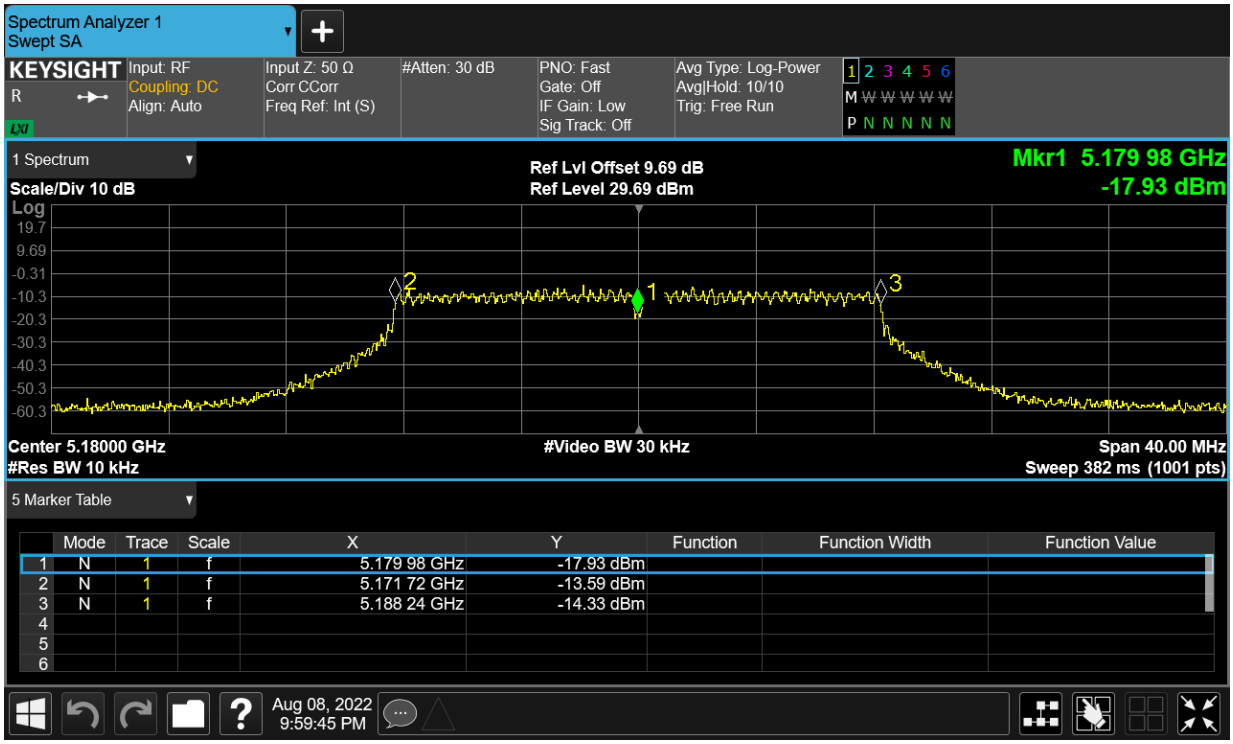
Test Data

Frequency Stability

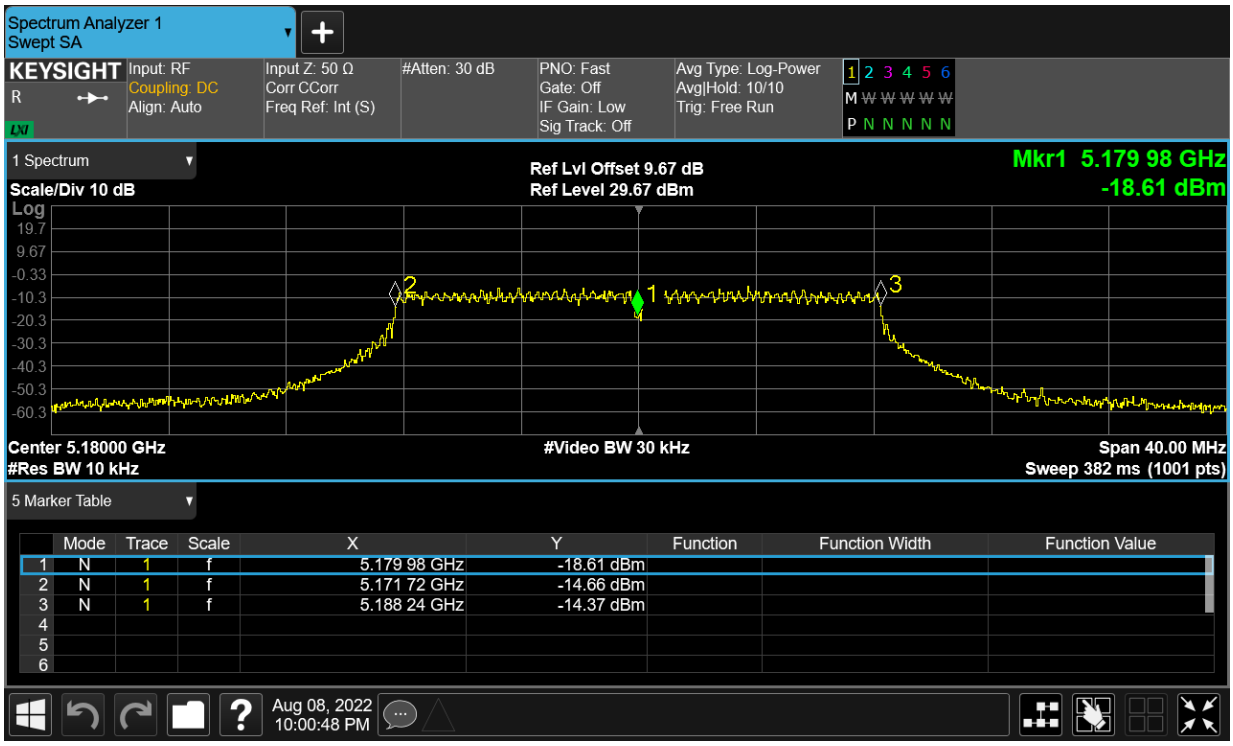
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5180	Ant1	5179.98	-3.86	Within authorized band	Pass
HVNT	a	5180	Ant2	5179.98	-3.86		Pass
LVNT	a	5180	Ant1	5179.98	-3.86		Pass
LVNT	a	5180	Ant2	5180	0		Pass
NVHT	a	5180	Ant1	5179.98	-3.86		Pass
NVHT	a	5180	Ant2	5180	0		Pass
NVLT	a	5180	Ant1	5179.98	-3.86		Pass
NVLT	a	5180	Ant2	5179.98	-3.86		Pass
NVNT	a	5180	Ant1	5179.98	-3.86		Pass
NVNT	a	5180	Ant2	5179.98	-3.86		Pass
HVNT	ax20	5180	Sum	5179.98	-3.86		Pass
LVNT	ax20	5180	Sum	5179.98	-3.86		Pass
NVHT	ax20	5180	Sum	5179.98	-3.86		Pass
NVLT	ax20	5180	Sum	5179.98	-3.86		Pass
NVNT	ax20	5180	Sum	5179.98	-3.86		Pass
HVNT	ax40	5190	Sum	5190	0		Pass
LVNT	ax40	5190	Sum	5189.96	-7.71		Pass
NVHT	ax40	5190	Sum	5189.96	-7.71		Pass
NVLT	ax40	5190	Sum	5189.96	-7.71		Pass
NVNT	ax40	5190	Sum	5189.96	-7.71		Pass
HVNT	ax80	5210	Sum	5210	0		Pass
LVNT	ax80	5210	Sum	5210	0		Pass
NVHT	ax80	5210	Sum	5210	0		Pass
NVLT	ax80	5210	Sum	5210	0		Pass
NVNT	ax80	5210	Sum	5210	0		Pass
HVNT	n20	5180	Sum	5179.98	-3.86		Pass
LVNT	n20	5180	Sum	5179.98	-3.86		Pass
NVHT	n20	5180	Sum	5180	0		Pass
NVLT	n20	5180	Sum	5179.96	-7.72		Pass
NVNT	n20	5180	Sum	5179.96	-7.72		Pass
HVNT	n40	5190	Sum	5190	0		Pass
LVNT	n40	5190	Sum	5190	0		Pass
NVHT	n40	5190	Sum	5190	0		Pass
NVLT	n40	5190	Sum	5190	0		Pass
NVNT	n40	5190	Sum	5190	0		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

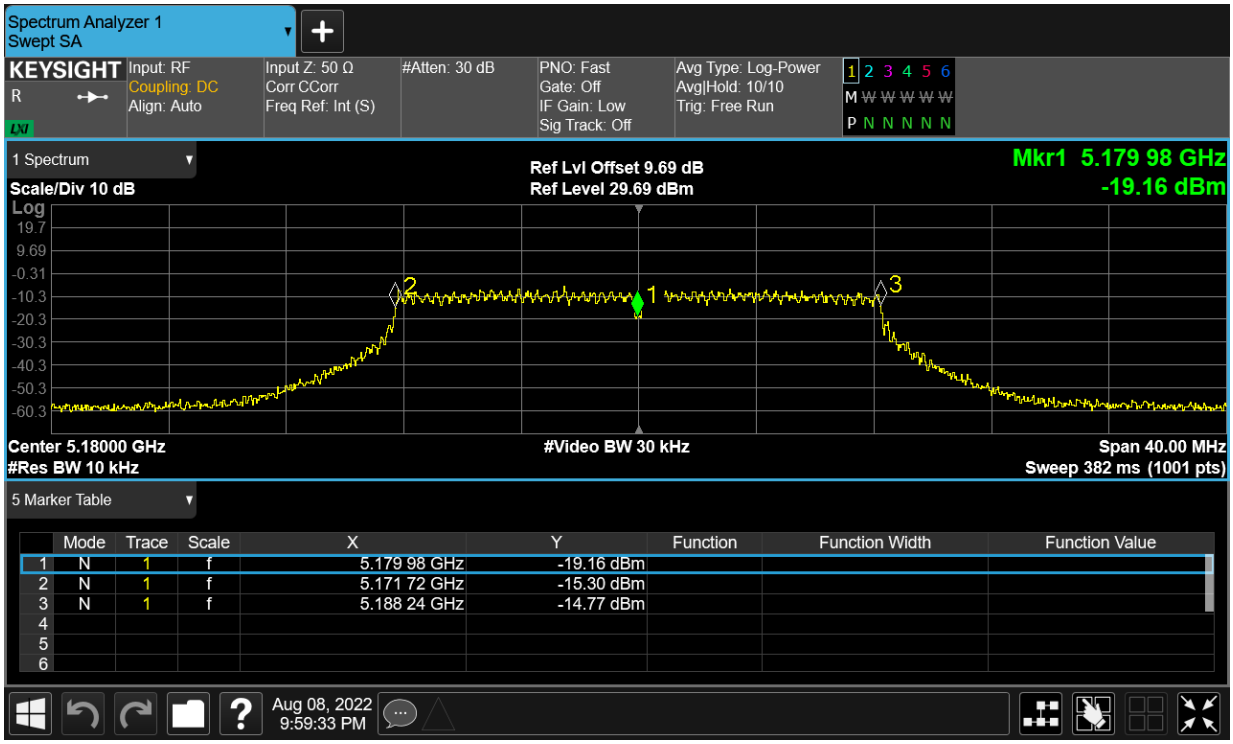
Freq. Stability HVNT a 5180MHz Ant1



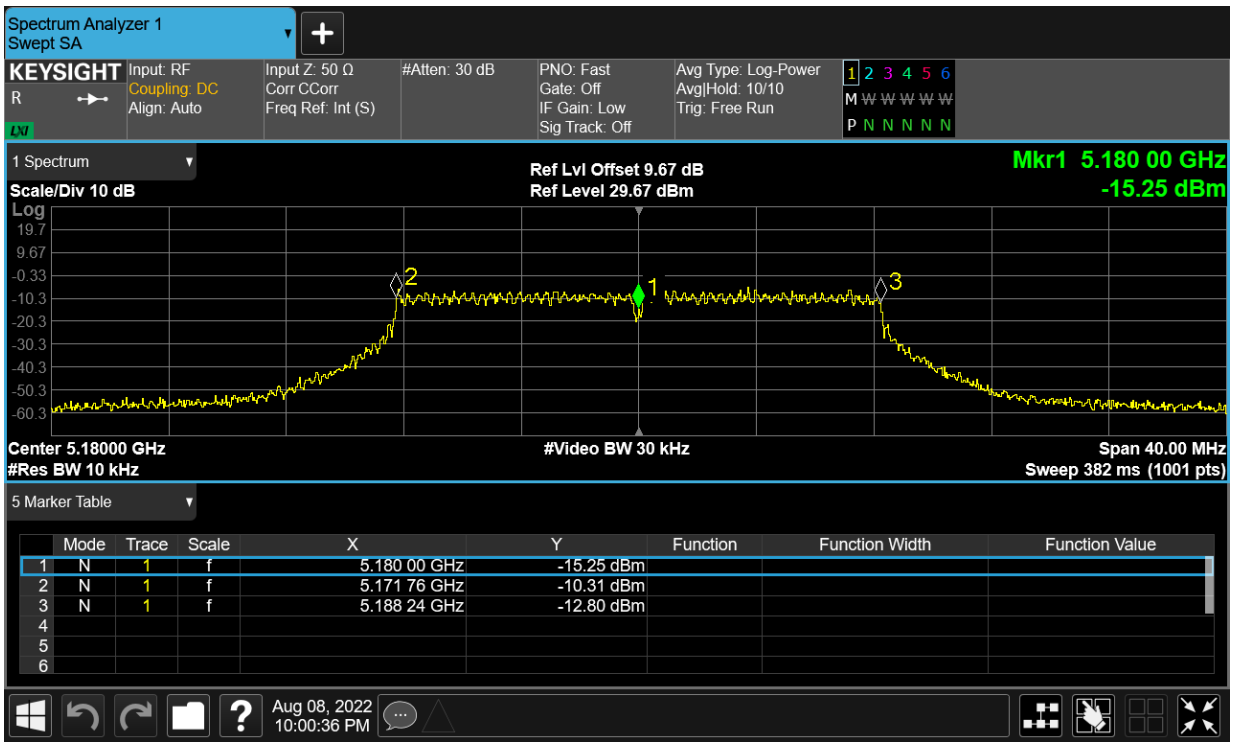
Freq. Stability HVNT a 5180MHz Ant2



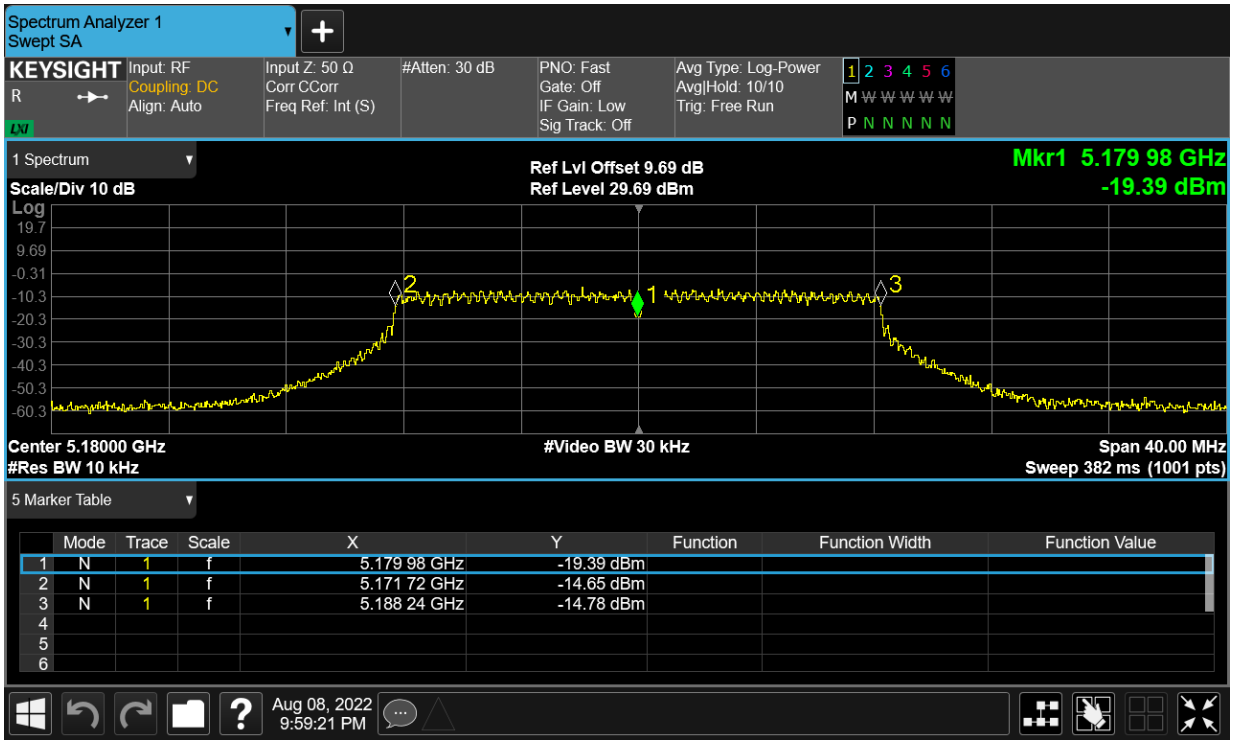
Freq. Stability LVNT a 5180MHz Ant1



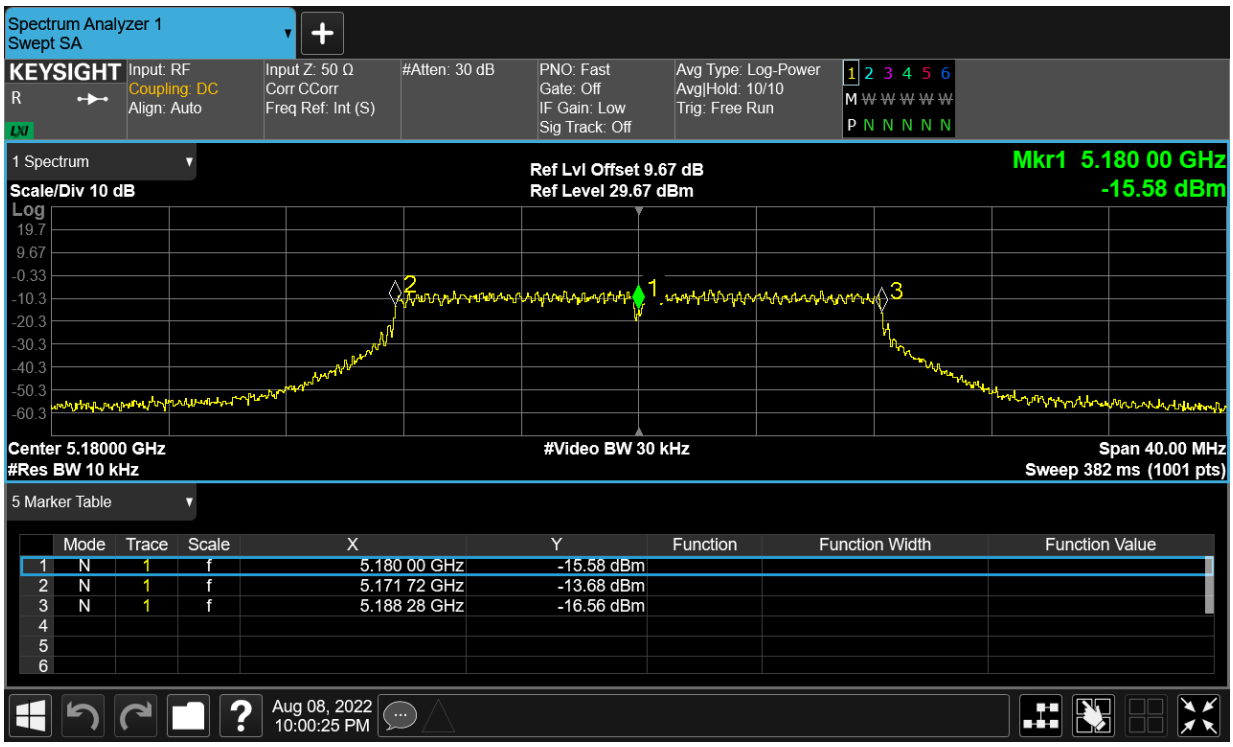
Freq. Stability LVNT a 5180MHz Ant2



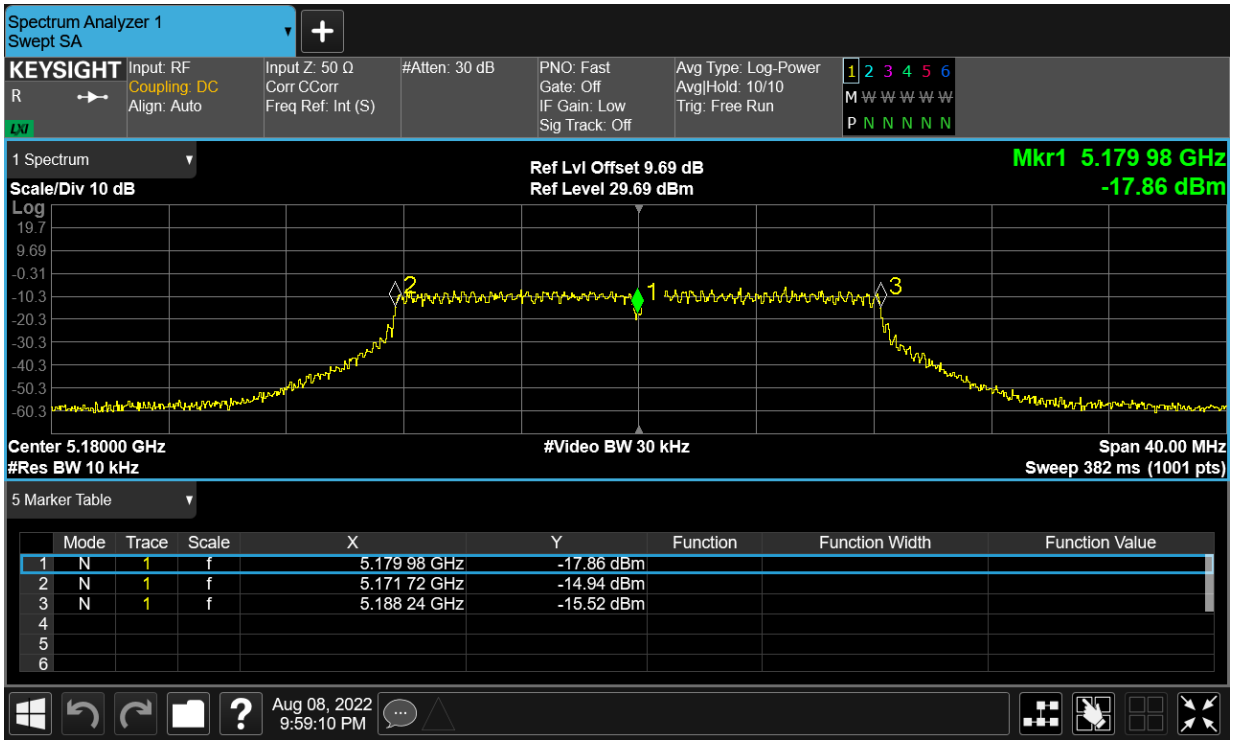
Freq. Stability NVHT a 5180MHz Ant1



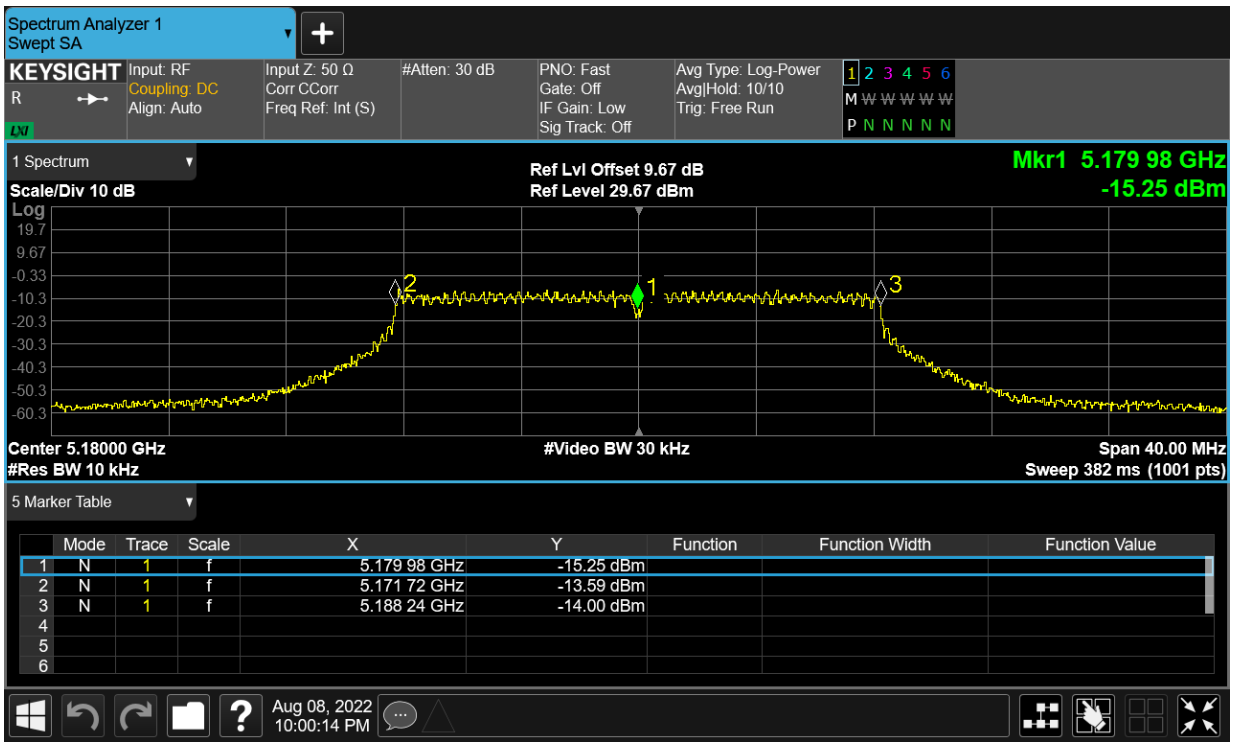
Freq. Stability NVHT a 5180MHz Ant2



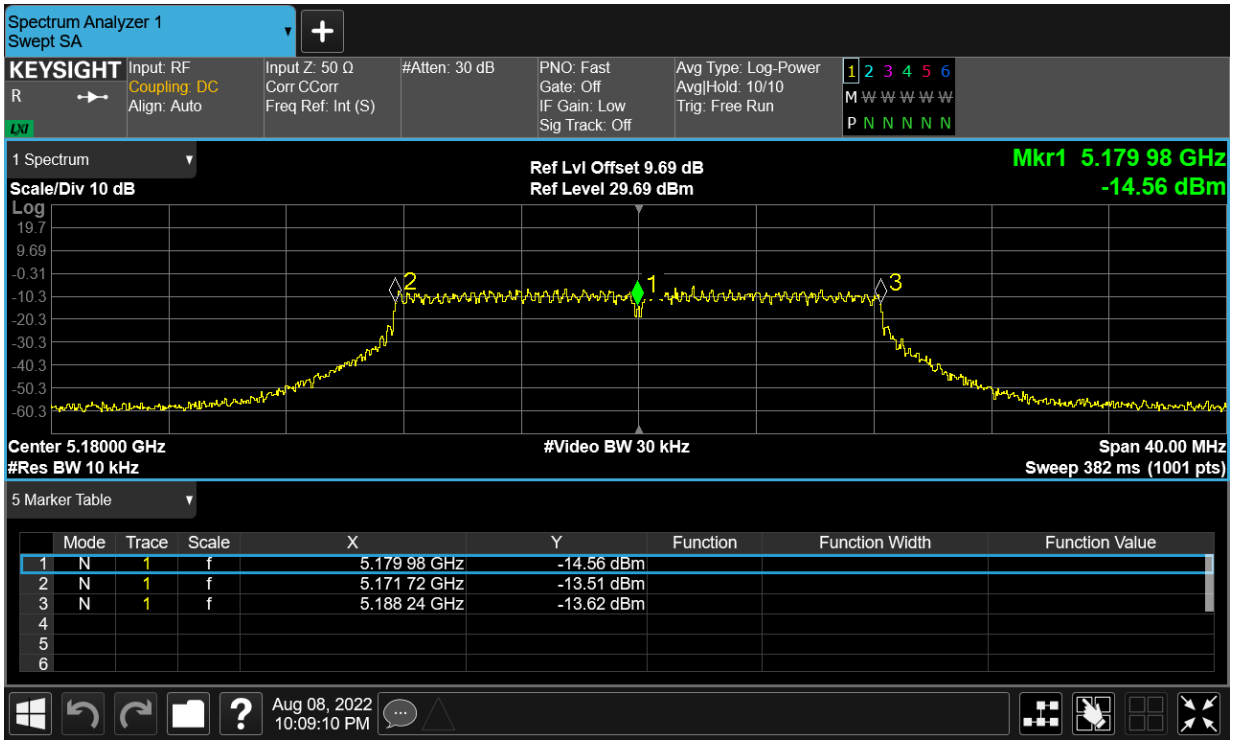
Freq. Stability NVLT a 5180MHz Ant1



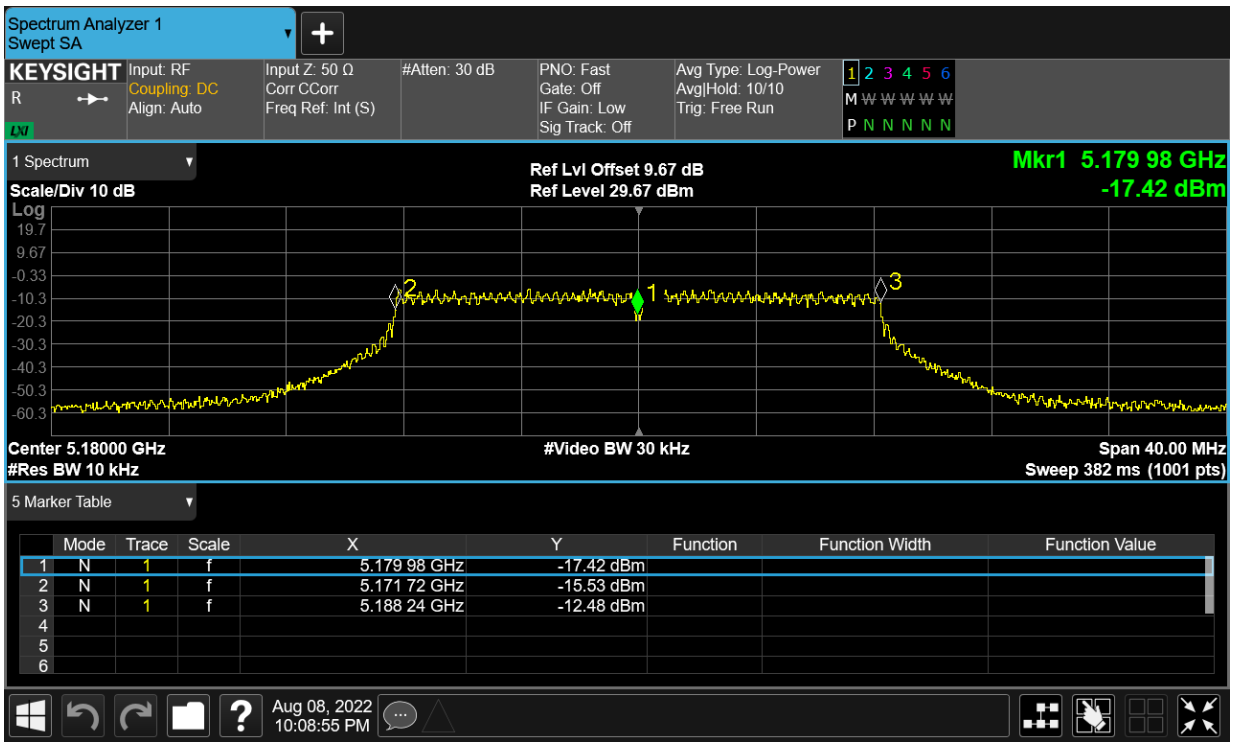
Freq. Stability NVLT a 5180MHz Ant2



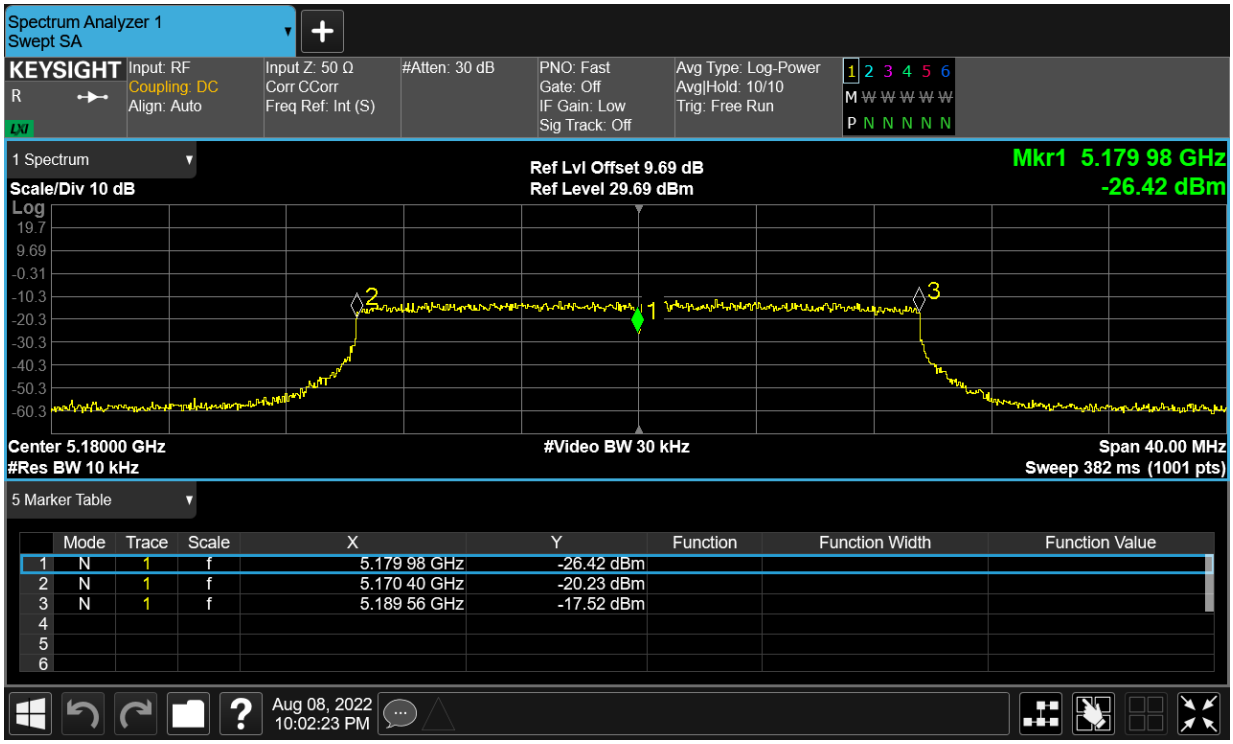
Freq. Stability NVNT a 5180MHz Ant1



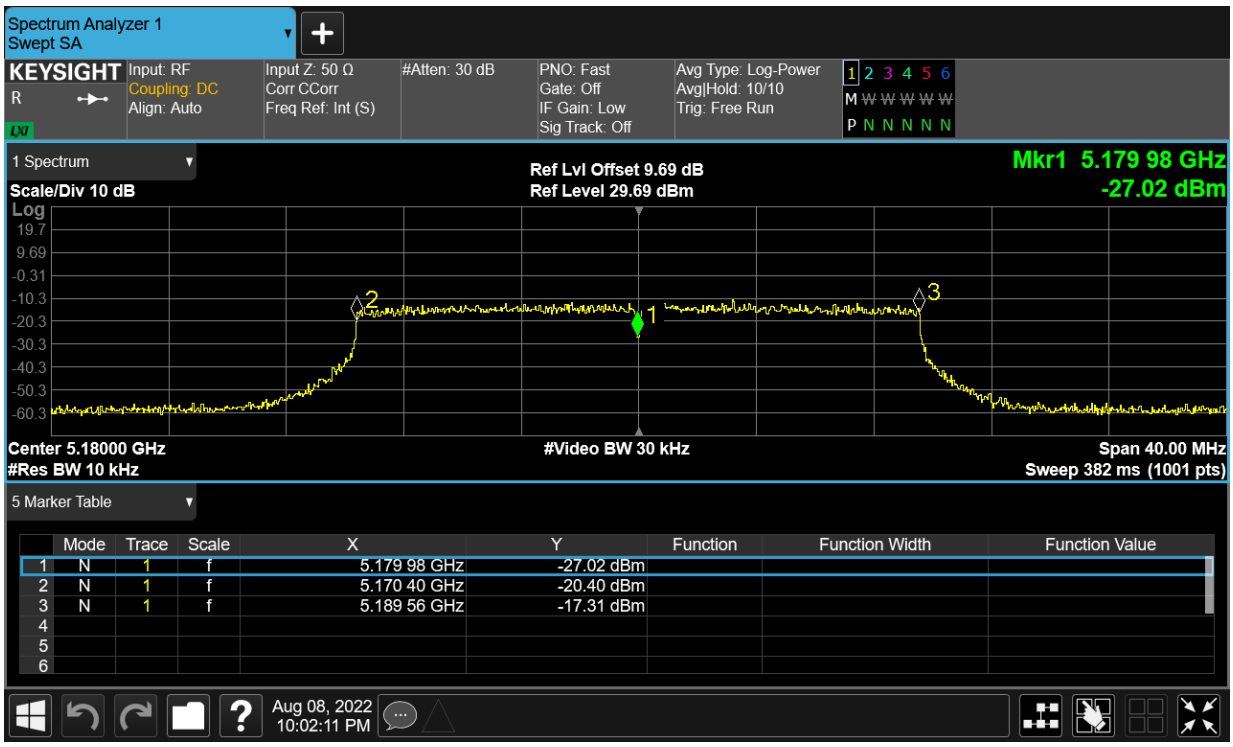
Freq. Stability NVNT a 5180MHz Ant2



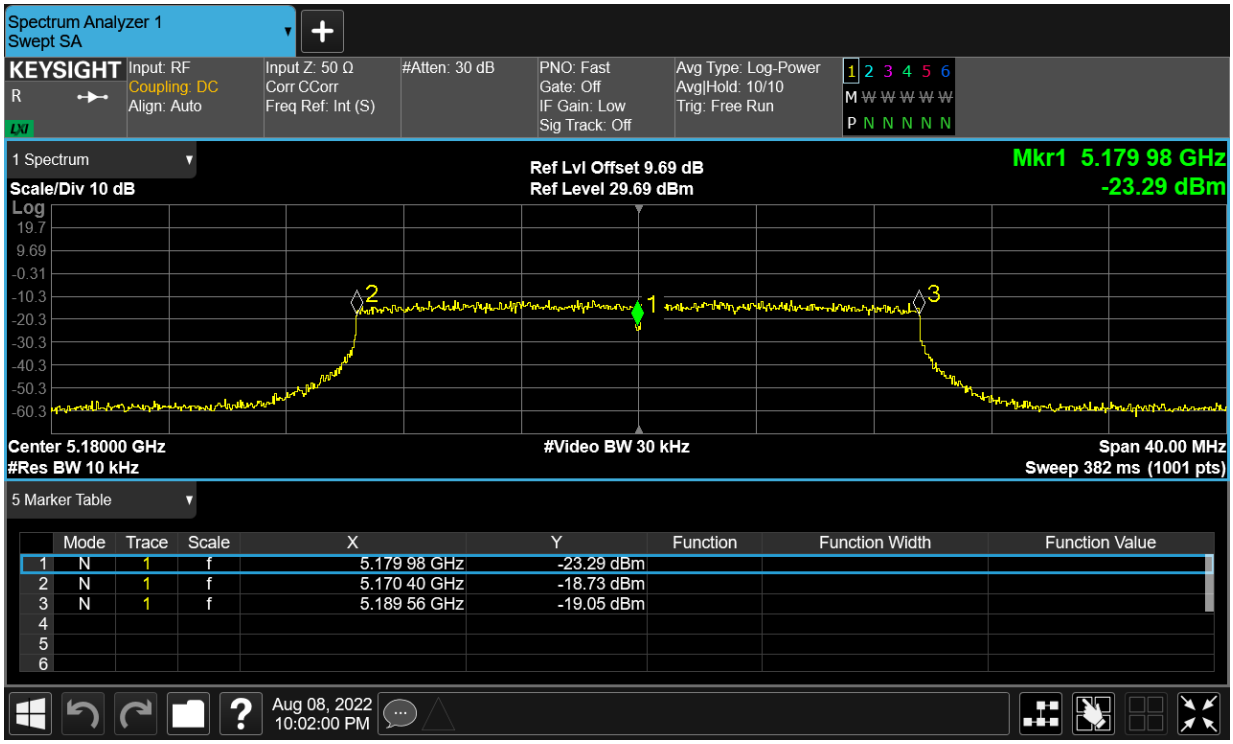
Freq. Stability HVNT ax20 5180MHz Sum



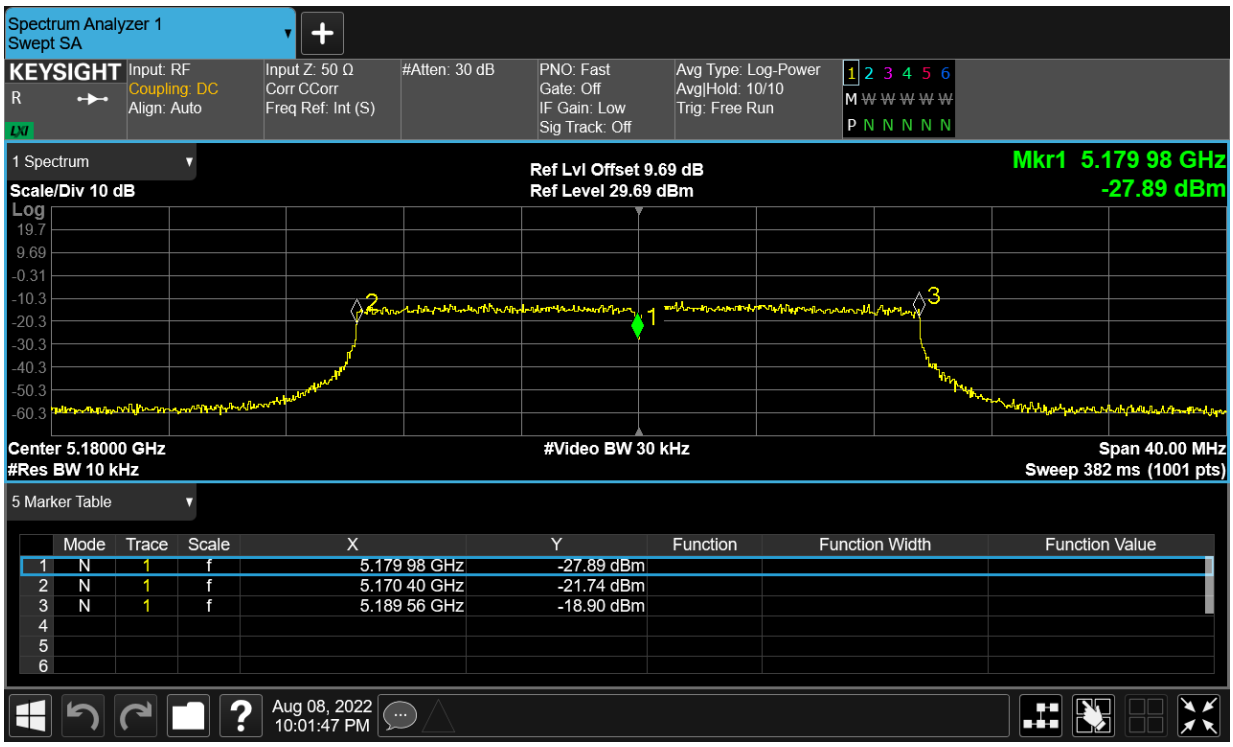
Freq. Stability LVNT ax20 5180MHz Sum



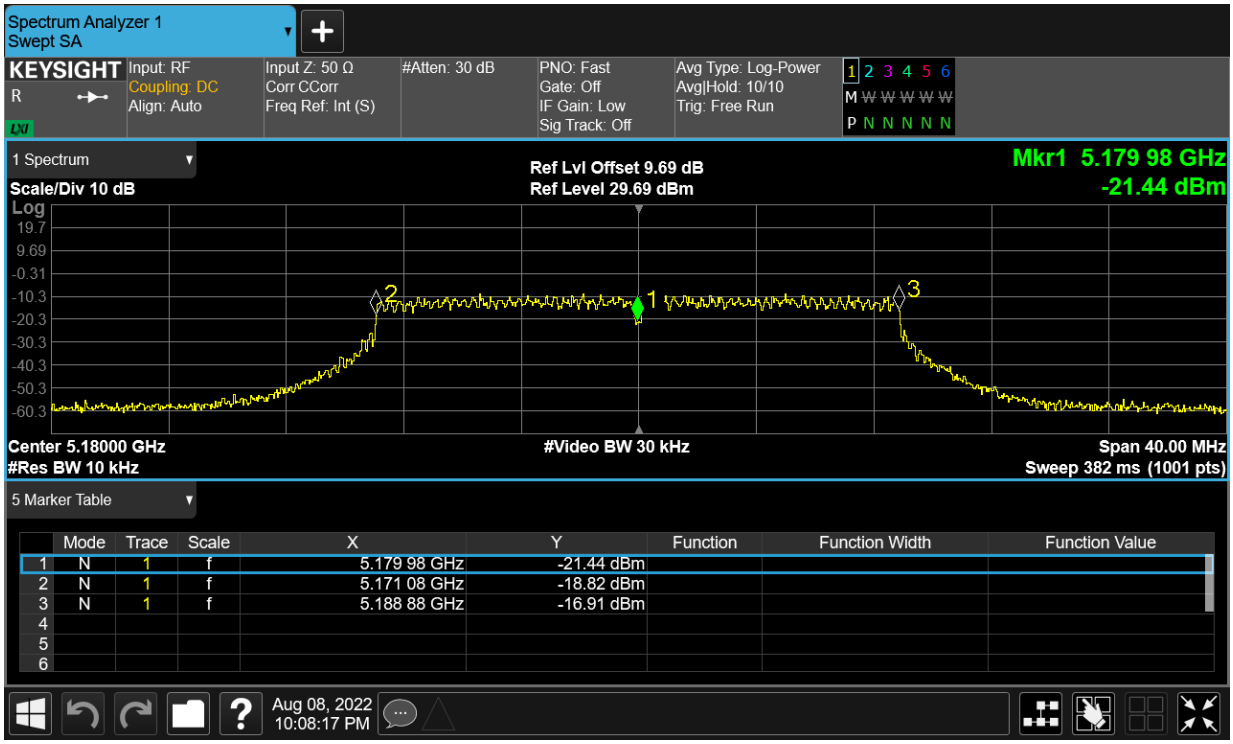
Freq. Stability NVHT ax20 5180MHz Sum



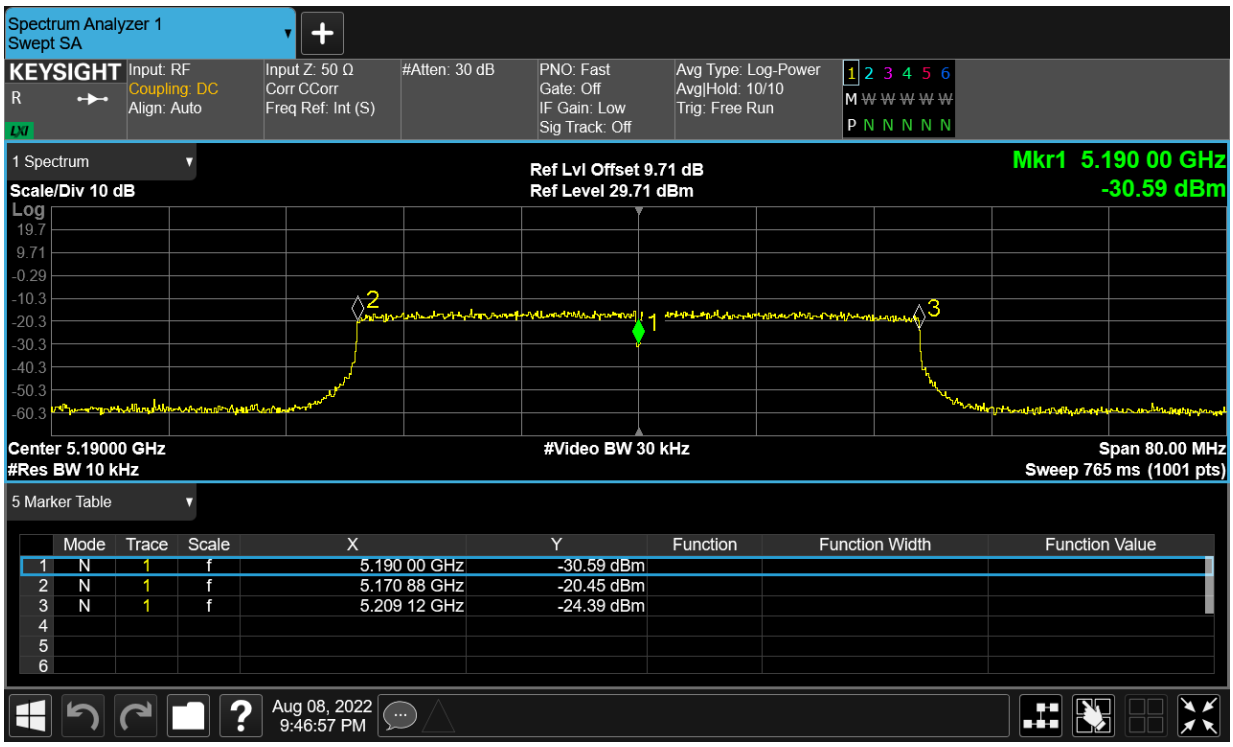
Freq. Stability NVLT ax20 5180MHz Sum



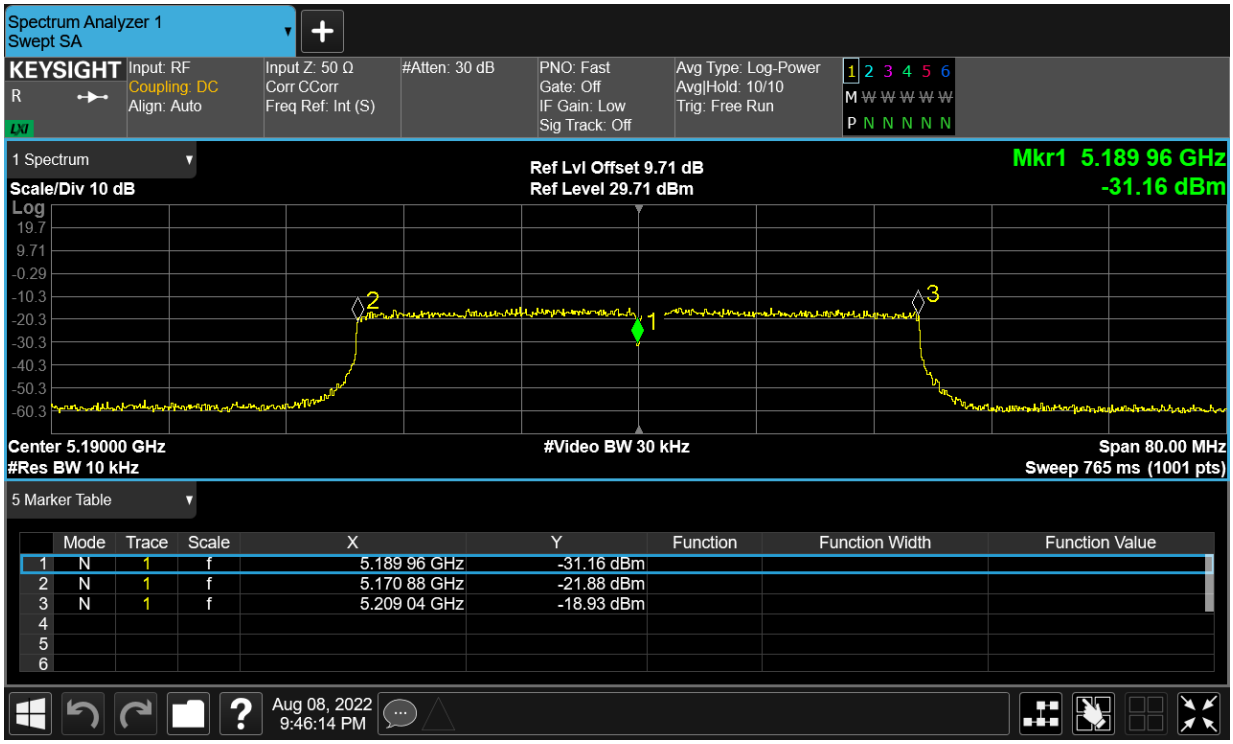
Freq. Stability NVNT ax20 5180MHz Sum



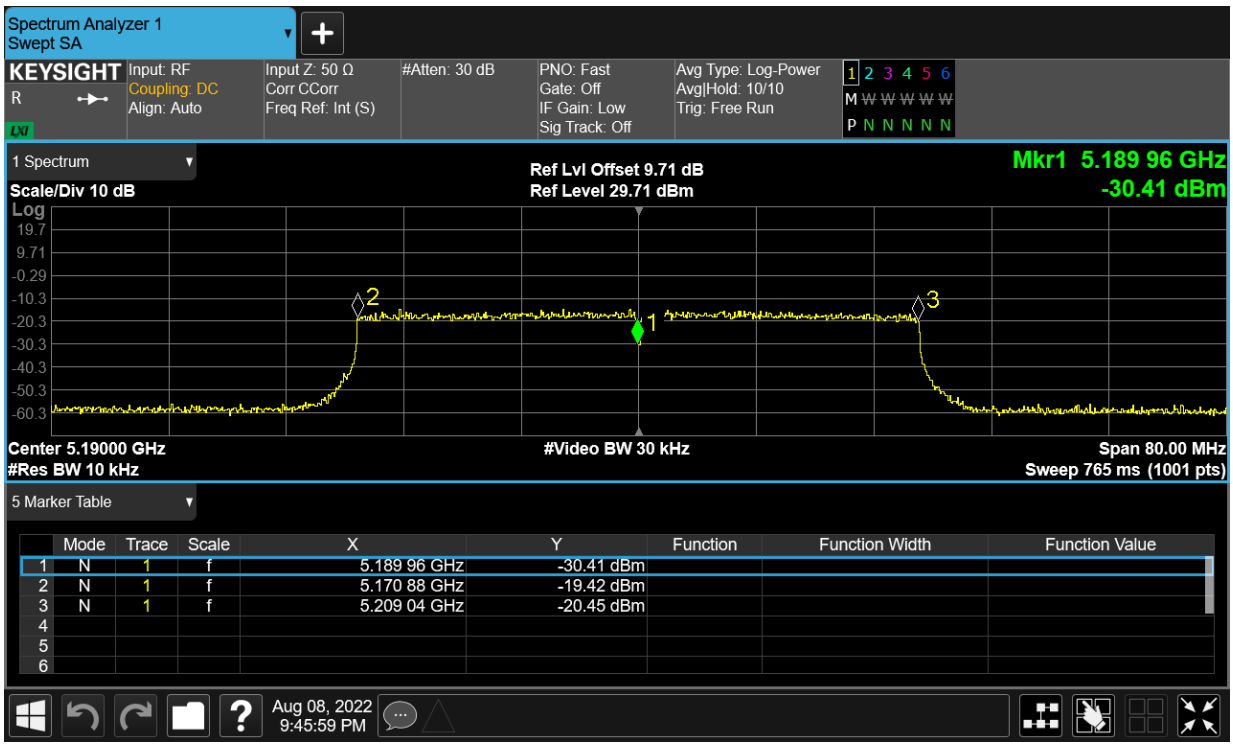
Freq. Stability HVNT ax40 5190MHz Sum



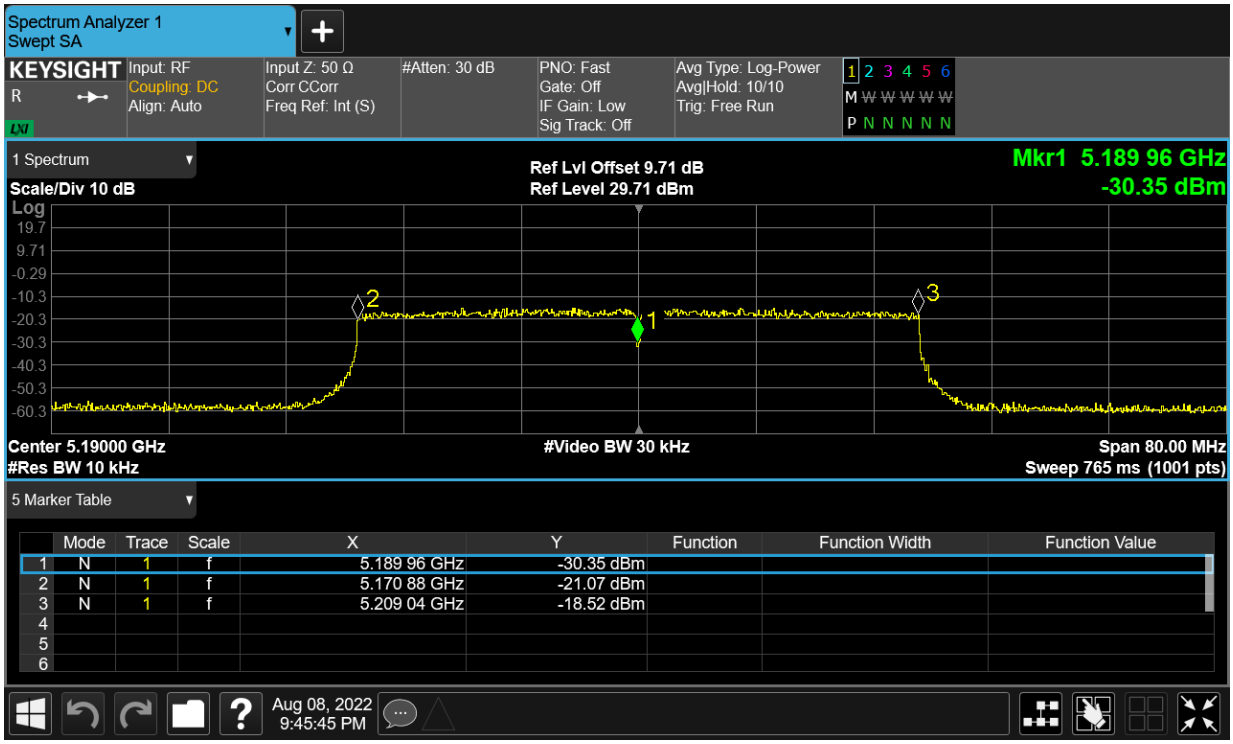
Freq. Stability LVNT ax40 5190MHz Sum



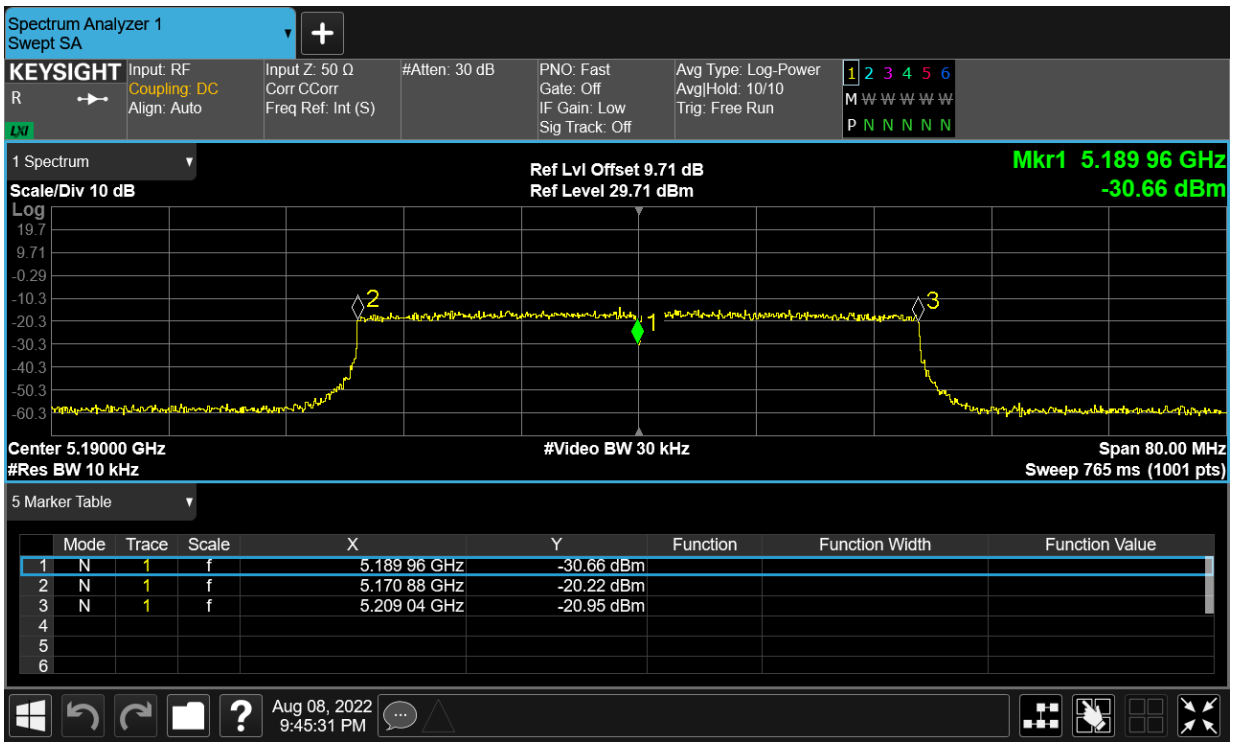
Freq. Stability NVHT ax40 5190MHz Sum



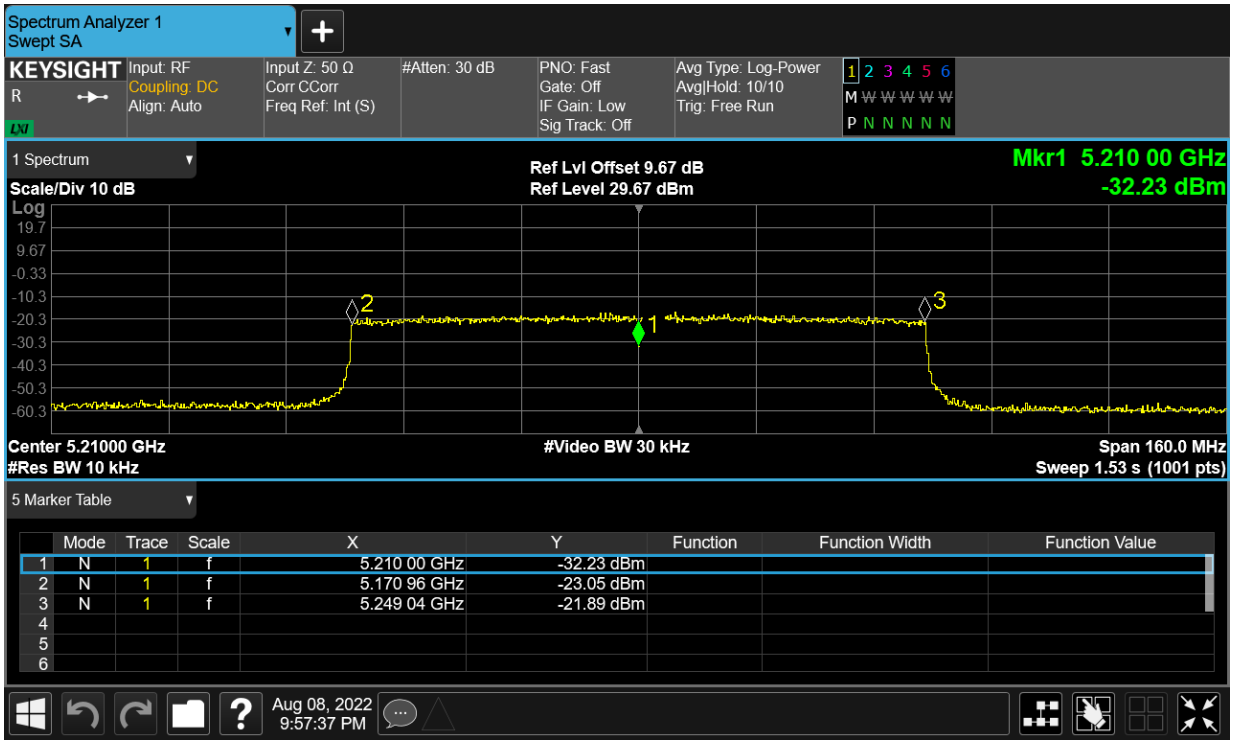
Freq. Stability NVLT ax40 5190MHz Sum



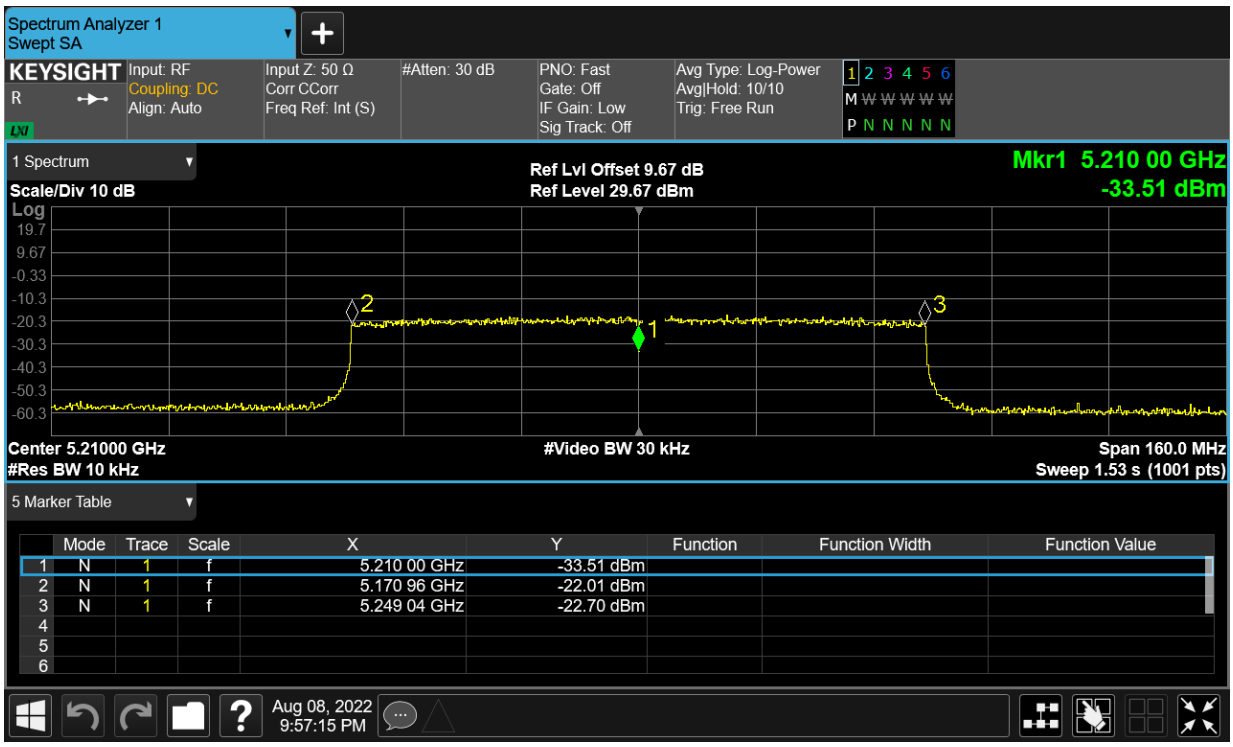
Freq. Stability NVNT ax40 5190MHz Sum



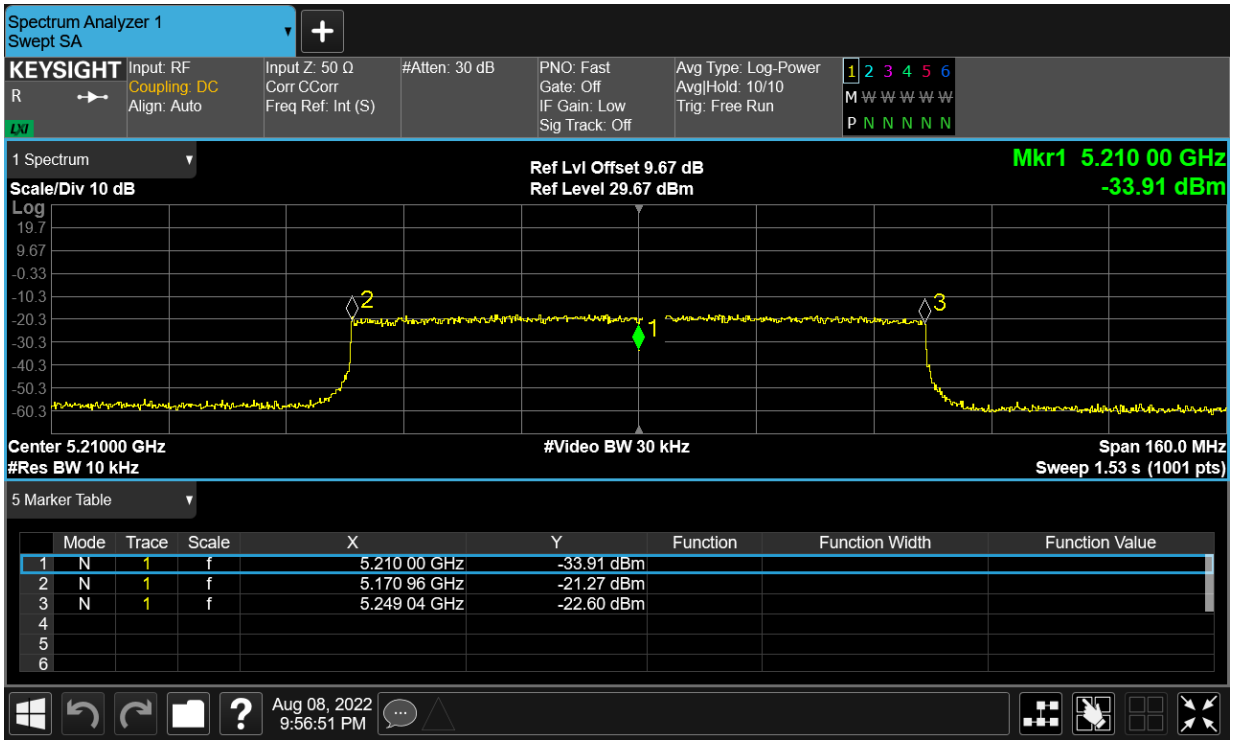
Freq. Stability HVNT ax80 5210MHz Sum



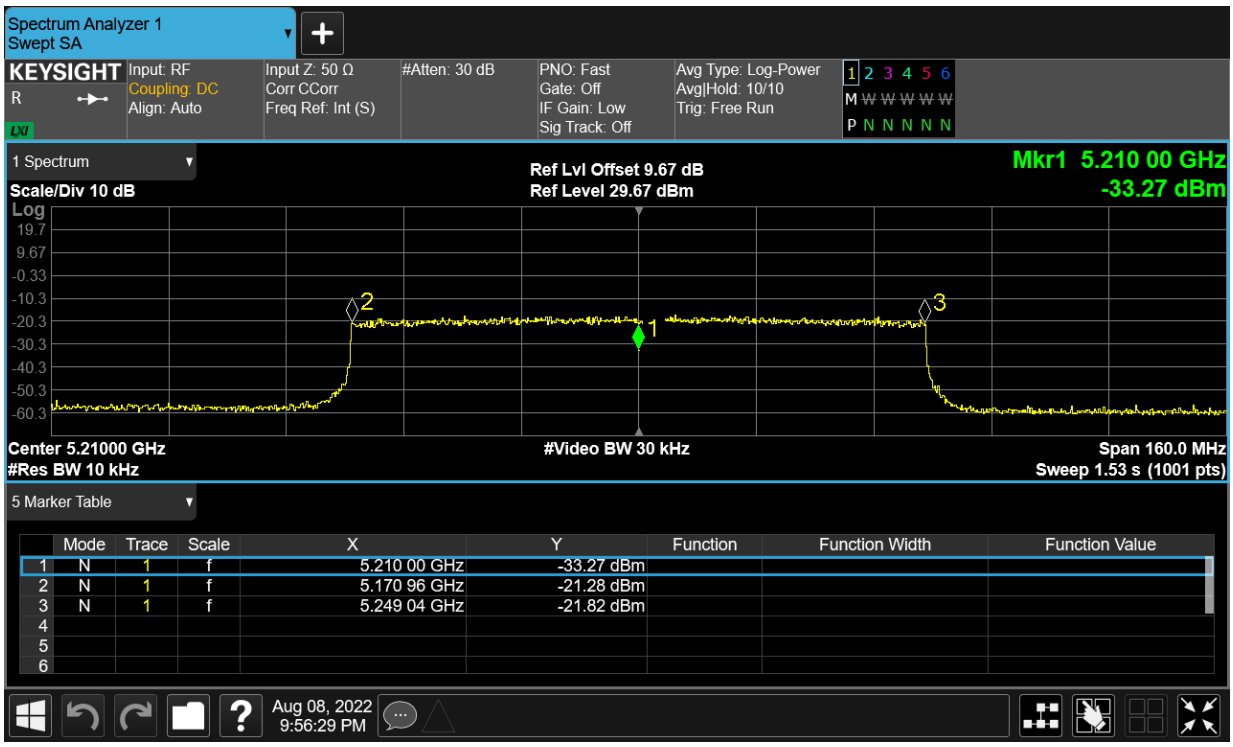
Freq. Stability LVNT ax80 5210MHz Sum



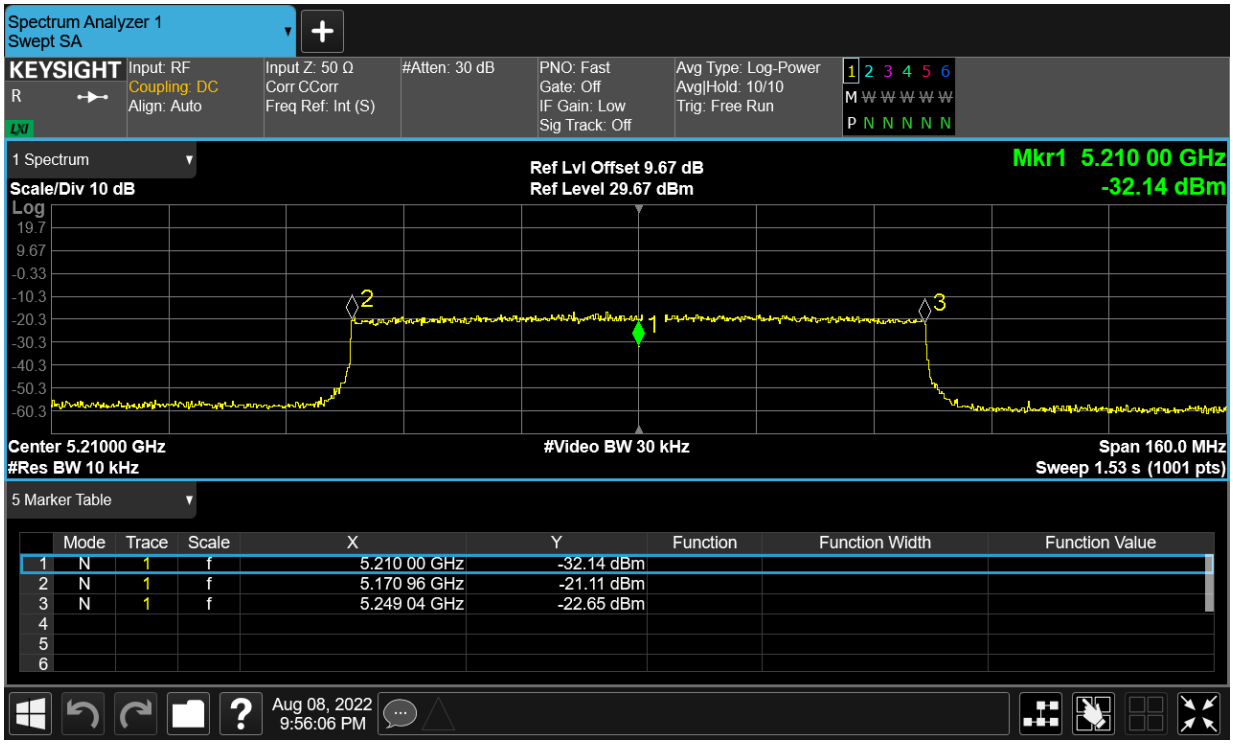
Freq. Stability NVHT ax80 5210MHz Sum



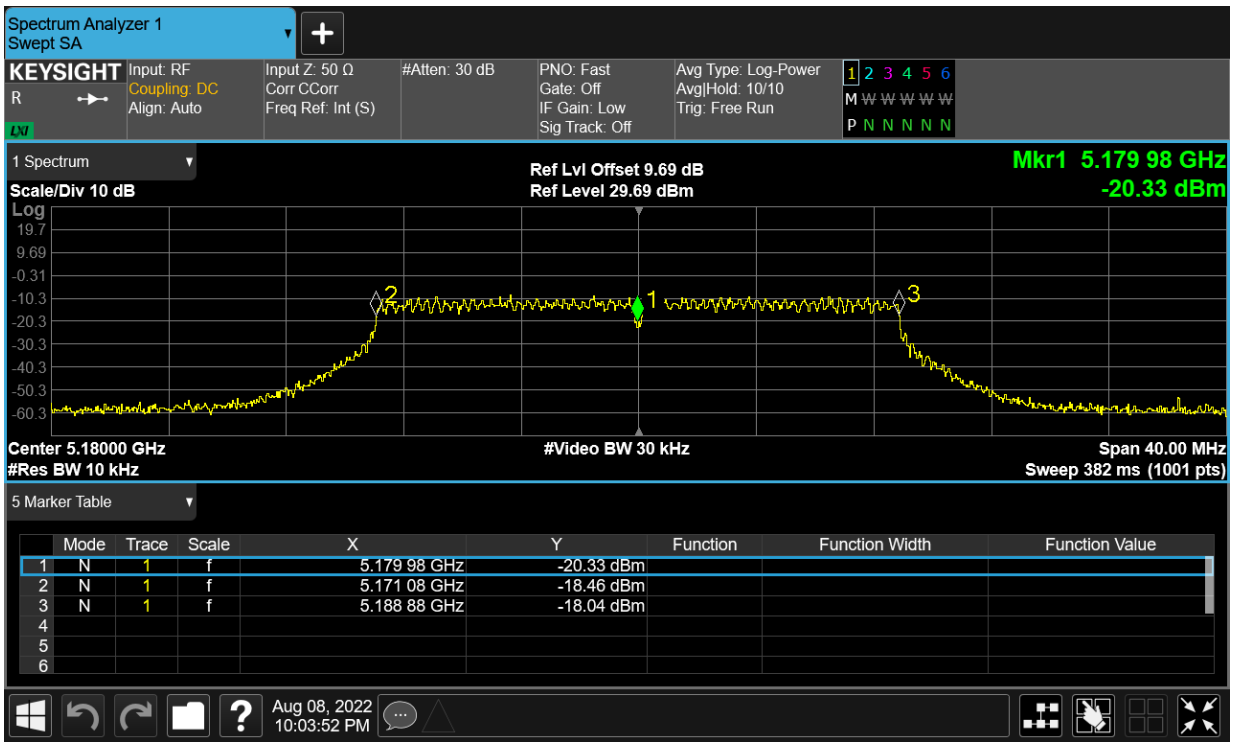
Freq. Stability NVLT ax80 5210MHz Sum



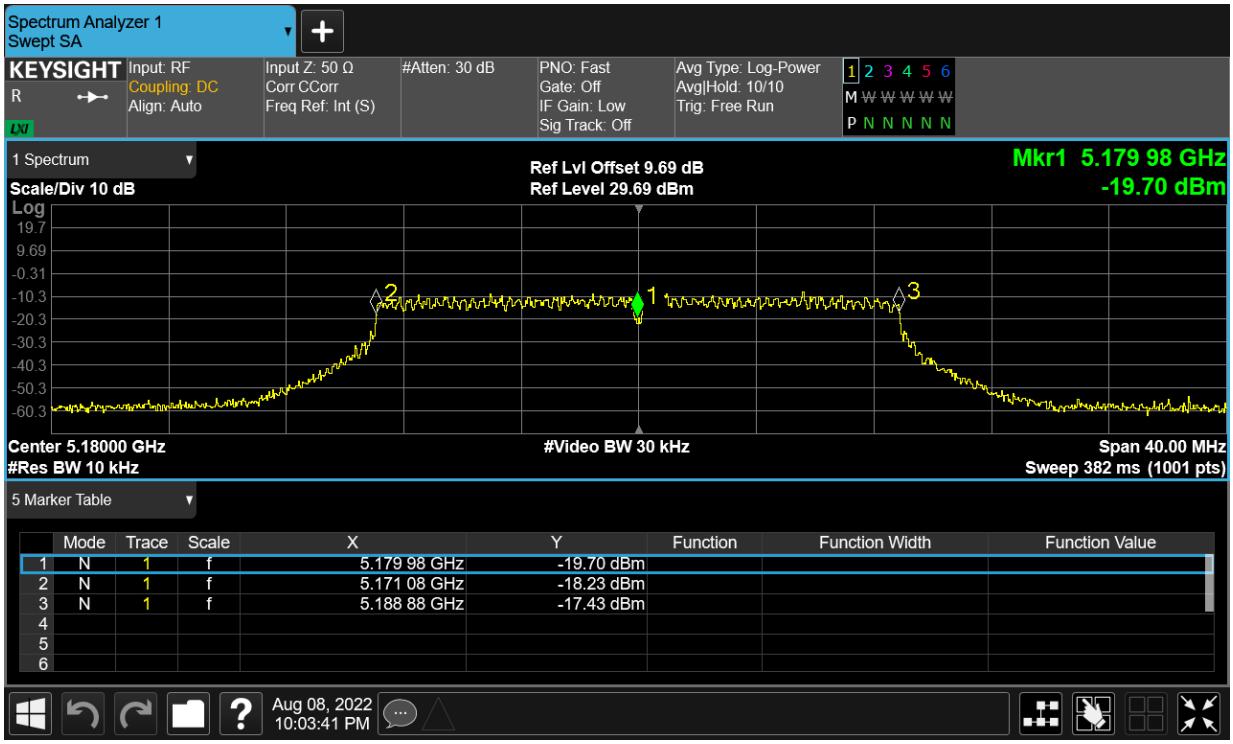
Freq. Stability NVNT ax80 5210MHz Sum



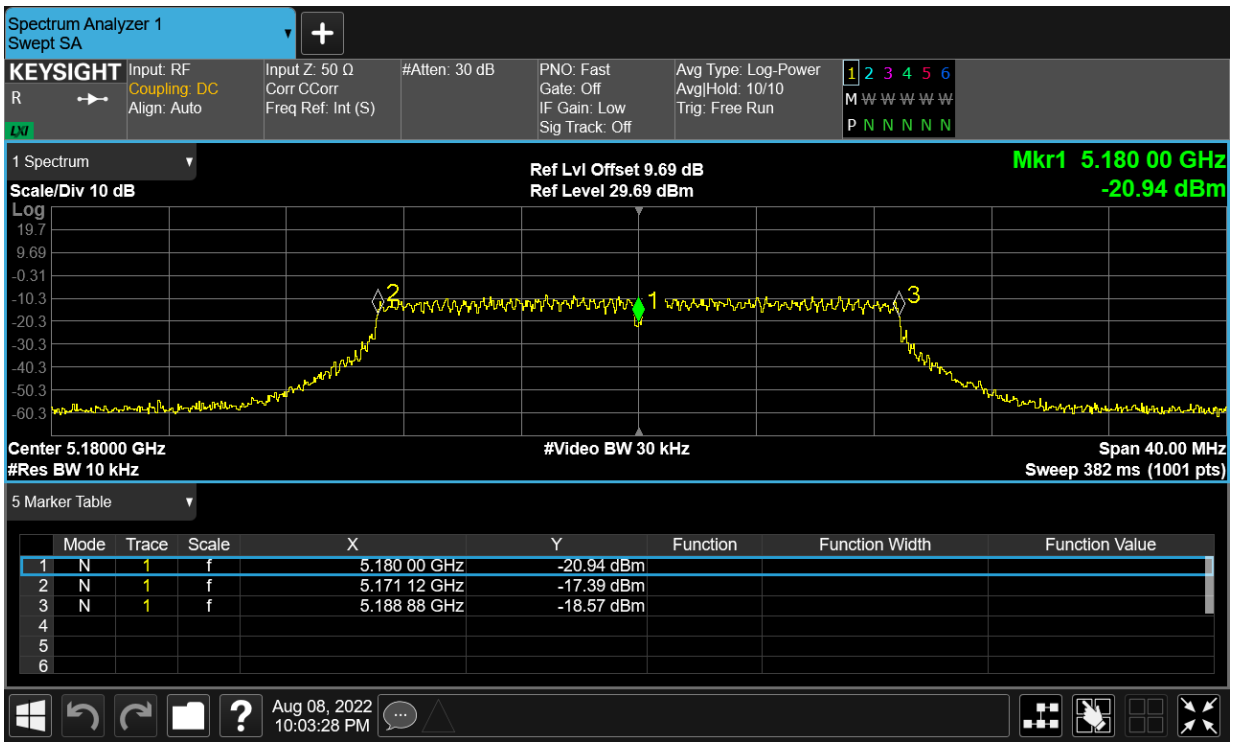
Freq. Stability HVNT n20 5180MHz Sum



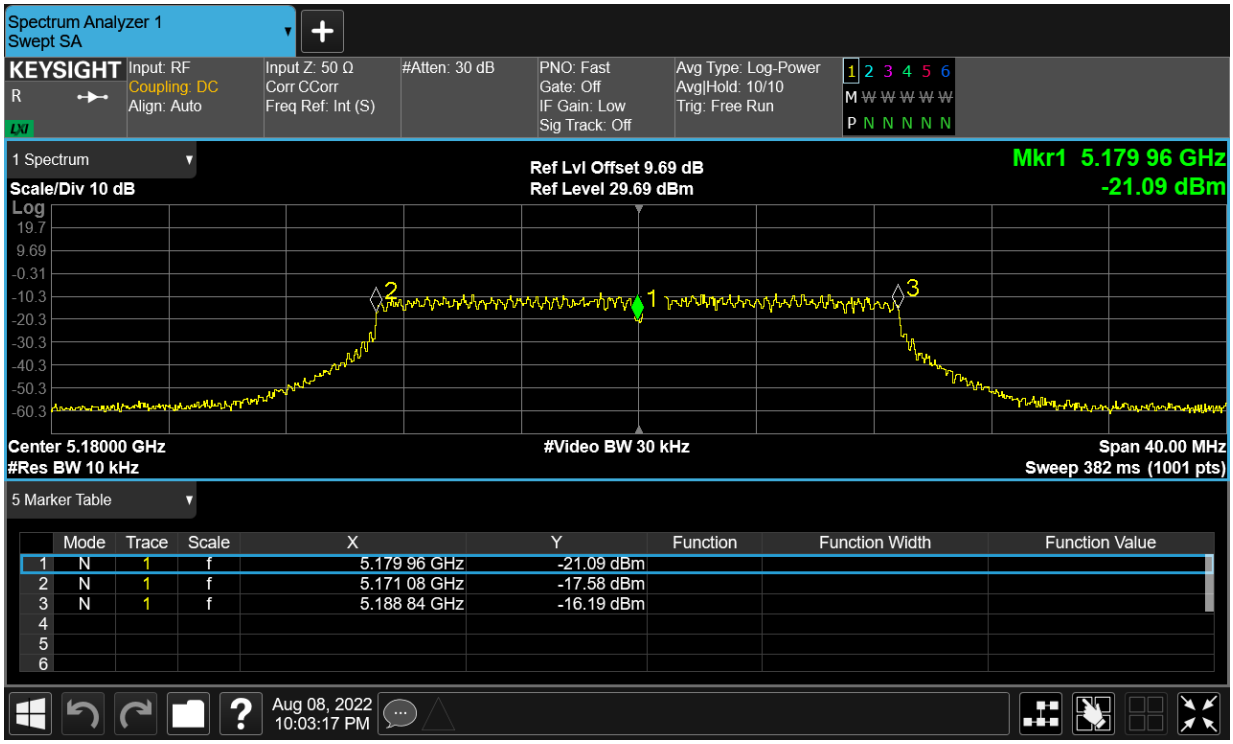
Freq. Stability LVNT n20 5180MHz Sum



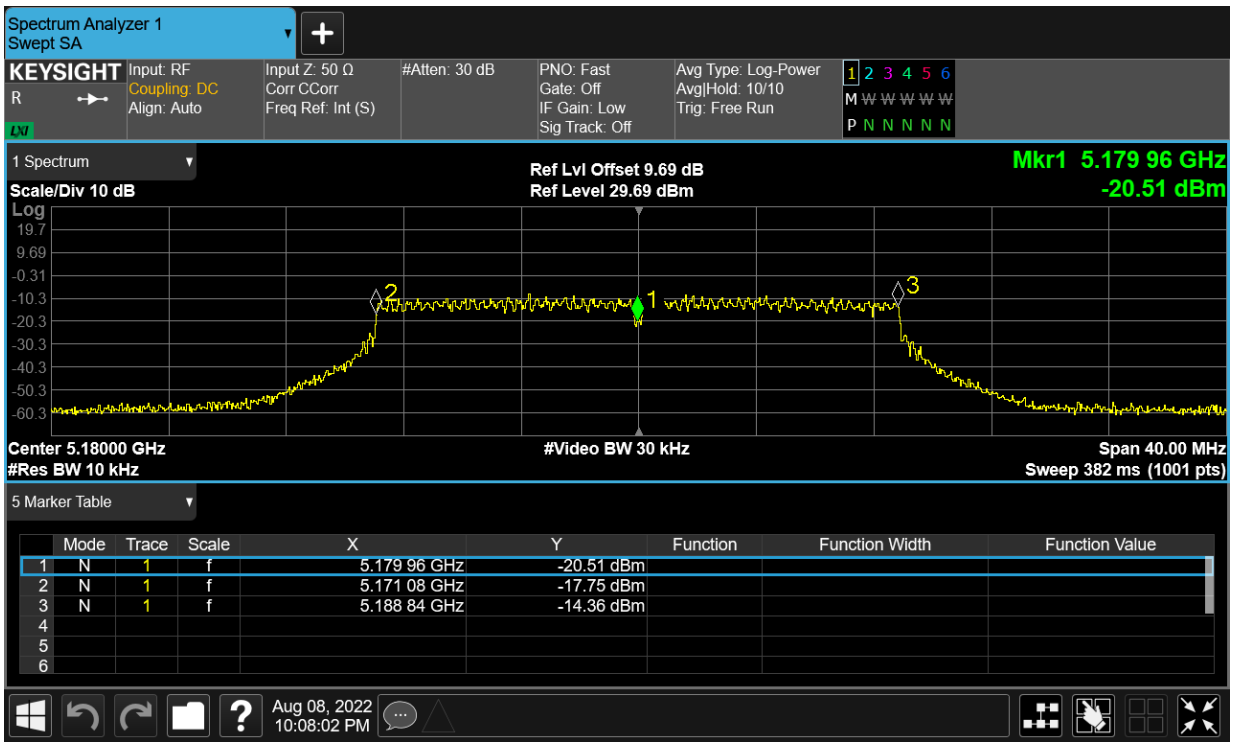
Freq. Stability NVHT n20 5180MHz Sum



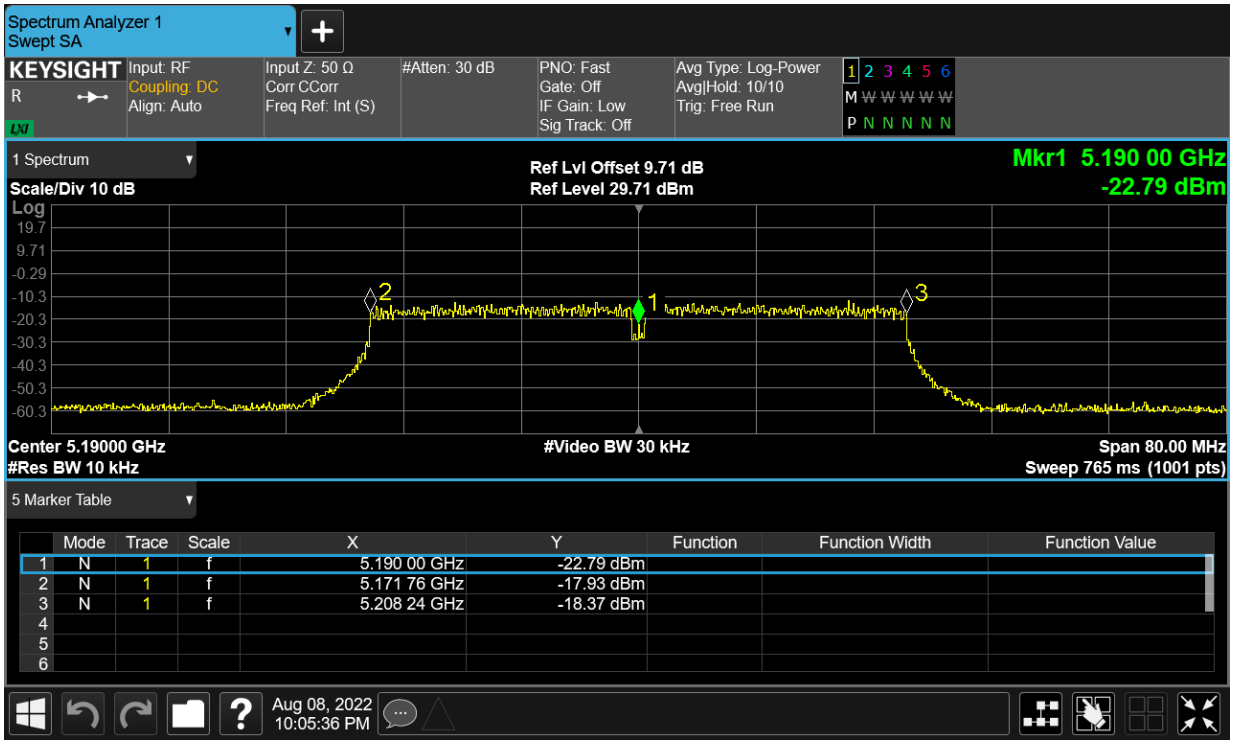
Freq. Stability NVLT n20 5180MHz Sum



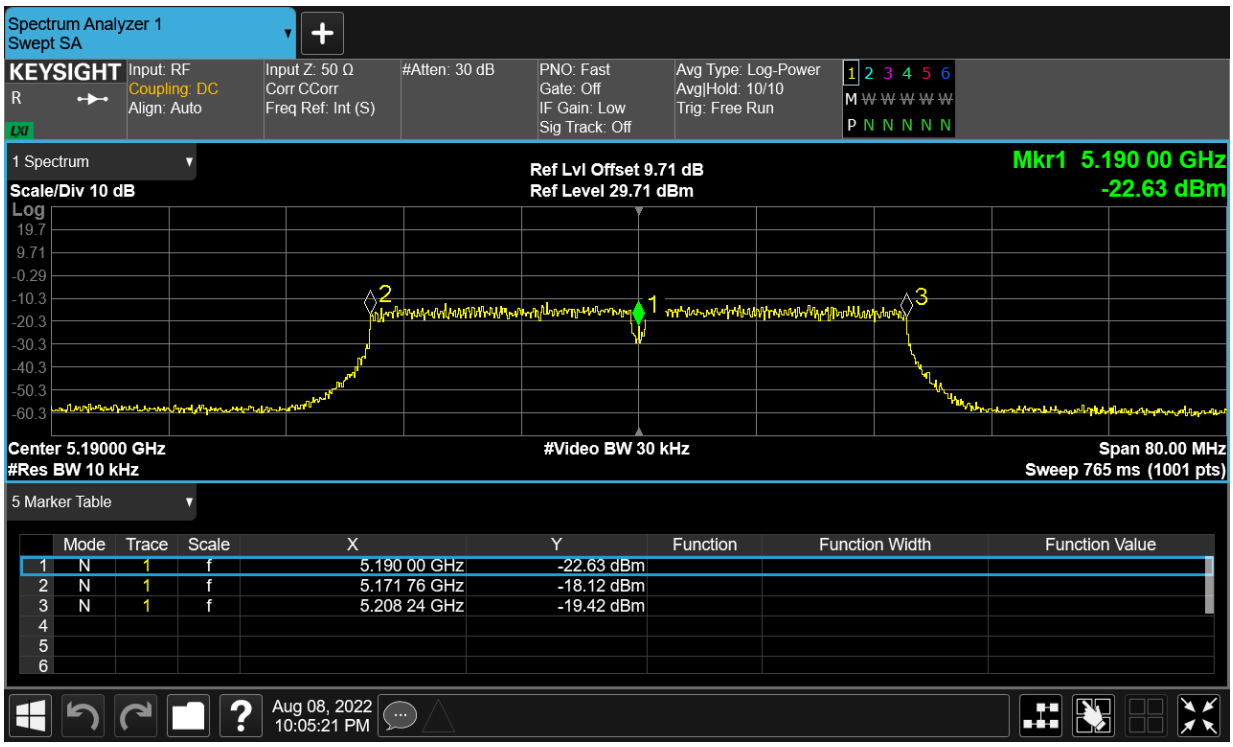
Freq. Stability NVNT n20 5180MHz Sum



Freq. Stability HVNT n40 5190MHz Sum

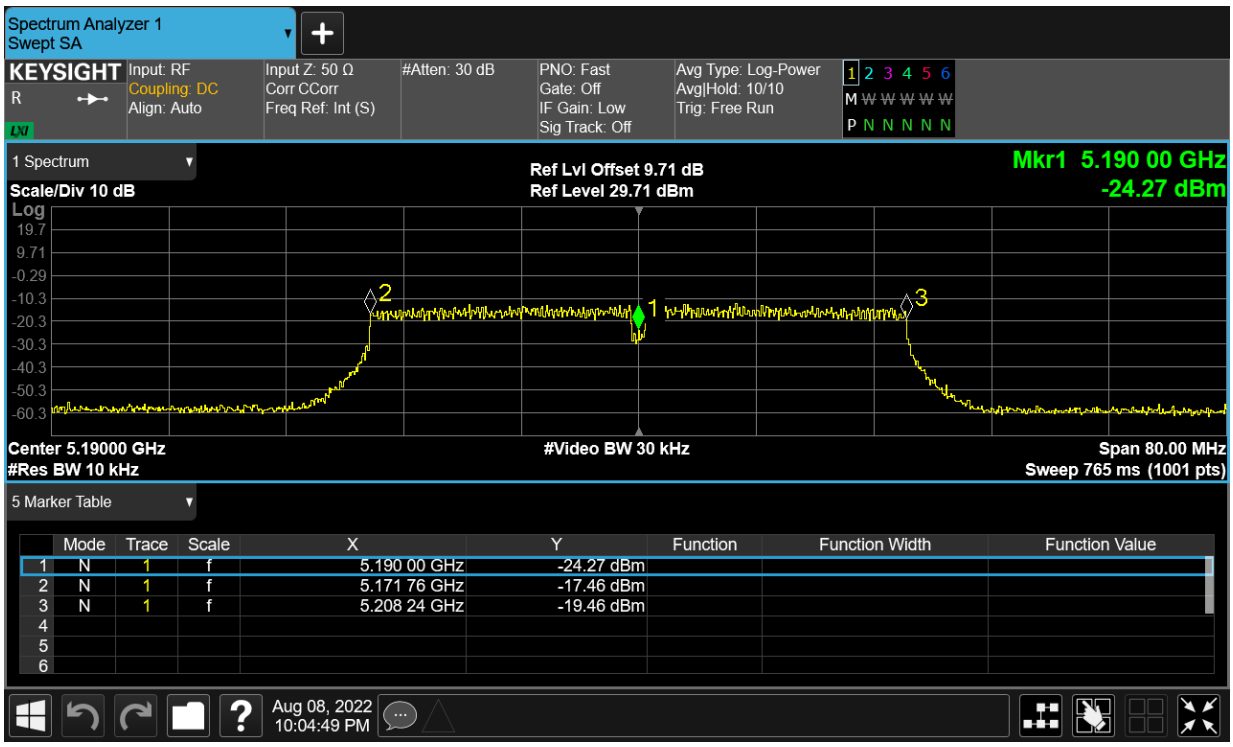


Freq. Stability LVNT n40 5190MHz Sum

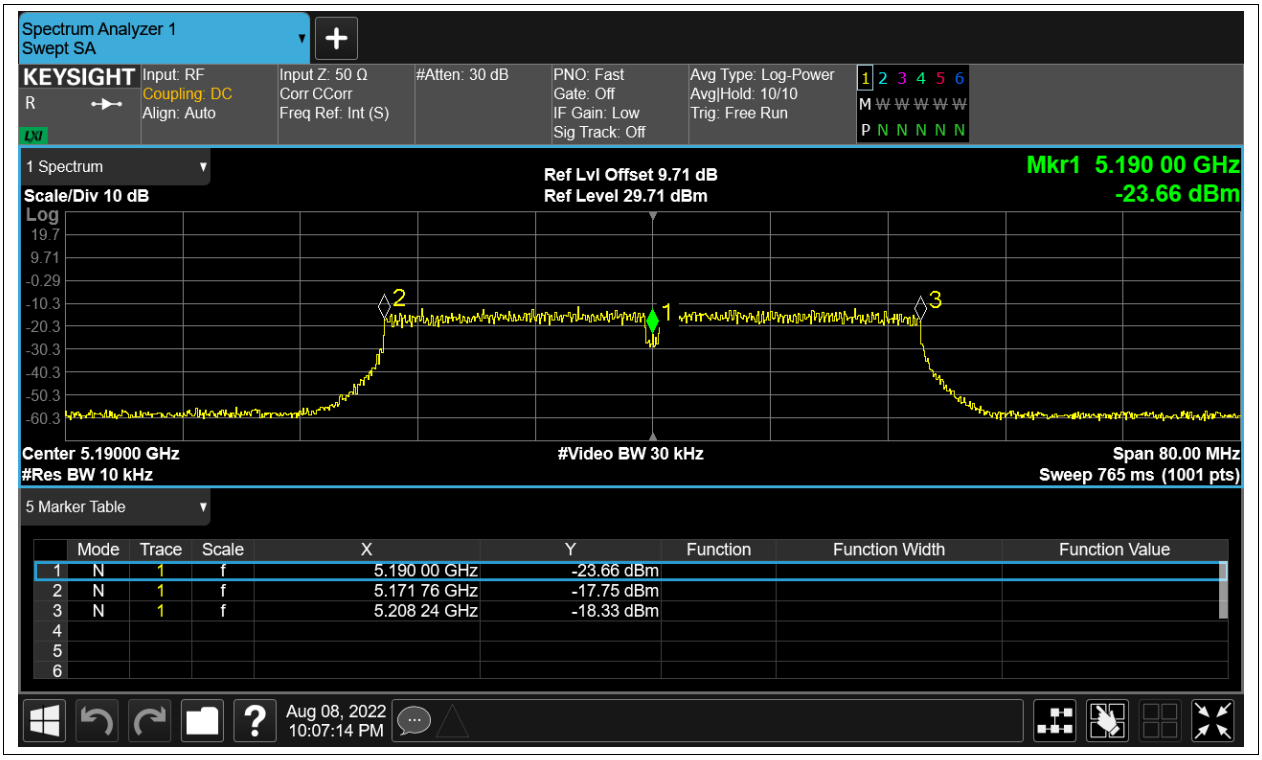


Freq. Stability NVHT n40 5190MHz Sum

Freq. Stability NVLT n40 5190MHz Sum



Freq. Stability NVNT n40 5190MHz Sum

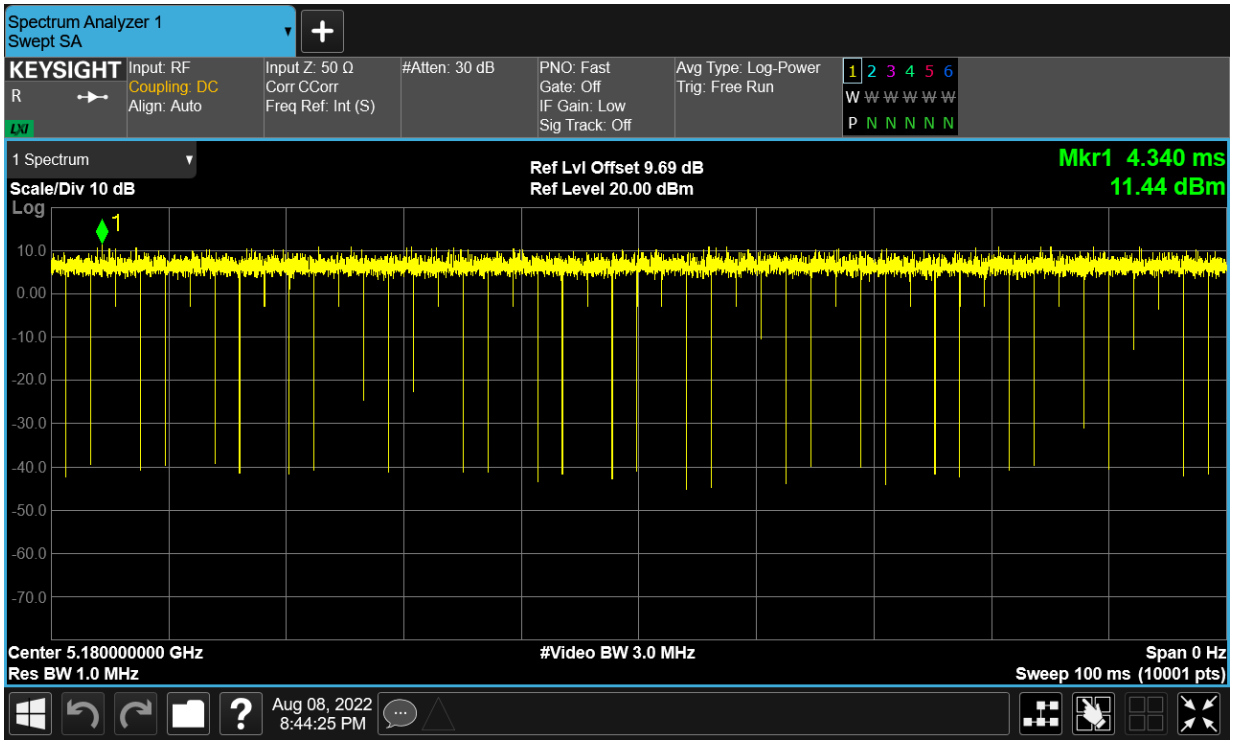

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 9.71 dB
Ref Level 29.71 dBm
Mkr1 5.190 00 GHz
-23.66 dBm
Center 5.19000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 80.00 MHz
Sweep 765 ms (1001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 f 5.190 00 GHz -23.66 dBm
2 N 1 f 5.171 76 GHz -17.75 dBm
3 N 1 f 5.208 24 GHz -18.33 dBm
Aug 08, 2022
10:07:14 PM

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	99.77	0.01
NVNT	a	5200	Ant1	99.79	0.01
NVNT	a	5240	Ant1	99.81	0.01
NVNT	a	5180	Ant2	99.77	0.01
NVNT	a	5200	Ant2	99.79	0.01
NVNT	a	5240	Ant2	99.76	0.01
NVNT	ac20	5180	Sum	99.93	0
NVNT	ac20	5200	Sum	100	0
NVNT	ac20	5240	Sum	99.9	0
NVNT	ac40	5190	Sum	99.91	0
NVNT	ac40	5230	Sum	99.9	0
NVNT	ac80	5210	Sum	99.9	0
NVNT	ax20	5180	Sum	99.91	0
NVNT	ax20	5200	Sum	99.92	0
NVNT	ax20	5240	Sum	99.89	0
NVNT	ax40	5190	Sum	99.92	0
NVNT	ax40	5230	Sum	99.9	0
NVNT	ax80	5210	Sum	99.92	0
NVNT	n20	5180	Sum	99.91	0
NVNT	n20	5200	Sum	99.89	0
NVNT	n20	5240	Sum	99.93	0
NVNT	n40	5190	Sum	99.89	0
NVNT	n40	5230	Sum	99.94	0

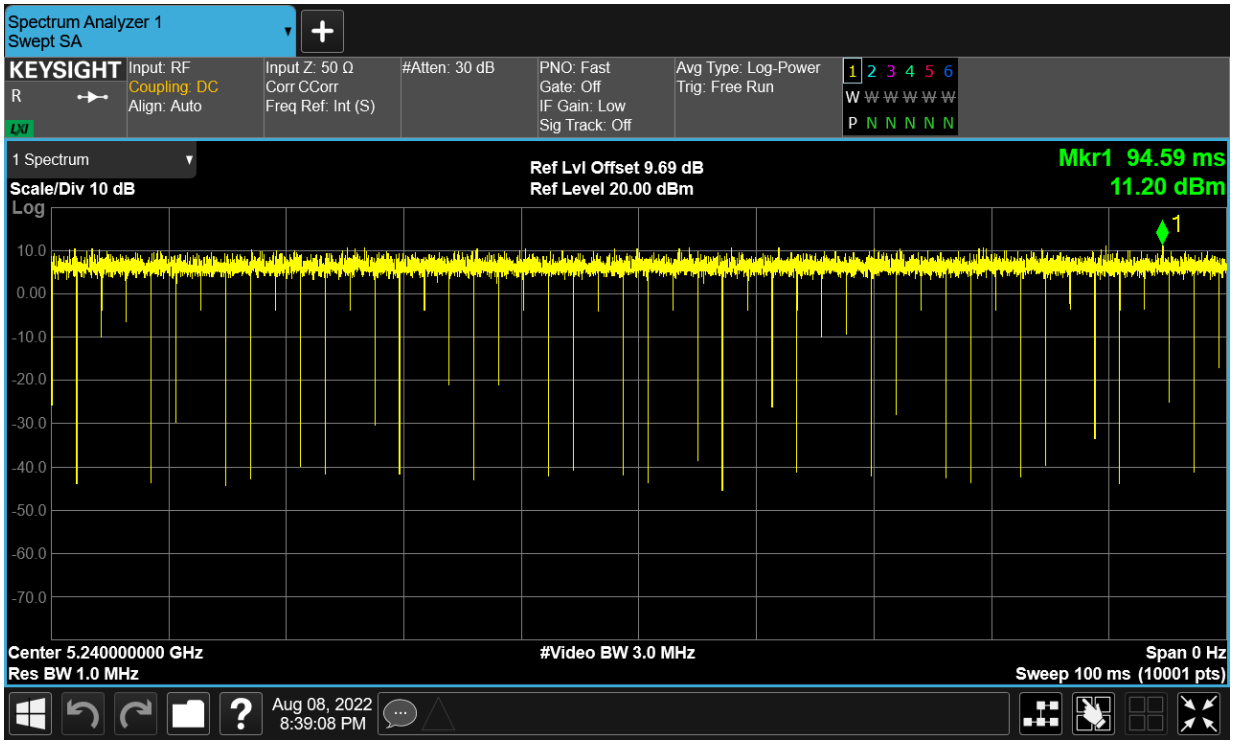
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

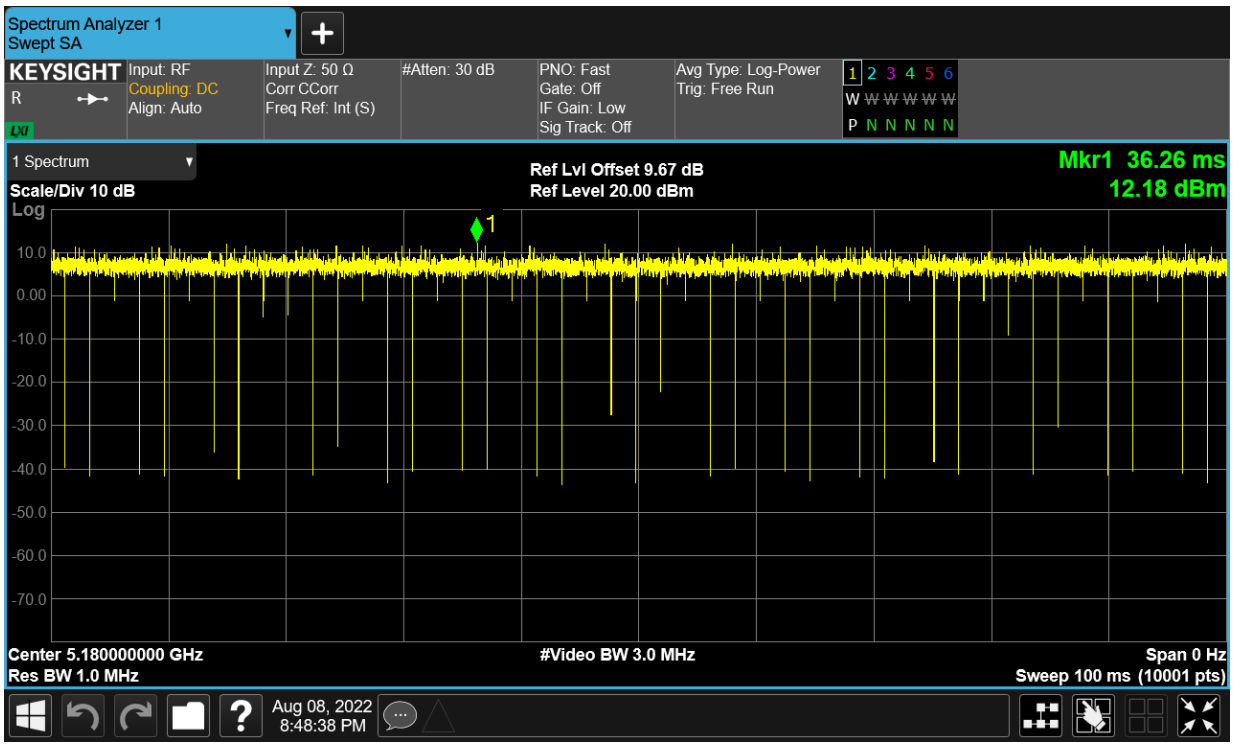


Duty Cycle NVNT a 5200MHz Ant1

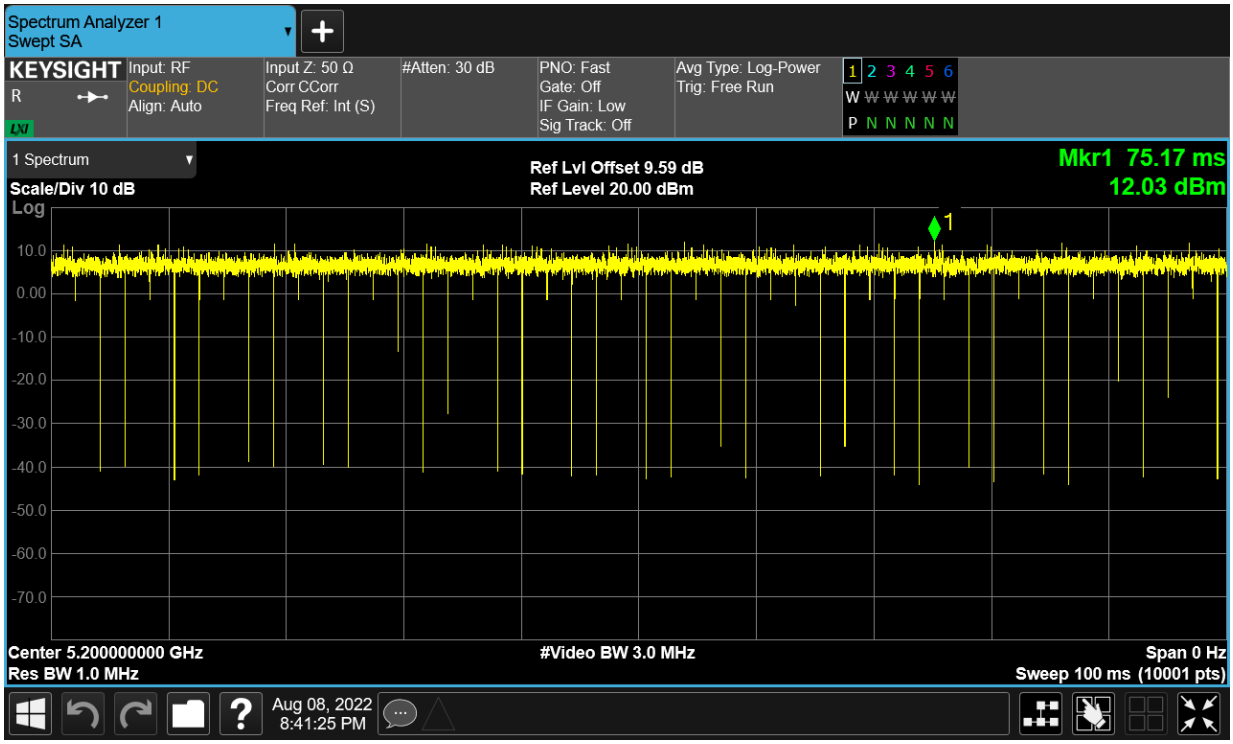
Duty Cycle NVNT a 5240MHz Ant1



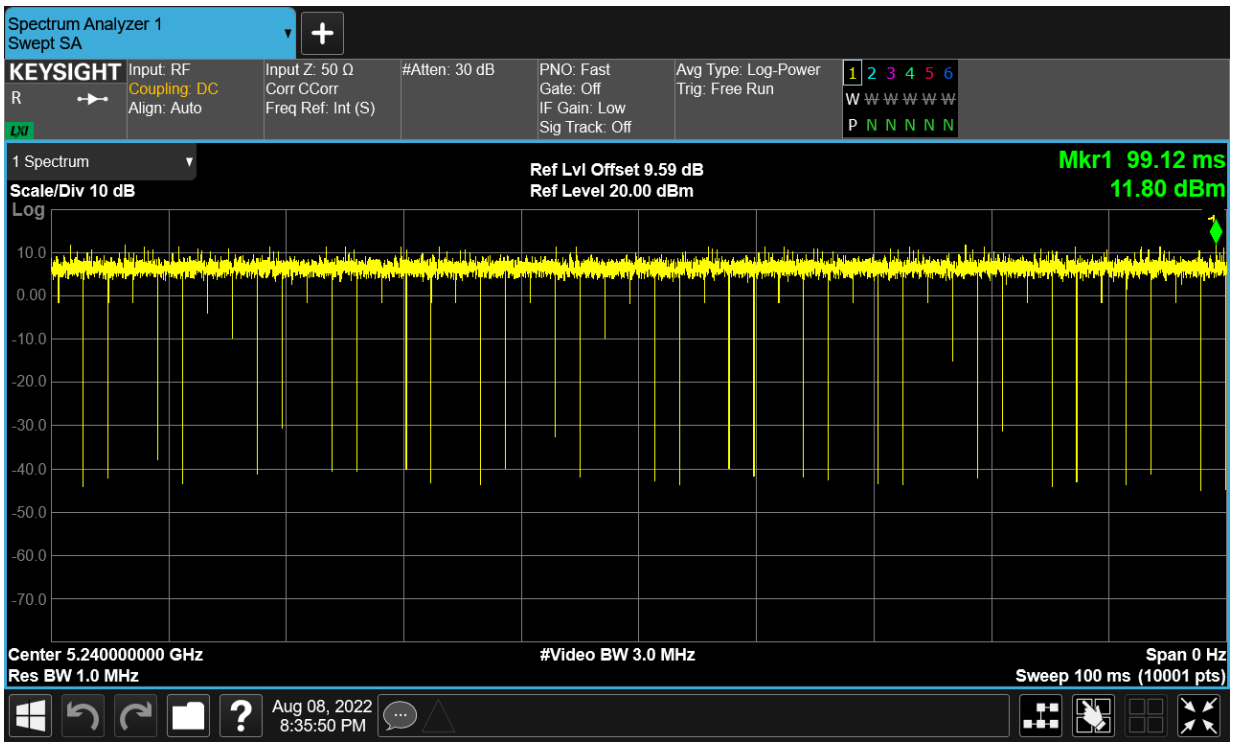
Duty Cycle NVNT a 5180MHz Ant2



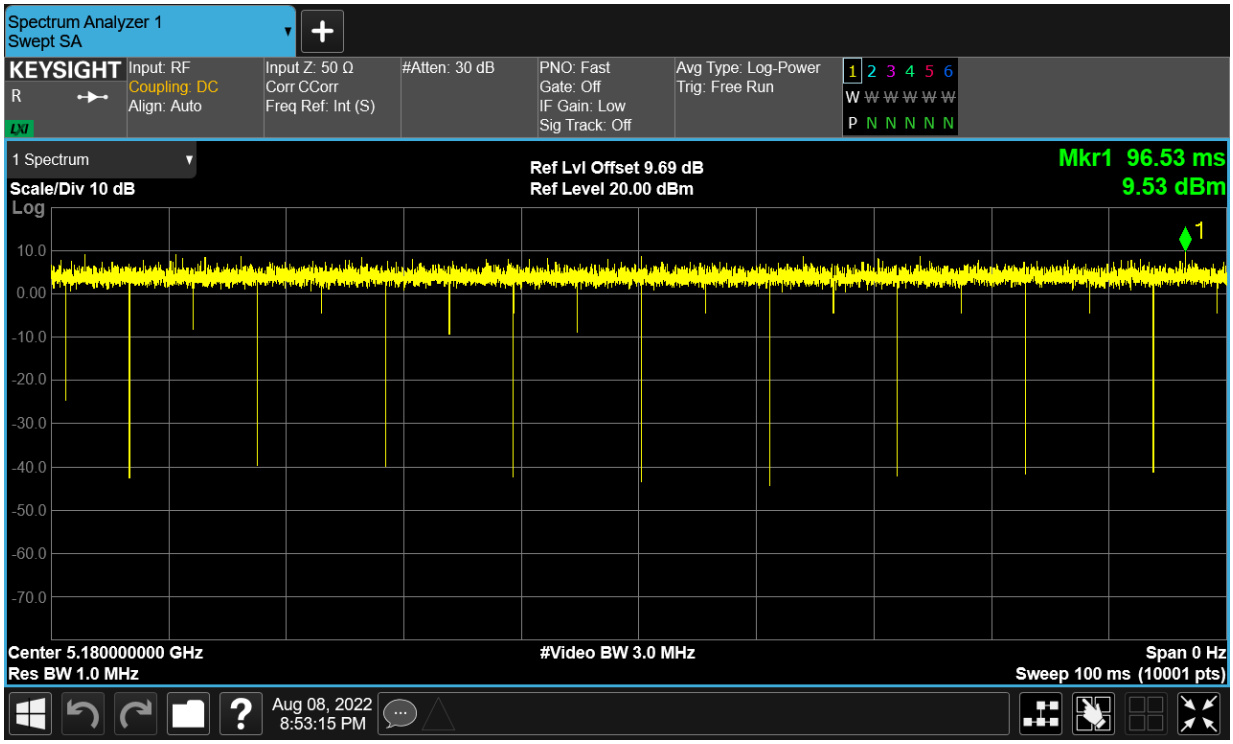
Duty Cycle NVNT a 5200MHz Ant2



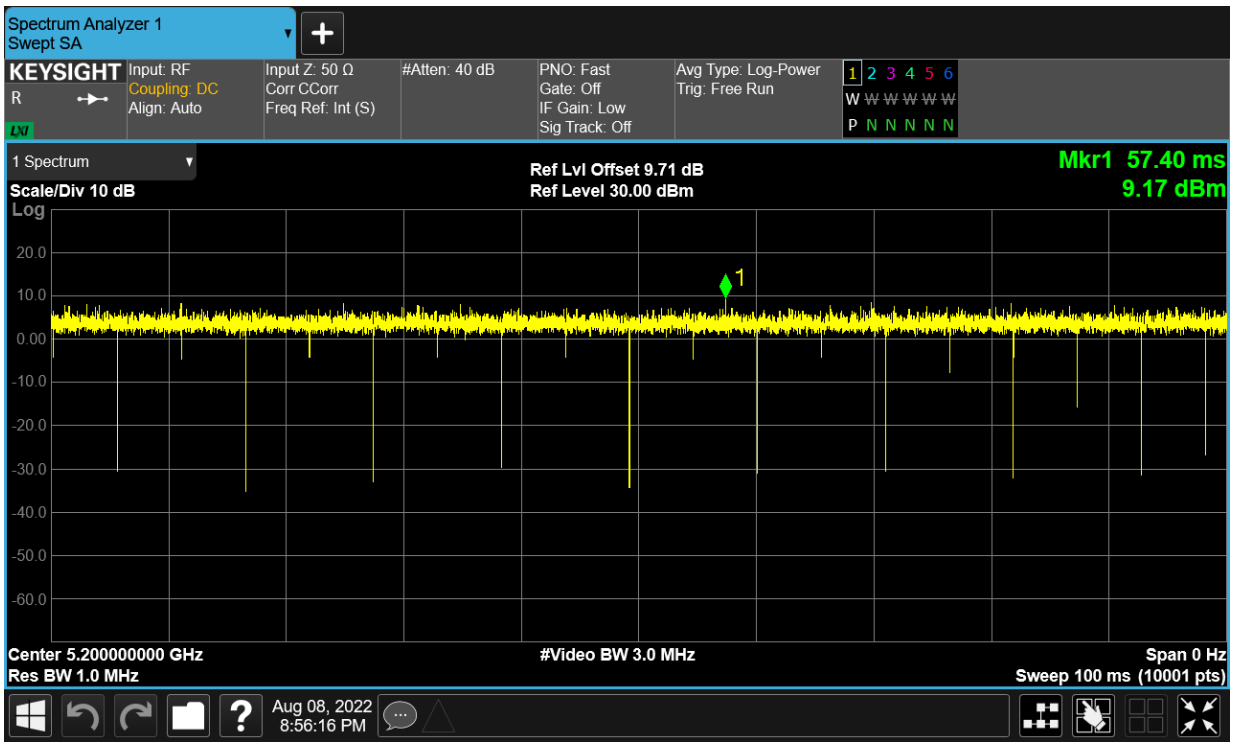
Duty Cycle NVNT a 5240MHz Ant2



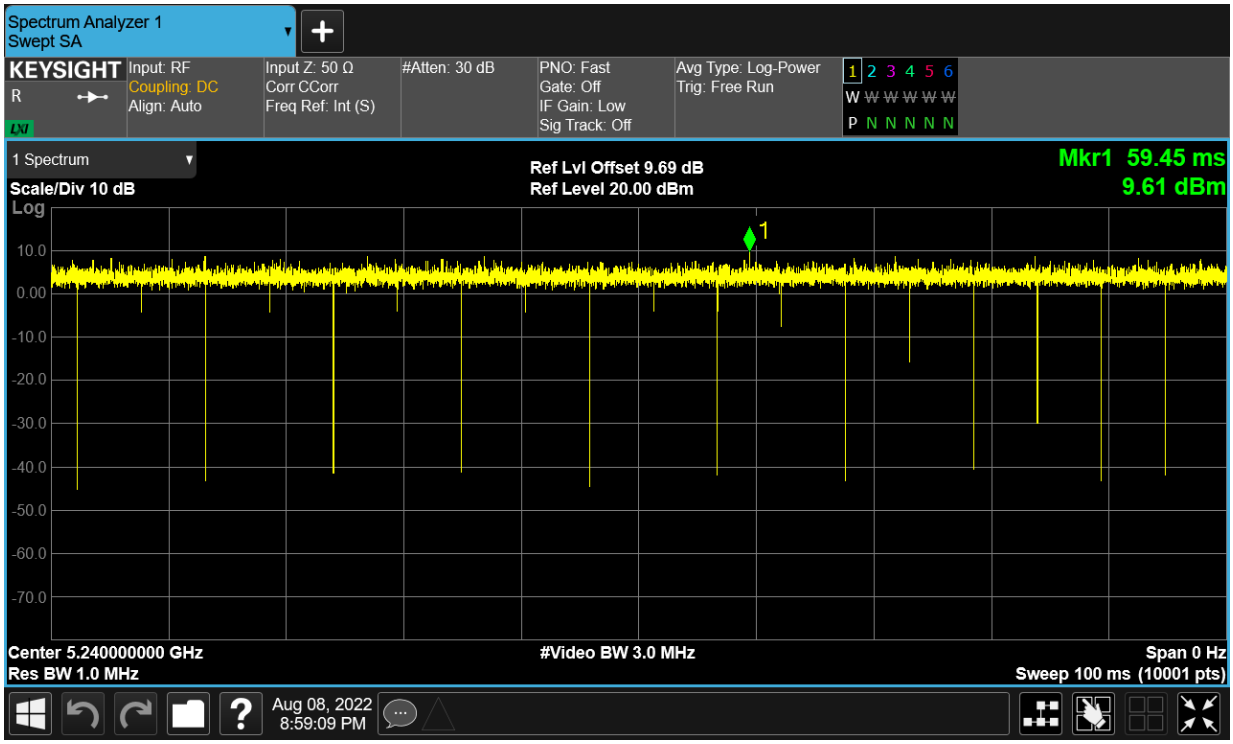
Duty Cycle NVNT ac20 5180MHz Sum



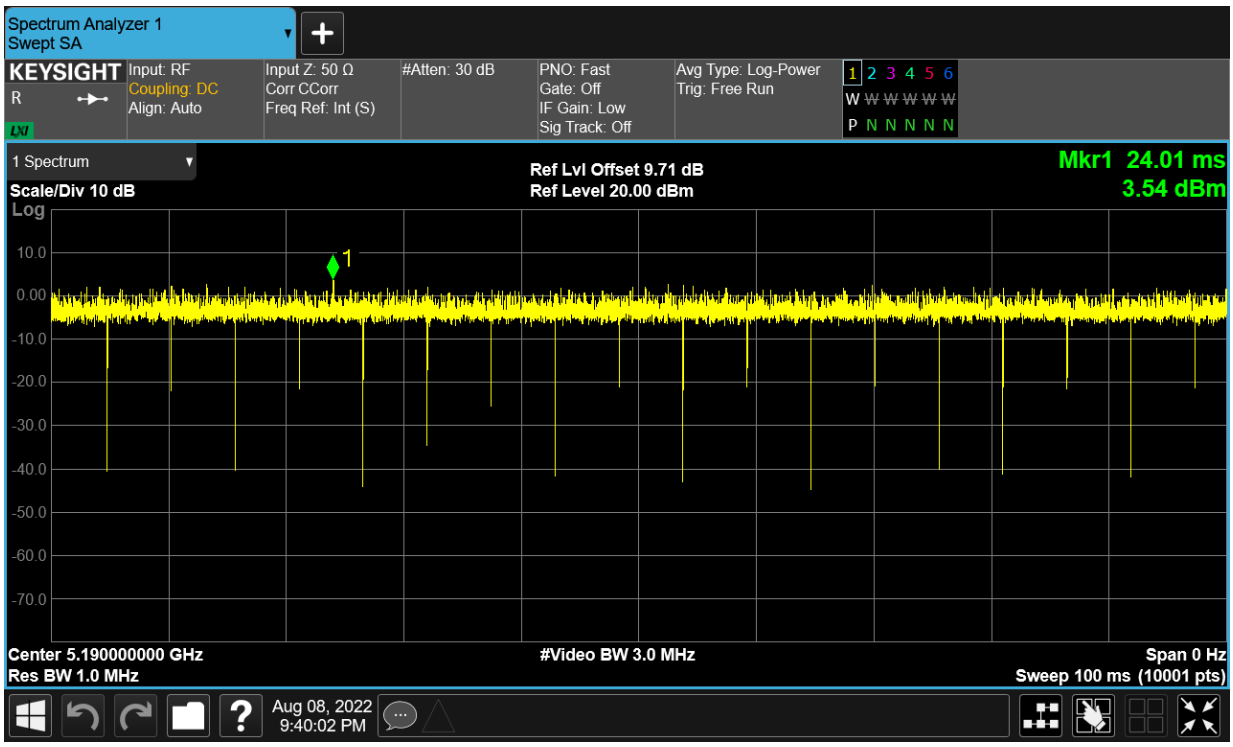
Duty Cycle NVNT ac20 5200MHz Sum



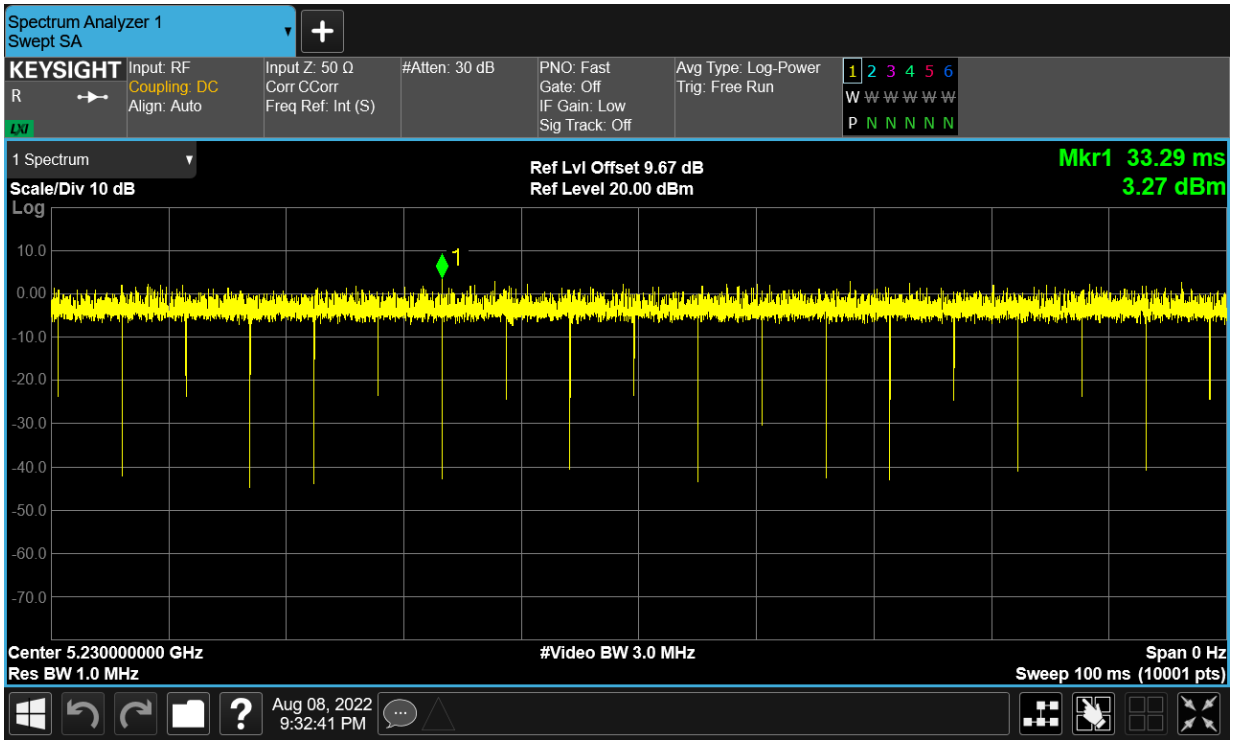
Duty Cycle NVNT ac20 5240MHz Sum



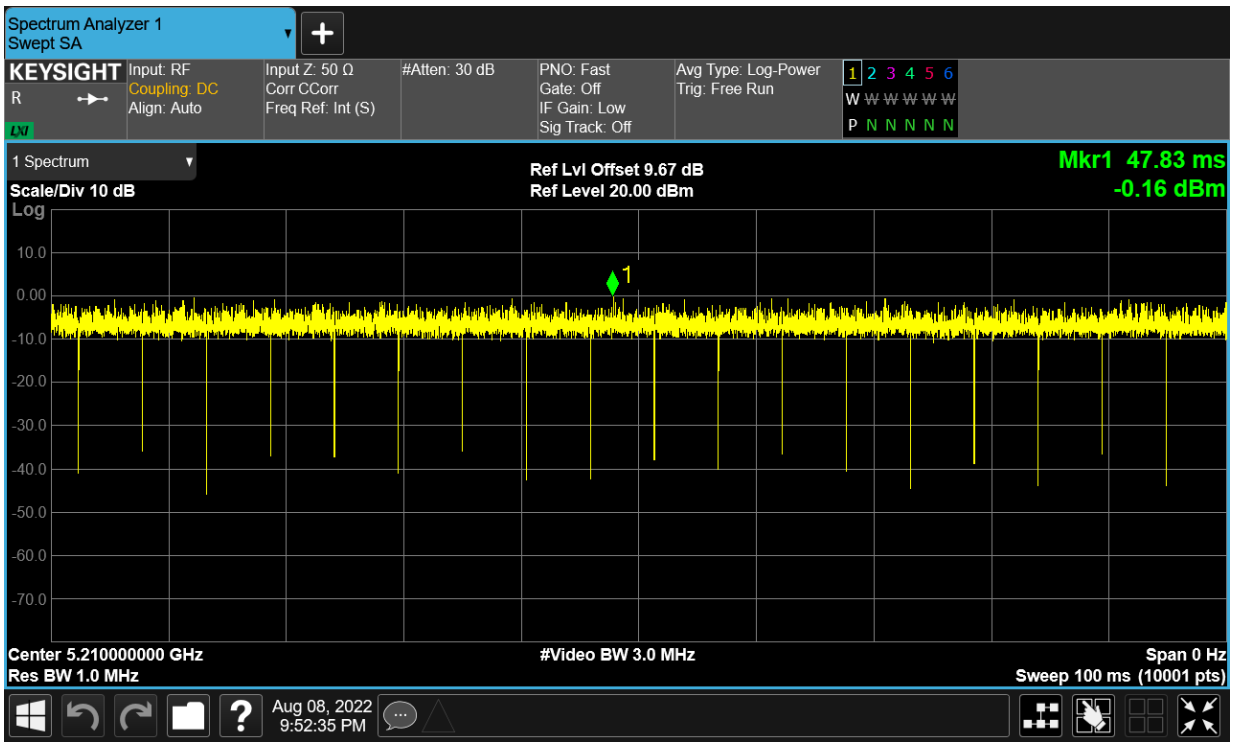
Duty Cycle NVNT ac40 5190MHz Sum



Duty Cycle NVNT ac40 5230MHz Sum

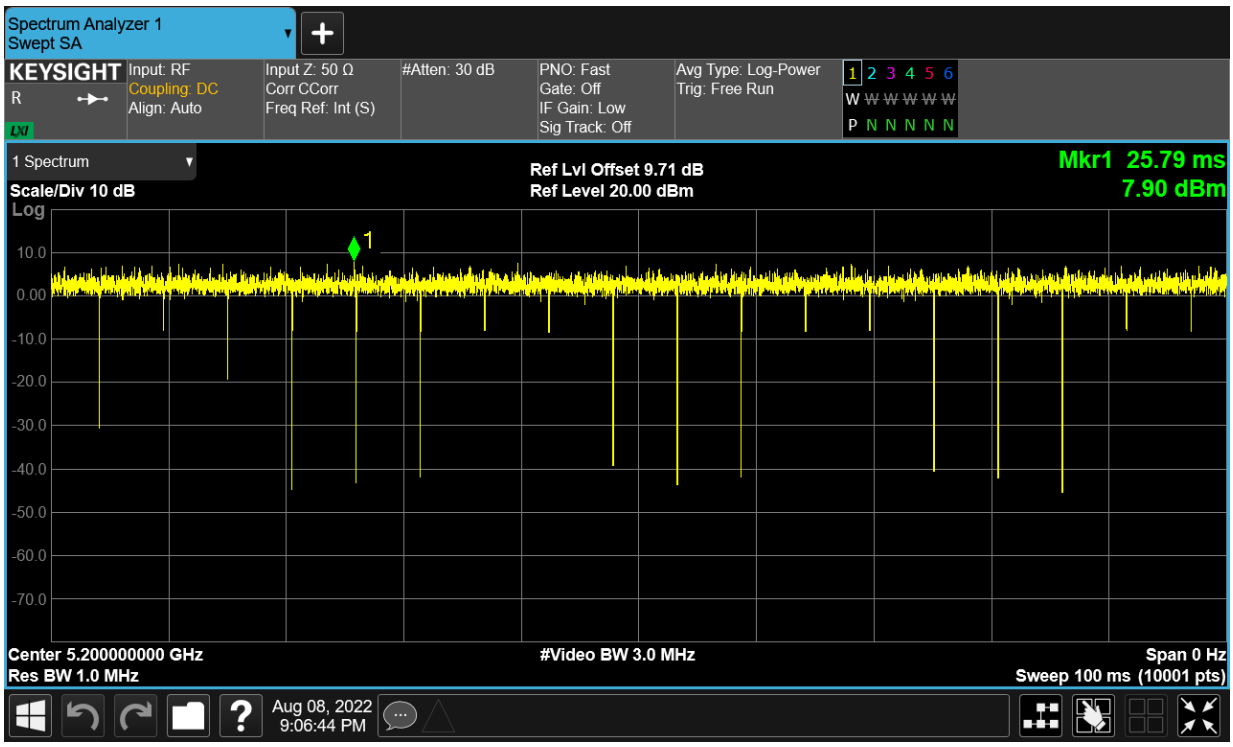


Duty Cycle NVNT ac80 5210MHz Sum

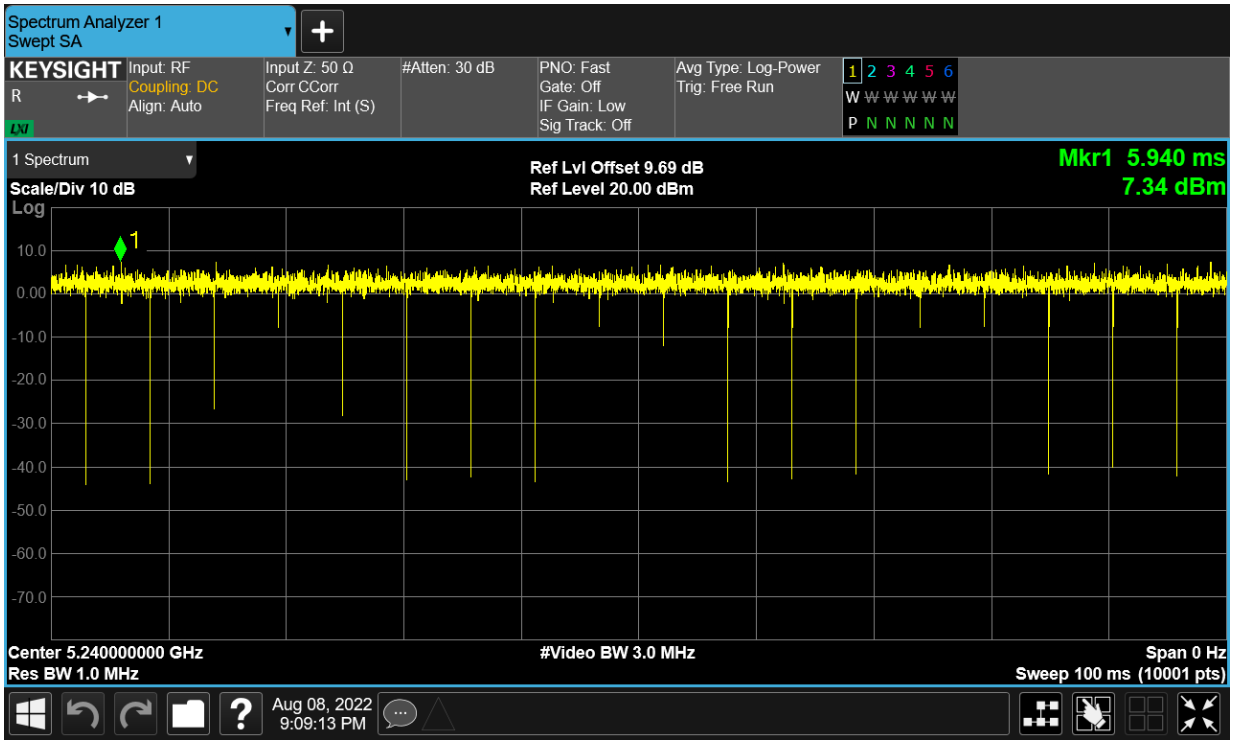


Duty Cycle NVNT ax20 5180MHz Sum

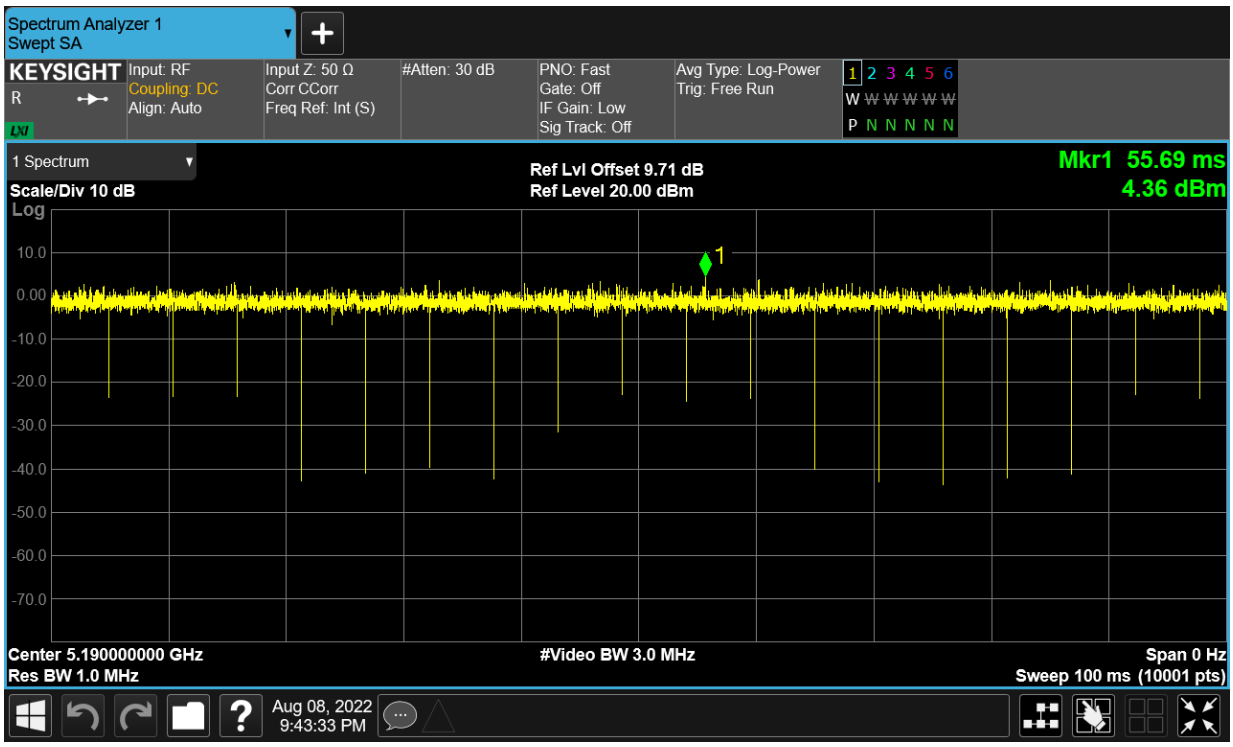
Duty Cycle NVNT ax20 5200MHz Sum



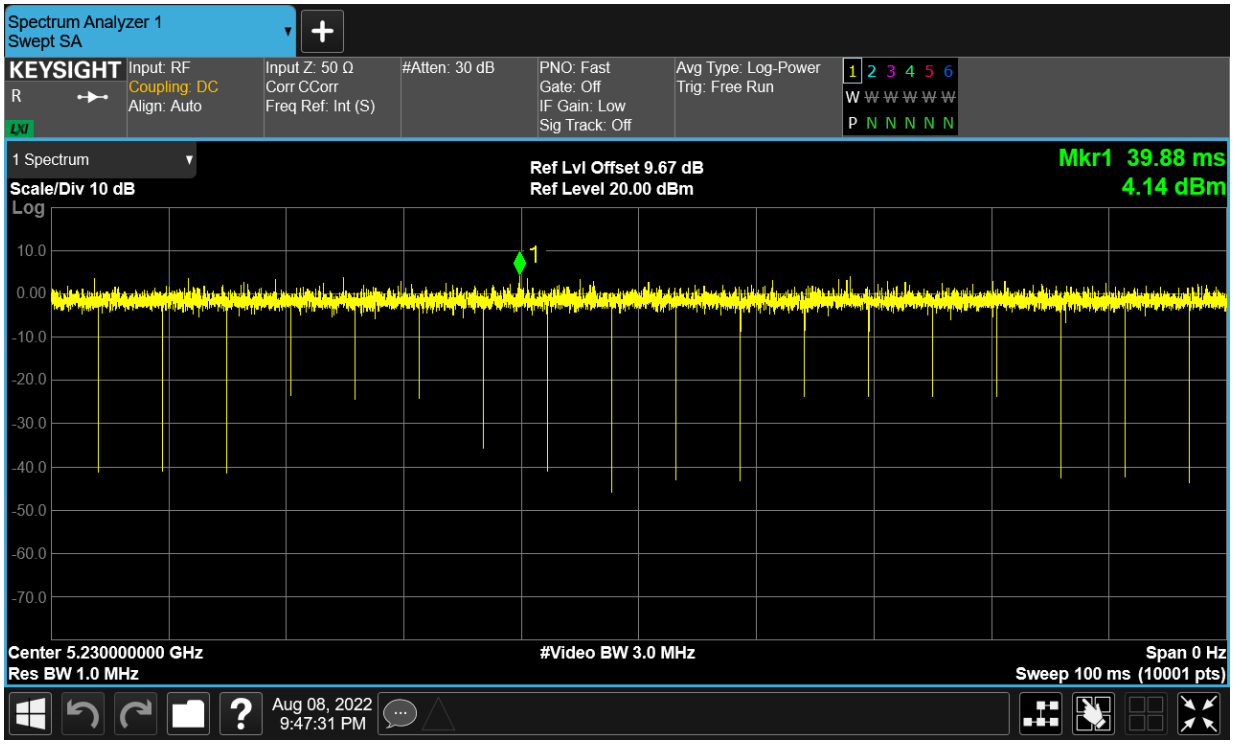
Duty Cycle NVNT ax20 5240MHz Sum



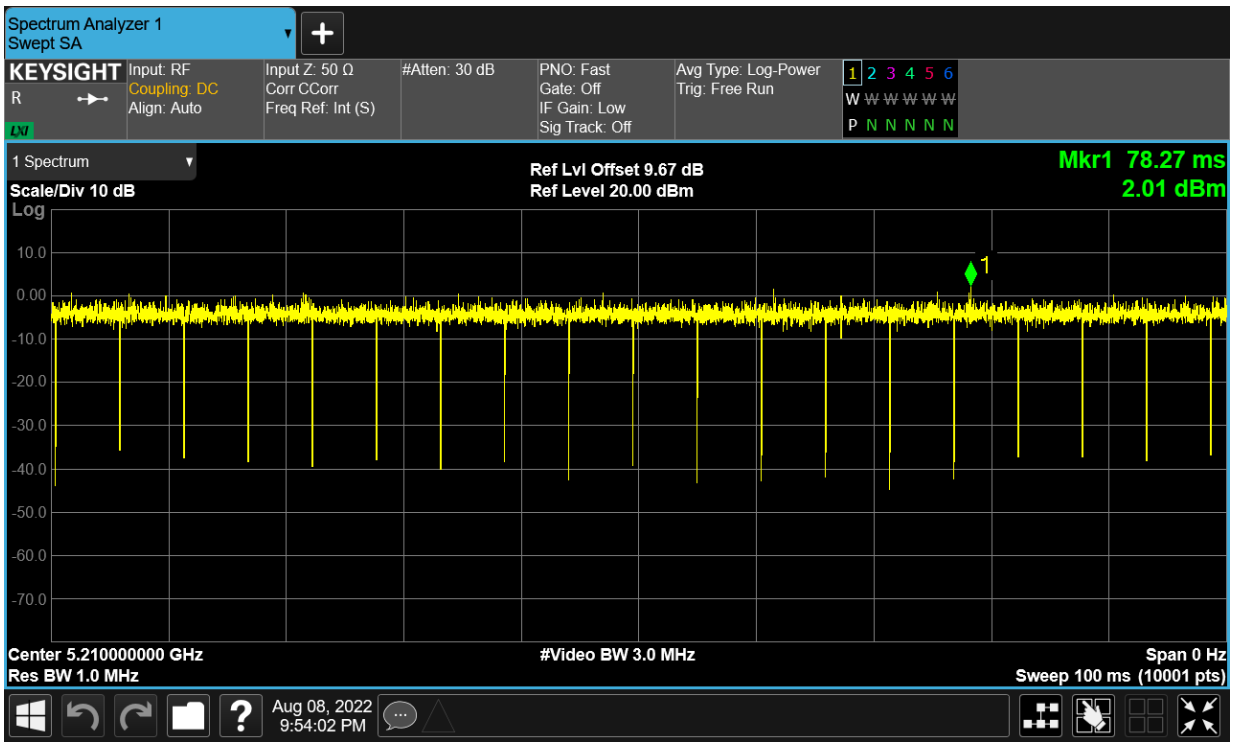
Duty Cycle NVNT ax40 5190MHz Sum



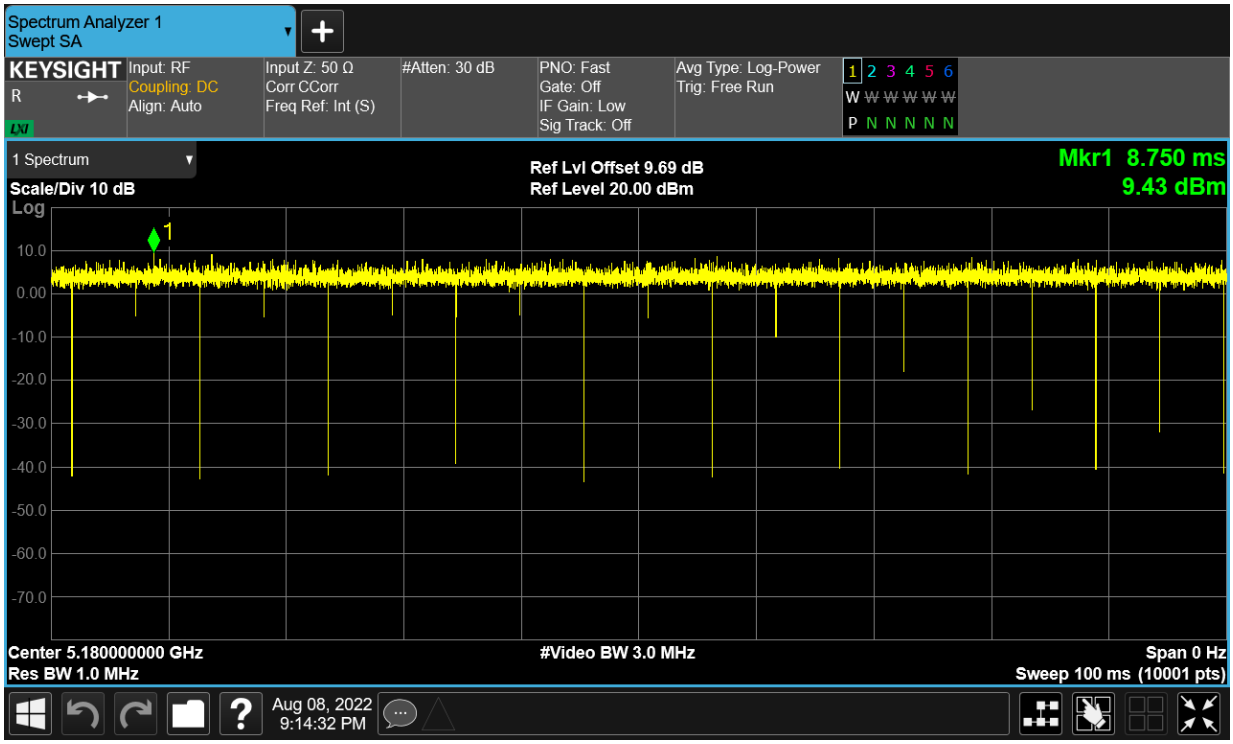
Duty Cycle NVNT ax40 5230MHz Sum



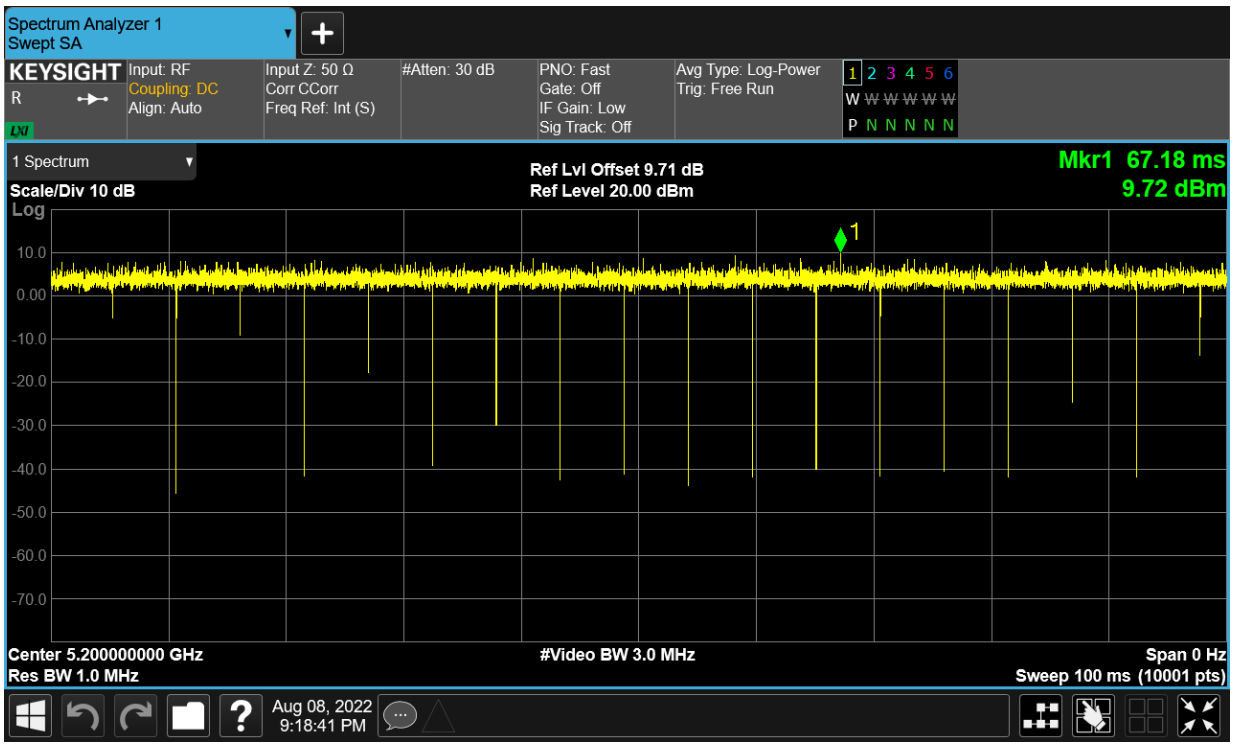
Duty Cycle NVNT ax80 5210MHz Sum



Duty Cycle NVNT n20 5180MHz Sum



Duty Cycle NVNT n20 5200MHz Sum



Duty Cycle NVNT n20 5240MHz Sum