

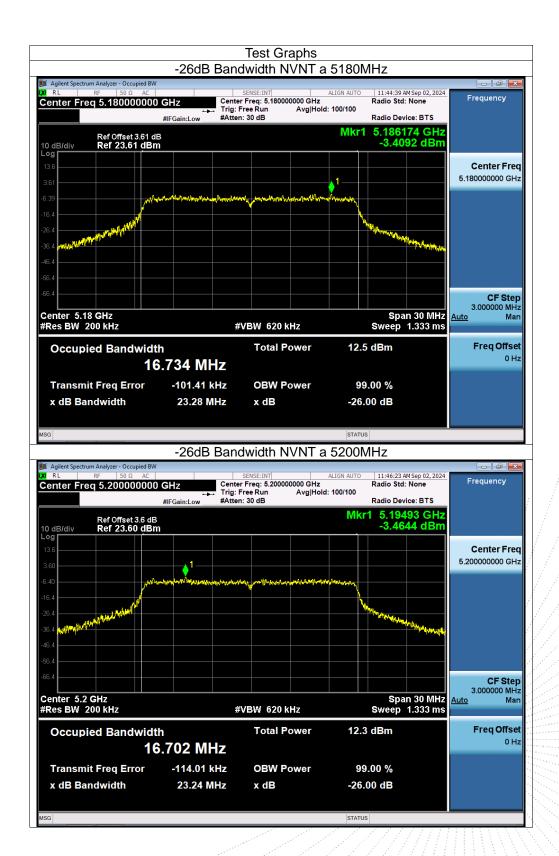
9.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5180-5240MHz)		

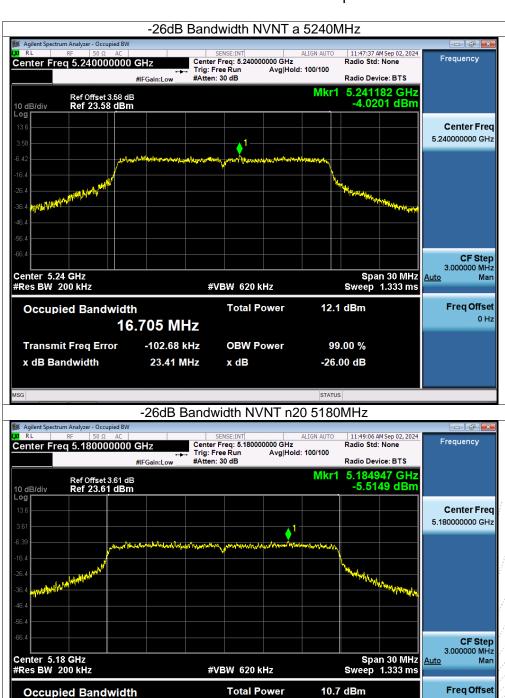
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	99% OBW (MHz)
NVNT	а	5180	23.276	16.720
NVNT	а	5200	23.239	16.719
NVNT	а	5240	23.409	16.691
NVNT	n20	5180	25.226	17.944
NVNT	n20	5200	24.840	17.910
NVNT	n20	5240	24.835	17.929
NVNT	n40	5190	46.279	36.518
NVNT	n40	5230	47.824	36.467
NVNT	ac20	5180	24.784	17.941
NVNT	ac20	5200	24.580	17.909
NVNT	ac20	5240	24.942	17.942
NVNT	ac40	5190	47.402	36.481
NVNT	ax40	5230	47.047	36.522
NVNT	ax20	5180	25.313	19.134
NVNT	ax20	5200	24.788	19.089
NVNT	ax20	5240	24.998	19.087
NVNT	ax40	5190	44.546	38.016
NVNT	ax40	5230	44.647	38.017

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OBW Power

x dB

99.00 %

-26.00 dB

17.956 MHz

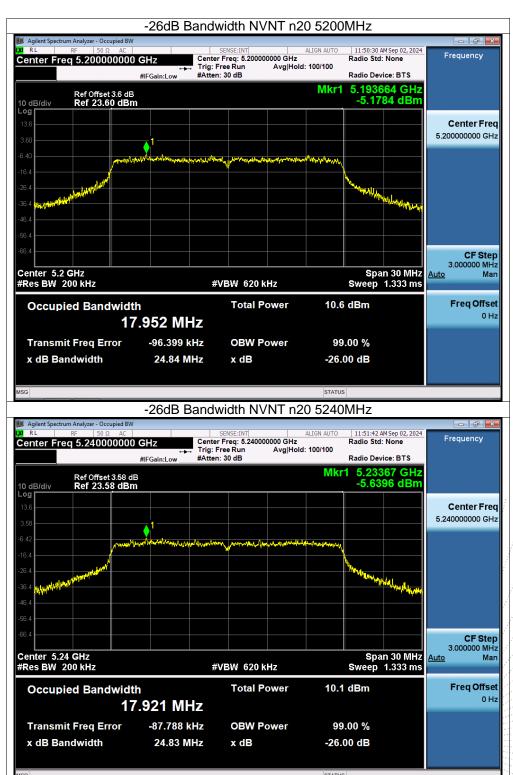
-72.573 kHz

25.23 MHz

Transmit Freq Error

x dB Bandwidth







Center 5.23 GHz #Res BW 430 kHz

Occupied Bandwidth

Transmit Freq Error

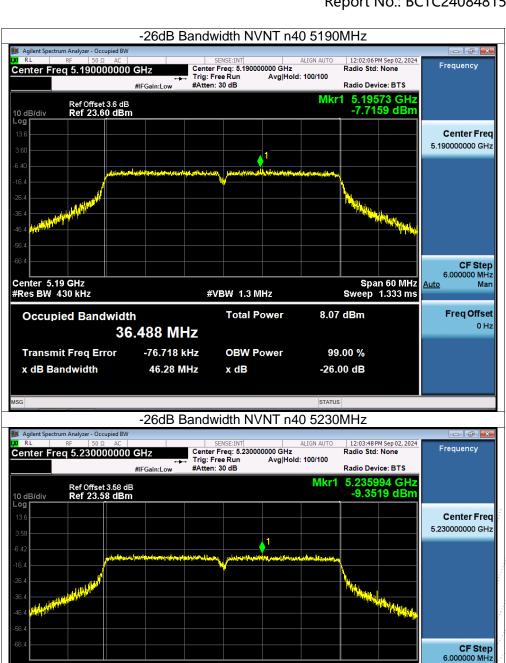
x dB Bandwidth

36.549 MHz

-116.64 kHz

47.82 MHz

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#VBW 1.3 MHz
Total Power

x dB

OBW Power

Span 60 MHz Sweep 1.333 ms

7.01 dBm

99.00 %

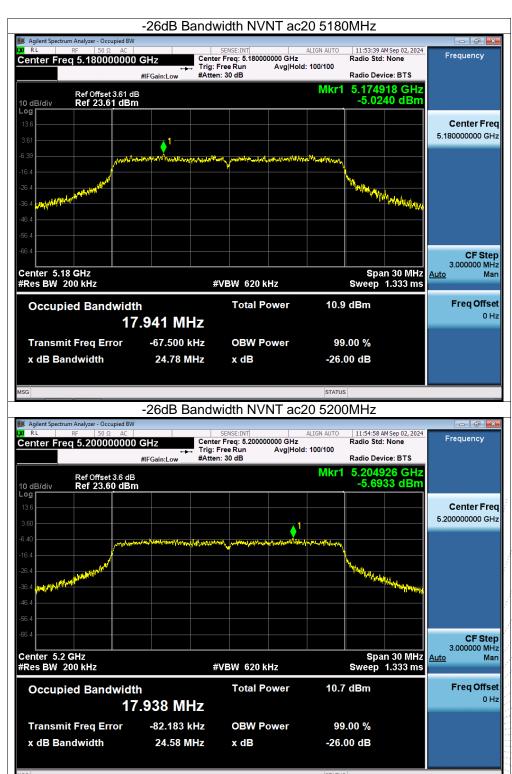
-26.00 dB

Mar

Freq Offset





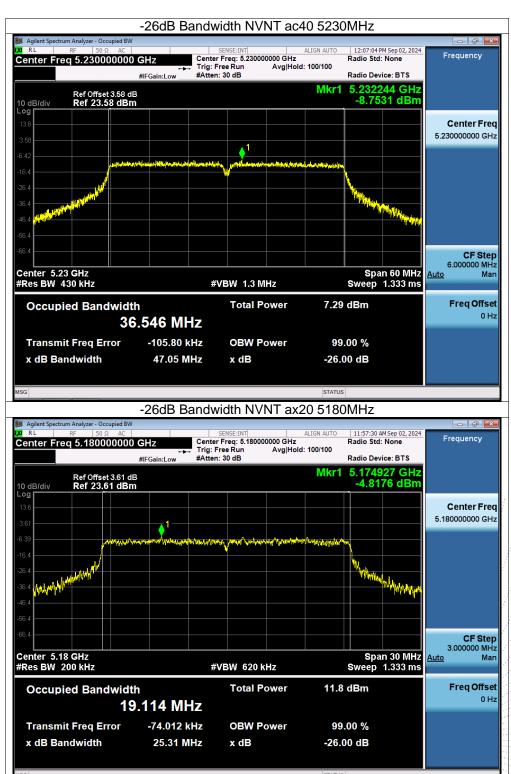


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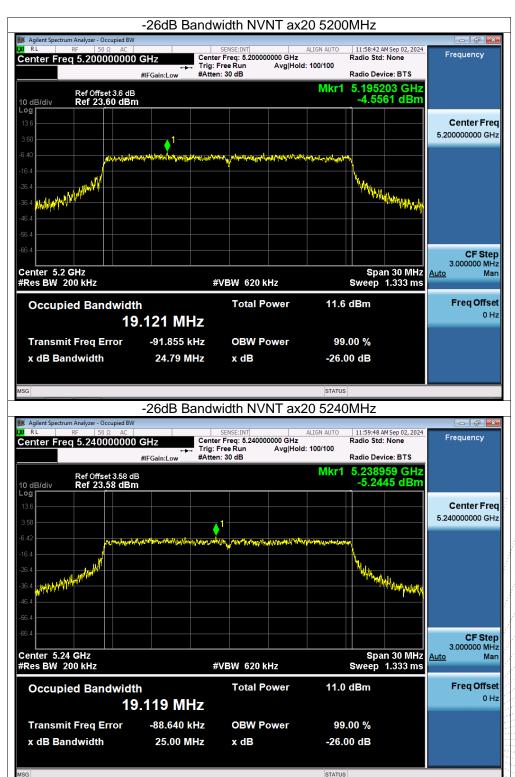












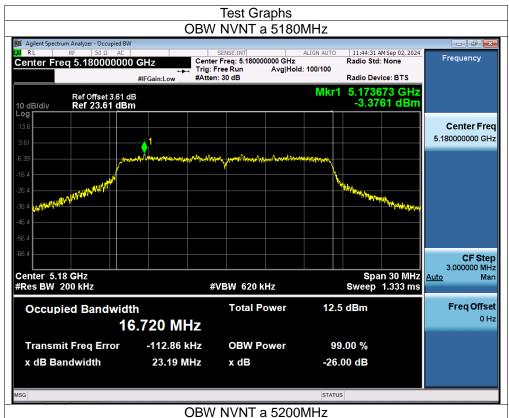
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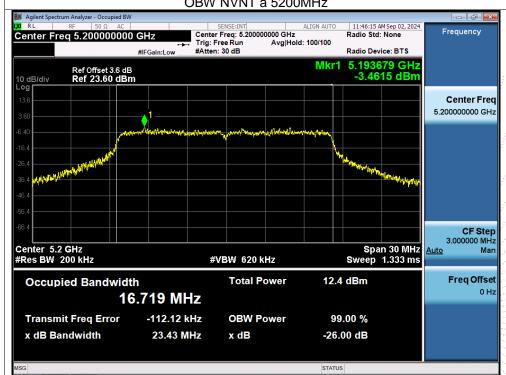




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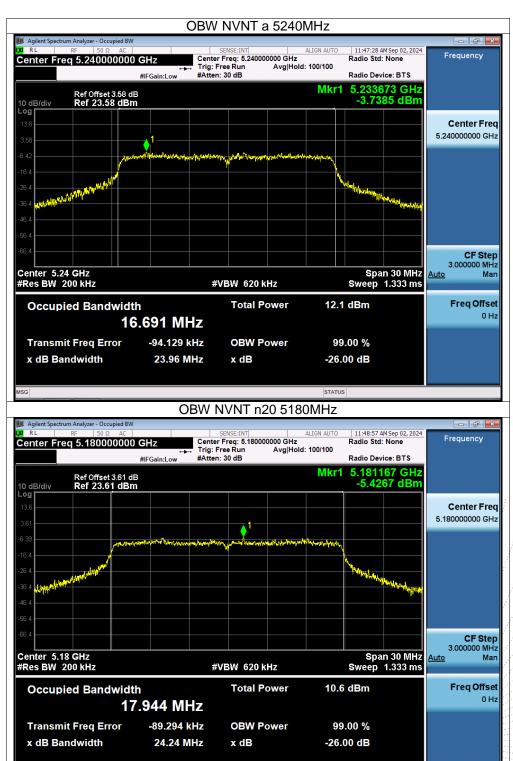




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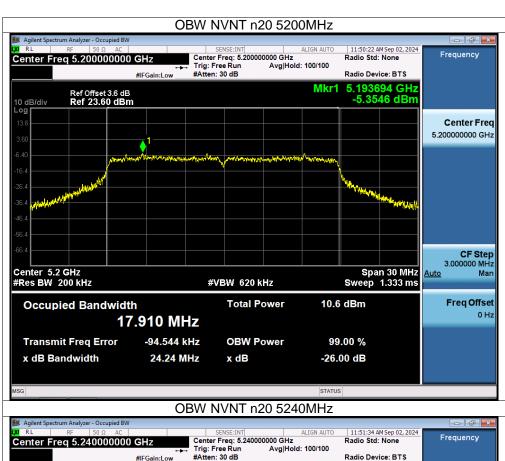


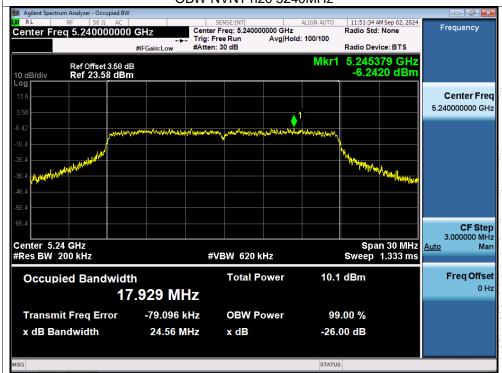




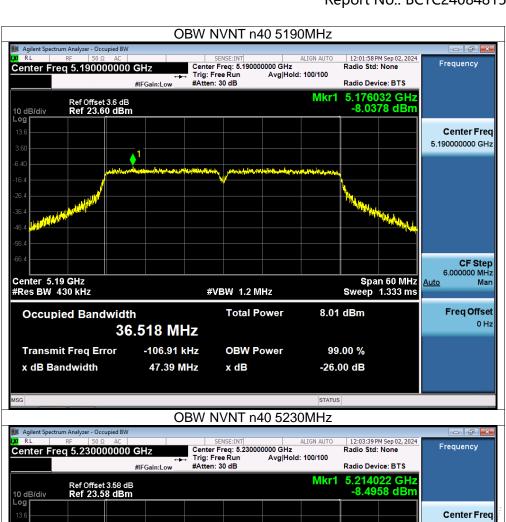
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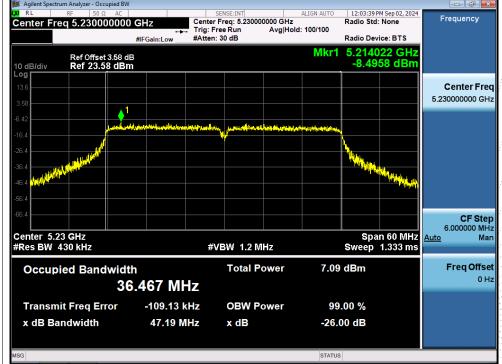












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Center 5.2 GHz #Res BW 200 kHz

Occupied Bandwidth

Transmit Freq Error

x dB Bandwidth

17.909 MHz

-81.809 kHz

24.38 MHz

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CF Step 3.000000 MHz

Freq Offset

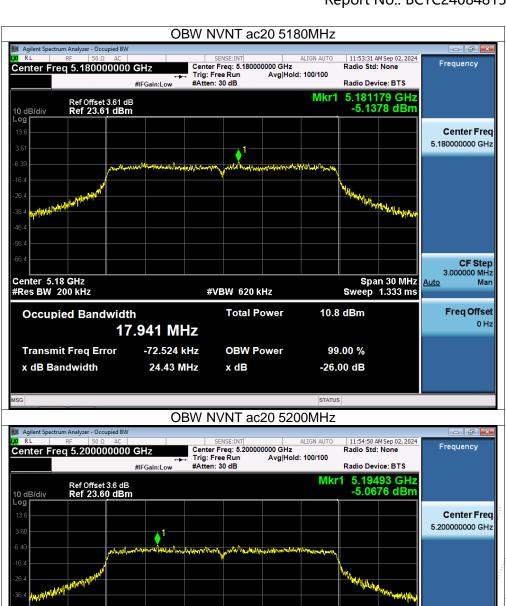
Mar

Span 30 MHz Sweep 1.333 ms

10.8 dBm

99.00 %

-26.00 dB



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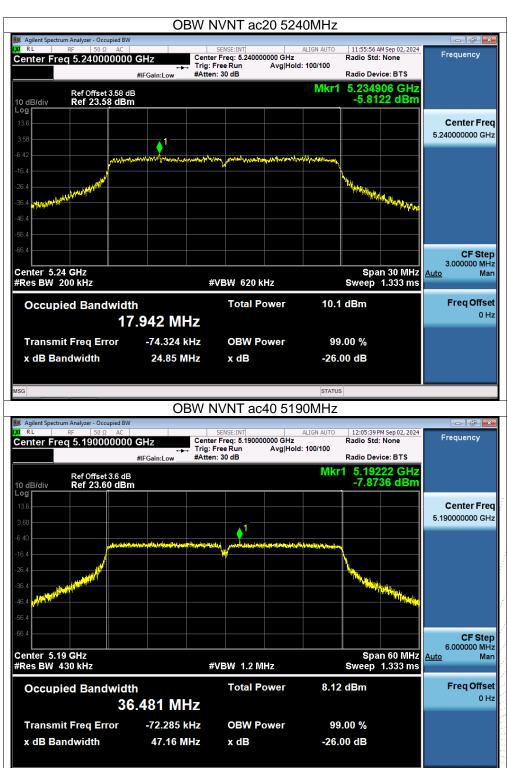
#VBW 620 kHz

x dB

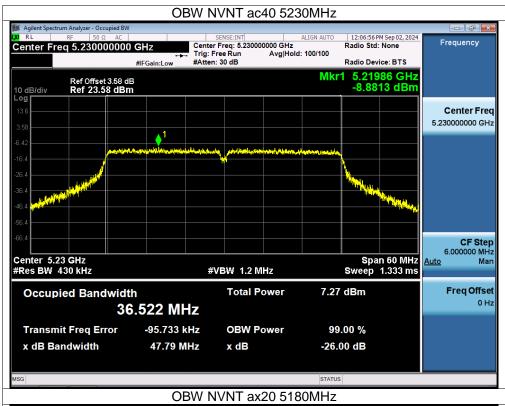
Total Power

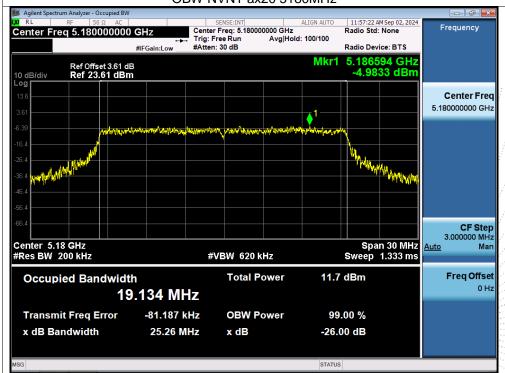
OBW Power







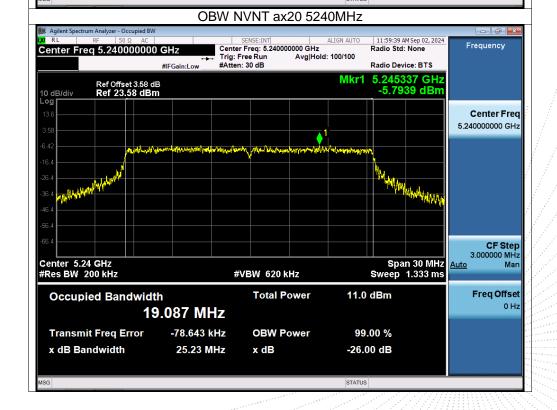




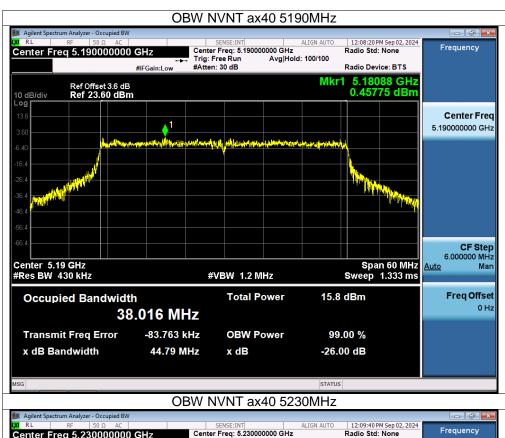
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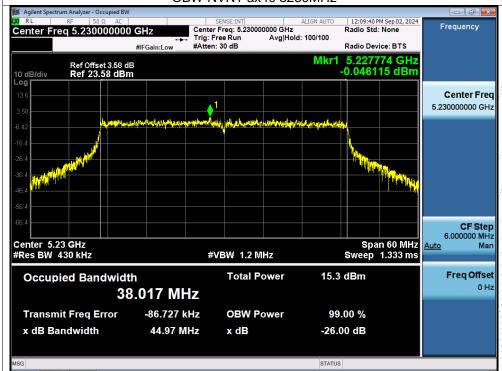










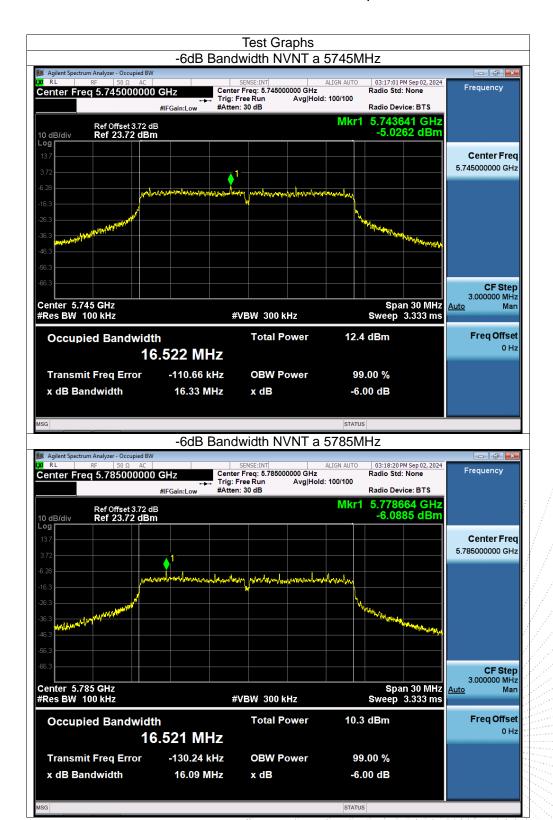




Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5745-5825MHz)		

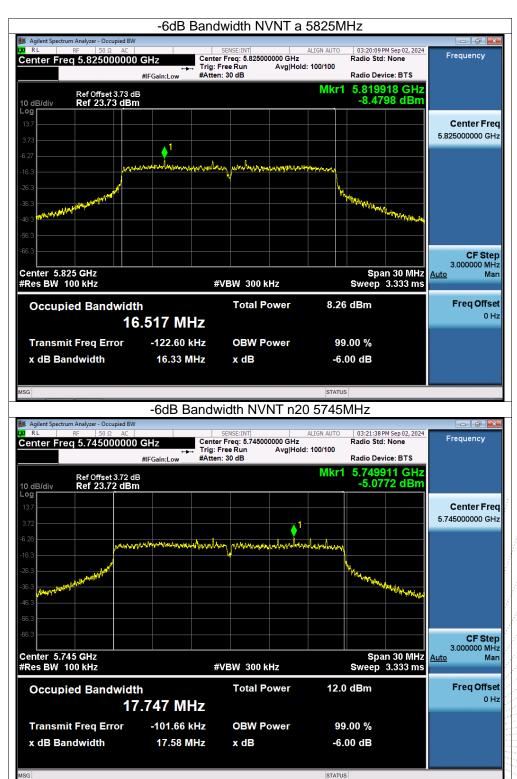
Condition	Mode	Frequency (MHz)	99% OBW (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	а	5745	16.334	16.742	0.5	Pass
NVNT	а	5785	16.095	16.742	0.5	Pass
NVNT	а	5825	16.326	16.696	0.5	Pass
NVNT	n20	5745	17.579	17.948	0.5	Pass
NVNT	n20	5785	17.569	17.995	0.5	Pass
NVNT	n20	5825	17.573	17.948	0.5	Pass
NVNT	n40	5755	36.317	36.553	0.5	Pass
NVNT	n40	5795	35.697	36.606	0.5	Pass
NVNT	ac20	5745	17.575	17.914	0.5	Pass
NVNT	ac20	5785	17.574	17.988	0.5	Pass
NVNT	ac20	5825	17.561	17.928	0.5	Pass
NVNT	ac40	5755	36.081	36.536	0.5	Pass
NVNT	ac40	5795	35.738	36.549	0.5	Pass
NVNT	ax20	5745	18.928	19.102	0.5	Pass
NVNT	ax20	5785	18.882	19.152	0.5	Pass
NVNT	ax20	5825	18.751	19.106	0.5	Pass
NVNT	ax40	5755	37.857	37.925	0.5	Pass
NVNT	ax40	5795	37.816	37.925	0.5	Pass

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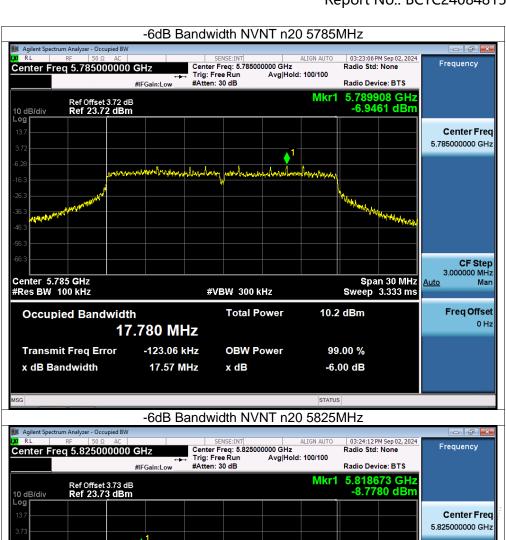


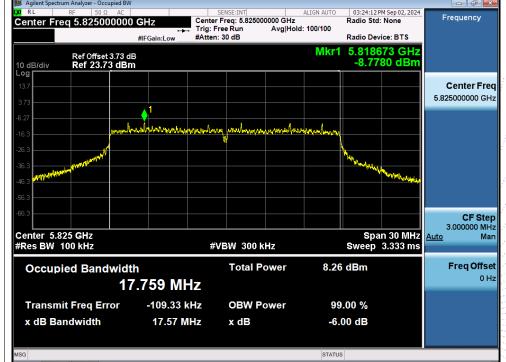
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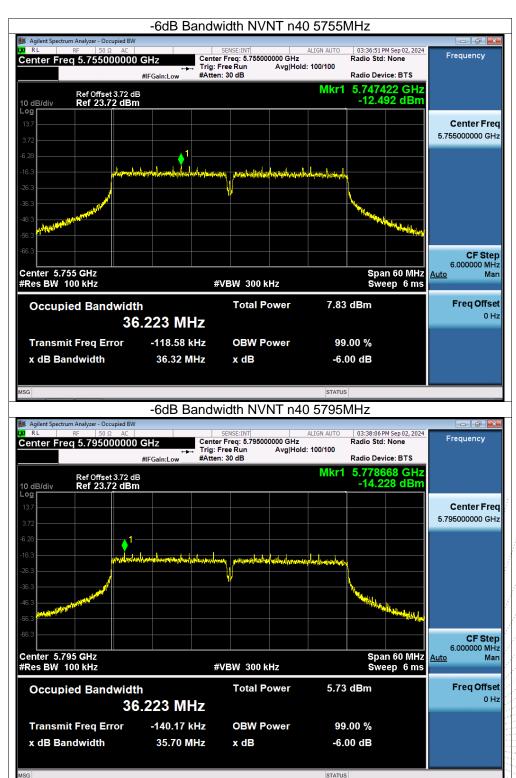




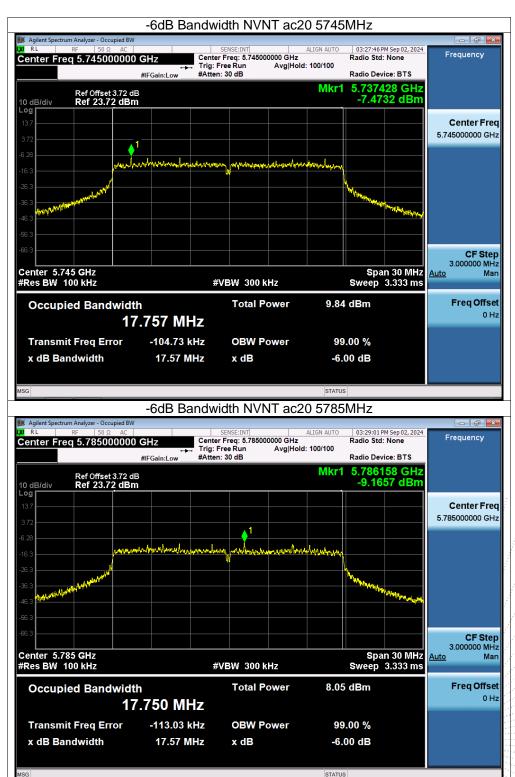


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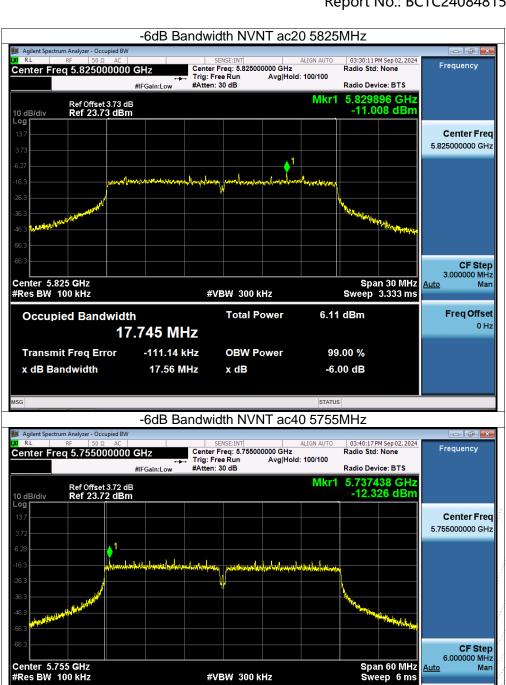








Freq Offset



#VBW 300 kHz

x dB

Total Power

OBW Power

7.72 dBm

99.00 %

-6.00 dB

Occupied Bandwidth

Transmit Freq Error

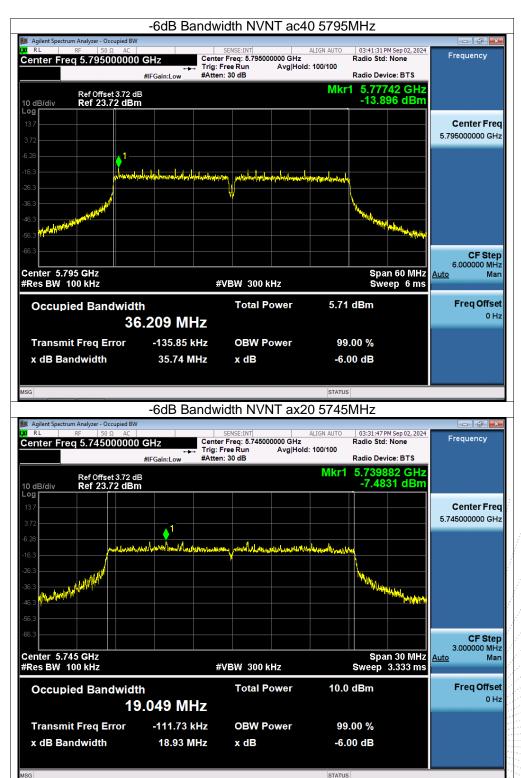
x dB Bandwidth

36.238 MHz

-116.36 kHz

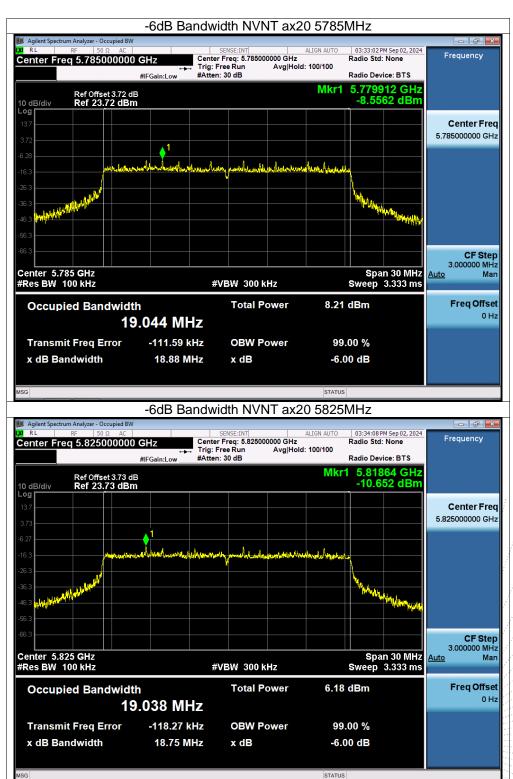
36.08 MHz





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Center 5.795 GHz #Res BW 100 kHz

Occupied Bandwidth

Transmit Freq Error

x dB Bandwidth

37.796 MHz

-148.72 kHz

37.82 MHz

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CF Step 6.000000 MHz

Freq Offset

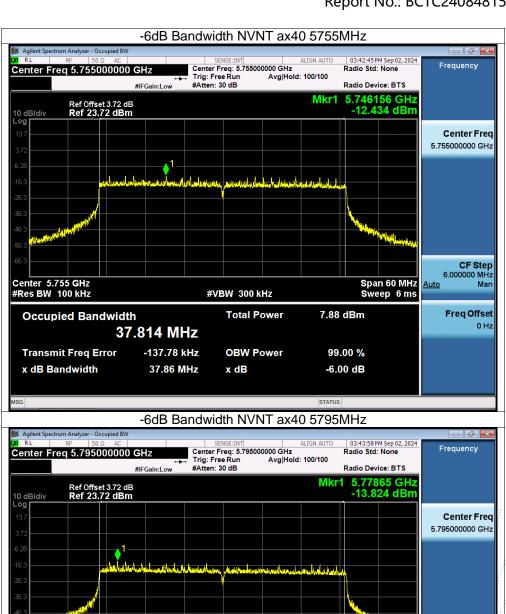
Mar

Span 60 MHz Sweep 6 ms

5.89 dBm

99.00 %

-6.00 dB



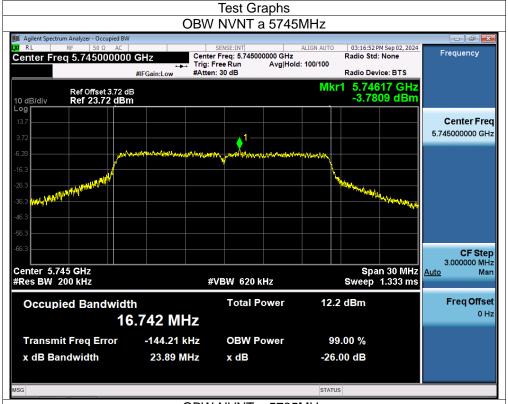
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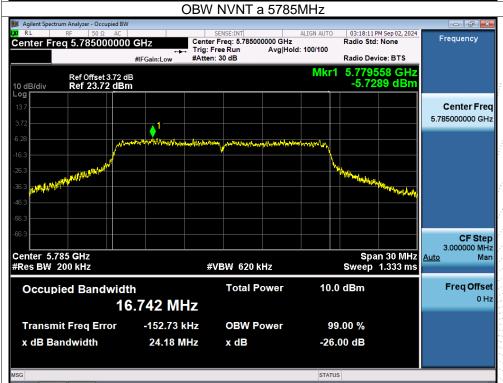
#VBW 300 kHz

x dB

Total Power

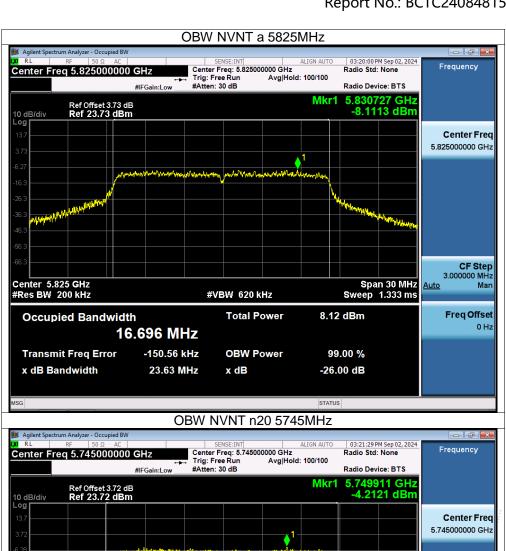
OBW Power





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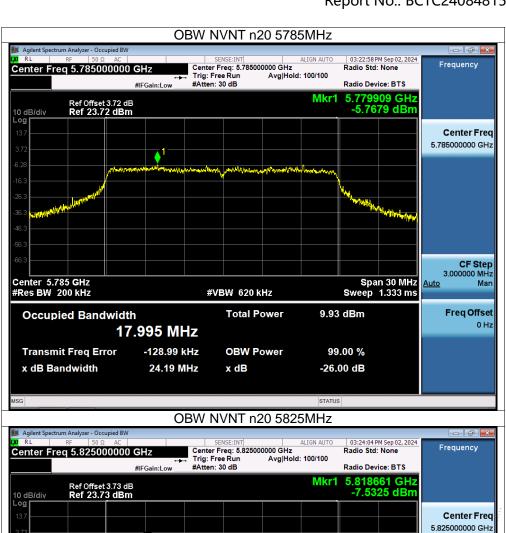


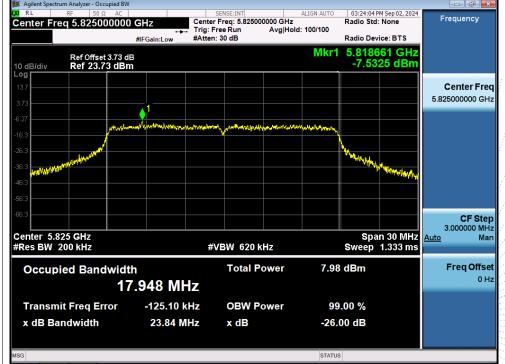




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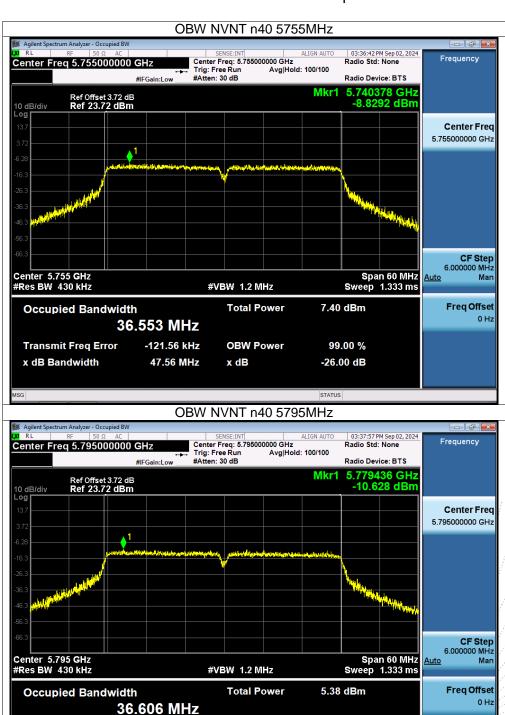
Transmit Freq Error

x dB Bandwidth

-203.91 kHz

47.87 MHz

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OBW Power

x dB

99.00 %

-26.00 dB



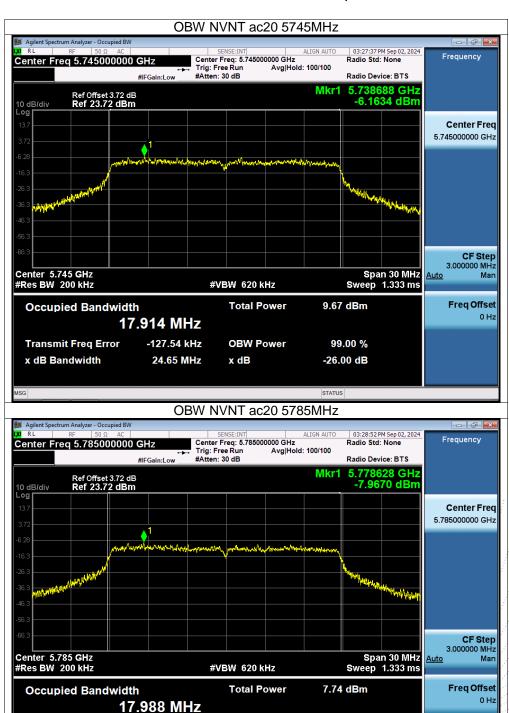
Transmit Freq Error

x dB Bandwidth

-138.18 kHz

24.58 MHz

Report No.: BCTC2408481528-4E



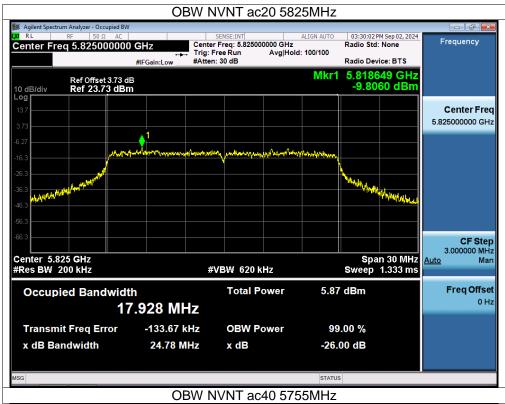
OBW Power

x dB

99.00 %

-26.00 dB



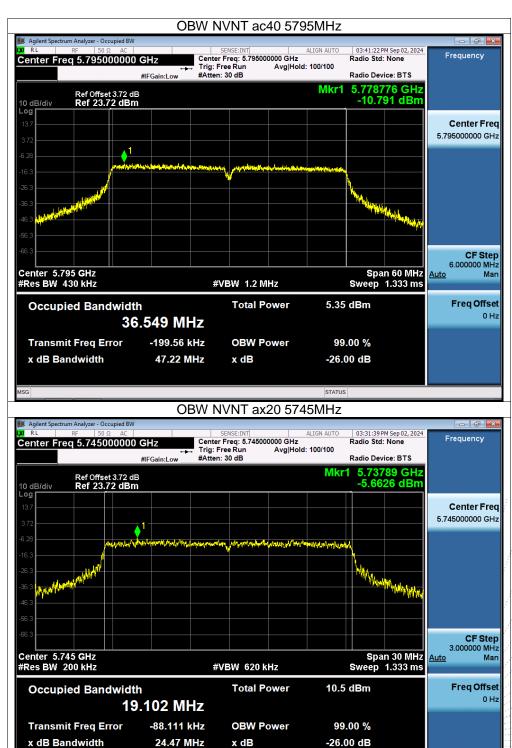




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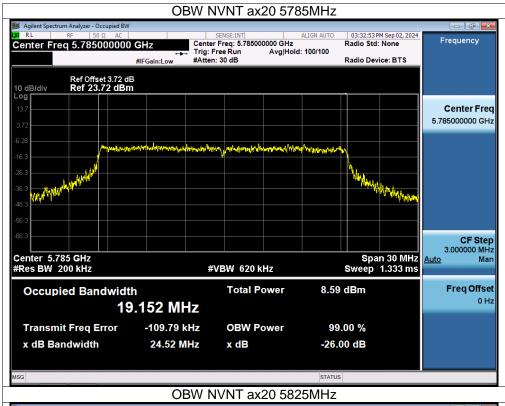


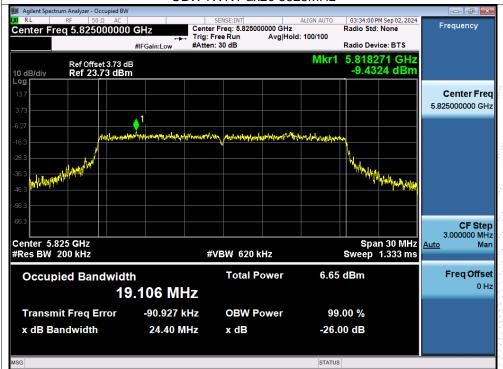




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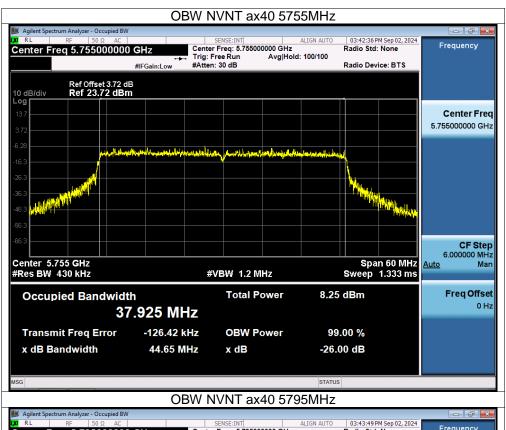


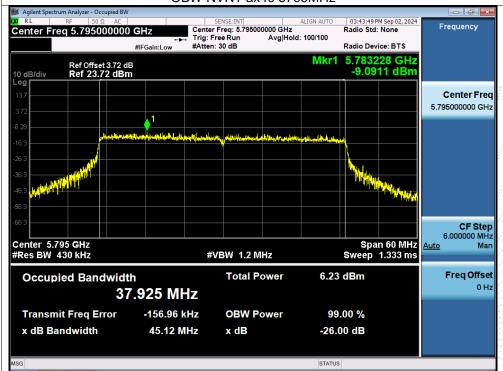




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BC APPI



10. Maximum Conducted Output Power

10.1 Block Diagram Of Test Setup

EUT	POWER	METER

10.2 Limit

According to FCC §15.407

The maximum conduced output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5725~5850	1W

10.3 Test procedure

Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter.

1. Device Configuration

If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).

- a) The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.
- b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99-percent occupied bandwidth of the signal.1 However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

- a) The test method shall be selected as follows: (i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:
 - The EUT transmits continuously (or with a duty cycle ≥ 98 percent).
- Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.
- (ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the

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transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

- (iii) Method SA-3 (RMS detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.
- b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep): (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
 - (ii) Set RBW = 1 MHz.
 - (iii) Set VBW ≥ 3 MHz.
- (iv) Number of points in sweep \geq 2 Span / RBW. (This ensures that bin-to-bin spacing is \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
 - (v) Sweep time = auto.
 - (vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- (vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".
 - (viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- (ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum

10.4 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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