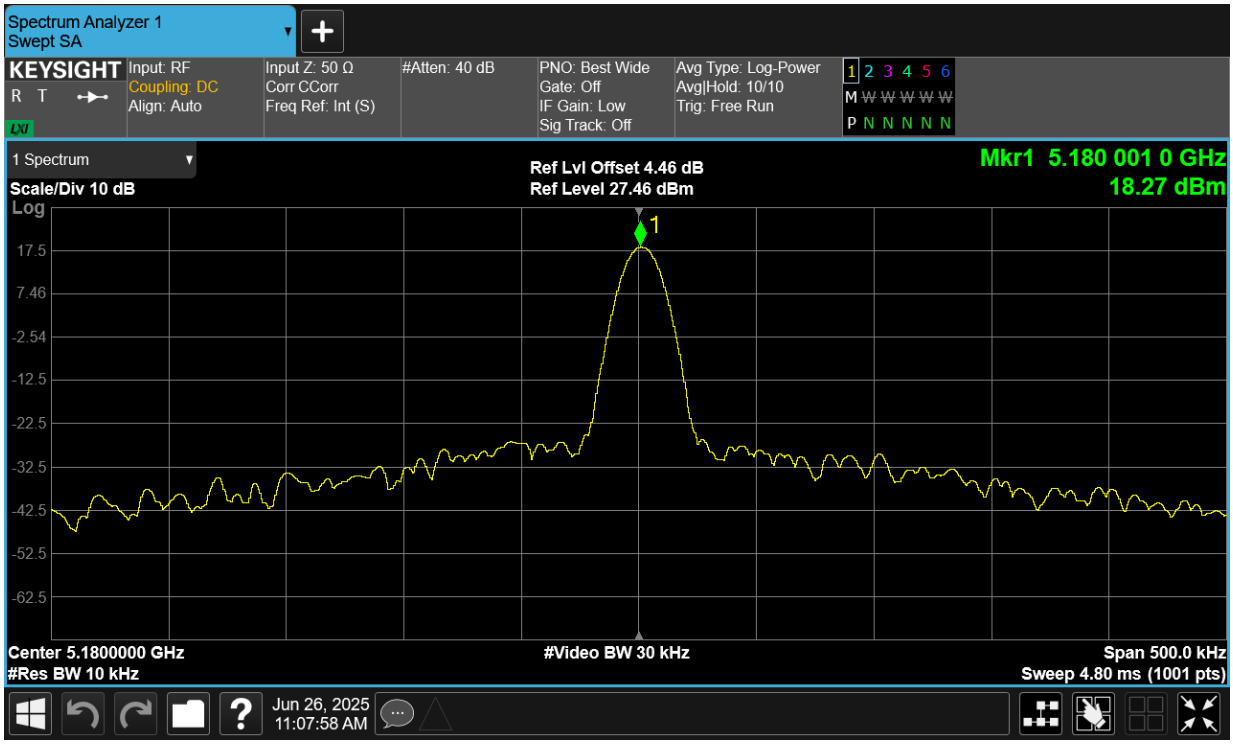
Test Data

Frequency Stability

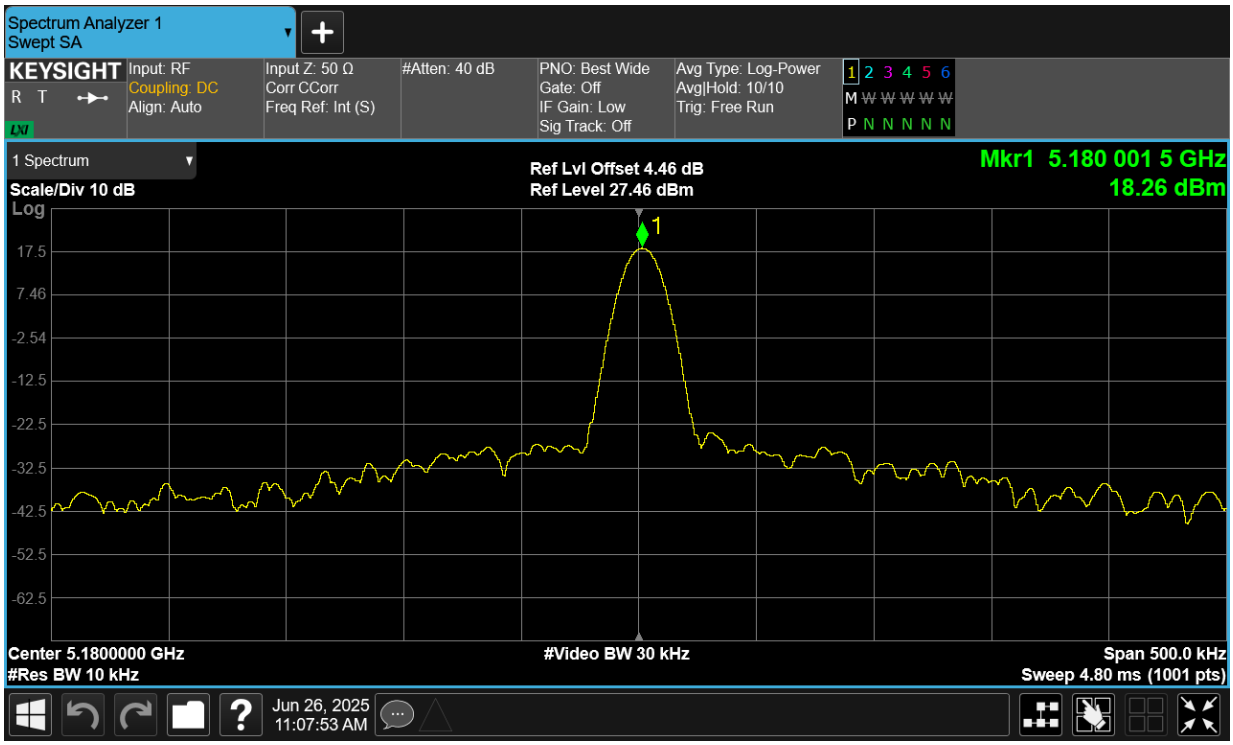
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5180	Ant14	5180.001	0.19	Within authorized band	Pass
LVNT	a	5180	Ant14	5180.0015	0.29		Pass
NVHT	a	5180	Ant14	5180.002	0.39		Pass
NVLT	a	5180	Ant14	5180.0025	0.48		Pass
NVNT	a	5180	Ant14	5180.003	0.58		Pass
HVNT	ac80	5210	Ant14	5210	0		Pass
LVNT	ac80	5210	Ant14	5210.0005	0.1		Pass
NVHT	ac80	5210	Ant14	5210.0005	0.1		Pass
NVLT	ac80	5210	Ant14	5210.001	0.19		Pass
NVNT	ac80	5210	Ant14	5210.001744766	0.33		Pass
HVNT	n40	5190	Ant14	5190.0005	0.1		Pass
LVNT	n40	5190	Ant14	5190.001	0.19		Pass
NVHT	n40	5190	Ant14	5190.0015	0.29		Pass
NVLT	n40	5190	Ant14	5190.002	0.39		Pass
NVNT	n40	5190	Ant14	5190.0025	0.48		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.

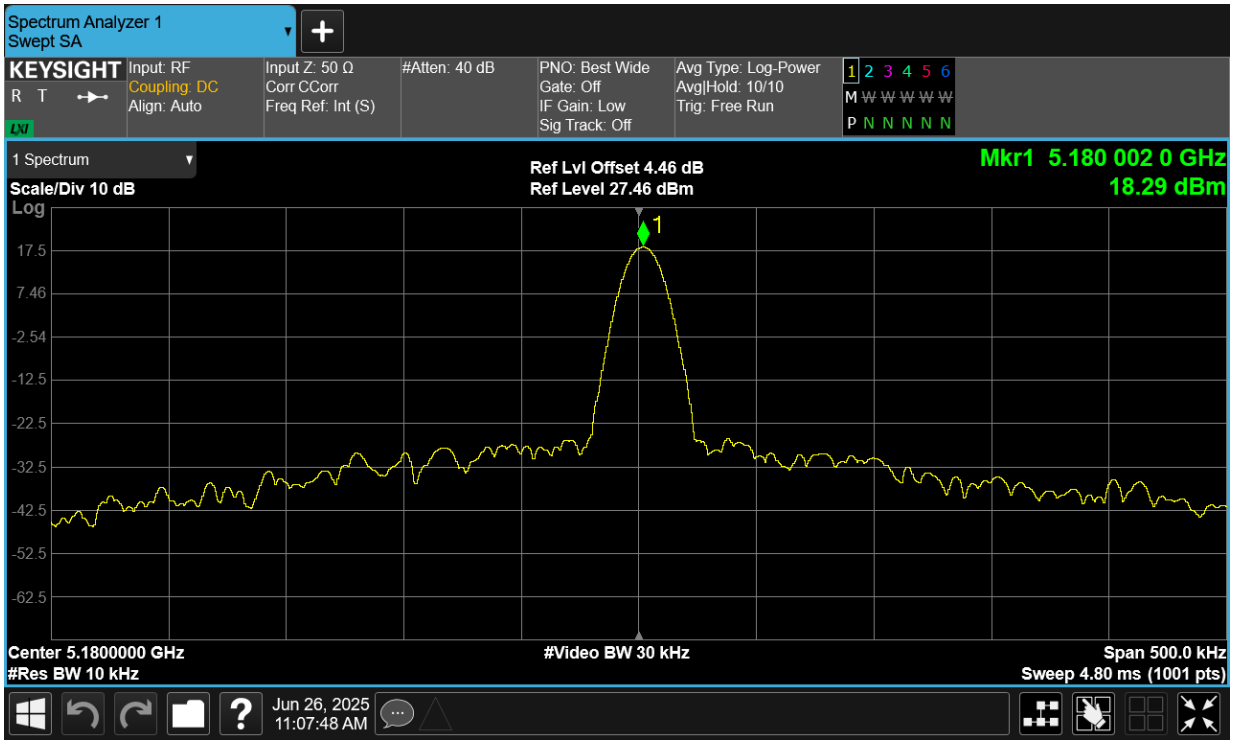
Test Graphs
Freq. Stability HVNT a 5180MHz Ant14



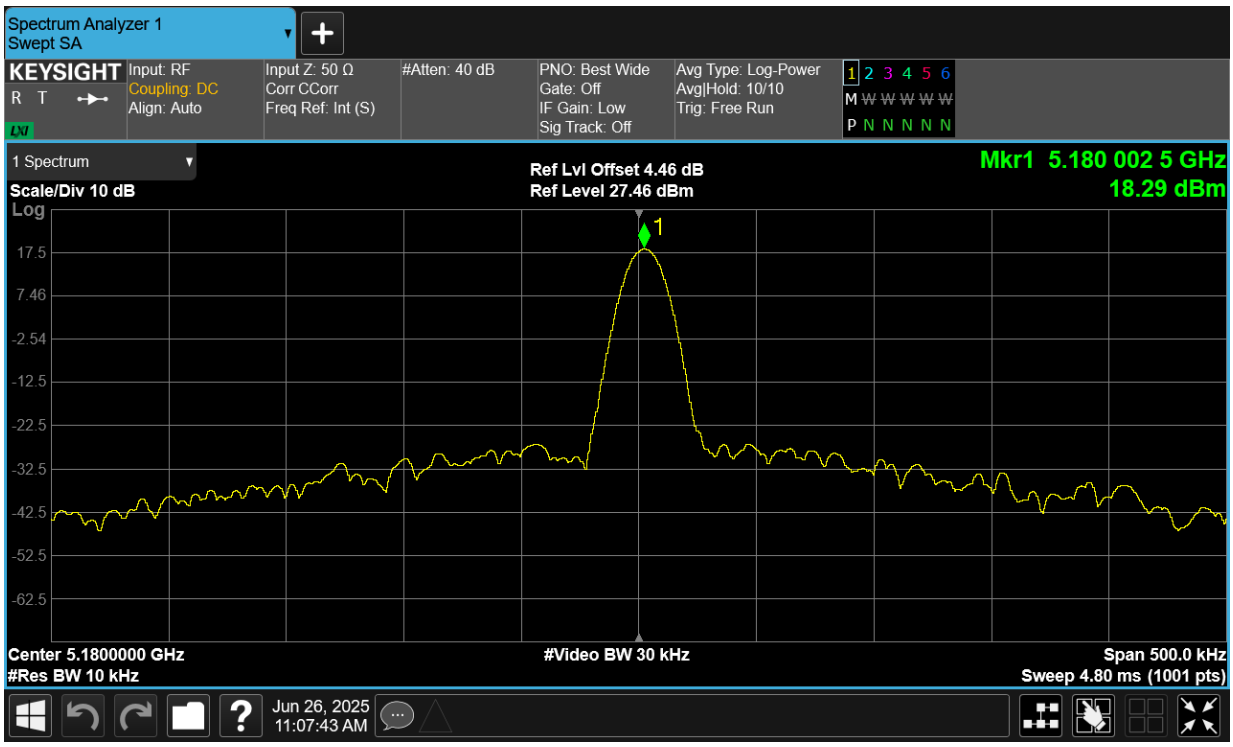
Freq. Stability LVNT a 5180MHz Ant14



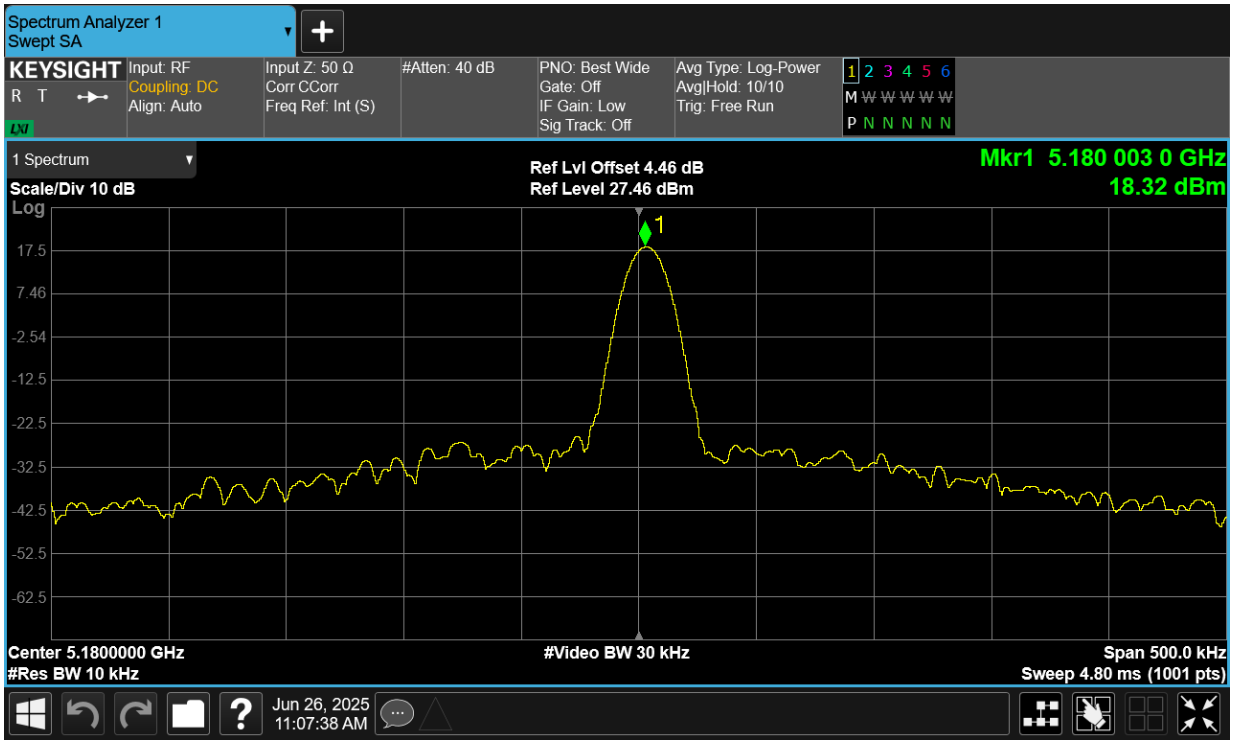
Freq. Stability NVHT a 5180MHz Ant14



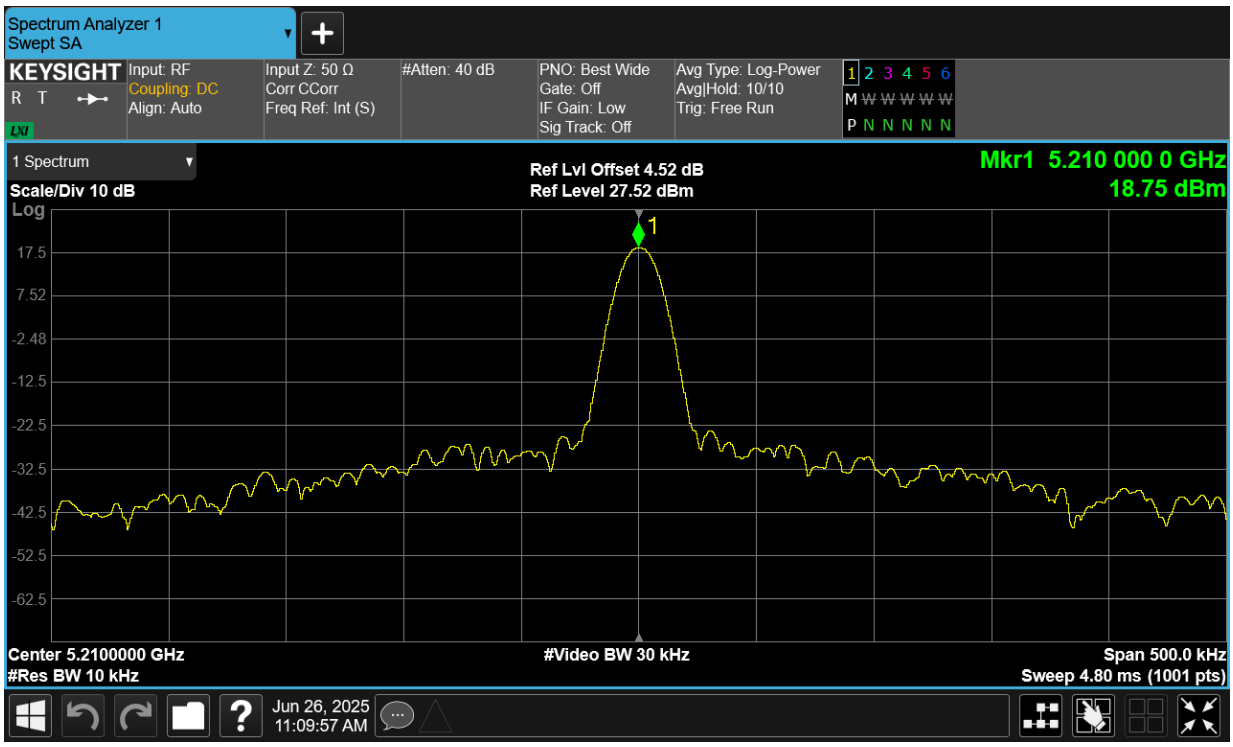
Freq. Stability NVLT a 5180MHz Ant14



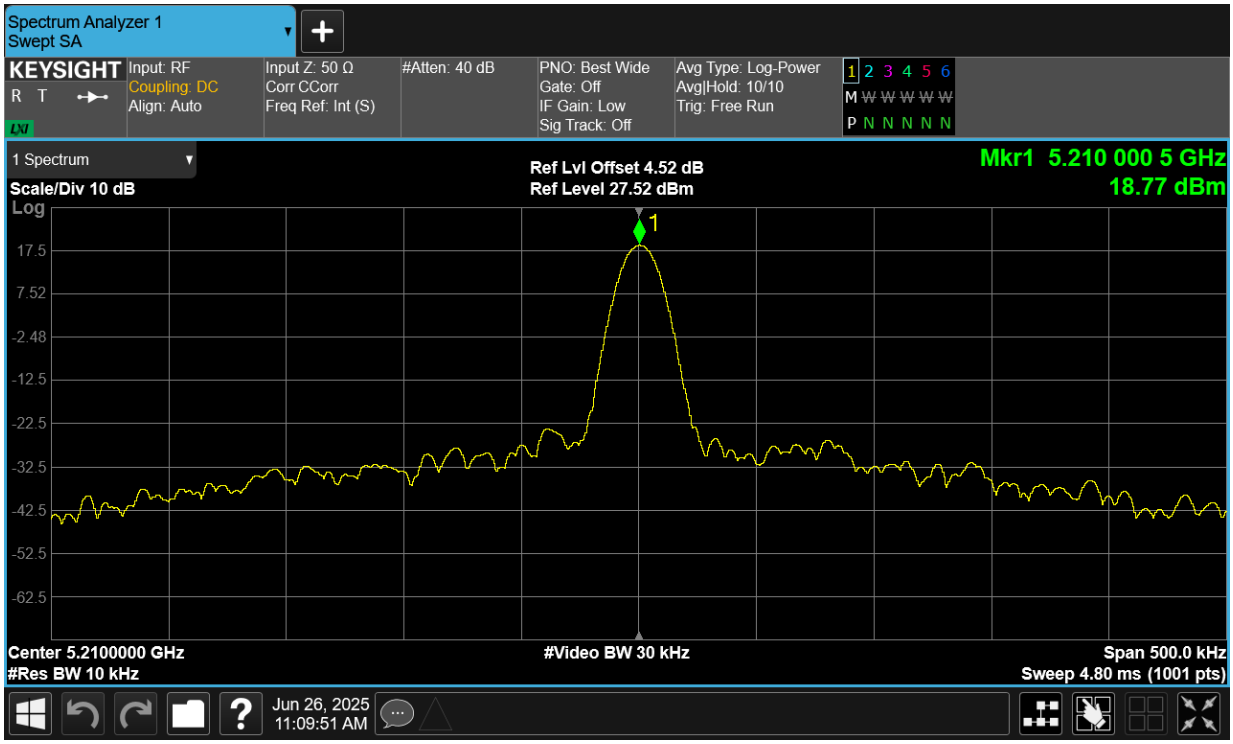
Freq. Stability NVNT a 5180MHz Ant14



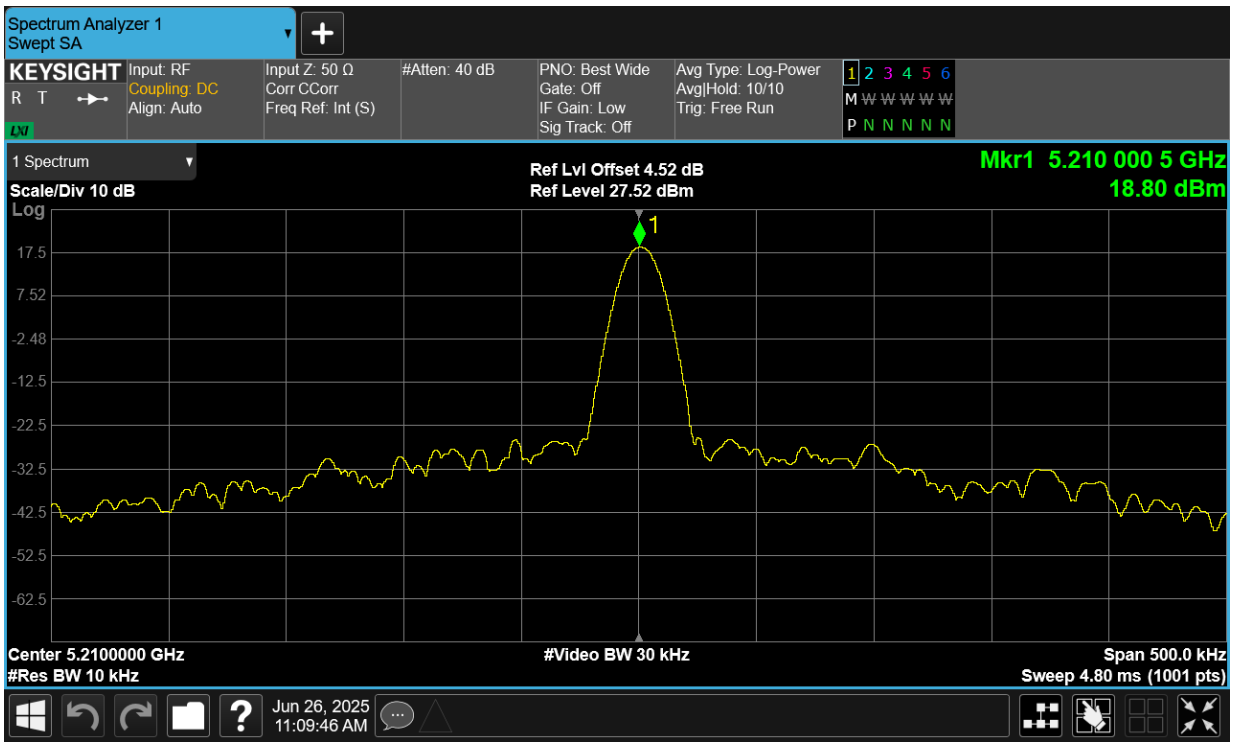
Freq. Stability HVNT ac80 5210MHz Ant14



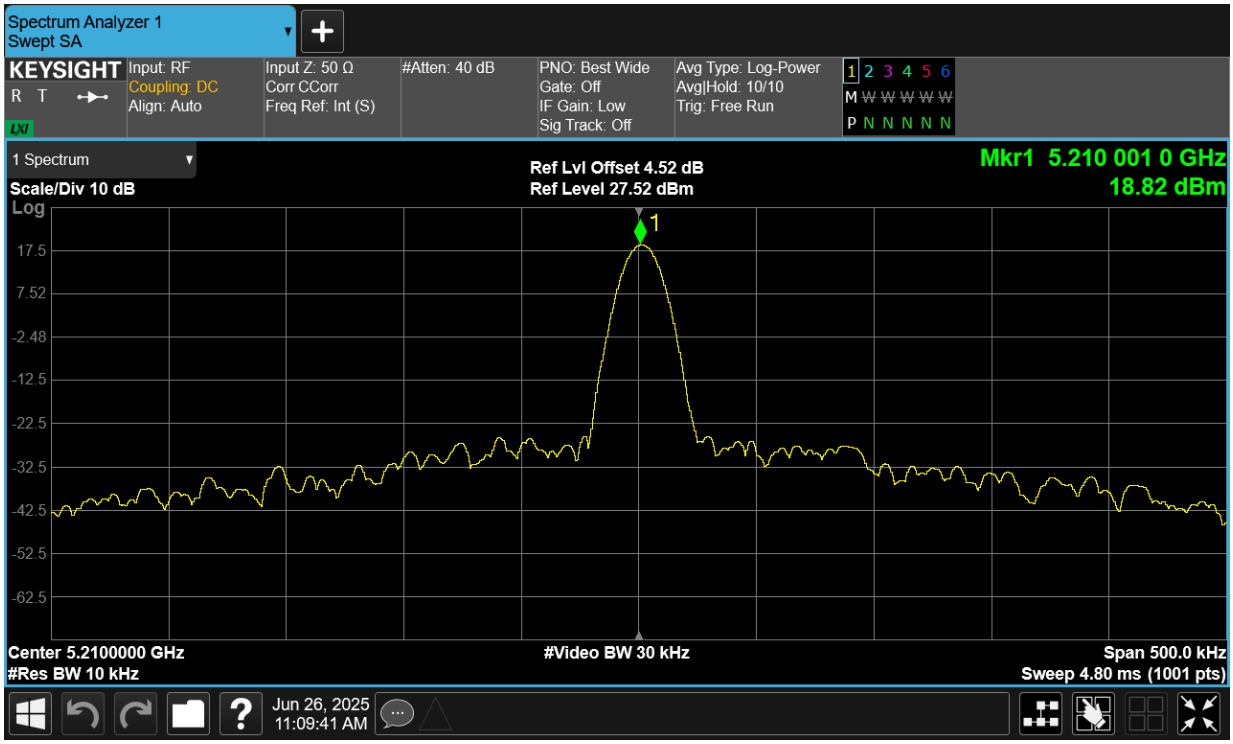
Freq. Stability LVNT ac80 5210MHz Ant14



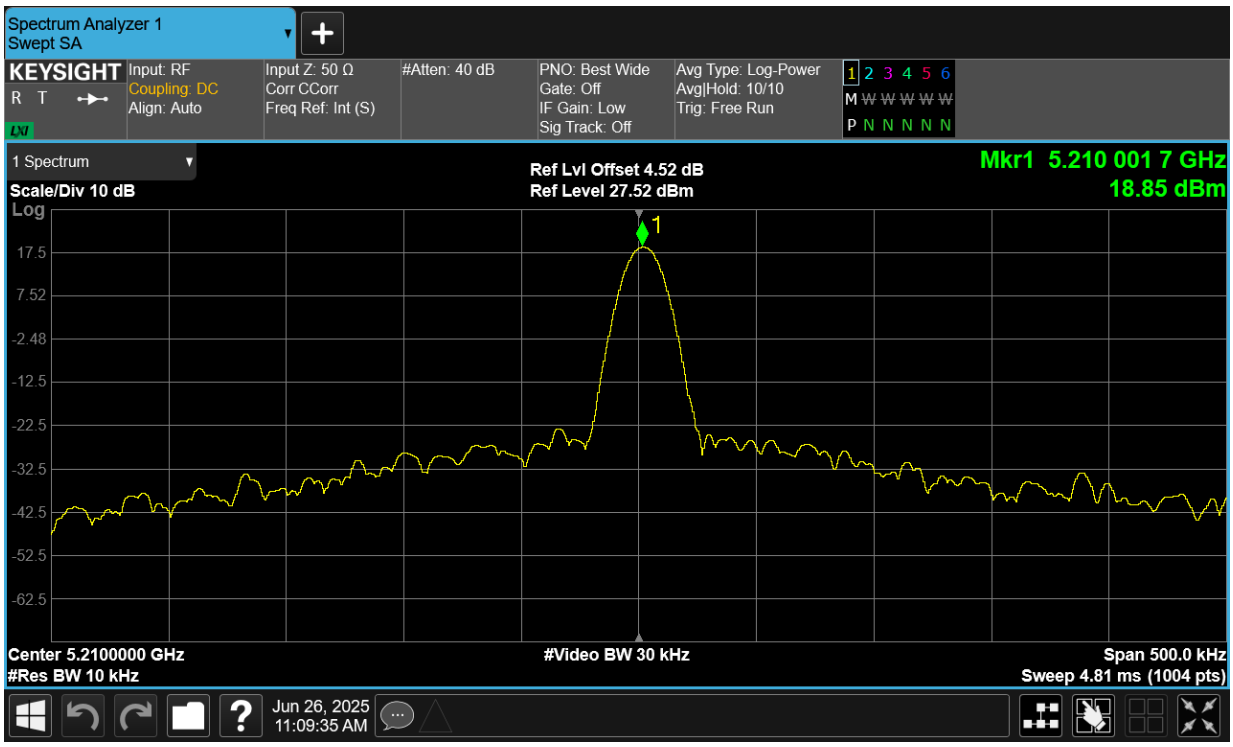
Freq. Stability NVHT ac80 5210MHz Ant14



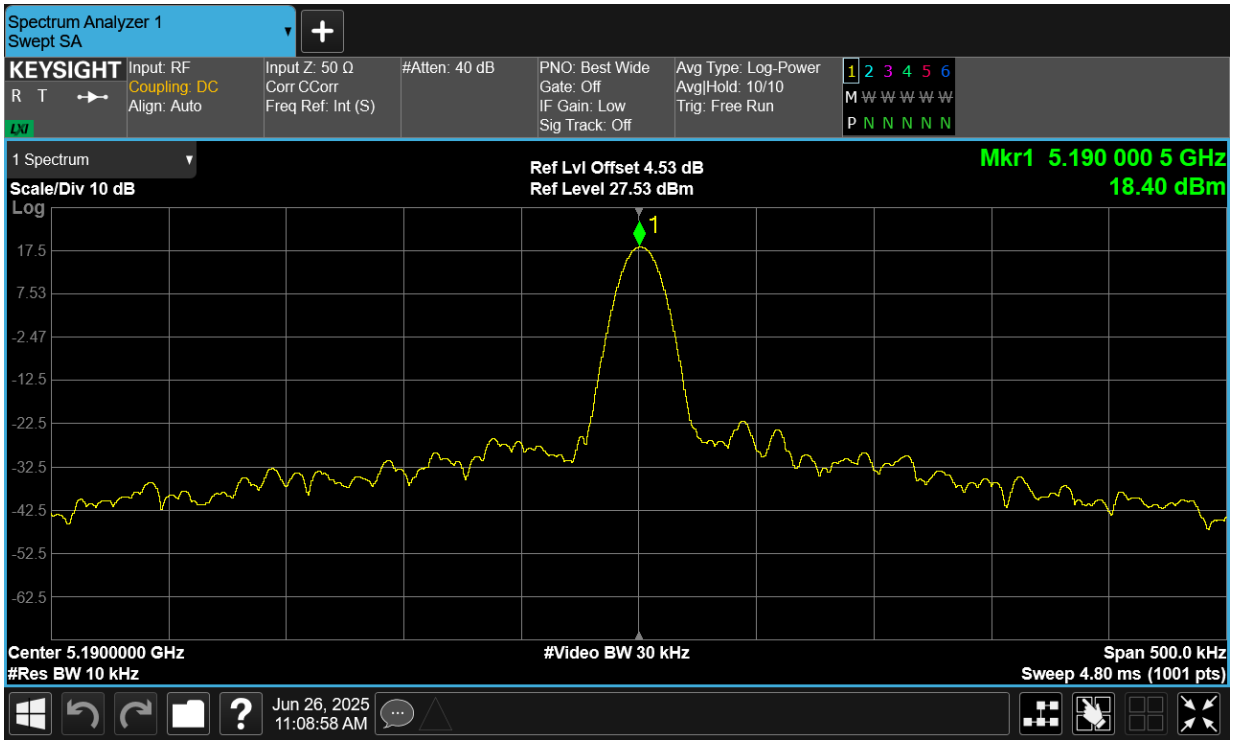
Freq. Stability NVLT ac80 5210MHz Ant14



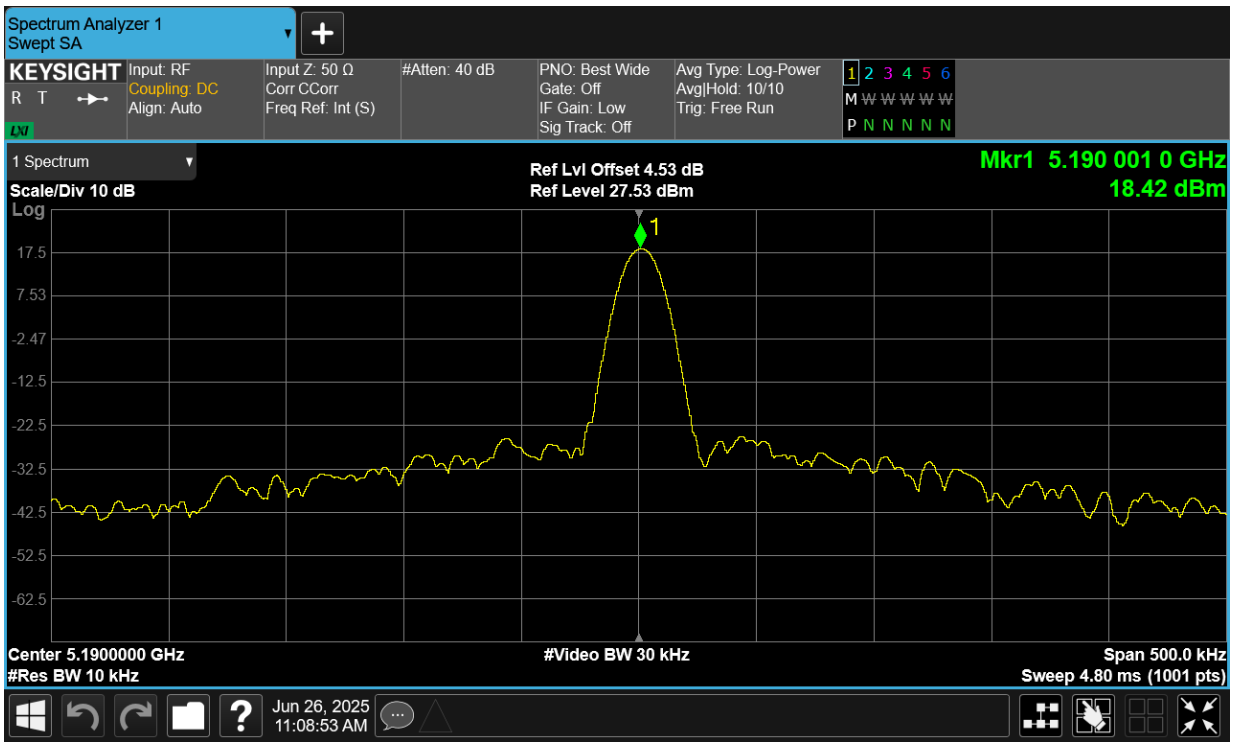
Freq. Stability NVNT ac80 5210MHz Ant14



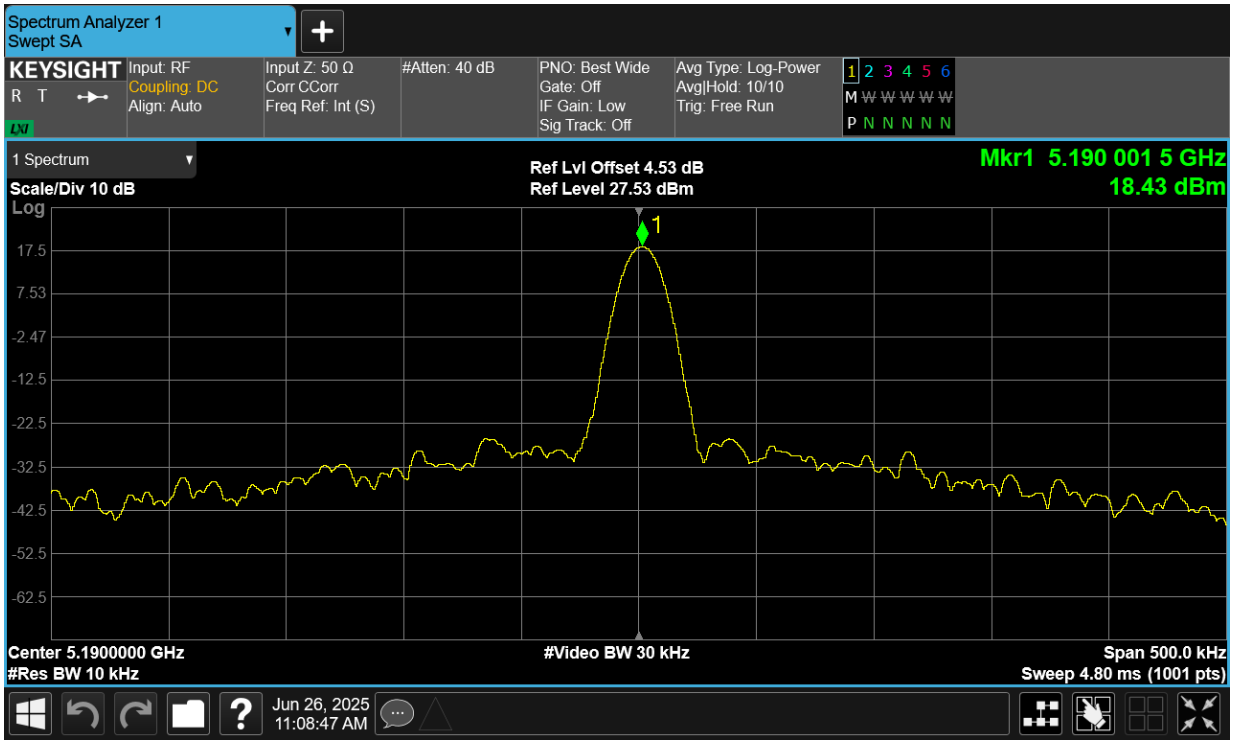
Freq. Stability HVNT n40 5190MHz Ant14



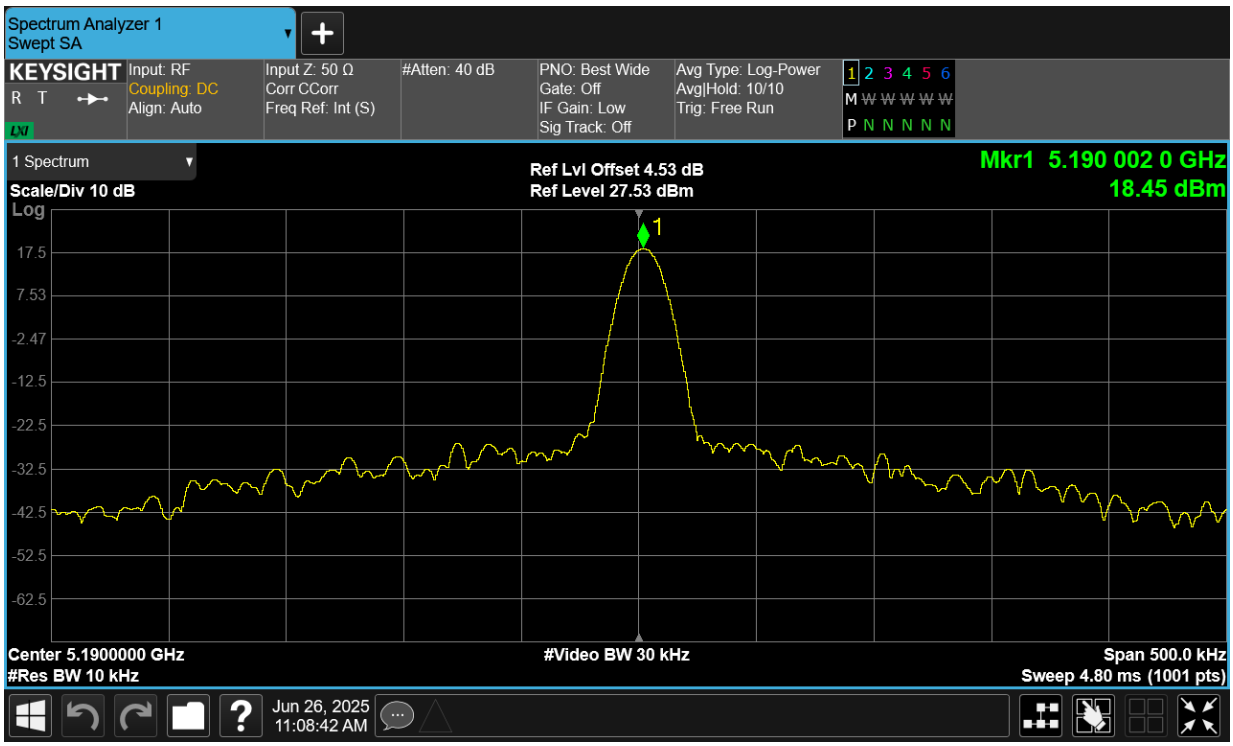
Freq. Stability LVNT n40 5190MHz Ant14



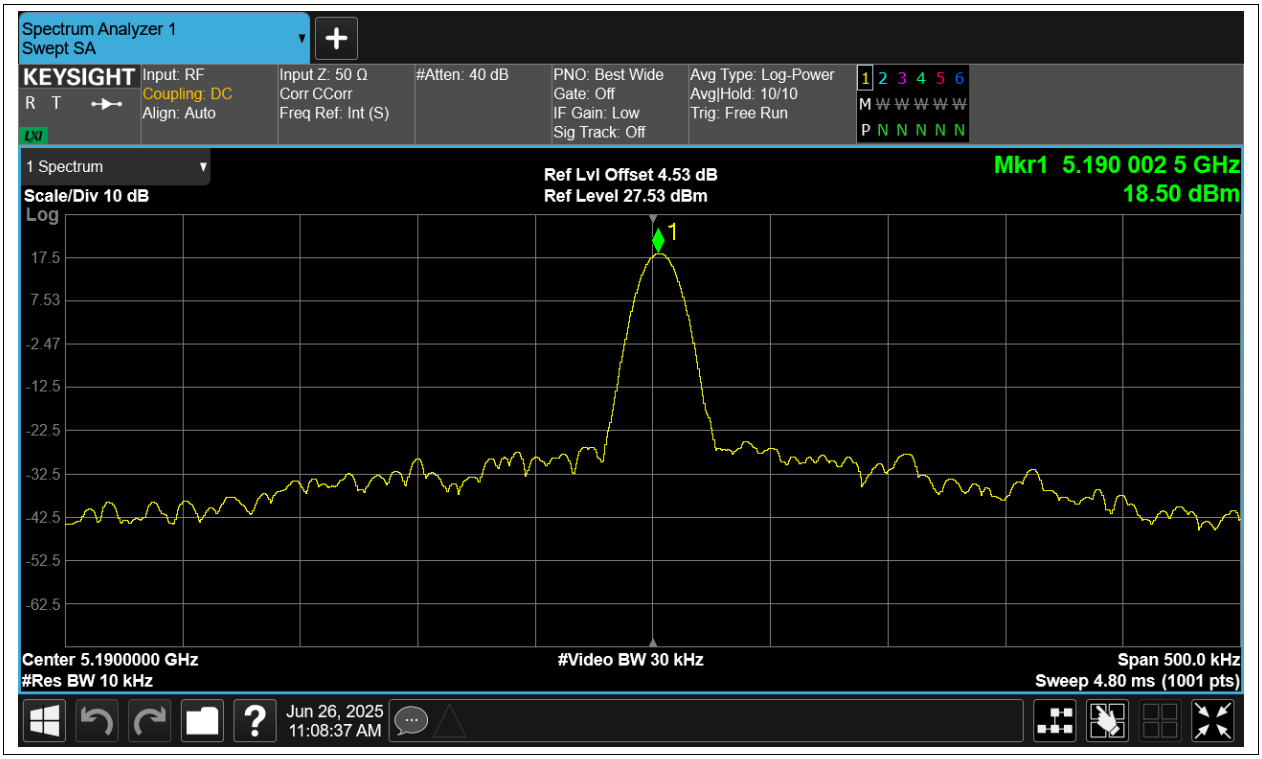
Freq. Stability NVHT n40 5190MHz Ant14



Freq. Stability NVLT n40 5190MHz Ant14



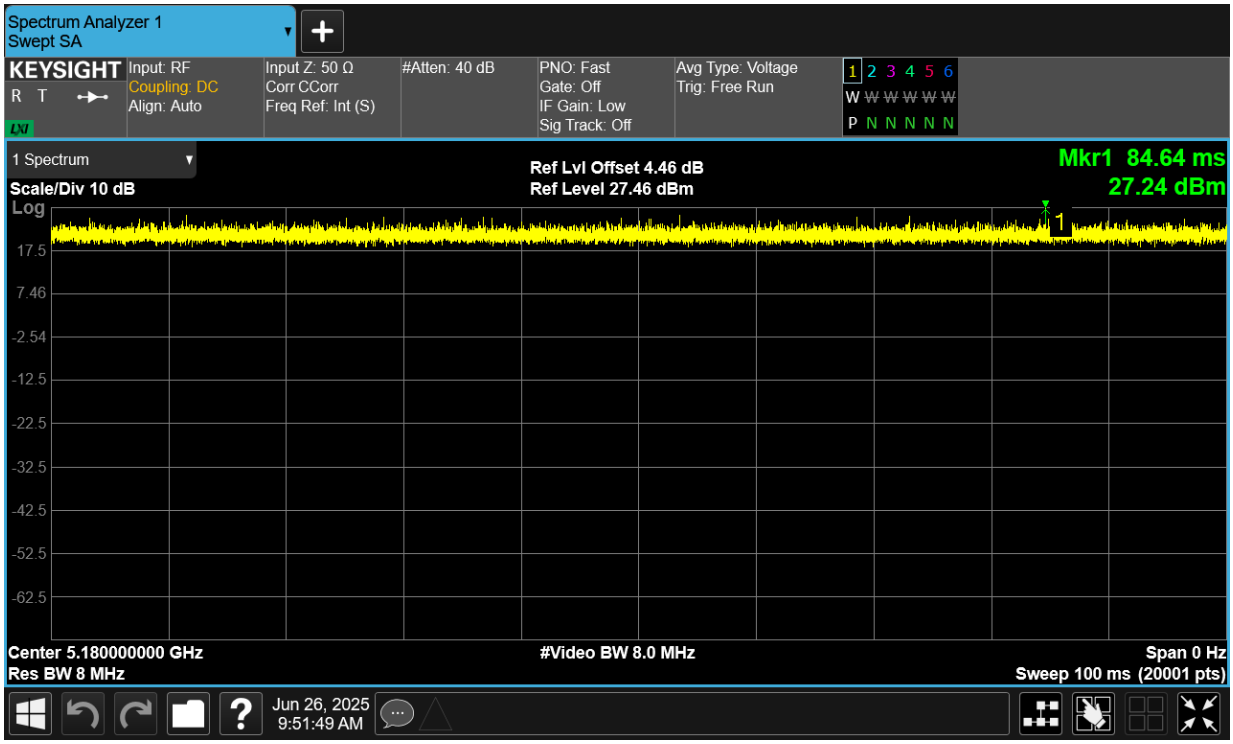
Freq. Stability NVNT n40 5190MHz Ant14


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 5.190 002 5 GHz
18.50 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)
Jun 26, 2025
11:08:37 AM

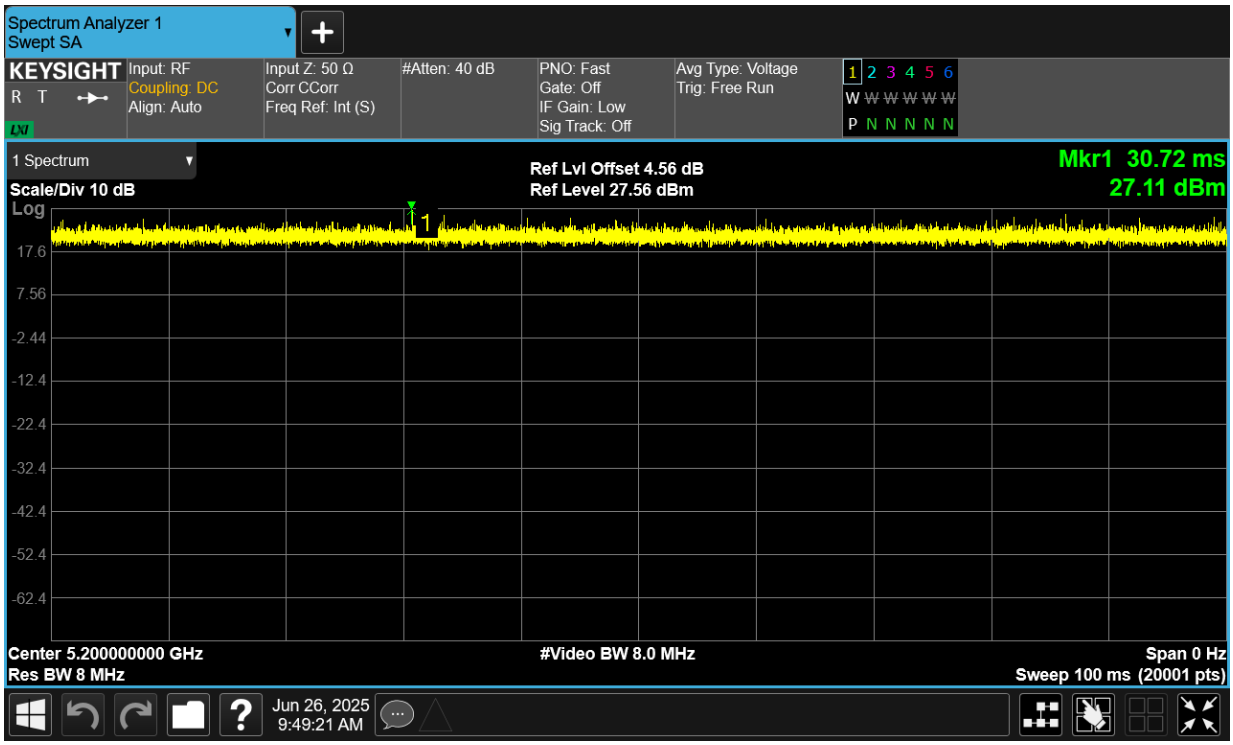
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant14	100	0
NVNT	a	5200	Ant14	100	0
NVNT	a	5240	Ant14	100	0
NVNT	ac20	5180	Ant14	100	0
NVNT	ac20	5200	Ant14	100	0
NVNT	ac20	5240	Ant14	100	0
NVNT	ac40	5190	Ant14	100	0
NVNT	ac40	5230	Ant14	100	0
NVNT	ac80	5210	Ant14	100	0
NVNT	n20	5180	Ant14	100	0
NVNT	n20	5200	Ant14	100	0
NVNT	n20	5240	Ant14	100	0
NVNT	n40	5190	Ant14	100	0
NVNT	n40	5230	Ant14	100	0

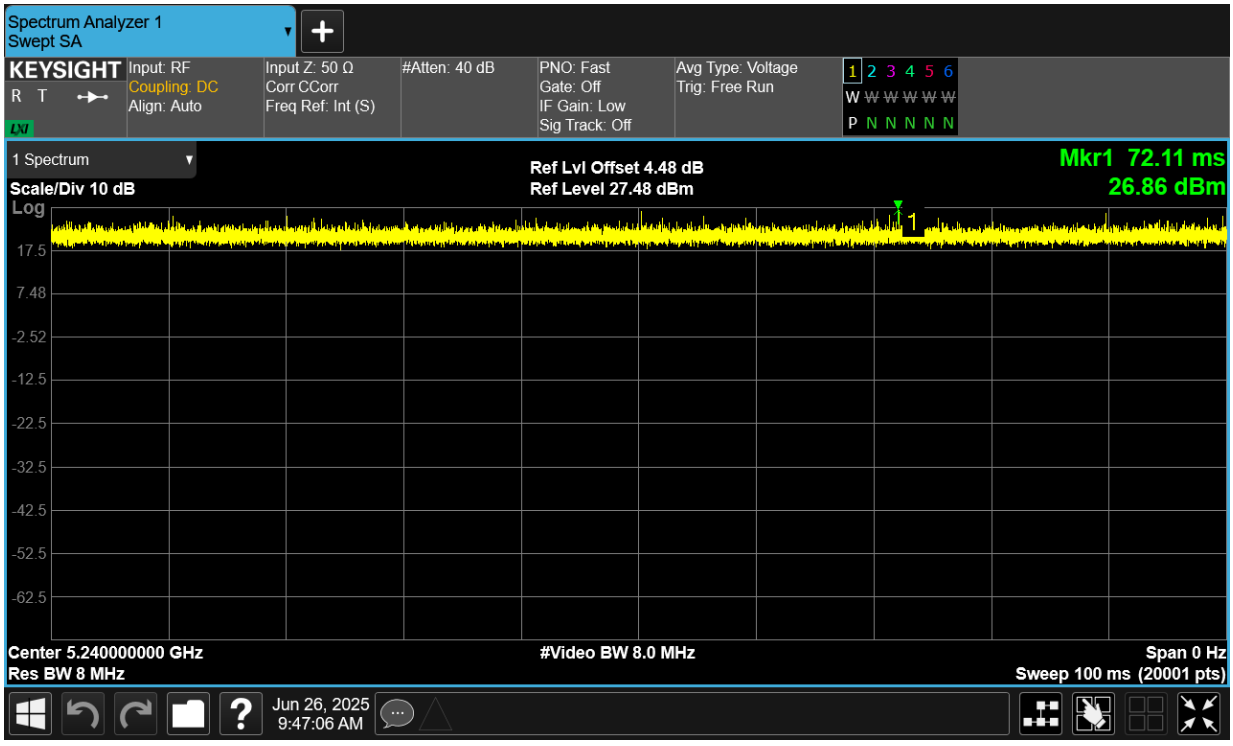
Test Graphs
Duty Cycle NVNT a 5180MHz Ant14



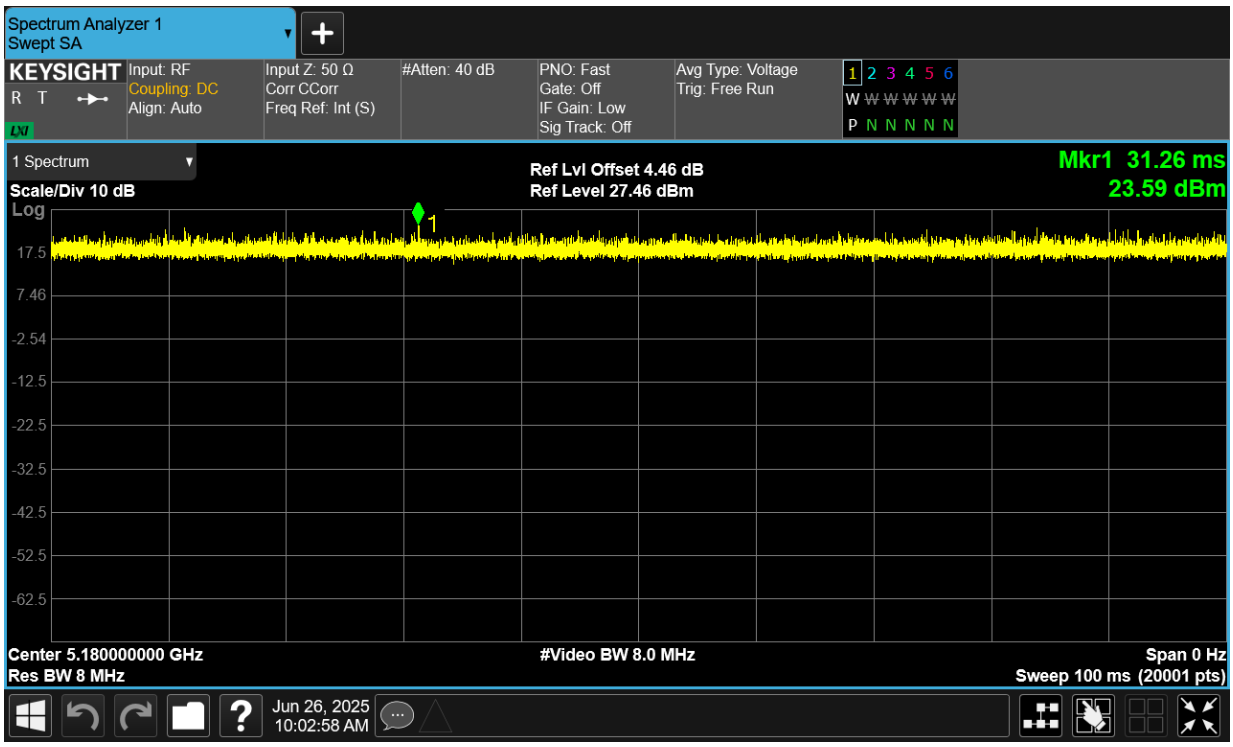
Duty Cycle NVNT a 5200MHz Ant14



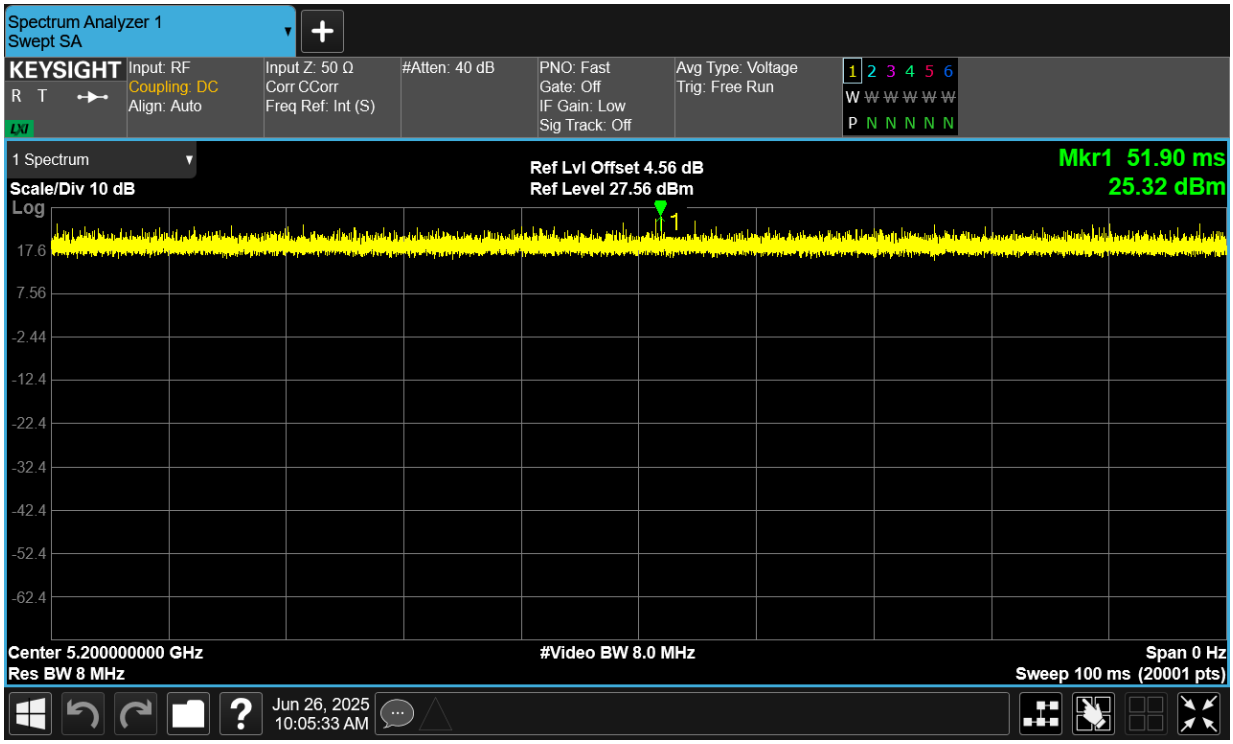
Duty Cycle NVNT a 5240MHz Ant14



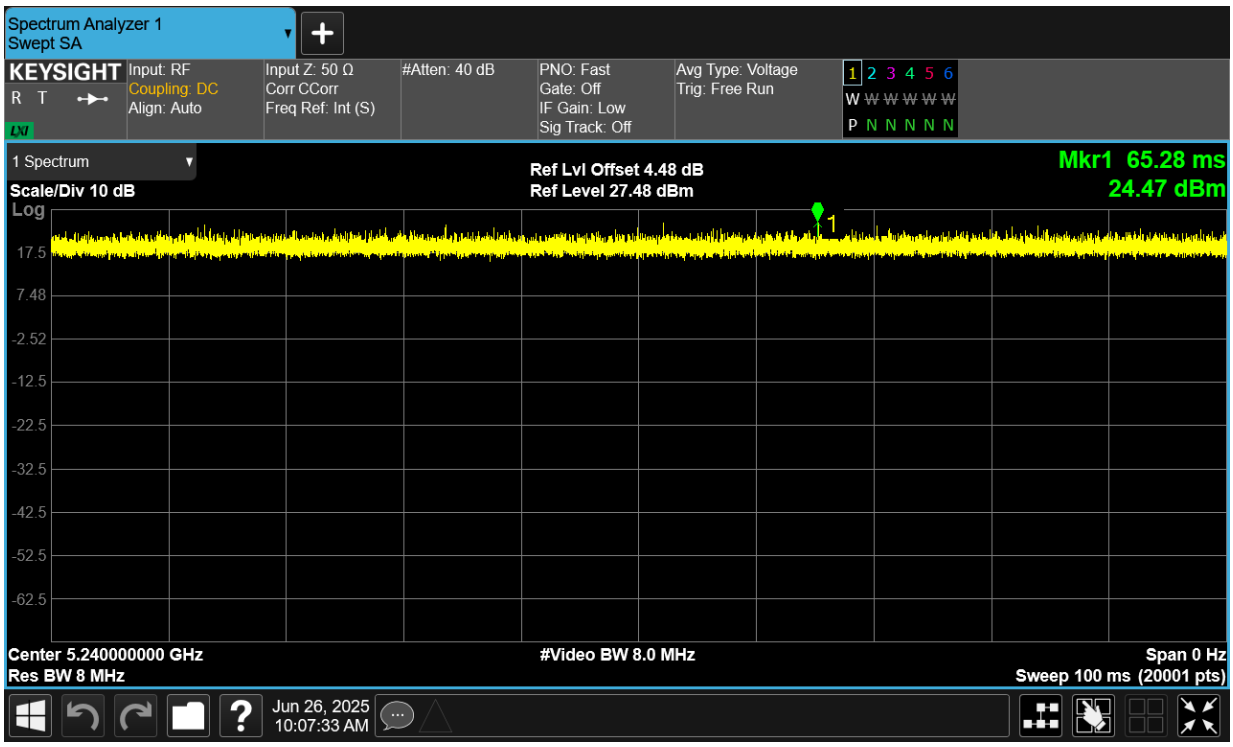
Duty Cycle NVNT ac20 5180MHz Ant14



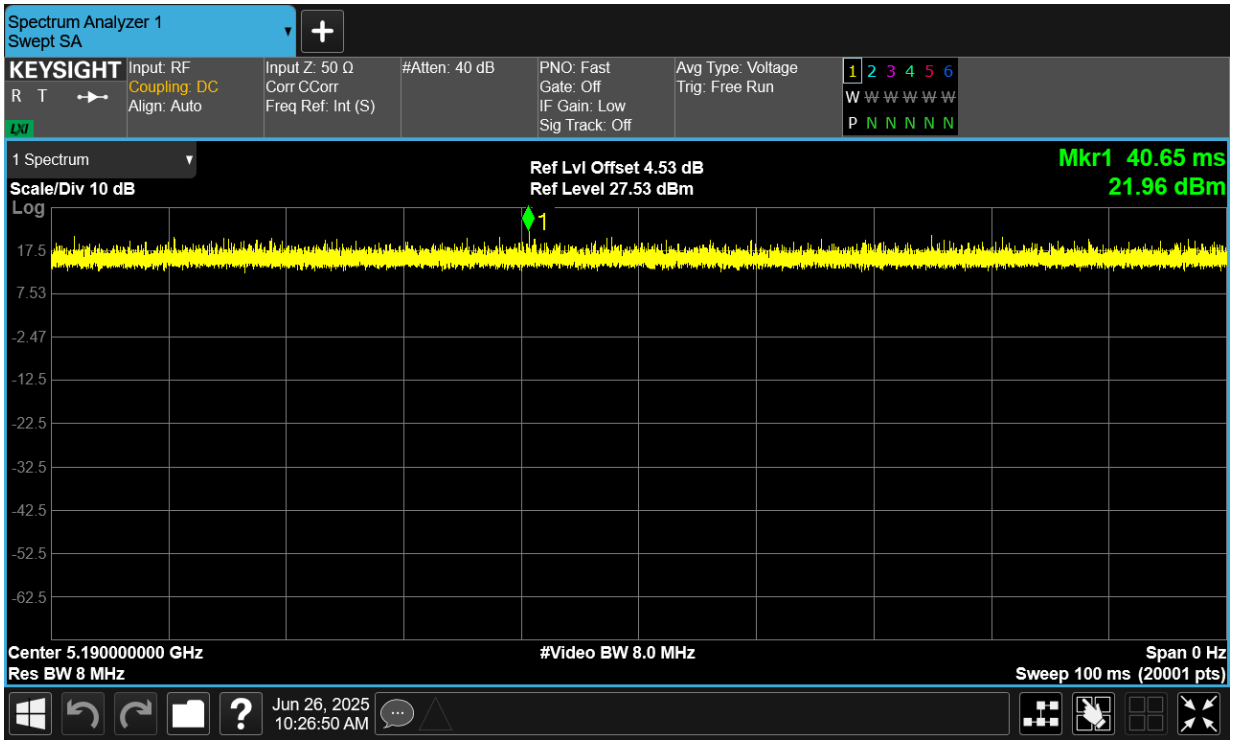
Duty Cycle NVNT ac20 5200MHz Ant14



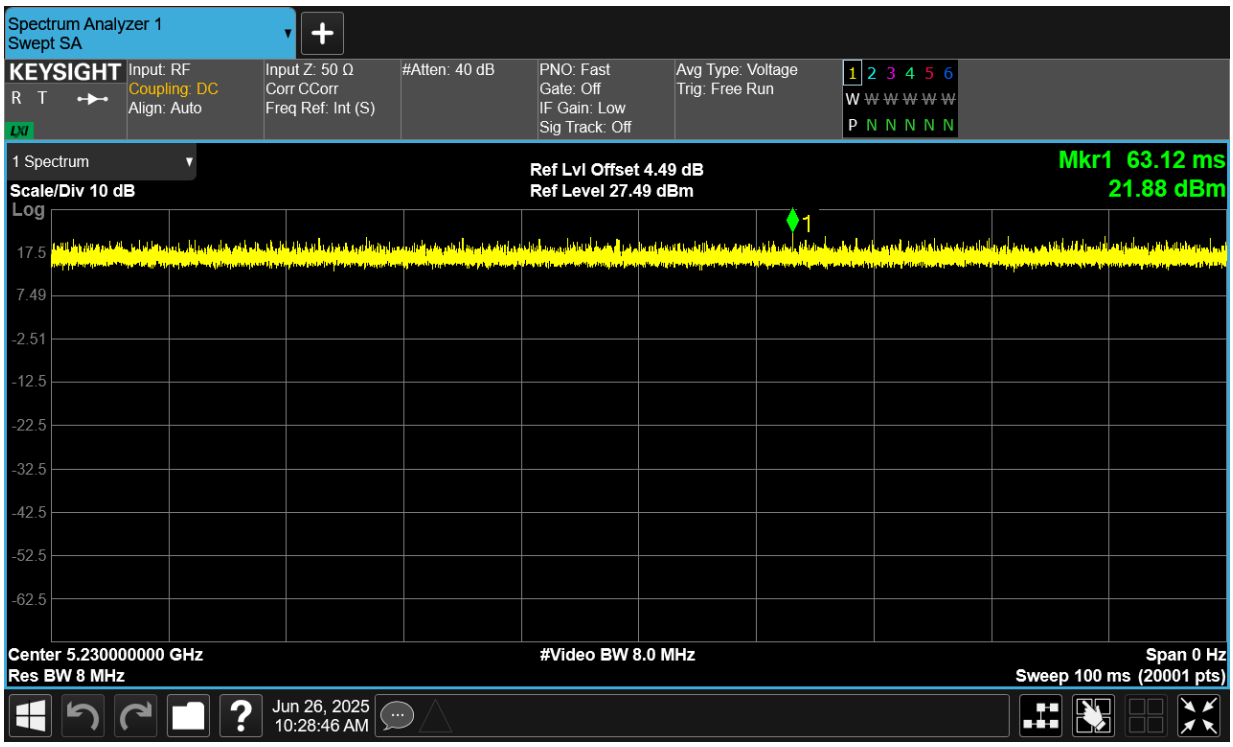
Duty Cycle NVNT ac20 5240MHz Ant14



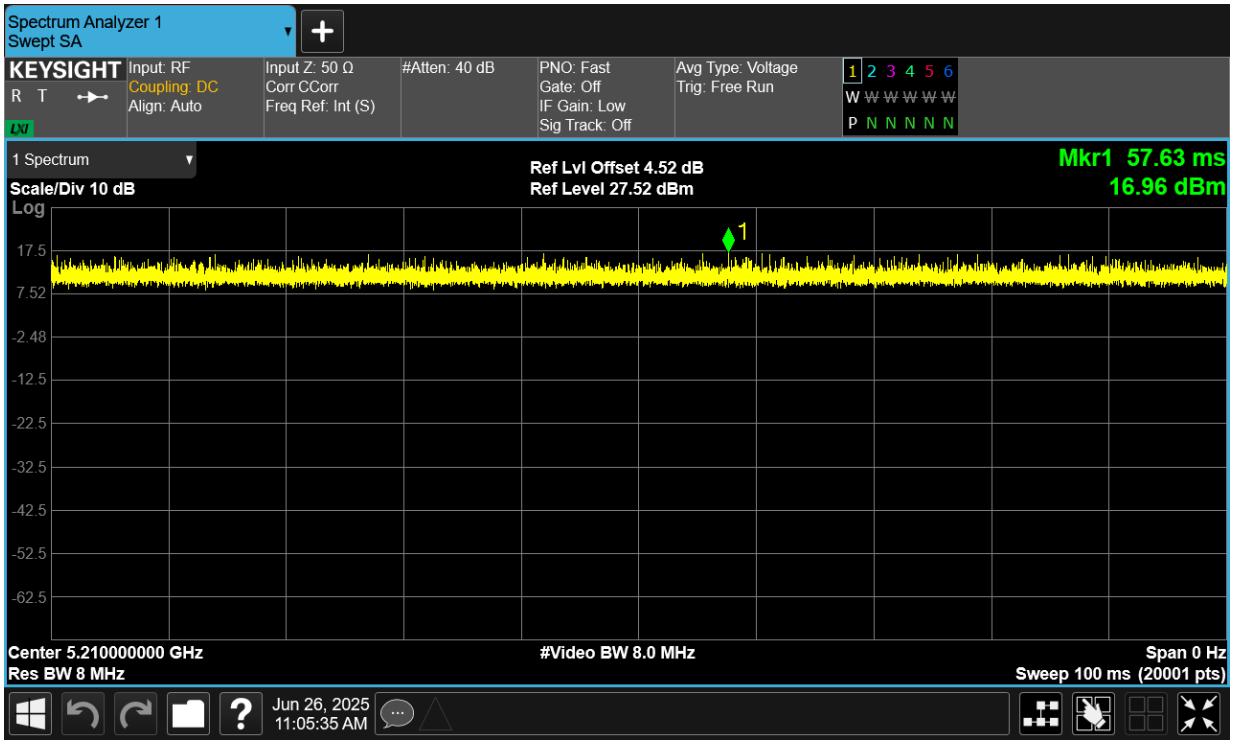
Duty Cycle NVNT ac40 5190MHz Ant14



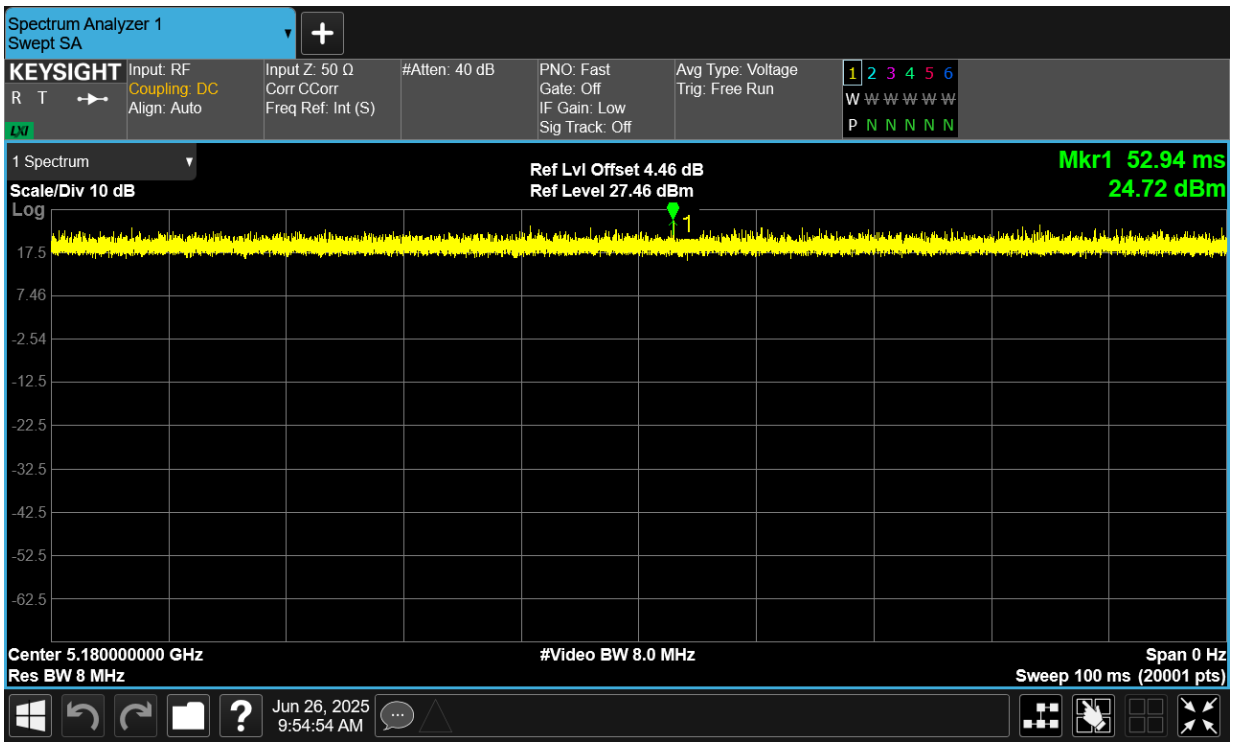
Duty Cycle NVNT ac40 5230MHz Ant14



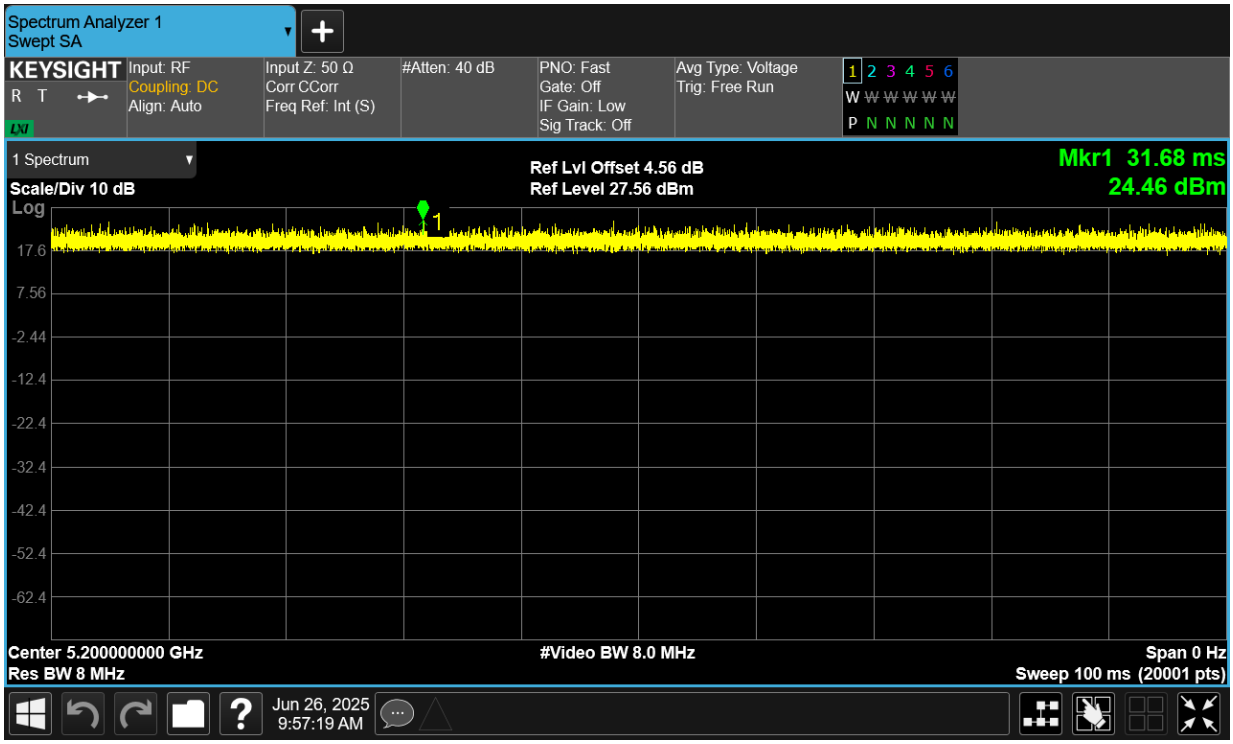
Duty Cycle NVNT ac80 5210MHz Ant14



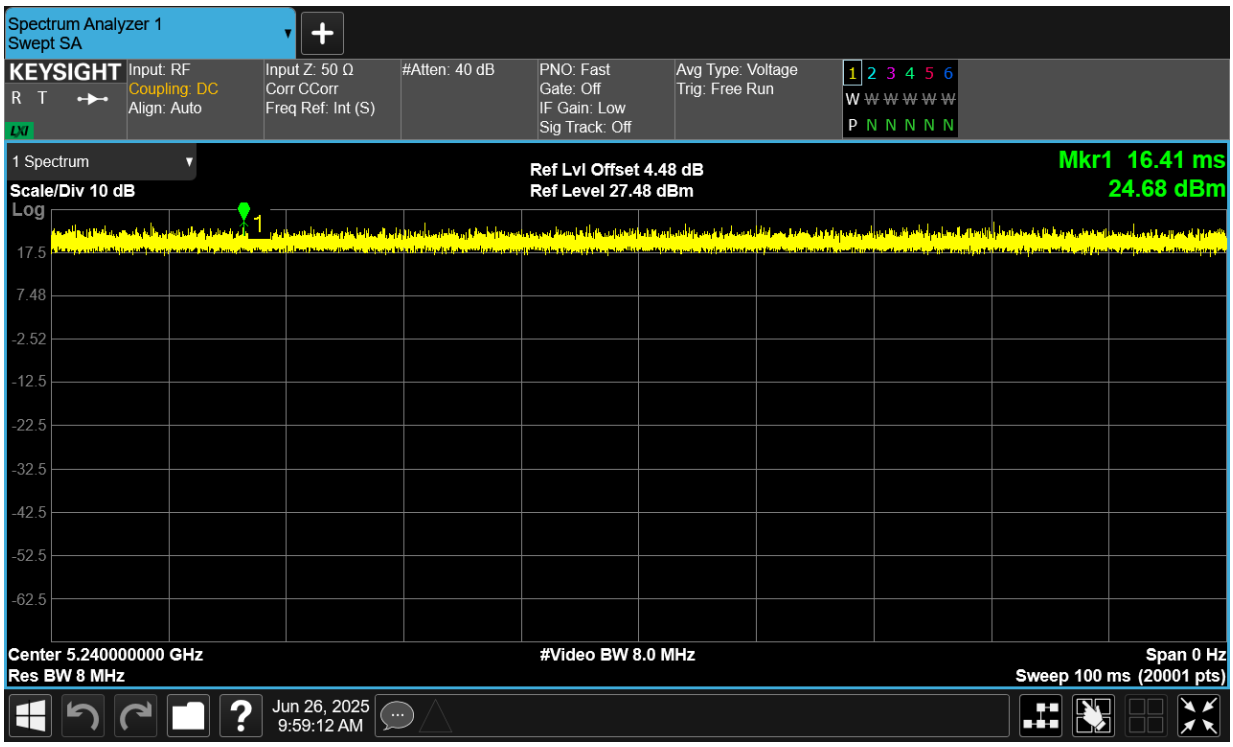
Duty Cycle NVNT n20 5180MHz Ant14



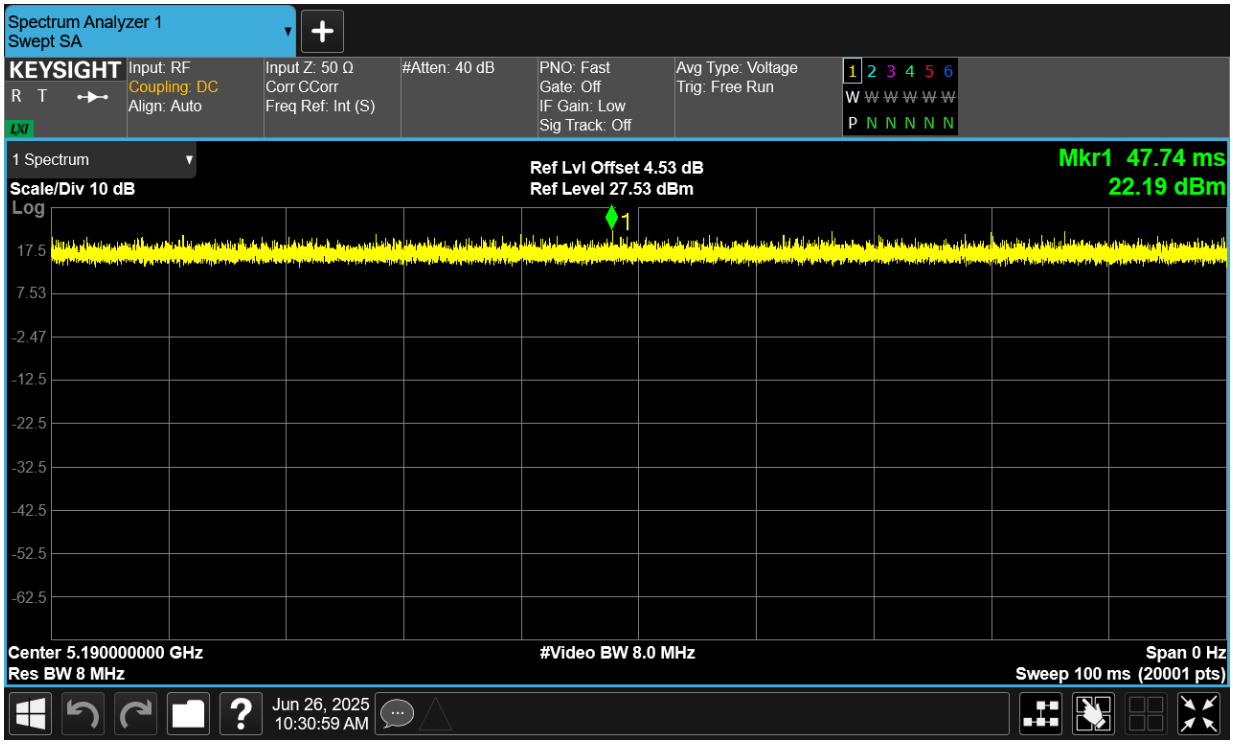
Duty Cycle NVNT n20 5200MHz Ant14



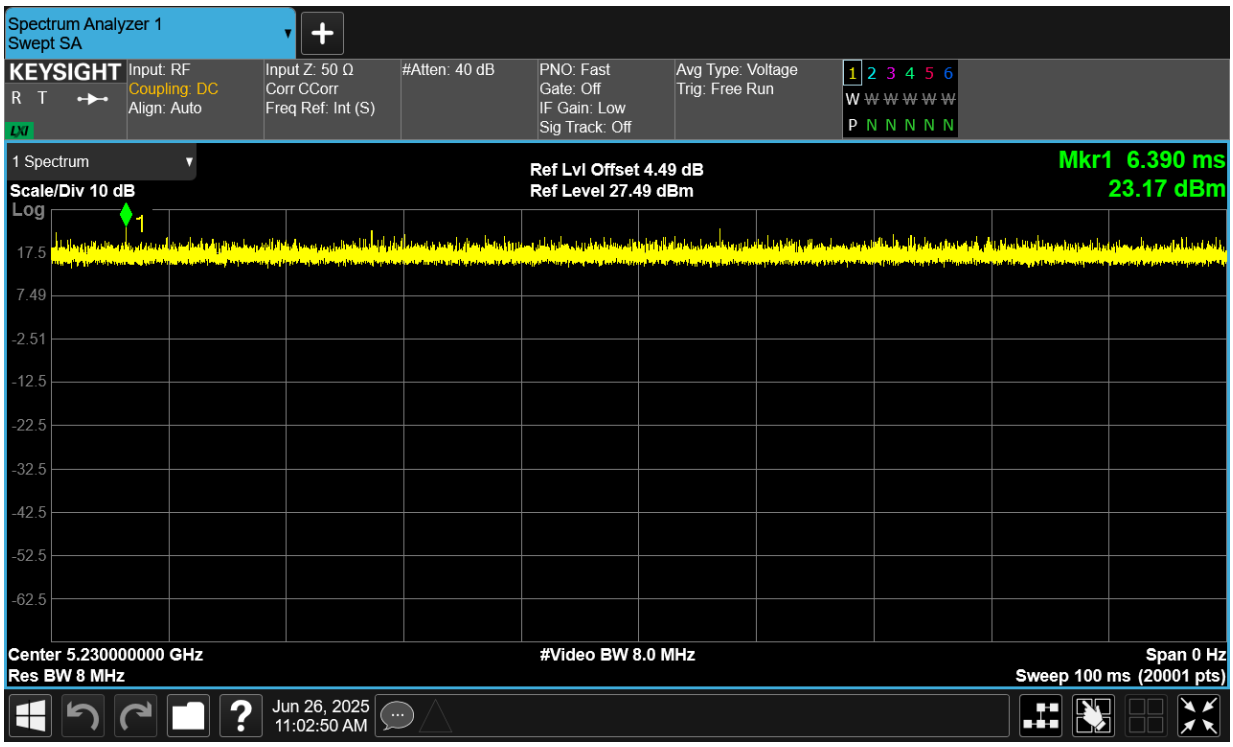
Duty Cycle NVNT n20 5240MHz Ant14



Duty Cycle NVNT n40 5190MHz Ant14



Duty Cycle NVNT n40 5230MHz Ant14



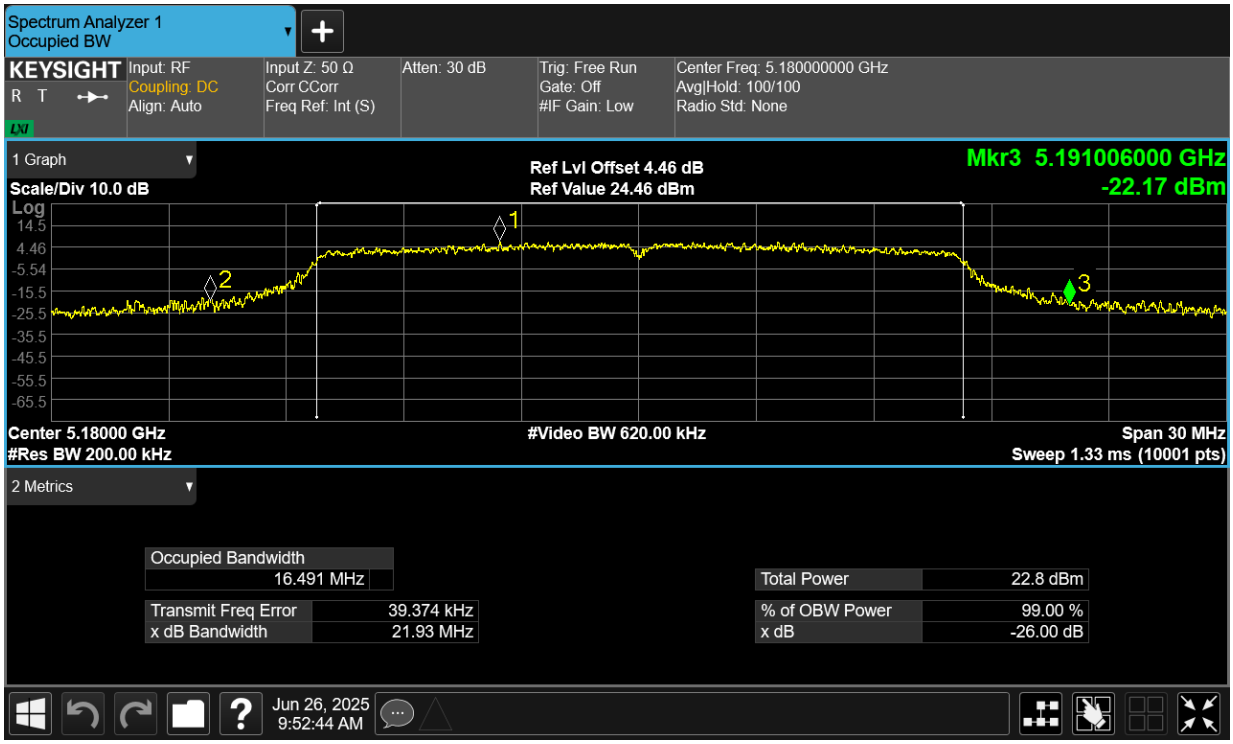
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant14	16.95	0	16.95	24	Pass
NVNT	a	5200	Ant14	16.9	0	16.9	24	Pass
NVNT	a	5240	Ant14	17.05	0	17.05	24	Pass
NVNT	ac20	5180	Ant14	14.29	0	14.29	24	Pass
NVNT	ac20	5200	Ant14	14.64	0	14.64	24	Pass
NVNT	ac20	5240	Ant14	15.05	0	15.05	24	Pass
NVNT	ac40	5190	Ant14	14.21	0	14.21	23	Pass
NVNT	ac40	5230	Ant14	15.04	0	15.04	24	Pass
NVNT	ac80	5210	Ant14	13.66	0	13.66	24	Pass
NVNT	n20	5180	Ant14	15.19	0	15.19	24	Pass
NVNT	n20	5200	Ant14	15.59	0	15.59	24	Pass
NVNT	n20	5240	Ant14	15.97	0	15.97	24	Pass
NVNT	n40	5190	Ant14	15.31	0	15.31	24	Pass
NVNT	n40	5230	Ant14	15.63	0	15.63	24	Pass

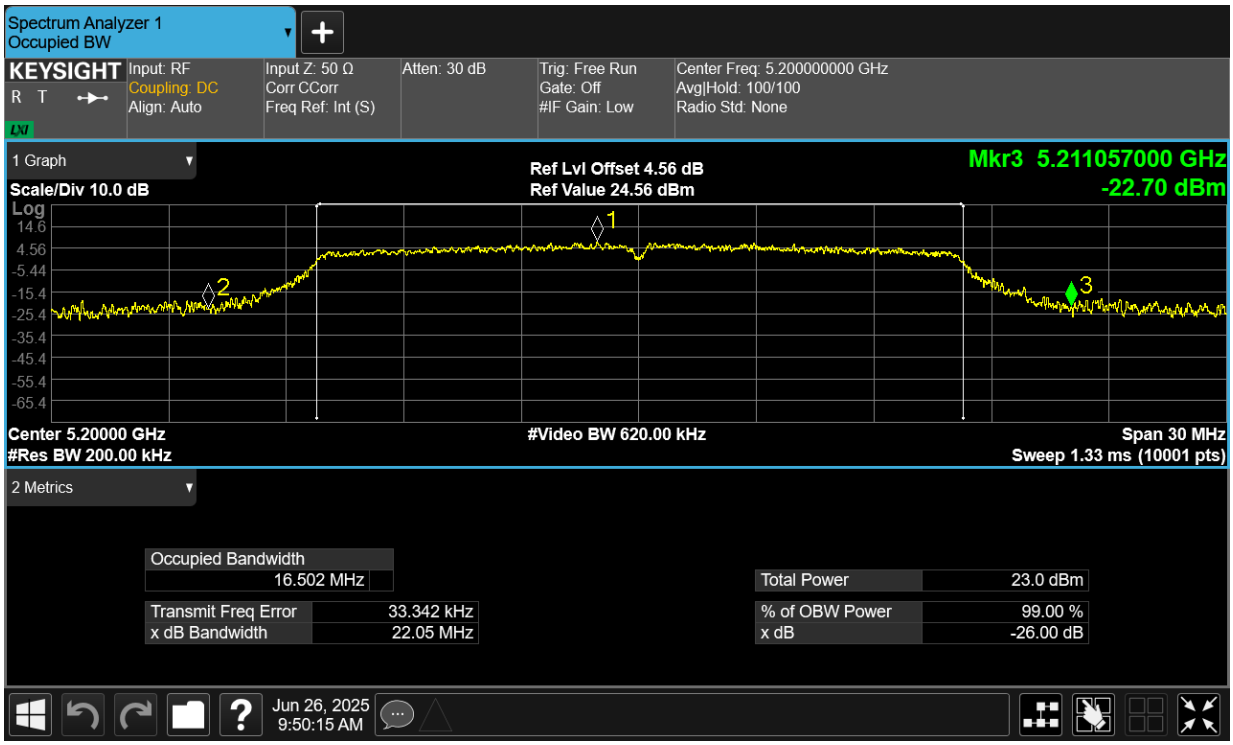
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant14	21.934
NVNT	a	5200	Ant14	22.047
NVNT	a	5240	Ant14	22.654
NVNT	ac20	5180	Ant14	20.158
NVNT	ac20	5200	Ant14	20.101
NVNT	ac20	5240	Ant14	20.195
NVNT	ac40	5190	Ant14	40.532
NVNT	ac40	5230	Ant14	41.325
NVNT	ac80	5210	Ant14	80.386
NVNT	n20	5180	Ant14	20.242
NVNT	n20	5200	Ant14	20.483
NVNT	n20	5240	Ant14	20.03
NVNT	n40	5190	Ant14	40.052
NVNT	n40	5230	Ant14	40.723

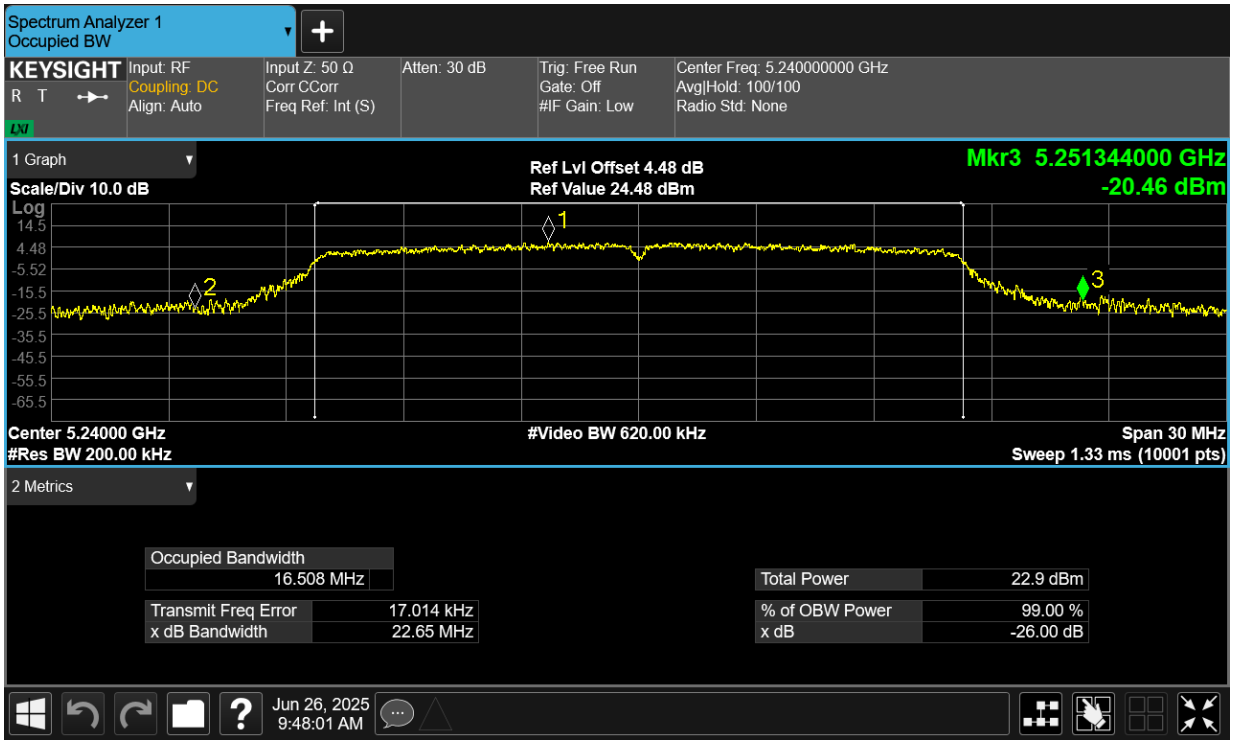
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant14



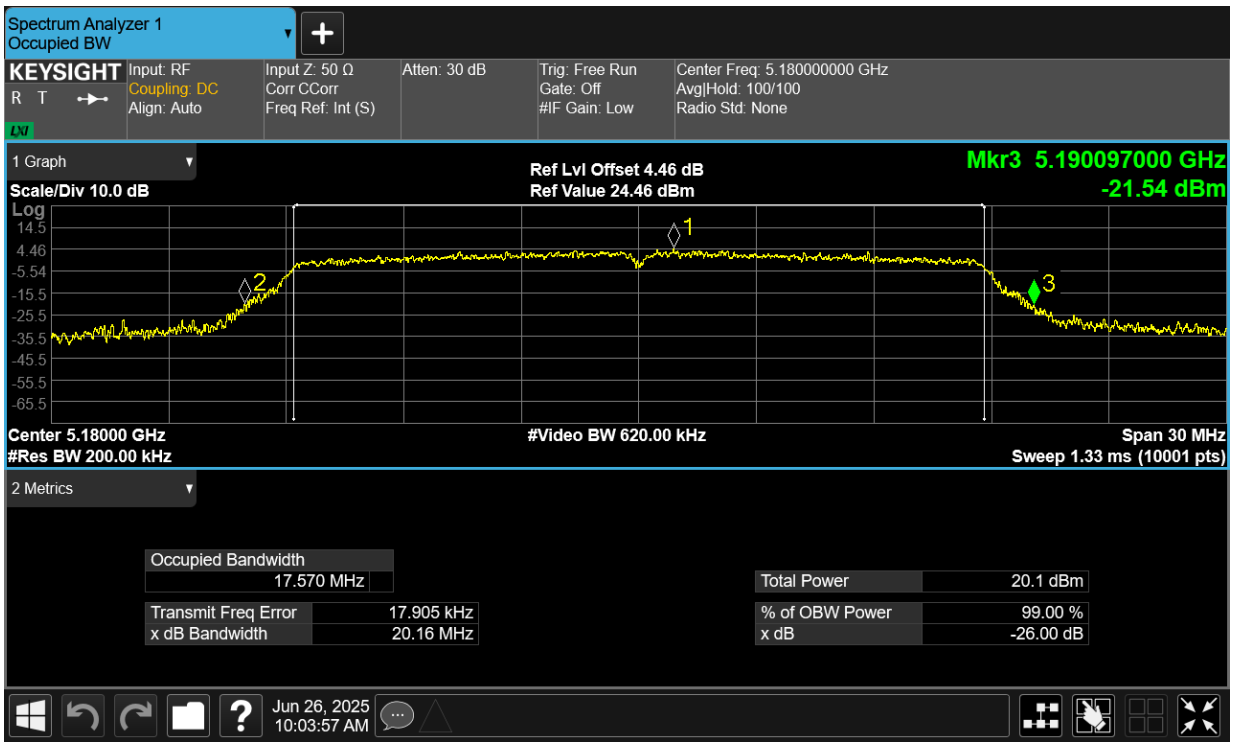
-26dB Bandwidth NVNT a 5200MHz Ant14



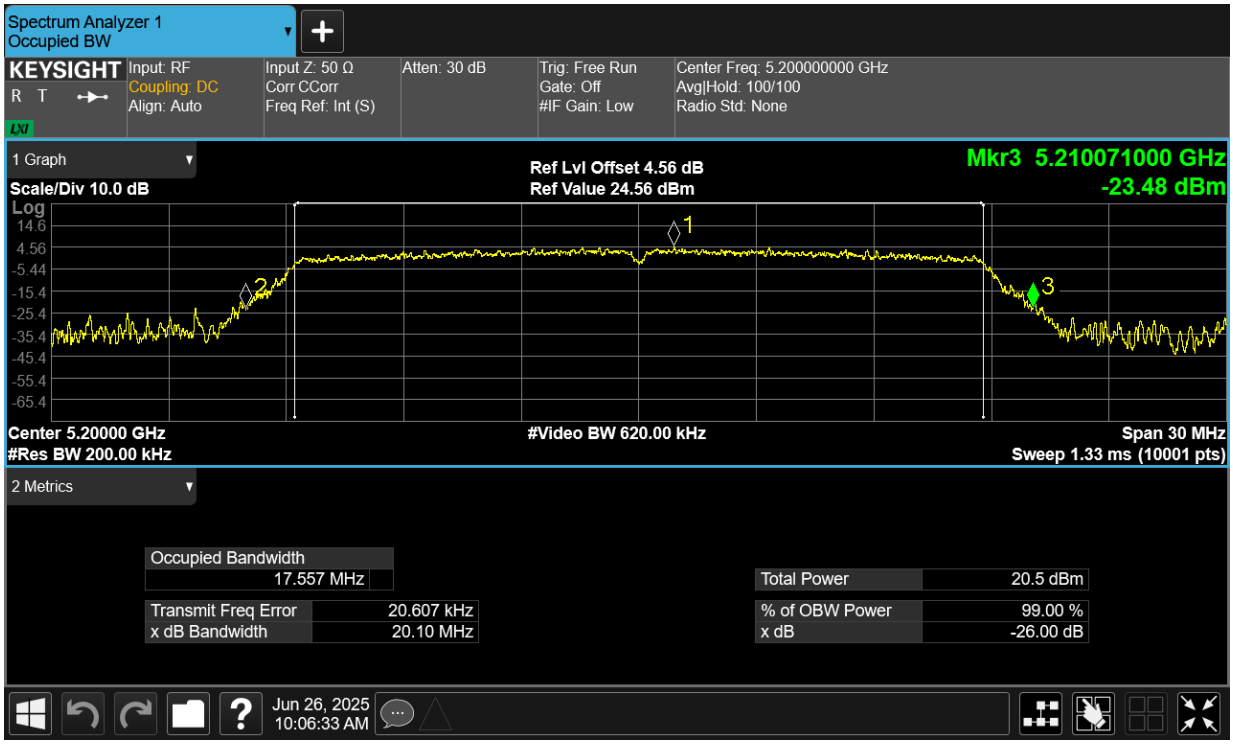
-26dB Bandwidth NVNT a 5240MHz Ant14



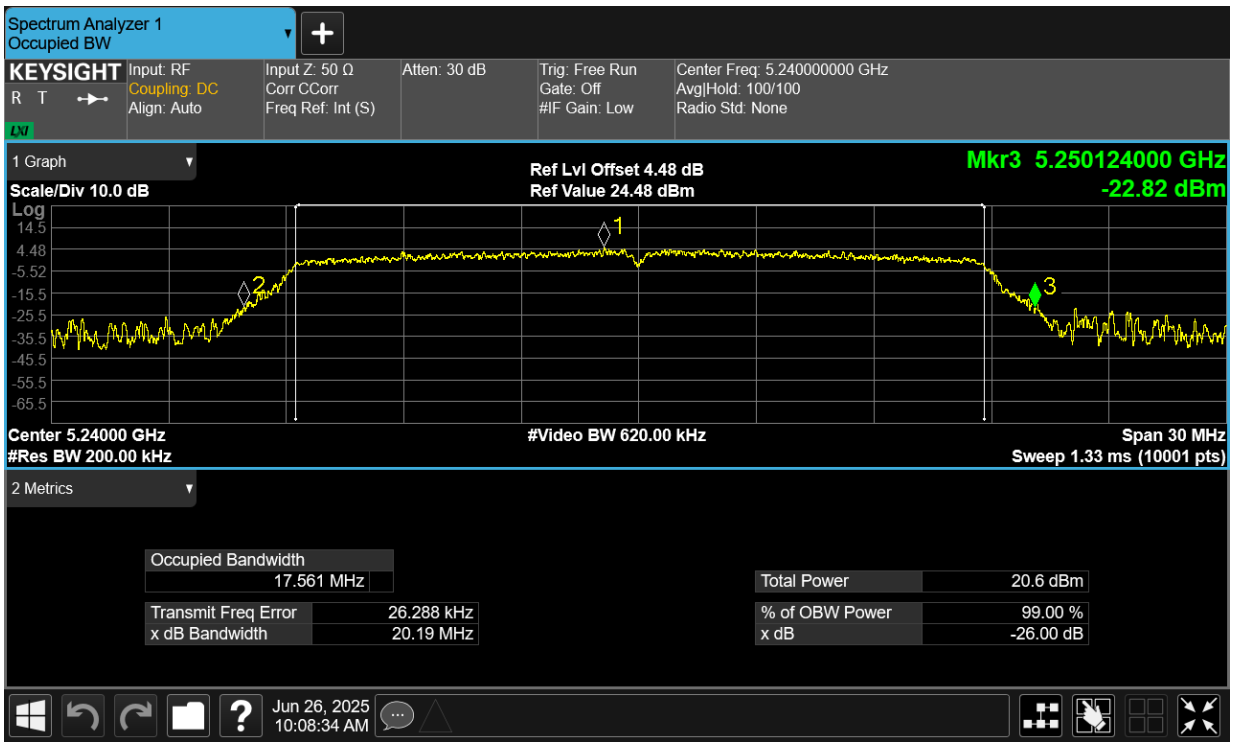
-26dB Bandwidth NVNT ac20 5180MHz Ant14



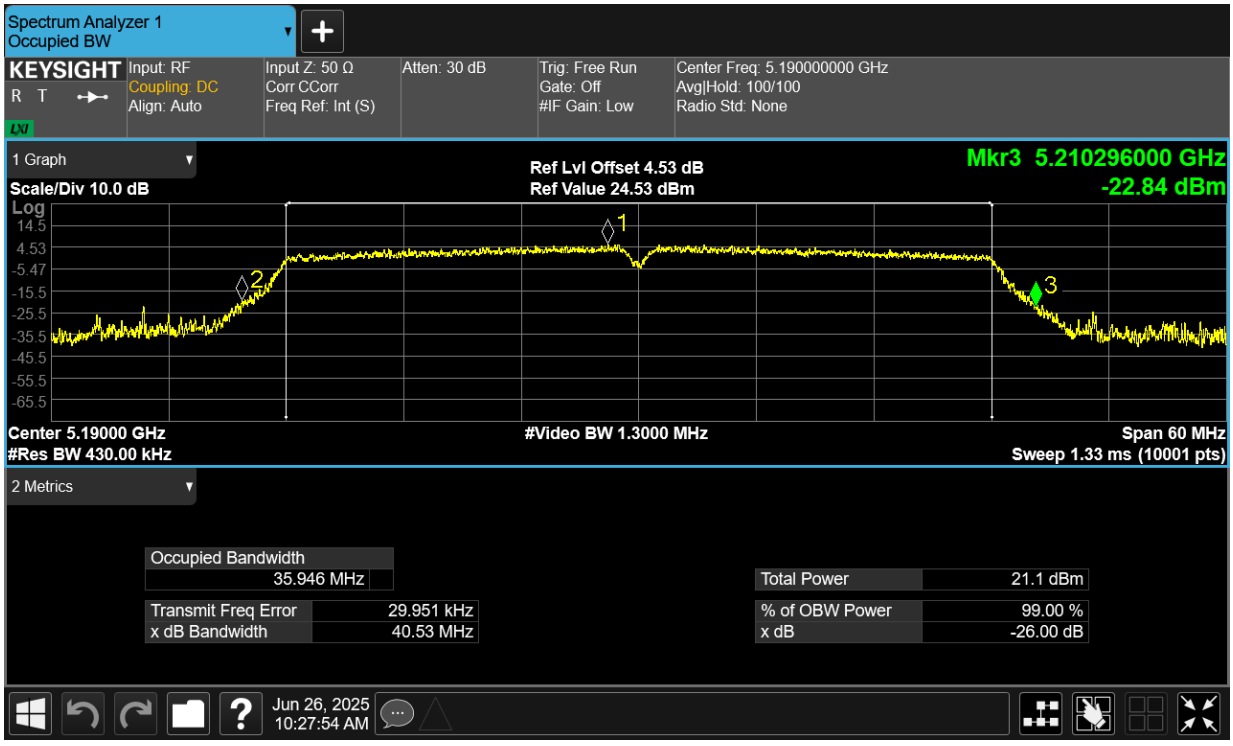
-26dB Bandwidth NVNT ac20 5200MHz Ant14



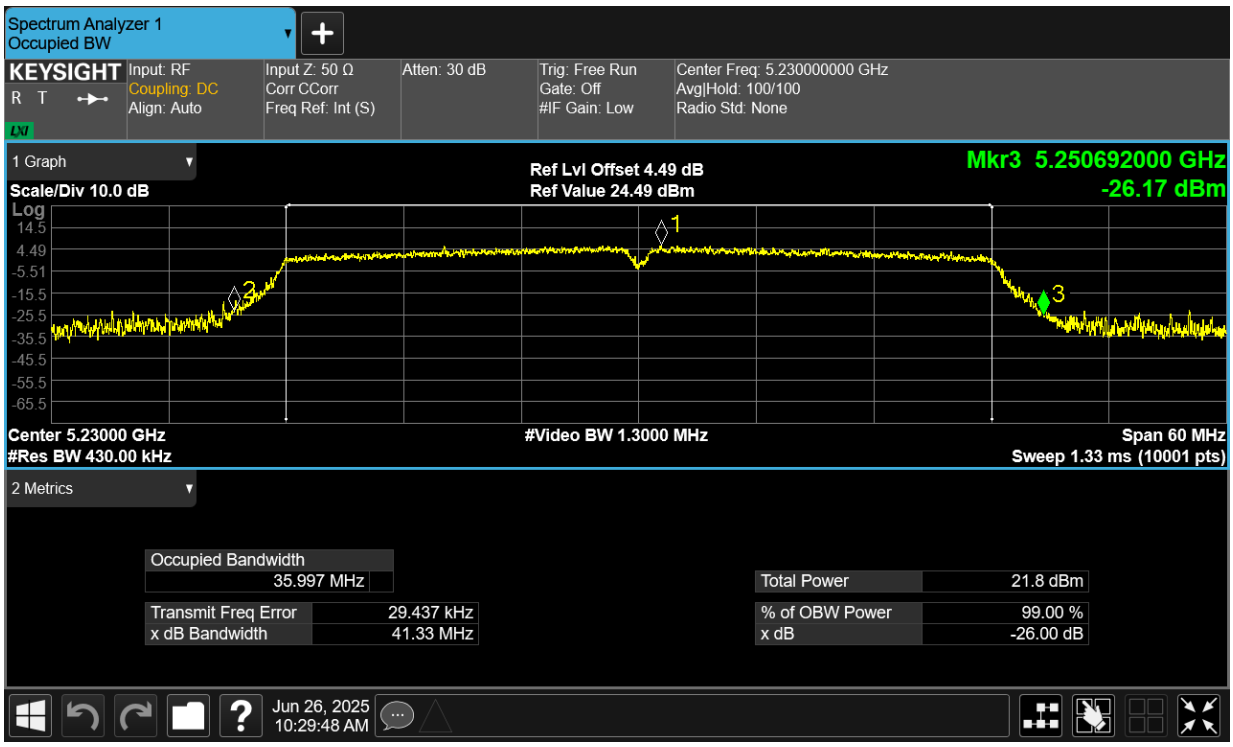
-26dB Bandwidth NVNT ac20 5240MHz Ant14



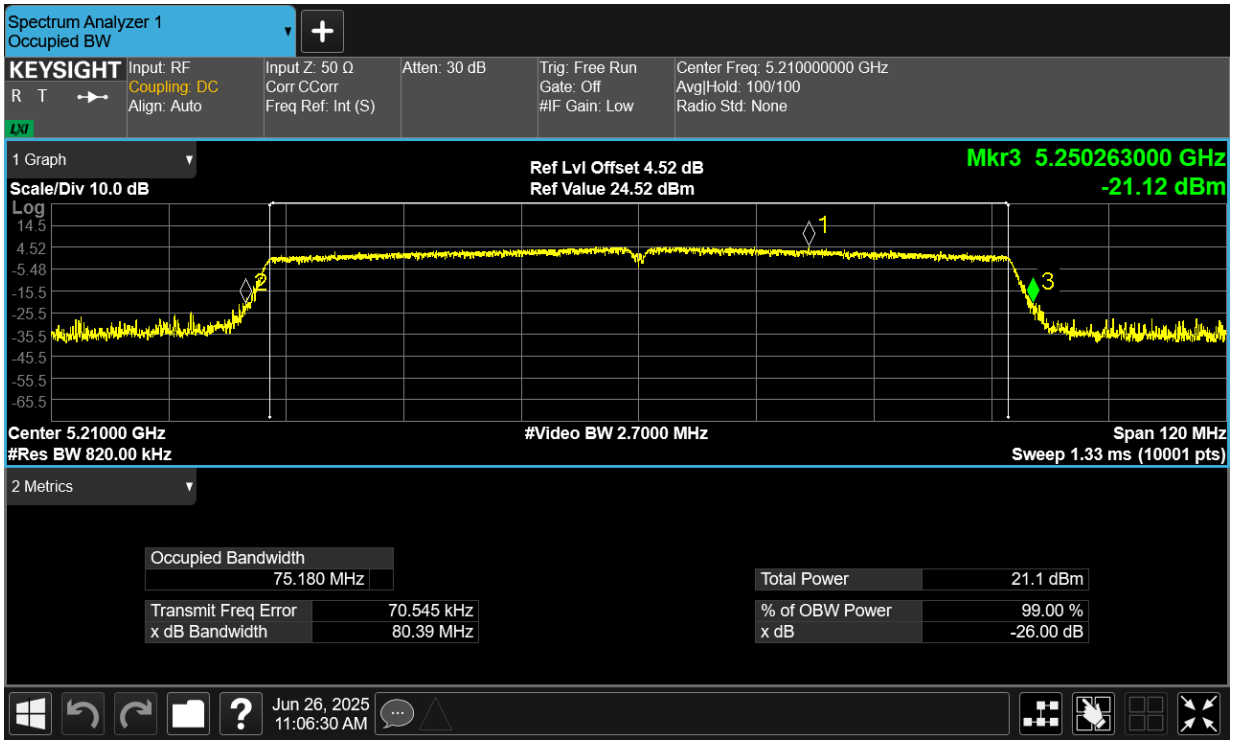
-26dB Bandwidth NVNT ac40 5190MHz Ant14



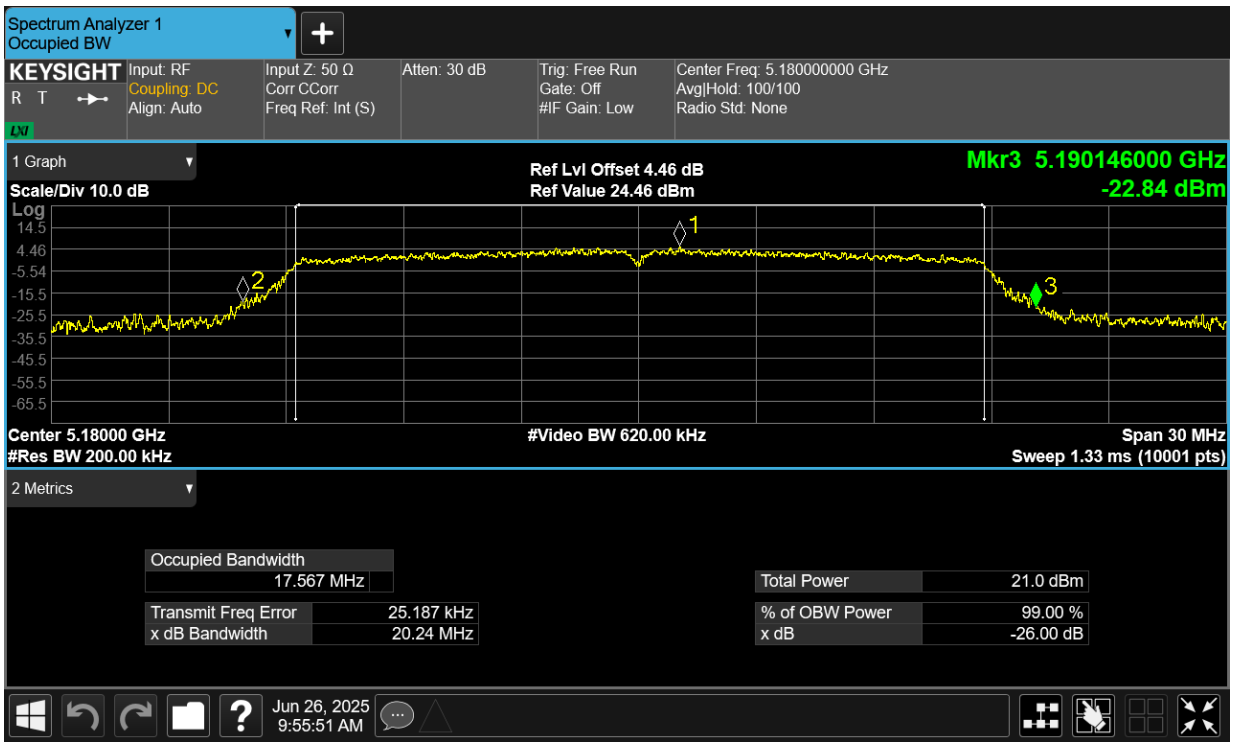
-26dB Bandwidth NVNT ac40 5230MHz Ant14



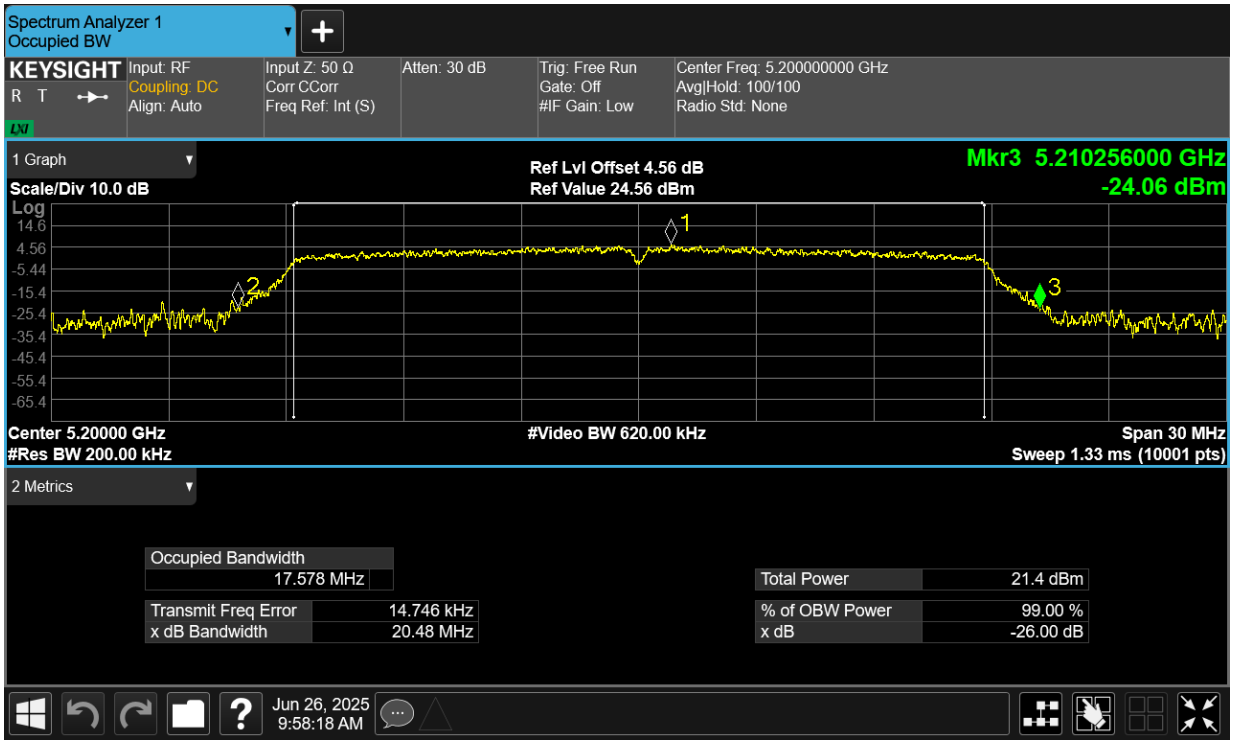
-26dB Bandwidth NVNT ac80 5210MHz Ant14



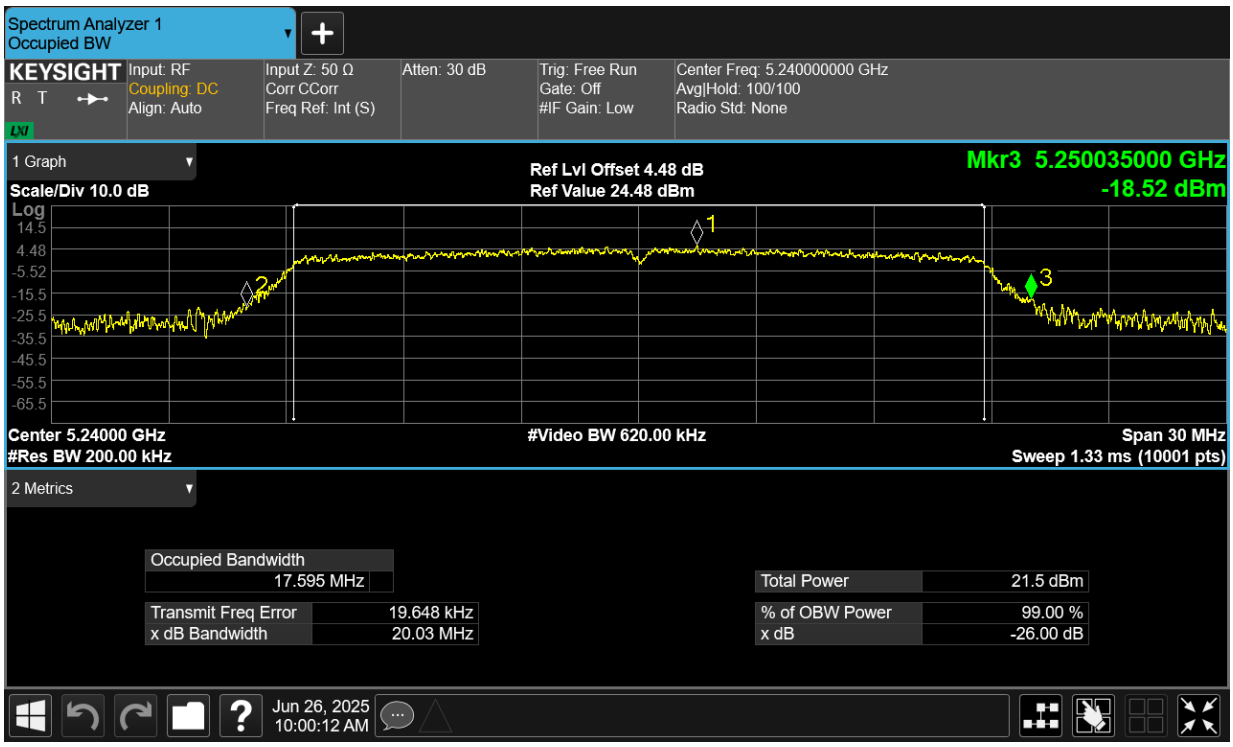
-26dB Bandwidth NVNT n20 5180MHz Ant14



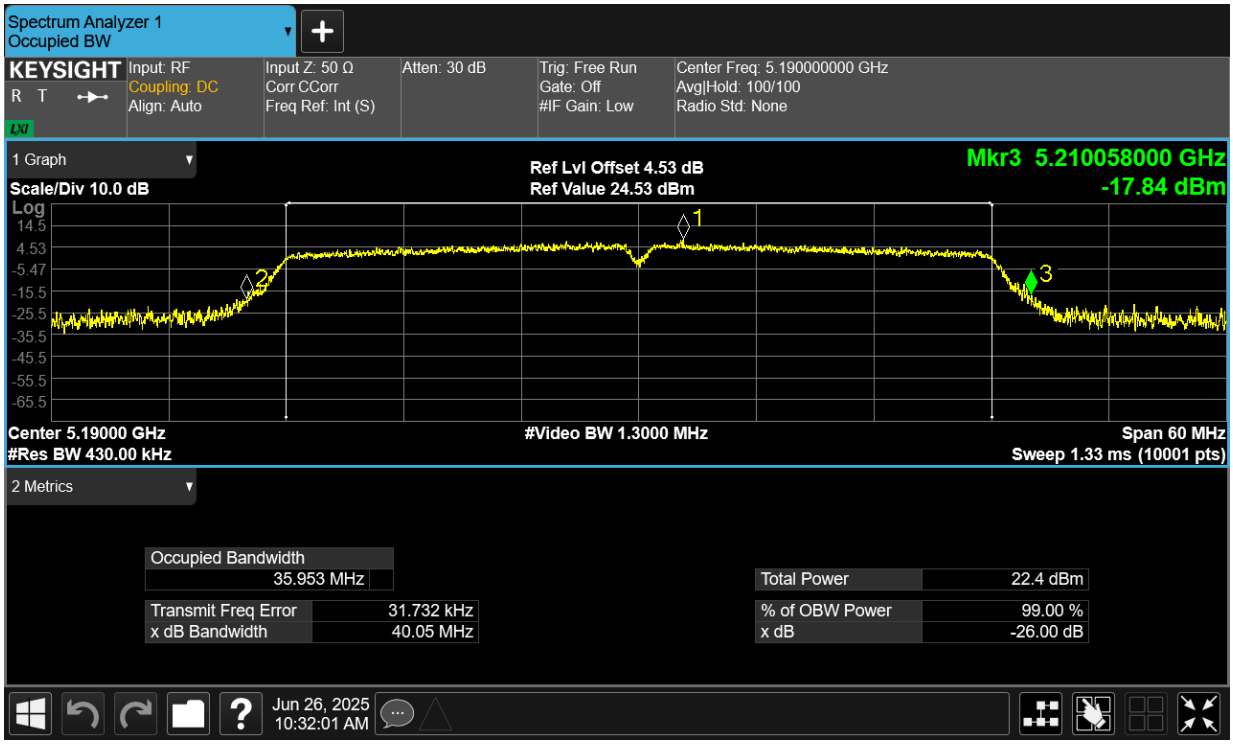
-26dB Bandwidth NVNT n20 5200MHz Ant14



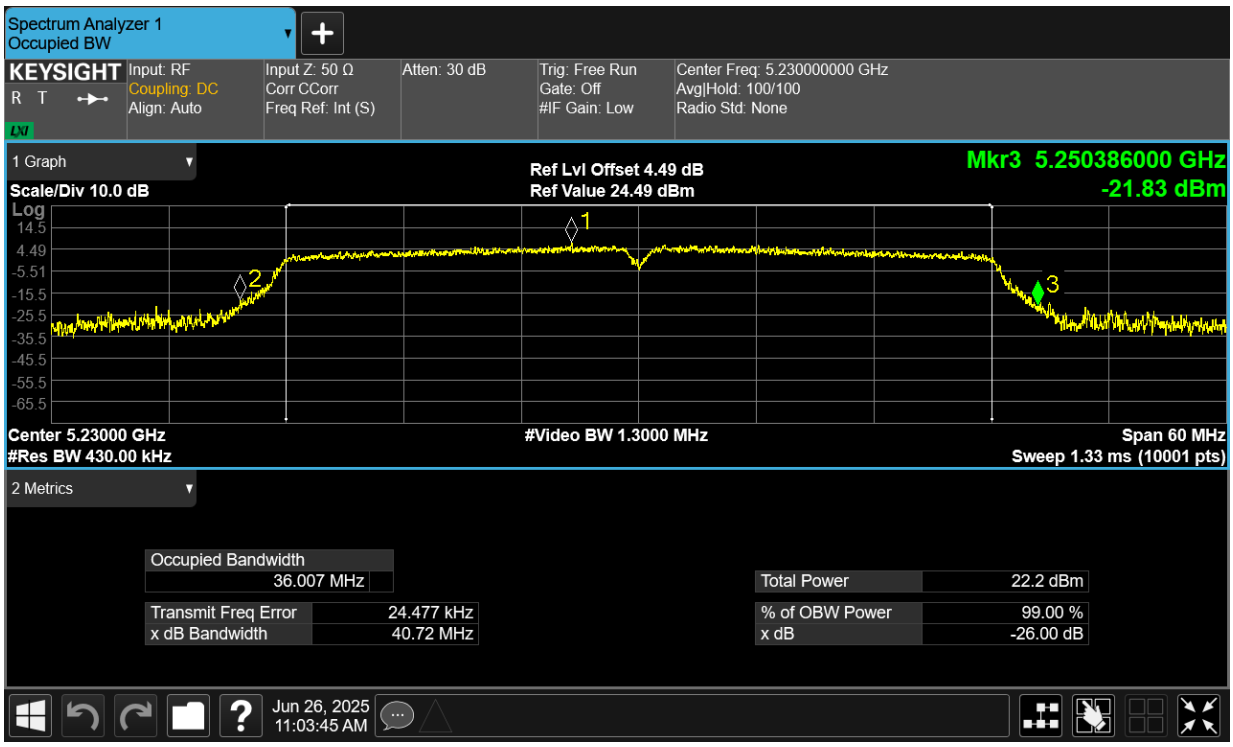
-26dB Bandwidth NVNT n20 5240MHz Ant14



-26dB Bandwidth NVNT n40 5190MHz Ant14



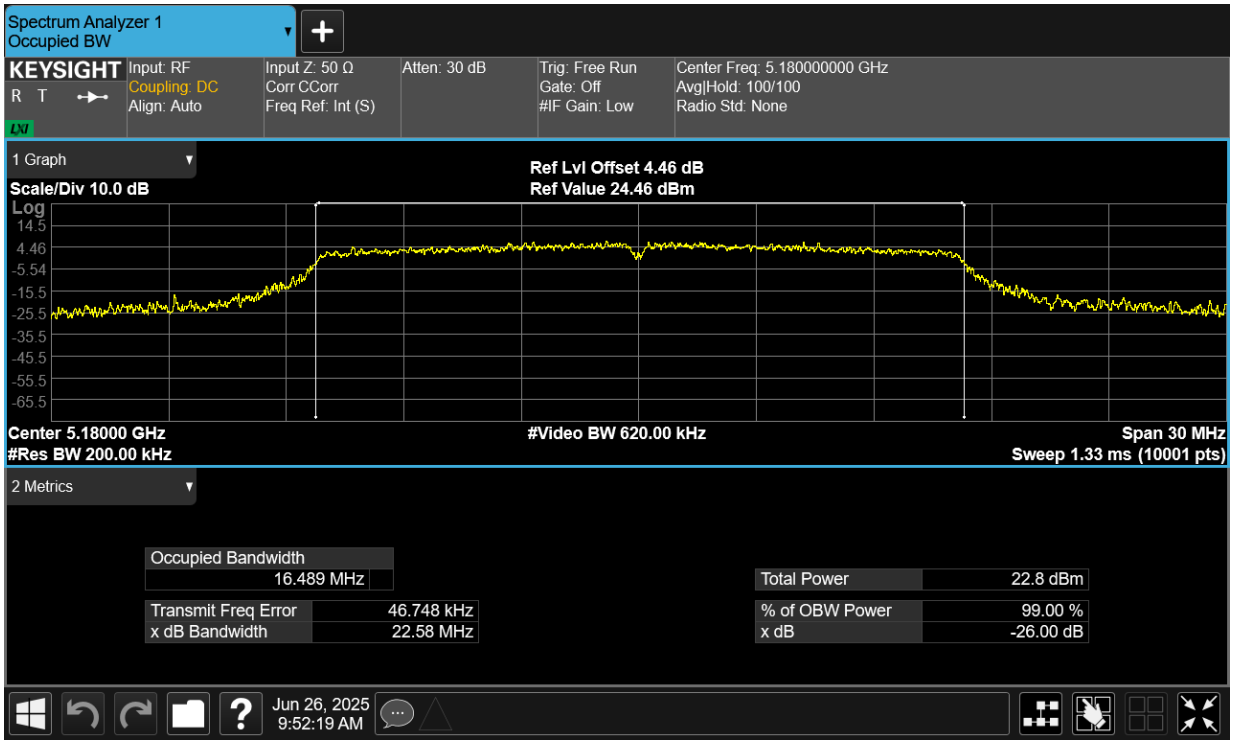
-26dB Bandwidth NVNT n40 5230MHz Ant14



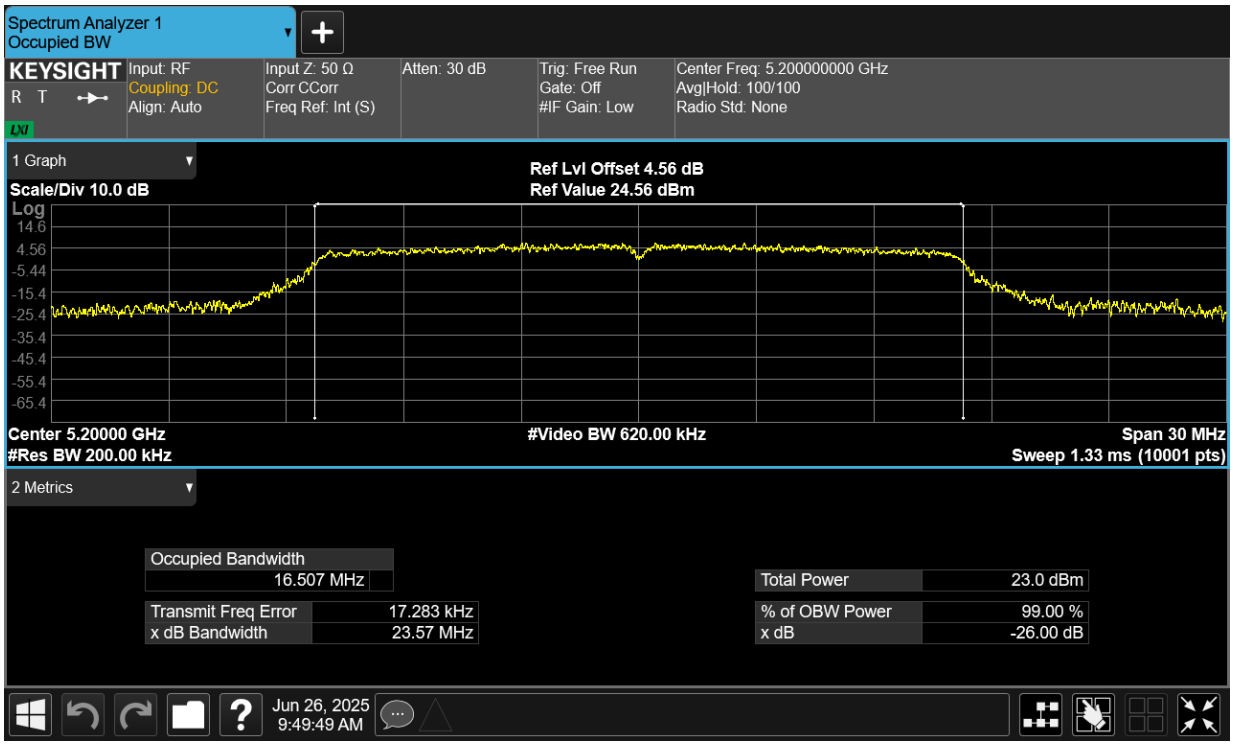
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant14	16.489
NVNT	a	5200	Ant14	16.507
NVNT	a	5240	Ant14	16.476
NVNT	ac20	5180	Ant14	17.556
NVNT	ac20	5200	Ant14	17.548
NVNT	ac20	5240	Ant14	17.589
NVNT	ac40	5190	Ant14	35.993
NVNT	ac40	5230	Ant14	35.946
NVNT	ac80	5210	Ant14	75.153
NVNT	n20	5180	Ant14	17.57
NVNT	n20	5200	Ant14	17.576
NVNT	n20	5240	Ant14	17.583
NVNT	n40	5190	Ant14	35.964
NVNT	n40	5230	Ant14	35.93

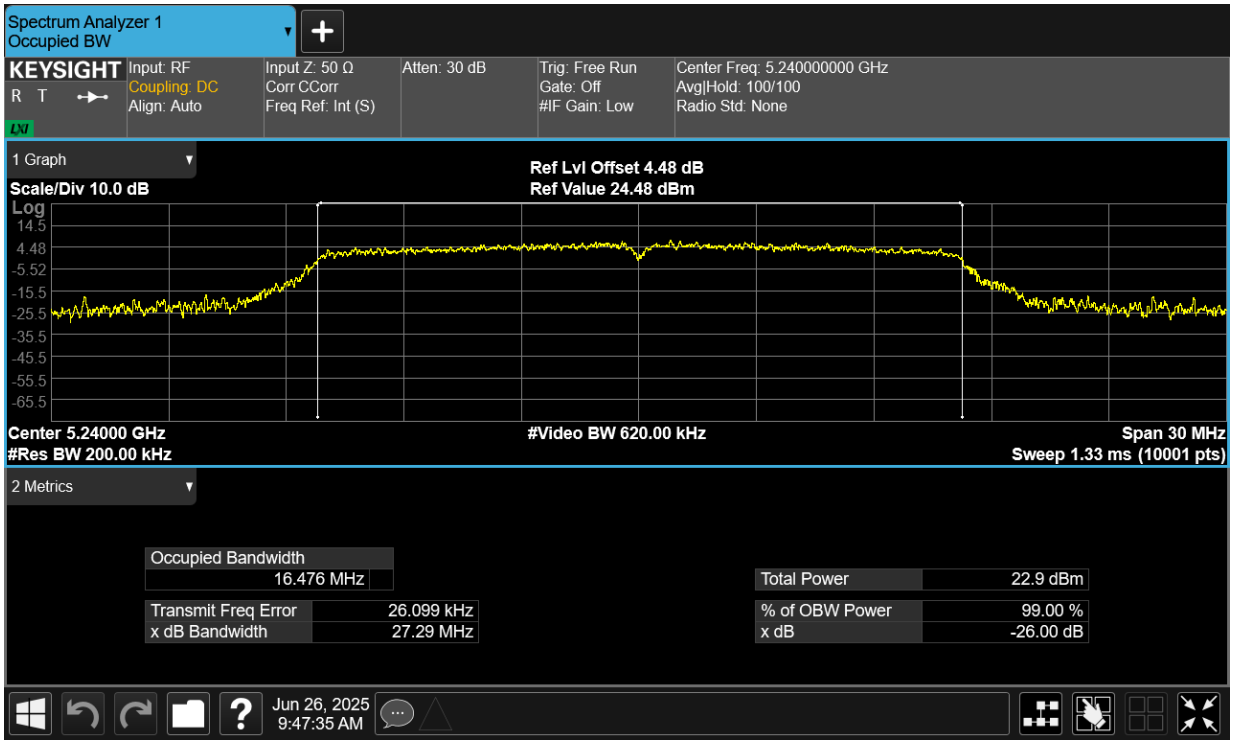
Test Graphs
OBW NVNT a 5180MHz Ant14



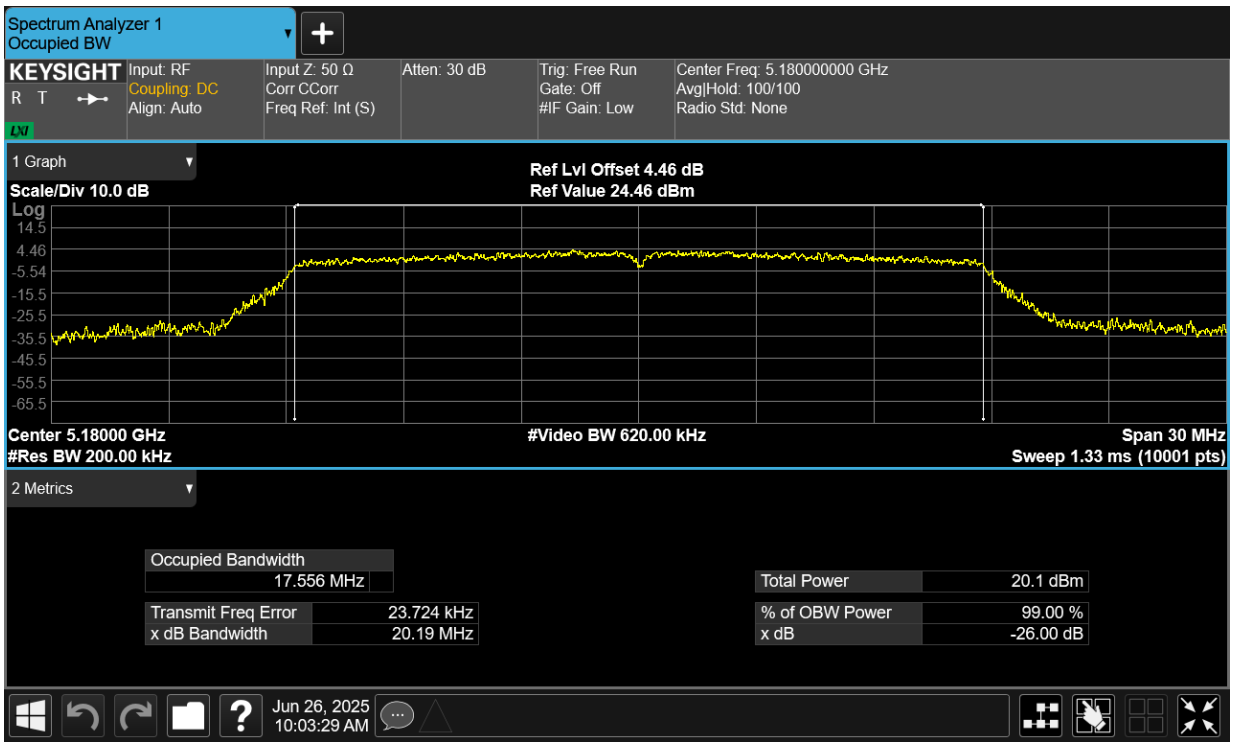
OBW NVNT a 5200MHz Ant14



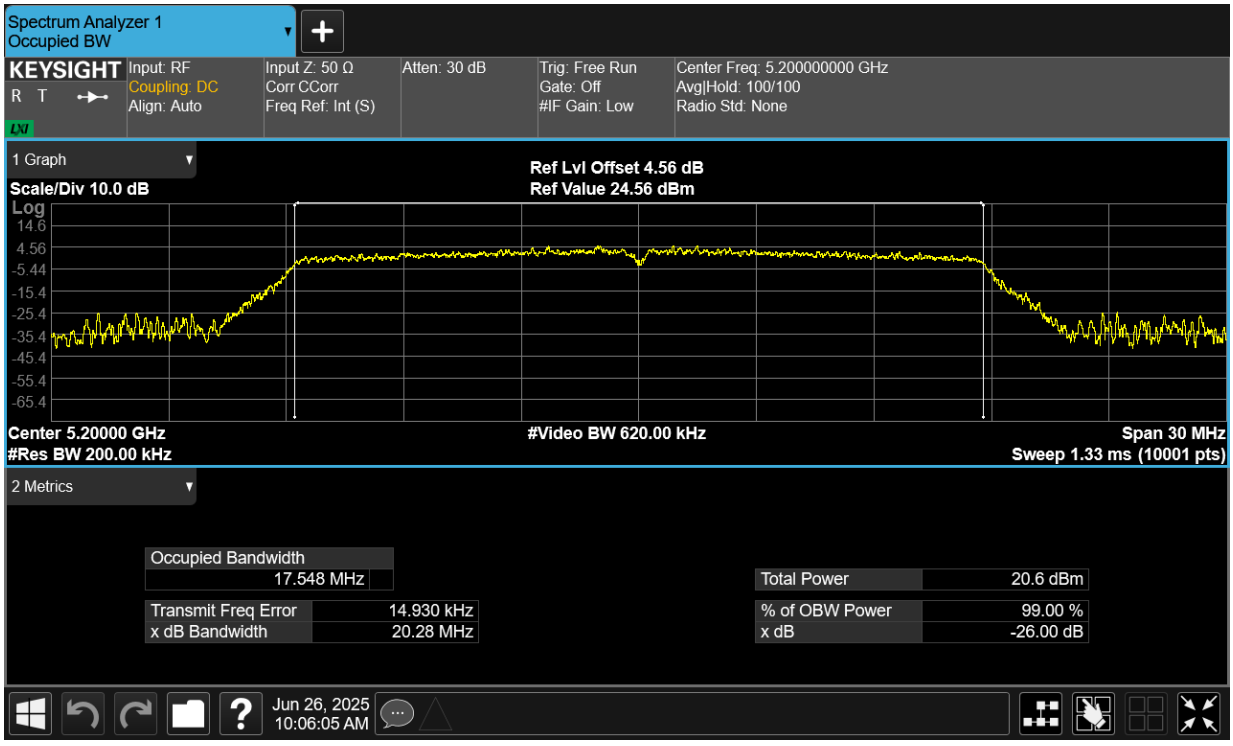
OBW NVNT a 5240MHz Ant14



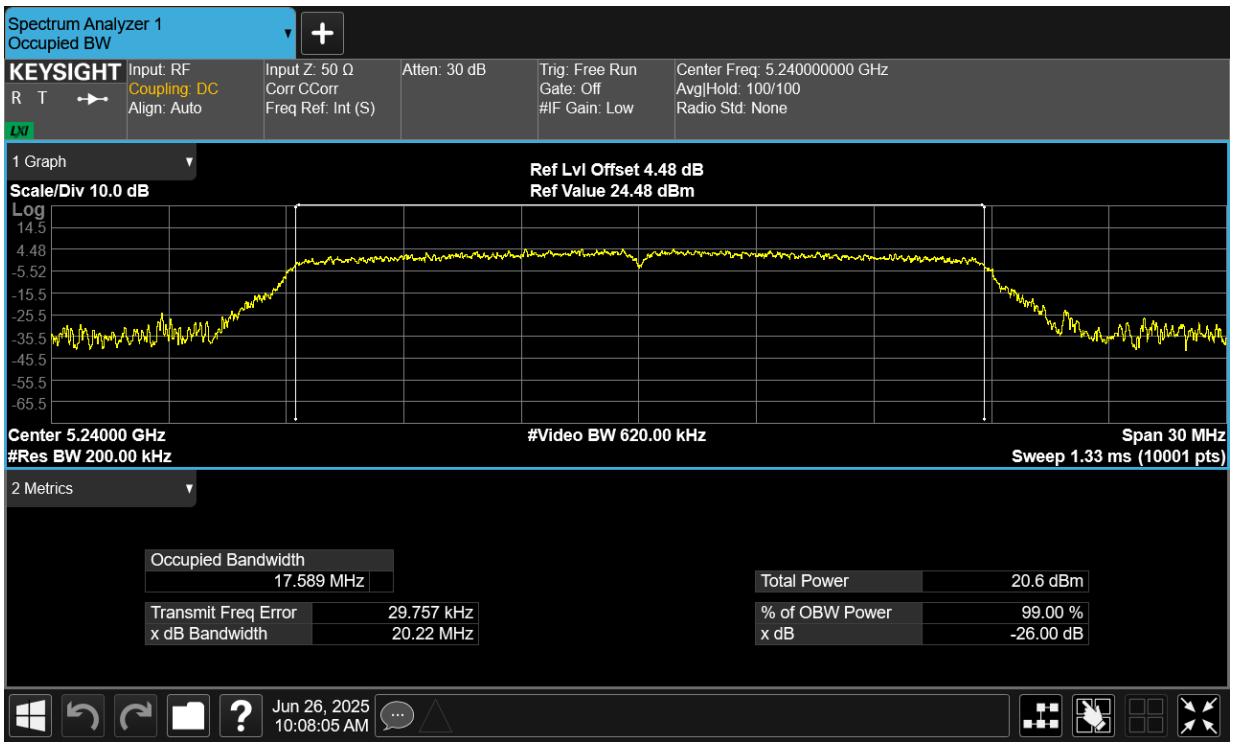
OBW NVNT ac20 5180MHz Ant14



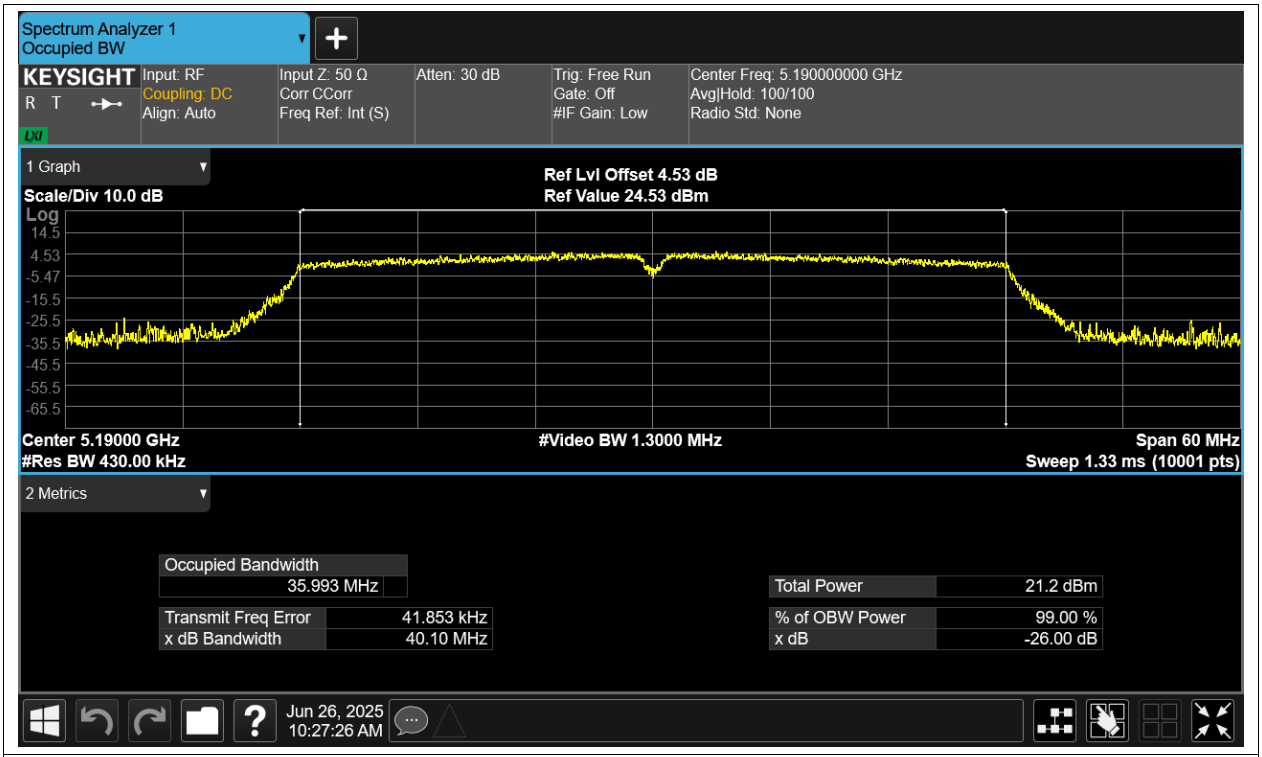
OBW NVNT ac20 5200MHz Ant14



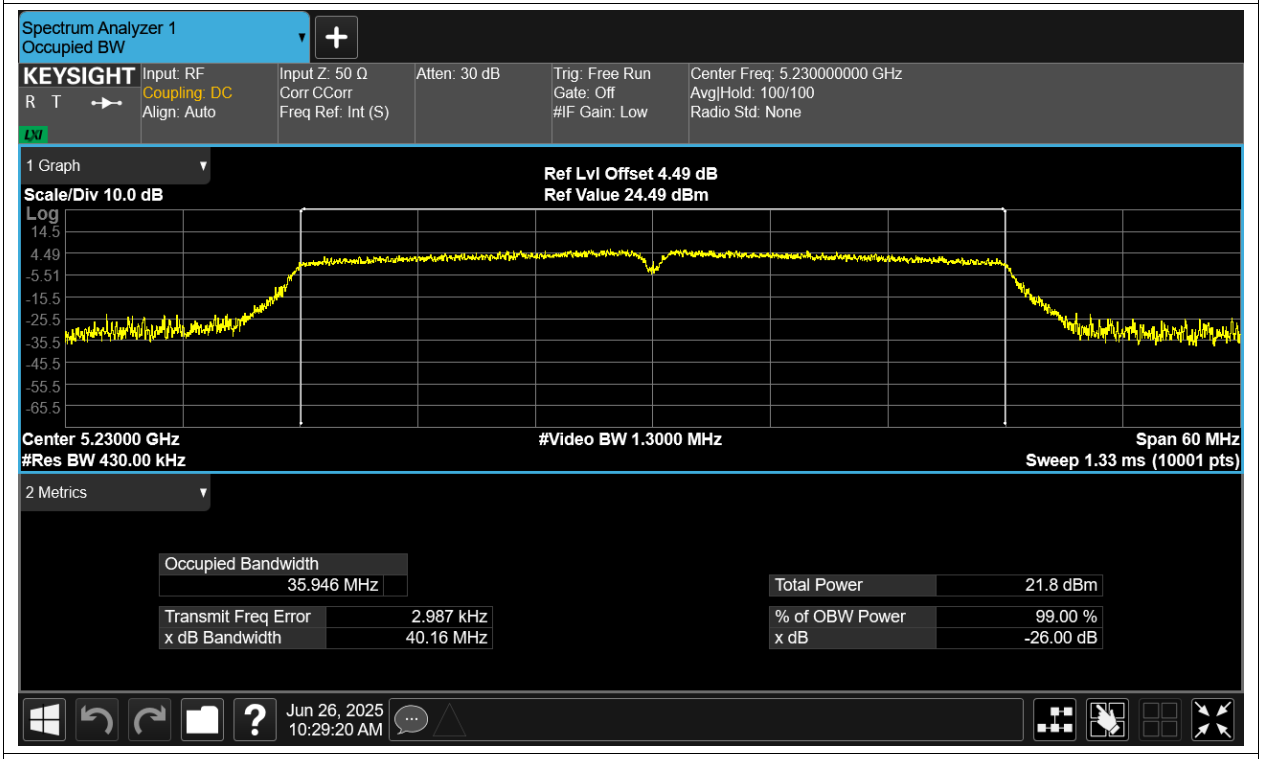
OBW NVNT ac20 5240MHz Ant14



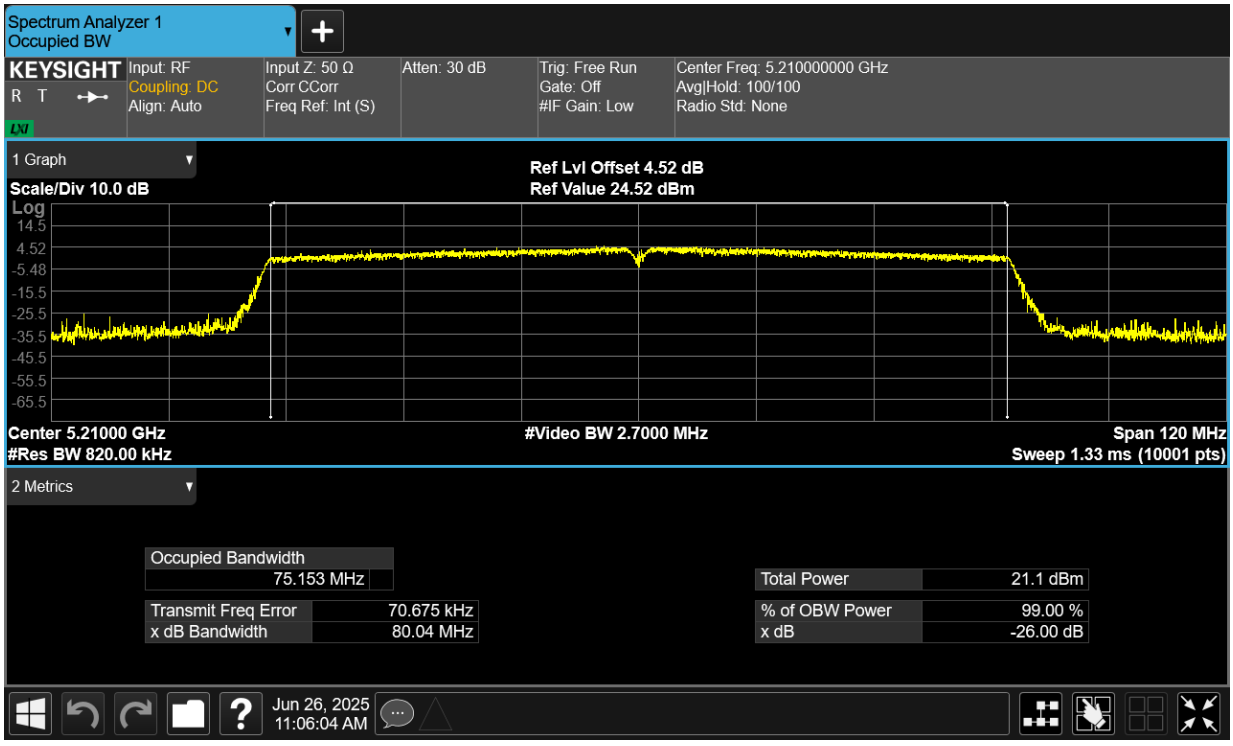
OBW NVNT ac40 5190MHz Ant14



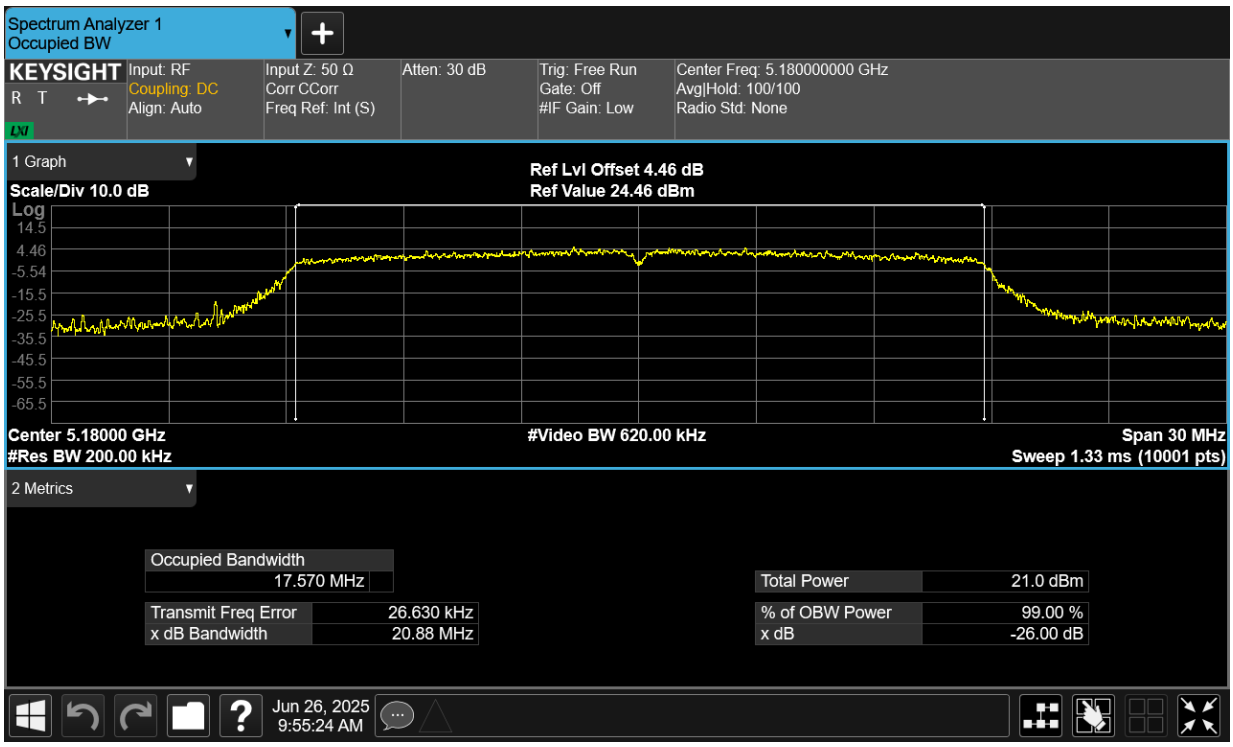
OBW NVNT ac40 5230MHz Ant14



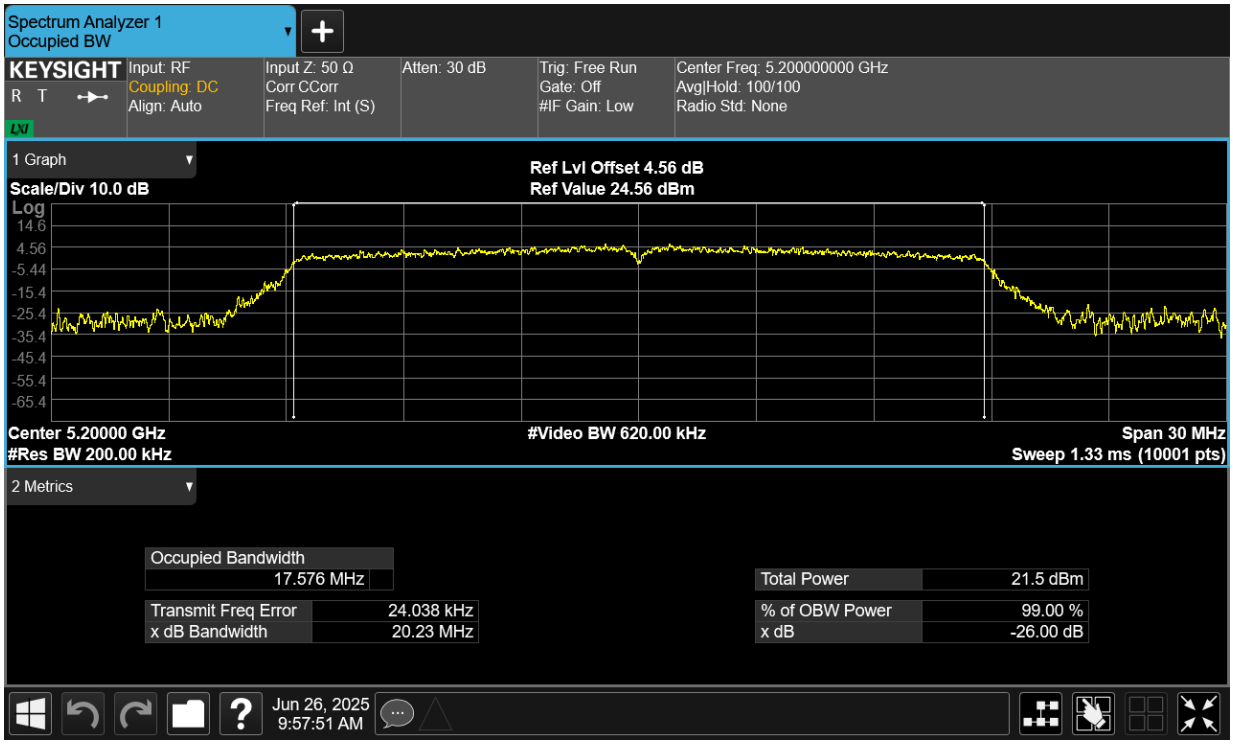
OBW NVNT ac80 5210MHz Ant14



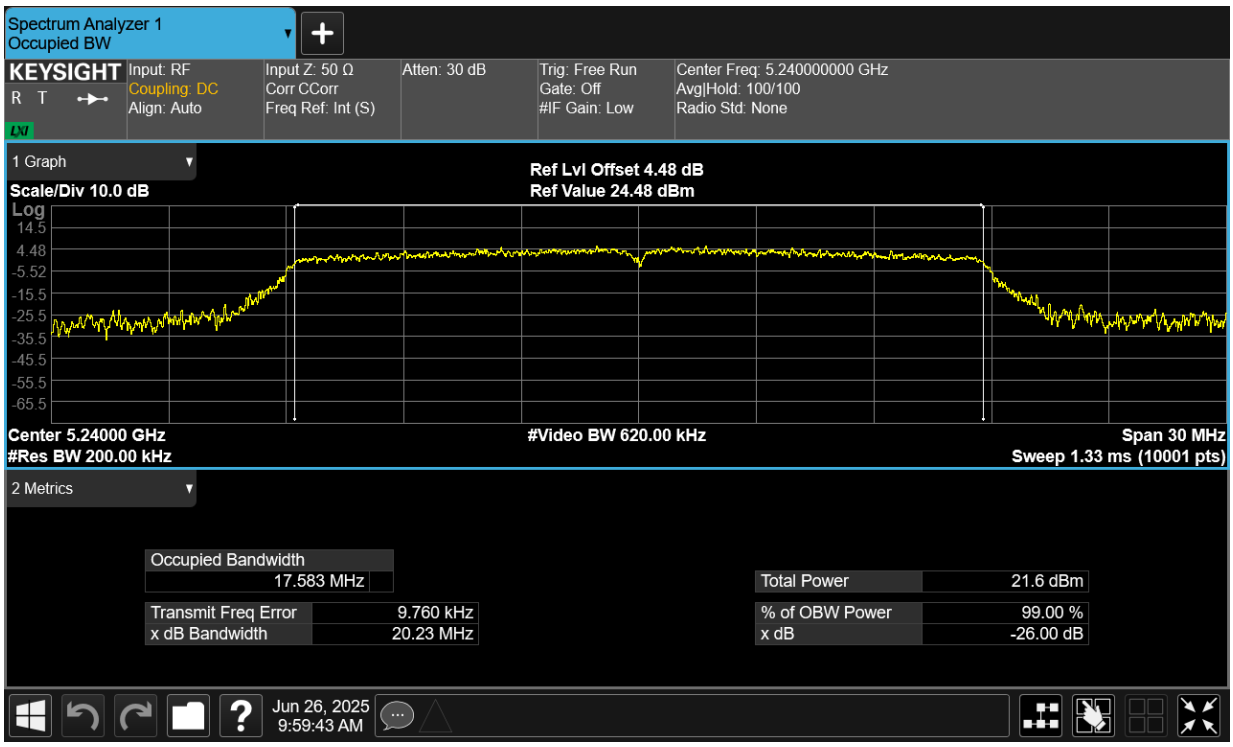
OBW NVNT n20 5180MHz Ant14



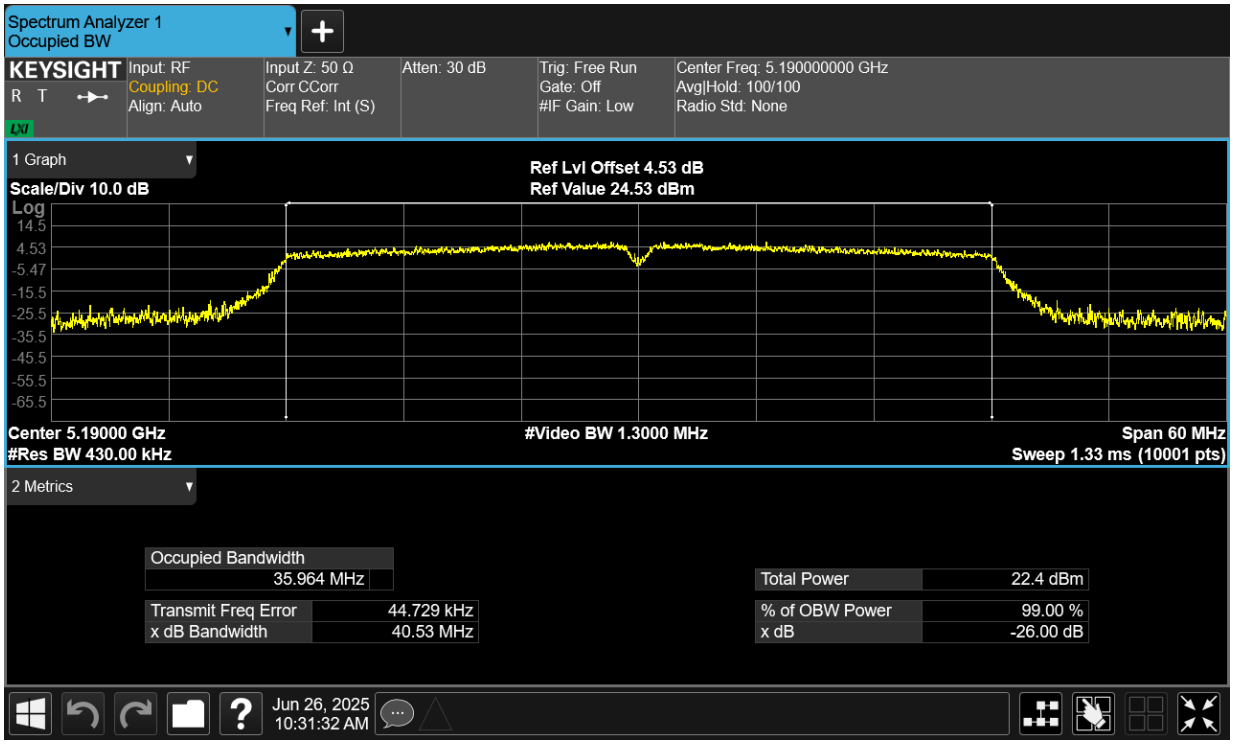
OBW NVNT n20 5200MHz Ant14



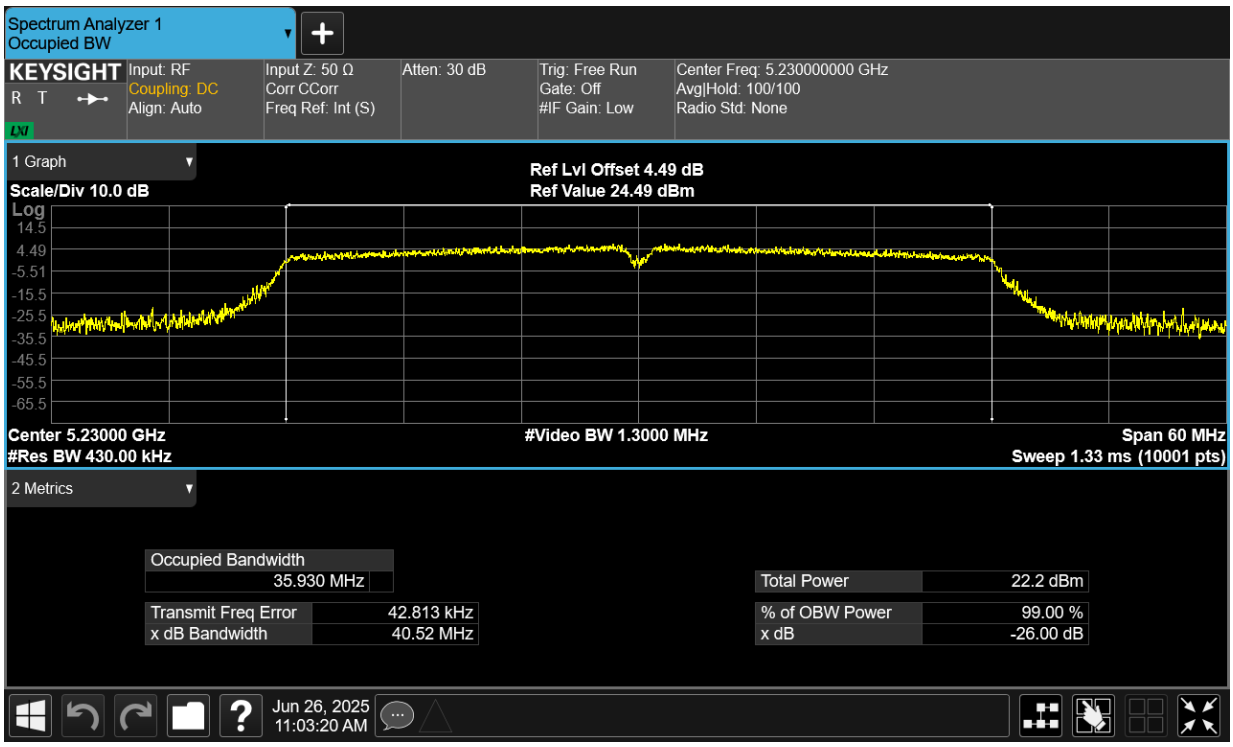
OBW NVNT n20 5240MHz Ant14



OBW NVNT n40 5190MHz Ant14



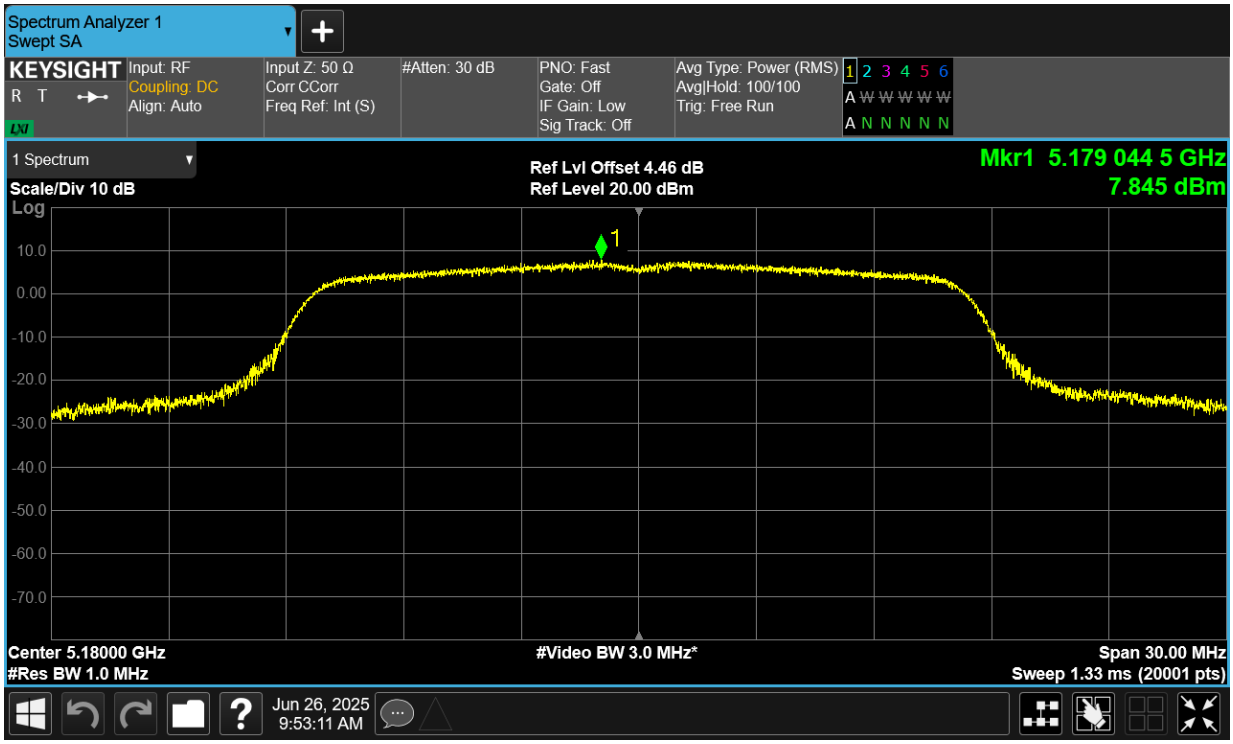
OBW NVNT n40 5230MHz Ant14



Maximum Power Spectral Density Level

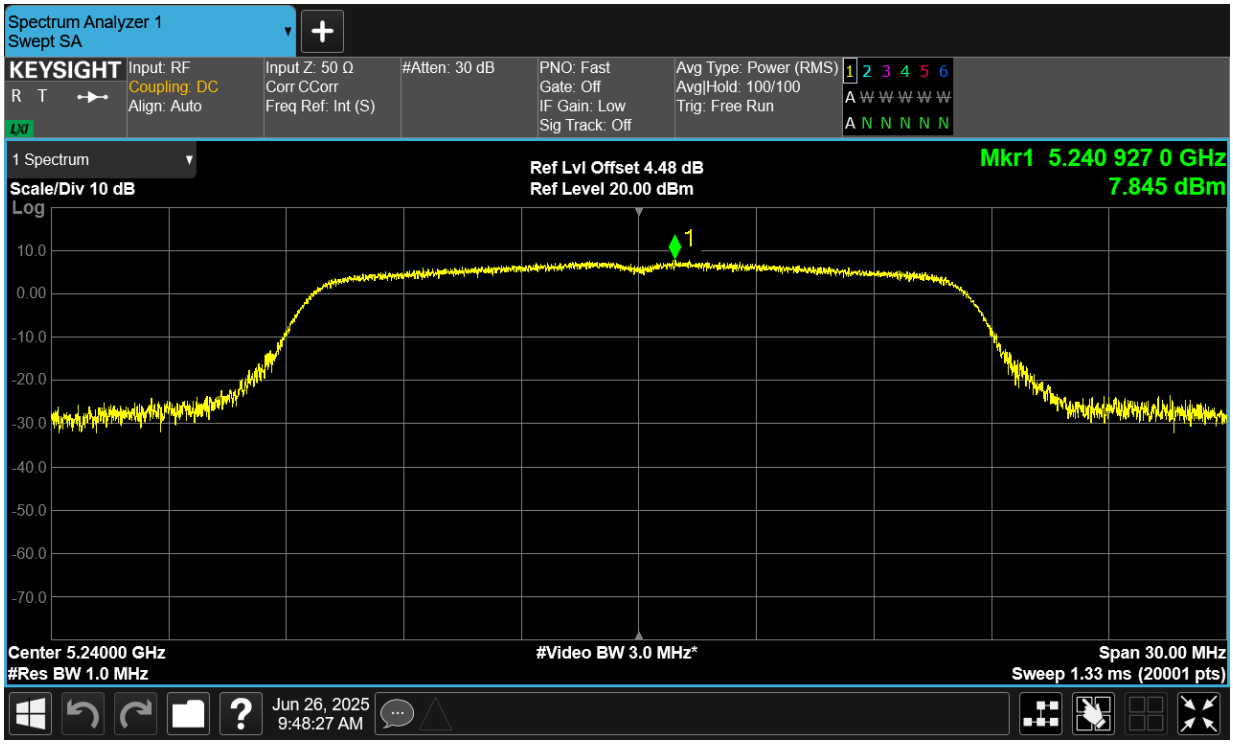
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant14	7.845	11	Pass
NVNT	a	5200	Ant14	8.057	11	Pass
NVNT	a	5240	Ant14	7.845	11	Pass
NVNT	ac20	5180	Ant14	5.062	11	Pass
NVNT	ac20	5200	Ant14	5.369	11	Pass
NVNT	ac20	5240	Ant14	5.536	11	Pass
NVNT	ac40	5190	Ant14	2.728	11	Pass
NVNT	ac40	5230	Ant14	3.348	11	Pass
NVNT	ac80	5210	Ant14	-1.041	11	Pass
NVNT	n20	5180	Ant14	5.806	11	Pass
NVNT	n20	5200	Ant14	6.134	11	Pass
NVNT	n20	5240	Ant14	6.594	11	Pass
NVNT	n40	5190	Ant14	4.026	11	Pass
NVNT	n40	5230	Ant14	3.766	11	Pass

Test Graphs
PSD NVNT a 5180MHz Ant14

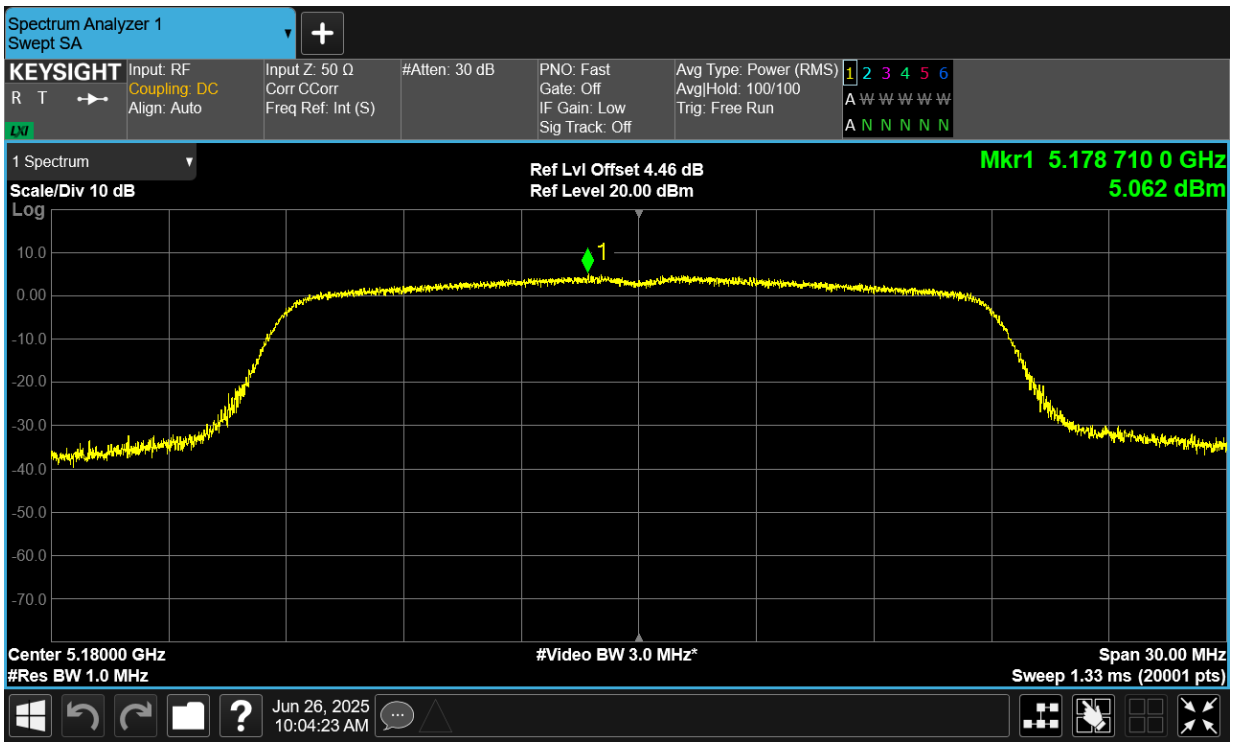


PSD NVNT a 5200MHz Ant14

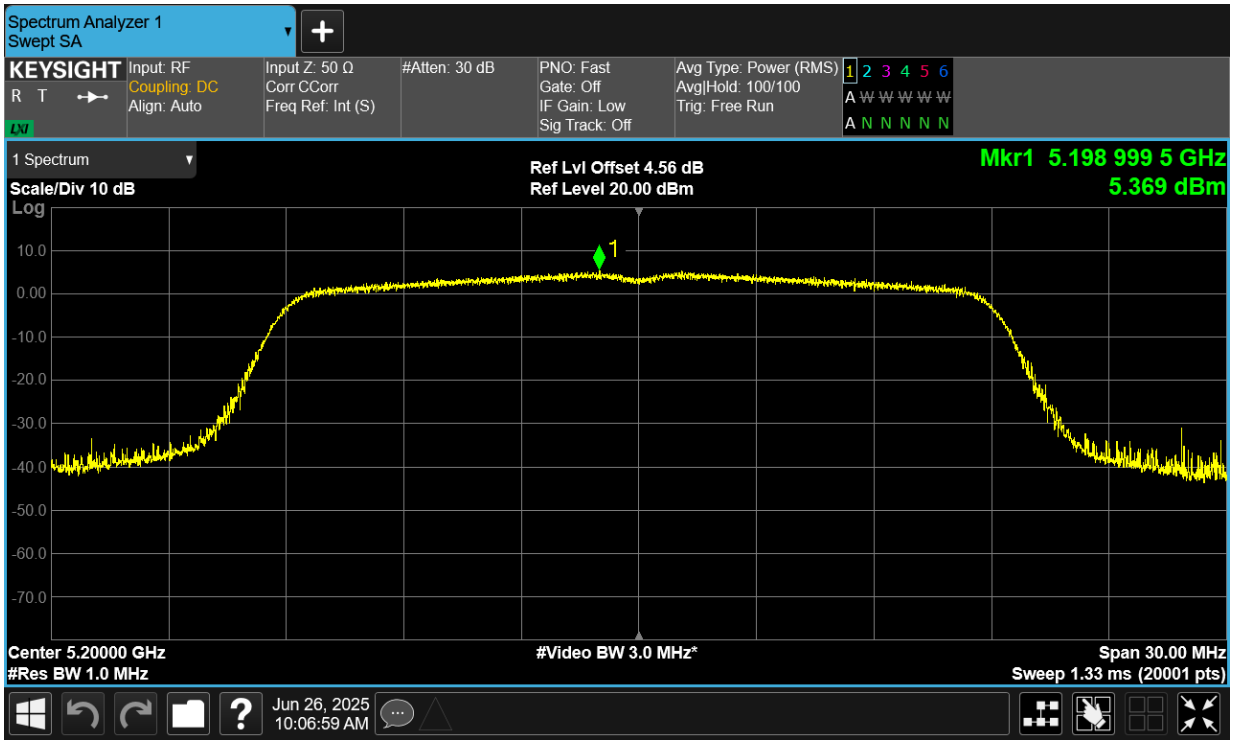
PSD NVNT a 5240MHz Ant14



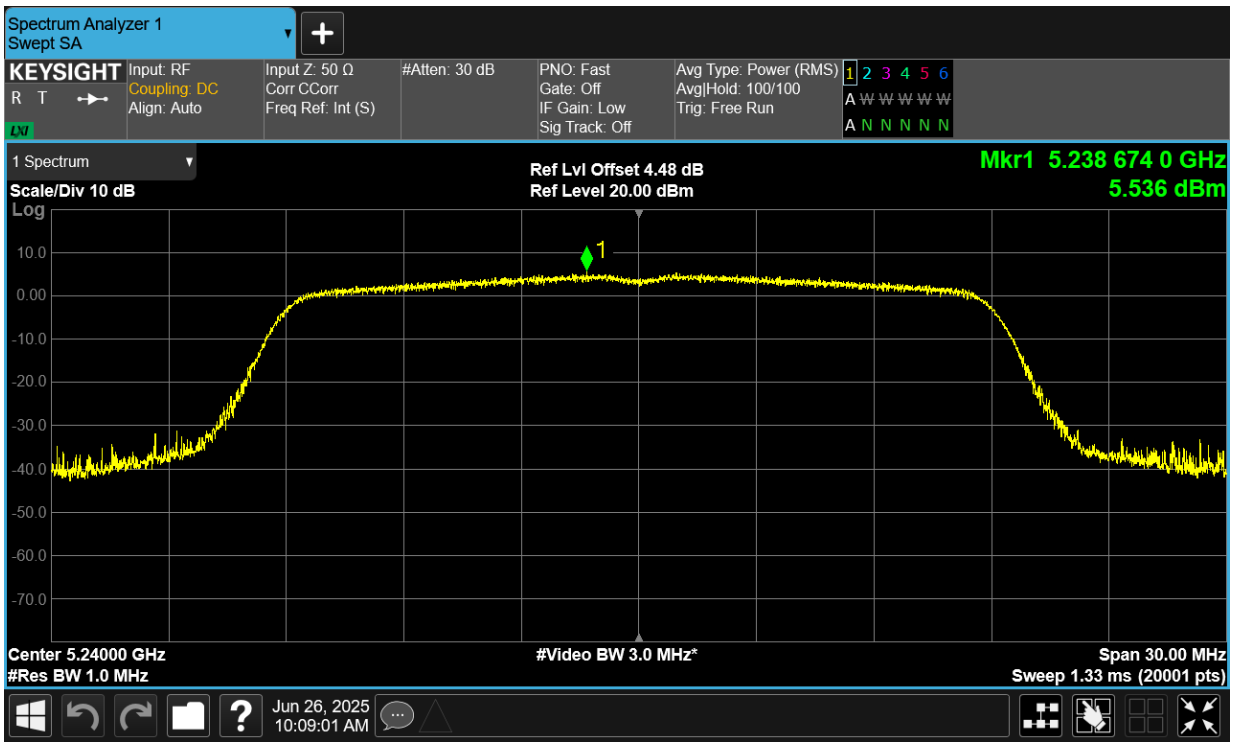
PSD NVNT ac20 5180MHz Ant14



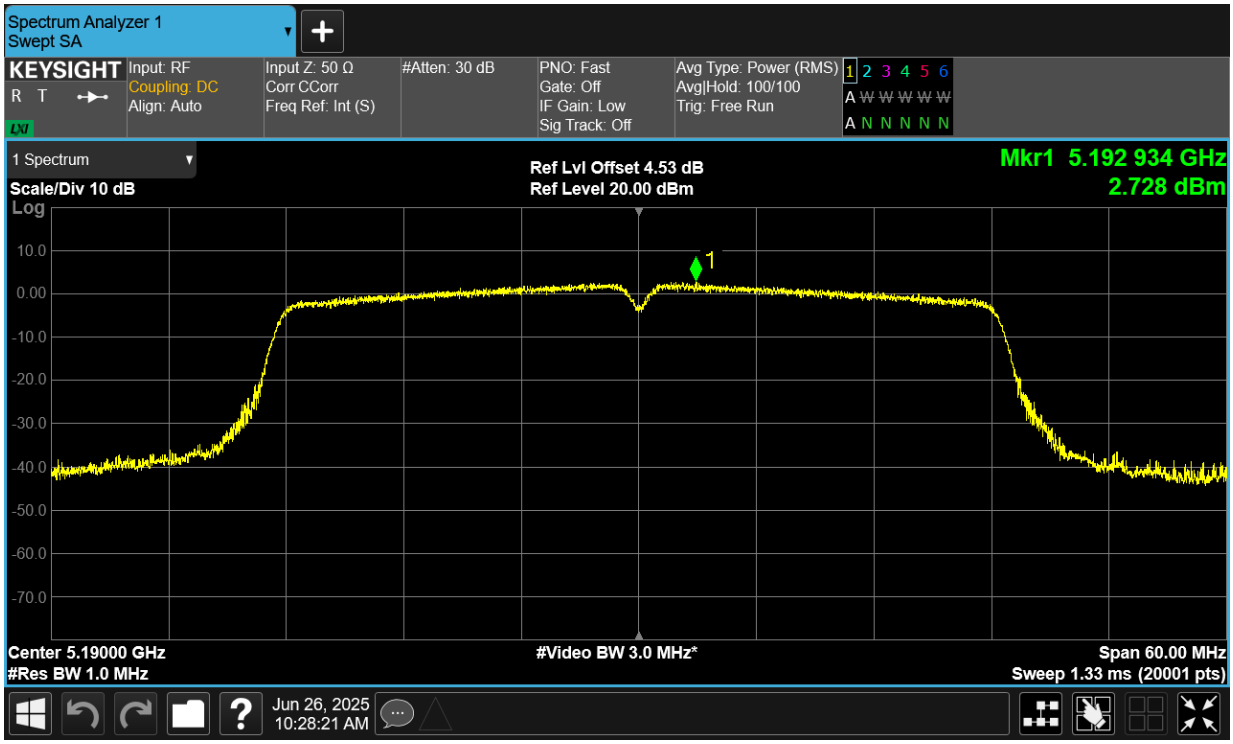
PSD NVNT ac20 5200MHz Ant14



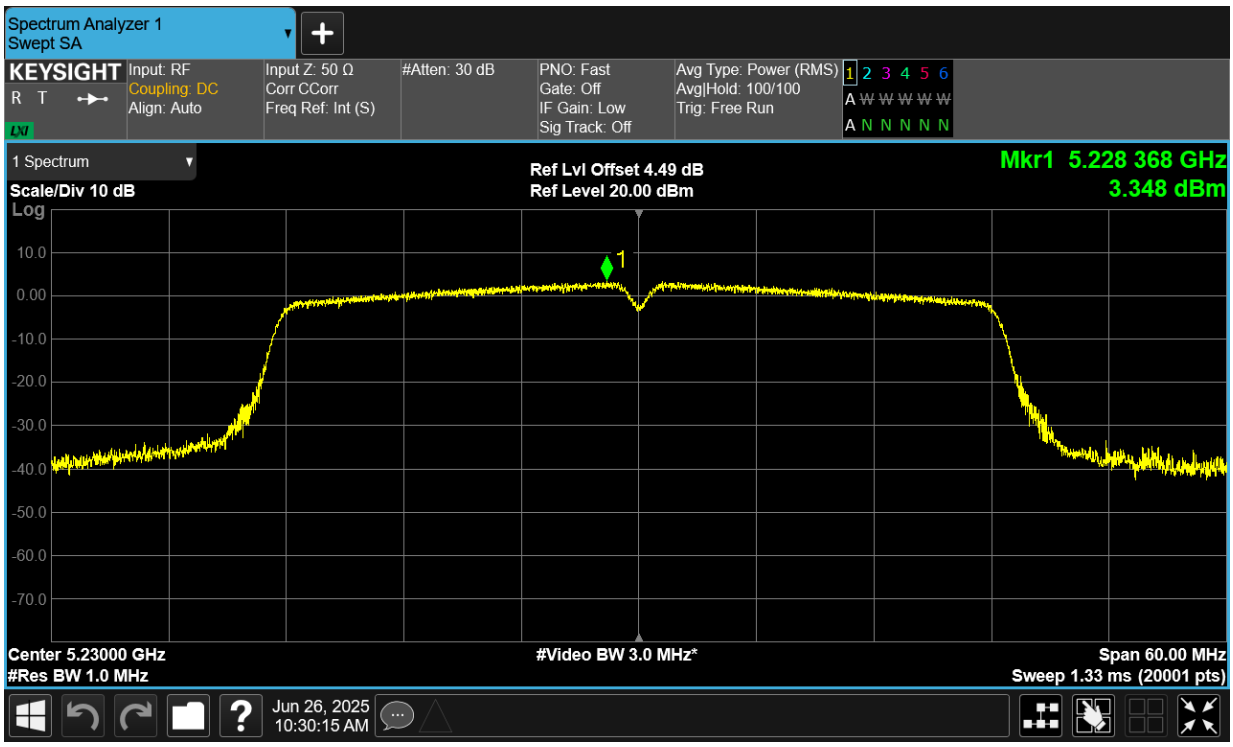
PSD NVNT ac20 5240MHz Ant14



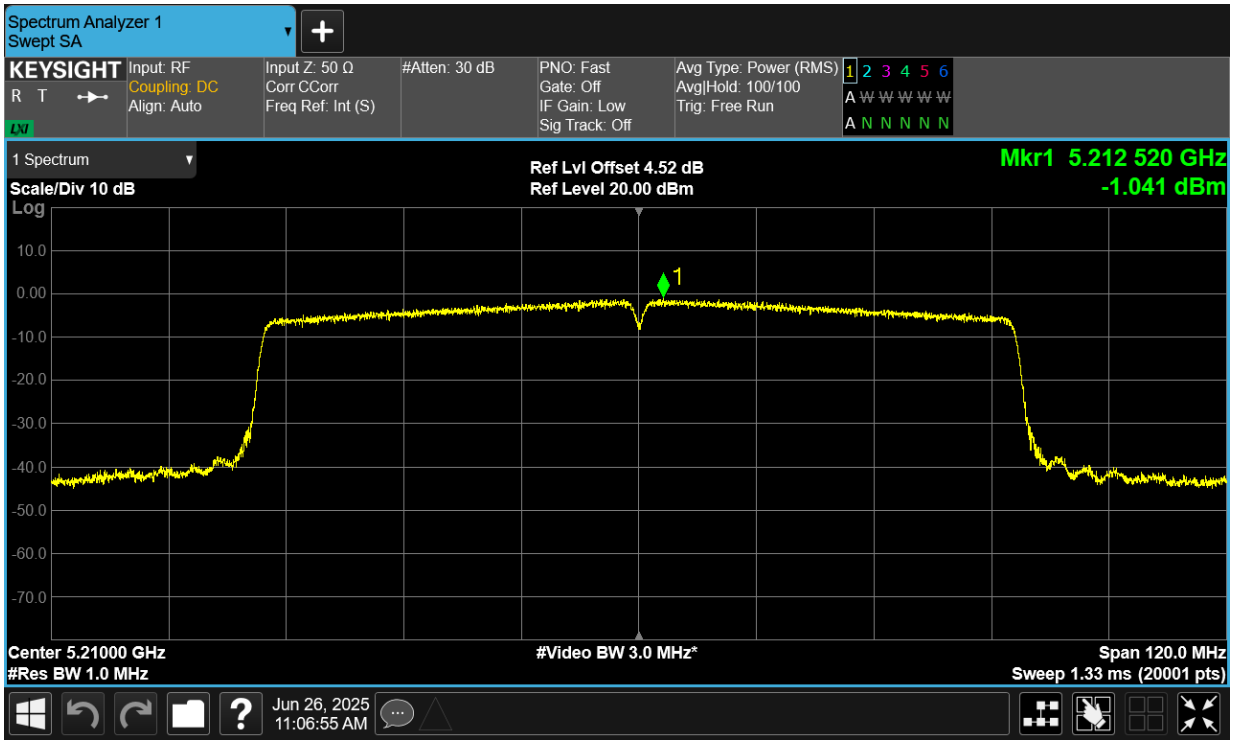
PSD NVNT ac40 5190MHz Ant14



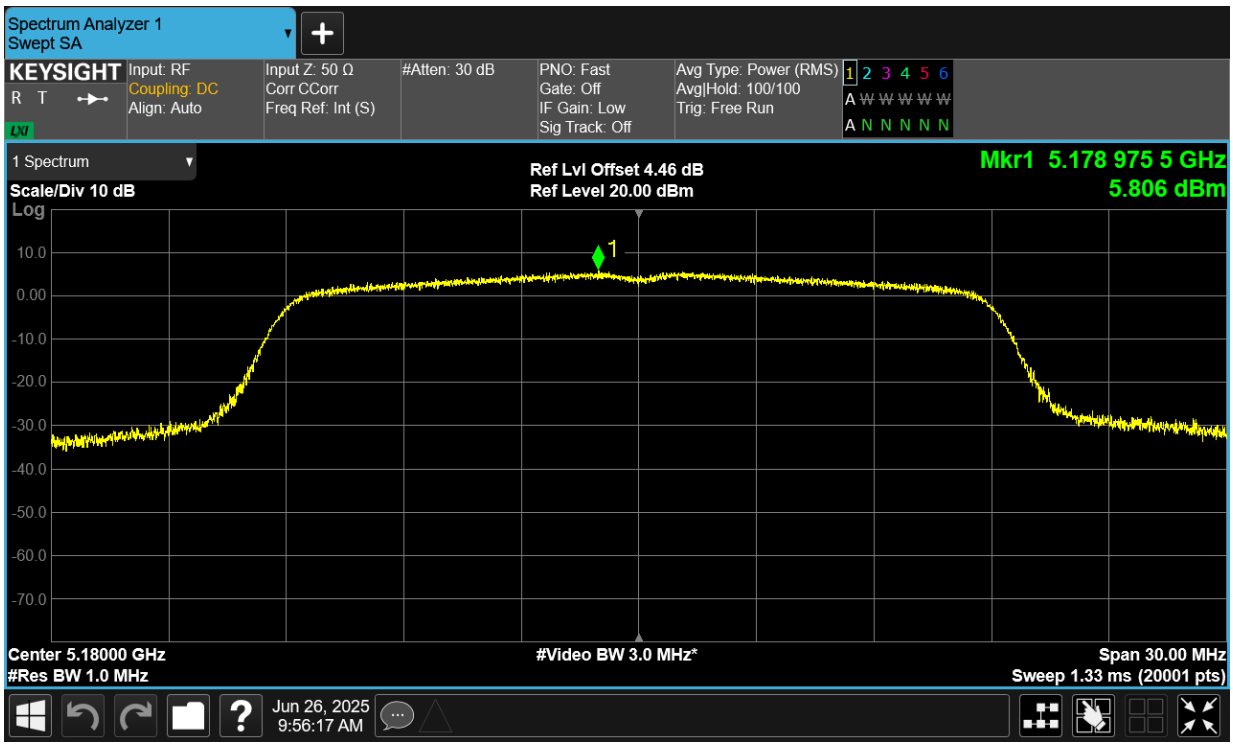
PSD NVNT ac40 5230MHz Ant14



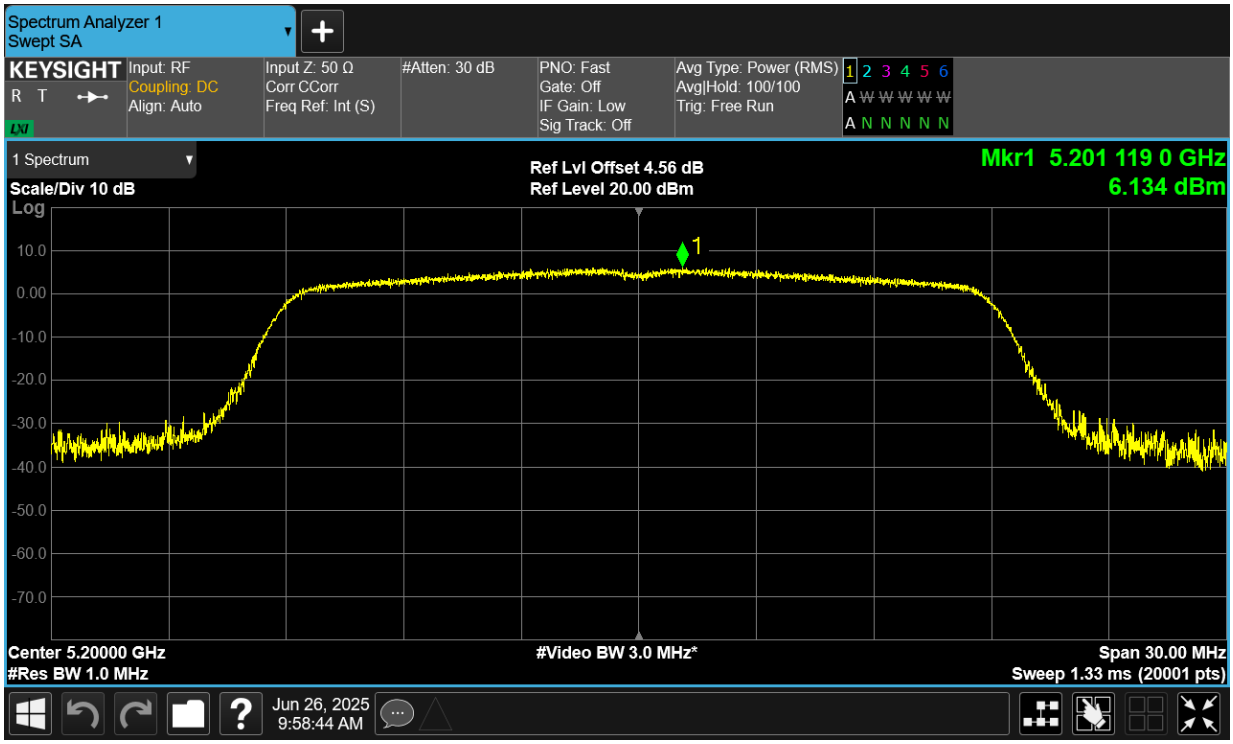
PSD NVNT ac80 5210MHz Ant14



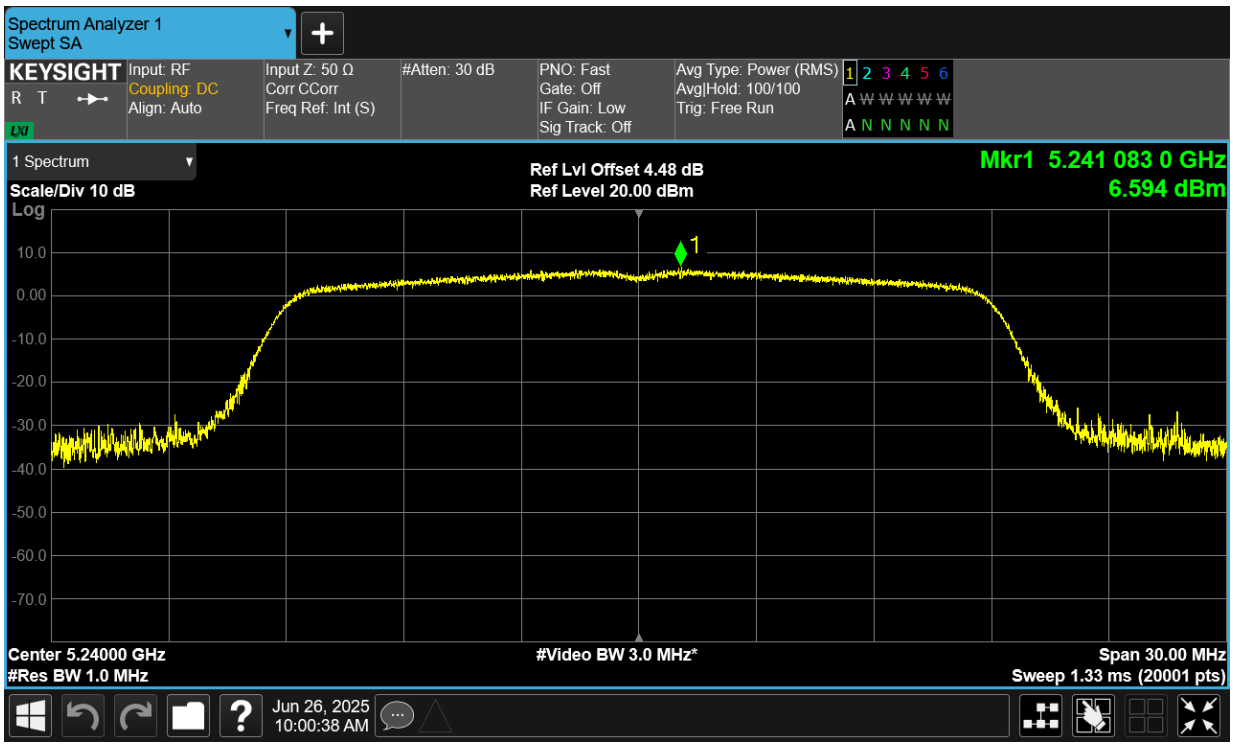
PSD NVNT n20 5180MHz Ant14



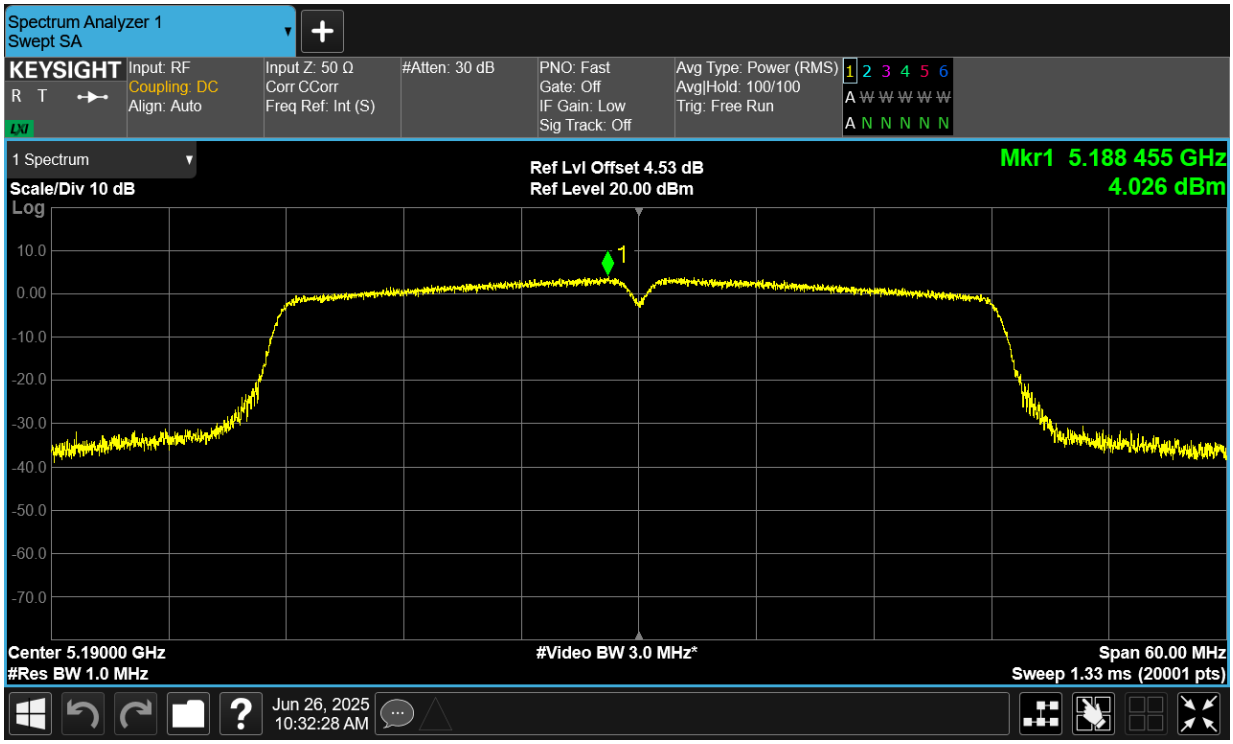
PSD NVNT n20 5200MHz Ant14



PSD NVNT n20 5240MHz Ant14



PSD NVNT n40 5190MHz Ant14



PSD NVNT n40 5230MHz Ant14