FCC TEST REPORT

FCC ID: 2APEP-NC-01

On Behalf of

Newscon Corporation

WIRELESS CARPLAY

Model No.: NC-01, NC-02, NC-01B, NC-02B

Prepared for	:	Newscon Corporation
Address	:	#922 9F Yaekyung Bldg., Olympic-ro 651, Gangdong-gu, Seoul South Korea

Prepared By	:	Shenzhen PSI Testing Co., Ltd.
Address	:	1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number	:	psi2505007-C01-R03
Date of Receipt	:	April 28, 2025
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TEST REPORT DECLARATION

Applicant	:	Newscon Corporation
Address	:	#922 9F Yaekyung Bldg., Olympic-ro 651, Gangdong-gu, Seoul South Korea
Manufacturer	:	Shenzhen Betterliv Technology Co.,Ltd
Address	:	Room 201, Xinting Building, Xinqiao Street, Baoan District, Shenzhen, Guangdong
EUT Description	:	WIRELESS CARPLAY
		(A) Model No. : NC-01, NC-02, NC-01B, NC-02B
		(B) Trademark : /

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart E

ANSI C63.4:2014, ANSI C63.10:2013

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart E limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:	Felix Pang Test Engineer	Felix Pang .....
Approved by (name + signature)…....:	Simple Guan Project Manager	Simple Guan .....
Date of issue……..:	June 11, 2025	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	June 11, 2025	Initial released Issue	Felix Pang

1 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	Section 15.203 Section 7.1.4 RSS-Gen Issue 5	PASS
AC Power Line Conducted Emission	Section 15.207 Section 7.2.4 RSS-GEN(8.8), ANSI C63.10	PASS
occupied bandwidth	Section 15.407 (e)	PASS
Maximum Conducted Output Power	Section 15.407(a), RSS-247 5.4(2)	PASS
Power Spectral Density	Section 15.407(a), RSS-247 5.2(2)	PASS
Undesirable Emission	Section 15.407(b), RSS-247 5.5	PASS
Radiated Emission	Section 15.407(b)&15.209 Section 5.5 RSS-Gen(8.9), RSS-247(5.5), ANSI C63.10	PASS
Band Edge	15.205, RSS-247 Issue 3, ANSI C63.10	PASS
Frequency Stability	15.407(g), RSS-GEN(6.11)	PASS

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.
2. Frequency Stability: The manufacturer stated in the user's manual.
3. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.

1.1 Measurement Uncertainty

Item	Uncertainty
Uncertainty for Power Line Conducted Emissions Test	2.17dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	2.74dB(Polarize: V)
	2.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 18GHz)	4.29dB(Polarize: V)
	4.82dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31dB(Polarize: V)
	4.30dB(Polarize: H)
Uncertainty for radio frequency	48.24KHz
Uncertainty for conducted RF Power	0.41dB
Uncertainty for Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Conducted-Spurious Emission	1.26dB

2 General Information

2.1 General Description of EUT

EUT Name	:	WIRELESS CARPLAY
Model	:	NC-01
Diff	:	NC-01 is the test model, while other models are derivative models. These models are the same on the circuit, with only different model names. Therefore, the test data of NC-01 can represent the remaining models.
Test Voltage	:	Input: 5 V⎓2 A, 9 V⎓1.67 A Wireless charging port output: 5 W/ 7.5 W/ 10 W/15 W
Adapter		/
Radio Technology	:	5G WIFI
Operation frequency	:	802.11a/802.11ac20/802.11ax20/802.11n(HT20): 5180-5240MHz, 5745-5825MHz 802.11ac40/802.11ax40/802.11n(HT40): 5190-5230MHz, 5755-5795MHz
Channel separation	:	20MHz for 802.11a/802.11ac20/802.11ax20/802.11n(HT20) 40MHz for 802.11ac40/802.11ax40/802.11n(HT40)
Modulation technology:	:	IEEE 802.11n: OFDM (64QAM,16QAM,QPSK,BPSK) IEEE 802.11a: OFDM (64QAM,16QAM,QPSK,BPSK) IEEE 802.11ac/ax: OFDM (64QAM,16QAM, 256QAM,QPSK,BPSK)
Antenna Type	:	Chip Antenna, maximum gain is 4.62dBi.
PMN	:	N/A
HVIN	:	N/A
Software version	:	V1.0
Hardware version	:	V1.0
Note	:	Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

2.2 Test mode

Transmitting mode Keep the EUT in transmitting with modulation.
EUT was test with 99% duty cycle at its maximum power control level.

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

2.3 Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission
Registration Number: 916281

September 21, 2023 Certificated by IC
Registration Number: 31123
CAB identifier: CN0158

2.4 Description of Support Units

Accessories 1 : /
Manufacturer : /
Model : /
Rating : /

Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number
E-1	AC Adapter	Xiao mi	MDY-08-EH	/

2.6 Deviation from Standards

None.

2.7 Abnormalities from Standard Conditions

None.

2.8 Other Information Requested by the Customer

None.

2.9 Additional instructions

Software (Used for test) from client

Channel	Power level
Lowest	Default
Middle	Default
Highest	Default

2.10 Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	26℃
Humidity range:	25-75%	54%
Pressure range:	86-106kPa	101kPa

3 Test Instruments list

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2022.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2024.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV216	102282	/	2024.12.18	1 Year
4.	L.I.S.N.#2	RFT	NNB111	13835240	/	2024.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2024.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LAPA_01G18G-45dB	SK2022032901	/	2024.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_0118G-45	SK2020010801	/	2024.12.18	1 Year
12.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-1111533-Fz	/	2024.12.18	1 Year
13.	RF Sensor Unit	Tachoy	TR1029-2	20220428P008	/	2024.12.18	1 Year
14.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2024.12.18	1 Year
15.	Temp. & Humid Chamber	Auchno	9606	/	/	2024.12.18	1 Year
16.	Regulated DC Power Supply	Xinouhua	ADC120V10A	202211251638	/	2024.12.18	1 Year
17.	Cable	SKET	Cable-RE-1	#02/#03	/	2024.12.18	1 Year
18.	Cable	SKET	Cable-RE-2	#01	/	2024.12.18	1 Year
19.	Cable	SKET	Cable-RE-3	#04	/	2024.12.18	1 Year
20.	Cable	SKET	Cable-CE-1	A-E-24	/	2024.12.18	1 Year
21.	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2024.12.18	1 Year
22.	Power meter	Agilent	E4419B	GB40202121	/	2024.12.18	1 Year

For Test Software Information			
Item	**Software Name**	**Manufacturer**	**Version**
RE	EZ_EMC	Farad	PSI-3A1
CE	EZ_EMC	Farad	PSI-3A1
RF	RTS	TACHOY	V1.0.0

4 Test results and Measurement Data

4.1 Antenna requirement:

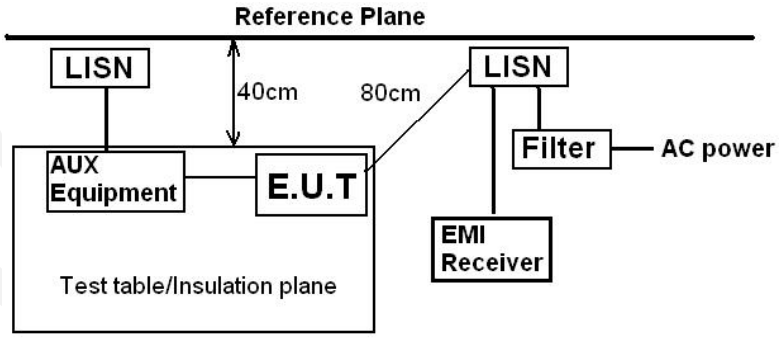
Standard requirement:	FCC Part15 C Section 15.203, RSS-GEN(6.8)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
Chip Antenna, Maximum Gain is 4.62dBi.	

4.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207, RSS-Gen §8.8
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9KHz, VBW=30KHz
Limit:	

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

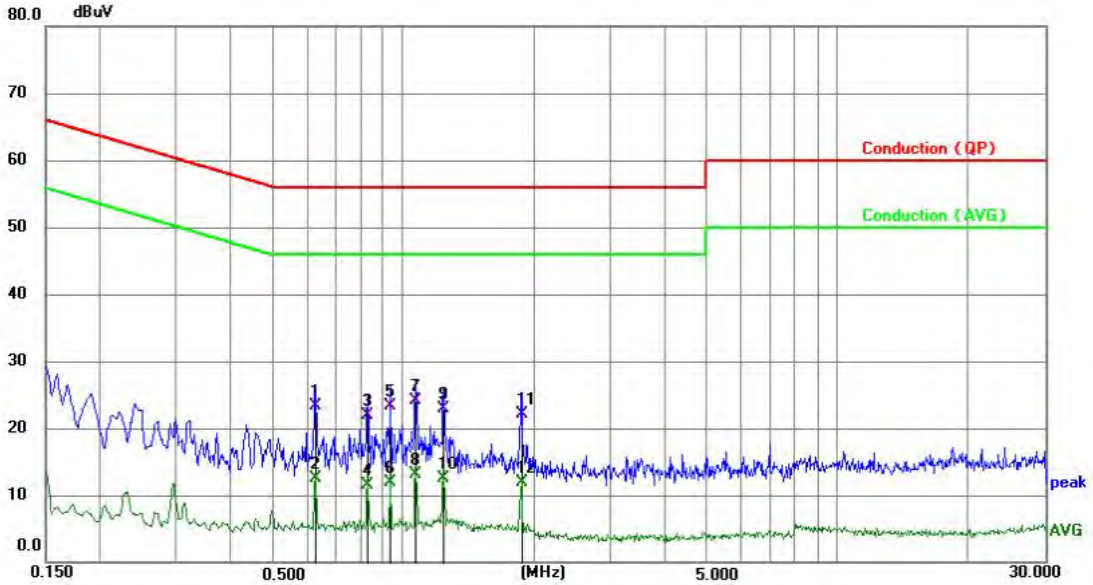
* Decreases with the logarithm of the frequency.

Test procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data

An initial pre-scan was performed on the line and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

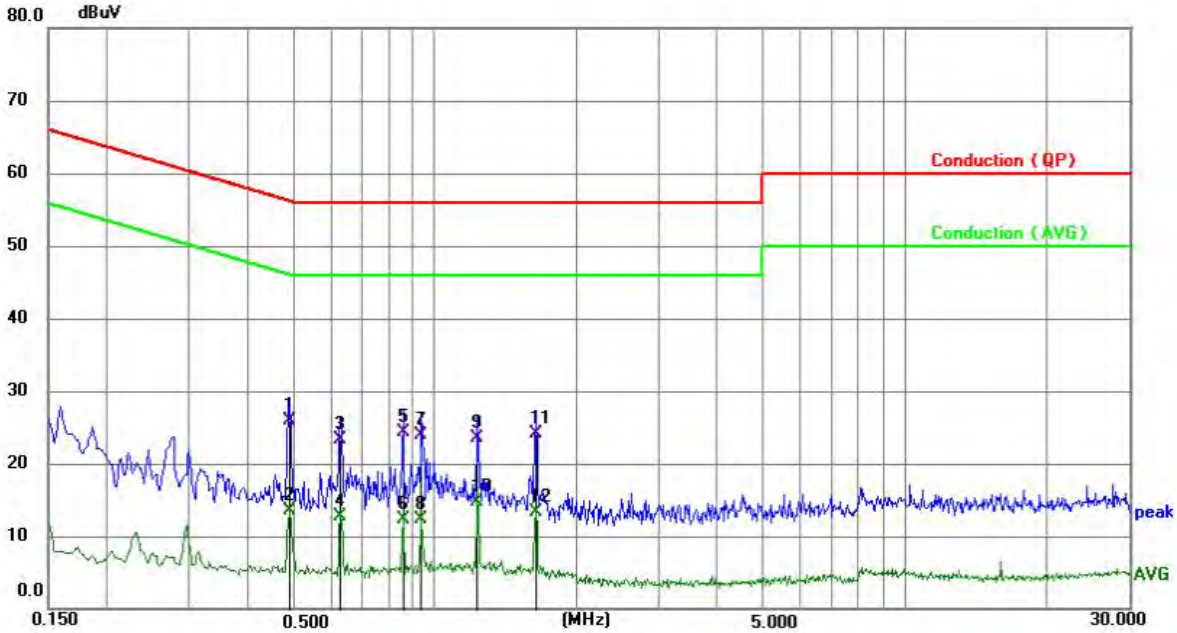
Line:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.6270	13.30	10.03	23.33	56.00	-32.67	QP	P	
2	0.6270	2.53	10.03	12.56	46.00	-33.44	AVG	P	
3	0.8295	11.91	10.05	21.96	56.00	-34.04	QP	P	
4	0.8295	1.51	10.05	11.56	46.00	-34.44	AVG	P	
5	0.9375	13.27	10.05	23.32	56.00	-32.68	QP	P	
6	0.9375	1.84	10.05	11.89	46.00	-34.11	AVG	P	
7 *	1.0680	14.05	10.06	24.11	56.00	-31.89	QP	P	
8	1.0680	3.05	10.06	13.11	46.00	-32.89	AVG	P	
9	1.2390	12.86	10.06	22.92	56.00	-33.08	QP	P	
10	1.2390	2.39	10.06	12.45	46.00	-33.55	AVG	P	
11	1.8690	11.96	10.06	22.02	56.00	-33.98	QP	P	
12	1.8690	1.77	10.06	11.83	46.00	-34.17	AVG	P	

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

Neutral:

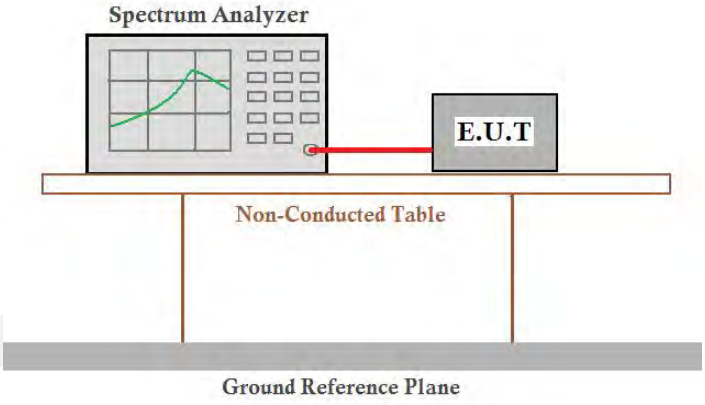


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.4873	15.80	10.01	25.81	56.21	-30.40	QP	P	
2	0.4873	3.52	10.01	13.53	46.21	-32.68	AVG	P	
3	0.6270	13.33	10.03	23.36	56.00	-32.64	QP	P	
4	0.6270	2.67	10.03	12.70	46.00	-33.30	AVG	P	
5	0.8565	14.18	10.05	24.23	56.00	-31.77	QP	P	
6	0.8565	2.28	10.05	12.33	46.00	-33.67	AVG	P	
7	0.9375	13.86	10.05	23.91	56.00	-32.09	QP	P	
8	0.9375	2.21	10.05	12.26	46.00	-33.74	AVG	P	
9	1.2343	13.51	10.06	23.57	56.00	-32.43	QP	P	
10	1.2343	4.71	10.06	14.77	46.00	-31.23	AVG	P	
11	1.6393	14.05	10.06	24.11	56.00	-31.89	QP	P	
12	1.6393	3.29	10.06	13.35	46.00	-32.65	AVG	P	

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

All modes and channels have been tested and only the 5.2GWIFI aC20 5180MHz mode with the worst data is listed.

4.3 Emission Bandwidth and 99% Occupied Bandwidth

Test Requirement:	FCC Part15 E Section 15.407, RSS-Gen §6.7; RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	N/A
Test setup:	
Test procedure:	According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

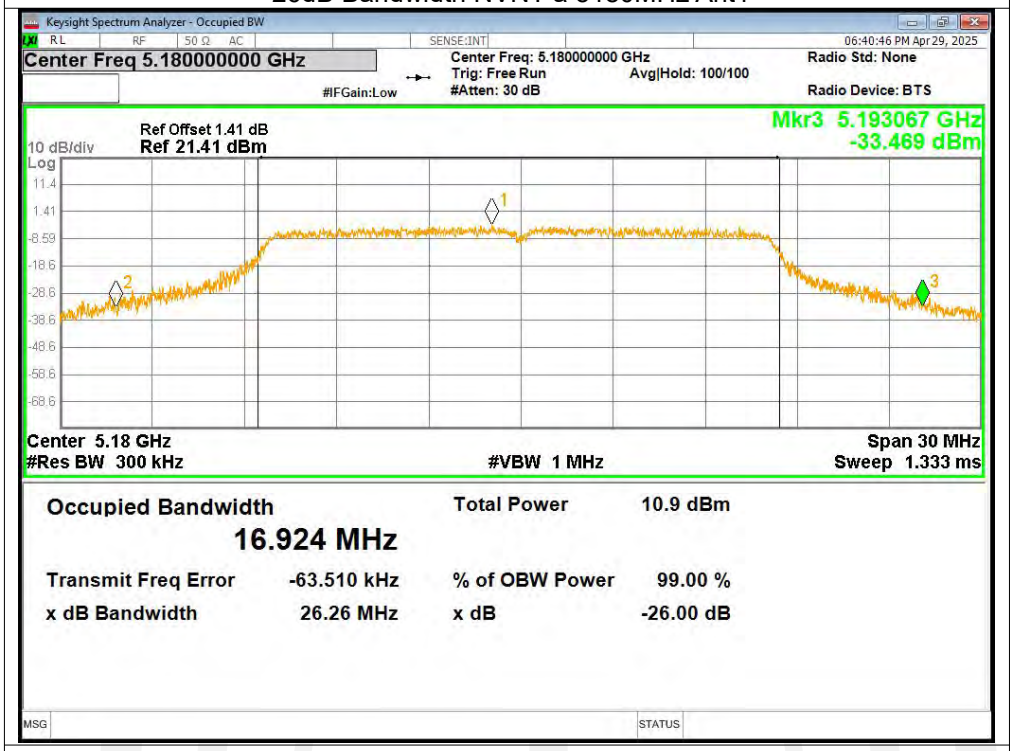
Measurement Data:

5.2GWIFI (5180-5240 MHz)

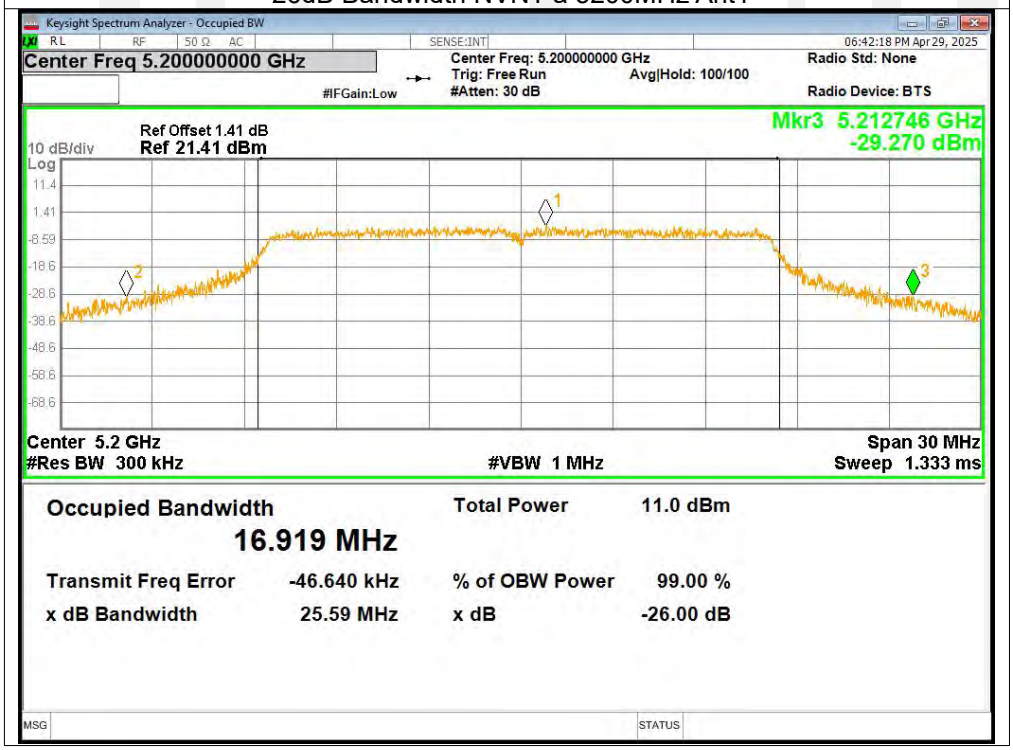
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	26.261	0.5	Pass
NVNT	a	5200	Ant1	25.586	0.5	Pass
NVNT	a	5240	Ant1	25.428	0.5	Pass
NVNT	n20	5180	Ant1	24.652	0.5	Pass
NVNT	n20	5200	Ant1	24.894	0.5	Pass
NVNT	n20	5240	Ant1	24.971	0.5	Pass
NVNT	n40	5190	Ant1	52.197	0.5	Pass
NVNT	n40	5230	Ant1	48.491	0.5	Pass
NVNT	ac20	5180	Ant1	25.26	0.5	Pass
NVNT	ac20	5200	Ant1	24.578	0.5	Pass
NVNT	ac20	5240	Ant1	24.995	0.5	Pass
NVNT	ac40	5190	Ant1	44.033	0.5	Pass
NVNT	ac40	5230	Ant1	43.782	0.5	Pass
NVNT	ax20	5180	Ant1	24.919	0.5	Pass
NVNT	ax20	5200	Ant1	25.393	0.5	Pass
NVNT	ax20	5240	Ant1	25.224	0.5	Pass
NVNT	ax40	5190	Ant1	43.479	0.5	Pass
NVNT	ax40	5230	Ant1	43.027	0.5	Pass

Test Graphs

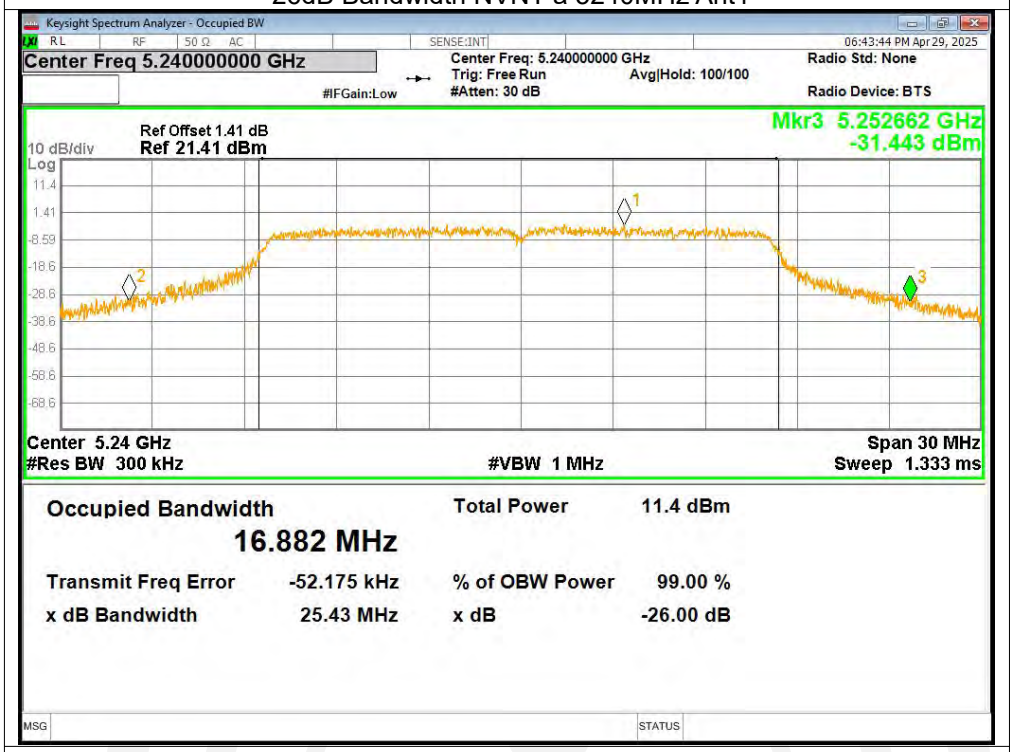
-26dB Bandwidth NVNT a 5180MHz Ant1



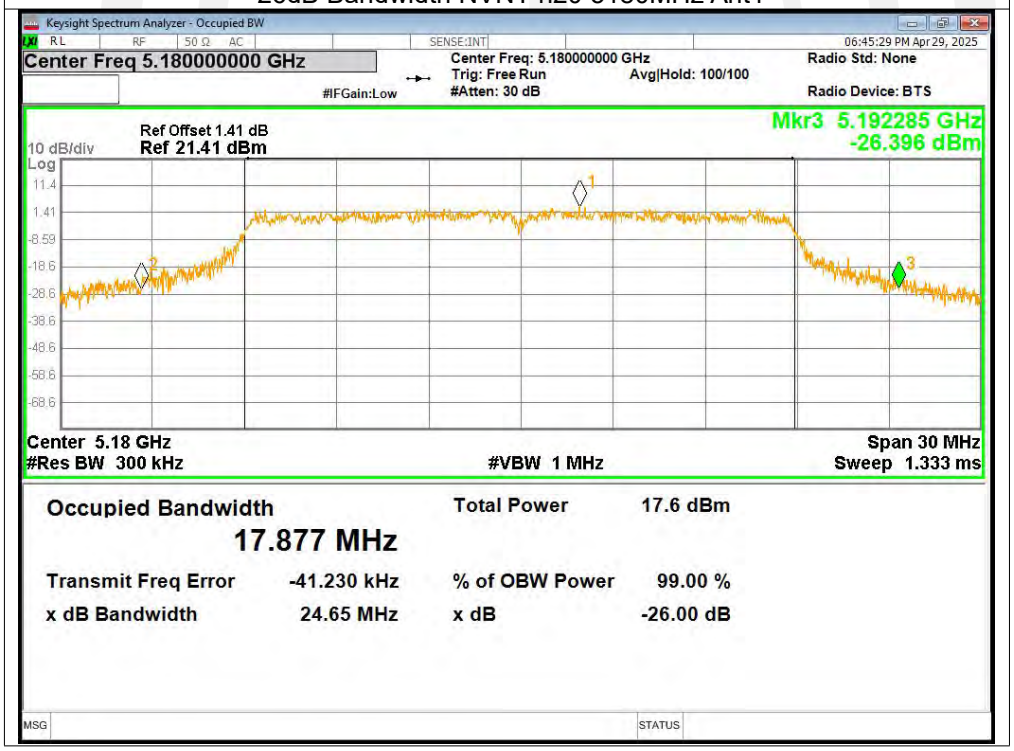
-26dB Bandwidth NVNT a 5200MHz Ant1



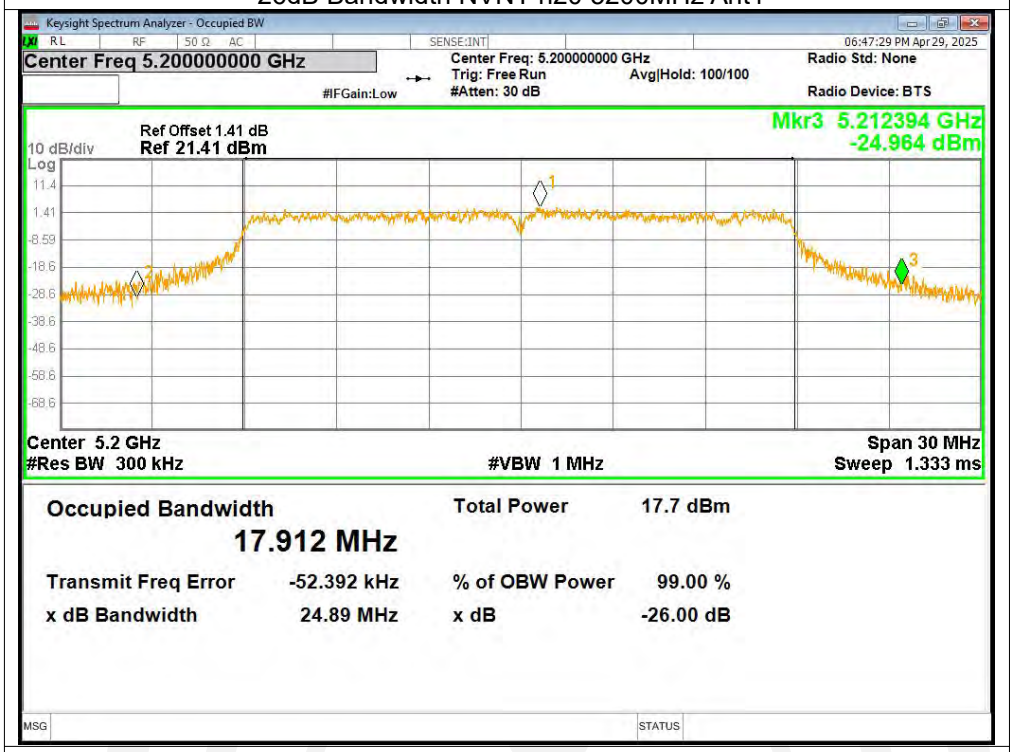
-26dB Bandwidth NVNT a 5240MHz Ant1



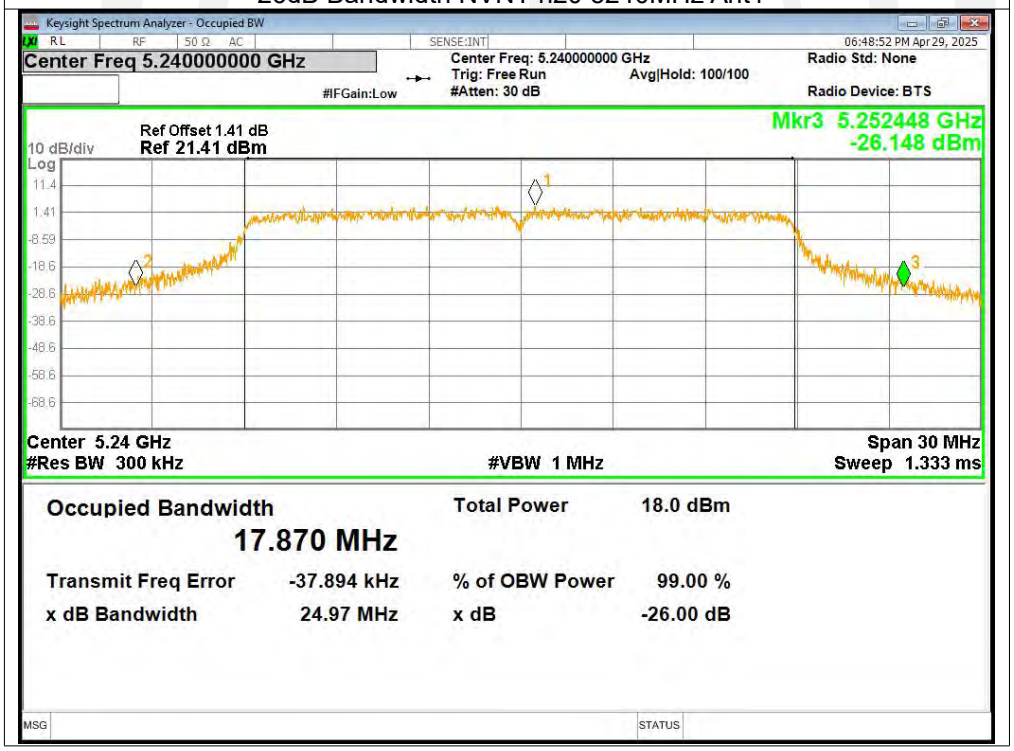
-26dB Bandwidth NVNT n20 5180MHz Ant1



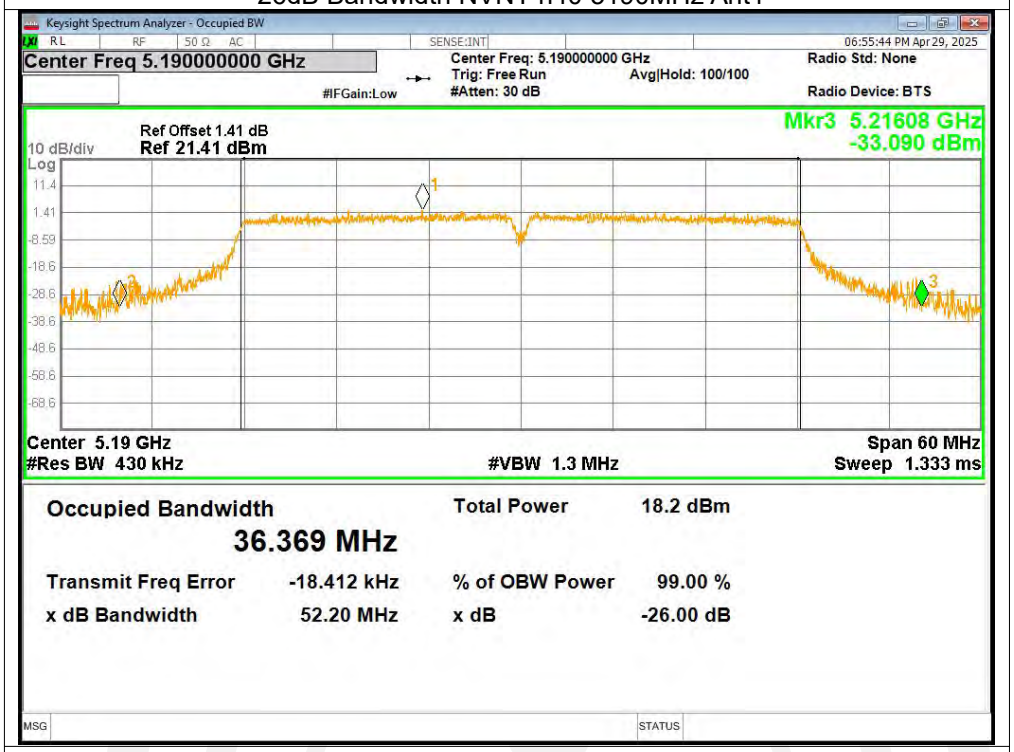
-26dB Bandwidth NVNT n20 5200MHz Ant1



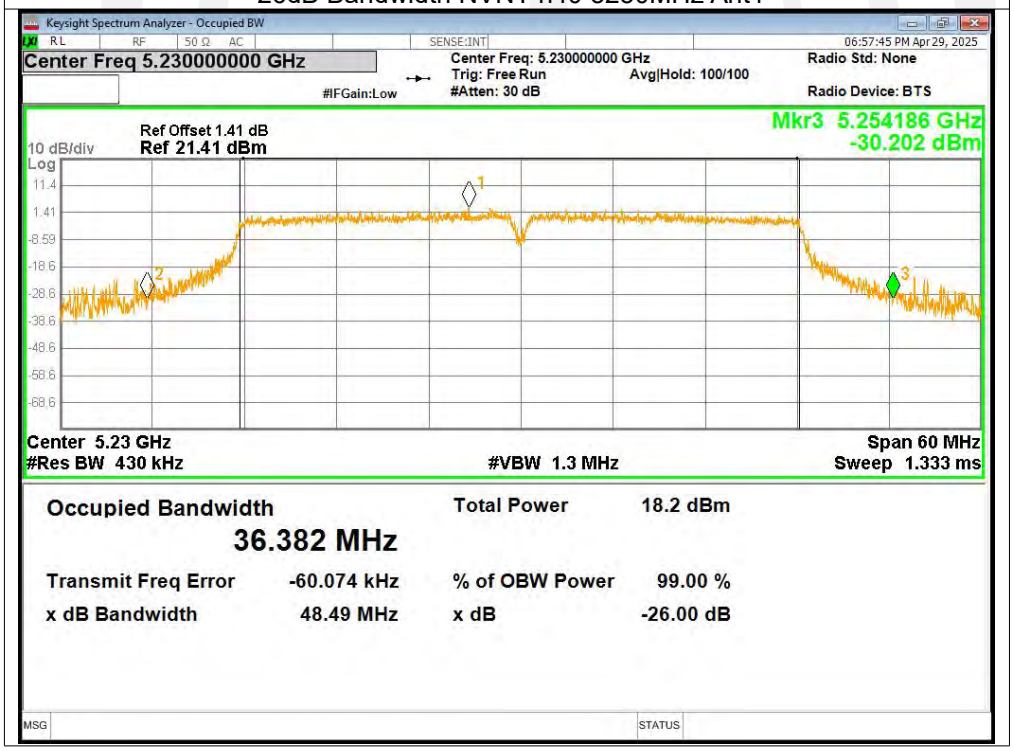
-26dB Bandwidth NVNT n20 5240MHz Ant1



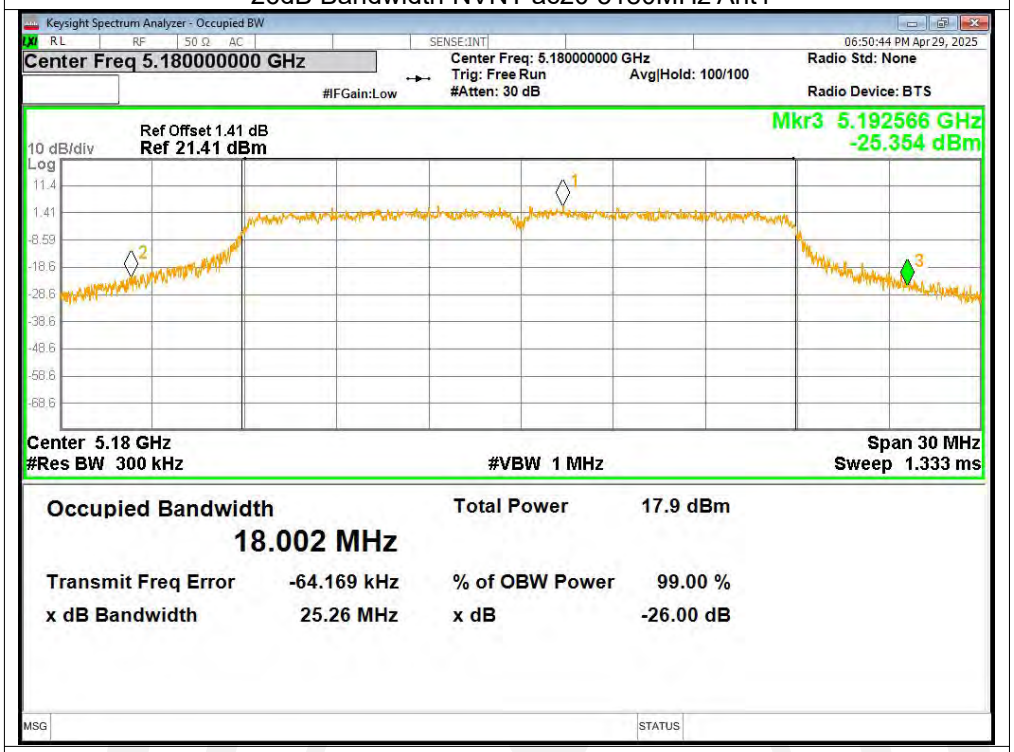
-26dB Bandwidth NVNT n40 5190MHz Ant1



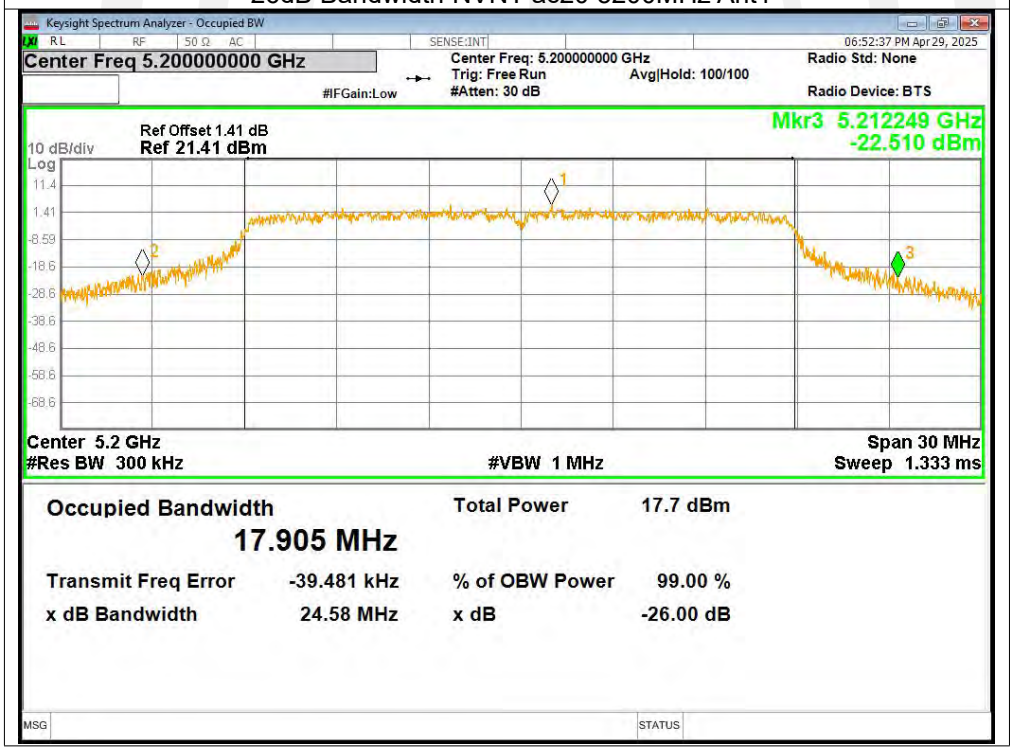
-26dB Bandwidth NVNT n40 5230MHz Ant1



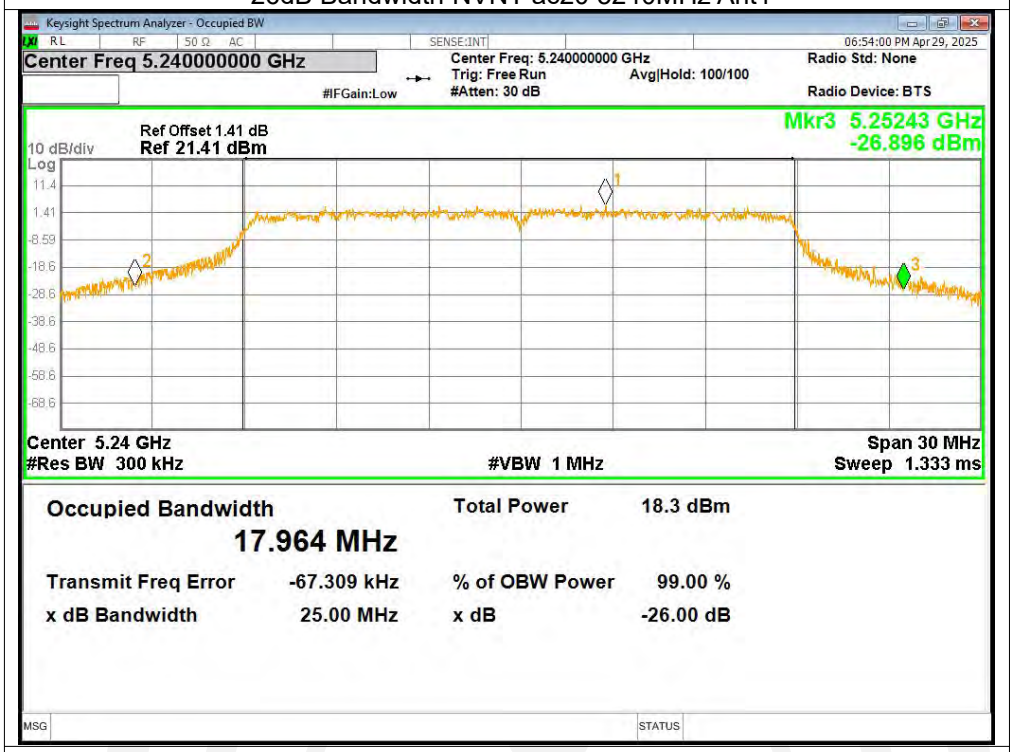
-26dB Bandwidth NVNT ac20 5180MHz Ant1



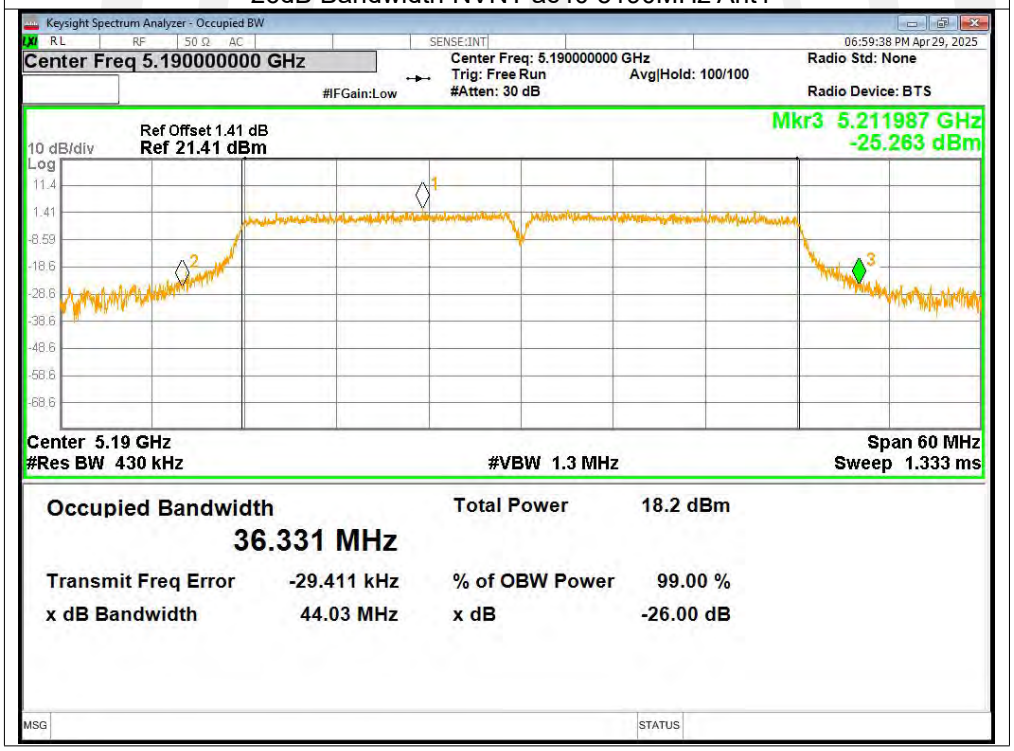
-26dB Bandwidth NVNT ac20 5200MHz Ant1



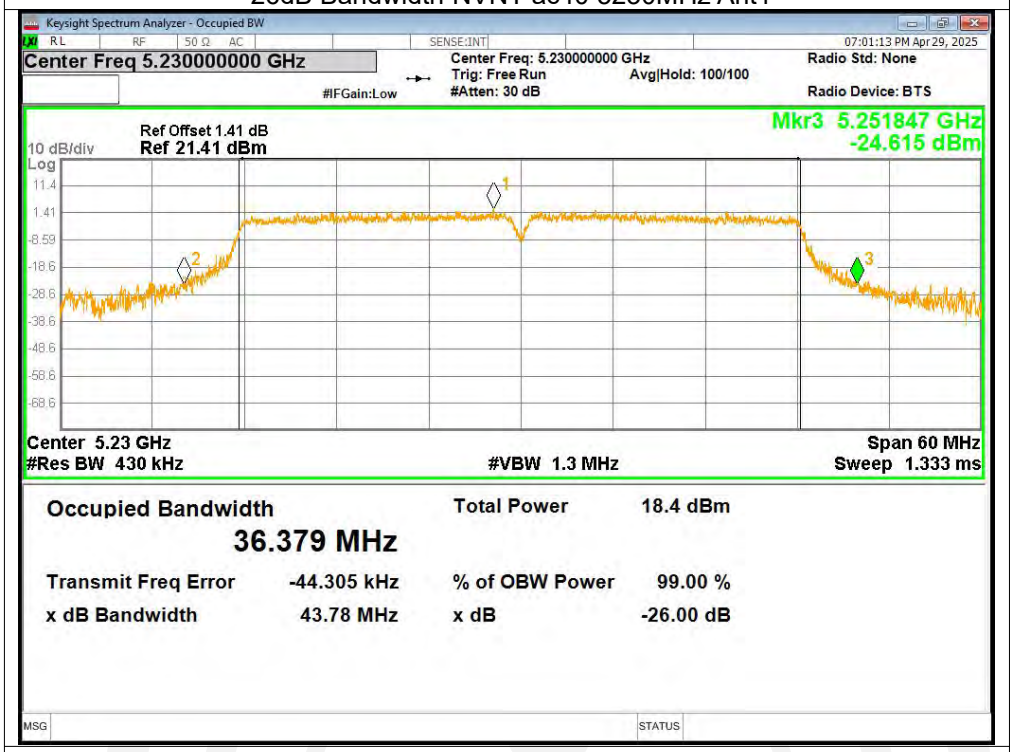
-26dB Bandwidth NVNT ac20 5240MHz Ant1



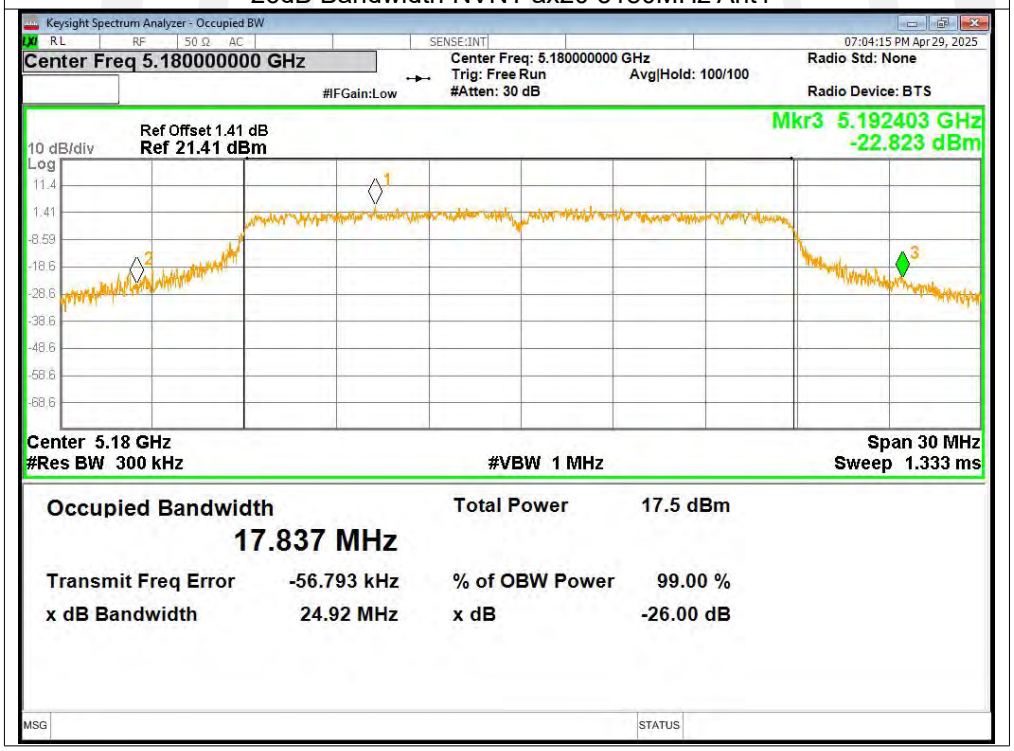
-26dB Bandwidth NVNT ac40 5190MHz Ant1



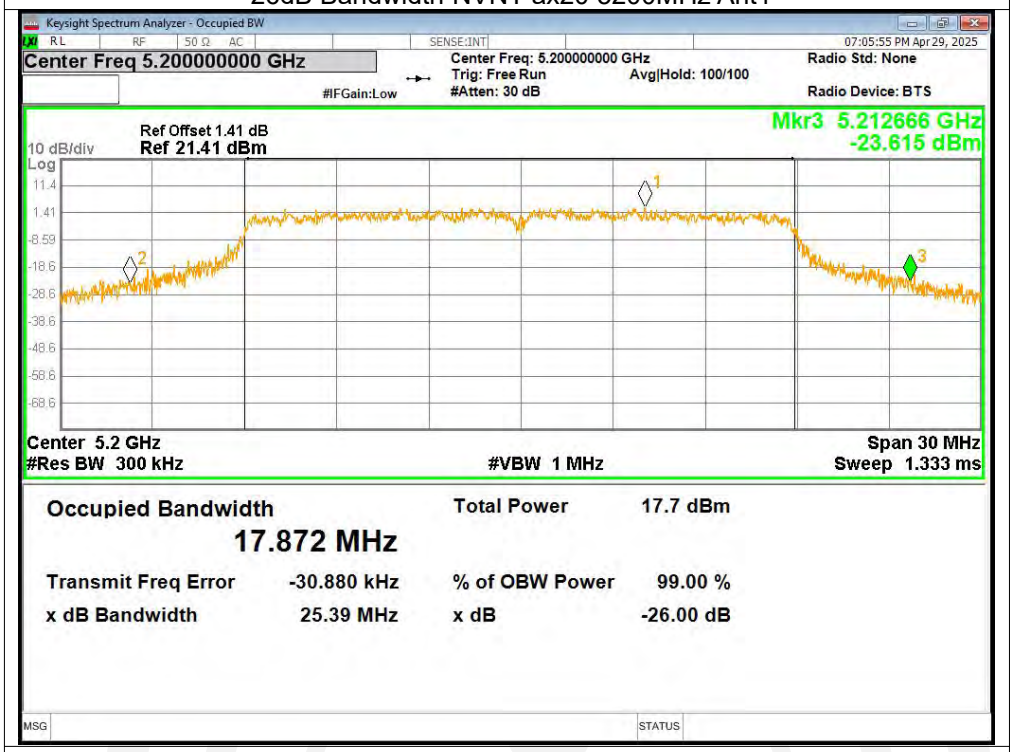
-26dB Bandwidth NVNT ac40 5230MHz Ant1



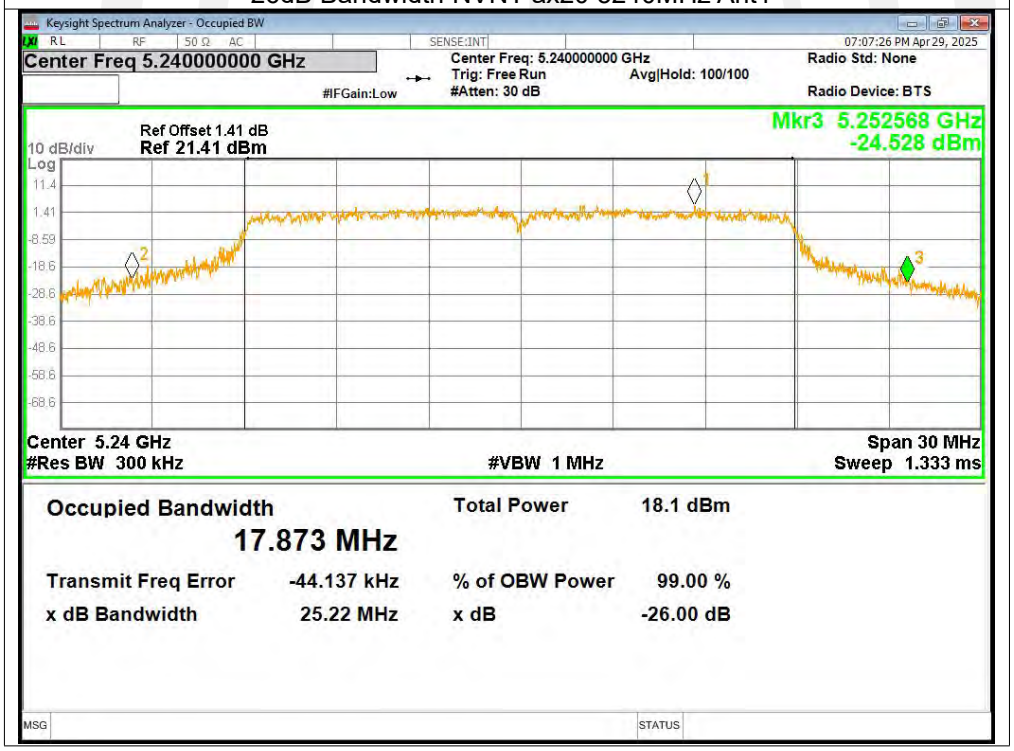
-26dB Bandwidth NVNT ax20 5180MHz Ant1



-26dB Bandwidth NVNT ax20 5200MHz Ant1



-26dB Bandwidth NVNT ax20 5240MHz Ant1



-26dB Bandwidth NVNT ax40 5190MHz Ant1

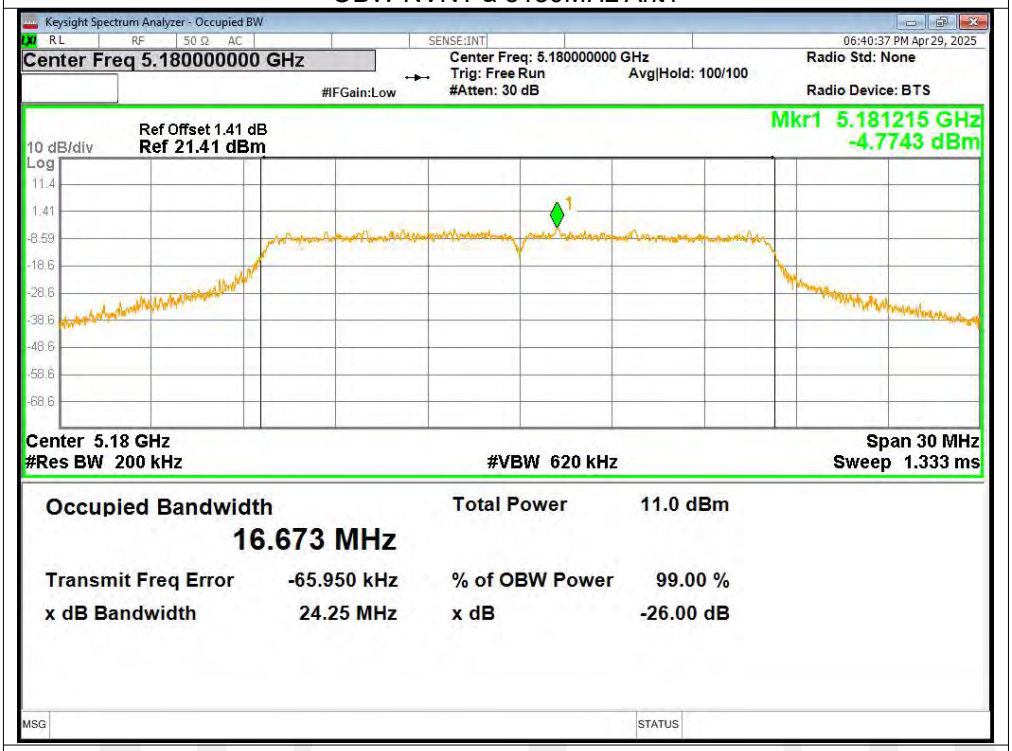
-26dB Bandwidth NVNT ax40 5230MHz Ant1

5.2GWIFI (5180-5240 MHz)

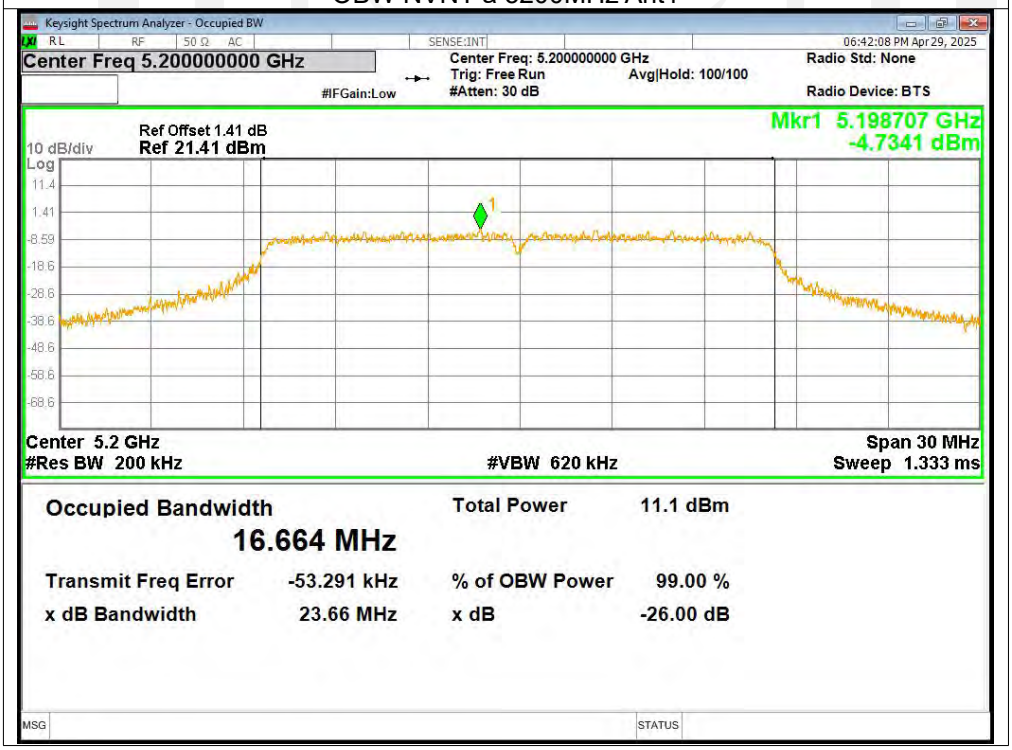
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.673
NVNT	a	5200	Ant1	16.664
NVNT	a	5240	Ant1	16.616
NVNT	n20	5180	Ant1	17.72
NVNT	n20	5200	Ant1	17.69
NVNT	n20	5240	Ant1	17.712
NVNT	n40	5190	Ant1	36.415
NVNT	n40	5230	Ant1	36.322
NVNT	ac20	5180	Ant1	17.744
NVNT	ac20	5200	Ant1	17.768
NVNT	ac20	5240	Ant1	17.747
NVNT	ac40	5190	Ant1	36.336
NVNT	ac40	5230	Ant1	36.335
NVNT	ax20	5180	Ant1	17.721
NVNT	ax20	5200	Ant1	17.727
NVNT	ax20	5240	Ant1	17.713
NVNT	ax40	5190	Ant1	37.861
NVNT	ax40	5230	Ant1	37.838

Test Graphs

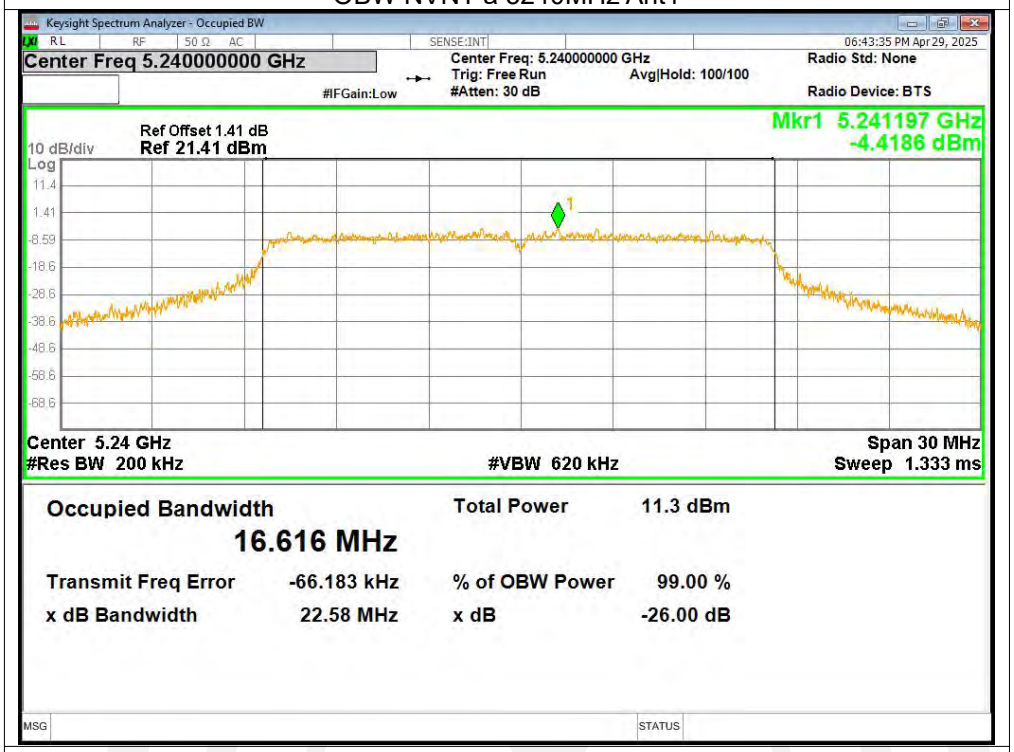
OBW NVNT a 5180MHz Ant1



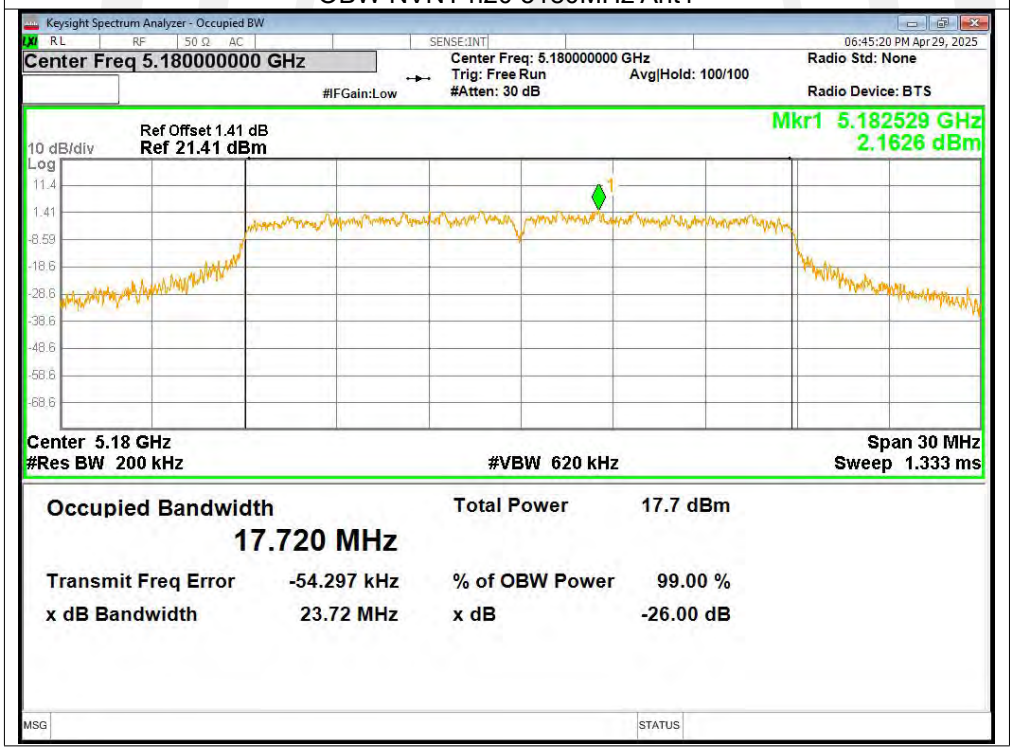
OBW NVNT a 5200MHz Ant1



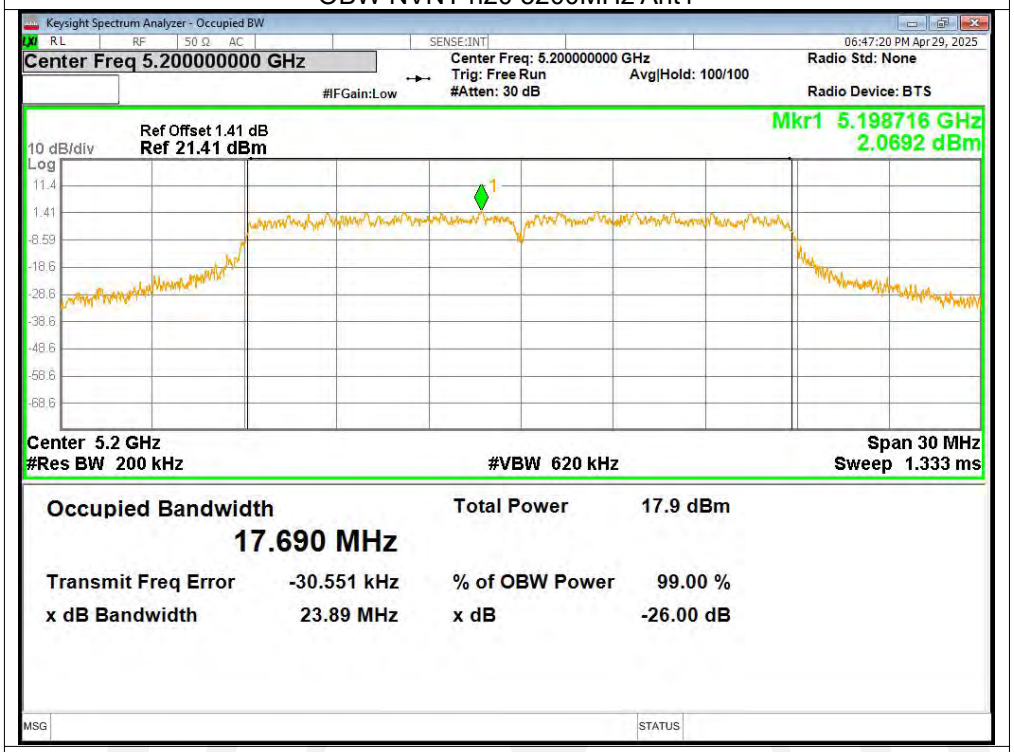
OBW NVNT a 5240MHz Ant1



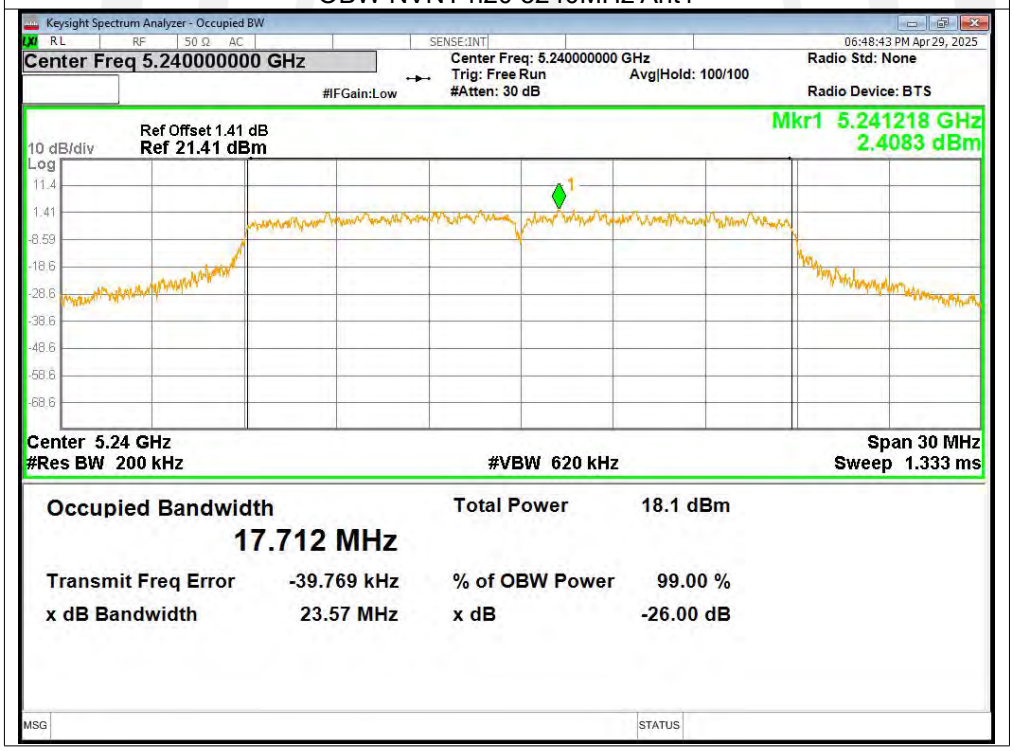
OBW NVNT n20 5180MHz Ant1



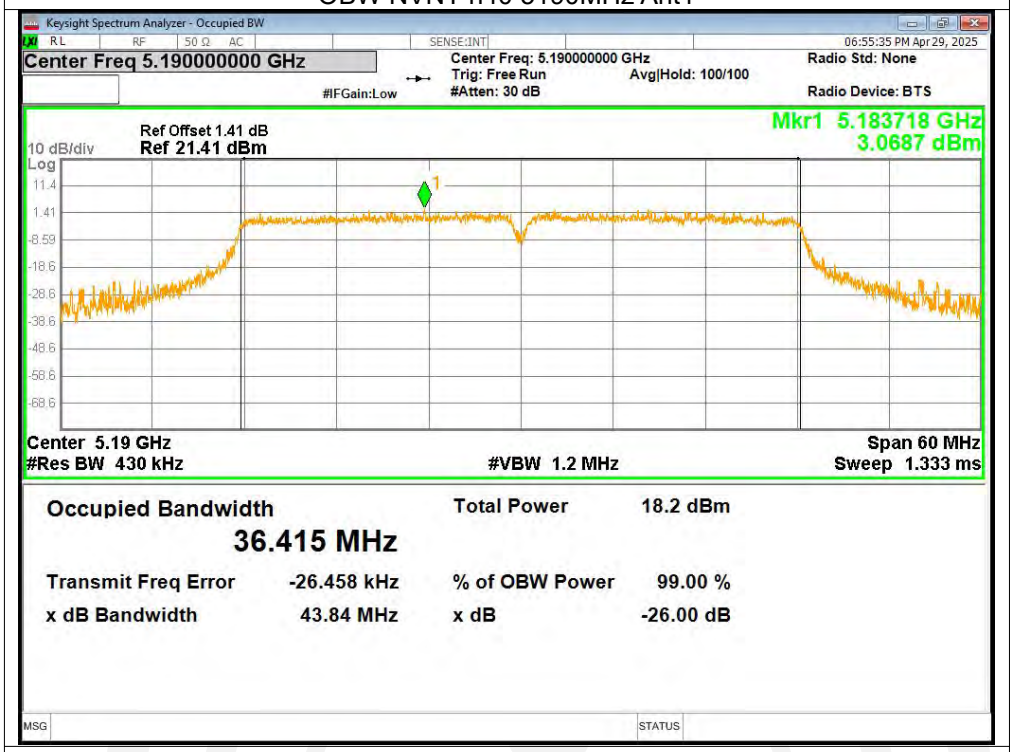
OBW NVNT n20 5200MHz Ant1



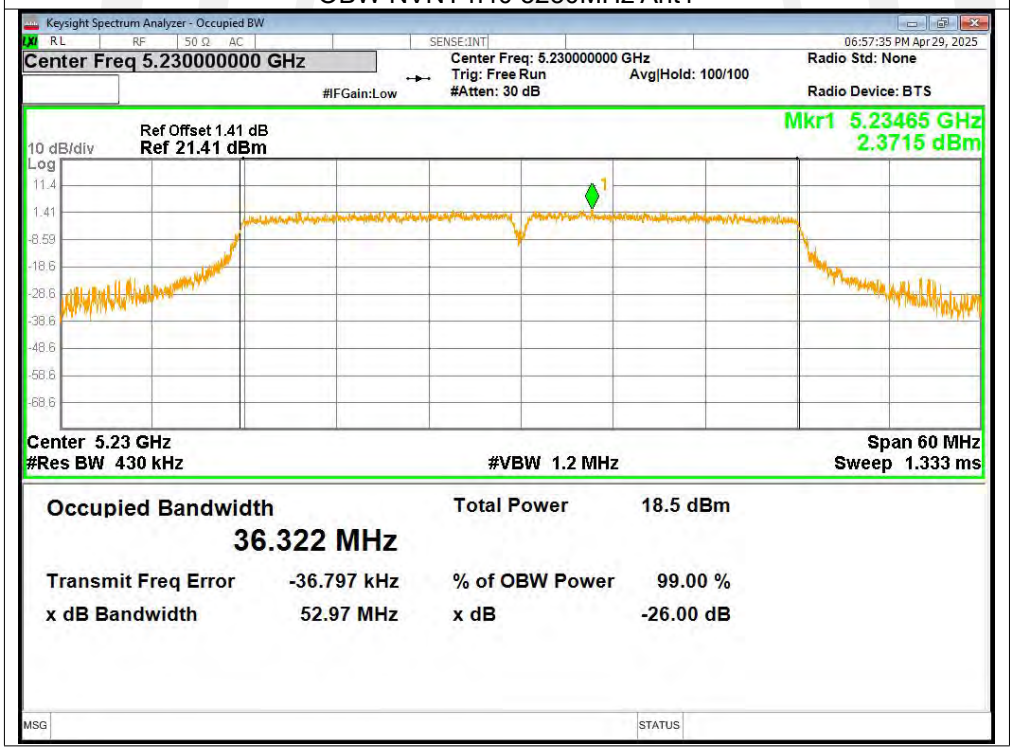
OBW NVNT n20 5240MHz Ant1



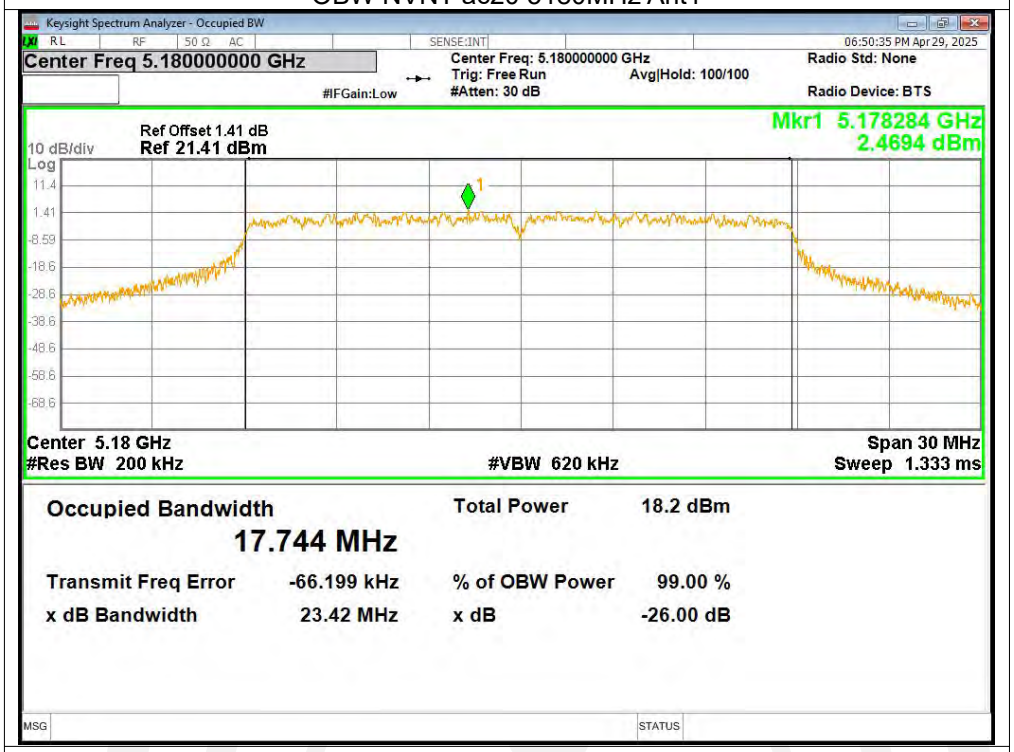
OBW NVNT n40 5190MHz Ant1



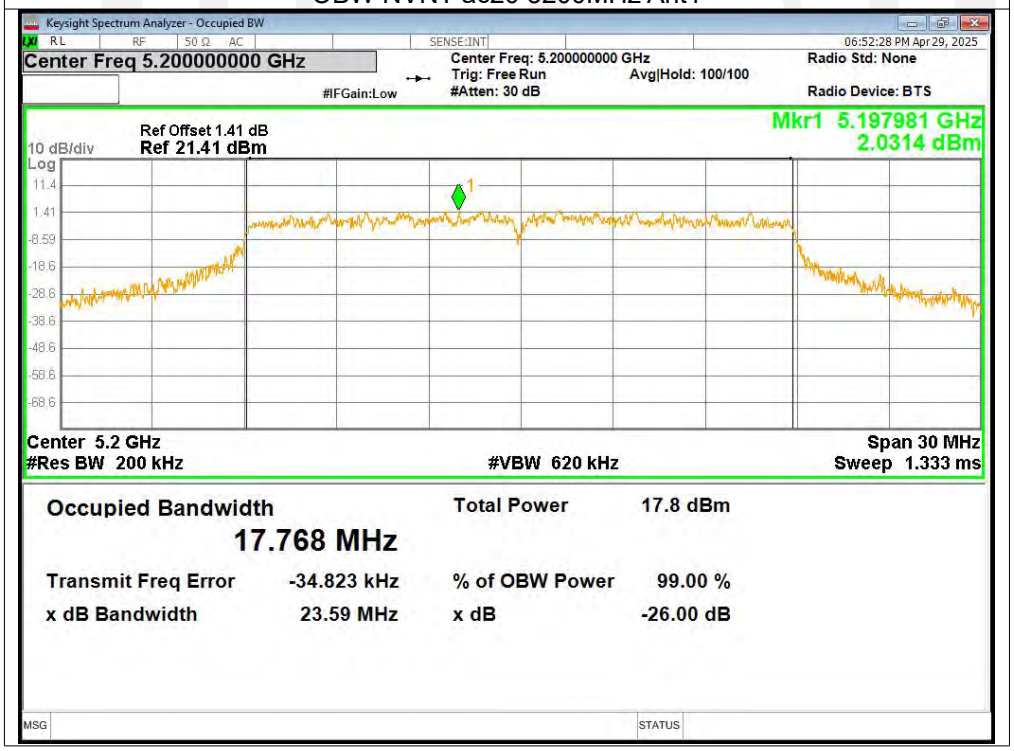
OBW NVNT n40 5230MHz Ant1



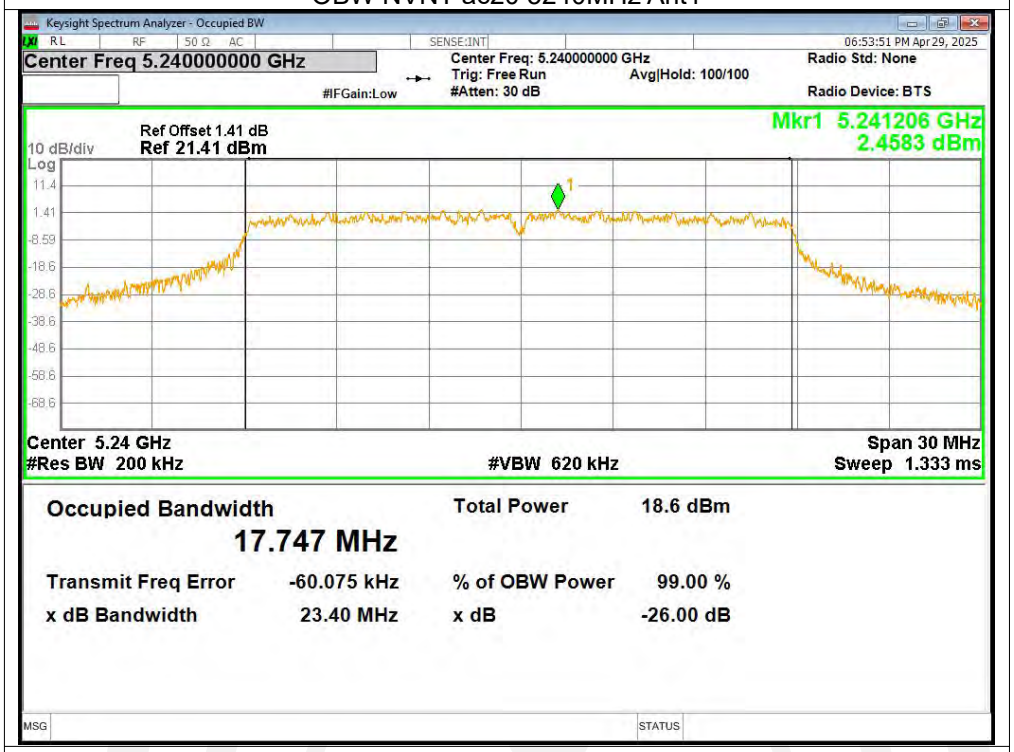
OBW NVNT ac20 5180MHz Ant1



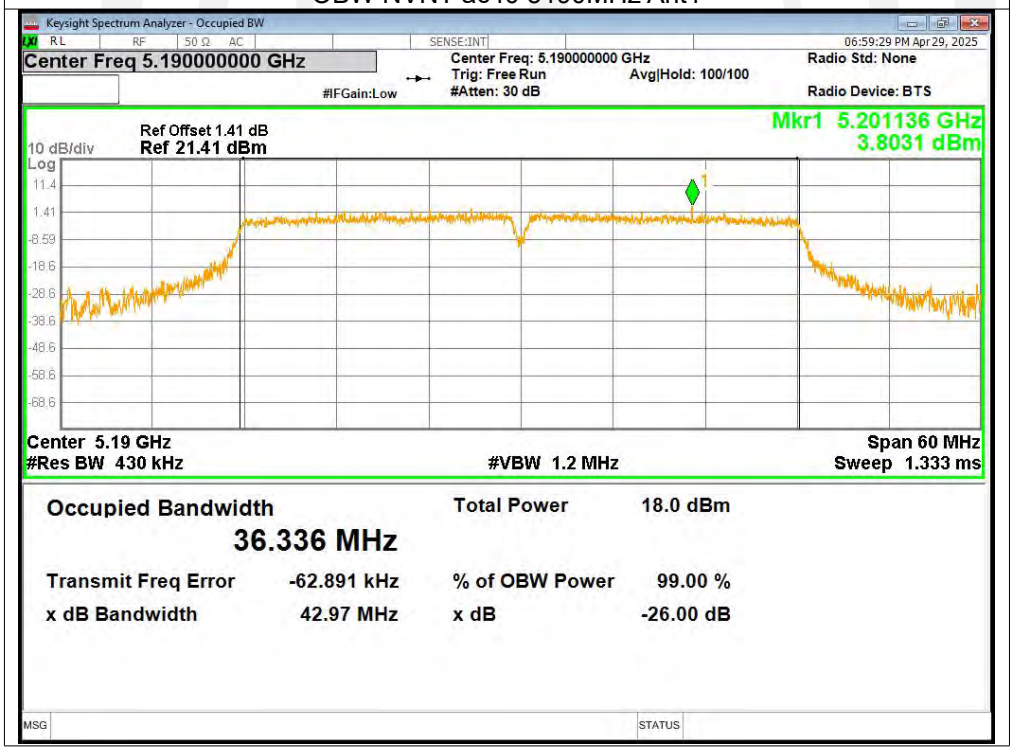
OBW NVNT ac20 5200MHz Ant1



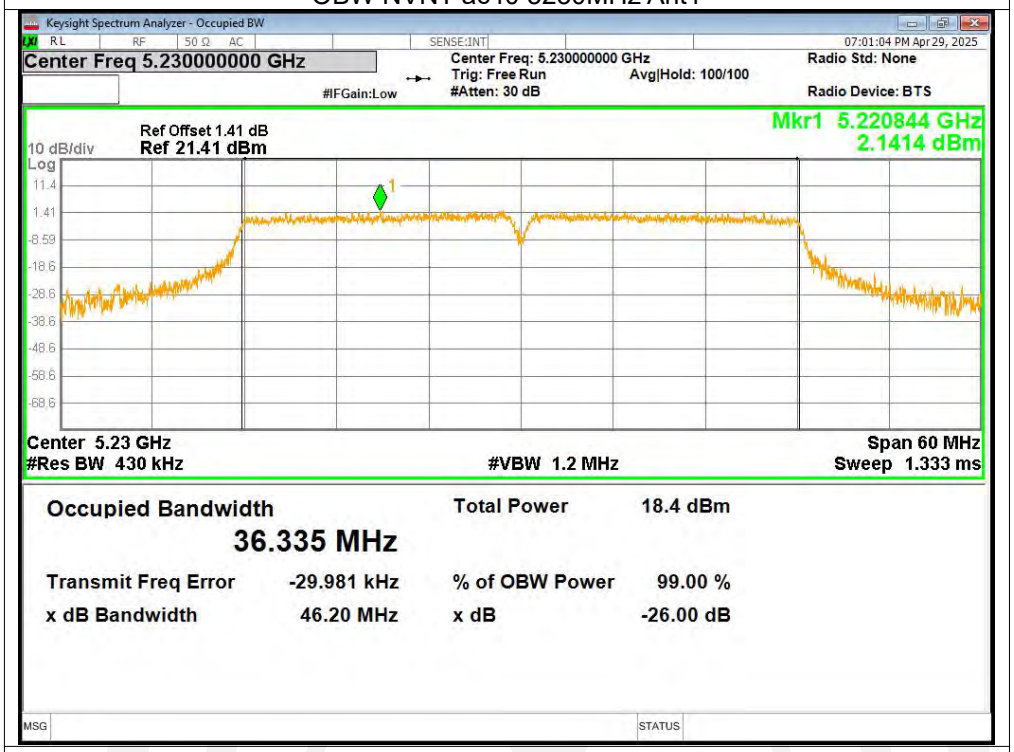
OBW NVNT ac20 5240MHz Ant1



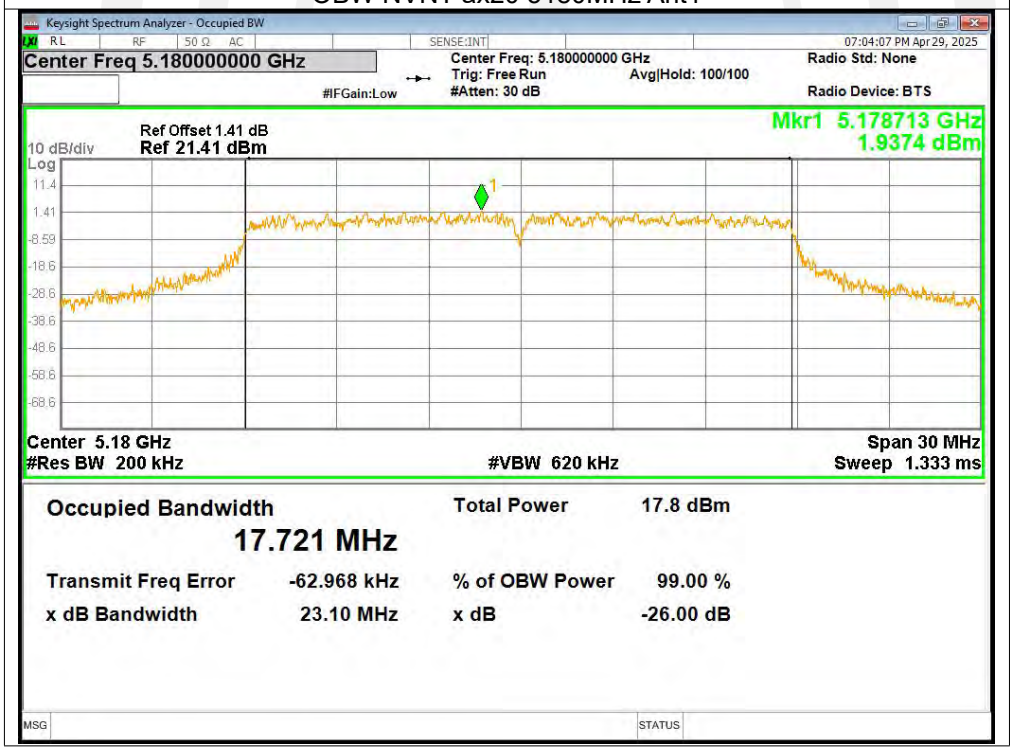
OBW NVNT ac40 5190MHz Ant1



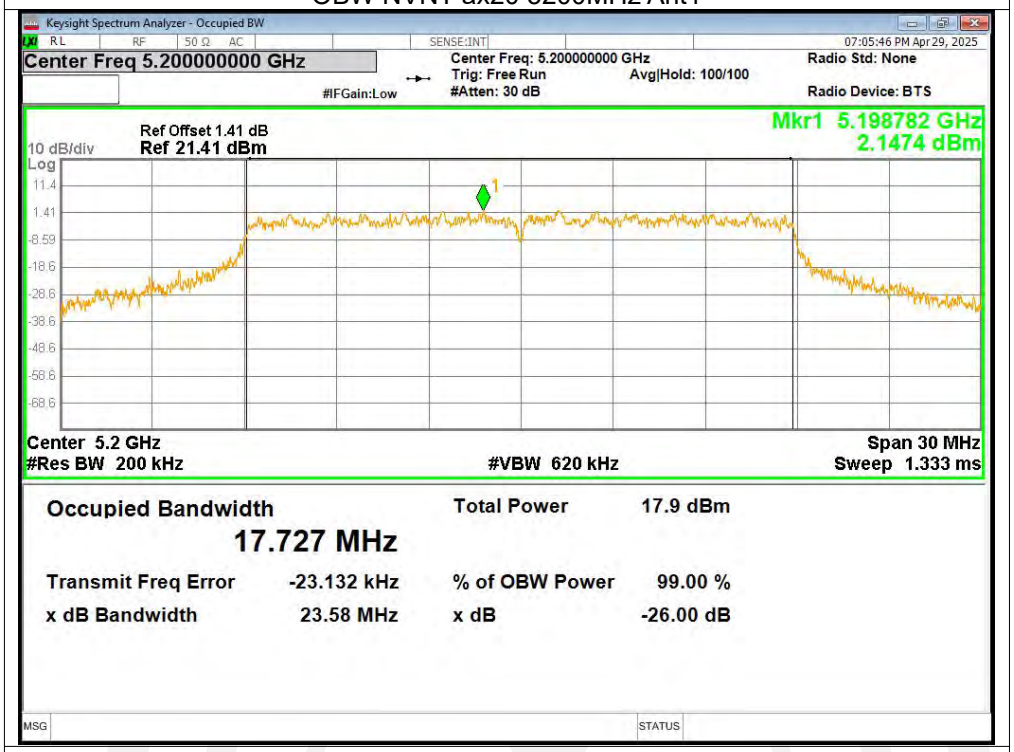
OBW NVNT ac40 5230MHz Ant1



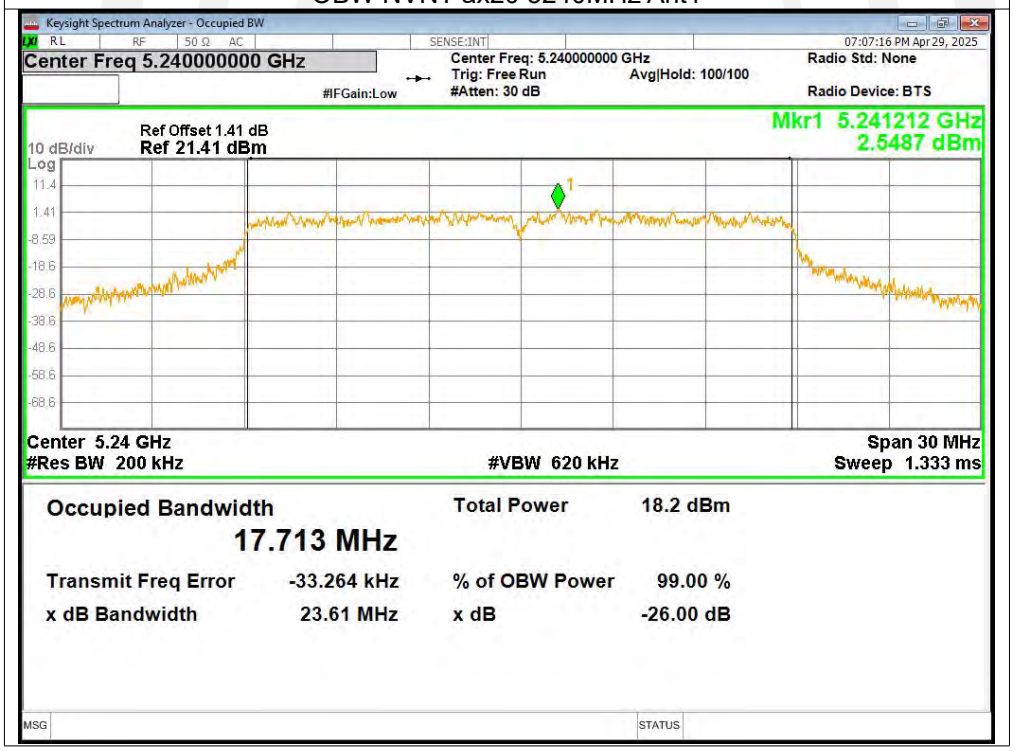
OBW NVNT ax20 5180MHz Ant1



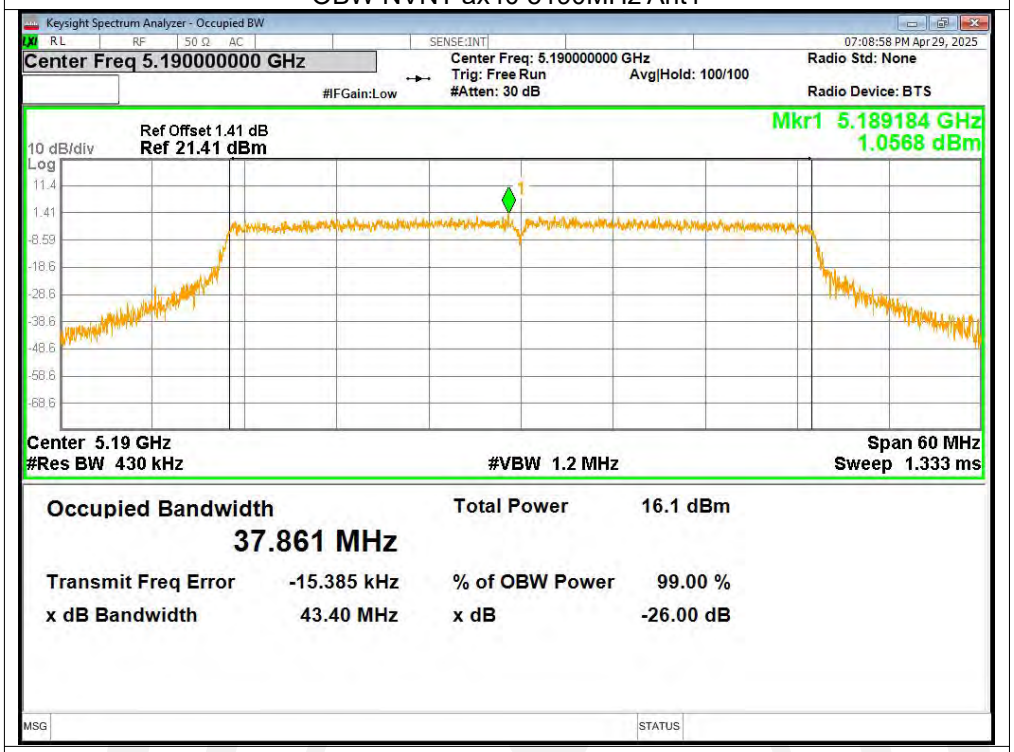
OBW NVNT ax20 5200MHz Ant1



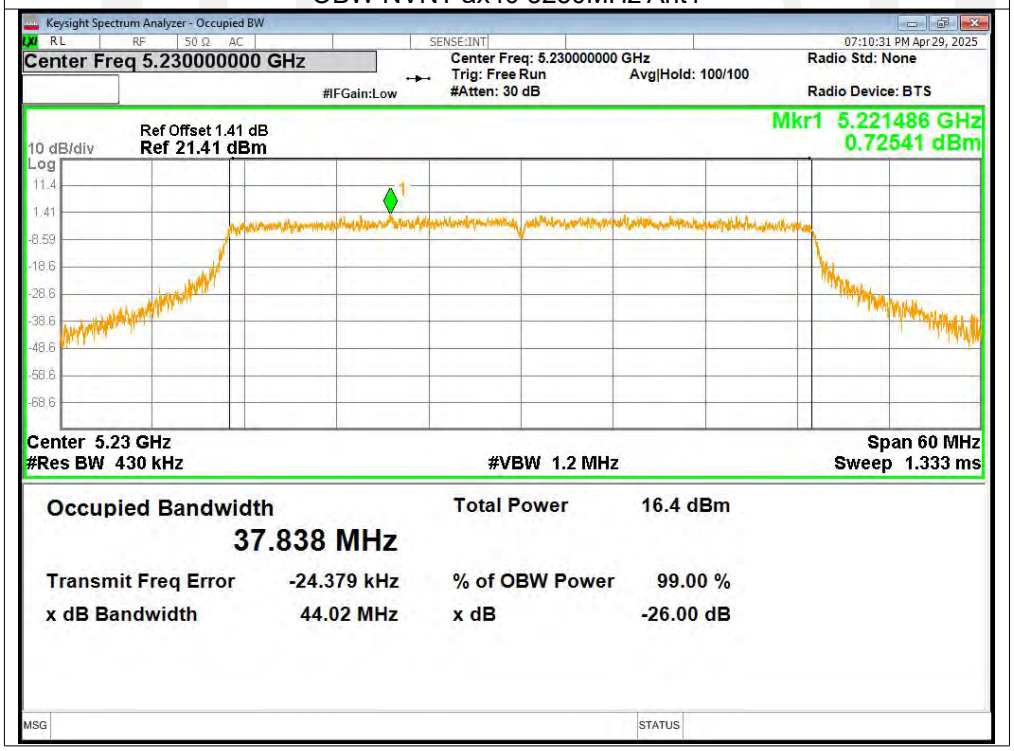
OBW NVNT ax20 5240MHz Ant1



OBW NVNT ax40 5190MHz Ant1



OBW NVNT ax40 5230MHz Ant1

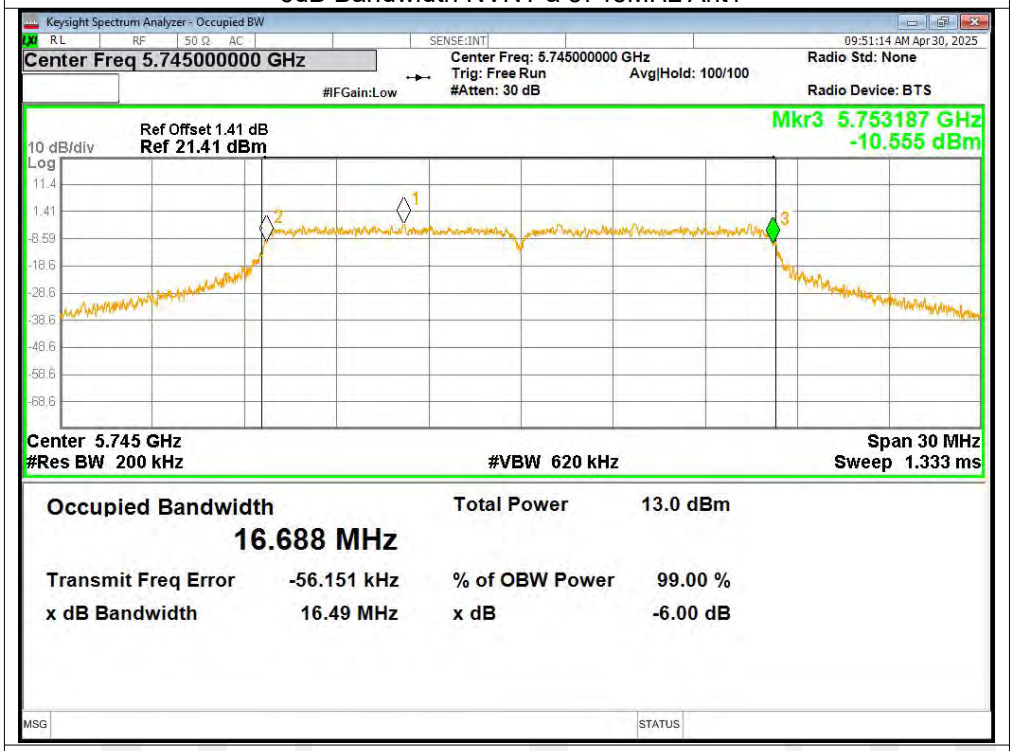


5.8GWIFI (5745MHz-5825 MHz)

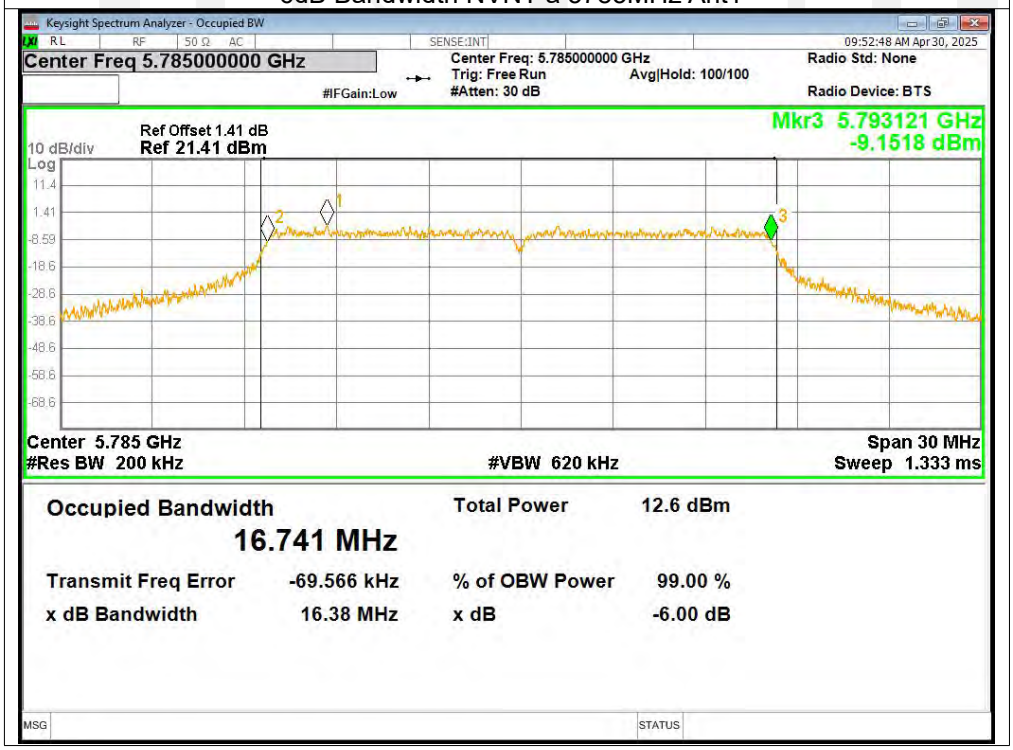
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.485	0.5	Pass
NVNT	a	5785	Ant1	16.38	0.5	Pass
NVNT	a	5825	Ant1	16.401	0.5	Pass
NVNT	n20	5745	Ant1	17.769	0.5	Pass
NVNT	n20	5785	Ant1	17.691	0.5	Pass
NVNT	n20	5825	Ant1	17.814	0.5	Pass
NVNT	n40	5755	Ant1	36.274	0.5	Pass
NVNT	n40	5795	Ant1	36.404	0.5	Pass
NVNT	ac20	5745	Ant1	17.793	0.5	Pass
NVNT	ac20	5785	Ant1	17.744	0.5	Pass
NVNT	ac20	5825	Ant1	17.718	0.5	Pass
NVNT	ac40	5755	Ant1	36.354	0.5	Pass
NVNT	ac40	5795	Ant1	36.495	0.5	Pass
NVNT	ax20	5745	Ant1	17.724	0.5	Pass
NVNT	ax20	5785	Ant1	17.735	0.5	Pass
NVNT	ax20	5825	Ant1	17.739	0.5	Pass
NVNT	ax40	5755	Ant1	38.139	0.5	Pass
NVNT	ax40	5795	Ant1	38.227	0.5	Pass

Test Graphs

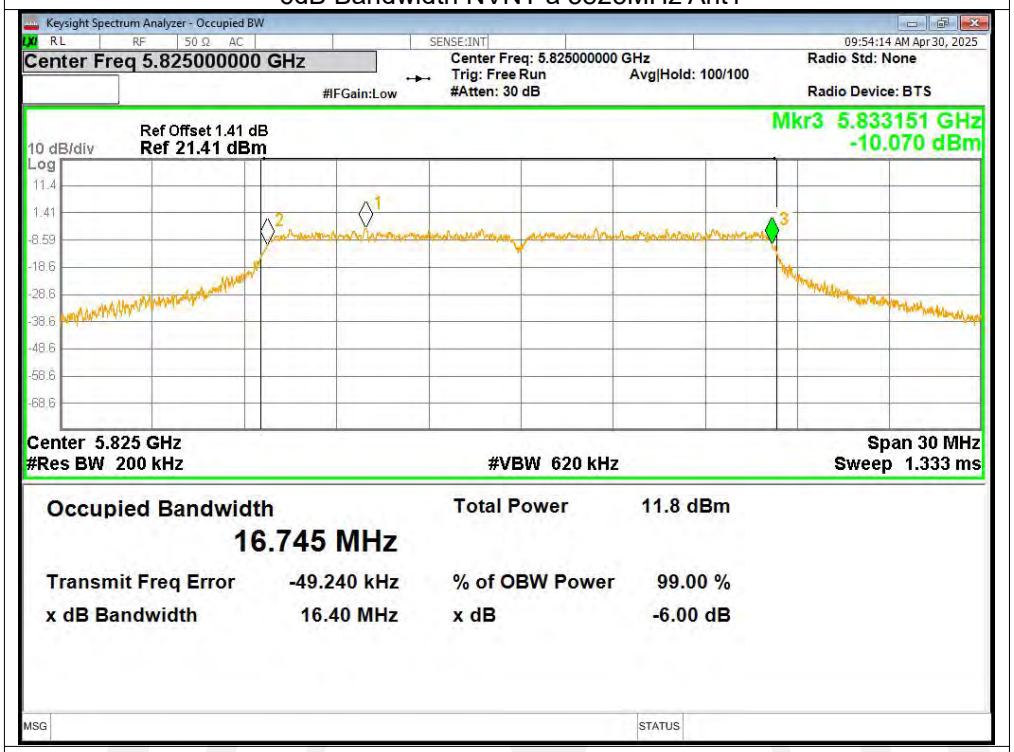
-6dB Bandwidth NVNT a 5745MHz Ant1



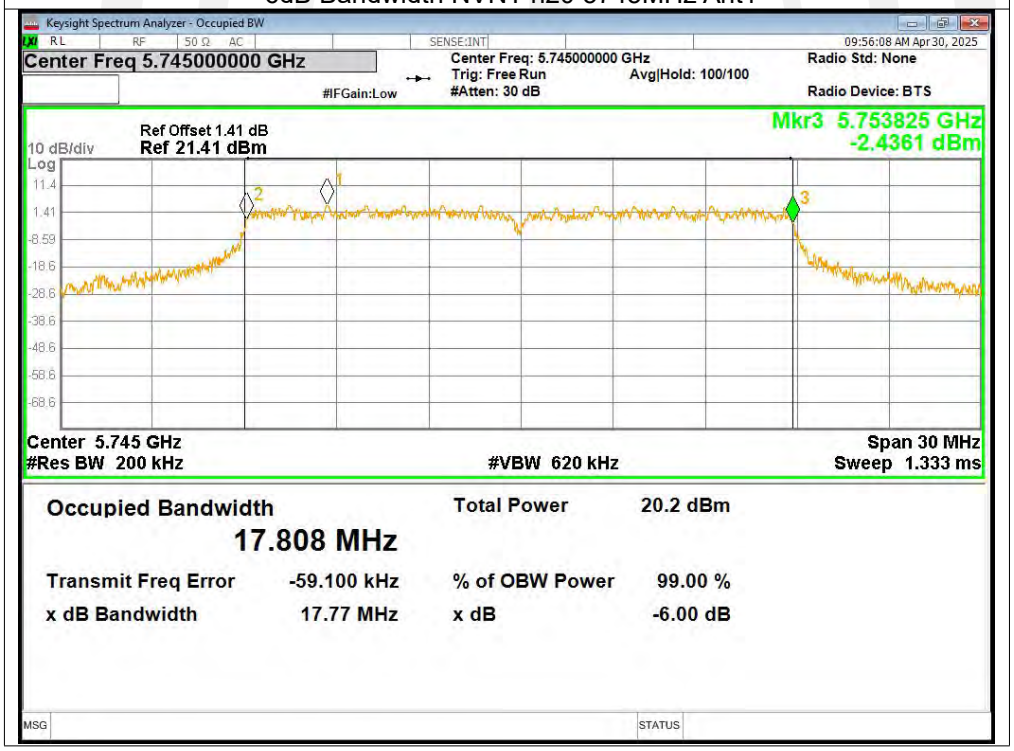
-6dB Bandwidth NVNT a 5785MHz Ant1



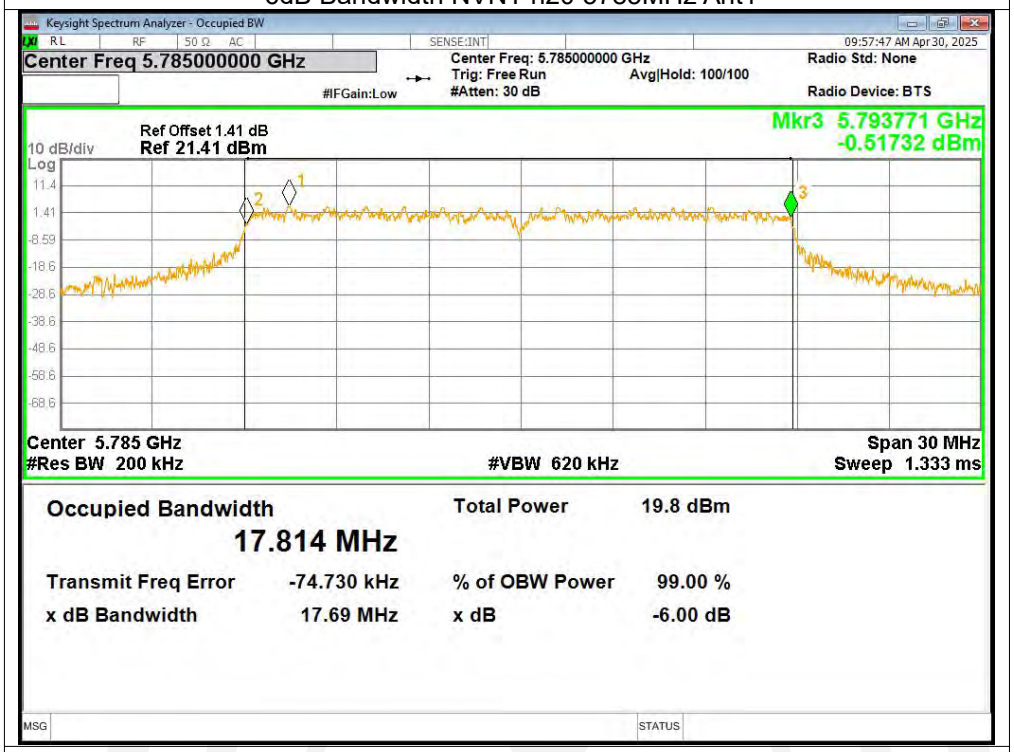
-6dB Bandwidth NVNT a 5825MHz Ant1



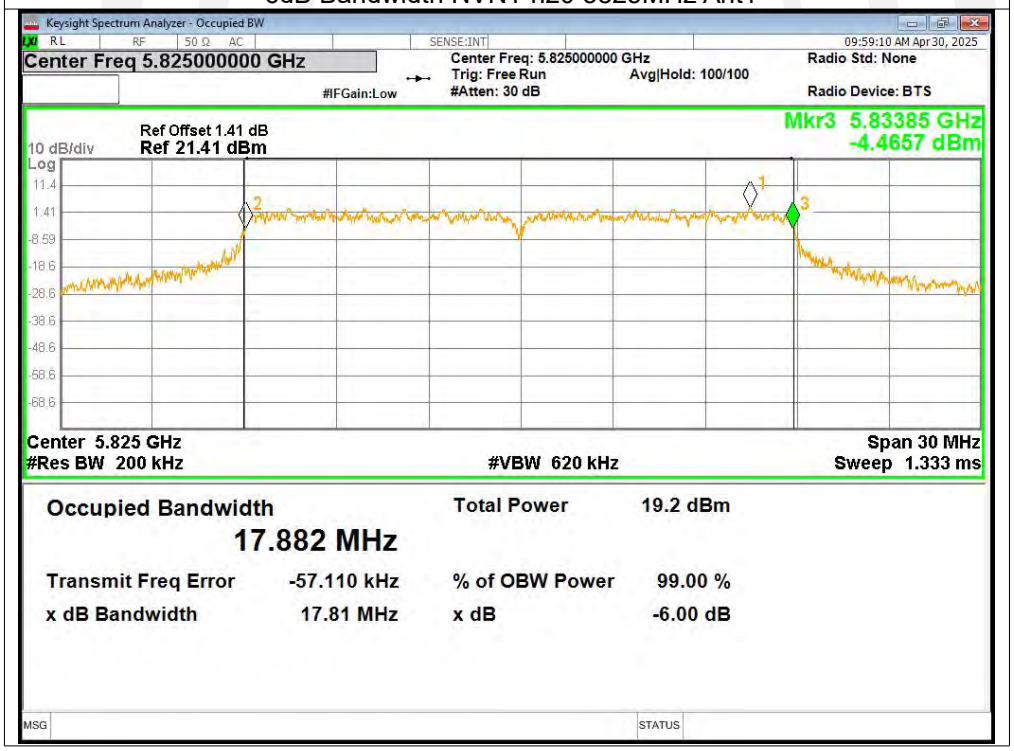
-6dB Bandwidth NVNT n20 5745MHz Ant1



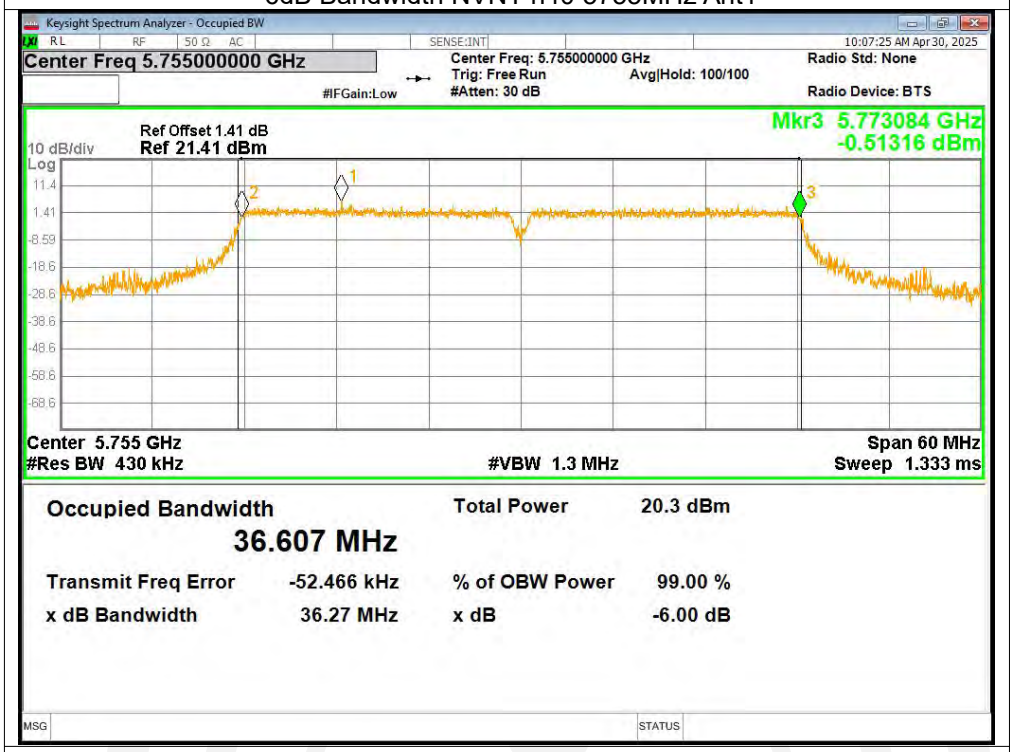
-6dB Bandwidth NVNT n20 5785MHz Ant1



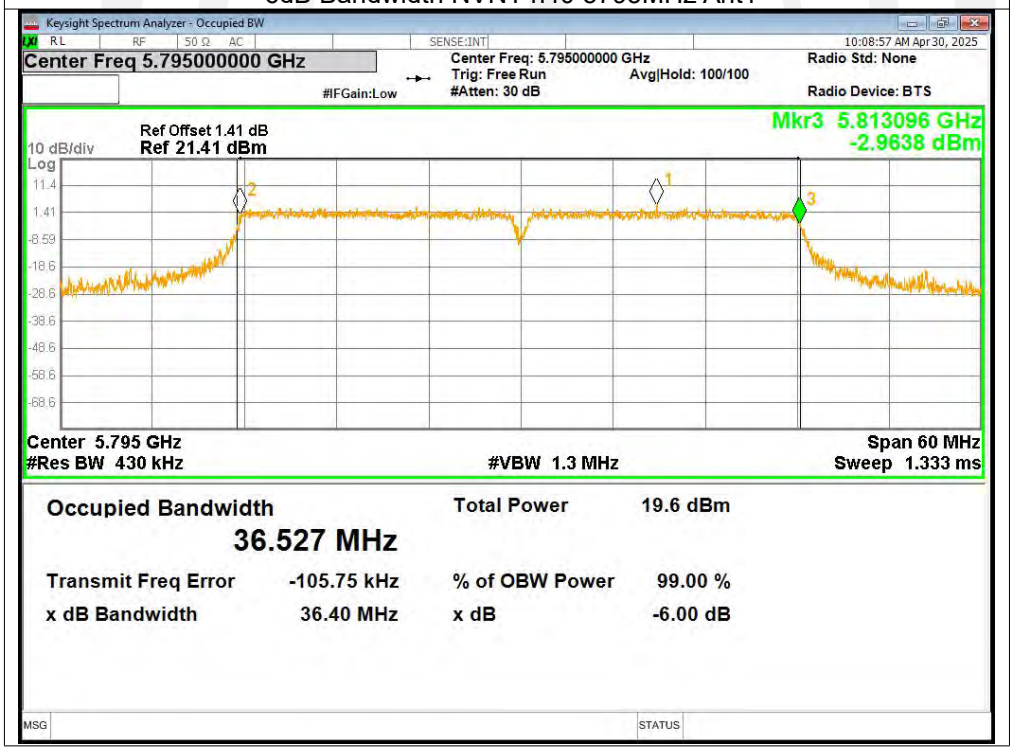
-6dB Bandwidth NVNT n20 5825MHz Ant1



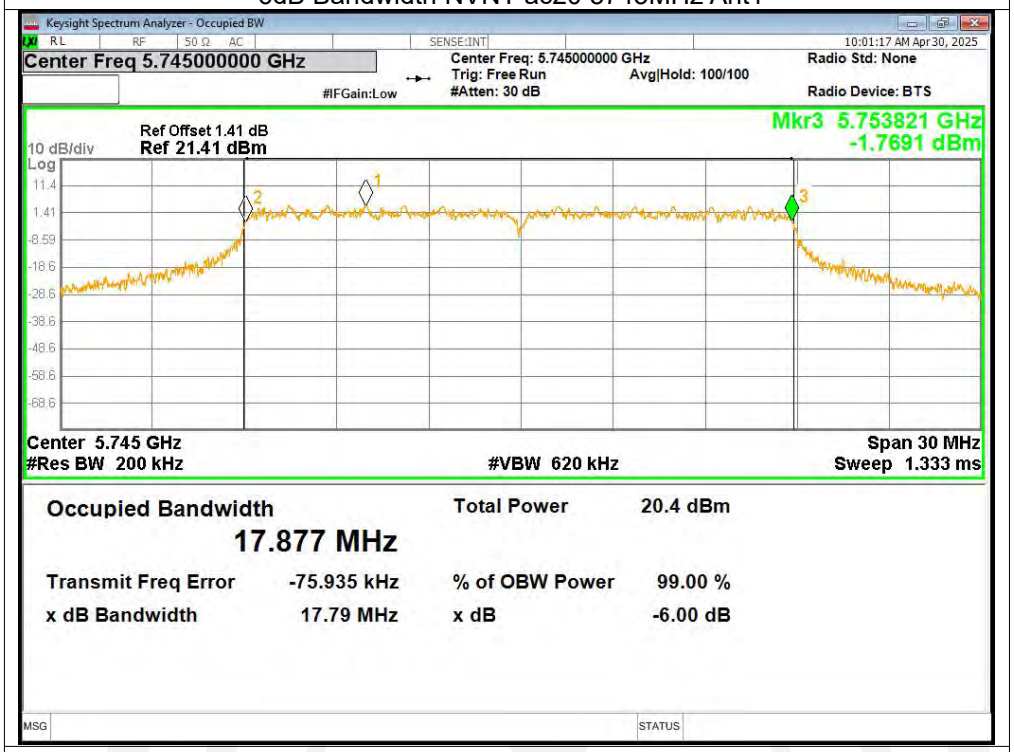
-6dB Bandwidth NVNT n40 5755MHz Ant1



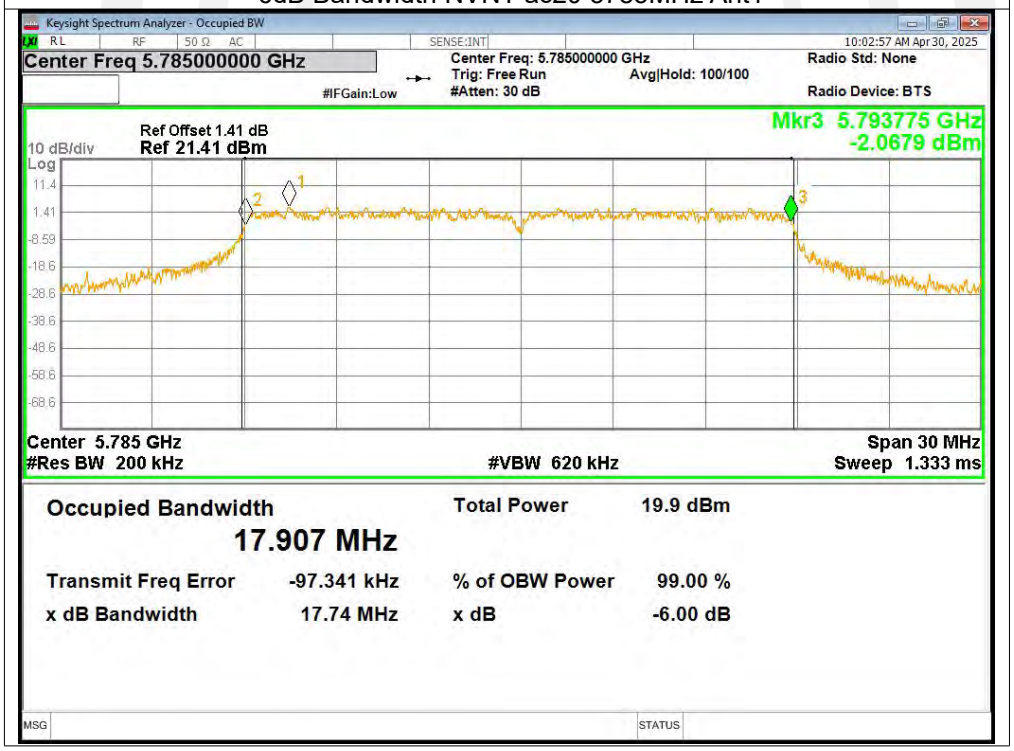
-6dB Bandwidth NVNT n40 5795MHz Ant1



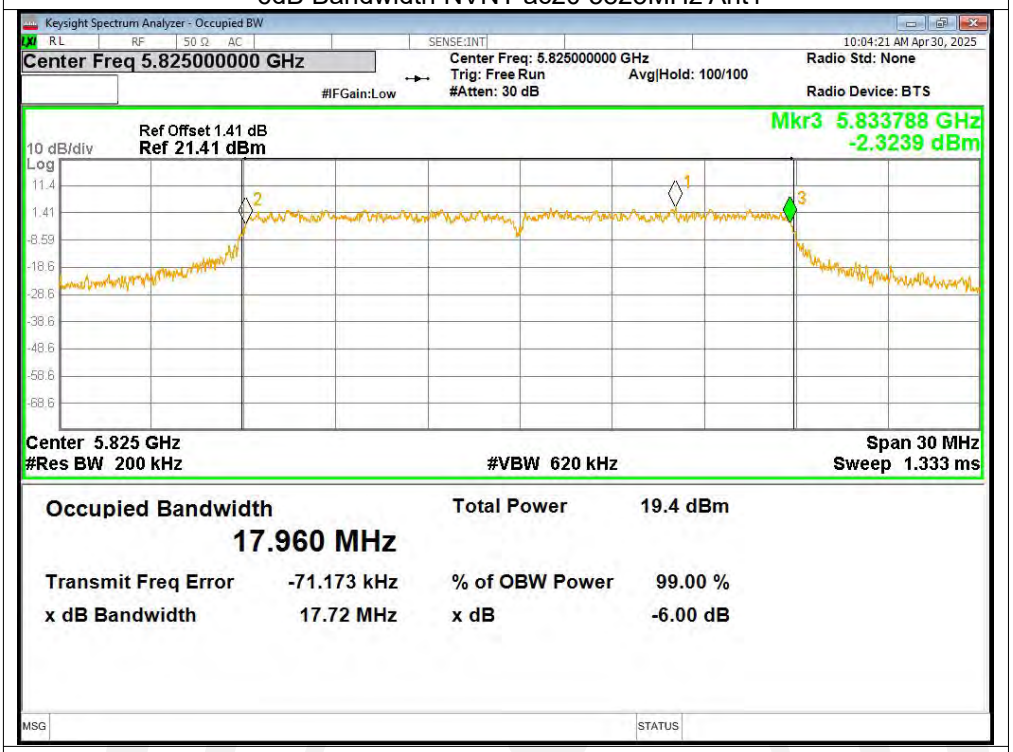
-6dB Bandwidth NVNT ac20 5745MHz Ant1



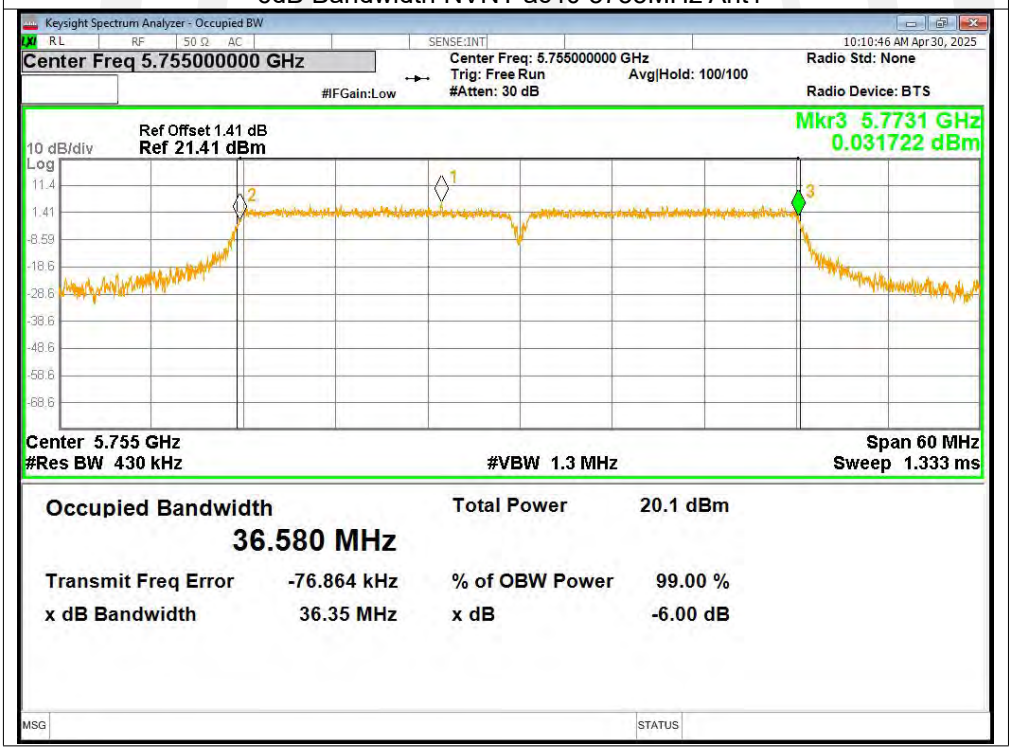
-6dB Bandwidth NVNT ac20 5785MHz Ant1



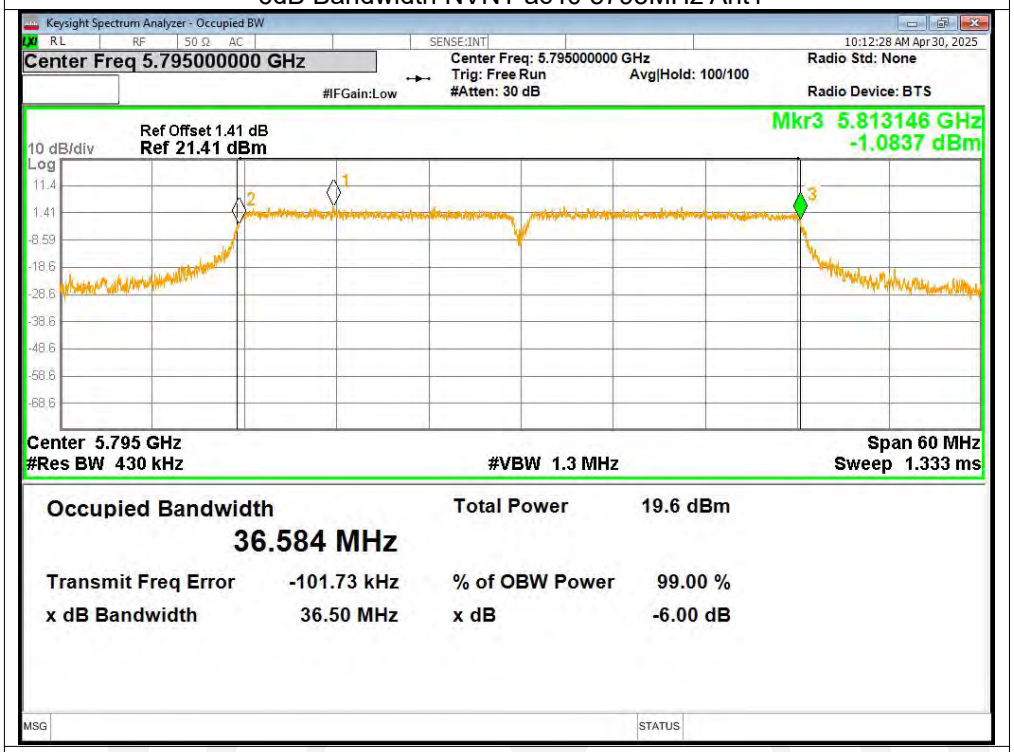
-6dB Bandwidth NVNT ac20 5825MHz Ant1



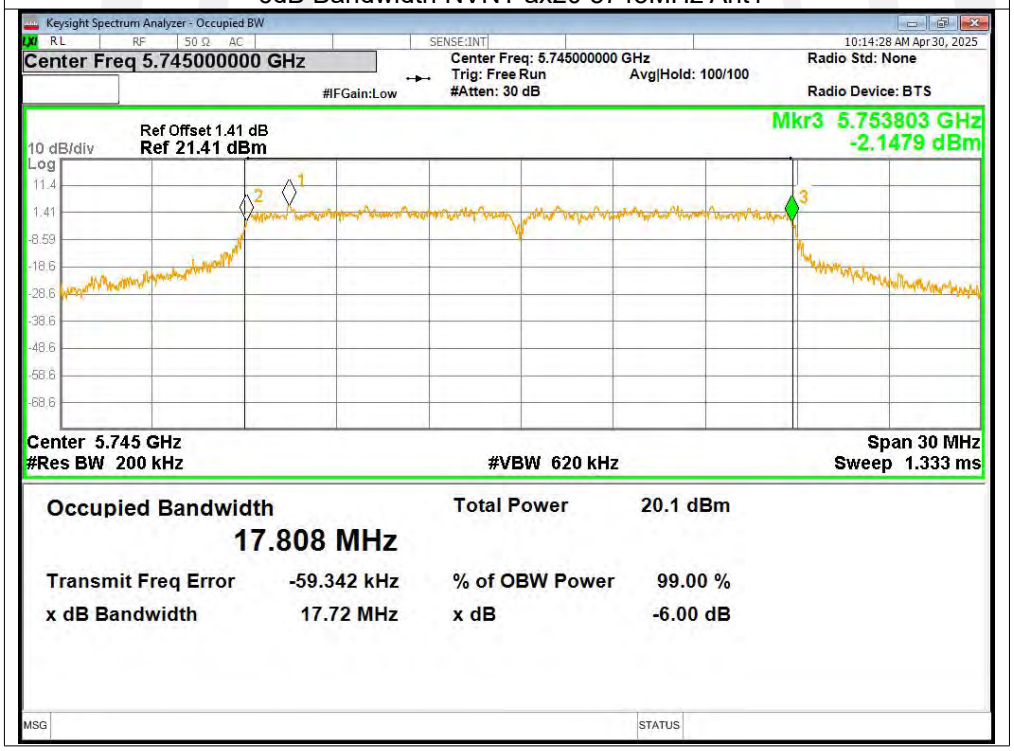
-6dB Bandwidth NVNT ac40 5755MHz Ant1



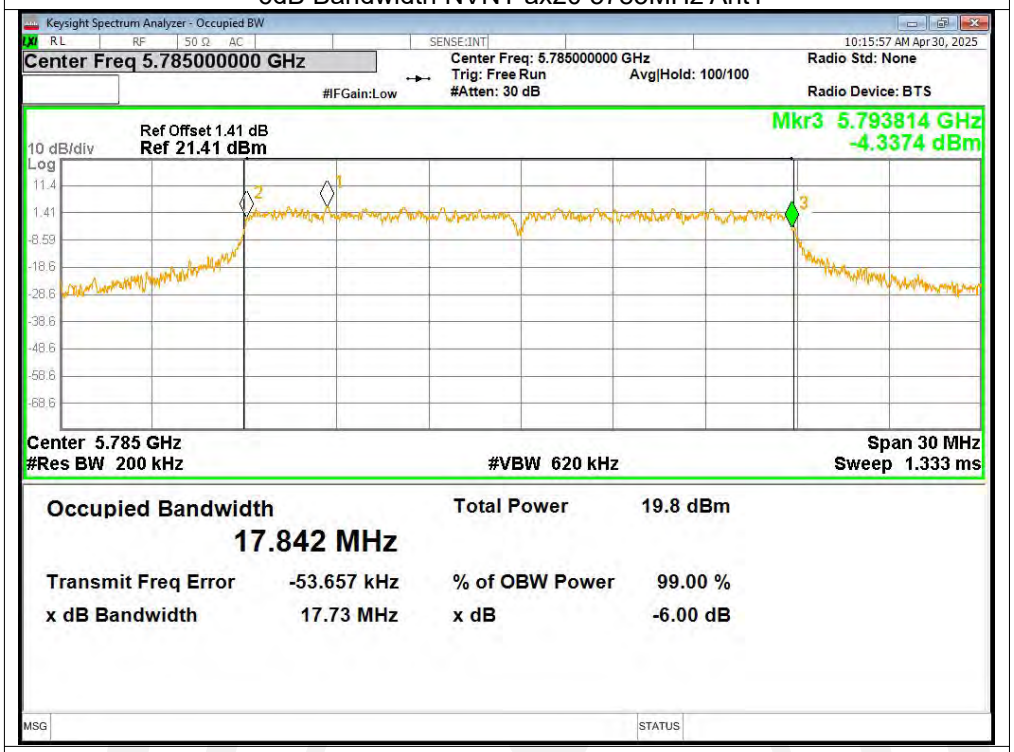
-6dB Bandwidth NVNT ac40 5795MHz Ant1



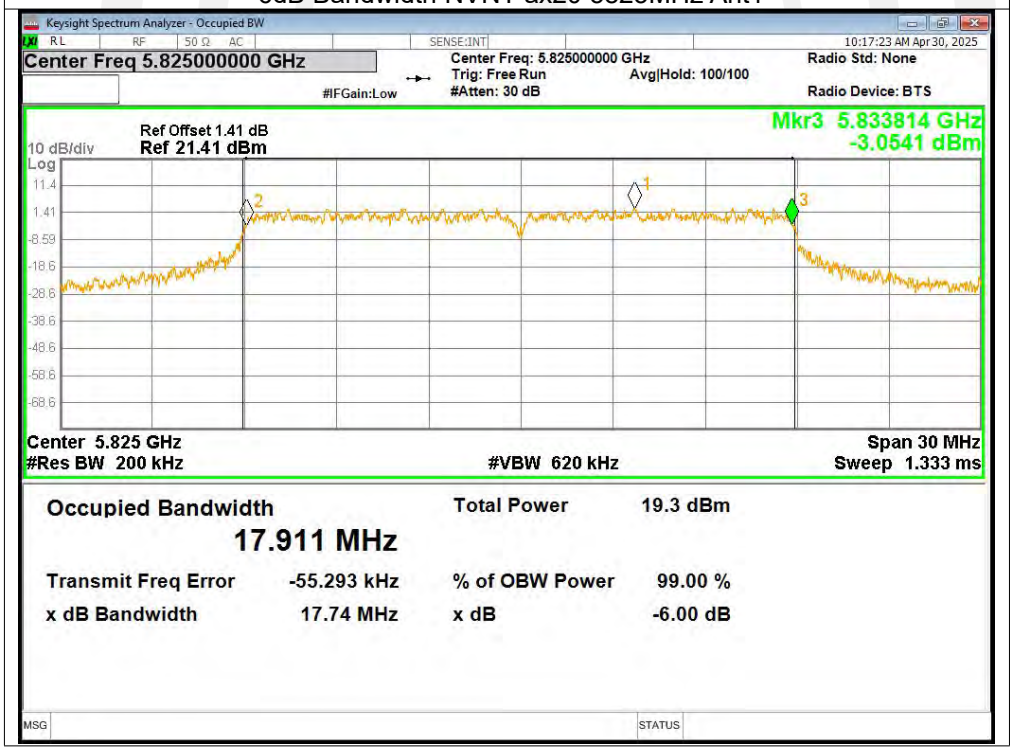
-6dB Bandwidth NVNT ax20 5745MHz Ant1



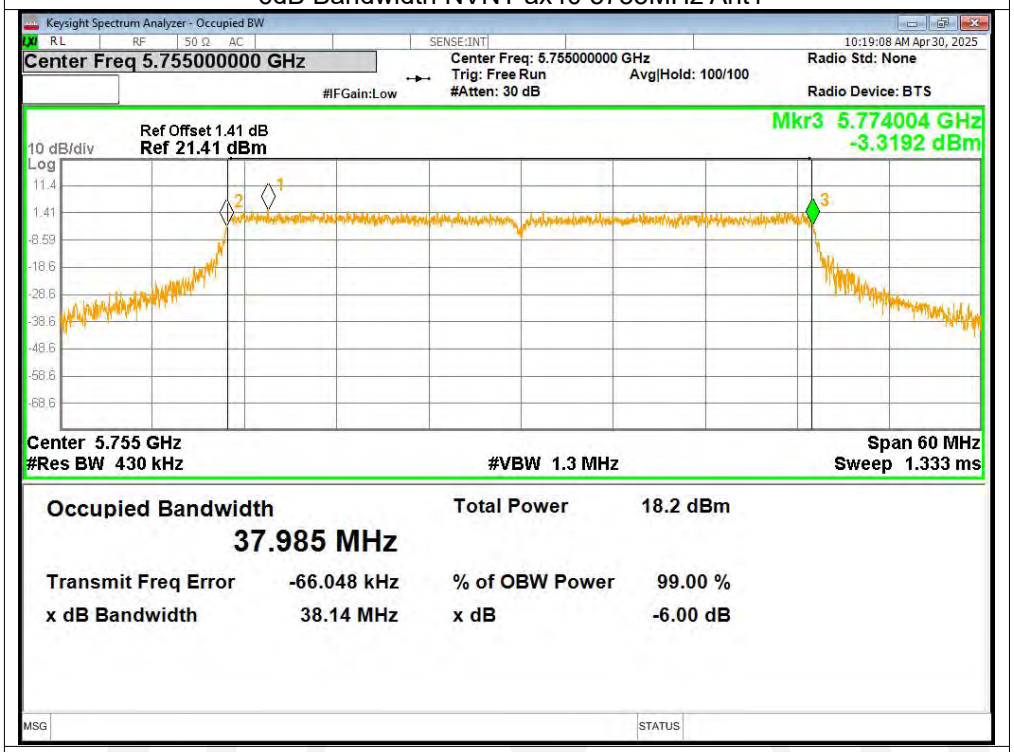
-6dB Bandwidth NVNT ax20 5785MHz Ant1



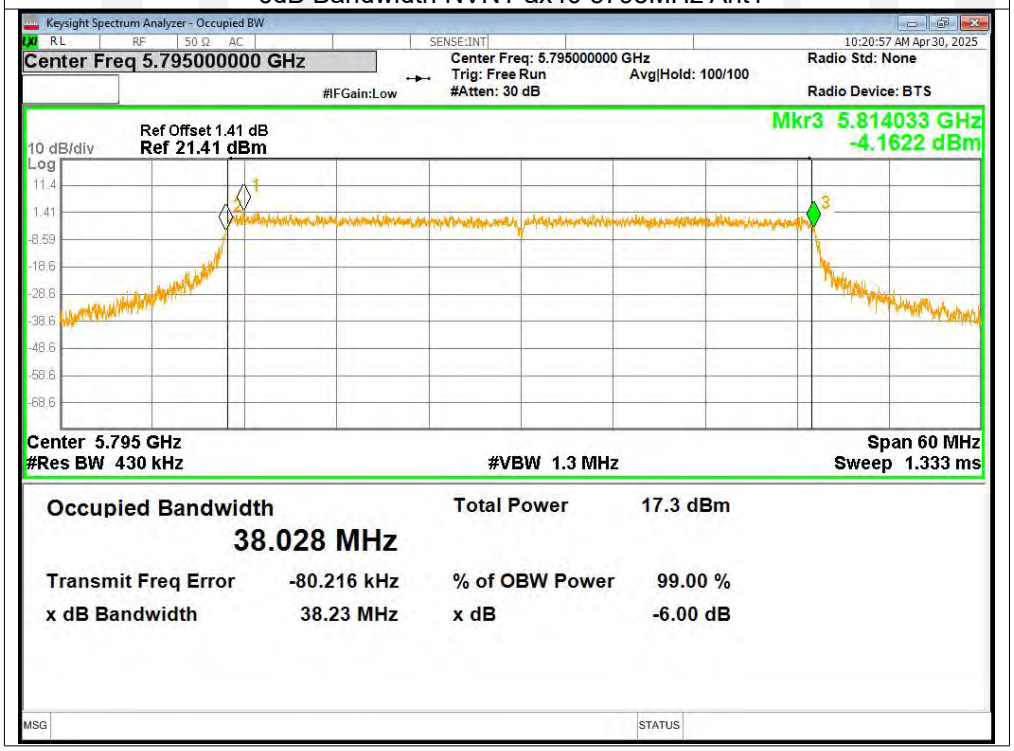
-6dB Bandwidth NVNT ax20 5825MHz Ant1



-6dB Bandwidth NVNT ax40 5755MHz Ant1



-6dB Bandwidth NVNT ax40 5795MHz Ant1

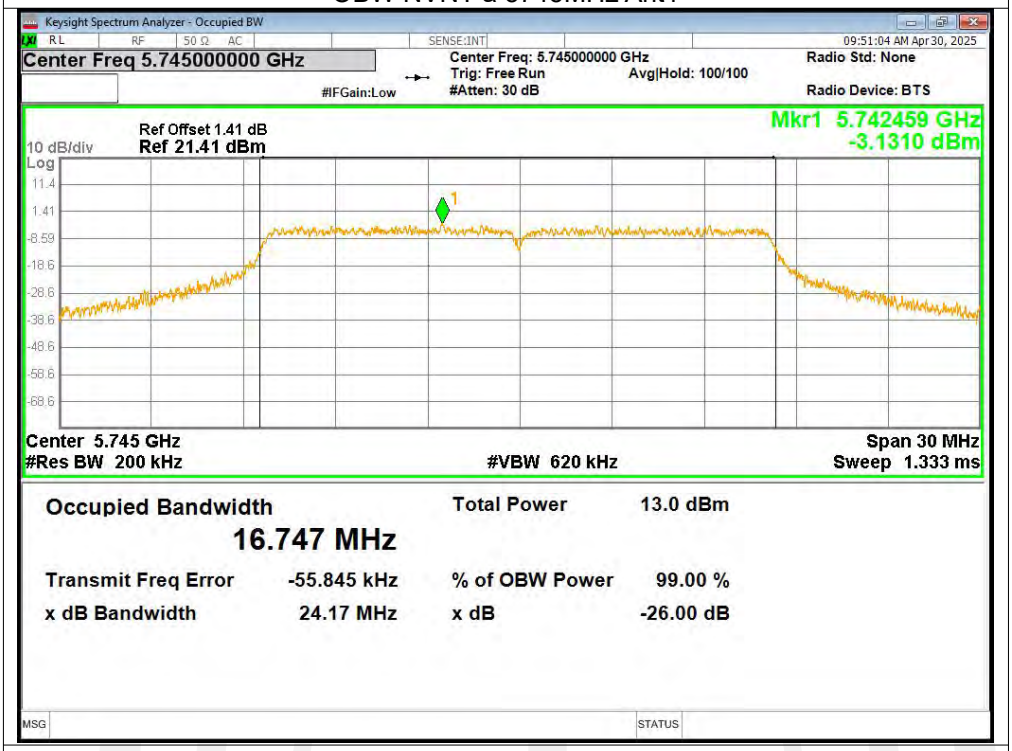


5.8GWIFI (5745MHz-5825 MHz)

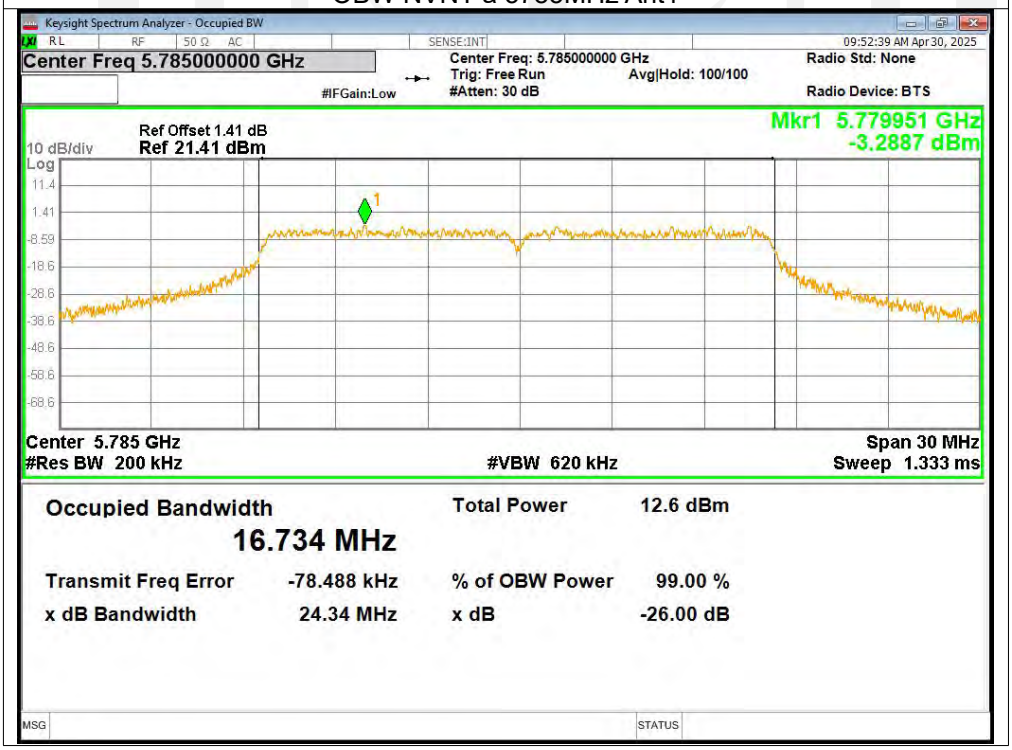
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.747
NVNT	a	5785	Ant1	16.734
NVNT	a	5825	Ant1	16.735
NVNT	n20	5745	Ant1	17.769
NVNT	n20	5785	Ant1	17.825
NVNT	n20	5825	Ant1	17.873
NVNT	n40	5755	Ant1	36.568
NVNT	n40	5795	Ant1	36.57
NVNT	ac20	5745	Ant1	17.852
NVNT	ac20	5785	Ant1	17.916
NVNT	ac20	5825	Ant1	17.955
NVNT	ac40	5755	Ant1	36.602
NVNT	ac40	5795	Ant1	36.651
NVNT	ax20	5745	Ant1	17.813
NVNT	ax20	5785	Ant1	17.824
NVNT	ax20	5825	Ant1	17.861
NVNT	ax40	5755	Ant1	38.022
NVNT	ax40	5795	Ant1	37.981

Test Graphs

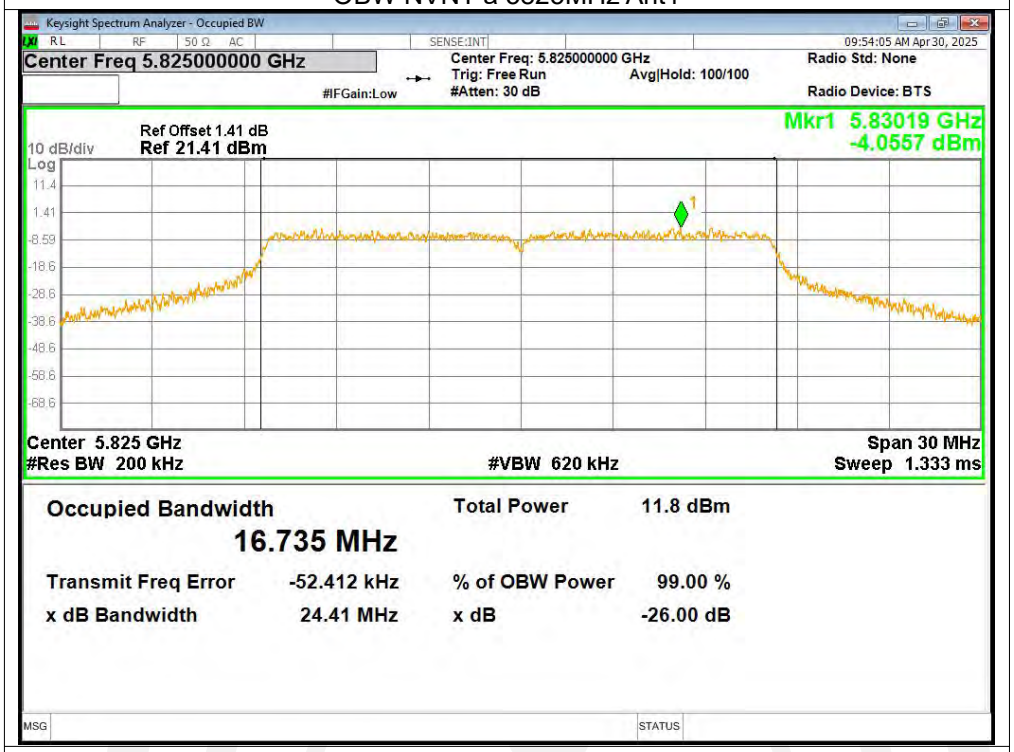
OBW NVNT a 5745MHz Ant1



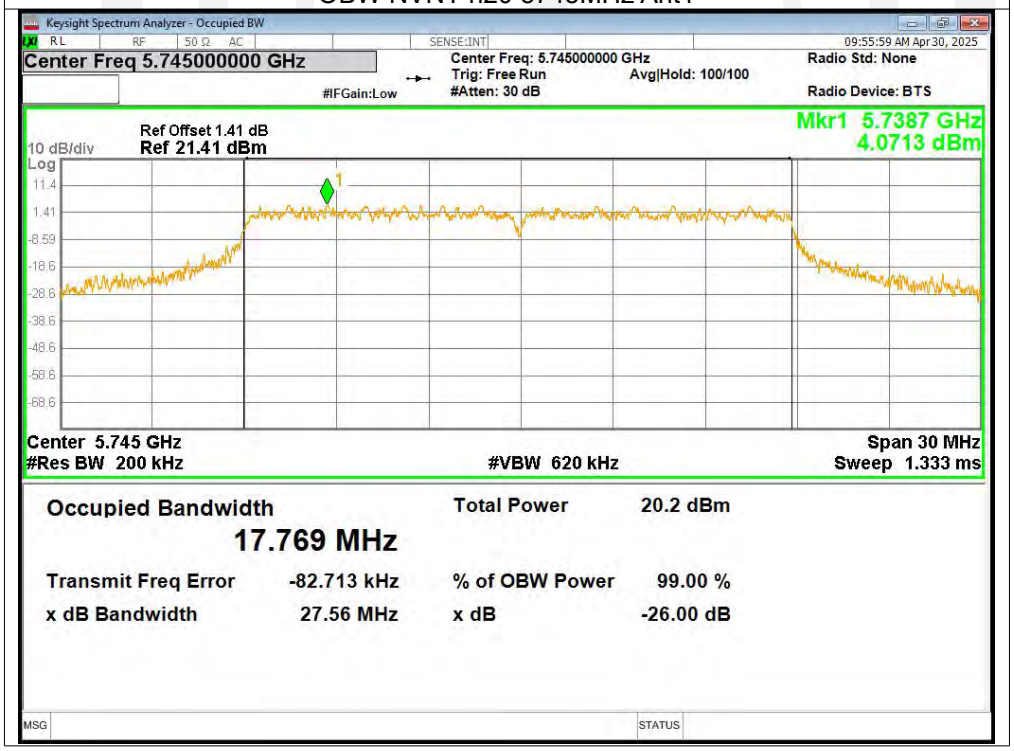
OBW NVNT a 5785MHz Ant1



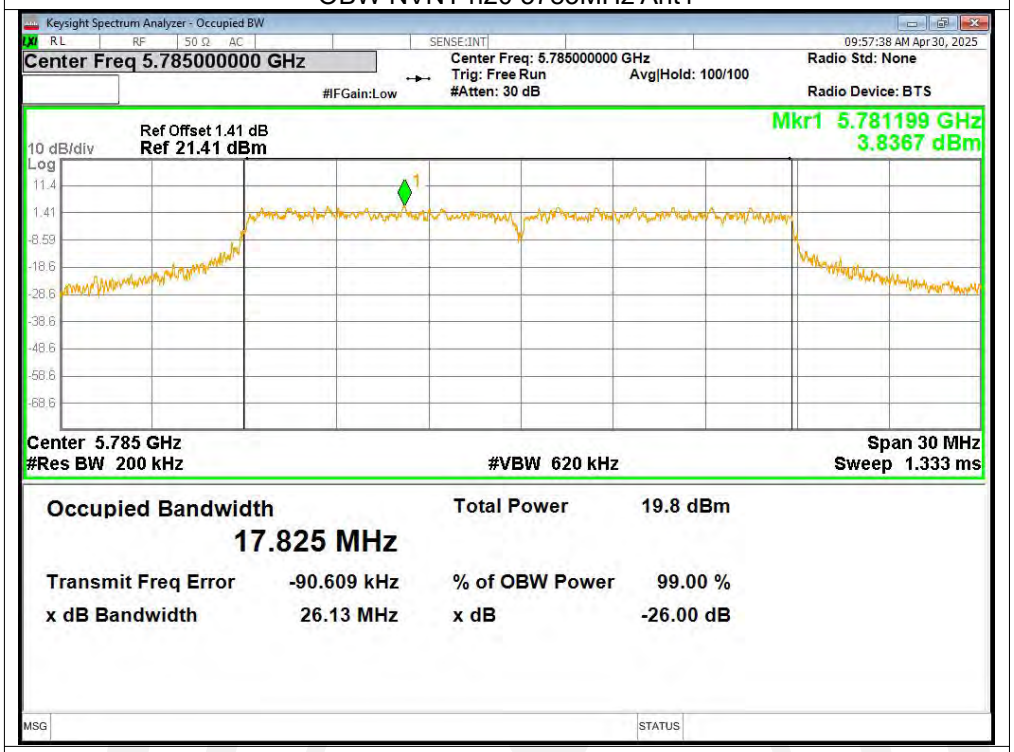
OBW NVNT a 5825MHz Ant1



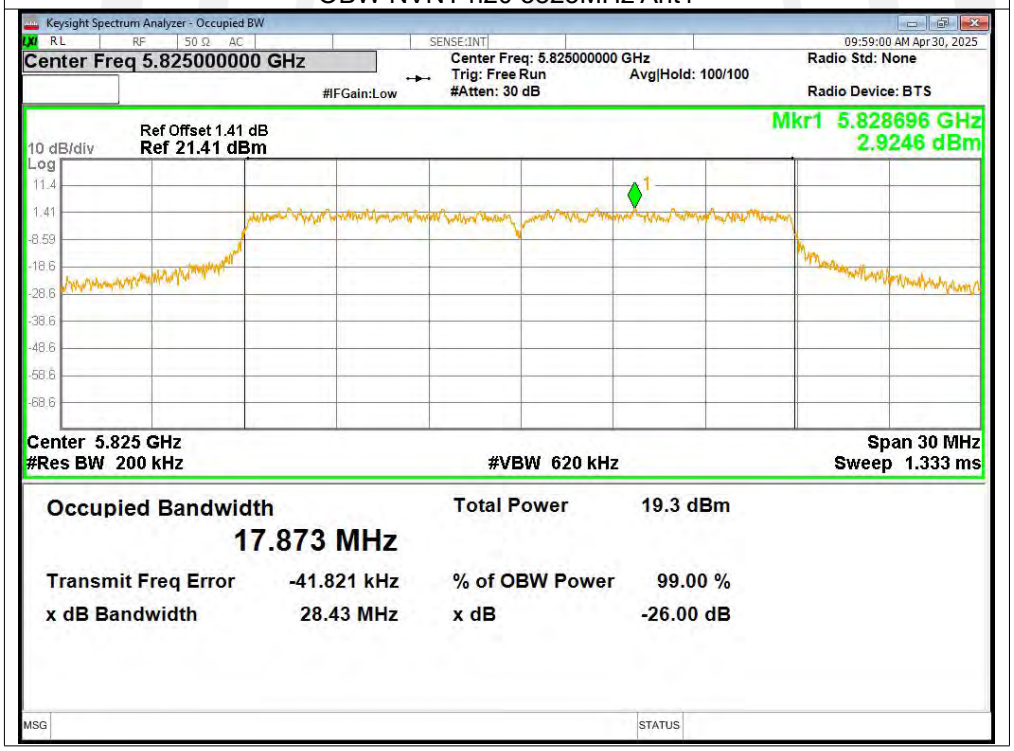
OBW NVNT n20 5745MHz Ant1



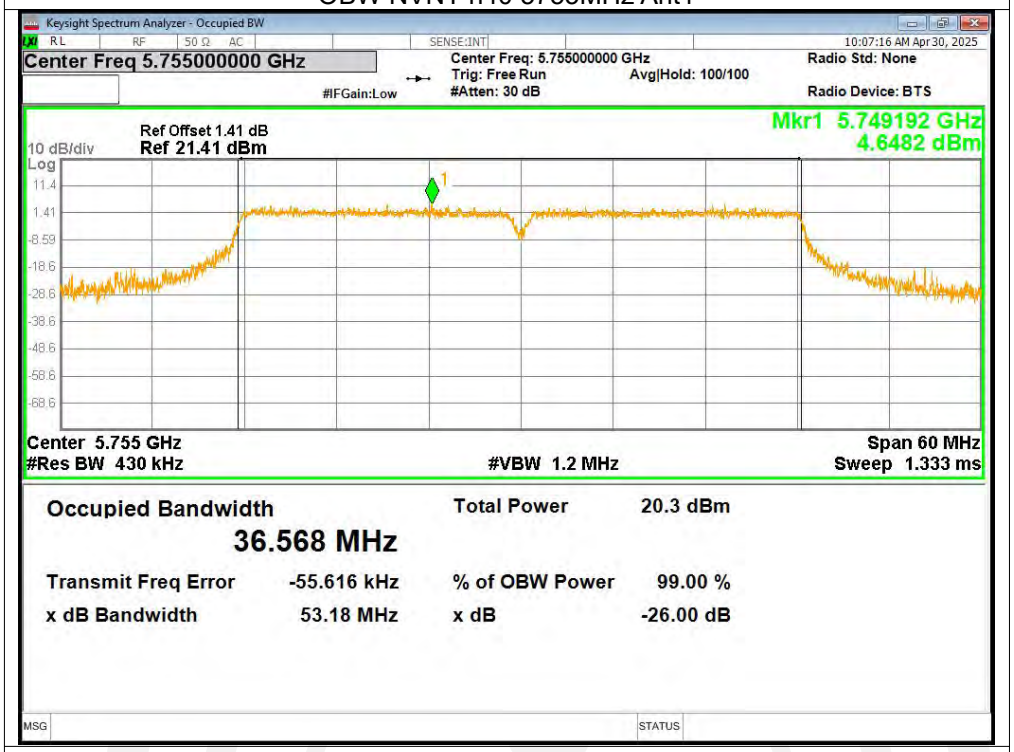
OBW NVNT n20 5785MHz Ant1



OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



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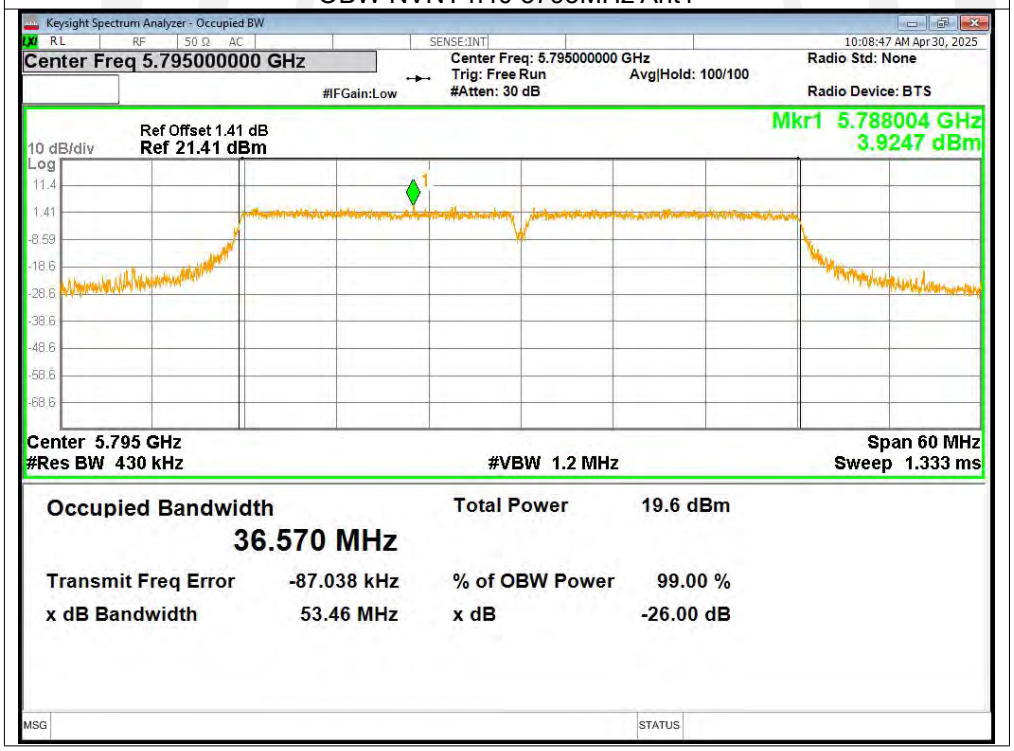

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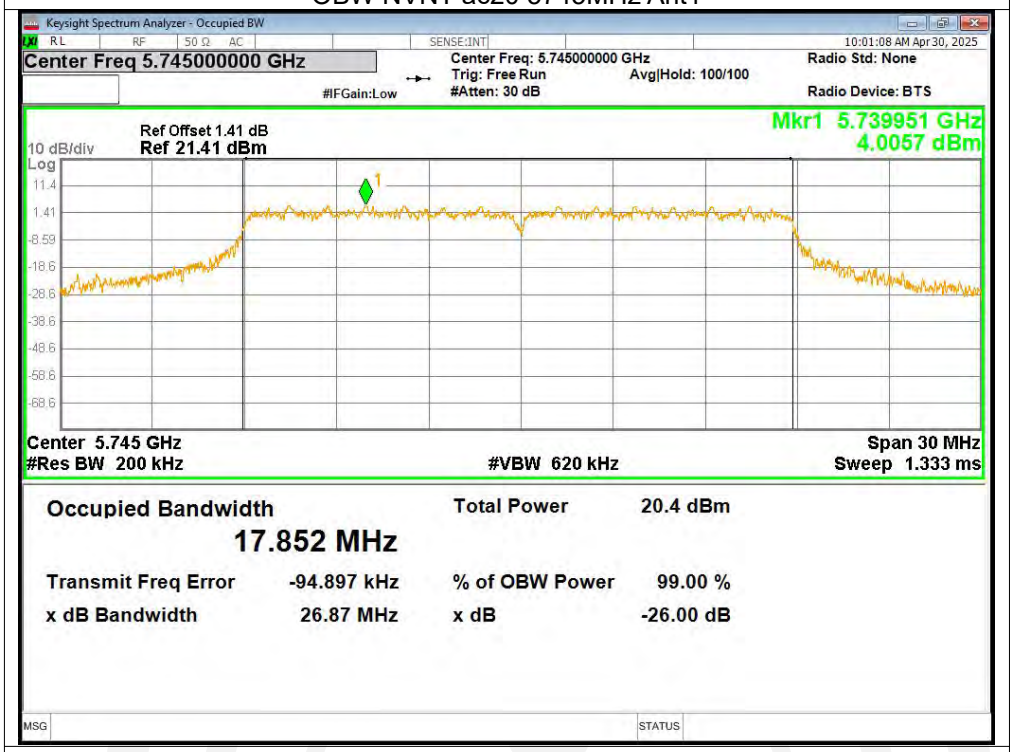

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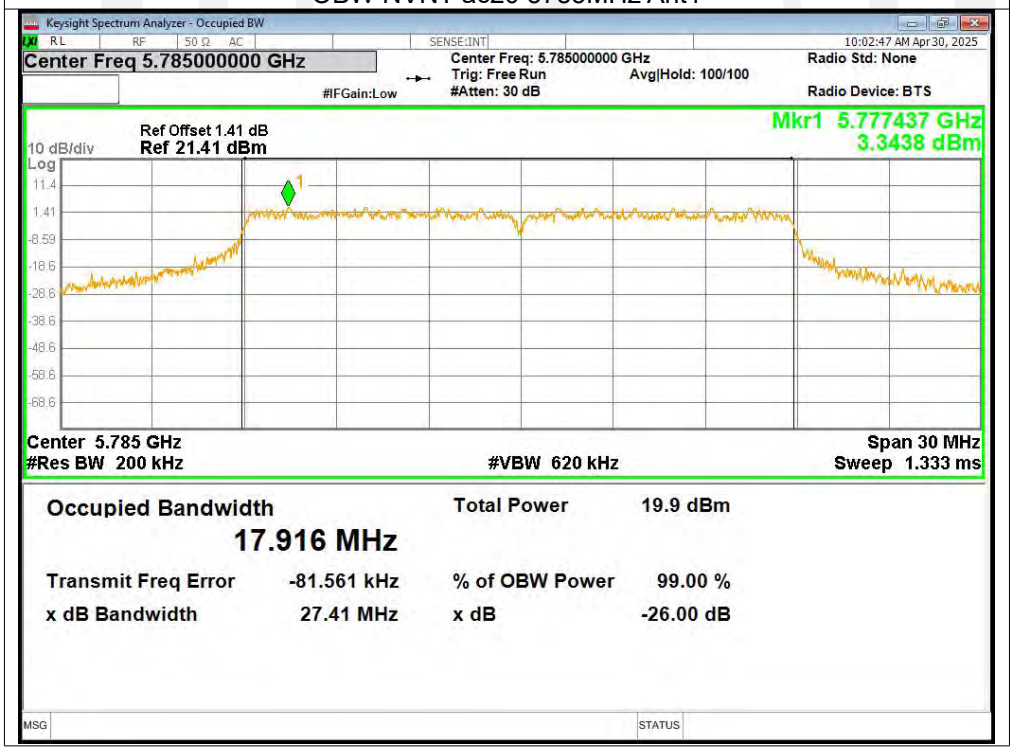

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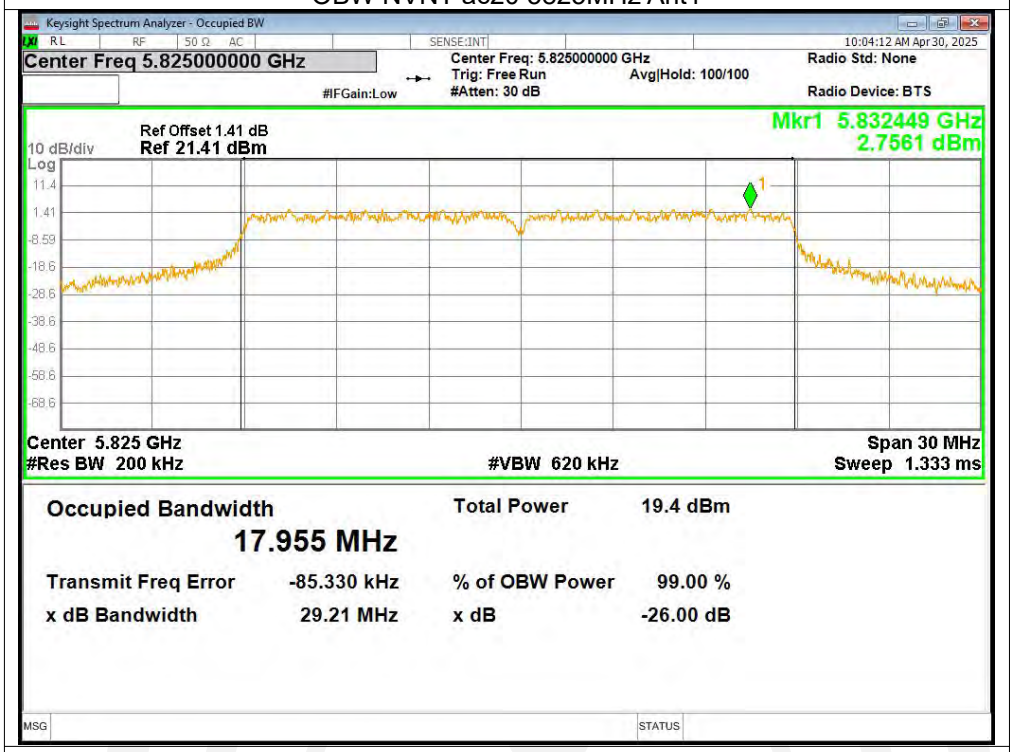

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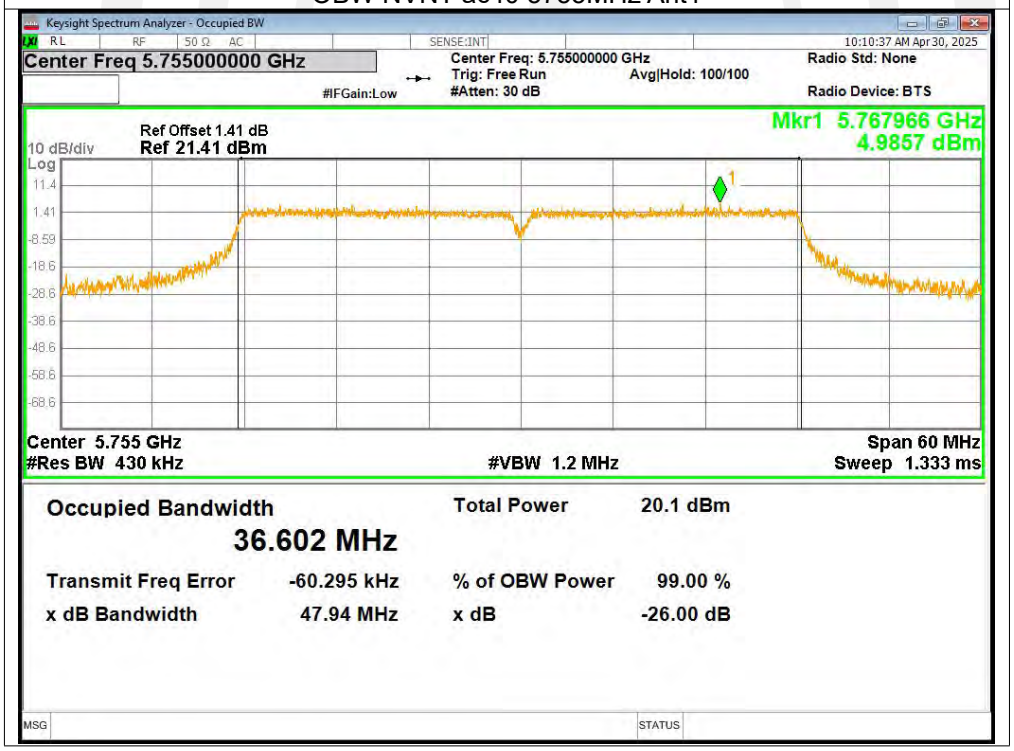

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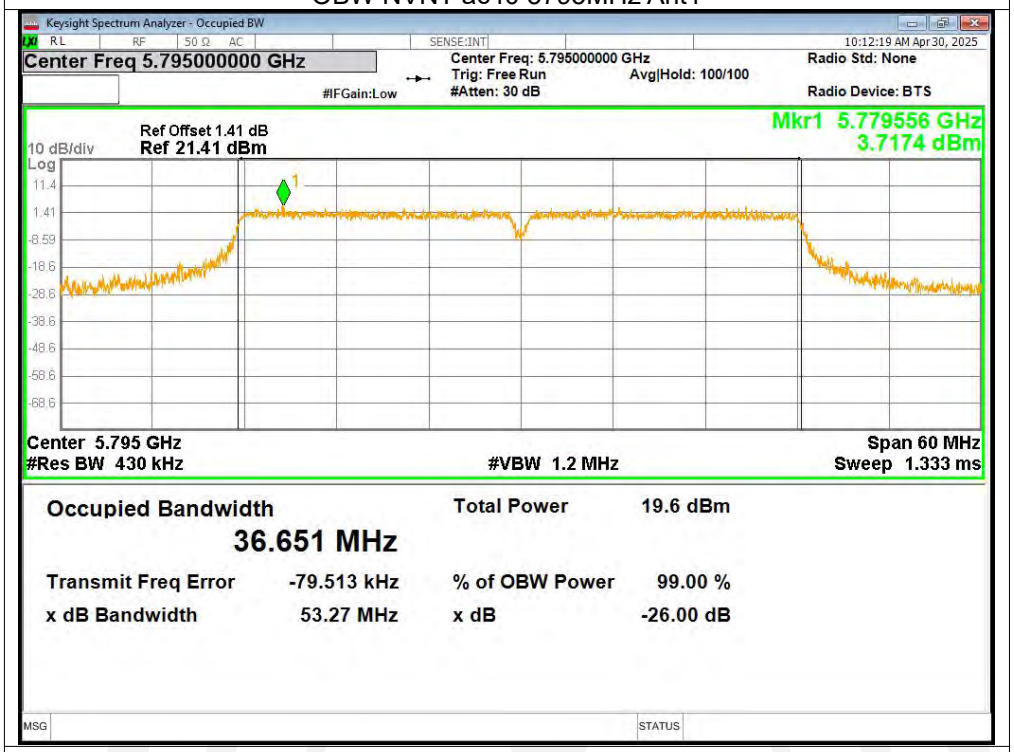

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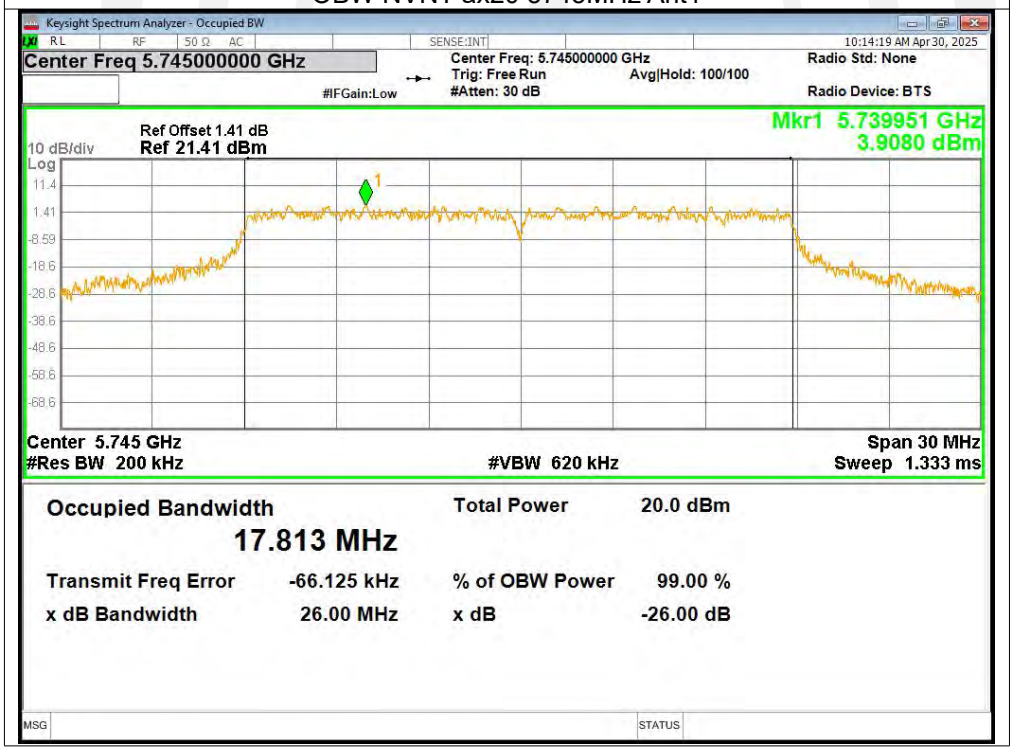

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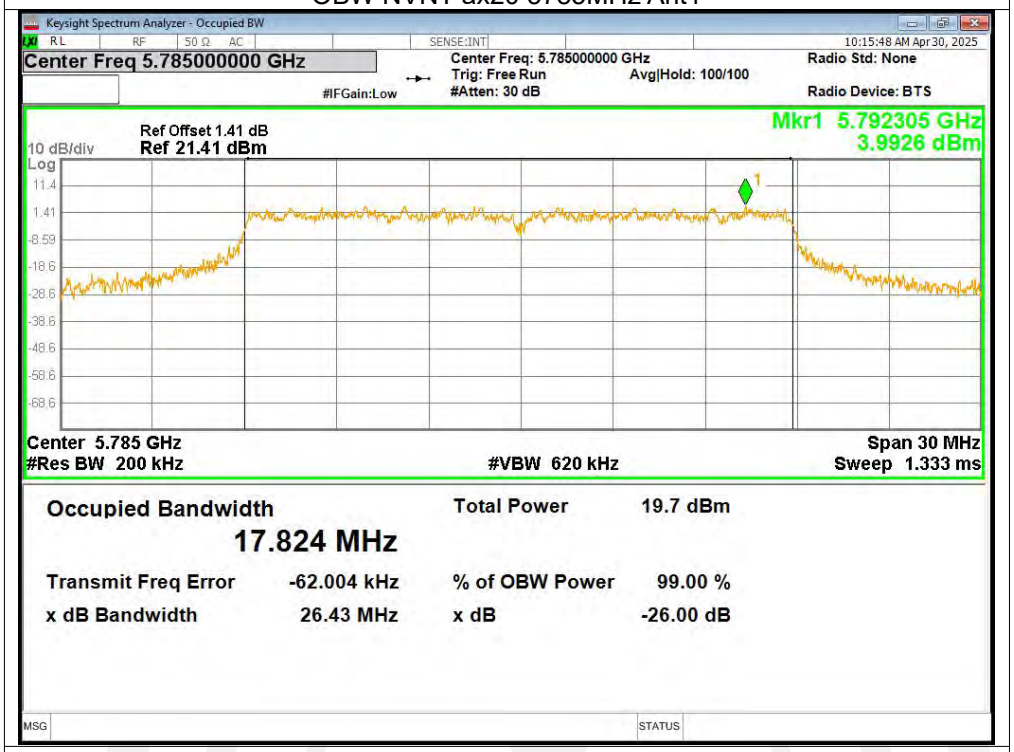
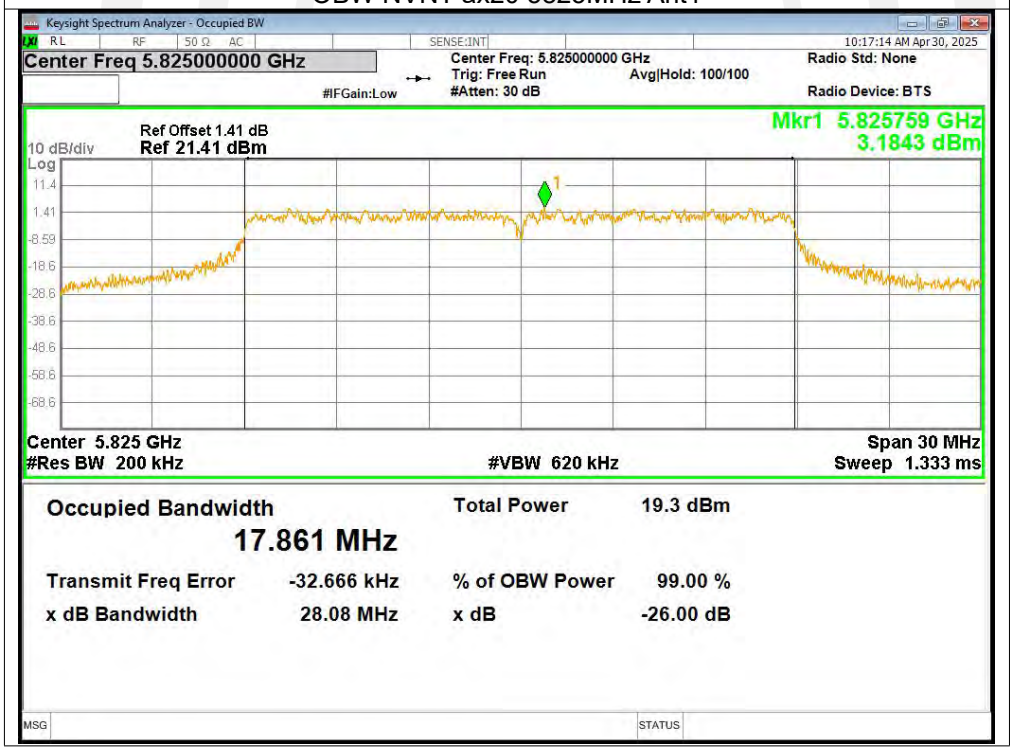
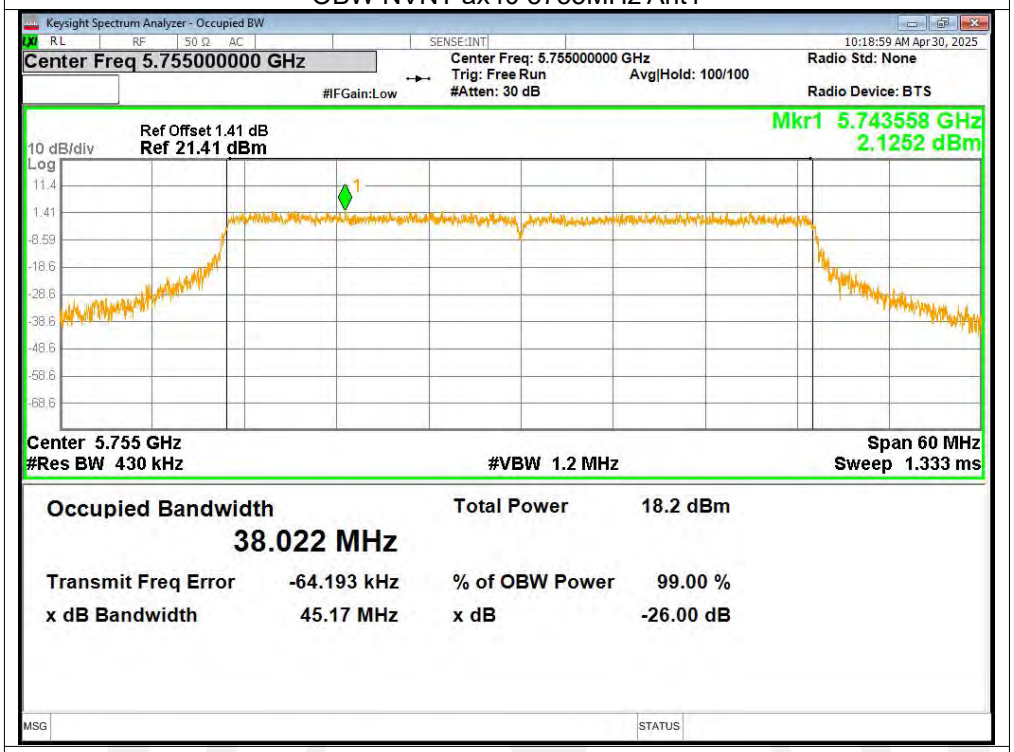


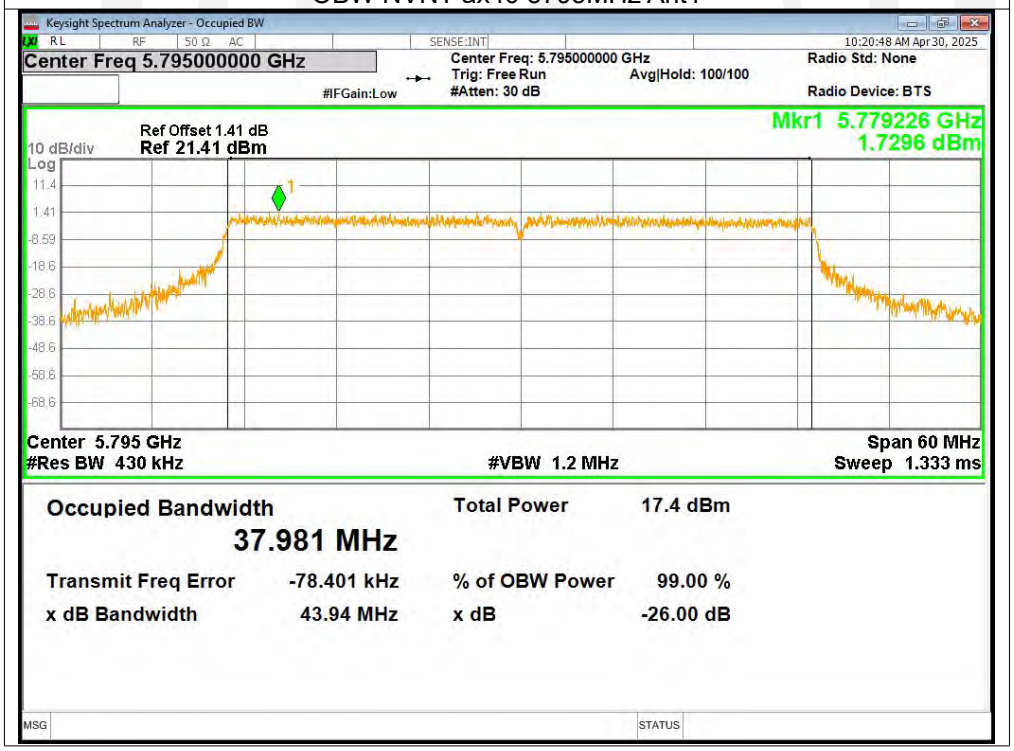
OBW NVNT ax20 5825MHz Ant1



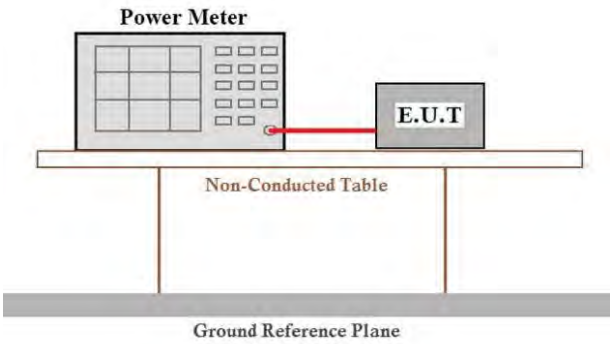
OBW NVNT ax40 5755MHz Ant1



OBW NVNT ax40 5795MHz Ant1



4.4 Maximum Conducted Output Power

Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W. IC: For the 5.15–5.25 GHz band, For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. For the 5.25–5.35 GHz band, Other than devices installed in vehicles, the maximum conducted output power shall not exceed 250 mW or 11 + 10 log10 B, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10 B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the 5.47–5.6 GHz and 5.65–5.725 GHz band, the maximum conducted output power shall not exceed 250 mW or 11 + 10 log10 B, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10 B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
Test setup:	
Test procedure:	**Measurement using an RF average power meter** (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the

	conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding 10 log(1/x) where x is the duty cycle (e.g., 10log(1/0.25) if the duty cycle is 25 percent).
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

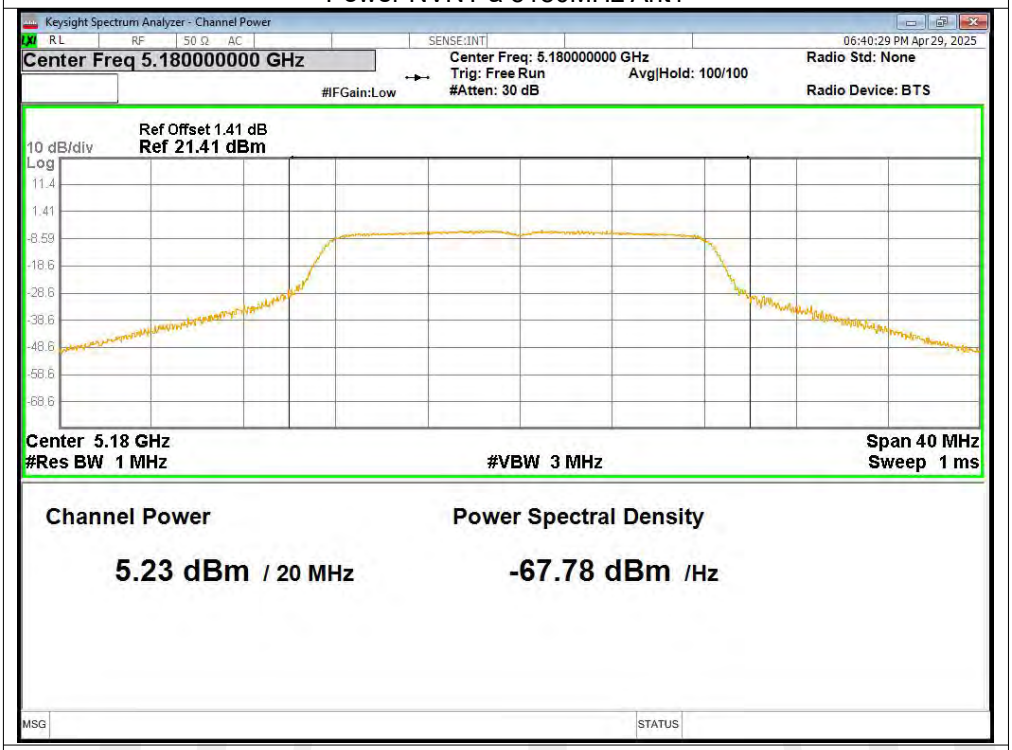
Measurement Data:

5.2GWIFI (5180-5240 MHz)

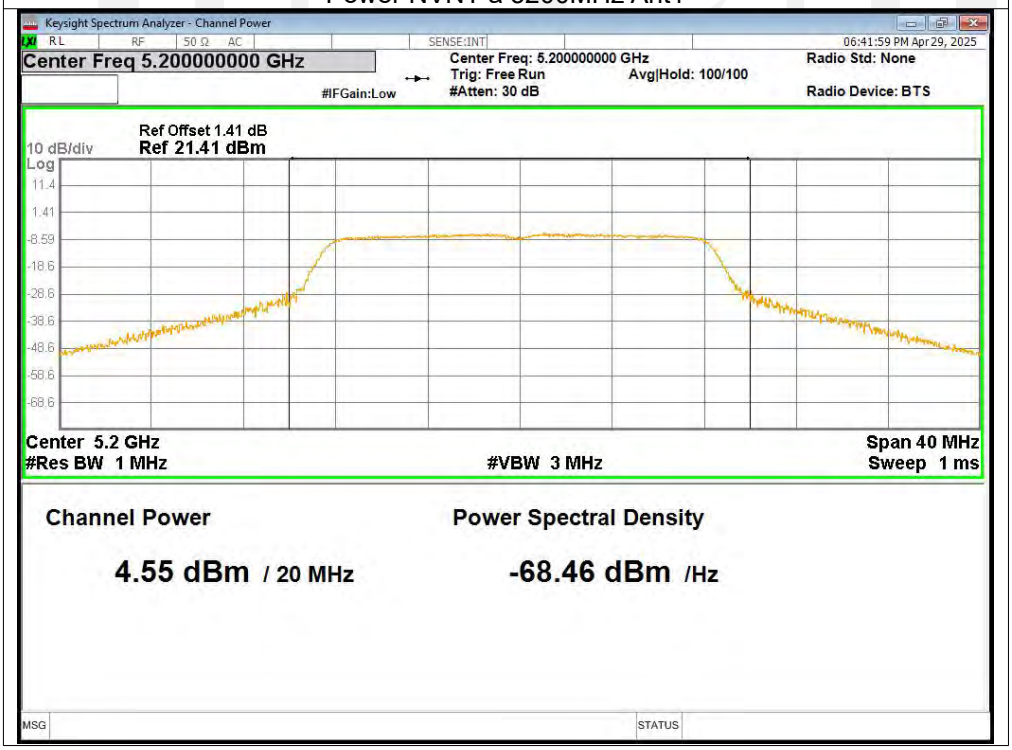
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	5.23	0.3	5.53	24	Pass
NVNT	a	5200	Ant1	4.55	0.09	4.64	24	Pass
NVNT	a	5240	Ant1	5.09	0.12	5.21	24	Pass
NVNT	n20	5180	Ant1	7.16	3.61	10.77	24	Pass
NVNT	n20	5200	Ant1	8.59	3.76	12.35	24	Pass
NVNT	n20	5240	Ant1	8.31	4.94	13.25	24	Pass
NVNT	n40	5190	Ant1	11.46	0.75	12.21	24	Pass
NVNT	n40	5230	Ant1	11.05	2.28	13.33	24	Pass
NVNT	ac20	5180	Ant1	11.41	4.94	16.35	24	Pass
NVNT	ac20	5200	Ant1	7.37	3.72	11.09	24	Pass
NVNT	ac20	5240	Ant1	7.98	0.92	8.9	24	Pass
NVNT	ac40	5190	Ant1	10.12	0.75	10.87	24	Pass
NVNT	ac40	5230	Ant1	11.71	0.83	12.54	24	Pass
NVNT	ax20	5180	Ant1	8.43	4.86	13.29	24	Pass
NVNT	ax20	5200	Ant1	8.21	3.61	11.82	24	Pass
NVNT	ax20	5240	Ant1	7.88	3.76	11.64	24	Pass
NVNT	ax40	5190	Ant1	6.75	3.44	10.19	24	Pass
NVNT	ax40	5230	Ant1	7.99	0.56	8.55	24	Pass

Test Graphs

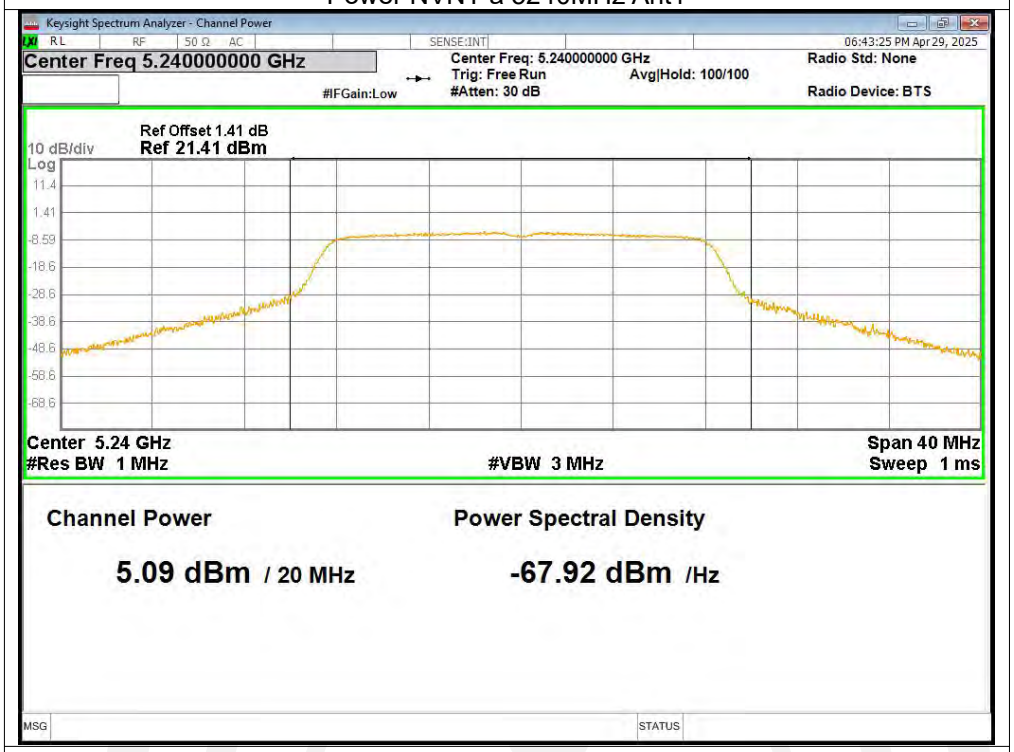
Power NVNT a 5180MHz Ant1



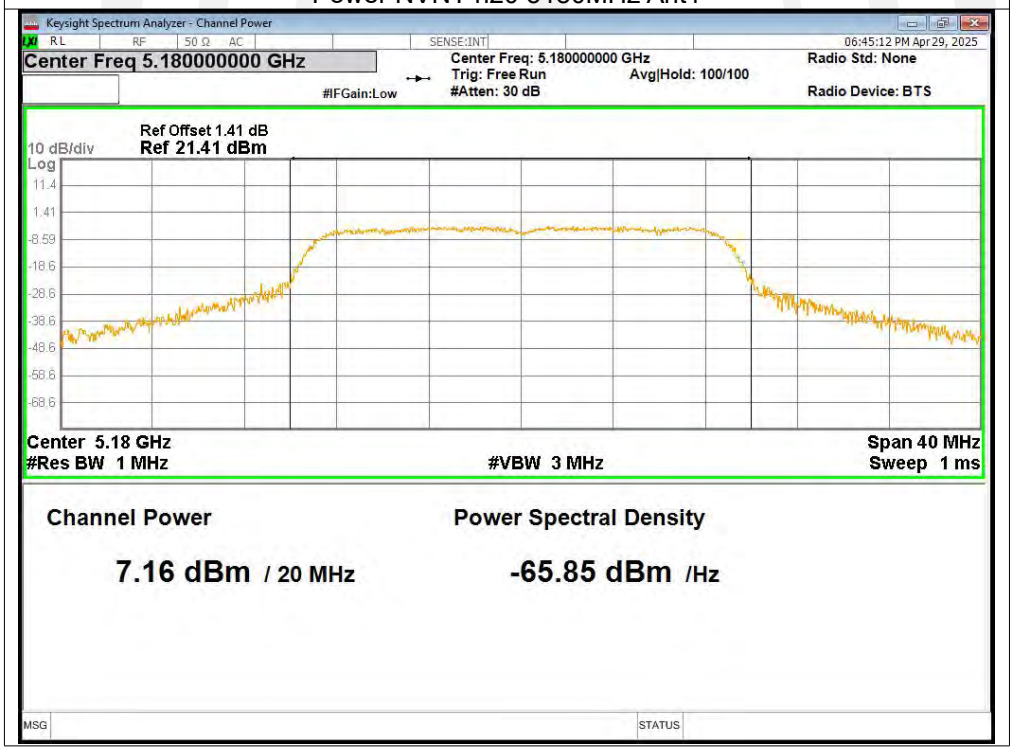
Power NVNT a 5200MHz Ant1



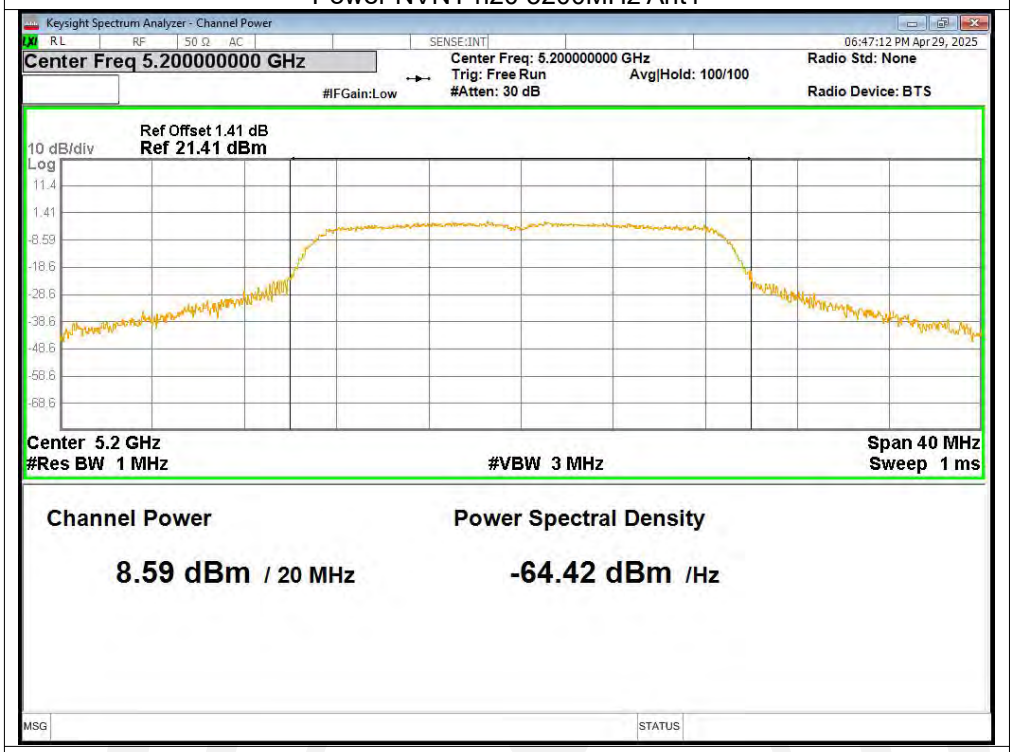
Power NVNT a 5240MHz Ant1



Power NVNT n20 5180MHz Ant1



Power NVNT n20 5200MHz Ant1



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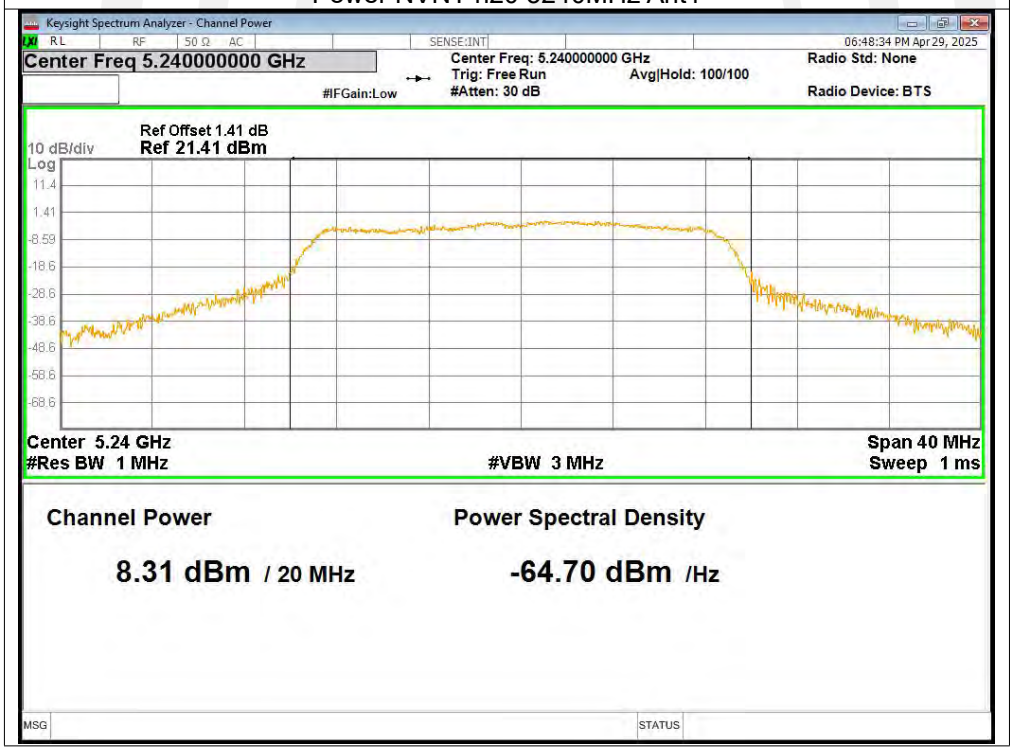

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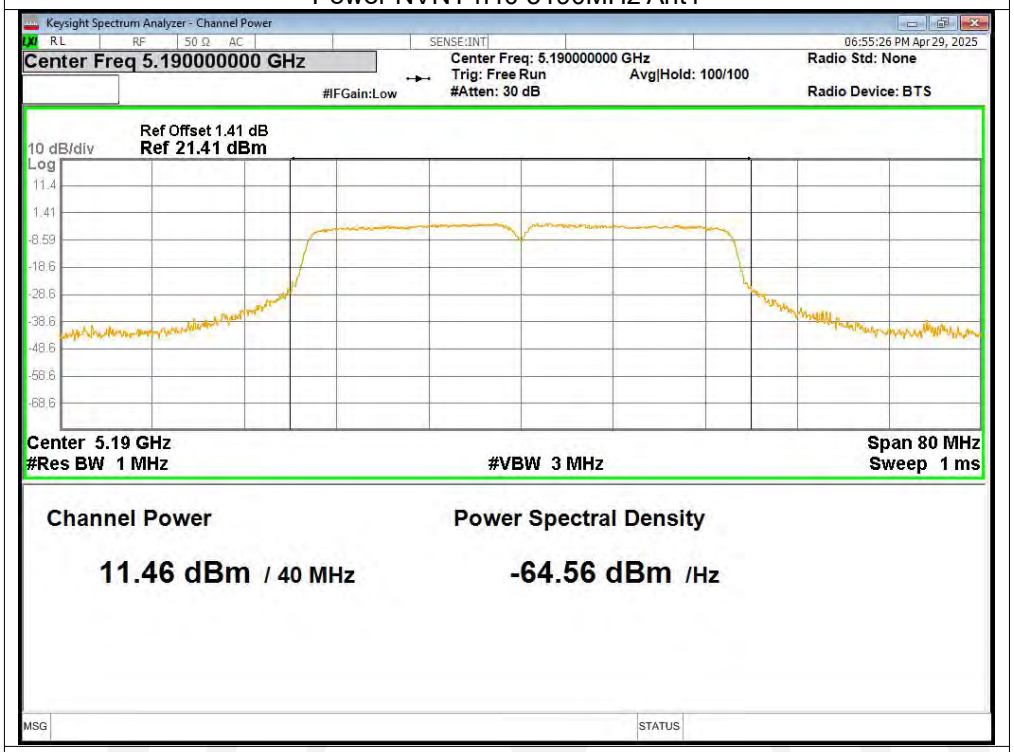
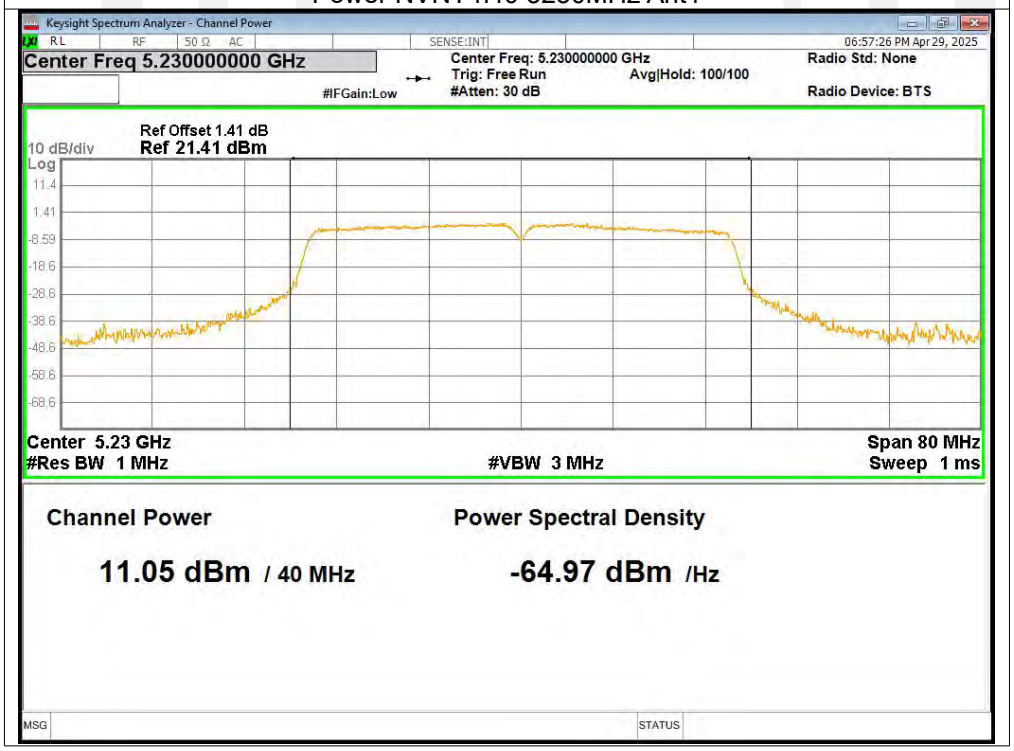
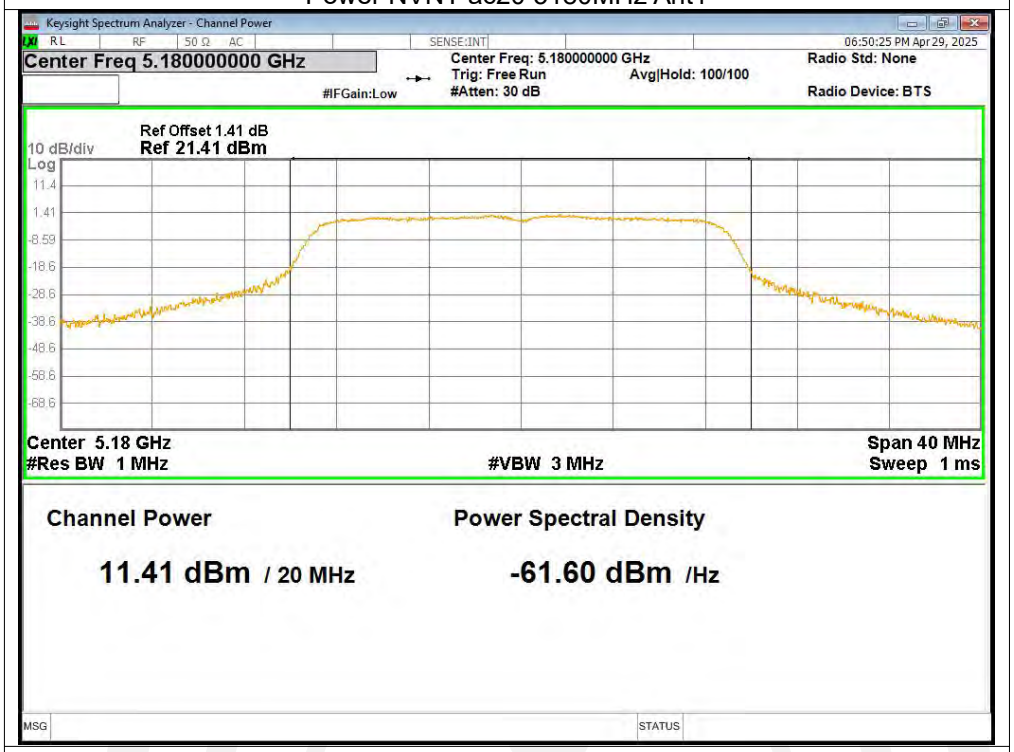
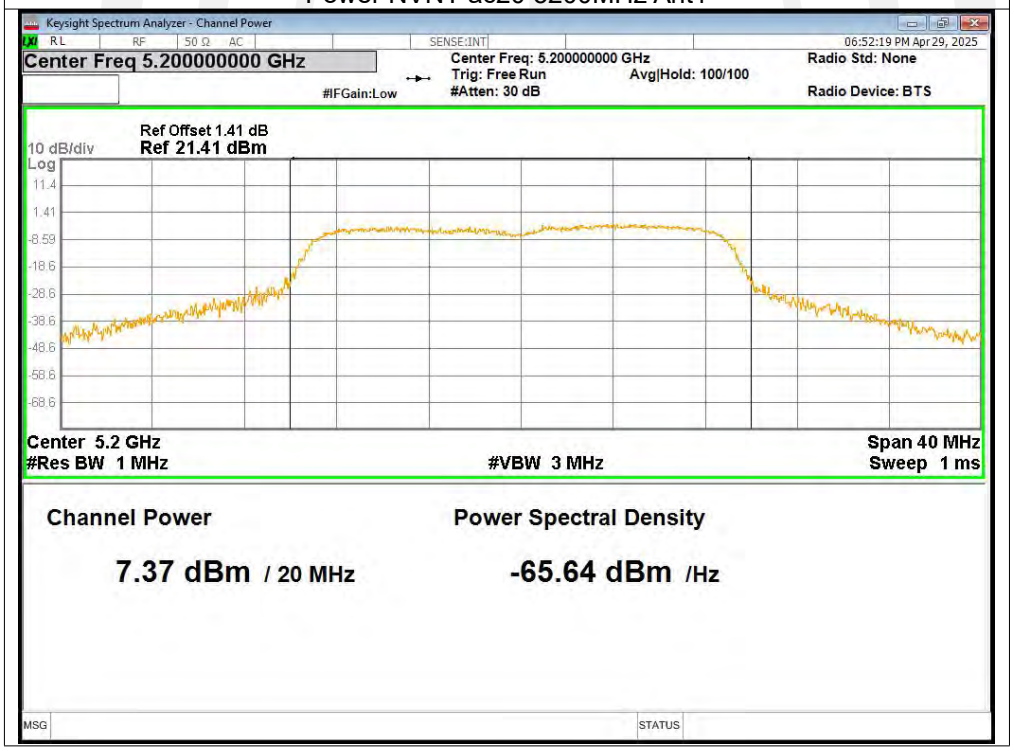


Power NVNT n40 5230MHz Ant1



Power NVNT ac20 5180MHz Ant1



Power NVNT ac20 5200MHz Ant1