

## Appendix for 15.247

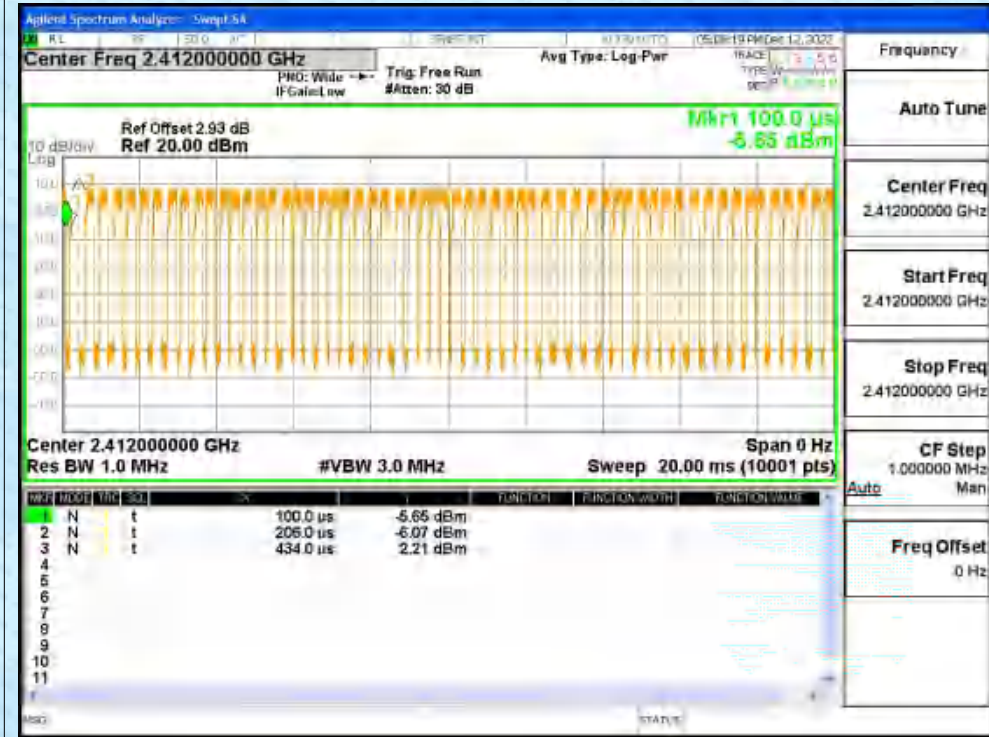
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## Duty Cycle

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | g    | 2412            | Ant1/2  | 68.26          | 1.66                   | 4.39      |
|           |      | 2437            |         | 93.14          | 0.31                   | 0.48      |
|           |      | 2462            |         | 68.45          | 1.65                   | 4.35      |
|           | n20  | Ant1            | 2412    | 62.98          | 2.01                   | 4.39      |
|           |      |                 | 2437    | 94.34          | 0.25                   | 0.48      |
|           |      |                 | 2462    | 72.15          | 1.42                   | 4.39      |
|           |      | Ant2            | 2412    | 97.54          | 0.11                   | 0.48      |
|           |      |                 | 2437    | 95.12          | 0.22                   | 0.48      |
|           |      |                 | 2462    | 95.21          | 0.21                   | 0.48      |

Test Graphs

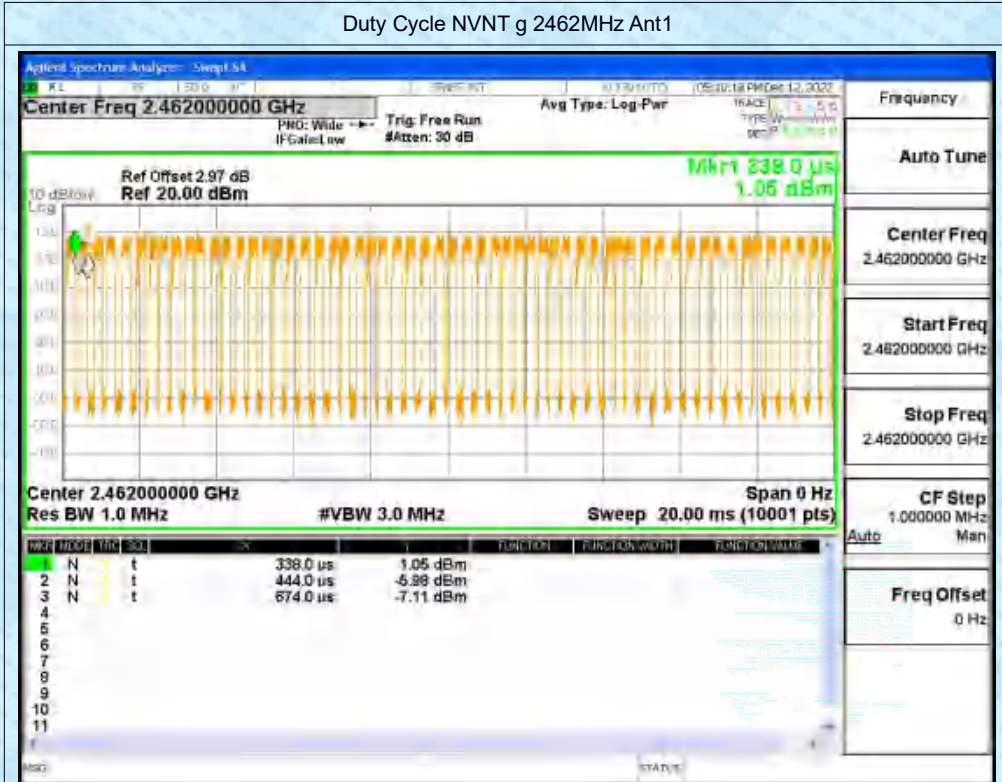
Duty Cycle NVNT g 2412MHz Ant1



Duty Cycle NVNT g 2437MHz Ant1



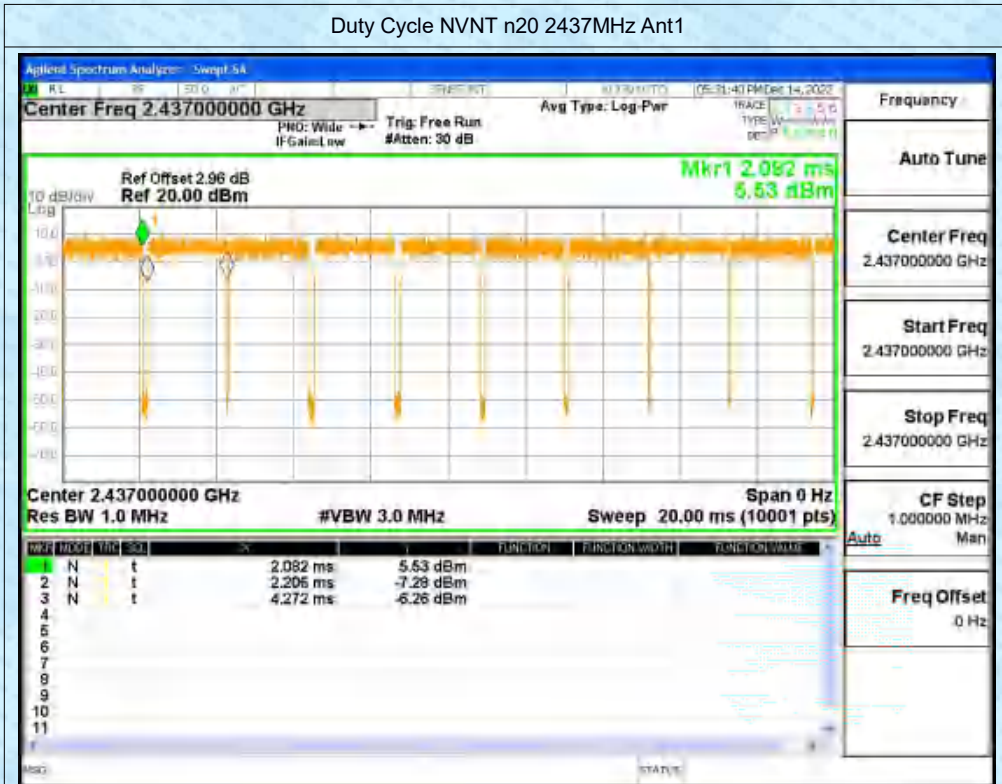
Duty Cycle NVNT g 2462MHz Ant1



Duty Cycle NVNT n20 2412MHz Ant1



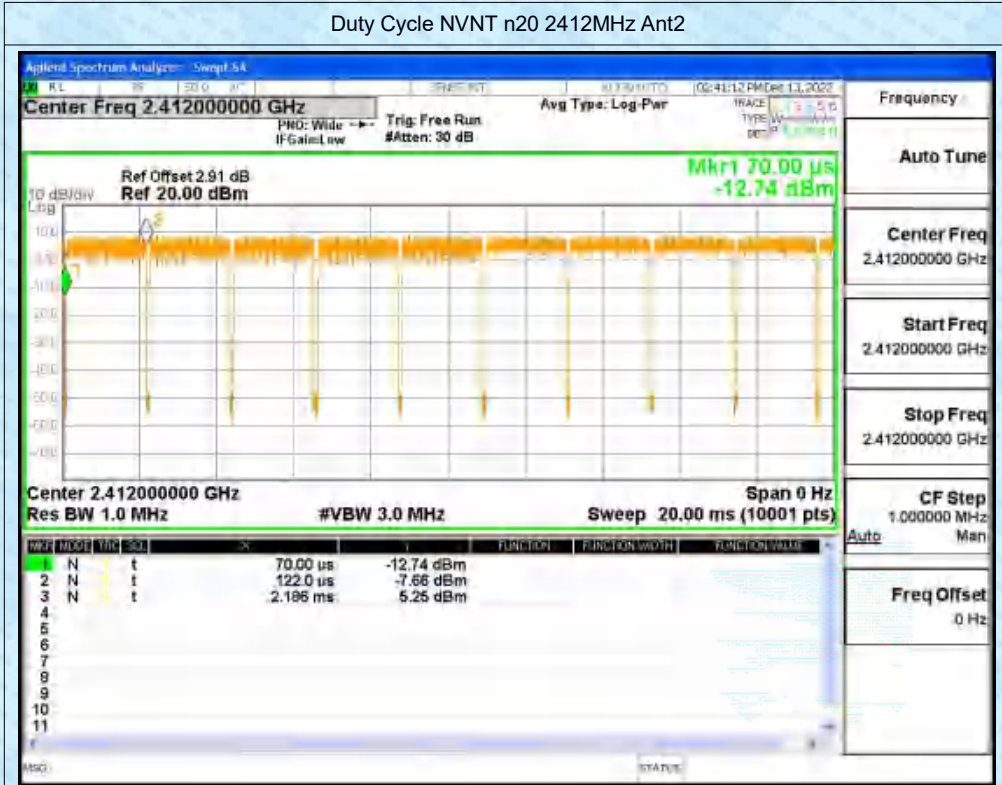
Duty Cycle NVNT n20 2437MHz Ant1



Duty Cycle NVNT n20 2462MHz Ant1

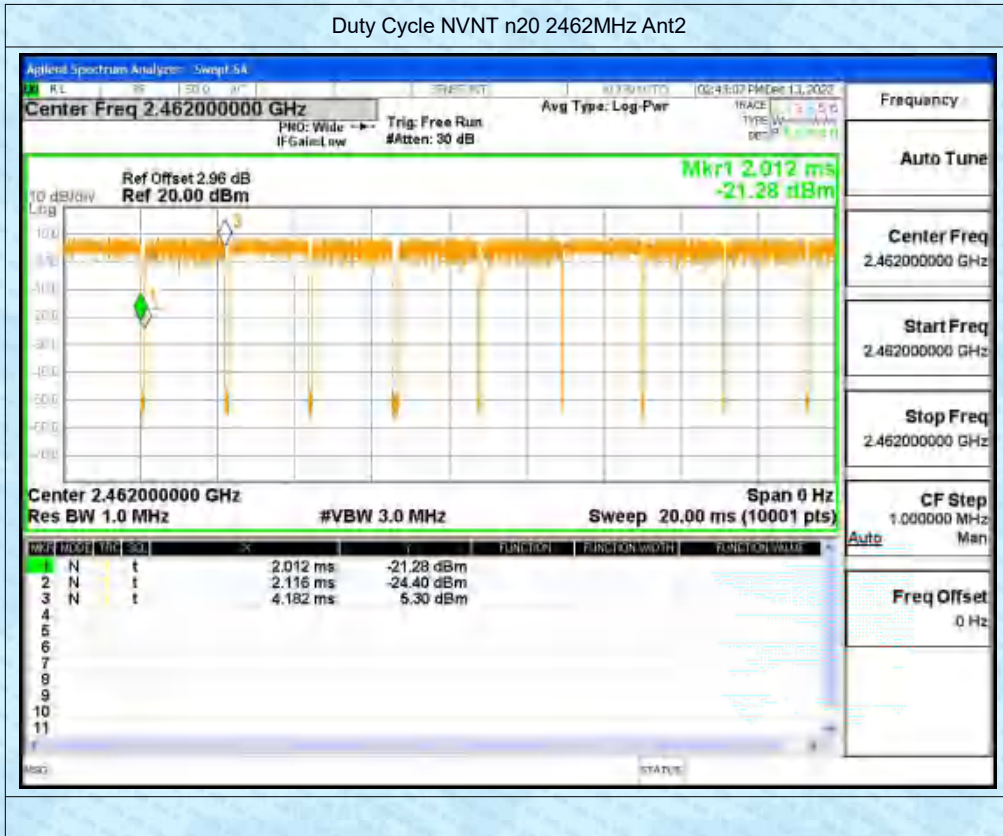


Duty Cycle NVNT n20 2412MHz Ant2



Duty Cycle NVNT n20 2437MHz Ant2





## Maximum Conducted Output Power

| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|-----------------------|------------------|-------------------|-------------|---------|
| NVNT      | g    | 2412            | Ant1/2  | 8.36                  | 0                | 8.36              | 30          | Pass    |
|           |      | 2437            |         | 8.12                  | 0                | 8.12              | 30          | Pass    |
|           |      | 2462            |         | 8.35                  | 0                | 8.35              | 30          | Pass    |
|           | n20  | 2412            | Ant1    | 6.8                   | 0                | 6.8               | 30          | Pass    |
|           |      |                 | Ant2    | 6.93                  | 0                | 6.93              | 30          | Pass    |
|           |      |                 | Sum     | 9.82                  | 0                | 9.82              | 30          | Pass    |
|           |      | 2437            | Ant1    | 6.61                  | 0                | 6.61              | 30          | Pass    |
|           |      |                 | Ant2    | 7.21                  | 0                | 7.21              | 30          | Pass    |
|           |      |                 | Sum     | 9.86                  | 0                | 9.86              | 30          | Pass    |
|           |      | 2462            | Ant1    | 6.86                  | 0                | 6.86              | 30          | Pass    |
|           |      |                 | Ant2    | 7.12                  | 0                | 7.12              | 30          | Pass    |
|           |      |                 | Sum     | 9.95                  | 0                | 9.95              | 30          | Pass    |

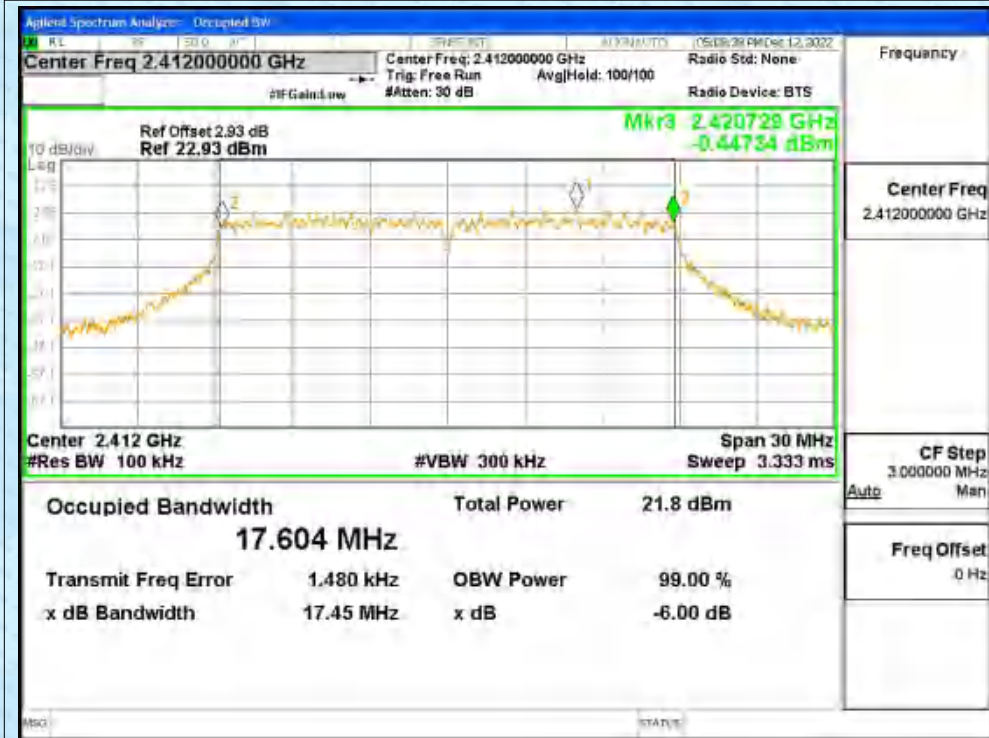


## -6dB Bandwidth

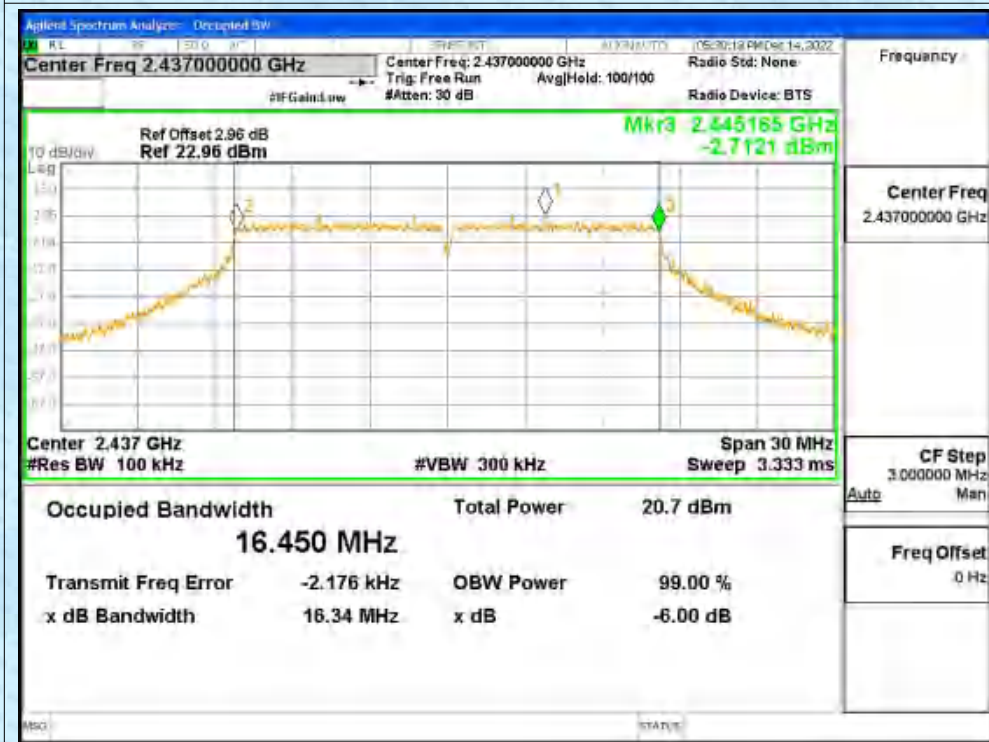
| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | g    | 2412            | Ant1/2  | 17.454                | 0.5                         | Pass    |
|           |      | 2437            |         | 16.335                | 0.5                         | Pass    |
|           |      | 2462            |         | 17.5                  | 0.5                         | Pass    |
|           | n20  | Ant1            | 2412    | 17.513                | 0.5                         | Pass    |
|           |      |                 | 2437    | 16.339                | 0.5                         | Pass    |
|           |      |                 | 2462    | 17.493                | 0.5                         | Pass    |
|           |      | Ant2            | 2412    | 16.332                | 0.5                         | Pass    |
|           |      |                 | 2437    | 16.35                 | 0.5                         | Pass    |
|           |      |                 | 2462    | 16.33                 | 0.5                         | Pass    |

Test Graphs

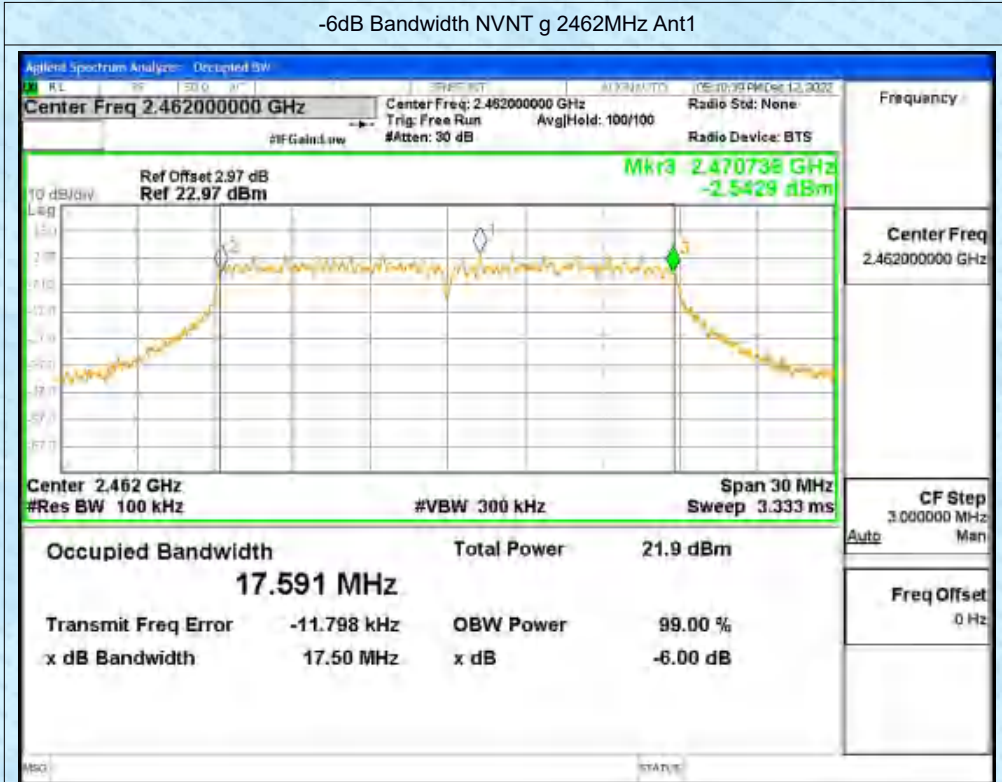
-6dB Bandwidth NVNT g 2412MHz Ant1



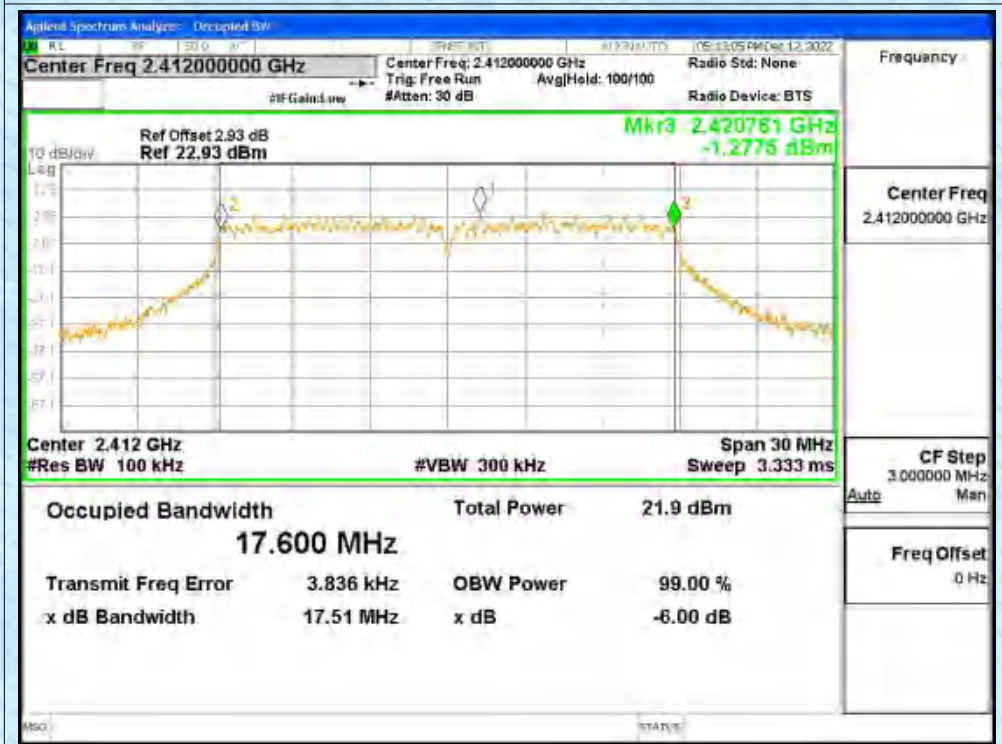
-6dB Bandwidth NVNT g 2437MHz Ant1



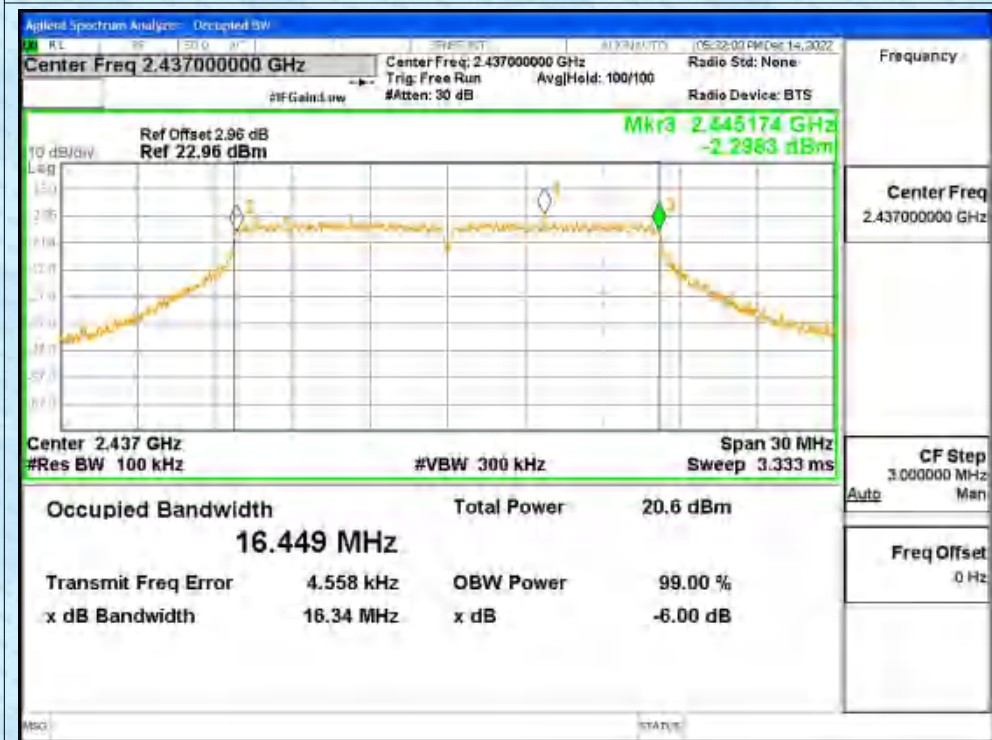
-6dB Bandwidth NVNT g 2462MHz Ant1



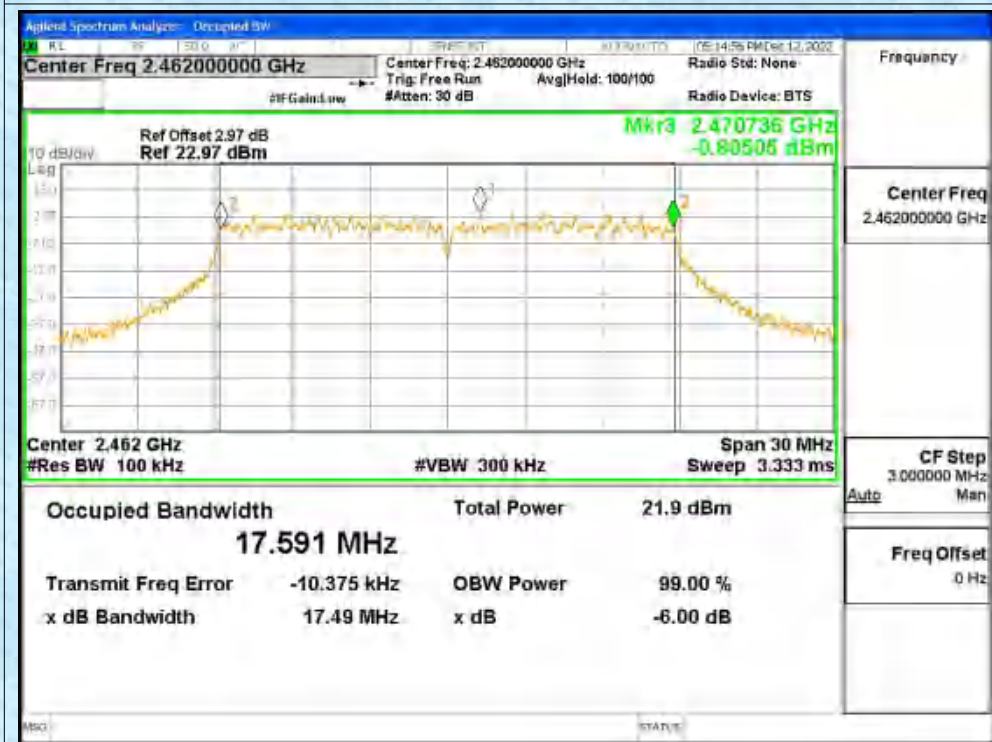
-6dB Bandwidth NVNT n20 2412MHz Ant1

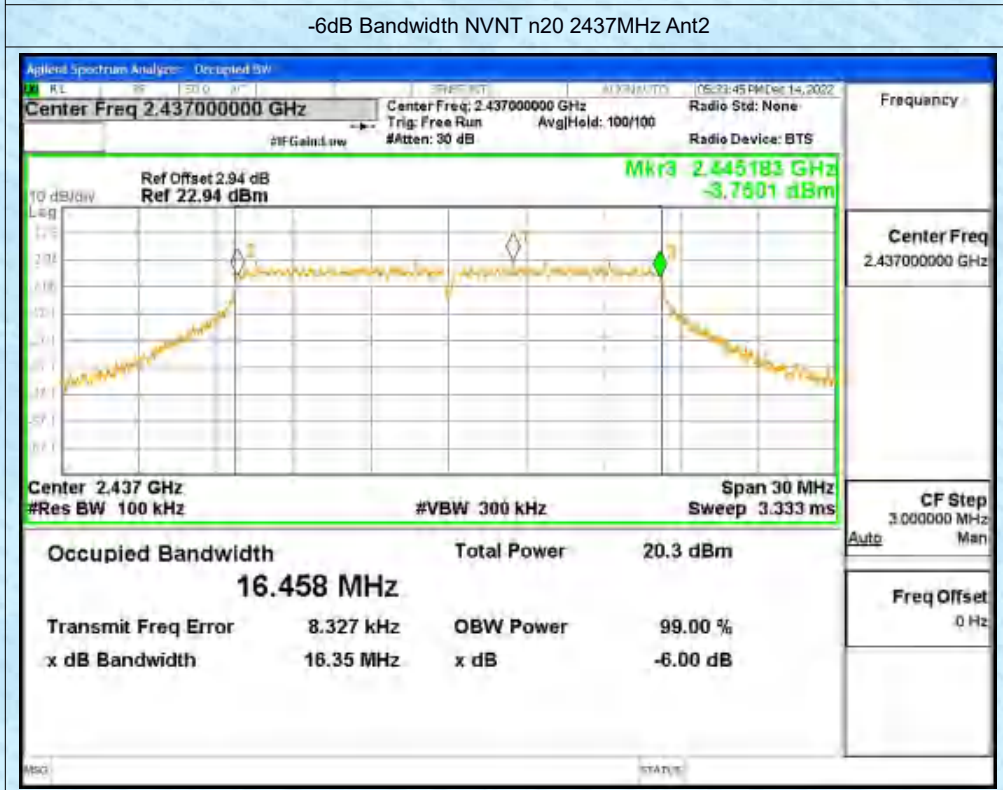
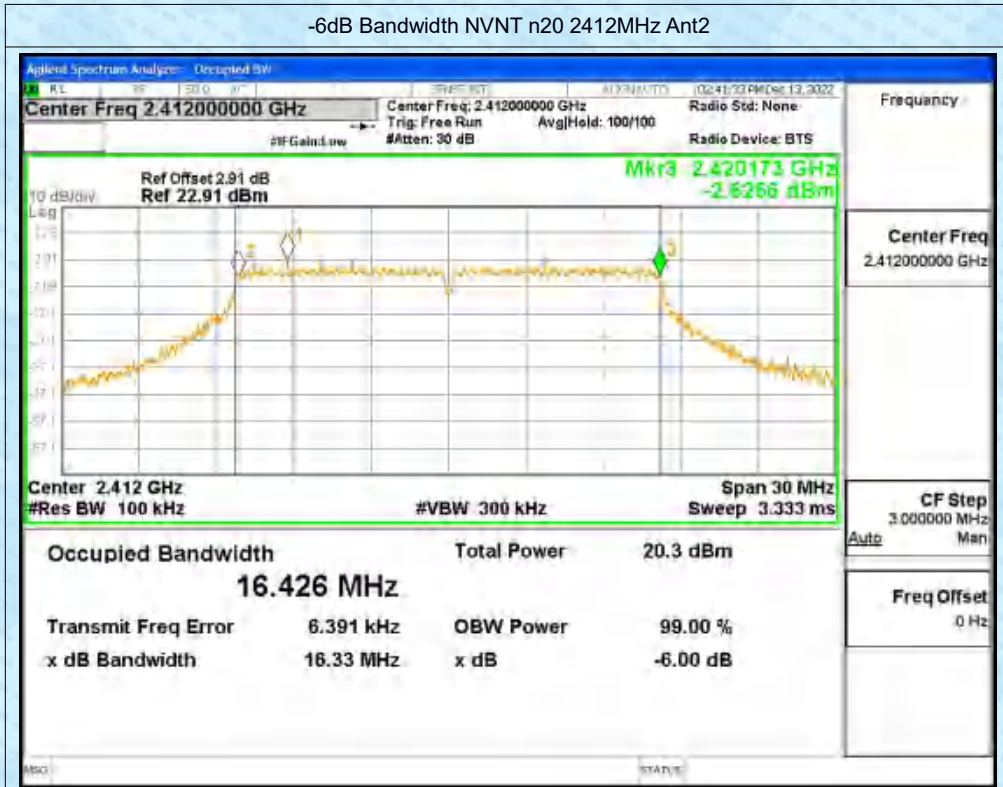


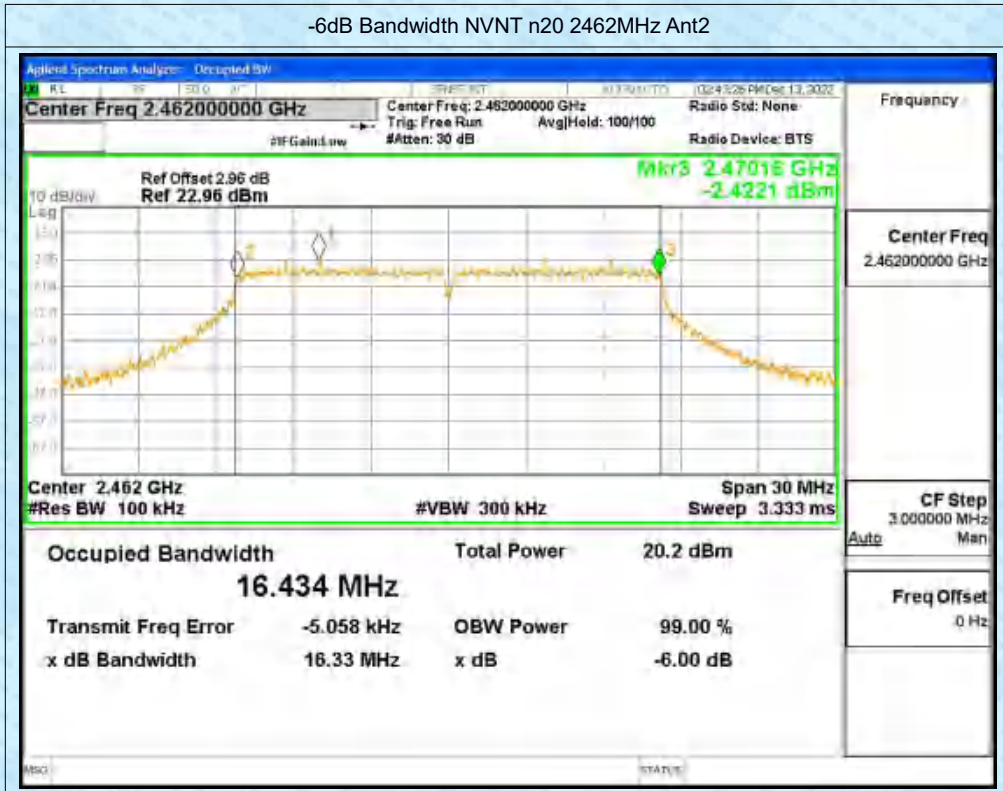
-6dB Bandwidth NVNT n20 2437MHz Ant1



-6dB Bandwidth NVNT n20 2462MHz Ant1





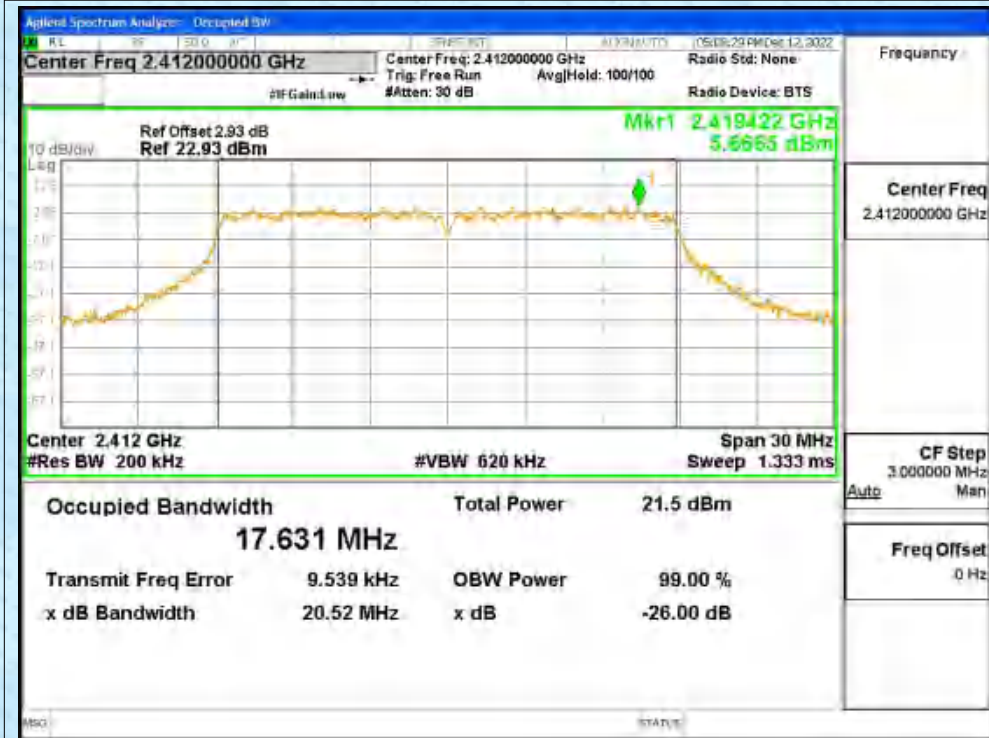


## Occupied Channel Bandwidth

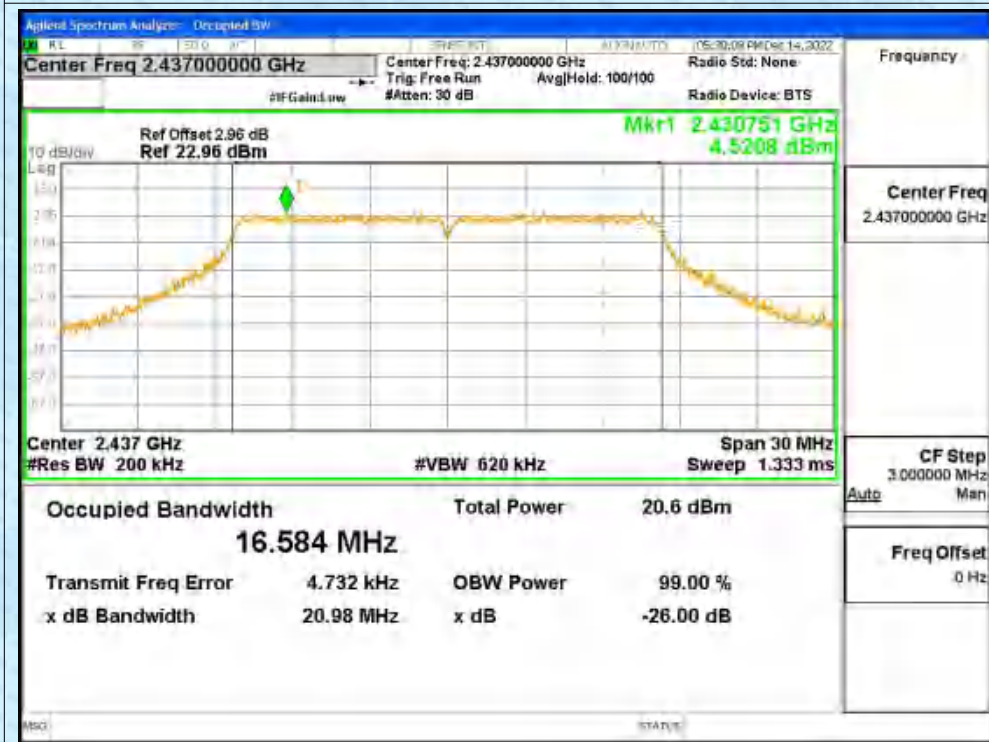
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT      | g    | 2412            | Ant1/2  | 17.631        |
|           |      | 2437            |         | 16.584        |
|           |      | 2462            |         | 17.62         |
|           | n20  | Ant1            | 2412    | 17.624        |
|           |      |                 | 2437    | 16.607        |
|           |      |                 | 2462    | 17.614        |
|           |      | Ant2            | 2412    | 16.541        |
|           |      |                 | 2437    | 16.596        |
|           |      |                 | 2462    | 16.509        |

Test Graphs

OBW NVNT g 2412MHz Ant1

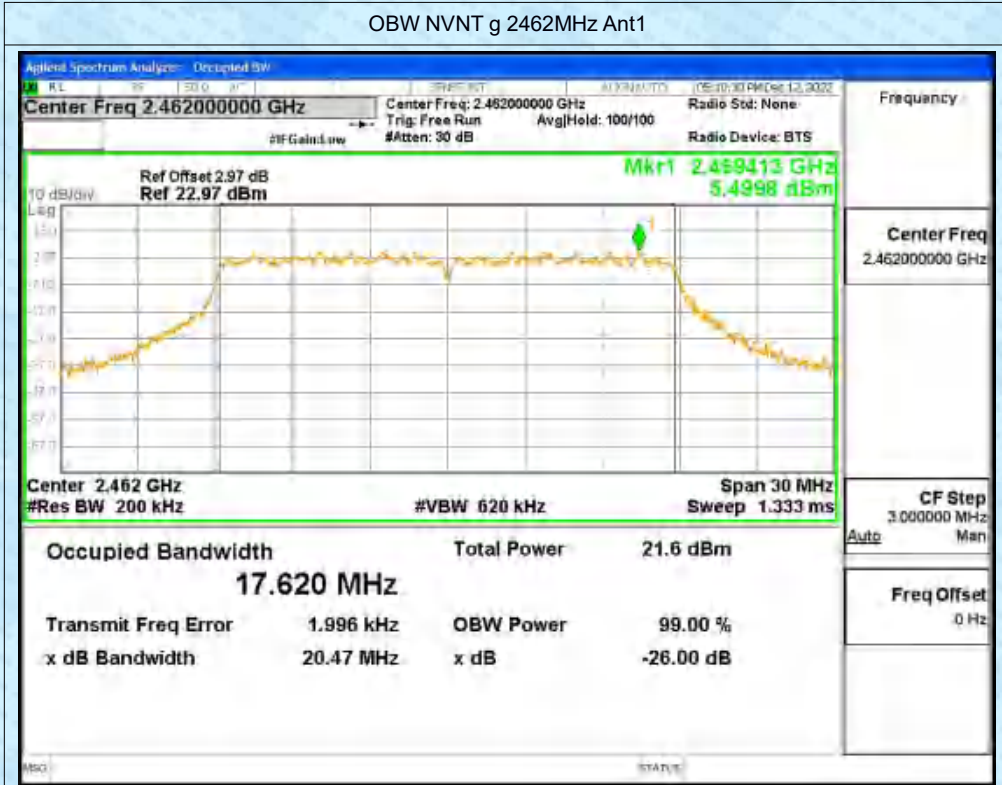


OBW NVNT g 2437MHz Ant1

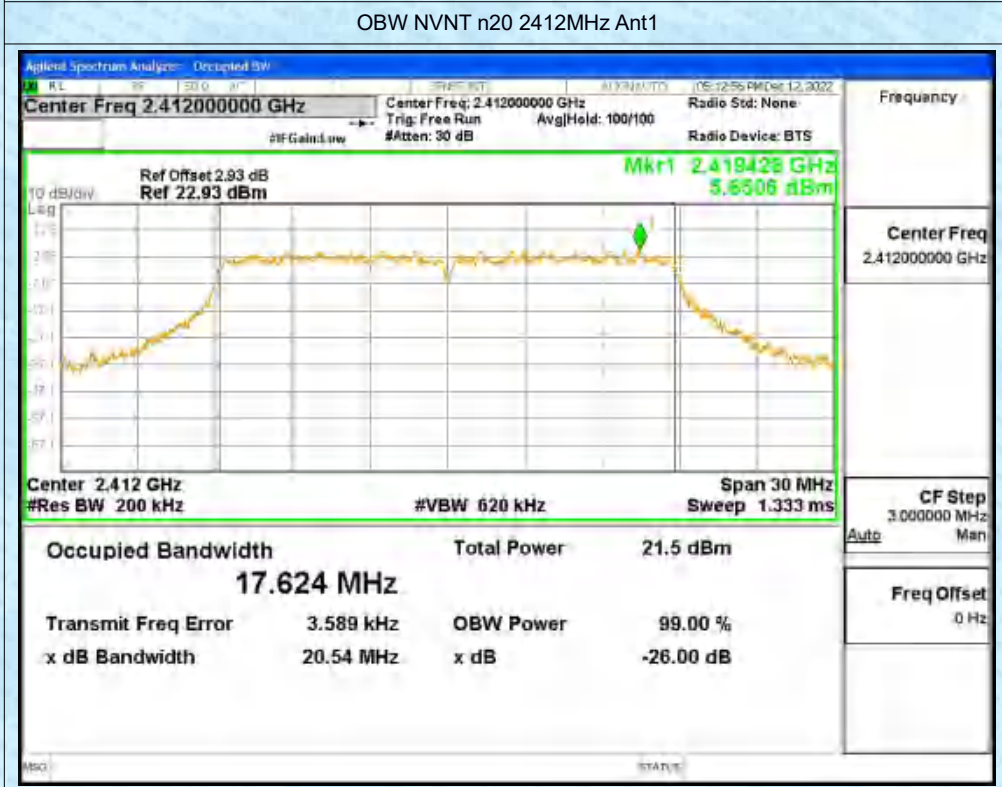




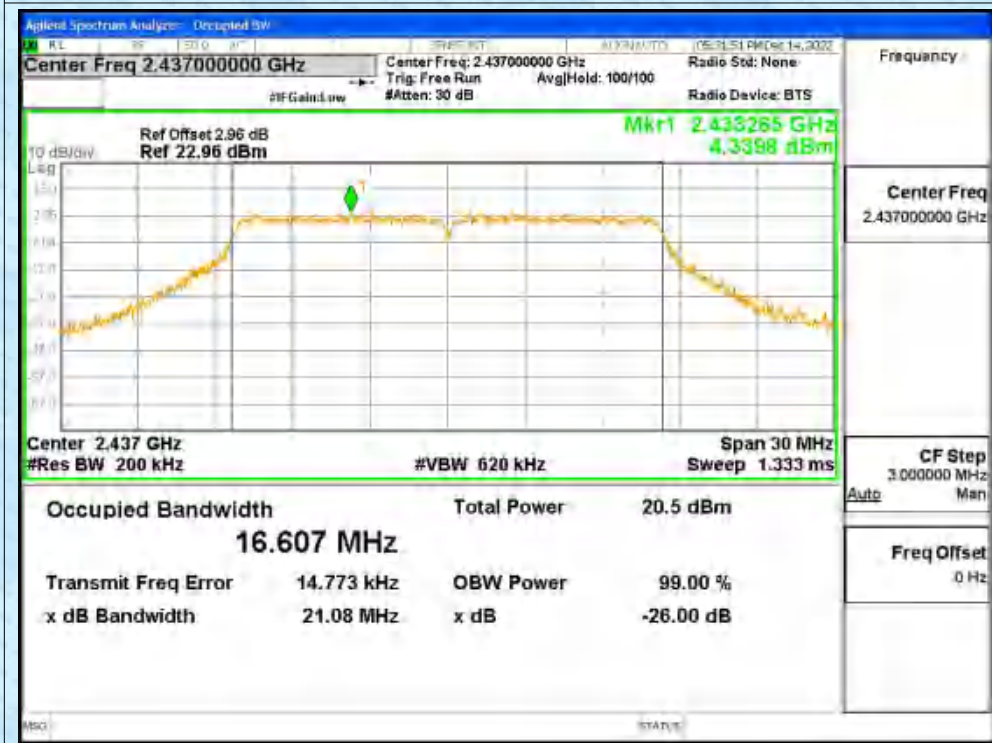
OBW NVNT g 2462MHz Ant1



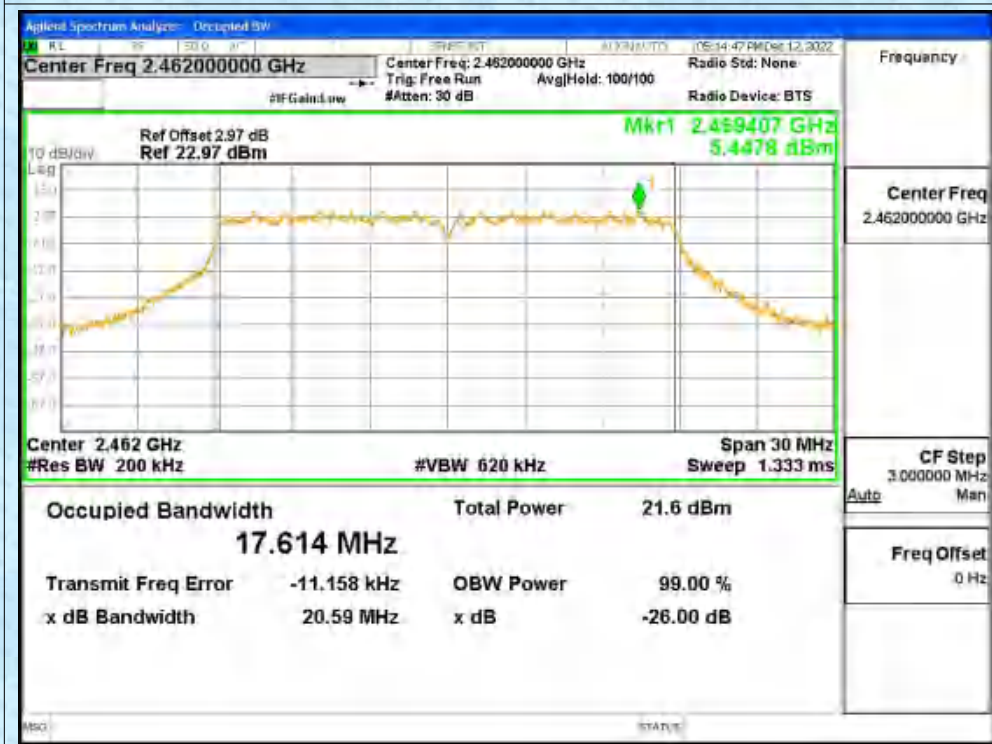
OBW NVNT n20 2412MHz Ant1



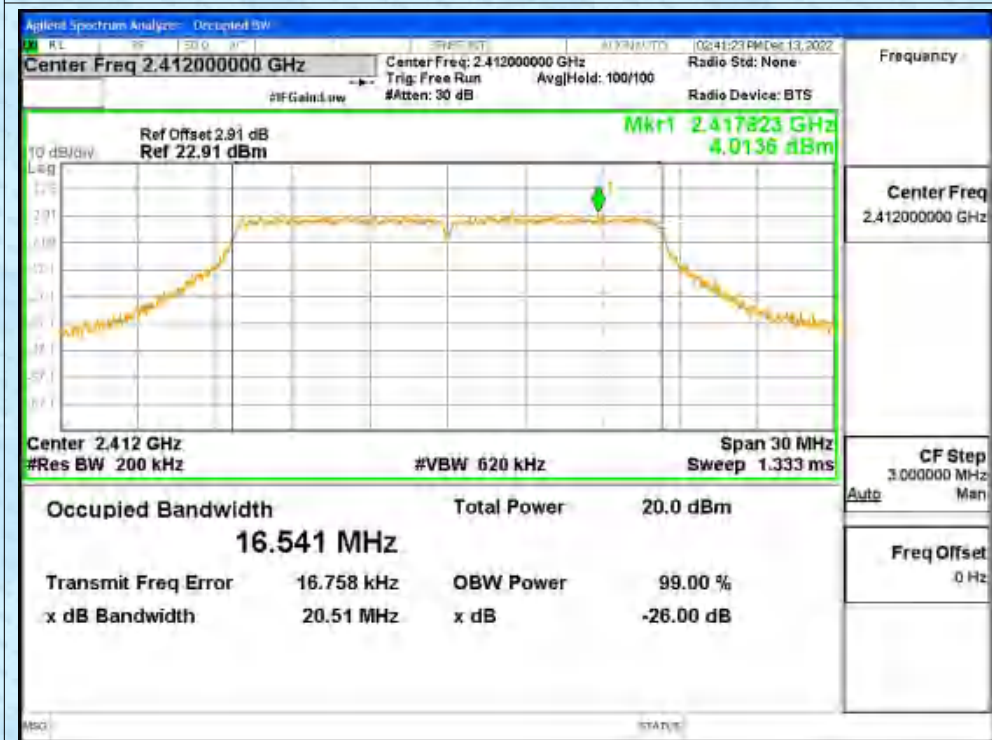
OBW NVNT n20 2437MHz Ant1



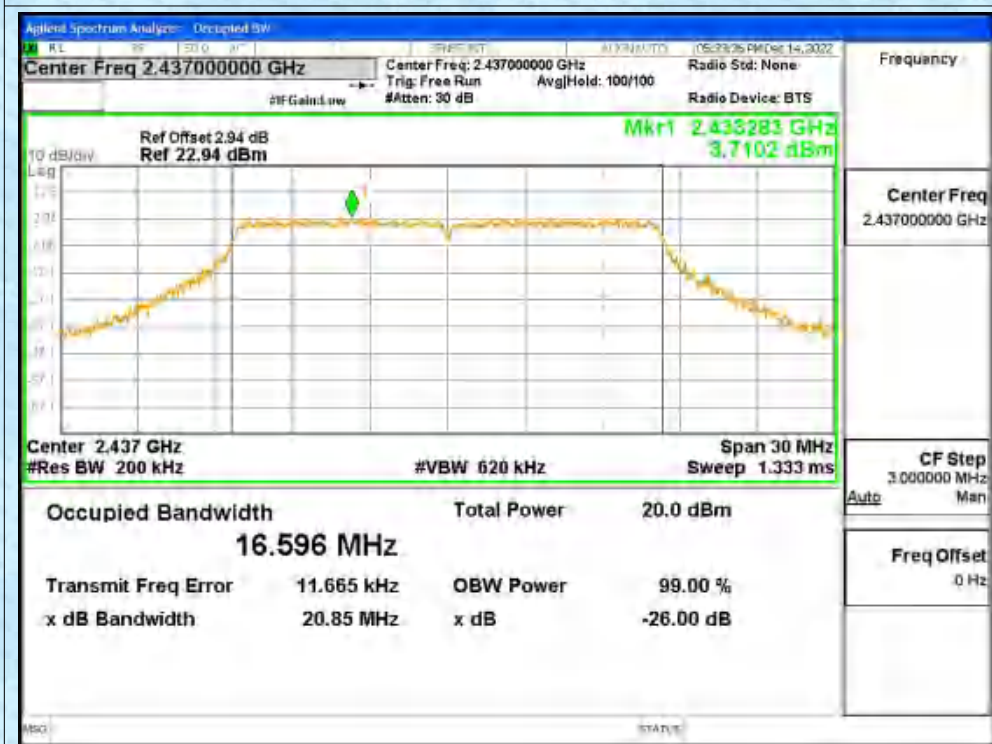
OBW NVNT n20 2462MHz Ant1

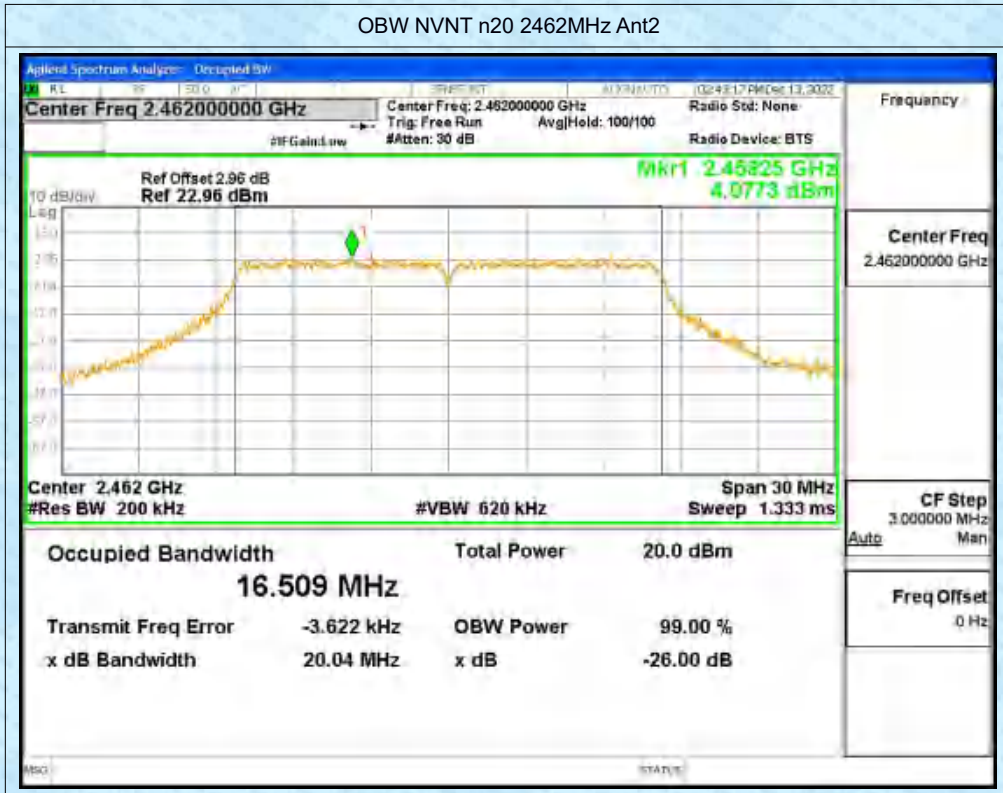


OBW NVNT n20 2412MHz Ant2



OBW NVNT n20 2437MHz Ant2



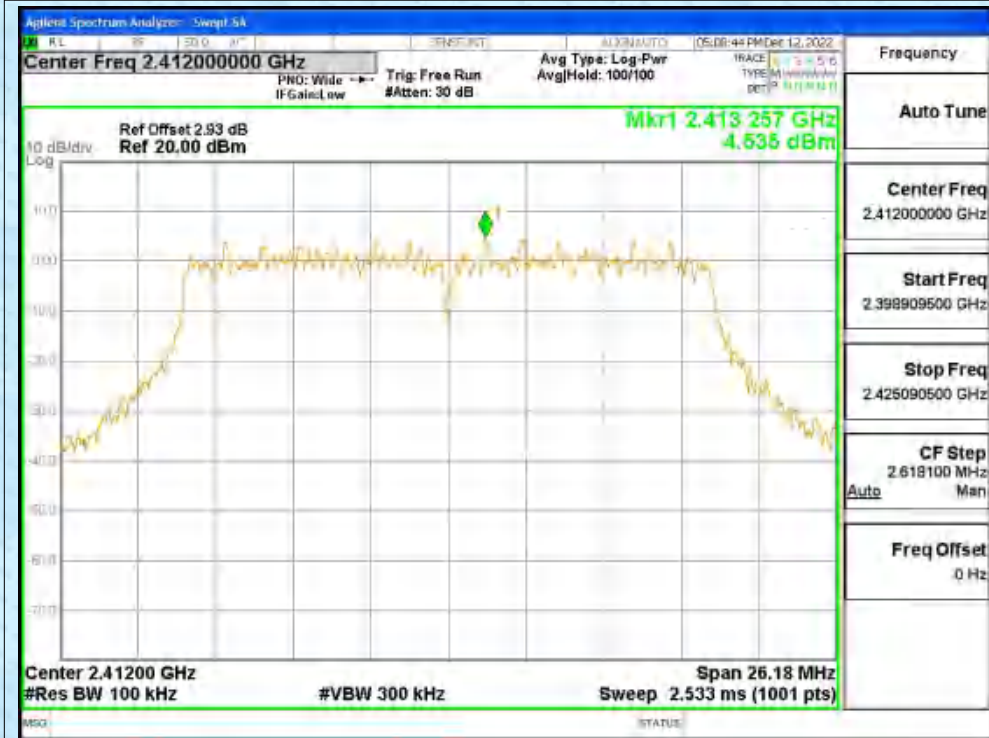


## Maximum Power Spectral Density Level

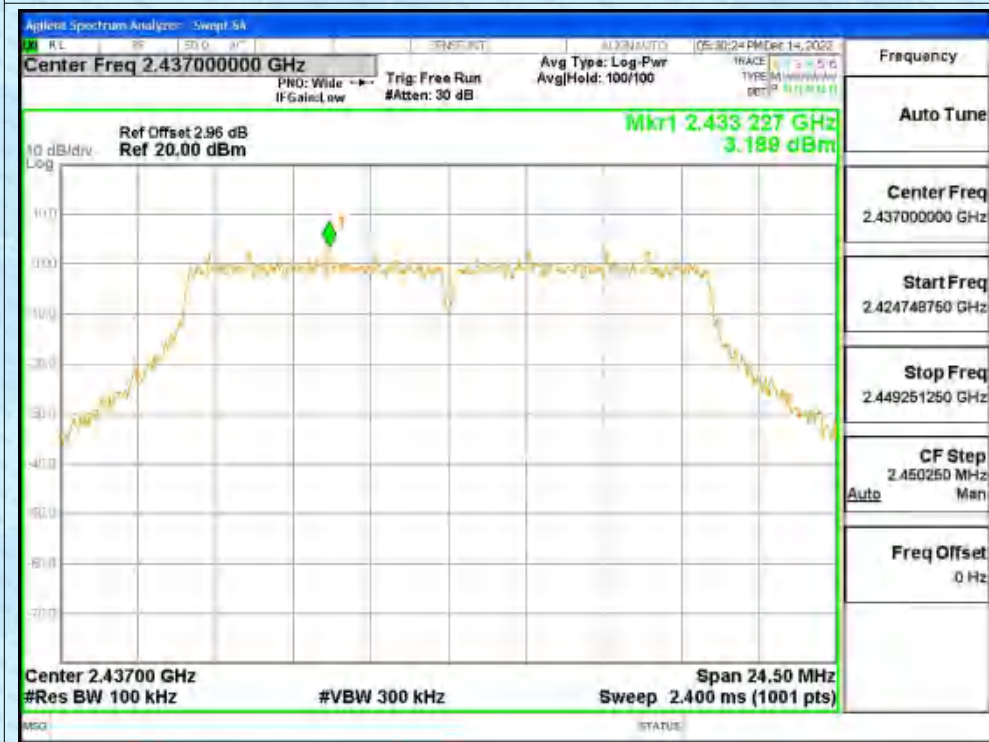
| Condition | Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm/3kHz) | Duty Factor (dB) | Total PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|------|-----------------|---------|--------------------------|------------------|----------------------|------------------|---------|
| NVNT      | g    | 2412            | Ant1    | 4.54                     | 0                | 4.54                 | 8                | Pass    |
|           |      | 2437            |         | 3.19                     | 0                | 3.19                 | 8                | Pass    |
|           |      | 2462            |         | 4.49                     | 0                | 4.49                 | 8                | Pass    |
|           | n20  | 2412            | Ant1    | -4.2                     | 0                | -4.2                 | 8                | Pass    |
|           |      |                 | Ant2    | -4.15                    | 0                | -4.15                | 8                | Pass    |
|           |      |                 | Sum     | -1.16                    | 0                | -1.16                | 8                | Pass    |
|           |      | 2437            | Ant1    | -0.14                    | 0                | -0.14                | 8                | Pass    |
|           |      |                 | Ant2    | -2.07                    | 0                | -2.07                | 8                | Pass    |
|           |      |                 | Sum     | 2.01                     | 0                | 2.01                 | 8                | Pass    |
|           |      | 2462            | Ant1    | -4.68                    | 0                | -4.68                | 8                | Pass    |
|           |      |                 | Ant2    | -5.05                    | 0                | -5.05                | 8                | Pass    |
|           |      |                 | Sum     | -1.85                    | 0                | -1.85                | 8                | Pass    |

Test Graphs

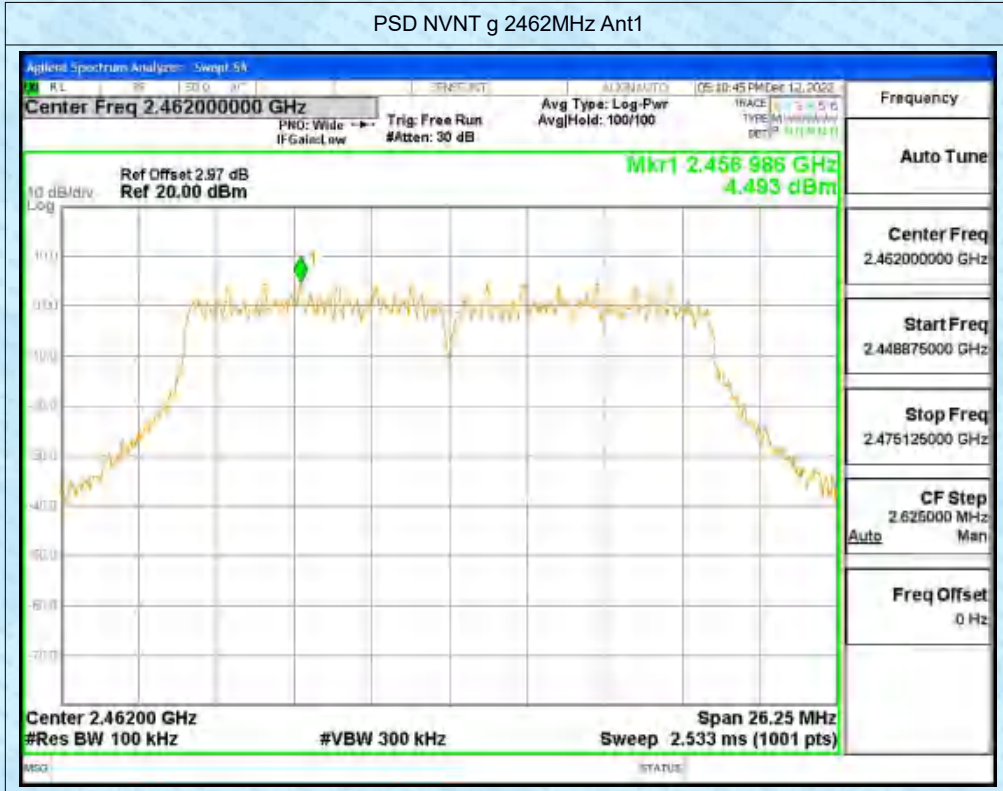
PSD NVNT g 2412MHz Ant1



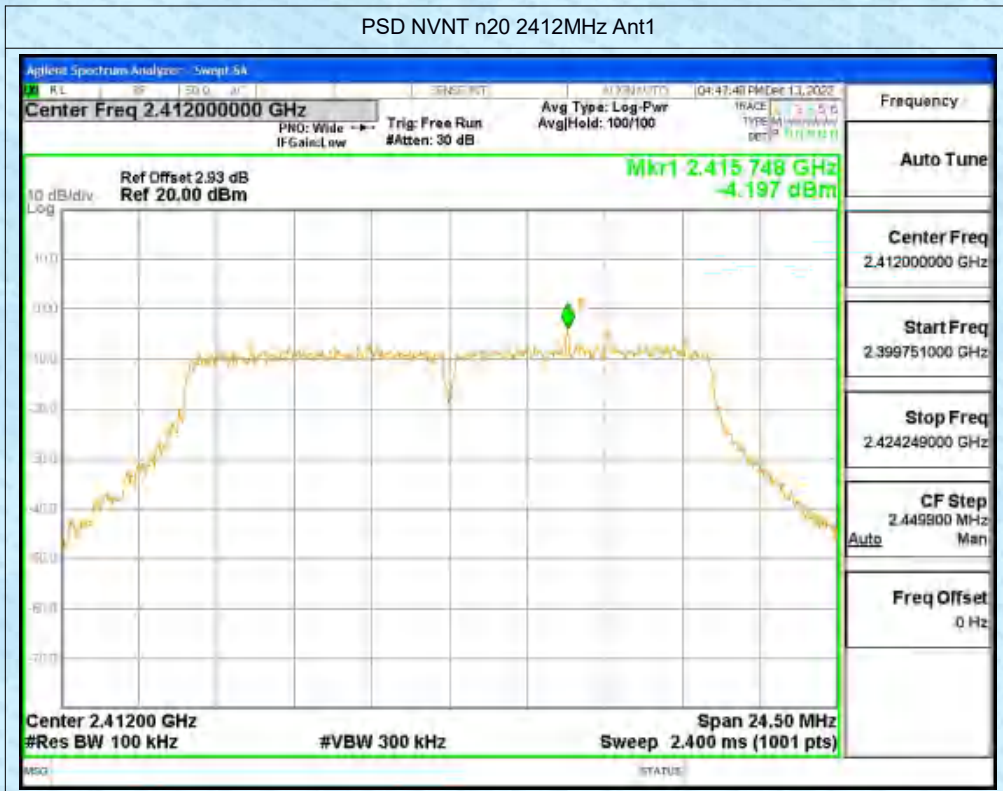
PSD NVNT g 2437MHz Ant1



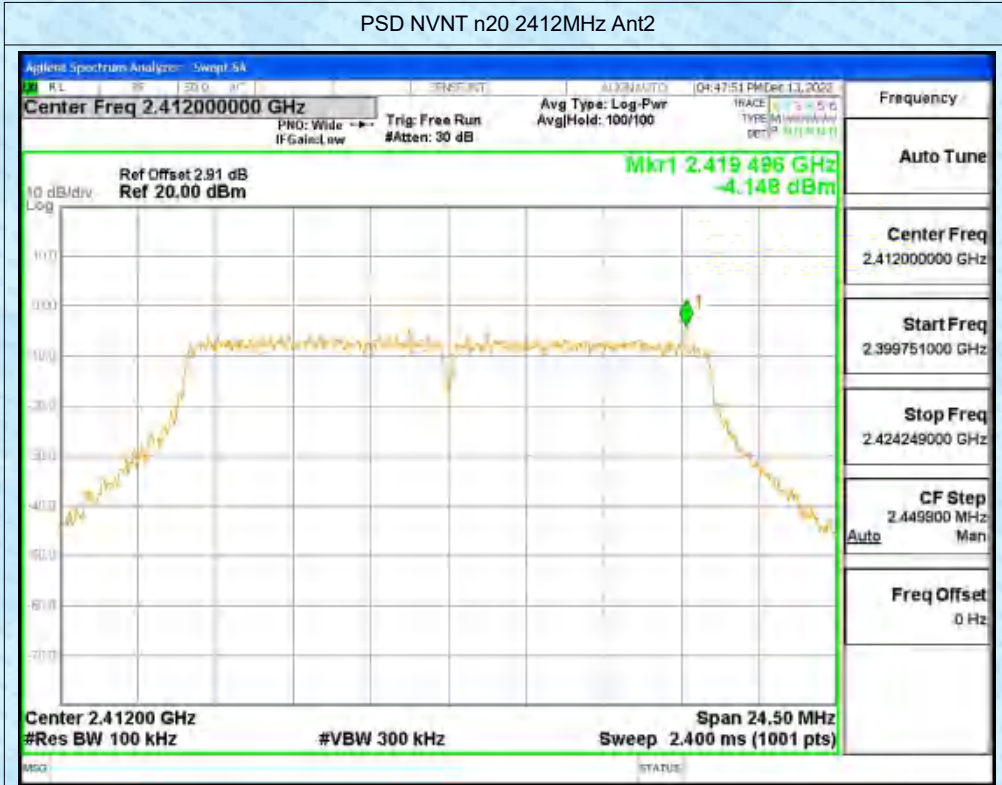
PSD NVNT g 2462MHz Ant1



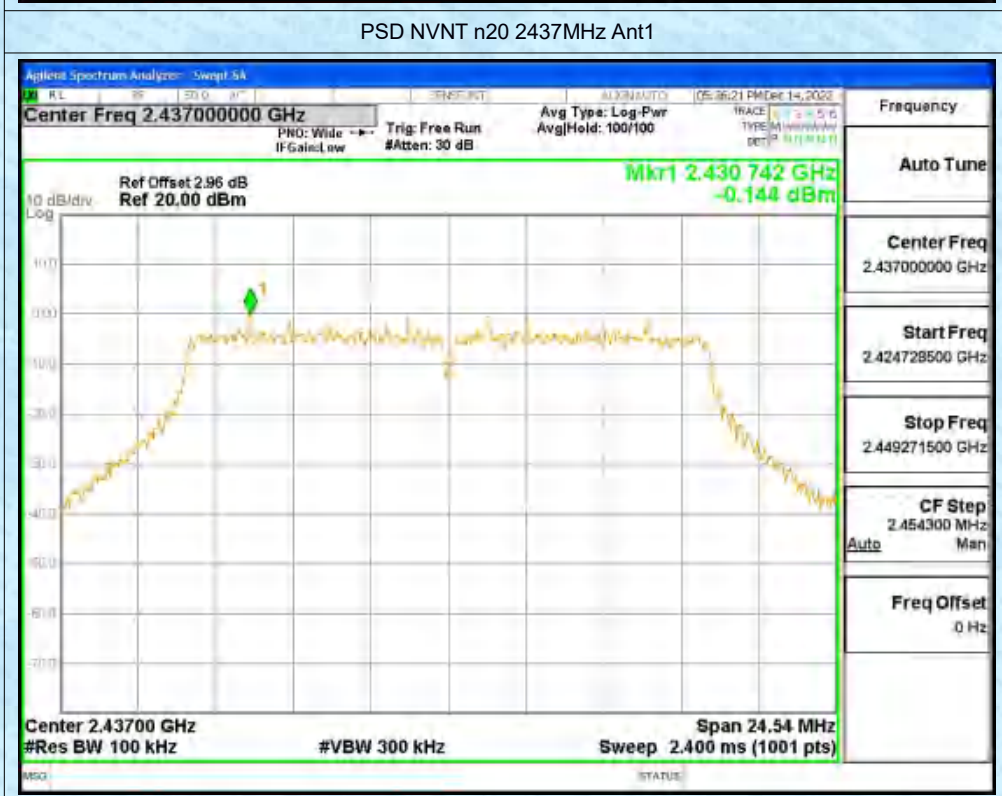
PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2412MHz Ant2

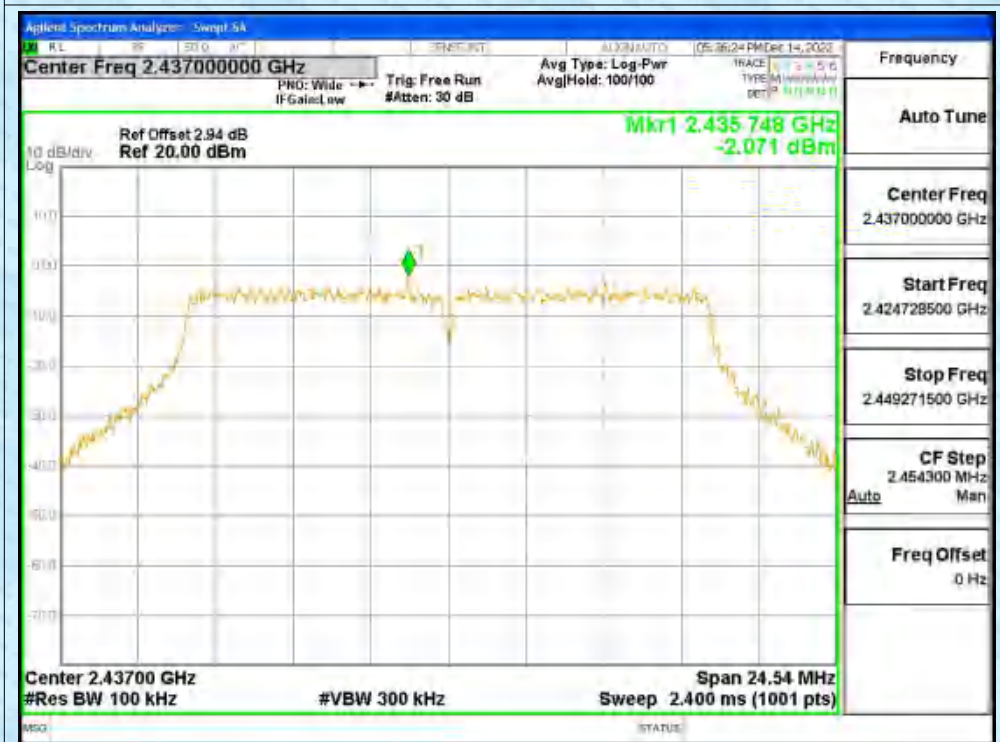


PSD NVNT n20 2437MHz Ant1

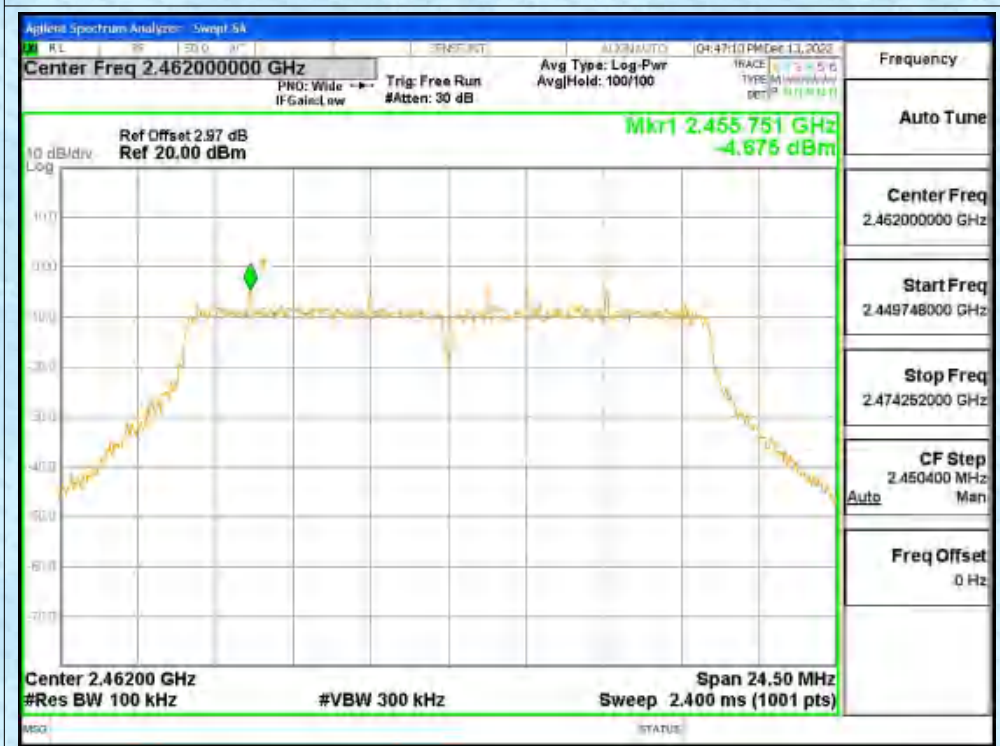


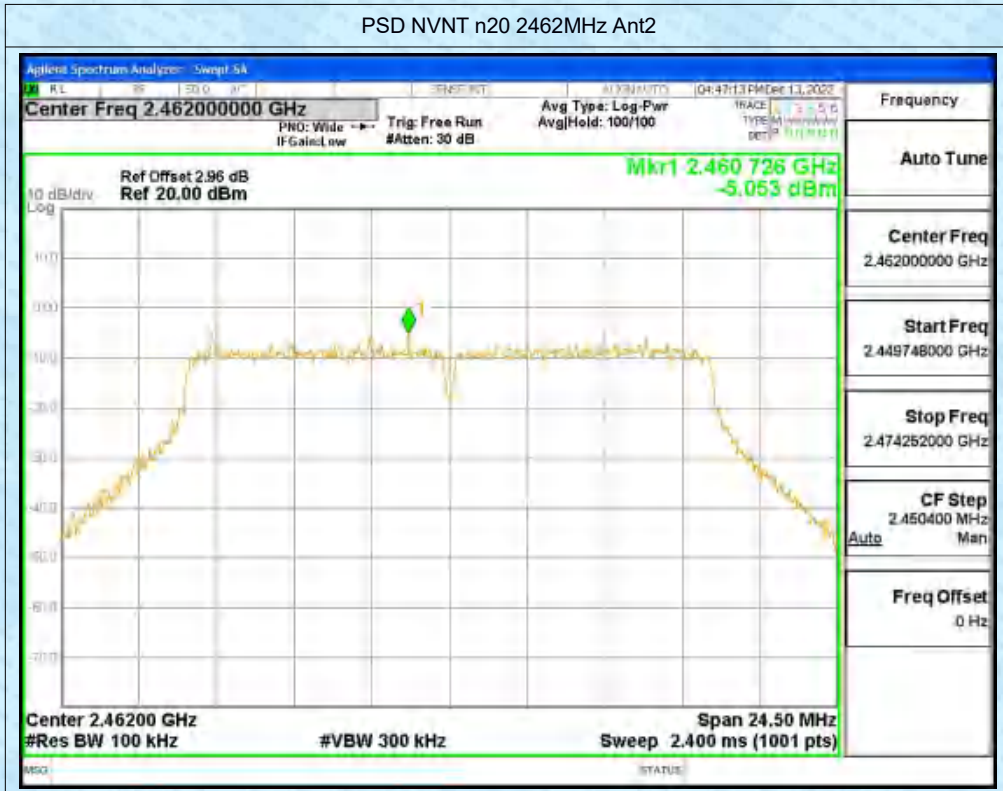


PSD NVNT n20 2437MHz Ant2



PSD NVNT n20 2462MHz Ant1



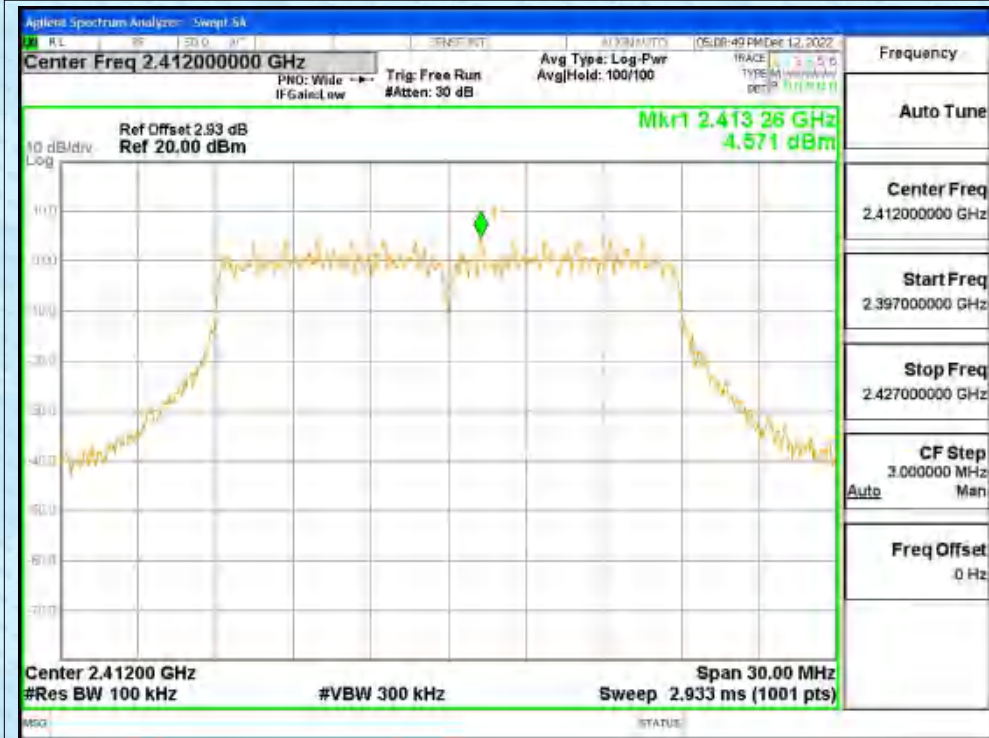


## Band Edge

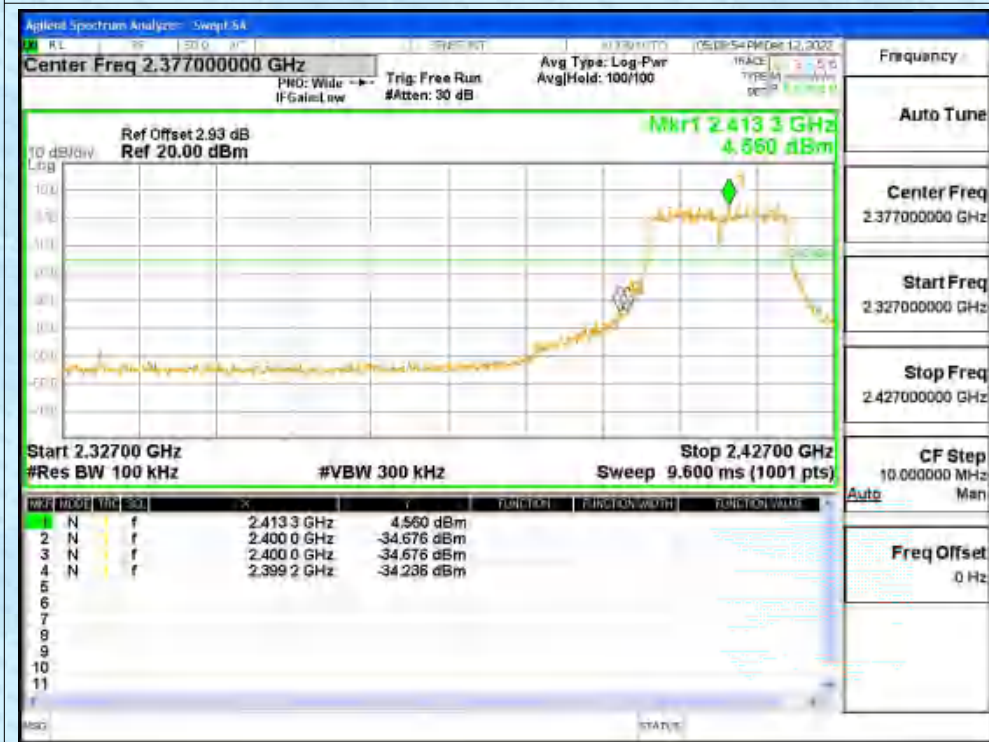
| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | g    | 2412            | Ant1/2  | -38.8           | -20         | Pass    |
|           |      | 2462            |         | -50.39          | -20         | Pass    |
|           | n20  | 2412            | Ant1    | -38.94          | -20         | Pass    |
|           |      | 2462            |         | -49.26          | -20         | Pass    |
|           |      | 2412            | Ant2    | -37.29          | -20         | Pass    |
|           |      | 2462            |         | -50.15          | -20         | Pass    |

Test Graphs

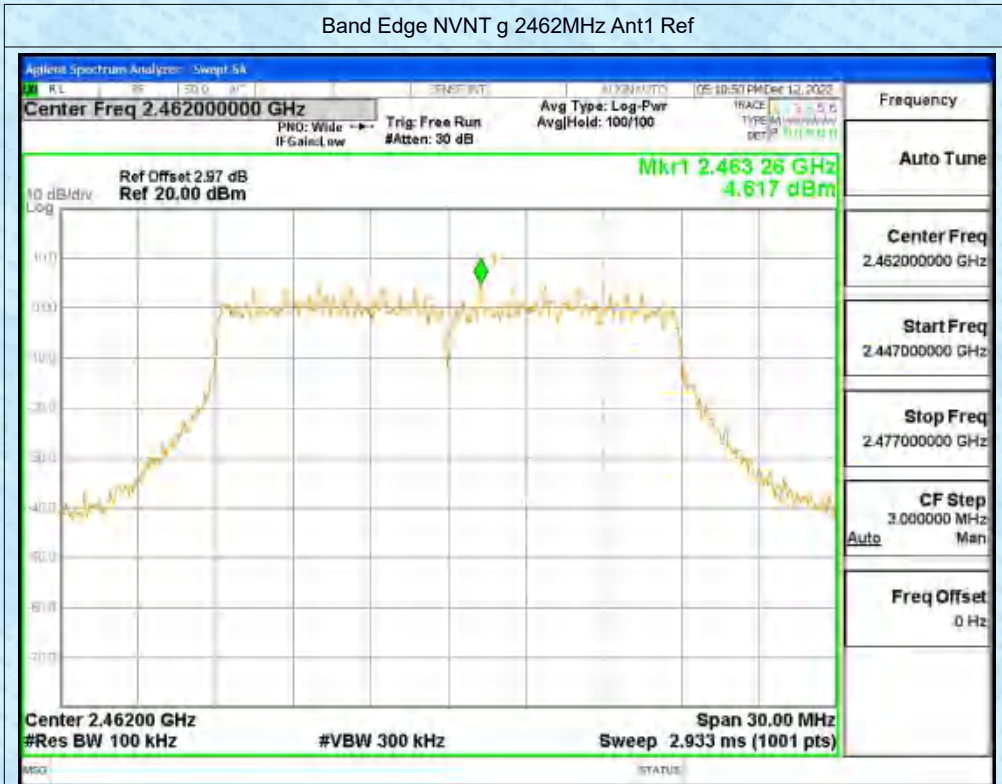
Band Edge NVNT g 2412MHz Ant1 Ref



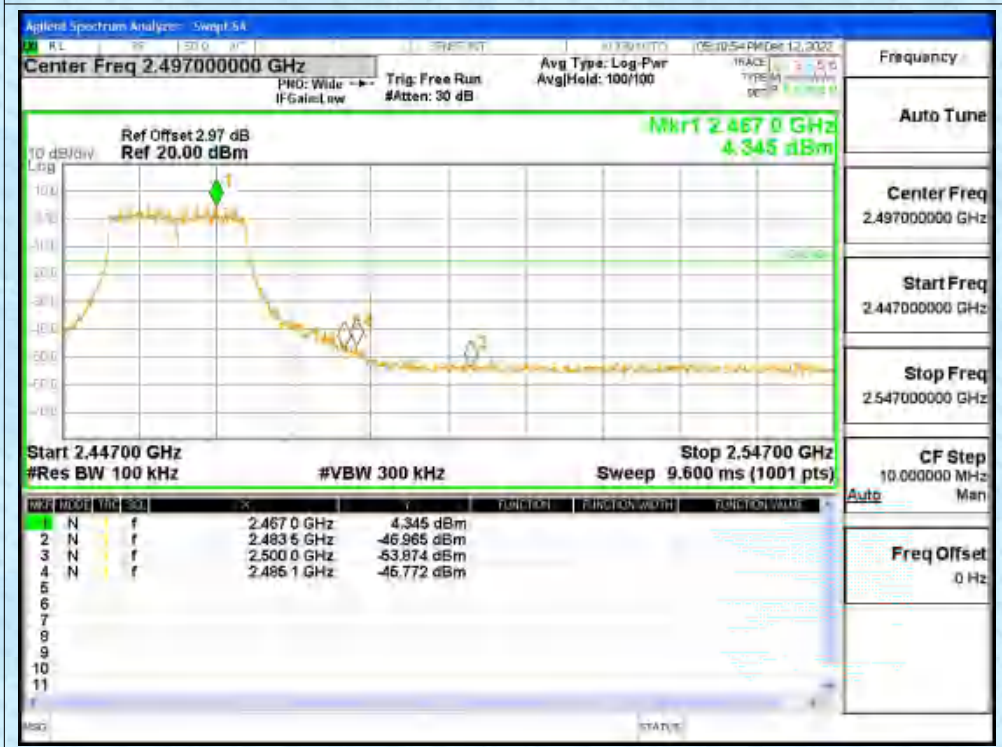
Band Edge NVNT g 2412MHz Ant1 Emission

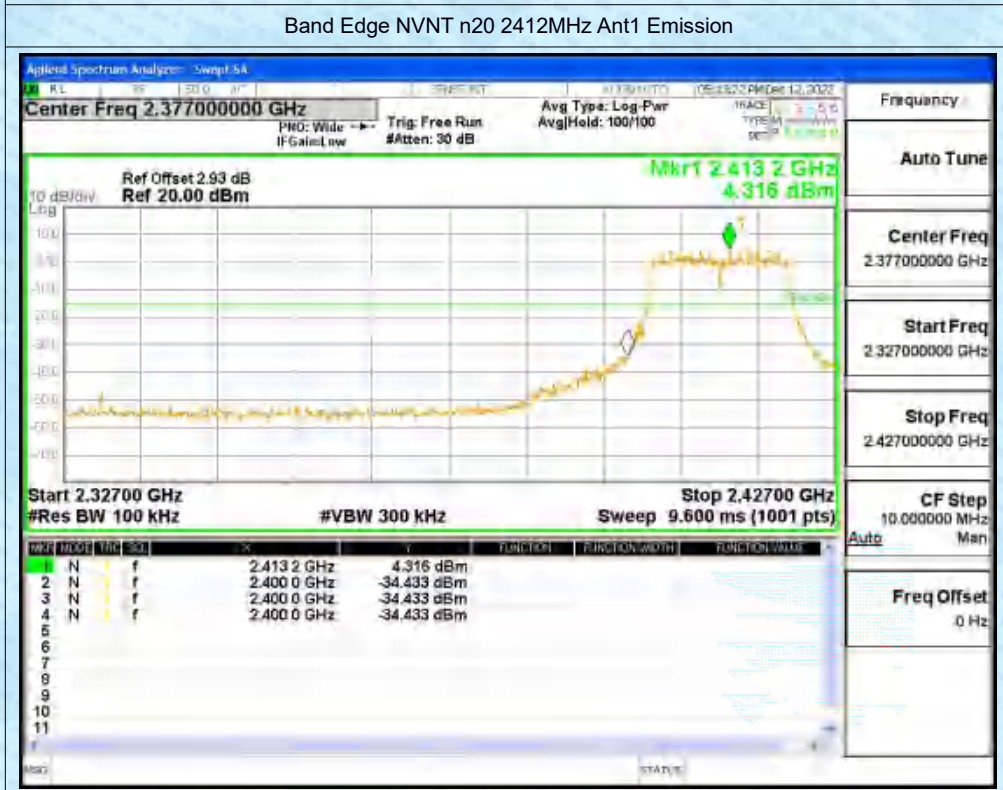
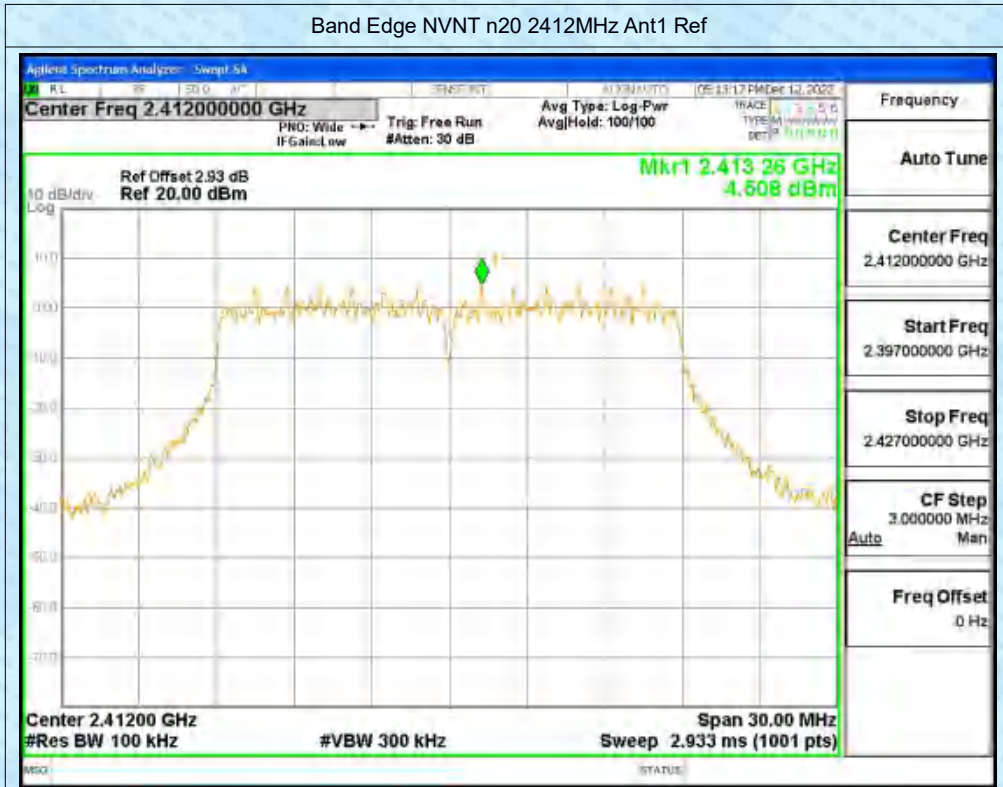


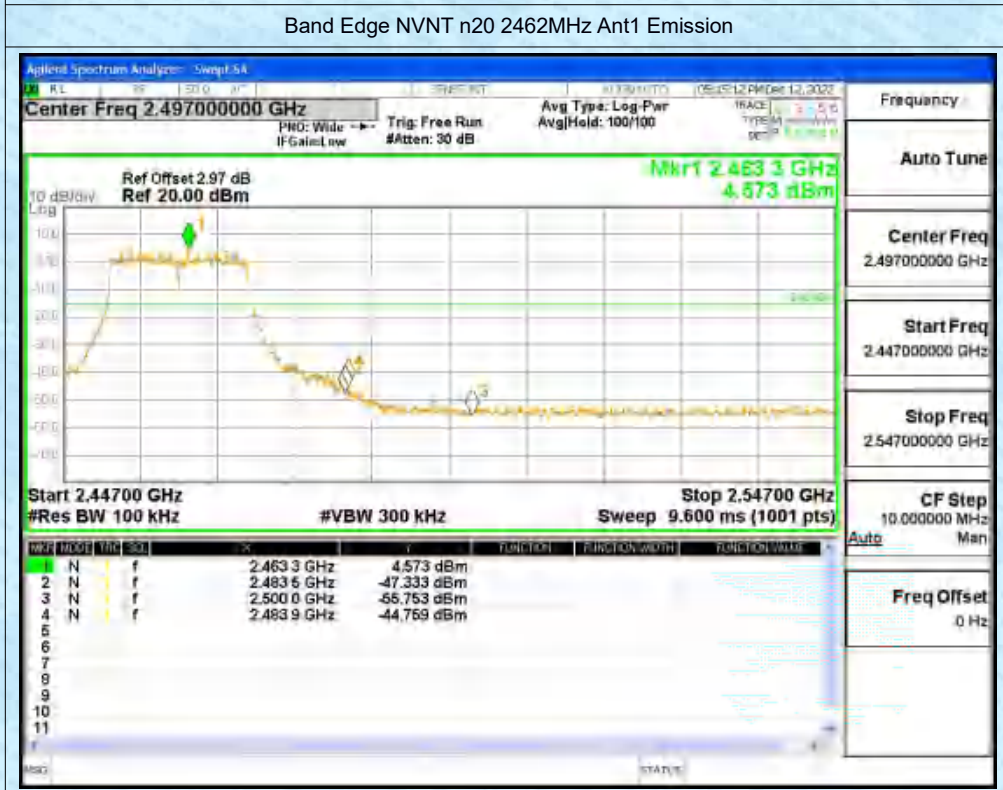
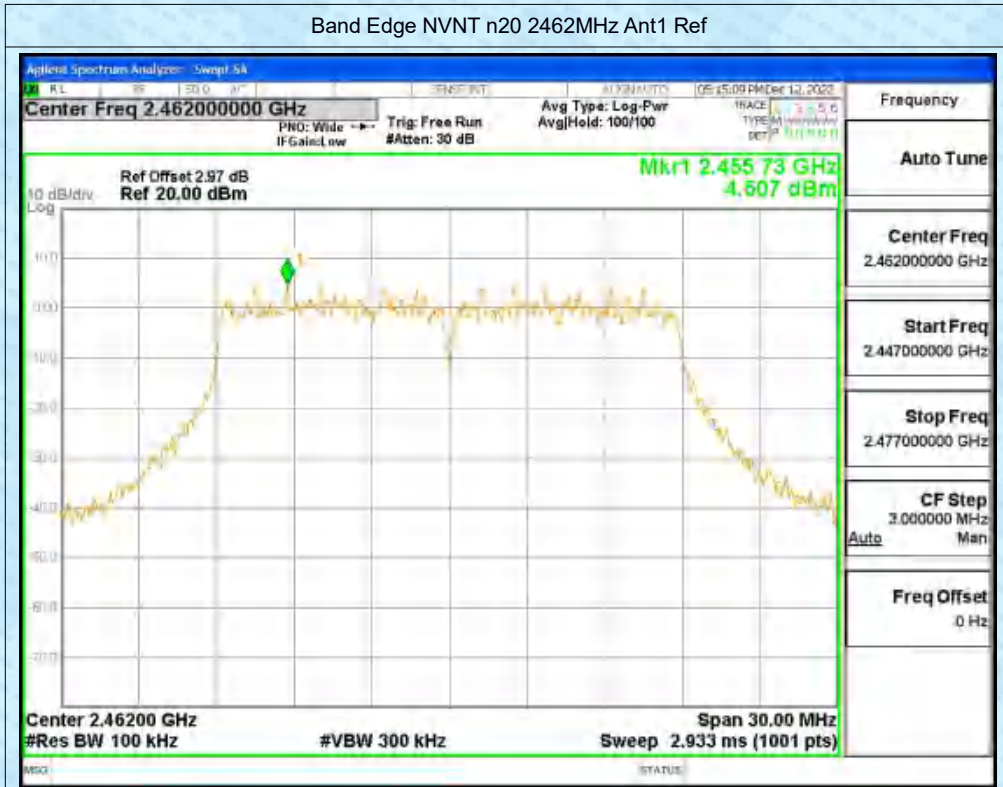
Band Edge NVNT g 2462MHz Ant1 Ref

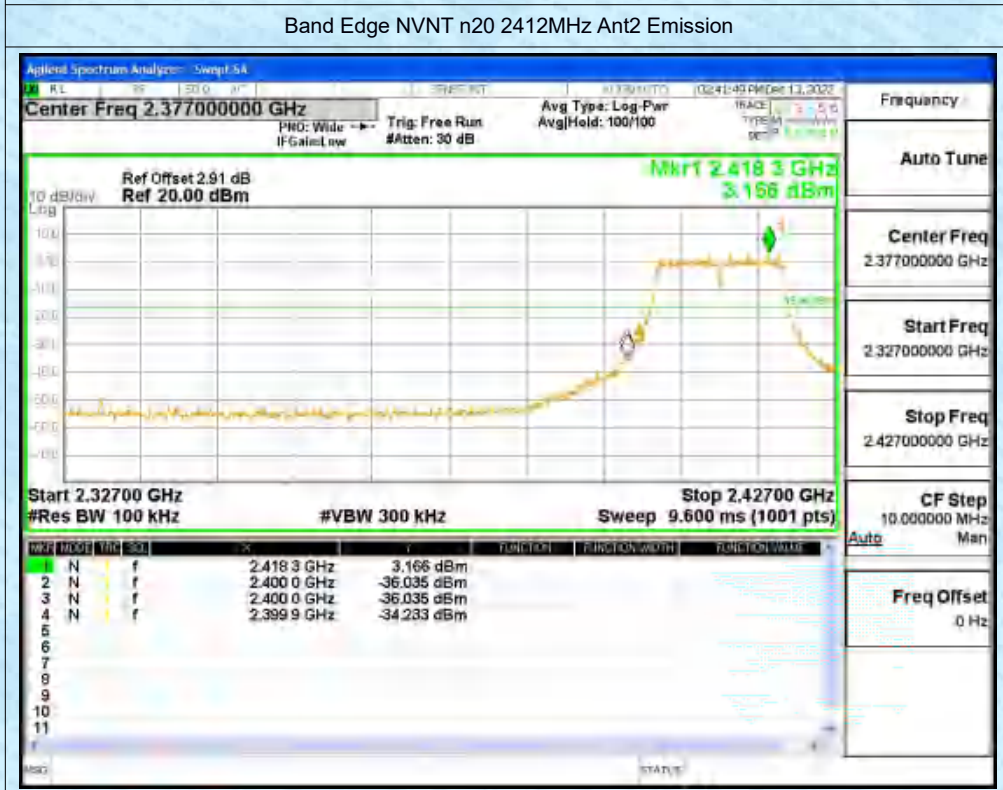
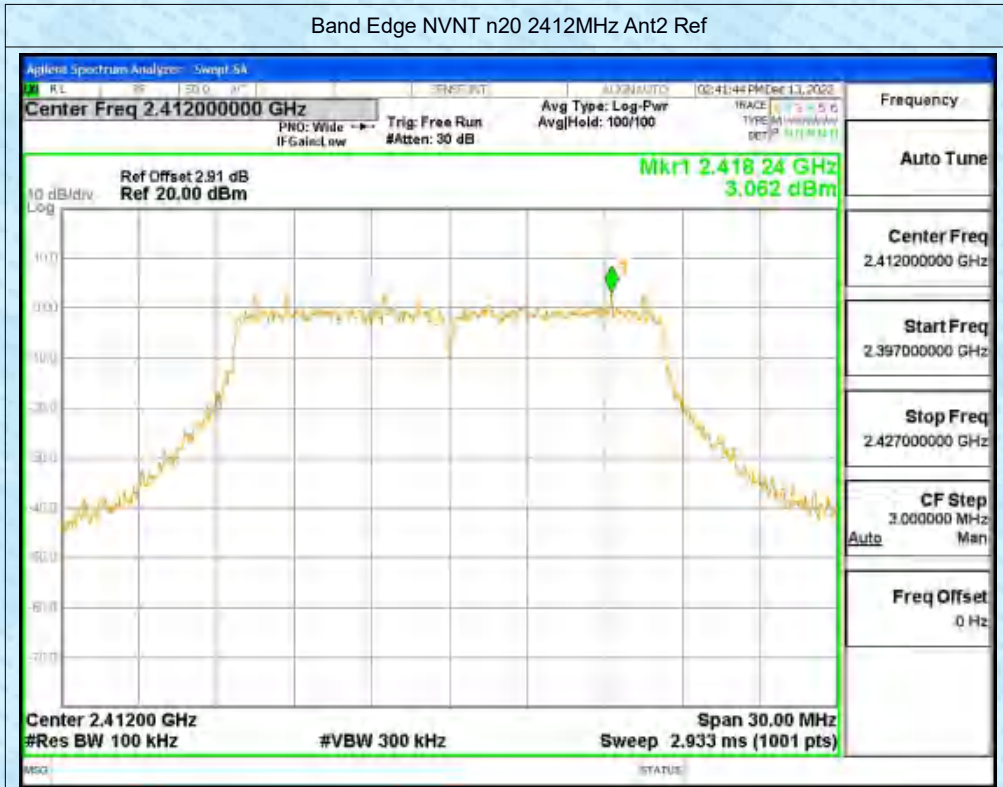


Band Edge NVNT g 2462MHz Ant1 Emission

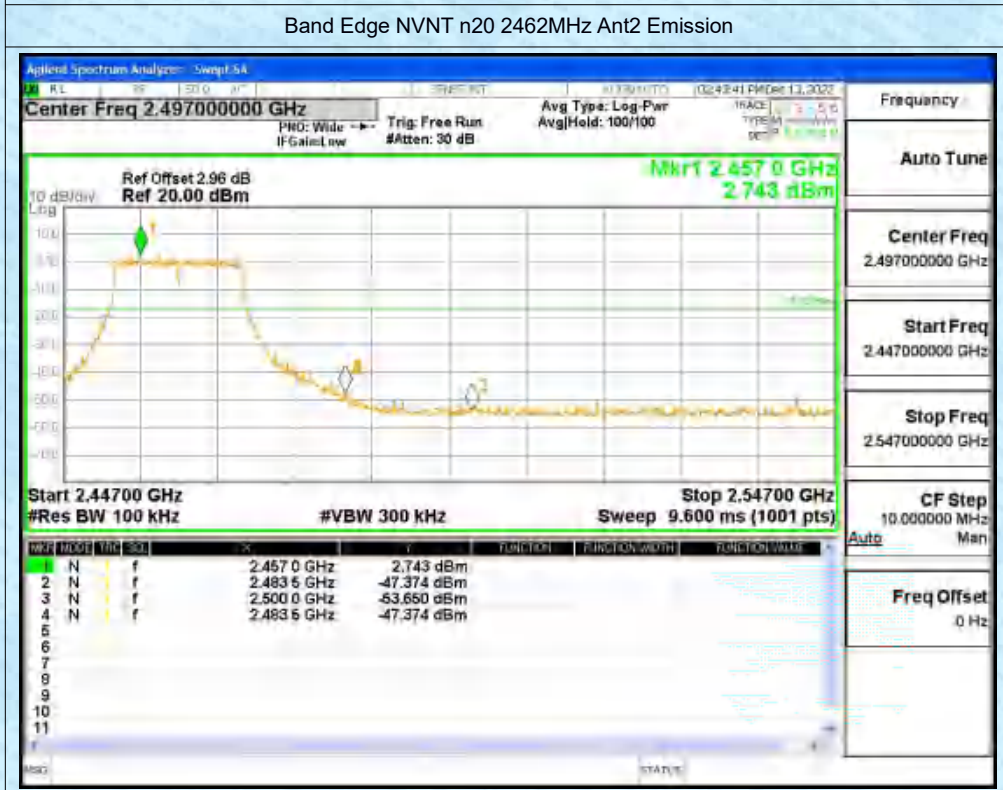
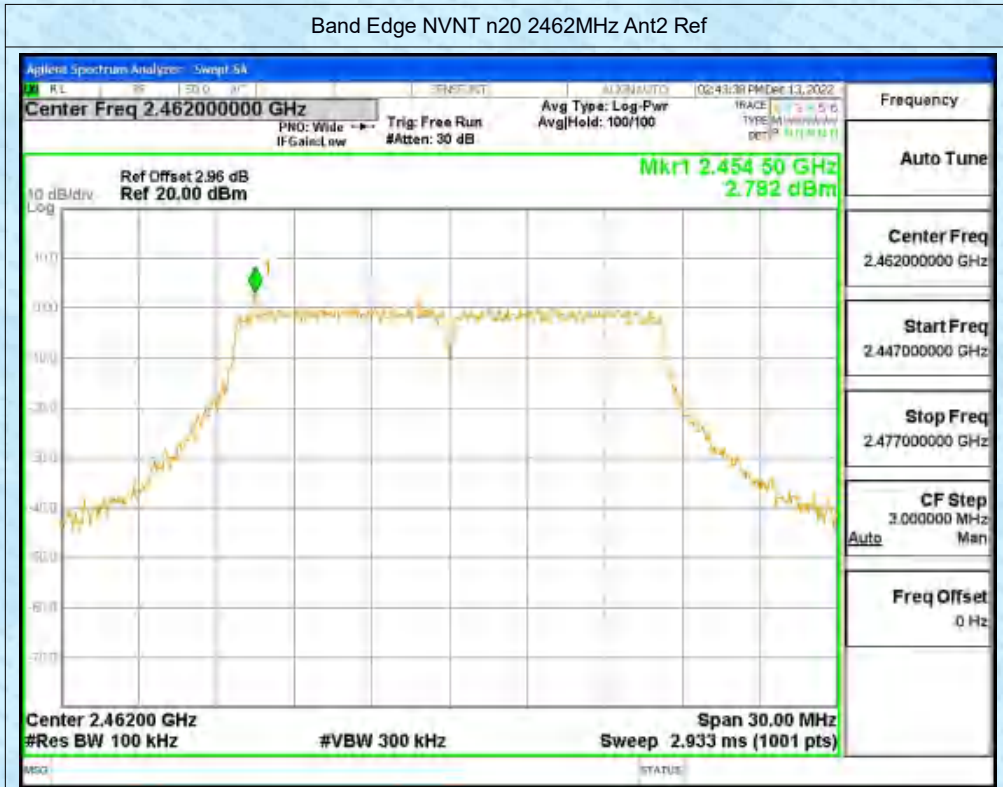










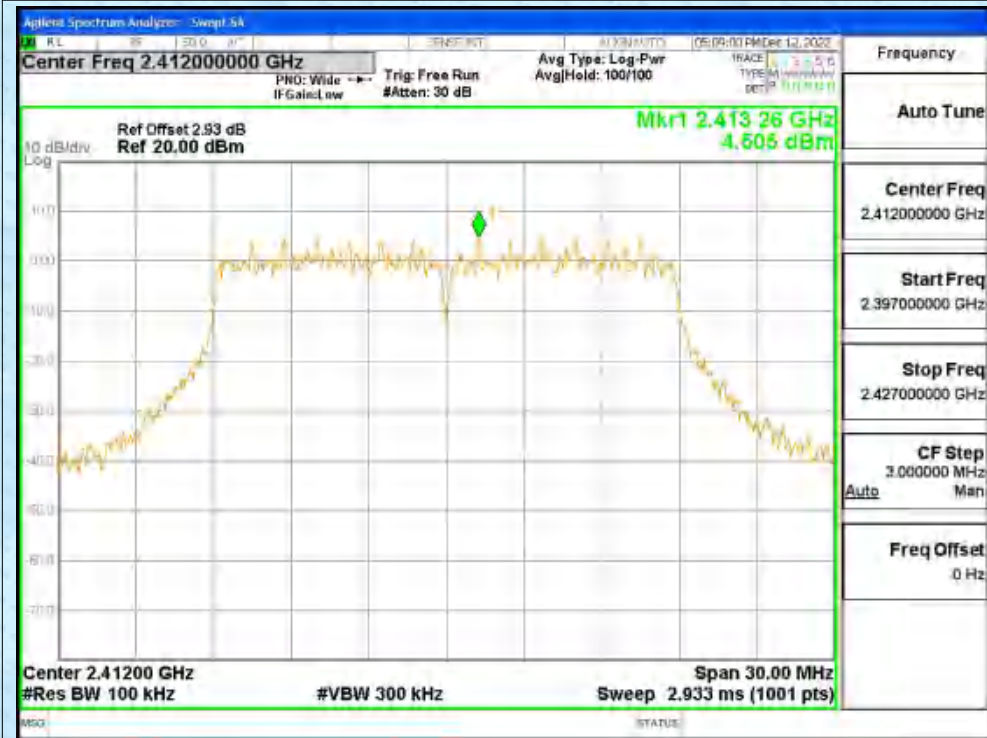


## Conducted RF Spurious Emission

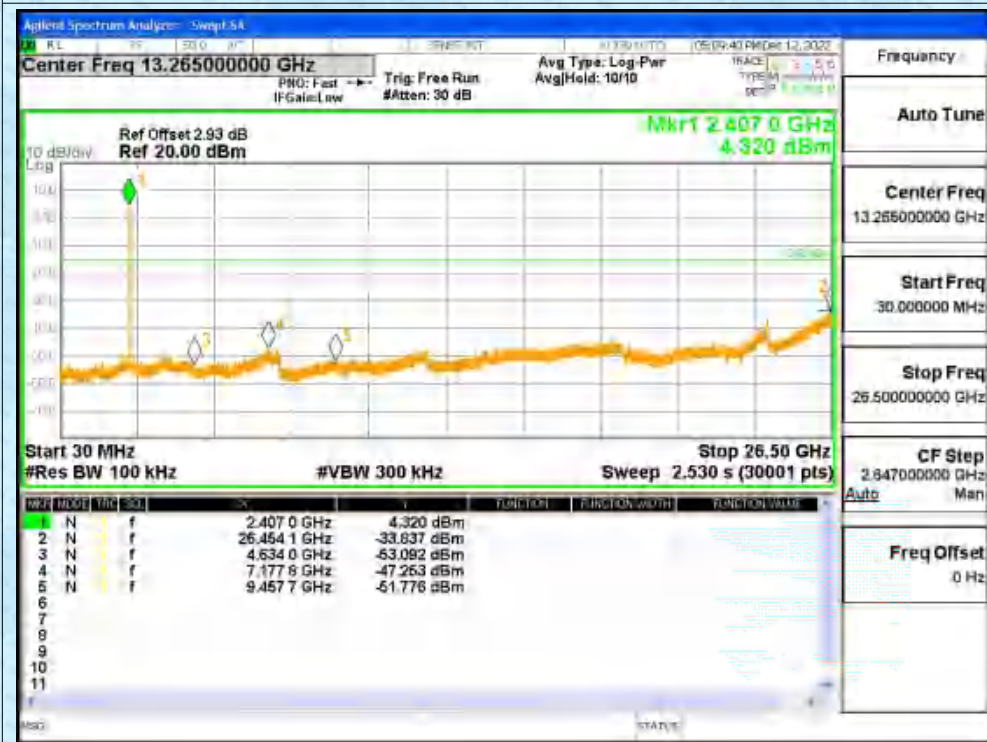
| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | g    | 2412            | Ant1/2  | -38.34          | -20         | Pass    |
|           |      | 2437            |         | -38.15          | -20         | Pass    |
|           |      | 2462            |         | -38.67          | -20         | Pass    |
|           | n20  | Ant1            | 2412    | -38.23          | -20         | Pass    |
|           |      |                 | 2437    | -38.43          | -20         | Pass    |
|           |      |                 | 2462    | -36.99          | -20         | Pass    |
|           |      | Ant2            | 2412    | -36.85          | -20         | Pass    |
|           |      |                 | 2437    | -36.97          | -20         | Pass    |
|           |      |                 | 2462    | -37.5           | -20         | Pass    |

Test Graphs

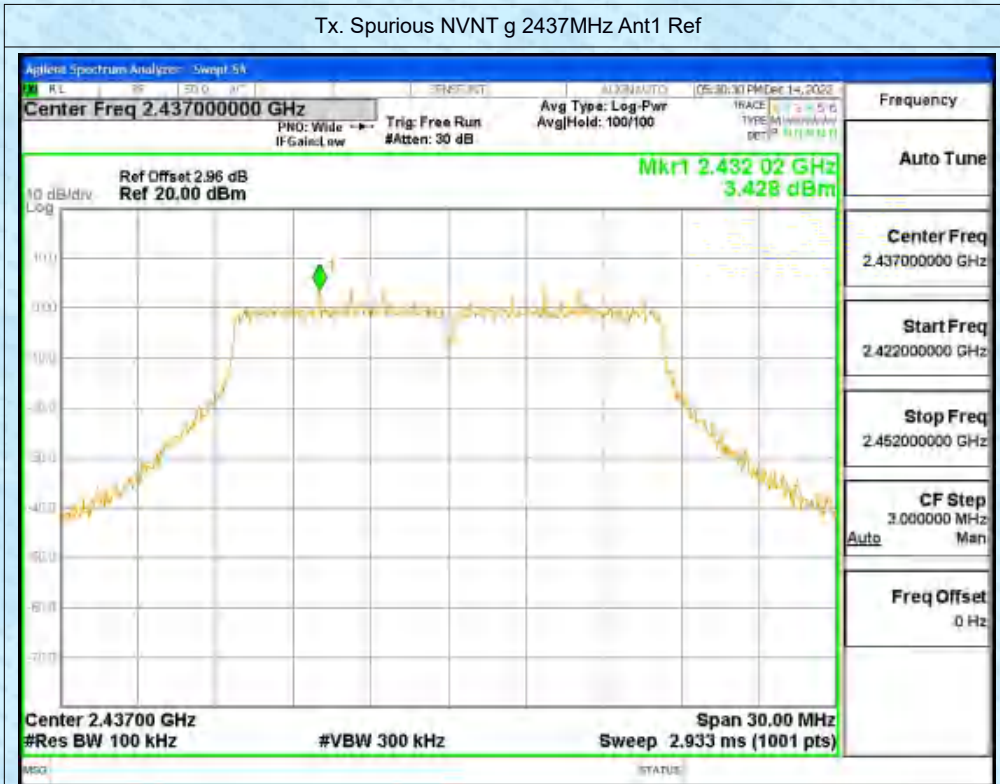
Tx. Spurious NVNT g 2412MHz Ant1 Ref



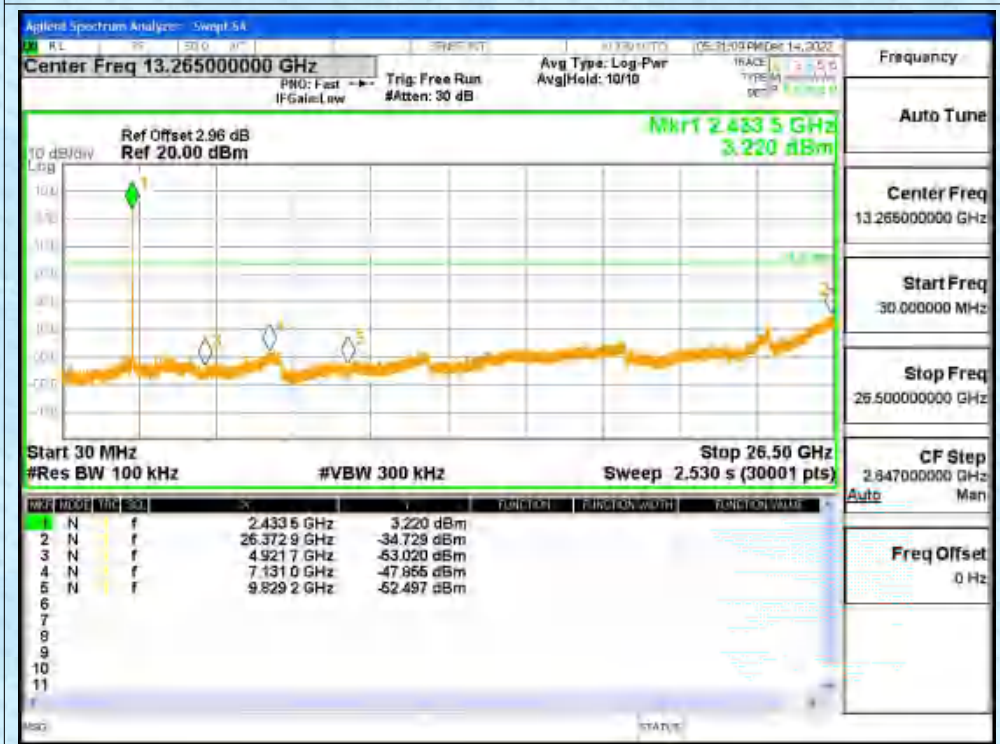
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref



Tx. Spurious NVNT g 2437MHz Ant1 Emission



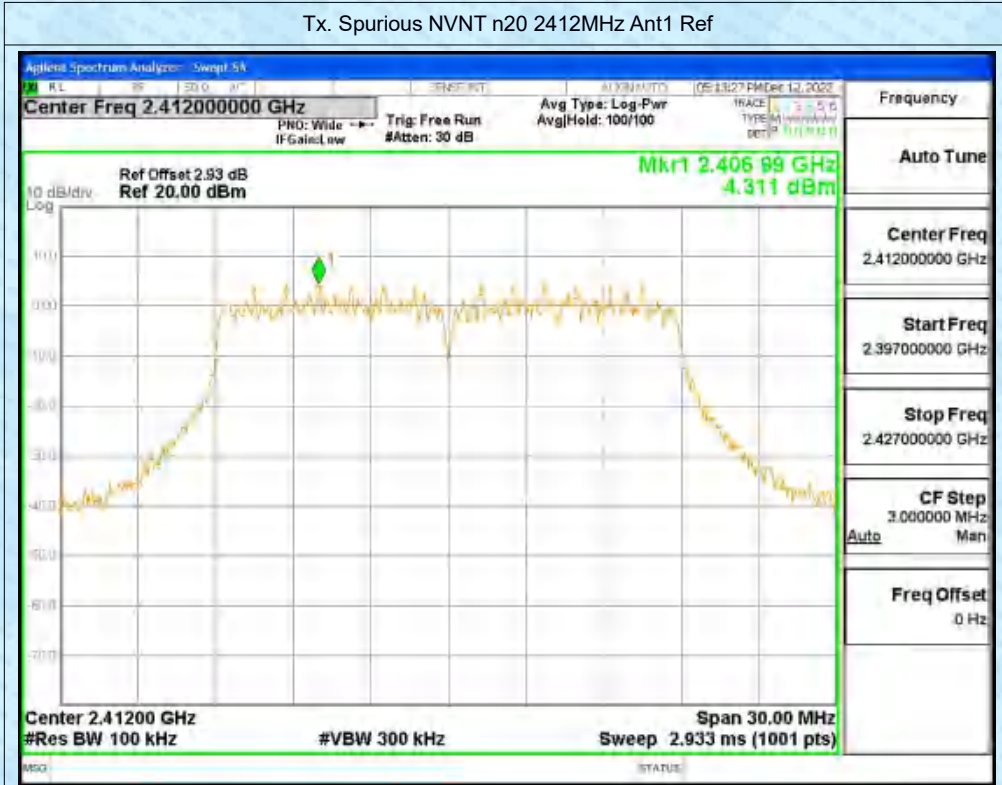
Tx. Spurious NVNT g 2462MHz Ant1 Ref



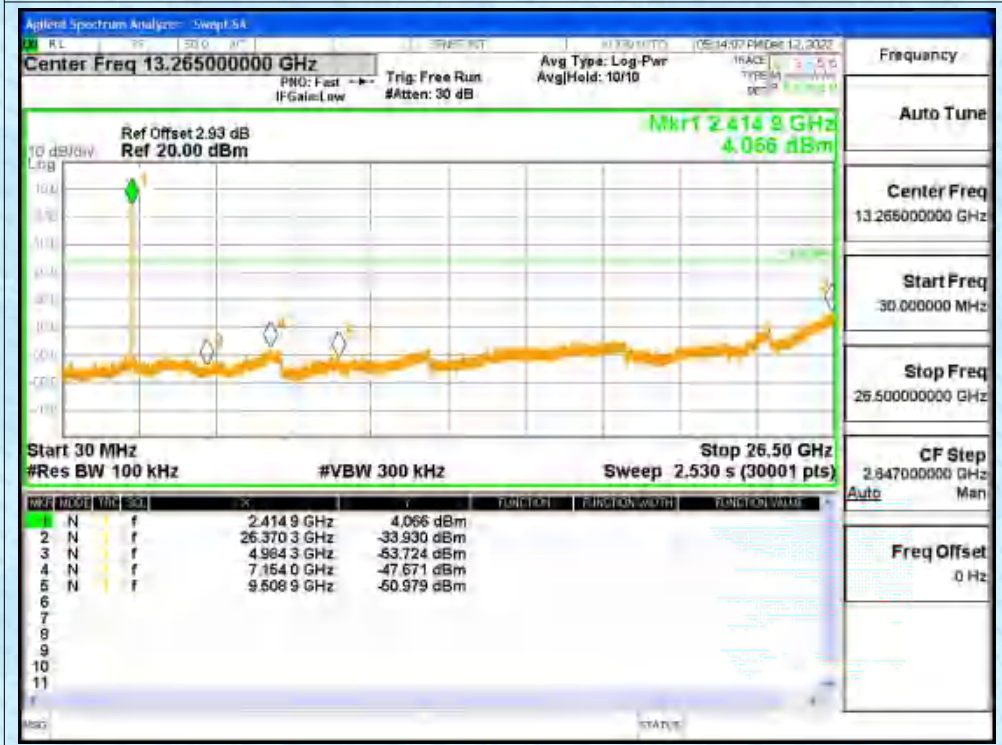
Tx. Spurious NVNT g 2462MHz Ant1 Emission



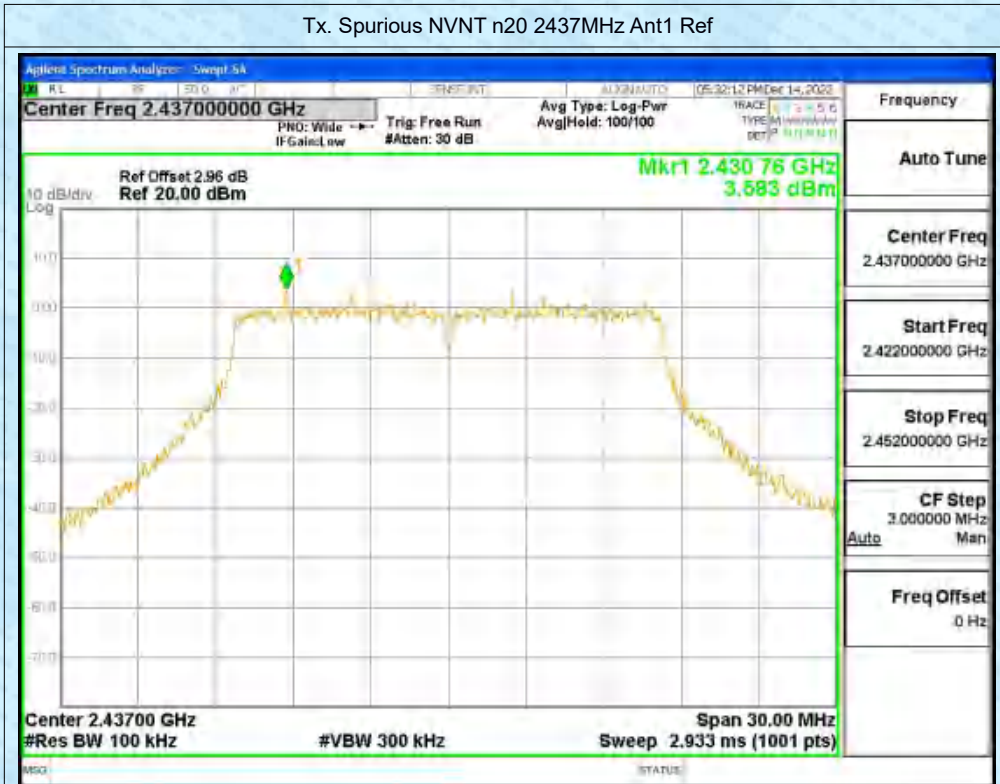
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



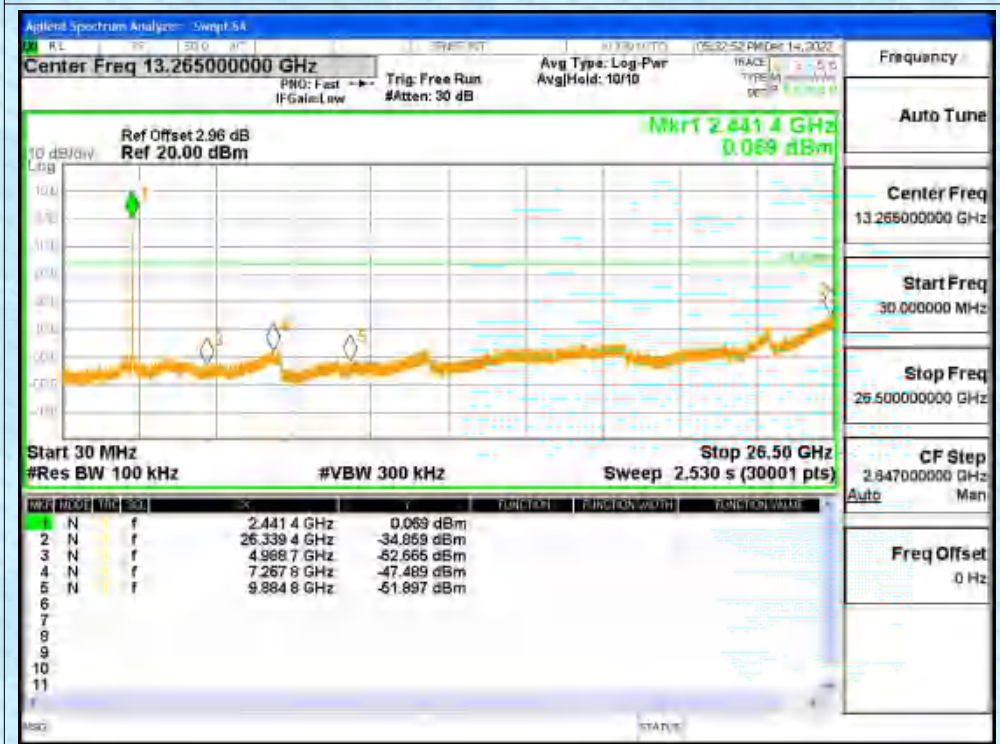
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



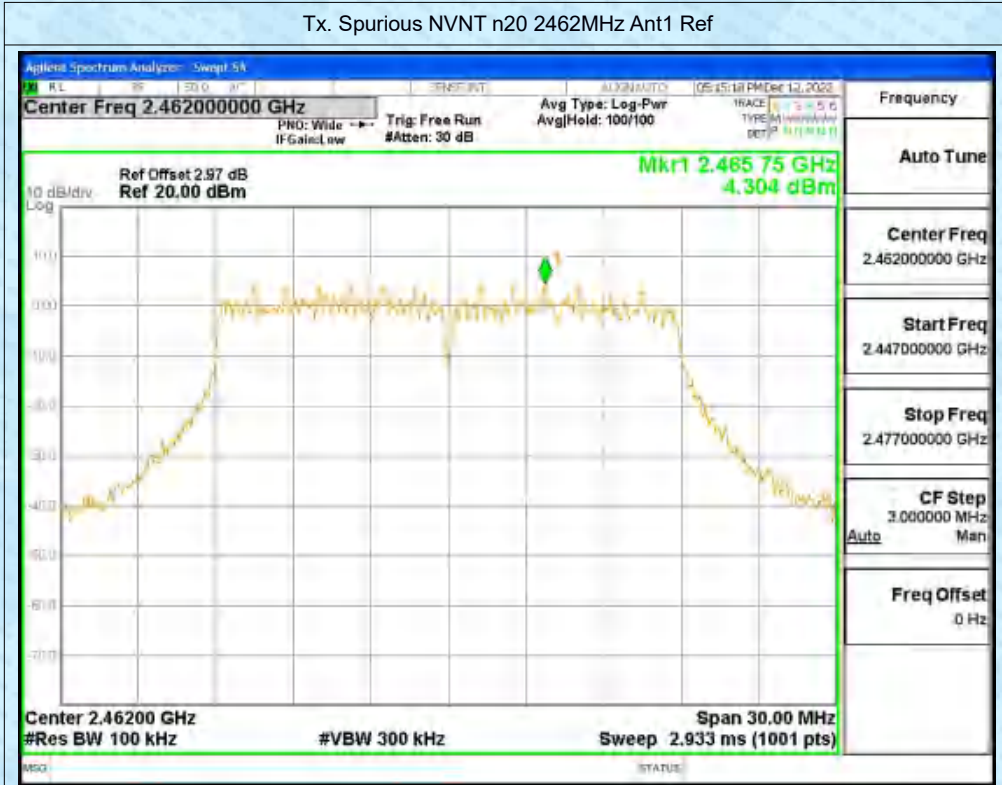
Tx. Spurious NVNT n20 2437MHz Ant1 Ref



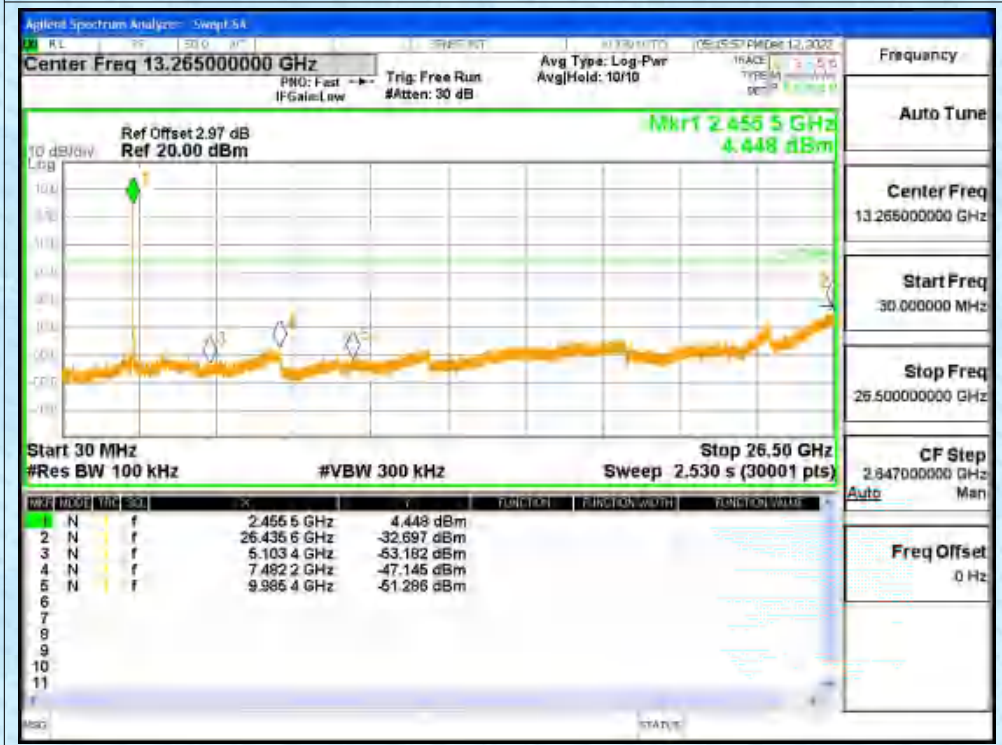
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



Tx. Spurious NVNT n20 2462MHz Ant1 Ref

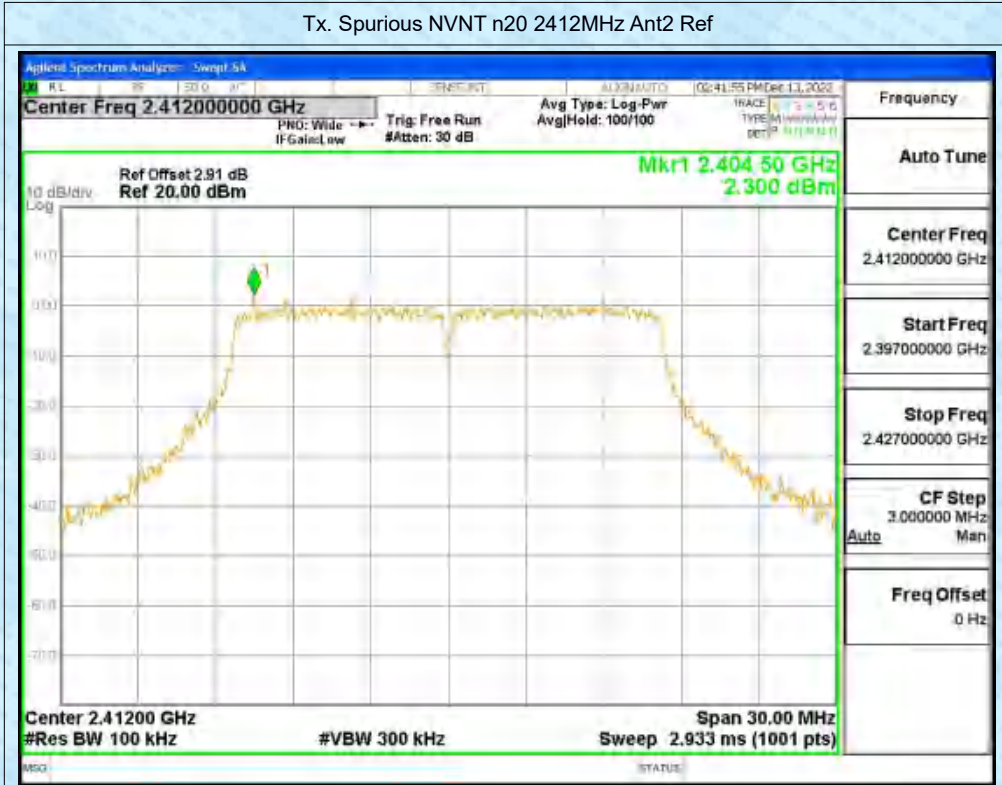


Tx. Spurious NVNT n20 2462MHz Ant1 Emission

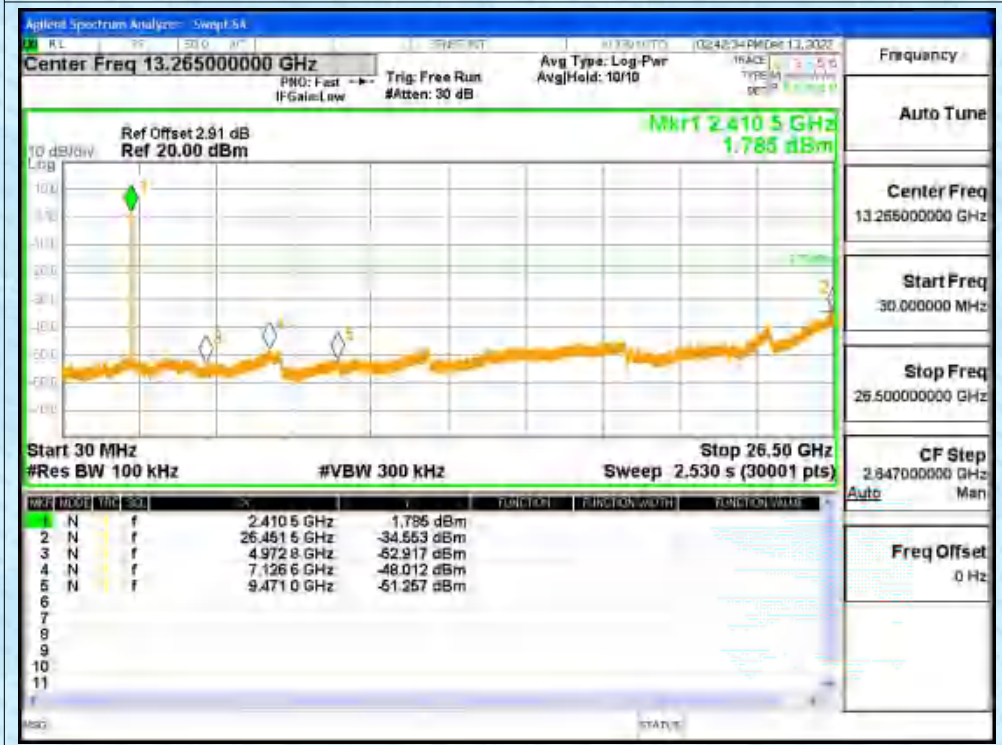




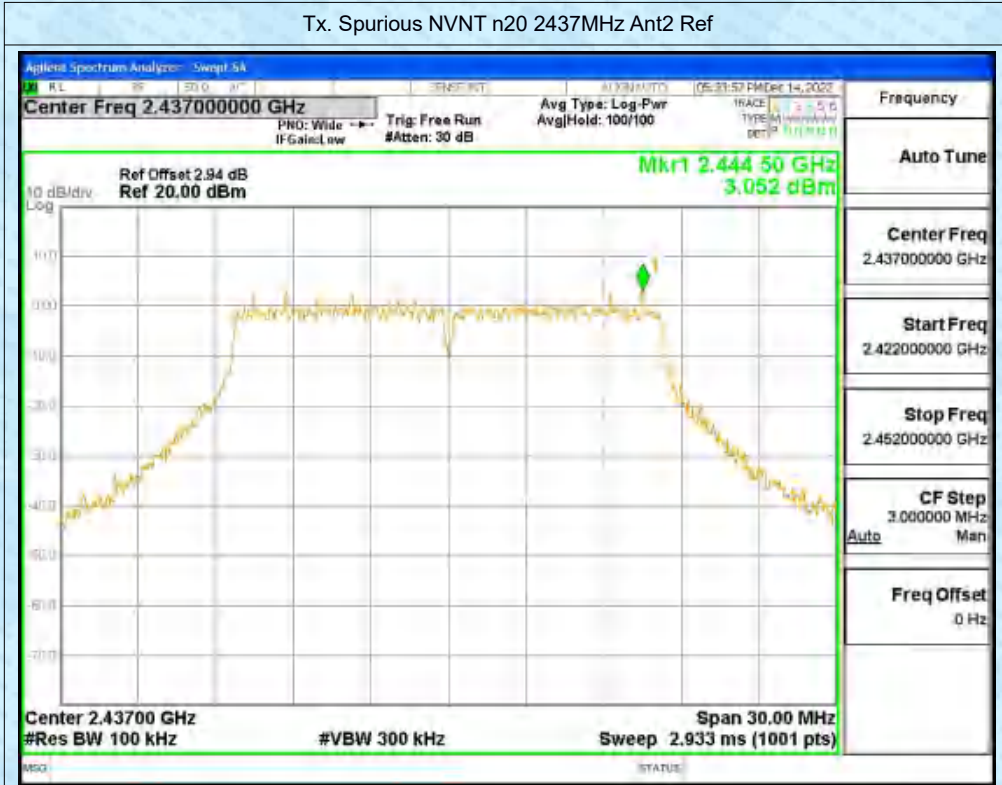
Tx. Spurious NVNT n20 2412MHz Ant2 Ref



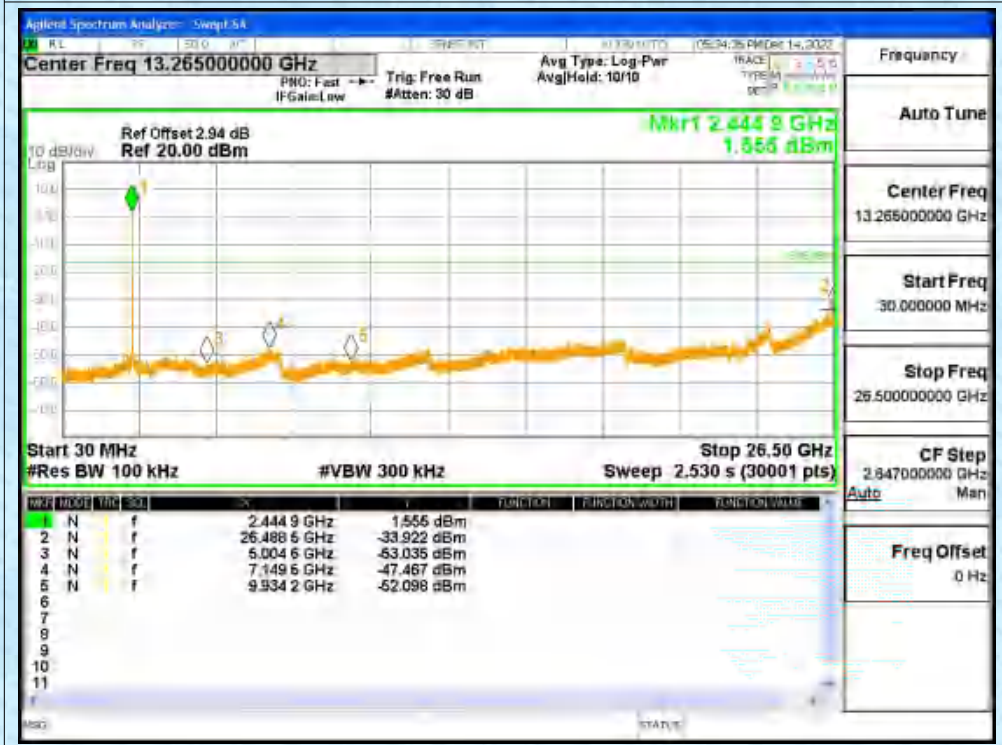
Tx. Spurious NVNT n20 2412MHz Ant2 Emission



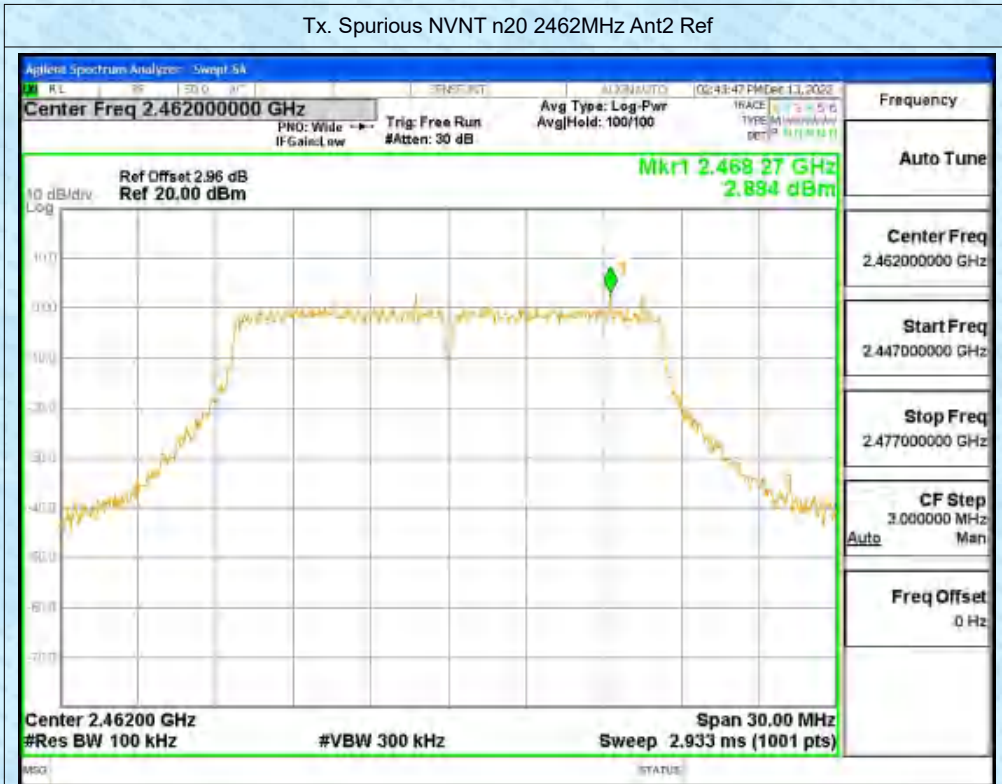
Tx. Spurious NVNT n20 2437MHz Ant2 Ref



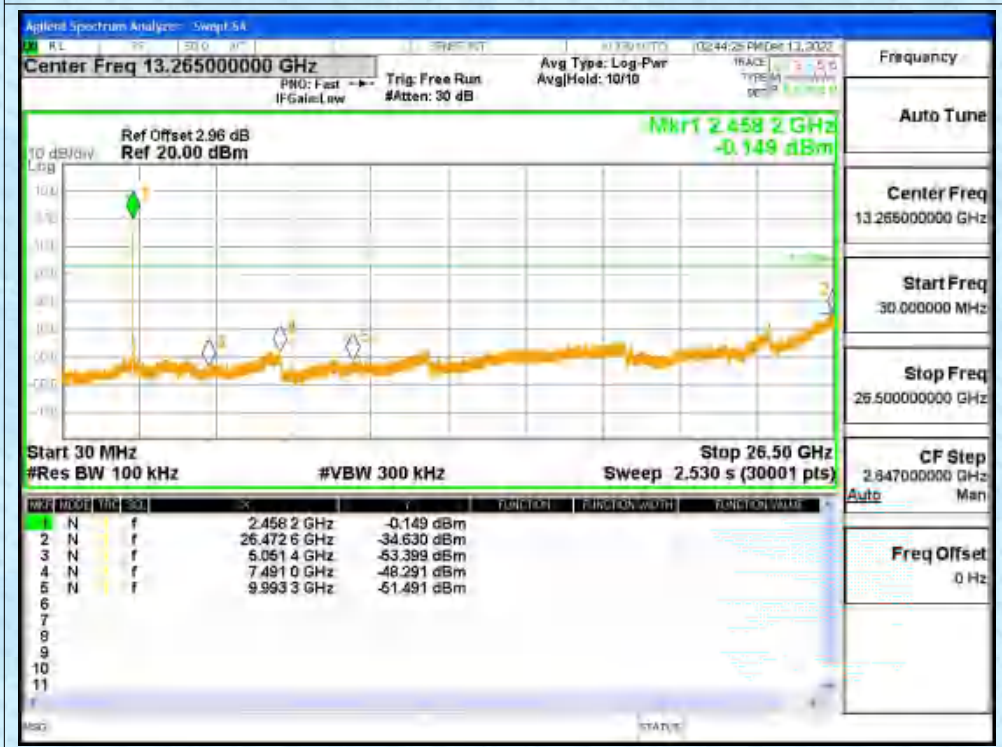
Tx. Spurious NVNT n20 2437MHz Ant2 Emission



Tx. Spurious NVNT n20 2462MHz Ant2 Ref



Tx. Spurious NVNT n20 2462MHz Ant2 Emission



-----End-----