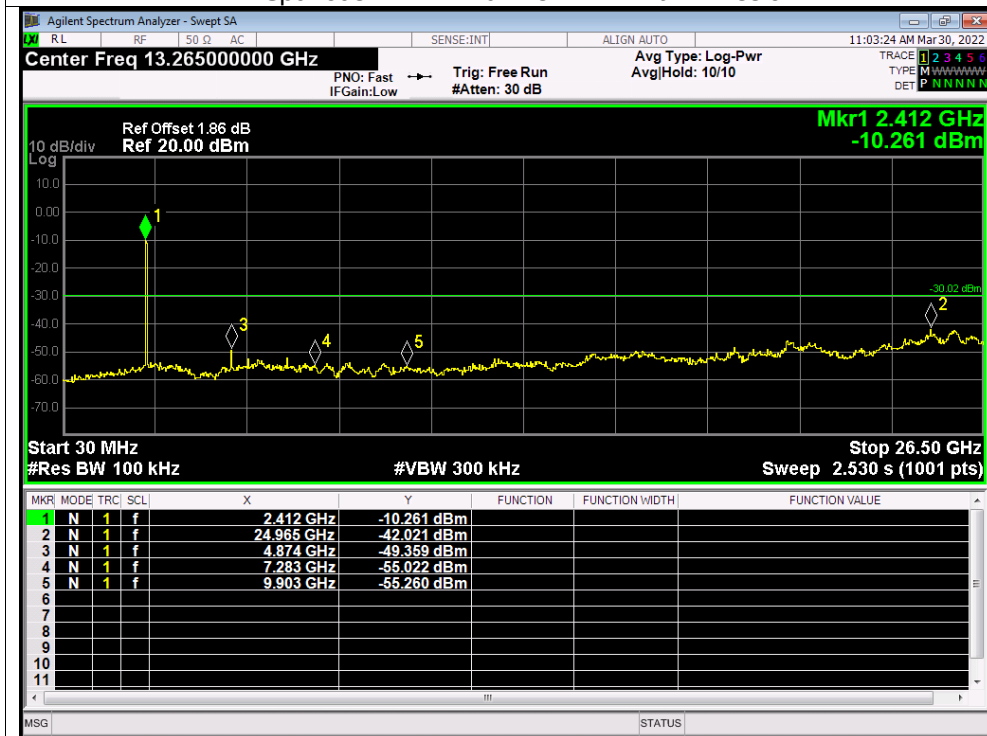




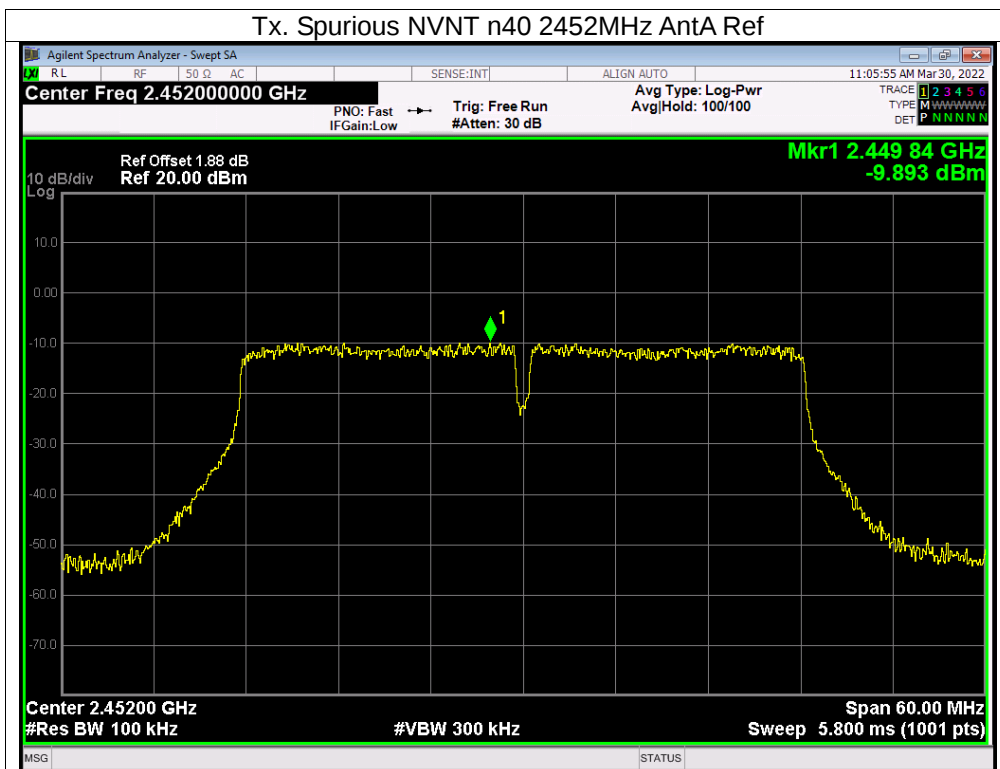
## Tx. Spurious NVNT n40 2437MHz AntA Ref



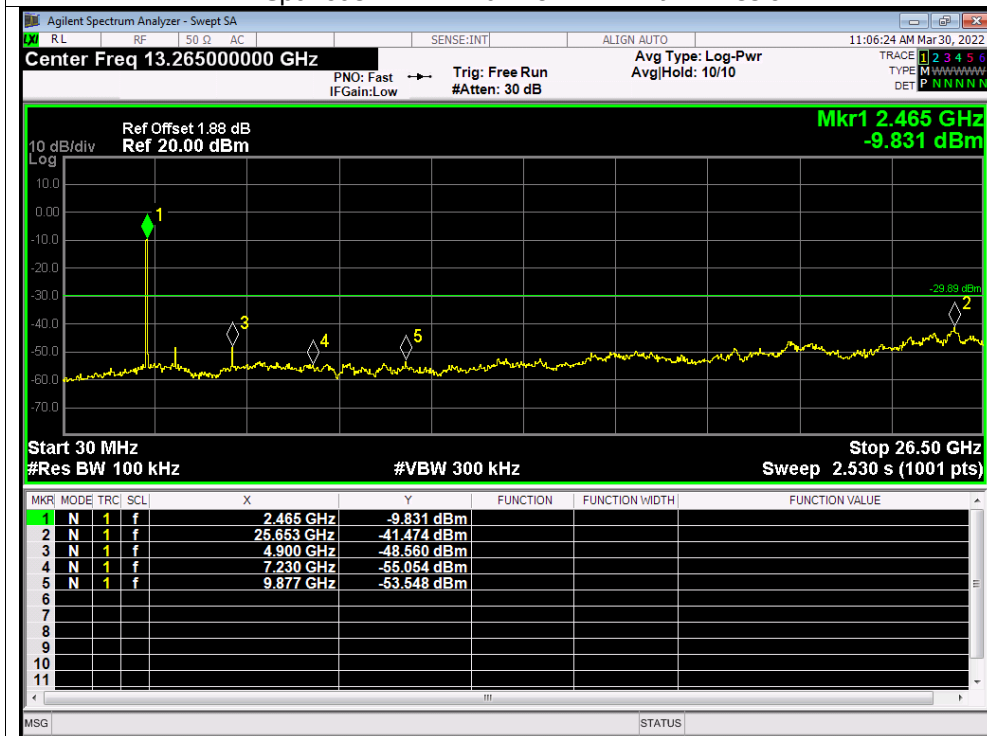
## Tx. Spurious NVNT n40 2437MHz AntA Emission



## Tx. Spurious NVNT n40 2452MHz AntA Ref



## Tx. Spurious NVNT n40 2452MHz AntA Emission



## 13. Duty Cycle Of Test Signal

### 13.1 Standard Requirement

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

### 13.2 Formula

Duty Cycle =  $T_{on} / (T_{on} + T_{off})$

### 13.3 Test Procedure

1. Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

### 13.4 Test Result

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | b    | 2412            | AntA    | 100            | 0                      | 0         |
| NVNT      | b    | 2437            | AntA    | 100            | 0                      | 0         |
| NVNT      | b    | 2462            | AntA    | 100            | 0                      | 0         |
| NVNT      | g    | 2412            | AntA    | 100            | 0                      | 0         |
| NVNT      | g    | 2437            | AntA    | 100            | 0                      | 0         |
| NVNT      | g    | 2462            | AntA    | 100            | 0                      | 0         |
| NVNT      | n20  | 2412            | AntA    | 100            | 0                      | 0         |
| NVNT      | n20  | 2437            | AntA    | 100            | 0                      | 0         |
| NVNT      | n20  | 2462            | AntA    | 100            | 0                      | 0         |
| NVNT      | n40  | 2422            | AntA    | 100            | 0                      | 0         |
| NVNT      | n40  | 2437            | AntA    | 100            | 0                      | 0         |
| NVNT      | n40  | 2452            | AntA    | 100            | 0                      | 0         |

