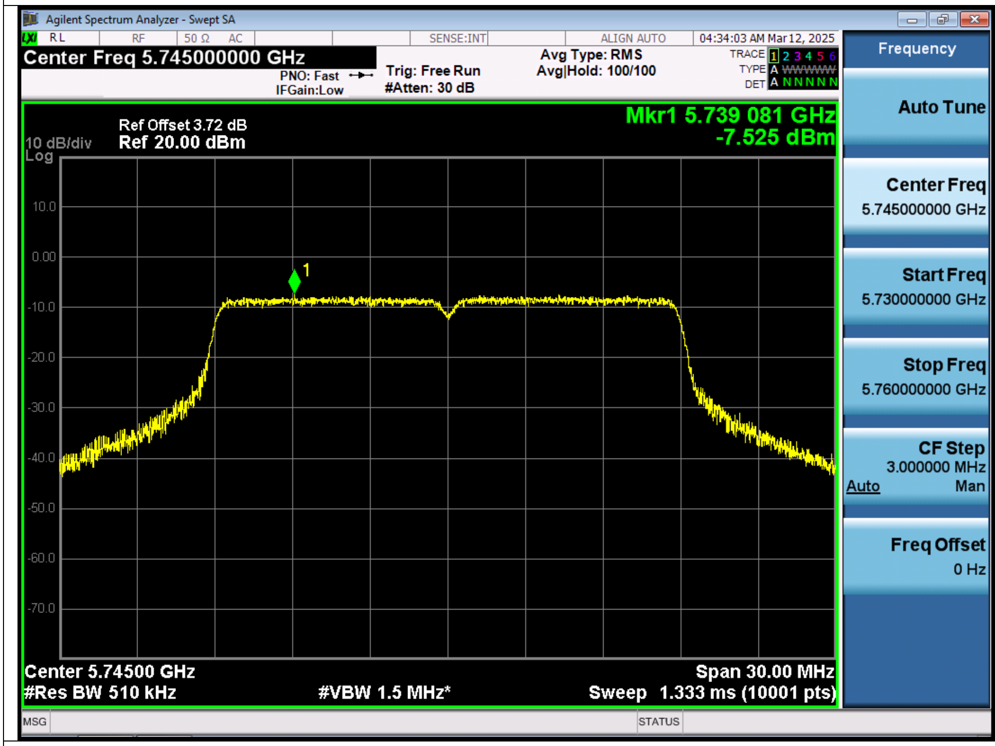
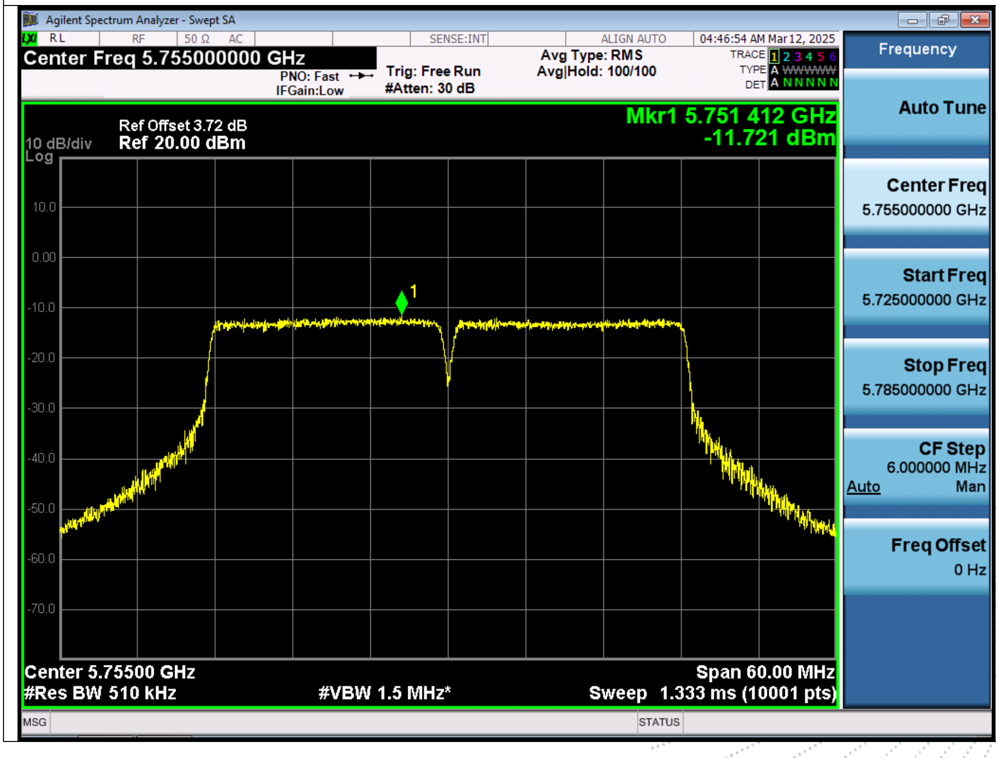
PSD NVNT ac20 5745MHz



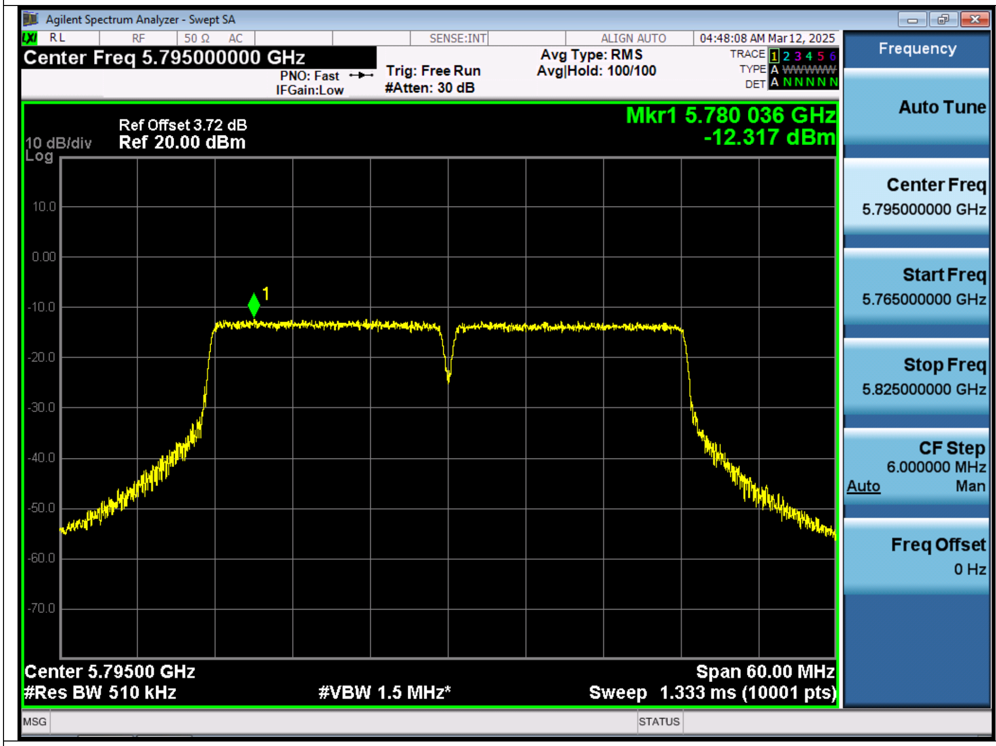
PSD NVNT ac20 5785MHz

PSD NVNT ac20 5825MHz

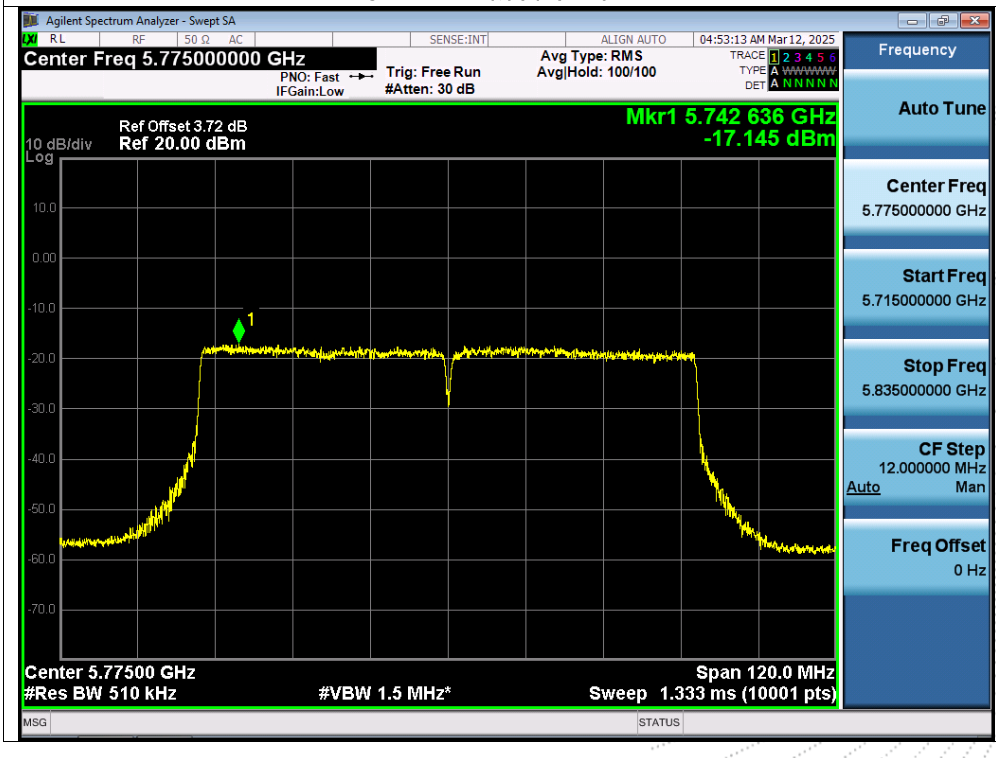
PSD NVNT ac40 5755MHz



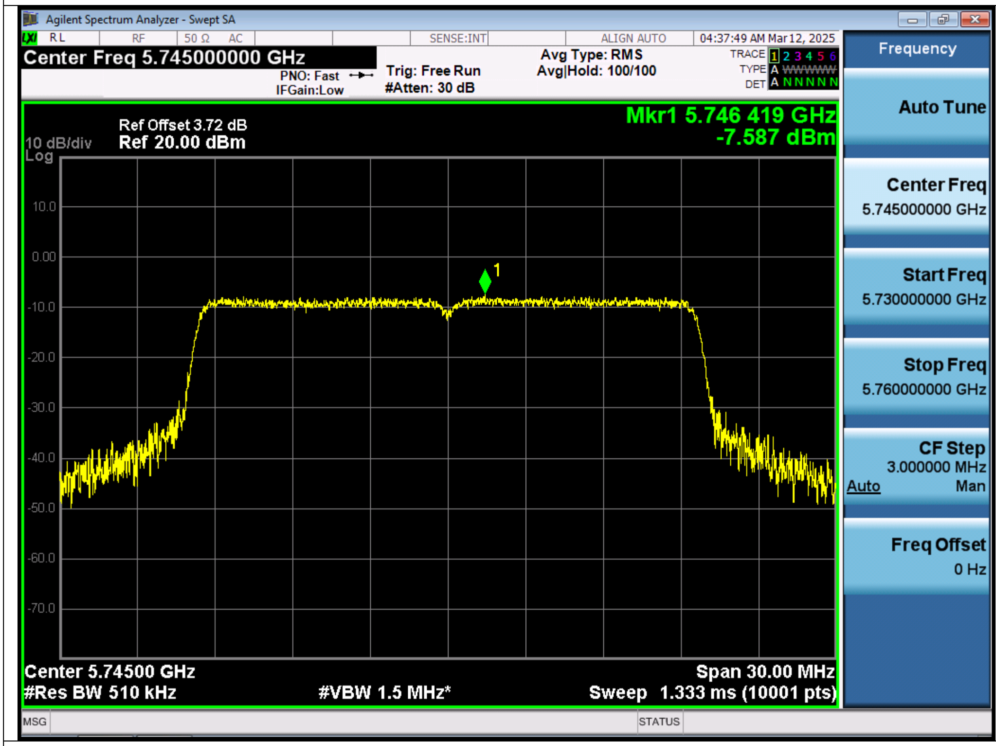
PSD NVNT ac40 5795MHz



PSD NVNT ac80 5775MHz



PSD NVNT ax20 5745MHz



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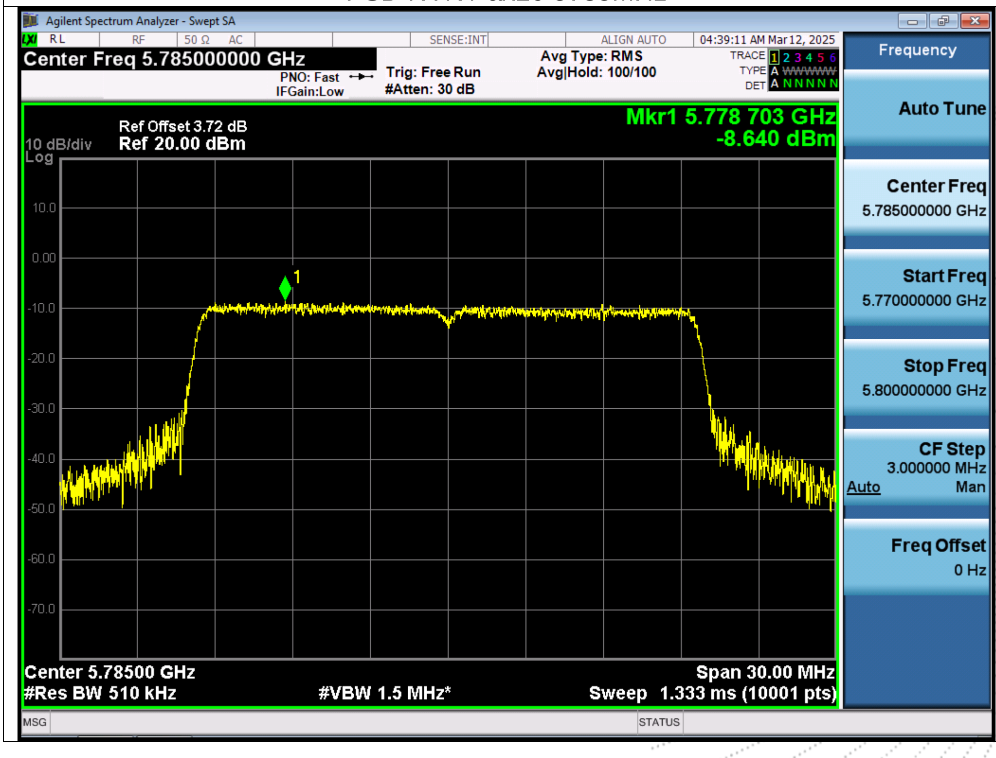

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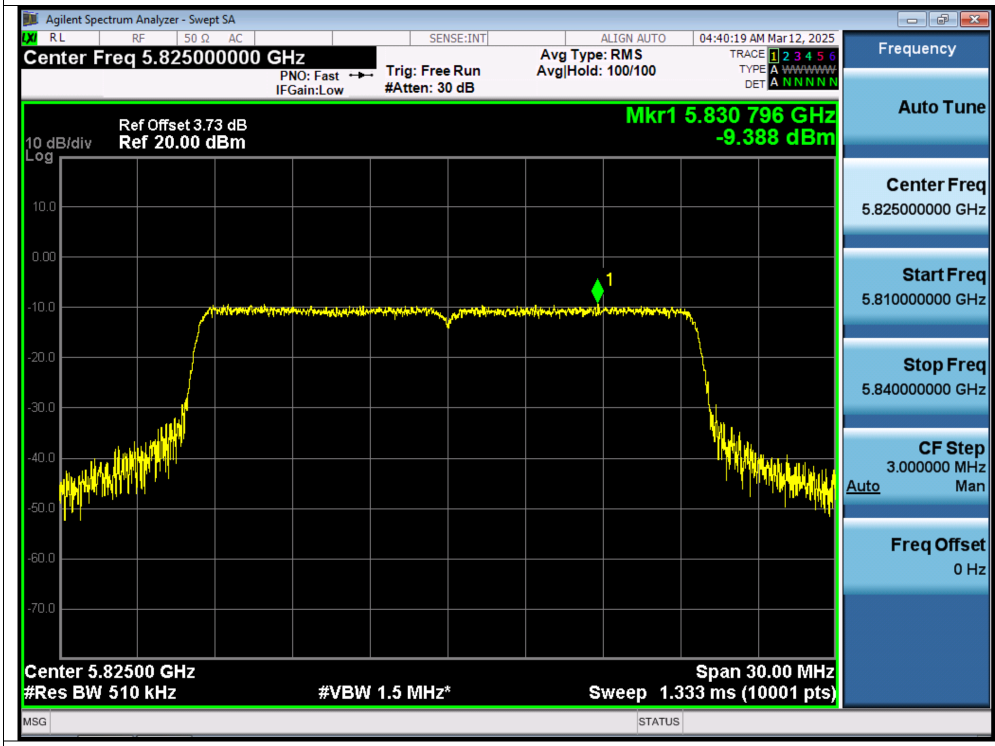
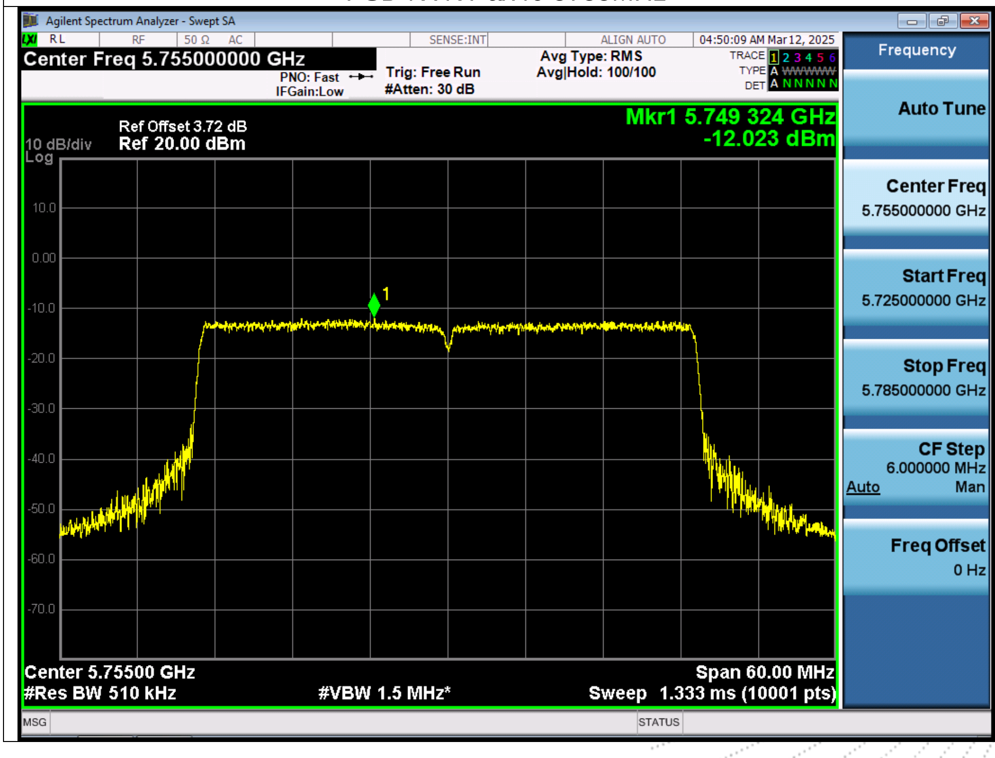
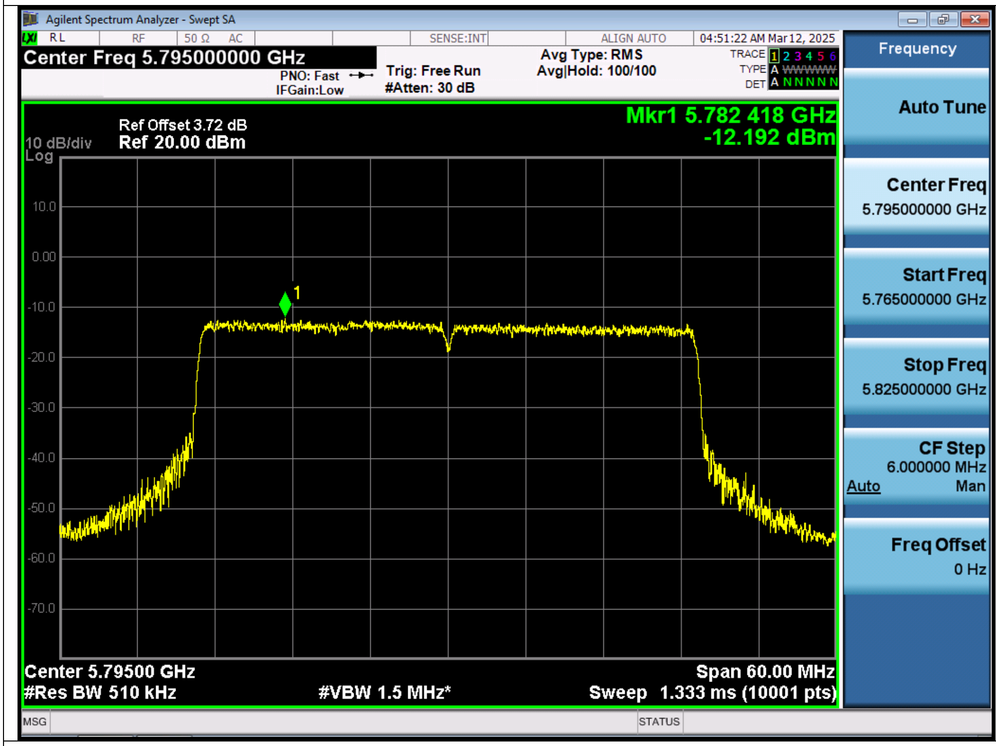


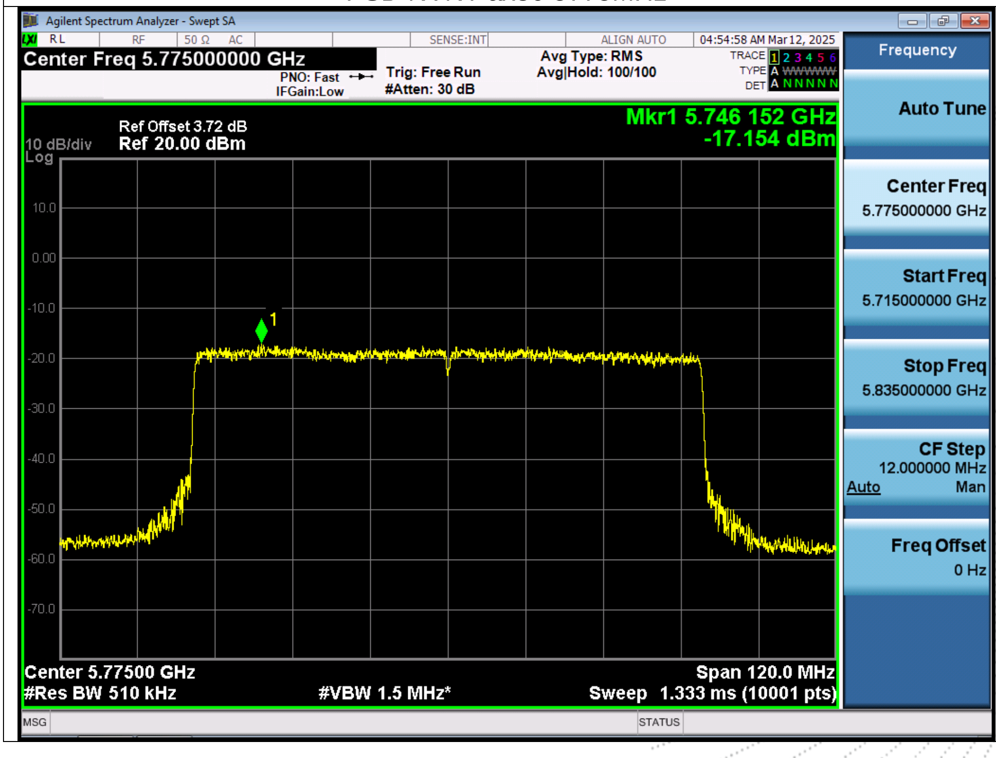
PSD NVNT ax40 5755MHz



PSD NVNT ax40 5795MHz

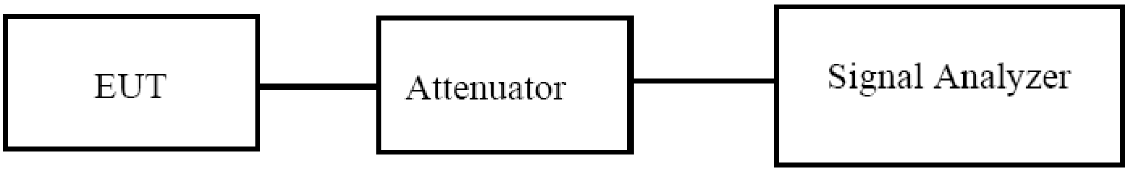


PSD NVNT ax80 5775MHz



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

a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) 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:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · 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

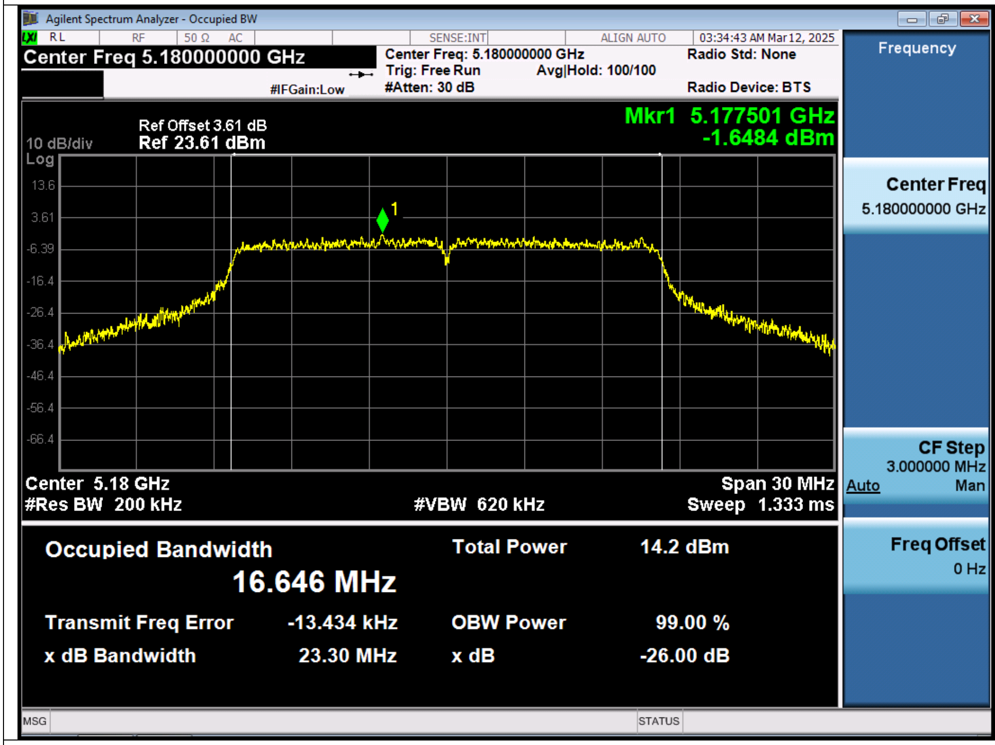
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

9.5 Test Result

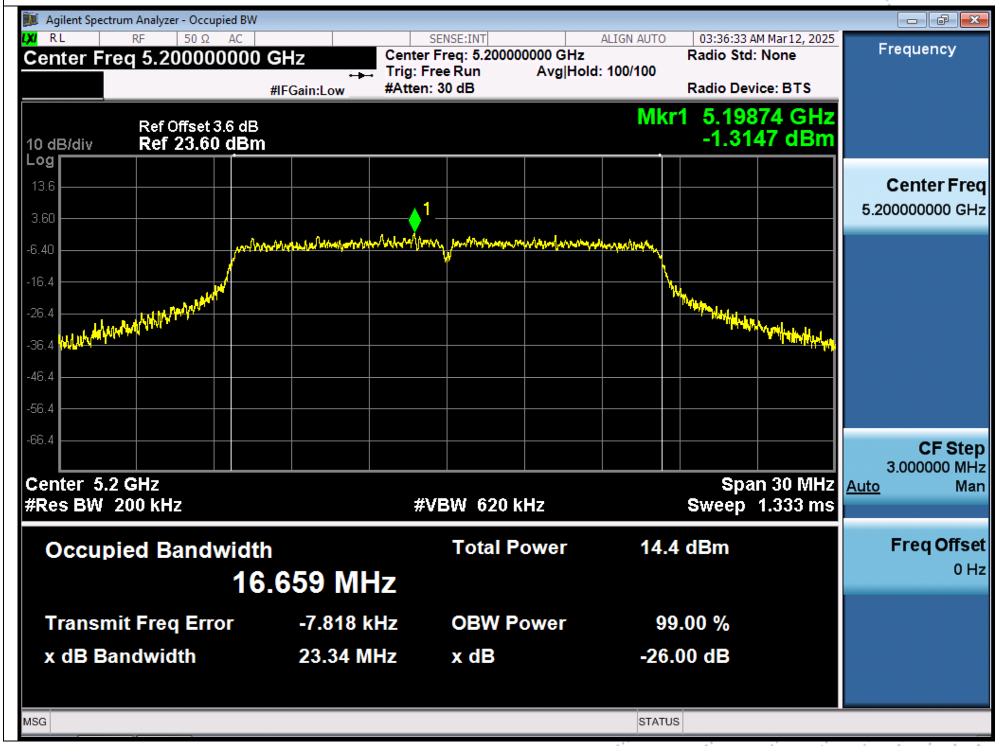
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	23.297	16.638	Pass
NVNT	a	5200	23.338	16.641	Pass
NVNT	a	5240	23.613	16.647	Pass
NVNT	n20	5180	24.689	17.818	Pass
NVNT	n20	5200	25.184	17.801	Pass
NVNT	n20	5240	24.105	17.834	Pass
NVNT	n40	5190	44.606	36.349	Pass
NVNT	n40	5230	47.008	36.369	Pass
NVNT	ac20	5180	24.370	17.799	Pass
NVNT	ac20	5200	24.192	17.856	Pass
NVNT	ac20	5240	23.810	17.841	Pass
NVNT	ac40	5190	44.600	36.364	Pass
NVNT	ac40	5230	45.829	36.413	Pass
NVNT	ac80	5210	87.736	75.666	Pass
NVNT	ax20	5180	23.531	19.039	Pass
NVNT	ax20	5200	24.098	19.041	Pass
NVNT	ax20	5240	24.141	19.030	Pass
NVNT	ax40	5190	44.289	37.820	Pass
NVNT	ax40	5230	44.908	37.815	Pass
NVNT	ax80	5210	84.799	77.192	Pass

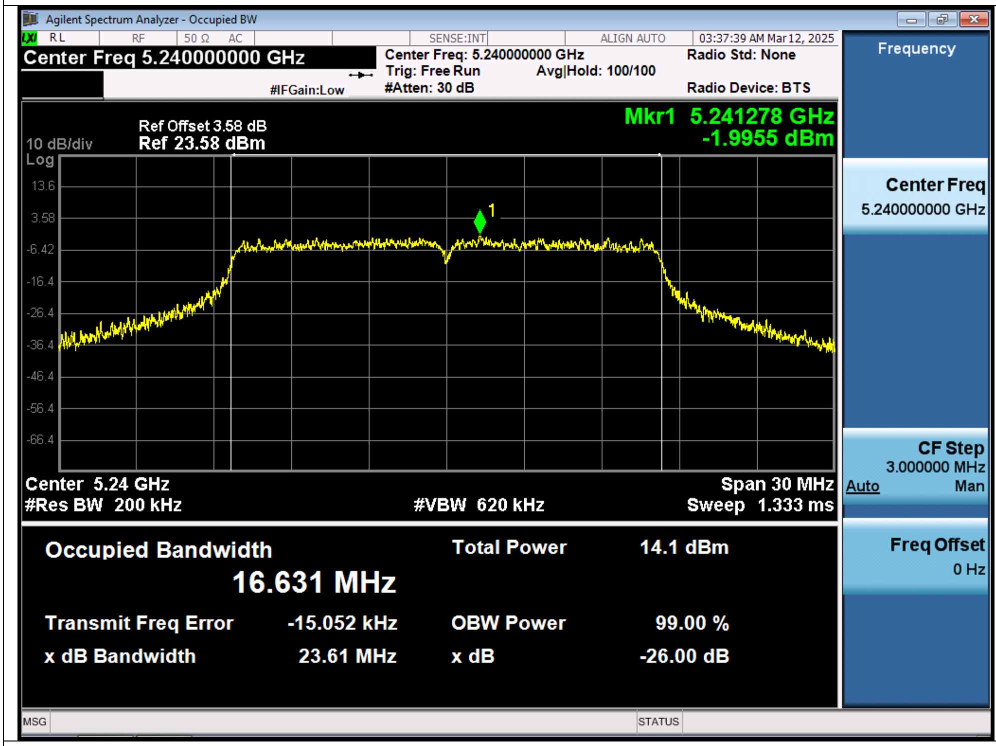
Test Graphs
-26dB Bandwidth NVNT a 5180MHz



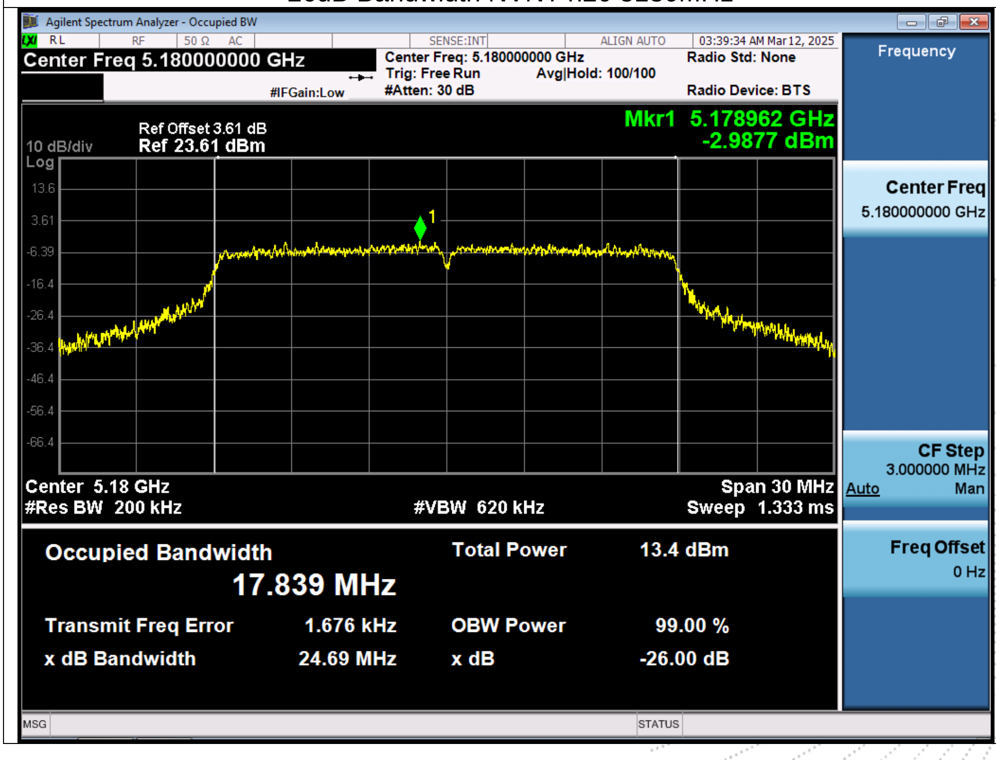
-26dB Bandwidth NVNT a 5200MHz



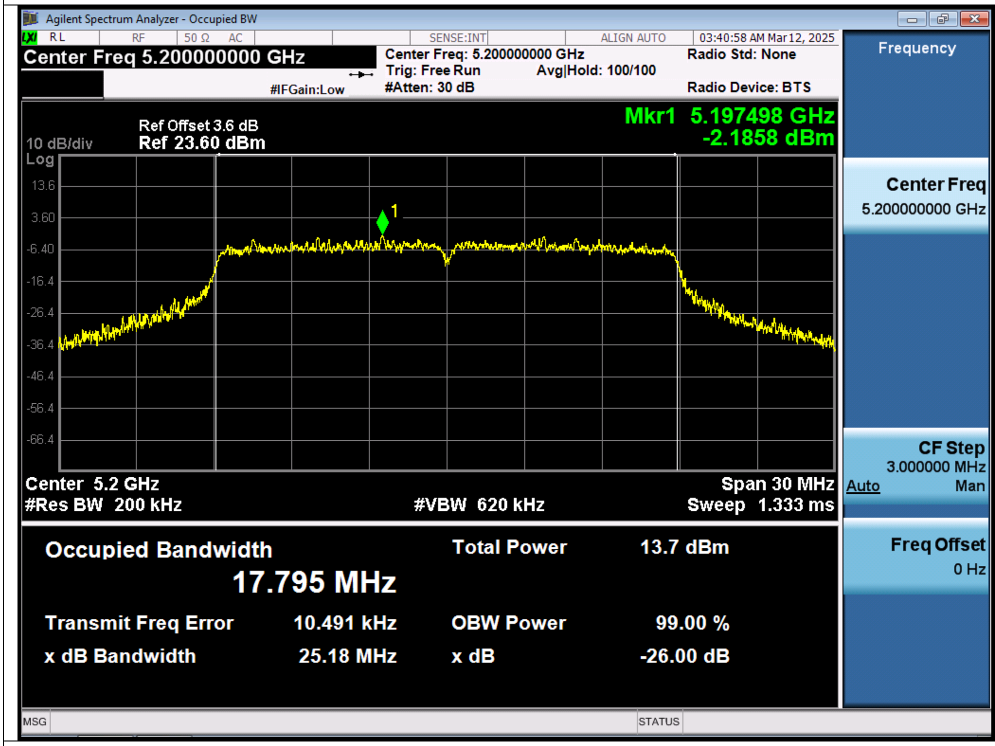
-26dB Bandwidth NVNT a 5240MHz



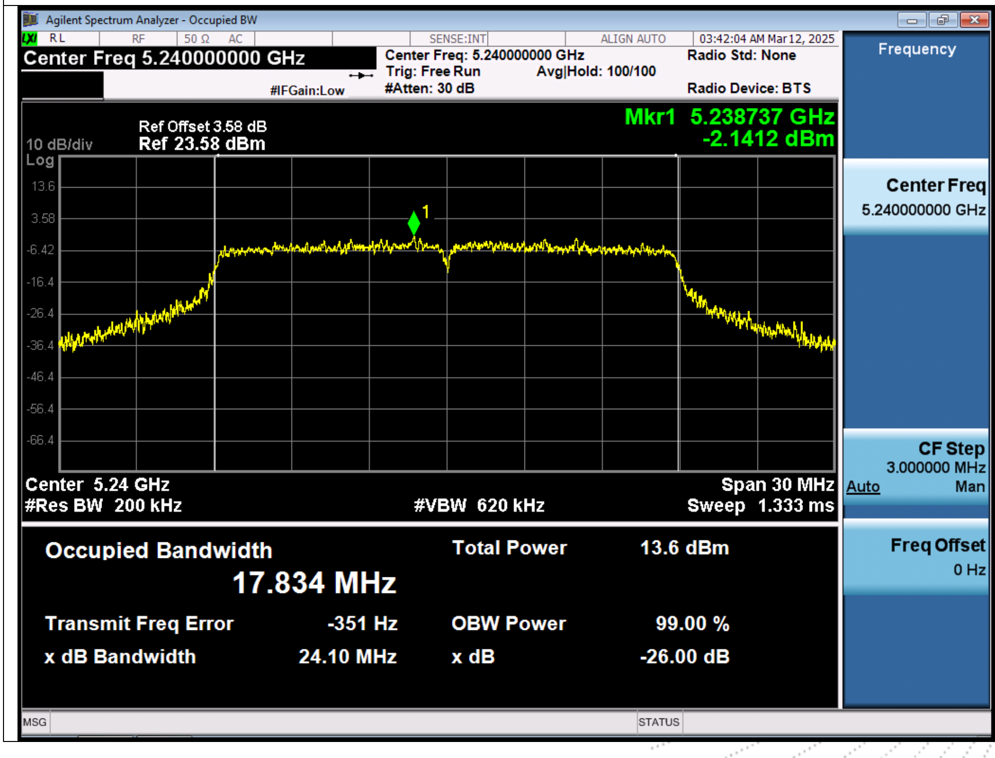
-26dB Bandwidth NVNT n20 5180MHz



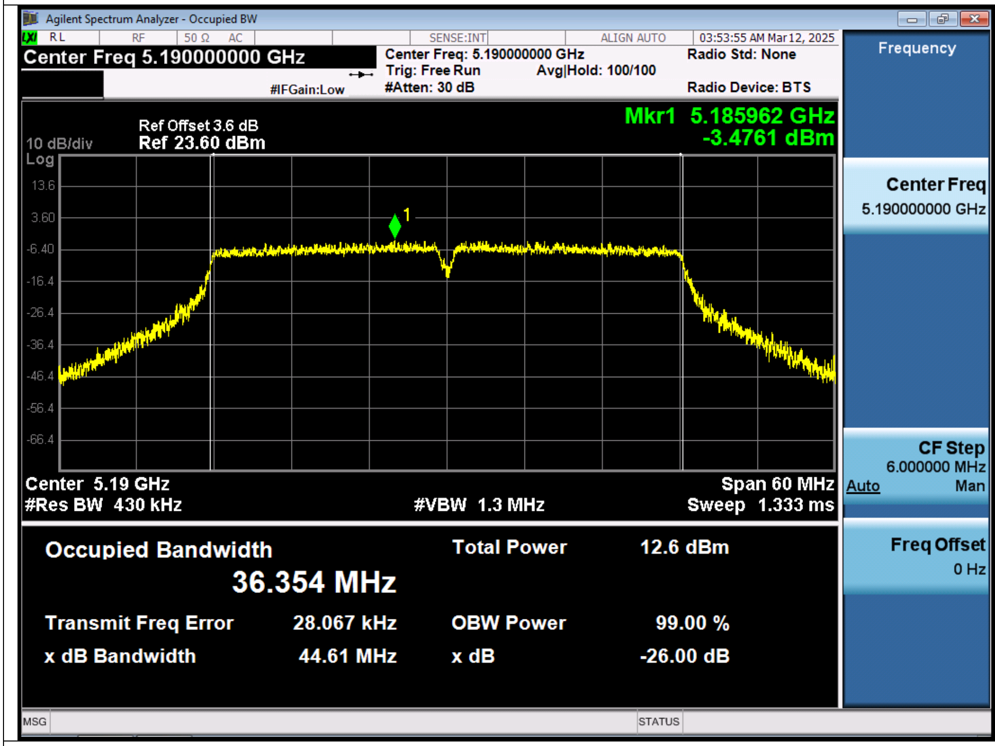
-26dB Bandwidth NVNT n20 5200MHz



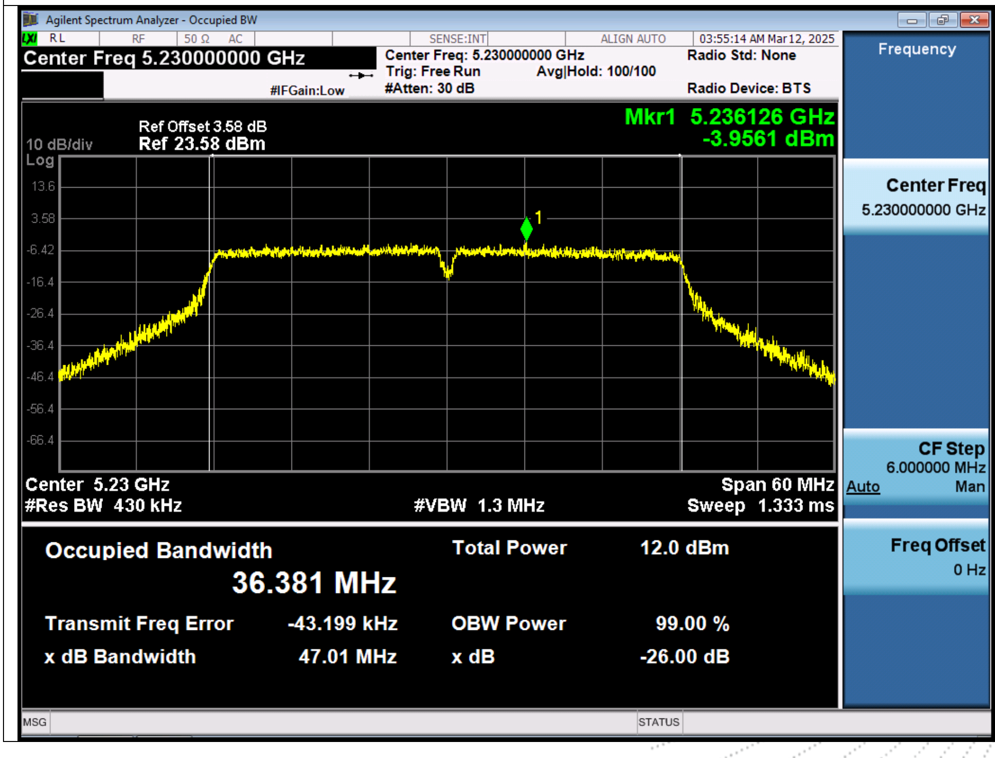
-26dB Bandwidth NVNT n20 5240MHz



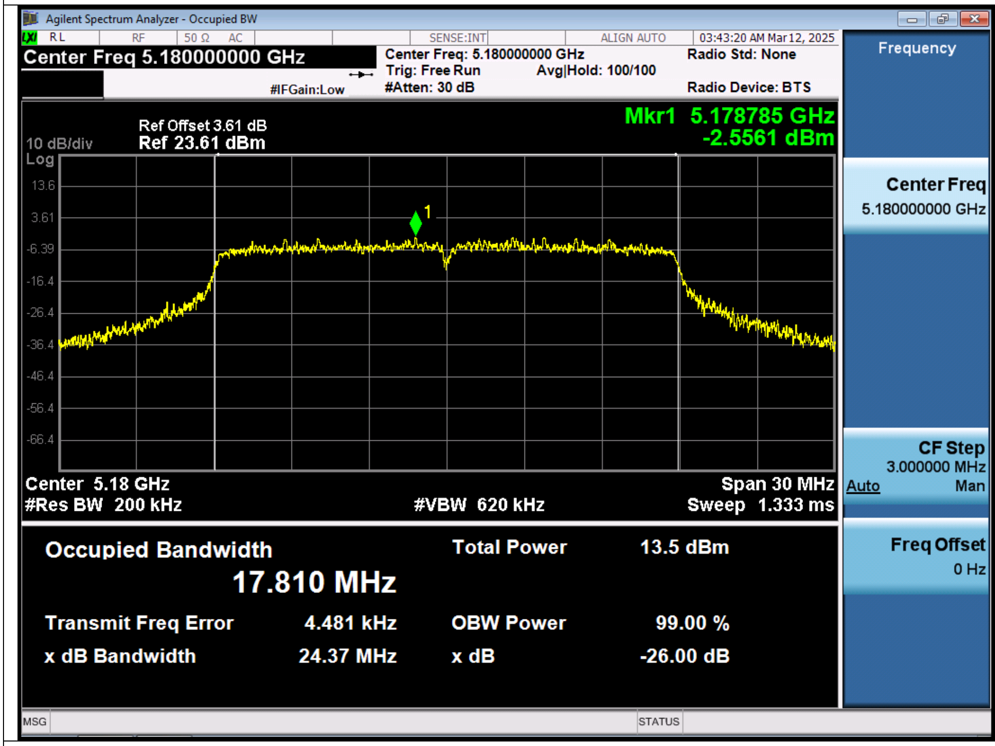
-26dB Bandwidth NVNT n40 5190MHz



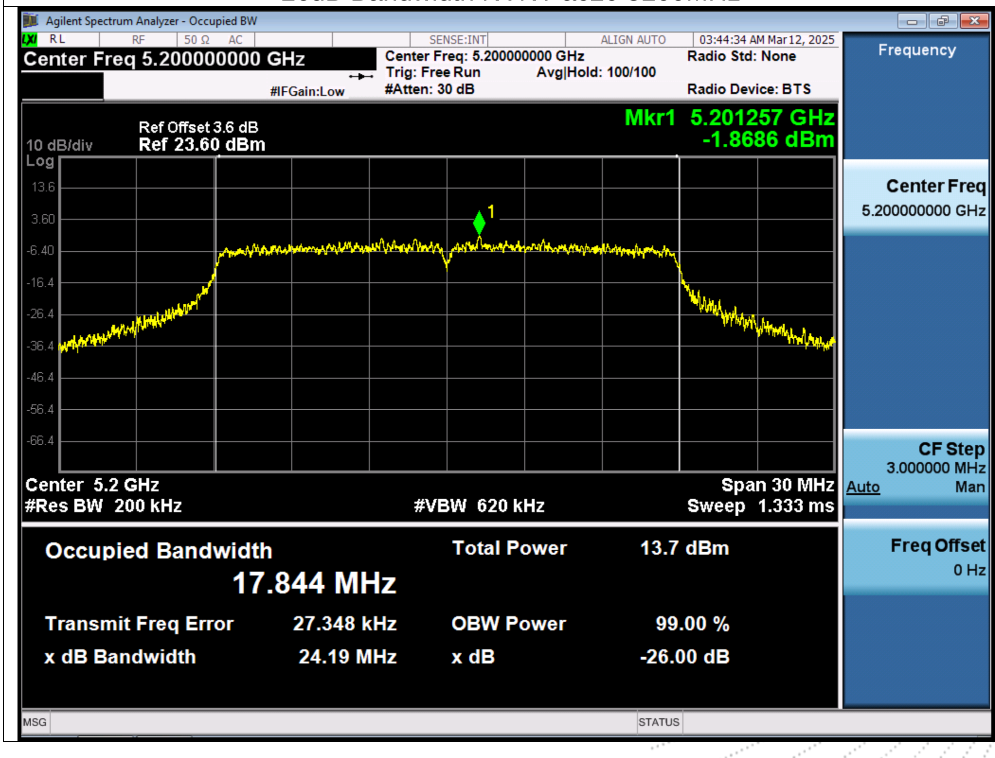
-26dB Bandwidth NVNT n40 5230MHz



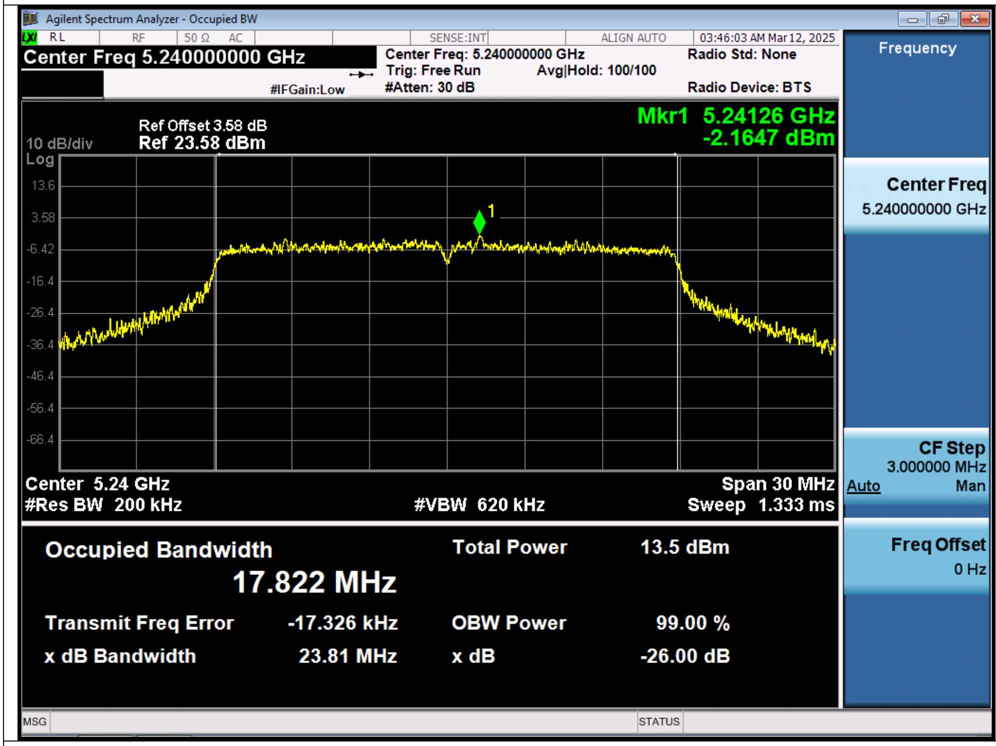
-26dB Bandwidth NVNT ac20 5180MHz



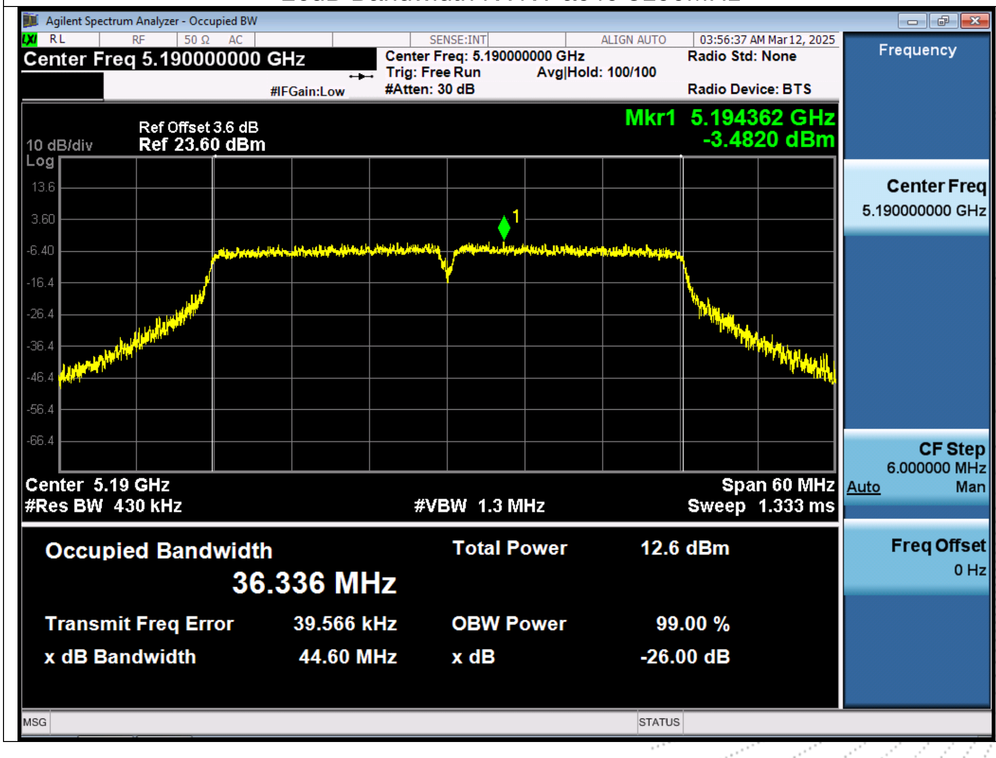
-26dB Bandwidth NVNT ac20 5200MHz



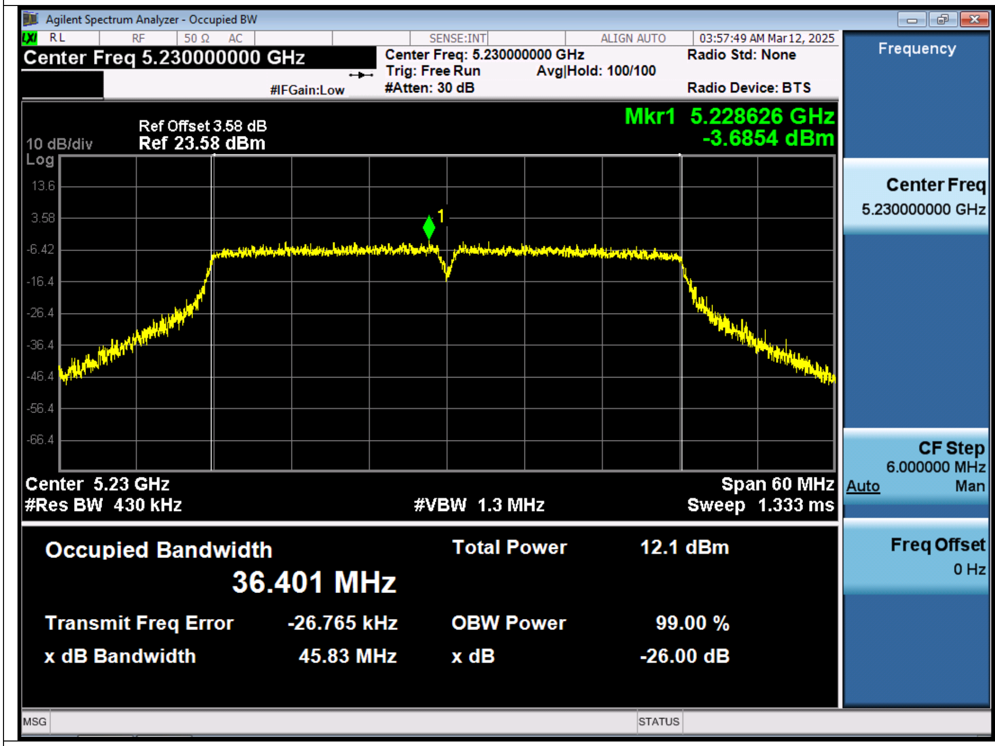
-26dB Bandwidth NVNT ac20 5240MHz



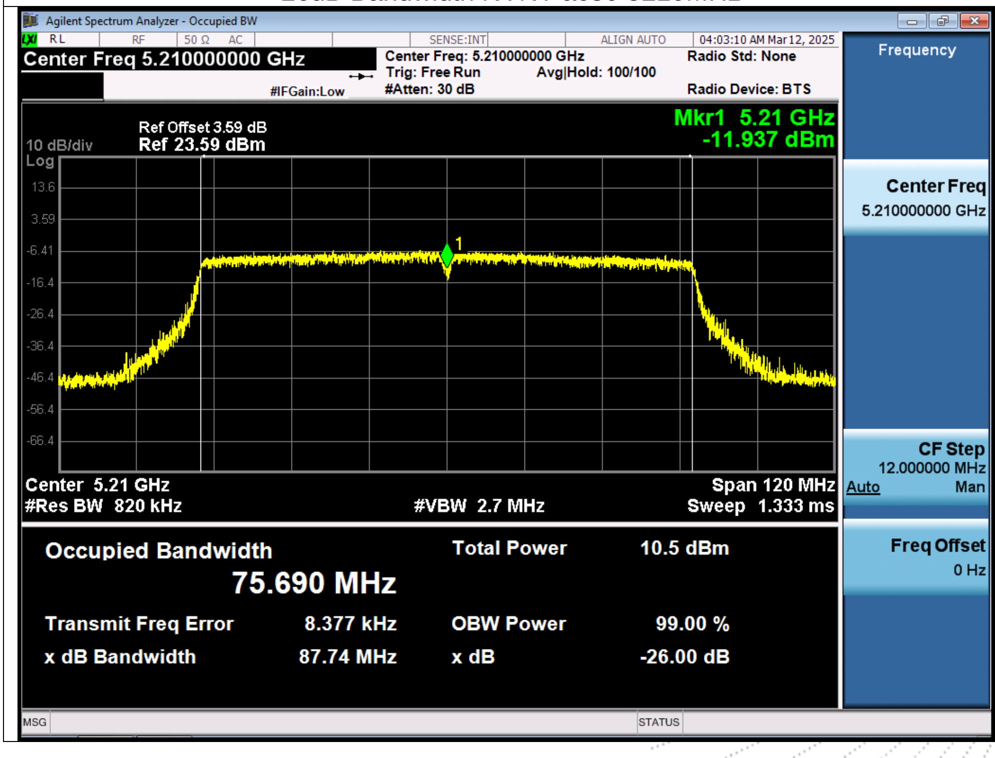
-26dB Bandwidth NVNT ac40 5190MHz



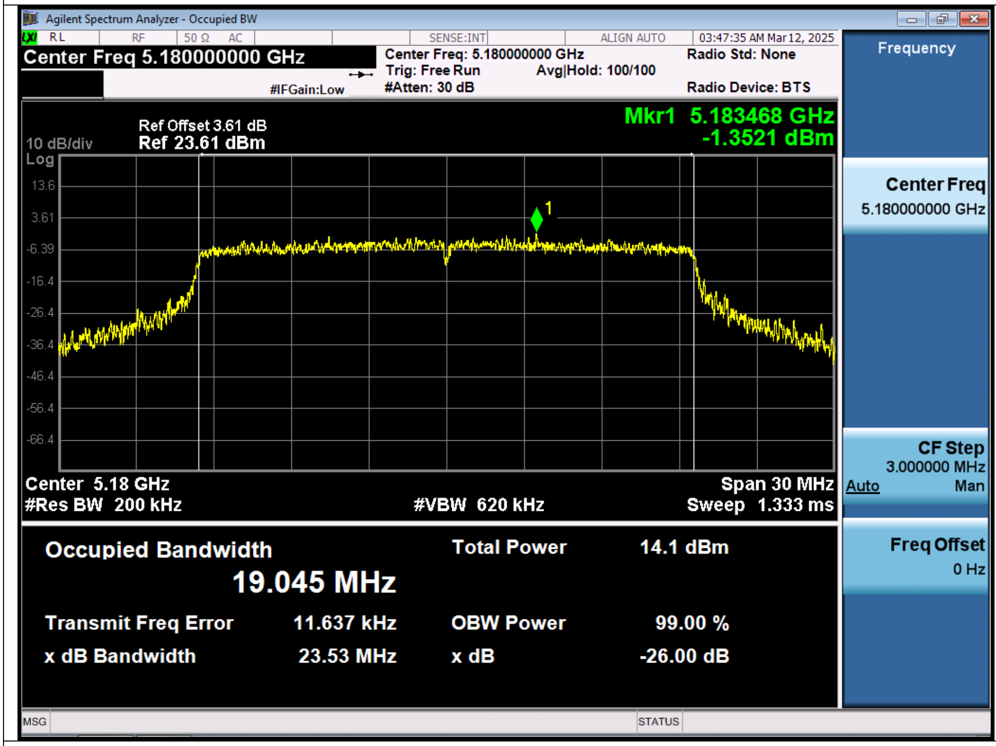
-26dB Bandwidth NVNT ac40 5230MHz



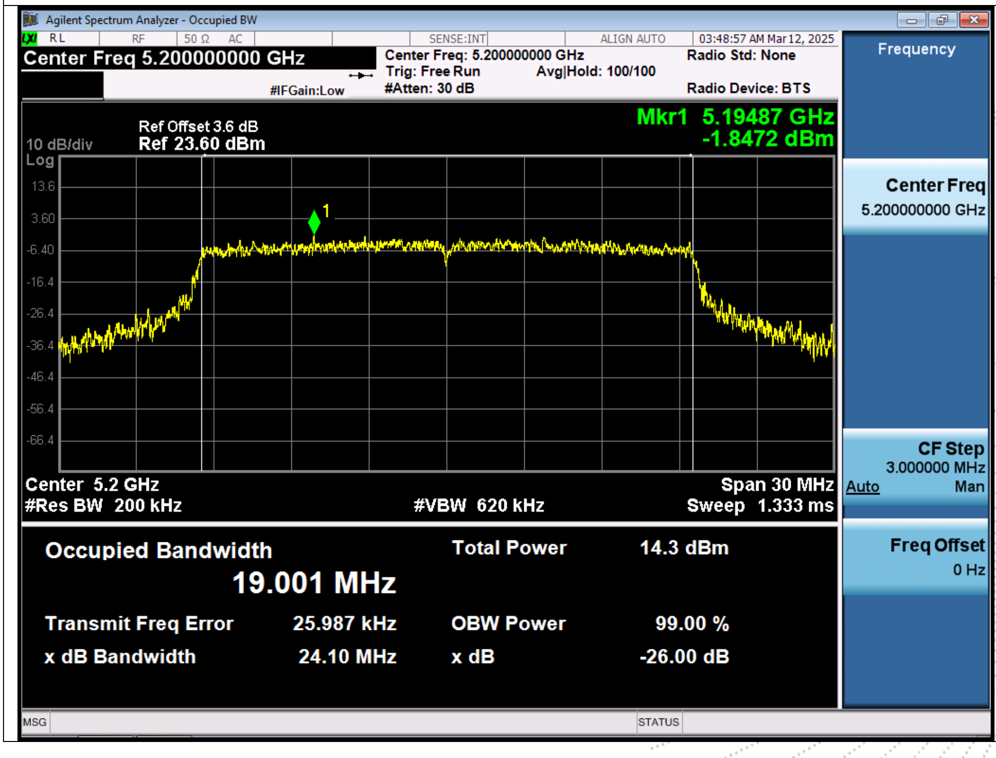
-26dB Bandwidth NVNT ac80 5210MHz



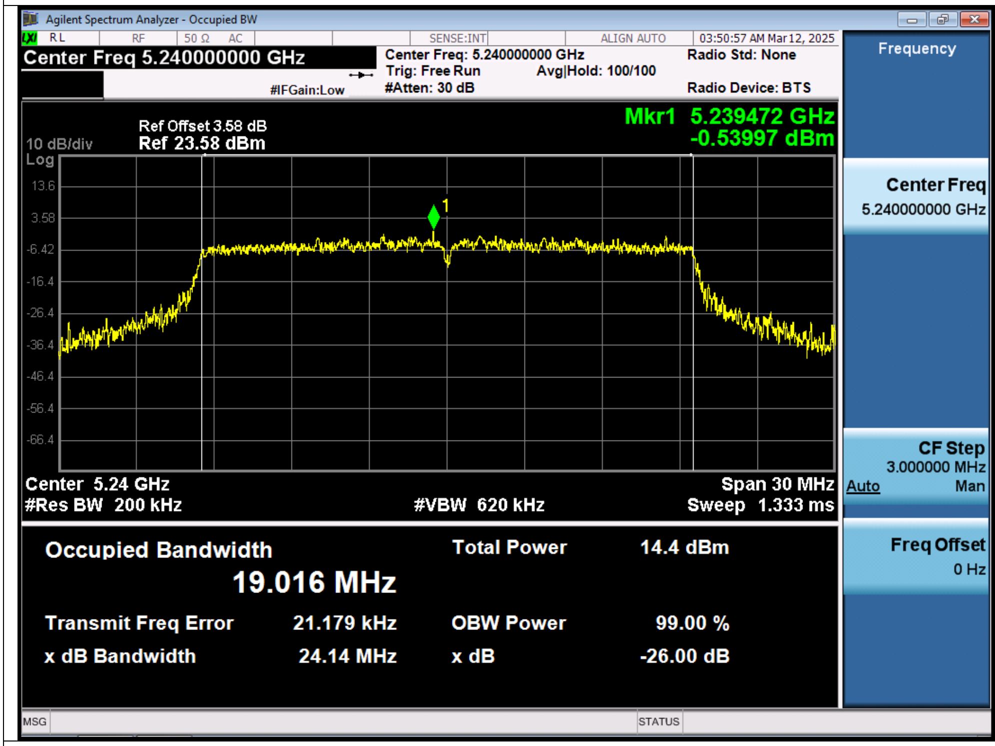
-26dB Bandwidth NVNT ax20 5180MHz



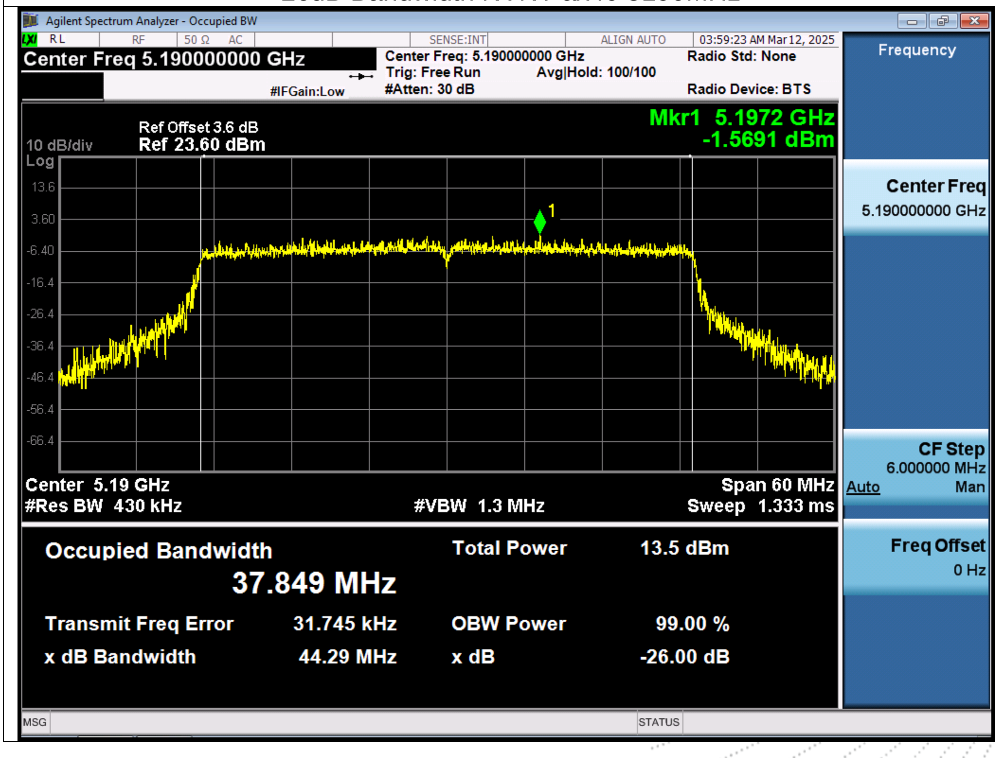
-26dB Bandwidth NVNT ax20 5200MHz



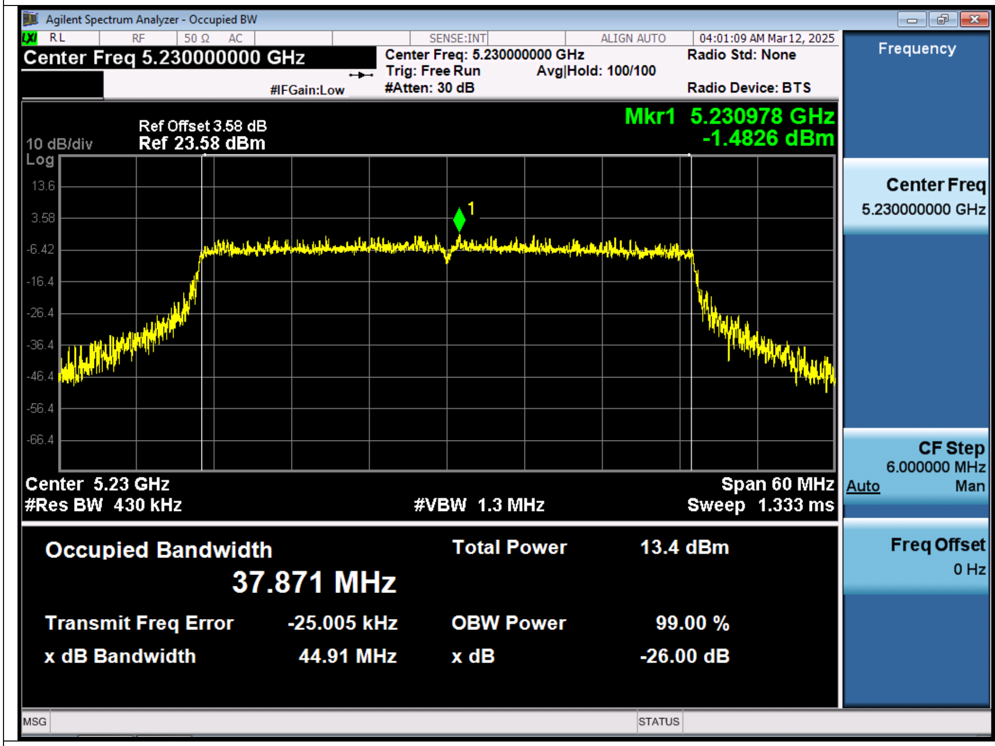
-26dB Bandwidth NVNT ax20 5240MHz



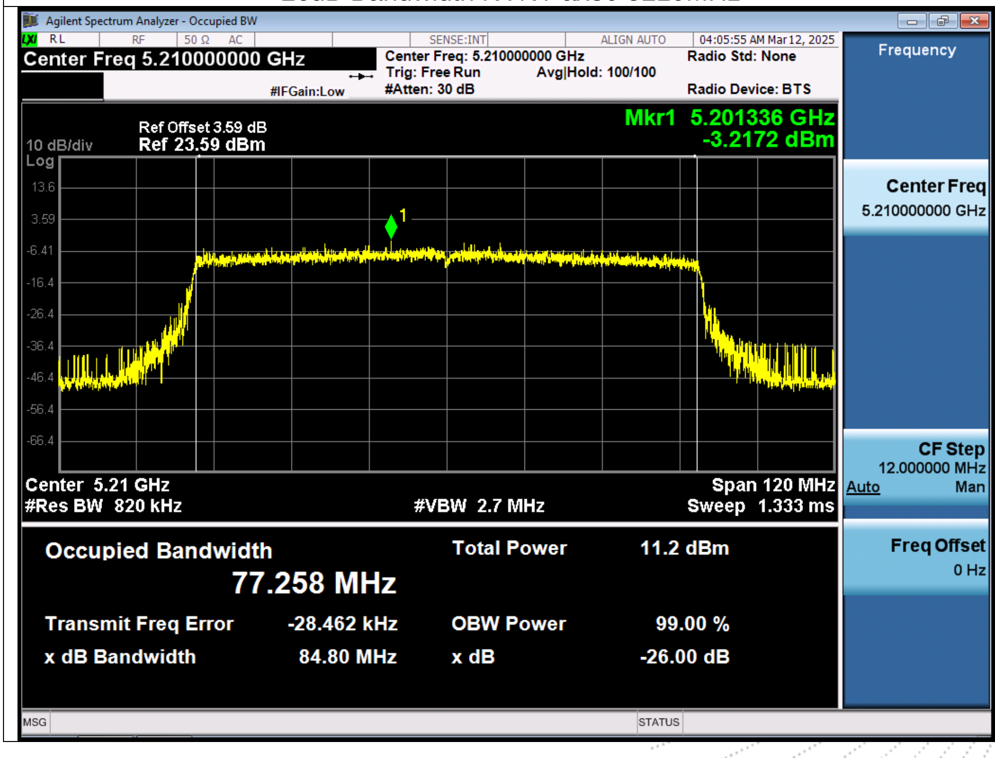
-26dB Bandwidth NVNT ax40 5190MHz



-26dB Bandwidth NVNT ax40 5230MHz

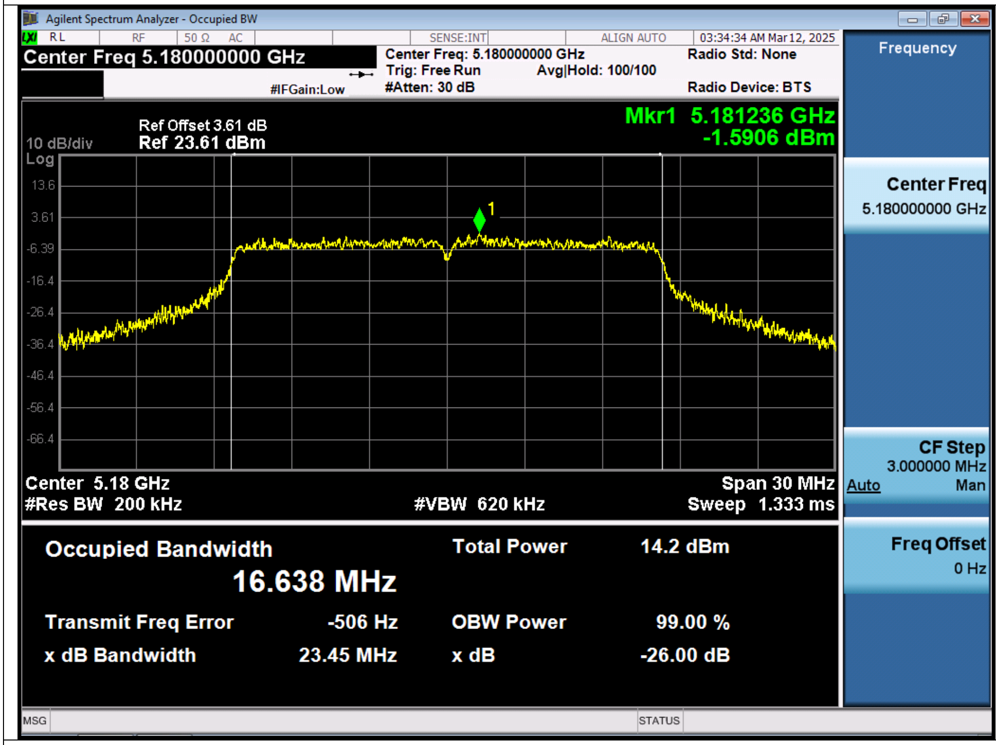


-26dB Bandwidth NVNT ax80 5210MHz

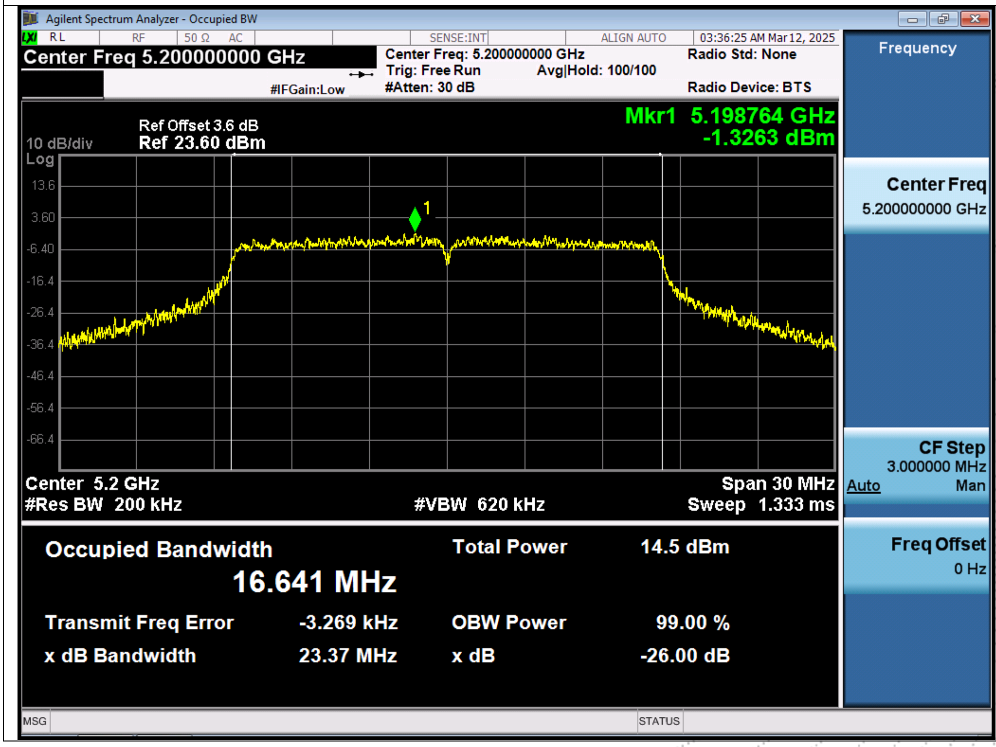


Test Graphs

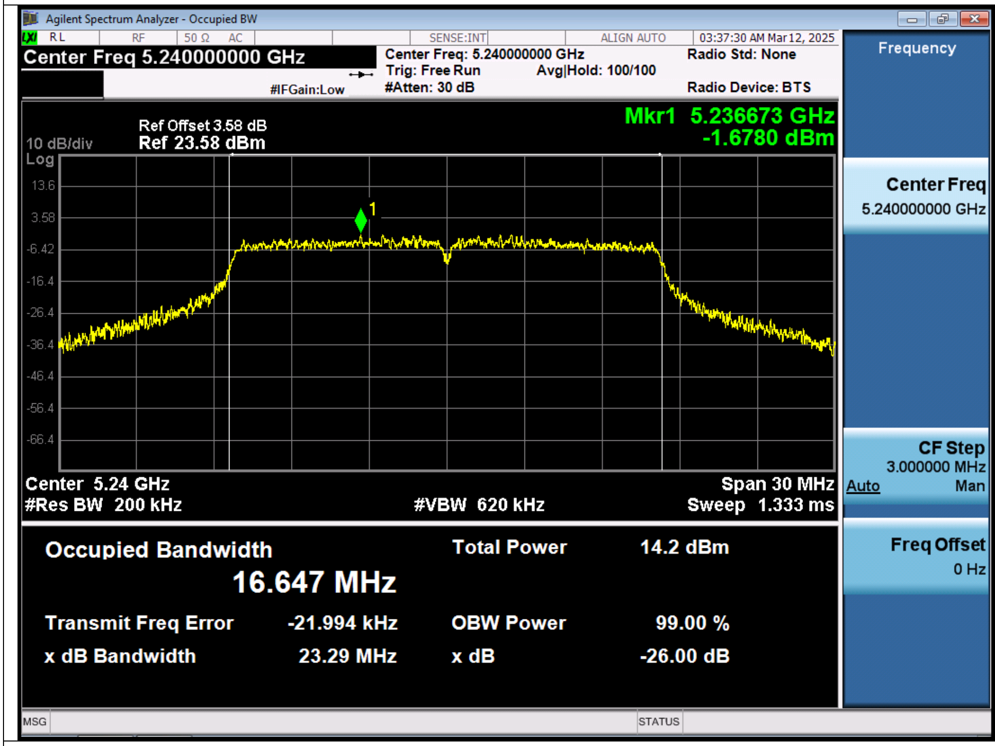
OBW NVNT a 5180MHz



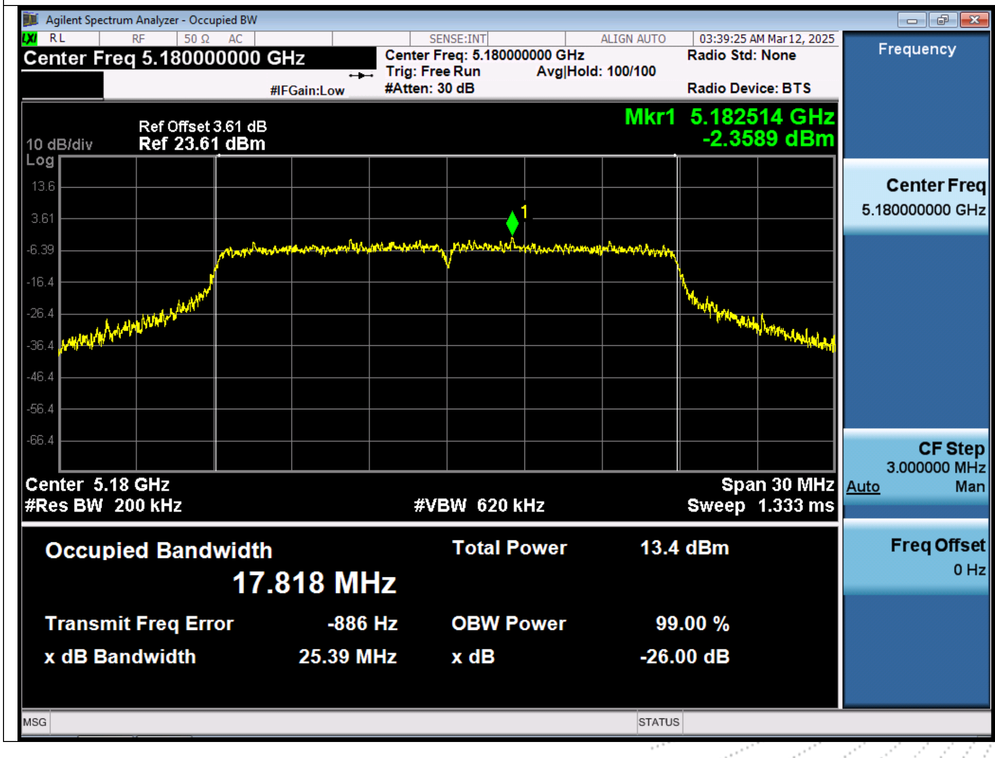
OBW NVNT a 5200MHz



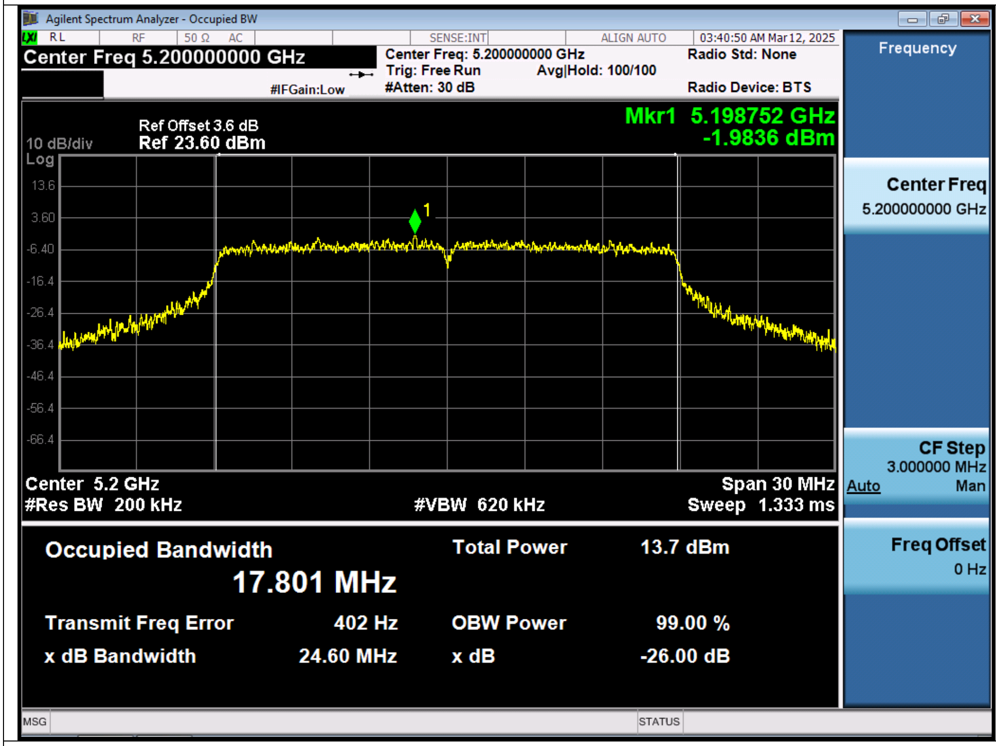
OBW NVNT a 5240MHz



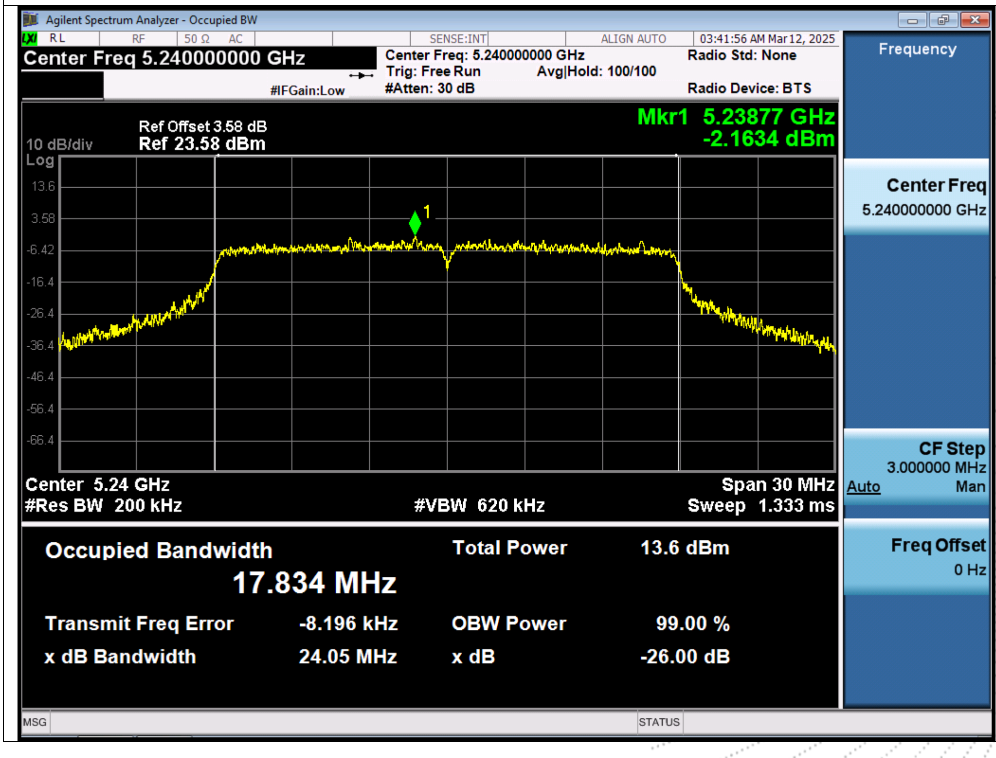
OBW NVNT n20 5180MHz



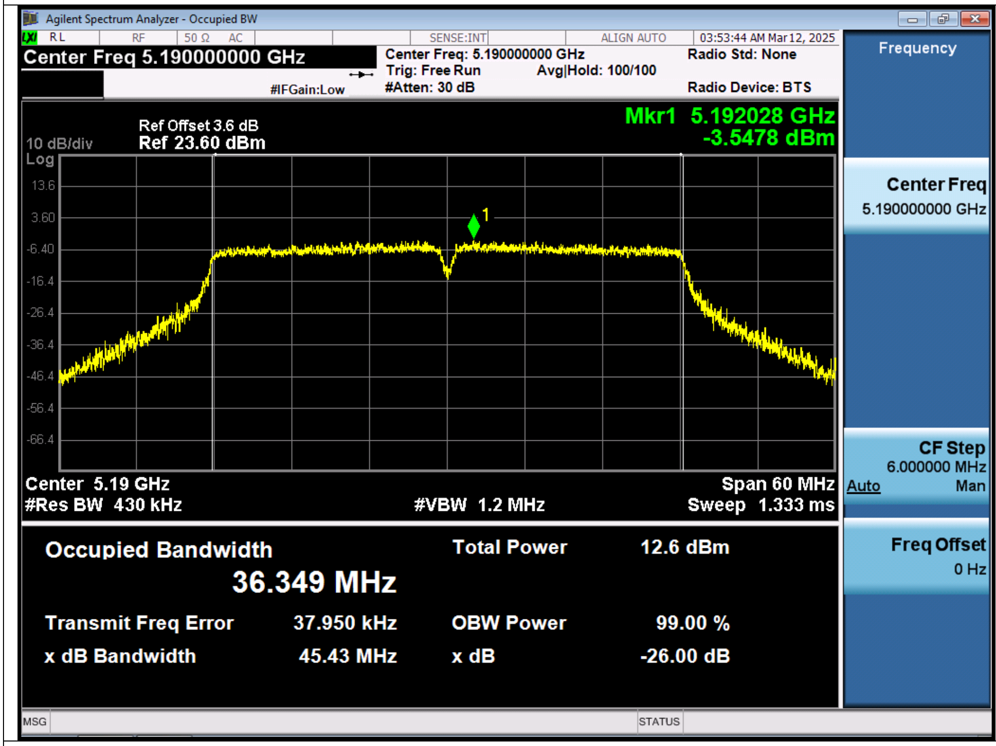
OBW NVNT n20 5200MHz



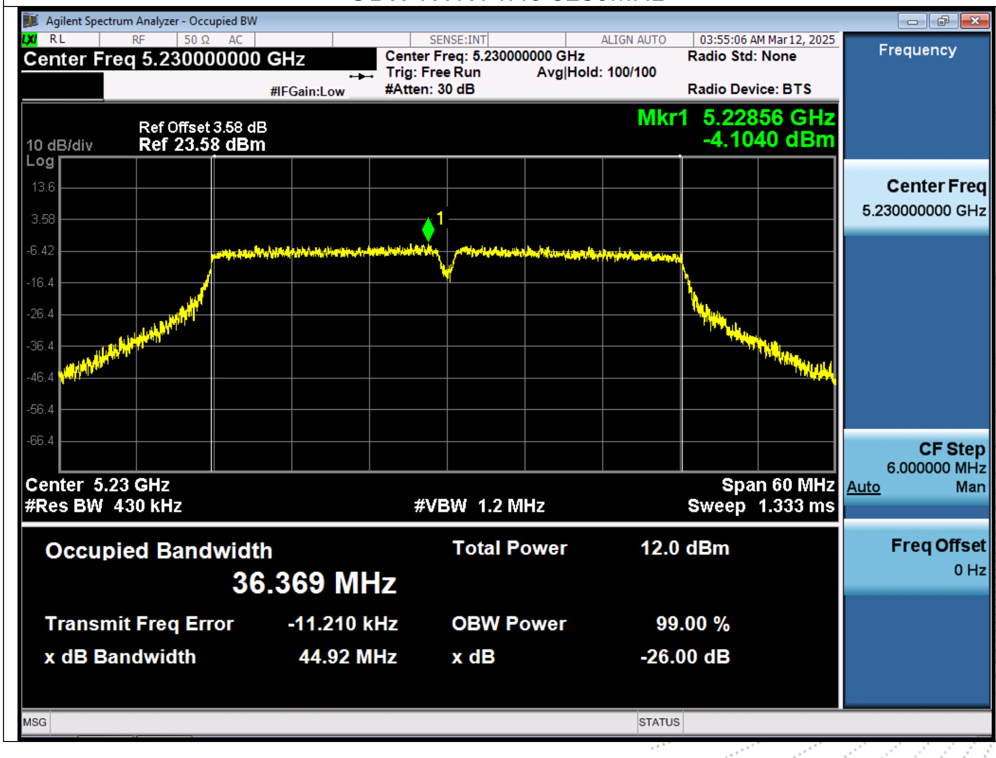
OBW NVNT n20 5240MHz



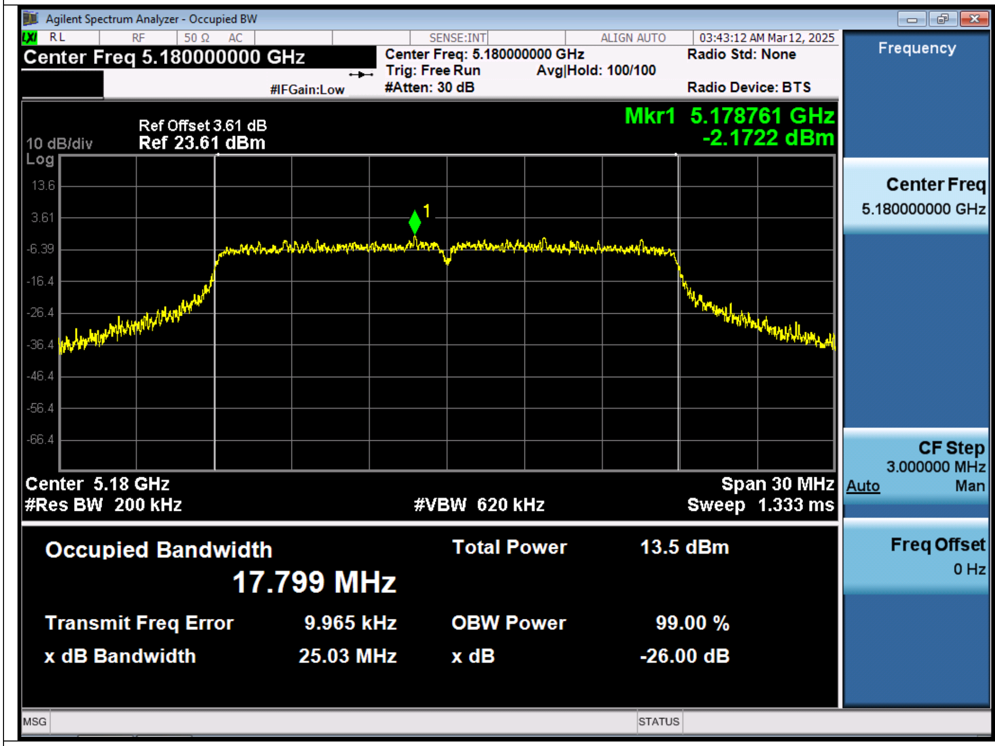
OBW NVNT n40 5190MHz



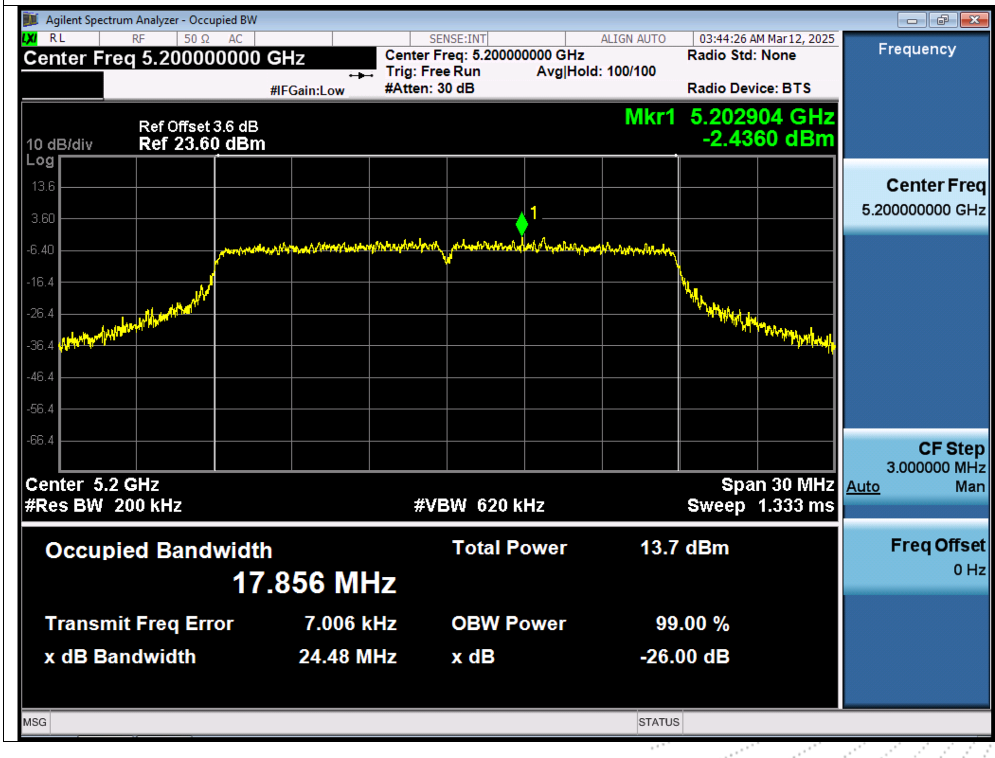
OBW NVNT n40 5230MHz



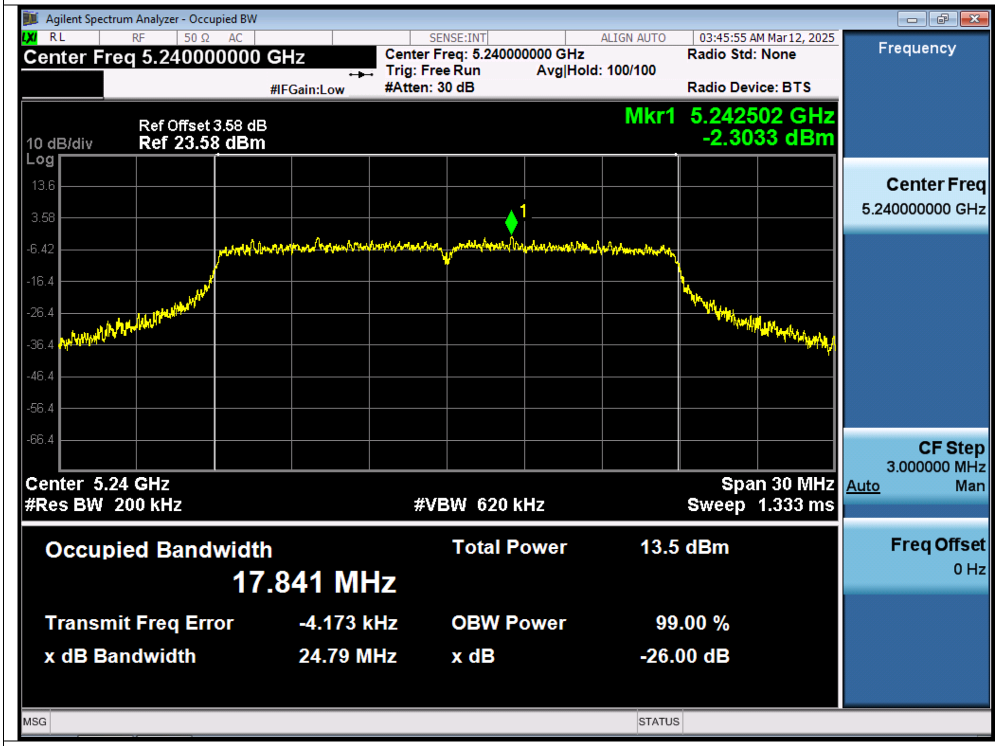
OBW NVNT ac20 5180MHz



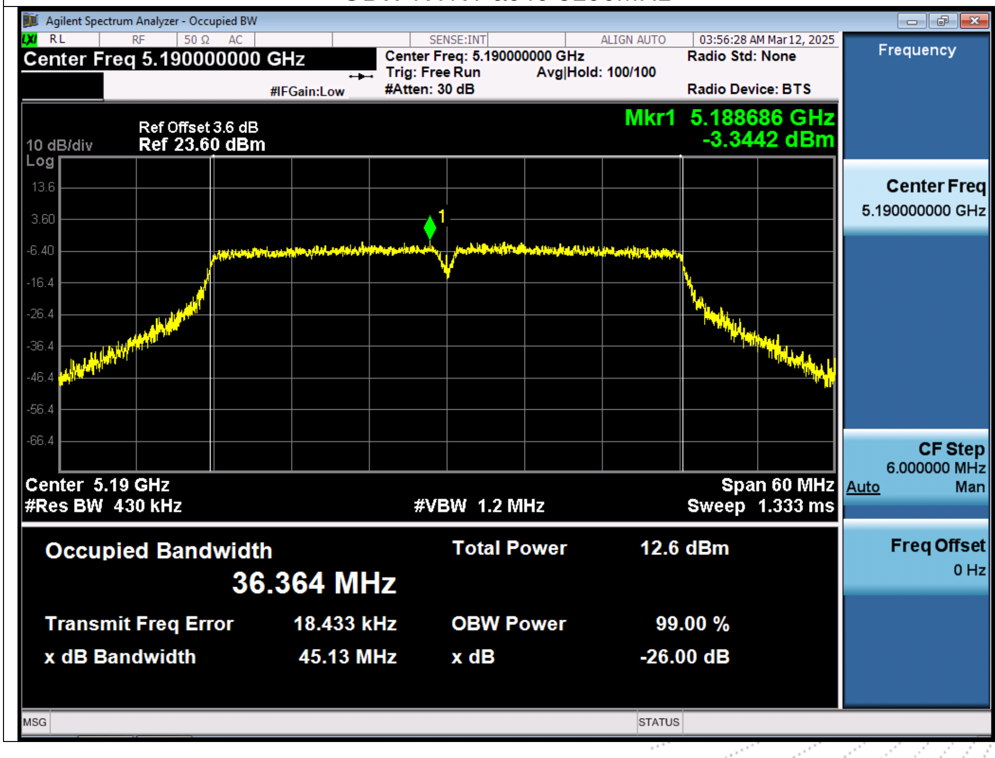
OBW NVNT ac20 5200MHz



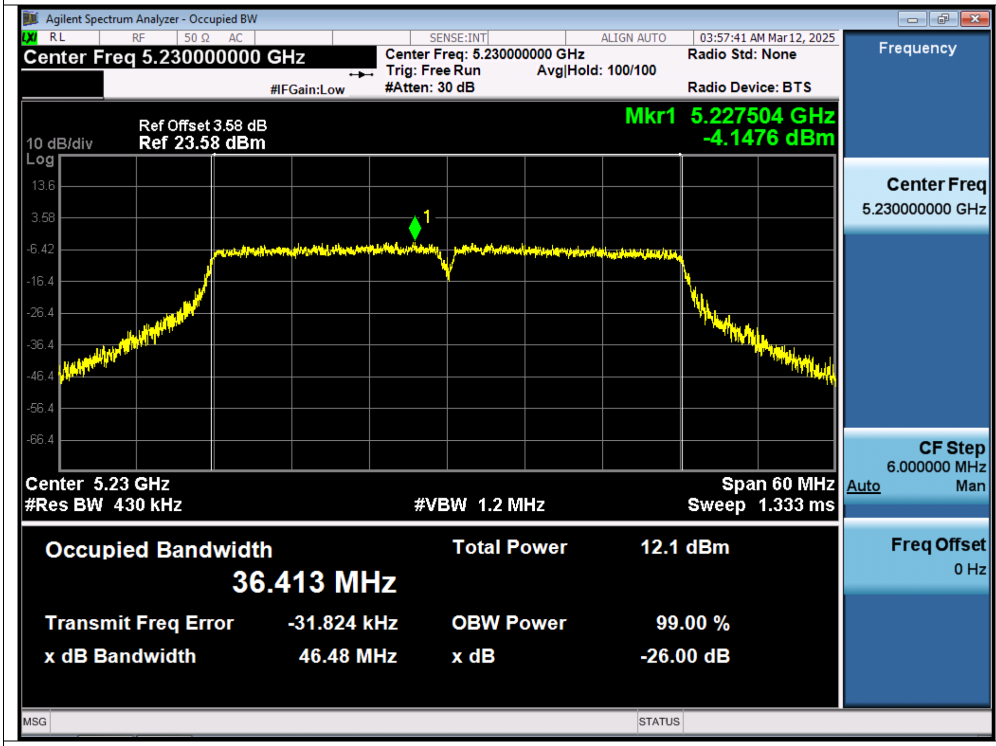
OBW NVNT ac20 5240MHz



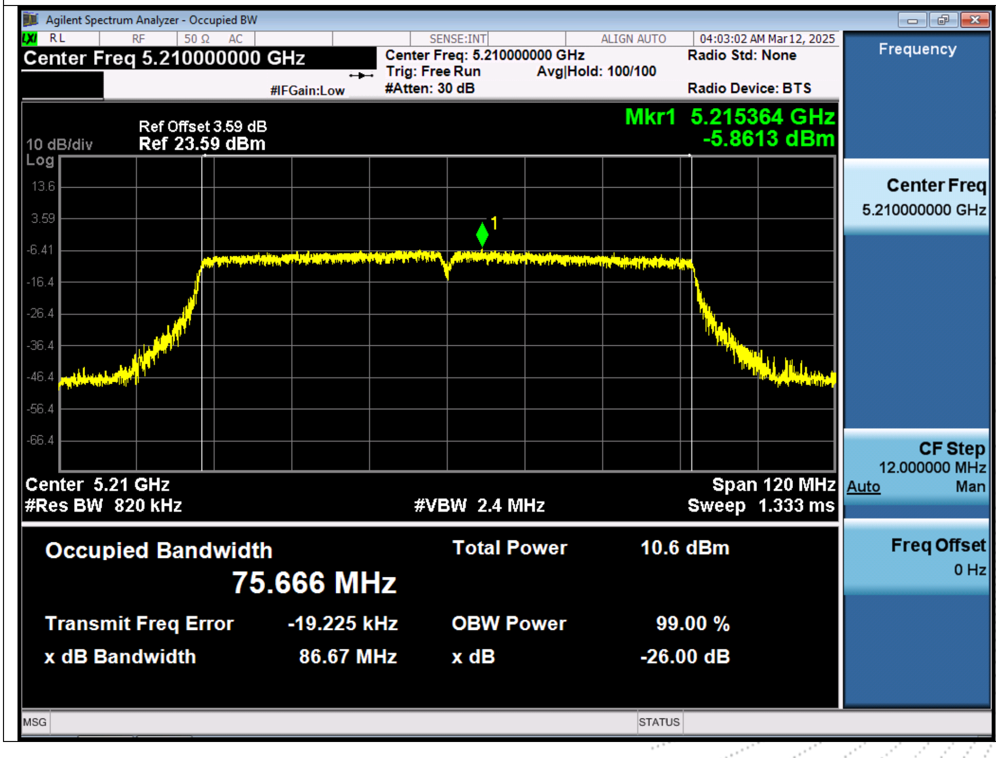
OBW NVNT ac40 5190MHz



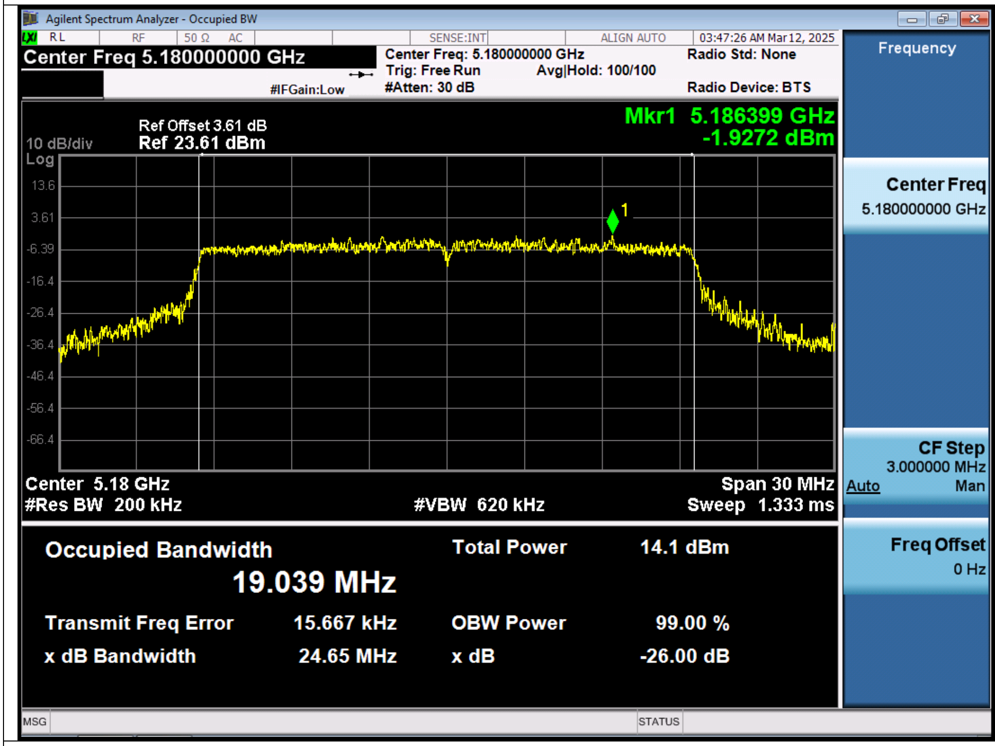
OBW NVNT ac40 5230MHz



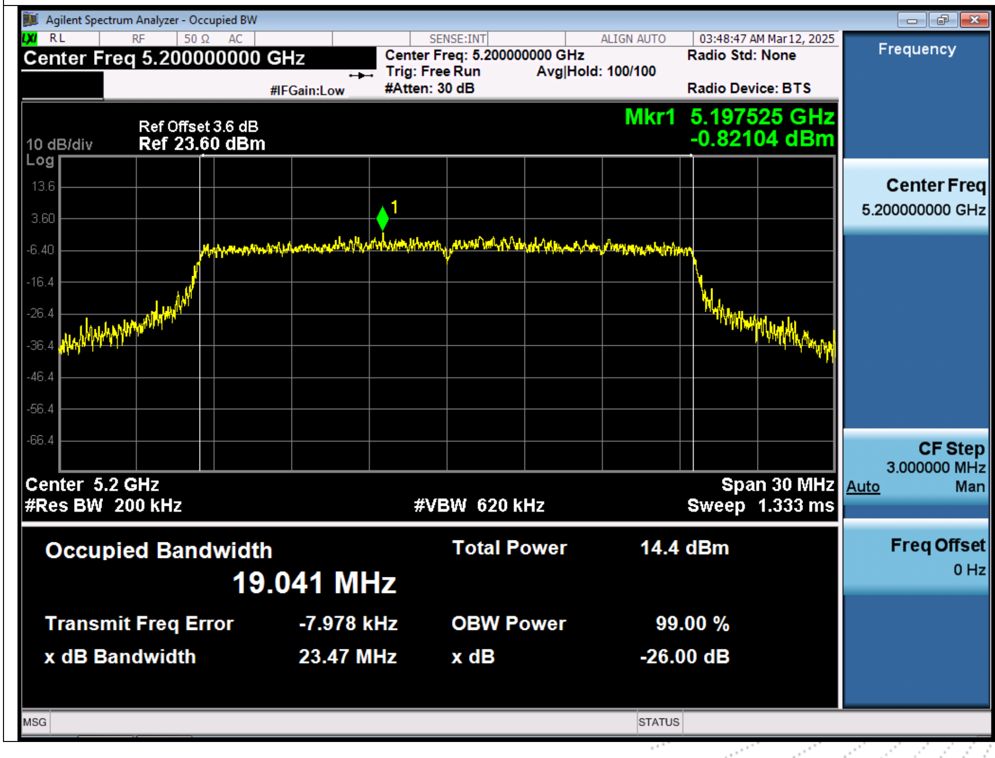
OBW NVNT ac80 5210MHz



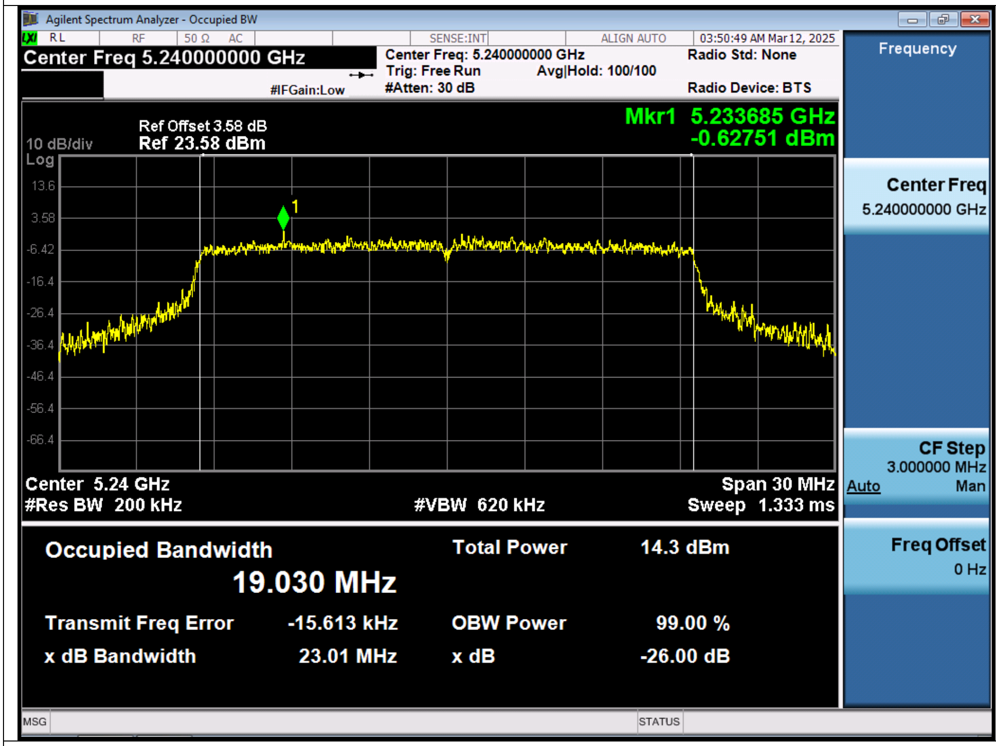
OBW NVNT ax20 5180MHz



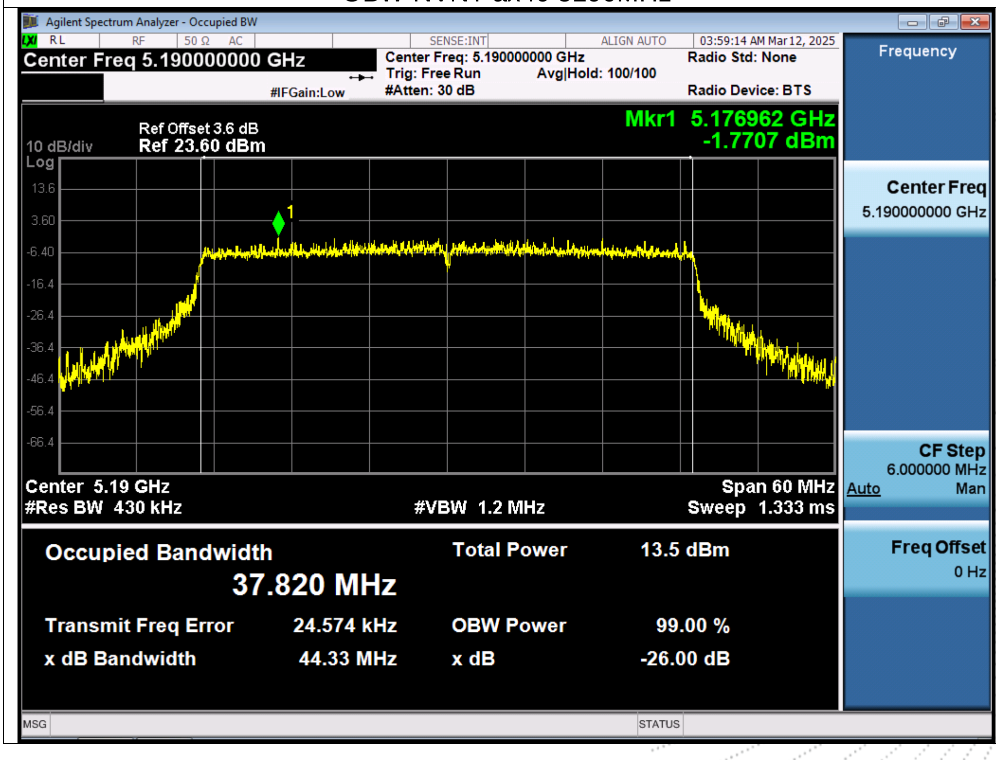
OBW NVNT ax20 5200MHz



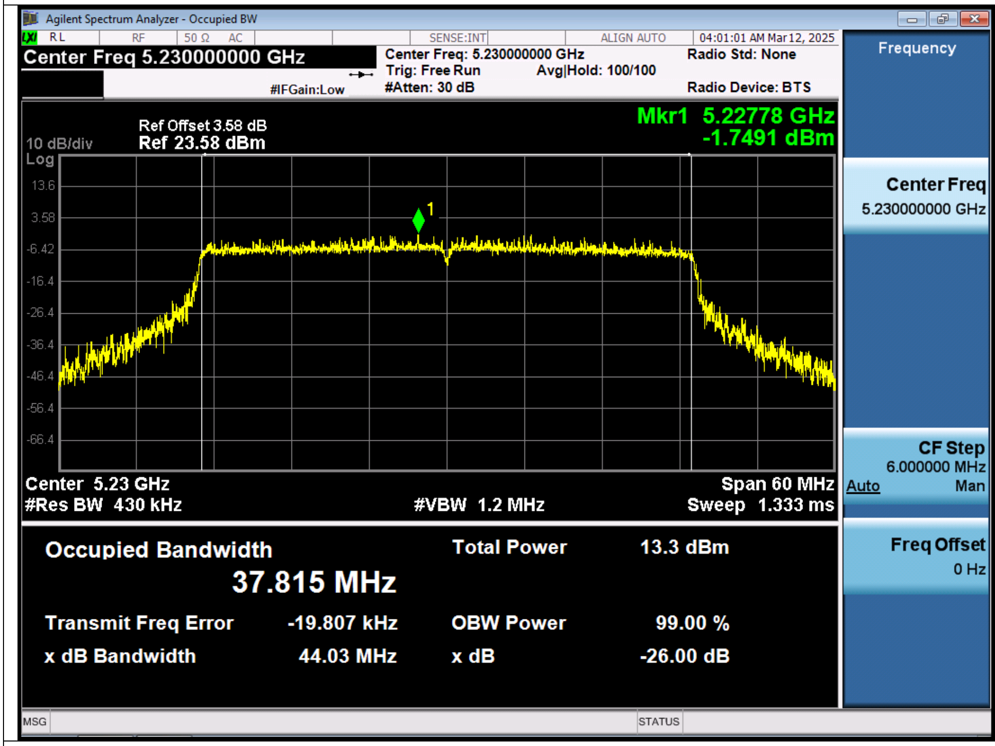
OBW NVNT ax20 5240MHz



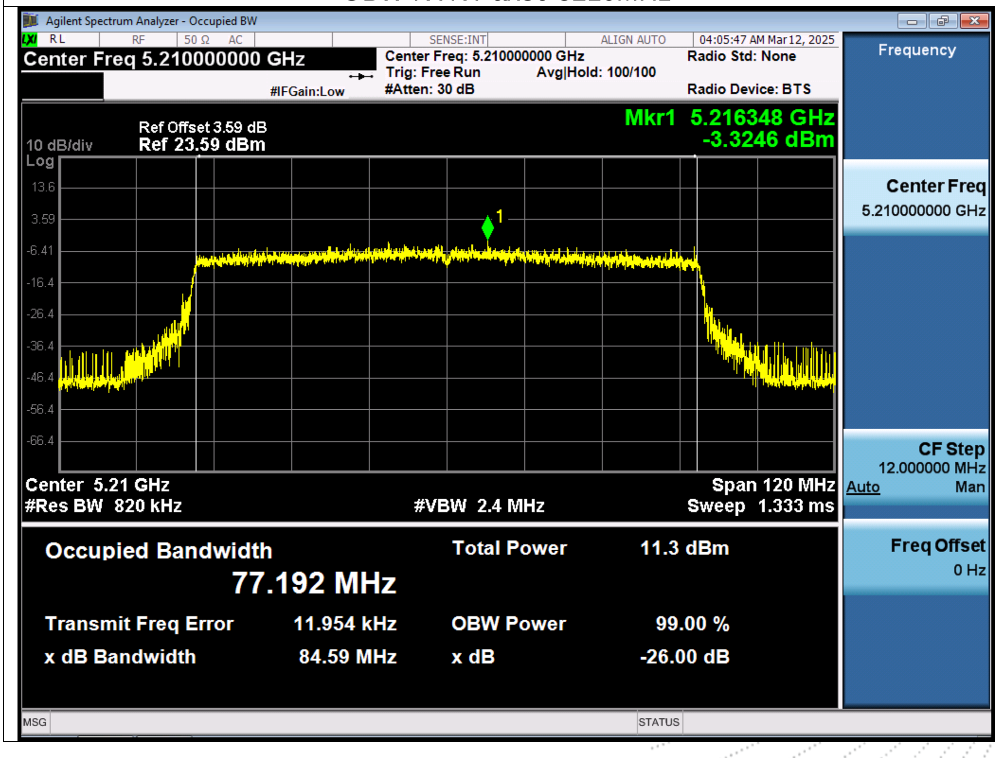
OBW NVNT ax40 5190MHz



OBW NVNT ax40 5230MHz



OBW NVNT ax80 5210MHz

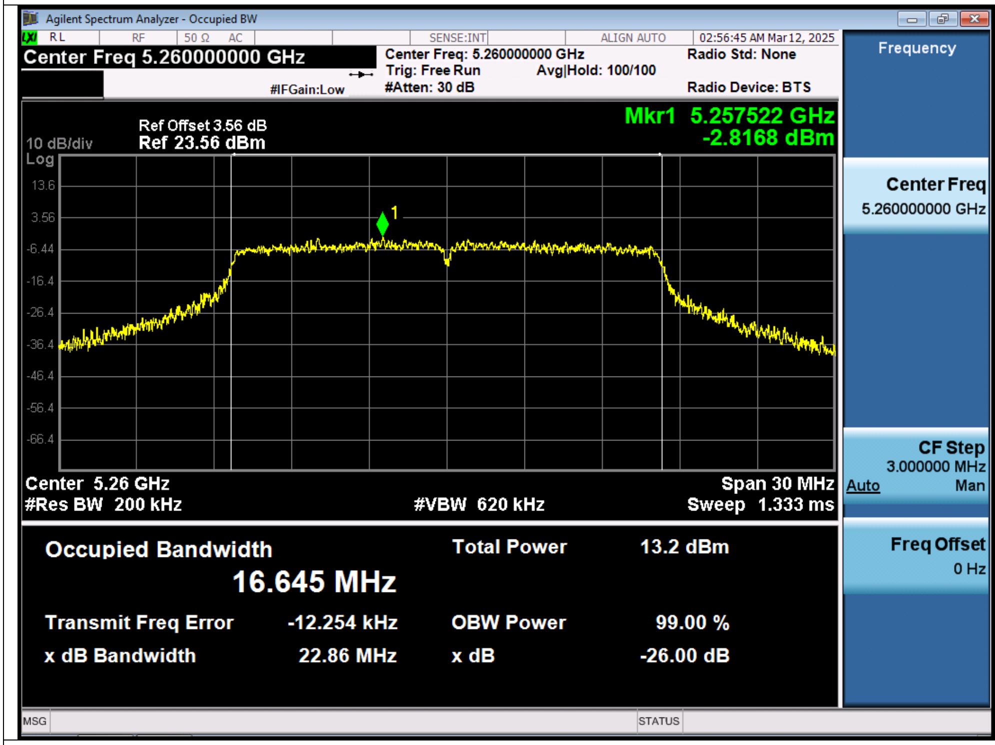


Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5260-5320MHz)		

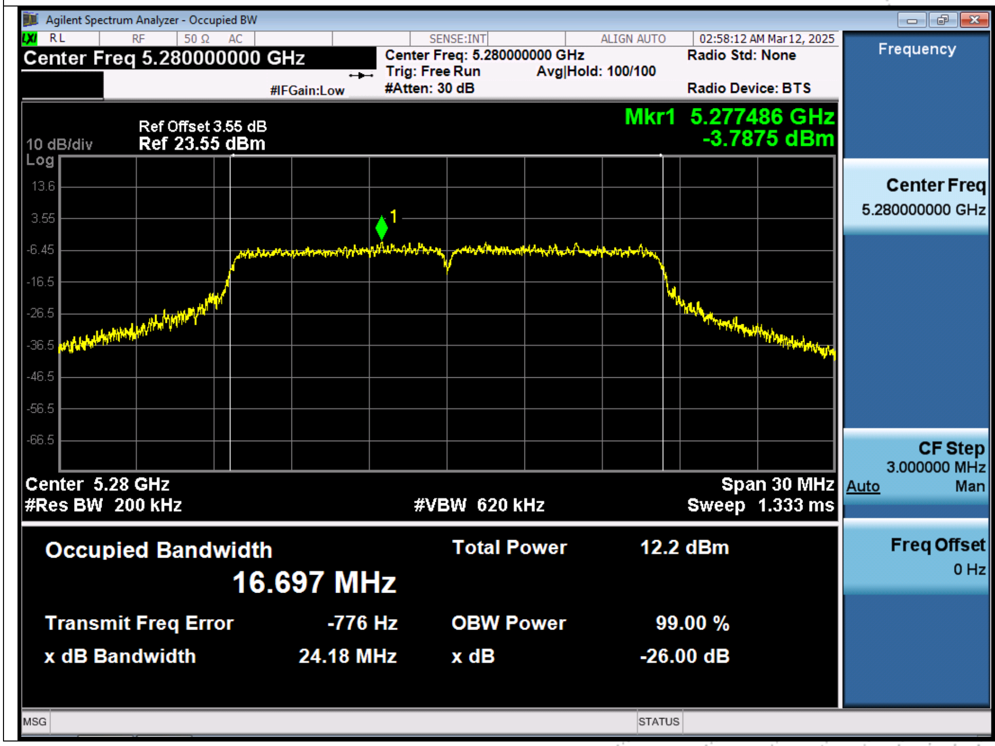
Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	26dB bandwidth (MHz)	Result
NVNT	a	5260	22.861	16.635	Pass
NVNT	a	5280	24.183	16.701	Pass
NVNT	a	5320	23.658	16.652	Pass
NVNT	n20	5260	24.006	17.811	Pass
NVNT	n20	5280	24.662	17.864	Pass
NVNT	n20	5320	23.707	17.806	Pass
NVNT	n40	5270	44.955	36.399	Pass
NVNT	n40	5310	44.941	36.345	Pass
NVNT	ac20	5260	24.290	17.811	Pass
NVNT	ac20	5280	24.836	17.846	Pass
NVNT	ac20	5320	24.310	17.818	Pass
NVNT	ac40	5270	45.330	36.449	Pass
NVNT	ac40	5310	46.349	36.357	Pass
NVNT	ac80	5290	84.785	75.617	Pass
NVNT	ax20	5260	25.470	19.038	Pass
NVNT	ax20	5280	24.342	19.032	Pass
NVNT	ax20	5320	23.728	18.977	Pass
NVNT	ax40	5270	42.561	37.866	Pass
NVNT	ax40	5310	44.630	37.870	Pass
NVNT	ax80	5290	83.515	77.119	Pass

Test Graphs

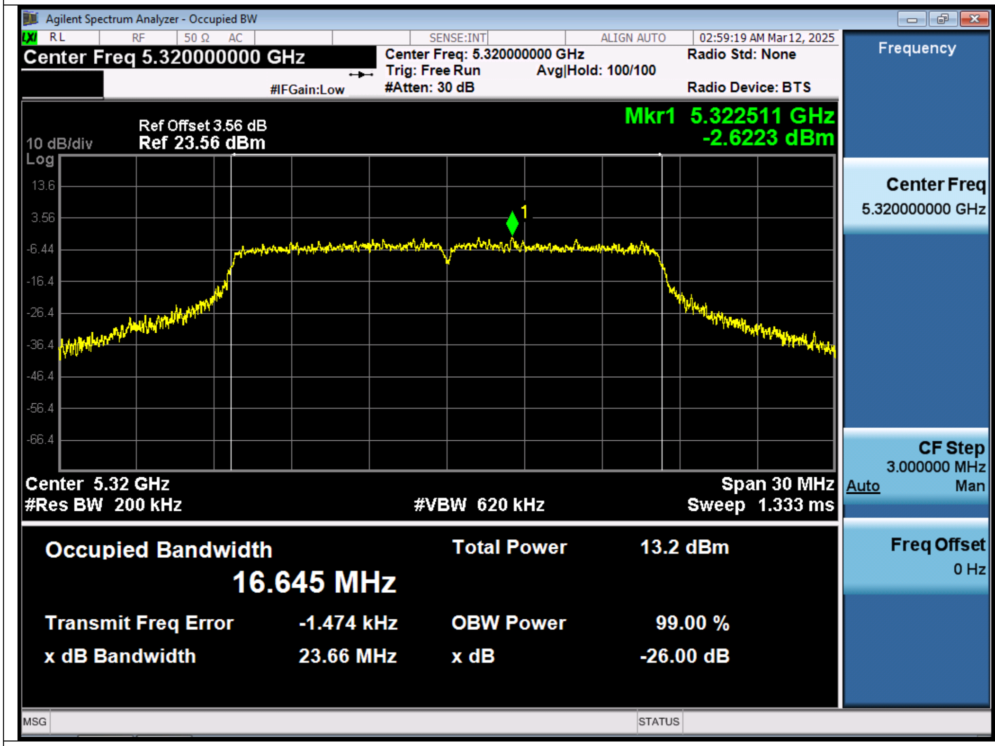
-26dB Bandwidth NVNT a 5260MHz



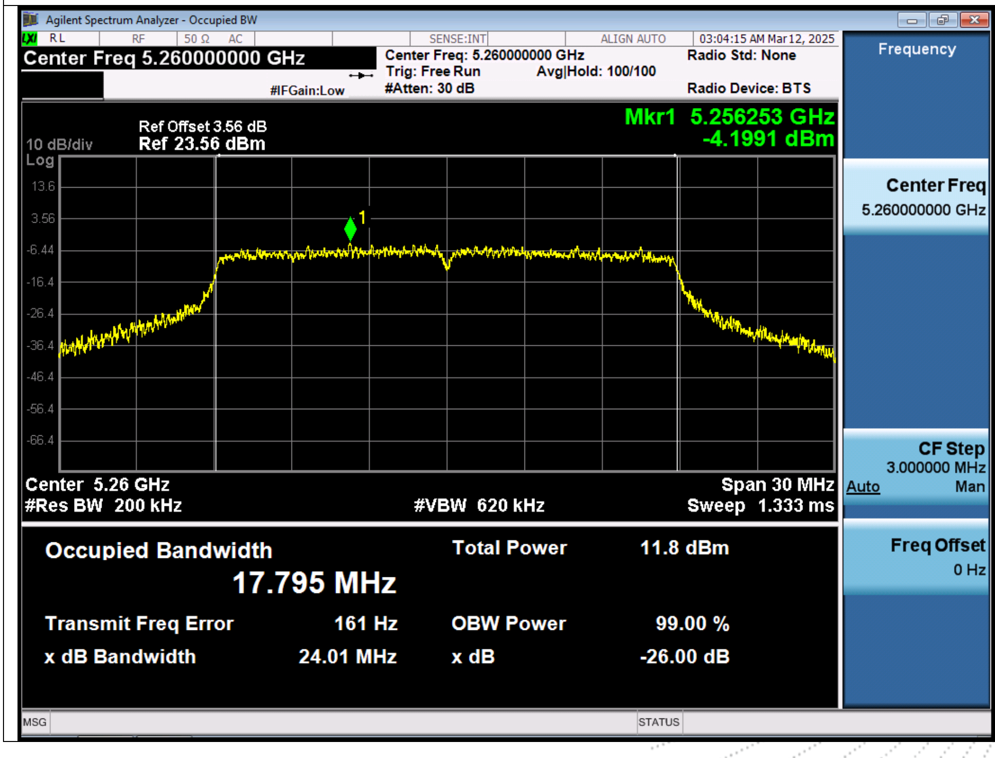
-26dB Bandwidth NVNT a 5280MHz



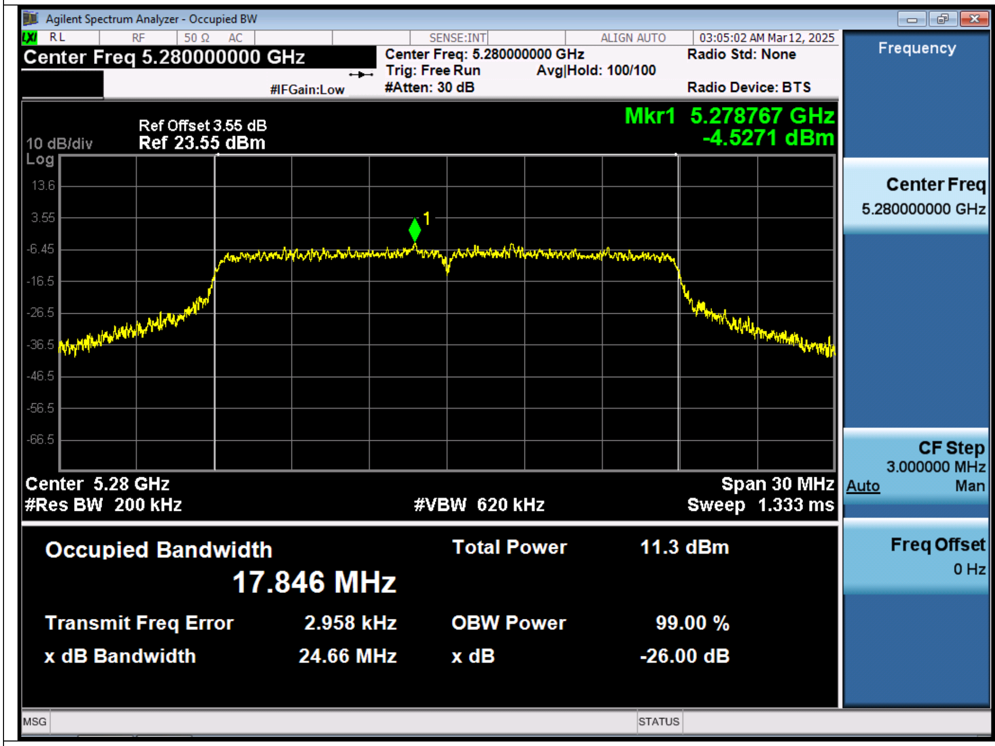
-26dB Bandwidth NVNT a 5320MHz



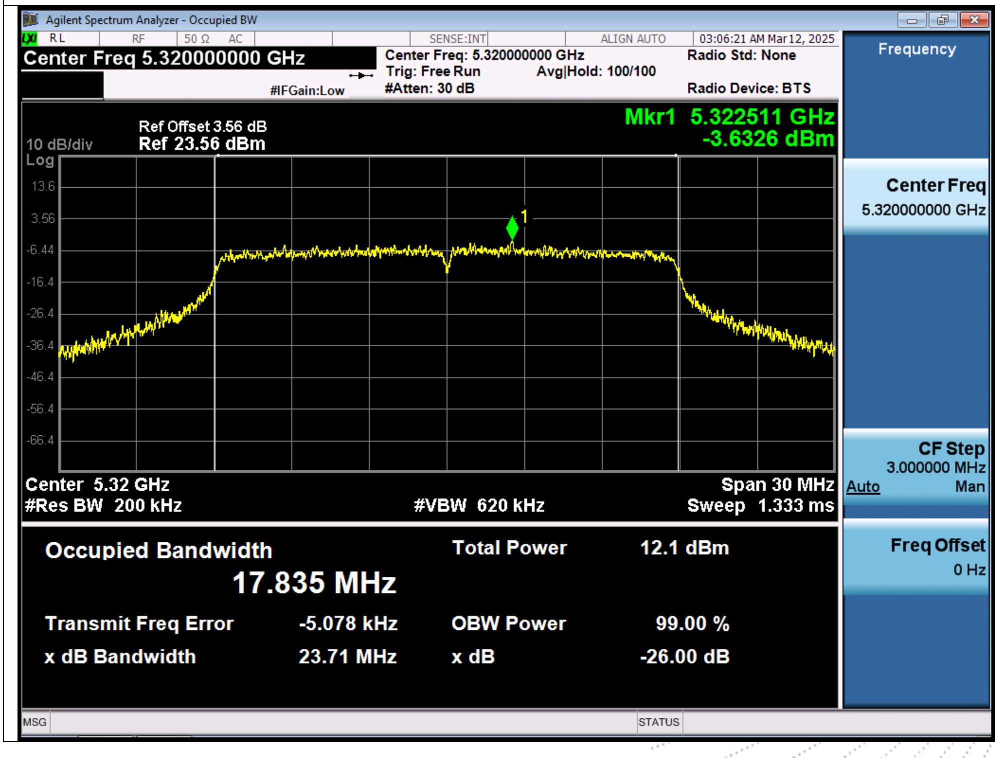
-26dB Bandwidth NVNT n20 5260MHz



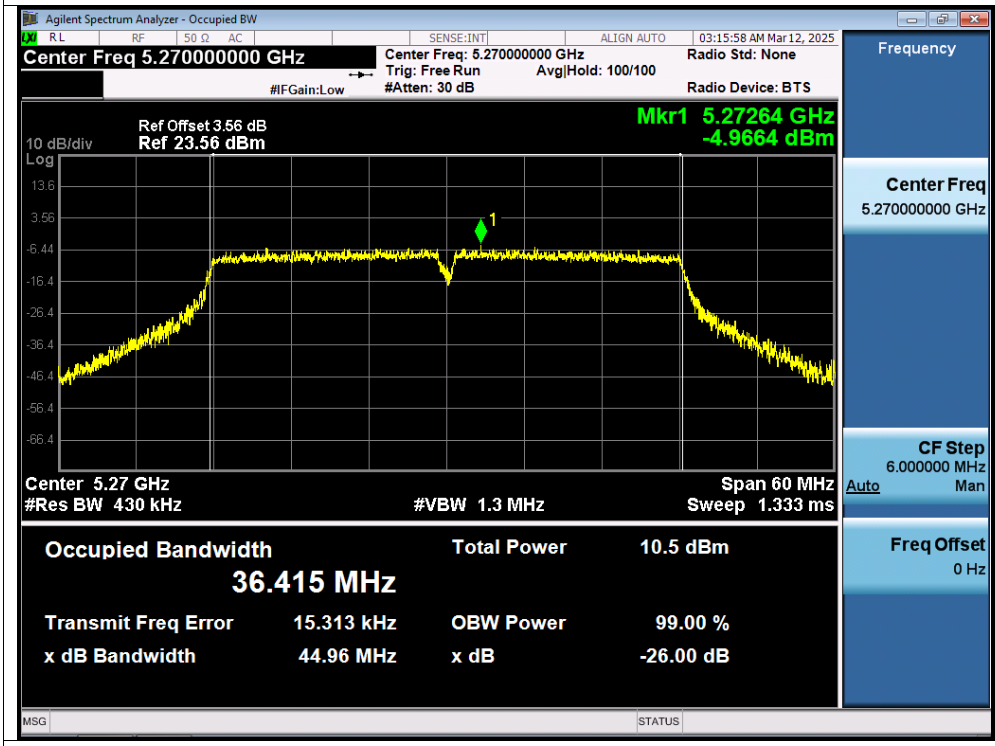
-26dB Bandwidth NVNT n20 5280MHz



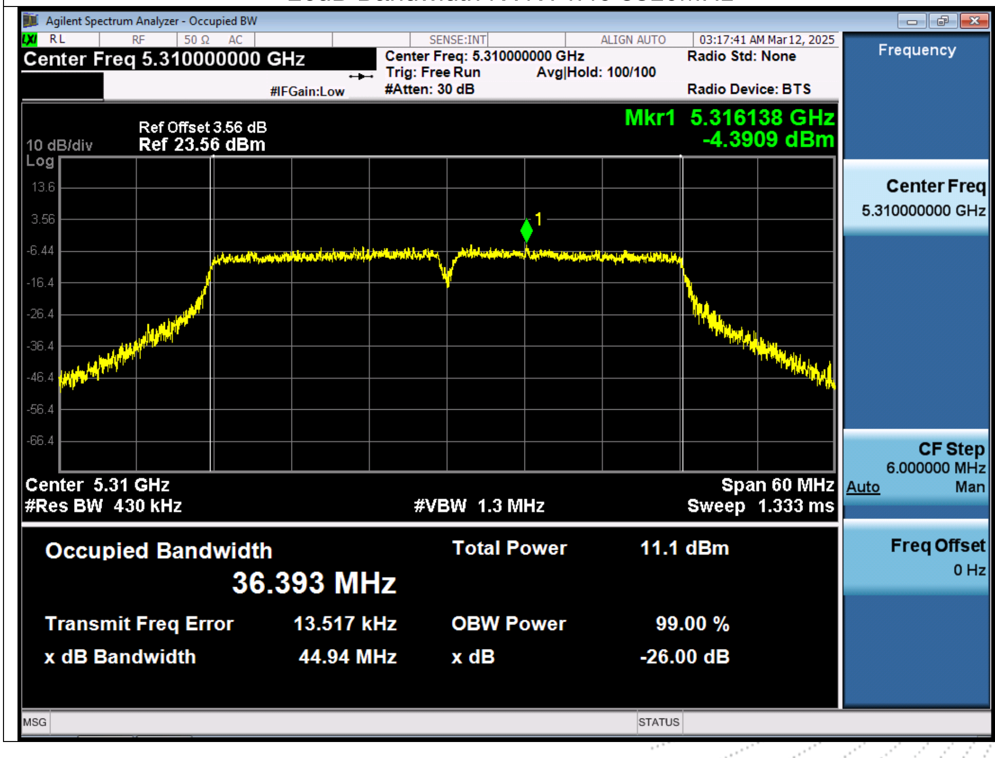
-26dB Bandwidth NVNT n20 5320MHz



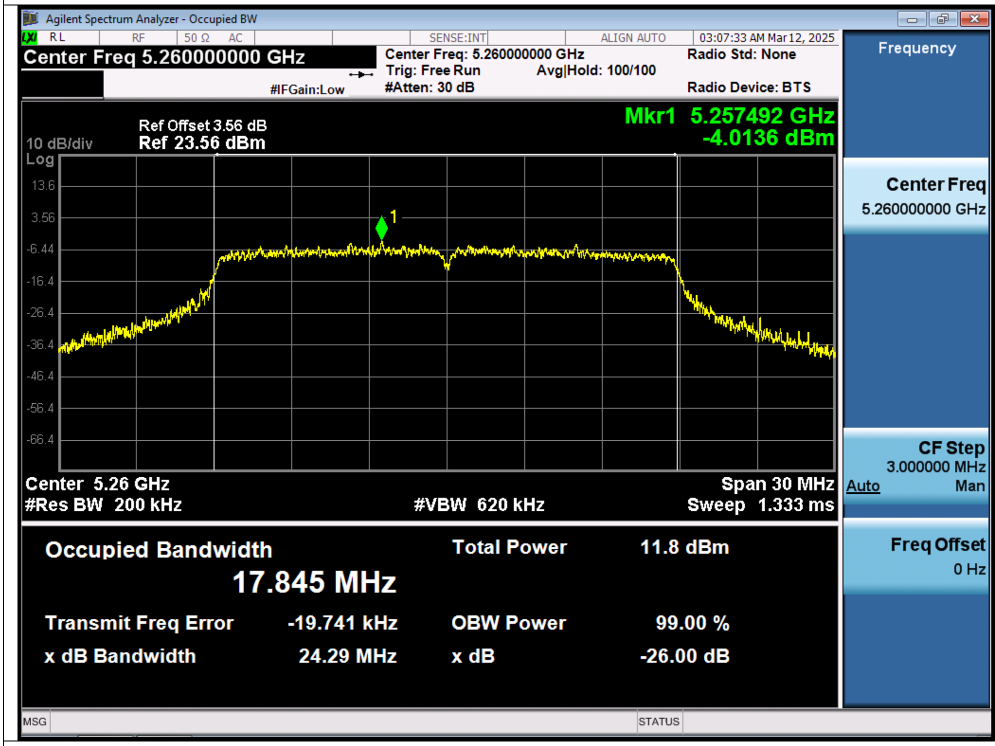
-26dB Bandwidth NVNT n40 5270MHz



-26dB Bandwidth NVNT n40 5310MHz



-26dB Bandwidth NVNT ac20 5260MHz



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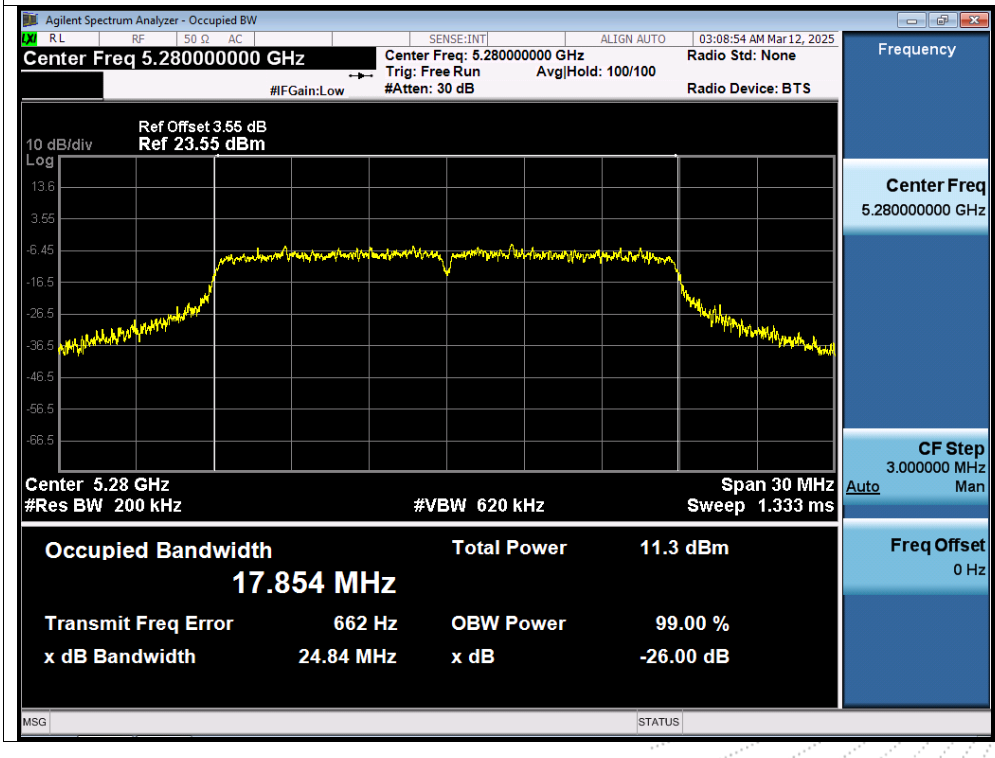

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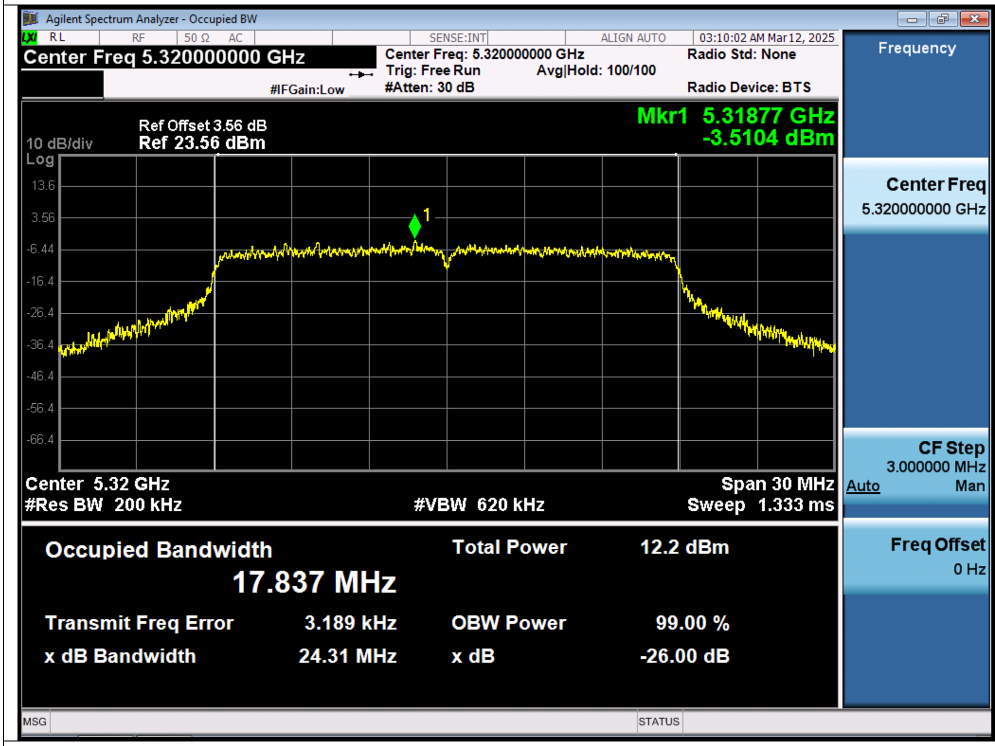

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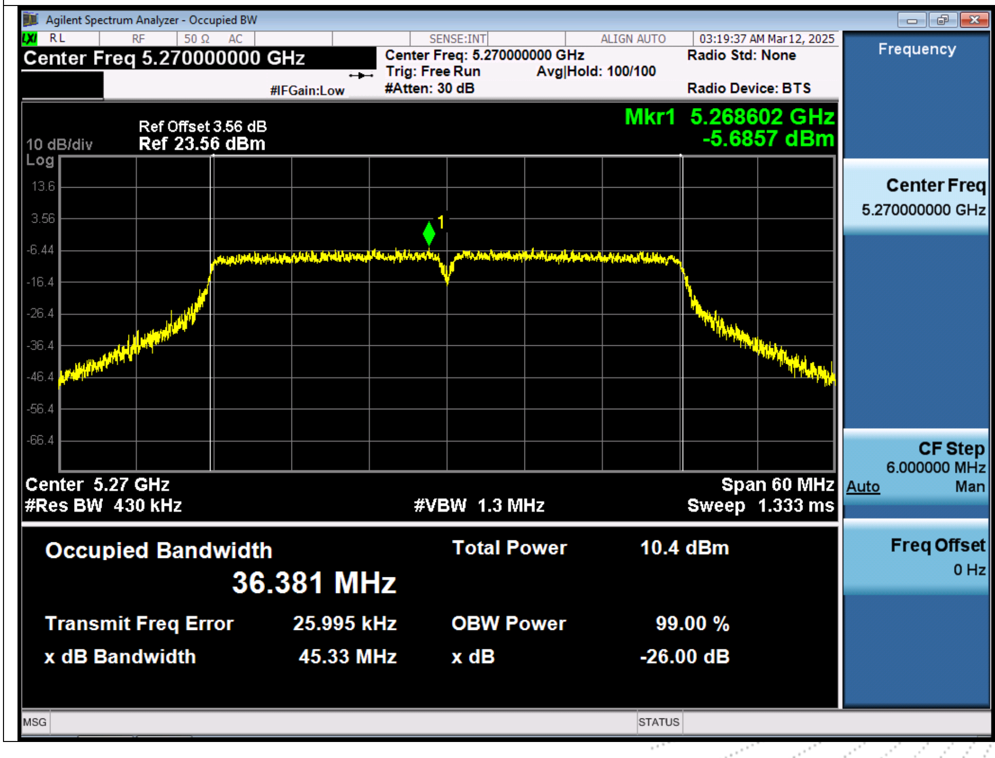
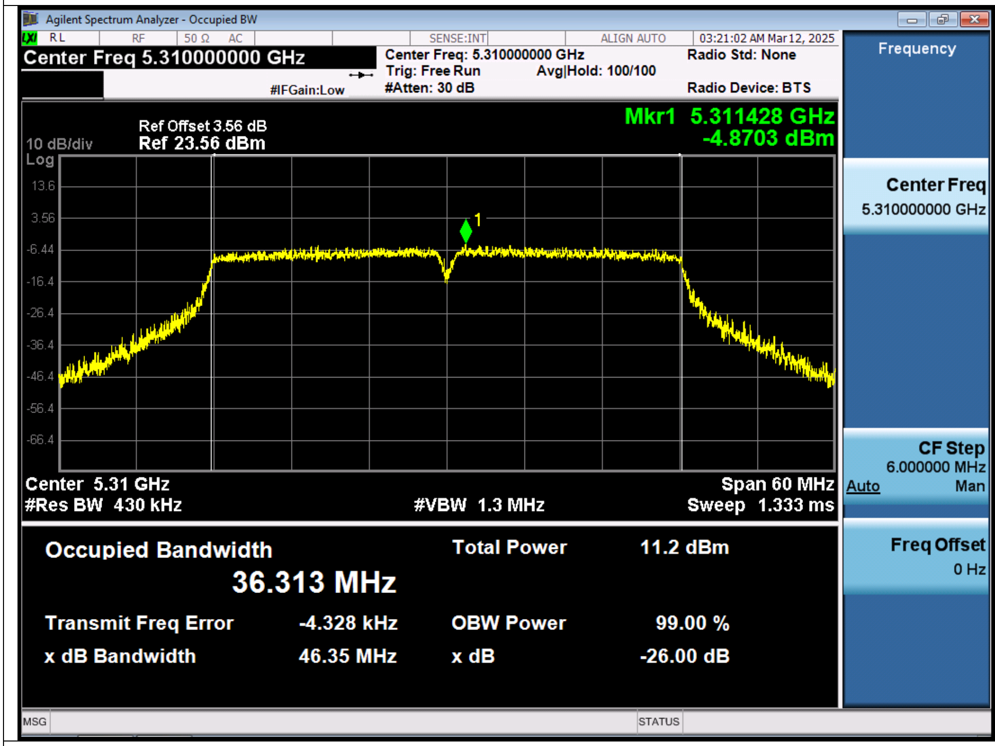
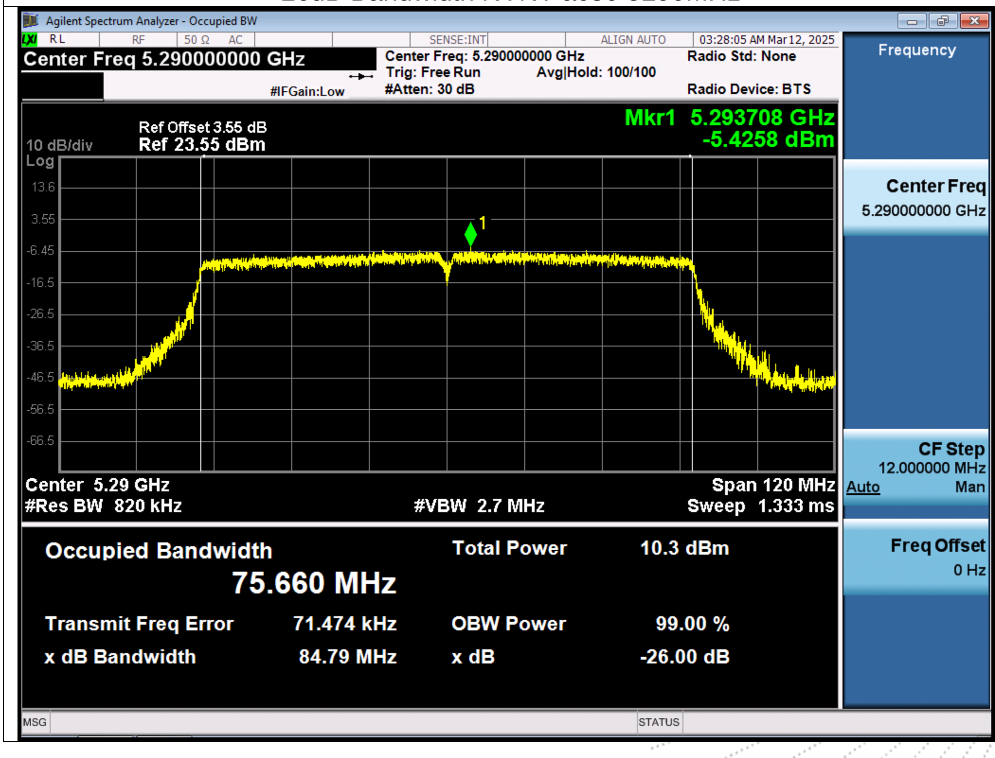


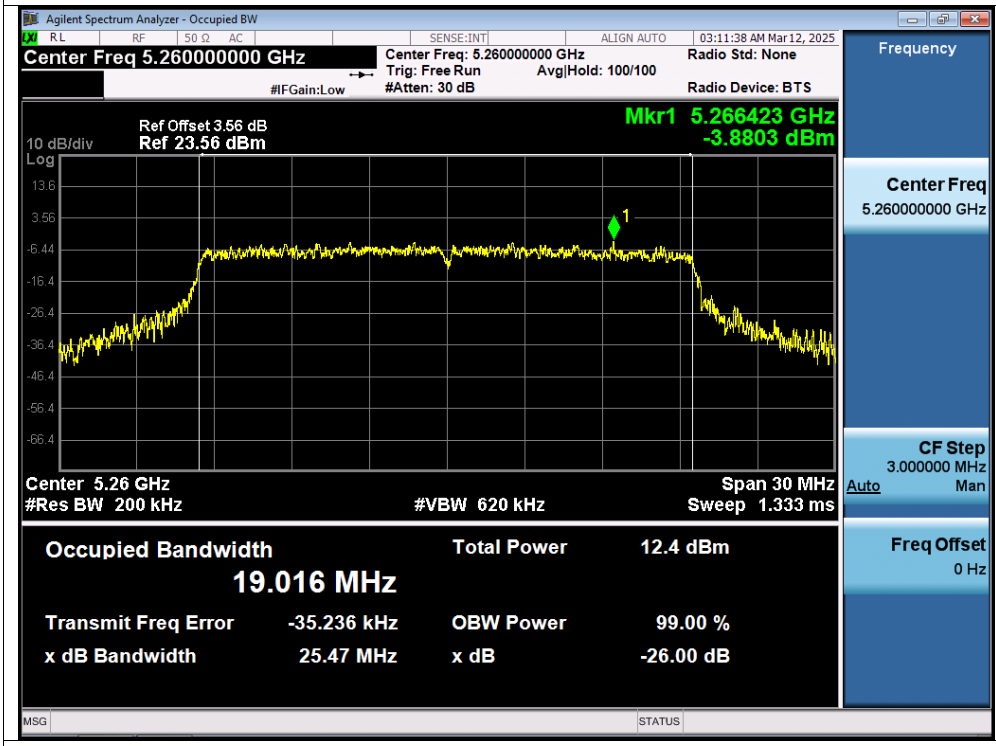
-26dB Bandwidth NVNT ac40 5310MHz



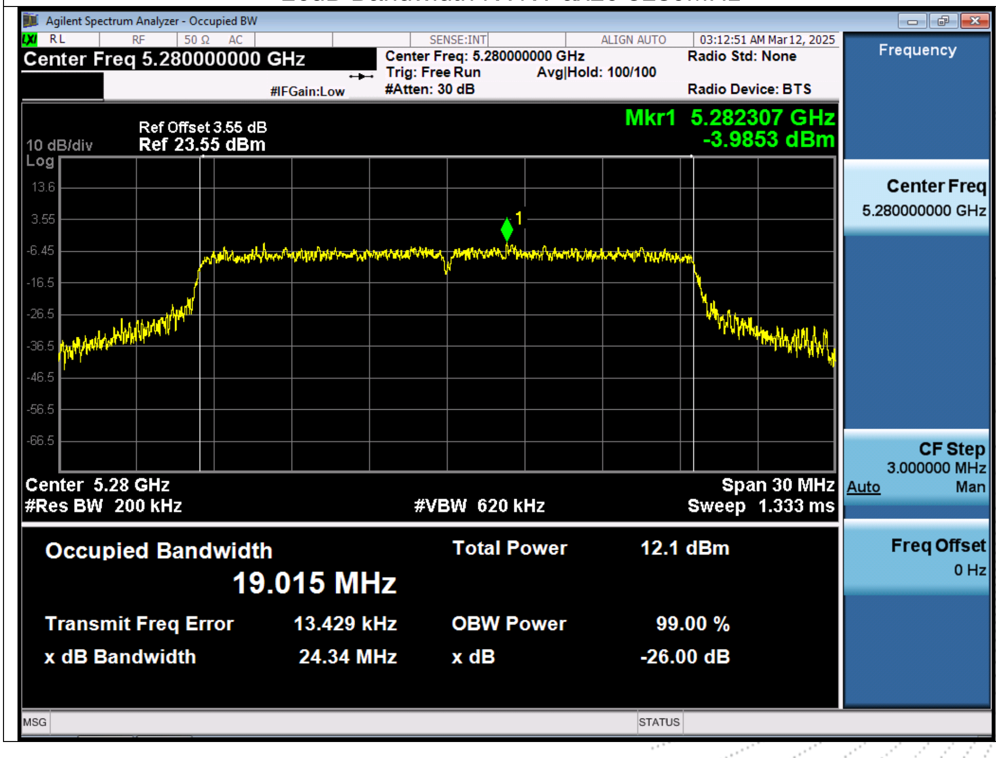
-26dB Bandwidth NVNT ac80 5290MHz



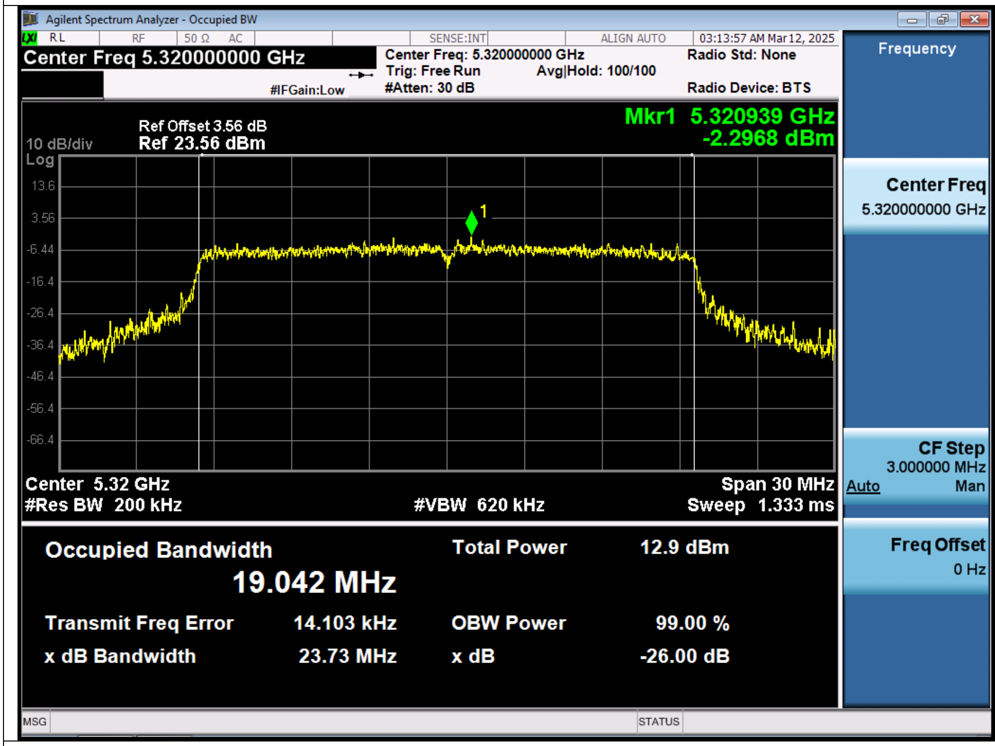
-26dB Bandwidth NVNT ax20 5260MHz



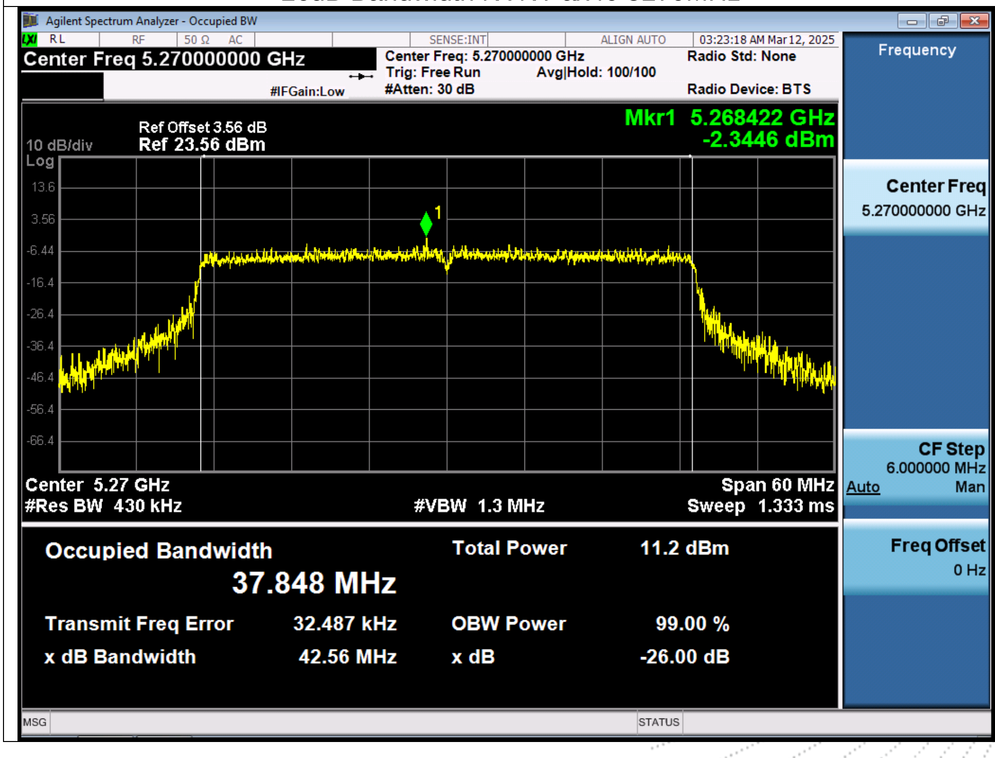
-26dB Bandwidth NVNT ax20 5280MHz



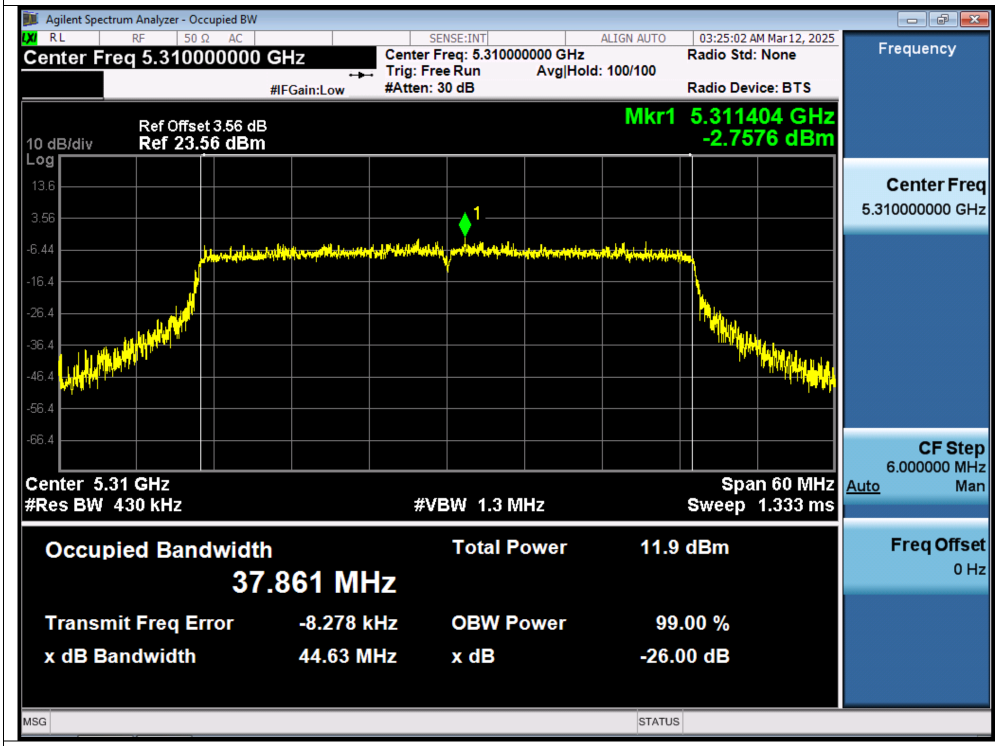
-26dB Bandwidth NVNT ax20 5320MHz



-26dB Bandwidth NVNT ax40 5270MHz



-26dB Bandwidth NVNT ax40 5310MHz



-26dB Bandwidth NVNT ax80 5290MHz