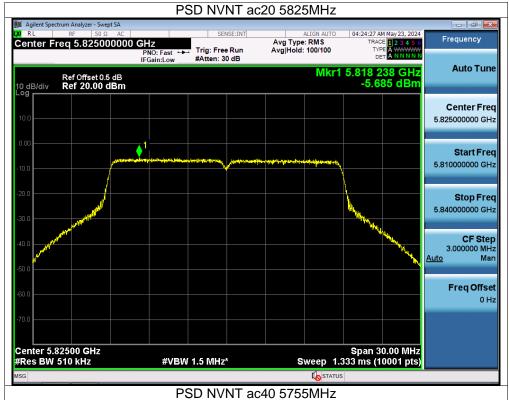




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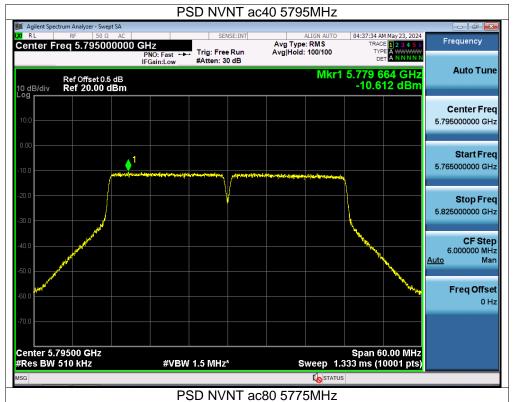






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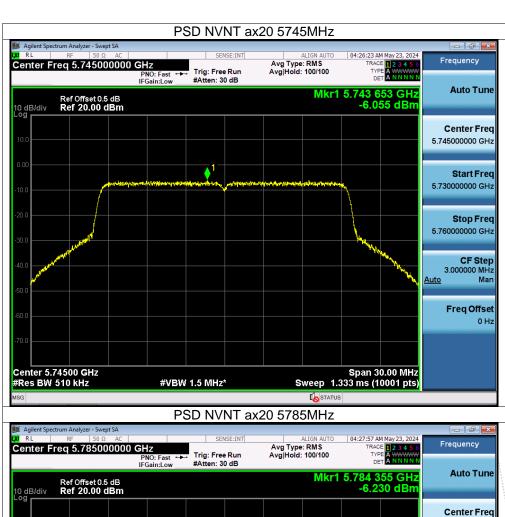


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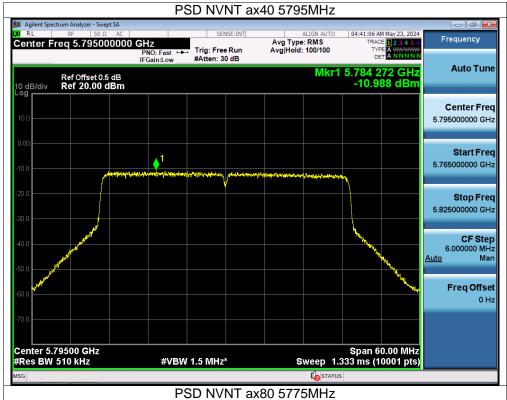






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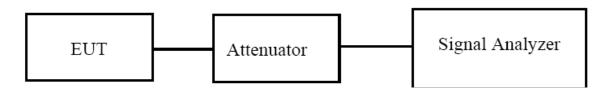


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9. 26dB & 6dB & 99% Emission Bandwidth

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 $\overrightarrow{RBW} = 1 \%$ 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) \geq 3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.

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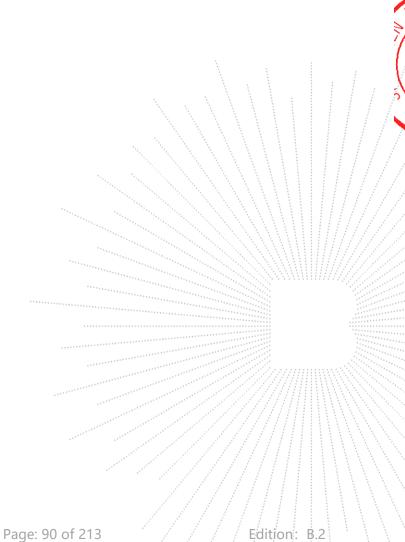


6. Allow the trace to stabilize.

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.



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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% OB	W (MHz)	26dB ba (M	Result	
			ANT A	ANT B	ANT A	ANT B	
NVNT	а	5180	16.554	16.55	22.393	22.603	Pass
NVNT	а	5200	16.573	16.556	22.695	22.4	Pass
NVNT	а	5240	16.528	16.549	22.481	22.48	Pass
NVNT	n20	5180	17.704	17.672	22.698	22.634	Pass
NVNT	n20	5200	17.68	17.701	23.031	22.511	Pass
NVNT	n20	5240	17.678	17.661	22.856	23.364	Pass
NVNT	n40	5190	36.055	36.061	43.389	42.729	Pass
NVNT	n40	5230	36.056	35.988	41.992	42.494	Pass
NVNT	ac20	5180	17.683	17.672	22.977	22.677	Pass
NVNT	ac20	5200	17.667	17.675	22.541	22.852	Pass
NVNT	ac20	5240	17.694	17.685	22.176	22.412	Pass
NVNT	ac40	5190	36.071	36.046	43.86	43.637	Pass
NVNT	ac40	5230	36.045	36.032	43.06	42.778	Pass
NVNT	ac80	5210	75.266	75.197	85.746	84.371	Pass
NVNT	ax20	5180	18.887	18.881	22.51	22.958	Pass
NVNT	ax20	5200	18.854	18.853	22.475	23.057	Pass
NVNT	ax20	5240	18.85	18.855	23.249	22.554	Pass
NVNT	ax40	5190	37.487	37.472	42.041	42.17	Pass
NVNT	ax40	5230	37.502	37.537	42.726	42.133	Pass
NVNT	ax80	5210	76.594	76.689	82.613	82.481	Pass

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,TC

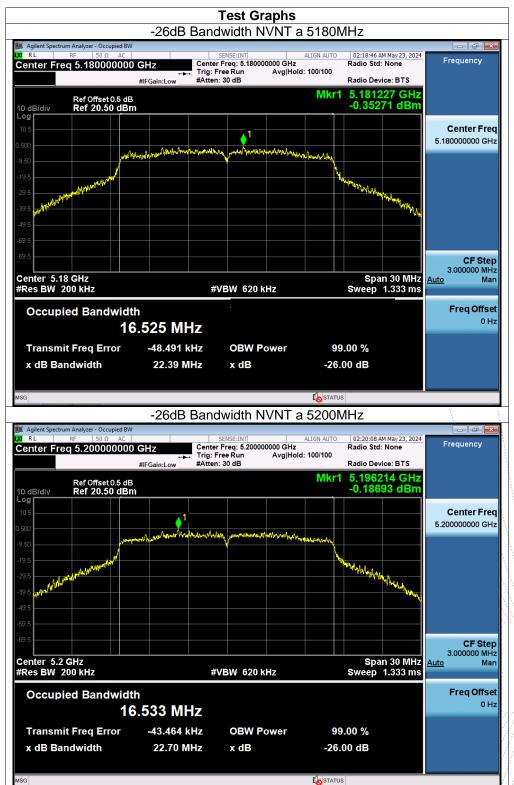
3C





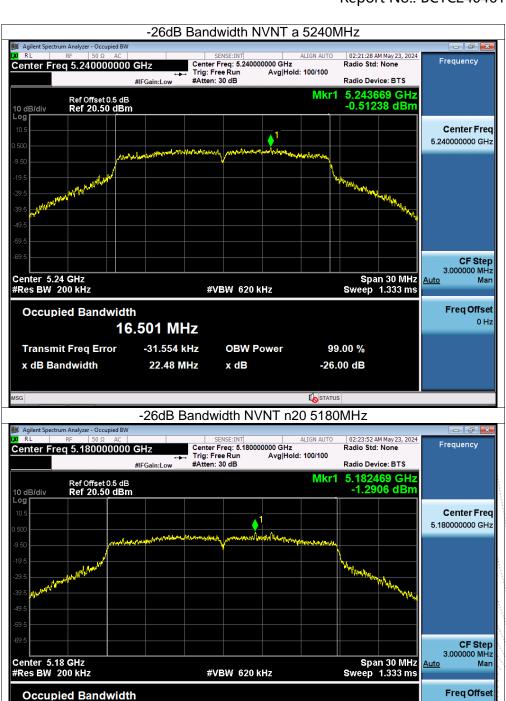
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Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.



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OBW Power

x dB

99.00 %

-26.00 dB

17.699 MHz

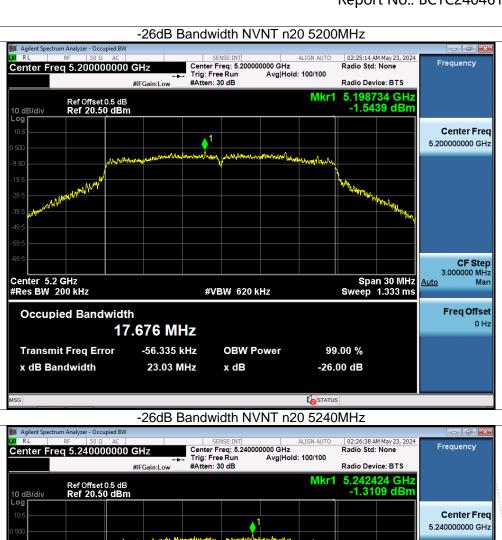
-72.961 kHz

22.70 MHz

Transmit Freq Error

x dB Bandwidth







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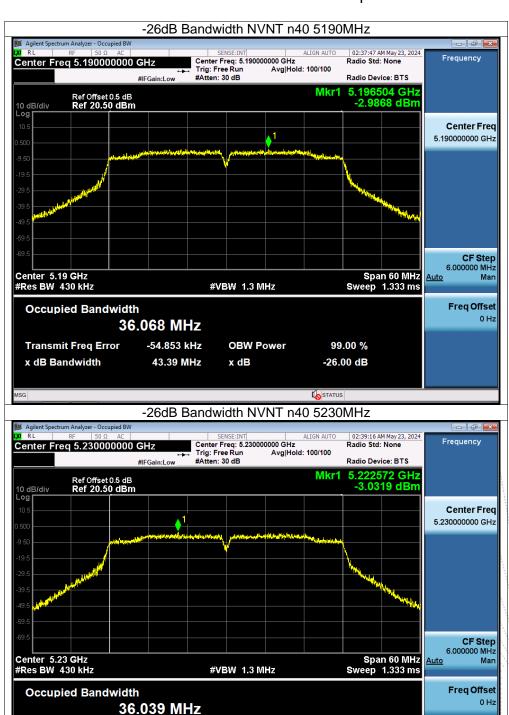
Transmit Freq Error

x dB Bandwidth

-34.380 kHz

41.99 MHz

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OBW Power

x dB

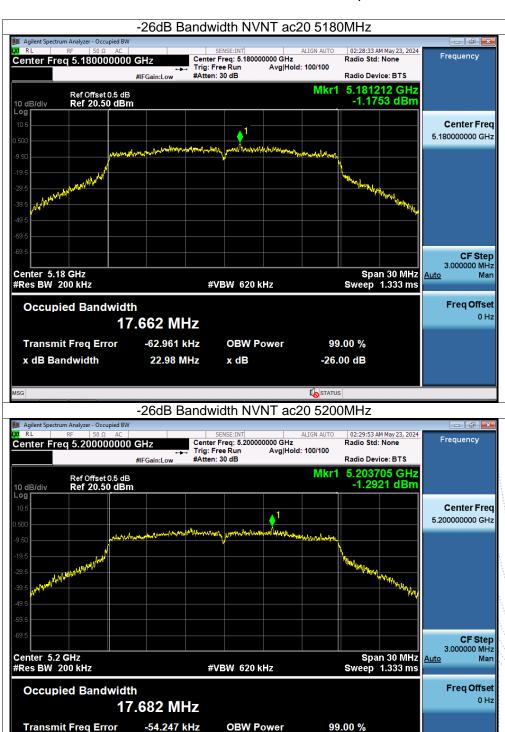
99.00 %

-26.00 dB



x dB Bandwidth

Report No.: BCTC2404619065-4E



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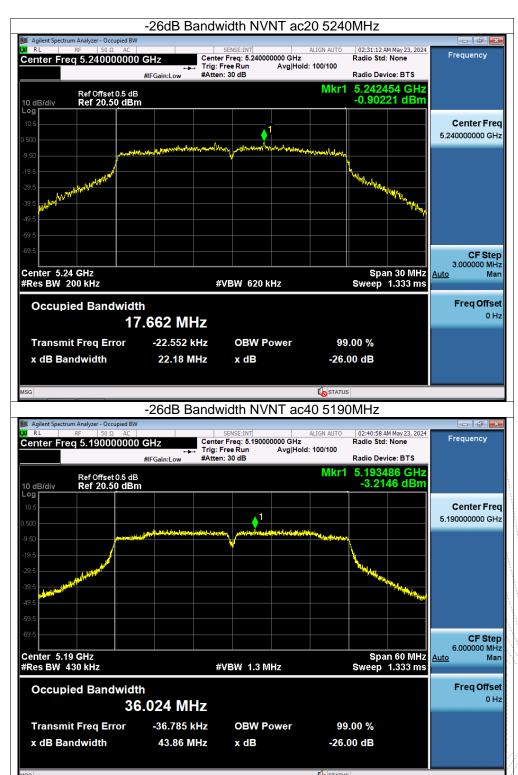
x dB

-26.00 dB

22.54 MHz



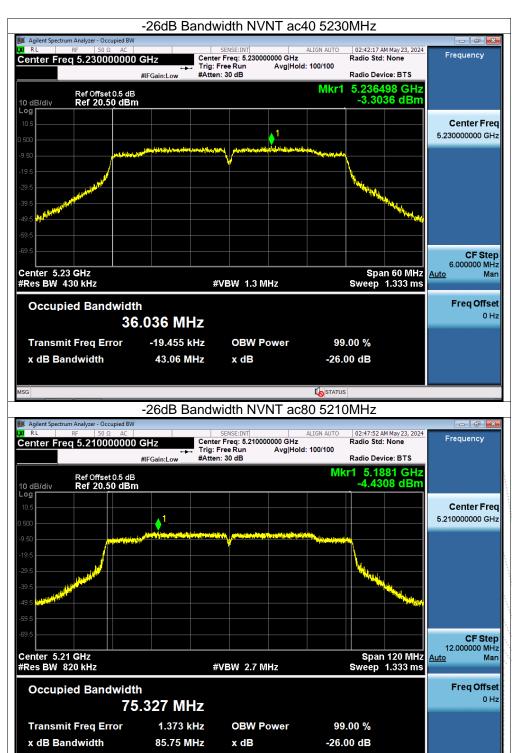
epoi



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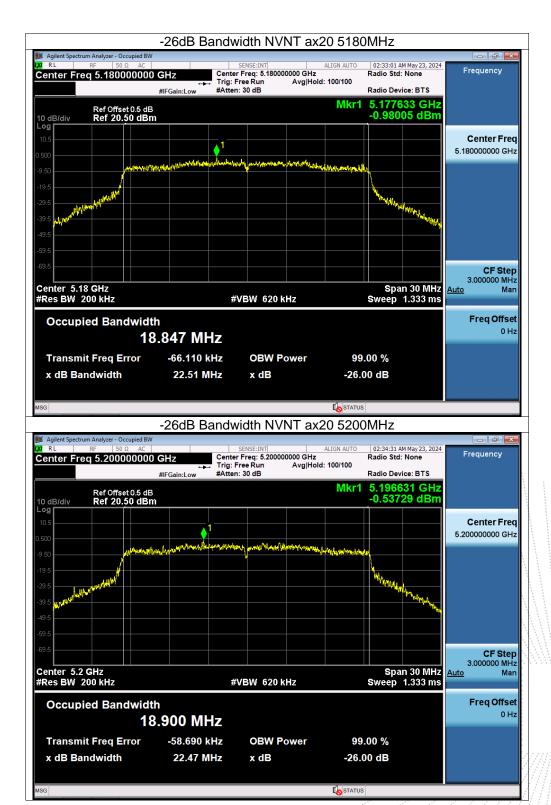


t sea



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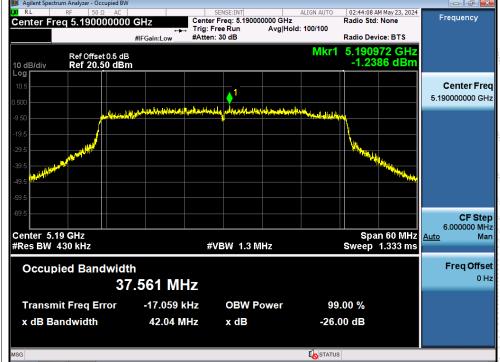




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Occupied Bandwidth

Transmit Freq Error

x dB Bandwidth

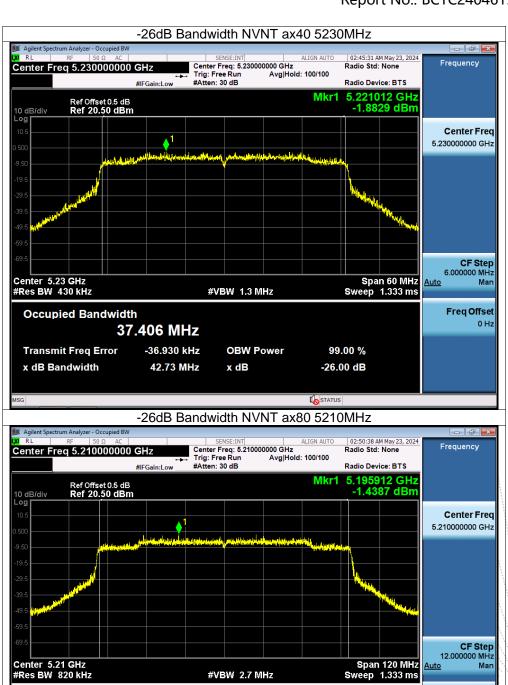
76.698 MHz

24.170 kHz

82.61 MHz

Report No.: BCTC2404619065-4E

Freq Offset



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OBW Power

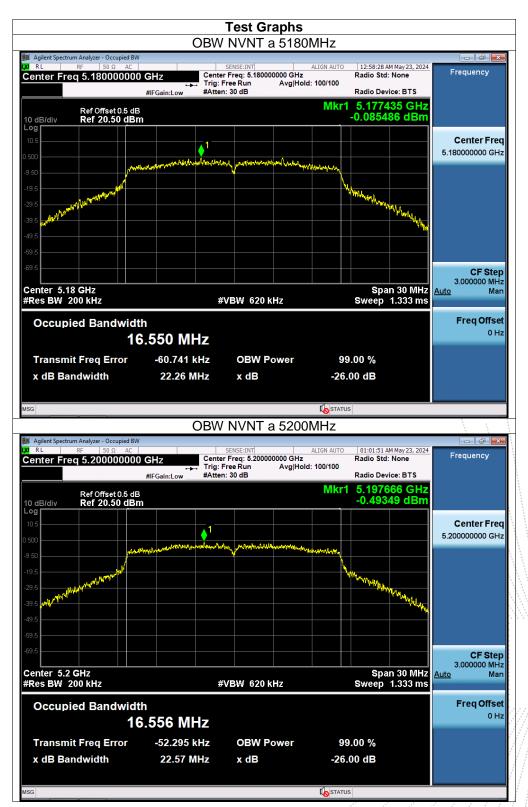
x dB

99.00 %

-26.00 dB



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

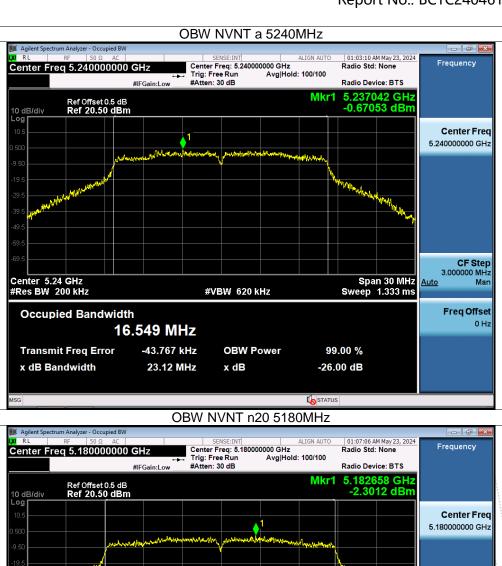


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CF Step 3.000000 MHz

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Center 5.18 GHz
#Res BW 200 kHz #VBW 620 kHz Span 30 MHz
Auto Man

Occupied Bandwidth
17.672 MHz

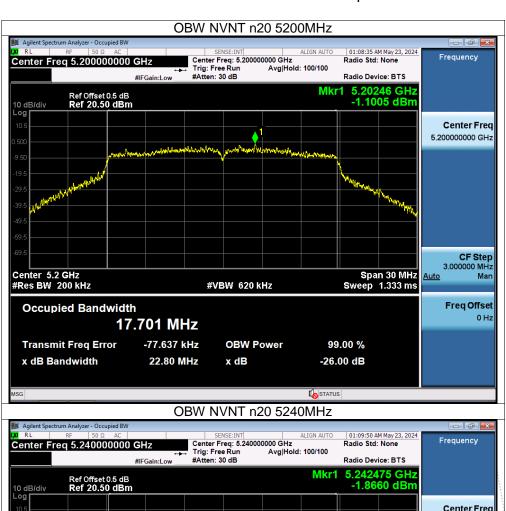
Transmit Freq Error -65.048 kHz OBW Power 99.00 %
x dB Bandwidth 23.28 MHz x dB -26.00 dB

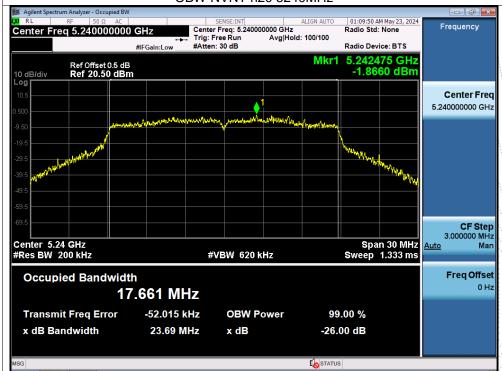
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7PF







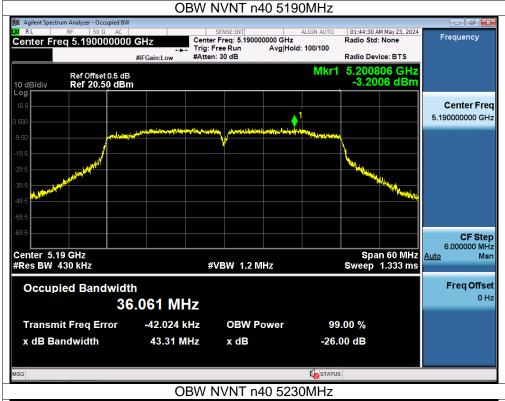


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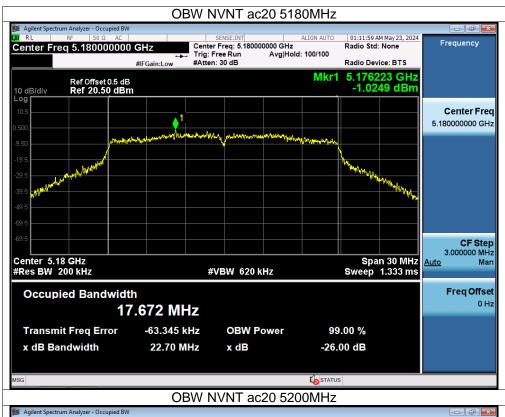






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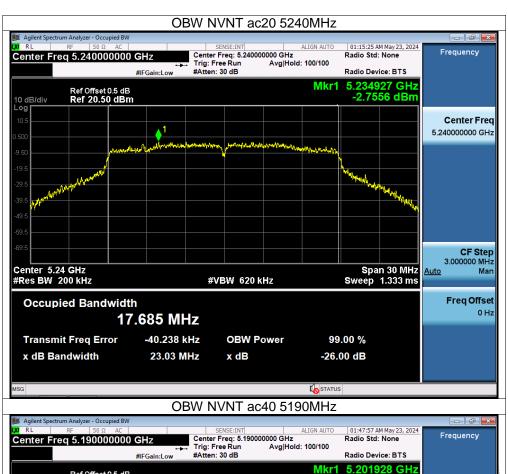






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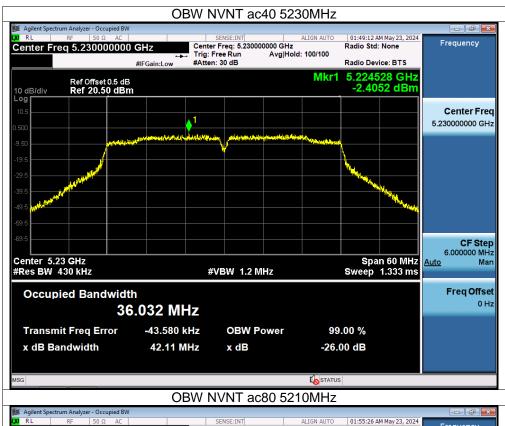






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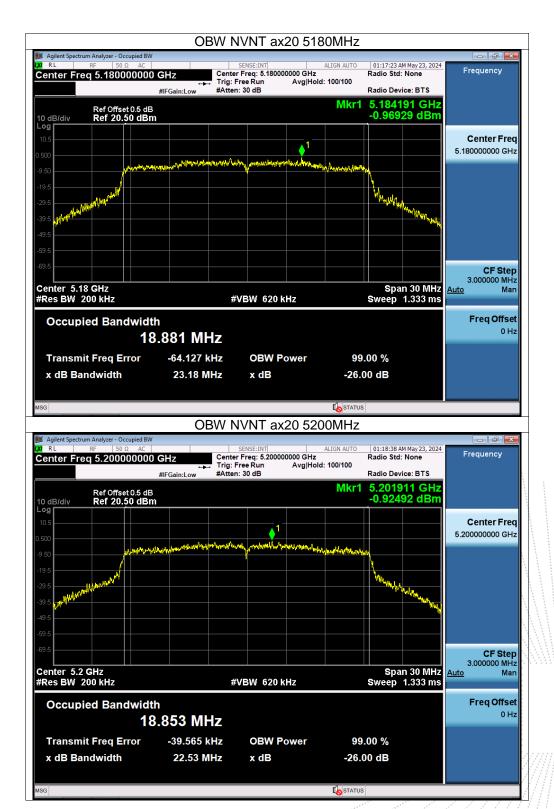




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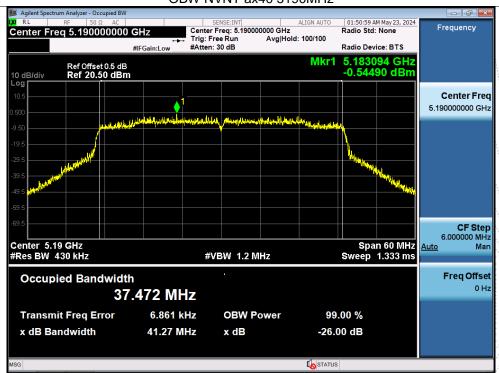




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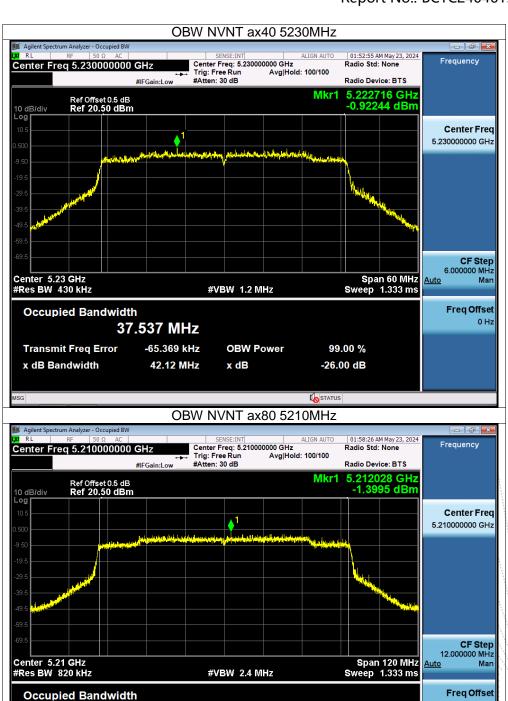






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OBW Power

x dB

99.00 % -26.00 dB

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76.689 MHz

22.643 kHz

81.74 MHz

Transmit Freq Error

x dB Bandwidth

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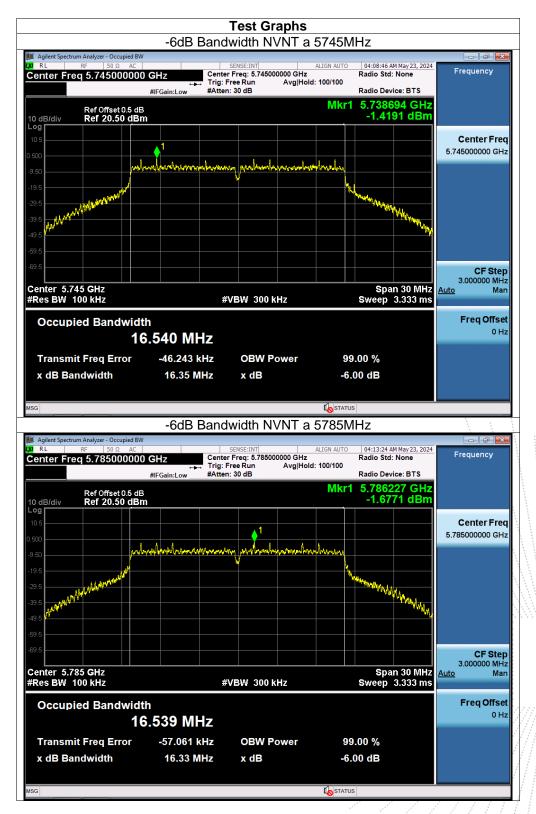
Temperature:	26 ℃	Relative Humidity:	54%		
Pressure:	101kPa	Test Voltage:	DC 11.4V		
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)				

Mode	Channel	Frequency (MHz)	99% OBW (MHz)		-6dB bandwidth (MHz)		Limit -6dB	Result
			ANT A	ANT B	ANT A	ANT B	bandwidth MHz	Result
NVNT	а	5745	16.675	16.722	16.342	16.354	0.5	Pass
NVNT	а	5785	16.703	16.656	16.313	16.327	0.5	Pass
NVNT	а	5825	16.706	16.694	16.345	16.293	0.5	Pass
NVNT	n20	5745	17.839	17.841	17.558	17.59	0.5	Pass
NVNT	n20	5785	17.855	17.857	17.566	17.559	0.5	Pass
NVNT	n20	5825	17.904	17.837	17.561	17.559	0.5	Pass
NVNT	n40	5755	36.377	36.355	36.318	36.347	0.5	Pass
NVNT	n40	5795	36.349	36.348	36.349	36.068	0.5	Pass
NVNT	ac20	5745	17.848	17.859	17.566	17.57	0.5	Pass
NVNT	ac20	5785	17.882	17.84	17.574	17.57	0.5	Pass
NVNT	ac20	5825	17.845	17.878	17.567	17.559	0.5	Pass
NVNT	ac40	5755	36.353	36.349	36.366	36.315	0.5	Pass
NVNT	ac40	5795	36.322	36.318	36.35	36.055	0.5	Pass
NVNT	ac80	5775	74.896	74.903	62.558	69.741	0.5	Pass
NVNT	ax20	5745	19.03	19.032	18.331	18.634	0.5	Pass
NVNT	ax20	5785	18.991	19.018	18.806	18.735	0.5	Pass
NVNT	ax20	5825	18.985	19.045	18.868	18.424	0.5	Pass
NVNT	ax40	5755	37.811	37.8	37.273	37.276	0.5	Pass
NVNT	ax40	5795	37.795	37.824	37.836	37.83	0.5	Pass
NVNT	ax80	5775	76.523	76.449	63.027	63.862	0.5	Pass

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



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