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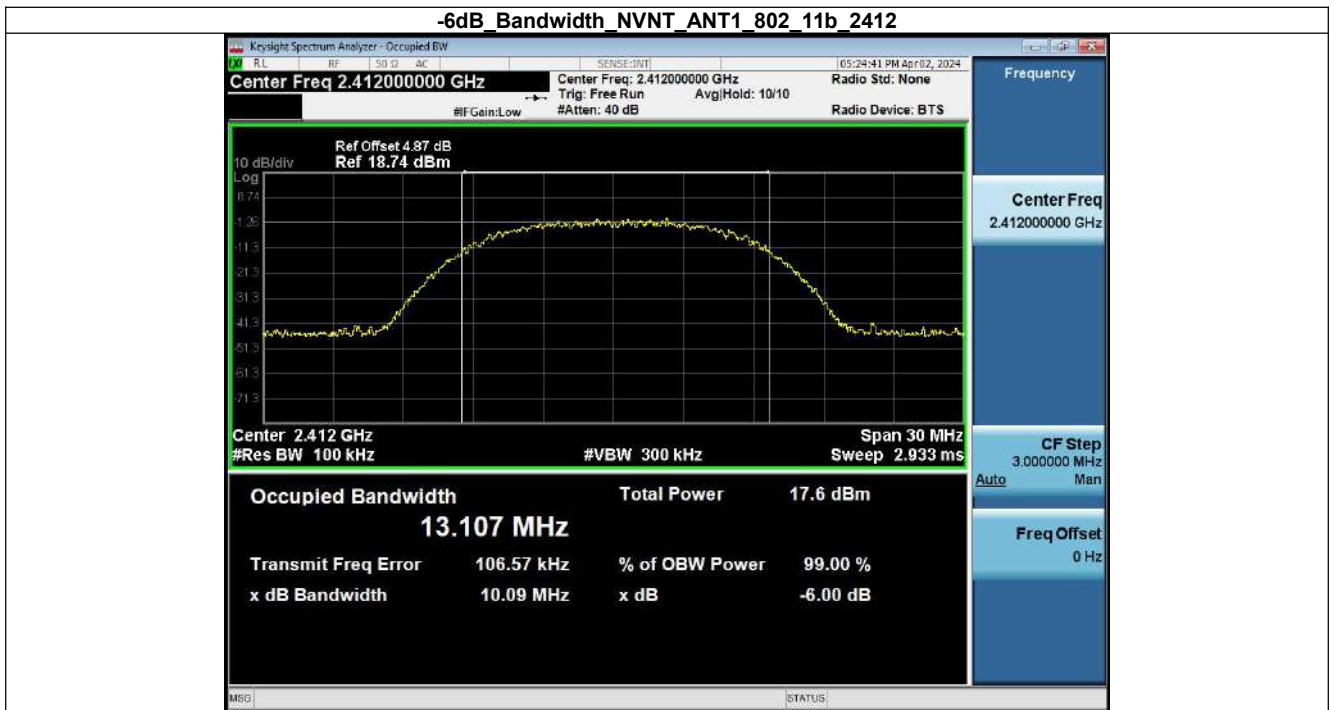
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# FCC ID&IC ID WIFI2.4

## Test Data

### 1. -6dB Bandwidth

| Condition | Antenna | Modulation    | Frequency (MHz) | -6dB BW(MHz) | limit(kHz) | Result |
|-----------|---------|---------------|-----------------|--------------|------------|--------|
| NVNT      | ANT1    | 802.11b       | 2412.00         | 10.09        | 500        | Pass   |
| NVNT      | ANT1    | 802.11b       | 2437.00         | 10.09        | 500        | Pass   |
| NVNT      | ANT1    | 802.11b       | 2462.00         | 9.87         | 500        | Pass   |
| NVNT      | ANT1    | 802.11g       | 2412.00         | 16.43        | 500        | Pass   |
| NVNT      | ANT1    | 802.11g       | 2437.00         | 16.43        | 500        | Pass   |
| NVNT      | ANT1    | 802.11g       | 2462.00         | 16.45        | 500        | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00         | 17.13        | 500        | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00         | 16.80        | 500        | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00         | 16.78        | 500        | Pass   |



**-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11b\_2437**



-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11b\_2462



-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11g\_2412



-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11g\_2437



-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11g\_2462



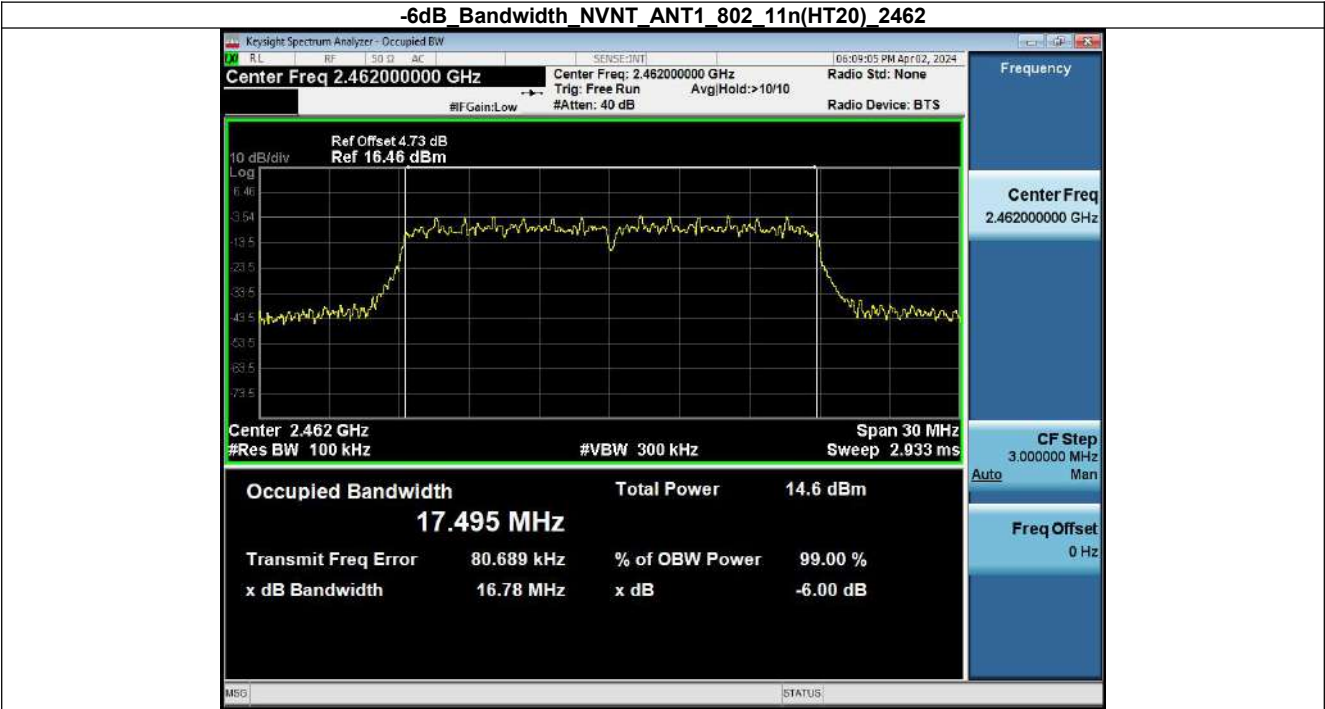
-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2412



-6dB\_Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2437



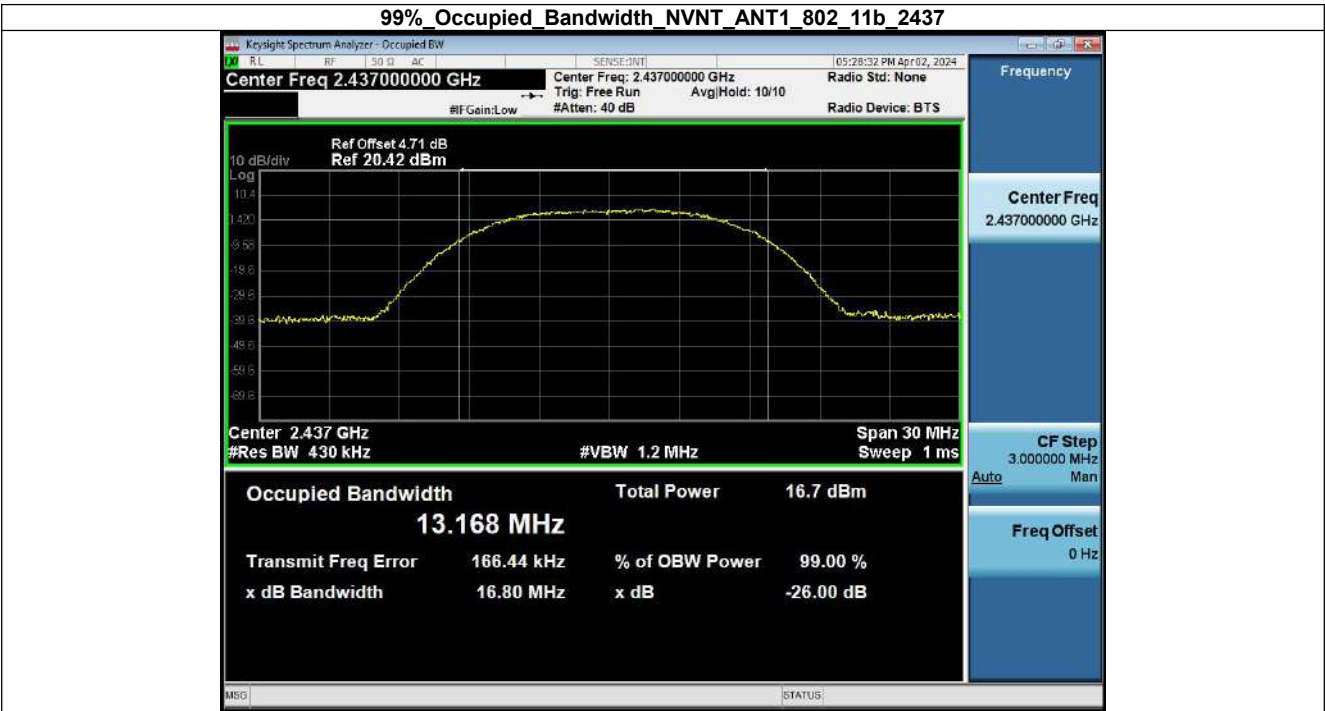
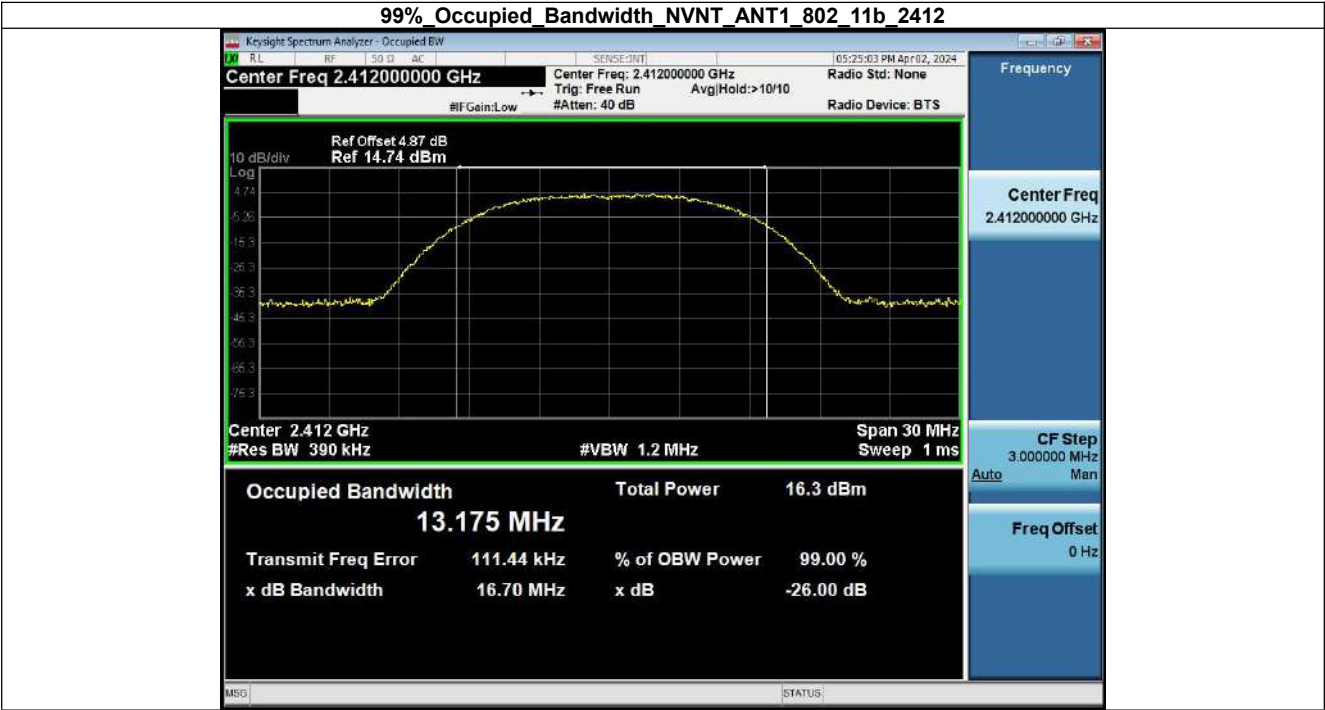
-6dB Bandwidth NVNT\_ANT1 802\_11n(HT20) 2462





2. 99% Occupied Bandwidth

| Condition | Antenna | Modulation    | Frequency (MHz) | 99% BW (MHz) |
|-----------|---------|---------------|-----------------|--------------|
| NVNT      | ANT1    | 802.11b       | 2412.00         | 13.175       |
| NVNT      | ANT1    | 802.11b       | 2437.00         | 13.168       |
| NVNT      | ANT1    | 802.11b       | 2462.00         | 13.177       |
| NVNT      | ANT1    | 802.11g       | 2412.00         | 16.874       |
| NVNT      | ANT1    | 802.11g       | 2437.00         | 16.959       |
| NVNT      | ANT1    | 802.11g       | 2462.00         | 16.976       |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00         | 17.590       |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00         | 17.613       |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00         | 17.601       |



### 99% Occupied Bandwidth NVNT\_ANT1\_802\_11b\_2462



### 99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2412



### 99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2437

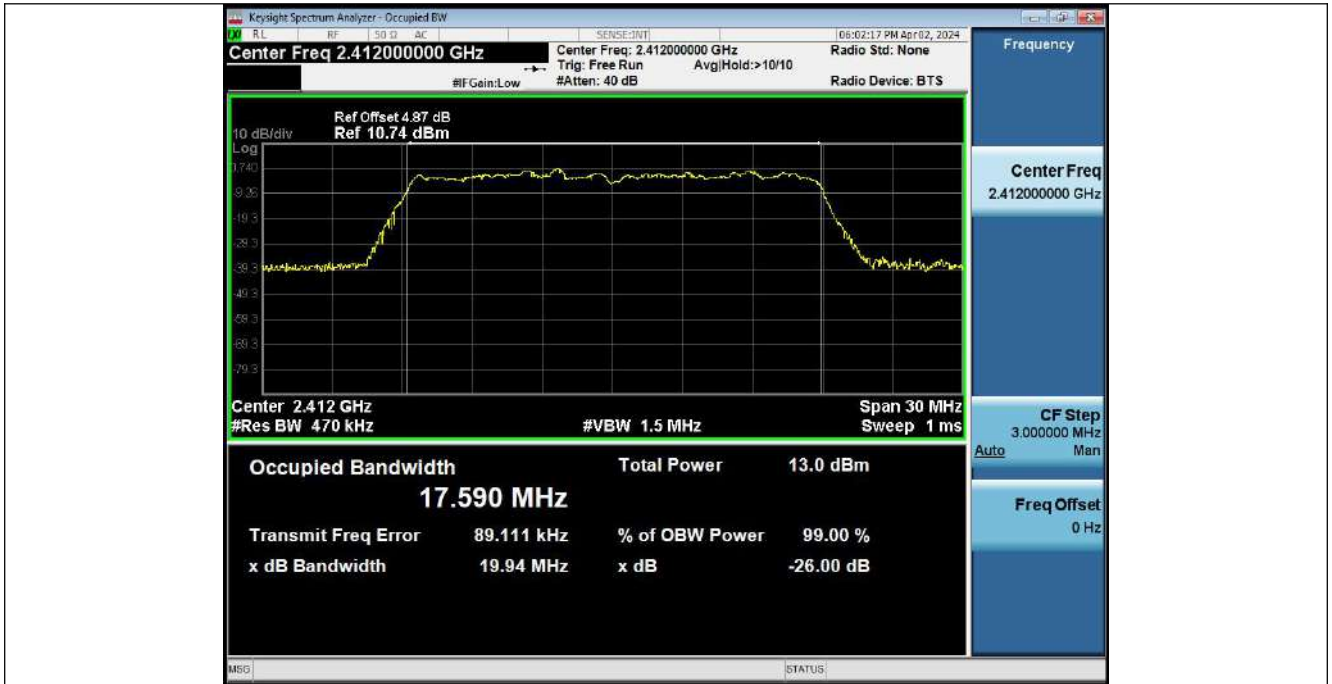




99% Occupied Bandwidth\_NVNT\_ANT1\_802\_11g\_2462



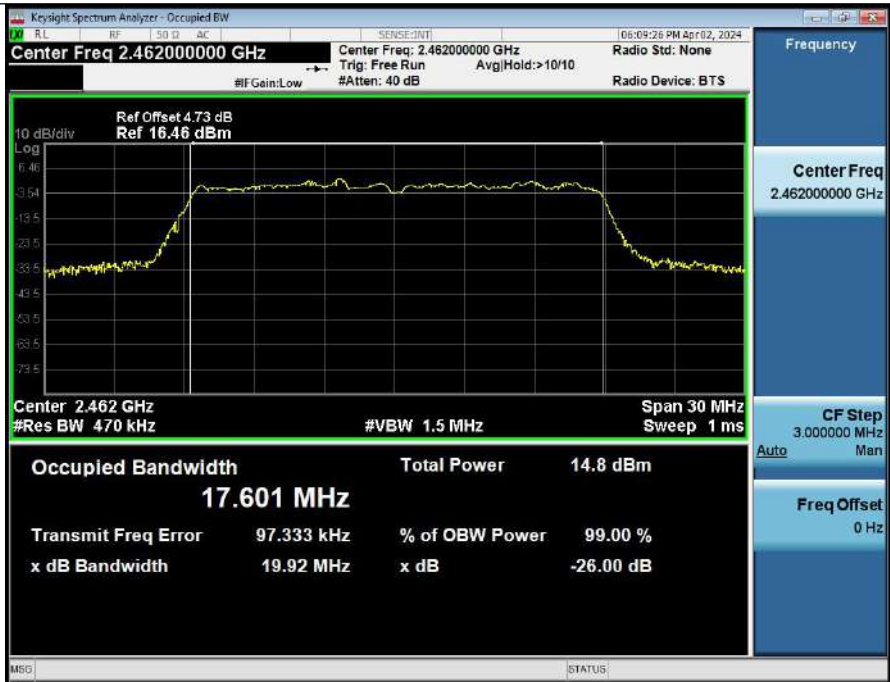
99%\_Occupied\_Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2412



99% Occupied Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2437

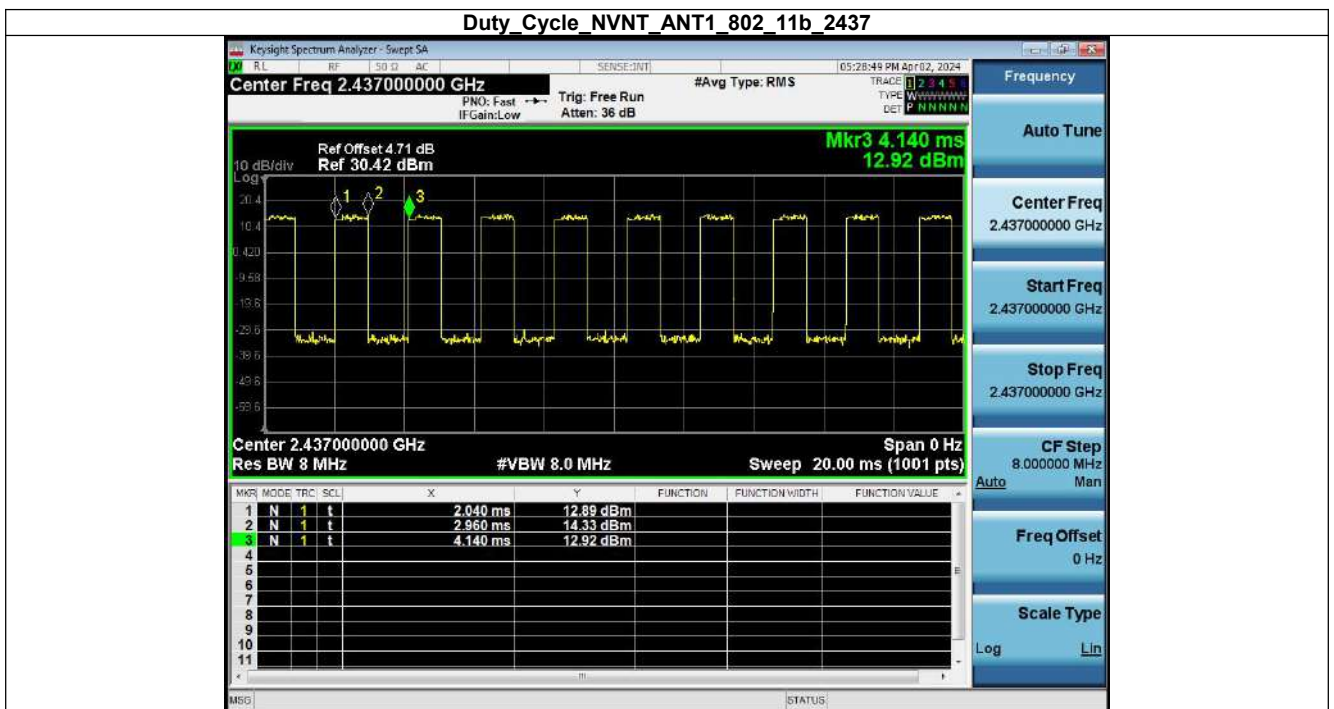
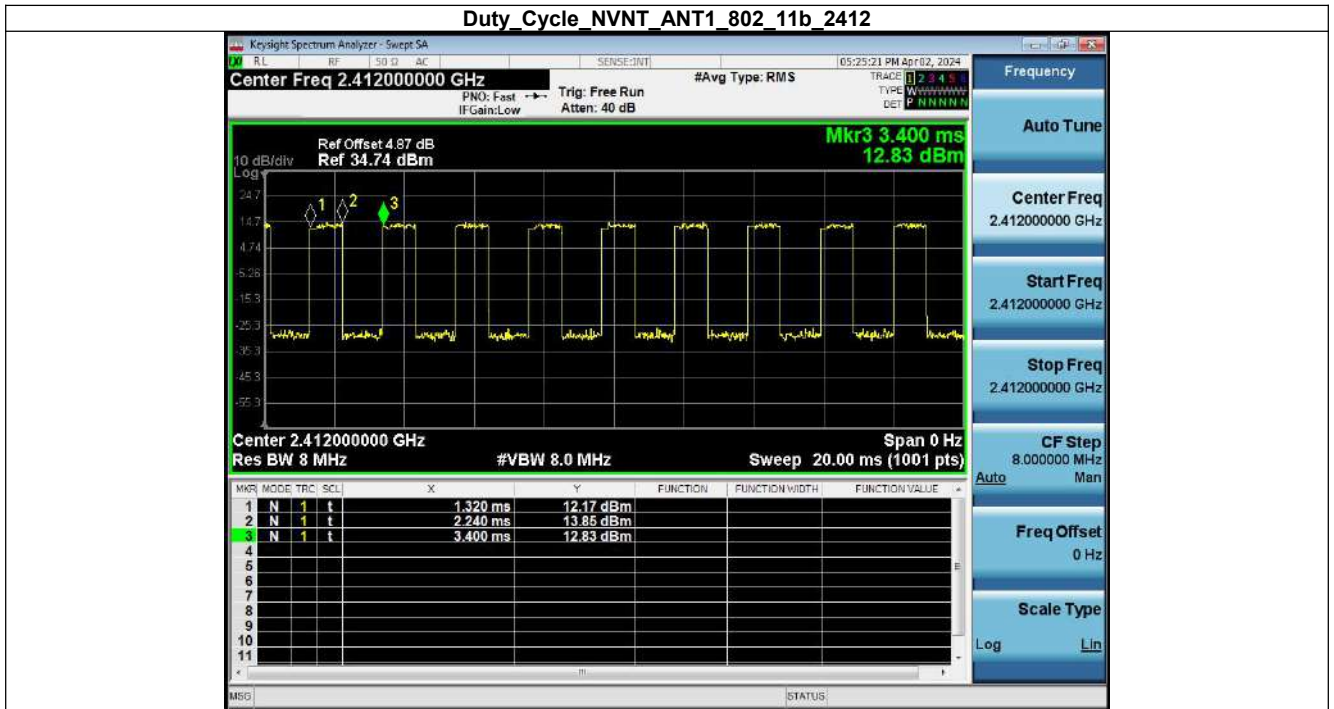


99%\_Occupied\_Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2462

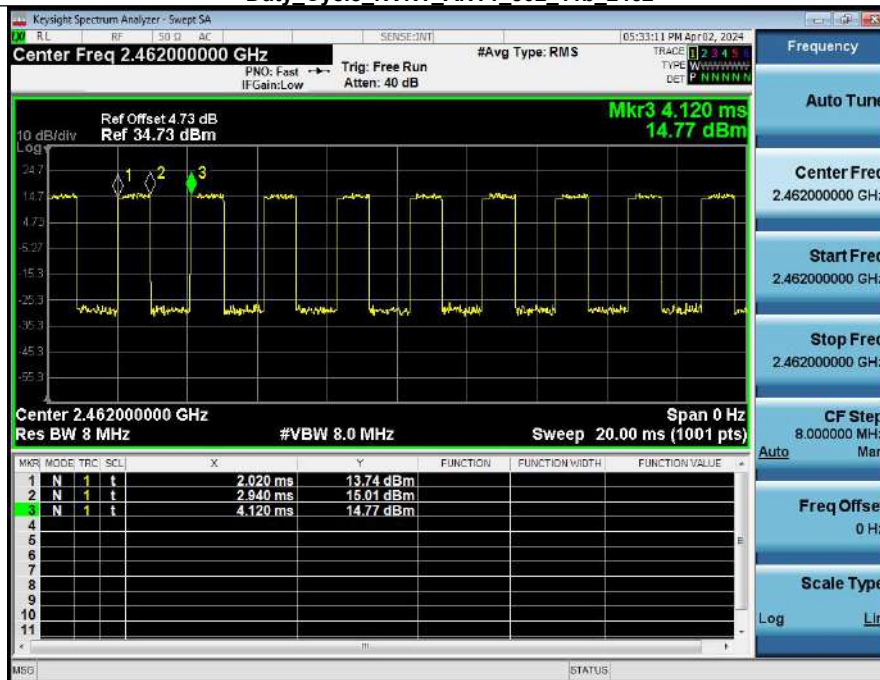


### 3. Duty Cycle

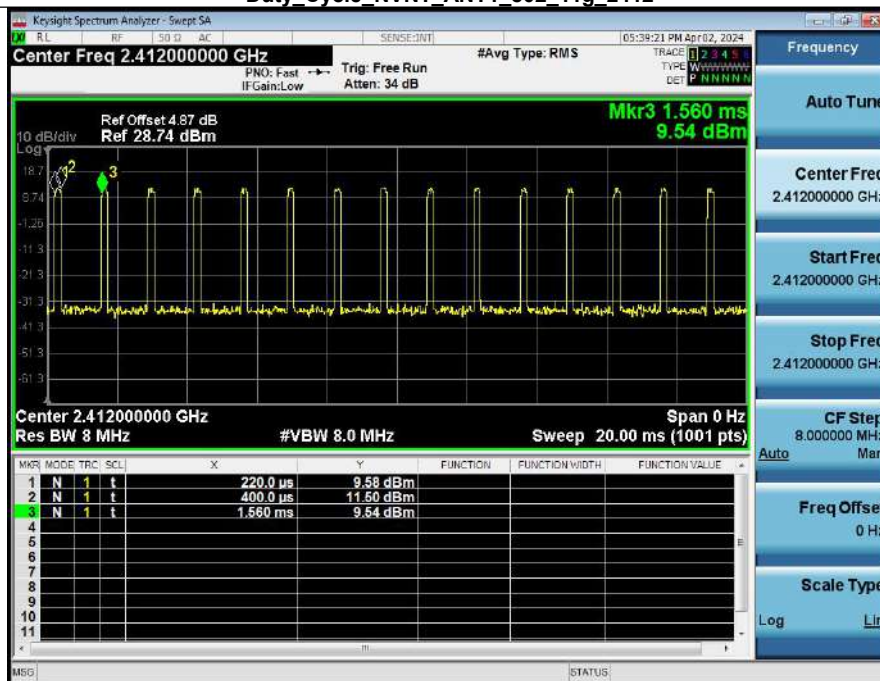
| Condition | Antenna | Modulation    | Frequency (MHz) | Duty cycle(%) | Duty factor(dB) |
|-----------|---------|---------------|-----------------|---------------|-----------------|
| NVNT      | ANT1    | 802.11b       | 2412.00         | 45.19         | 3.45            |
| NVNT      | ANT1    | 802.11b       | 2437.00         | 44.76         | 3.49            |
| NVNT      | ANT1    | 802.11b       | 2462.00         | 44.76         | 3.49            |
| NVNT      | ANT1    | 802.11g       | 2412.00         | 13.43         | 8.72            |
| NVNT      | ANT1    | 802.11g       | 2437.00         | 13.43         | 8.72            |
| NVNT      | ANT1    | 802.11g       | 2462.00         | 12.12         | 9.16            |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00         | 12.12         | 9.16            |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00         | 10.77         | 9.68            |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00         | 10.77         | 9.68            |



# Duty Cycle NVNT\_ANT1\_802\_11b\_2462

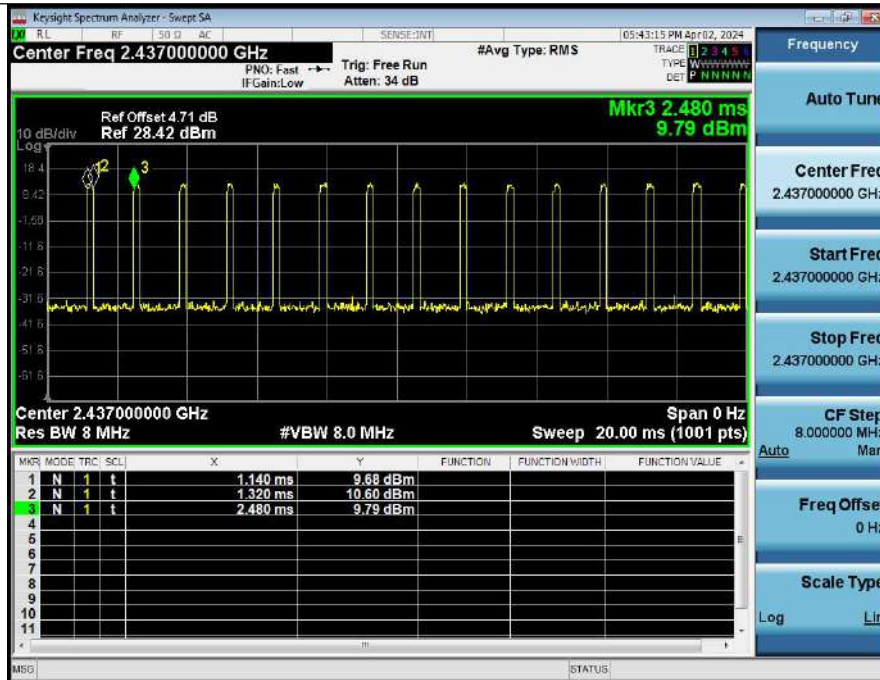


# Duty Cycle NVNT\_ANT1\_802\_11g\_2412

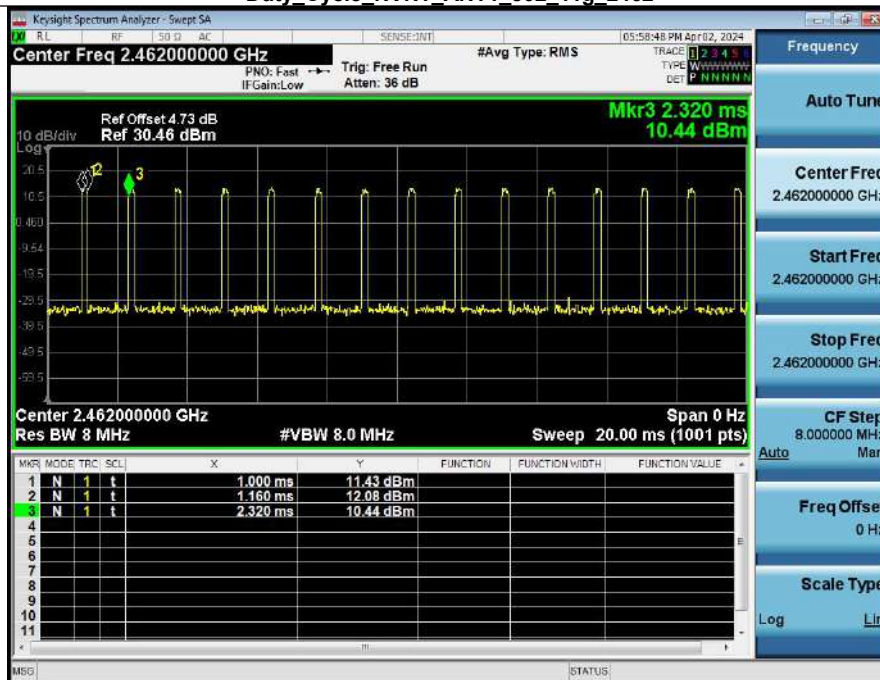


# Duty Cycle NVNT\_ANT1\_802\_11g\_2437



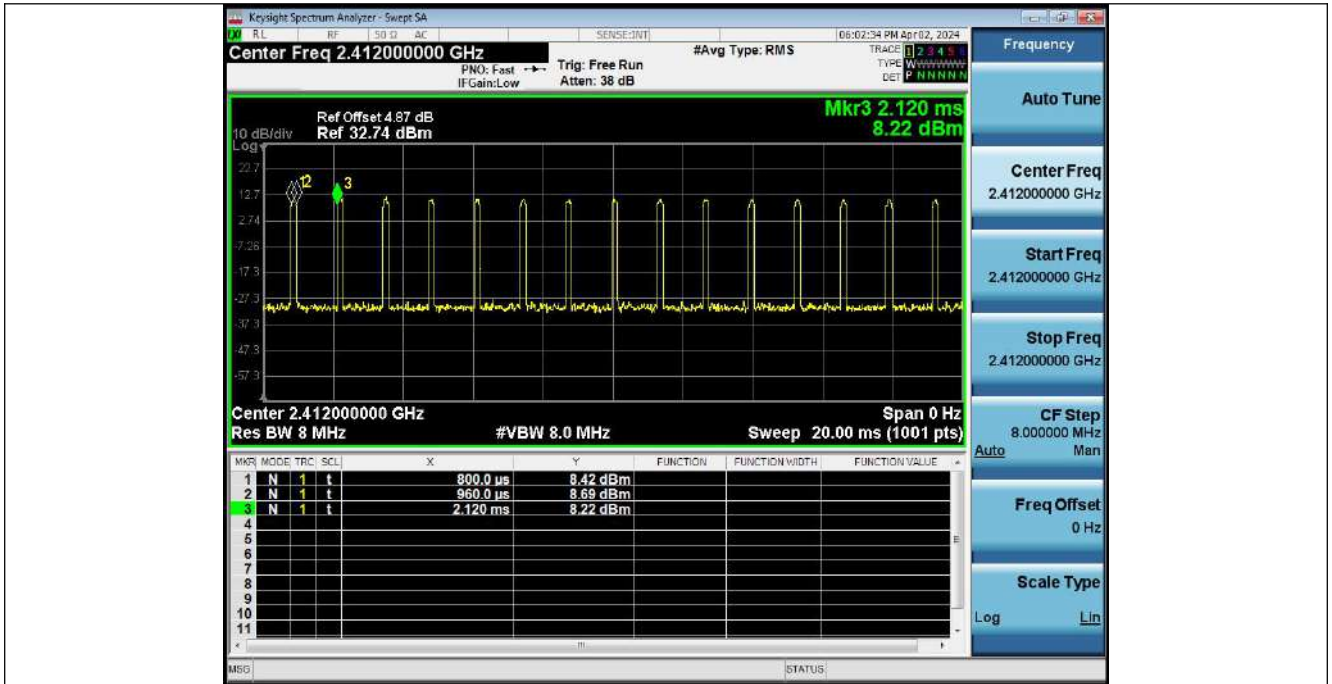


Duty\_Cycle\_NVNT\_ANT1\_802\_11g\_2462

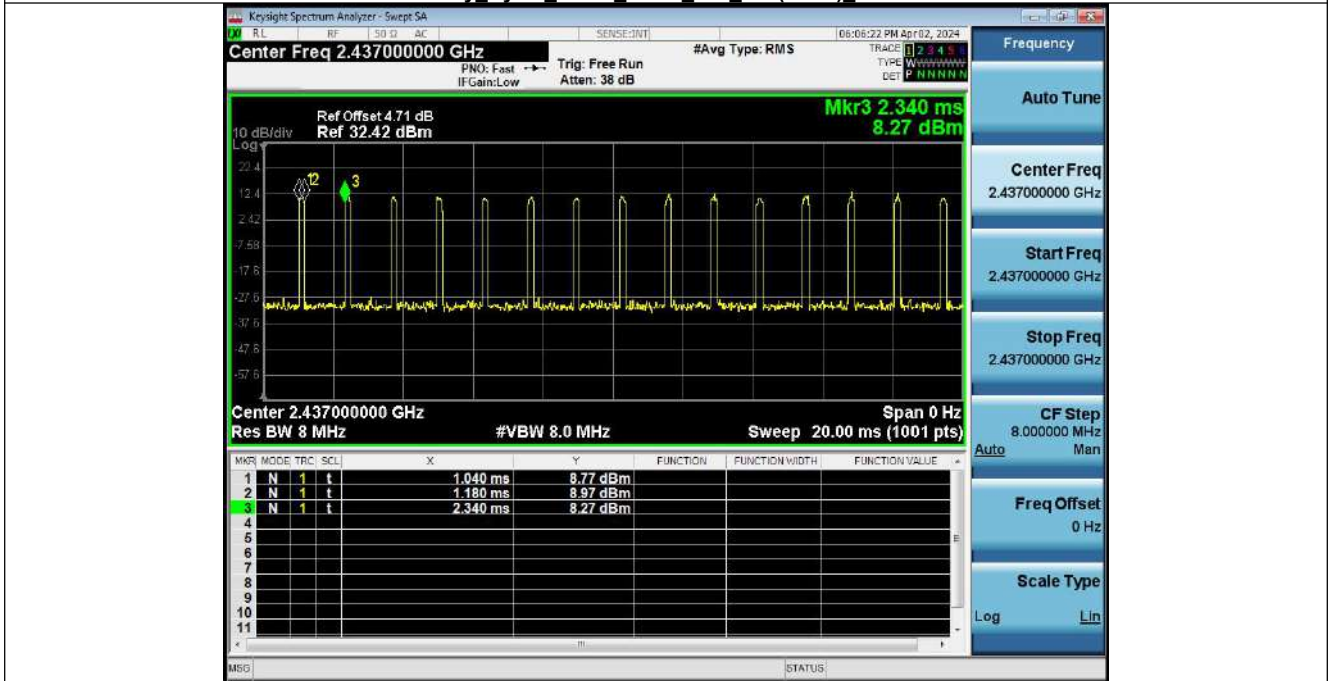


Duty\_Cycle\_NVNT\_ANT1\_802\_11n(HT20)\_2412

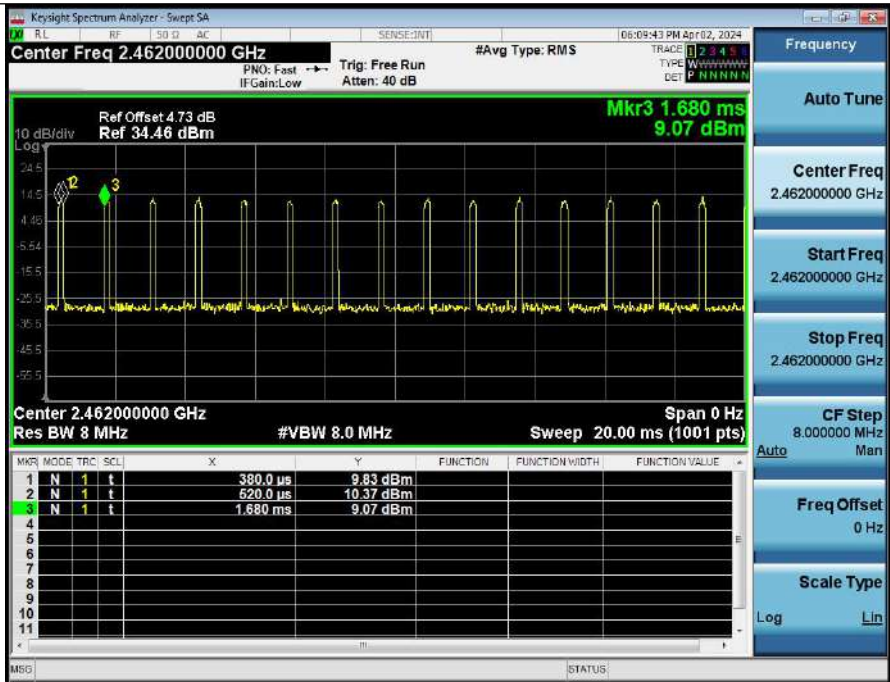




Duty\_Cycle\_NVNT\_ANT1\_802\_11n(HT20)\_2437



Duty\_Cycle\_NVNT\_ANT1\_802\_11n(HT20)\_2462



## 4. MAX. Output Power

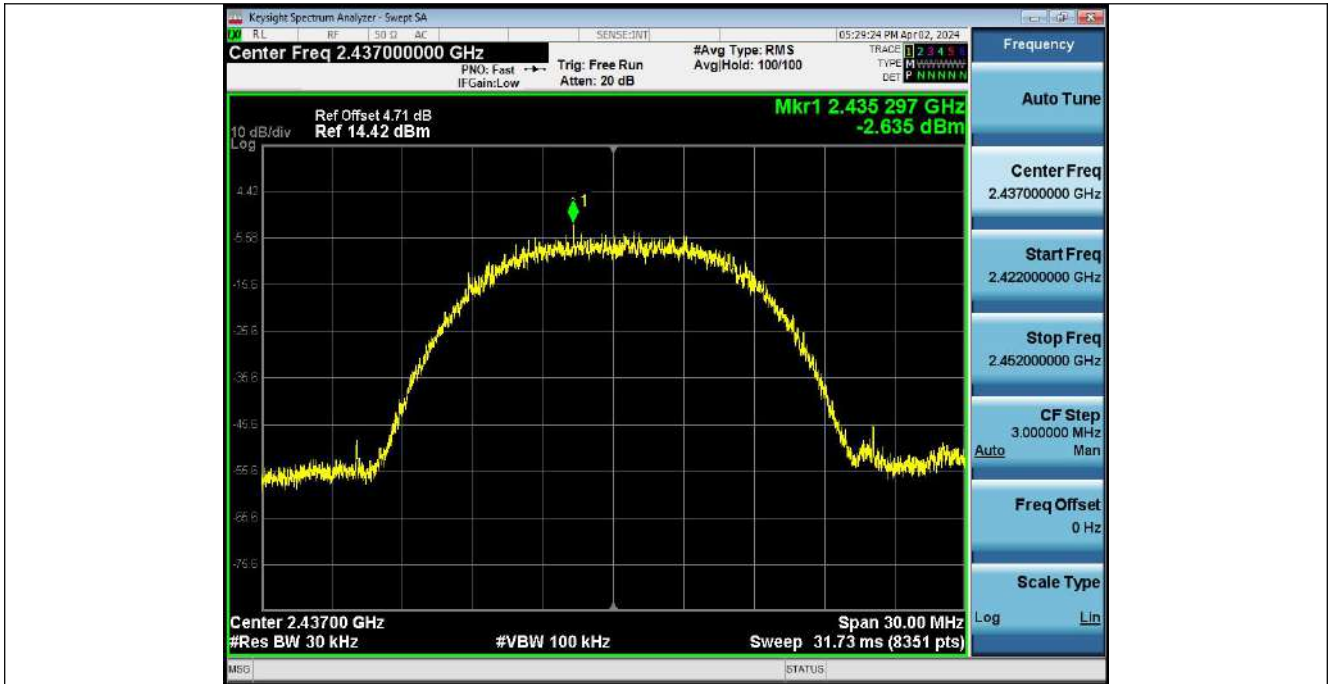
| Condition | Antenna | Modulation    | Frequency (MHz) | Antenna gain | Conducted Power (dBm) | Limit (dBm) | EIRP (dBm) | EIRP limit (dBm) | Result |
|-----------|---------|---------------|-----------------|--------------|-----------------------|-------------|------------|------------------|--------|
| NVNT      | ANT1    | 802.11b       | 2412.00         | 2.21         | 15.00                 | 30          | 17.21      | 36               | Pass   |
| NVNT      | ANT1    | 802.11b       | 2437.00         | 2.21         | 15.71                 | 30          | 17.92      | 36               | Pass   |
| NVNT      | ANT1    | 802.11b       | 2462.00         | 2.21         | 16.70                 | 30          | 18.91      | 36               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2412.00         | 2.21         | 14.20                 | 30          | 16.41      | 36               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2437.00         | 2.21         | 14.64                 | 30          | 16.85      | 36               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2462.00         | 2.21         | 15.96                 | 30          | 18.17      | 36               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00         | 2.21         | 13.61                 | 30          | 15.82      | 36               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00         | 2.21         | 13.98                 | 30          | 16.19      | 36               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00         | 2.21         | 15.34                 | 30          | 17.55      | 36               | Pass   |

5. Power Spectral Density

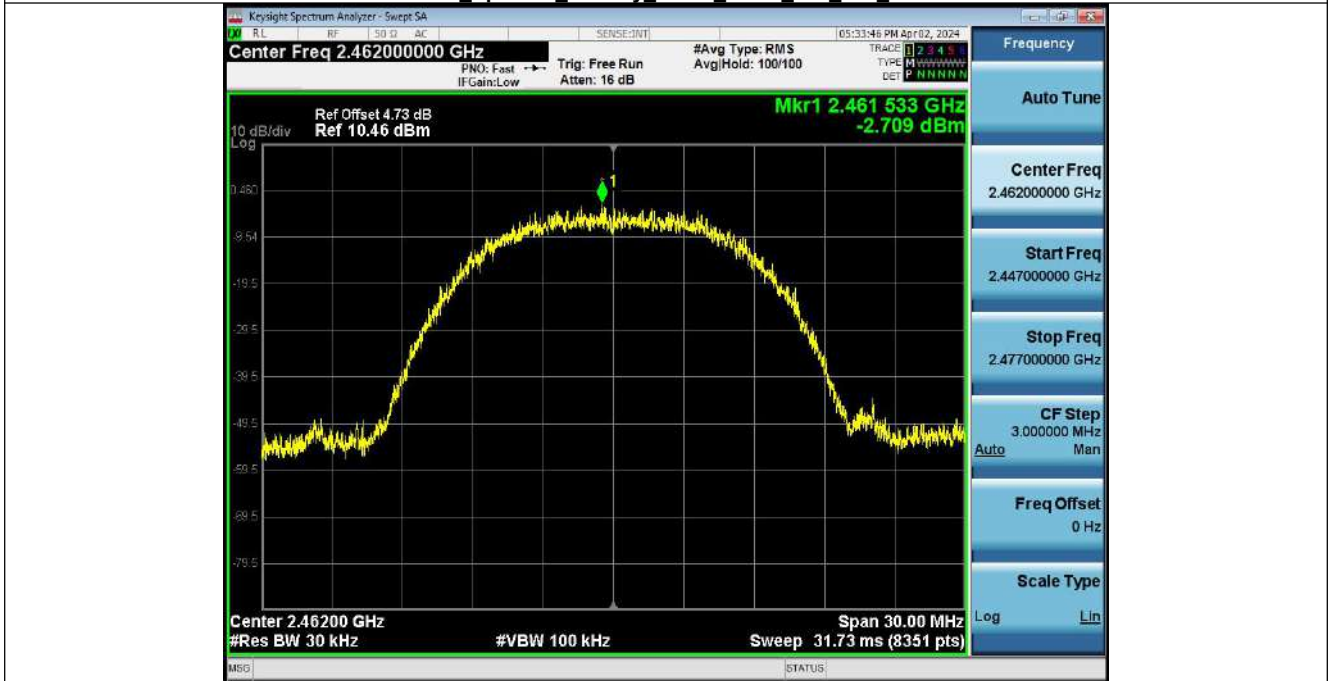
| Condition | Antenna | Modulation    | Frequency (MHz) | PSD(dBm/30kHz) | Duty factor(dB) | RB factor(dB) | PSD(dBm/3kHz) | limit(dBm/3kHz) | Result |
|-----------|---------|---------------|-----------------|----------------|-----------------|---------------|---------------|-----------------|--------|
| NVNT      | ANT1    | 802.11b       | 2412.00         | -2.91          | N/A             | -10.00        | -12.91        | 8               | Pass   |
| NVNT      | ANT1    | 802.11b       | 2437.00         | -2.63          | N/A             | -10.00        | -12.63        | 8               | Pass   |
| NVNT      | ANT1    | 802.11b       | 2462.00         | -2.71          | N/A             | -10.00        | -12.71        | 8               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2412.00         | -8.63          | N/A             | -10.00        | -18.63        | 8               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2437.00         | -8.17          | N/A             | -10.00        | -18.17        | 8               | Pass   |
| NVNT      | ANT1    | 802.11g       | 2462.00         | -7.07          | N/A             | -10.00        | -17.07        | 8               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00         | -9.87          | N/A             | -10.00        | -19.87        | 8               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00         | -9.46          | N/A             | -10.00        | -19.46        | 8               | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00         | -8.18          | N/A             | -10.00        | -18.18        | 8               | Pass   |



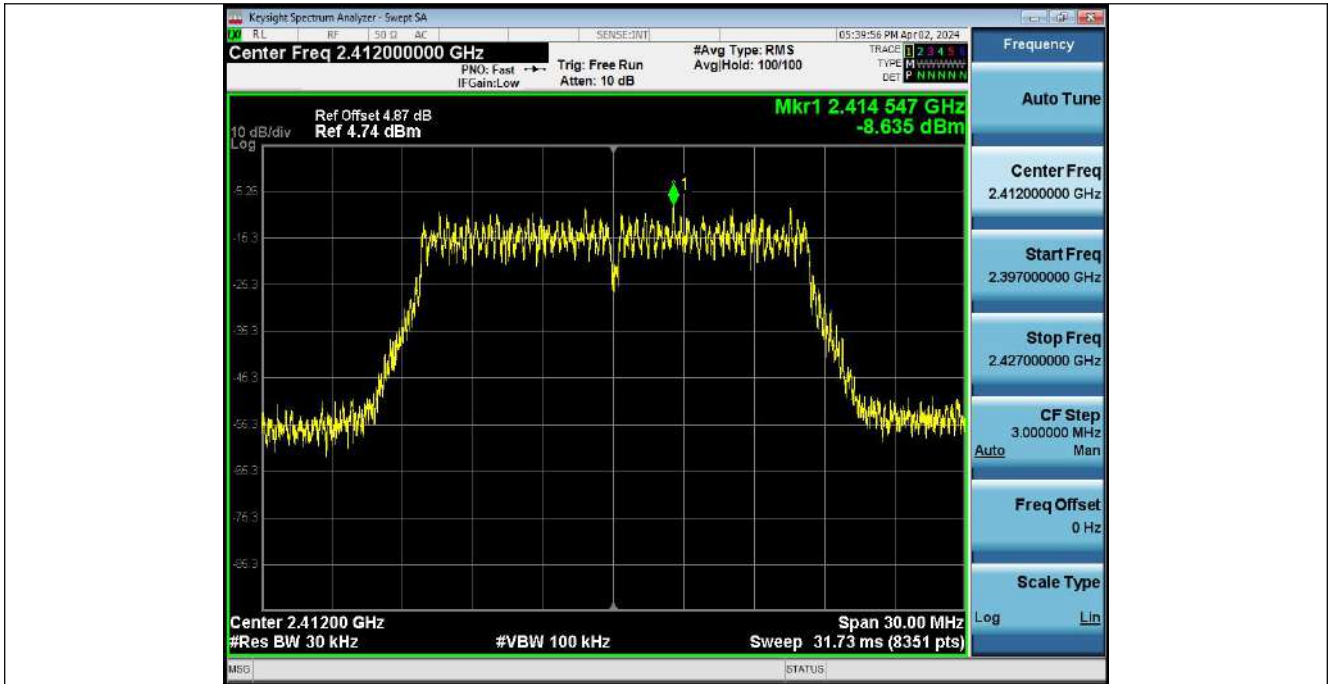
Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11b\_2437



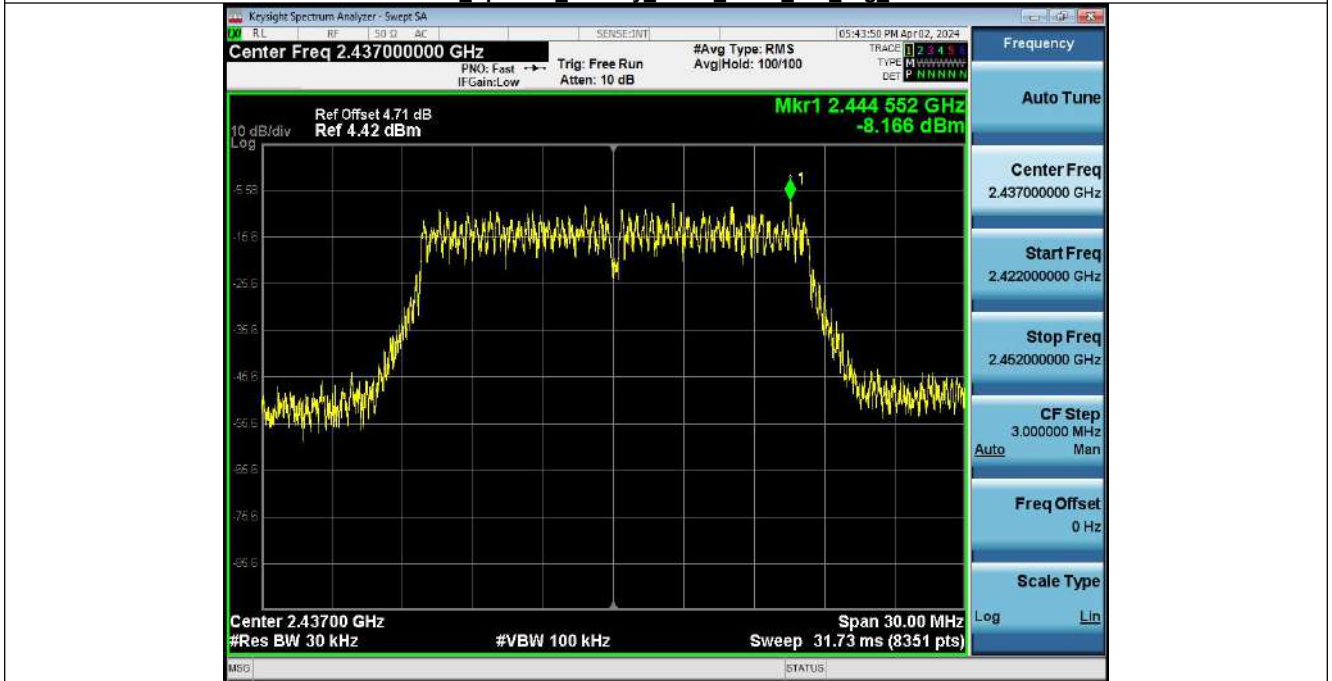
Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11b\_2462



Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11g\_2412

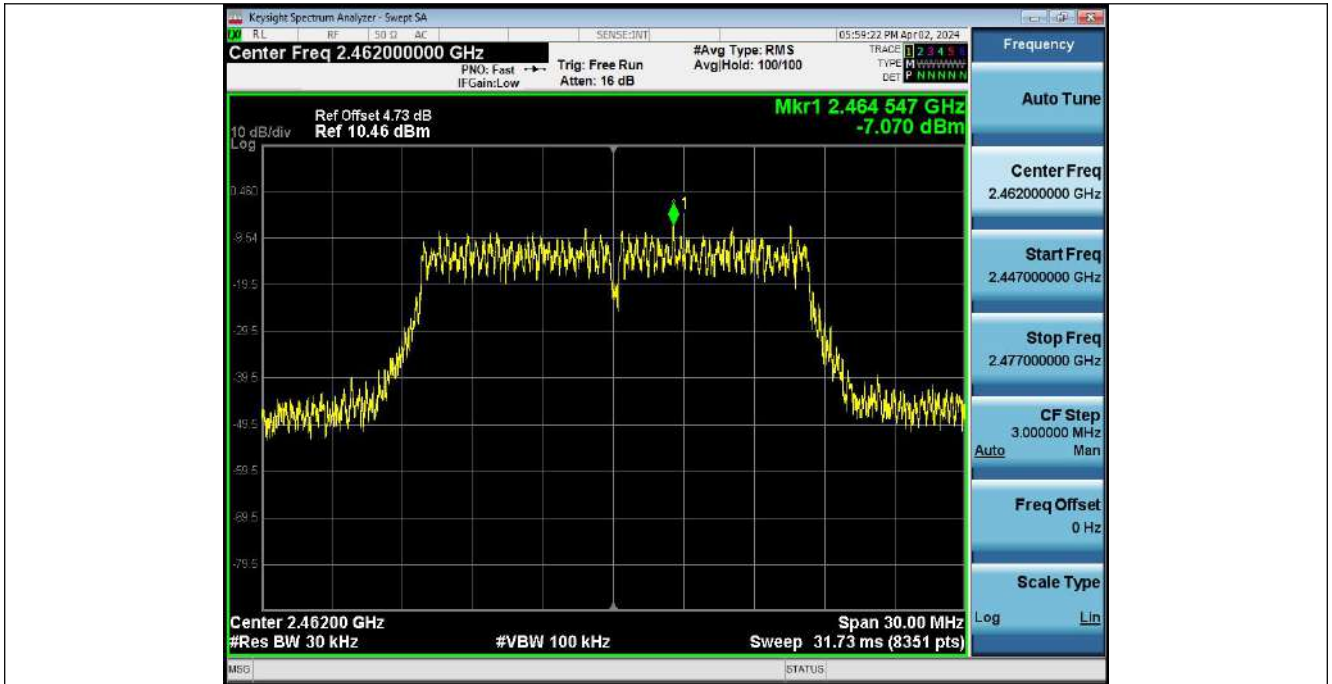


Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11g\_2437

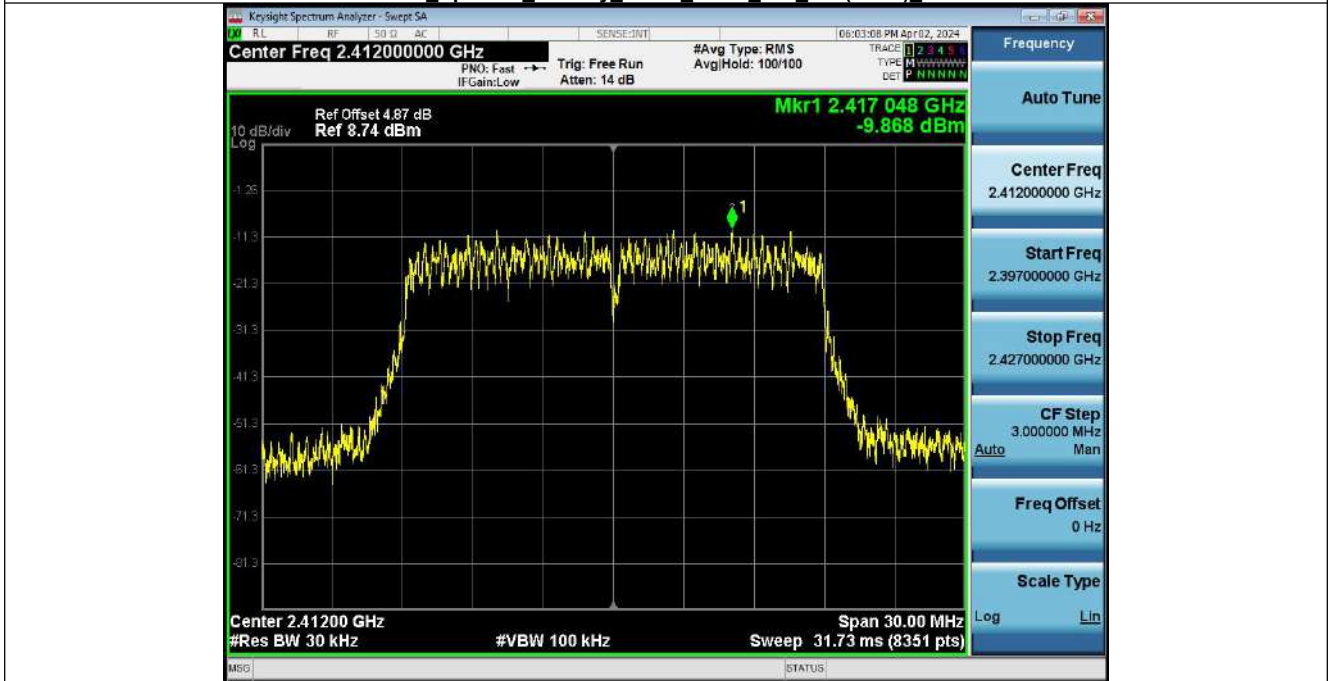


Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11g\_2462

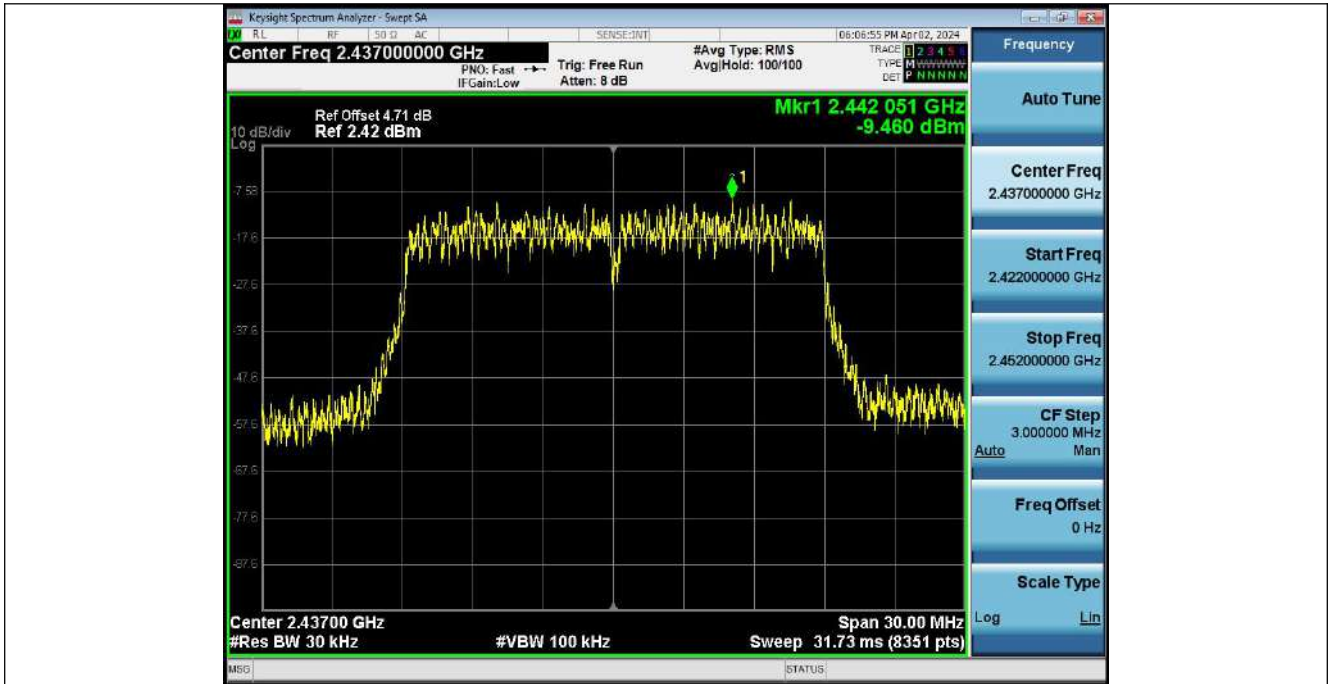




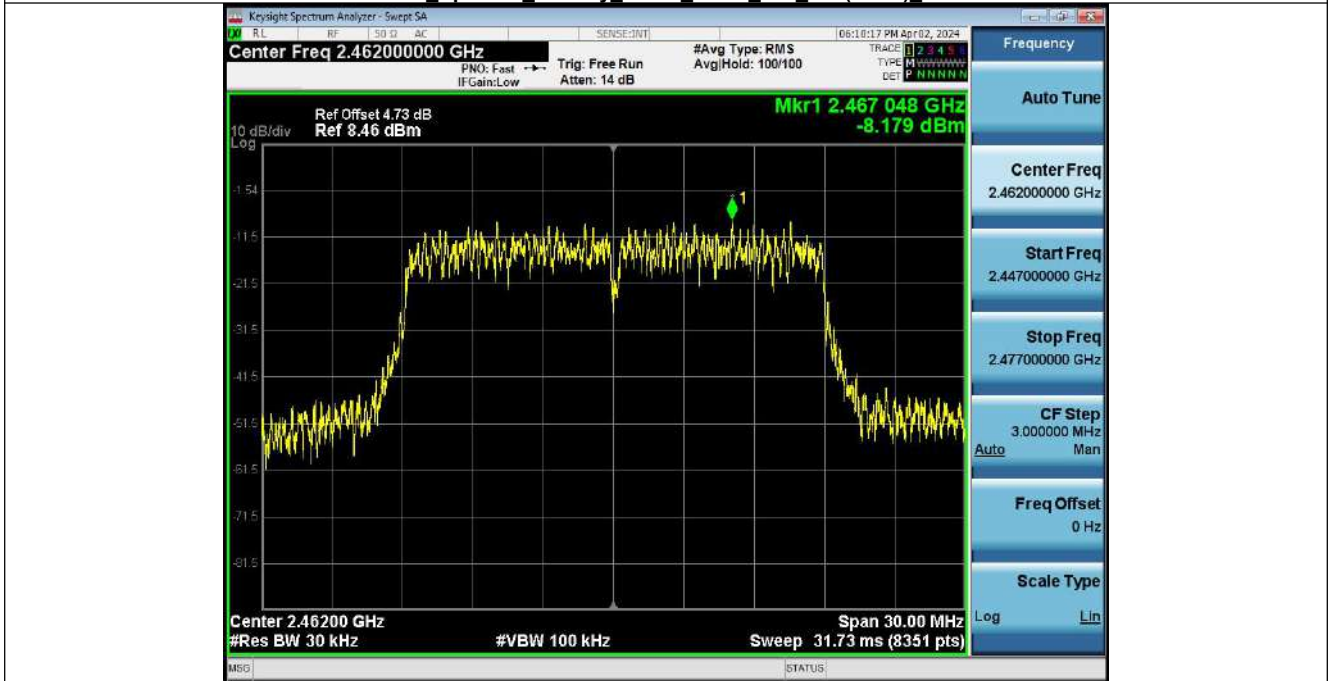
Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT20)\_2412



Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT20)\_2437



Power Spectral Density NVNT ANT1 802\_11n(HT20)\_2462



6. Bandedge

| Condition | Antenna | Modulation    | TX_Frequency (MHz) | Max. Mark_frequency(MHz) | Spurious level(dBm) | limit(dBm) | Result |
|-----------|---------|---------------|--------------------|--------------------------|---------------------|------------|--------|
| NVNT      | ANT1    | 802.11b       | 2412.00            | 2399.824                 | -49.599             | -20.868    | Pass   |
| NVNT      | ANT1    | 802.11b       | 2462.00            | 2483.536                 | -50.246             | -17.585    | Pass   |
| NVNT      | ANT1    | 802.11g       | 2412.00            | 2398.256                 | -47.614             | -23.713    | Pass   |
| NVNT      | ANT1    | 802.11g       | 2462.00            | 2484.880                 | -43.624             | -22.410    | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00            | 2399.600                 | -48.663             | -24.937    | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00            | 2483.584                 | -48.060             | -23.042    | Pass   |

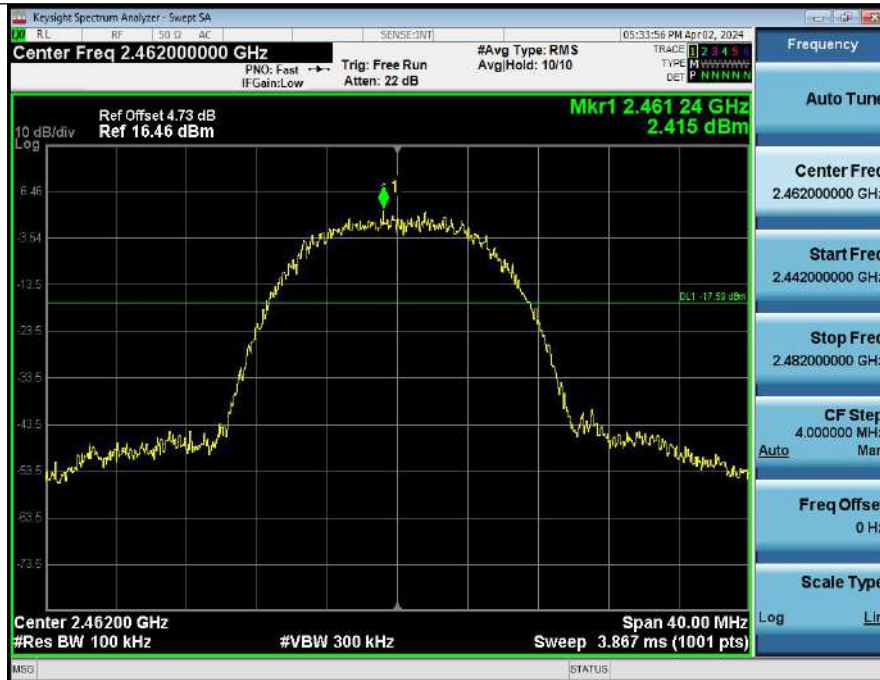
1 Reference Level NVNT\_ANT1\_802\_11b\_2412



2 Bandedge\_NVNT\_ANT1\_802\_11b\_2412



1 Reference\_Level\_NVNT\_ANT1\_802\_11b\_2462

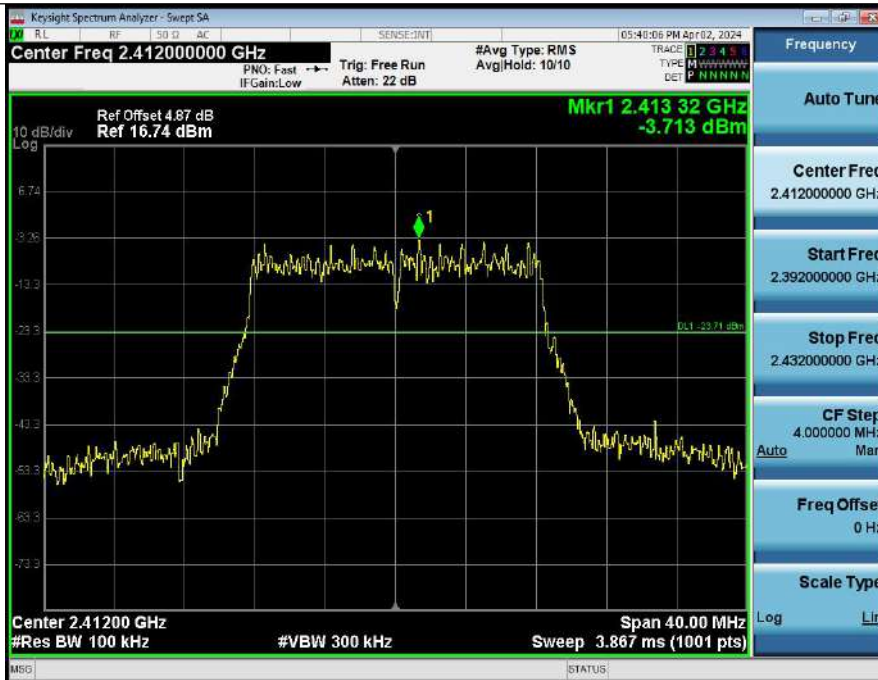


2\_Bandedge\_NVNT\_ANT1\_802\_11b\_2462



1\_Reference\_Level\_NVNT\_ANT1\_802\_11g\_2412

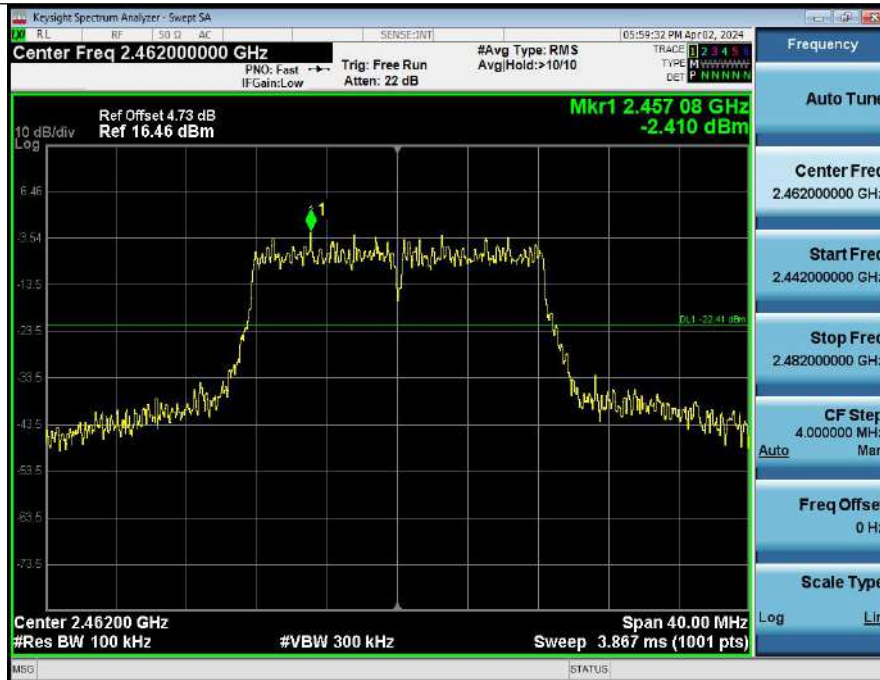




2\_Bandedge\_NVNT\_ANT1\_802\_11g\_2412



1\_Reference\_Level\_NVNT\_ANT1\_802\_11g\_2462



2\_Bandedge\_NVNT\_ANT1\_802\_11g\_2462



1\_Reference\_Level\_NVNT\_ANT1\_802\_11n(HT20)\_2412

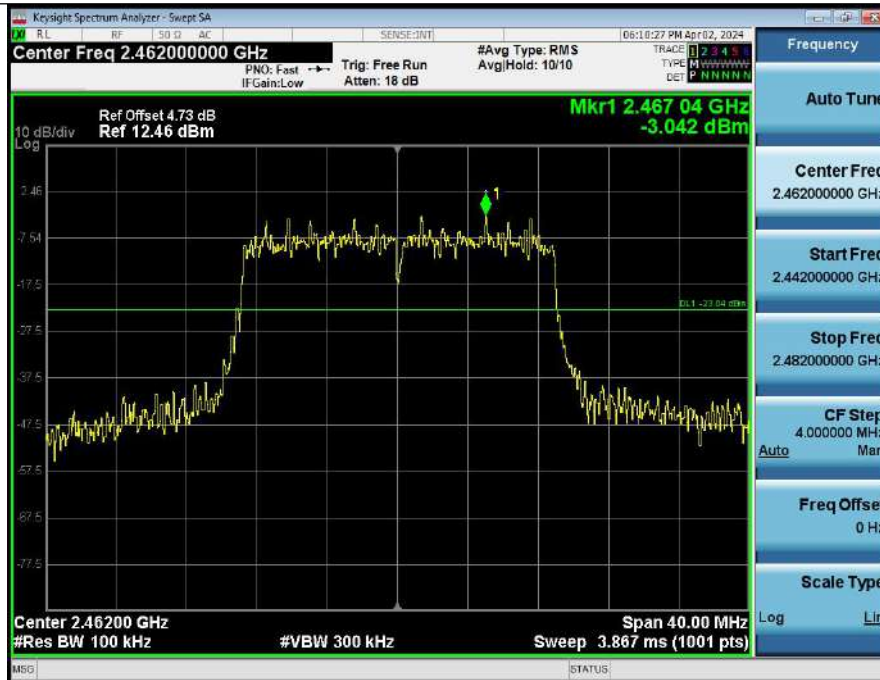




2\_Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2412



1\_Reference\_Level\_NVNT\_ANT1\_802\_11n(HT20)\_2462



## 2\_Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2462



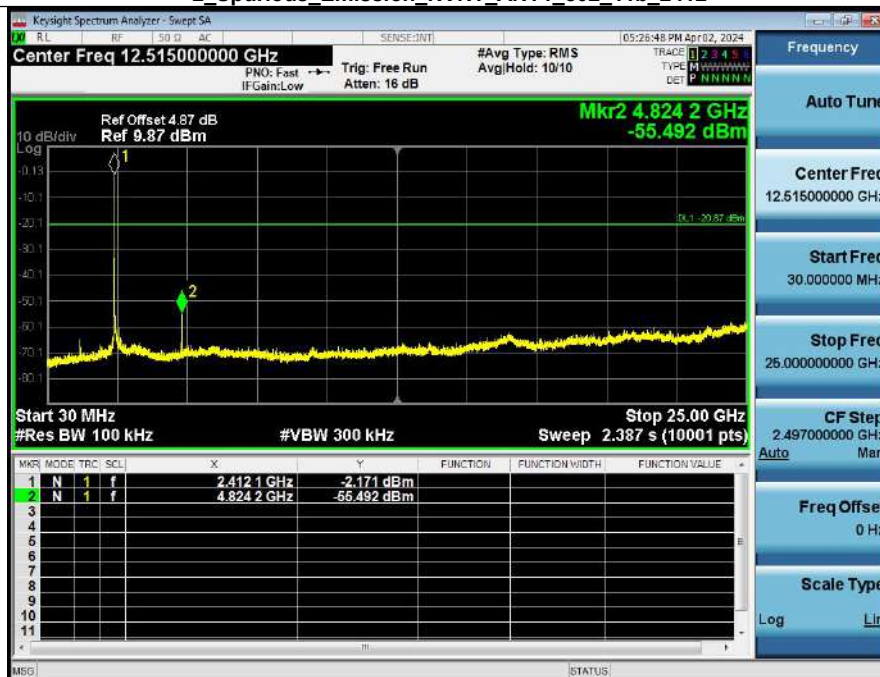
# 7. Spurious Emission

| Condition | Antenna | Modulation    | TX_Frequency (MHz) | Max. Mark_frequency(MHz) | Spurious level(dBm) | limit(dBm) | Result |
|-----------|---------|---------------|--------------------|--------------------------|---------------------|------------|--------|
| NVNT      | ANT1    | 802.11b       | 2412.00            | 4824.240                 | -55.492             | -20.868    | Pass   |
| NVNT      | ANT1    | 802.11b       | 2437.00            | 4874.180                 | -52.853             | -20.665    | Pass   |
| NVNT      | ANT1    | 802.11b       | 2462.00            | 24500.600                | -55.466             | -17.585    | Pass   |
| NVNT      | ANT1    | 802.11g       | 2412.00            | 25000.000                | -55.266             | -23.713    | Pass   |
| NVNT      | ANT1    | 802.11g       | 2437.00            | 24995.006                | -56.242             | -23.962    | Pass   |
| NVNT      | ANT1    | 802.11g       | 2462.00            | 25000.000                | -55.749             | -22.410    | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2412.00            | 24995.006                | -62.307             | -24.937    | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2437.00            | 1745.439                 | -58.242             | -24.546    | Pass   |
| NVNT      | ANT1    | 802.11n(HT20) | 2462.00            | 24513.085                | -58.873             | -23.042    | Pass   |

1\_Reference\_Level\_NVNT\_ANT1\_802\_11b\_2412



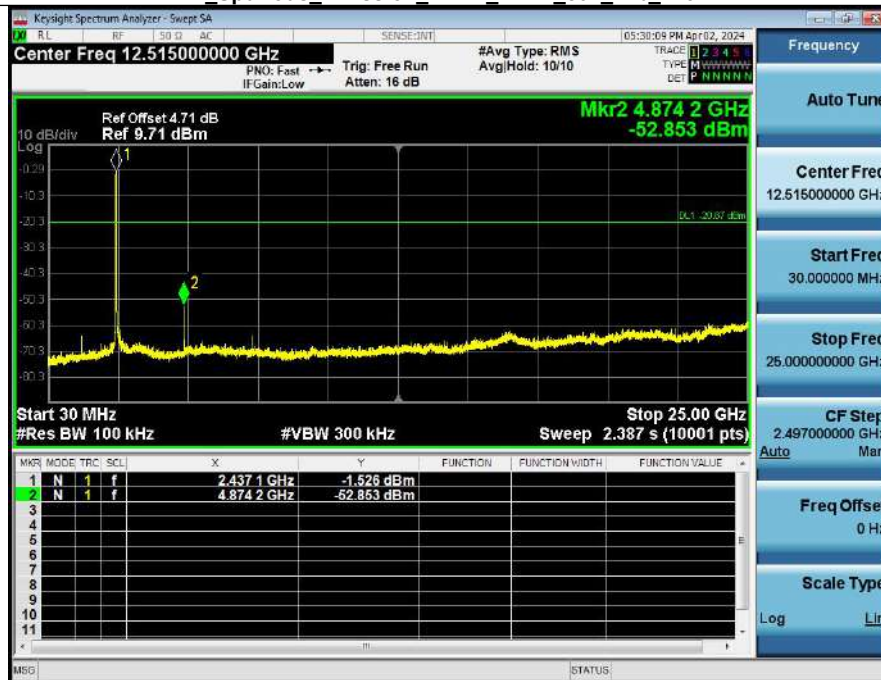
2\_Spurious Emission\_NVNT\_ANT1\_802\_11b\_2412



# 1 Reference Level NVNT\_ANT1\_802\_11b\_2437

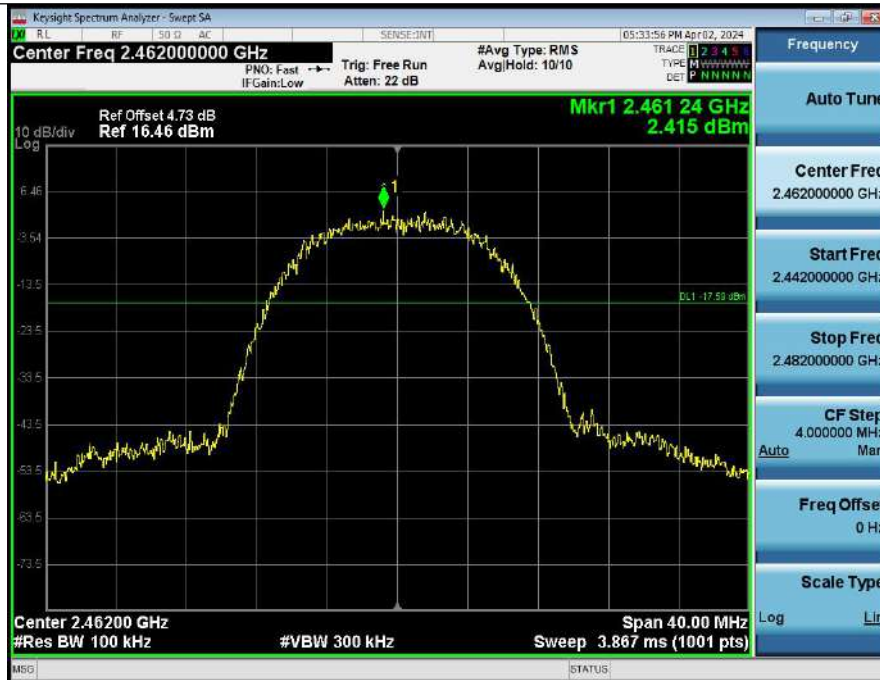


# 2 Spurious Emission NVNT\_ANT1\_802\_11b\_2437

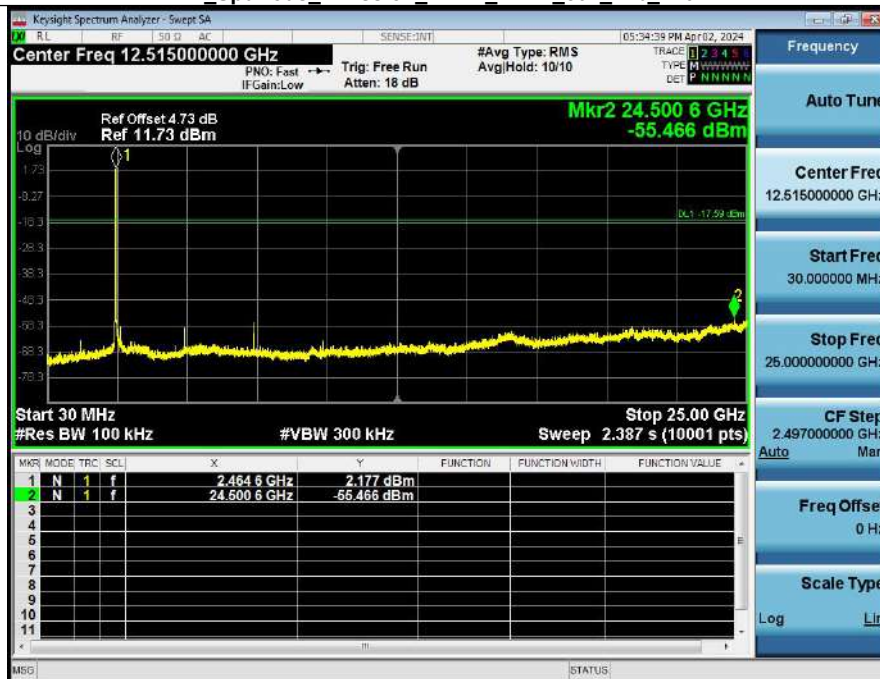


# 1 Reference Level NVNT\_ANT1\_802\_11b\_2462



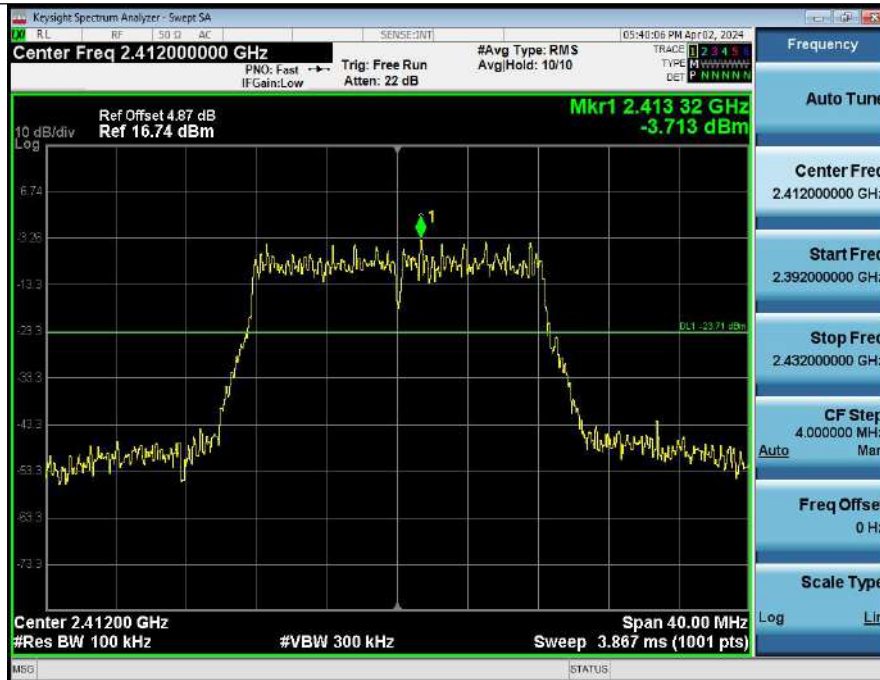


## 2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11b\_2462

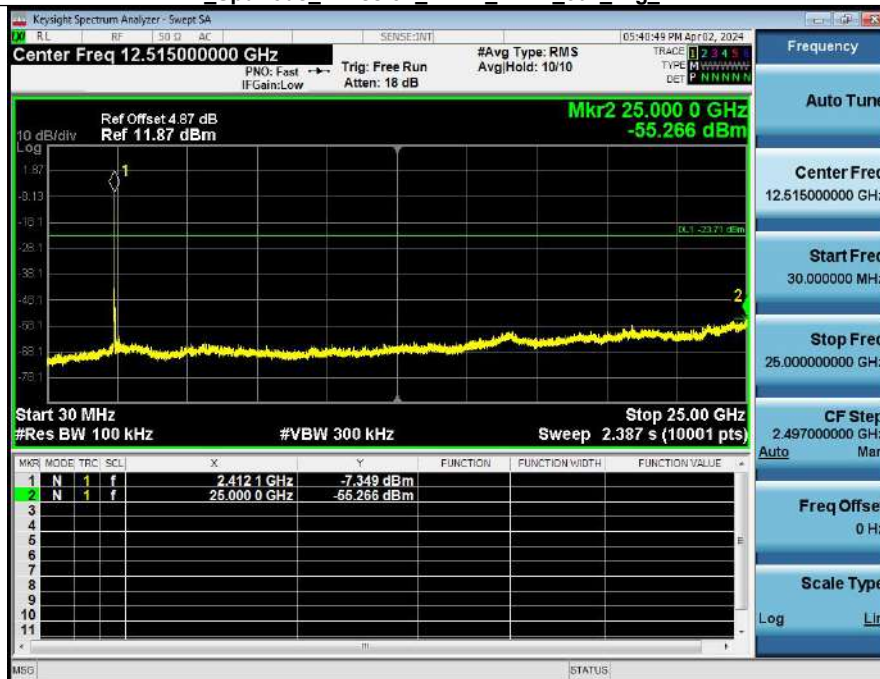


## 1\_Reference\_Level\_NVNT\_ANT1\_802\_11g\_2412

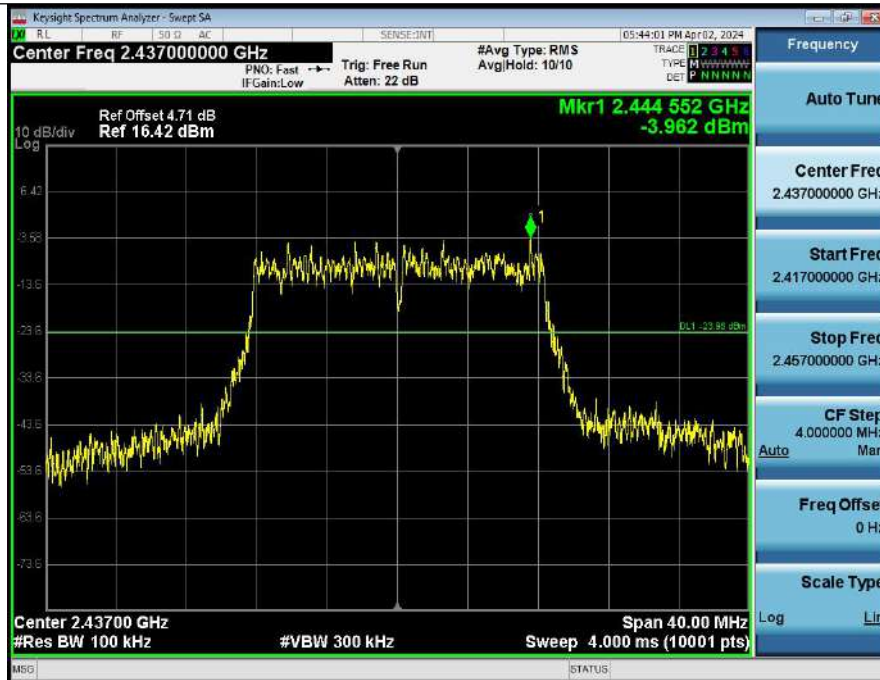




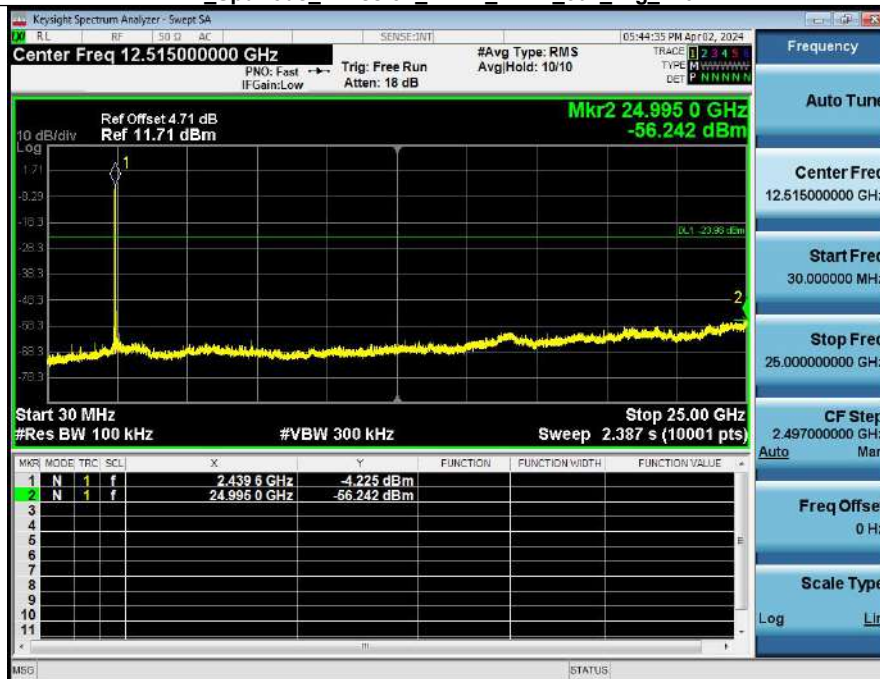
## 2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11g\_2412



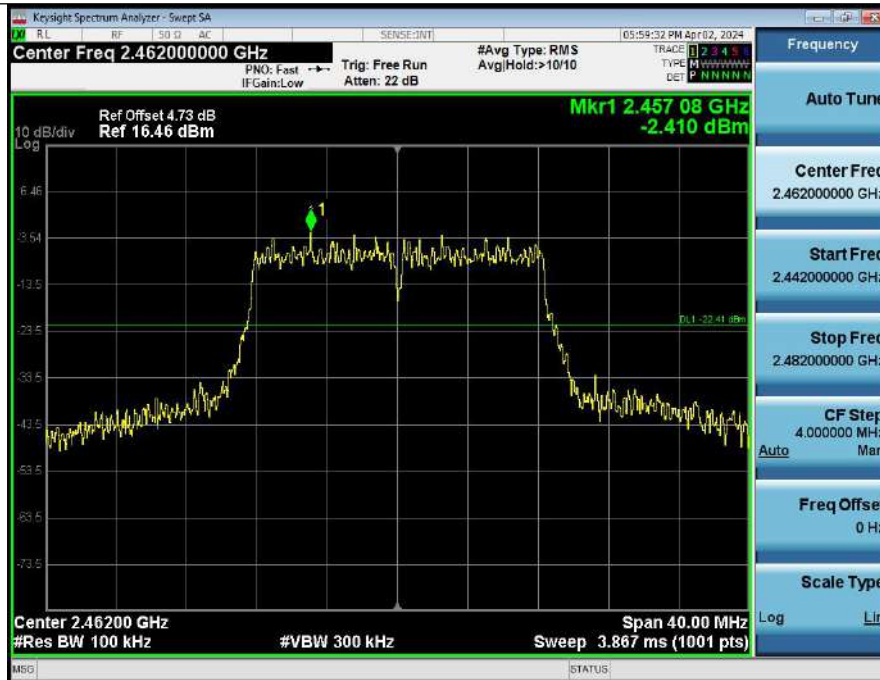
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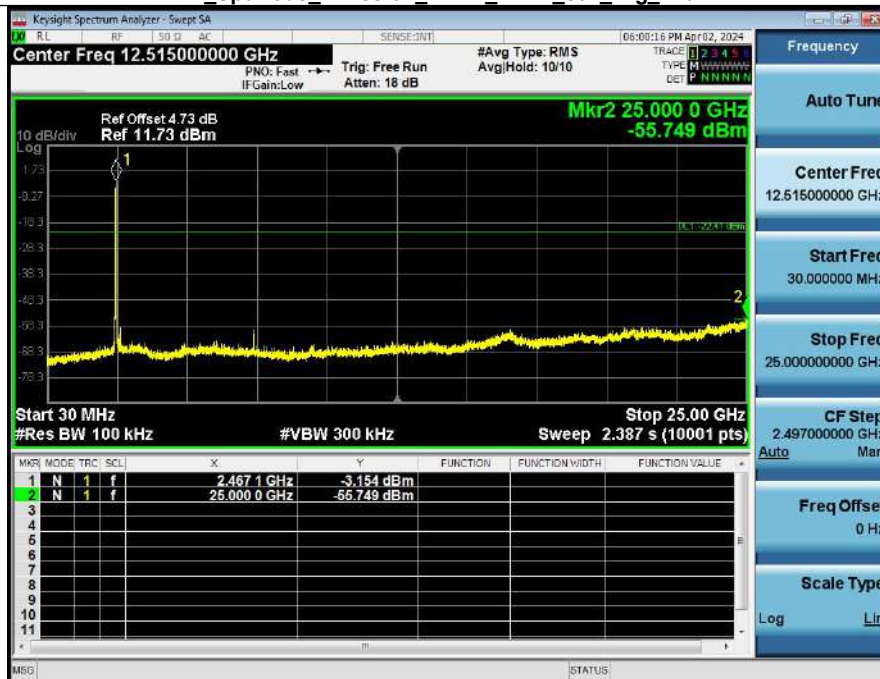
## 2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11g\_2437



## 1\_Reference\_Level\_NVNT\_ANT1\_802\_11g\_2462



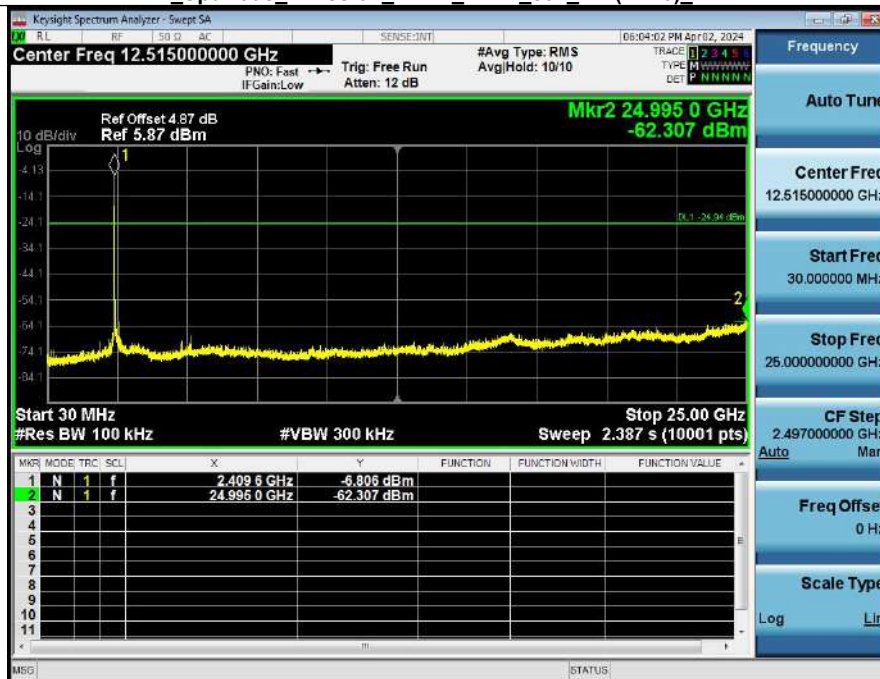
2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11g\_2462



1\_Reference\_Level\_NVNT\_ANT1\_802\_11n(HT20)\_2412



2 Spurious Emission\_NVNT\_ANT1\_802\_11n(HT20)\_2412

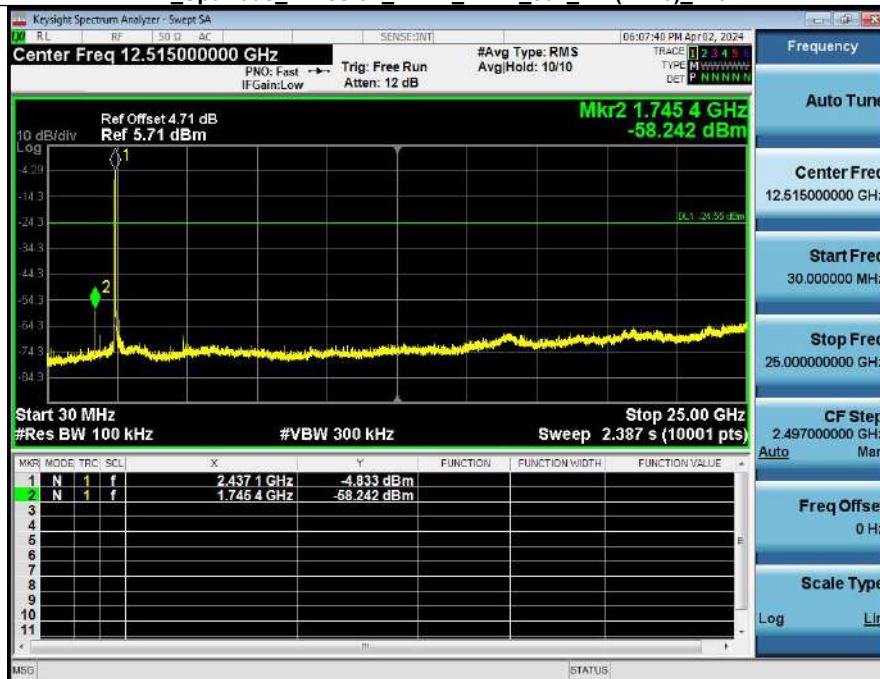


1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2437



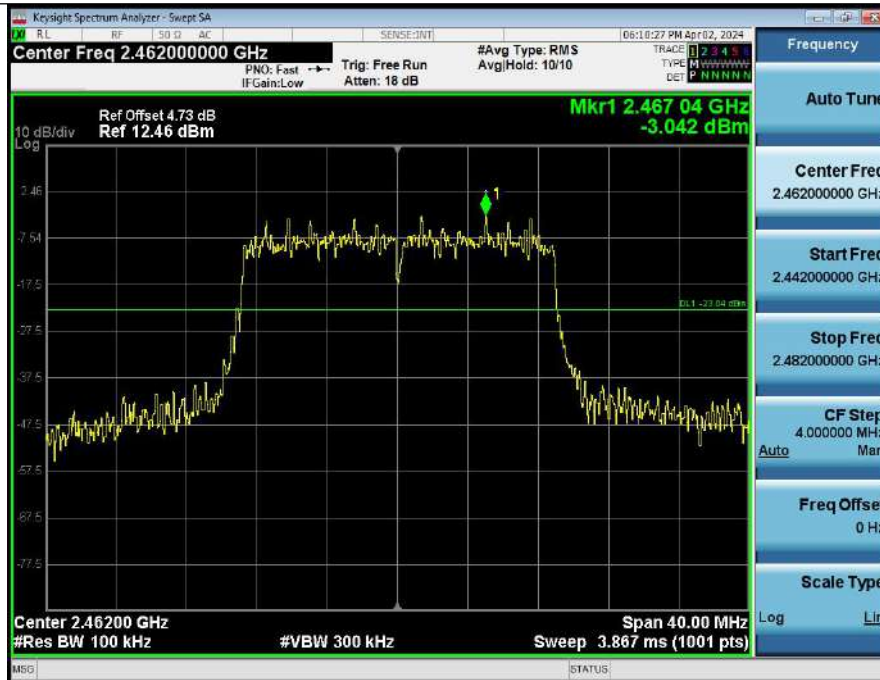


## 2 Spurious Emission\_NVNT\_ANT1\_802\_11n(HT20)\_2437



## 1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2462





## 2 Spurious Emission\_NVNT\_ANT1\_802\_11n(HT20)\_2462

