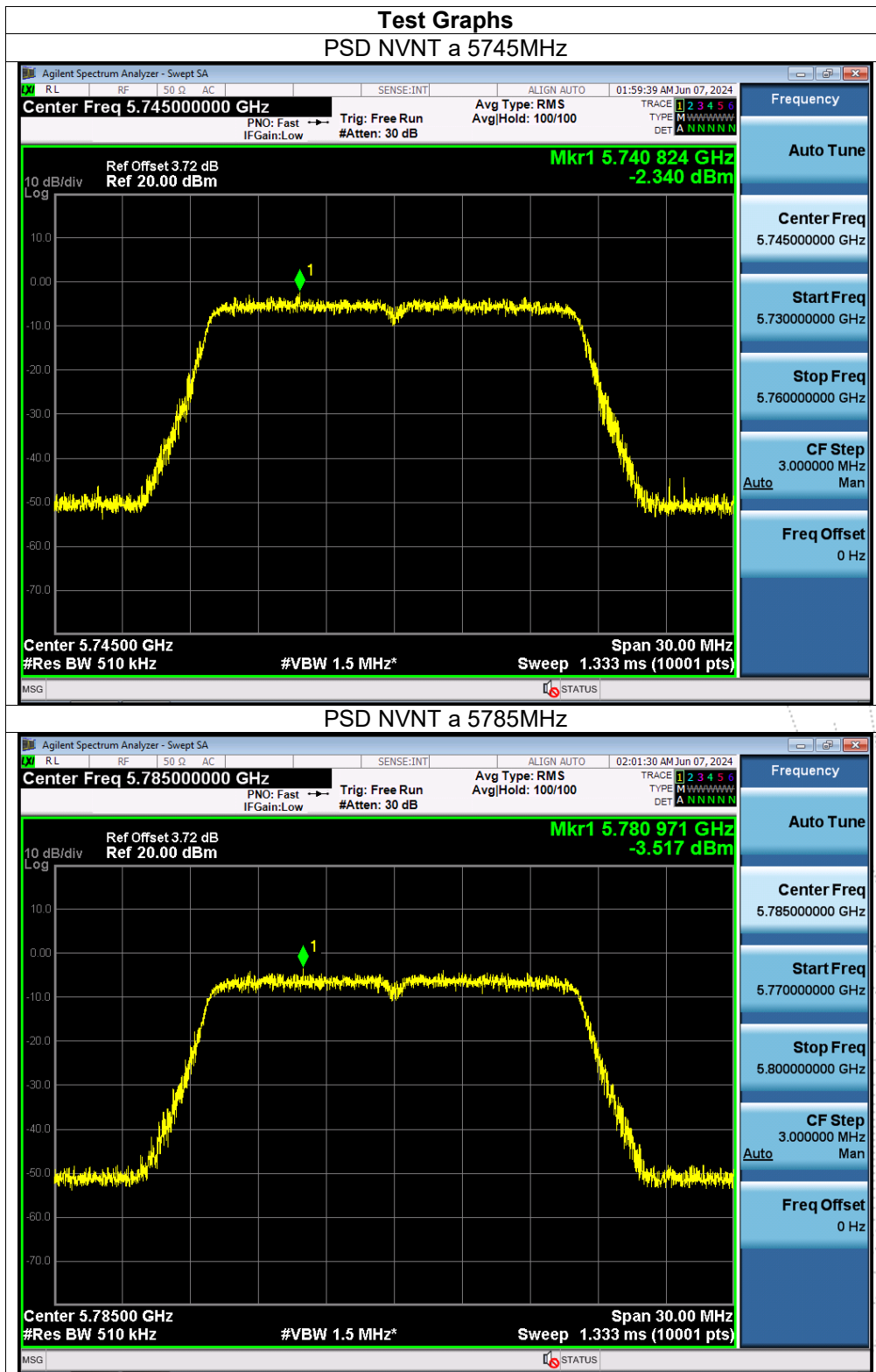
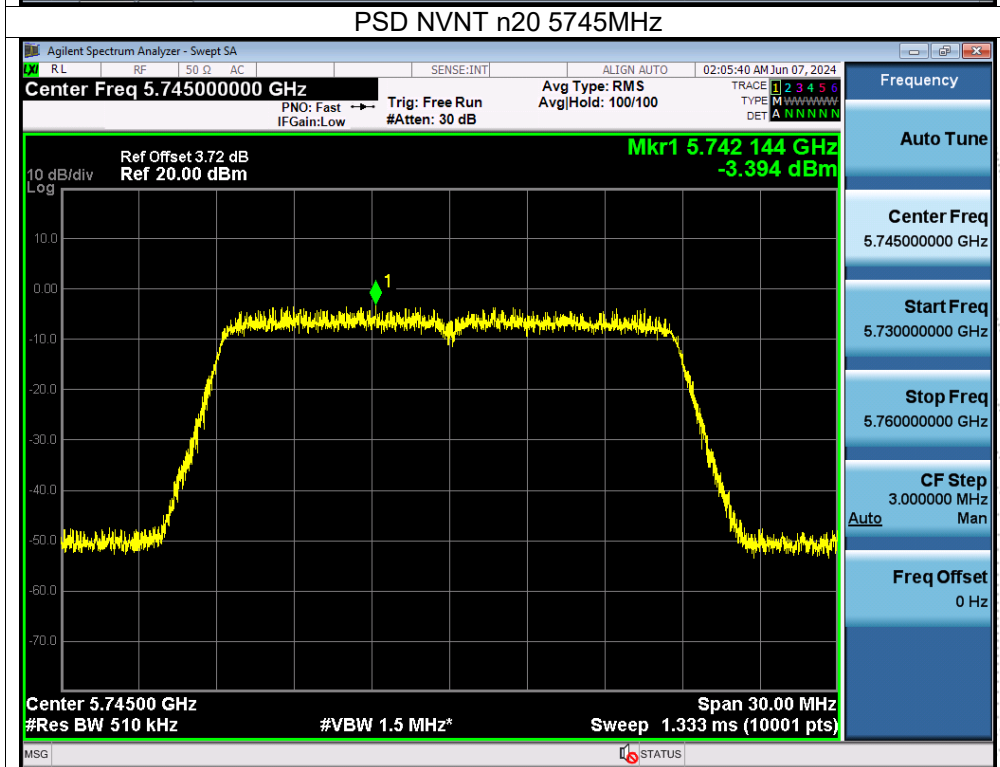
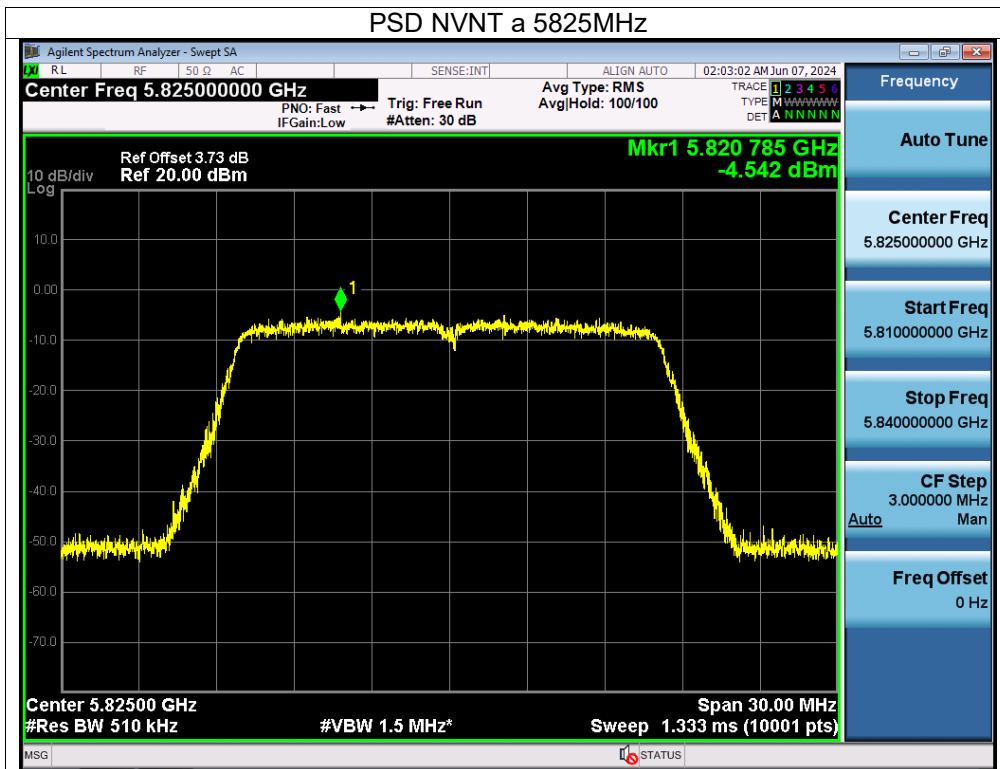
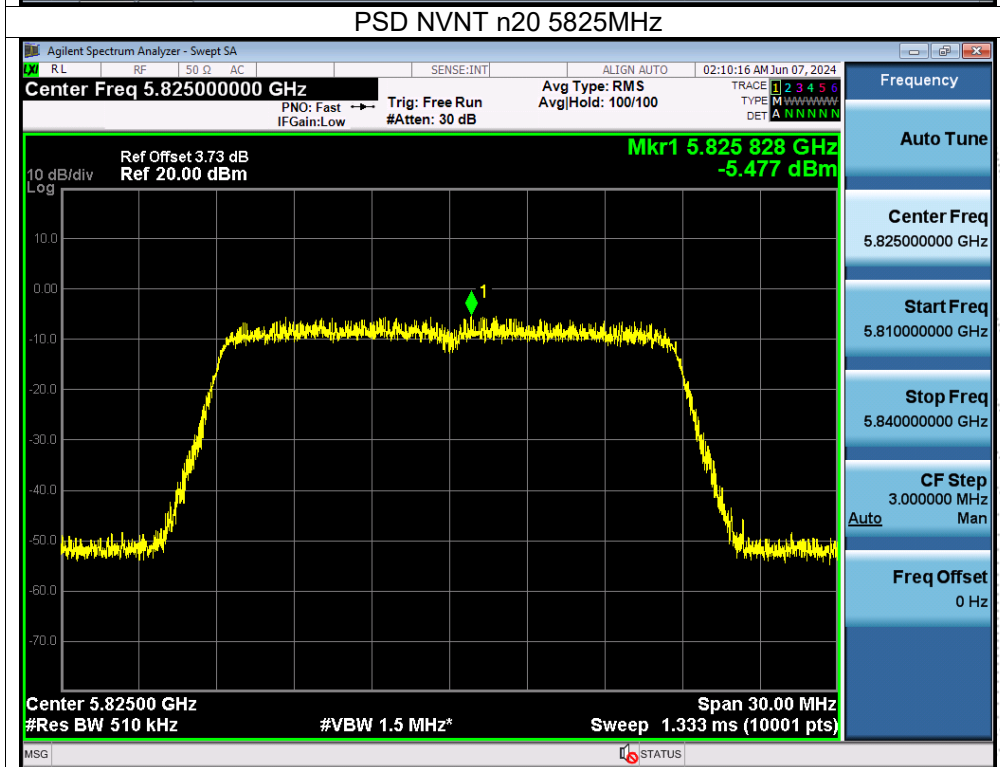
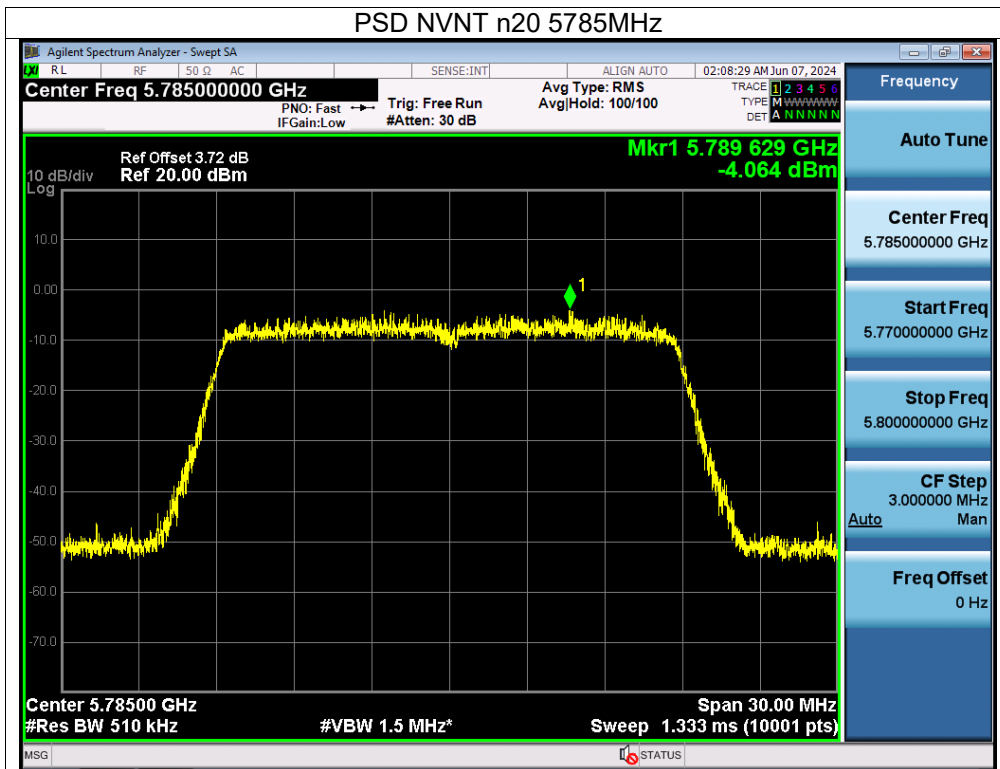
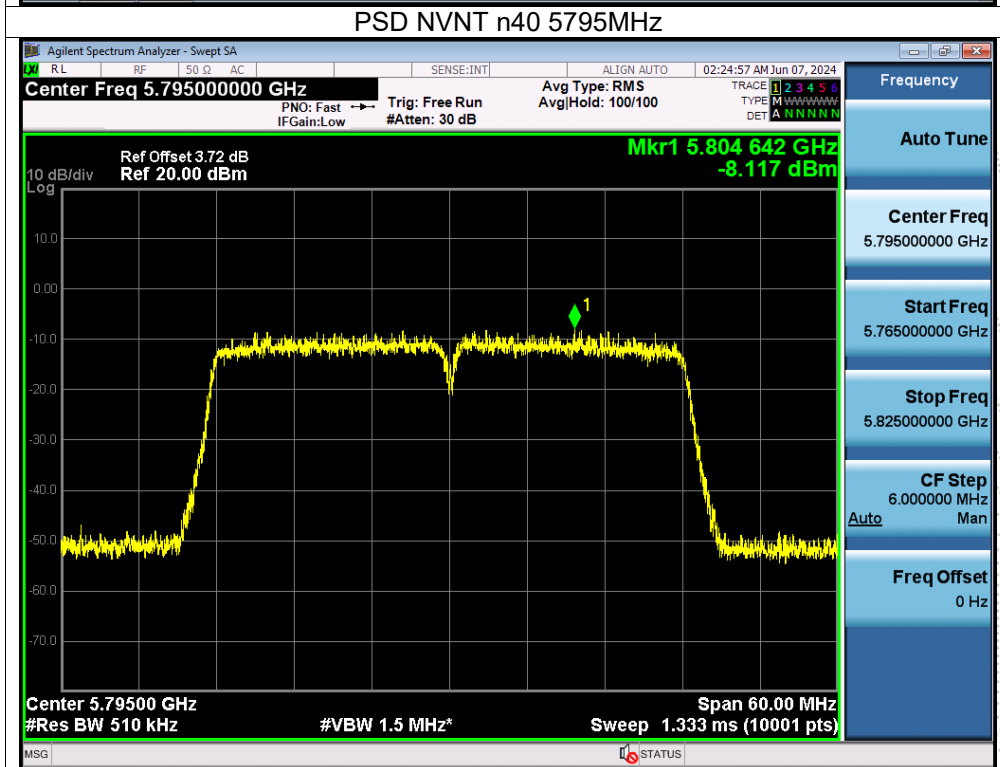
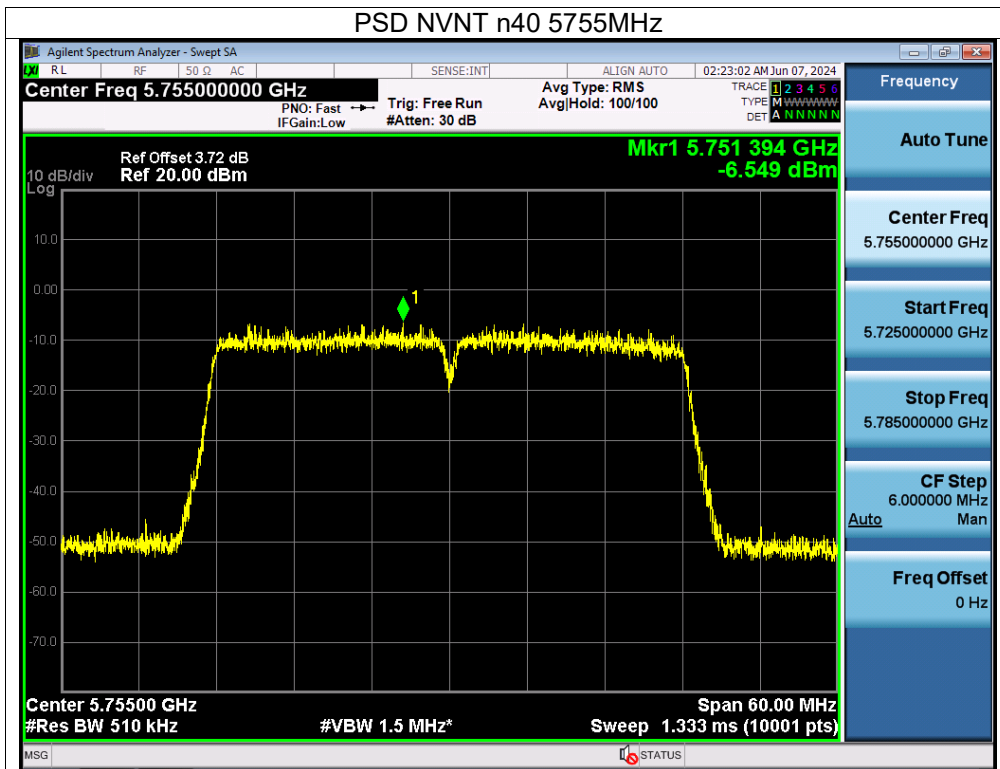


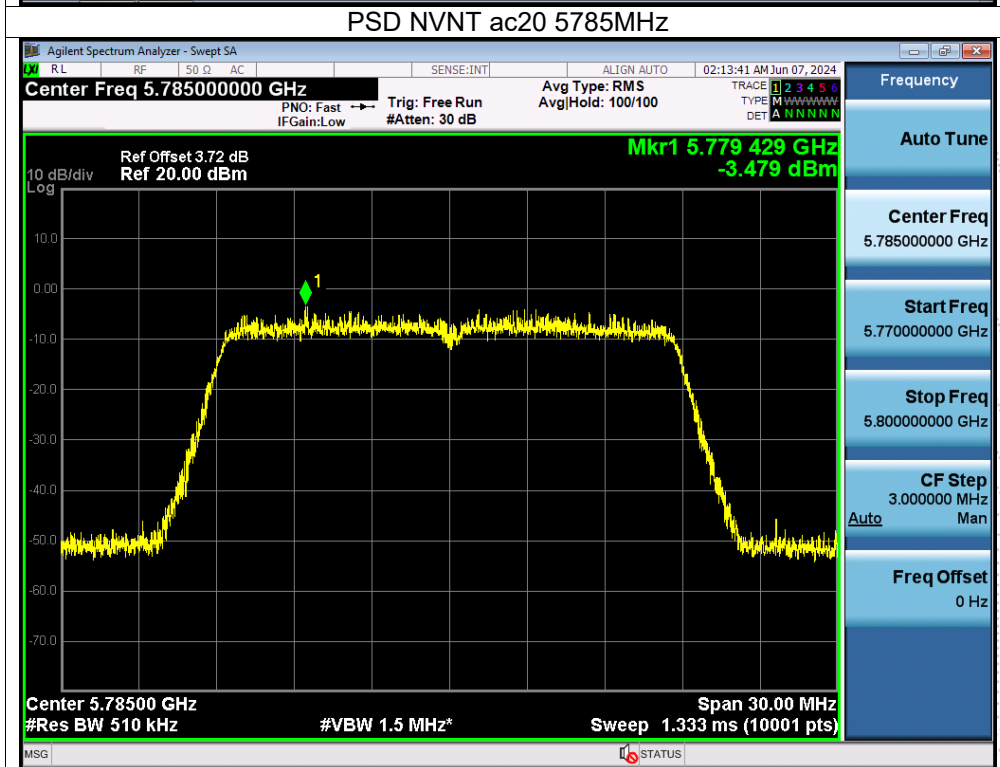
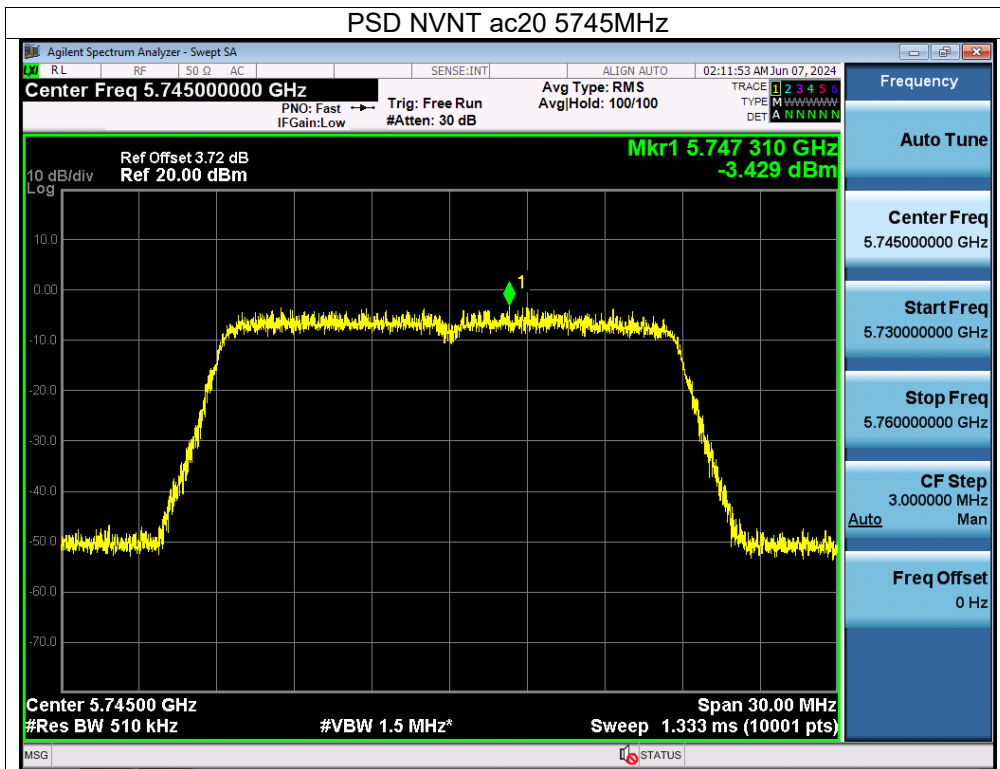
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

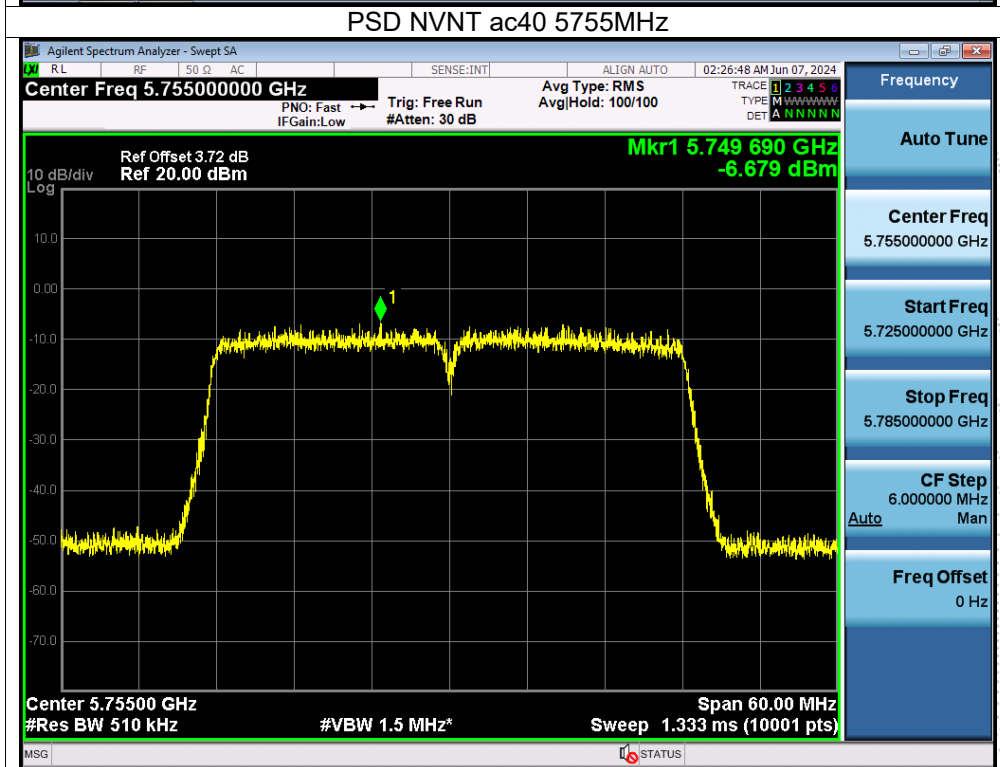
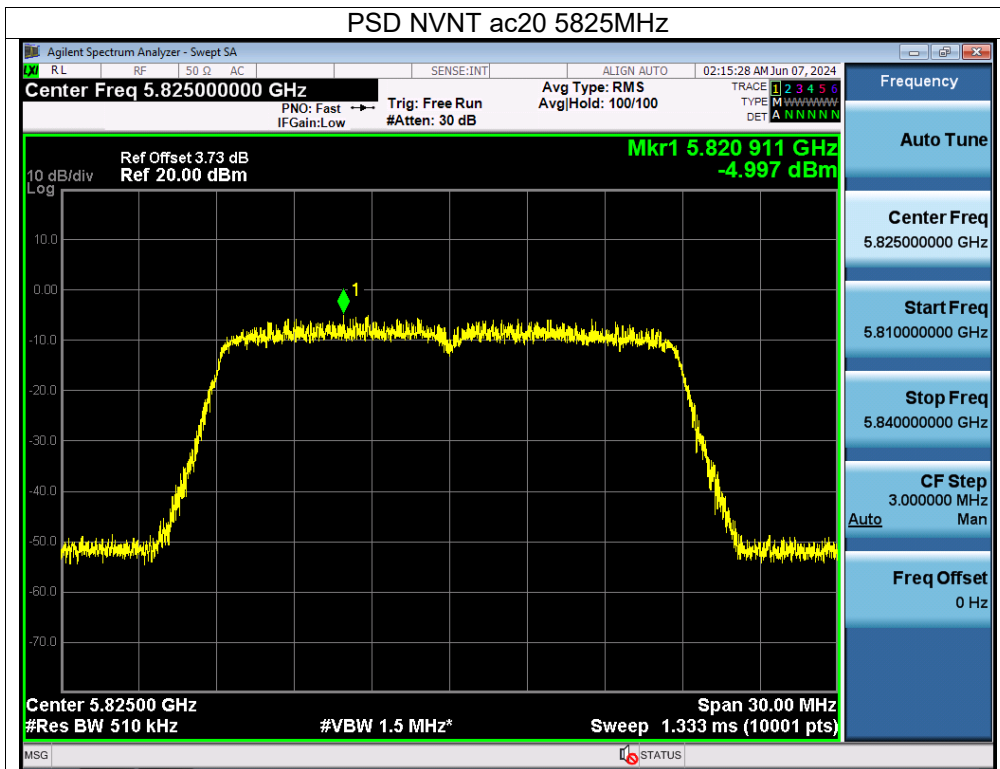


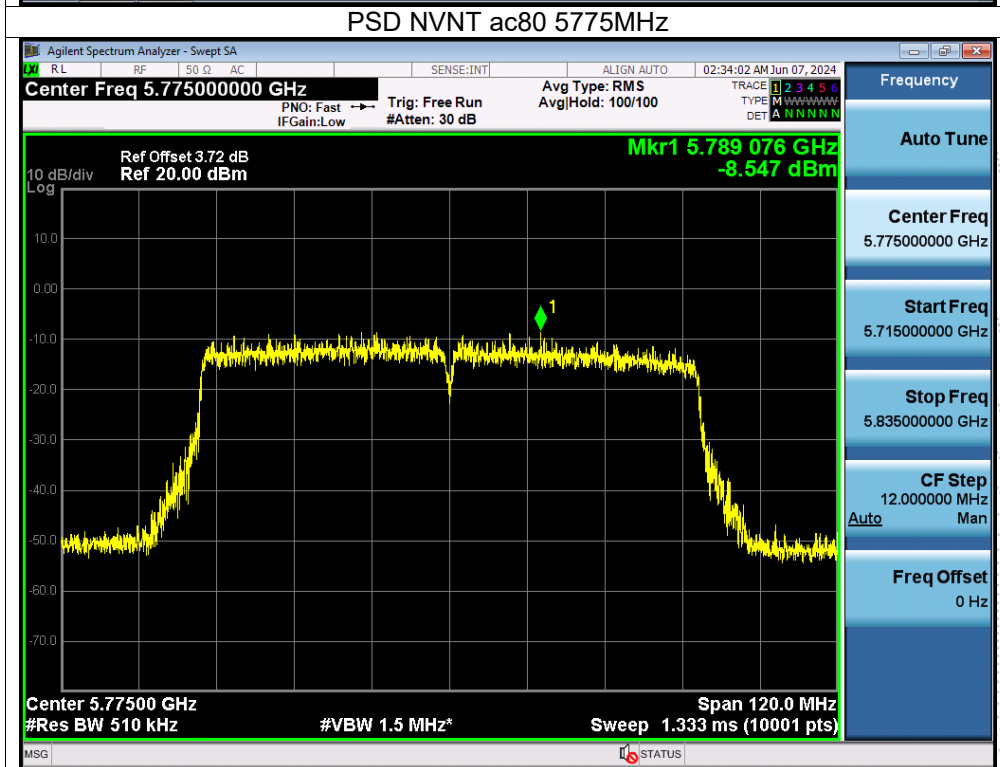
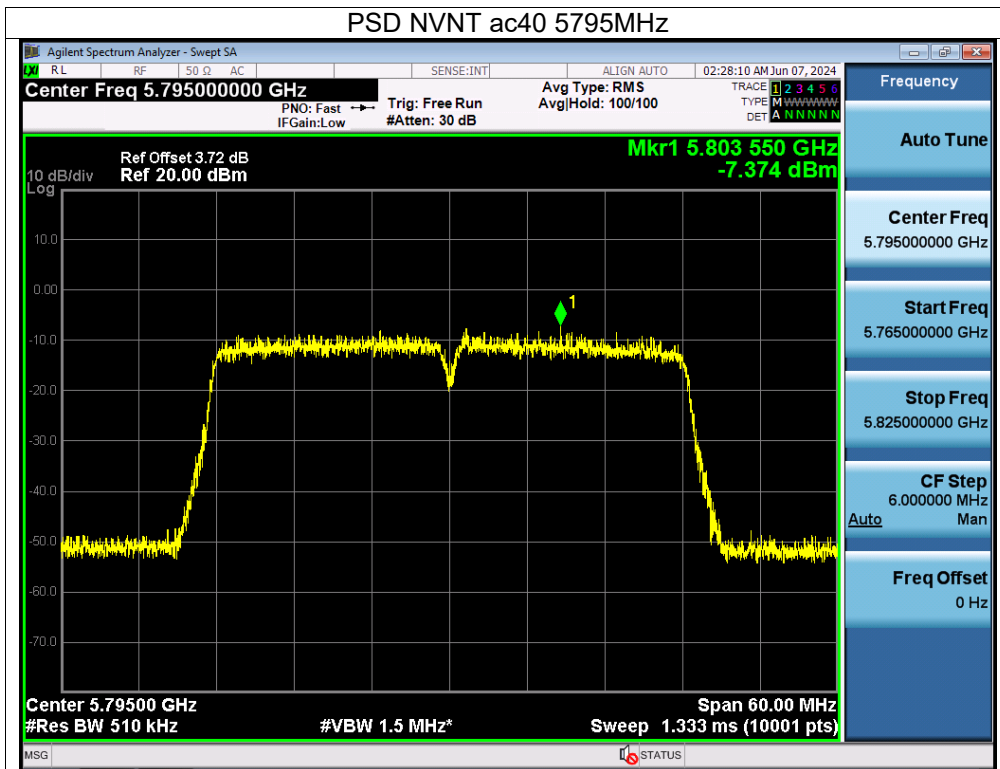


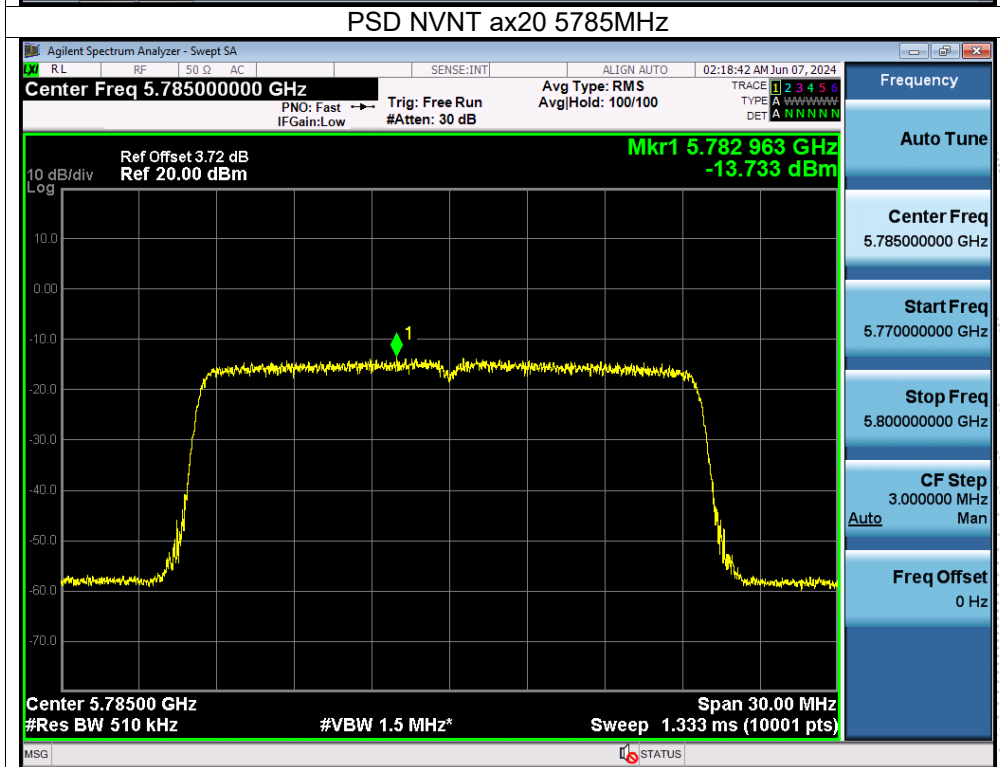
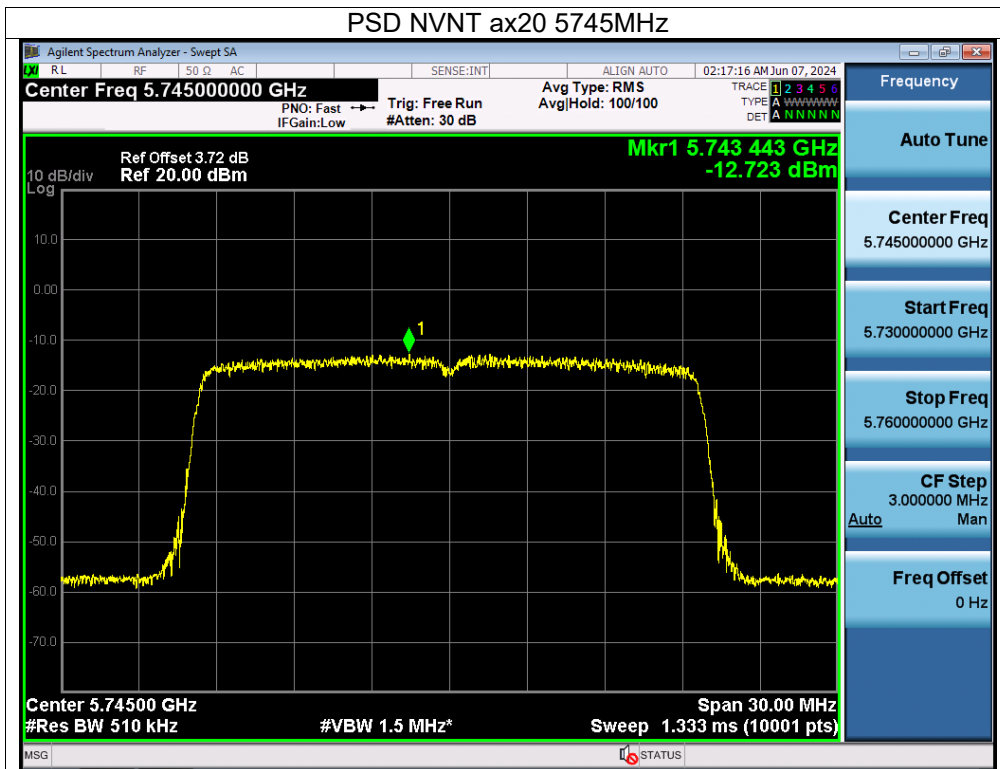


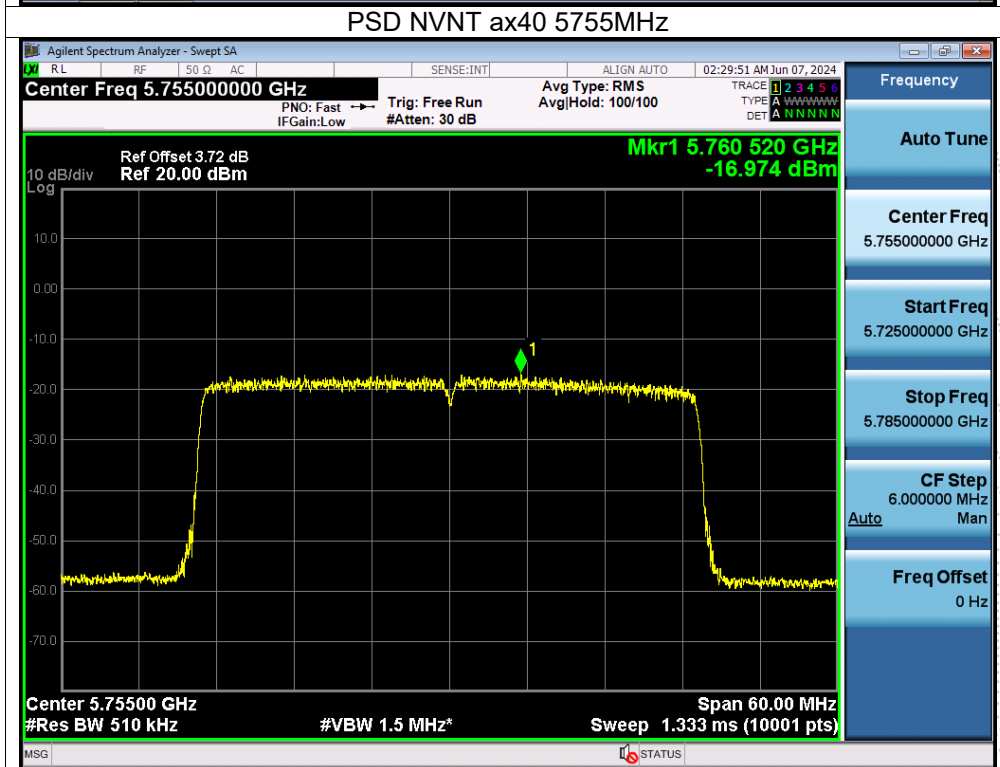
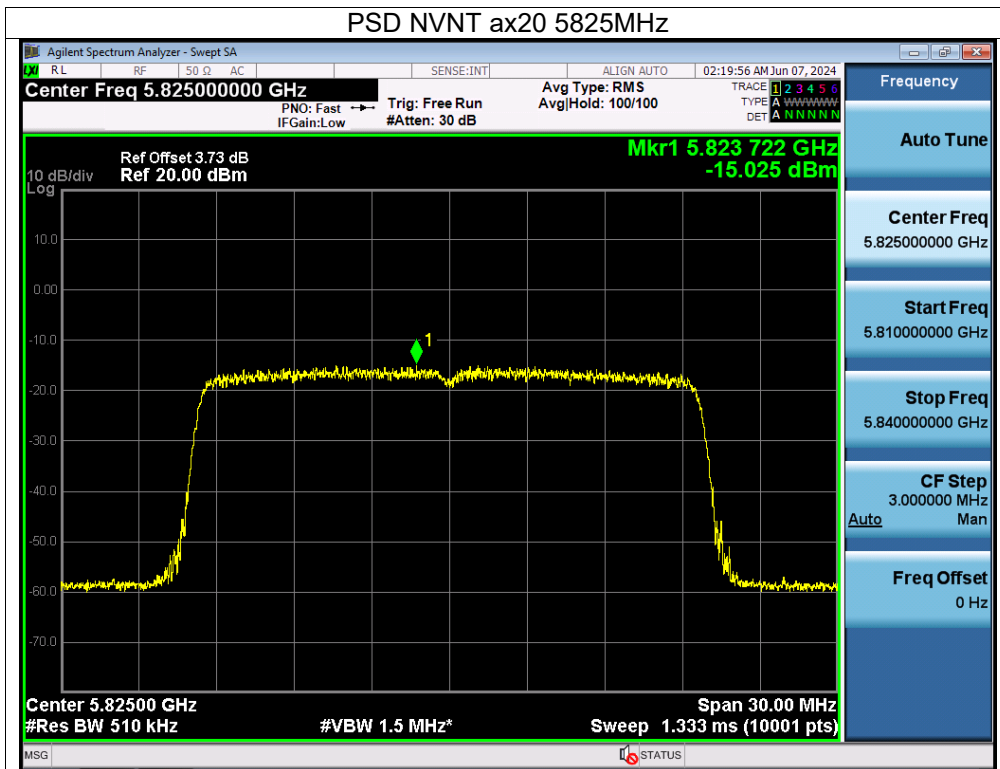


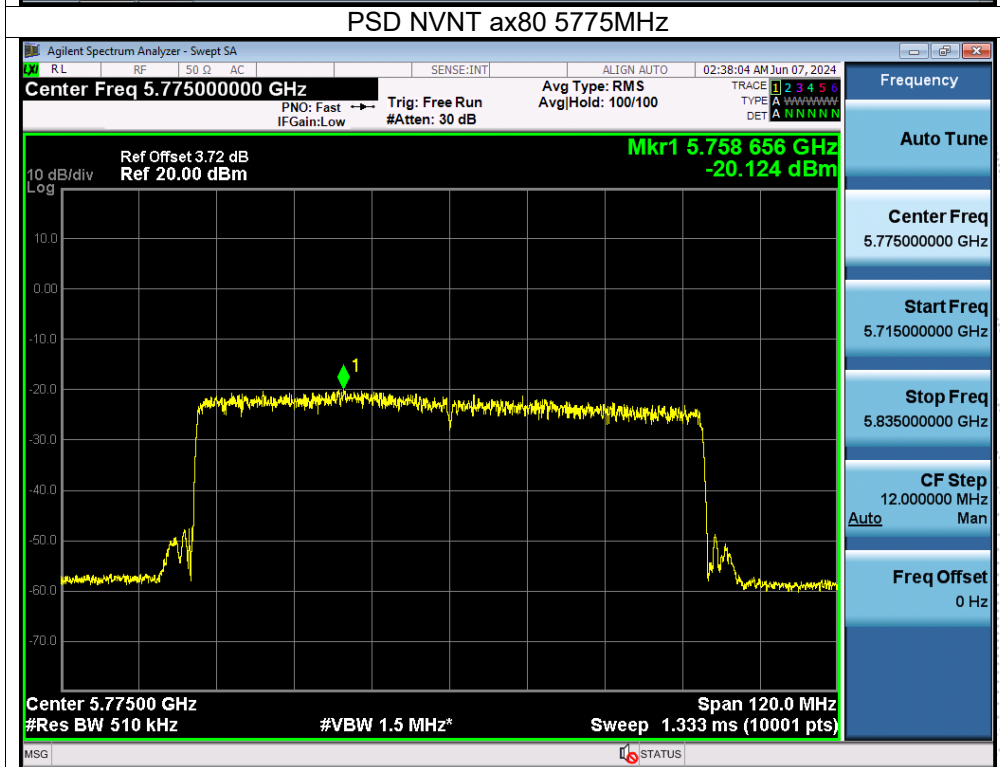
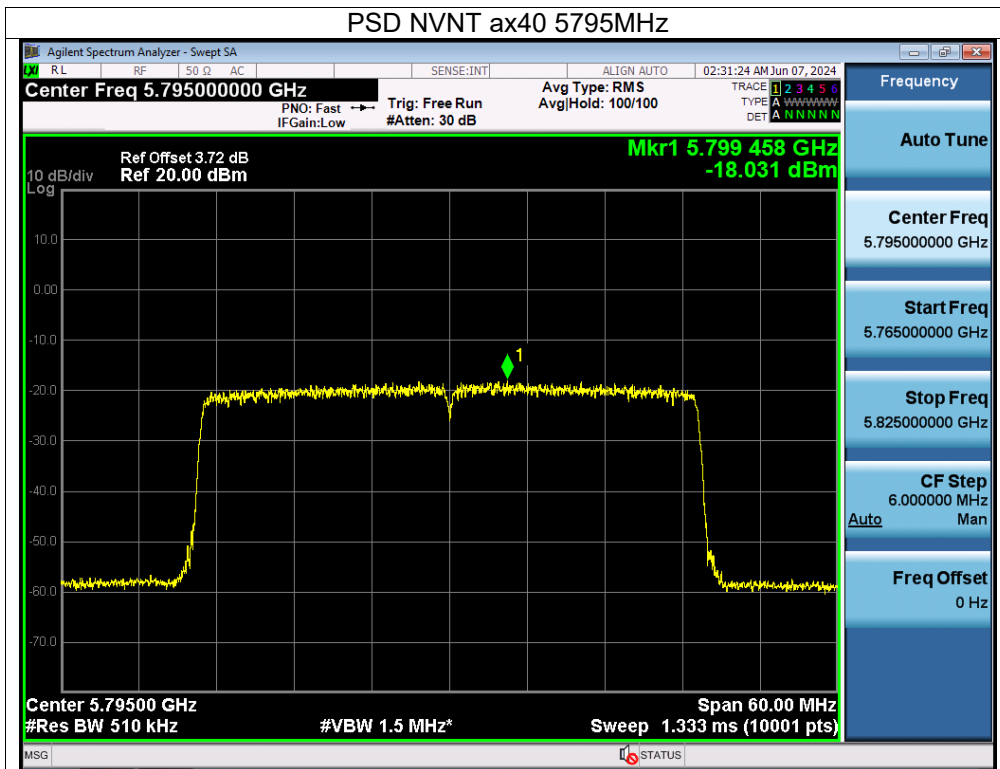






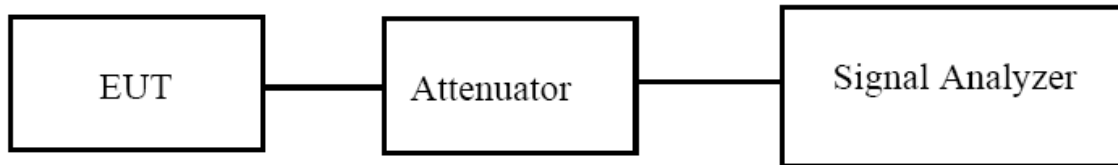






9. 26dB & 6dB & 99% Emission Bandwidth

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%.

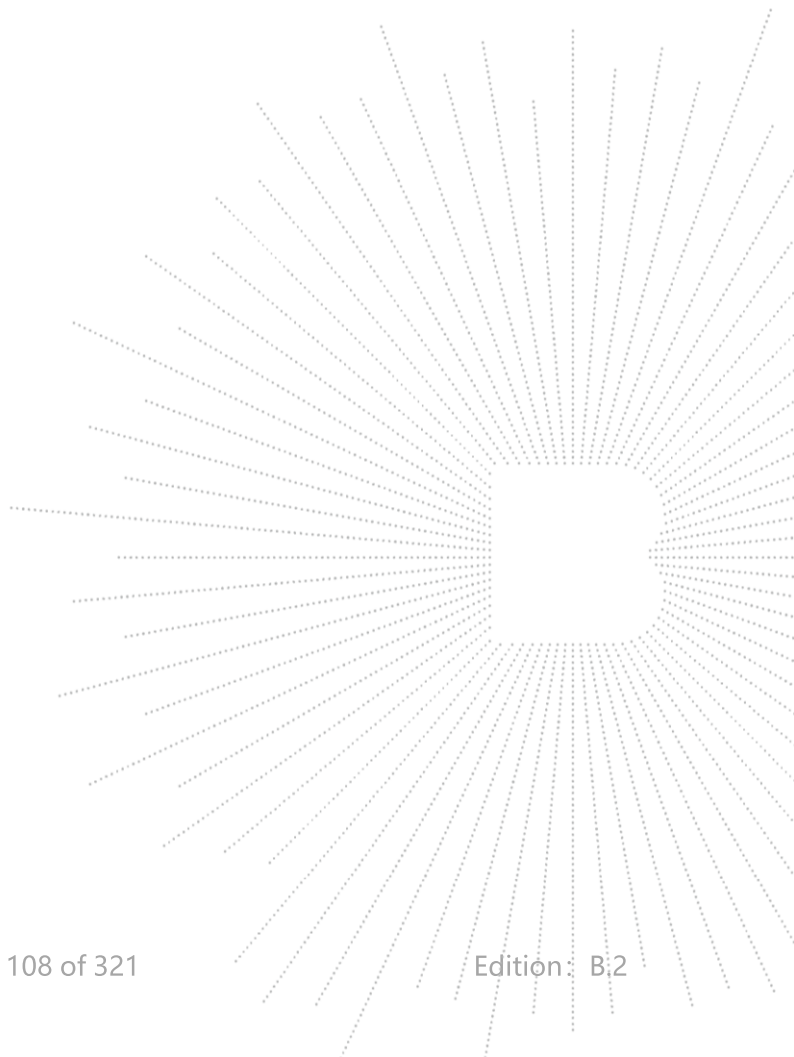
The following procedure shall be used for measuring (99 %) power bandwidth:

- 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.

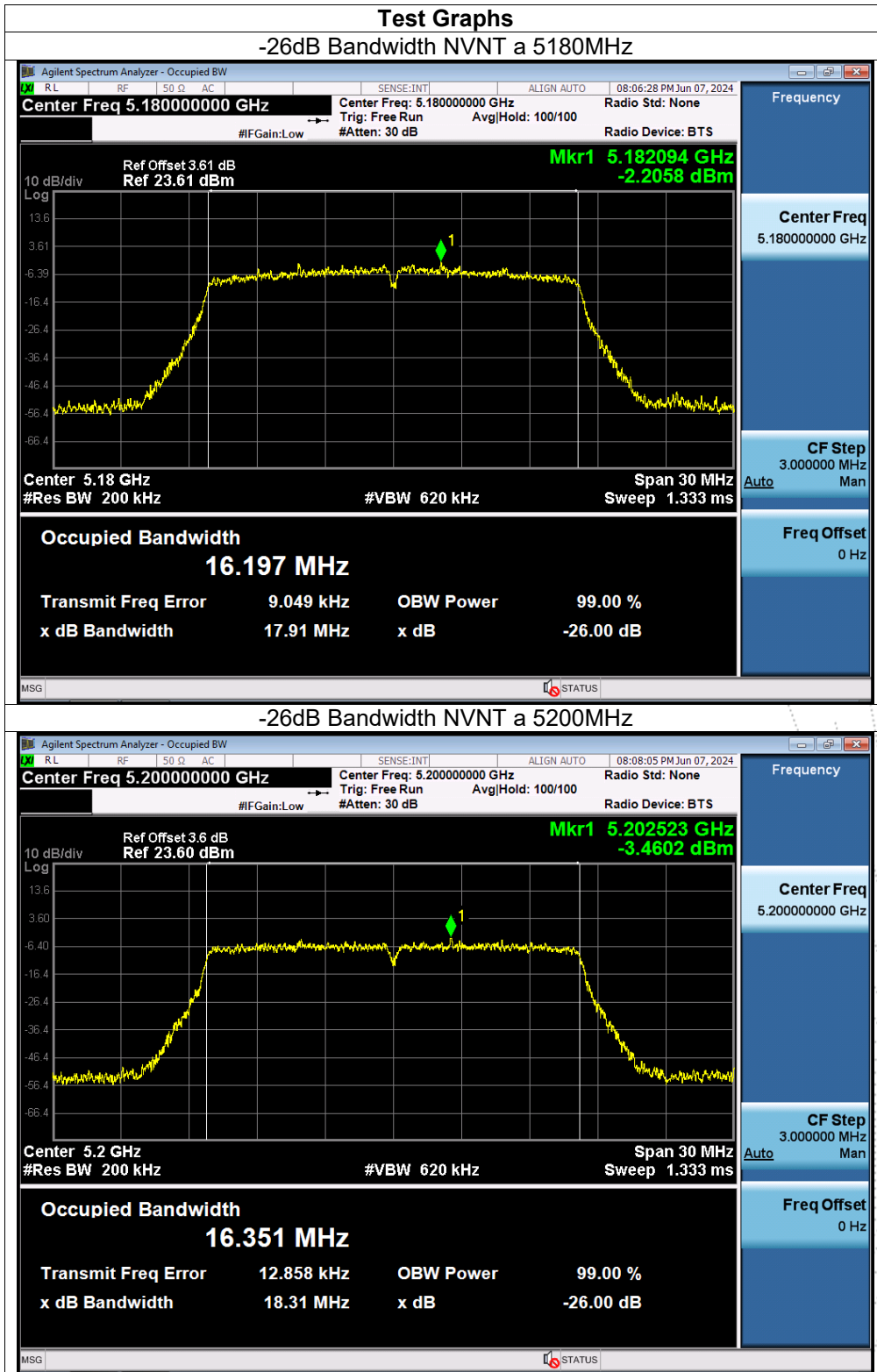


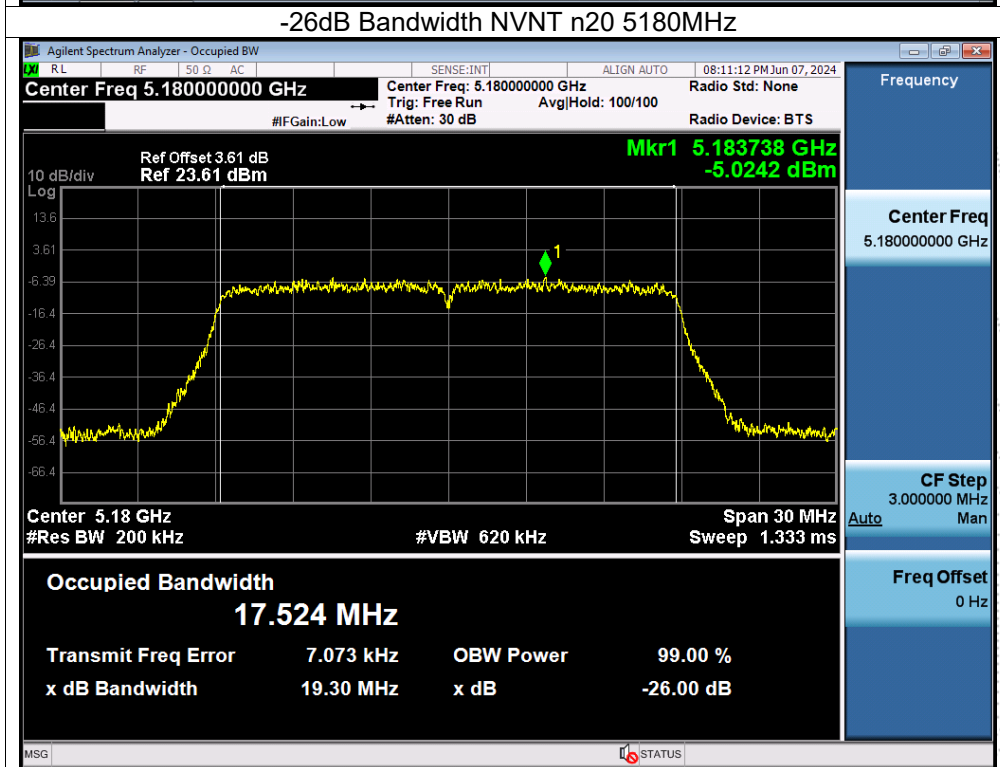
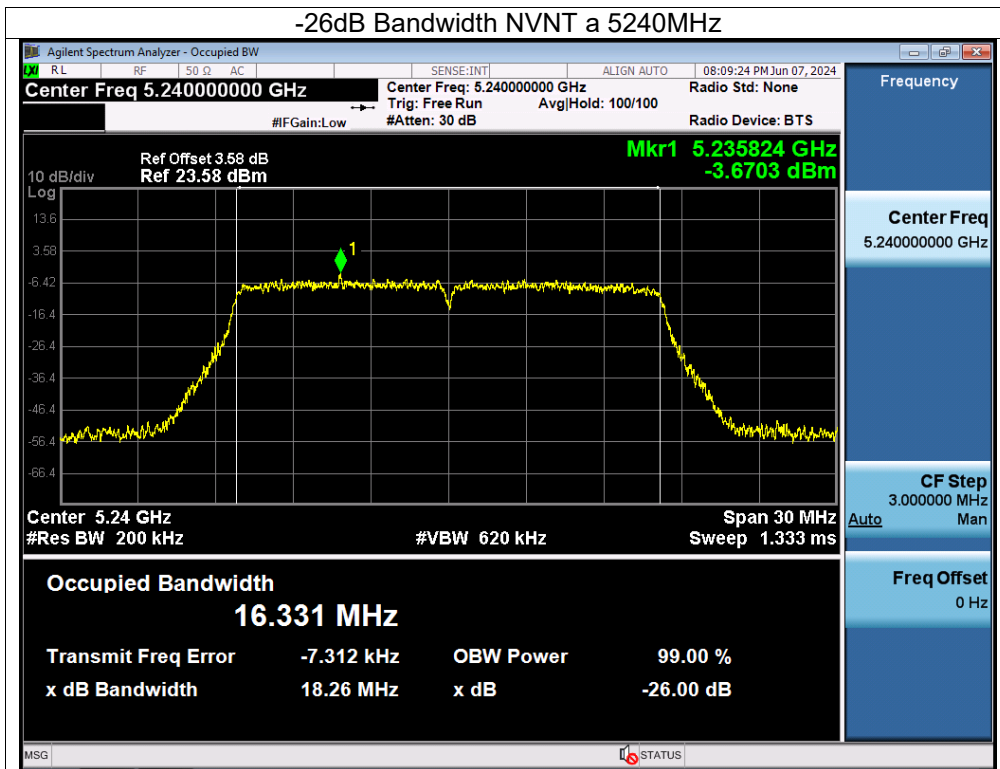
9.5 Test Result

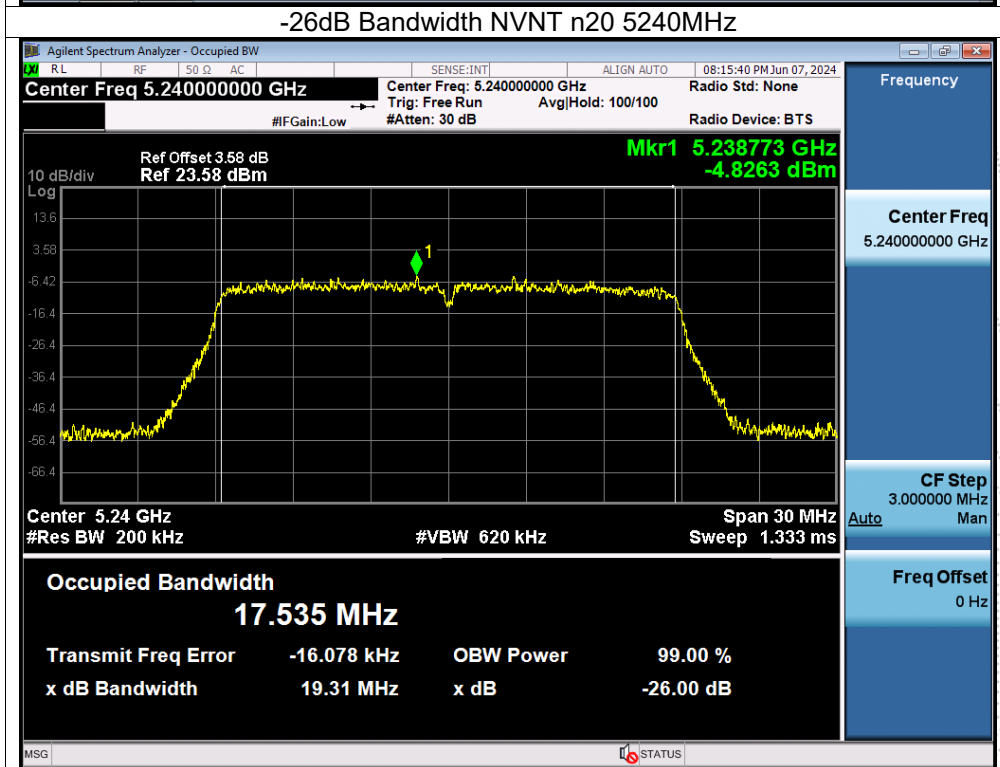
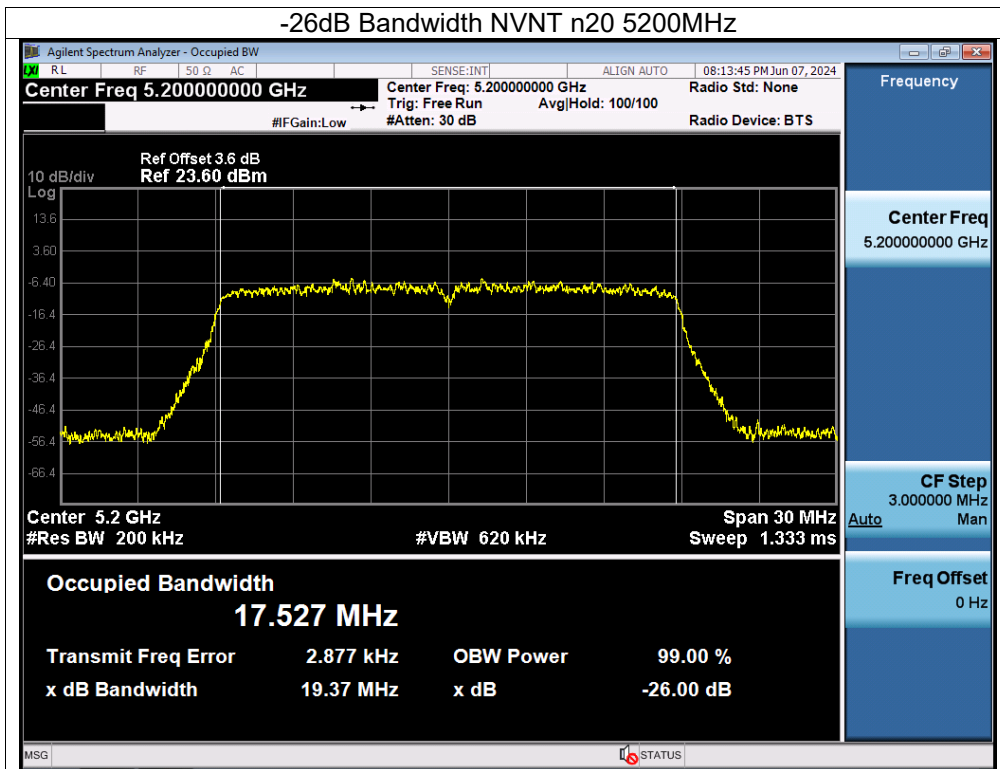
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5180-5240MHz)		

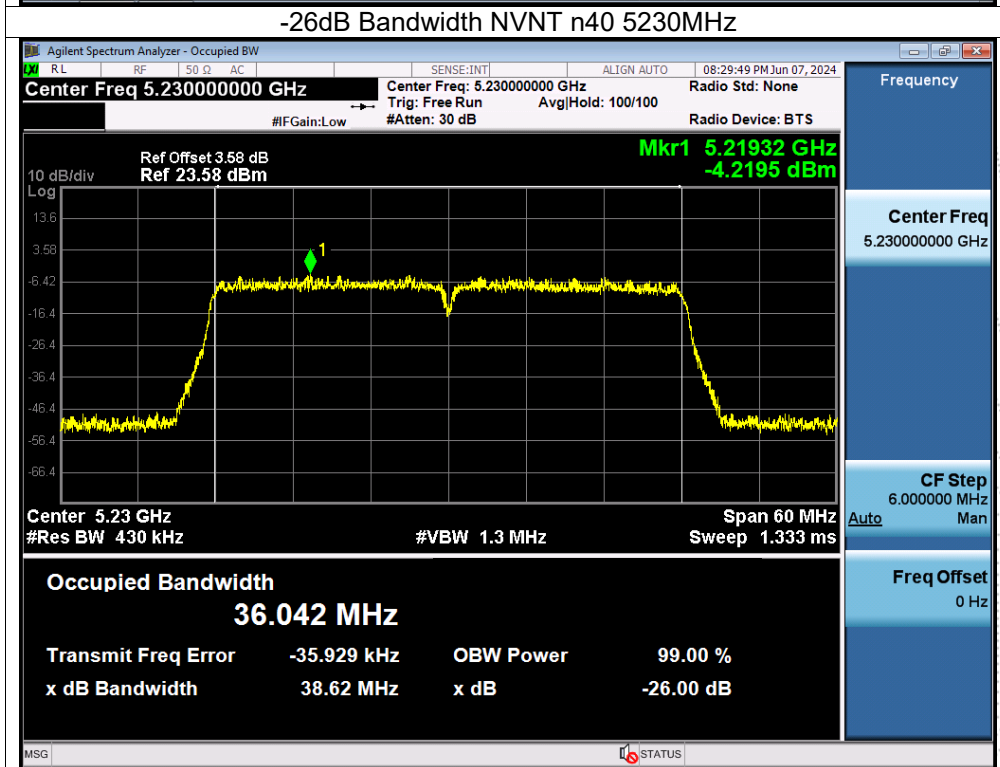
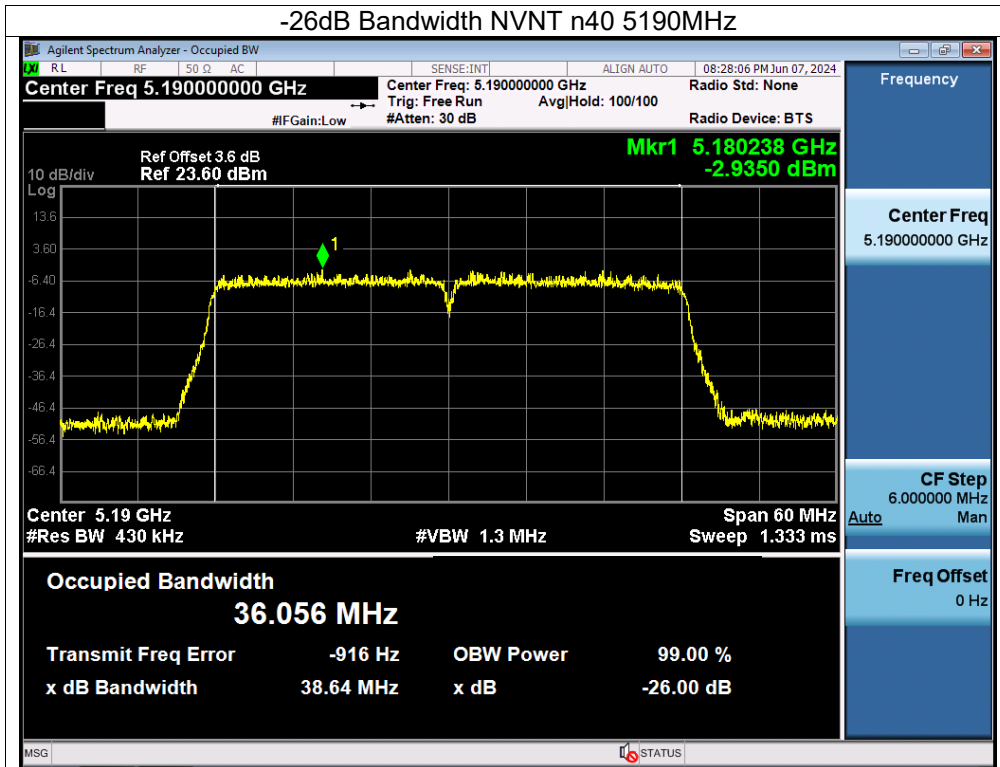
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5180	17.79	17.908	16.213	16.202	Pass
NVNT	a	5200	18.368	18.307	16.327	16.342	Pass
NVNT	a	5240	18.325	18.263	16.323	16.352	Pass
NVNT	n20	5180	19.278	19.302	17.519	17.509	Pass
NVNT	n20	5200	19.395	19.374	17.534	17.515	Pass
NVNT	n20	5240	19.28	19.31	17.526	17.516	Pass
NVNT	n40	5190	38.55	38.639	36.011	36.024	Pass
NVNT	n40	5230	38.435	38.623	35.984	36.014	Pass
NVNT	ac20	5180	19.232	19.314	17.51	17.525	Pass
NVNT	ac20	5200	19.219	19.296	17.53	17.523	Pass
NVNT	ac20	5240	19.192	19.157	17.512	17.524	Pass
NVNT	ac40	5190	38.604	38.658	35.997	36.018	Pass
NVNT	ac40	5230	38.437	38.812	35.964	35.979	Pass
NVNT	ac80	5210	83.874	83.937	75.714	75.649	Pass
NVNT	ax20	5180	20.244	20.13	18.866	18.841	Pass
NVNT	ax20	5200	20.162	20.27	18.869	18.871	Pass
NVNT	ax20	5240	19.972	20.094	18.85	18.853	Pass
NVNT	ax40	5190	39.703	39.688	37.7	37.668	Pass
NVNT	ax40	5230	39.788	40.004	37.69	37.652	Pass
NVNT	ax80	5210	80.255	80.03	76.799	76.71	Pass

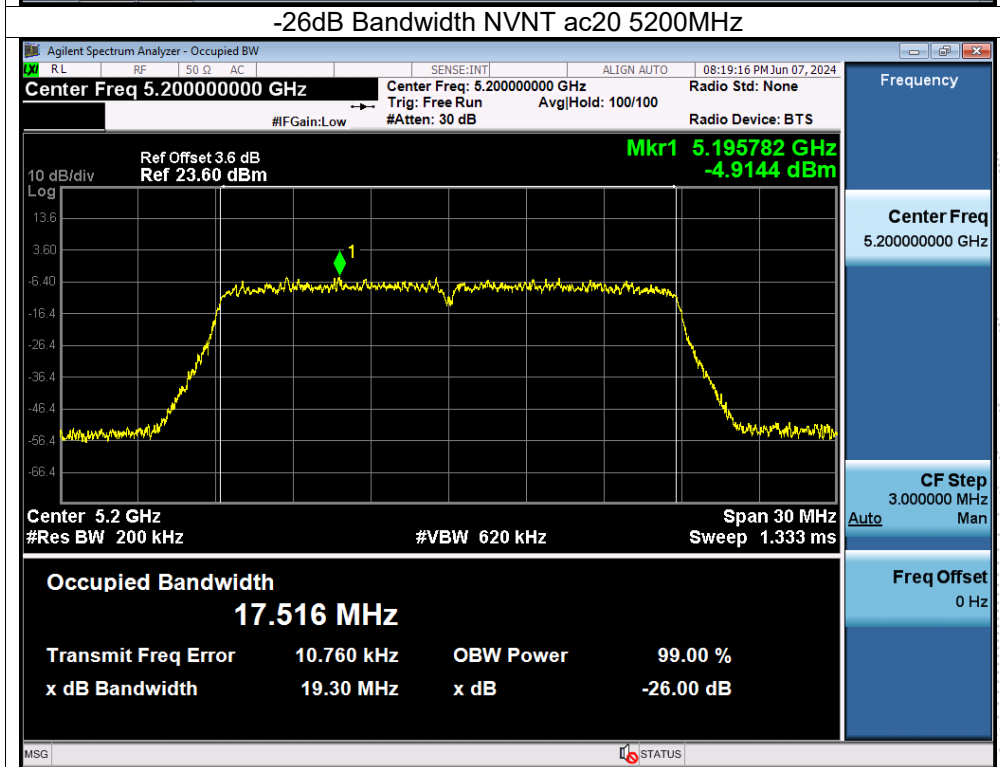
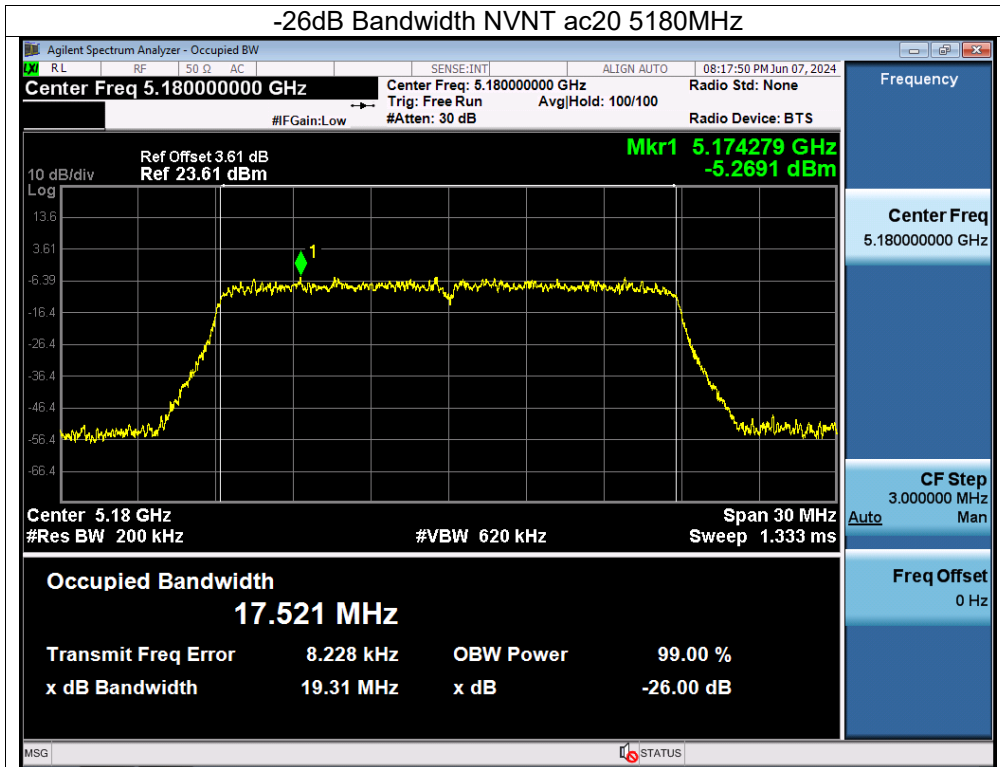
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

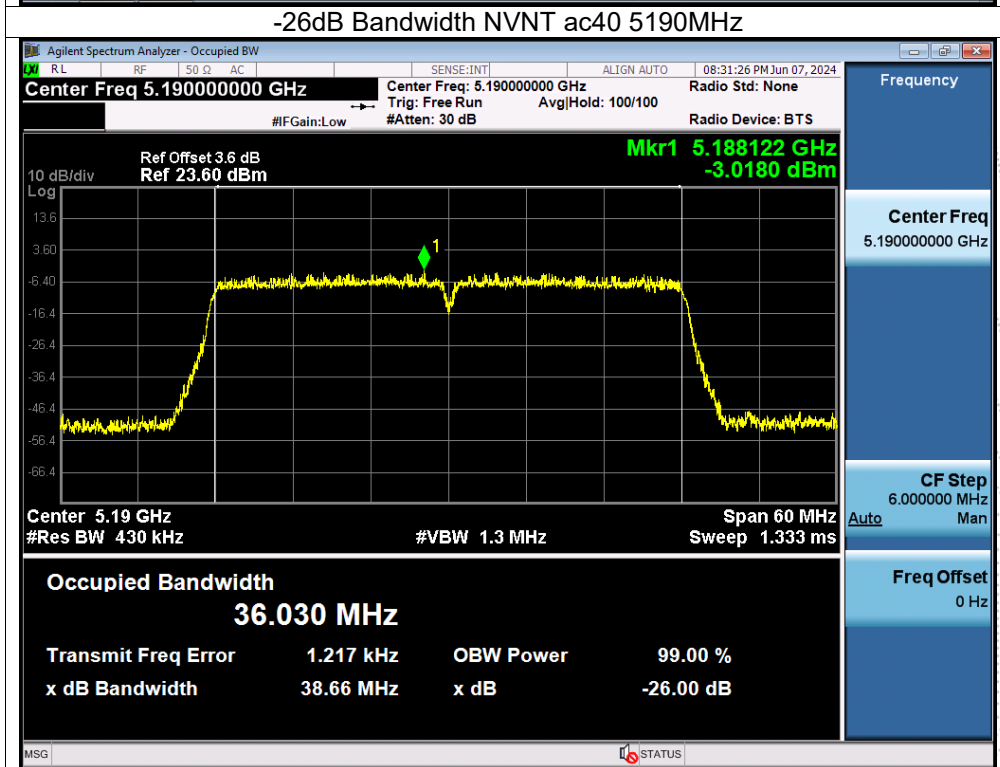
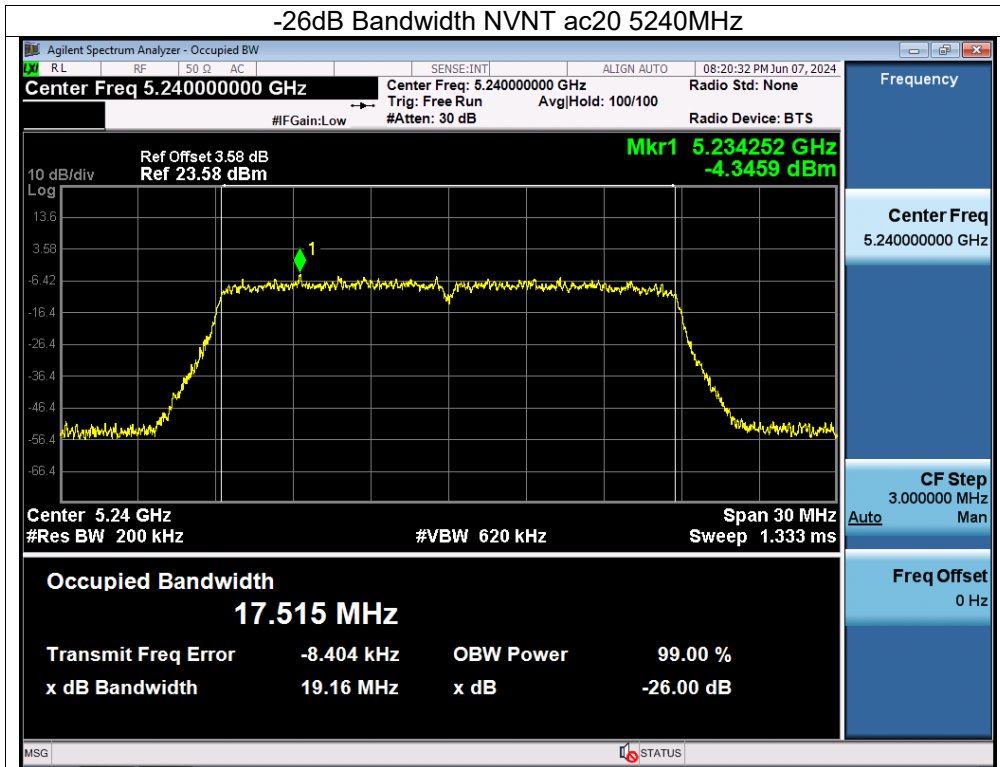


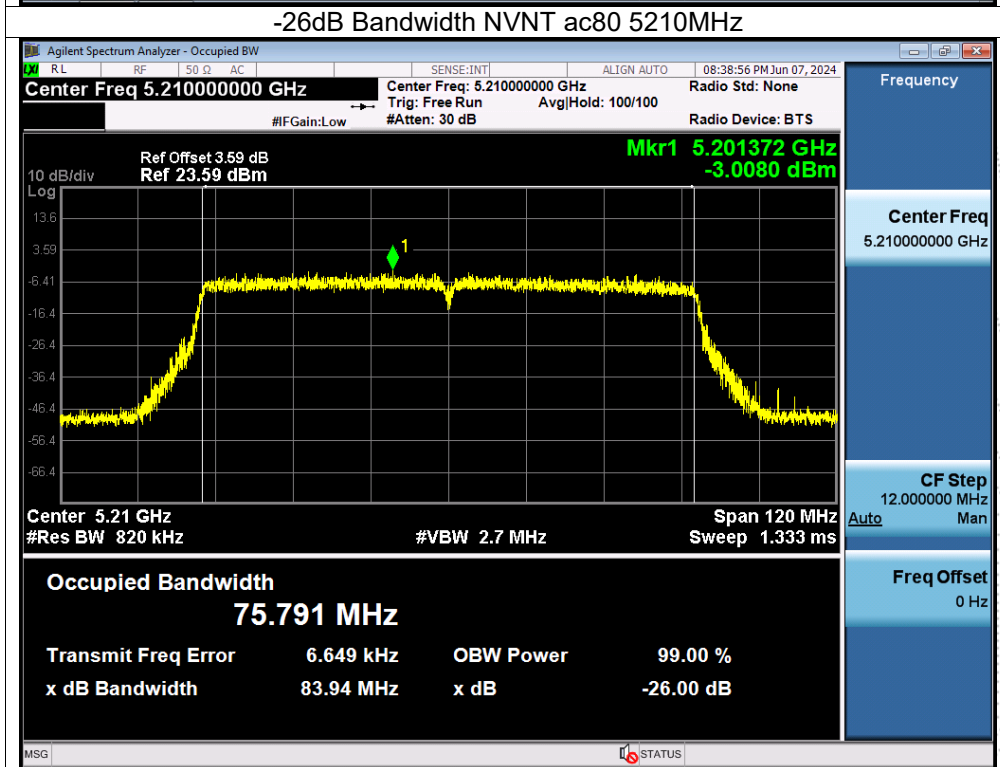
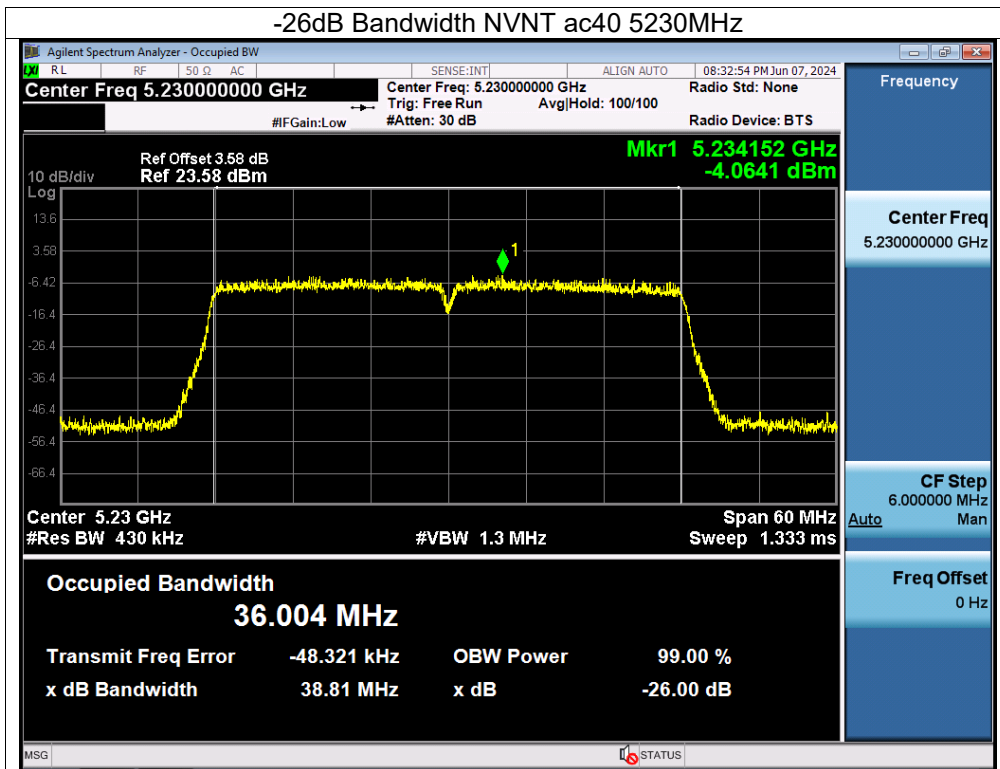


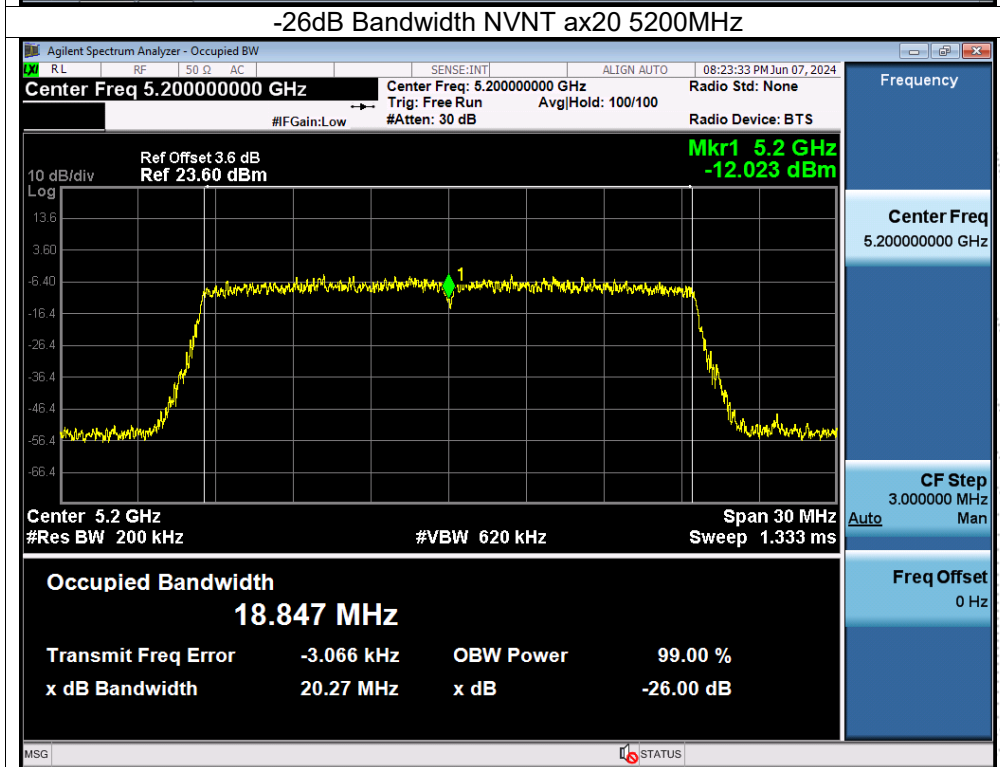
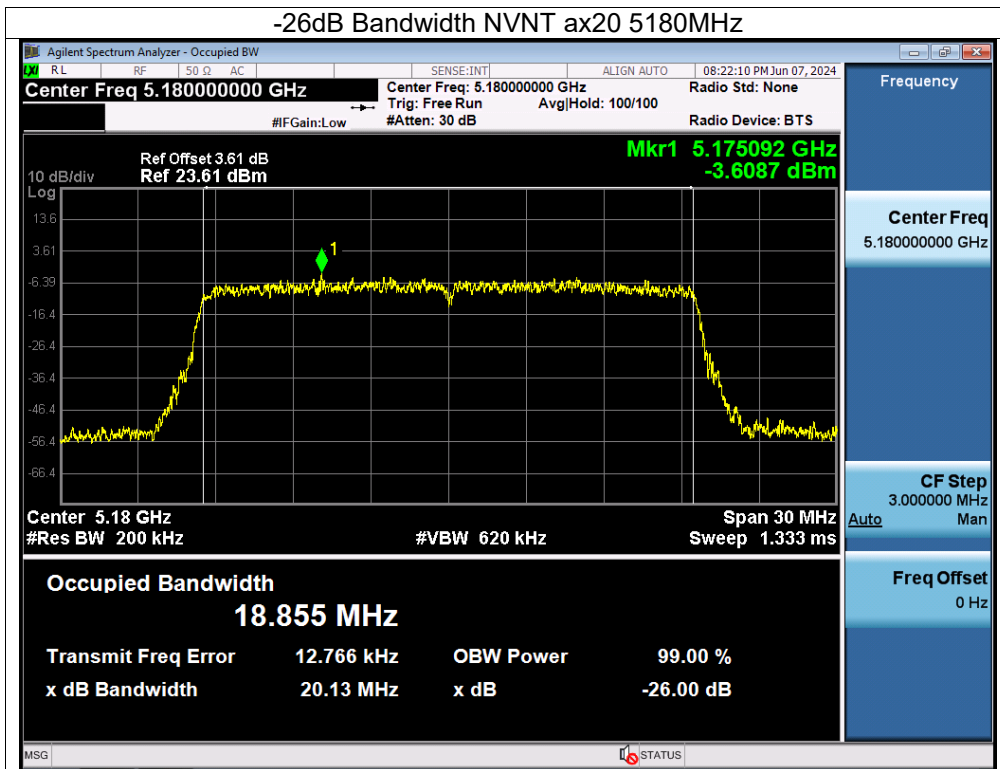


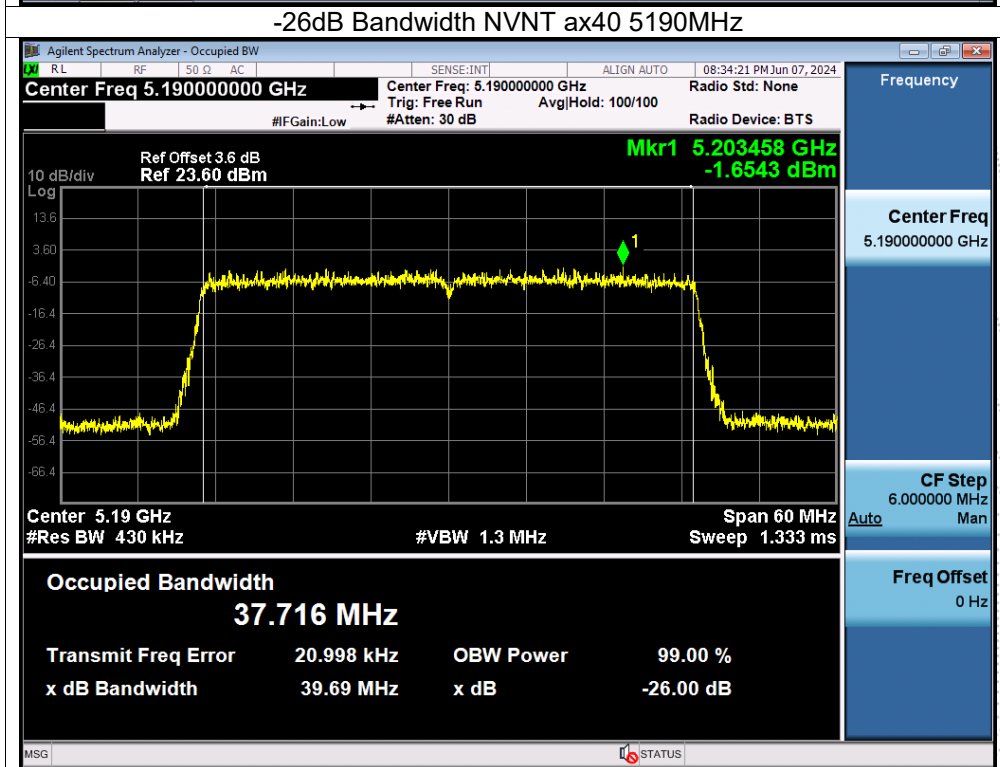
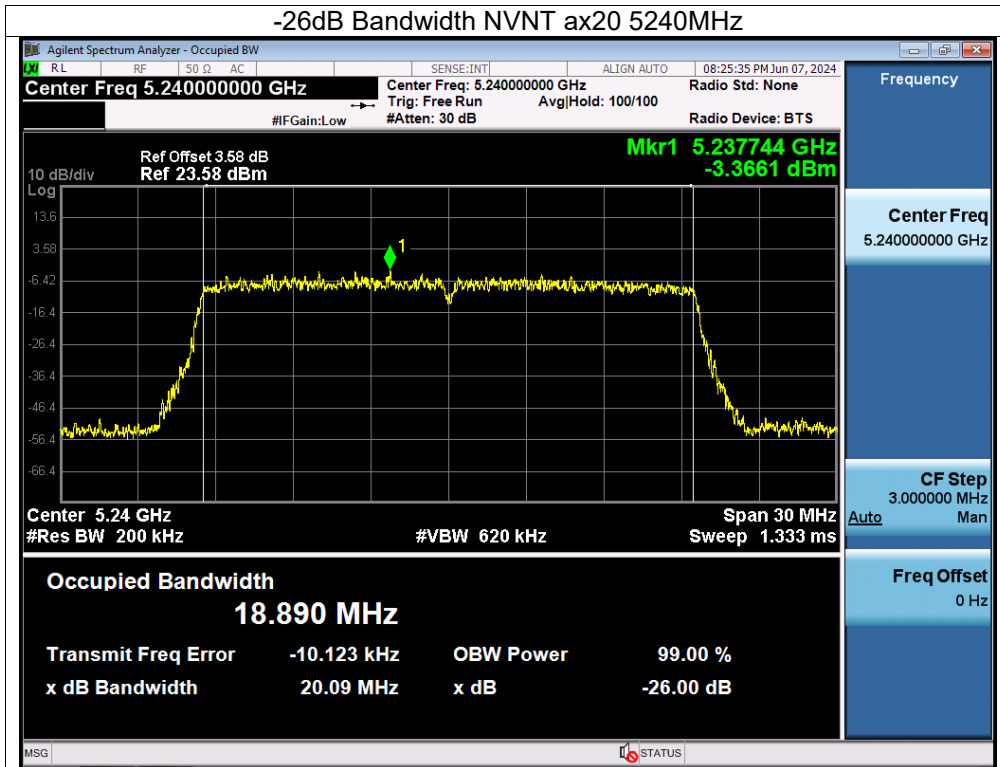


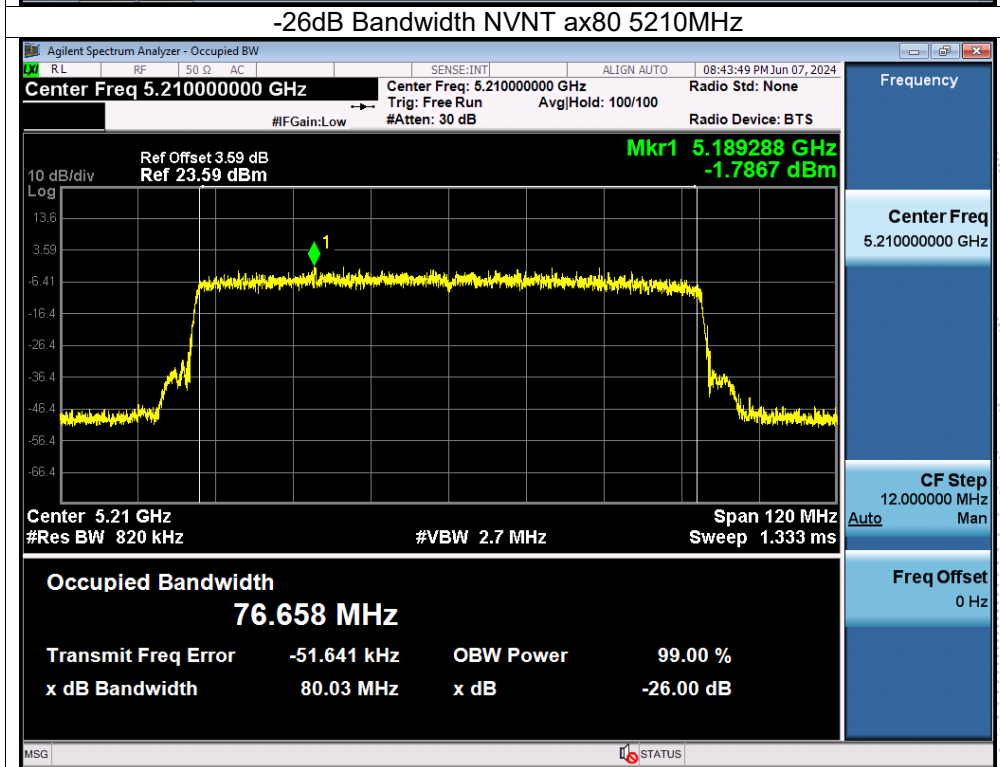
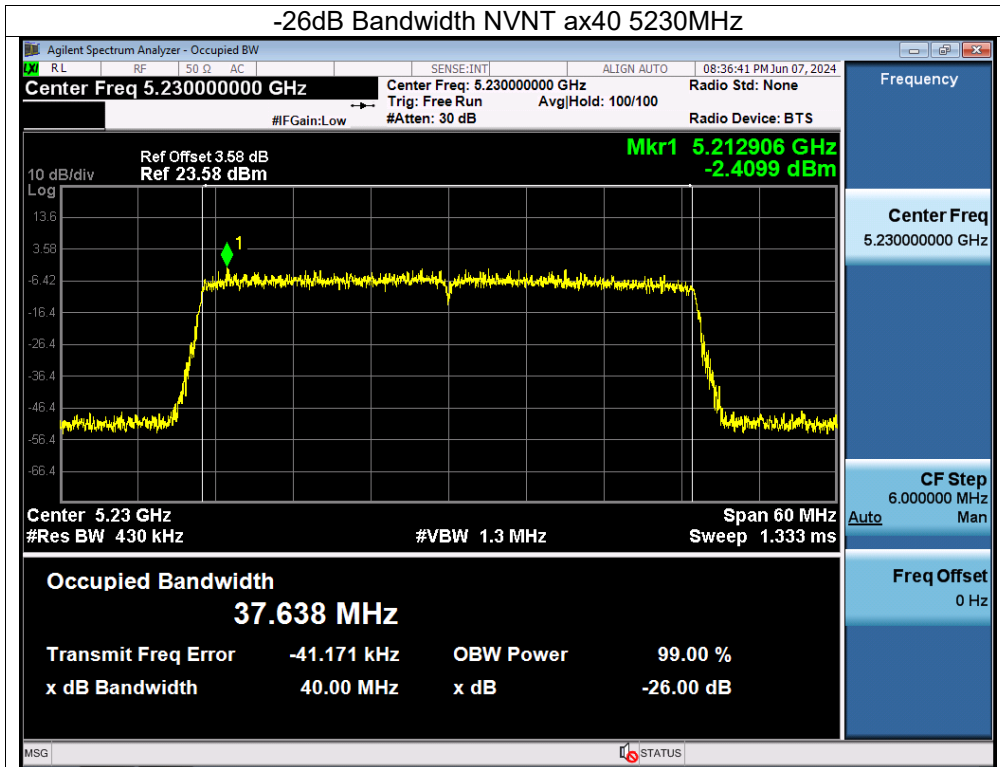




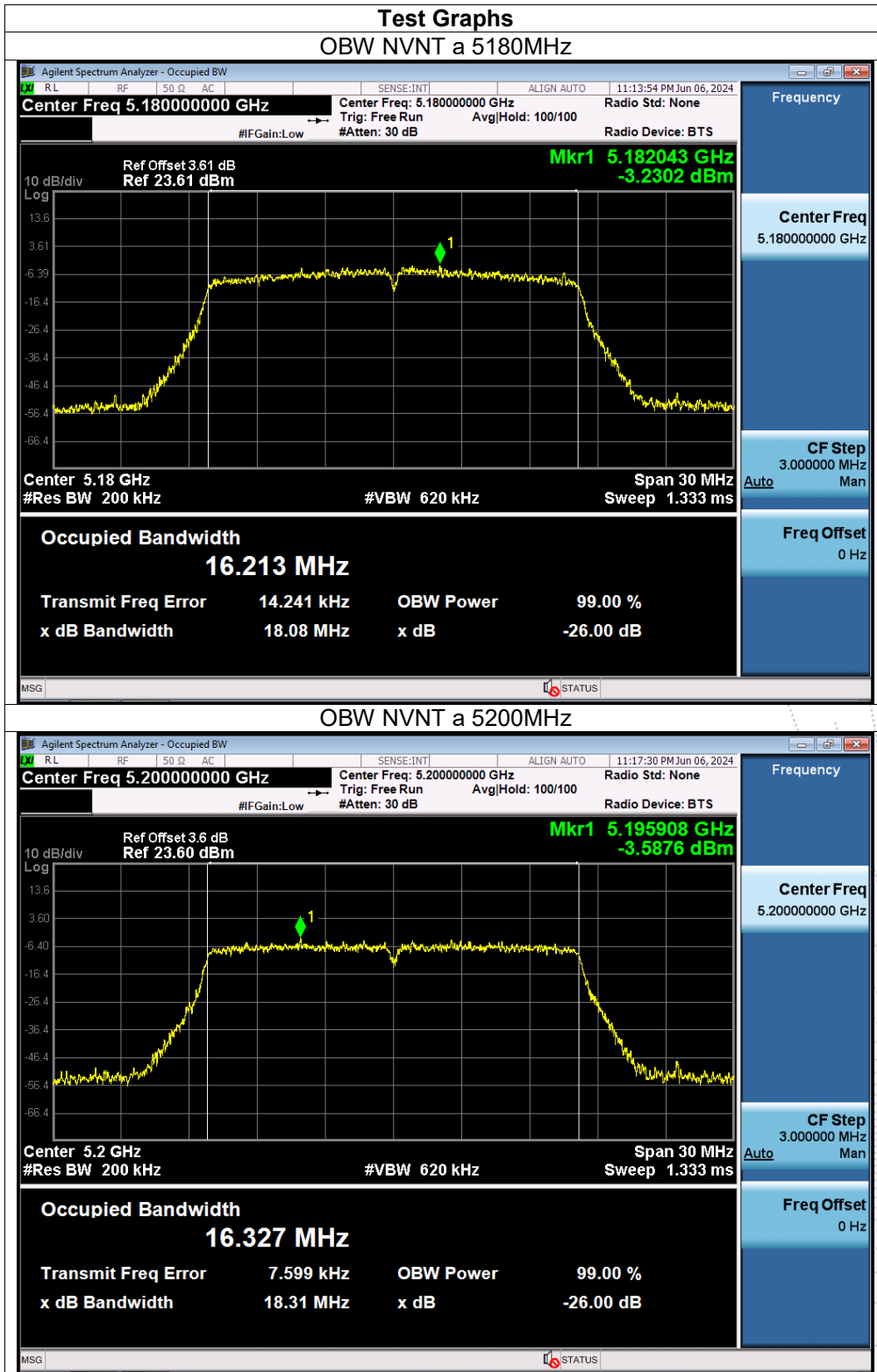


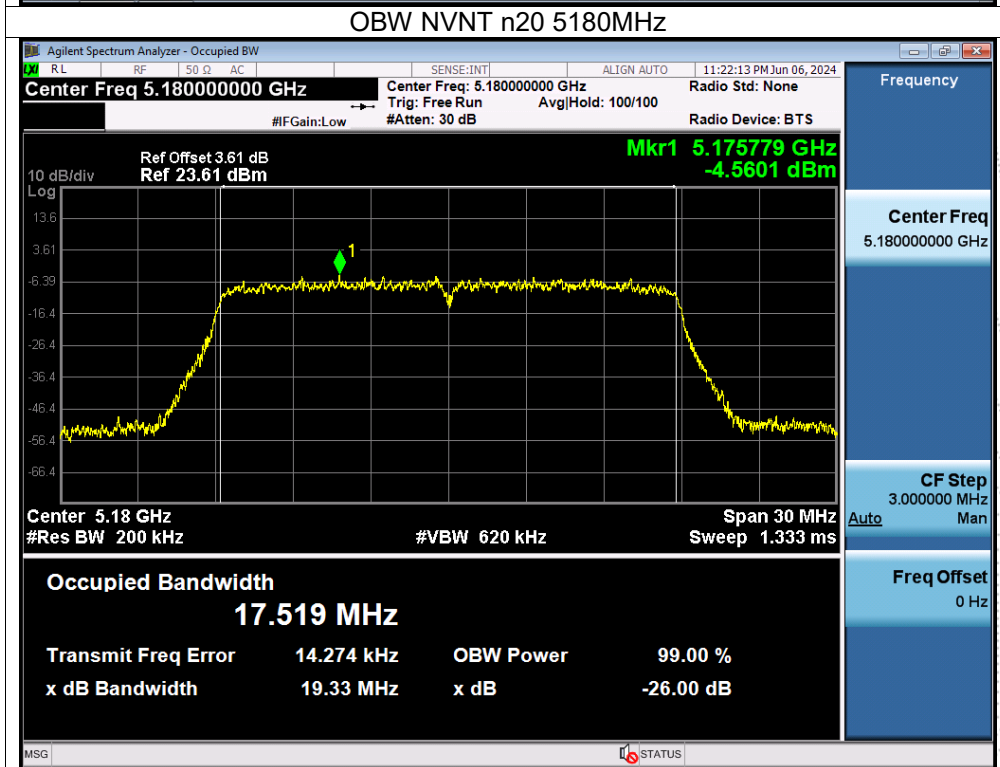
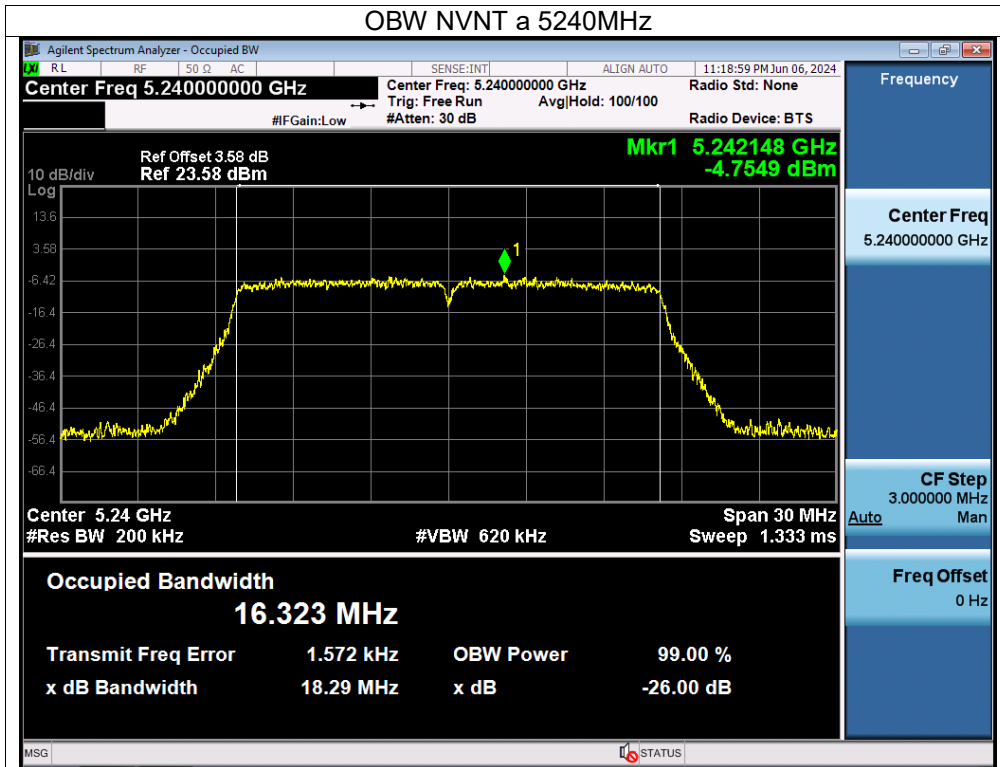


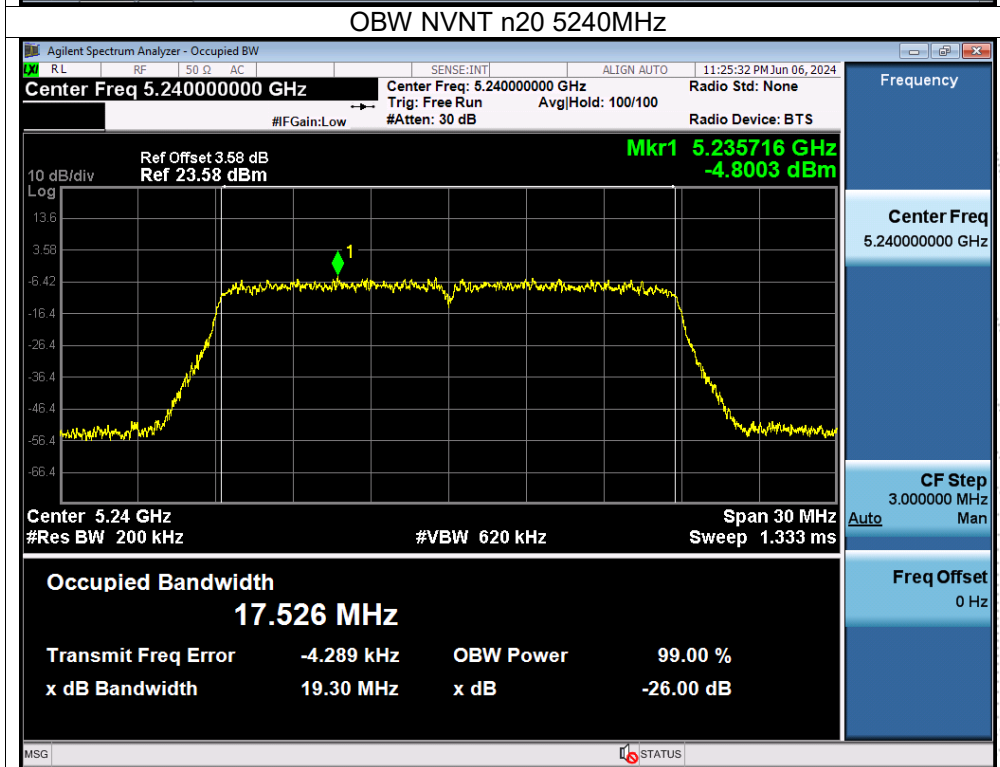
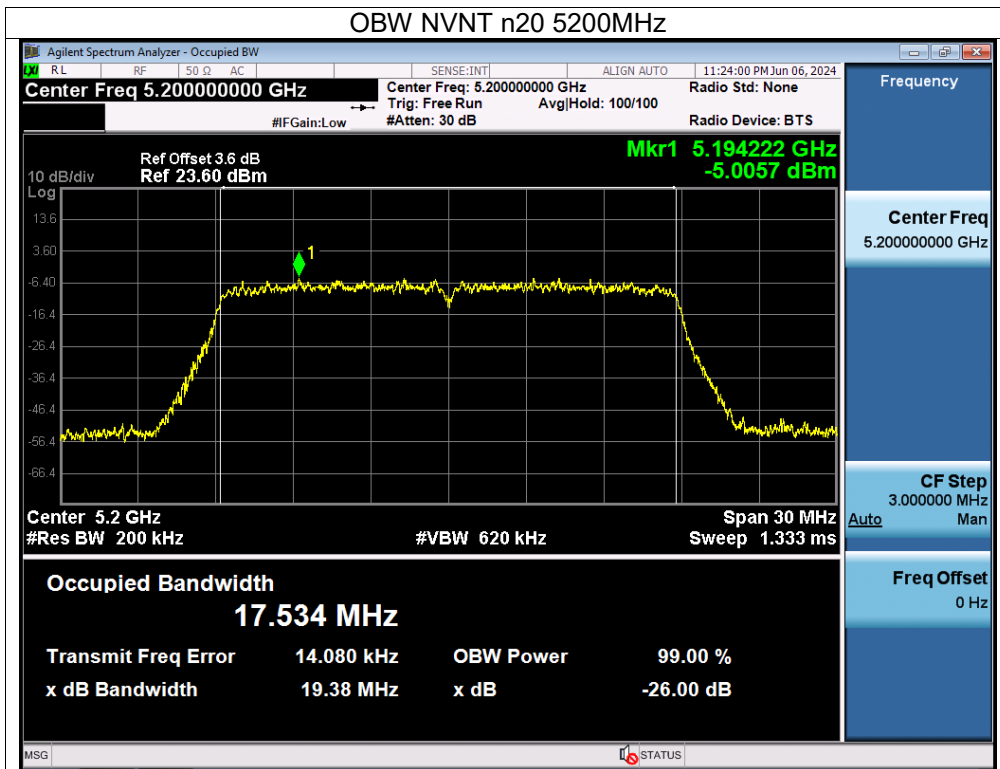


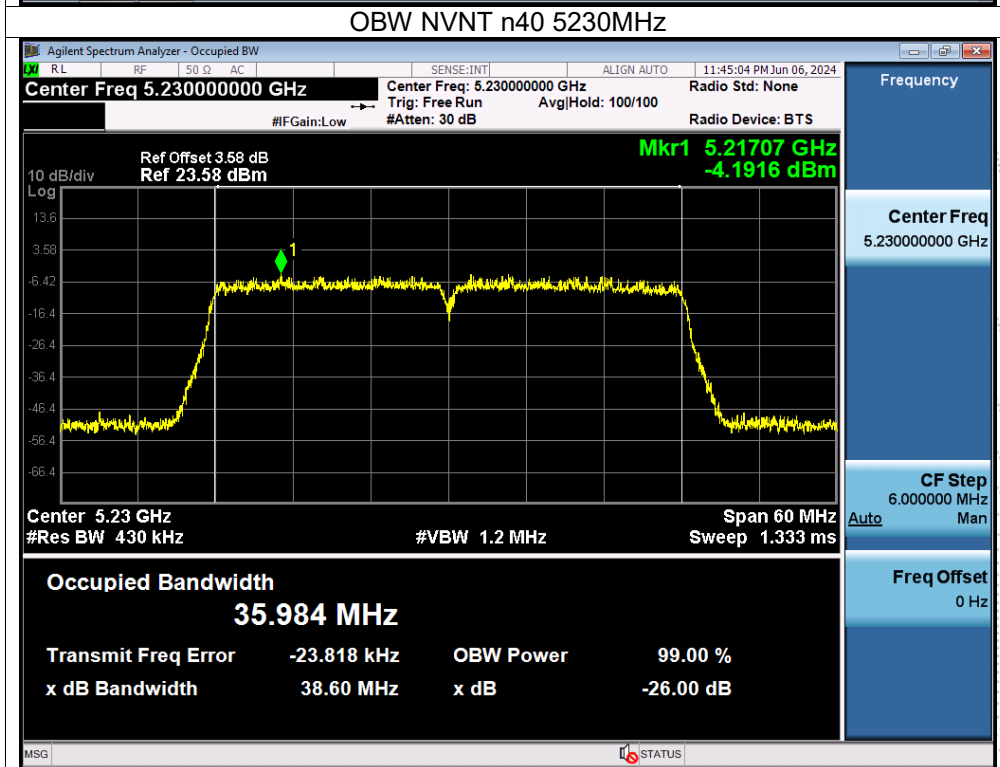
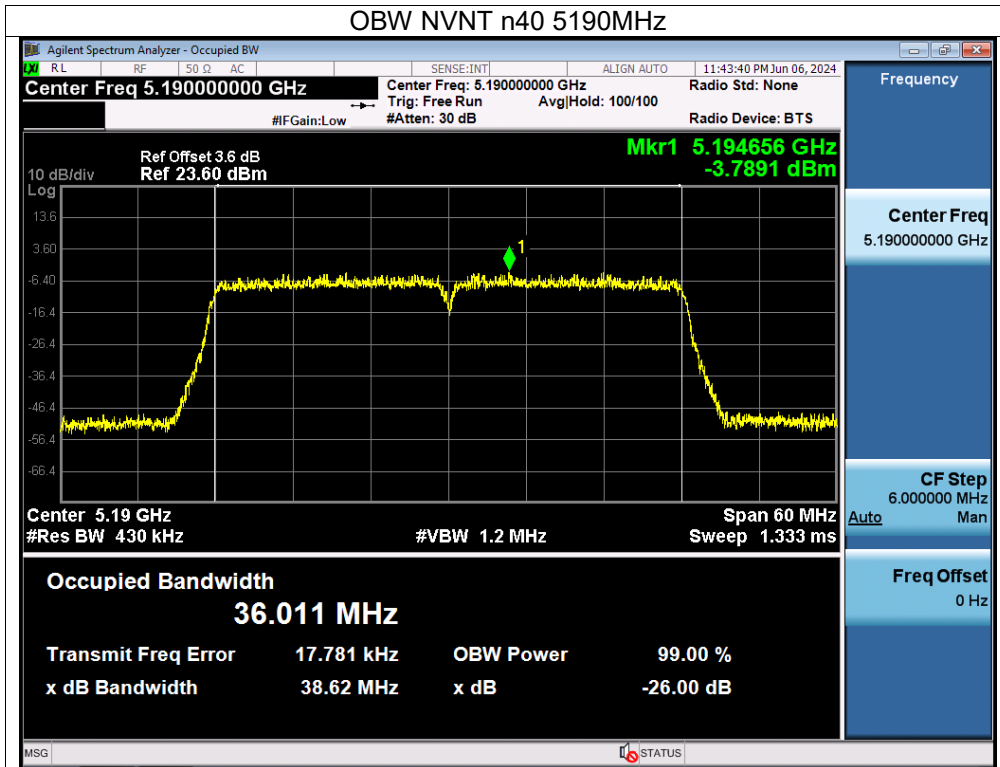


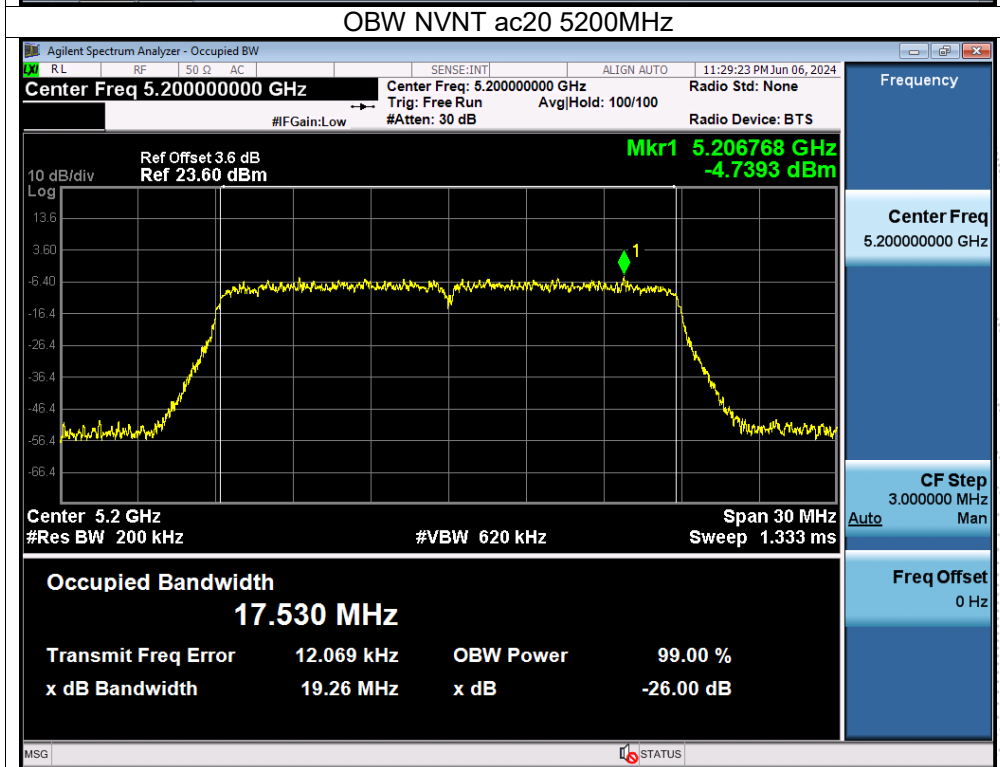
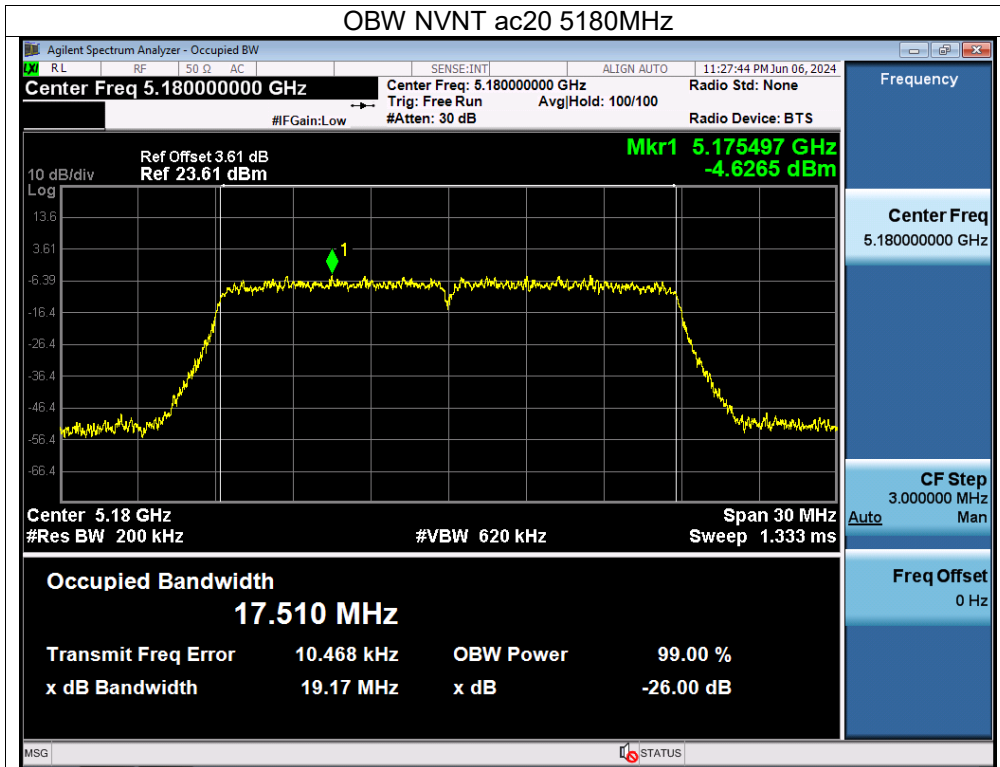
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

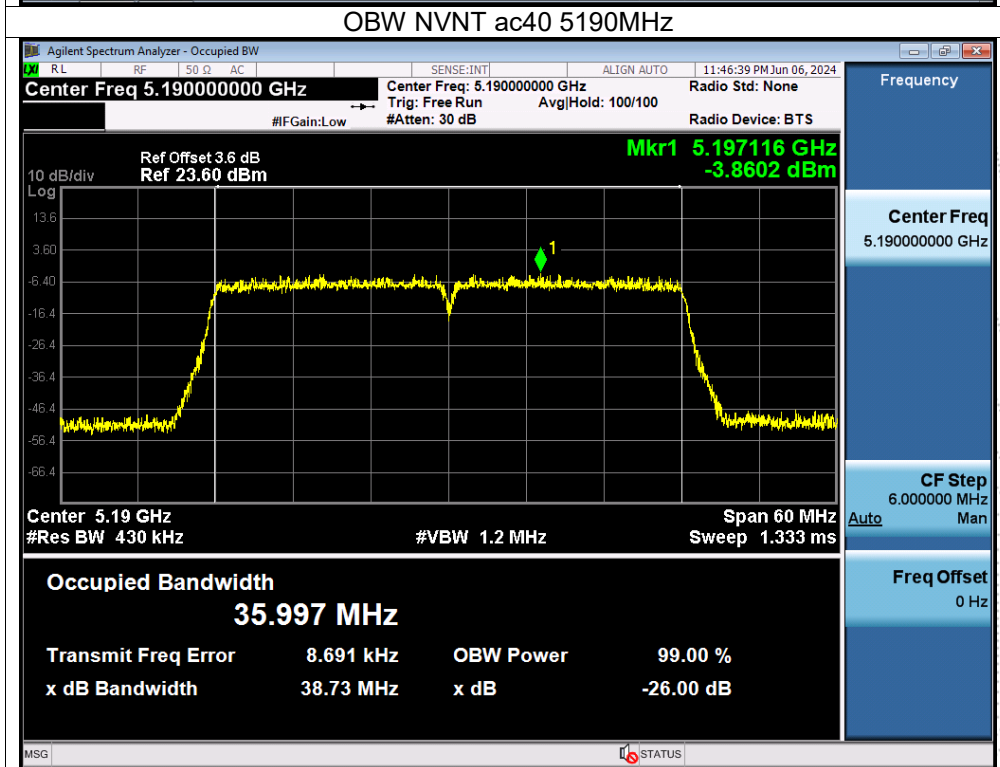
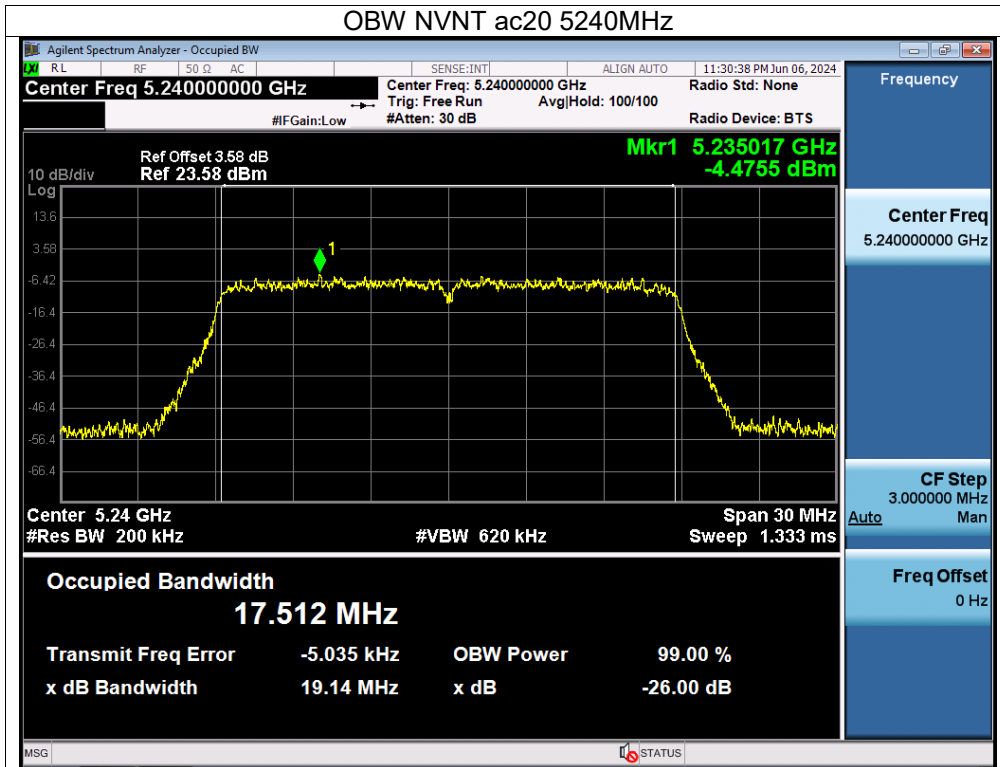


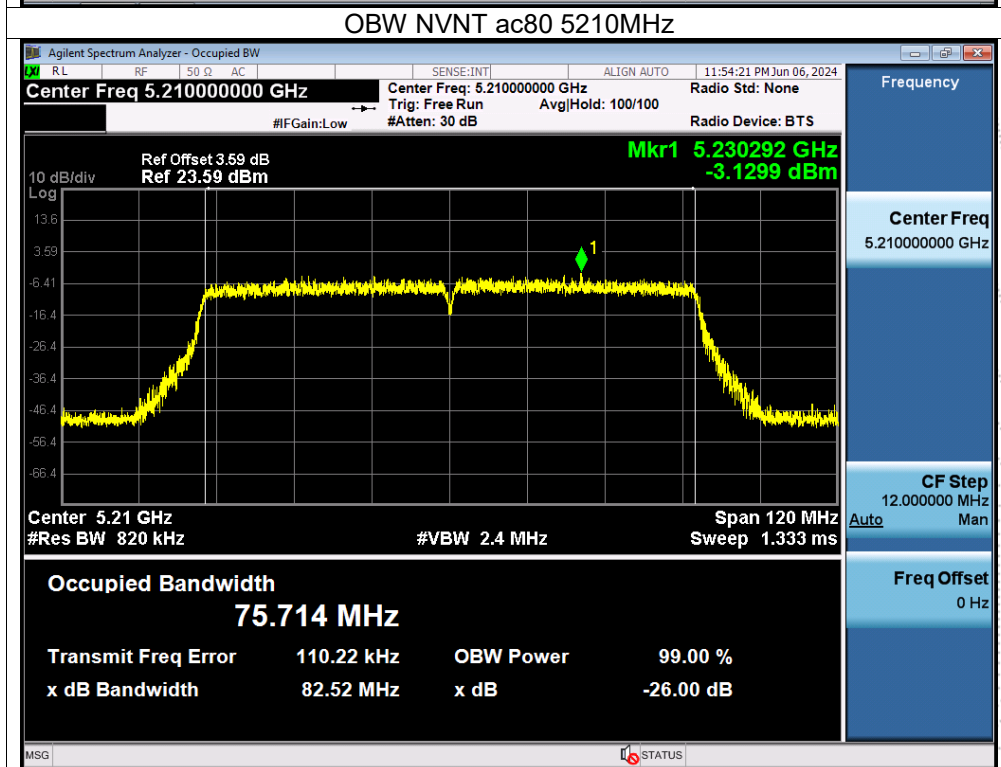
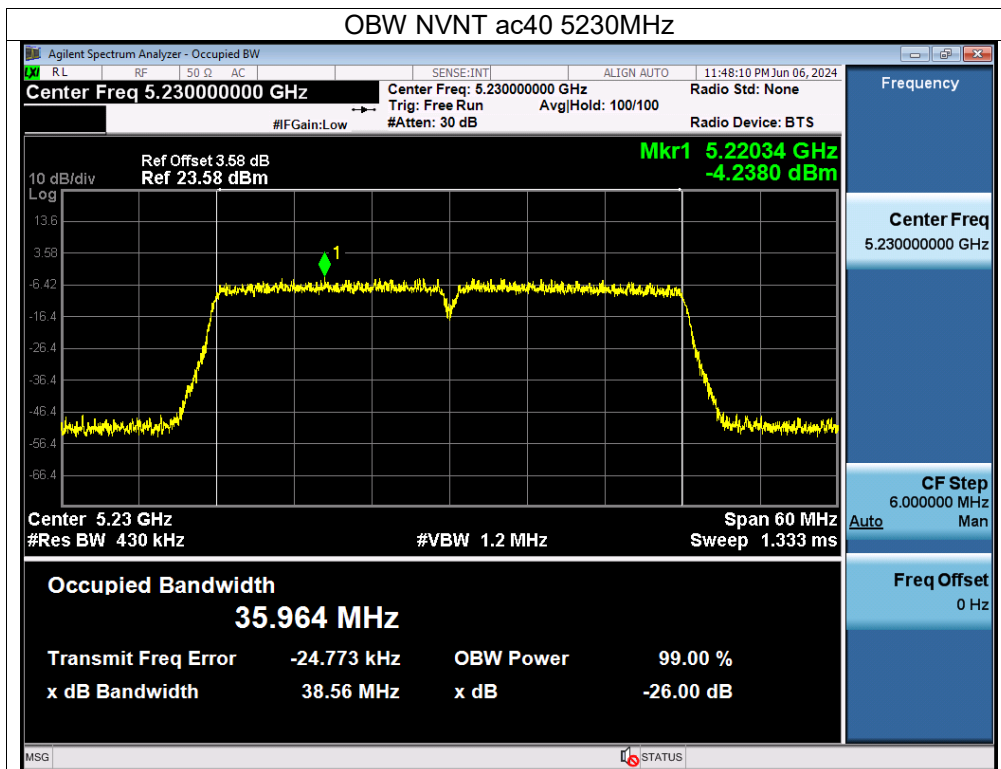


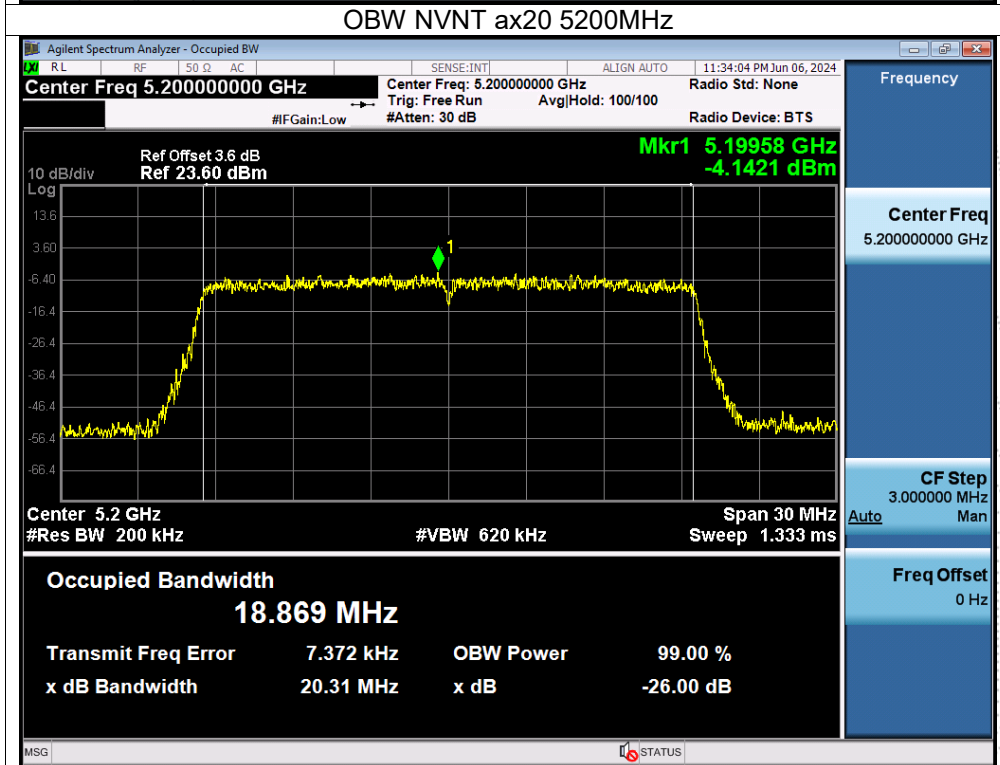
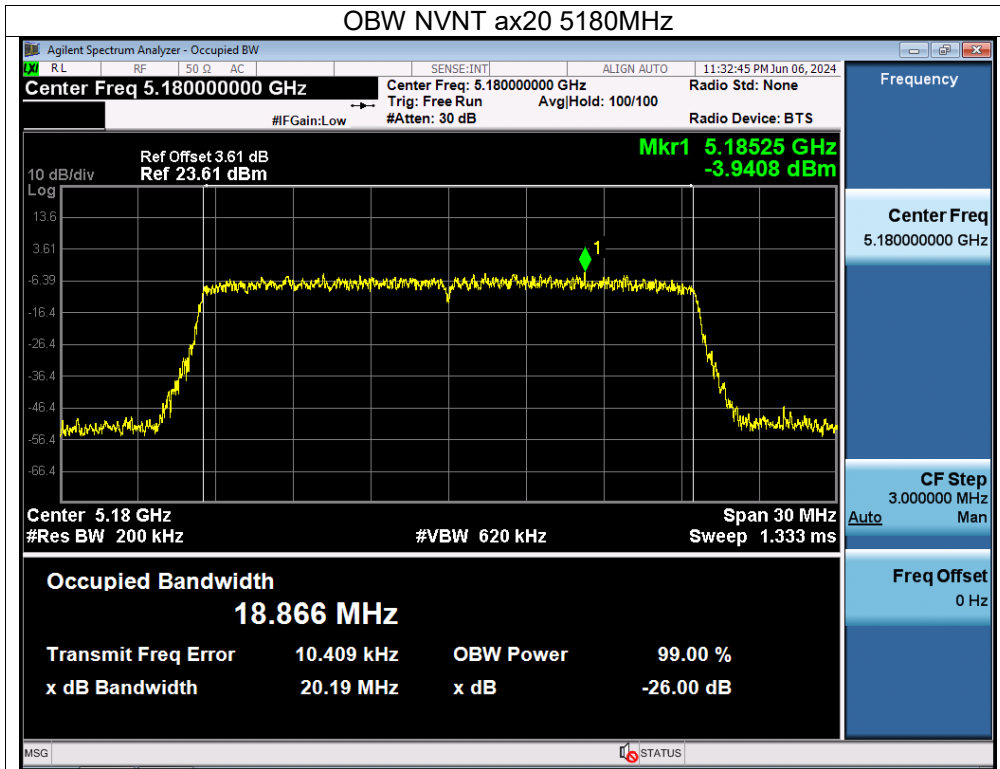


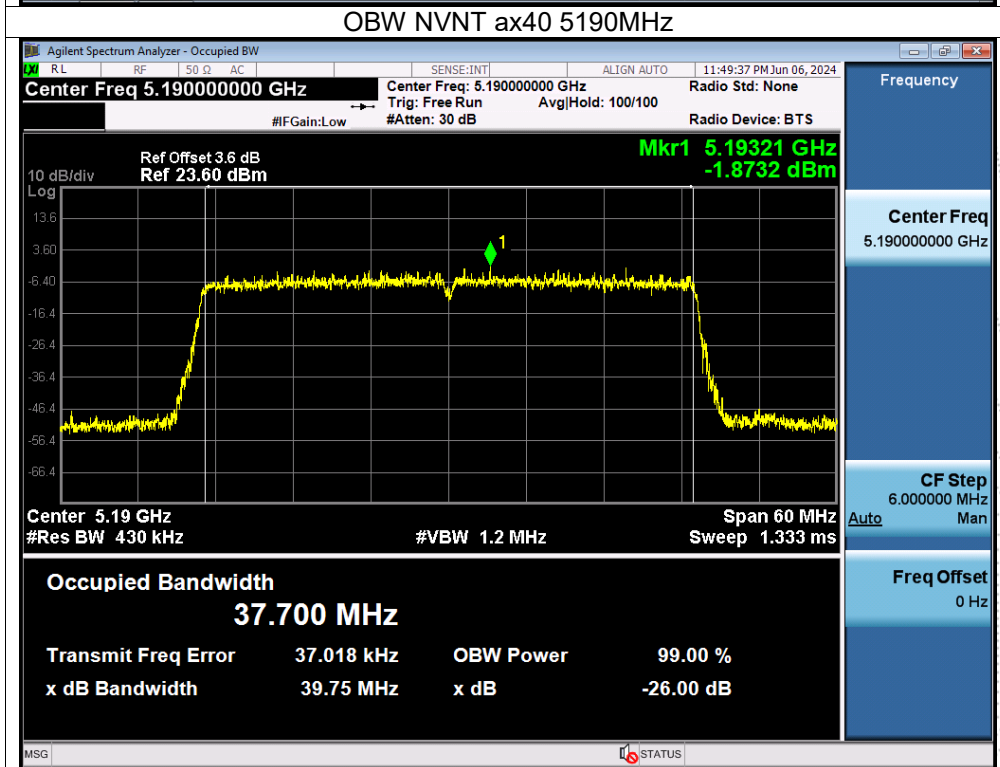
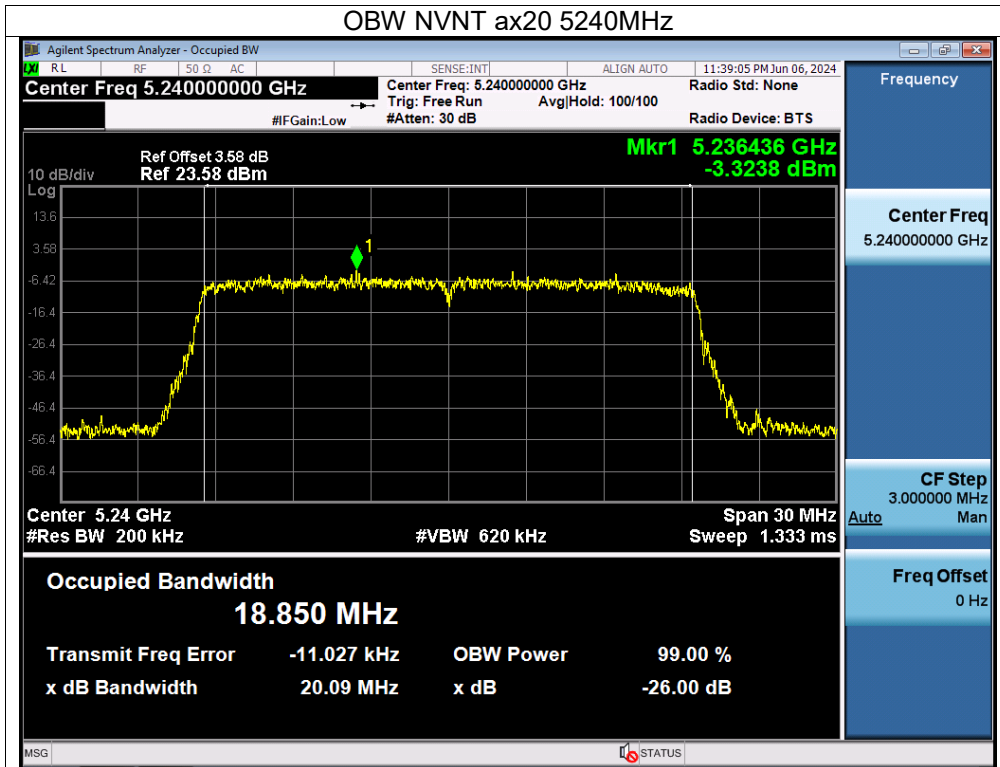


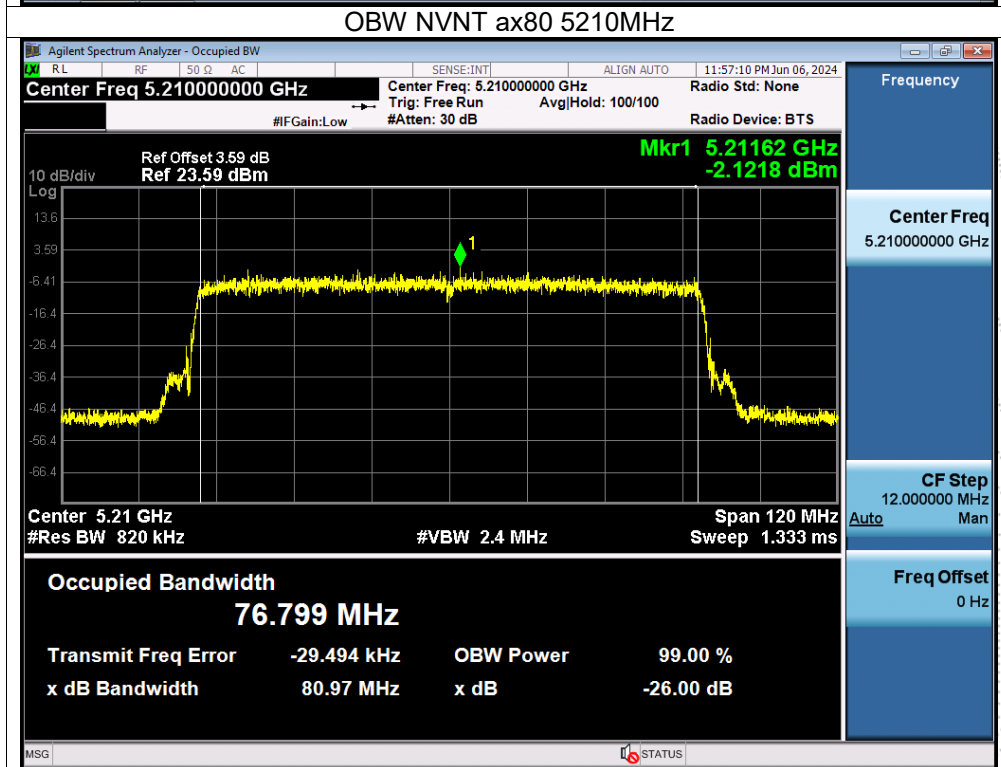
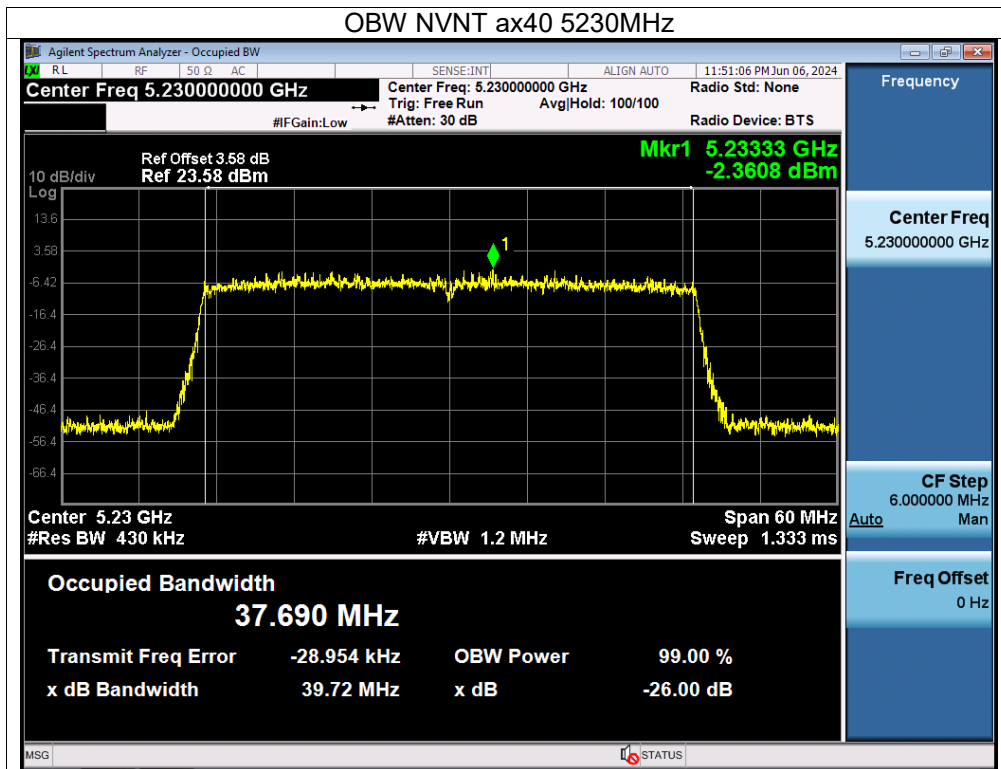








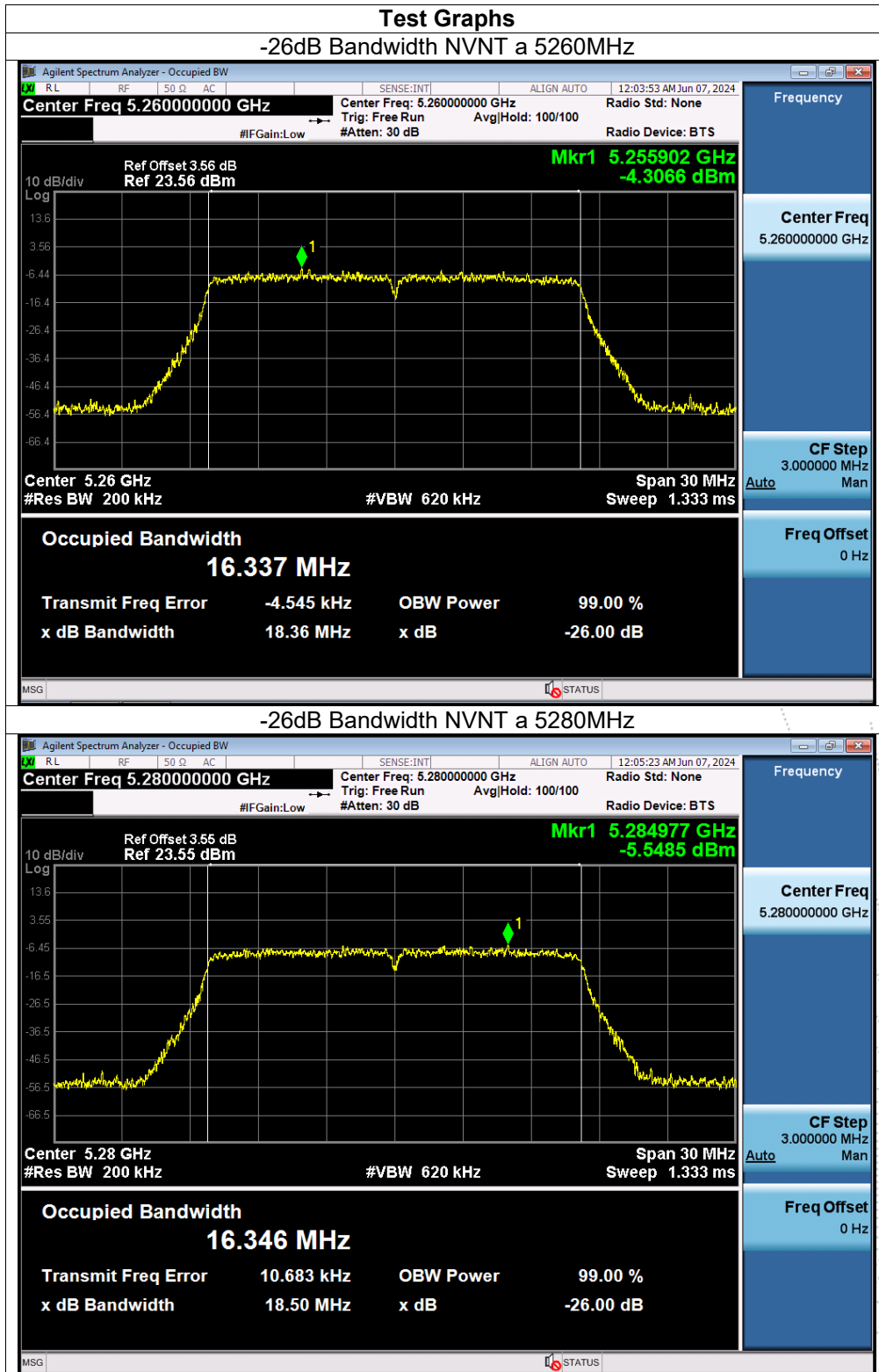


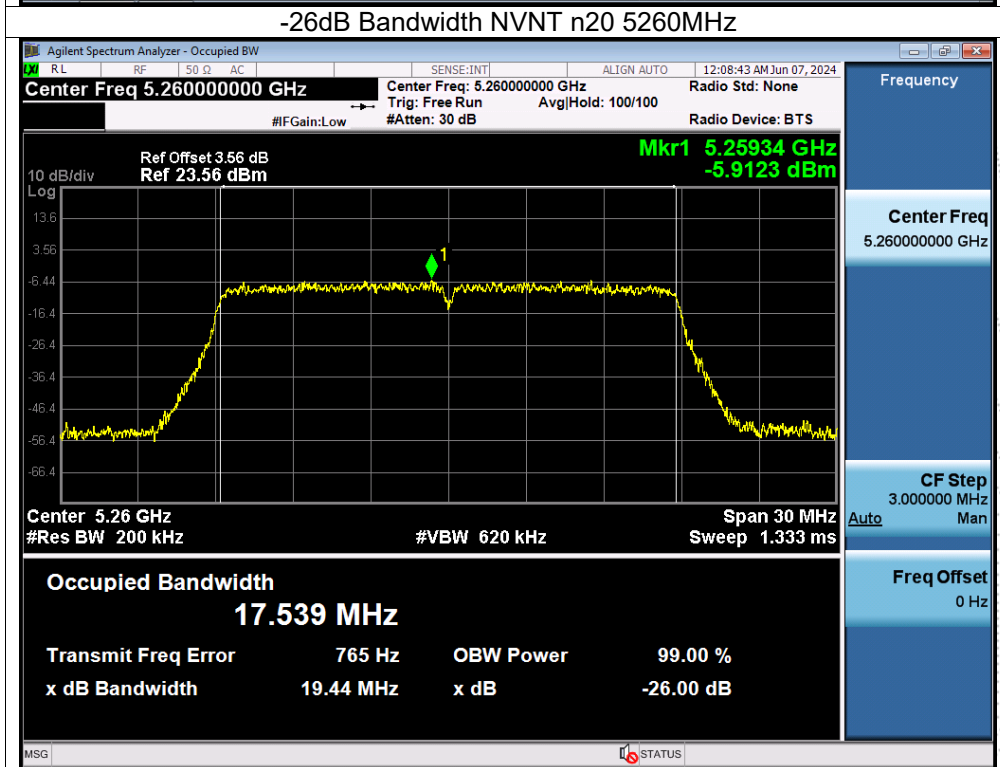
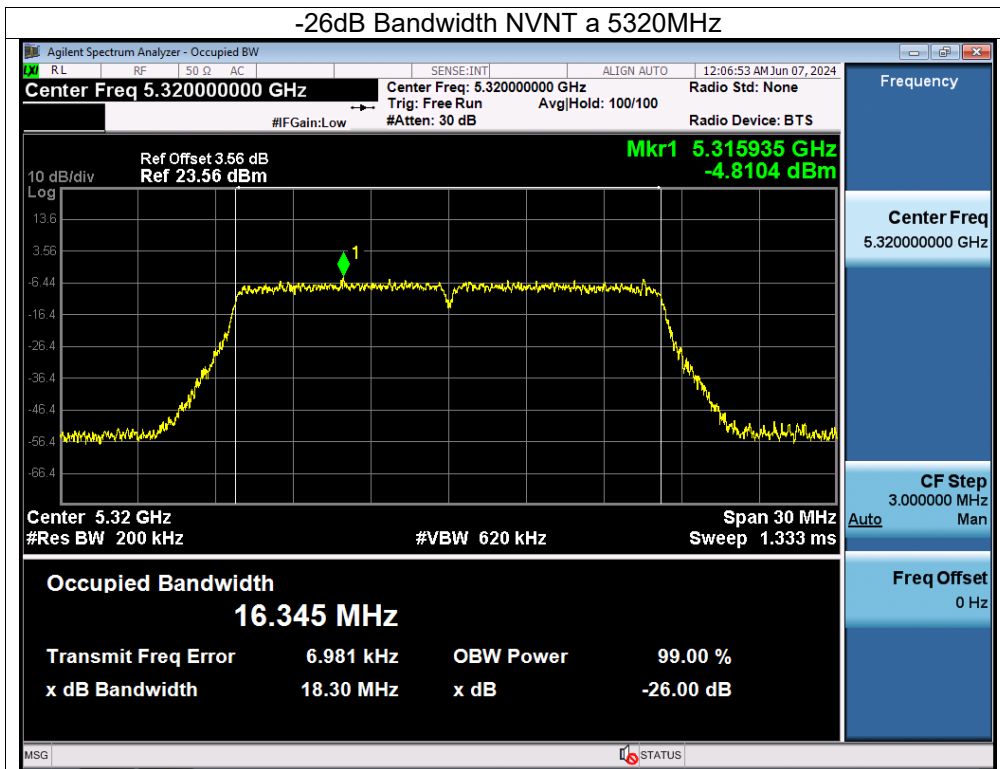


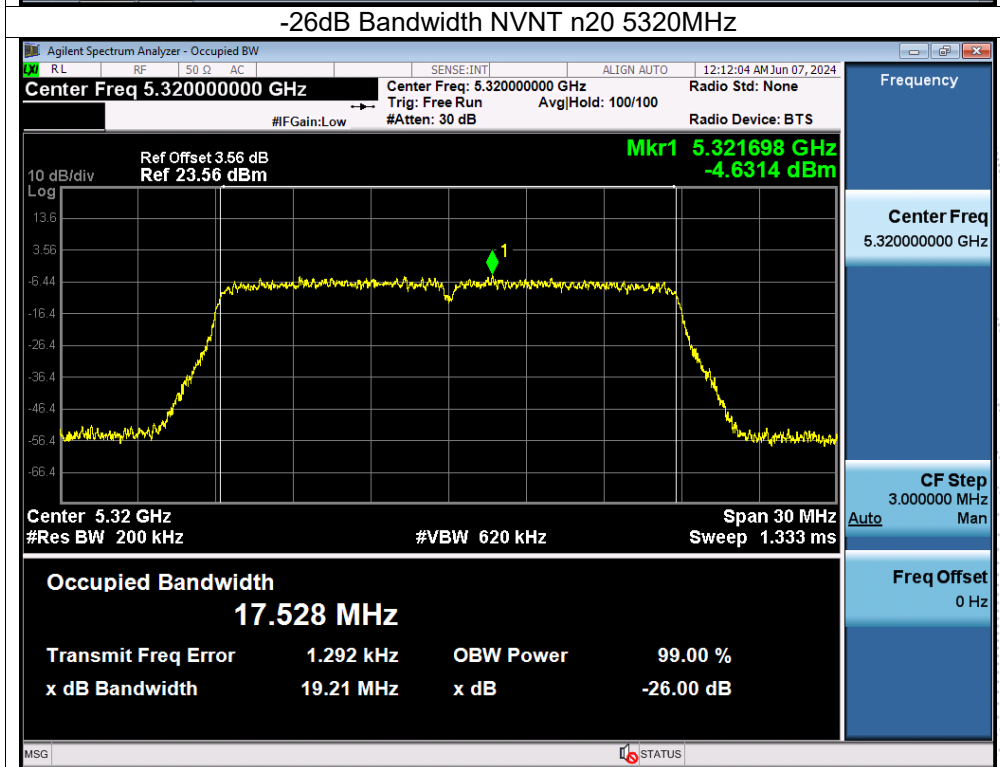
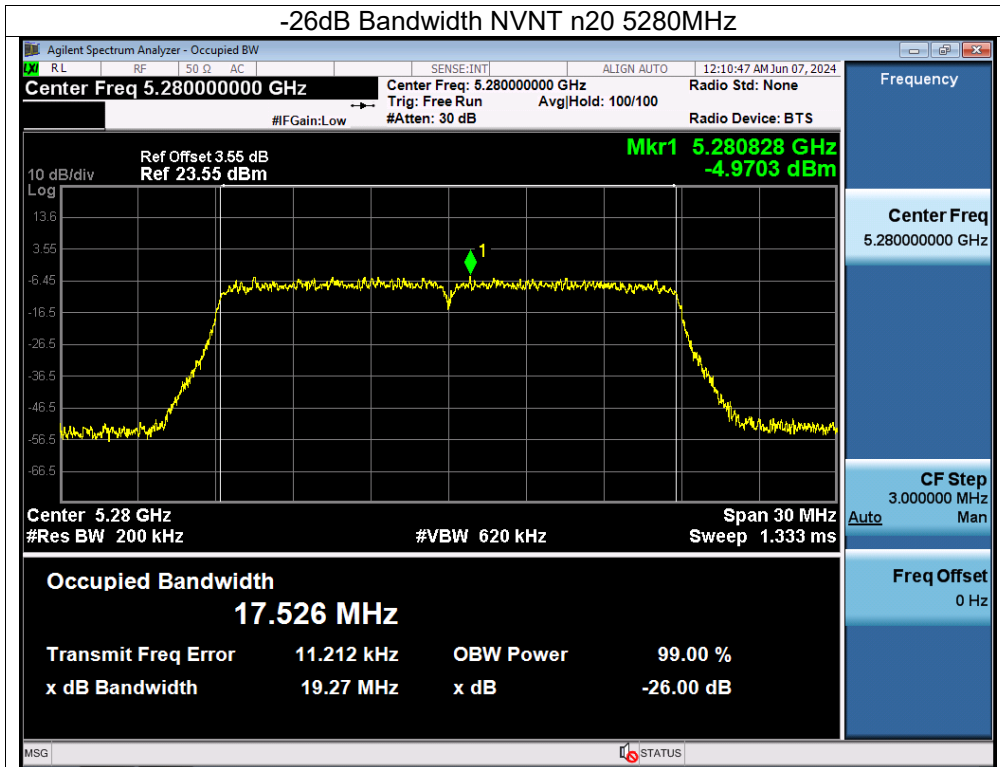
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5260-5320MHz)		

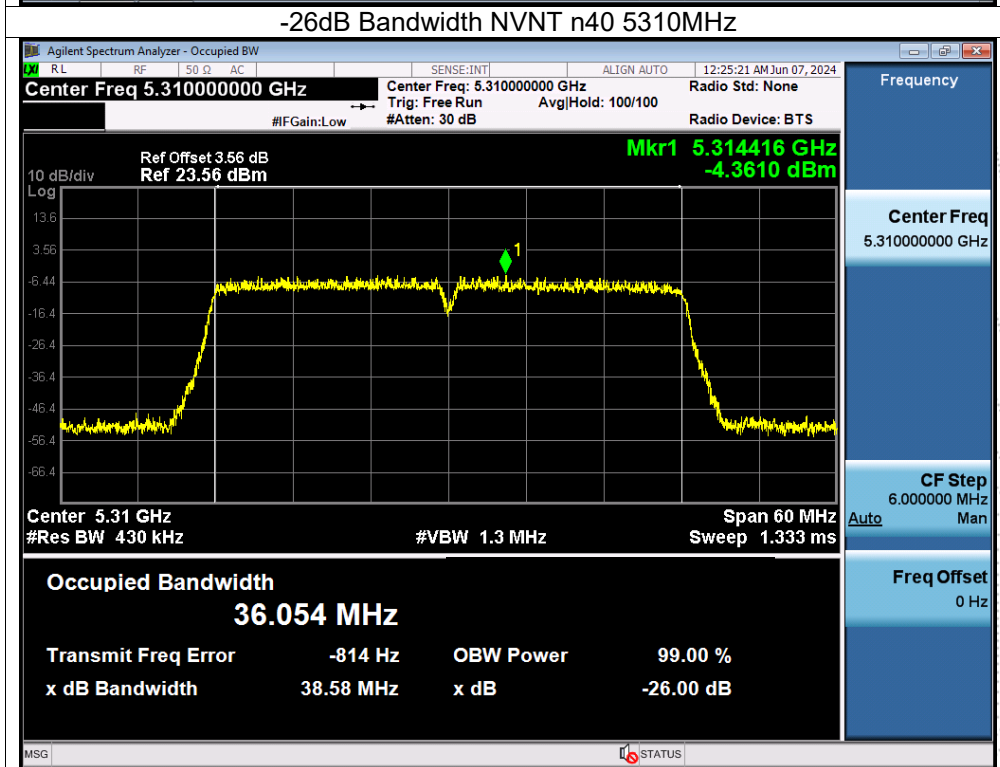
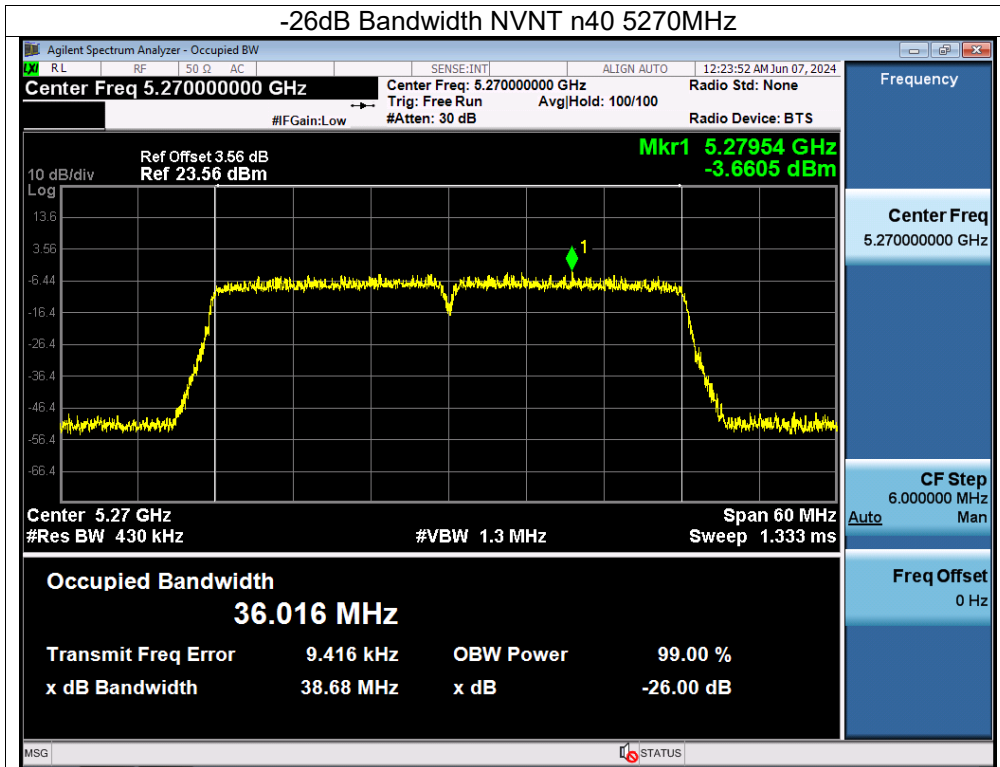
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5260	18.358	18.327	16.341	16.331	Pass
NVNT	a	5280	18.499	18.308	16.339	16.349	Pass
NVNT	a	5320	18.304	18.113	16.332	16.339	Pass
NVNT	n20	5260	19.444	19.218	17.541	17.525	Pass
NVNT	n20	5280	19.27	19.197	17.522	17.524	Pass
NVNT	n20	5320	19.213	19.185	17.523	17.518	Pass
NVNT	n40	5270	38.681	38.917	36.023	36.068	Pass
NVNT	n40	5310	38.582	38.671	36.023	36.017	Pass
NVNT	ac20	5260	19.215	19.203	17.533	17.527	Pass
NVNT	ac20	5280	19.335	19.429	17.526	17.532	Pass
NVNT	ac20	5320	19.315	19.285	17.522	17.511	Pass
NVNT	ac40	5270	38.97	38.756	36.038	36.078	Pass
NVNT	ac40	5310	38.531	38.88	36.043	36.058	Pass
NVNT	ac80	5290	83.199	83.035	75.661	75.641	Pass
NVNT	ax20	5260	20.089	20.311	18.86	18.848	Pass
NVNT	ax20	5280	20.19	20.232	18.87	18.892	Pass
NVNT	ax20	5320	20.234	20.105	18.876	18.865	Pass
NVNT	ax40	5270	39.639	39.743	37.676	37.712	Pass
NVNT	ax40	5310	39.698	39.776	37.609	37.663	Pass
NVNT	ax80	5290	80.11	80.509	76.8	76.766	Pass

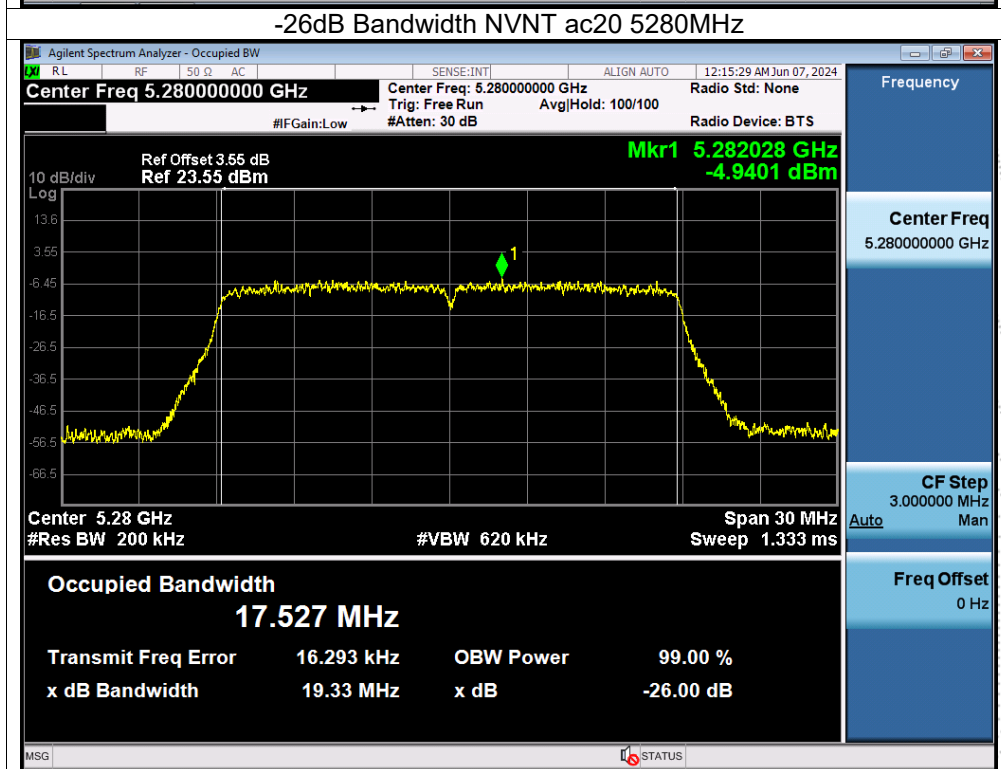
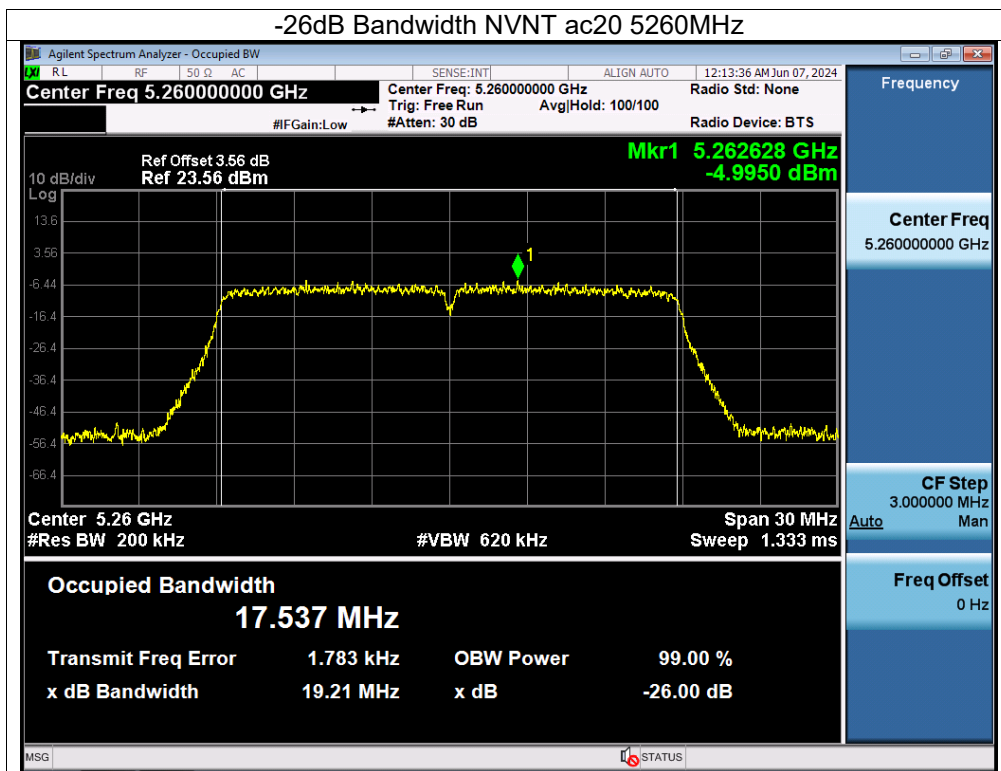
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

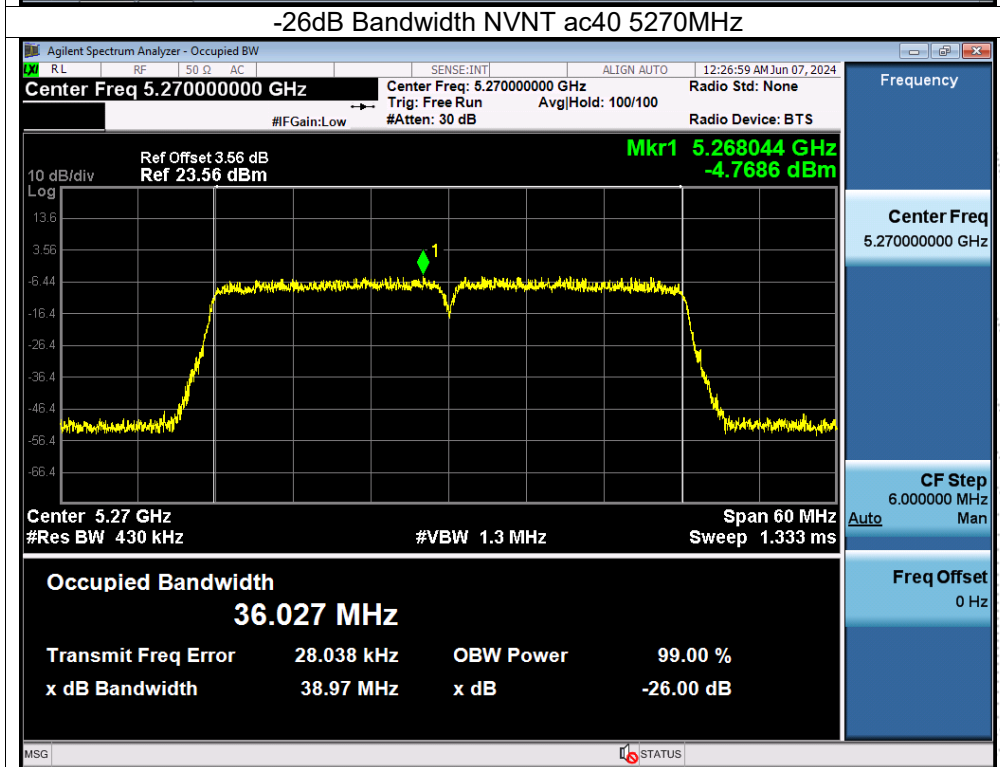
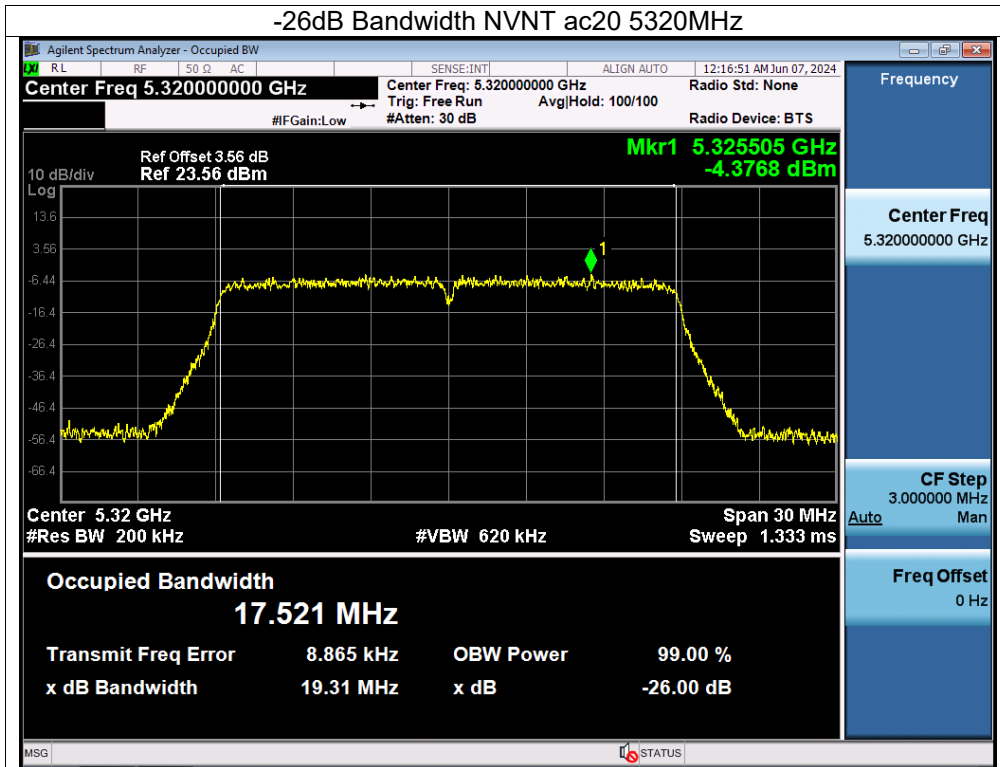


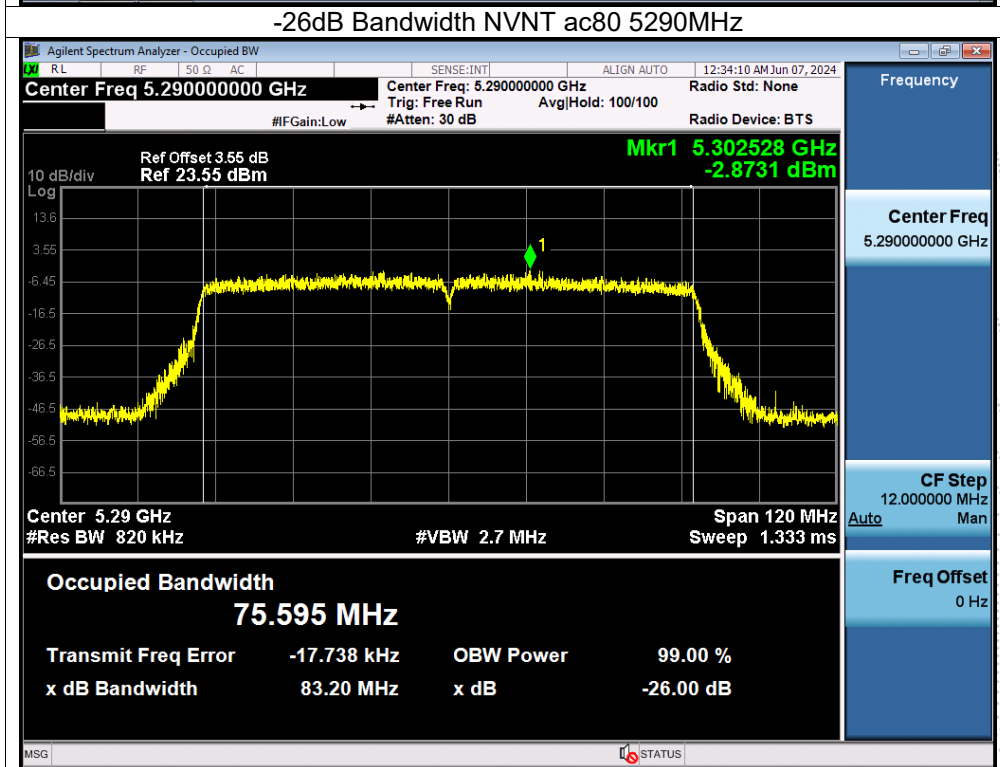
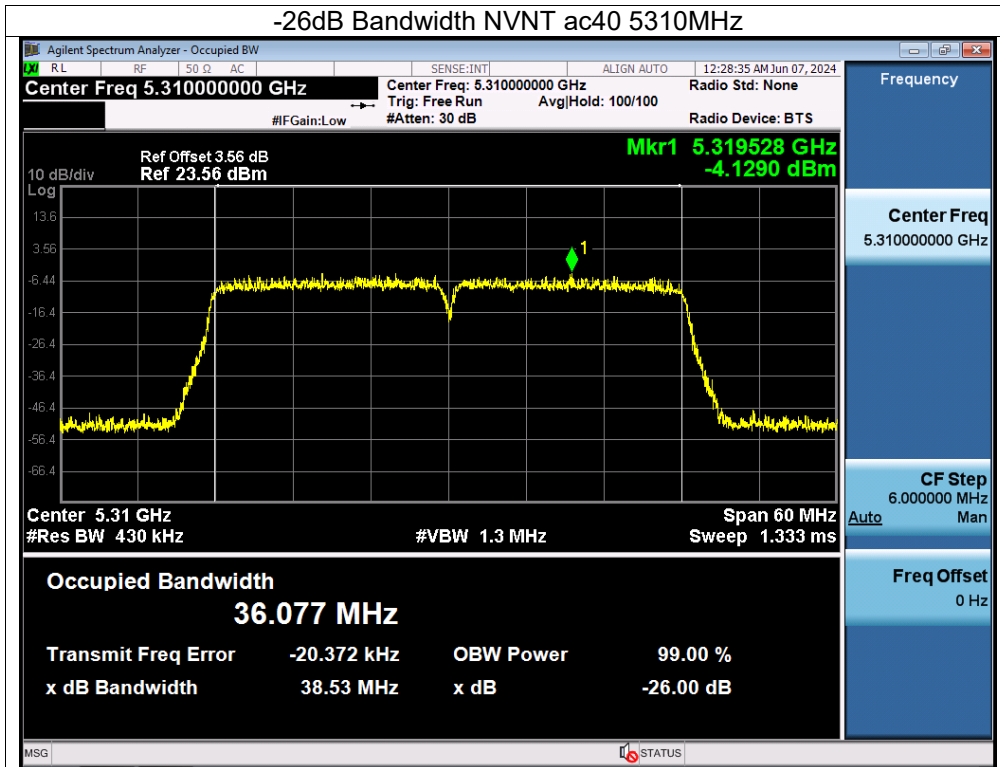


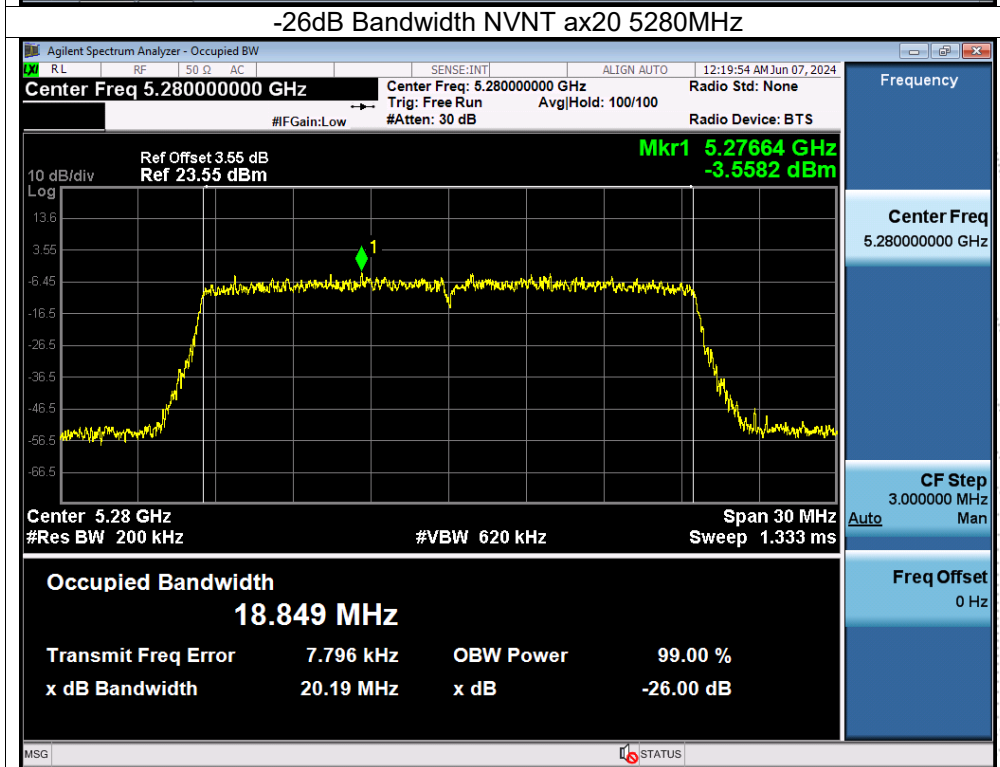
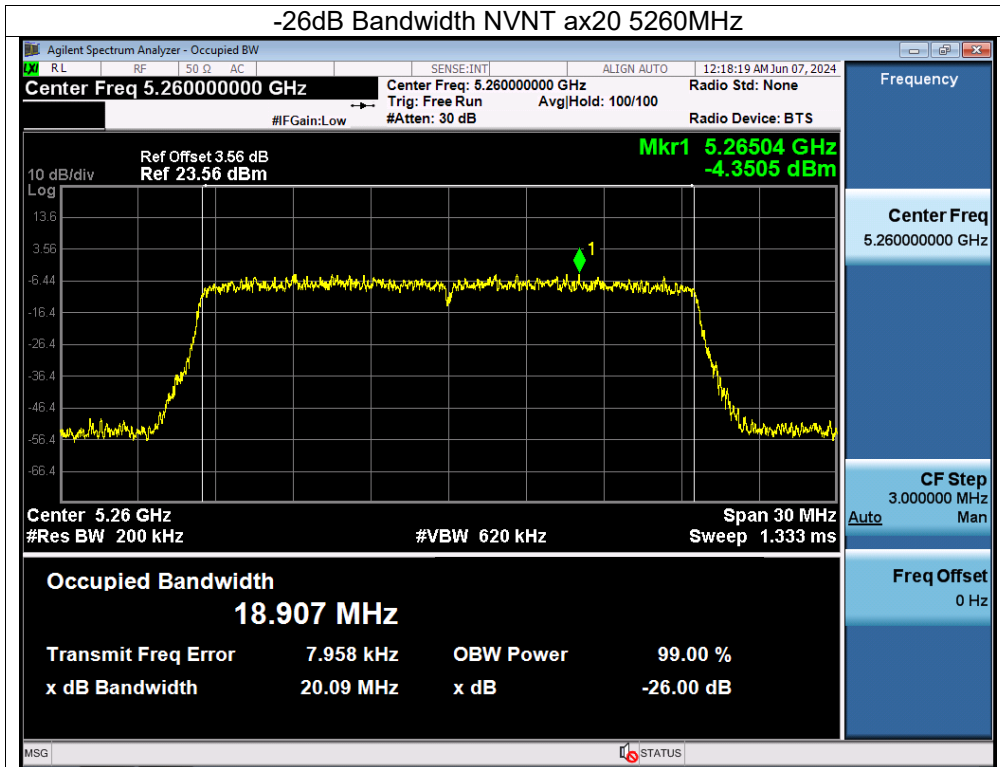


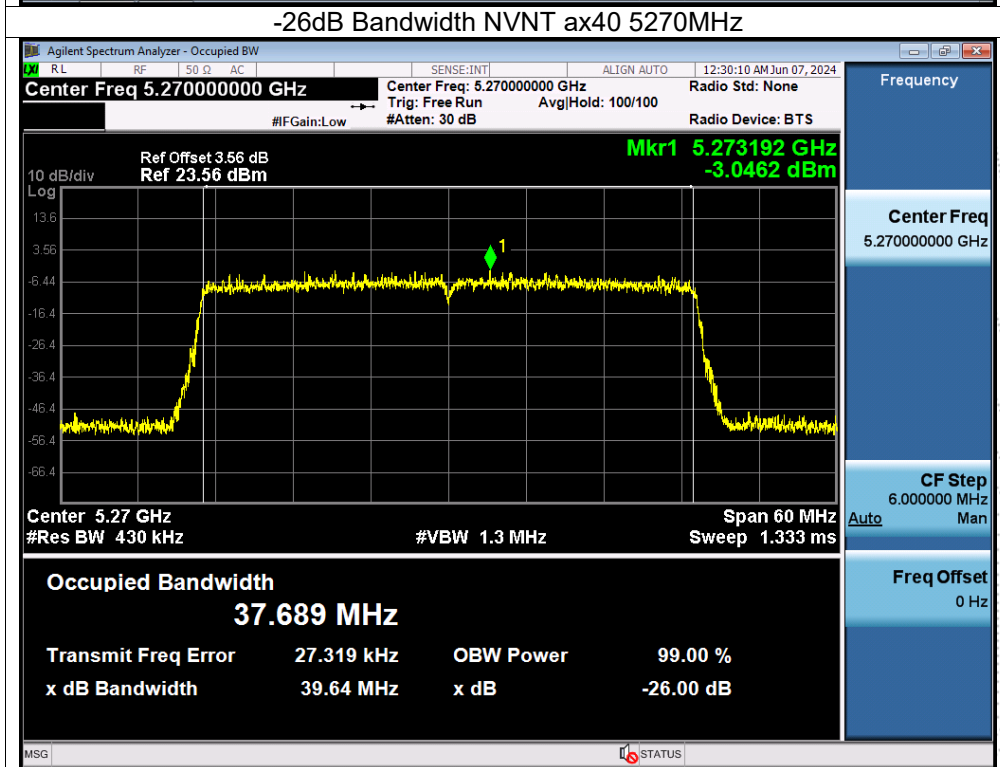
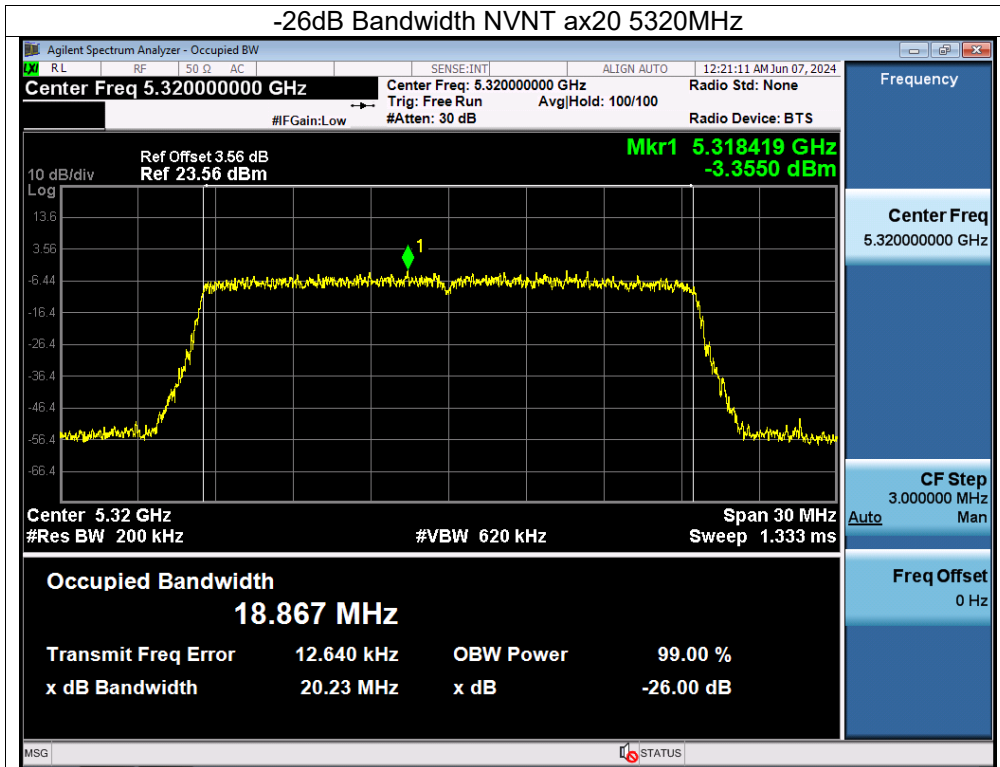


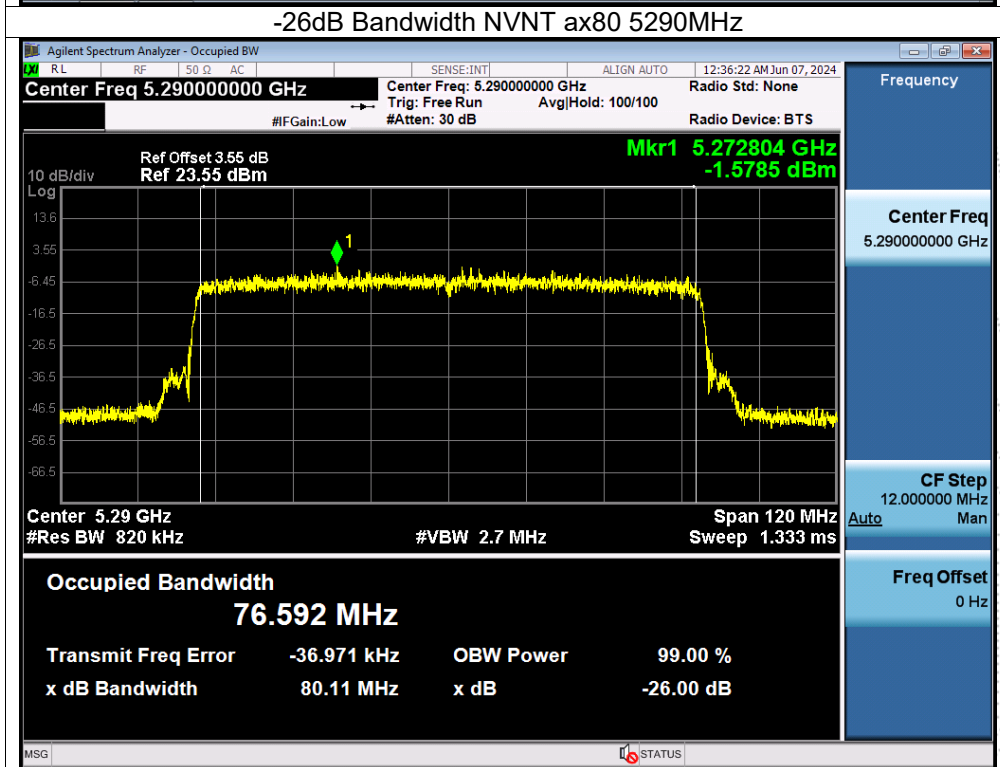
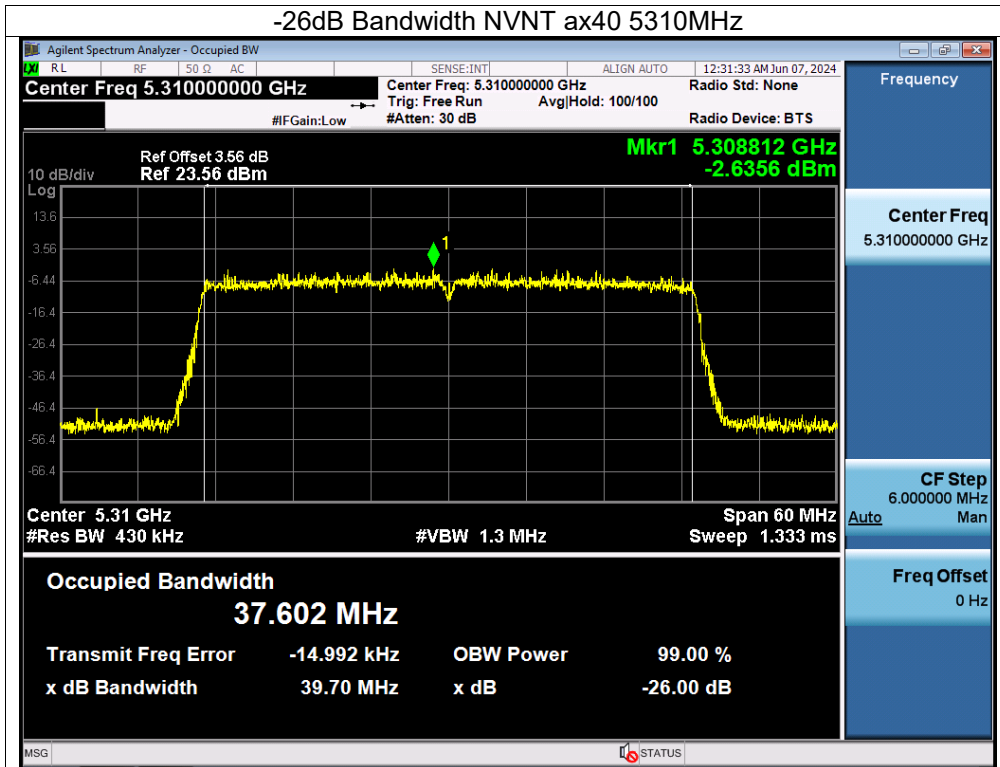












Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

