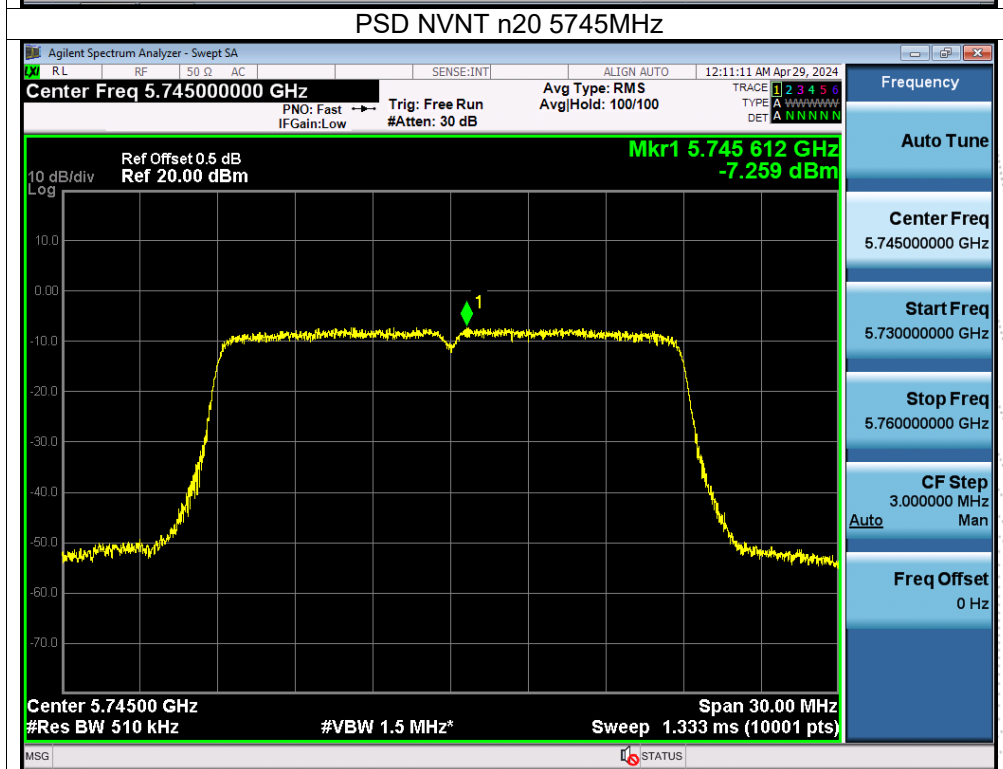
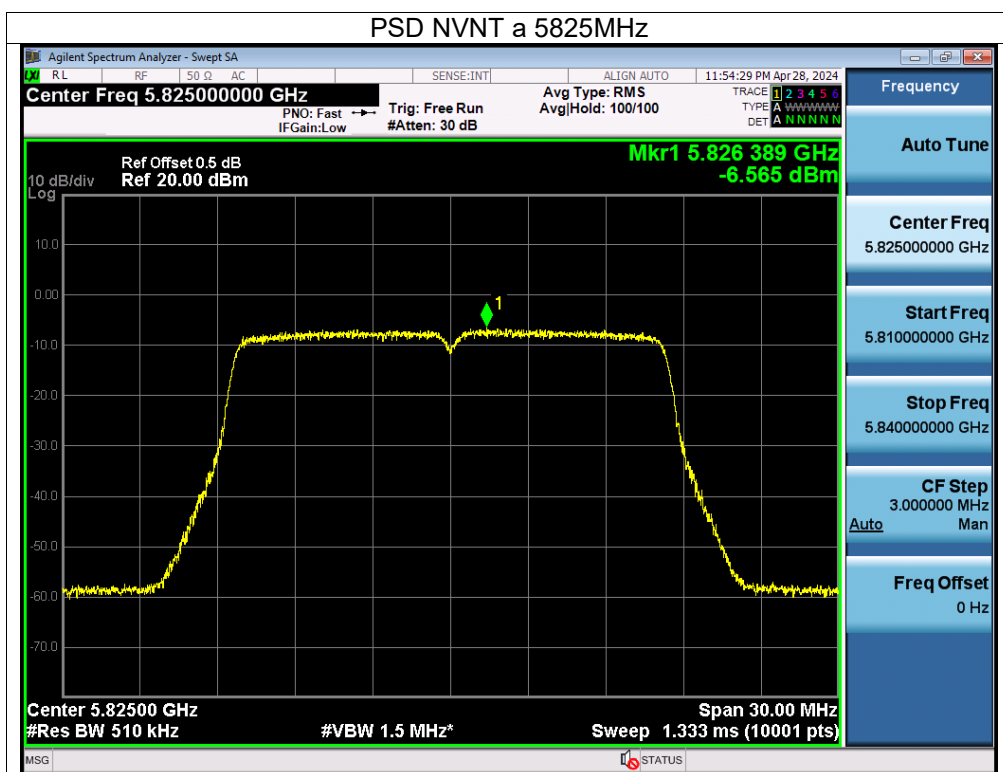
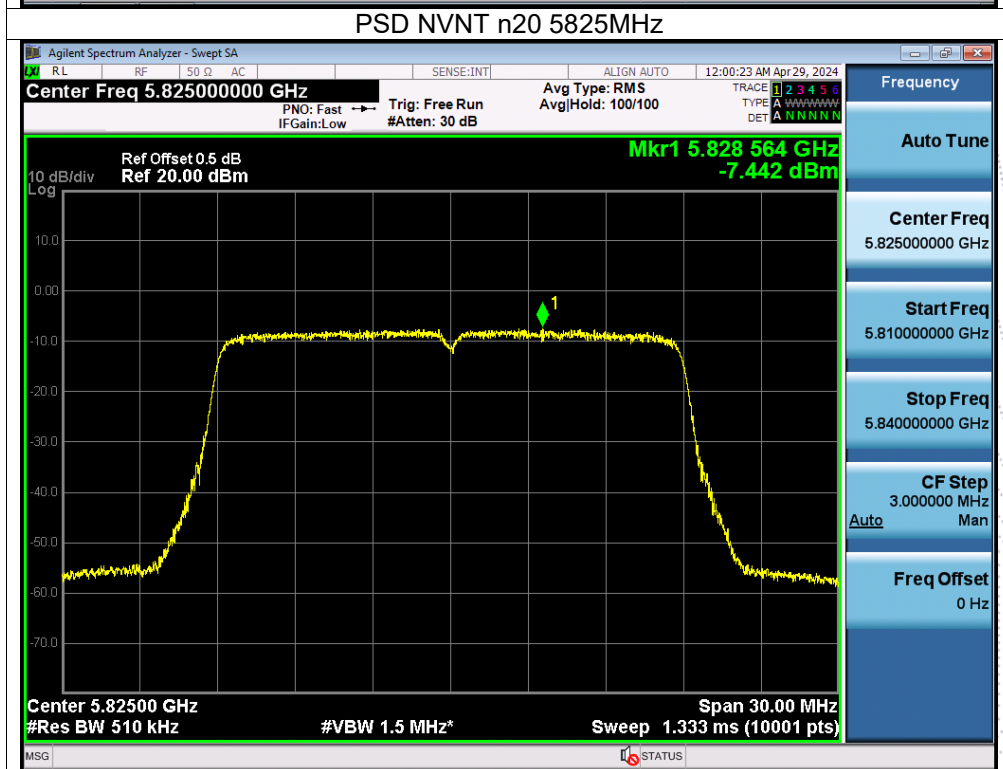
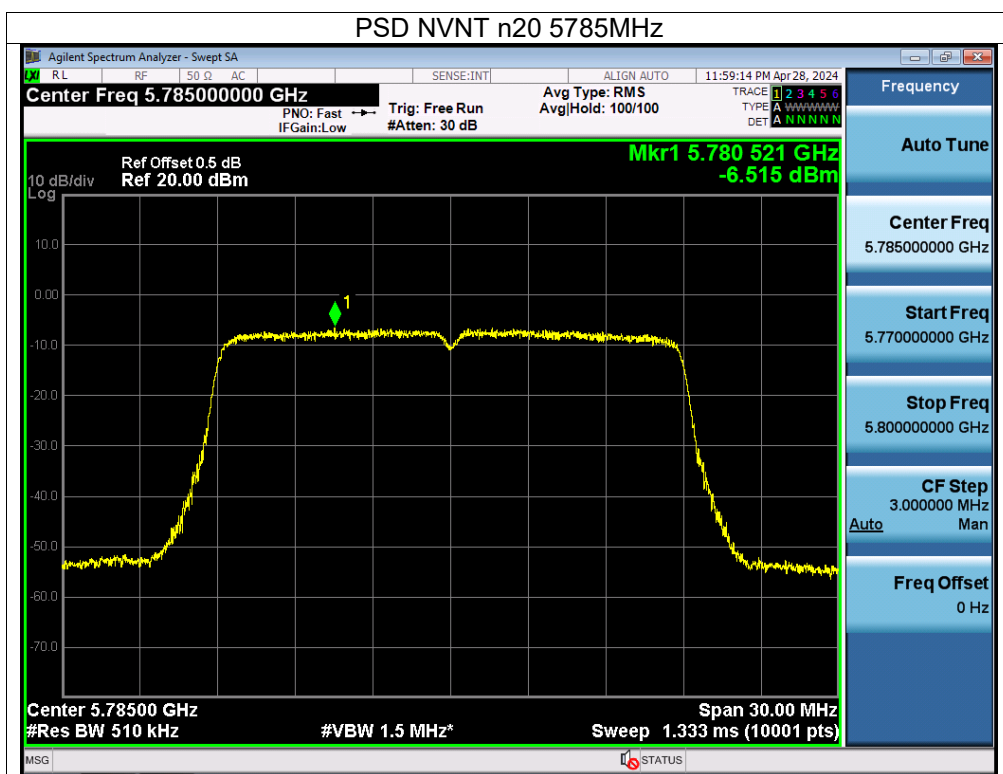
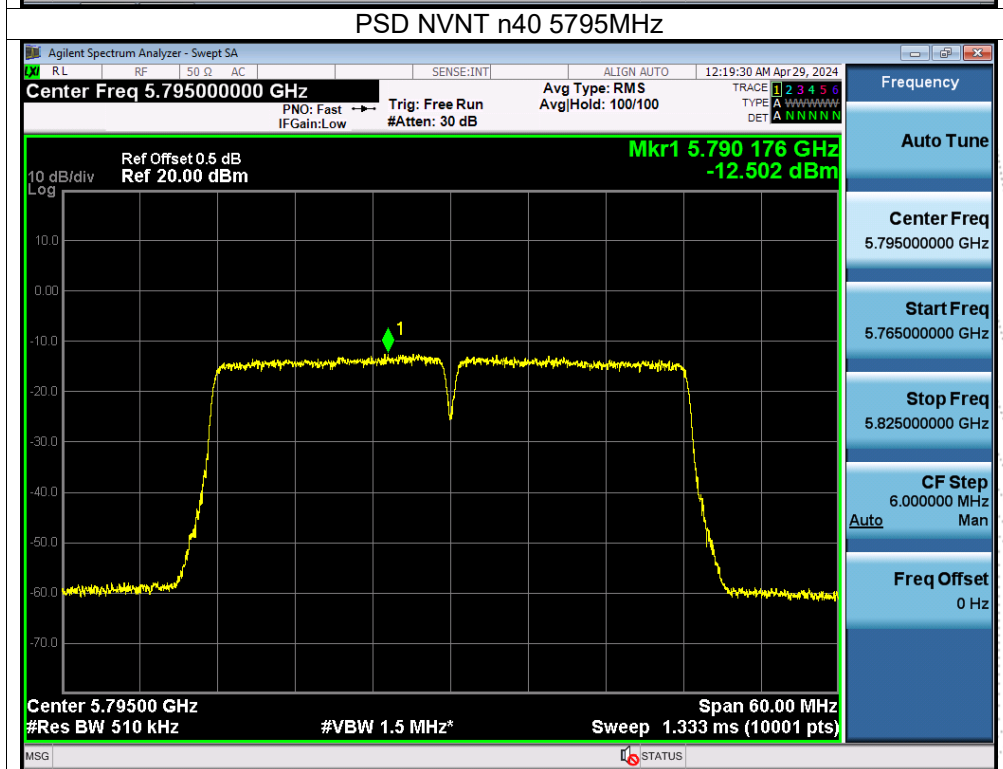
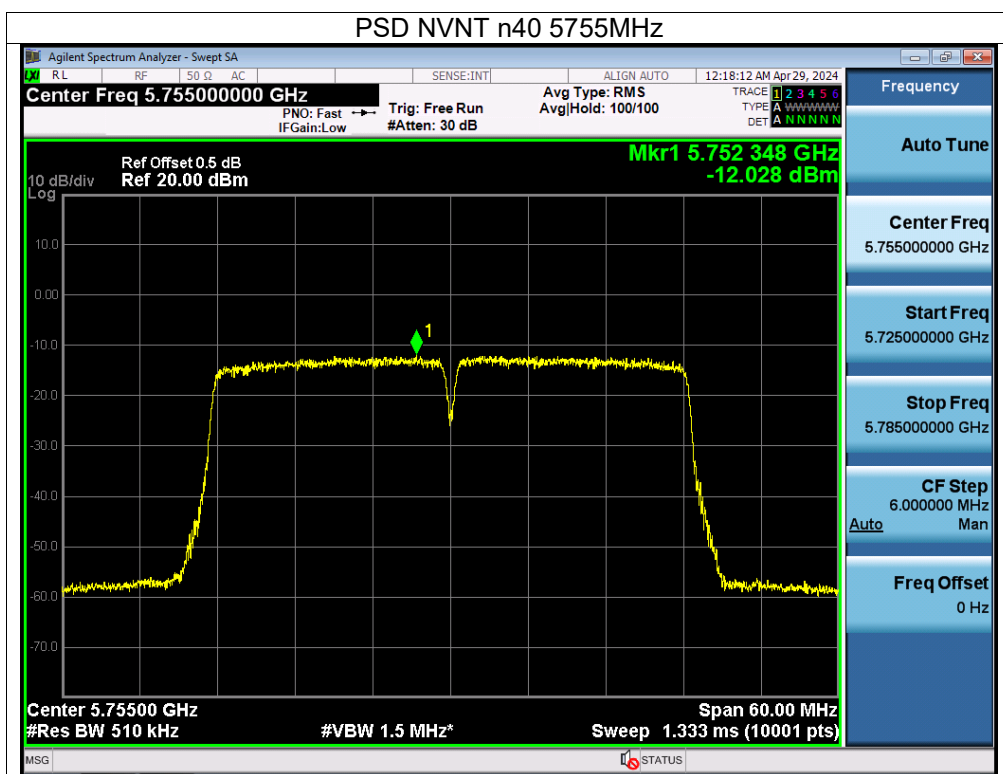
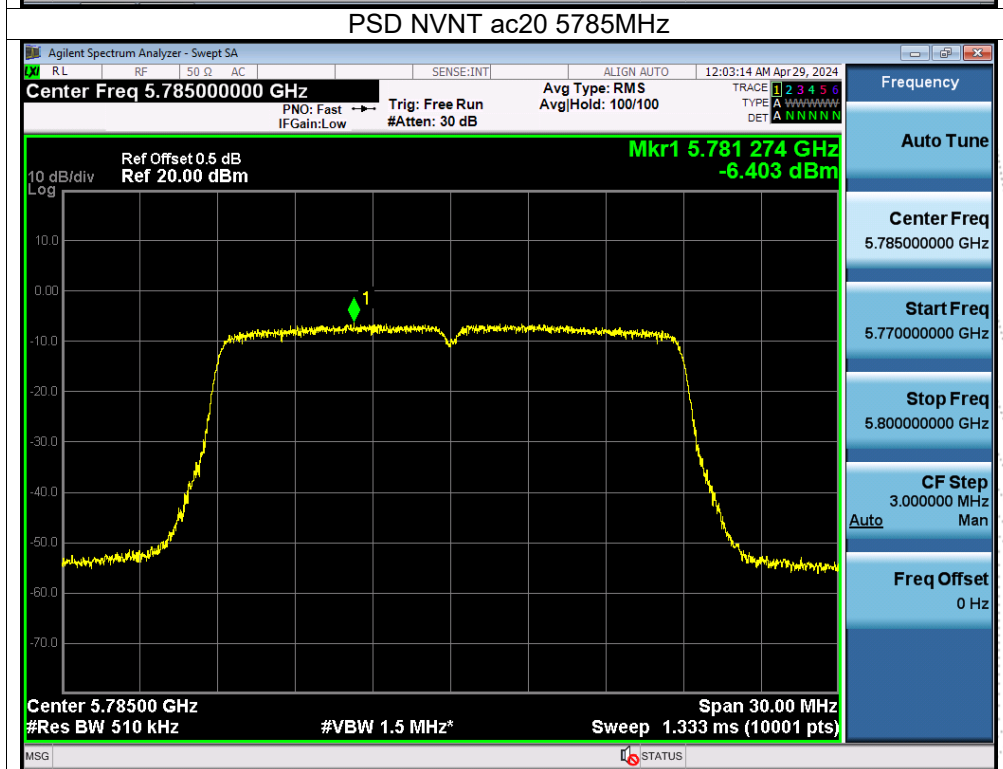
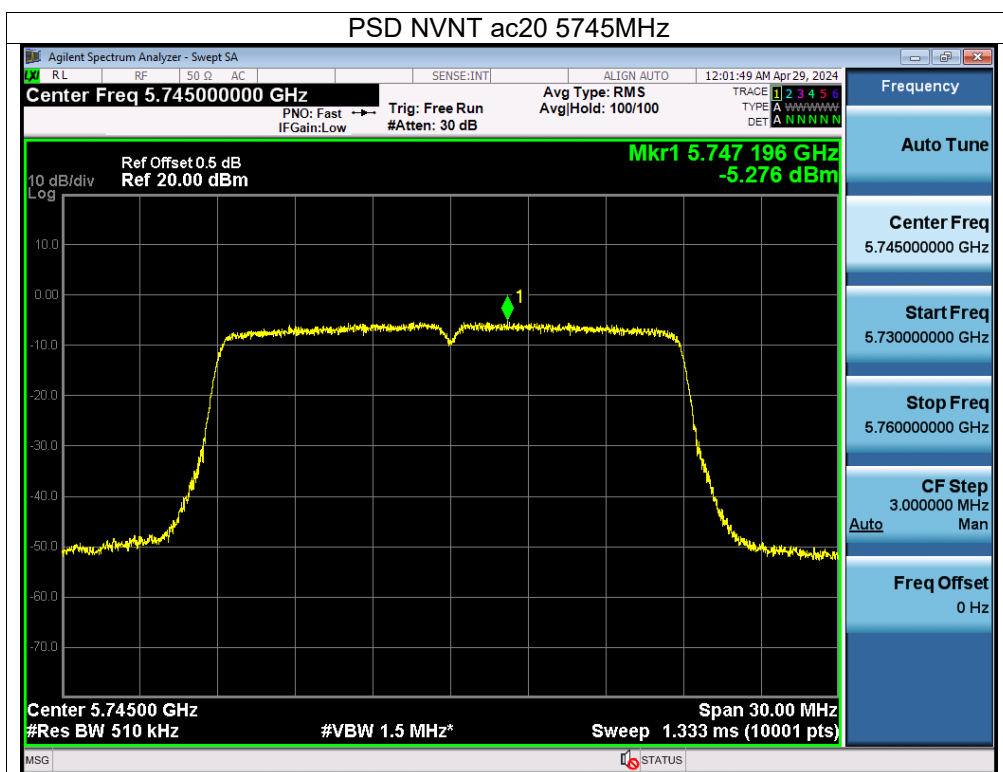
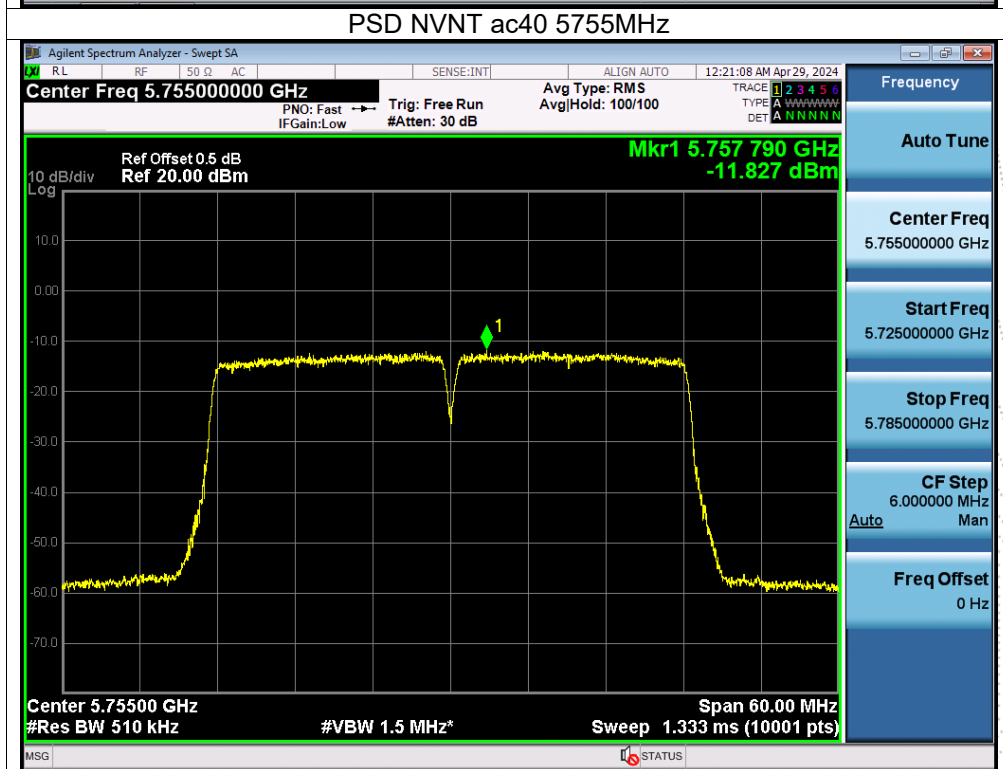
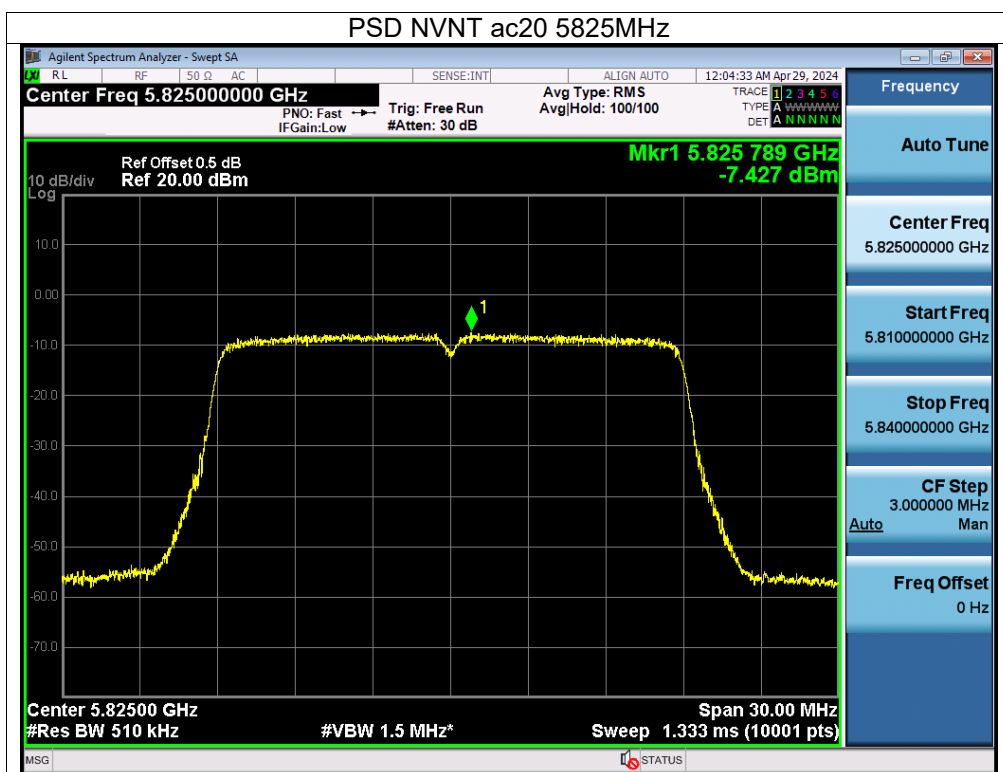


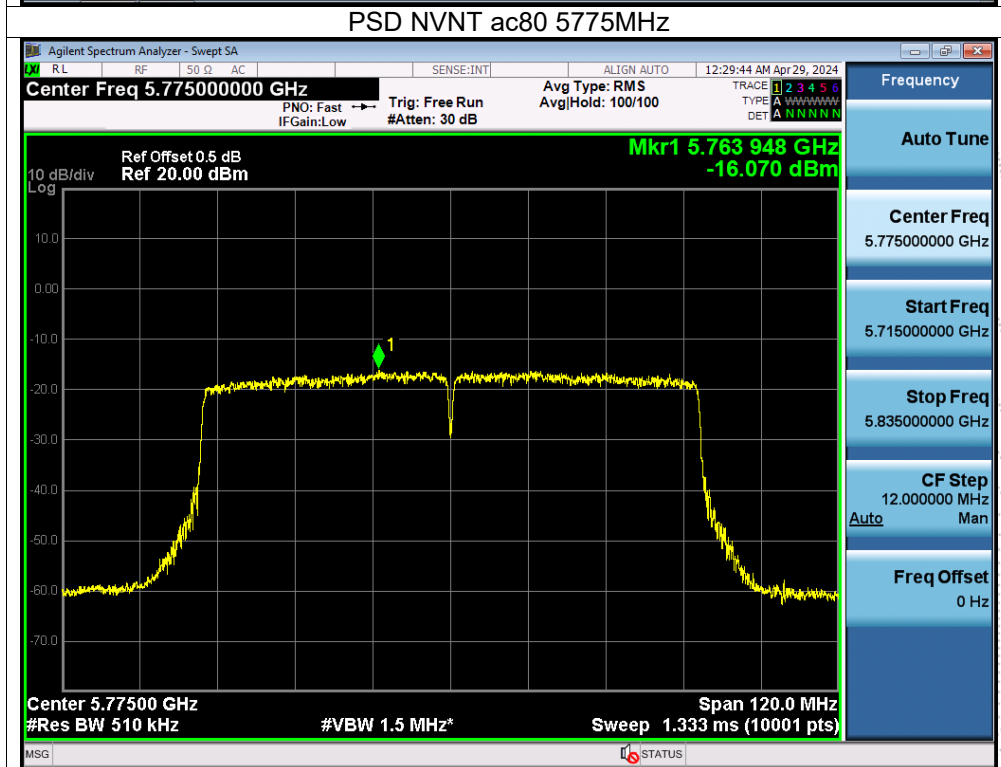
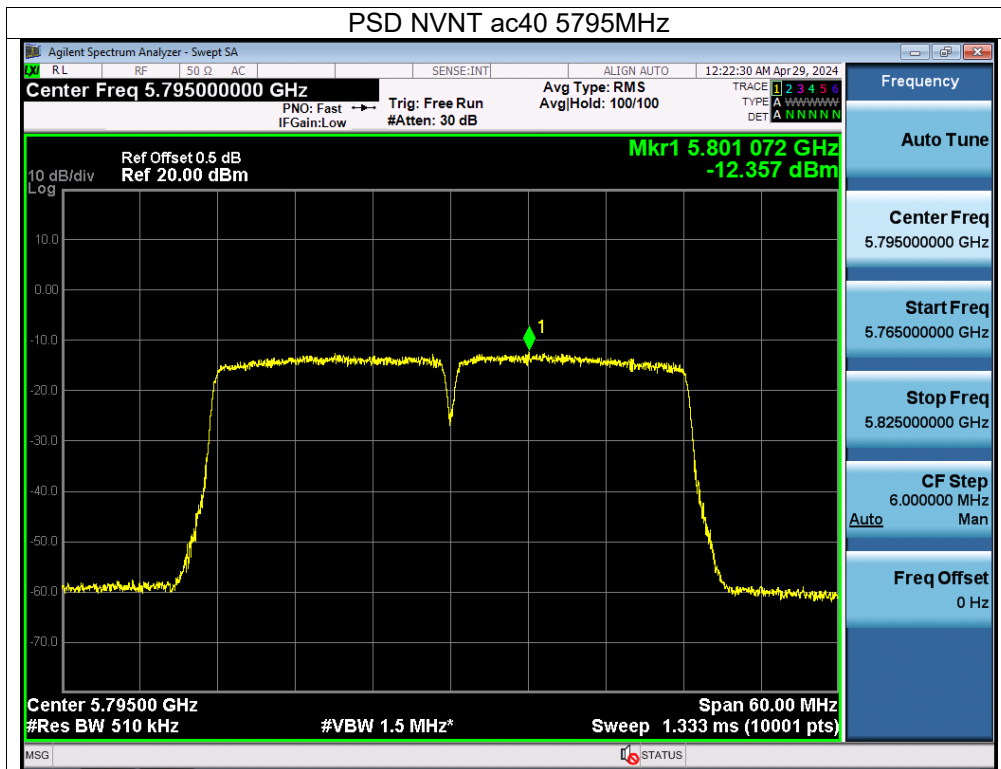


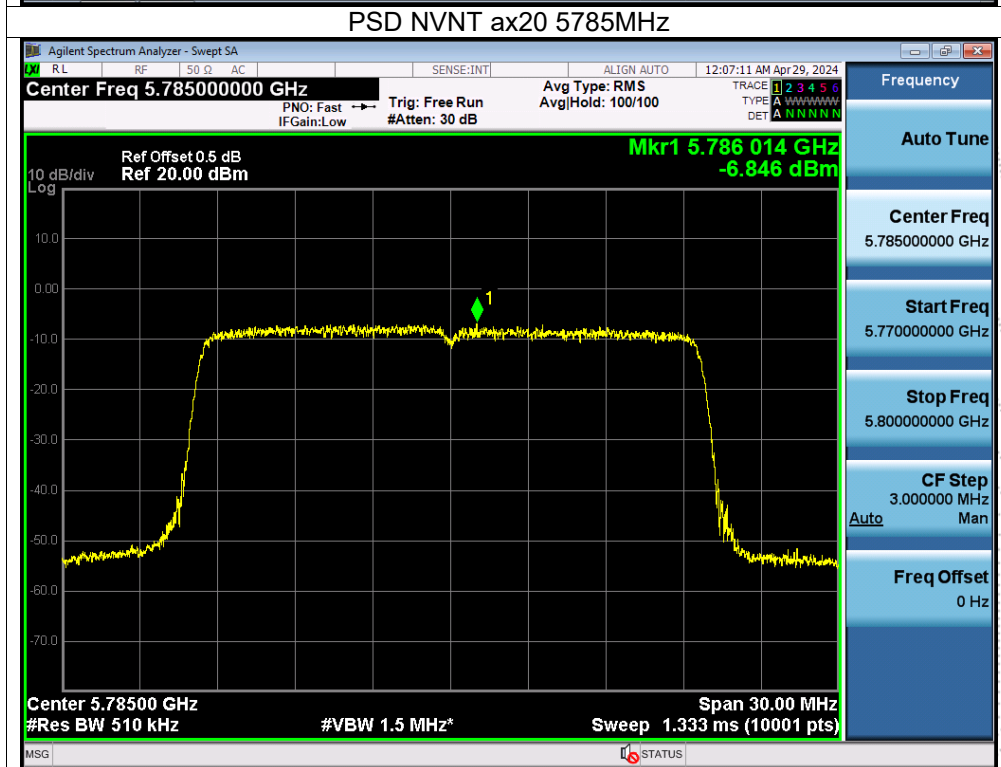
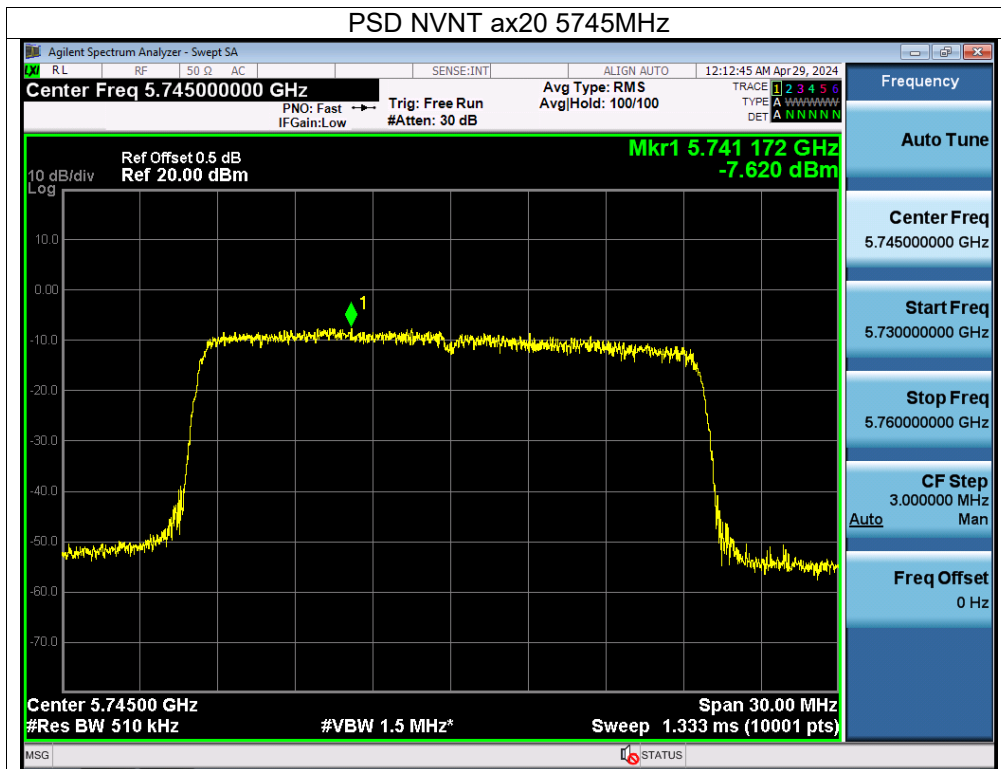


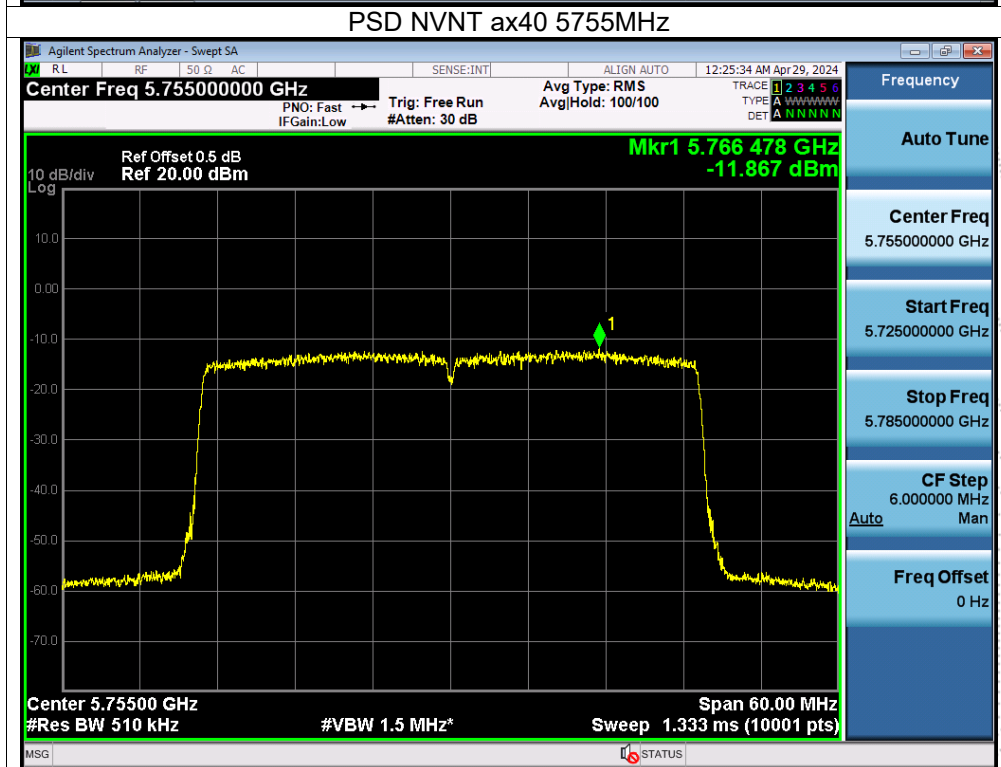
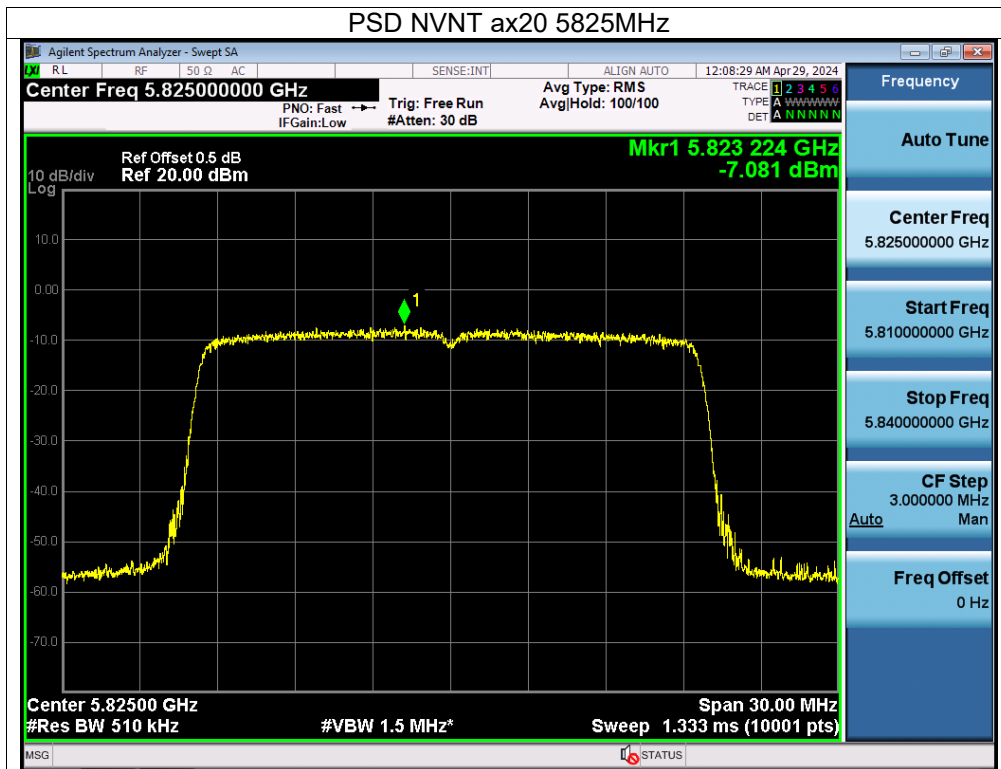


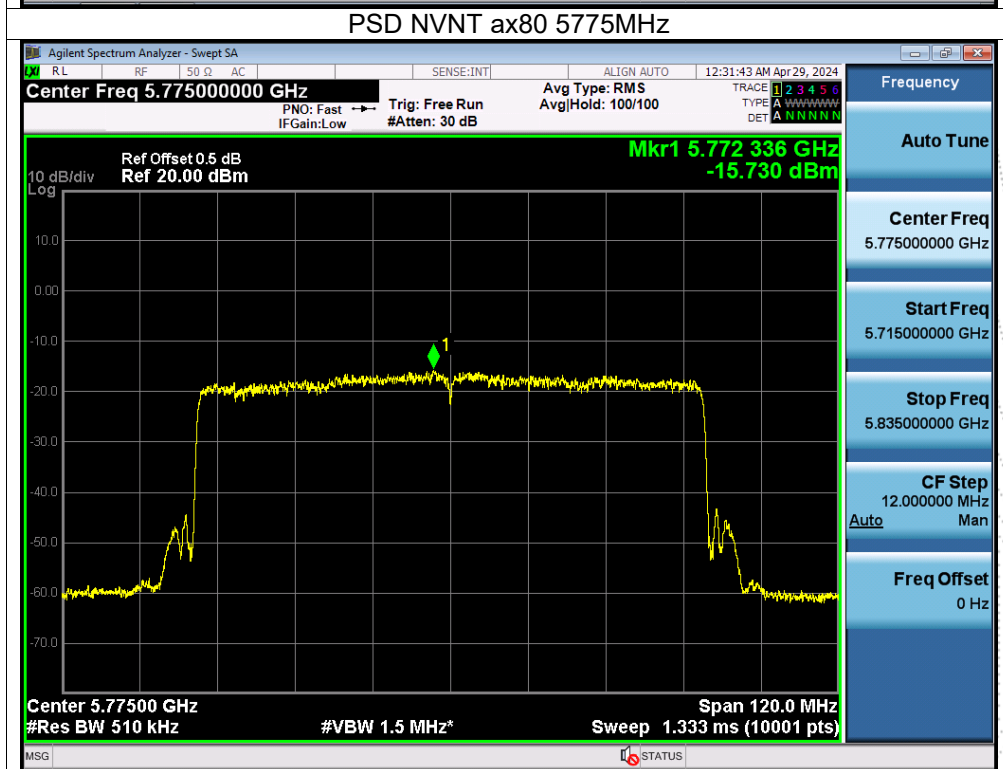
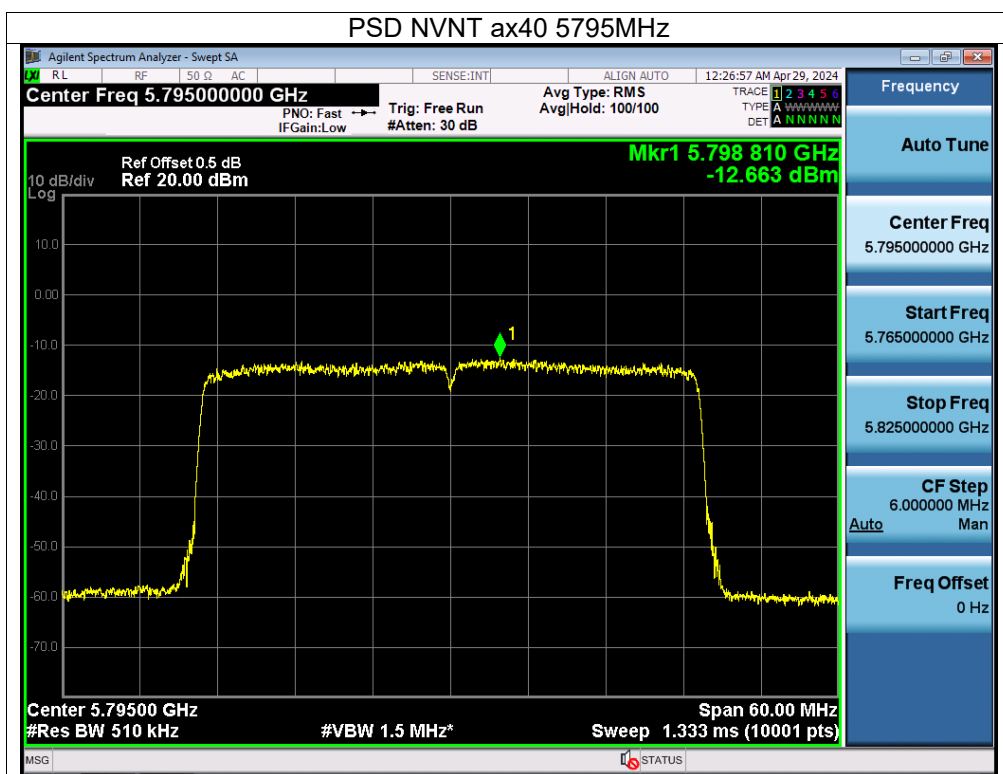






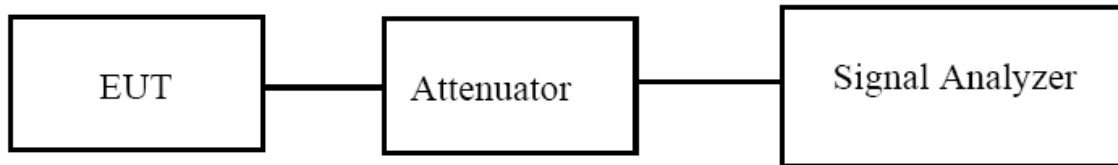






9. 26dB & 6dB & 99% Emission Bandwidth

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 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%.

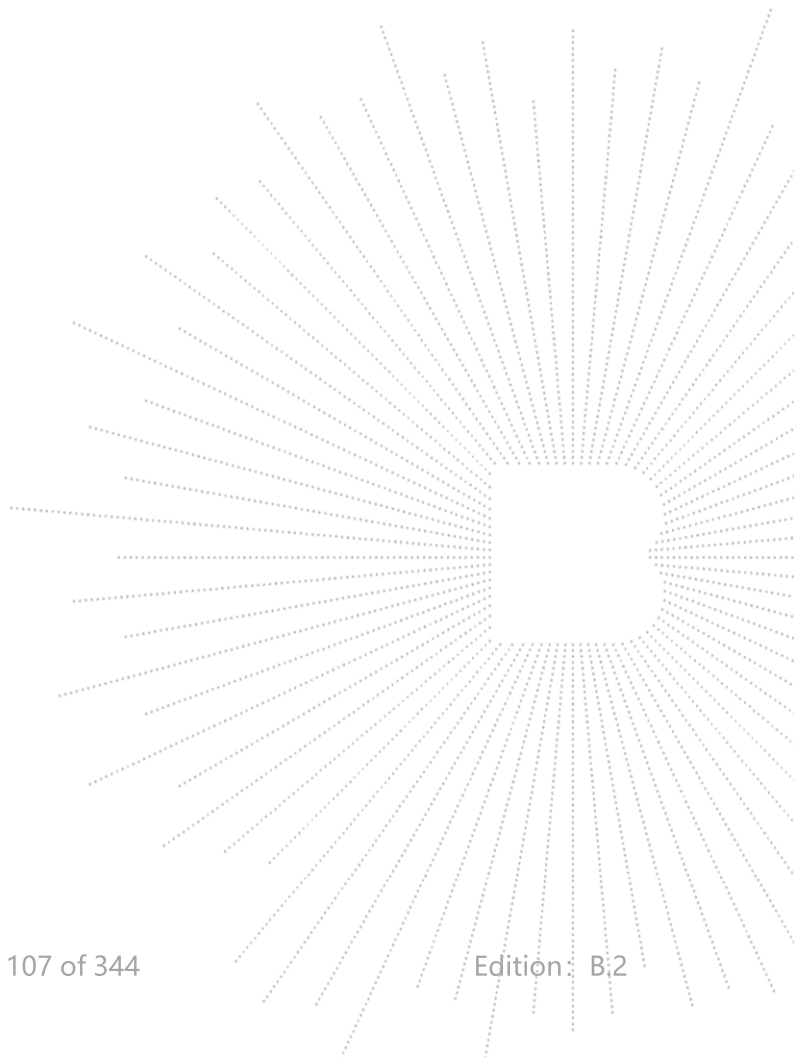
The following procedure shall be used for measuring (99 %) power bandwidth:

- 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.

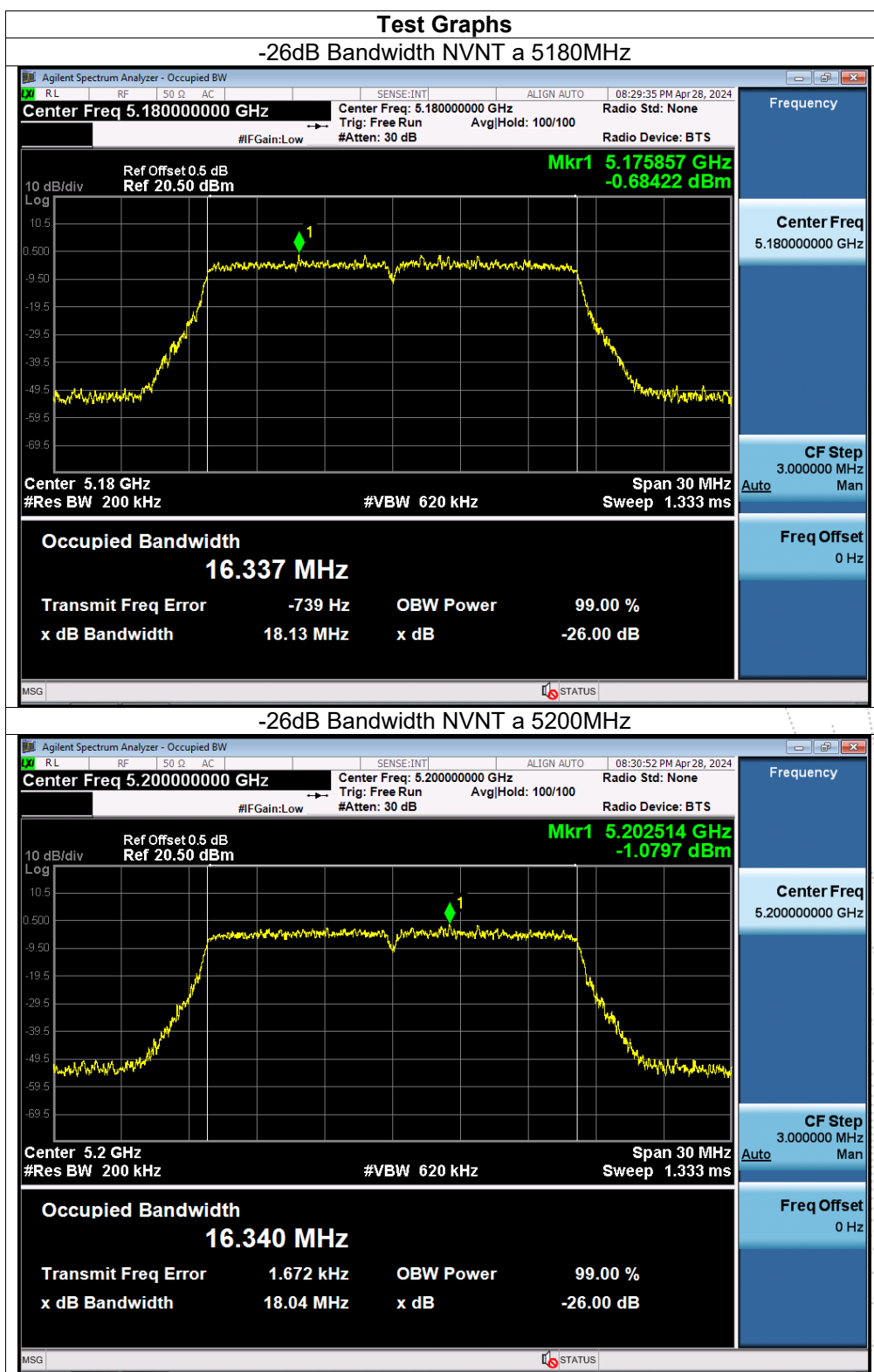


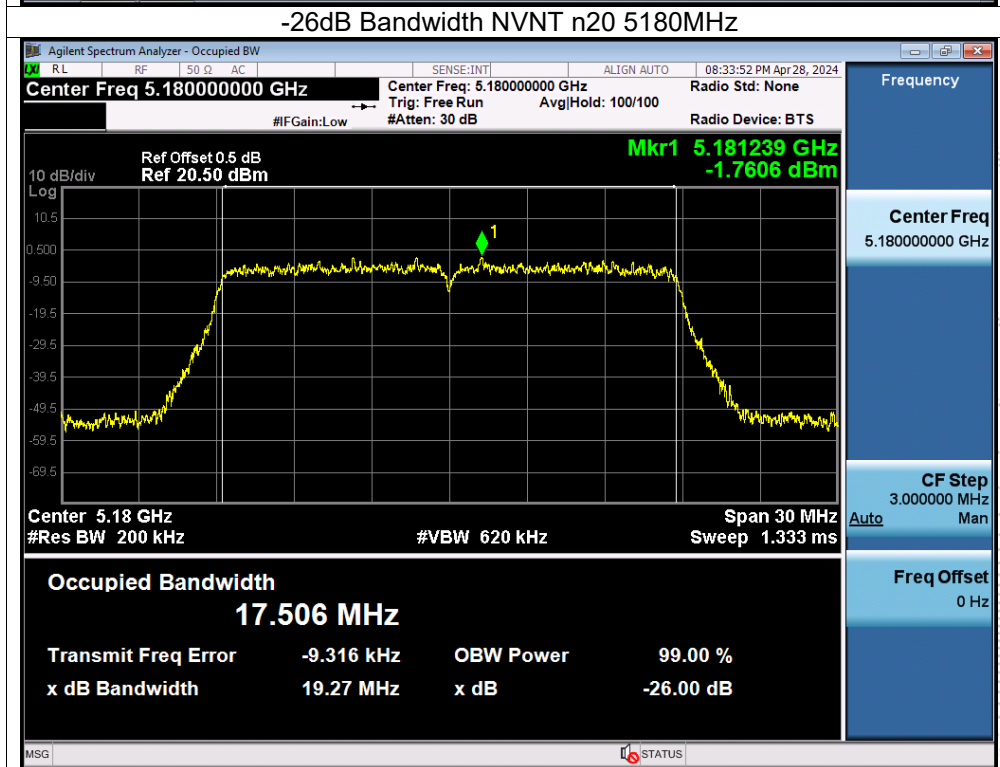
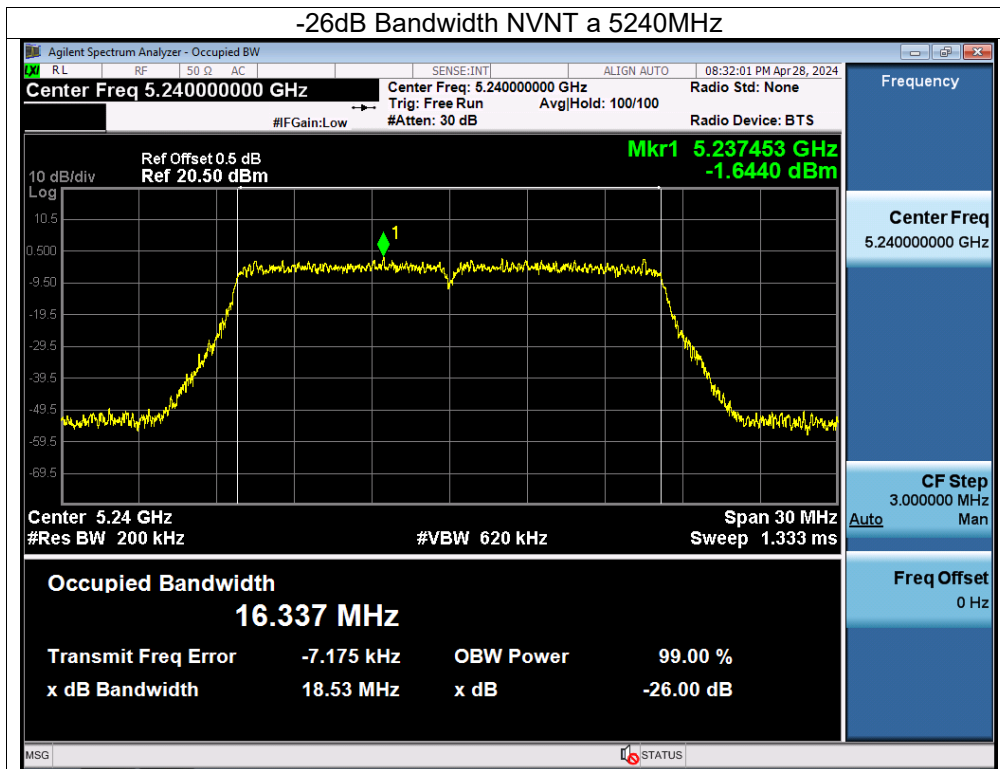
9.5 Test Result

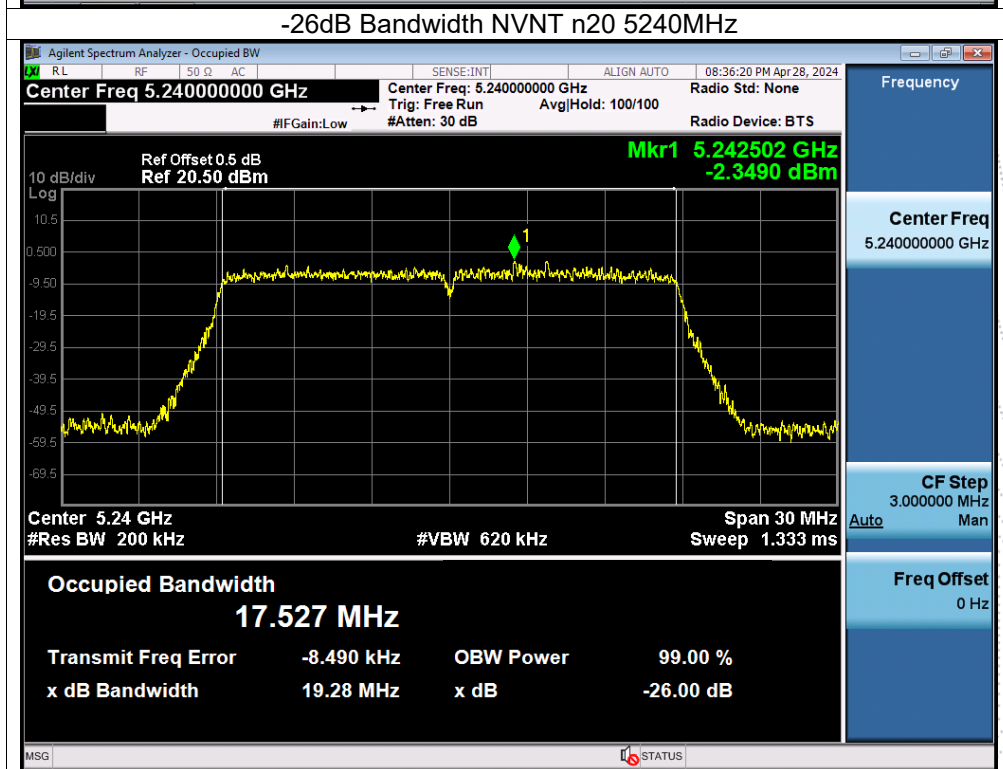
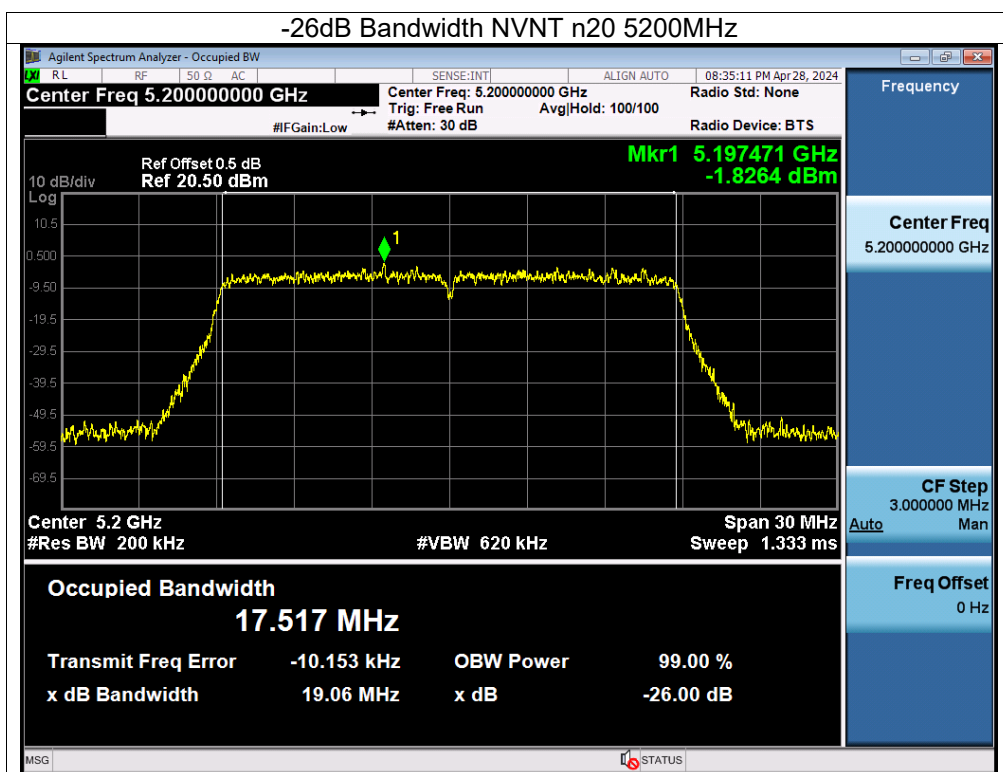
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5180-5240MHz)		

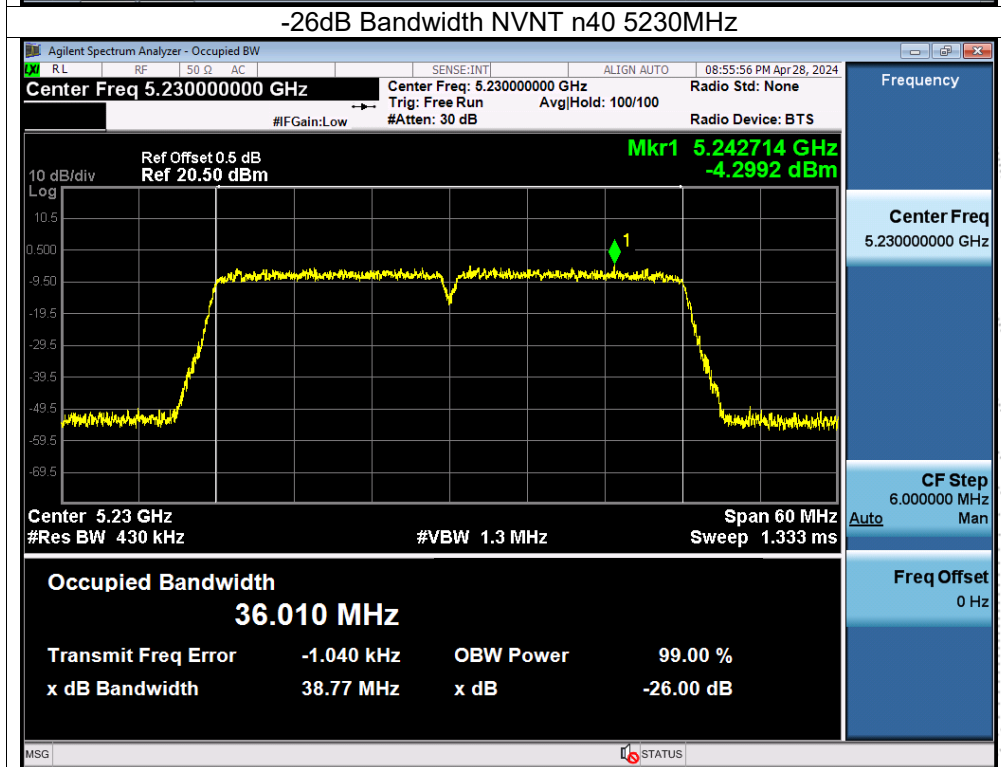
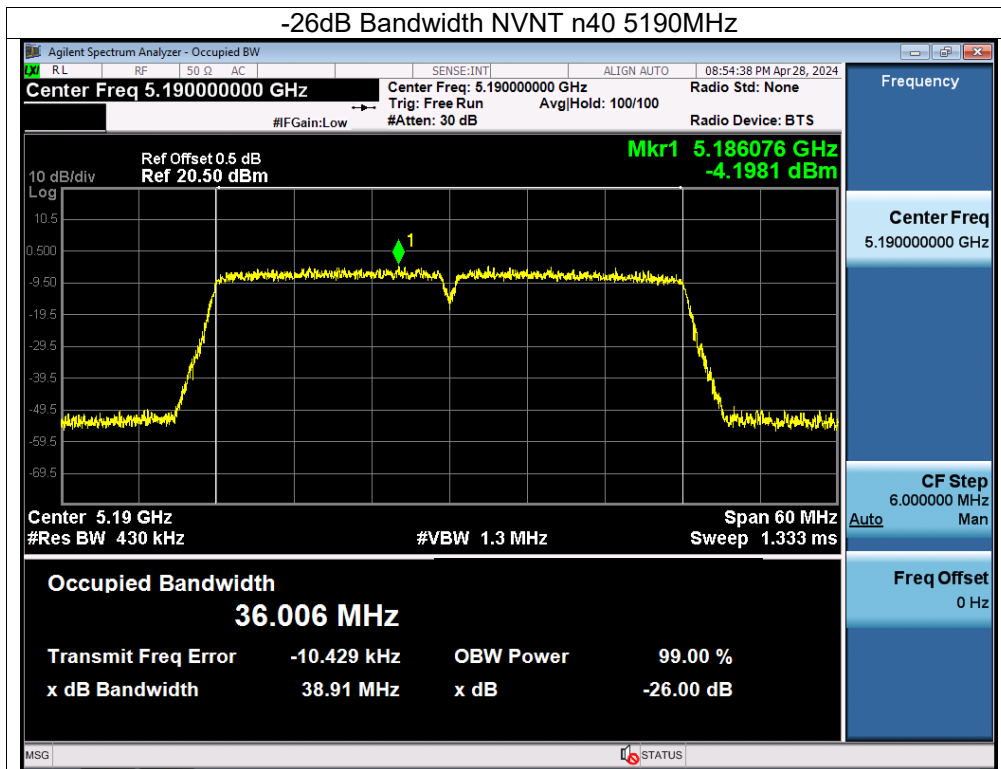
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5180	18.135	18.245	16.324	16.332	Pass
NVNT	a	5200	18.039	18.142	16.335	16.331	Pass
NVNT	a	5240	18.526	18.416	16.337	16.343	Pass
NVNT	n20	5180	19.269	19.26	17.507	17.513	Pass
NVNT	n20	5200	19.058	19.324	17.54	17.506	Pass
NVNT	n20	5240	19.284	19.144	17.535	17.518	Pass
NVNT	n40	5190	38.907	39.06	35.993	36.027	Pass
NVNT	n40	5230	38.768	38.903	36.009	36.005	Pass
NVNT	ac20	5180	19.276	19.226	17.529	17.5	Pass
NVNT	ac20	5200	19.149	19.171	17.517	17.524	Pass
NVNT	ac20	5240	19.096	19.291	17.513	17.502	Pass
NVNT	ac40	5190	38.812	38.87	36.054	36.046	Pass
NVNT	ac40	5230	38.907	38.625	36.073	36.04	Pass
NVNT	ac80	5210	87.565	86.979	76.233	76.077	Pass
NVNT	ax20	5180	20.165	20.156	18.894	18.877	Pass
NVNT	ax20	5200	20.212	20.221	18.868	18.868	Pass
NVNT	ax20	5240	20.238	20.424	18.861	18.884	Pass
NVNT	ax40	5190	39.433	39.569	37.637	37.661	Pass
NVNT	ax40	5230	39.651	39.759	37.67	37.635	Pass
NVNT	ax80	5210	81.176	81.174	77.215	77.171	Pass

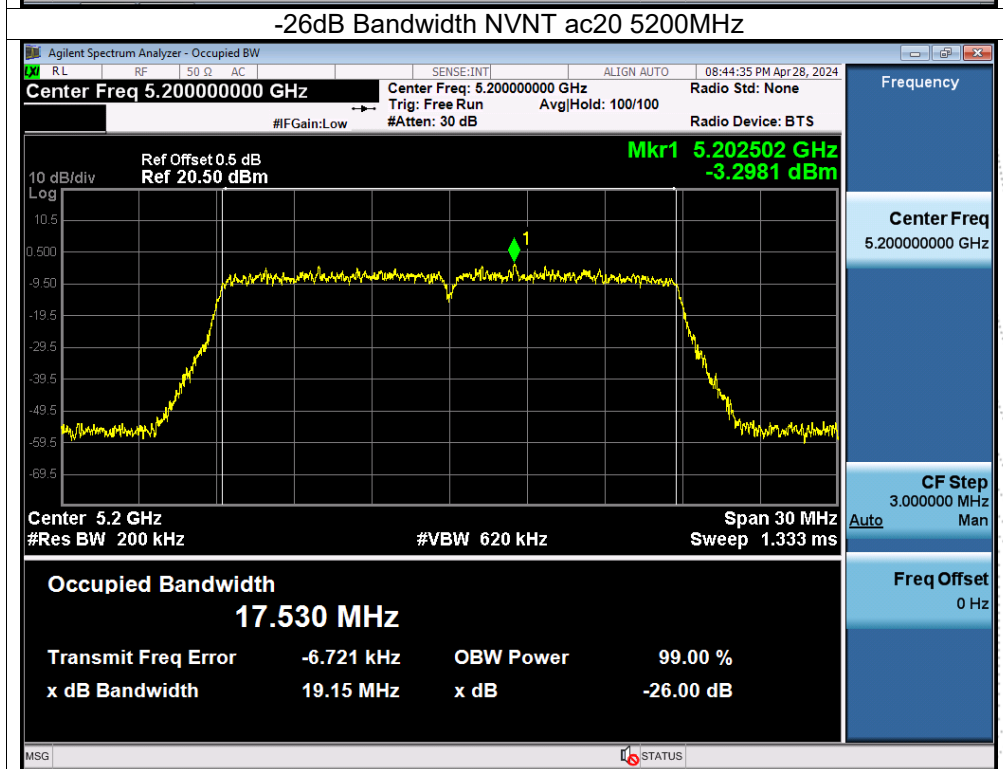
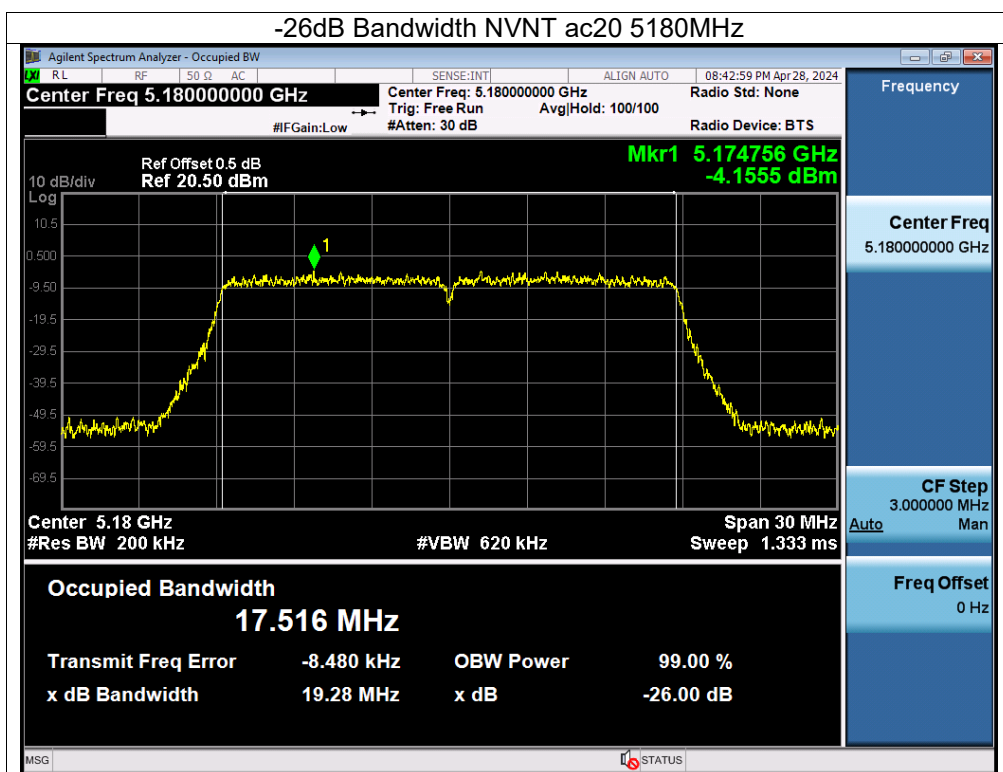
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

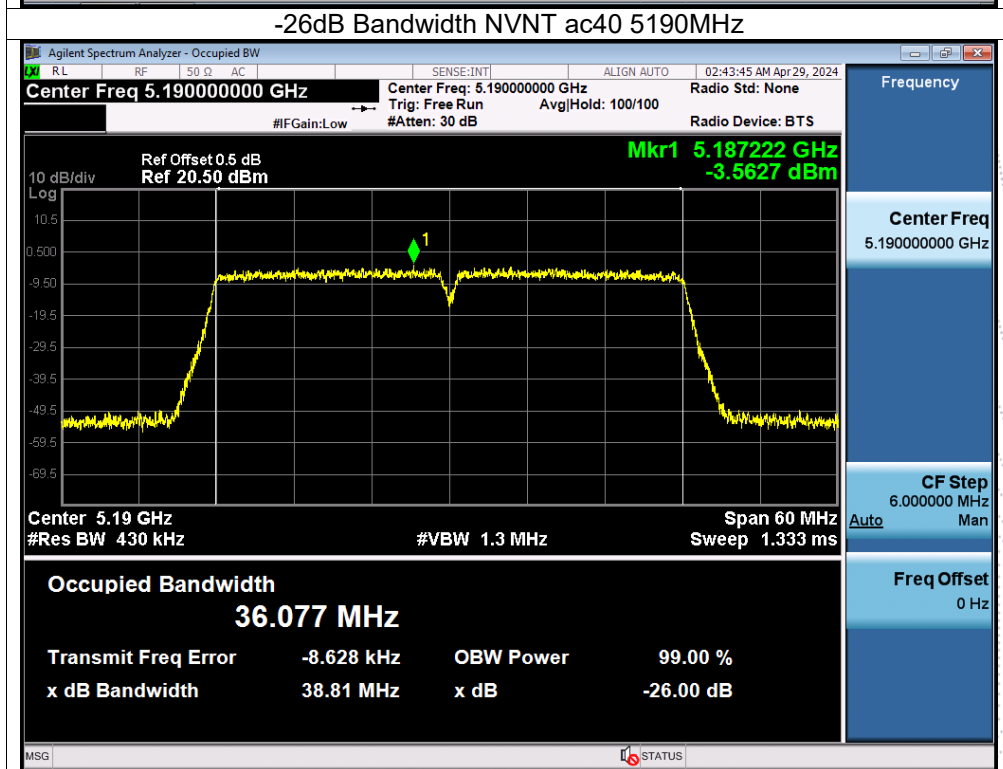
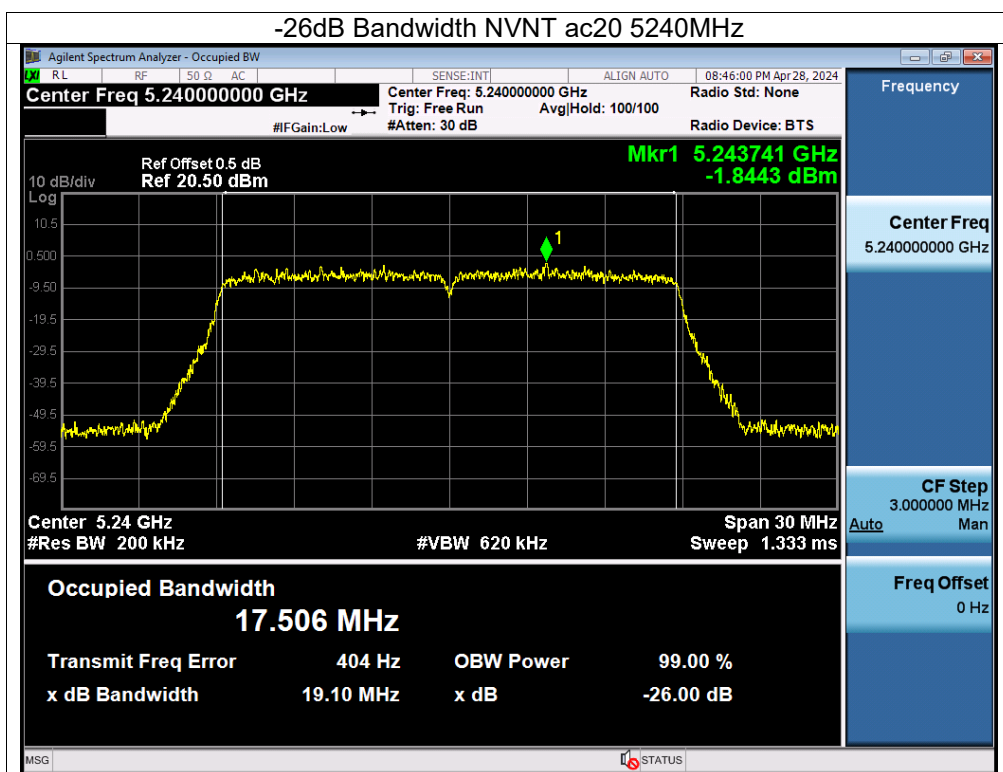


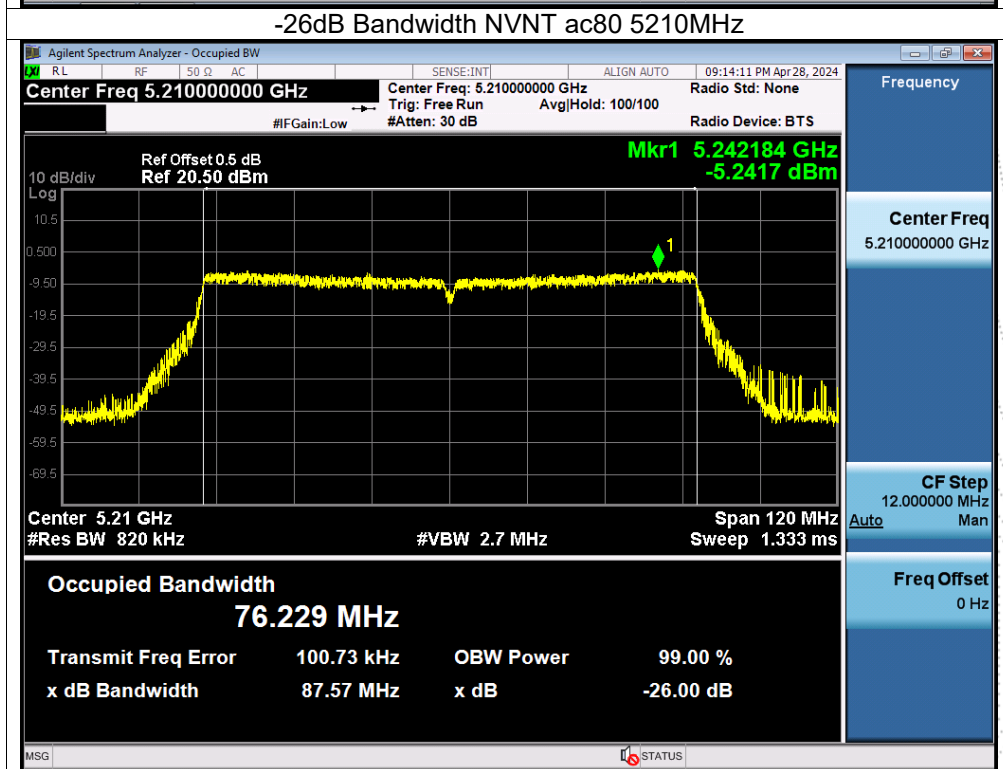
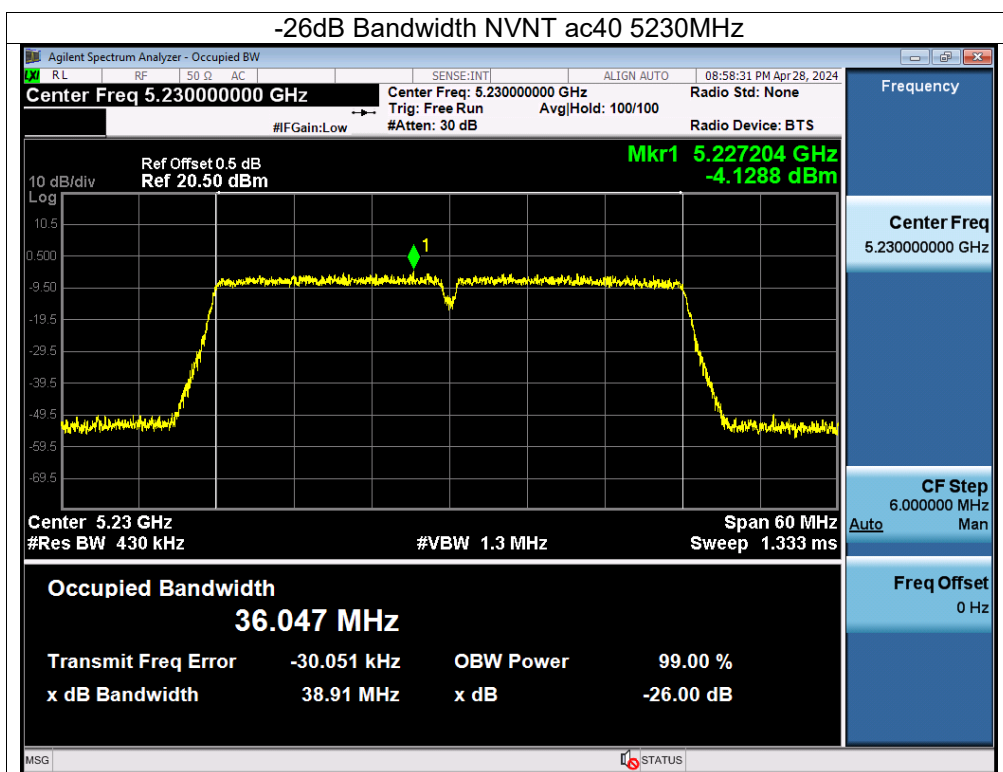


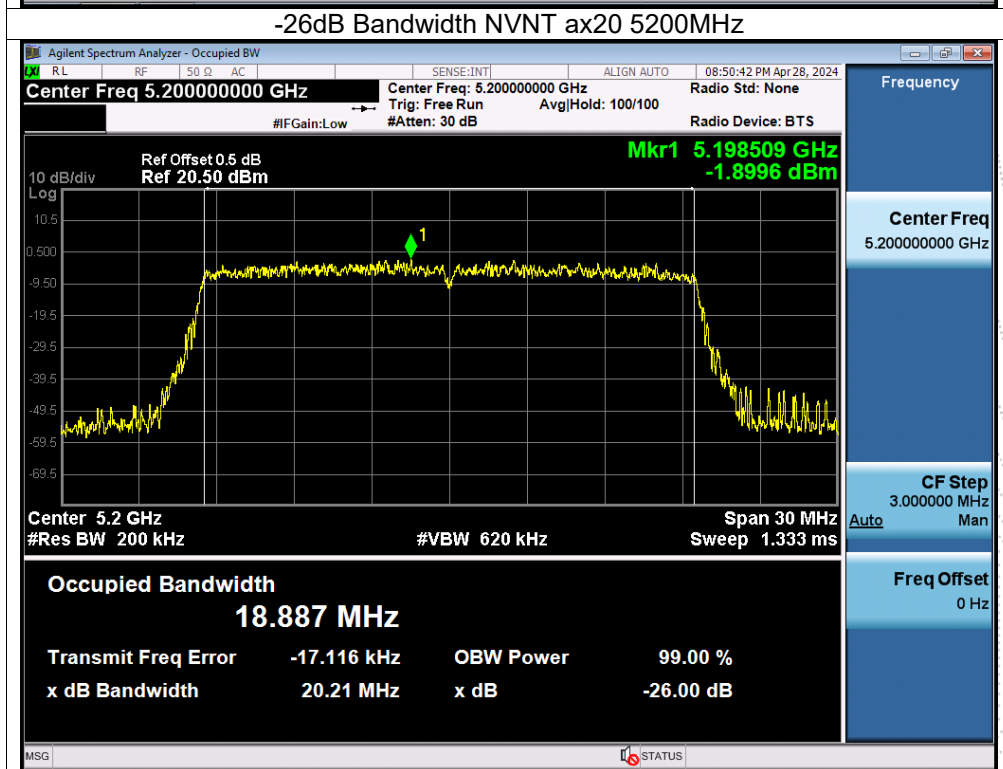
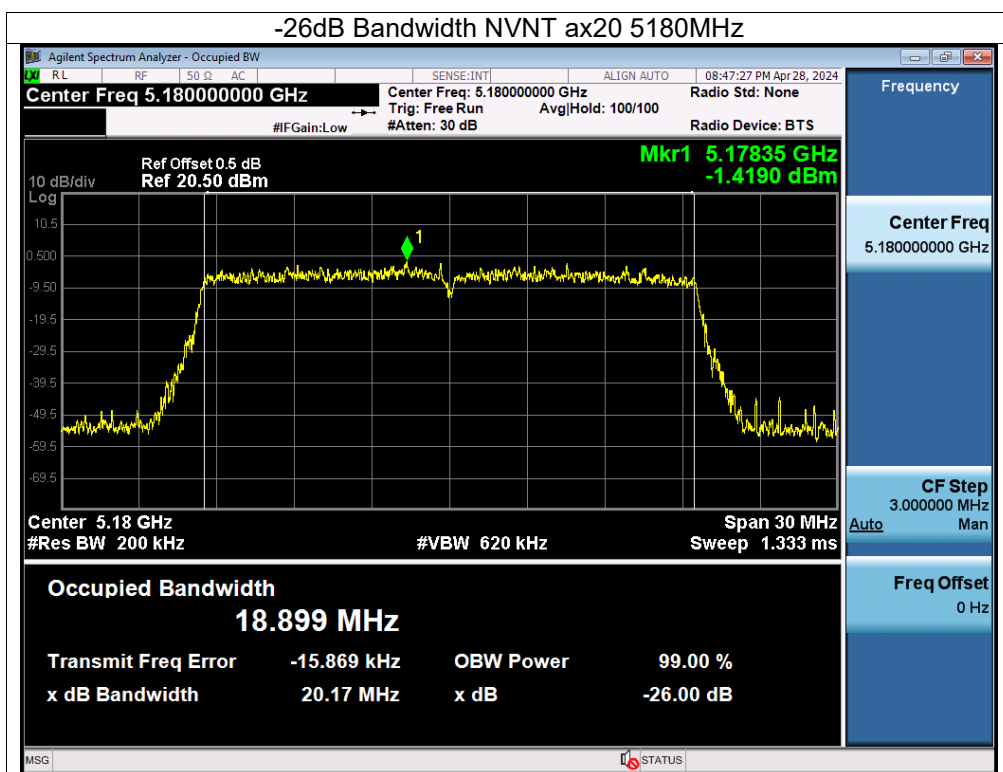


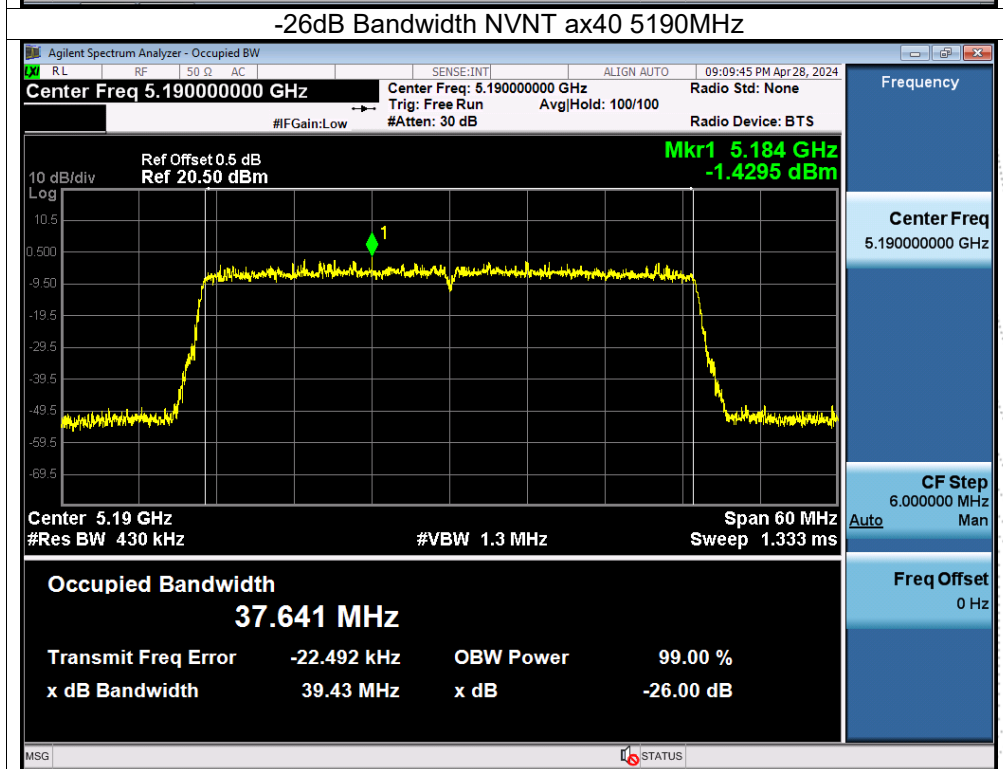
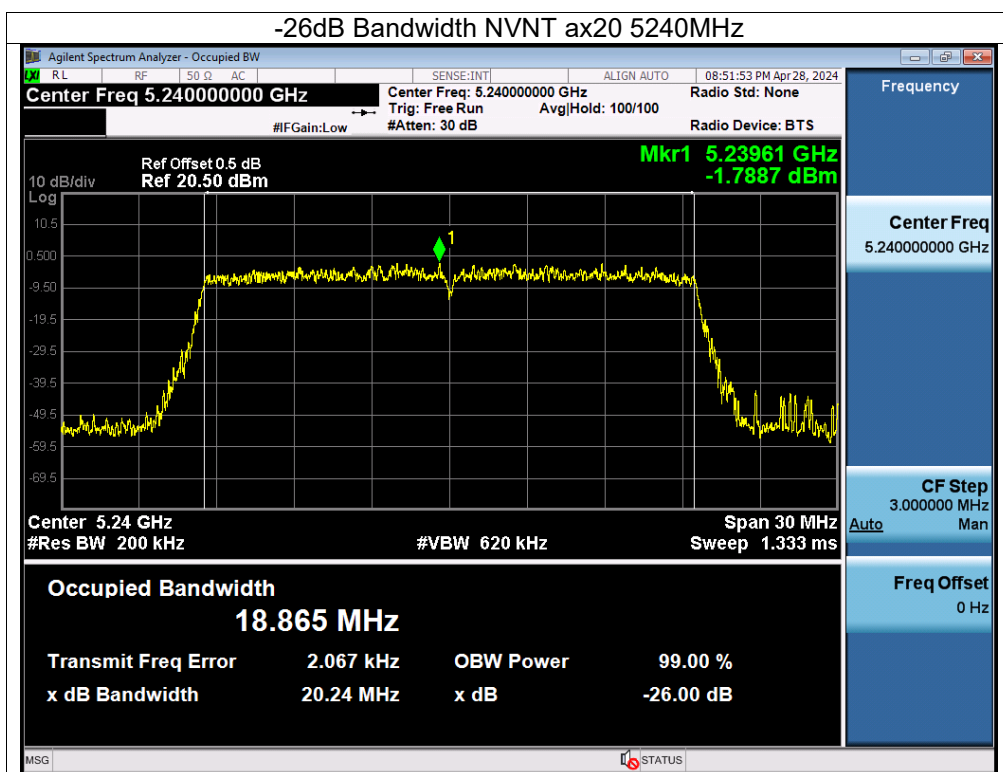


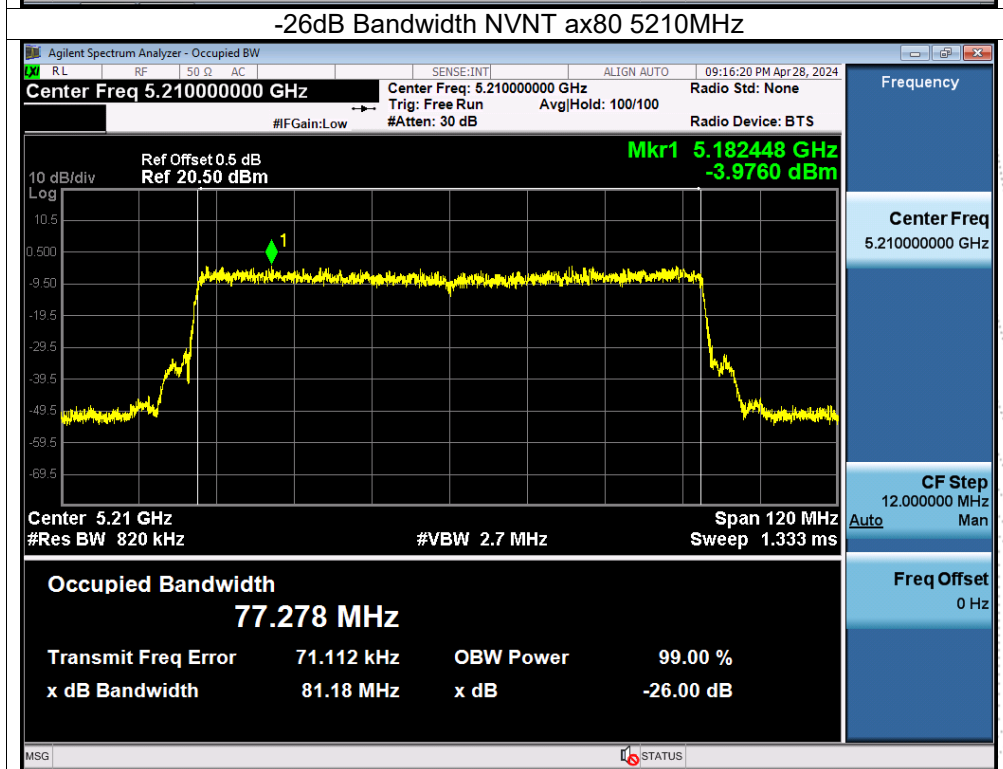
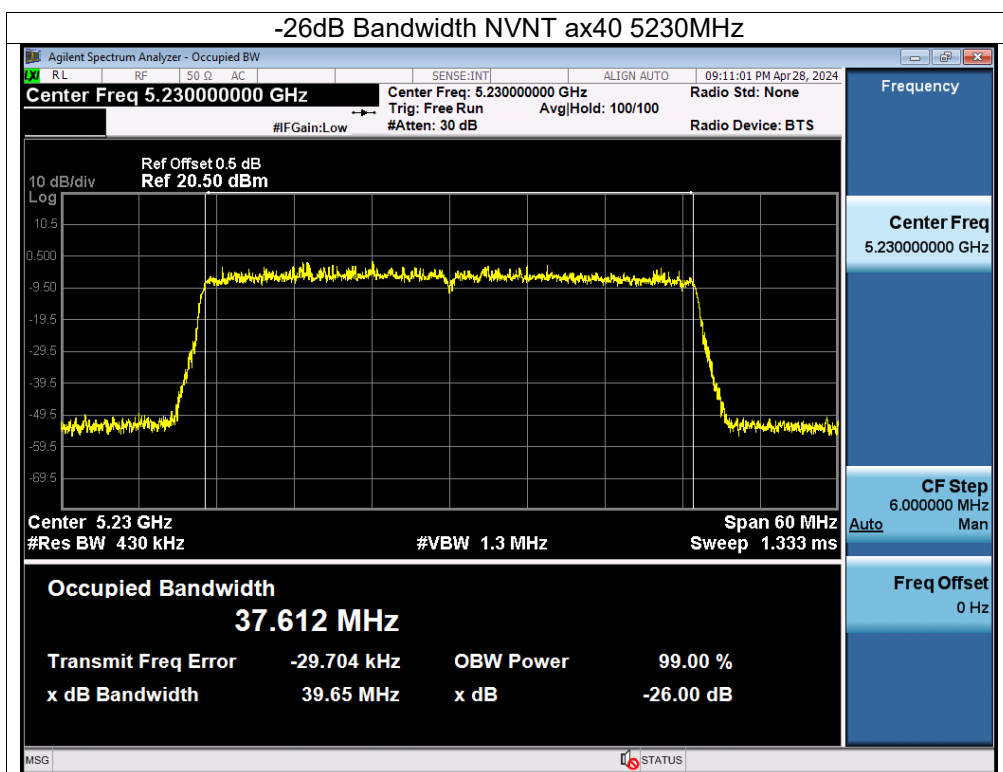




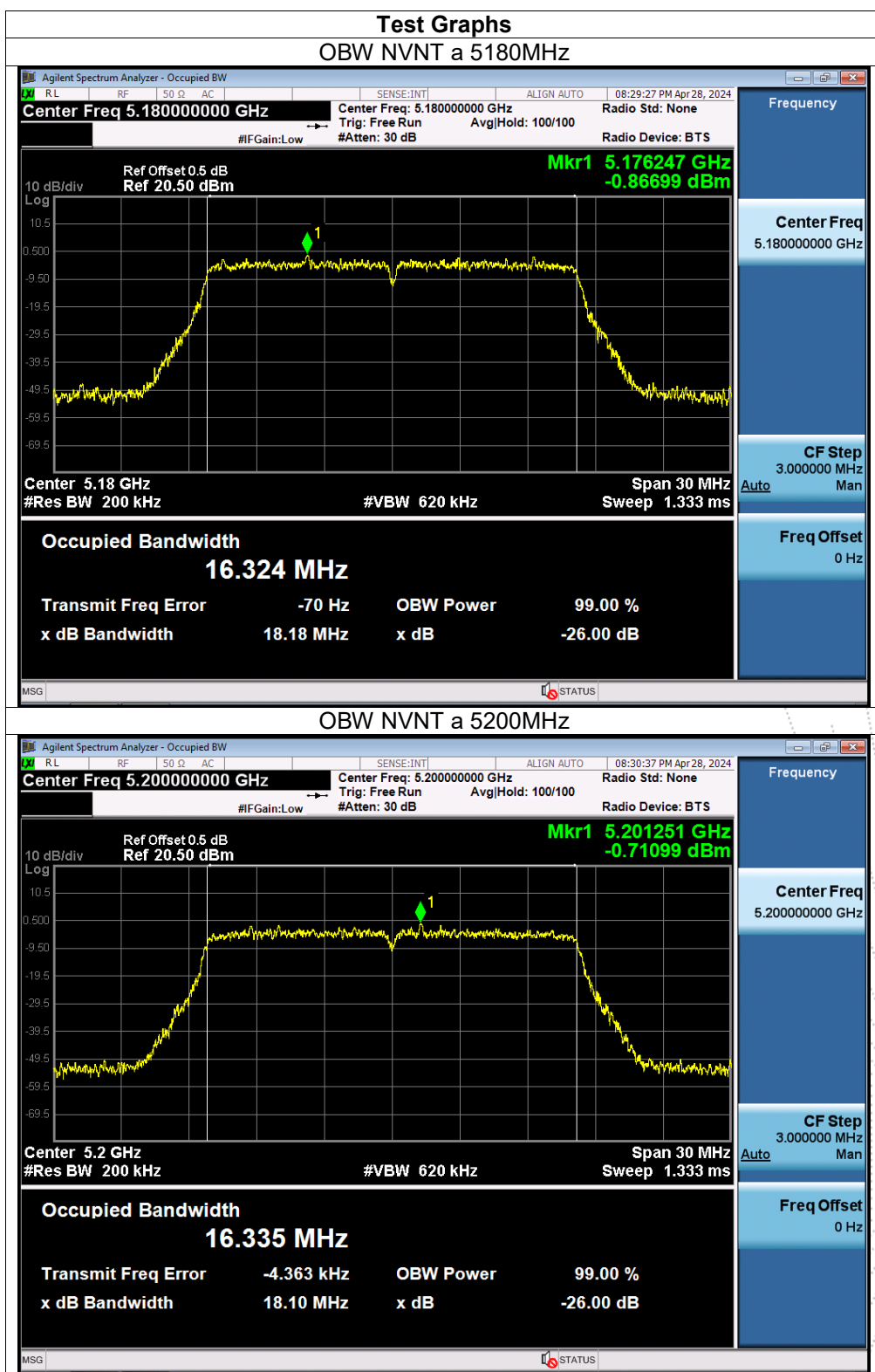


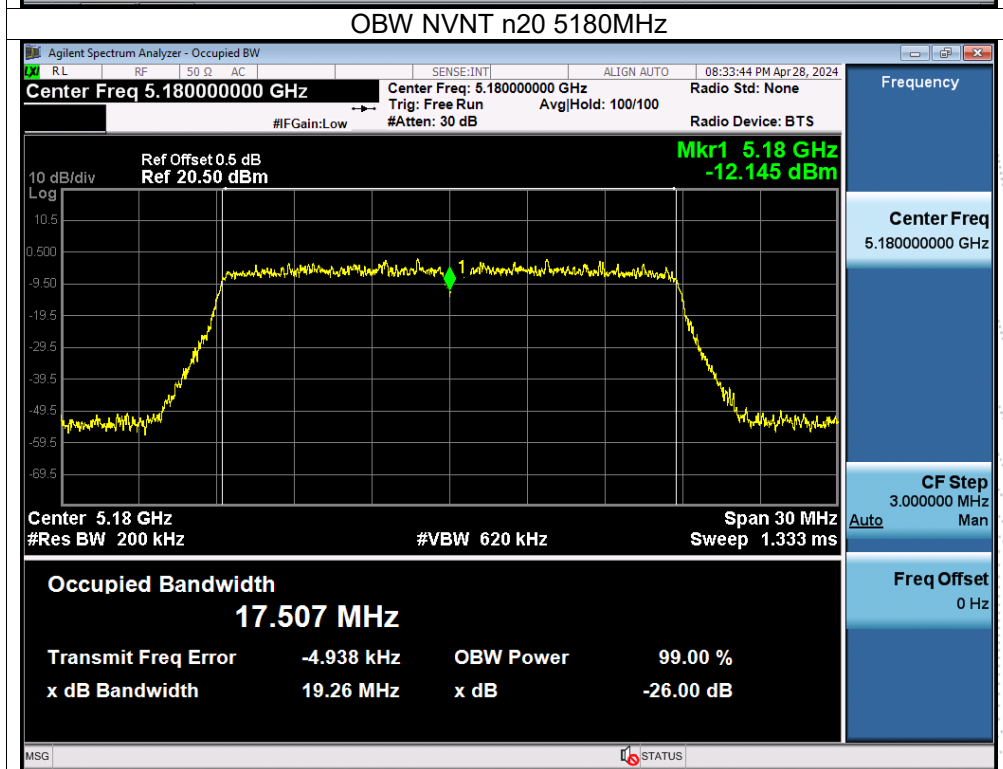
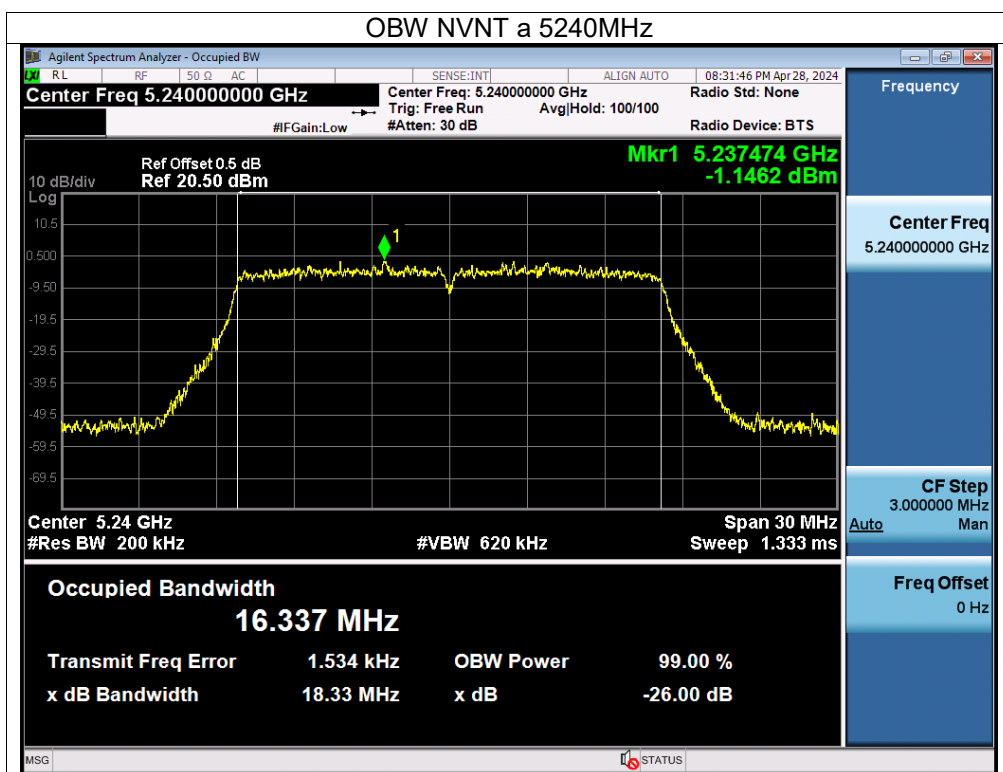


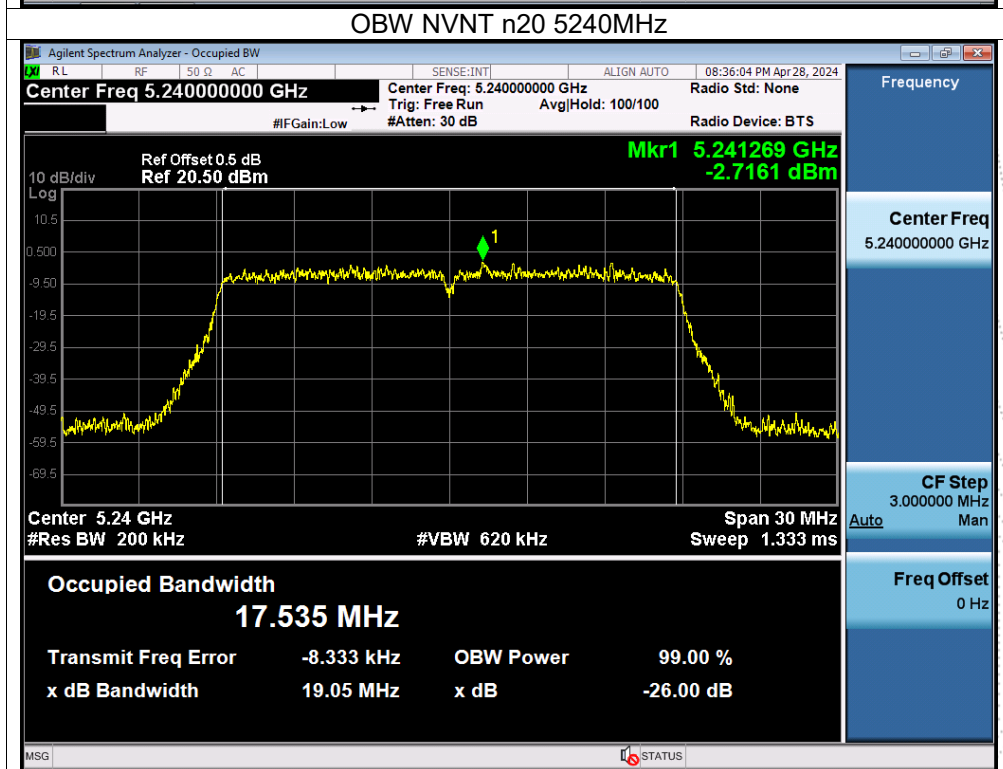
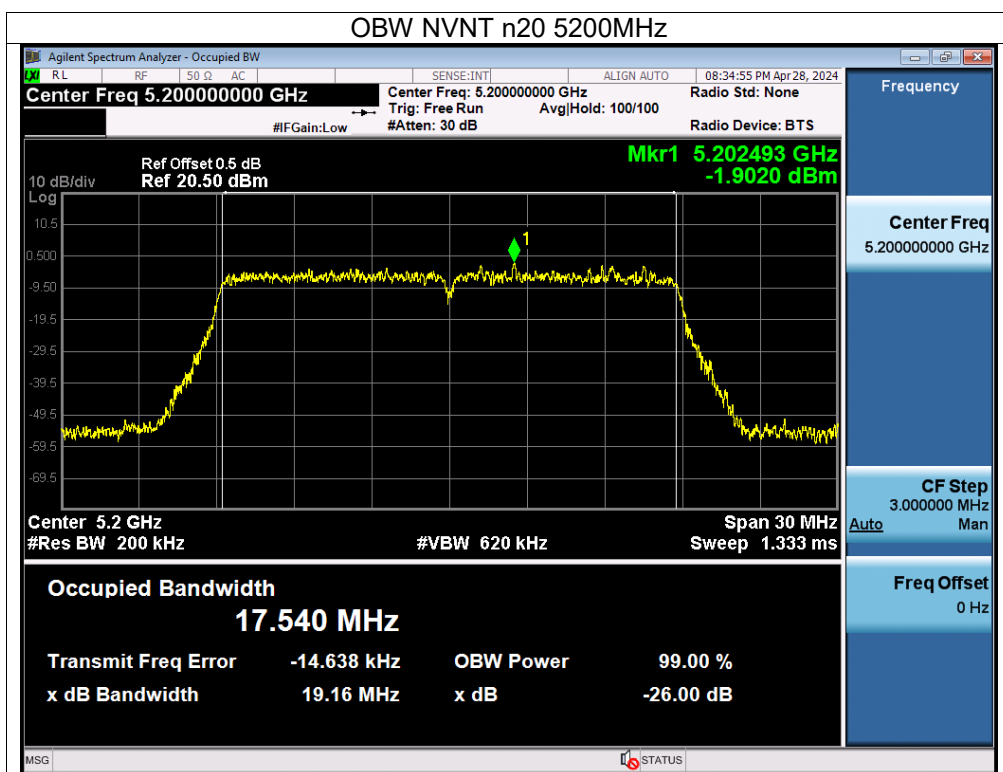


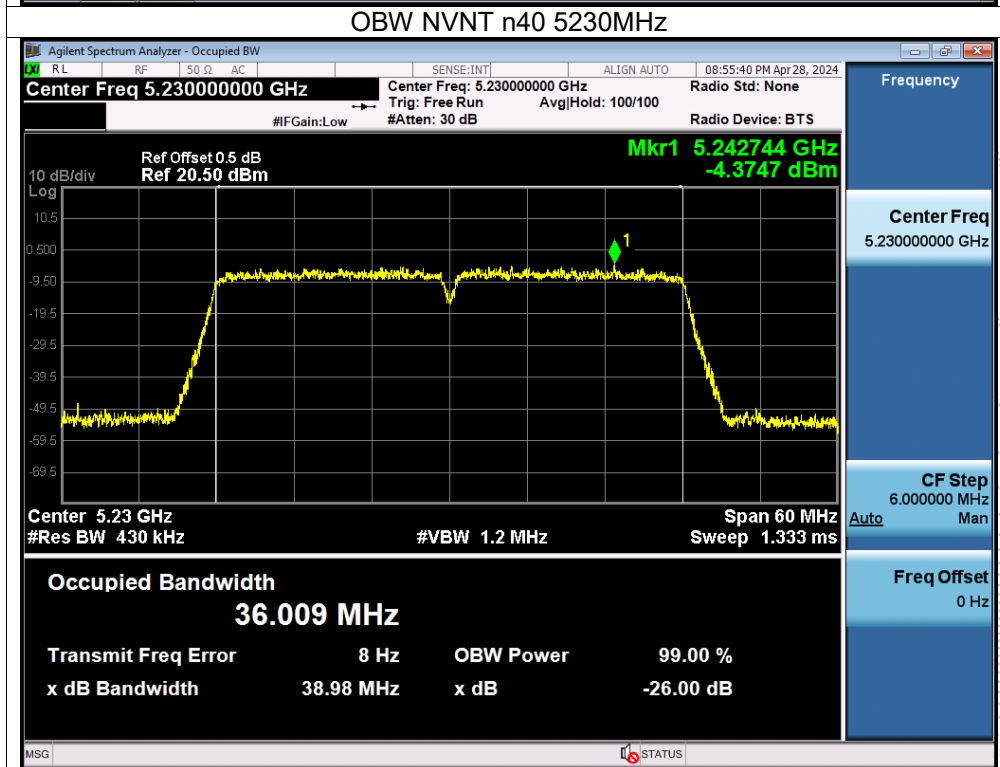
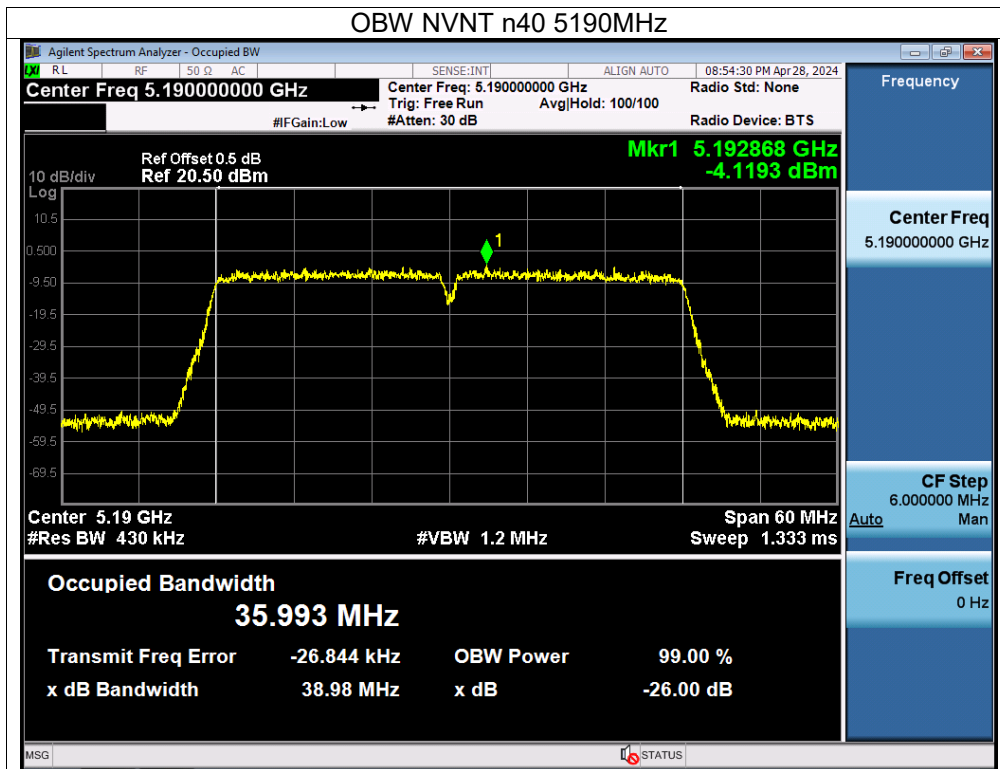


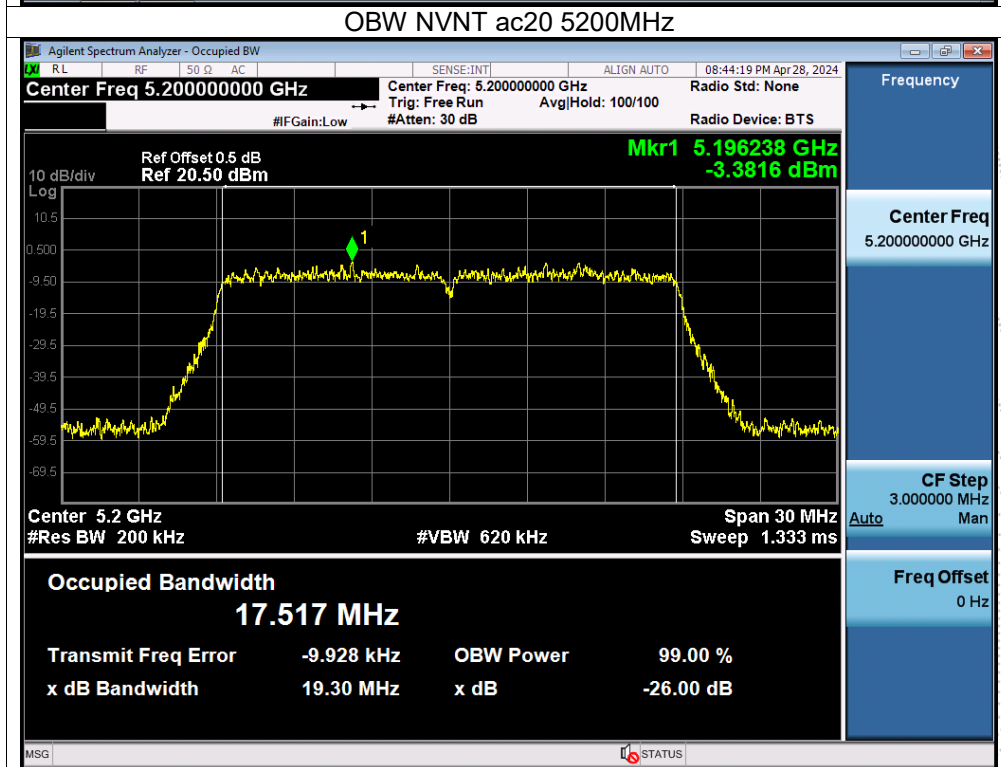
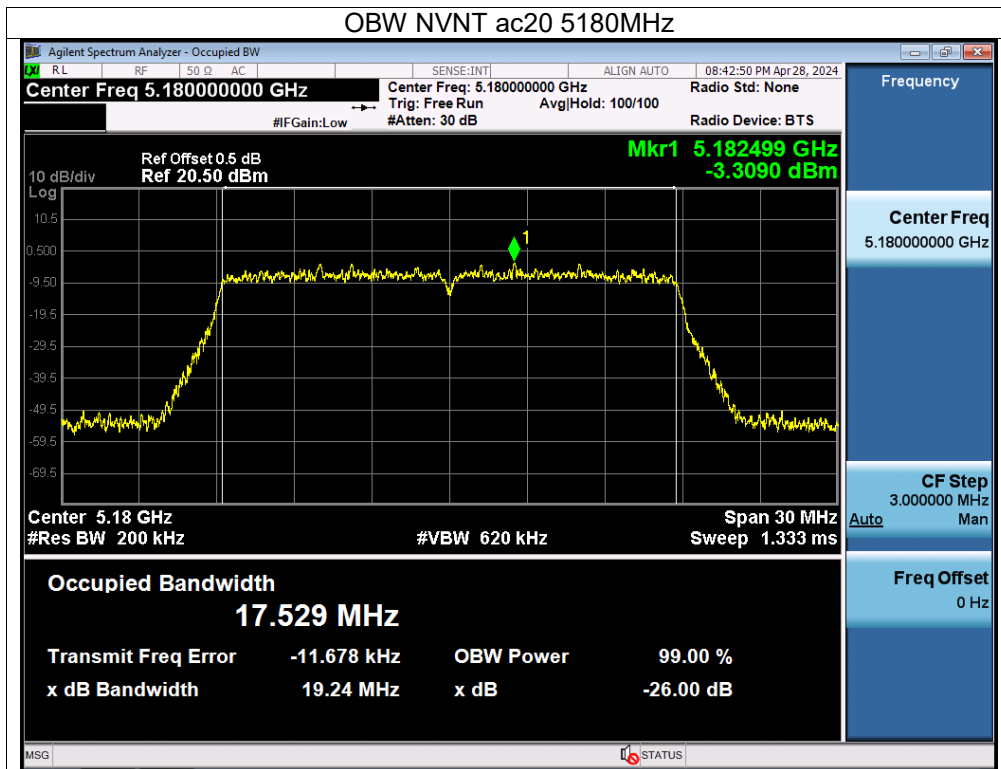
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

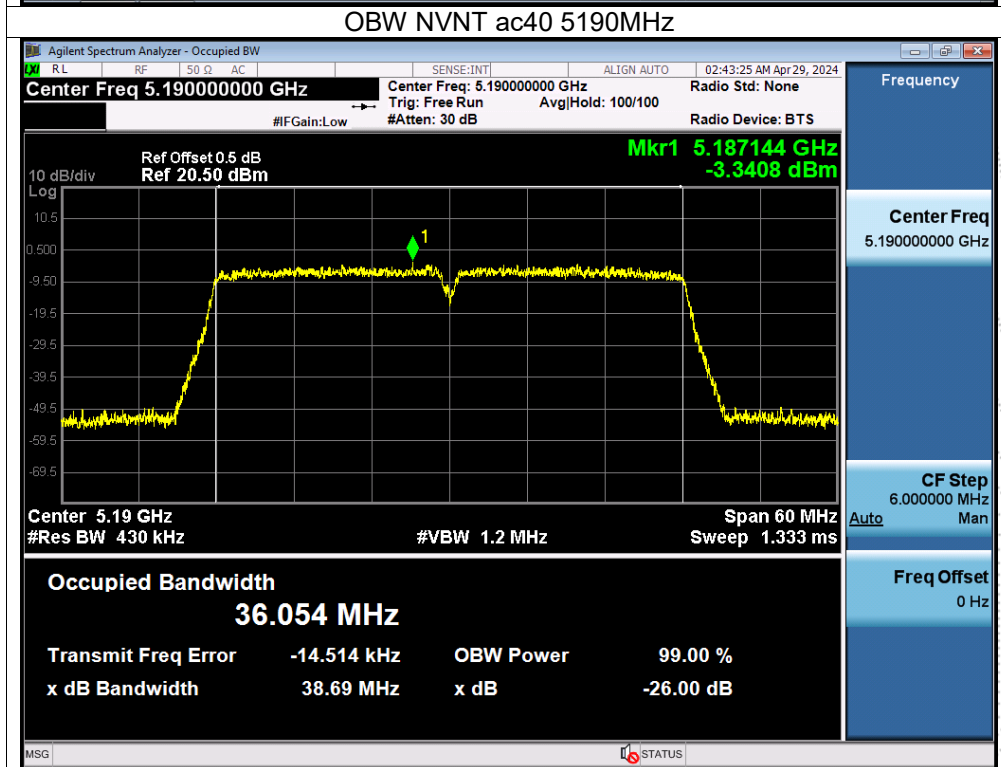
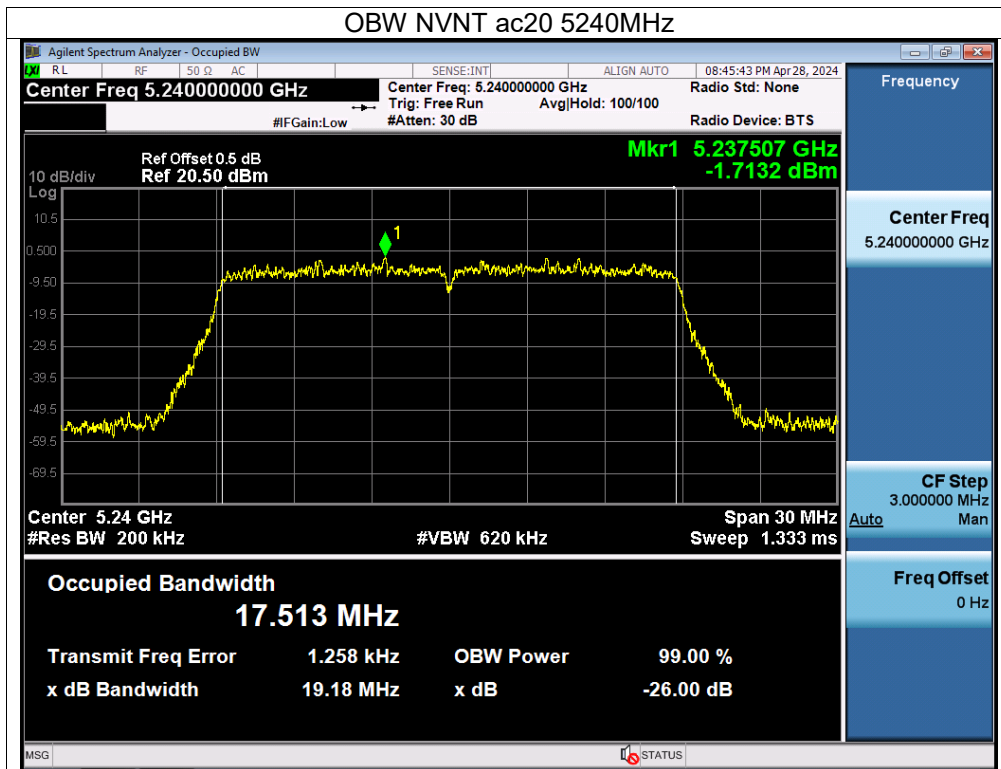


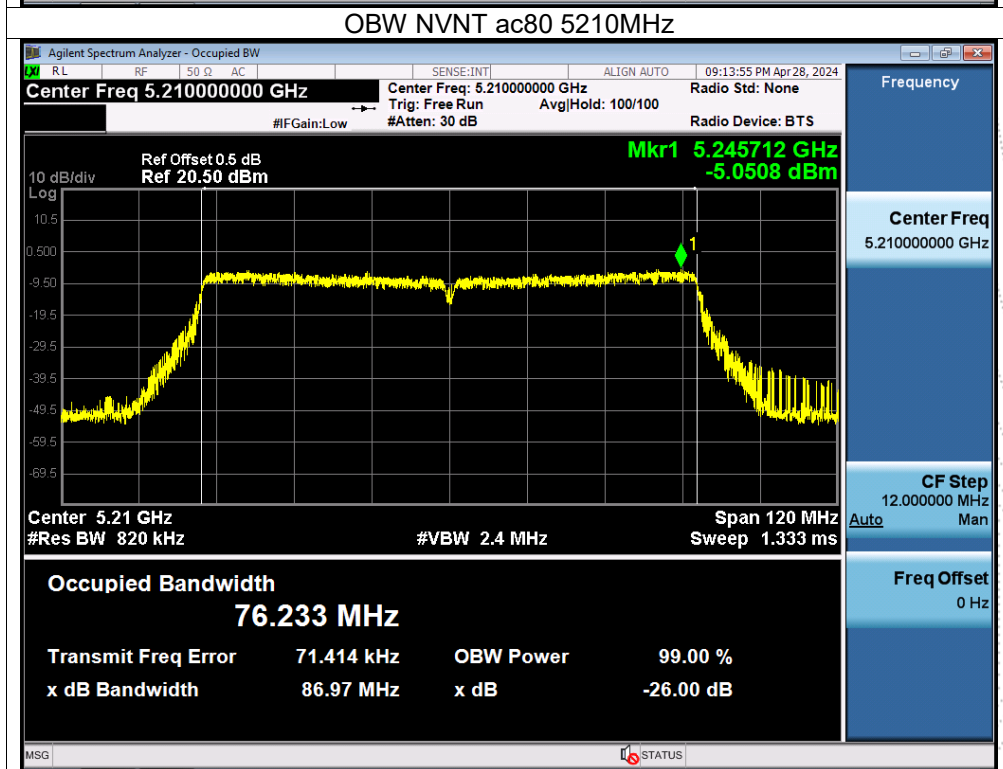
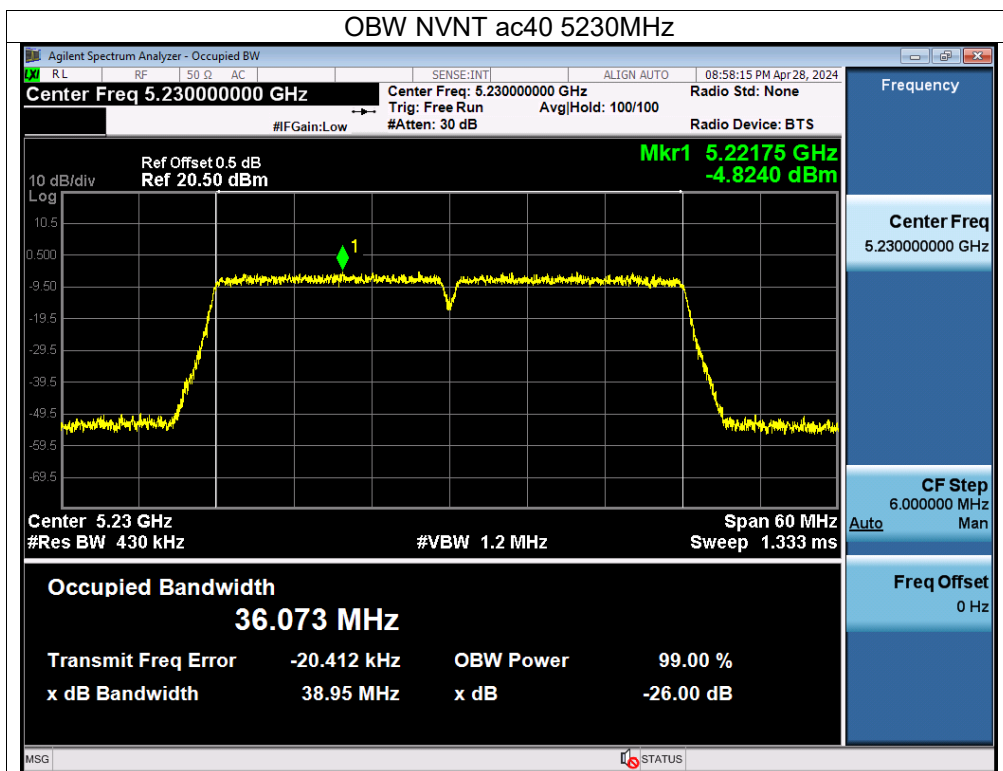


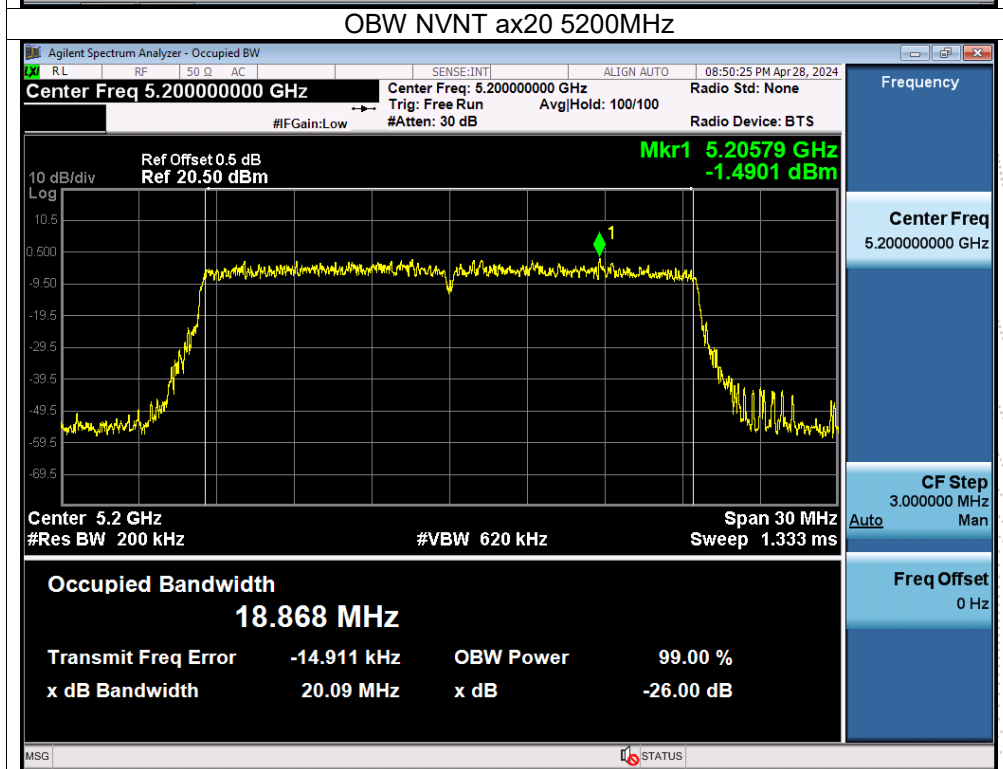
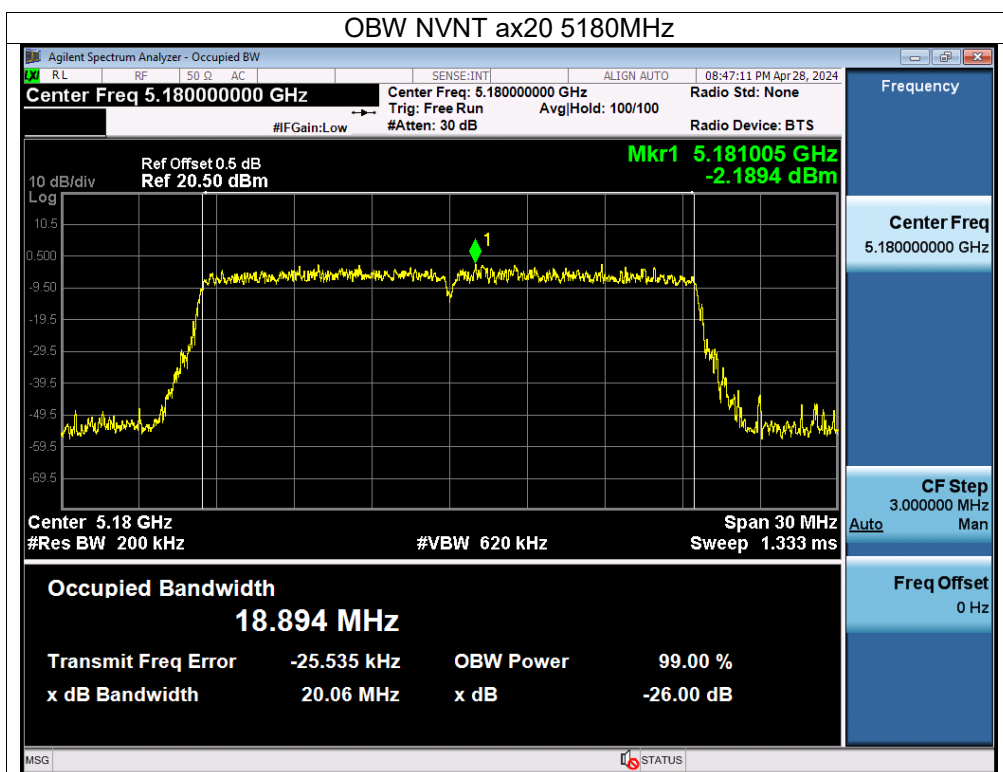


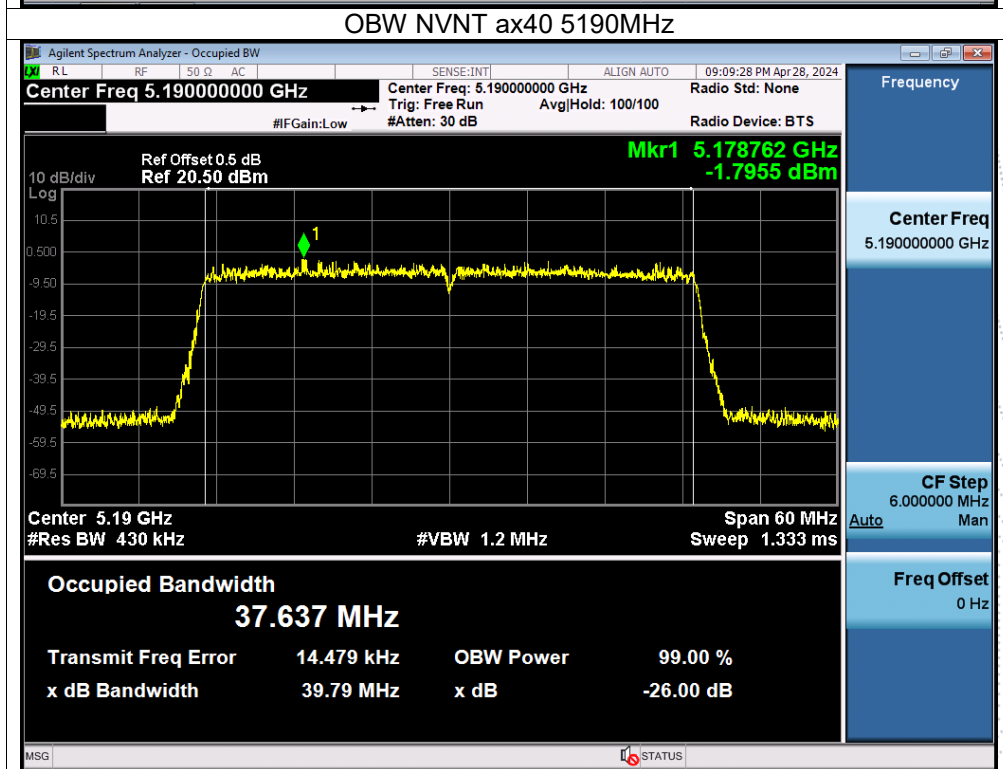
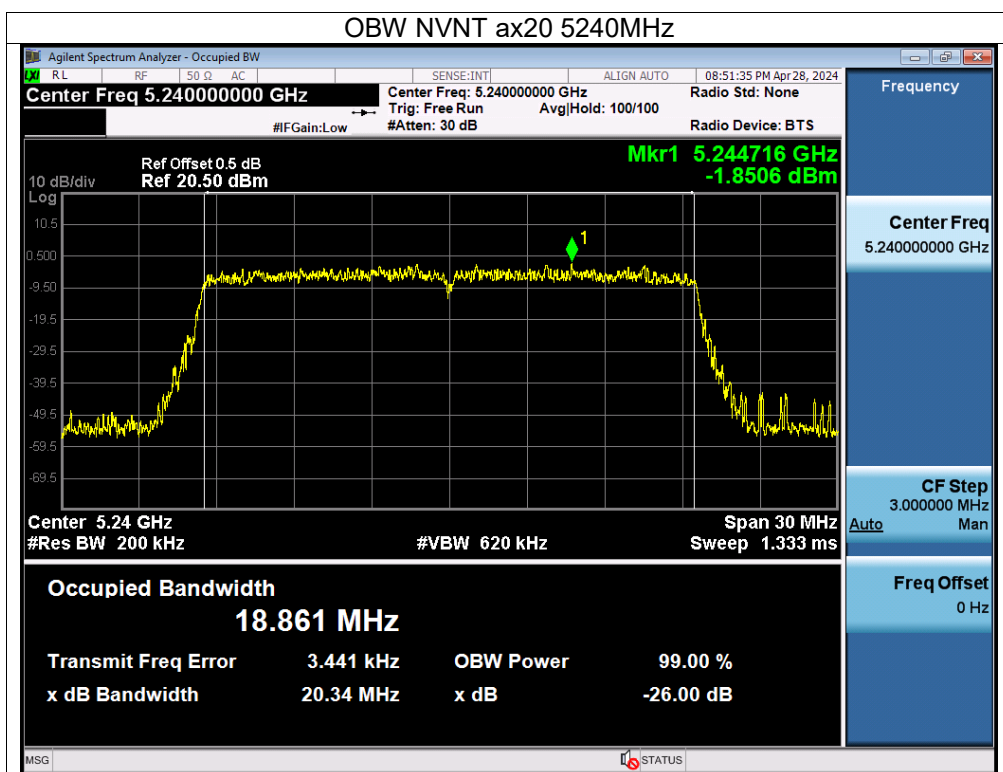


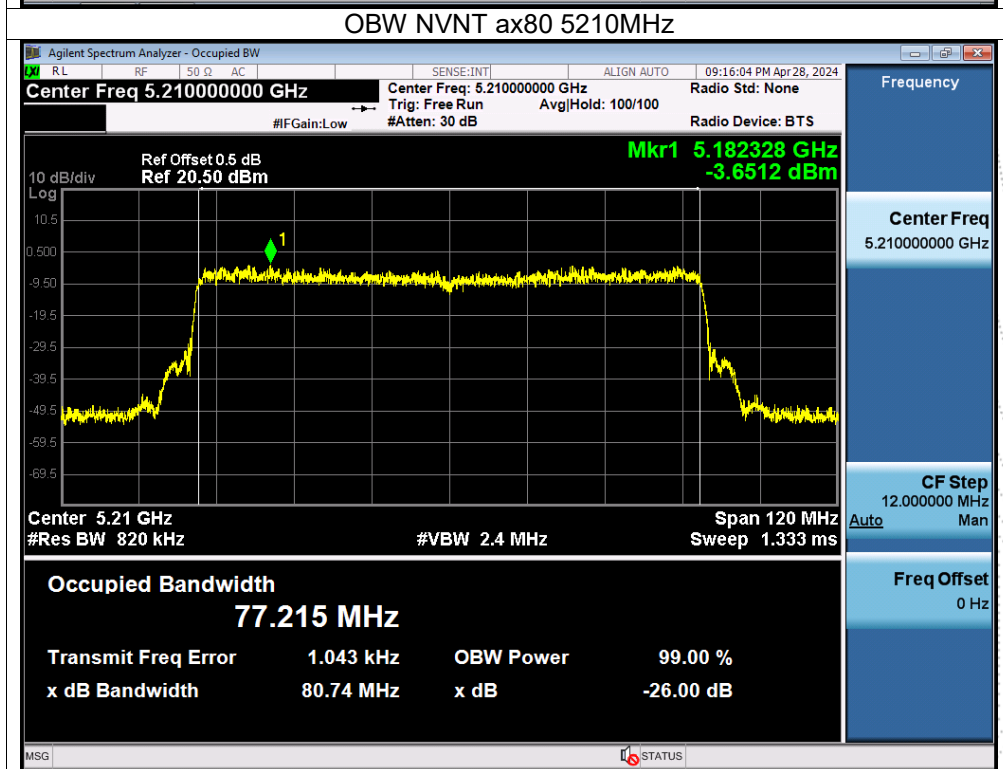
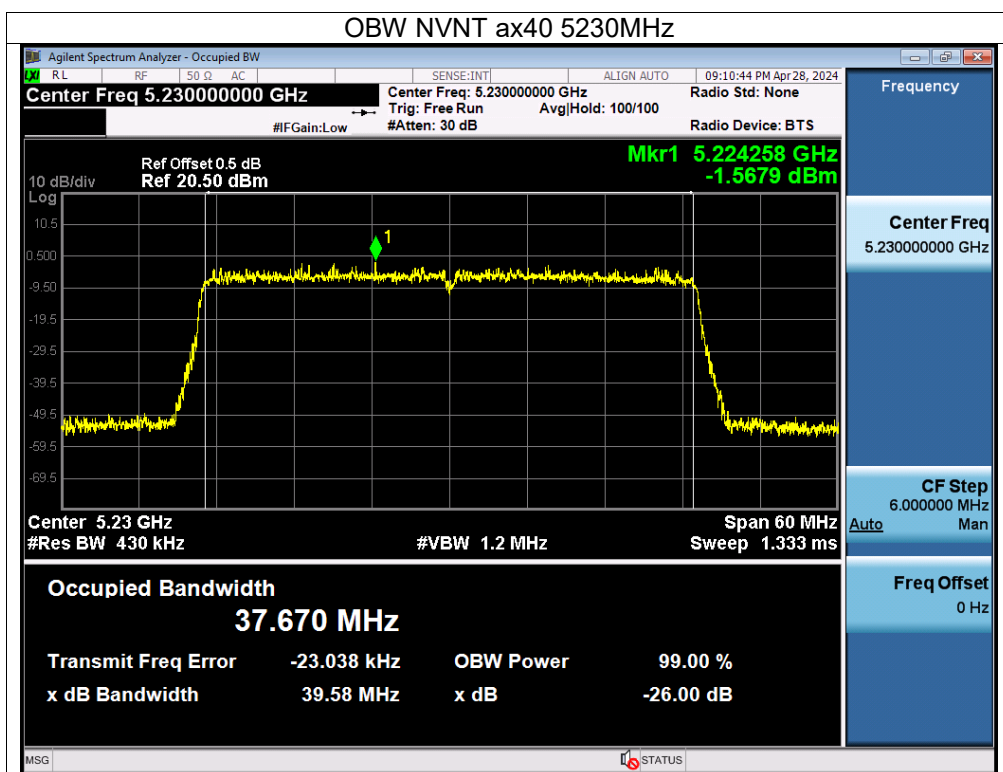








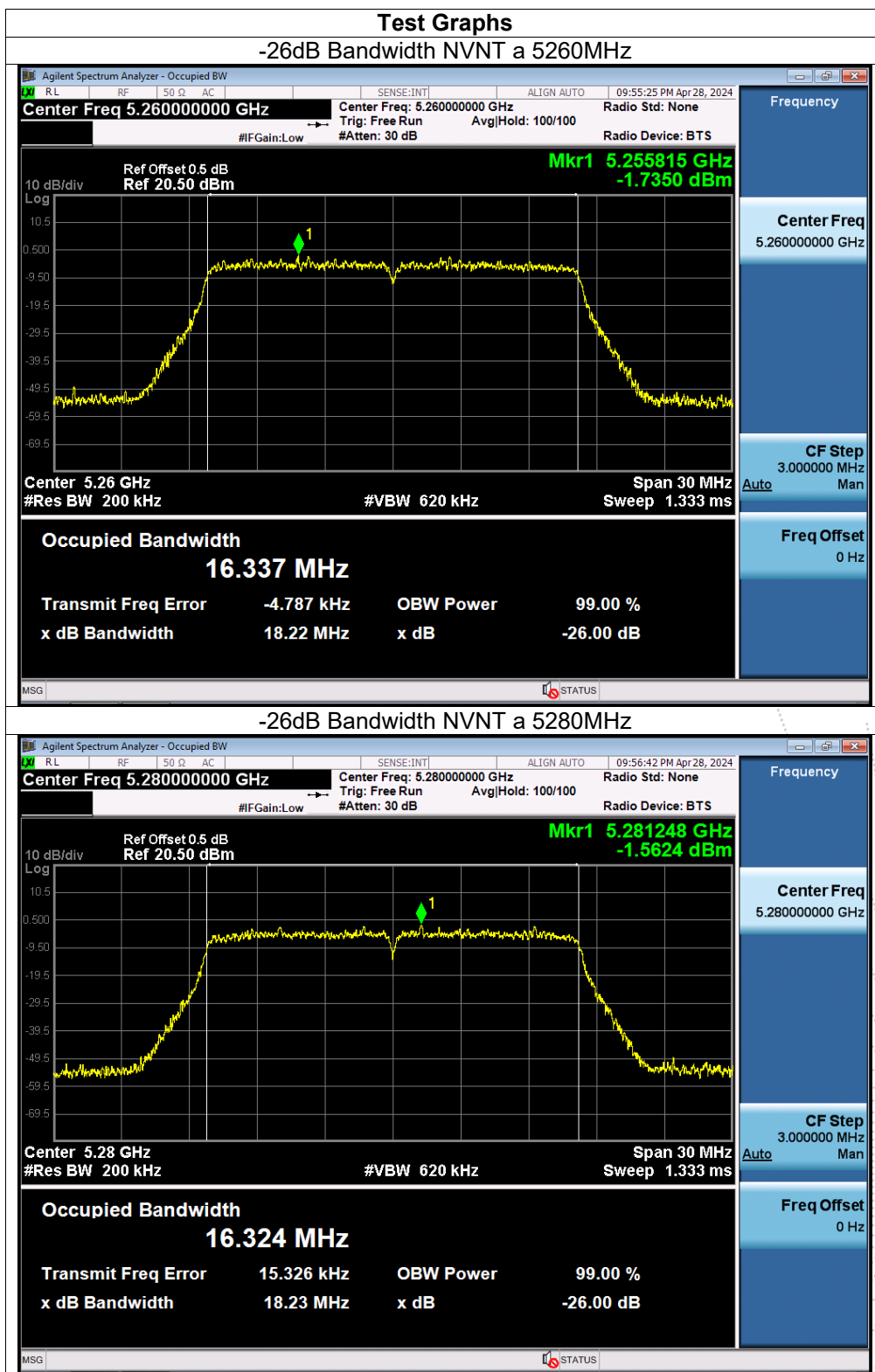


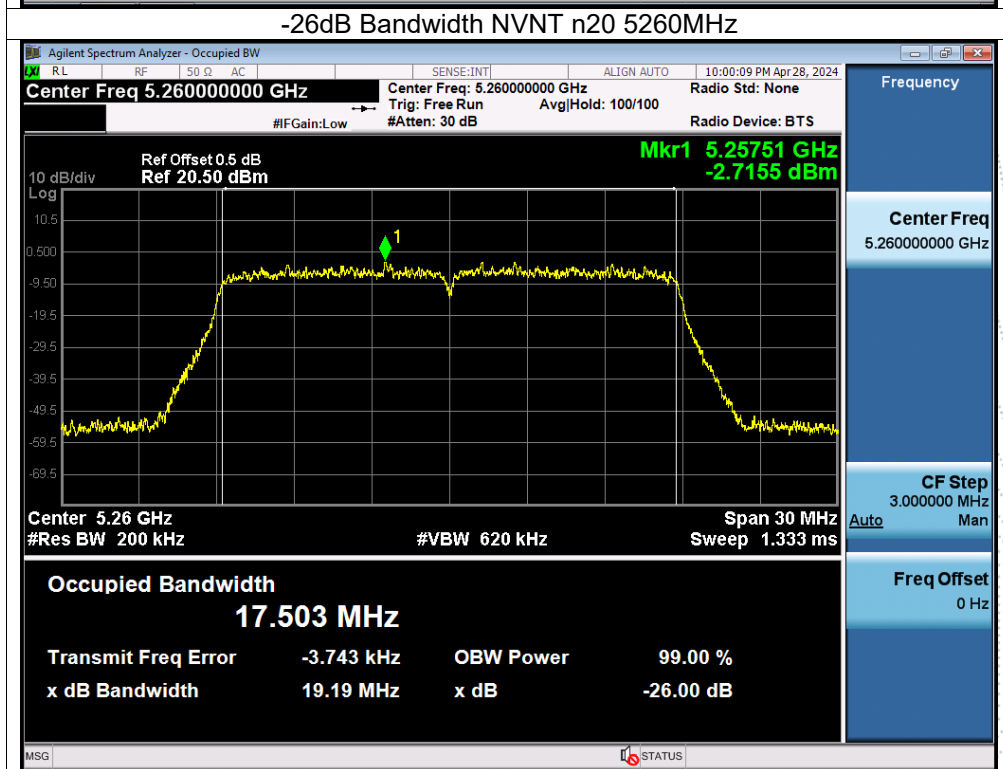
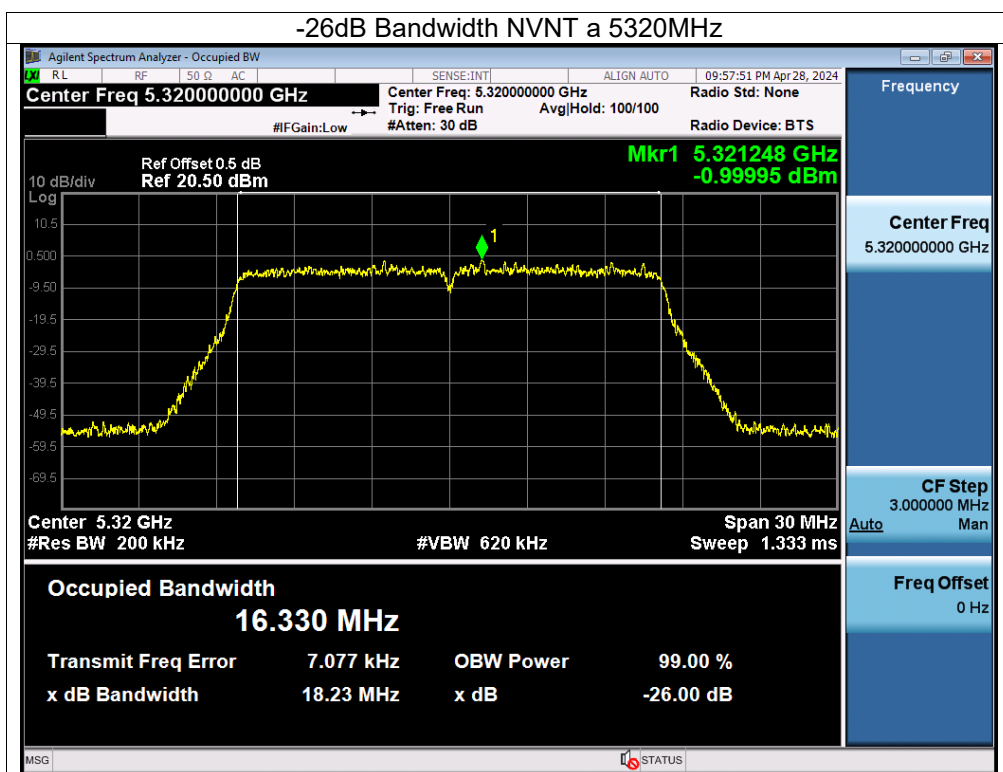


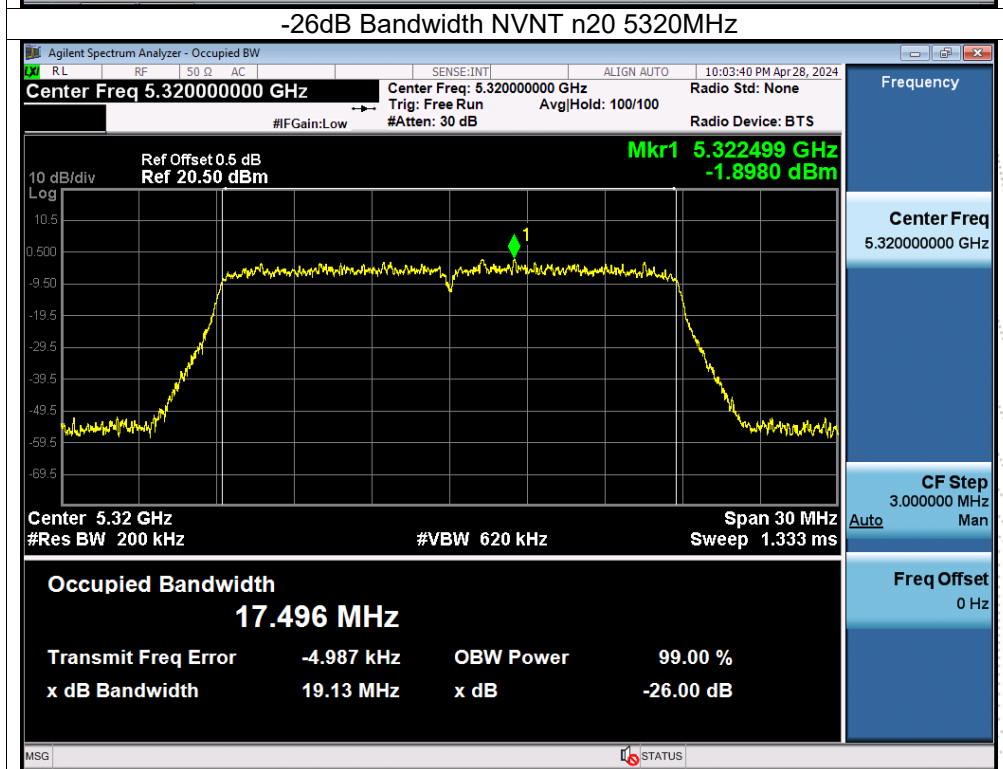
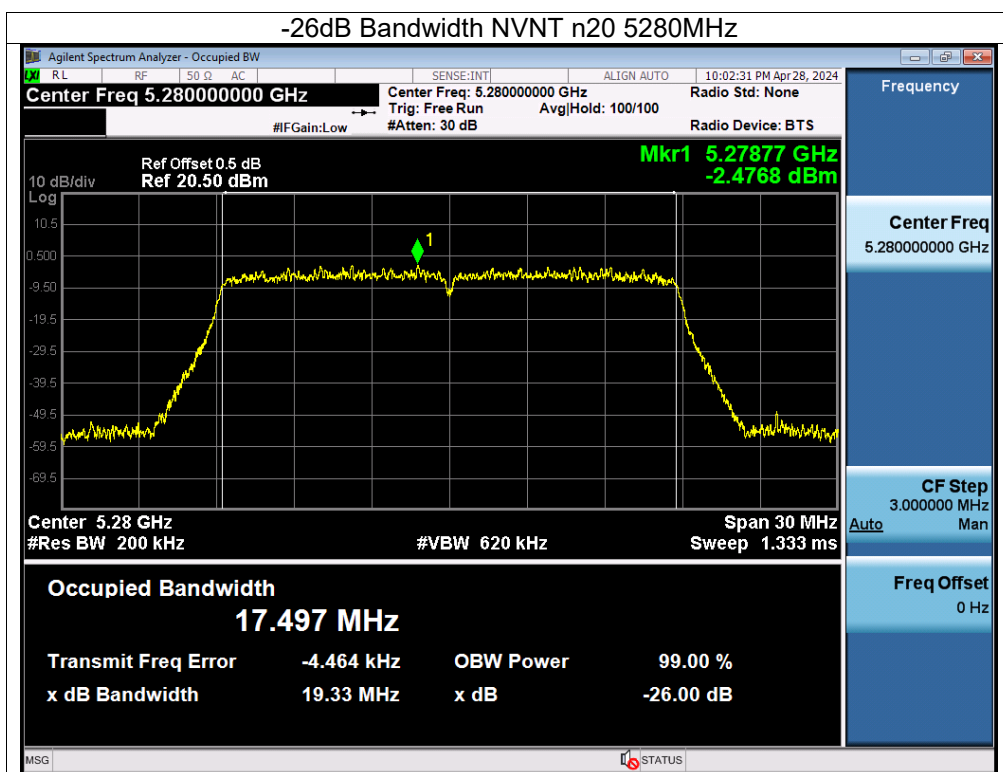
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5260-5320MHz)		

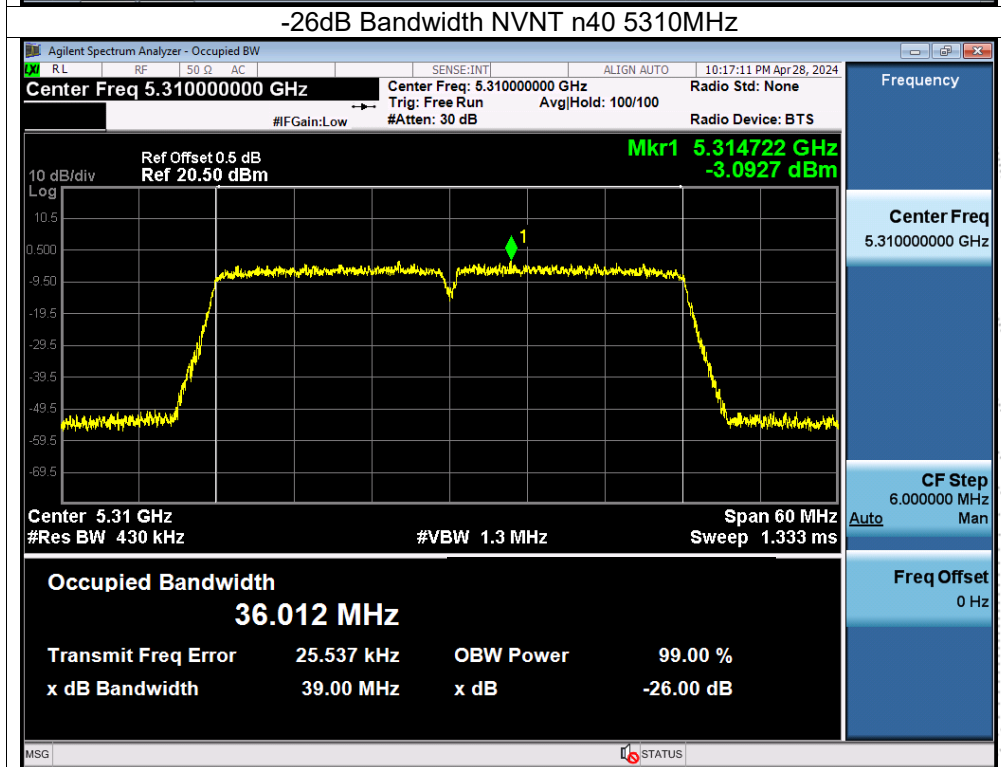
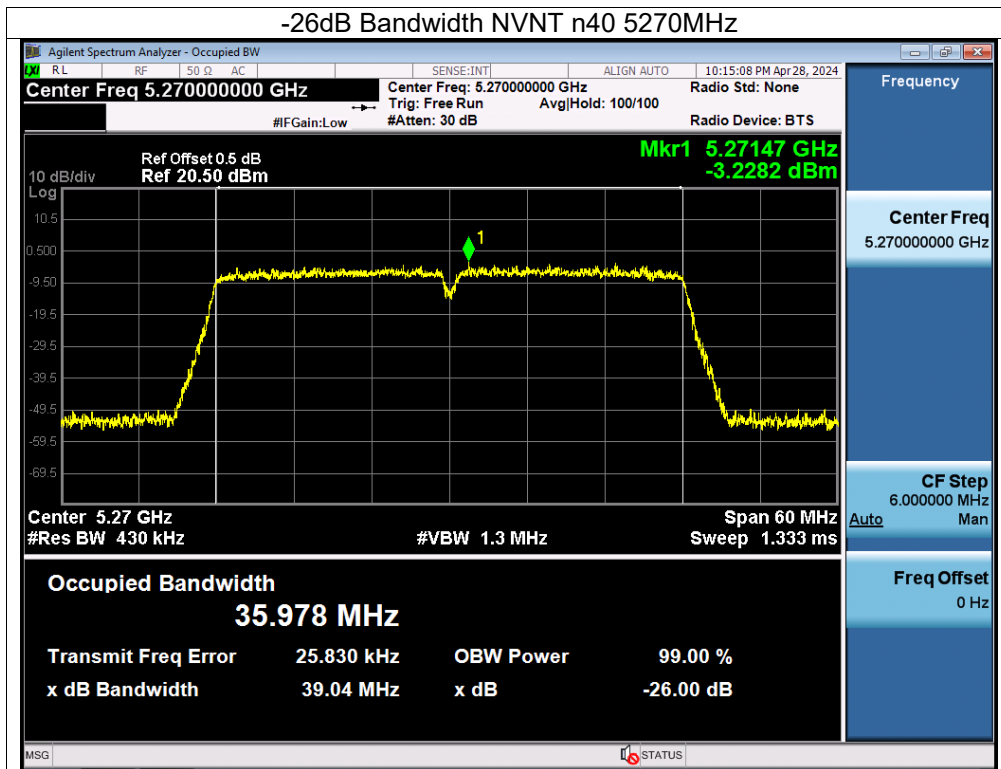
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5260	18.223	18.141	16.336	16.328	Pass
NVNT	a	5280	18.225	18.385	16.314	16.341	Pass
NVNT	a	5320	18.234	18.395	16.343	16.343	Pass
NVNT	n20	5260	19.194	19.254	17.497	17.496	Pass
NVNT	n20	5280	19.332	19.212	17.498	17.5	Pass
NVNT	n20	5320	19.134	19.21	17.503	17.493	Pass
NVNT	n40	5270	39.04	39.039	36.001	36.037	Pass
NVNT	n40	5310	39.005	38.938	36.006	36.054	Pass
NVNT	ac20	5260	19.258	19.244	17.488	17.501	Pass
NVNT	ac20	5280	19.243	19.245	17.485	17.511	Pass
NVNT	ac20	5320	19.188	19.178	17.507	17.516	Pass
NVNT	ac40	5270	38.861	38.887	36.014	36.032	Pass
NVNT	ac40	5310	38.829	38.772	36.033	36.029	Pass
NVNT	ac80	5290	86.778	86.668	76.161	76.117	Pass
NVNT	ax20	5260	20.158	20.065	18.873	18.884	Pass
NVNT	ax20	5280	20.315	20.165	18.844	18.909	Pass
NVNT	ax20	5320	20.177	20.005	18.871	18.884	Pass
NVNT	ax40	5270	39.611	39.634	37.64	37.677	Pass
NVNT	ax40	5310	39.66	39.702	37.646	37.628	Pass
NVNT	ax80	5290	81.233	81.13	77.262	77.286	Pass

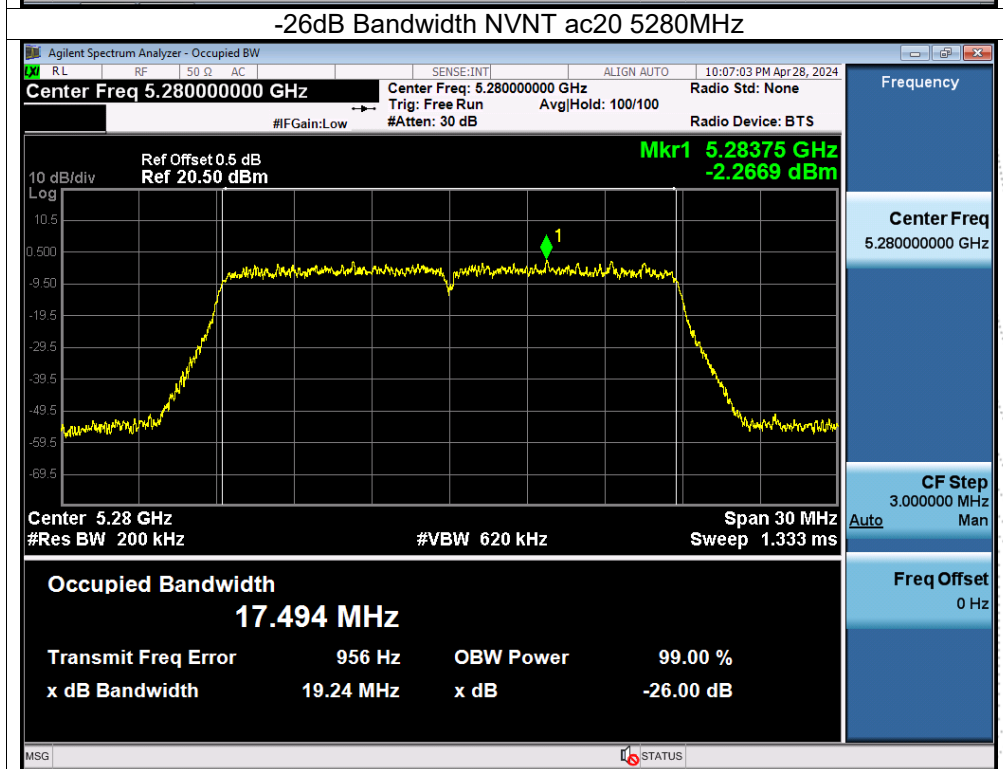
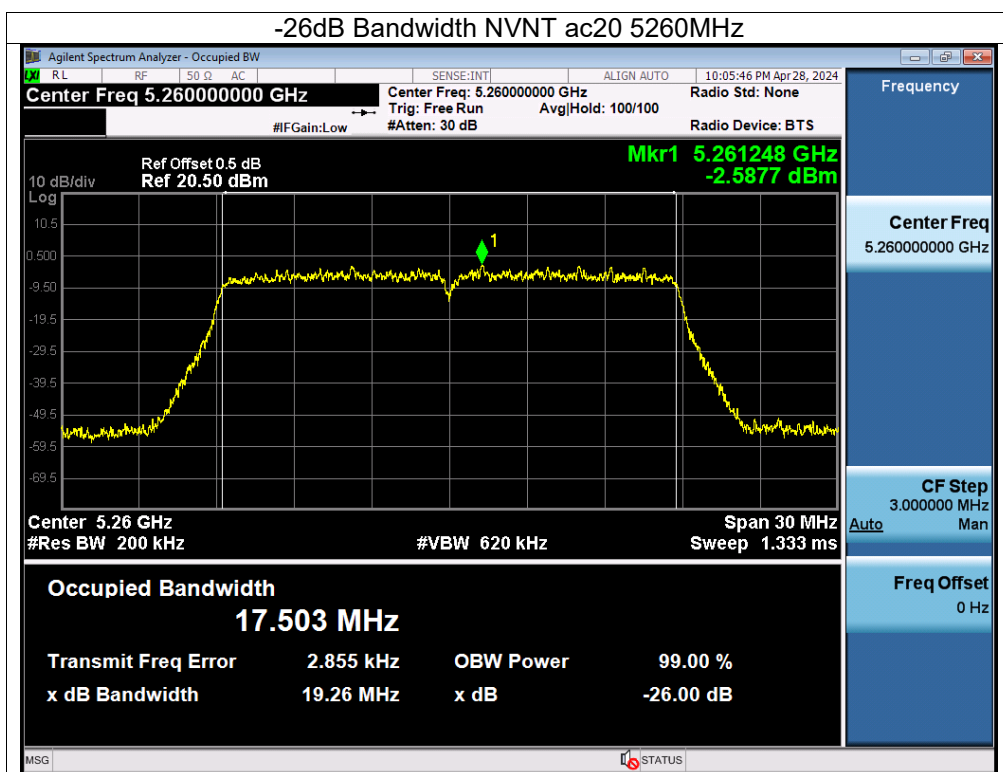
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

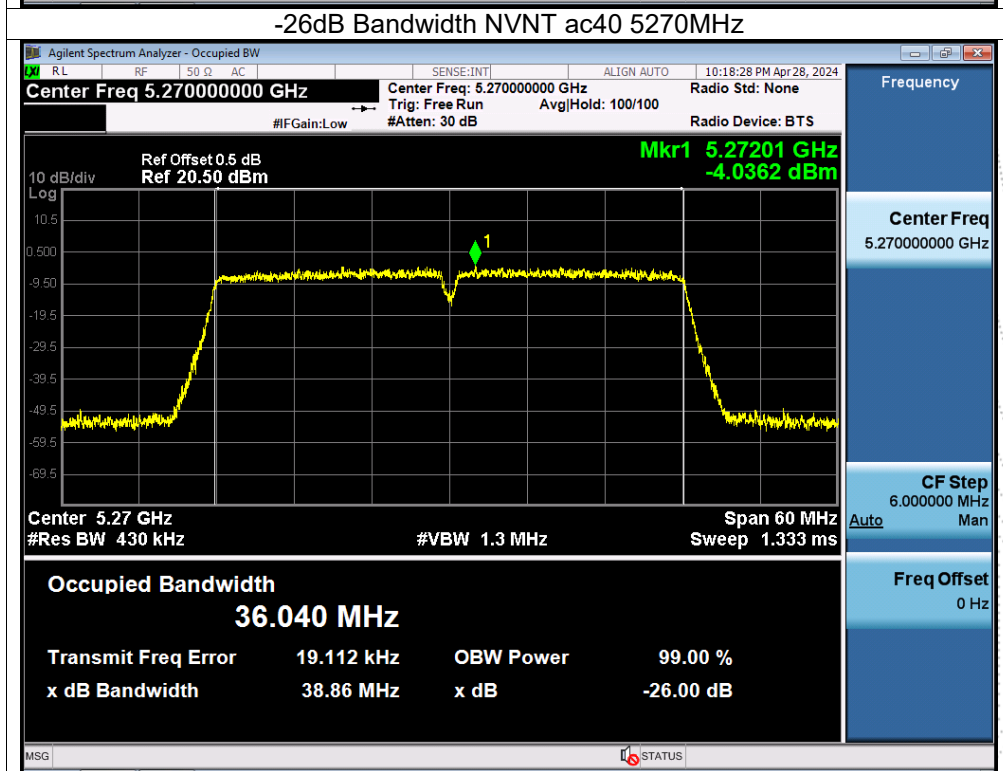
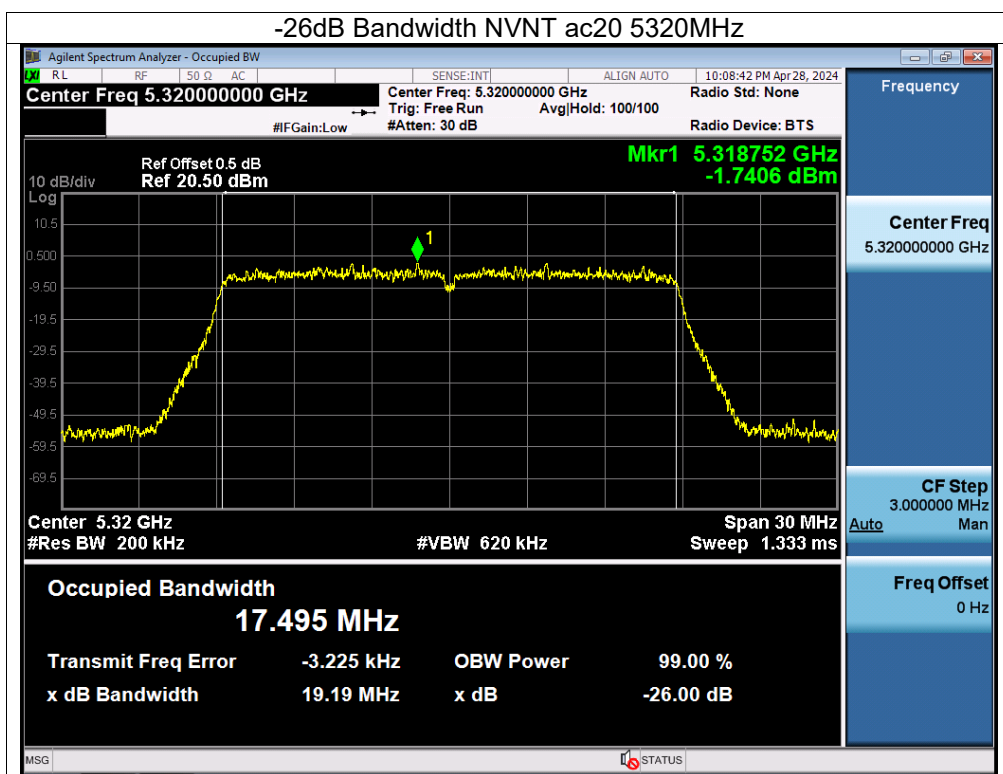


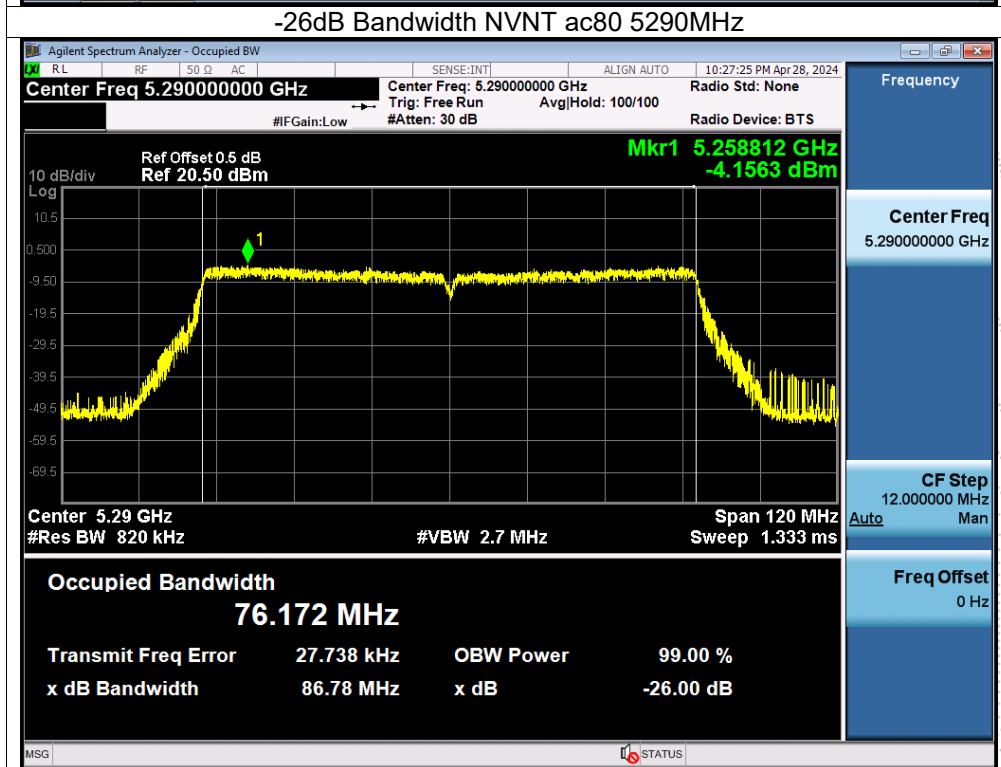
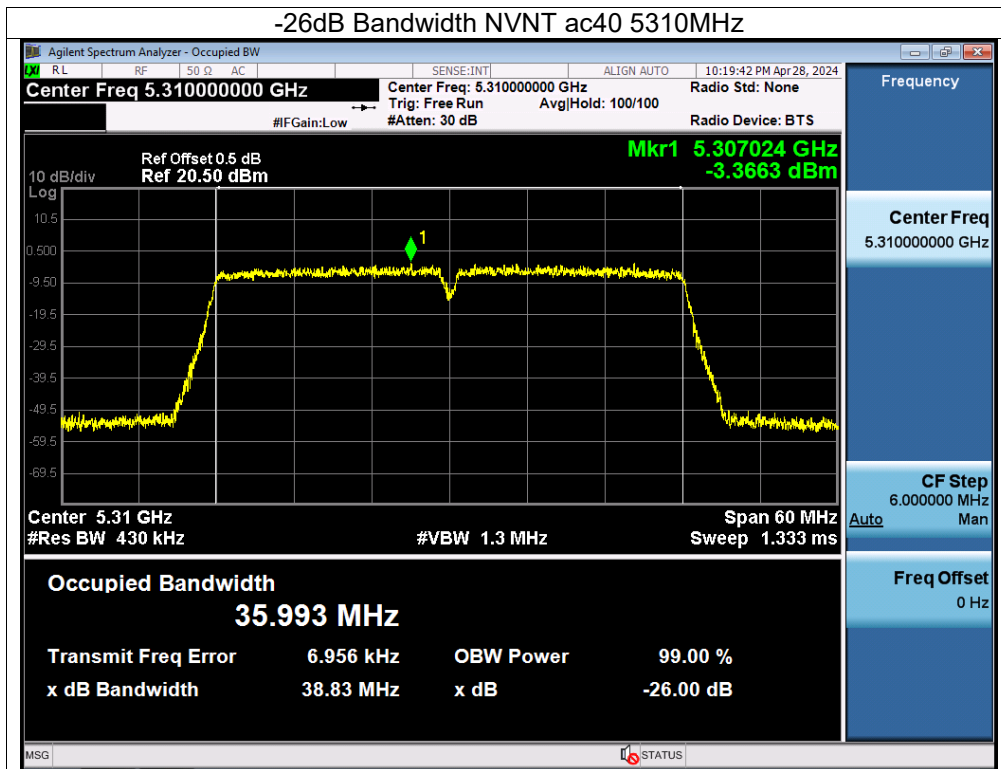


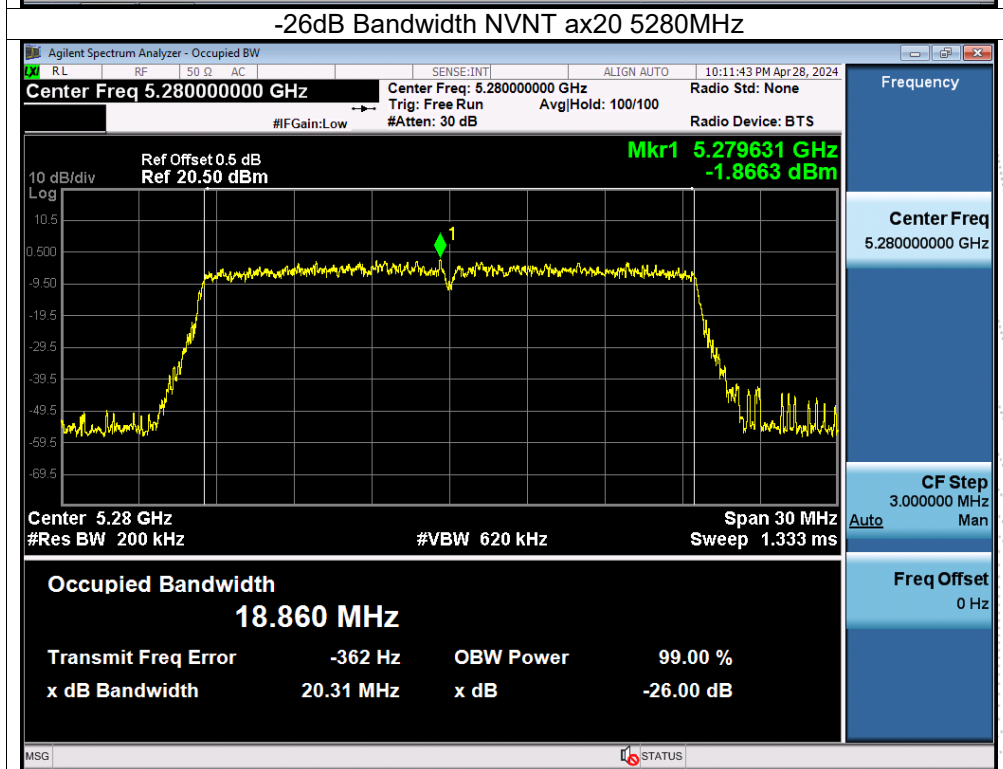
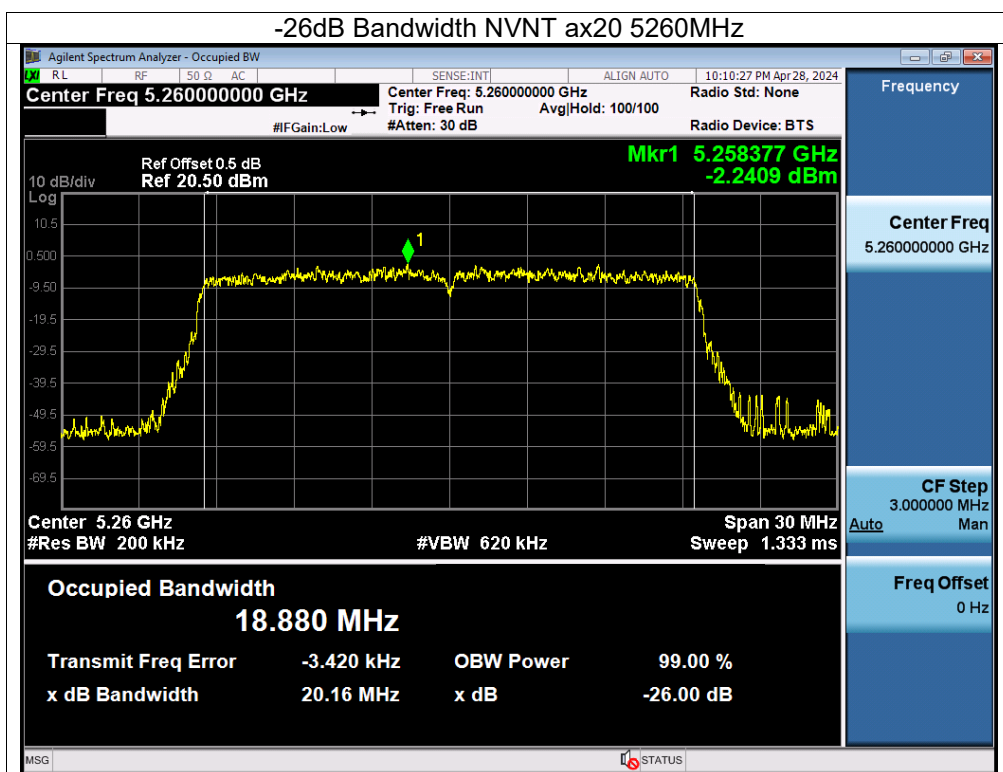


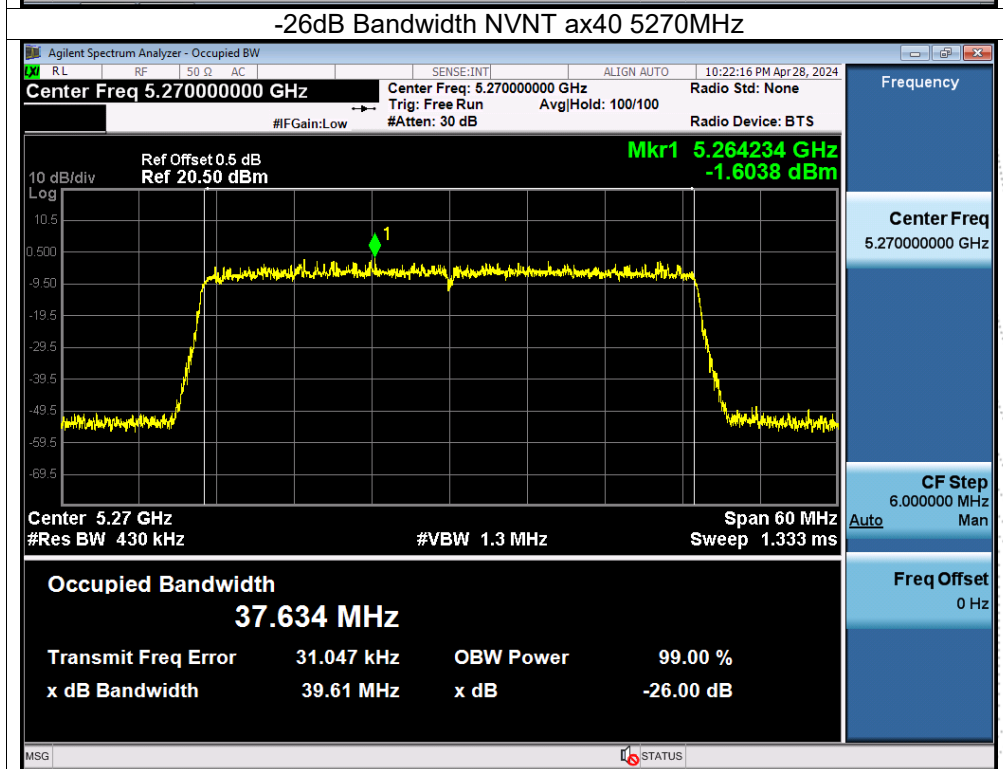
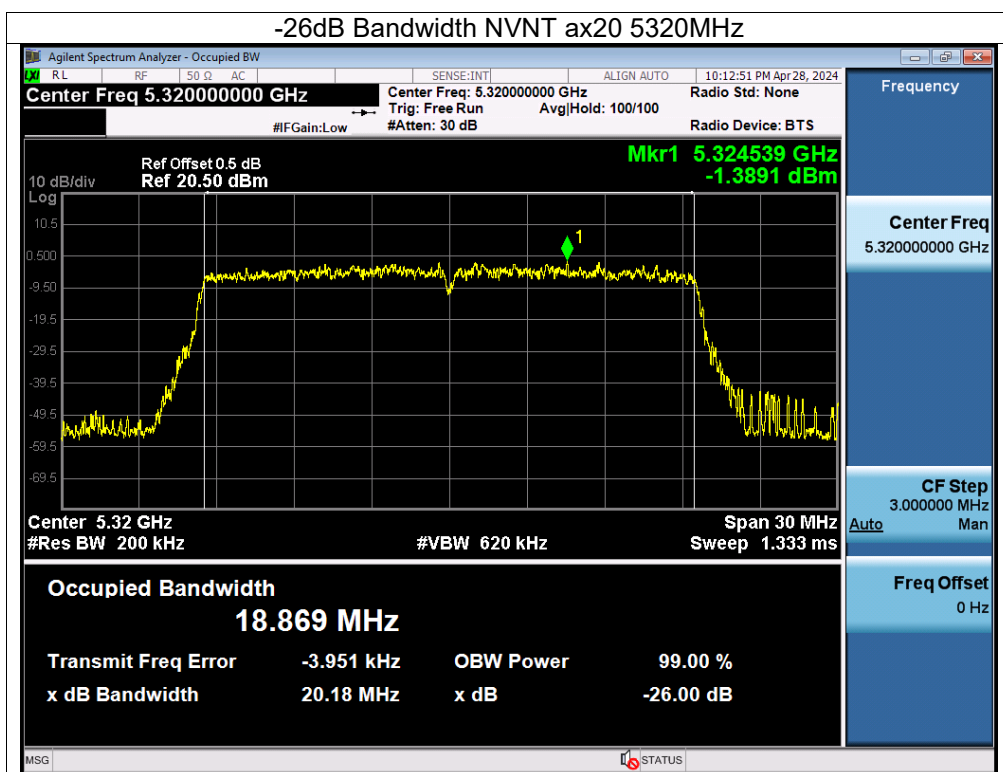


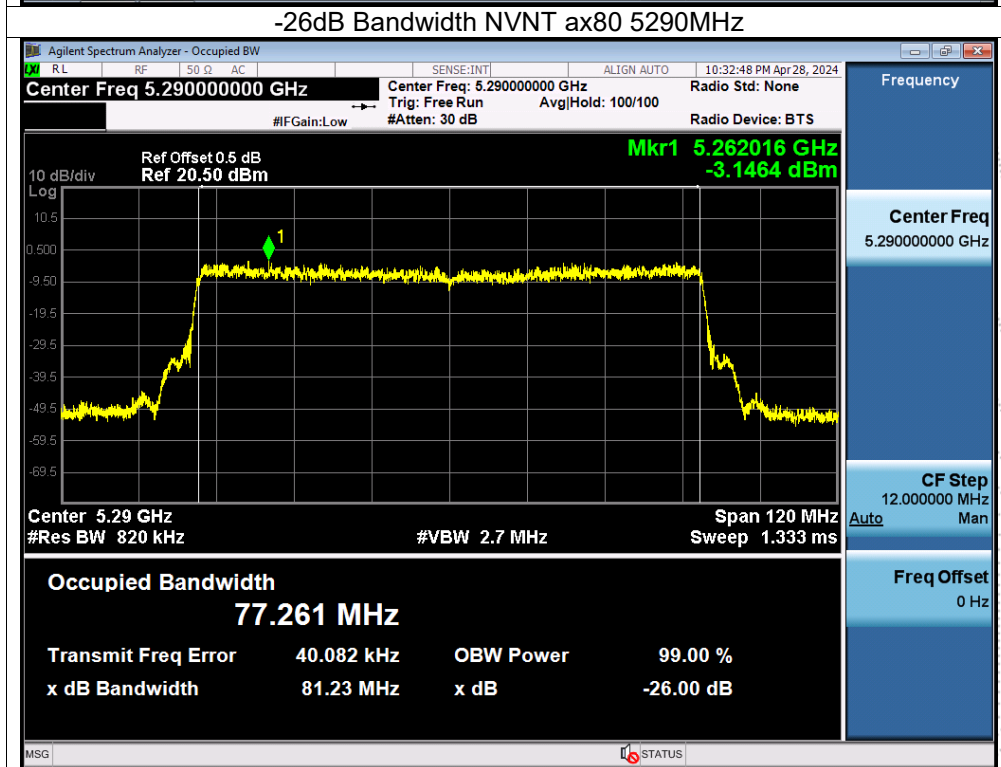
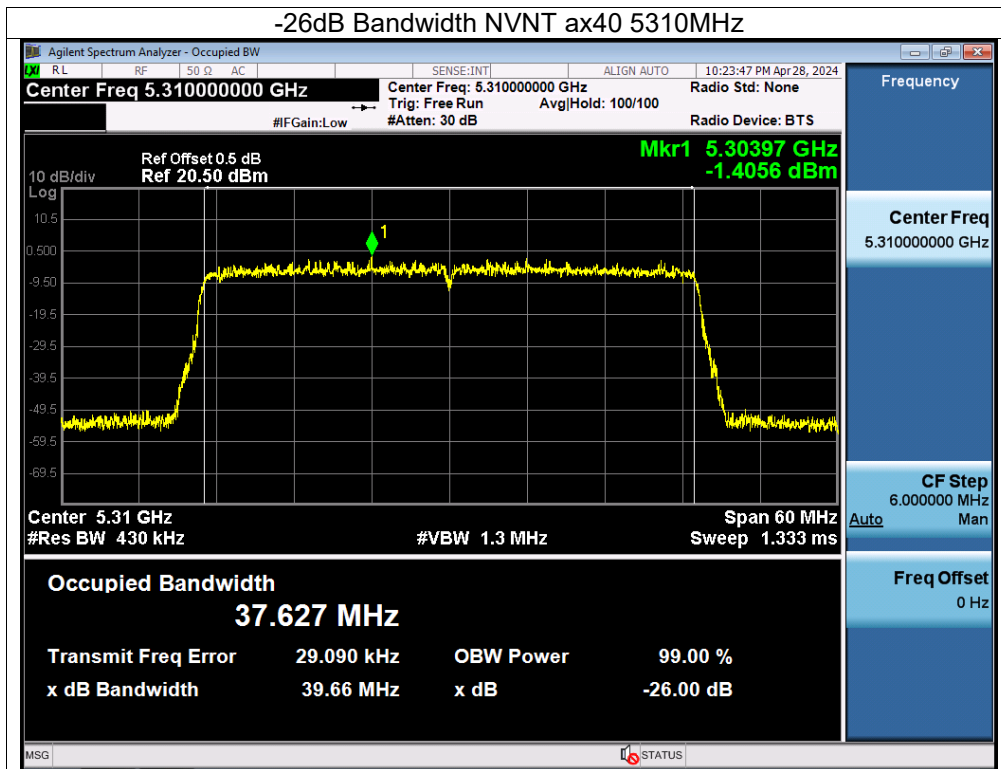












Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

