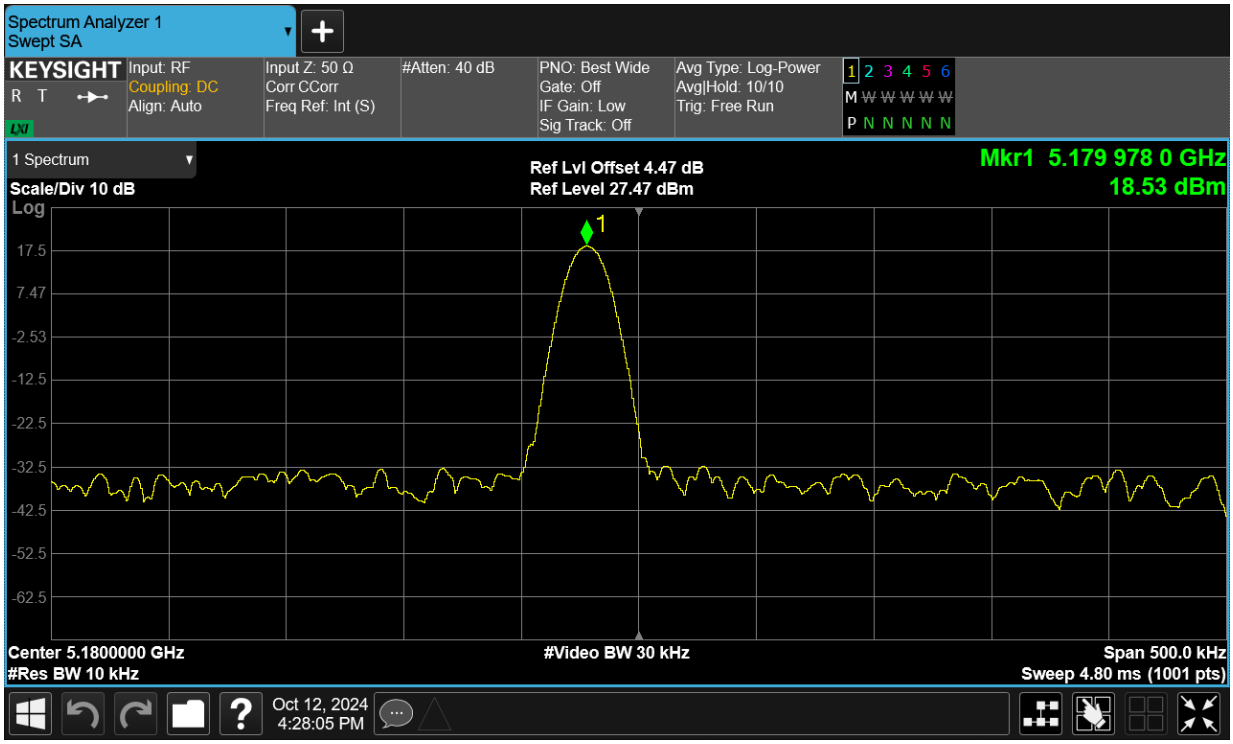
Test Data

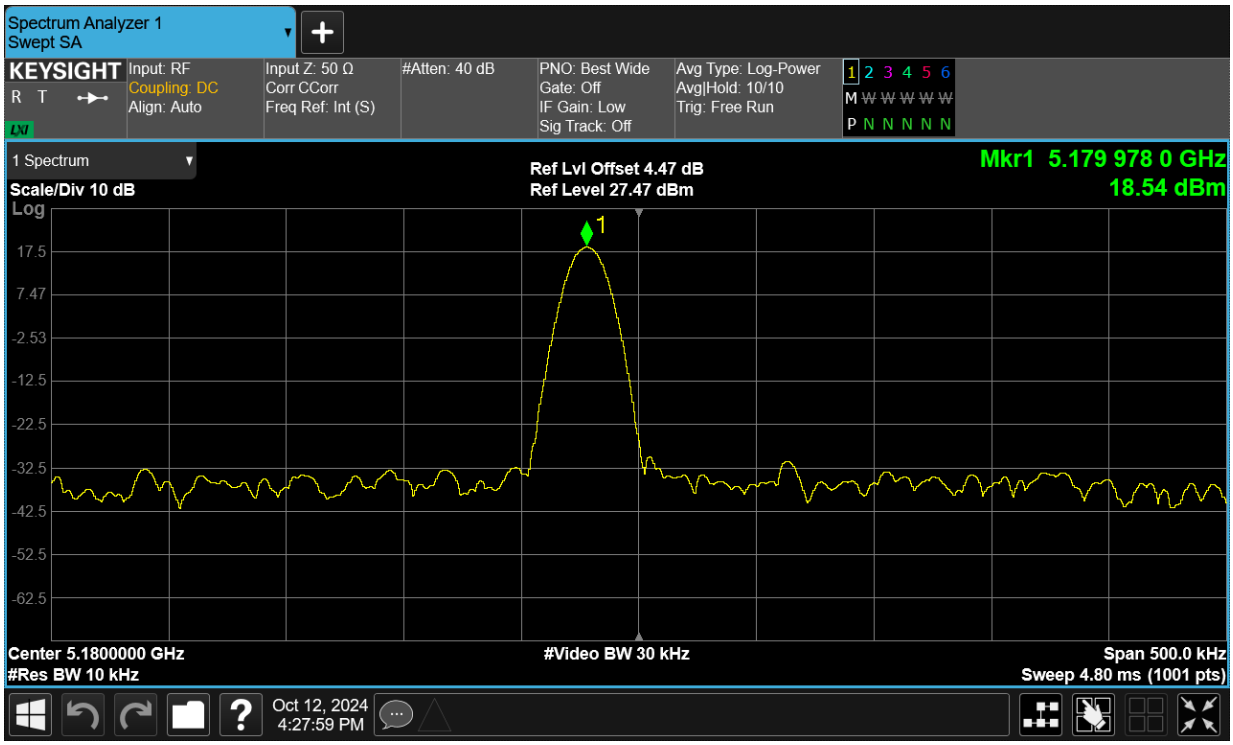
Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5180	Ant1	5179.978	-4.25	25	Pass
LVNT	a	5180	Ant1	5179.978	-4.25	25	Pass
NVHT	a	5180	Ant1	5179.9775	-4.34	25	Pass
NVLT	a	5180	Ant1	5179.9775	-4.34	25	Pass
NVNT	a	5180	Ant1	5179.9775	-4.34	25	Pass
HVNT	ac80	5210	Ant1	5209.977	-4.41	25	Pass
LVNT	ac80	5210	Ant1	5209.977	-4.41	25	Pass
NVHT	ac80	5210	Ant1	5209.977	-4.41	25	Pass
NVLT	ac80	5210	Ant1	5209.9765	-4.51	25	Pass
NVNT	ac80	5210	Ant1	5209.976819541	-4.45	25	Pass
HVNT	n40	5190	Ant1	5189.9775	-4.34	25	Pass
LVNT	n40	5190	Ant1	5189.9775	-4.34	25	Pass
NVHT	n40	5190	Ant1	5189.9775	-4.34	25	Pass
NVLT	n40	5190	Ant1	5189.9775	-4.34	25	Pass
NVNT	n40	5190	Ant1	5189.977	-4.43	25	Pass

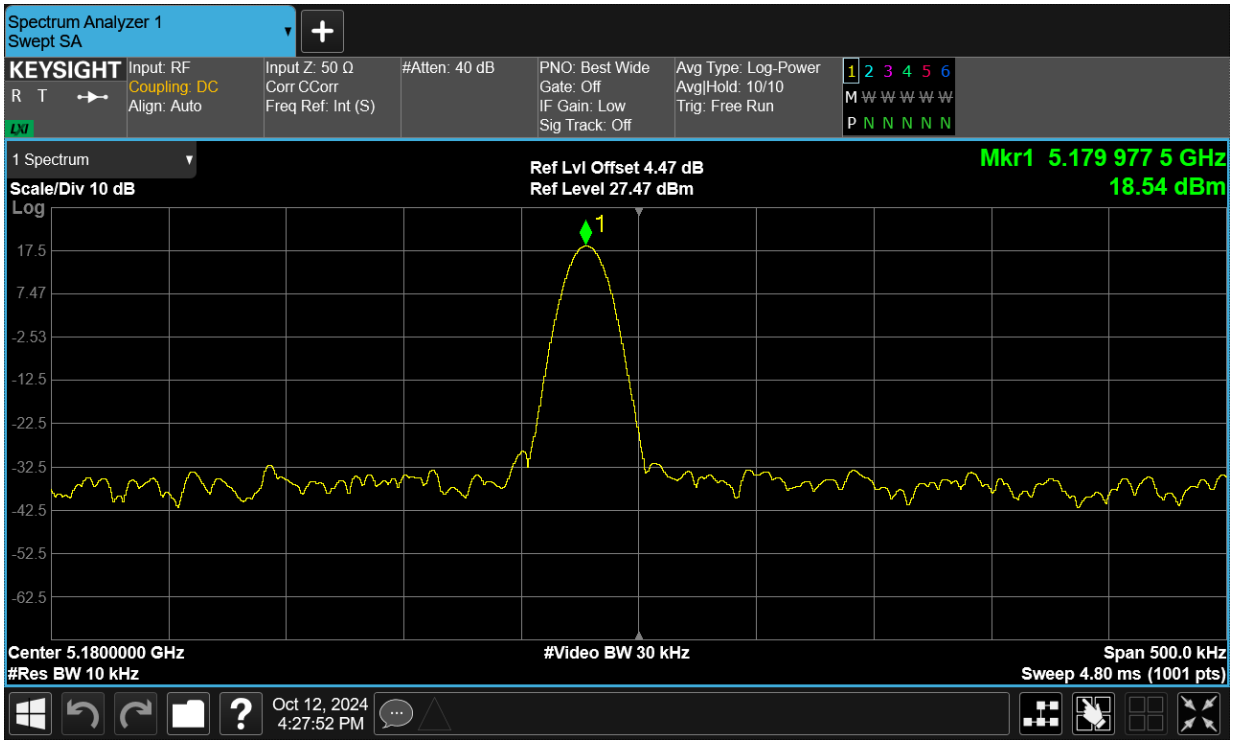
Test Graphs
Freq. Stability HVNT a 5180MHz Ant1



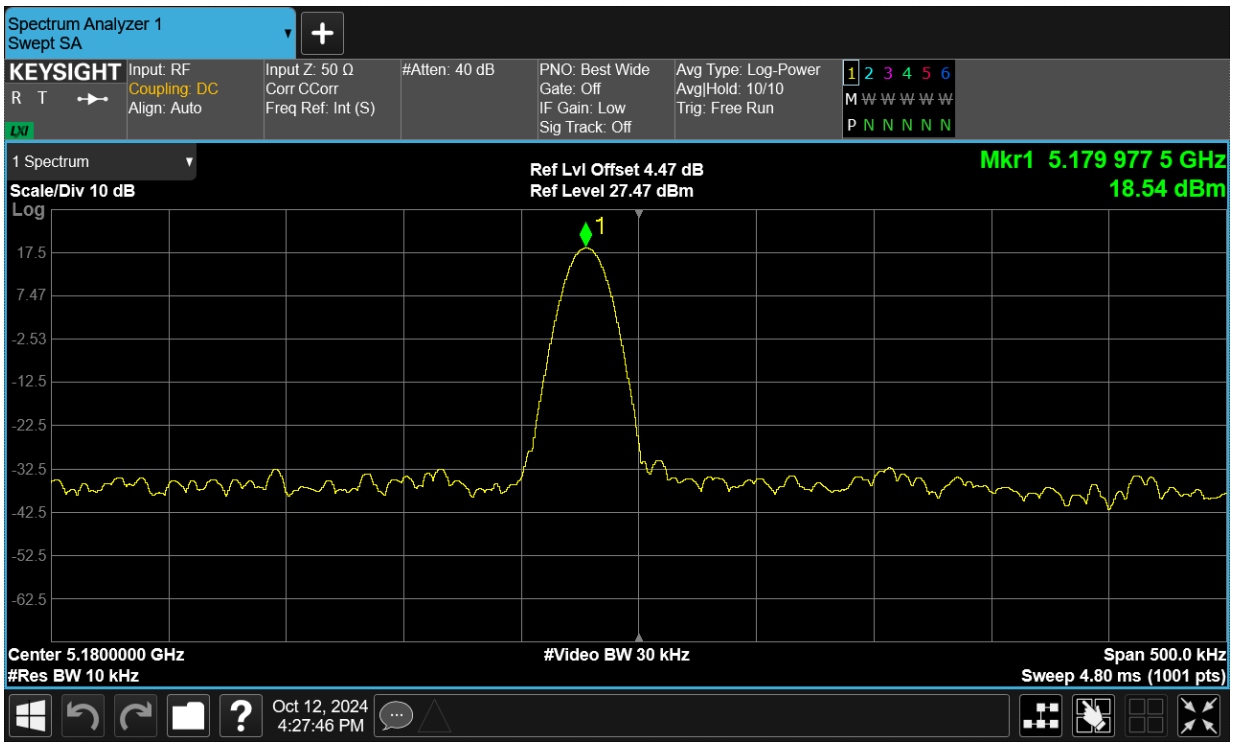
Freq. Stability LVNT a 5180MHz Ant1



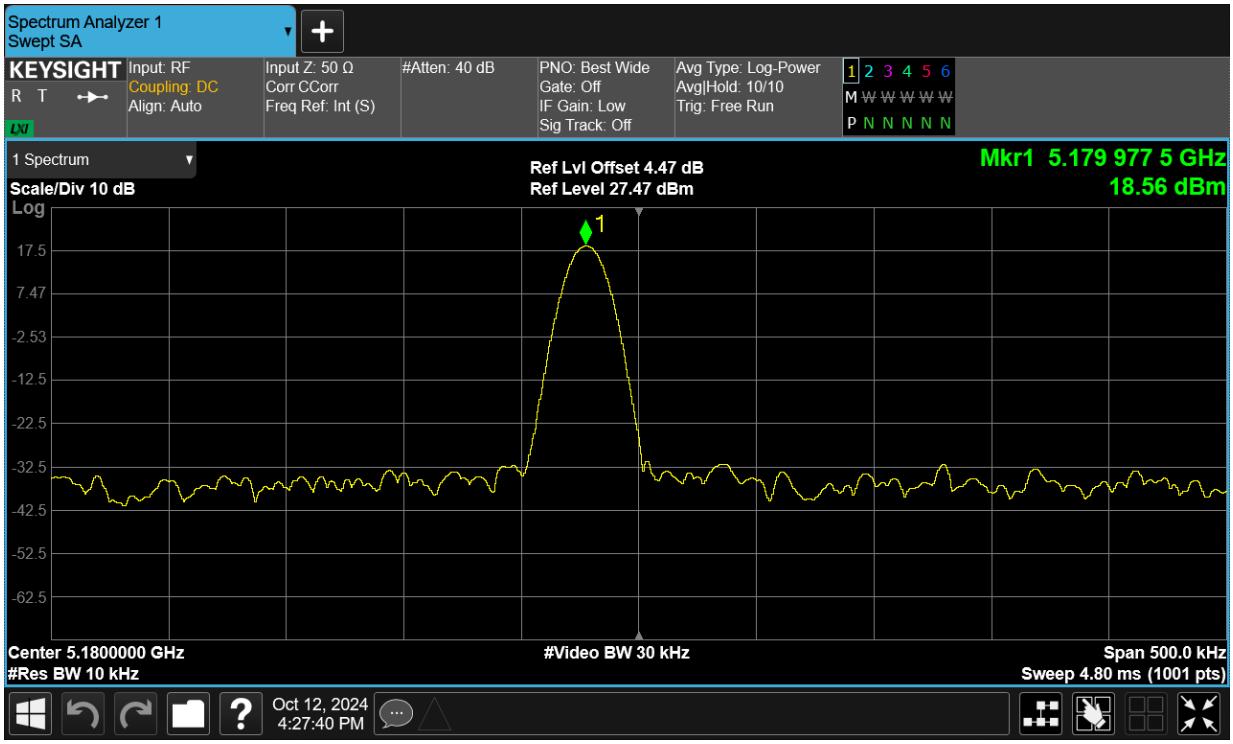
Freq. Stability NVHT a 5180MHz Ant1



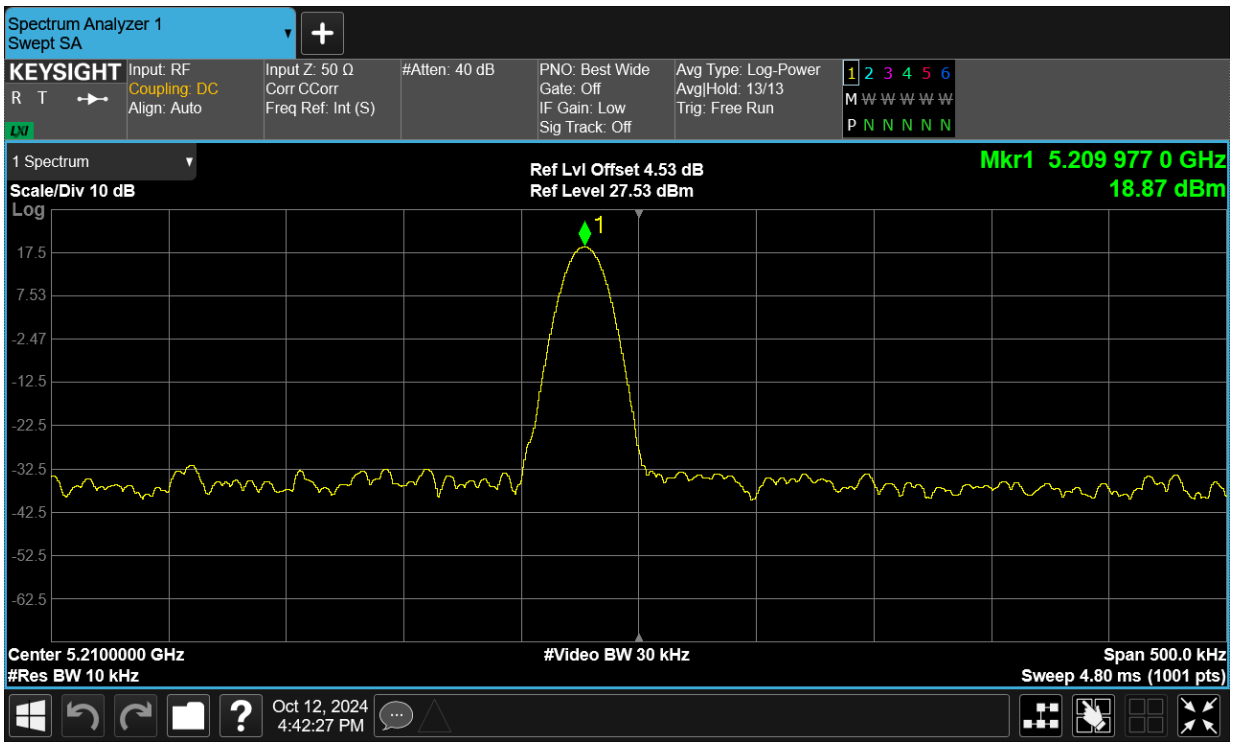
Freq. Stability NVLT a 5180MHz Ant1



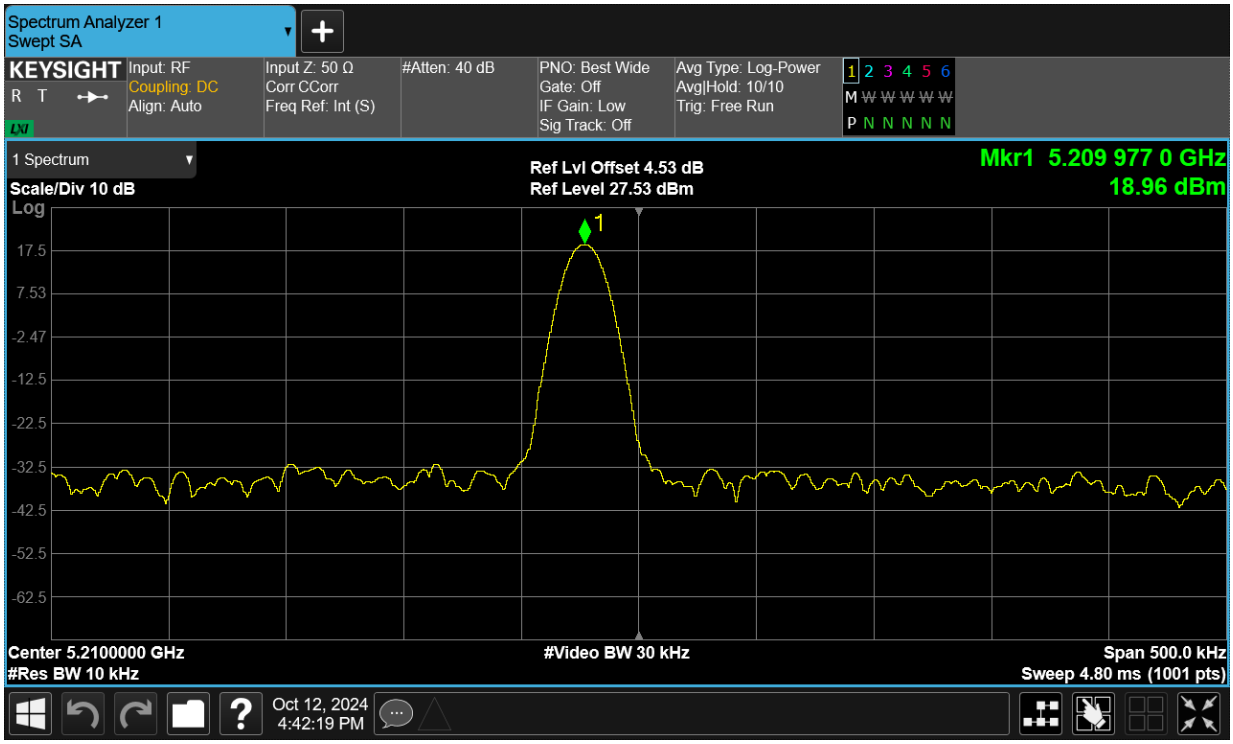
Freq. Stability NVNT a 5180MHz Ant1



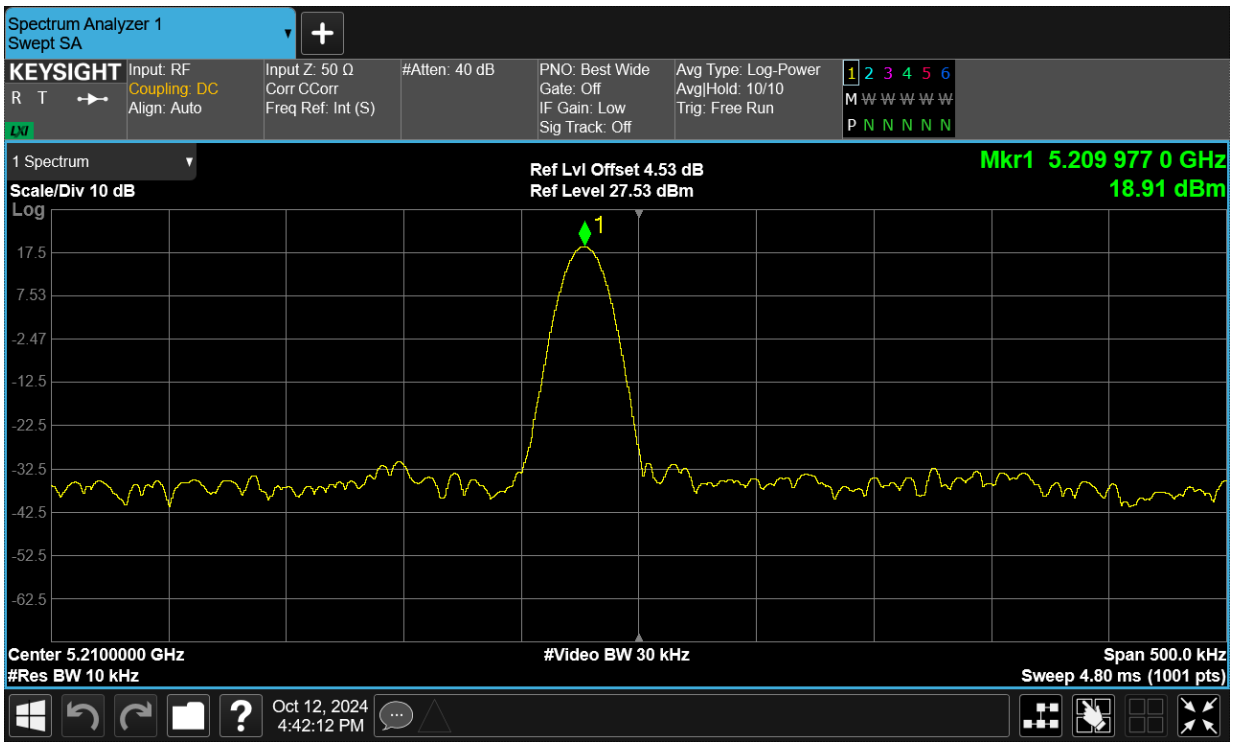
Freq. Stability HVNT ac80 5210MHz Ant1



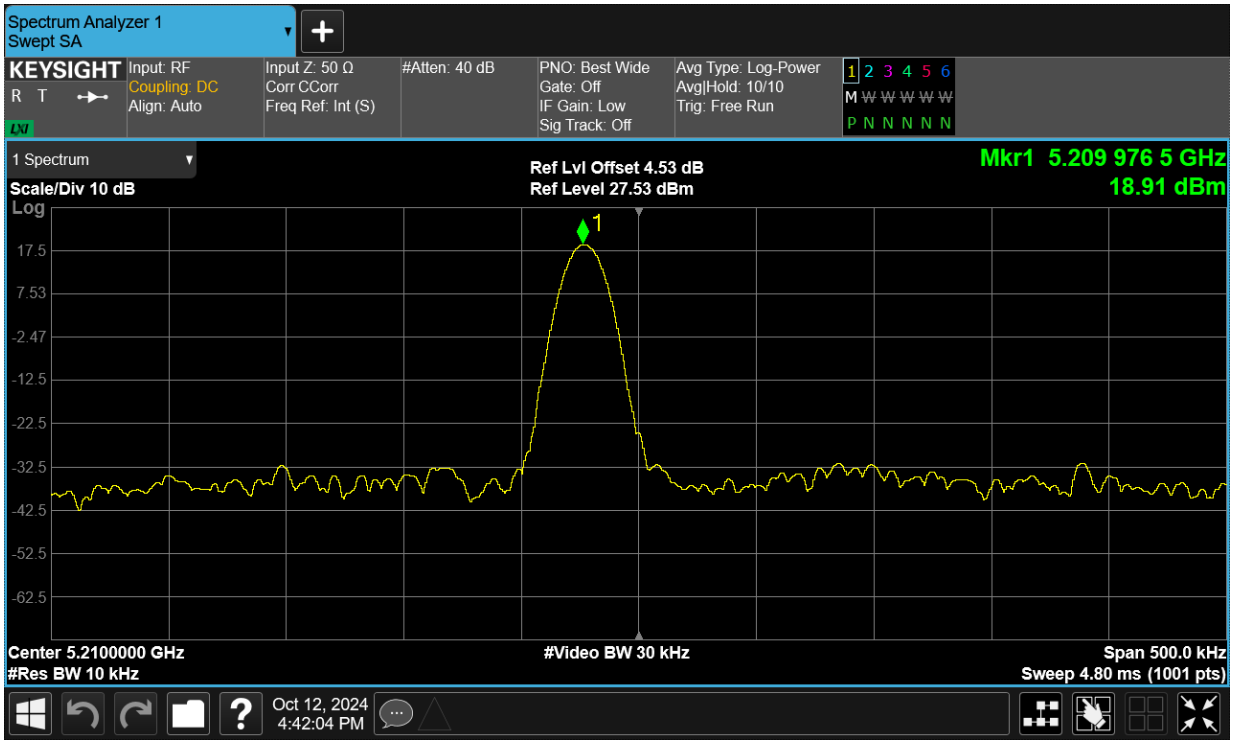
Freq. Stability LVNT ac80 5210MHz Ant1



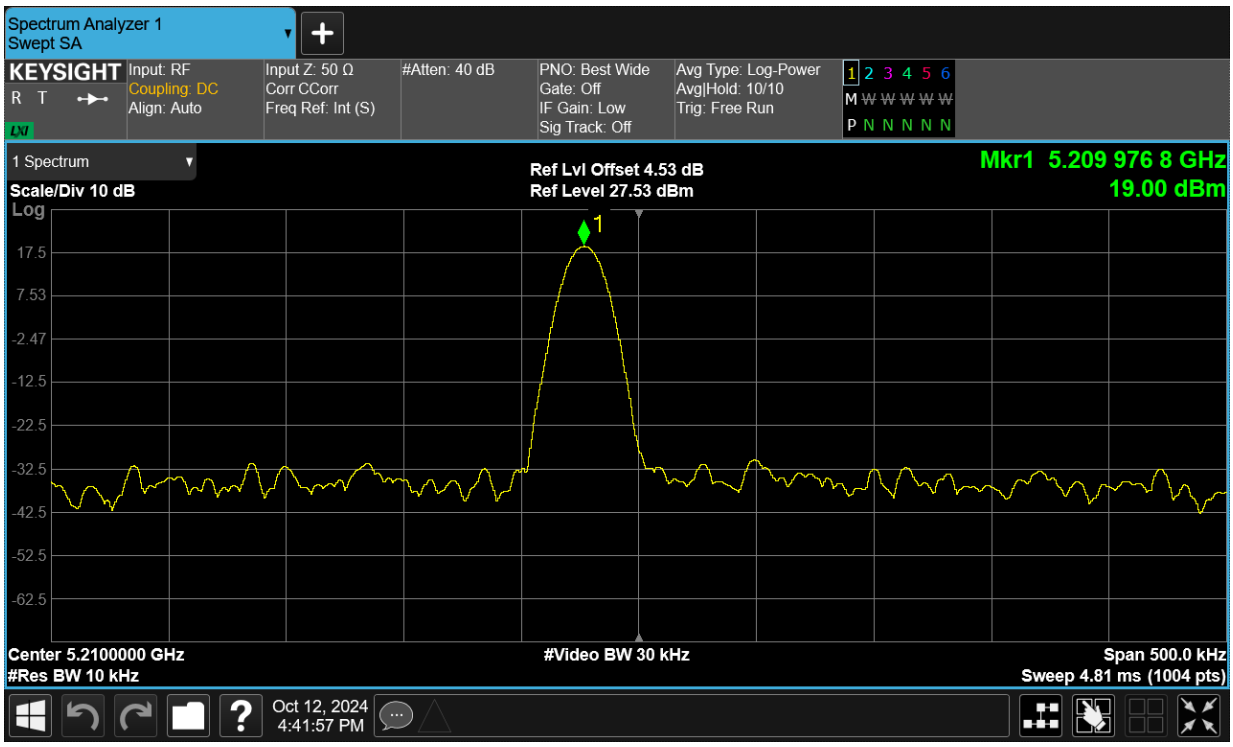
Freq. Stability NVHT ac80 5210MHz Ant1



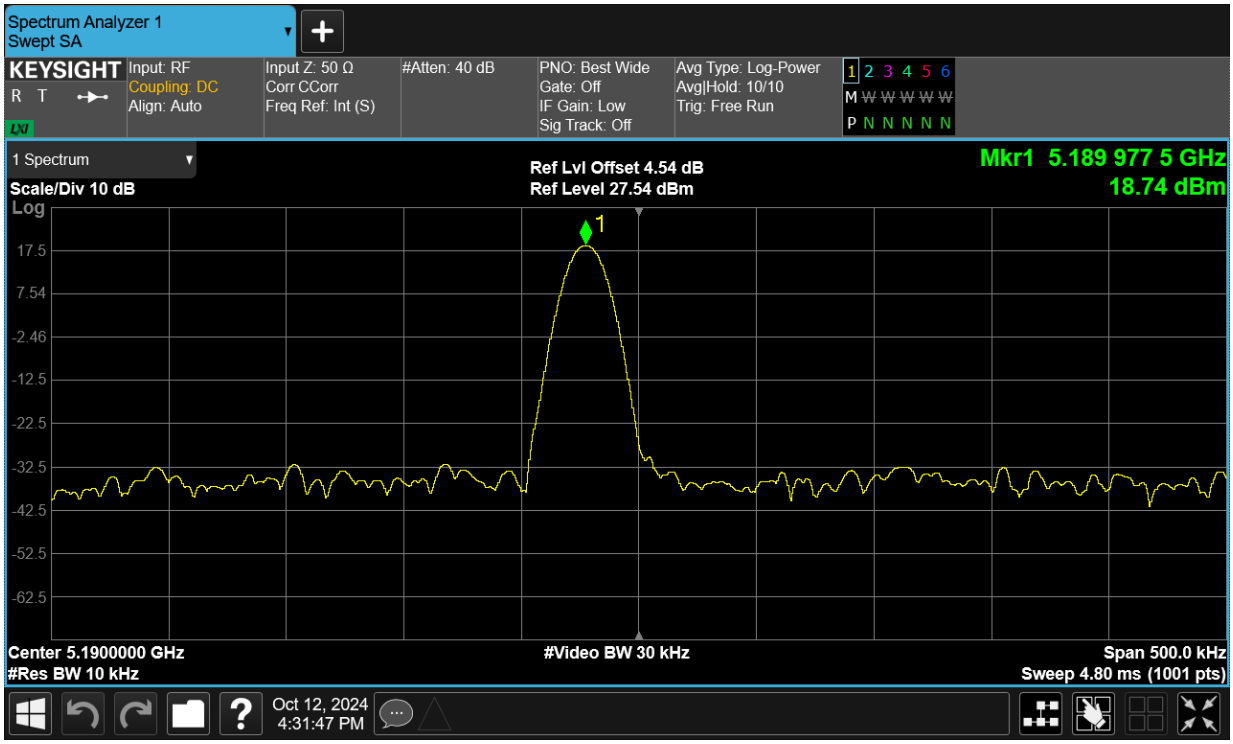
Freq. Stability NVLT ac80 5210MHz Ant1



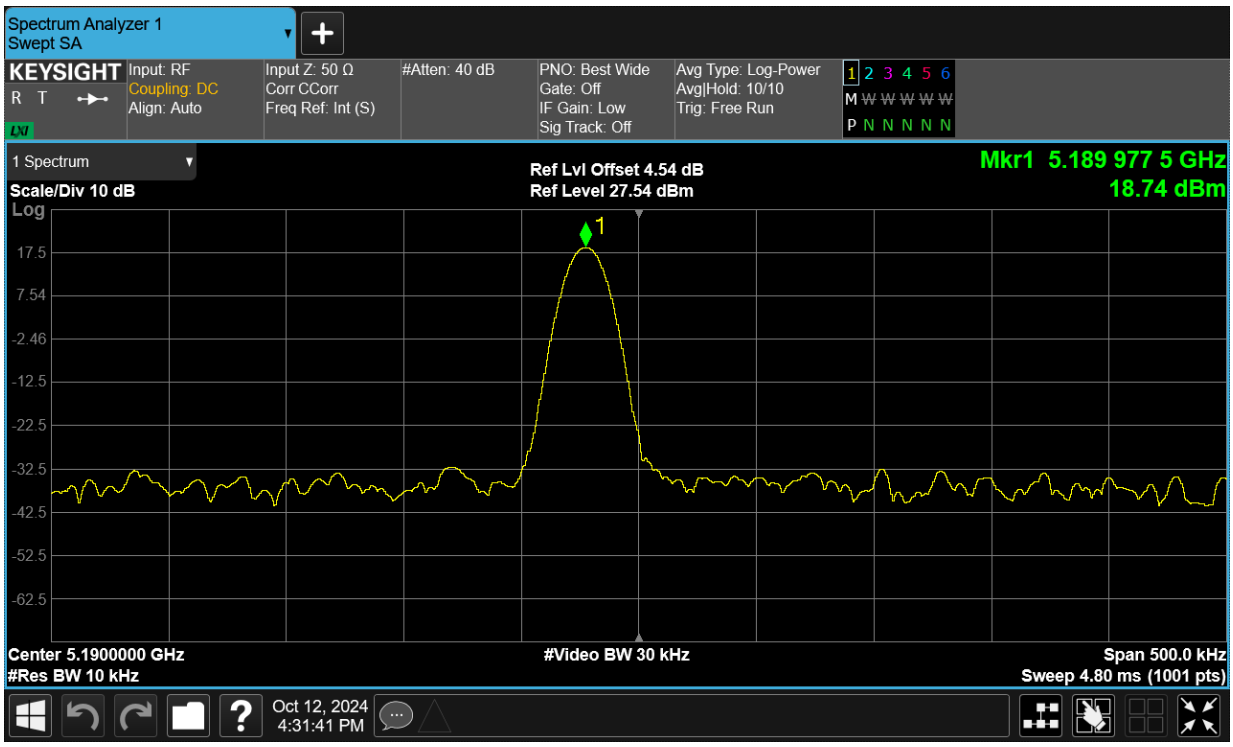
Freq. Stability NVNT ac80 5210MHz Ant1



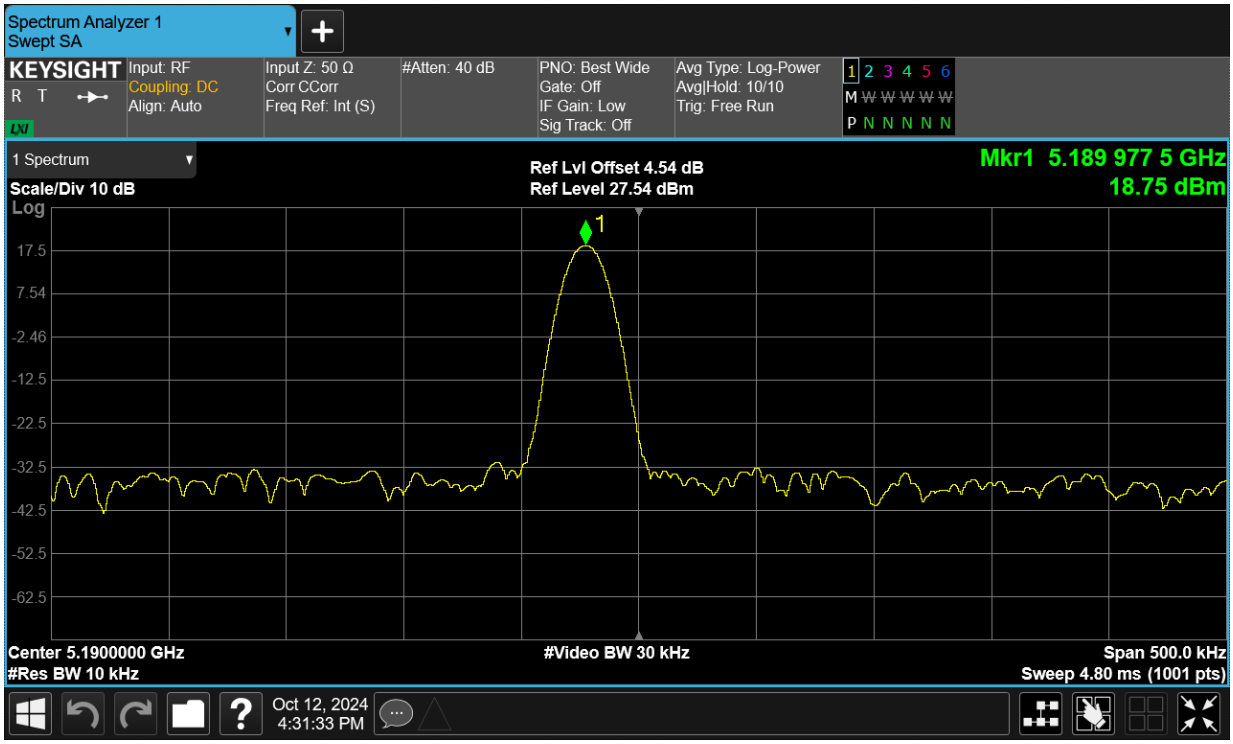
Freq. Stability HVNT n40 5190MHz Ant1



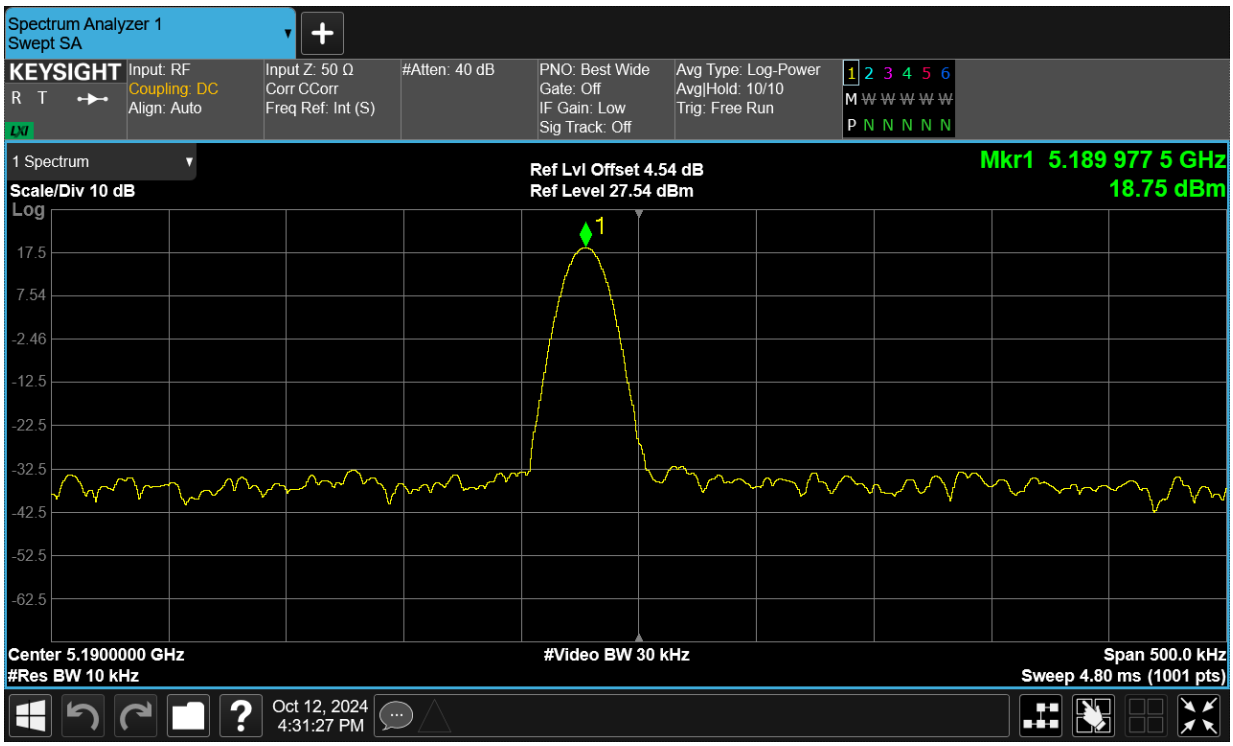
Freq. Stability LVNT n40 5190MHz Ant1



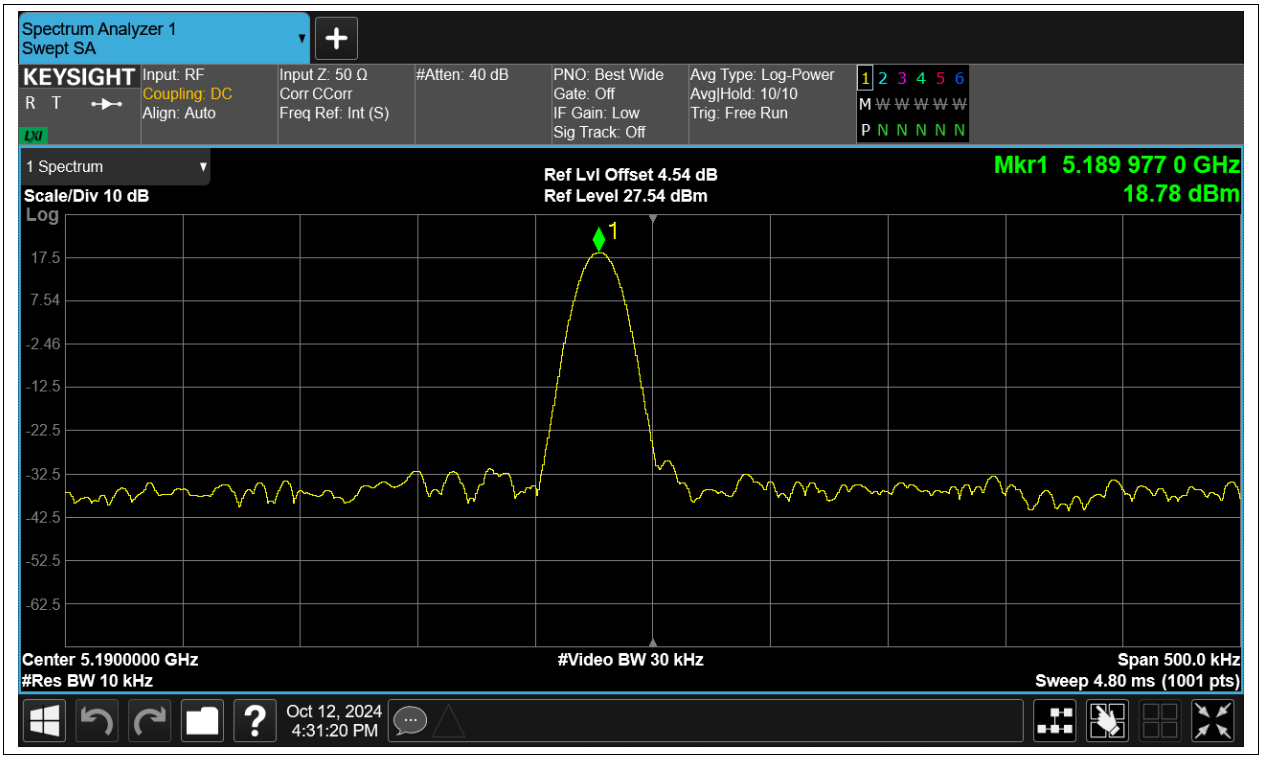
Freq. Stability NVHT n40 5190MHz Ant1



Freq. Stability NVLT n40 5190MHz Ant1



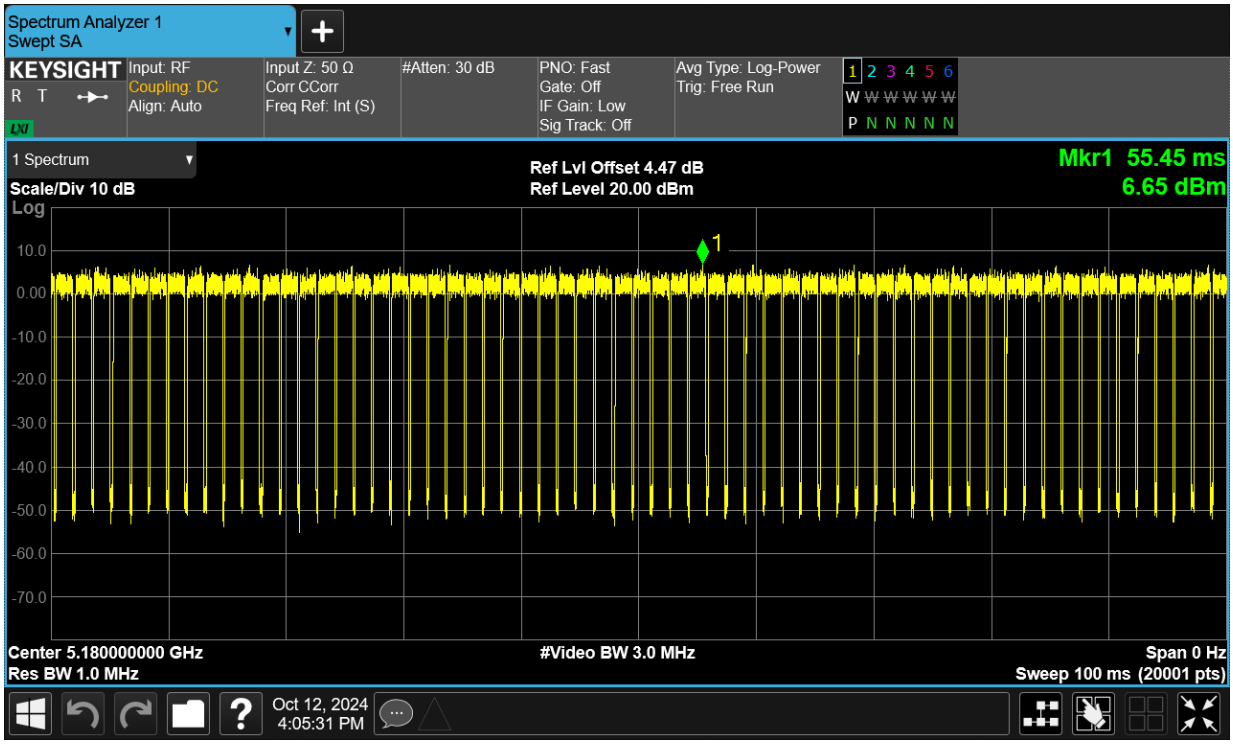
Freq. Stability NVNT n40 5190MHz Ant1


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 4.54 dB
Ref Level 27.54 dBm
Mkr1 5.189 977 0 GHz
18.78 dBm
Log
17.5
7.54
-2.46
-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)
Oct 12, 2024
4:31:20 PM

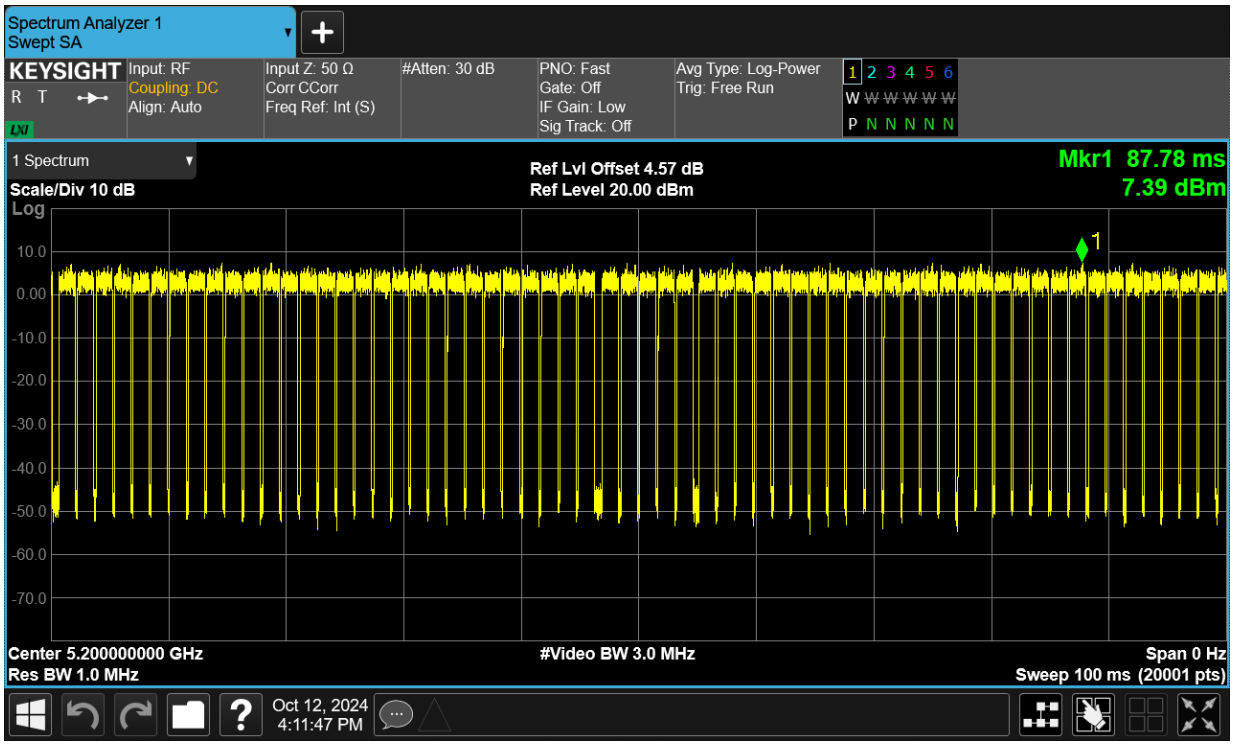
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	88.12	0.55
NVNT	a	5200	Ant1	87.59	0.58
NVNT	a	5240	Ant1	88.53	0.53
NVNT	ac20	5180	Ant1	87.1	0.6
NVNT	ac20	5200	Ant1	86.29	0.64
NVNT	ac20	5240	Ant1	86.94	0.61
NVNT	ac40	5190	Ant1	76.42	1.17
NVNT	ac40	5230	Ant1	75.73	1.21
NVNT	ac80	5210	Ant1	62.79	2.02
NVNT	n20	5180	Ant1	87	0.61
NVNT	n20	5200	Ant1	86.84	0.61
NVNT	n20	5240	Ant1	87.04	0.6
NVNT	n40	5190	Ant1	75.33	1.23
NVNT	n40	5230	Ant1	76.33	1.17

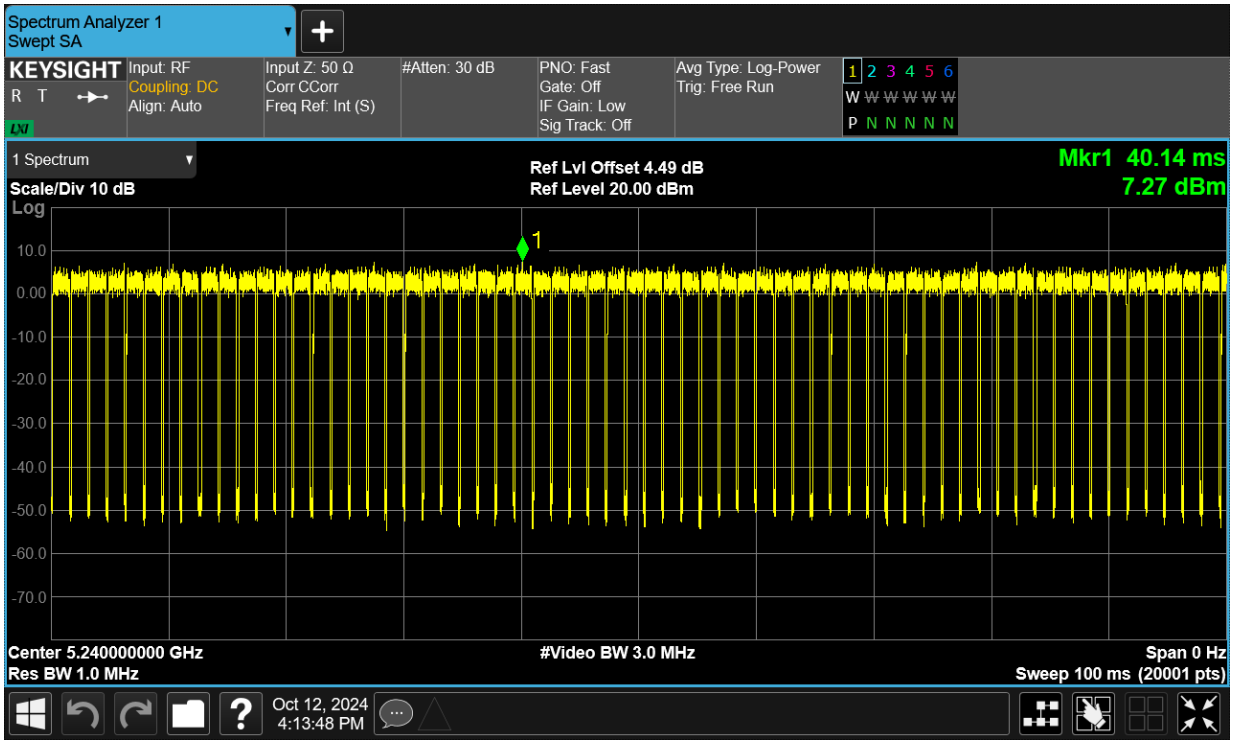
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



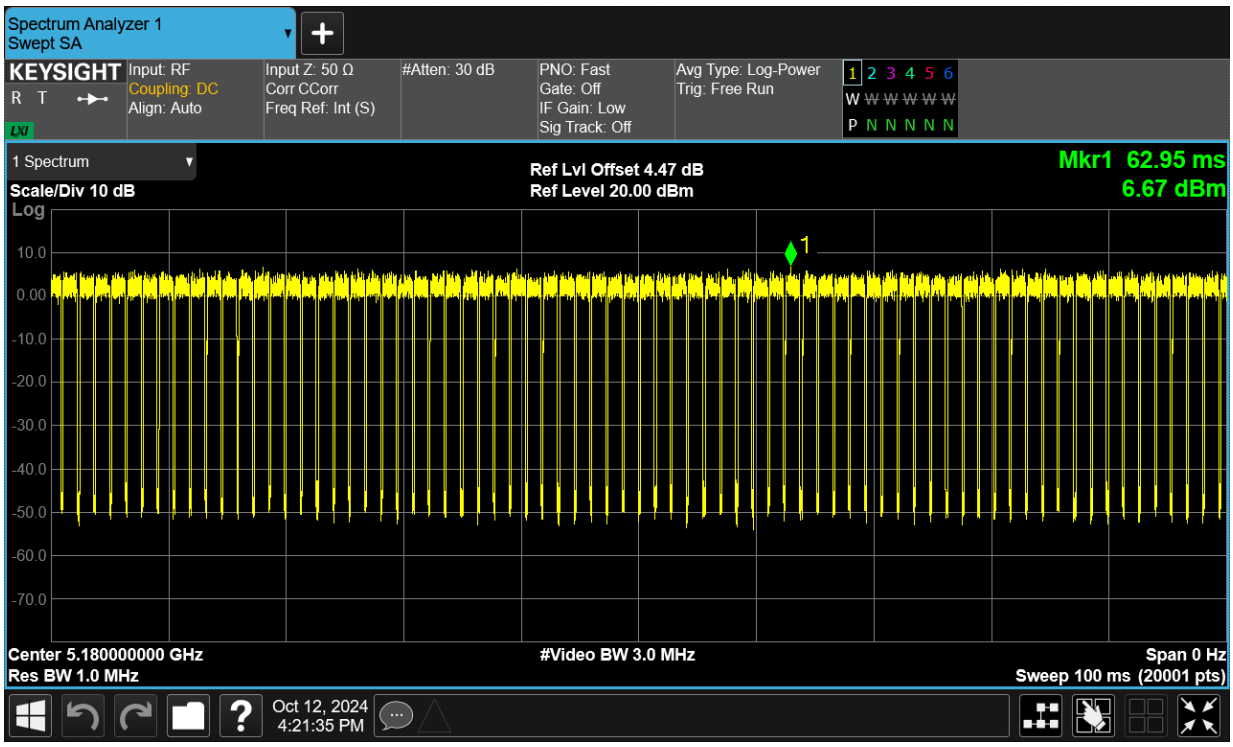
Duty Cycle NVNT a 5200MHz Ant1



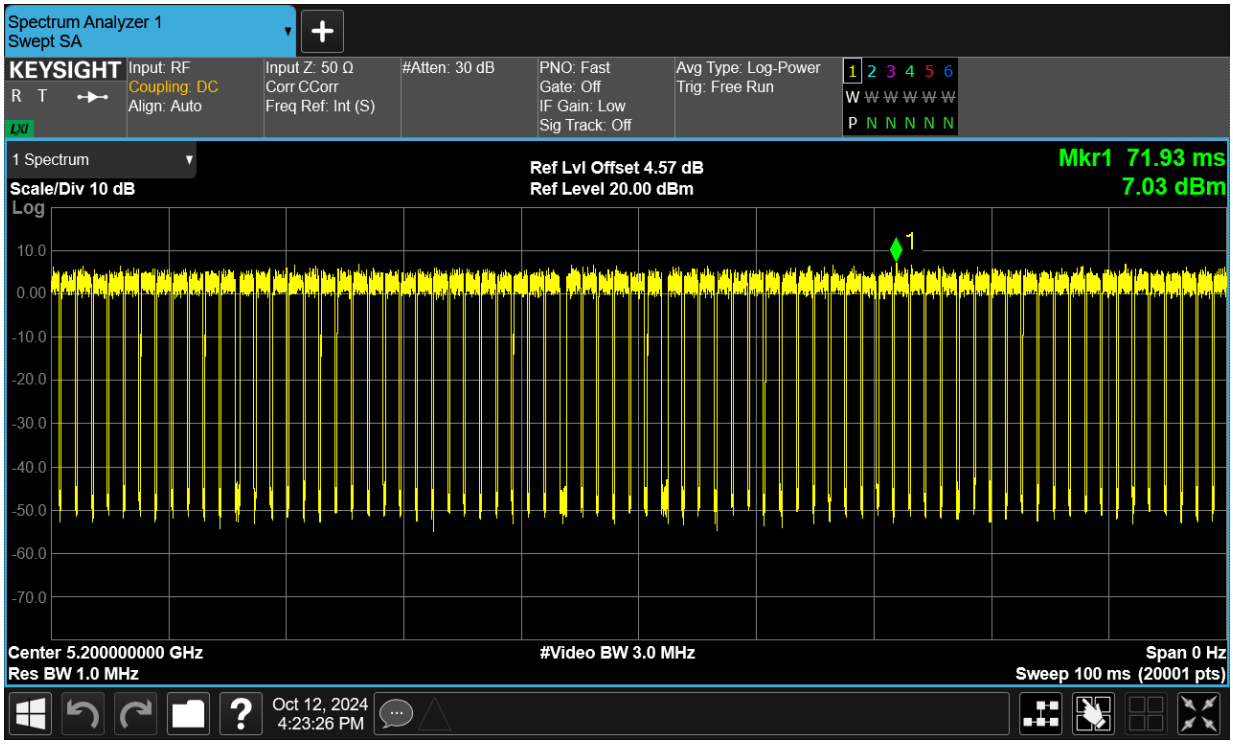
Duty Cycle NVNT a 5240MHz Ant1



Duty Cycle NVNT ac20 5180MHz Ant1

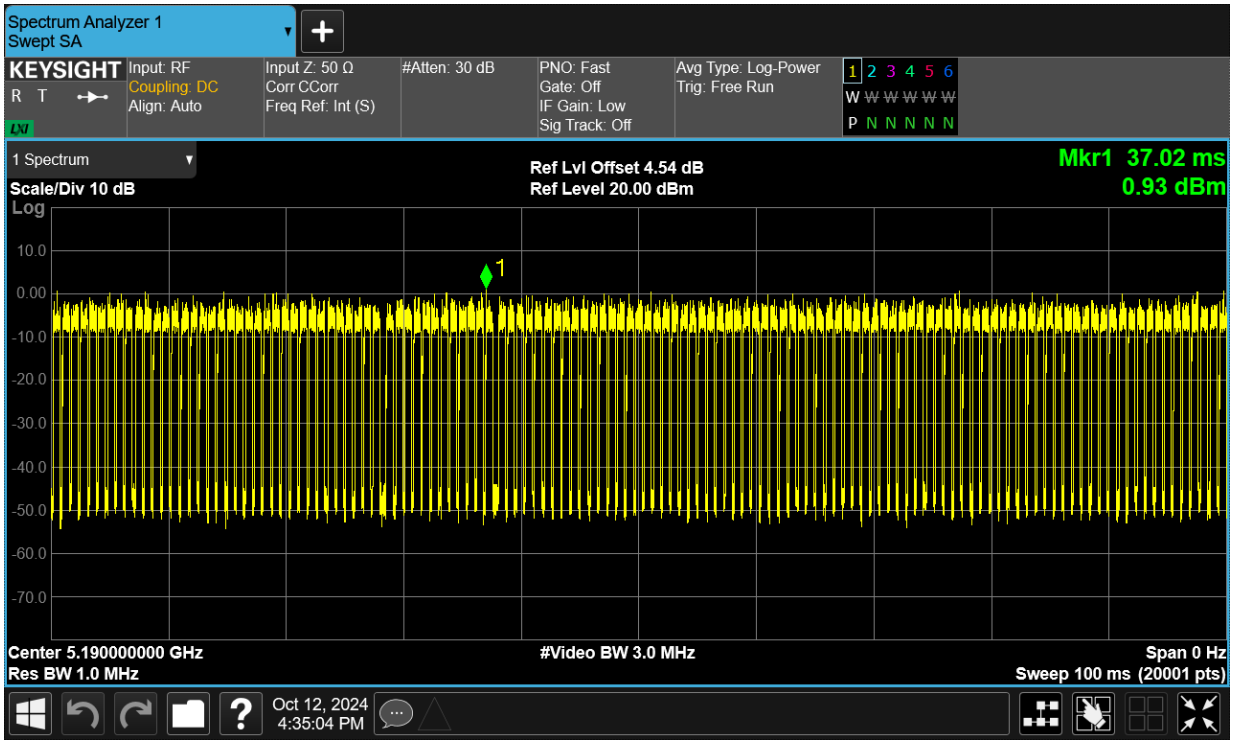


Duty Cycle NVNT ac20 5200MHz Ant1

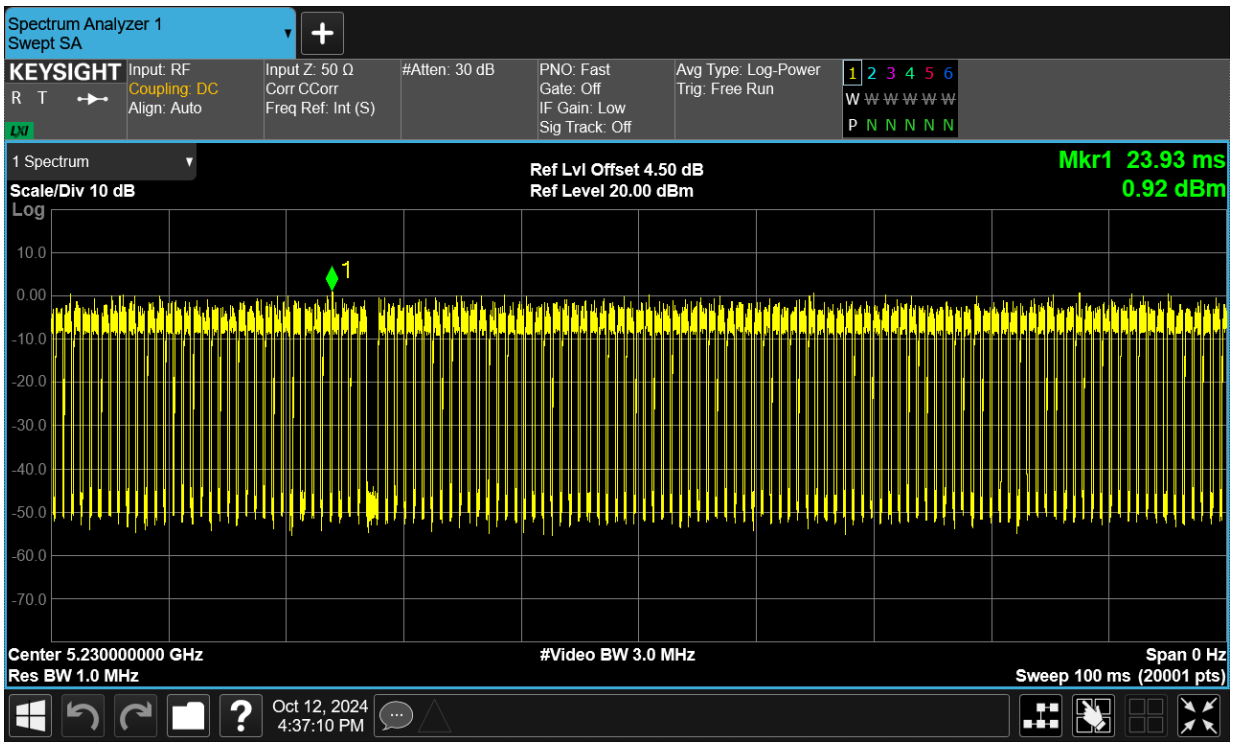


Duty Cycle NVNT ac20 5240MHz Ant1

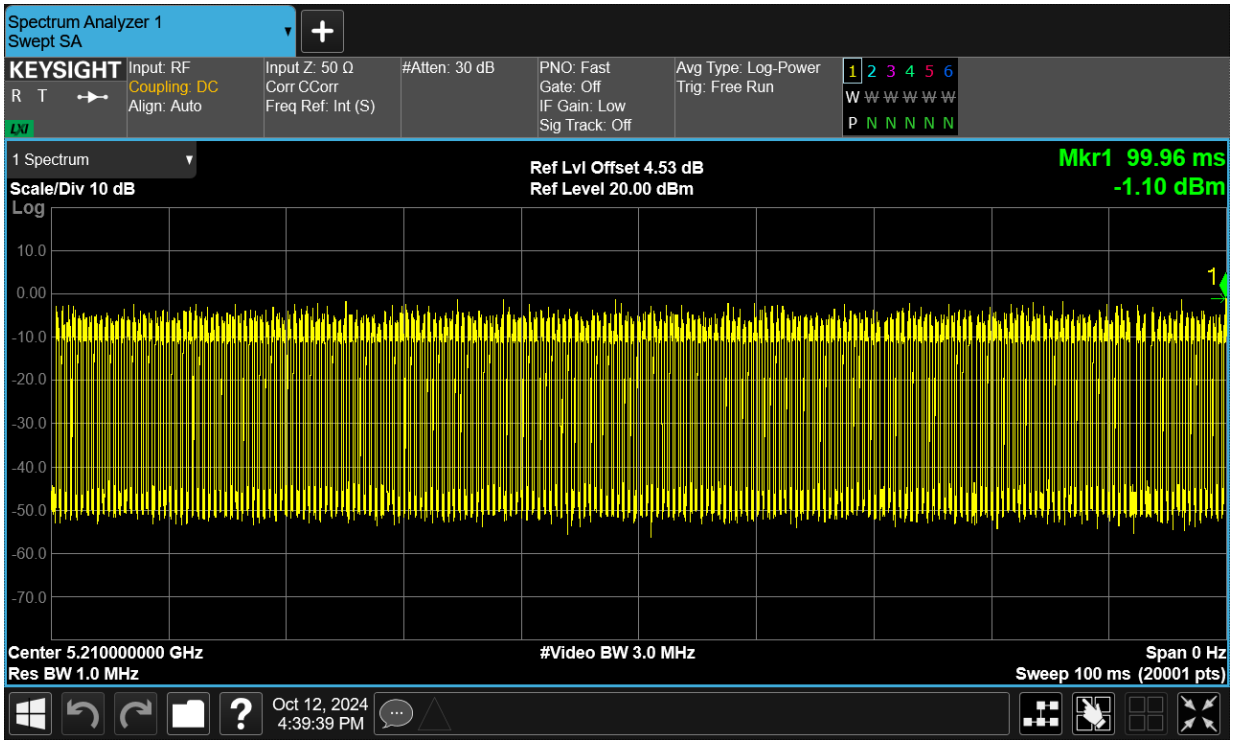
Duty Cycle NVNT ac40 5190MHz Ant1



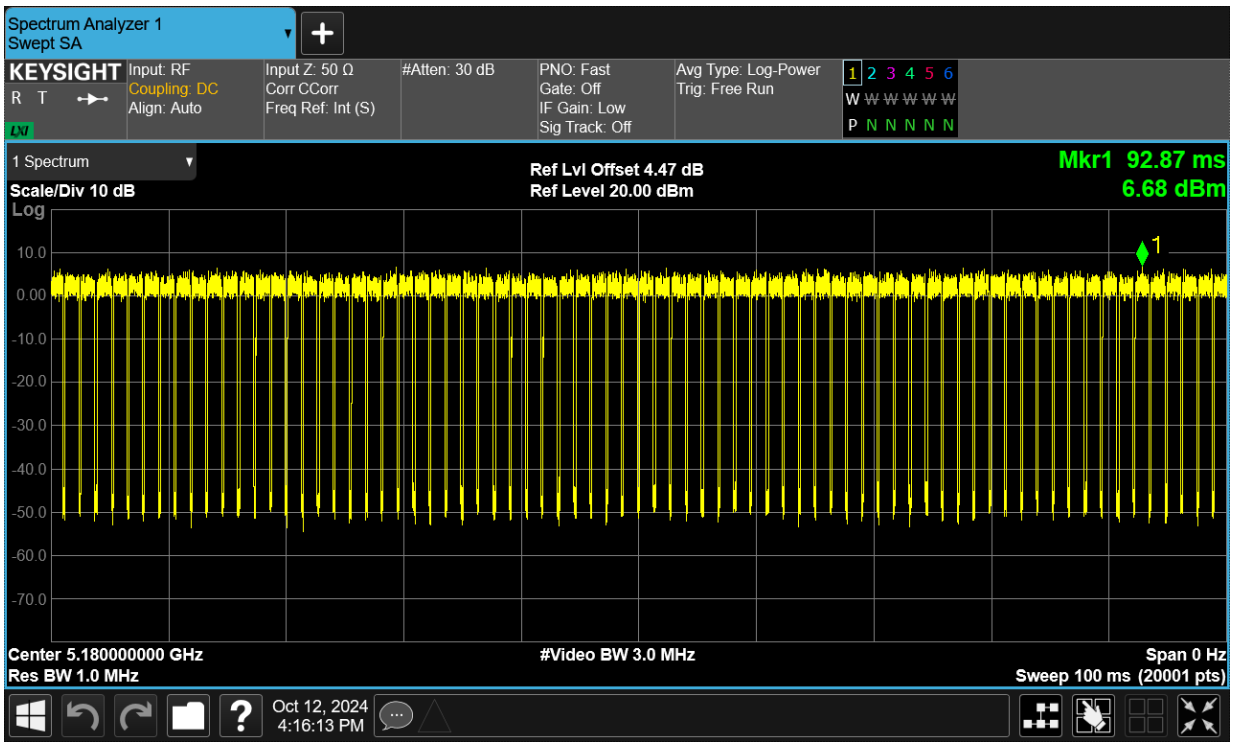
Duty Cycle NVNT ac40 5230MHz Ant1



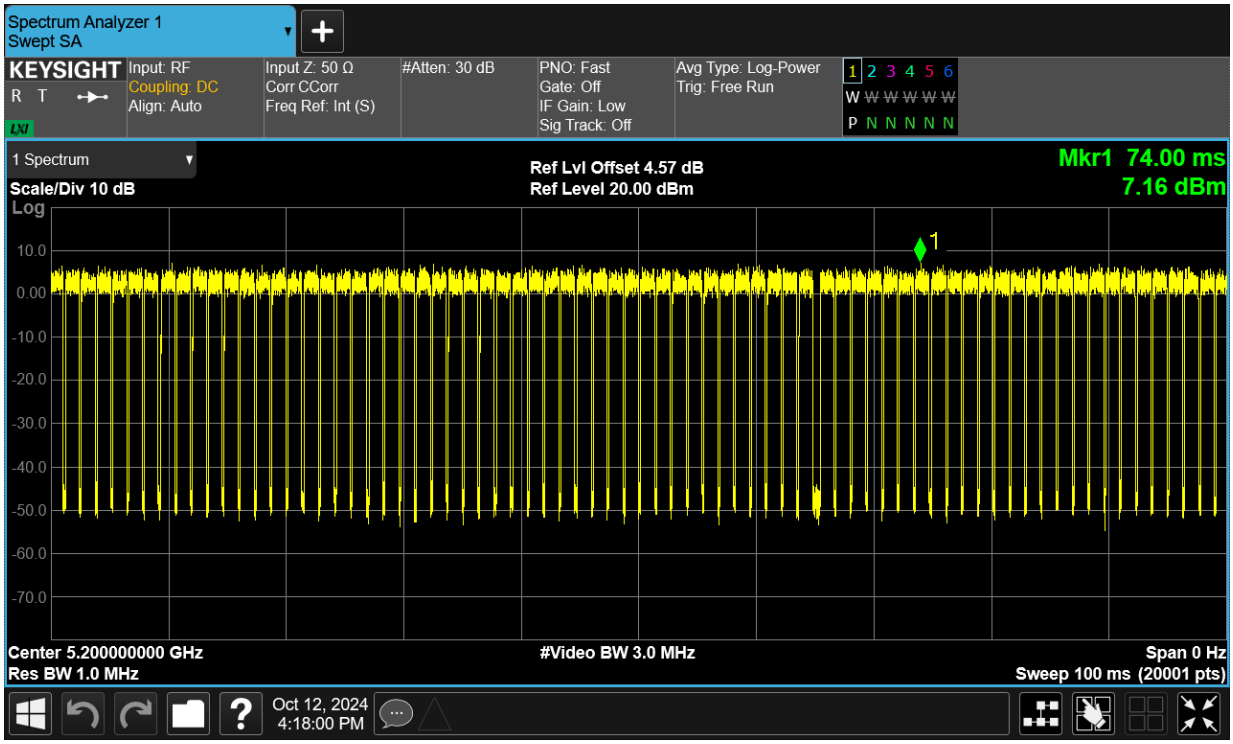
Duty Cycle NVNT ac80 5210MHz Ant1



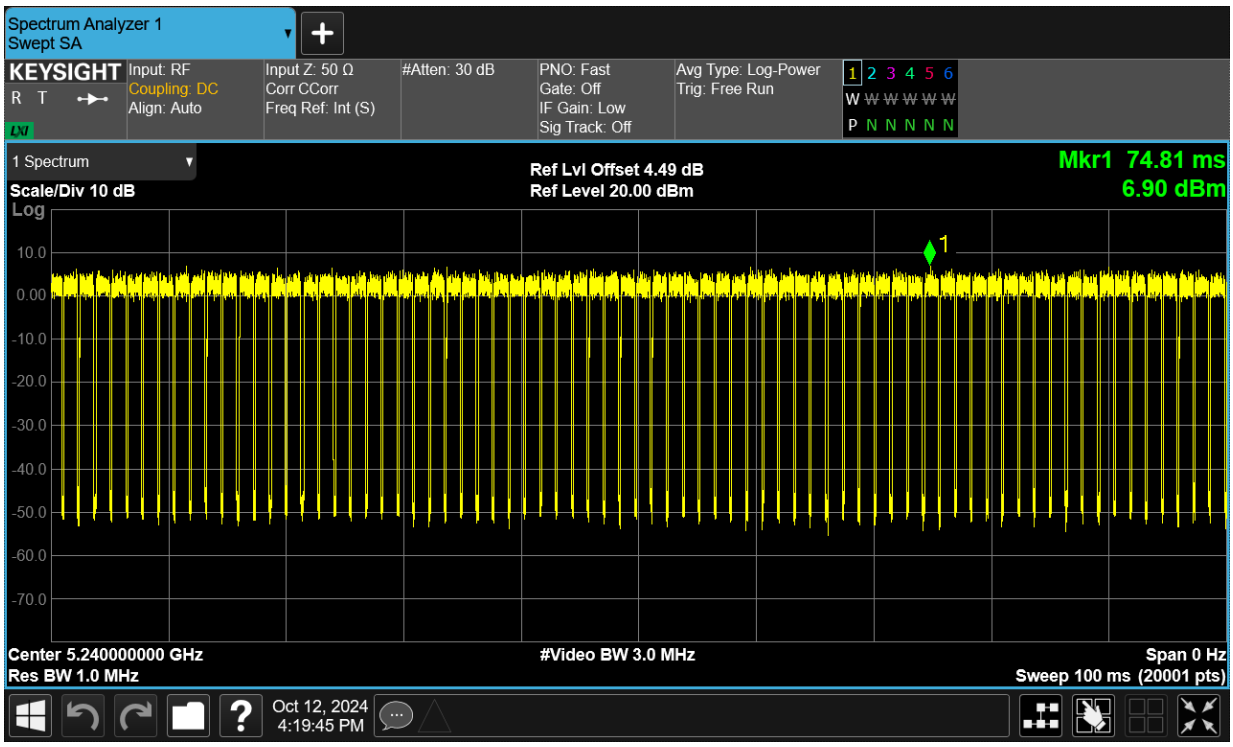
Duty Cycle NVNT n20 5180MHz Ant1



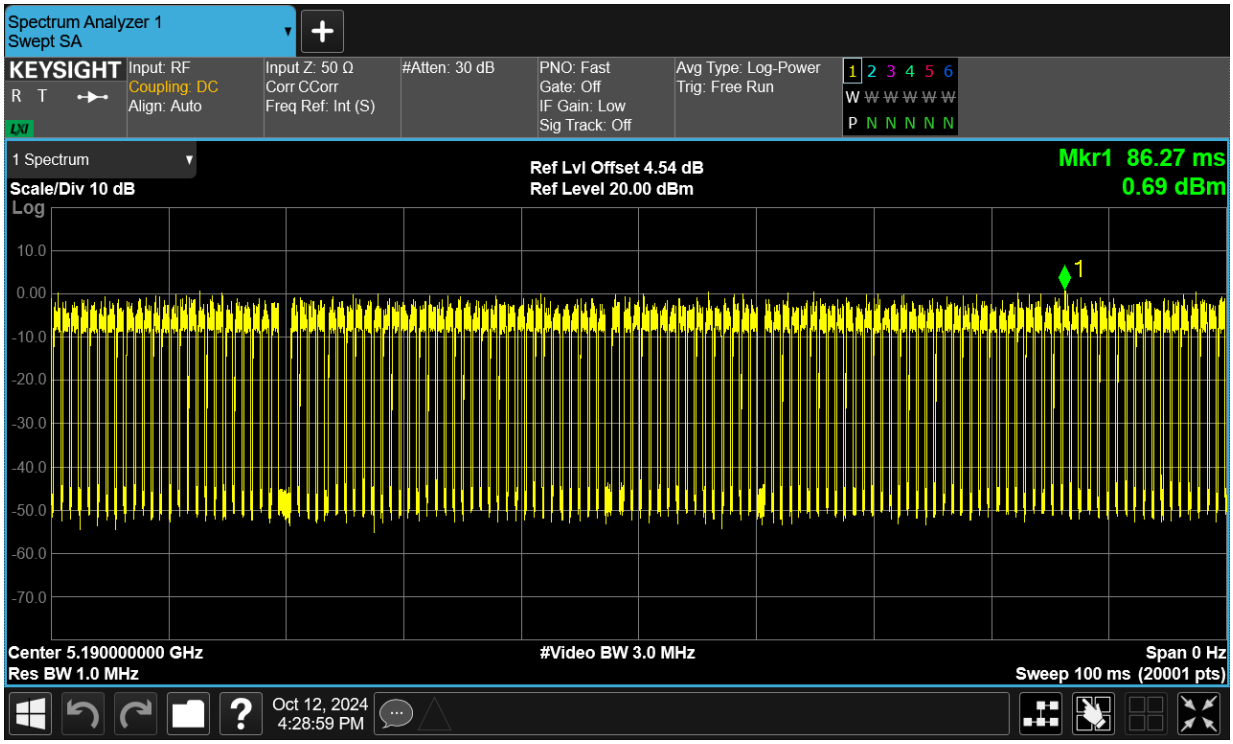
Duty Cycle NVNT n20 5200MHz Ant1



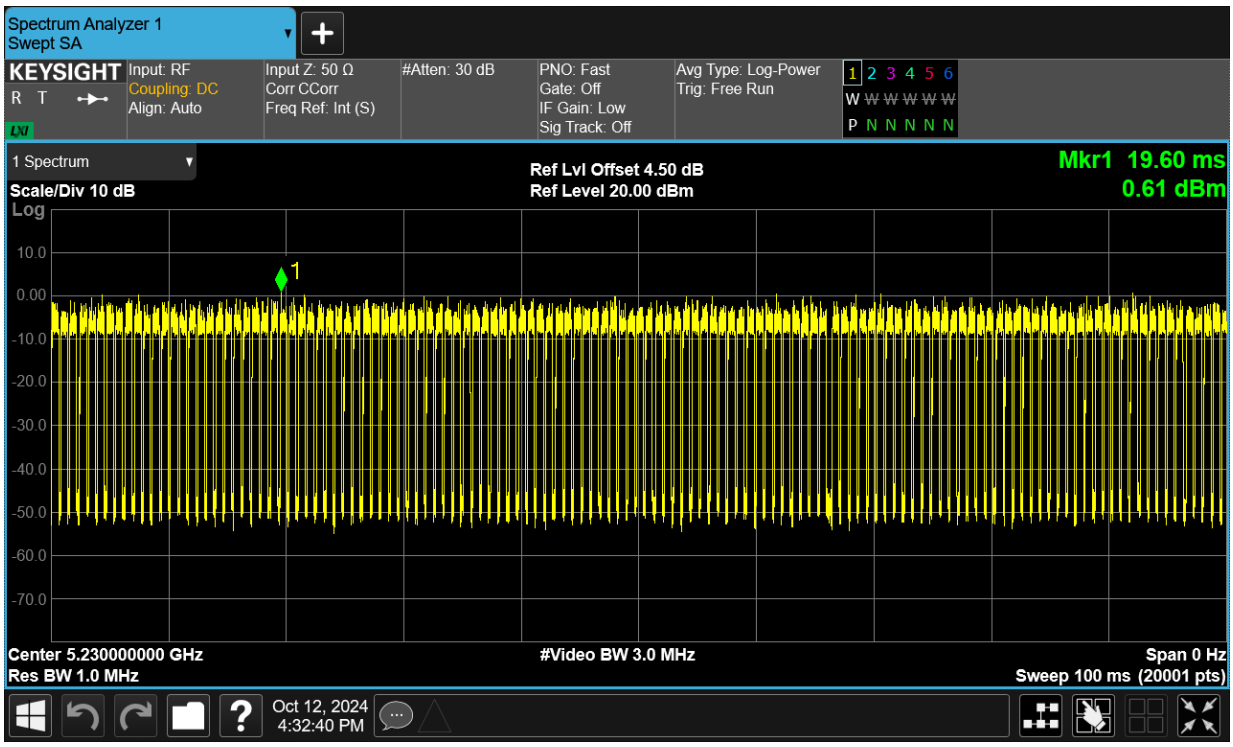
Duty Cycle NVNT n20 5240MHz Ant1



Duty Cycle NVNT n40 5190MHz Ant1



Duty Cycle NVNT n40 5230MHz Ant1



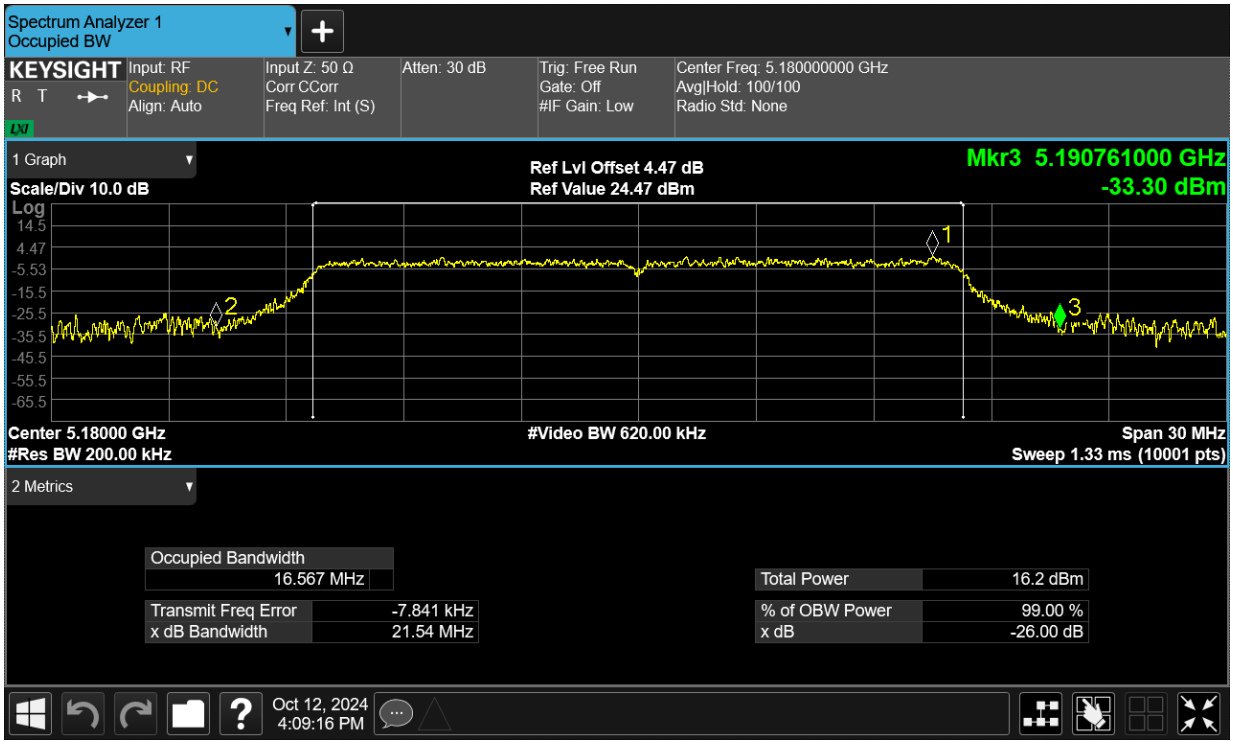
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	10.16	0.55	10.71	24	Pass
NVNT	a	5200	Ant1	11.08	0.58	11.66	24	Pass
NVNT	a	5240	Ant1	10.82	0.53	11.35	24	Pass
NVNT	ac20	5180	Ant1	10.35	0.6	10.95	24	Pass
NVNT	ac20	5200	Ant1	10.99	0.64	11.63	24	Pass
NVNT	ac20	5240	Ant1	10.75	0.61	11.36	24	Pass
NVNT	ac40	5190	Ant1	8.49	1.17	9.66	23	Pass
NVNT	ac40	5230	Ant1	8.68	1.21	9.89	24	Pass
NVNT	ac80	5210	Ant1	9.9	2.02	11.92	24	Pass
NVNT	n20	5180	Ant1	10.42	0.61	11.03	24	Pass
NVNT	n20	5200	Ant1	11.04	0.61	11.65	24	Pass
NVNT	n20	5240	Ant1	10.77	0.6	11.37	24	Pass
NVNT	n40	5190	Ant1	8.44	1.23	9.67	24	Pass
NVNT	n40	5230	Ant1	8.6	1.17	9.77	24	Pass

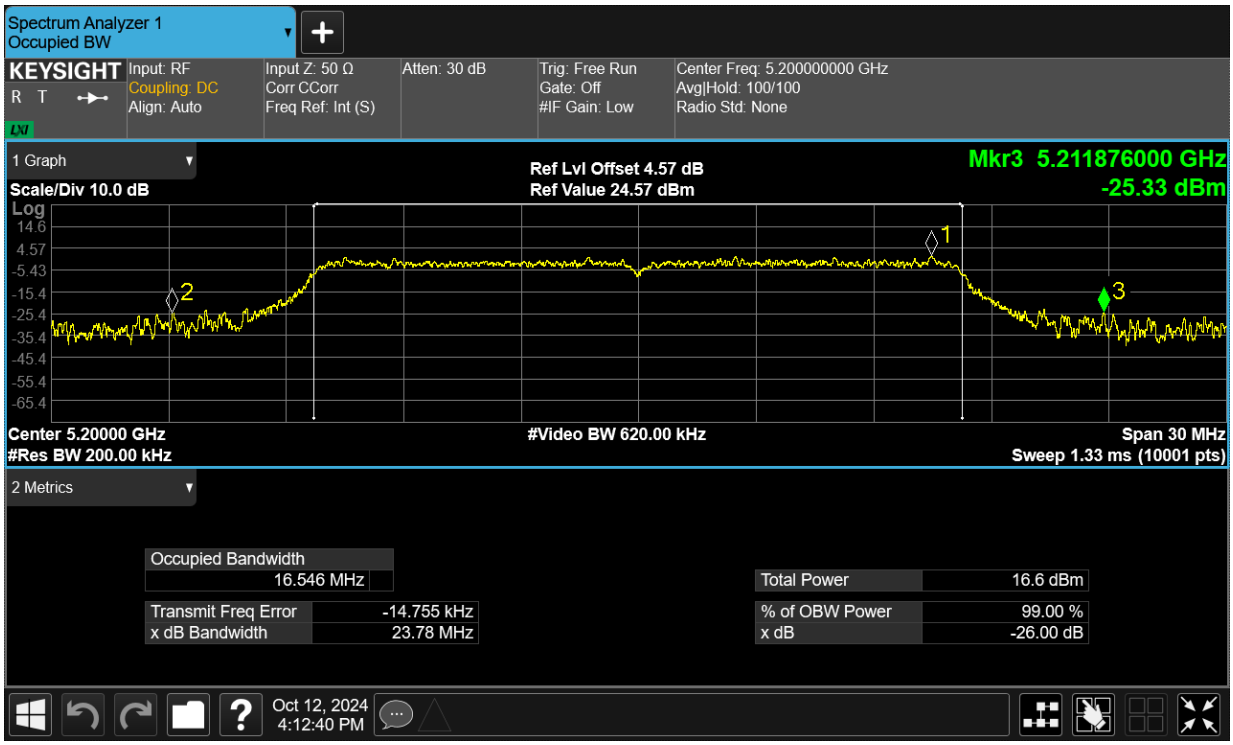
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	21.538
NVNT	a	5200	Ant1	23.782
NVNT	a	5240	Ant1	23.562
NVNT	ac20	5180	Ant1	27.339
NVNT	ac20	5200	Ant1	22.51
NVNT	ac20	5240	Ant1	21.449
NVNT	ac40	5190	Ant1	51.391
NVNT	ac40	5230	Ant1	47.972
NVNT	ac80	5210	Ant1	78.345
NVNT	n20	5180	Ant1	25.486
NVNT	n20	5200	Ant1	25.853
NVNT	n20	5240	Ant1	26.191
NVNT	n40	5190	Ant1	49.596
NVNT	n40	5230	Ant1	54.135

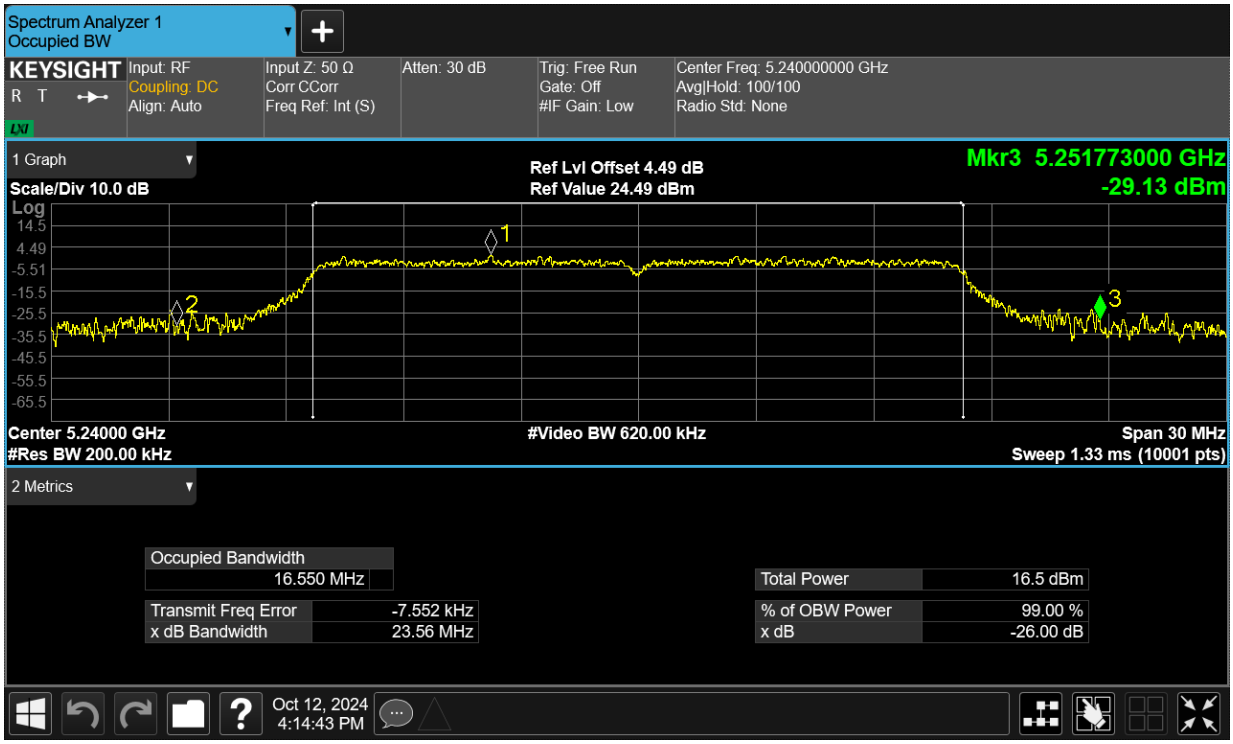
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1



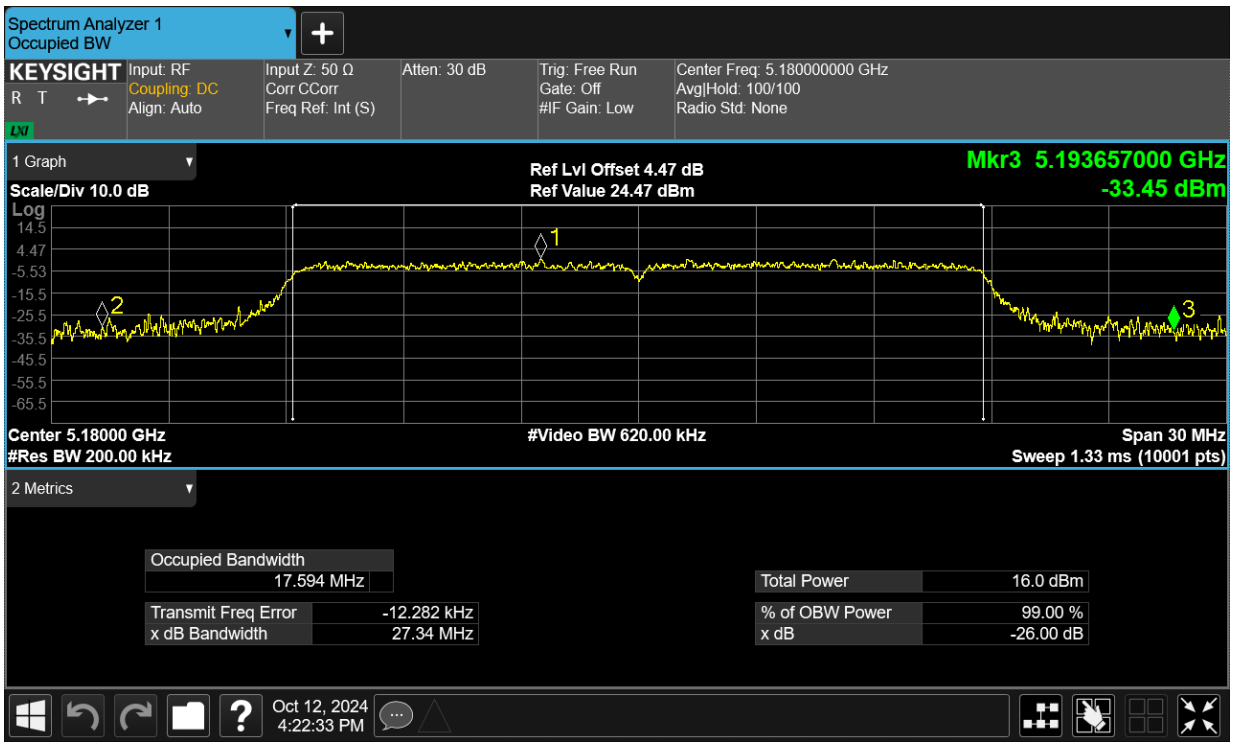
-26dB Bandwidth NVNT a 5200MHz Ant1



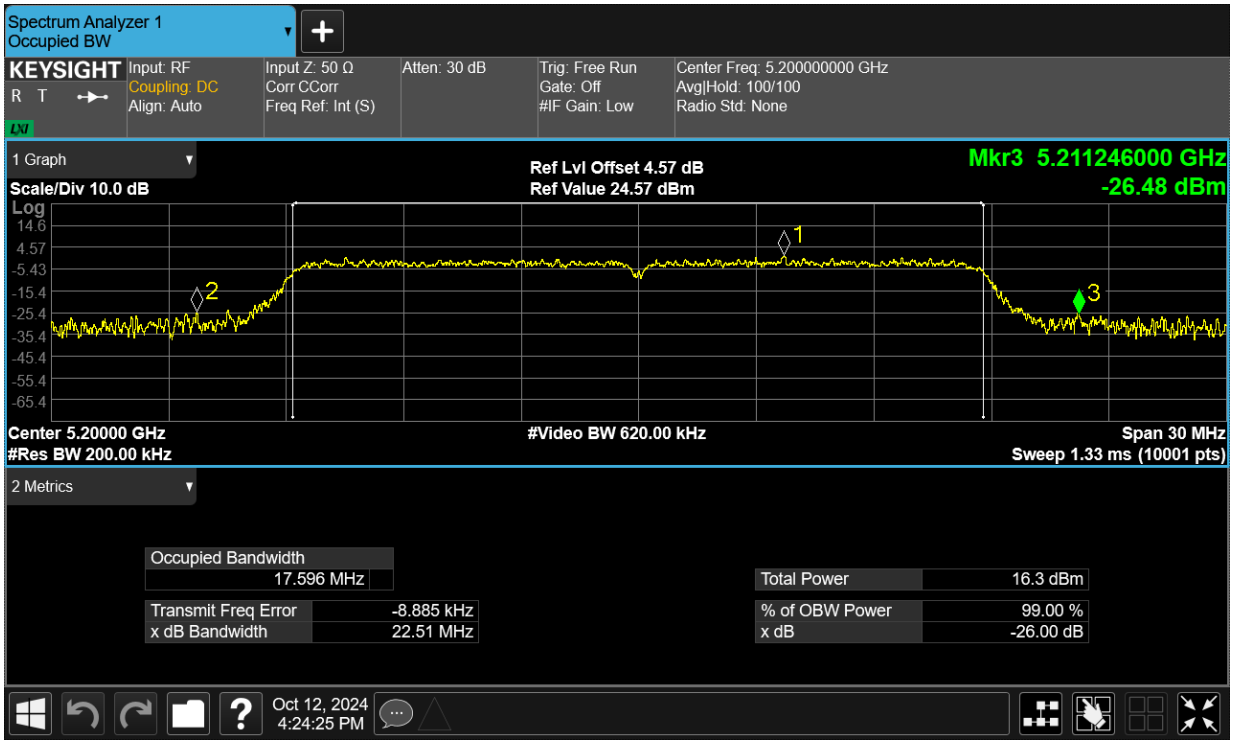
-26dB Bandwidth NVNT a 5240MHz Ant1



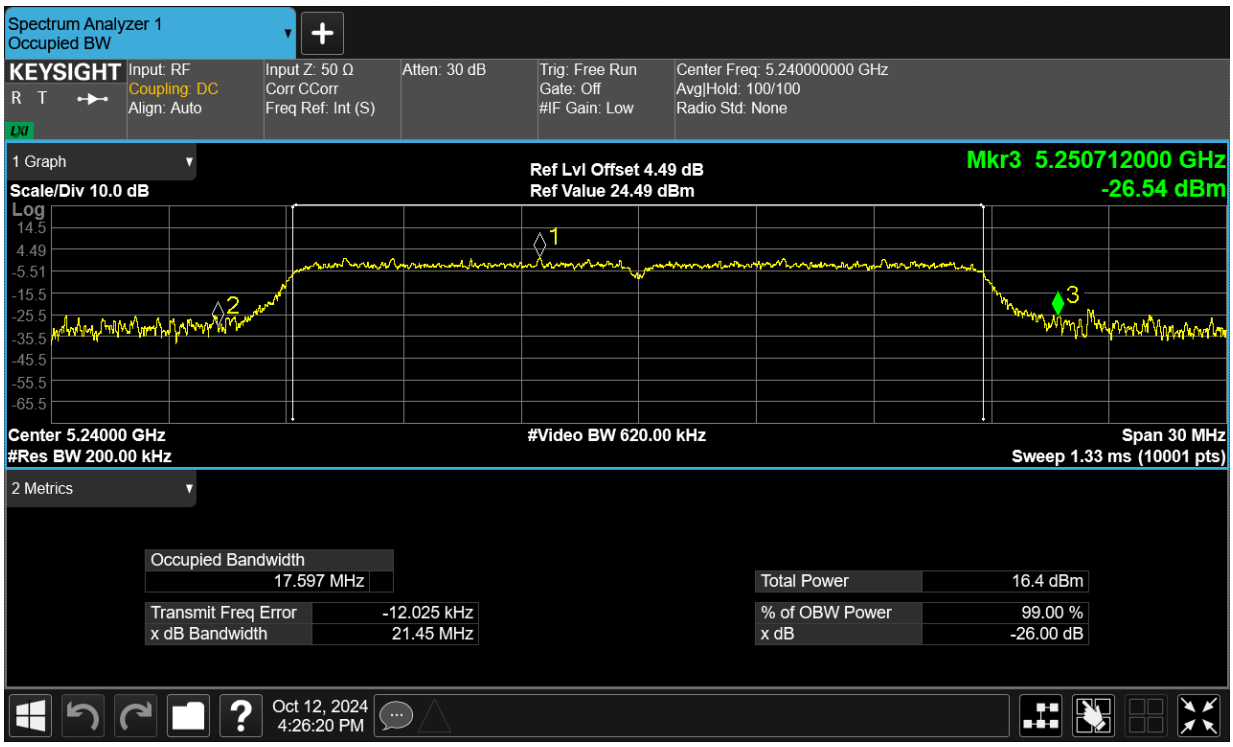
-26dB Bandwidth NVNT ac20 5180MHz Ant1



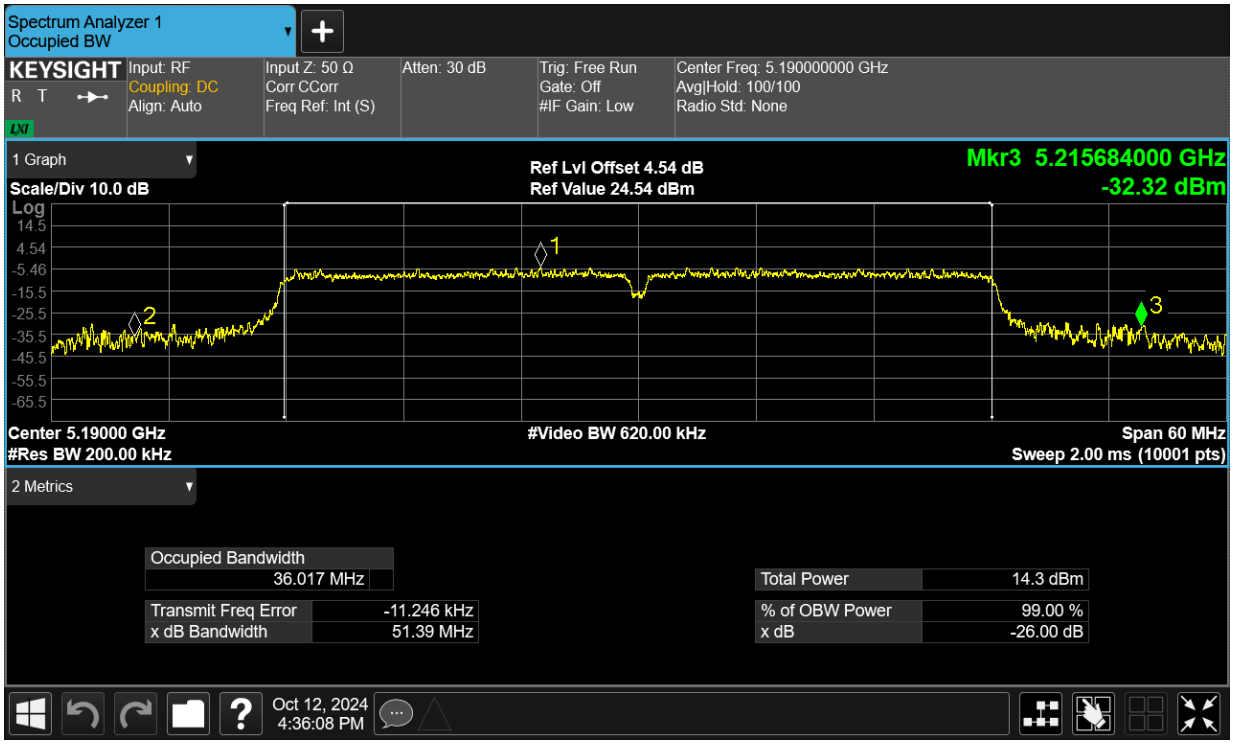
-26dB Bandwidth NVNT ac20 5200MHz Ant1



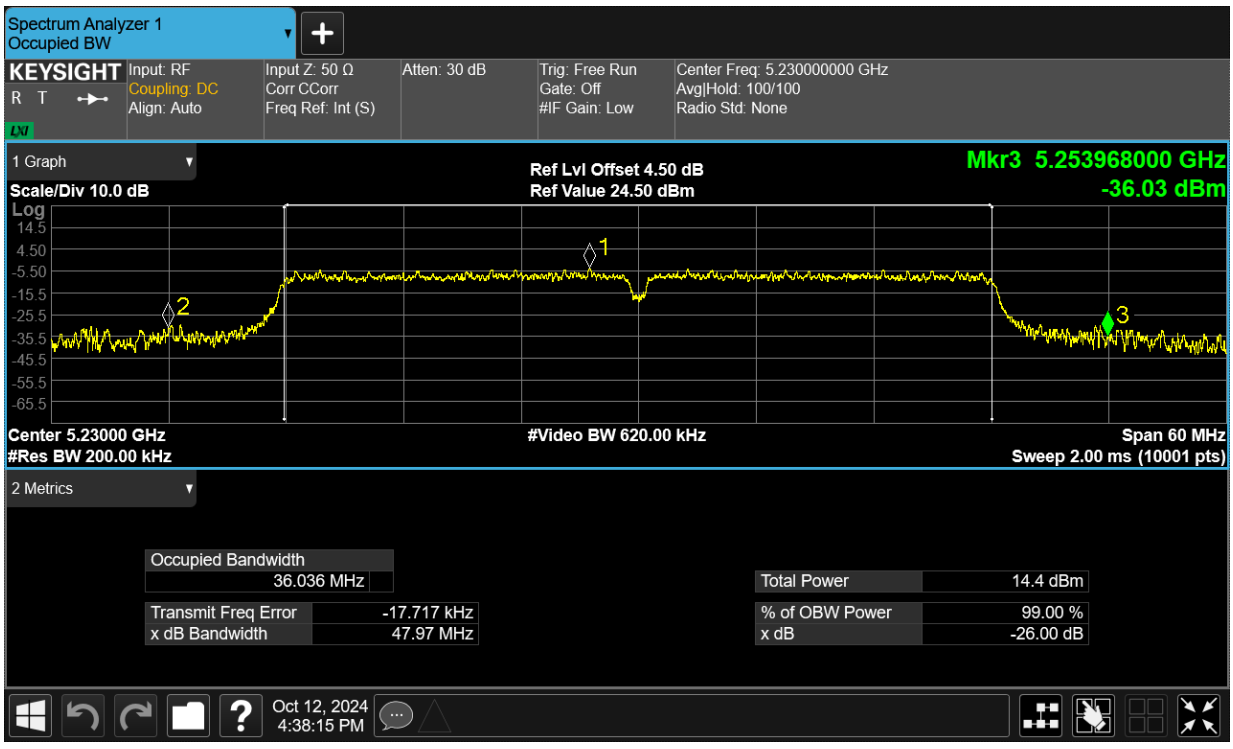
-26dB Bandwidth NVNT ac20 5240MHz Ant1



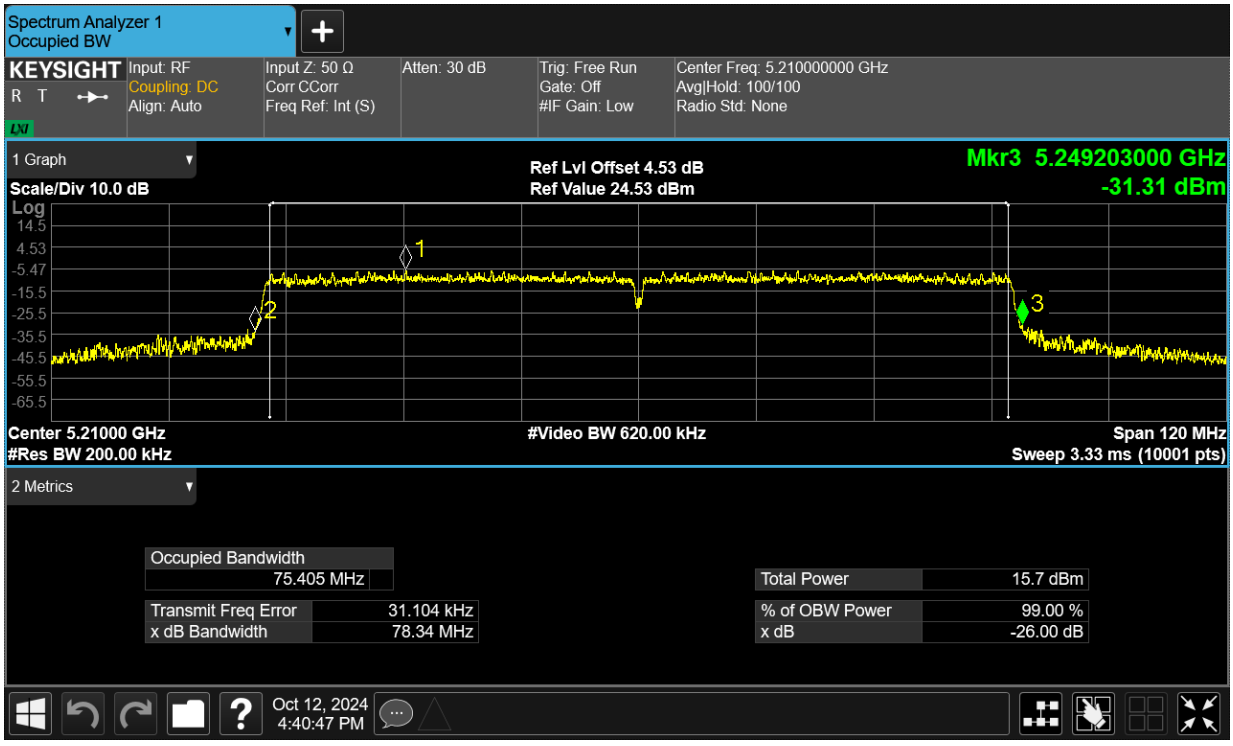
-26dB Bandwidth NVNT ac40 5190MHz Ant1



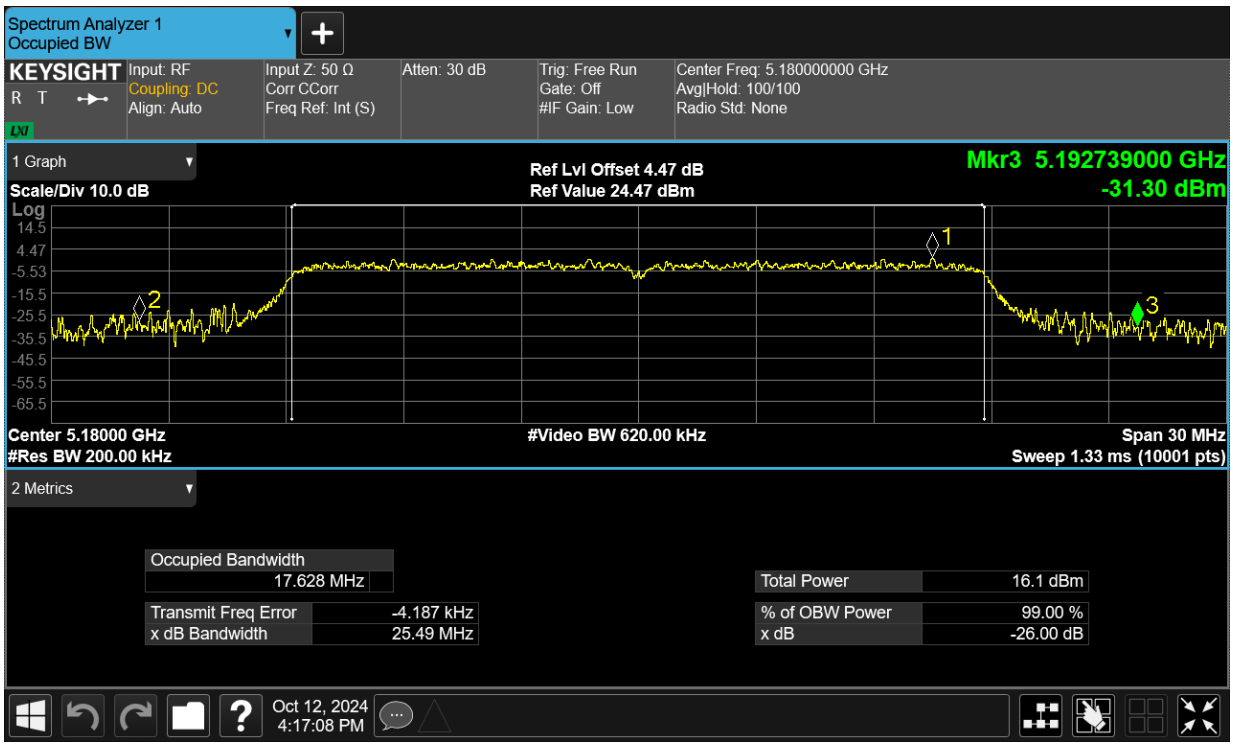
-26dB Bandwidth NVNT ac40 5230MHz Ant1



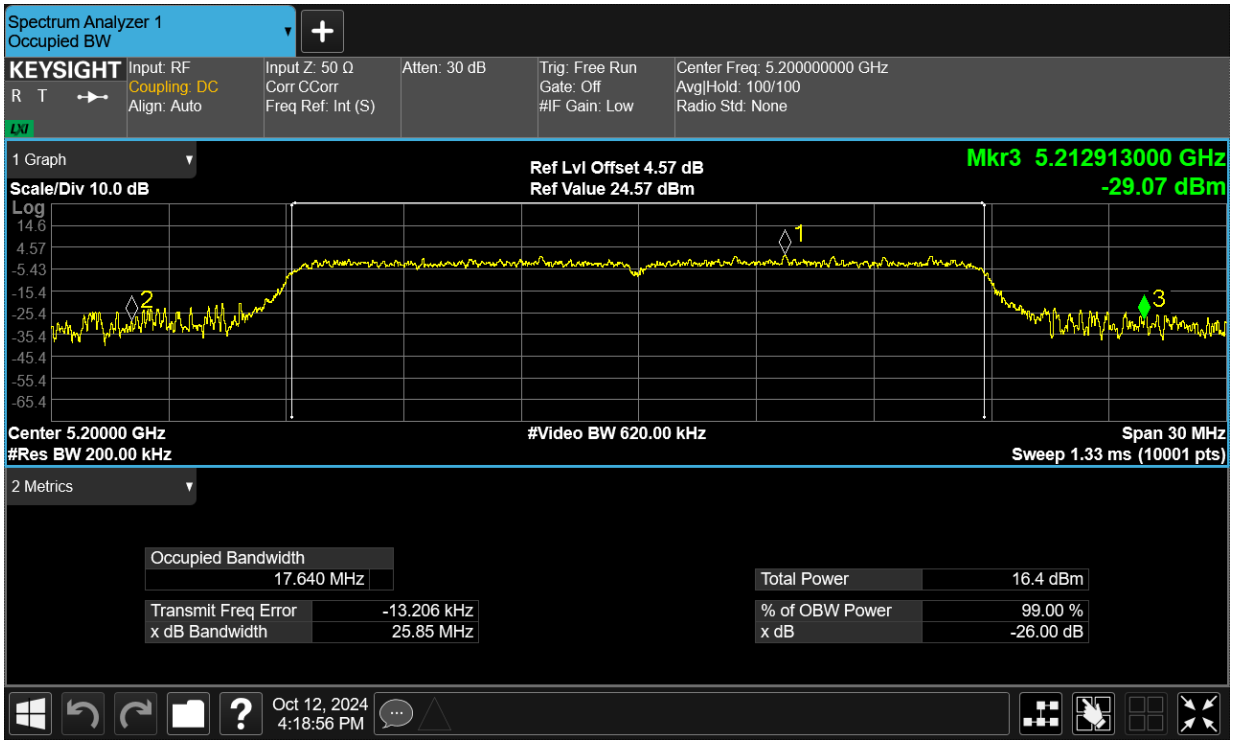
-26dB Bandwidth NVNT ac80 5210MHz Ant1



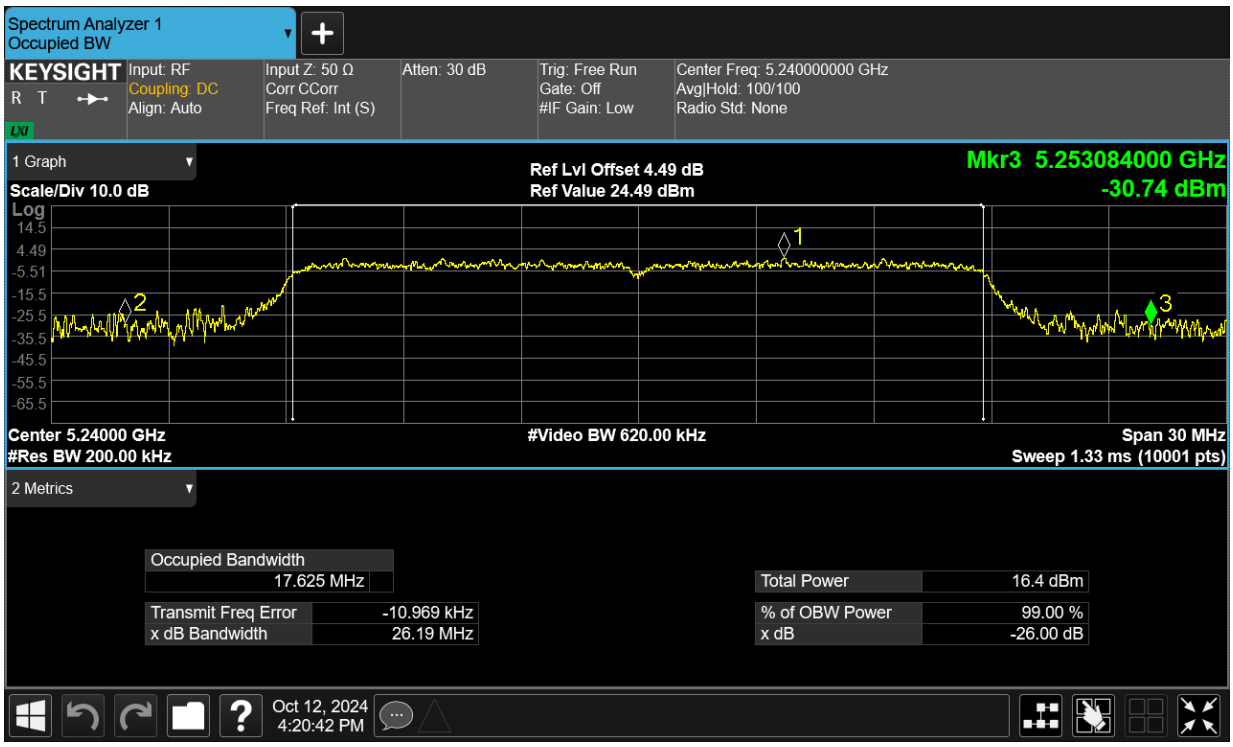
-26dB Bandwidth NVNT n20 5180MHz Ant1



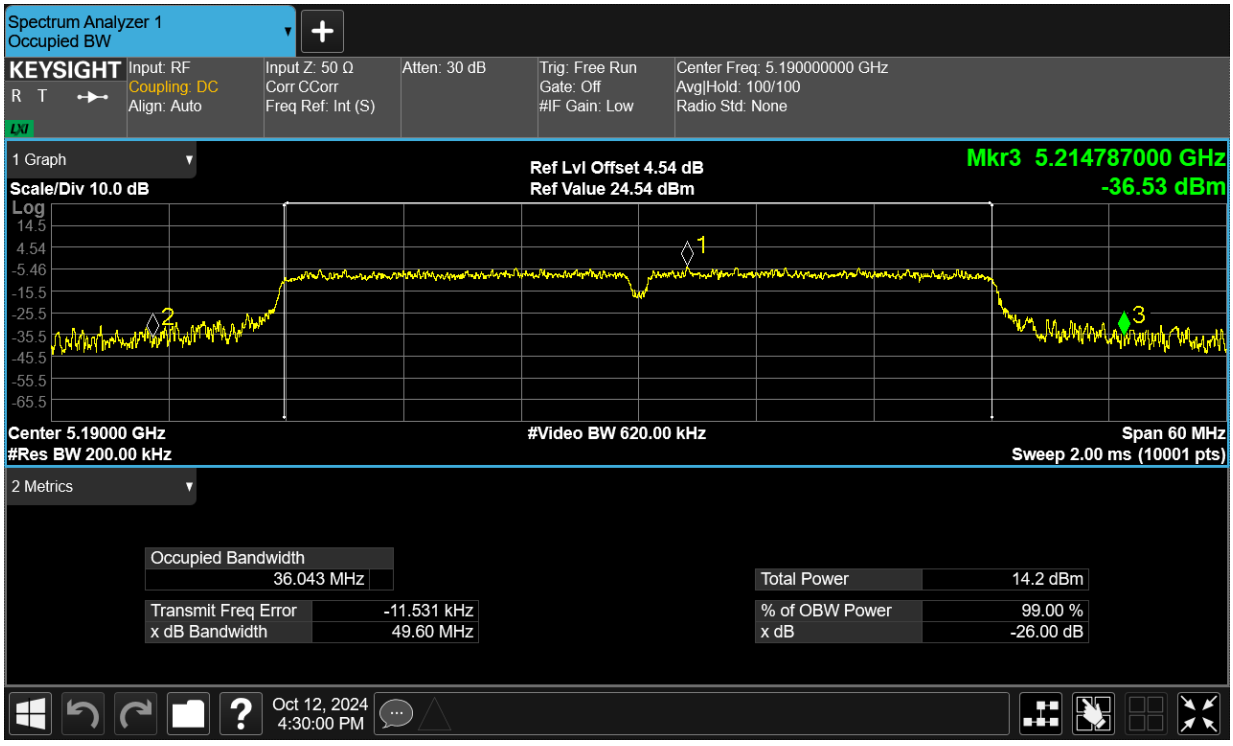
-26dB Bandwidth NVNT n20 5200MHz Ant1



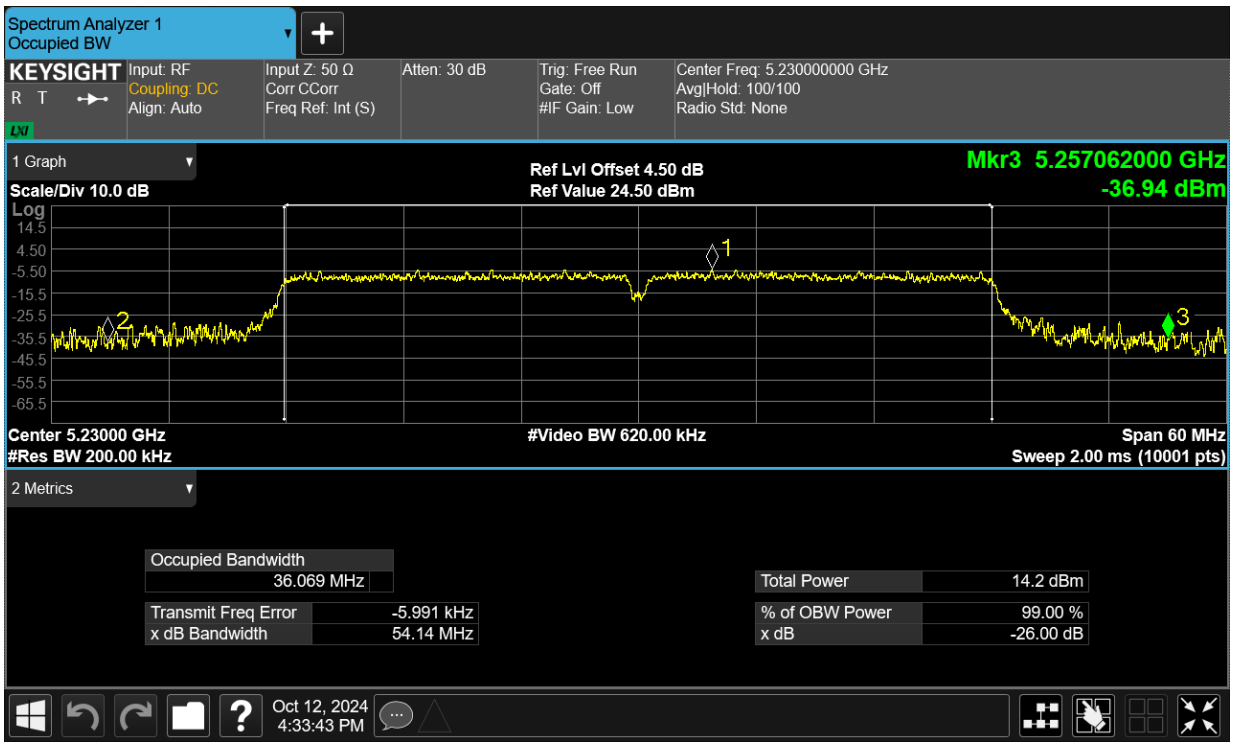
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



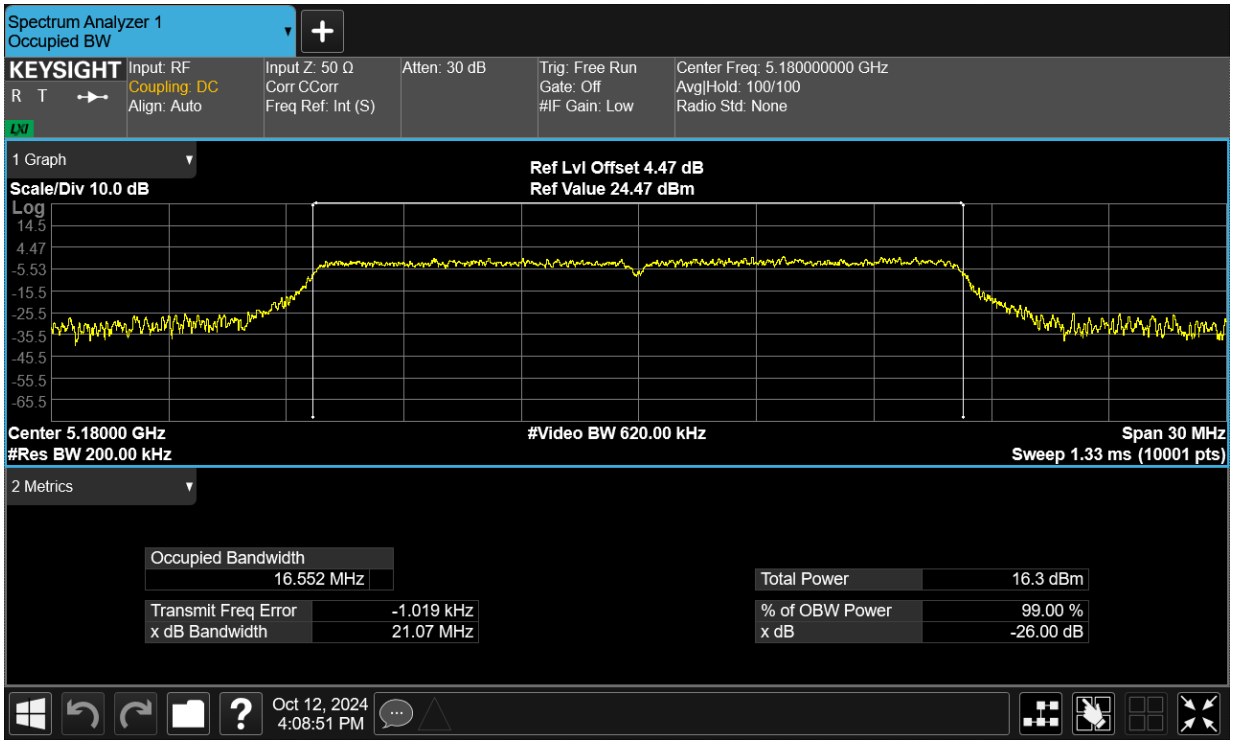
-26dB Bandwidth NVNT n40 5230MHz Ant1



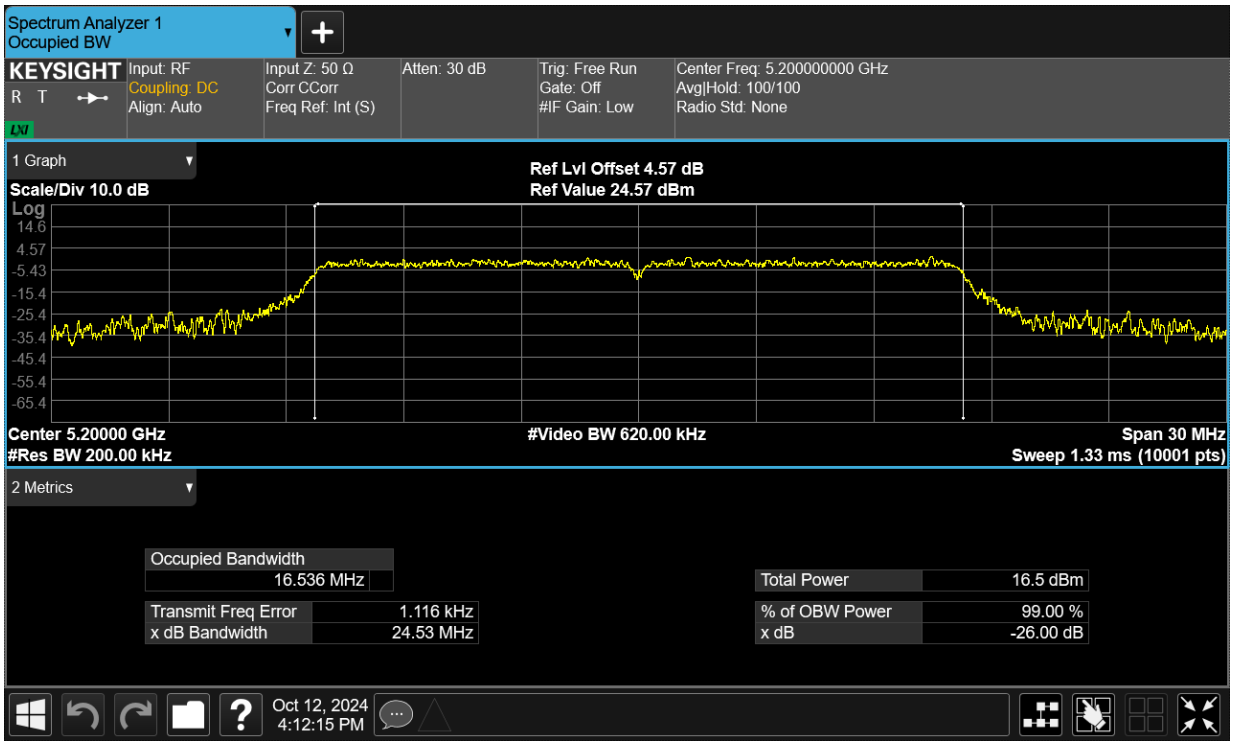
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.552
NVNT	a	5200	Ant1	16.536
NVNT	a	5240	Ant1	16.547
NVNT	ac20	5180	Ant1	17.608
NVNT	ac20	5200	Ant1	17.604
NVNT	ac20	5240	Ant1	17.592
NVNT	ac40	5190	Ant1	36.191
NVNT	ac40	5230	Ant1	36.135
NVNT	ac80	5210	Ant1	75.522
NVNT	n20	5180	Ant1	17.637
NVNT	n20	5200	Ant1	17.594
NVNT	n20	5240	Ant1	17.634
NVNT	n40	5190	Ant1	36.163
NVNT	n40	5230	Ant1	36.138

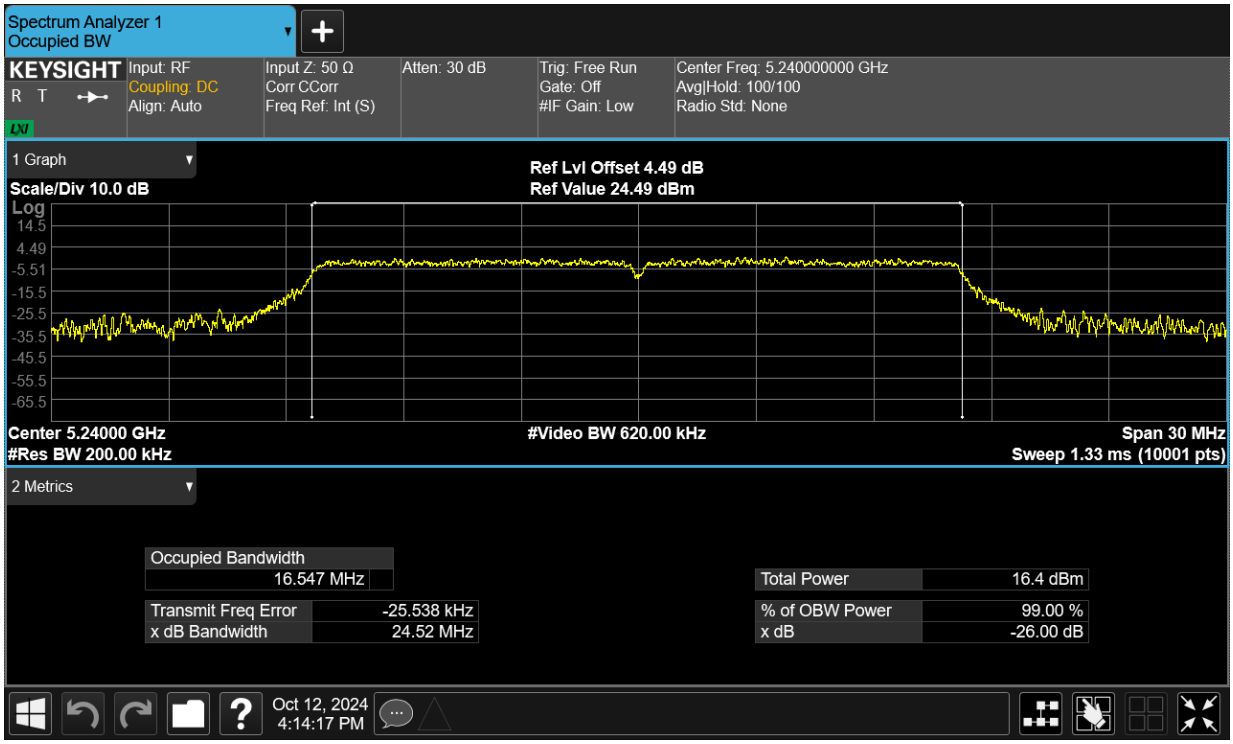
Test Graphs
OBW NVNT a 5180MHz Ant1



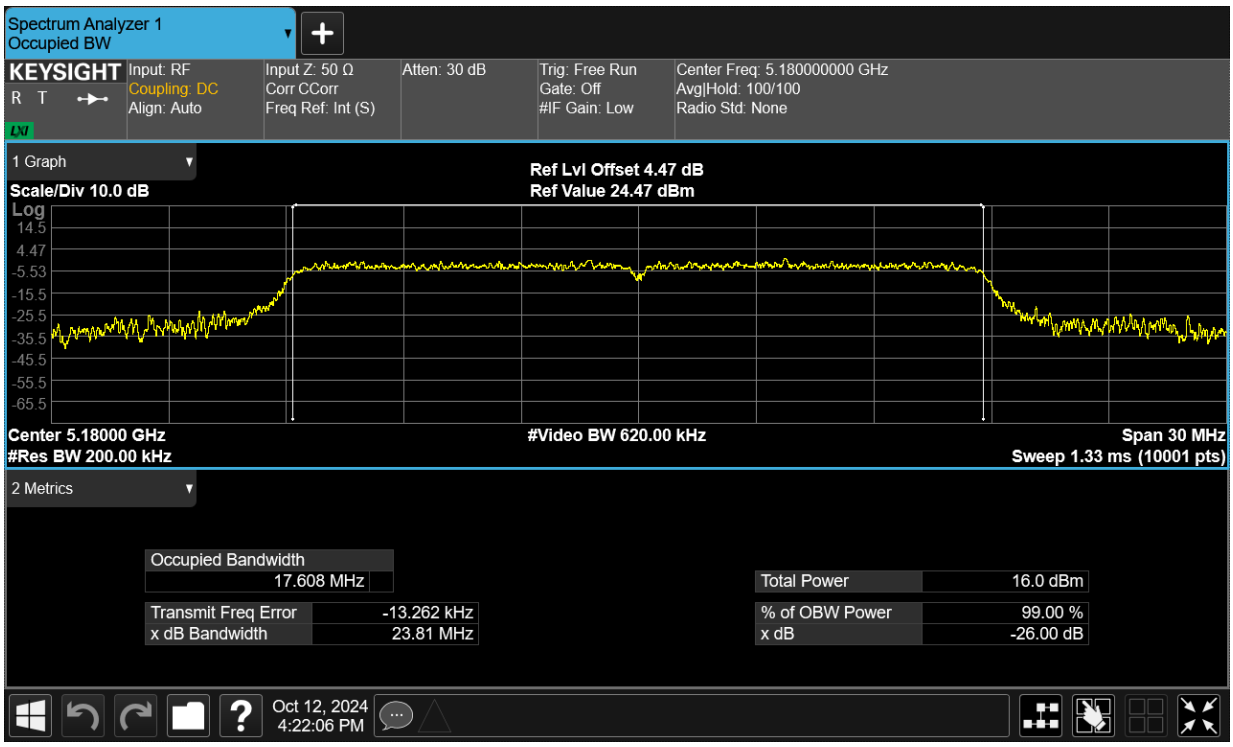
OBW NVNT a 5200MHz Ant1



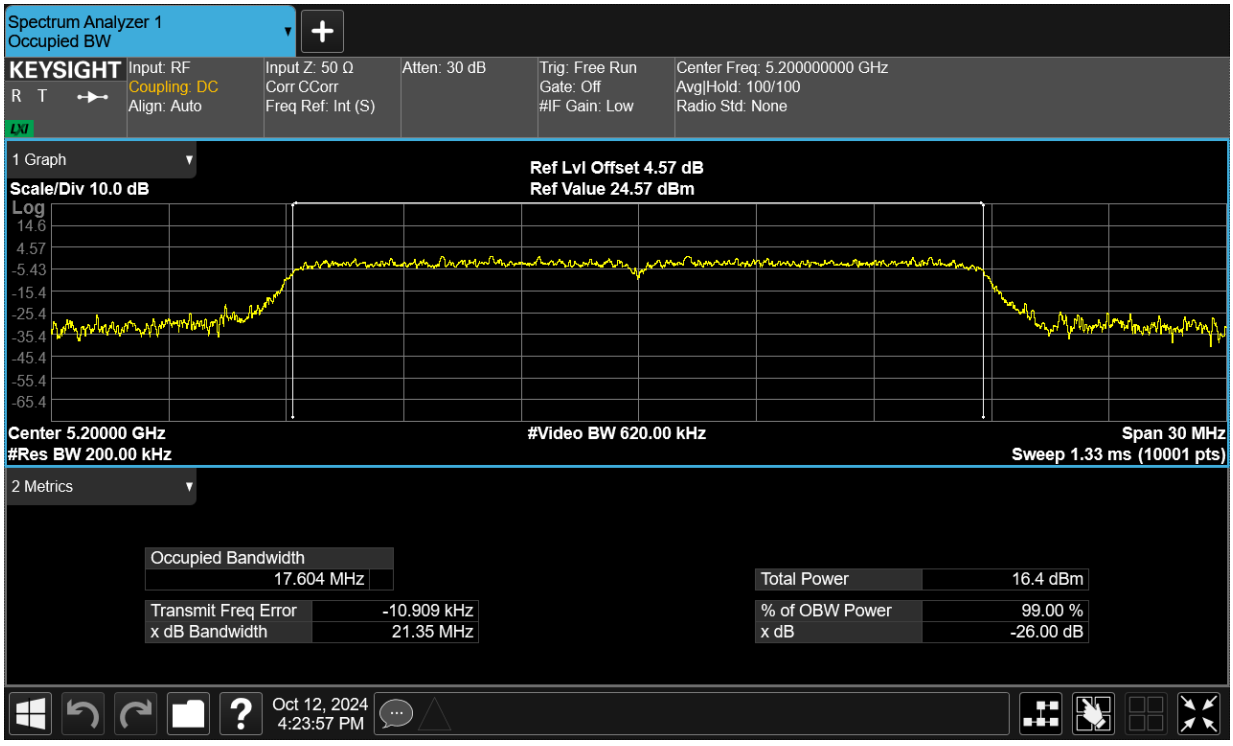
OBW NVNT a 5240MHz Ant1



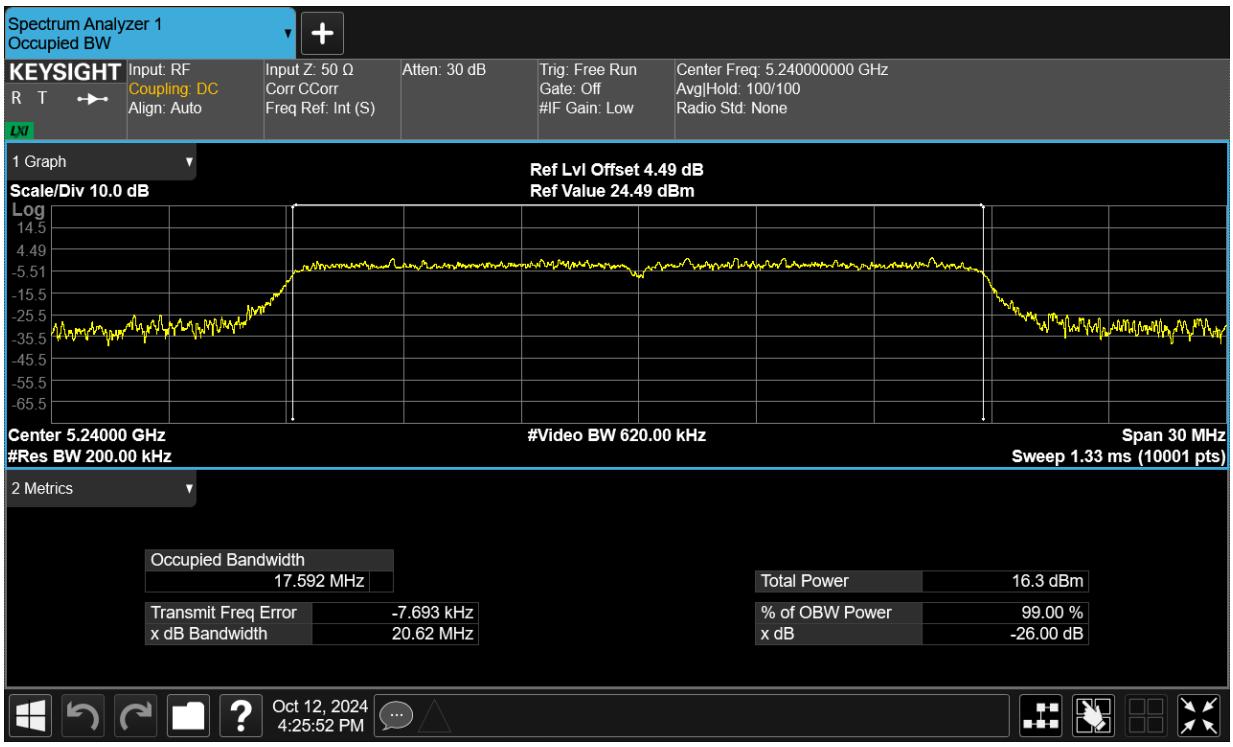
OBW NVNT ac20 5180MHz Ant1



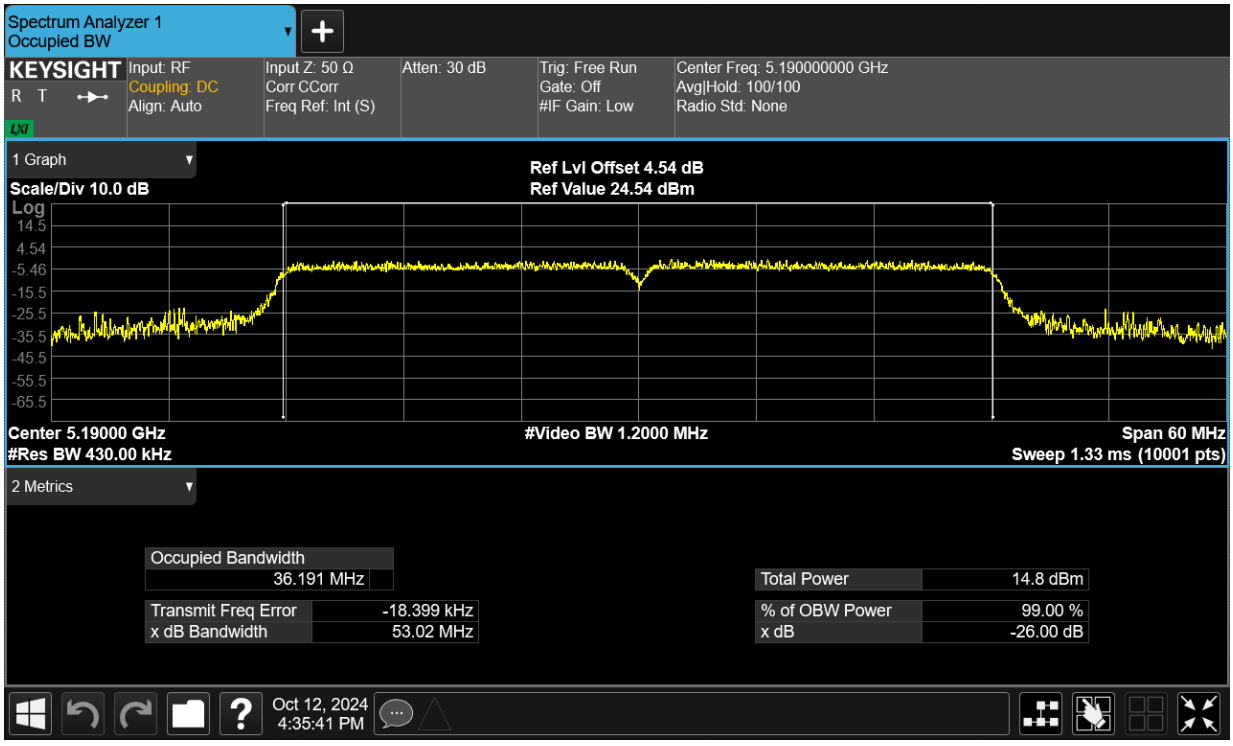
OBW NVNT ac20 5200MHz Ant1



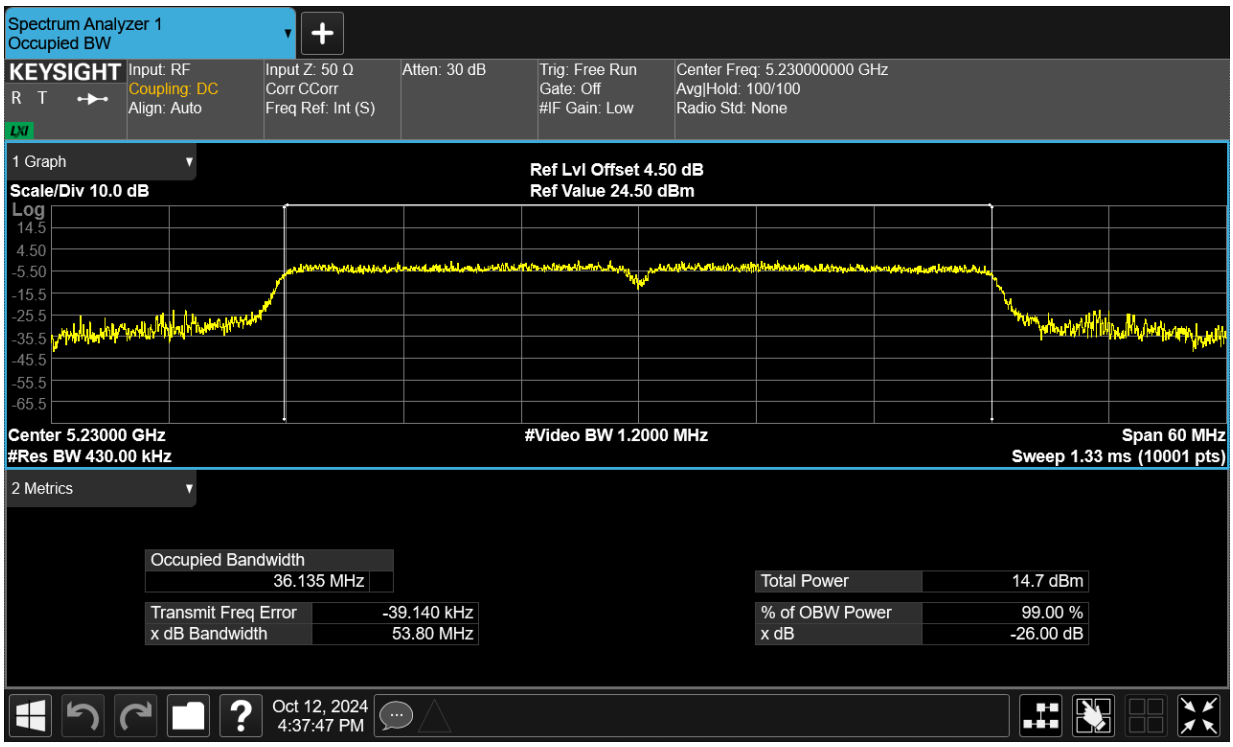
OBW NVNT ac20 5240MHz Ant1



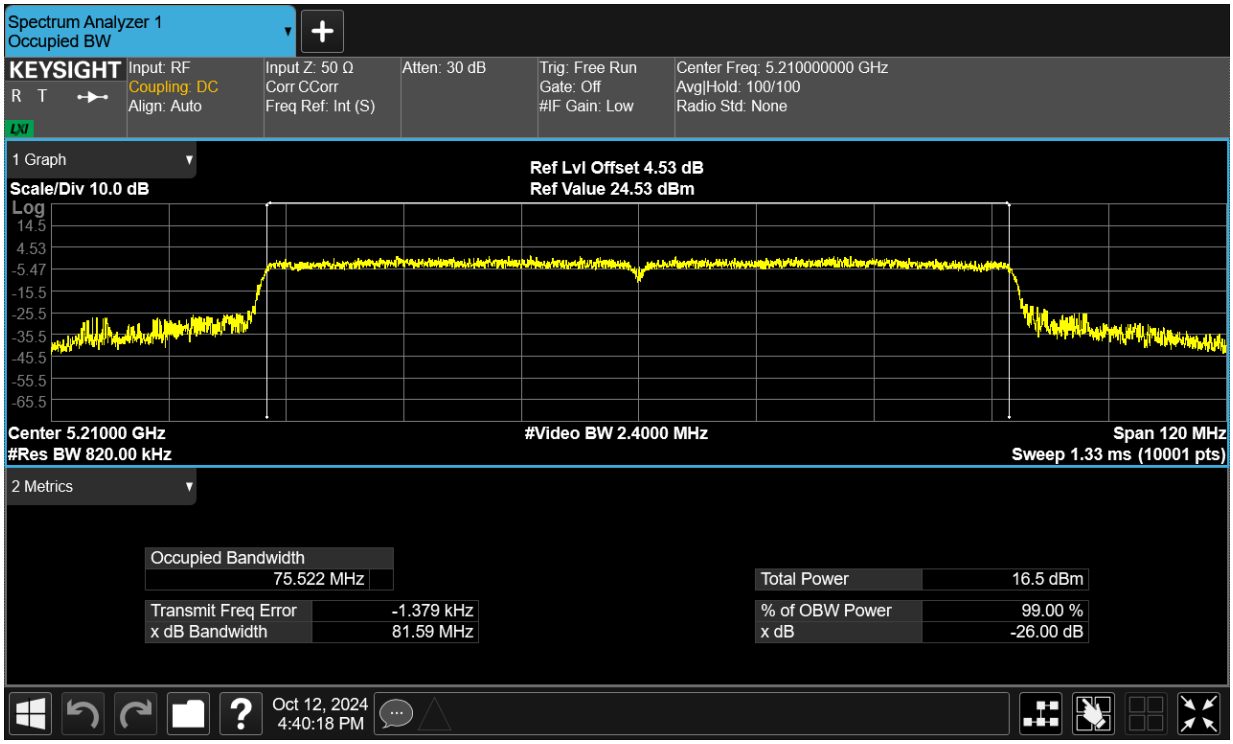
OBW NVNT ac40 5190MHz Ant1



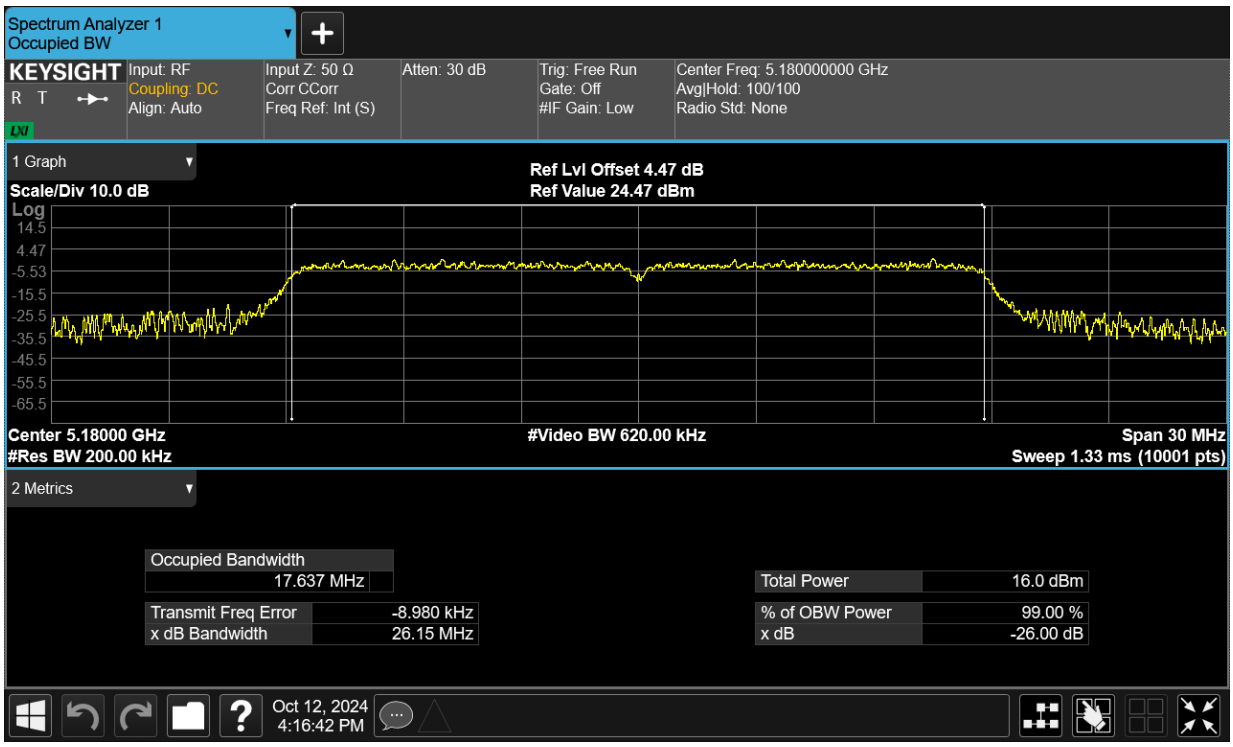
OBW NVNT ac40 5230MHz Ant1



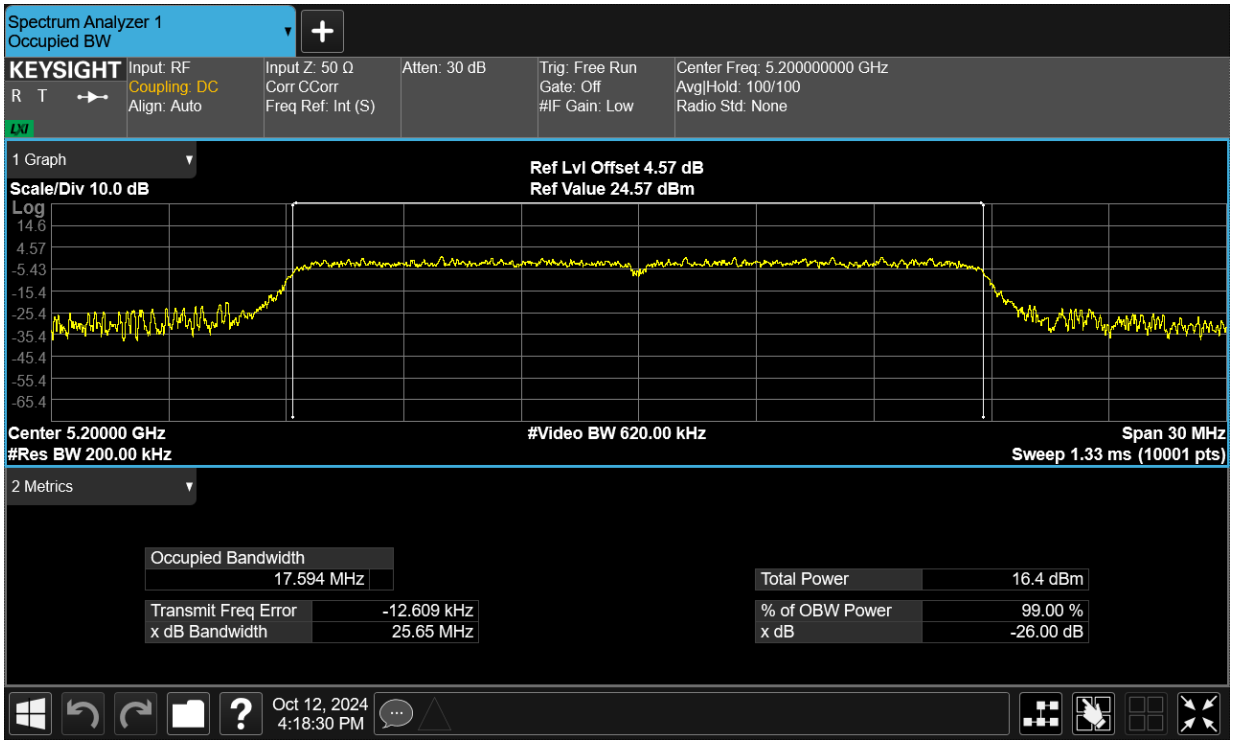
OBW NVNT ac80 5210MHz Ant1



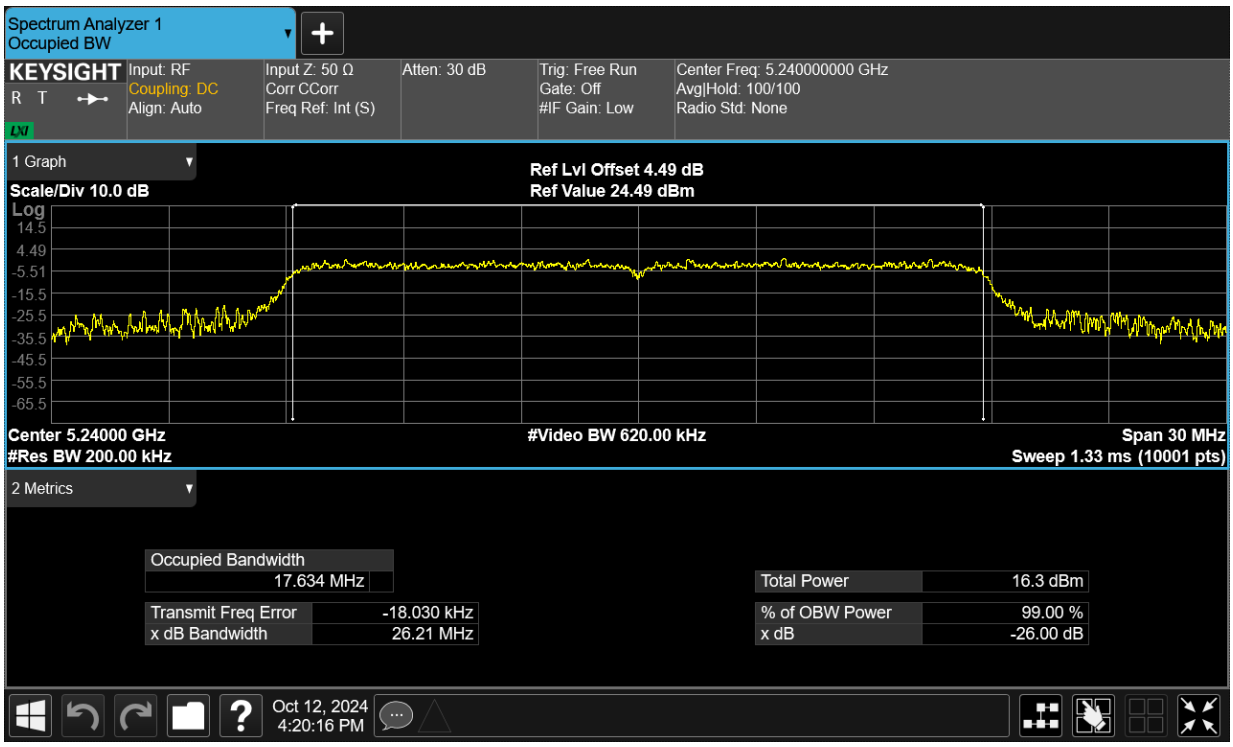
OBW NVNT n20 5180MHz Ant1



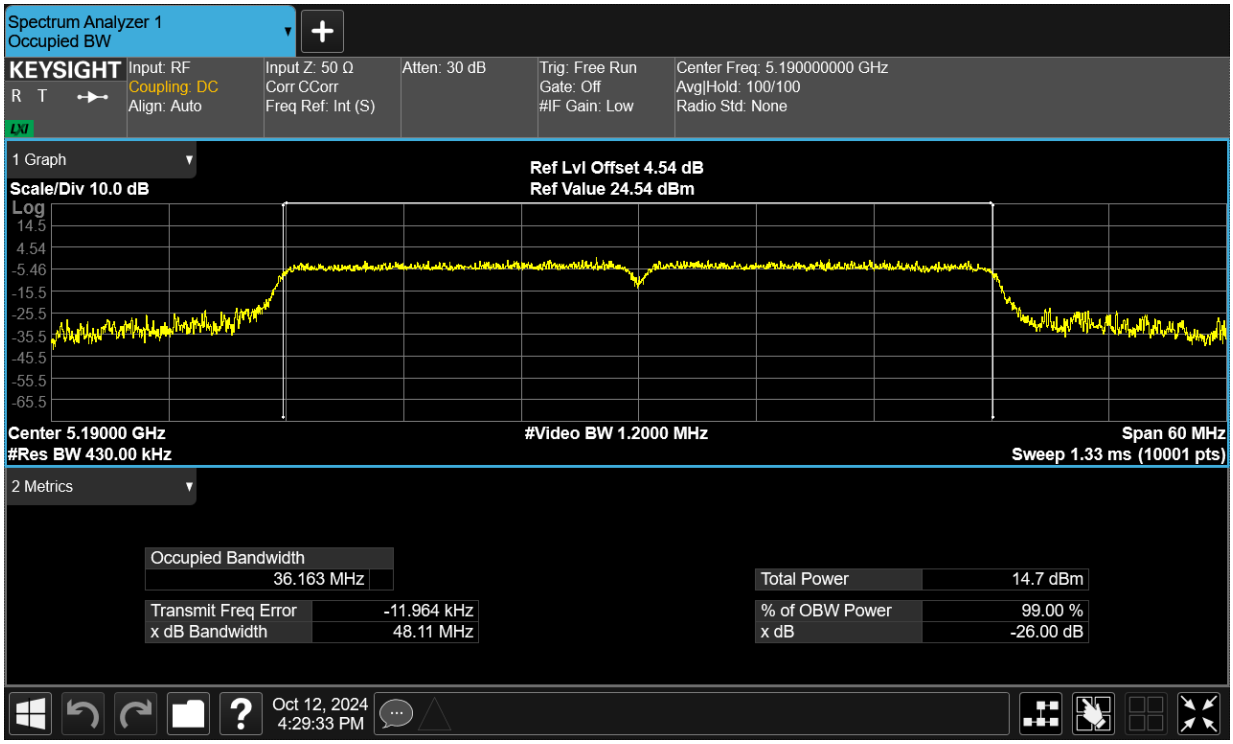
OBW NVNT n20 5200MHz Ant1



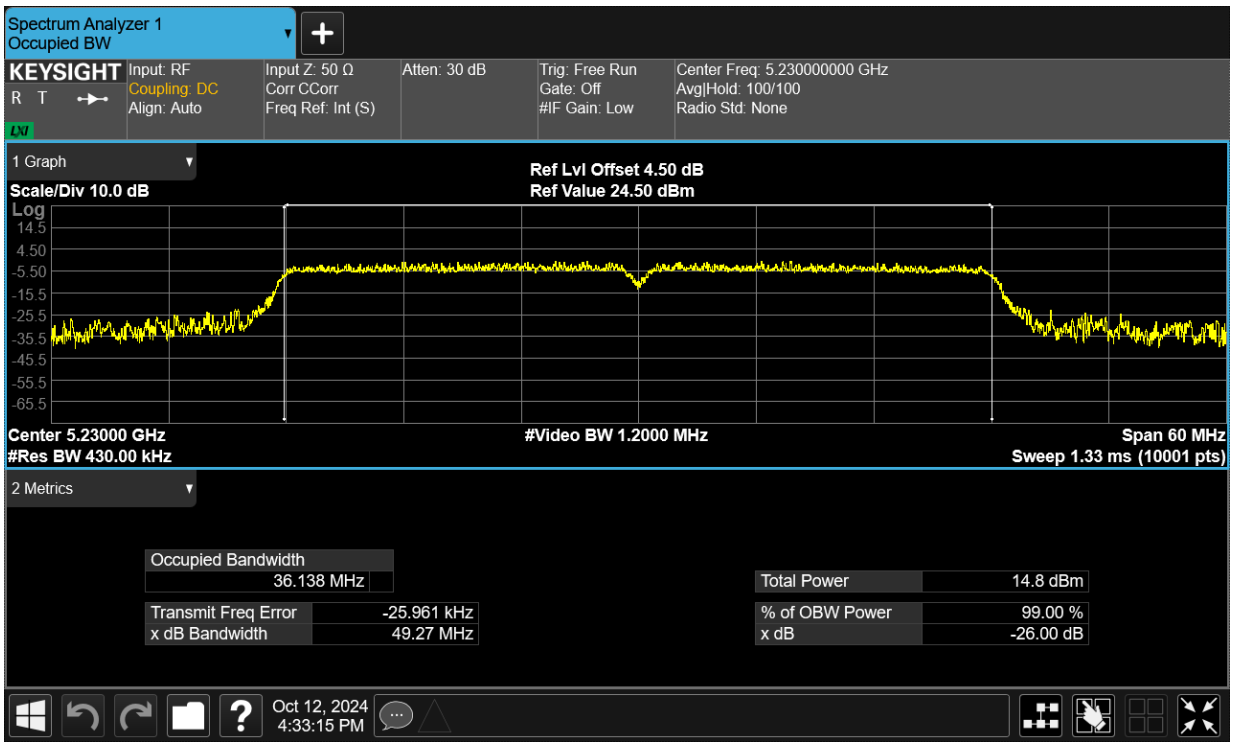
OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



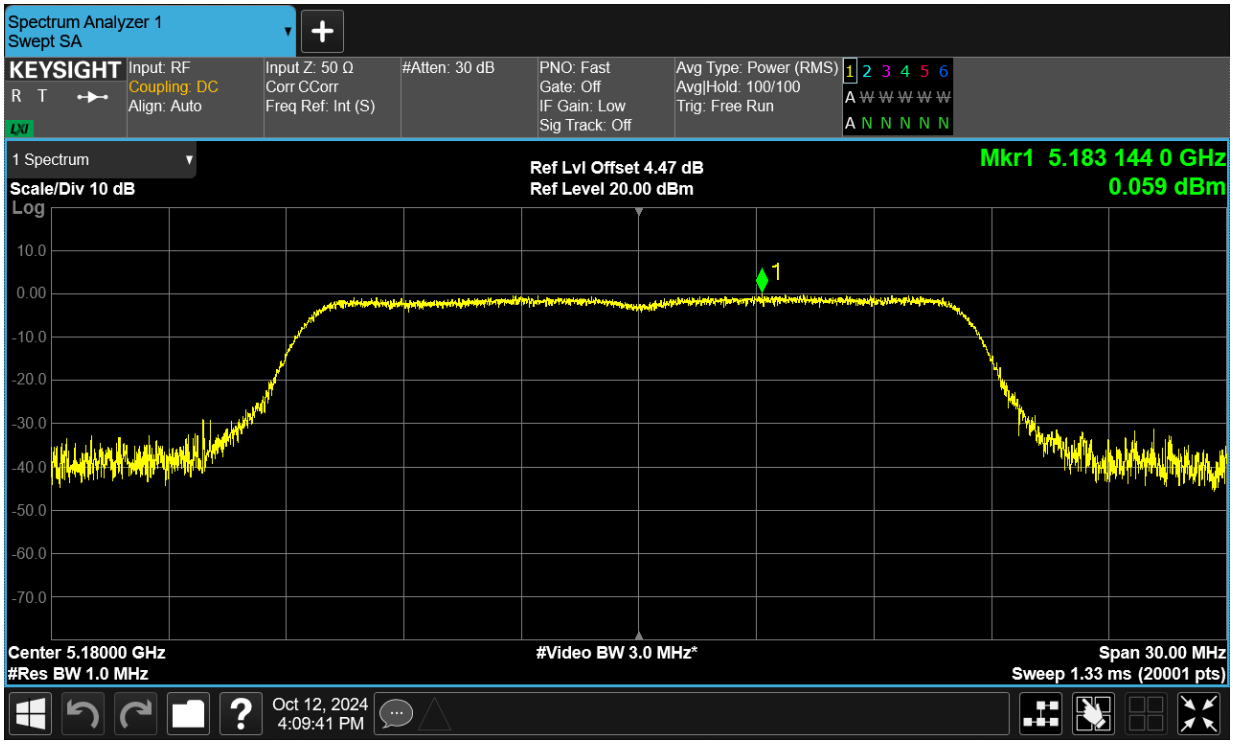
OBW NVNT n40 5230MHz Ant1



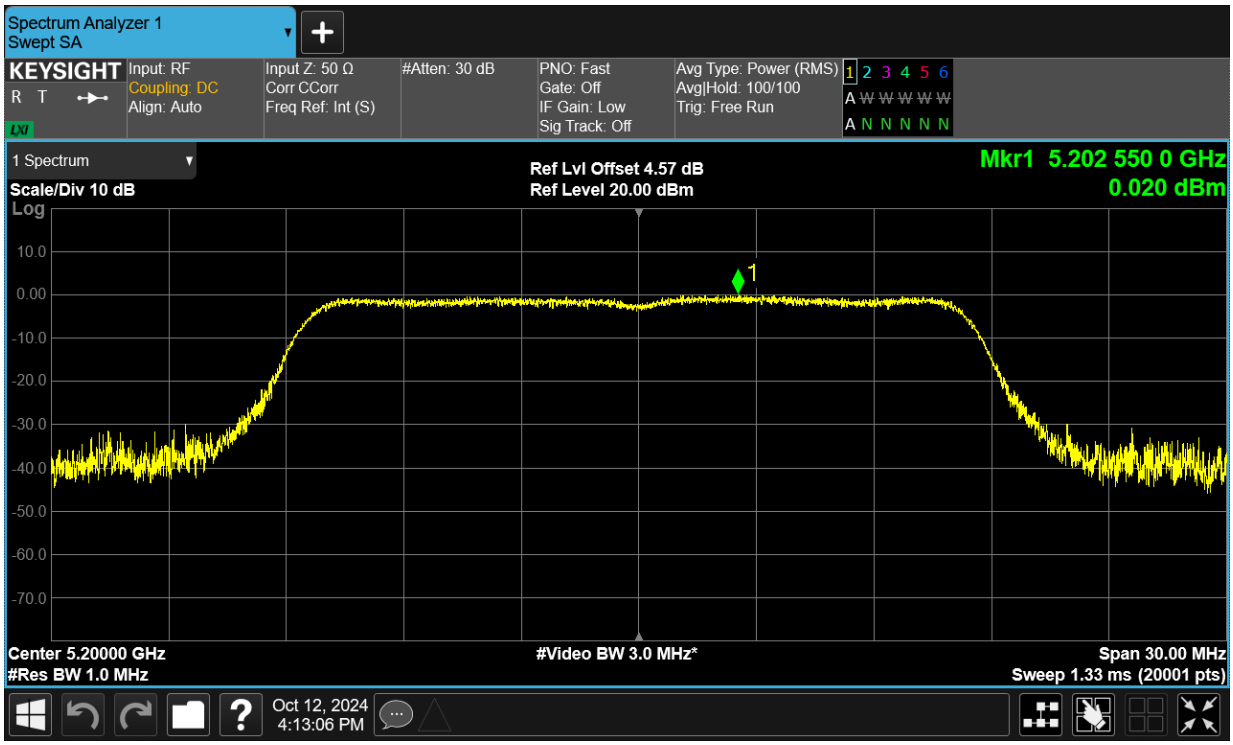
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	0.059	11	Pass
NVNT	a	5200	Ant1	0.02	11	Pass
NVNT	a	5240	Ant1	-0.239	11	Pass
NVNT	ac20	5180	Ant1	-0.699	11	Pass
NVNT	ac20	5200	Ant1	-0.344	11	Pass
NVNT	ac20	5240	Ant1	-0.348	11	Pass
NVNT	ac40	5190	Ant1	-5.298	11	Pass
NVNT	ac40	5230	Ant1	-5.285	11	Pass
NVNT	ac80	5210	Ant1	-8.417	11	Pass
NVNT	n20	5180	Ant1	-0.594	11	Pass
NVNT	n20	5200	Ant1	-0.182	11	Pass
NVNT	n20	5240	Ant1	-0.354	11	Pass
NVNT	n40	5190	Ant1	-5.442	11	Pass
NVNT	n40	5230	Ant1	-5.671	11	Pass

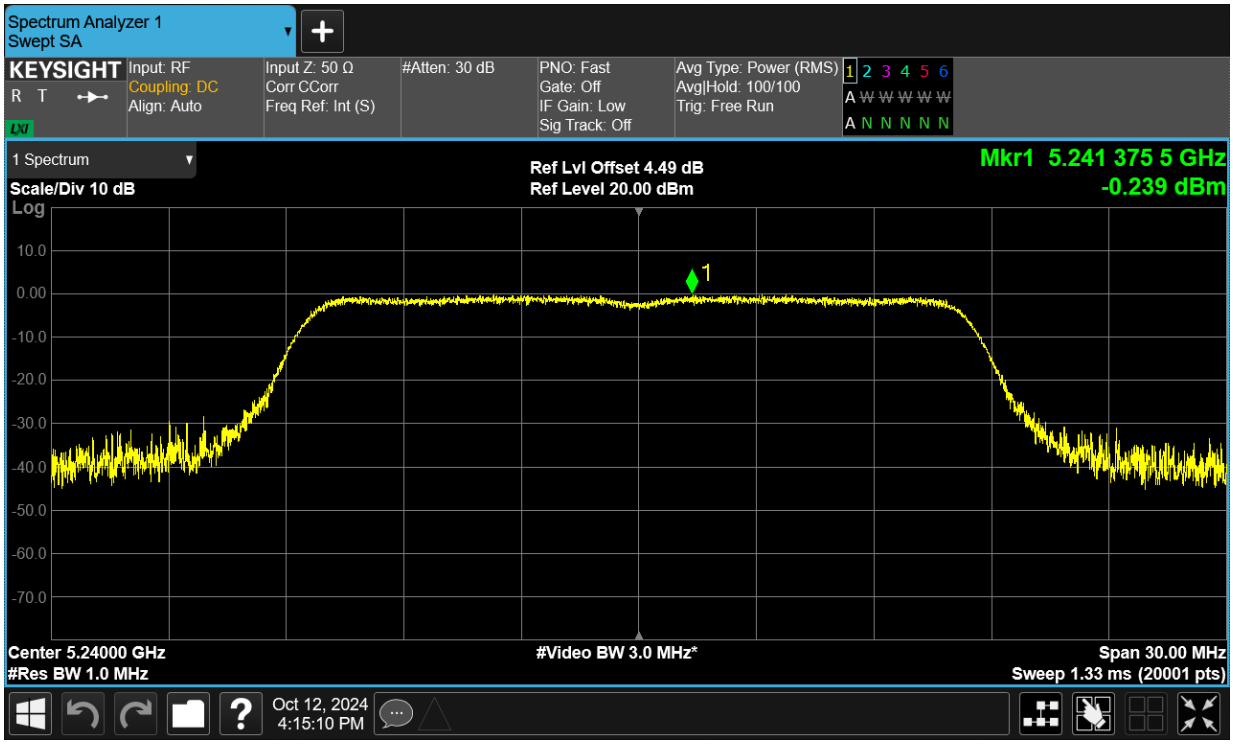
Test Graphs
PSD NVNT a 5180MHz Ant1



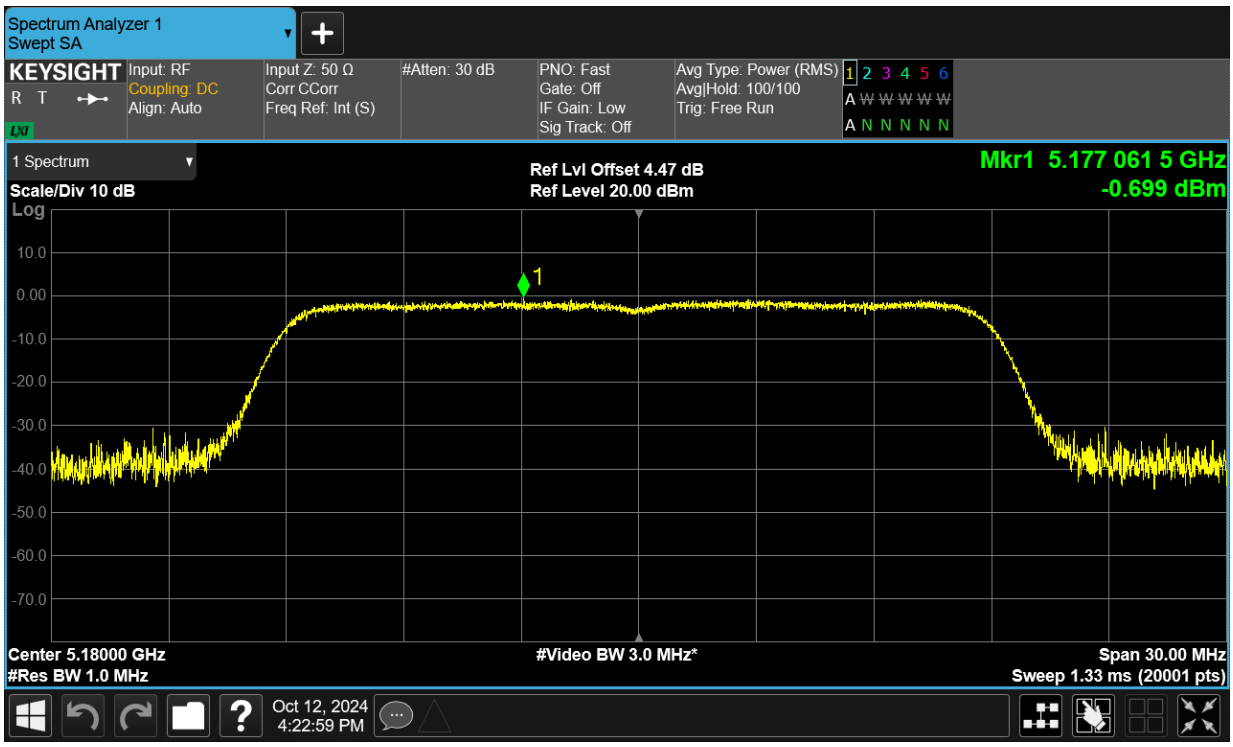
PSD NVNT a 5200MHz Ant1



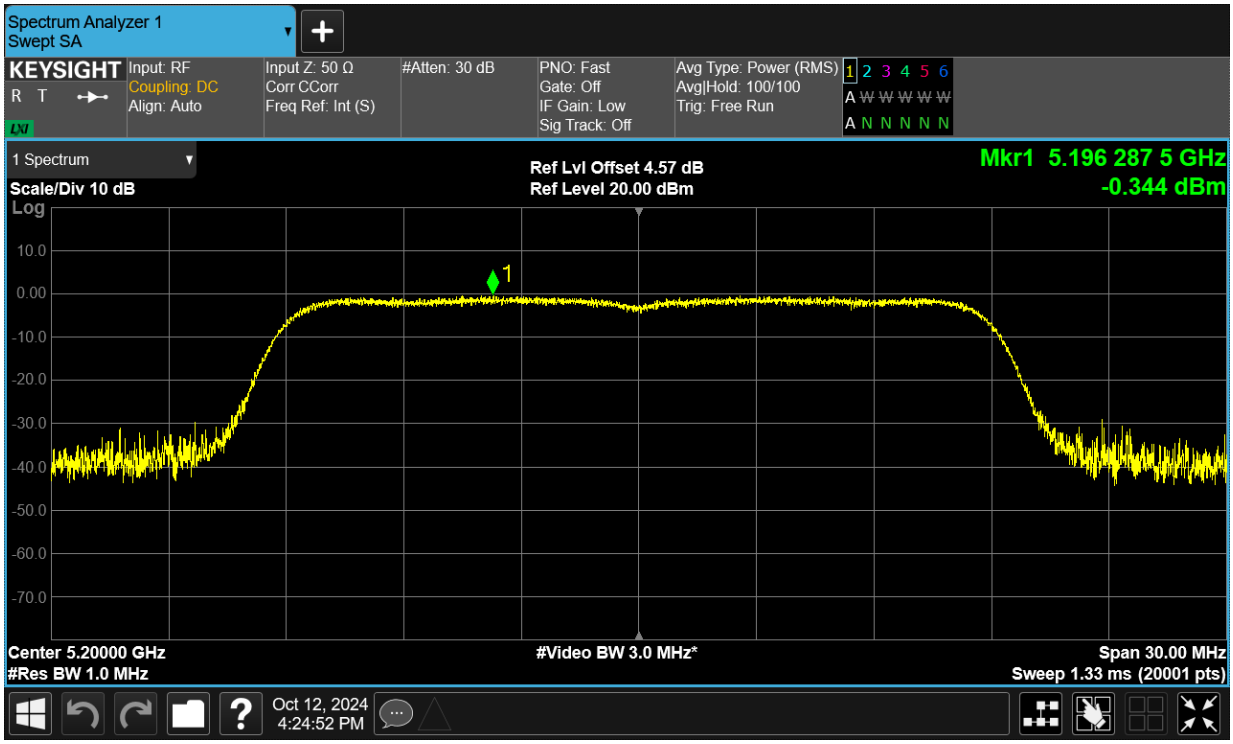
PSD NVNT a 5240MHz Ant1



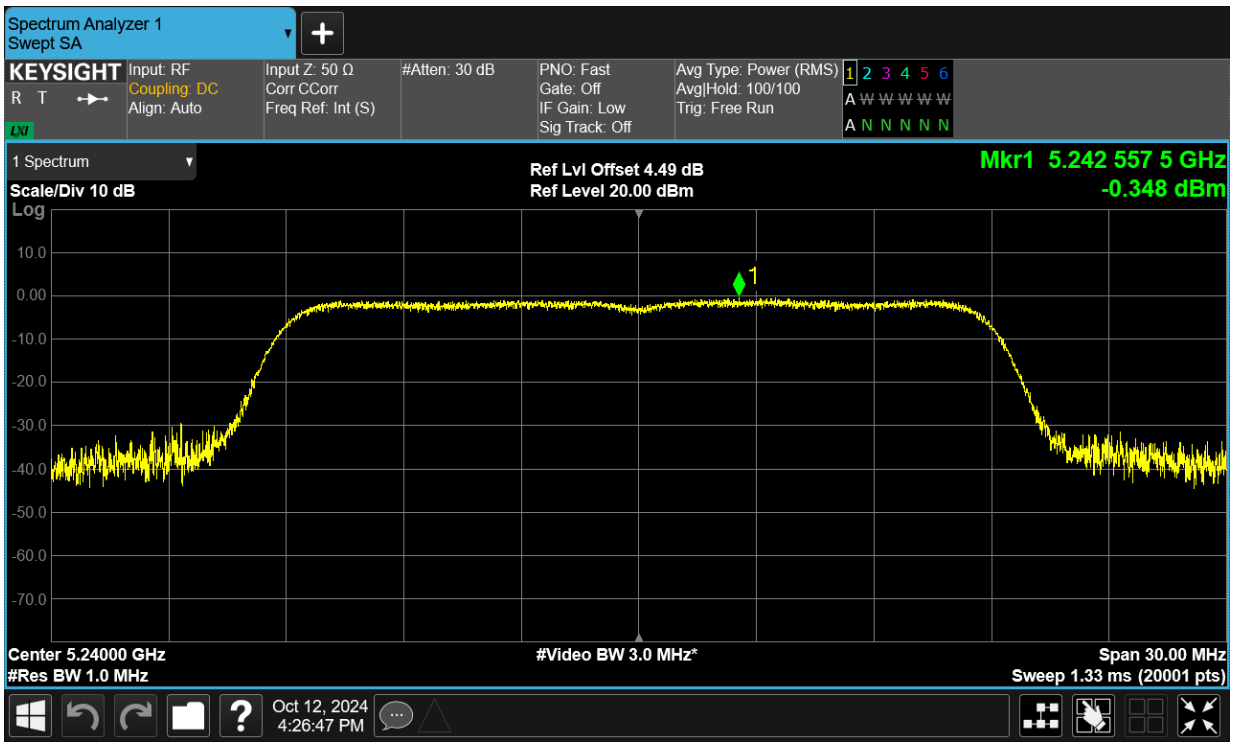
PSD NVNT ac20 5180MHz Ant1



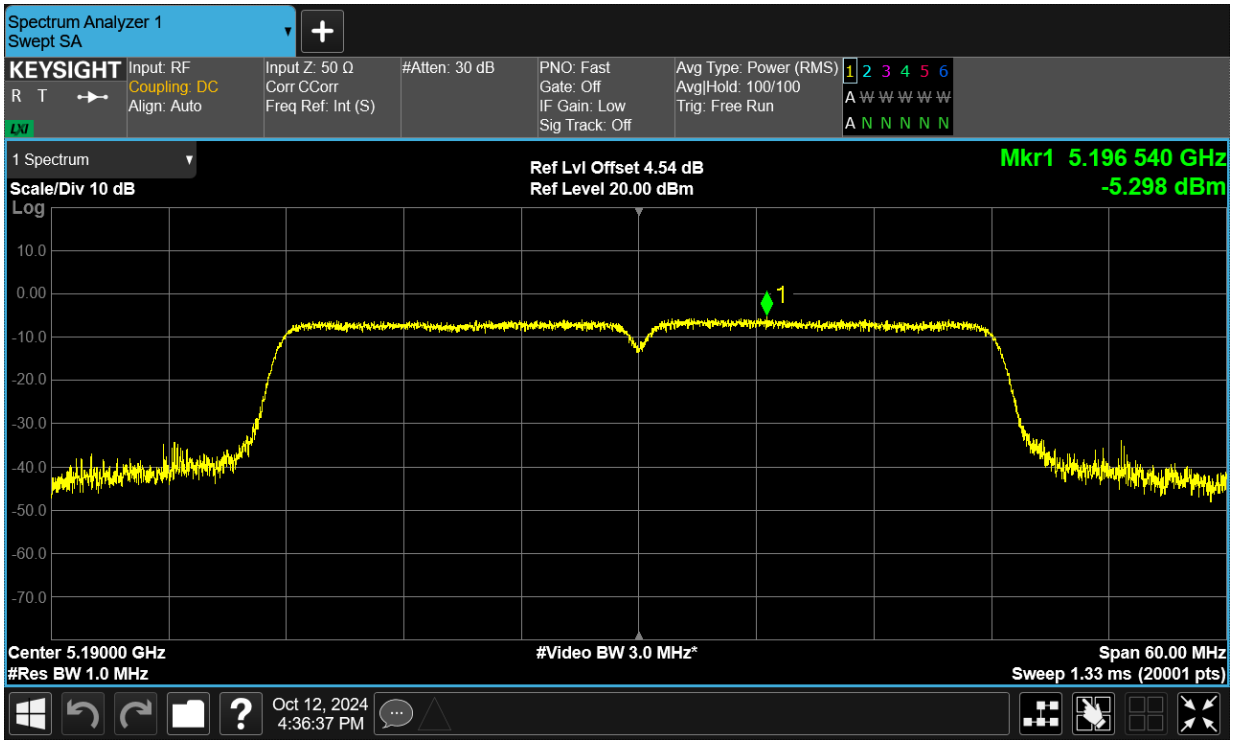
PSD NVNT ac20 5200MHz Ant1



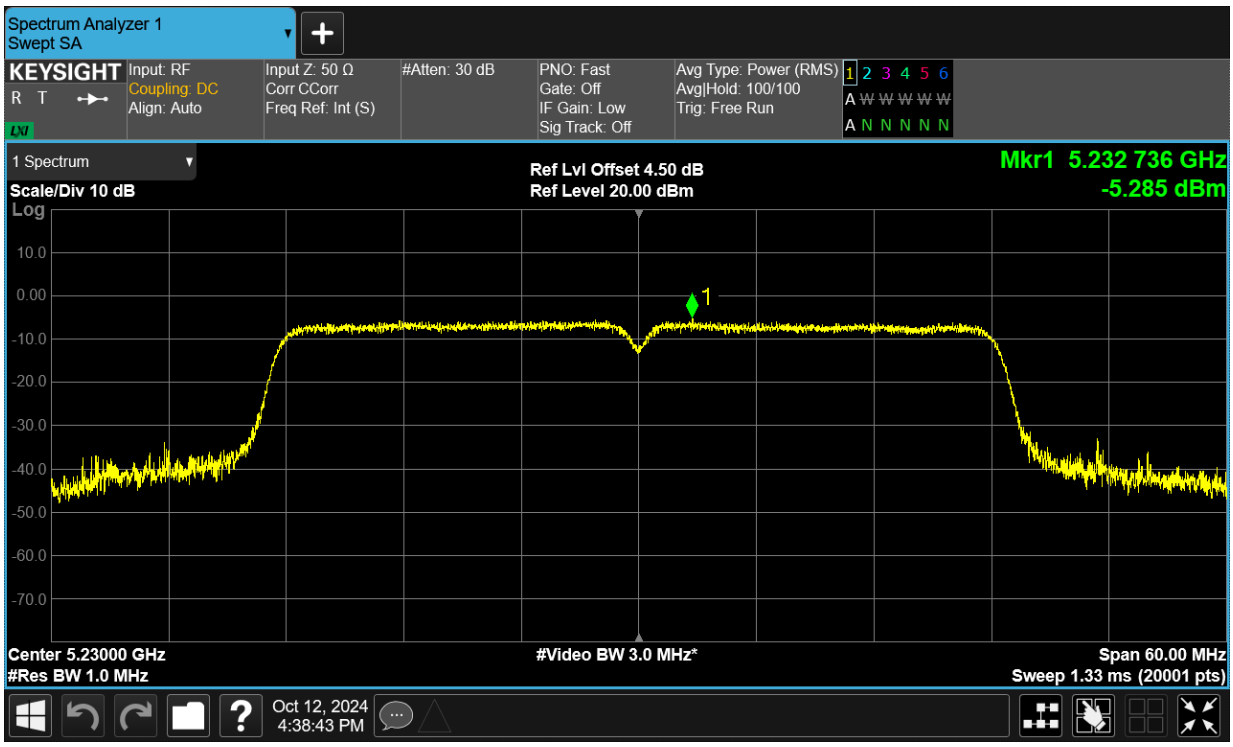
PSD NVNT ac20 5240MHz Ant1



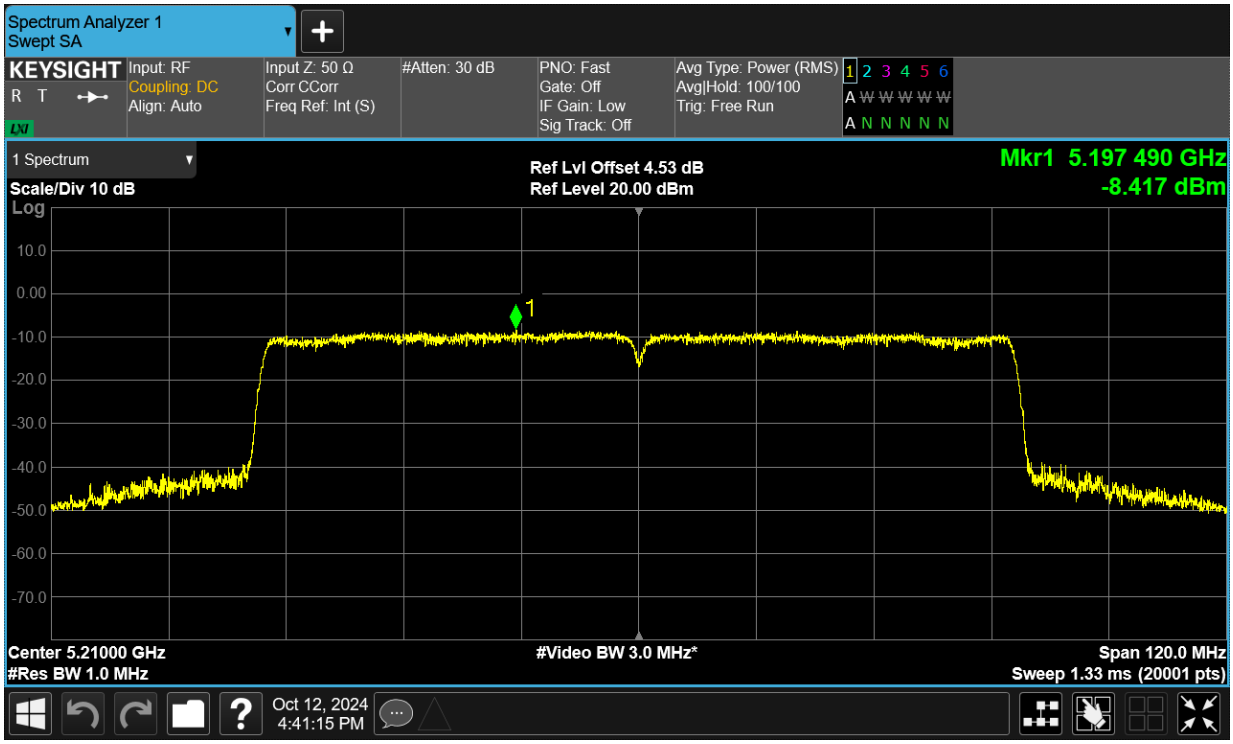
PSD NVNT ac40 5190MHz Ant1



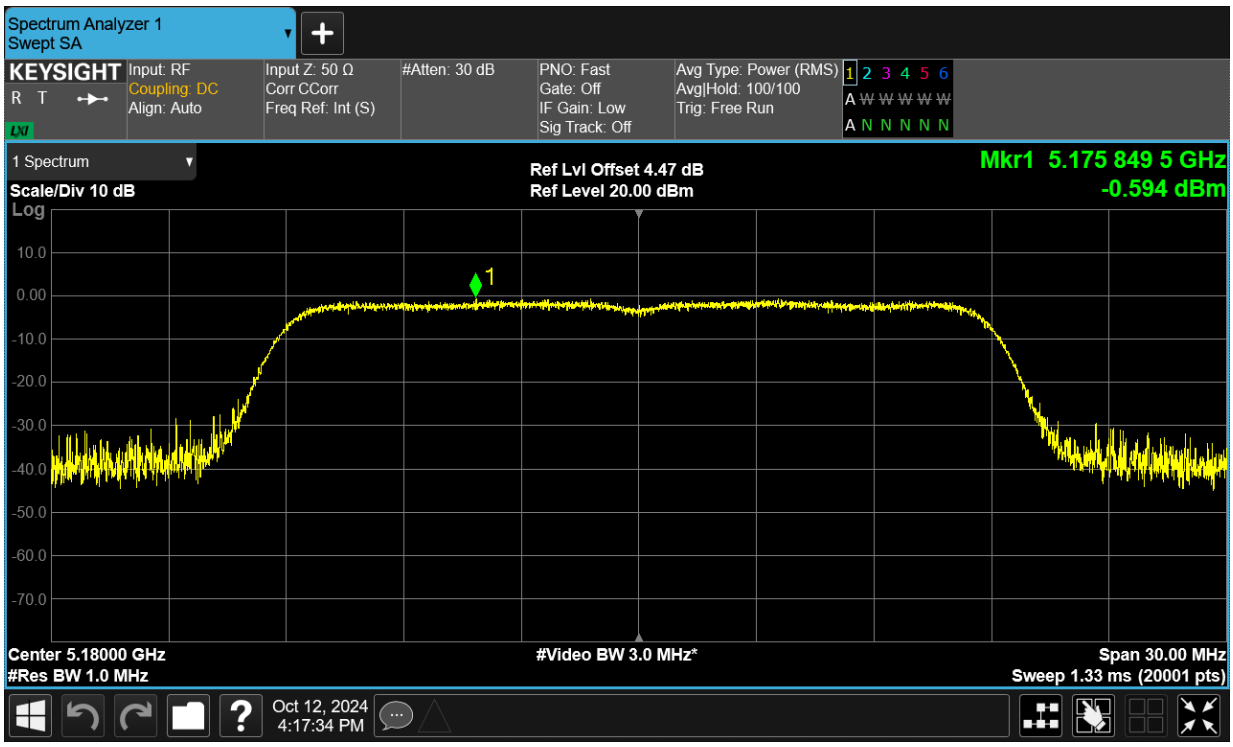
PSD NVNT ac40 5230MHz Ant1



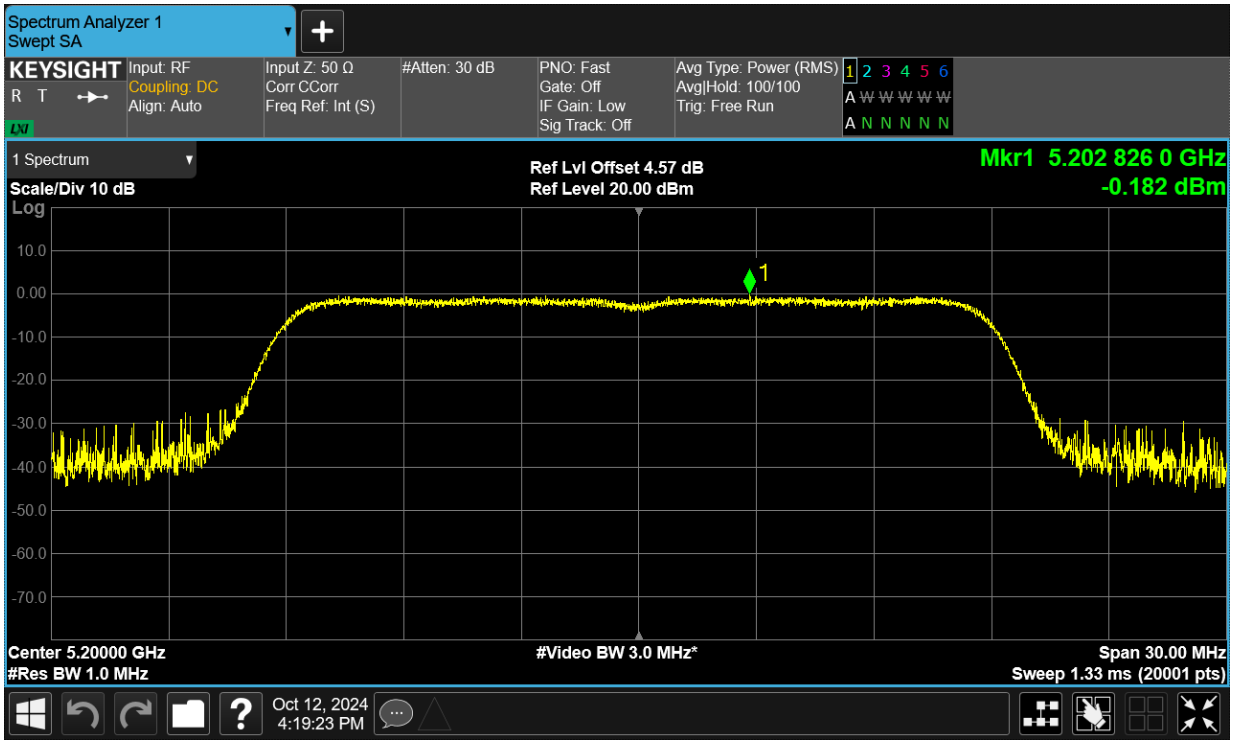
PSD NVNT ac80 5210MHz Ant1



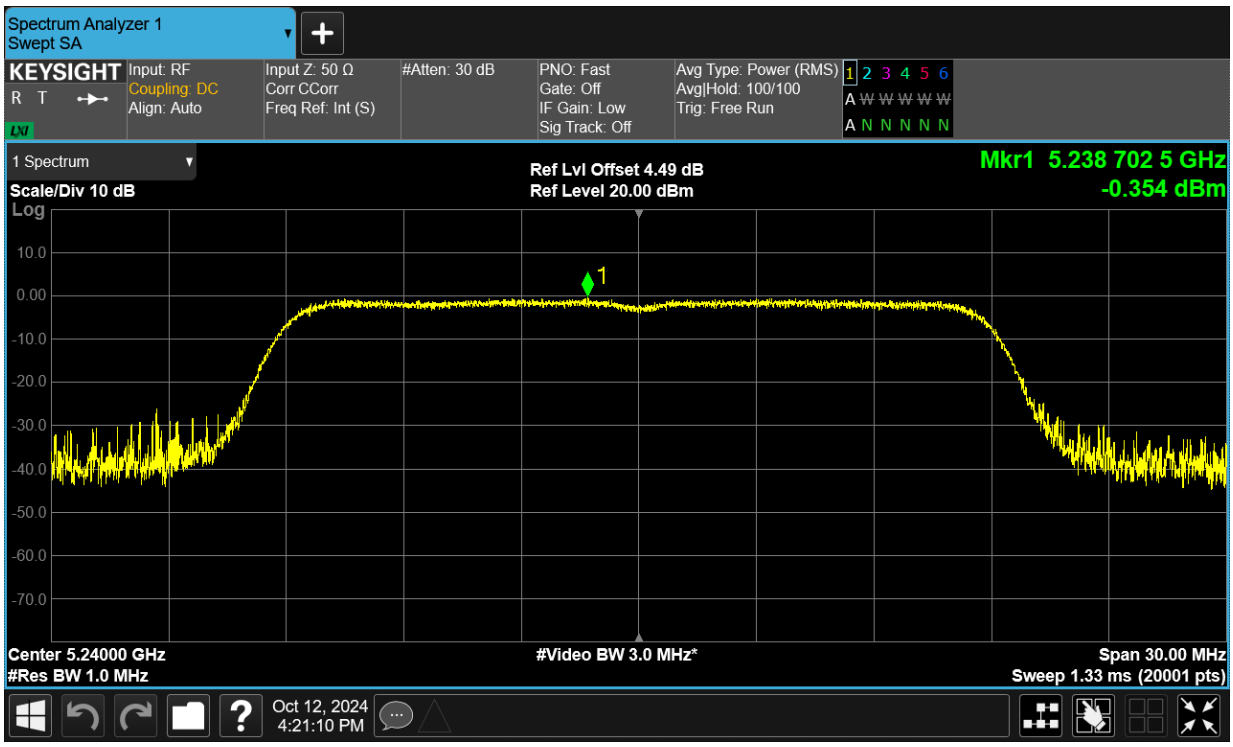
PSD NVNT n20 5180MHz Ant1



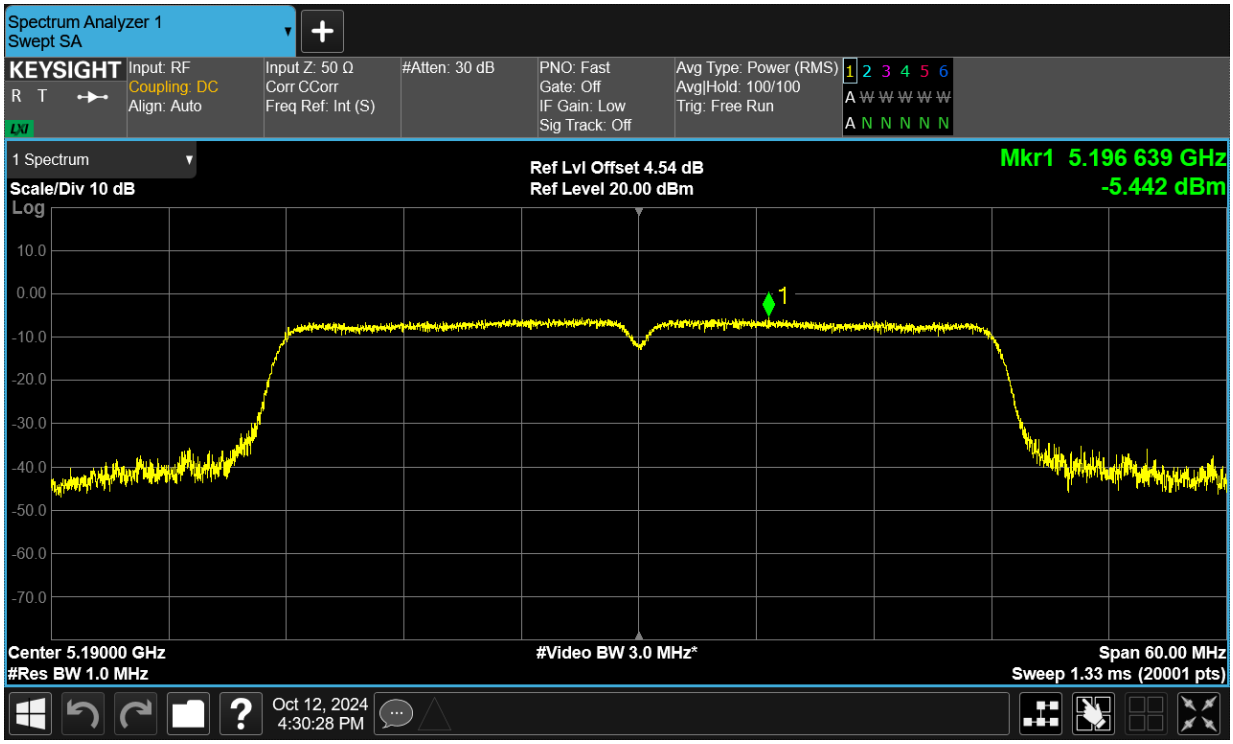
PSD NVNT n20 5200MHz Ant1



PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1