

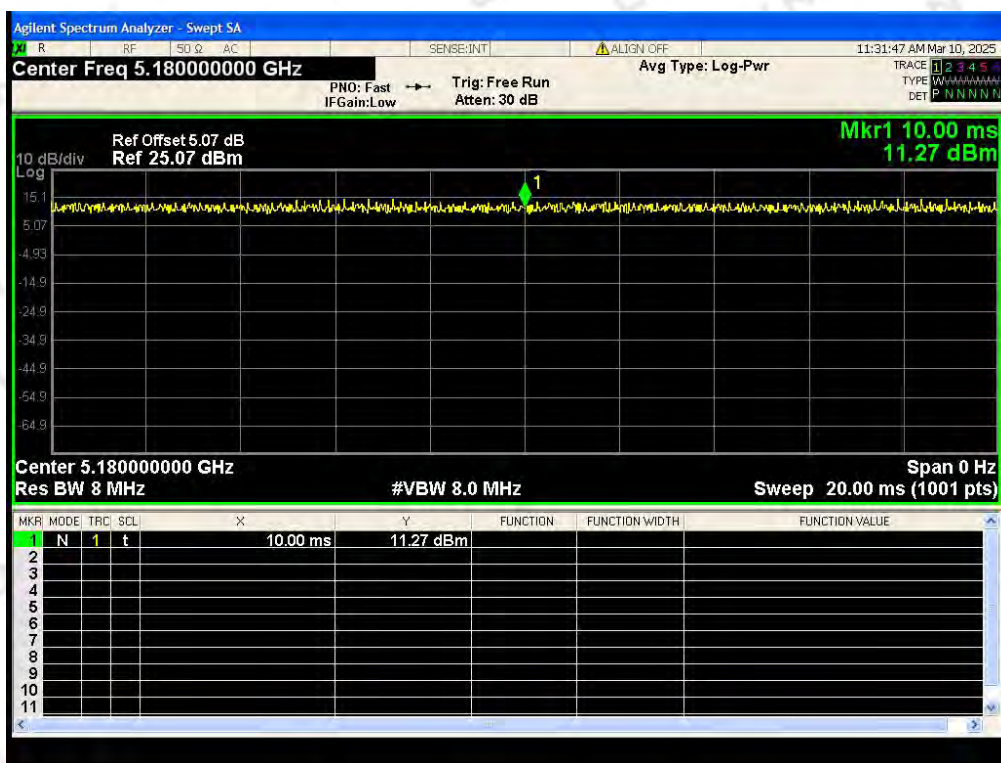
## Test Report

### ANT 1 5G WIFI RF test data\_B1

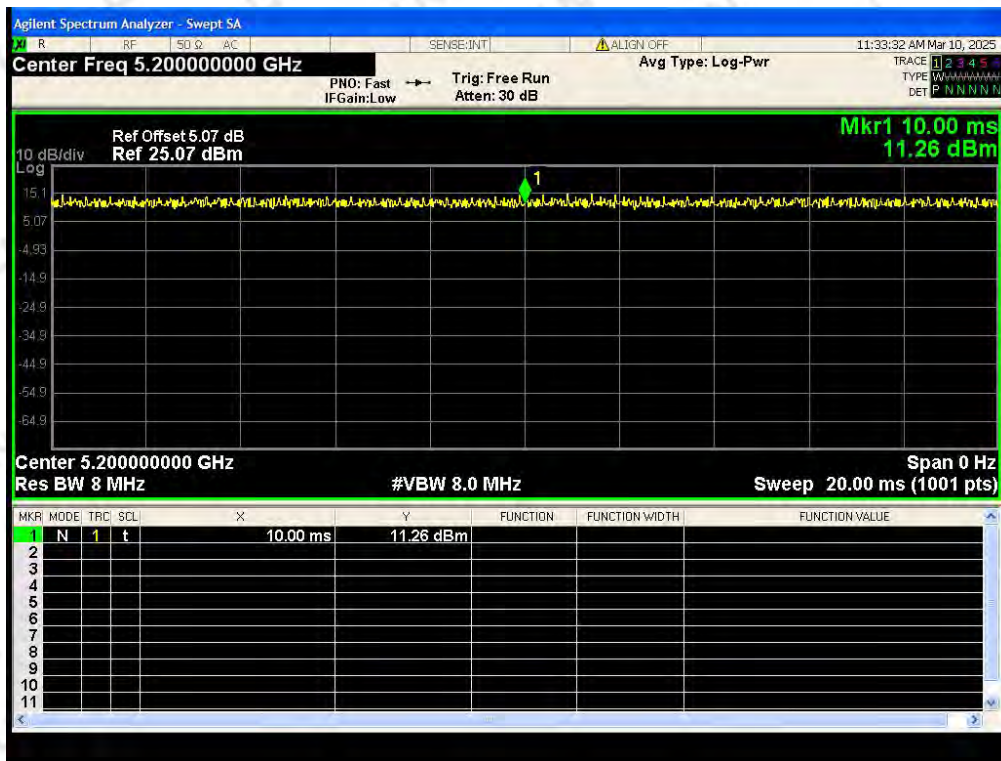
## Duty Cycle

| Condition | Mode          | Frequency (MHz) | Duty Cycle (%) | Correction Factor (dB) |
|-----------|---------------|-----------------|----------------|------------------------|
| NVNT      | 802.11a       | 5180            | 100            | 0                      |
| NVNT      | 802.11a       | 5200            | 100            | 0                      |
| NVNT      | 802.11a       | 5240            | 100            | 0                      |
| NVNT      | 802.11ac20    | 5180            | 100            | 0                      |
| NVNT      | 802.11ac20    | 5200            | 100            | 0                      |
| NVNT      | 802.11ac20    | 5240            | 100            | 0                      |
| NVNT      | 802.11ac40    | 5190            | 100            | 0                      |
| NVNT      | 802.11ac40    | 5230            | 100            | 0                      |
| NVNT      | 802.11ac80    | 5210            | 100            | 0                      |
| NVNT      | 802.11n(HT20) | 5180            | 100            | 0                      |
| NVNT      | 802.11n(HT20) | 5200            | 100            | 0                      |
| NVNT      | 802.11n(HT20) | 5240            | 100            | 0                      |
| NVNT      | 802.11n(HT40) | 5190            | 100            | 0                      |
| NVNT      | 802.11n(HT40) | 5230            | 100            | 0                      |

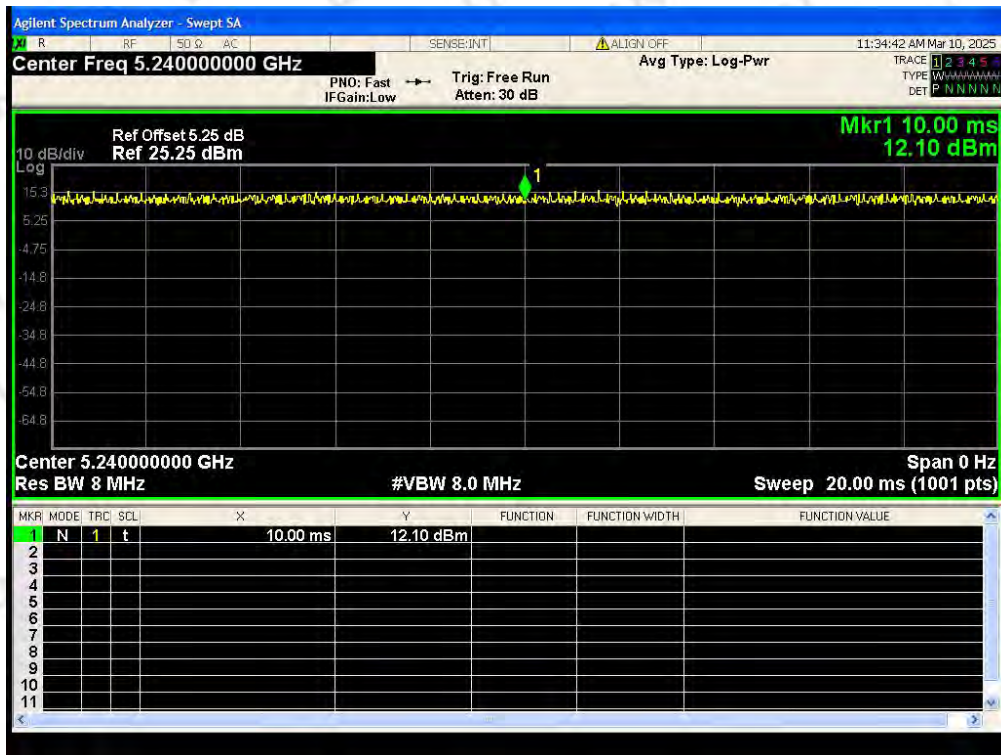
Duty Cycle NVNT 802.11a 5180MHz



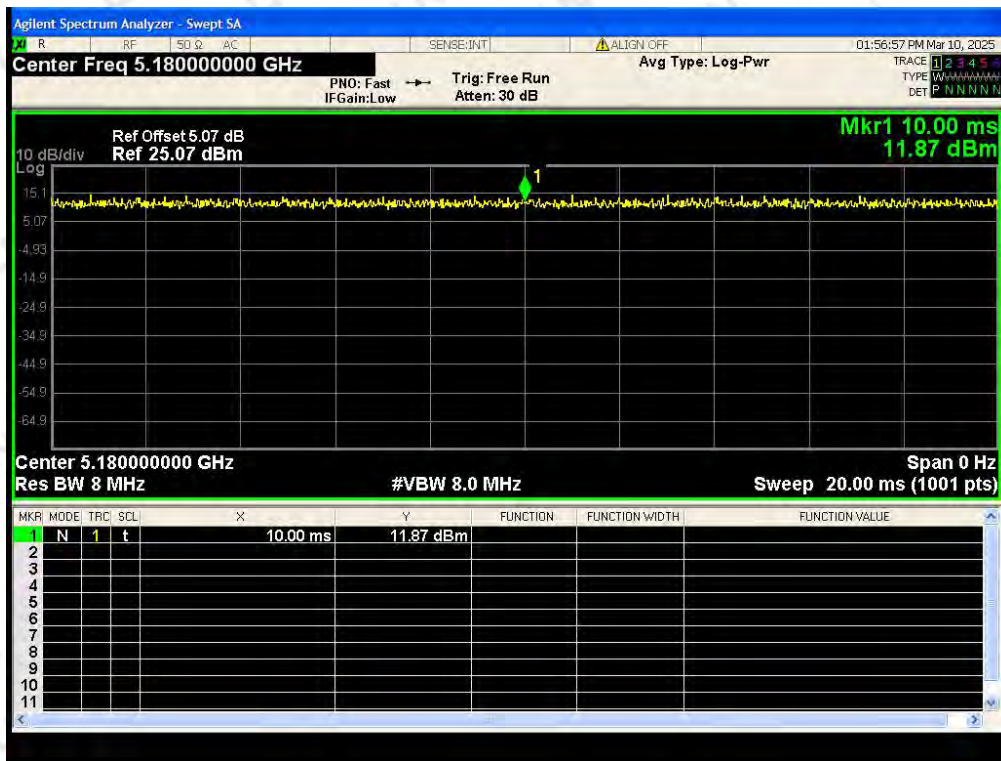
### Duty Cycle NVNT 802.11a 5200MHz



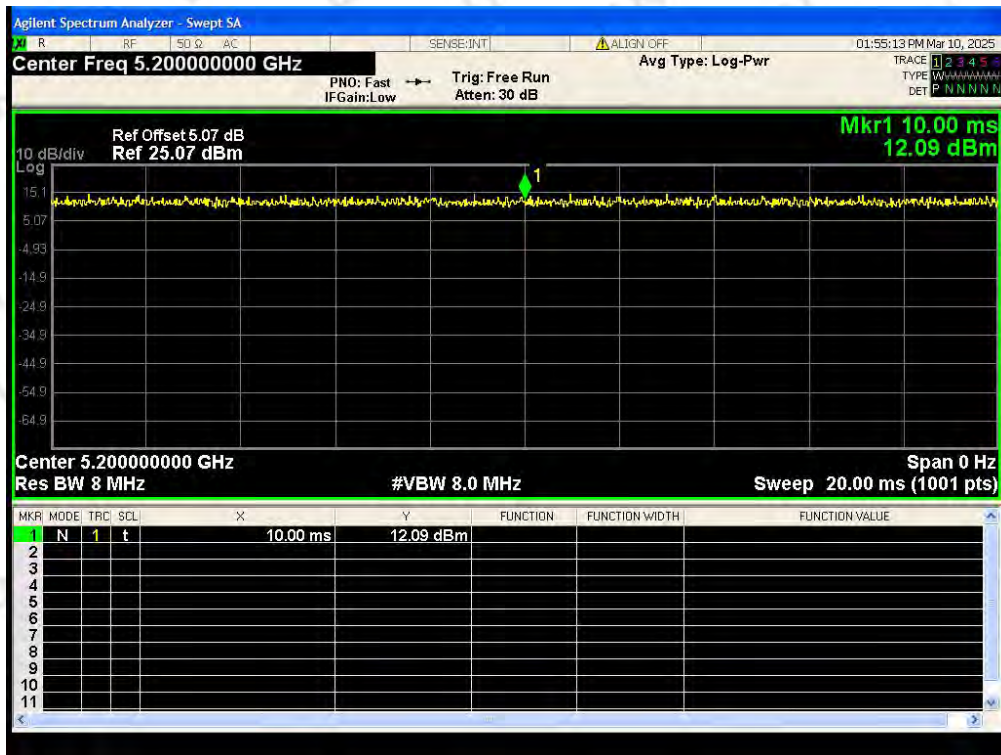
### Duty Cycle NVNT 802.11a 5240MHz



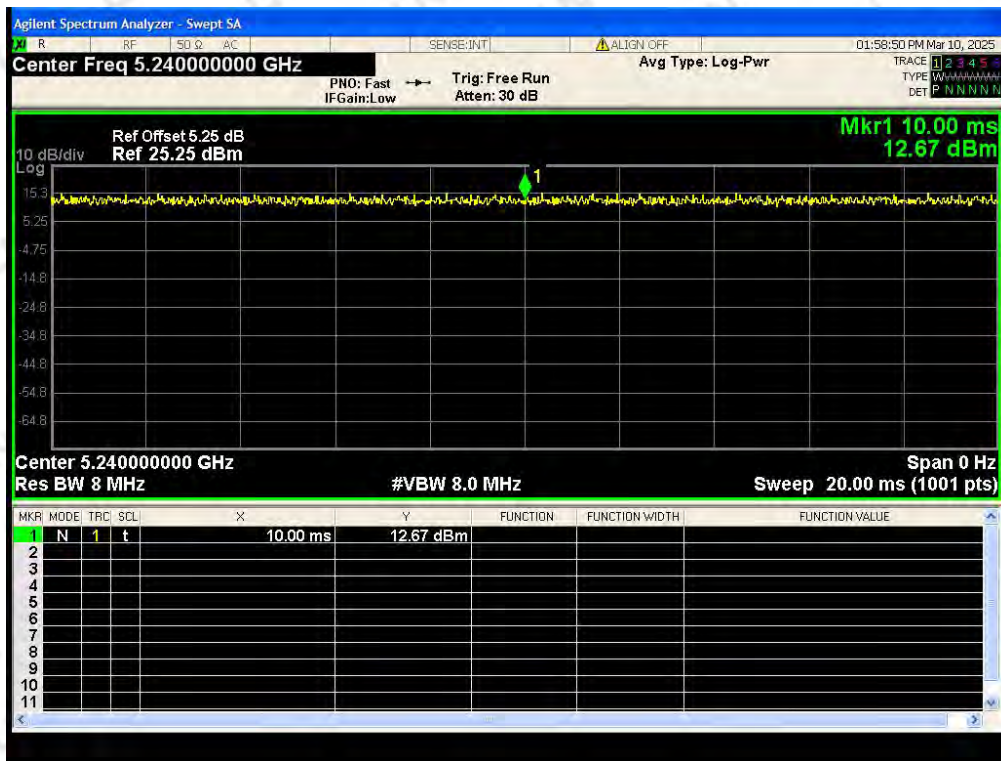
### Duty Cycle NVNT 802.11ac20 5180MHz



### Duty Cycle NVNT 802.11ac20 5200MHz



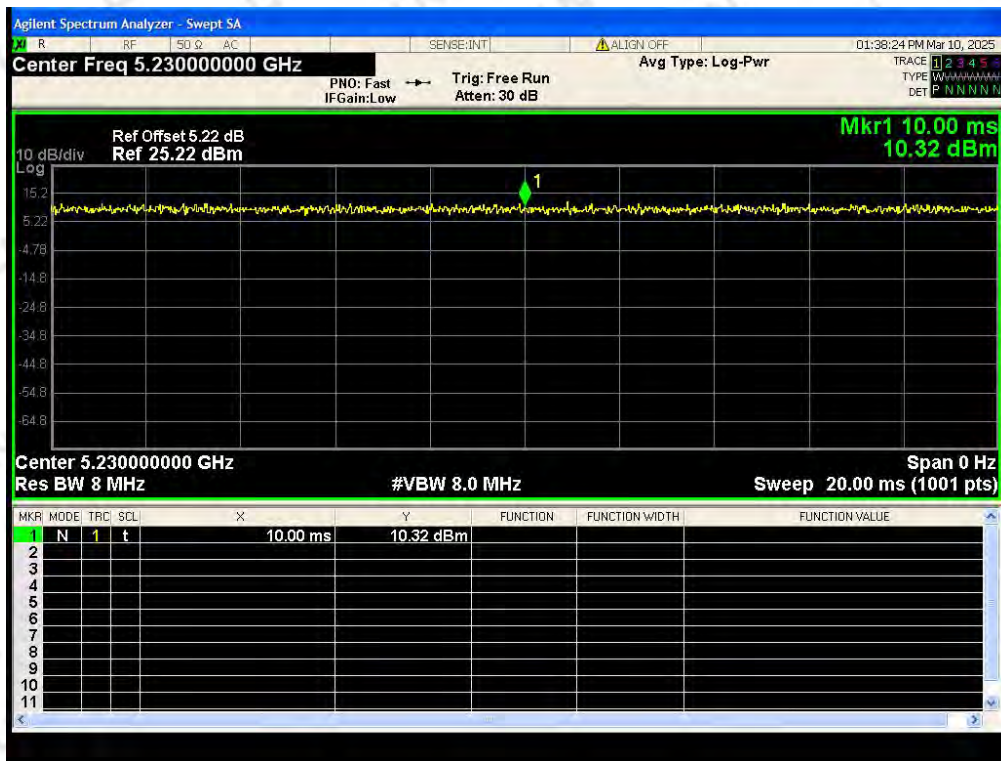
### Duty Cycle NVNT 802.11ac20 5240MHz



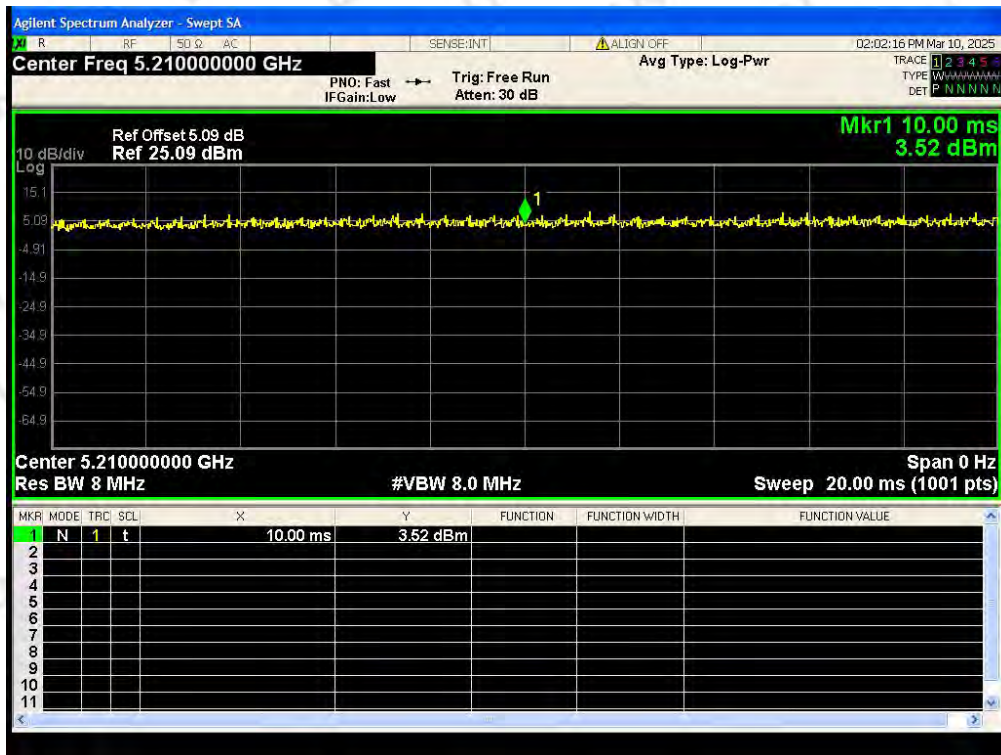
### Duty Cycle NVNT 802.11ac40 5190MHz



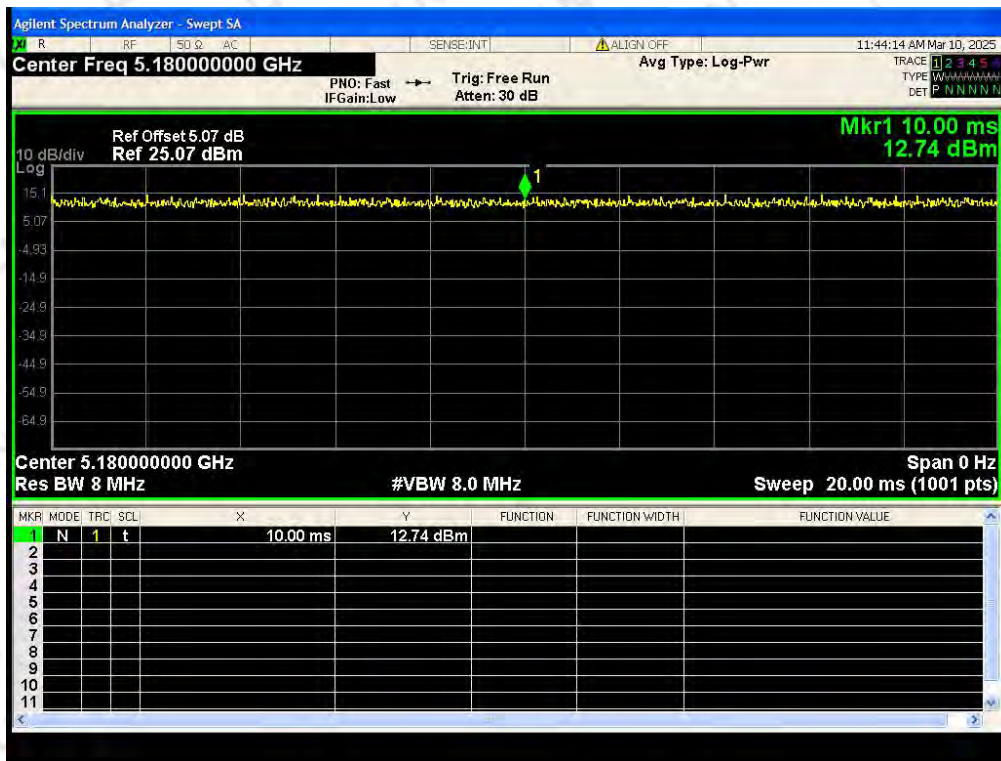
### Duty Cycle NVNT 802.11ac40 5230MHz



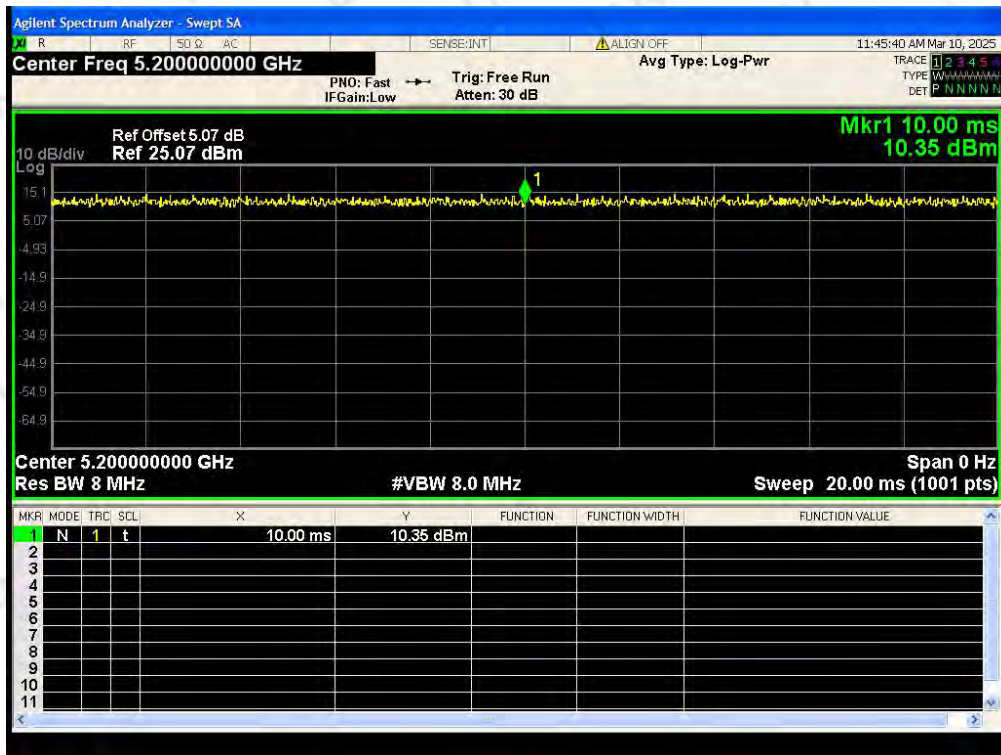
### Duty Cycle NVNT 802.11ac80 5210MHz



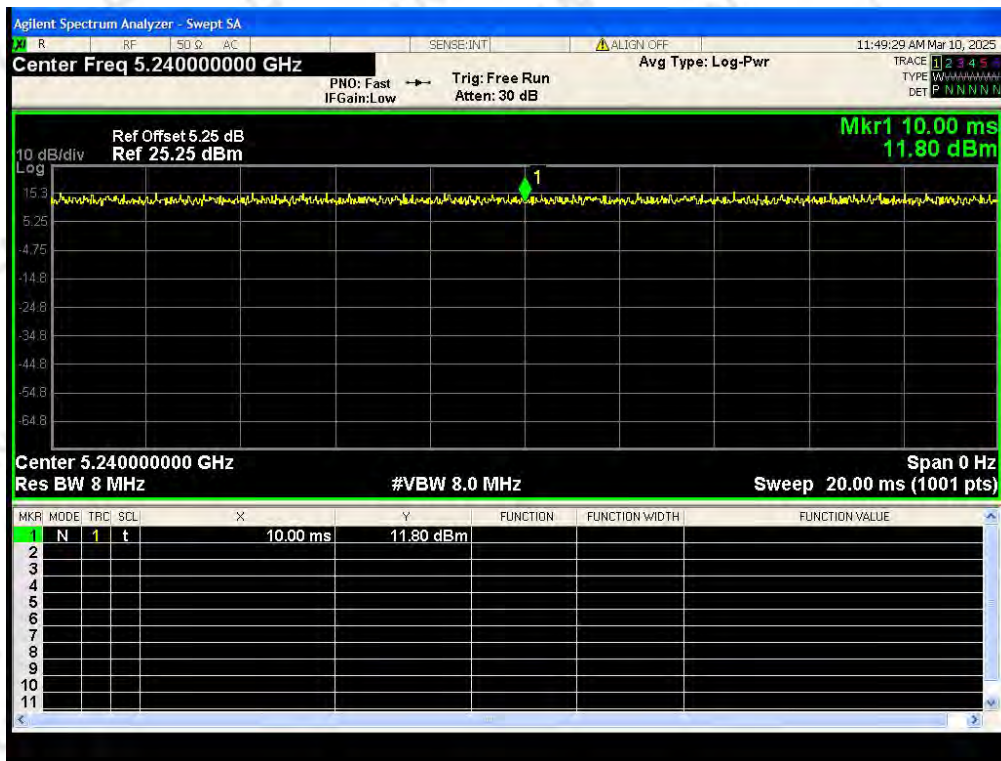
### Duty Cycle NVNT 802.11n(HT20) 5180MHz



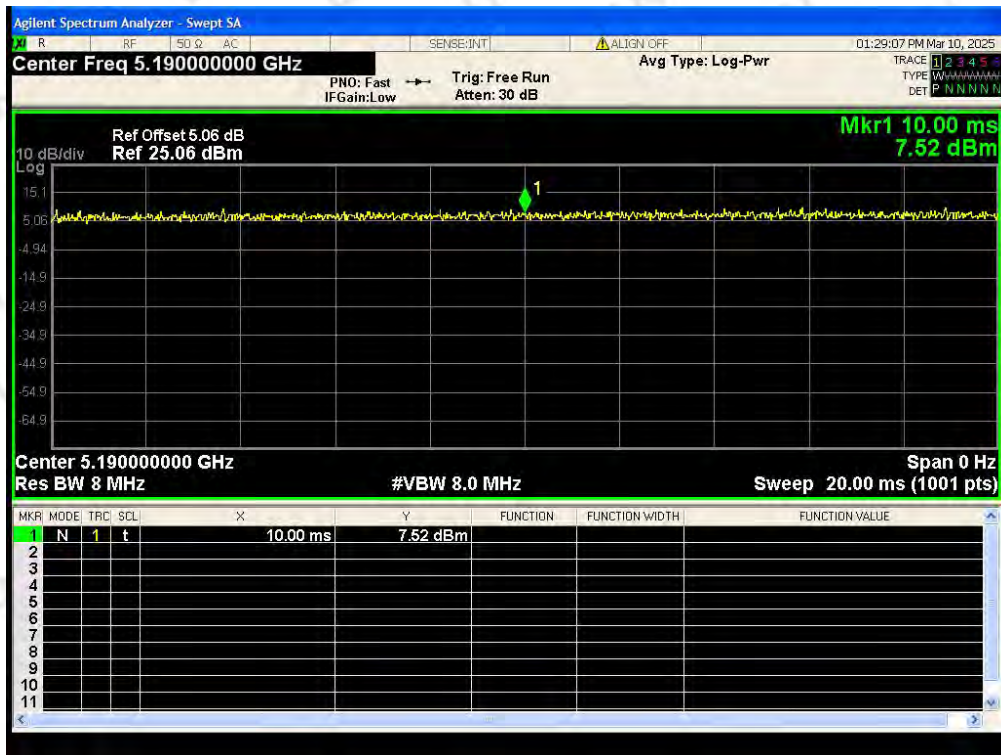
### Duty Cycle NVNT 802.11n(HT20) 5200MHz



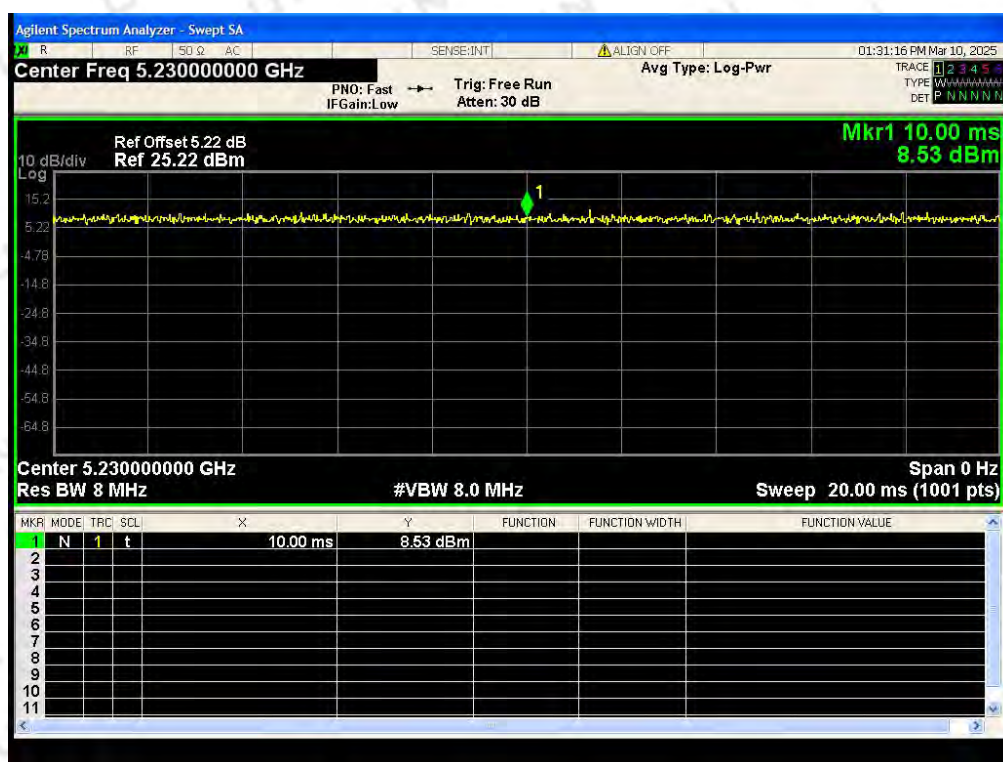
### Duty Cycle NVNT 802.11n(HT20) 5240MHz



### Duty Cycle NVNT 802.11n(HT40) 5190MHz



## Duty Cycle NVNT 802.11n(HT40) 5230MHz



## Maximum Conducted Output Power

| Condition | Mode          | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|---------------|-----------------|---------|-----------------------|------------------|-------------------|-------------|---------|
| NVNT      | 802.11a       | 5180            | Ant 1   | 13.89                 | 0                | 13.89             | 24          | Pass    |
| NVNT      | 802.11a       | 5200            | Ant 1   | 14.31                 | 0                | 14.31             | 24          | Pass    |
| NVNT      | 802.11a       | 5240            | Ant 1   | 12.41                 | 0                | 12.41             | 24          | Pass    |
| NVNT      | 802.11ac20    | 5180            | Ant 1   | 14.50                 | 0                | 14.50             | 24          | Pass    |
| NVNT      | 802.11ac20    | 5200            | Ant 1   | 14.59                 | 0                | 14.59             | 24          | Pass    |
| NVNT      | 802.11ac20    | 5240            | Ant 1   | 12.64                 | 0                | 12.64             | 24          | Pass    |
| NVNT      | 802.11ac40    | 5190            | Ant 1   | 15.08                 | 0                | 15.08             | 24          | Pass    |
| NVNT      | 802.11ac40    | 5230            | Ant 1   | 15.74                 | 0                | 15.74             | 24          | Pass    |
| NVNT      | 802.11ac80    | 5210            | Ant 1   | 16.41                 | 0                | 16.41             | 24          | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | Ant 1   | 14.72                 | 0                | 14.72             | 24          | Pass    |
| NVNT      | 802.11n(HT20) | 5200            | Ant 1   | 11.96                 | 0                | 11.96             | 24          | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | Ant 1   | 15.44                 | 0                | 15.44             | 24          | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | Ant 1   | 13.95                 | 0                | 13.95             | 24          | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | Ant 1   | 14.43                 | 0                | 14.43             | 24          | Pass    |

Power NVNT 802.11a 5180MHz Ant1



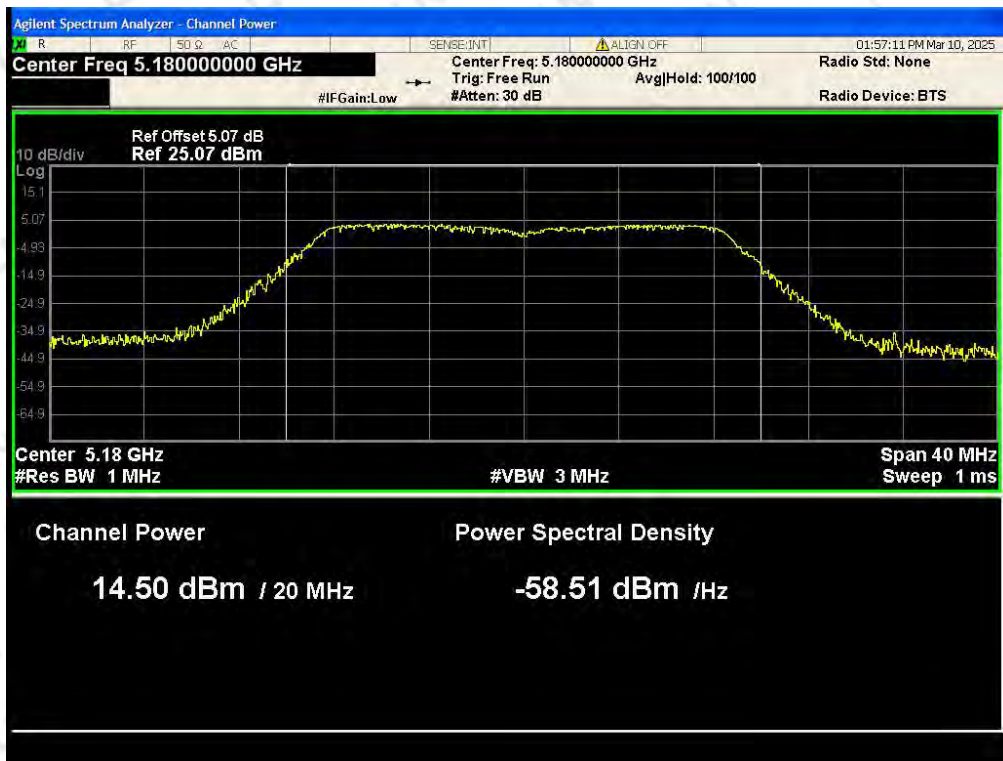
## Power NVNT 802.11a 5200MHz Ant1



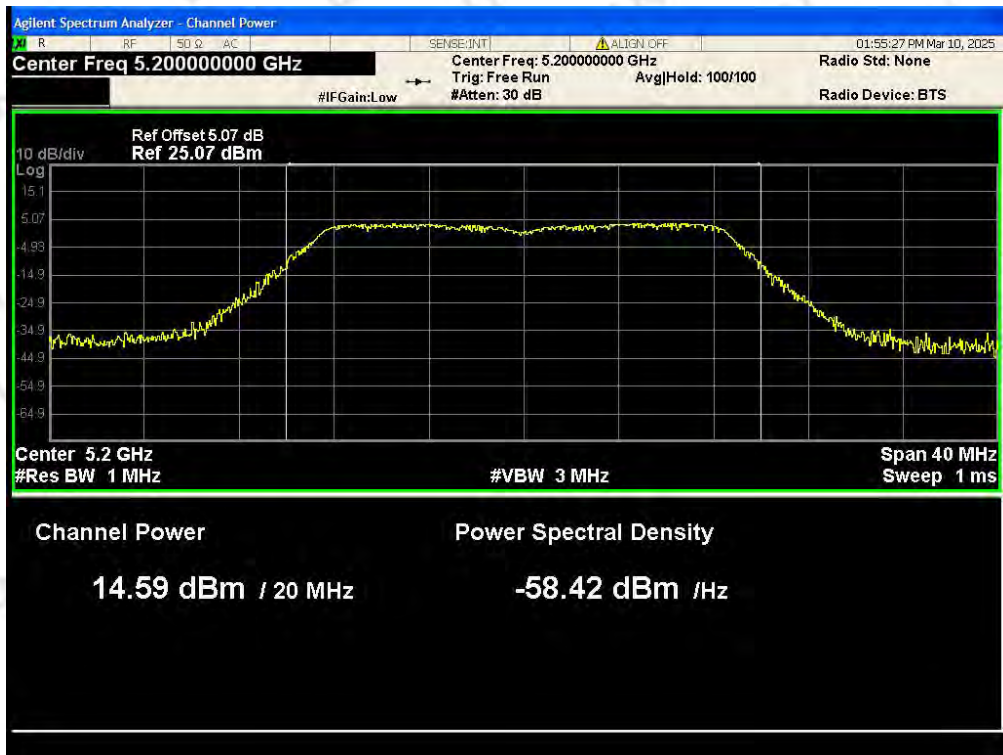
## Power NVNT 802.11a 5240MHz Ant1



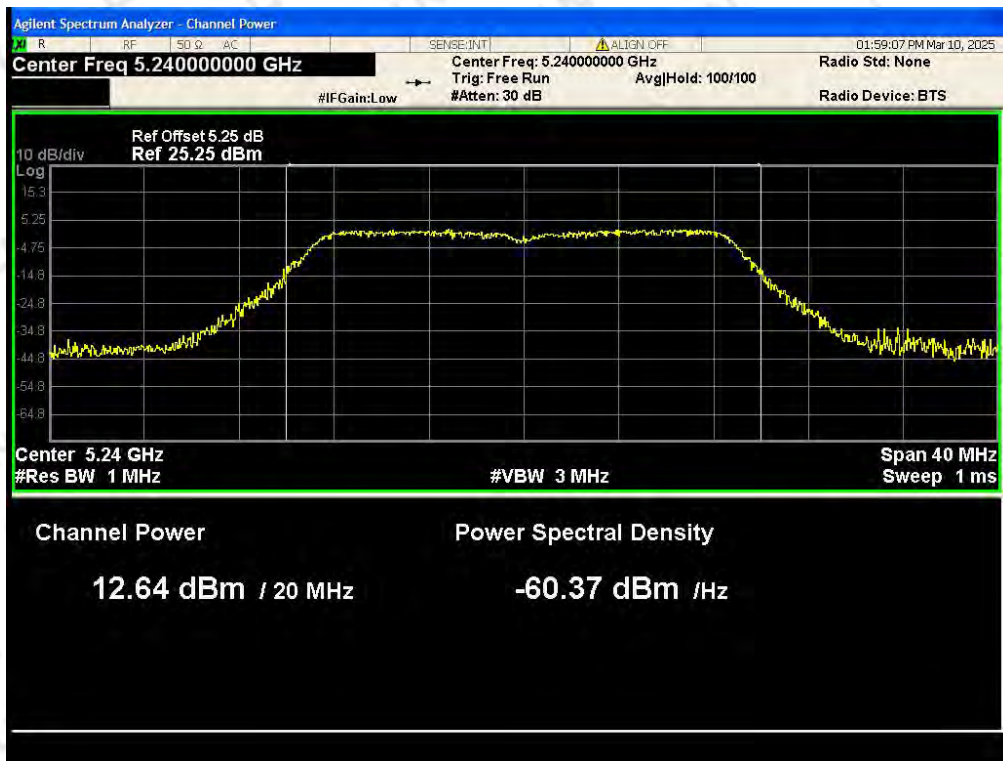
## Power NVNT 802.11ac20 5180MHz Ant1



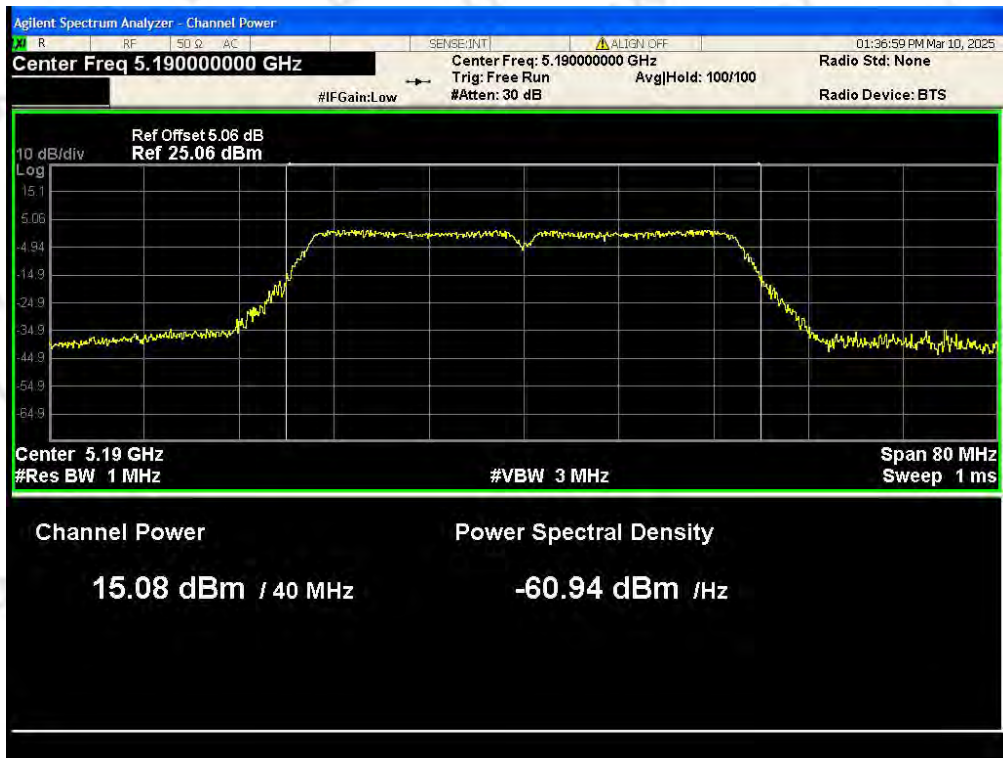
## Power NVNT 802.11ac20 5200MHz Ant1



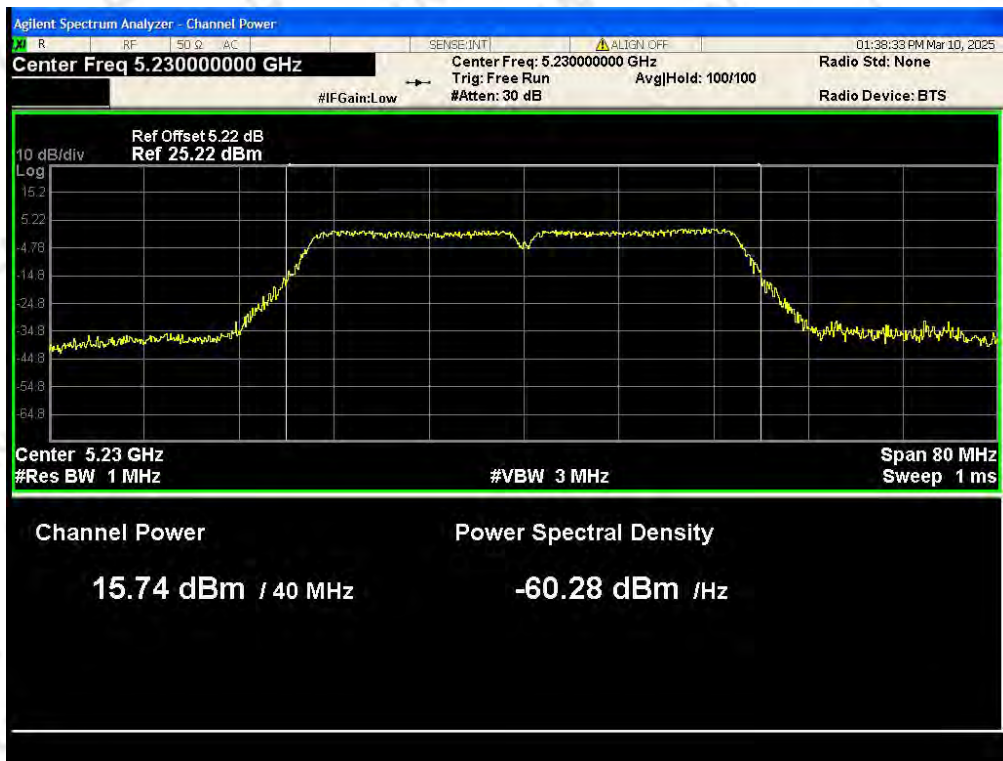
Power NVNT 802.11ac20 5240MHz Ant1



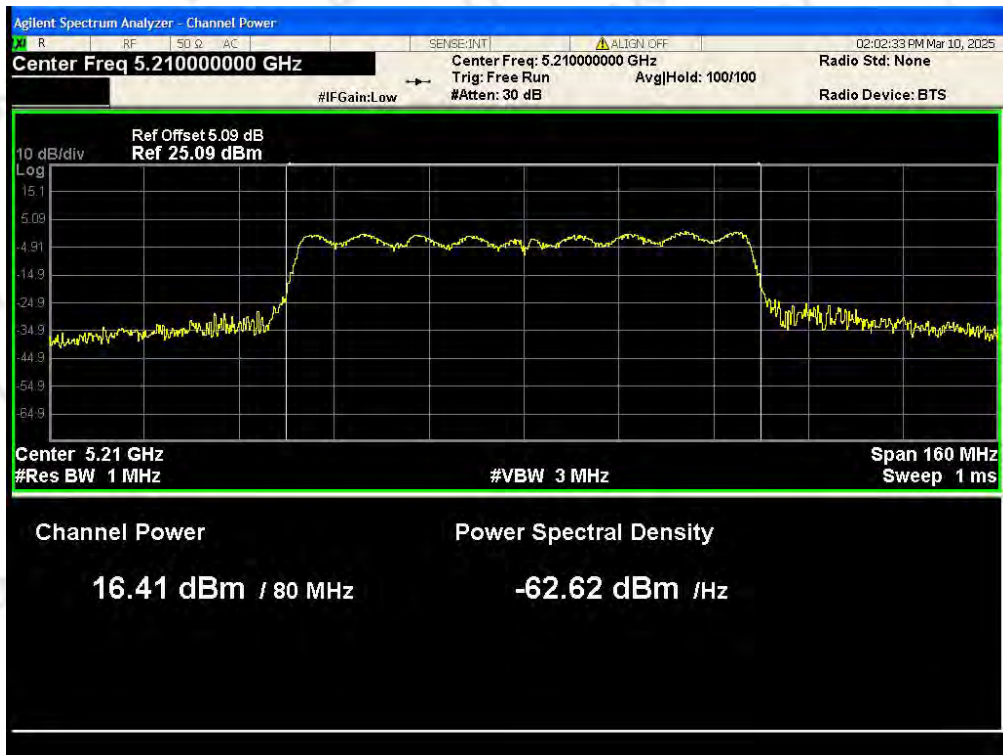
Power NVNT 802.11ac40 5190MHz Ant1



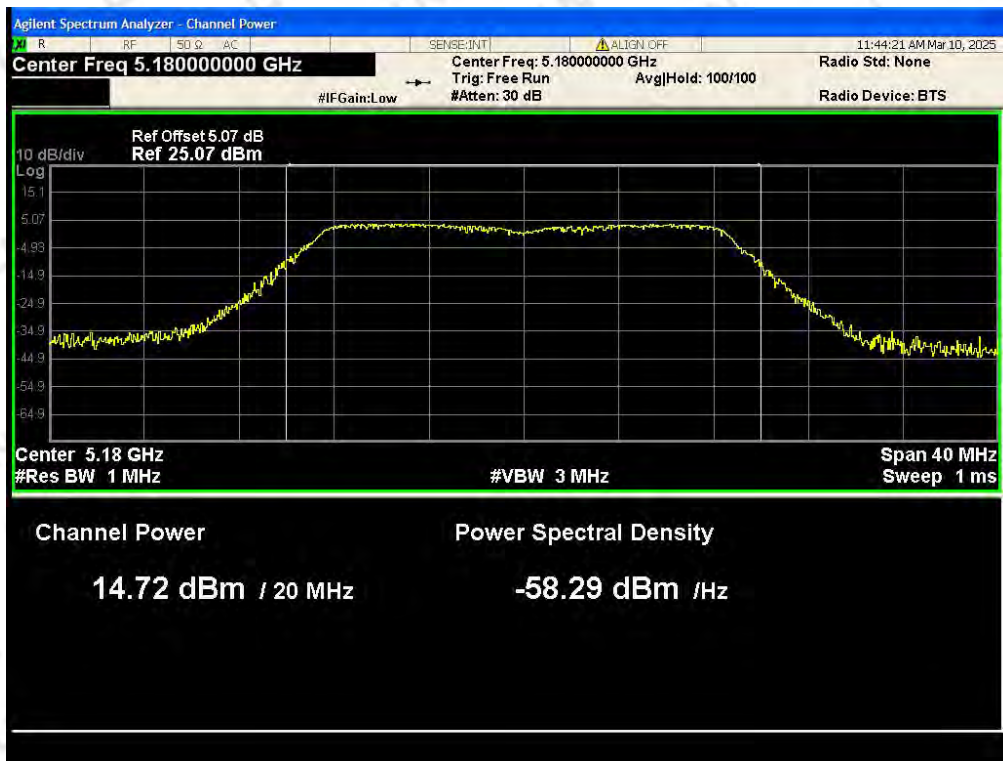
Power NVNT 802.11ac40 5230MHz Ant1



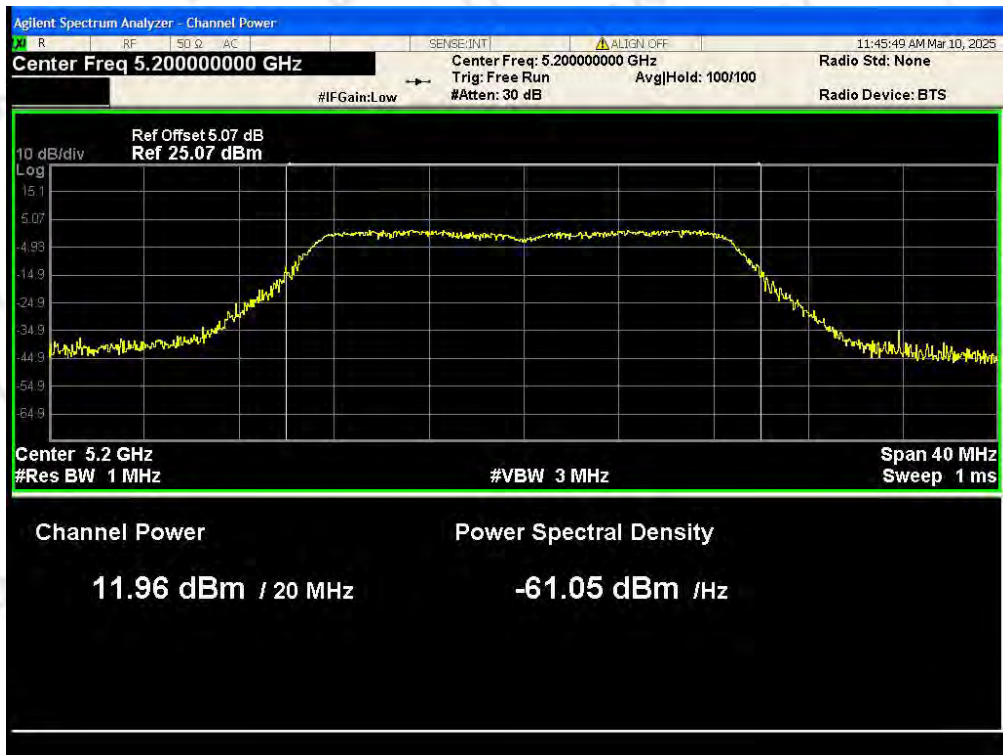
Power NVNT 802.11ac80 5210MHz Ant1



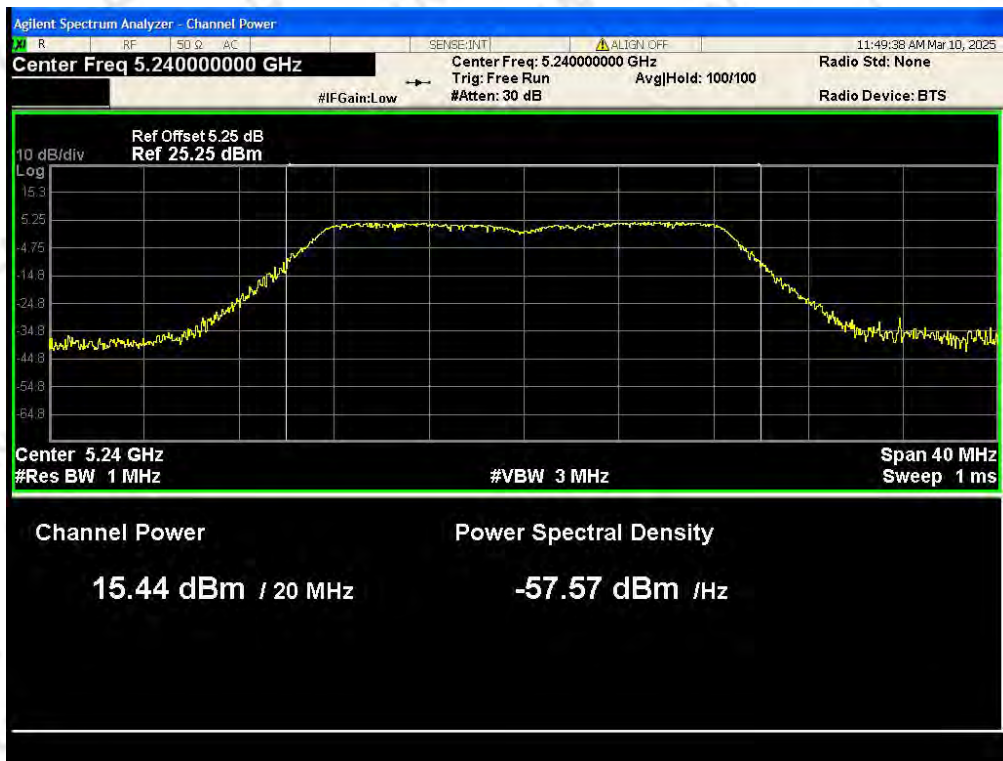
Power NVNT 802.11n(HT20) 5180MHz Ant1



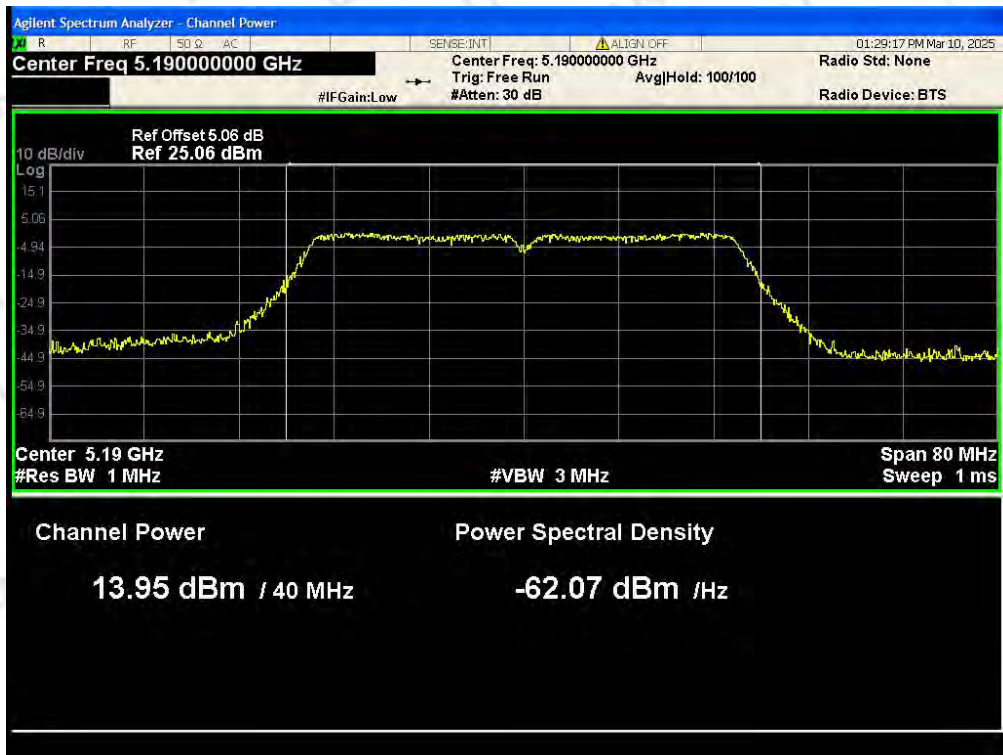
Power NVNT 802.11n(HT20) 5200MHz Ant1



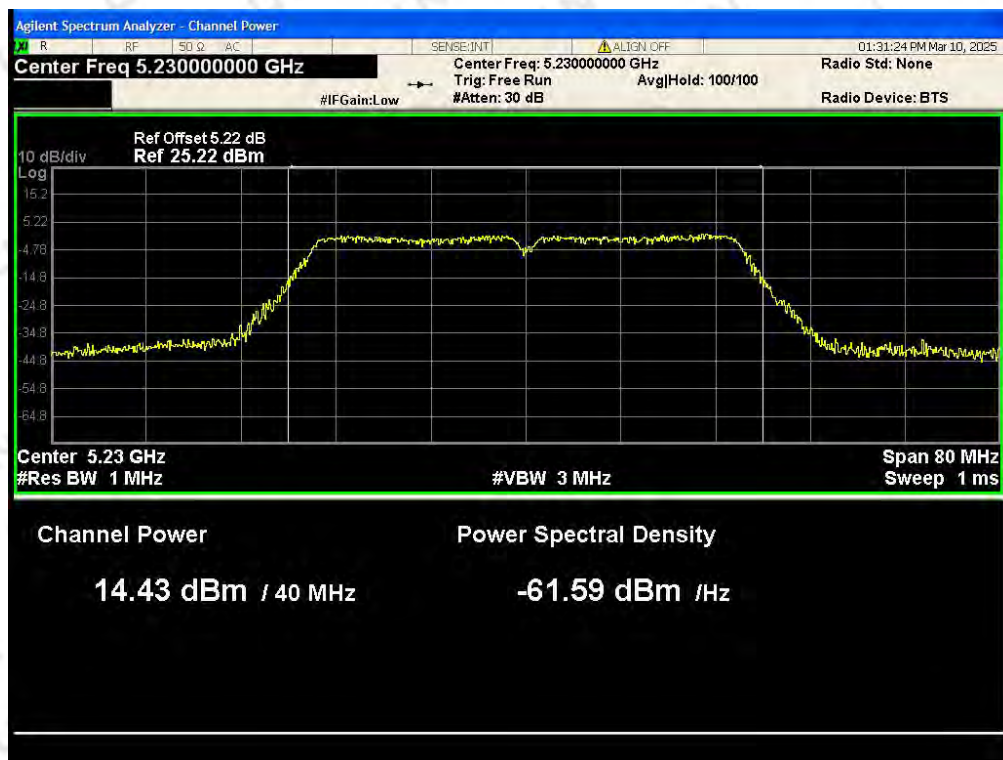
Power NVNT 802.11n(HT20) 5240MHz Ant1



Power NVNT 802.11n(HT40) 5190MHz Ant1



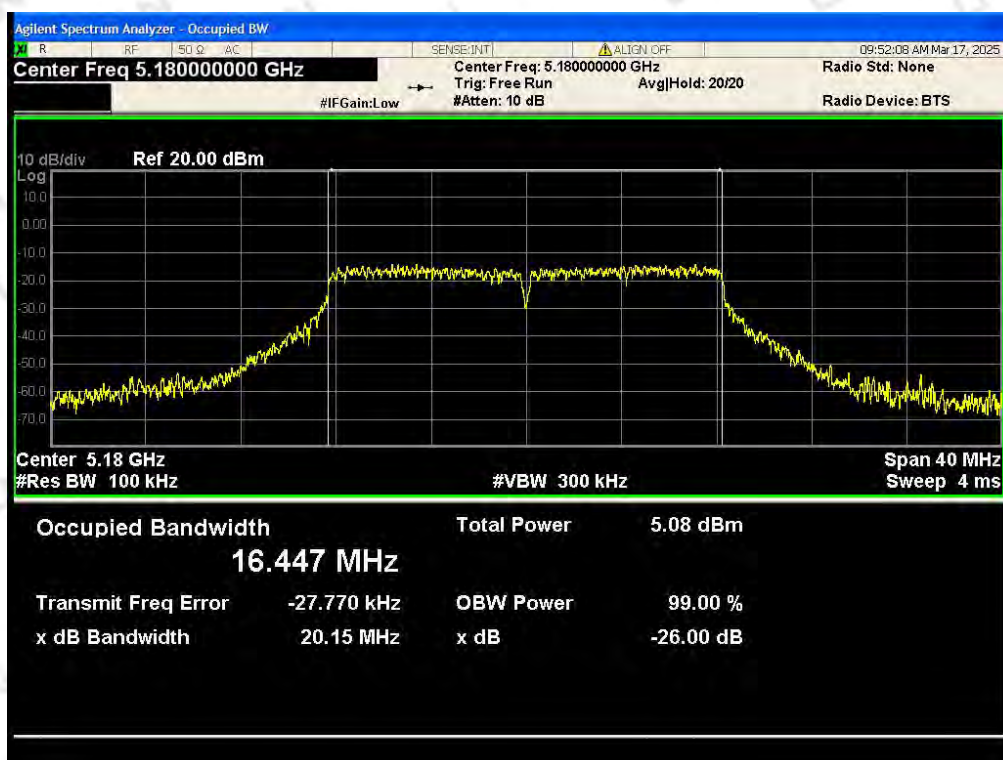
## Power NVNT 802.11n(HT40) 5230MHz Ant1



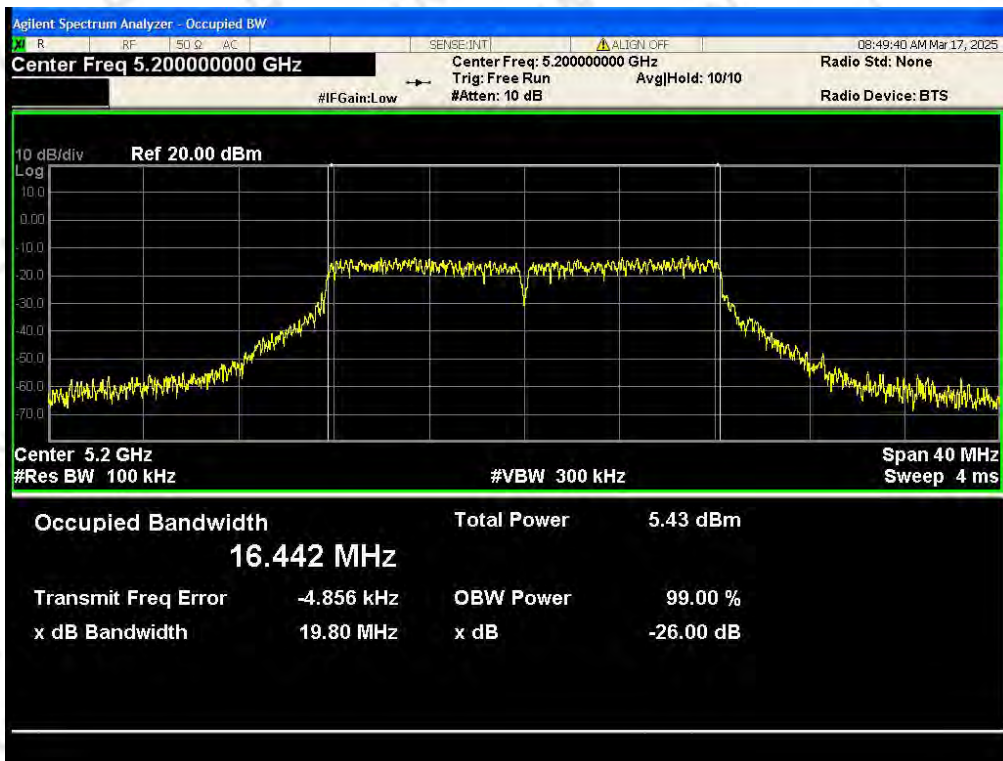
## Occupied Channel Bandwidth

| Condition | Mode          | Frequency (MHz) | Antenna | 99% OBW (MHz) | -26 dB Bandwidth (MHz) | Limit -26 dB Bandwidth (MHz) | Verdict |
|-----------|---------------|-----------------|---------|---------------|------------------------|------------------------------|---------|
| NVNT      | 802.11a       | 5180            | Ant 1   | 16.447        | 20.15                  | N/A                          | Pass    |
| NVNT      | 802.11a       | 5200            | Ant 1   | 16.442        | 19.80                  | N/A                          | Pass    |
| NVNT      | 802.11a       | 5240            | Ant 1   | 16.445        | 20.38                  | N/A                          | Pass    |
| NVNT      | 802.11ac20    | 5180            | Ant 1   | 17.641        | 20.15                  | N/A                          | Pass    |
| NVNT      | 802.11ac20    | 5200            | Ant 1   | 17.611        | 20.06                  | N/A                          | Pass    |
| NVNT      | 802.11ac20    | 5240            | Ant 1   | 17.651        | 21.14                  | N/A                          | Pass    |
| NVNT      | 802.11ac40    | 5190            | Ant 1   | 36.147        | 39.68                  | N/A                          | Pass    |
| NVNT      | 802.11ac40    | 5230            | Ant 1   | 36.128        | 38.86                  | N/A                          | Pass    |
| NVNT      | 802.11ac80    | 5210            | Ant 1   | 75.587        | 78.55                  | N/A                          | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | Ant 1   | 17.654        | 20.81                  | N/A                          | Pass    |
| NVNT      | 802.11n(HT20) | 5200            | Ant 1   | 17.621        | 20.44                  | N/A                          | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | Ant 1   | 17.657        | 20.68                  | N/A                          | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | Ant 1   | 36.150        | 39.58                  | N/A                          | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | Ant 1   | 36.126        | 40.65                  | N/A                          | Pass    |

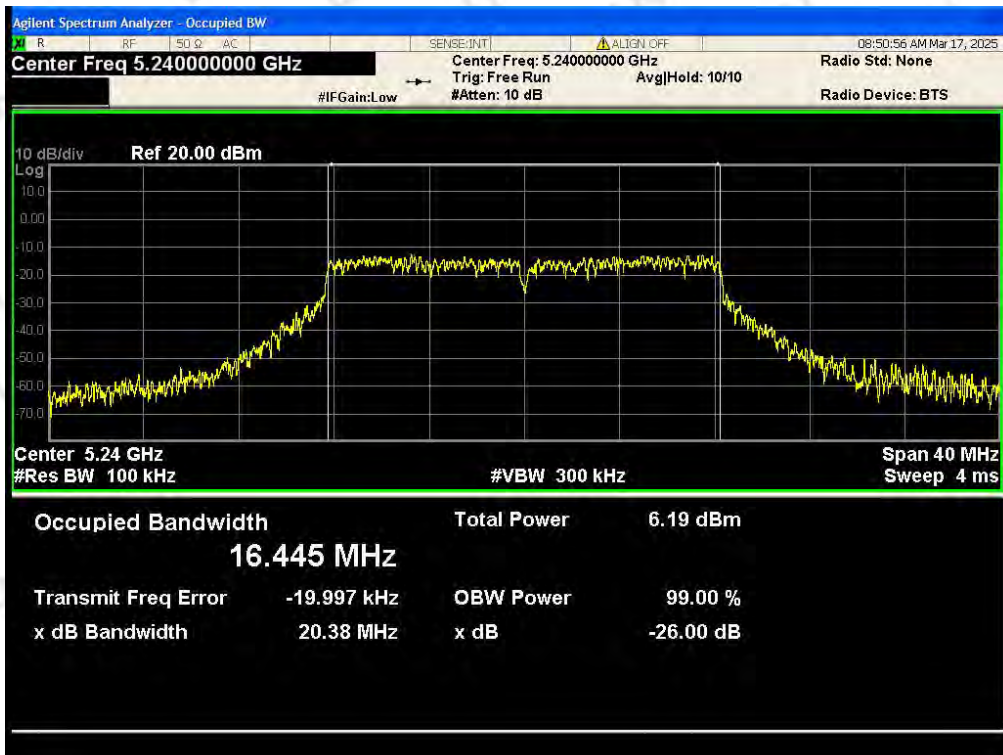
OBW NVNT 802.11a 5180MHz Ant1



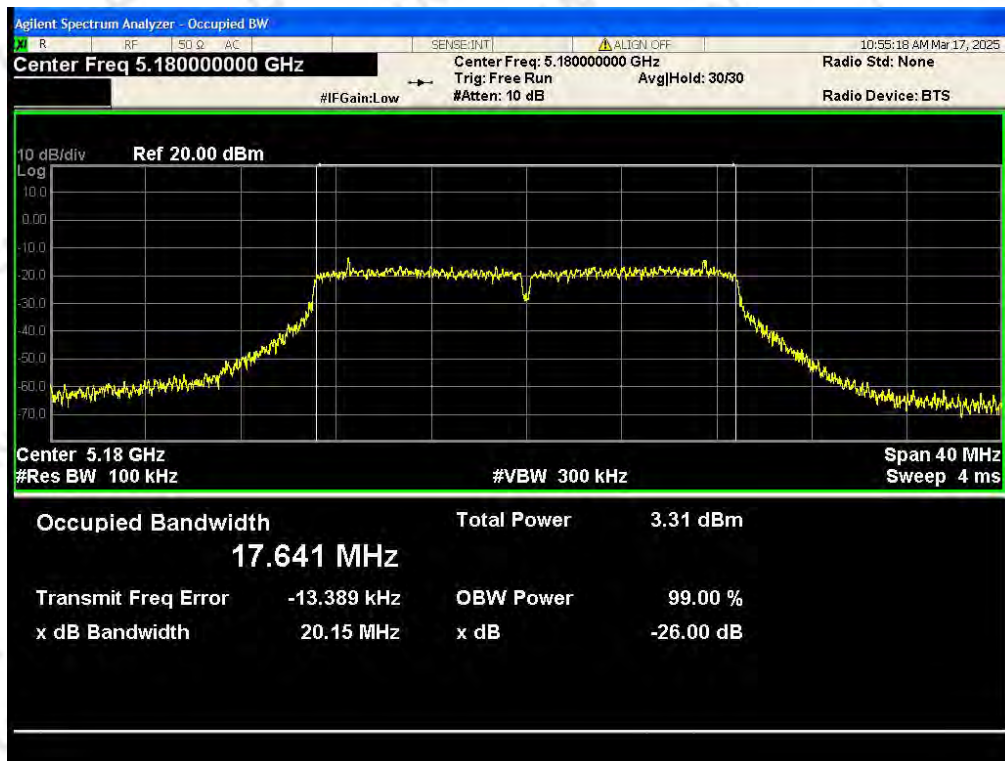
OBW NVNT 802.11a 5200MHz Ant1



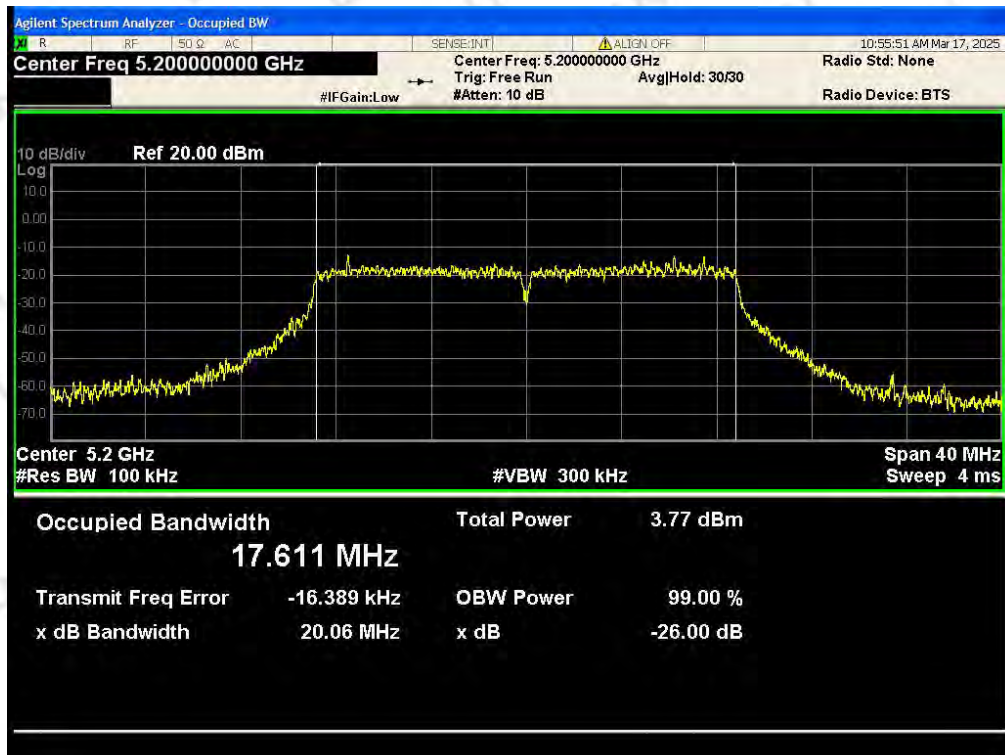
OBW NVNT 802.11a 5240MHz Ant1



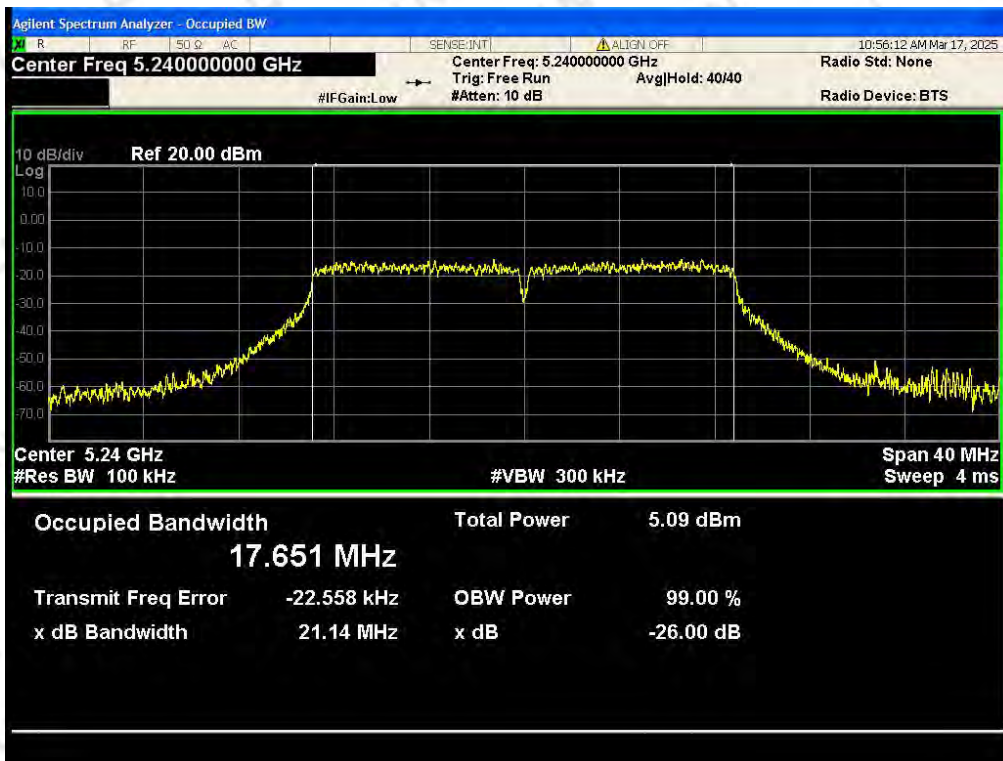
## OBW NVNT 802.11ac20 5180MHz Ant1



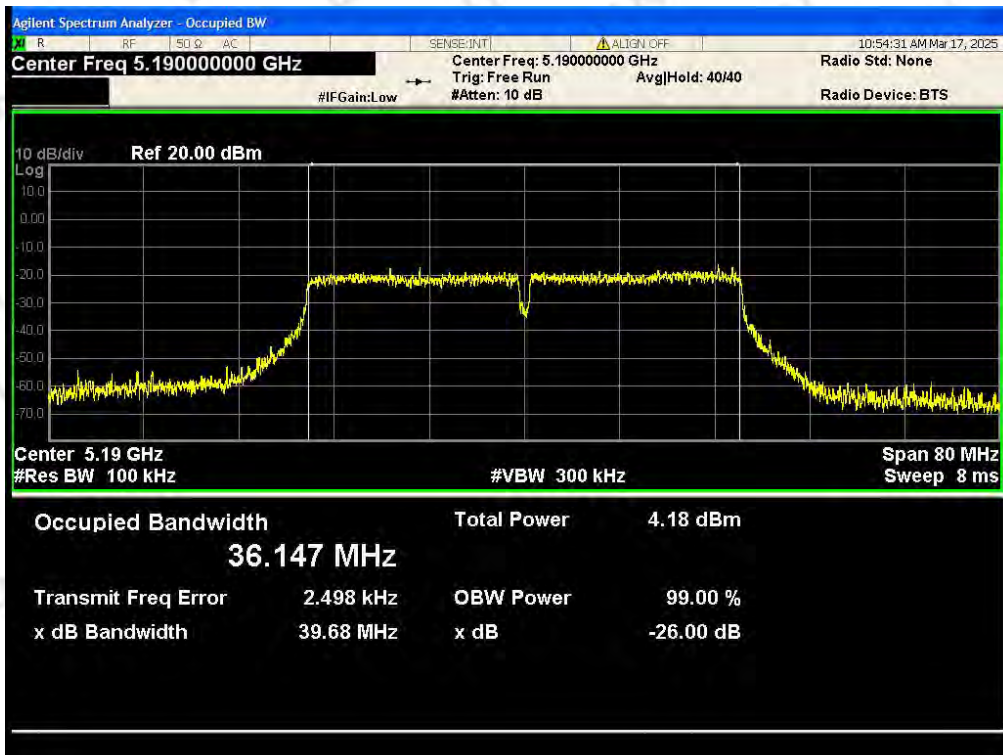
## OBW NVNT 802.11ac20 5200MHz Ant1



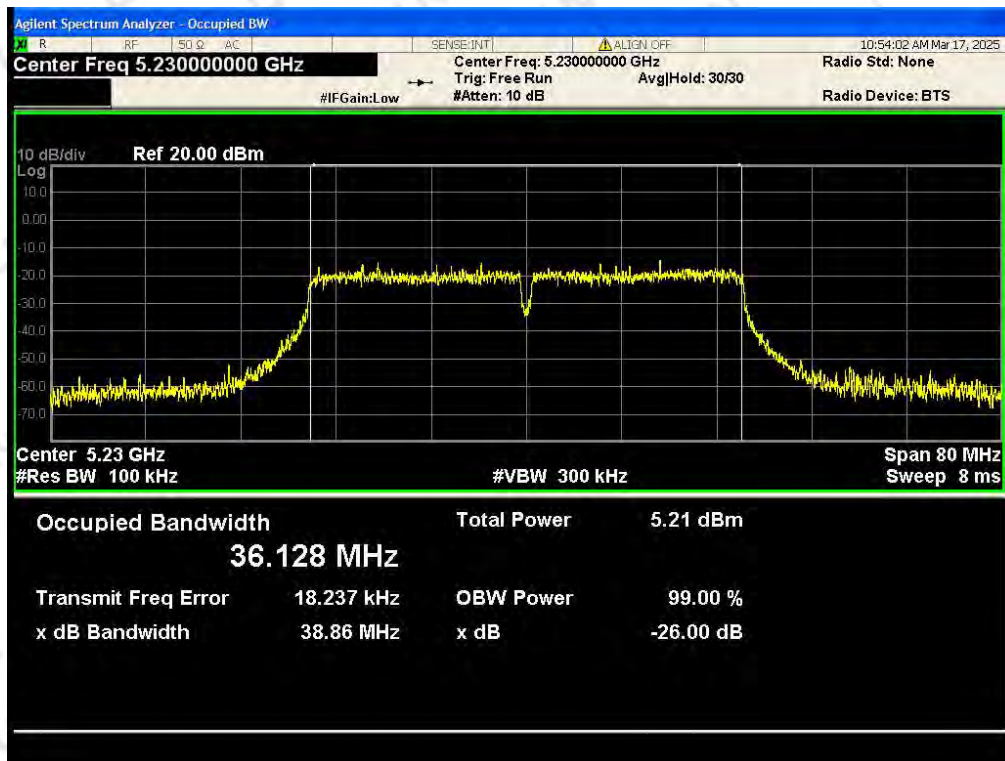
OBW NVNT 802.11ac20 5240MHz Ant1



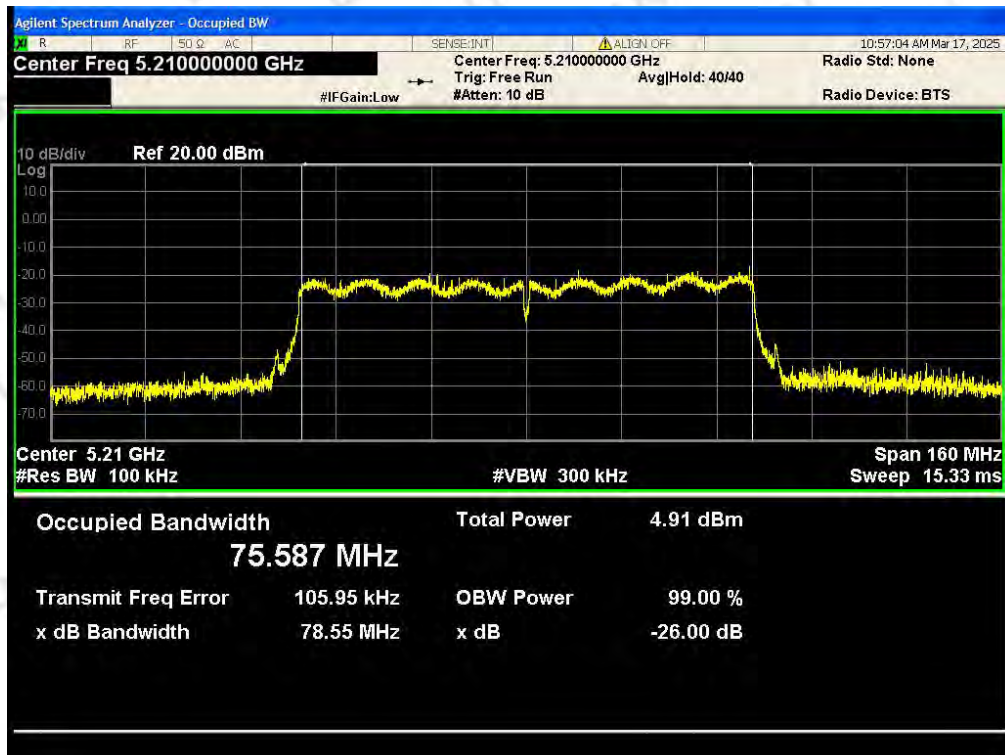
OBW NVNT 802.11ac40 5190MHz Ant1



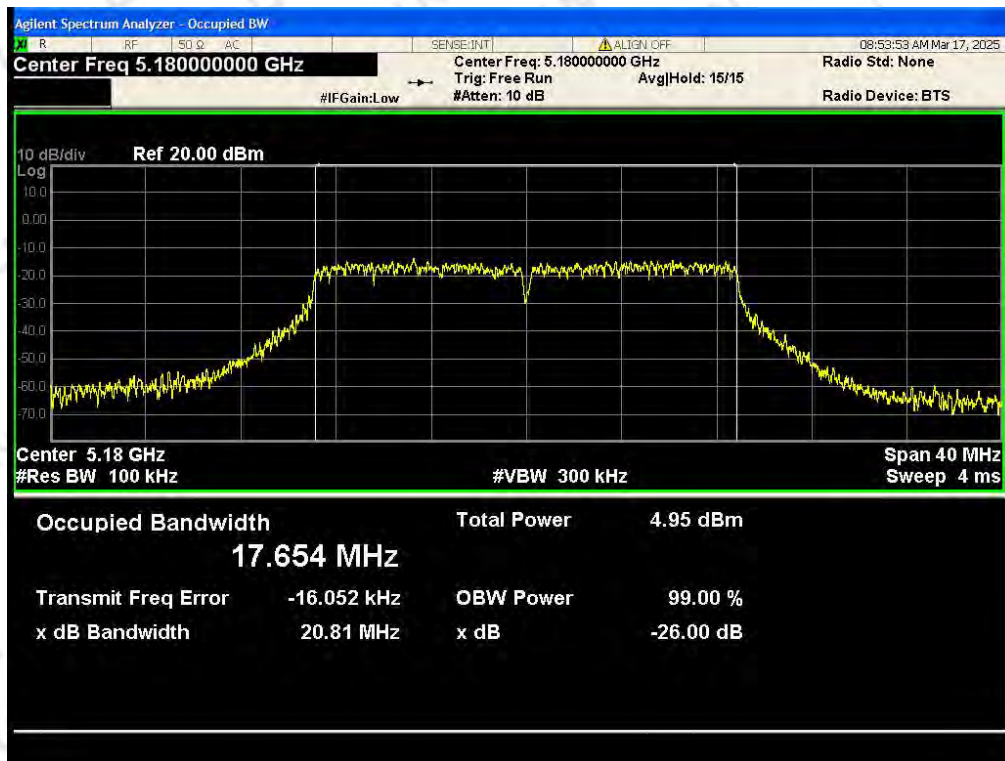
OBW NVNT 802.11ac40 5230MHz Ant1



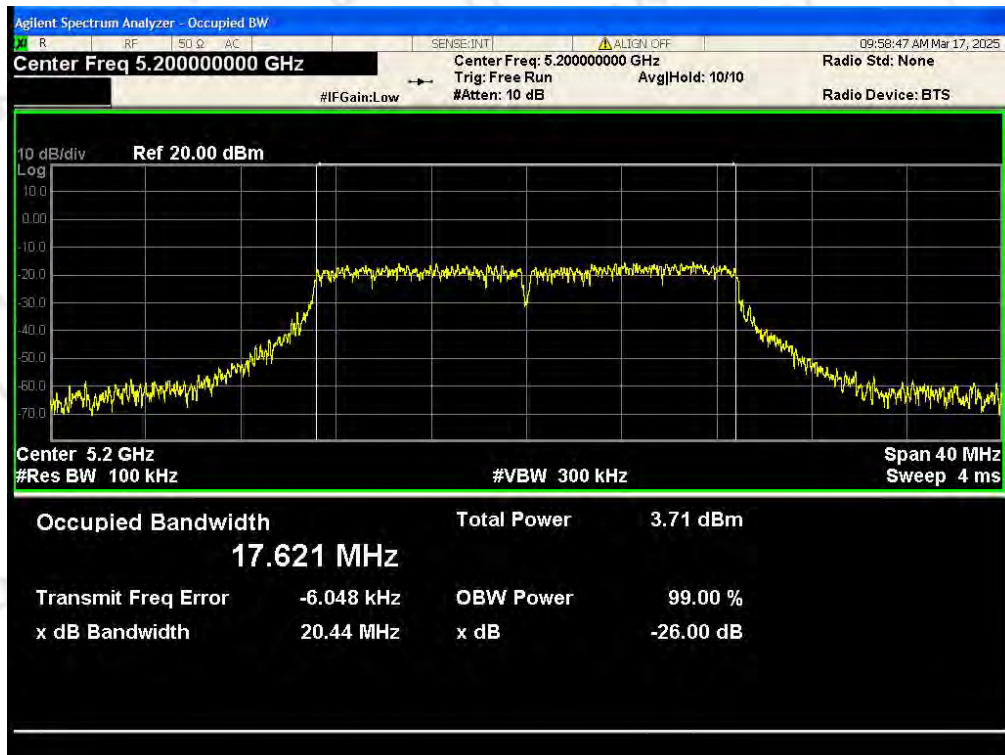
OBW NVNT 802.11ac80 5210MHz Ant1



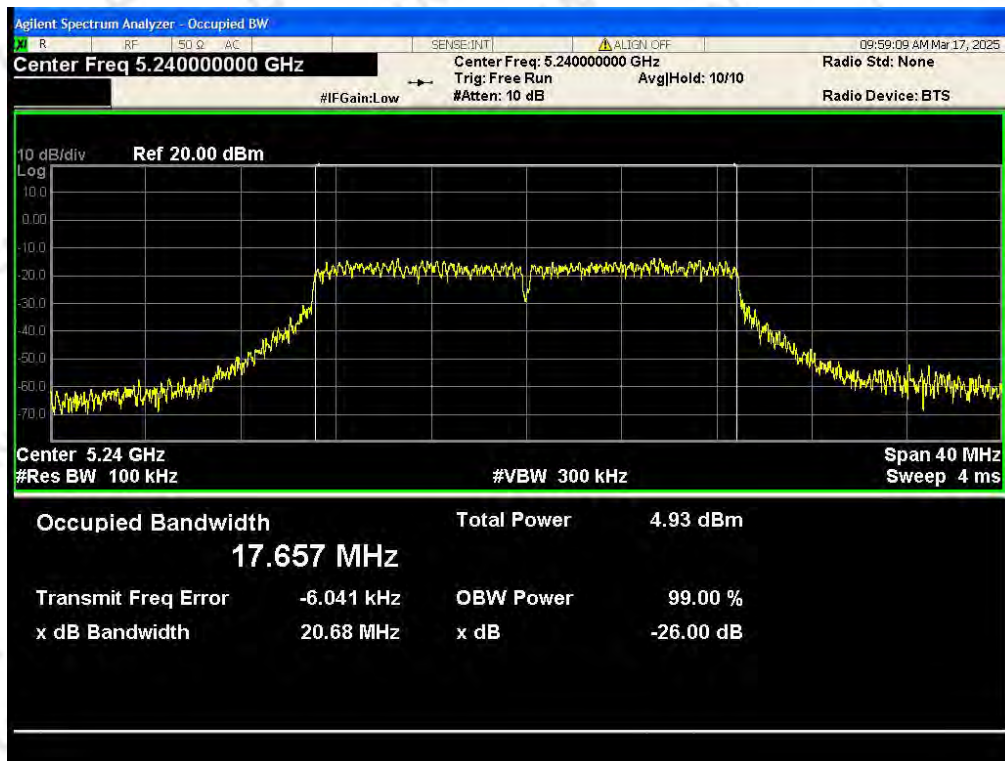
## OBW NVNT 802.11n(HT20) 5180MHz Ant1



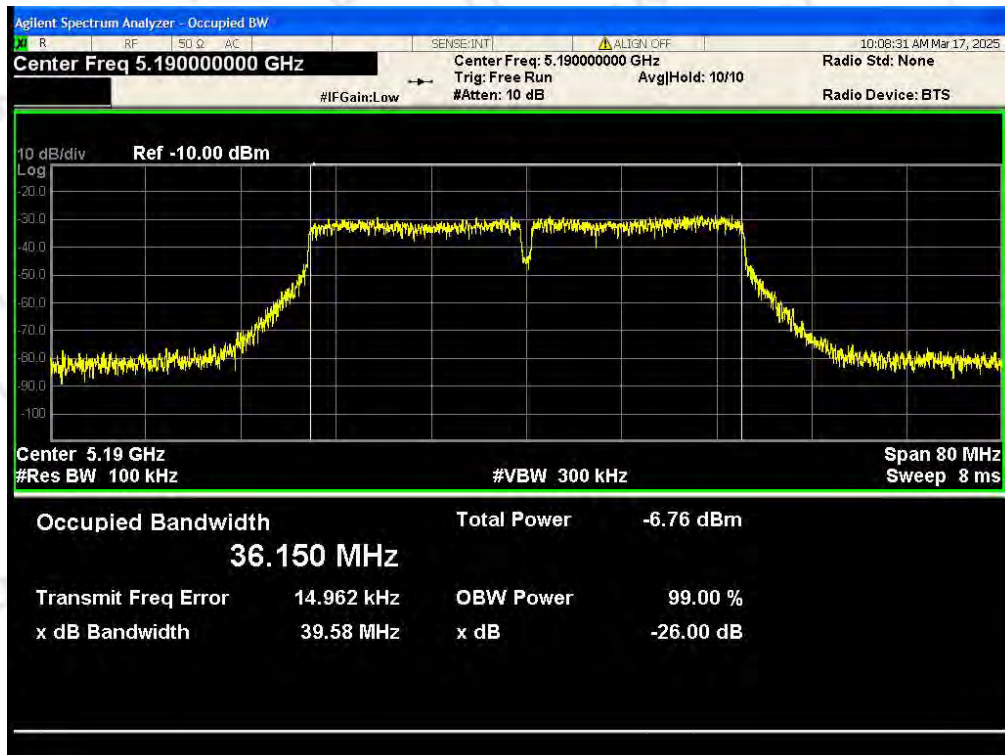
## OBW NVNT 802.11n(HT20) 5200MHz Ant1



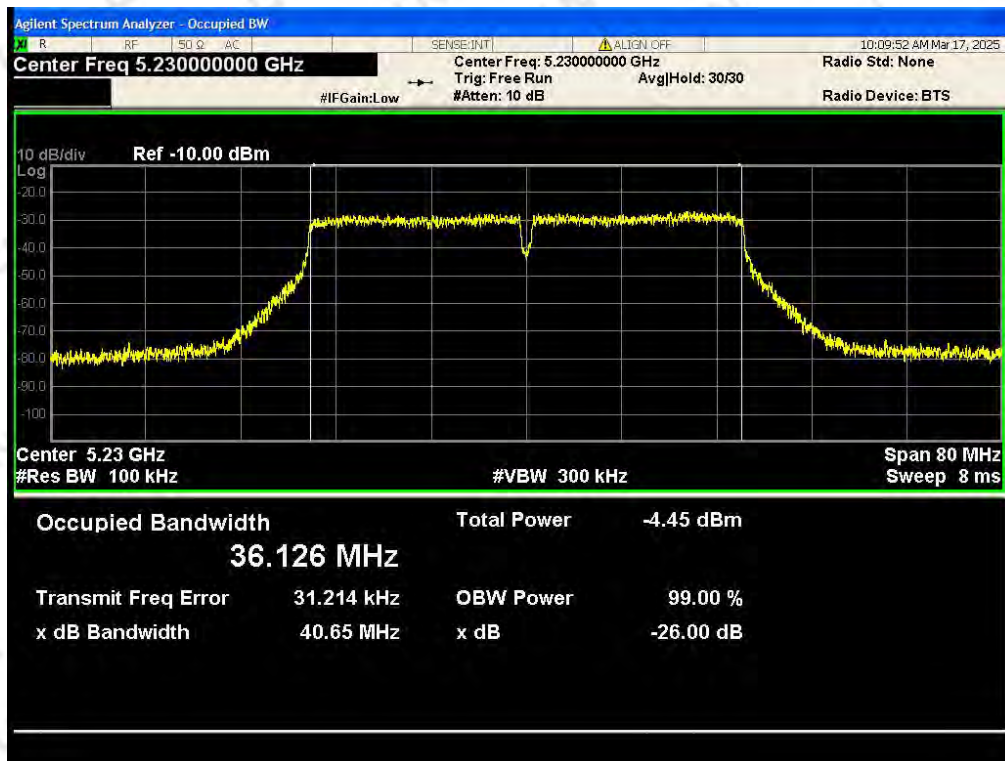
OBW NVNT 802.11n(HT20) 5240MHz Ant1



OBW NVNT 802.11n(HT40) 5190MHz Ant1



## OBW NVNT 802.11n(HT40) 5230MHz Ant1



## Maximum Power Spectral Density Level

| Condition | Mode          | Frequency (MHz) | Antenna | Conducted PSD (dBm) | Duty Factor (dB) | Total PSD (dBm) | Limit (dBm) | Verdict |
|-----------|---------------|-----------------|---------|---------------------|------------------|-----------------|-------------|---------|
| NVNT      | 802.11a       | 5180            | Ant 1   | 3.577               | 0                | 3.577           | 11          | Pass    |
| NVNT      | 802.11a       | 5200            | Ant 1   | 3.75                | 0                | 3.75            | 11          | Pass    |
| NVNT      | 802.11a       | 5240            | Ant 1   | 4.467               | 0                | 4.467           | 11          | Pass    |
| NVNT      | 802.11ac20    | 5180            | Ant 1   | 3.439               | 0                | 3.439           | 11          | Pass    |
| NVNT      | 802.11ac20    | 5200            | Ant 1   | 3.536               | 0                | 3.536           | 11          | Pass    |
| NVNT      | 802.11ac20    | 5240            | Ant 1   | 4.378               | 0                | 4.378           | 11          | Pass    |
| NVNT      | 802.11ac40    | 5190            | Ant 1   | 1.063               | 0                | 1.063           | 11          | Pass    |
| NVNT      | 802.11ac40    | 5230            | Ant 1   | 1.971               | 0                | 1.971           | 11          | Pass    |
| NVNT      | 802.11ac80    | 5210            | Ant 1   | 0.256               | 0                | 0.256           | 11          | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | Ant 1   | 3.585               | 0                | 3.585           | 11          | Pass    |
| NVNT      | 802.11n(HT20) | 5200            | Ant 1   | 3.564               | 0                | 3.564           | 11          | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | Ant 1   | 4.409               | 0                | 4.409           | 11          | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | Ant 1   | -0.101              | 0                | -0.101          | 11          | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | Ant 1   | 0.628               | 0                | 0.628           | 11          | Pass    |

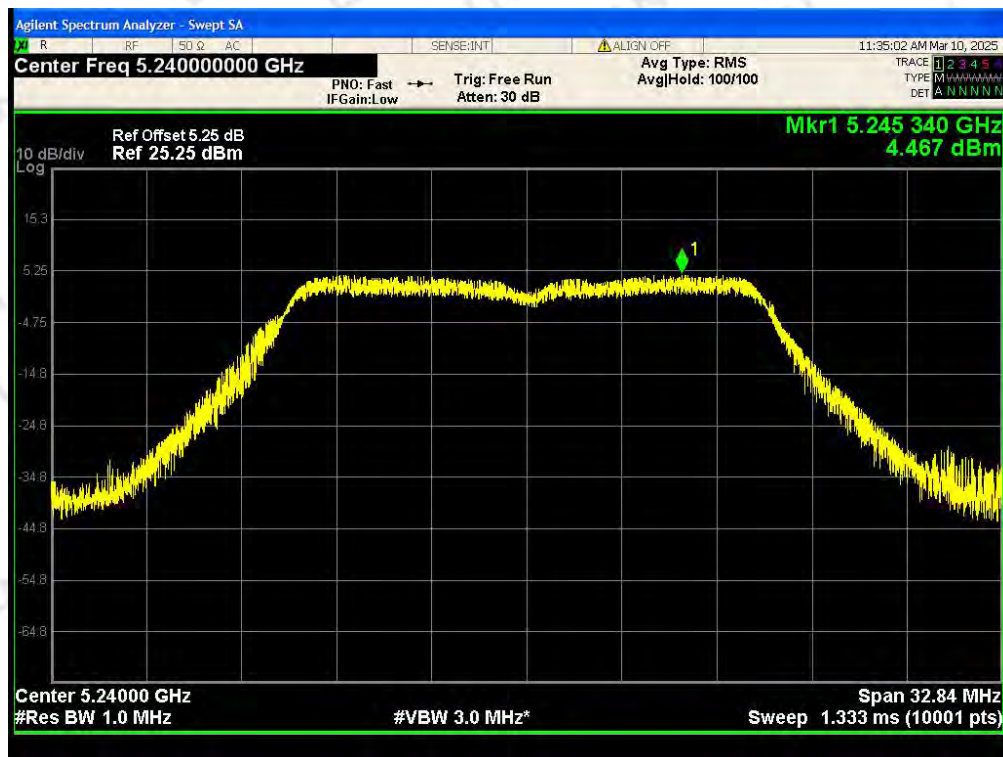
PSD NVNT 802.11a 5180MHz Ant1



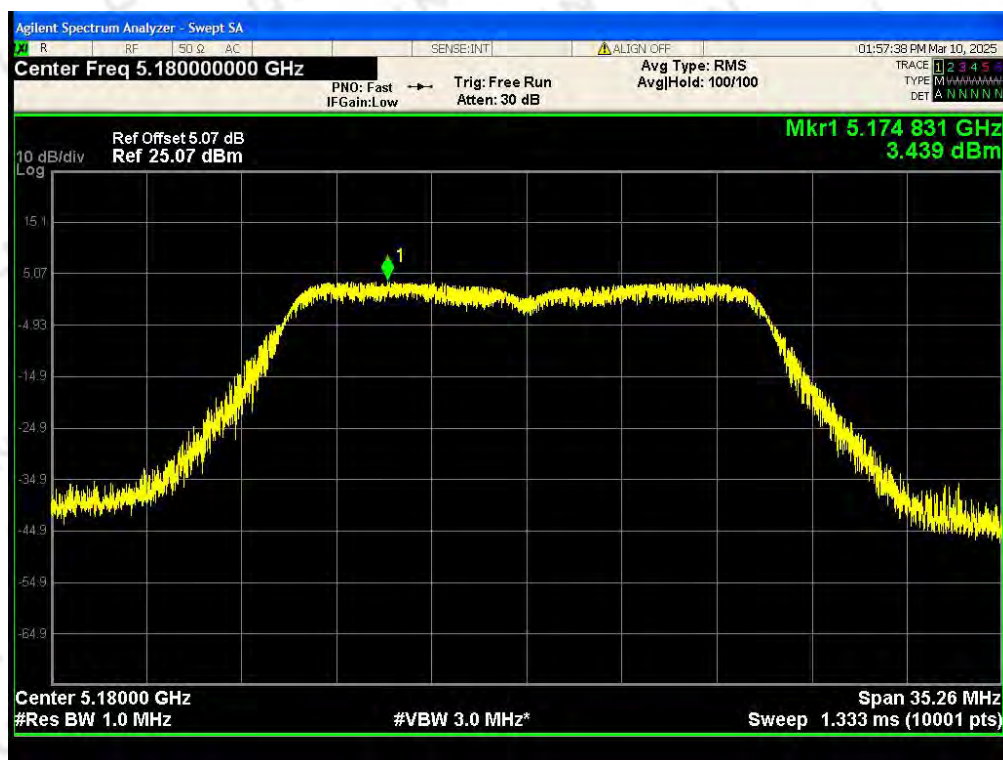
PSD NVNT 802.11a 5200MHz Ant1



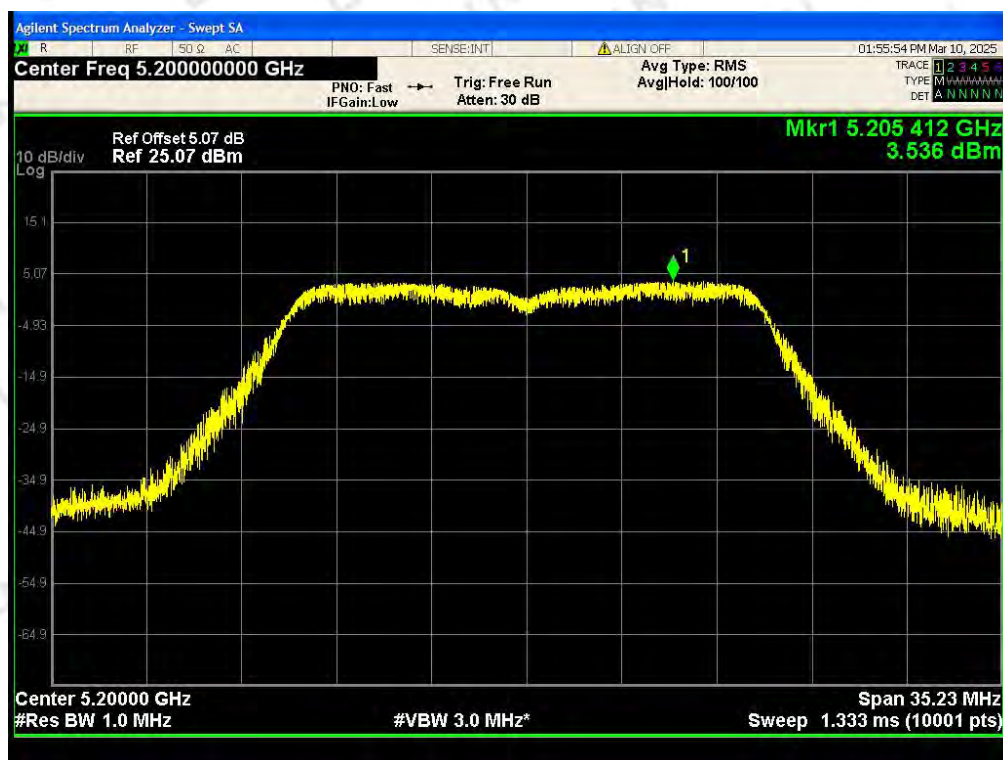
PSD NVNT 802.11a 5240MHz Ant1



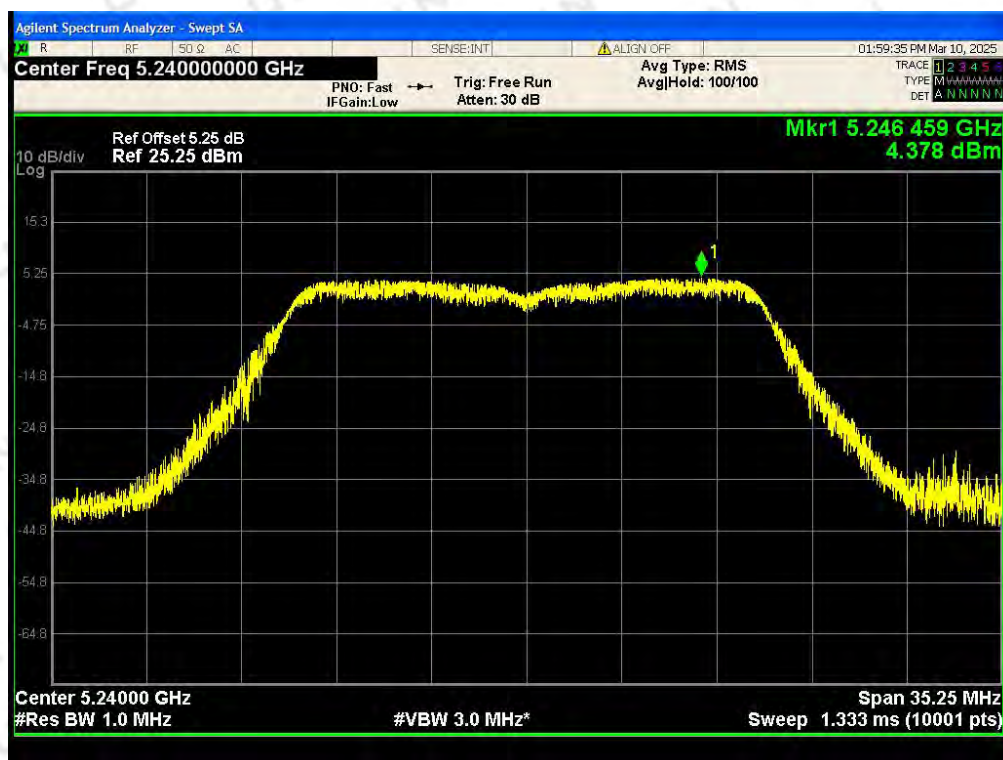
PSD NVNT 802.11ac20 5180MHz Ant1



PSD NVNT 802.11ac20 5200MHz Ant1



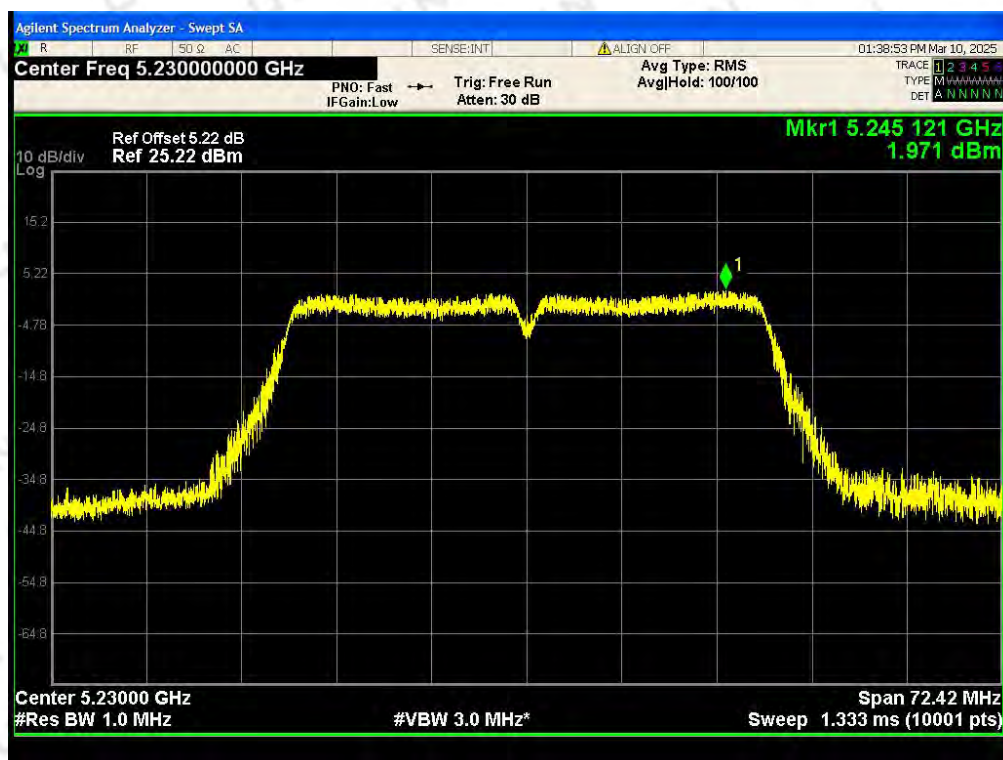
PSD NVNT 802.11ac20 5240MHz Ant1



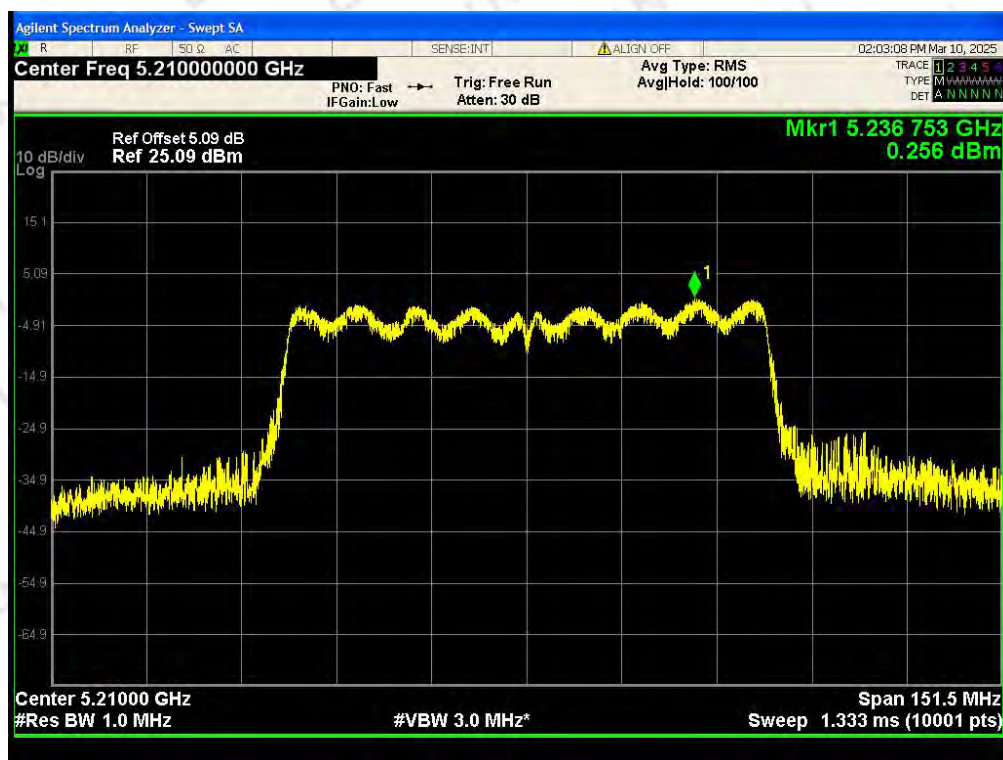
PSD NVNT 802.11ac40 5190MHz Ant1



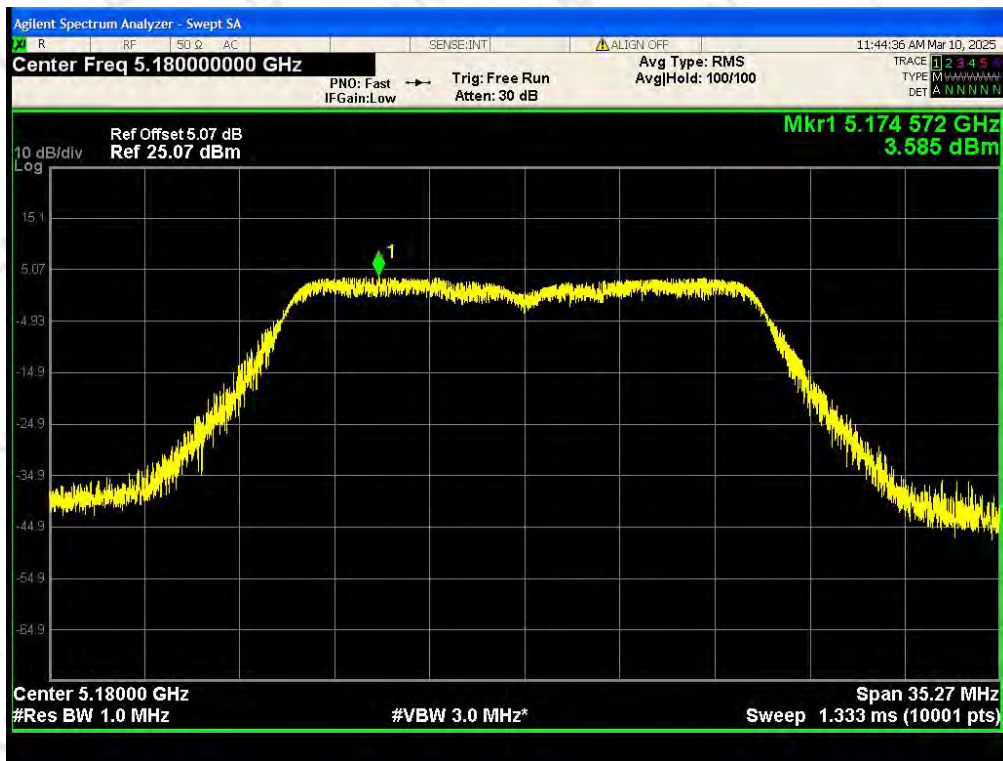
PSD NVNT 802.11ac40 5230MHz Ant1



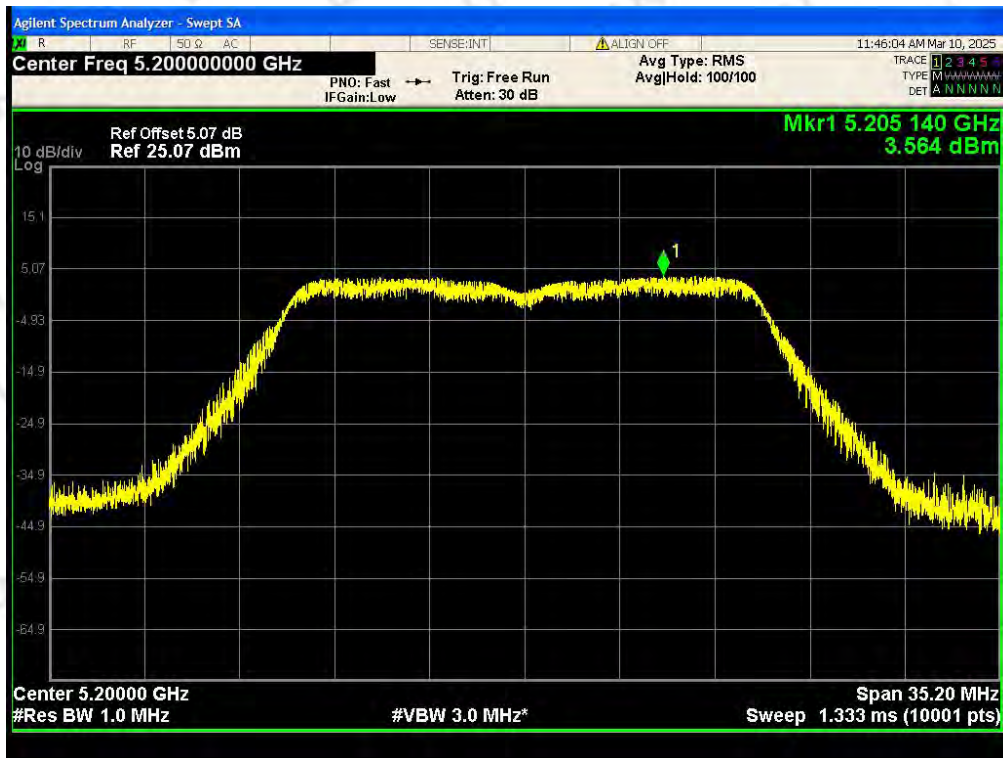
PSD NVNT 802.11ac80 5210MHz Ant1



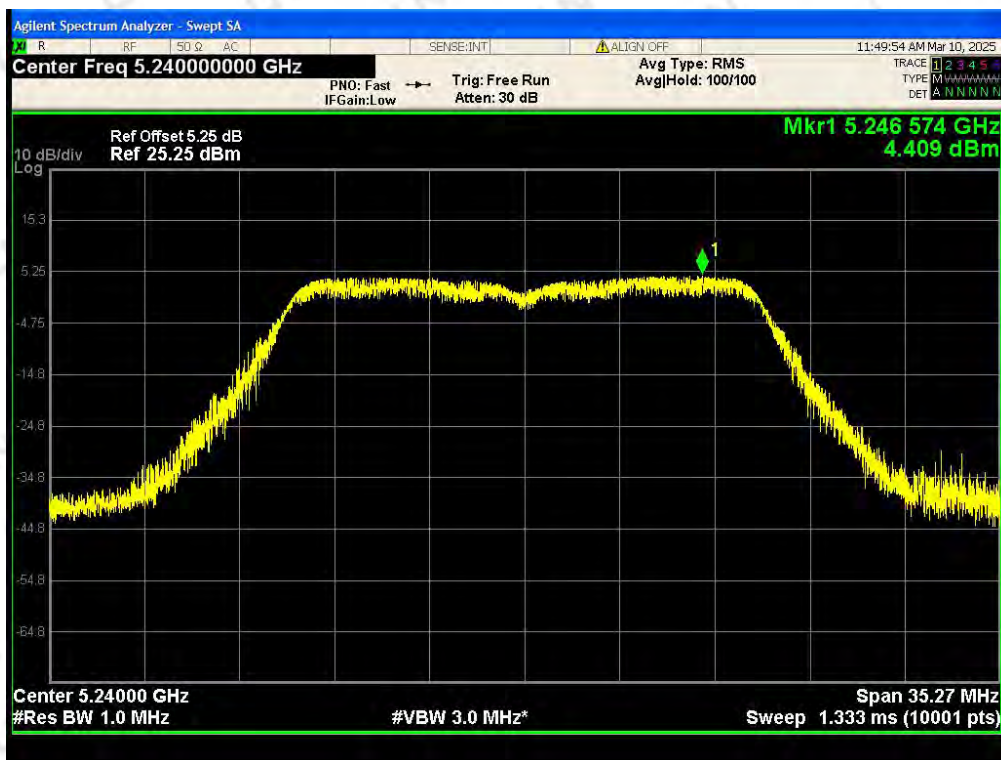
PSD NVNT 802.11n(HT20) 5180MHz Ant1



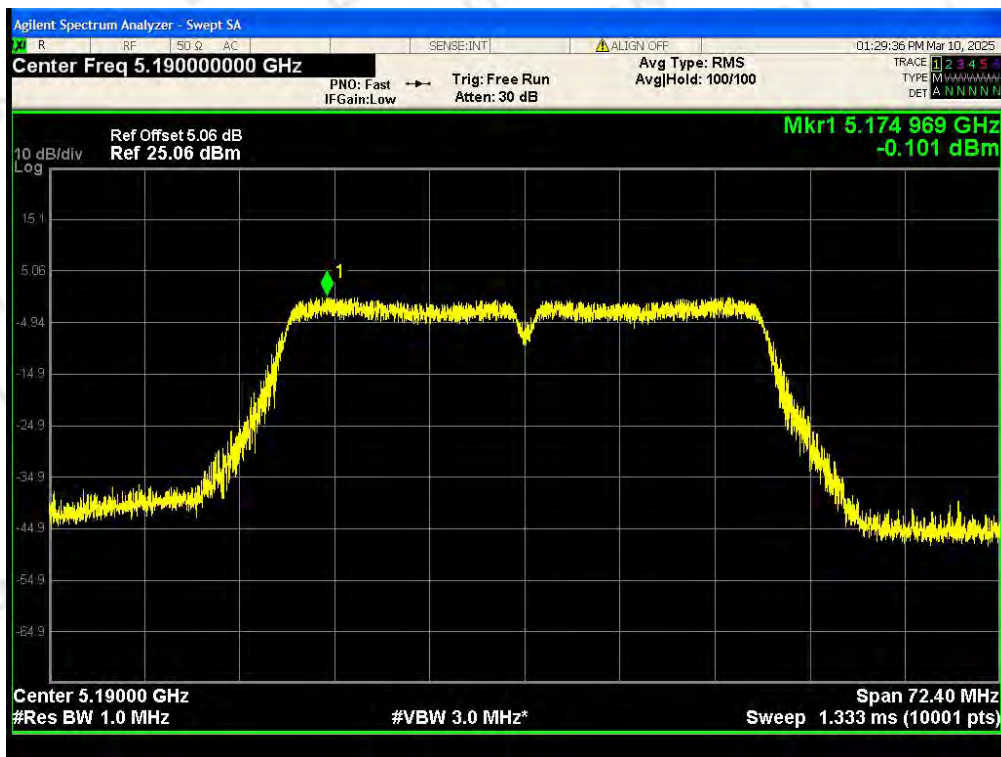
PSD NVNT 802.11n(HT20) 5200MHz Ant1



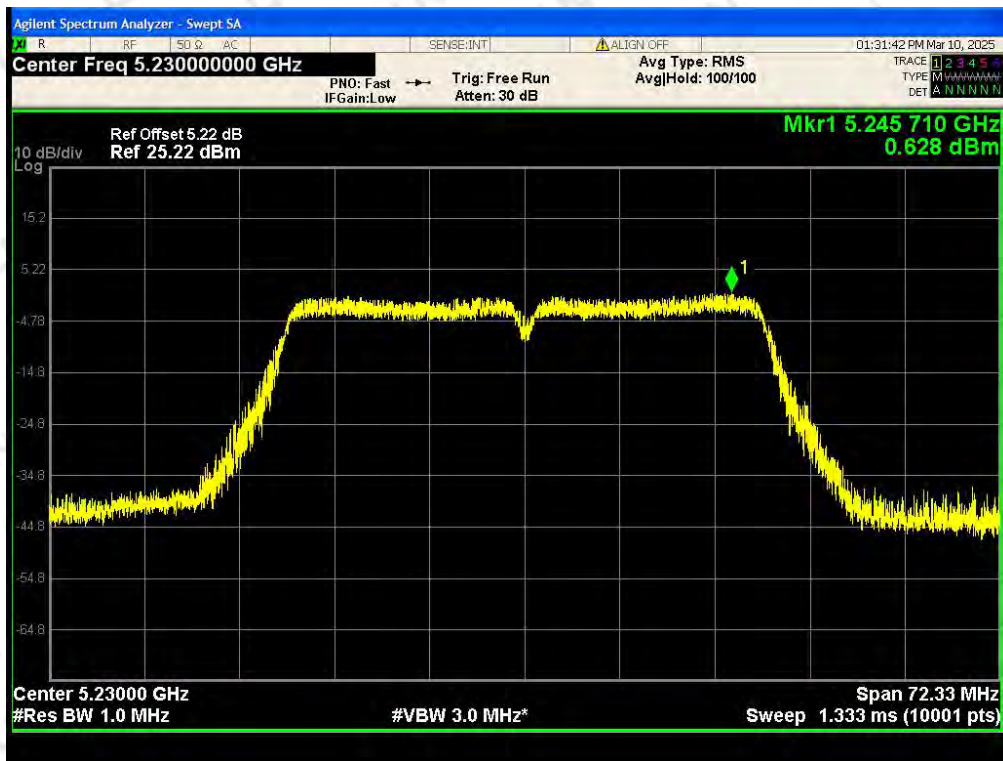
PSD NVNT 802.11n(HT20) 5240MHz Ant1



PSD NVNT 802.11n(HT40) 5190MHz Ant1



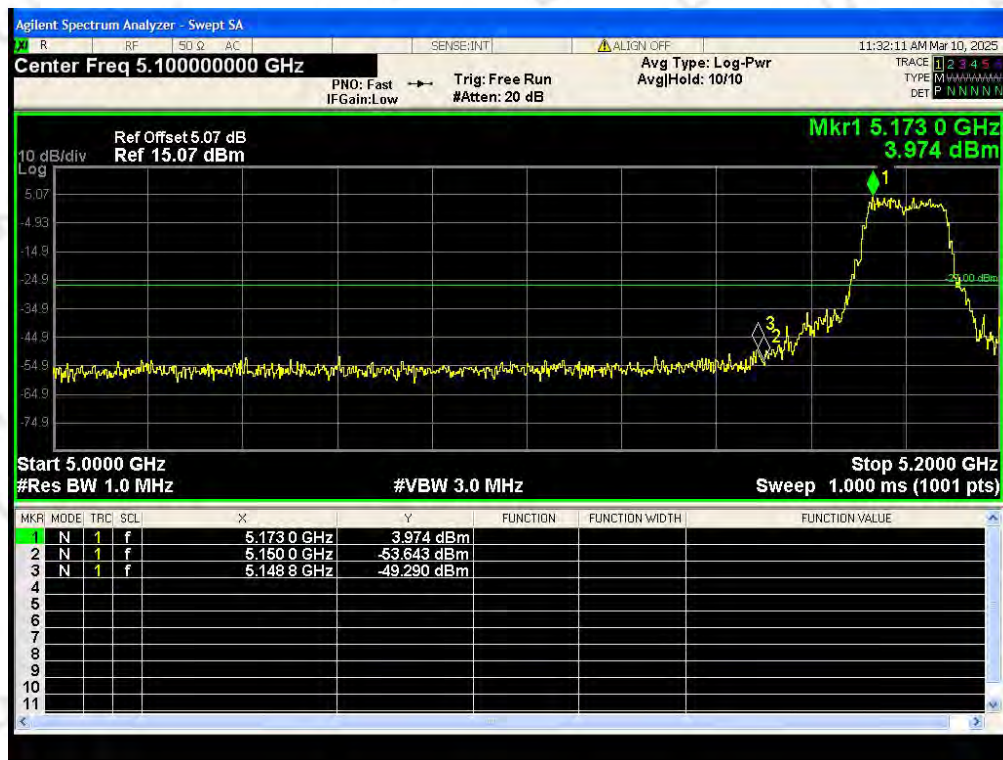
## PSD NVNT 802.11n(HT40) 5230MHz Ant1



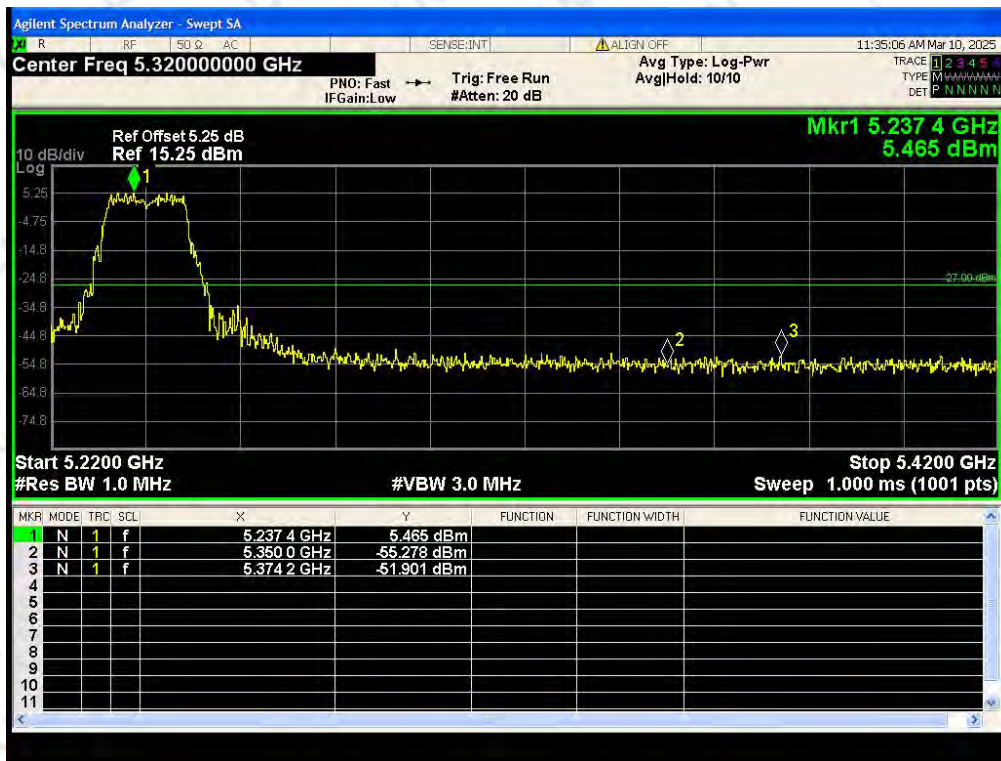
## Band Edge

| Condition | Mode          | Frequency (MHz) | Antenna | Max Value (dBm) | Limit (dBm) | Verdict |
|-----------|---------------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 802.11a       | 5180            | Ant 1   | -49.29          | -27         | Pass    |
| NVNT      | 802.11a       | 5240            | Ant 1   | -51.9           | -27         | Pass    |
| NVNT      | 802.11ac20    | 5180            | Ant 1   | -46.91          | -27         | Pass    |
| NVNT      | 802.11ac20    | 5240            | Ant 1   | -50.27          | -27         | Pass    |
| NVNT      | 802.11ac40    | 5190            | Ant 1   | -39.71          | -27         | Pass    |
| NVNT      | 802.11ac40    | 5230            | Ant 1   | -51.9           | -27         | Pass    |
| NVNT      | 802.11ac80    | 5210            | Ant 1   | -33.18          | -27         | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | Ant 1   | -49.67          | -27         | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | Ant 1   | -51.89          | -27         | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | Ant 1   | -42.33          | -27         | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | Ant 1   | -50.53          | -27         | Pass    |

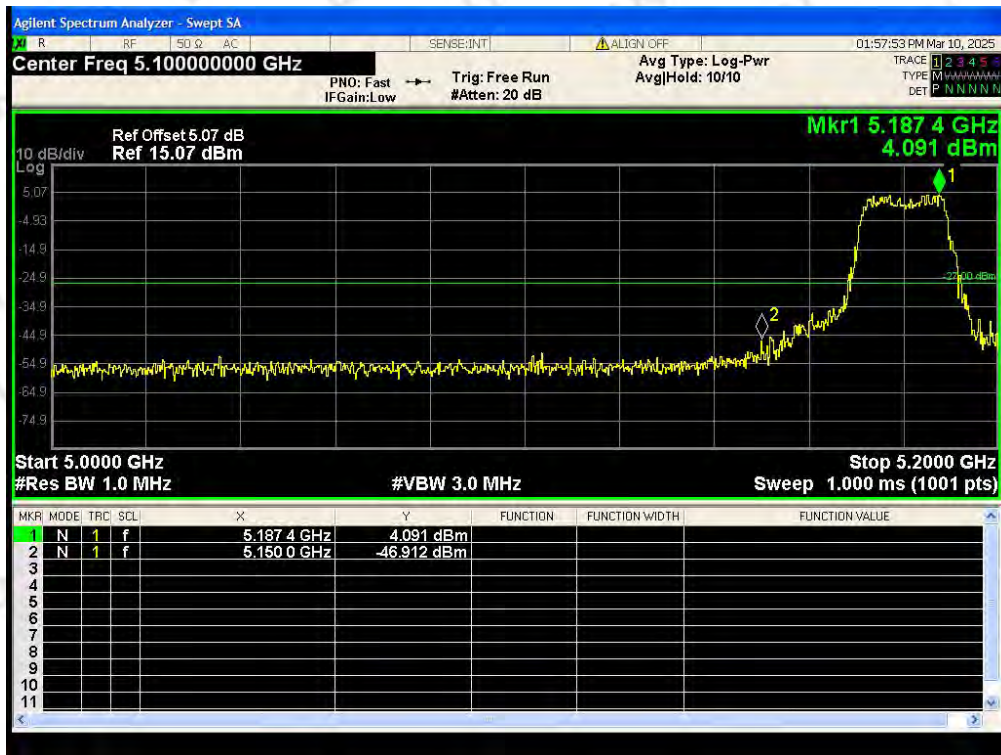
Band Edge NVNT 802.11a 5180MHz Ant1



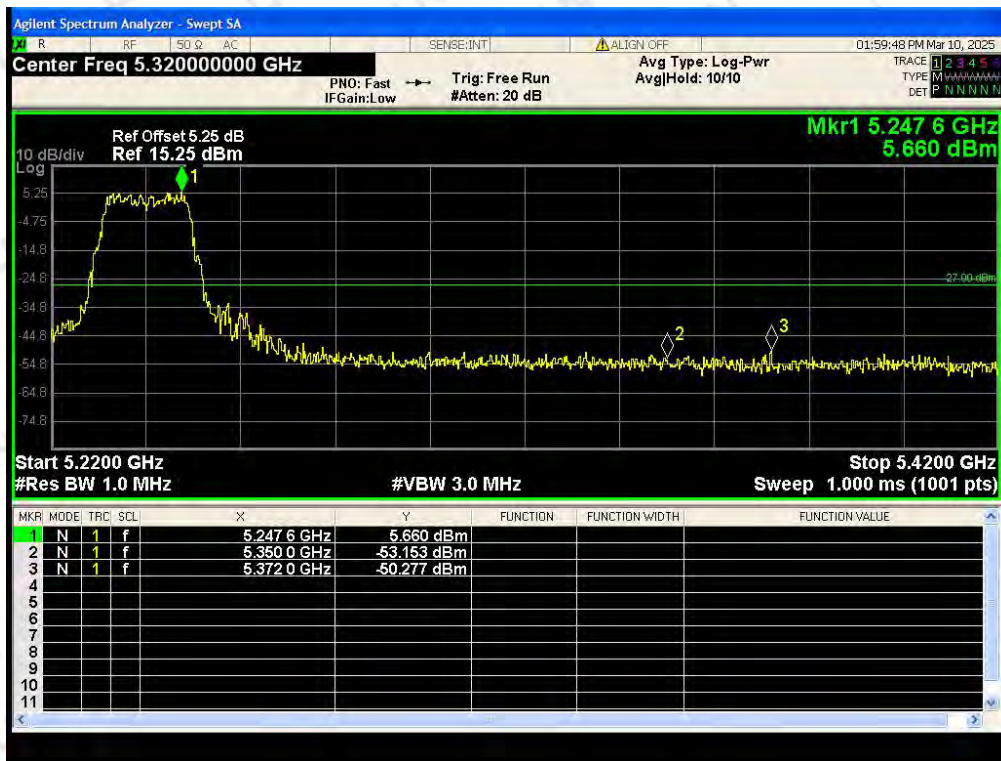
### Band Edge NVNT 802.11a 5240MHz Ant1



### Band Edge NVNT 802.11ac20 5180MHz Ant1



### Band Edge NVNT 802.11ac20 5240MHz Ant1



### Band Edge NVNT 802.11ac40 5190MHz Ant1



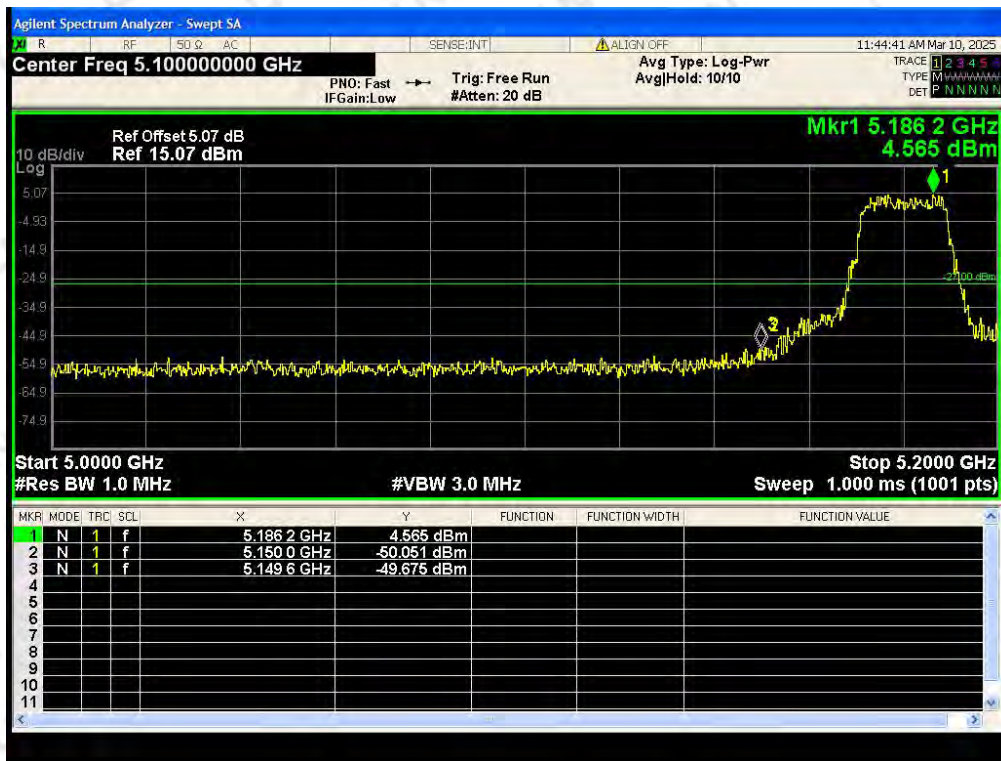
### Band Edge NVNT 802.11ac40 5230MHz Ant1



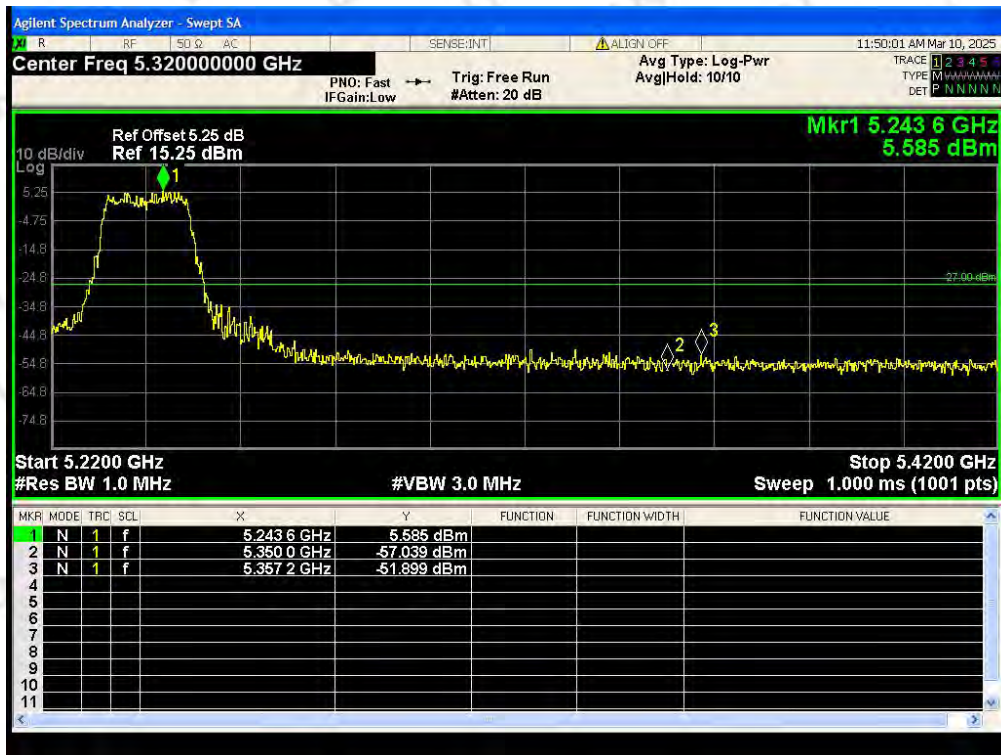
### Band Edge NVNT 802.11ac80 5210MHz Ant1



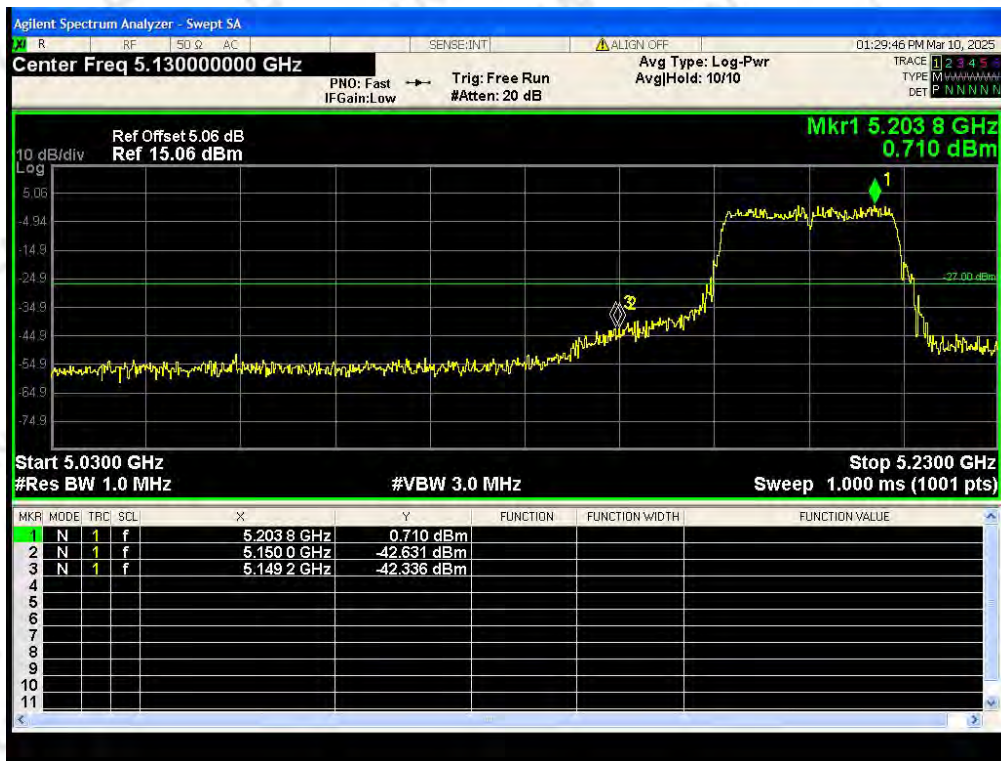
### Band Edge NVNT 802.11n(HT20) 5180MHz Ant1



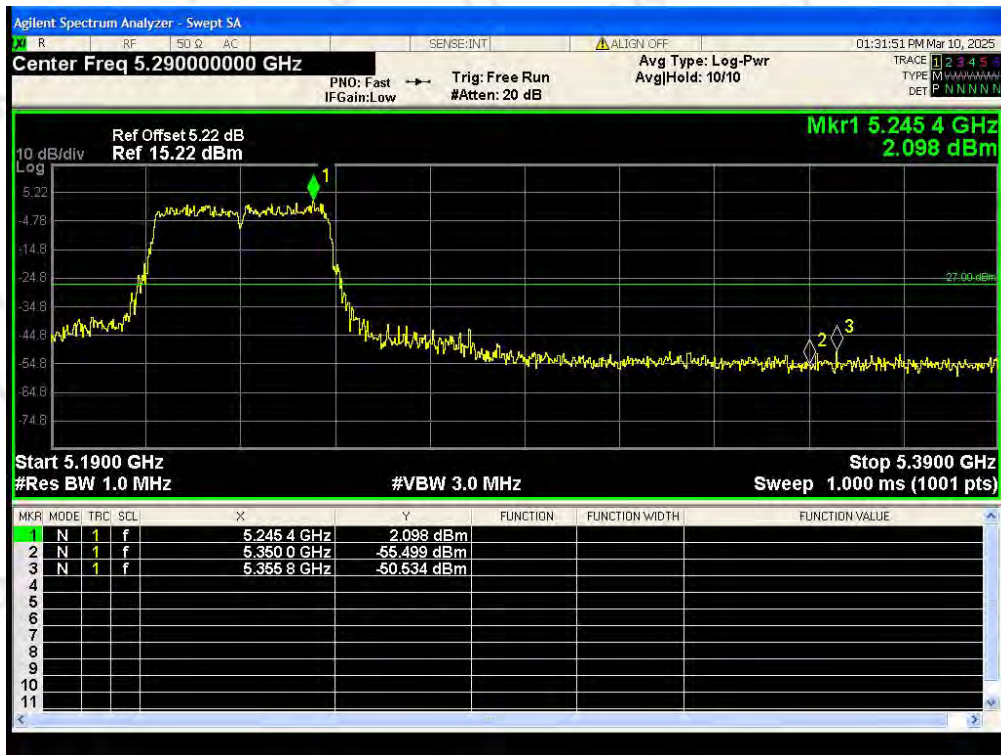
### Band Edge NVNT 802.11n(HT20) 5240MHz Ant1



# Band Edge NVNT 802.11n(HT40) 5190MHz Ant1



# Band Edge NVNT 802.11n(HT40) 5230MHz Ant1



## Frequency Stability

| Condition | Mode          | Frequency (MHz) | Measured Frequency (MHz) | Deviation (ppm) | Limit (ppm) | Verdict |
|-----------|---------------|-----------------|--------------------------|-----------------|-------------|---------|
| NVNT      | 802.11a       | 5180            | 5180                     | 0               | 25          | Pass    |
| NVNT      | 802.11a       | 5200            | 5200                     | 0               | 25          | Pass    |
| NVNT      | 802.11a       | 5240            | 5240                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac20    | 5180            | 5180                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac20    | 5200            | 5200                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac20    | 5240            | 5240                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac40    | 5190            | 5190                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac40    | 5230            | 5230                     | 0               | 25          | Pass    |
| NVNT      | 802.11ac80    | 5210            | 5210                     | 0               | 25          | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | 5180                     | 0               | 25          | Pass    |
| NVNT      | 802.11n(HT20) | 5200            | 5200                     | 0               | 25          | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | 5240                     | 0               | 25          | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | 5190                     | 0               | 25          | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | 5230                     | 0               | 25          | Pass    |

Freq. Stability NVNT 802.11a 5180MHz



### Freq. Stability NVNT 802.11a 5200MHz



### Freq. Stability NVNT 802.11a 5240MHz



# Freq. Stability NVNT 802.11ac20 5180MHz



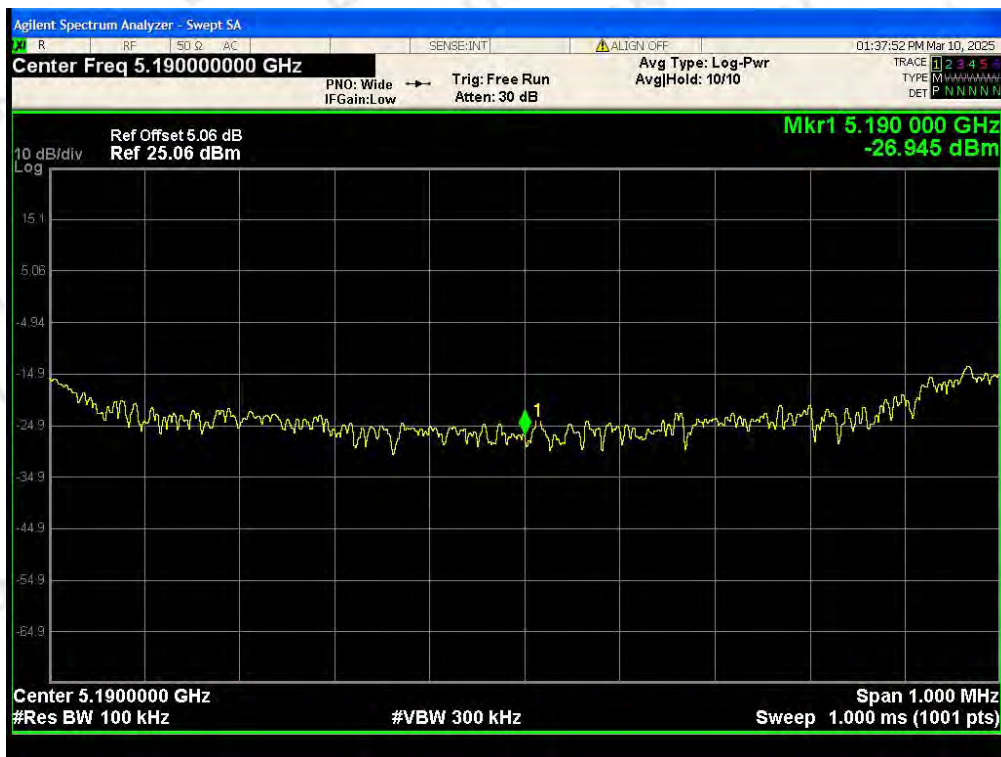
# Freq. Stability NVNT 802.11ac20 5200MHz



### Freq. Stability NVNT 802.11ac20 5240MHz



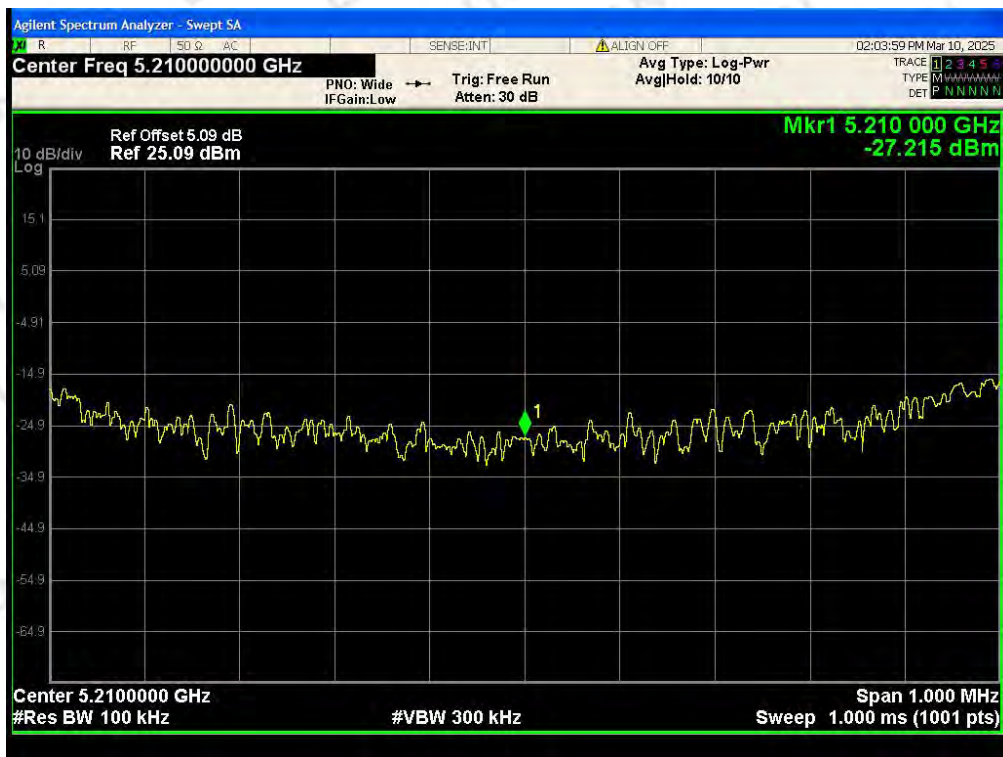
### Freq. Stability NVNT 802.11ac40 5190MHz



Freq. Stability NVNT 802.11ac40 5230MHz



Freq. Stability NVNT 802.11ac80 5210MHz



### Freq. Stability NVNT 802.11n(HT20) 5180MHz



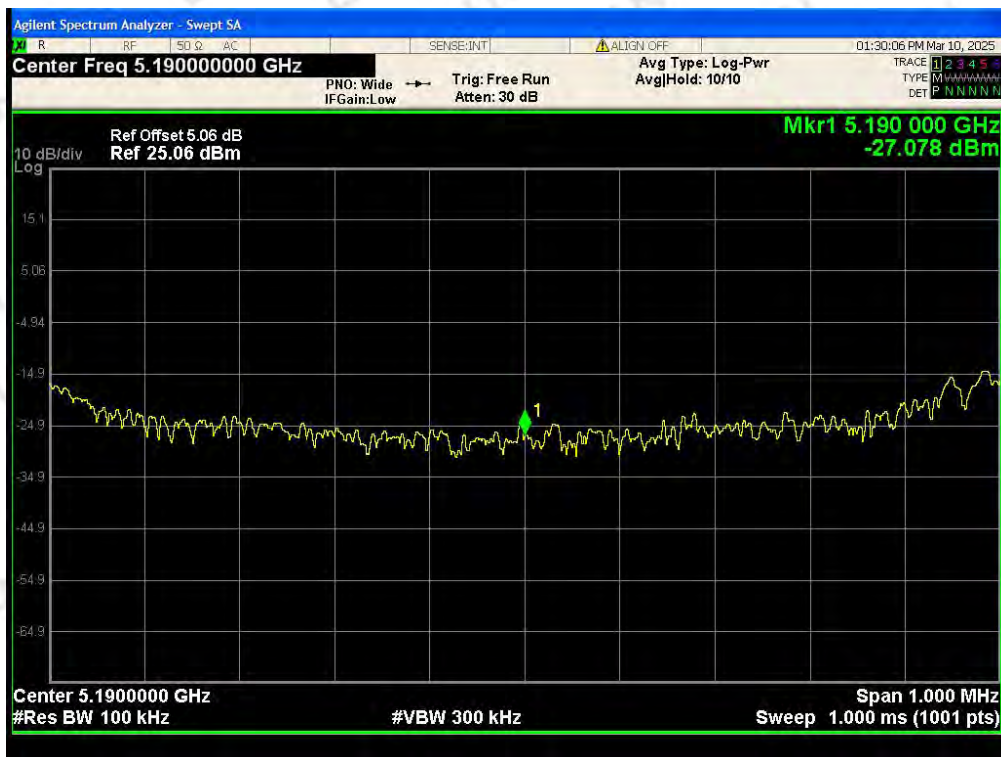
### Freq. Stability NVNT 802.11n(HT20) 5200MHz



Freq. Stability NVNT 802.11n(HT20) 5240MHz



Freq. Stability NVNT 802.11n(HT40) 5190MHz



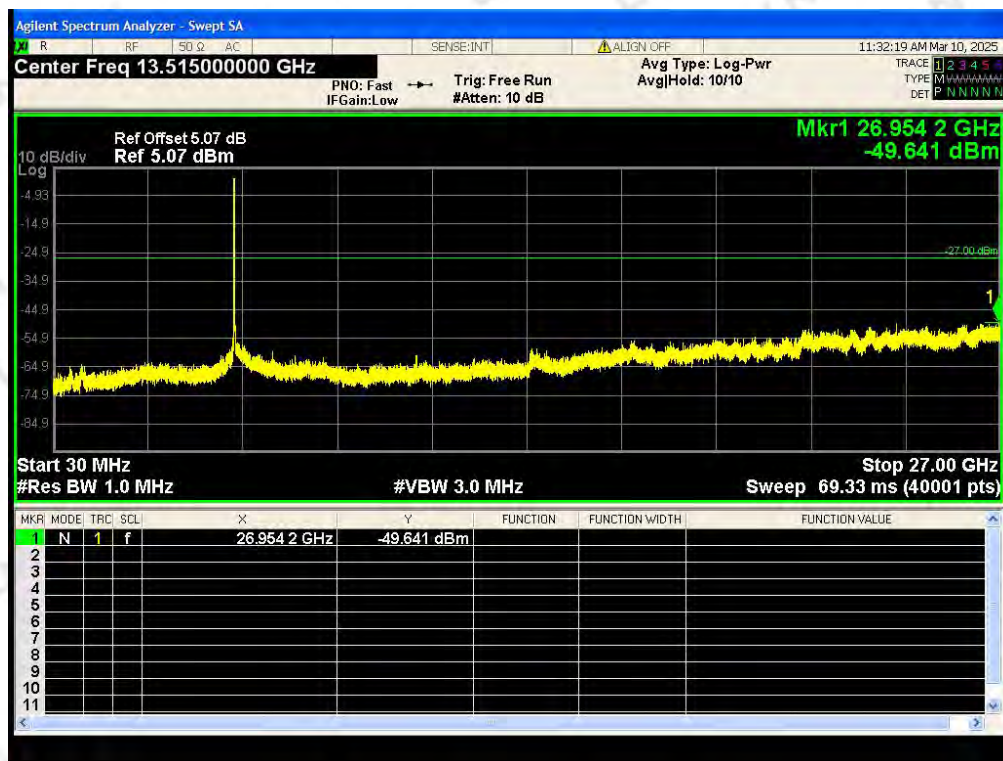
# Freq. Stability NVNT 802.11n(HT40) 5230MHz



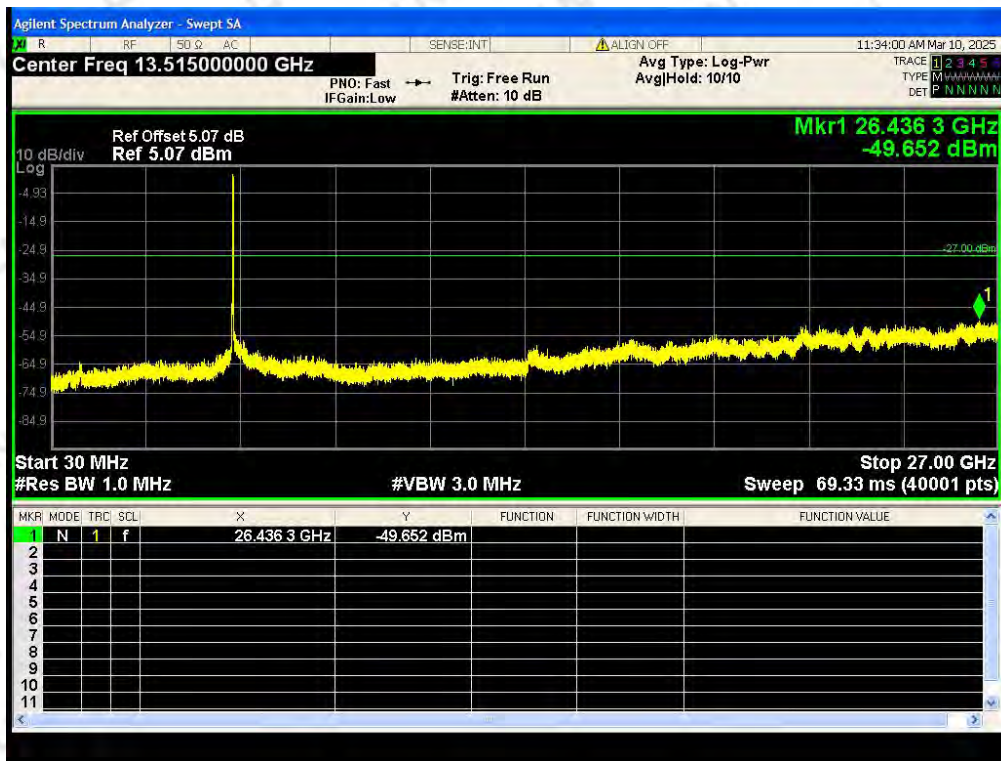
## Conducted RF Spurious Emission

| Condition | Mode          | Frequency (MHz) | Antenna | Max Value (dBm) | Limit (dBm) | Verdict |
|-----------|---------------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 802.11a       | 5180            | Ant 1   | -49.64          | -27         | Pass    |
| NVNT      | 802.11a       | 5200            | Ant 1   | -49.65          | -27         | Pass    |
| NVNT      | 802.11a       | 5240            | Ant 1   | -49.57          | -27         | Pass    |
| NVNT      | 802.11ac20    | 5180            | Ant 1   | -49.68          | -27         | Pass    |
| NVNT      | 802.11ac20    | 5200            | Ant 1   | -47.19          | -27         | Pass    |
| NVNT      | 802.11ac20    | 5240            | Ant 1   | -49.06          | -27         | Pass    |
| NVNT      | 802.11ac40    | 5190            | Ant 1   | -49.07          | -27         | Pass    |
| NVNT      | 802.11ac40    | 5230            | Ant 1   | -49.04          | -27         | Pass    |
| NVNT      | 802.11ac80    | 5210            | Ant 1   | -48.54          | -27         | Pass    |
| NVNT      | 802.11n(HT20) | 5180            | Ant 1   | -49.29          | -27         | Pass    |
| NVNT      | 802.11n(HT20) | 5200            | Ant 1   | -49.54          | -27         | Pass    |
| NVNT      | 802.11n(HT20) | 5240            | Ant 1   | -47.99          | -27         | Pass    |
| NVNT      | 802.11n(HT40) | 5190            | Ant 1   | -48.51          | -27         | Pass    |
| NVNT      | 802.11n(HT40) | 5230            | Ant 1   | -49             | -27         | Pass    |

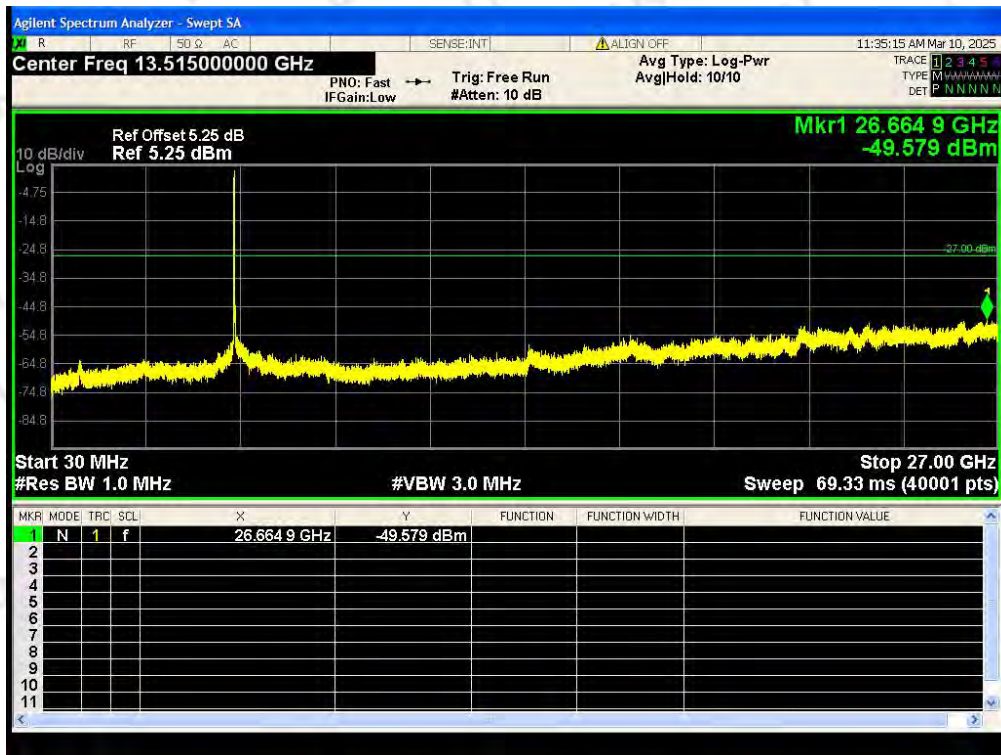
Tx. Spurious NVNT 802.11a 5180MHz Ant1 Emission



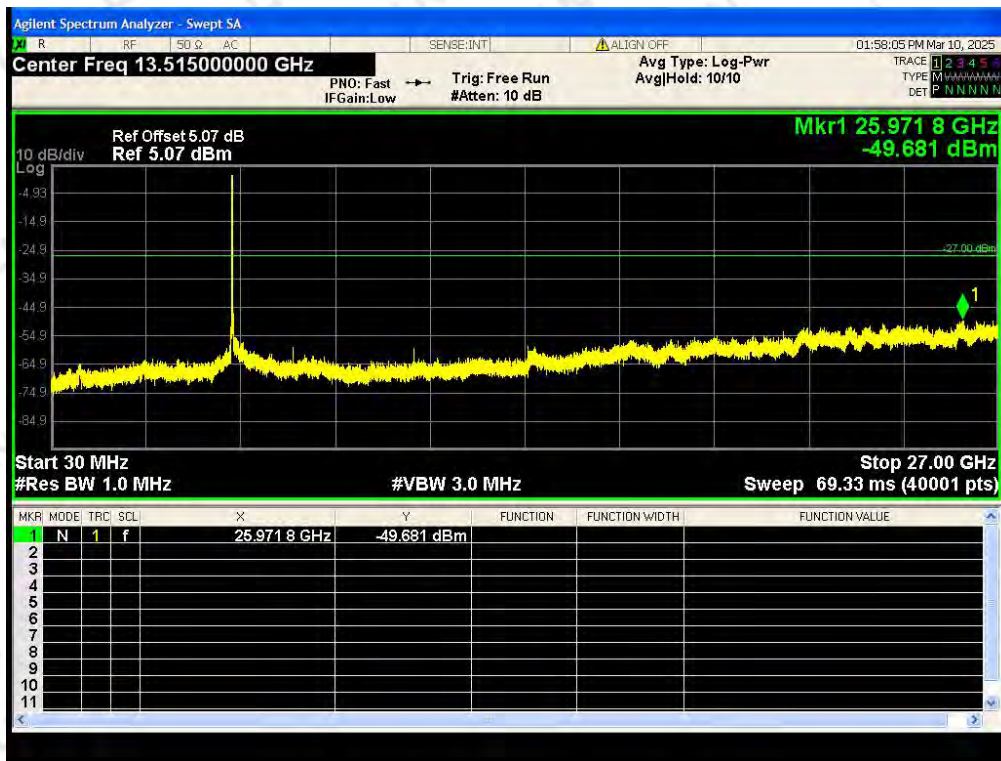
## Tx. Spurious NVNT 802.11a 5200MHz Ant1 Emission



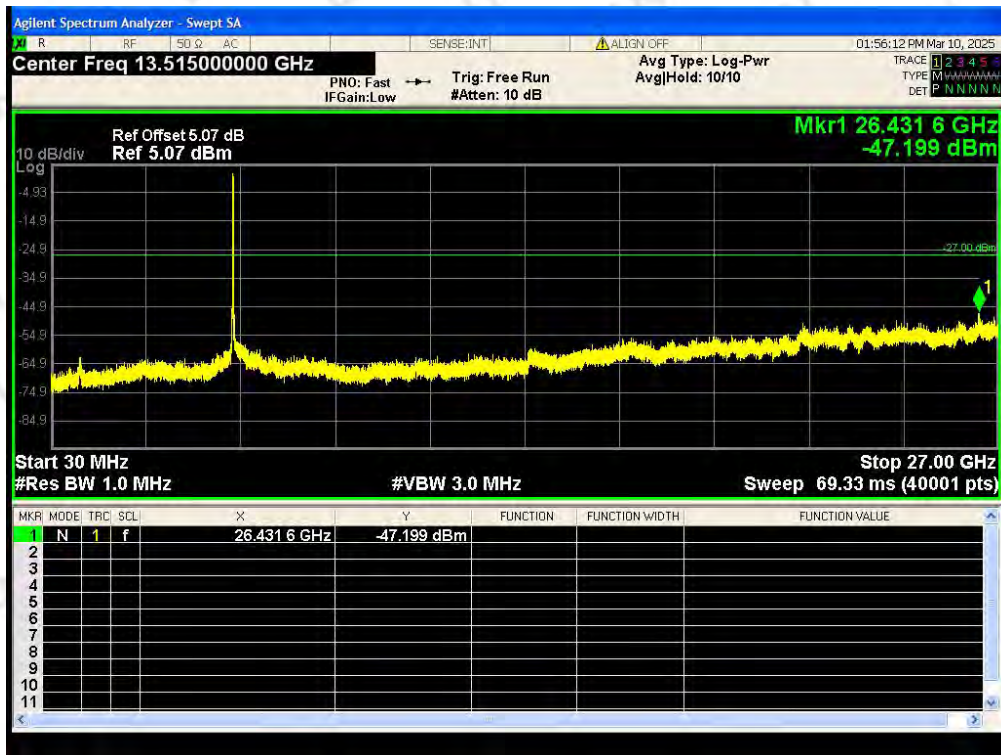
## Tx. Spurious NVNT 802.11a 5240MHz Ant1 Emission



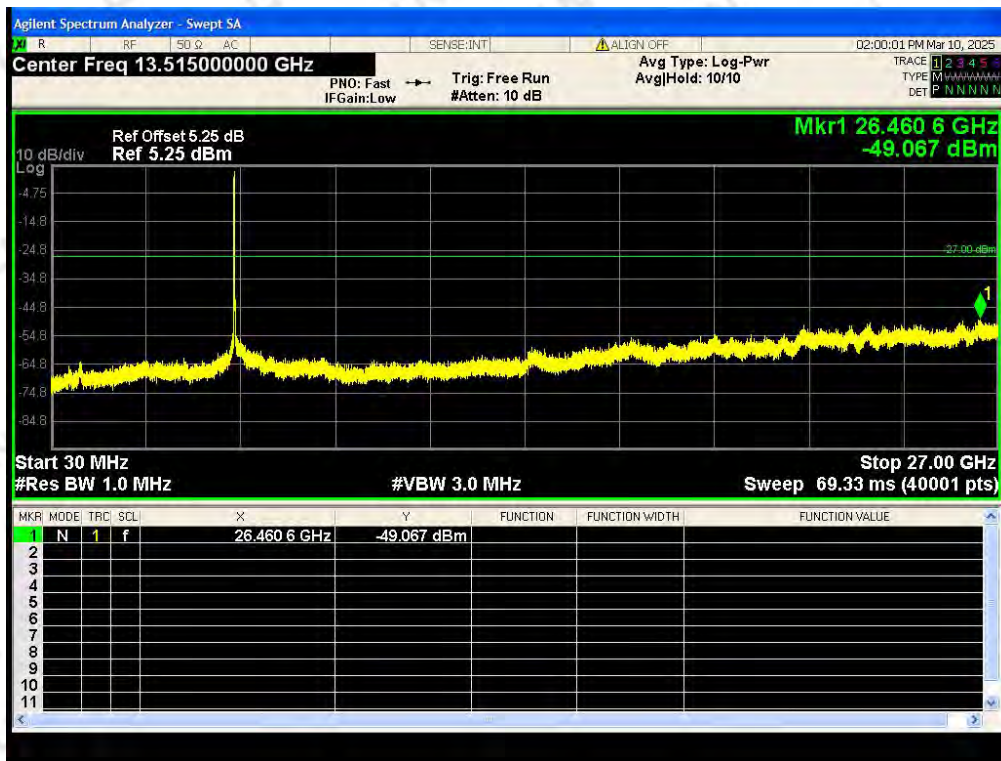
## Tx. Spurious NVNT 802.11ac20 5180MHz Ant1 Emission



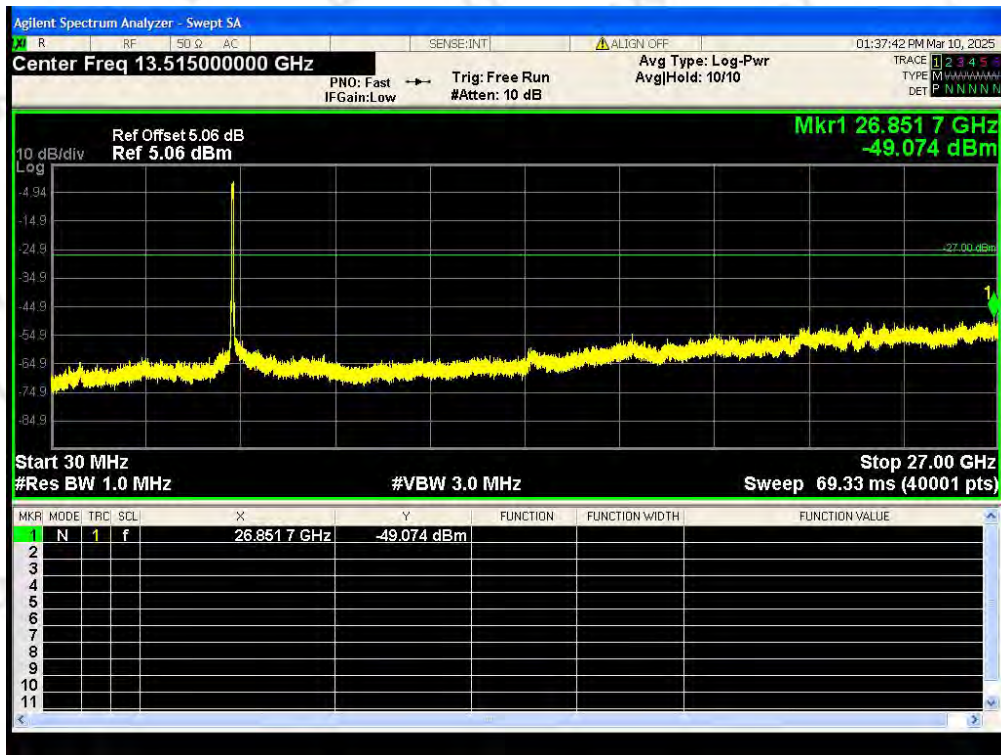
## Tx. Spurious NVNT 802.11ac20 5200MHz Ant1 Emission



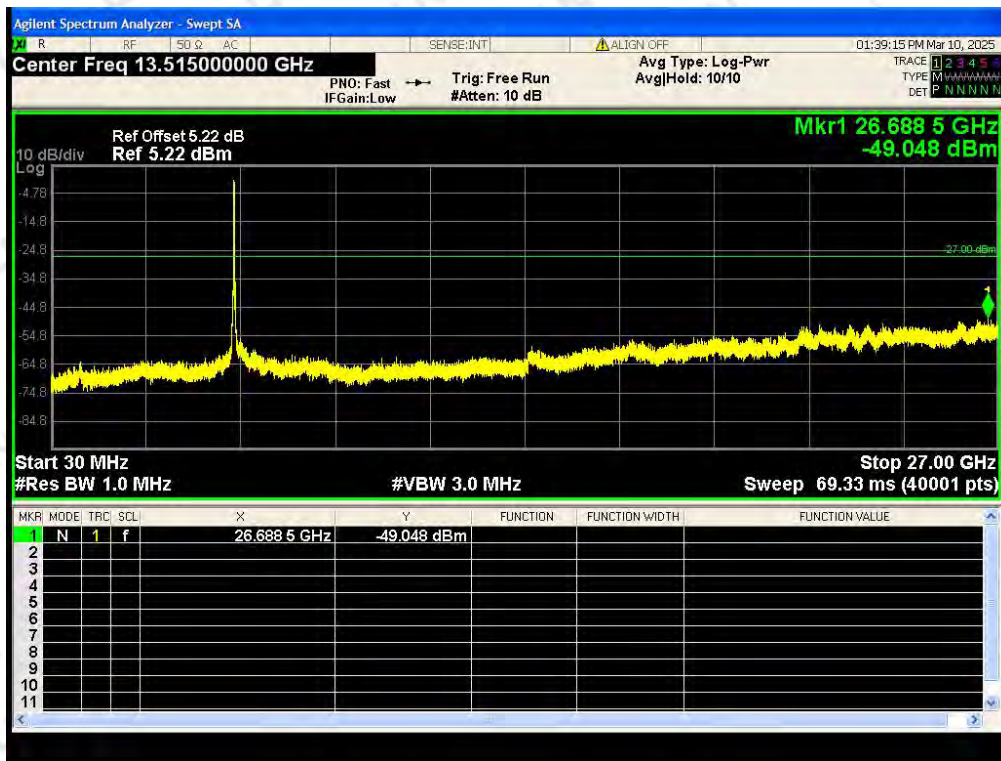
## Tx. Spurious NVNT 802.11ac20 5240MHz Ant1 Emission



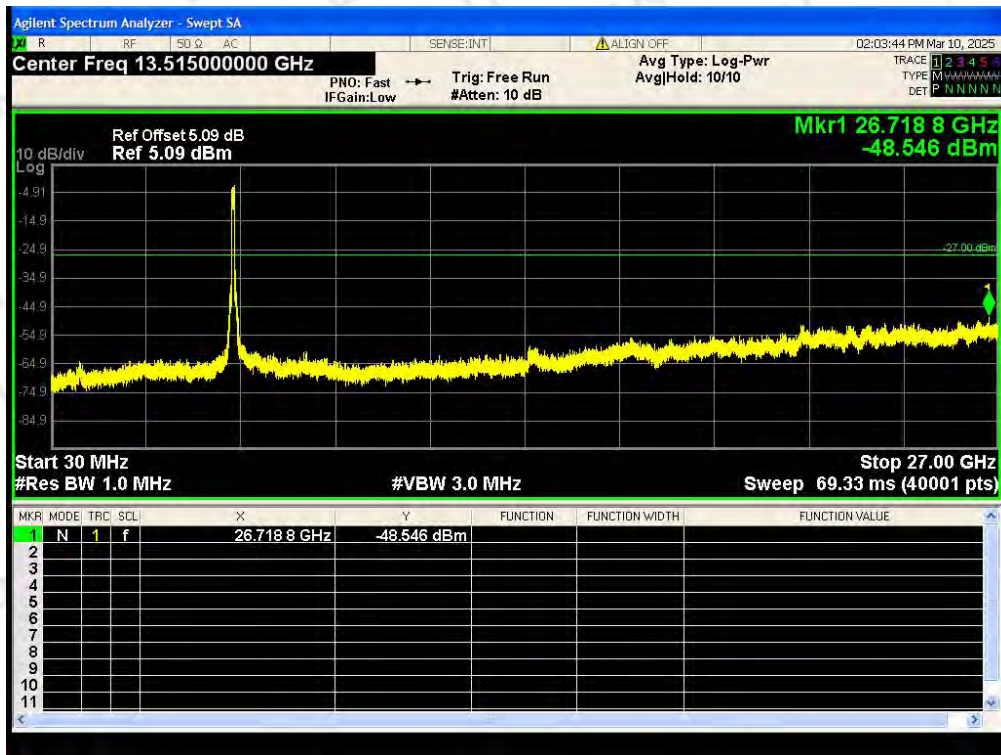
## Tx. Spurious NVNT 802.11ac40 5190MHz Ant1 Emission



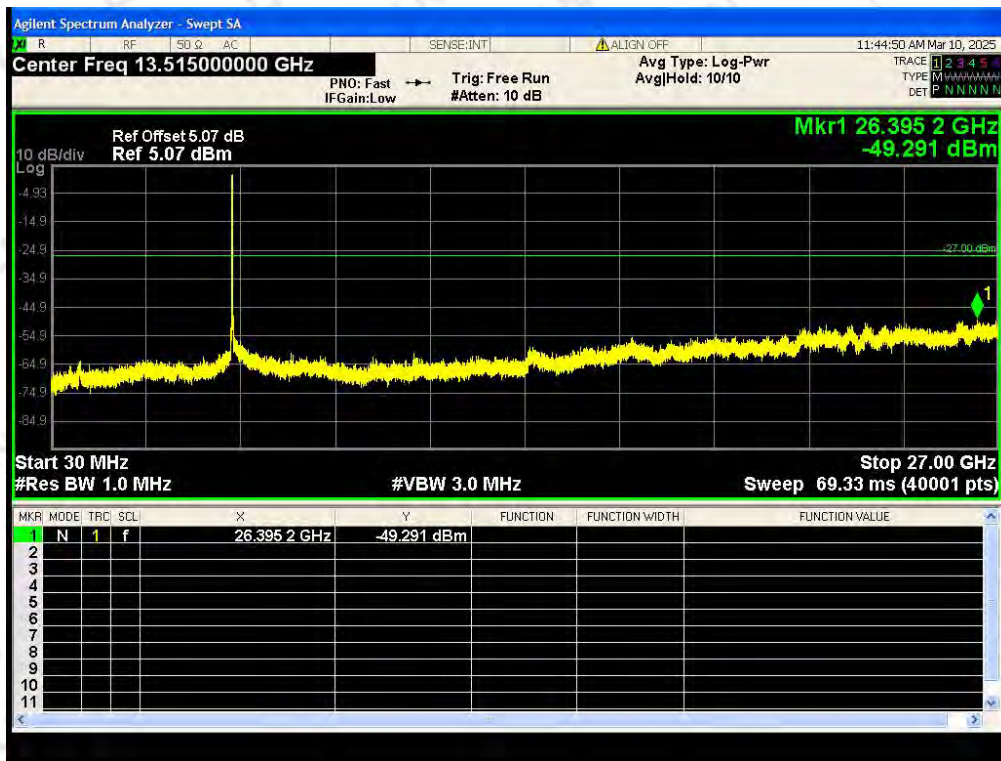
## Tx. Spurious NVNT 802.11ac40 5230MHz Ant1 Emission



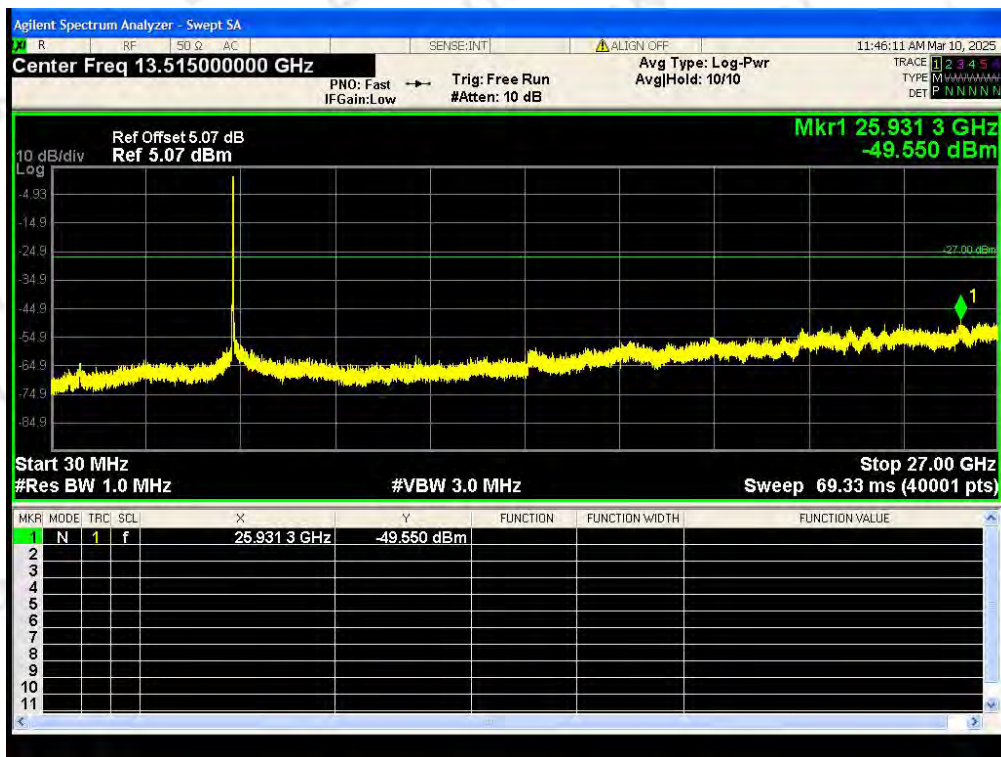
## Tx. Spurious NVNT 802.11ac80 5210MHz Ant1 Emission



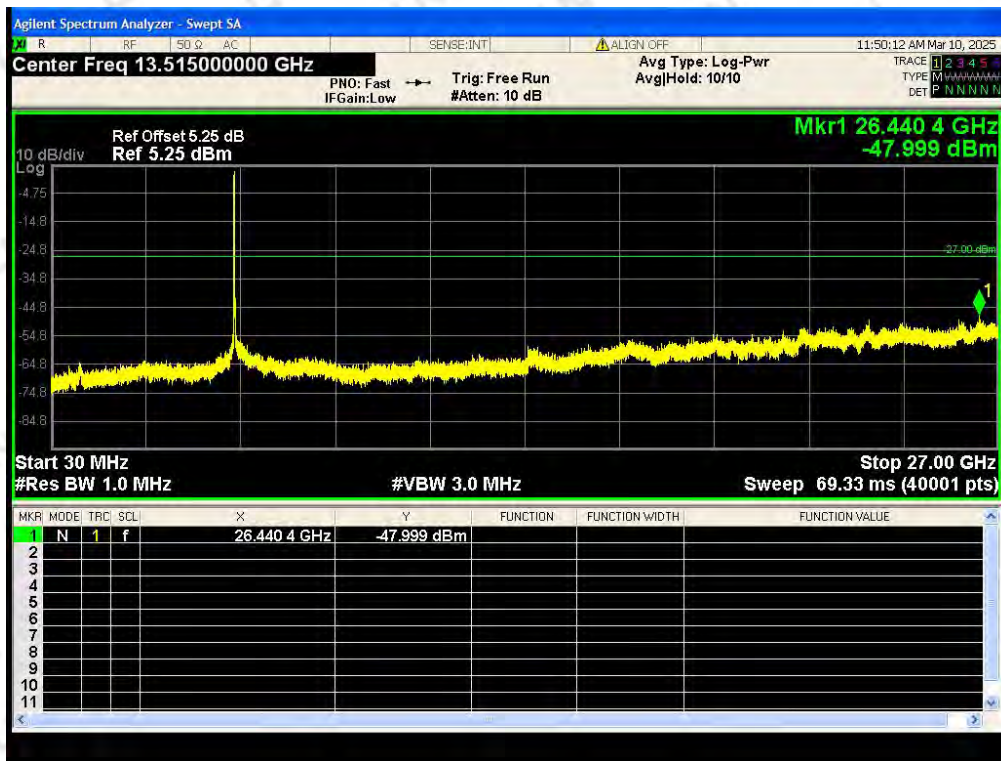
Tx. Spurious NVNT 802.11n(HT20) 5180MHz Ant1 Emission



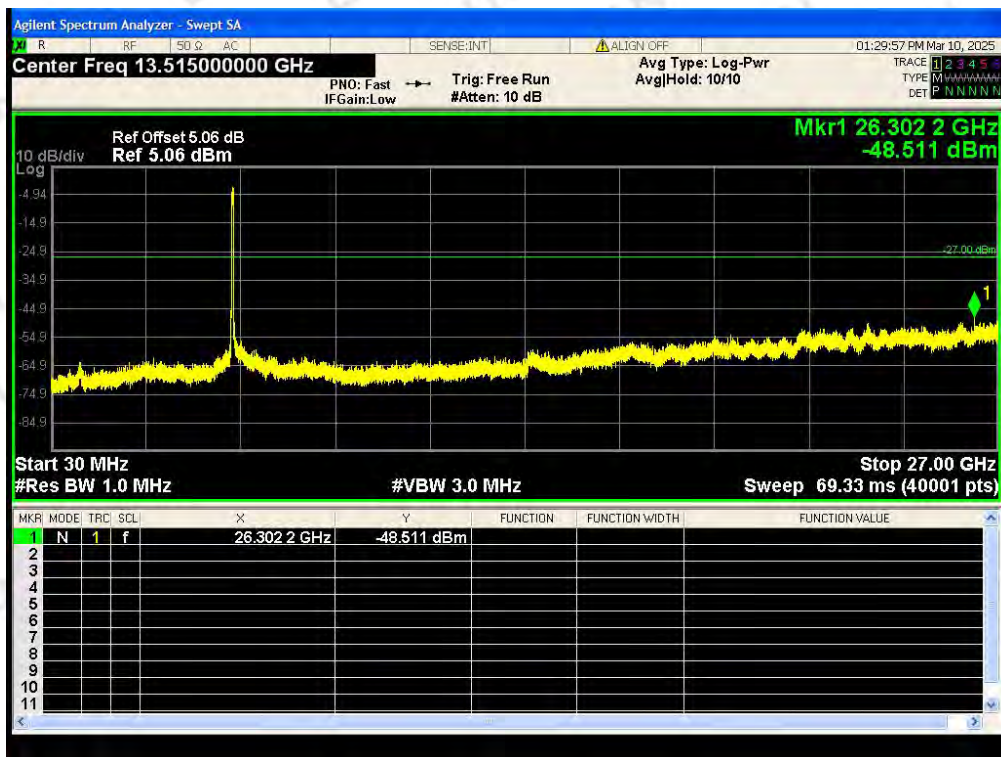
Tx. Spurious NVNT 802.11n(HT20) 5200MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5240MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT40) 5190MHz Ant1 Emission



## Tx. Spurious NVNT 802.11n(HT40) 5230MHz Ant1 Emission

