

# Appendix C

## 7.1 Maximum Conducted Output Power

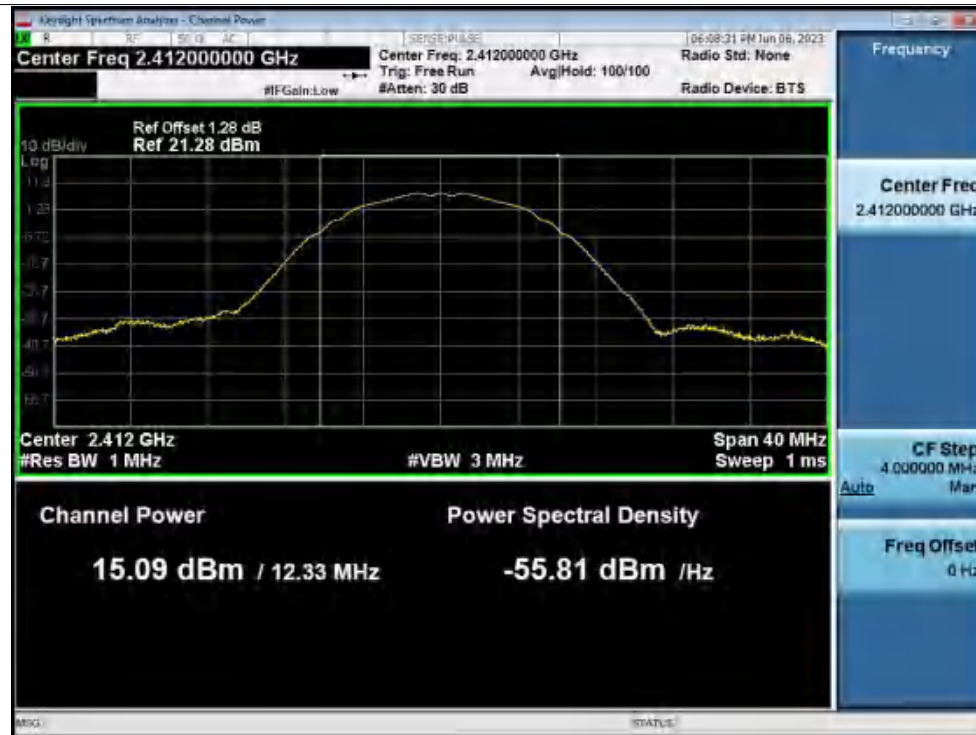
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | E.I.R.P (dBm) | E.I.R.P Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|-----------------------|------------------|-------------------|-------------|---------------|---------------------|---------|
| NVNT      | b    | 2412            | Ant1    | 15.09                 | 0                | 15.09             | 30          | 19.30         | <=36.02             | Pass    |
| NVNT      | b    | 2437            | Ant1    | 14.44                 | 0                | 14.44             | 30          | 18.65         | <=36.02             | Pass    |
| NVNT      | b    | 2462            | Ant1    | 14.29                 | 0                | 14.29             | 30          | 18.50         | <=36.02             | Pass    |
| NVNT      | g    | 2412            | Ant1    | 16.13                 | 0                | 16.13             | 30          | 20.34         | <=36.02             | Pass    |
| NVNT      | g    | 2437            | Ant1    | 15.5                  | 0                | 15.5              | 30          | 19.71         | <=36.02             | Pass    |
| NVNT      | g    | 2462            | Ant1    | 15.31                 | 0                | 15.31             | 30          | 19.52         | <=36.02             | Pass    |
| NVNT      | n20  | 2412            | Ant1    | 16.13                 | 0                | 16.13             | 30          | 20.34         | <=36.02             | Pass    |
| NVNT      | n20  | 2437            | Ant1    | 15.52                 | 0                | 15.52             | 30          | 19.73         | <=36.02             | Pass    |
| NVNT      | n20  | 2462            | Ant1    | 15.27                 | 0                | 15.27             | 30          | 19.48         | <=36.02             | Pass    |
| NVNT      | n40  | 2422            | Ant1    | 15.78                 | 0                | 15.78             | 30          | 19.99         | <=36.02             | Pass    |
| NVNT      | n40  | 2437            | Ant1    | 15.55                 | 0                | 15.55             | 30          | 19.76         | <=36.02             | Pass    |
| NVNT      | n40  | 2452            | Ant1    | 12.68                 | 0                | 12.68             | 30          | 16.89         | <=36.02             | Pass    |
| NVNT      | ax20 | 2412            | Ant1    | 16.74                 | 0                | 16.74             | 30          | 20.95         | <=36.02             | Pass    |
| NVNT      | ax20 | 2437            | Ant1    | 16.16                 | 0                | 16.16             | 30          | 20.37         | <=36.02             | Pass    |
| NVNT      | ax20 | 2462            | Ant1    | 15.84                 | 0                | 15.84             | 30          | 20.05         | <=36.02             | Pass    |
| NVNT      | ax40 | 2422            | Ant1    | 13.63                 | 0                | 13.63             | 30          | 17.84         | <=36.02             | Pass    |
| NVNT      | ax40 | 2437            | Ant1    | 13.16                 | 0                | 13.16             | 30          | 17.37         | <=36.02             | Pass    |
| NVNT      | ax40 | 2452            | Ant1    | 16.33                 | 0                | 16.33             | 30          | 20.54         | <=36.02             | Pass    |

Note1: Antenna Gain: 4.21dBi;

Note2: E.I.R.P = Measured Power + Antenna Gain

## Test Graphs

Power NVNT b 2412MHz Ant1



Power NVNT b 2437MHz Ant1



Power NVNT b 2462MHz Ant1



Power NVNT g 2412MHz Ant1



Power NVNT g 2437MHz Ant1



Power NVNT g 2462MHz Ant1



Power NVNT n20 2412MHz Ant1



Power NVNT n20 2437MHz Ant1



Power NVNT n20 2462MHz Ant1



Power NVNT n40 2422MHz Ant1



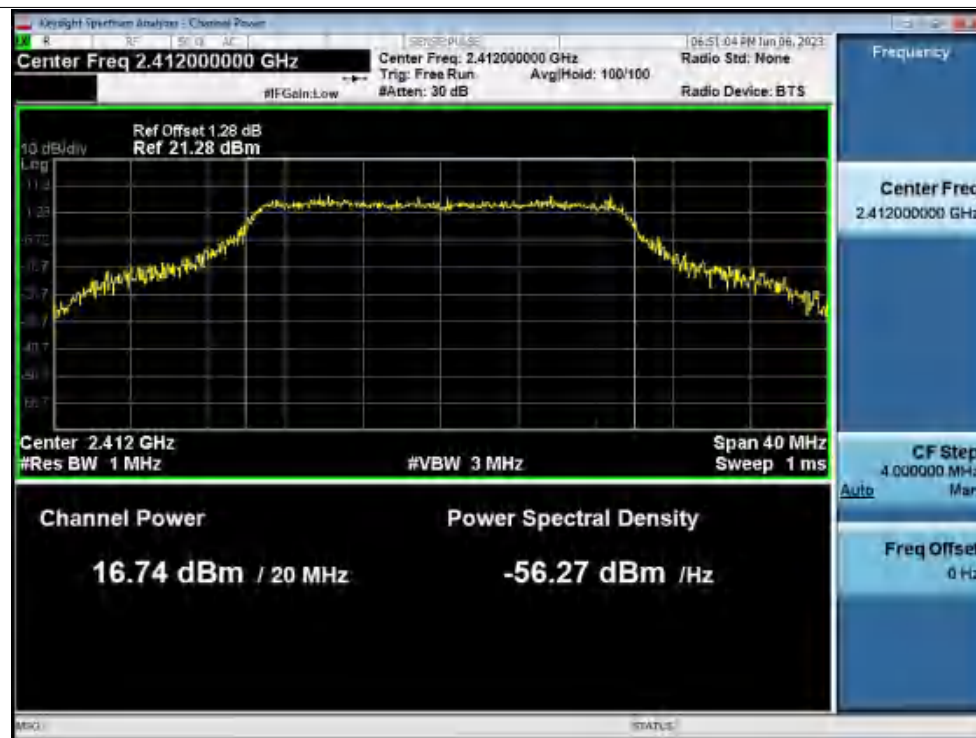
Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1



Power NVNT ax20 2412MHz Ant1



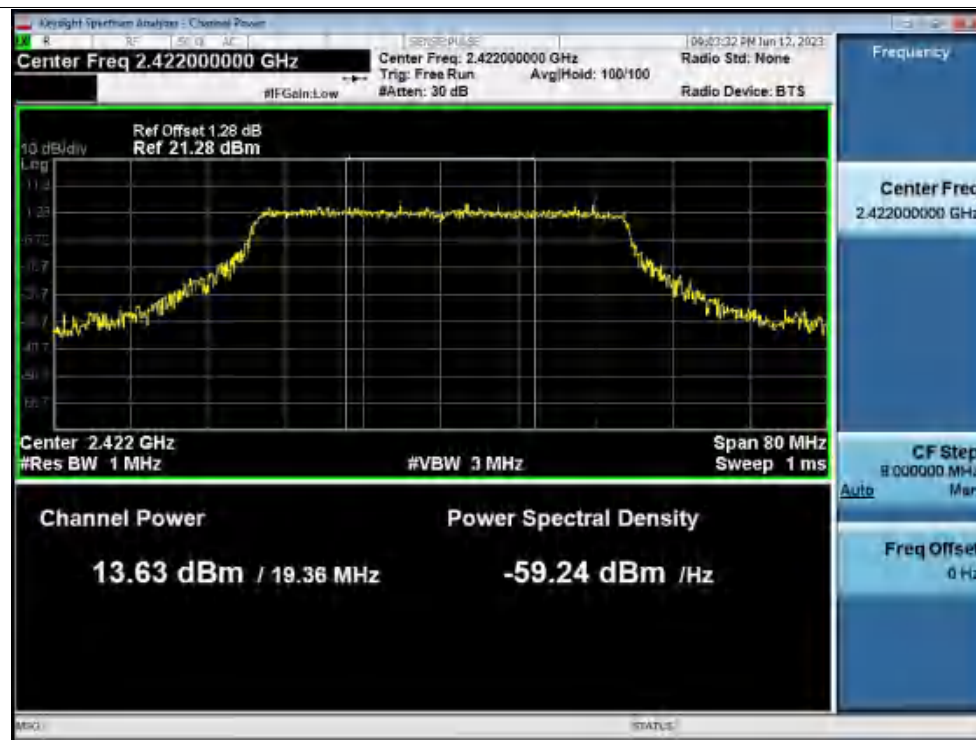
Power NVNT ax20 2437MHz Ant1



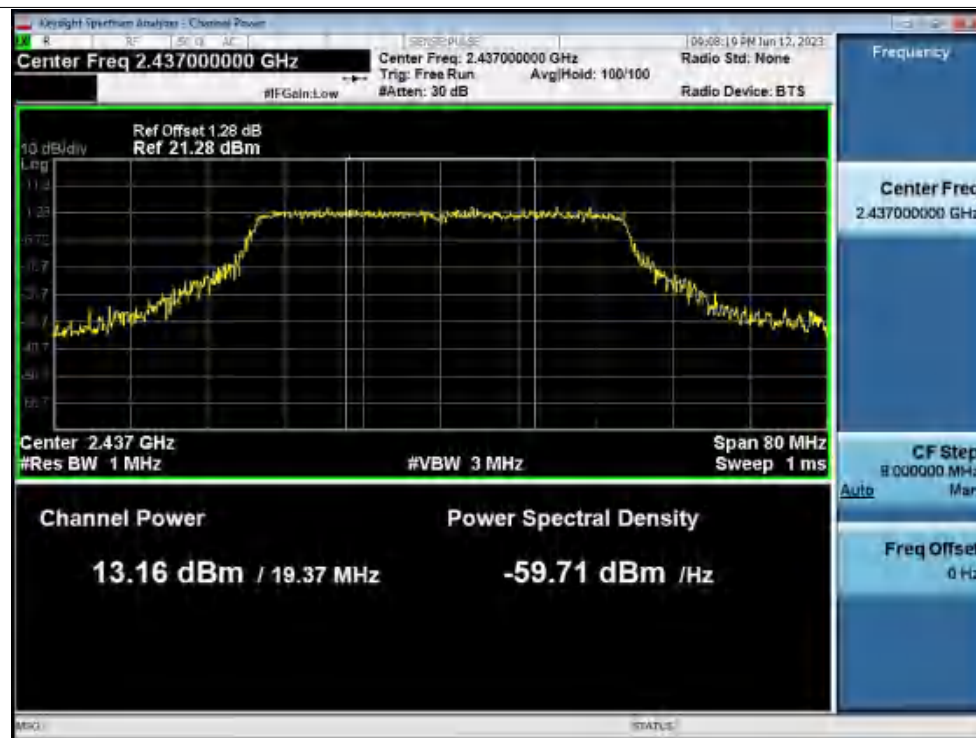
Power NVNT ax20 2462MHz Ant1



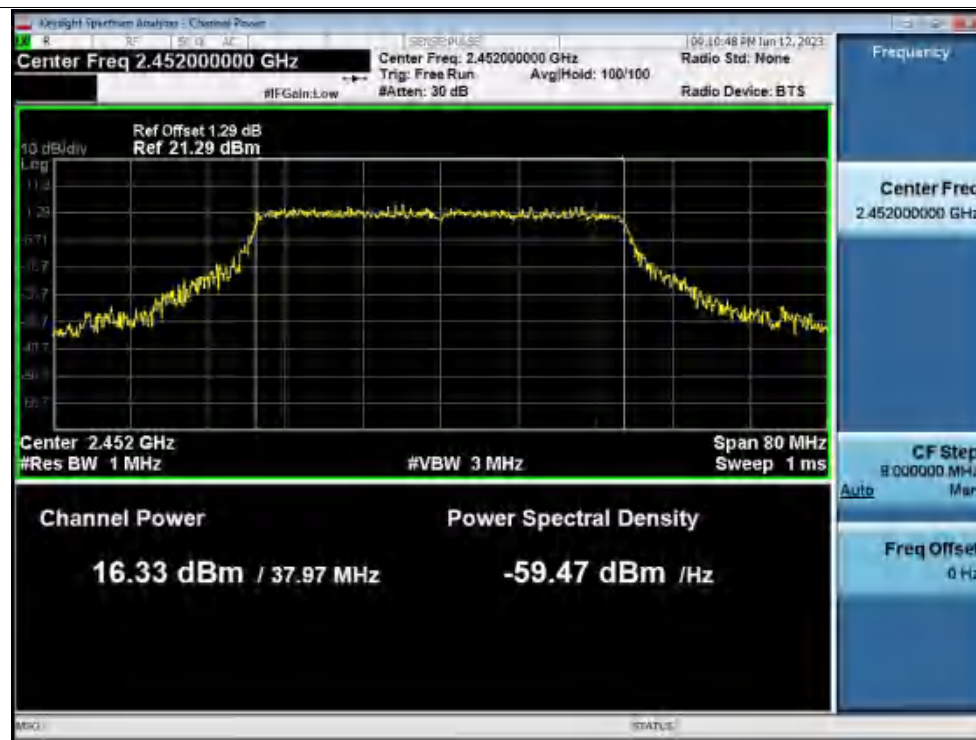
Power NVNT ax40 2422MHz Ant1



Power NVNT ax40 2437MHz Ant1



Power NVNT ax40 2452MHz Ant1



## 7.2 6dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | b    | 2412            | Ant1    | 7.522                 | 0.5                         | Pass    |
| NVNT      | b    | 2437            | Ant1    | 7.036                 | 0.5                         | Pass    |
| NVNT      | b    | 2462            | Ant1    | 7.055                 | 0.5                         | Pass    |
| NVNT      | g    | 2412            | Ant1    | 16.333                | 0.5                         | Pass    |
| NVNT      | g    | 2437            | Ant1    | 17.573                | 0.5                         | Pass    |
| NVNT      | g    | 2462            | Ant1    | 17.556                | 0.5                         | Pass    |
| NVNT      | n20  | 2412            | Ant1    | 17.577                | 0.5                         | Pass    |
| NVNT      | n20  | 2437            | Ant1    | 17.545                | 0.5                         | Pass    |
| NVNT      | n20  | 2462            | Ant1    | 17.572                | 0.5                         | Pass    |
| NVNT      | n40  | 2422            | Ant1    | 35.745                | 0.5                         | Pass    |
| NVNT      | n40  | 2437            | Ant1    | 36.31                 | 0.5                         | Pass    |
| NVNT      | n40  | 2452            | Ant1    | 36.291                | 0.5                         | Pass    |
| NVNT      | ax20 | 2412            | Ant1    | 18.854                | 0.5                         | Pass    |
| NVNT      | ax20 | 2437            | Ant1    | 18.874                | 0.5                         | Pass    |
| NVNT      | ax20 | 2462            | Ant1    | 18.911                | 0.5                         | Pass    |
| NVNT      | ax40 | 2422            | Ant1    | 37.812                | 0.5                         | Pass    |
| NVNT      | ax40 | 2437            | Ant1    | 37.747                | 0.5                         | Pass    |
| NVNT      | ax40 | 2452            | Ant1    | 37.896                | 0.5                         | Pass    |

## Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2437MHz Ant1



-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1



-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1



-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2437MHz Ant1



-6dB Bandwidth NVNT n20 2462MHz Ant1



-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



-6dB Bandwidth NVNT ax20 2412MHz Ant1



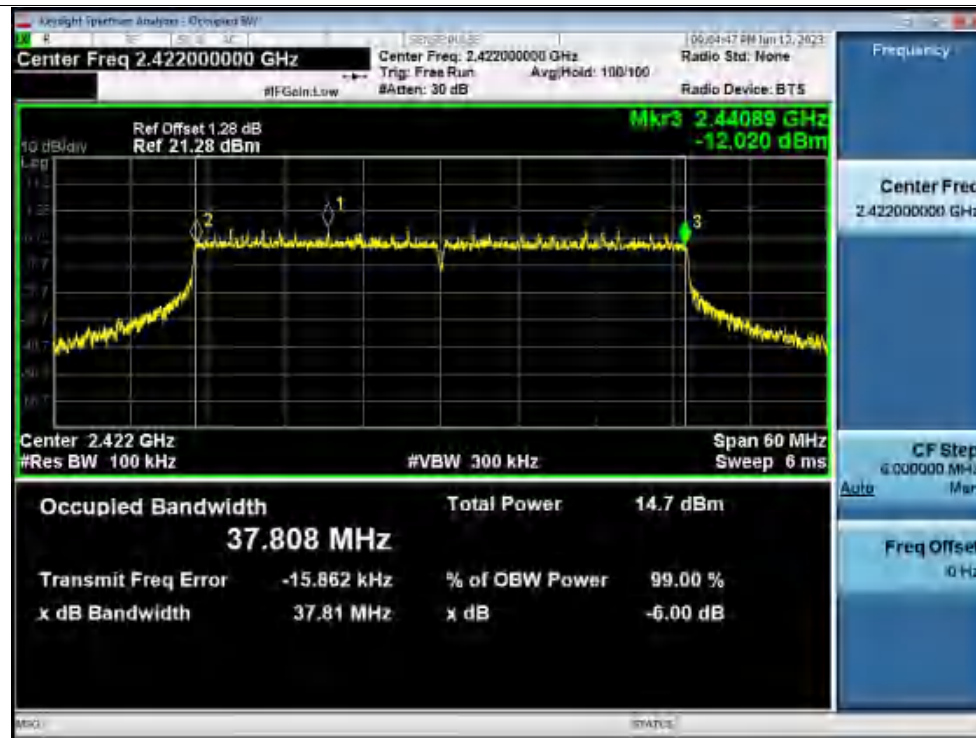
-6dB Bandwidth NVNT ax20 2437MHz Ant1



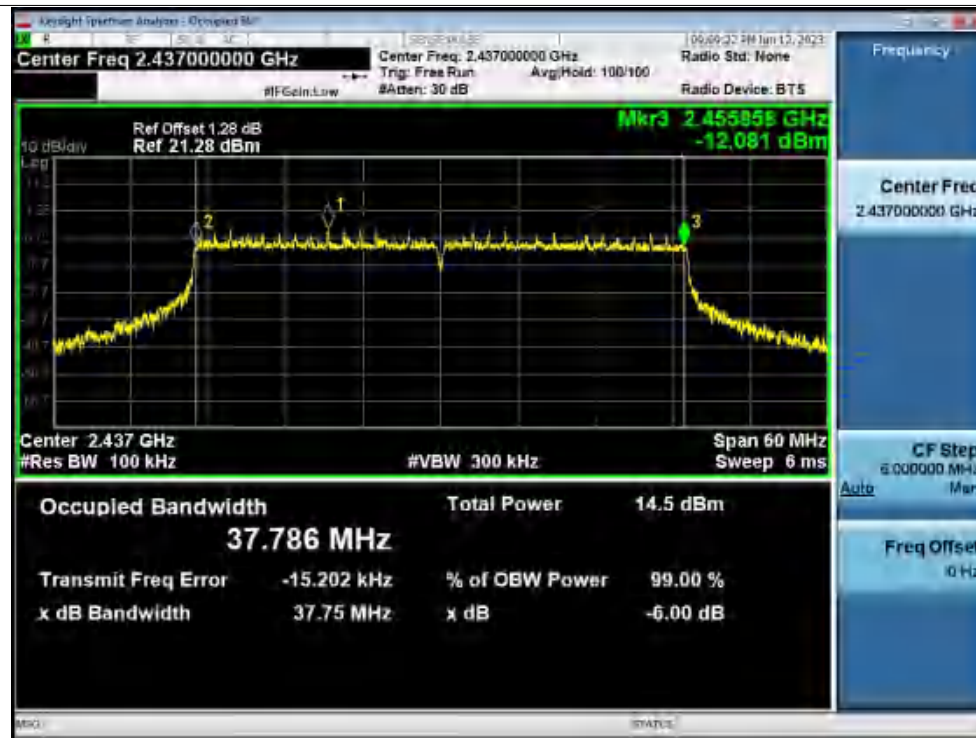
-6dB Bandwidth NVNT ax20 2462MHz Ant1



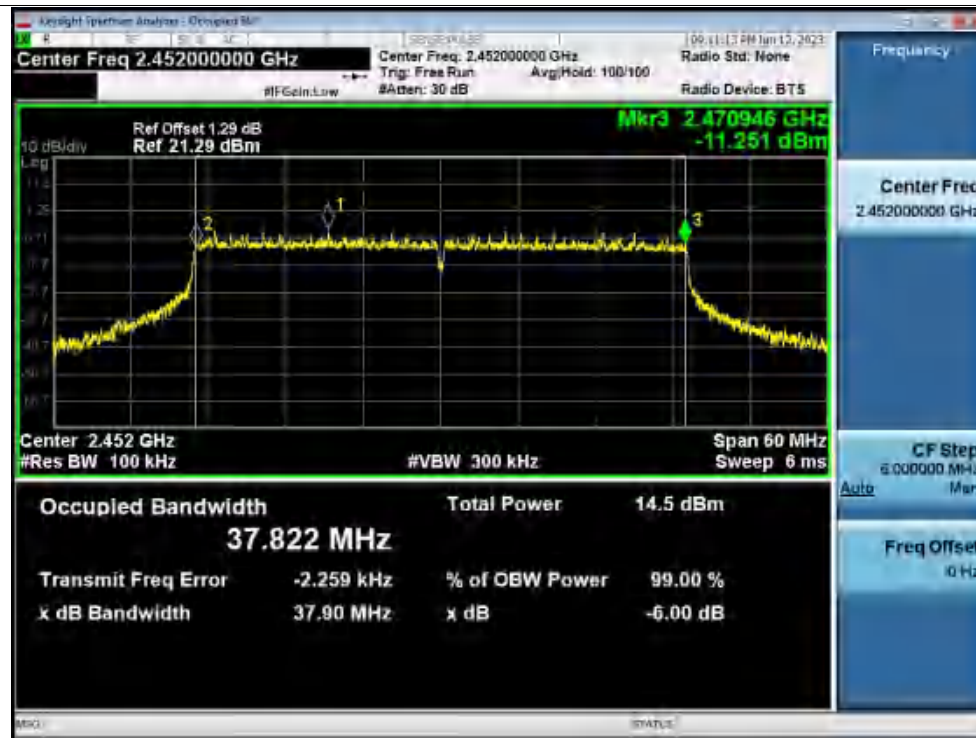
-6dB Bandwidth NVNT ax40 2422MHz Ant1



-6dB Bandwidth NVNT ax40 2437MHz Ant1



-6dB Bandwidth NVNT ax40 2452MHz Ant1



## Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT      | b    | 2412            | Ant1    | 12.329        |
| NVNT      | b    | 2437            | Ant1    | 12.348        |
| NVNT      | b    | 2462            | Ant1    | 12.359        |
| NVNT      | g    | 2412            | Ant1    | 16.725        |
| NVNT      | g    | 2437            | Ant1    | 17.984        |
| NVNT      | g    | 2462            | Ant1    | 17.96         |
| NVNT      | n20  | 2412            | Ant1    | 18.047        |
| NVNT      | n20  | 2437            | Ant1    | 17.955        |
| NVNT      | n20  | 2462            | Ant1    | 18.038        |
| NVNT      | n40  | 2422            | Ant1    | 36.557        |
| NVNT      | n40  | 2437            | Ant1    | 36.608        |
| NVNT      | n40  | 2452            | Ant1    | 36.573        |
| NVNT      | ax20 | 2412            | Ant1    | 19.14         |
| NVNT      | ax20 | 2437            | Ant1    | 19.134        |
| NVNT      | ax20 | 2462            | Ant1    | 19.146        |
| NVNT      | ax40 | 2422            | Ant1    | 38.022        |
| NVNT      | ax40 | 2437            | Ant1    | 37.907        |
| NVNT      | ax40 | 2452            | Ant1    | 37.969        |

## Test Graphs

OBW NVNT b 2412MHz Ant1



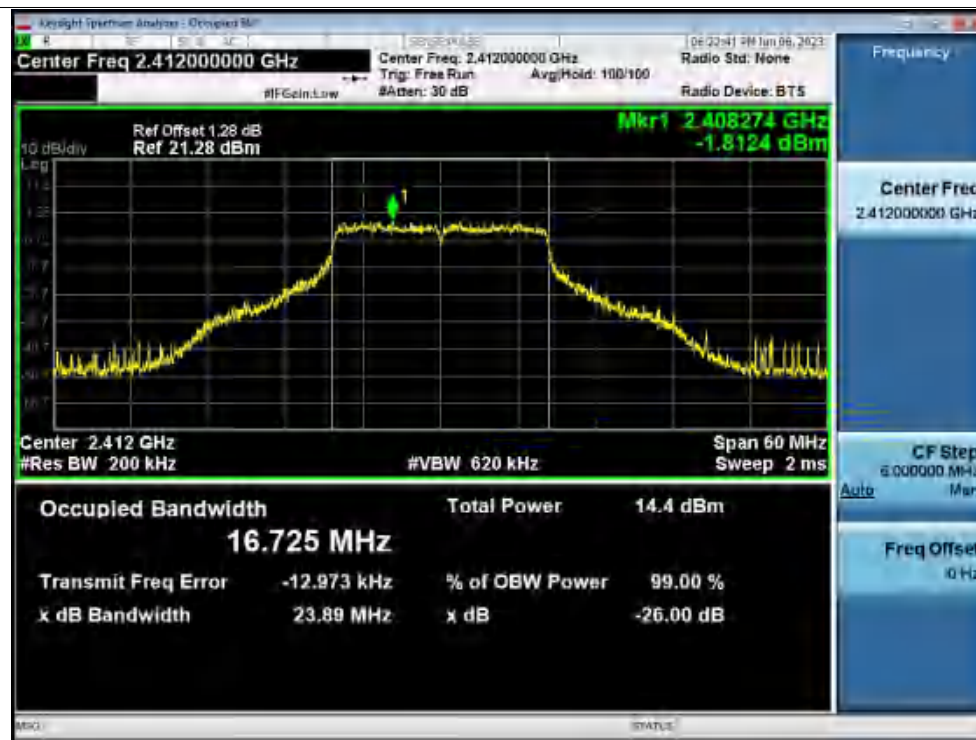
OBW NVNT b 2437MHz Ant1



OBW NVNT b 2462MHz Ant1



OBW NVNT g 2412MHz Ant1



OBW NVNT g 2437MHz Ant1



OBW NVNT g 2462MHz Ant1



OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2437MHz Ant1



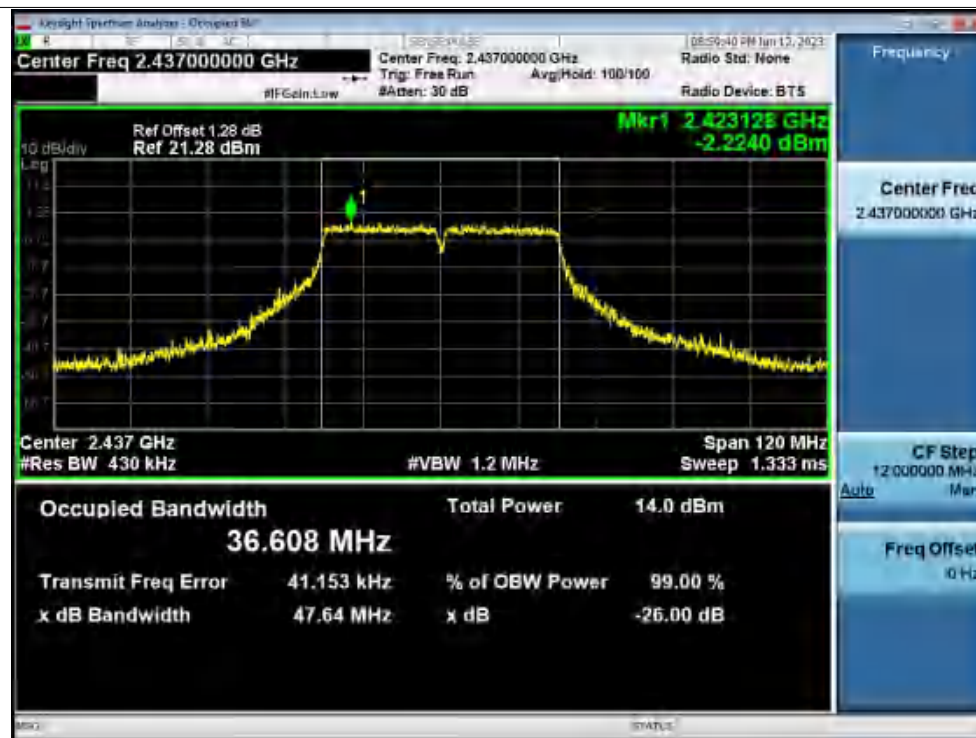
OBW NVNT n20 2462MHz Ant1



OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1



OBW NVNT ax20 2412MHz Ant1



OBW NVNT ax20 2437MHz Ant1



OBW NVNT ax20 2462MHz Ant1



OBW NVNT ax40 2422MHz Ant1



OBW NVNT ax40 2437MHz Ant1



OBW NVNT ax40 2452MHz Ant1



### 7.3 Maximum Power Spectral Density Level

| Condition | Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm/3kHz) | Duty Factor (dB) | Total PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|------|-----------------|---------|--------------------------|------------------|----------------------|------------------|---------|
| NVNT      | b    | 2412            | Ant1    | -5.89                    | 0                | -5.89                | 8                | Pass    |
| NVNT      | b    | 2437            | Ant1    | -8.05                    | 0                | -8.05                | 8                | Pass    |
| NVNT      | b    | 2462            | Ant1    | -5.37                    | 0                | -5.37                | 8                | Pass    |
| NVNT      | g    | 2412            | Ant1    | -15.83                   | 0                | -15.83               | 8                | Pass    |
| NVNT      | g    | 2437            | Ant1    | -16.93                   | 0                | -16.93               | 8                | Pass    |
| NVNT      | g    | 2462            | Ant1    | -17.3                    | 0                | -17.3                | 8                | Pass    |
| NVNT      | n20  | 2412            | Ant1    | -16.01                   | 0                | -16.01               | 8                | Pass    |
| NVNT      | n20  | 2437            | Ant1    | -17.51                   | 0                | -17.51               | 8                | Pass    |
| NVNT      | n20  | 2462            | Ant1    | -16.99                   | 0                | -16.99               | 8                | Pass    |
| NVNT      | n40  | 2422            | Ant1    | -18.54                   | 0                | -18.54               | 8                | Pass    |
| NVNT      | n40  | 2437            | Ant1    | -20.26                   | 0                | -20.26               | 8                | Pass    |
| NVNT      | n40  | 2452            | Ant1    | -20.19                   | 0                | -20.19               | 8                | Pass    |
| NVNT      | ax20 | 2412            | Ant1    | -17.58                   | 0                | -17.58               | 8                | Pass    |
| NVNT      | ax20 | 2437            | Ant1    | -17.61                   | 0                | -17.61               | 8                | Pass    |
| NVNT      | ax20 | 2462            | Ant1    | -18.05                   | 0                | -18.05               | 8                | Pass    |
| NVNT      | ax40 | 2422            | Ant1    | -20.94                   | 0                | -20.94               | 8                | Pass    |
| NVNT      | ax40 | 2437            | Ant1    | -19.75                   | 0                | -19.75               | 8                | Pass    |
| NVNT      | ax40 | 2452            | Ant1    | -20.91                   | 0                | -20.91               | 8                | Pass    |

## Test Graphs

PSD NVNT b 2412MHz Ant1



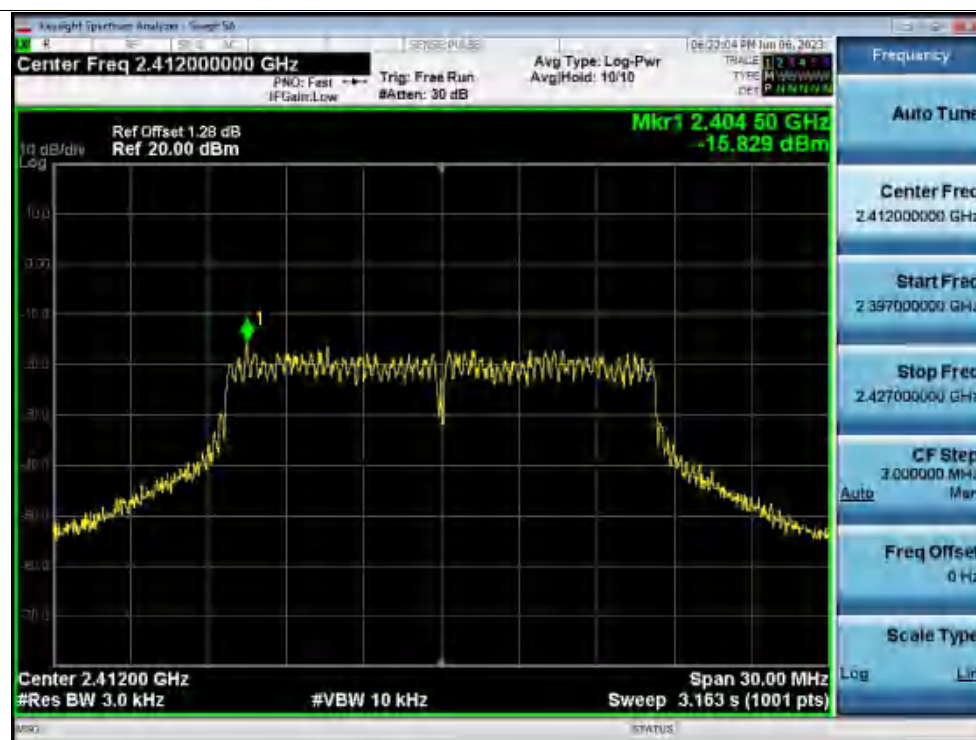
PSD NVNT b 2437MHz Ant1



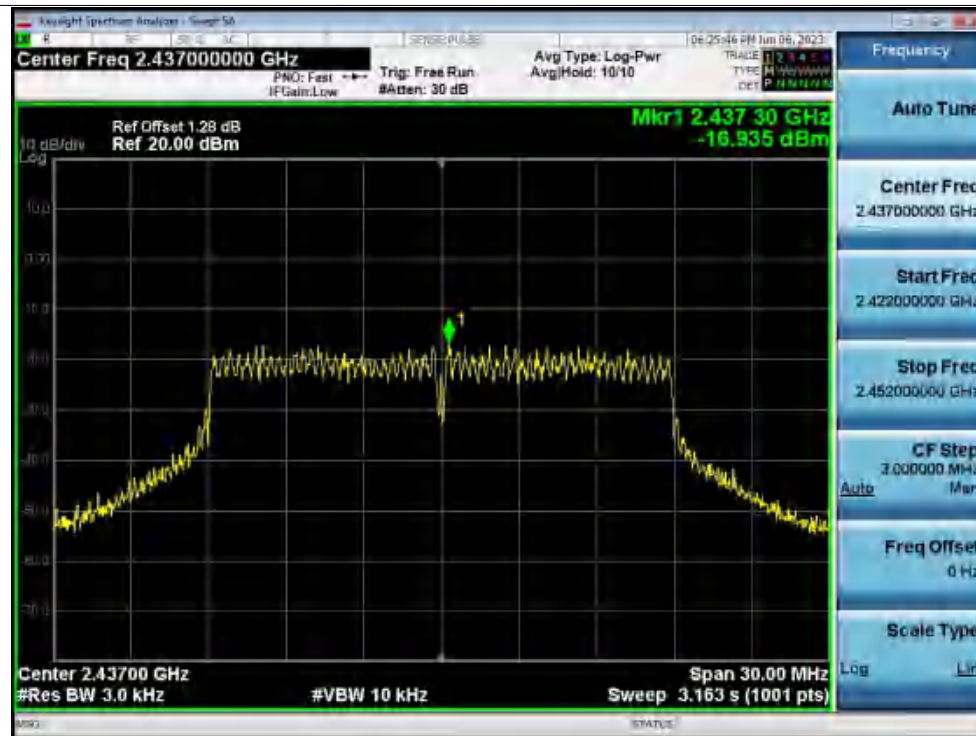
PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



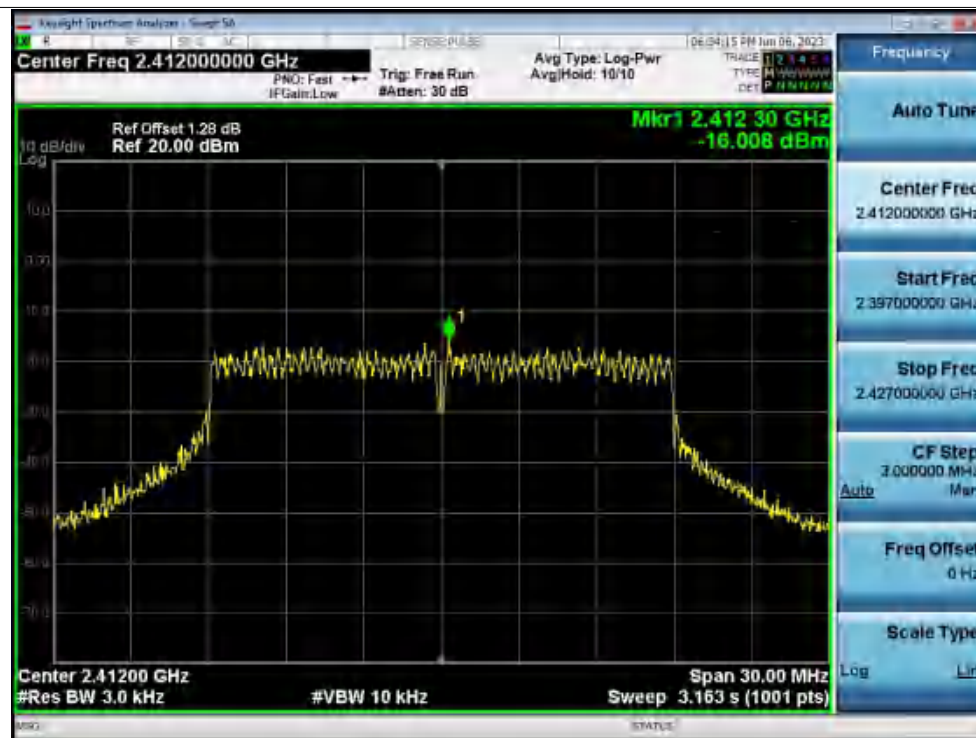
PSD NVNT g 2437MHz Ant1



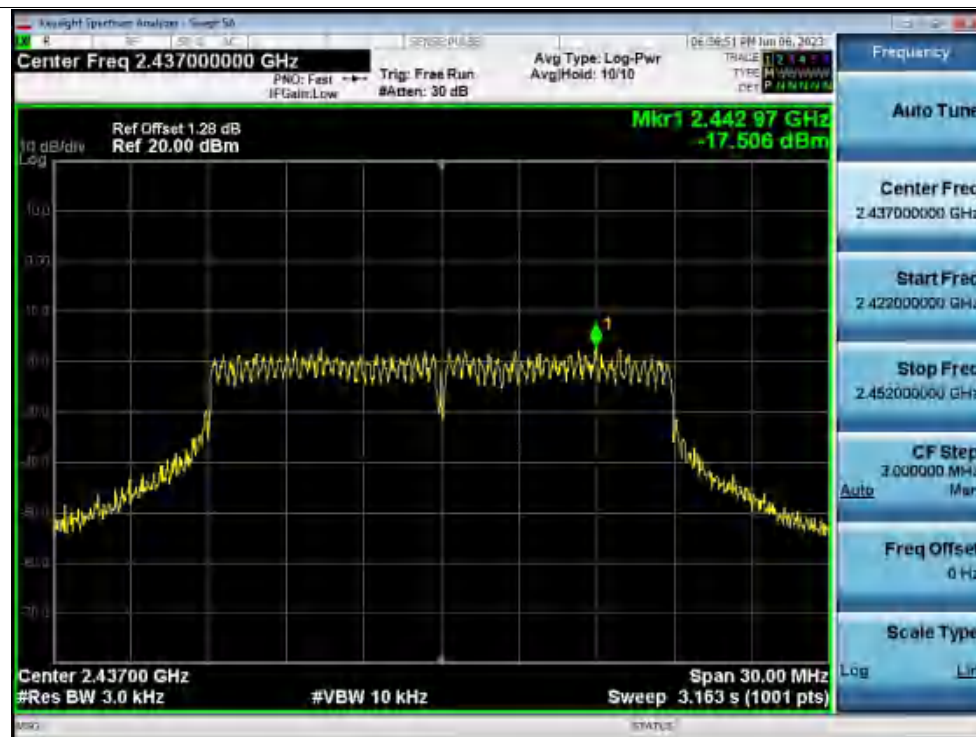
PSD NVNT g 2462MHz Ant1



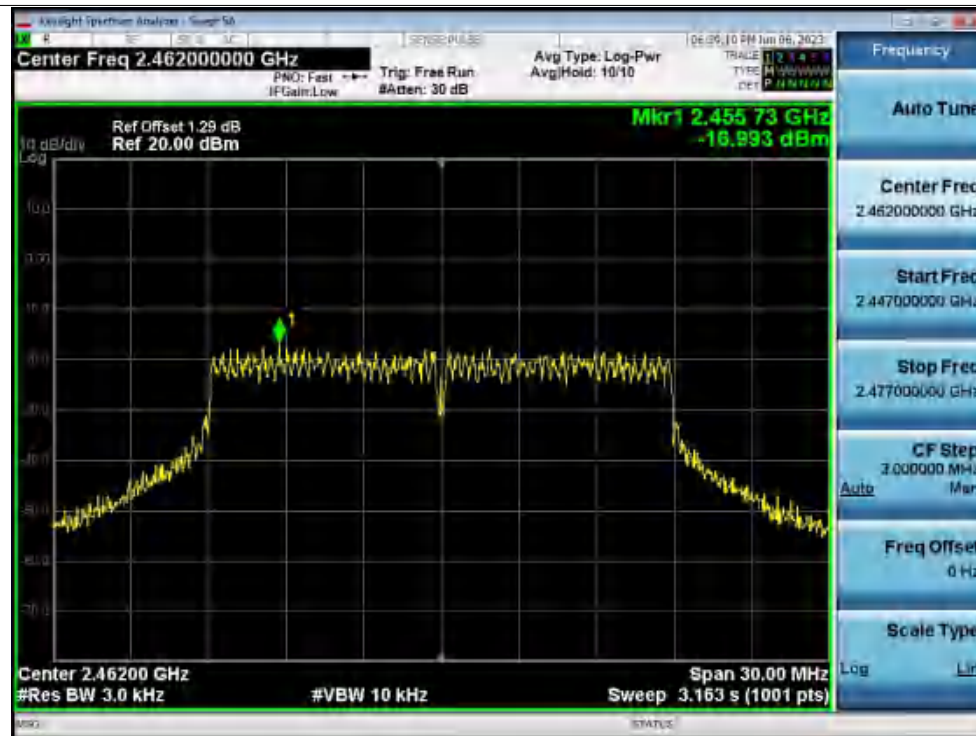
PSD NVNT n20 2412MHz Ant1



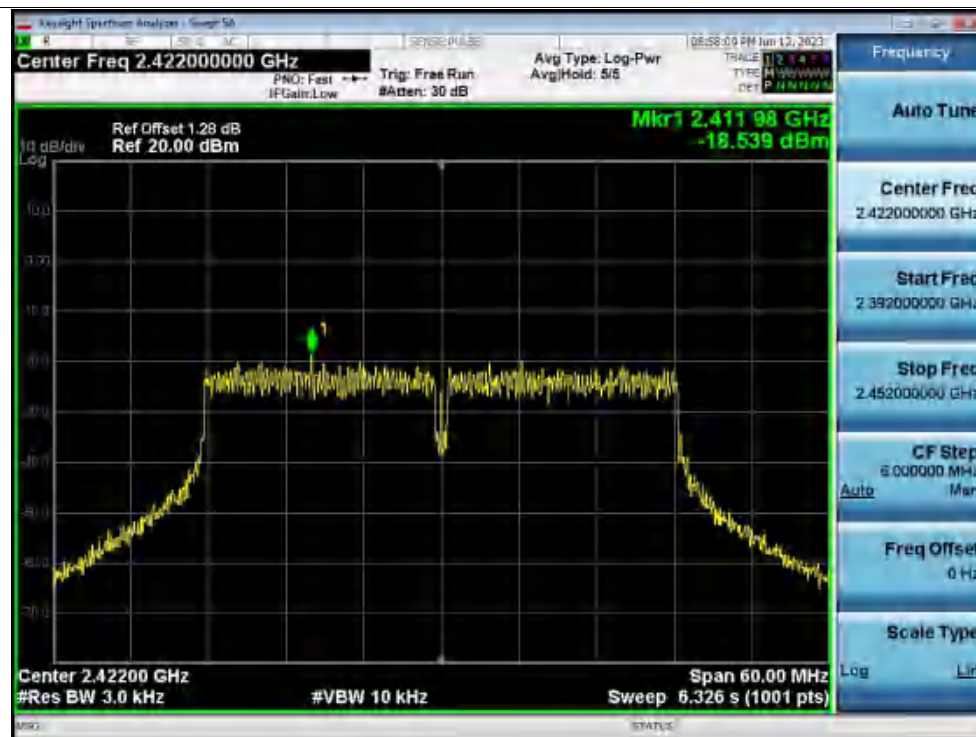
PSD NVNT n20 2437MHz Ant1



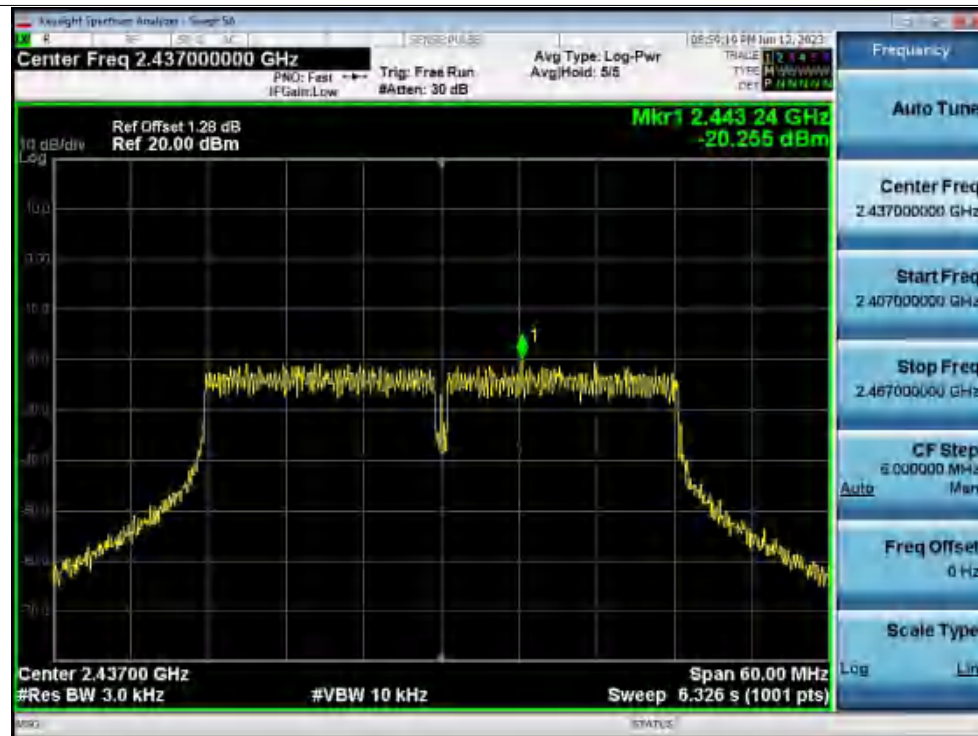
PSD NVNT n20 2462MHz Ant1



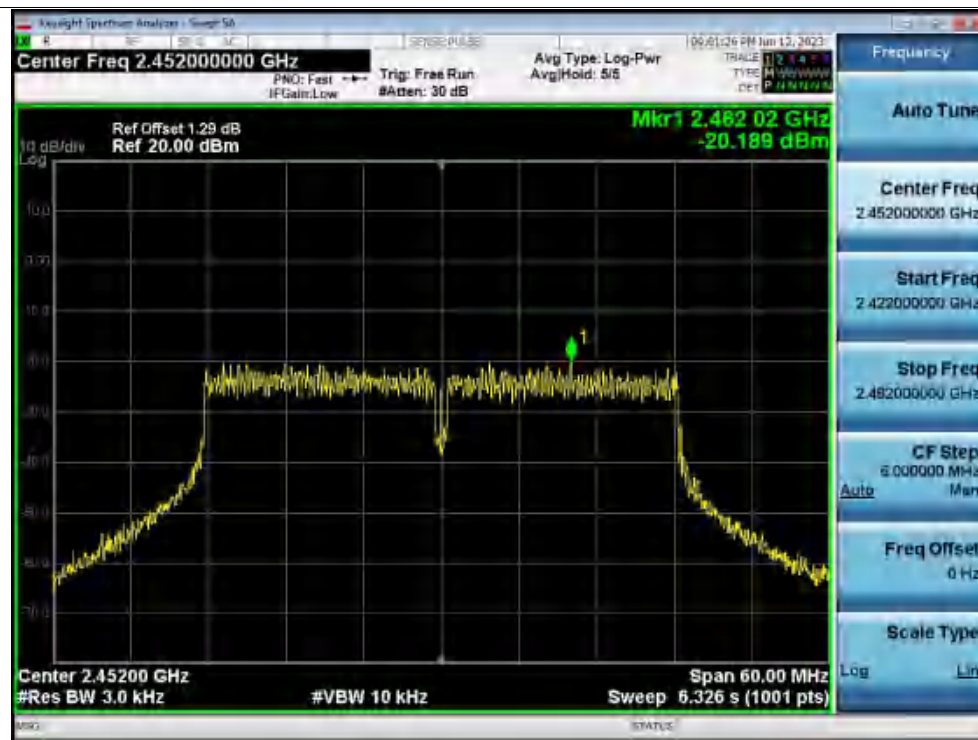
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



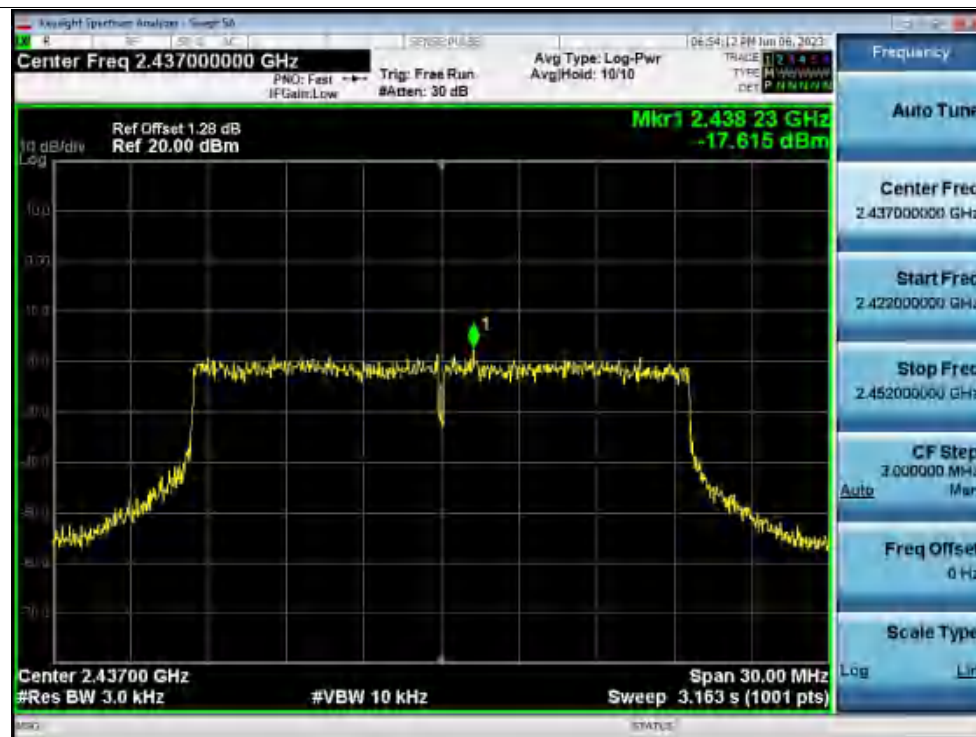
PSD NVNT n40 2452MHz Ant1



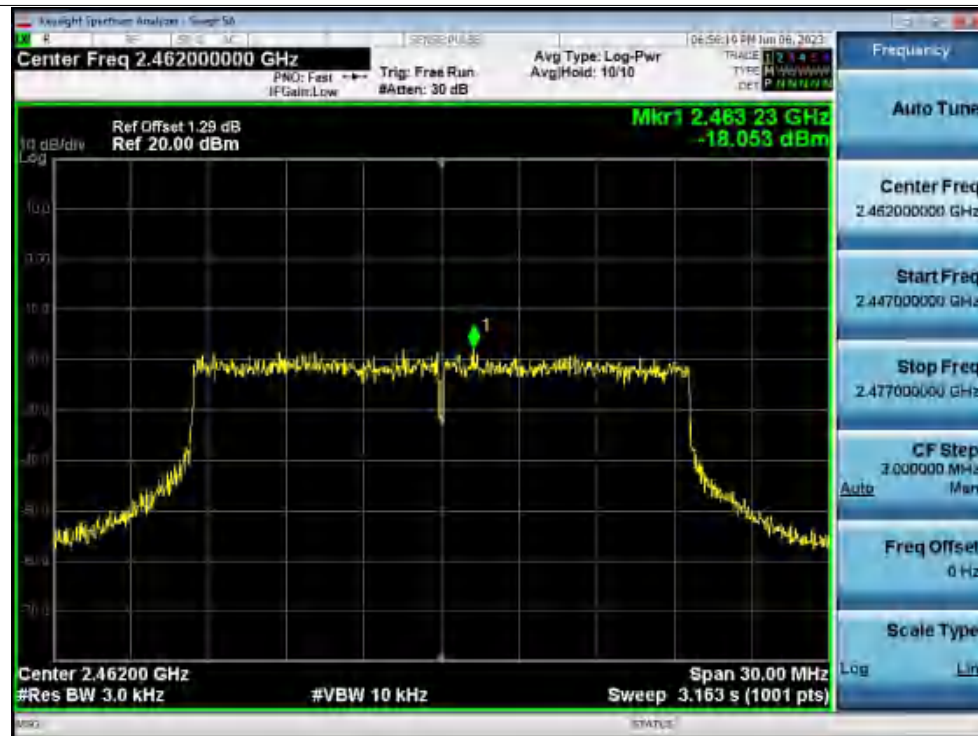
PSD NVNT ax20 2412MHz Ant1



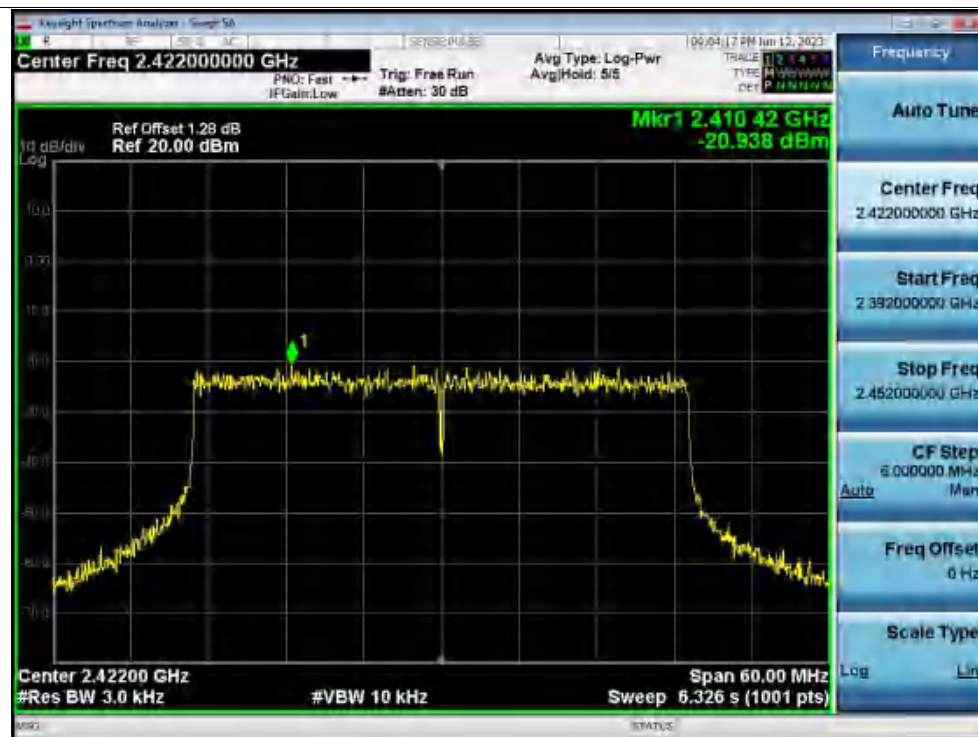
PSD NVNT ax20 2437MHz Ant1



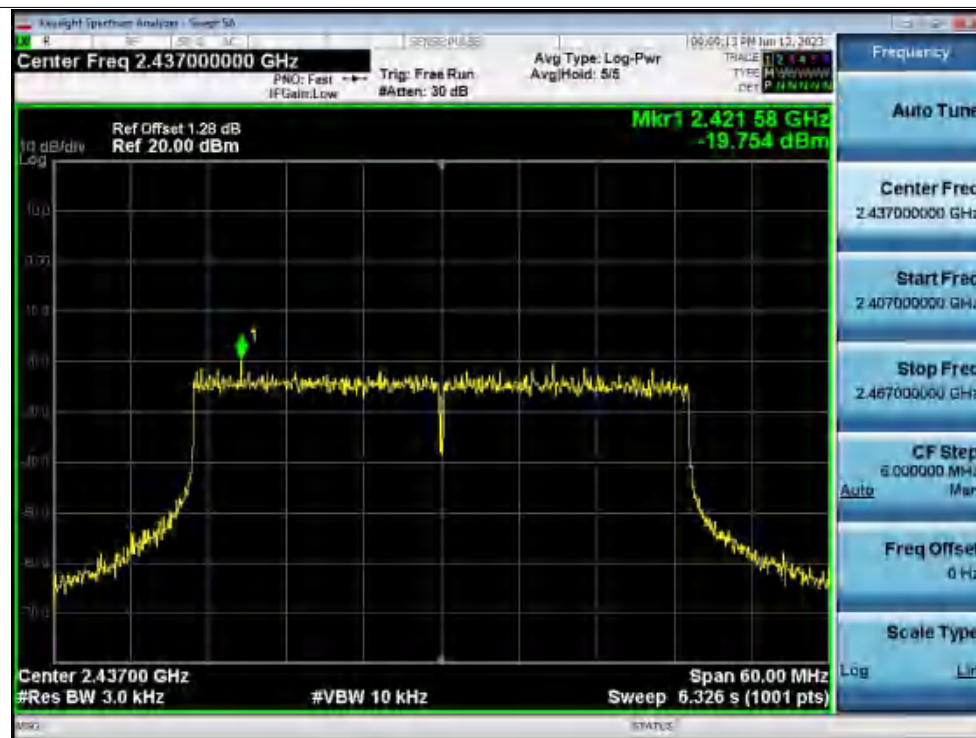
PSD NVNT ax20 2462MHz Ant1



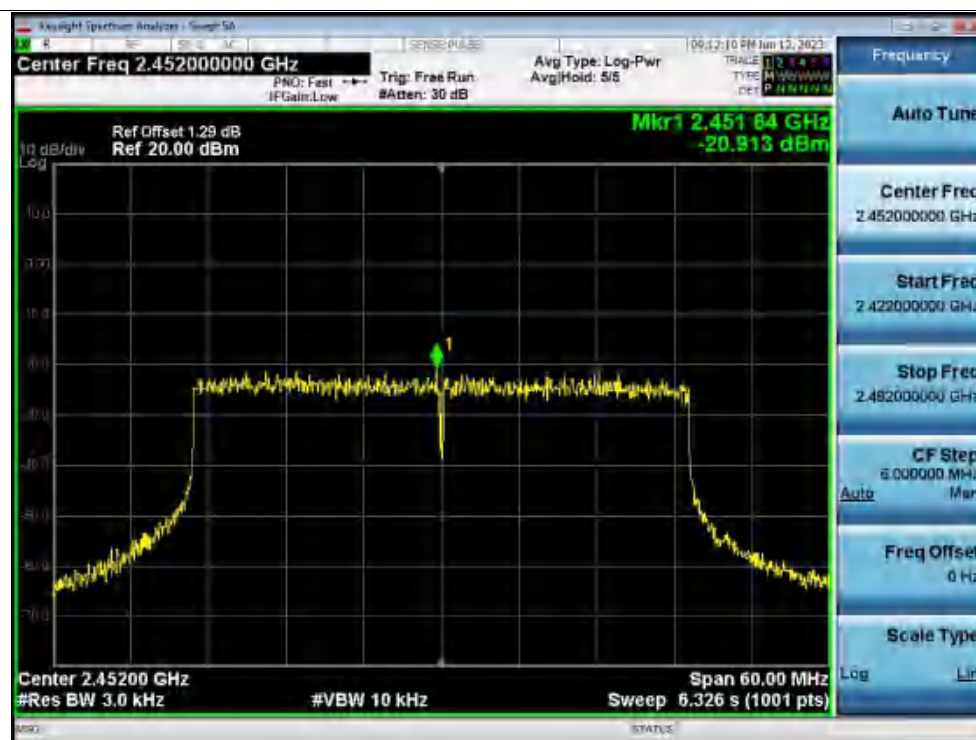
PSD NVNT ax40 2422MHz Ant1



PSD NVNT ax40 2437MHz Ant1



PSD NVNT ax40 2452MHz Ant1



## 7.4 Band Edge

| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | b    | 2412            | Ant1    | -48.31          | -20         | Pass    |
| NVNT      | b    | 2462            | Ant1    | -60.46          | -20         | Pass    |
| NVNT      | g    | 2412            | Ant1    | -28.57          | -20         | Pass    |
| NVNT      | g    | 2462            | Ant1    | -46.46          | -20         | Pass    |
| NVNT      | n20  | 2412            | Ant1    | -29.12          | -20         | Pass    |
| NVNT      | n20  | 2462            | Ant1    | -44.66          | -20         | Pass    |
| NVNT      | n40  | 2422            | Ant1    | -27.61          | -20         | Pass    |
| NVNT      | n40  | 2452            | Ant1    | -40.47          | -20         | Pass    |
| NVNT      | ax20 | 2412            | Ant1    | -29             | -20         | Pass    |
| NVNT      | ax20 | 2462            | Ant1    | -45.83          | -20         | Pass    |
| NVNT      | ax40 | 2422            | Ant1    | -29.64          | -20         | Pass    |
| NVNT      | ax40 | 2452            | Ant1    | -39.49          | -20         | Pass    |

## Test Graphs

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 2462MHz Ant1 Ref



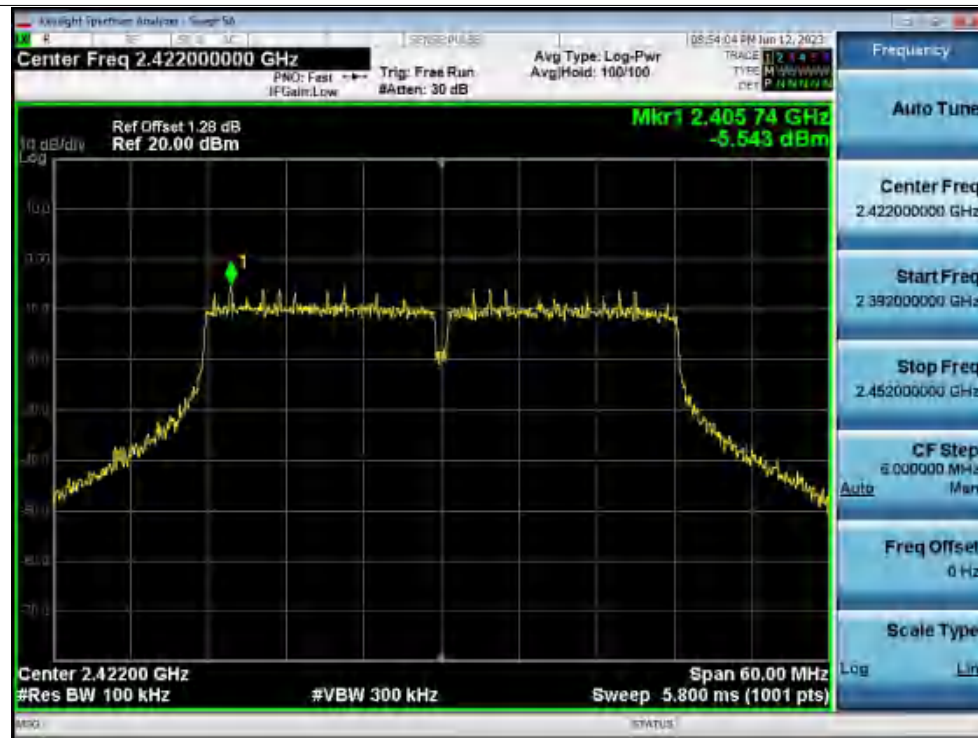
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission





Band Edge NVNT ax20 2412MHz Ant1 Ref

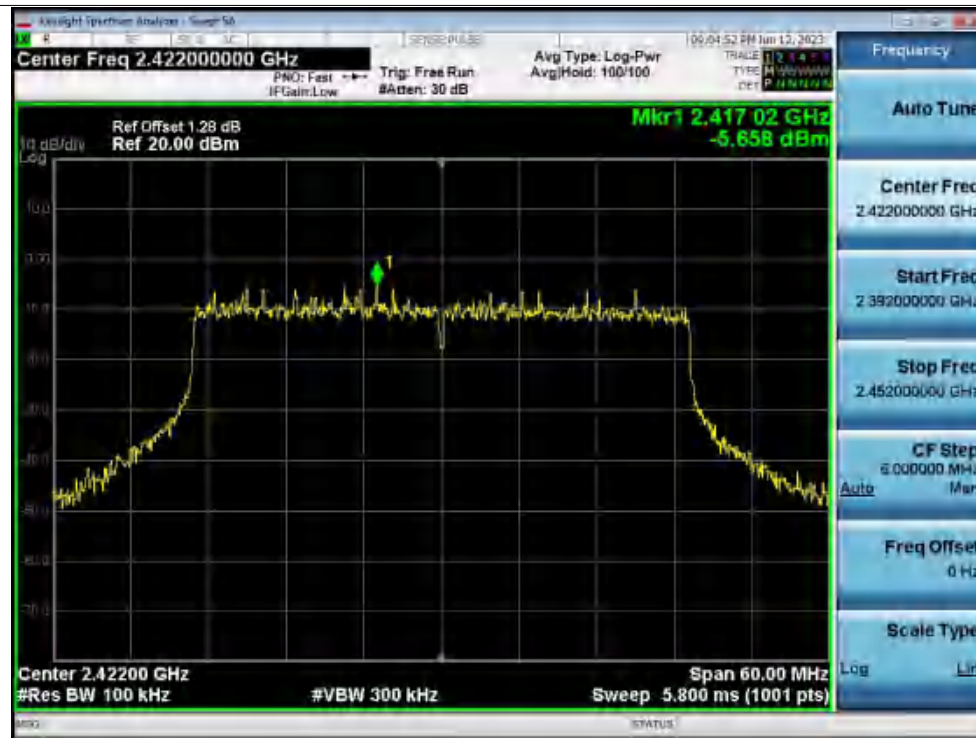


Band Edge NVNT ax20 2412MHz Ant1 Emission

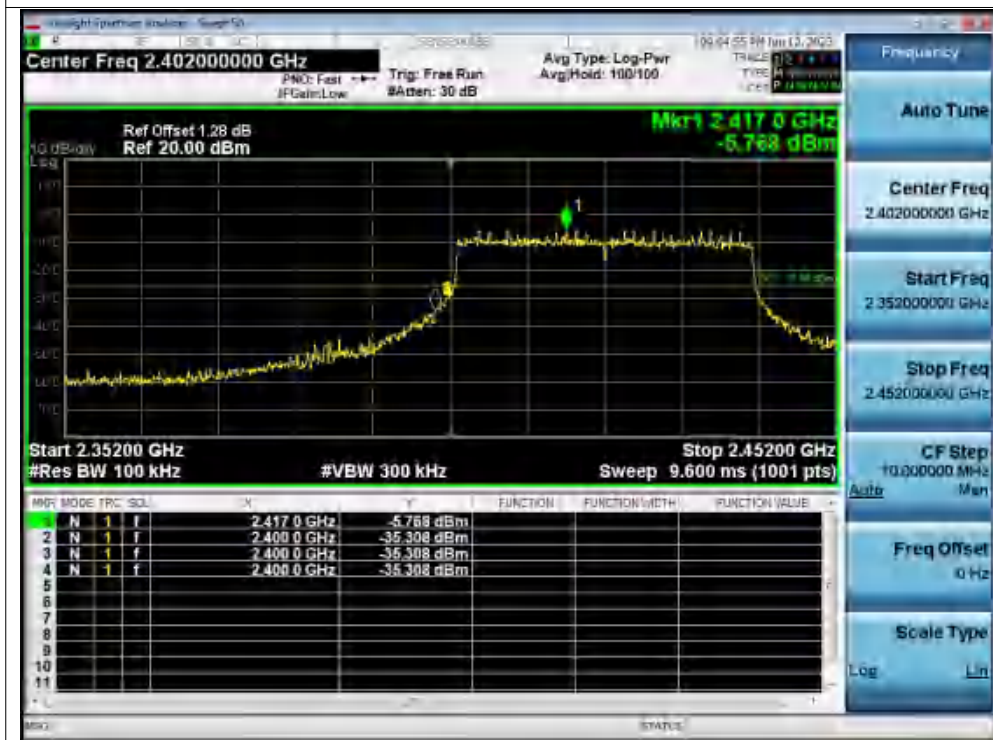


Band Edge NVNT ax20 2462MHz Ant1 Ref

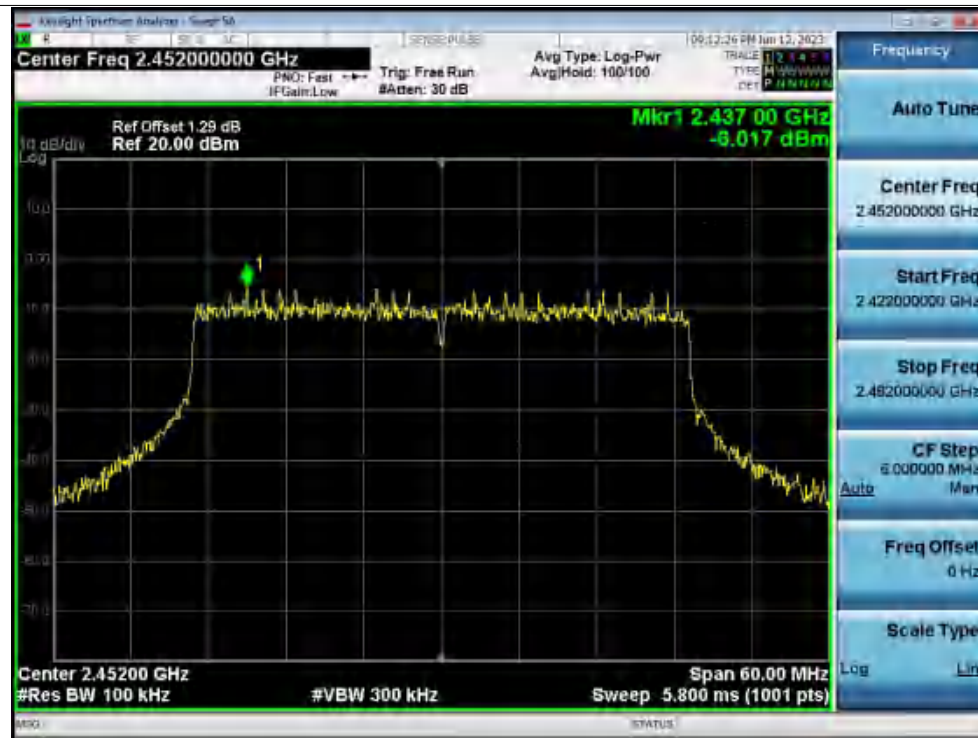
Band Edge NVNT ax40 2422MHz Ant1 Ref



Band Edge NVNT ax40 2422MHz Ant1 Emission



Band Edge NVNT ax40 2452MHz Ant1 Ref



Band Edge NVNT ax40 2452MHz Ant1 Emission



## Conducted RF Spurious Emission

| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | b    | 2412            | Ant1    | -45.77          | -20         | Pass    |
| NVNT      | b    | 2437            | Ant1    | -44.56          | -20         | Pass    |
| NVNT      | b    | 2462            | Ant1    | -45.3           | -20         | Pass    |
| NVNT      | g    | 2412            | Ant1    | -39.93          | -20         | Pass    |
| NVNT      | g    | 2437            | Ant1    | -39.42          | -20         | Pass    |
| NVNT      | g    | 2462            | Ant1    | -38.25          | -20         | Pass    |
| NVNT      | n20  | 2412            | Ant1    | -39.83          | -20         | Pass    |
| NVNT      | n20  | 2437            | Ant1    | -38.81          | -20         | Pass    |
| NVNT      | n20  | 2462            | Ant1    | -38.57          | -20         | Pass    |
| NVNT      | n40  | 2422            | Ant1    | -37.21          | -20         | Pass    |
| NVNT      | n40  | 2437            | Ant1    | -36.63          | -20         | Pass    |
| NVNT      | n40  | 2452            | Ant1    | -35.72          | -20         | Pass    |
| NVNT      | ax20 | 2412            | Ant1    | -40.04          | -20         | Pass    |
| NVNT      | ax20 | 2437            | Ant1    | -38.47          | -20         | Pass    |
| NVNT      | ax20 | 2462            | Ant1    | -38.56          | -20         | Pass    |
| NVNT      | ax40 | 2422            | Ant1    | -36.88          | -20         | Pass    |
| NVNT      | ax40 | 2437            | Ant1    | -35.95          | -20         | Pass    |
| NVNT      | ax40 | 2452            | Ant1    | -36.51          | -20         | Pass    |

## Test Graphs

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



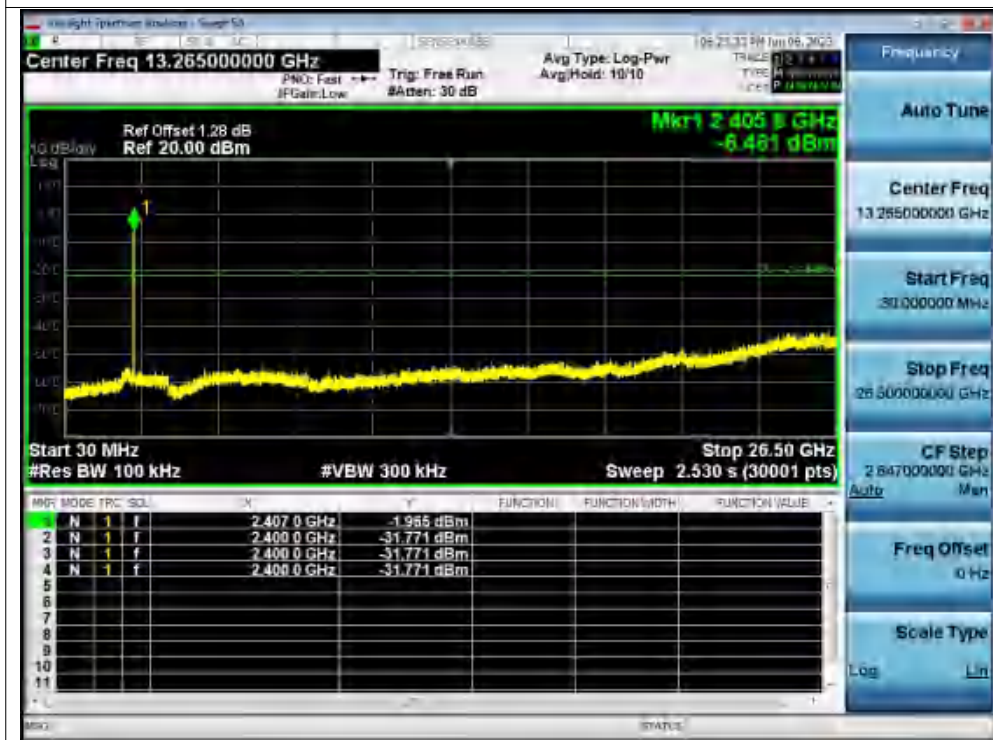
Tx. Spurious NVNT b 2462MHz Ant1 Emission



Tx. Spurious NVNT g 2412MHz Ant1 Ref



Tx. Spurious NVNT g 2412MHz Ant1 Emission

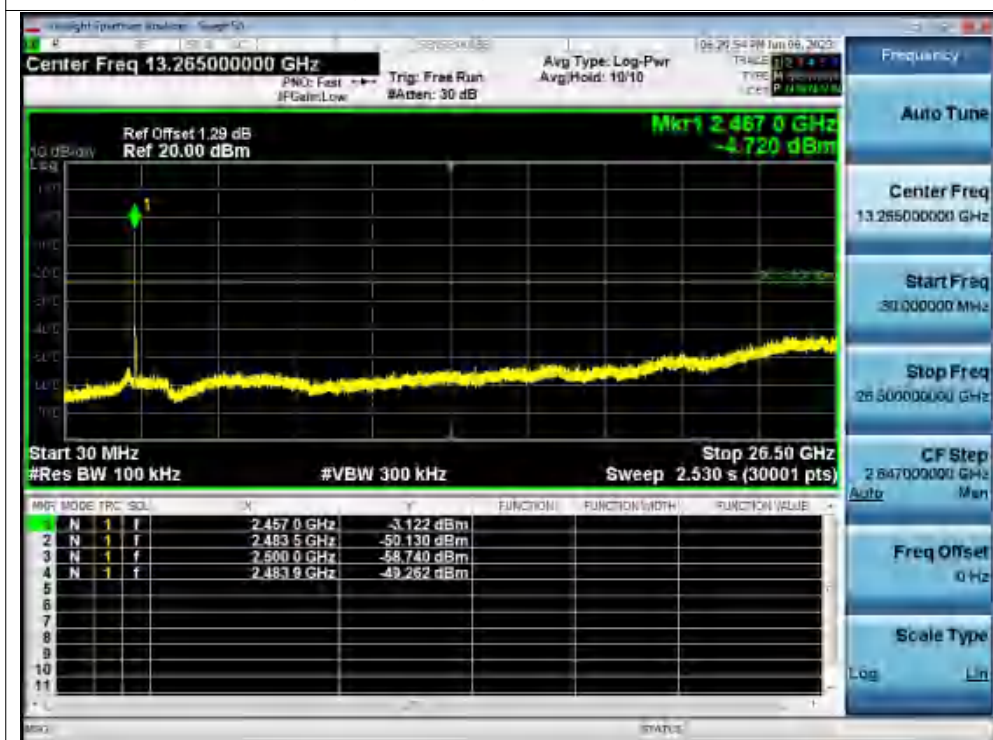


Tx. Spurious NVNT g 2437MHz Ant1 Ref

Tx. Spurious NVNT g 2462MHz Ant1 Ref



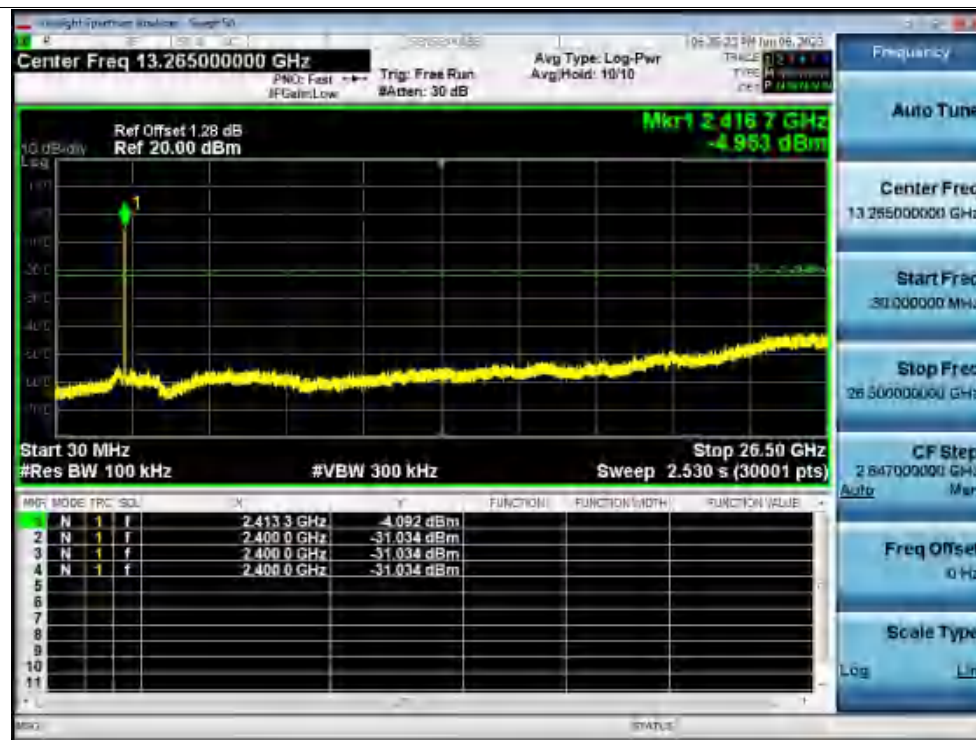
Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref



Tx. Spurious NVNT n20 2412MHz Ant1 Emission





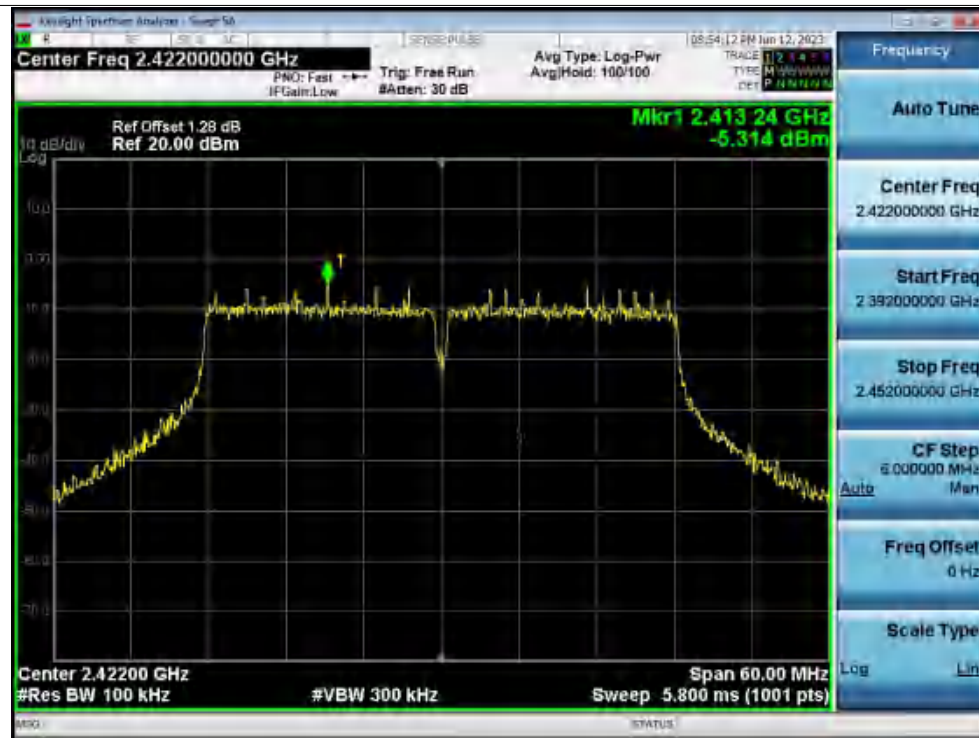
Tx. Spurious NVNT n20 2462MHz Ant1 Ref



Tx. Spurious NVNT n20 2462MHz Ant1 Emission



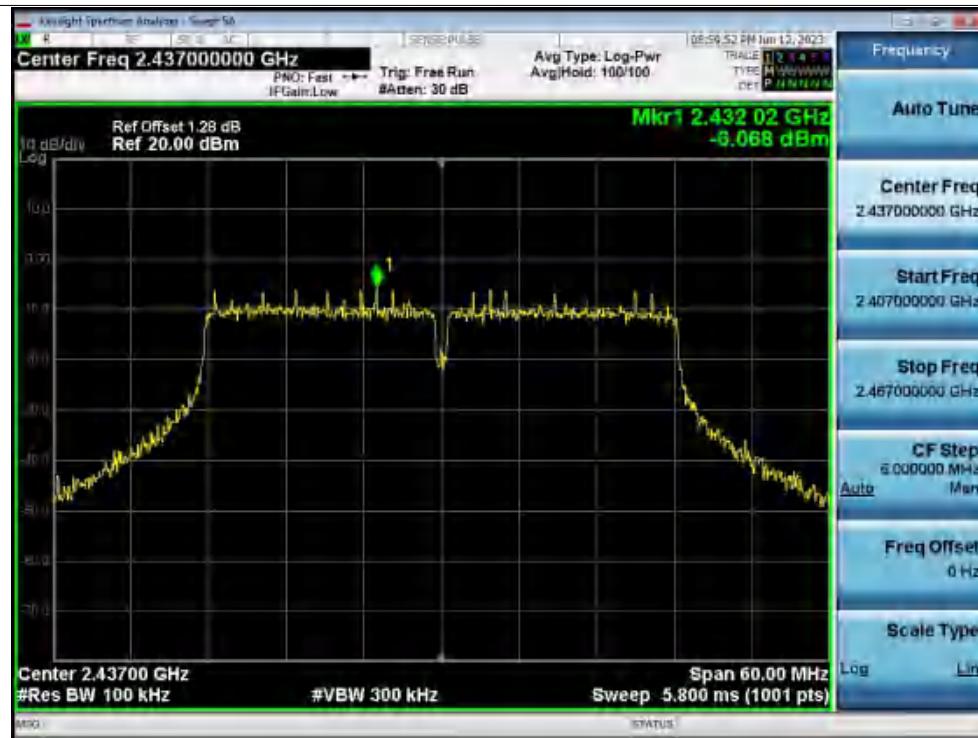
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



Tx. Spurious NVNT n40 2422MHz Ant1 Emission



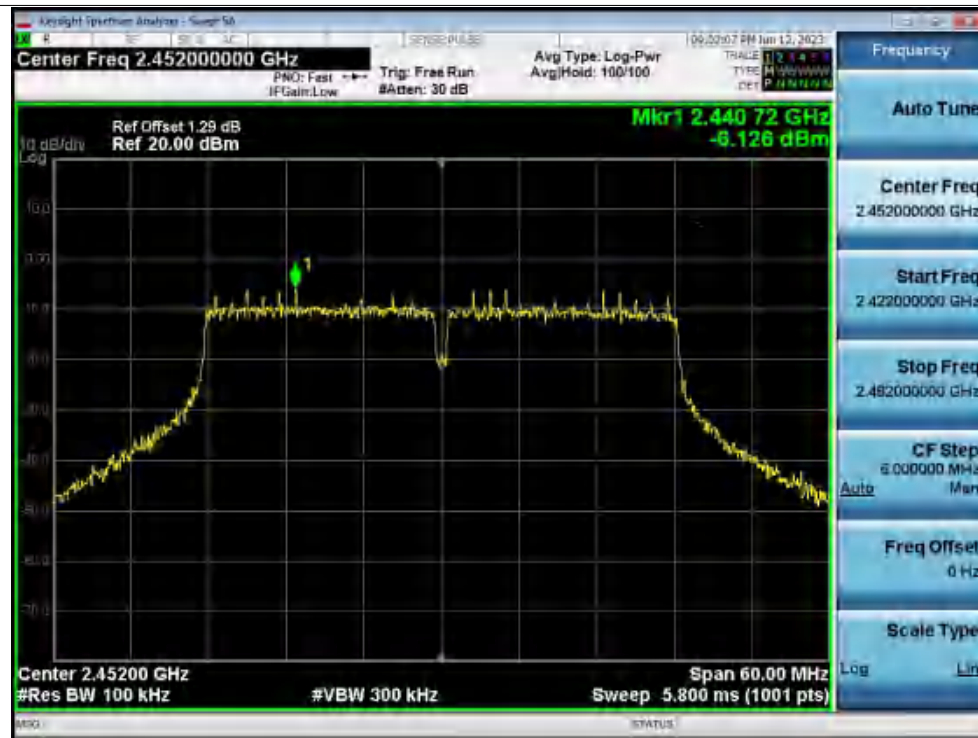
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



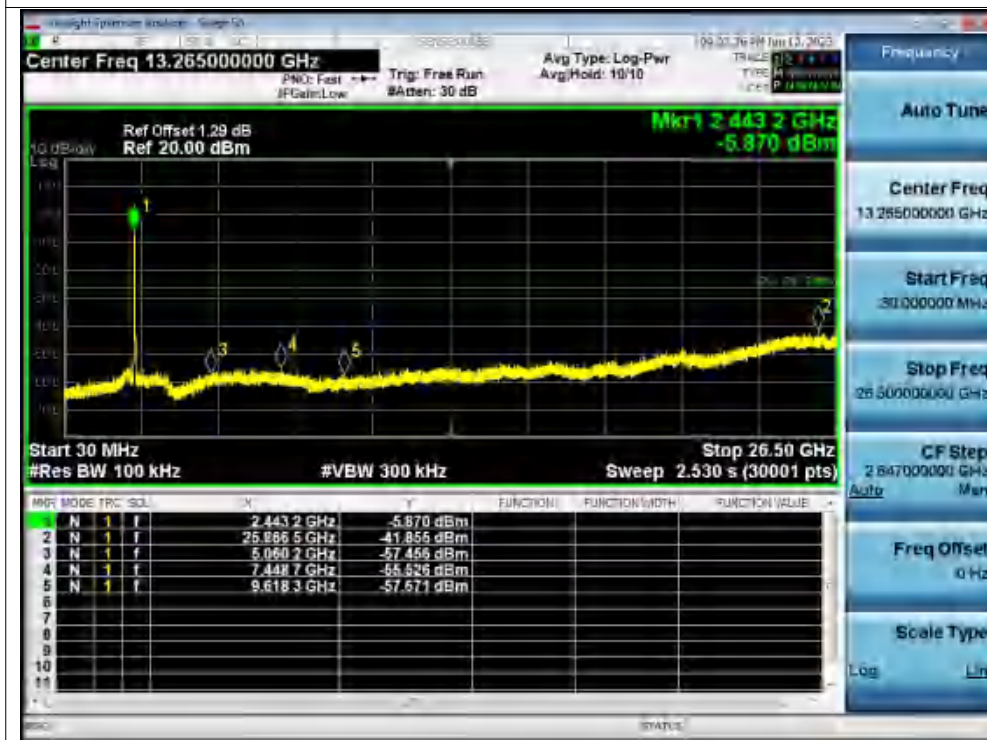
Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



Tx. Spurious NVNT ax20 2412MHz Ant1 Ref



Tx. Spurious NVNT ax20 2412MHz Ant1 Emission



Tx. Spurious NVNT ax20 2437MHz Ant1 Ref

Tx. Spurious NVNT ax20 2462MHz Ant1 Ref

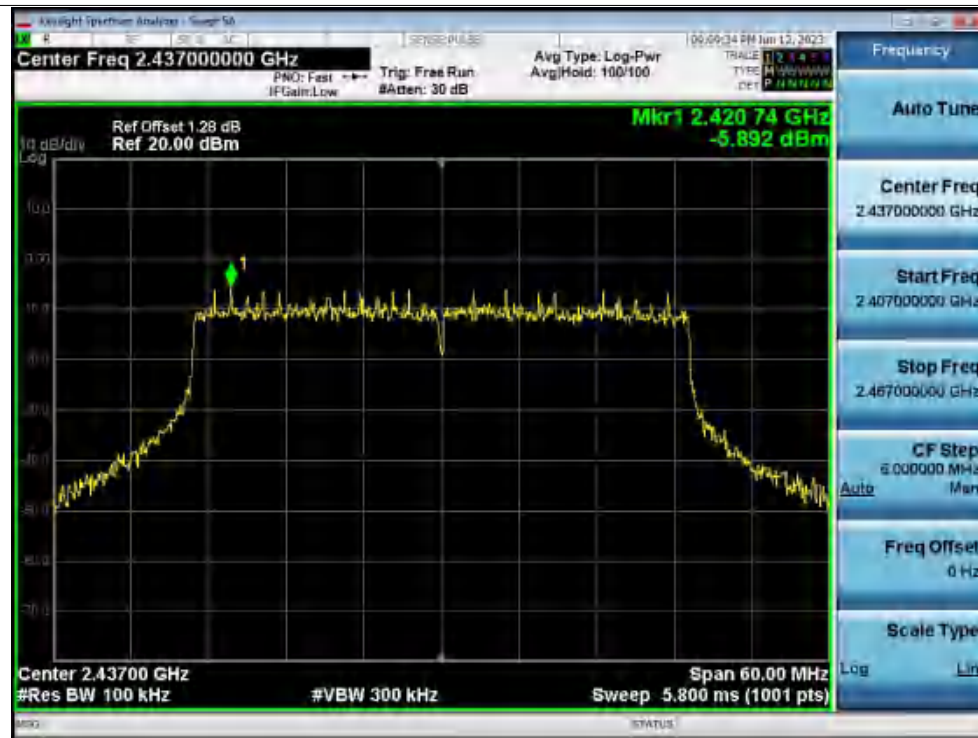
Tx. Spurious NVNT ax40 2422MHz Ant1 Ref



Tx. Spurious NVNT ax40 2422MHz Ant1 Emission



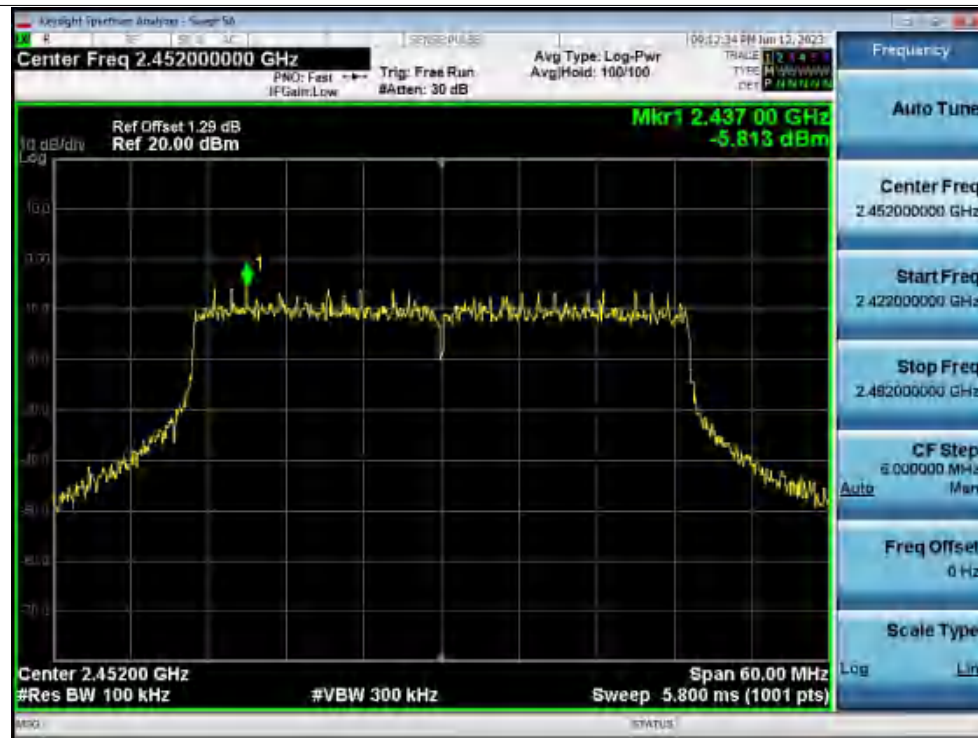
Tx. Spurious NVNT ax40 2437MHz Ant1 Ref



Tx. Spurious NVNT ax40 2437MHz Ant1 Emission



Tx. Spurious NVNT ax40 2452MHz Ant1 Ref



Tx. Spurious NVNT ax40 2452MHz Ant1 Emission



## 7.5 Duty Cycle

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | b    | 2412            | Ant1    | 99.12          | 0                      | 0.08      |
| NVNT      | b    | 2437            | Ant1    | 98.58          | 0                      | 0.08      |
| NVNT      | b    | 2462            | Ant1    | 99.63          | 0                      | 0.08      |
| NVNT      | g    | 2412            | Ant1    | 93.13          | 0.31                   | 0.49      |
| NVNT      | g    | 2437            | Ant1    | 91.5           | 0.39                   | 0.53      |
| NVNT      | g    | 2462            | Ant1    | 97.03          | 0.13                   | 0.53      |
| NVNT      | n20  | 2412            | Ant1    | 94.32          | 0.25                   | 0.53      |
| NVNT      | n20  | 2437            | Ant1    | 96.93          | 0.14                   | 0.53      |
| NVNT      | n20  | 2462            | Ant1    | 95.66          | 0.19                   | 0.53      |
| NVNT      | n40  | 2422            | Ant1    | 94.14          | 0.26                   | 1.07      |
| NVNT      | n40  | 2437            | Ant1    | 84.12          | 0.75                   | 1.07      |
| NVNT      | n40  | 2452            | Ant1    | 99.57          | 0                      | 1.08      |
| NVNT      | ax20 | 2412            | Ant1    | 94.42          | 0.25                   | 0.69      |
| NVNT      | ax20 | 2437            | Ant1    | 91.23          | 0.4                    | 0.69      |
| NVNT      | ax20 | 2462            | Ant1    | 96.17          | 0.17                   | 0.69      |
| NVNT      | ax40 | 2422            | Ant1    | 80.95          | 0.92                   | 1.34      |
| NVNT      | ax40 | 2437            | Ant1    | 90.56          | 0.43                   | 1.34      |
| NVNT      | ax40 | 2452            | Ant1    | 94.92          | 0.23                   | 1.34      |