PSD NVNT n20 5200MHz

PSD NVNT n20 5240MHz

PSD NVNT n40 5190MHz

PSD NVNT n40 5230MHz

PSD NVNT ac20 5180MHz

PSD NVNT ac20 5200MHz

PSD NVNT ac20 5240MHz

PSD NVNT ac40 5190MHz

PSD NVNT ac40 5230MHz

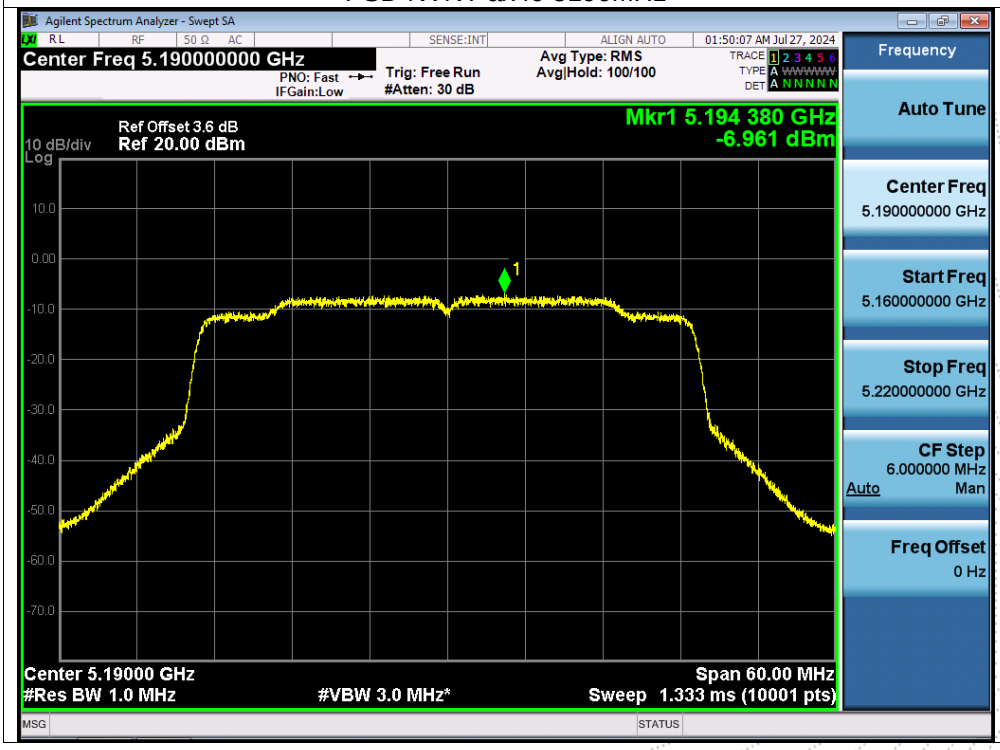
PSD NVNT ac80 5210MHz

PSD NVNT ax20 5180MHz

PSD NVNT ax20 5200MHz

PSD NVNT ax20 5240MHz

PSD NVNT ax40 5190MHz



PSD NVNT ax40 5230MHz

PSD NVNT ax80 5210MHz

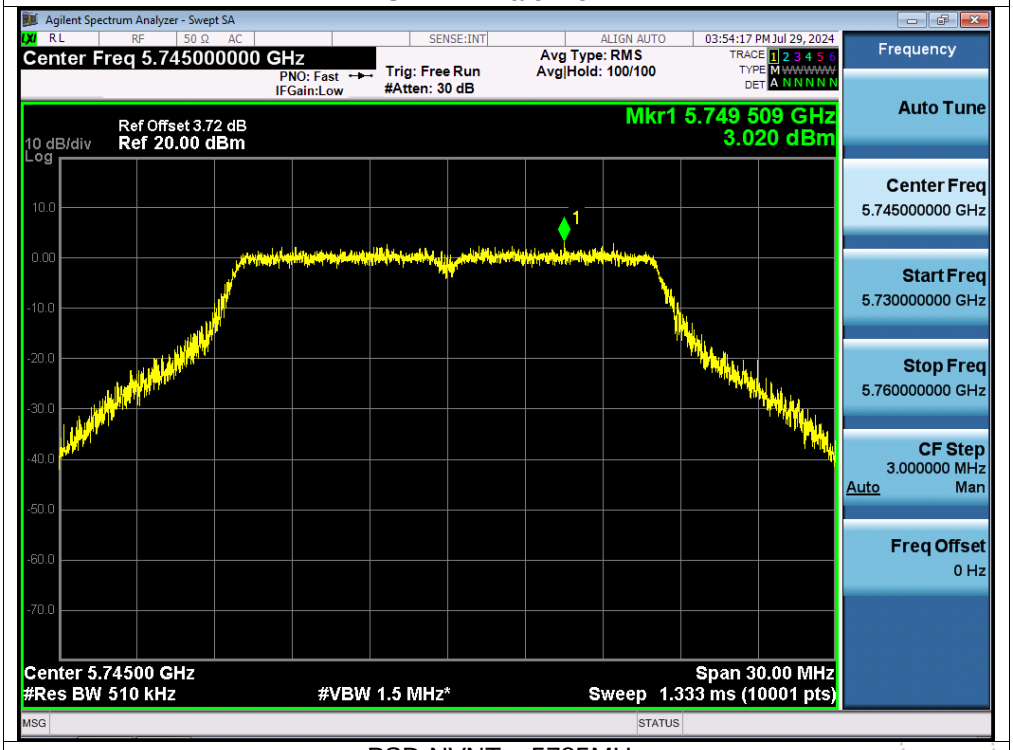
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 11.4V
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Measured Power Density (dBm/MHz)			Limit (dBm/MHz)	Result
			ANT A	ANT B	Total		
NVNT	a	5745	**3.02**	1.41	/	30	PASS
NVNT	a	5785	2.08	0.5	/	30	PASS
NVNT	a	5825	1.71	0.01	/	30	PASS
NVNT	n20	5745	1.3	0.38	3.87	30	PASS
NVNT	n20	5785	0.65	-0.74	3.02	30	PASS
NVNT	n20	5825	0.63	-1	2.90	30	PASS
NVNT	n40	5755	-2.87	-4.09	-0.43	30	PASS
NVNT	n40	5795	-2.64	-5.03	-0.66	30	PASS
NVNT	ac20	5745	1.95	0.14	4.15	30	PASS
NVNT	ac20	5785	0.78	-0.8	3.07	30	PASS
NVNT	ac20	5825	1.59	-1.4	3.36	30	PASS
NVNT	ac40	5755	-2.43	-4.22	-0.22	30	PASS
NVNT	ac40	5795	-2.95	-4.79	-0.76	30	PASS
NVNT	ac80	5775	-7.1	-7.59	-4.33	30	PASS
NVNT	ax20	5745	-6.39	-7.55	-3.92	30	PASS
NVNT	ax20	5785	-6.39	-8.19	-4.19	30	PASS
NVNT	ax20	5825	-7.5	-8.73	-5.06	30	PASS
NVNT	ax40	5755	-10.48	-11.26	-7.84	30	PASS
NVNT	ax40	5795	-11.11	-12.13	-8.58	30	PASS
NVNT	ax80	5775	-14.47	-14.73	-11.59	30	PASS

Note:
Antenna A gain:2.42 dBi, Antenna B gain: 2.79 dBi, Directional gain=[GainANT + 10 log(NANT) dBi] =4.8 dbi＜6dbi
Limit=30dBm/MHz

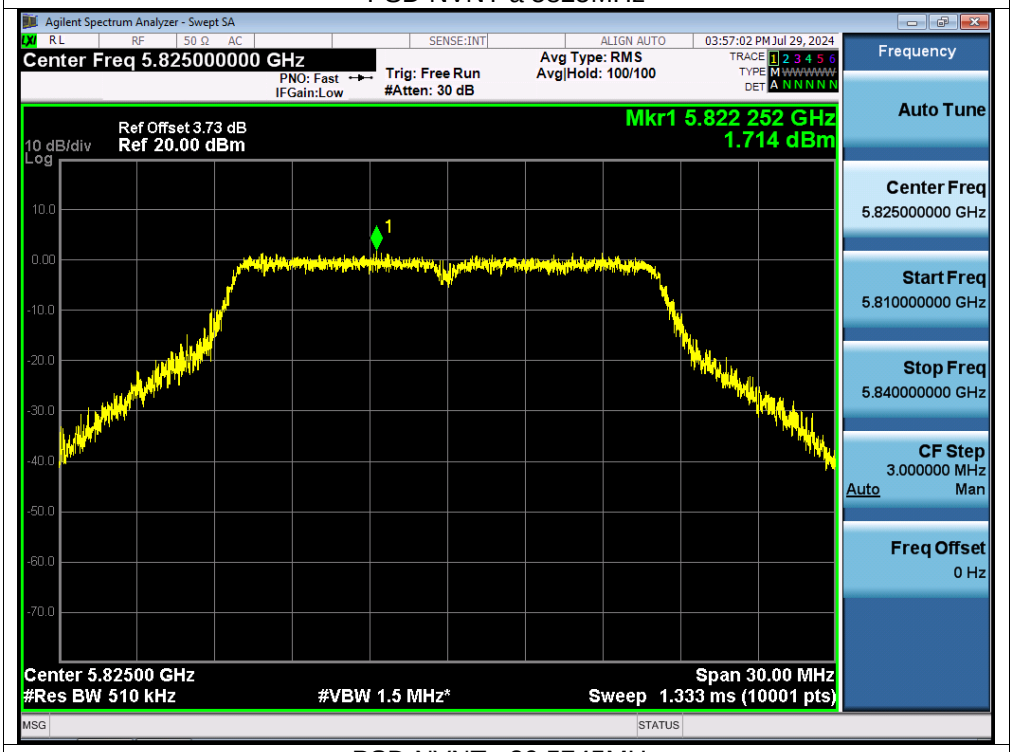
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs
PSD NVNT a 5745MHz



PSD NVNT a 5785MHz

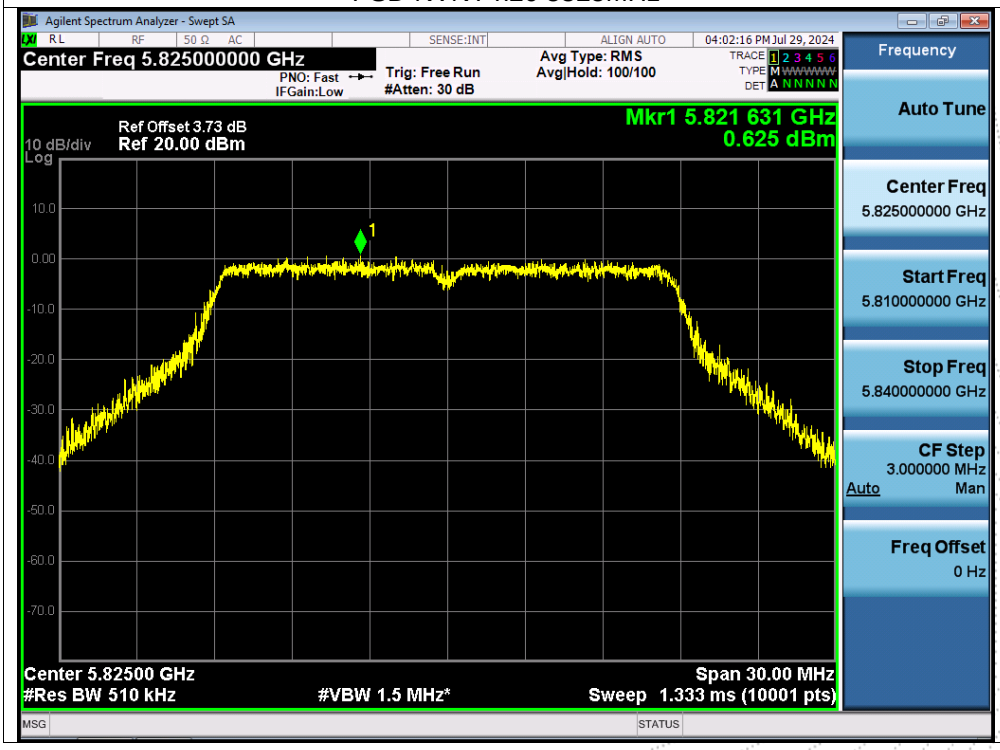
PSD NVNT a 5825MHz



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

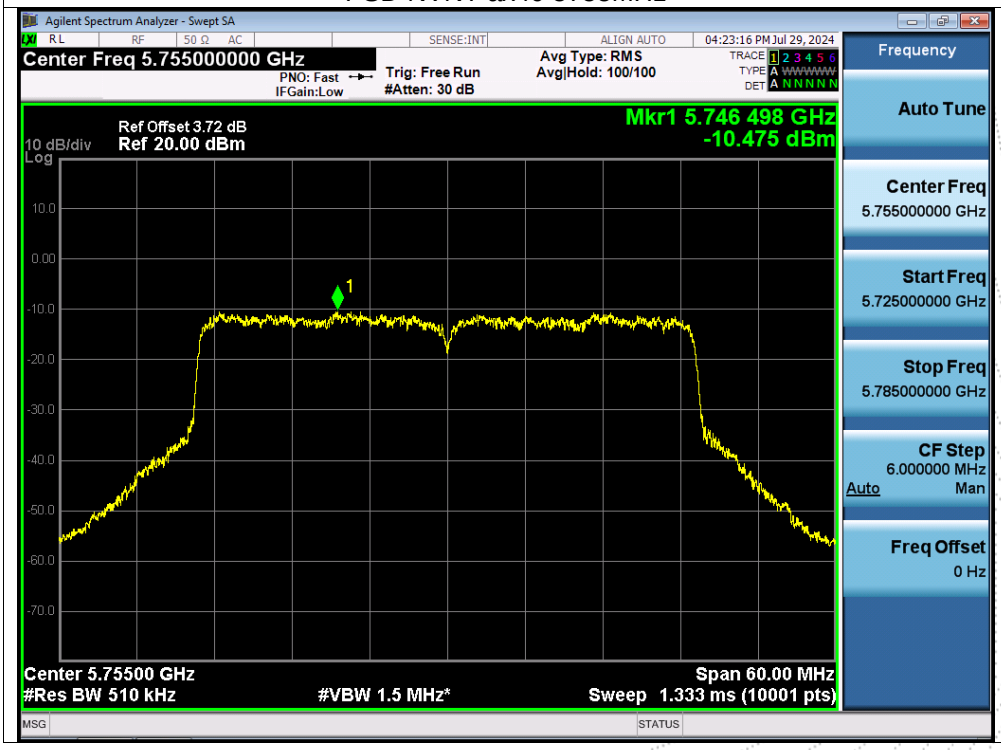
PSD NVNT ac80 5775MHz

PSD NVNT ax20 5745MHz

PSD NVNT ax20 5785MHz

PSD NVNT ax20 5825MHz

PSD NVNT ax40 5755MHz

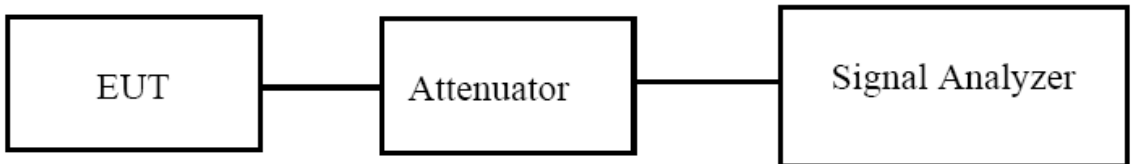


PSD NVNT ax40 5795MHz

PSD NVNT ax80 5775MHz

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

9.1 Block Diagram Of Test Setup



9.2 Limit

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

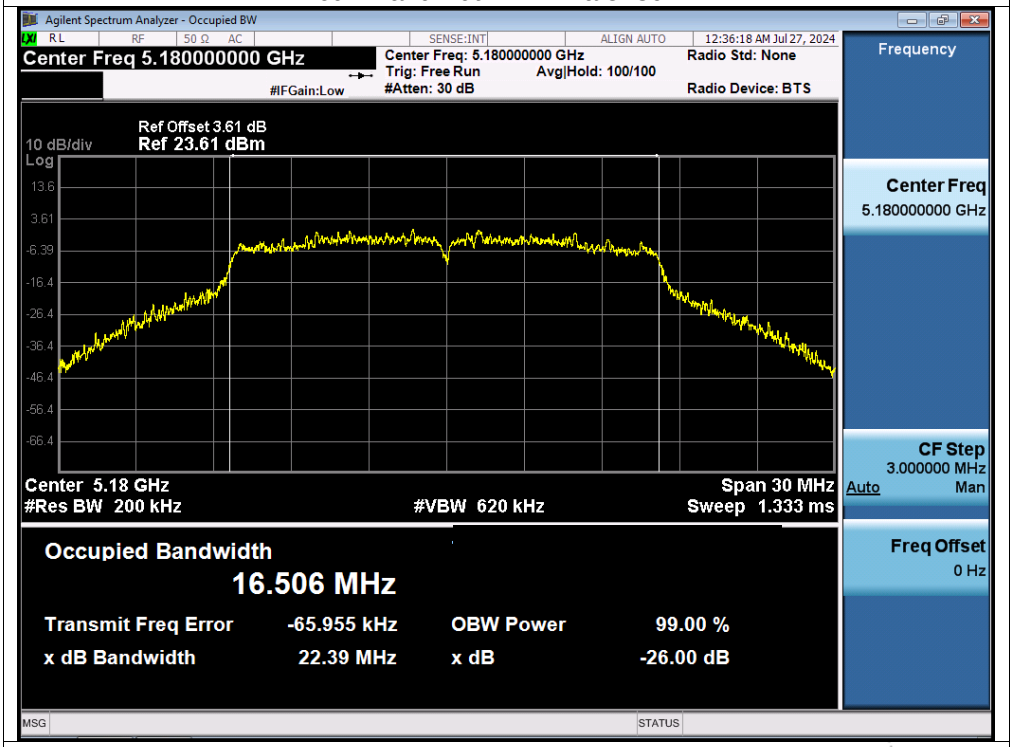
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 11.4V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Mode	Channel	Frequency (MHz)	99% OBW (MHz)		26dB bandwidth (MHz)		Result
			ANT A	ANT B	ANT A	ANT B	
NVNT	a	5180	16.554	16.514	22.392	22.293	Pass
NVNT	a	5200	16.521	16.511	21.998	22.058	Pass
NVNT	a	5240	16.522	16.522	21.902	22.158	Pass
NVNT	n20	5180	17.665	17.652	22.94	22.483	Pass
NVNT	n20	5200	17.679	17.668	23.394	23.035	Pass
NVNT	n20	5240	17.718	17.651	22.853	22.692	Pass
NVNT	n40	5190	36.006	35.948	41.836	41.448	Pass
NVNT	n40	5230	35.99	36.02	41.568	41.393	Pass
NVNT	ac20	5180	17.674	17.697	22.858	22.192	Pass
NVNT	ac20	5200	17.683	17.669	22.746	22.535	Pass
NVNT	ac20	5240	17.672	17.657	23.121	22.162	Pass
NVNT	ac40	5190	36.011	35.961	42.357	41.894	Pass
NVNT	ac40	5230	36.002	35.998	42.182	41.818	Pass
NVNT	ac80	5210	75.189	75.113	**84.016**	84.011	Pass
NVNT	ax20	5180	18.838	18.861	23.302	23.039	Pass
NVNT	ax20	5200	18.825	18.827	22.87	22.579	Pass
NVNT	ax20	5240	18.898	18.884	22.625	22.962	Pass
NVNT	ax40	5190	37.516	37.471	41.562	41.267	Pass
NVNT	ax40	5230	37.465	37.44	41.05	41.143	Pass
NVNT	ax80	5210	**76.747**	76.644	81.903	83.195	Pass

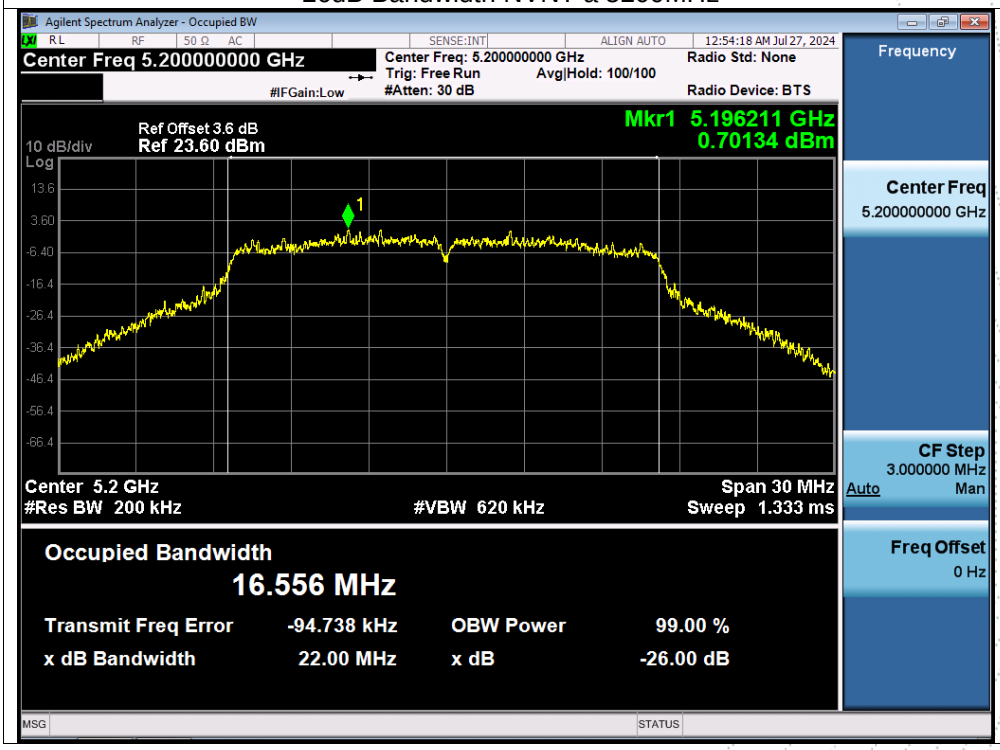
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

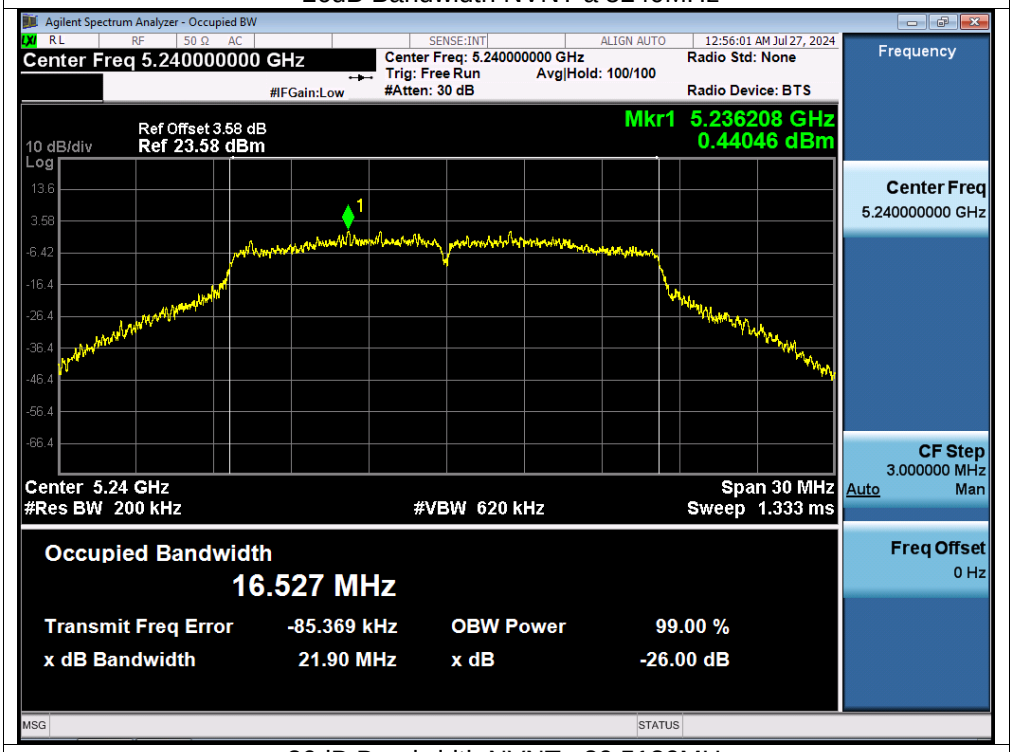
-26dB Bandwidth NVNT a 5180MHz



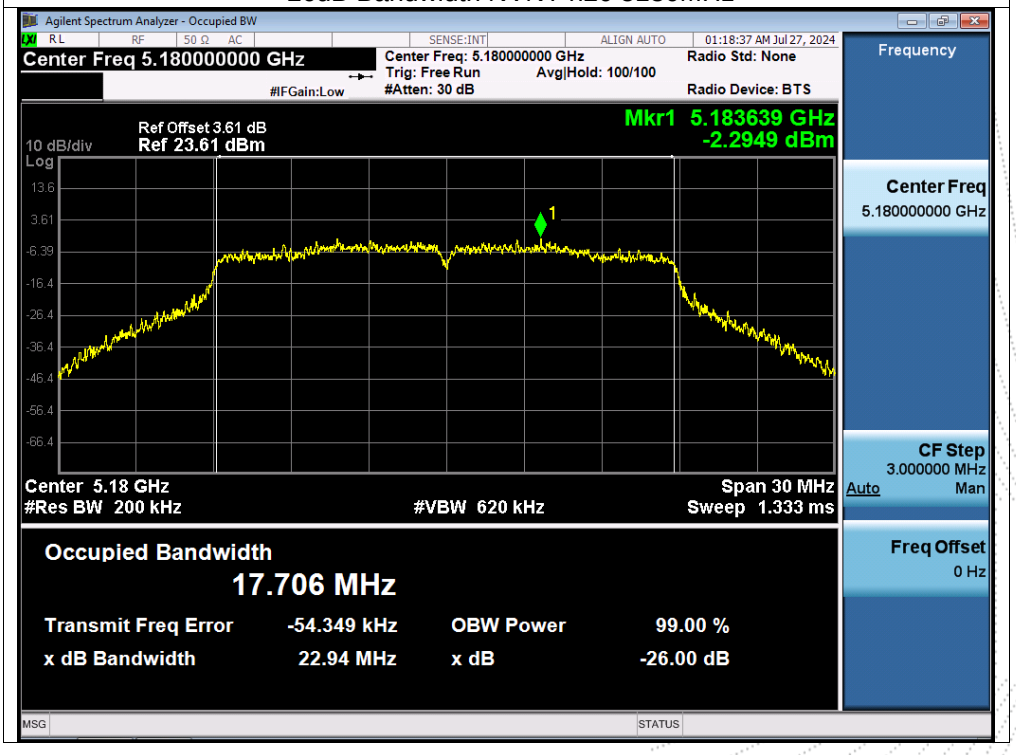
-26dB Bandwidth NVNT a 5200MHz



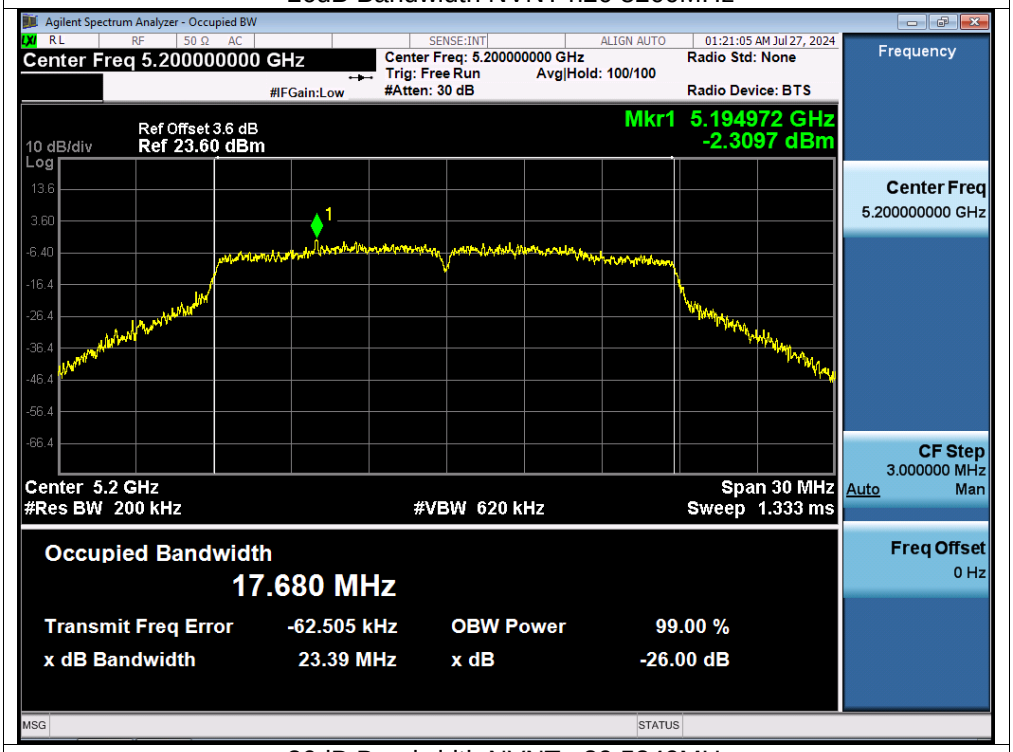
-26dB Bandwidth NVNT a 5240MHz



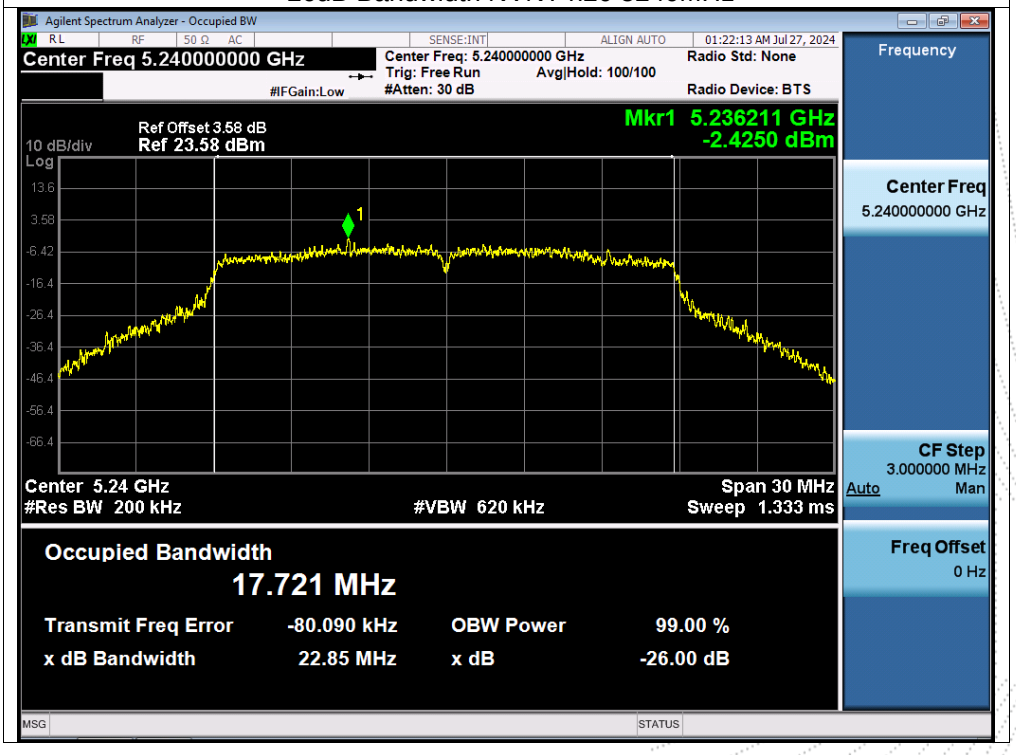
-26dB Bandwidth NVNT n20 5180MHz



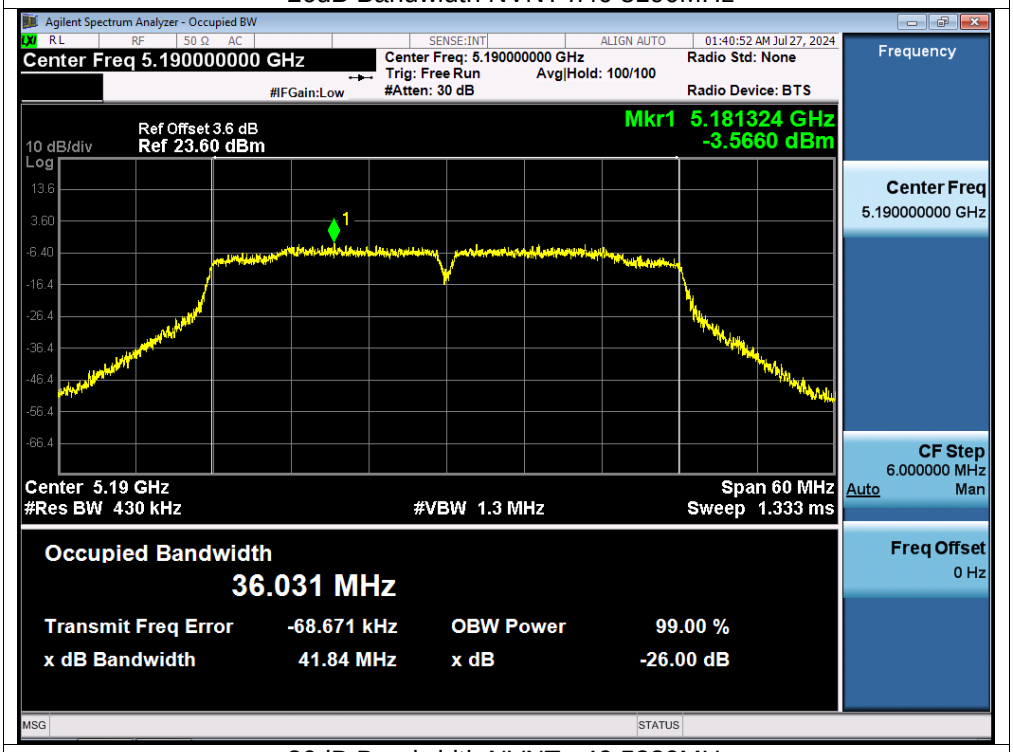
-26dB Bandwidth NVNT n20 5200MHz



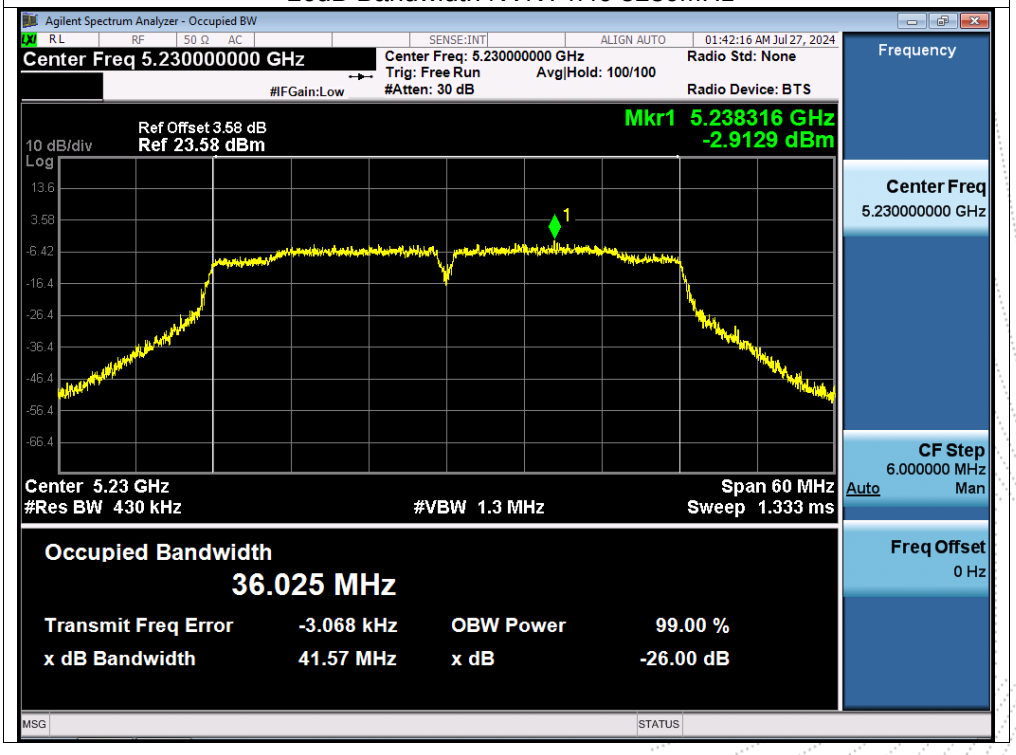
-26dB Bandwidth NVNT n20 5240MHz



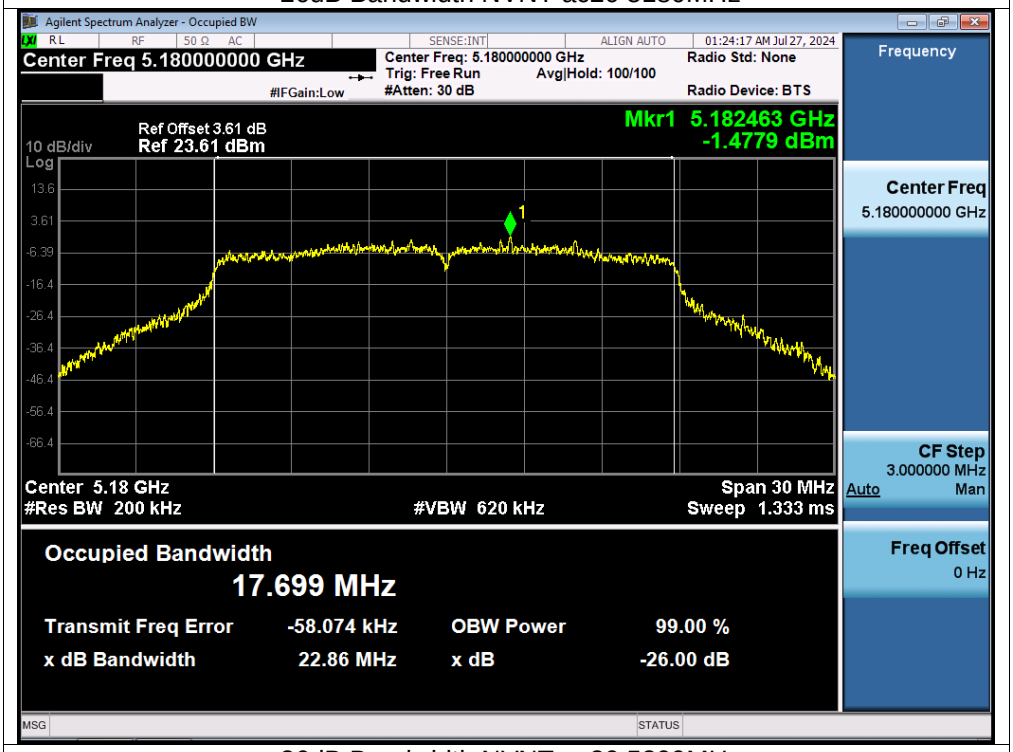
-26dB Bandwidth NVNT n40 5190MHz



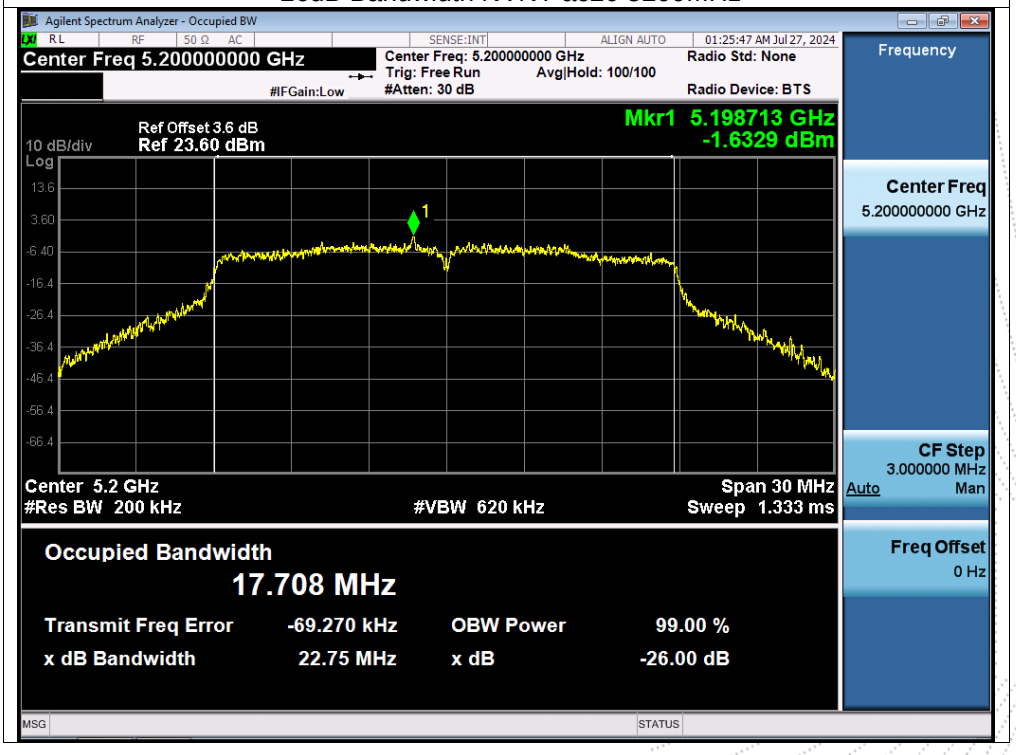
-26dB Bandwidth NVNT n40 5230MHz



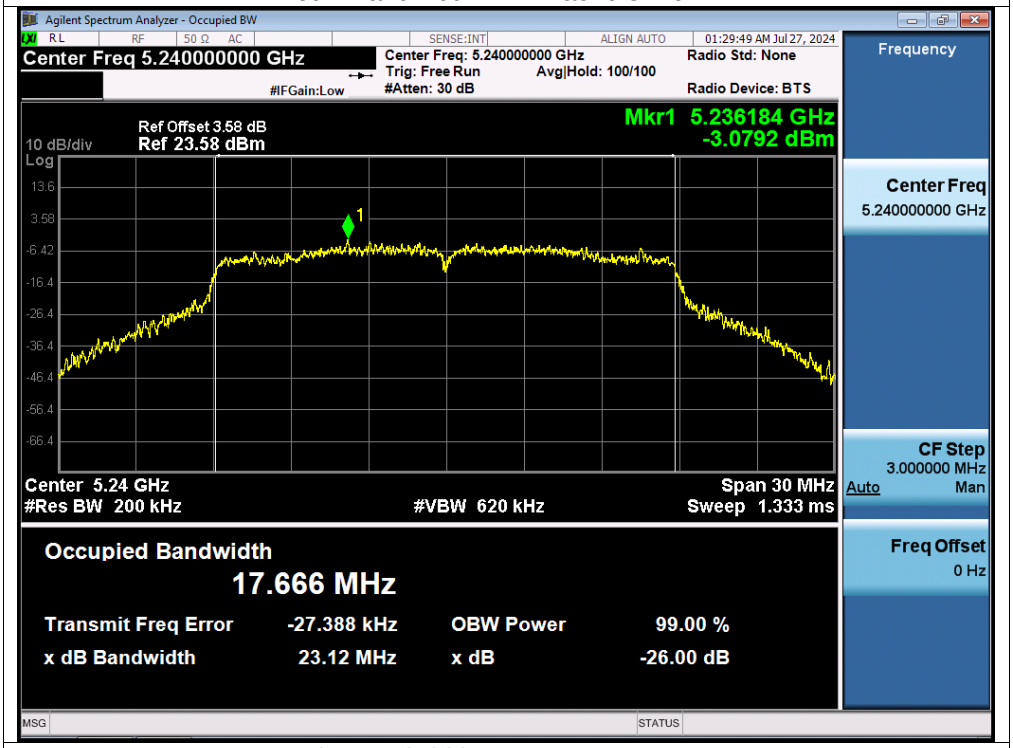
-26dB Bandwidth NVNT ac20 5180MHz



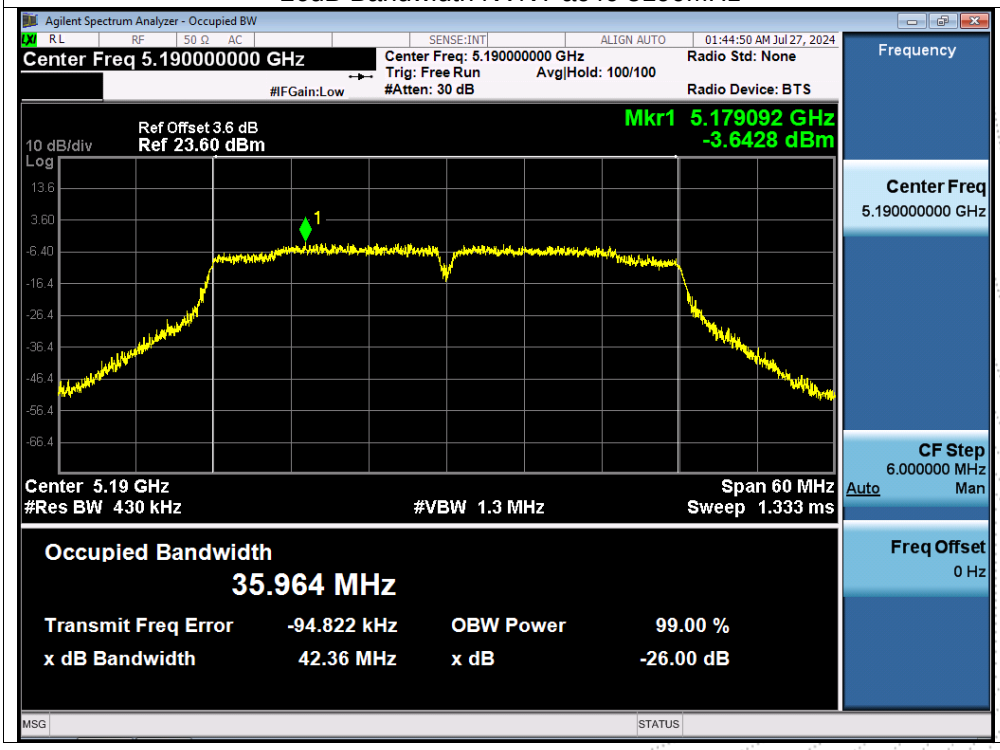
-26dB Bandwidth NVNT ac20 5200MHz



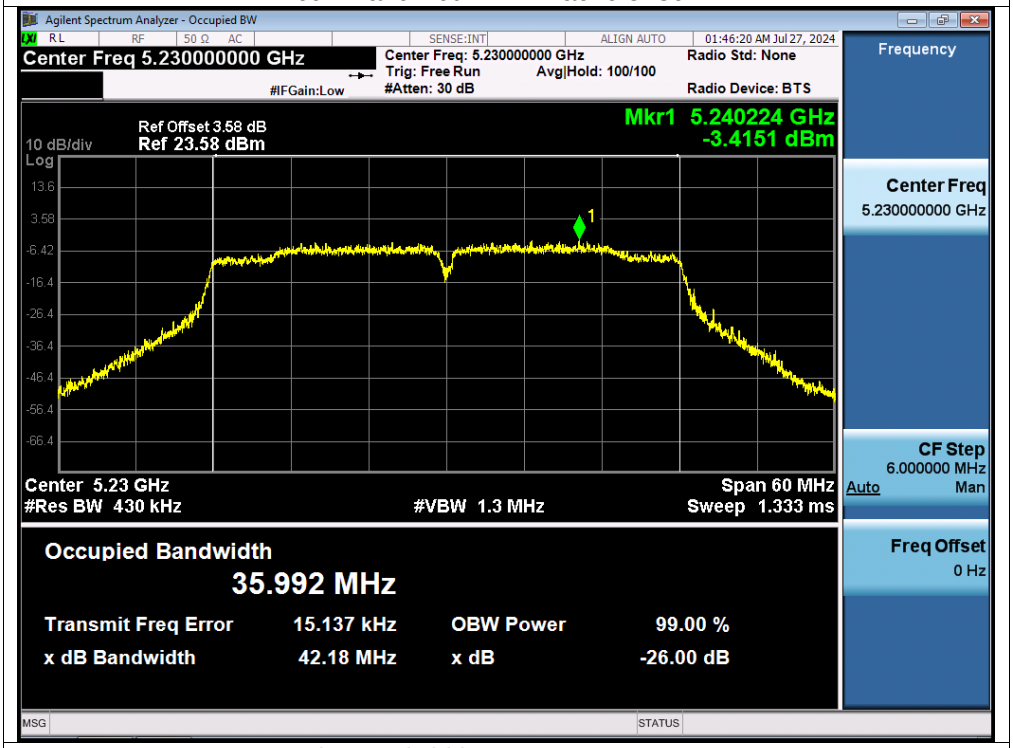
-26dB Bandwidth NVNT ac20 5240MHz



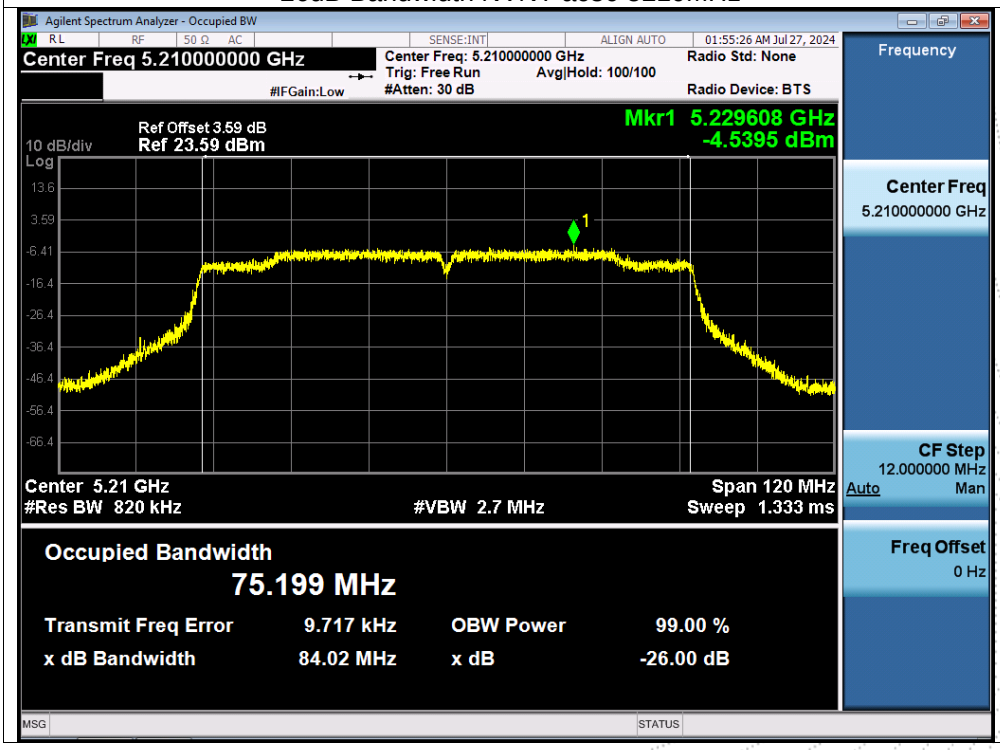
-26dB Bandwidth NVNT ac40 5190MHz



-26dB Bandwidth NVNT ac40 5230MHz

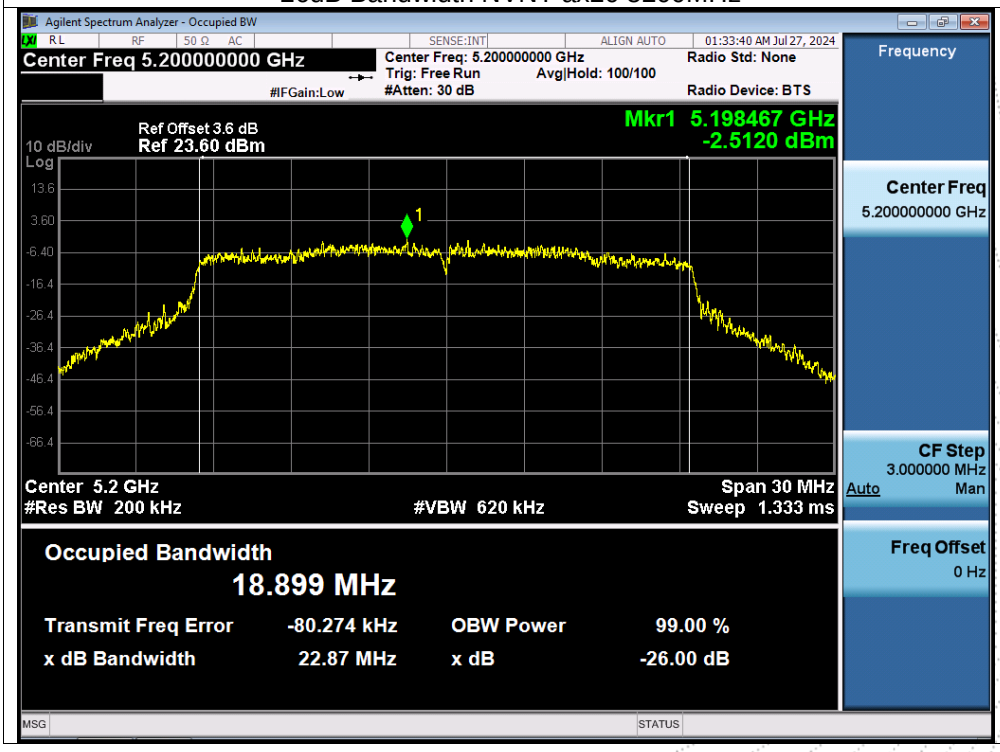


-26dB Bandwidth NVNT ac80 5210MHz

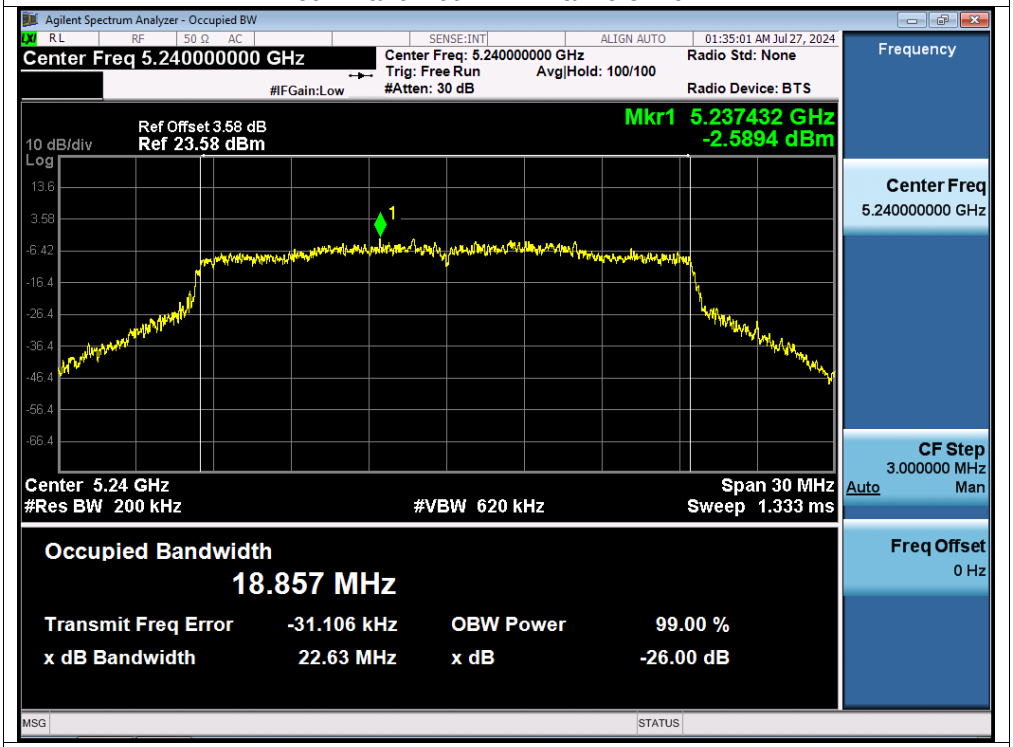


-26dB Bandwidth NVNT ax20 5180MHz

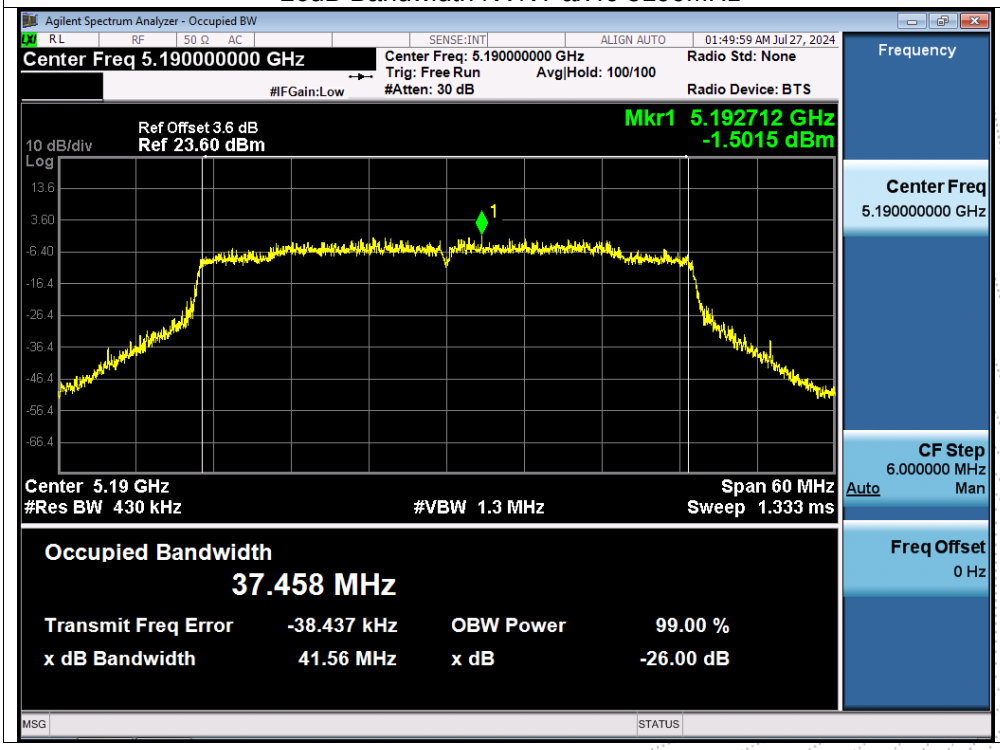
-26dB Bandwidth NVNT ax20 5200MHz



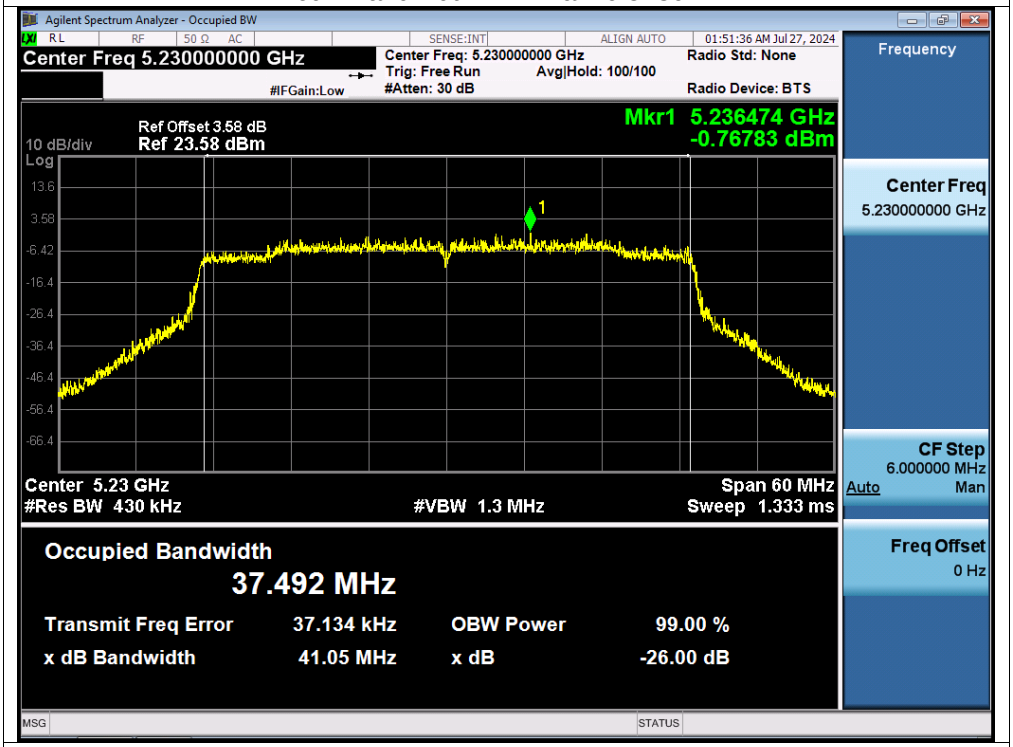
-26dB Bandwidth NVNT ax20 5240MHz



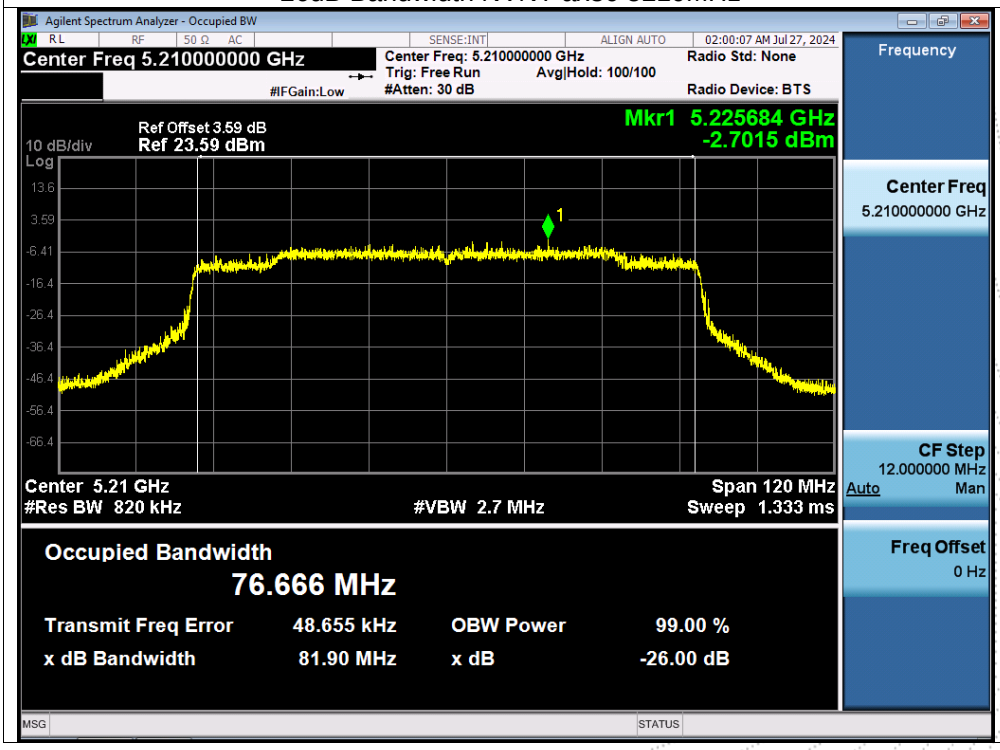
-26dB Bandwidth NVNT ax40 5190MHz



-26dB Bandwidth NVNT ax40 5230MHz



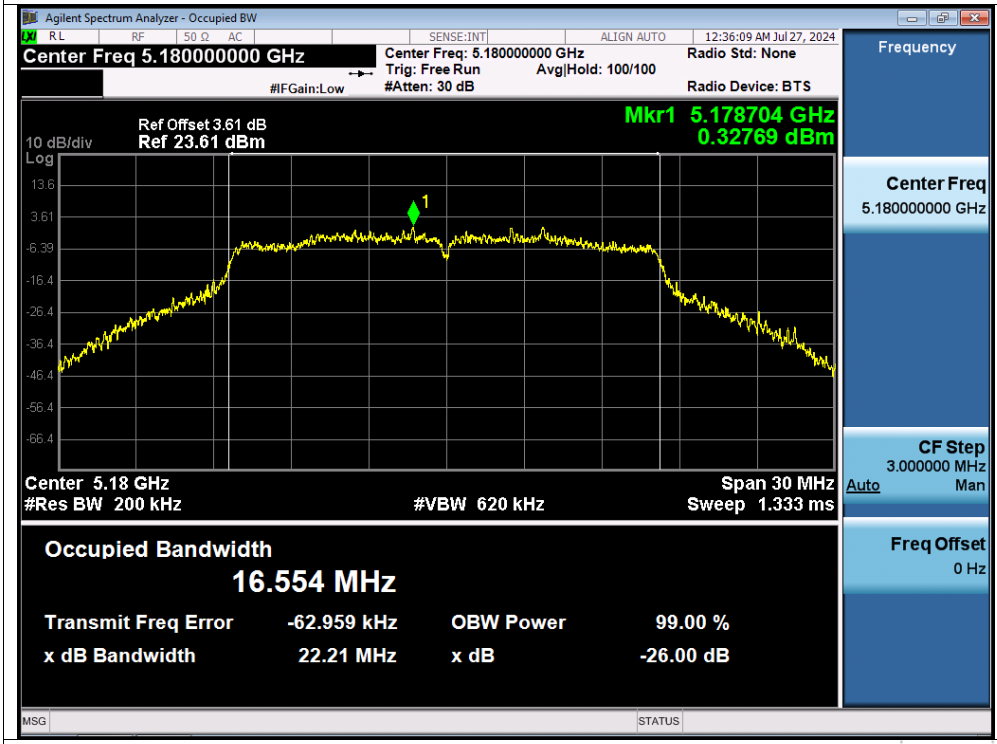
-26dB Bandwidth NVNT ax80 5210MHz



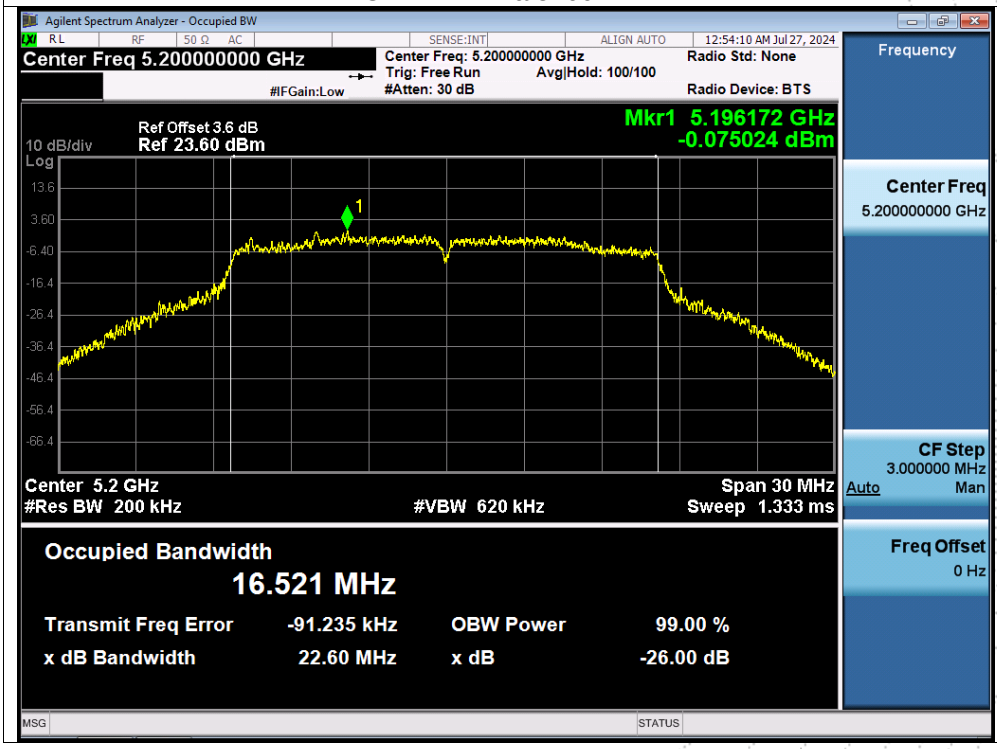
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

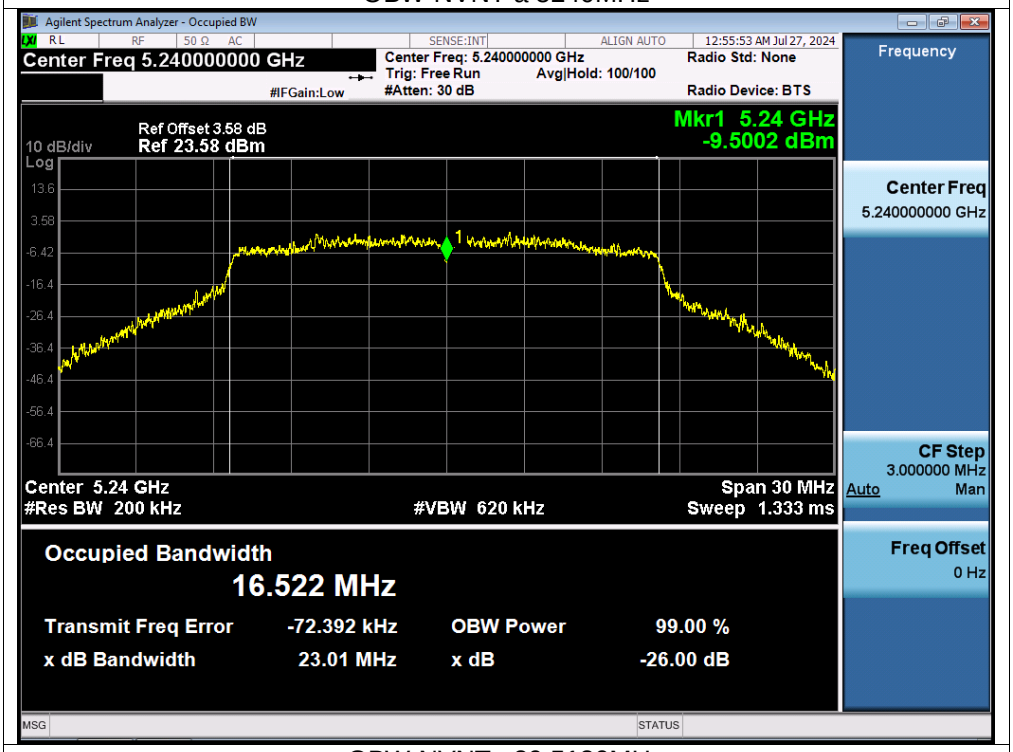
OBW NVNT a 5180MHz



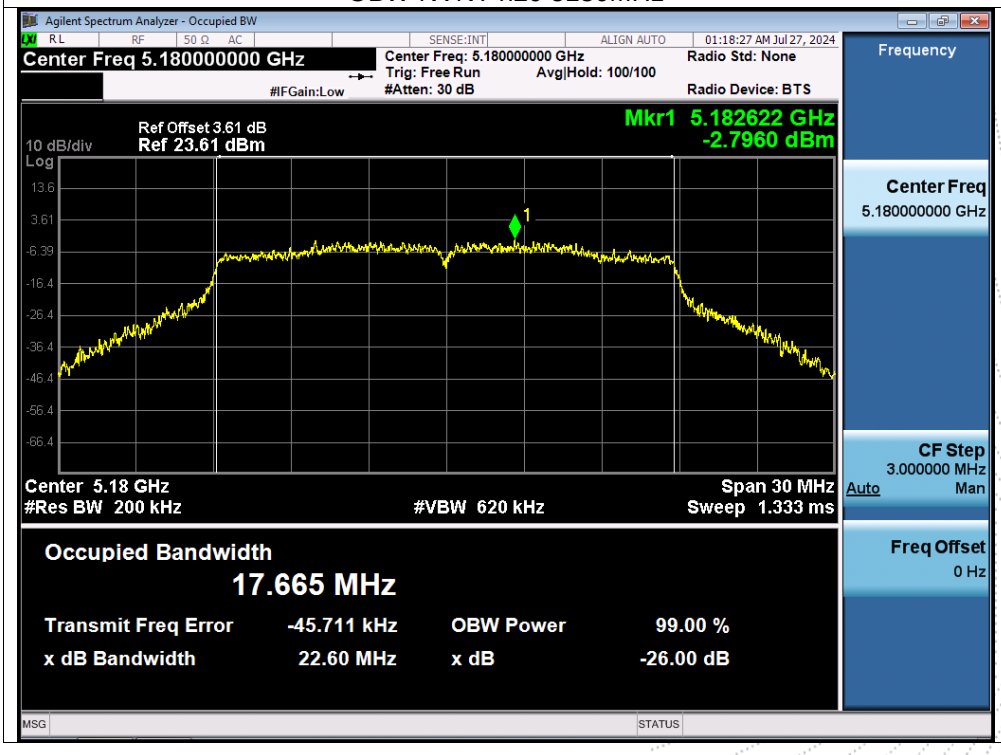
OBW NVNT a 5200MHz



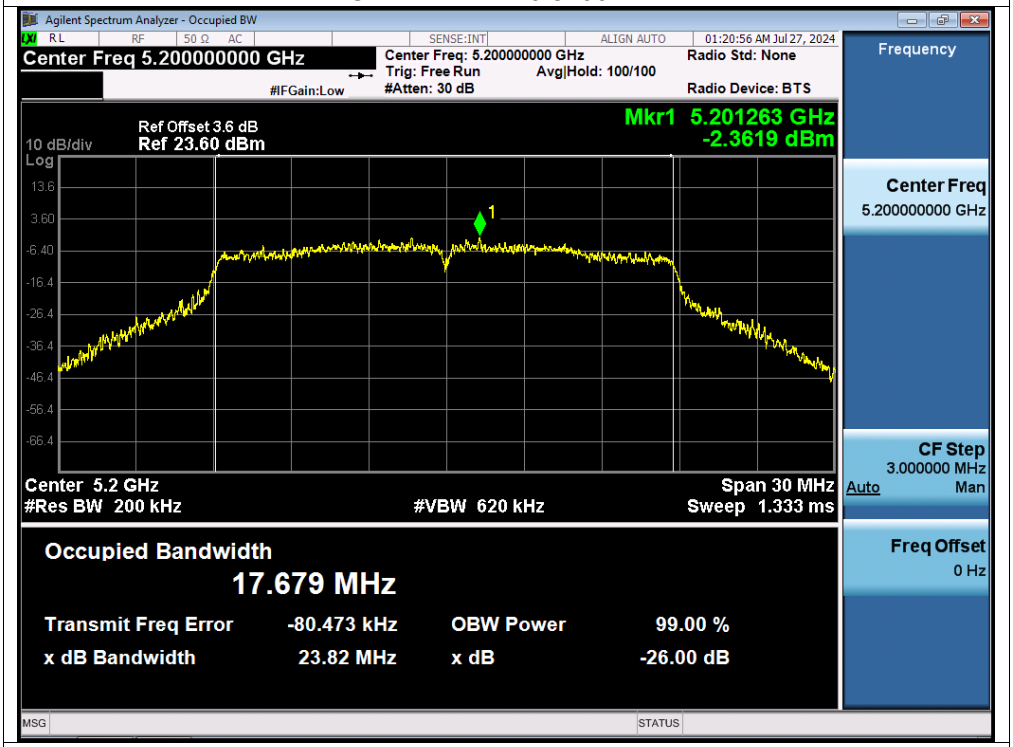
OBW NVNT a 5240MHz



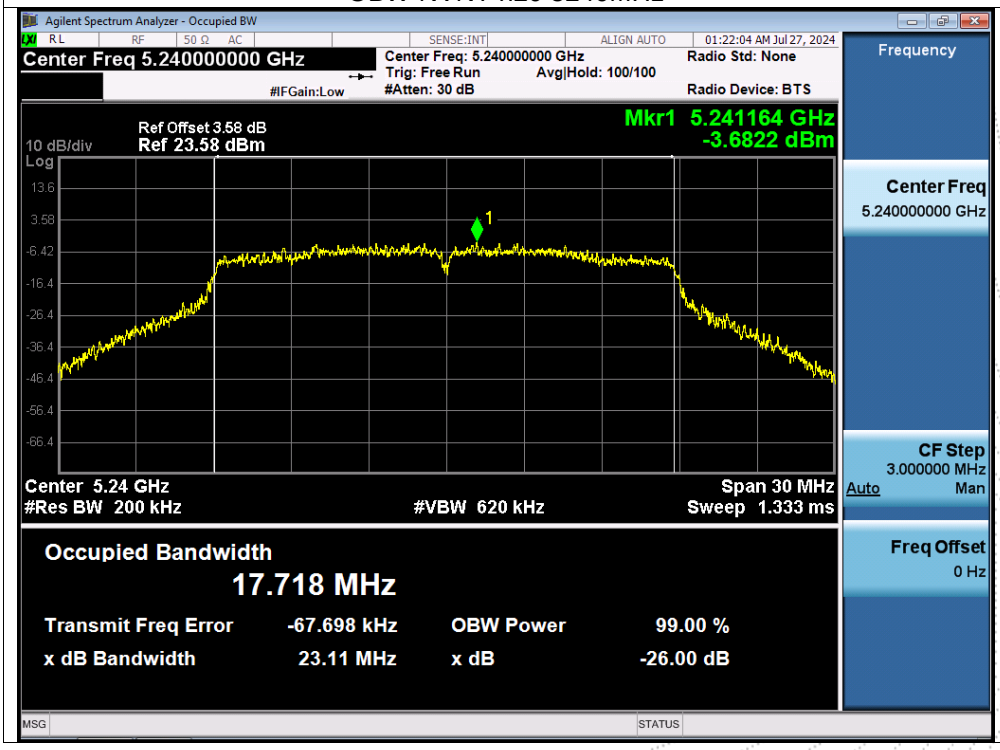
OBW NVNT n20 5180MHz



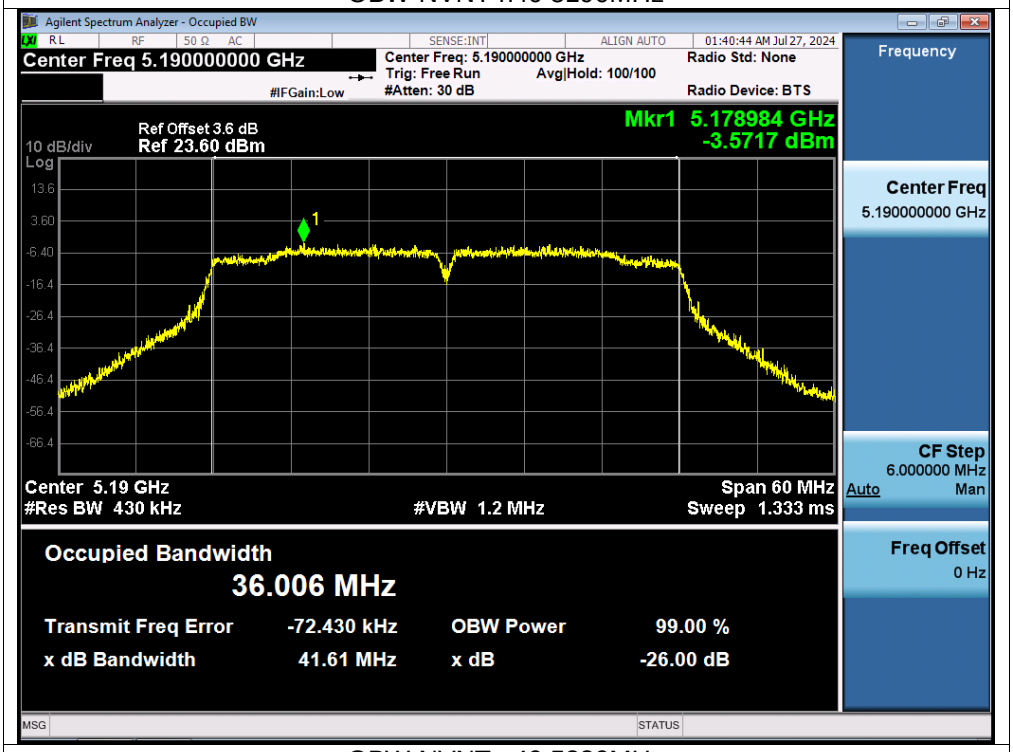
OBW NVNT n20 5200MHz



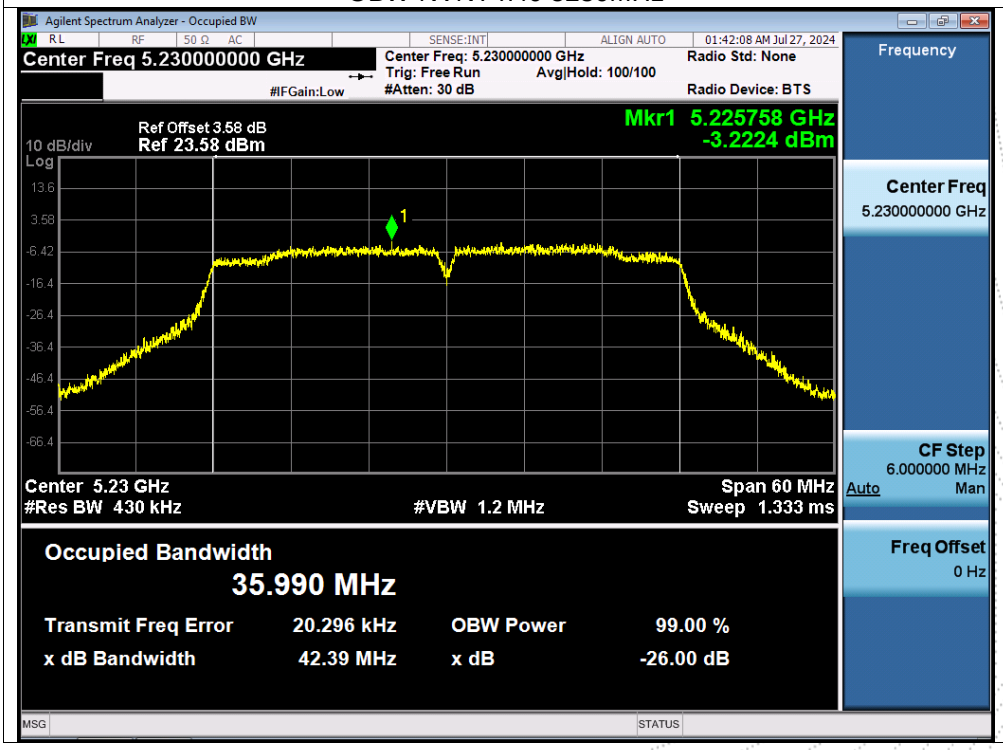
OBW NVNT n20 5240MHz



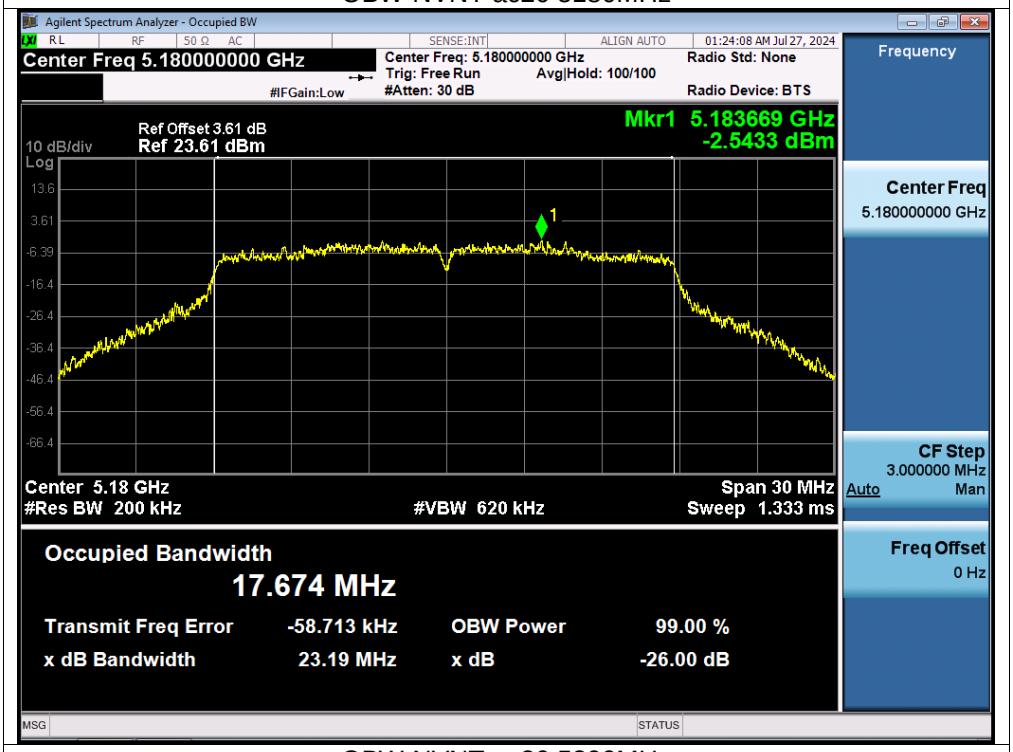
OBW NVNT n40 5190MHz



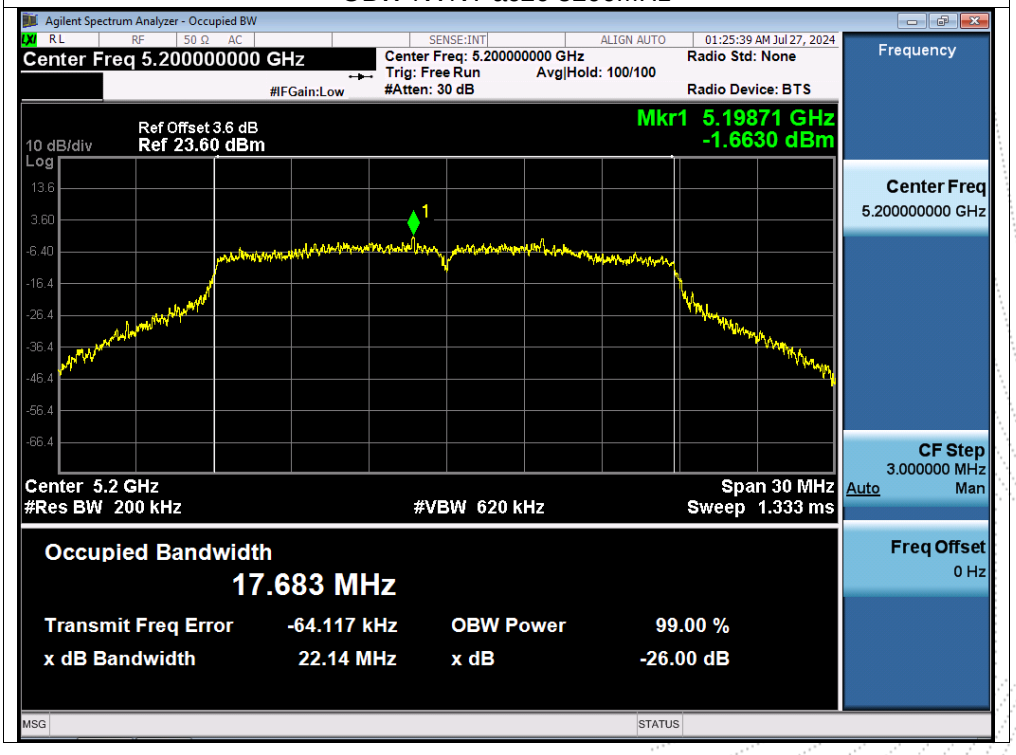
OBW NVNT n40 5230MHz



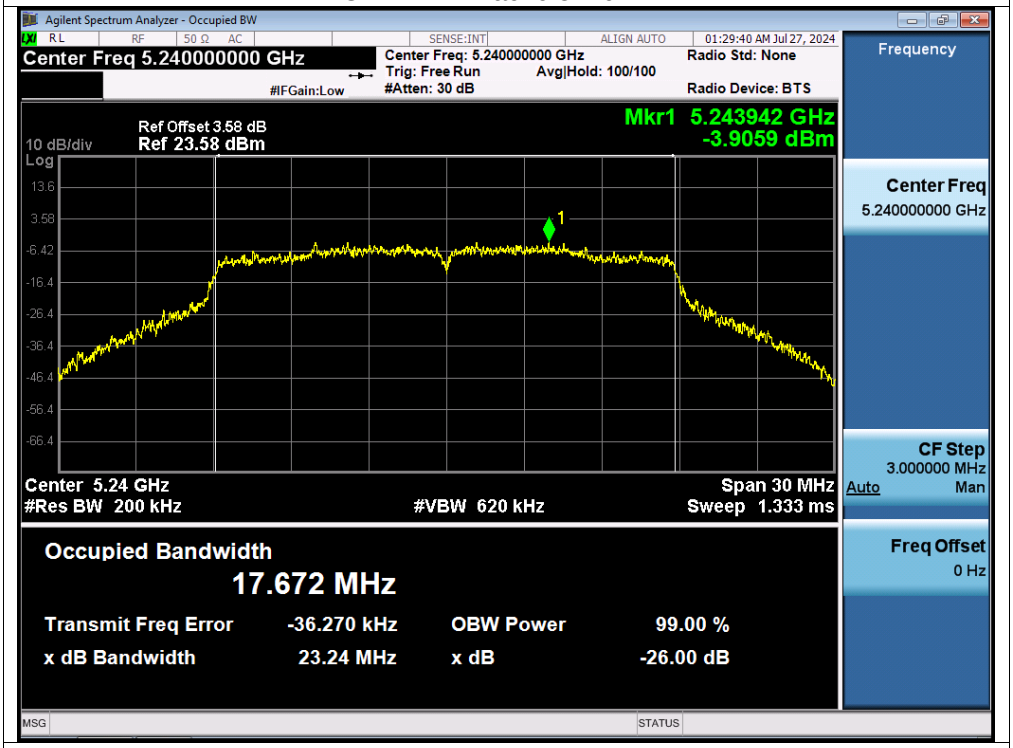
OBW NVNT ac20 5180MHz



OBW NVNT ac20 5200MHz



OBW NVNT ac20 5240MHz



OBW NVNT ac40 5190MHz