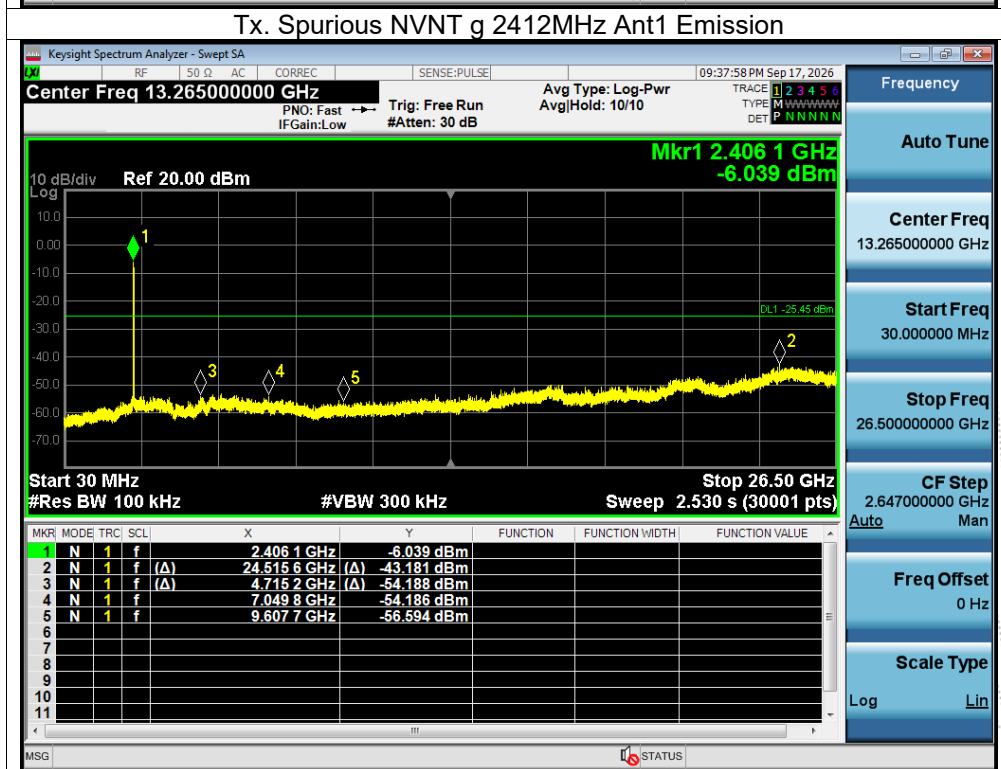
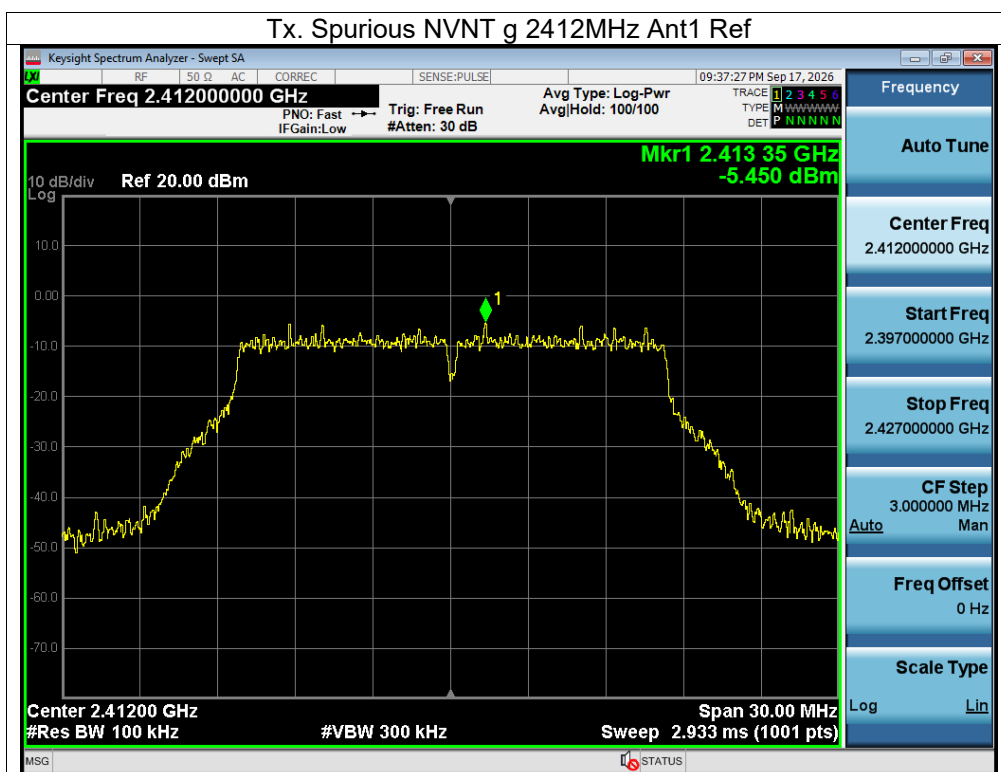
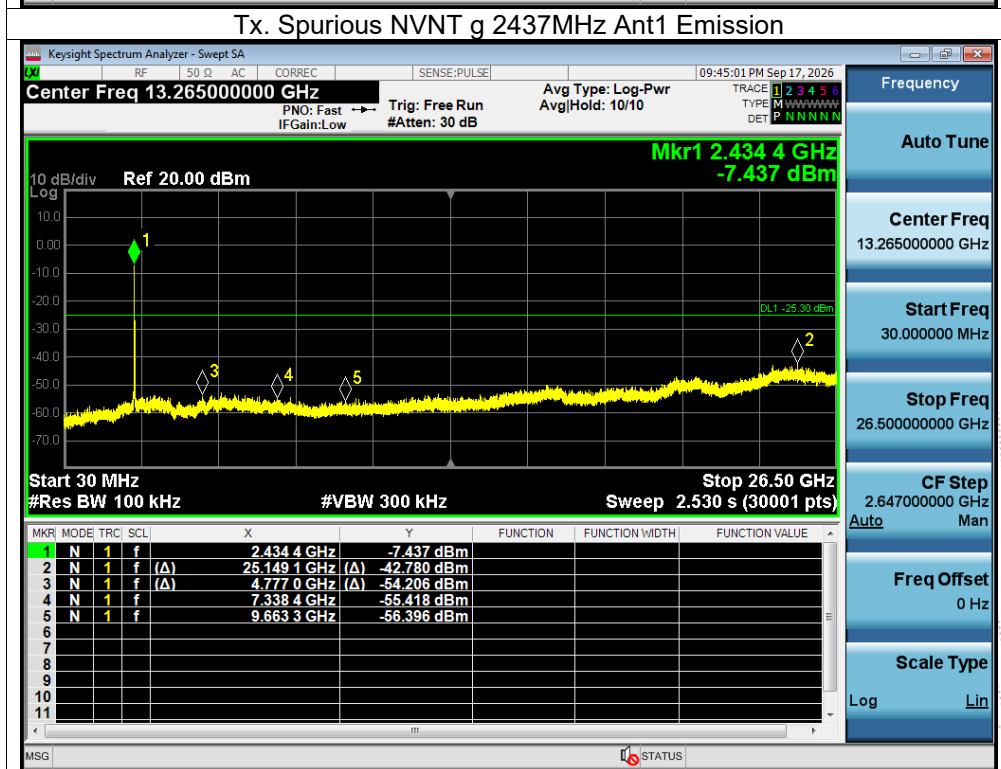
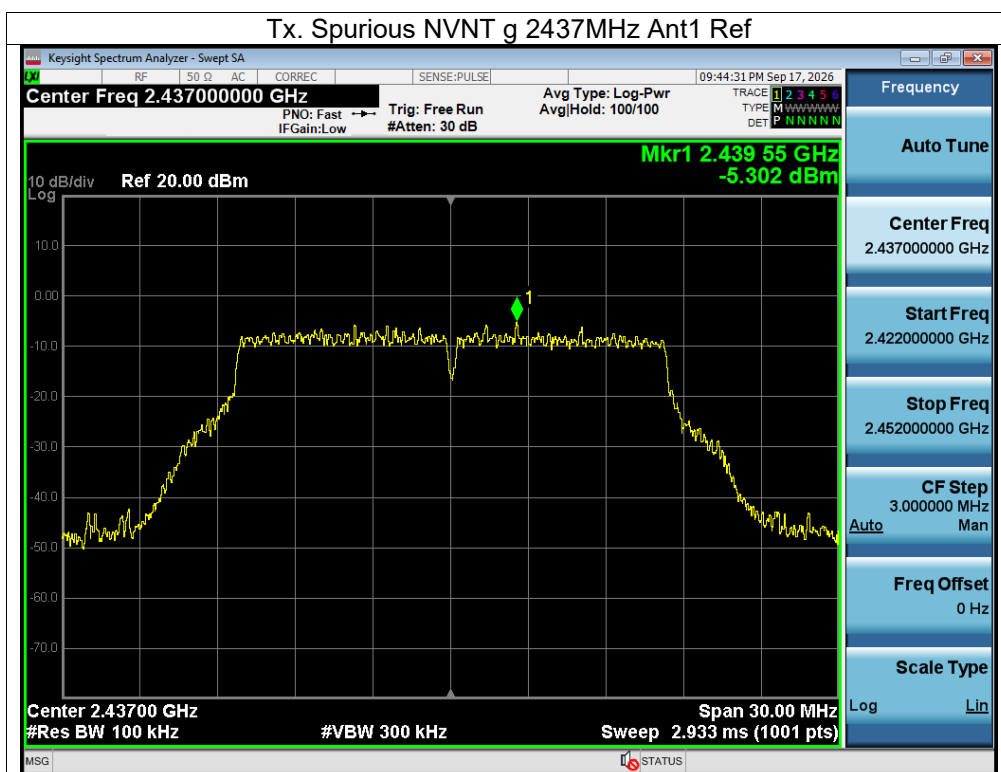
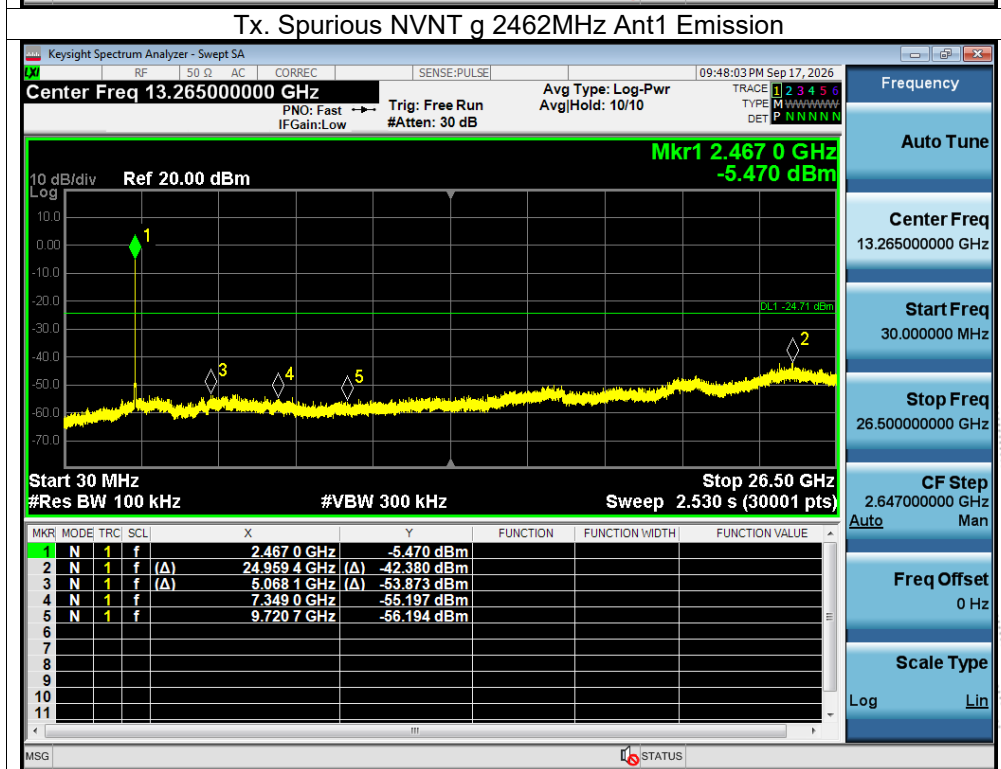
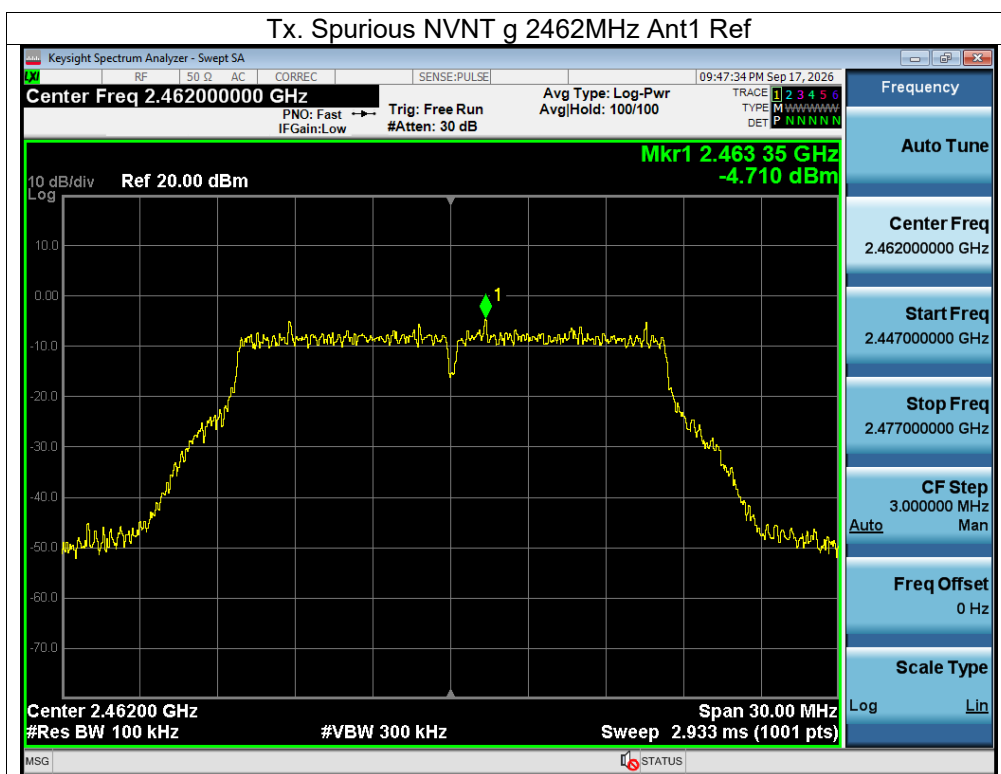
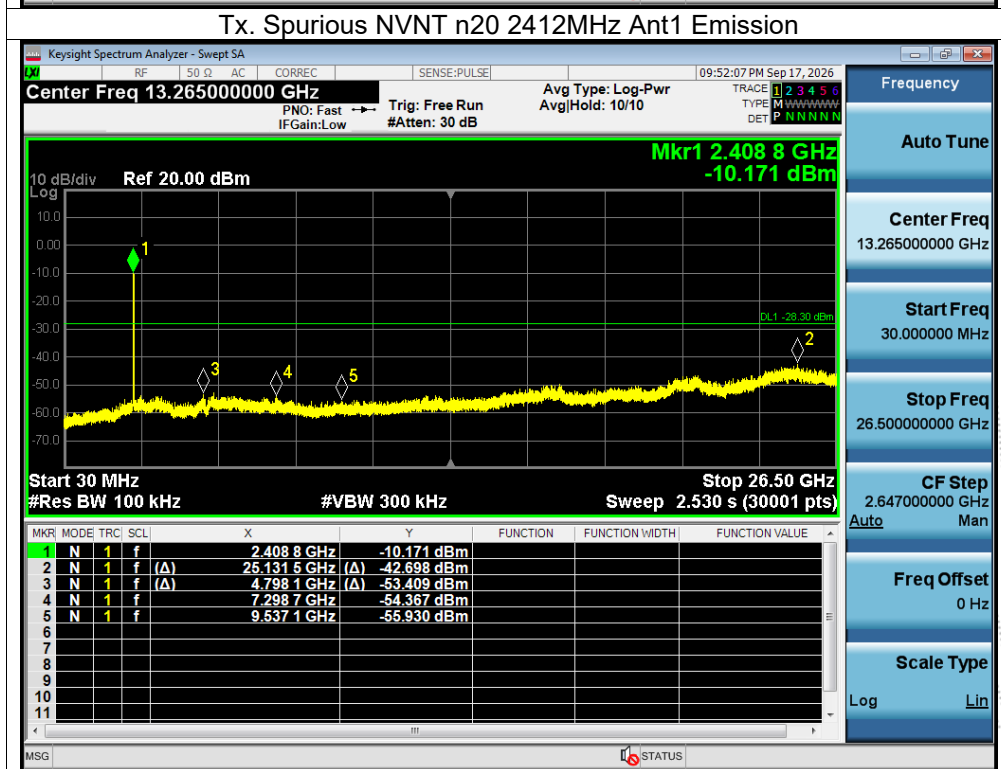
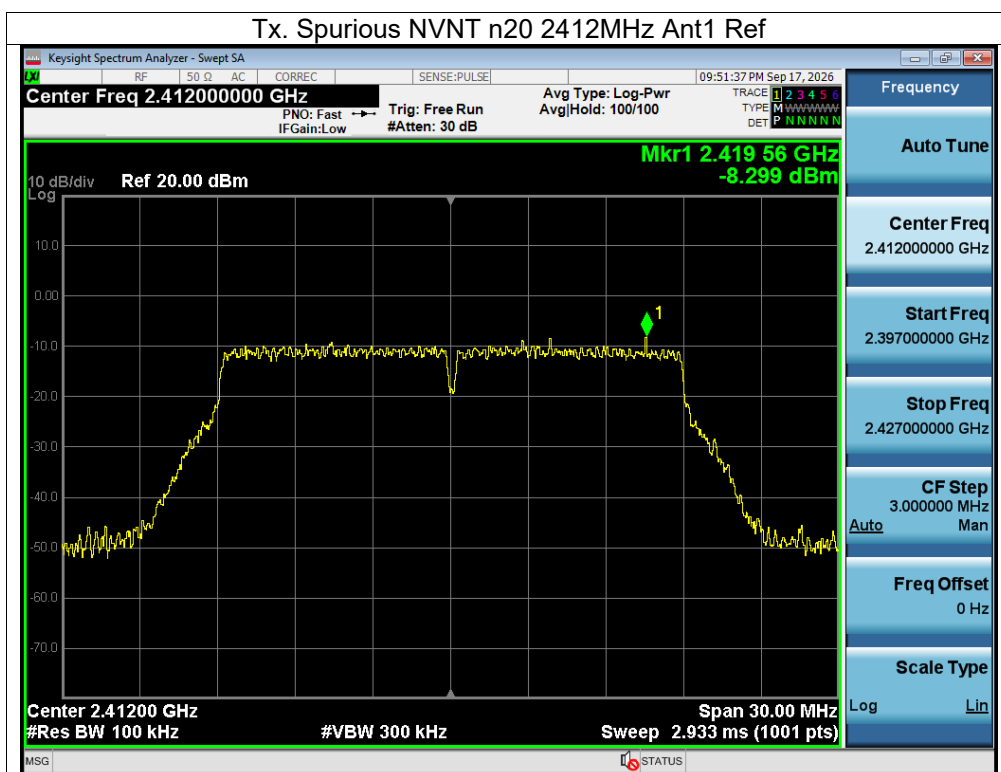


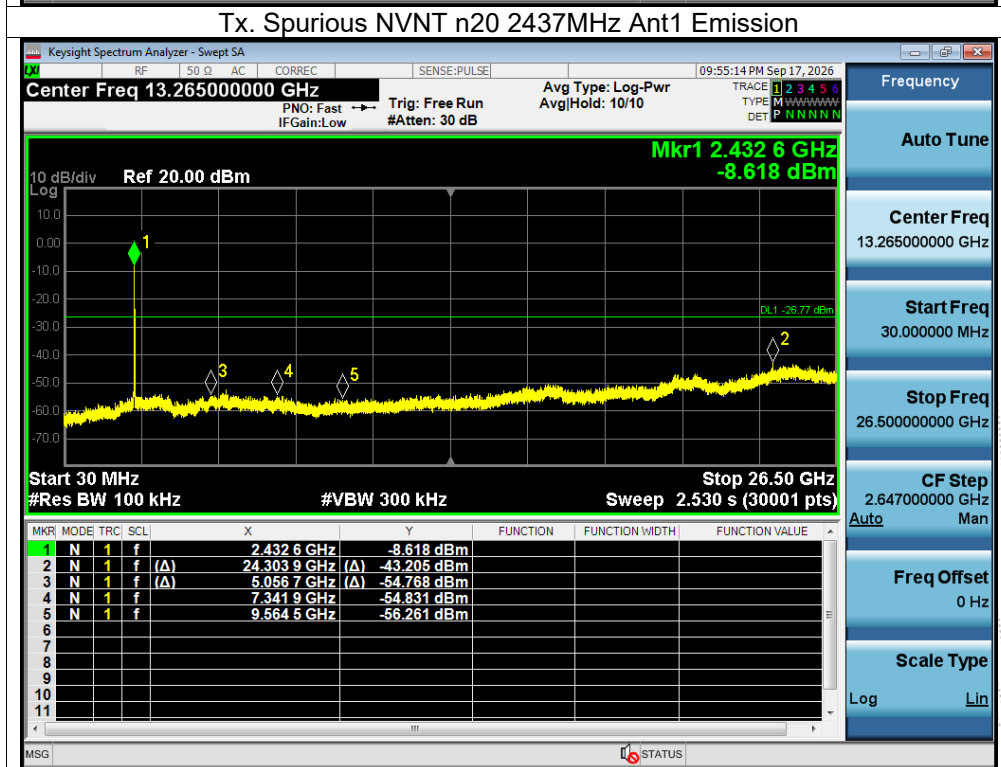
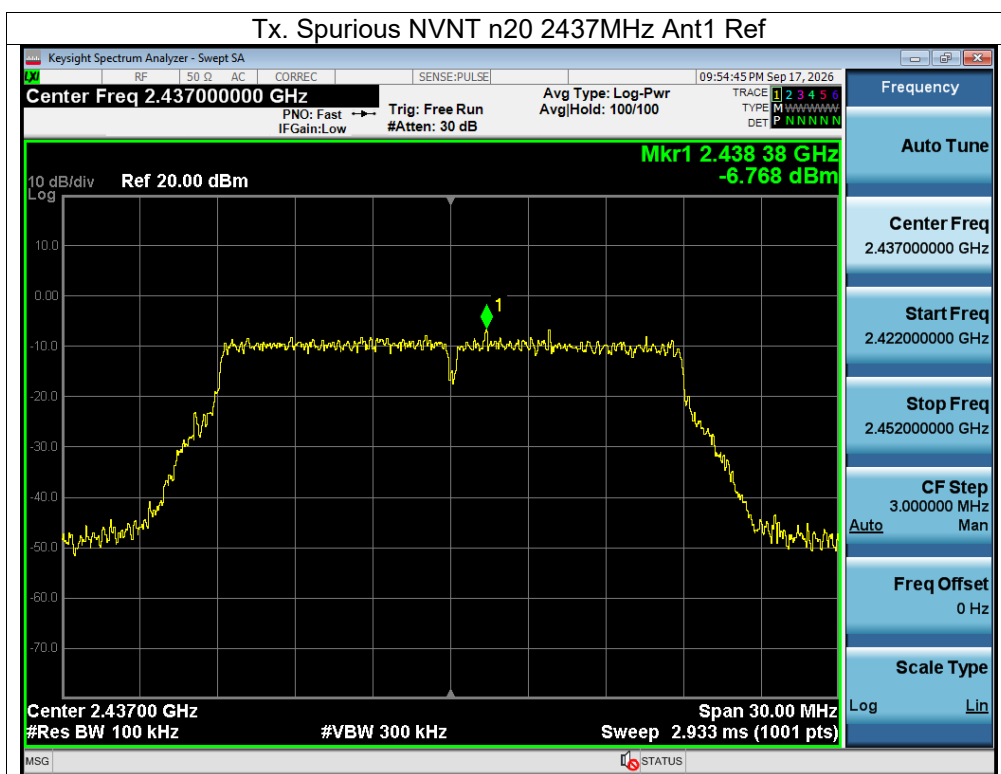


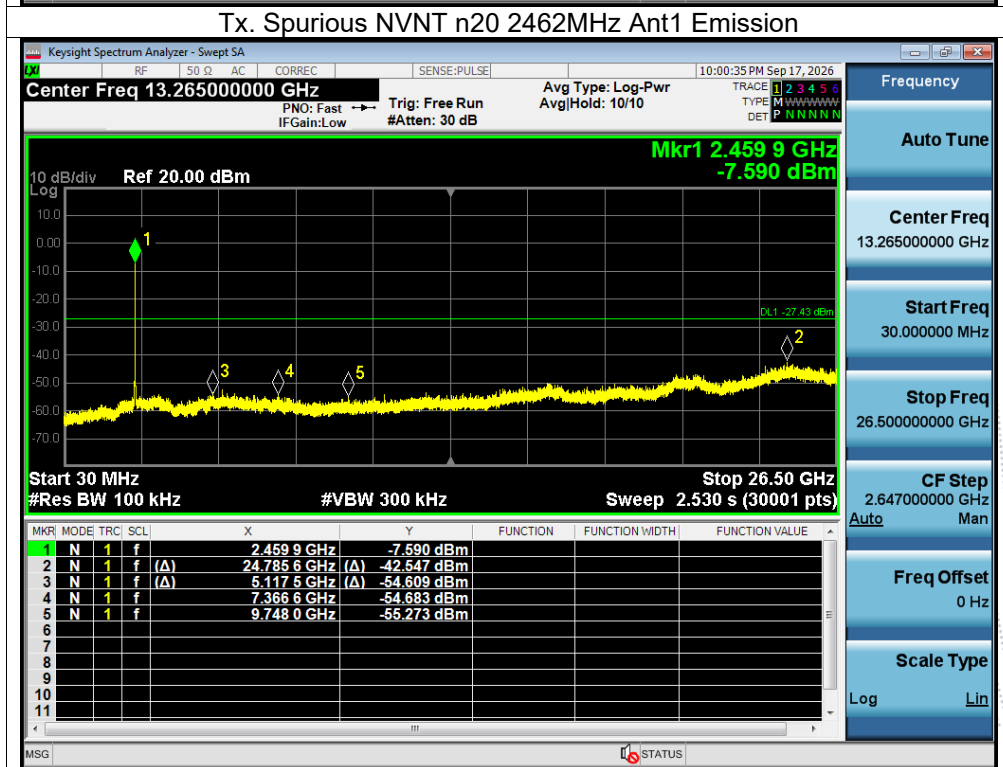
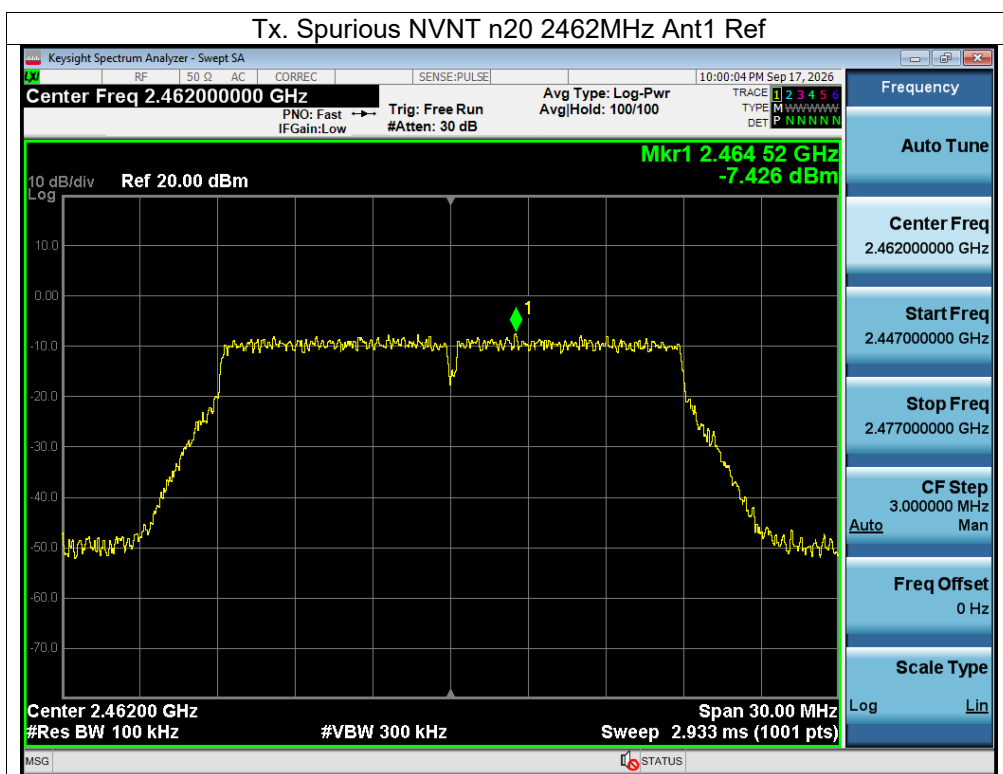
BCTC CO., LTD

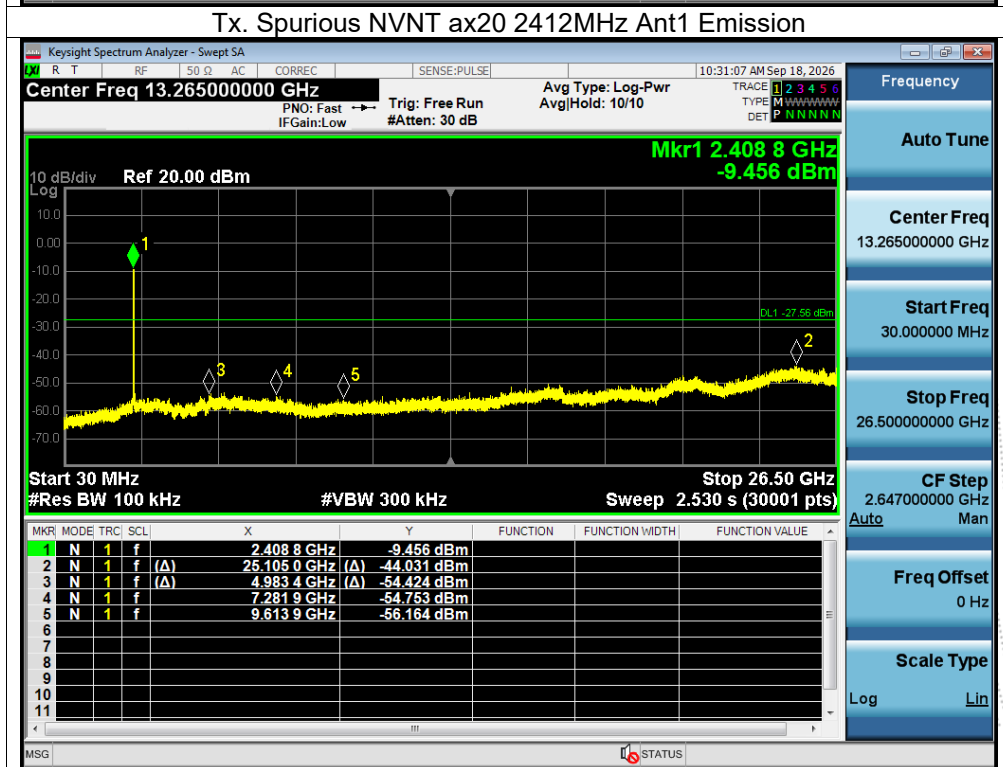
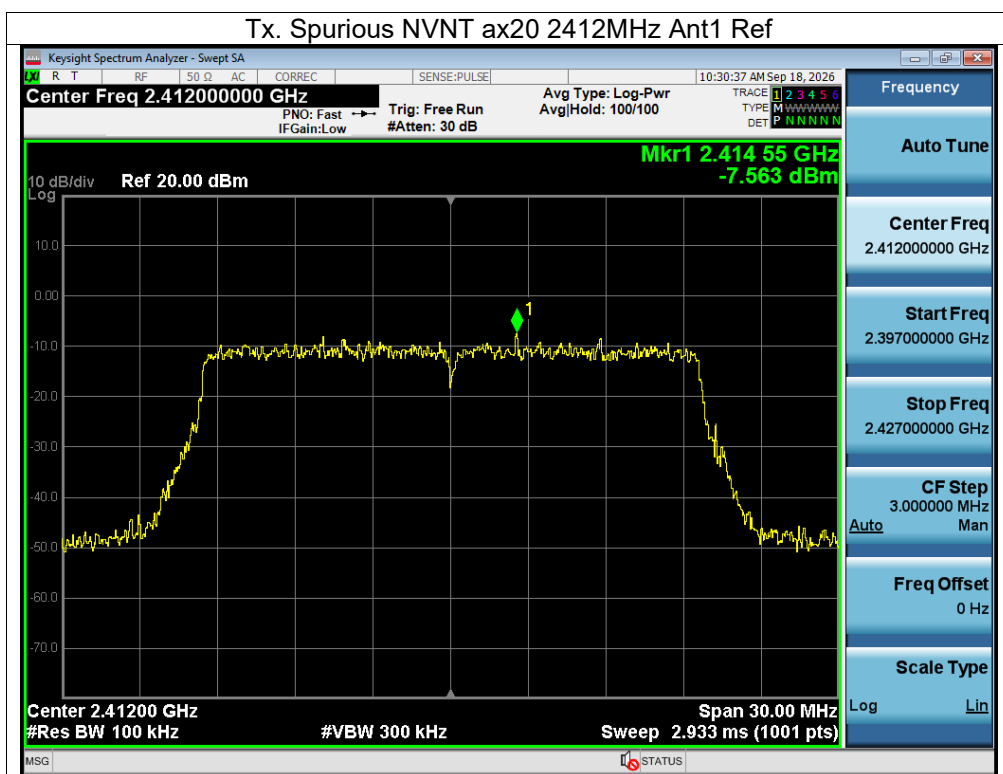


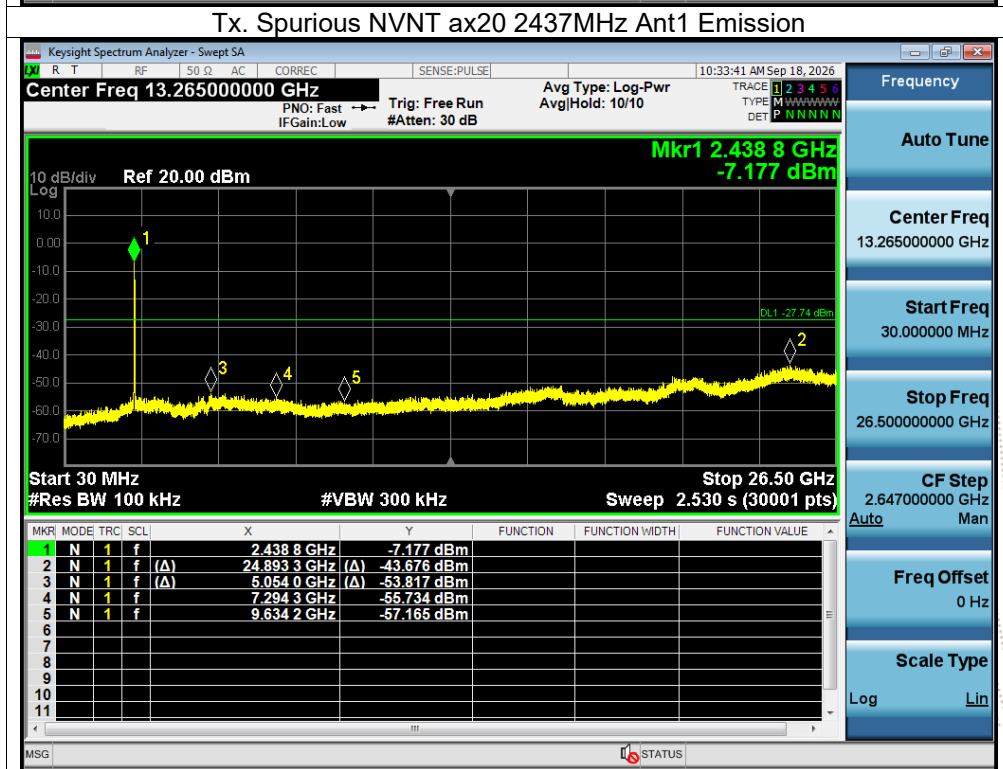
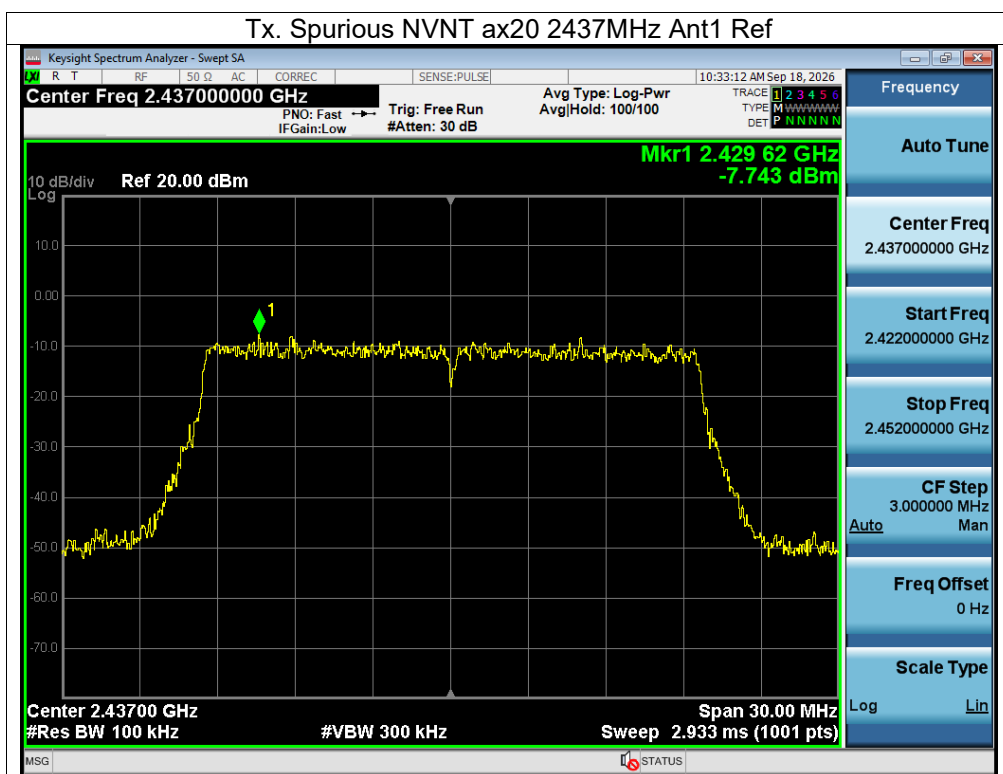


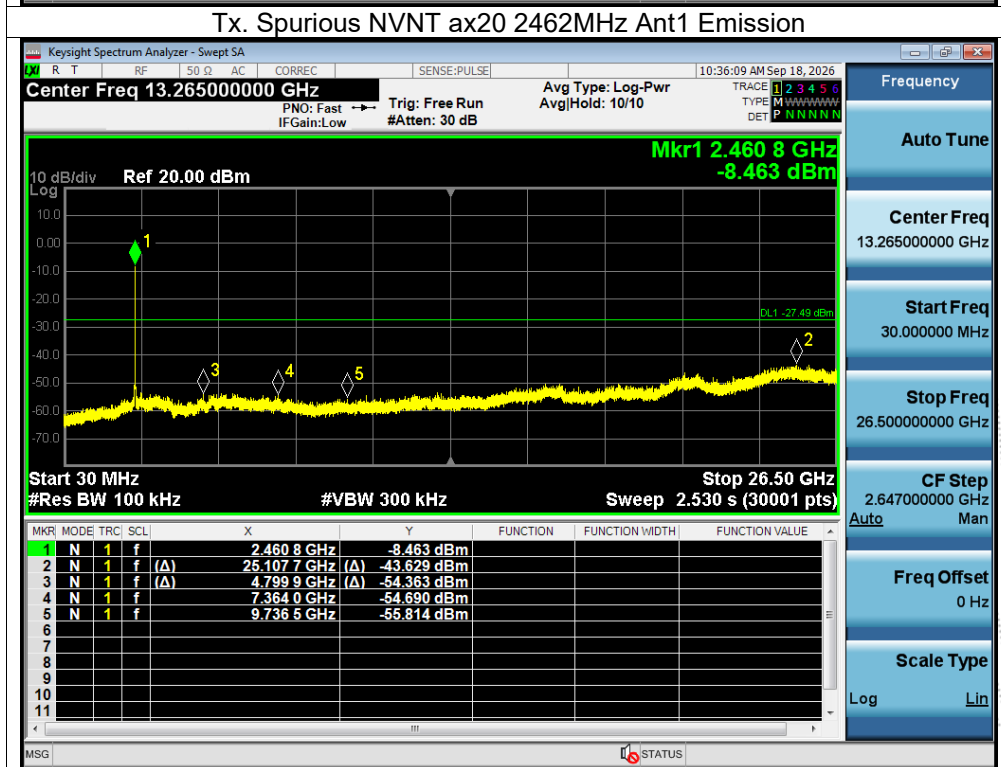
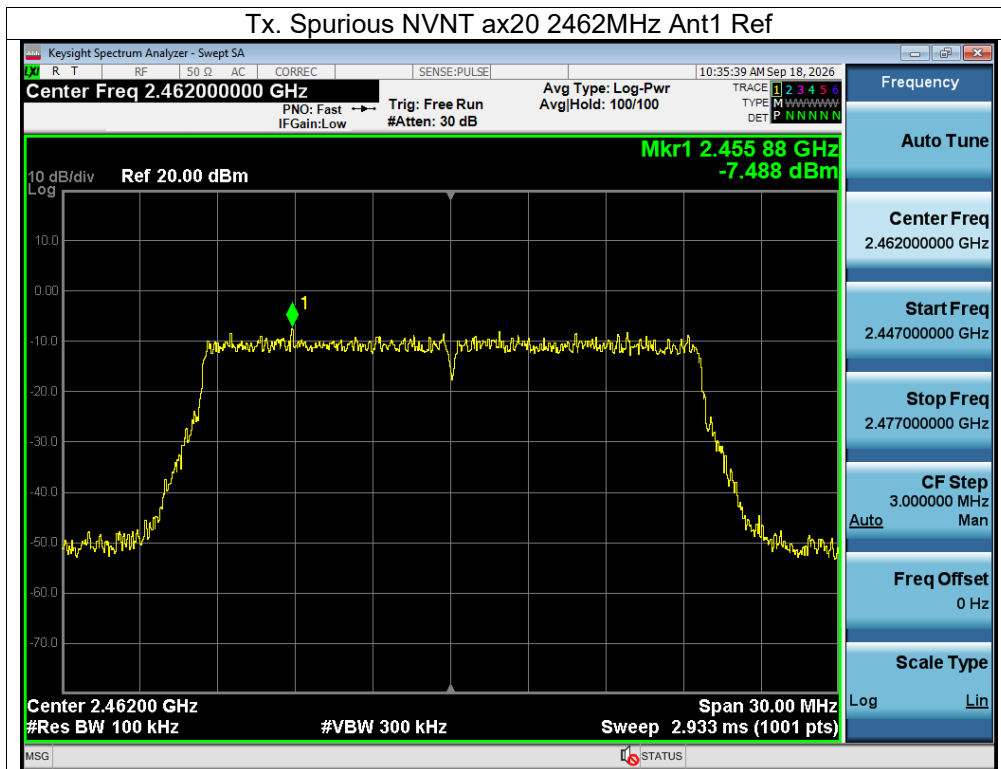












## 13. Duty Cycle Of Test Signal

### 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

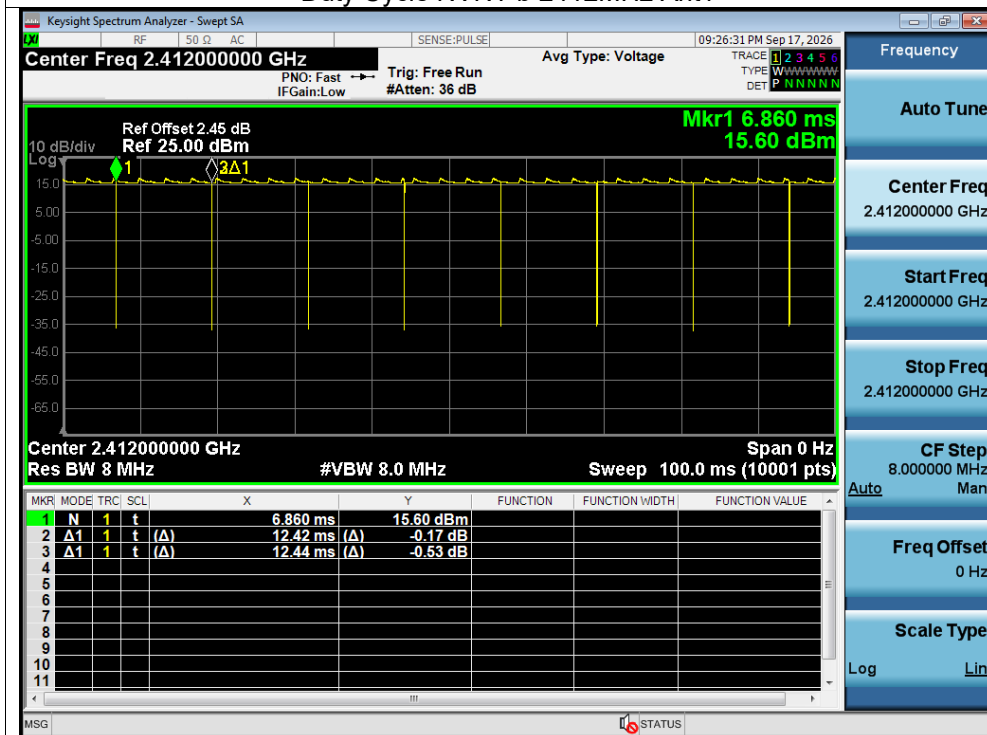
1. Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

### 13.4 Test Result

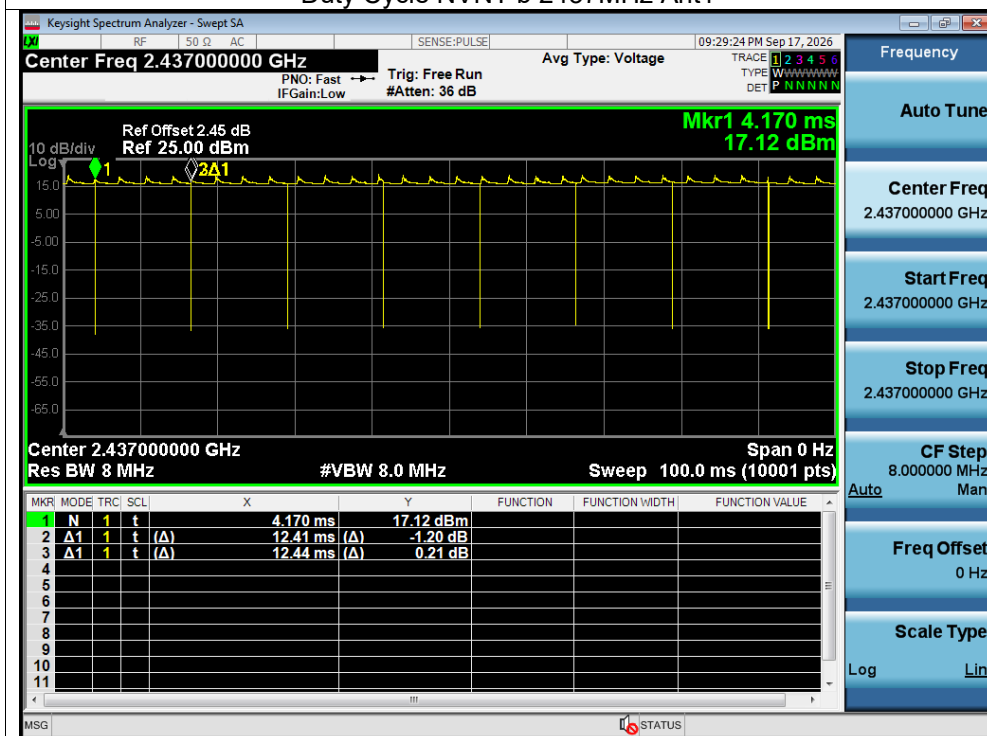
| Condition | Mode | Frequency (MHz) | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|----------------|------------------------|-----------|
| NVNT      | b    | 2412            | 99.84          | 0.01                   | 0.08      |
| NVNT      | b    | 2437            | 99.76          | 0.01                   | 0.08      |
| NVNT      | b    | 2462            | 99.84          | 0.01                   | 0.08      |
| NVNT      | g    | 2412            | 93.46          | 0.29                   | 0.7       |
| NVNT      | g    | 2437            | 93.46          | 0.29                   | 0.7       |
| NVNT      | g    | 2462            | 93.46          | 0.29                   | 0.7       |
| NVNT      | n20  | 2412            | 98.08          | 0.08                   | 0.2       |
| NVNT      | n20  | 2437            | 98.08          | 0.08                   | 0.2       |
| NVNT      | n20  | 2462            | 98.08          | 0.08                   | 0.2       |
| NVNT      | ax20 | 2412            | 97.5           | 0.11                   | 0.26      |
| NVNT      | ax20 | 2437            | 97.5           | 0.11                   | 0.26      |
| NVNT      | ax20 | 2462            | 97.5           | 0.11                   | 0.26      |

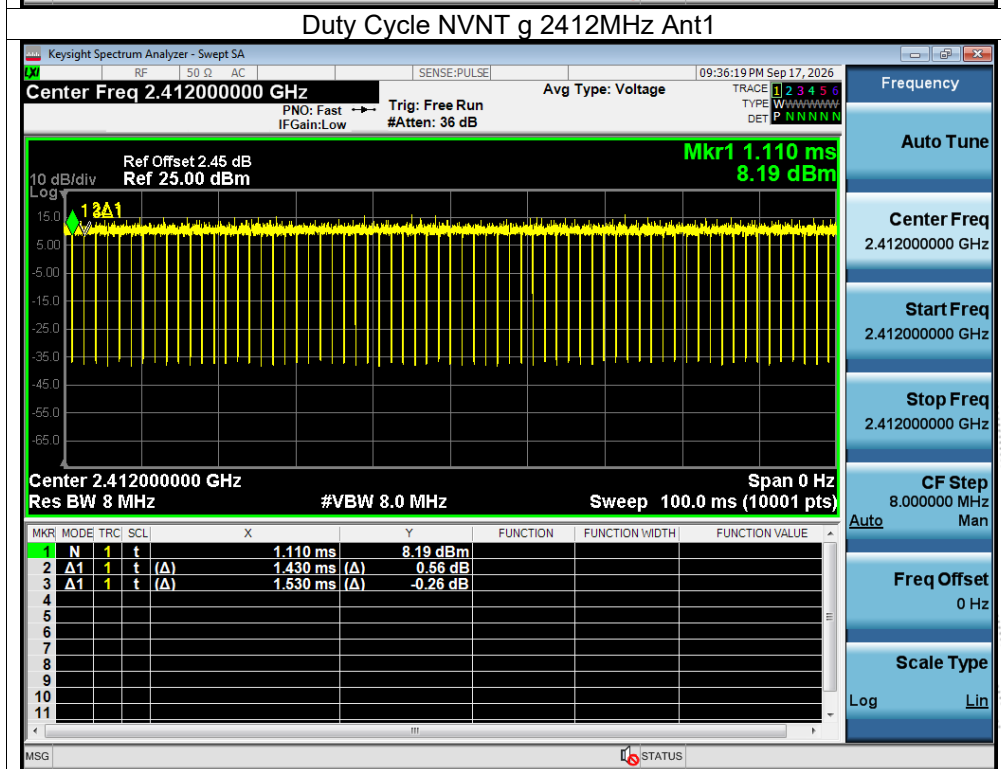
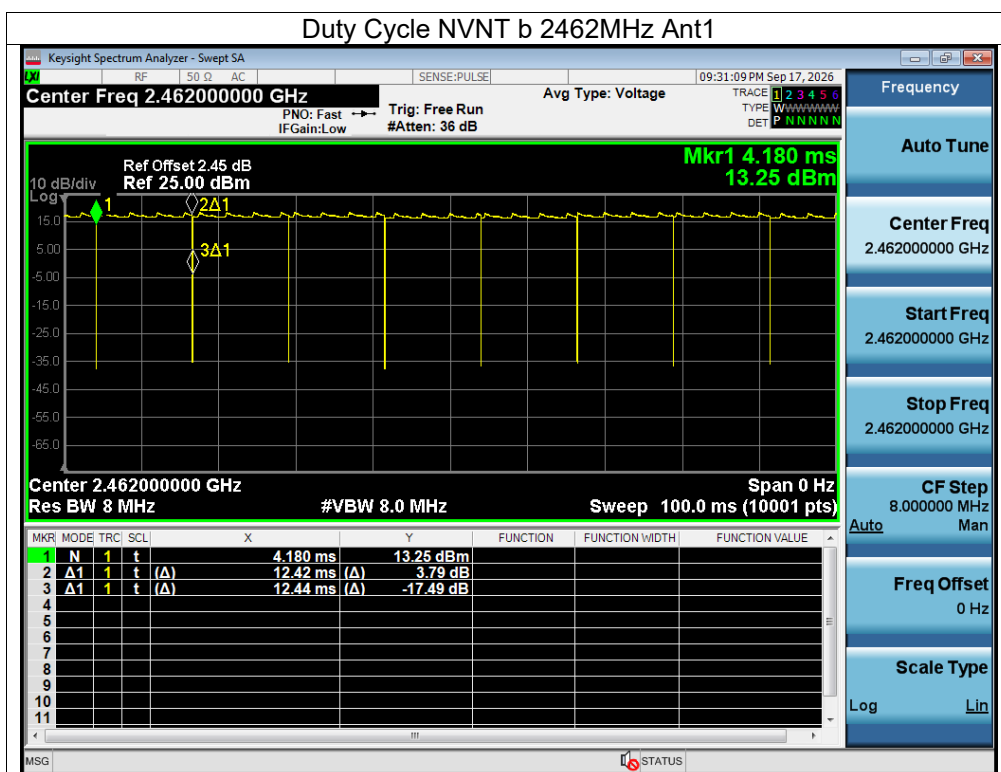
### Test Graphs

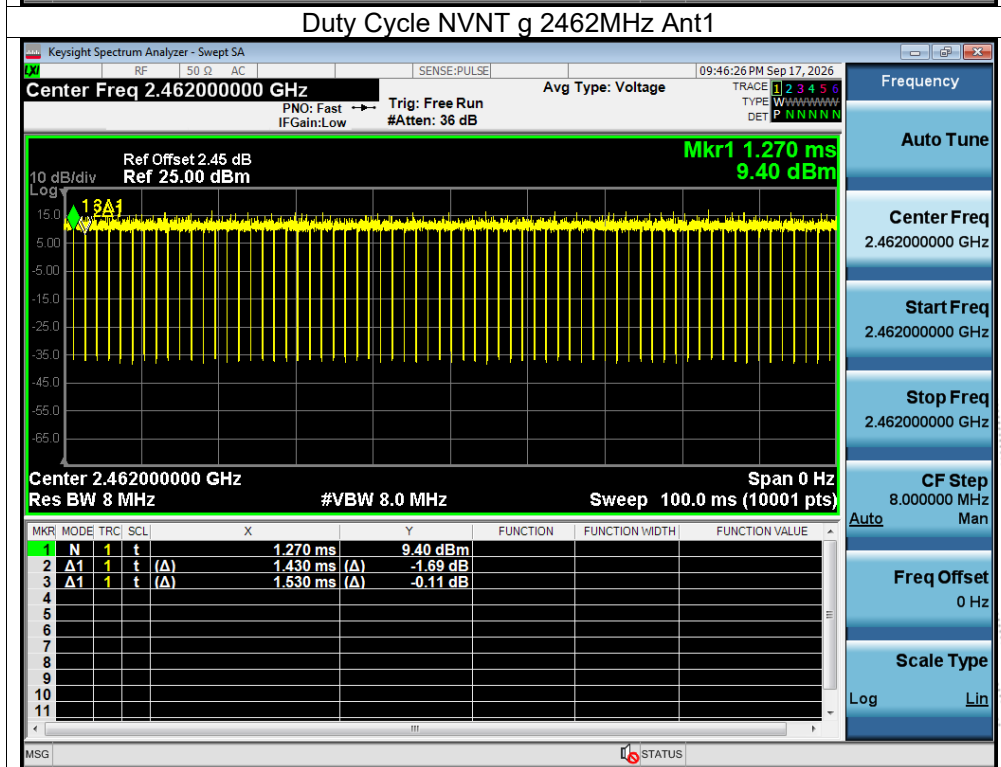
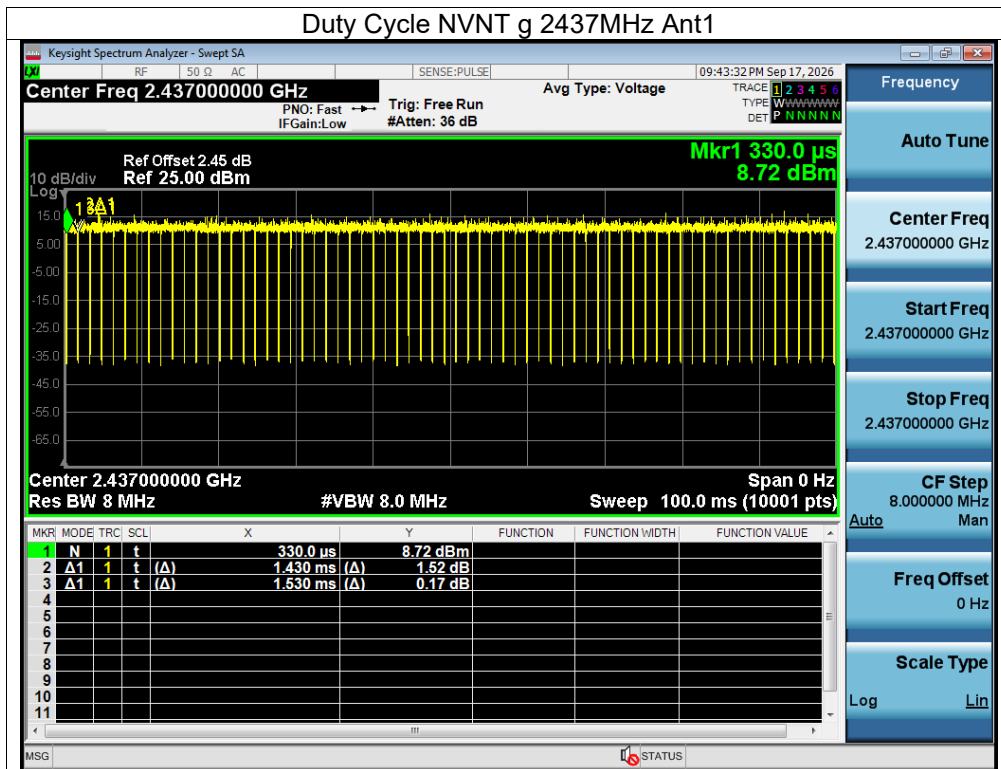
#### Duty Cycle NVNT b 2412MHz Ant1

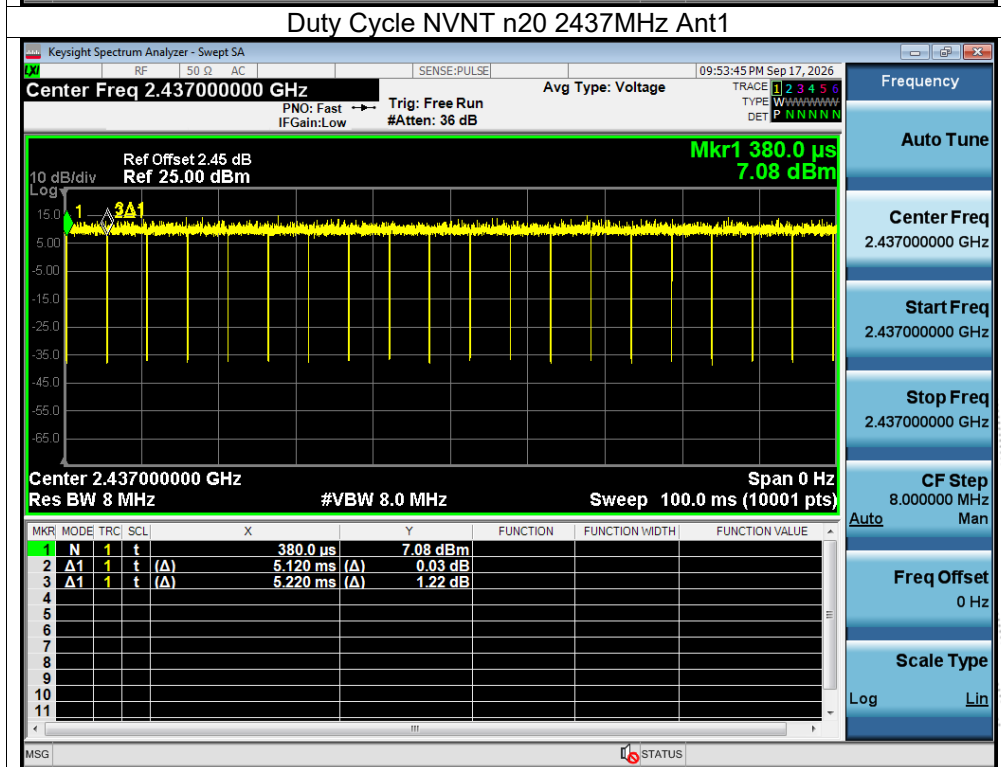
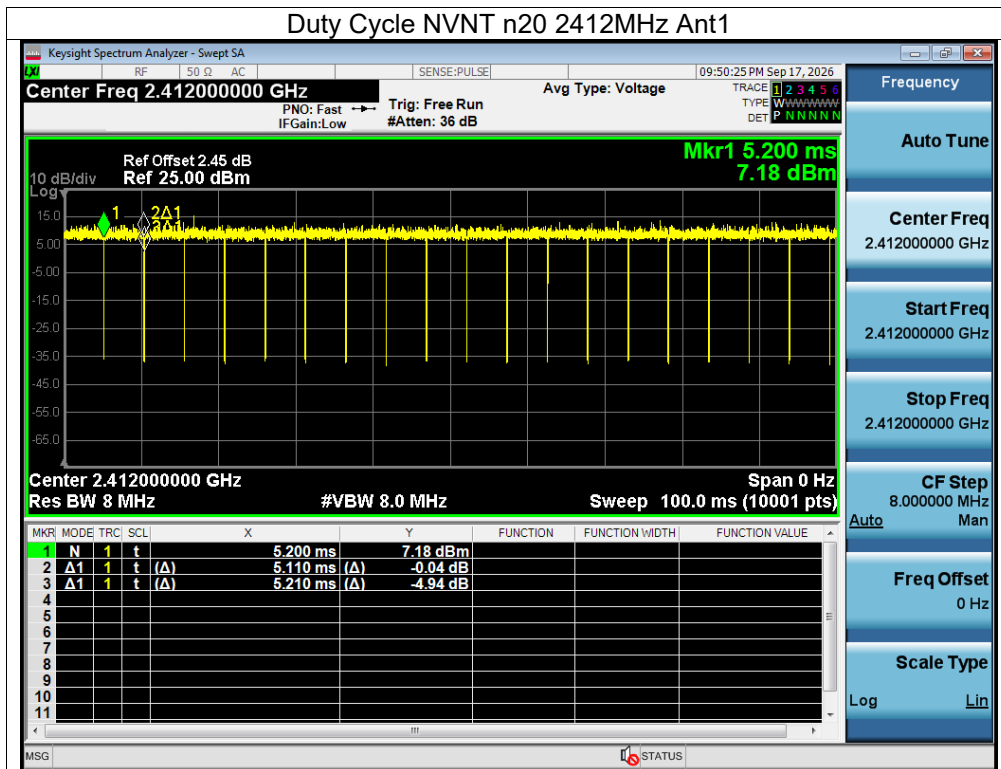


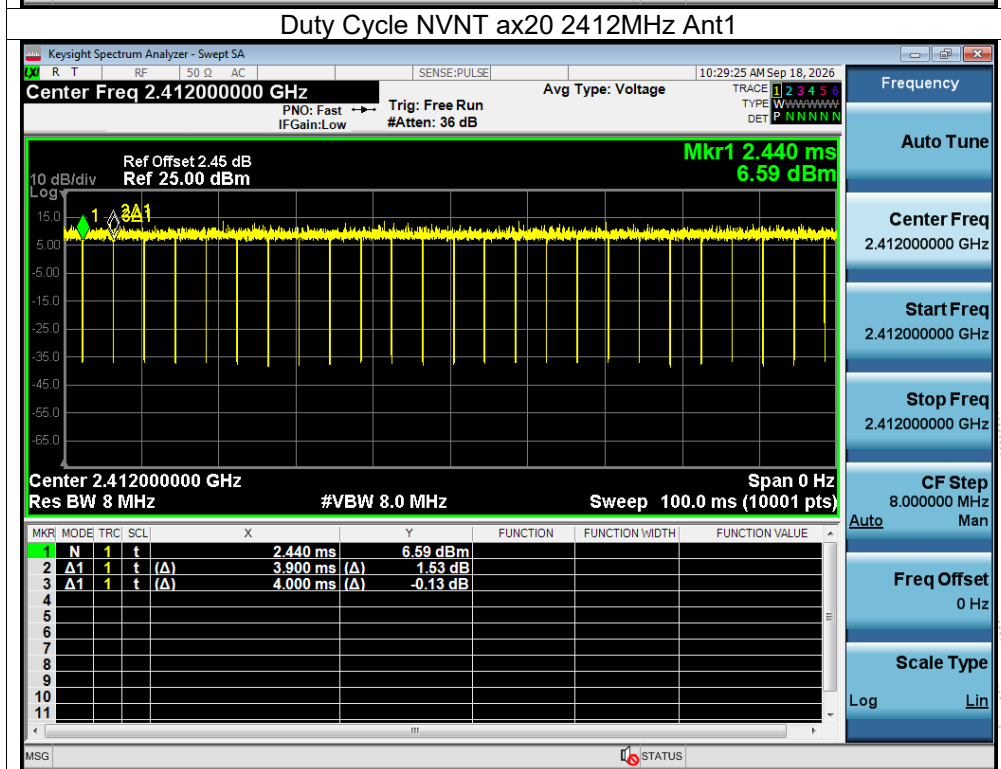
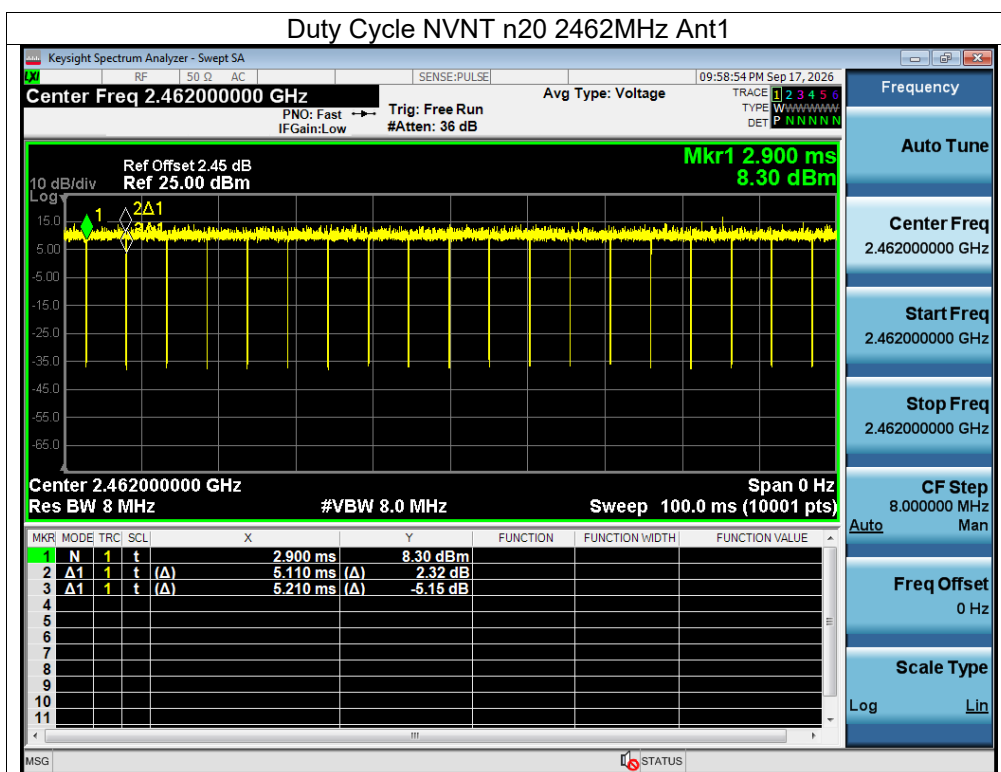
#### Duty Cycle NVNT b 2437MHz Ant1

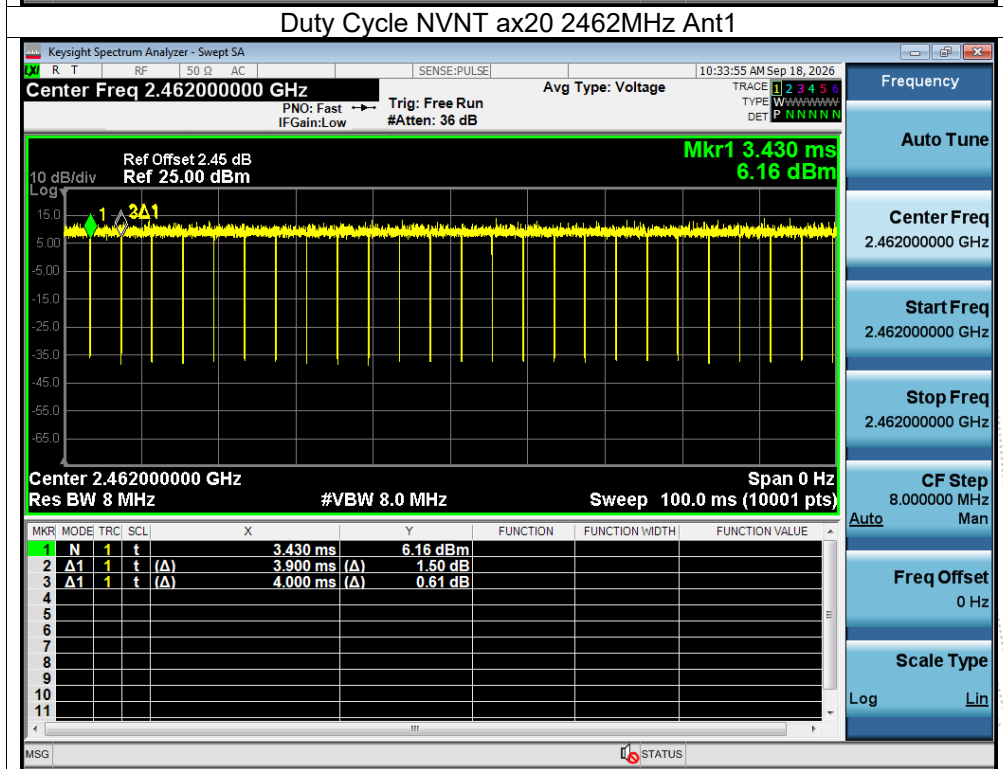
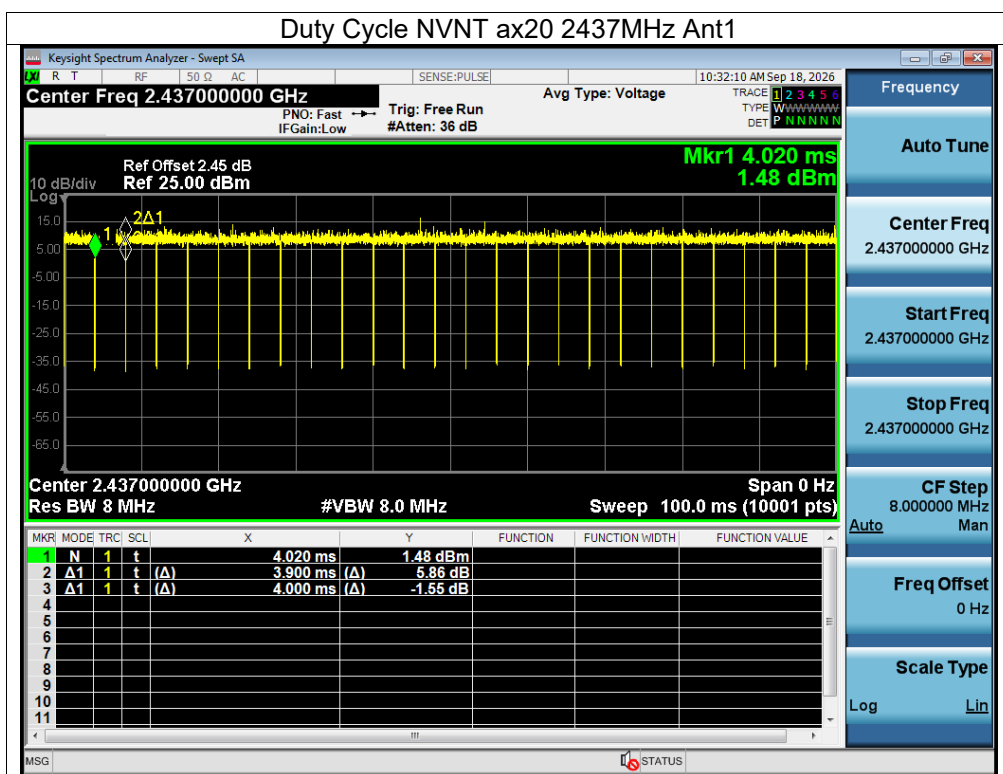












## 14. Antenna Requirement

### 14.1 Limit

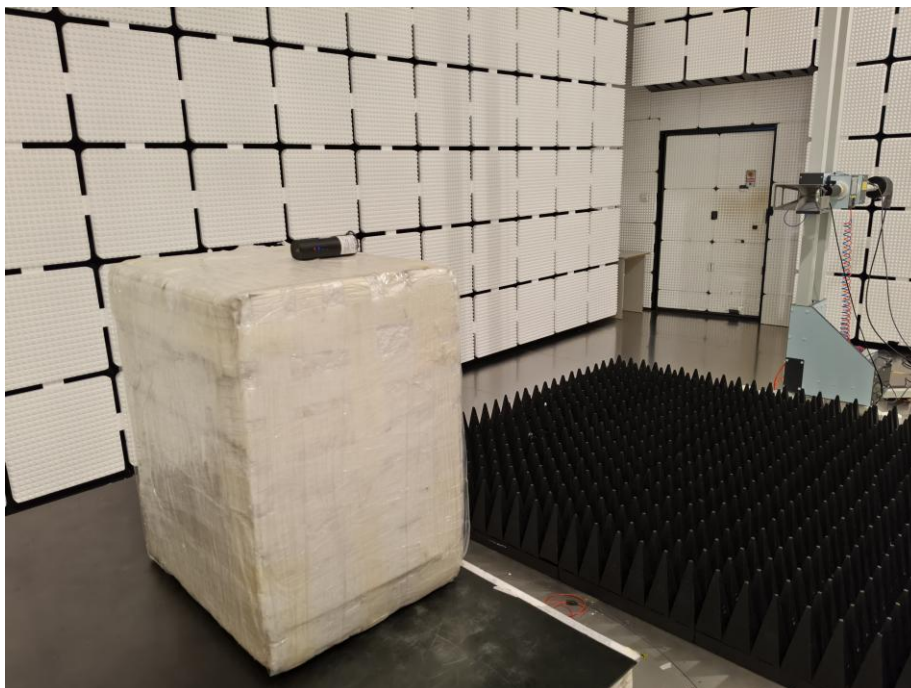
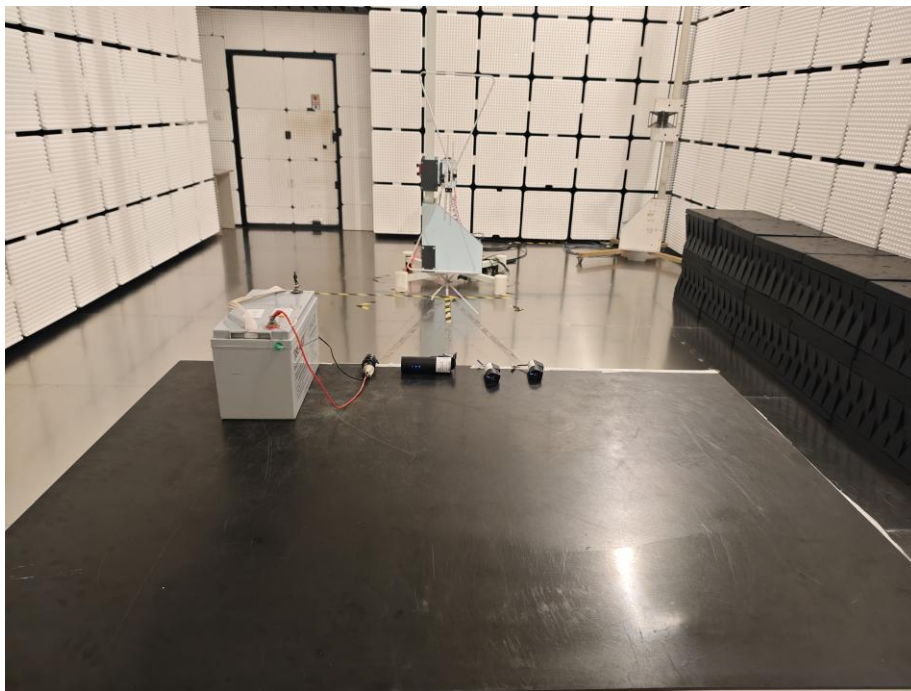
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

### 14.2 Test Result

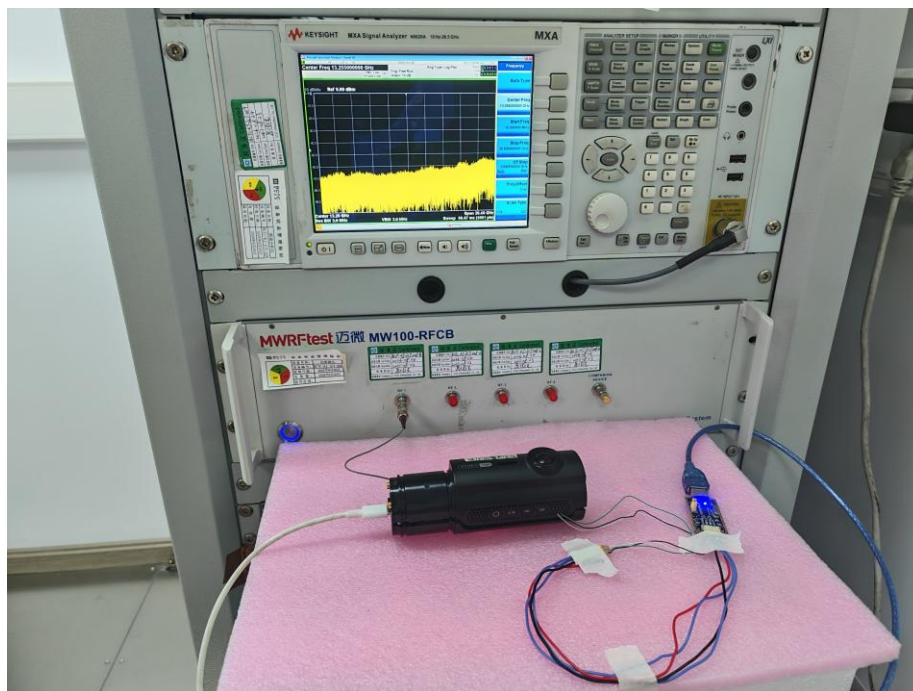
The EUT antenna is internal antenna, fulfill the requirement of this section.

## 15. EUT Test Setup Photographs

Radiated Measurement Photos



RF Conducted Test



## STATEMENT

1. The equipment lists are traceable to the International System of Units (SI)
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC 17025:2017.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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Complaint/Advice E-mail: [advice@bctc-lab.com.cn](mailto:advice@bctc-lab.com.cn)

\*\*\*\*\* END \*\*\*\*\*