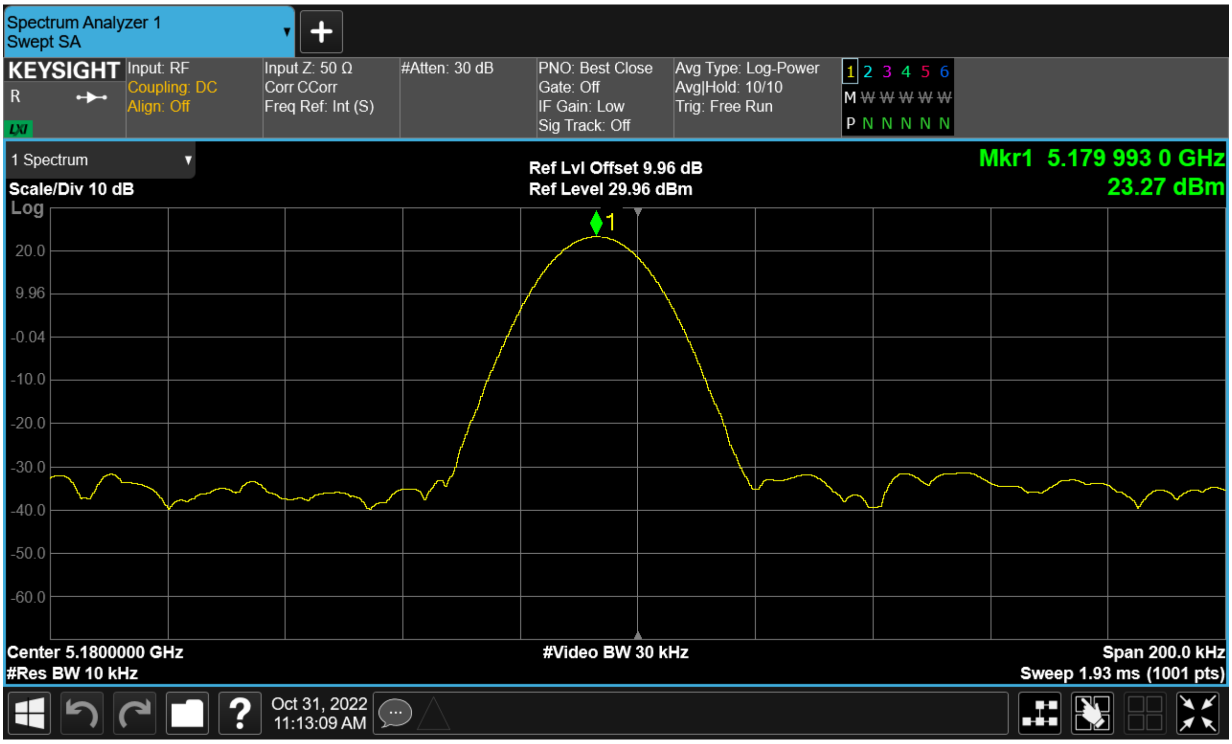
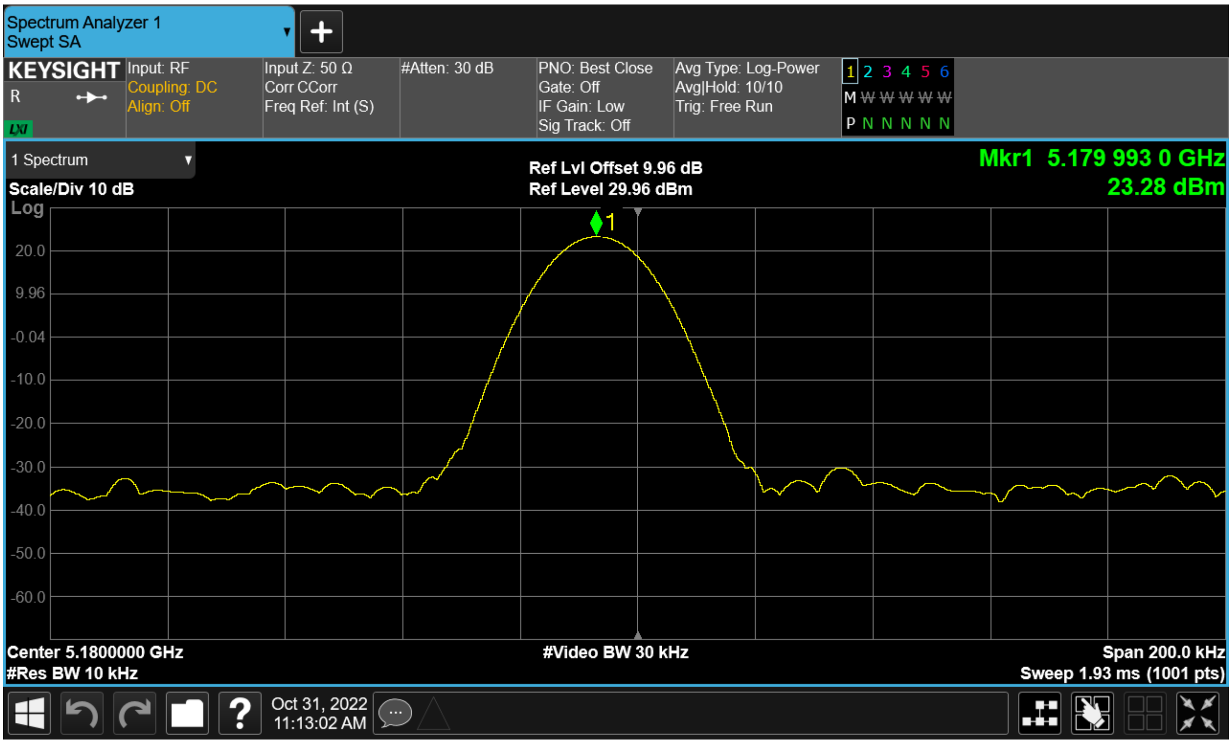
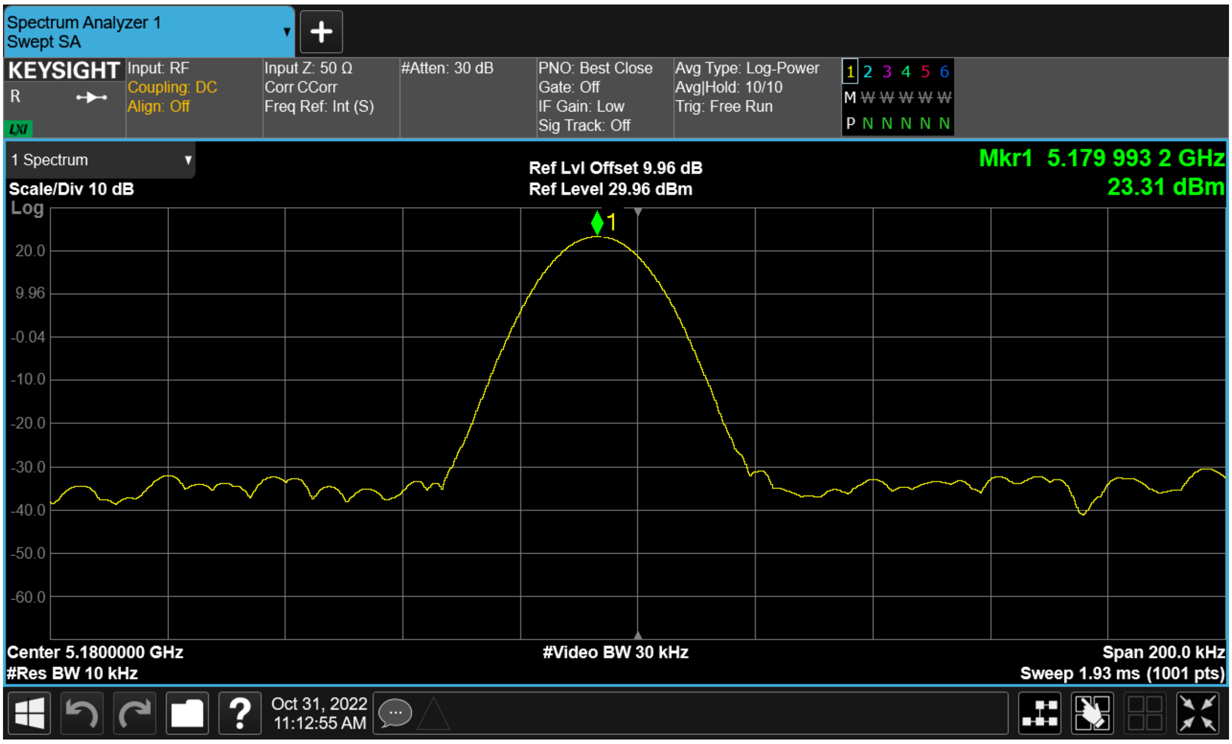
# Test Data

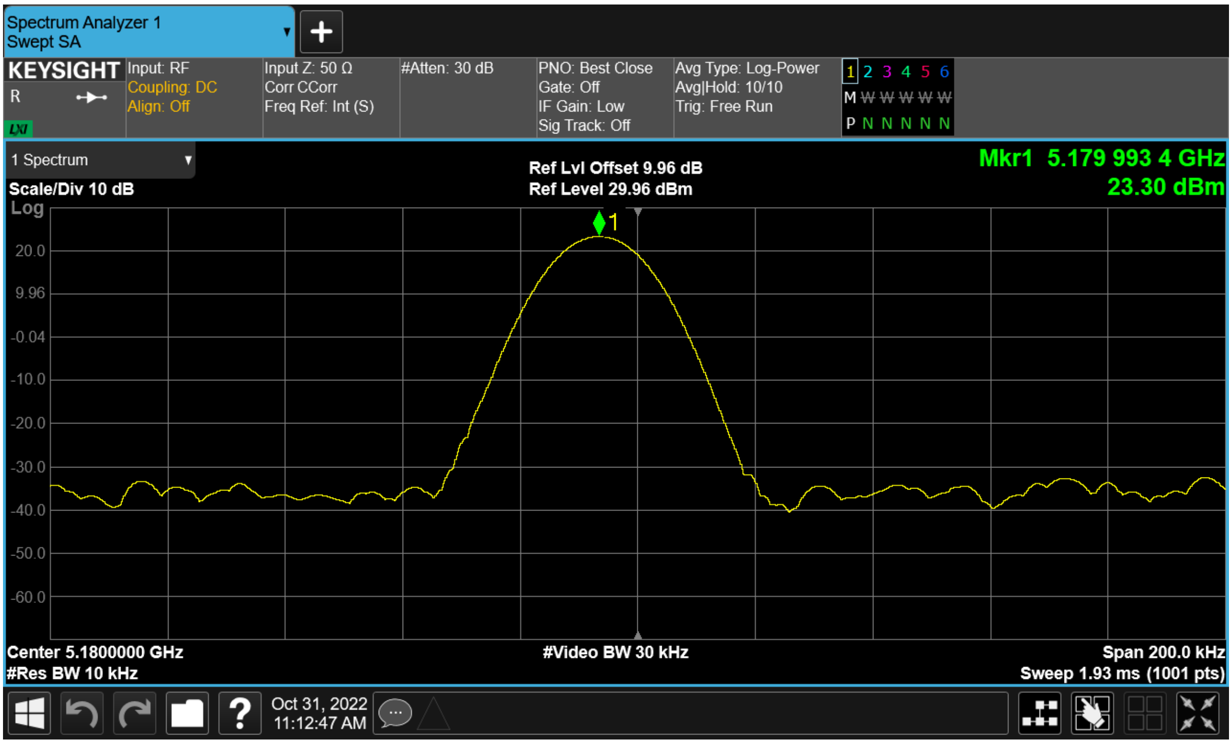
## Frequency Stability

| Condition | Mode | Frequency (MHz) | Antenna | Measured Frequency (MHz) | Deviation (ppm) | Limit (ppm) | Verdict |
|---|---|---|---|---|---|---|---|
| HVNT | a | 5180 | Ant2 | 5179.993 | -1.35 | 25 | Pass |
| LVNT | a | 5180 | Ant2 | 5179.993 | -1.35 | 25 | Pass |
| NVHT | a | 5180 | Ant2 | 5179.9932 | -1.31 | 25 | Pass |
| NVLT | a | 5180 | Ant2 | 5179.9934 | -1.27 | 25 | Pass |
| NVNT | a | 5180 | Ant2 | 5179.9938 | -1.2 | 25 | Pass |
| HVNT | ac80 | 5210 | Ant2 | 5209.9934 | -1.27 | 25 | Pass |
| LVNT | ac80 | 5210 | Ant2 | 5209.9938 | -1.19 | 25 | Pass |
| NVHT | ac80 | 5210 | Ant2 | 5209.9942 | -1.11 | 25 | Pass |
| NVLT | ac80 | 5210 | Ant2 | 5209.9952 | -0.92 | 25 | Pass |
| NVNT | ac80 | 5210 | Ant2 | 5209.999102692 | -0.17 | 25 | Pass |
| HVNT | n40 | 5190 | Ant2 | 5189.993 | -1.35 | 25 | Pass |
| LVNT | n40 | 5190 | Ant2 | 5189.9934 | -1.27 | 25 | Pass |
| NVHT | n40 | 5190 | Ant2 | 5189.9938 | -1.19 | 25 | Pass |
| NVLT | n40 | 5190 | Ant2 | 5189.9946 | -1.04 | 25 | Pass |
| NVNT | n40 | 5190 | Ant2 | 5189.9976 | -0.46 | 25 | Pass |

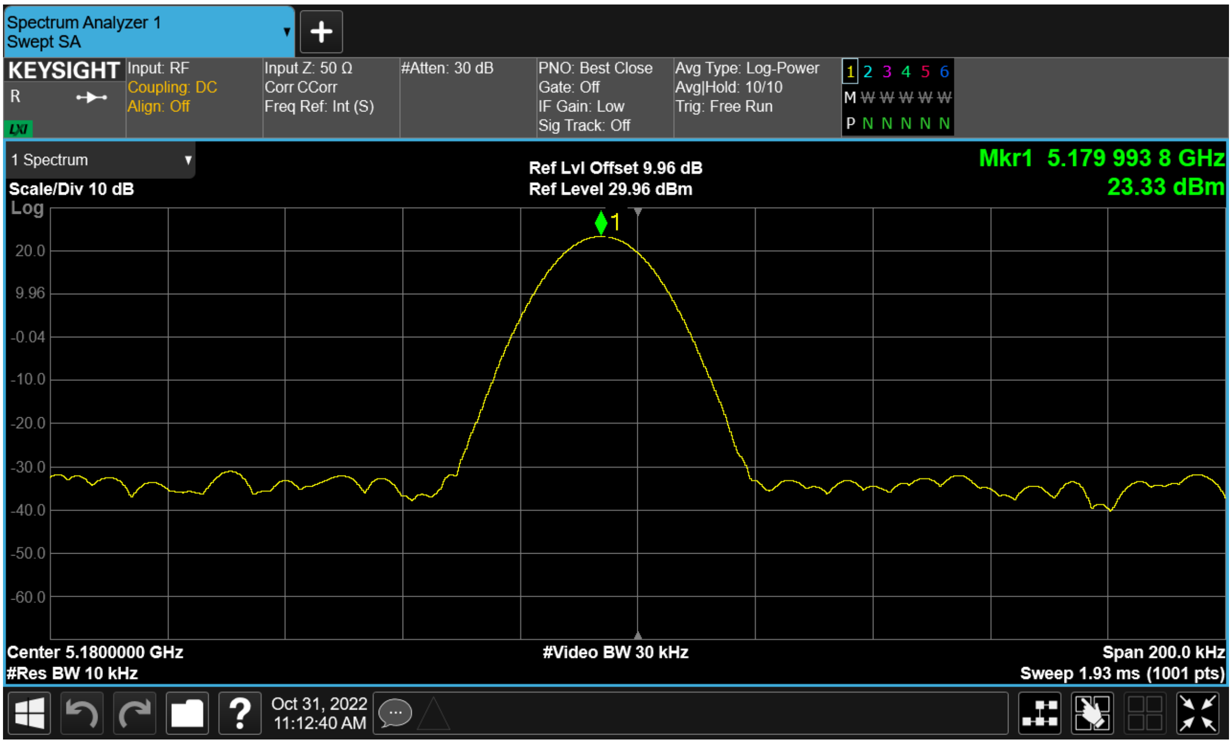
| Test Graphs |
| --- |
| Freq. Stability HVNT a 5180MHz Ant2 |
|  |
| Freq. Stability LVNT a 5180MHz Ant2 |
|  |
| Freq. Stability NVHT a 5180MHz Ant2 |



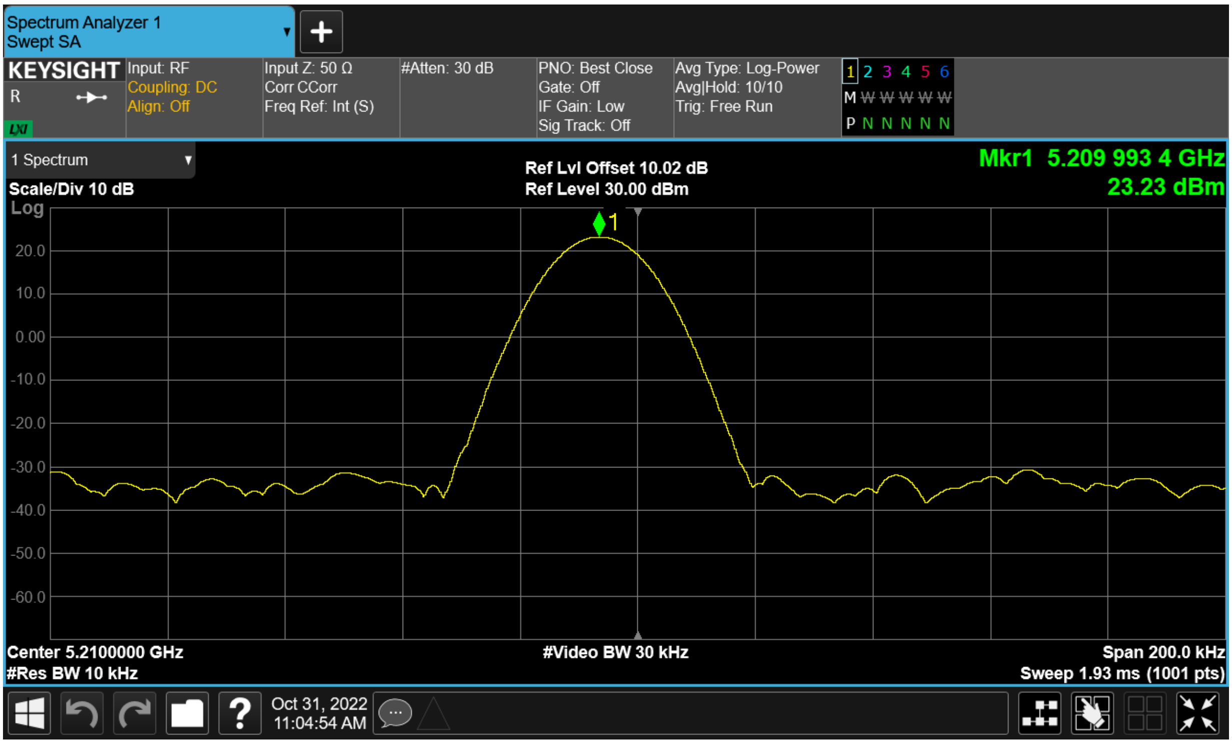

Freq. Stability NVLT a 5180MHz Ant2



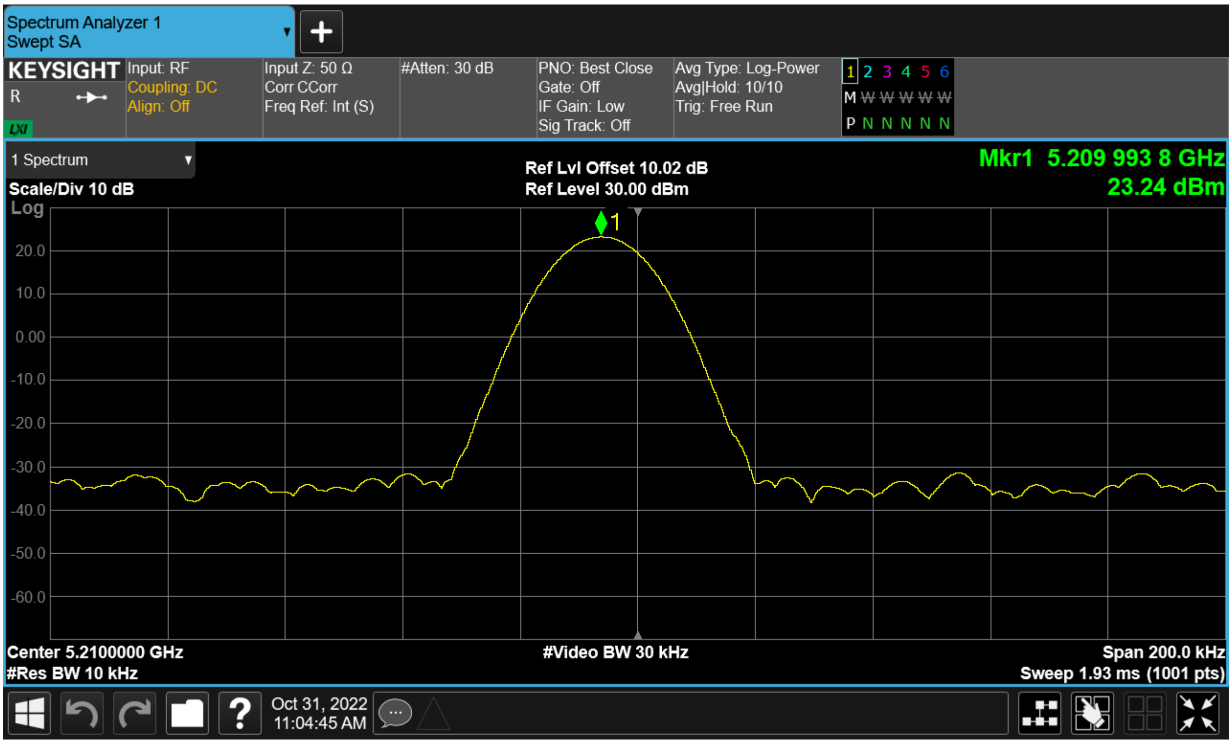

Freq. Stability NVNT a 5180MHz Ant2



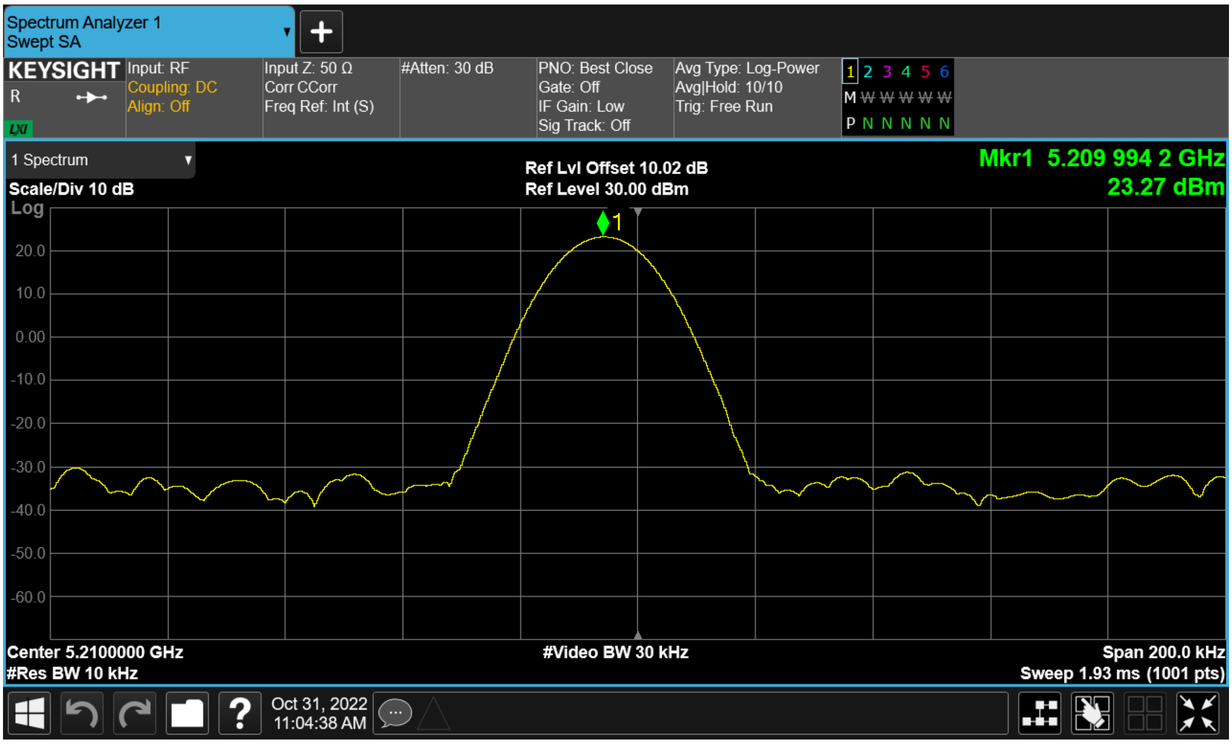

Freq. Stability HVNT ac80 5210MHz Ant2



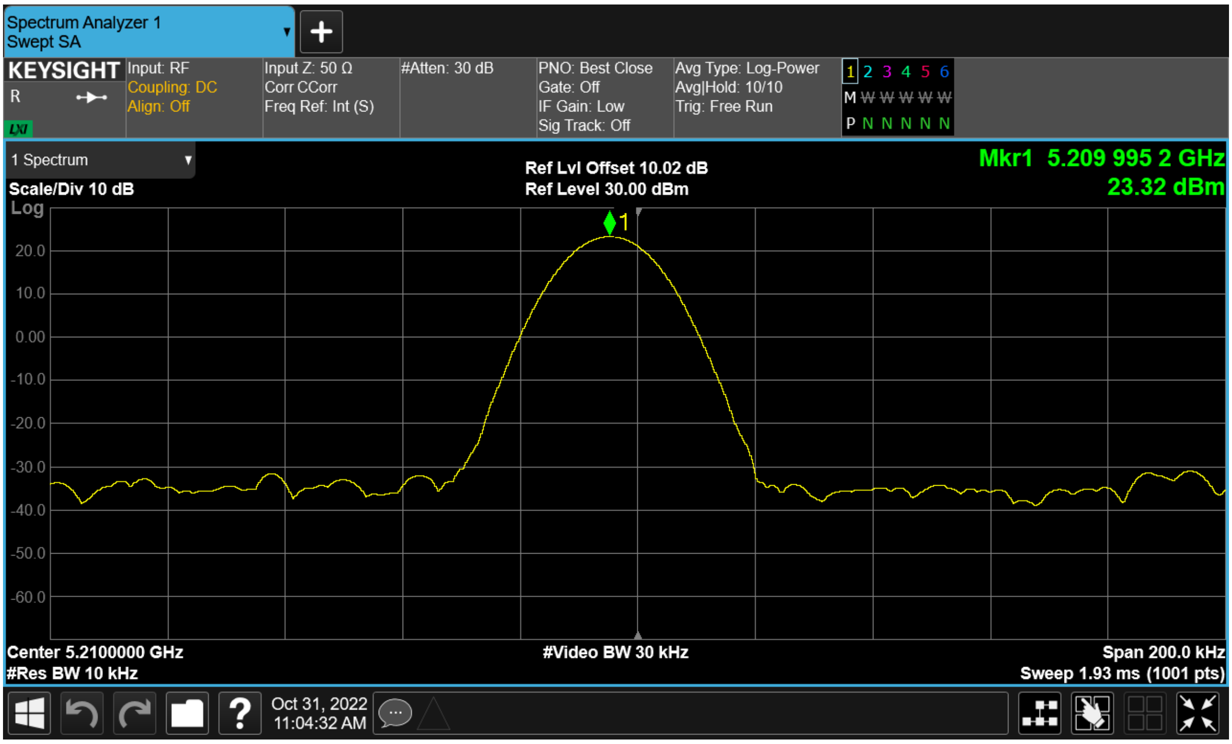

Freq. Stability LVNT ac80 5210MHz Ant2



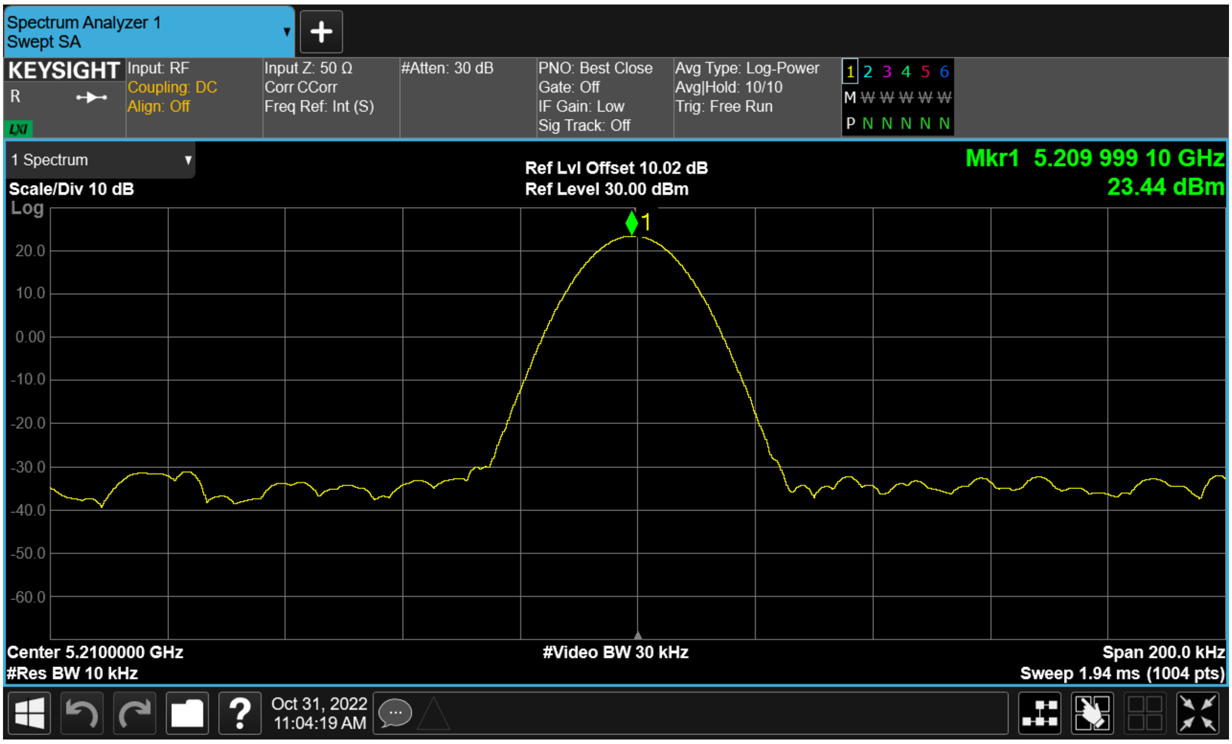

Freq. Stability NVHT ac80 5210MHz Ant2



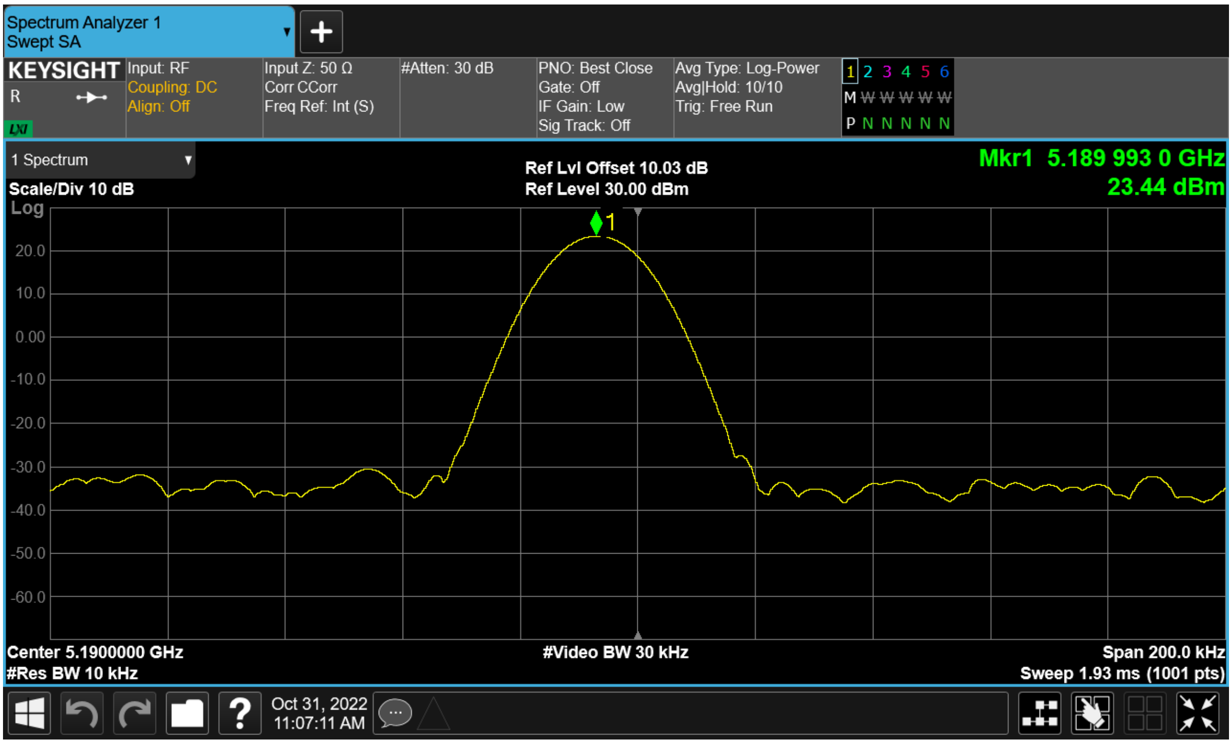

Freq. Stability NVLT ac80 5210MHz Ant2



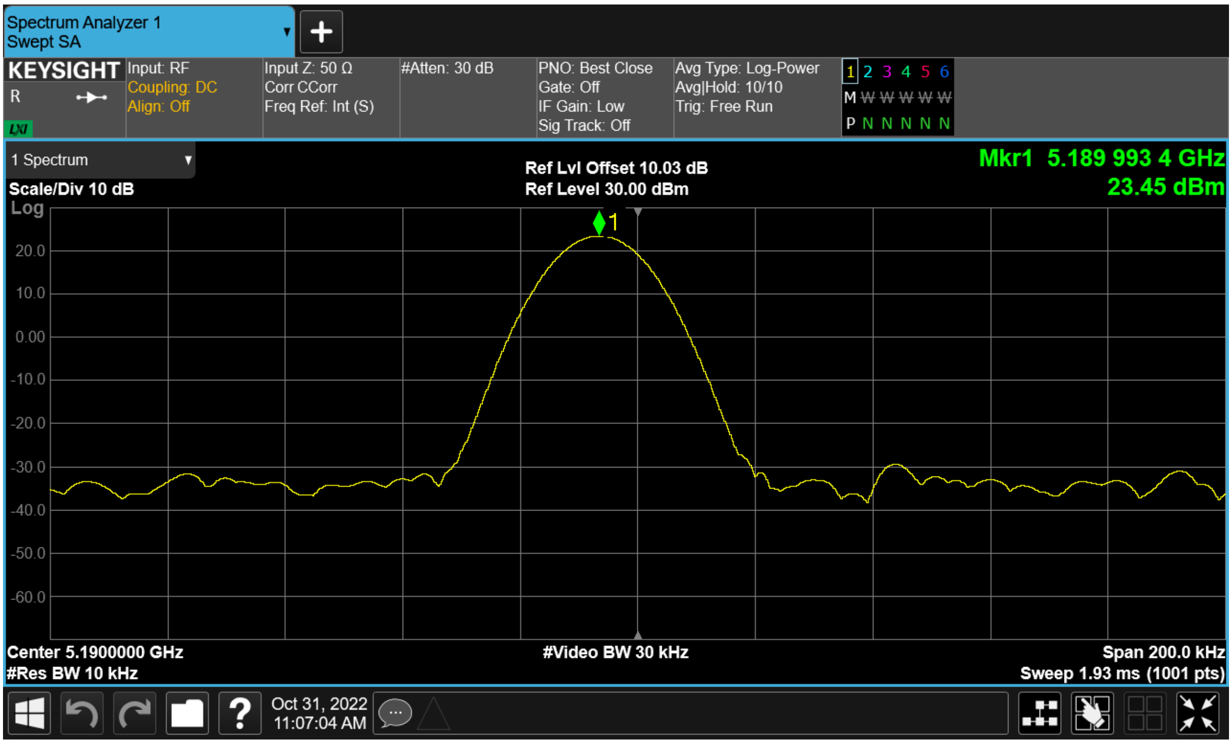

Freq. Stability NVNT ac80 5210MHz Ant2



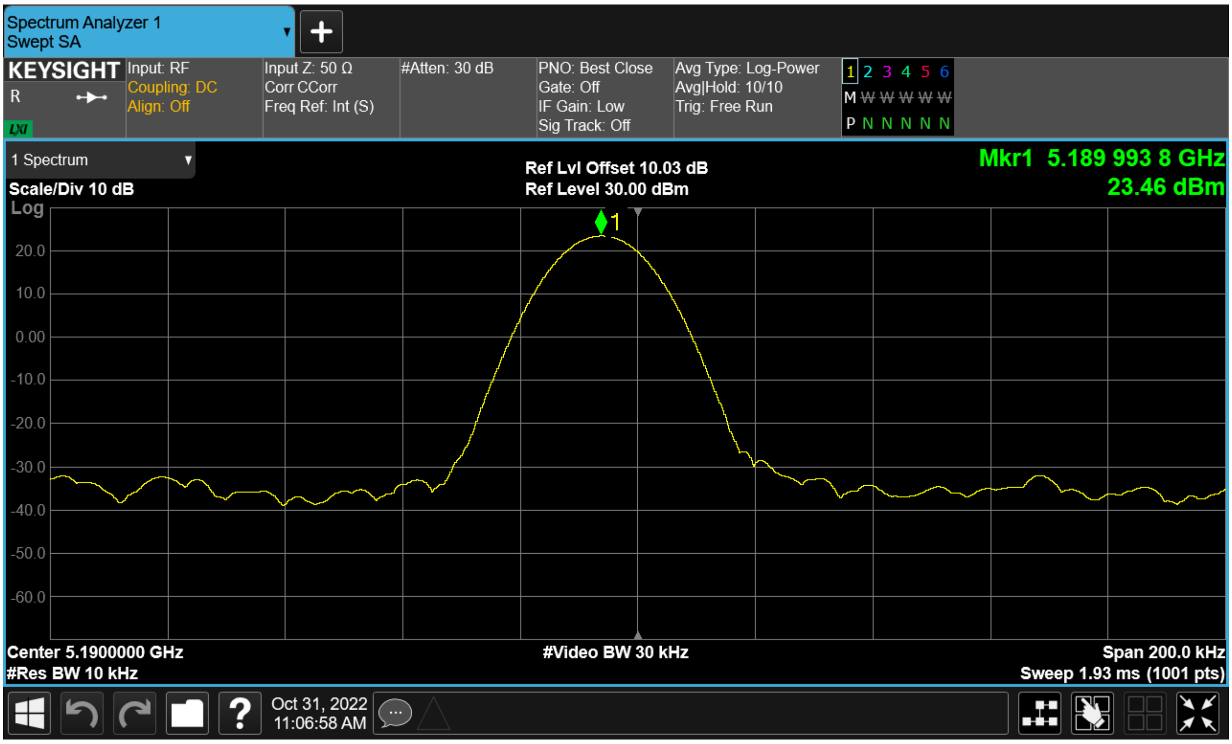

Freq. Stability HVNT n40 5190MHz Ant2



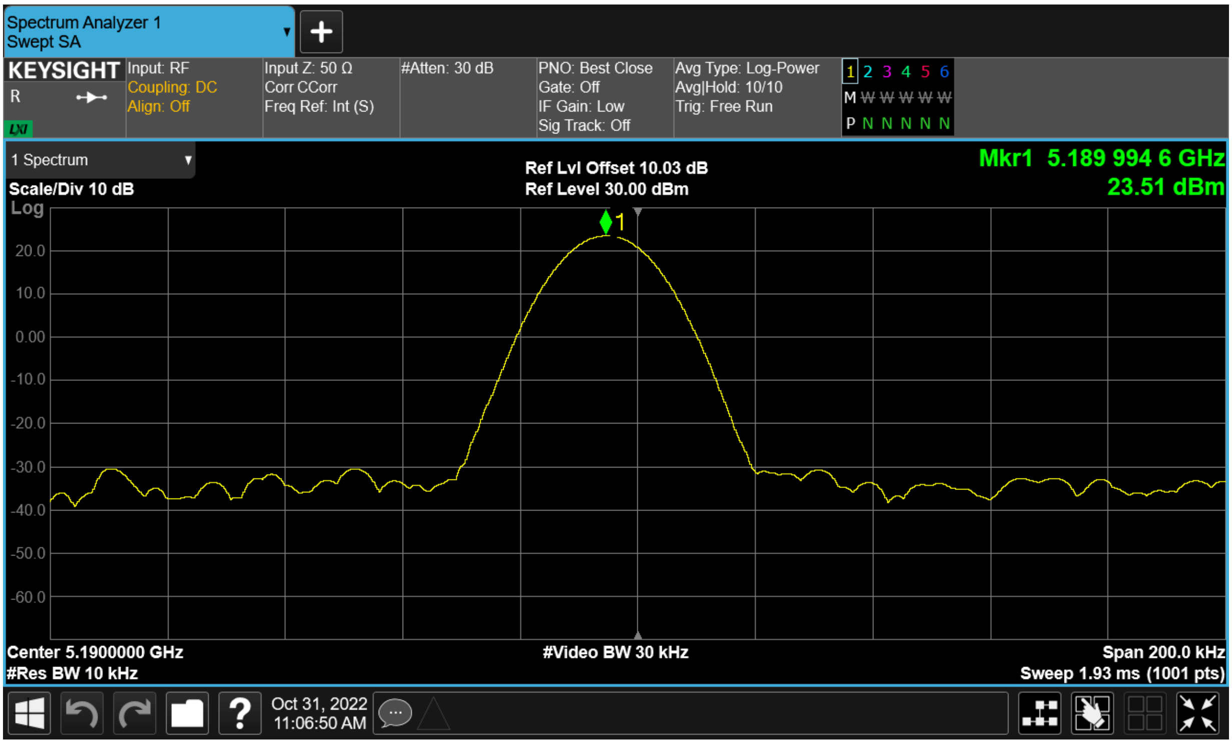

Freq. Stability LVNT n40 5190MHz Ant2



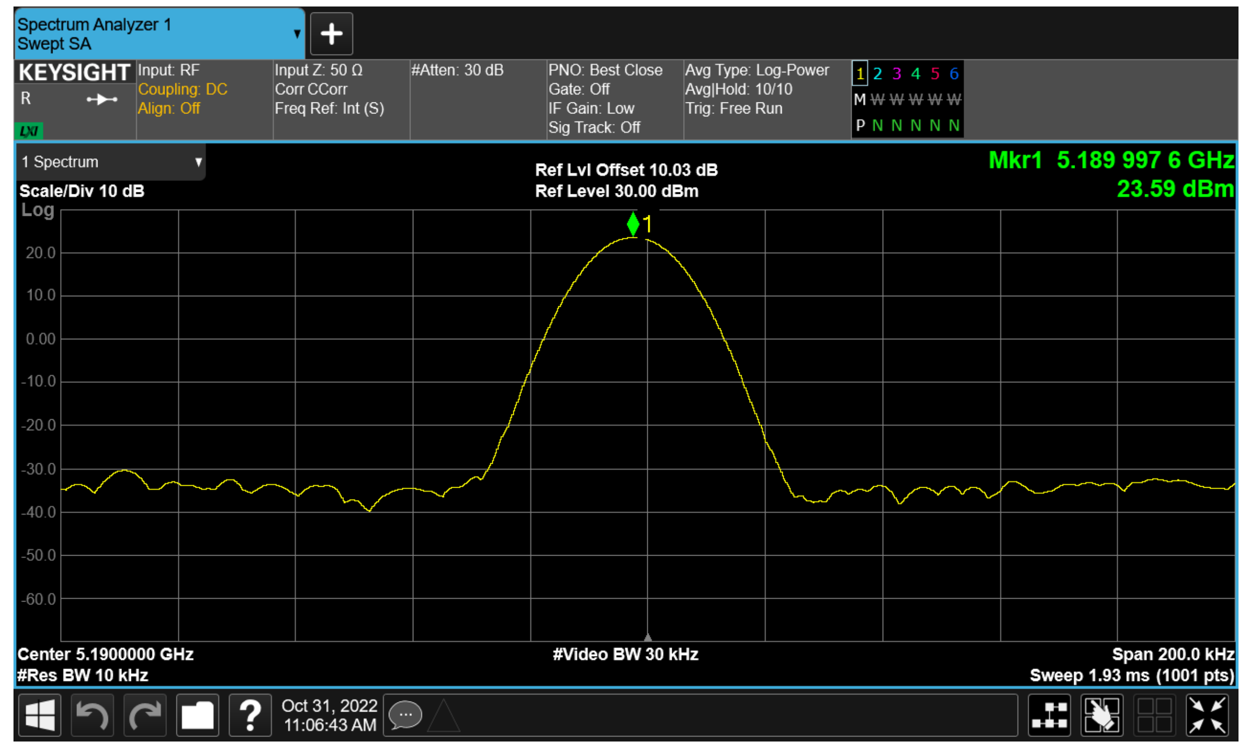

Freq. Stability NVHT n40 5190MHz Ant2



Freq. Stability NVLT n40 5190MHz Ant2



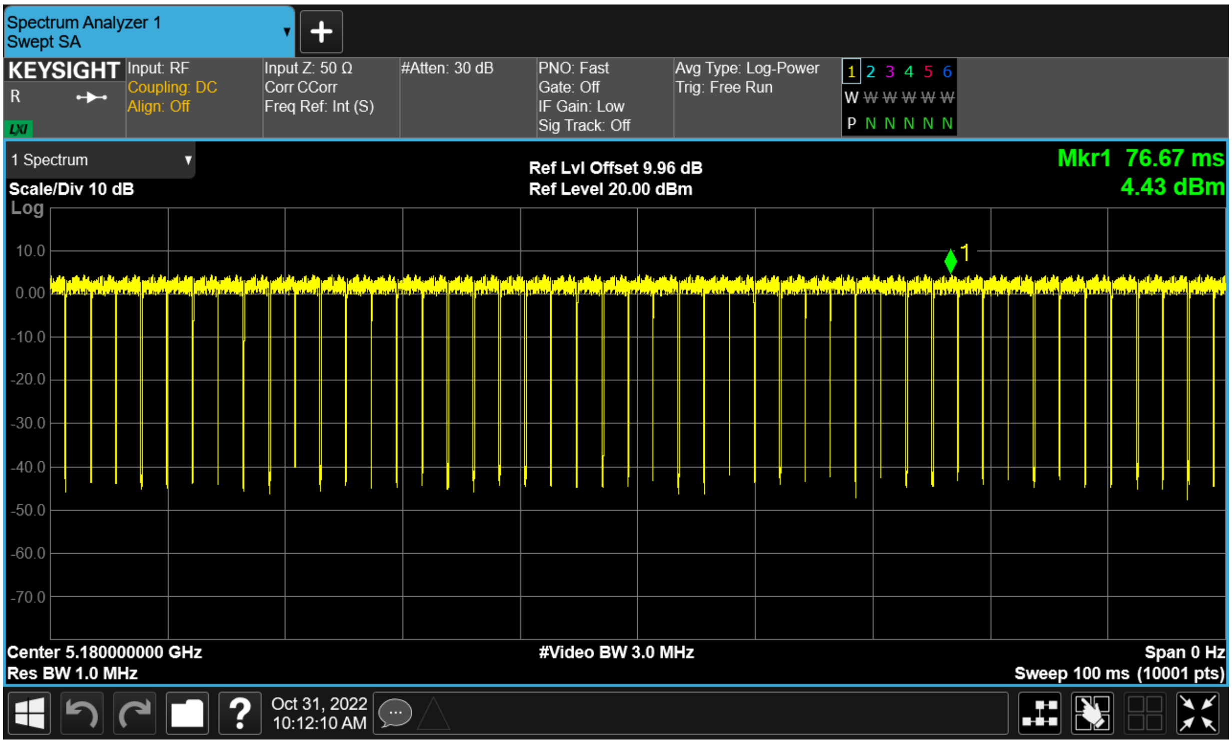
Freq. Stability NVNT n40 5190MHz Ant2


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Off
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Best Close
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 10.03 dB
Ref Level 30.00 dBm
Mkr1 5.189 997 6 GHz
23.59 dBm
Center 5.1900000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 200.0 kHz
Sweep 1.93 ms (1001 pts)
Oct 31, 2022
11:06:43 AM

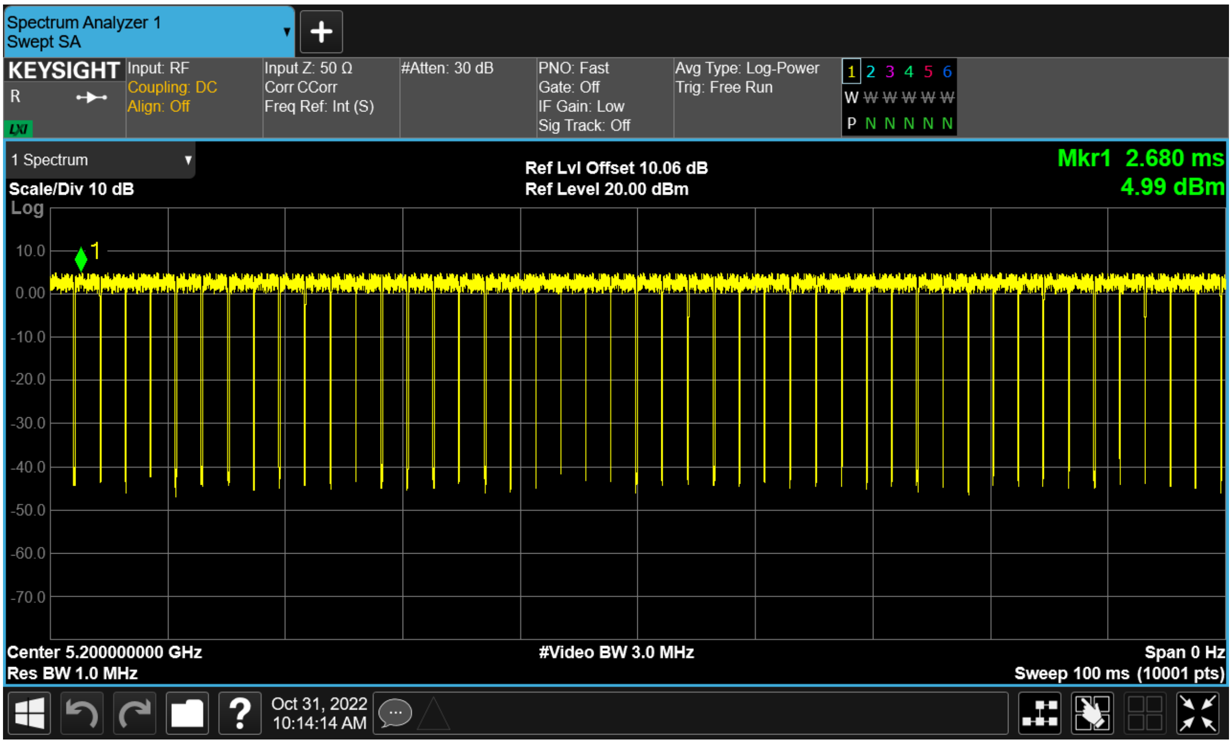
# Duty Cycle

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) |
|---|---|---|---|---|---|
| NVNT | a | 5180 | Ant2 | 95.93 | 0.18 |
| NVNT | a | 5200 | Ant2 | 95.91 | 0.18 |
| NVNT | a | 5240 | Ant2 | 95.7 | 0.19 |
| NVNT | ac20 | 5180 | Ant2 | 95.12 | 0.22 |
| NVNT | ac20 | 5200 | Ant2 | 96.27 | 0.17 |
| NVNT | ac20 | 5240 | Ant2 | 95.66 | 0.19 |
| NVNT | ac40 | 5190 | Ant2 | 91.66 | 0.38 |
| NVNT | ac40 | 5230 | Ant2 | 91.25 | 0.4 |
| NVNT | ac80 | 5210 | Ant2 | 83.44 | 0.79 |
| NVNT | n20 | 5180 | Ant2 | 95.38 | 0.21 |
| NVNT | n20 | 5200 | Ant2 | 95.4 | 0.2 |
| NVNT | n20 | 5240 | Ant2 | 95.74 | 0.19 |
| NVNT | n40 | 5190 | Ant2 | 91.87 | 0.37 |
| NVNT | n40 | 5230 | Ant2 | 91.6 | 0.38 |

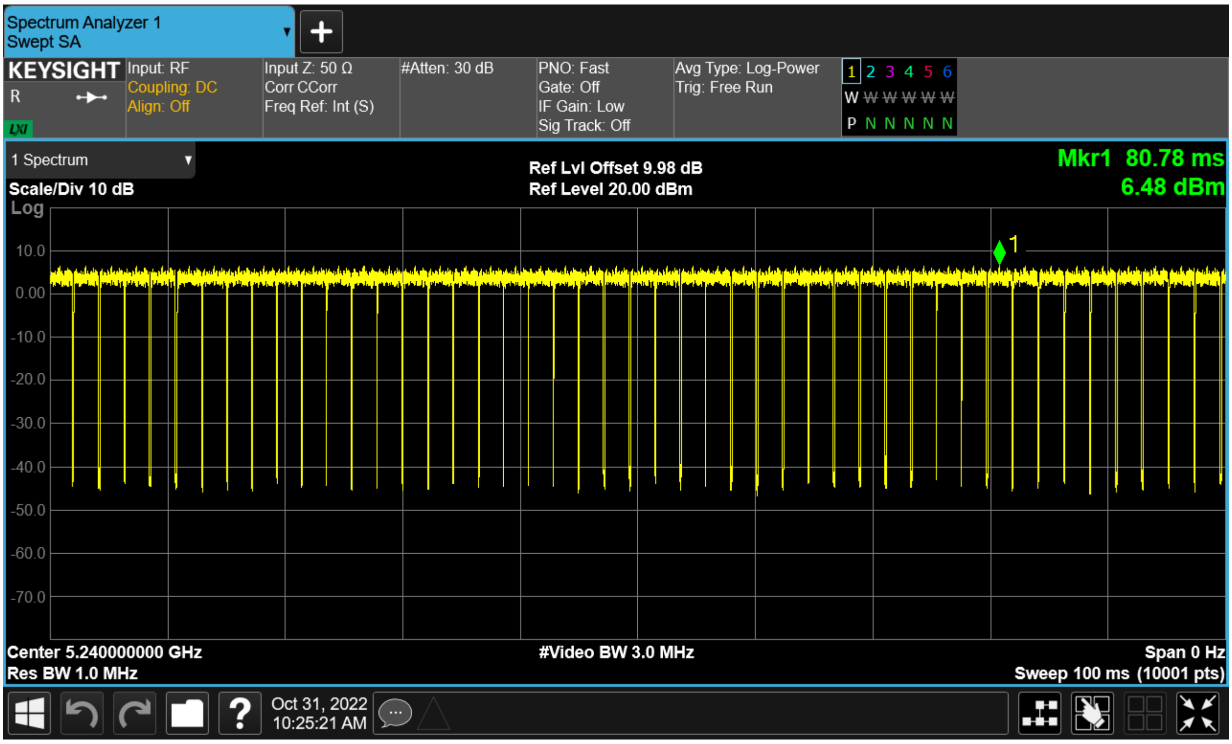
| Test Graphs |
| --- |
| Duty Cycle NVNT a 5180MHz Ant2 |



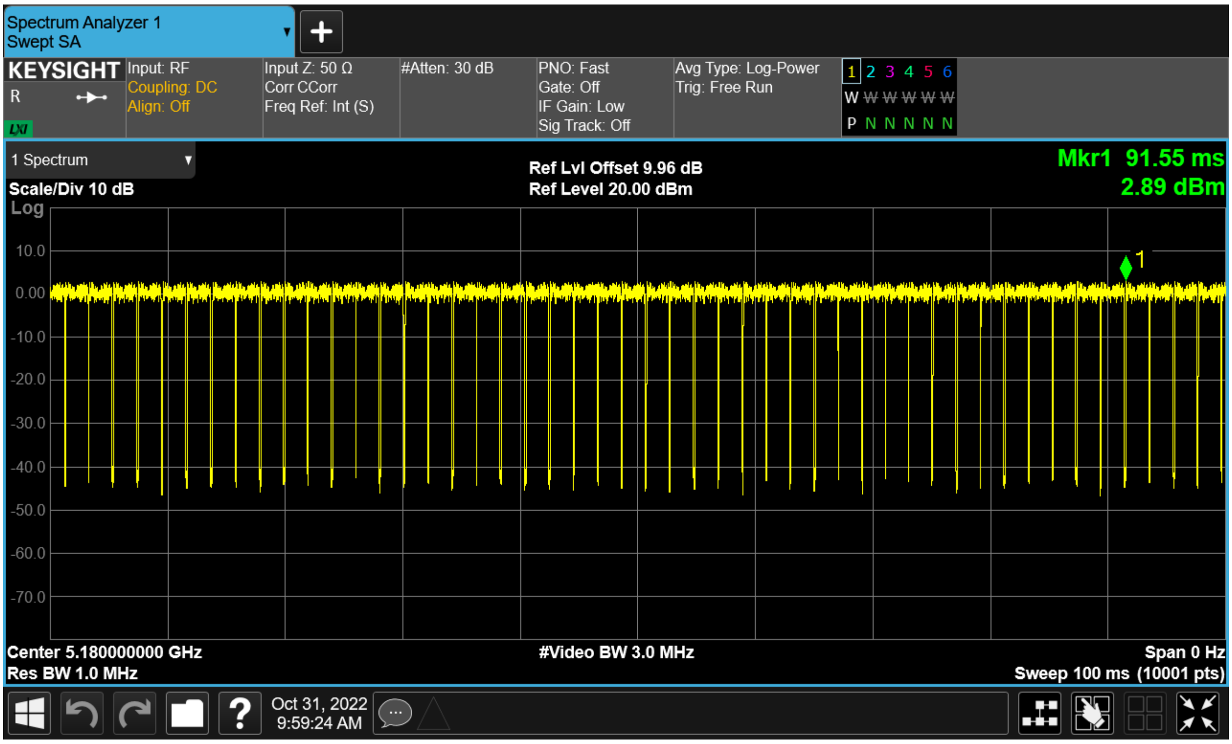

| Duty Cycle NVNT a 5200MHz Ant2 |
| --- |




| Duty Cycle NVNT a 5240MHz Ant2 |
| --- |

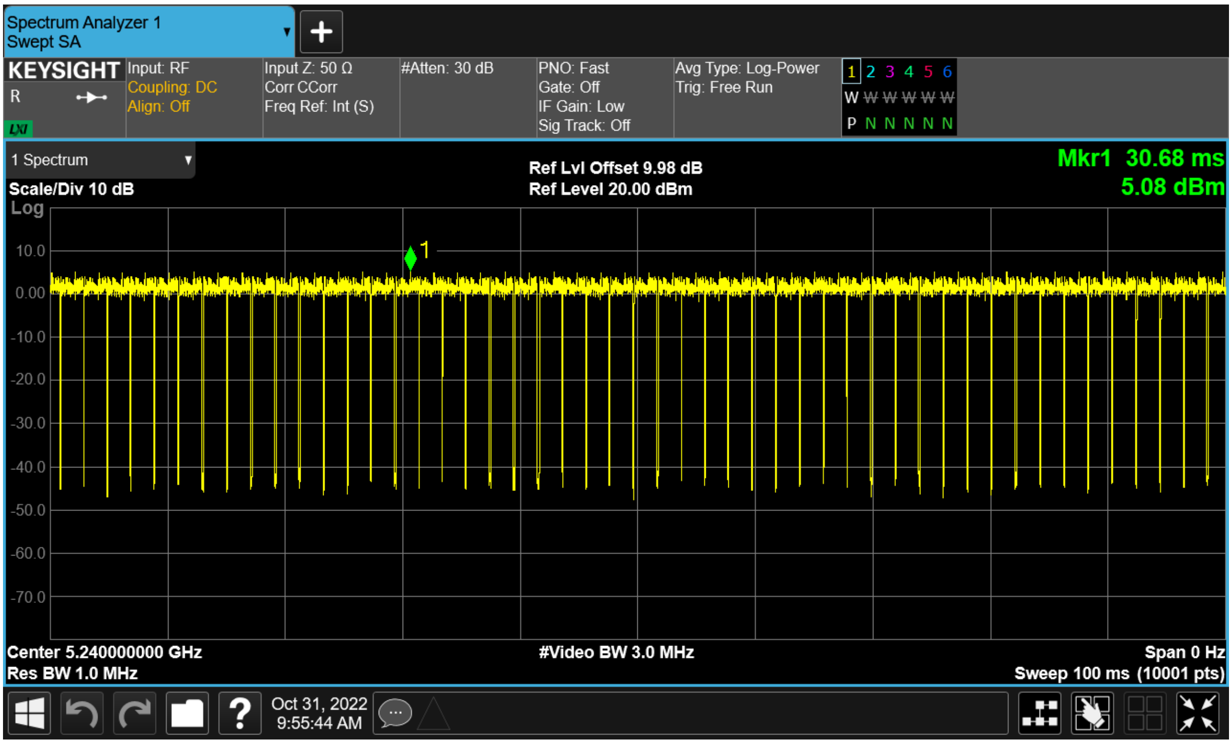



Duty Cycle NVNT ac20 5180MHz Ant2

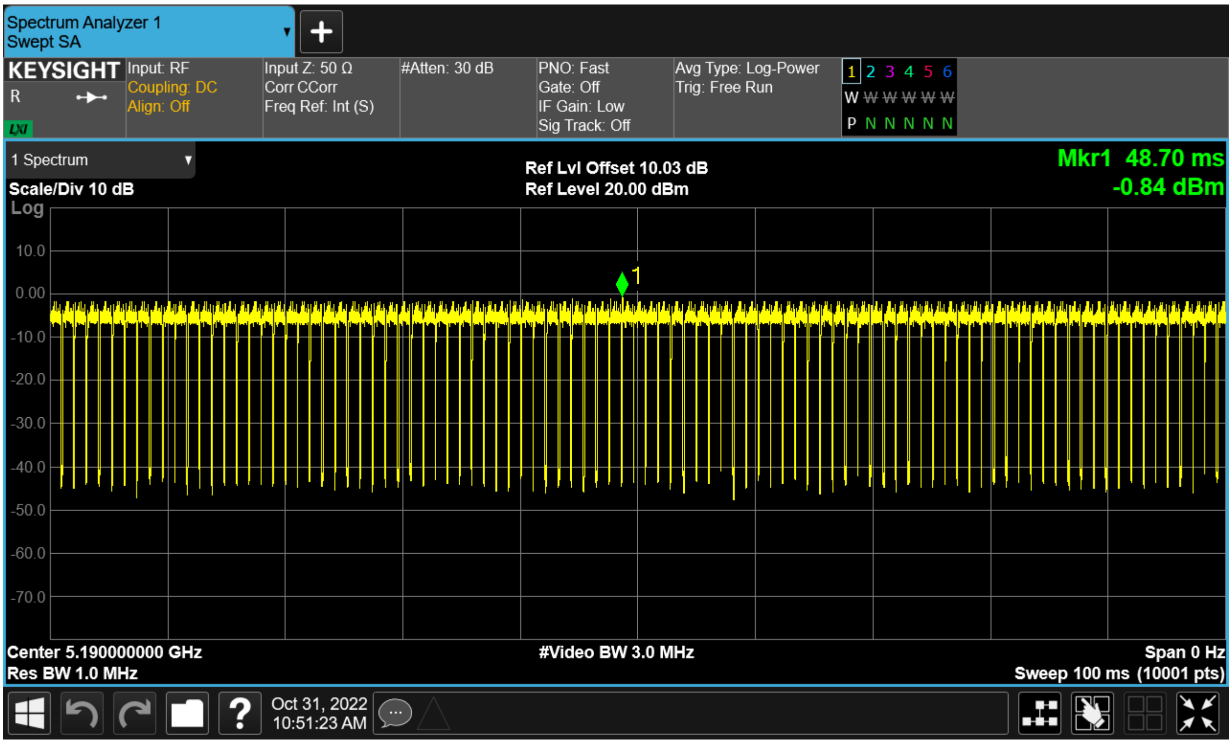



Duty Cycle NVNT ac20 5200MHz Ant2

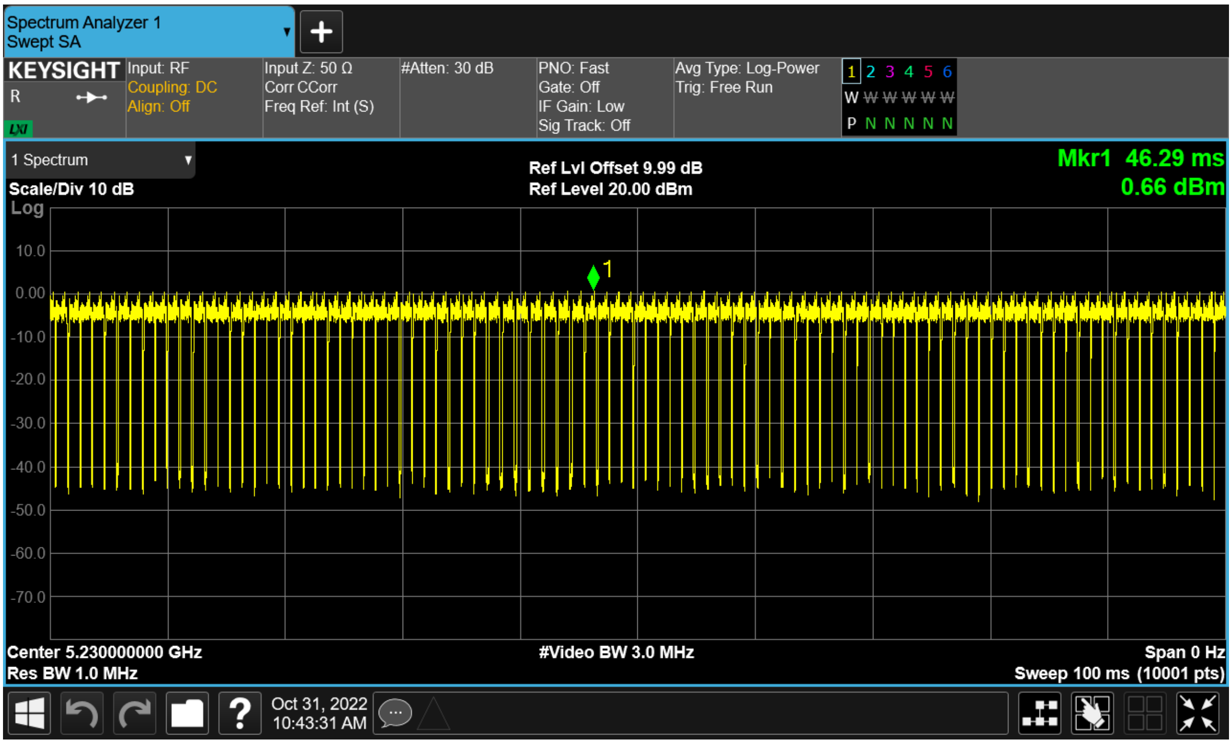

Duty Cycle NVNT ac20 5240MHz Ant2



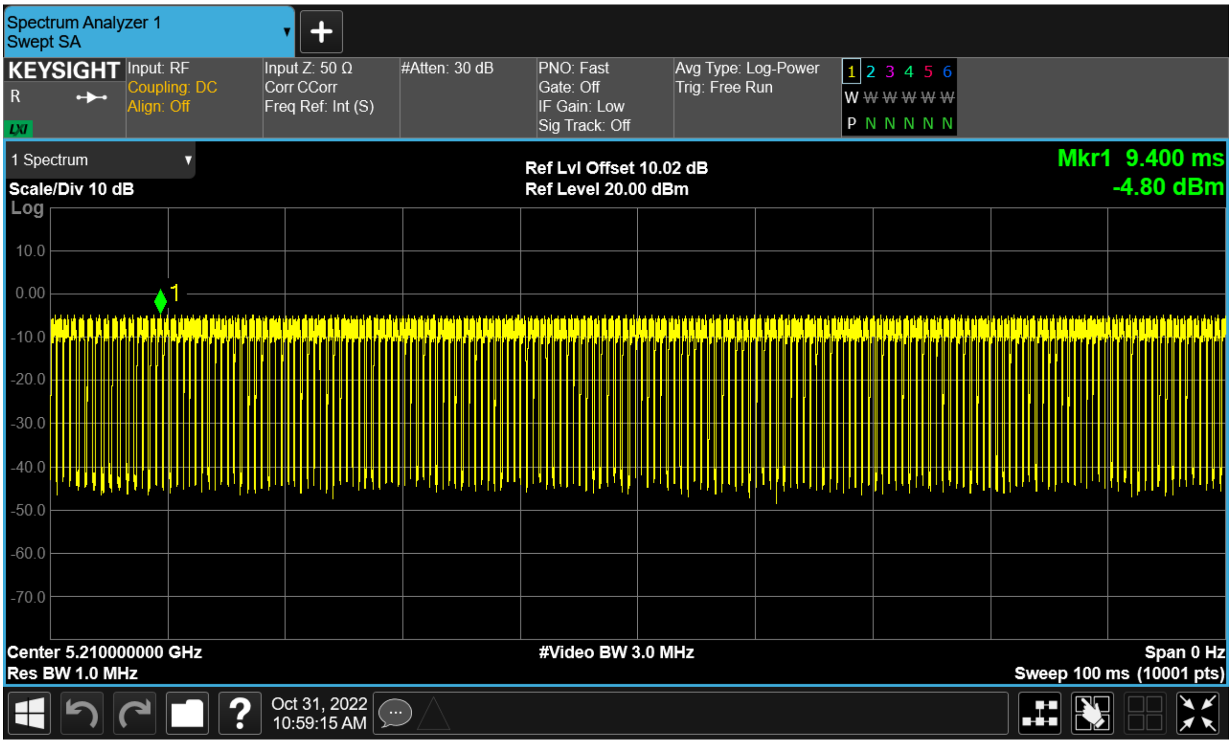

Duty Cycle NVNT ac40 5190MHz Ant2



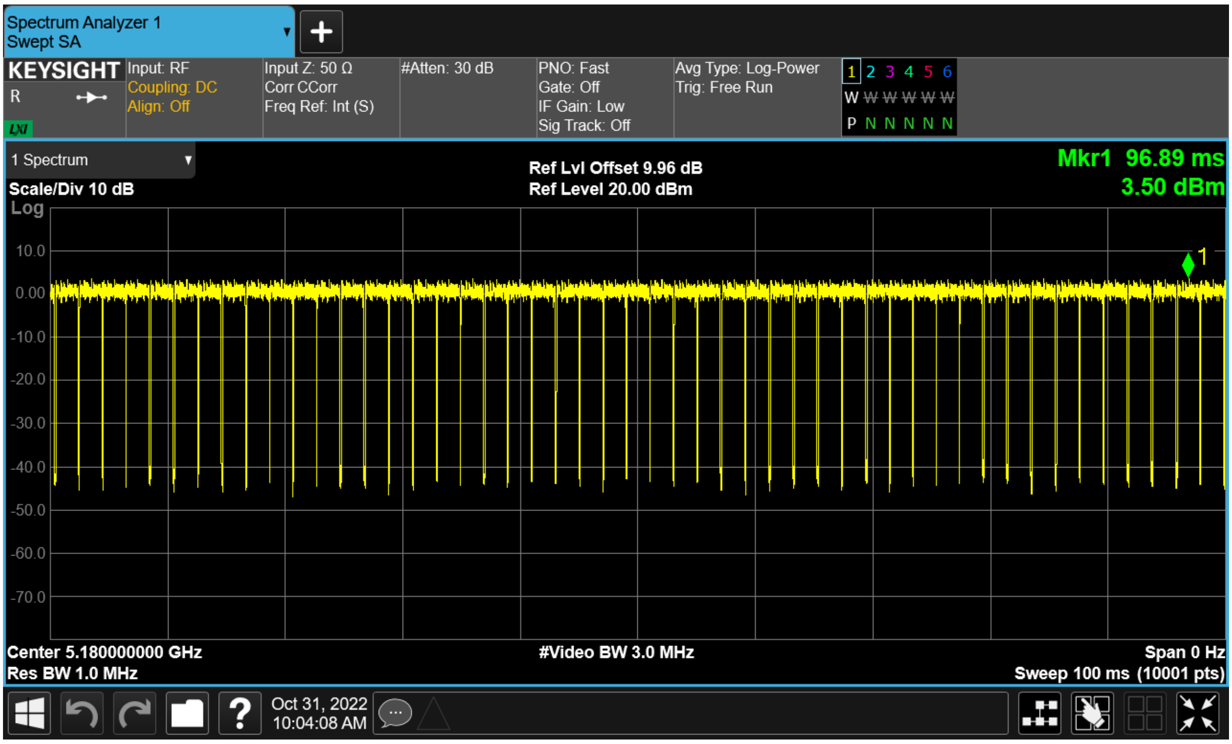

Duty Cycle NVNT ac40 5230MHz Ant2



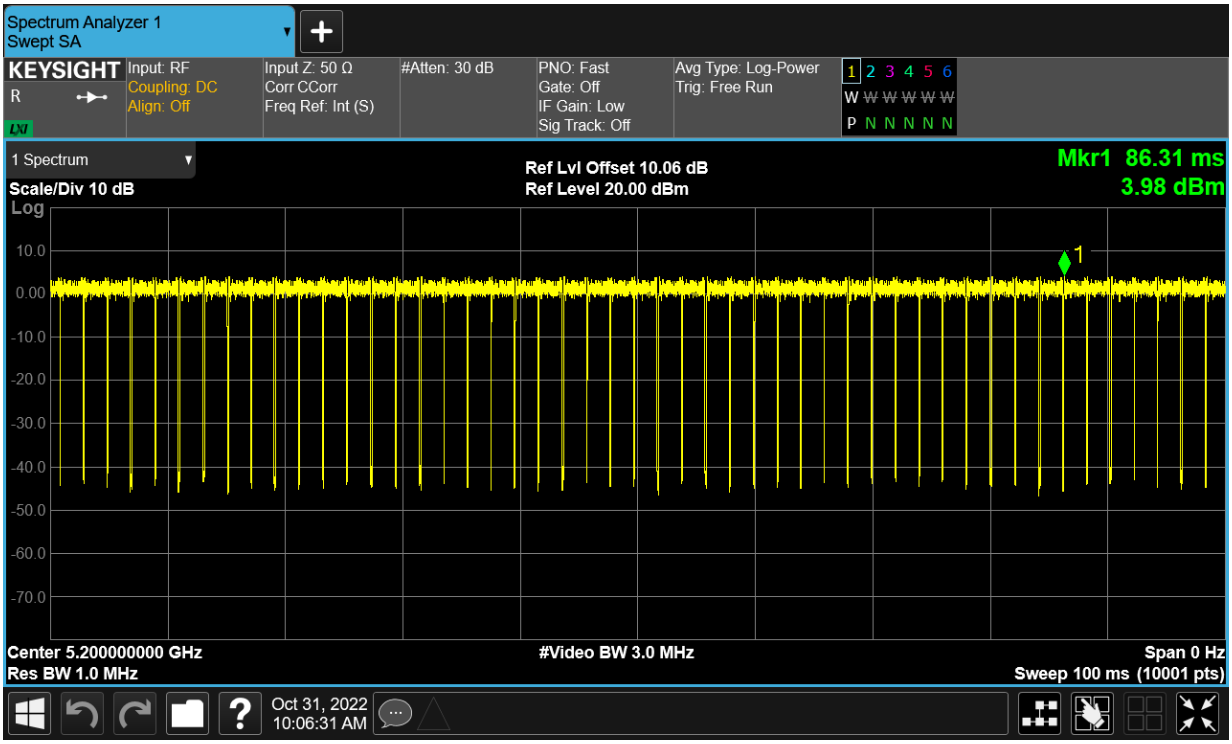

Duty Cycle NVNT ac80 5210MHz Ant2



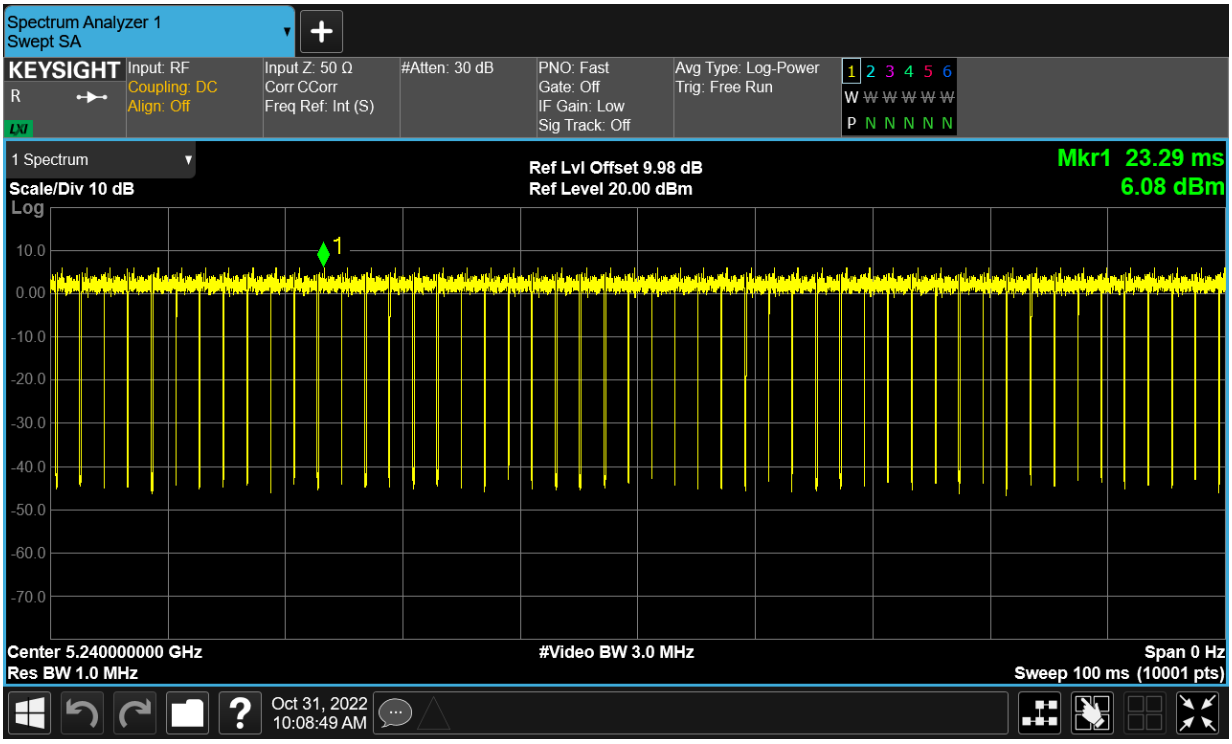

Duty Cycle NVNT n20 5180MHz Ant2



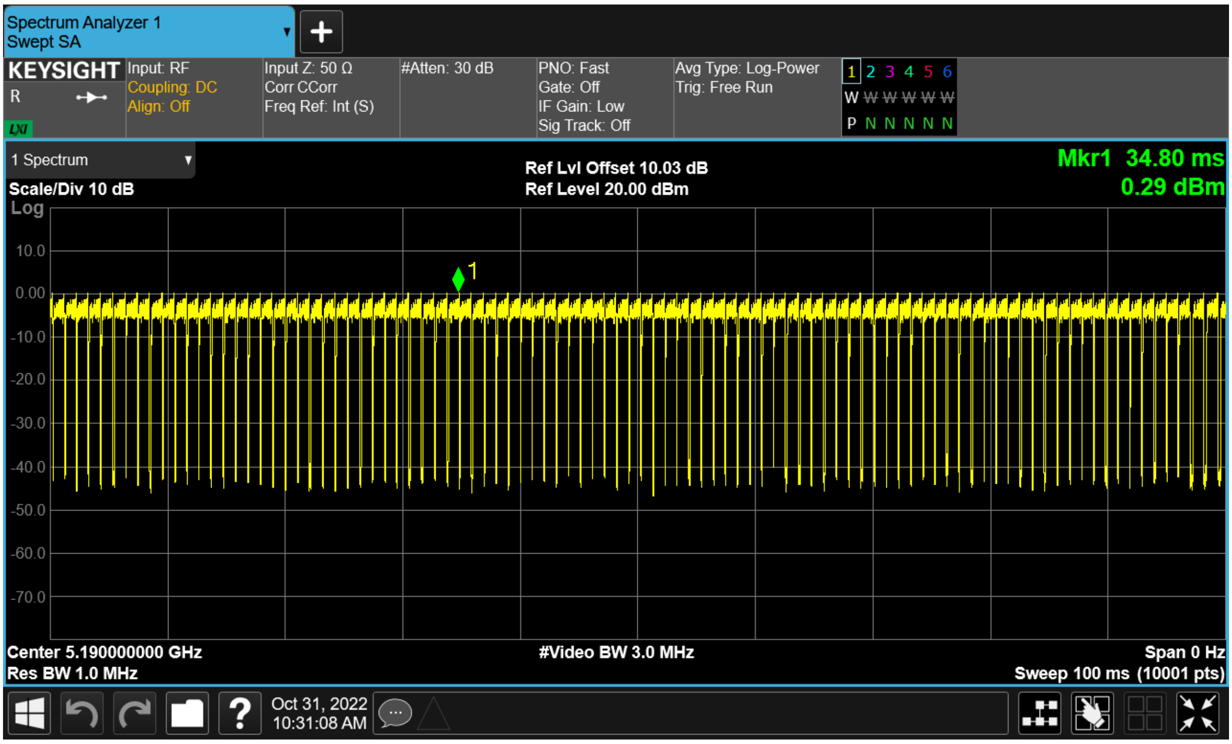

Duty Cycle NVNT n20 5200MHz Ant2



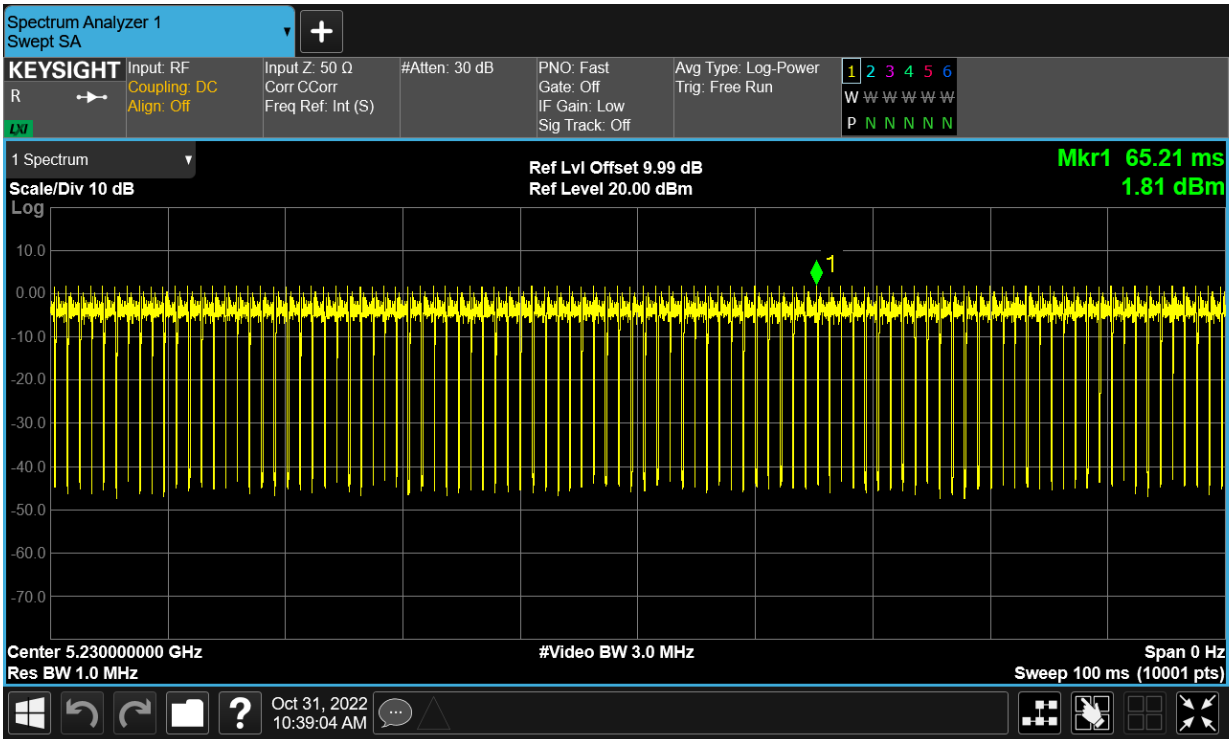

Duty Cycle NVNT n20 5240MHz Ant2




Duty Cycle NVNT n40 5190MHz Ant2




Duty Cycle NVNT n40 5230MHz Ant2



# Maximum Conducted Output Power

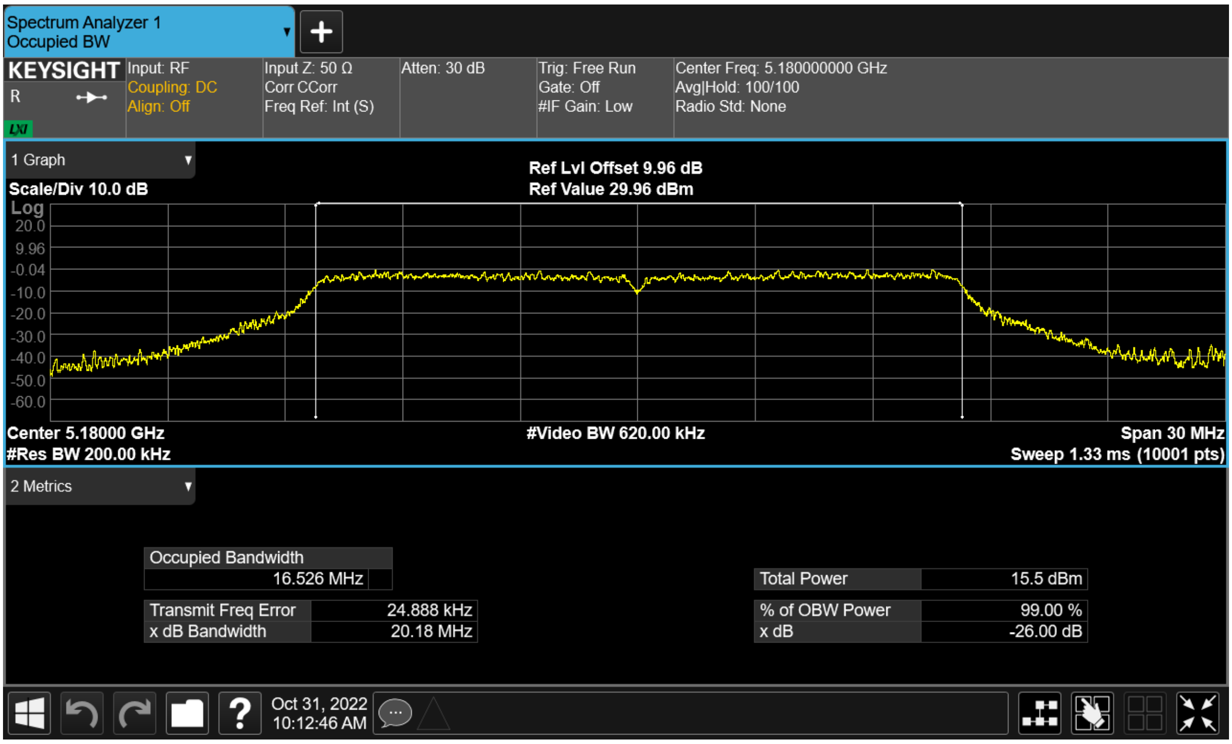
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|
| NVNT | a | 5180 | Ant2 | 10.88 | 0.18 | 11.06 | 24 | Pass |
| NVNT | a | 5200 | Ant2 | 11.43 | 0.18 | 11.61 | 24 | Pass |
| NVNT | a | 5240 | Ant2 | 12.28 | 0.19 | 12.47 | 24 | Pass |
| NVNT | ac20 | 5180 | Ant2 | 9.64 | 0.22 | 9.86 | 24 | Pass |
| NVNT | ac20 | 5200 | Ant2 | 10.09 | 0.17 | 10.26 | 24 | Pass |
| NVNT | ac20 | 5240 | Ant2 | 10.72 | 0.19 | 10.91 | 24 | Pass |
| NVNT | ac40 | 5190 | Ant2 | 9.64 | 0.38 | 10.02 | 24 | Pass |
| NVNT | ac40 | 5230 | Ant2 | 10.38 | 0.4 | 10.78 | 24 | Pass |
| NVNT | ac80 | 5210 | Ant2 | 9.22 | 0.79 | 10.01 | 24 | Pass |
| NVNT | n20 | 5180 | Ant2 | 9.87 | 0.21 | 10.08 | 24 | Pass |
| NVNT | n20 | 5200 | Ant2 | 10.47 | 0.2 | 10.67 | 24 | Pass |
| NVNT | n20 | 5240 | Ant2 | 11.23 | 0.19 | 11.42 | 24 | Pass |
| NVNT | n40 | 5190 | Ant2 | 10.53 | 0.37 | 10.9 | 24 | Pass |
| NVNT | n40 | 5230 | Ant2 | 10.83 | 0.38 | 11.21 | 24 | Pass |

# Occupied Channel Bandwidth

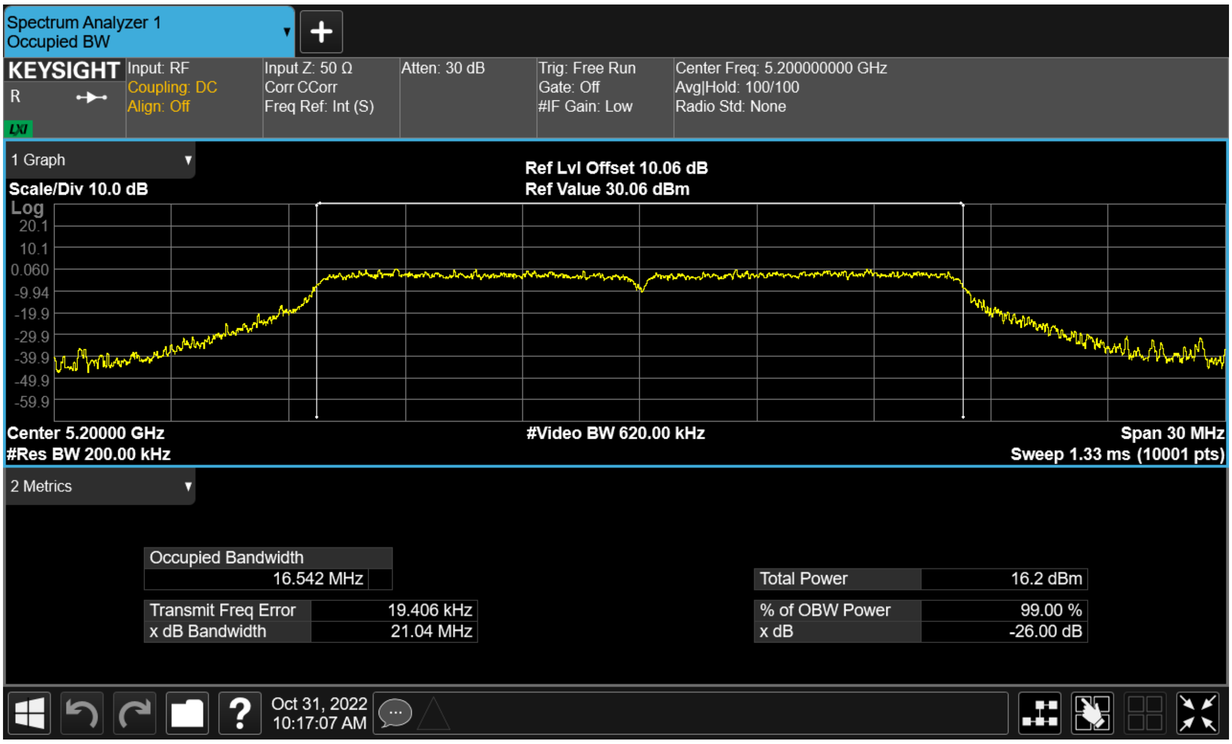
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5180 | Ant2 | 16.526 |
| NVNT | a | 5200 | Ant2 | 16.542 |
| NVNT | a | 5240 | Ant2 | 16.572 |
| NVNT | ac20 | 5180 | Ant2 | 17.623 |
| NVNT | ac20 | 5200 | Ant2 | 17.613 |
| NVNT | ac20 | 5240 | Ant2 | 17.598 |
| NVNT | ac40 | 5190 | Ant2 | 36.168 |
| NVNT | ac40 | 5230 | Ant2 | 36.211 |
| NVNT | ac80 | 5210 | Ant2 | 75.309 |
| NVNT | n20 | 5180 | Ant2 | 17.63 |
| NVNT | n20 | 5200 | Ant2 | 17.643 |
| NVNT | n20 | 5240 | Ant2 | 17.594 |
| NVNT | n40 | 5190 | Ant2 | 36.154 |
| NVNT | n40 | 5230 | Ant2 | 36.188 |

Test Graphs

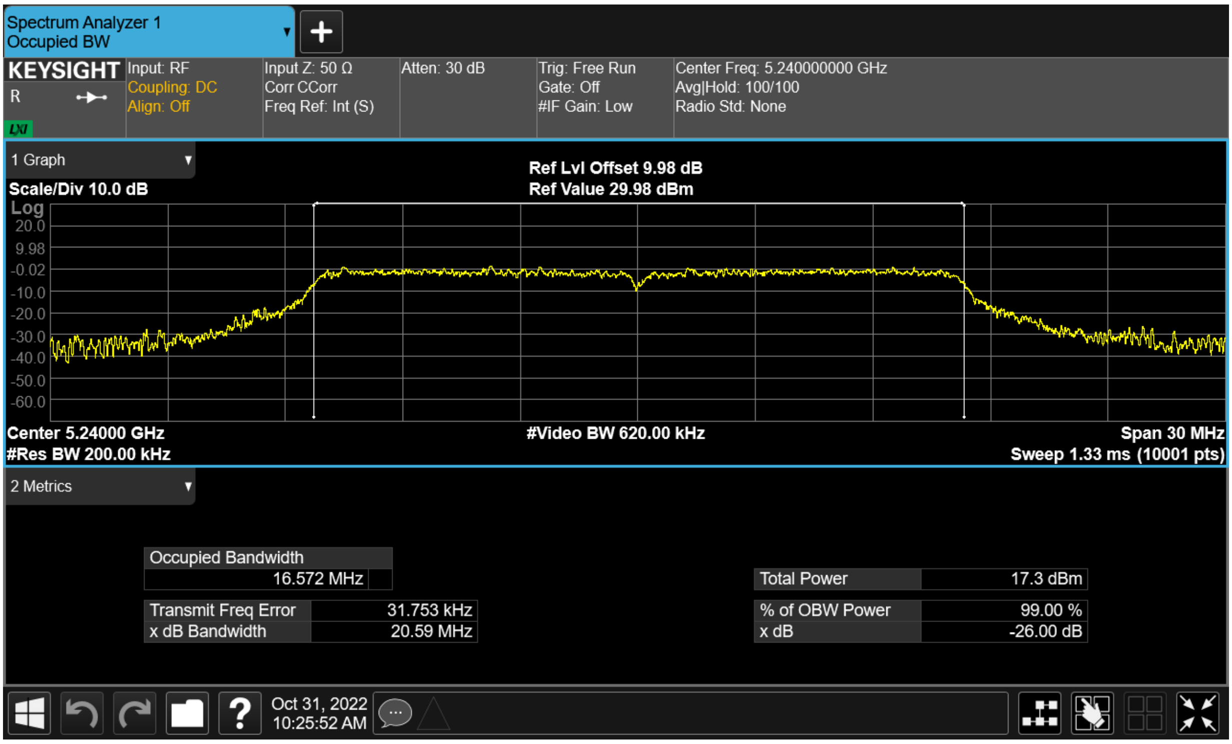
OBW NVNT a 5180MHz Ant2



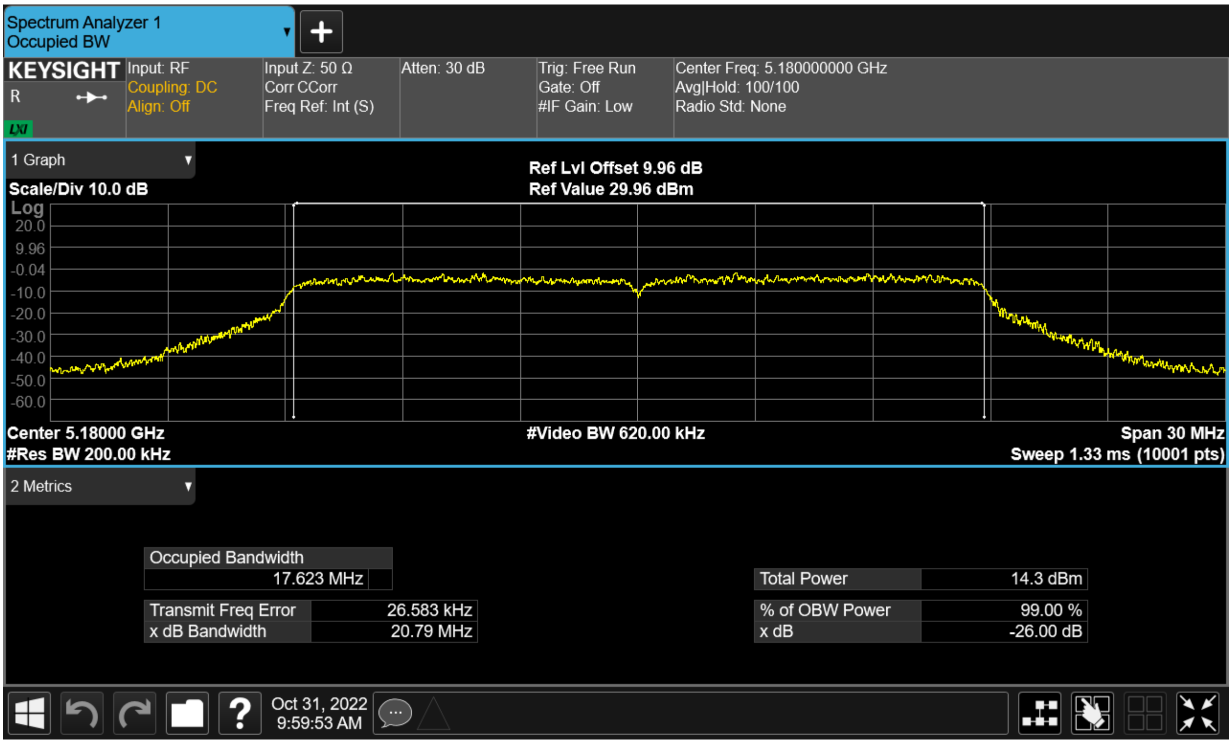

OBW NVNT a 5200MHz Ant2



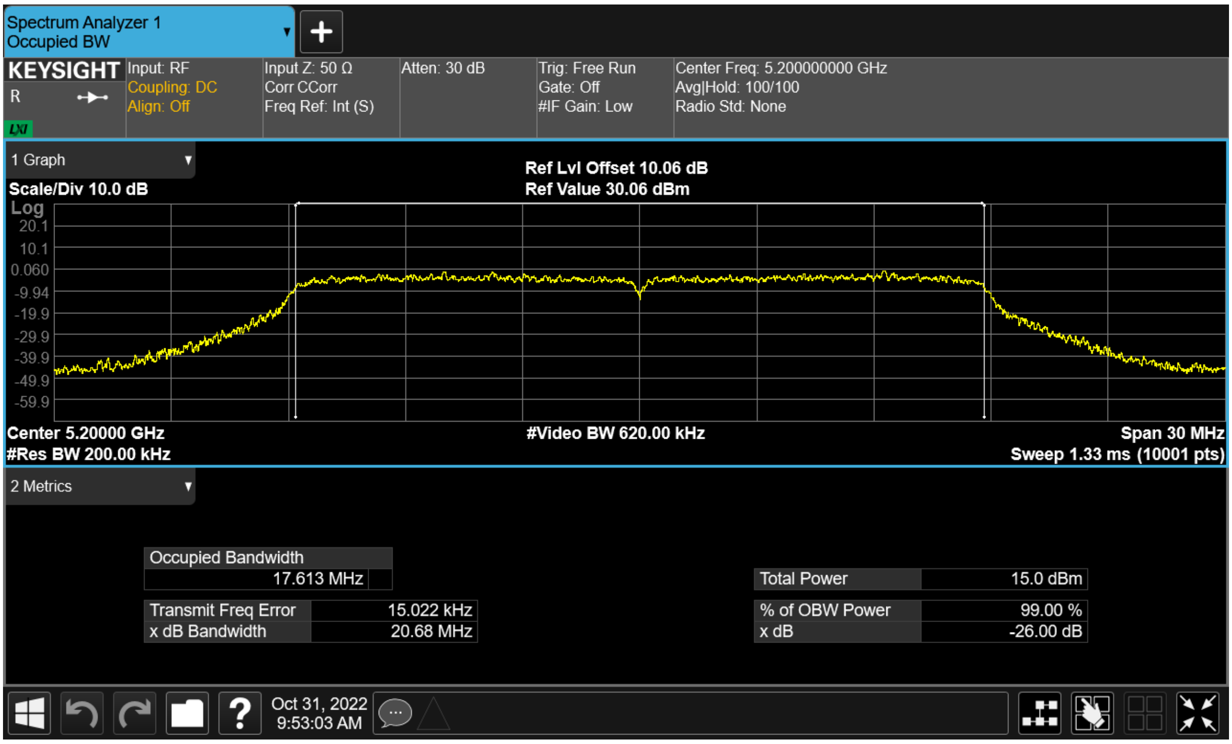

OBW NVNT a 5240MHz Ant2



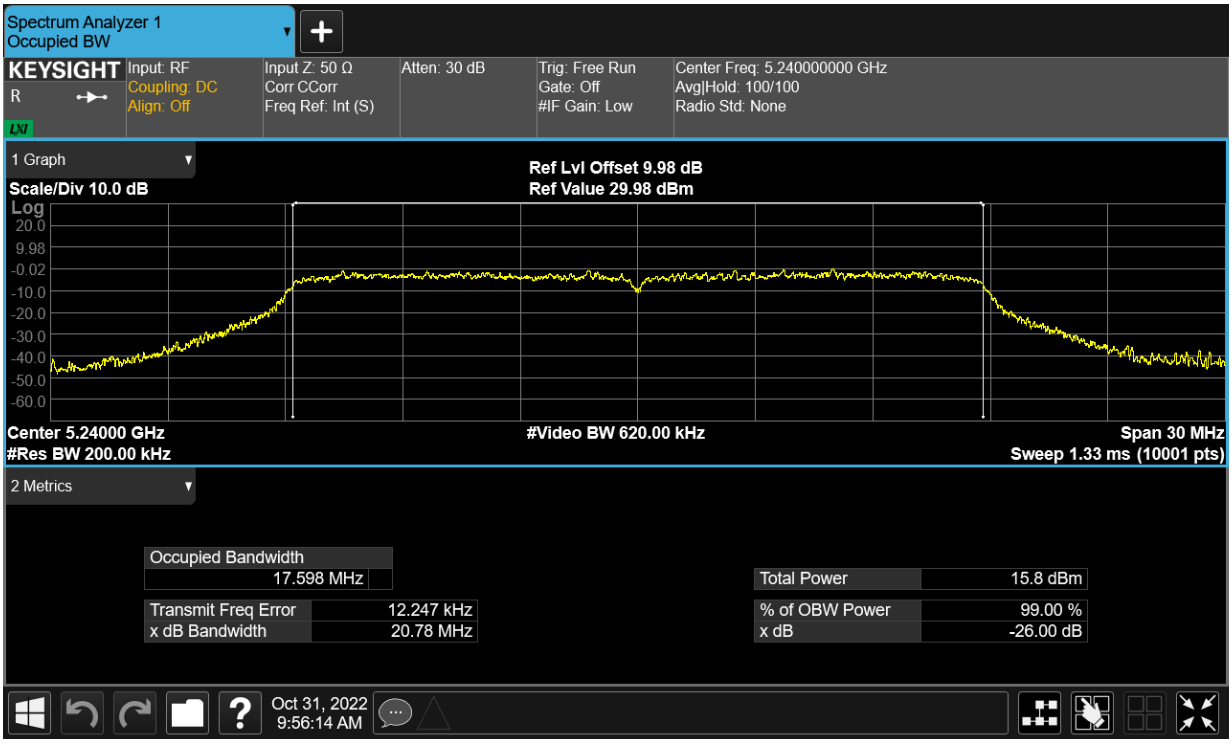

OBW NVNT ac20 5180MHz Ant2



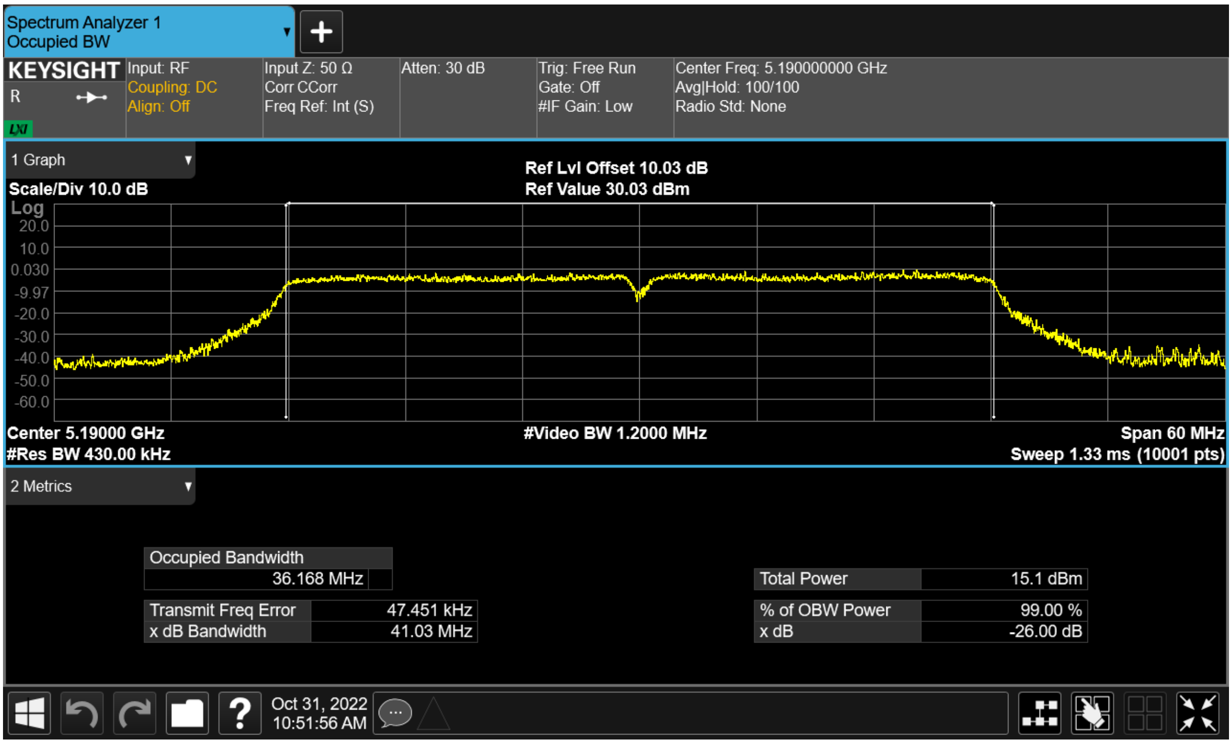

OBW NVNT ac20 5200MHz Ant2



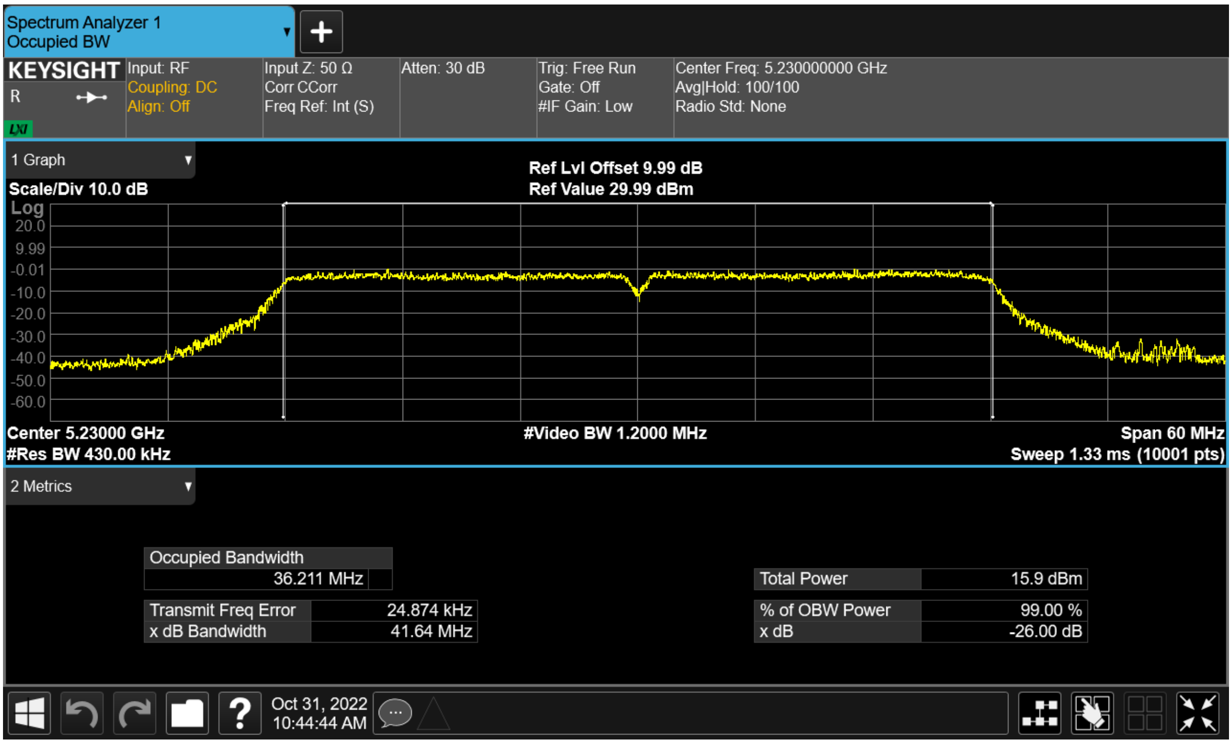

OBW NVNT ac20 5240MHz Ant2



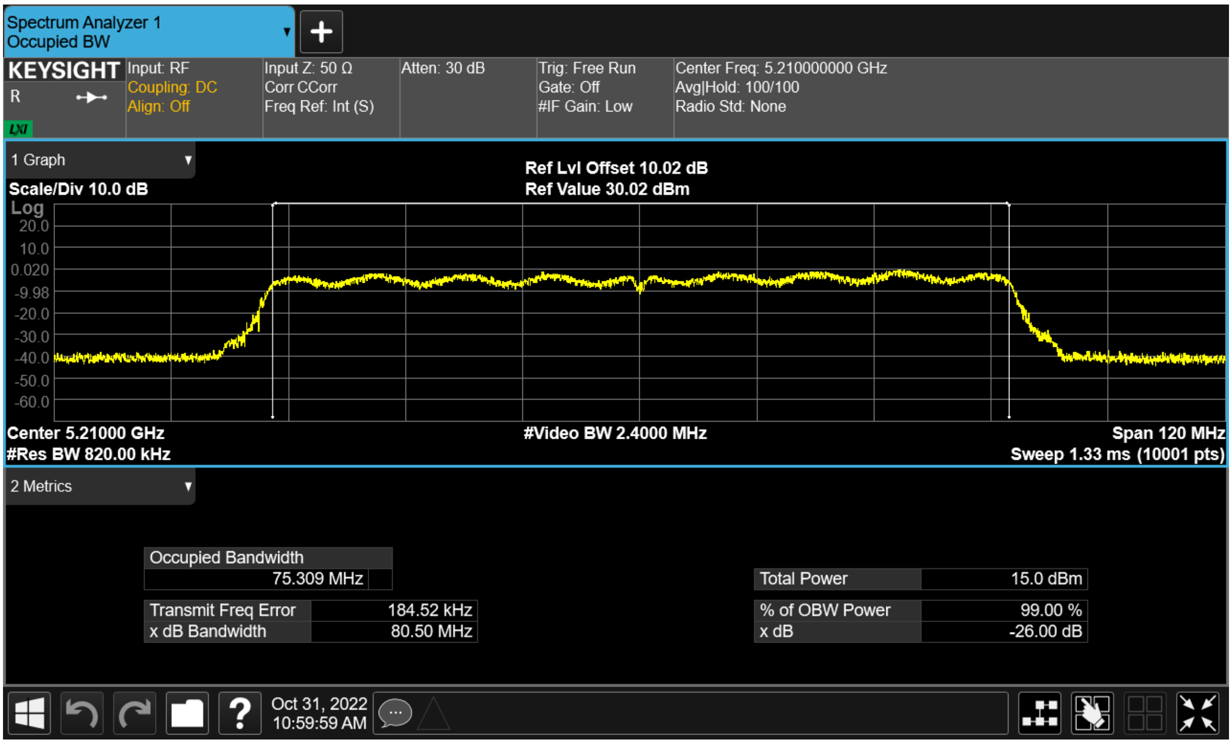

OBW NVNT ac40 5190MHz Ant2



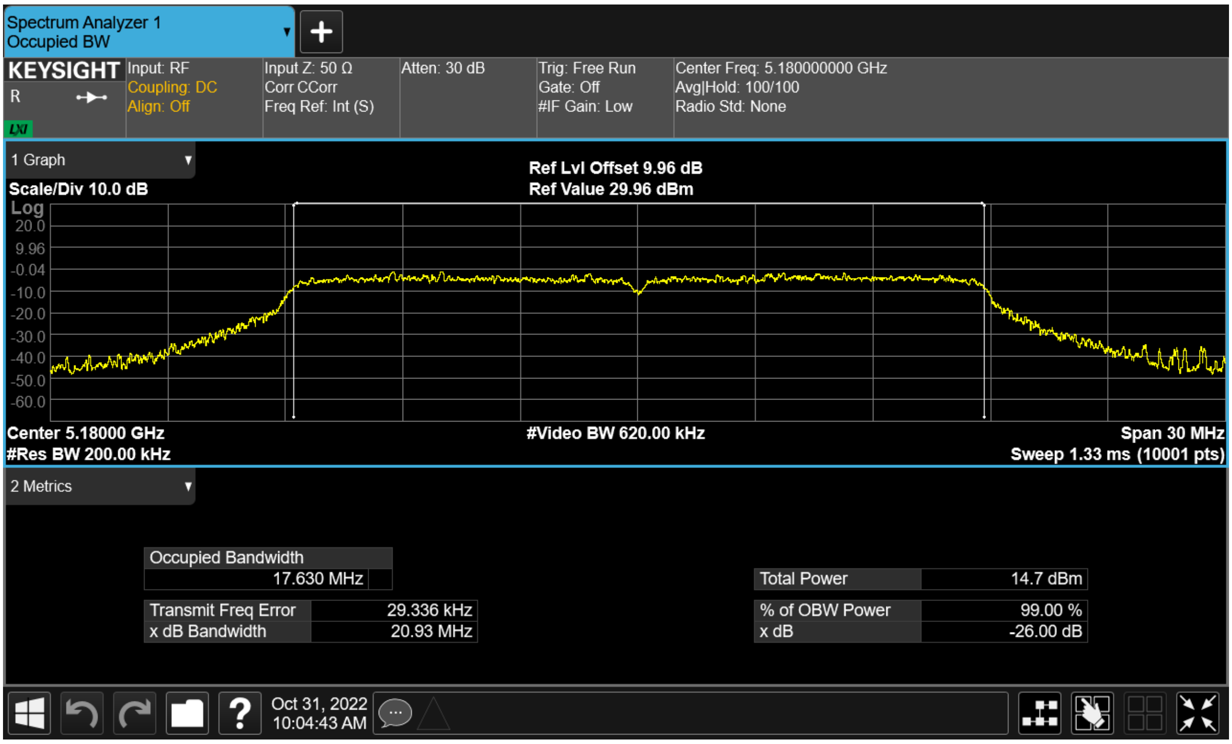

OBW NVNT ac40 5230MHz Ant2



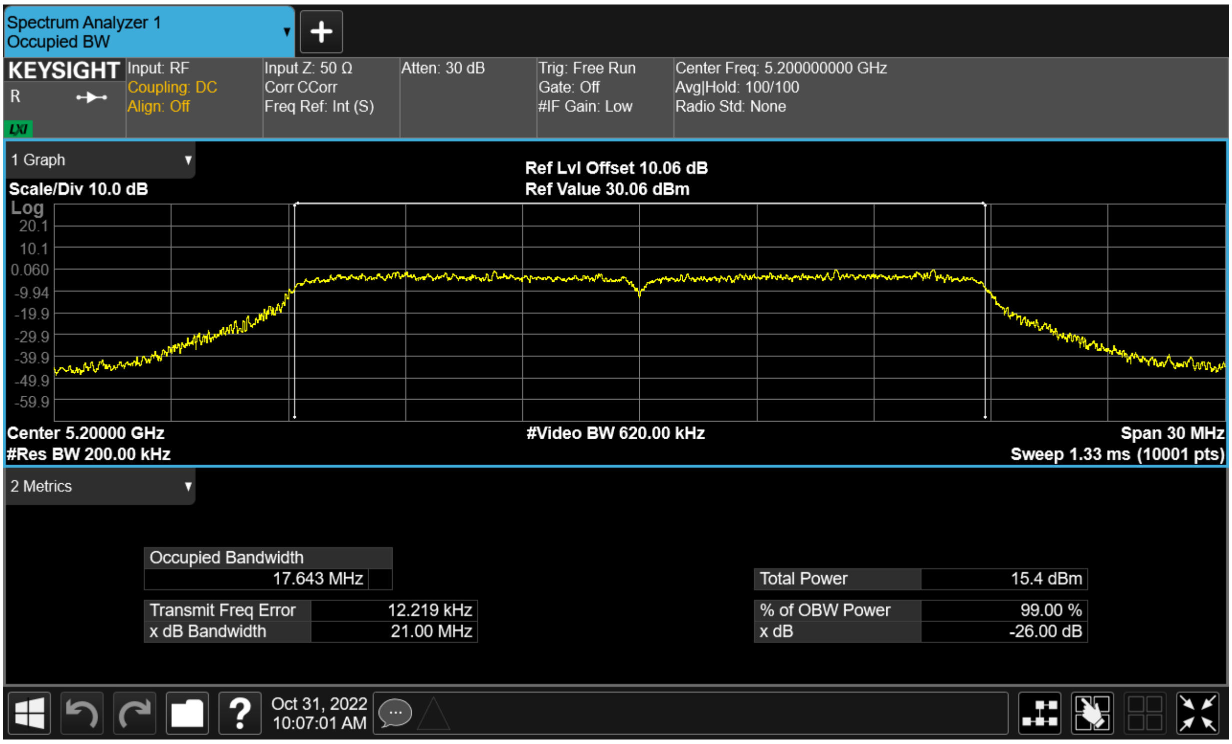

OBW NVNT ac80 5210MHz Ant2



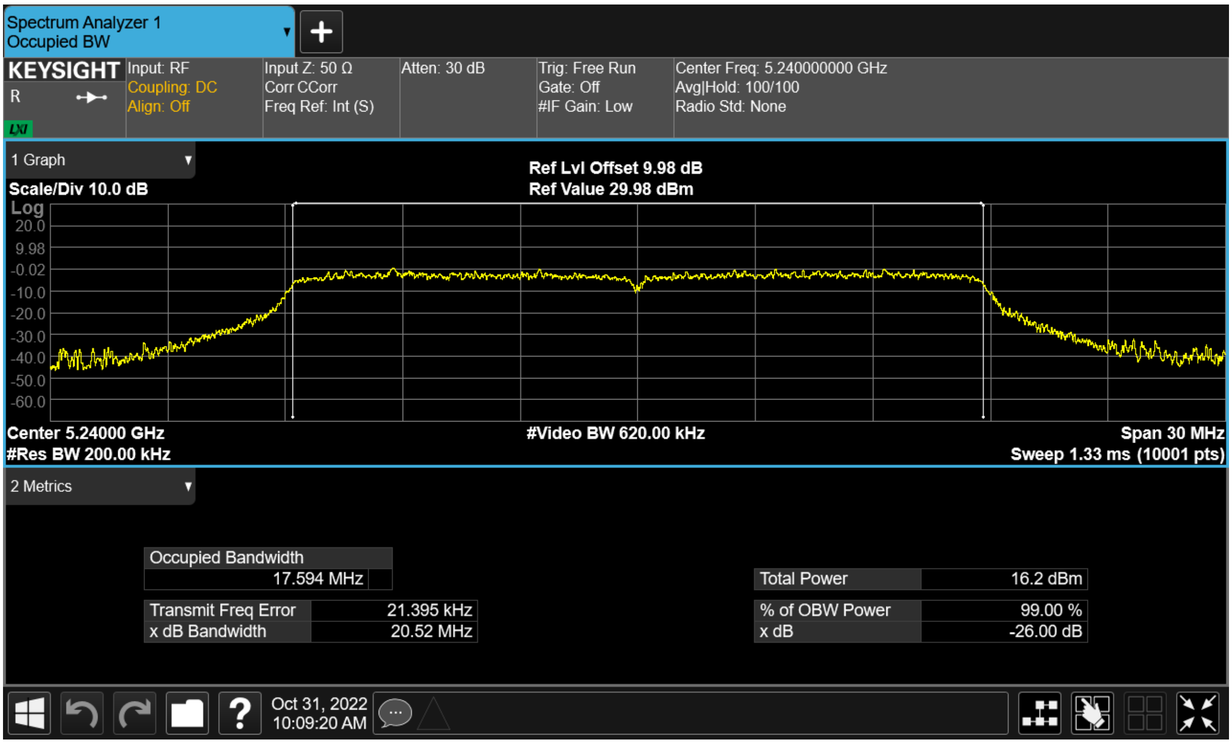

OBW NVNT n20 5180MHz Ant2



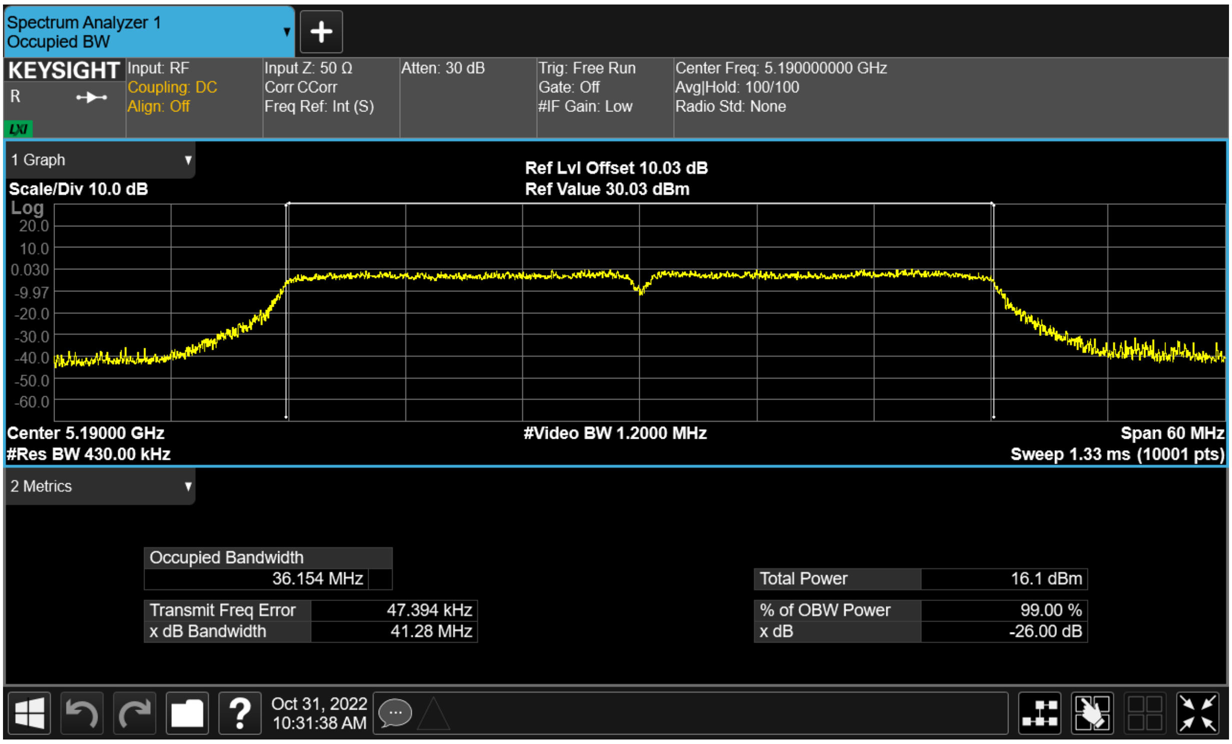

OBW NVNT n20 5200MHz Ant2



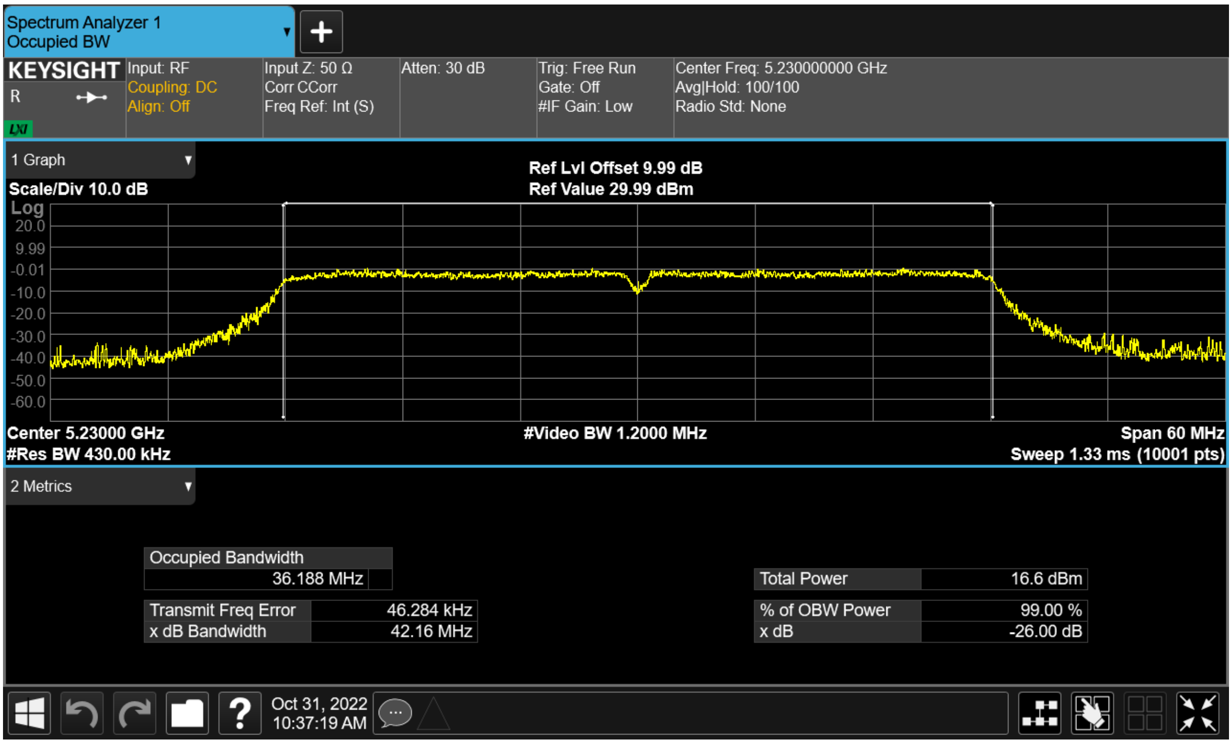

OBW NVNT n20 5240MHz Ant2




OBW NVNT n40 5190MHz Ant2

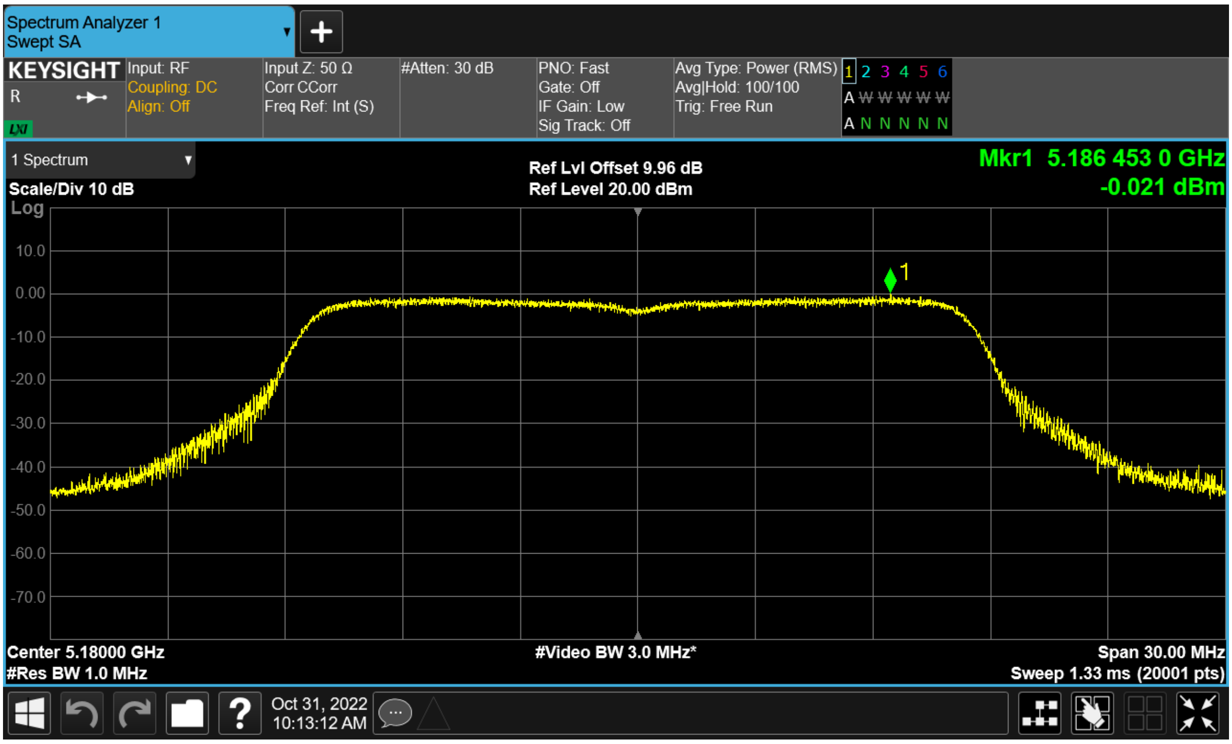
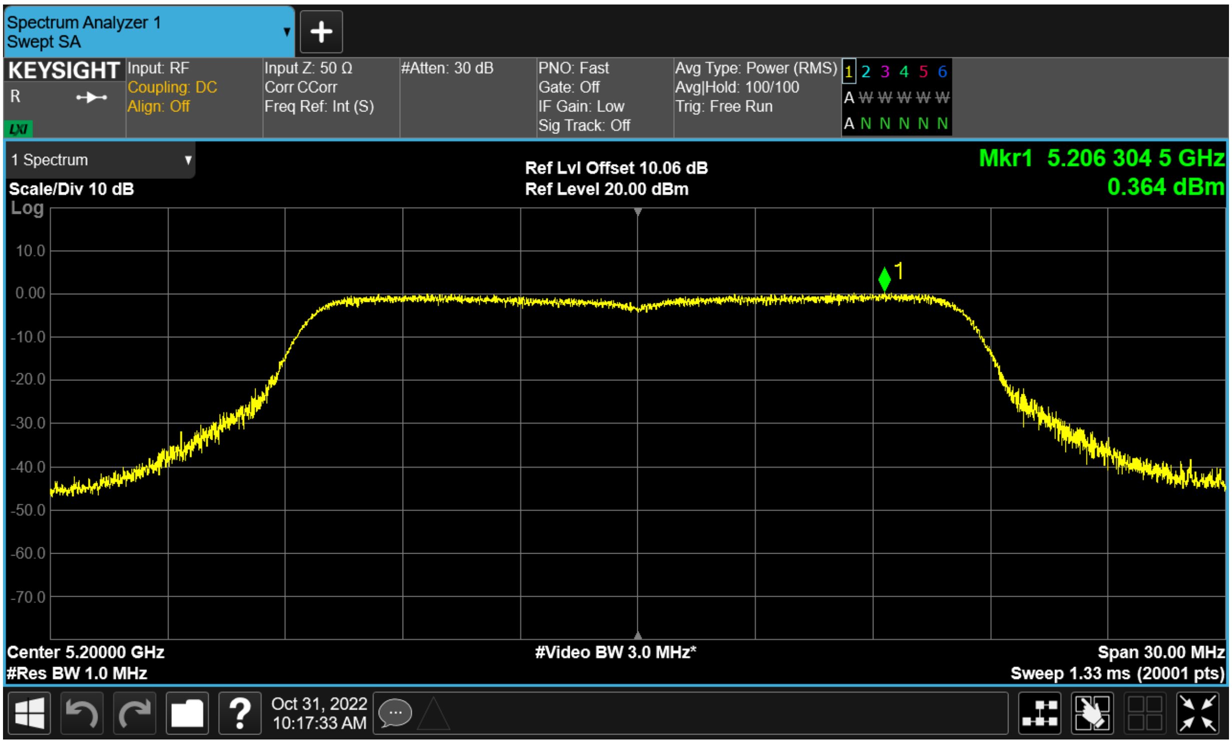


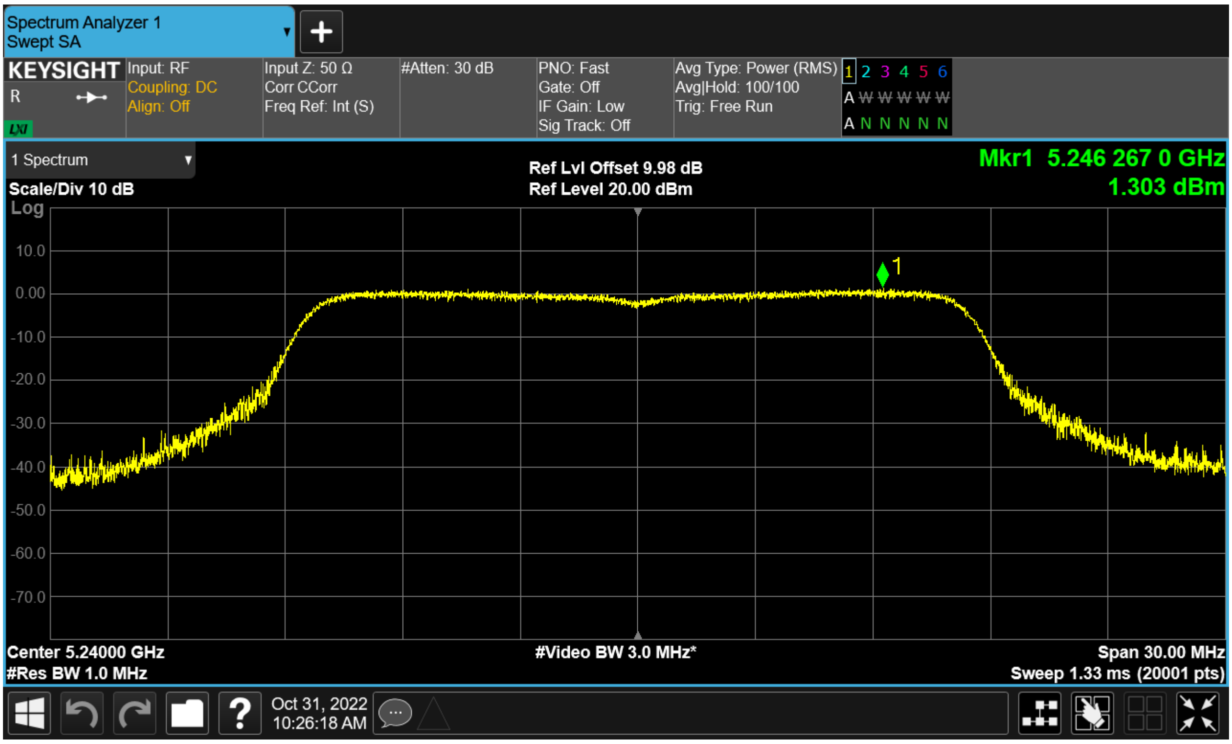

OBW NVNT n40 5230MHz Ant2



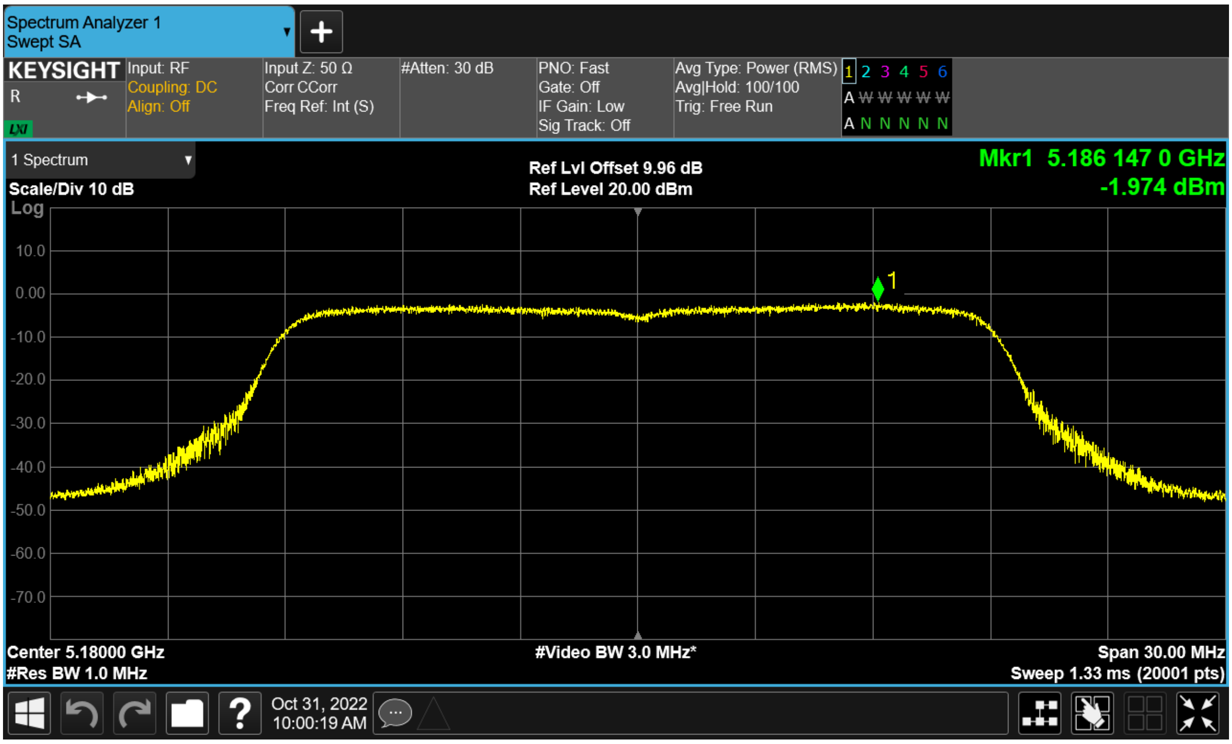
# Maximum Power Spectral Density Level

| Condition | Mode | Frequency (MHz) | Antenna | Max PSD (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5180 | Ant2 | -0.021 | 11 | Pass |
| NVNT | a | 5200 | Ant2 | 0.364 | 11 | Pass |
| NVNT | a | 5240 | Ant2 | 1.303 | 11 | Pass |
| NVNT | ac20 | 5180 | Ant2 | -1.974 | 11 | Pass |
| NVNT | ac20 | 5200 | Ant2 | -1.468 | 11 | Pass |
| NVNT | ac20 | 5240 | Ant2 | -0.425 | 11 | Pass |
| NVNT | ac40 | 5190 | Ant2 | -4.703 | 11 | Pass |
| NVNT | ac40 | 5230 | Ant2 | -3.313 | 11 | Pass |
| NVNT | ac80 | 5210 | Ant2 | -7.775 | 11 | Pass |
| NVNT | n20 | 5180 | Ant2 | -1.598 | 11 | Pass |
| NVNT | n20 | 5200 | Ant2 | -0.848 | 11 | Pass |
| NVNT | n20 | 5240 | Ant2 | 0.058 | 11 | Pass |
| NVNT | n40 | 5190 | Ant2 | -3.213 | 11 | Pass |
| NVNT | n40 | 5230 | Ant2 | -3.242 | 11 | Pass |

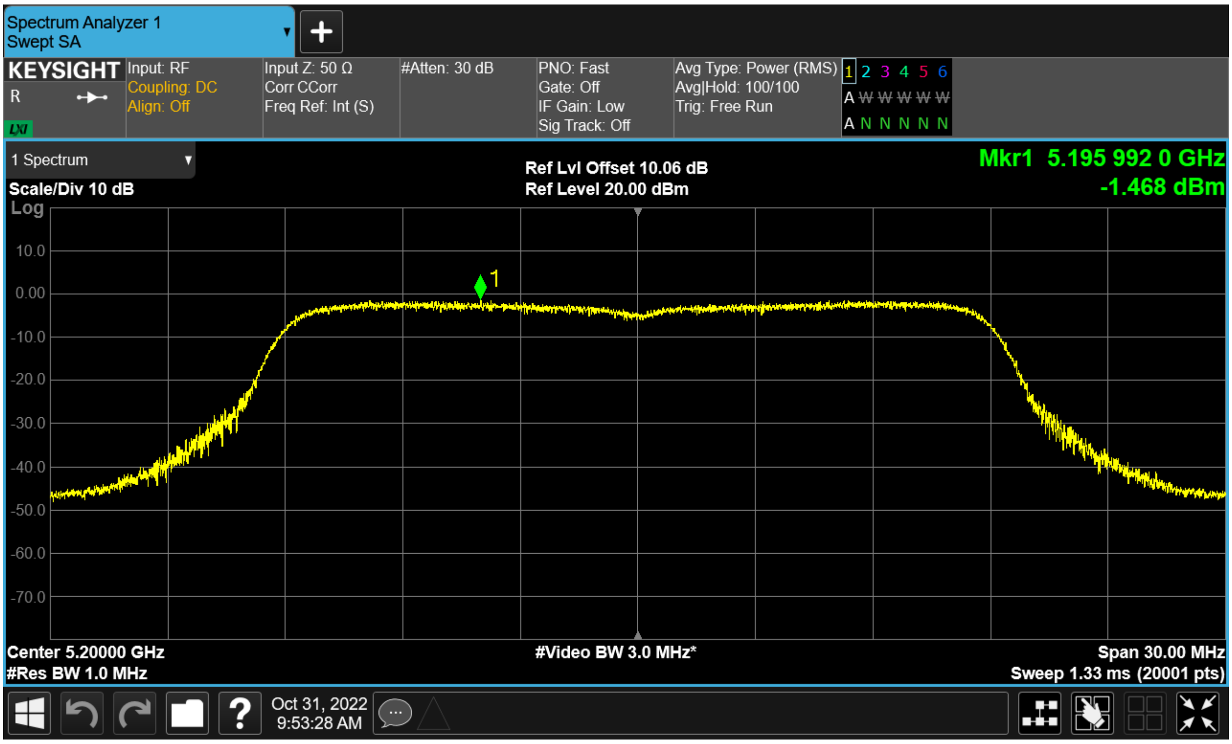
| Test Graphs |
| --- |
| PSD NVNT a 5180MHz Ant2 |
|  |
| PSD NVNT a 5200MHz Ant2 |
|  |
| PSD NVNT a 5240MHz Ant2 |




PSD NVNT ac20 5180MHz Ant2

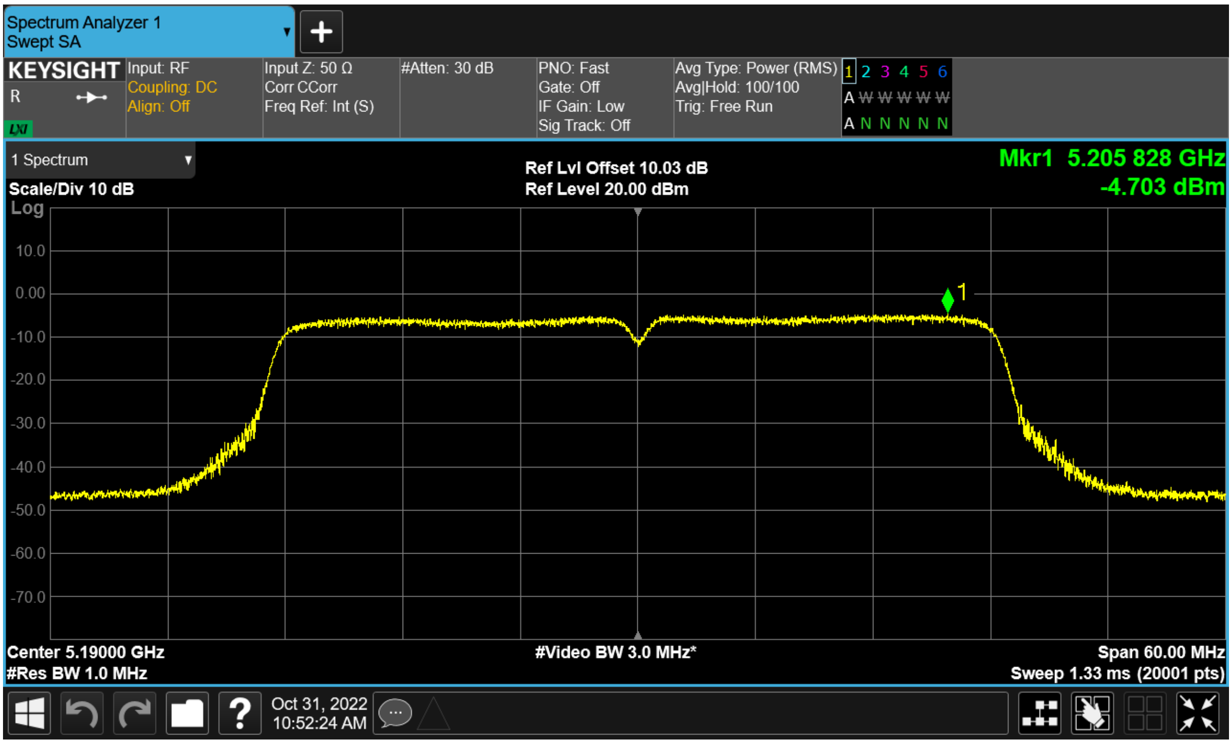



PSD NVNT ac20 5200MHz Ant2

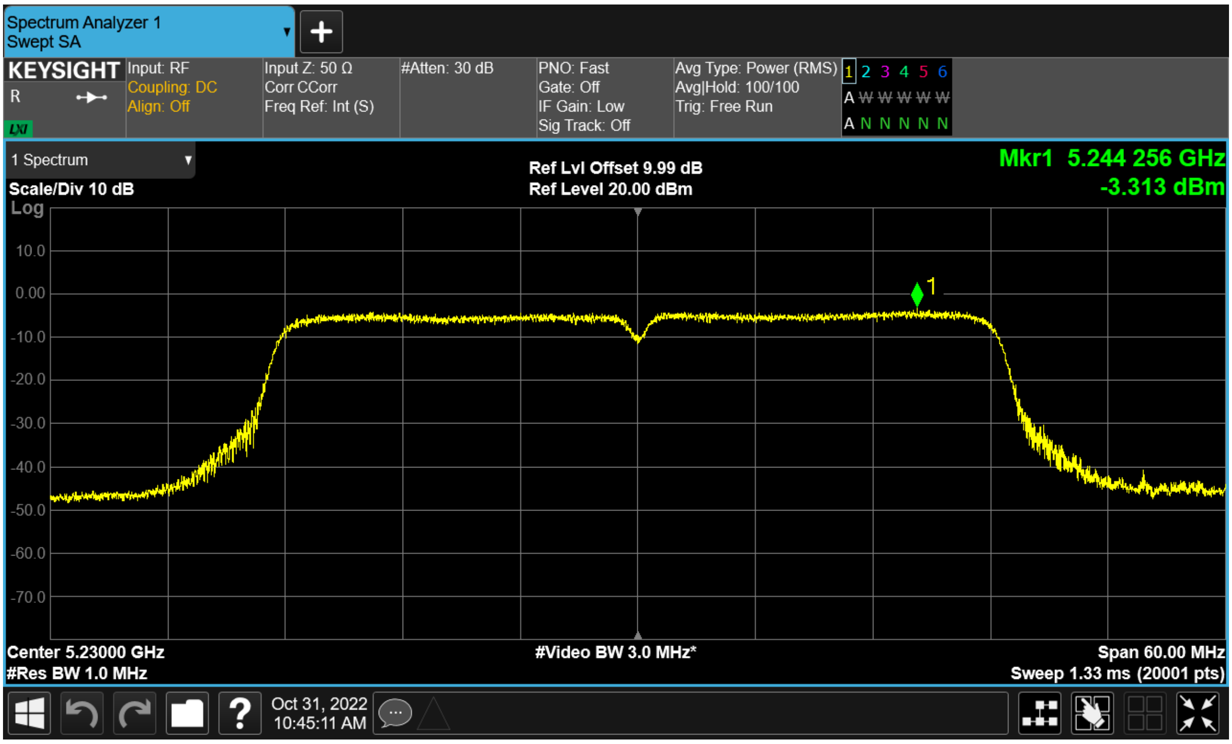



PSD NVNT ac20 5240MHz Ant2

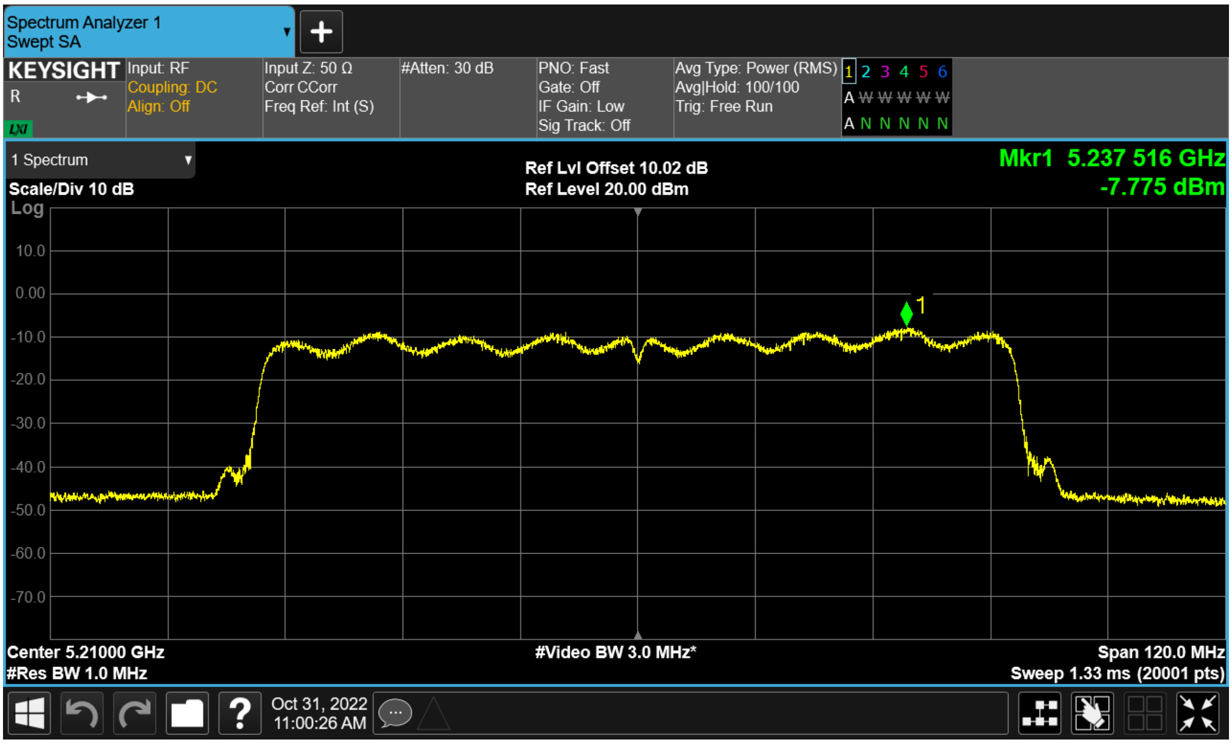

PSD NVNT ac40 5190MHz Ant2



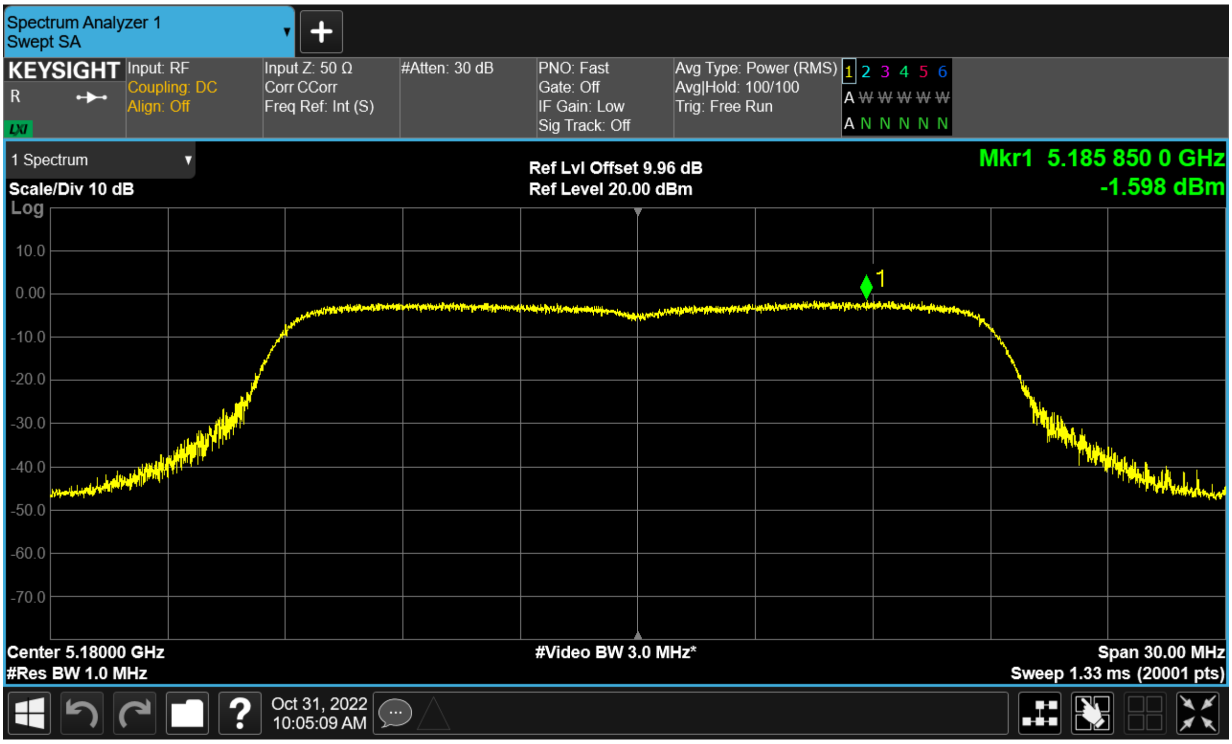

PSD NVNT ac40 5230MHz Ant2



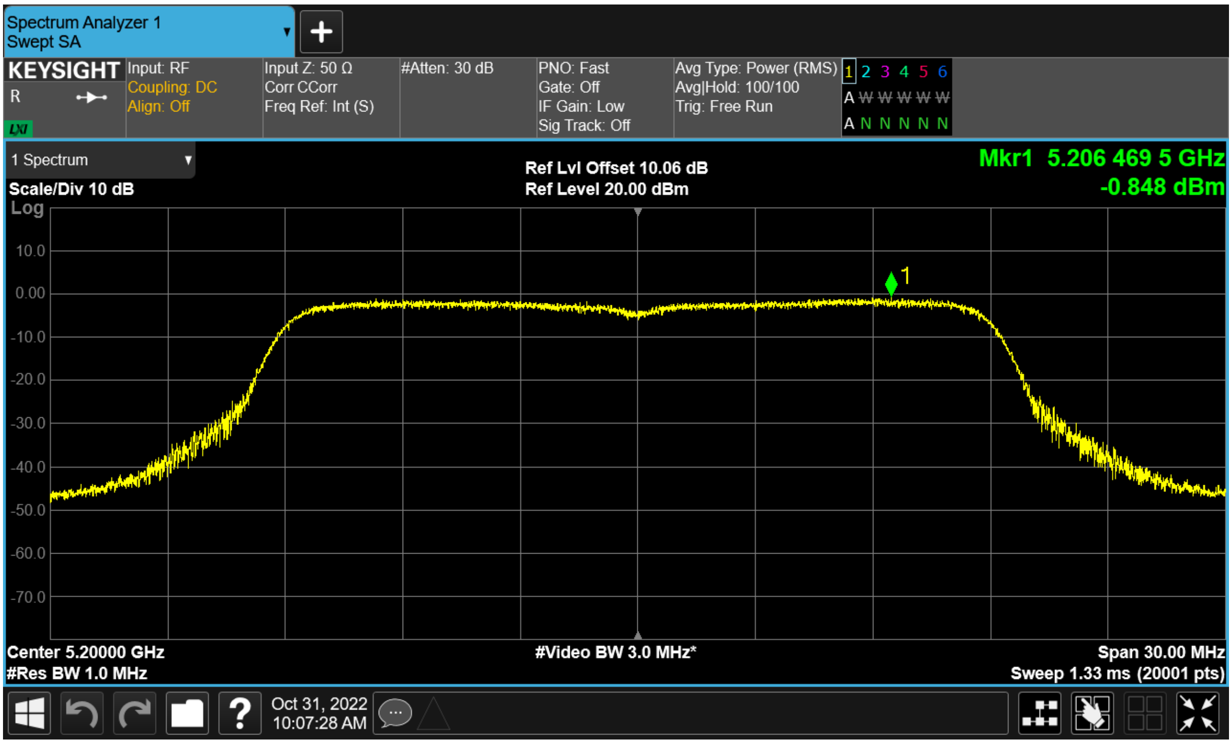

PSD NVNT ac80 5210MHz Ant2




PSD NVNT n20 5180MHz Ant2




PSD NVNT n20 5200MHz Ant2

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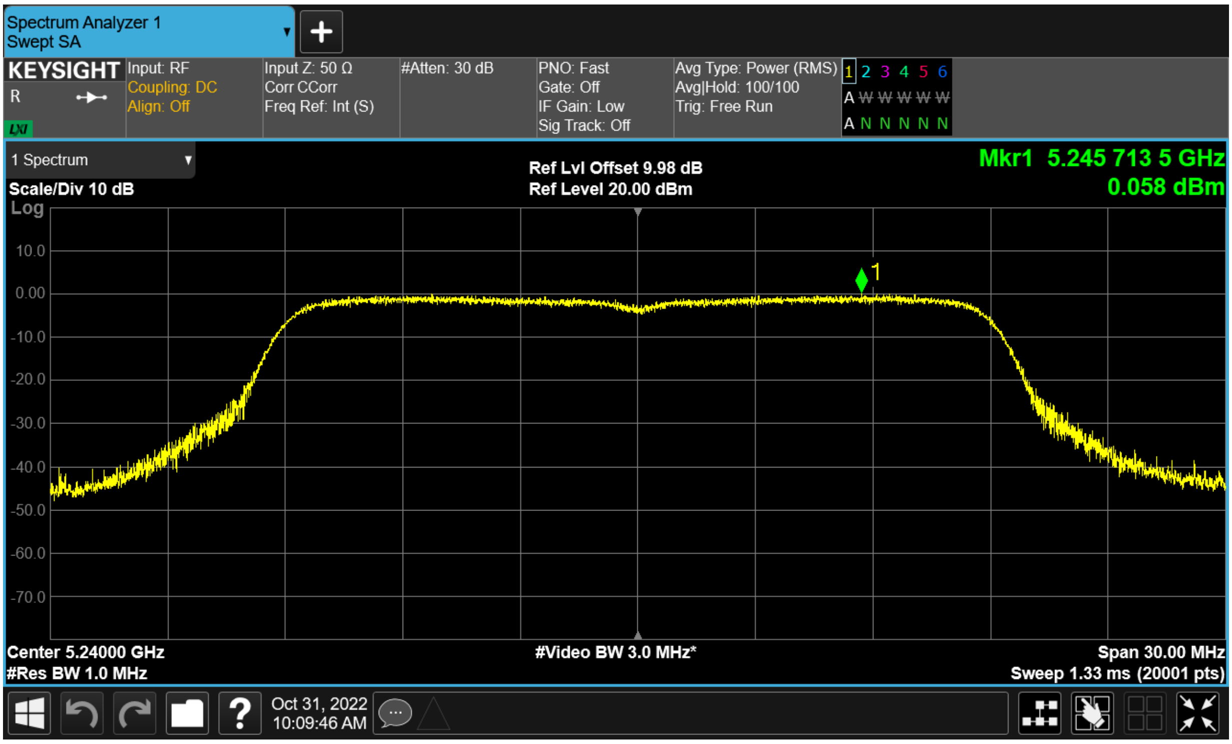
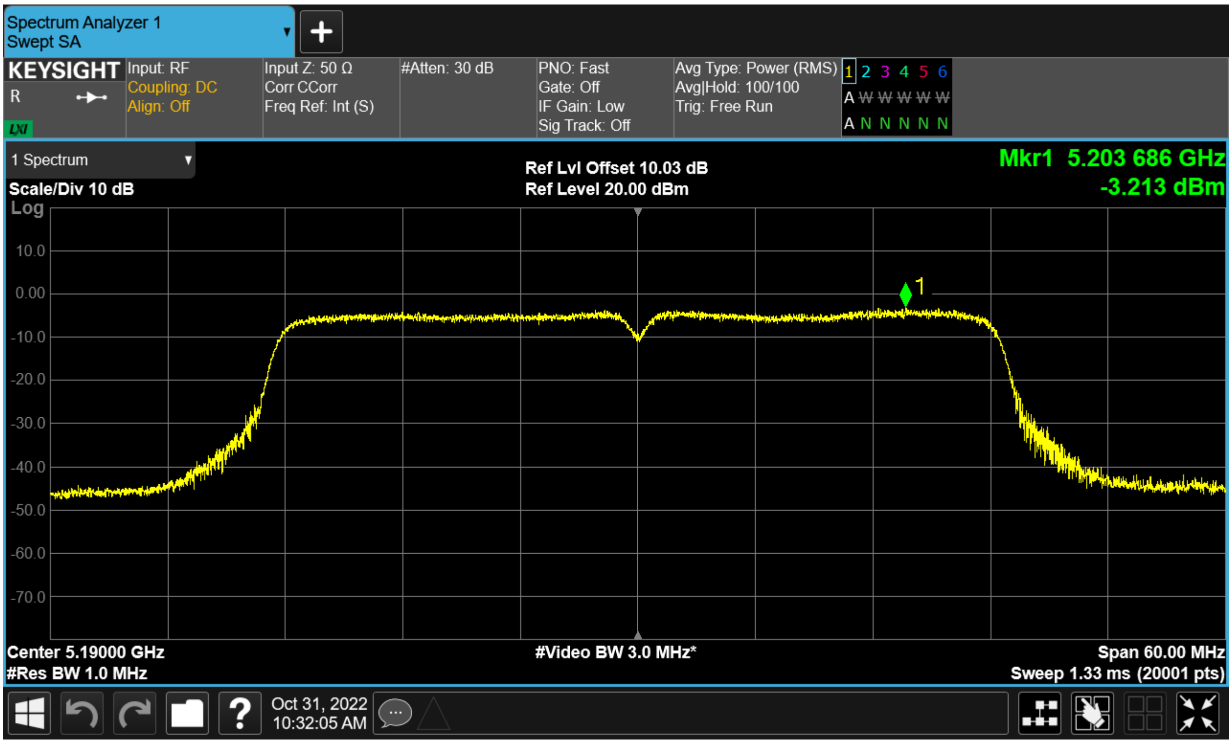



PSD NVNT n40 5190MHz Ant2




PSD NVNT n40 5230MHz Ant2