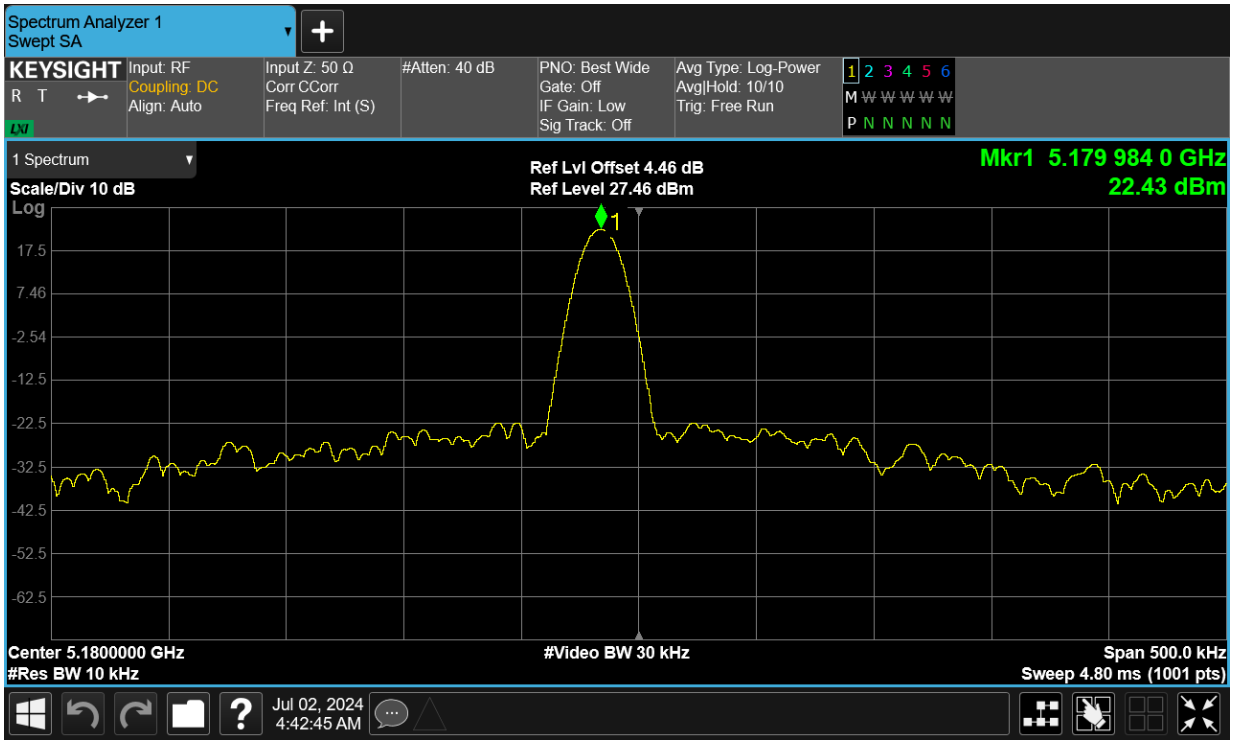
Test Data

Frequency Stability

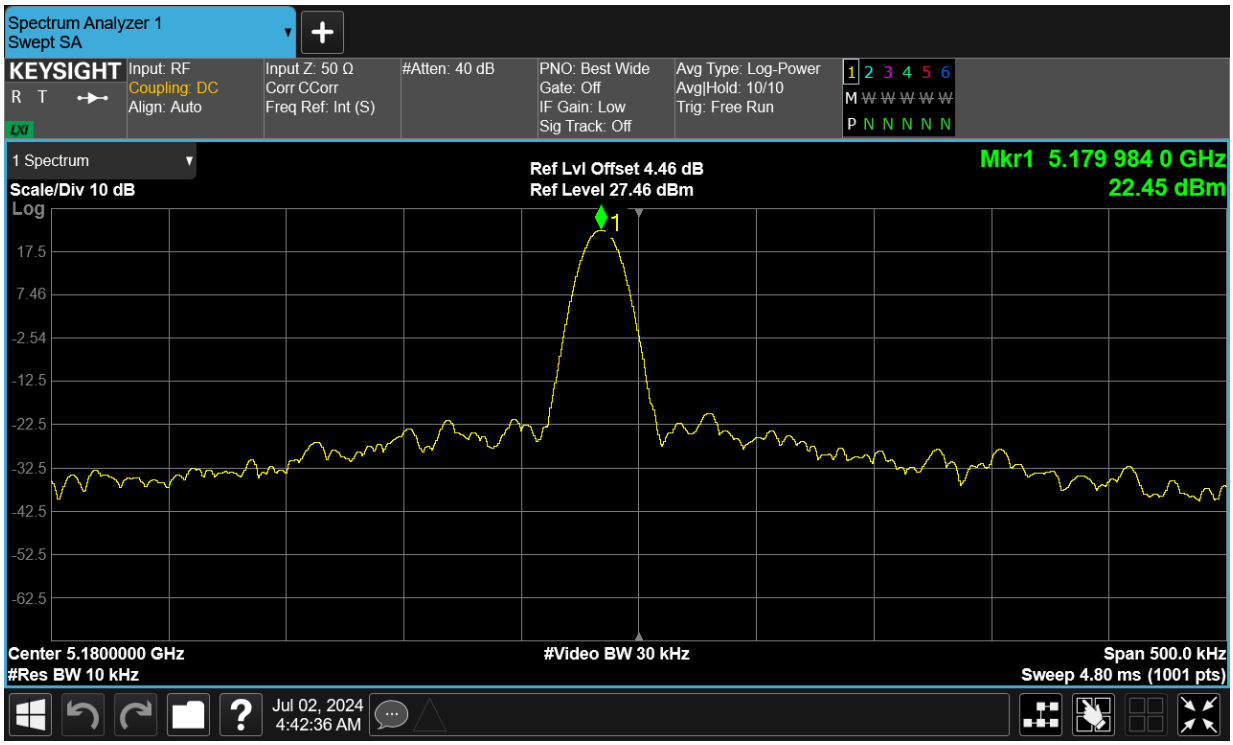
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5180	Ant2	5179.984	-3.09	Within authorized band	Pass
LVNT	a	5180	Ant2	5179.984	-3.09		Pass
NVHT	a	5180	Ant2	5179.984	-3.09		Pass
NVLT	a	5180	Ant2	5179.984	-3.09		Pass
NVNT	a	5180	Ant2	5179.9845	-2.99		Pass
HVNT	ac80	5210	Ant2	5209.9855	-2.78		Pass
LVNT	ac80	5210	Ant2	5209.986	-2.69		Pass
NVHT	ac80	5210	Ant2	5209.9865	-2.59		Pass
NVLT	ac80	5210	Ant2	5209.9865	-2.59		Pass
NVNT	ac80	5210	Ant2	5209.988285145	-2.25		Pass
HVNT	n40	5190	Ant2	5189.9845	-2.99		Pass
LVNT	n40	5190	Ant2	5189.985	-2.89		Pass
NVHT	n40	5190	Ant2	5189.985	-2.89		Pass
NVLT	n40	5190	Ant2	5189.9855	-2.79		Pass
NVNT	n40	5190	Ant2	5189.9855	-2.79		Pass

Remark: “NTNV” means Normal Temperature Normal Voltage, “NVHT” means Normal Voltage High Temperature, “NVLT” means Normal Voltage Low Temperature, “LVNT” means Low Voltage Normal Temperature, “HVNT” means High Voltage Normal Temperature.

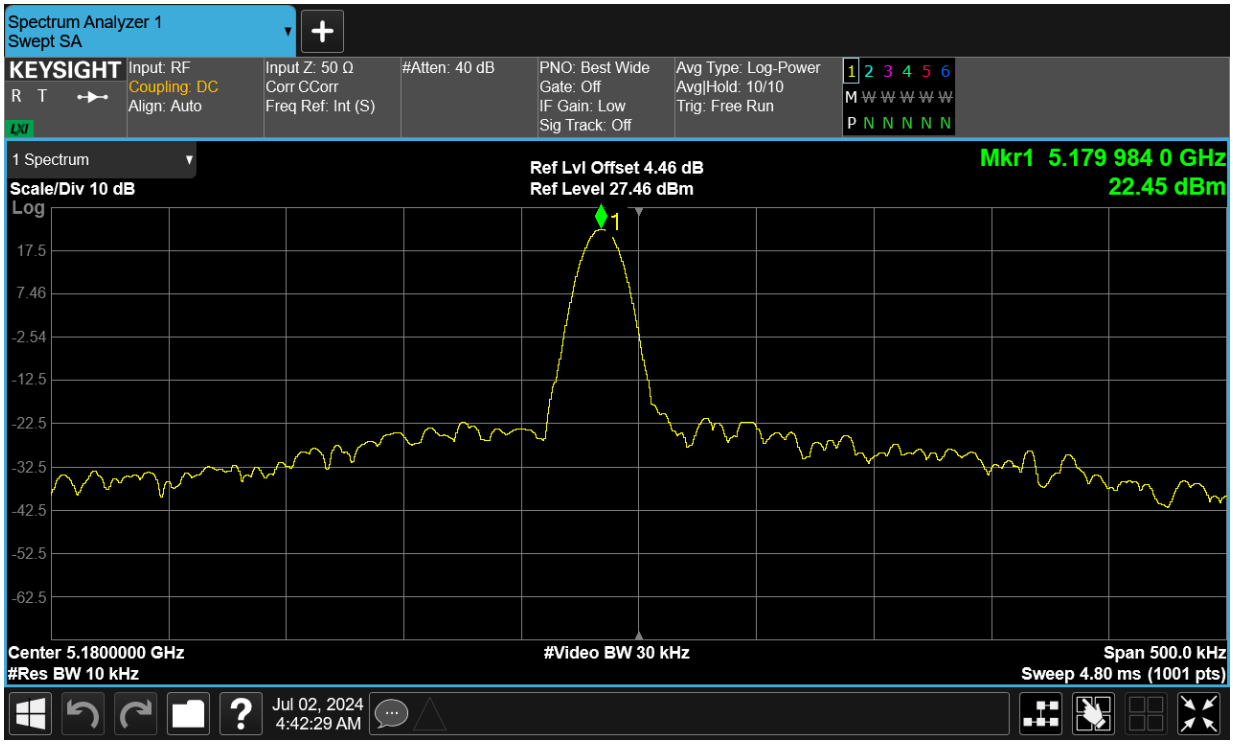
Test Graphs
Freq. Stability HVNT a 5180MHz Ant2



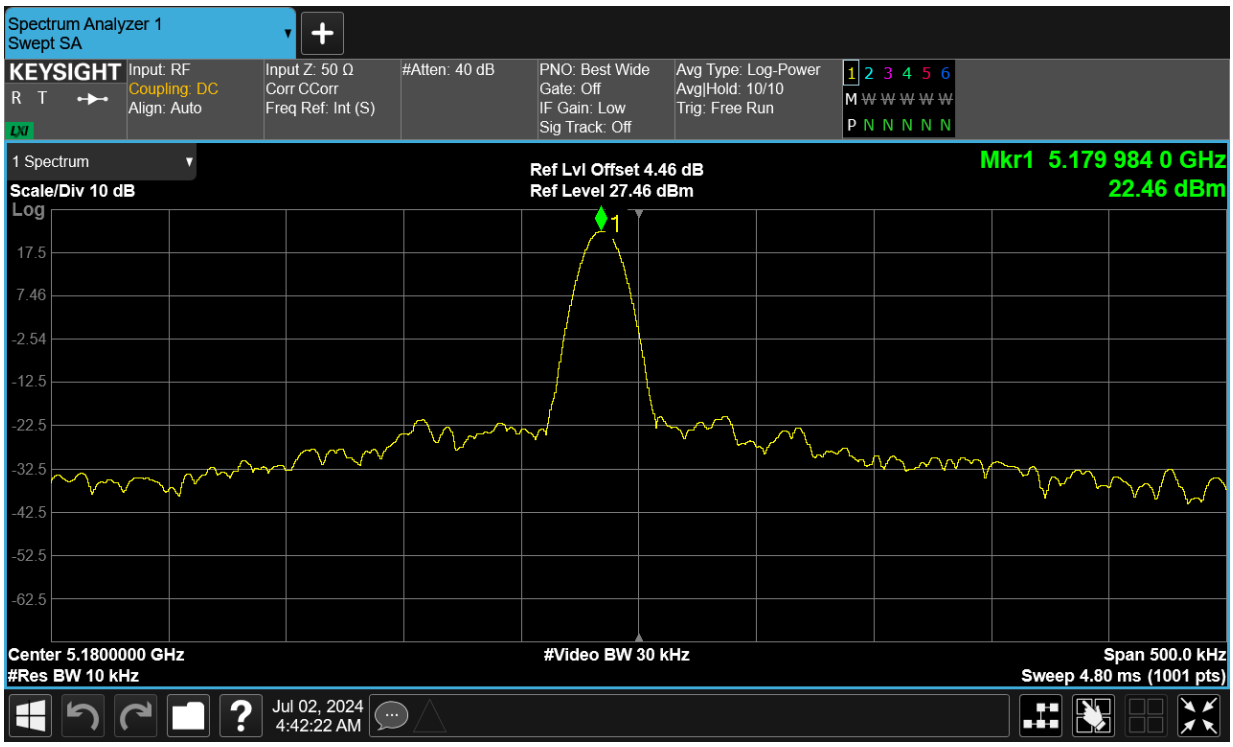
Freq. Stability LVNT a 5180MHz Ant2



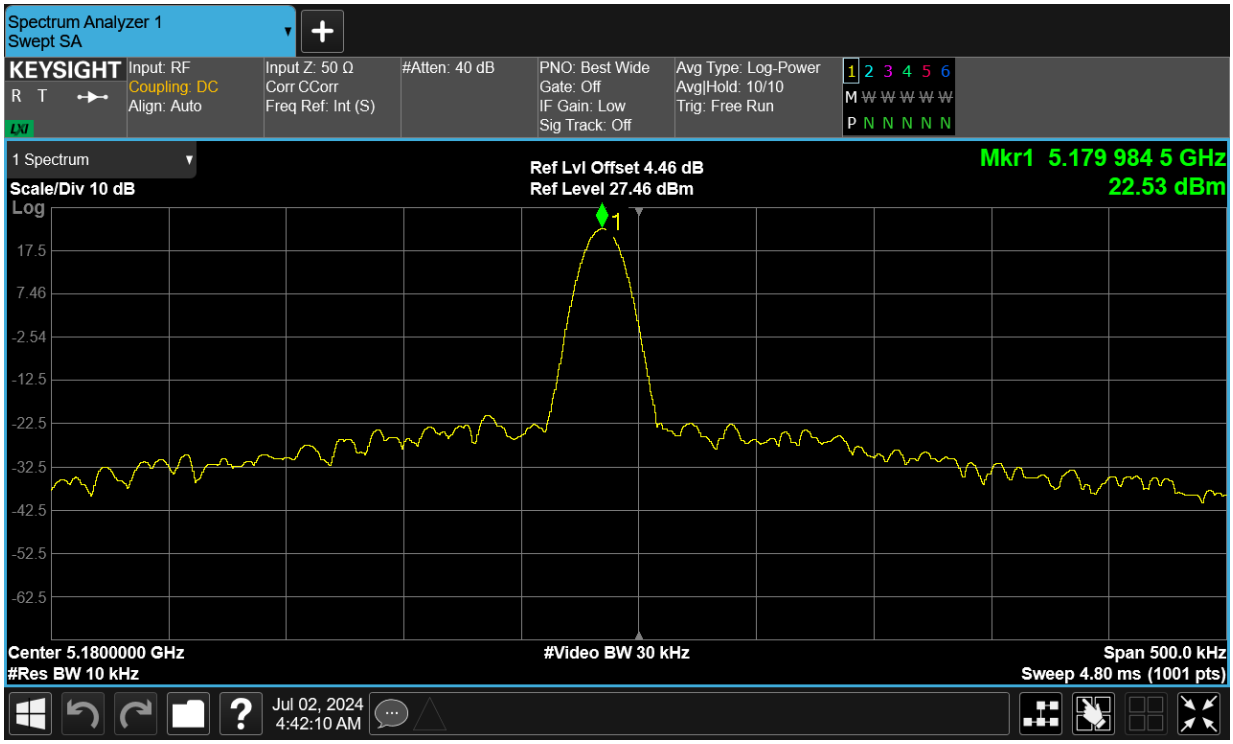
Freq. Stability NVHT a 5180MHz Ant2



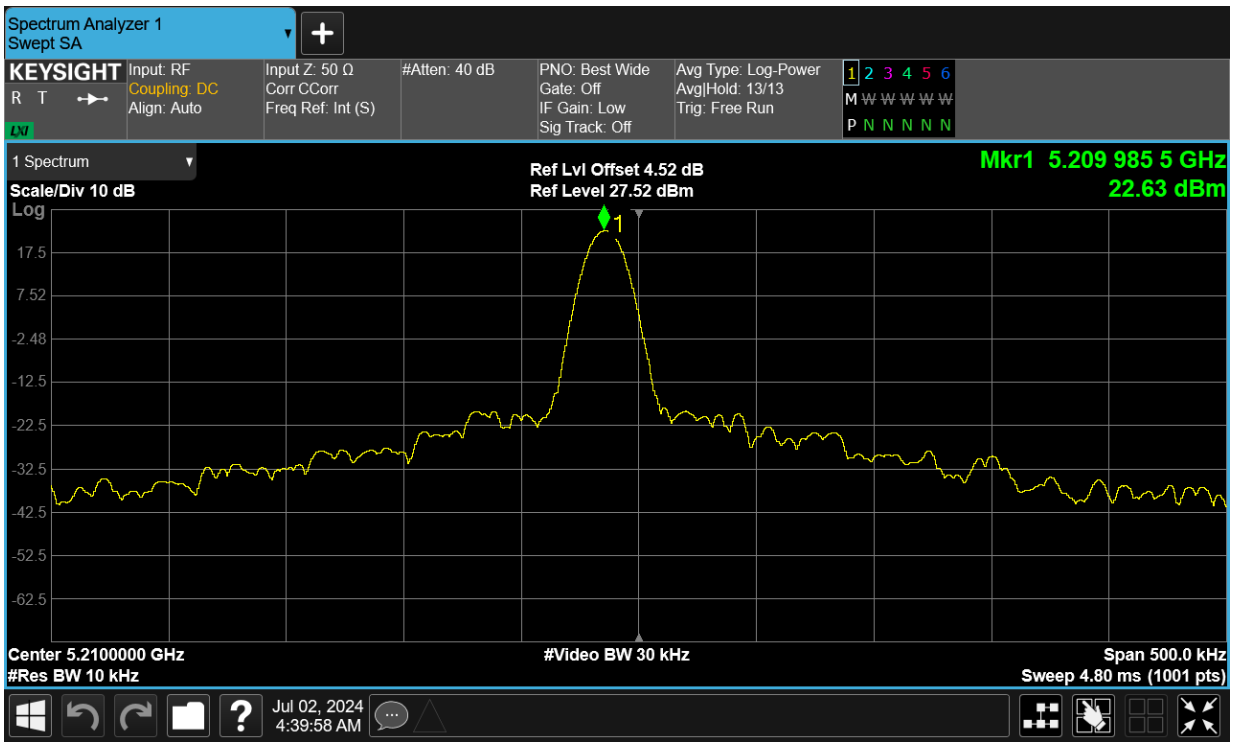
Freq. Stability NVLT a 5180MHz Ant2



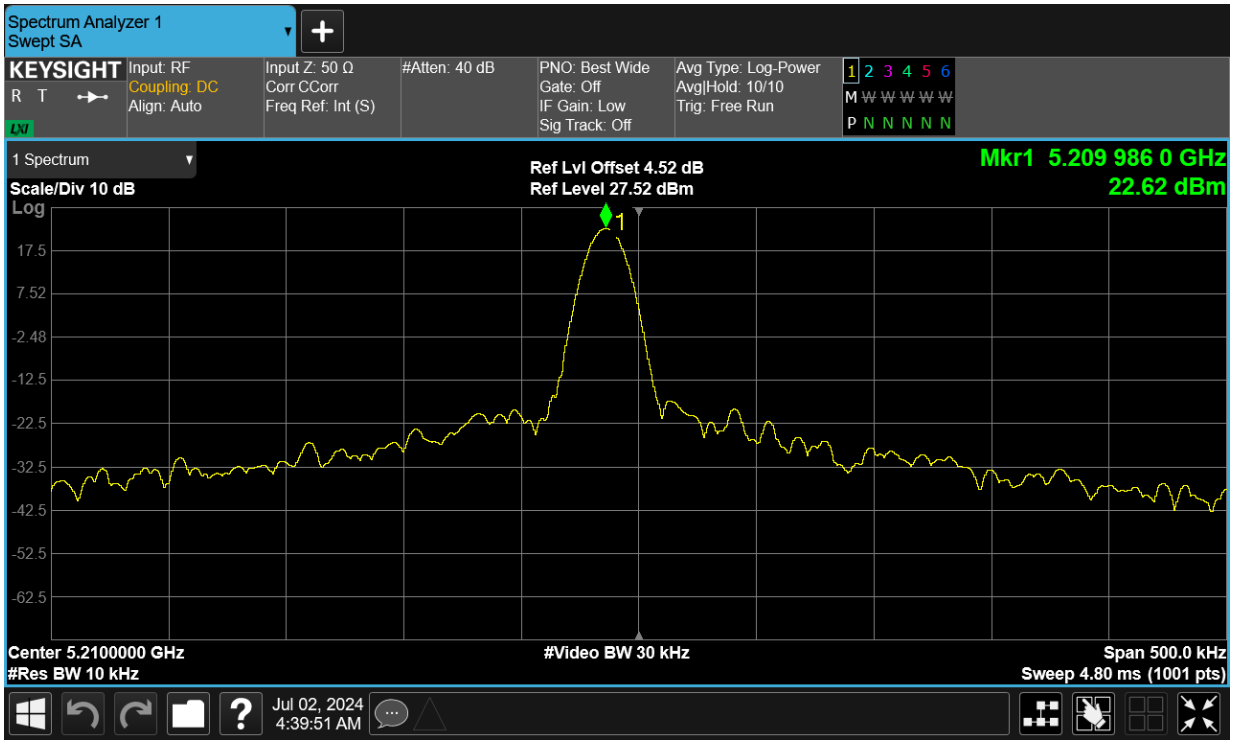
Freq. Stability NVNT a 5180MHz Ant2



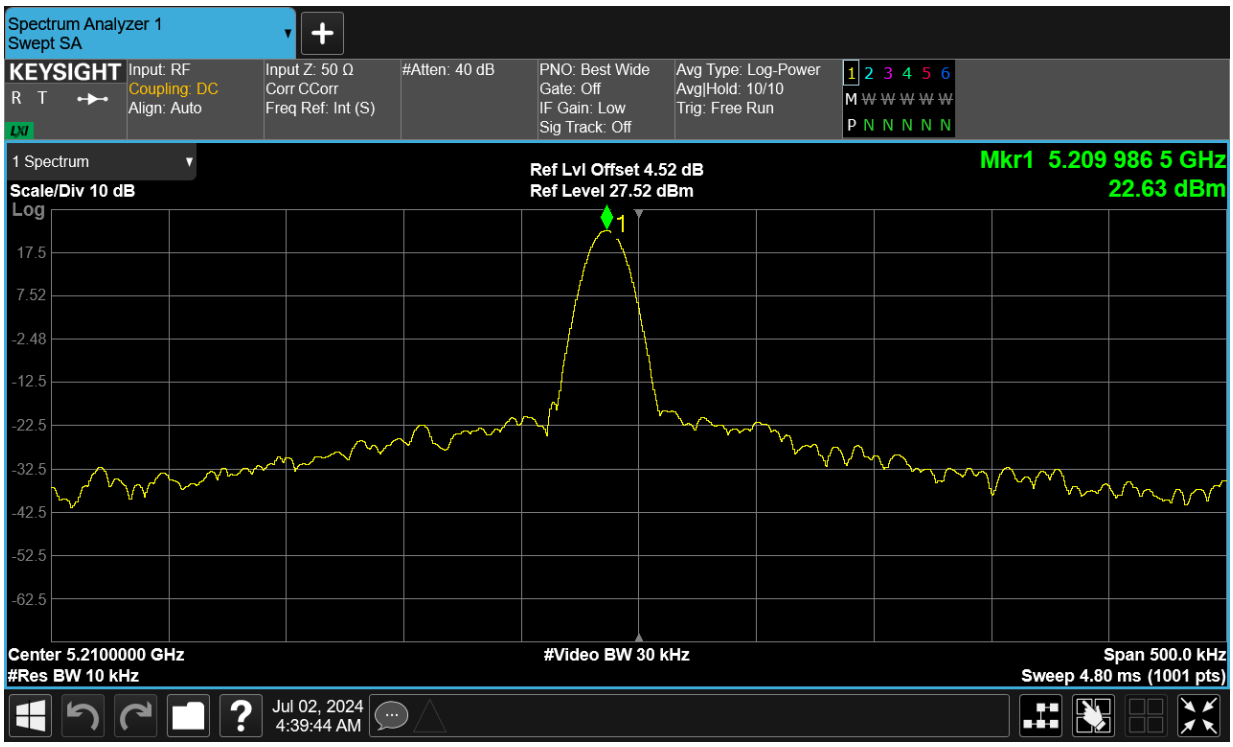
Freq. Stability HVNT ac80 5210MHz Ant2



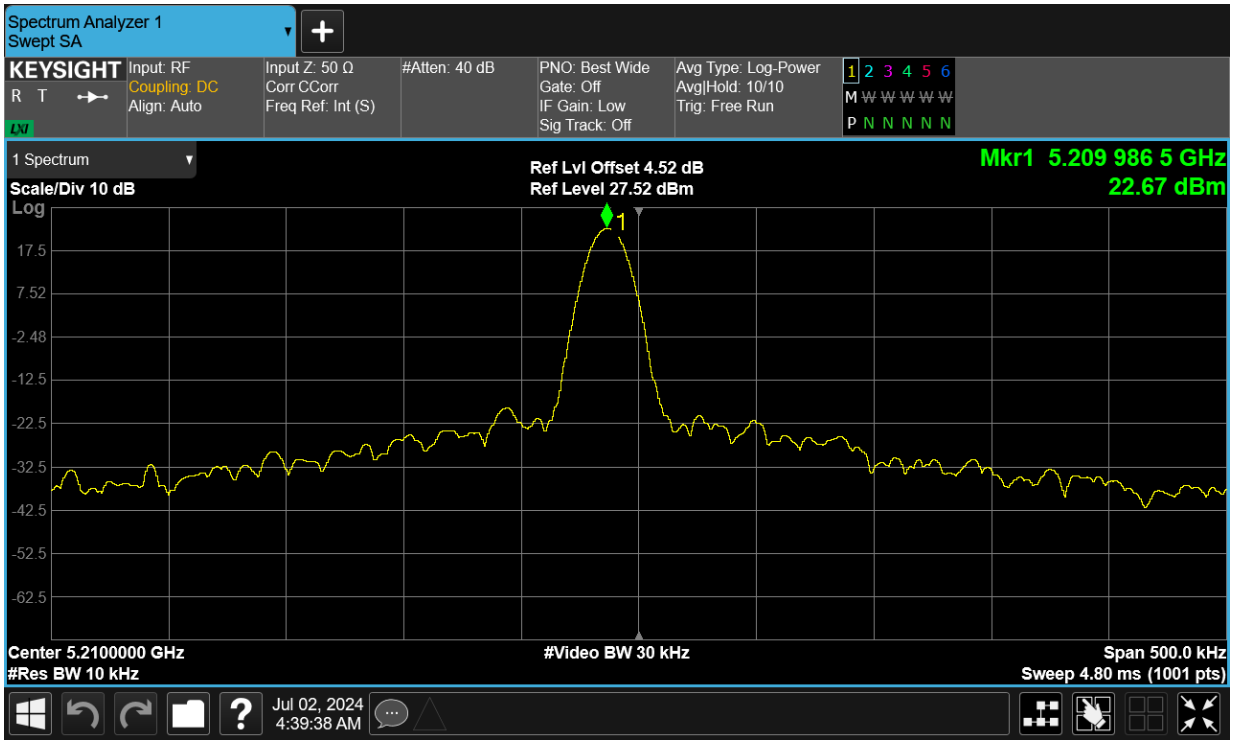
Freq. Stability LVNT ac80 5210MHz Ant2



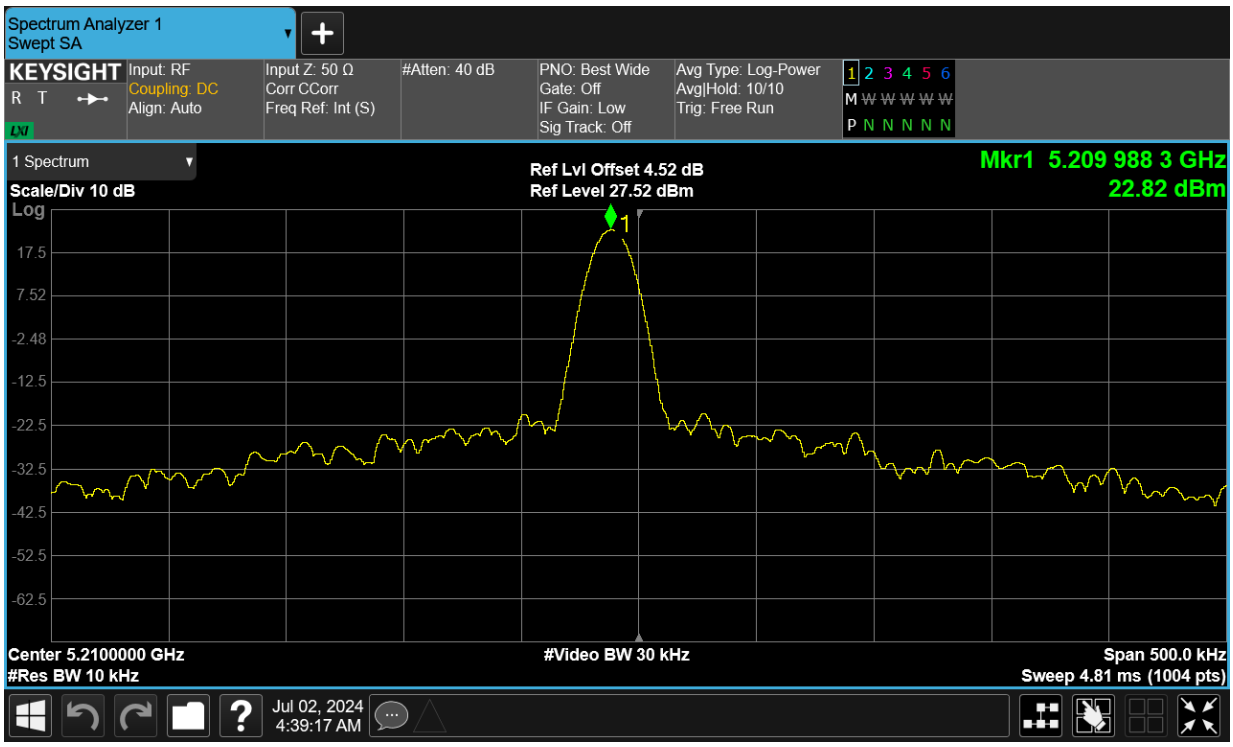
Freq. Stability NVHT ac80 5210MHz Ant2



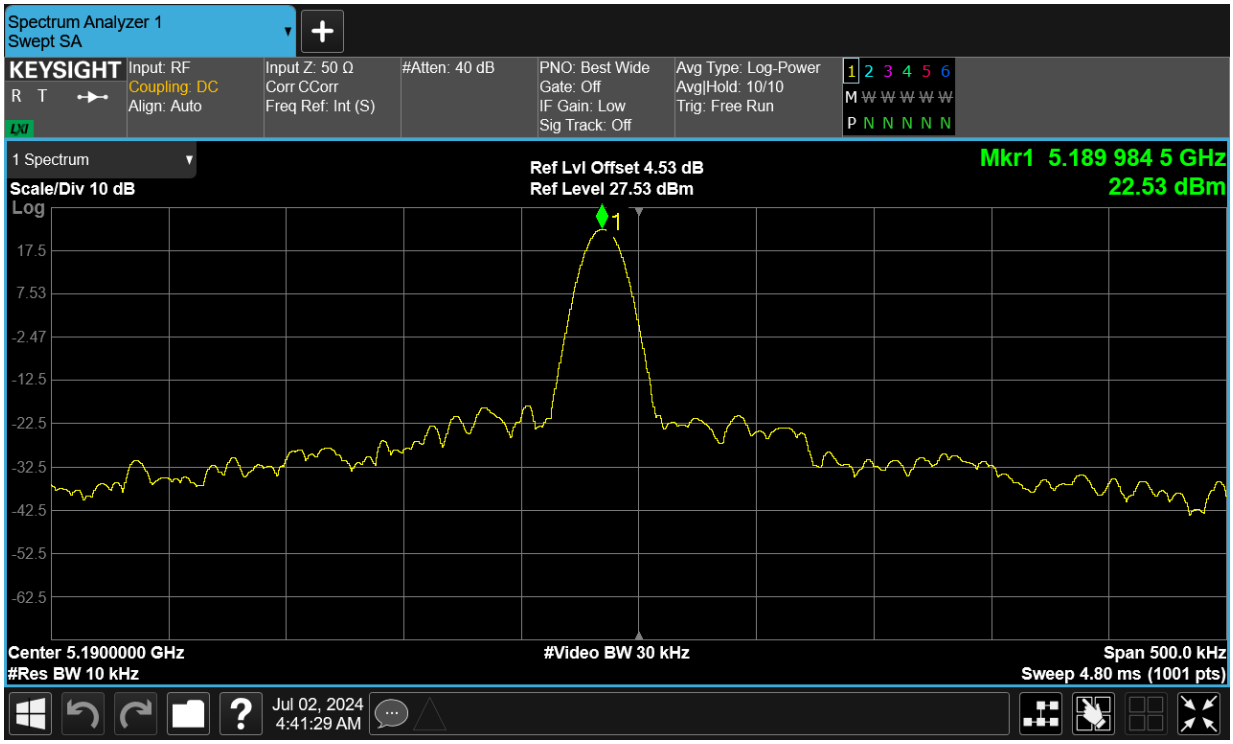
Freq. Stability NVLT ac80 5210MHz Ant2



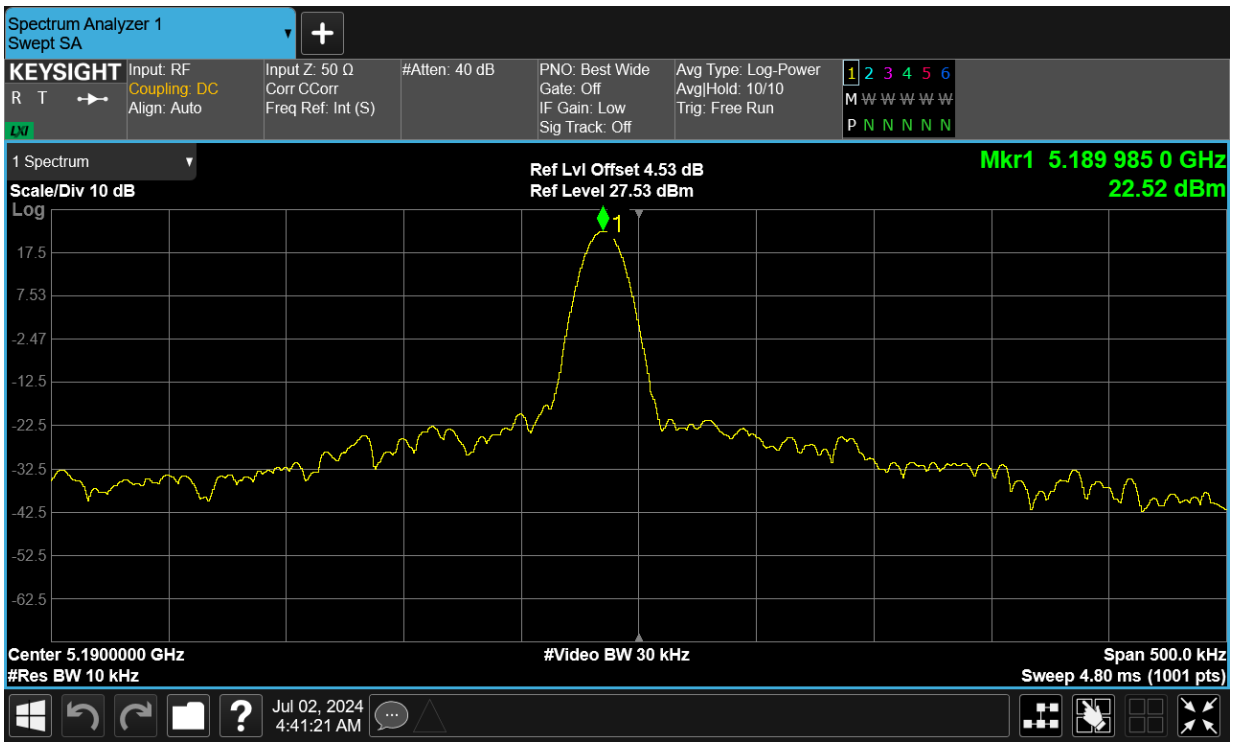
Freq. Stability NVNT ac80 5210MHz Ant2



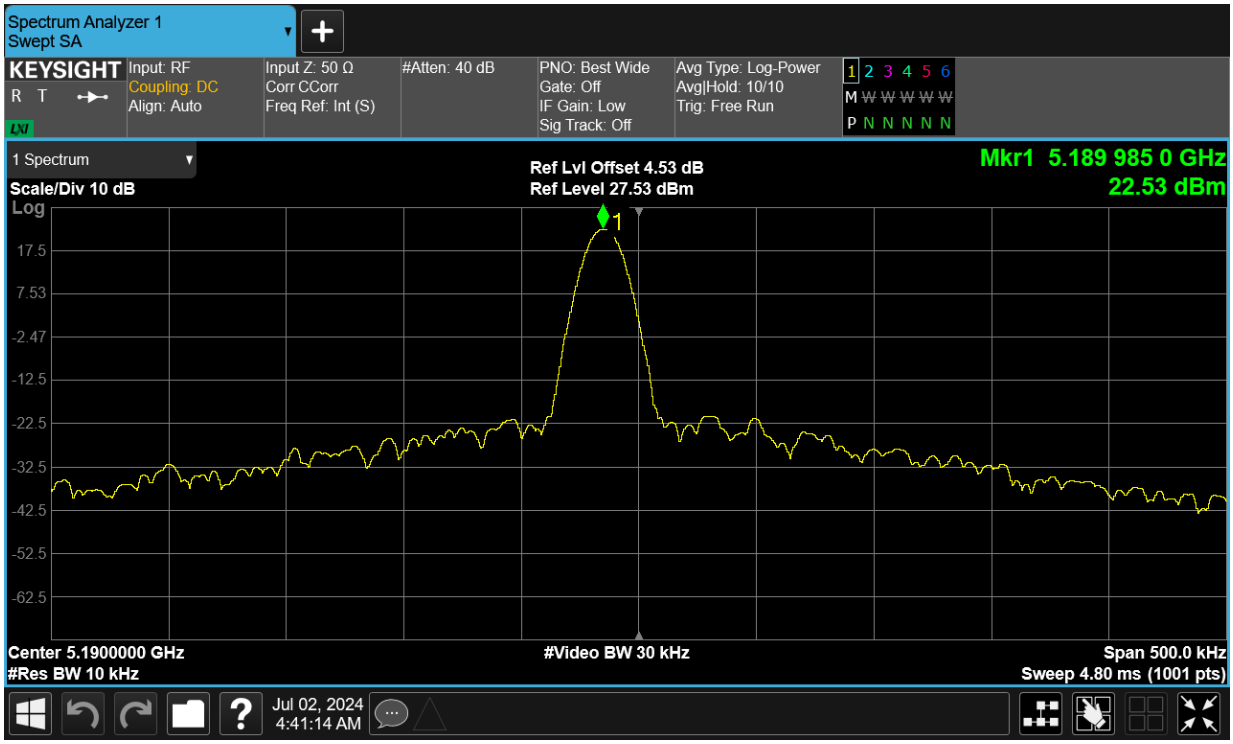
Freq. Stability HVNT n40 5190MHz Ant2



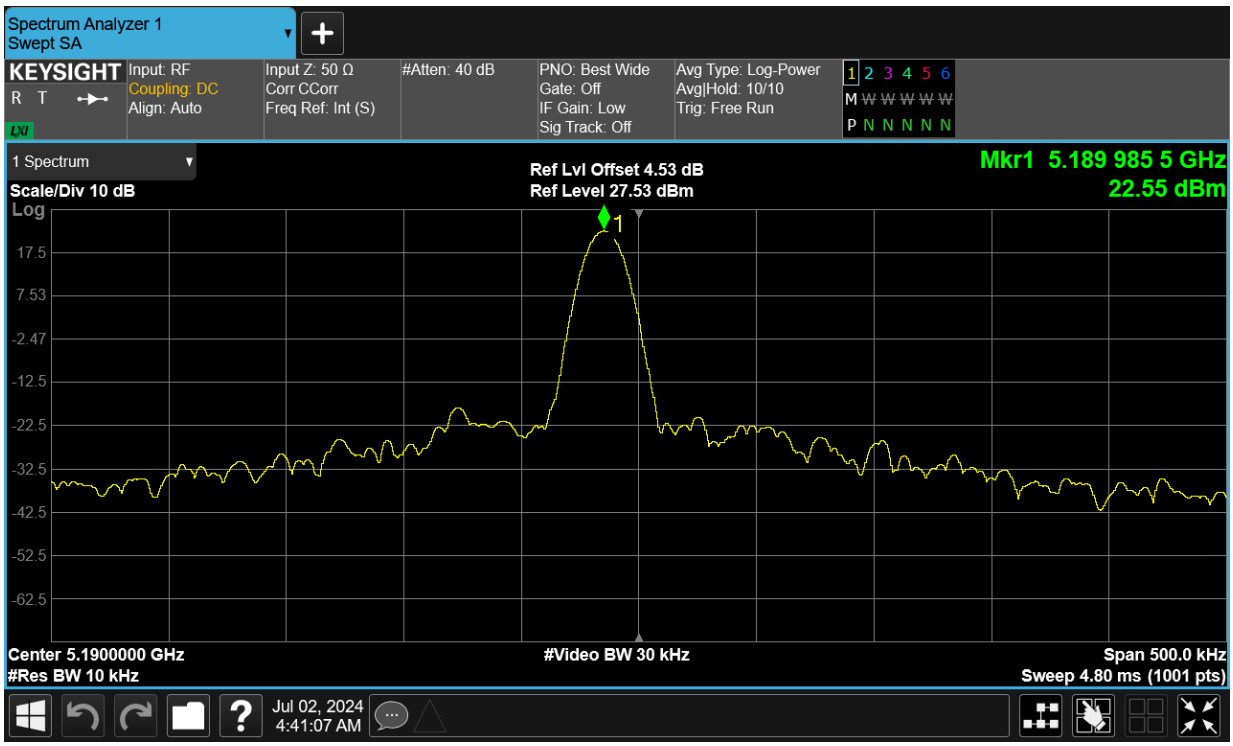
Freq. Stability LVNT n40 5190MHz Ant2



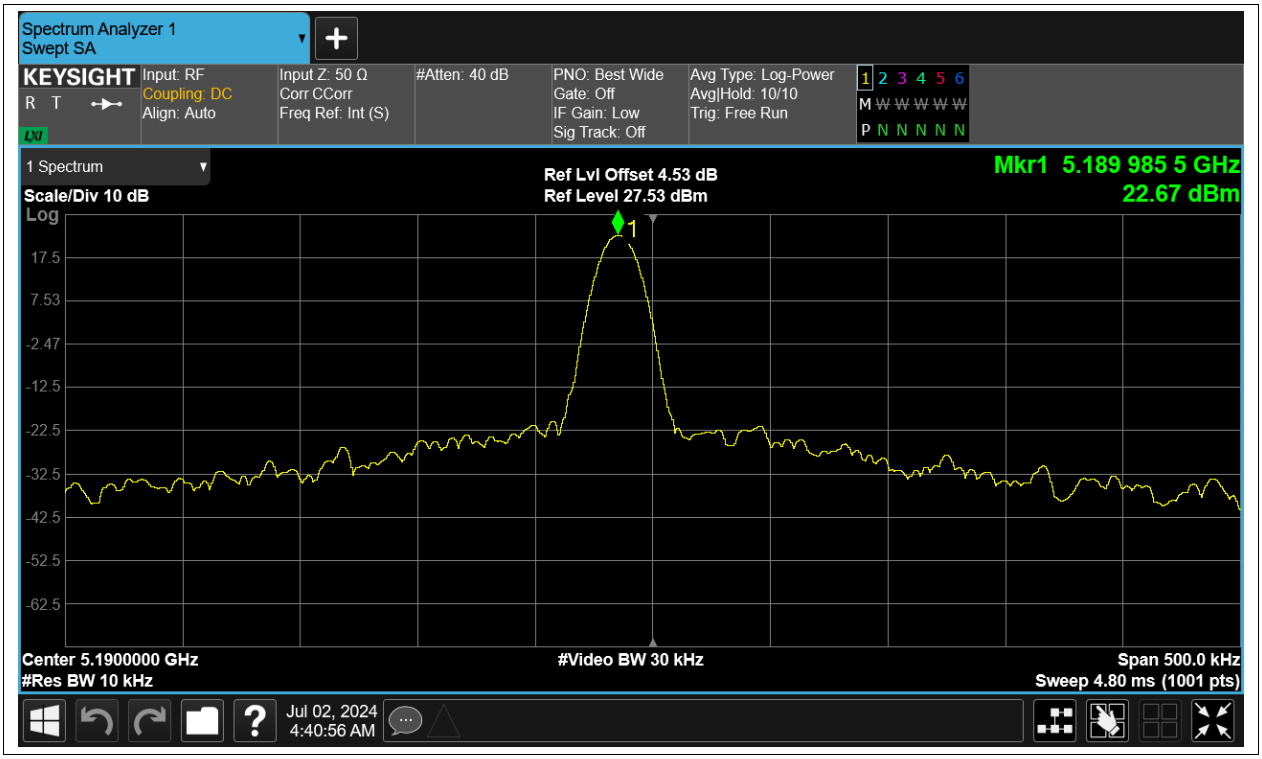
Freq. Stability NVHT n40 5190MHz Ant2



Freq. Stability NVLT n40 5190MHz Ant2



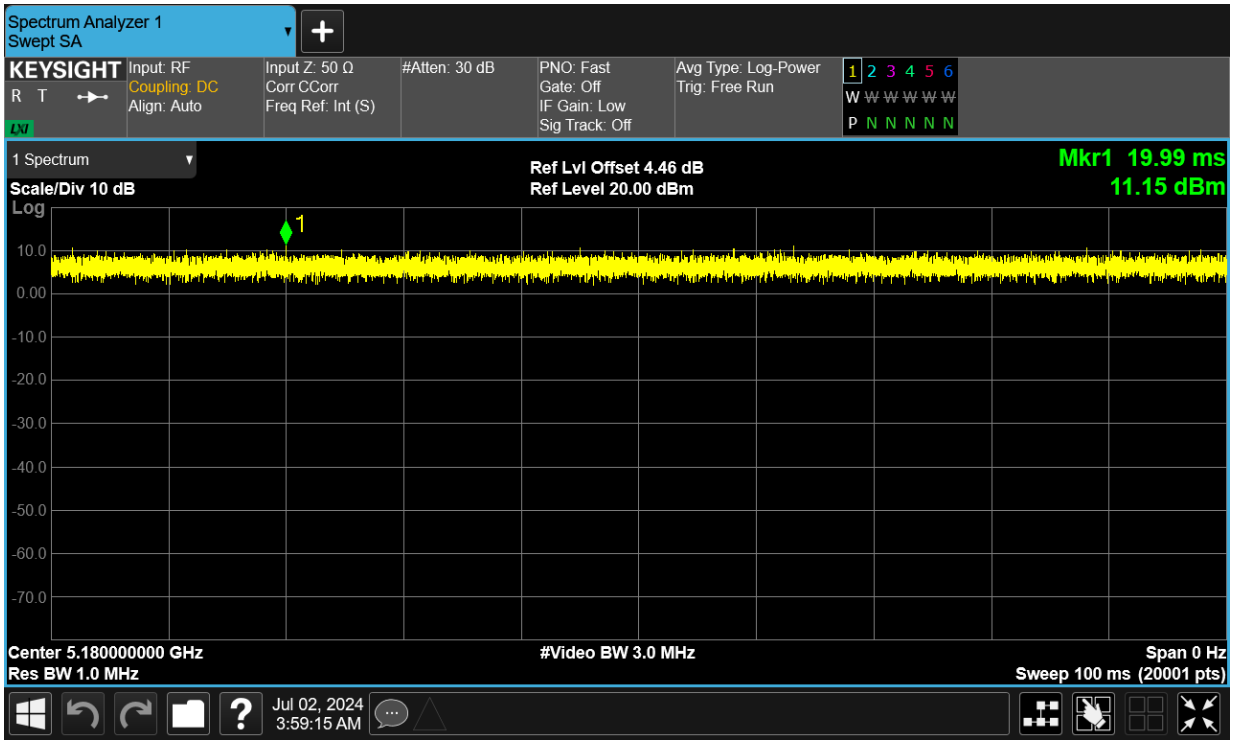
Freq. Stability NVNT n40 5190MHz Ant2


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Wide
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
Ref Lvl Offset 4.53 dB
Ref Level 27.53 dBm
Mkr1 5.189 985 5 GHz
22.67 dBm
Log
17.5
7.53
-2.47
-12.5
-22.5
-32.5
-42.5
-52.5
-62.5
Center 5.1900000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 500.0 kHz
Sweep 4.80 ms (1001 pts)
Jul 02, 2024
4:40:56 AM

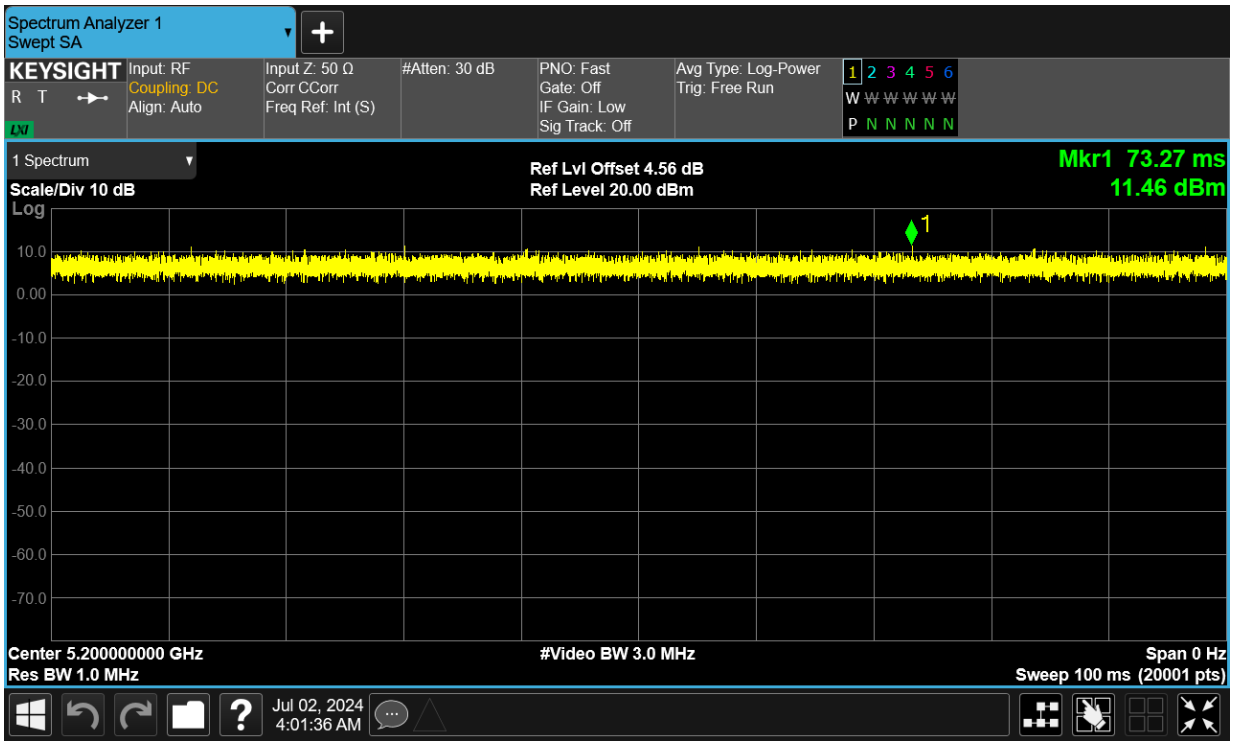
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant2	100	0
NVNT	a	5200	Ant2	100	0
NVNT	a	5240	Ant2	100	0
NVNT	ac20	5180	Ant2	100	0
NVNT	ac20	5200	Ant2	100	0
NVNT	ac20	5240	Ant2	100	0
NVNT	ac40	5190	Ant2	100	0
NVNT	ac40	5230	Ant2	100	0
NVNT	ac80	5210	Ant2	100	0
NVNT	n20	5180	Ant2	100	0
NVNT	n20	5200	Ant2	100	0
NVNT	n20	5240	Ant2	100	0
NVNT	n40	5190	Ant2	100	0
NVNT	n40	5230	Ant2	100	0

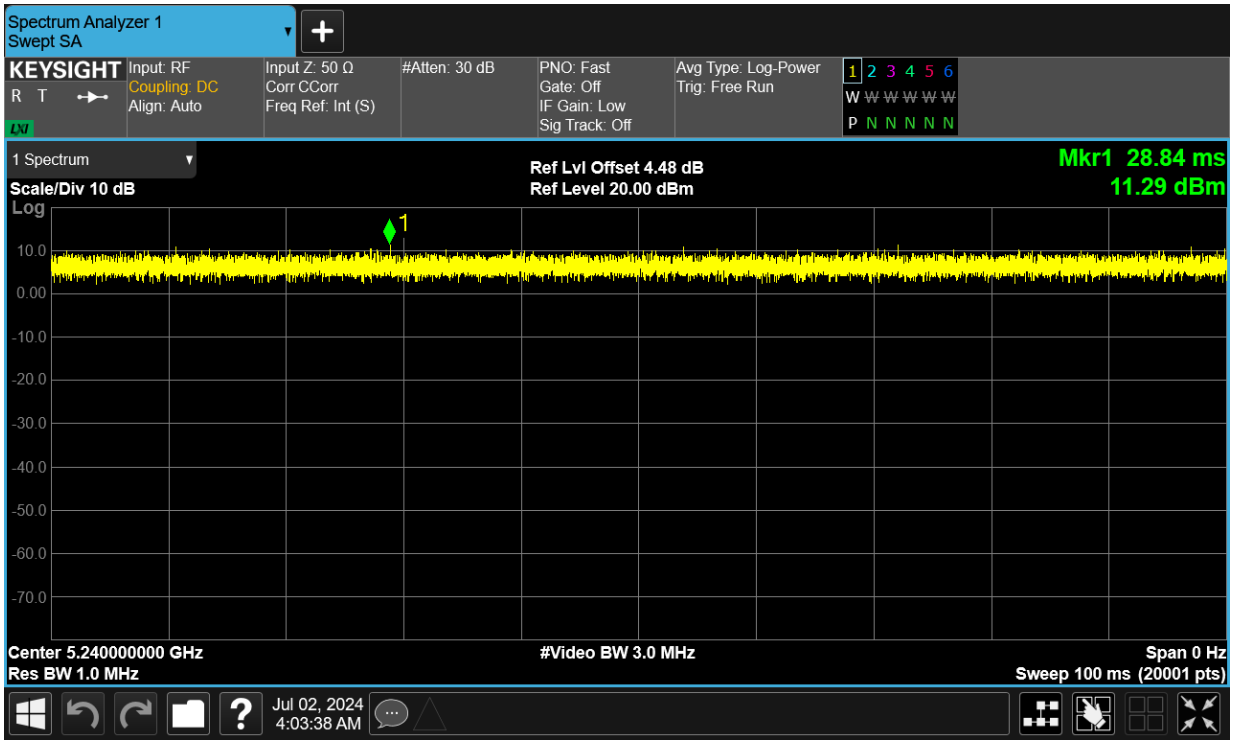
Test Graphs
Duty Cycle NVNT a 5180MHz Ant2



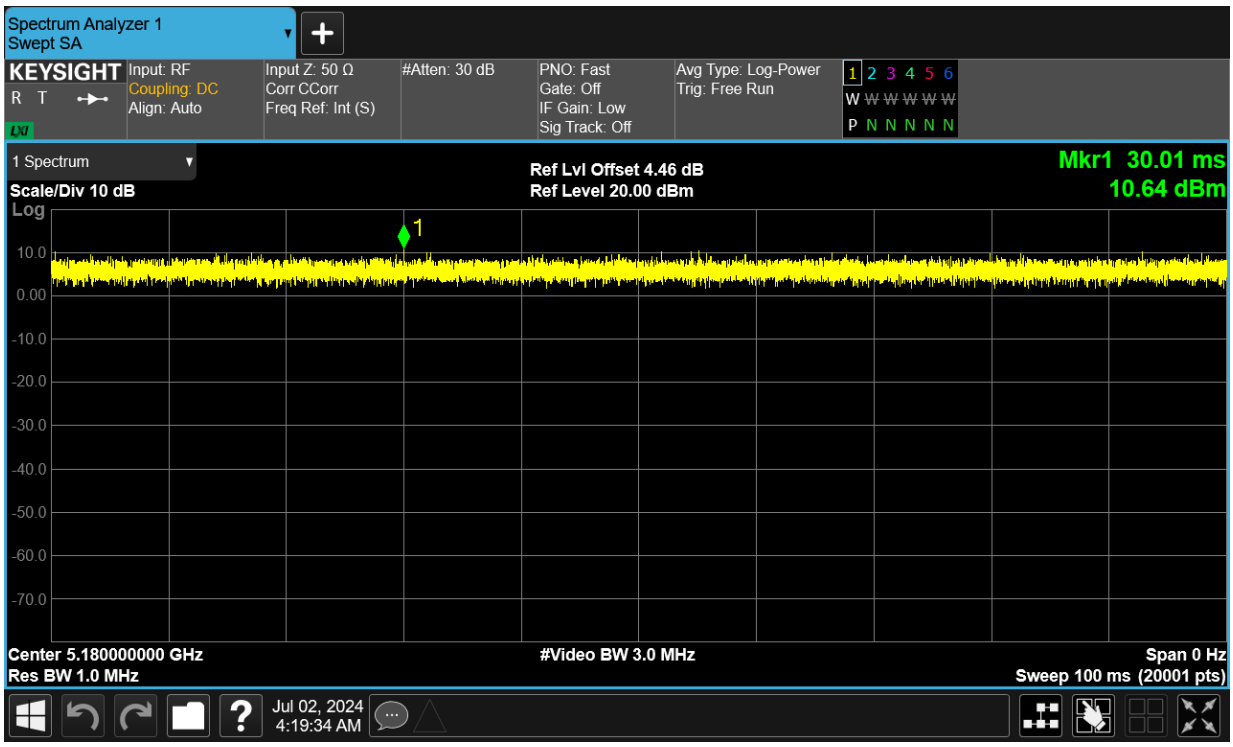
Duty Cycle NVNT a 5200MHz Ant2



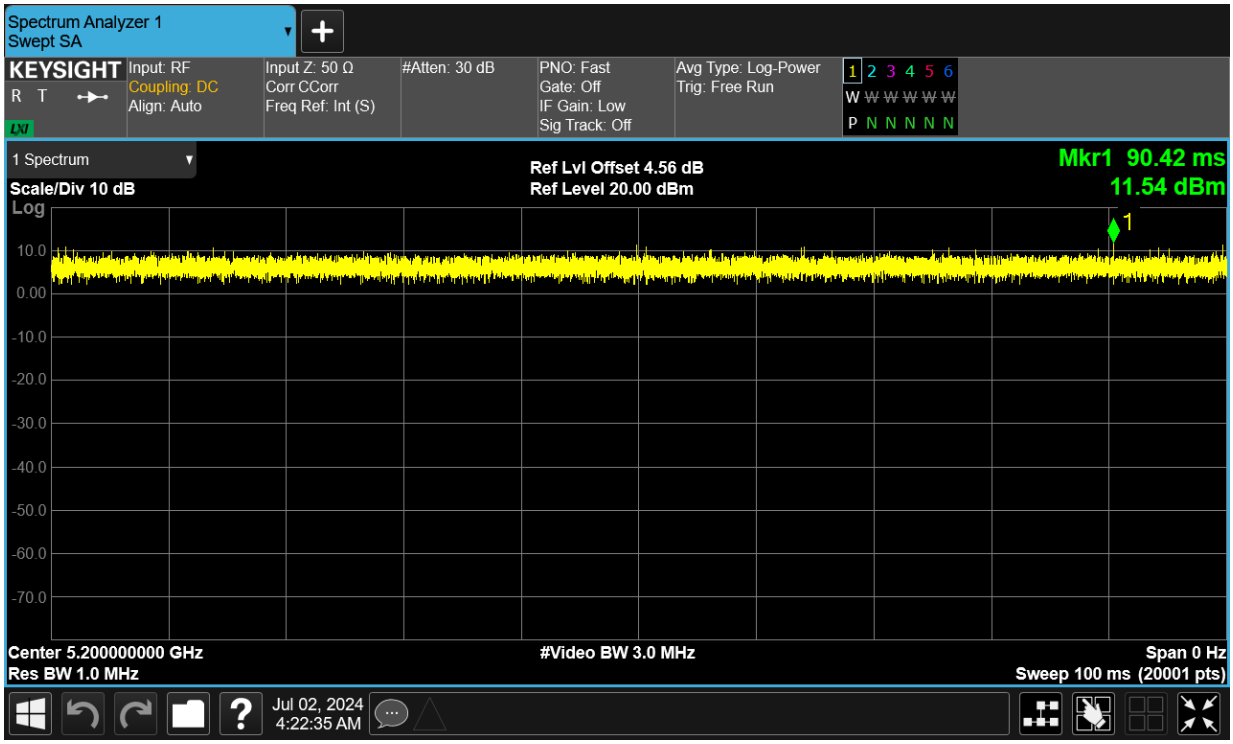
Duty Cycle NVNT a 5240MHz Ant2



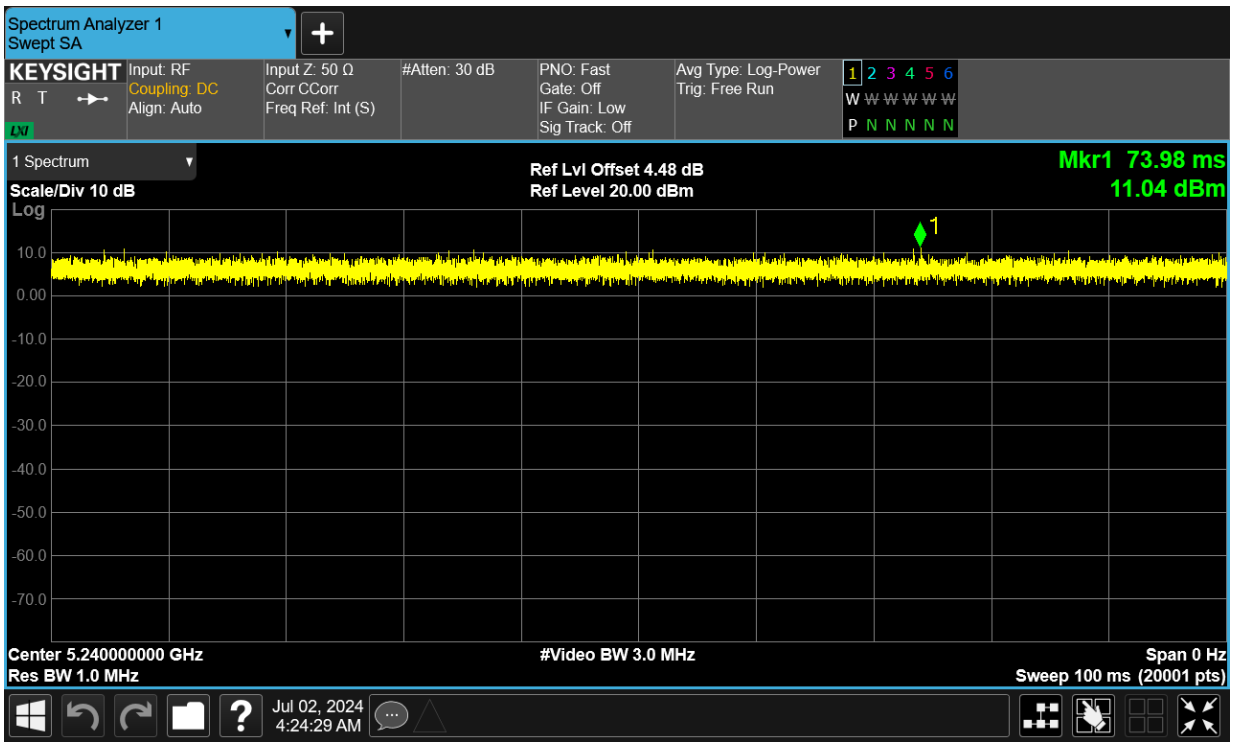
Duty Cycle NVNT ac20 5180MHz Ant2



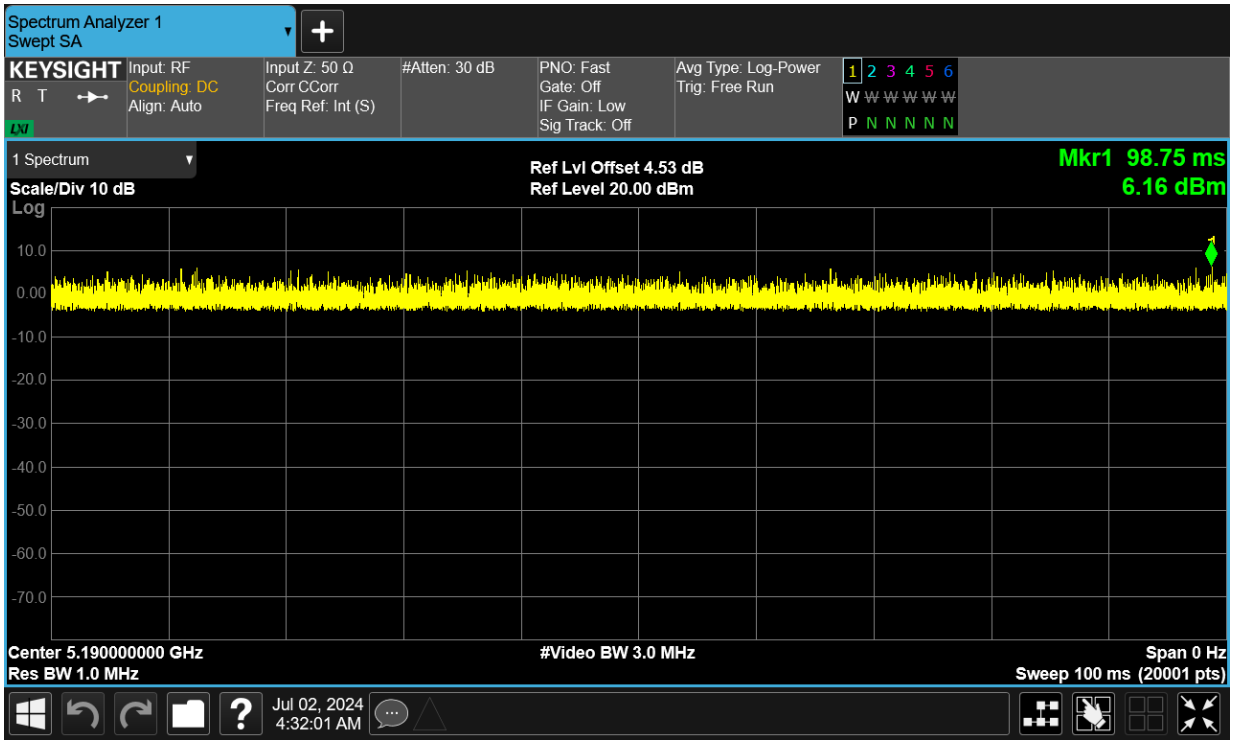
Duty Cycle NVNT ac20 5200MHz Ant2



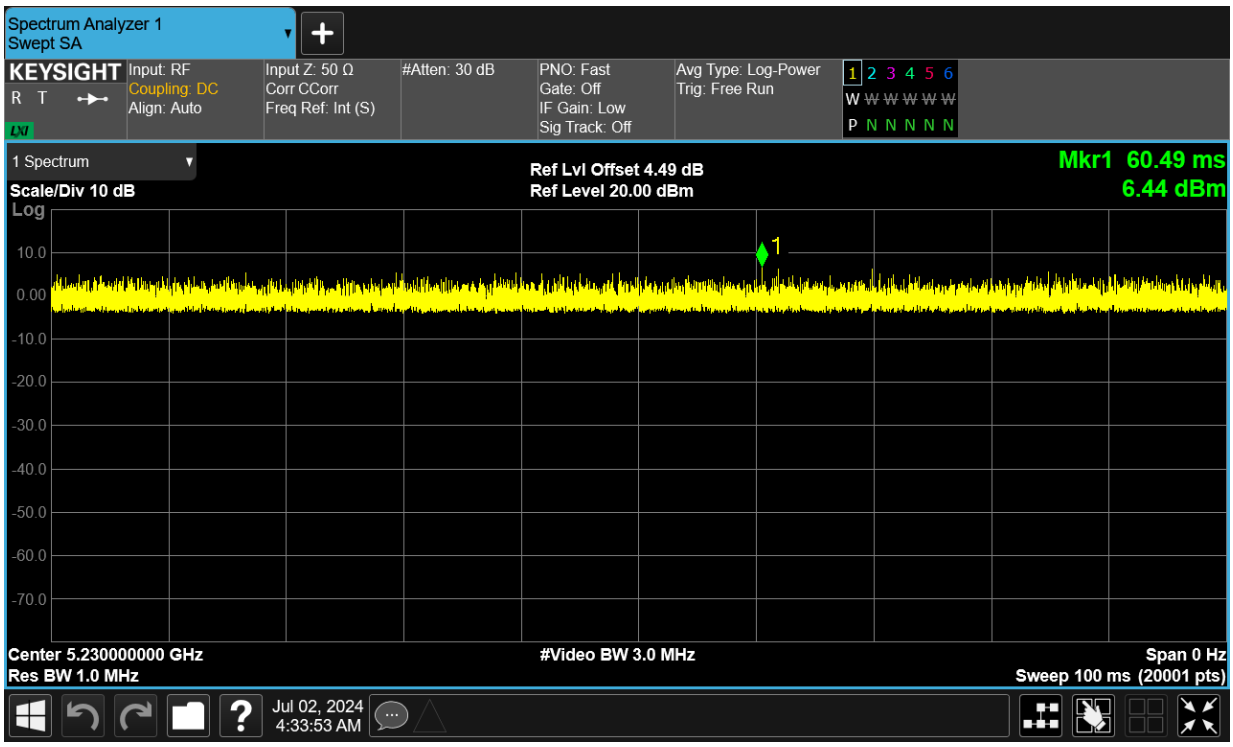
Duty Cycle NVNT ac20 5240MHz Ant2



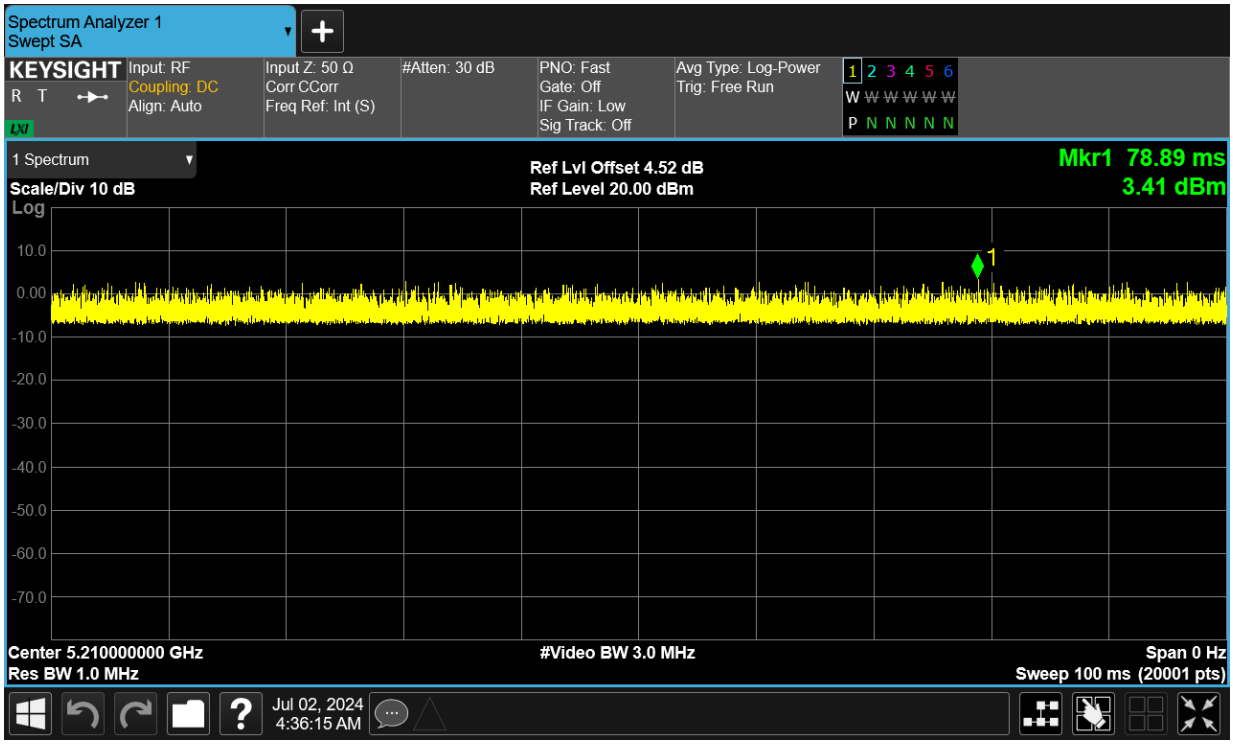
Duty Cycle NVNT ac40 5190MHz Ant2



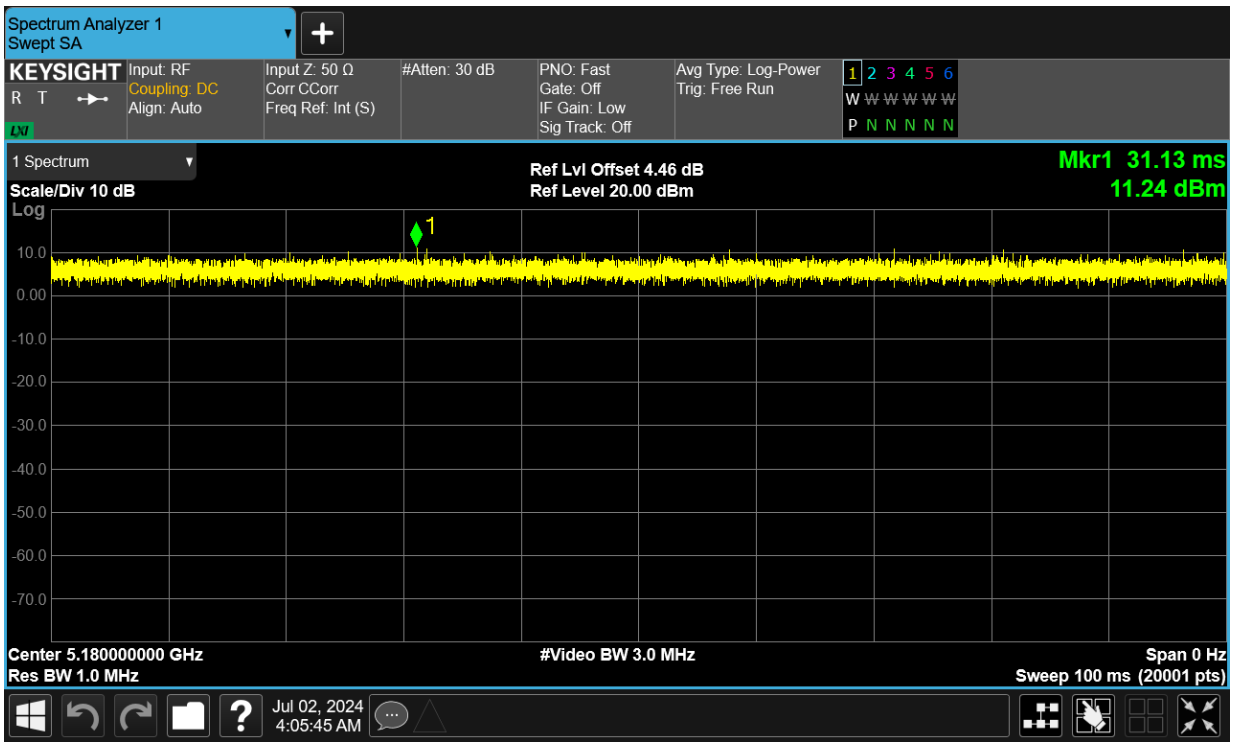
Duty Cycle NVNT ac40 5230MHz Ant2



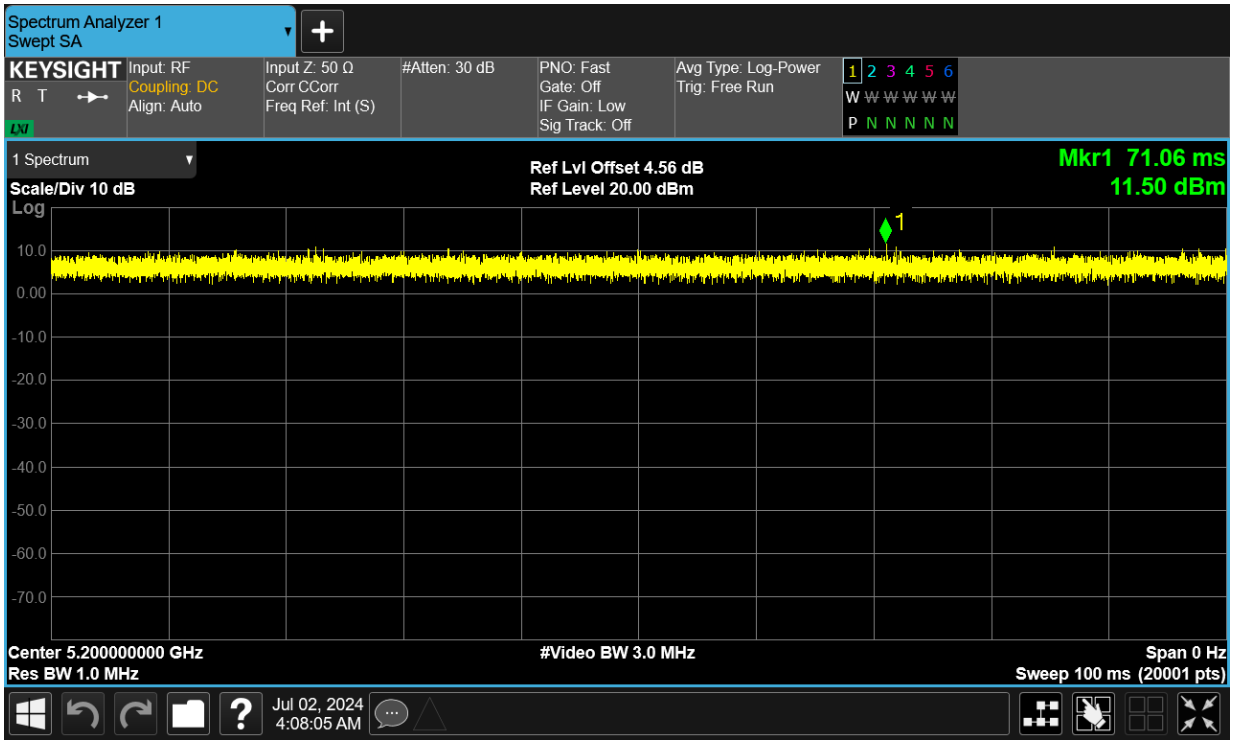
Duty Cycle NVNT ac80 5210MHz Ant2



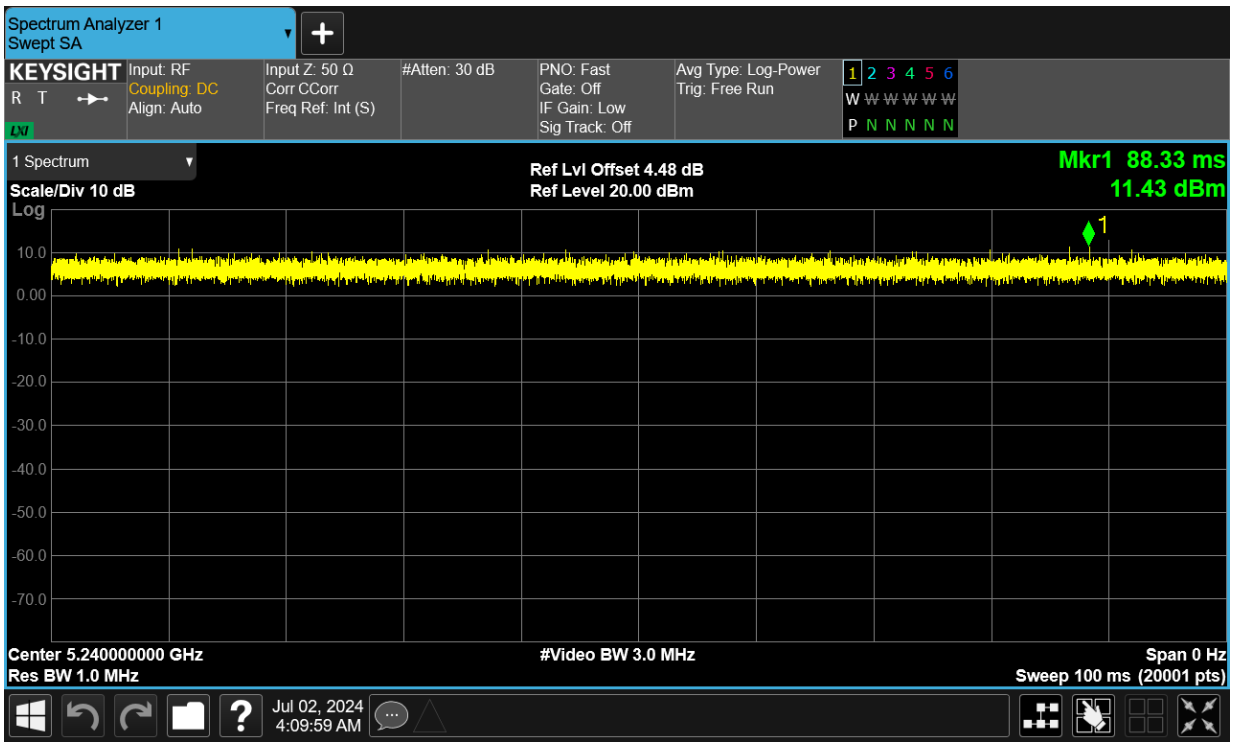
Duty Cycle NVNT n20 5180MHz Ant2



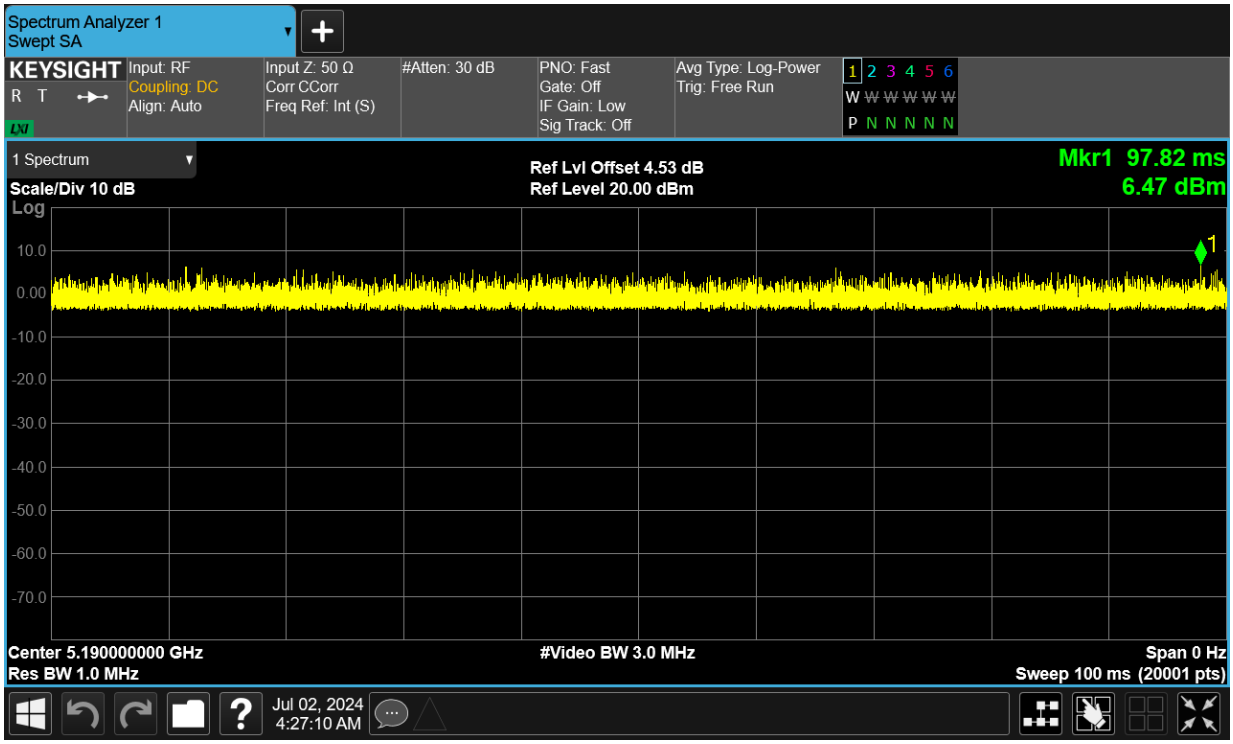
Duty Cycle NVNT n20 5200MHz Ant2



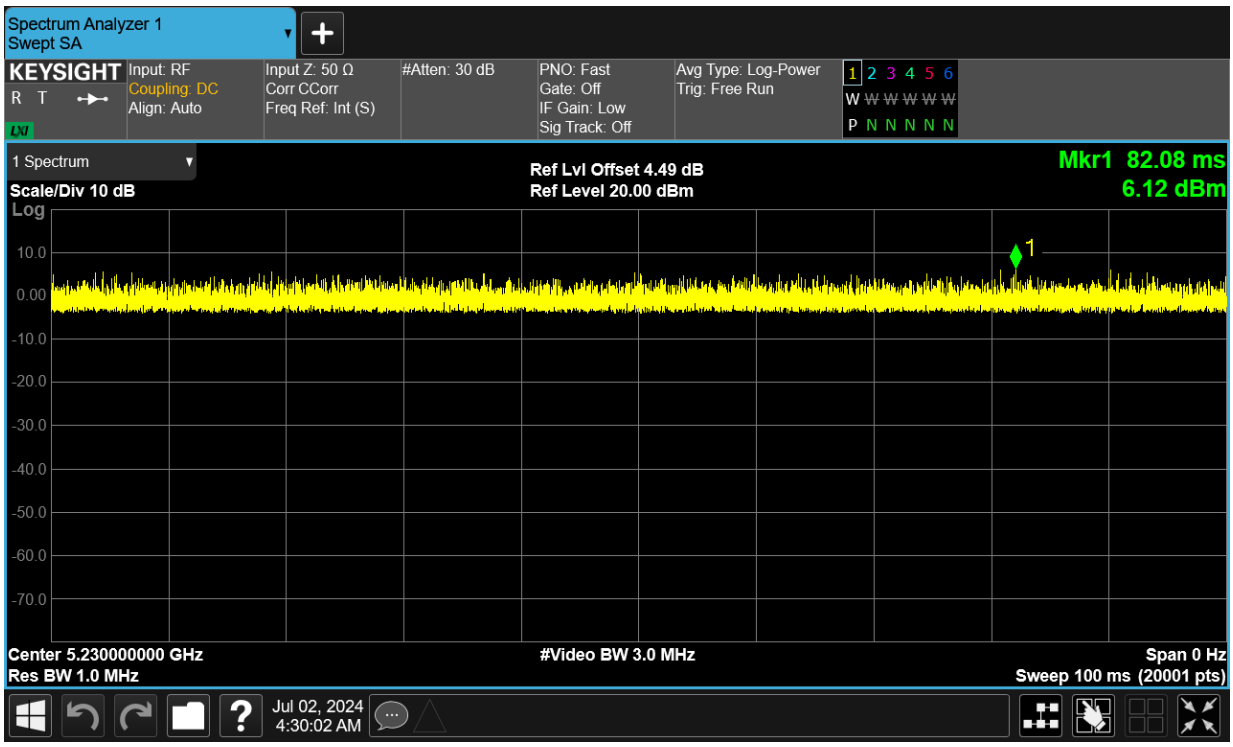
Duty Cycle NVNT n20 5240MHz Ant2



Duty Cycle NVNT n40 5190MHz Ant2



Duty Cycle NVNT n40 5230MHz Ant2



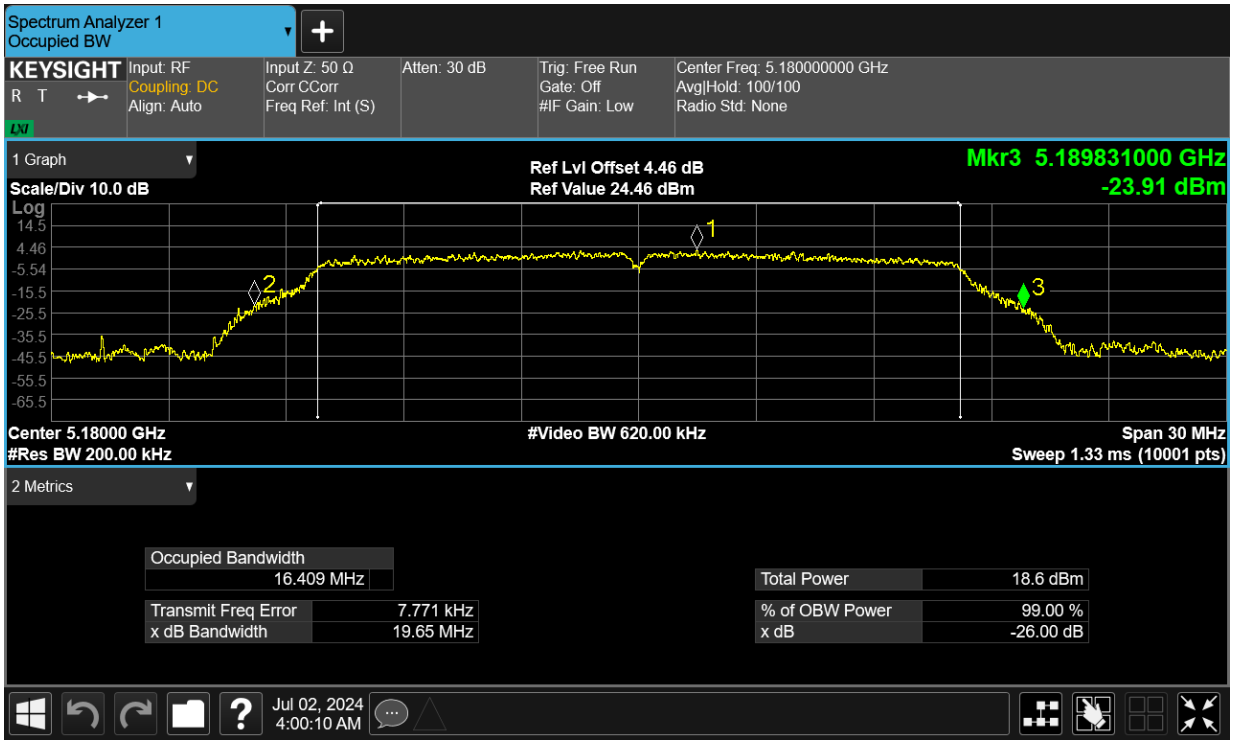
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant2	13.34	0	13.34	24	Pass
NVNT	a	5200	Ant2	13.76	0	13.76	24	Pass
NVNT	a	5240	Ant2	13.11	0	13.11	24	Pass
NVNT	ac20	5180	Ant2	12.97	0	12.97	24	Pass
NVNT	ac20	5200	Ant2	13.6	0	13.6	24	Pass
NVNT	ac20	5240	Ant2	12.98	0	12.98	24	Pass
NVNT	ac40	5190	Ant2	13.02	0	13.02	24	Pass
NVNT	ac40	5230	Ant2	13.23	0	13.23	24	Pass
NVNT	ac80	5210	Ant2	13.12	0	13.12	24	Pass
NVNT	n20	5180	Ant2	13.02	0	13.02	24	Pass
NVNT	n20	5200	Ant2	13.64	0	13.64	24	Pass
NVNT	n20	5240	Ant2	13.01	0	13.01	24	Pass
NVNT	n40	5190	Ant2	13.1	0	13.1	24	Pass
NVNT	n40	5230	Ant2	13.22	0	13.22	24	Pass

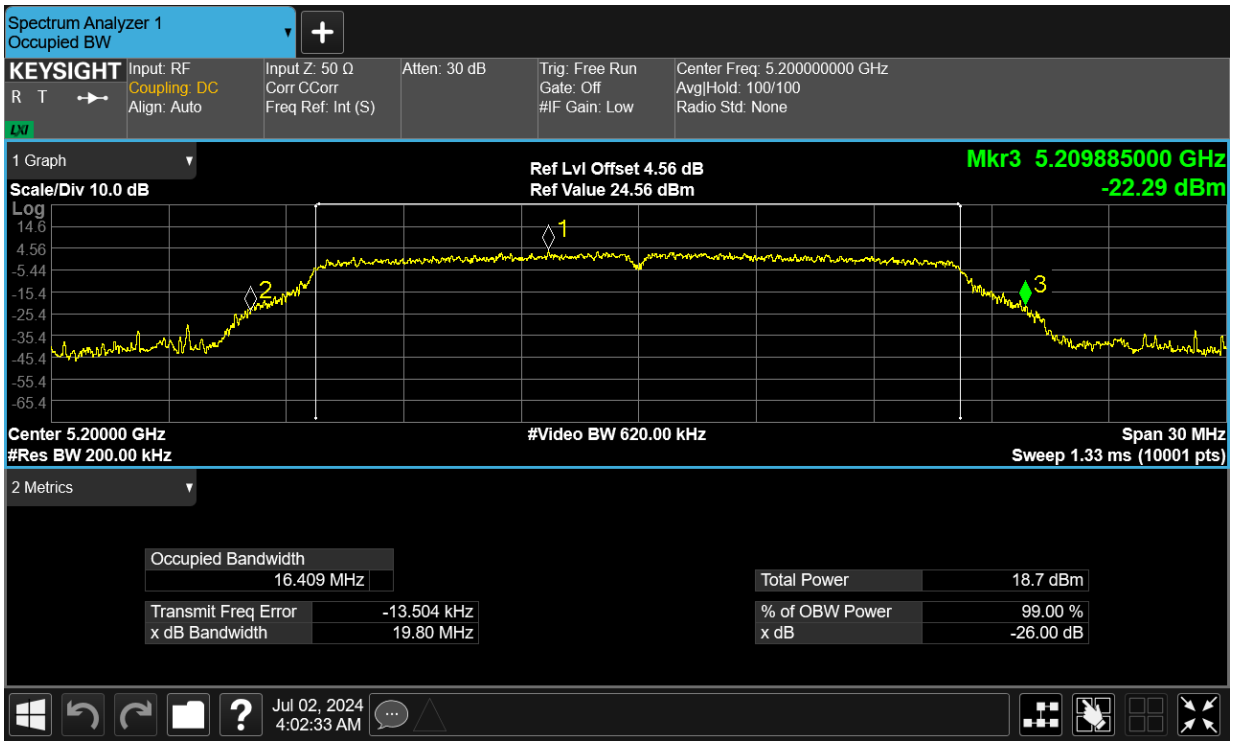
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant2	19.647
NVNT	a	5200	Ant2	19.797
NVNT	a	5240	Ant2	19.61
NVNT	ac20	5180	Ant2	19.934
NVNT	ac20	5200	Ant2	20.108
NVNT	ac20	5240	Ant2	20.056
NVNT	ac40	5190	Ant2	39.736
NVNT	ac40	5230	Ant2	39.811
NVNT	ac80	5210	Ant2	79.003
NVNT	n20	5180	Ant2	20.14
NVNT	n20	5200	Ant2	20.094
NVNT	n20	5240	Ant2	20.128
NVNT	n40	5190	Ant2	39.424
NVNT	n40	5230	Ant2	39.125

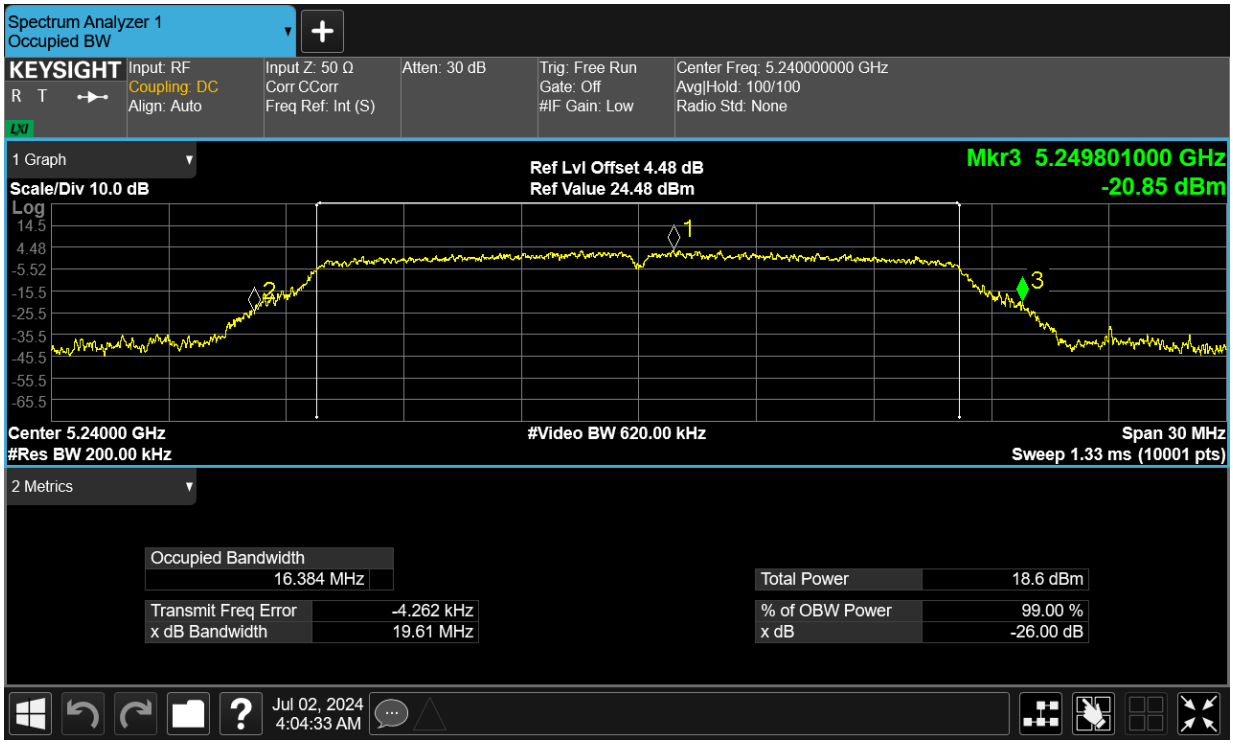
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant2



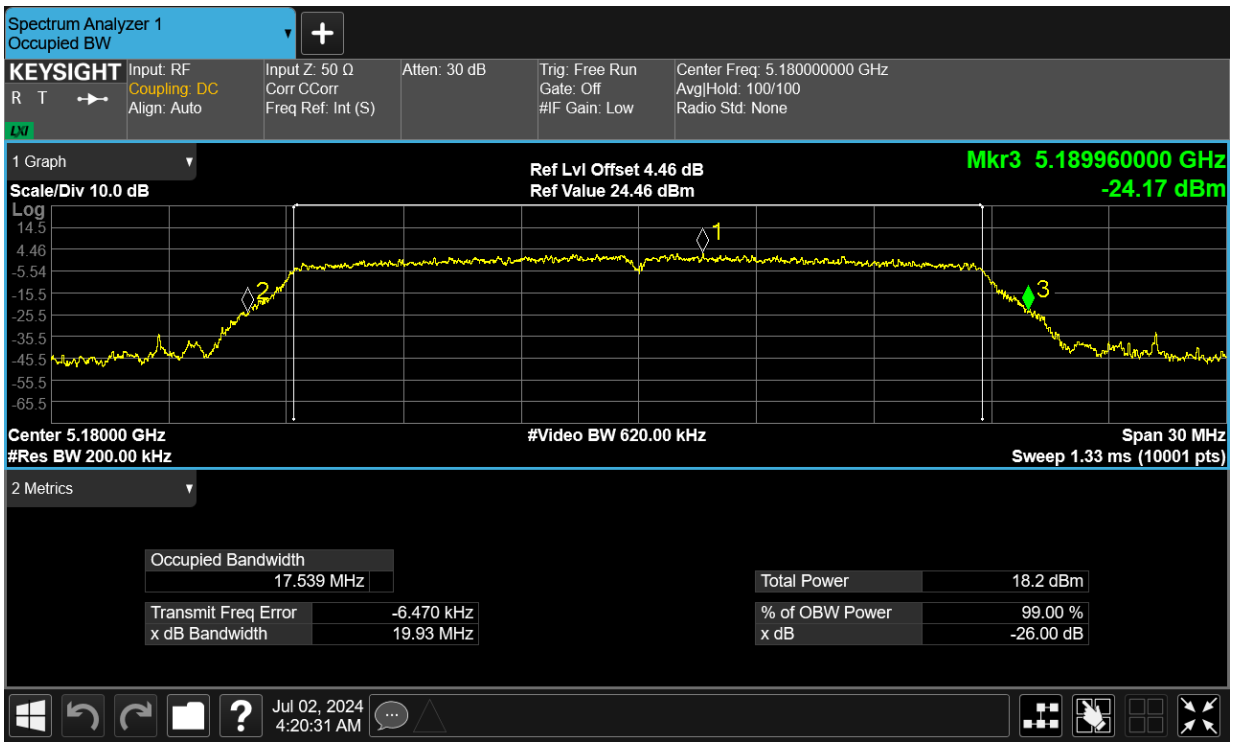
-26dB Bandwidth NVNT a 5200MHz Ant2



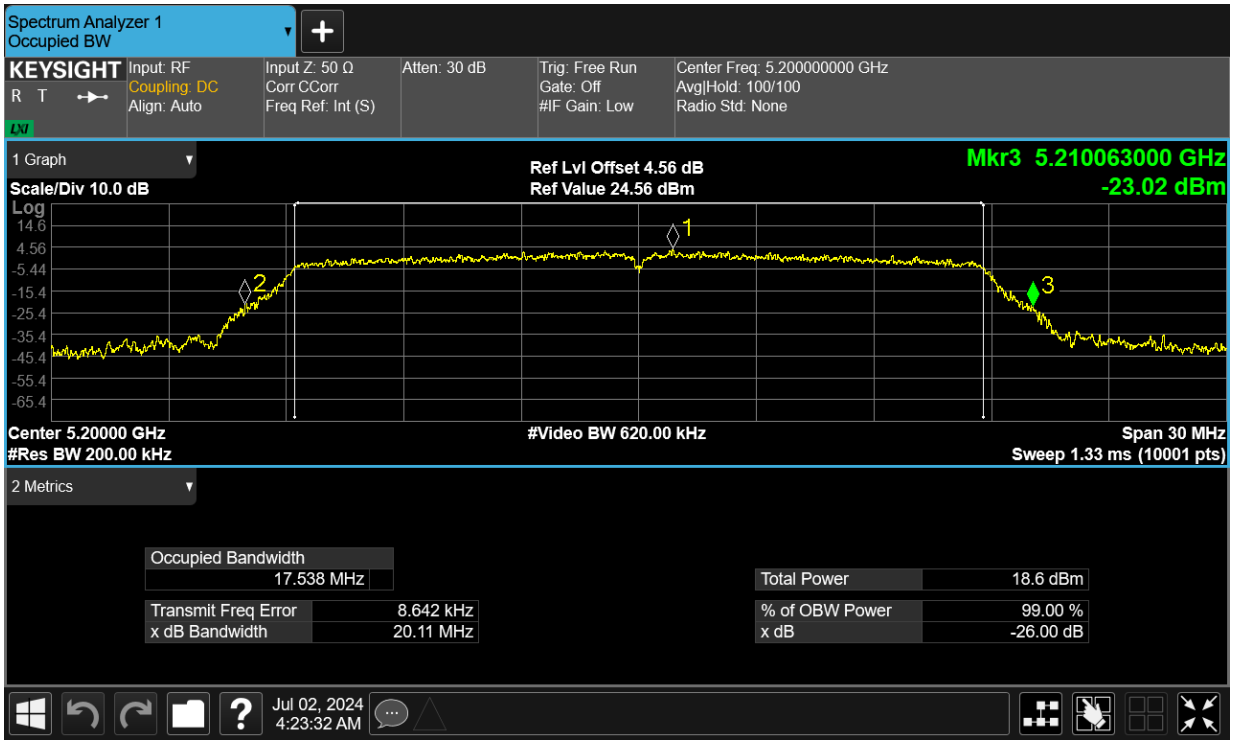
-26dB Bandwidth NVNT a 5240MHz Ant2



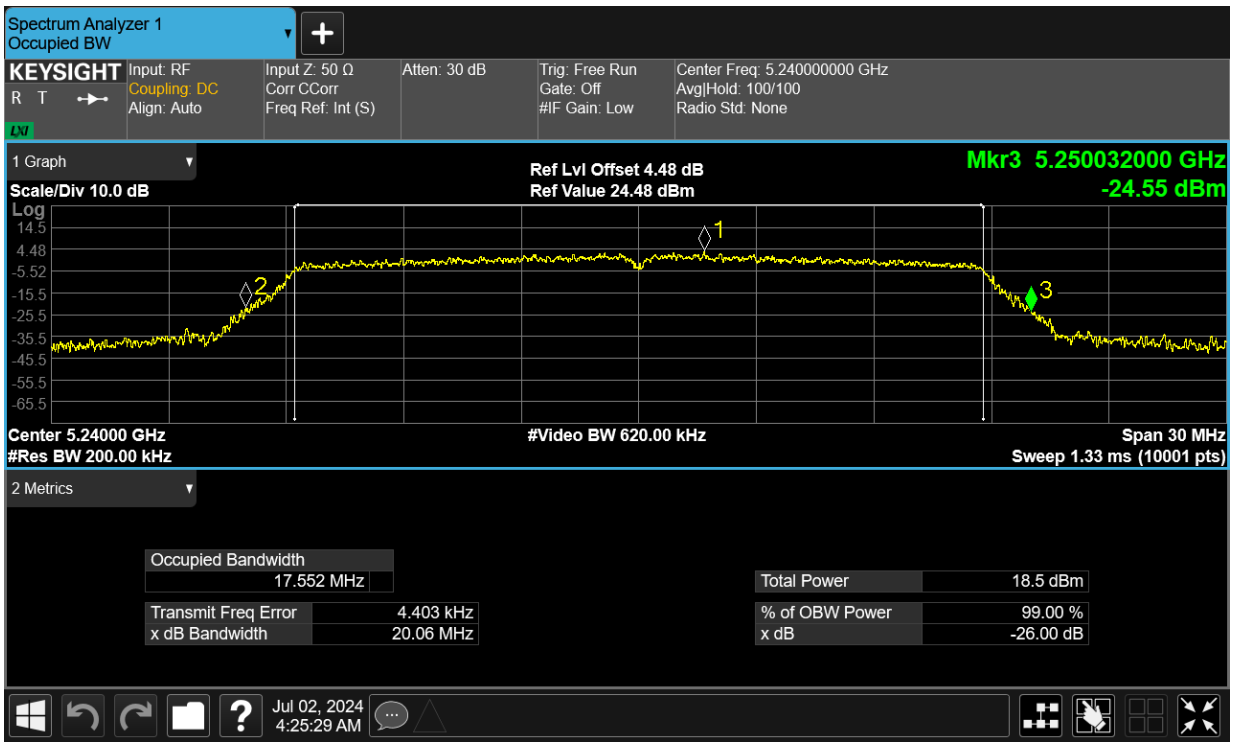
-26dB Bandwidth NVNT ac20 5180MHz Ant2



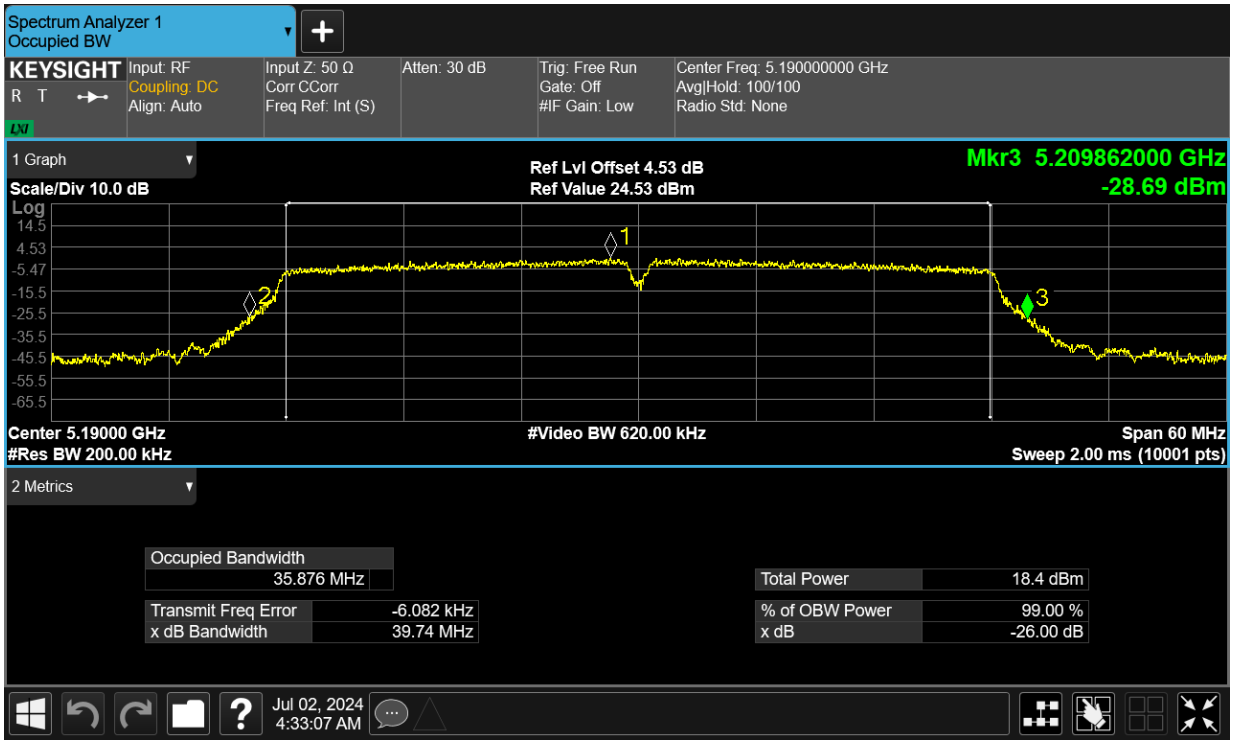
-26dB Bandwidth NVNT ac20 5200MHz Ant2



-26dB Bandwidth NVNT ac20 5240MHz Ant2

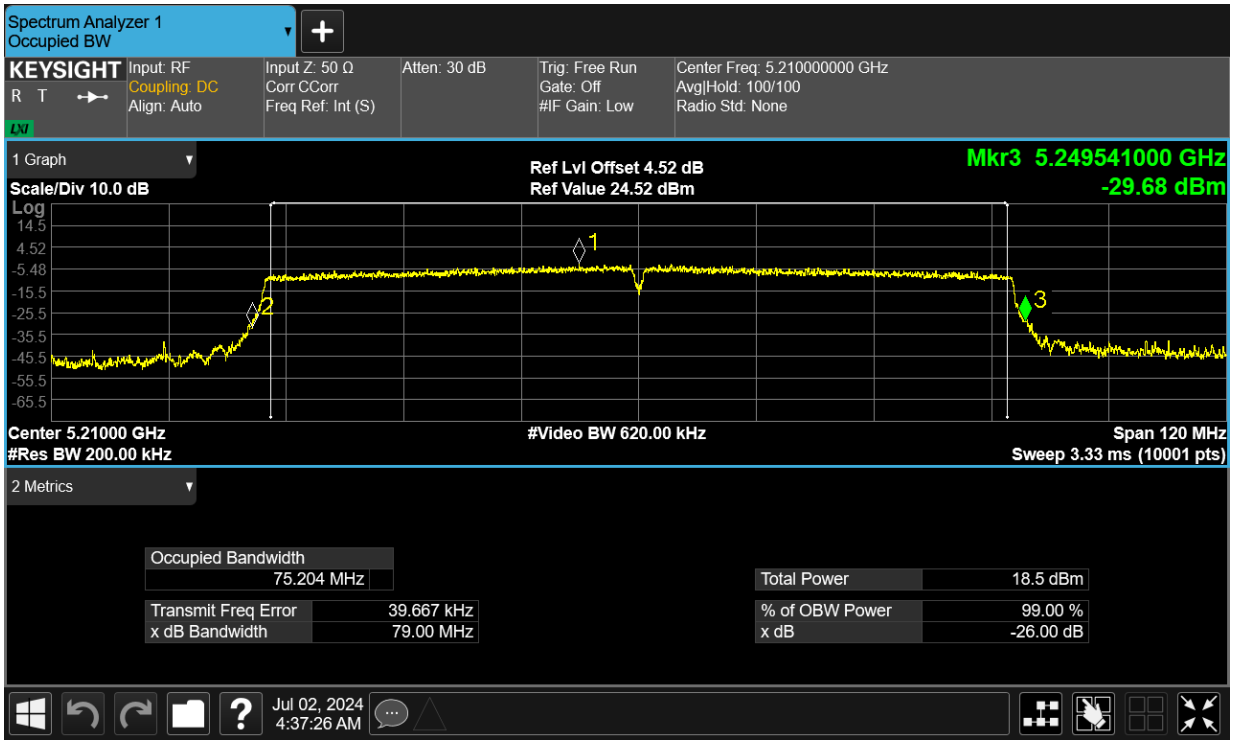


-26dB Bandwidth NVNT ac40 5190MHz Ant2



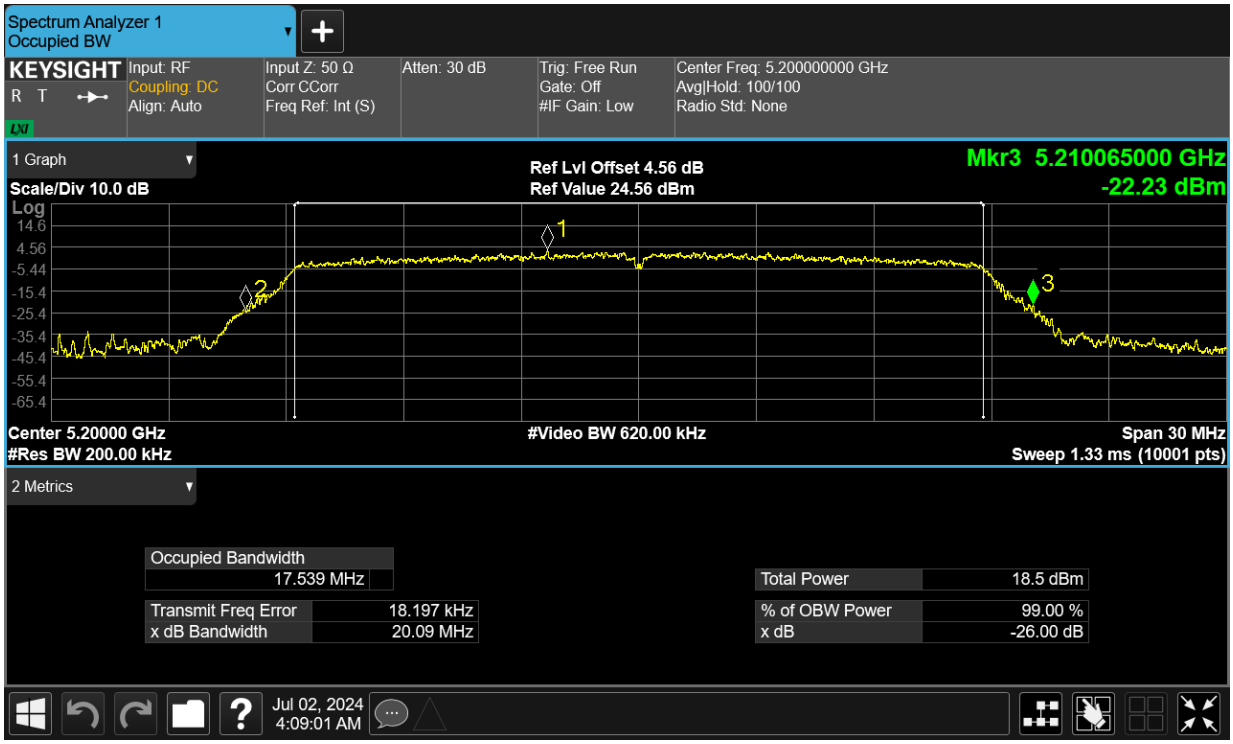
-26dB Bandwidth NVNT ac40 5230MHz Ant2

-26dB Bandwidth NVNT ac80 5210MHz Ant2

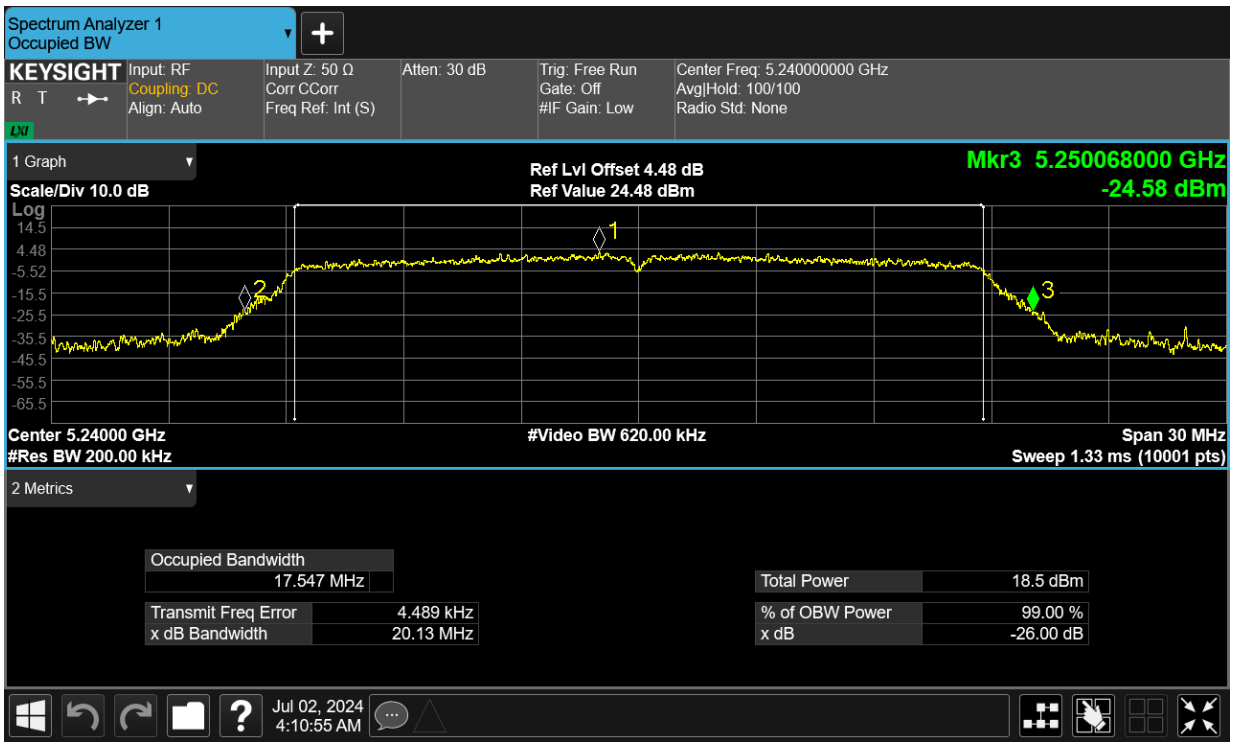


-26dB Bandwidth NVNT n20 5180MHz Ant2

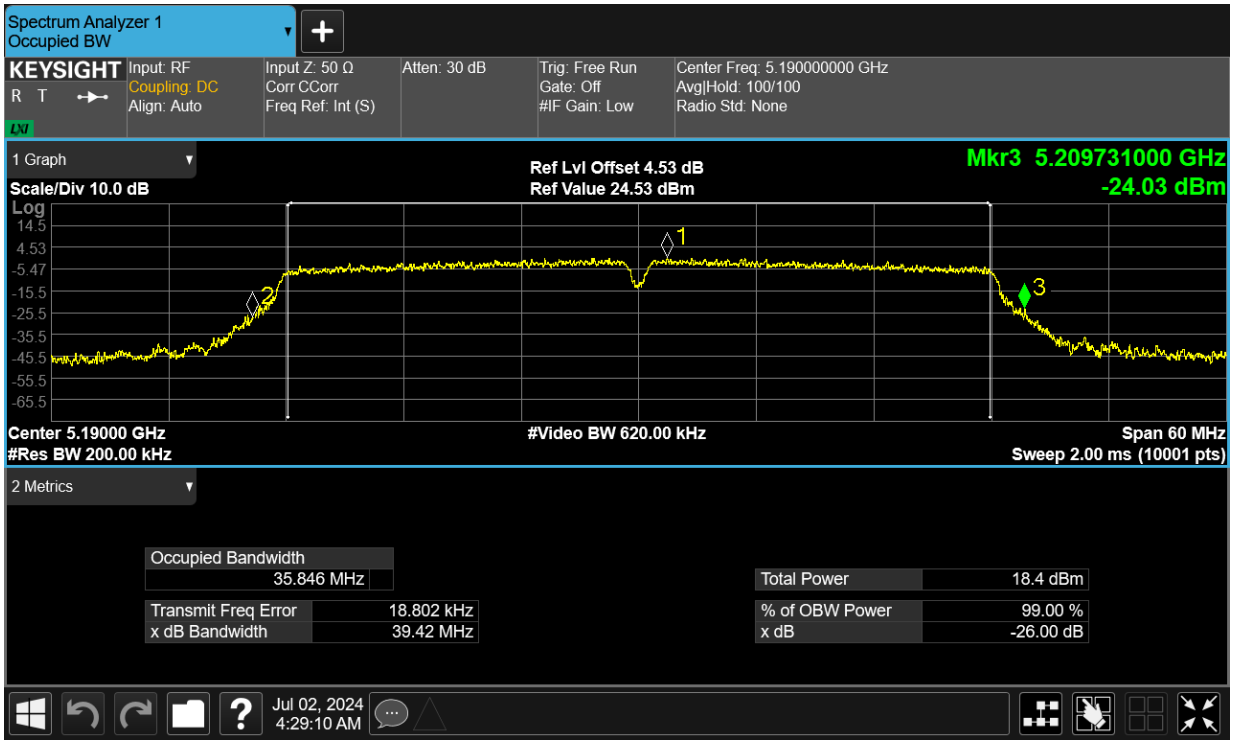
-26dB Bandwidth NVNT n20 5200MHz Ant2



-26dB Bandwidth NVNT n20 5240MHz Ant2



-26dB Bandwidth NVNT n40 5190MHz Ant2

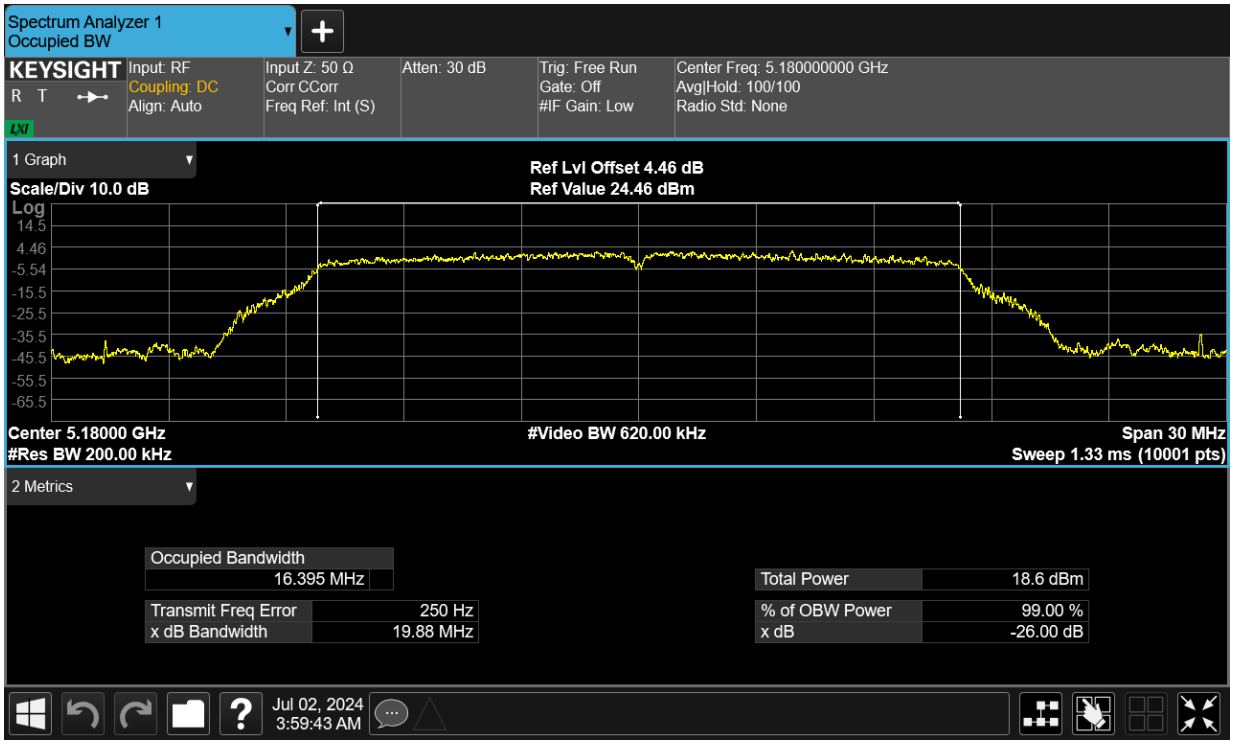


-26dB Bandwidth NVNT n40 5230MHz Ant2

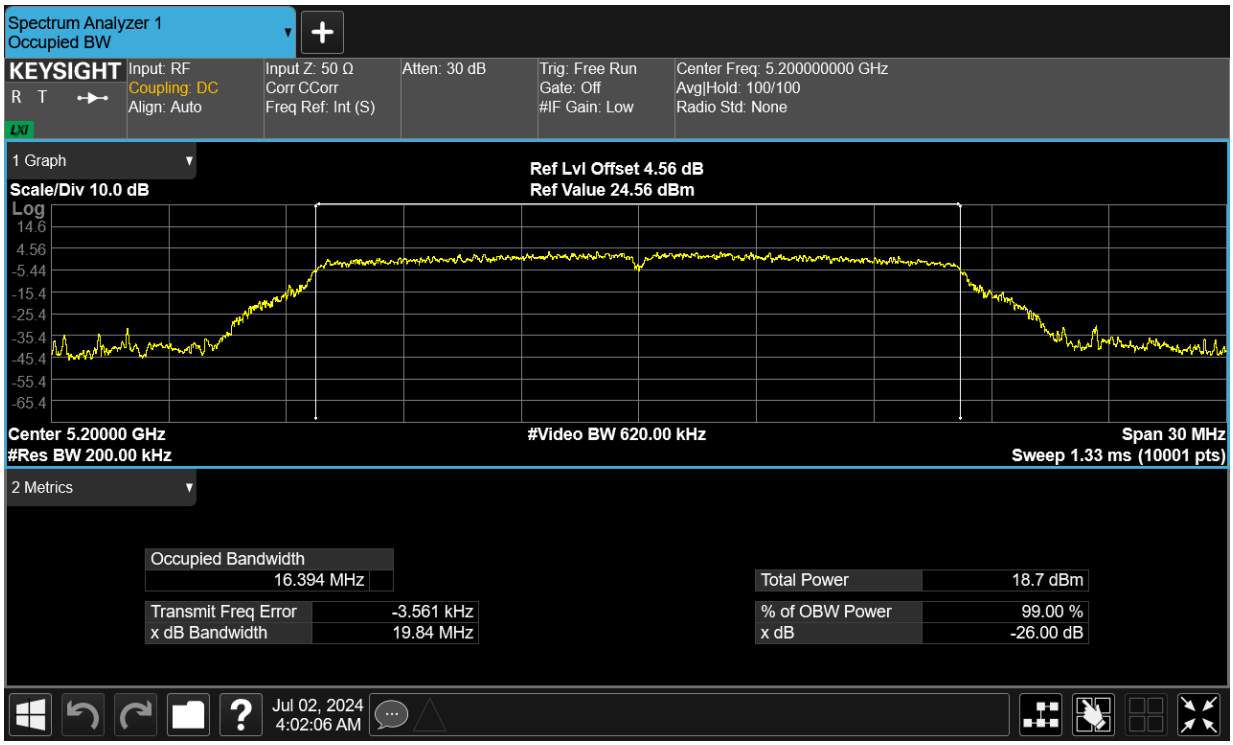
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant2	16.395
NVNT	a	5200	Ant2	16.394
NVNT	a	5240	Ant2	16.379
NVNT	ac20	5180	Ant2	17.534
NVNT	ac20	5200	Ant2	17.567
NVNT	ac20	5240	Ant2	17.538
NVNT	ac40	5190	Ant2	35.955
NVNT	ac40	5230	Ant2	35.978
NVNT	ac80	5210	Ant2	75.215
NVNT	n20	5180	Ant2	17.532
NVNT	n20	5200	Ant2	17.56
NVNT	n20	5240	Ant2	17.539
NVNT	n40	5190	Ant2	35.919
NVNT	n40	5230	Ant2	35.975

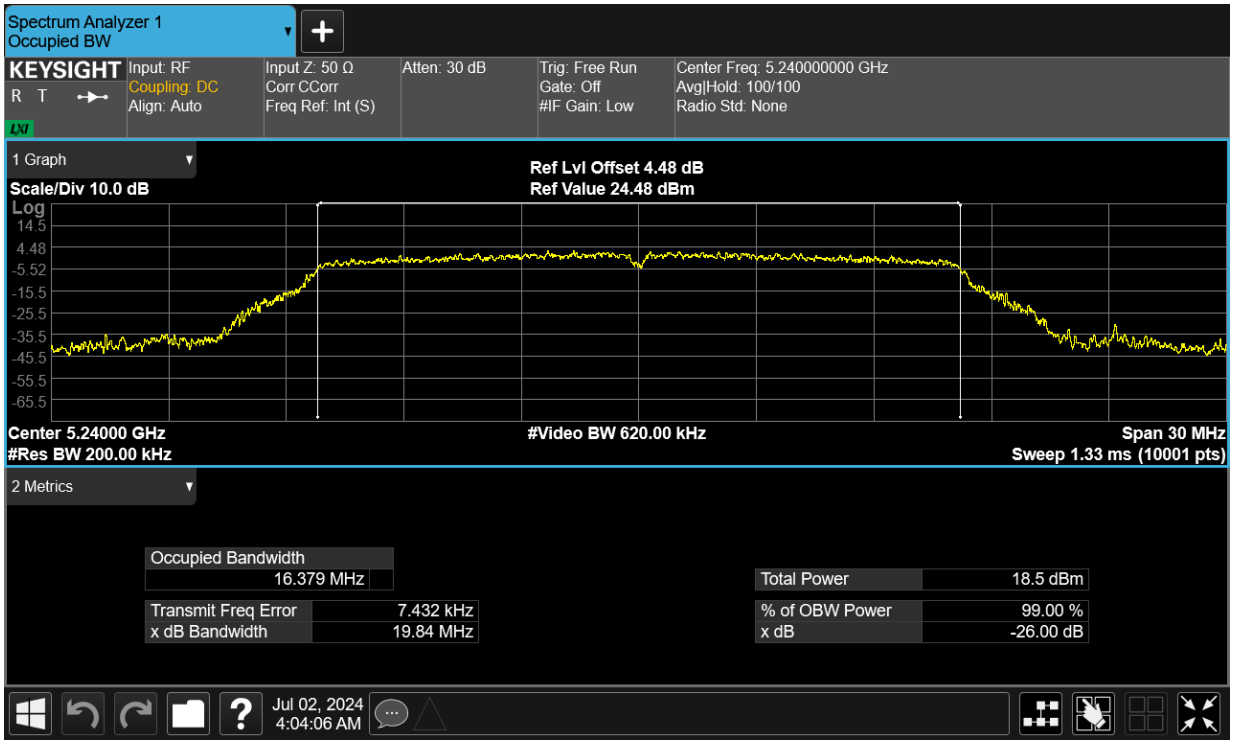
Test Graphs
OBW NVNT a 5180MHz Ant2



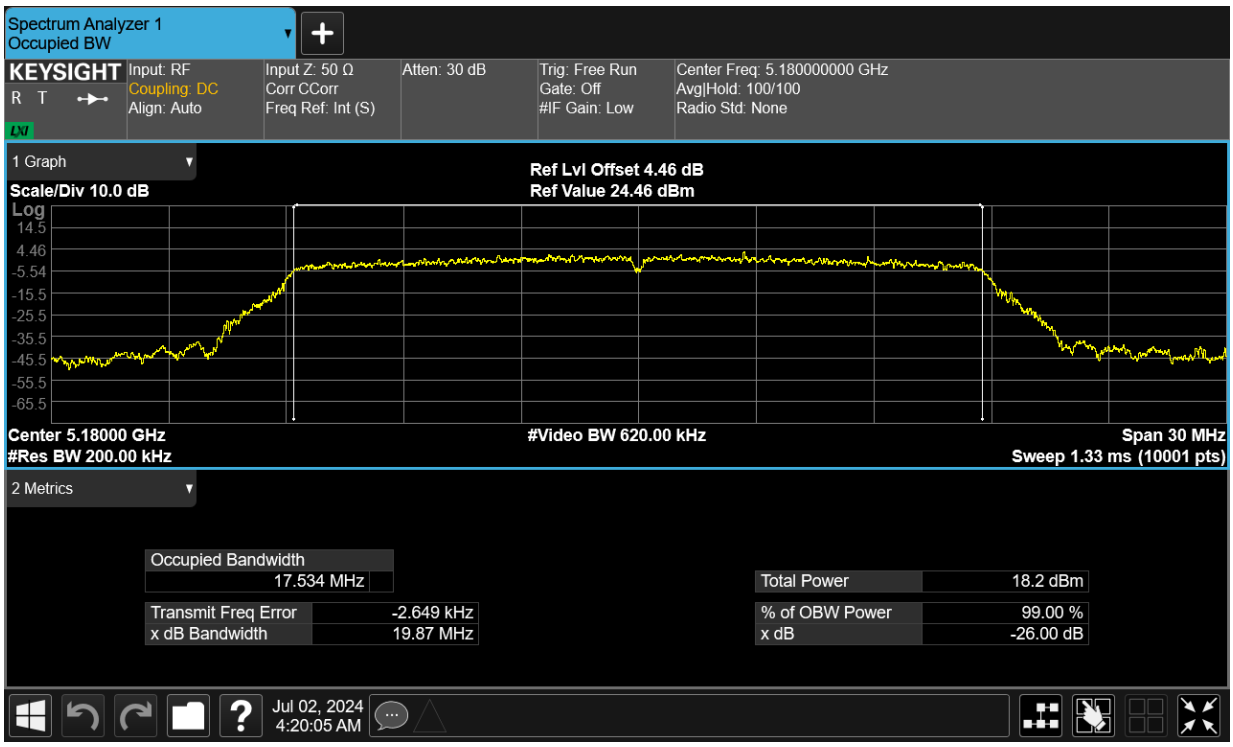
OBW NVNT a 5200MHz Ant2



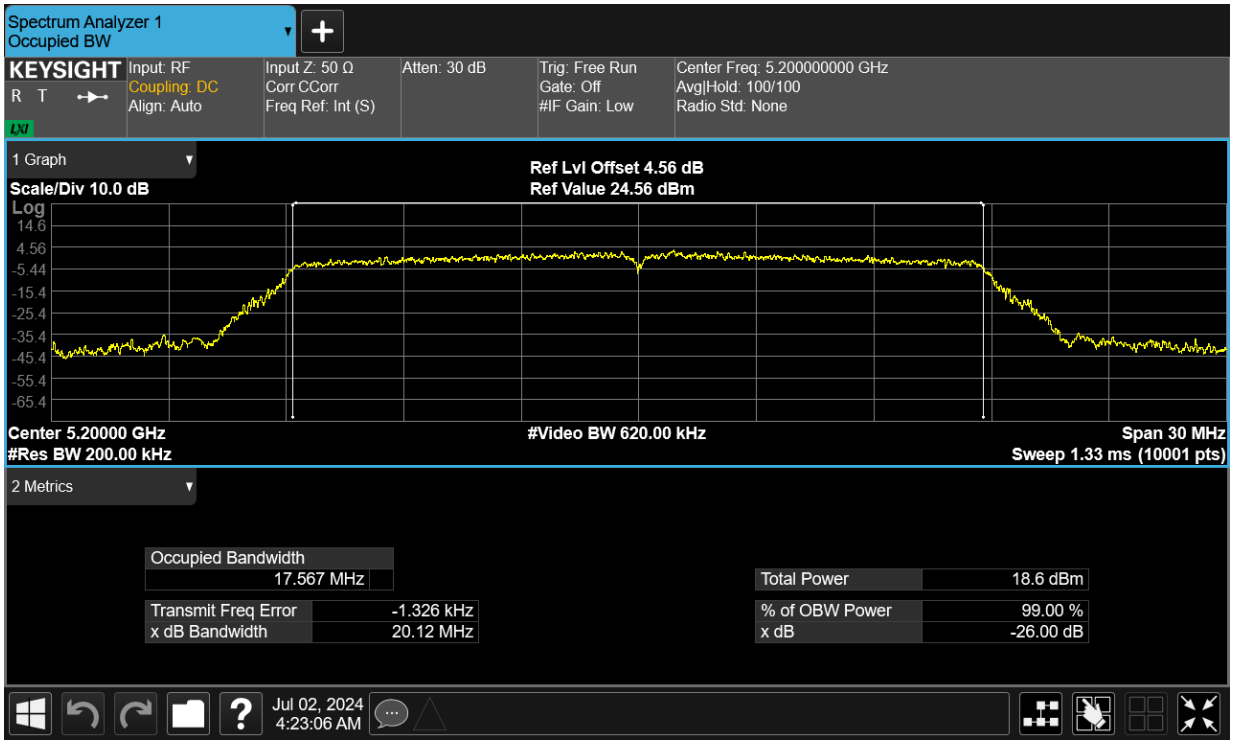
OBW NVNT a 5240MHz Ant2



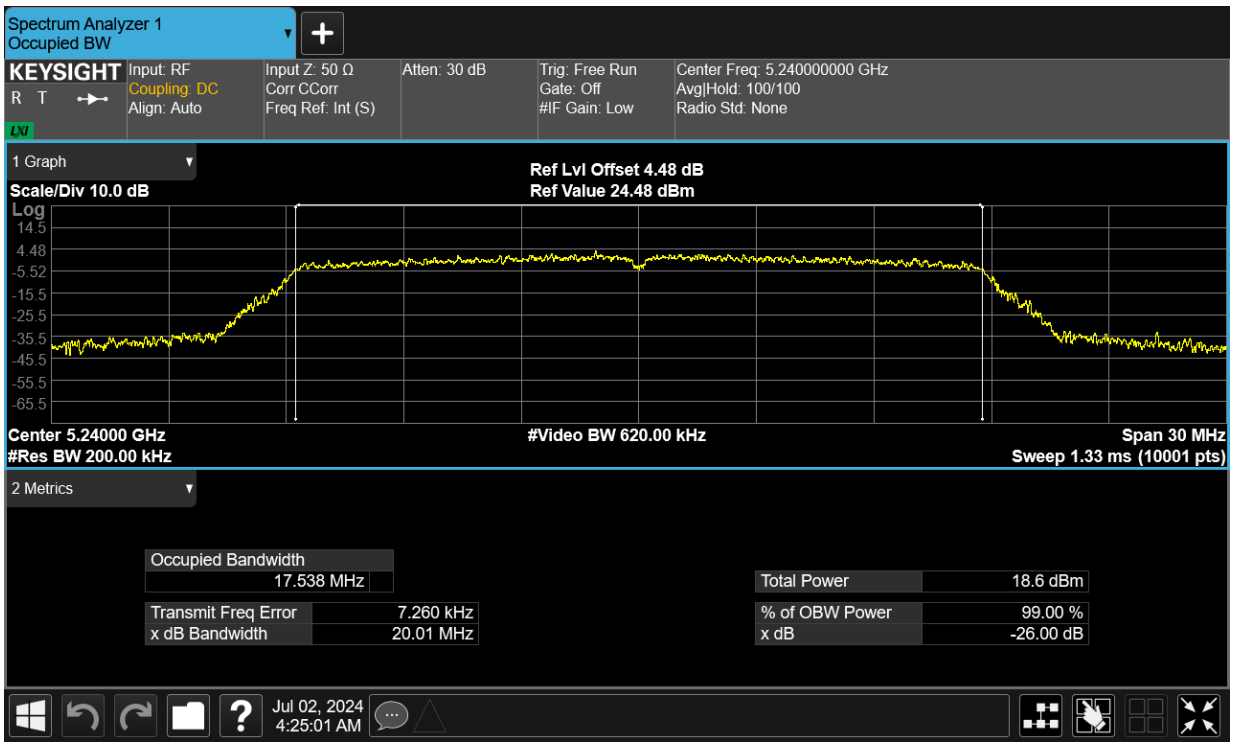
OBW NVNT ac20 5180MHz Ant2



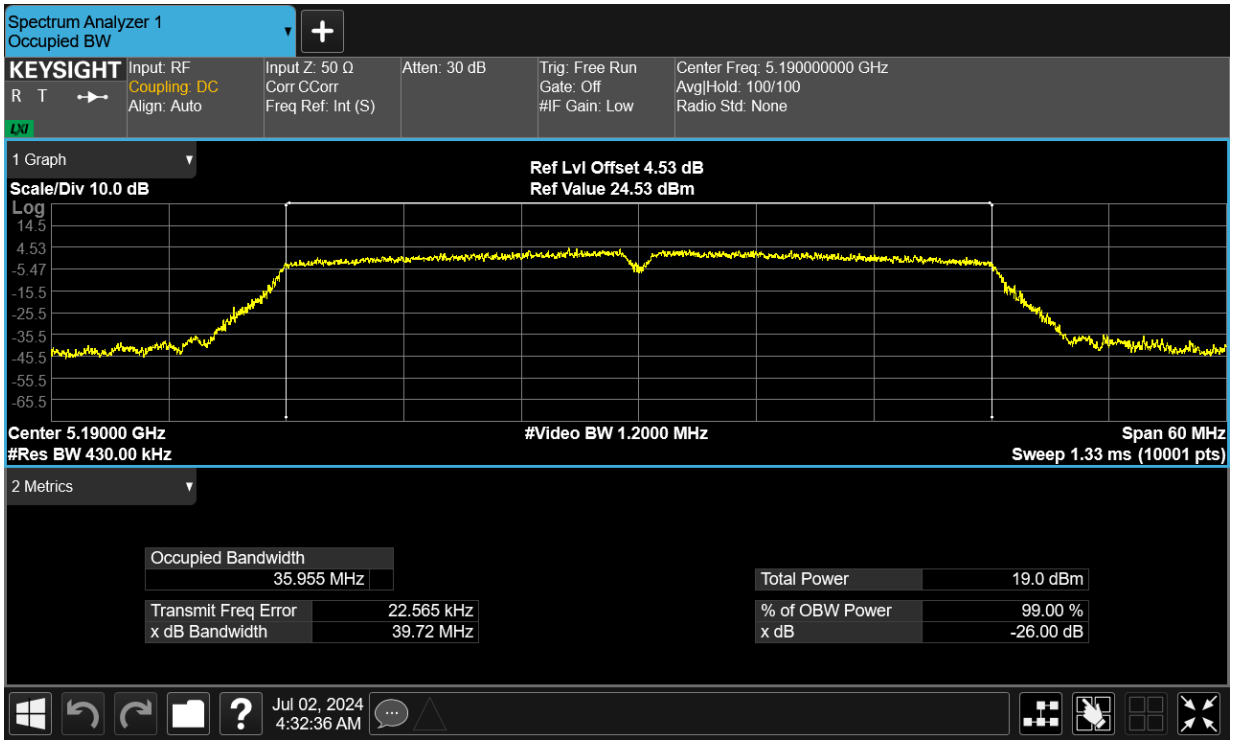
OBW NVNT ac20 5200MHz Ant2



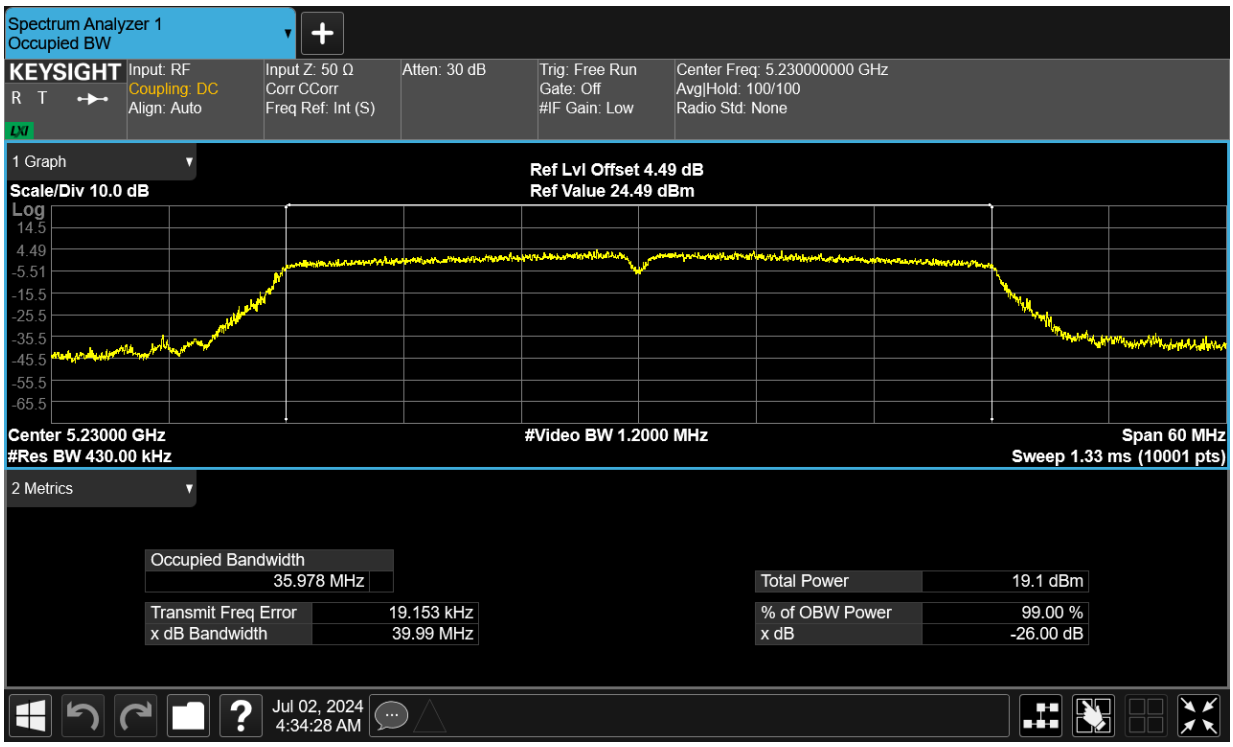
OBW NVNT ac20 5240MHz Ant2



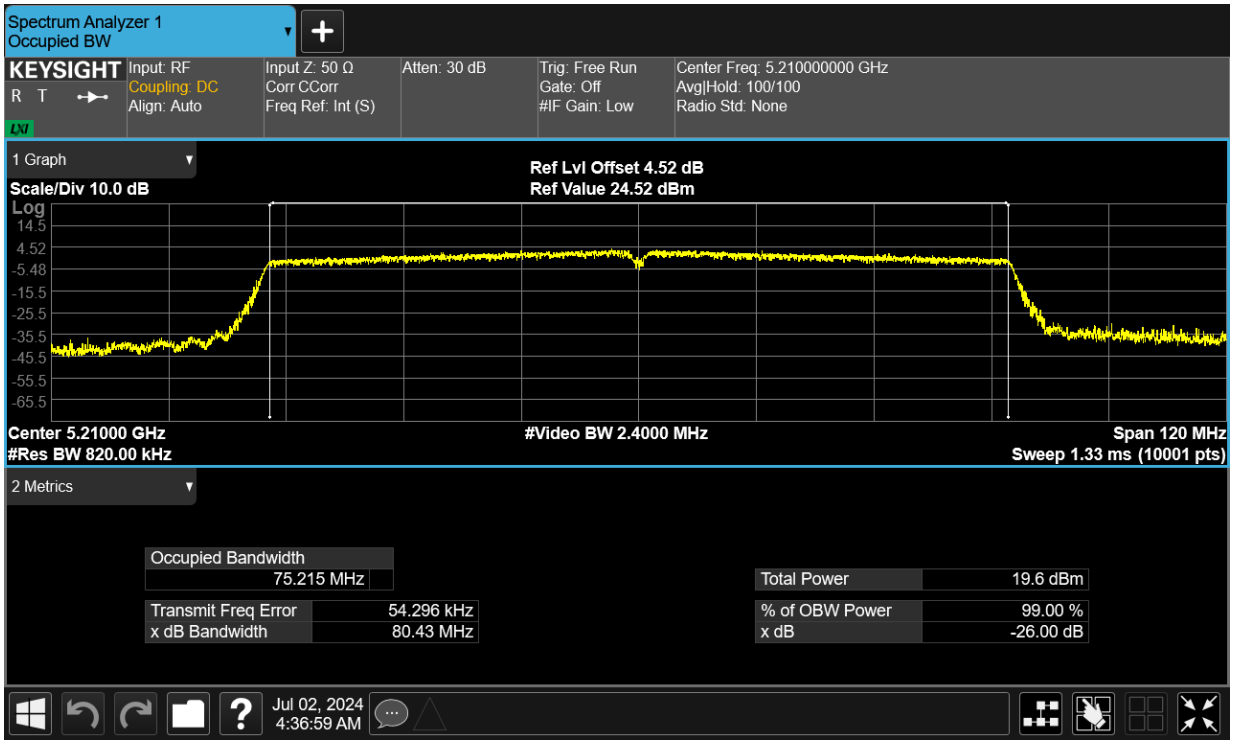
OBW NVNT ac40 5190MHz Ant2



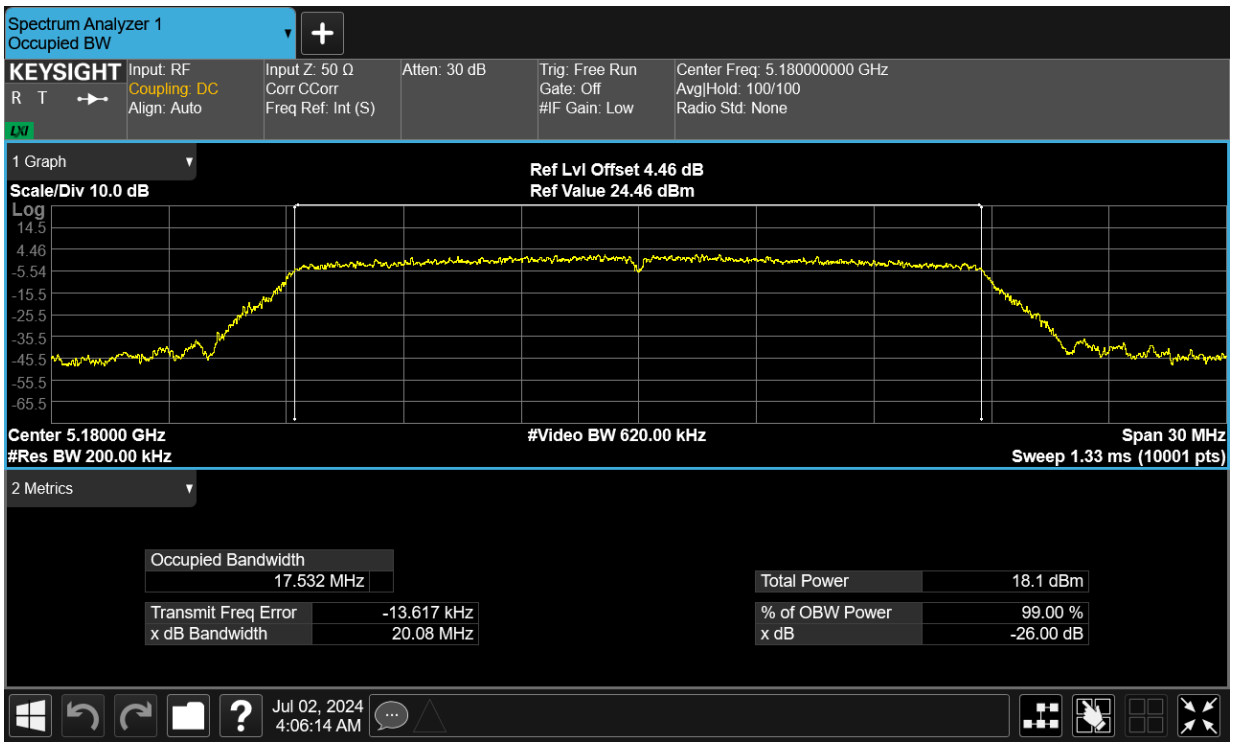
OBW NVNT ac40 5230MHz Ant2



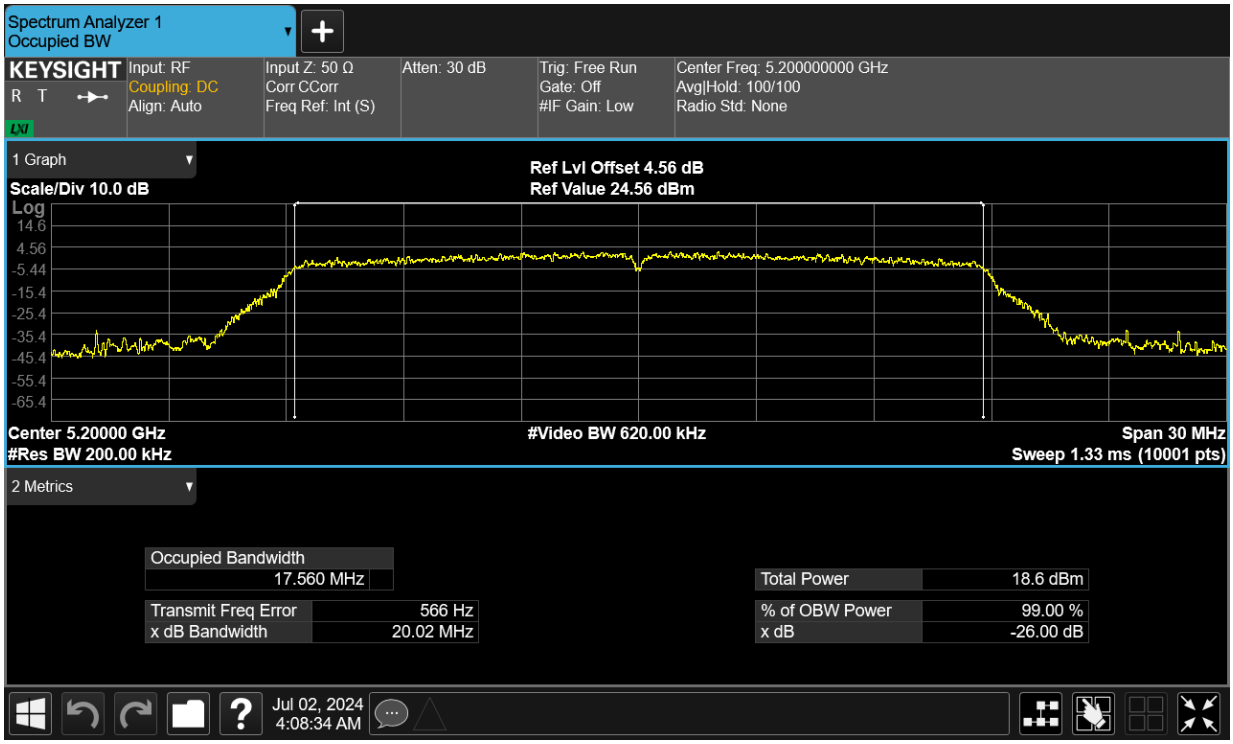
OBW NVNT ac80 5210MHz Ant2



OBW NVNT n20 5180MHz Ant2

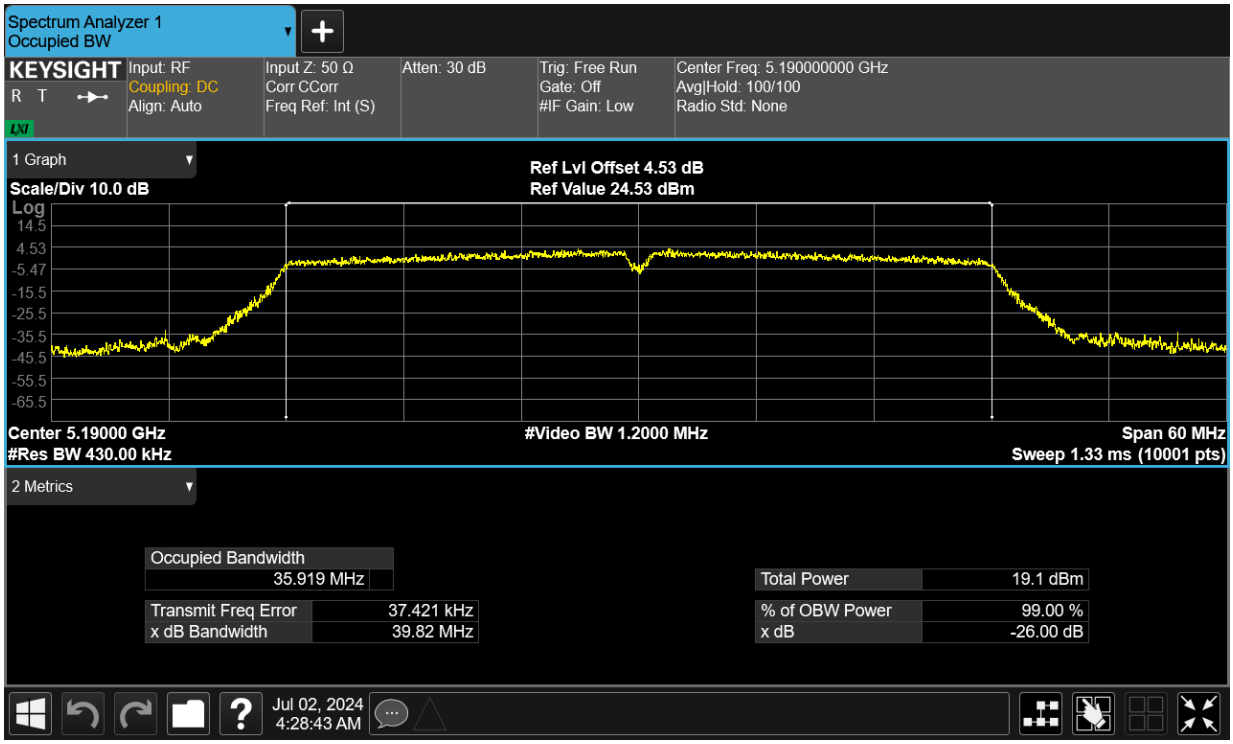


OBW NVNT n20 5200MHz Ant2

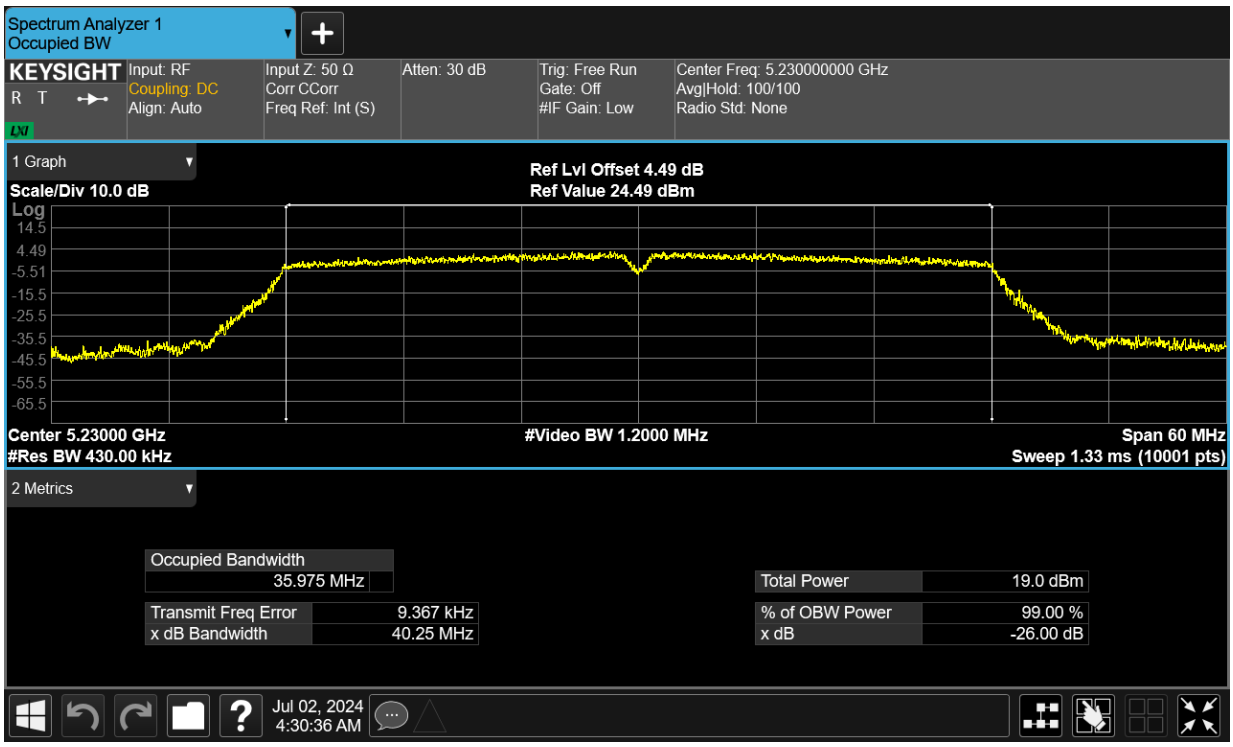


OBW NVNT n20 5240MHz Ant2

OBW NVNT n40 5190MHz Ant2



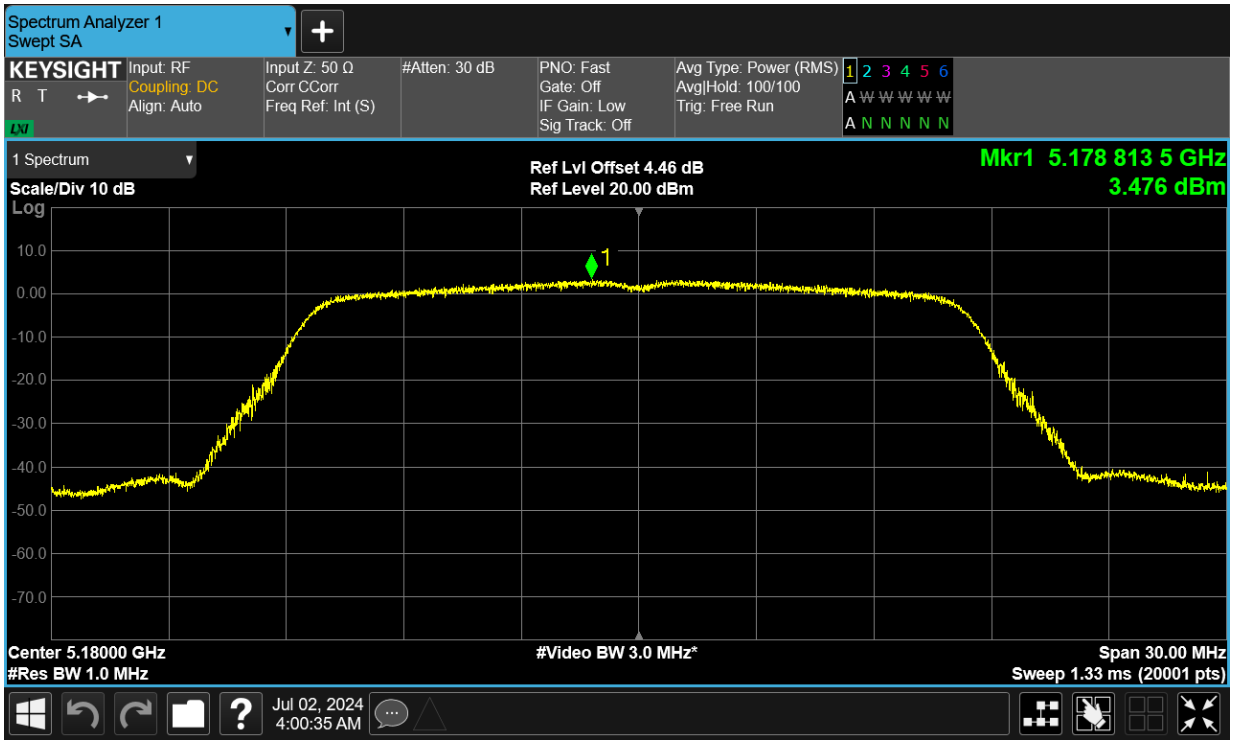
OBW NVNT n40 5230MHz Ant2



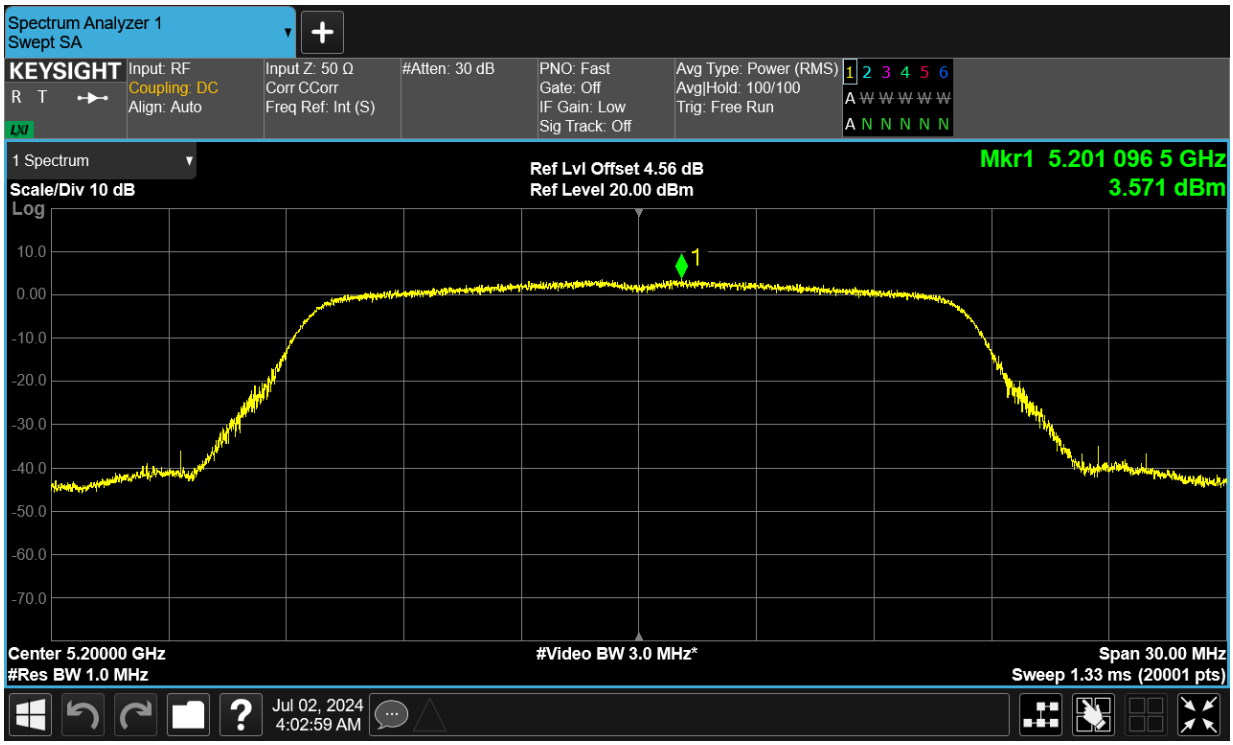
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant2	3.476	11	Pass
NVNT	a	5200	Ant2	3.571	11	Pass
NVNT	a	5240	Ant2	3.483	11	Pass
NVNT	ac20	5180	Ant2	2.93	11	Pass
NVNT	ac20	5200	Ant2	3.343	11	Pass
NVNT	ac20	5240	Ant2	3.297	11	Pass
NVNT	ac40	5190	Ant2	0.76	11	Pass
NVNT	ac40	5230	Ant2	0.674	11	Pass
NVNT	ac80	5210	Ant2	-2.573	11	Pass
NVNT	n20	5180	Ant2	2.799	11	Pass
NVNT	n20	5200	Ant2	3.34	11	Pass
NVNT	n20	5240	Ant2	3.204	11	Pass
NVNT	n40	5190	Ant2	0.781	11	Pass
NVNT	n40	5230	Ant2	0.558	11	Pass

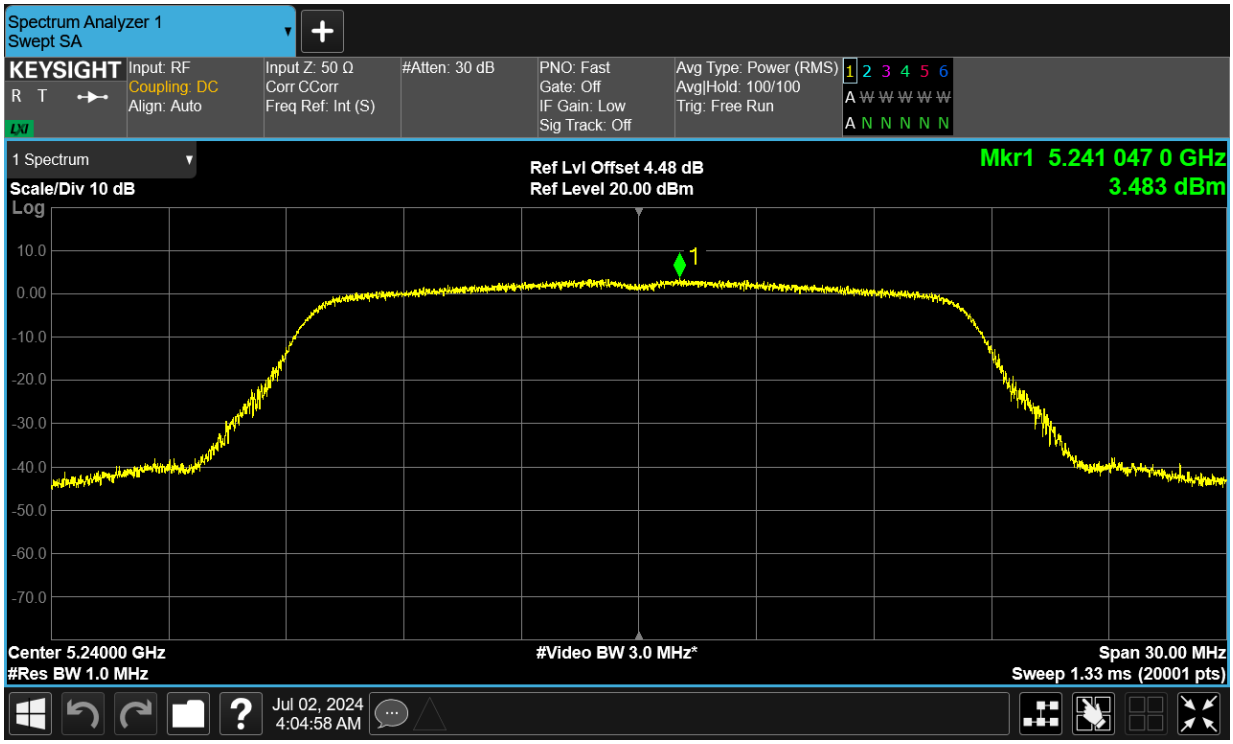
Test Graphs
PSD NVNT a 5180MHz Ant2



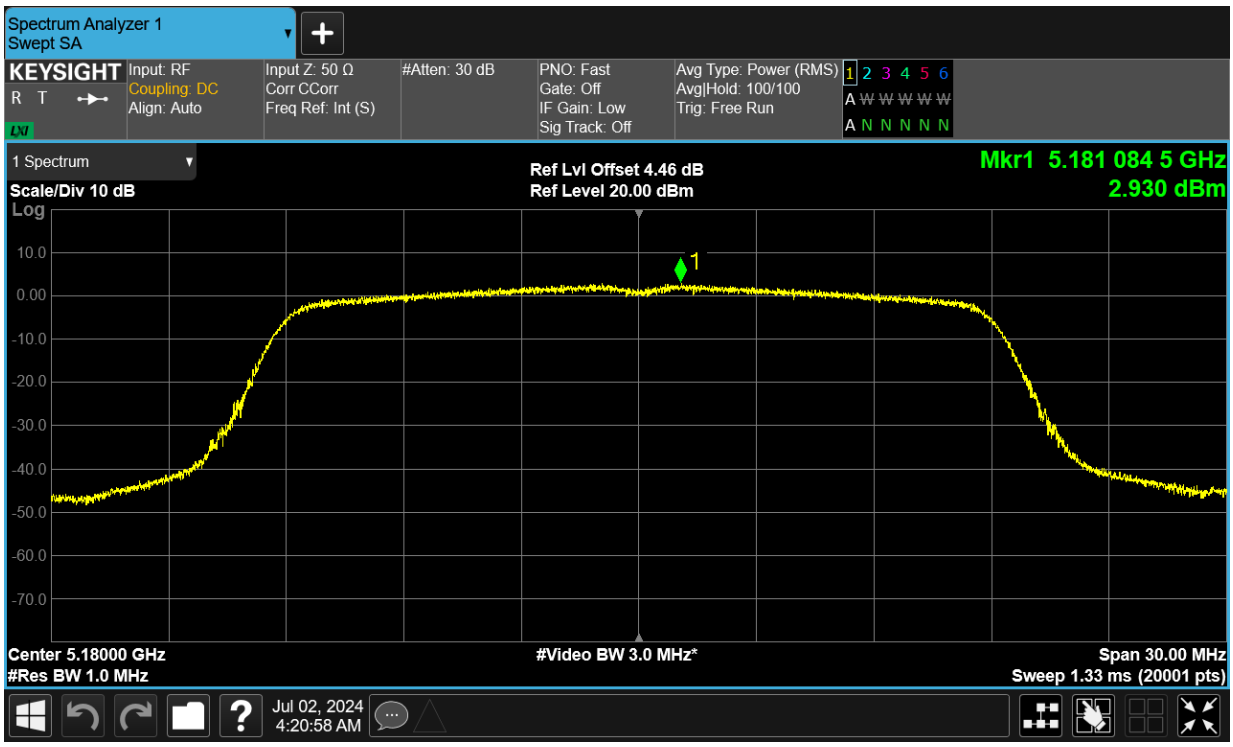
PSD NVNT a 5200MHz Ant2



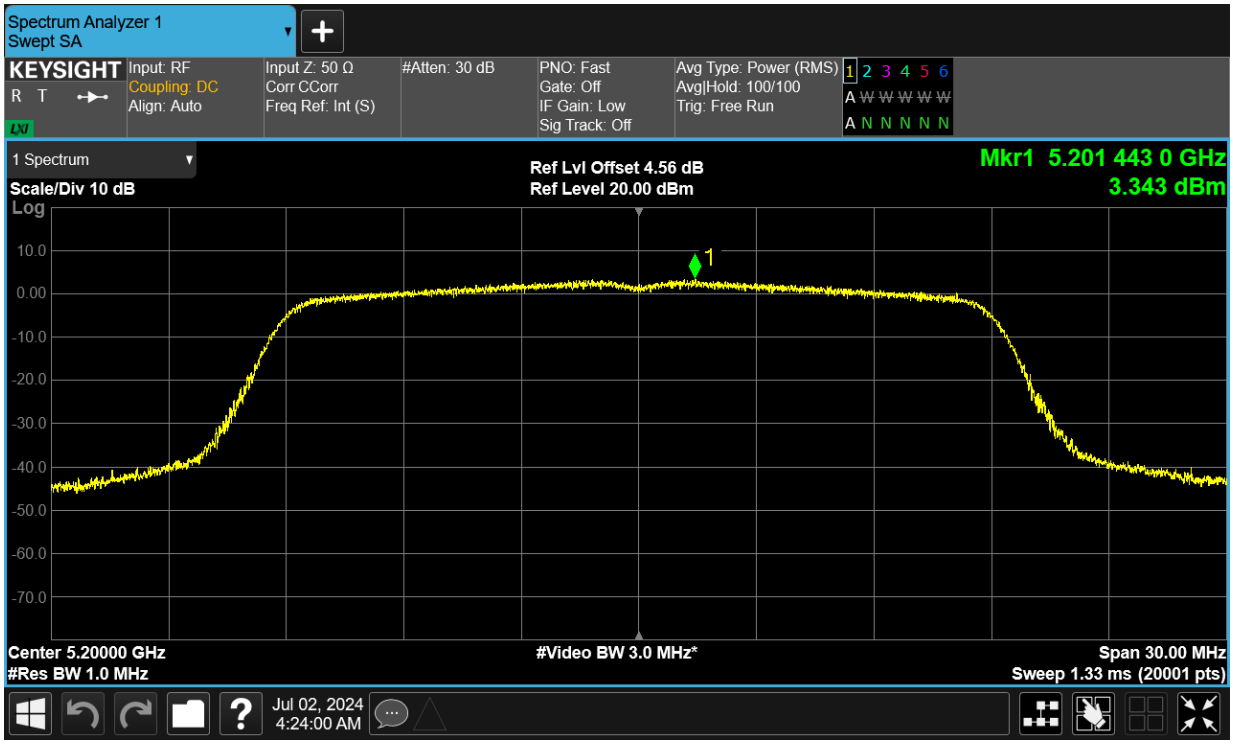
PSD NVNT a 5240MHz Ant2



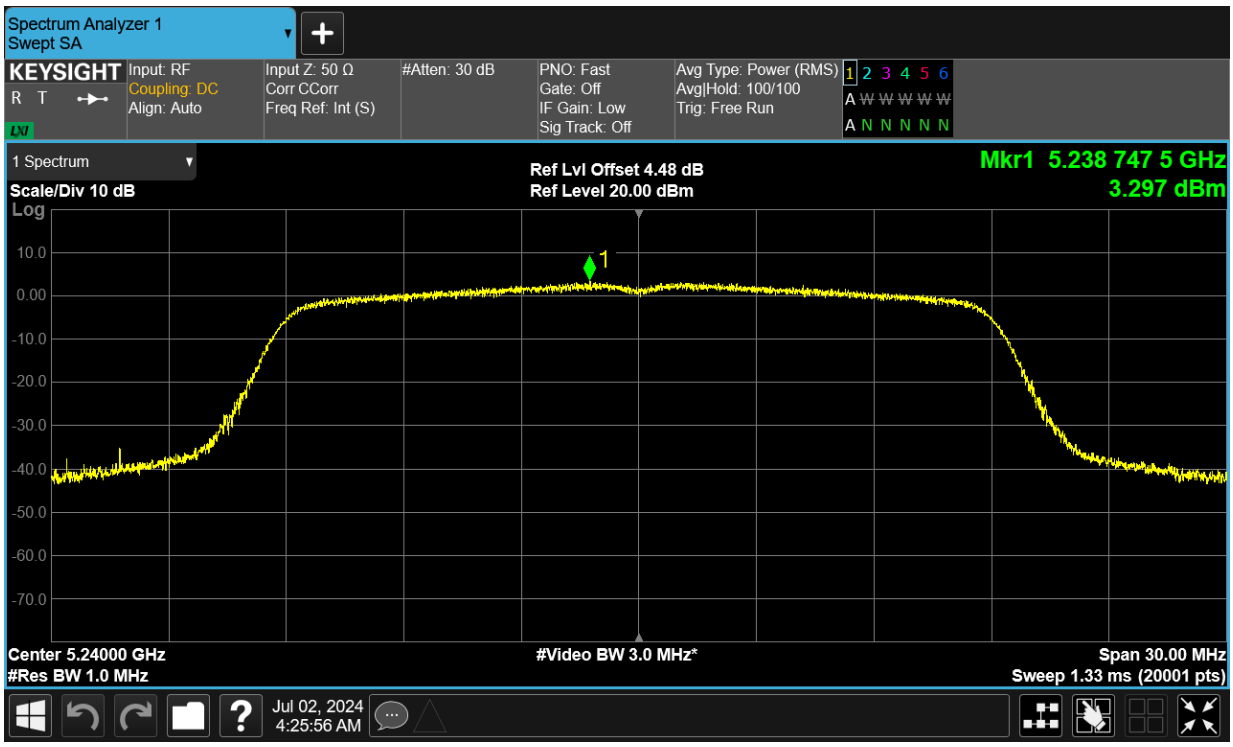
PSD NVNT ac20 5180MHz Ant2



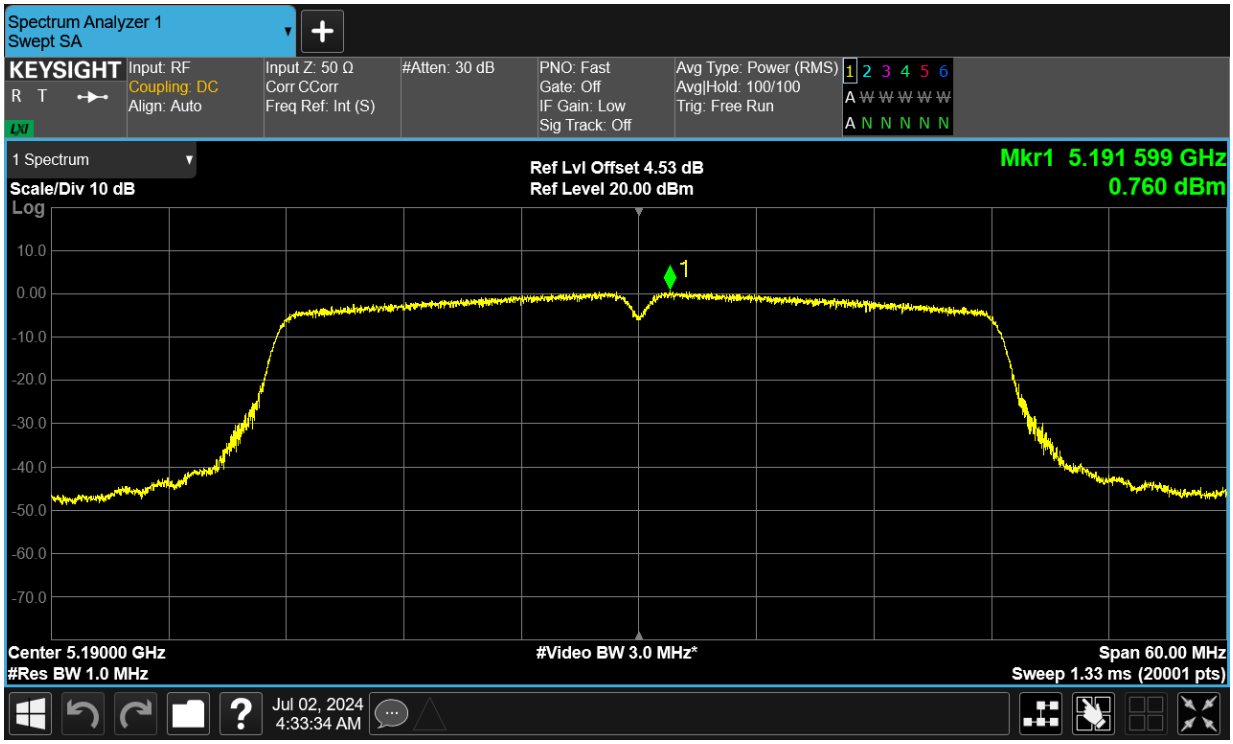
PSD NVNT ac20 5200MHz Ant2



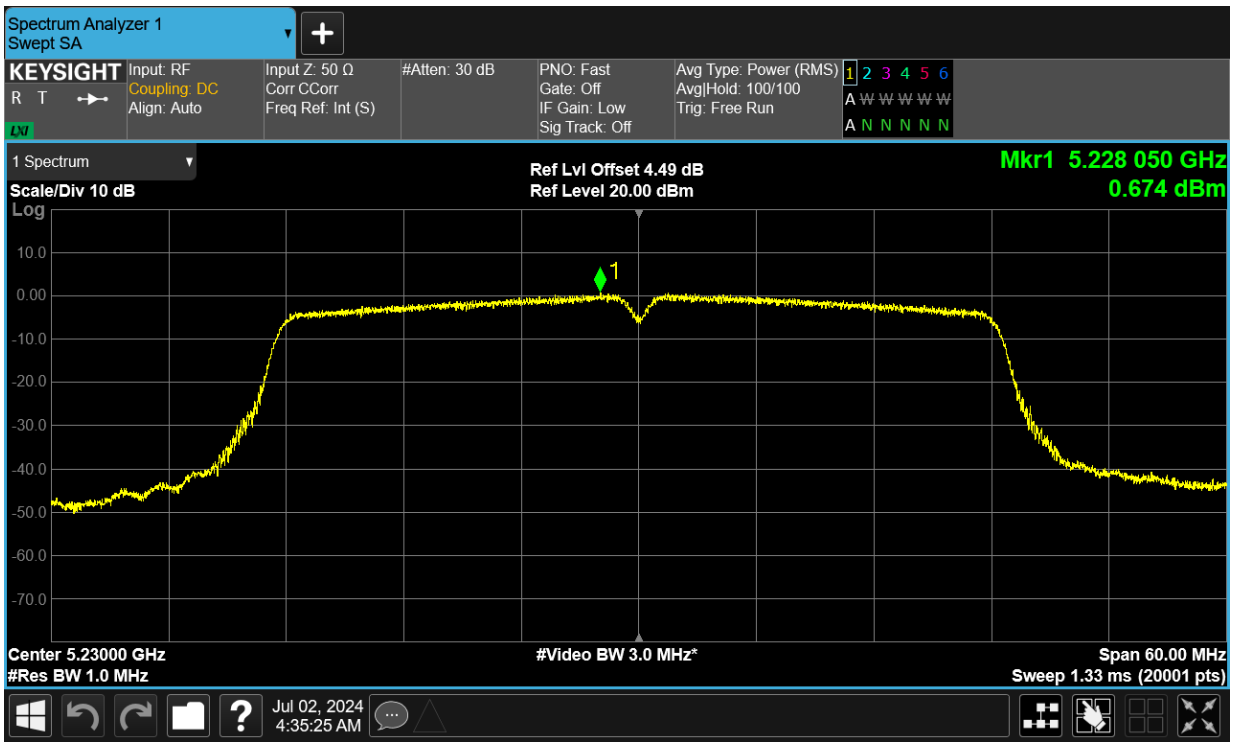
PSD NVNT ac20 5240MHz Ant2



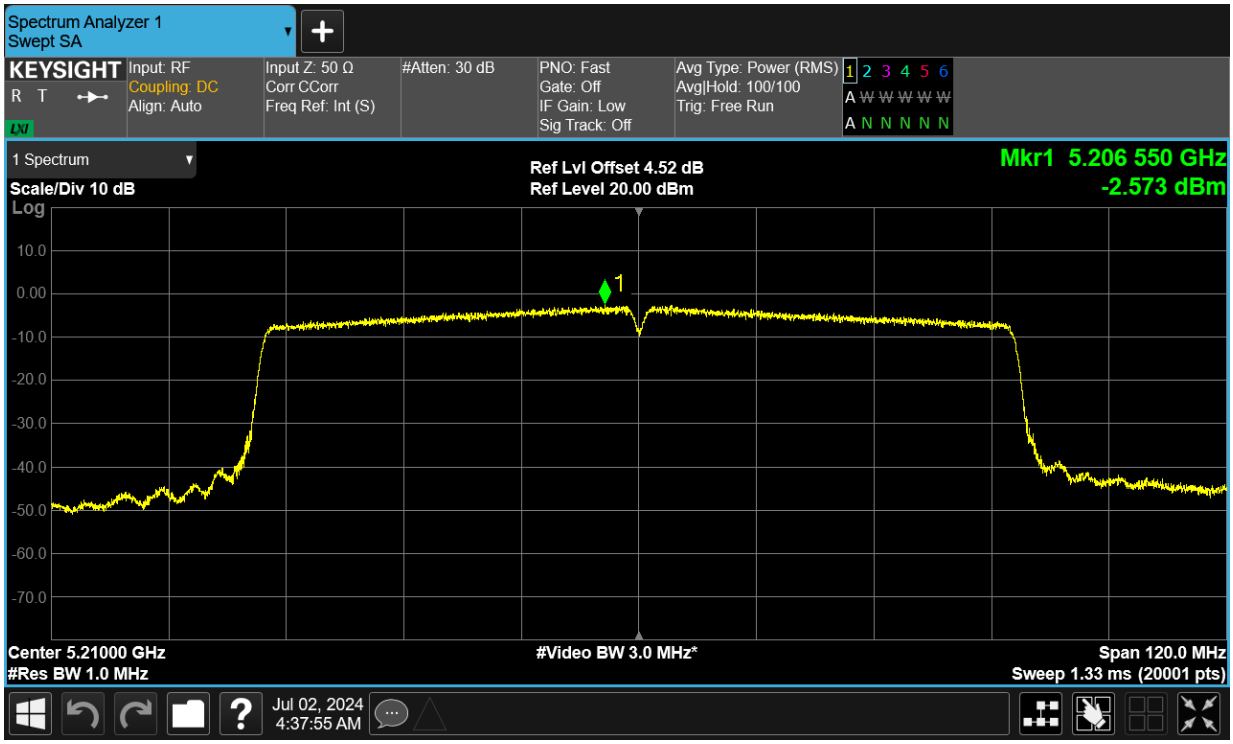
PSD NVNT ac40 5190MHz Ant2



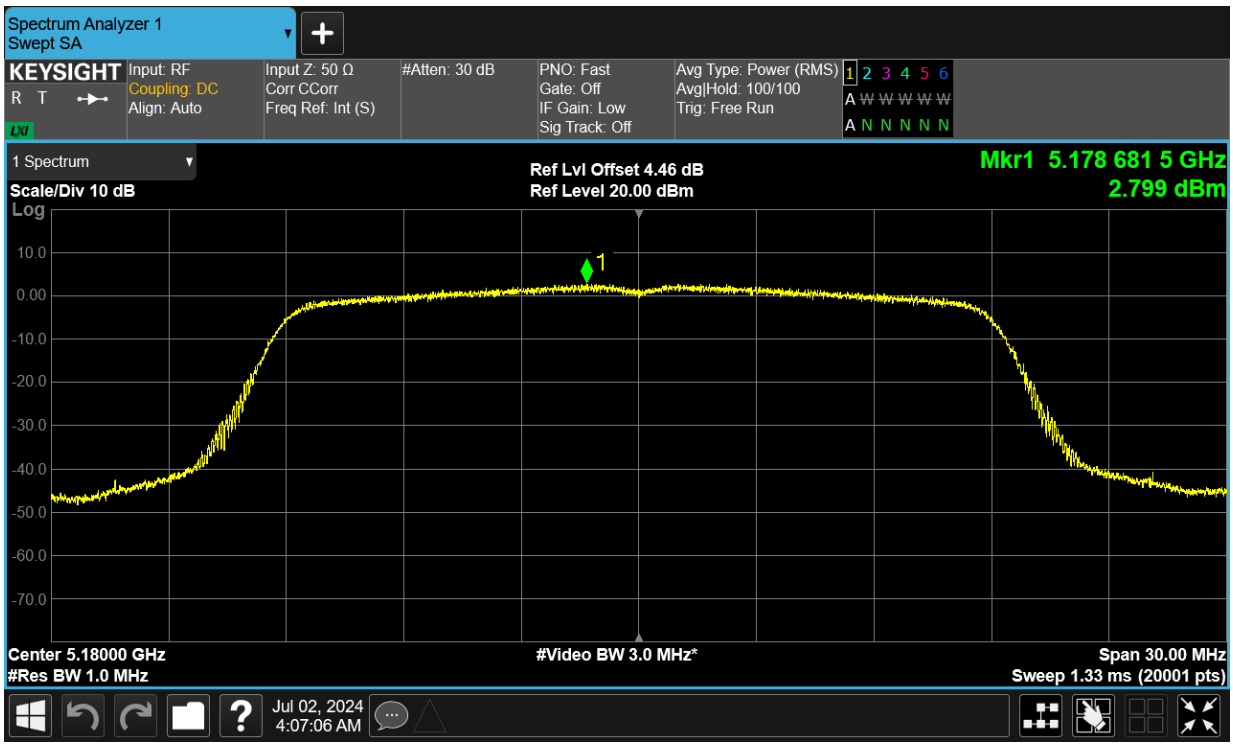
PSD NVNT ac40 5230MHz Ant2



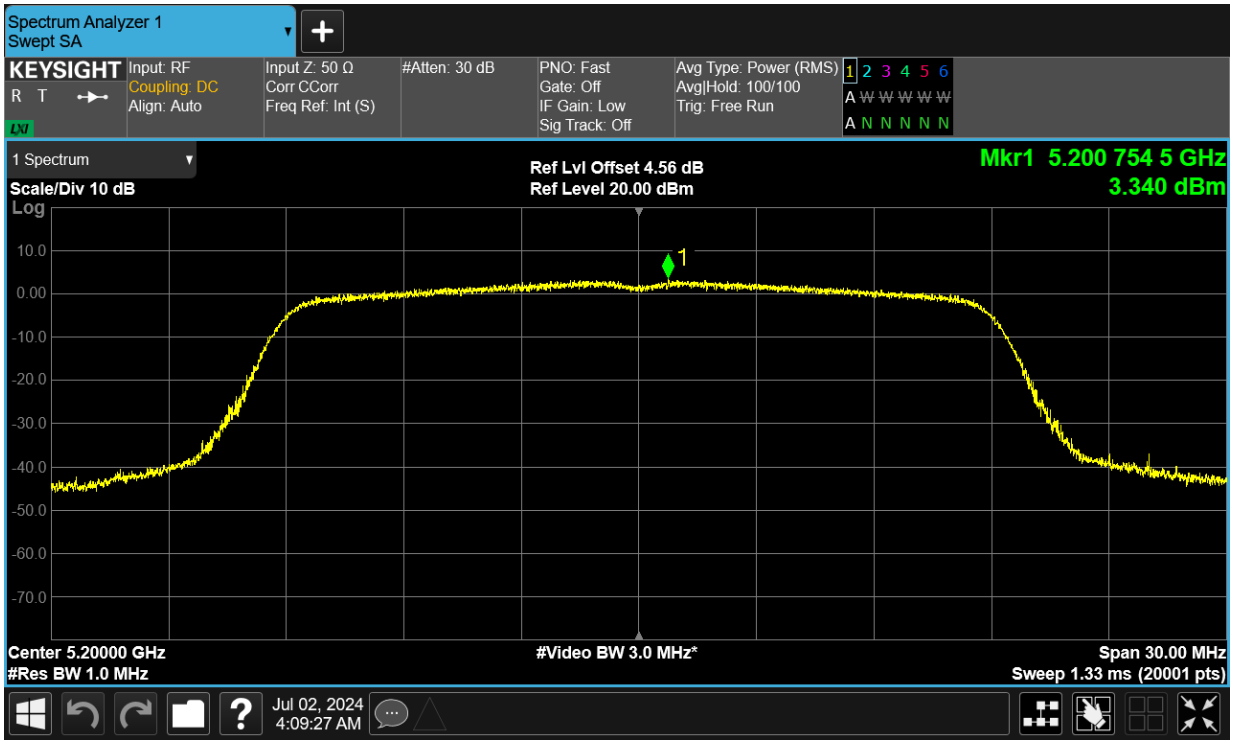
PSD NVNT ac80 5210MHz Ant2



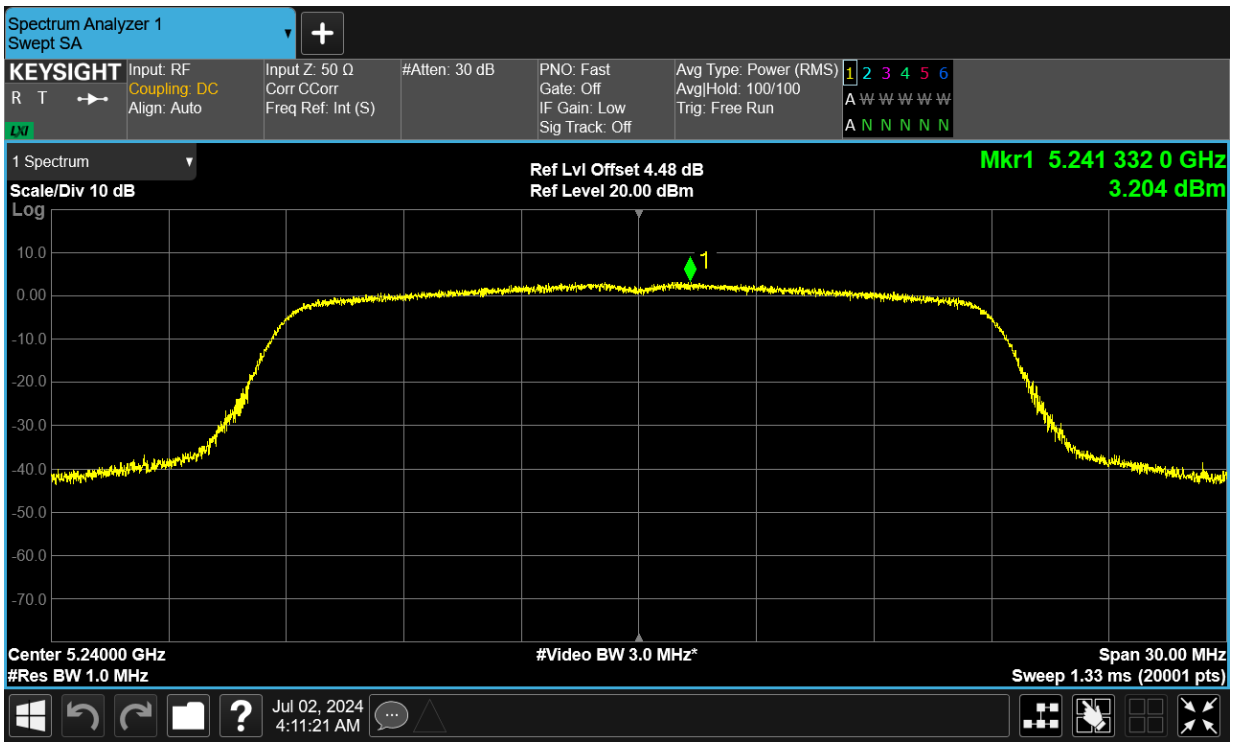
PSD NVNT n20 5180MHz Ant2



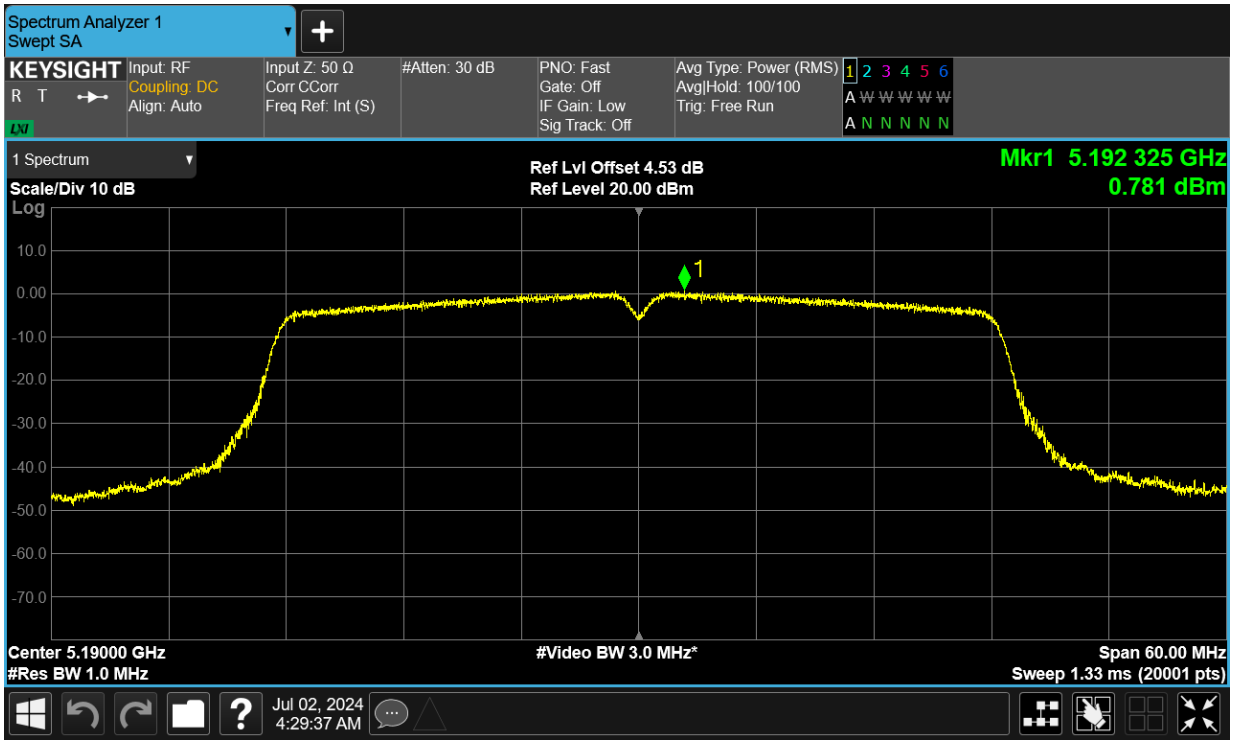
PSD NVNT n20 5200MHz Ant2



PSD NVNT n20 5240MHz Ant2



PSD NVNT n40 5190MHz Ant2



PSD NVNT n40 5230MHz Ant2