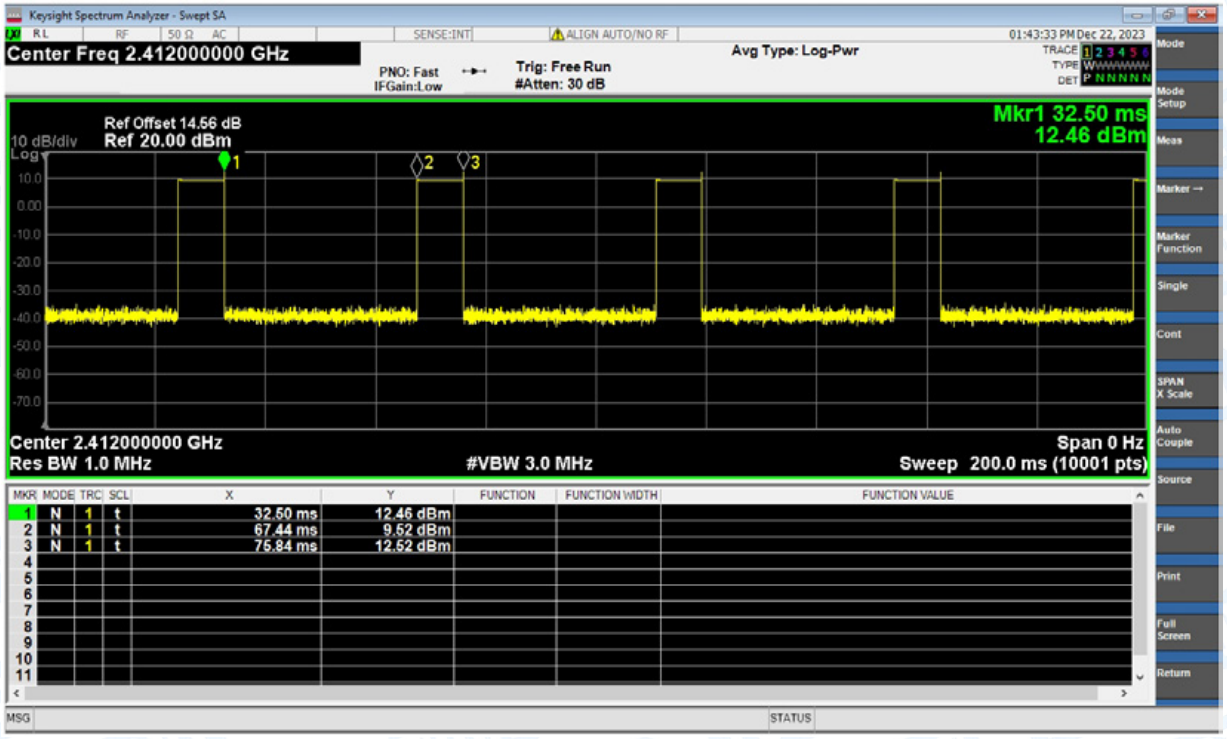
# RF Test Data for 2.4G WiFi (Conducted Measurements)

| General Description of EUT | |
|---|---|
| **Product Name:** | Wifi PIR Motion Sensor |
| **Test Model:** | P01 |
| **Sample ID:** | 202312-0065-5-2# |
| **Environmental Conditions** | |
| **Temperature:** | 24℃ |
| **Relative Humidity:** | 50% |
| **Test Voltage:** | DC 3V |
| **Test Engineer:** | Yanzhenming |
| Note: For a more detailed features description, please refer to the report TBR-C-202312-0065-81<br>The report only show the worst case data. | |

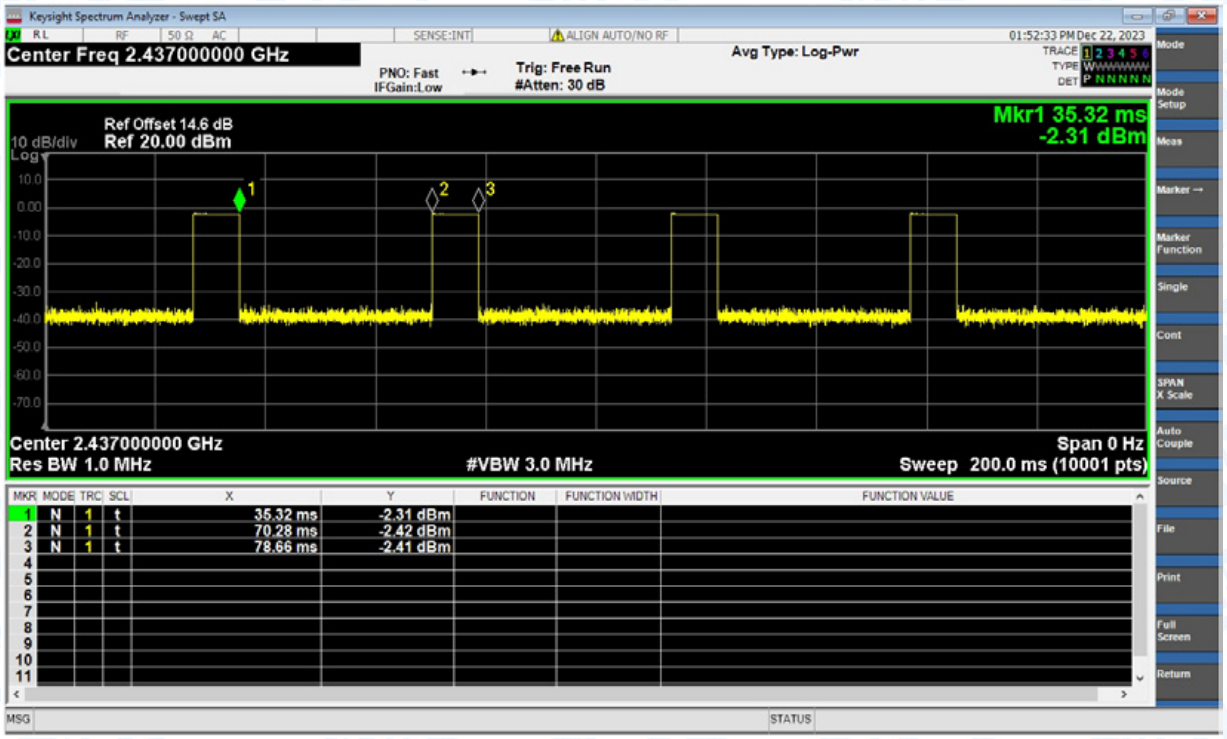
# Duty Cycle

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|---|---|---|---|---|---|---|
| NVNT | b | 2412 | Ant1 | 19.38 | 7.13 | 0.12 |
| NVNT | b | 2437 | Ant1 | 19.34 | 7.14 | 0.12 |
| NVNT | b | 2462 | Ant1 | 19.34 | 7.14 | 0.12 |
| NVNT | g | 2412 | Ant1 | 9.94 | 10.03 | 0.72 |
| NVNT | g | 2437 | Ant1 | 9.94 | 10.03 | 0.72 |
| NVNT | g | 2462 | Ant1 | 10.01 | 10 | 0.71 |
| NVNT | n(HT20) | 2412 | Ant1 | 9.95 | 10.02 | 0.77 |
| NVNT | n(HT20) | 2437 | Ant1 | 9.95 | 10.02 | 0.77 |
| NVNT | n(HT20) | 2462 | Ant1 | 9.95 | 10.02 | 0.77 |
| NVNT | n(HT40) | 2422 | Ant1 | 9.63 | 10.16 | 1.59 |
| NVNT | n(HT40) | 2437 | Ant1 | 9.65 | 10.15 | 1.59 |
| NVNT | n(HT40) | 2452 | Ant1 | 9.63 | 10.16 | 1.59 |

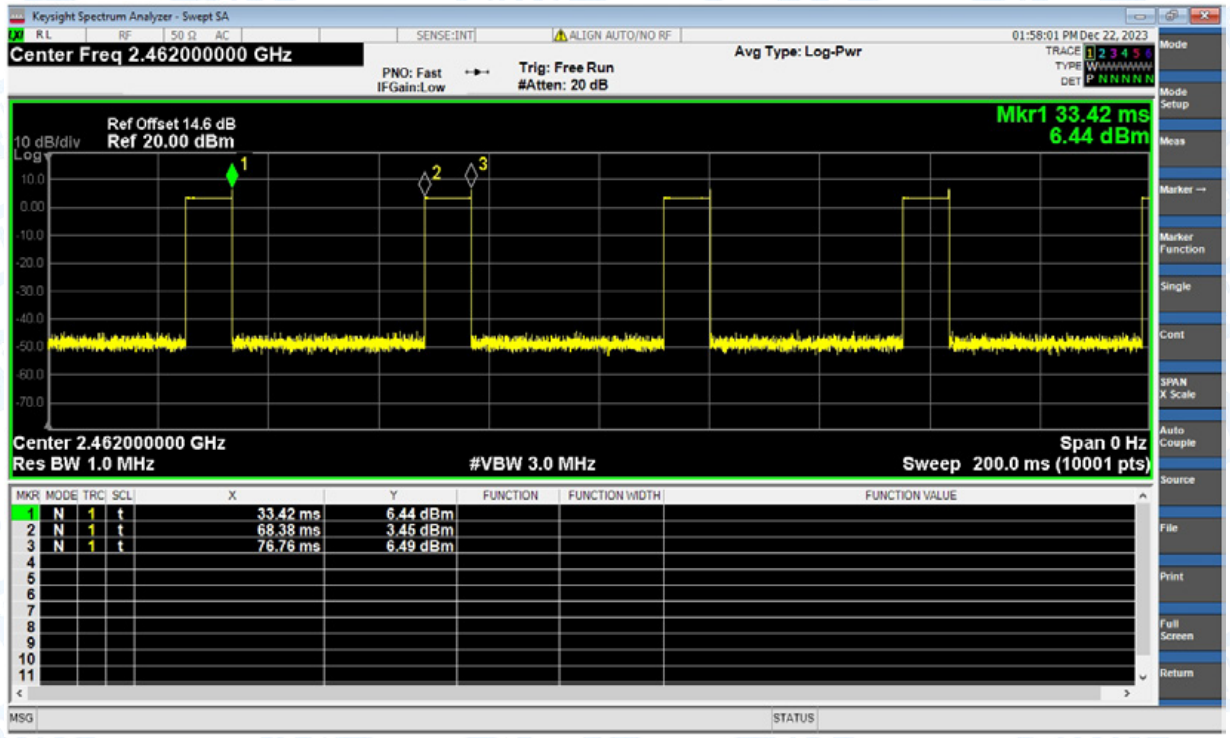
| Test Graphs |
| --- |
| Duty Cycle NVNT b 2412MHz Ant1 |



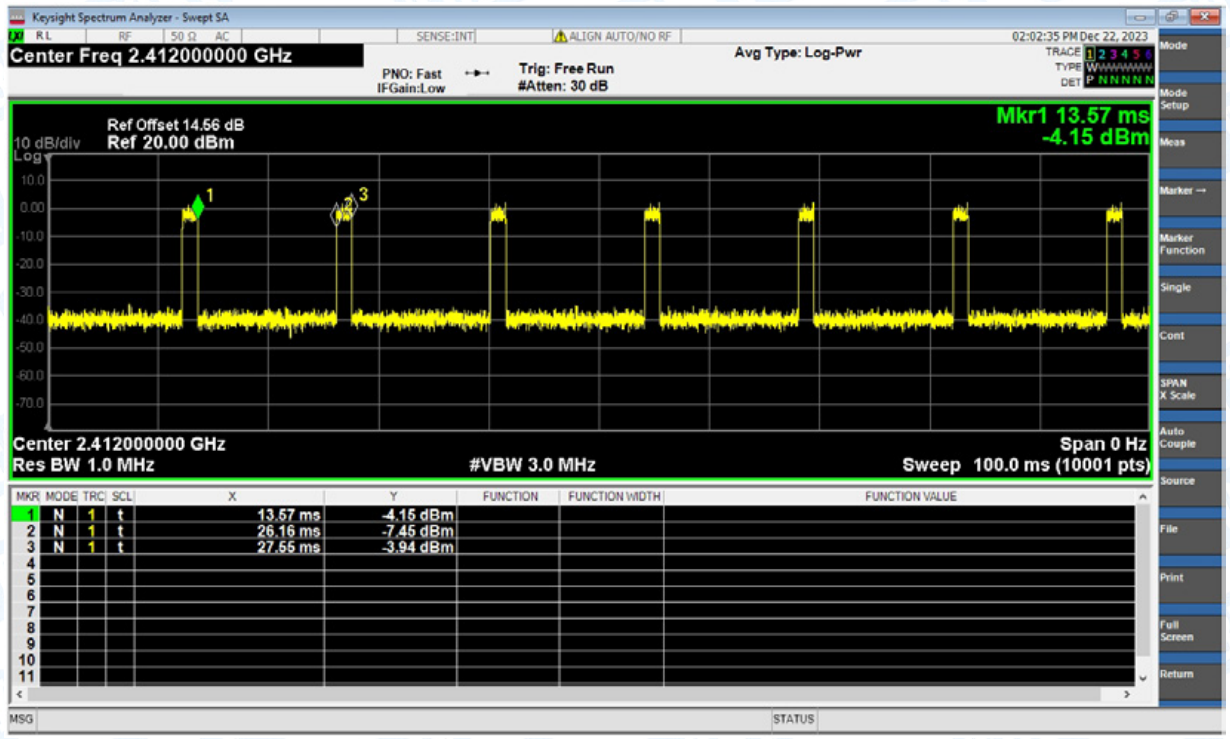

| Duty Cycle NVNT b 2437MHz Ant1 |
| --- |



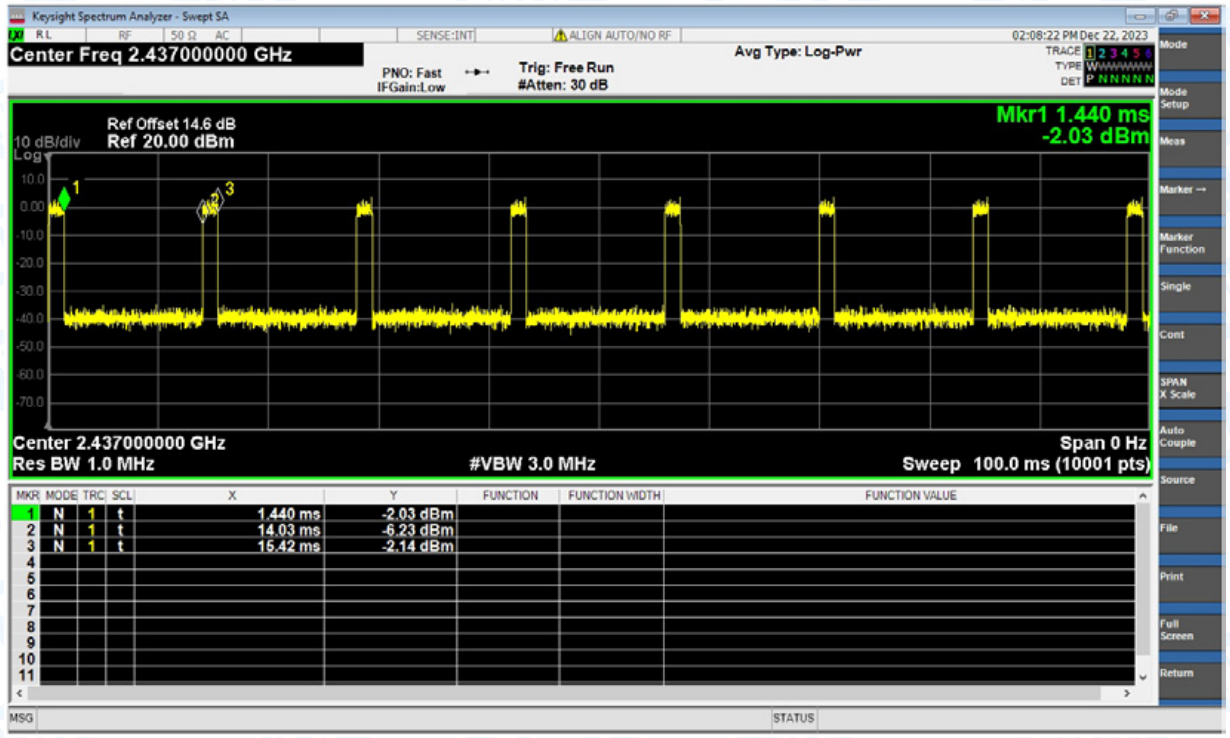
Duty Cycle NVNT b 2462MHz Ant1



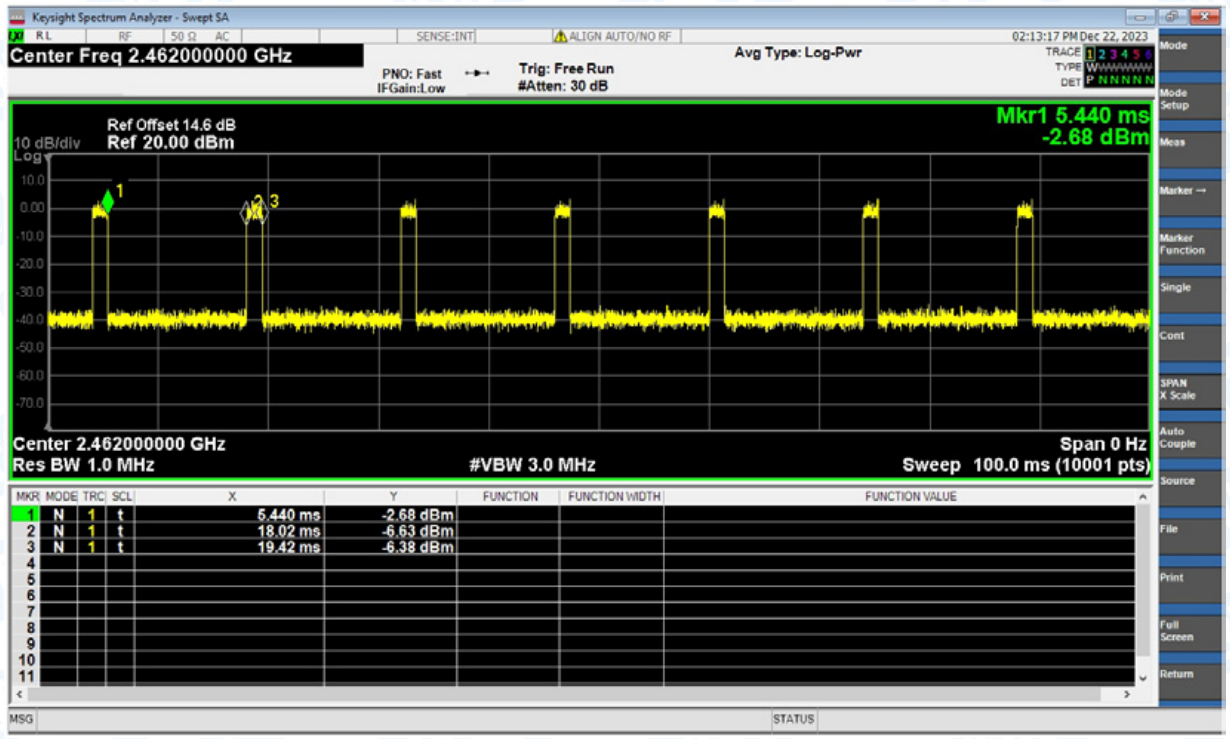

Duty Cycle NVNT g 2412MHz Ant1



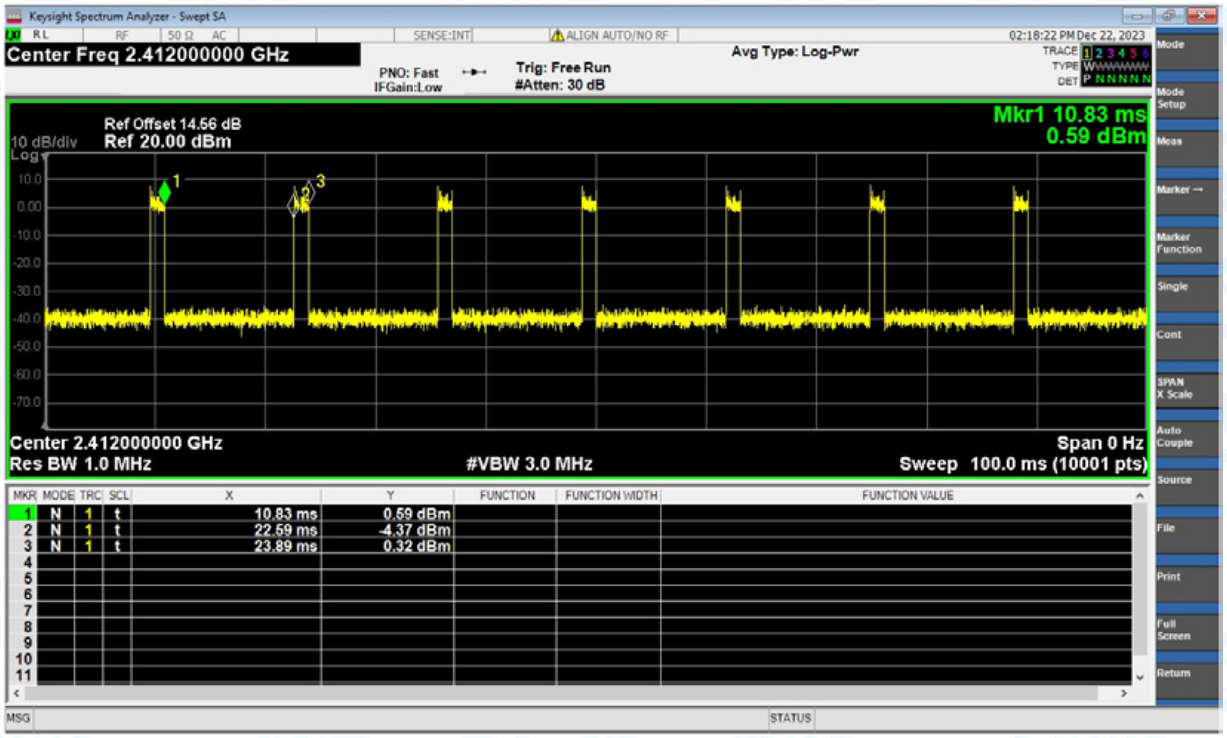
Duty Cycle NVNT g 2437MHz Ant1



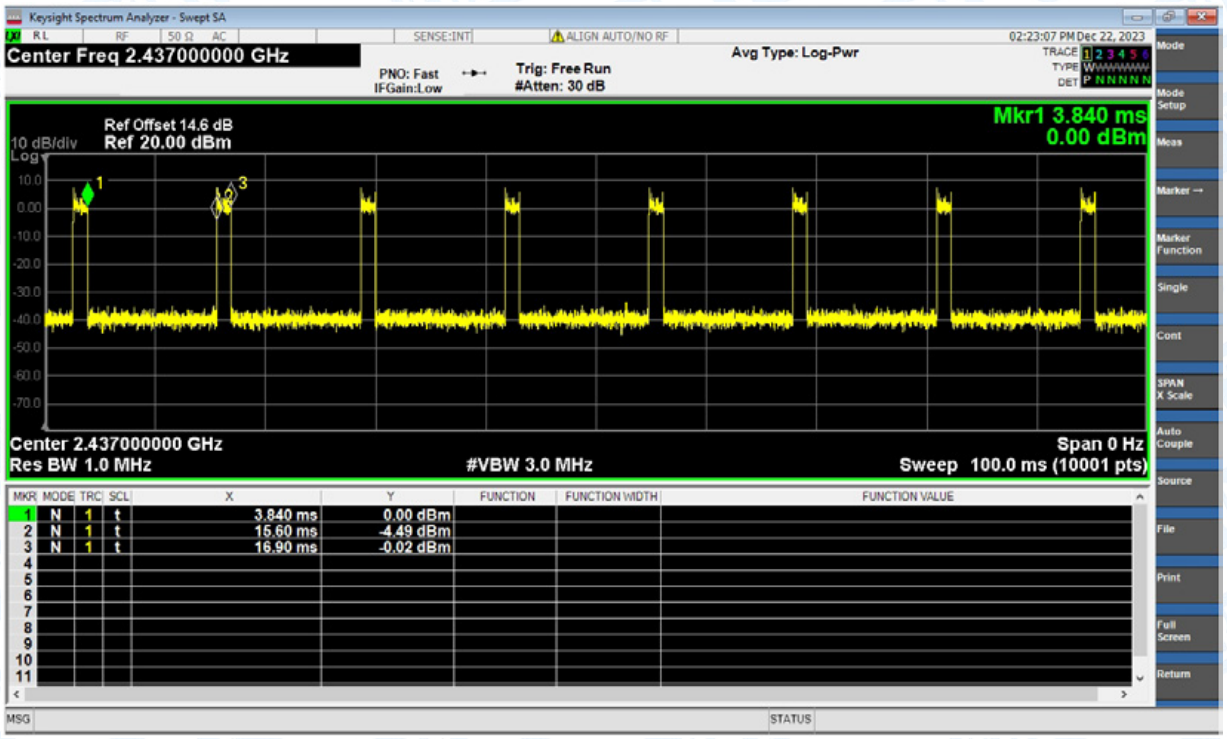

Duty Cycle NVNT g 2462MHz Ant1



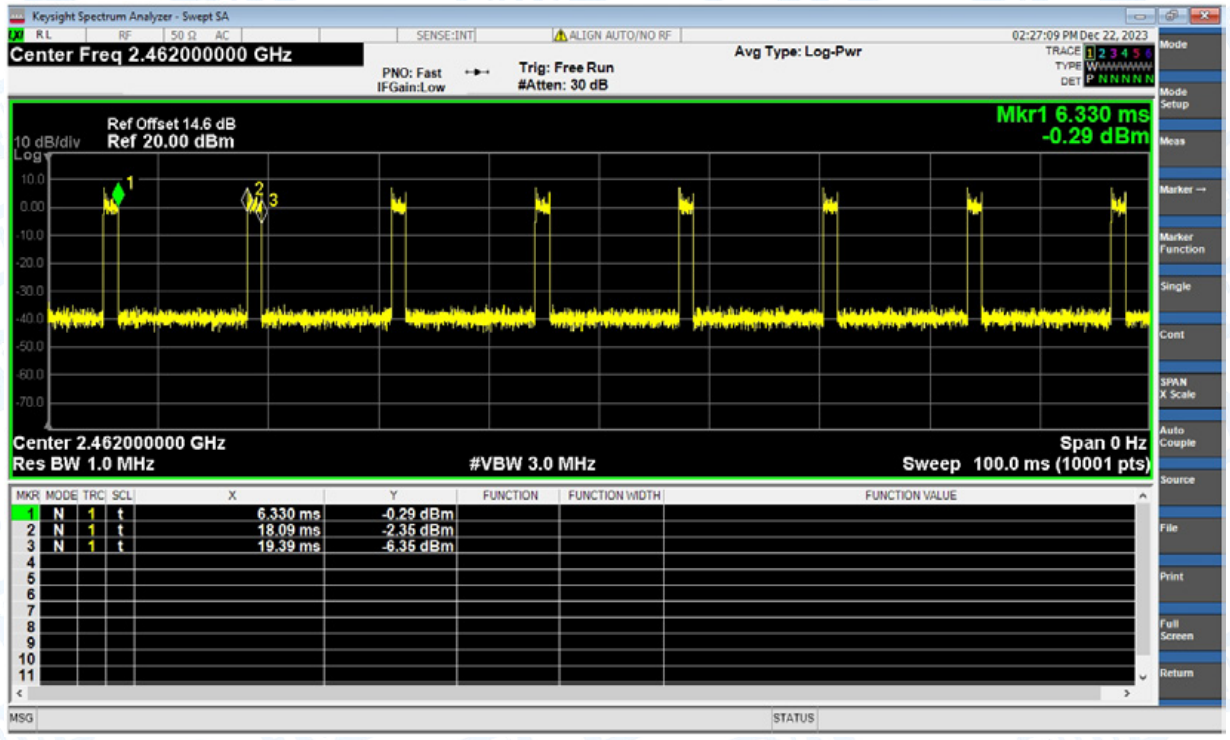
Duty Cycle NVNT n(HT20) 2412MHz Ant1



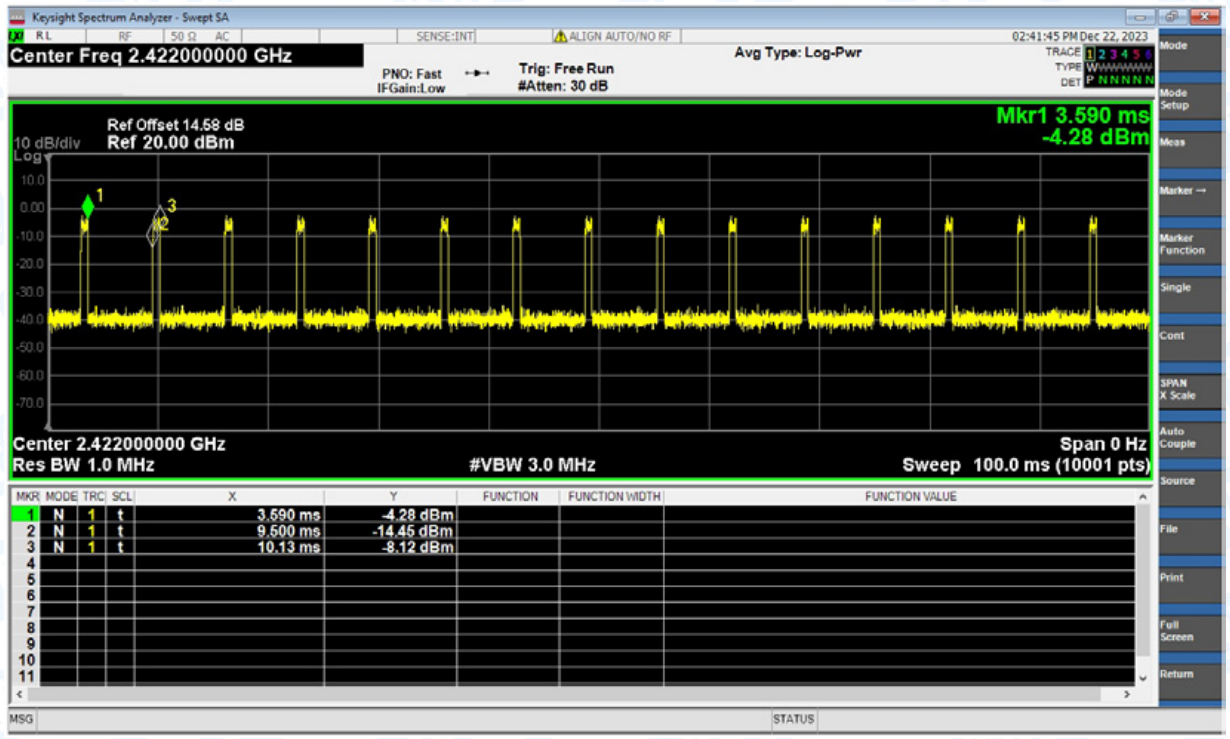

Duty Cycle NVNT n(HT20) 2437MHz Ant1



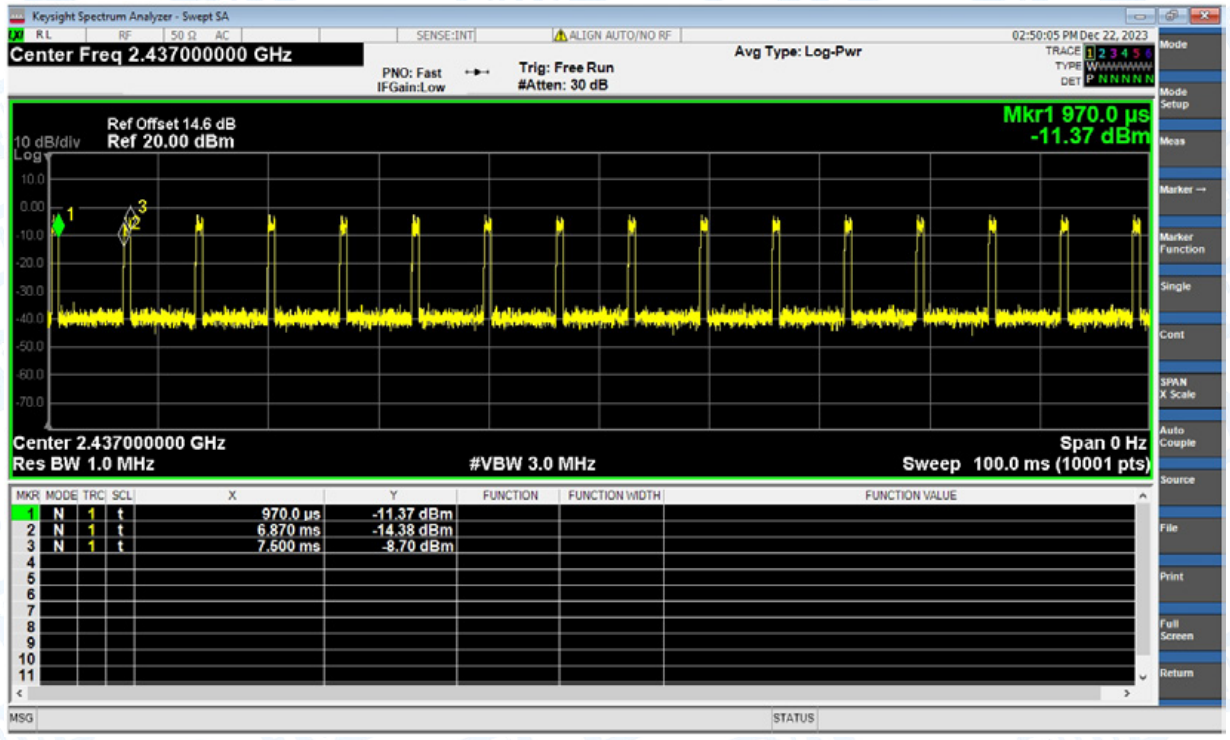
Duty Cycle NVNT n(HT20) 2462MHz Ant1



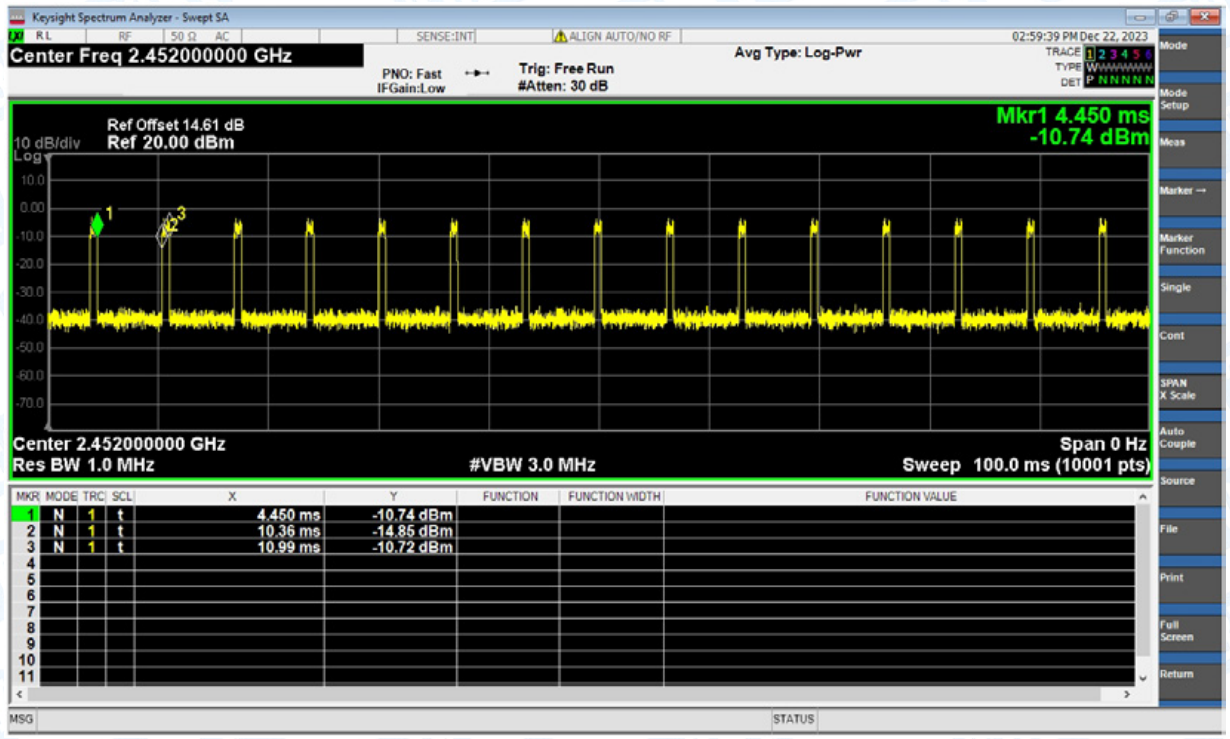

Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1




Duty Cycle NVNT n(HT40) 2452MHz Ant1



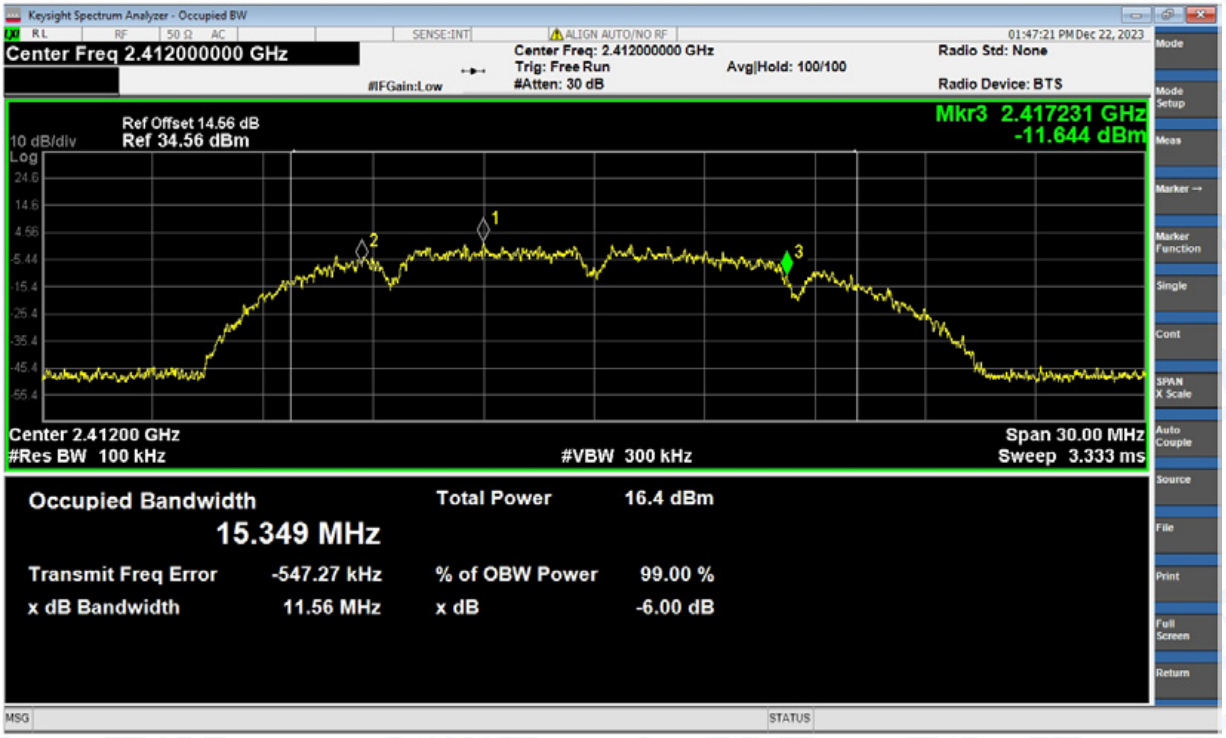
# Maximum Conducted Output Power

| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|
| NVNT | b | 2412 | Ant1 | 10.37 | 7.13 | 17.5 | 30 | Pass |
| NVNT | b | 2437 | Ant1 | 9.99 | 7.14 | 17.13 | 30 | Pass |
| NVNT | b | 2462 | Ant1 | 9.57 | 7.14 | 16.71 | 30 | Pass |
| NVNT | g | 2412 | Ant1 | 6.42 | 10.03 | 16.45 | 30 | Pass |
| NVNT | g | 2437 | Ant1 | 5.98 | 10.03 | 16.01 | 30 | Pass |
| NVNT | g | 2462 | Ant1 | 5.49 | 10 | 15.49 | 30 | Pass |
| NVNT | n(HT20) | 2412 | Ant1 | 7.59 | 10.02 | 17.61 | 30 | Pass |
| NVNT | n(HT20) | 2437 | Ant1 | 7.15 | 10.02 | 17.17 | 30 | Pass |
| NVNT | n(HT20) | 2462 | Ant1 | 6.65 | 10.02 | 16.67 | 30 | Pass |
| NVNT | n(HT40) | 2422 | Ant1 | 6.36 | 10.16 | 16.52 | 30 | Pass |
| NVNT | n(HT40) | 2437 | Ant1 | 5.92 | 10.15 | 16.07 | 30 | Pass |
| NVNT | n(HT40) | 2452 | Ant1 | 5.35 | 10.16 | 15.51 | 30 | Pass |

# -6dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | b | 2412 | Ant1 | 11.56 | 0.5 | Pass |
| NVNT | b | 2437 | Ant1 | 10.75 | 0.5 | Pass |
| NVNT | b | 2462 | Ant1 | 11.51 | 0.5 | Pass |
| NVNT | g | 2412 | Ant1 | 17.34 | 0.5 | Pass |
| NVNT | g | 2437 | Ant1 | 16.8 | 0.5 | Pass |
| NVNT | g | 2462 | Ant1 | 17.06 | 0.5 | Pass |
| NVNT | n(HT20) | 2412 | Ant1 | 16.96 | 0.5 | Pass |
| NVNT | n(HT20) | 2437 | Ant1 | 16.31 | 0.5 | Pass |
| NVNT | n(HT20) | 2462 | Ant1 | 18.01 | 0.5 | Pass |
| NVNT | n(HT40) | 2422 | Ant1 | 35.45 | 0.5 | Pass |
| NVNT | n(HT40) | 2437 | Ant1 | 30.62 | 0.5 | Pass |
| NVNT | n(HT40) | 2452 | Ant1 | 30.04 | 0.5 | Pass |

| Test Graphs |
| --- |
| -6dB Bandwidth NVNT b 2412MHz Ant1 |




| -6dB Bandwidth NVNT b 2437MHz Ant1 |
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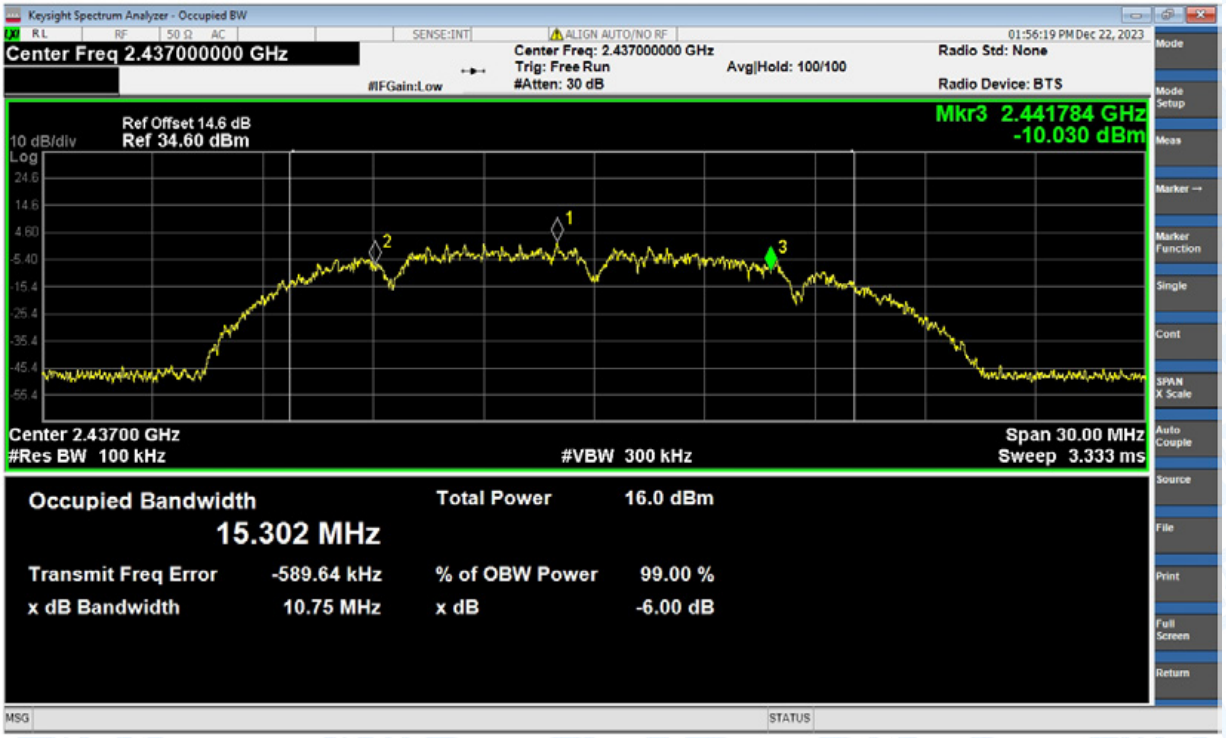
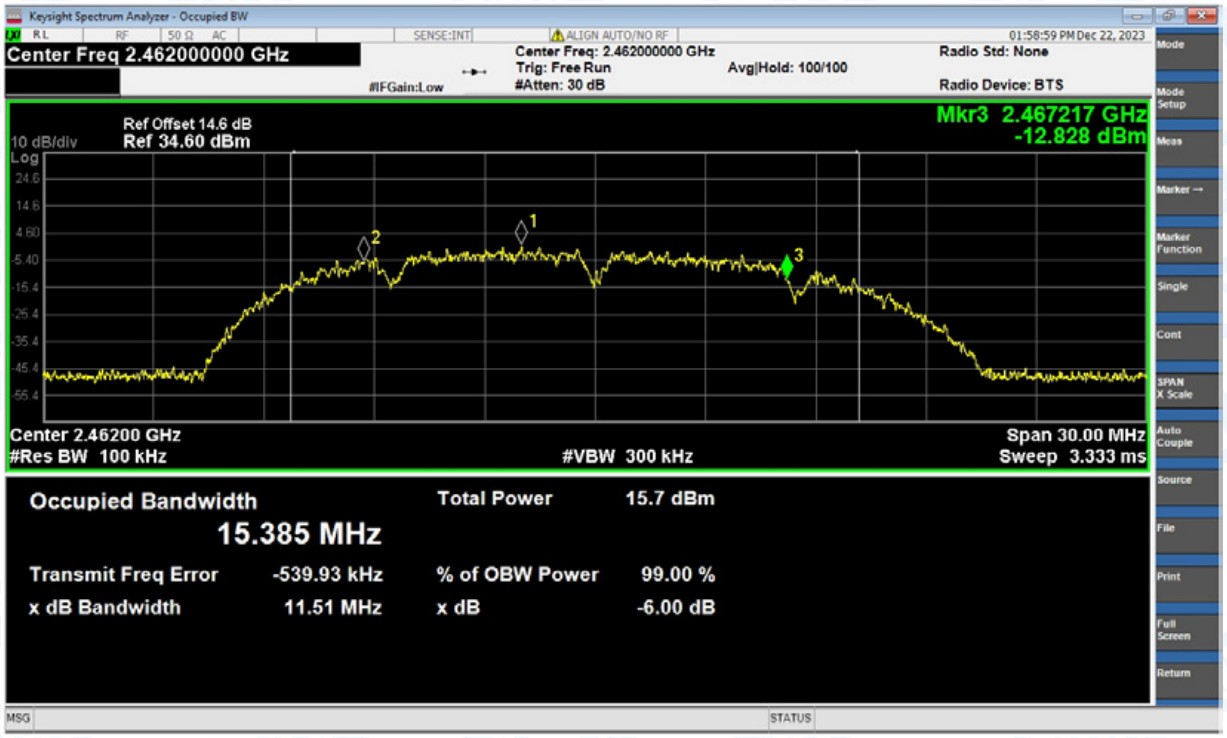
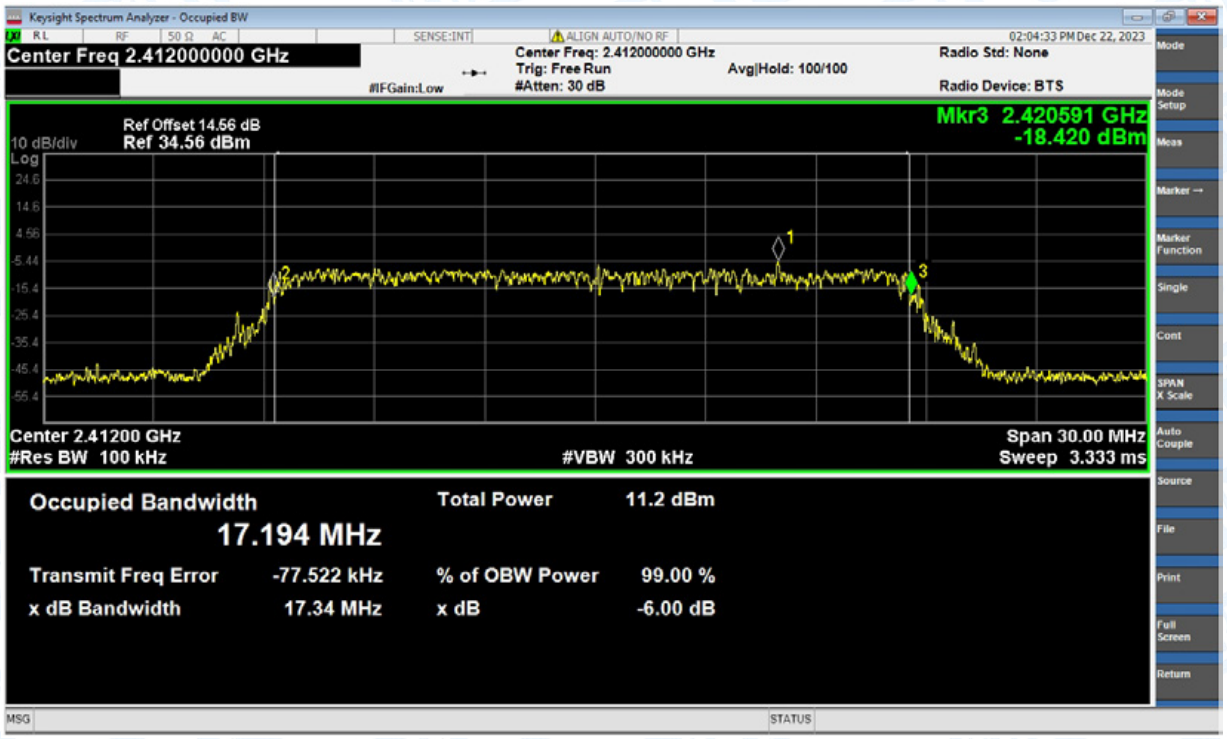


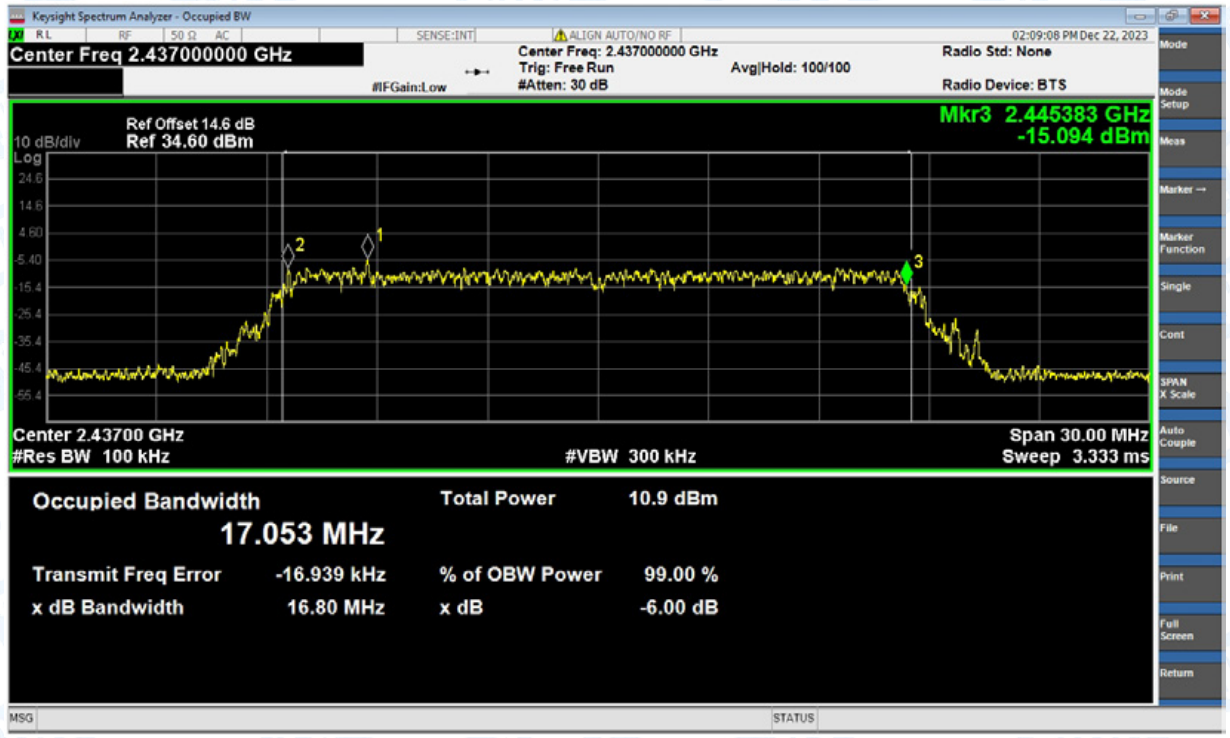
-6dB Bandwidth NVNT b 2462MHz Ant1



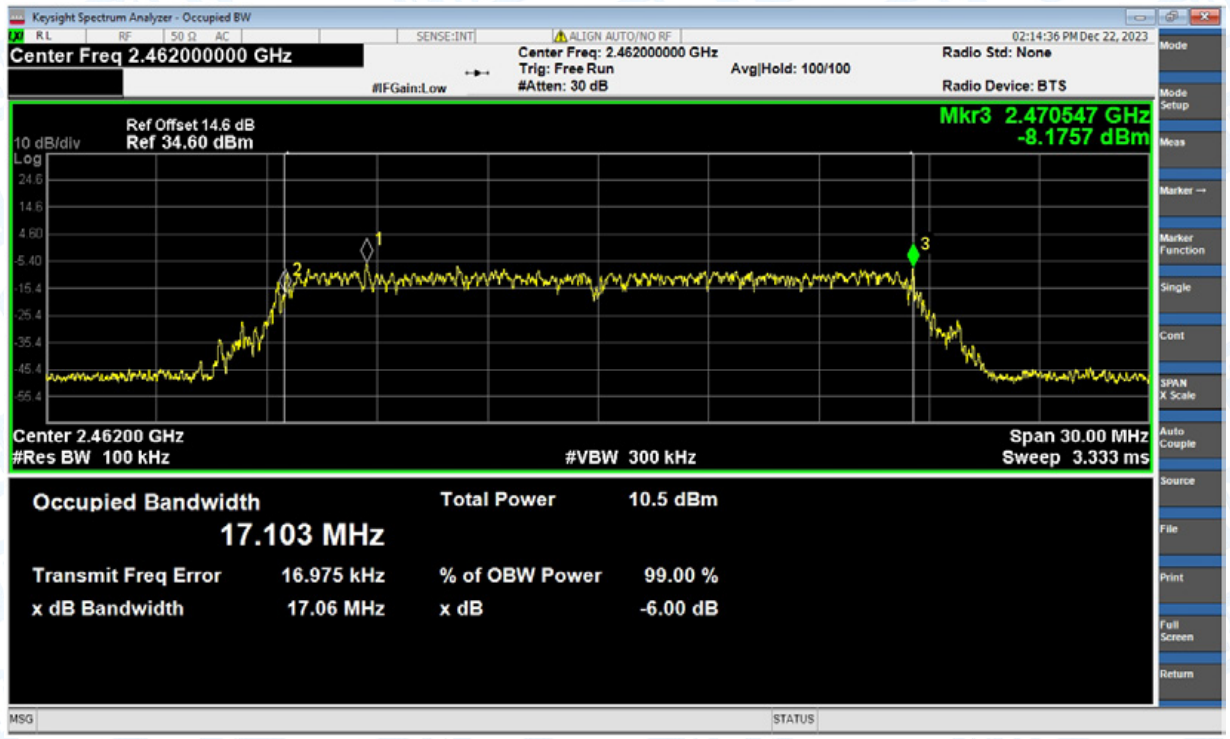

-6dB Bandwidth NVNT g 2412MHz Ant1



-6dB Bandwidth NVNT g 2437MHz Ant1

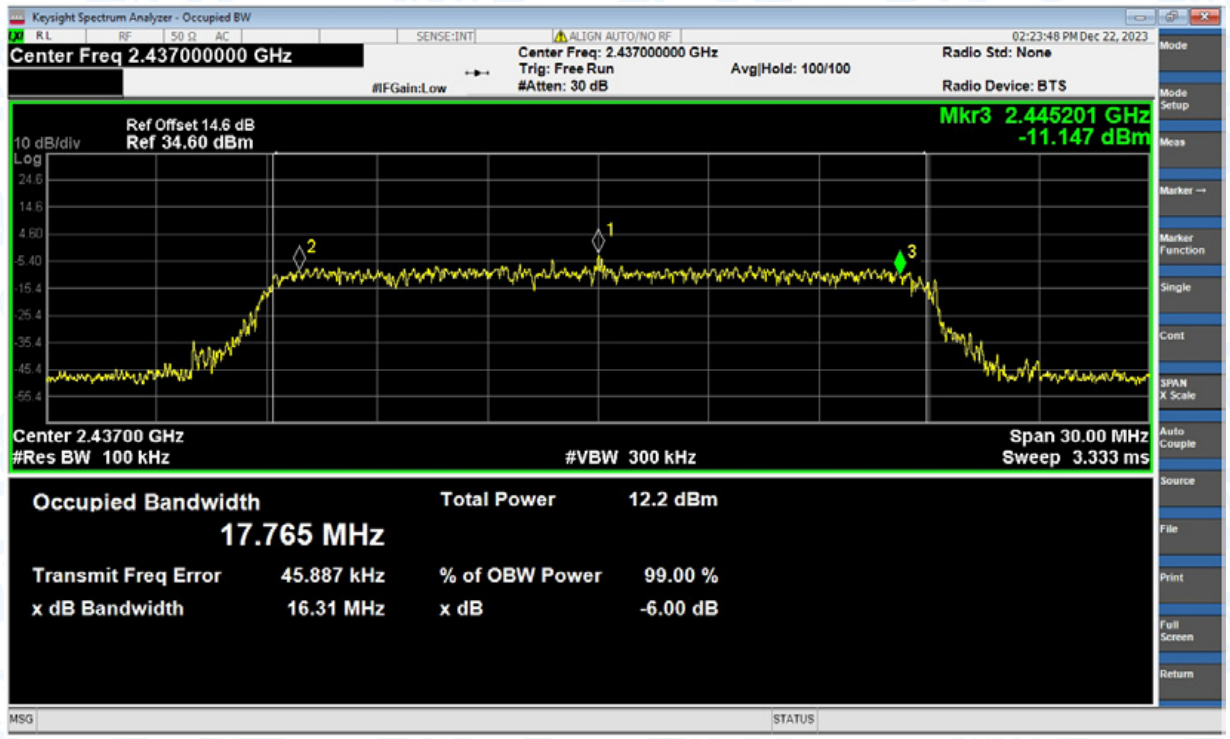



-6dB Bandwidth NVNT g 2462MHz Ant1

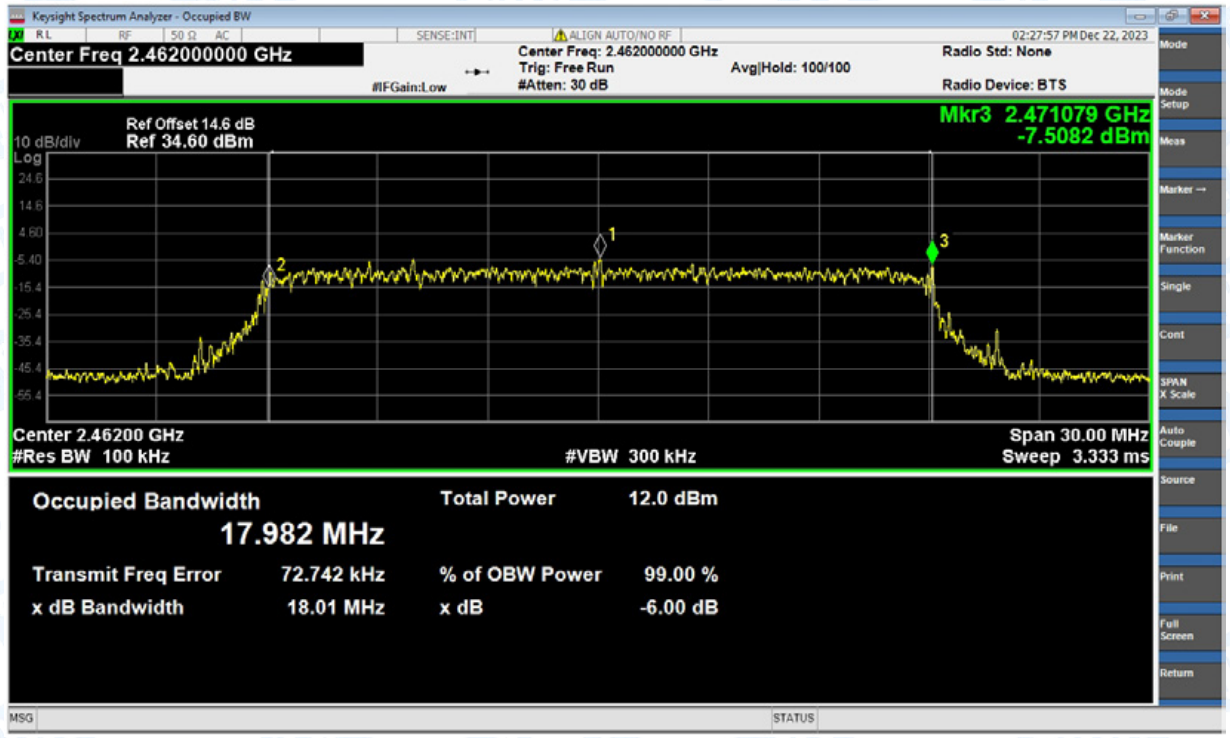


-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1

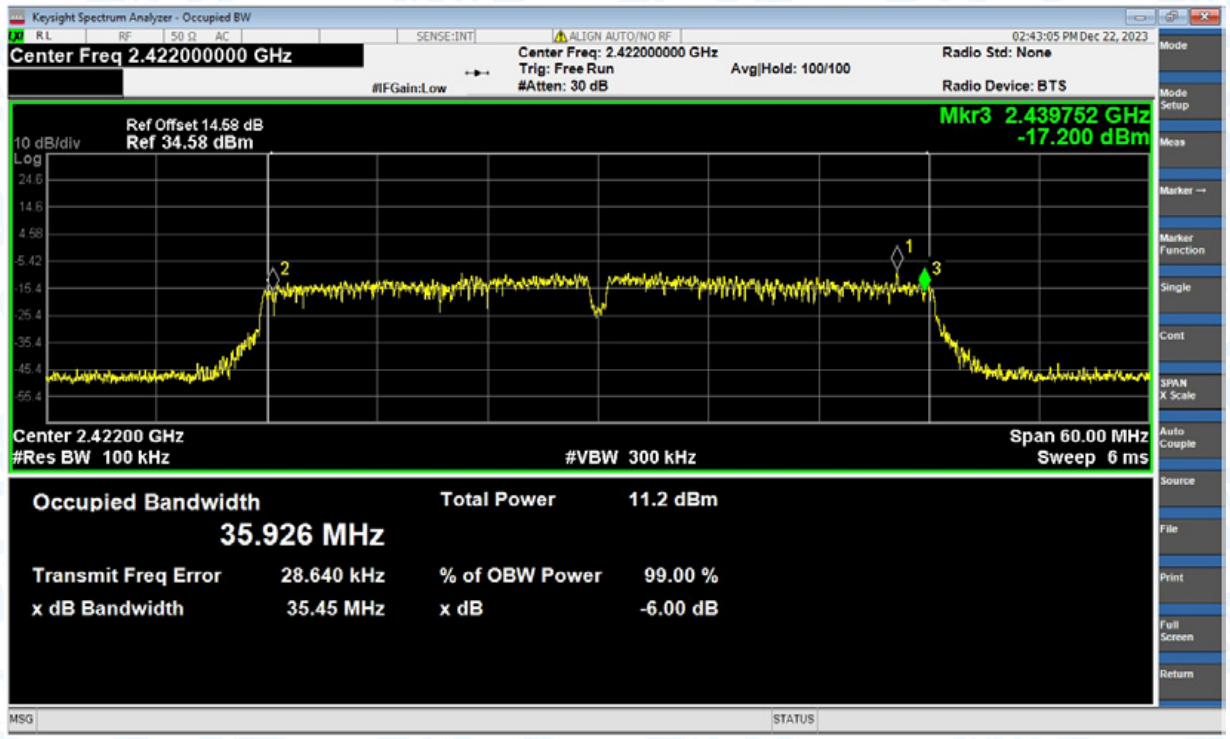

-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



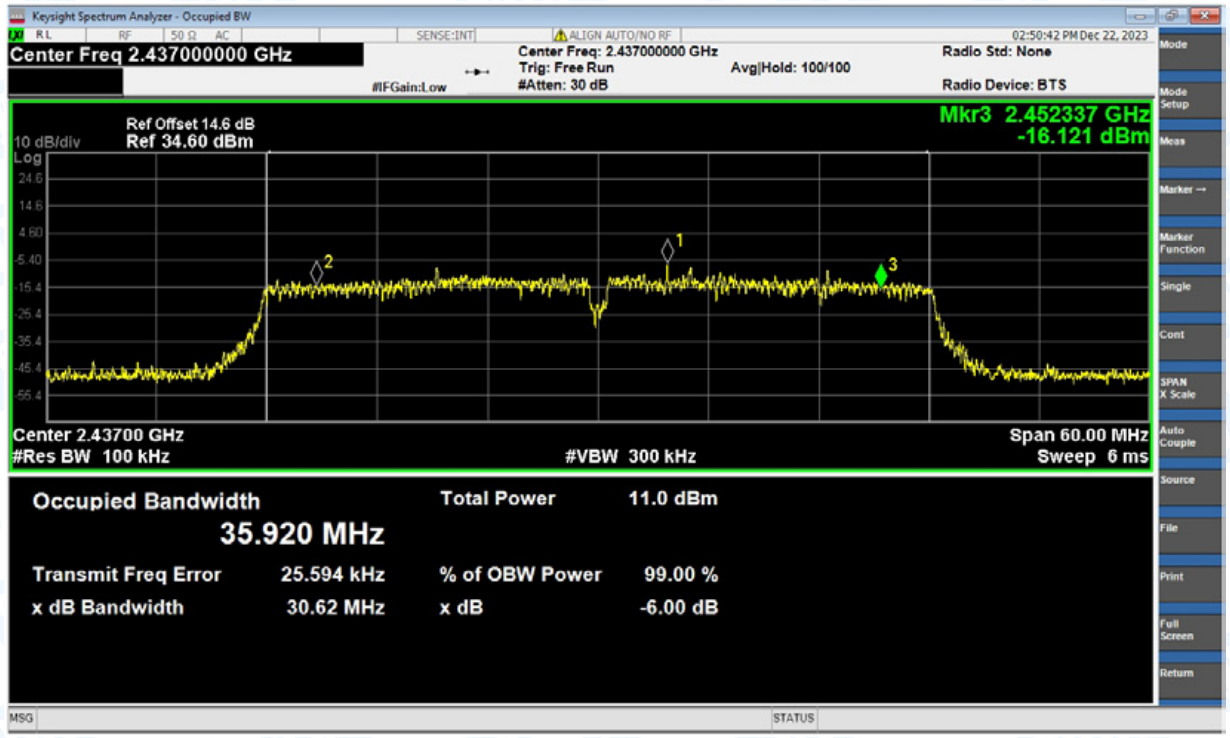
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



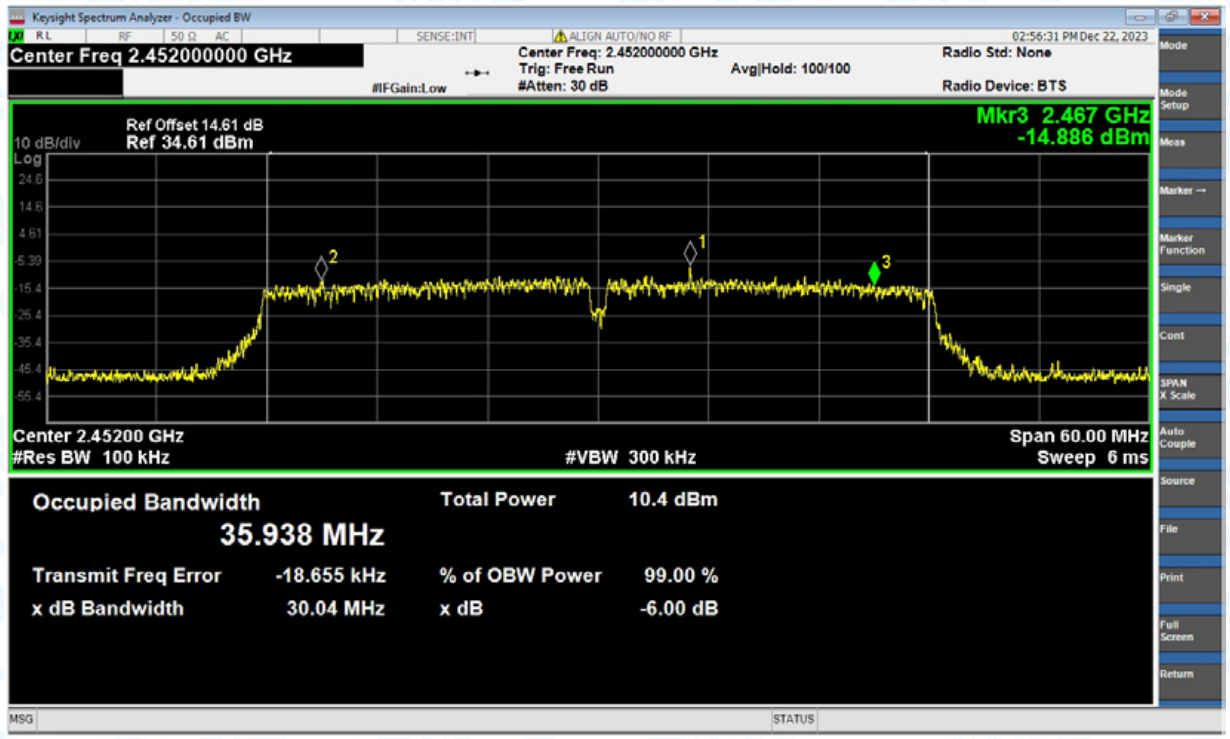

-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



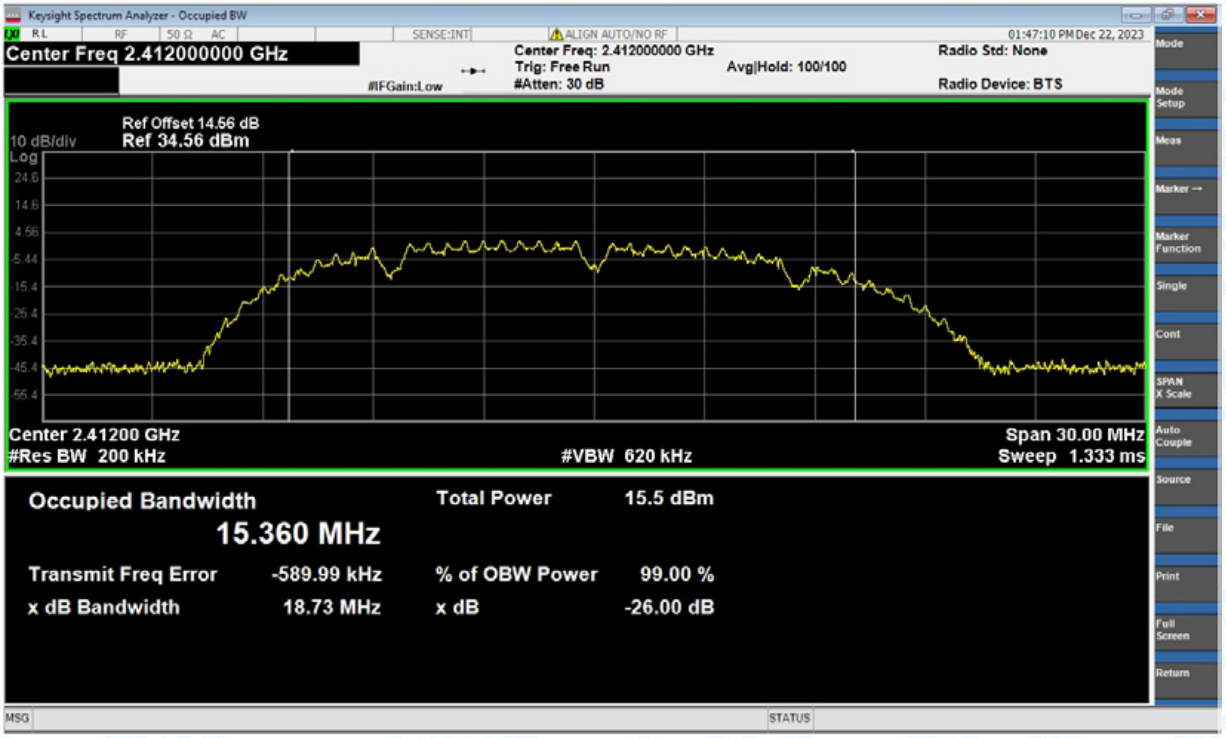

-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1



# Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | b | 2412 | Ant1 | 15.36 |
| NVNT | b | 2437 | Ant1 | 15.384 |
| NVNT | b | 2462 | Ant1 | 15.33 |
| NVNT | g | 2412 | Ant1 | 17.422 |
| NVNT | g | 2437 | Ant1 | 17.502 |
| NVNT | g | 2462 | Ant1 | 17.272 |
| NVNT | n(HT20) | 2412 | Ant1 | 18.001 |
| NVNT | n(HT20) | 2437 | Ant1 | 17.942 |
| NVNT | n(HT20) | 2462 | Ant1 | 18.054 |
| NVNT | n(HT40) | 2422 | Ant1 | 35.899 |
| NVNT | n(HT40) | 2437 | Ant1 | 35.996 |
| NVNT | n(HT40) | 2452 | Ant1 | 35.963 |

| Test Graphs |
| --- |
| OBW NVNT b 2412MHz Ant1 |




| OBW NVNT b 2437MHz Ant1 |
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