

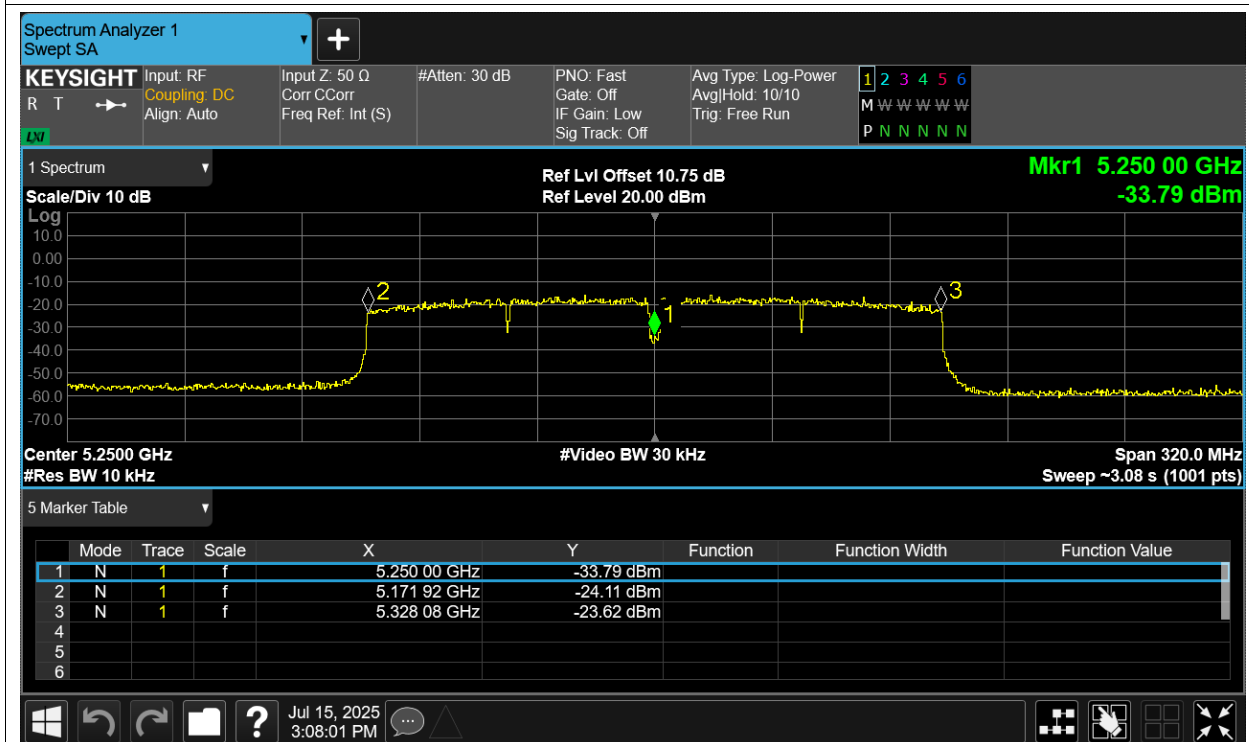
Test Data

Frequency Stability

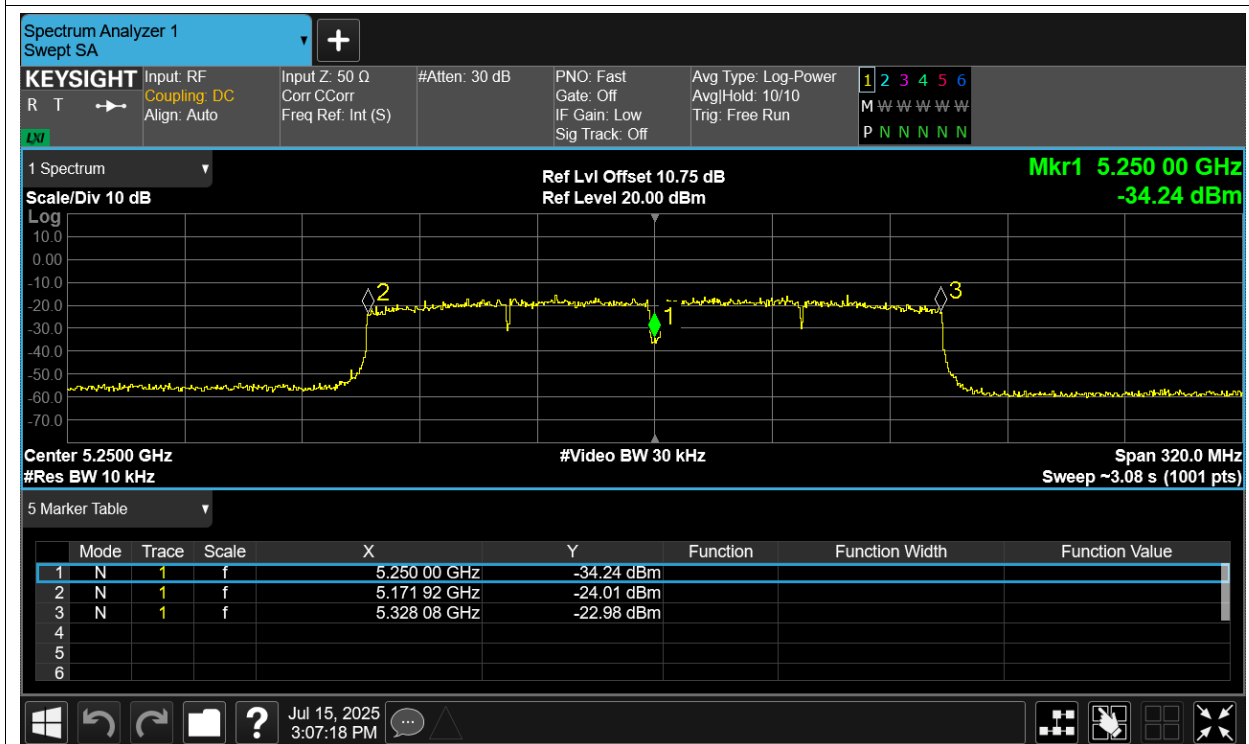
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	ac160	5250	Sum	5250	0	Within authorized band	Pass
LVNT	ac160	5250	Sum	5250	0		Pass
NVHT	ac160	5250	Sum	5250	0		Pass
NVLT	ac160	5250	Sum	5250	0		Pass
NVNT	ac160	5250	Sum	5250	0		Pass

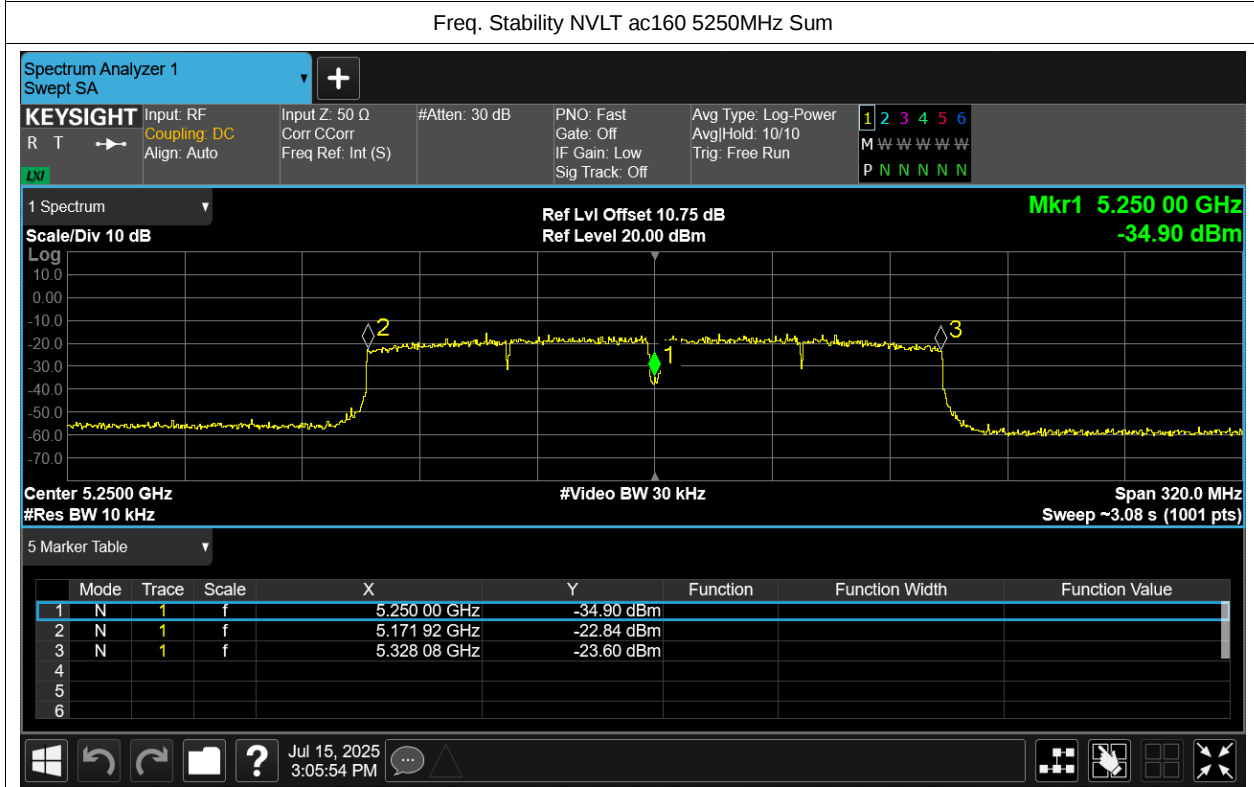
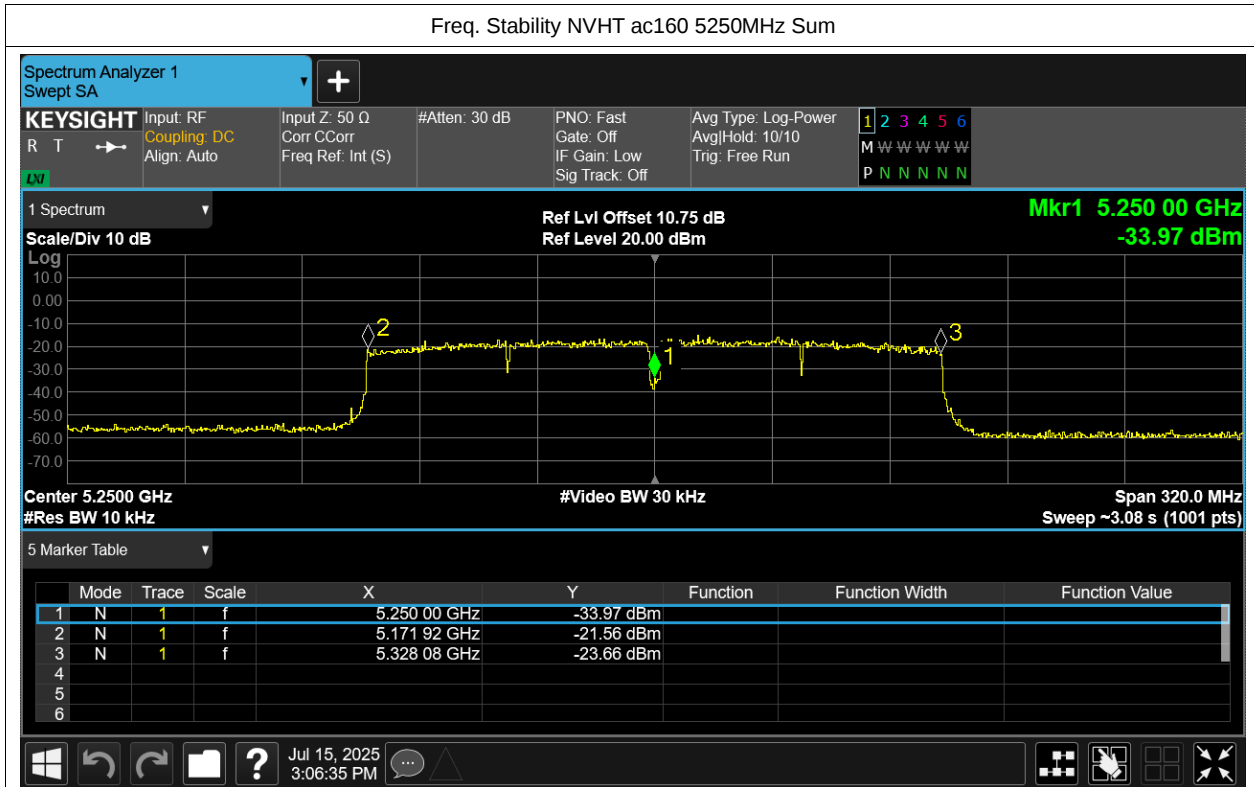
Remark: "NTNV" means Normal Temperature Normal Voltage, "NVHT" means Normal Voltage High Temperature, "NVLT" means Normal Voltage Low Temperature, "LVNT" means Low Voltage Normal Temperature, "HVNT" means High Voltage Normal Temperature.

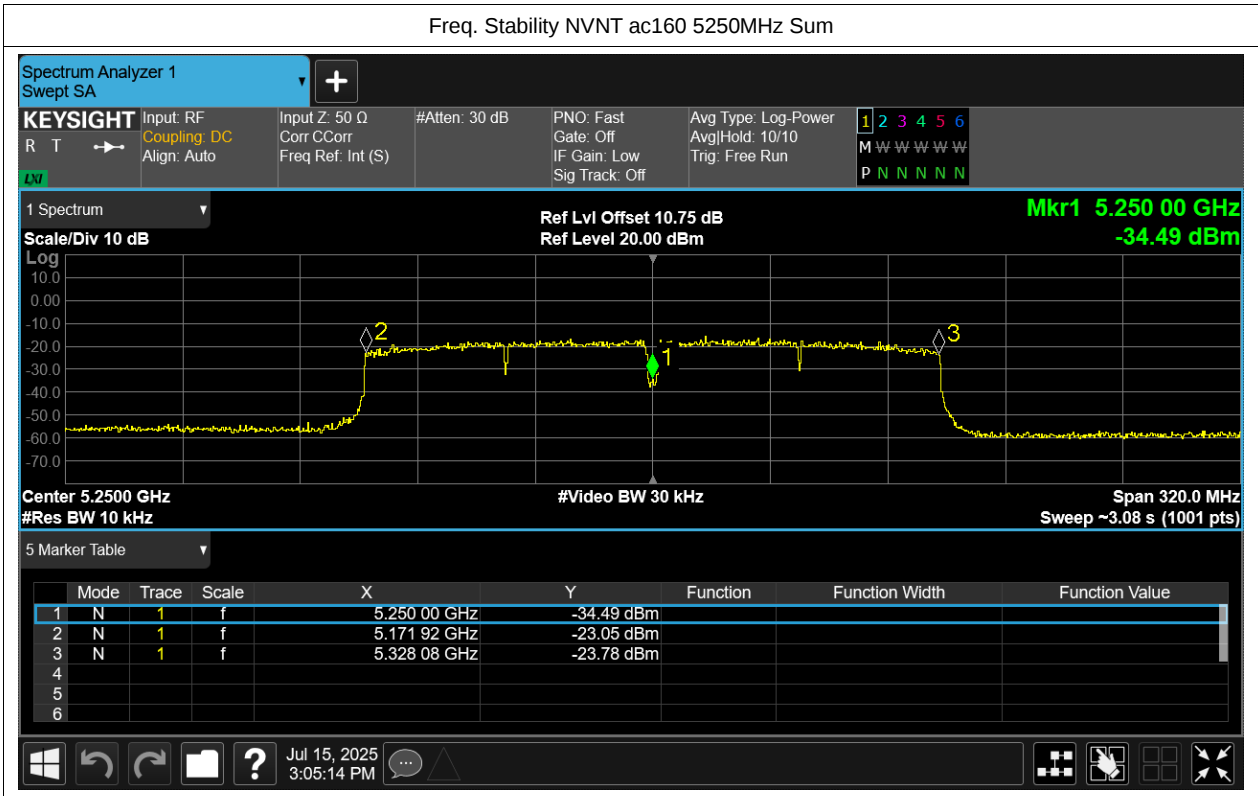
Freq. Stability HVNT ac160 5250MHz Sum



Freq. Stability LVNT ac160 5250MHz Sum





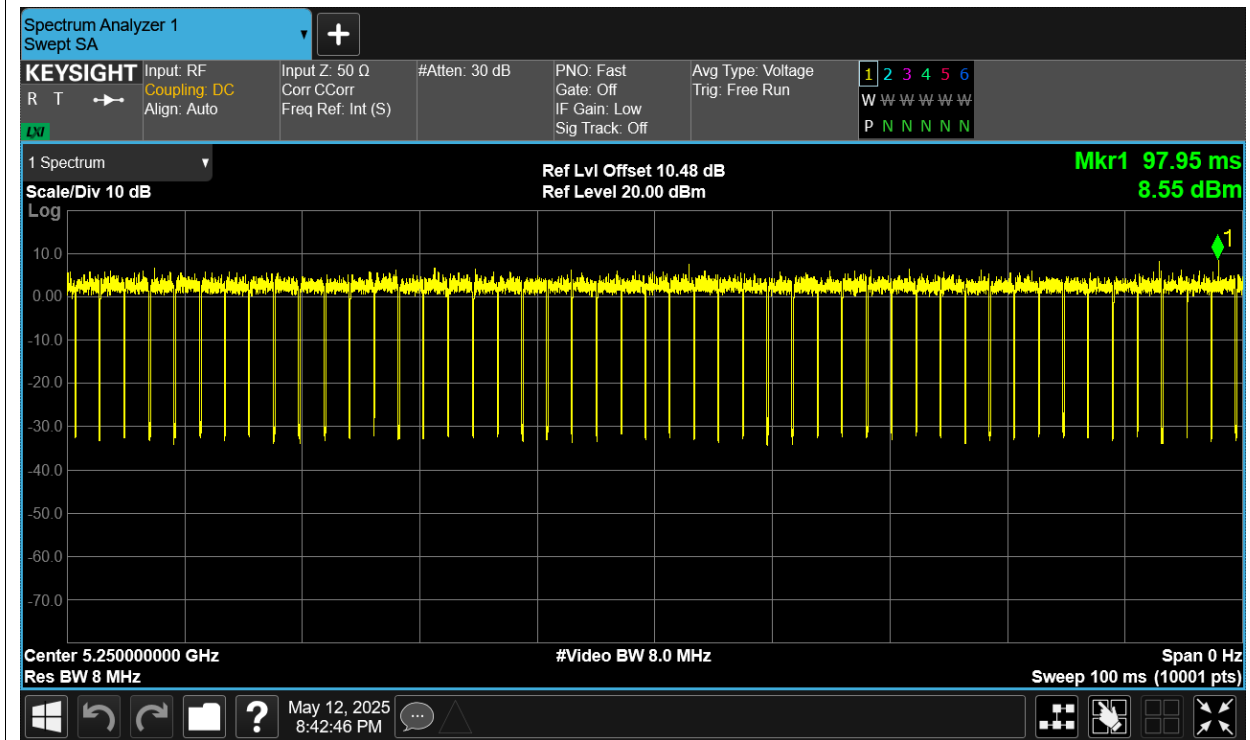


Duty Cycle

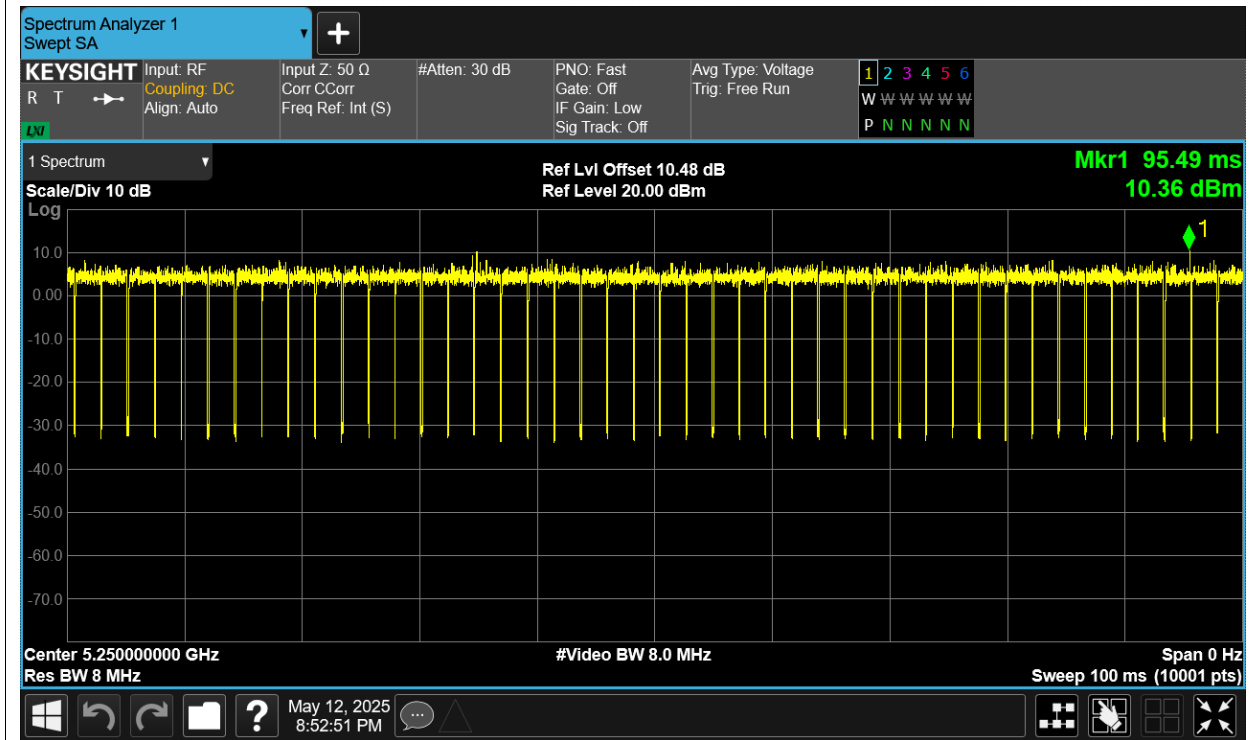
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	ac160	5250	Sum	95.06	0.22
NVNT	ax160	5250	Sum	95.66	0.19

Test Graphs

Duty Cycle NVNT ac160 5250MHz Sum



Duty Cycle NVNT ax160 5250MHz Sum



Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	ac160	5250	Ant1	10.18	0.22	10.4	19	Pass
NVNT	ac160	5250	Ant2	10.91	0.22	11.13	19	Pass
NVNT	ac160	5250	Ant3	11.85	0.22	12.07	19	Pass
NVNT	ac160	5250	Ant4	13.22	0.22	13.44	19	Pass
NVNT	ac160	5250	Sum	17.713	0.22	17.933	19	Pass
NVNT	ax160	5250	Ant1	10.34	0.19	10.53	19	Pass
NVNT	ax160	5250	Ant2	11.25	0.19	11.44	19	Pass
NVNT	ax160	5250	Ant3	12.16	0.19	12.35	19	Pass
NVNT	ax160	5250	Ant4	13.44	0.19	13.63	19	Pass
NVNT	ax160	5250	Sum	17.971	0.19	18.161	19	Pass

Note: The limits need reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

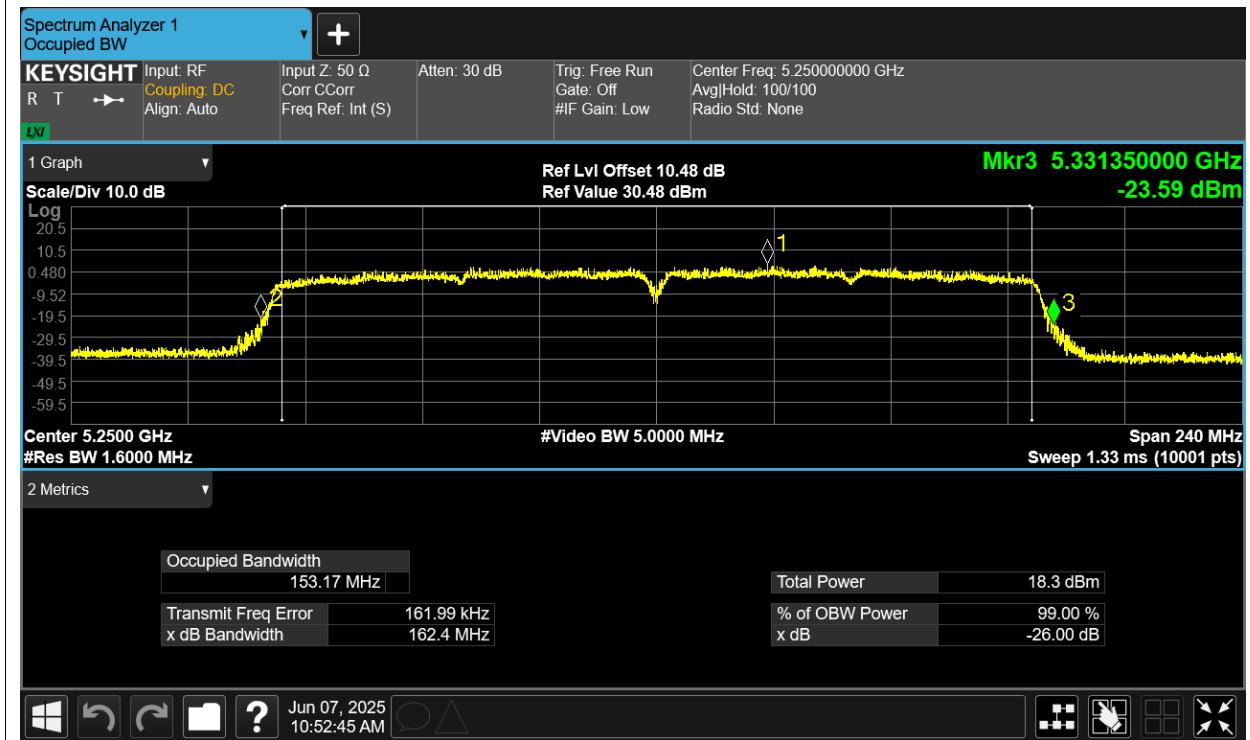
For MIMO mode: ant gain is $5+10*\log_{10}(4)=5+6.02=11.02$ dBi, the limit is $24-(11.02-6)=18.98$ dbm.

-26dB Bandwidth

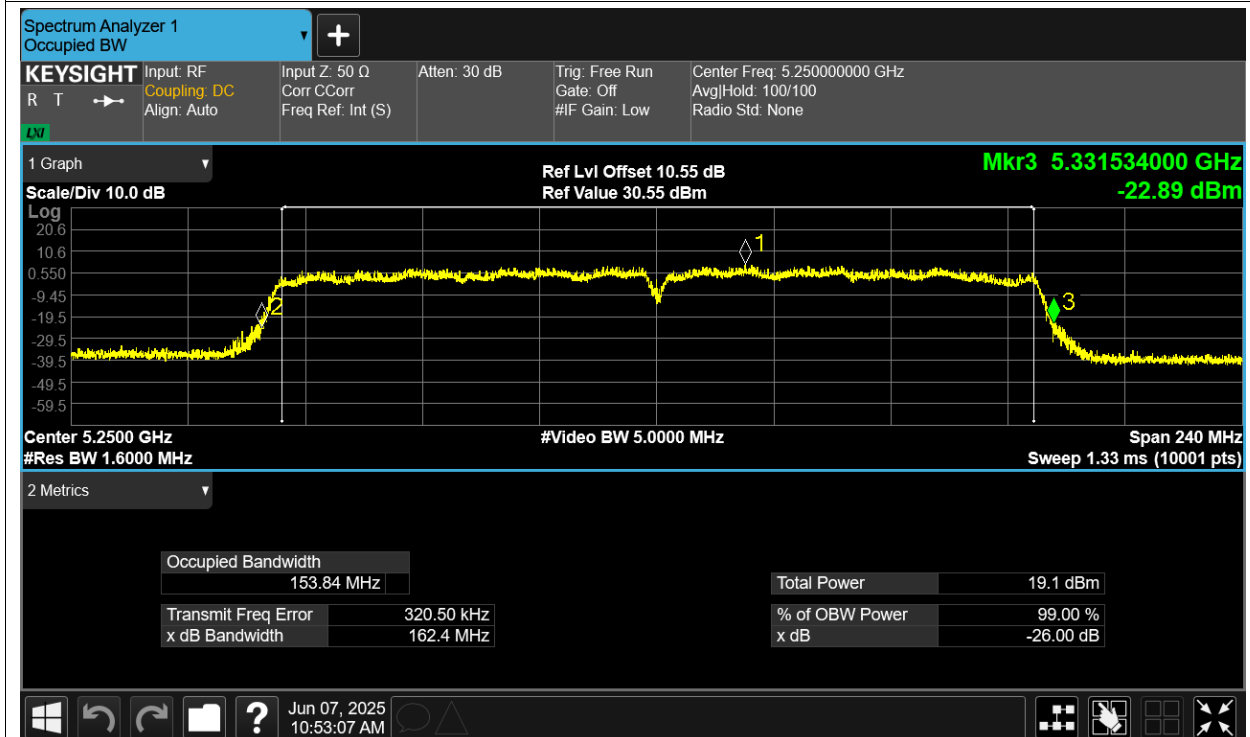
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	ac160	5250	Ant1	162.376
NVNT	ac160	5250	Ant2	162.427
NVNT	ac160	5250	Ant3	162.92
NVNT	ac160	5250	Ant4	162.699
NVNT	ax160	5250	Ant1	162.836
NVNT	ax160	5250	Ant2	164.487
NVNT	ax160	5250	Ant3	162.53
NVNT	ax160	5250	Ant4	162.325

Test Graphs

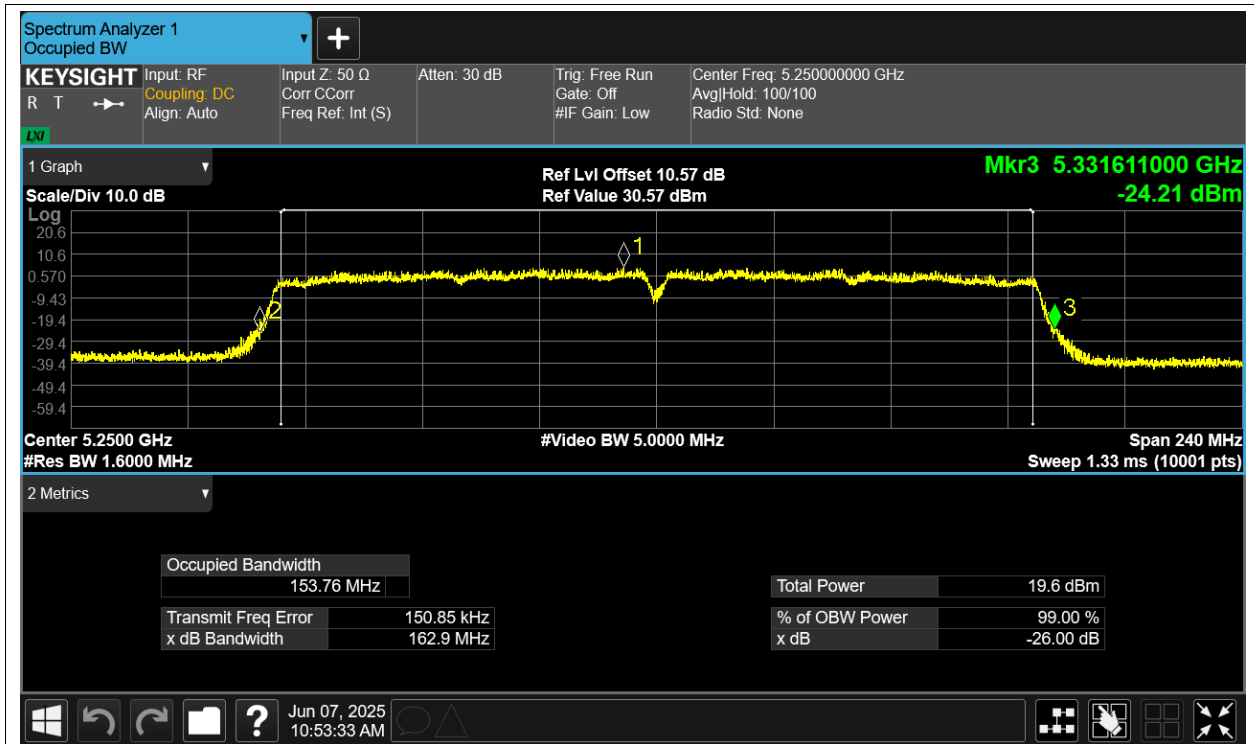
-26dB Bandwidth NVNT ac160 5250MHz Ant1



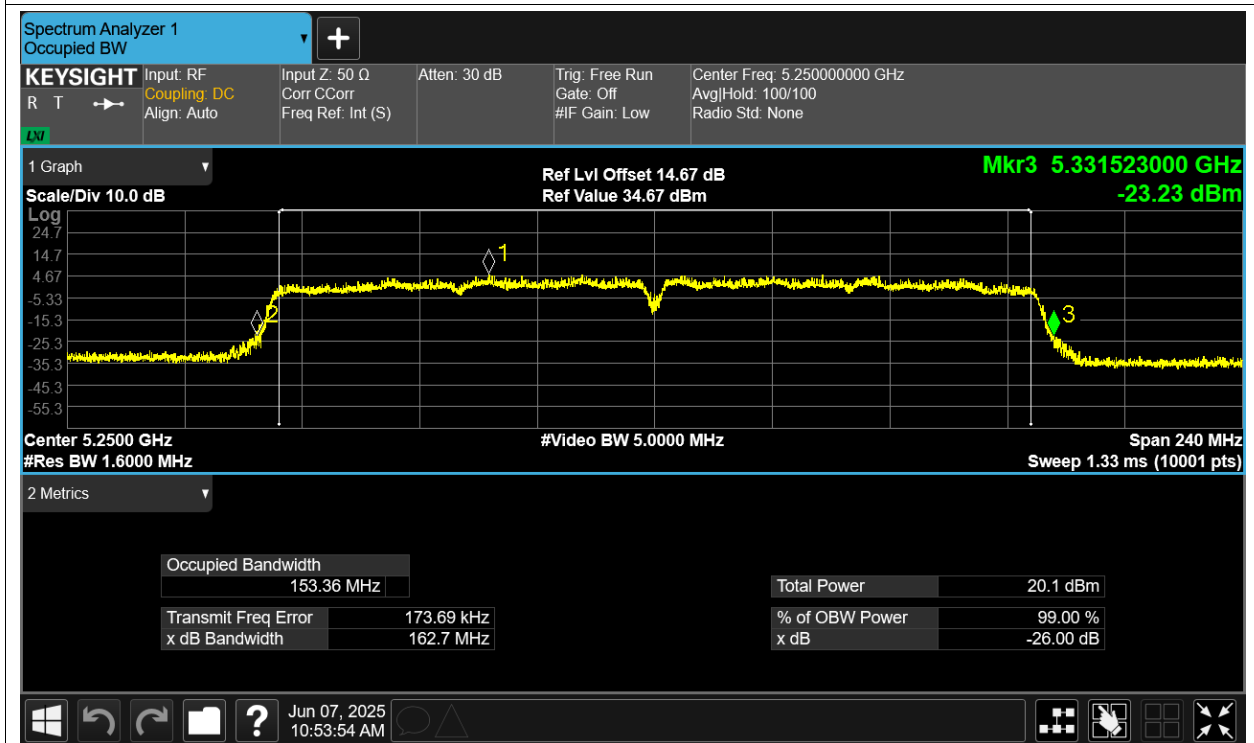
-26dB Bandwidth NVNT ac160 5250MHz Ant2



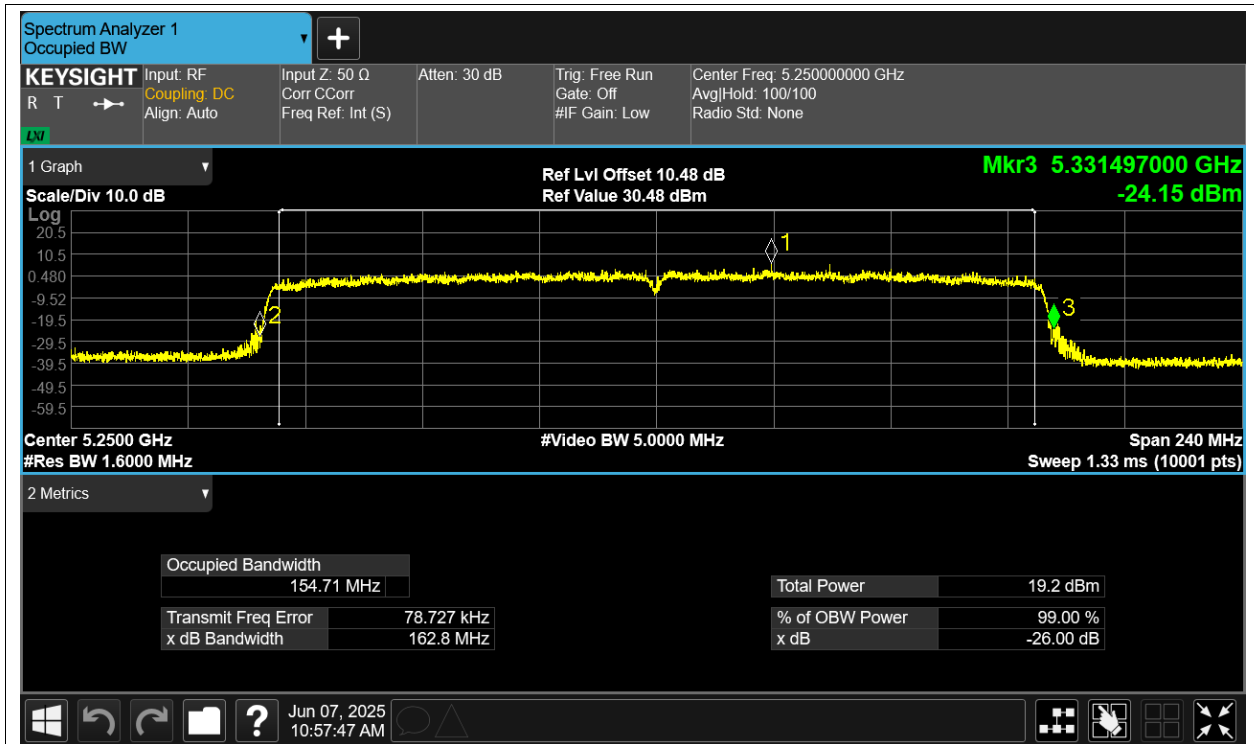
-26dB Bandwidth NVNT ac160 5250MHz Ant3



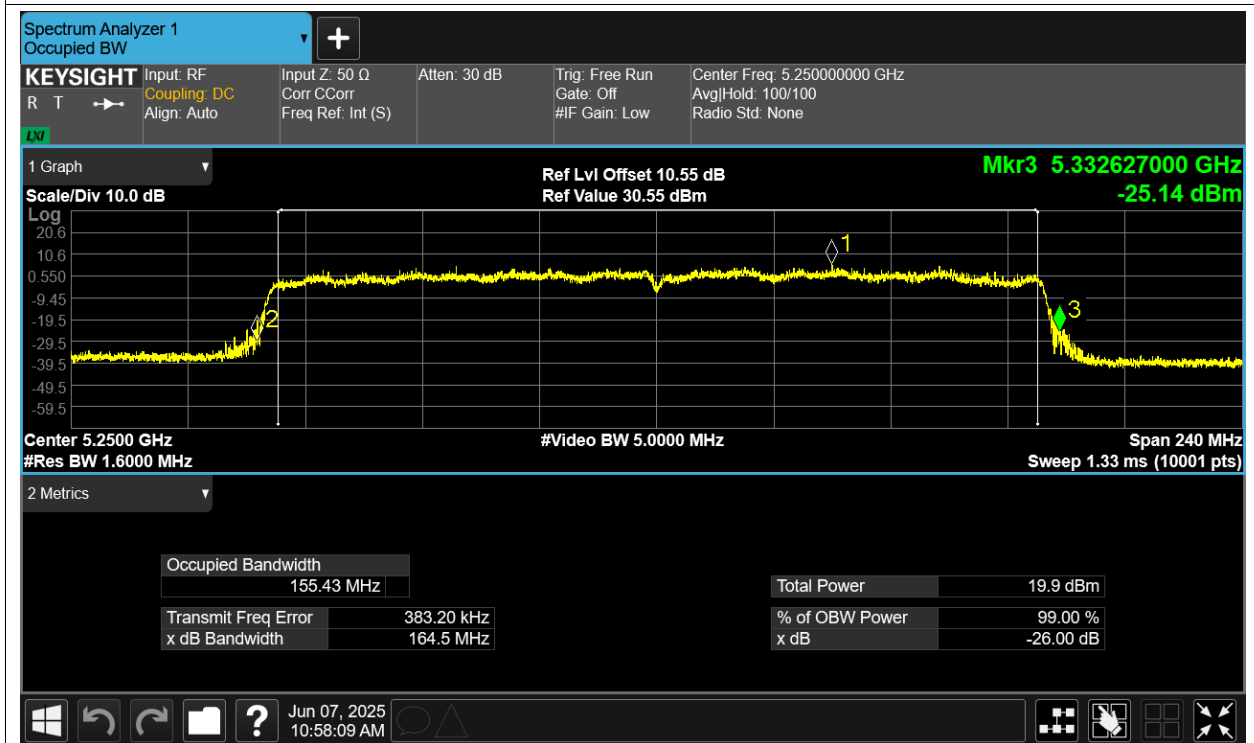
-26dB Bandwidth NVNT ac160 5250MHz Ant4



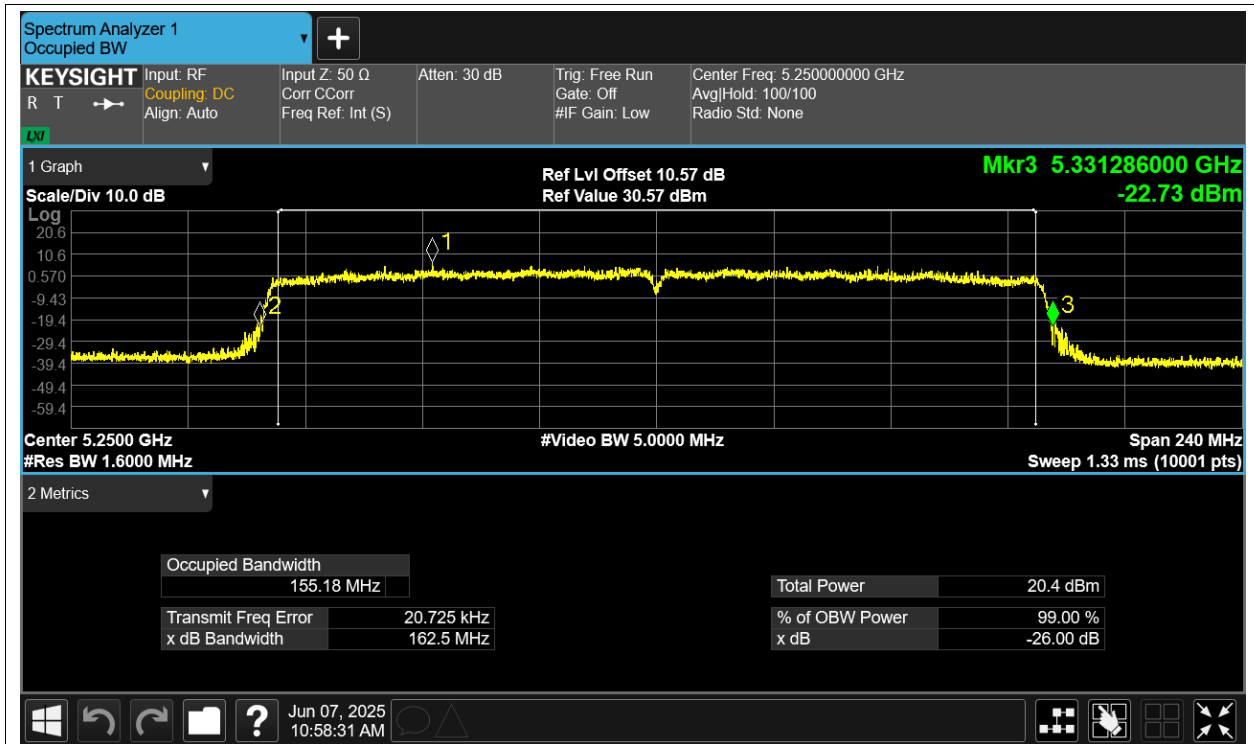
-26dB Bandwidth NVNT ax160 5250MHz Ant1



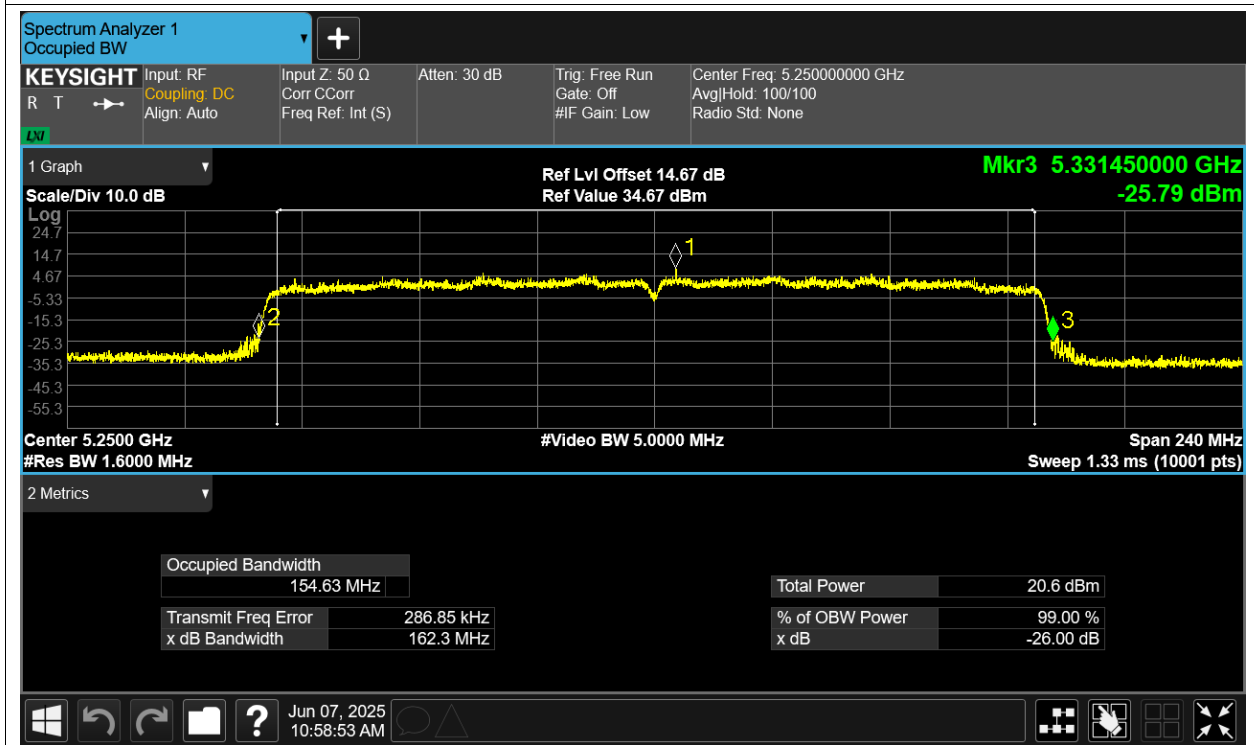
-26dB Bandwidth NVNT ax160 5250MHz Ant2



-26dB Bandwidth NVNT ax160 5250MHz Ant3



-26dB Bandwidth NVNT ax160 5250MHz Ant4

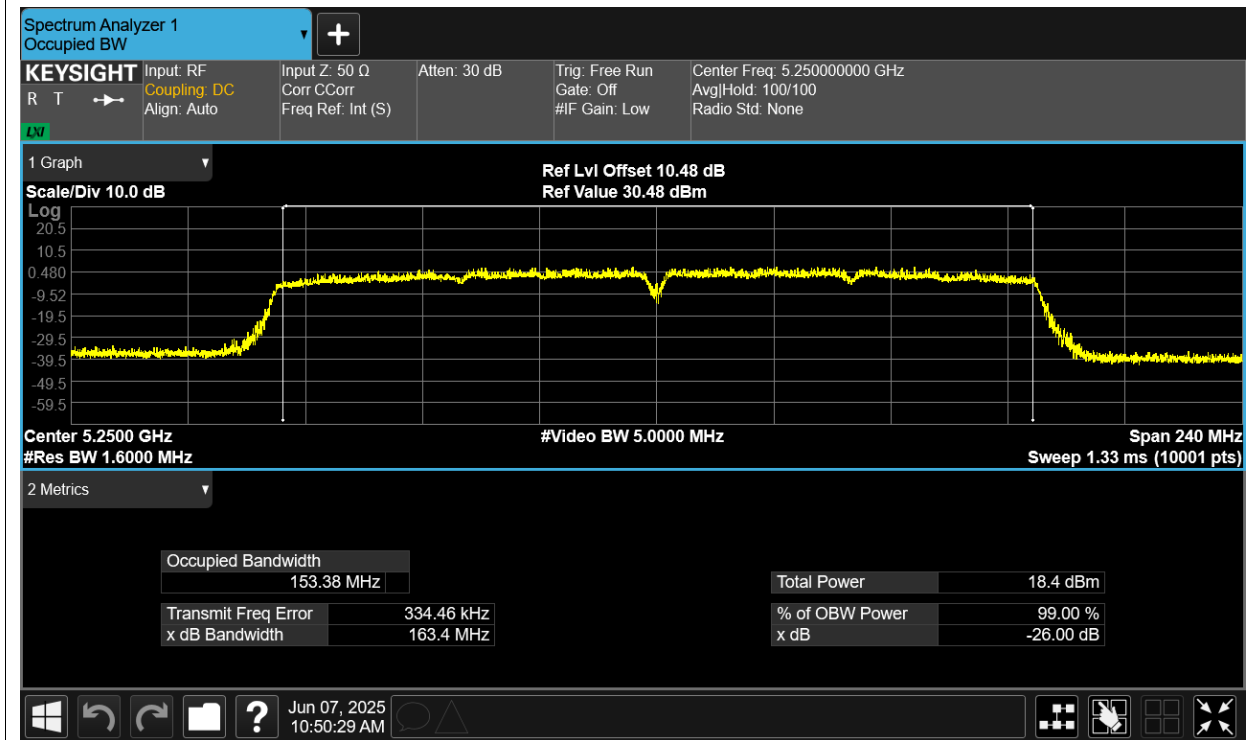


Occupied Channel Bandwidth

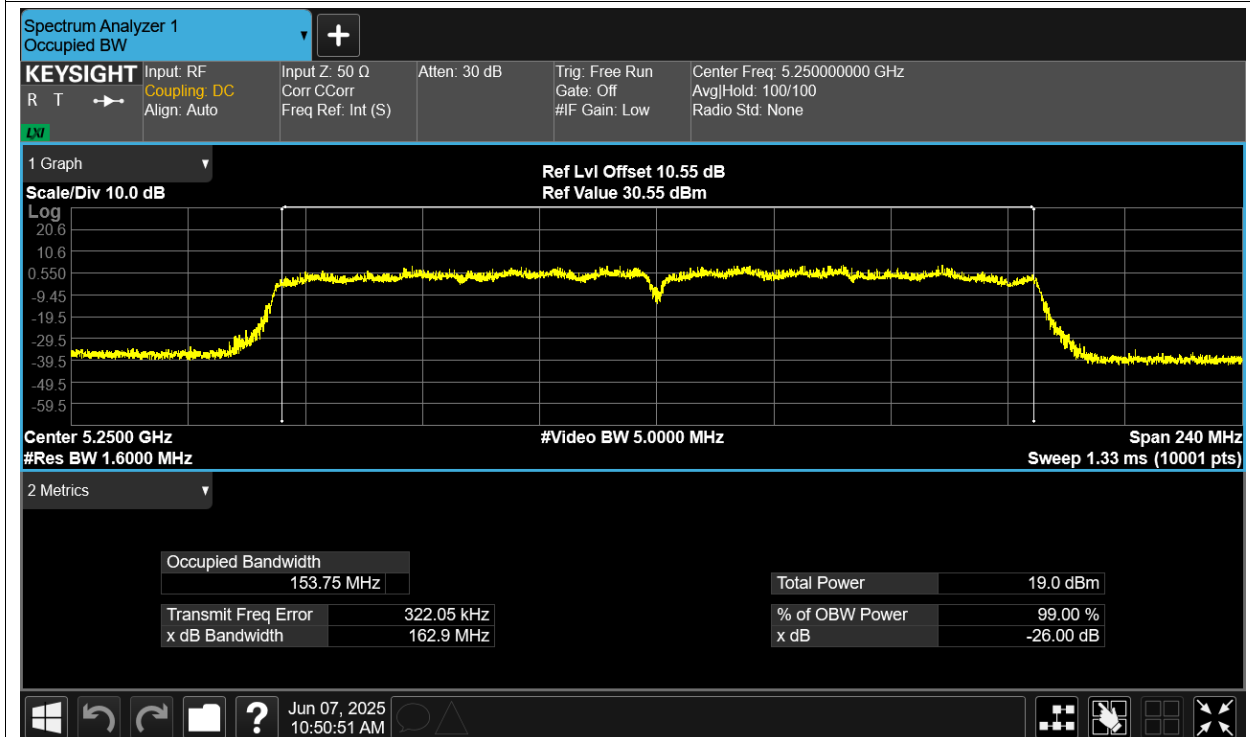
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ac160	5250	Ant1	153.38
NVNT	ac160	5250	Ant2	153.749
NVNT	ac160	5250	Ant3	153.829
NVNT	ac160	5250	Ant4	153.126
NVNT	ax160	5250	Ant1	154.748
NVNT	ax160	5250	Ant2	155.569
NVNT	ax160	5250	Ant3	155.125
NVNT	ax160	5250	Ant4	154.771

Test Graphs

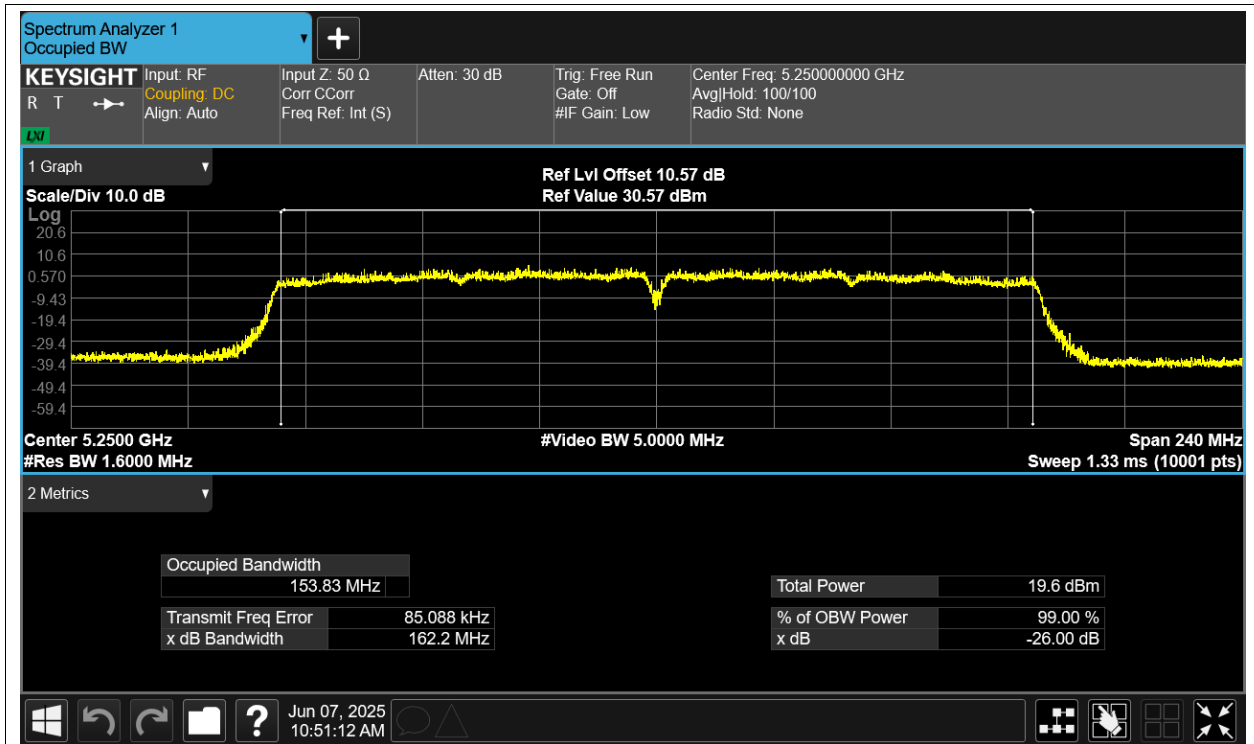
OBW NVNT ac160 5250MHz Ant1



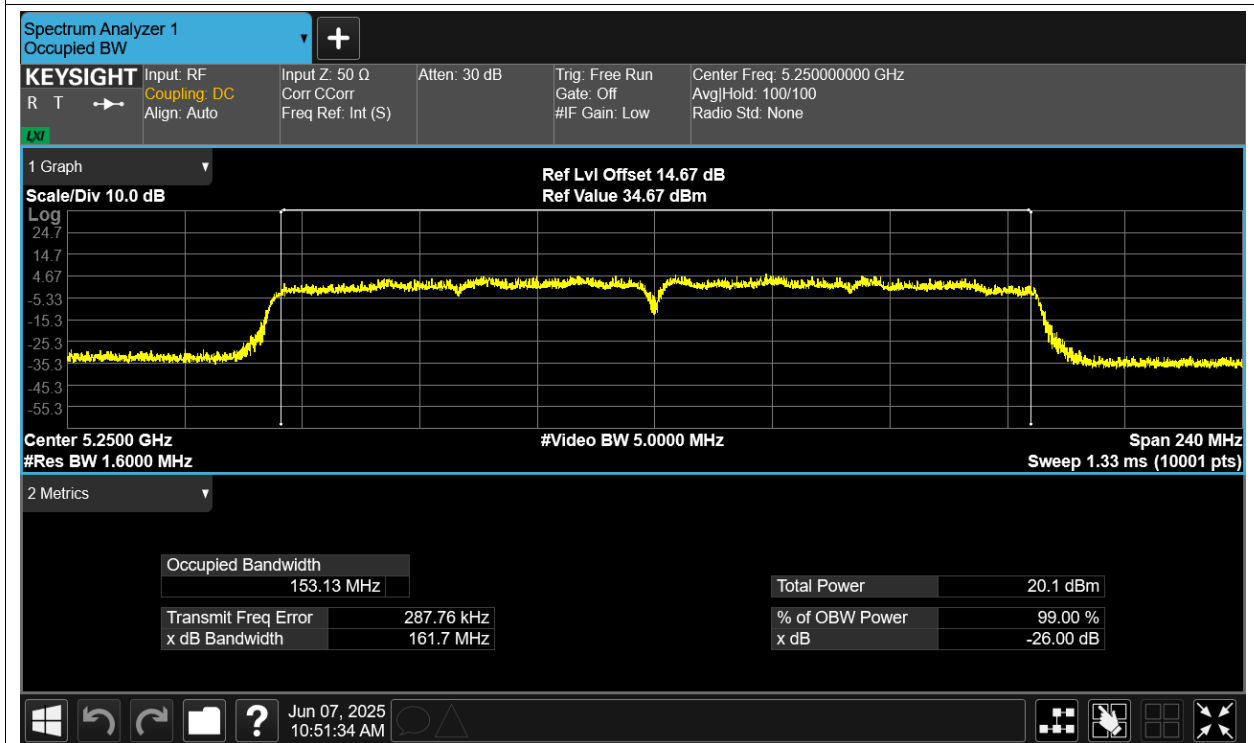
OBW NVNT ac160 5250MHz Ant2



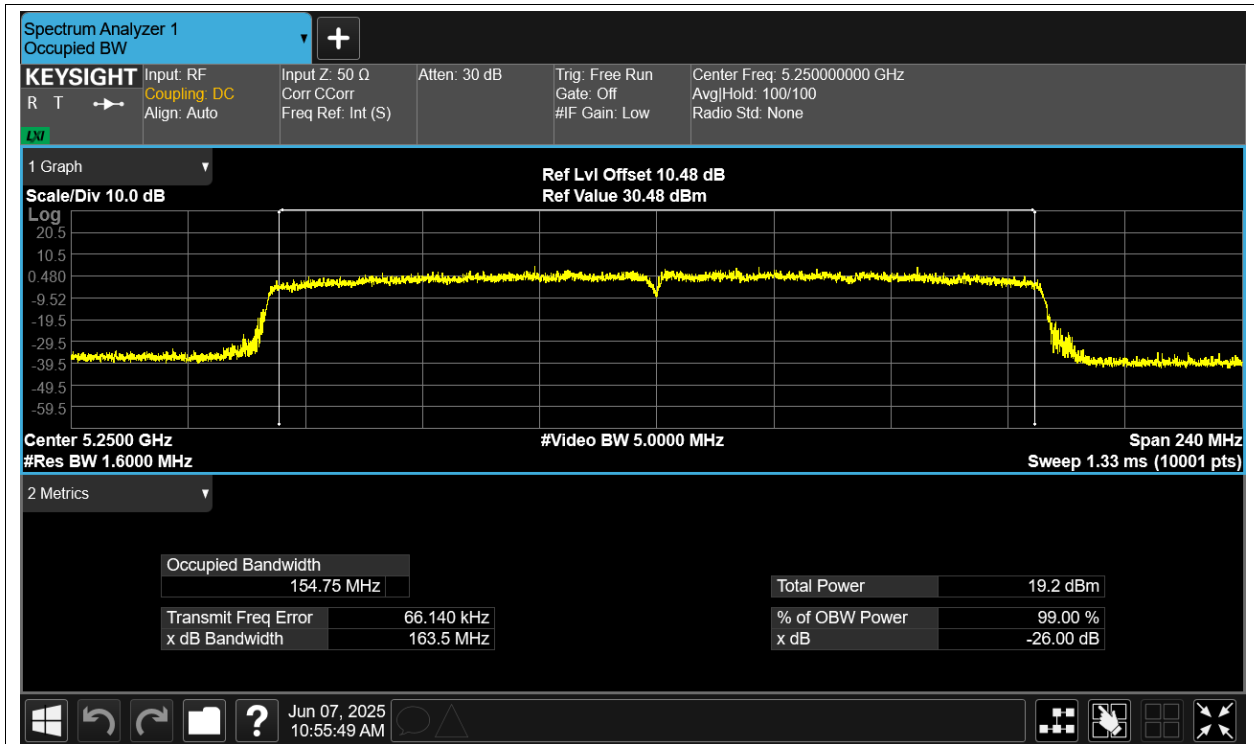
OBW NVNT ac160 5250MHz Ant3



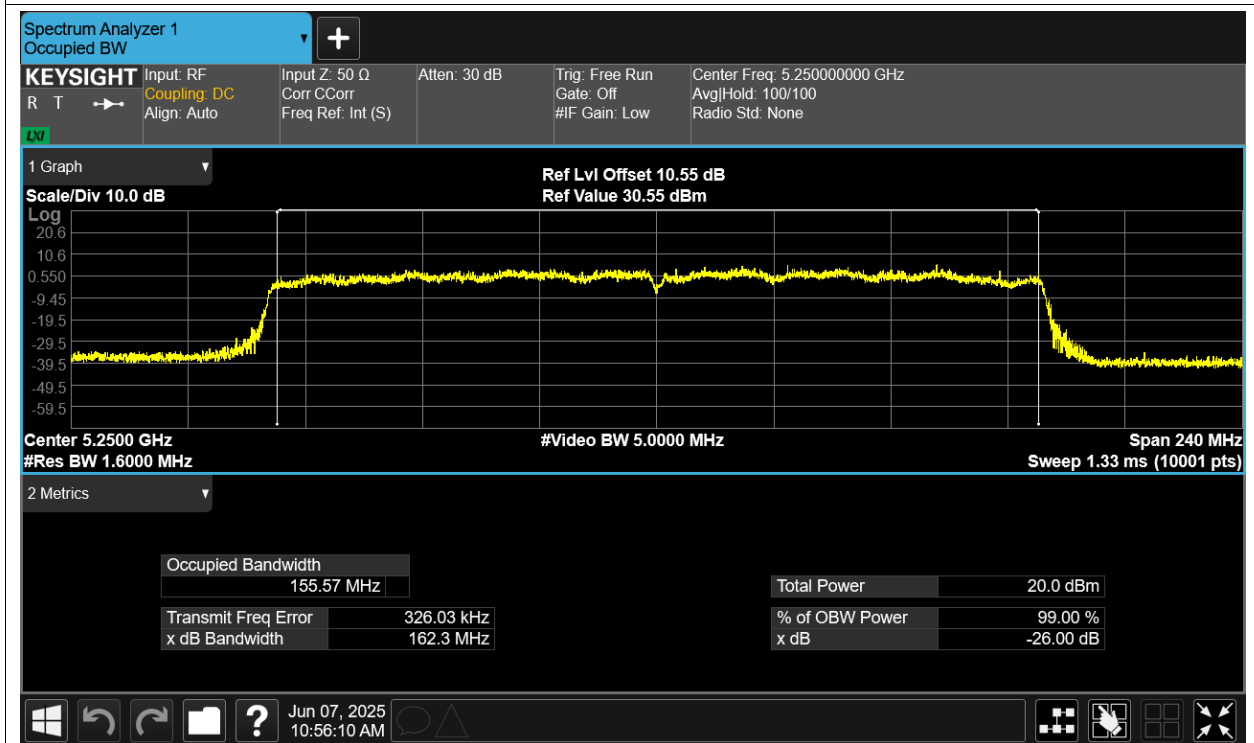
OBW NVNT ac160 5250MHz Ant4



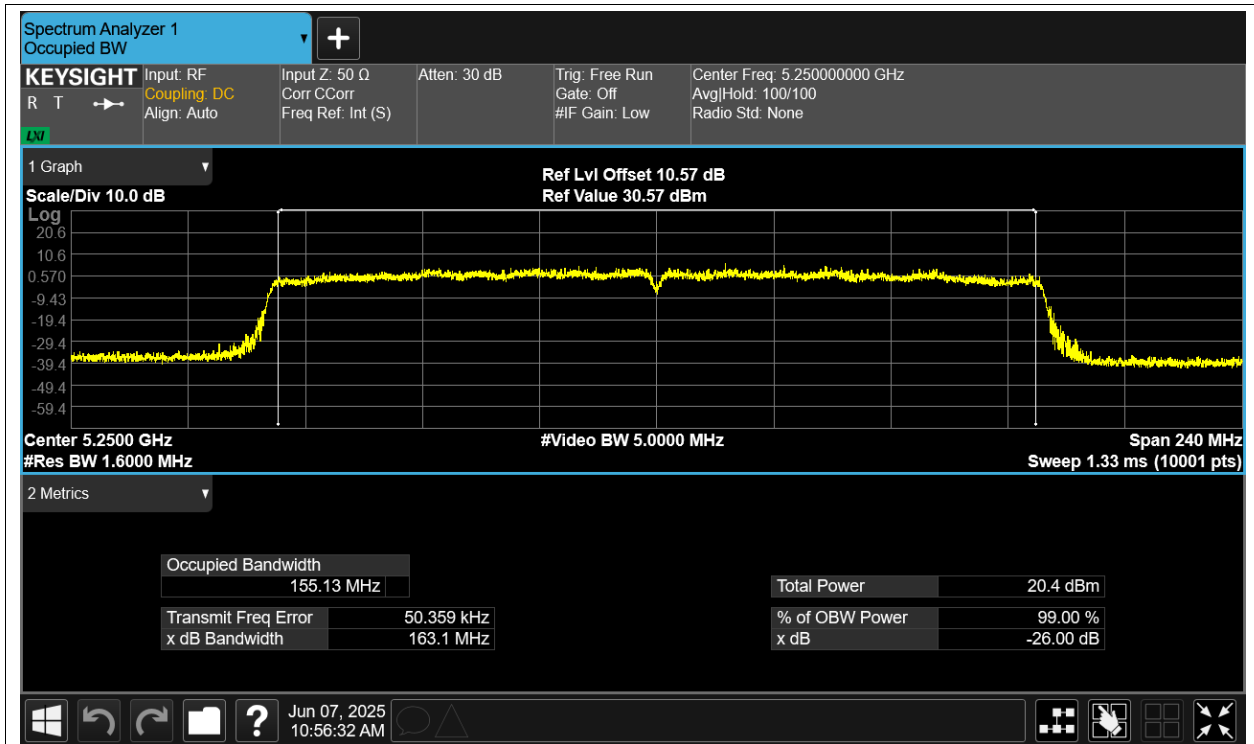
OBW NVNT ax160 5250MHz Ant1



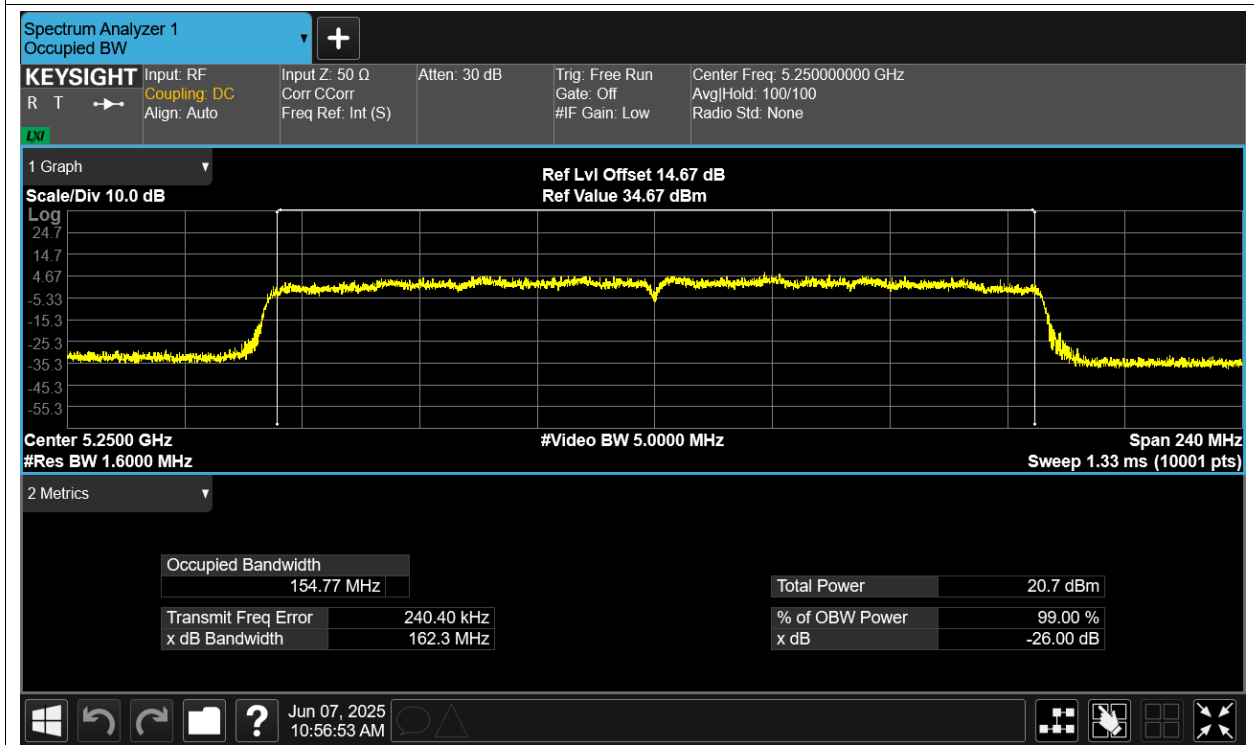
OBW NVNT ax160 5250MHz Ant2



OBW NVNT ax160 5250MHz Ant3



OBW NVNT ax160 5250MHz Ant4



Maximum Power Spectral Density Level

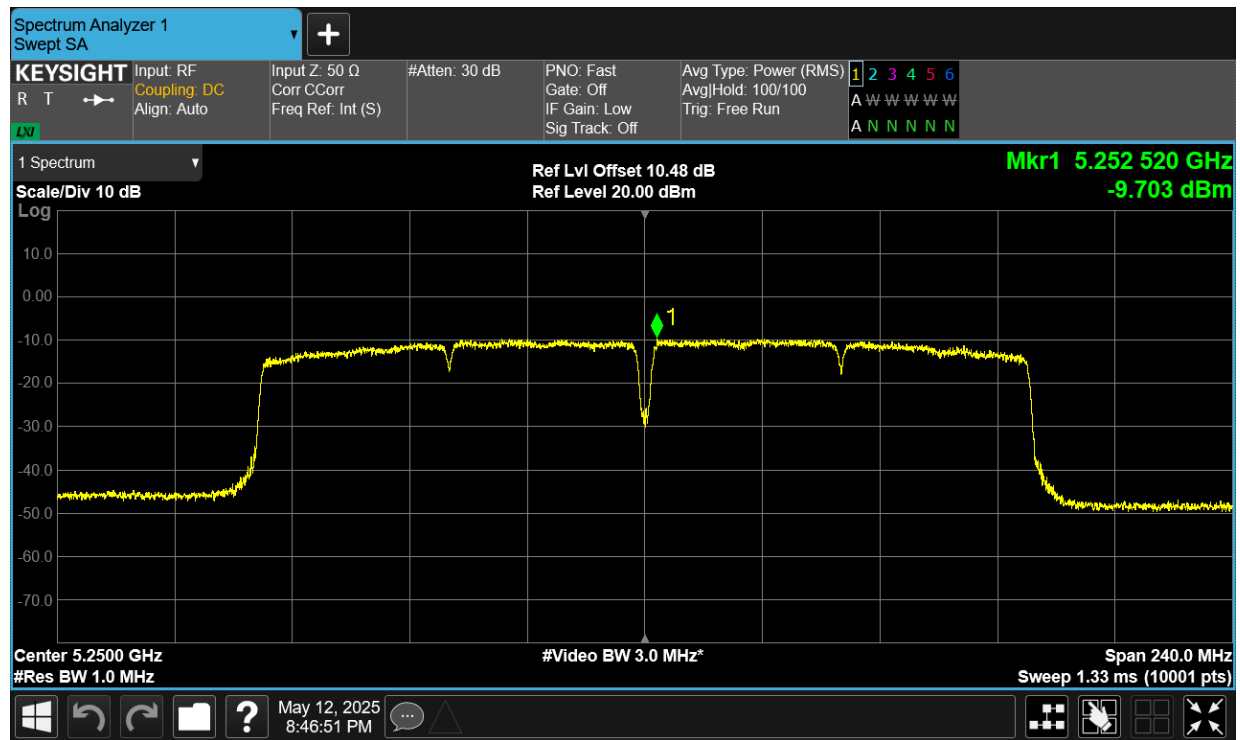
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ac160	5250	Ant1	-9.703	5.98	Pass
NVNT	ac160	5250	Ant2	-7.674	5.98	Pass
NVNT	ac160	5250	Ant3	-7.332	5.98	Pass
NVNT	ac160	5250	Ant4	-6.356	5.98	Pass
NVNT	ac160	5250	Sum	-1.585	5.98	Pass
NVNT	ax160	5250	Ant1	-8.891	5.98	Pass
NVNT	ax160	5250	Ant2	-7.084	5.98	Pass
NVNT	ax160	5250	Ant3	-6.965	5.98	Pass
NVNT	ax160	5250	Ant4	-6.396	5.98	Pass
NVNT	ax160	5250	Sum	-1.219	5.98	Pass

Note: The limits need reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

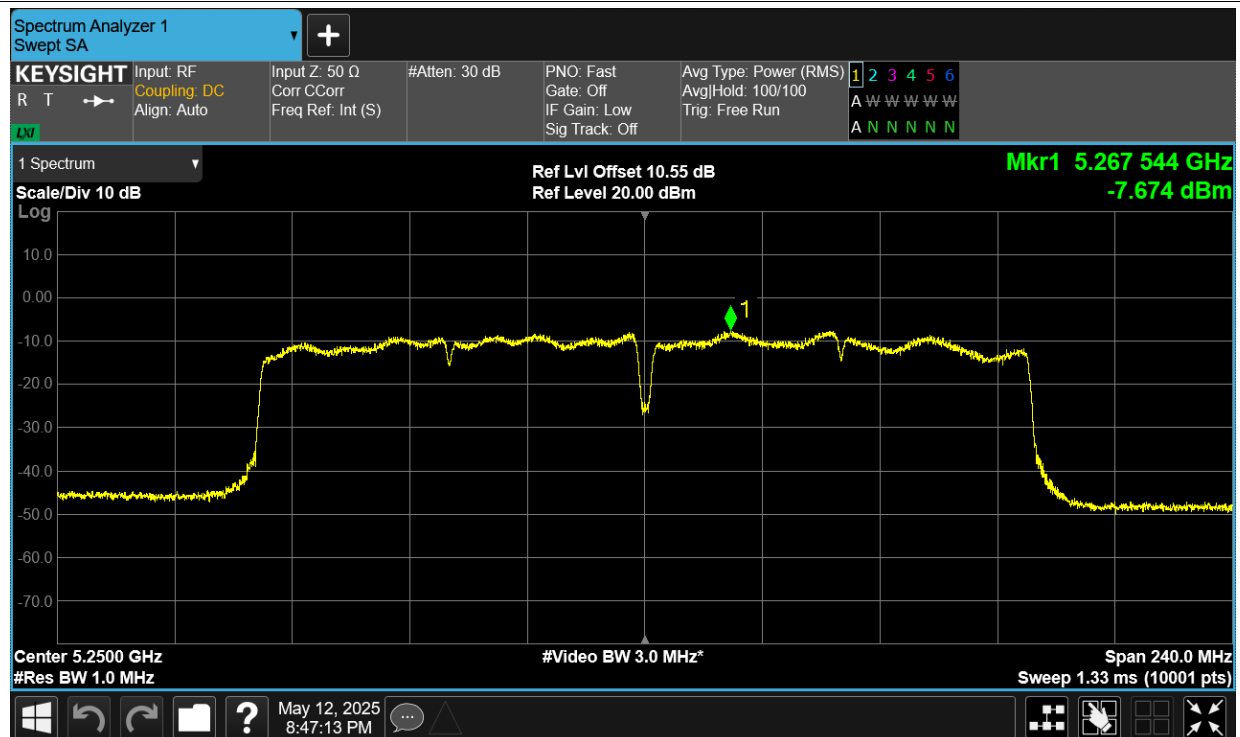
For MIMO mode: ant gain is $5+10*\log_{10}(4)=5+6.02=11.02$ dBi, the limit is $11-(11.02-6)=5.98$ dbm.

Test Graphs

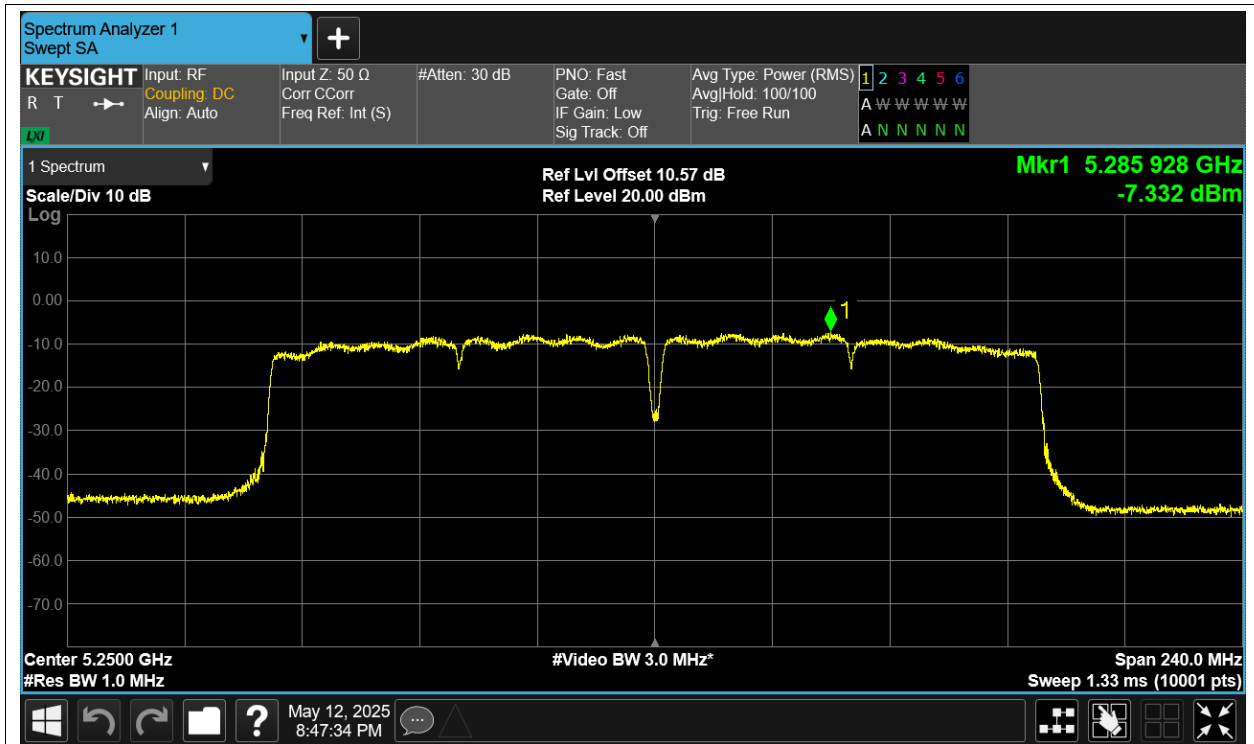
PSD NVNT ac160 5250MHz Ant1



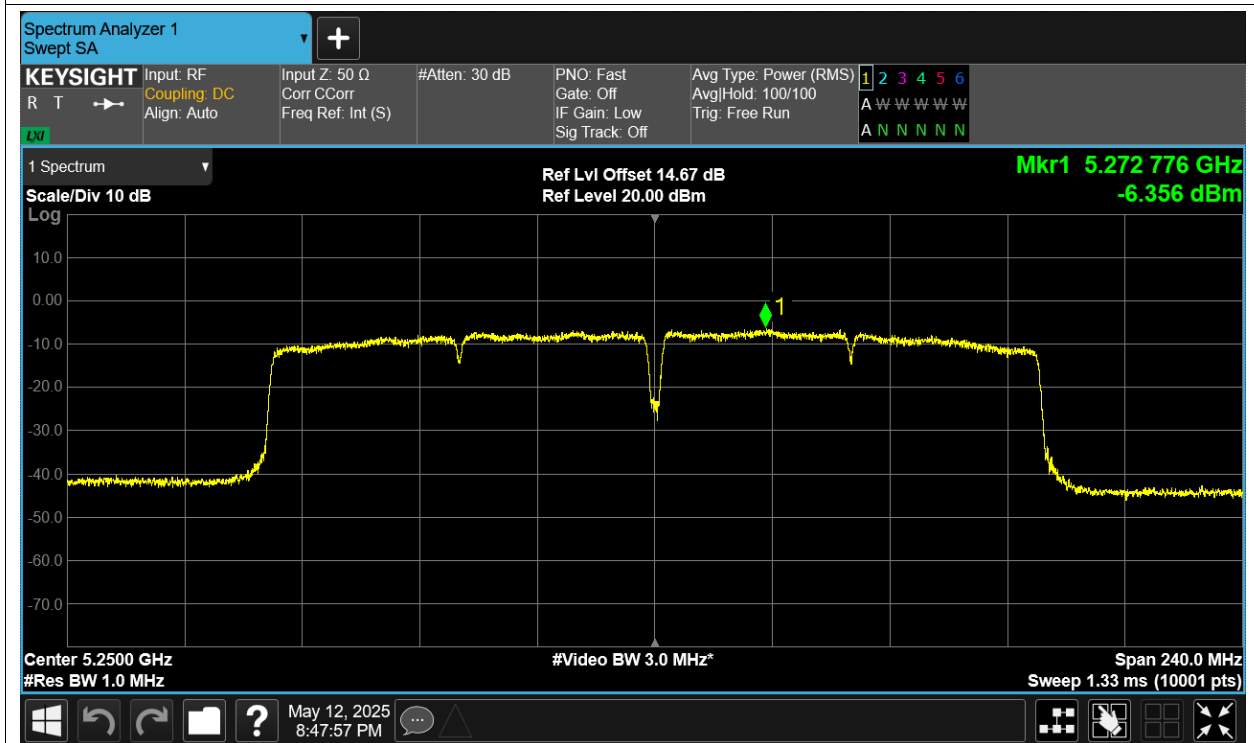
PSD NVNT ac160 5250MHz Ant2



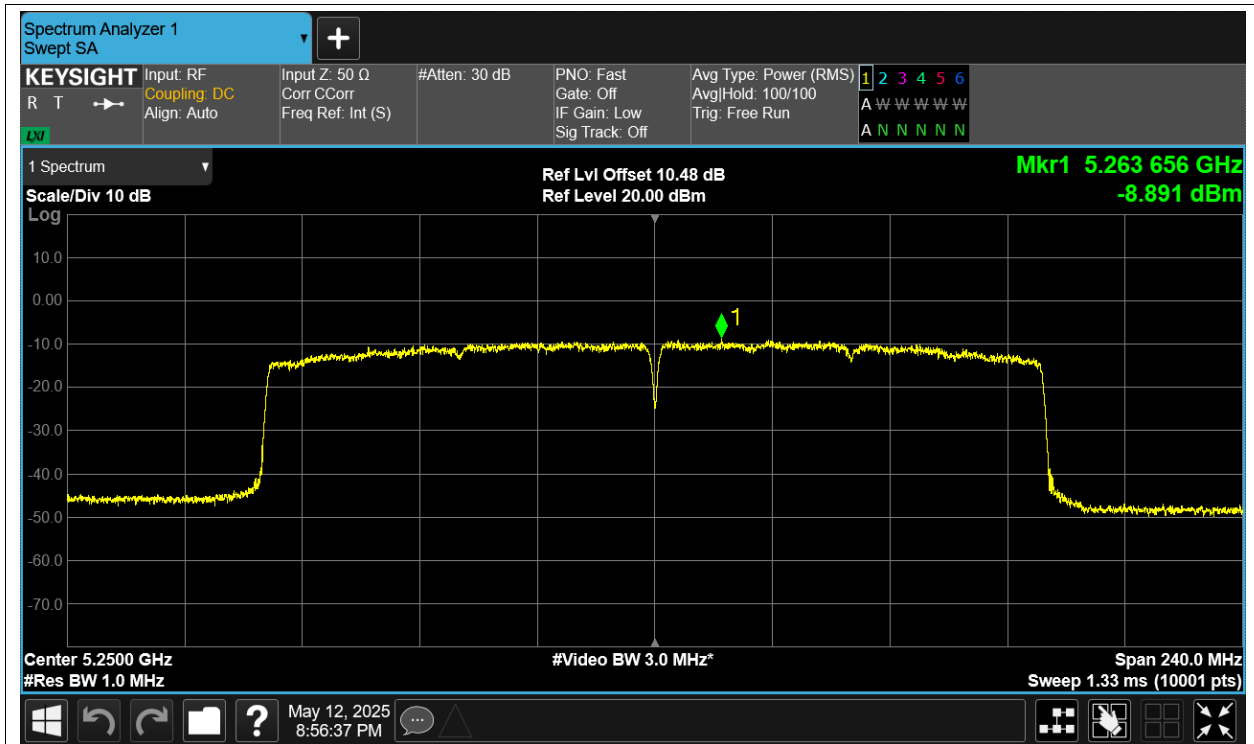
PSD NVNT ac160 5250MHz Ant3



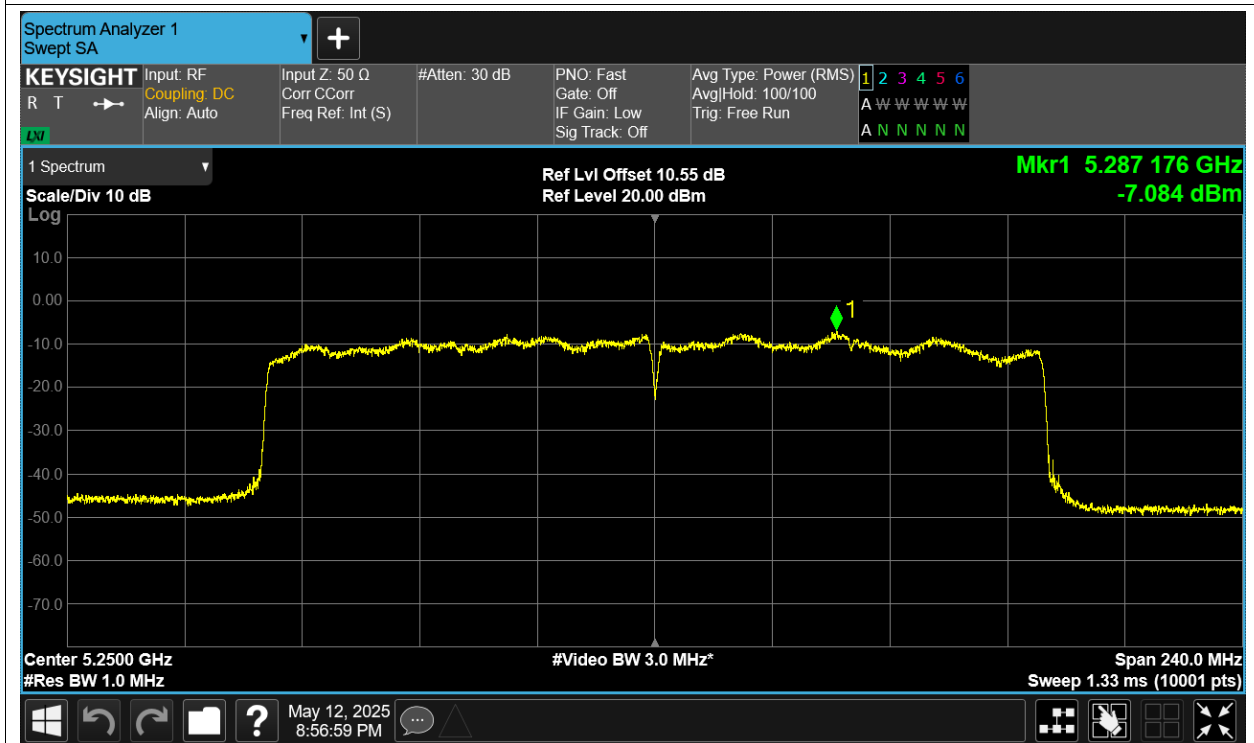
PSD NVNT ac160 5250MHz Ant4



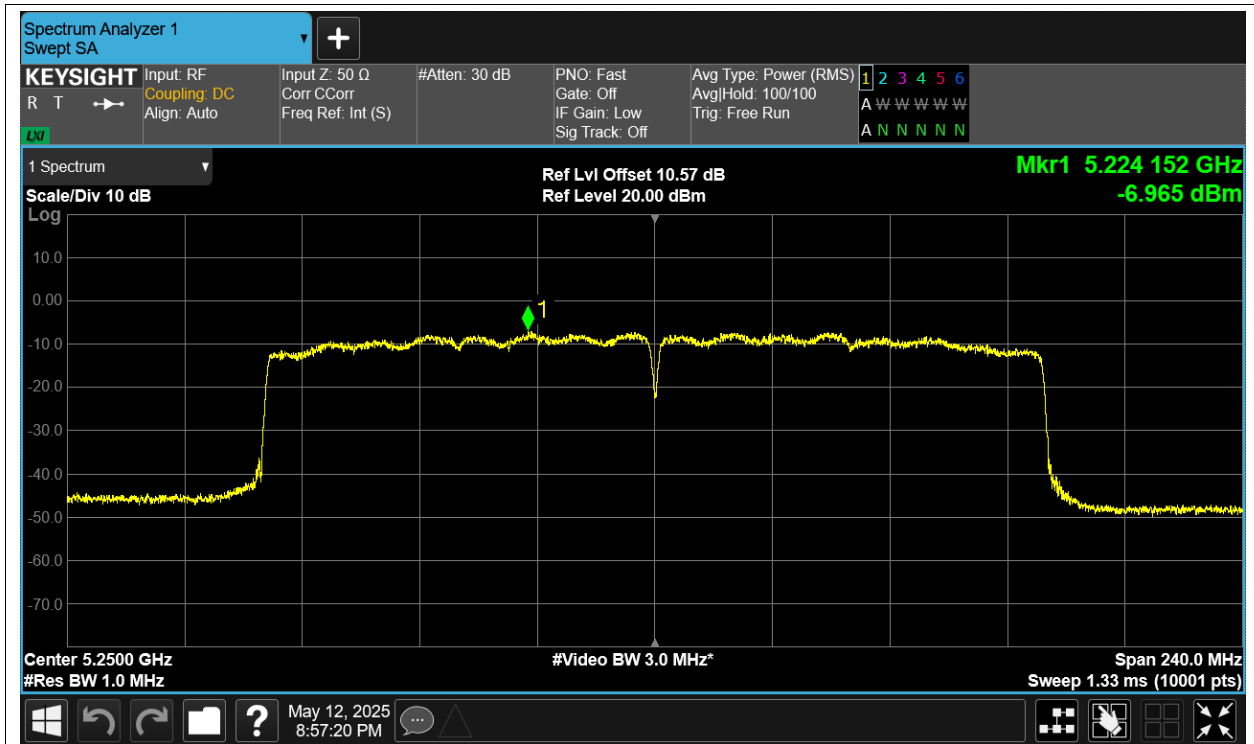
PSD NVNT ax160 5250MHz Ant1



PSD NVNT ax160 5250MHz Ant2



PSD NVNT ax160 5250MHz Ant3



PSD NVNT ax160 5250MHz Ant4

