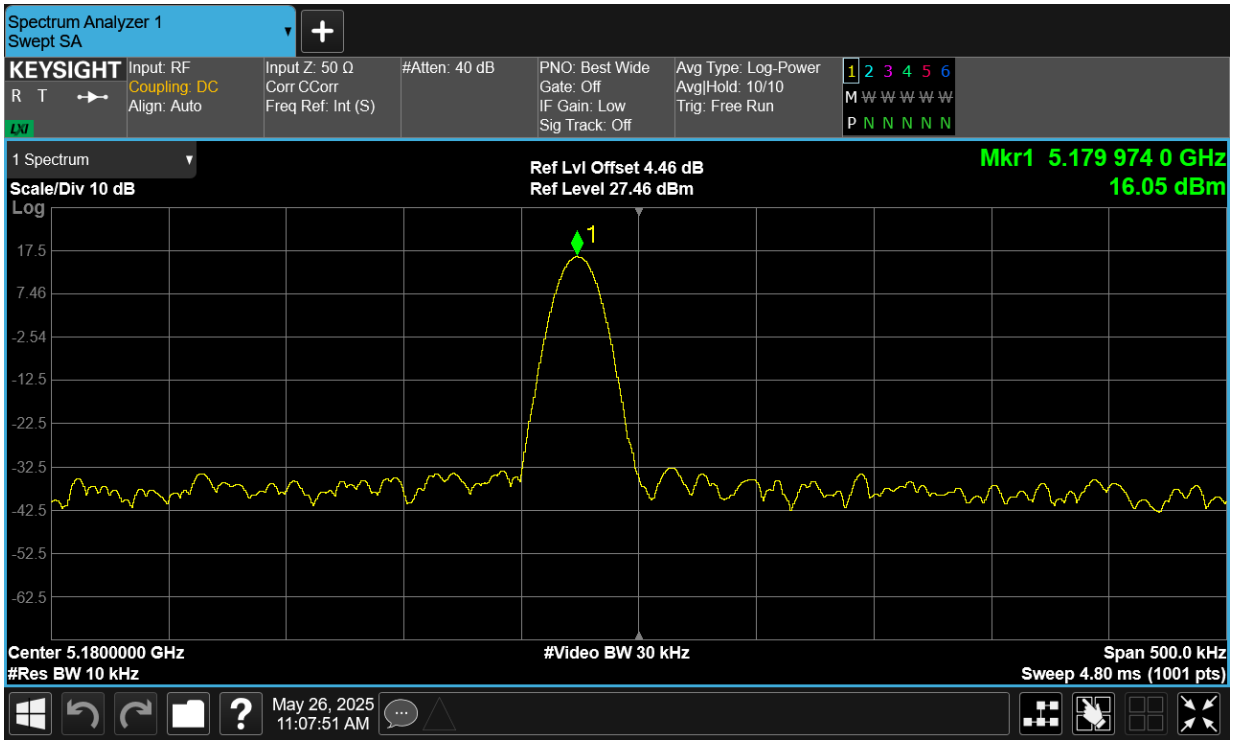
Test Data

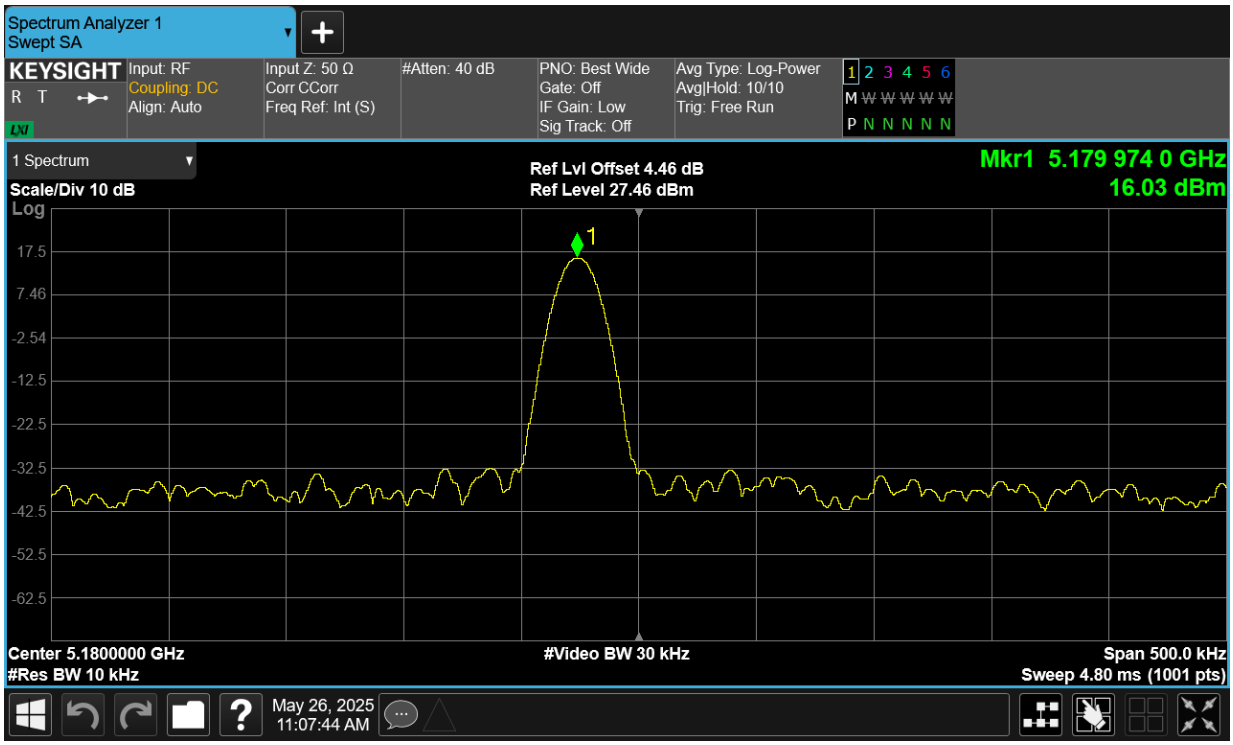
Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5180	Ant1	5179.974	-5.02	25	Pass
LVNT	a	5180	Ant1	5179.974	-5.02	25	Pass
NVHT	a	5180	Ant1	5179.974	-5.02	25	Pass
NVLT	a	5180	Ant1	5179.9745	-4.92	25	Pass
NVNT	a	5180	Ant1	5179.974	-5.02	25	Pass
HVNT	ac80	5210	Ant1	5209.9735	-5.09	25	Pass
LVNT	ac80	5210	Ant1	5209.9735	-5.09	25	Pass
NVHT	ac80	5210	Ant1	5209.9735	-5.09	25	Pass
NVLT	ac80	5210	Ant1	5209.9735	-5.09	25	Pass
NVNT	ac80	5210	Ant1	5209.97333001	-5.12	25	Pass
HVNT	n40	5190	Ant1	5189.9735	-5.11	25	Pass
LVNT	n40	5190	Ant1	5189.9735	-5.11	25	Pass
NVHT	n40	5190	Ant1	5189.9735	-5.11	25	Pass
NVLT	n40	5190	Ant1	5189.9735	-5.11	25	Pass
NVNT	n40	5190	Ant1	5189.9735	-5.11	25	Pass

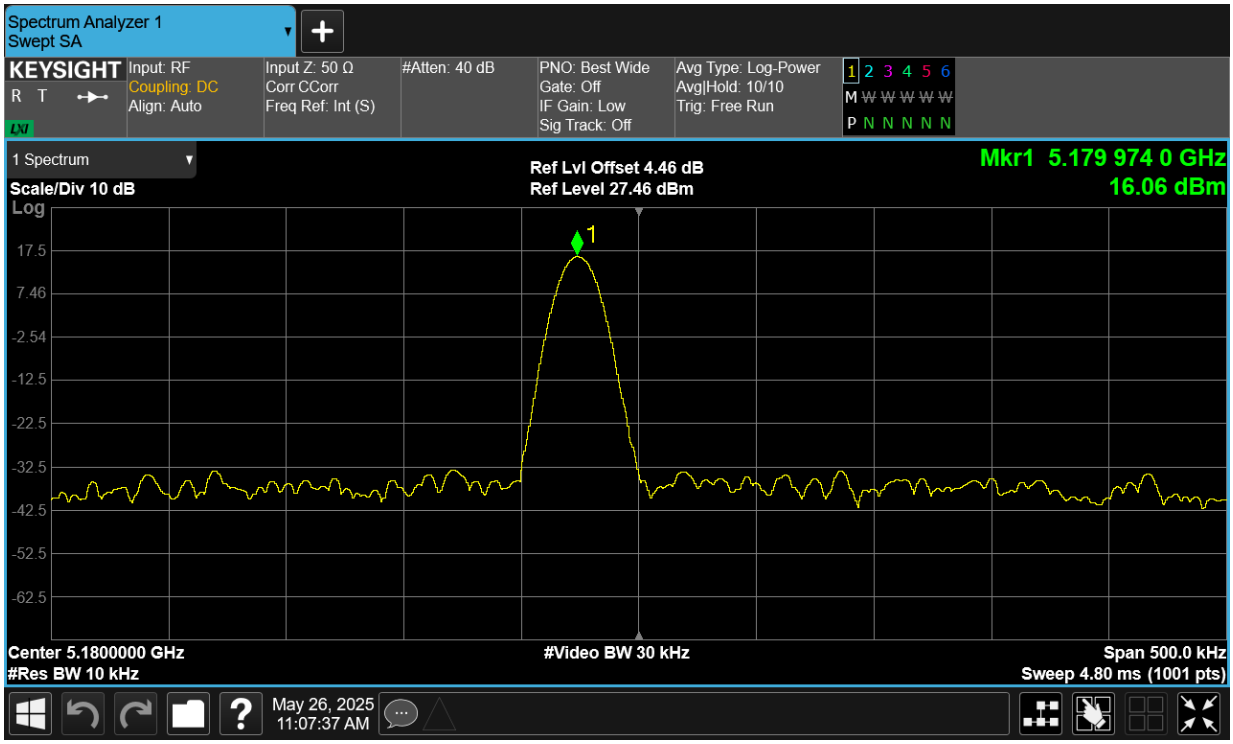
Test Graphs
Freq. Stability HVNT a 5180MHz Ant1



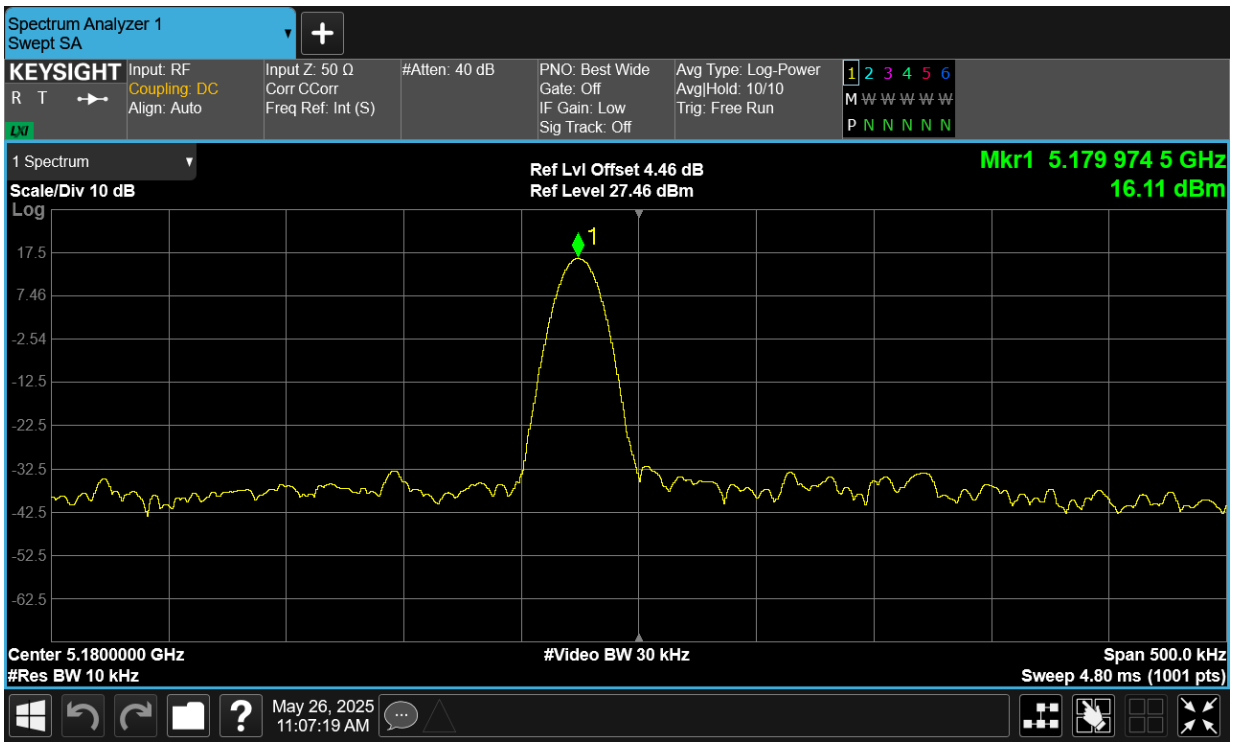
Freq. Stability LVNT a 5180MHz Ant1



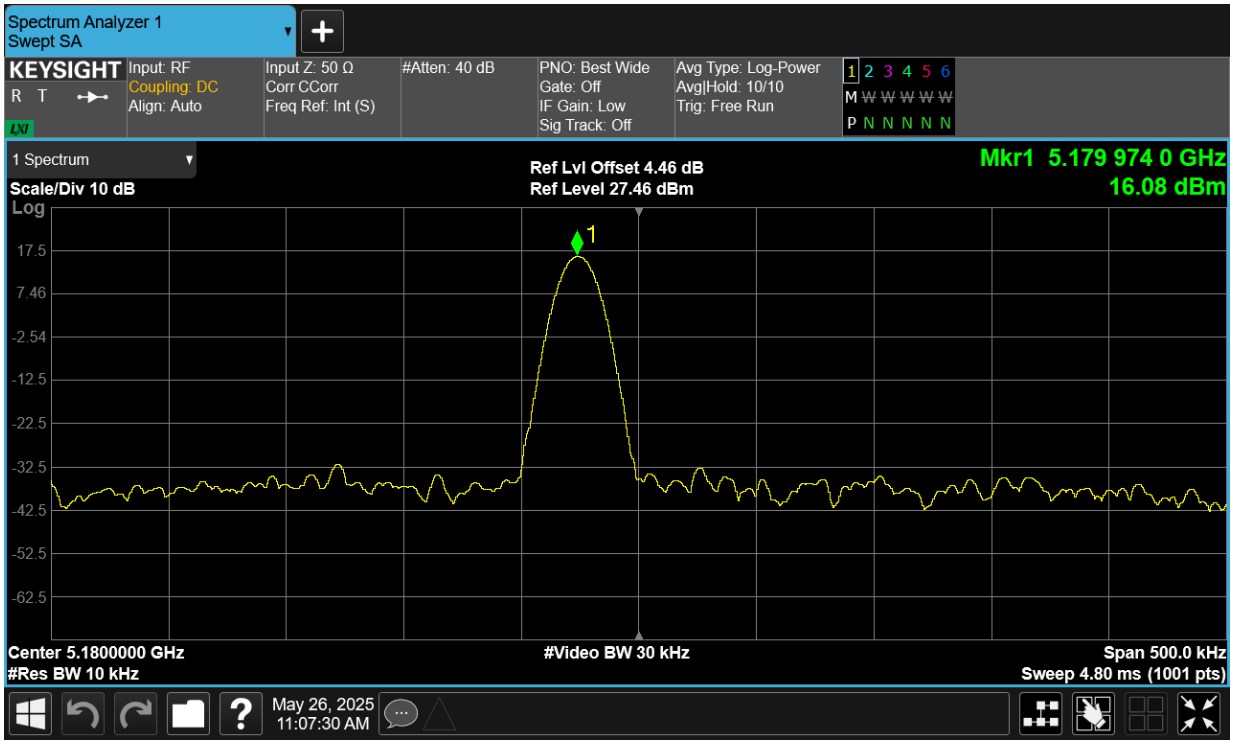
Freq. Stability NVHT a 5180MHz Ant1



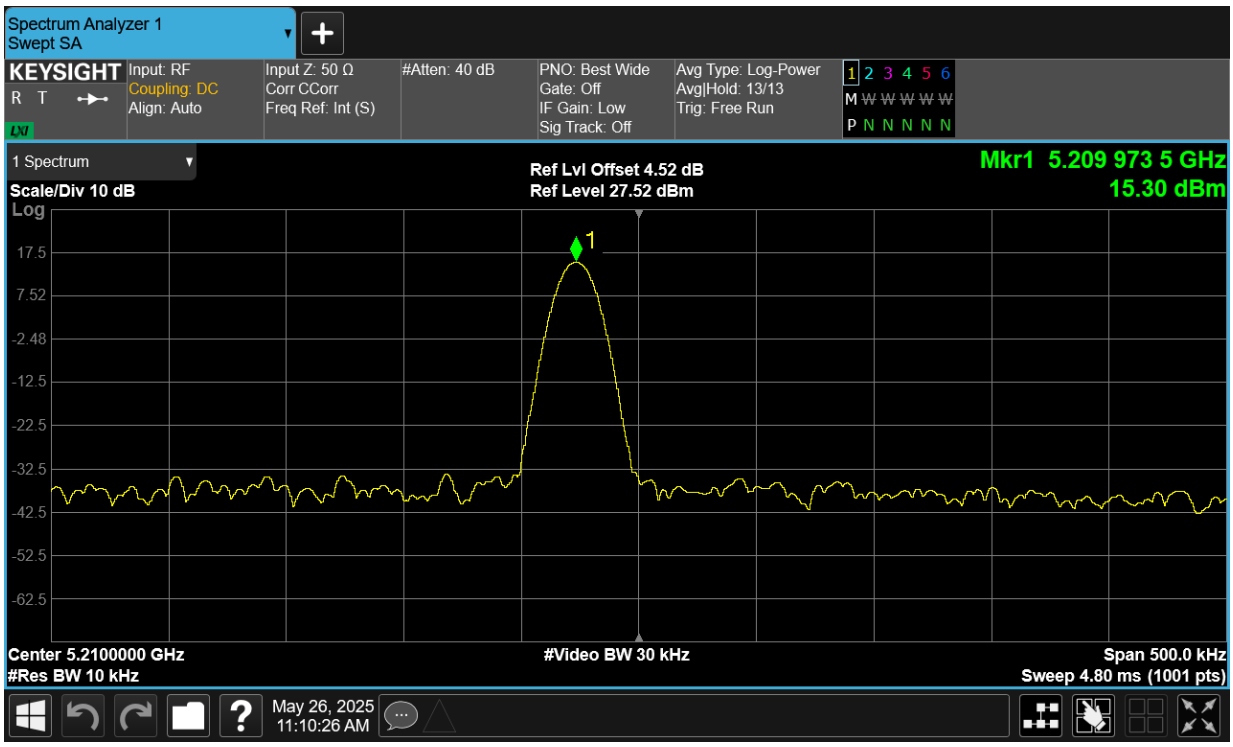
Freq. Stability NVLT a 5180MHz Ant1



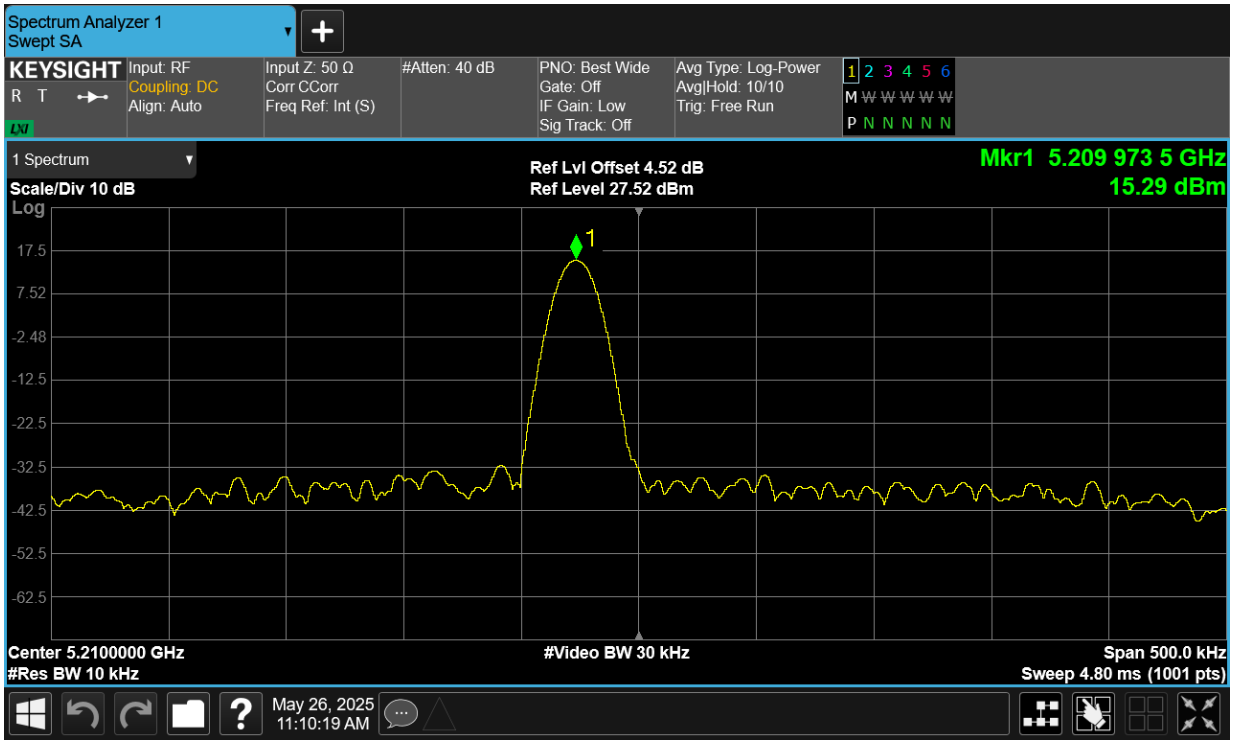
Freq. Stability NVNT a 5180MHz Ant1



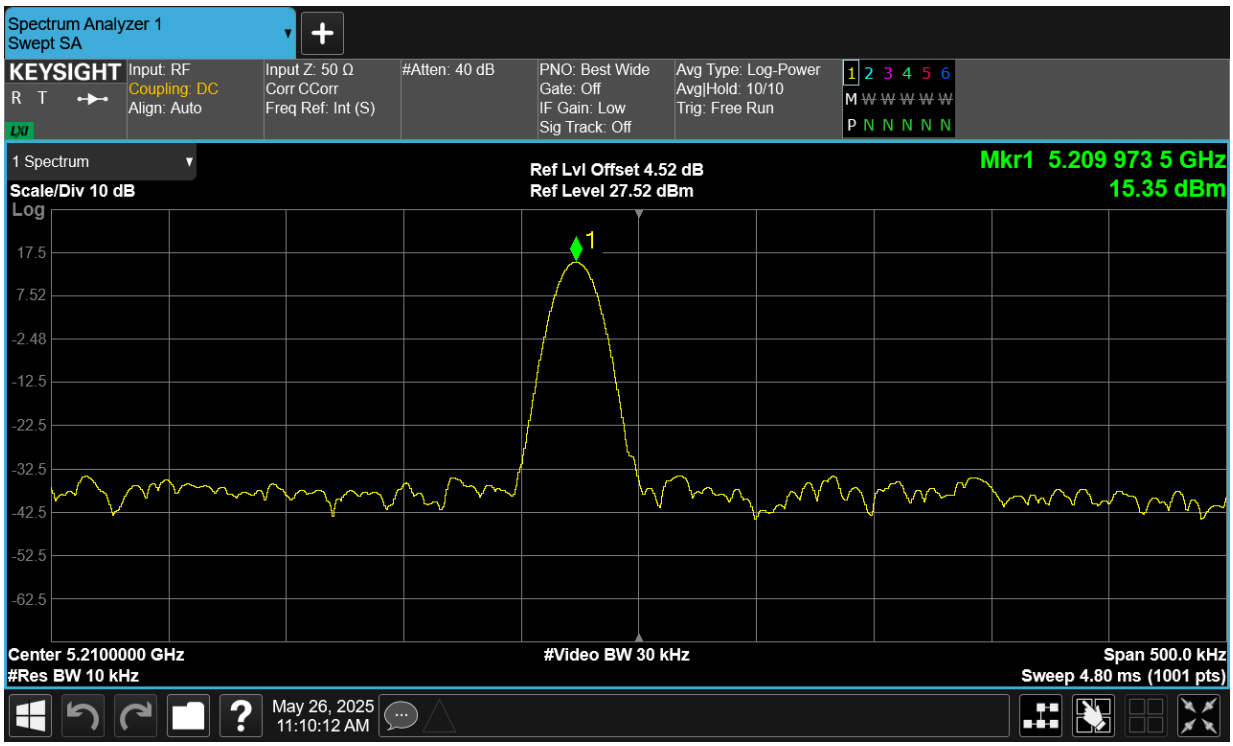
Freq. Stability HVNT ac80 5210MHz Ant1



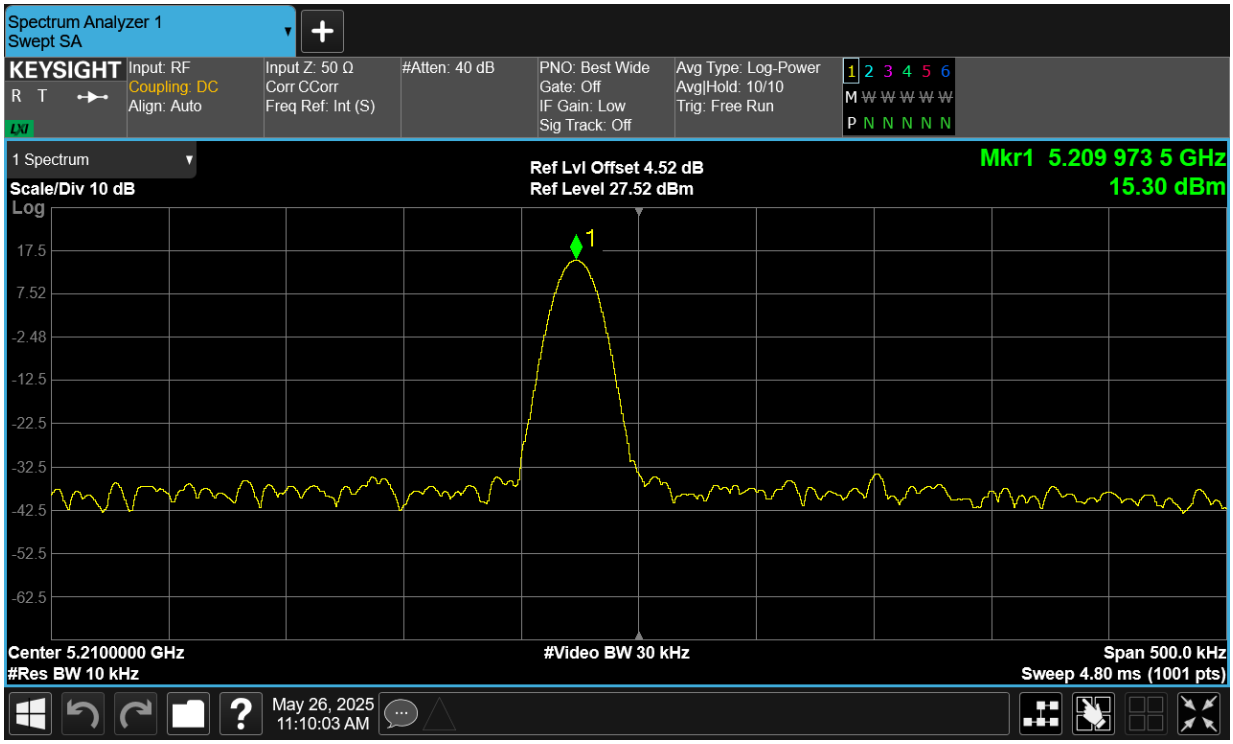
Freq. Stability LVNT ac80 5210MHz Ant1



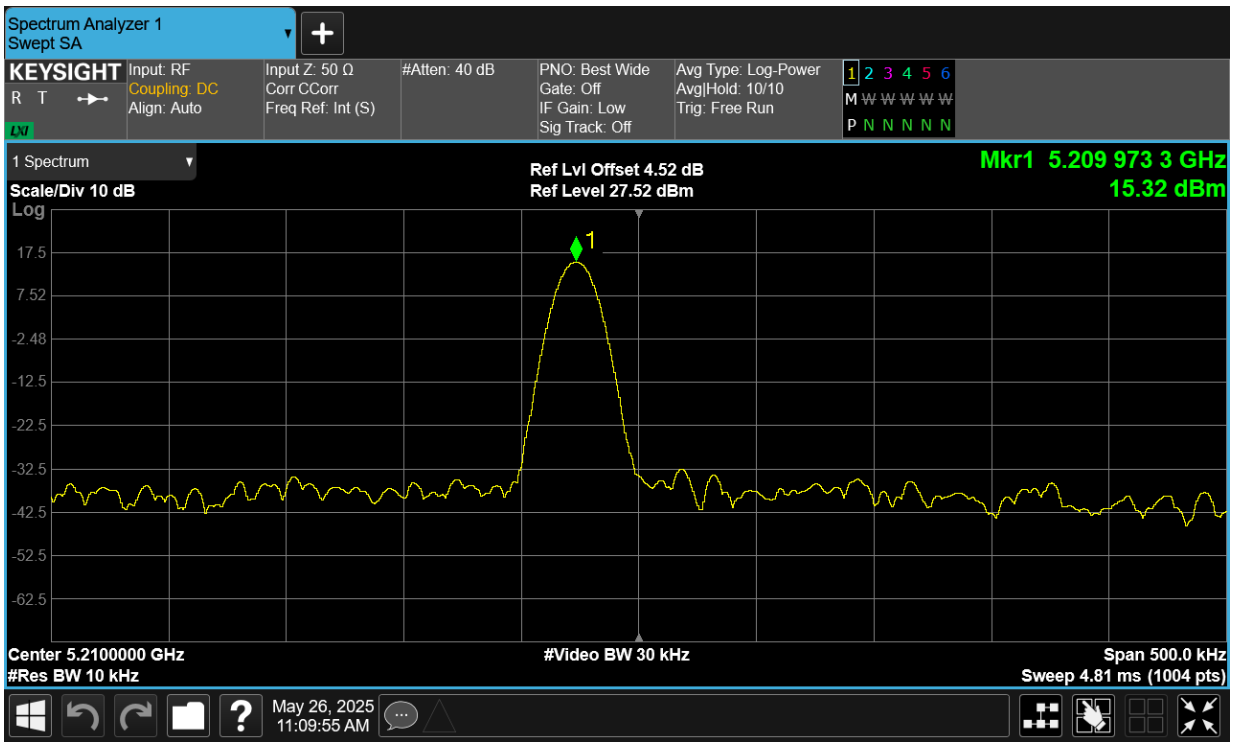
Freq. Stability NVHT ac80 5210MHz Ant1



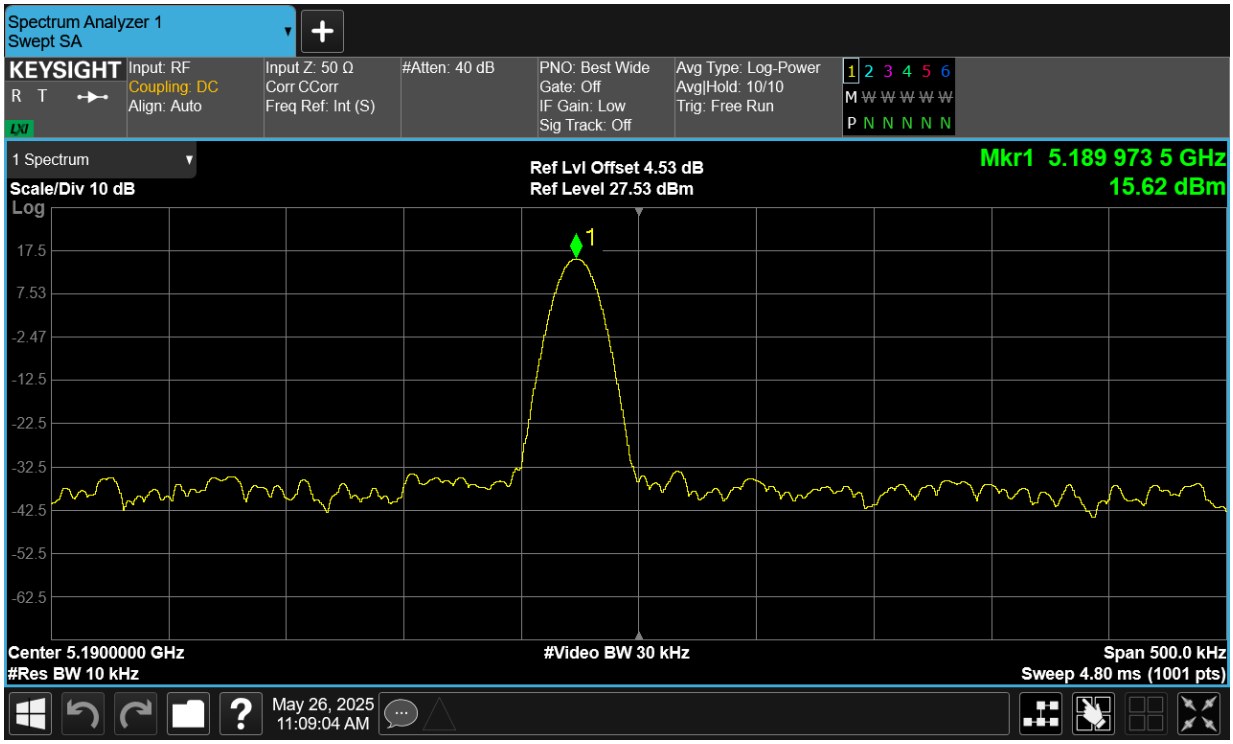
Freq. Stability NVLT ac80 5210MHz Ant1



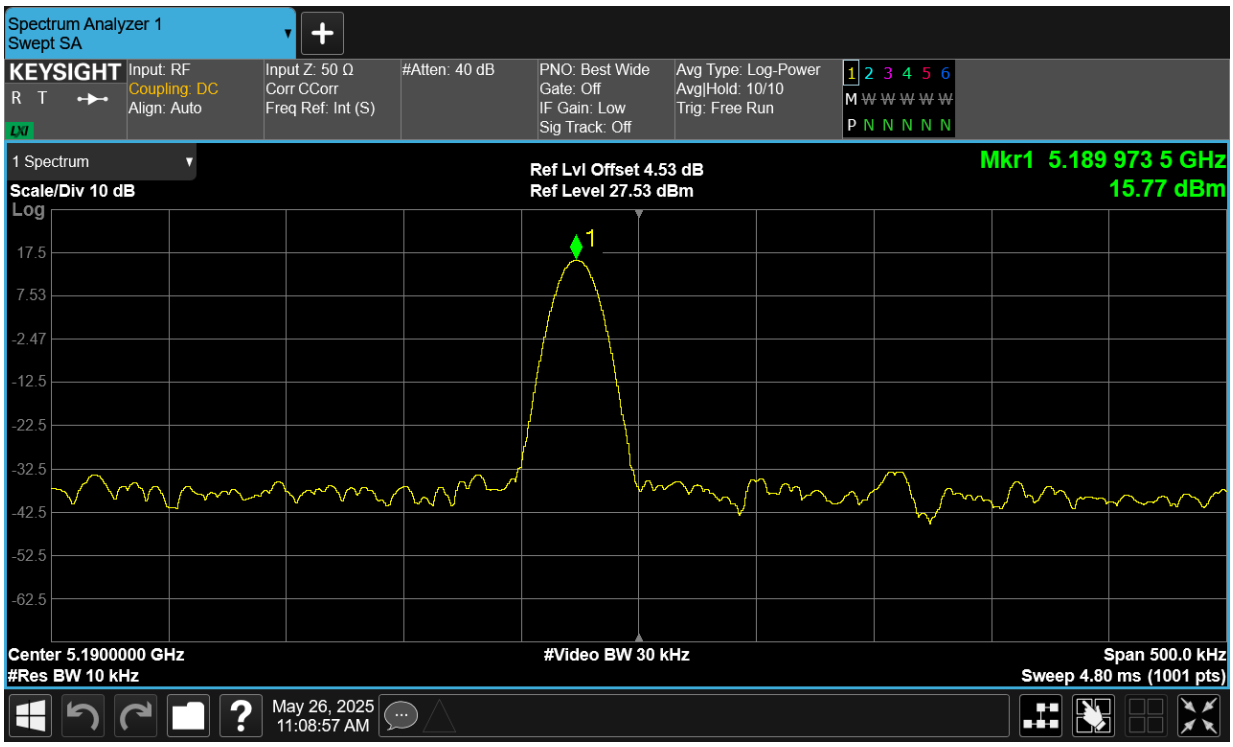
Freq. Stability NVNT ac80 5210MHz Ant1



Freq. Stability HVNT n40 5190MHz Ant1

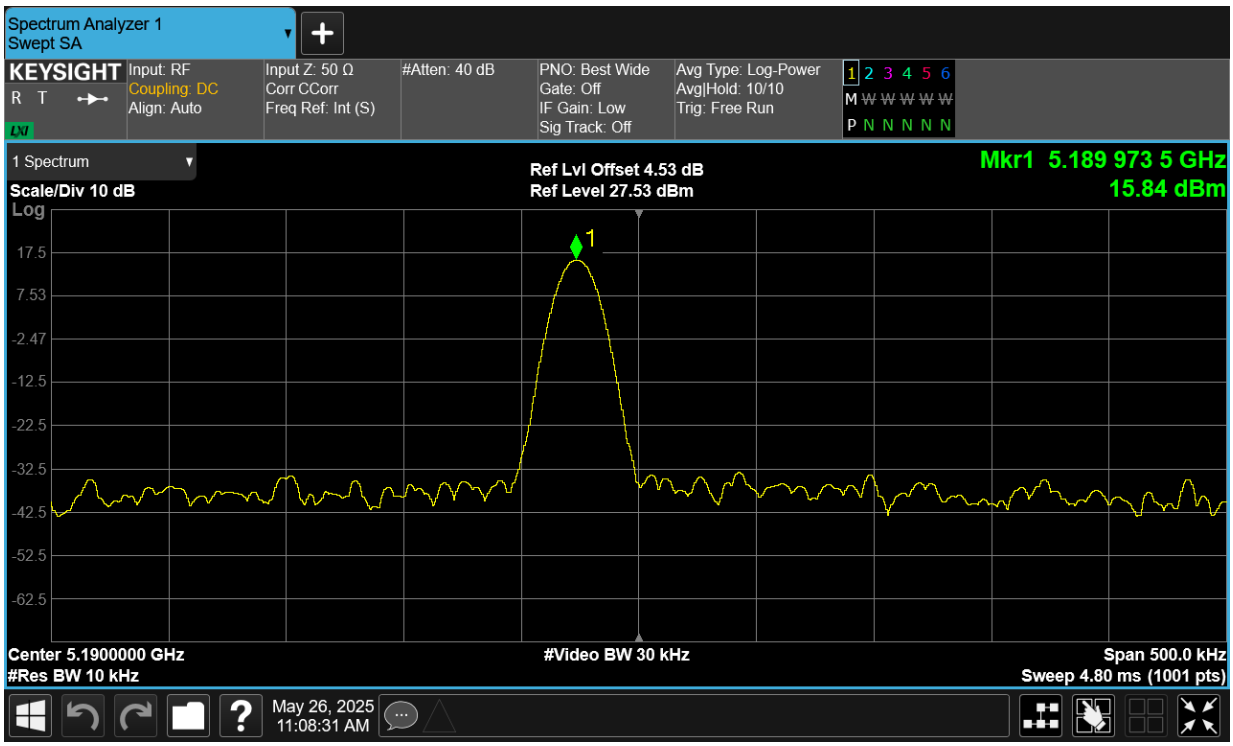


Freq. Stability LVNT n40 5190MHz Ant1

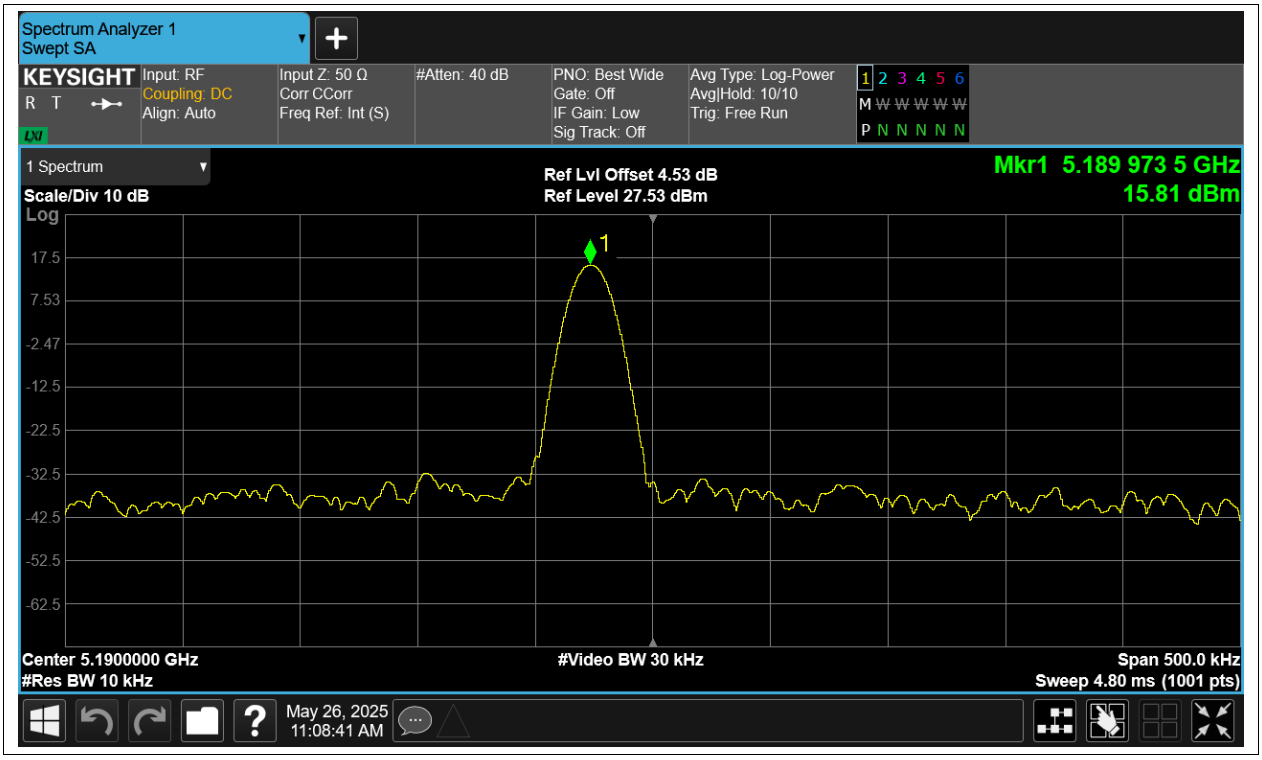


Freq. Stability NVHT n40 5190MHz Ant1

Freq. Stability NVLT n40 5190MHz Ant1



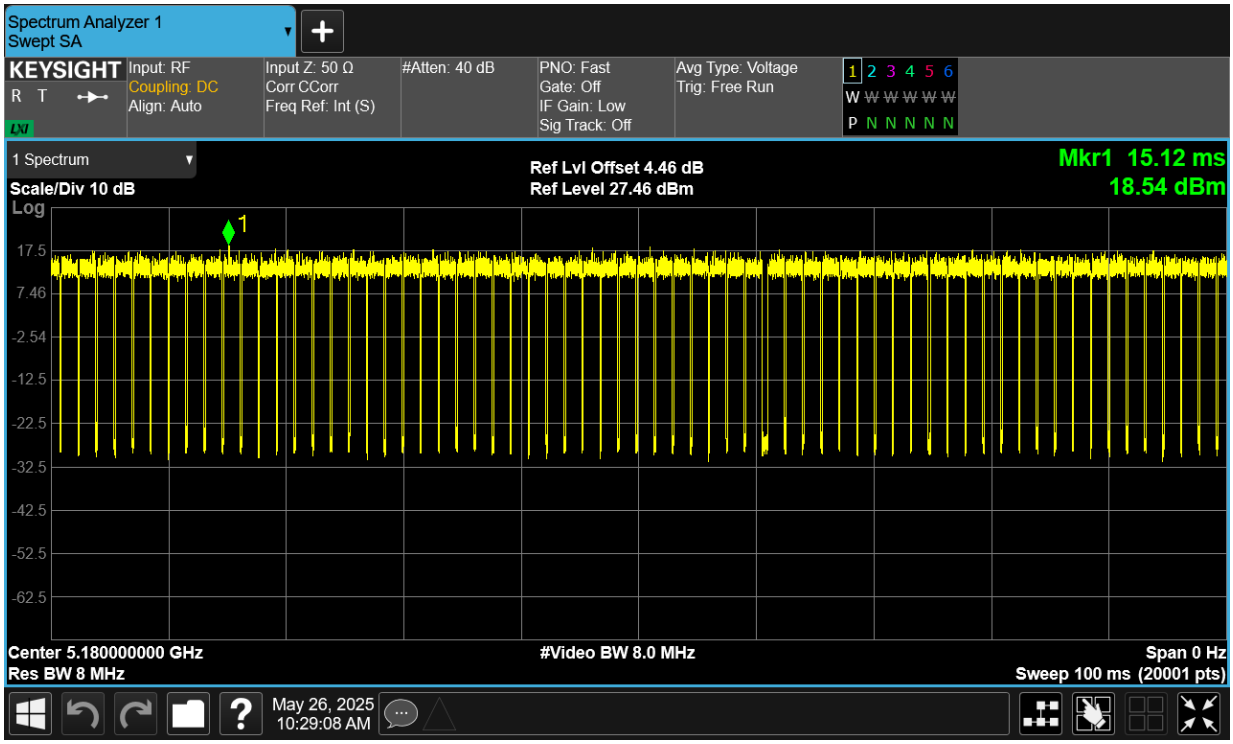
Freq. Stability NVNT n40 5190MHz Ant1


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 4.53 dB
Ref Level 27.53 dBm
Mkr1 5.189 973 5 GHz
15.81 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)
May 26, 2025
11:08:41 AM

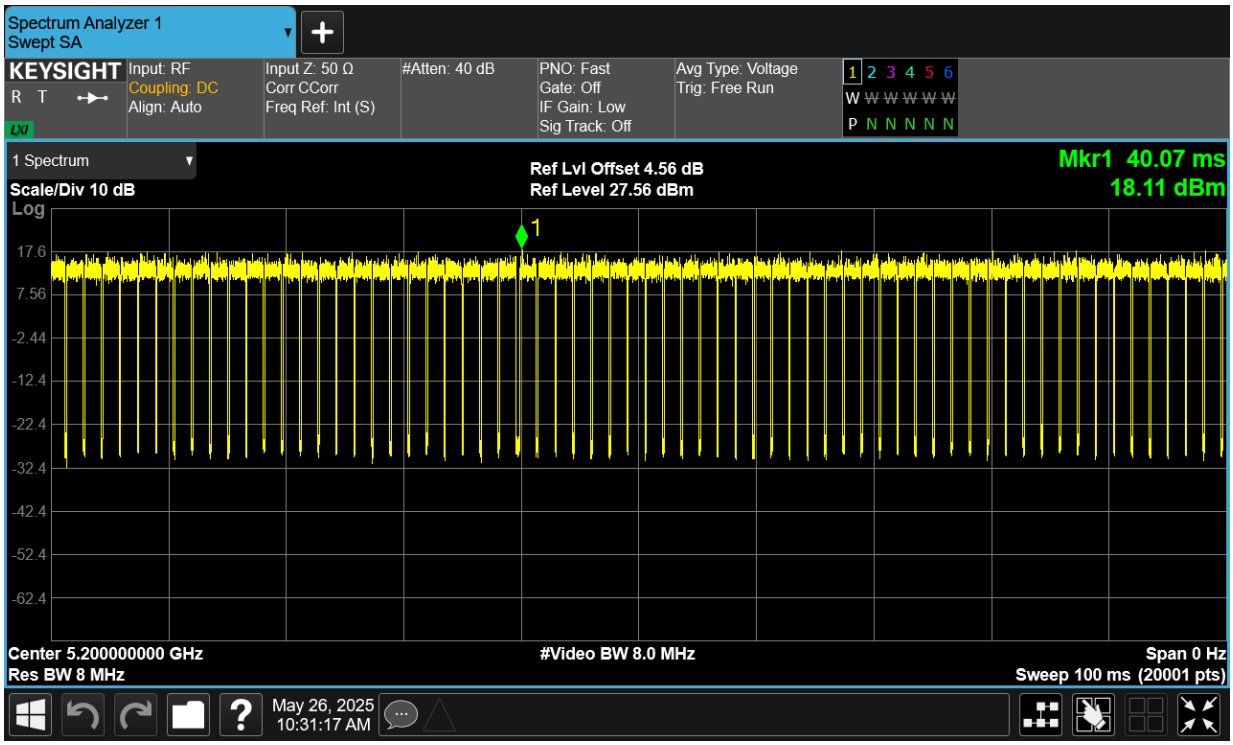
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	90.85	0.42
NVNT	a	5200	Ant1	90.94	0.41
NVNT	a	5240	Ant1	90.46	0.44
NVNT	ac20	5180	Ant1	89.12	0.5
NVNT	ac20	5200	Ant1	89.53	0.48
NVNT	ac20	5240	Ant1	89.64	0.48
NVNT	ac40	5190	Ant1	81.15	0.91
NVNT	ac40	5230	Ant1	81.63	0.88
NVNT	ac80	5210	Ant1	68.66	1.63
NVNT	n20	5180	Ant1	89.62	0.48
NVNT	n20	5200	Ant1	89.7	0.47
NVNT	n20	5240	Ant1	89.61	0.48
NVNT	n40	5190	Ant1	81.79	0.87
NVNT	n40	5230	Ant1	81.68	0.88

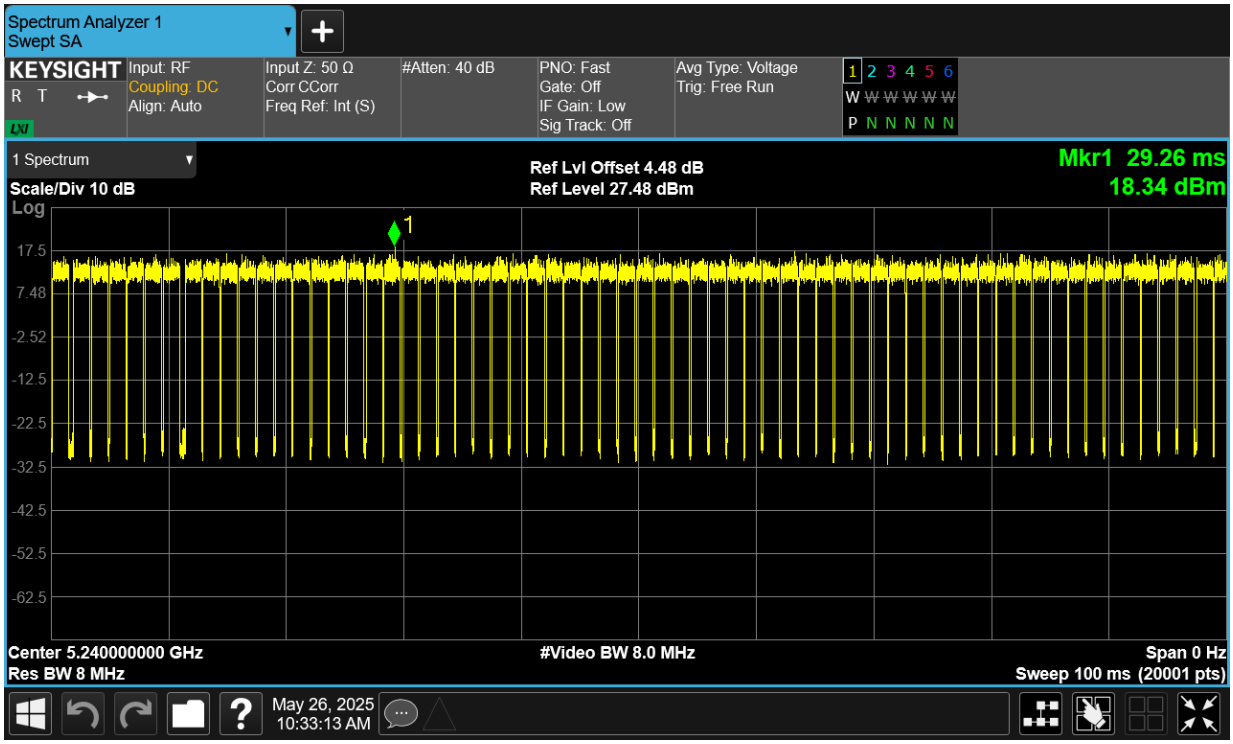
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



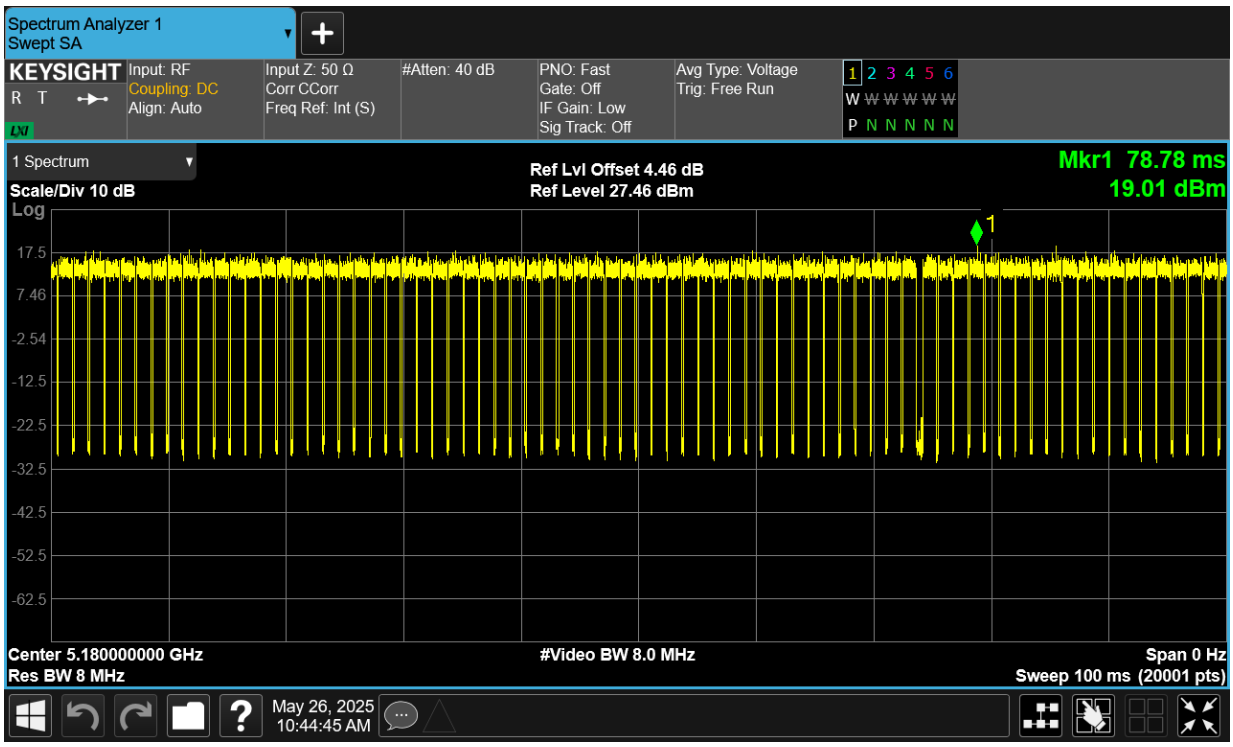
Duty Cycle NVNT a 5200MHz Ant1



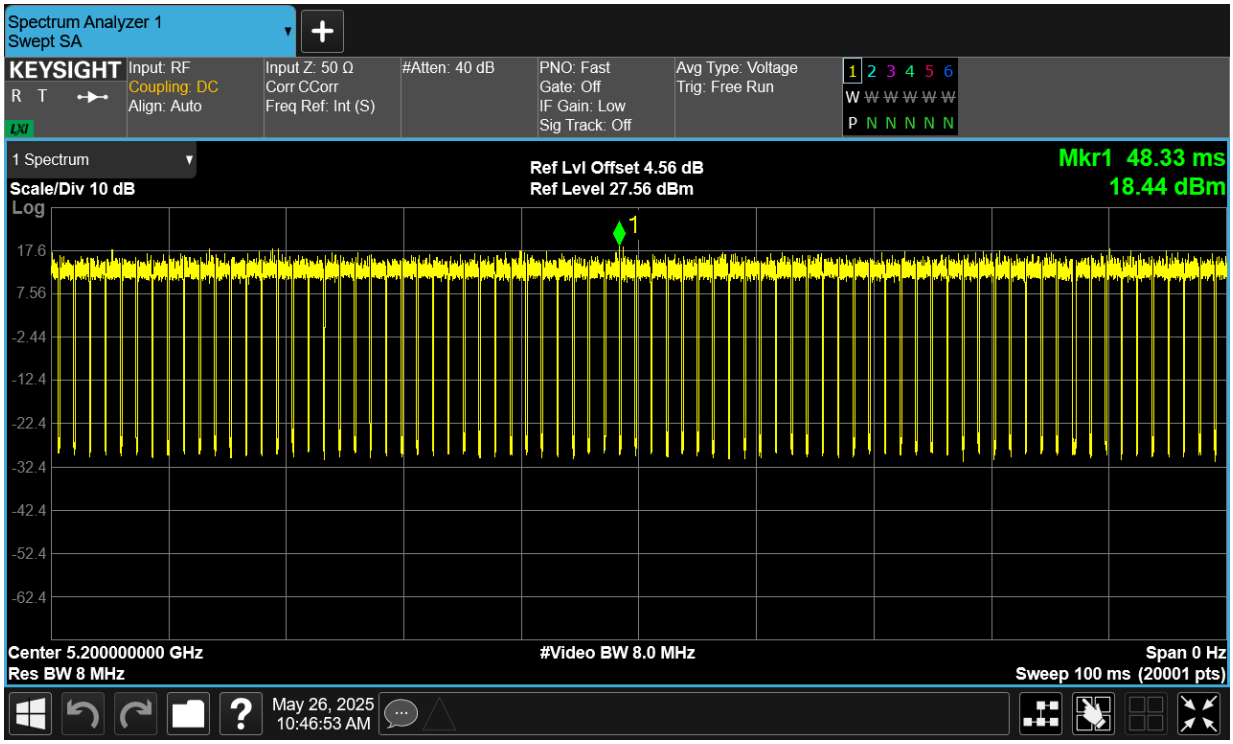
Duty Cycle NVNT a 5240MHz Ant1



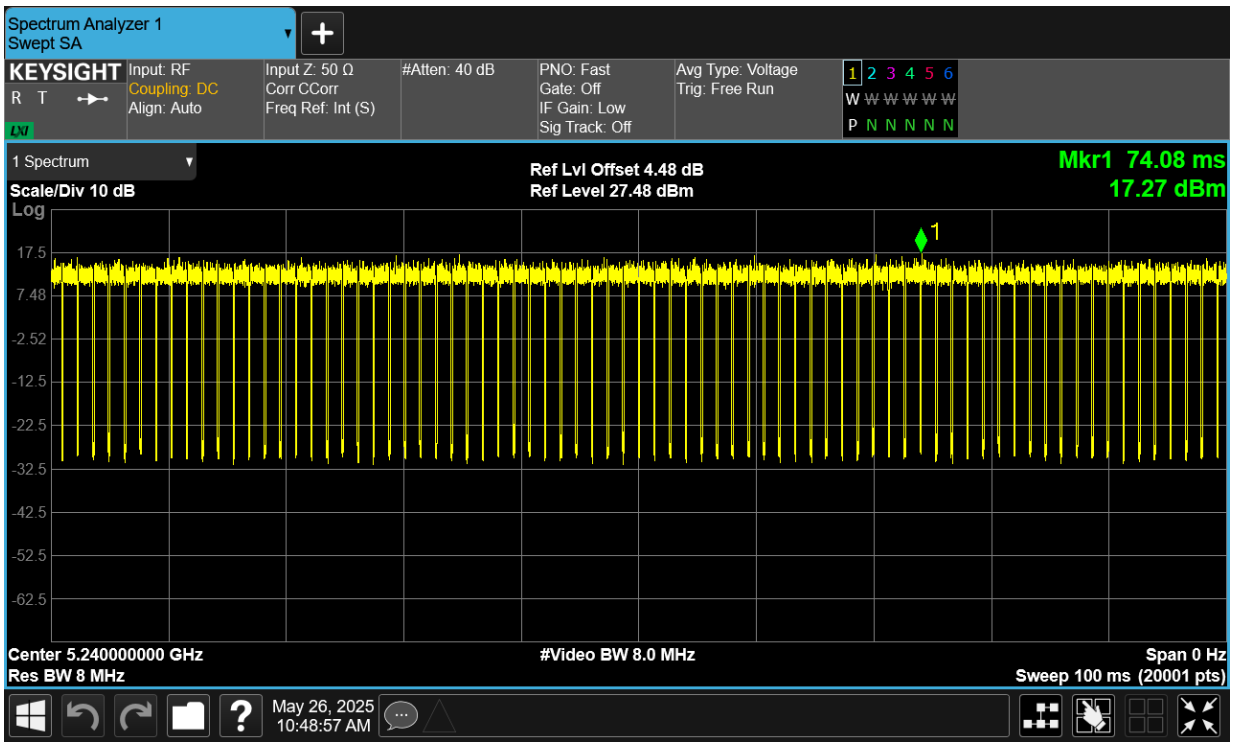
Duty Cycle NVNT ac20 5180MHz Ant1



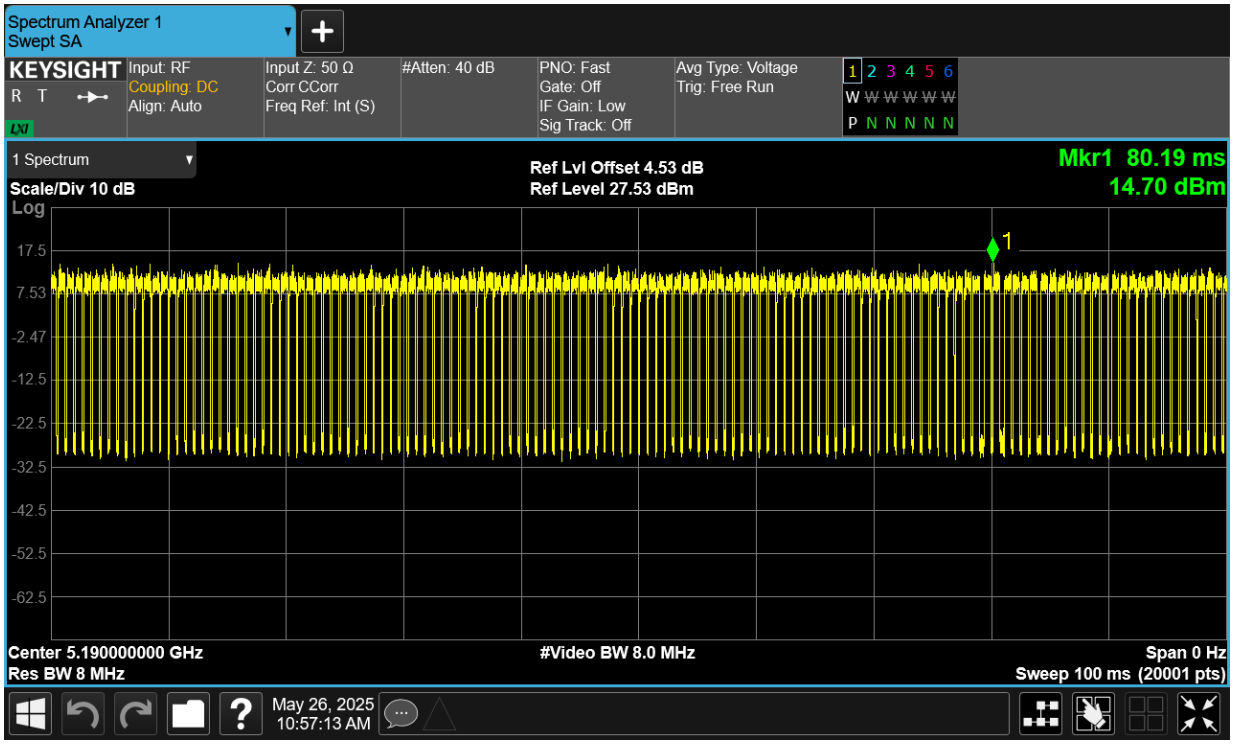
Duty Cycle NVNT ac20 5200MHz Ant1



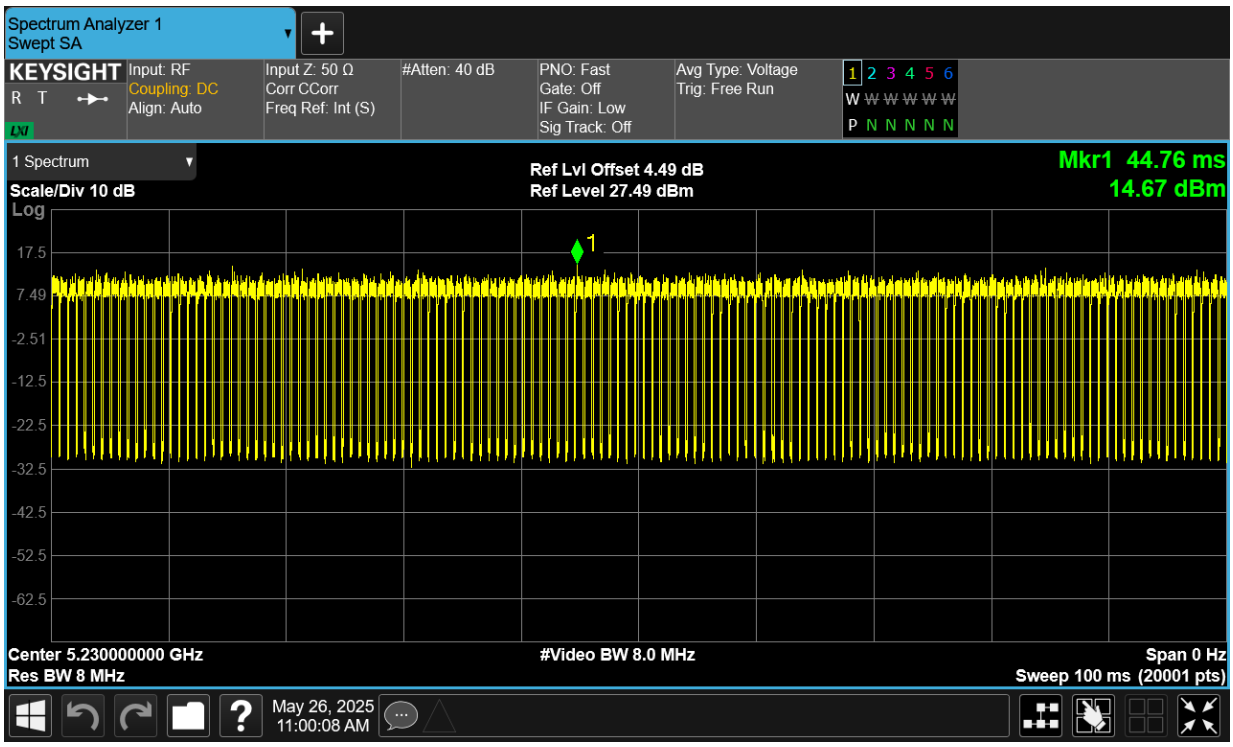
Duty Cycle NVNT ac20 5240MHz Ant1



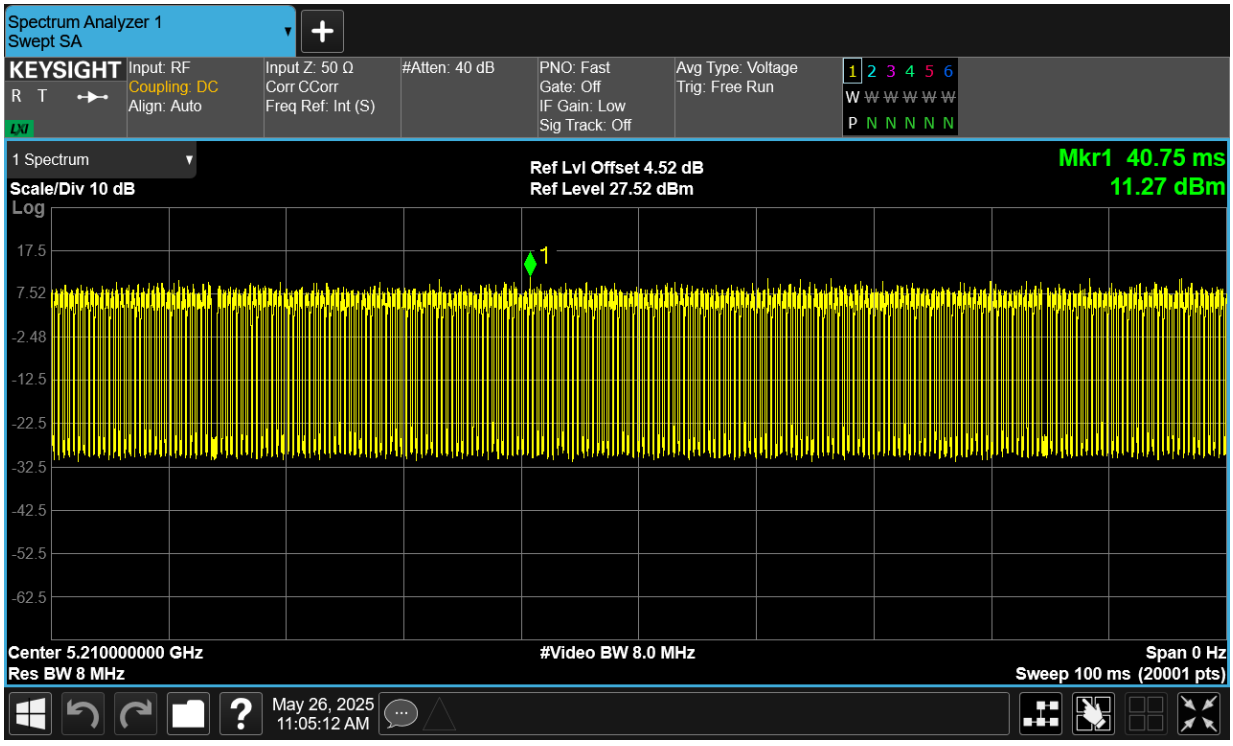
Duty Cycle NVNT ac40 5190MHz Ant1



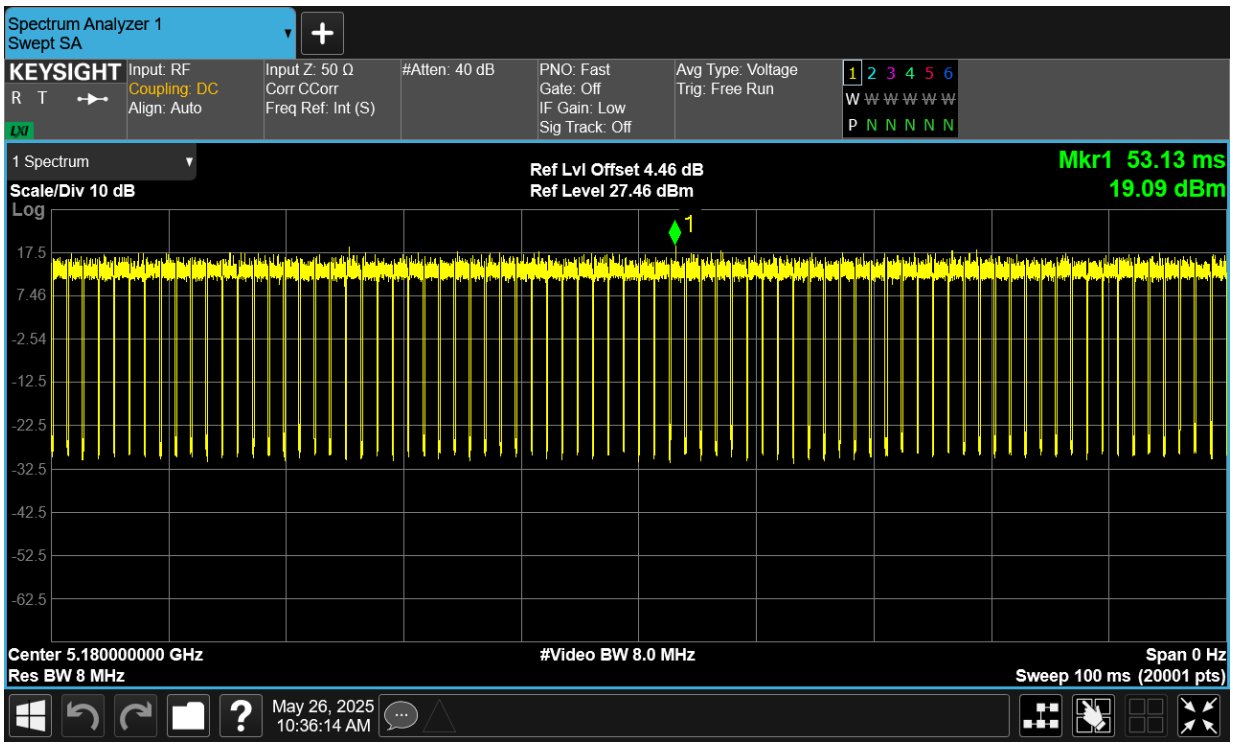
Duty Cycle NVNT ac40 5230MHz Ant1



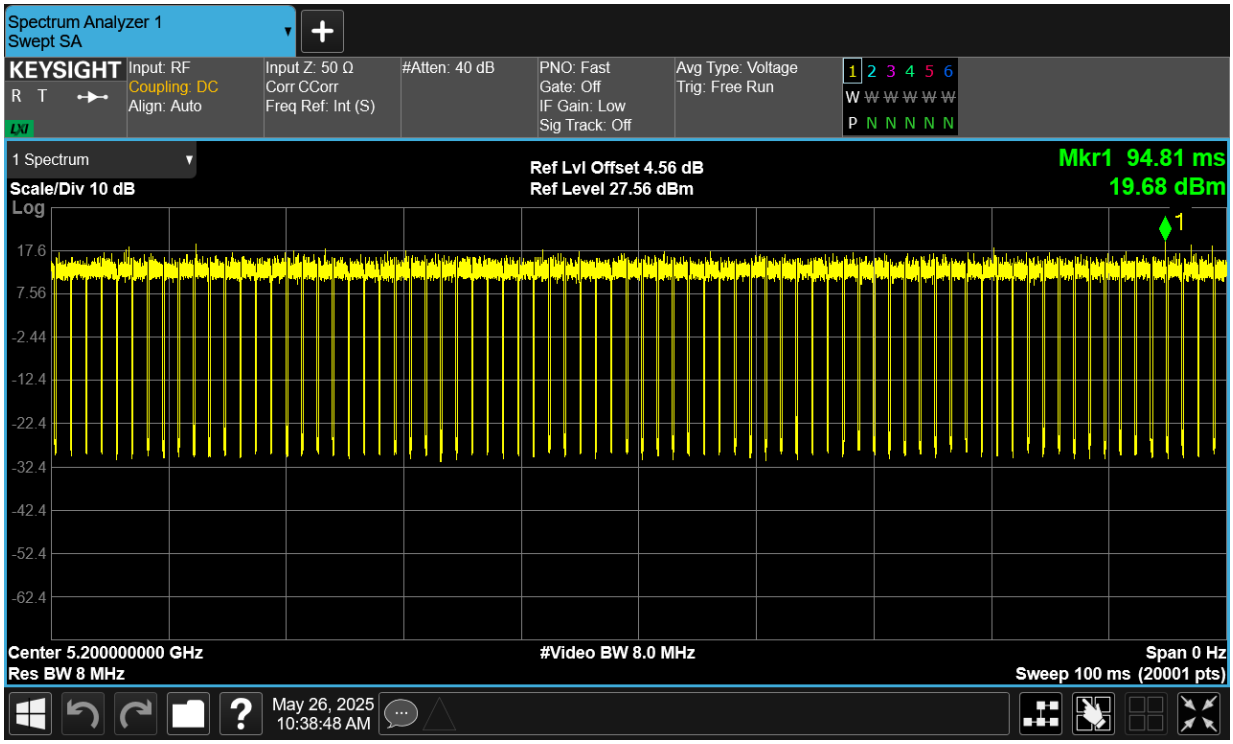
Duty Cycle NVNT ac80 5210MHz Ant1



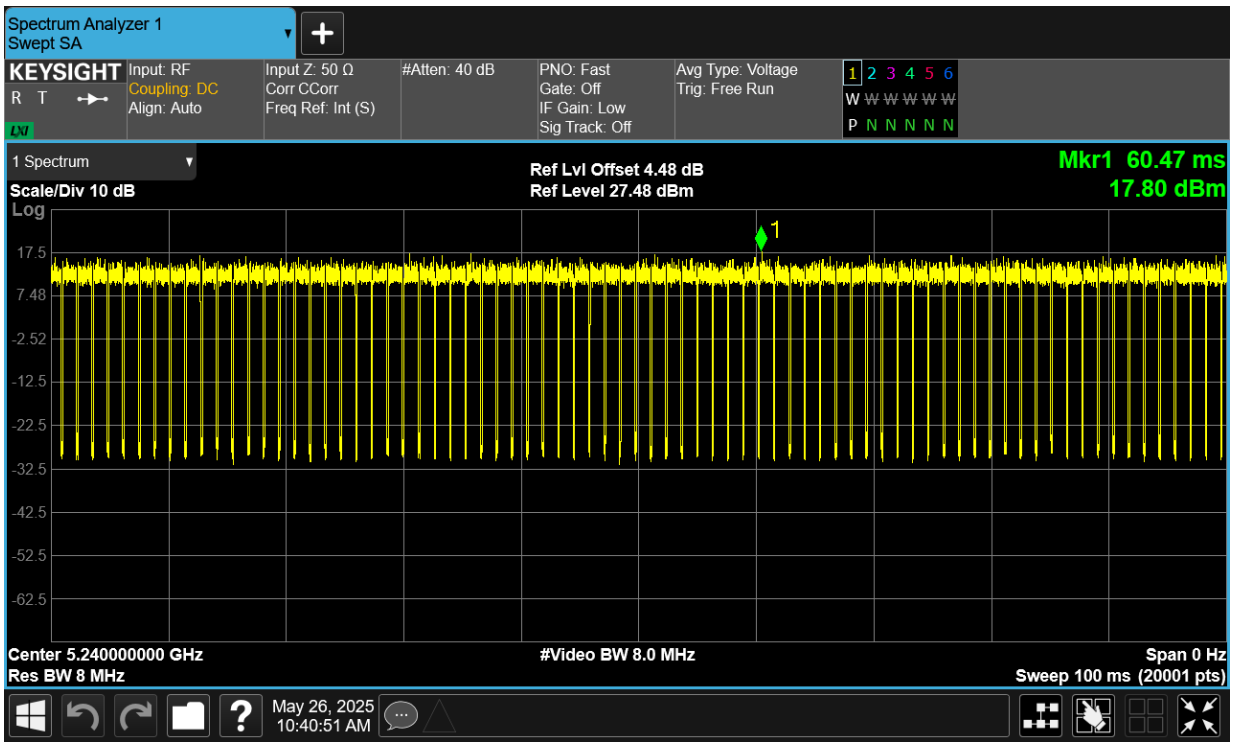
Duty Cycle NVNT n20 5180MHz Ant1



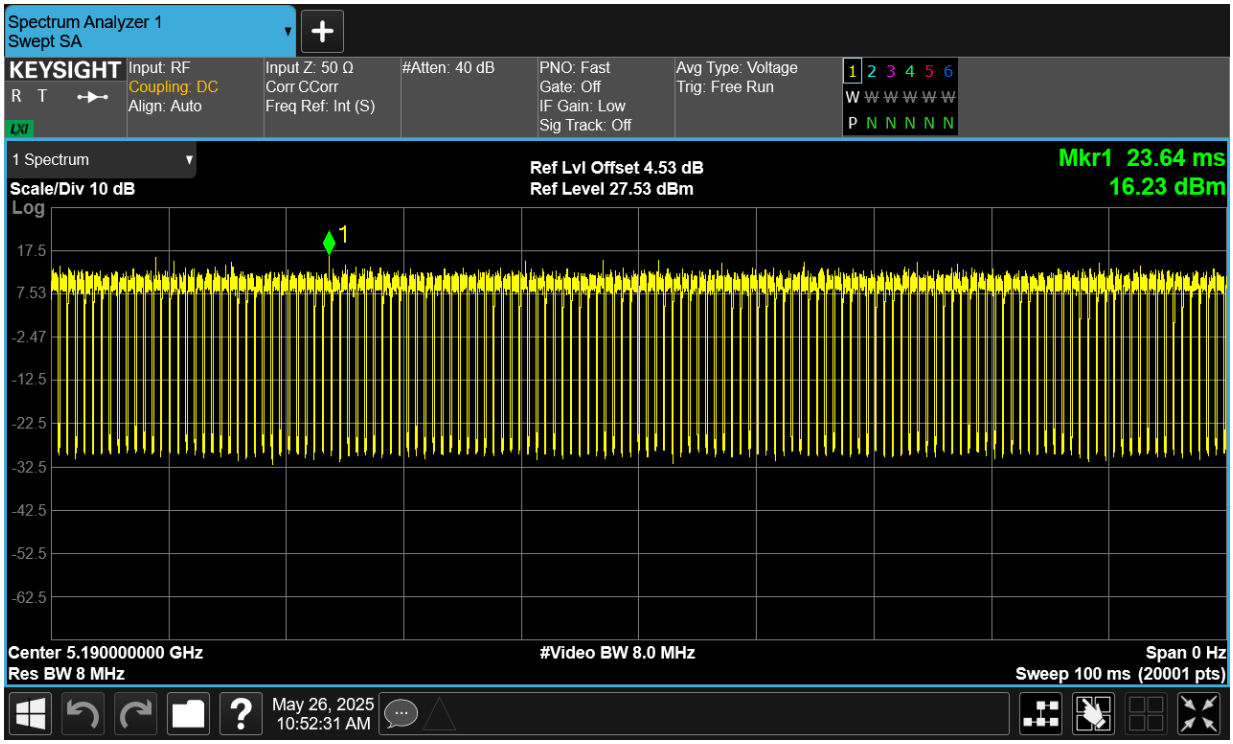
Duty Cycle NVNT n20 5200MHz Ant1



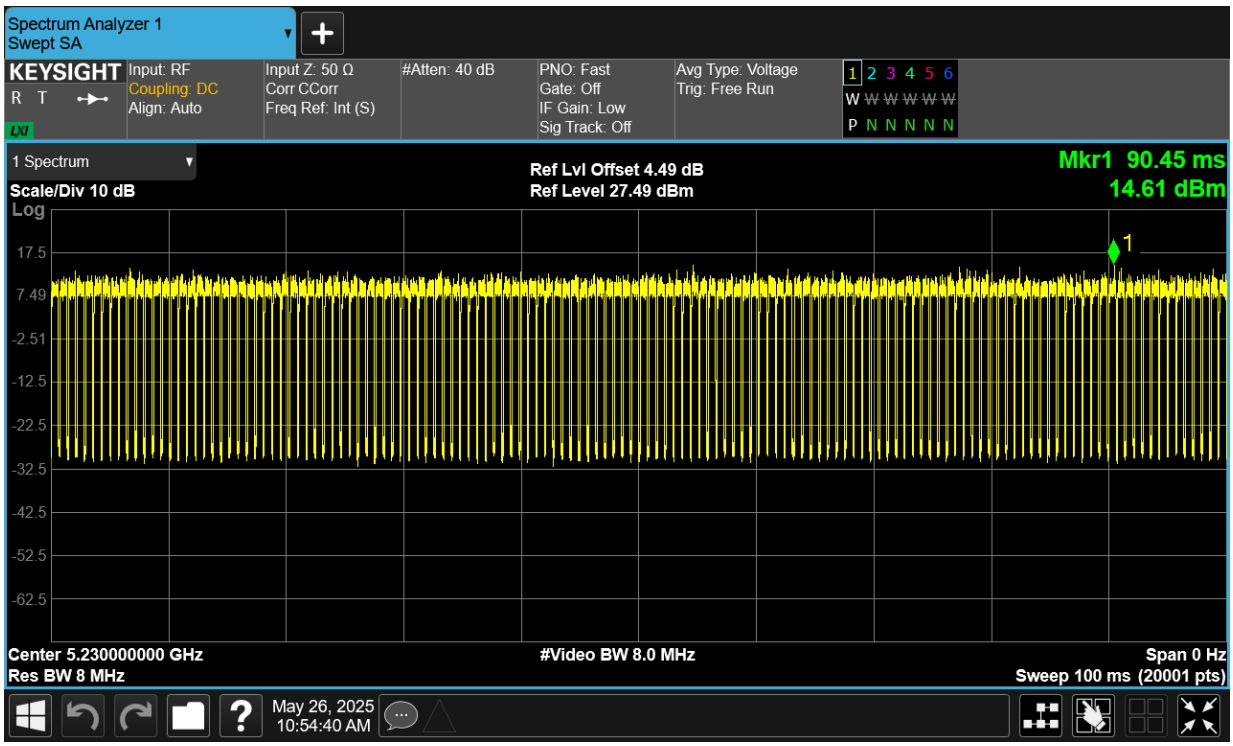
Duty Cycle NVNT n20 5240MHz Ant1



Duty Cycle NVNT n40 5190MHz Ant1



Duty Cycle NVNT n40 5230MHz Ant1



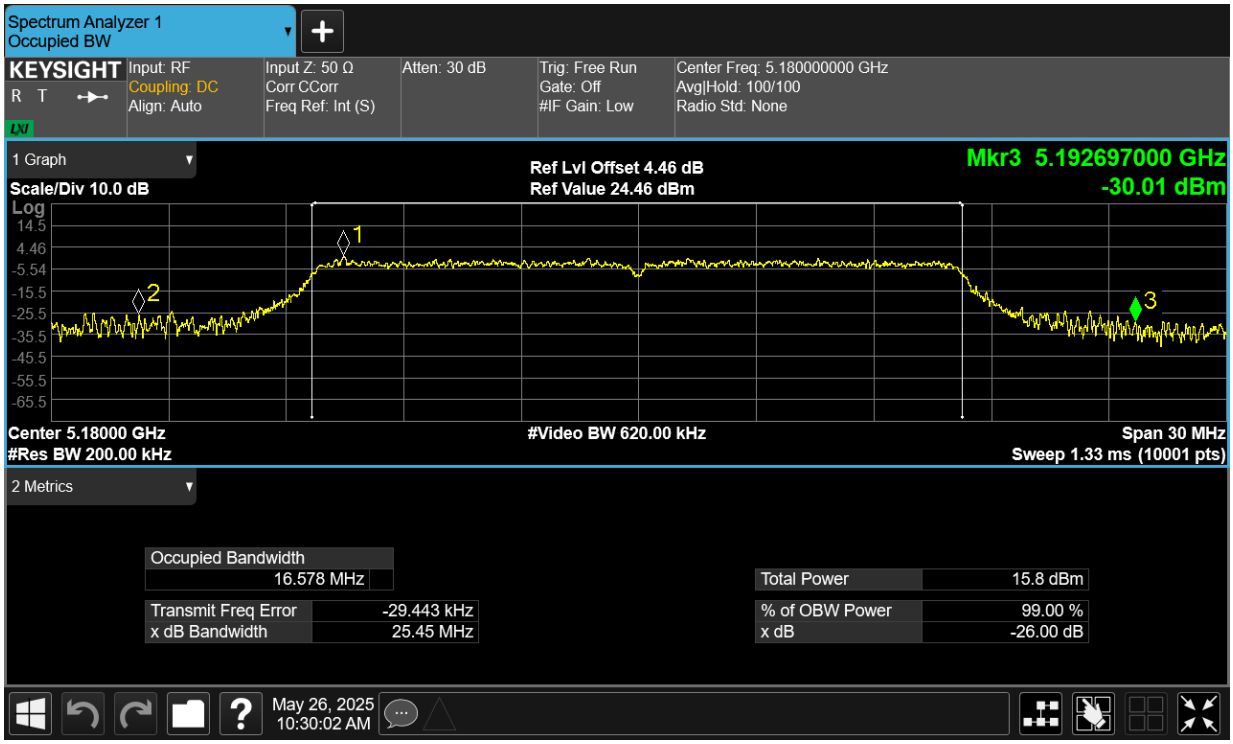
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	10.16	0.42	10.58	24	Pass
NVNT	a	5200	Ant1	9.93	0.41	10.34	24	Pass
NVNT	a	5240	Ant1	9.83	0.44	10.27	24	Pass
NVNT	ac20	5180	Ant1	10.41	0.5	10.91	24	Pass
NVNT	ac20	5200	Ant1	9.87	0.48	10.35	24	Pass
NVNT	ac20	5240	Ant1	9.73	0.48	10.21	24	Pass
NVNT	ac40	5190	Ant1	10.55	0.91	11.46	23	Pass
NVNT	ac40	5230	Ant1	10.08	0.88	10.96	24	Pass
NVNT	ac80	5210	Ant1	10.1	1.63	11.73	24	Pass
NVNT	n20	5180	Ant1	10.44	0.48	10.92	24	Pass
NVNT	n20	5200	Ant1	9.86	0.47	10.33	24	Pass
NVNT	n20	5240	Ant1	9.83	0.48	10.31	24	Pass
NVNT	n40	5190	Ant1	10.54	0.87	11.41	24	Pass
NVNT	n40	5230	Ant1	10.04	0.88	10.92	24	Pass

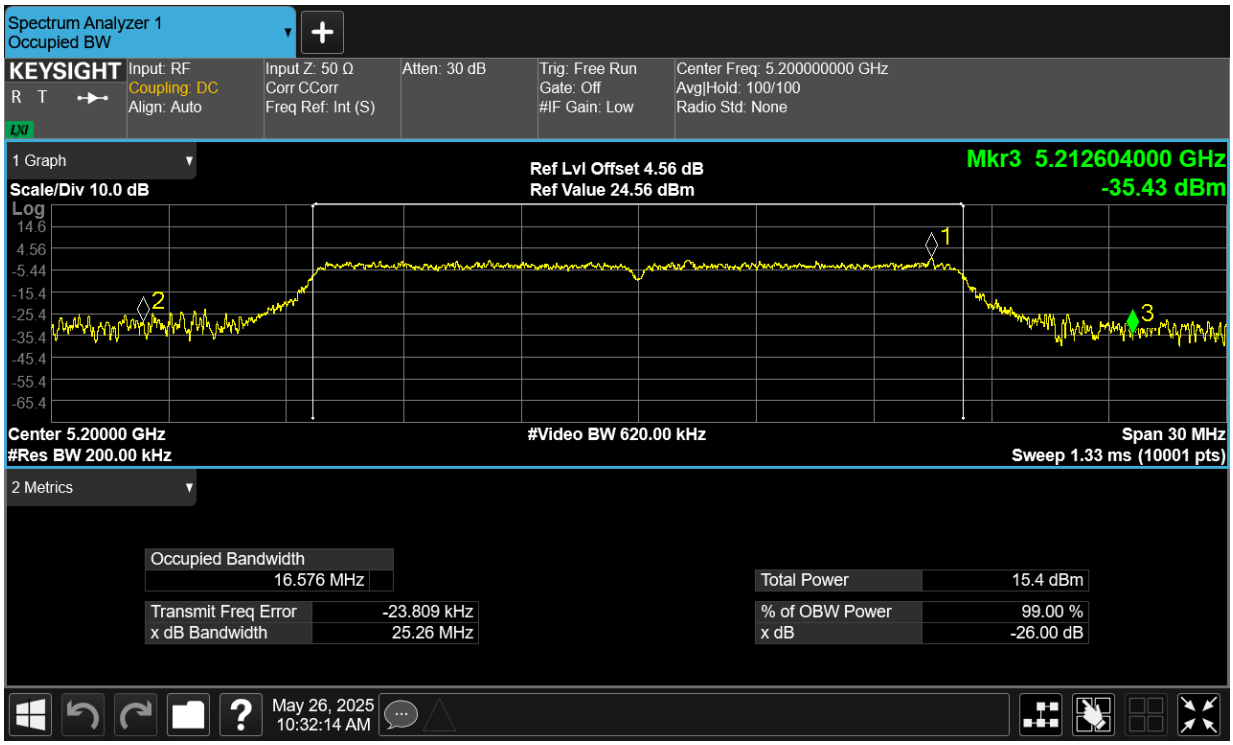
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	25.452
NVNT	a	5200	Ant1	25.256
NVNT	a	5240	Ant1	24.87
NVNT	ac20	5180	Ant1	21.965
NVNT	ac20	5200	Ant1	26.285
NVNT	ac20	5240	Ant1	28.912
NVNT	ac40	5190	Ant1	52.761
NVNT	ac40	5230	Ant1	53.673
NVNT	ac80	5210	Ant1	78.32
NVNT	n20	5180	Ant1	27.652
NVNT	n20	5200	Ant1	27.455
NVNT	n20	5240	Ant1	27.751
NVNT	n40	5190	Ant1	59.19
NVNT	n40	5230	Ant1	57.926

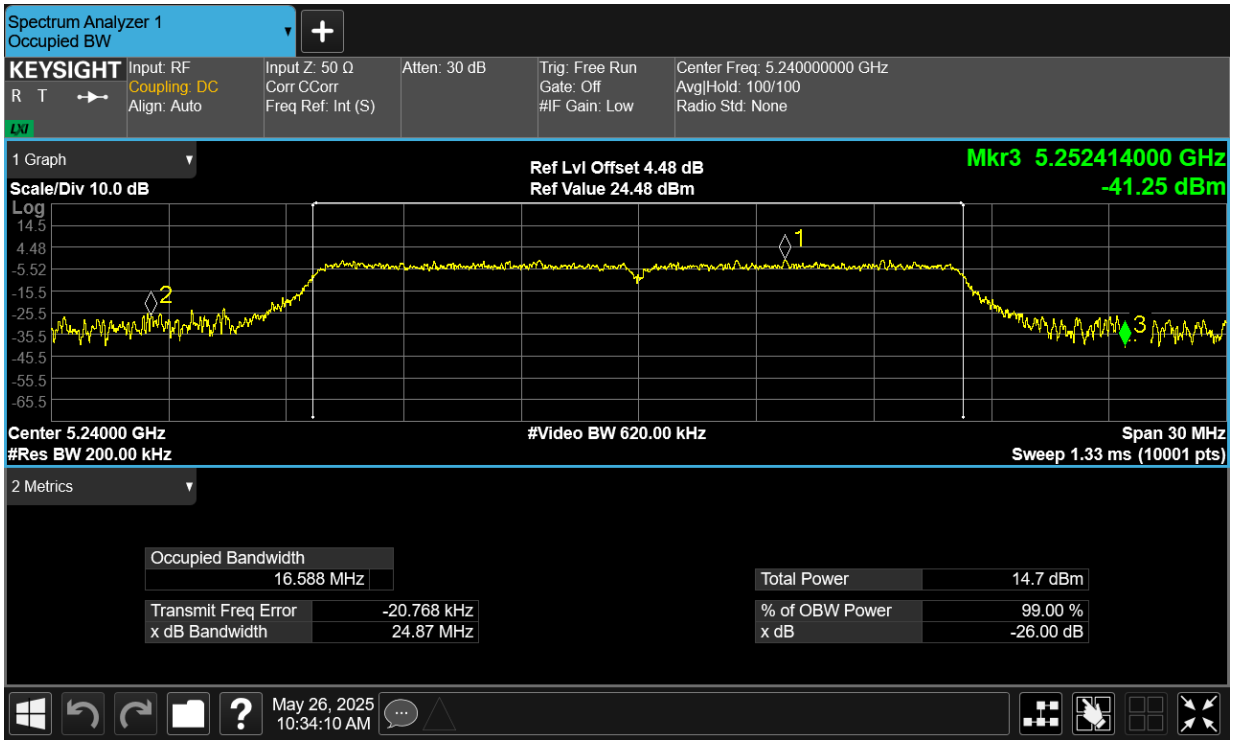
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1



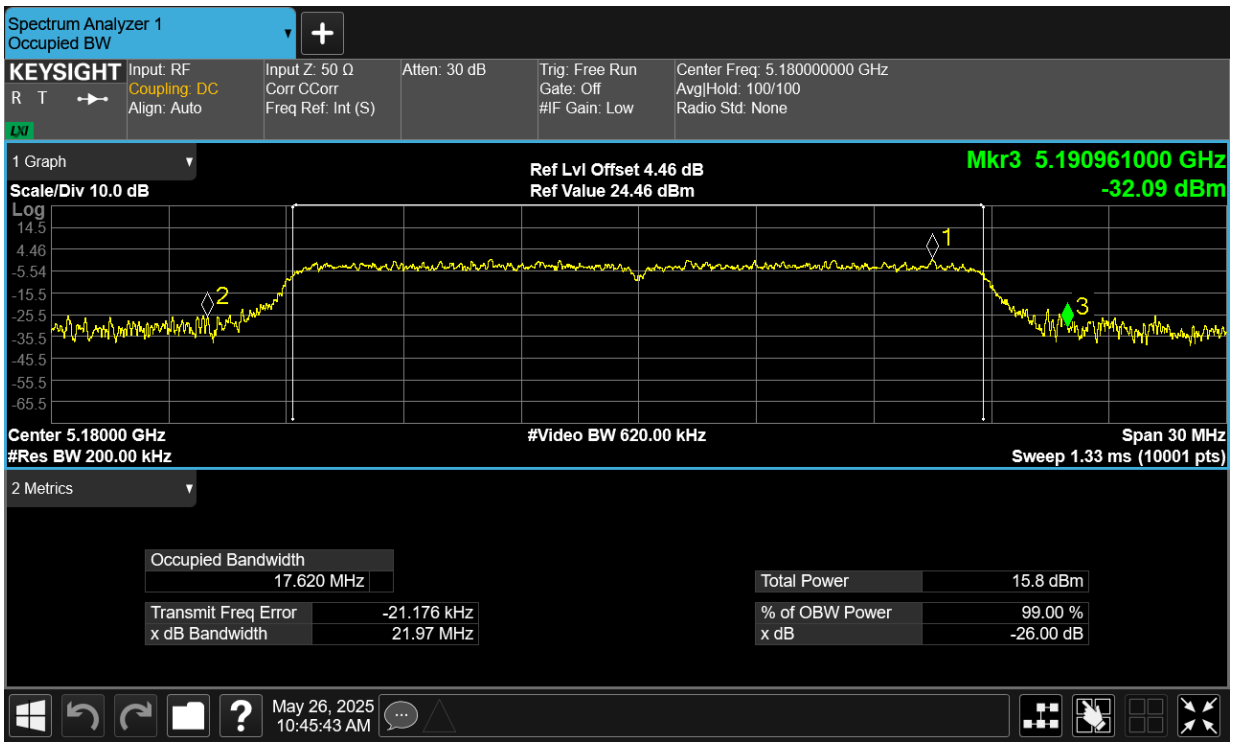
-26dB Bandwidth NVNT a 5200MHz Ant1



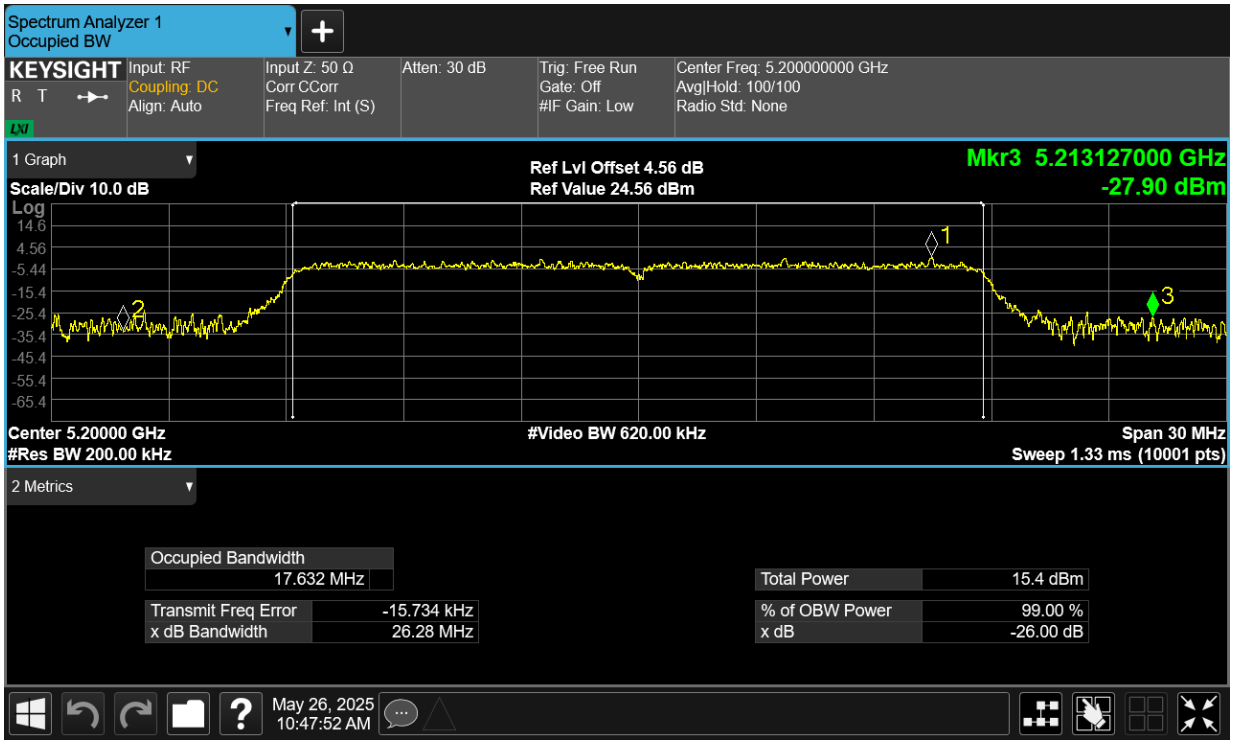
-26dB Bandwidth NVNT a 5240MHz Ant1



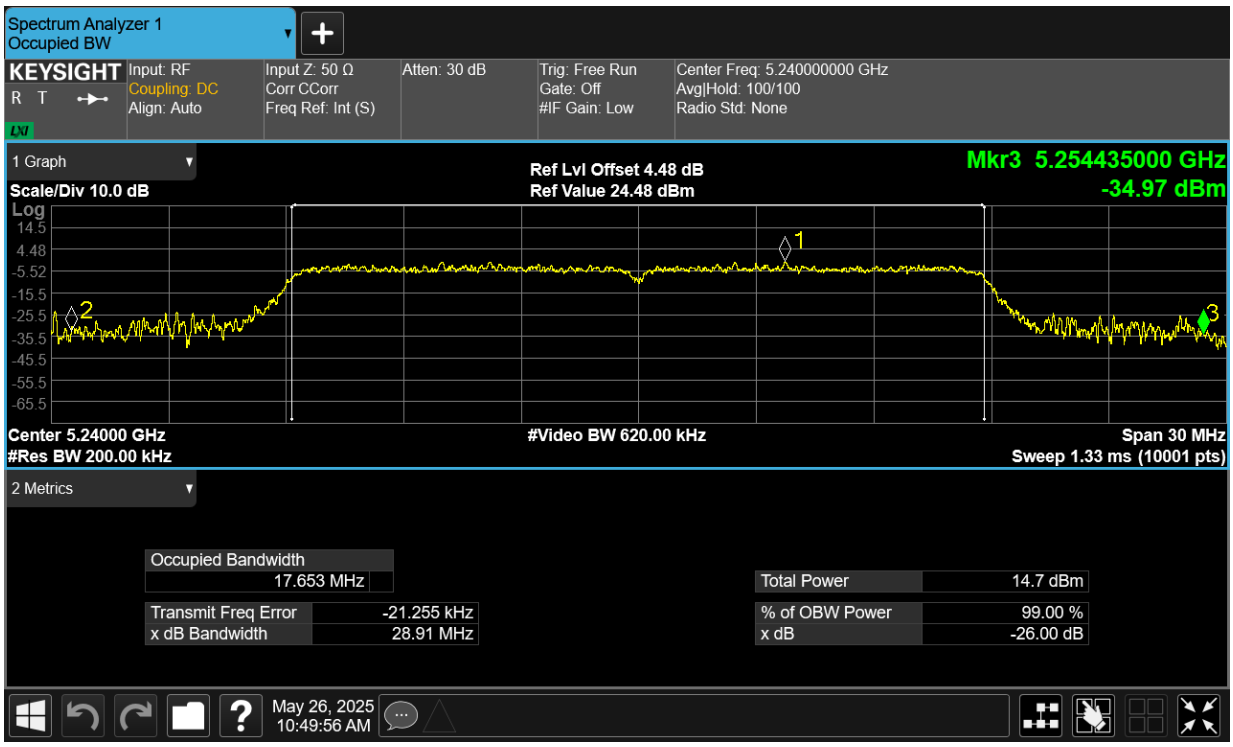
-26dB Bandwidth NVNT ac20 5180MHz Ant1



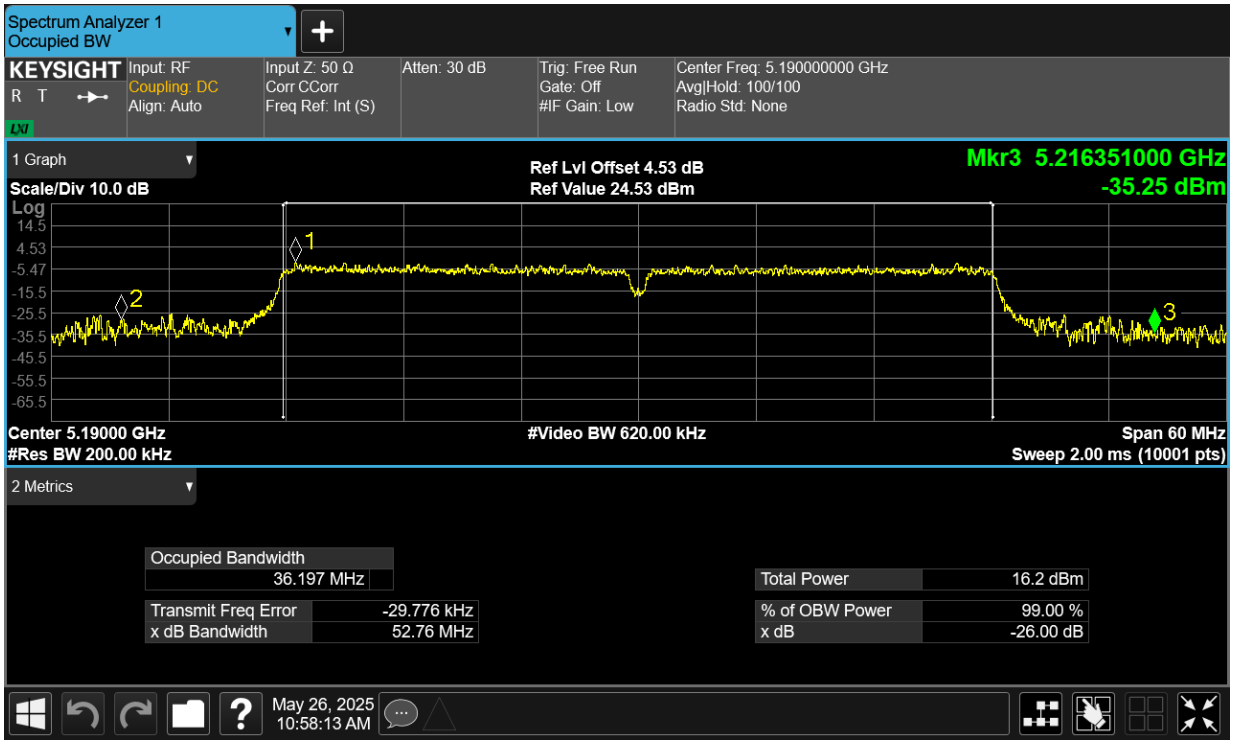
-26dB Bandwidth NVNT ac20 5200MHz Ant1



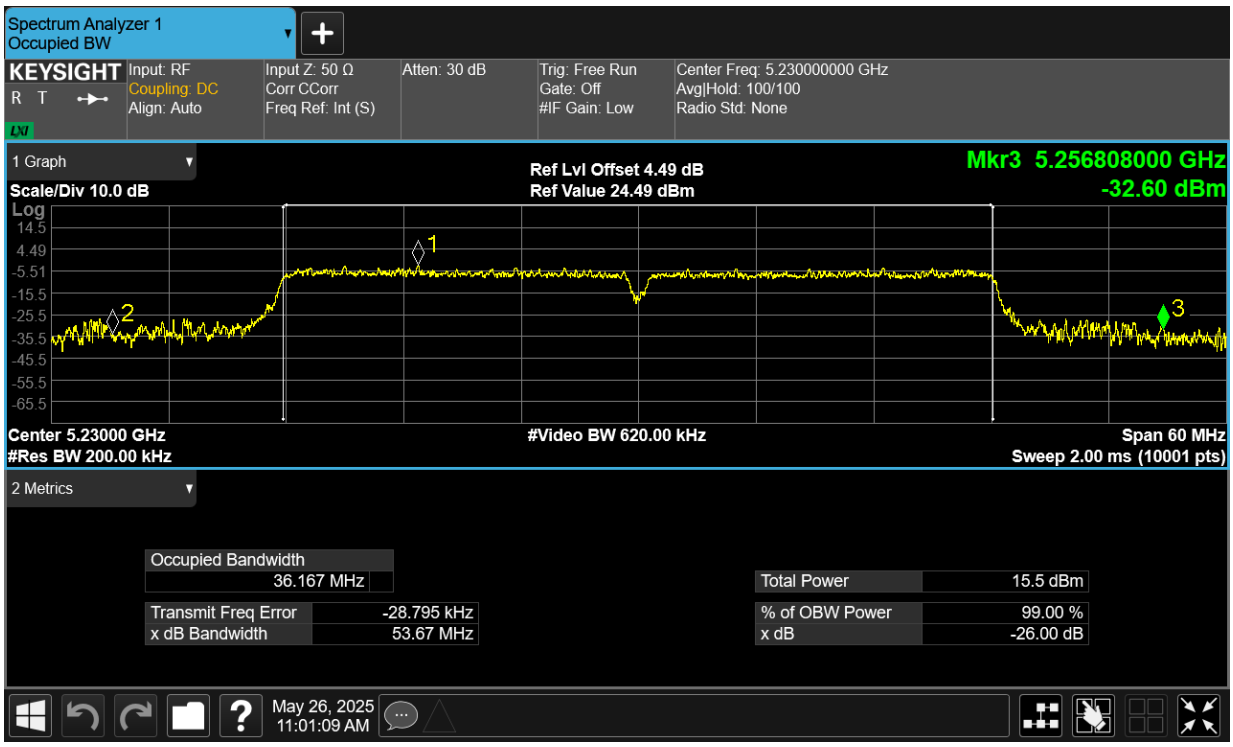
-26dB Bandwidth NVNT ac20 5240MHz Ant1



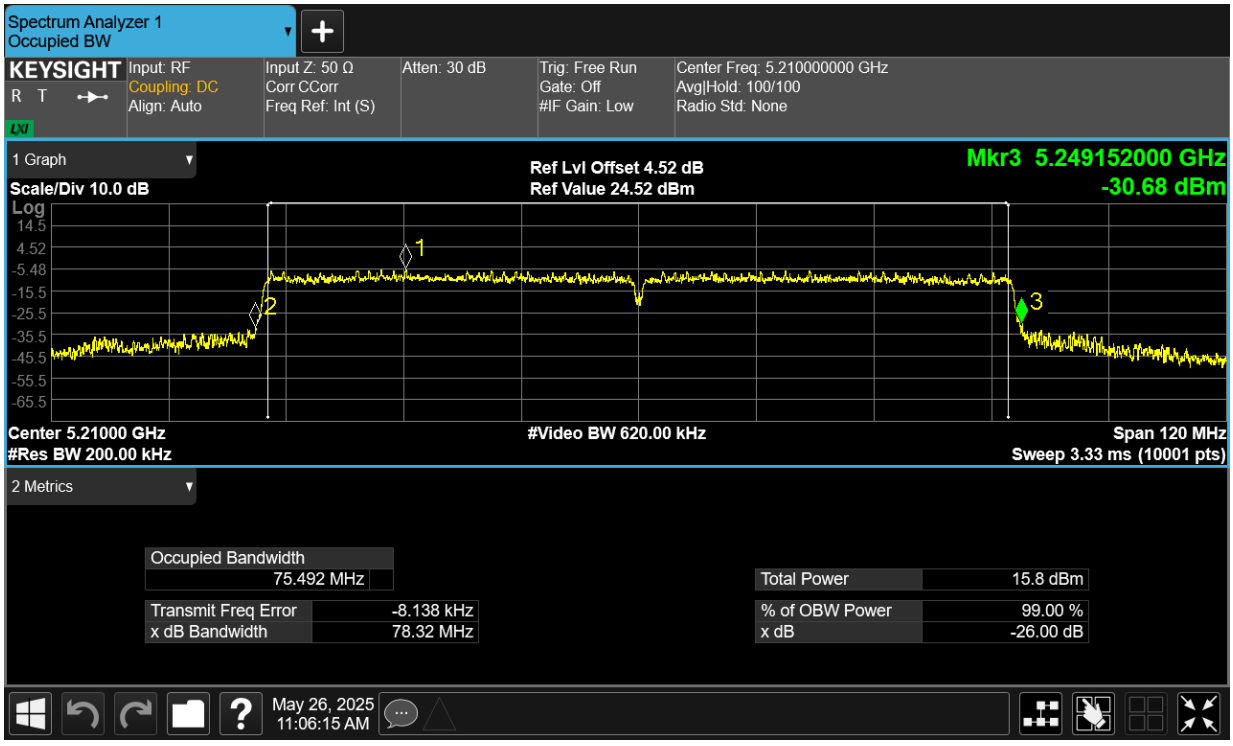
-26dB Bandwidth NVNT ac40 5190MHz Ant1



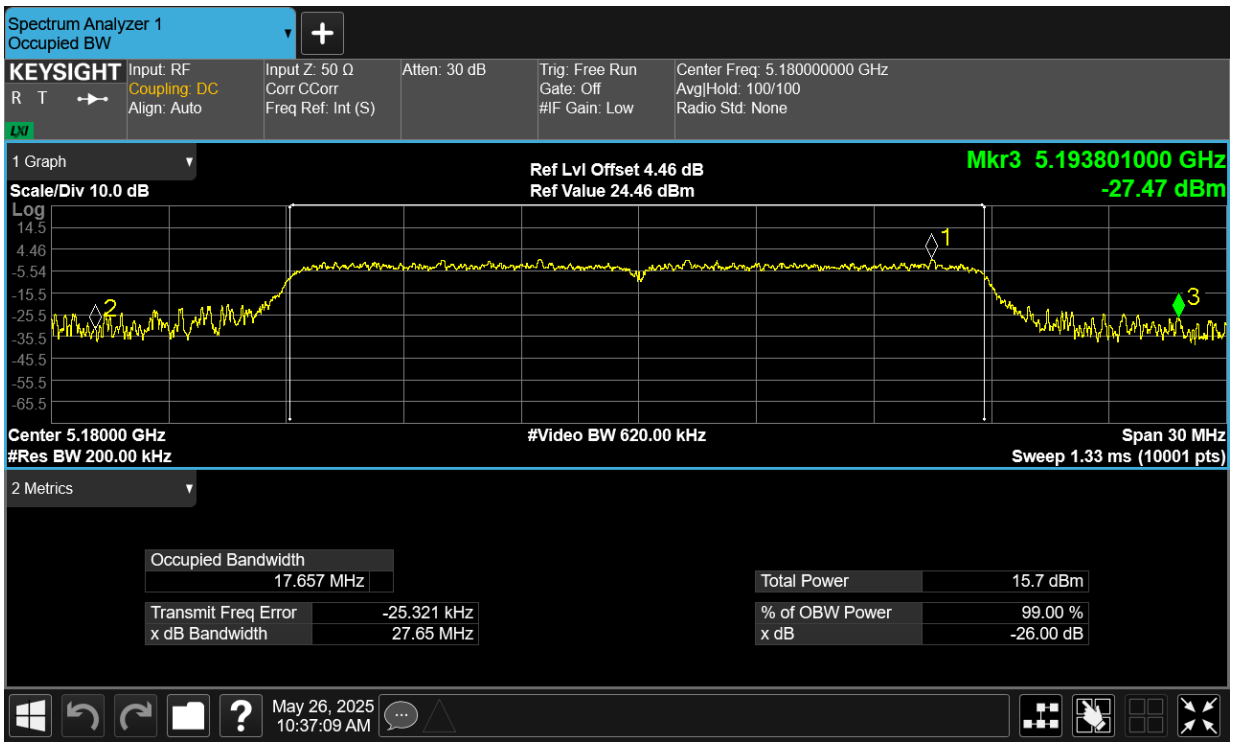
-26dB Bandwidth NVNT ac40 5230MHz Ant1



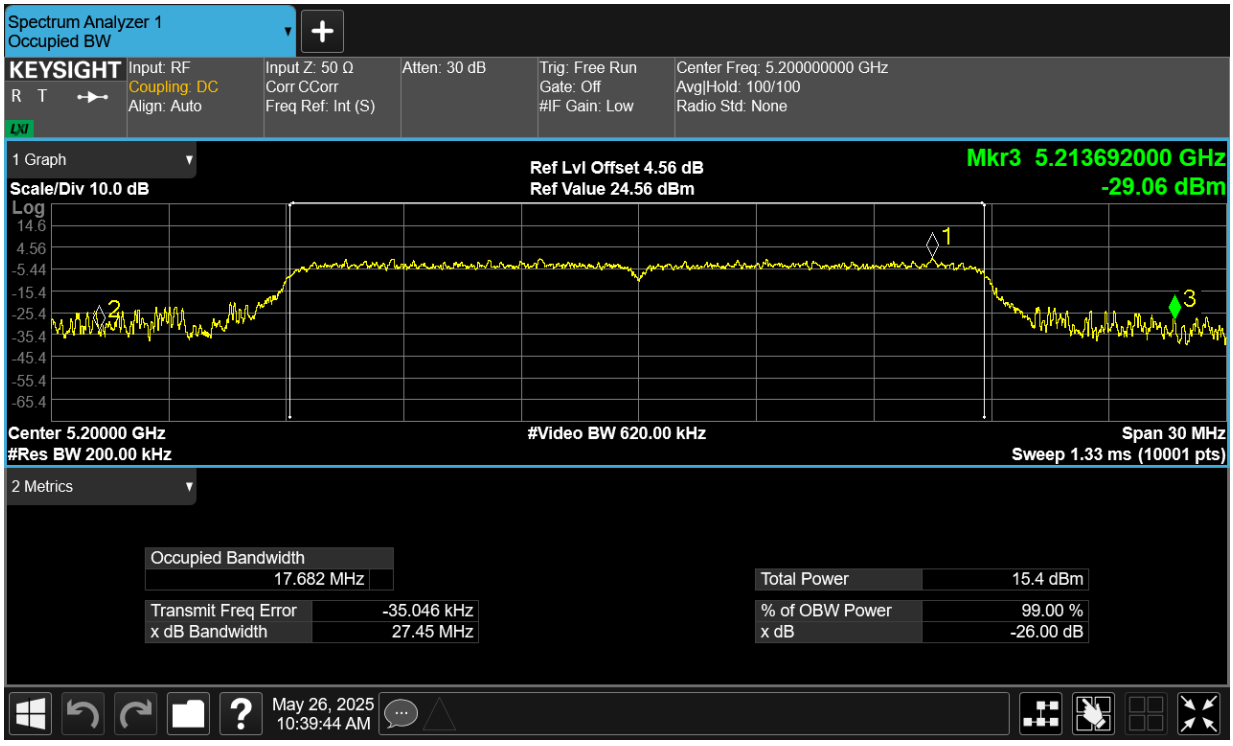
-26dB Bandwidth NVNT ac80 5210MHz Ant1



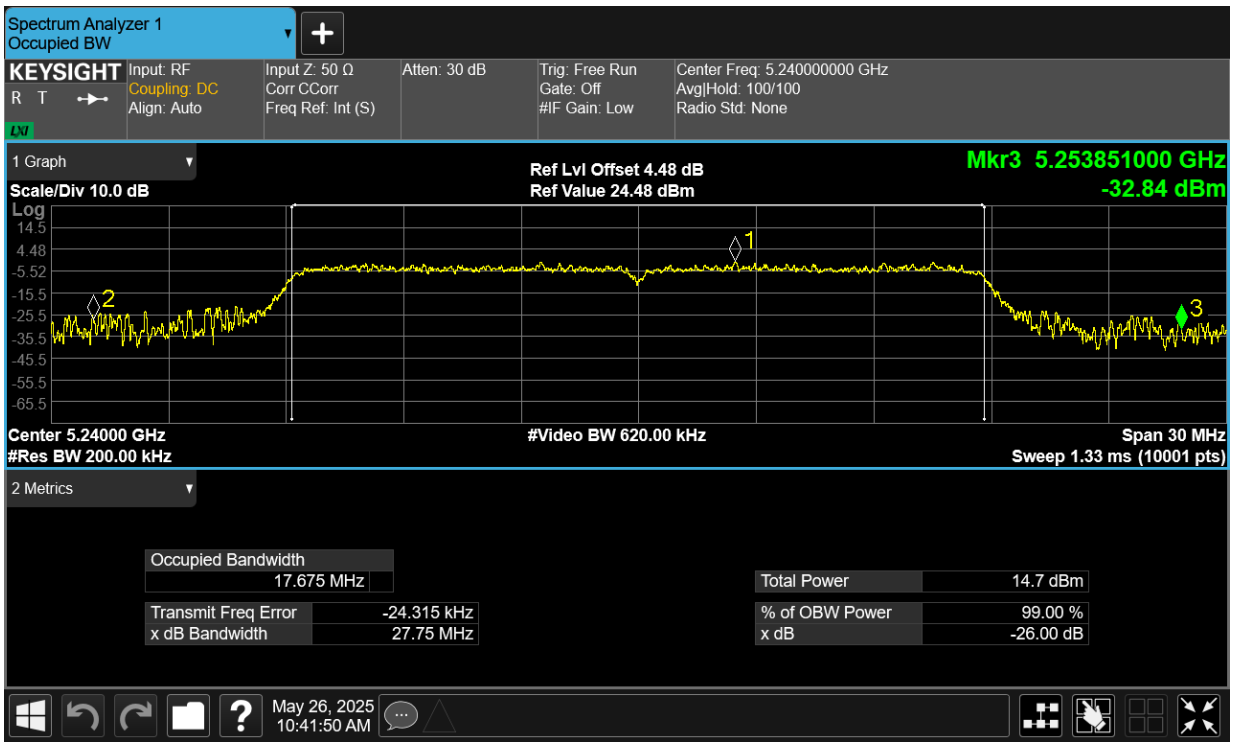
-26dB Bandwidth NVNT n20 5180MHz Ant1



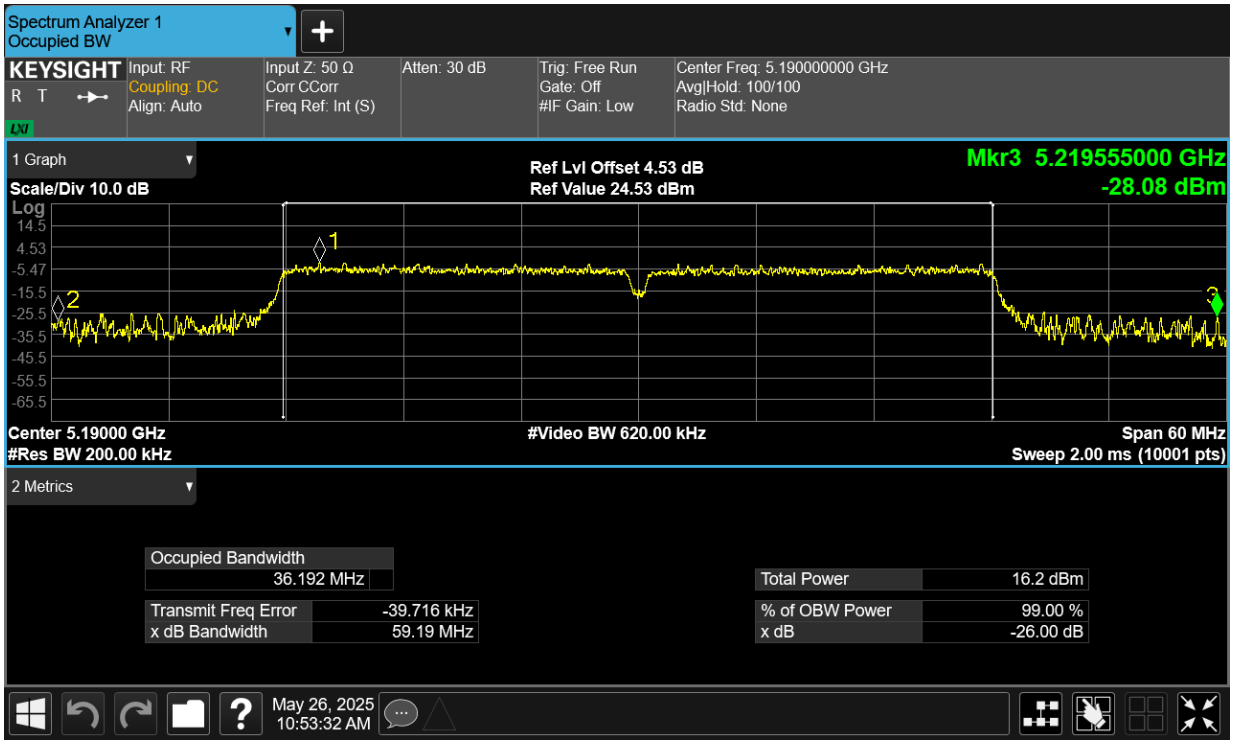
-26dB Bandwidth NVNT n20 5200MHz Ant1



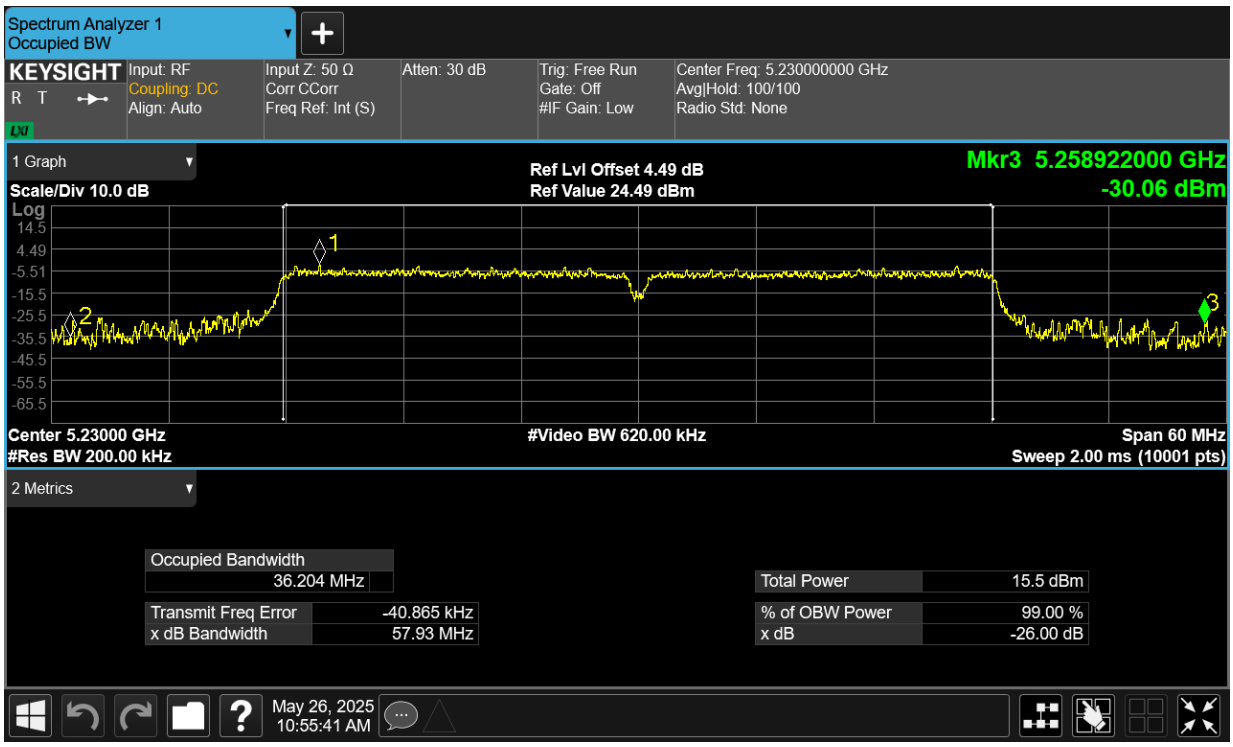
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



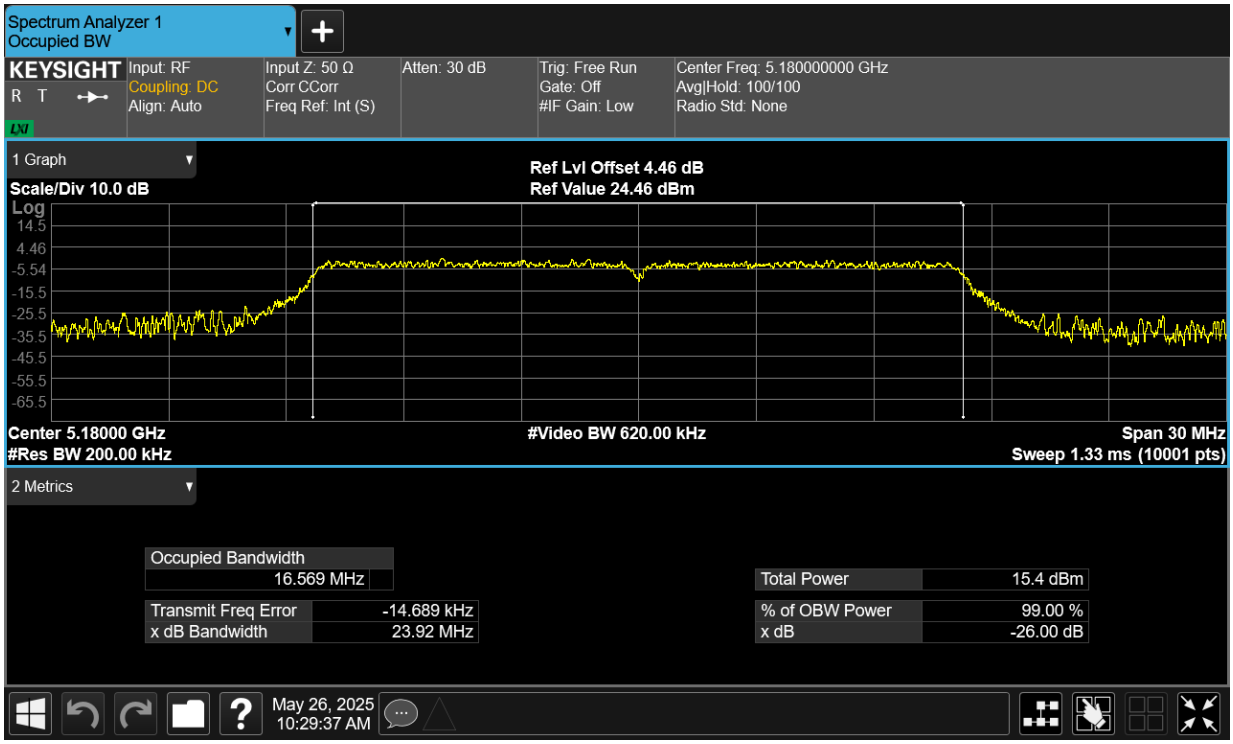
-26dB Bandwidth NVNT n40 5230MHz Ant1



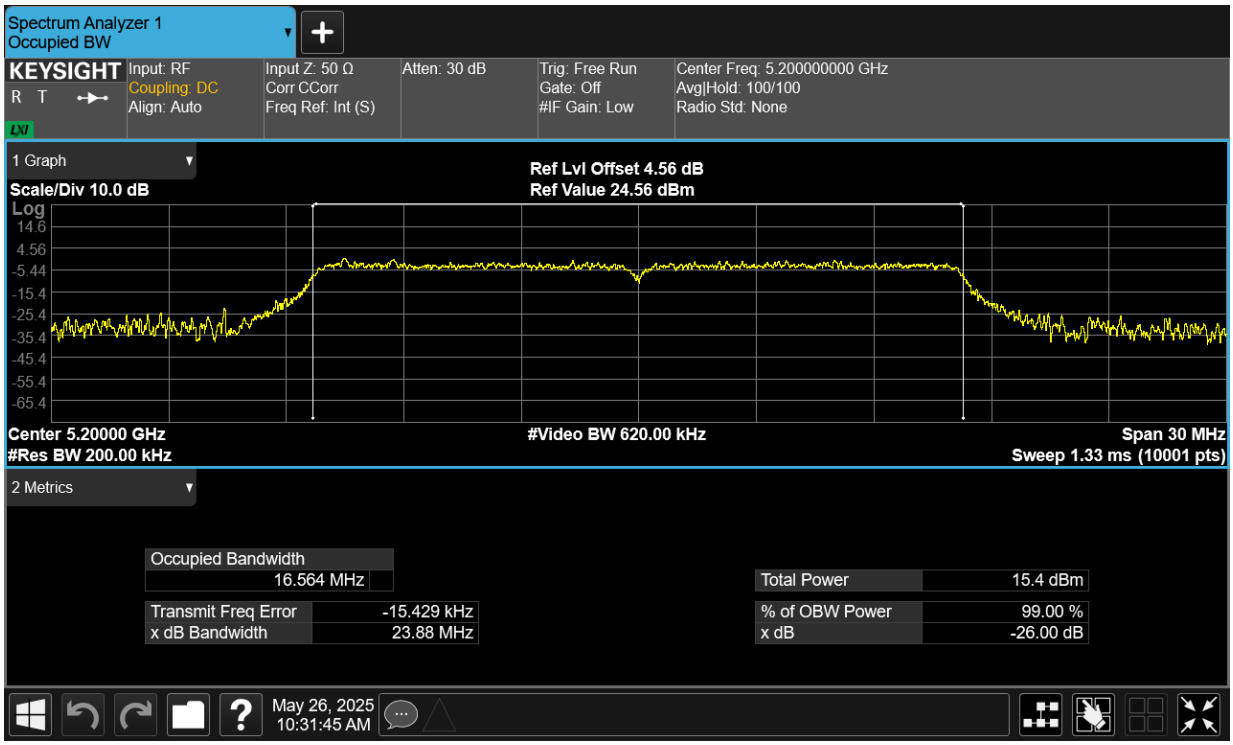
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.569
NVNT	a	5200	Ant1	16.564
NVNT	a	5240	Ant1	16.576
NVNT	ac20	5180	Ant1	17.626
NVNT	ac20	5200	Ant1	17.639
NVNT	ac20	5240	Ant1	17.629
NVNT	ac40	5190	Ant1	36.261
NVNT	ac40	5230	Ant1	36.351
NVNT	ac80	5210	Ant1	75.614
NVNT	n20	5180	Ant1	17.655
NVNT	n20	5200	Ant1	17.661
NVNT	n20	5240	Ant1	17.636
NVNT	n40	5190	Ant1	36.35
NVNT	n40	5230	Ant1	36.409

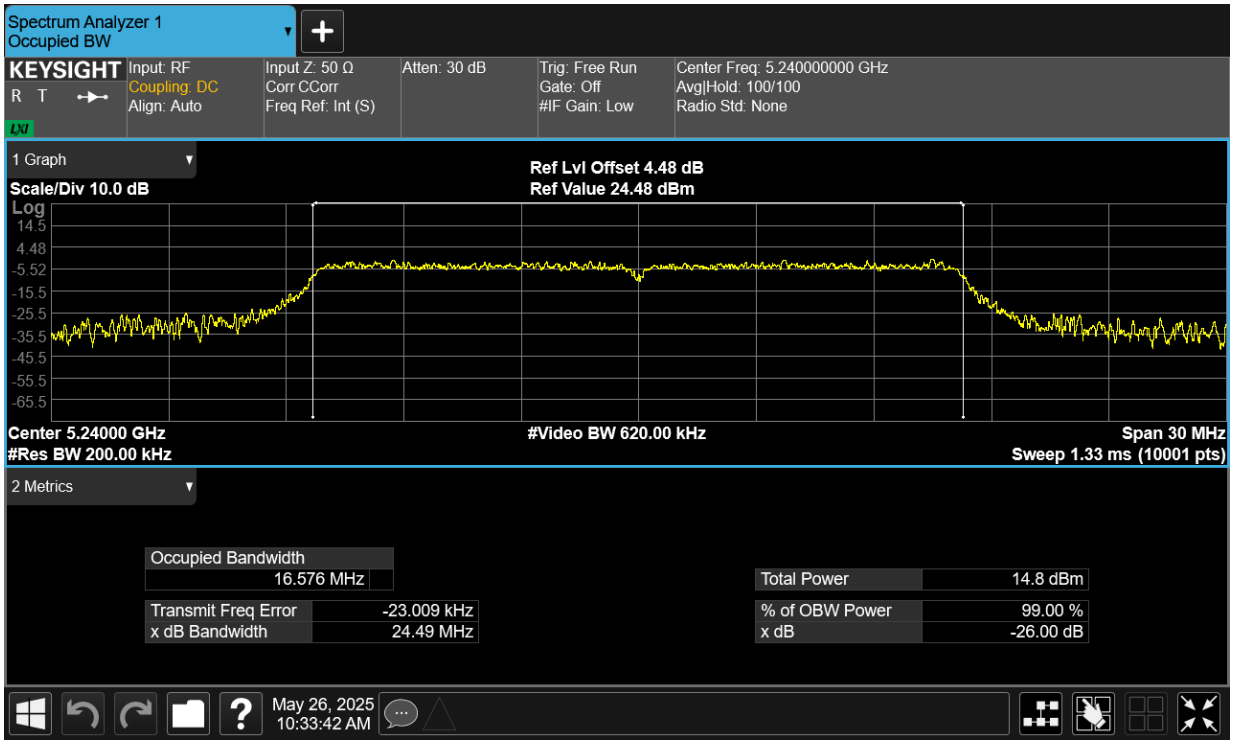
Test Graphs
OBW NVNT a 5180MHz Ant1



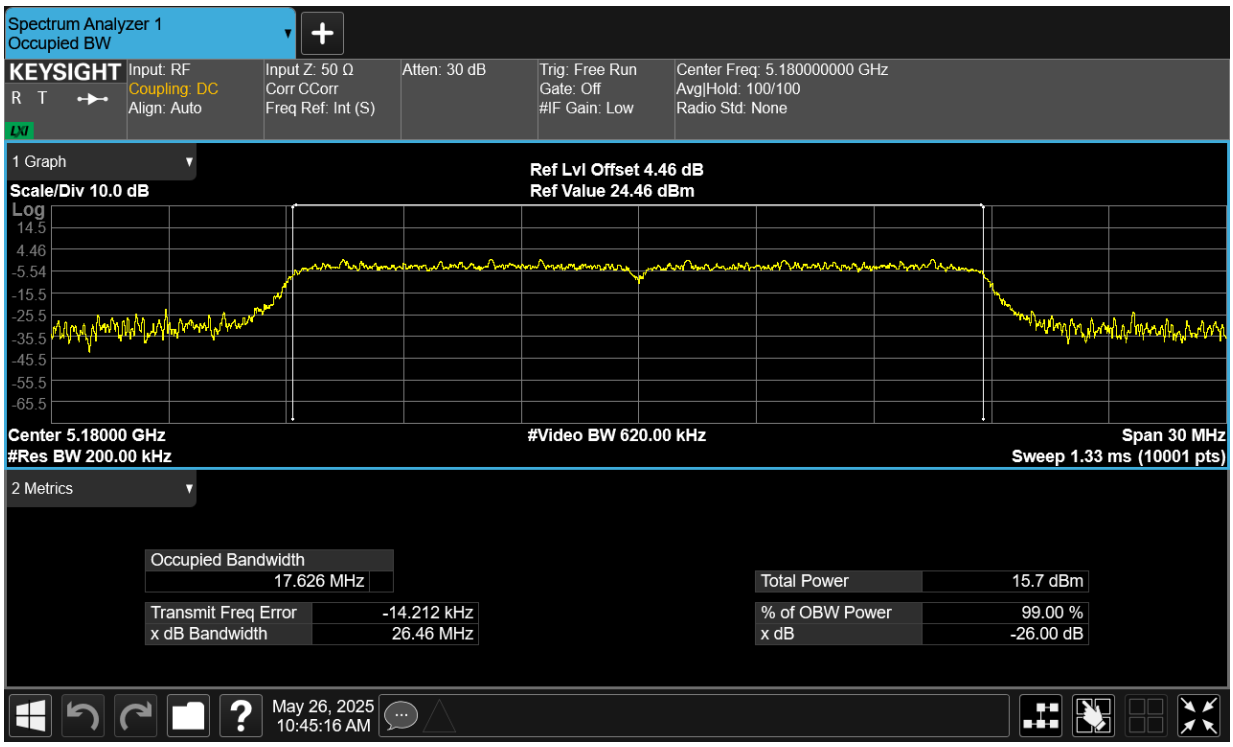
OBW NVNT a 5200MHz Ant1



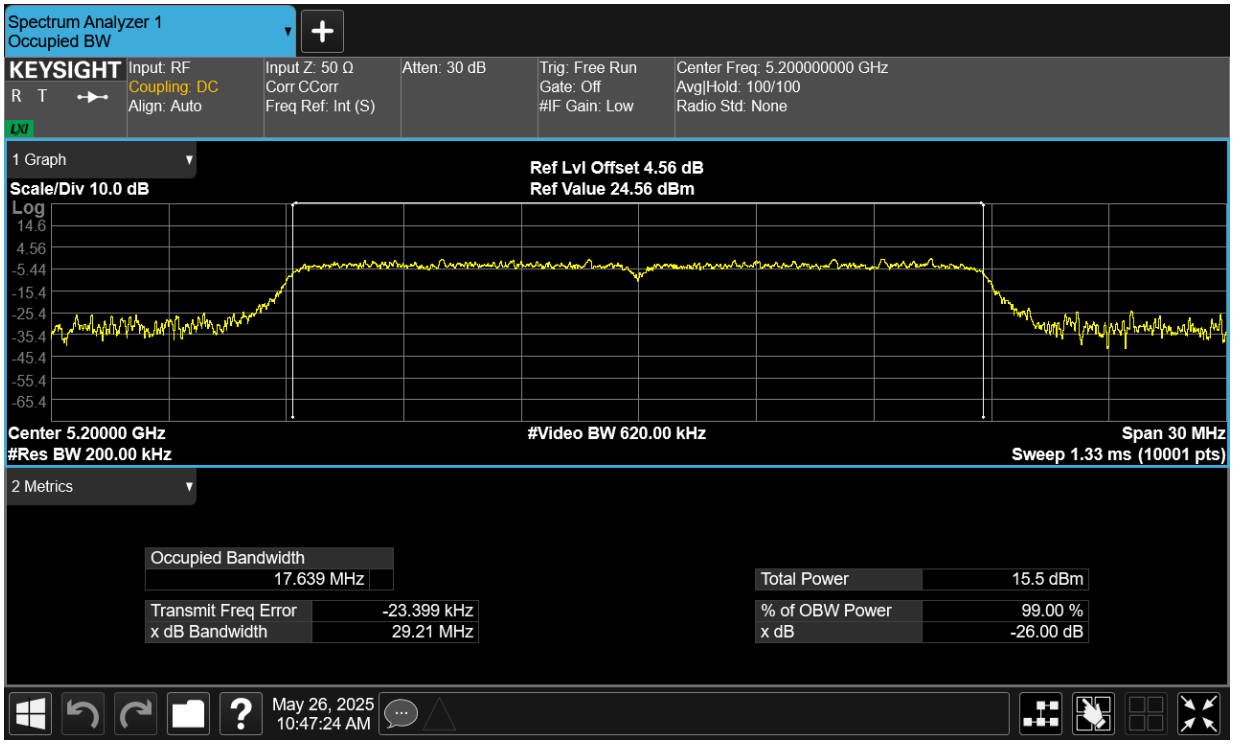
OBW NVNT a 5240MHz Ant1



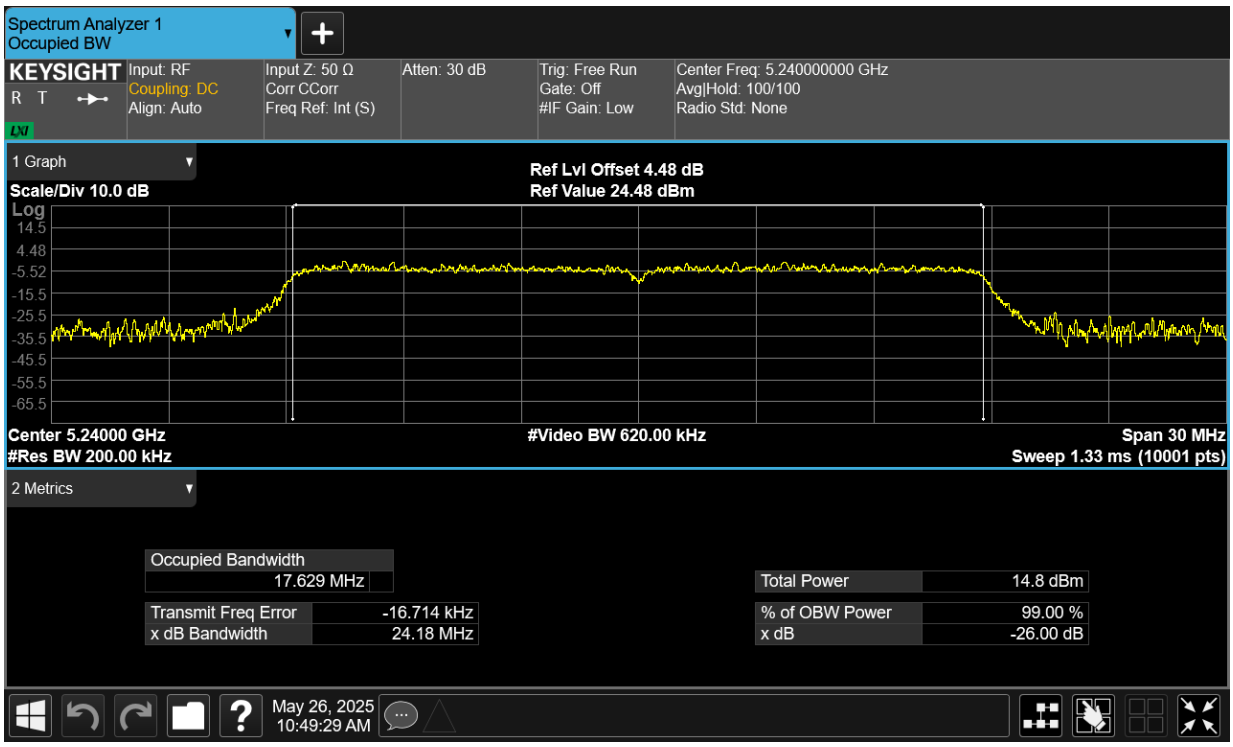
OBW NVNT ac20 5180MHz Ant1



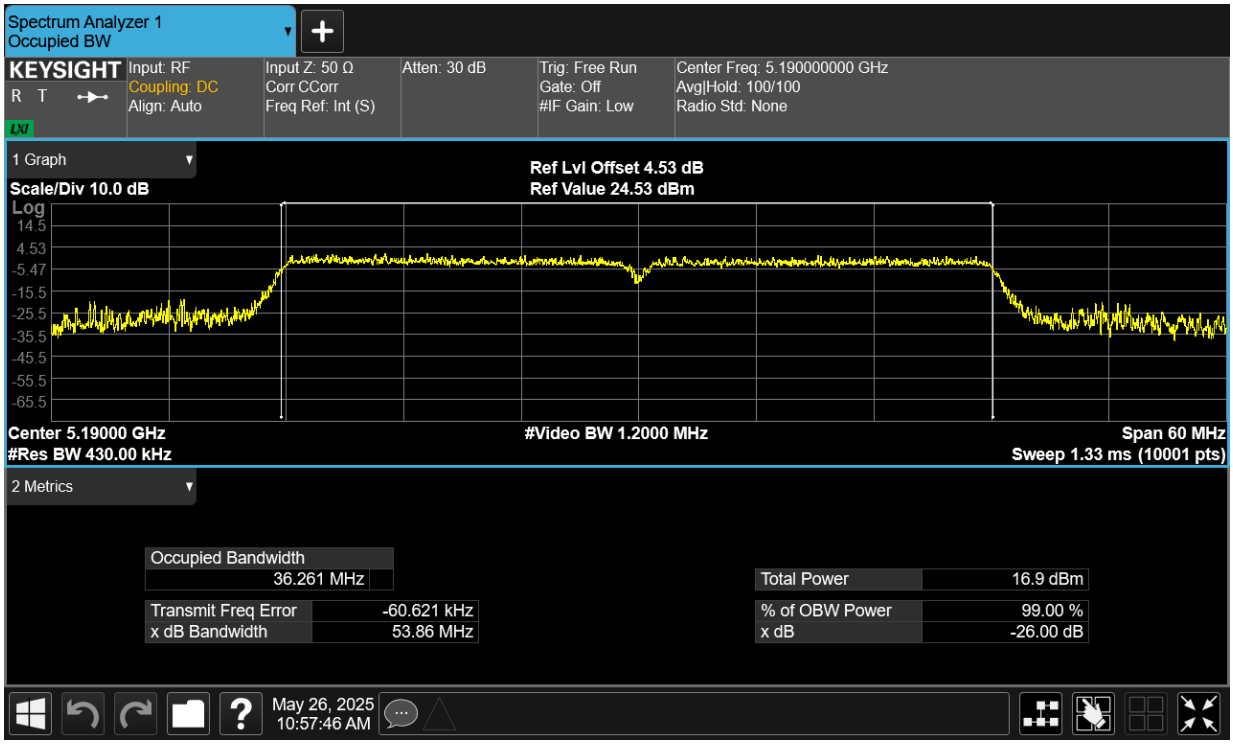
OBW NVNT ac20 5200MHz Ant1



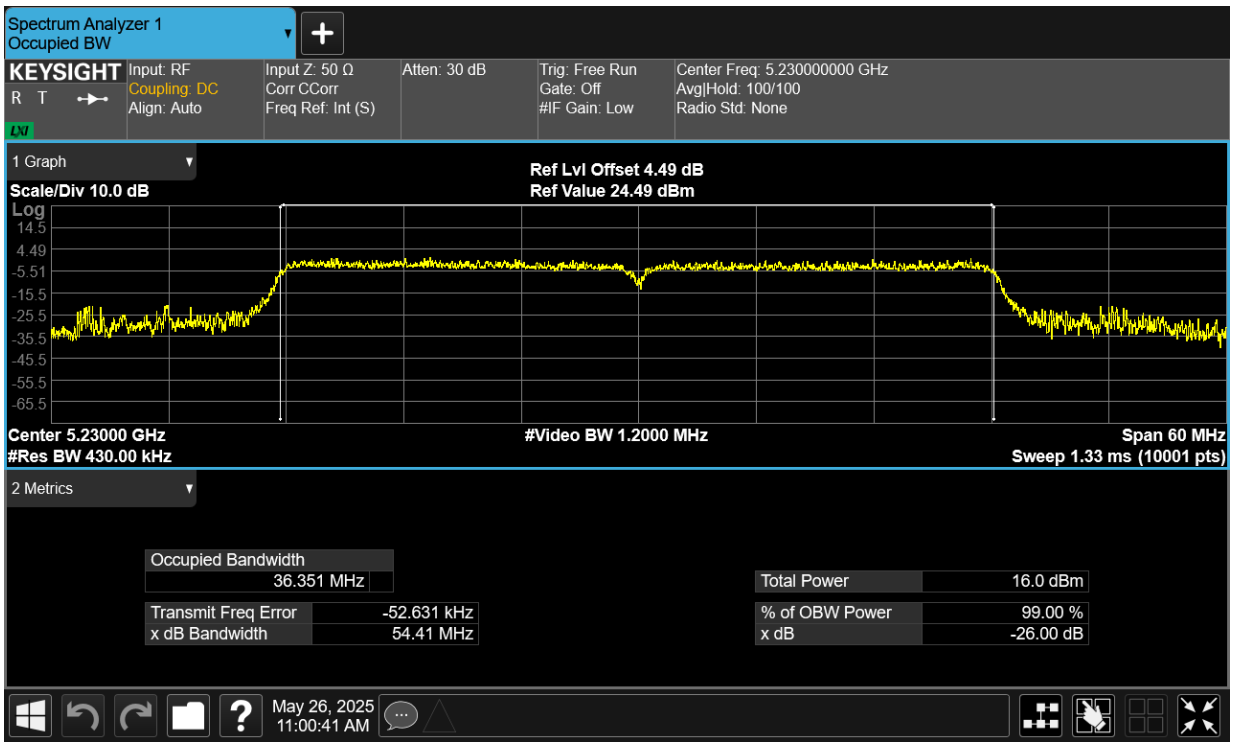
OBW NVNT ac20 5240MHz Ant1



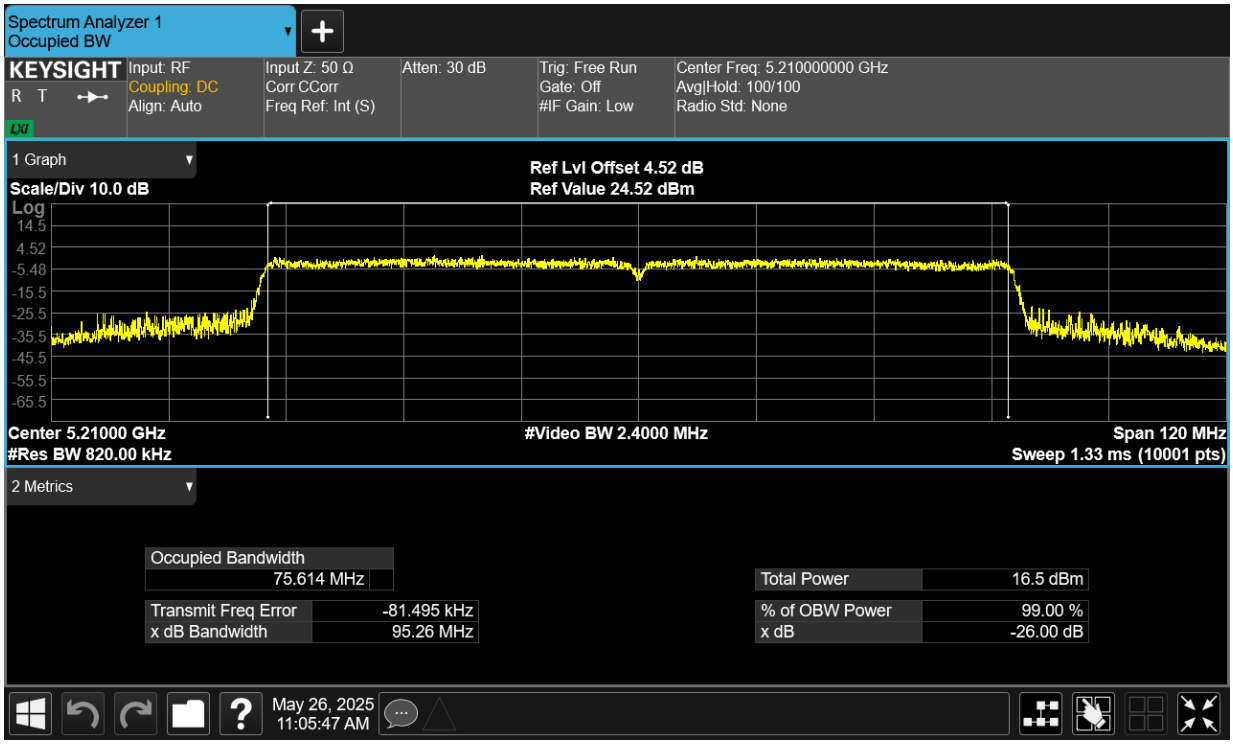
OBW NVNT ac40 5190MHz Ant1



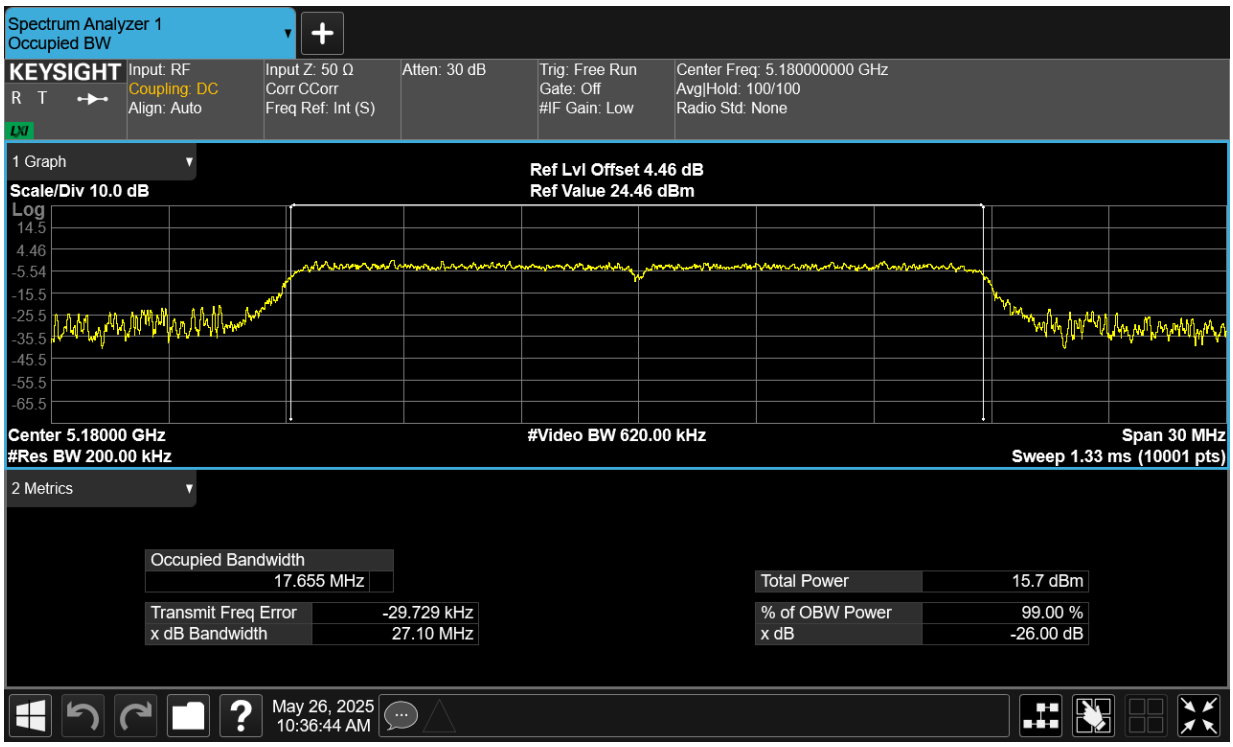
OBW NVNT ac40 5230MHz Ant1



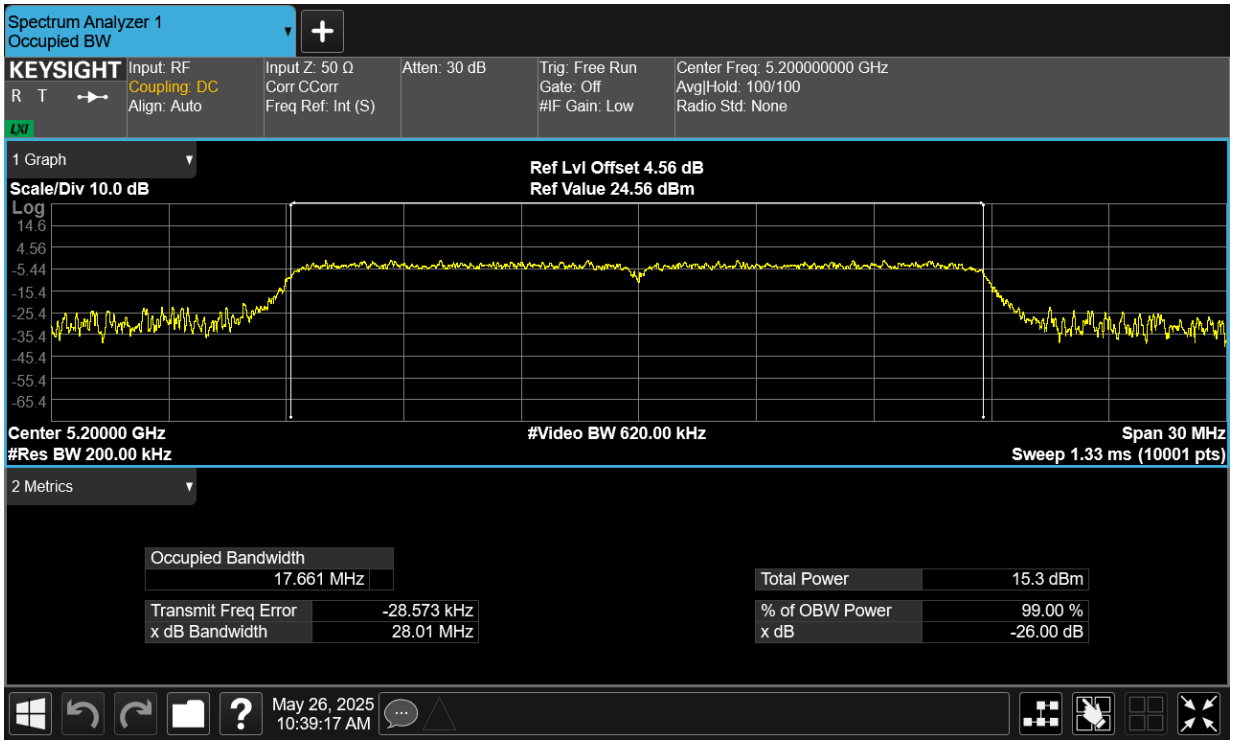
OBW NVNT ac80 5210MHz Ant1



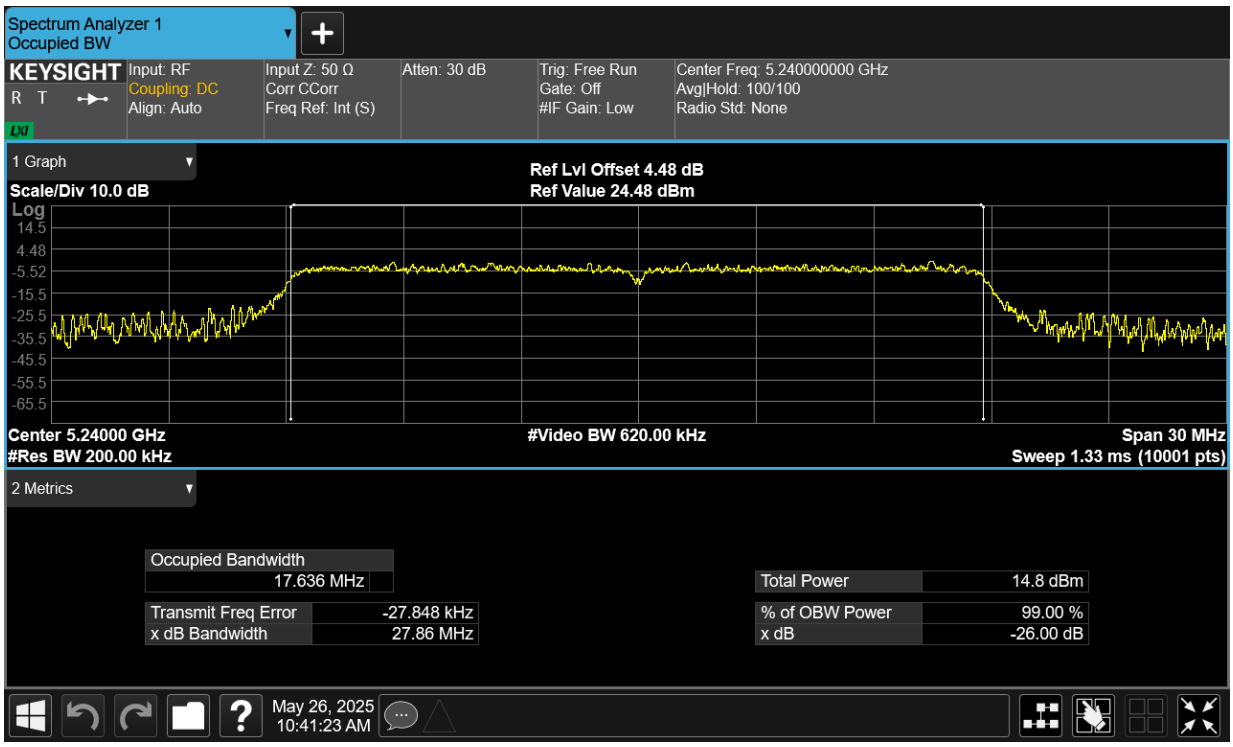
OBW NVNT n20 5180MHz Ant1



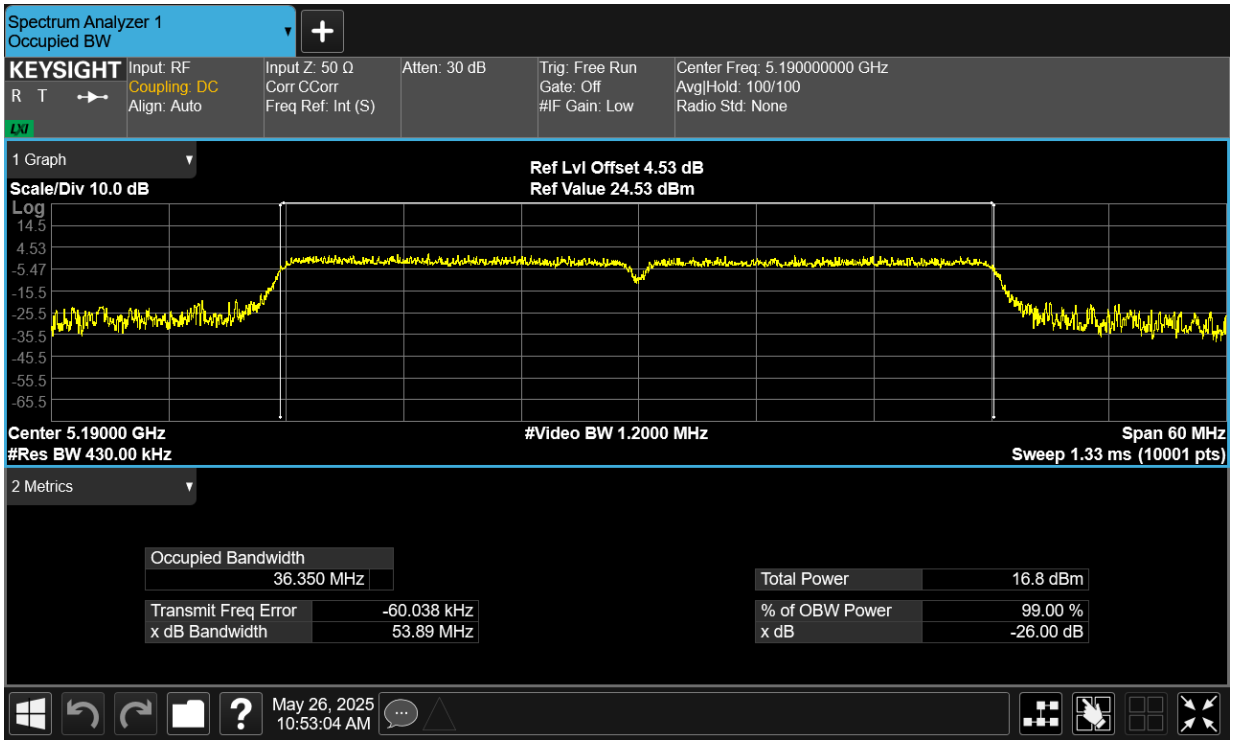
OBW NVNT n20 5200MHz Ant1



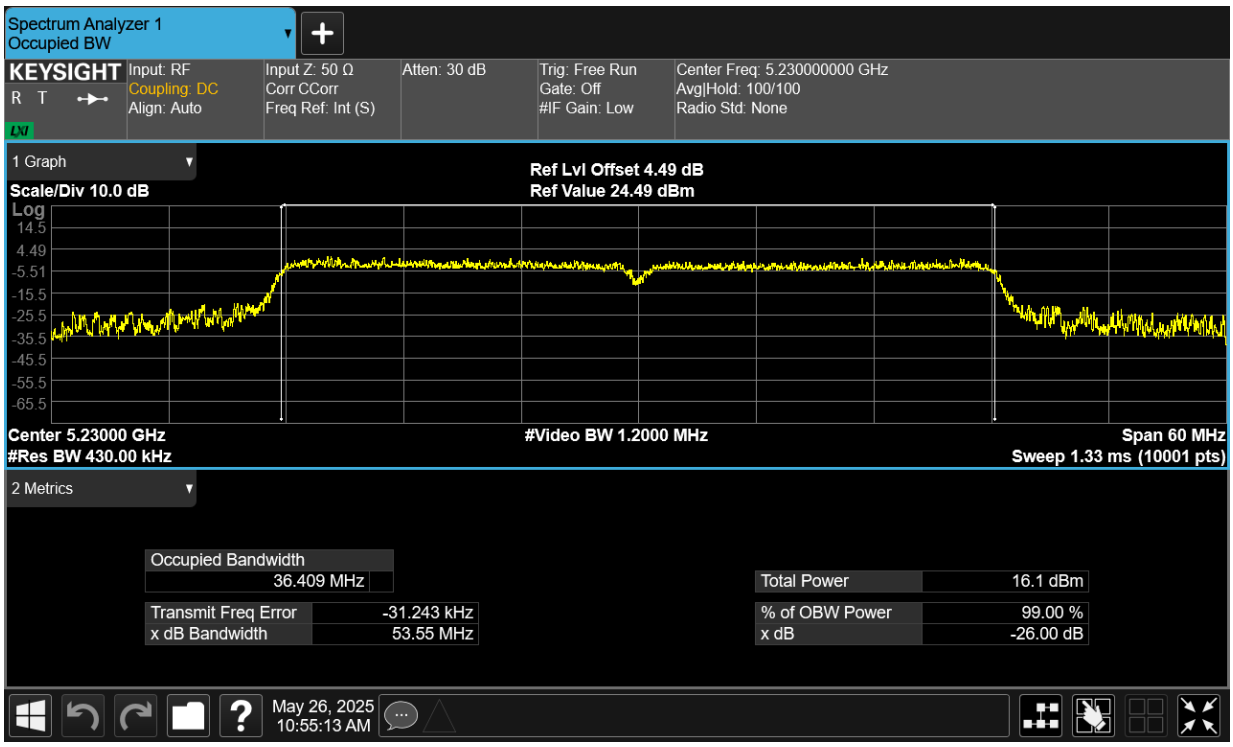
OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



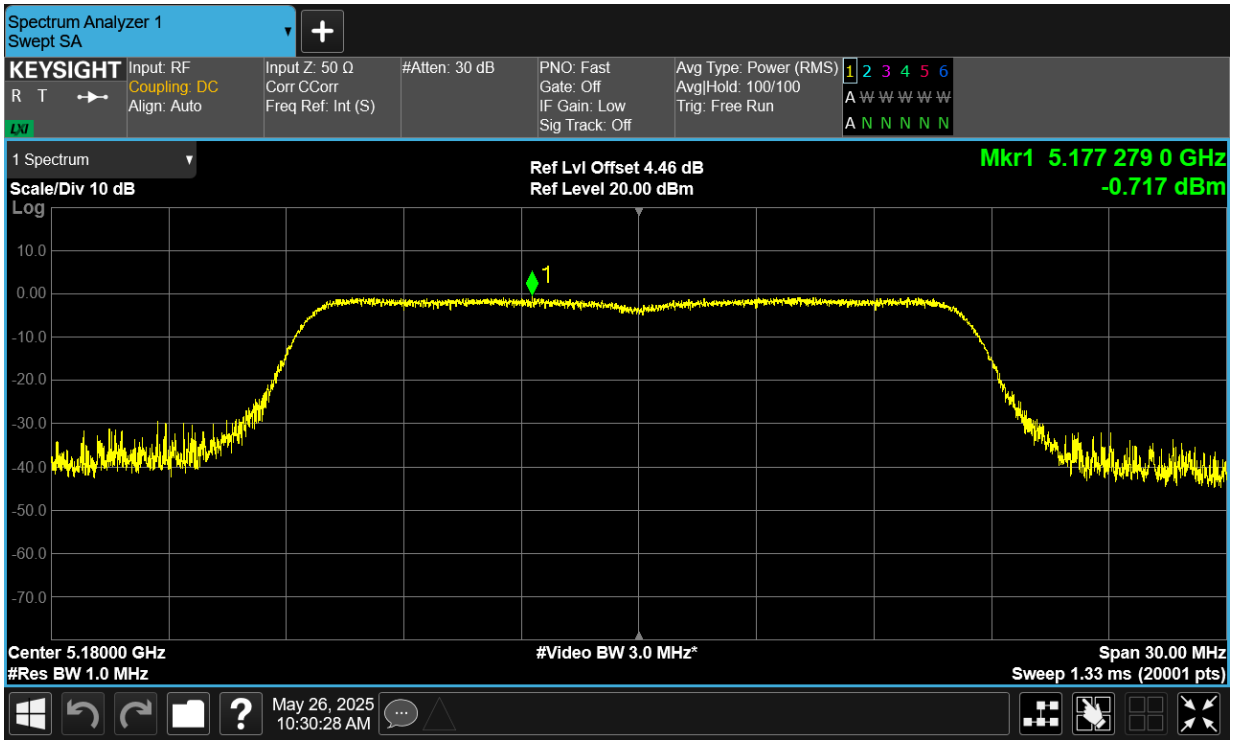
OBW NVNT n40 5230MHz Ant1



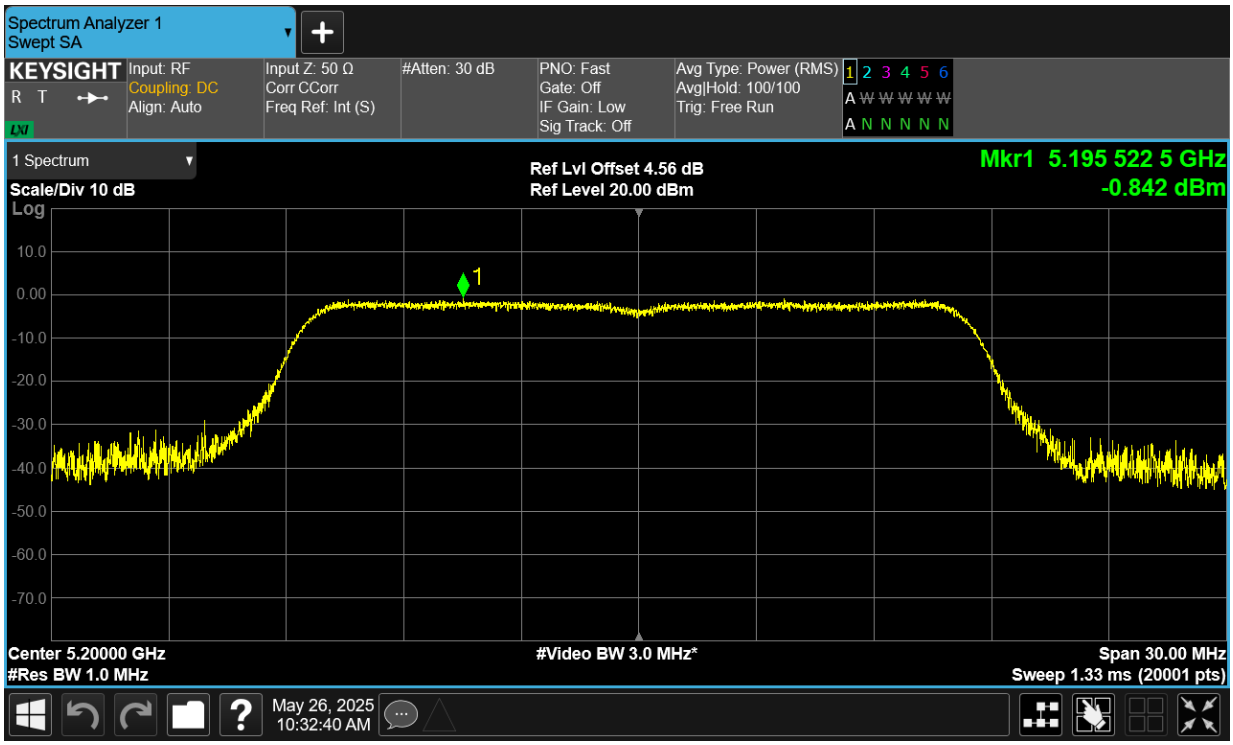
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Duty Factor (dB)	Max PSD (dBm)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	0.42	-0.717	-0.297	11	Pass
NVNT	a	5200	Ant1	0.41	-0.842	-0.432	11	Pass
NVNT	a	5240	Ant1	0.44	-1.805	-1.365	11	Pass
NVNT	ac20	5180	Ant1	0.5	-1.015	-0.515	11	Pass
NVNT	ac20	5200	Ant1	0.48	-1.3	-0.82	11	Pass
NVNT	ac20	5240	Ant1	0.48	-1.954	-1.474	11	Pass
NVNT	ac40	5190	Ant1	0.91	-3.054	-2.144	11	Pass
NVNT	ac40	5230	Ant1	0.88	-4.035	-3.155	11	Pass
NVNT	ac80	5210	Ant1	1.63	-7.847	-6.217	11	Pass
NVNT	n20	5180	Ant1	0.48	-1.08	-0.6	11	Pass
NVNT	n20	5200	Ant1	0.47	-1.139	-0.669	11	Pass
NVNT	n20	5240	Ant1	0.48	-1.619	-1.139	11	Pass
NVNT	n40	5190	Ant1	0.87	-2.598	-1.728	11	Pass
NVNT	n40	5230	Ant1	0.88	-3.473	-2.593	11	Pass

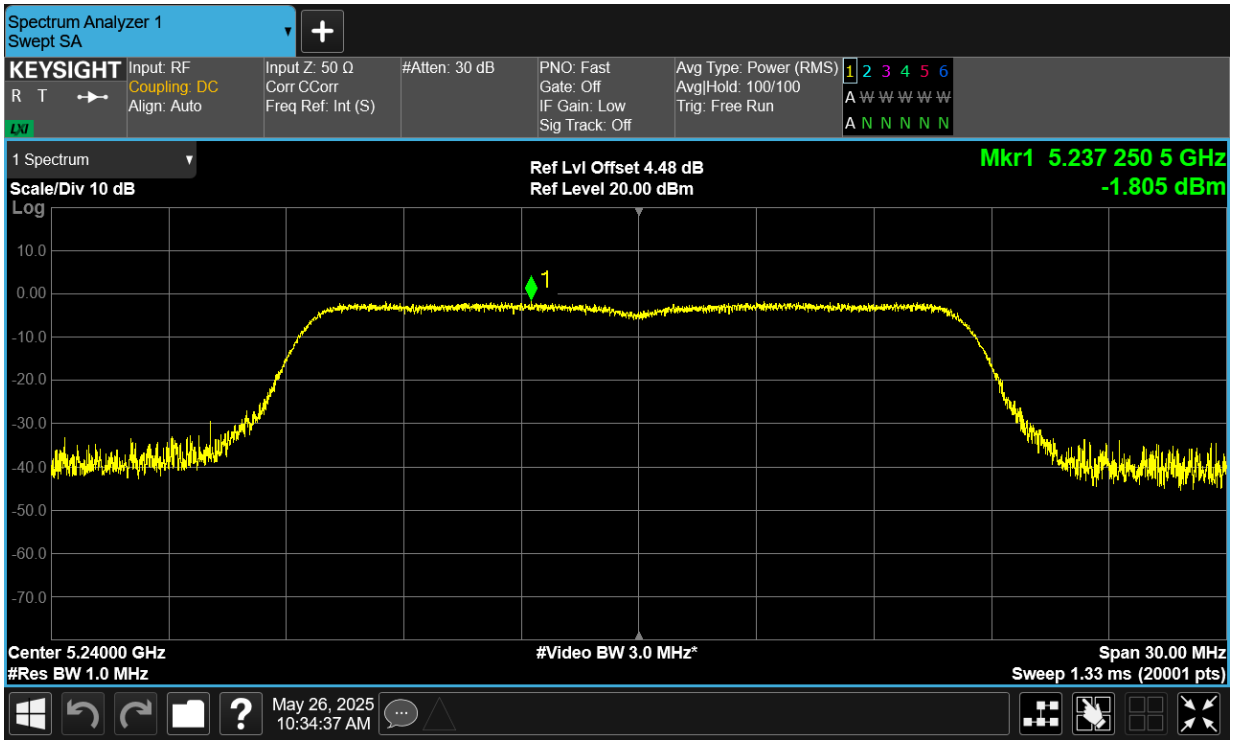
Test Graphs
PSD NVNT a 5180MHz Ant1



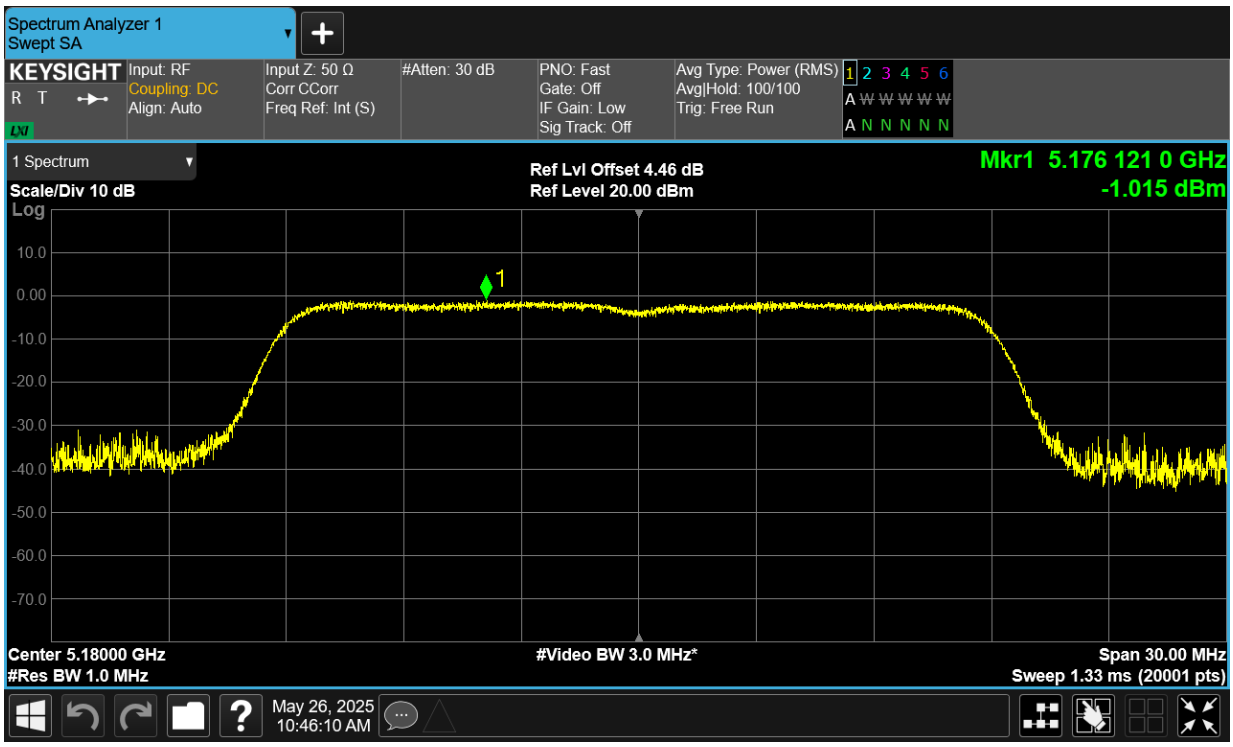
PSD NVNT a 5200MHz Ant1



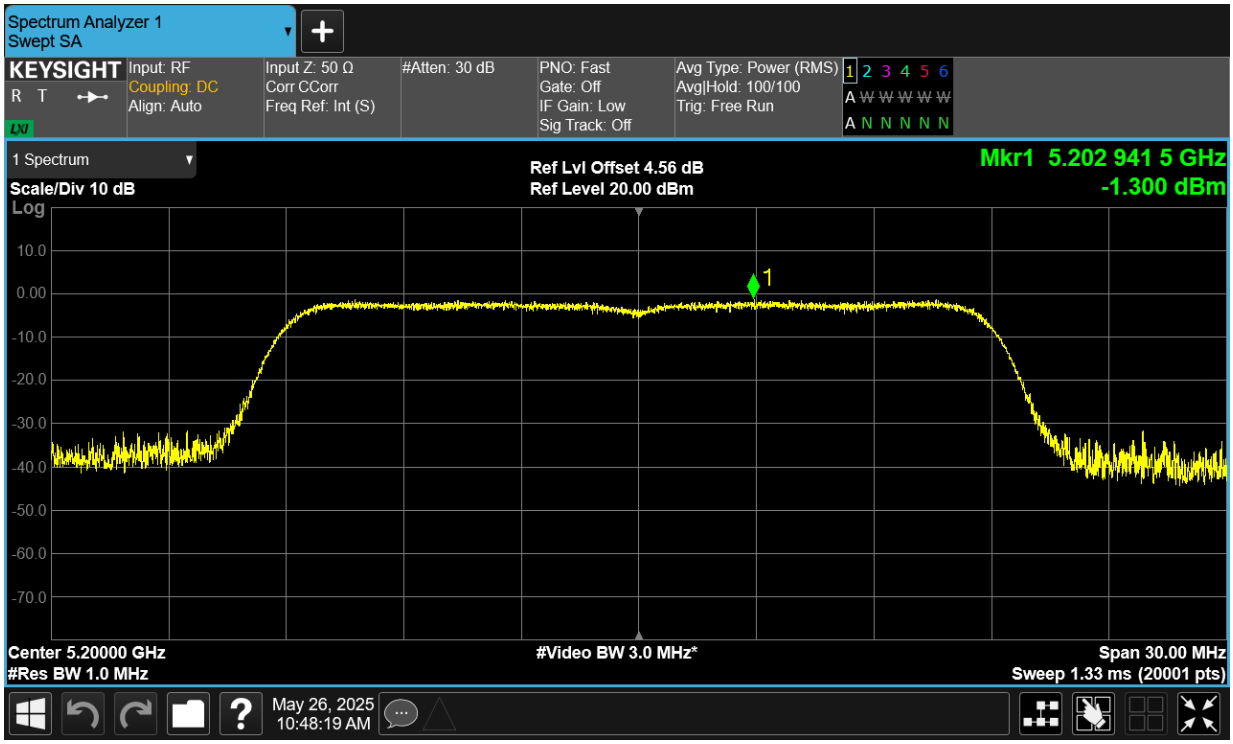
PSD NVNT a 5240MHz Ant1



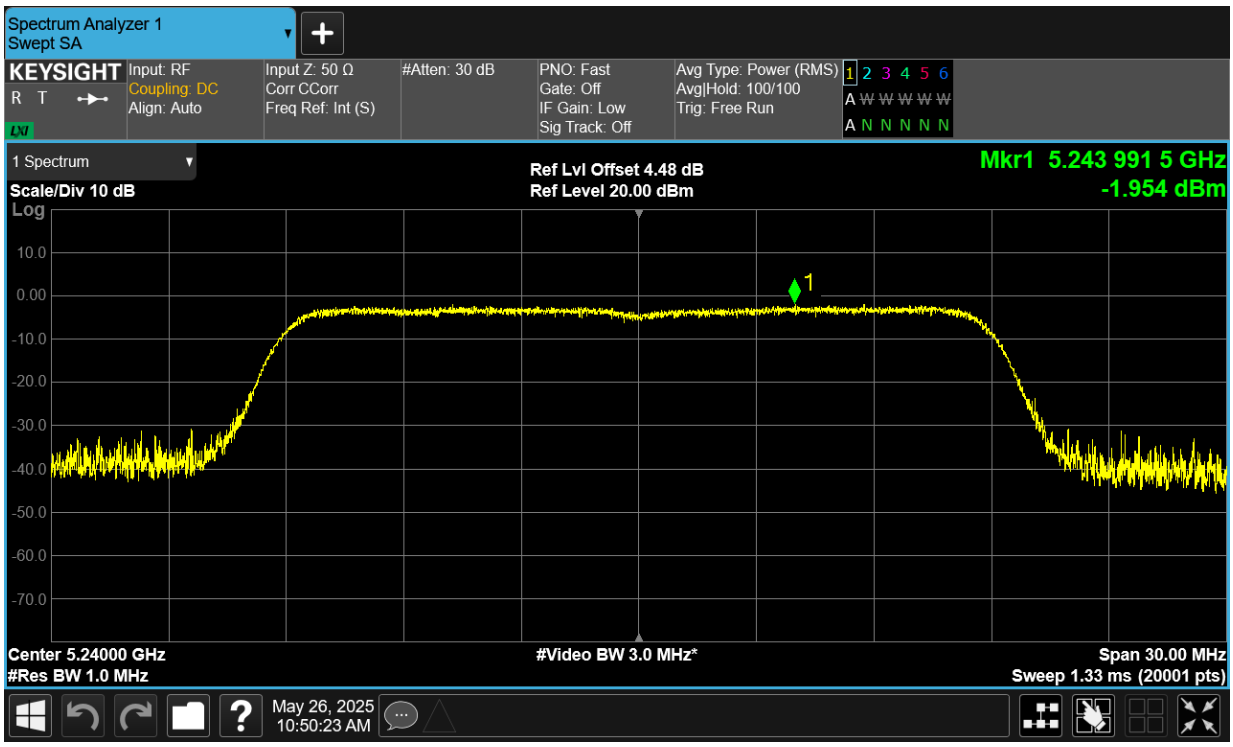
PSD NVNT ac20 5180MHz Ant1



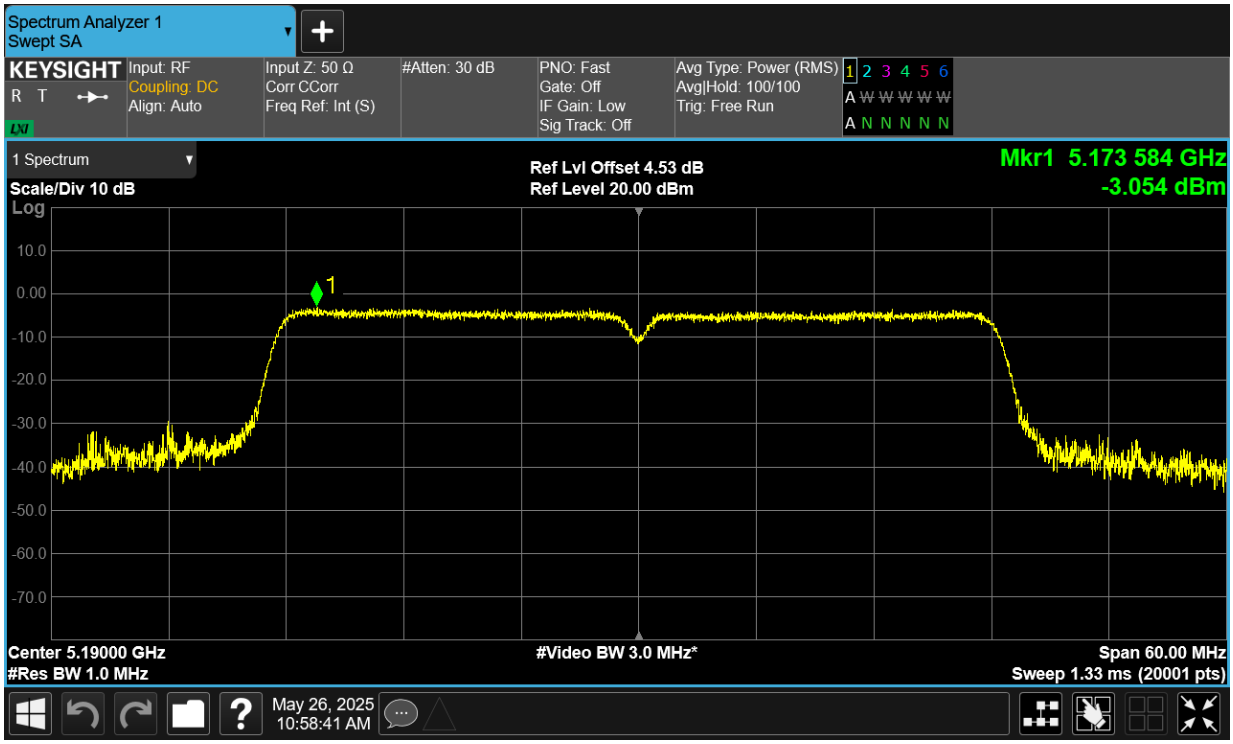
PSD NVNT ac20 5200MHz Ant1



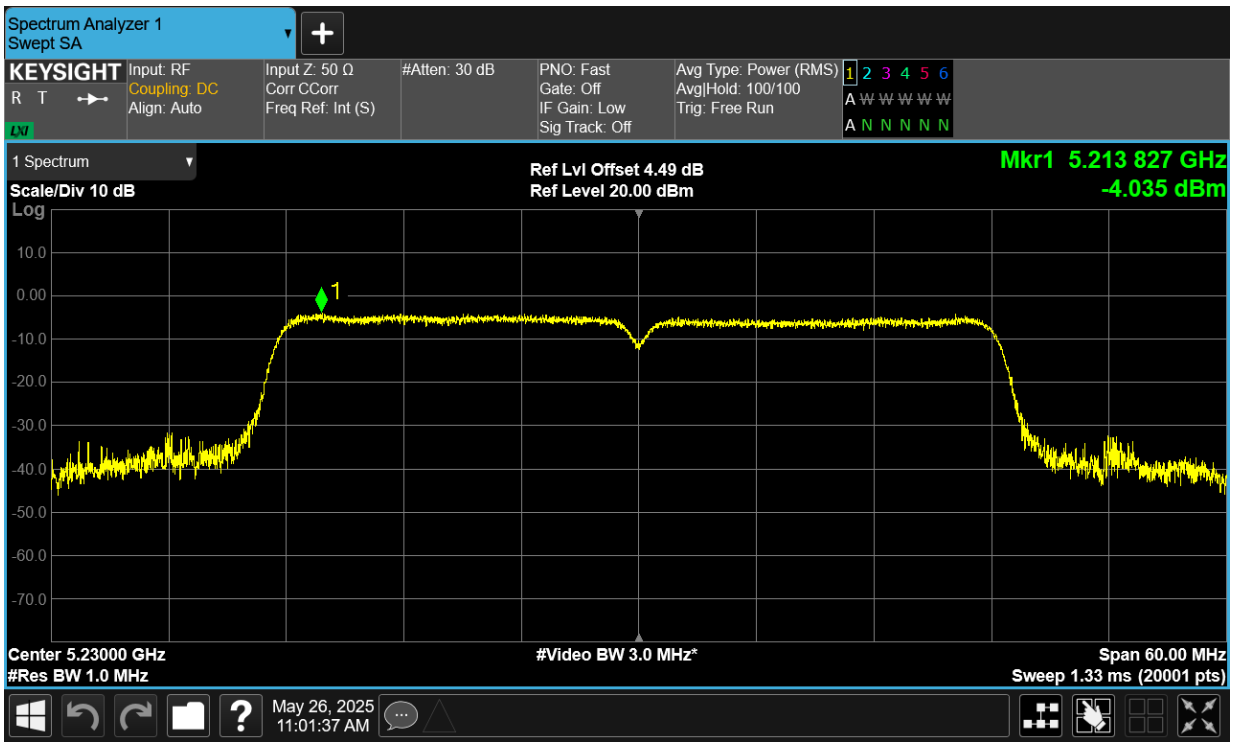
PSD NVNT ac20 5240MHz Ant1



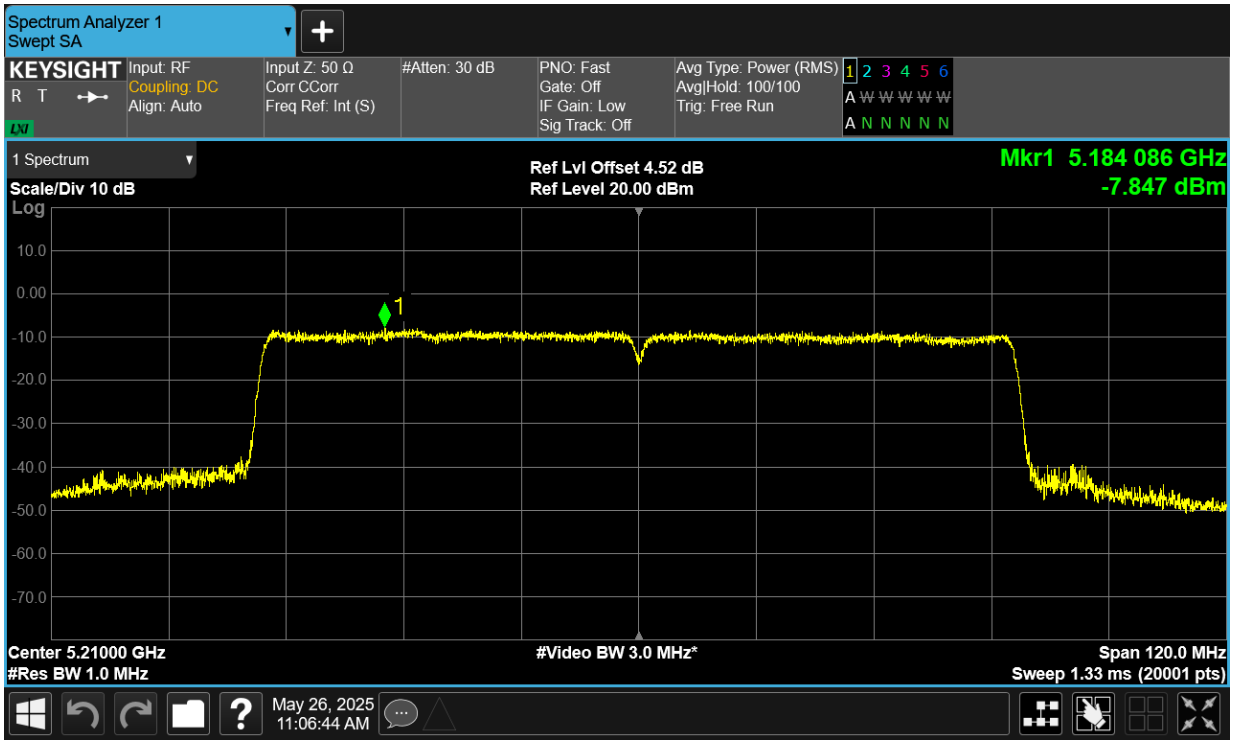
PSD NVNT ac40 5190MHz Ant1



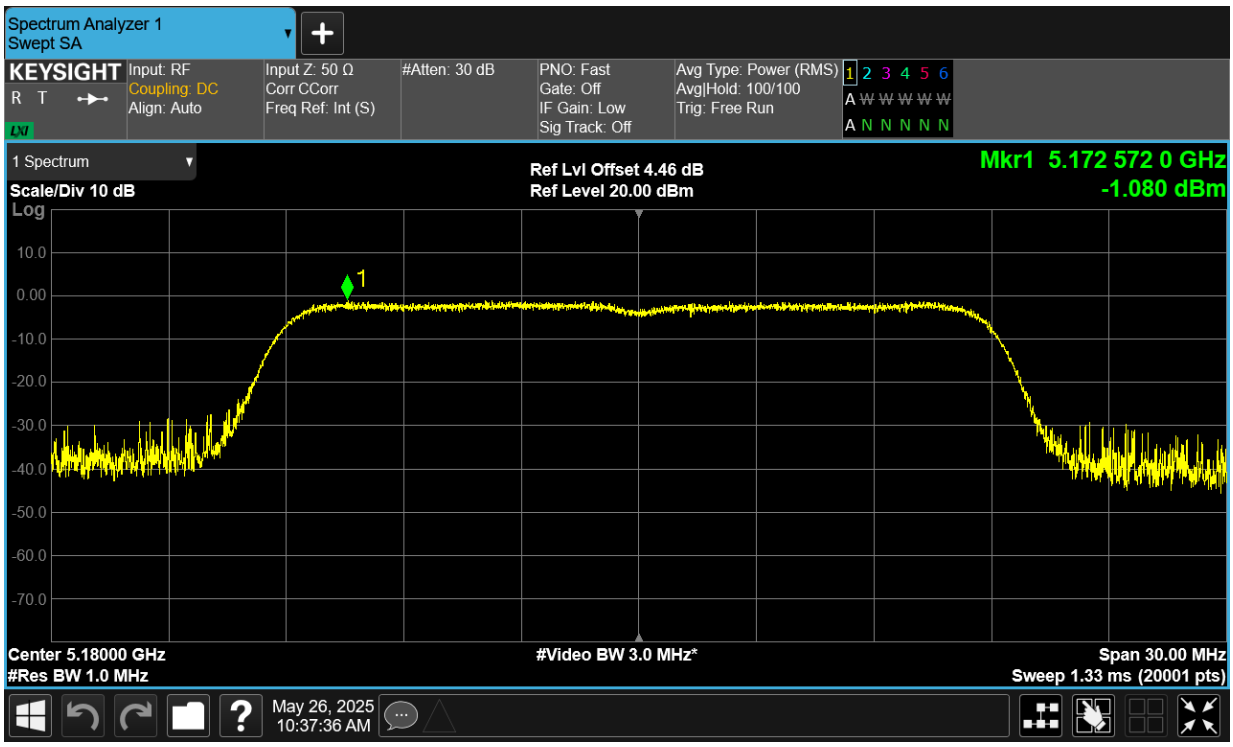
PSD NVNT ac40 5230MHz Ant1



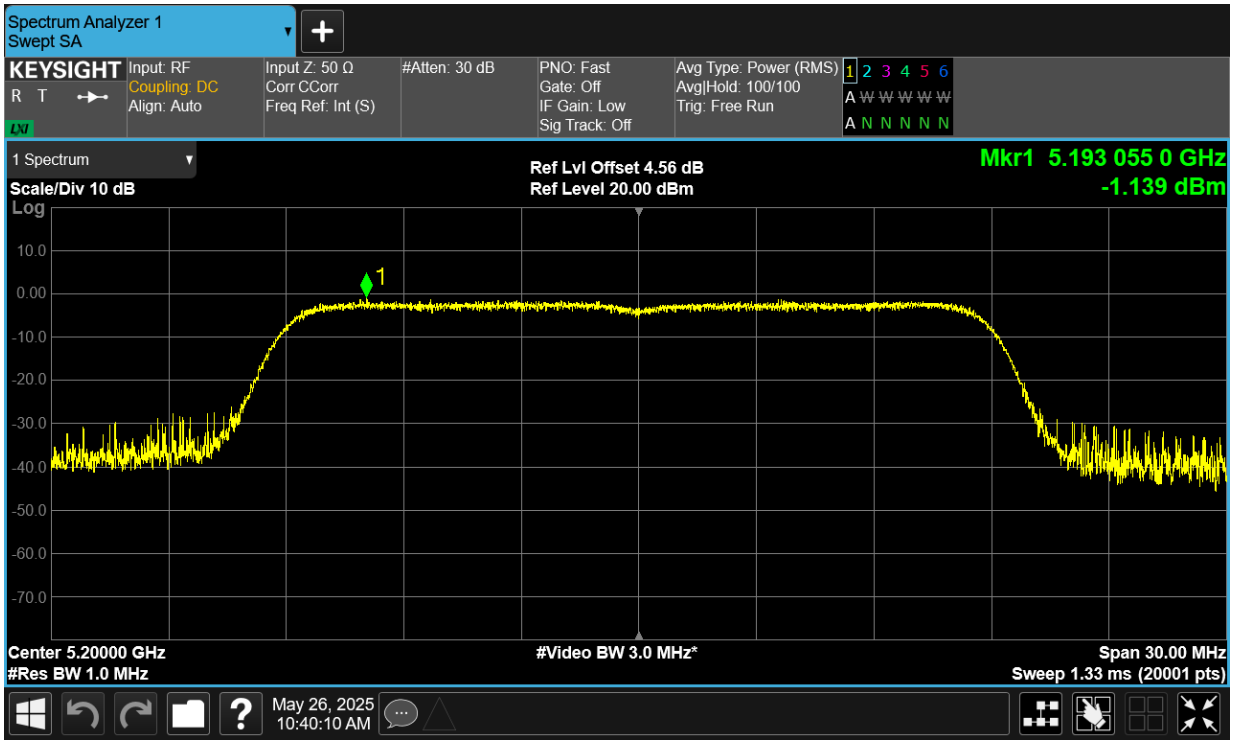
PSD NVNT ac80 5210MHz Ant1



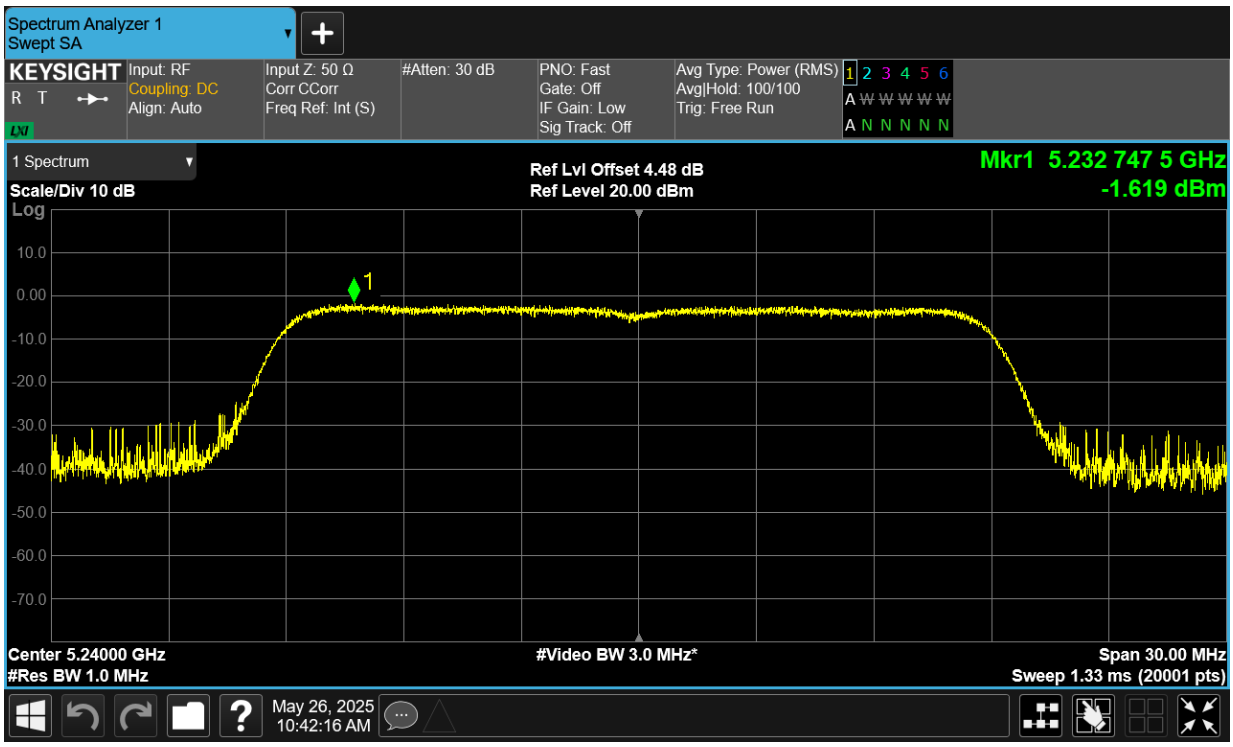
PSD NVNT n20 5180MHz Ant1



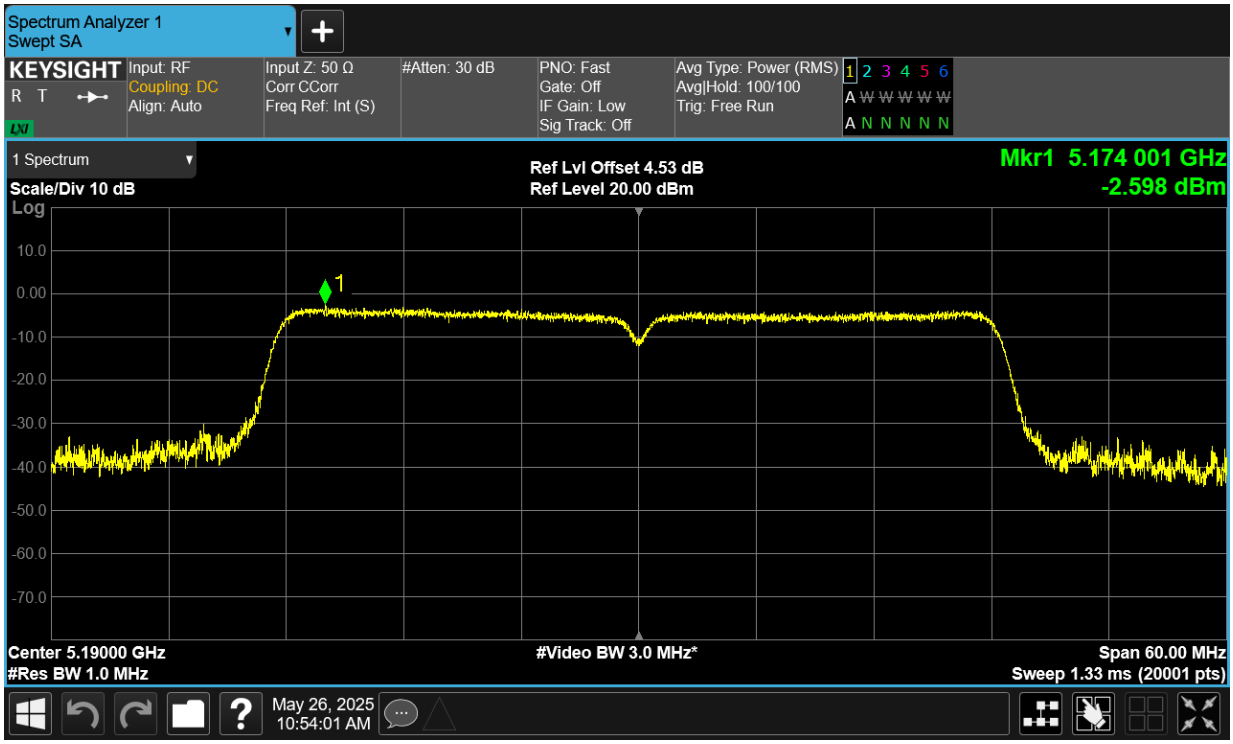
PSD NVNT n20 5200MHz Ant1



PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1