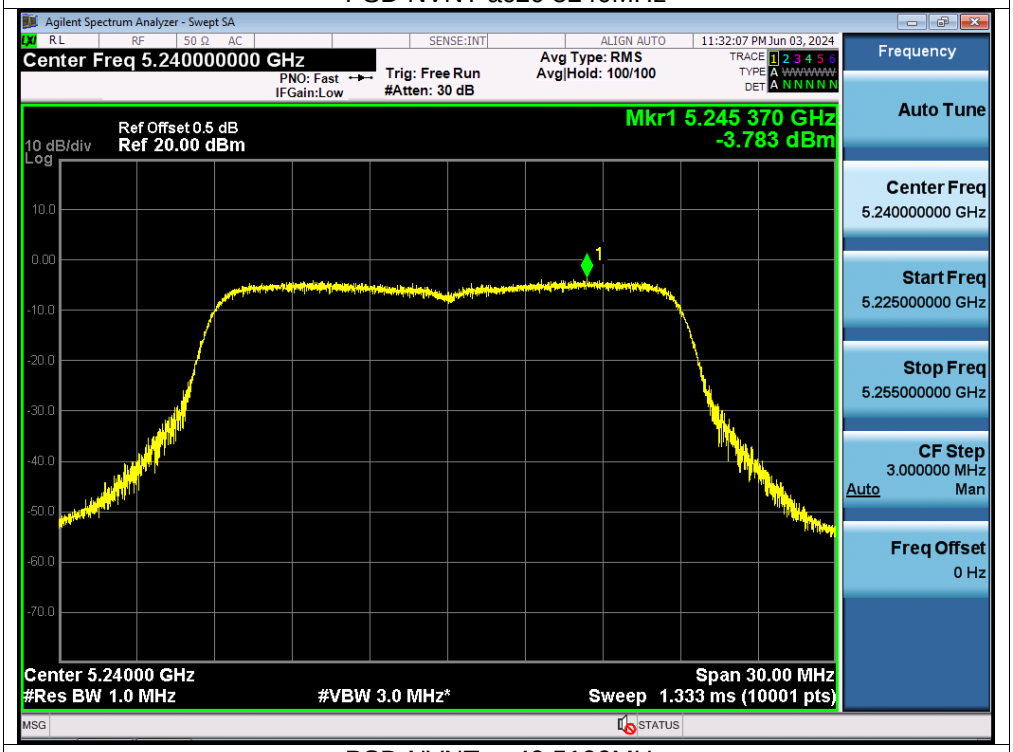
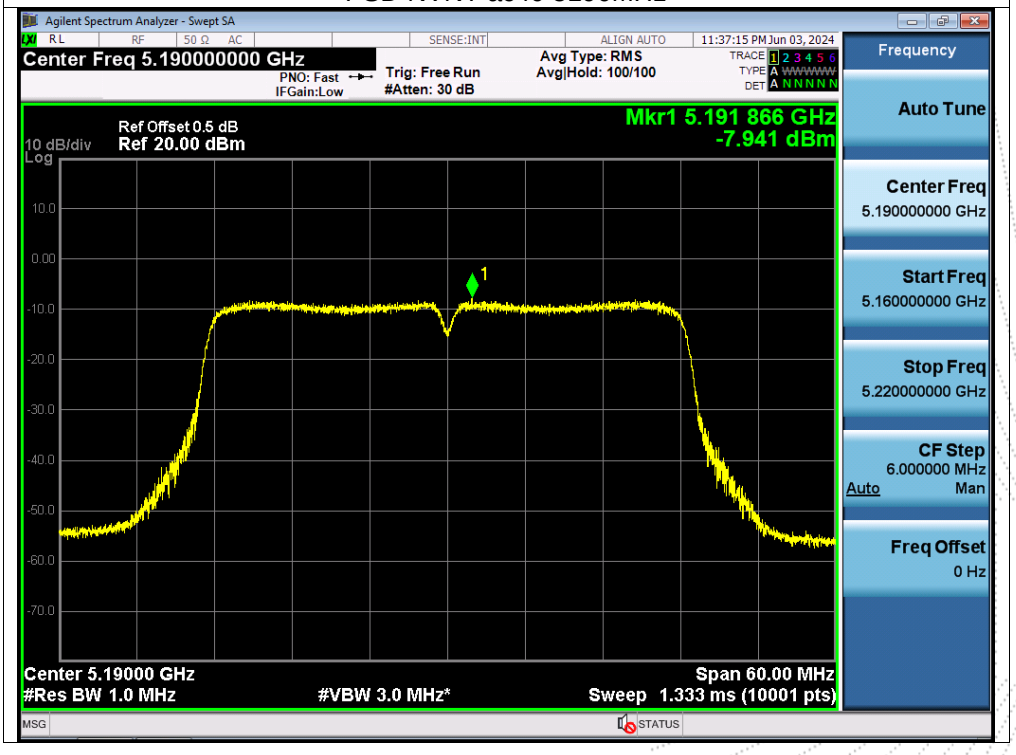
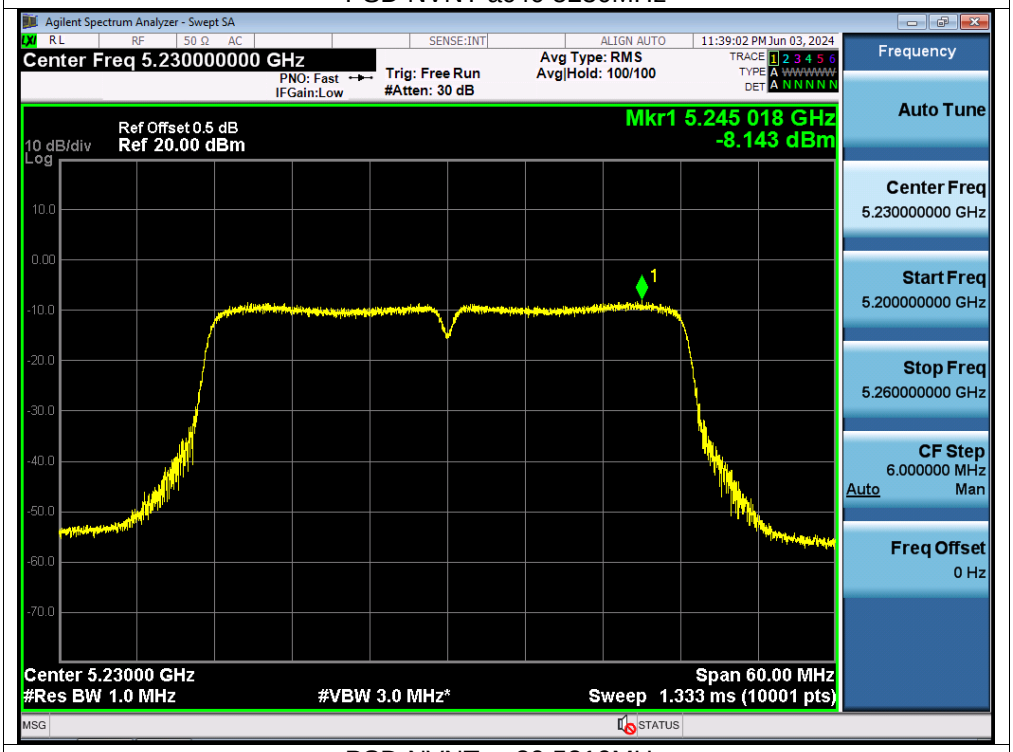
PSD NVNT ac20 5240MHz



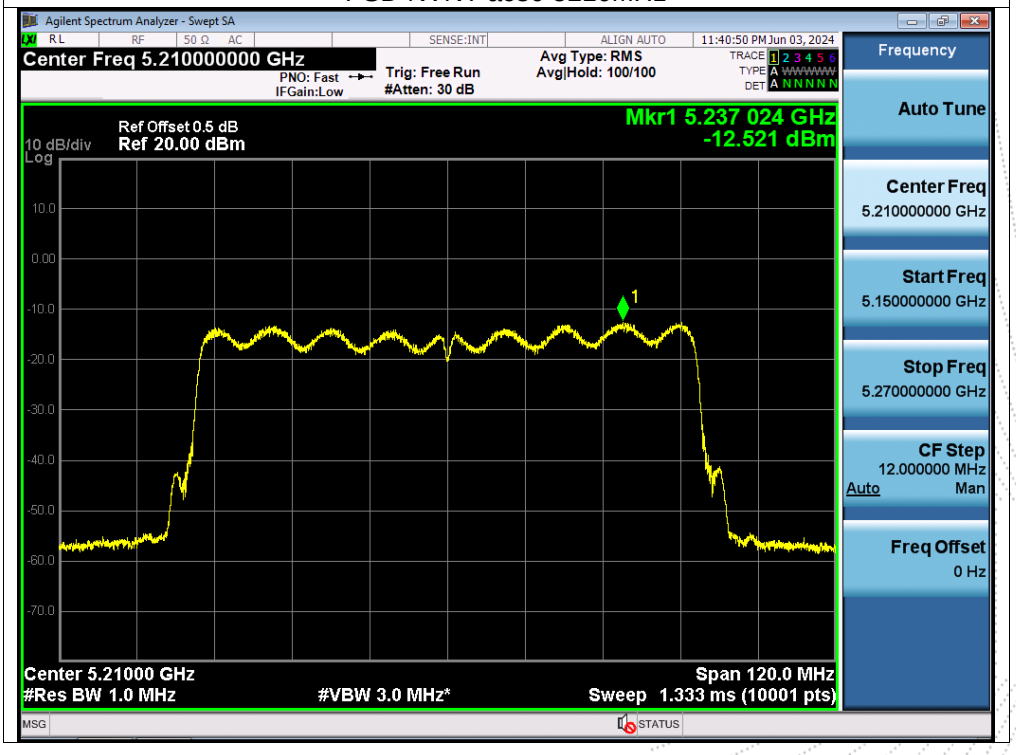
PSD NVNT ac40 5190MHz



PSD NVNT ac40 5230MHz



PSD NVNT ac80 5210MHz



Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	AC 120V/60HZ
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Measured Power Density (dBm/MHz)			Limit (dBm/MHz)	Result
			ANT A	ANT B	Total		
NVNT	a	5745	**-6.01**	-6.75	/	30	PASS
NVNT	a	5785	-6.67	-7.61	/	30	PASS
NVNT	a	5825	-7.68	-8.22	/	30	PASS
NVNT	n20	5745	-7.19	-7.89	-4.52	28.73	PASS
NVNT	n20	5785	-7.82	-8.96	-5.34	28.73	PASS
NVNT	n20	5825	-9.09	-9.75	-6.40	28.73	PASS
NVNT	n40	5755	-11.4	-12.15	-8.75	28.73	PASS
NVNT	n40	5795	-12.23	-13.24	-9.70	28.73	PASS
NVNT	ac20	5745	-6.97	-7.71	-4.31	28.73	PASS
NVNT	ac20	5785	-7.9	-8.97	-5.39	28.73	PASS
NVNT	ac20	5825	-9.09	-9.37	-6.22	28.73	PASS
NVNT	ac40	5755	-11.64	-12.17	-8.89	28.73	PASS
NVNT	ac40	5795	-12.57	-13.11	-9.82	28.73	PASS
NVNT	ac80	5775	-16.1	-16.75	-13.40	28.73	PASS

Note:
Antenna A gain: 3.42 dBi, Antenna B gain: 4.26 dBi, Directional gain=[GainANT + 10 log(NANT) dBi] =7.27 dbi>6dbi
Limit=30-(7.27-6)=28.73 dbi

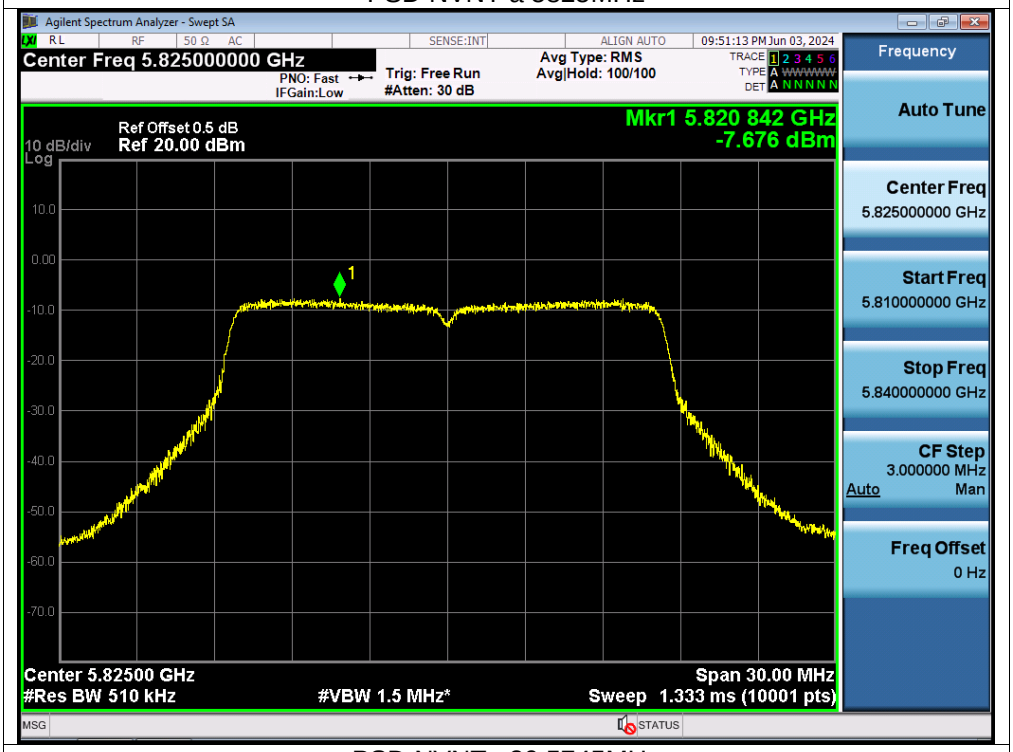
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

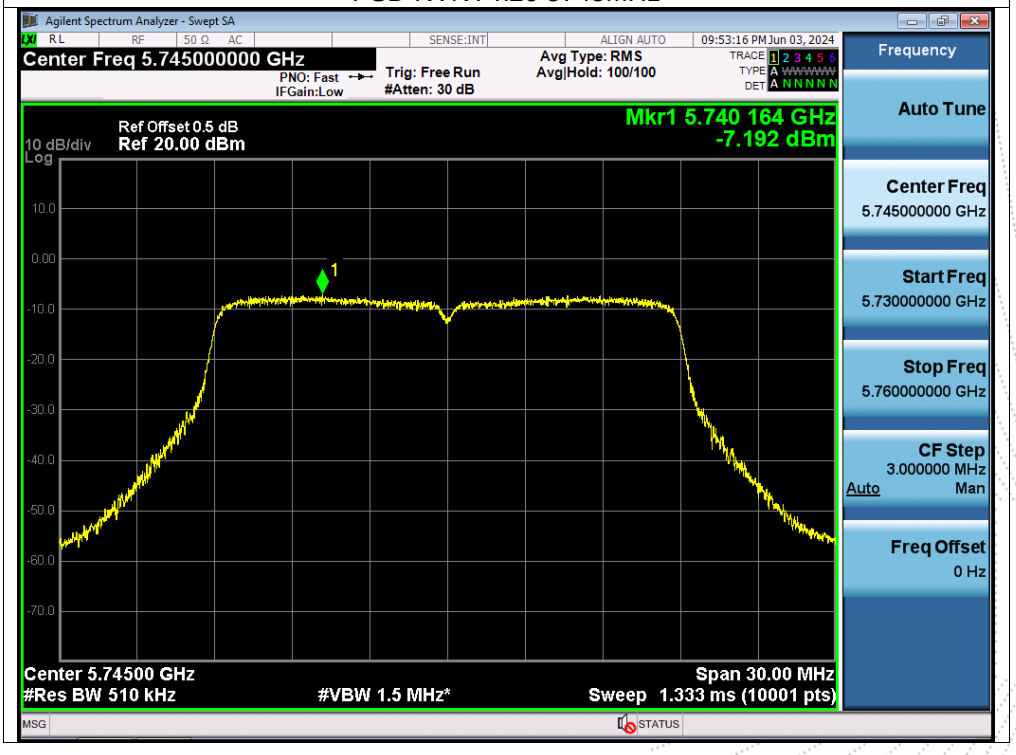
PSD NVNT a 5745MHz

PSD NVNT a 5785MHz

PSD NVNT a 5825MHz



PSD NVNT n20 5745MHz

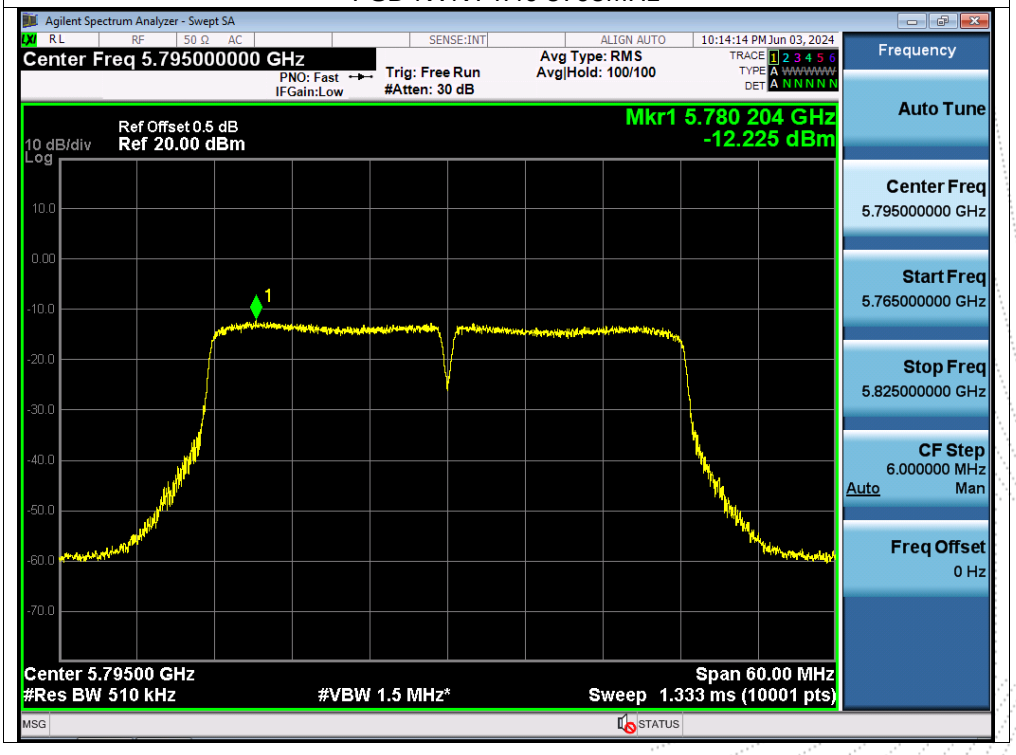


PSD NVNT n20 5785MHz

PSD NVNT n20 5825MHz

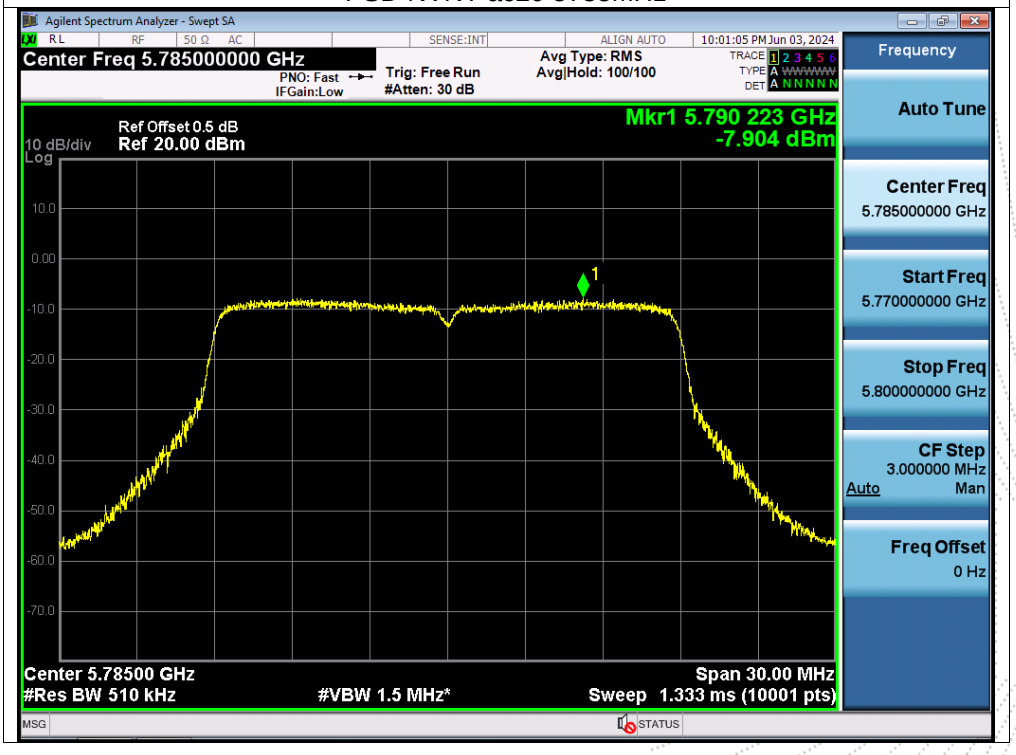
PSD NVNT n40 5755MHz

PSD NVNT n40 5795MHz



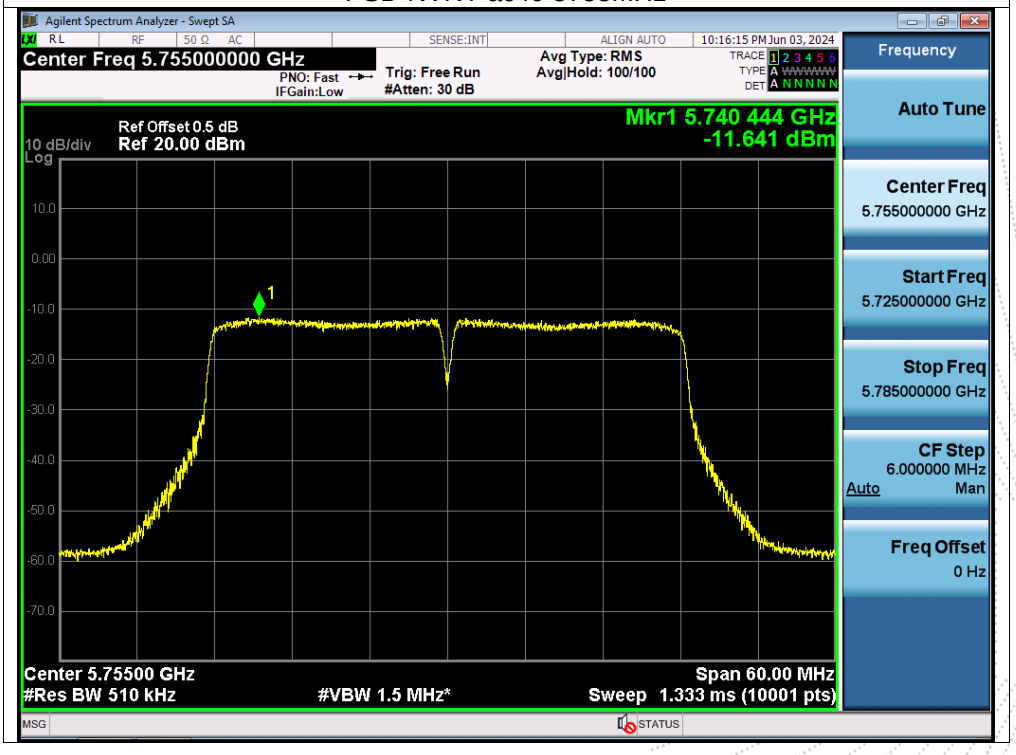
PSD NVNT ac20 5745MHz

PSD NVNT ac20 5785MHz



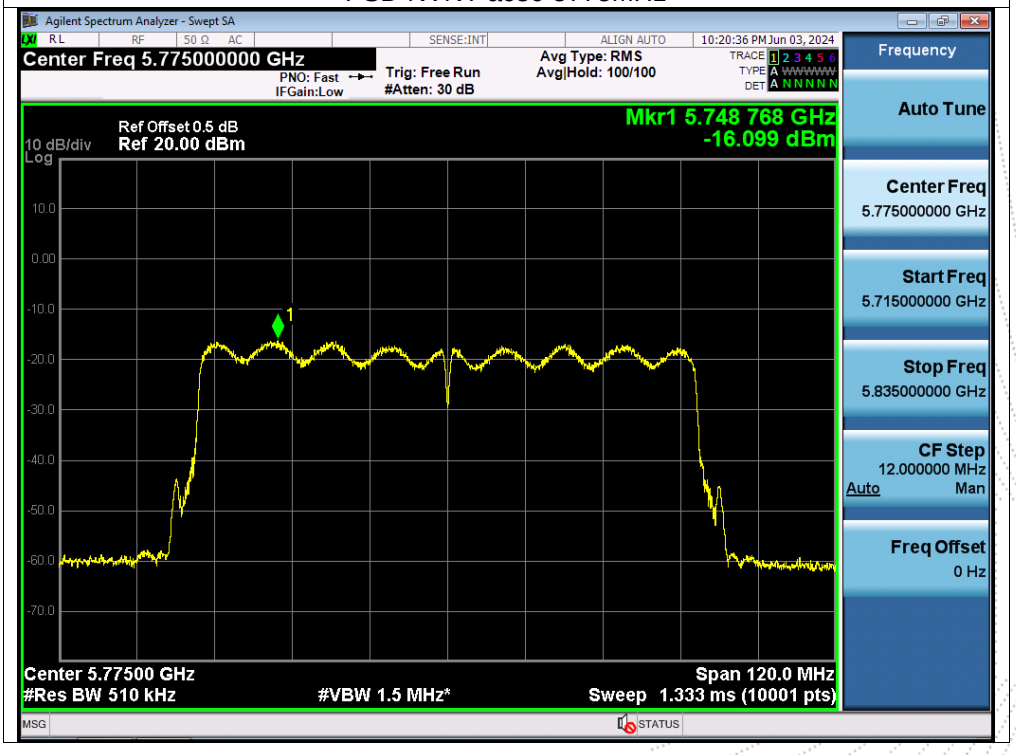
PSD NVNT ac20 5825MHz

PSD NVNT ac40 5755MHz



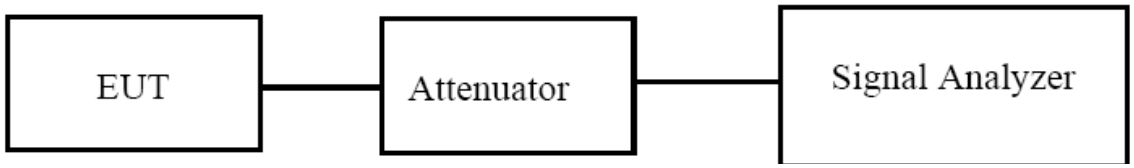
PSD NVNT ac40 5795MHz

PSD NVNT ac80 5775MHz



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

9.1 Block Diagram Of Test Setup



9.2 Limit

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power
is integrated over the full reference bandwidth.
(6dB bandwidth)>500kHz

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.

6dB
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.

6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

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

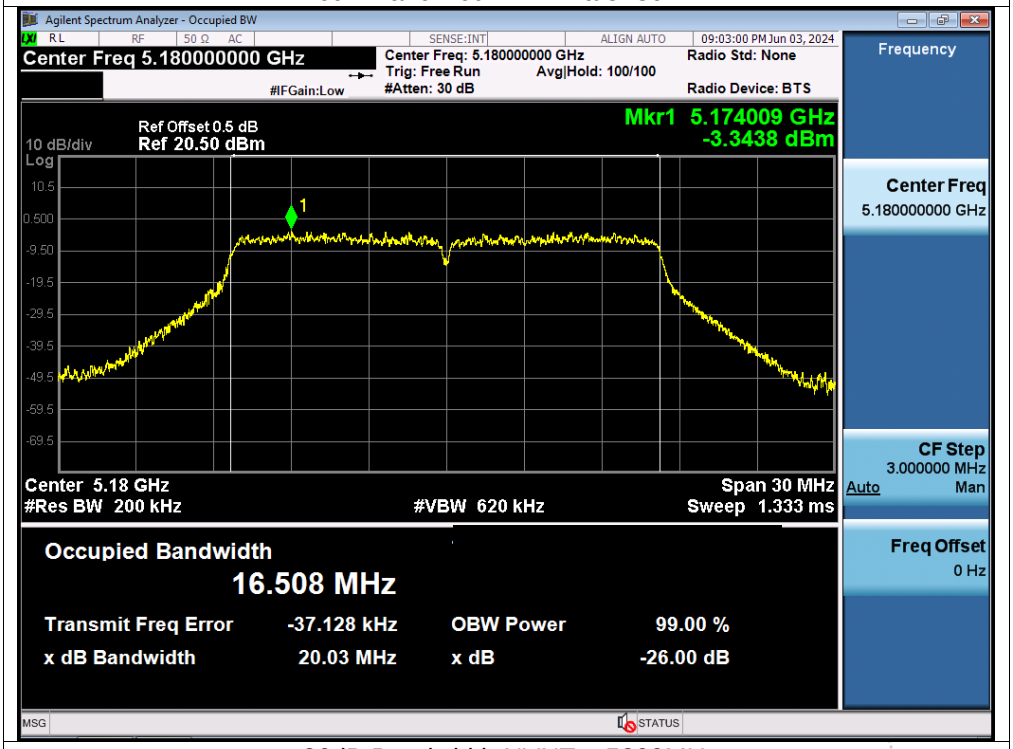
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage**:**	AC 120V/60HZ
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Mode	Channel	Frequency (MHz)	99% OBW (MHz)		26dB bandwidth (MHz)		Result
			ANT A	ANT B	ANT A	ANT B	
NVNT	a	5180	16.504	16.564	20.026	20.237	Pass
NVNT	a	5200	16.536	16.568	19.942	20.457	Pass
NVNT	a	5240	16.511	16.484	20.36	19.892	Pass
NVNT	n20	5180	17.657	17.681	20.994	21.196	Pass
NVNT	n20	5200	17.684	17.677	20.913	21.218	Pass
NVNT	n20	5240	17.662	17.658	21.078	21.058	Pass
NVNT	n40	5190	36.123	36.206	41.738	41.538	Pass
NVNT	n40	5230	36.201	36.233	41.905	41.677	Pass
NVNT	ac20	5180	17.669	17.66	20.755	21.113	Pass
NVNT	ac20	5200	17.681	17.658	21.174	21.195	Pass
NVNT	ac20	5240	17.7	17.679	21.079	20.914	Pass
NVNT	ac40	5190	36.192	36.17	41.578	41.711	Pass
NVNT	ac40	5230	36.199	36.189	41.647	41.827	Pass
NVNT	ac80	5210	**75.742**	75.725	**82.595**	82.43	Pass

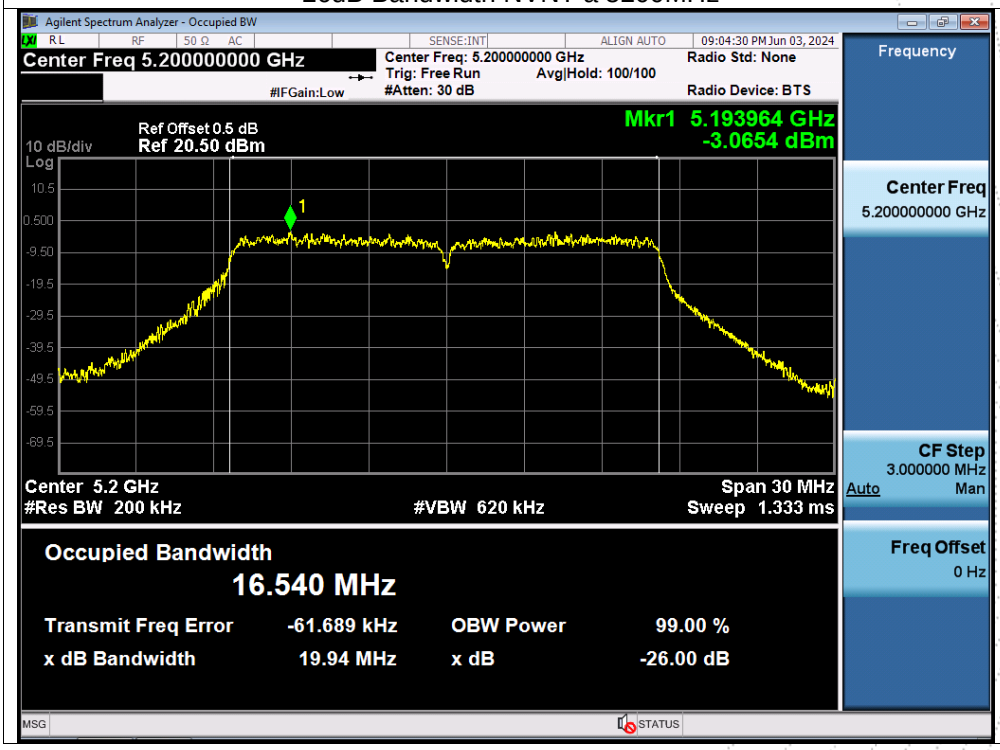
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

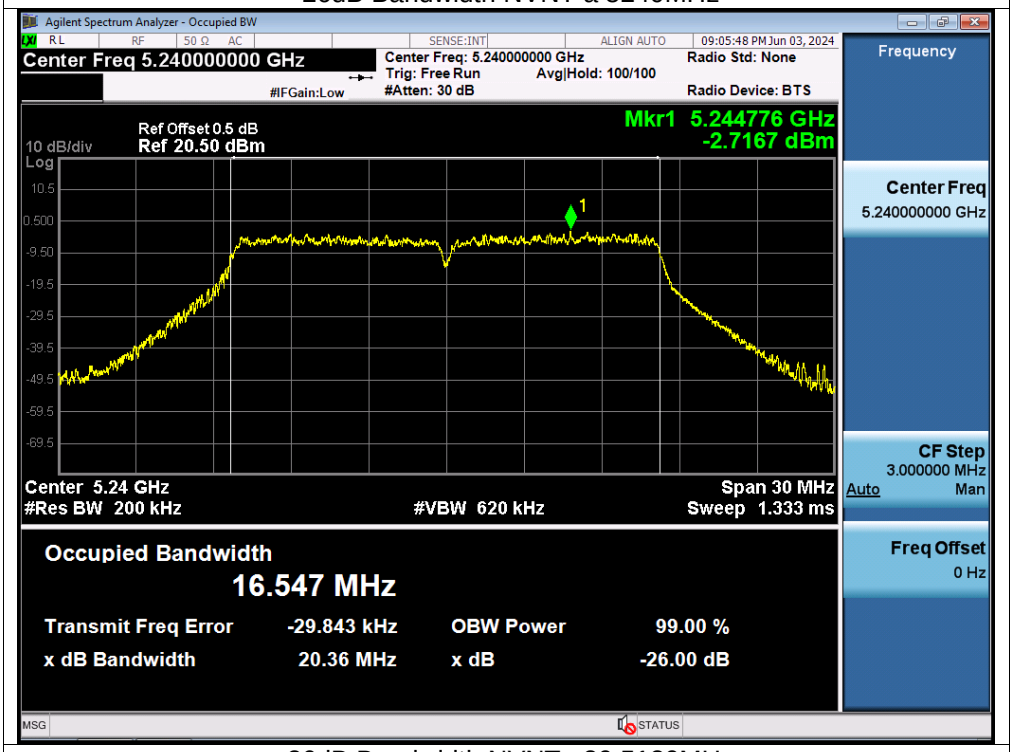
-26dB Bandwidth NVNT a 5180MHz



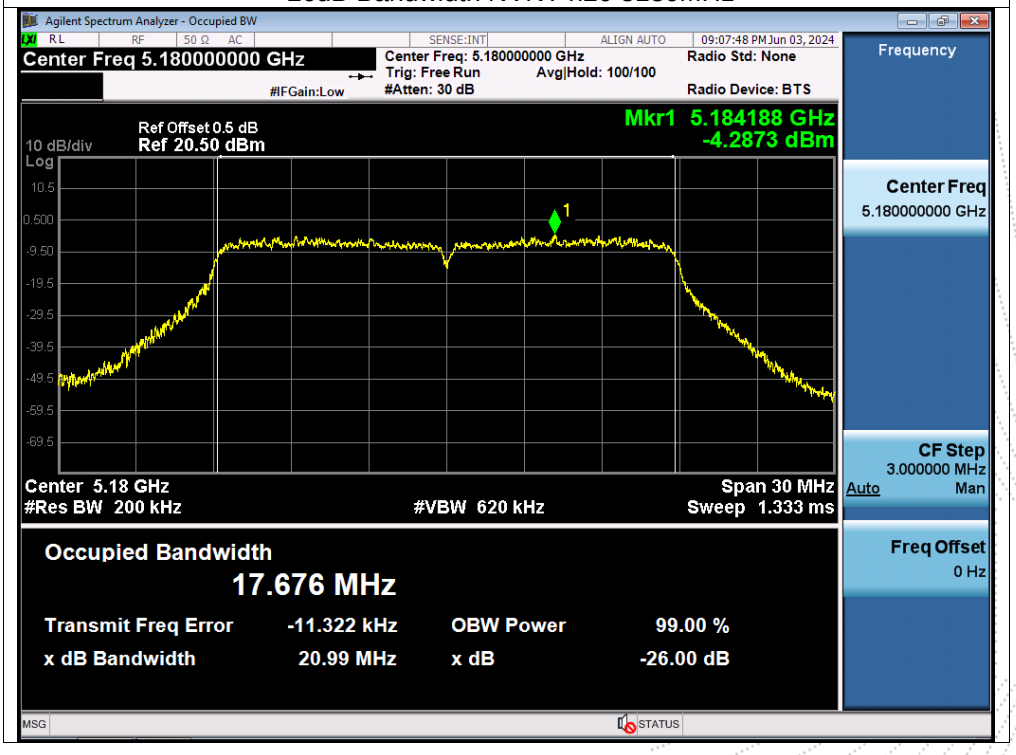
-26dB Bandwidth NVNT a 5200MHz



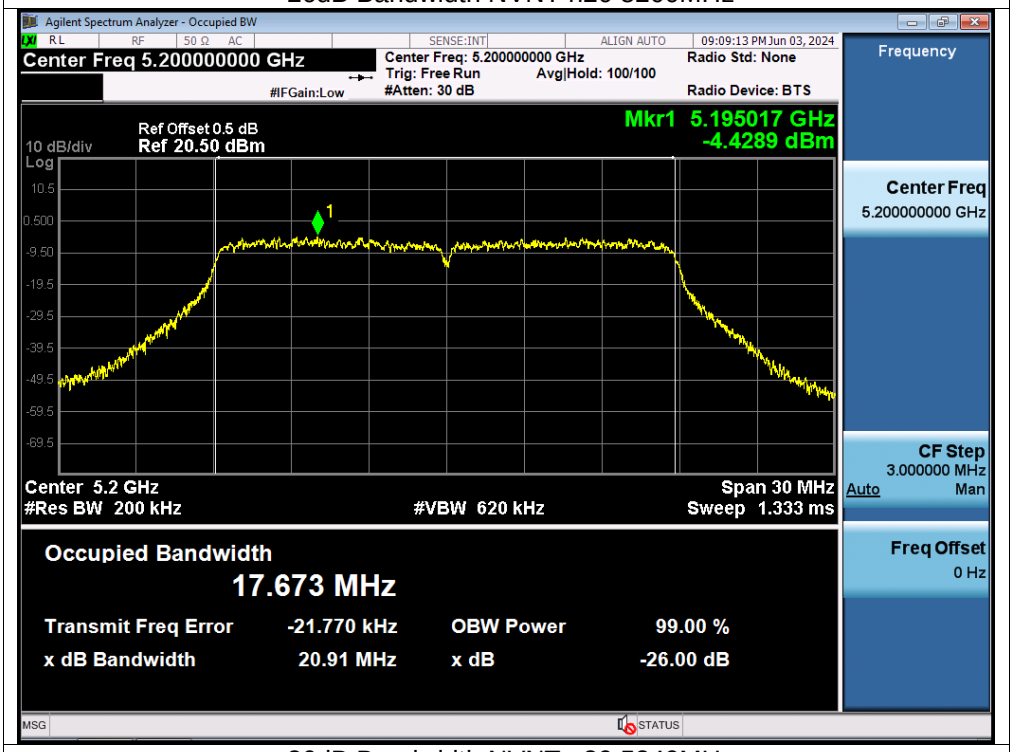
-26dB Bandwidth NVNT a 5240MHz



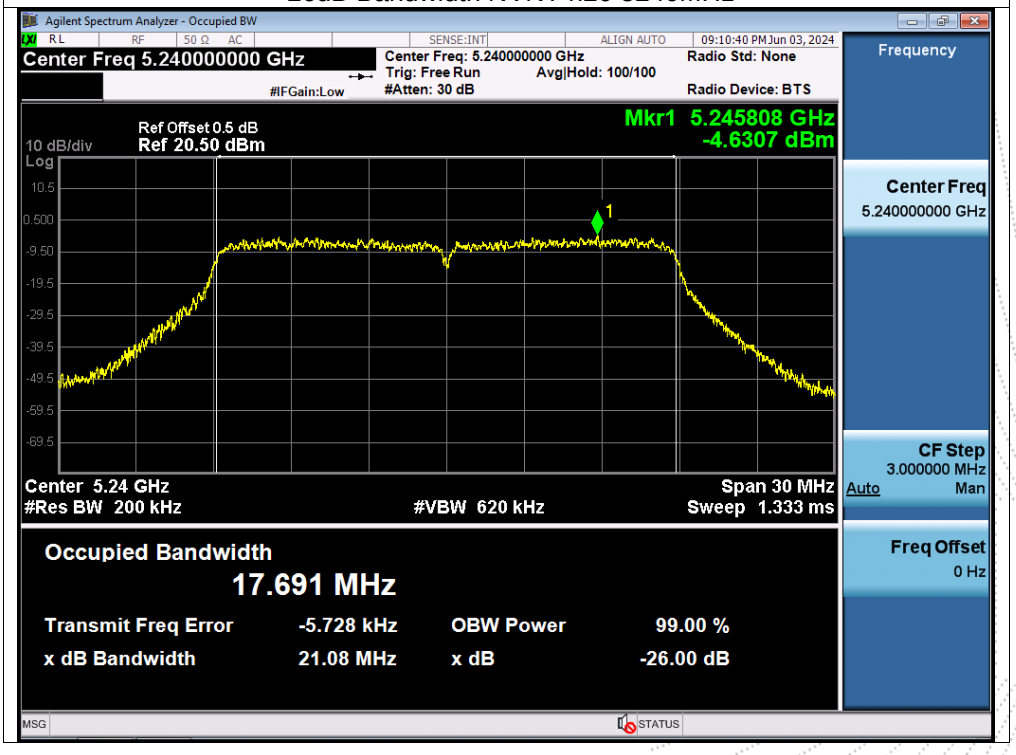
-26dB Bandwidth NVNT n20 5180MHz



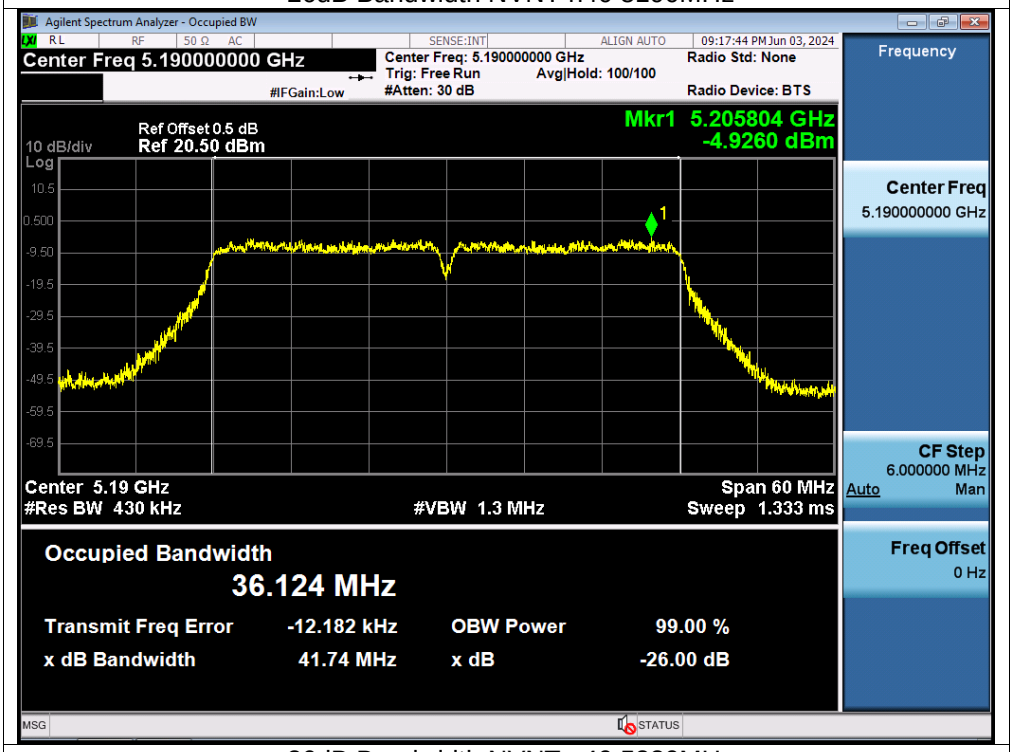
-26dB Bandwidth NVNT n20 5200MHz



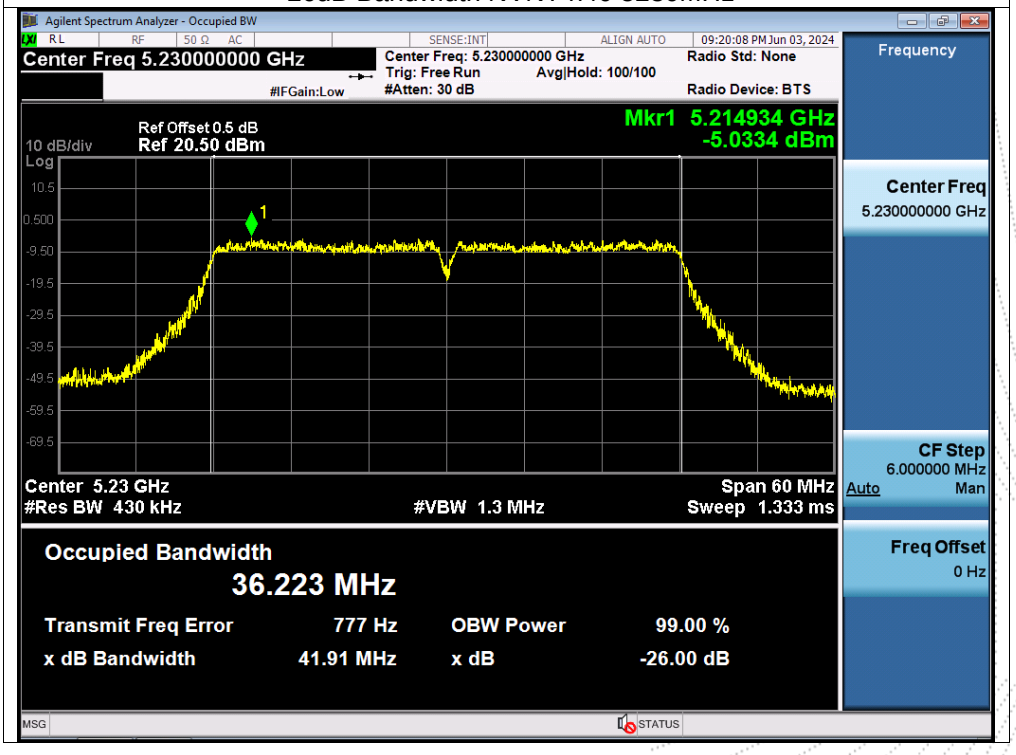
-26dB Bandwidth NVNT n20 5240MHz



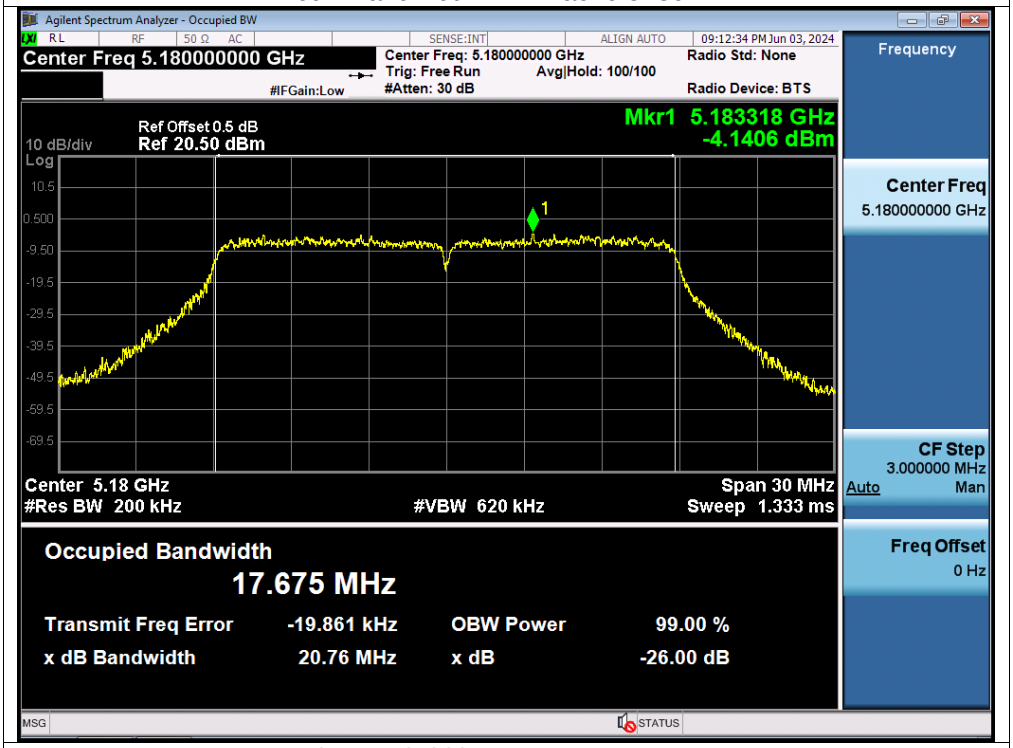
-26dB Bandwidth NVNT n40 5190MHz



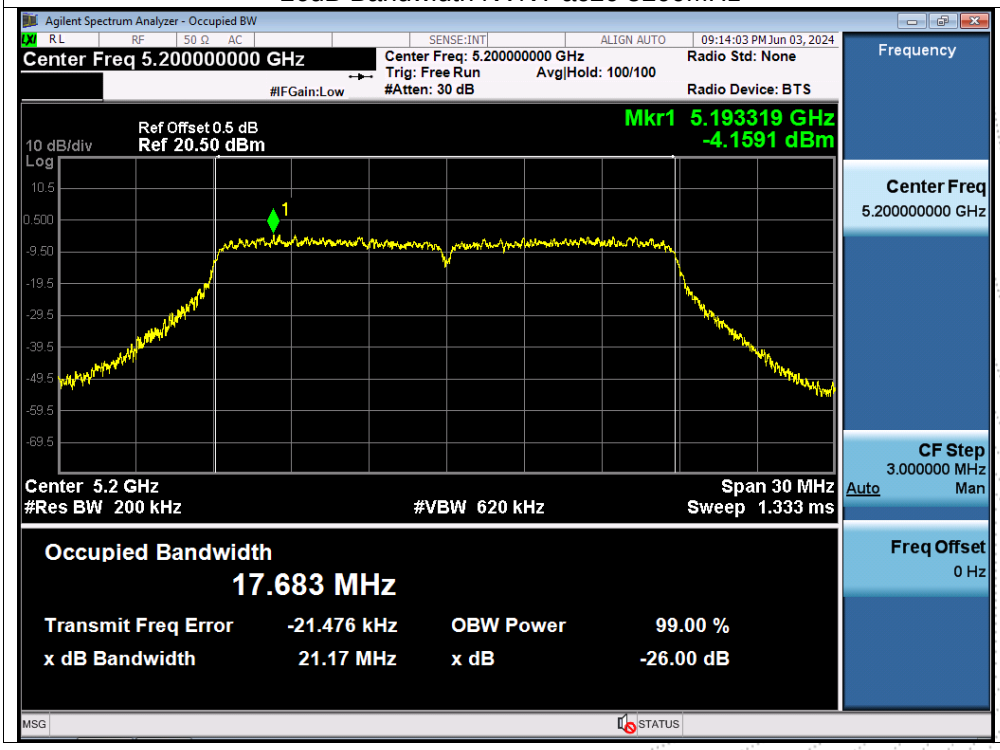
-26dB Bandwidth NVNT n40 5230MHz



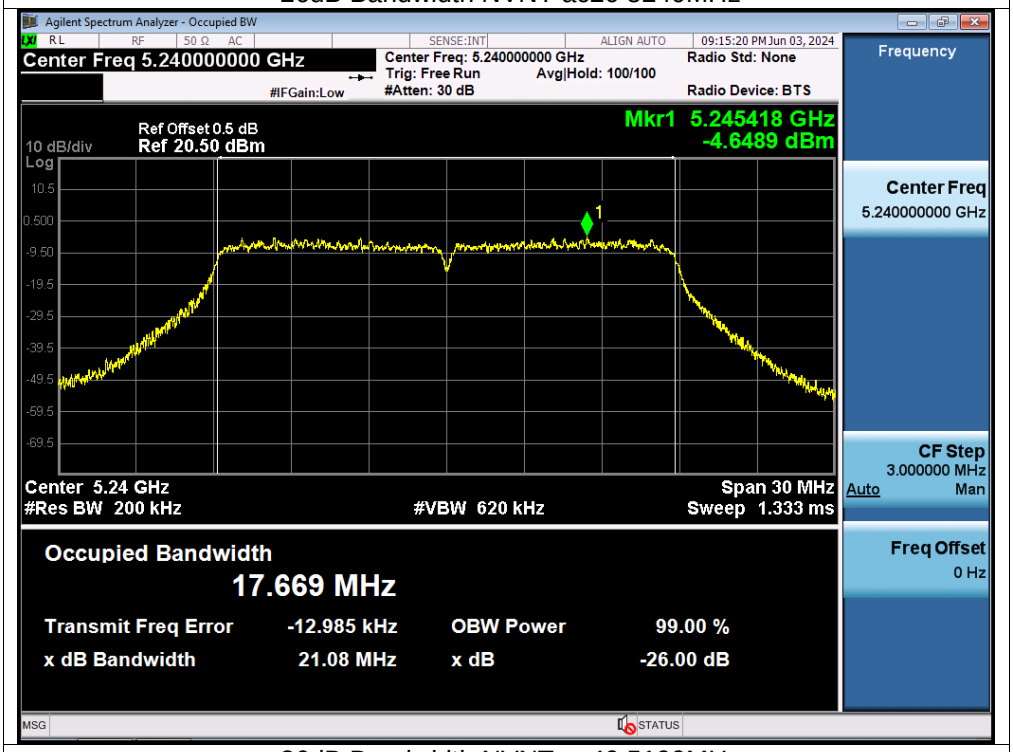
-26dB Bandwidth NVNT ac20 5180MHz



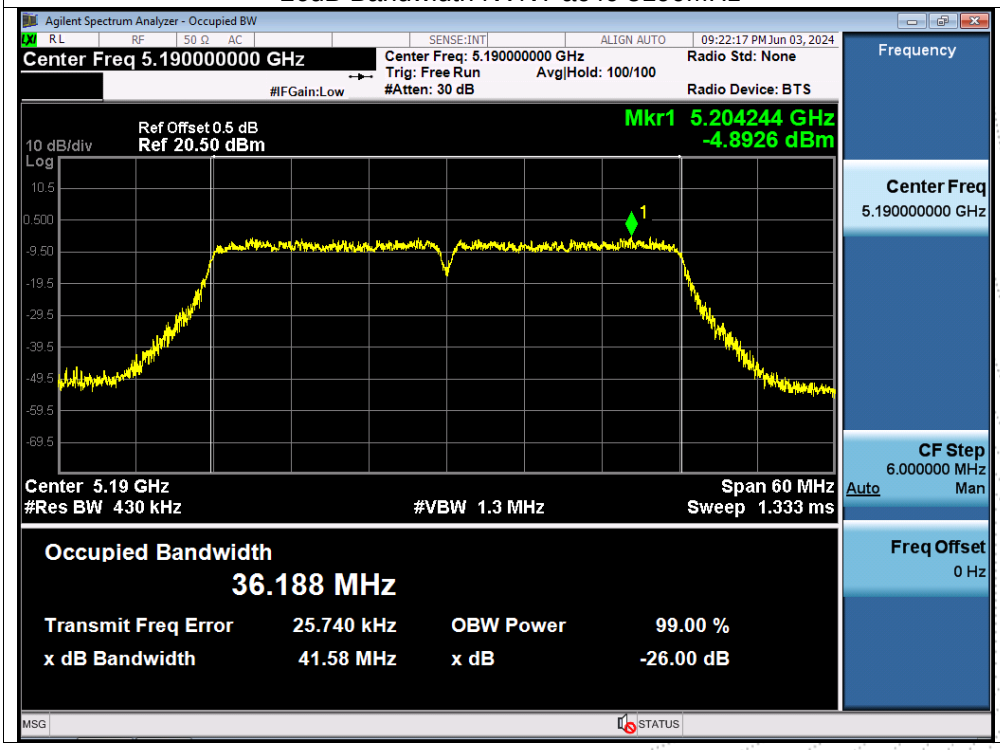
-26dB Bandwidth NVNT ac20 5200MHz



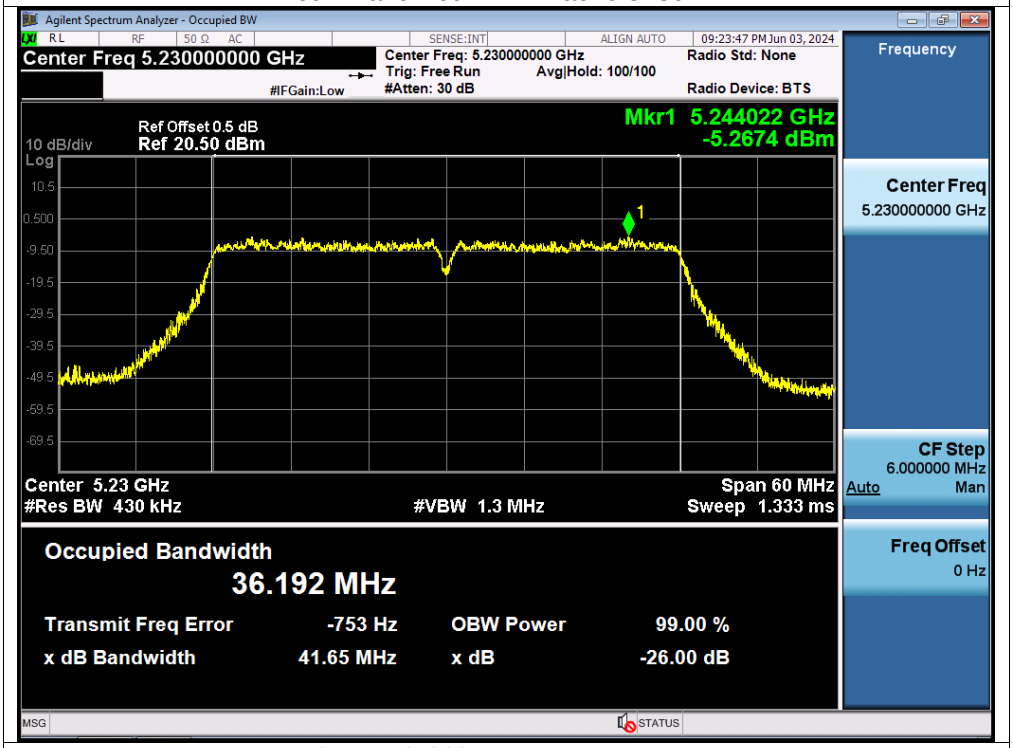
-26dB Bandwidth NVNT ac20 5240MHz



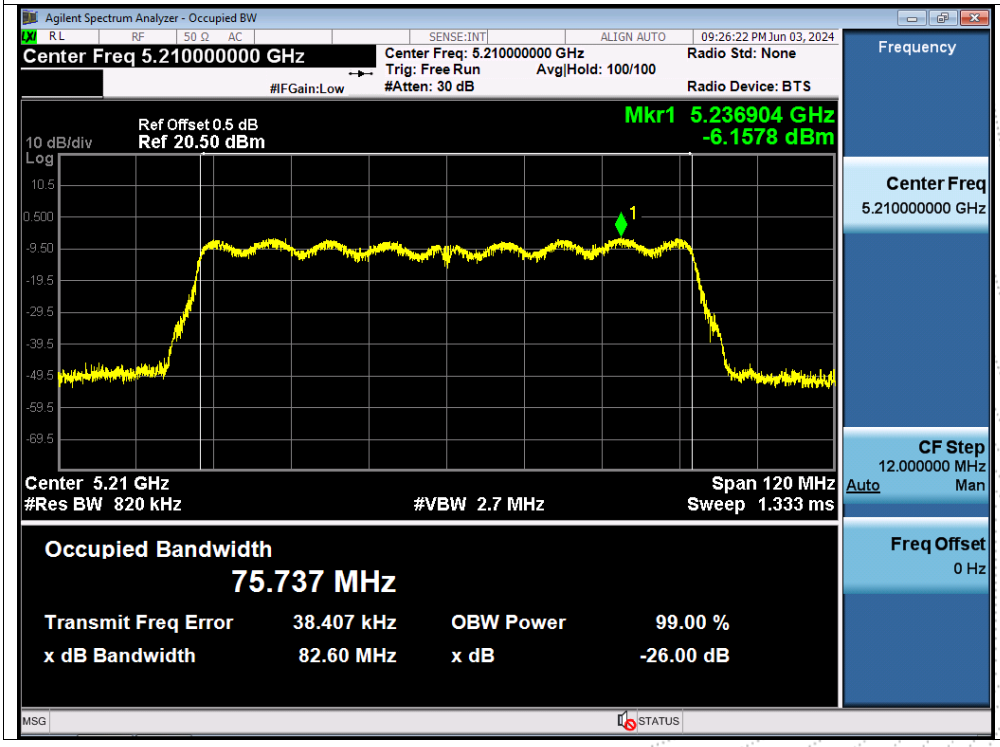
-26dB Bandwidth NVNT ac40 5190MHz



-26dB Bandwidth NVNT ac40 5230MHz



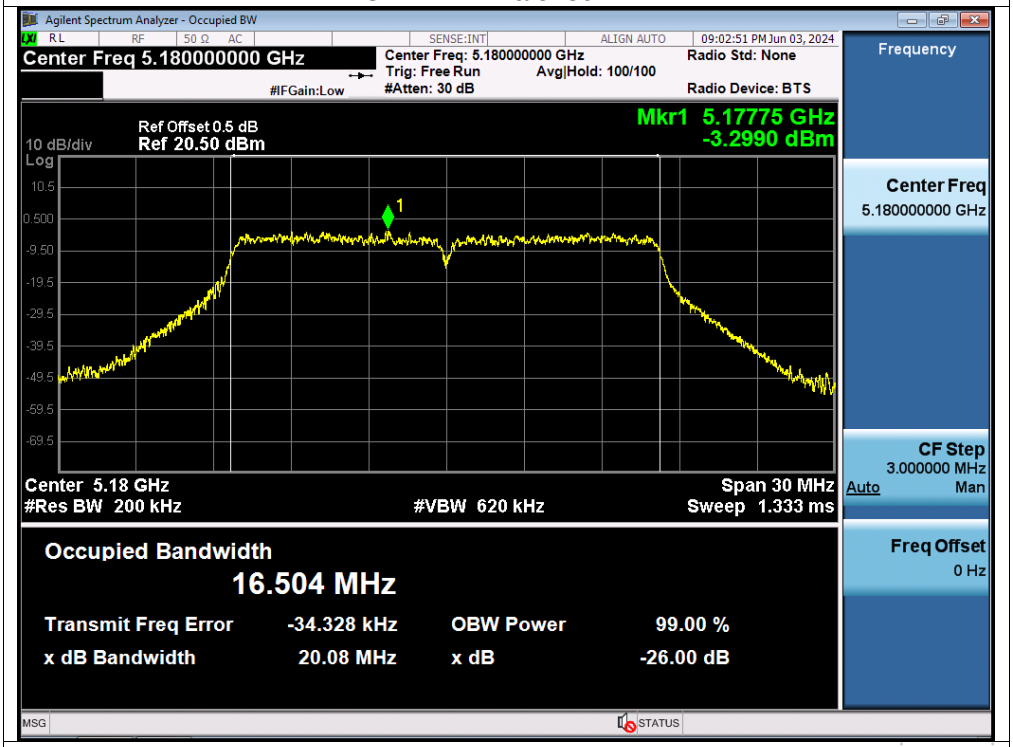
-26dB Bandwidth NVNT ac80 5210MHz



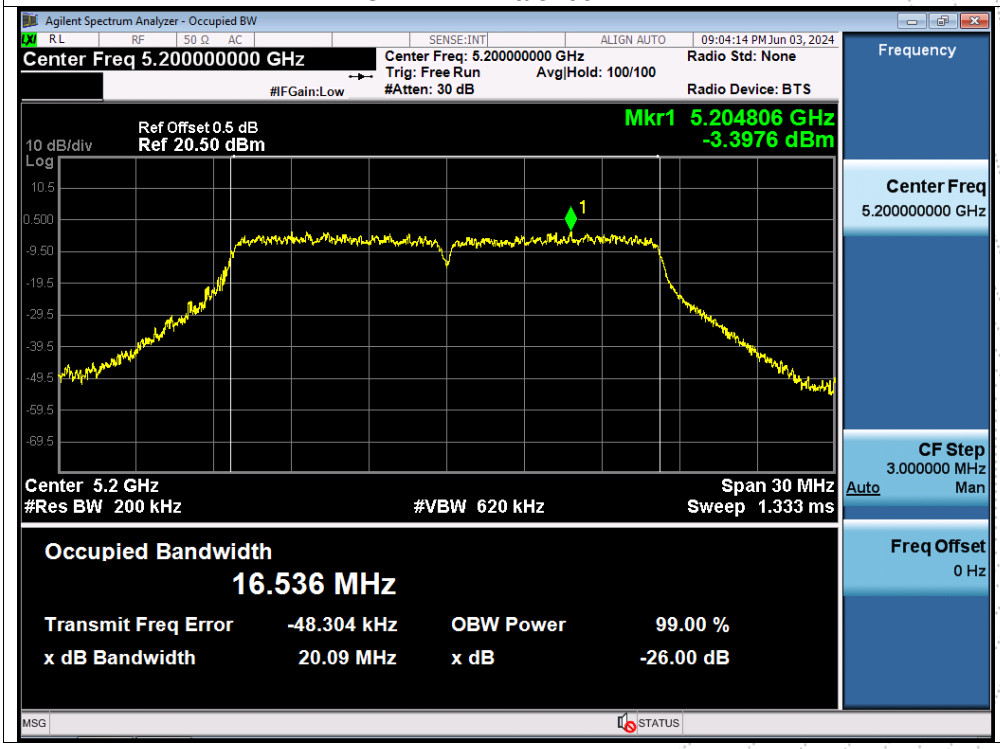
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

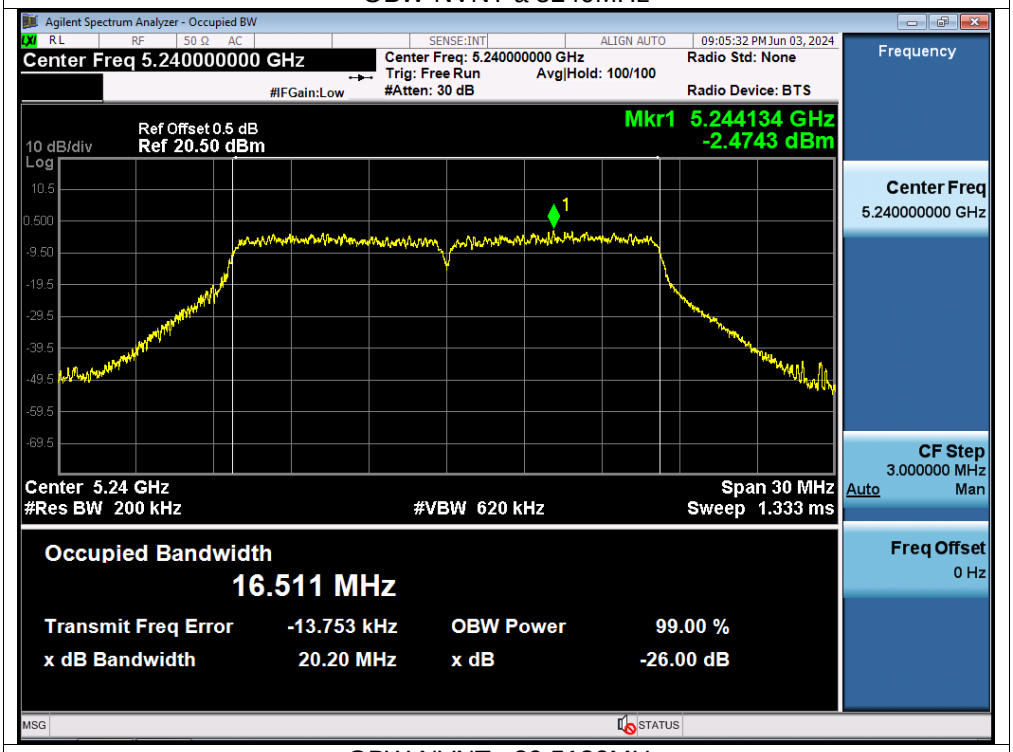
OBW NVNT a 5180MHz



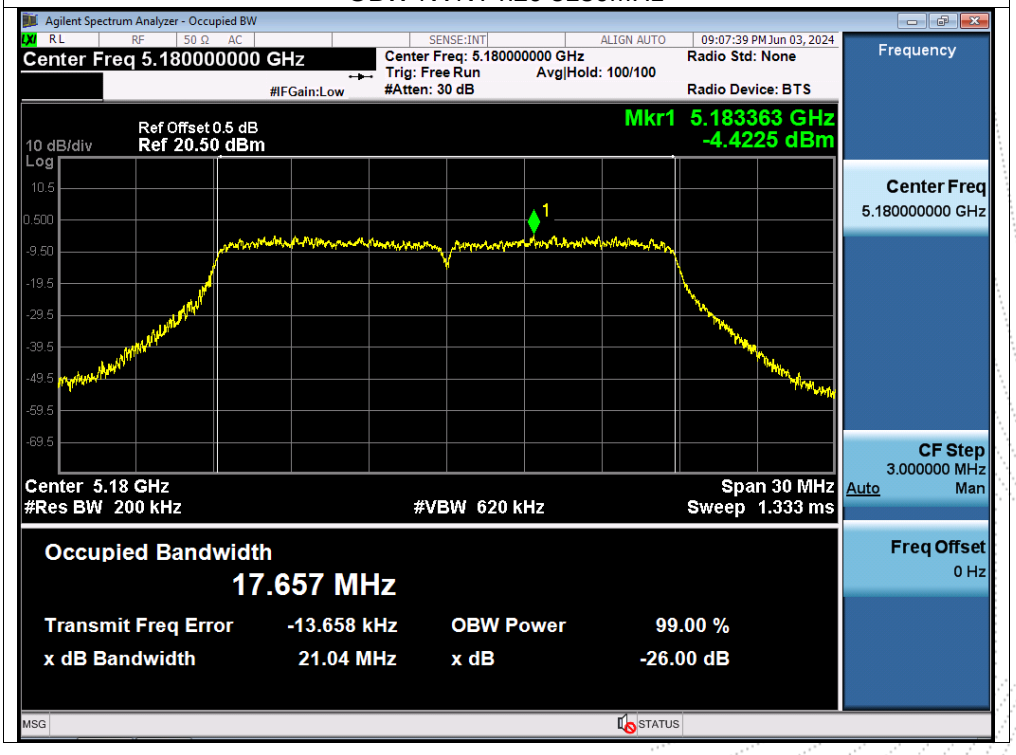
OBW NVNT a 5200MHz



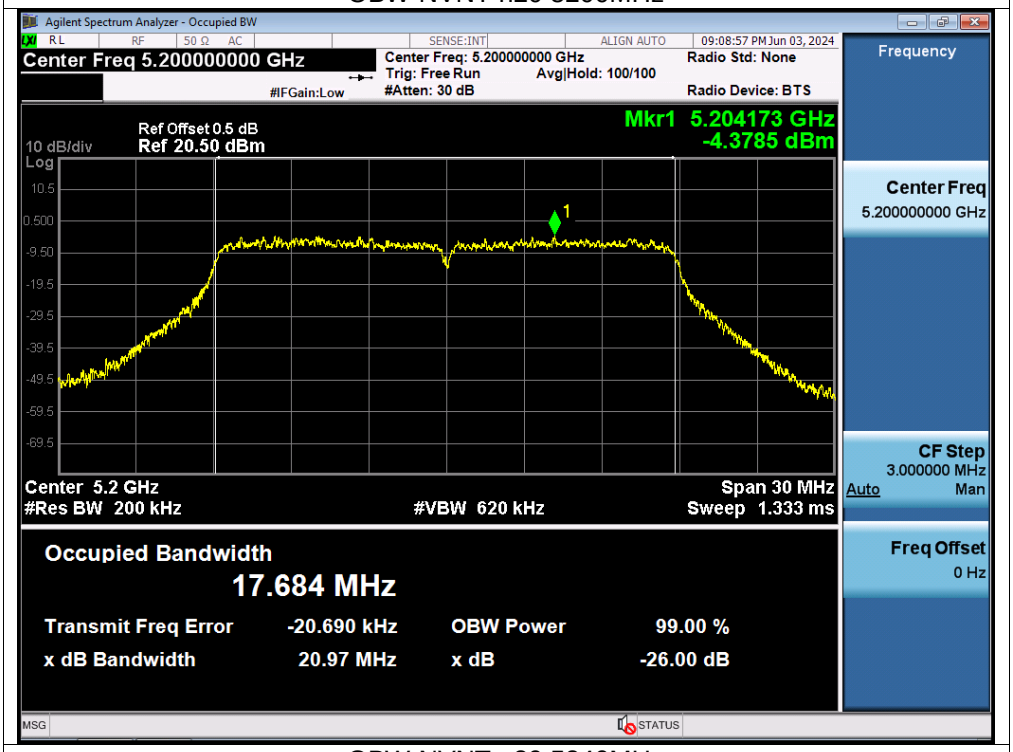
OBW NVNT a 5240MHz



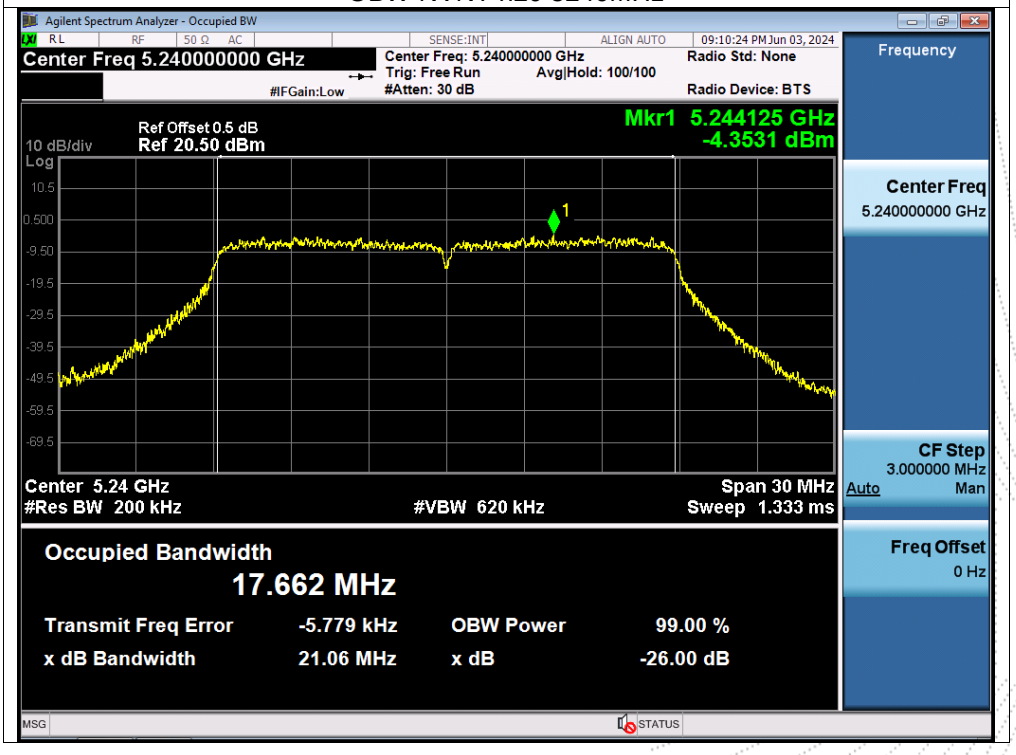
OBW NVNT n20 5180MHz



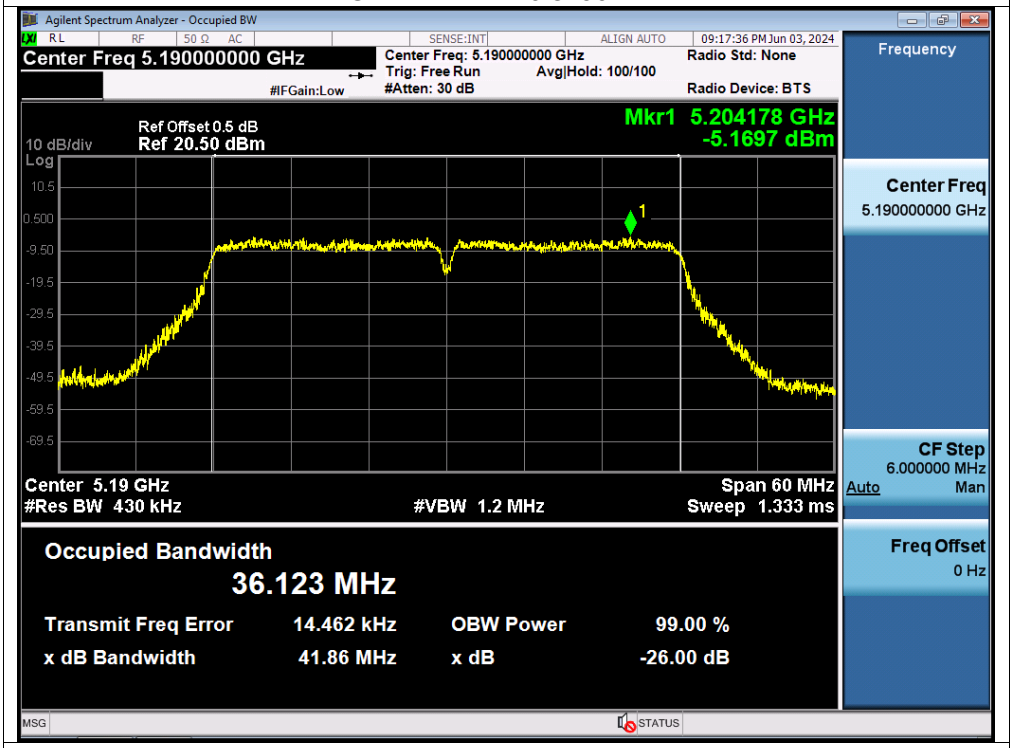
OBW NVNT n20 5200MHz



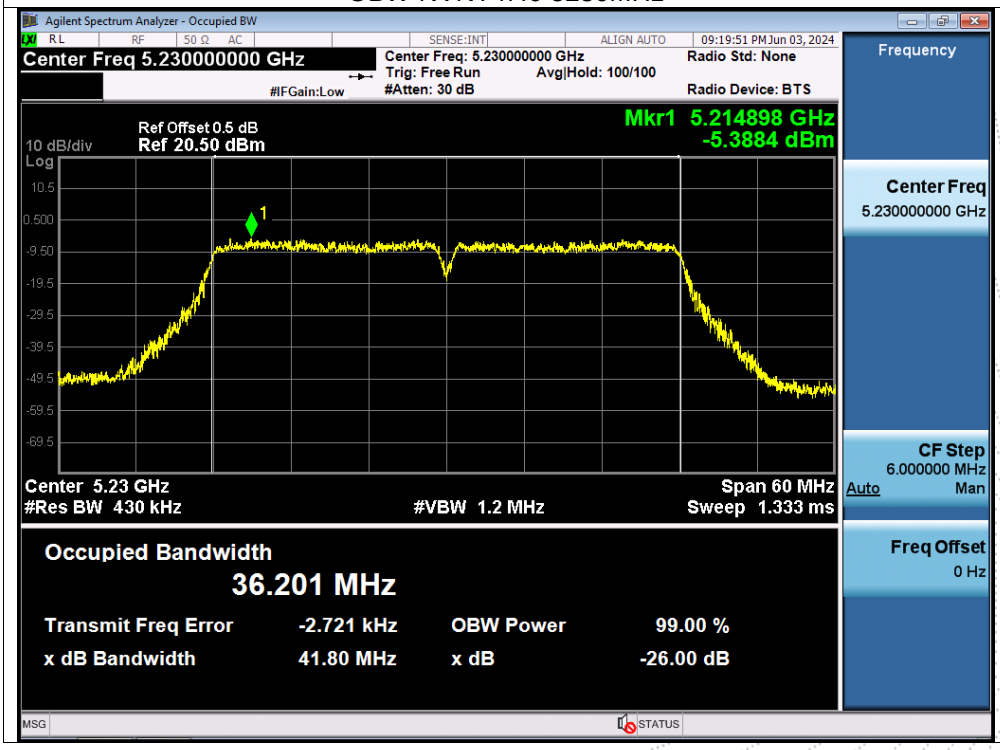
OBW NVNT n20 5240MHz



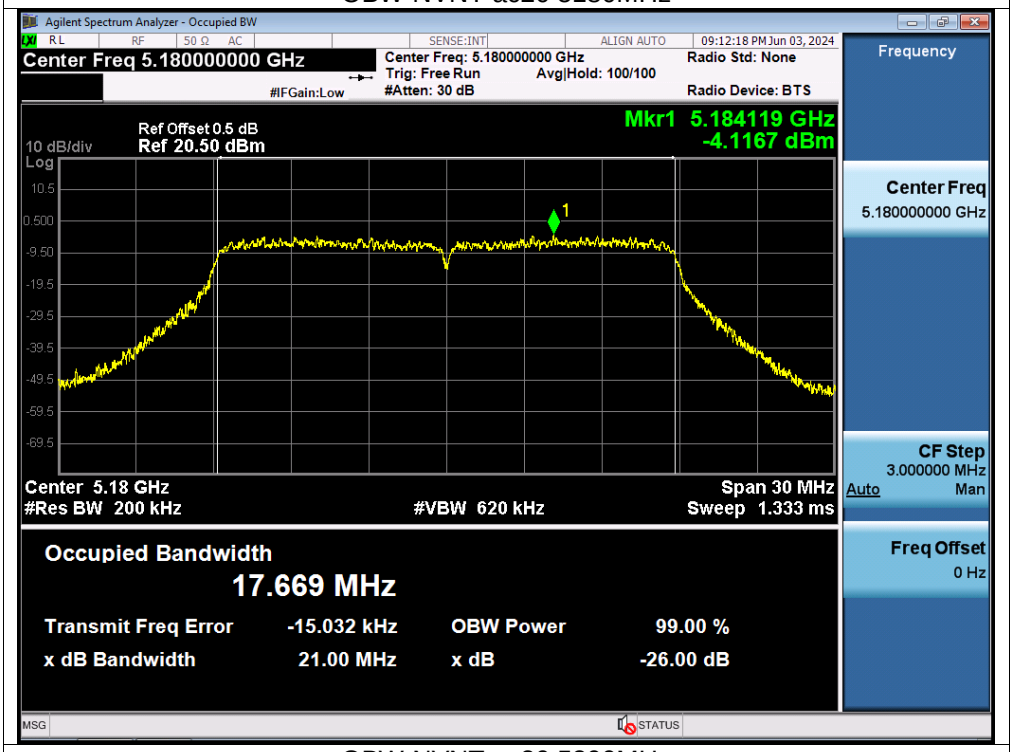
OBW NVNT n40 5190MHz



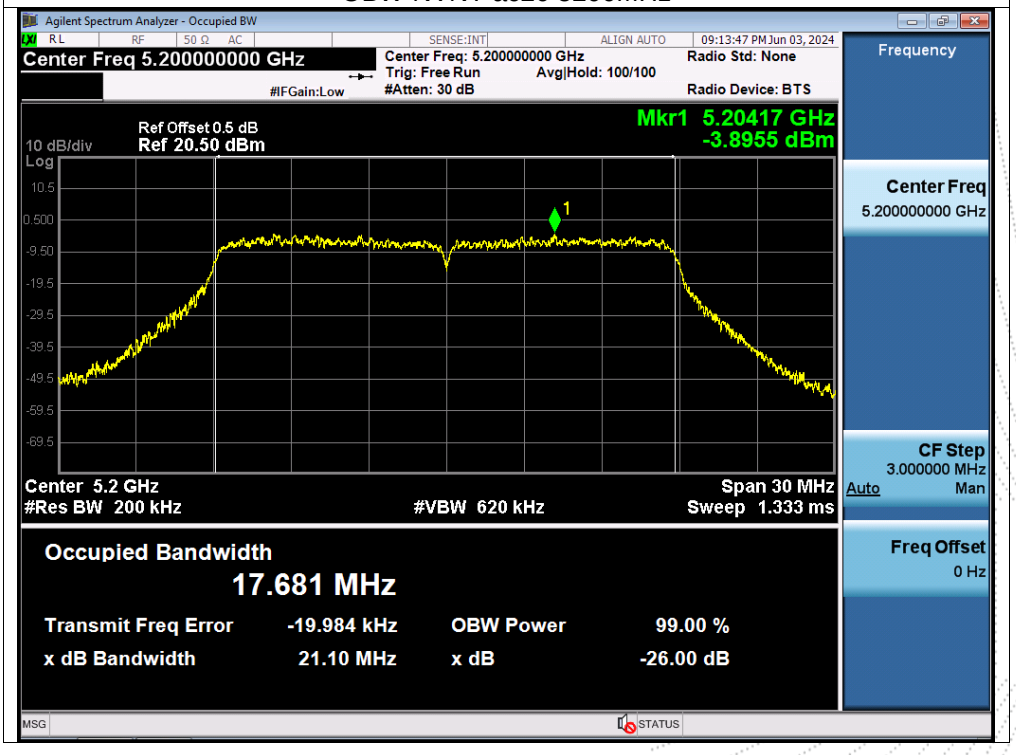
OBW NVNT n40 5230MHz



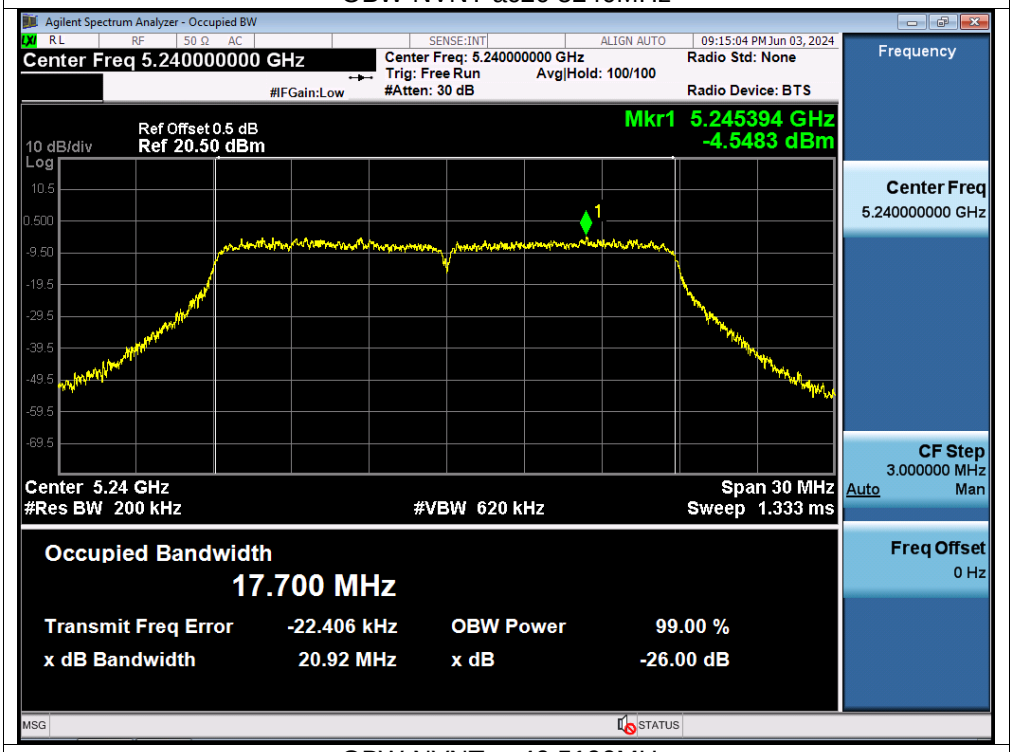
OBW NVNT ac20 5180MHz



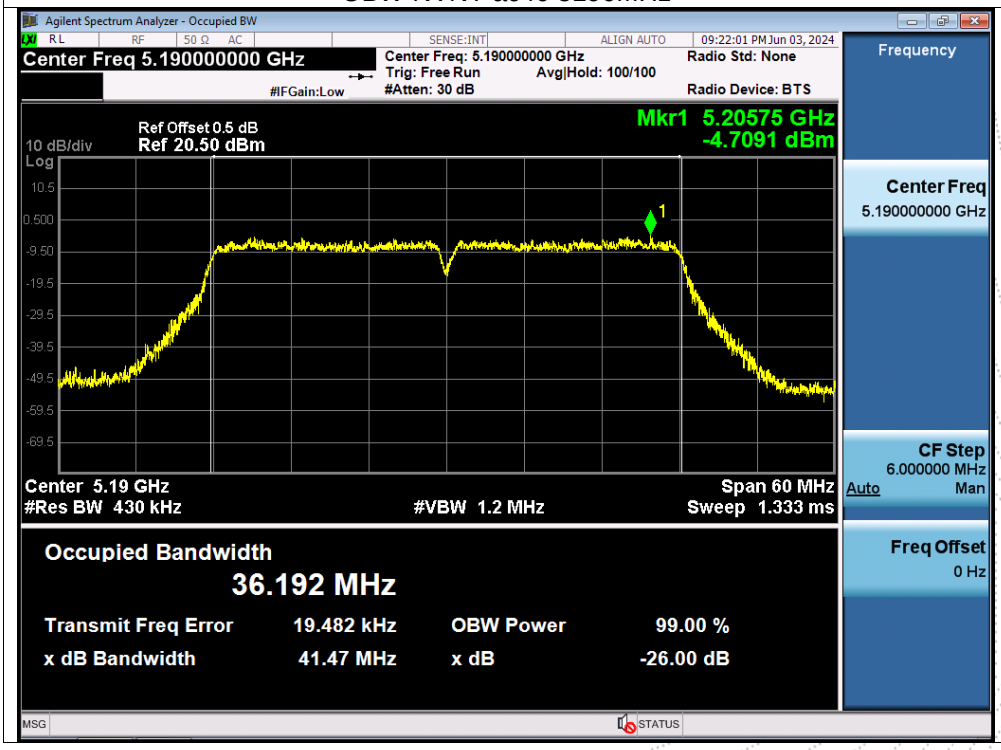
OBW NVNT ac20 5200MHz



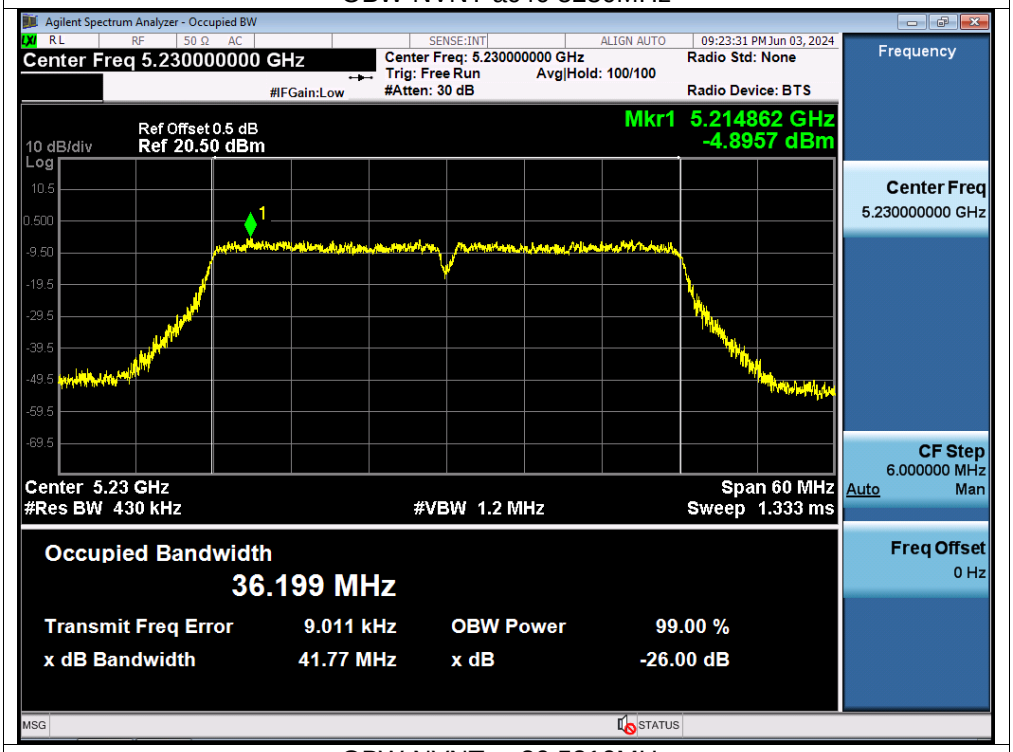
OBW NVNT ac20 5240MHz



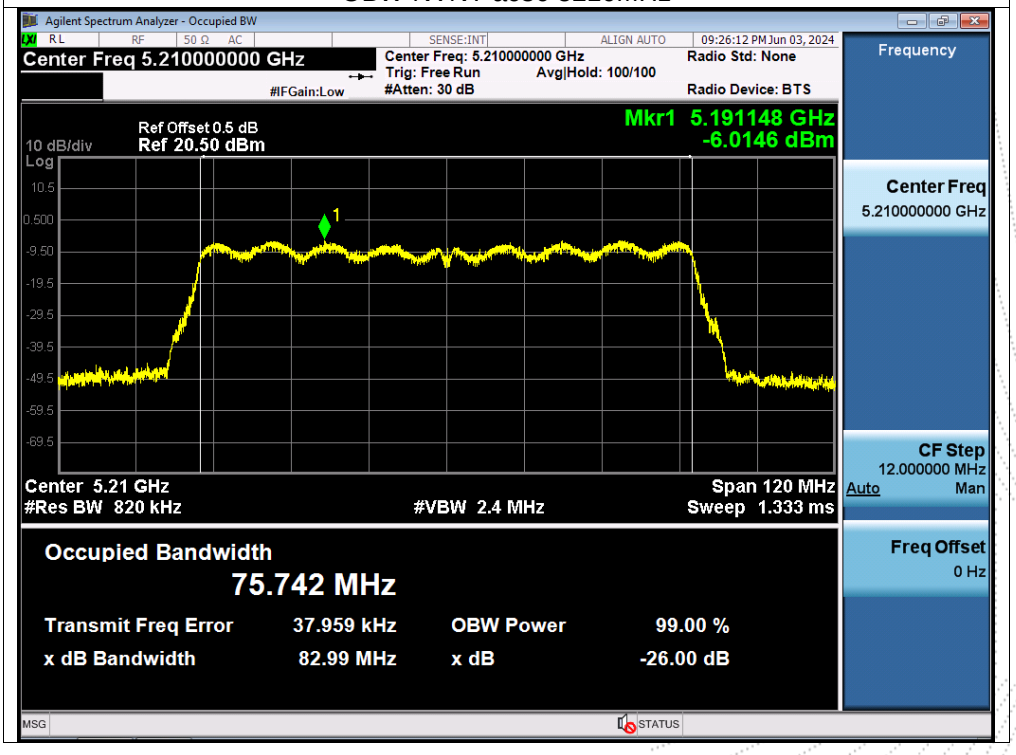
OBW NVNT ac40 5190MHz



OBW NVNT ac40 5230MHz



OBW NVNT ac80 5210MHz



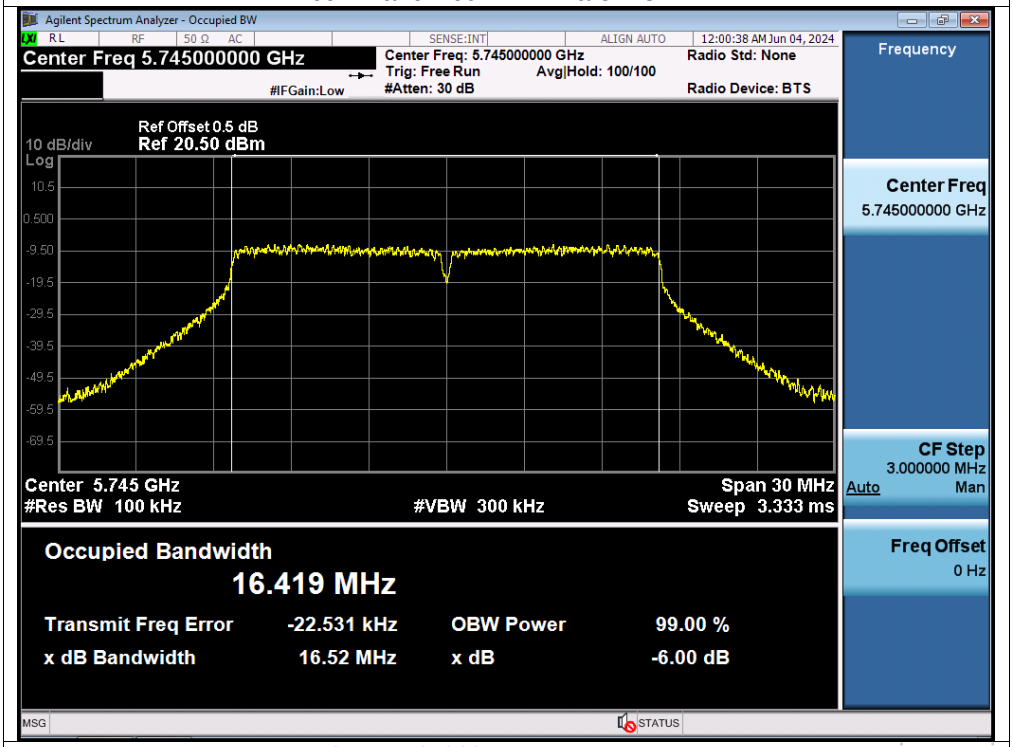
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	AC 120V/60HZ
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

Mode	Channel	Frequency (MHz)	99% OBW (MHz)		-6dB bandwidth (MHz)		Limit -6dB bandwidth MHz	Result
			ANT A	ANT B	ANT A	ANT B		
NVNT	a	5745	16.55	16.508	16.476	16.517	0.5	Pass
NVNT	a	5785	16.549	16.529	16.53	16.523	0.5	Pass
NVNT	a	5825	16.52	16.561	16.532	16.541	0.5	Pass
NVNT	n20	5745	17.702	17.684	17.644	17.717	0.5	Pass
NVNT	n20	5785	17.675	17.704	17.719	17.654	0.5	Pass
NVNT	n20	5825	17.696	17.696	17.655	17.635	0.5	Pass
NVNT	n40	5755	36.177	36.193	36.459	36.442	0.5	Pass
NVNT	n40	5795	36.217	36.209	36.424	36.463	0.5	Pass
NVNT	ac20	5745	17.685	17.686	17.667	17.641	0.5	Pass
NVNT	ac20	5785	17.674	17.68	17.662	17.664	0.5	Pass
NVNT	ac20	5825	17.685	17.671	17.649	17.672	0.5	Pass
NVNT	ac40	5755	36.187	36.215	36.438	36.443	0.5	Pass
NVNT	ac40	5795	36.226	36.231	36.412	36.392	0.5	Pass
NVNT	ac80	5775	75.65	**75.65**	76.334	**76.346**	0.5	Pass

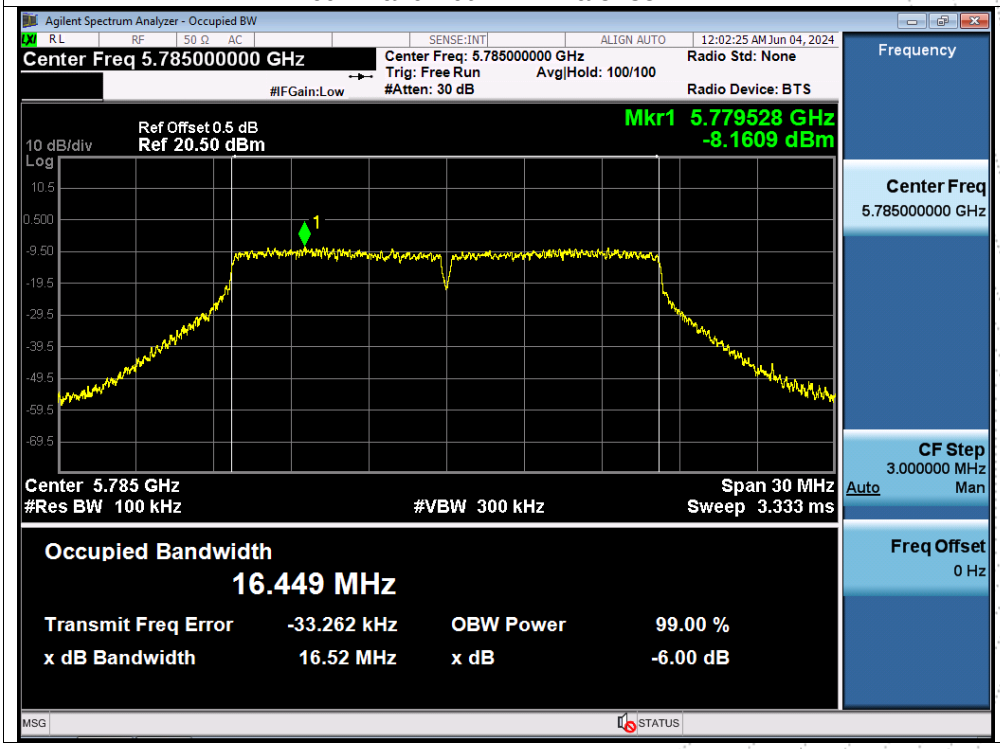
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna B, only shown Antenna B Plot.

Test Graphs

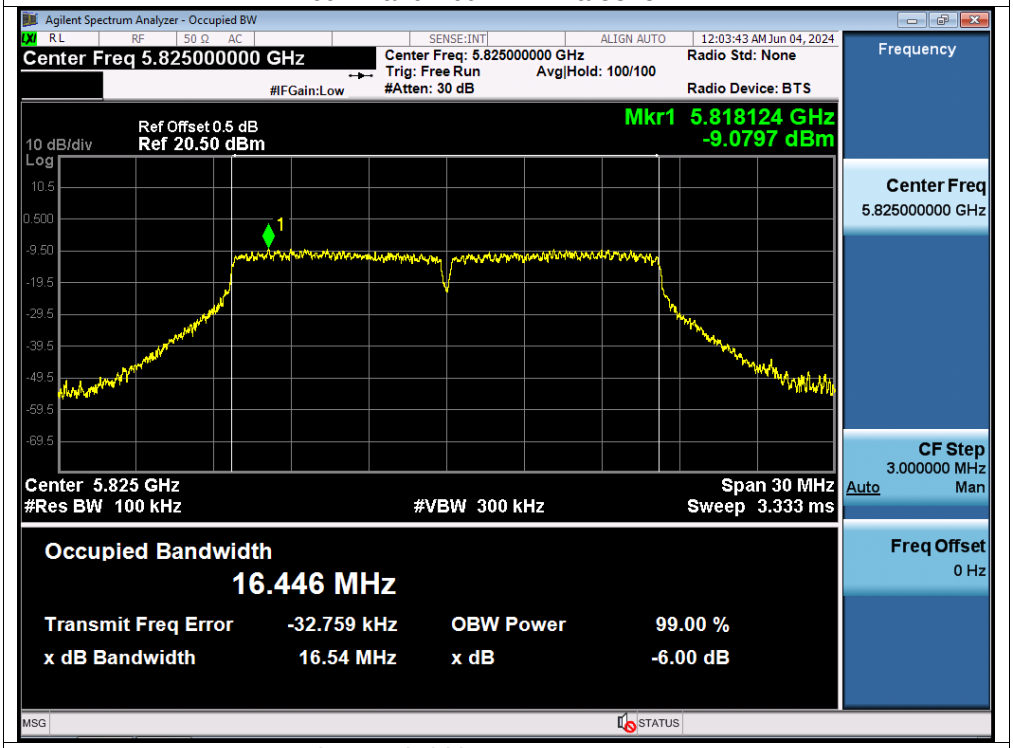
-6dB Bandwidth NVNT a 5745MHz



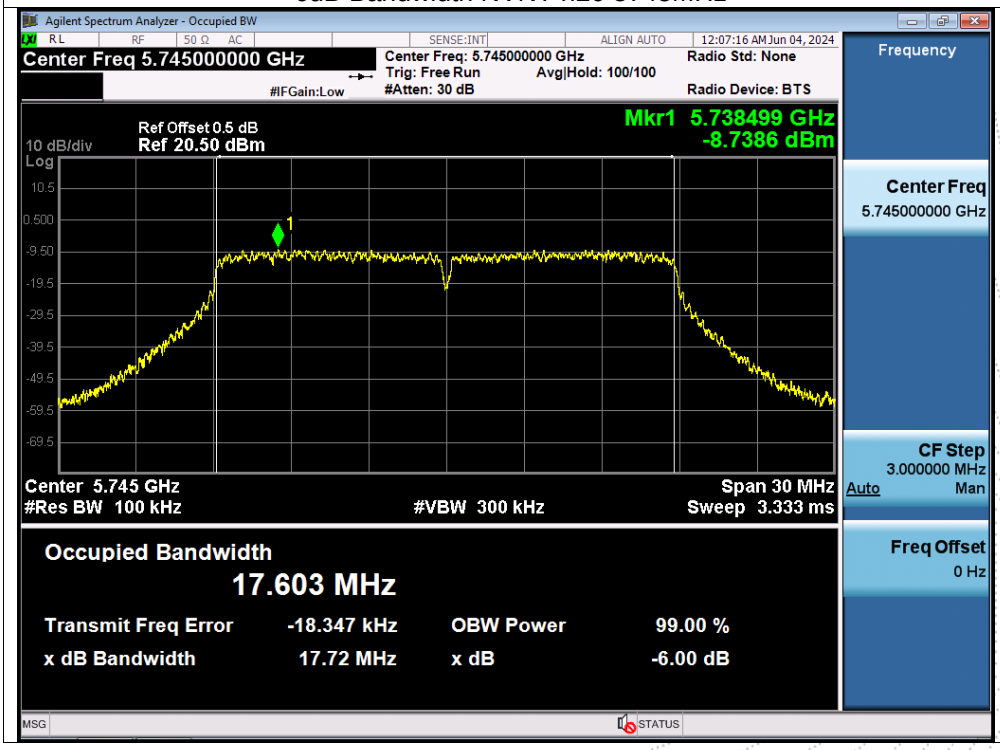
-6dB Bandwidth NVNT a 5785MHz



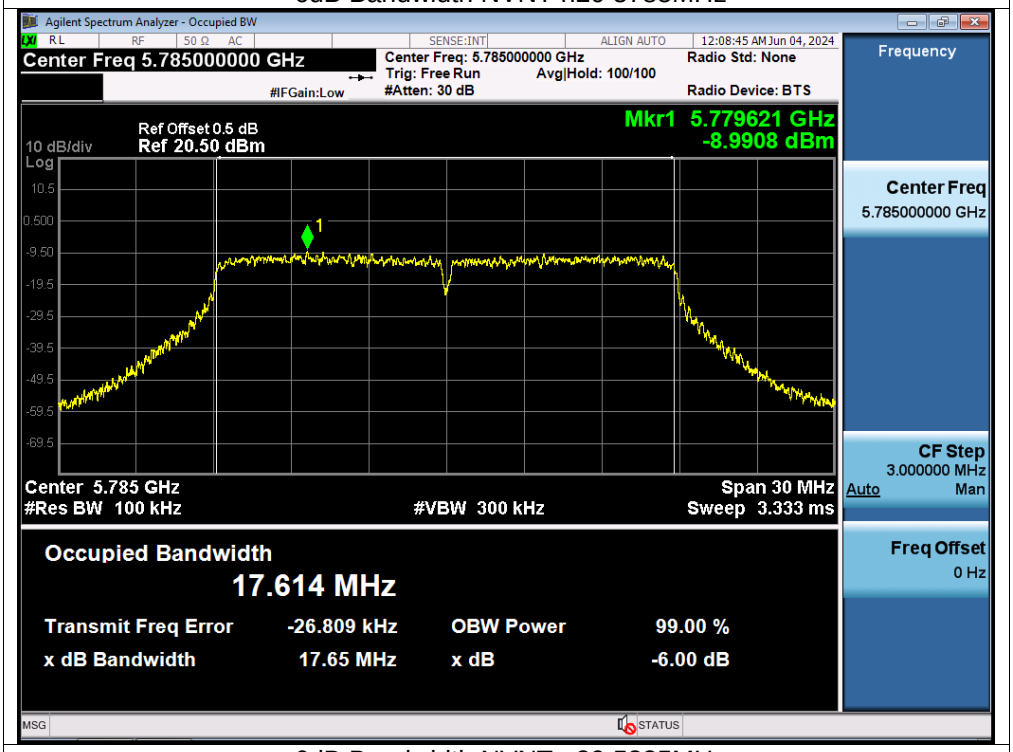
-6dB Bandwidth NVNT a 5825MHz



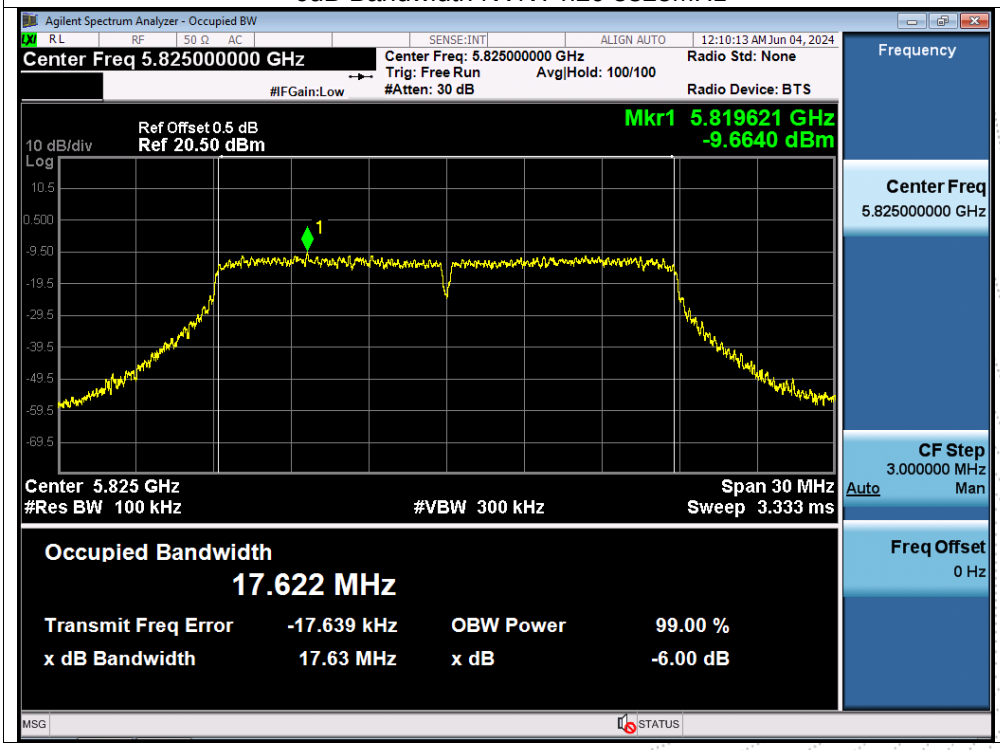
-6dB Bandwidth NVNT n20 5745MHz



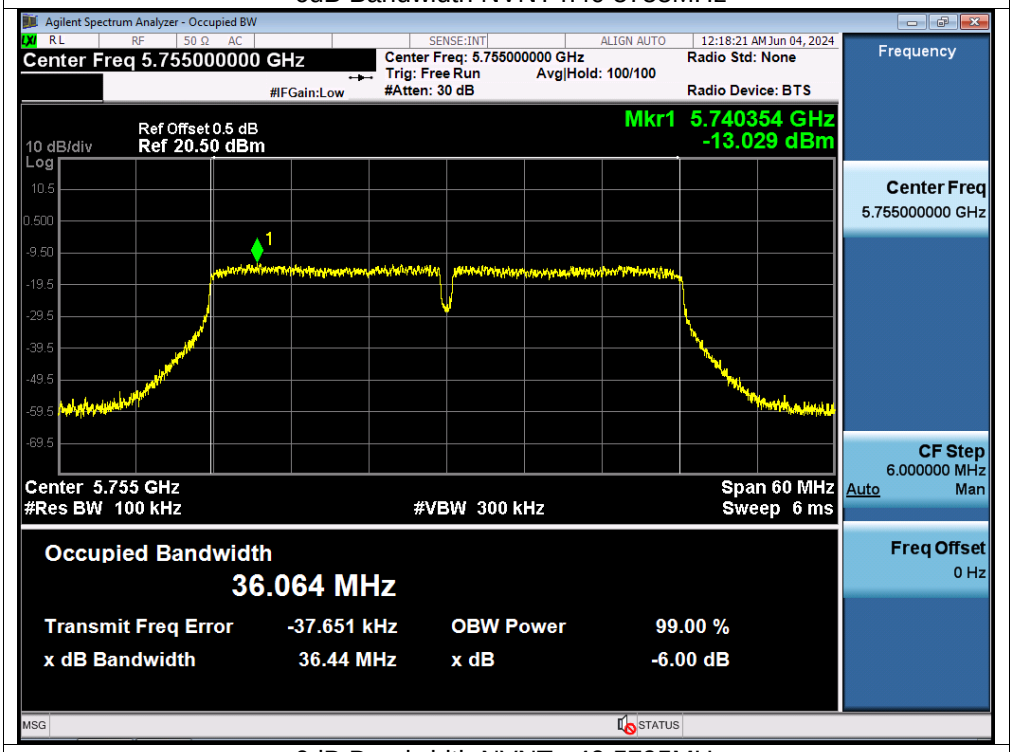
-6dB Bandwidth NVNT n20 5785MHz



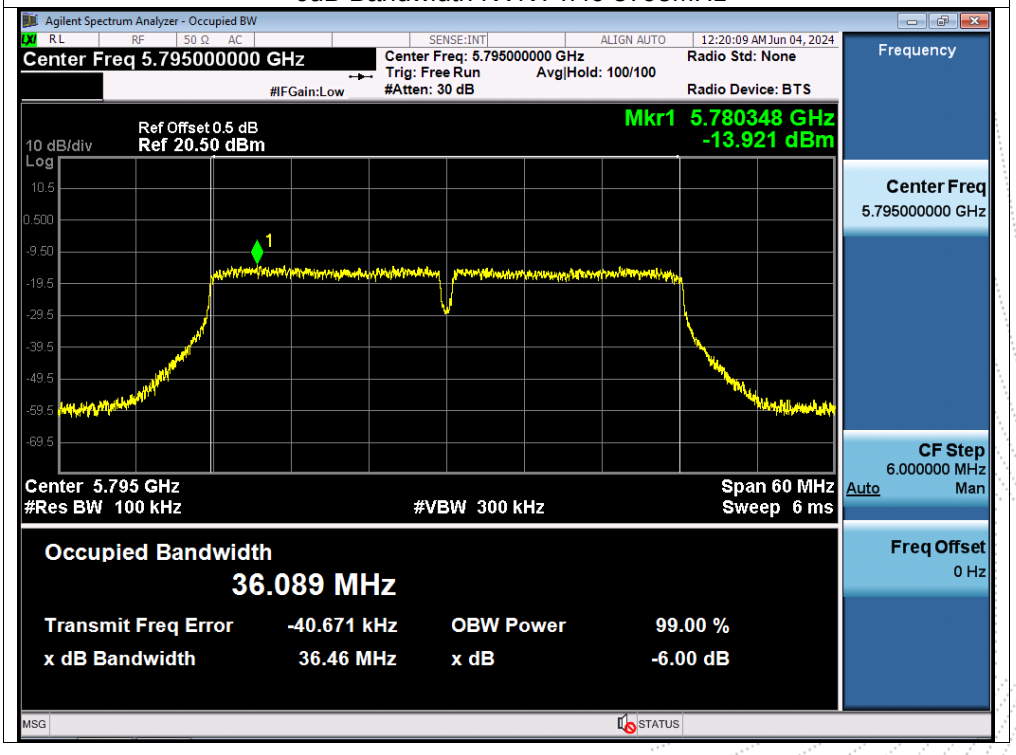
-6dB Bandwidth NVNT n20 5825MHz



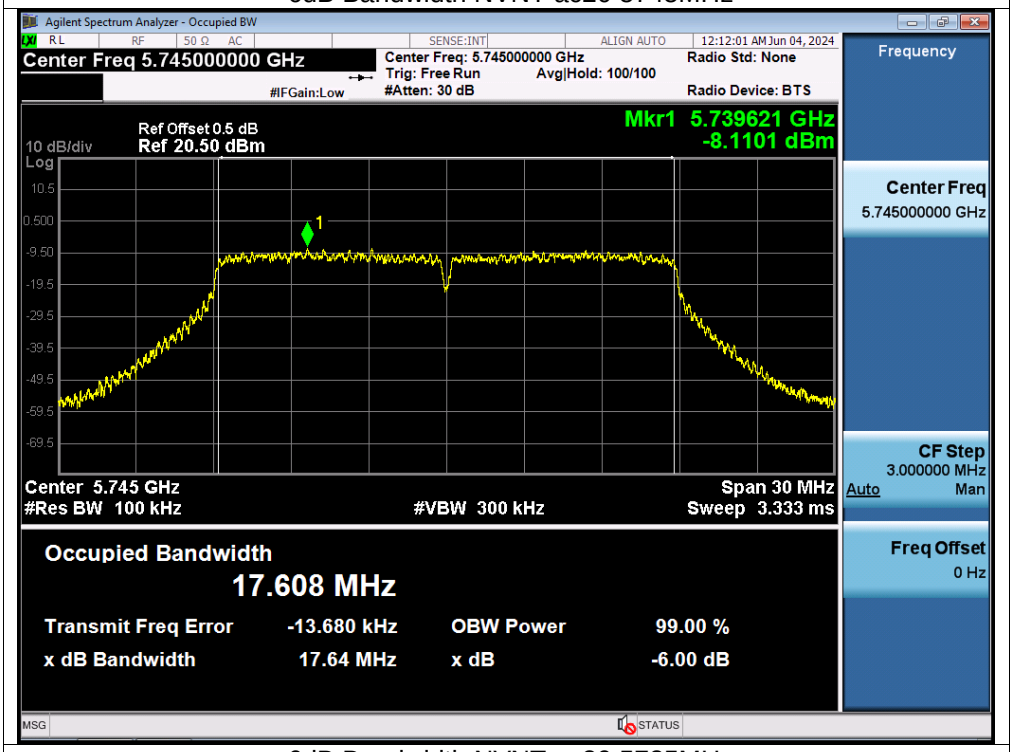
-6dB Bandwidth NVNT n40 5755MHz



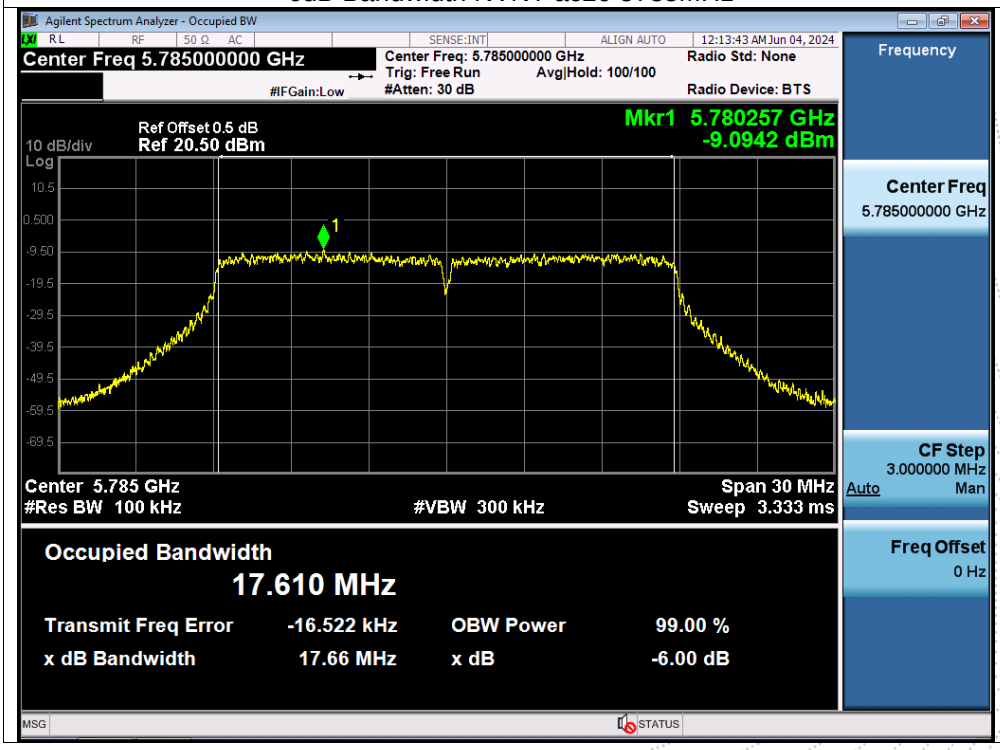
-6dB Bandwidth NVNT n40 5795MHz



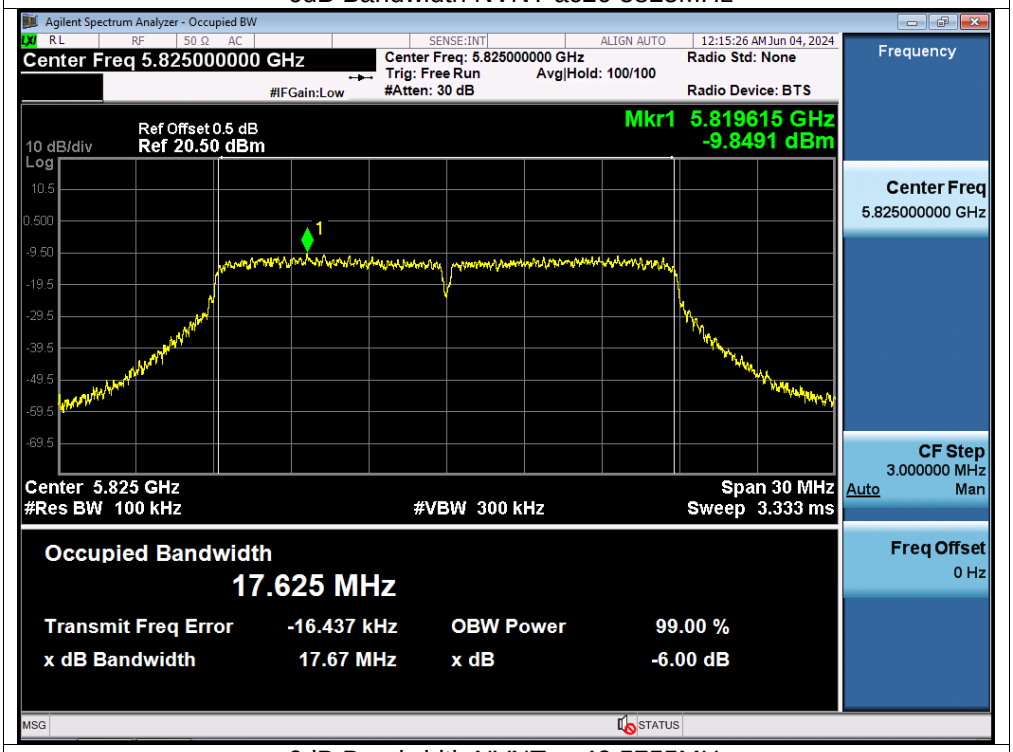
-6dB Bandwidth NVNT ac20 5745MHz



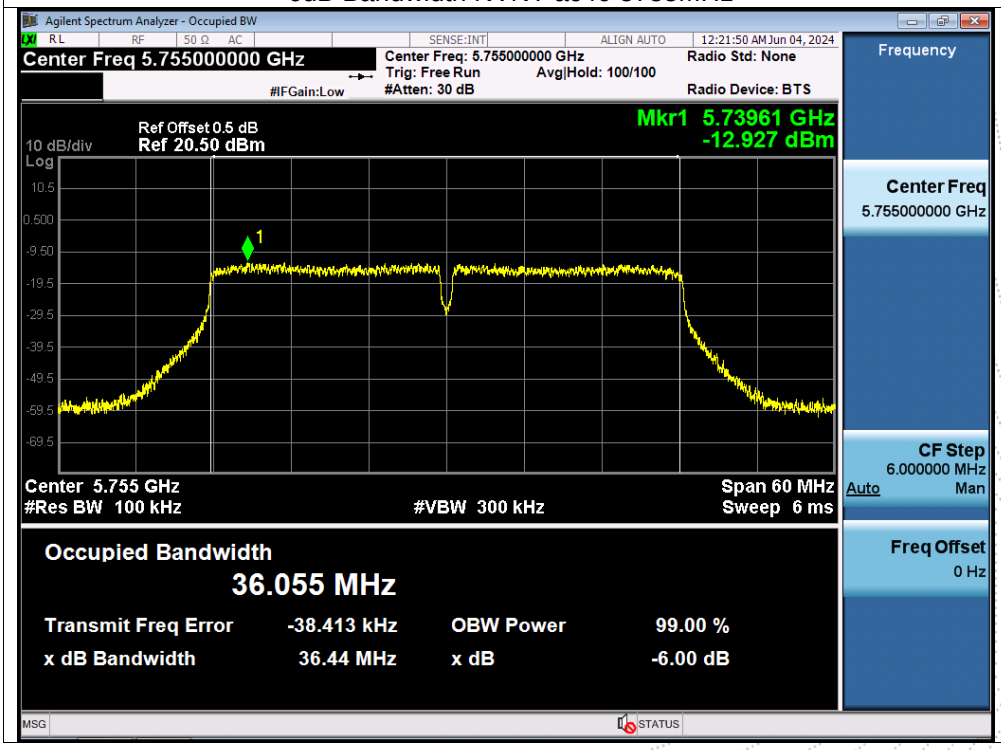
-6dB Bandwidth NVNT ac20 5785MHz



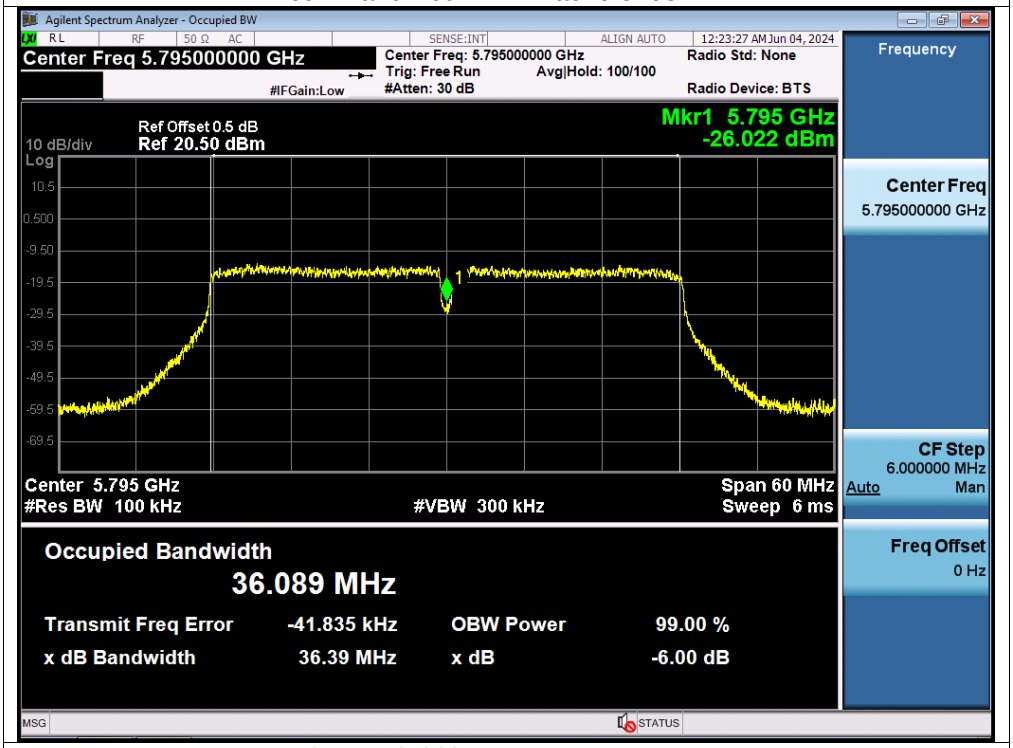
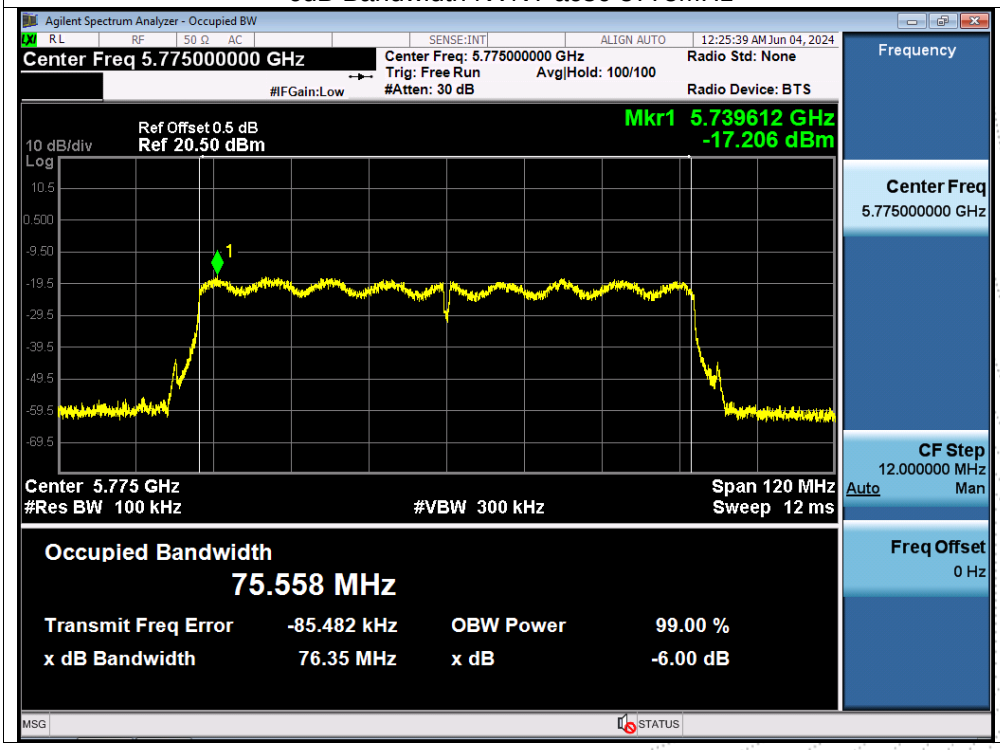
-6dB Bandwidth NVNT ac20 5825MHz



-6dB Bandwidth NVNT ac40 5755MHz



-6dB Bandwidth NVNT ac40 5795MHz



-6dB Bandwidth NVNT ac80 5775MHz