

Table of Contents

| | |
|---------------------------------|----|
| 1. -6dB Bandwidth | 2 |
| 2. 99% Occupied Bandwidth | 9 |
| 3. Duty Cycle | 16 |
| 5. Power Spectral Density | 23 |
| 6. Bandedge | 30 |
| 7. Spurious Emission | 38 |

FCC ID WIFI2.4

FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

| Condition | Antenna | Modulation | Frequency (MHz) | -6dB BW(MHz) | limit(kHz) | Result |
|-----------|---------|---------------|-----------------|--------------|------------|--------|
| NVNT | ANT1 | 802.11b | 2412.00 | 8.57 | 500 | Pass |
| NVNT | ANT1 | 802.11b | 2437.00 | 8.61 | 500 | Pass |
| NVNT | ANT1 | 802.11b | 2462.00 | 8.59 | 500 | Pass |
| NVNT | ANT1 | 802.11g | 2412.00 | 15.45 | 500 | Pass |
| NVNT | ANT1 | 802.11g | 2437.00 | 15.97 | 500 | Pass |
| NVNT | ANT1 | 802.11g | 2462.00 | 15.38 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | 15.82 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2437.00 | 17.12 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | 16.02 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | 35.09 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2437.00 | 36.20 | 500 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | 35.52 | 500 | Pass |

-6dB Bandwidth_NVNT_ANT1_802_11b_2412



-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



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB Bandwidth NVNT_ANT1_802_11n(HT40)_2437

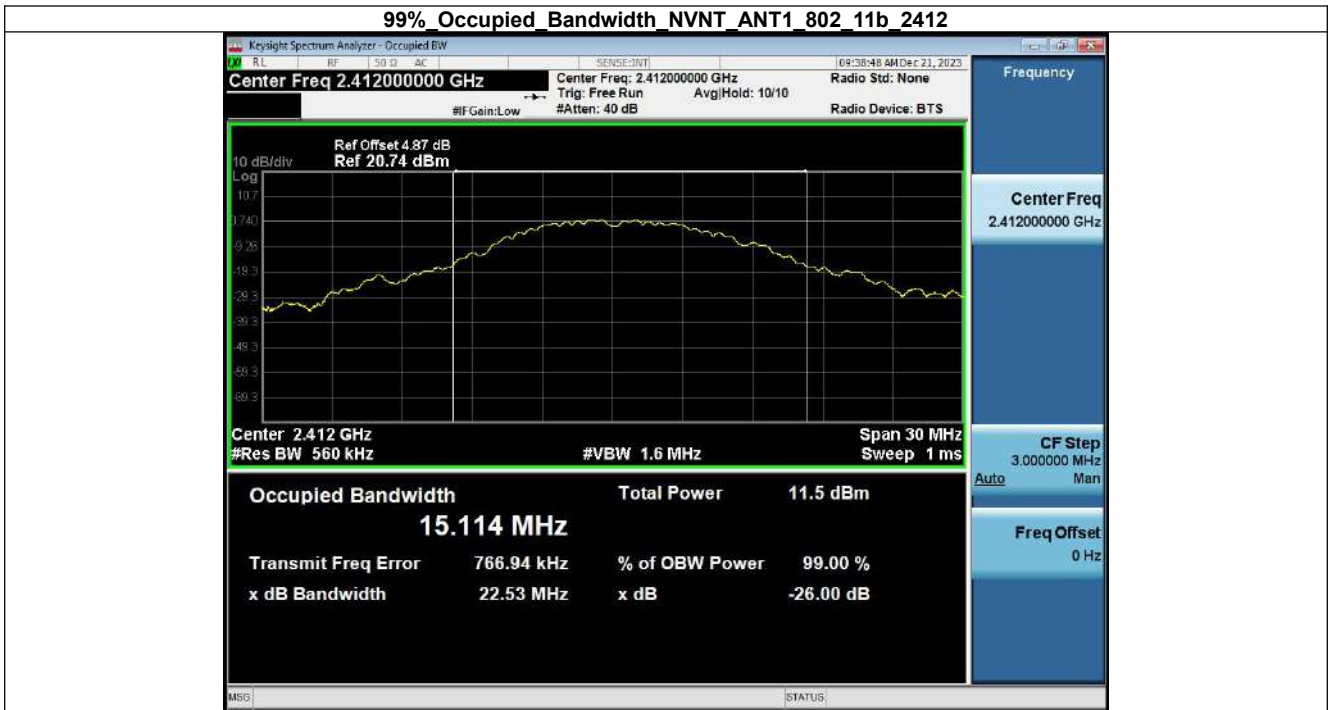


-6dB Bandwidth NVNT_ANT1_802_11n(HT40)_2452



2. 99% Occupied Bandwidth

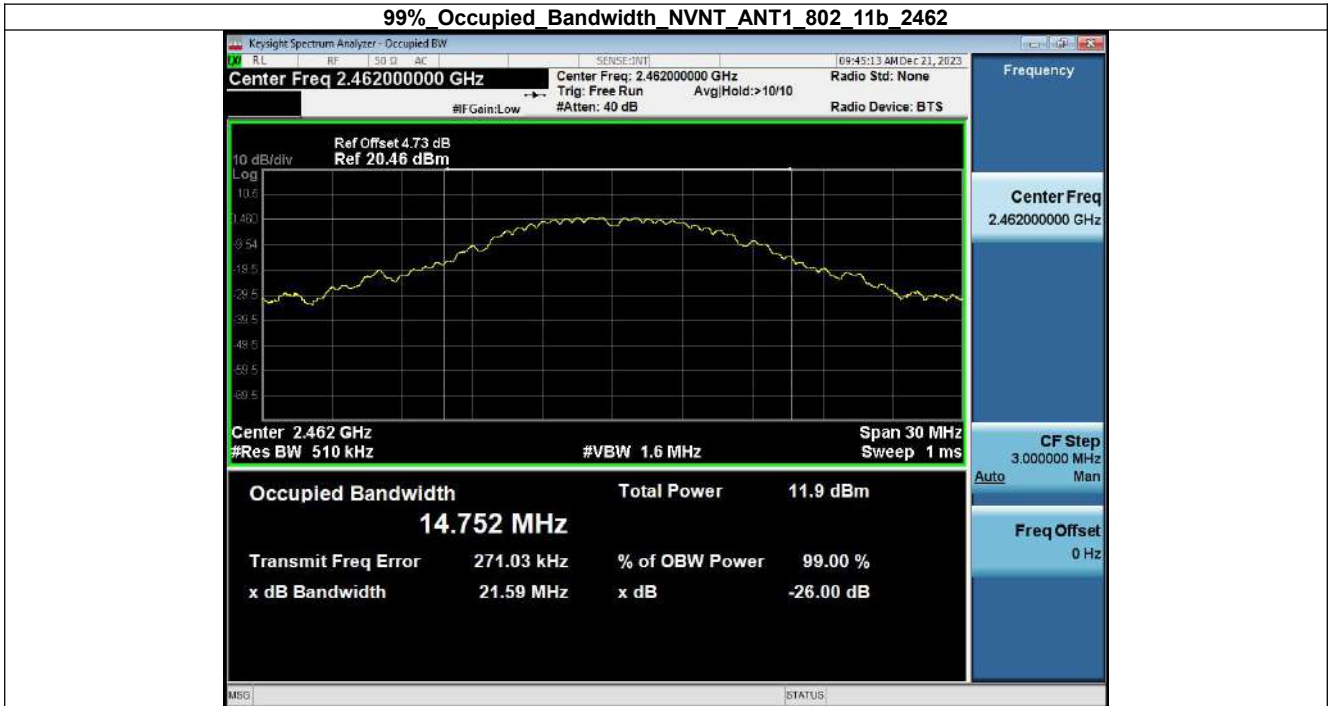
| Condition | Antenna | Modulation | Frequency (MHz) | 99% BW (MHz) |
|-----------|---------|---------------|-----------------|--------------|
| NVNT | ANT1 | 802.11b | 2412.00 | 15.114 |
| NVNT | ANT1 | 802.11b | 2437.00 | 11.994 |
| NVNT | ANT1 | 802.11b | 2462.00 | 14.752 |
| NVNT | ANT1 | 802.11g | 2412.00 | 22.047 |
| NVNT | ANT1 | 802.11g | 2437.00 | 17.298 |
| NVNT | ANT1 | 802.11g | 2462.00 | 22.292 |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | 21.329 |
| NVNT | ANT1 | 802.11n(HT20) | 2437.00 | 18.005 |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | 20.980 |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | 36.745 |
| NVNT | ANT1 | 802.11n(HT40) | 2437.00 | 37.311 |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | 36.511 |



99% Occupied Bandwidth NVNT ANT1 802_11b_2437



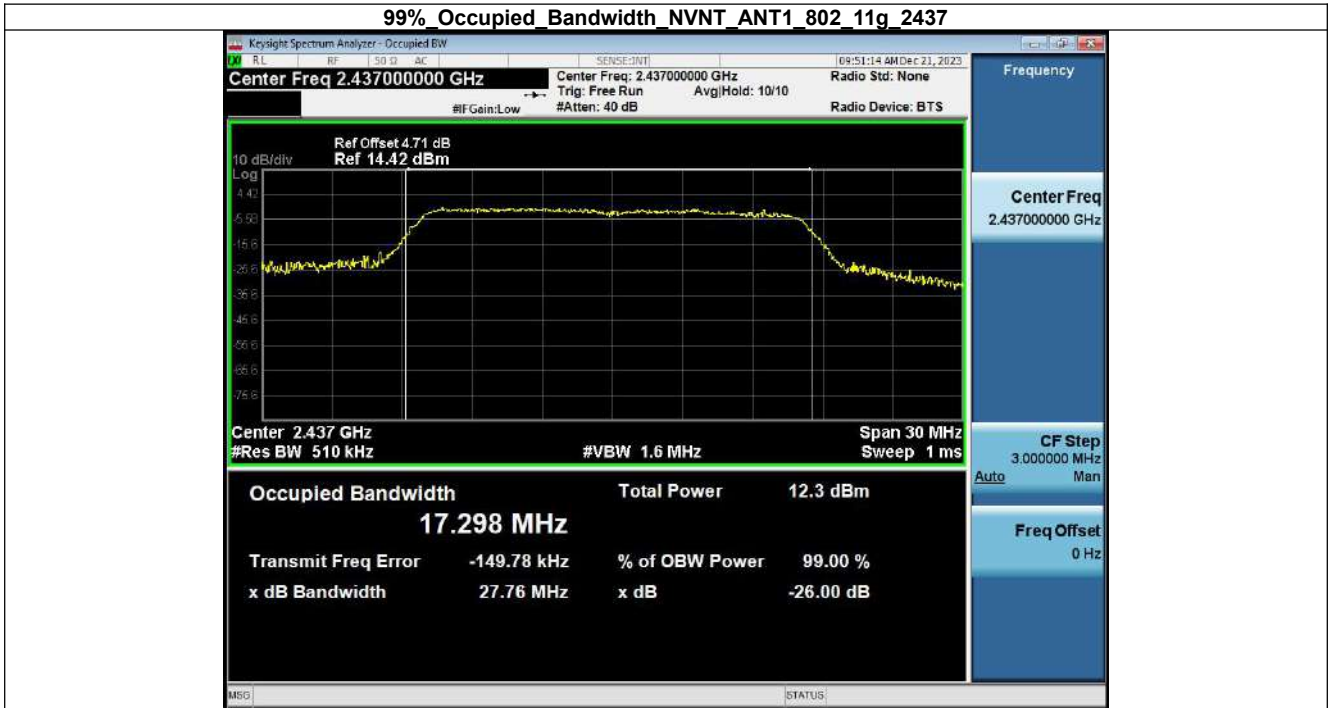
99% Occupied Bandwidth_NVNT_ANT1_802_11b_2462



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



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

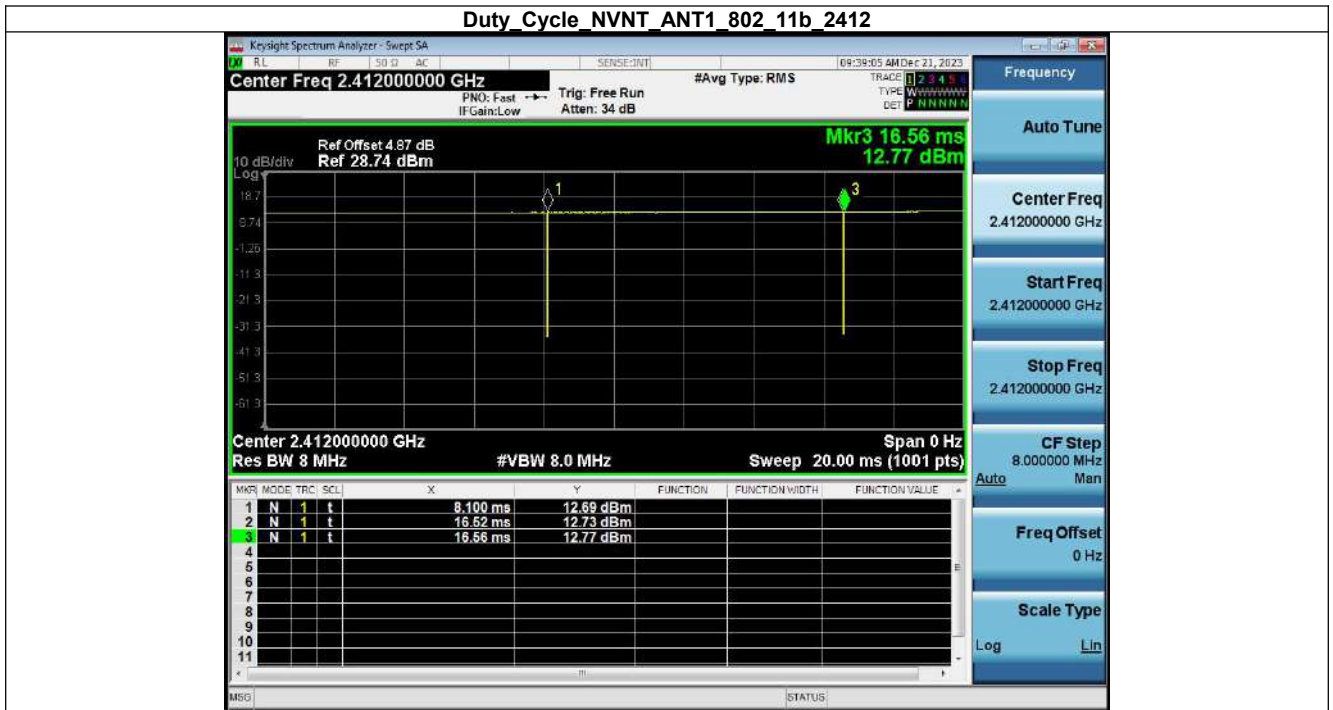


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452

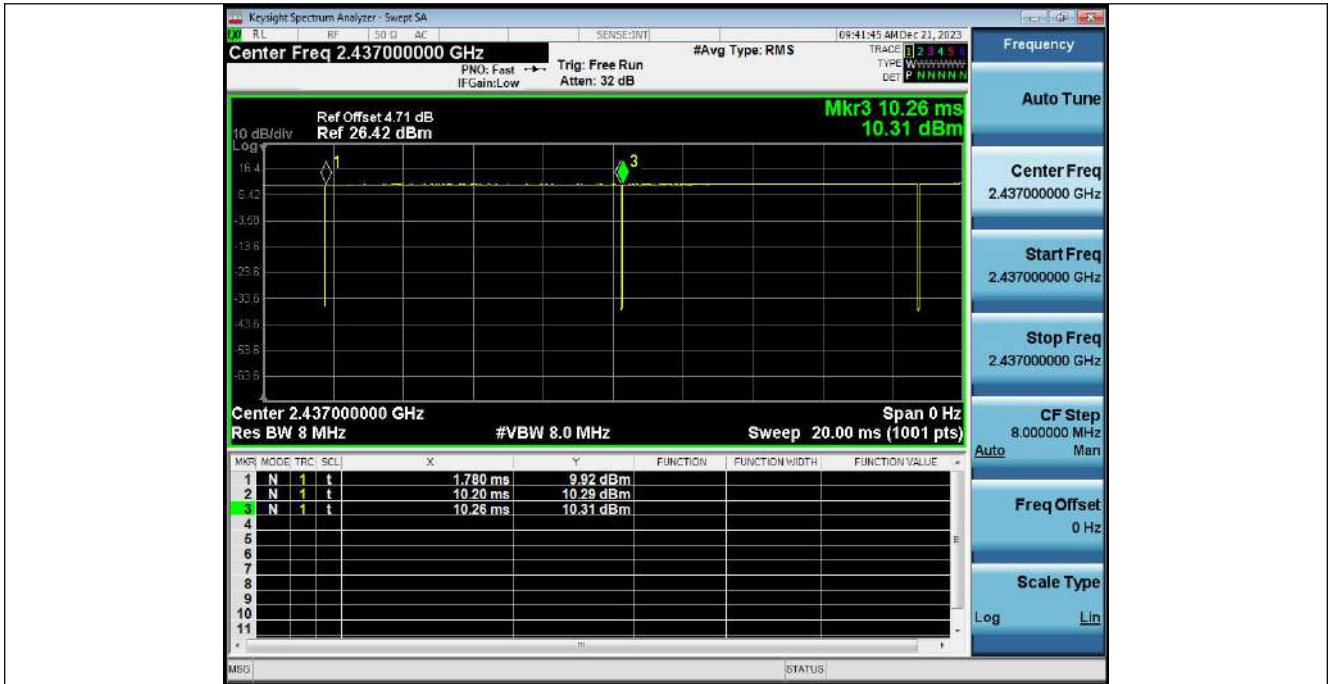


3. Duty Cycle

| Condition | Antenna | Modulation | Frequency (MHz) | Duty cycle(%) | Duty factor(dB) |
|-----------|---------|---------------|-----------------|---------------|-----------------|
| NVNT | ANT1 | 802.11b | 2412.00 | 99.76 | 0.00 |
| NVNT | ANT1 | 802.11b | 2437.00 | 99.53 | 0.00 |
| NVNT | ANT1 | 802.11b | 2462.00 | 99.53 | 0.00 |
| NVNT | ANT1 | 802.11g | 2412.00 | 97.26 | 0.12 |
| NVNT | ANT1 | 802.11g | 2437.00 | 98.61 | 0.00 |
| NVNT | ANT1 | 802.11g | 2462.00 | 97.26 | 0.12 |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | 98.36 | 0.00 |
| NVNT | ANT1 | 802.11n(HT20) | 2437.00 | 96.77 | 0.14 |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | 98.36 | 0.00 |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | 96.88 | 0.14 |
| NVNT | ANT1 | 802.11n(HT40) | 2437.00 | 96.88 | 0.14 |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | 90.63 | 0.43 |



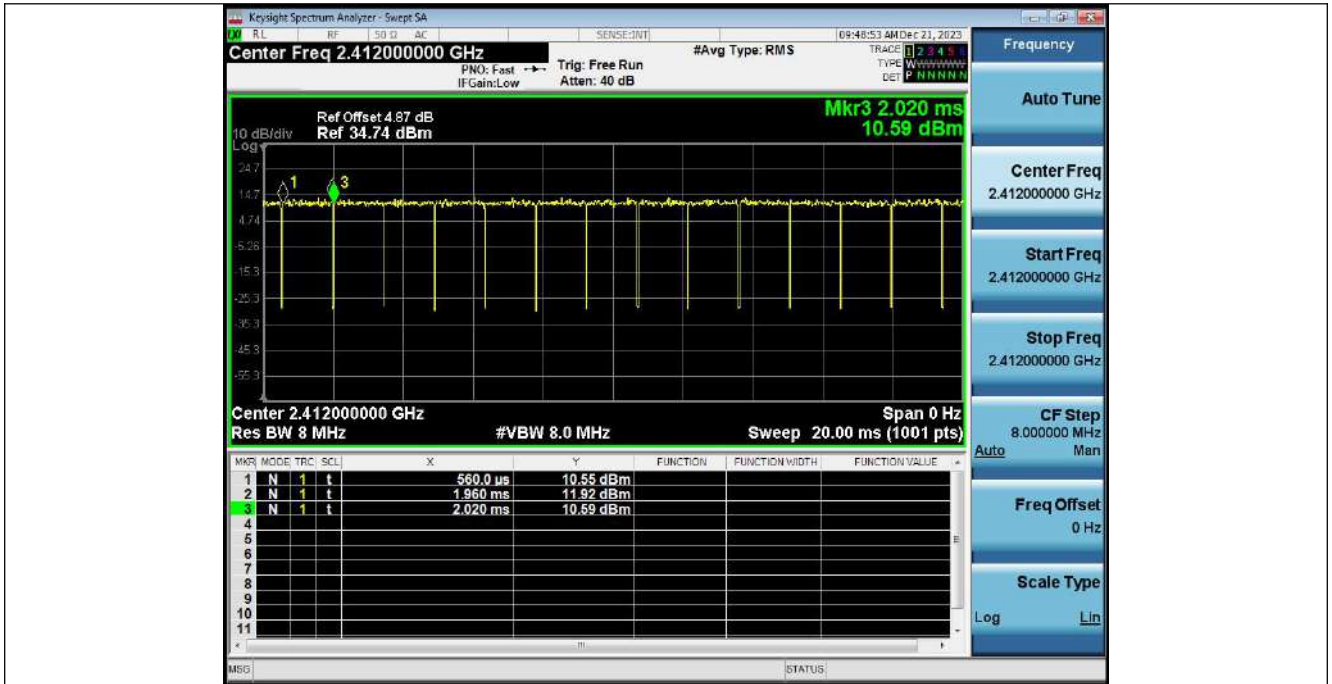
Duty Cycle NVNT ANT1 802_11b_2437



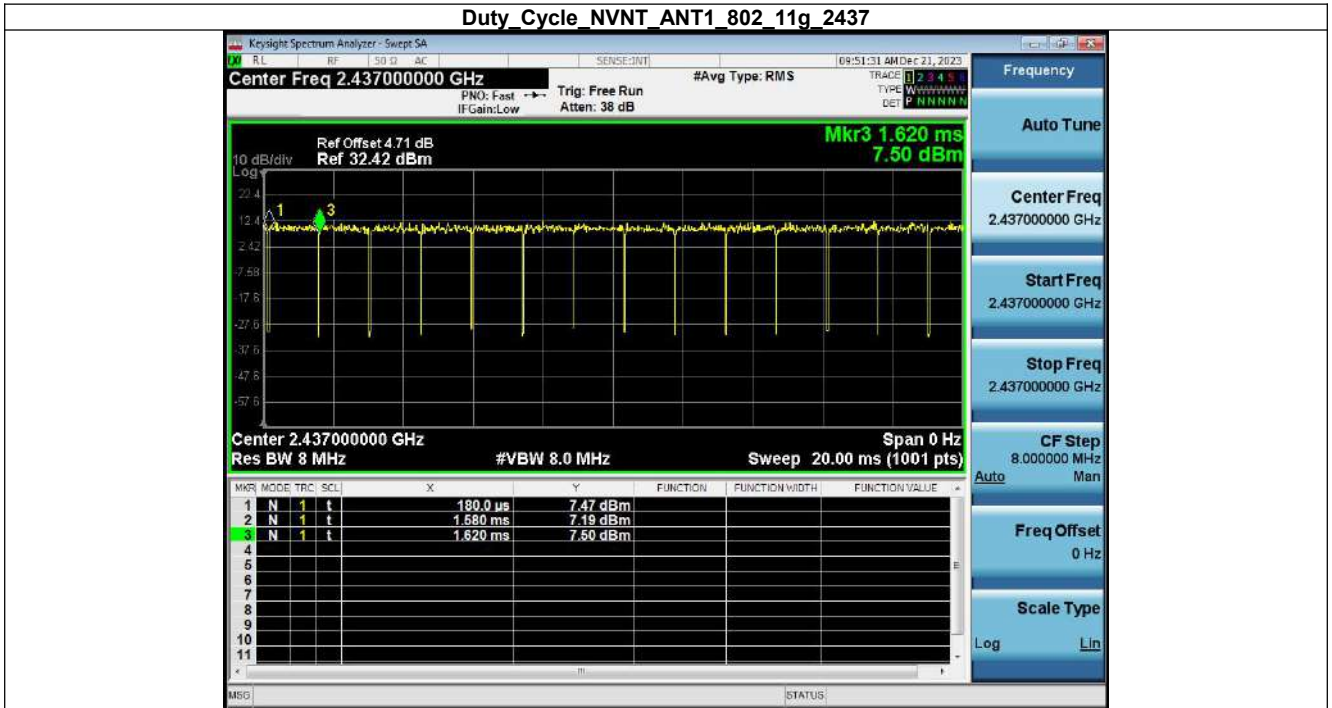
Duty Cycle NVNT ANT1 802_11b_2462



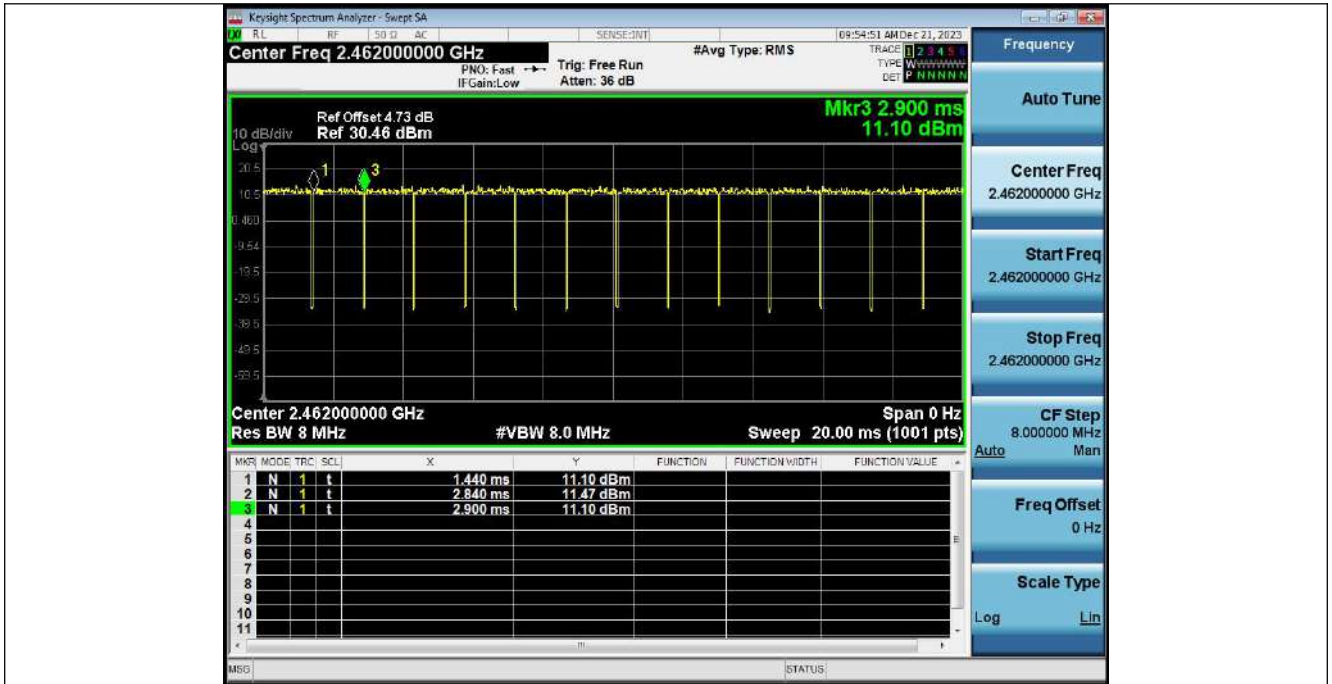
Duty Cycle NVNT ANT1 802_11g_2412



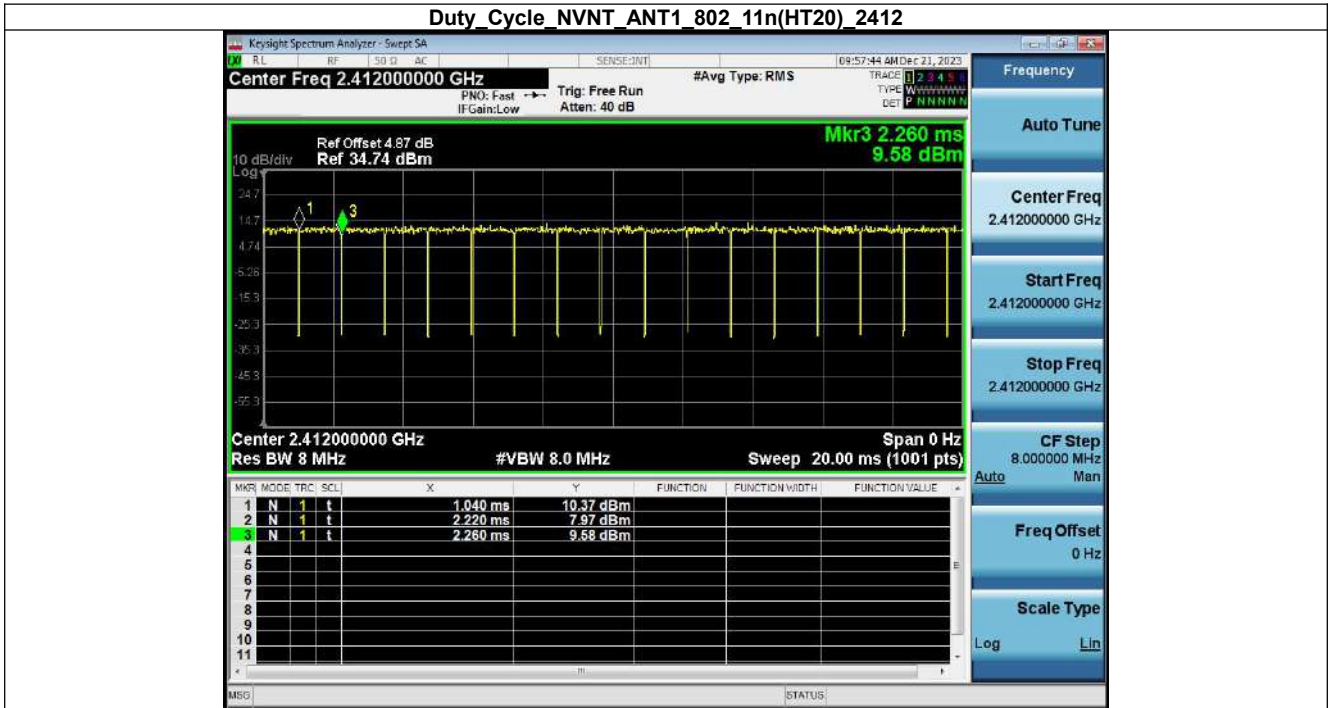
Duty Cycle NVNT ANT1 802_11g_2437



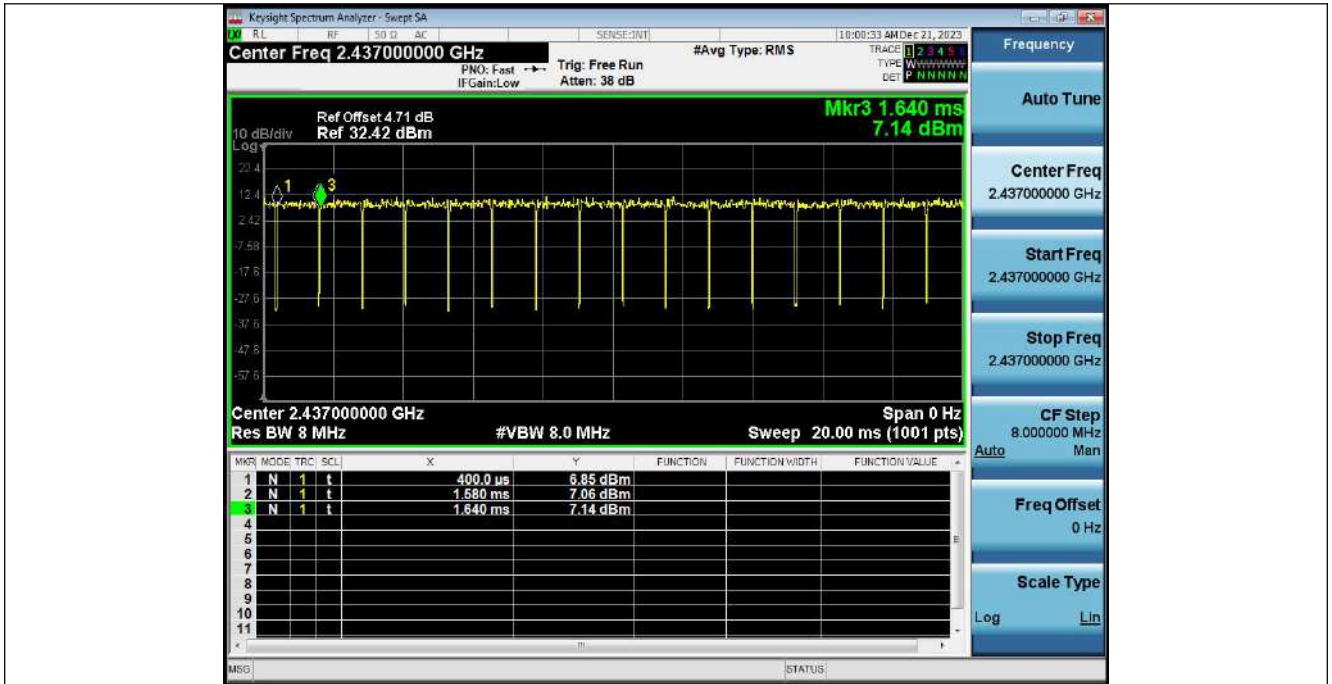
Duty Cycle NVNT ANT1 802_11g_2462



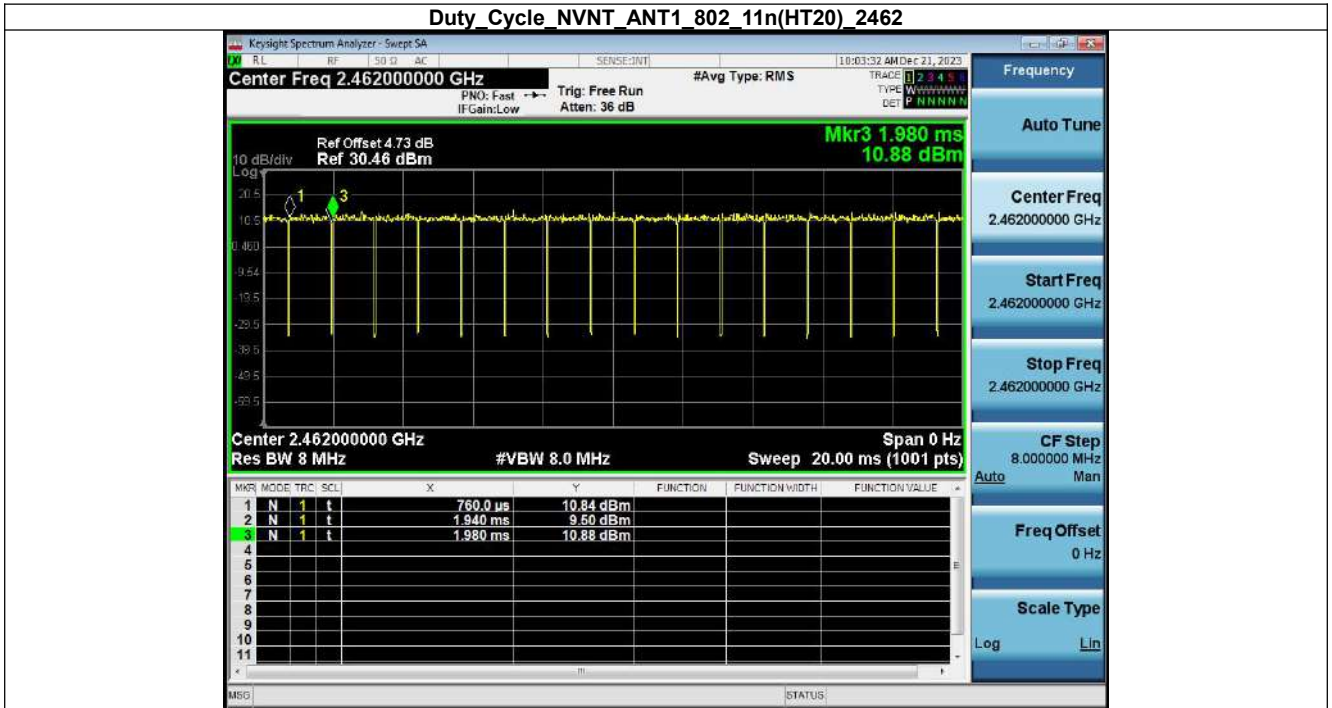
Duty Cycle_NVNT_ANT1_802_11n(HT20)_2412



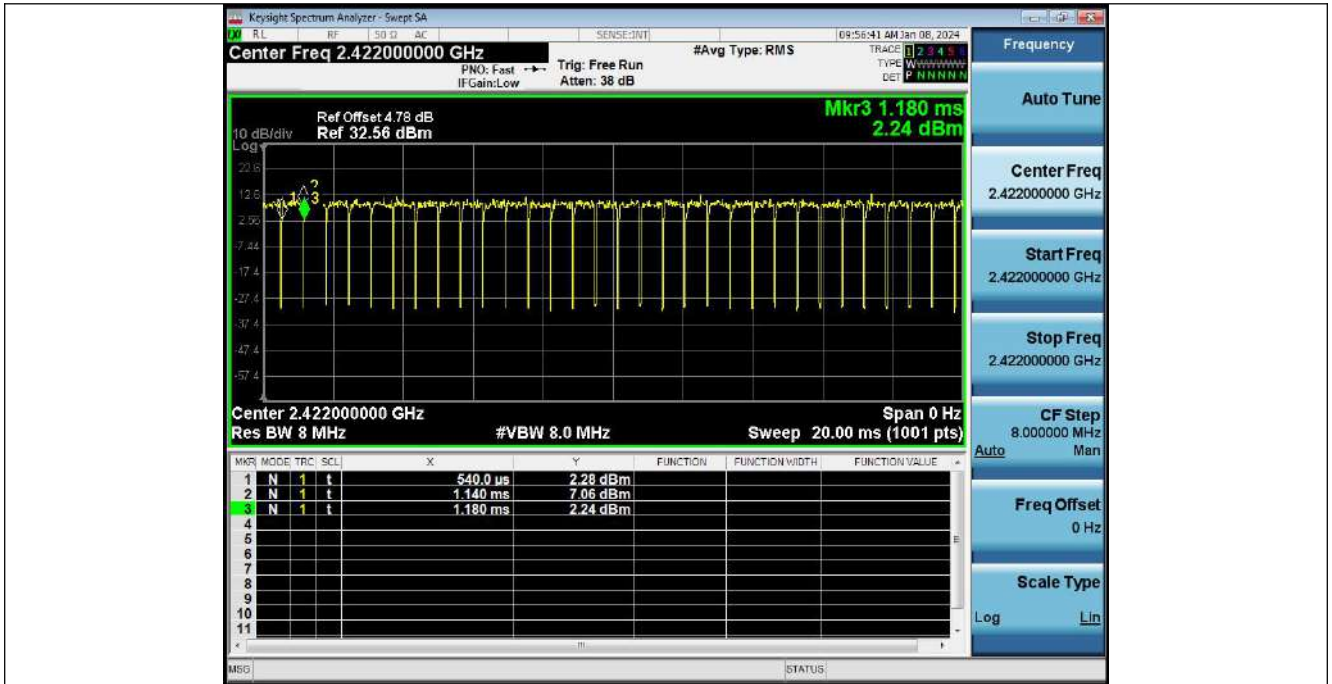
Duty Cycle_NVNT_ANT1_802_11n(HT20)_2437



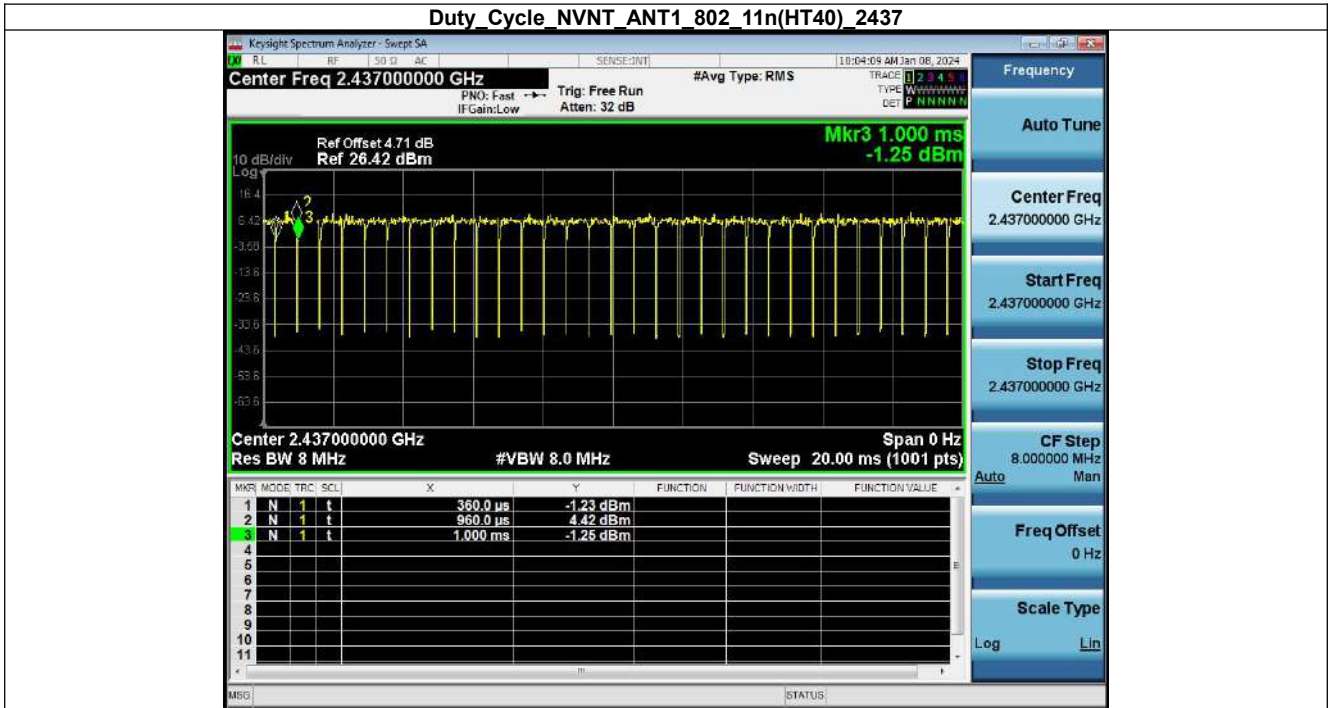
Duty Cycle_NVNT_ANT1_802_11n(HT20)_2462



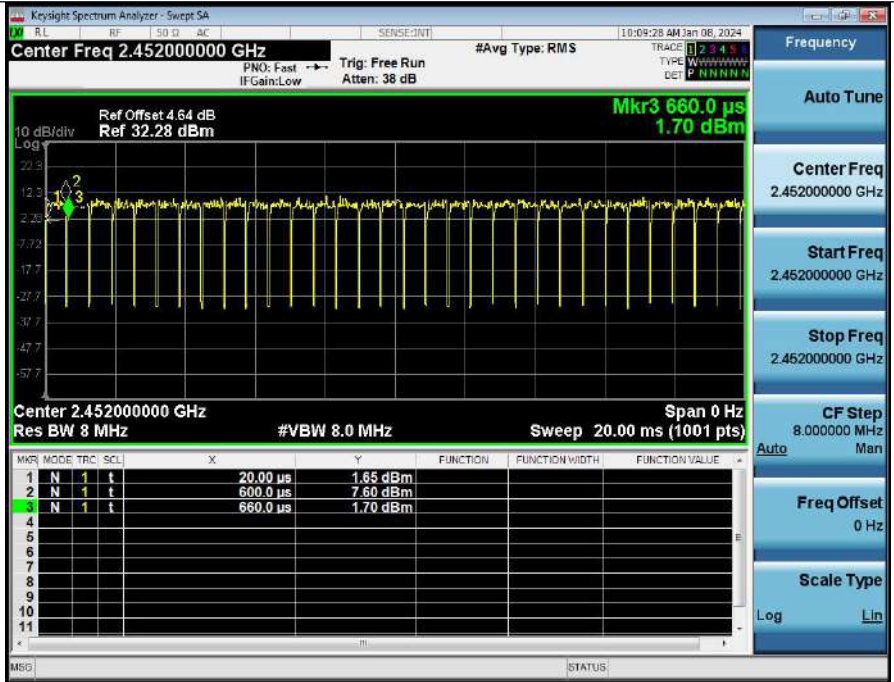
Duty Cycle_NVNT_ANT1_802_11n(HT40)_2422



Duty Cycle_NVNT_ANT1_802_11n(HT40)_2437

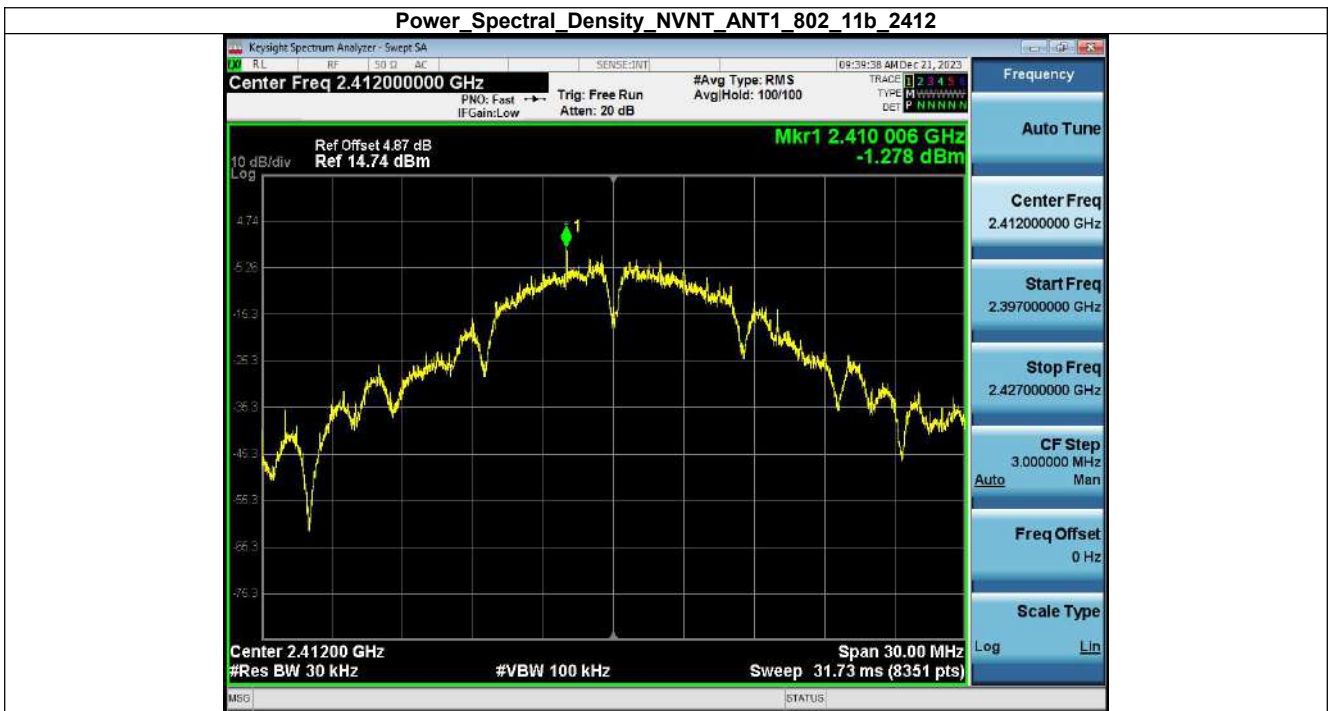


Duty Cycle_NVNT_ANT1_802_11n(HT40)_2452



5. Power Spectral Density

| Condition | Antenna | Modulation | Frequency (MHz) | PSD(dBm/30kHz) | PSD(dBm/3kHz) | limit(dBm/3kHz) | Result |
|-----------|---------|---------------|-----------------|----------------|---------------|-----------------|--------|
| NVNT | ANT1 | 802.11b | 2412.00 | -1.28 | -11.28 | 8 | Pass |
| NVNT | ANT1 | 802.11b | 2437.00 | -2.78 | -12.78 | 8 | Pass |
| NVNT | ANT1 | 802.11b | 2462.00 | 0.47 | -9.53 | 8 | Pass |
| NVNT | ANT1 | 802.11g | 2412.00 | -7.54 | -17.55 | 8 | Pass |
| NVNT | ANT1 | 802.11g | 2437.00 | -10.85 | -20.85 | 8 | Pass |
| NVNT | ANT1 | 802.11g | 2462.00 | -6.95 | -16.95 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | -7.79 | -17.79 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2437.00 | -11.59 | -21.59 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | -7.71 | -17.71 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | -10.25 | -20.25 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2437.00 | -12.32 | -22.32 | 8 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | -11.30 | -21.30 | 8 | Pass |



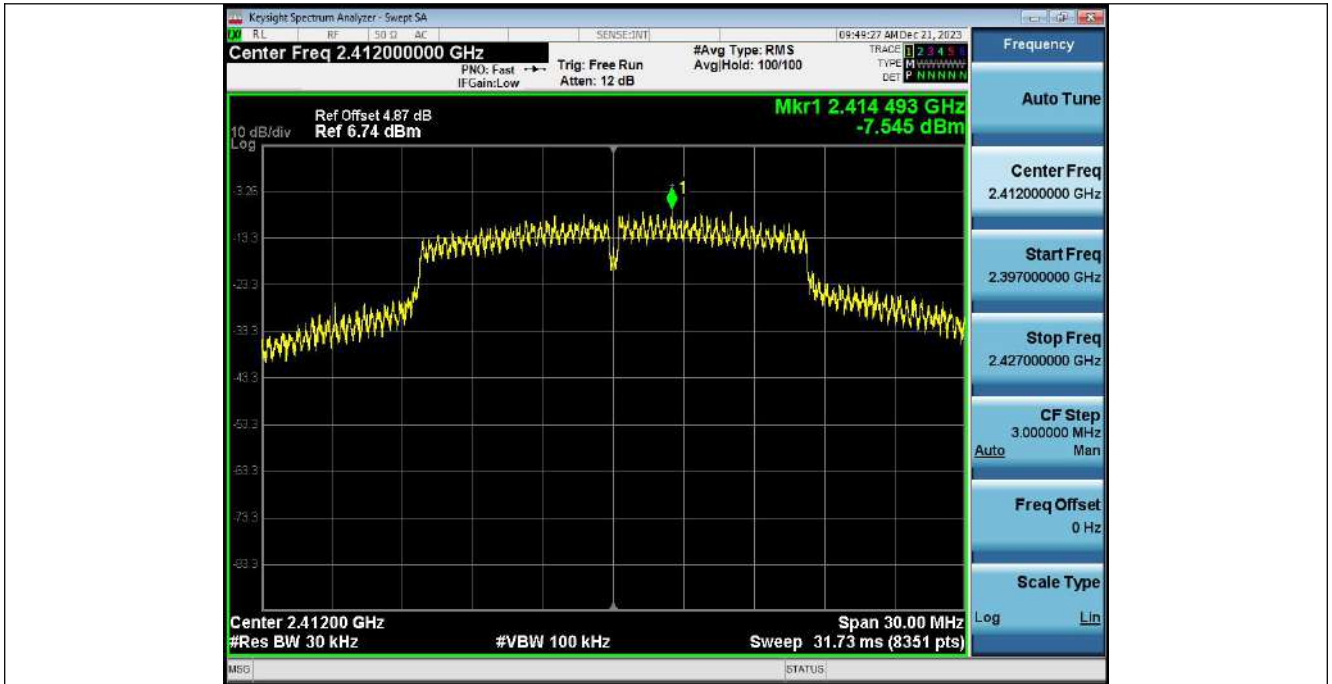
Power_Spectral_Density_NVNT_ANT1_802_11b_2437



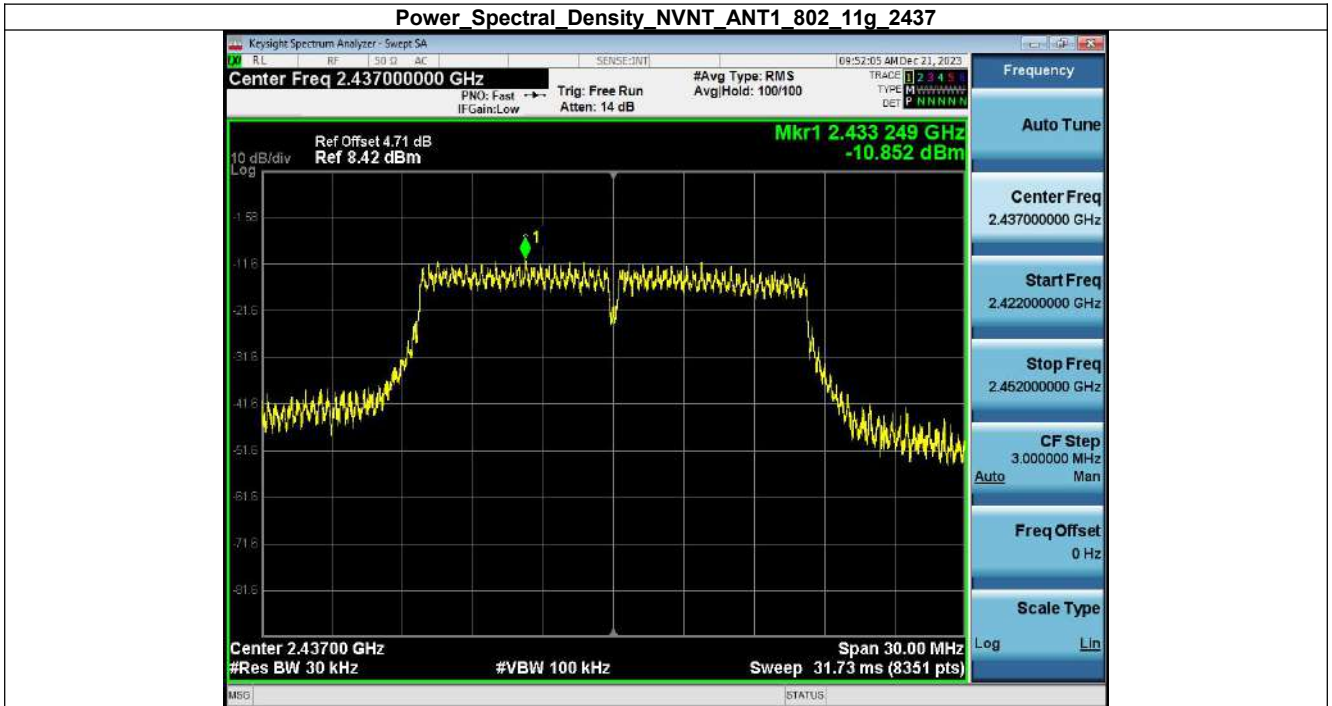
Power_Spectral_Density_NVNT_ANT1_802_11b_2462



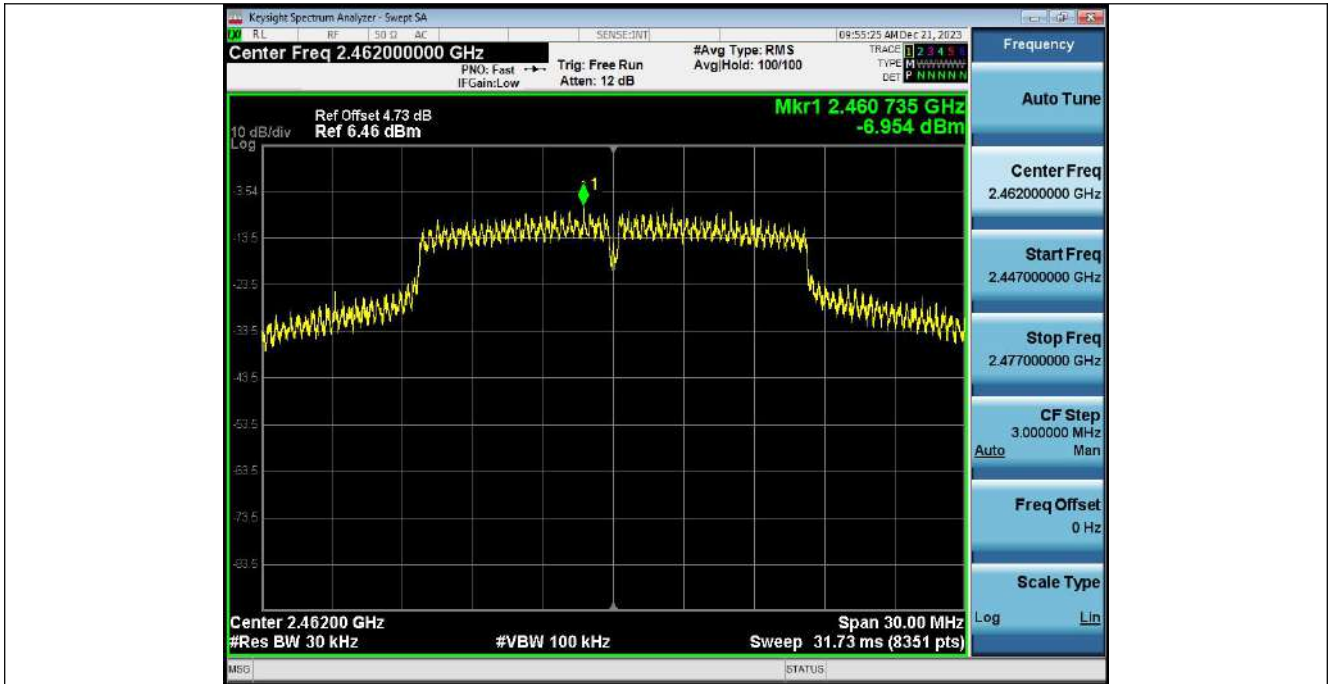
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



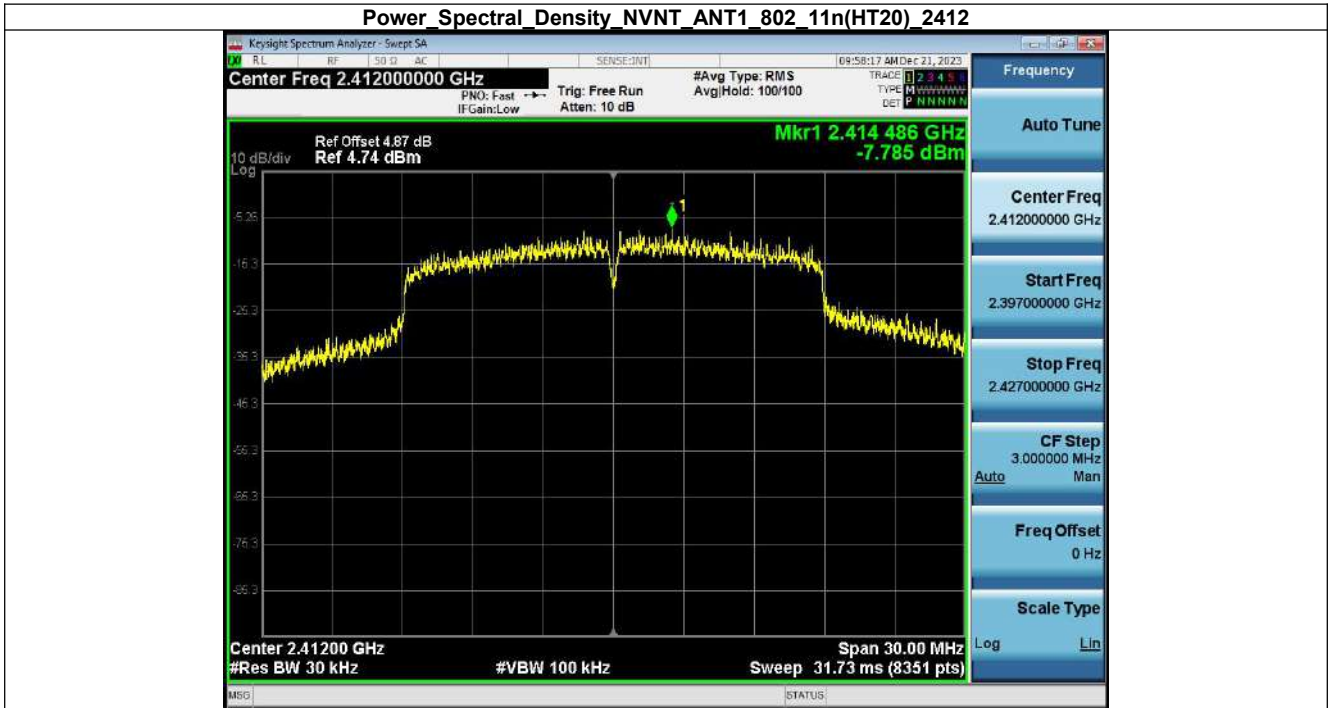
Power_Spectral_Density_NVNT_ANT1_802_11g_2437



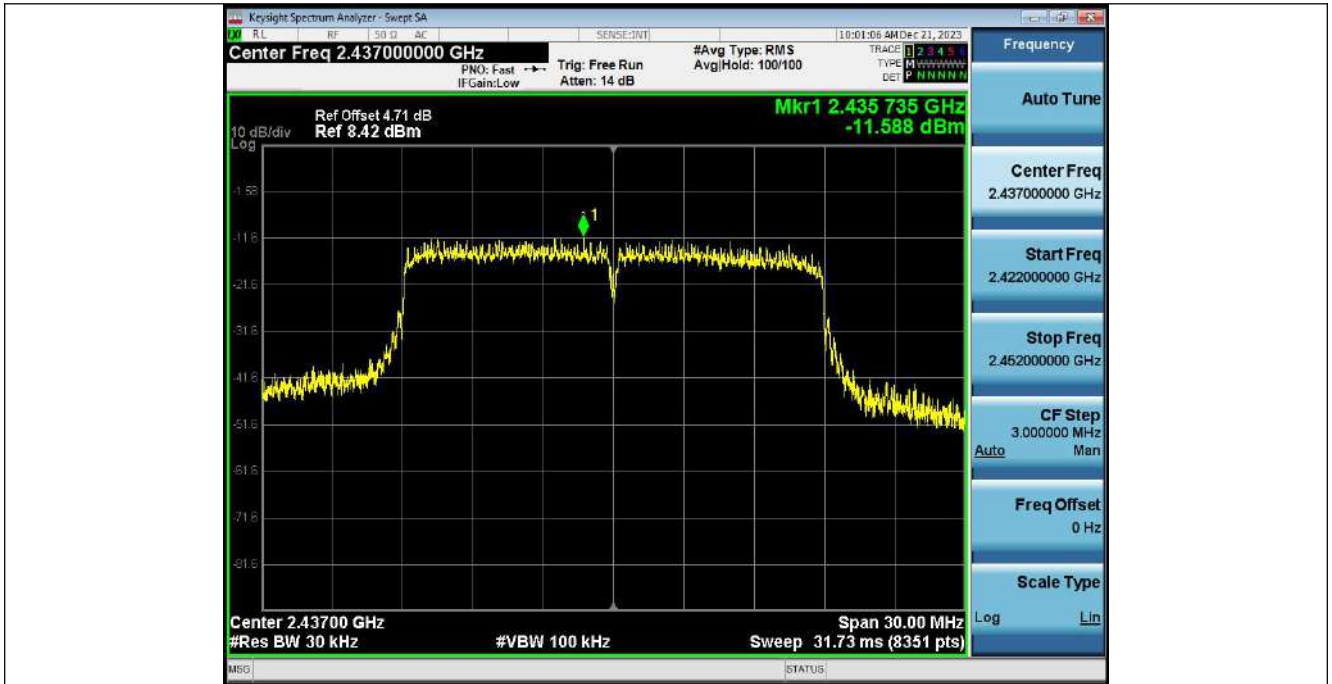
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



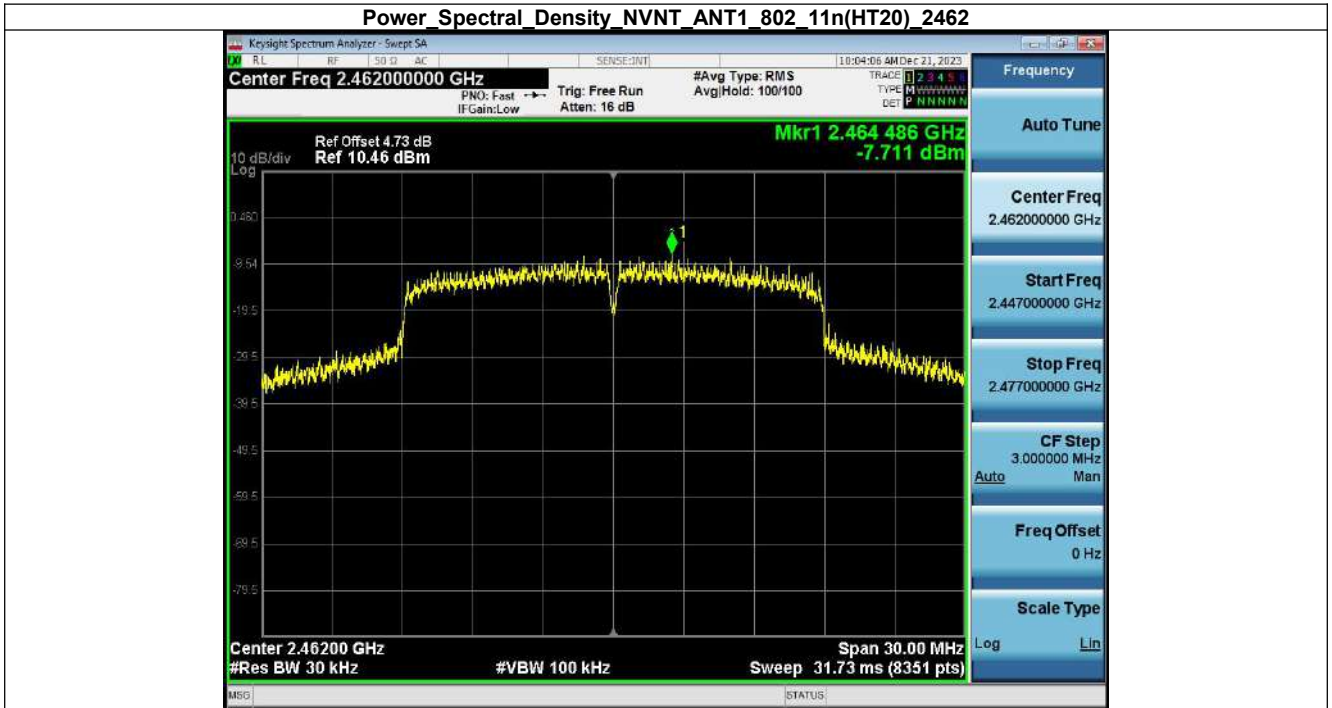
Power Spectral Density_NVNT_ANT1_802_11n(HT20)_2412



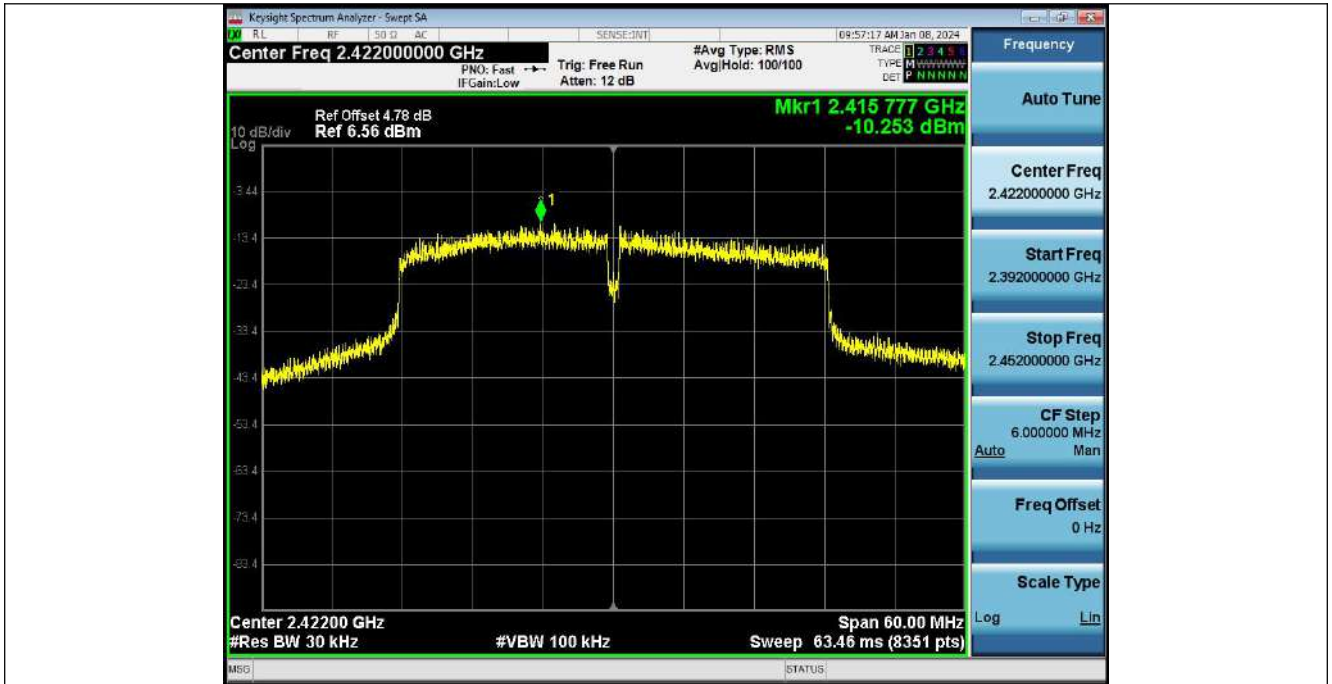
Power Spectral Density_NVNT_ANT1_802_11n(HT20)_2437



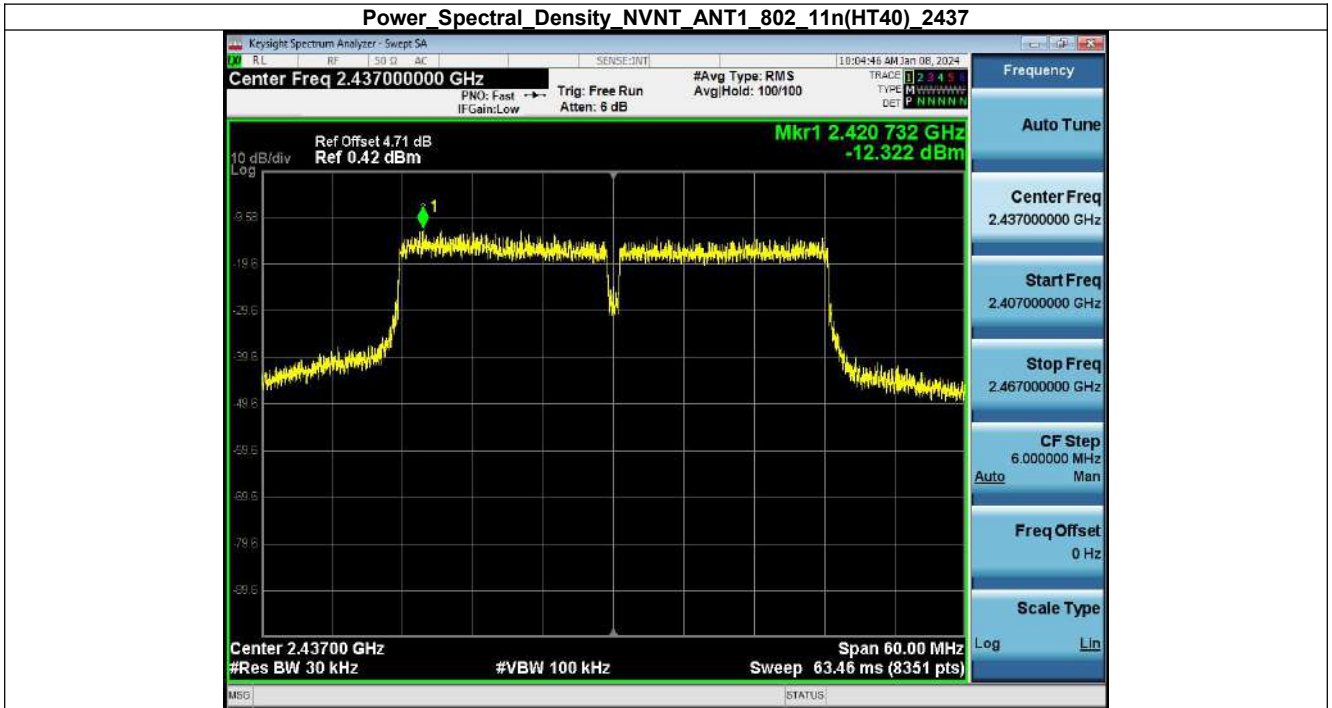
Power Spectral Density_NVNT_ANT1_802_11n(HT20)_2462



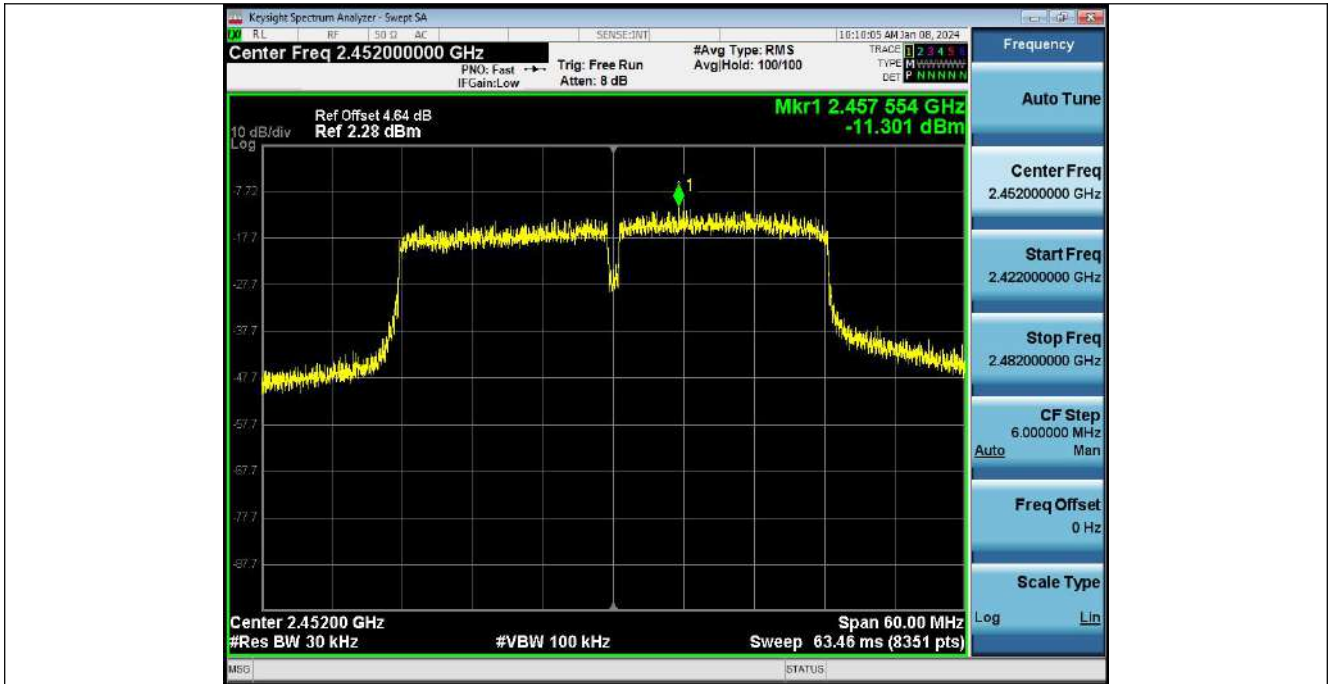
Power Spectral Density_NVNT_ANT1_802_11n(HT40)_2422



Power Spectral Density_NVNT_ANT1_802_11n(HT40)_2437



Power Spectral Density_NVNT_ANT1_802_11n(HT40)_2452



6. Bandedge

| Condition | Antenna | Modulation | TX_Frequency (MHz) | Max. Mark_frequency(MHz) | Spurious level(dBm) | limit(dBm) | Result |
|-----------|---------|---------------|--------------------|--------------------------|---------------------|------------|--------|
| NVNT | ANT1 | 802.11b | 2412.00 | 2399.936 | -32.520 | -19.209 | Pass |
| NVNT | ANT1 | 802.11b | 2462.00 | 2483.536 | -48.830 | -19.404 | Pass |
| NVNT | ANT1 | 802.11g | 2412.00 | 2399.936 | -25.168 | -22.199 | Pass |
| NVNT | ANT1 | 802.11g | 2462.00 | 2483.632 | -37.307 | -23.281 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | 2399.936 | -28.149 | -22.935 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | 2483.584 | -36.180 | -23.253 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | 2399.496 | -31.936 | -25.145 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | 2483.612 | -38.596 | -26.375 | Pass |

1 Reference Level NVNT_ANT1_802_11b_2412



2 Bandedge_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT_ANT1_802_11b_2462



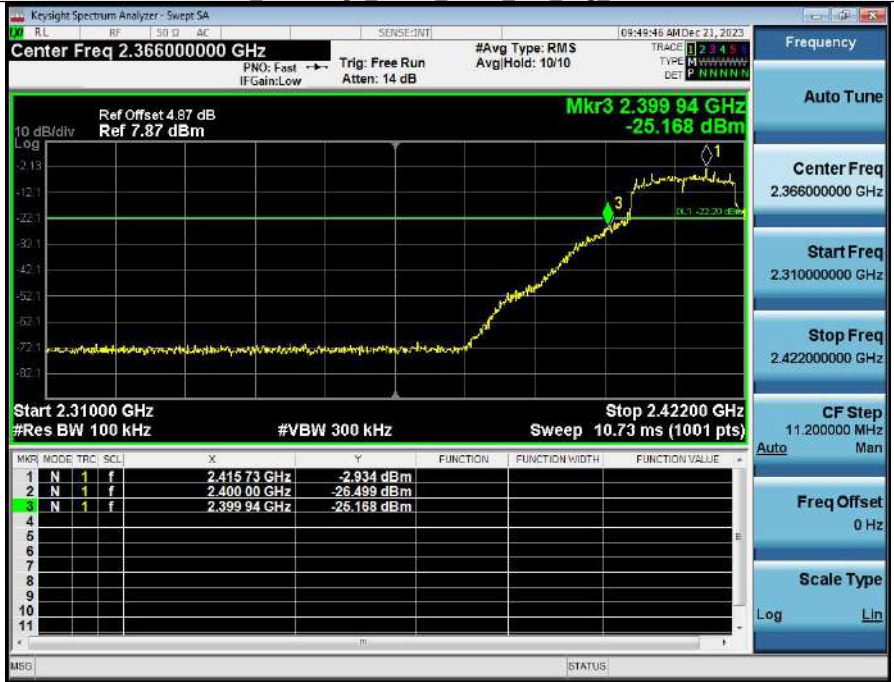
2_Bandedge_NVNT_ANT1_802_11b_2462



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



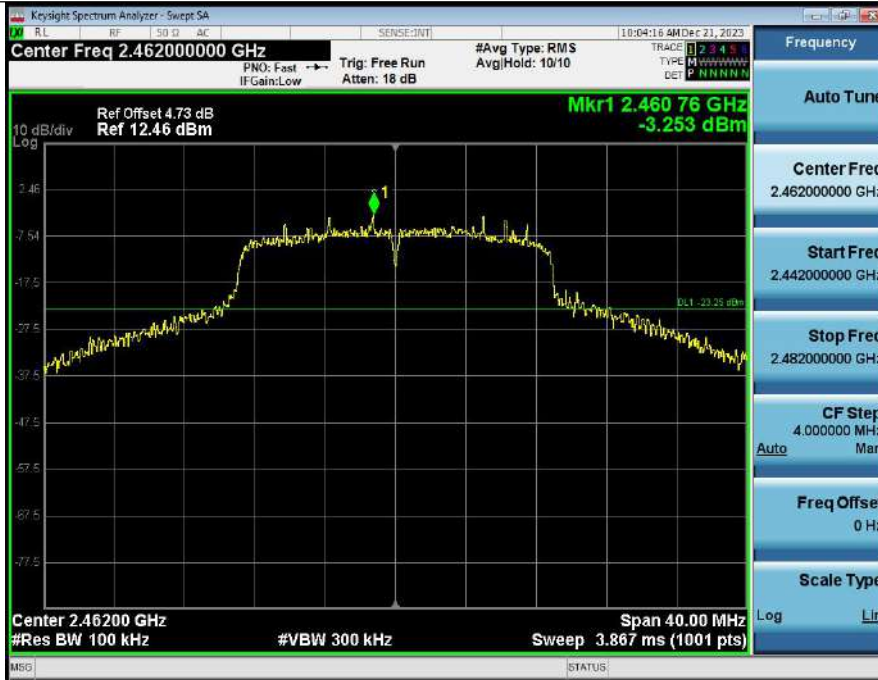
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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



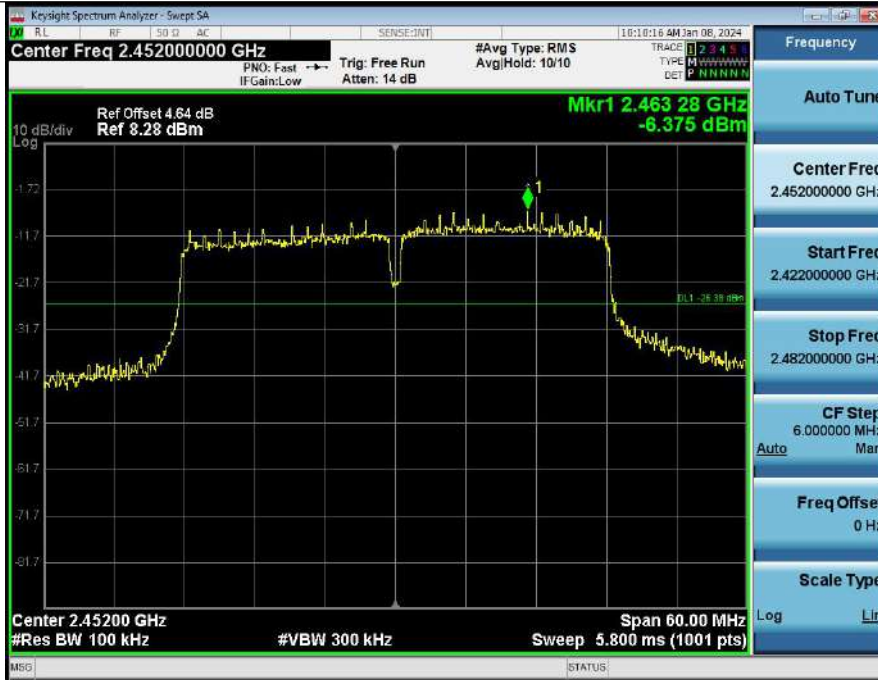
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



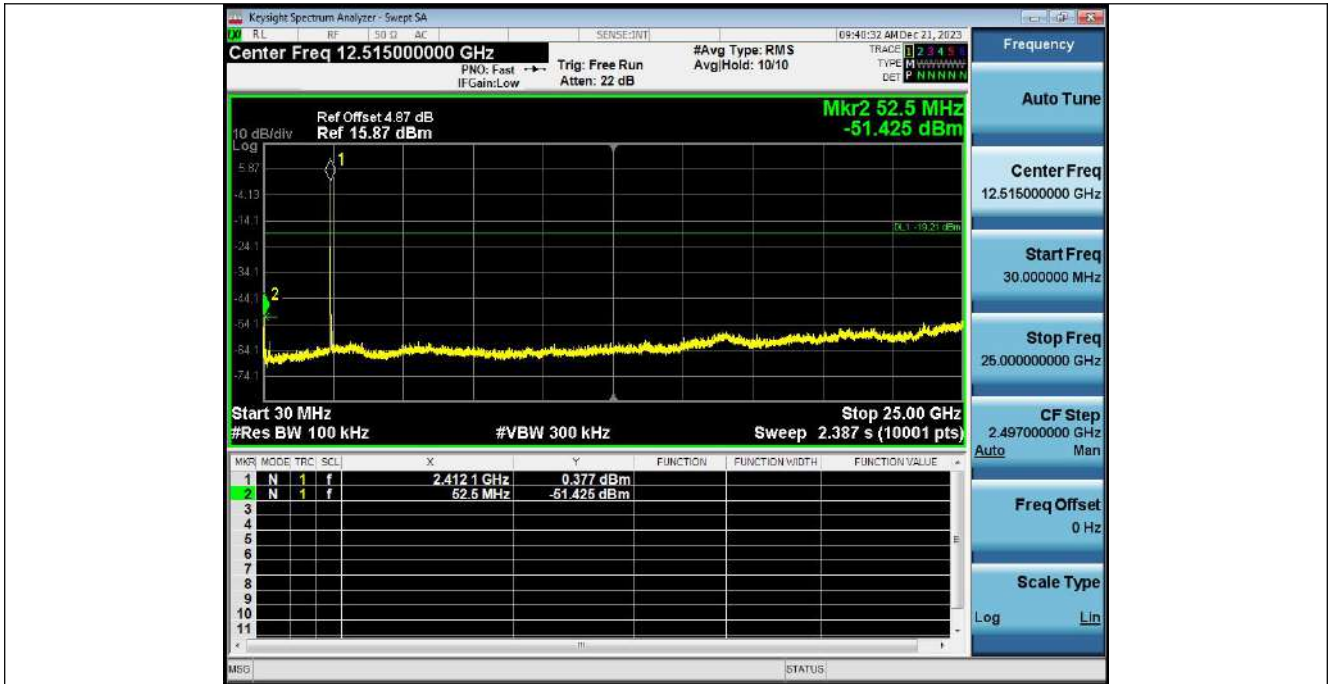
7. Spurious Emission

| Condition | Antenna | Modulation | TX_Frequency (MHz) | Max. Mark_frequency(MHz) | Spurious level(dBm) | limit(dBm) | Result |
|-----------|---------|---------------|--------------------|--------------------------|---------------------|------------|--------|
| NVNT | ANT1 | 802.11b | 2412.00 | 52.473 | -51.425 | -19.209 | Pass |
| NVNT | ANT1 | 802.11b | 2437.00 | 724.166 | -35.123 | -22.256 | Pass |
| NVNT | ANT1 | 802.11b | 2462.00 | 729.160 | -36.508 | -19.404 | Pass |
| NVNT | ANT1 | 802.11g | 2412.00 | 831.537 | -46.397 | -22.199 | Pass |
| NVNT | ANT1 | 802.11g | 2437.00 | 721.669 | -31.503 | -25.539 | Pass |
| NVNT | ANT1 | 802.11g | 2462.00 | 711.681 | -33.659 | -23.281 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2412.00 | 52.473 | -51.752 | -22.935 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2437.00 | 52.473 | -52.422 | -27.041 | Pass |
| NVNT | ANT1 | 802.11n(HT20) | 2462.00 | 52.473 | -51.343 | -23.253 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2422.00 | 49.976 | -53.052 | -25.145 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2437.00 | 49.976 | -54.216 | -27.405 | Pass |
| NVNT | ANT1 | 802.11n(HT40) | 2452.00 | 49.976 | -52.702 | -26.375 | Pass |

1 Reference_Level_NVNT_ANT1_802_11b_2412



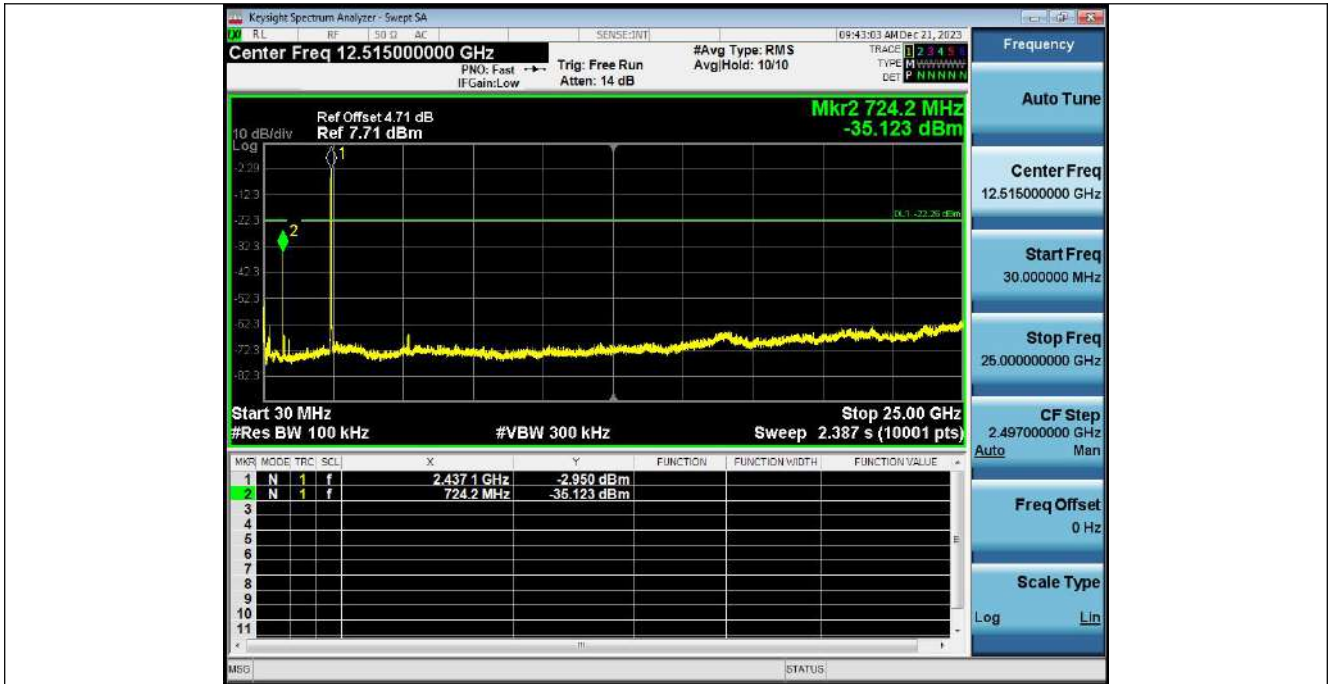
2 Spurious Emission_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT ANT1 802 11b 2437



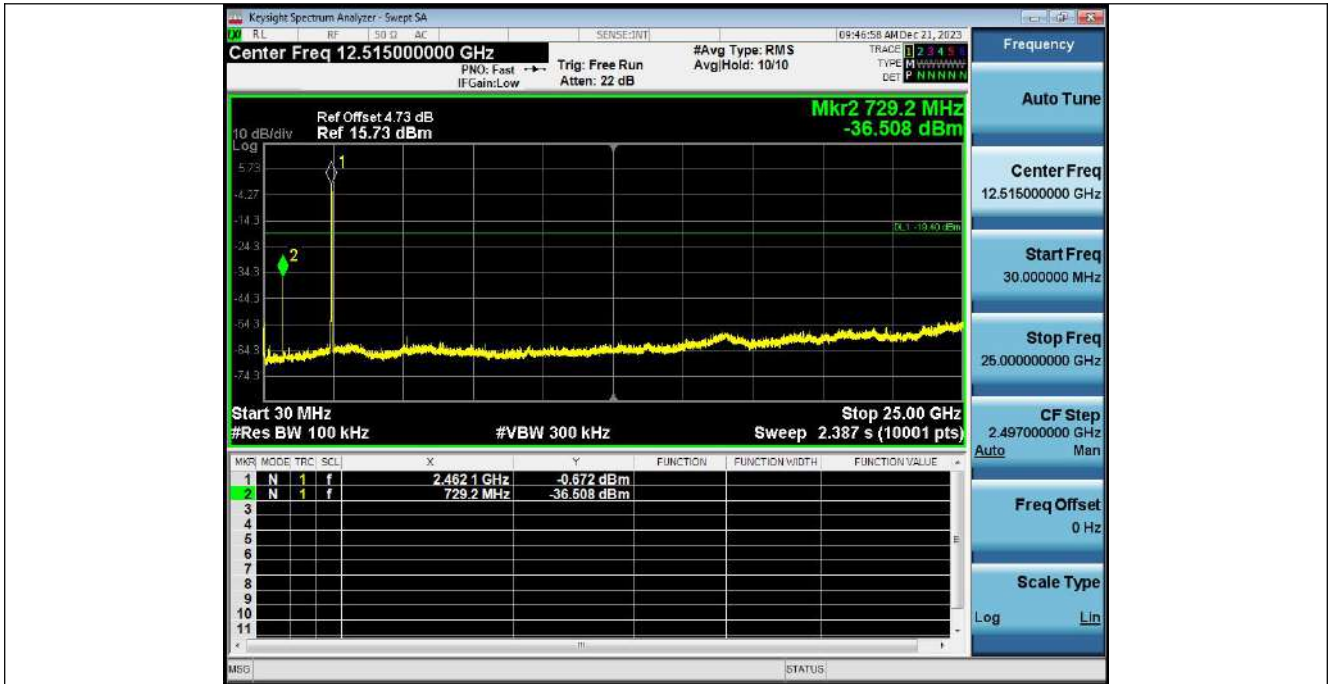
2 Spurious Emission_NVNT ANT1 802 11b 2437



1 Reference Level NVNT ANT1 802 11b 2462



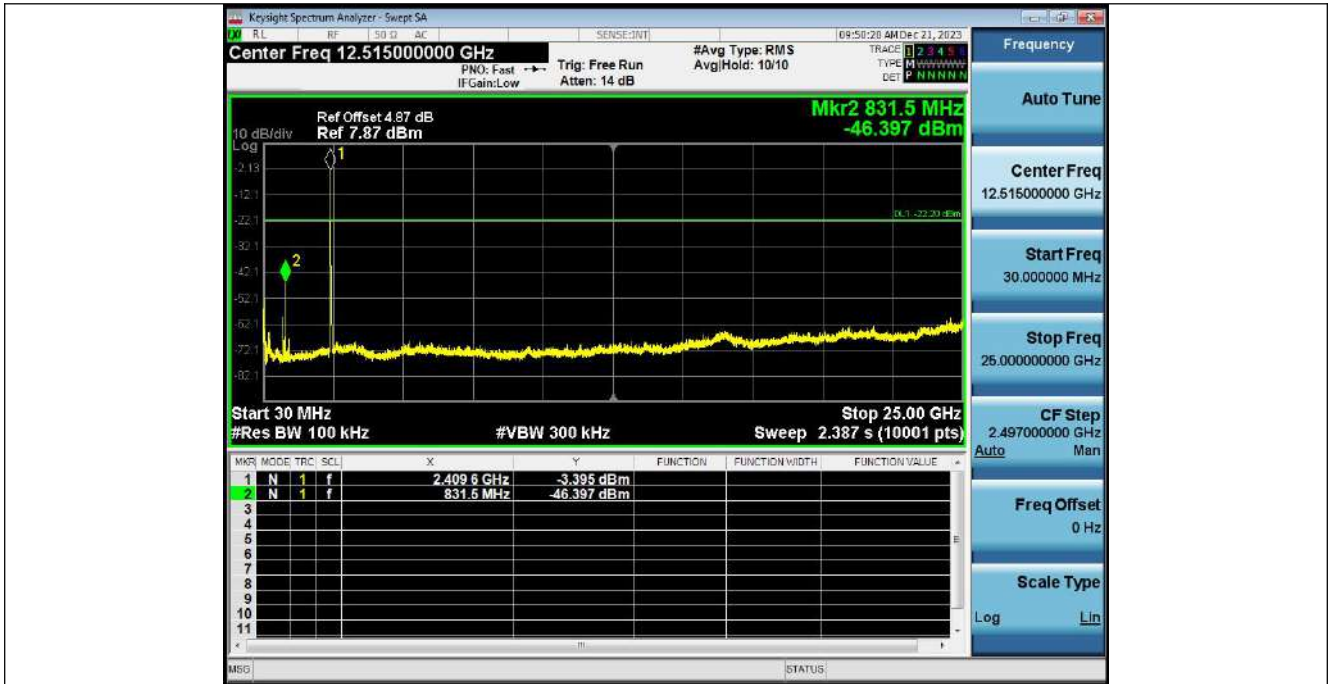
2 Spurious Emission_NVNT ANT1 802 11b 2462



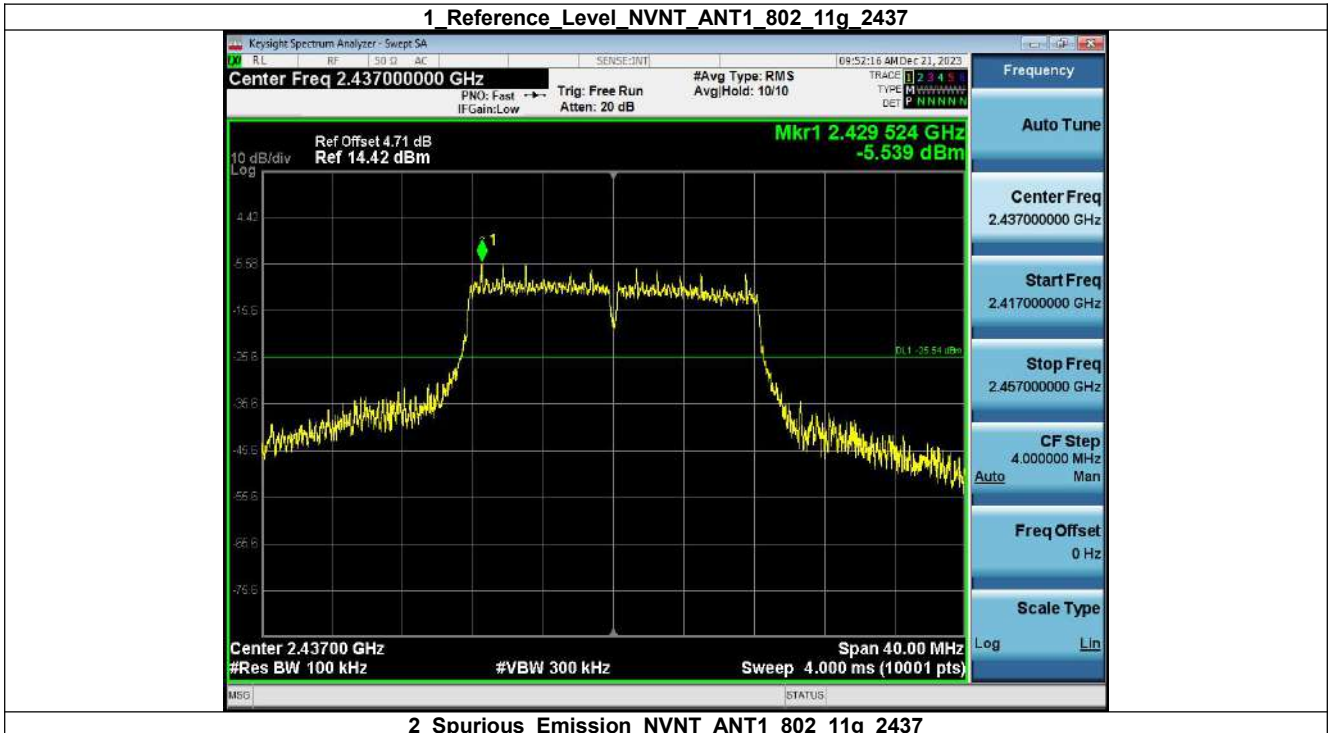
1 Reference Level NVNT ANT1 802 11g 2412



2 Spurious Emission_NVNT ANT1 802 11g 2412



1 Reference Level NVNT ANT1 802 11g 2437



2 Spurious Emission NVNT ANT1 802 11g 2437



1 Reference Level NVNT ANT1 802 11g 2462



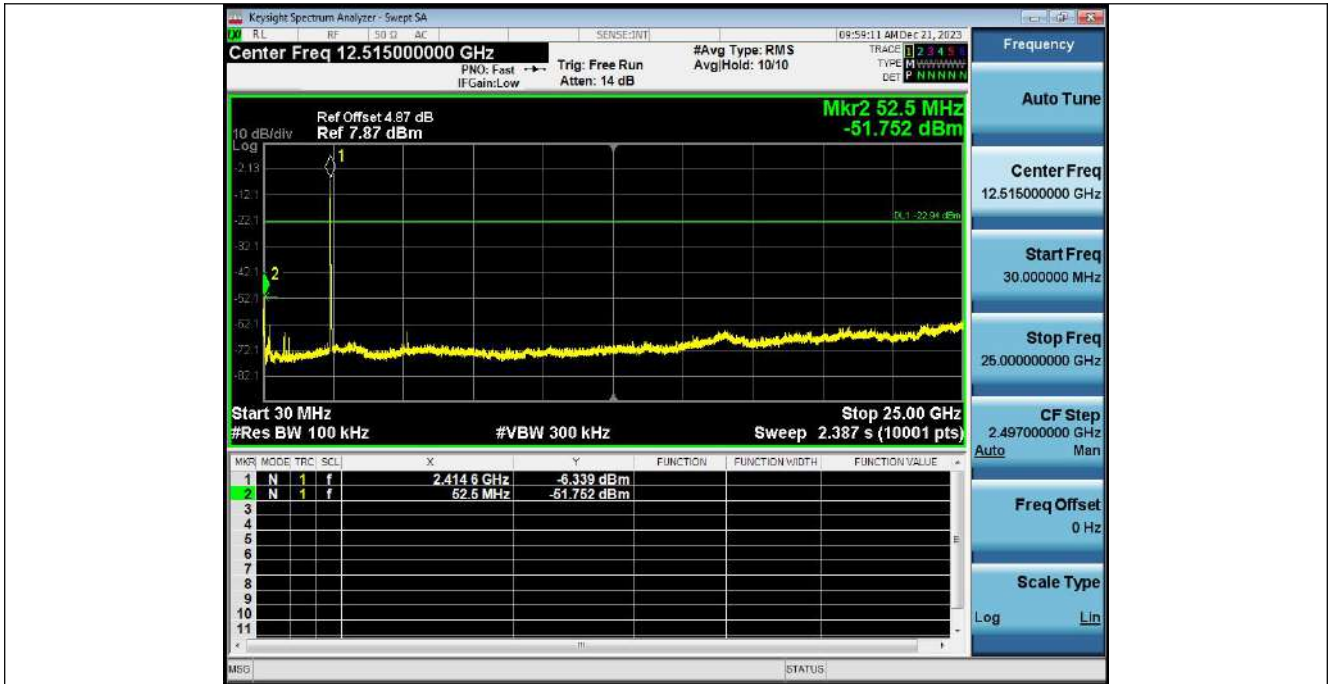
2 Spurious Emission NVNT ANT1 802 11g 2462



1 Reference Level NVNT ANT1 802 11n(HT20) 2412



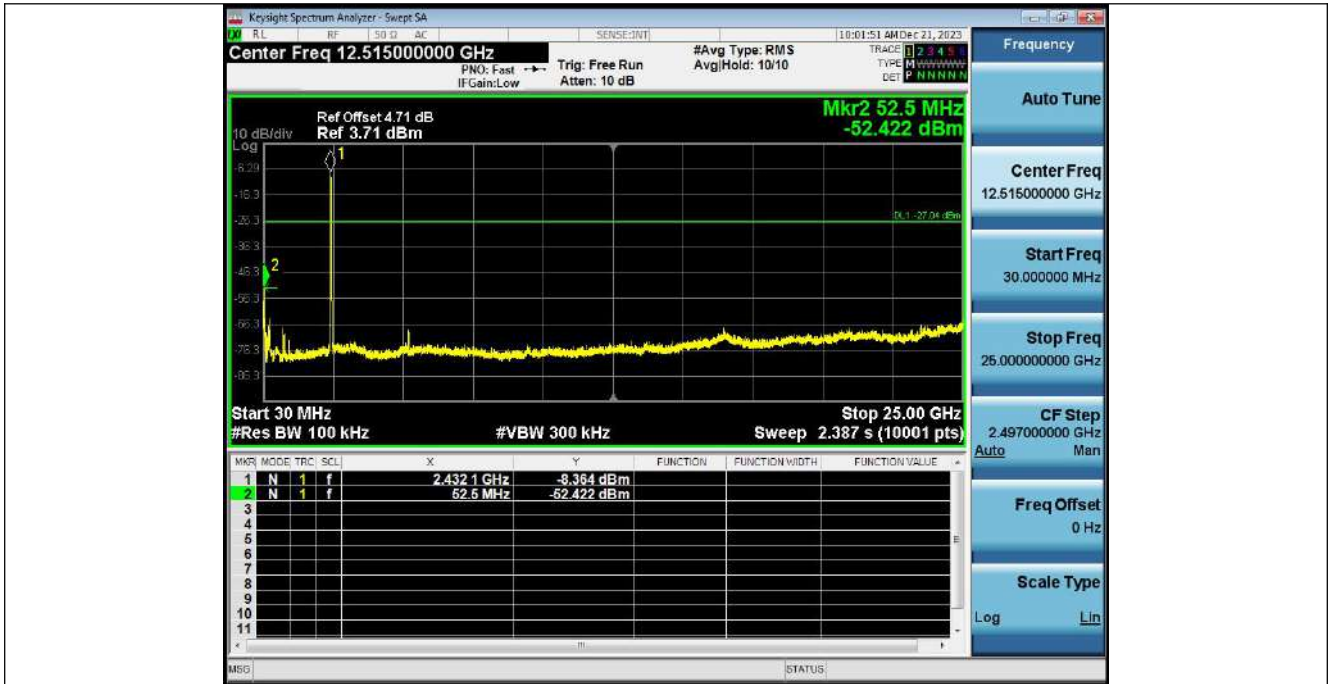
2 Spurious Emission NVNT ANT1 802 11n(HT20) 2412



1 Reference Level NVNT_ANT1_802_11n(HT20)_2437



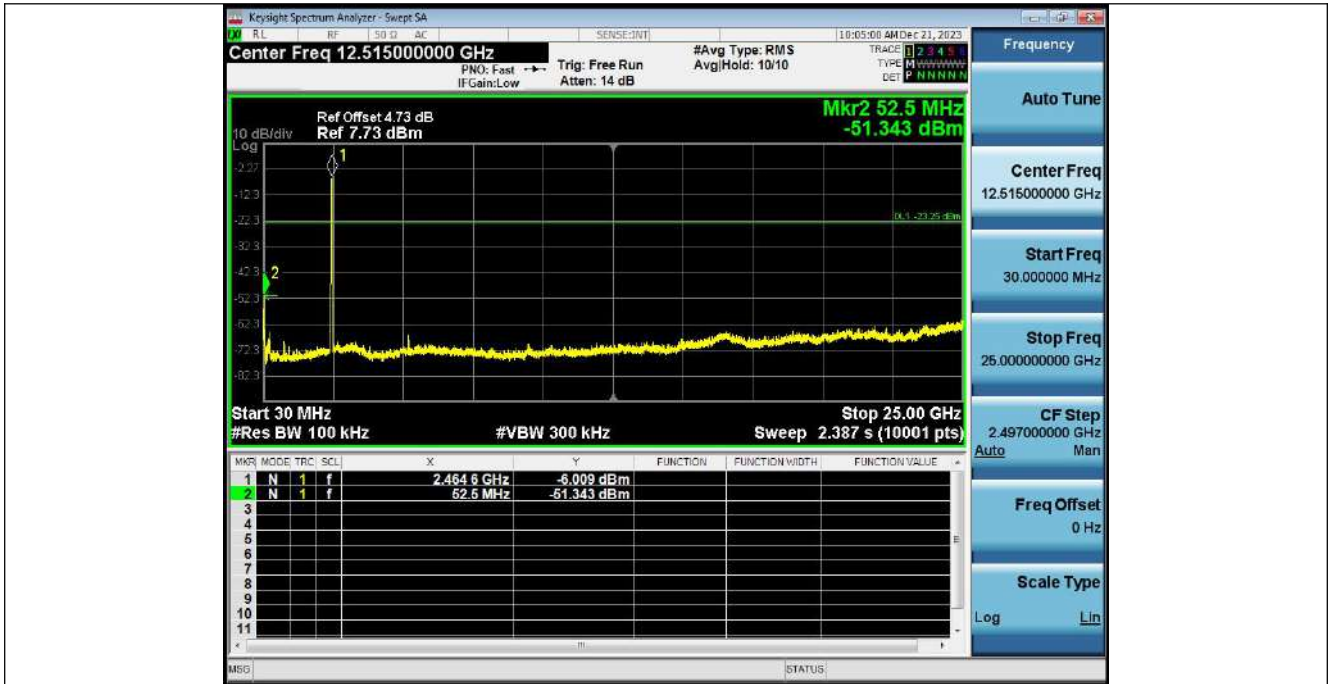
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437



1 Reference Level NVNT_ANT1_802_11n(HT20)_2462



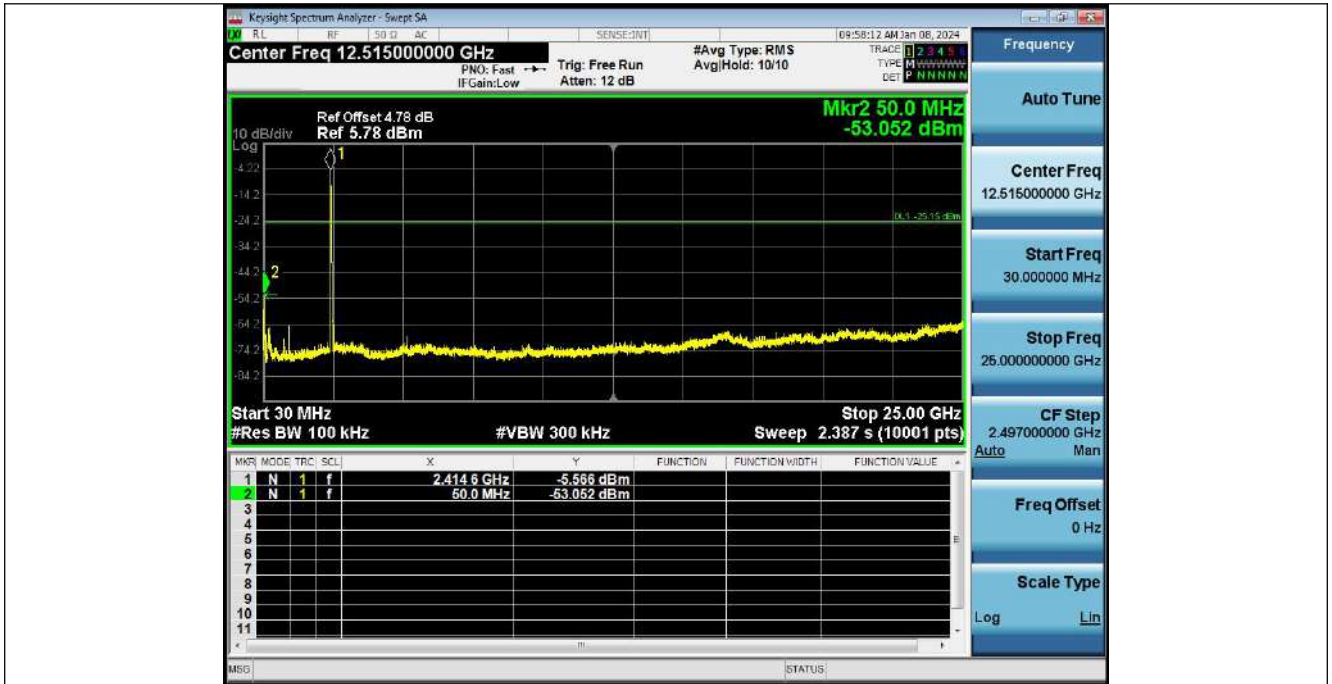
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2462



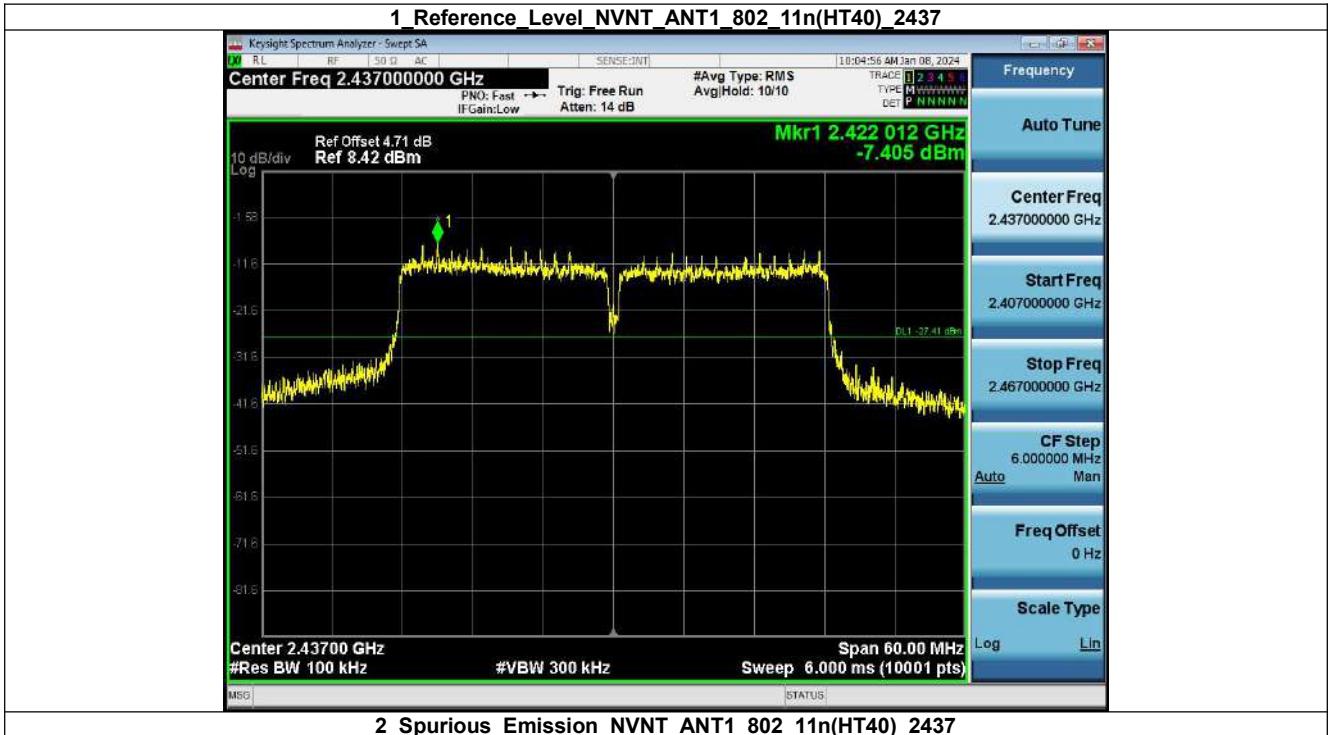
1 Reference Level NVNT_ANT1_802_11n(HT40)_2422



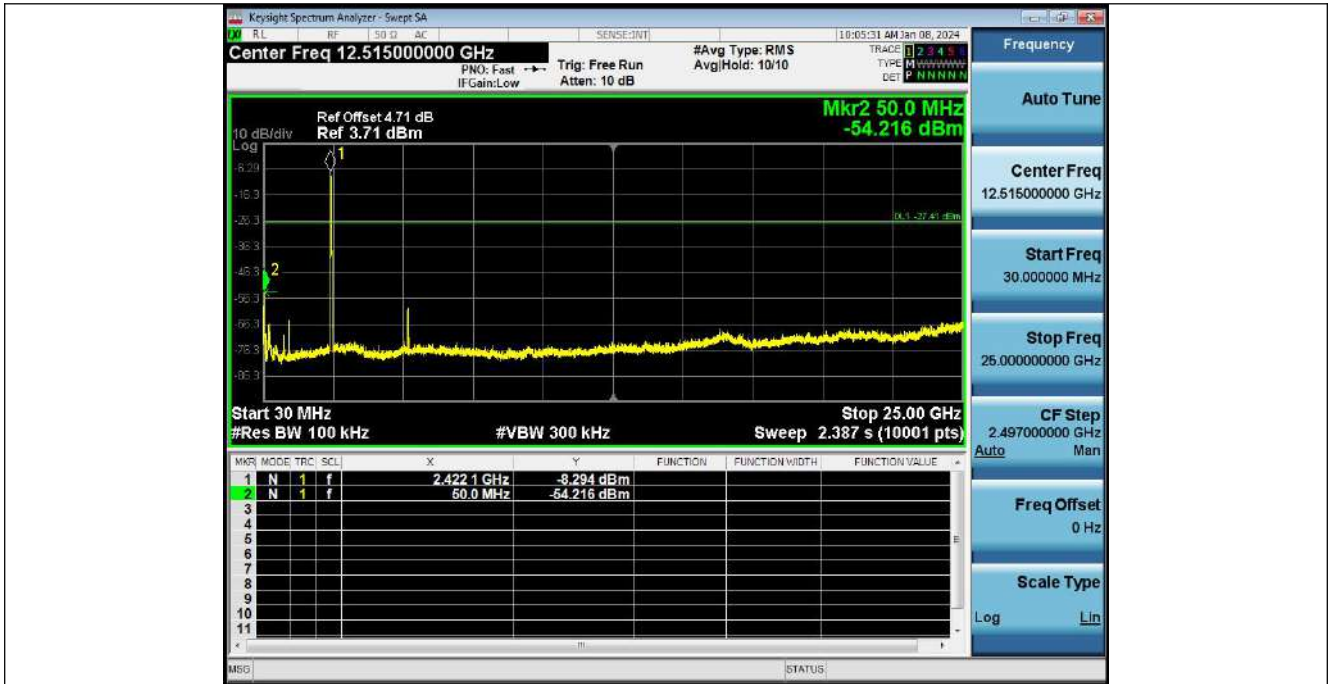
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



1 Reference Level NVNT_ANT1_802_11n(HT40)_2437



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2437



1 Reference Level NVNT_ANT1_802_11n(HT40)_2452



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2452

