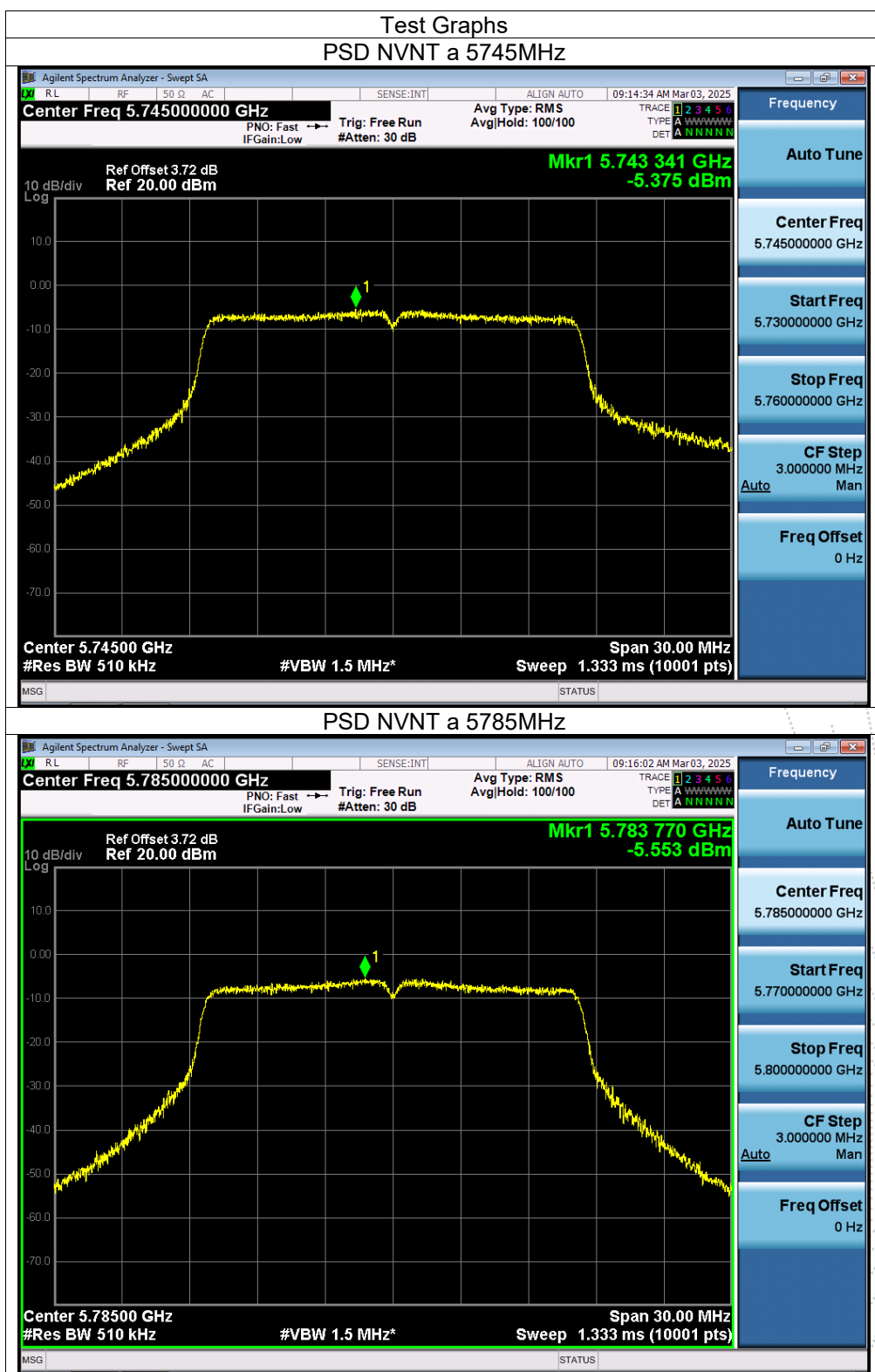
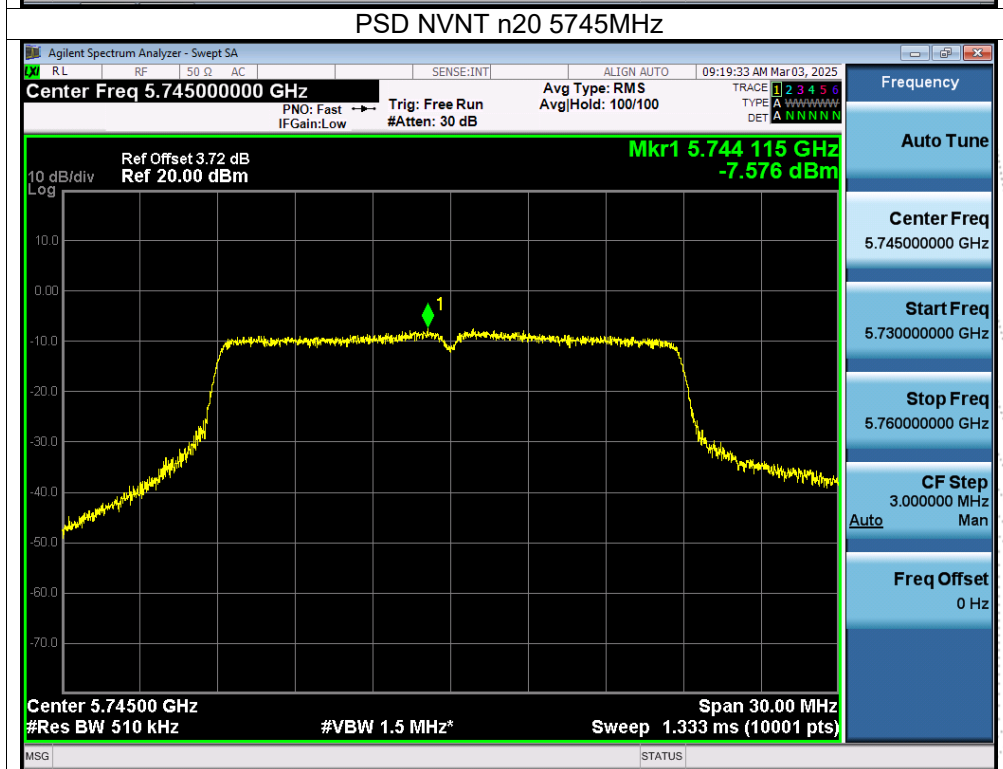
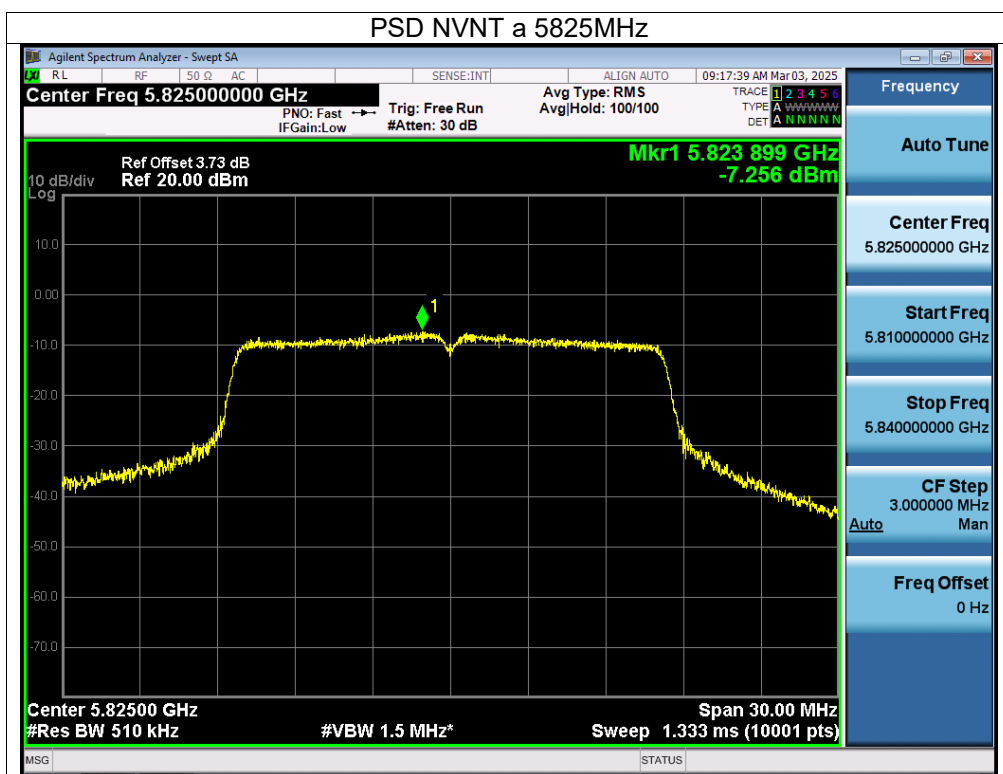
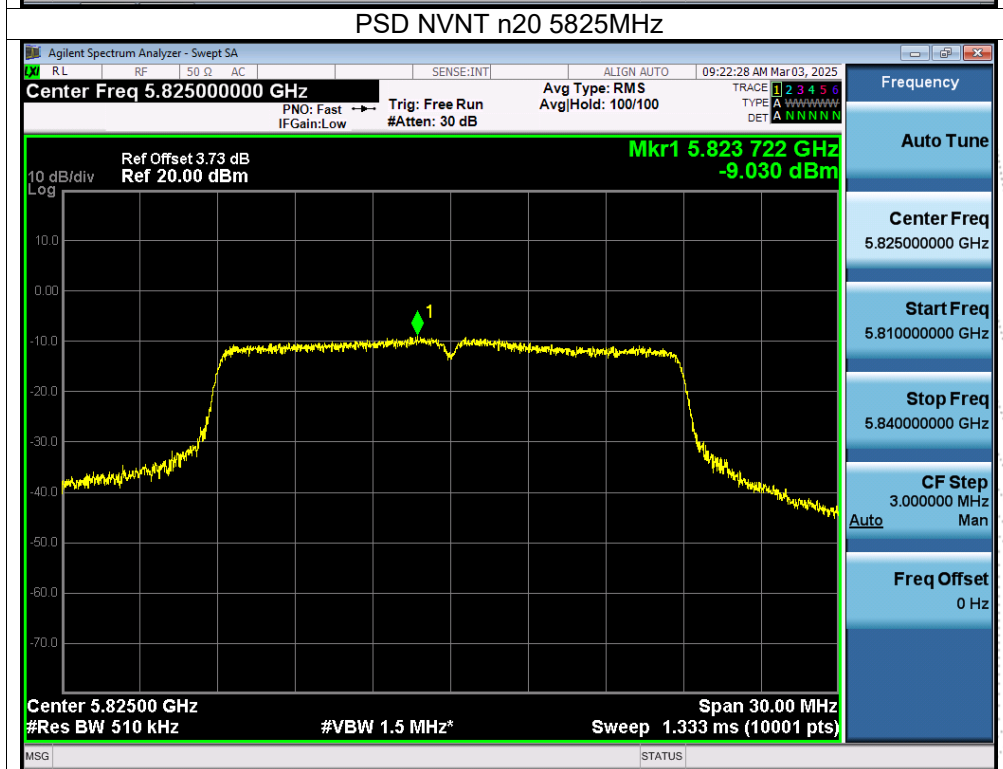
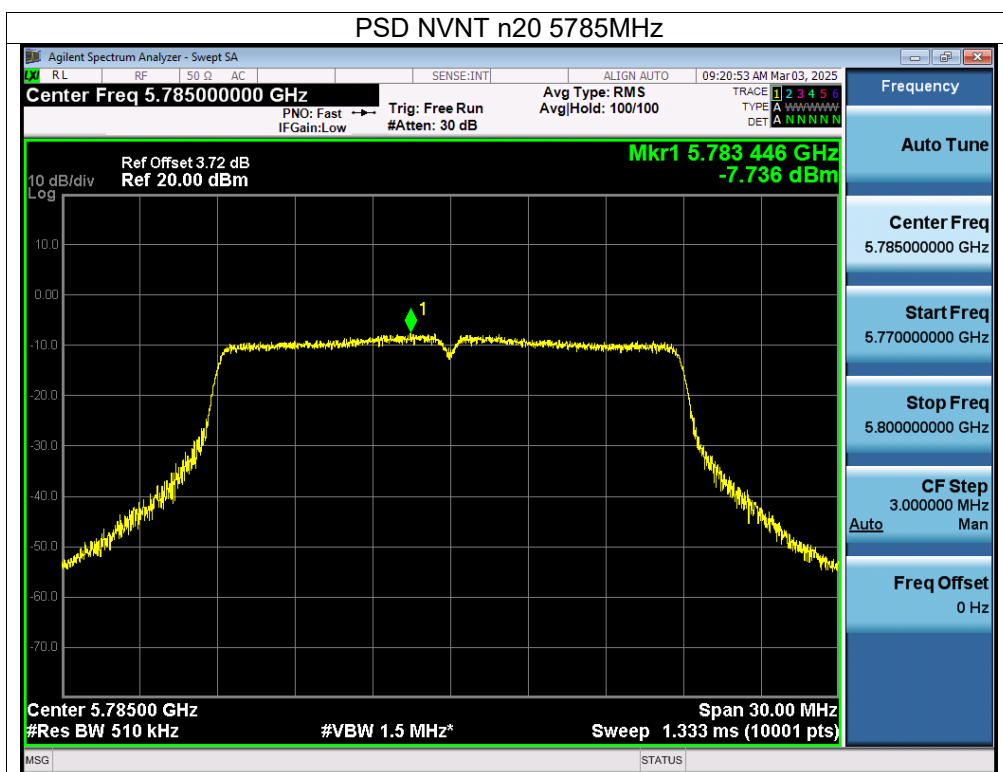
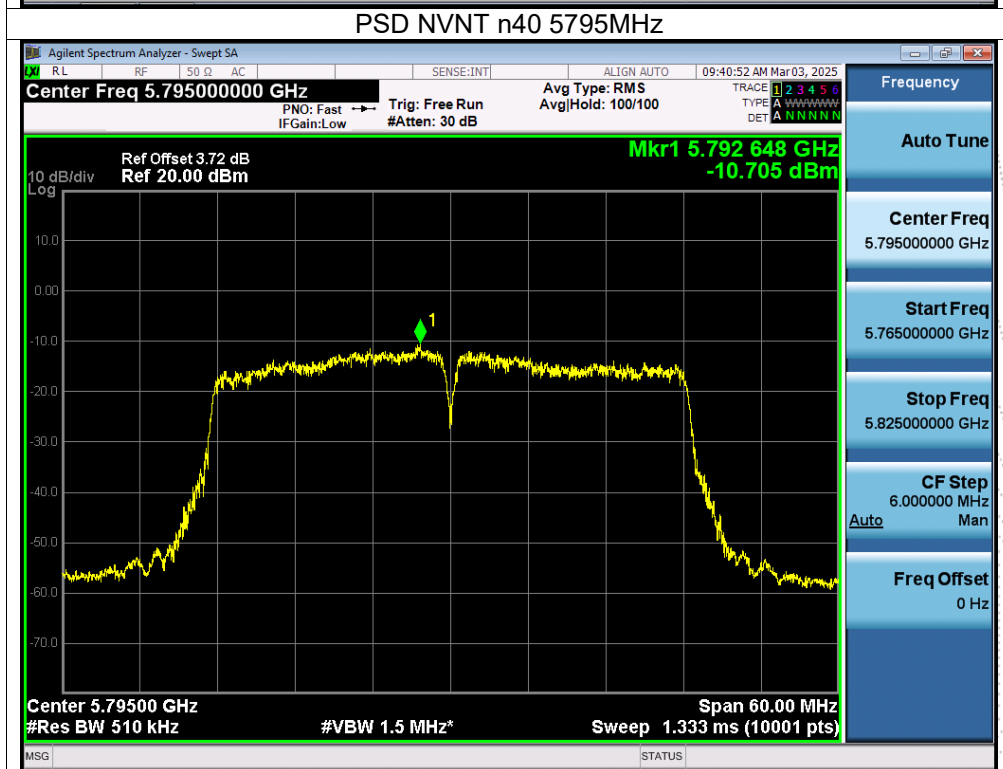
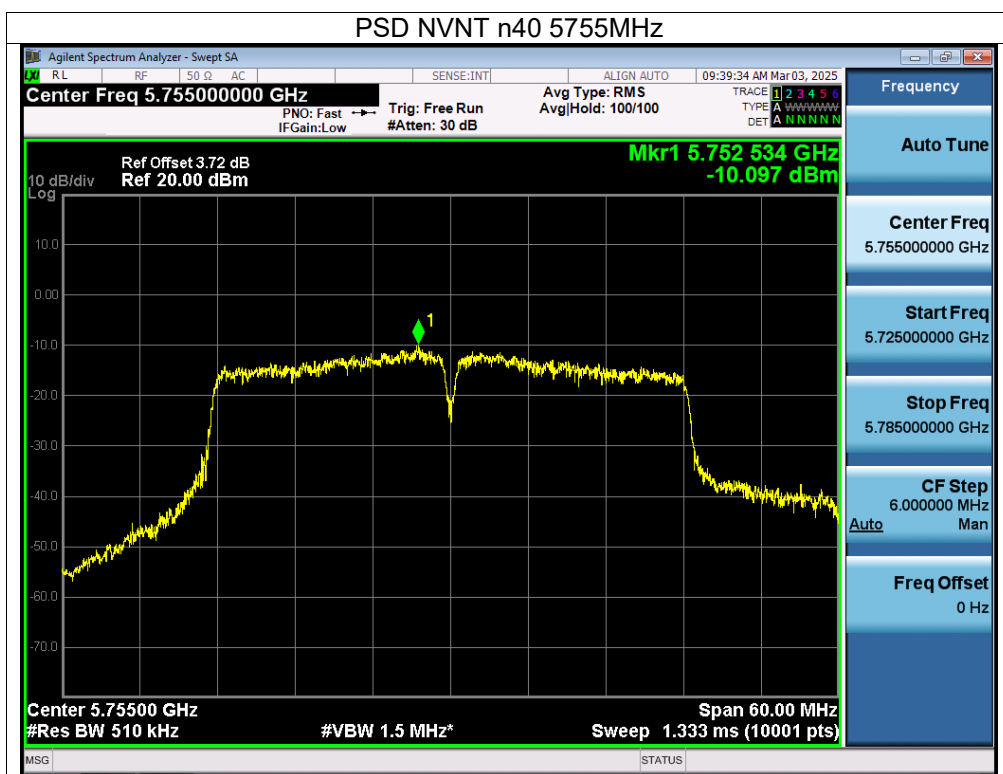


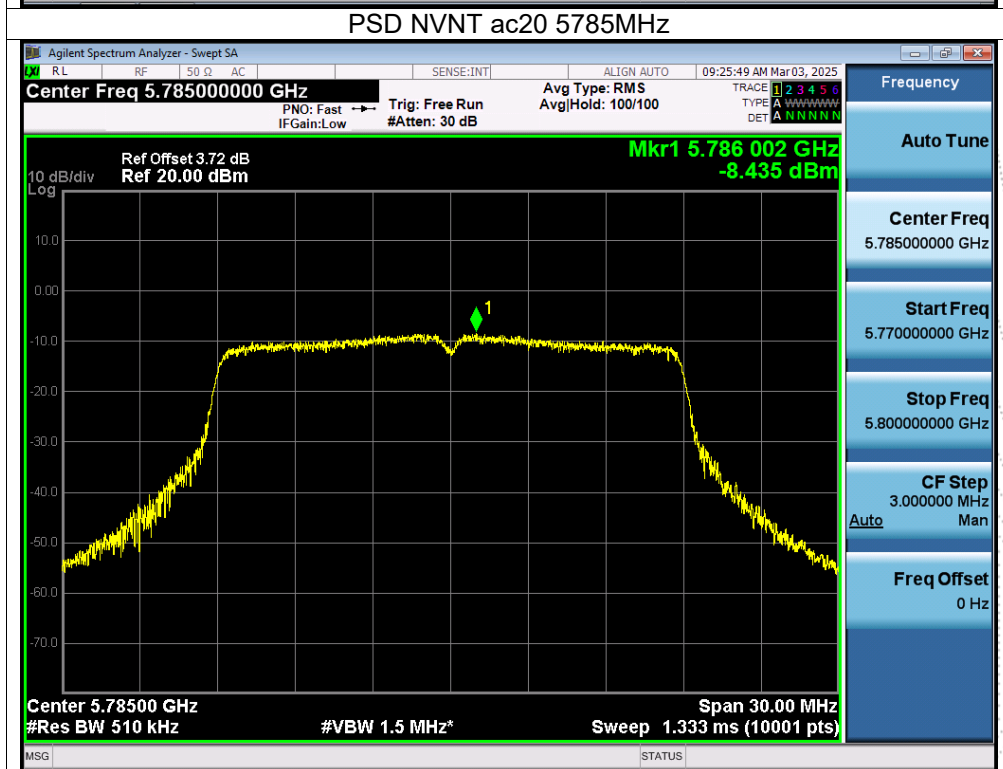
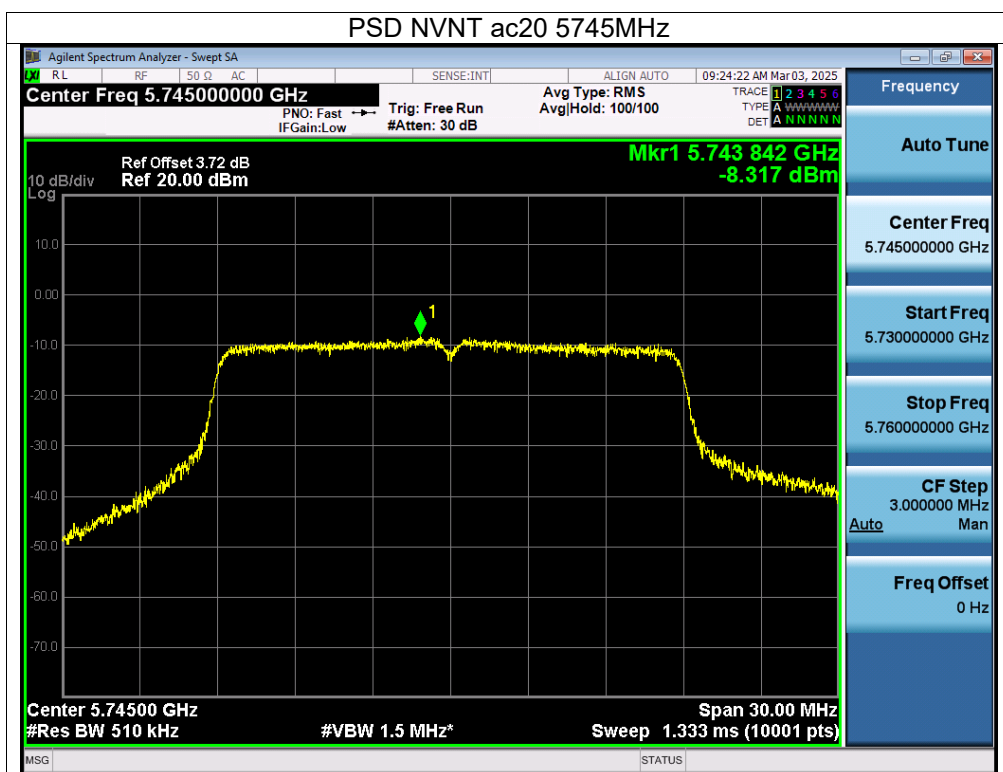
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

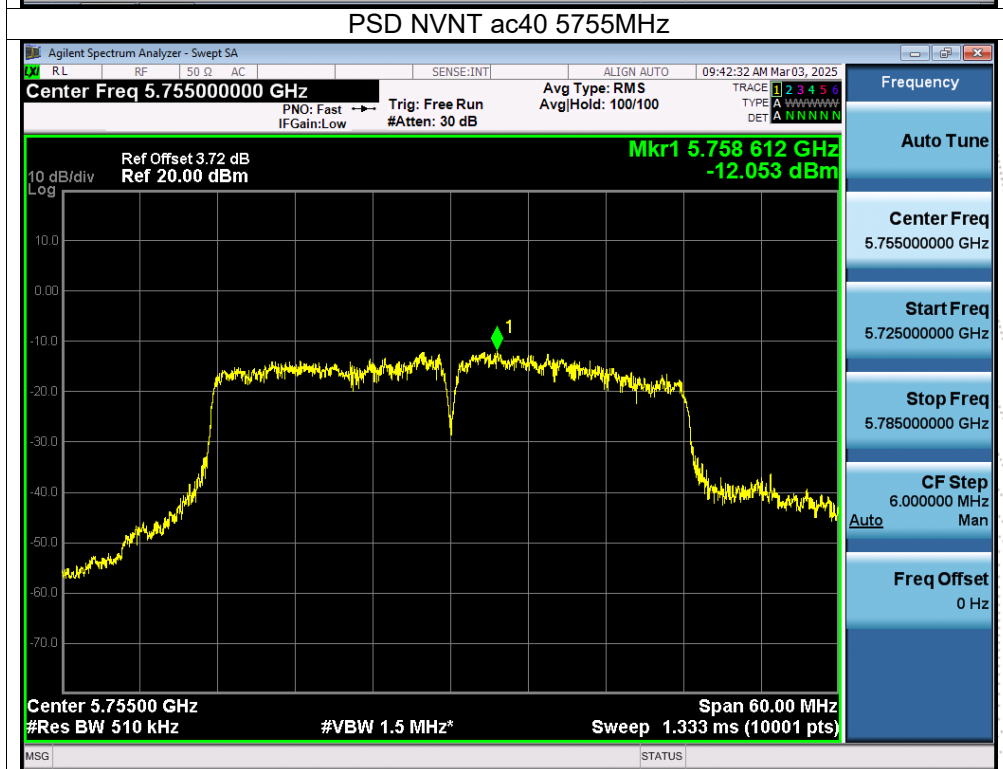
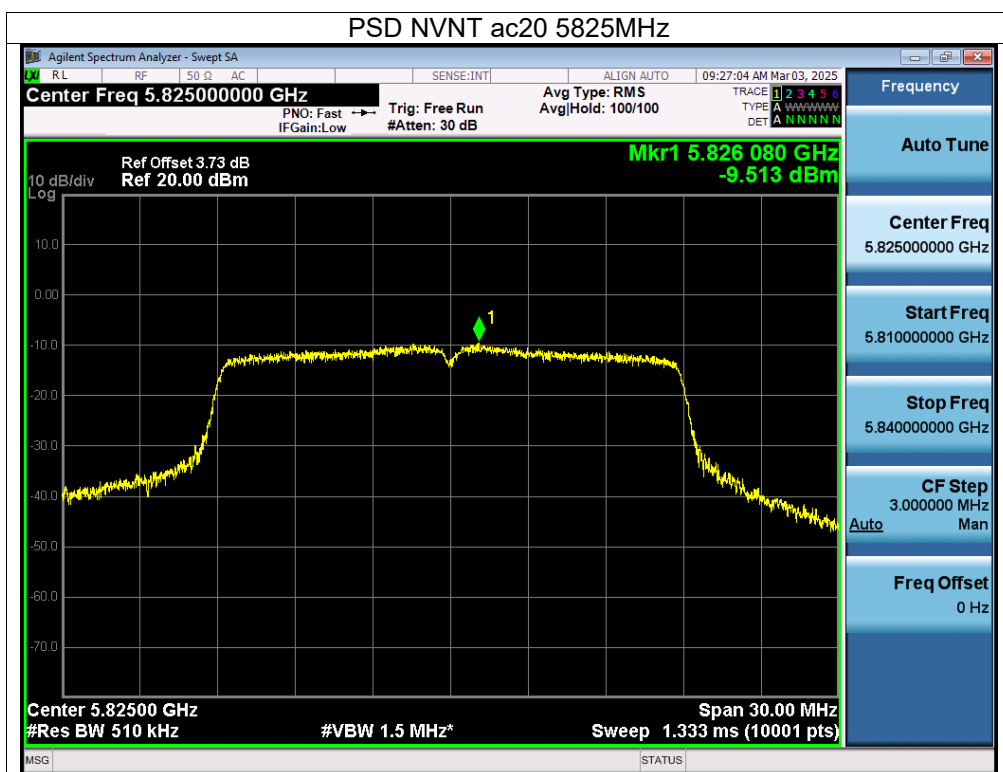


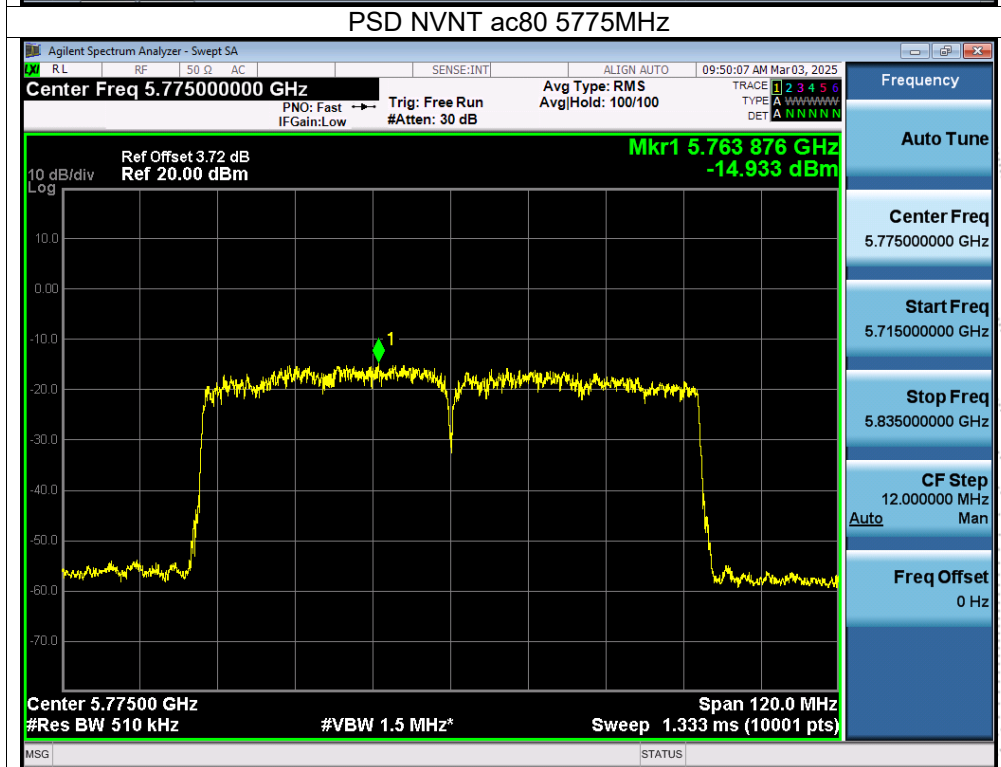
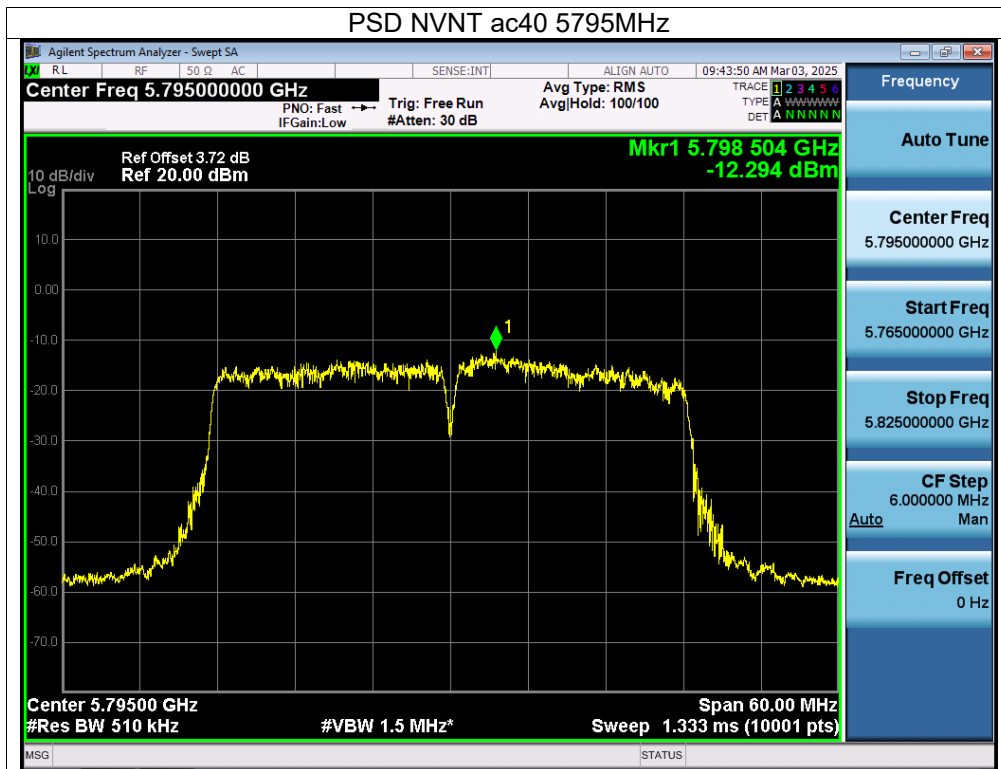


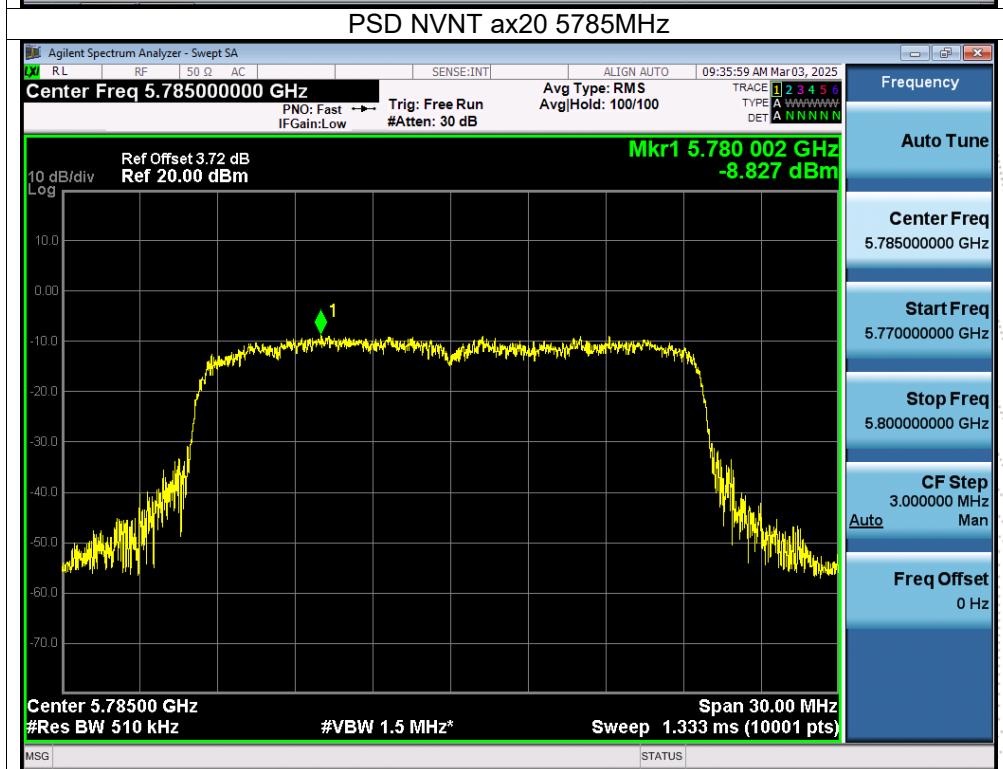
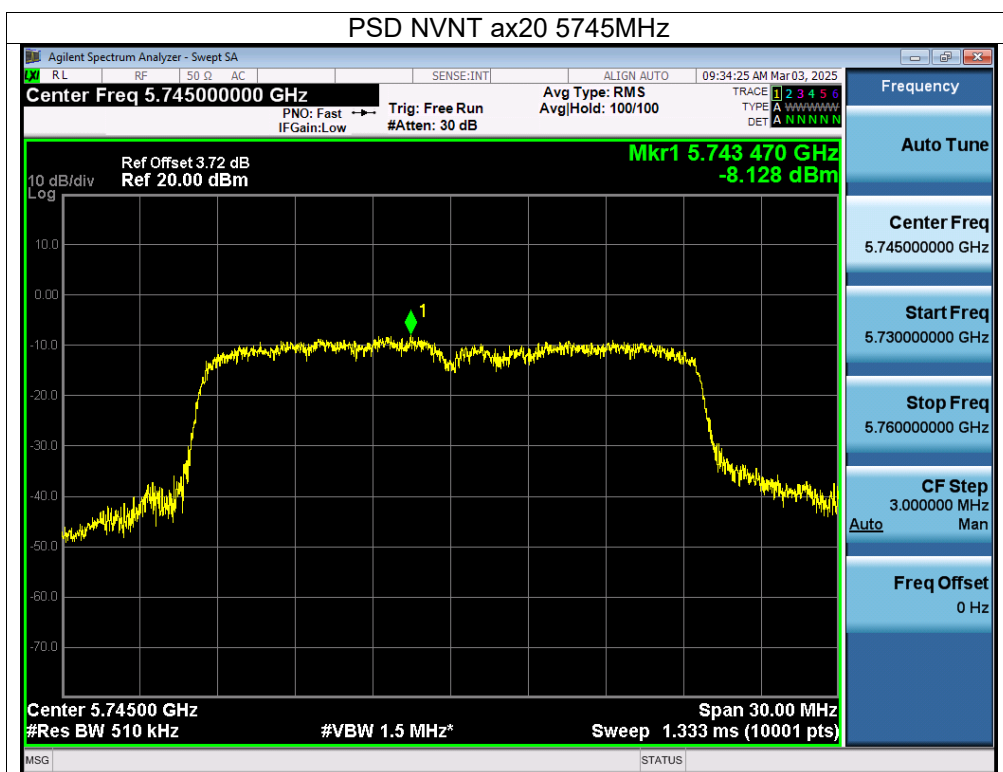


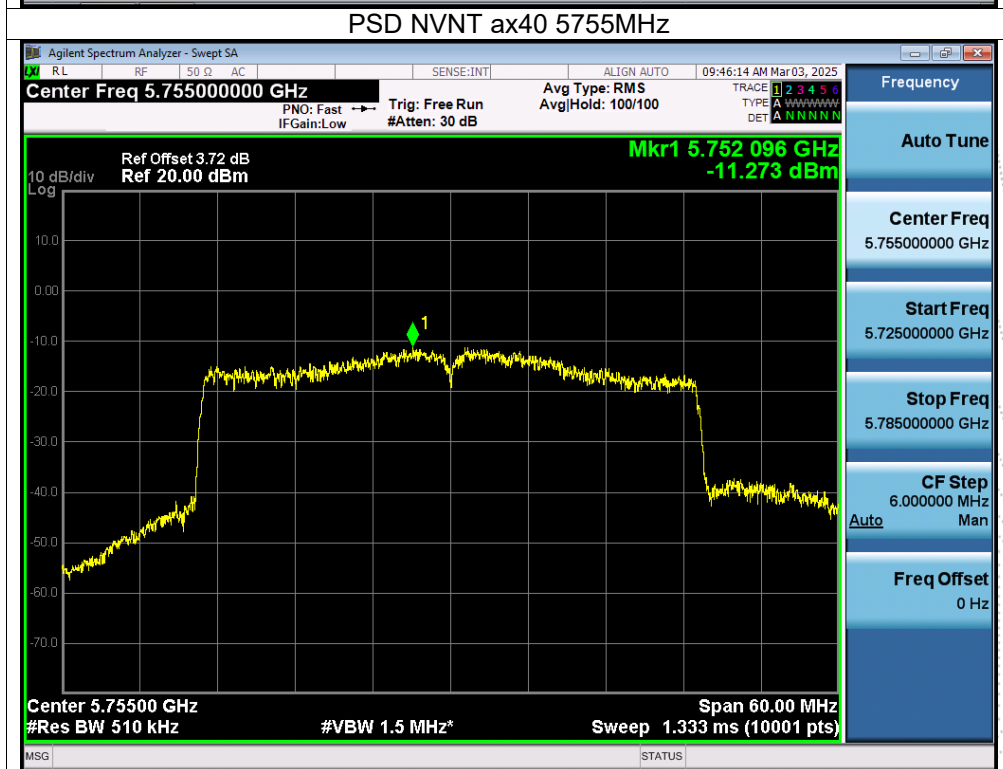
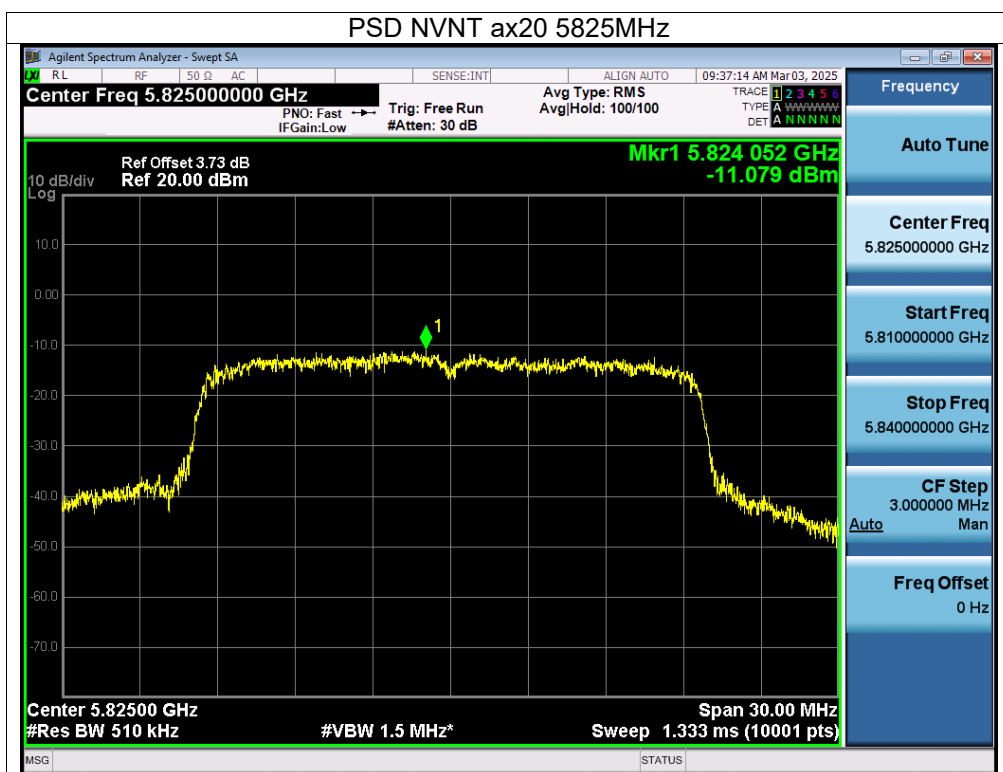


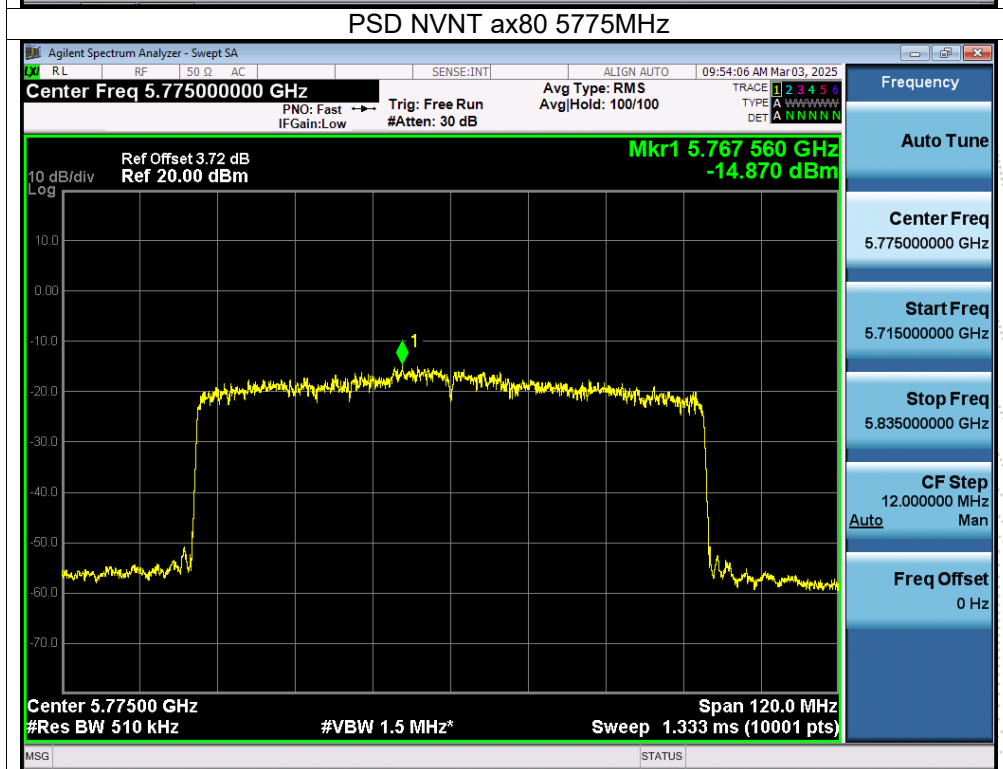
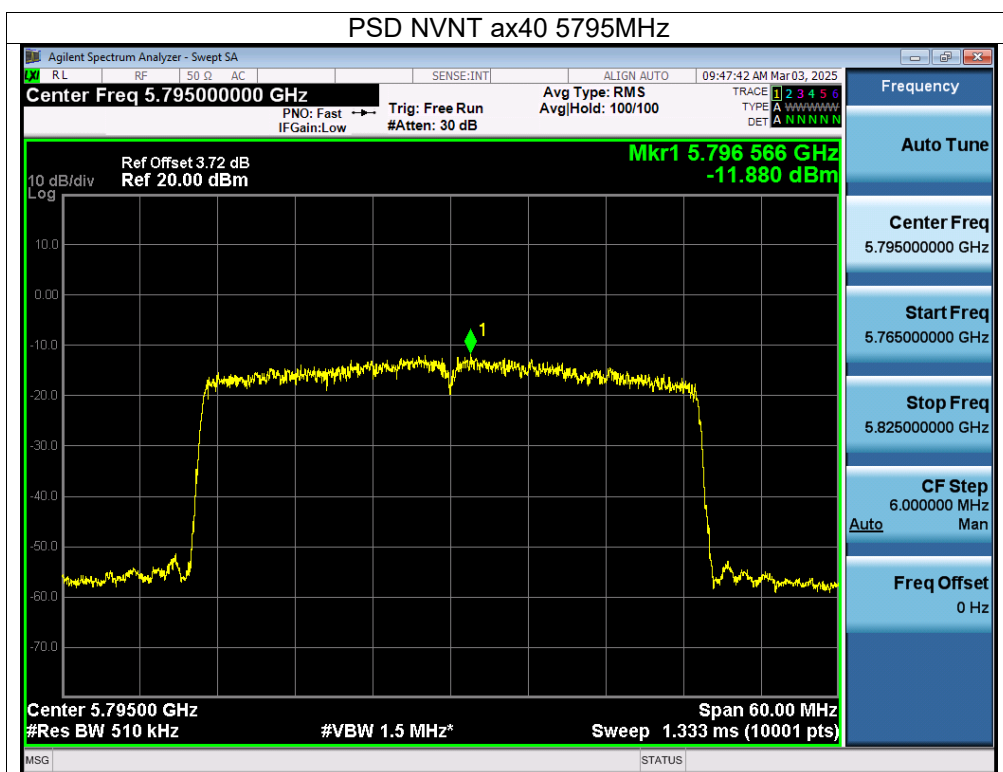






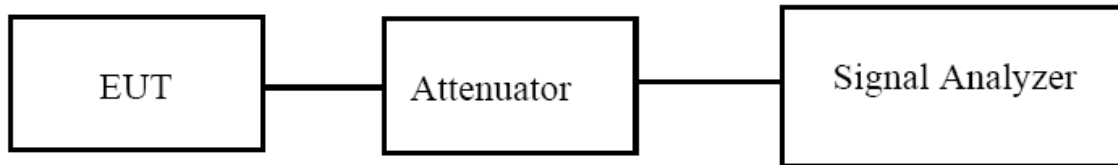






9. 26dB & 6dB & 99% Emission Bandwidth

9.1 Block Diagram Of Test Setup



9.2 Limit

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

9.3 Test Procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

9.4 EUT Operating Conditions

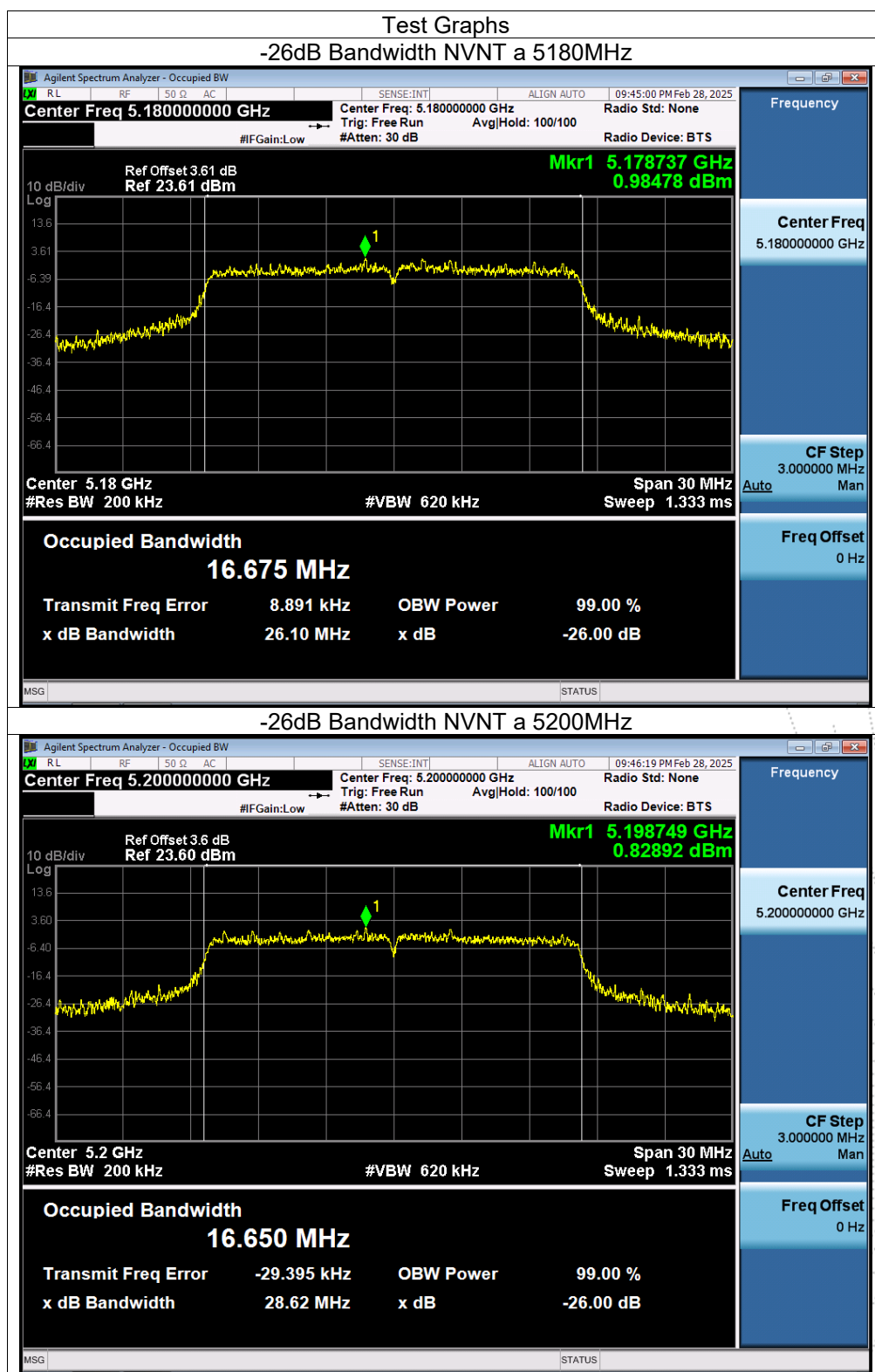
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

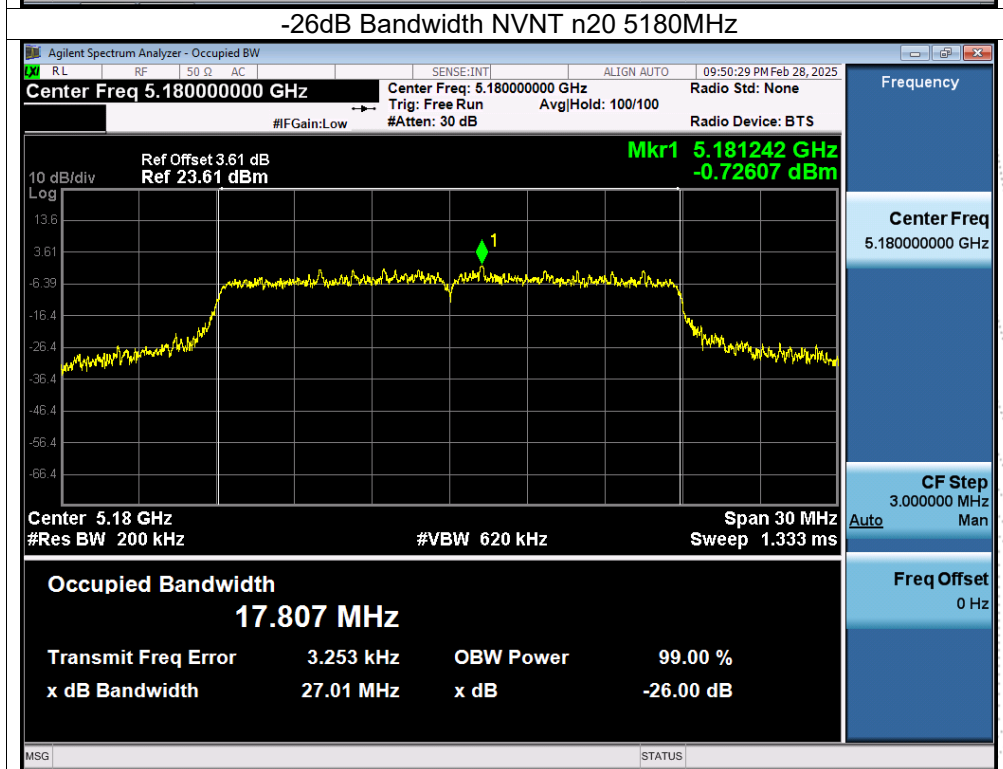
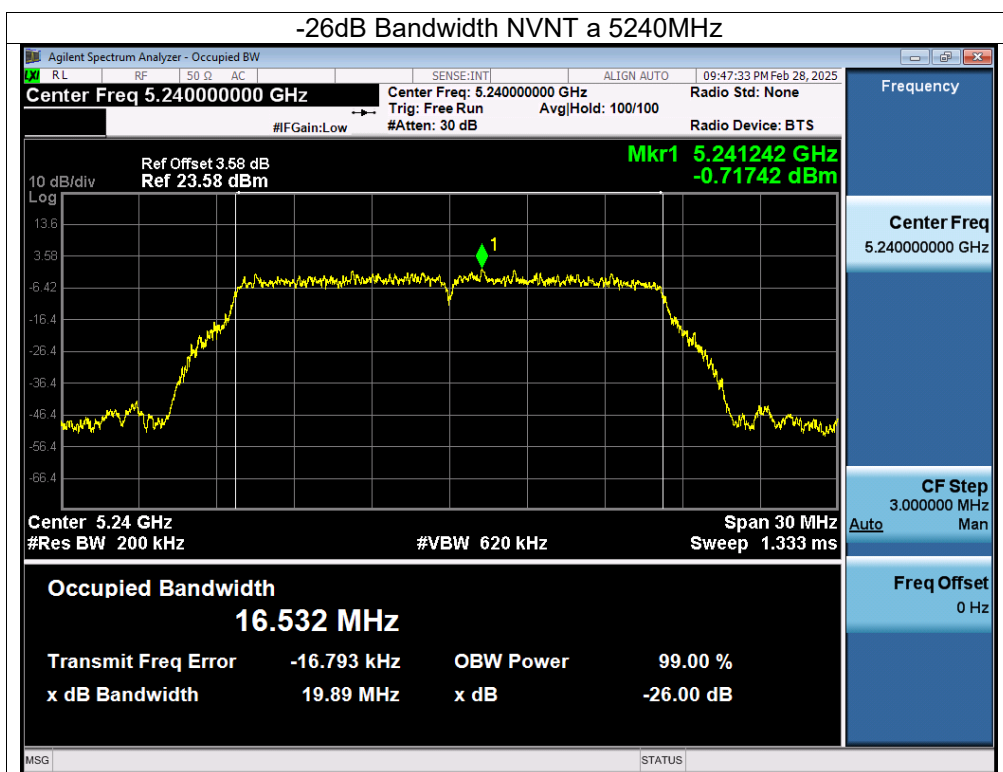
9.5 Test Result

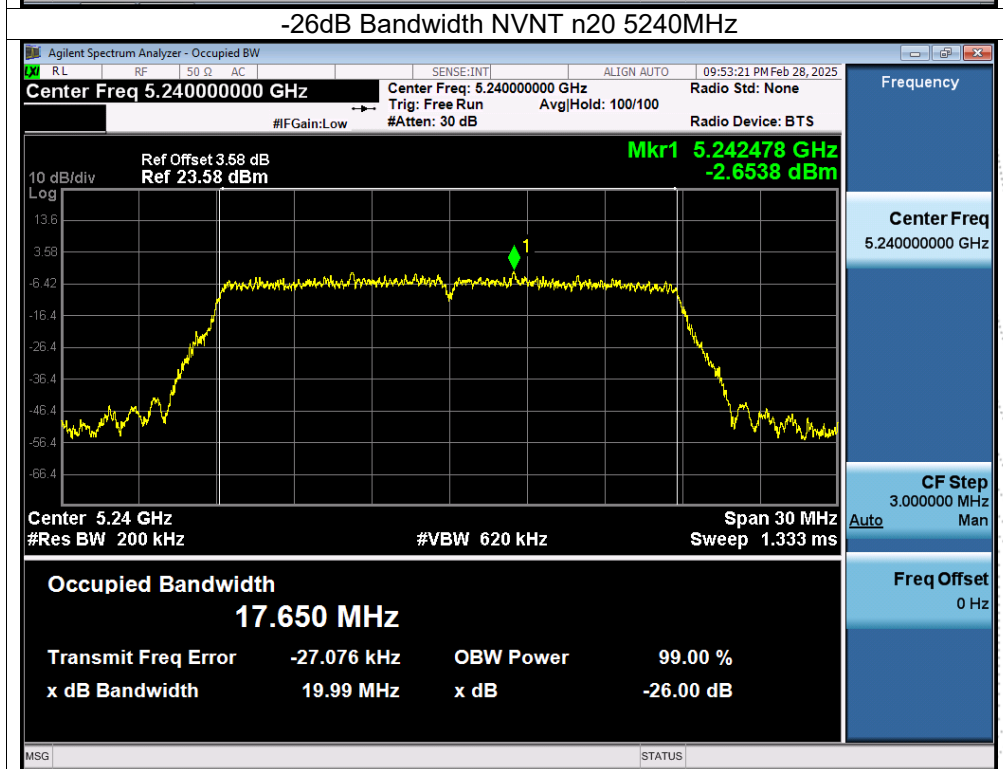
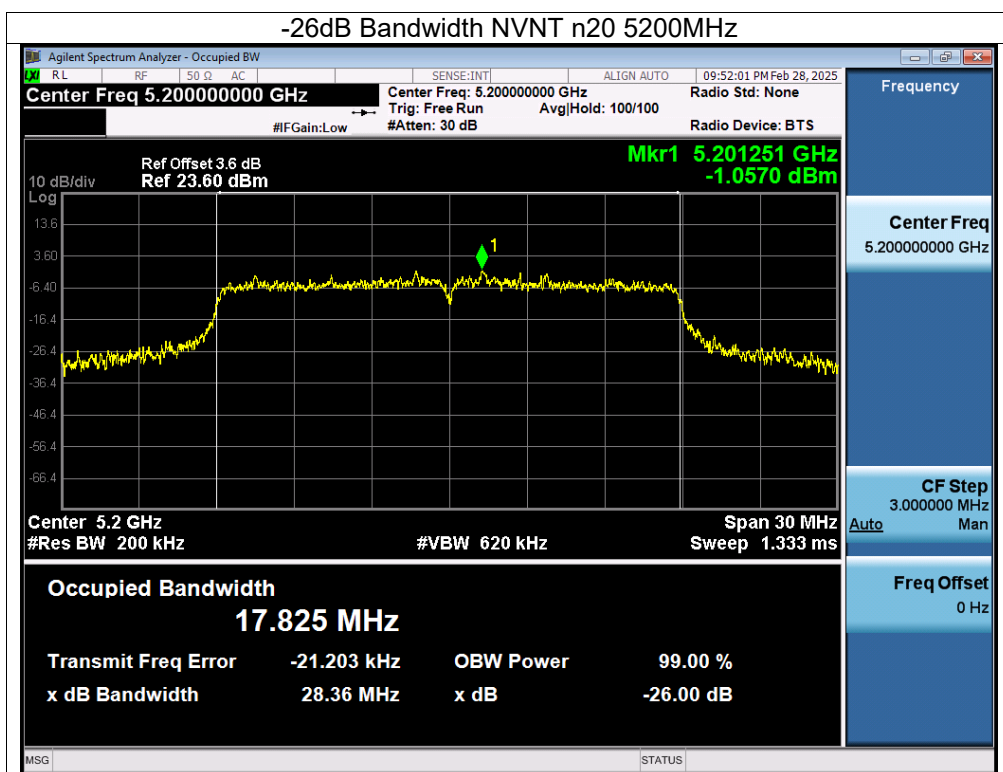
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(U-NII-1) 5180MHz-5240MHz		

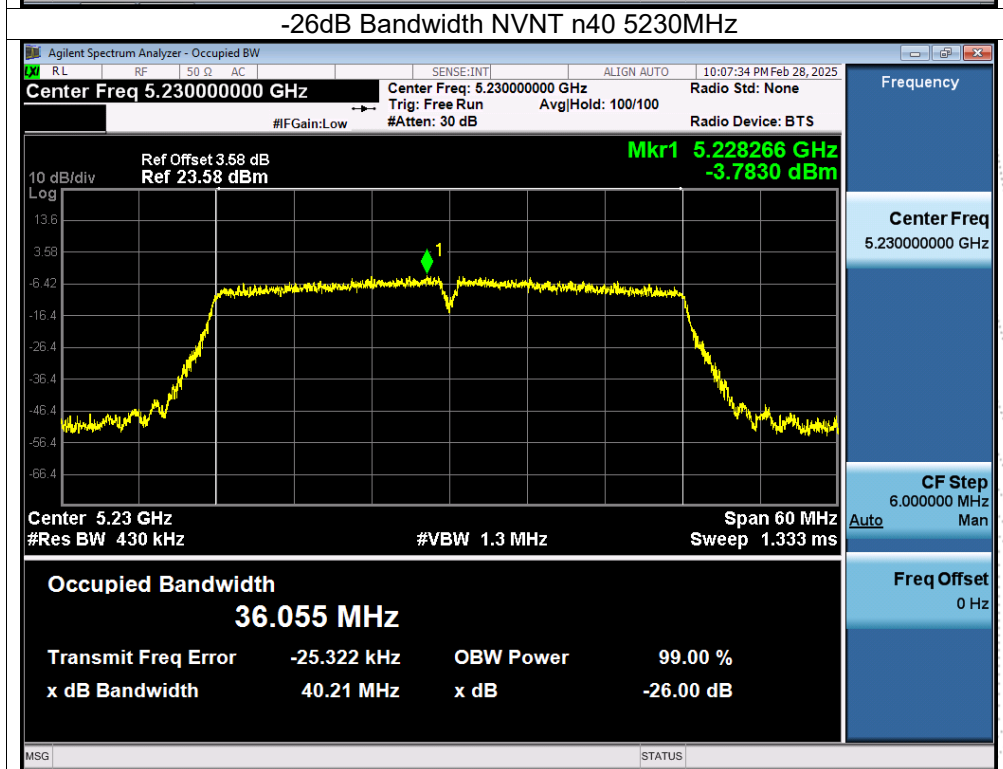
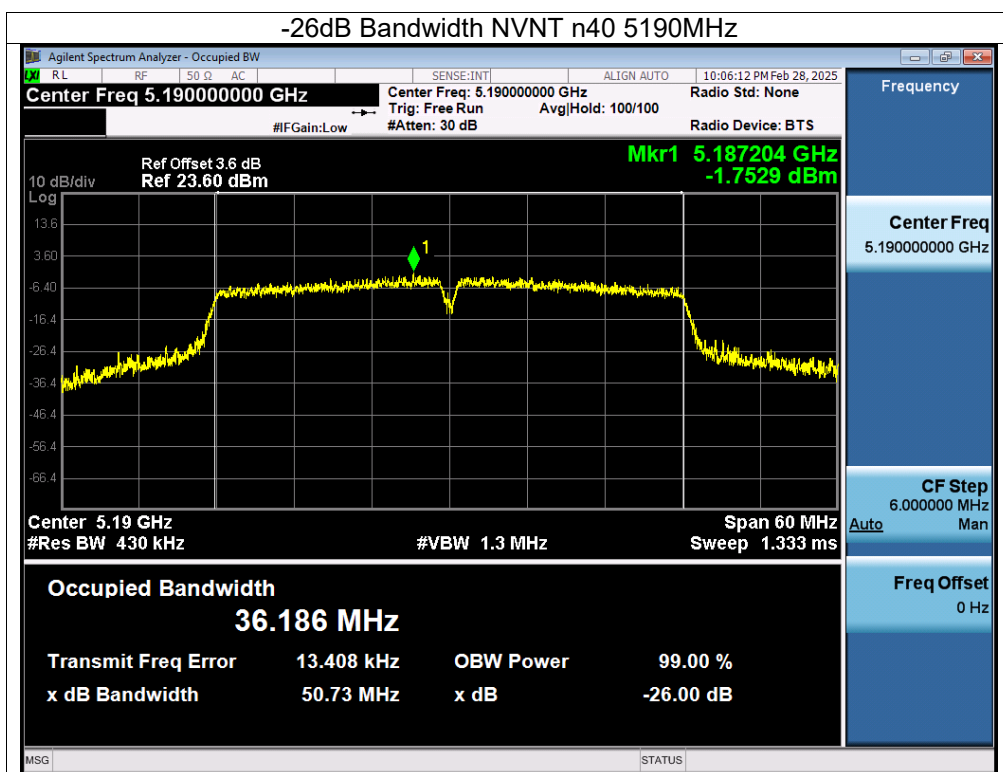
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5180	28.023	26.104	16.654	16.654	Pass
NVNT	a	5200	27.713	28.619	16.676	16.671	Pass
NVNT	a	5240	19.71	19.889	16.499	16.538	Pass
NVNT	n20	5180	28.43	27.013	17.864	17.824	Pass
NVNT	n20	5200	27.988	28.357	17.832	17.826	Pass
NVNT	n20	5240	20.199	19.992	17.682	17.667	Pass
NVNT	n40	5190	53.383	50.734	36.293	36.19	Pass
NVNT	n40	5230	40.449	40.214	36.03	36.059	Pass
NVNT	ac20	5180	24.89	27.906	17.778	17.843	Pass
NVNT	ac20	5200	27.615	27.1	17.809	17.844	Pass
NVNT	ac20	5240	20.112	20.195	17.639	17.632	Pass
NVNT	ac40	5190	54.969	51.234	36.235	36.187	Pass
NVNT	ac40	5230	39.947	40.379	36.008	36.017	Pass
NVNT	ac80	5210	102.674	105.998	75.597	75.54	Pass
NVNT	ax20	5180	25.899	28.305	18.965	18.964	Pass
NVNT	ax20	5200	27.665	26.872	18.997	18.975	Pass
NVNT	ax20	5240	19.886	19.823	18.878	18.856	Pass
NVNT	ax40	5190	45.902	47.473	37.648	37.69	Pass
NVNT	ax40	5230	39.15	39.459	37.457	37.546	Pass
NVNT	ax80	5210	92.978	102.499	76.771	76.91	Pass

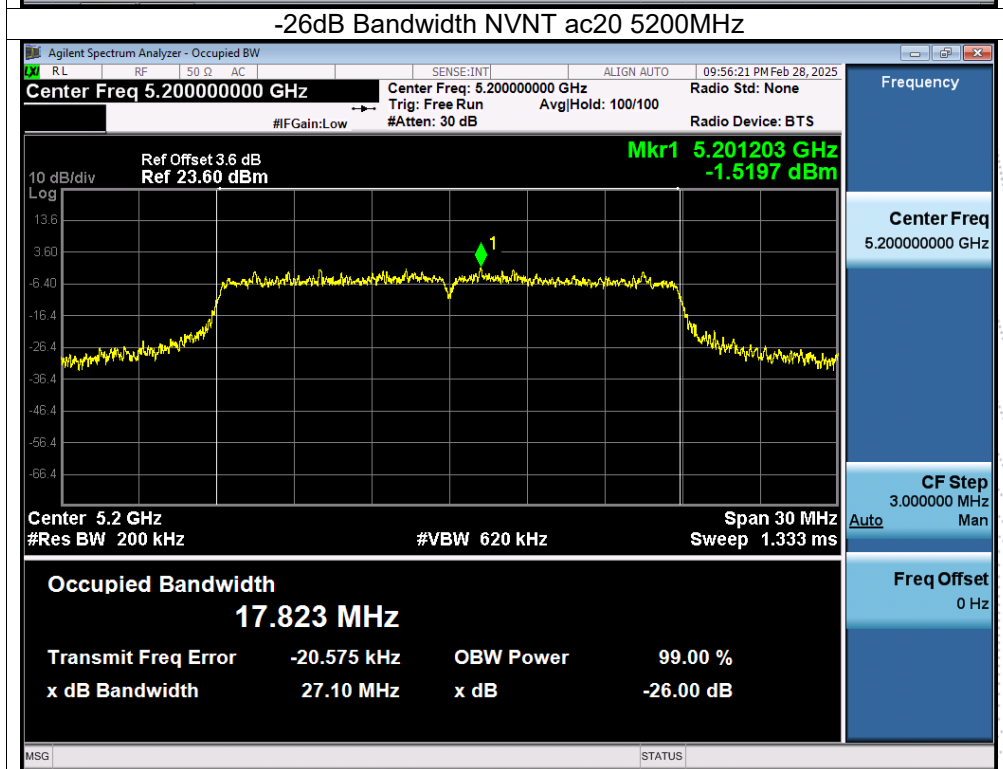
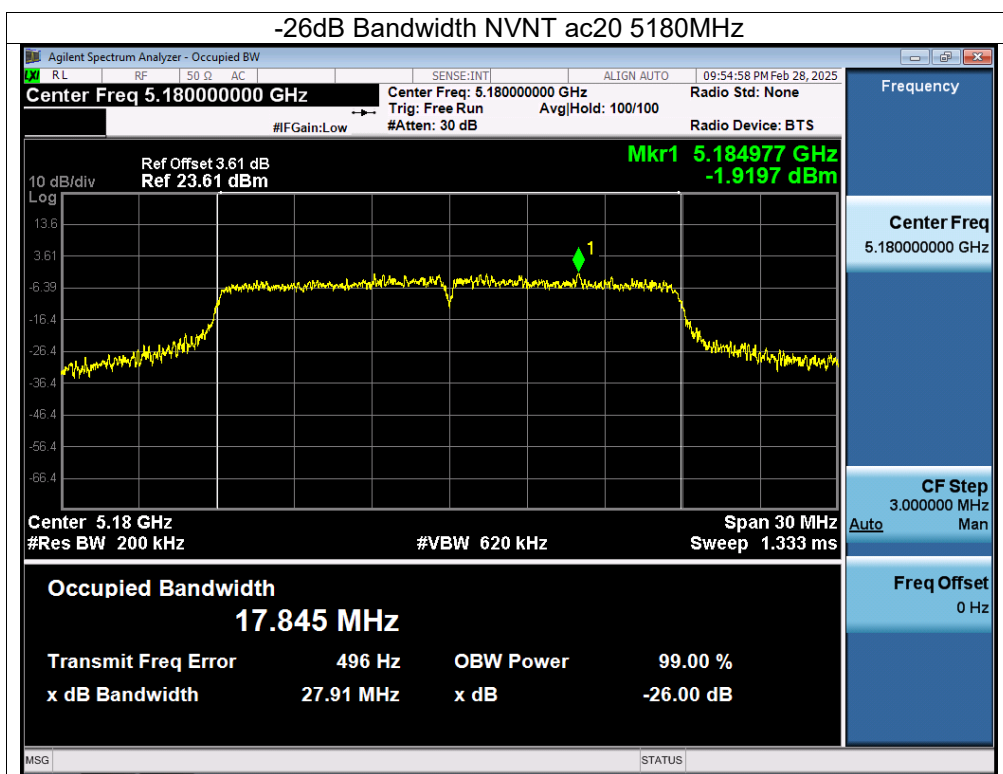
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

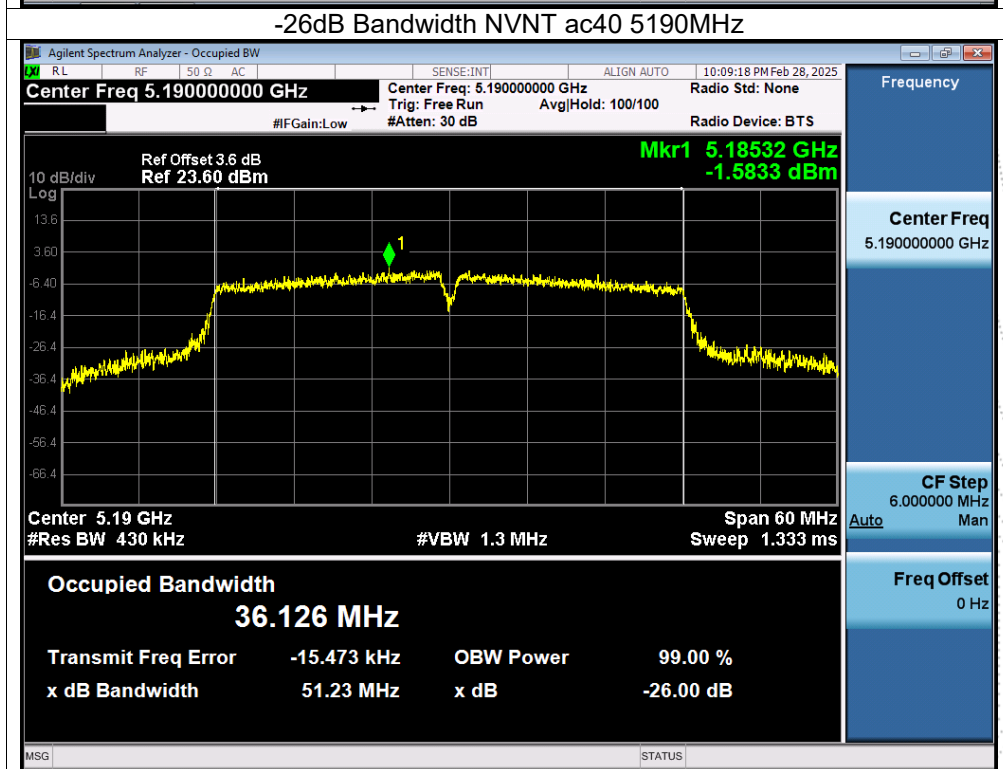
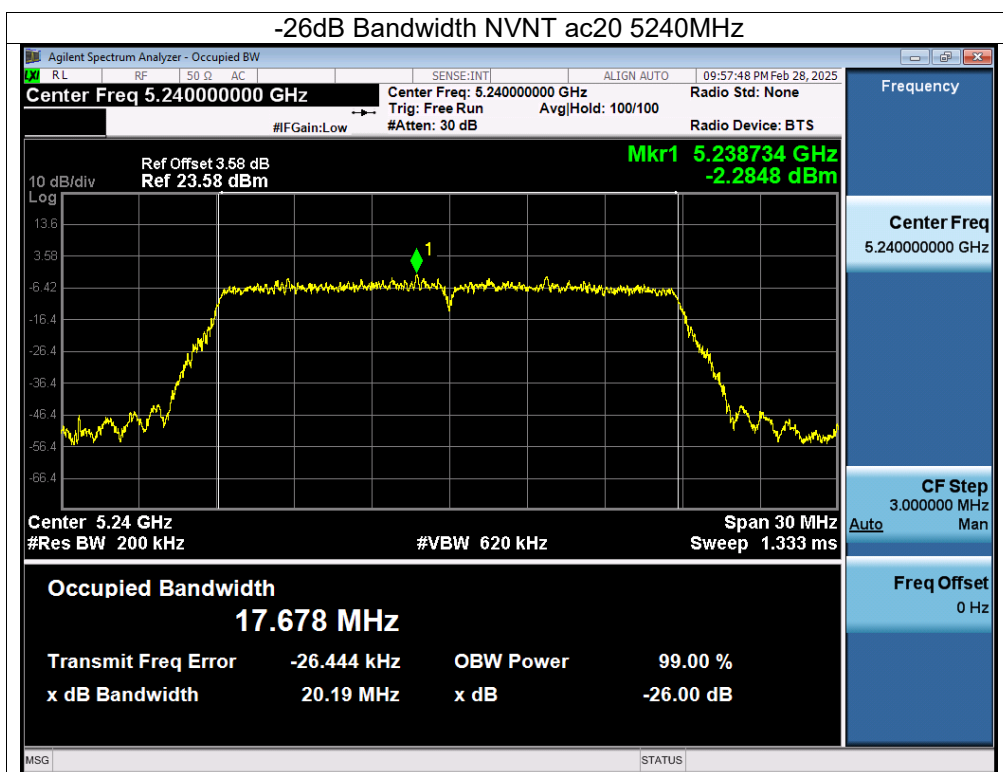


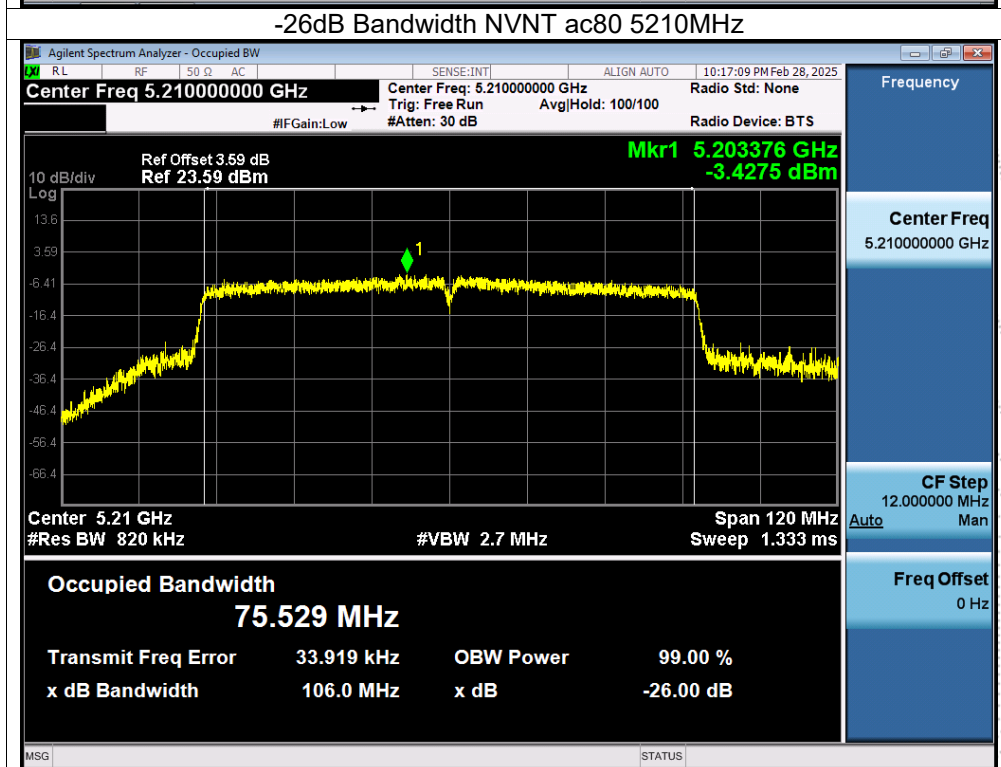
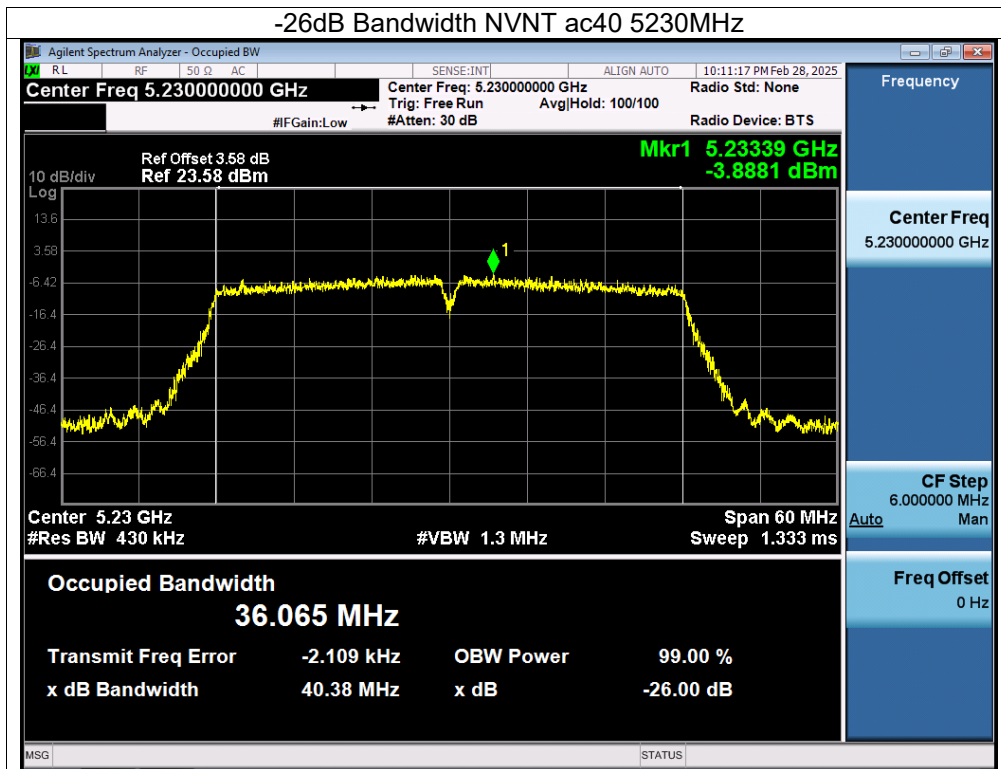


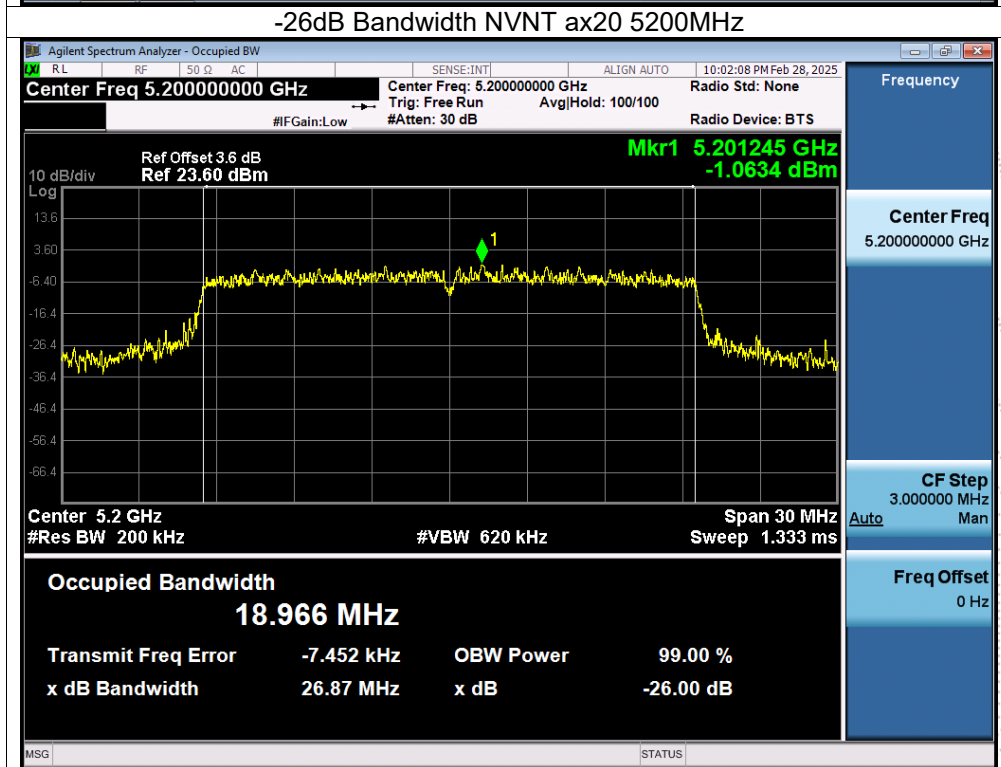
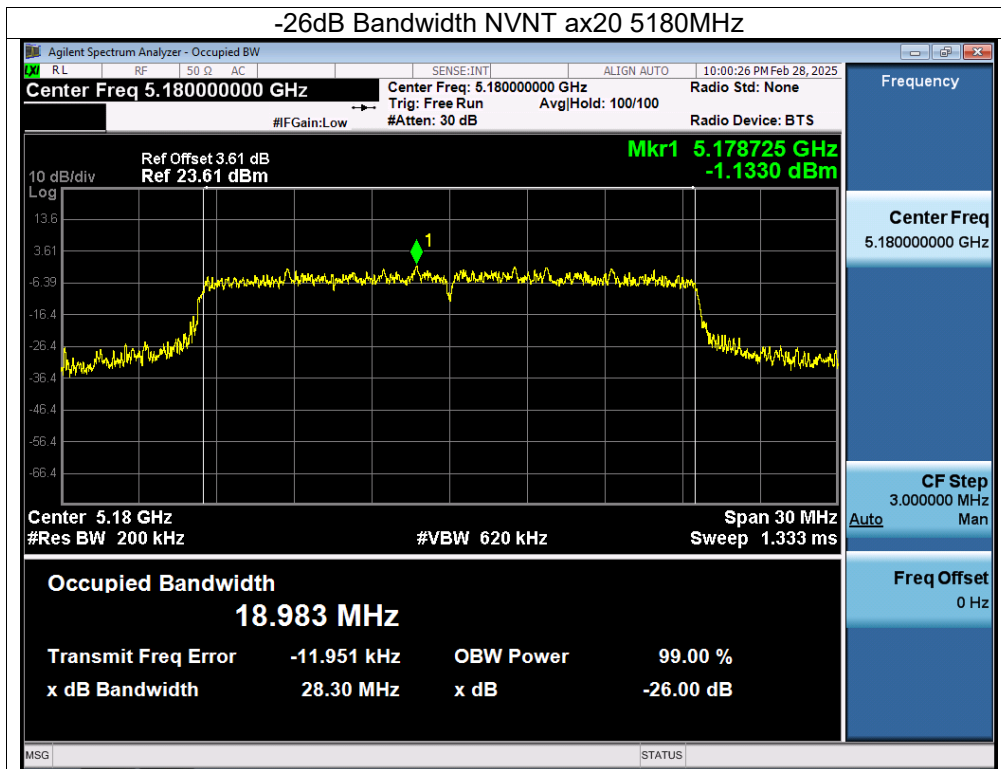


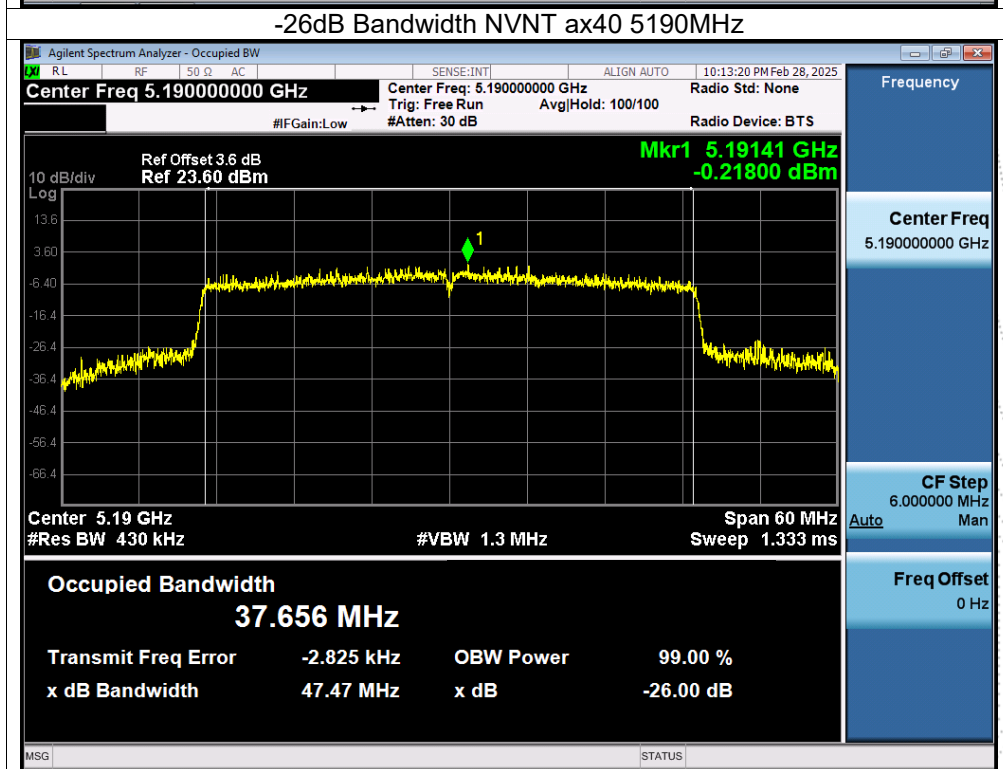
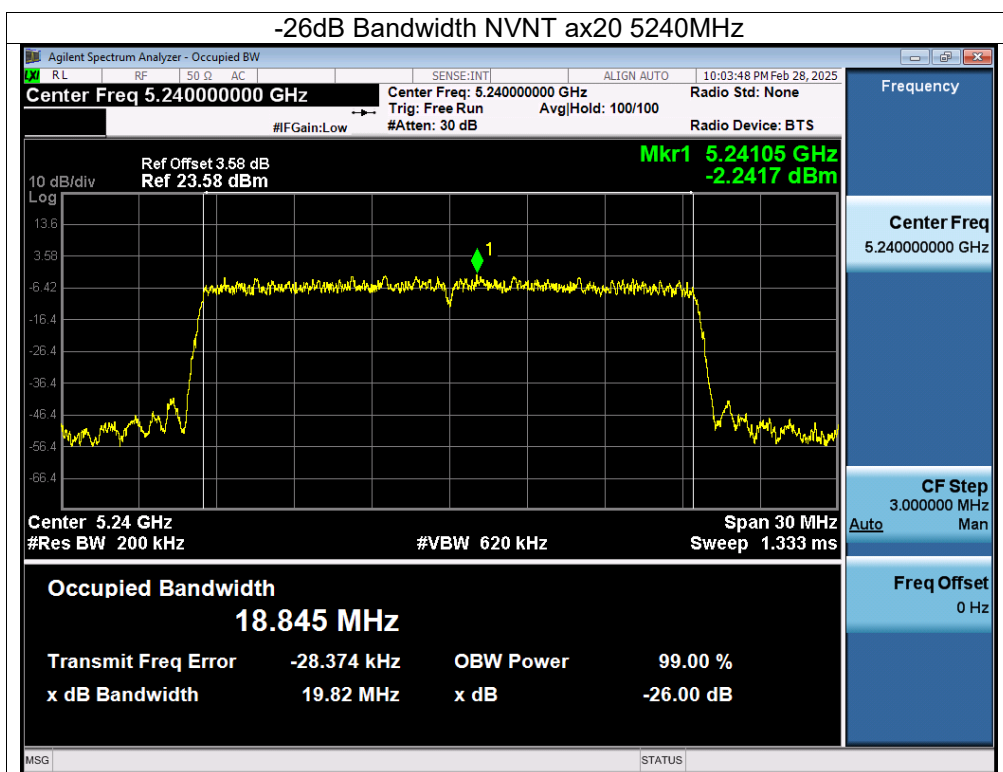


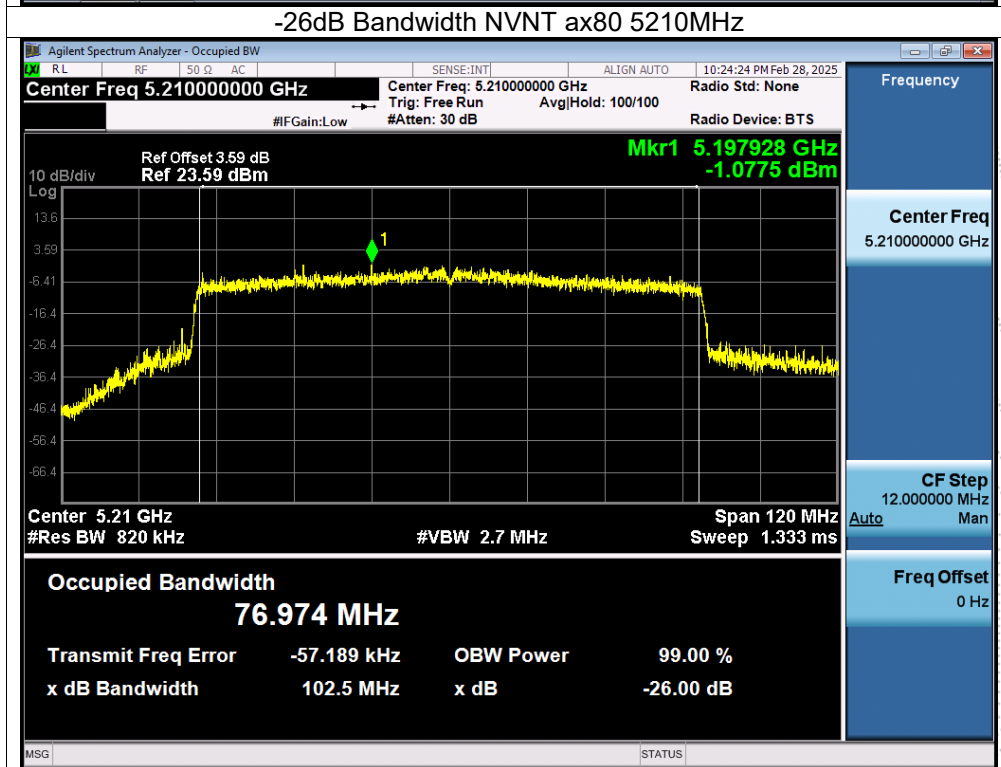
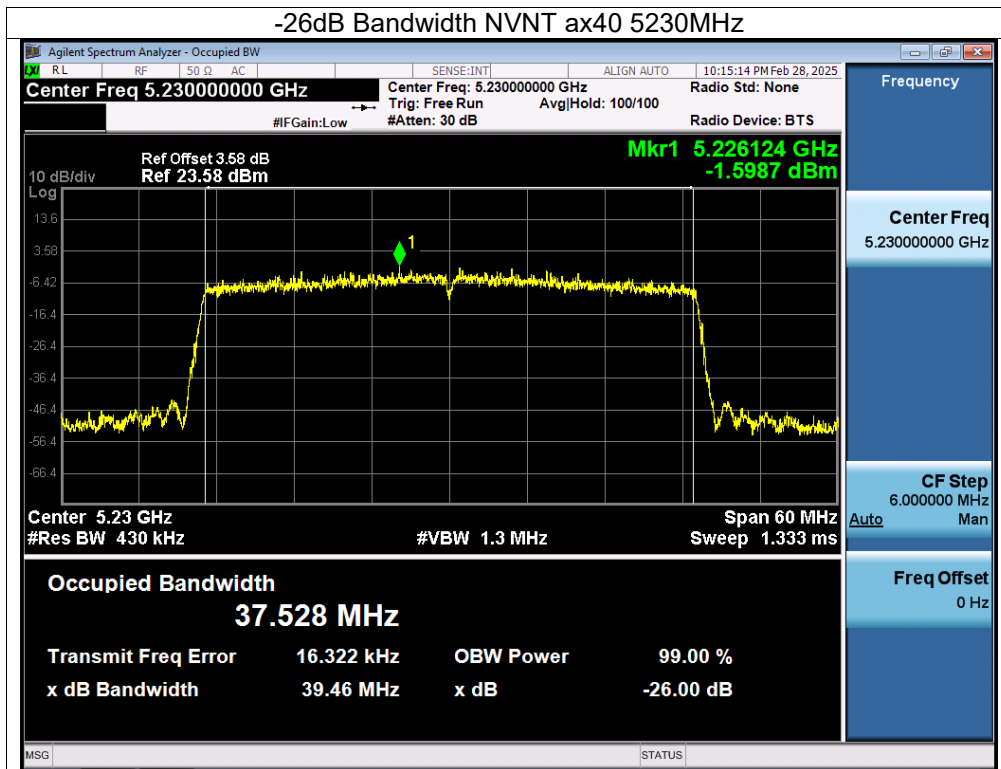




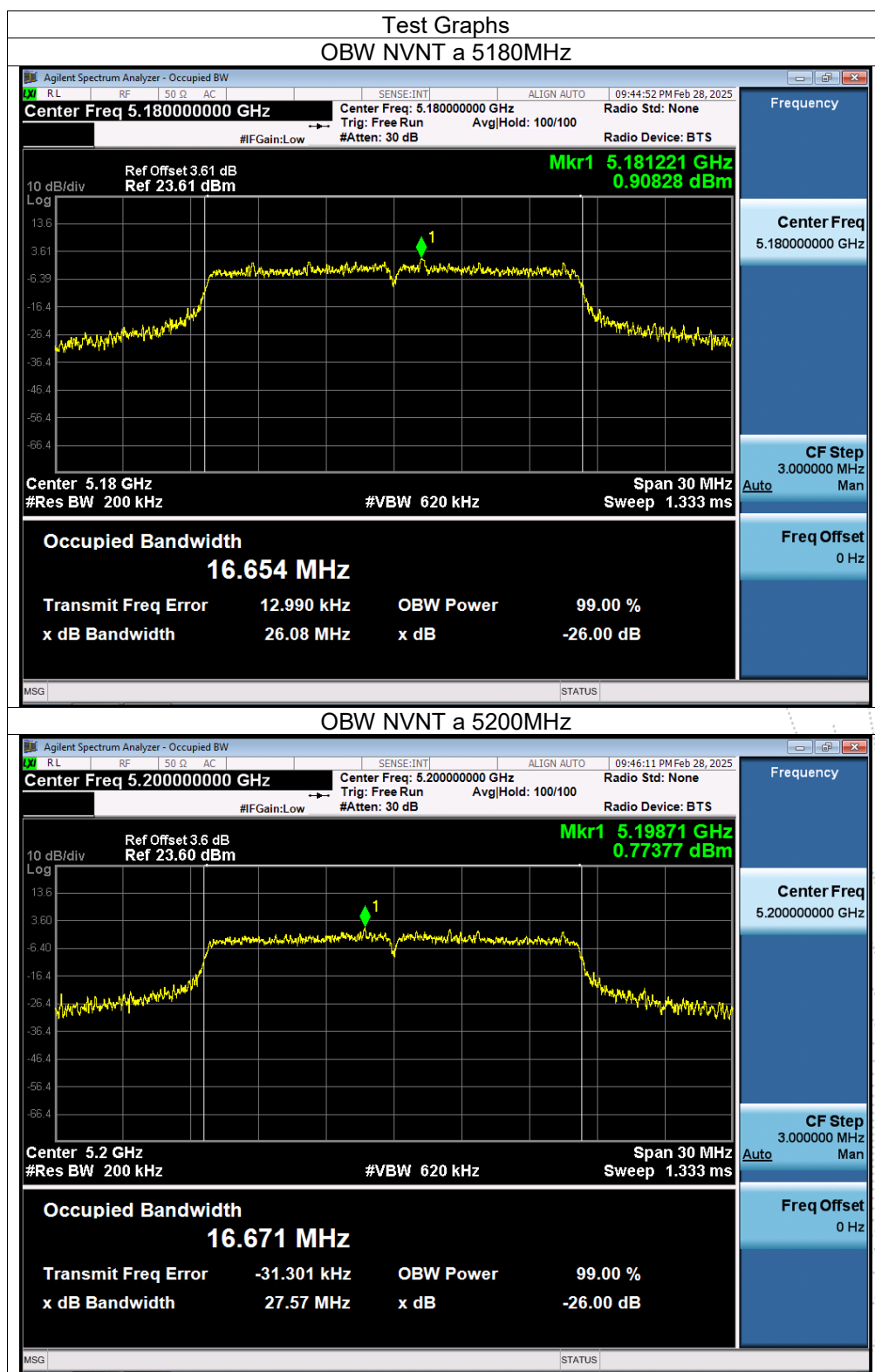


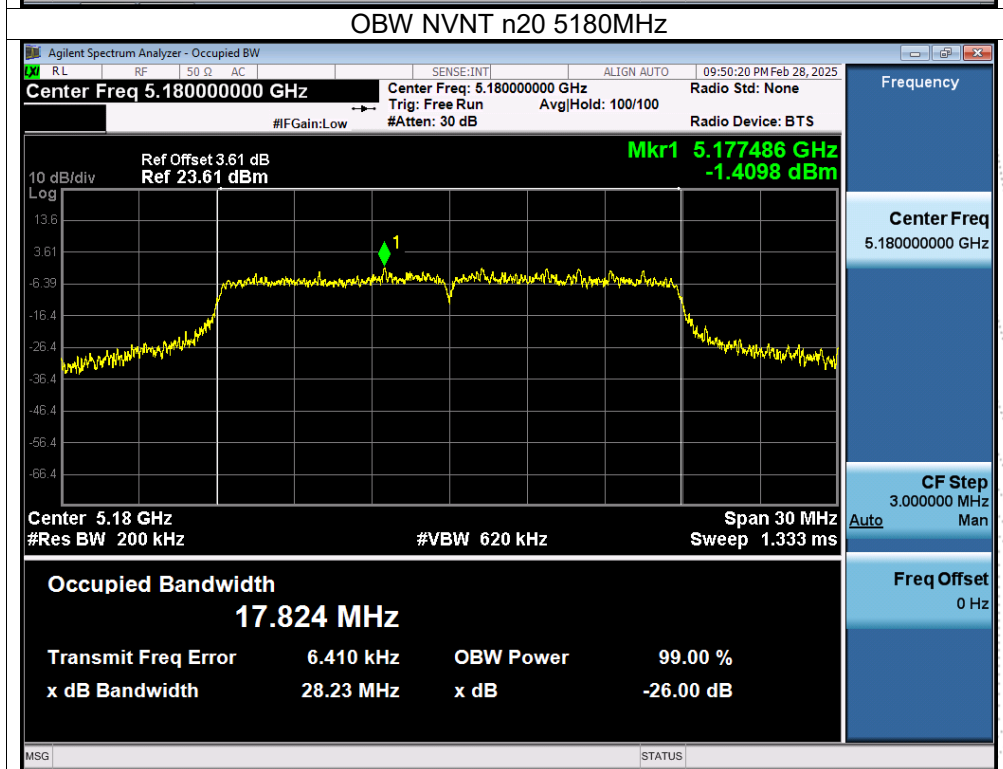
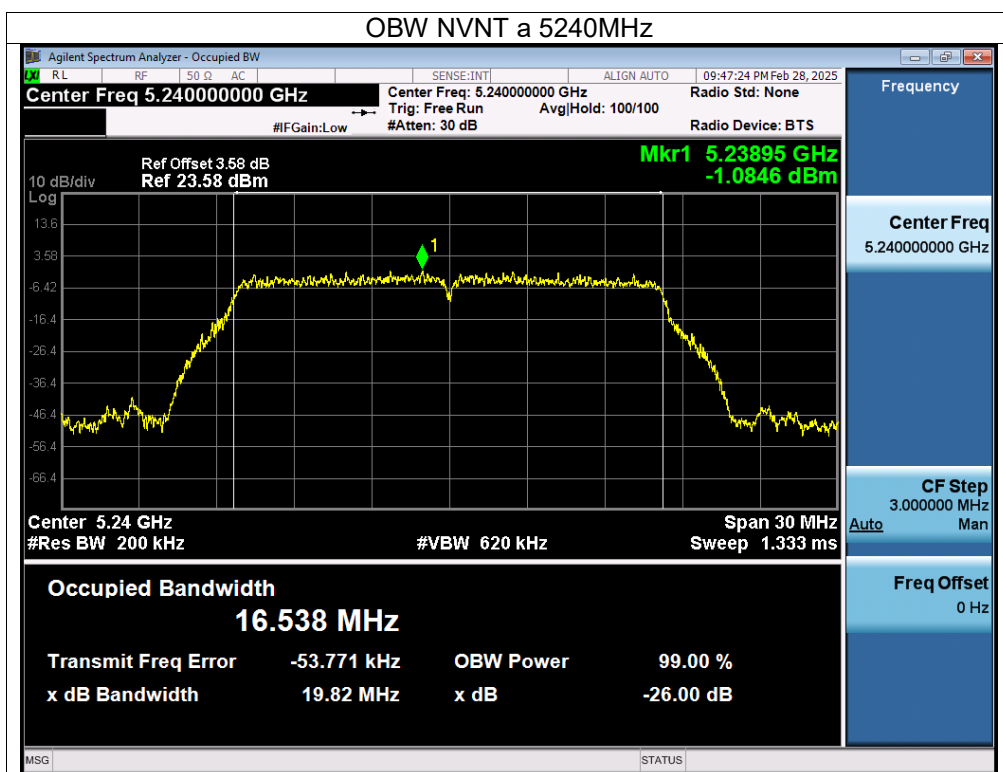


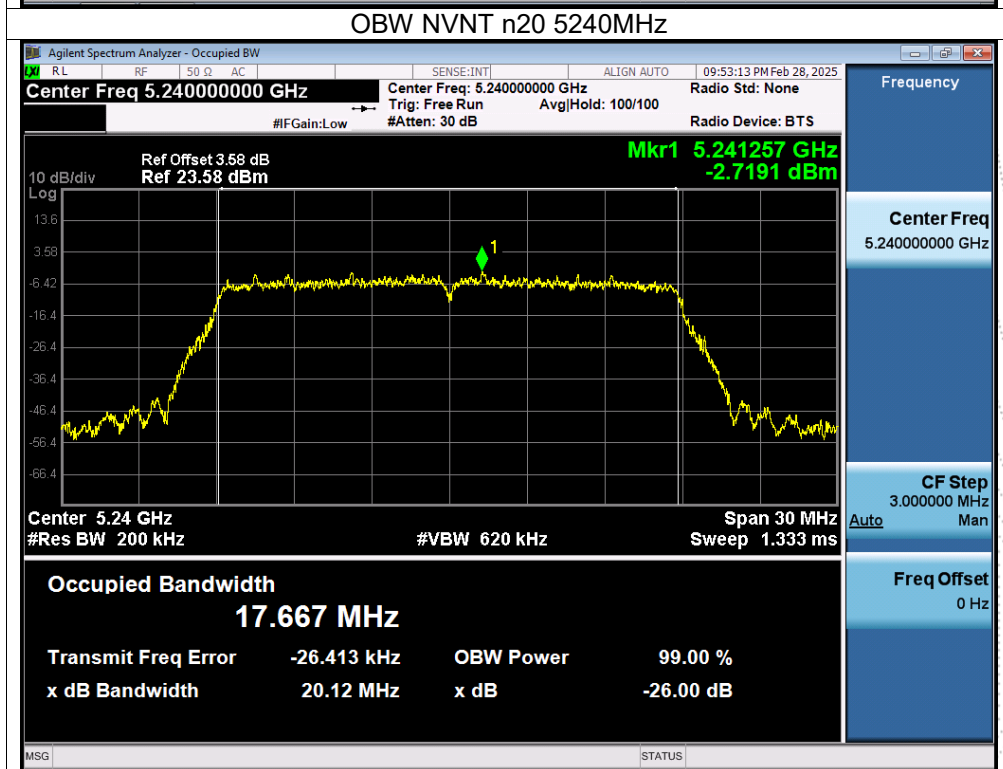
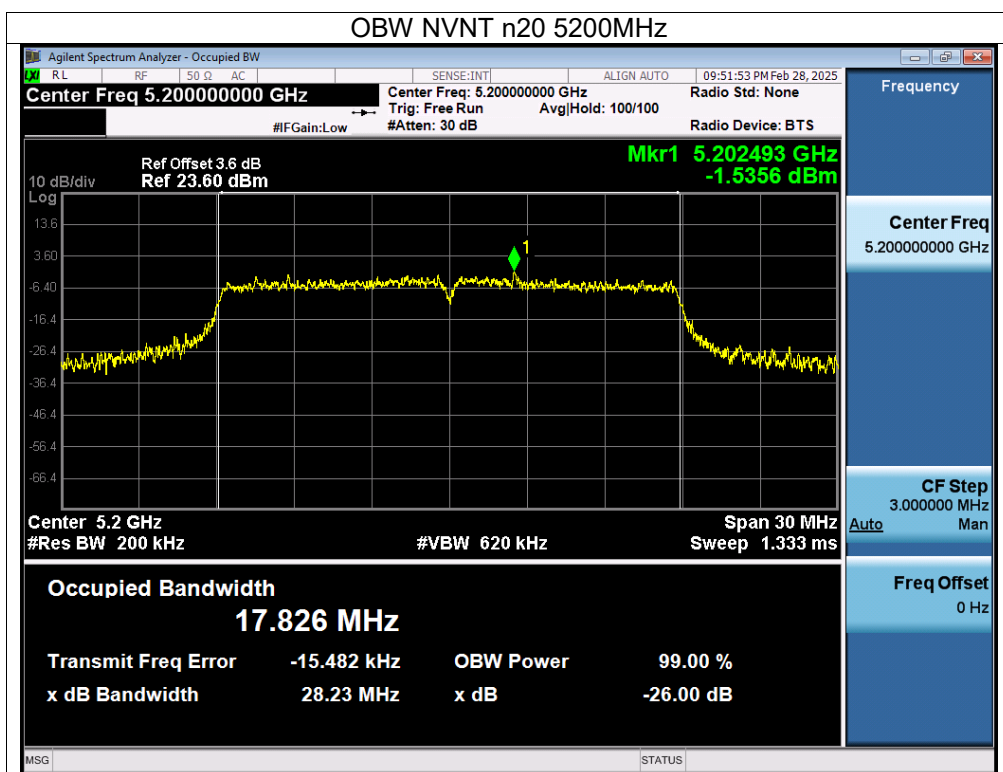


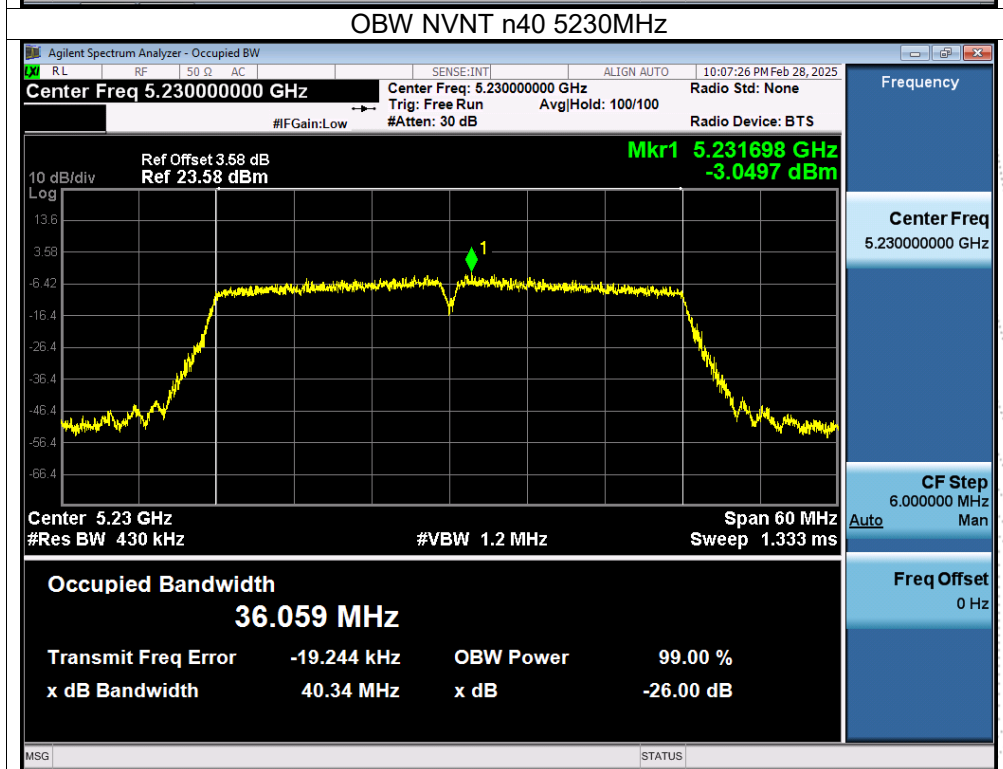
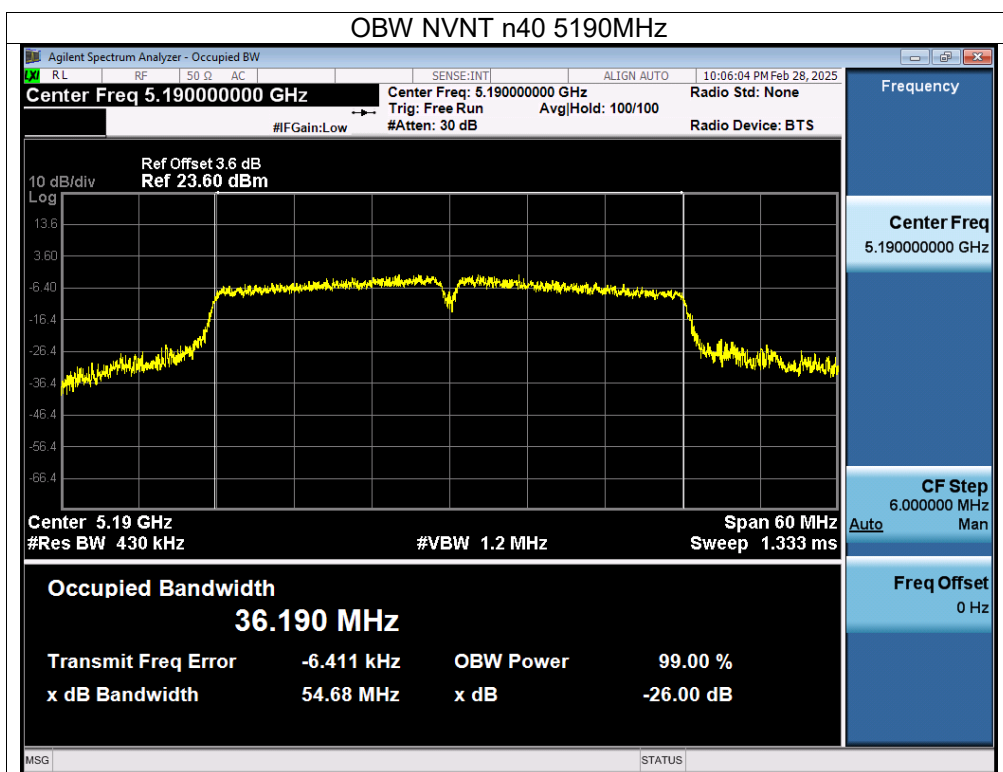


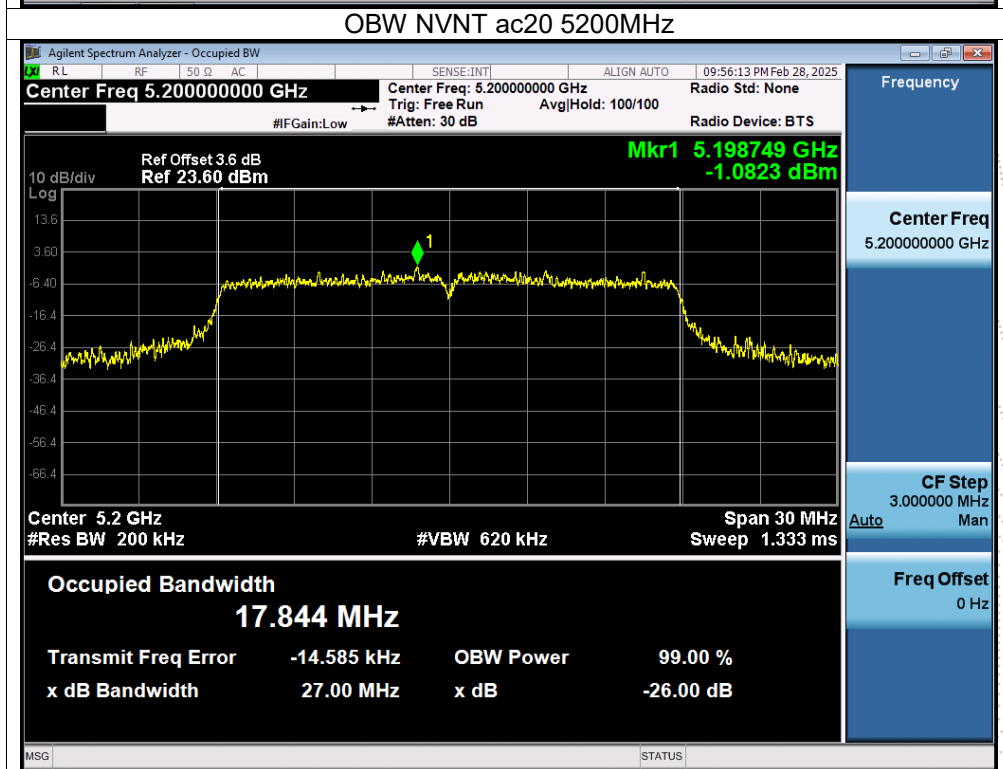
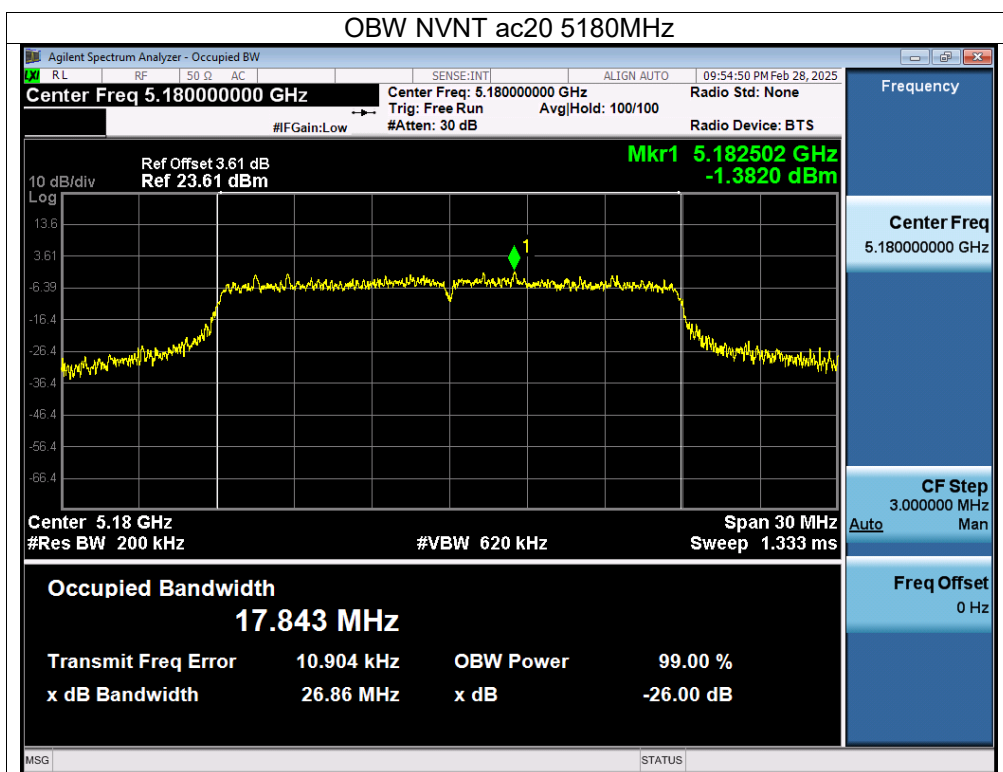
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

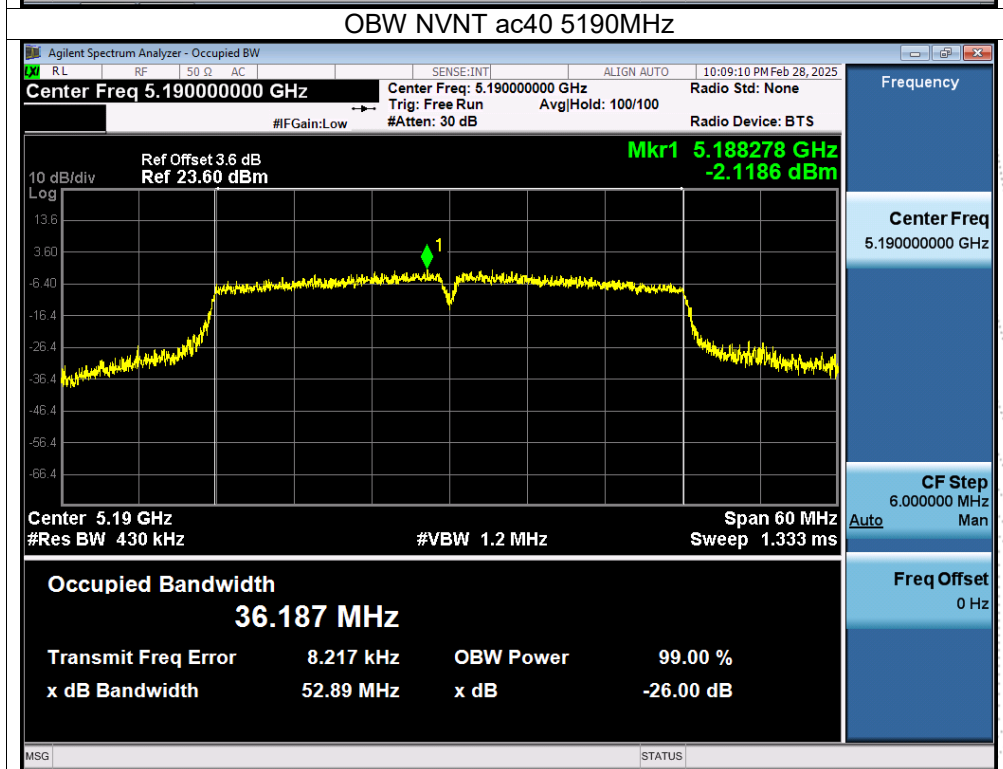
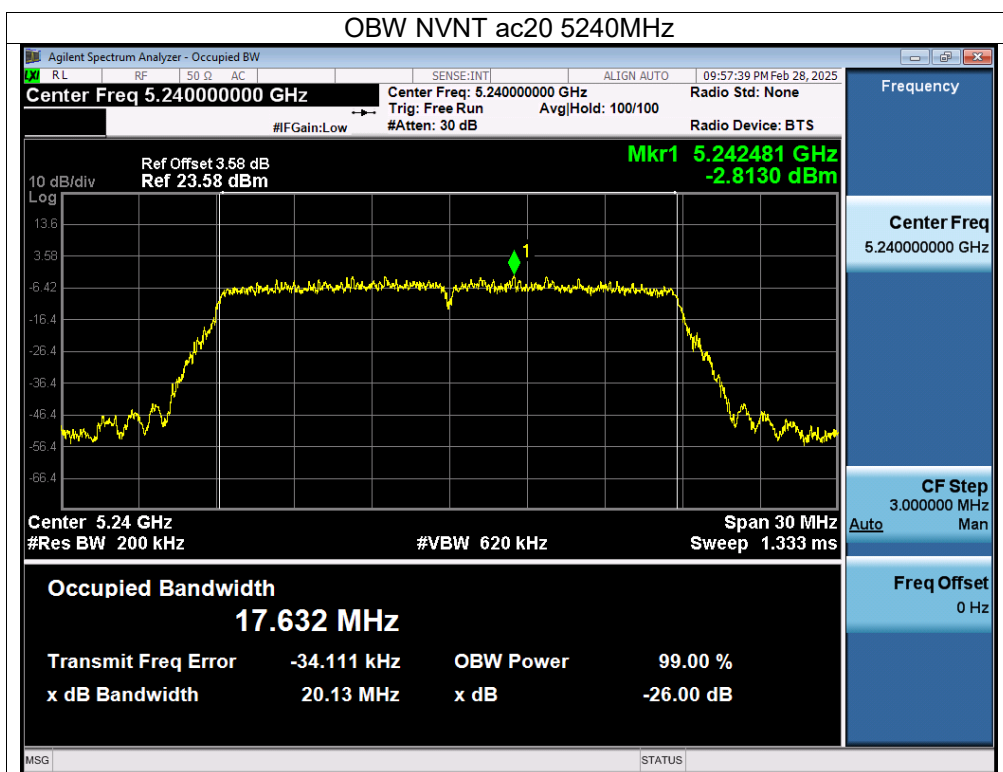


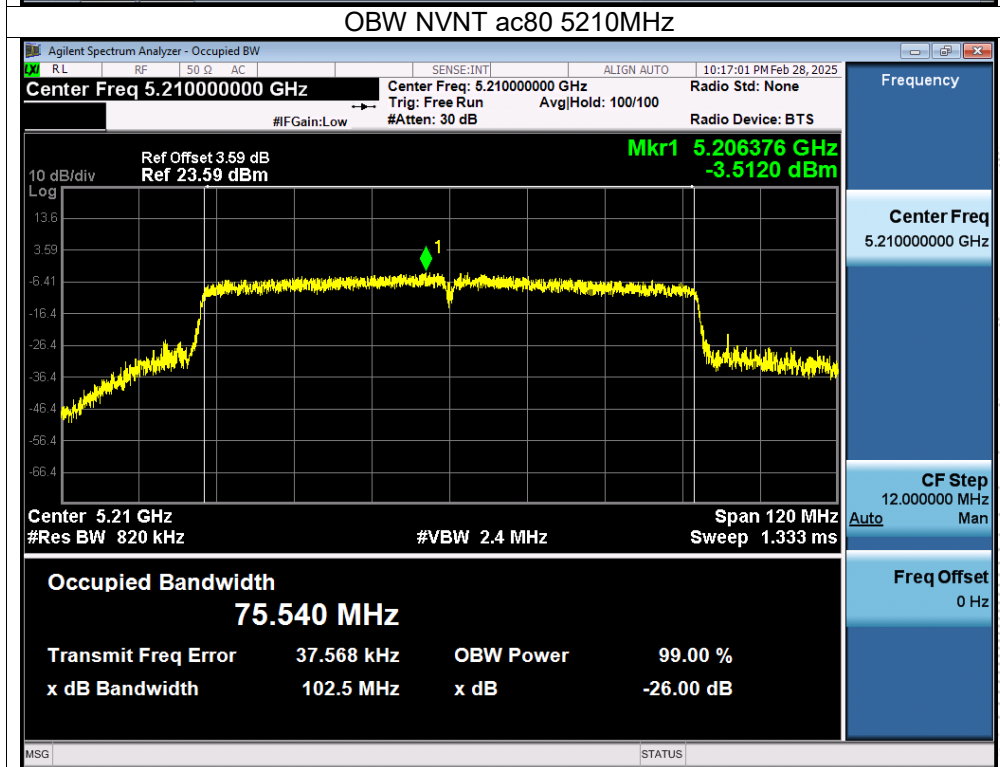
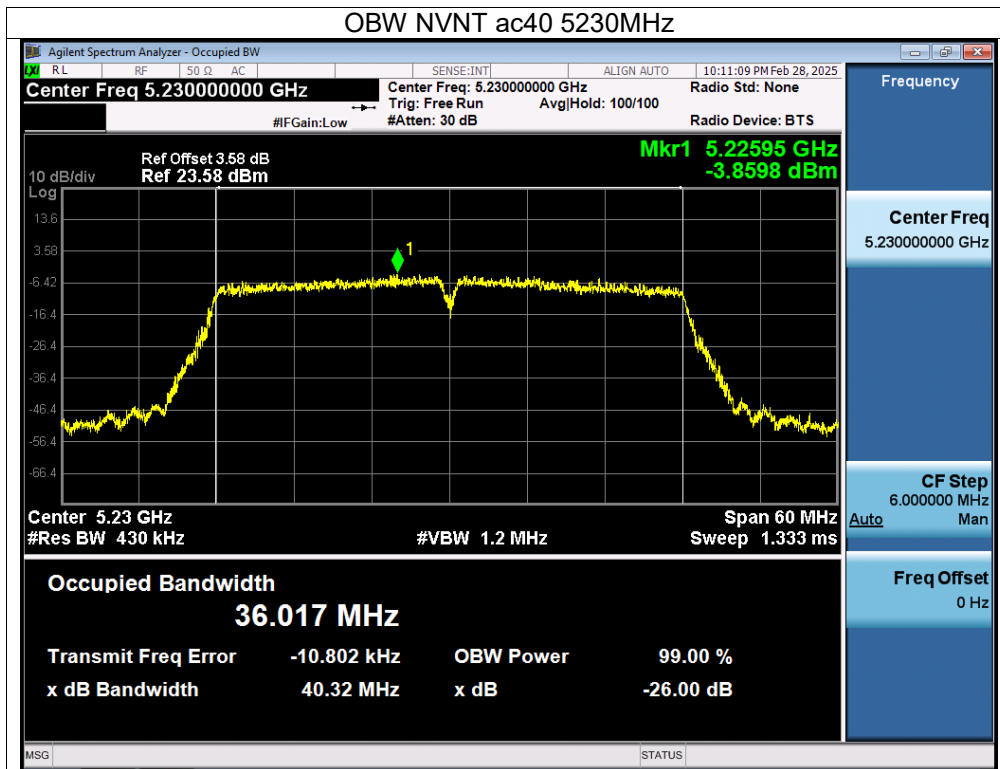


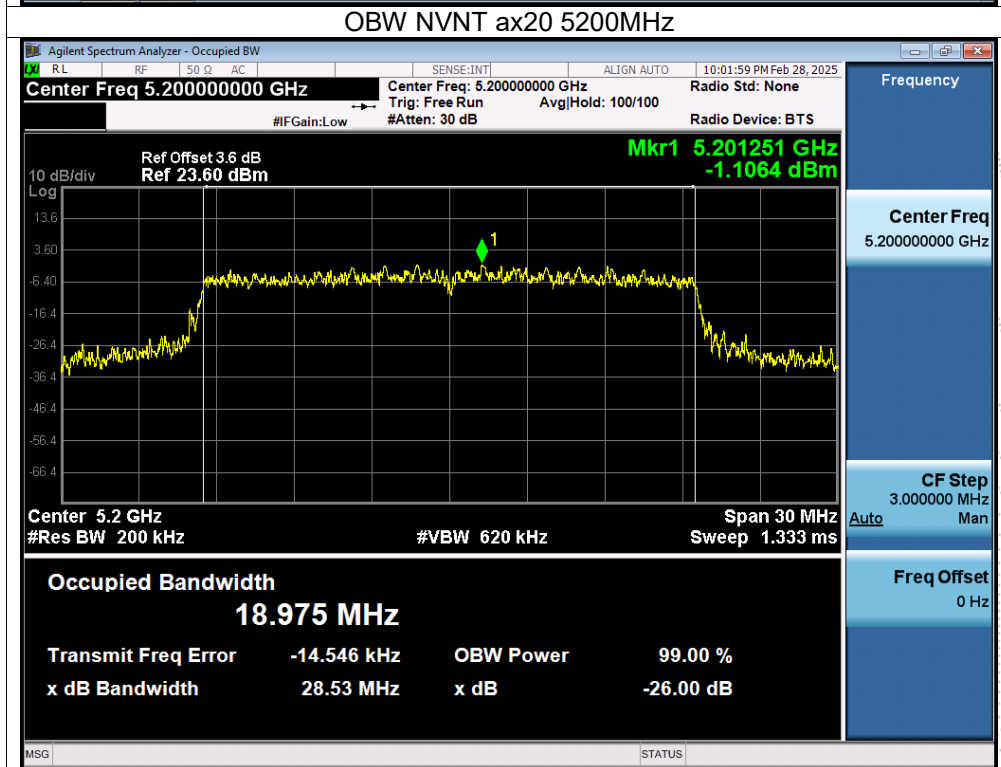
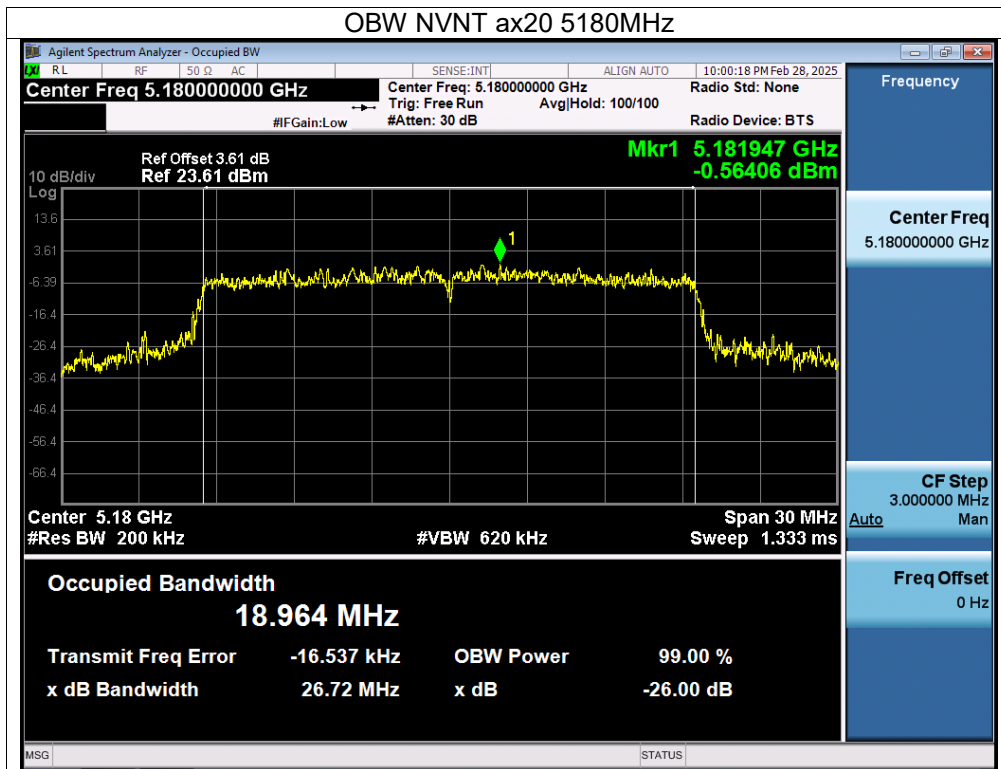


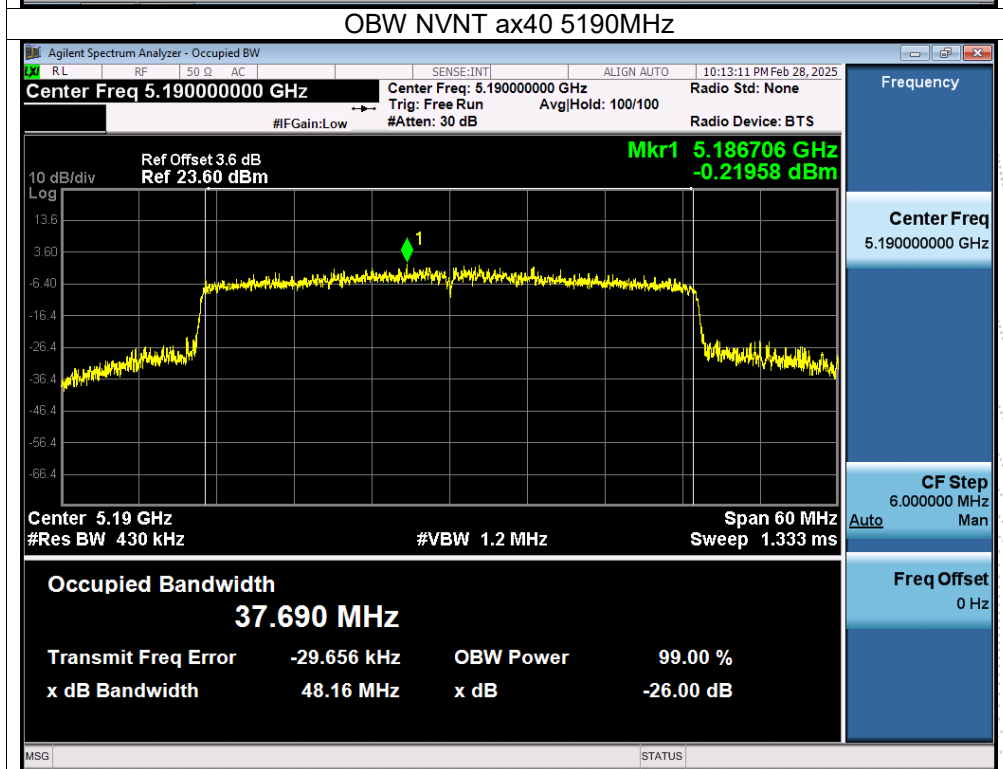
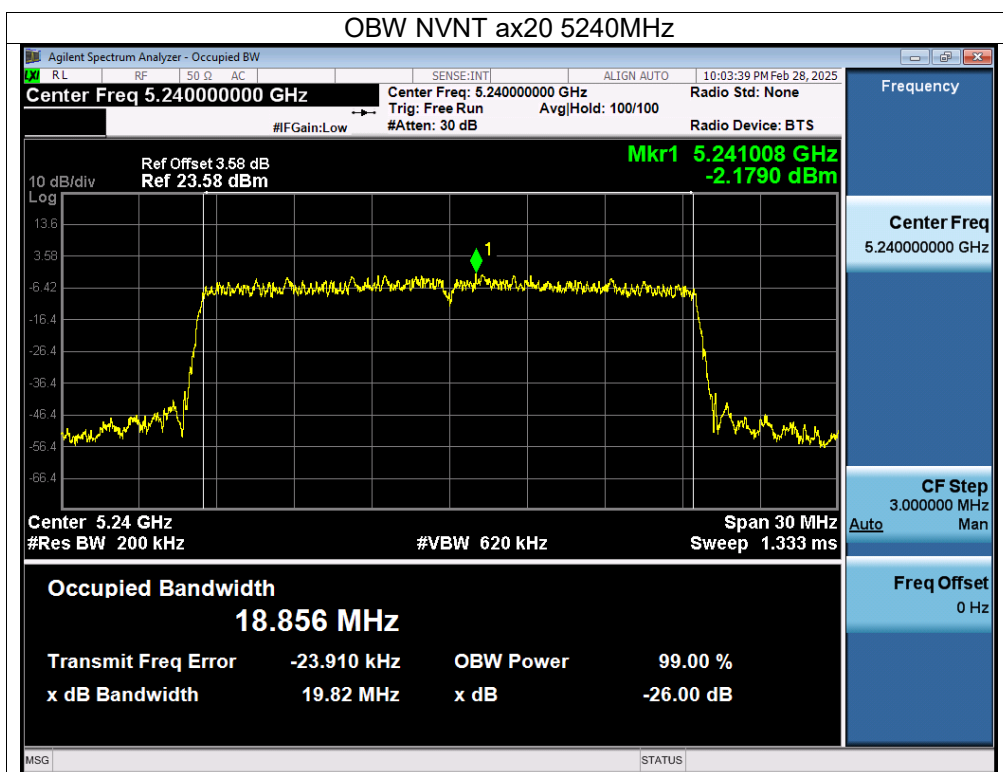


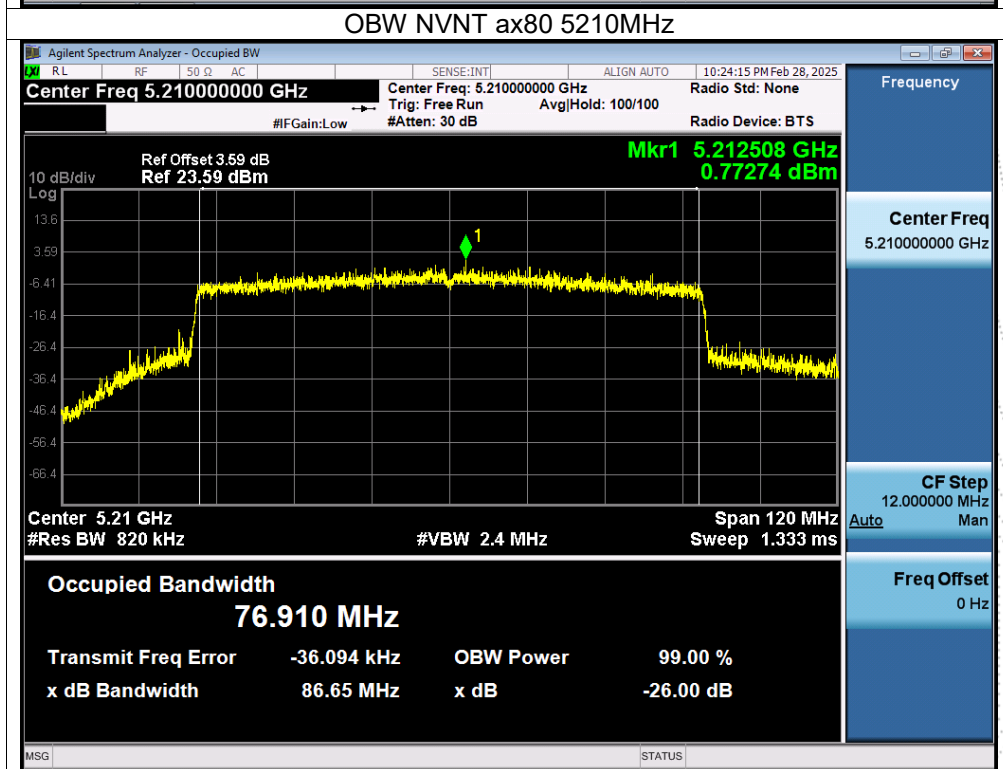
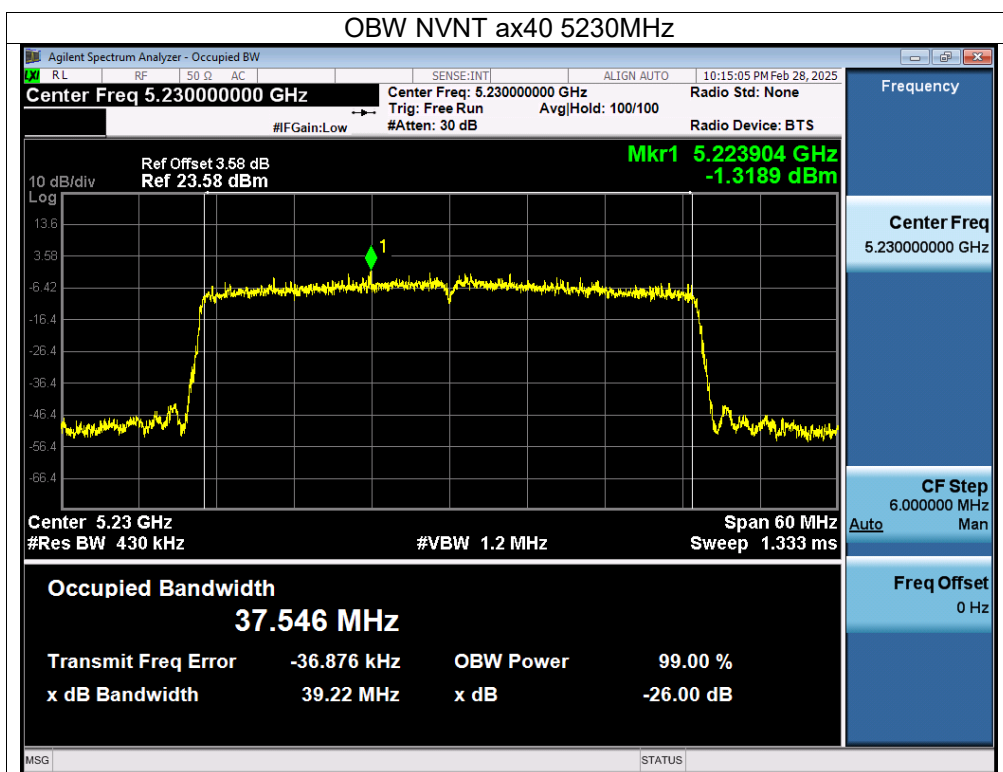








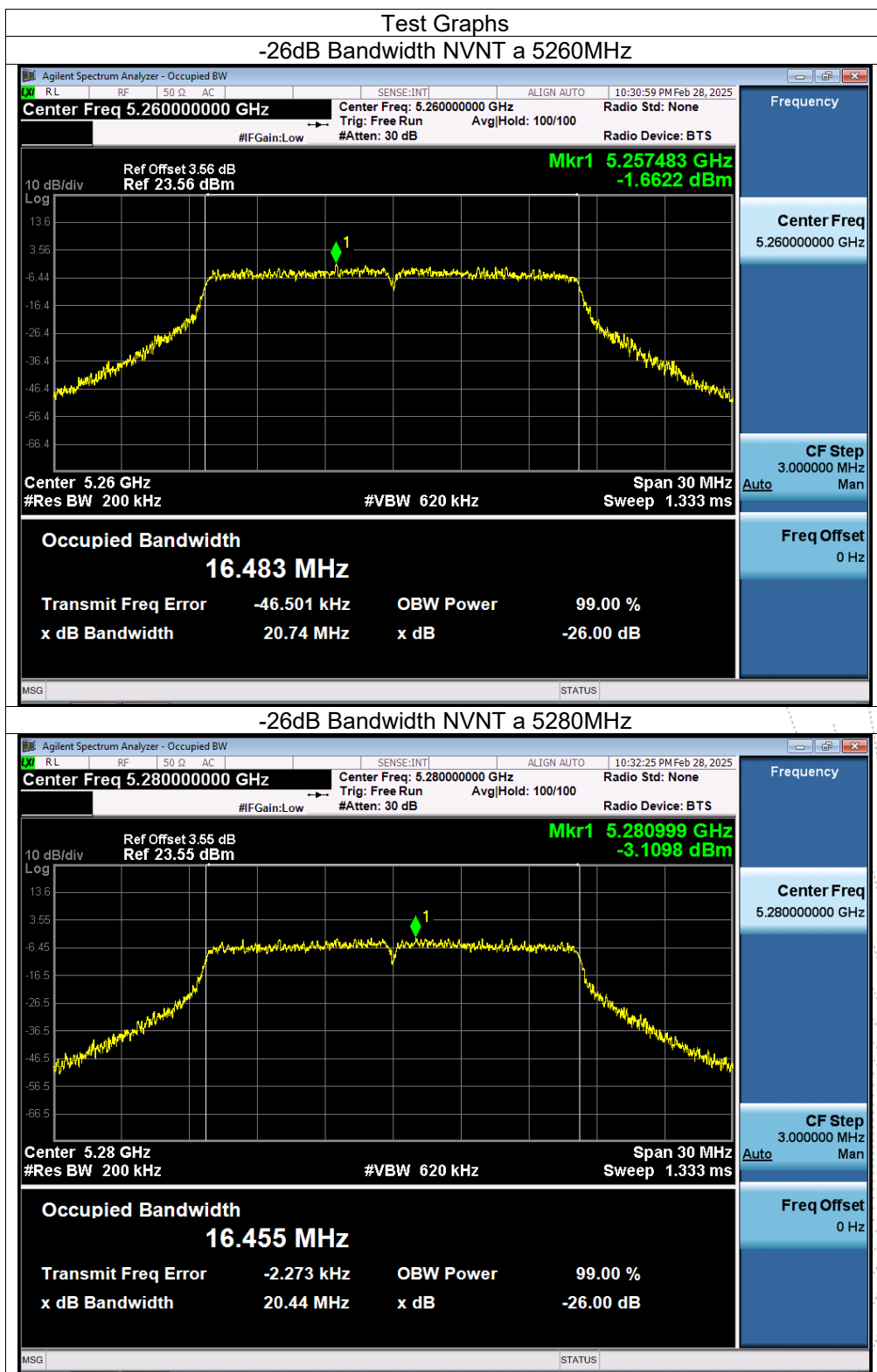


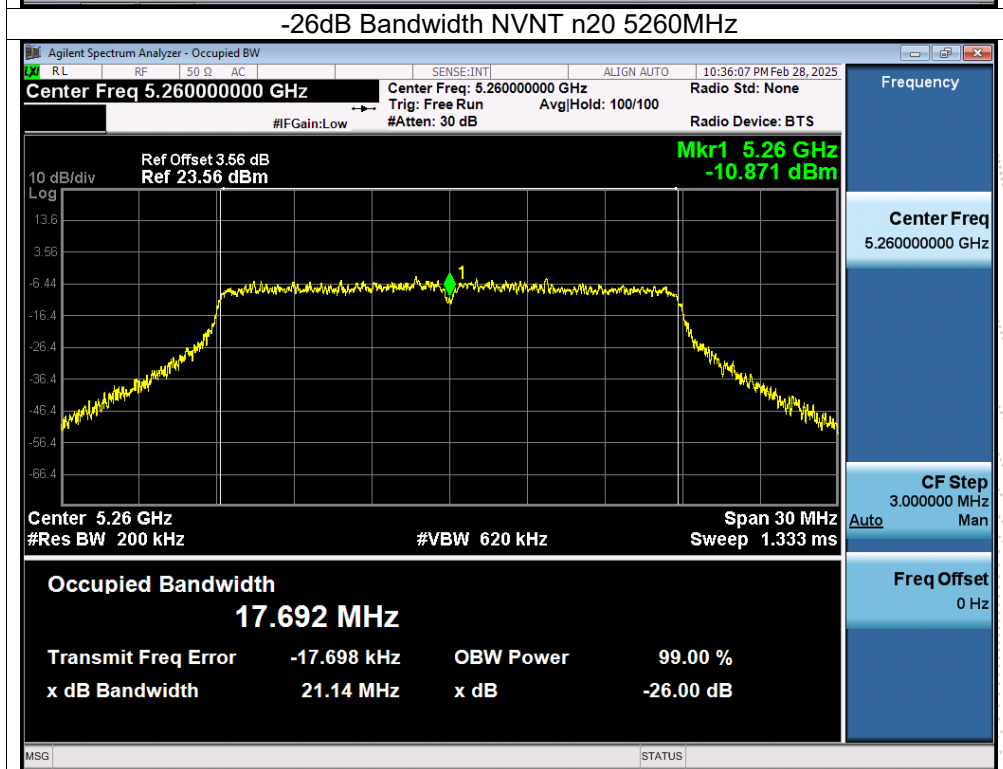
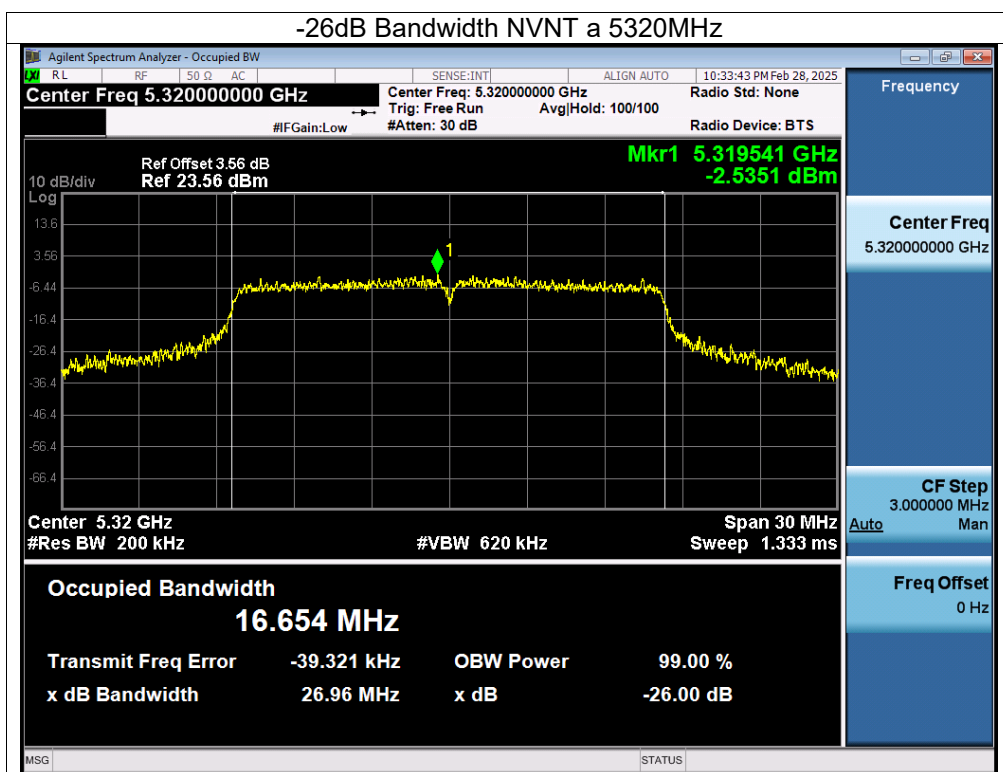


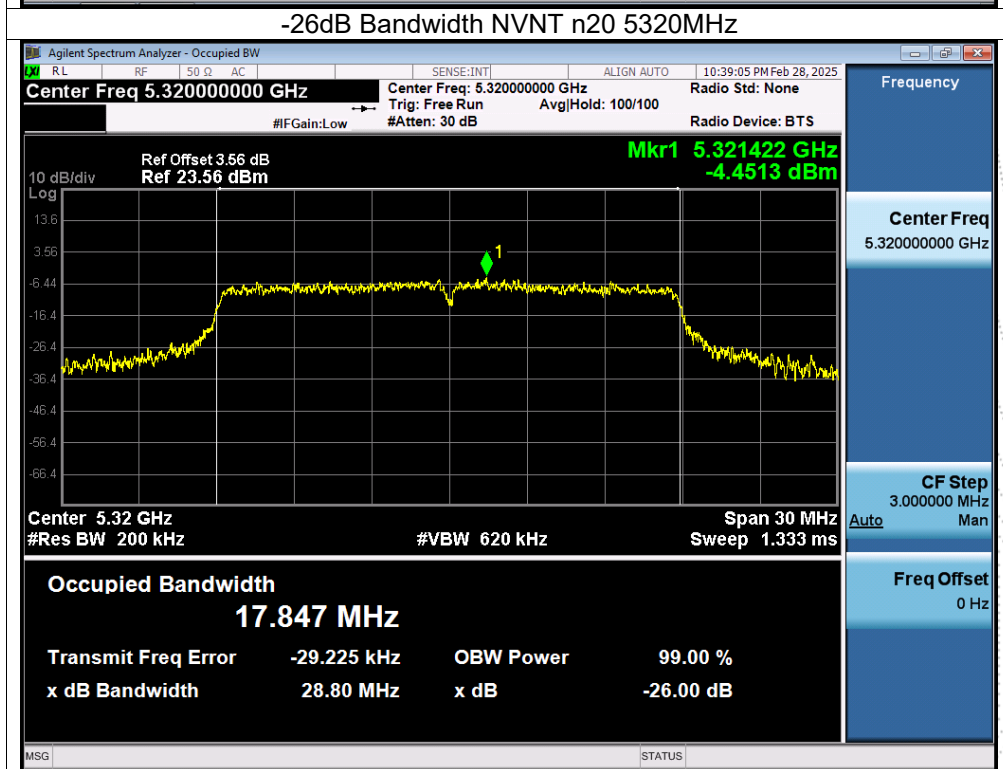
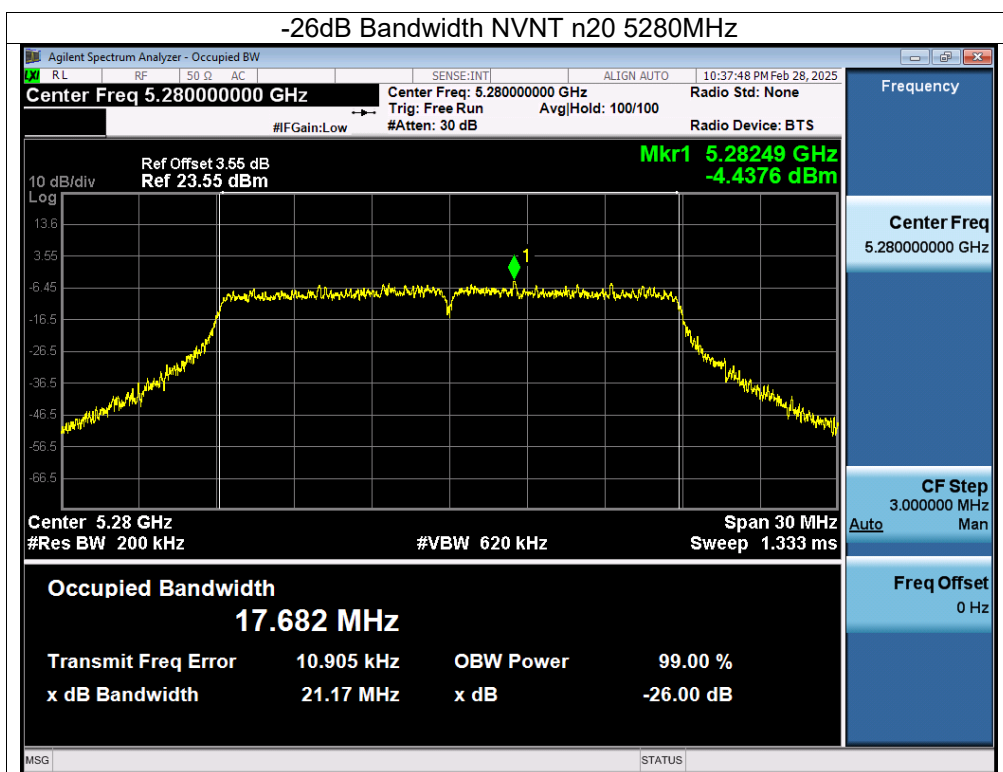
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(U-NII-2A) 5260MHz-5320MHz		

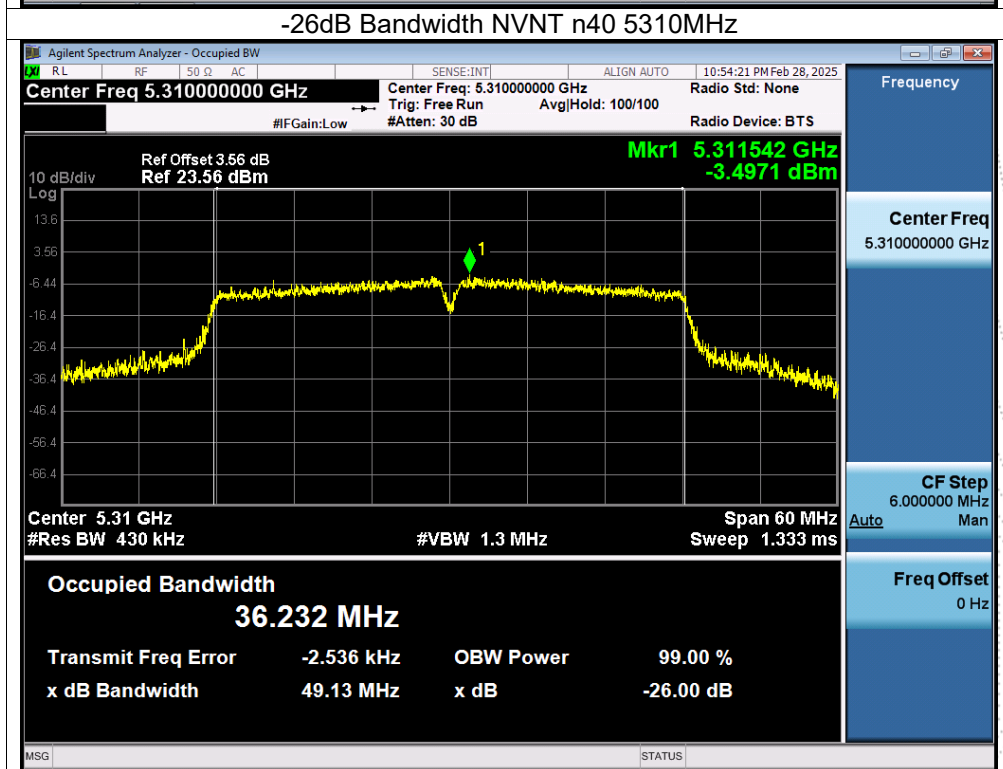
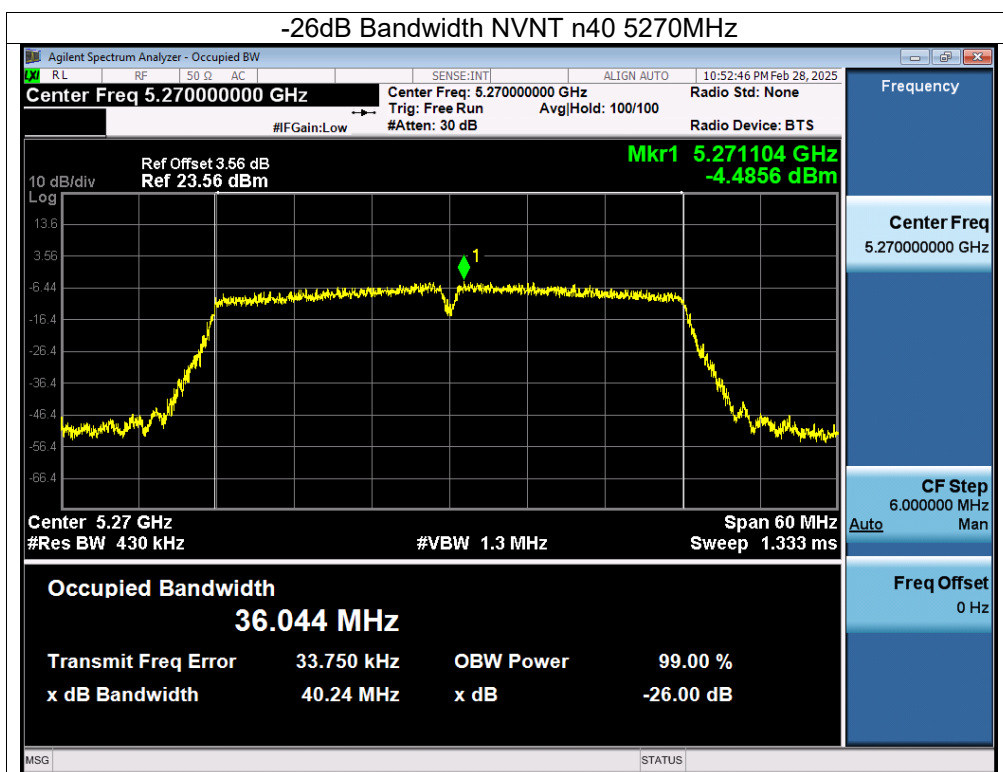
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5260	20.493	20.745	16.479	16.483	Pass
NVNT	a	5280	19.963	20.443	16.472	16.445	Pass
NVNT	a	5320	27.644	26.965	16.629	16.637	Pass
NVNT	n20	5260	21.823	21.141	17.666	17.658	Pass
NVNT	n20	5280	20.955	21.17	17.672	17.665	Pass
NVNT	n20	5320	26.107	28.796	17.797	17.786	Pass
NVNT	n40	5270	40.492	40.243	36.023	36.052	Pass
NVNT	n40	5310	50.144	49.131	36.249	36.208	Pass
NVNT	ac20	5260	21.373	20.926	17.696	17.665	Pass
NVNT	ac20	5280	20.984	20.569	17.675	17.655	Pass
NVNT	ac20	5320	25.972	26.936	17.784	17.795	Pass
NVNT	ac40	5270	40.19	40.003	36.034	36.036	Pass
NVNT	ac40	5310	51.887	50.331	36.143	36.127	Pass
NVNT	ac80	5290	102.517	103.234	75.377	75.405	Pass
NVNT	ax20	5260	21.461	21.4	18.944	18.942	Pass
NVNT	ax20	5280	21.521	21.713	18.906	18.912	Pass
NVNT	ax20	5320	26.594	25.987	19.023	18.959	Pass
NVNT	ax40	5270	39.41	39.147	37.446	37.555	Pass
NVNT	ax40	5310	48.071	48.104	37.68	37.606	Pass
NVNT	ax80	5290	89.791	99.418	77.003	76.952	Pass

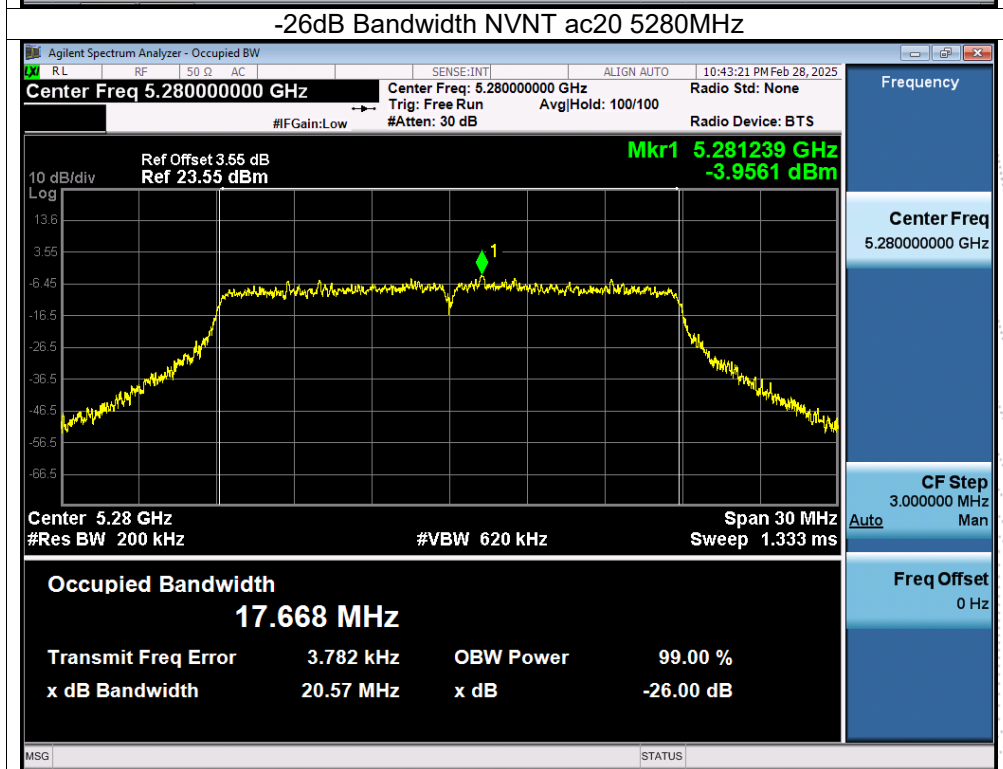
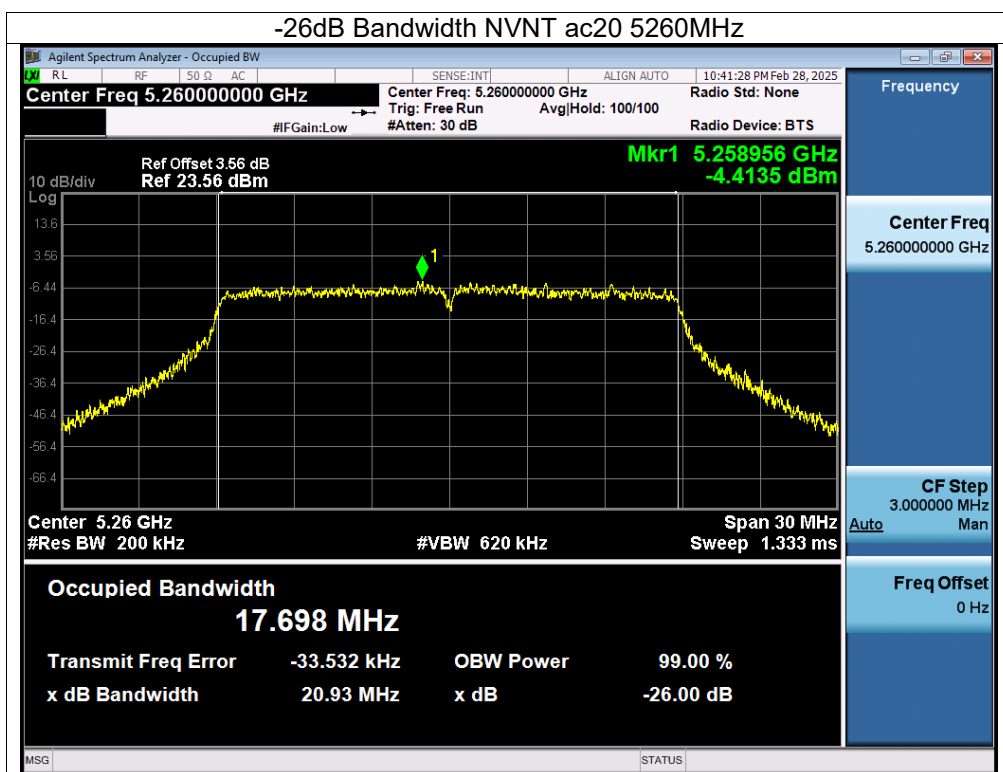
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

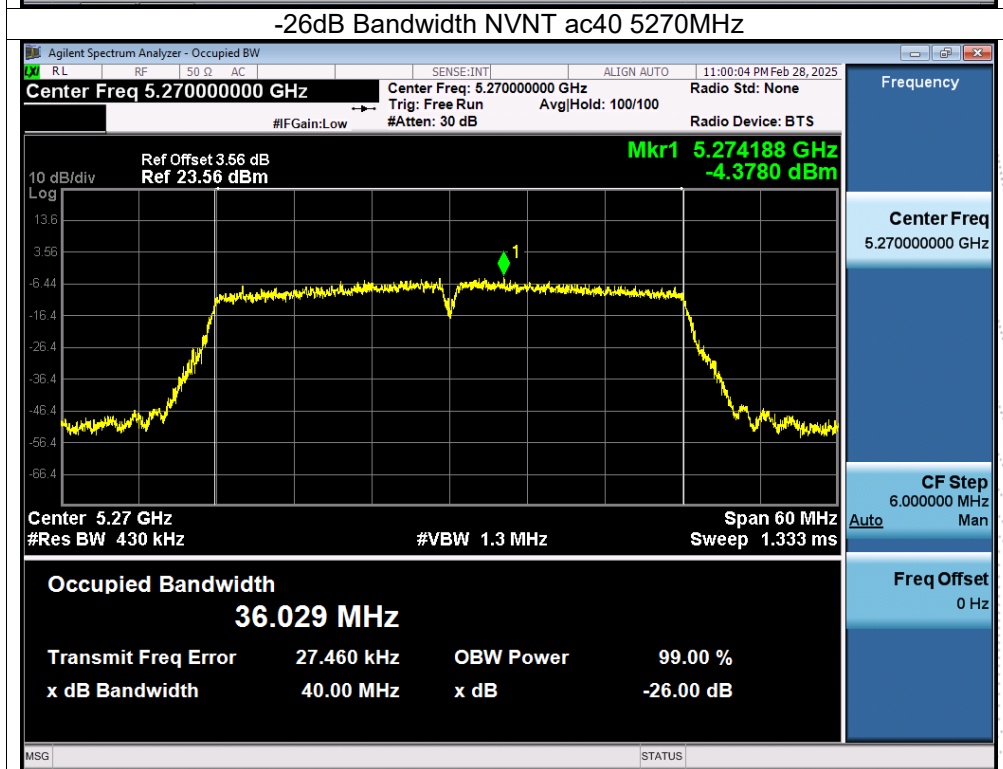
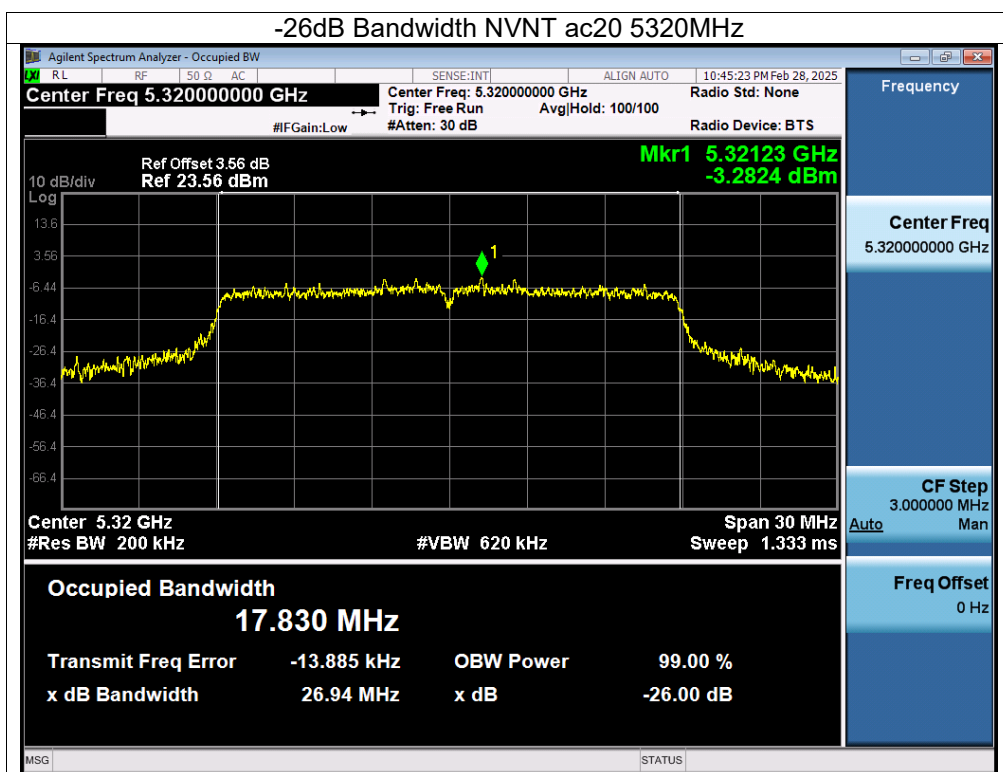


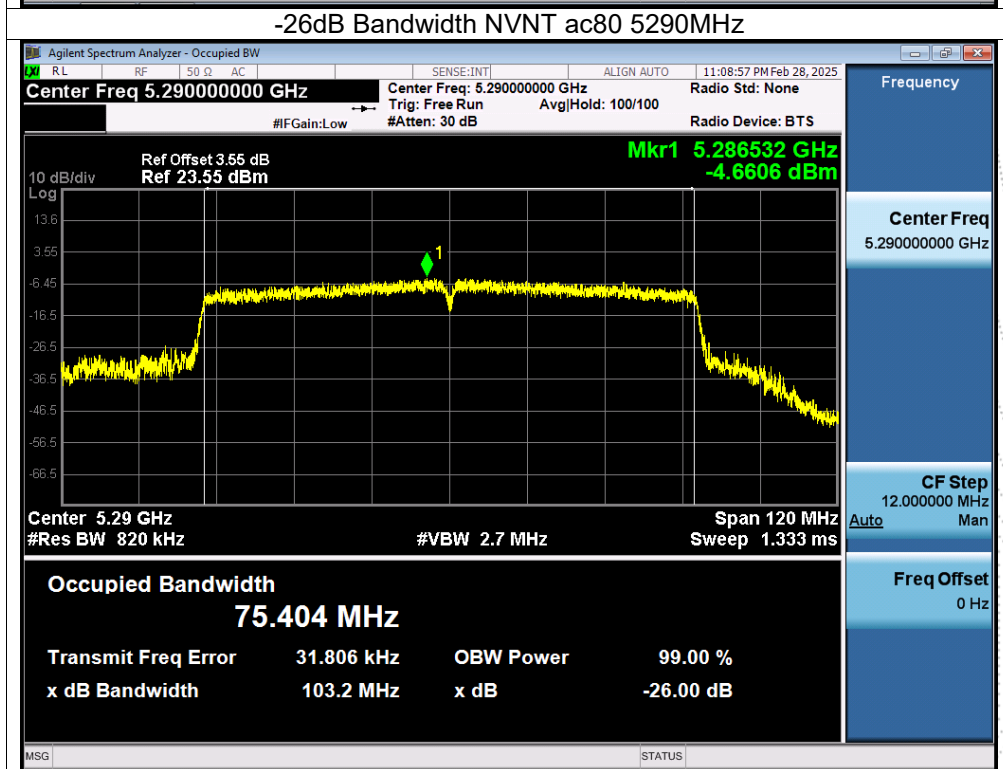
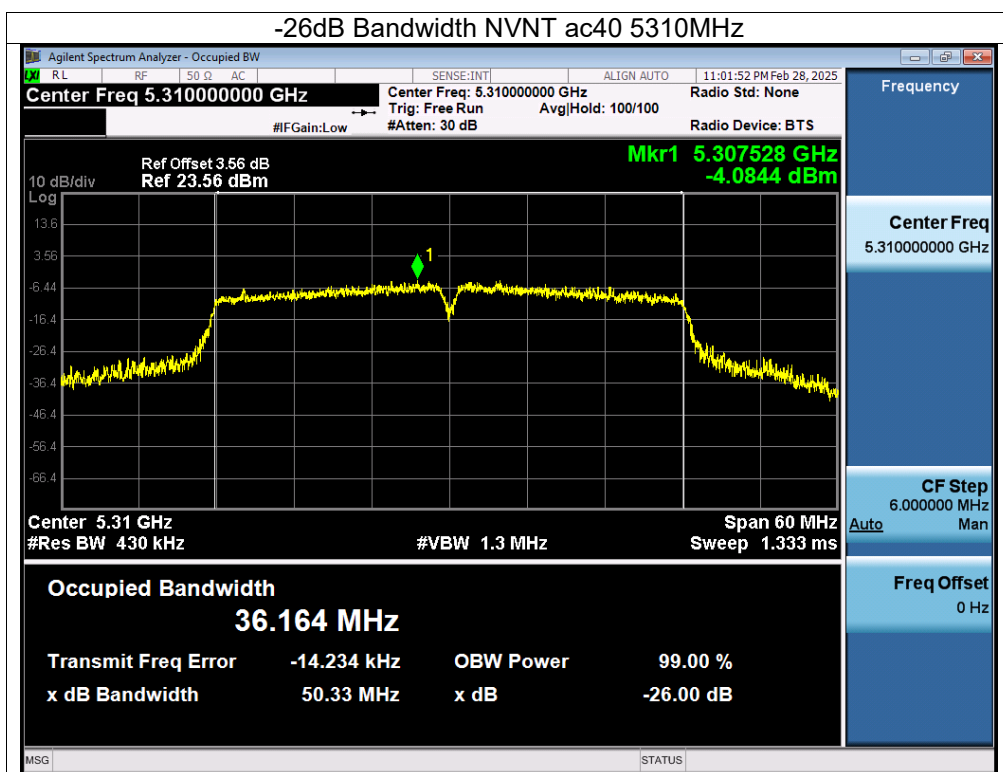


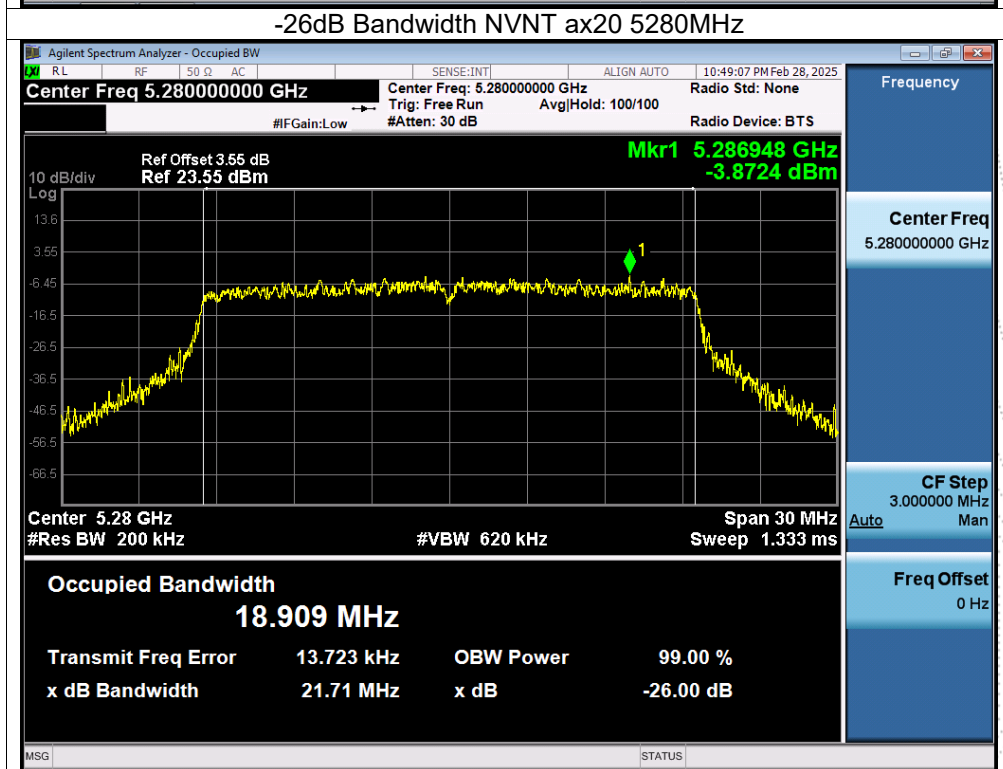
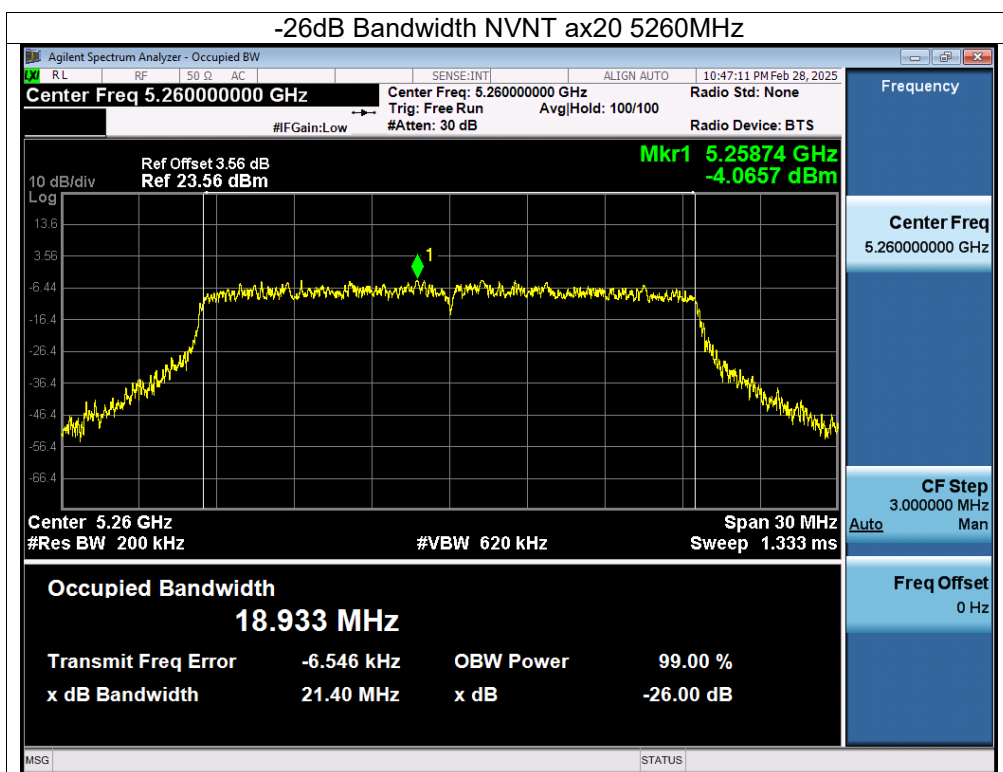


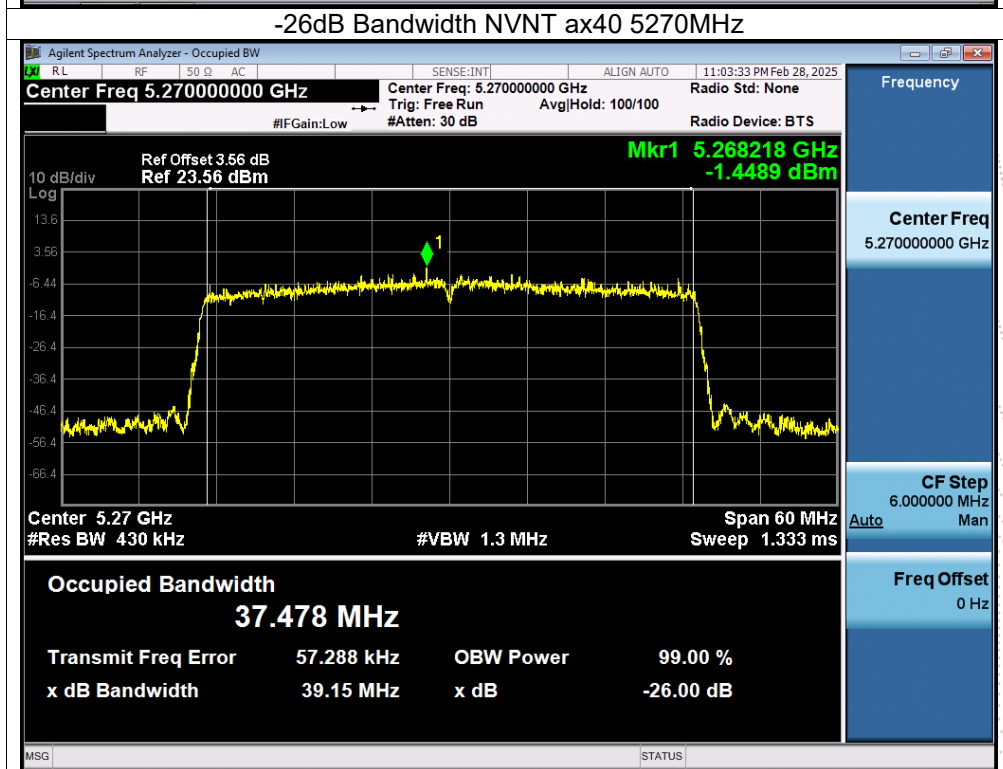
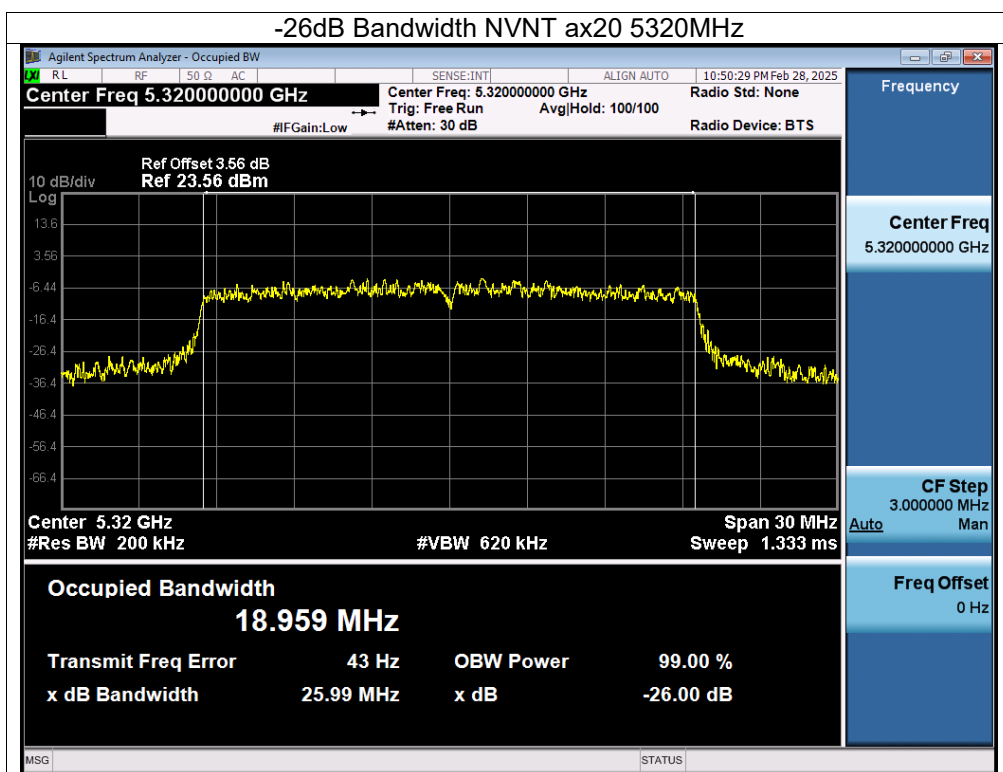


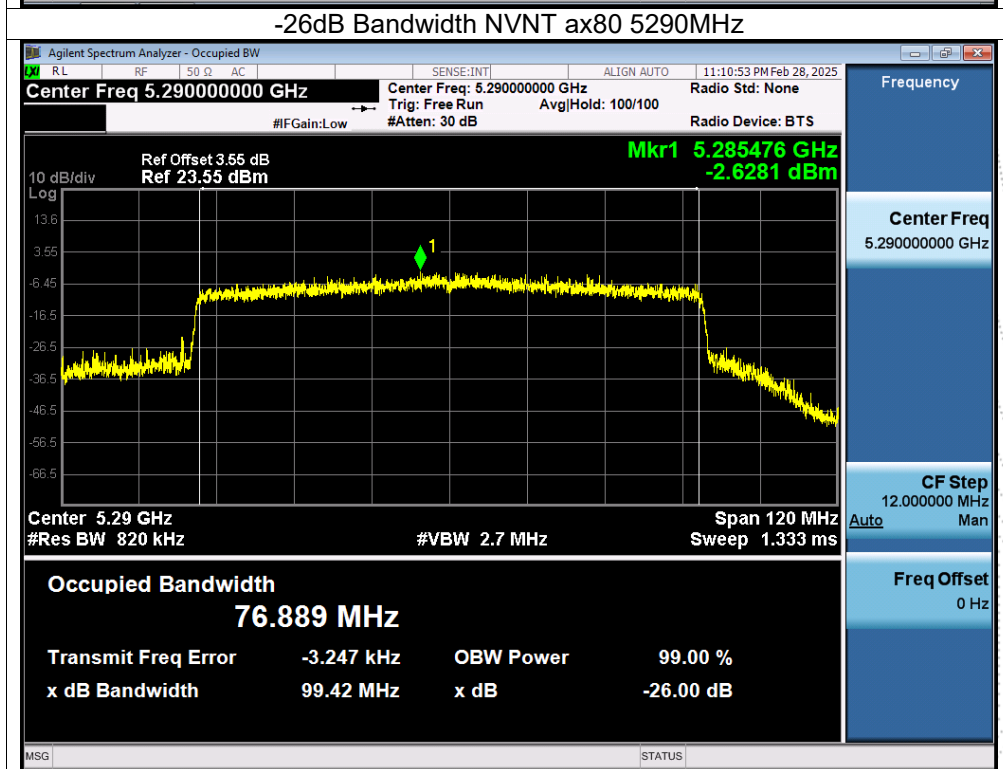
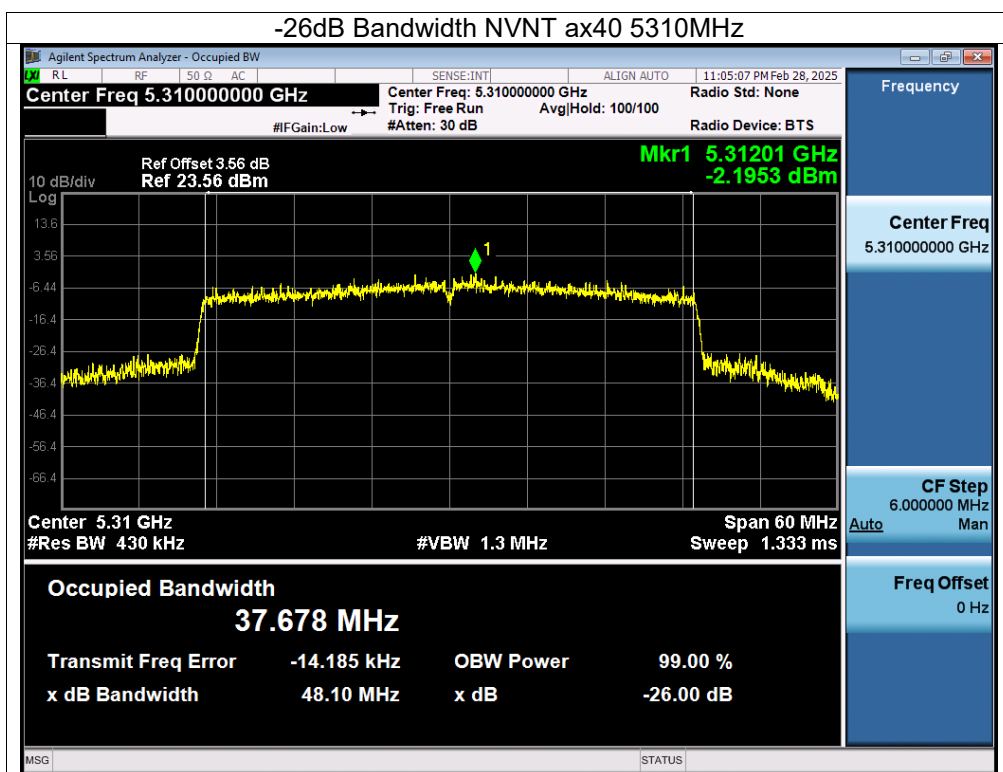












Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

