FCC TEST REPORT

FCC ID: Y44-R60

On Behalf of

STONEX SRL

Android total station

Model No.: R60 (1”), R60 (2”)

Prepared for	:	STONEX SRL
Address	:	via dei Mille 4 20900 Monza-MB Italy

Prepared By	:	Shenzhen Alpha Product Testing Co., Ltd.
Address	:	Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

Report Number	:	A2211349-C01-R08
Date of Receipt	:	February 8, 2023
Date of Test	:	February 8, 2023-April 20, 2023
Date of Report	:	April 21, 2023
Version Number	:	V0

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TEST REPORT DECLARATION

Applicant	:	STONEX SRL
Address	:	via dei Mille 4 20900 Monza-MB Italy
Manufacturer	:	SUZHOU FOIF CO.,LTD
Address	:	18 Tong Yuan Road, Suzhou, China
EUT Description	:	Android total station
		(A) Model No. : R60 (1”), R60 (2”)
		(B) Trademark : N/A

Measurement Standard Used:

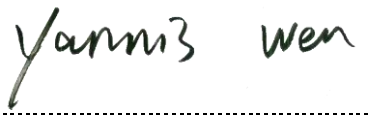
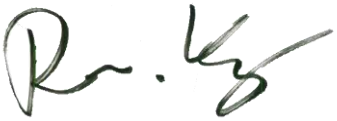
FCC Rules and Regulations Part 15 Subpart E

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

The device described above is tested by Shenzhen Alpha Product 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 Alpha Product 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 Alpha Product Testing Co., Ltd.

Tested by (name + signature).....:	Yannis Wen Project Engineer	
Approved by (name + signature).....:	Reak Yang Project Manager	
Date of issue…… ……..:	April 21, 2023	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	April 21, 2023	Initial released Issue	Yannis Wen

1 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	Section 15.203Section 7.1.4 RSS-Gen Issue 5	PASS
AC Power Line Conducted Emission	Section 15.207Section 7.2.4 RSS-GEN(8.8), ANSI C63.10	PASS
Peak Transmit 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)&15.209Section 5.5 RSS-Gen(8.9), RSS-247(5.5),ANSI C63.10	PASS
Band Edge	15.205, RSS-247 Issue 2, ANSI C63.10	PASS
Frequency Stability	15.407(f), 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 point Conducted Emissions Test	2.74dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	2.13 dB(Polarize: V)
	2.57dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	4.16dB(Polarize: H)
	4.13dB(Polarize: V)
Uncertainty for radio frequency	5.4×10-8
Uncertainty for conducted RF Power	0.37dB
Uncertainty for temperature	0.2℃
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

2 General Information

2.1 General Description of EUT

EUT Name	:	Android total station
Trademark	:	N/A
Model No.	:	R60 (1”), R60 (2”)
DIFF.	:	The angle measurement accuracy between the two models is different, R60 (1 ") angle measurement accuracy is 1". R60 (2 ") has an angle measurement accuracy of 2" and is friction stopped. They use the same wireless module, and all the test were performed on the model R60 (1”)
Power supply	:	DC 7.2V from battery, AC 120V/60Hz for battery charging
Radio Technology	:	5G WIFI
Operation Frequency	:	802.11ax/a/n(HT20)/ac(HT20): 5180~5240MHz; 5260-5320MHz; 5500-5700MHz; 5745~5825MHz 802.11ax/n(HT40)/ac(HT40): 5190~5230MHz; 5260-5320MHz; 5510-5670MHz; 5755~5795MHz 802.11ax/ac(HT80): 5210MHz, 5290MHz, 5530MHz, 5775MHz
Channel separation	:	20MHz for 802.11a x20/802.11a/ 802.11ac20/ 802.11n(HT20) 40MHz for 802.11a x40/802.11ac40/ 802.11n(HT40) 80MHz for 802.11a x80/802.11ac80
Modulation technology:	:	IEEE 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11a: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11ac: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11ax: OFDMA (1024-QAM, 256-QAM, 64-QAM, QPSK, BPSK)
Antenna Type	:	FPC Antenna, max gain 2.97dBi Antenna information is provided by applicant.
Software version	:	V1.0
Hardware version	:	V1.0
Intend use environment	:	Residential, commercial and light industrial environment

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 Alpha Product Testing Co., Ltd
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

June 21, 2018 File on Federal Communication Commission
Registration Number: 293961

July 25, 2017 Certificated by IC
Registration Number: CN0085

2.4 Description of Support Units

Accessories	:	Super Si Pro Quick Charger
Manufacturer	:	Shenzhen Times Innovation Technology Co., Ltd
Model	:	CCCJG30CE
Input	:	AC 100-240V, 50/60Hz, 1.2A Max
Type-C Output	:	5.0V⎓3.0A(15.0W); 9.0V⎓3.0A(27.0W); 12.0V⎓2.5A(30.0W); 15.0V⎓2.0A(30.0W); 20.0V⎓1.5A(15.0W)
USB Output	:	5.0V⎓3.0A(15.0W); 9.0V⎓3.0A(27.0W); 12.0V⎓2.5A(30.0W); 15.0V⎓2.0A(30.0W); 20.0V⎓1.5A(15.0W) 18.0W+12.0W
Type-C + USB Output	:	18W:9.0V⎓2.0A(18.0W); 12.0V⎓1.5A(18.0W); 12W: 5.0V⎓2.4A(12.0W); 9.0V⎓1.33A(12.0W); 12.0V⎓1.0A(12.0W)
Accessories	:	Quick Charger
Manufacturer	:	AMC
Model	:	CD272
Input	:	AC 100-240V~50/60Hz, 800mA Max
Type-C Output	:	5V⎓2A 9V⎓3 12V⎓2.75A 15V⎓2.2A 20V⎓1.65A 3.3-11V⎓3A
Output Power	:	33W Max

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

2.8 Additional instructions

Software (Used for test) from client

Channel	Power level
Lowest	Default
Middle	Default
Highest	Default

3 Test Instruments list

Equipment	Manufacture	Model No.	Firmware version	Serial No.	Last cal.	Cal Interval
9*6*6 anechoic chamber	CHENYU	9*6*6	/	N/A	2022.05.17	3Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	2.3	102137	2022.08.22	1Year
Spectrum analyzer	Agilent	N9020A	A.14.16	MY499100060	2022.08.22	1Year
Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03-102082-Wa	2022.08.22	1Year
Receiver	R&S	ESCI	4.42 SP1	101165	2022.08.22	1Year
Bilog Antenna	Schwarzbeck	VULB 9168	/	VULB 9168#627	2021.08.30	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	/	2106	2021.08.30	2Year
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00059	2021.08.30	2Year
RF Cable	Resenberger	Cable 1	/	RE1	2022.08.22	1Year
RF Cable	Resenberger	Cable 2	/	RE2	2022.08.22	1Year
RF Cable	Resenberger	Cable 3	/	CE1	2022.08.22	1Year
Pre-amplifier	HP	HP8347A	/	2834A00455	2022.08.22	1Year
Pre-amplifier	Agilent	8449B	/	3008A02664	2022.08.22	1Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	/	8126-466	2022.08.22	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2022.08.23	1 Year
Horn Antenna	SCHWARZBECK	BBHA9170	/	00946	2021.08.30	2 Year
Preamplifier	SKET	LNPA_1840-50	/	SK2018101801	2022.08.22	1 Year
Power Meter	Agilent	E9300A	/	MY41496628	2022.08.22	1 Year
Power Sensor	DARE	RPR3006W	/	15100041SNO91	2022.08.22	1 Year
Temp. & Humid. Chamber	Weihuang	WHTH-1000-40-880	/	100631	2023.04.18	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	/	20140927-6	2022.08.22	1 Year
Adjustable attenuator	MWRFtest	N/A	/	N/A	N/A	N/A
10dB Attenuator	Mini-Circuits	DC-6G	/	N/A	N/A	N/A

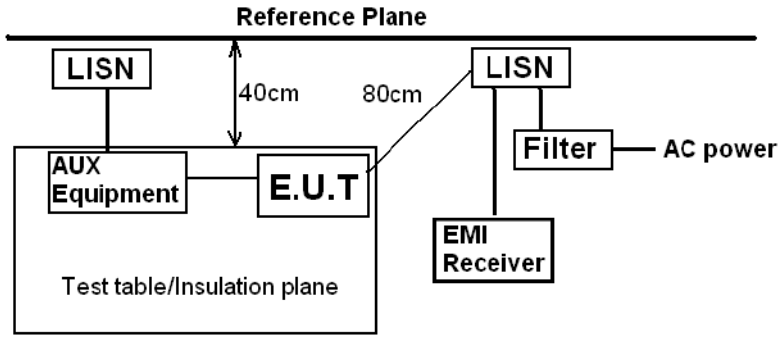
Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EZ-EMC	EZ	Alpha-3A1
CE	EZ-EMC	EZ	Alpha-3A1
RF-CE	MTS 8310	MW	V2.0.0.0

4 Test results and Measurement Data

4.1 Antenna requirement:

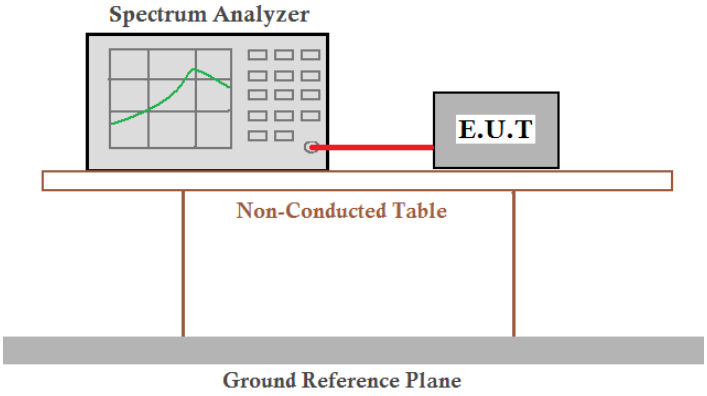
Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling 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:	
The antenna is internal antenna. The best case gain of the antenna is 2.97dBi for 5.15~5.25GHz, 5.25~5.35GHz , 5.5~5.7GHz, 5.725~5.85GHz	

4.2 Conducted Emissions

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>150KHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td>Class B</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9KHz, VBW=30KHz</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBuV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* Decreases with the logarithm of the frequency.
</td></tr>
<tr><td>Test procedure</td><td>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.</td></tr>
<tr><td>Test setup:</td><td> 

Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test Instruments:</td><td>Refer to section 5.10 for details</td></tr>
<tr><td>Test mode:</td><td>Refer to section 5.3 for details</td></tr>
<tr><td>Test results:</td><td>N/A. This product is powered by batteries during operation.</td></tr>
</table>

4.3 Emission Bandwidth and 99% Occupied Bandwidth

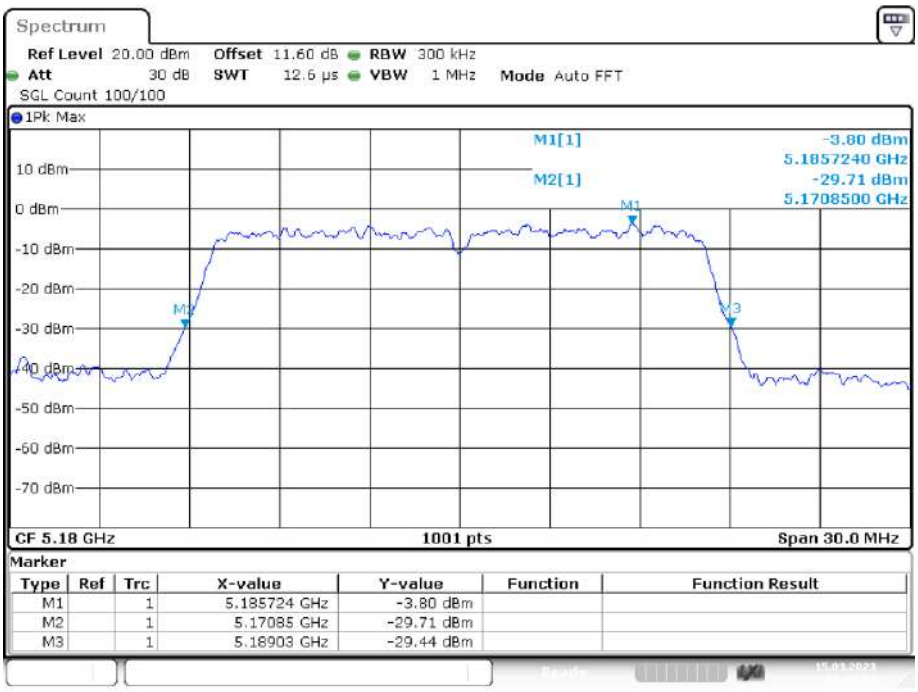
Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	N/A
Test setup:	
Test procedure:	According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data:

Band 1(5150-5250 MHz):
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	18.18	0.5	Pass
NVNT	a	5200	Ant1	18.06	0.5	Pass
NVNT	a	5240	Ant1	18.33	0.5	Pass
NVNT	ac20	5180	Ant1	18.75	0.5	Pass
NVNT	ac20	5200	Ant1	18.72	0.5	Pass
NVNT	ac20	5240	Ant1	18.81	0.5	Pass
NVNT	ac40	5190	Ant1	38.46	0.5	Pass
NVNT	ac40	5230	Ant1	38.22	0.5	Pass
NVNT	ac80	5210	Ant1	80.16	0.5	Pass
NVNT	ax20	5180	Ant1	21.18	0.5	Pass
NVNT	ax20	5200	Ant1	21.33	0.5	Pass
NVNT	ax20	5240	Ant1	21.45	0.5	Pass
NVNT	ax40	5190	Ant1	39.24	0.5	Pass
NVNT	ax40	5230	Ant1	39.6	0.5	Pass
NVNT	ax80	5210	Ant1	80.4	0.5	Pass
NVNT	n20	5180	Ant1	18.69	0.5	Pass
NVNT	n20	5200	Ant1	18.69	0.5	Pass
NVNT	n20	5240	Ant1	18.69	0.5	Pass
NVNT	n40	5190	Ant1	38.04	0.5	Pass
NVNT	n40	5230	Ant1	38.64	0.5	Pass

-26dB Bandwidth NVNT a 5180MHz Ant1



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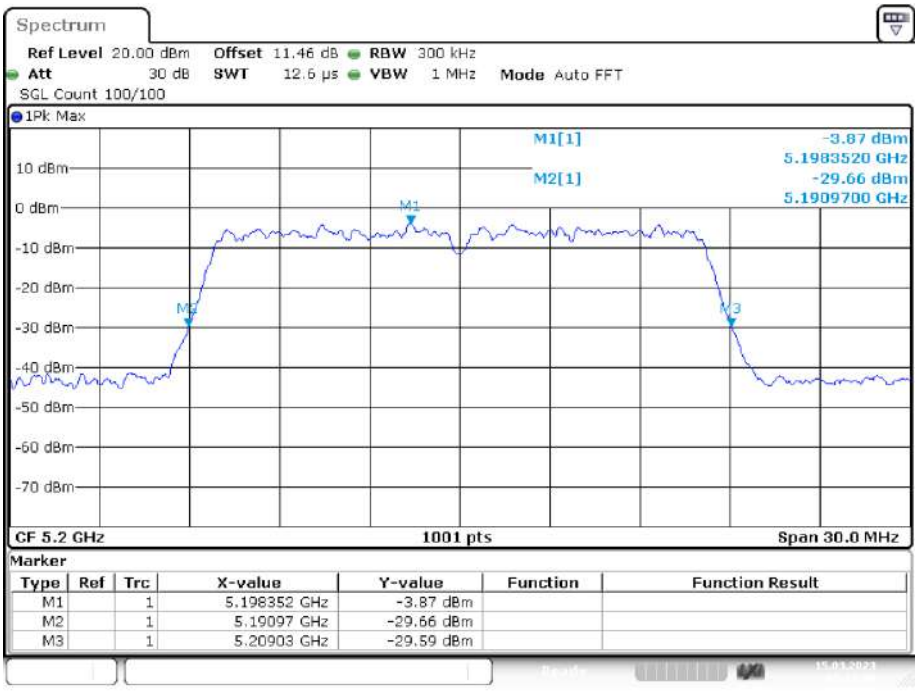

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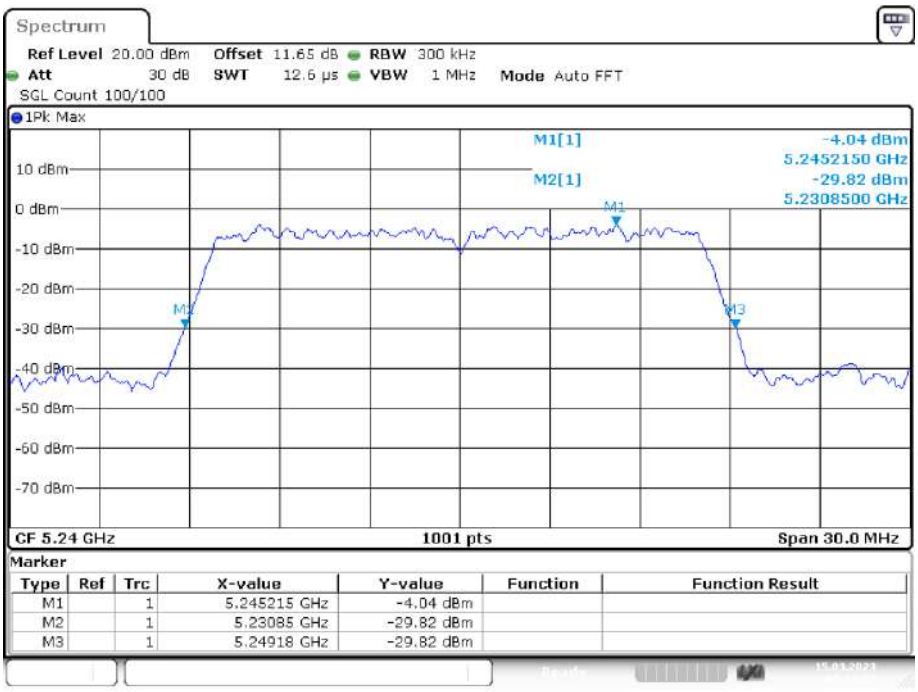

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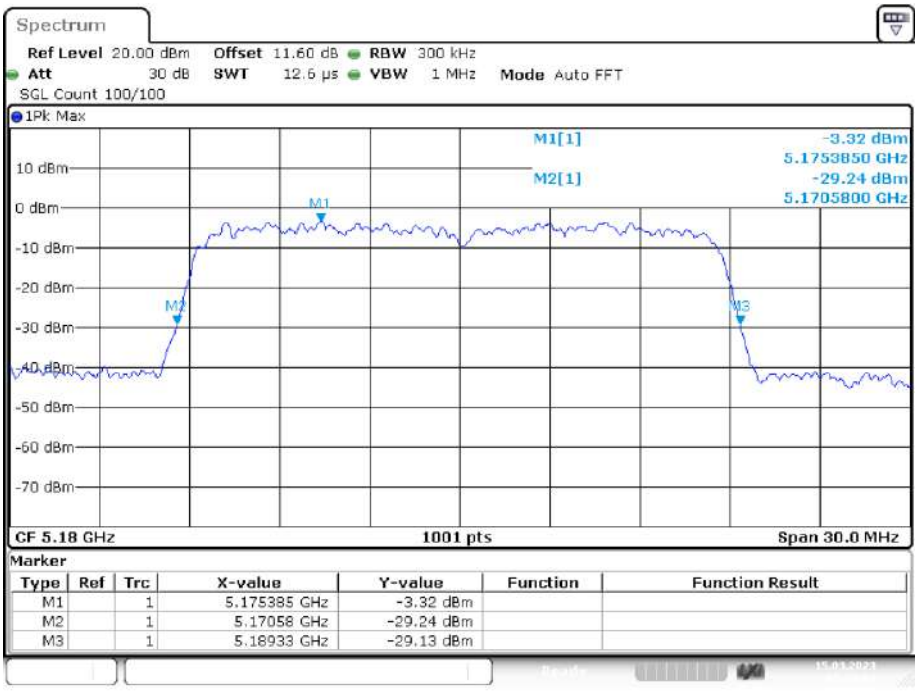

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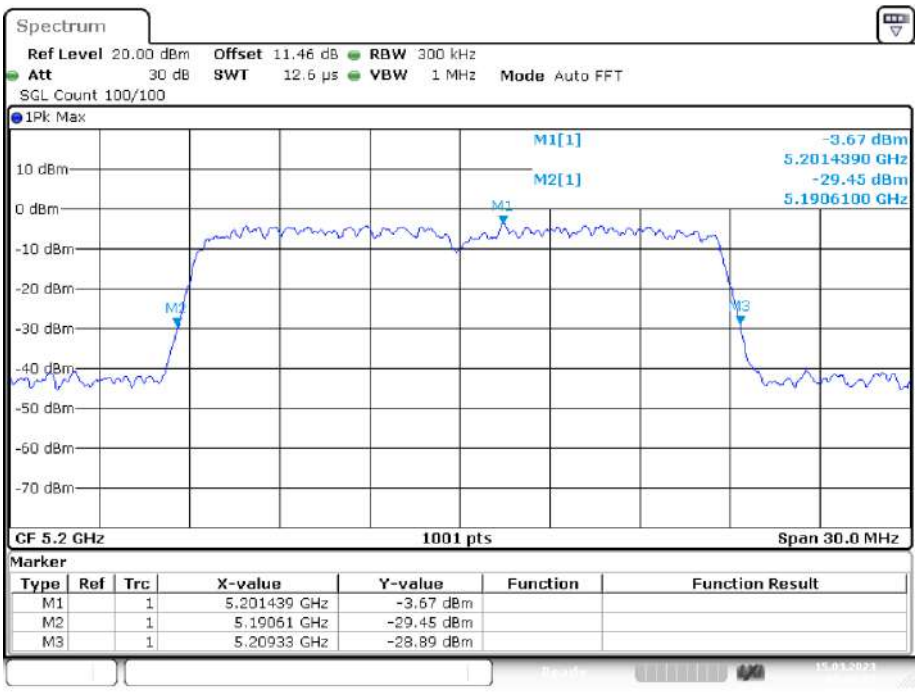

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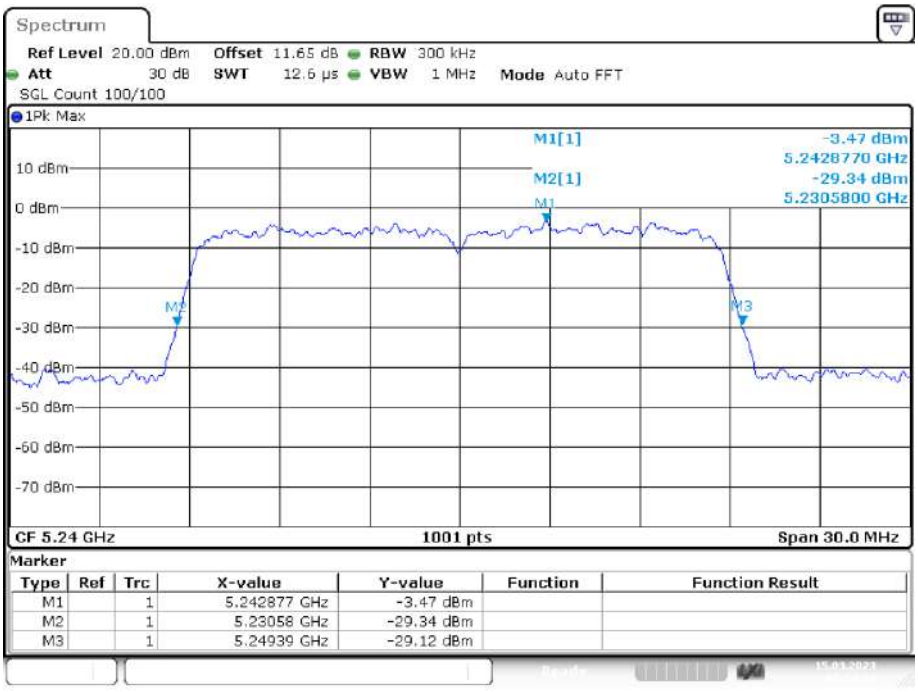

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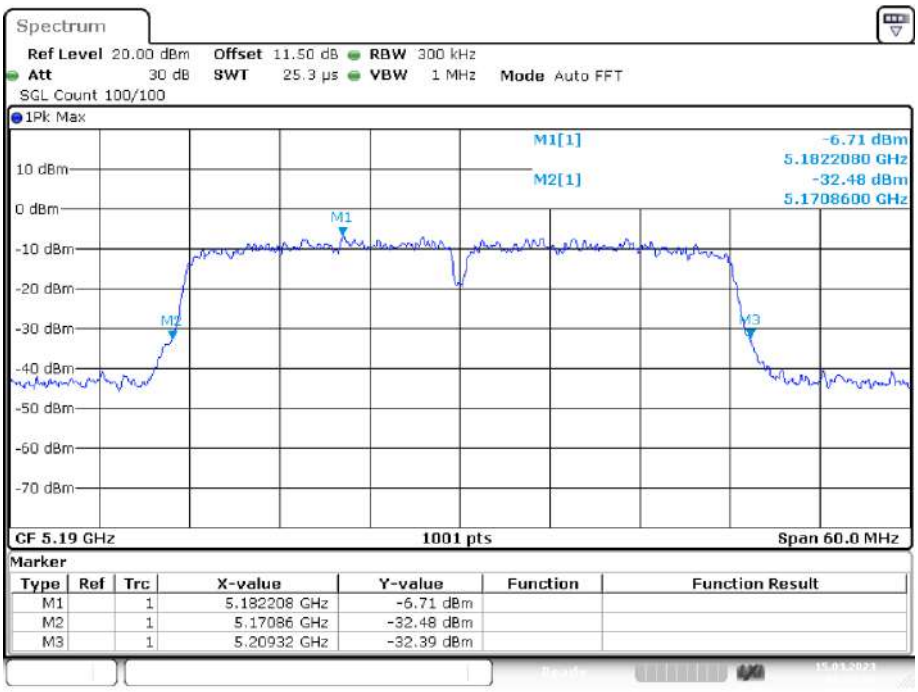

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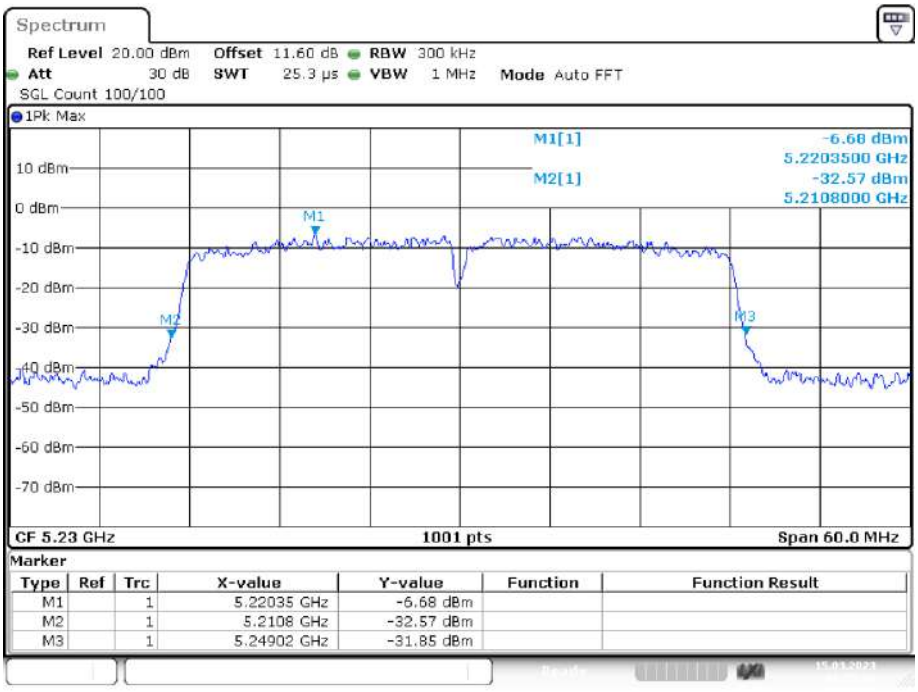
-26dB Bandwidth NVNT ac40 5230MHz Ant1



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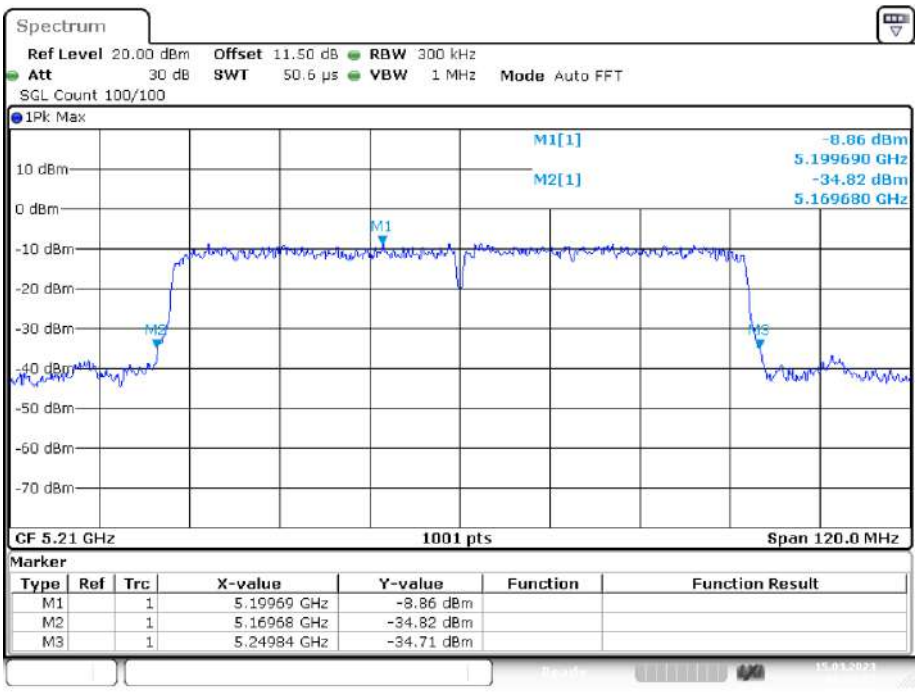

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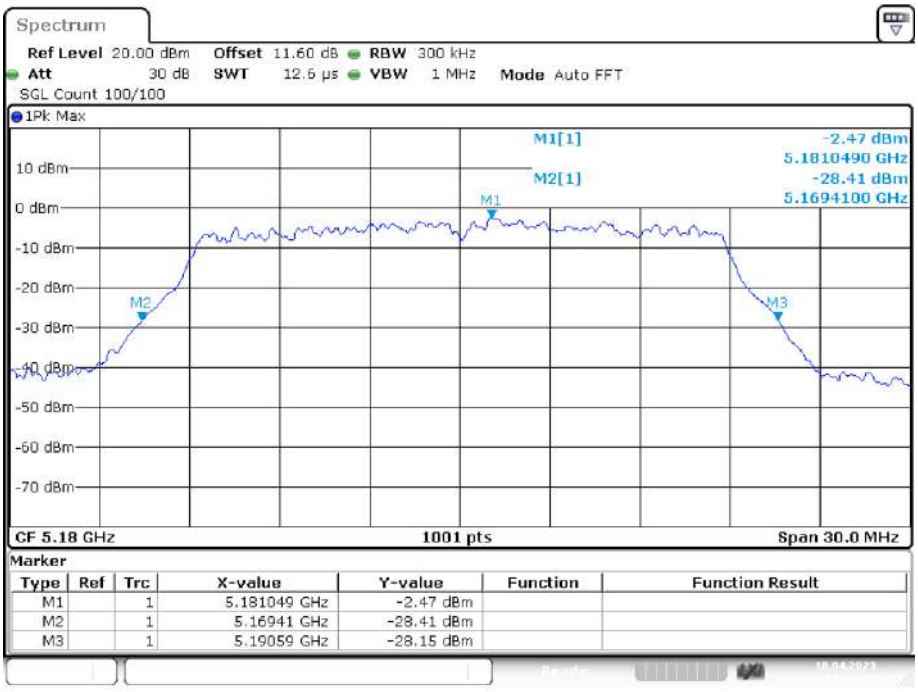

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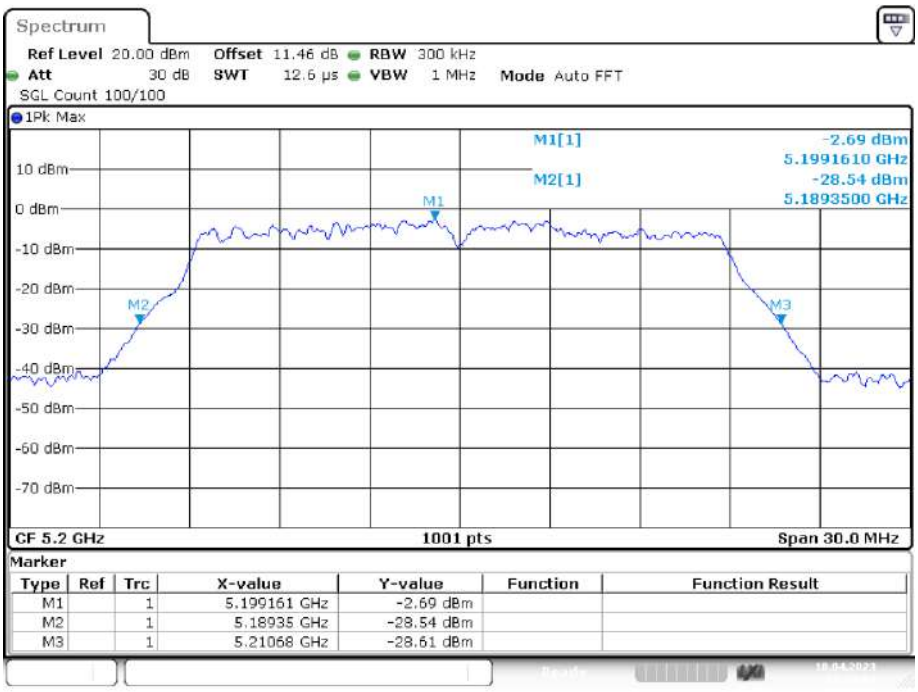

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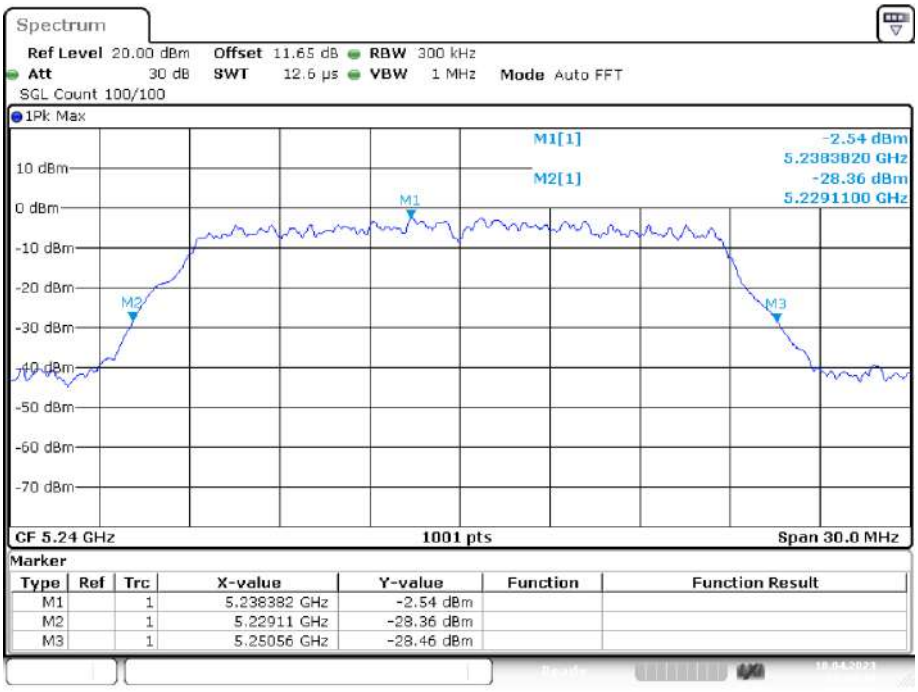

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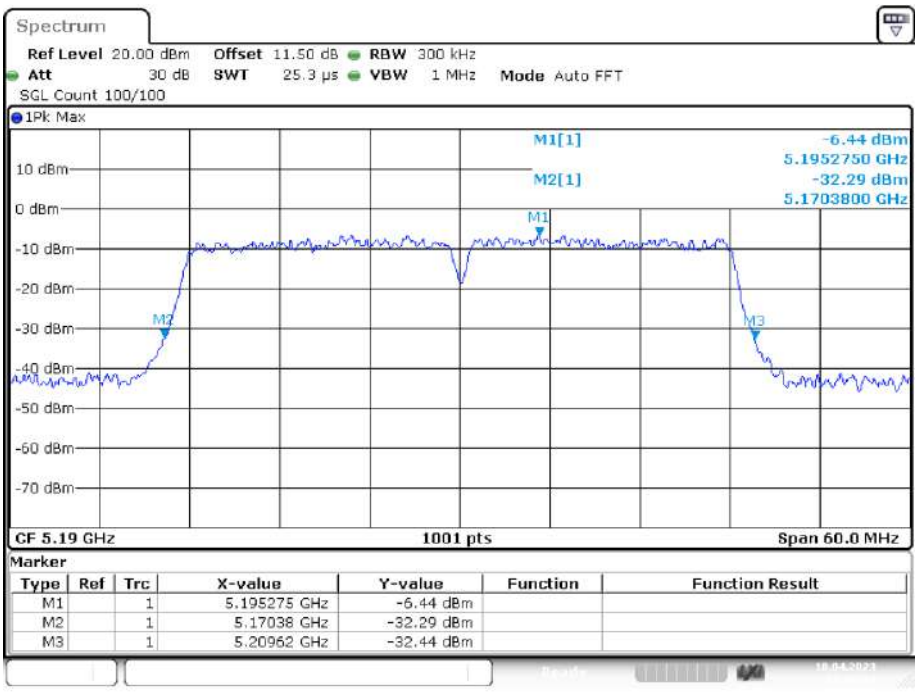

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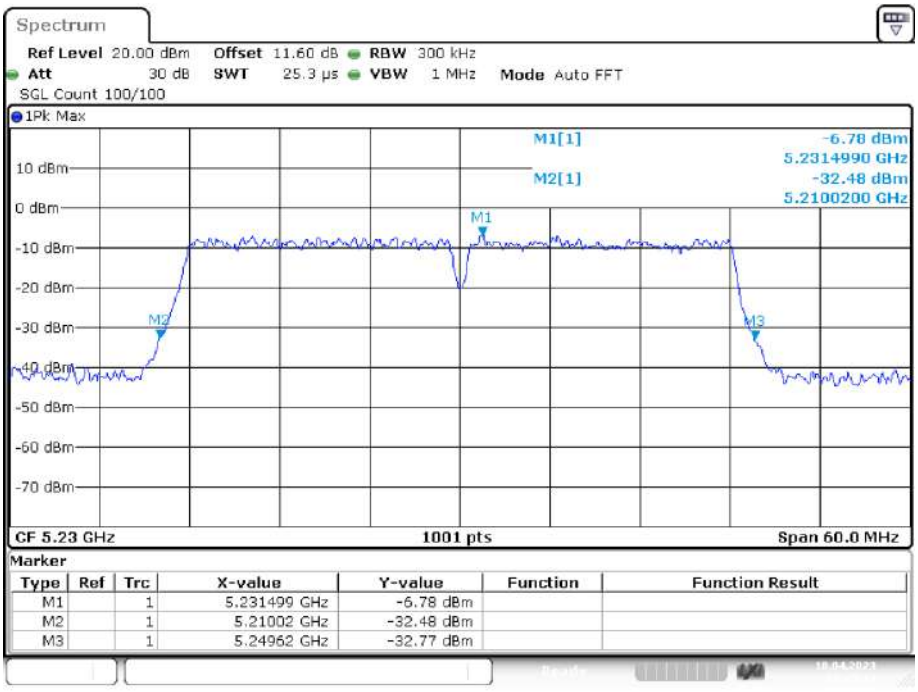

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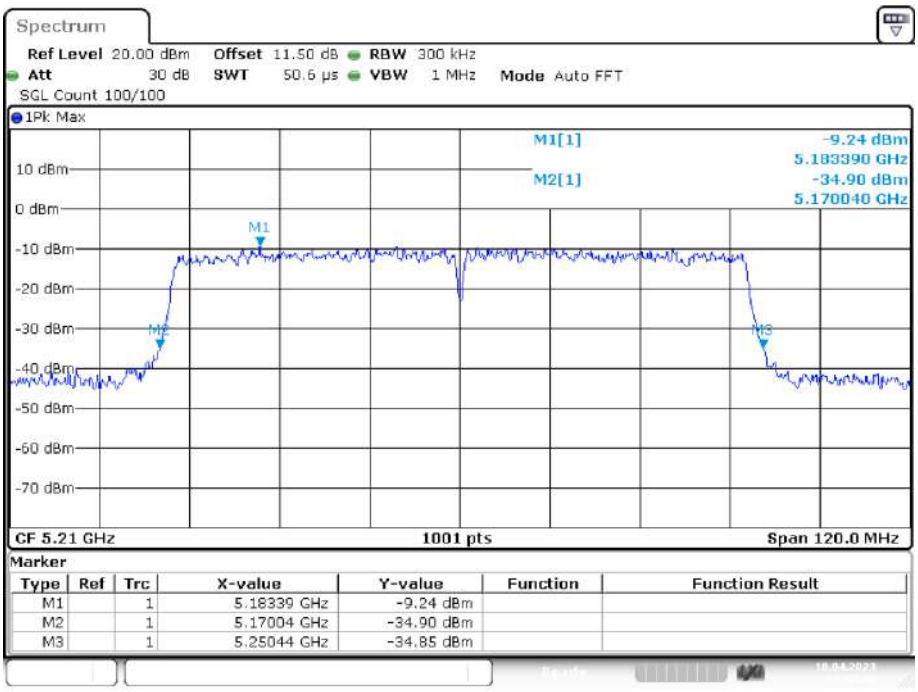

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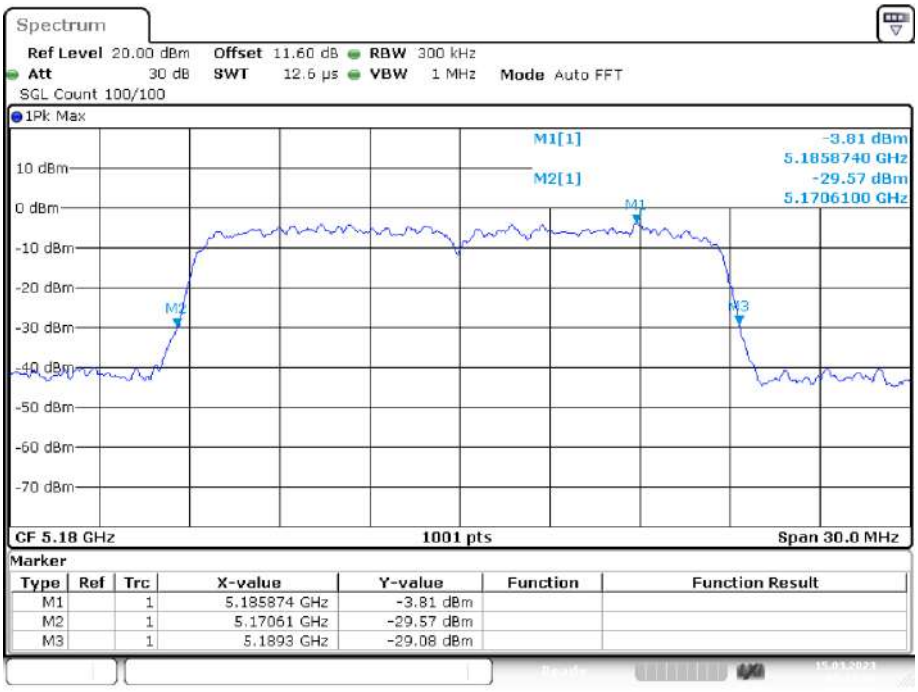

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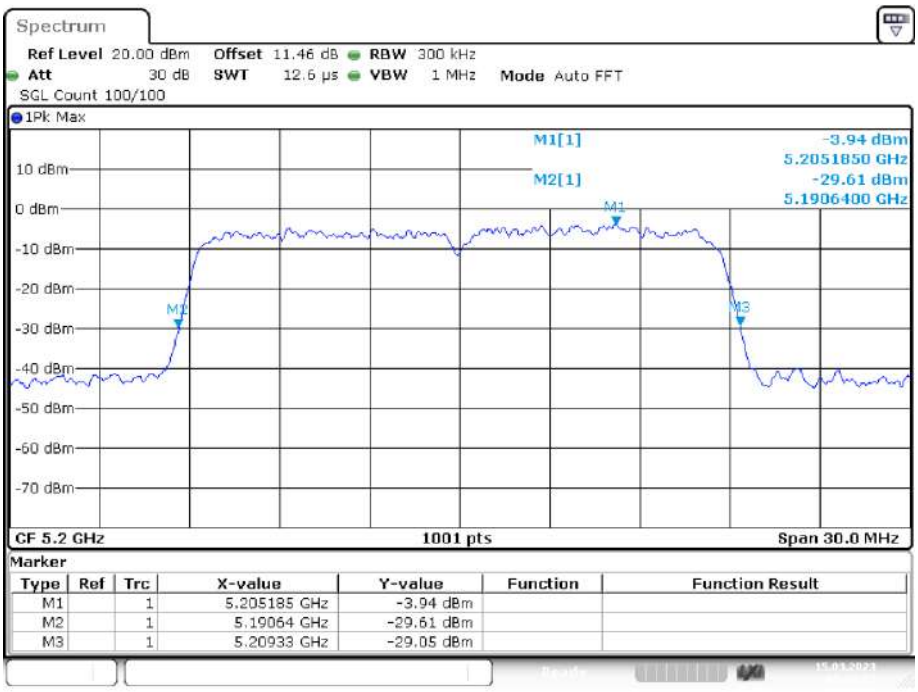
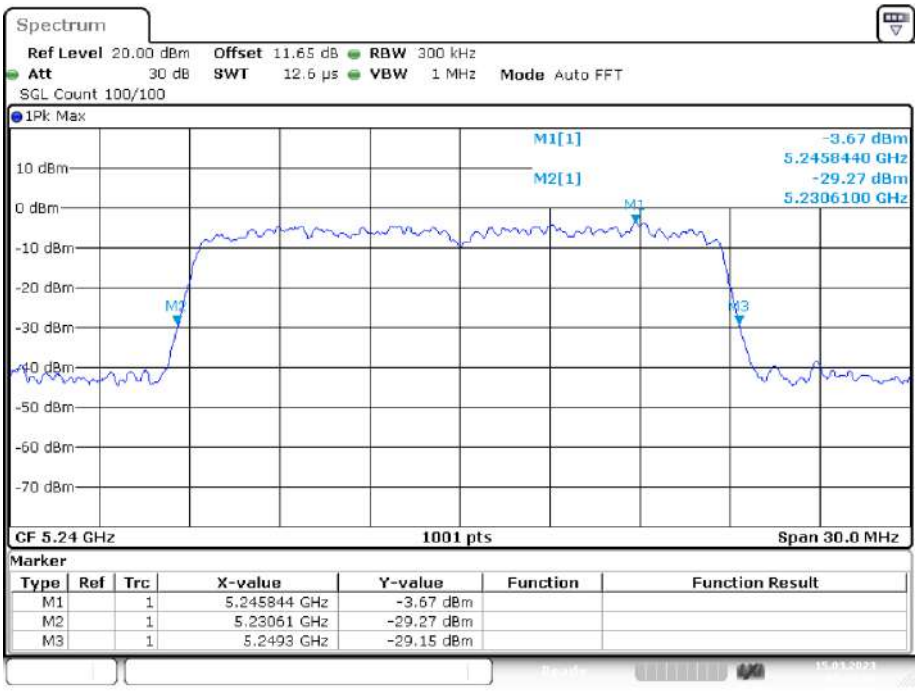


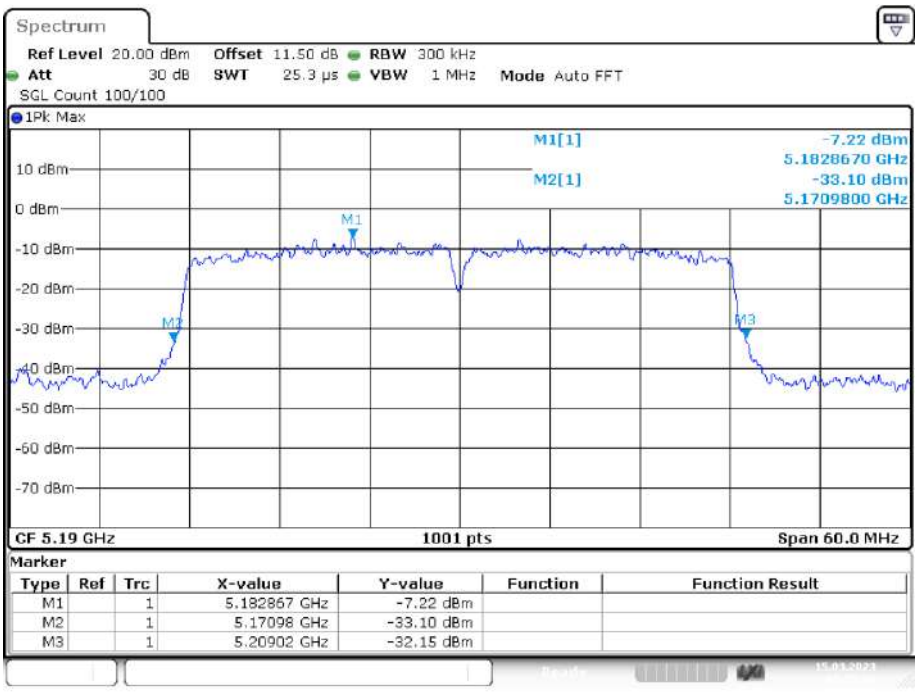
Date: 15.MAR.2023 05:26:53

-26dB Bandwidth NVNT n20 5240MHz Ant1



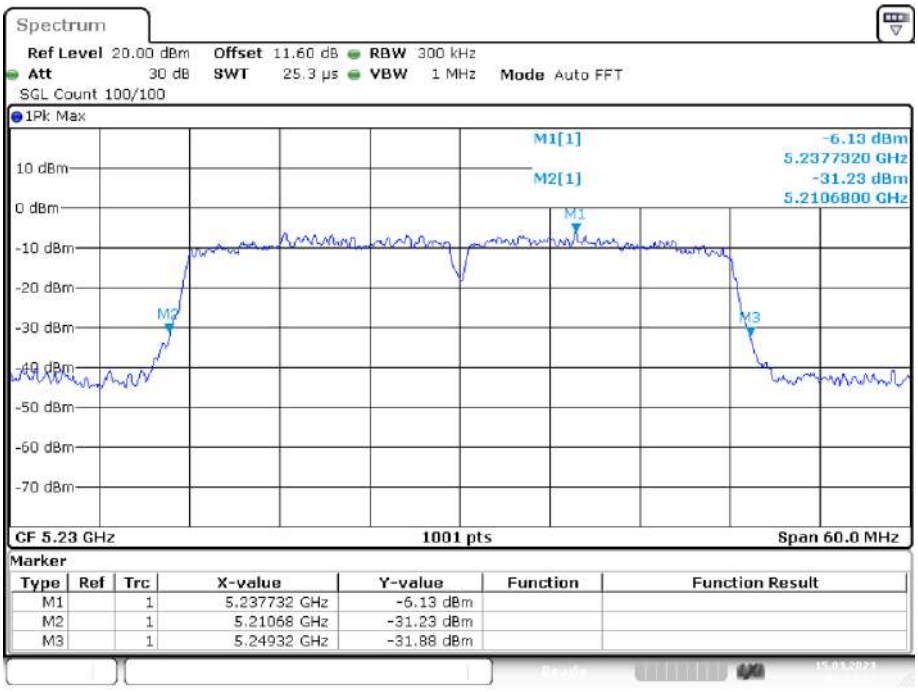
Date: 15.MAR.2023 05:30:55

-26dB Bandwidth NVNT n40 5190MHz Ant1



Date: 15.MAR.2023 05:59:36

-26dB Bandwidth NVNT n40 5230MHz Ant1

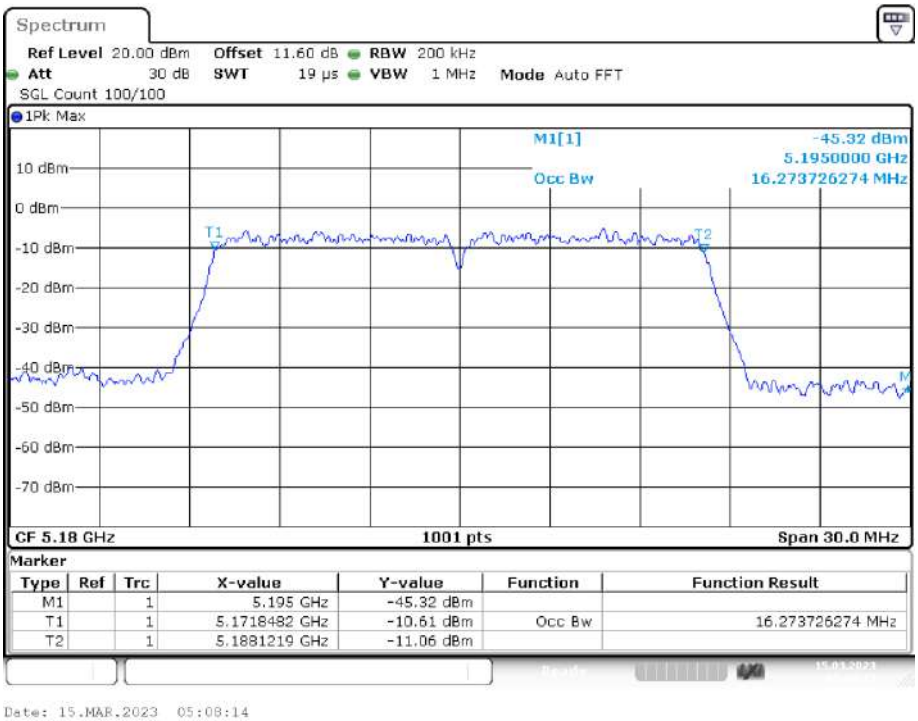


Date: 15.MAR.2023 06:14:21

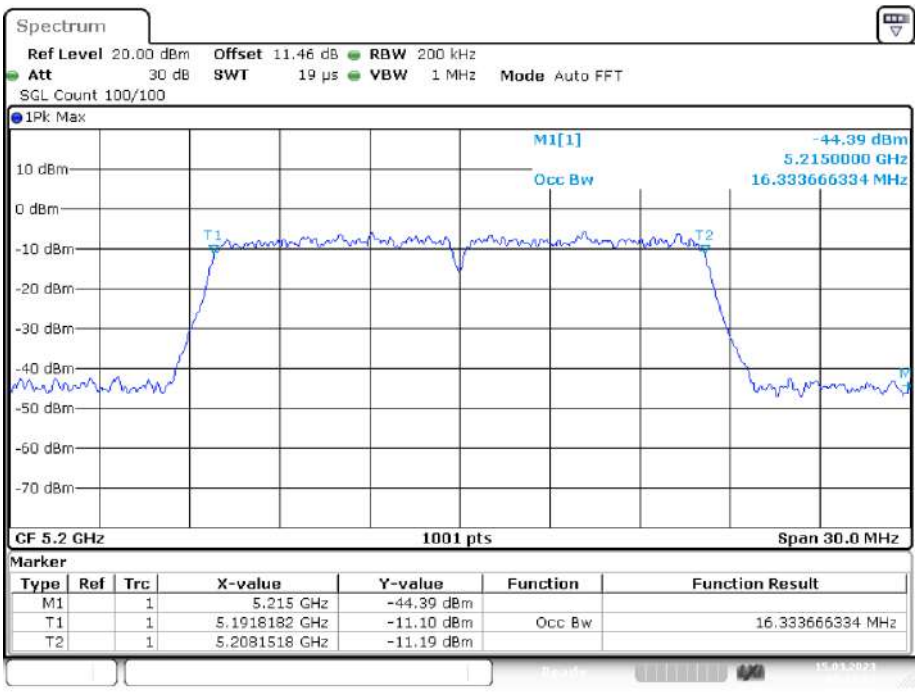
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.274
NVNT	a	5200	Ant1	16.334
NVNT	a	5240	Ant1	16.244
NVNT	ac20	5180	Ant1	17.203
NVNT	ac20	5200	Ant1	17.173
NVNT	ac20	5240	Ant1	17.233
NVNT	ac40	5190	Ant1	35.844
NVNT	ac40	5230	Ant1	35.724
NVNT	ac80	5210	Ant1	75.045
NVNT	ax20	5180	Ant1	17.592
NVNT	ax20	5200	Ant1	17.772
NVNT	ax20	5240	Ant1	17.682
NVNT	ax40	5190	Ant1	36.384
NVNT	ax40	5230	Ant1	36.444
NVNT	ax80	5210	Ant1	75.644
NVNT	n20	5180	Ant1	17.233
NVNT	n20	5200	Ant1	17.203
NVNT	n20	5240	Ant1	17.233
NVNT	n40	5190	Ant1	35.724
NVNT	n40	5230	Ant1	35.784

OBW NVNT a 5180MHz Ant1

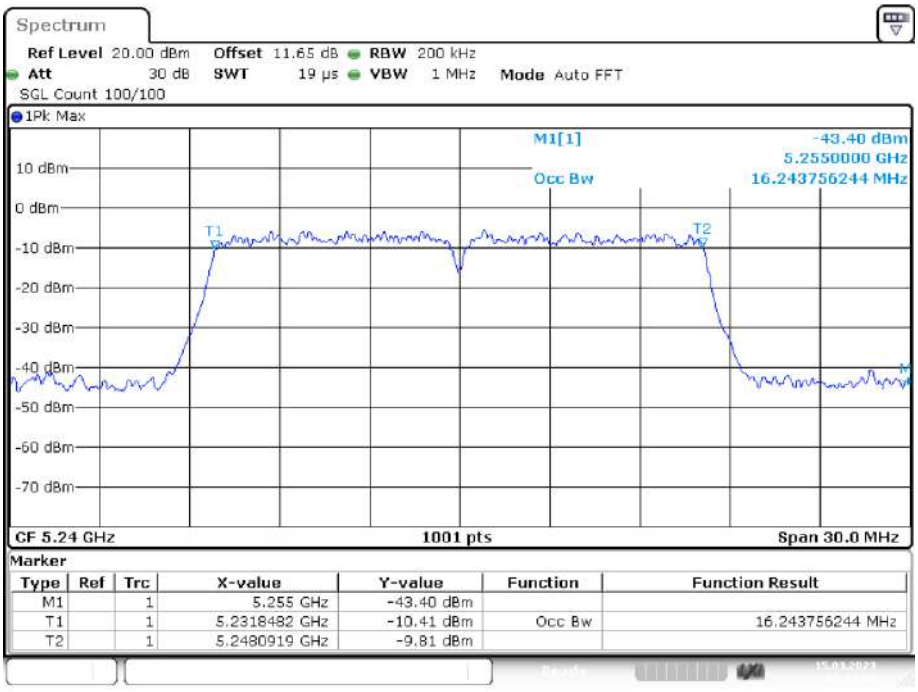


OBW NVNT a 5200MHz Ant1



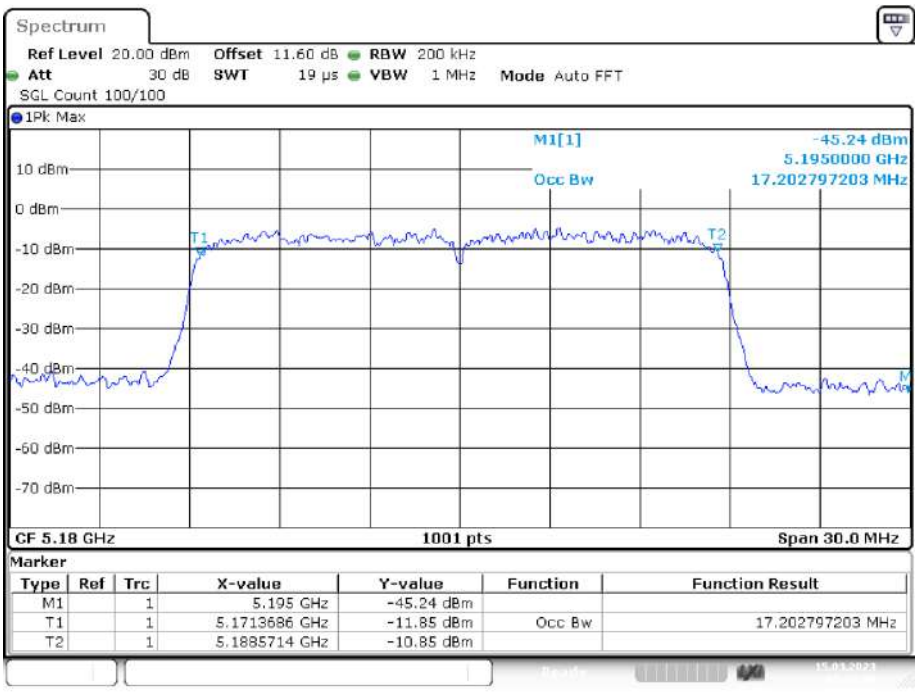
Date: 15.MAR.2023 05:12:31

OBW NVNT a 5240MHz Ant1



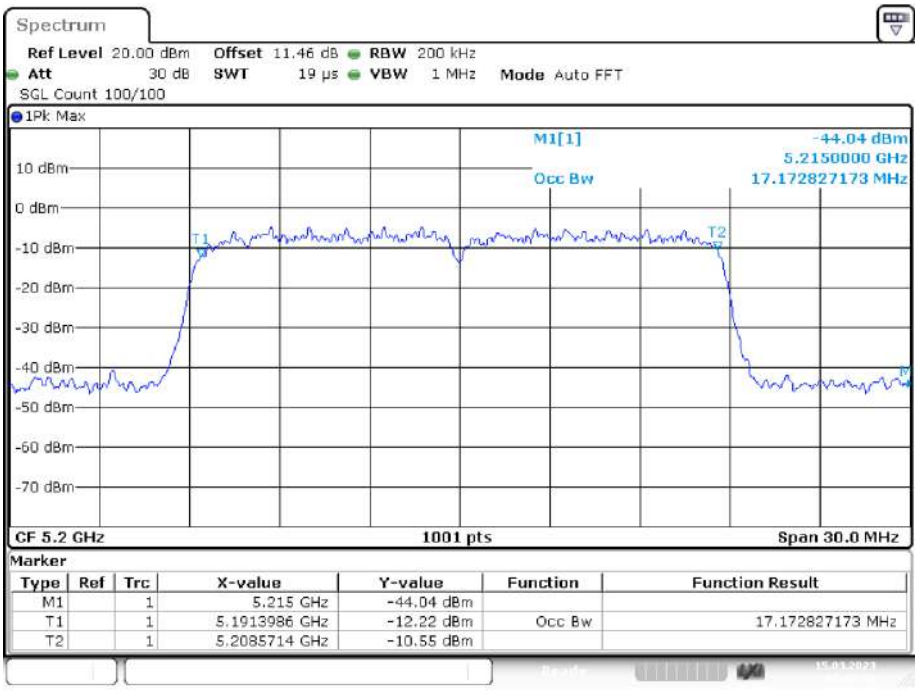
Date: 15.MAR.2023 05:18:41

OBW NVNT ac20 5180MHz Ant1



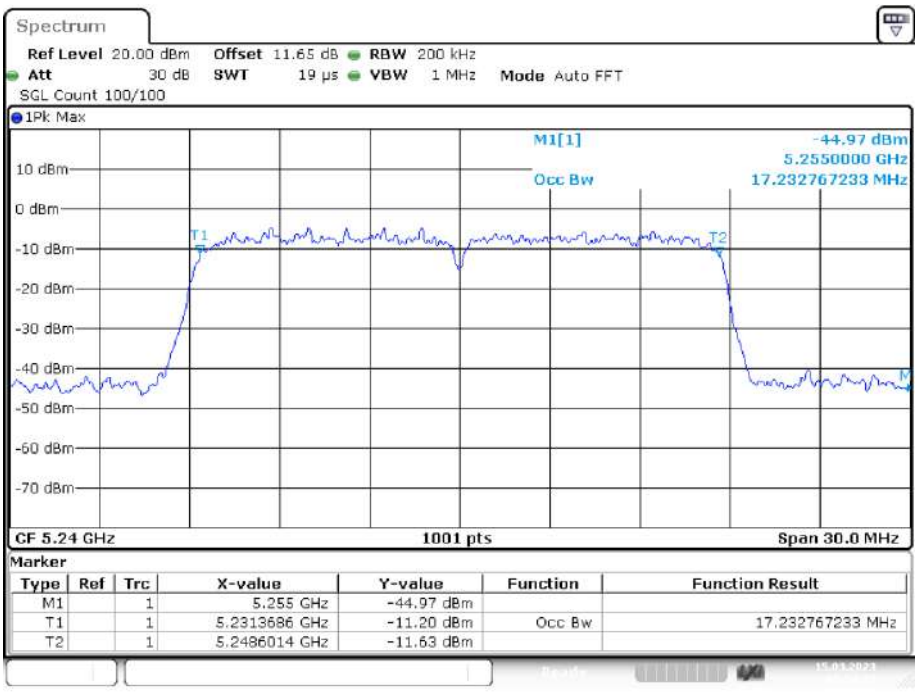
Date: 15.MAR.2023 05:33:49

OBW NVNT ac20 5200MHz Ant1



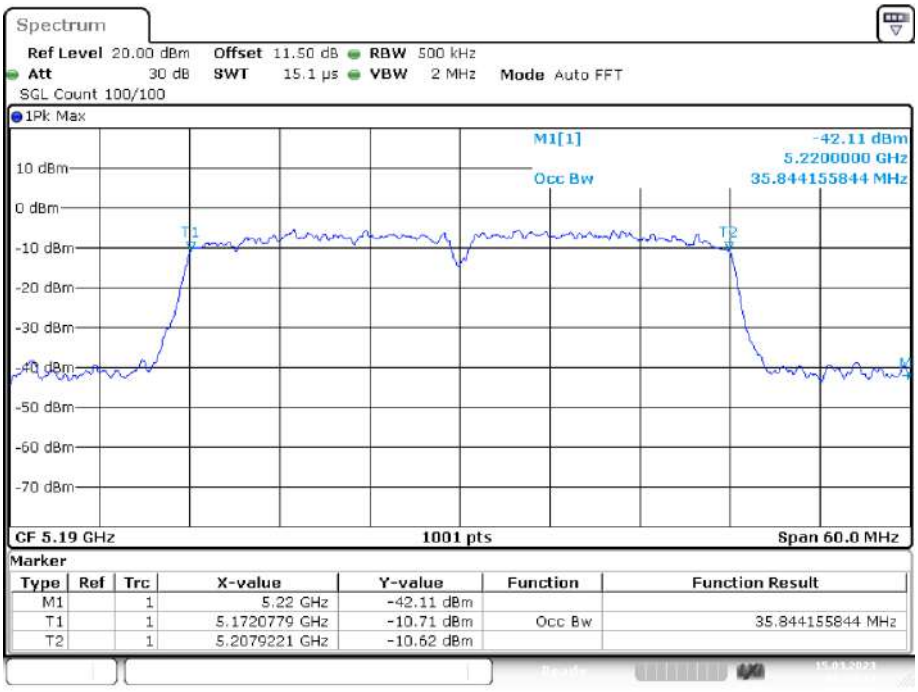
Date: 15.MAR.2023 05:47:09

OBW NVNT ac20 5240MHz Ant1



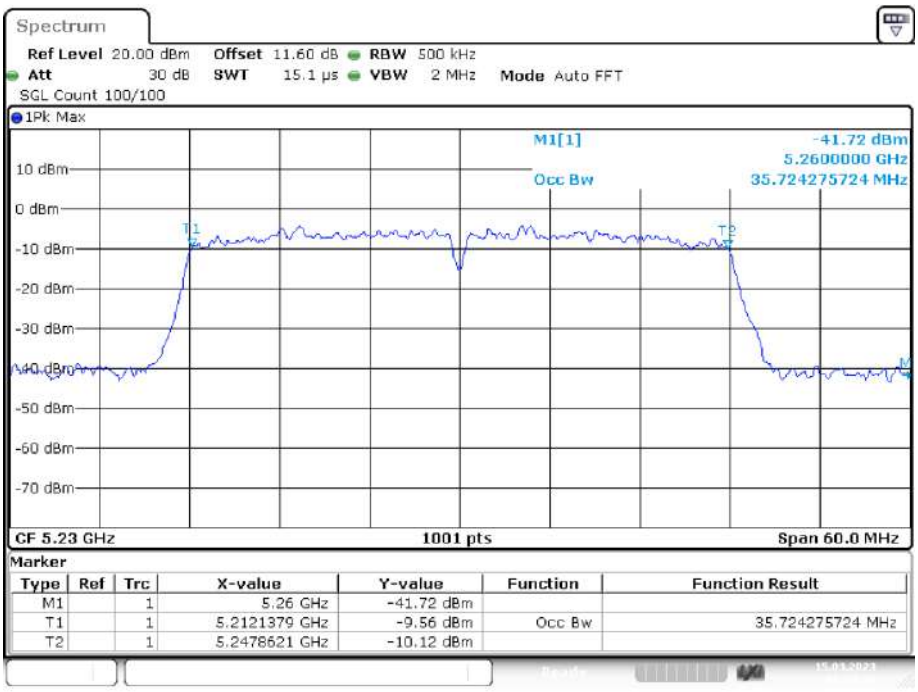
Date: 15.MAR.2023 05:54:23

OBW NVNT ac40 5190MHz Ant1



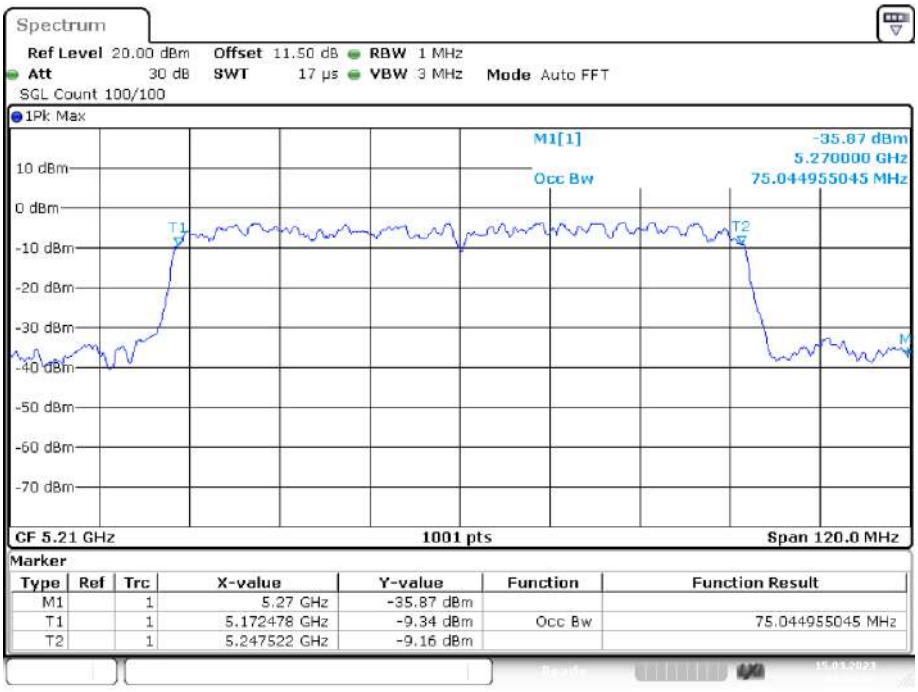
Date: 15.MAR.2023 06:20:11

OBW NVNT ac40 5230MHz Ant1



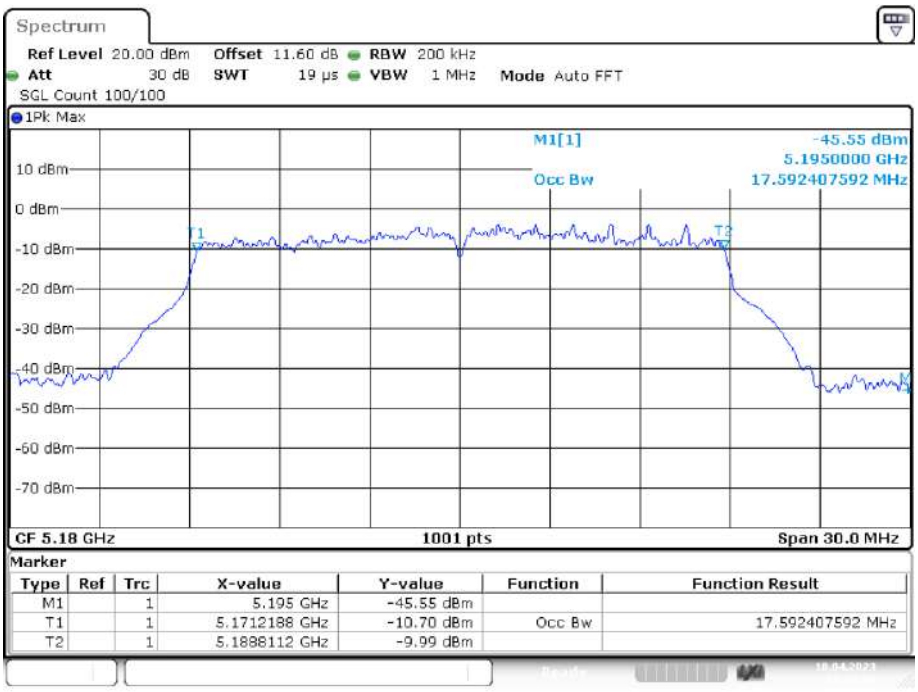
Date: 15.MAR.2023 06:24:48

OBW NVNT ac80 5210MHz Ant1



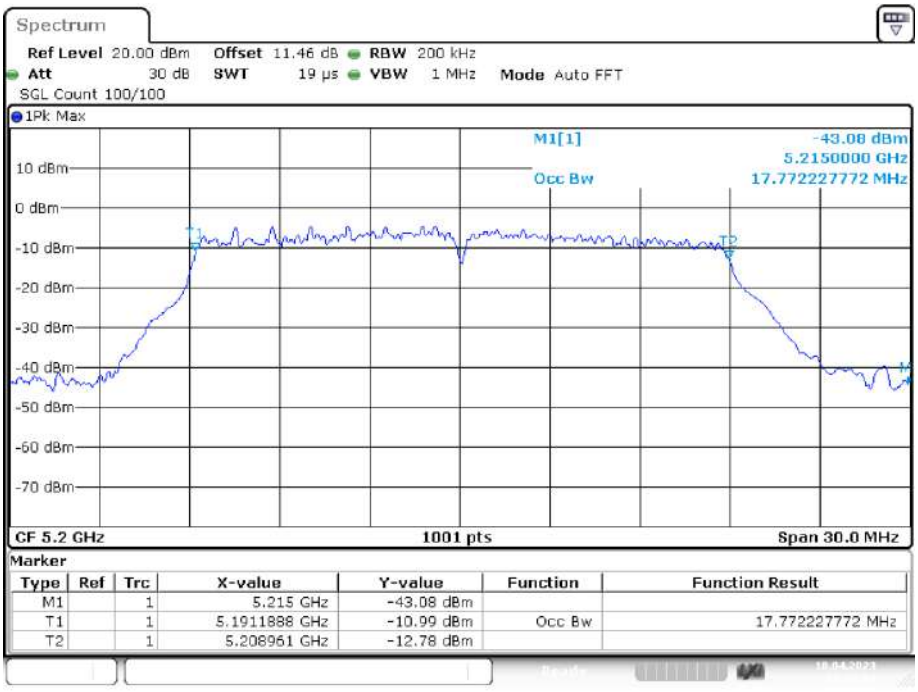
Date: 15.MAR.2023 06:30:09

OBW NVNT ax20 5180MHz Ant1



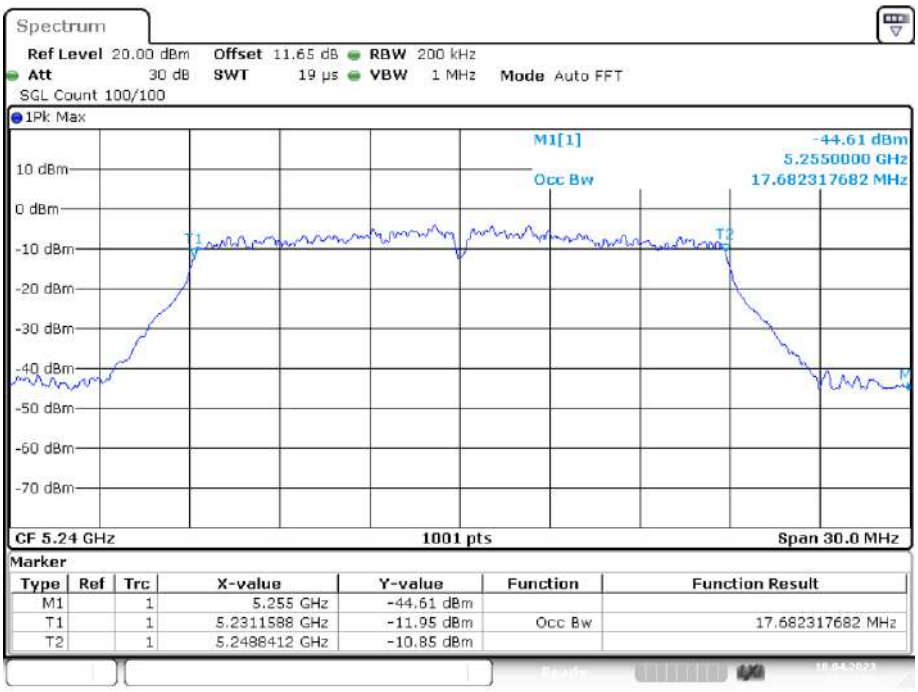
Date: 18.APR.2023 10:32:08

OBW NVNT ax20 5200MHz Ant1



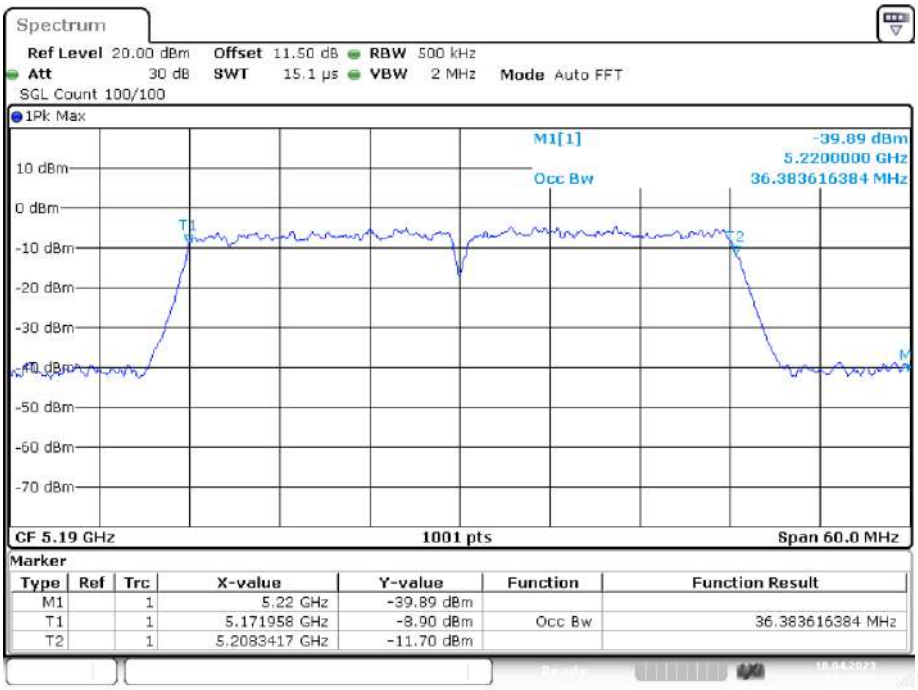
Date: 18.APR.2023 10:33:54

OBW NVNT ax20 5240MHz Ant1



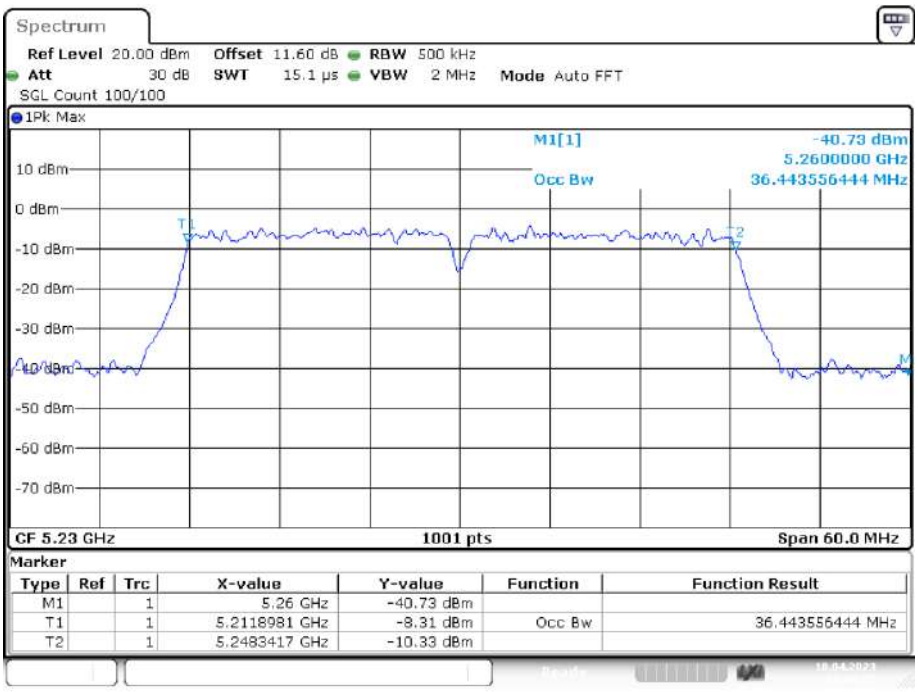
Date: 18.APR.2023 10:39:57

OBW NVNT ax40 5190MHz Ant1



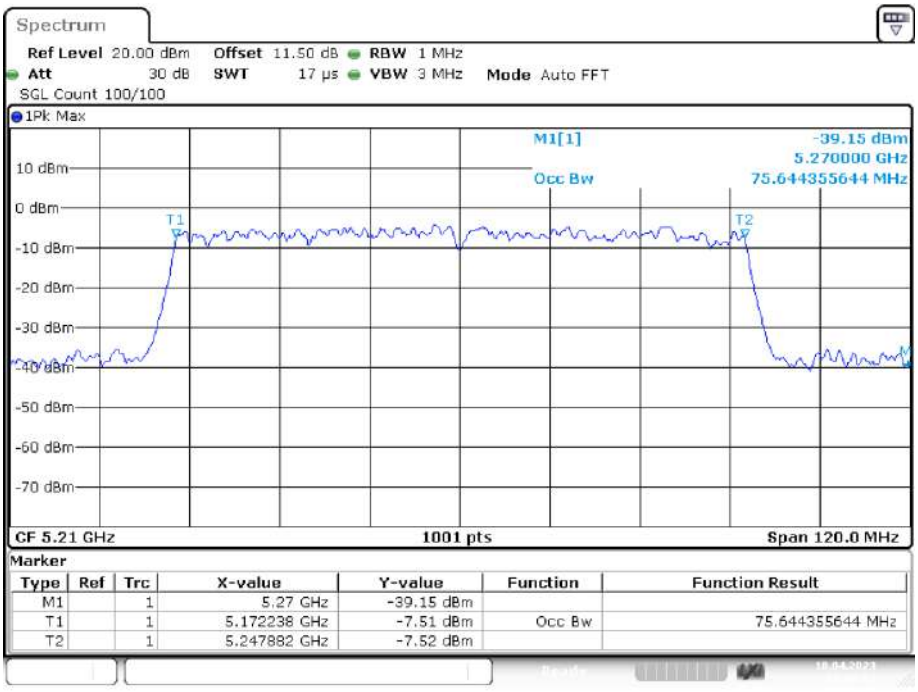
Date: 18.APR.2023 10:42:16

OBW NVNT ax40 5230MHz Ant1



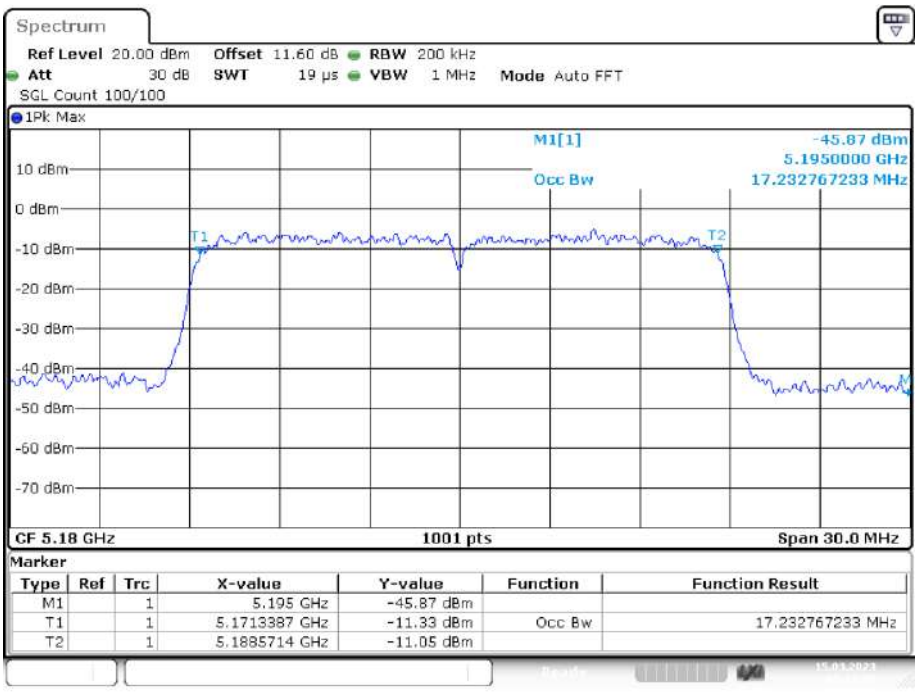
Date: 18.APR.2023 10:44:56

OBW NVNT ax80 5210MHz Ant1



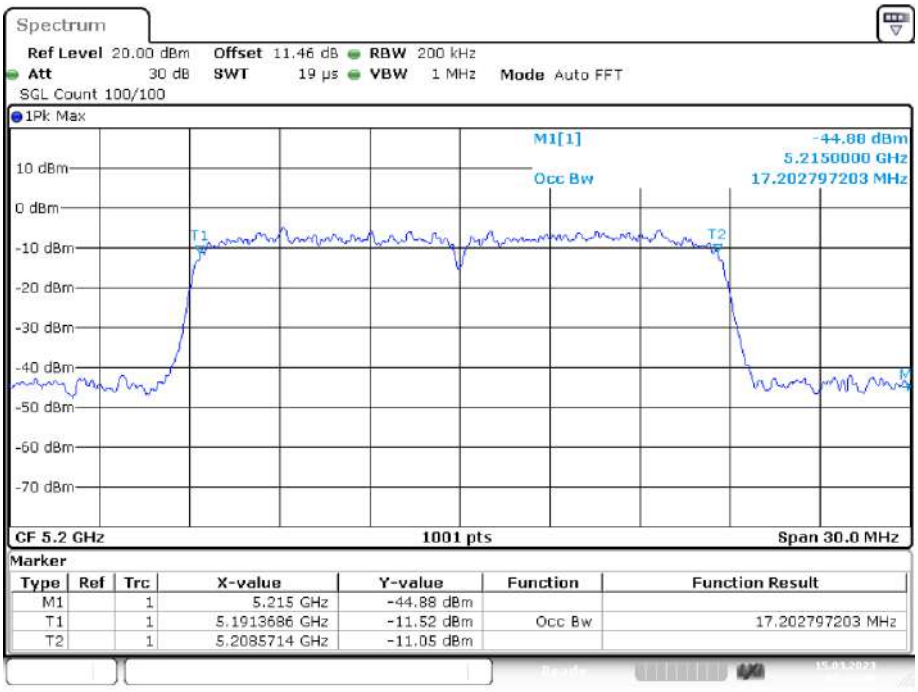
Date: 18.APR.2023 10:47:30

OBW NVNT n20 5180MHz Ant1



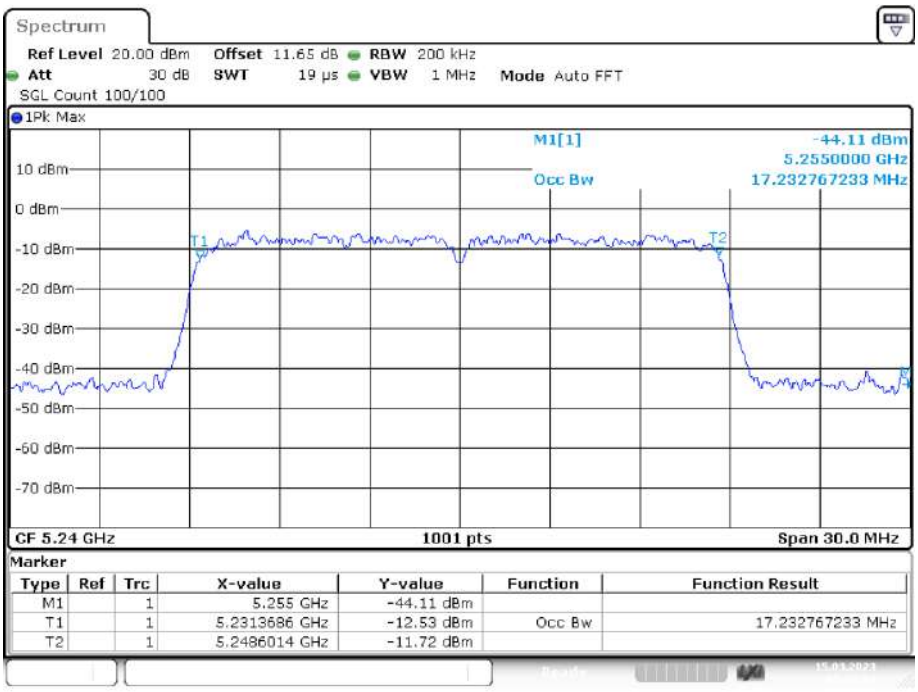
Date: 15.MAR.2023 05:22:47

OBW NVNT n20 5200MHz Ant1



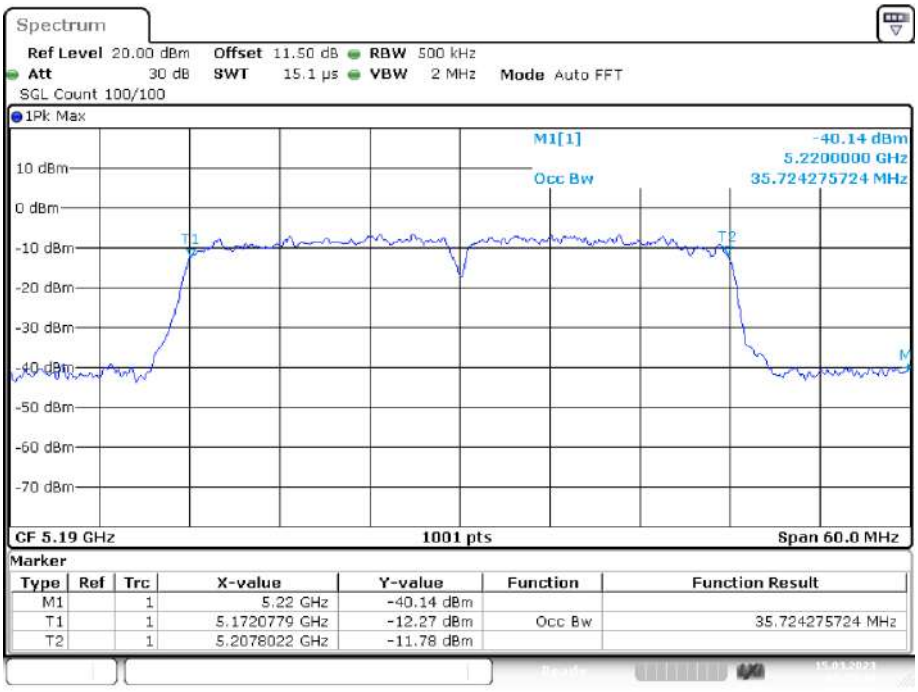
Date: 15.MAR.2023 05:26:41

OBW NVNT n20 5240MHz Ant1



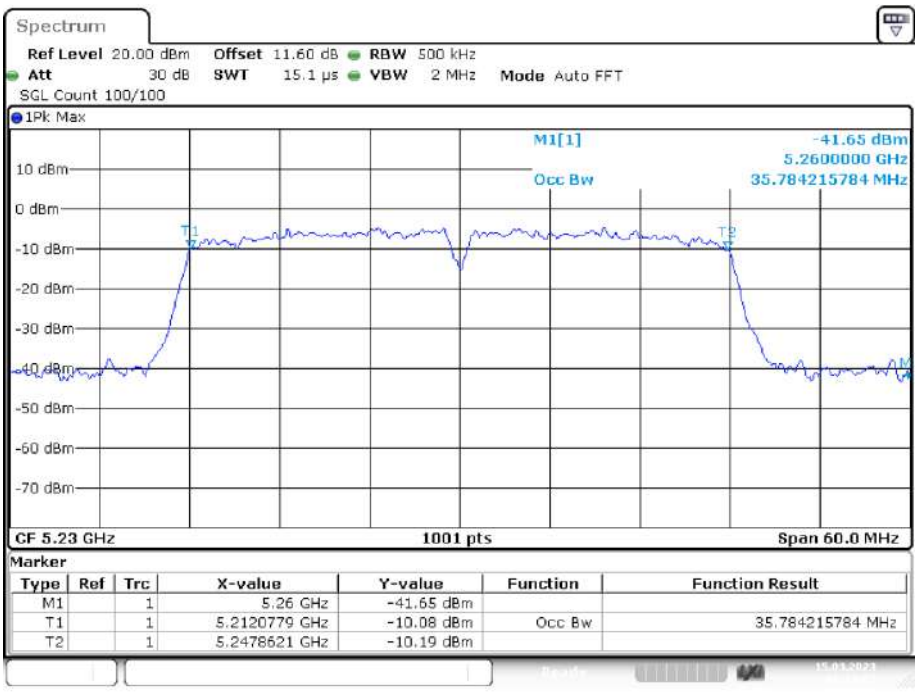
Date: 15.MAR.2023 05:30:42

OBW NVNT n40 5190MHz Ant1



Date: 15.MAR.2023 05:59:18

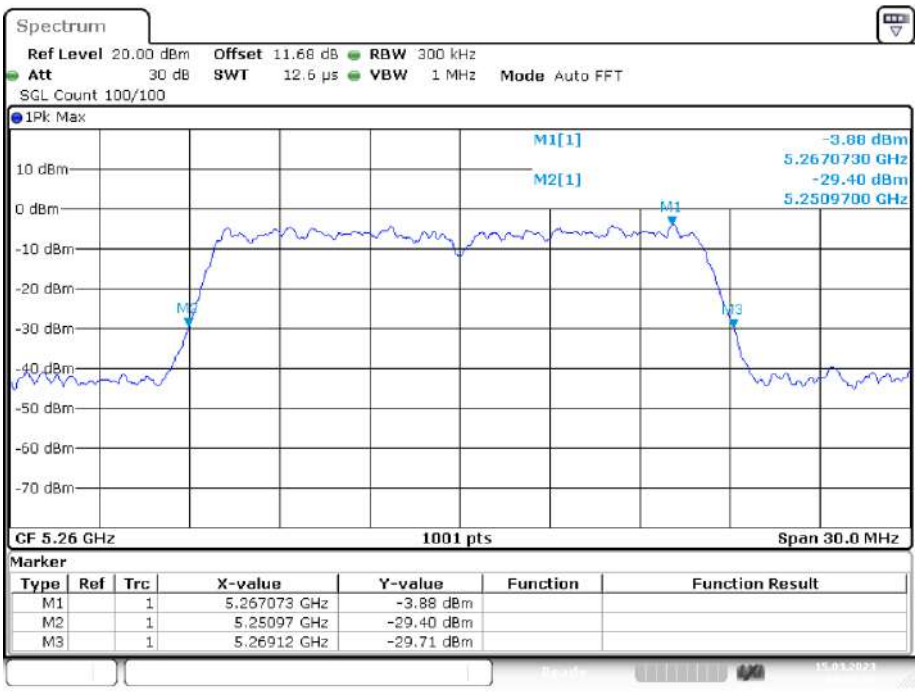
OBW NVNT n40 5230MHz Ant1



Band 2(5250-5350 MHz):
-26dB Bandwidth

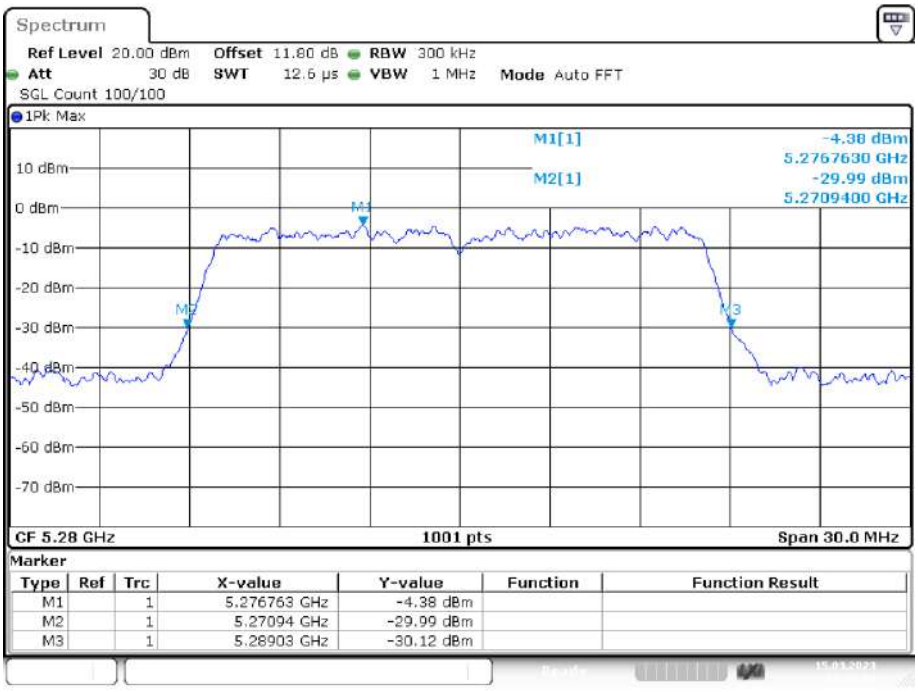
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	18.15	0.5	Pass
NVNT	a	5280	Ant1	18.09	0.5	Pass
NVNT	a	5320	Ant1	18.3	0.5	Pass
NVNT	ac20	5260	Ant1	18.69	0.5	Pass
NVNT	ac20	5280	Ant1	18.72	0.5	Pass
NVNT	ac20	5320	Ant1	18.84	0.5	Pass
NVNT	ac40	5270	Ant1	38.16	0.5	Pass
NVNT	ac40	5310	Ant1	38.4	0.5	Pass
NVNT	ac80	5290	Ant1	79.08	0.5	Pass
NVNT	ax20	5260	Ant1	21.69	0.5	Pass
NVNT	ax20	5280	Ant1	21.57	0.5	Pass
NVNT	ax20	5320	Ant1	21.12	0.5	Pass
NVNT	ax40	5270	Ant1	39.36	0.5	Pass
NVNT	ax40	5310	Ant1	39.84	0.5	Pass
NVNT	ax80	5290	Ant1	79.8	0.5	Pass
NVNT	n20	5260	Ant1	18.69	0.5	Pass
NVNT	n20	5280	Ant1	18.75	0.5	Pass
NVNT	n20	5320	Ant1	18.78	0.5	Pass
NVNT	n40	5270	Ant1	38.64	0.5	Pass
NVNT	n40	5310	Ant1	38.82	0.5	Pass

-26dB Bandwidth NVNT a 5260MHz Ant1



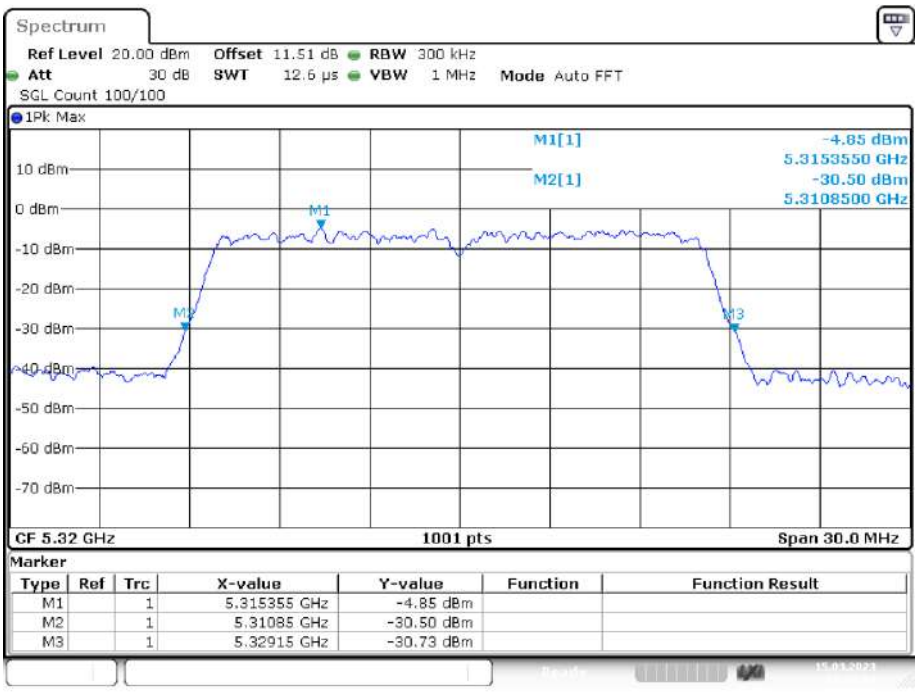
Date: 15.MAR.2023 09:01:59

-26dB Bandwidth NVNT a 5280MHz Ant1



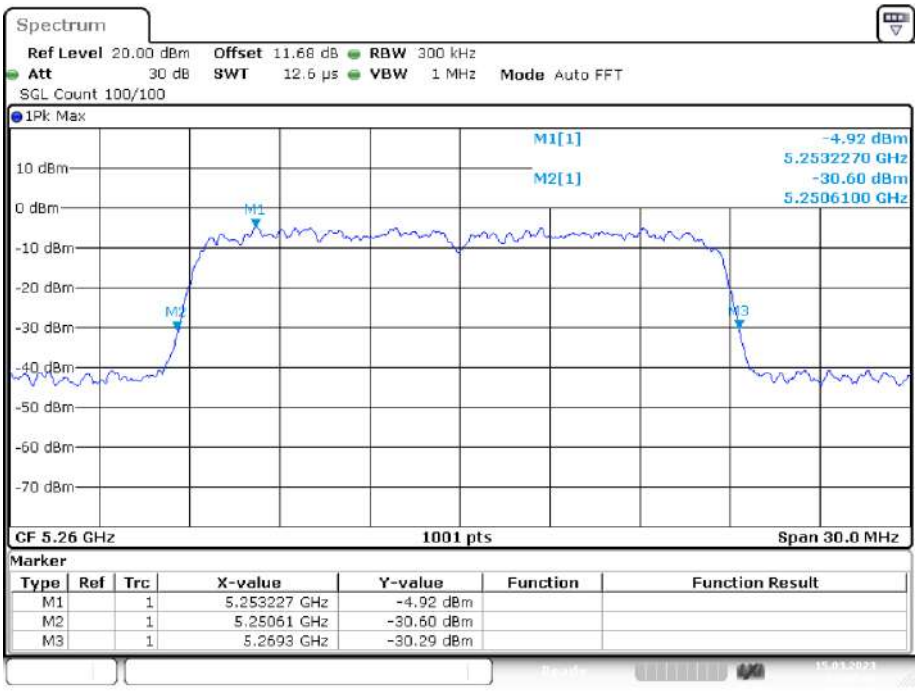
Date: 15.MAR.2023 12:33:20

-26dB Bandwidth NVNT a 5320MHz Ant1



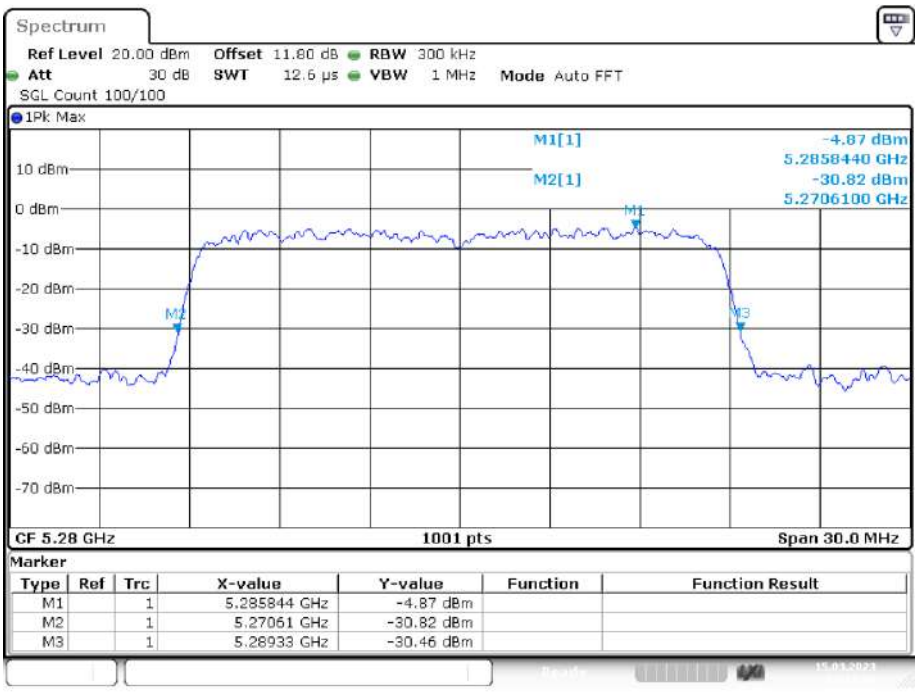
Date: 15.MAR.2023 12:36:38

-26dB Bandwidth NVNT ac20 5260MHz Ant1



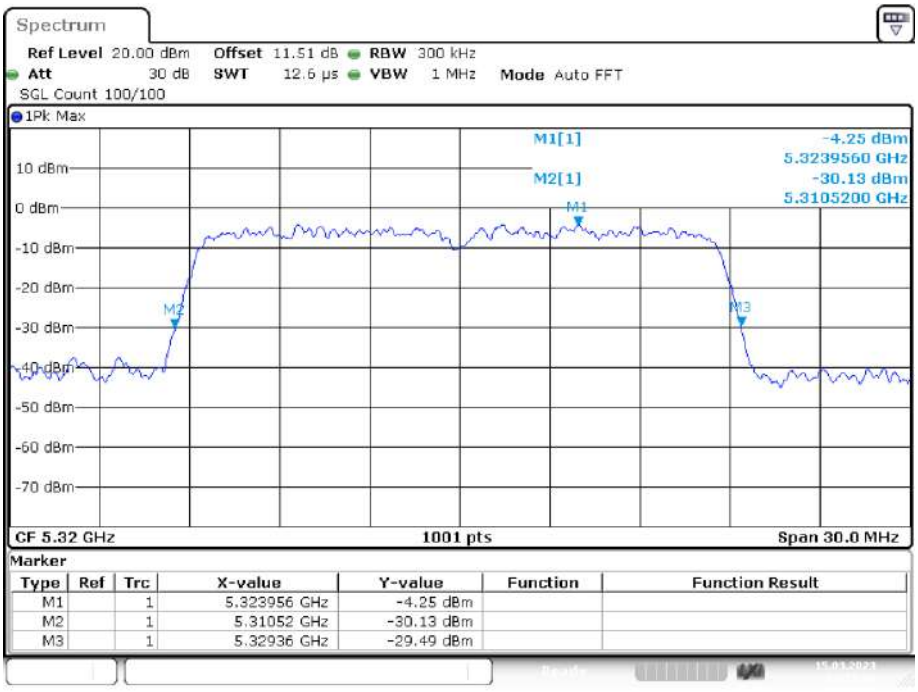
Date: 15.MAR.2023 14:07:41

-26dB Bandwidth NVNT ac20 5280MHz Ant1



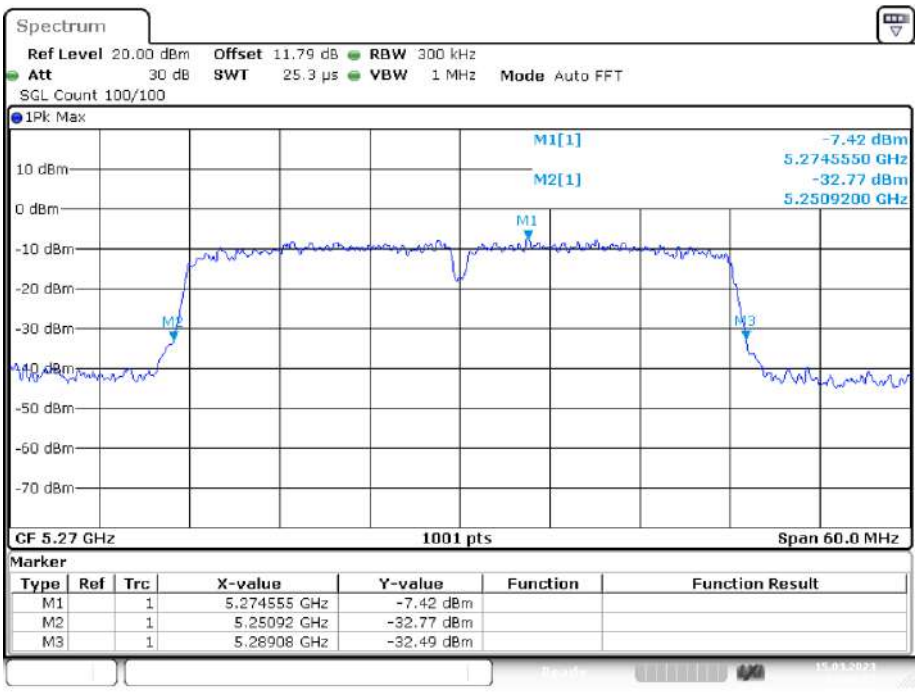
Date: 15.MAR.2023 14:11:42

-26dB Bandwidth NVNT ac20 5320MHz Ant1



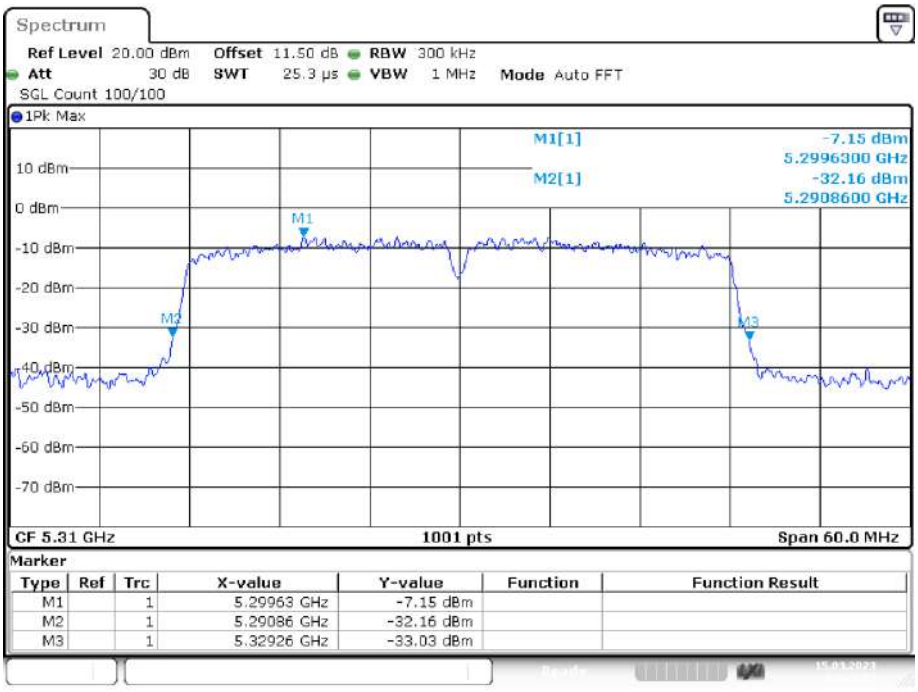
Date: 15.MAR.2023 14:15:37

-26dB Bandwidth NVNT ac40 5270MHz Ant1



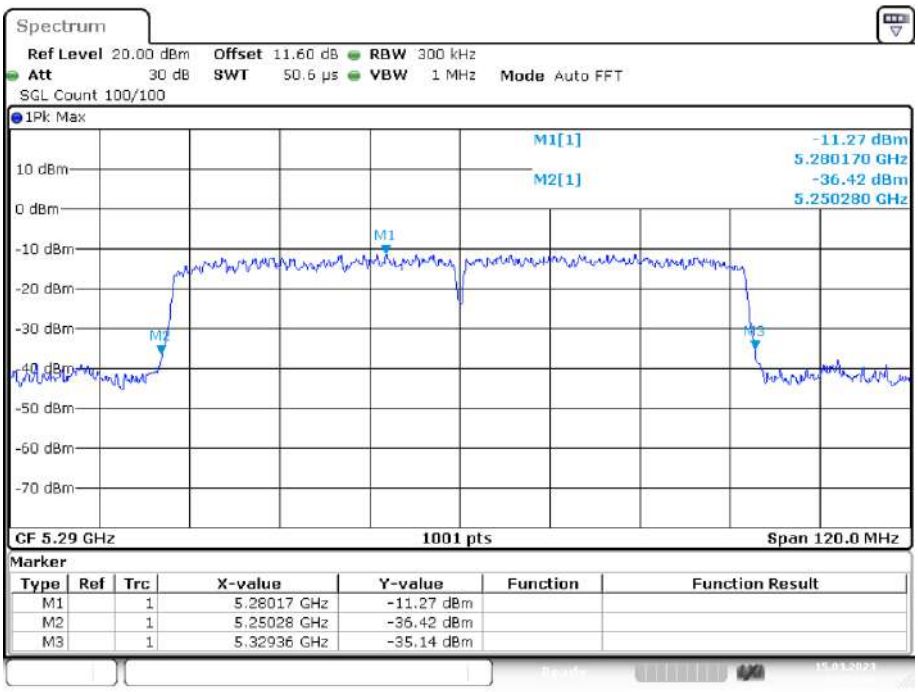
Date: 15.MAR.2023 14:40:53

-26dB Bandwidth NVNT ac40 5310MHz Ant1



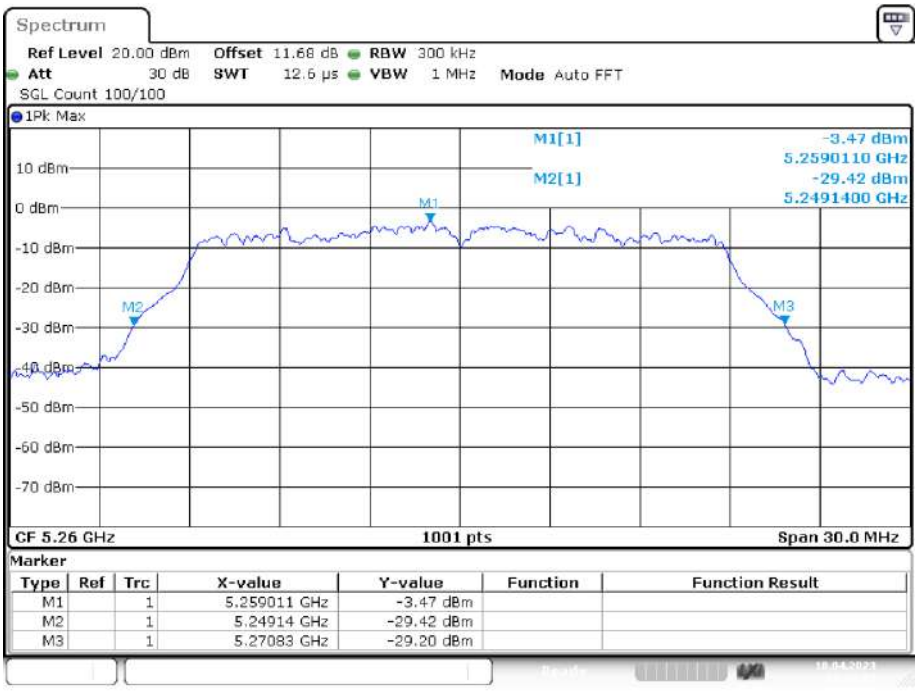
Date: 15.MAR.2023 14:45:36

-26dB Bandwidth NVNT ac80 5290MHz Ant1



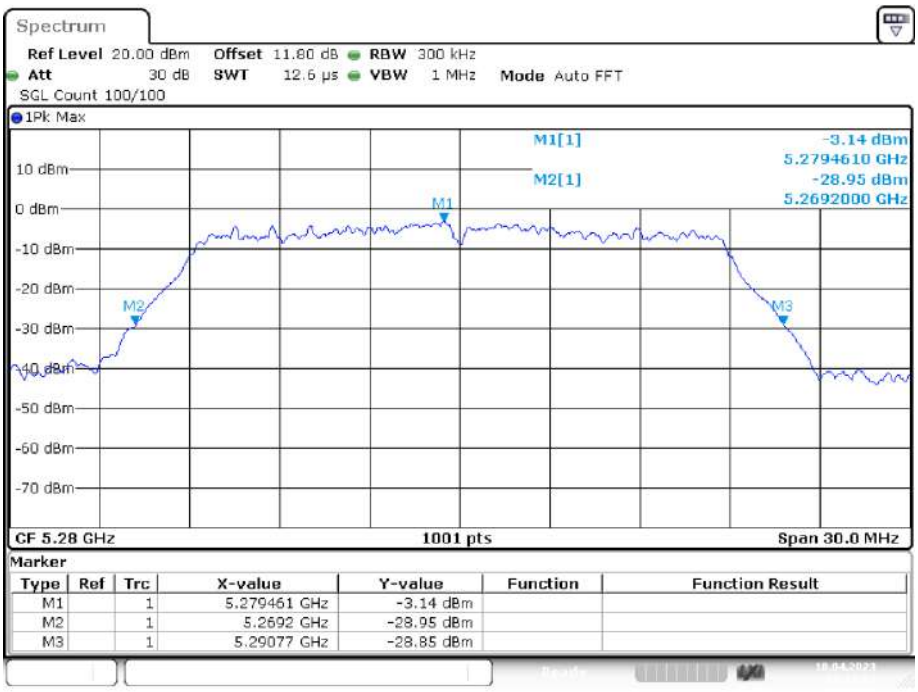
Date: 15.MAR.2023 14:54:57

-26dB Bandwidth NVNT ax20 5260MHz Ant1



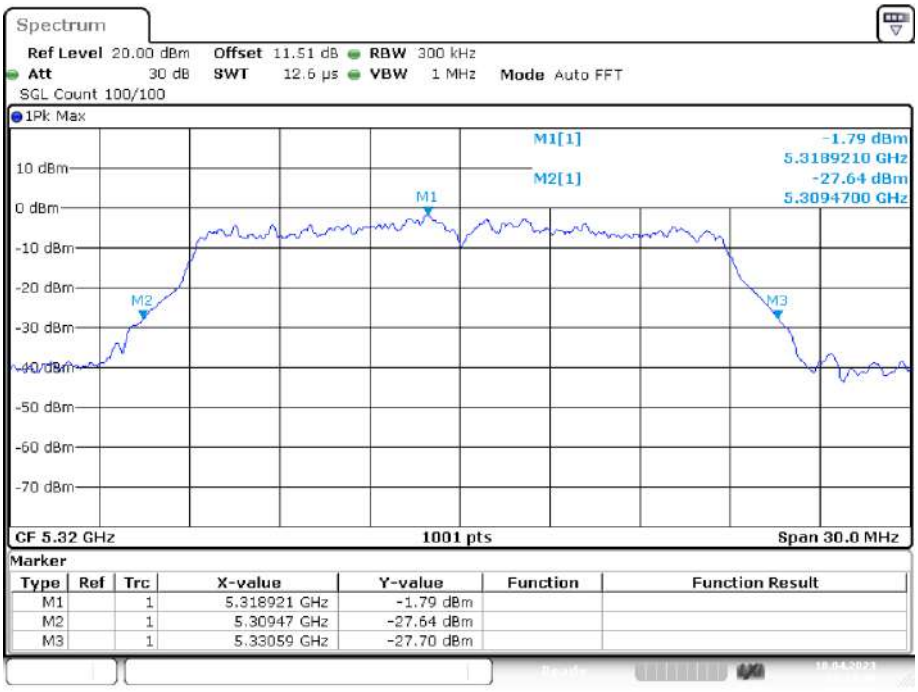
Date: 18.APR.2023 10:10:33

-26dB Bandwidth NVNT ax20 5280MHz Ant1



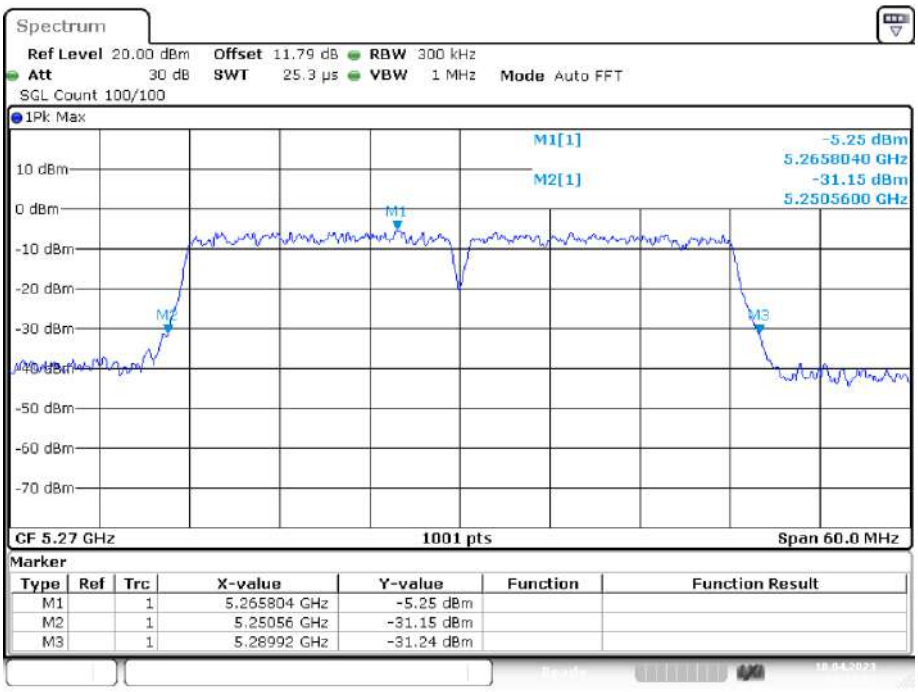
Date: 18.APR.2023 10:12:30

-26dB Bandwidth NVNT ax20 5320MHz Ant1



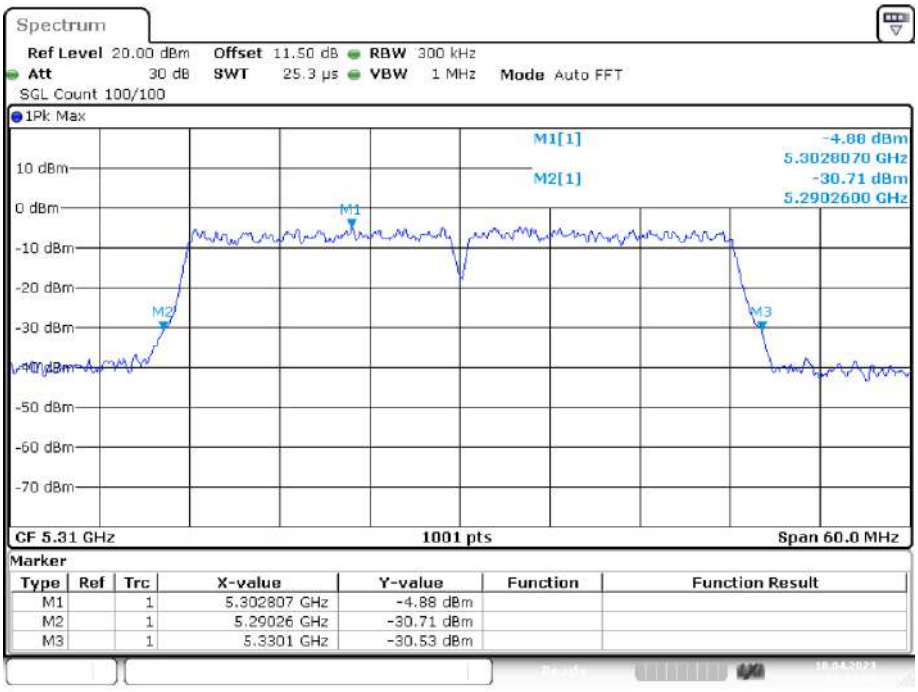
Date: 18.APR.2023 10:14:50

-26dB Bandwidth NVNT ax40 5270MHz Ant1



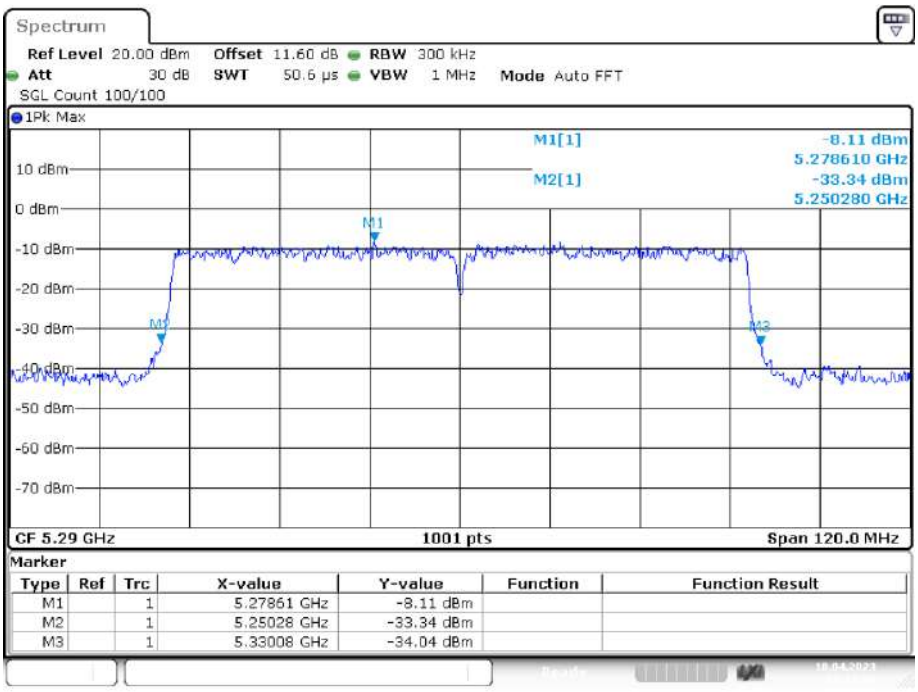
Date: 18.APR.2023 10:17:21

-26dB Bandwidth NVNT ax40 5310MHz Ant1



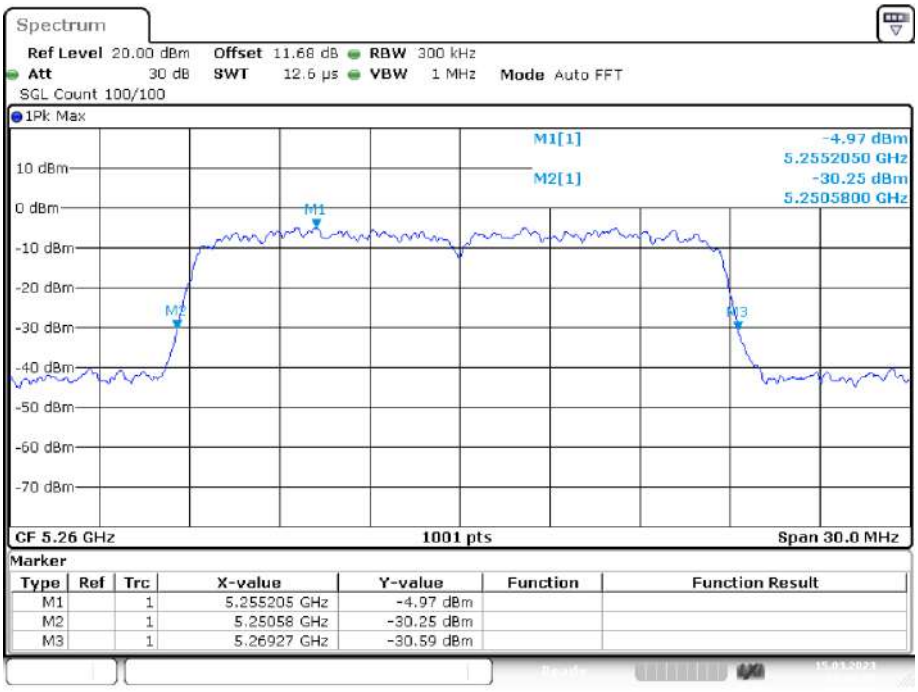
Date: 18.APR.2023 10:19:40

-26dB Bandwidth NVNT ax80 5290MHz Ant1



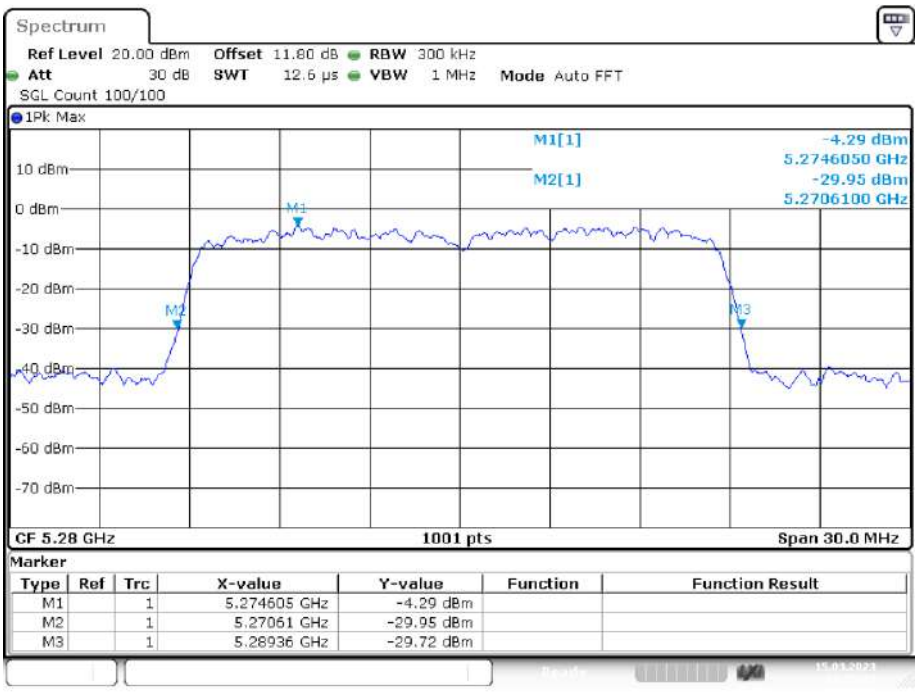
Date: 18.APR.2023 10:22:56

-26dB Bandwidth NVNT n20 5260MHz Ant1



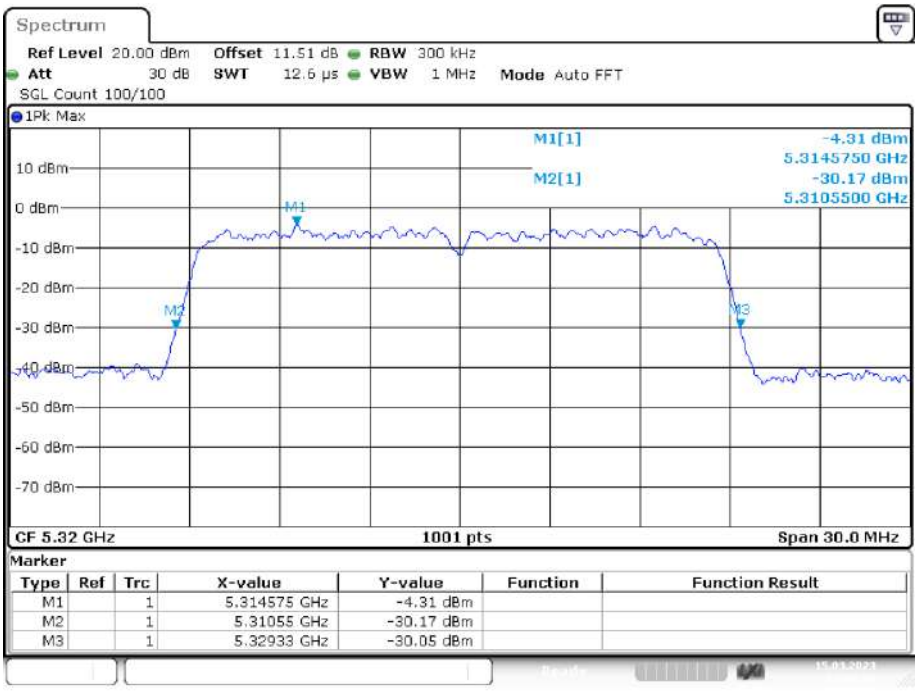
Date: 15.MAR.2023 13:40:35

-26dB Bandwidth NVNT n20 5280MHz Ant1



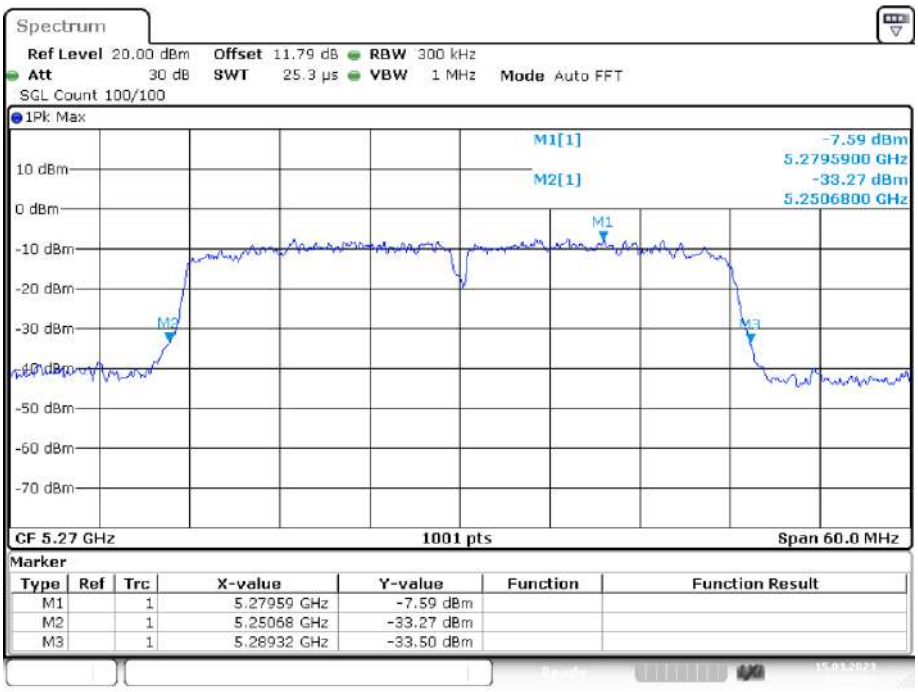
Date: 15.MAR.2023 13:52:28

-26dB Bandwidth NVNT n20 5320MHz Ant1



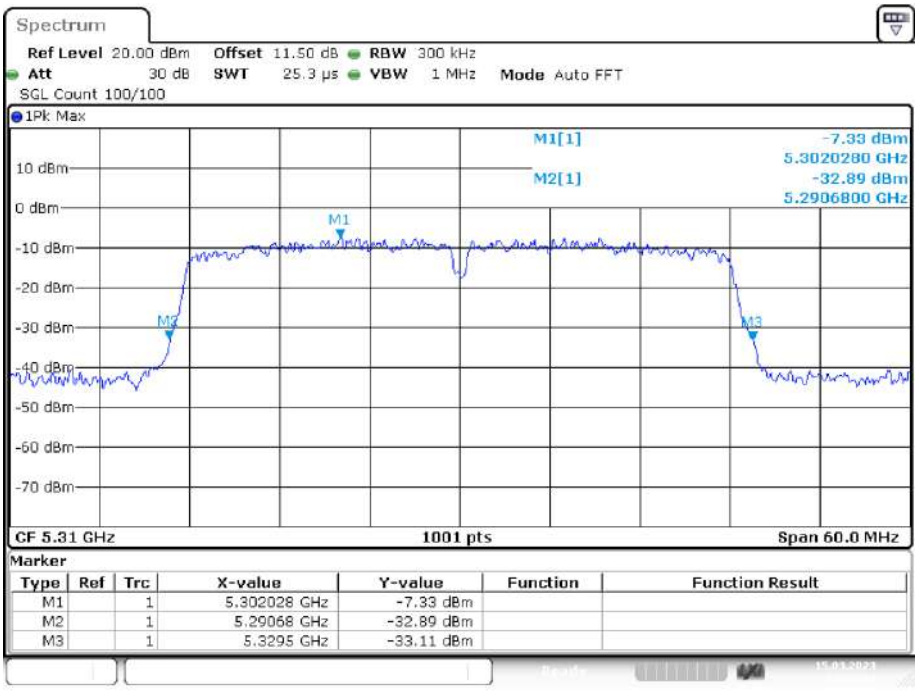
Date: 15.MAR.2023 14:00:05

-26dB Bandwidth NVNT n40 5270MHz Ant1



Date: 15.MAR.2023 14:30:54

-26dB Bandwidth NVNT n40 5310MHz Ant1

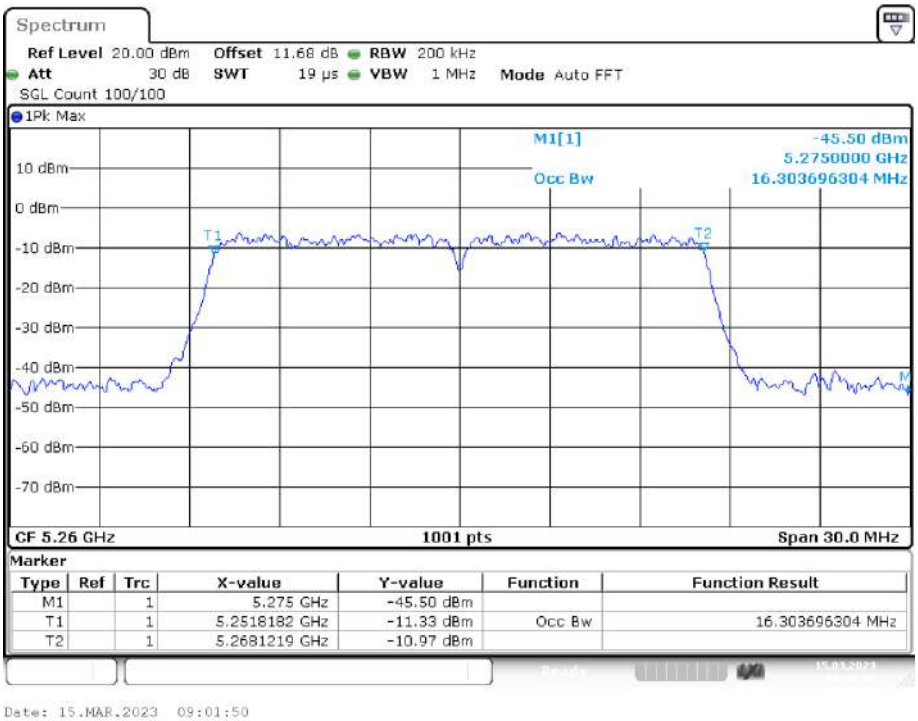


Date: 15.MAR.2023 14:36:29

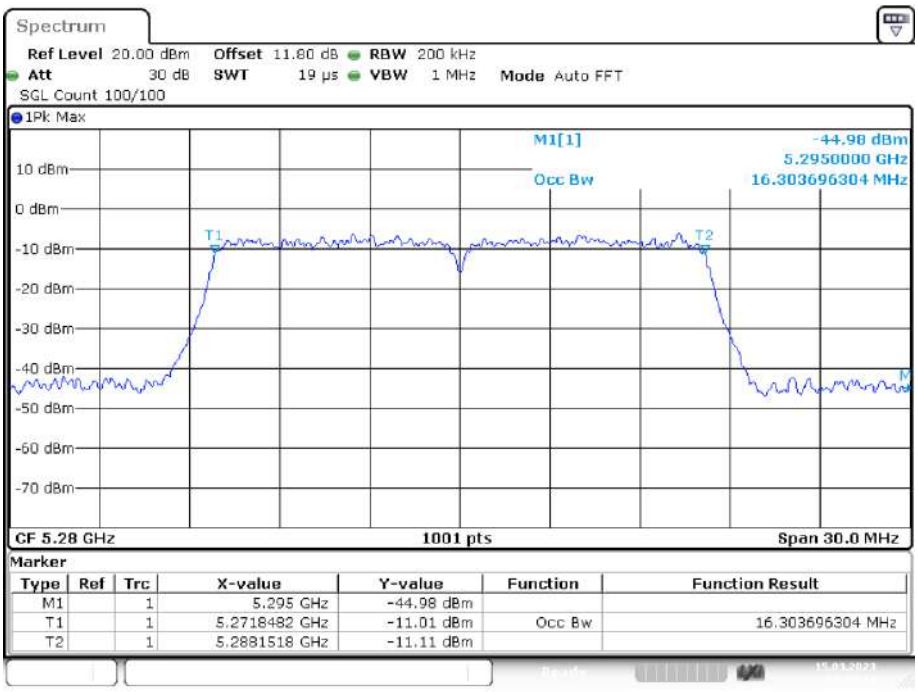
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.304
NVNT	a	5280	Ant1	16.304
NVNT	a	5320	Ant1	16.334
NVNT	ac20	5260	Ant1	17.263
NVNT	ac20	5280	Ant1	17.233
NVNT	ac20	5320	Ant1	17.203
NVNT	ac40	5270	Ant1	35.904
NVNT	ac40	5310	Ant1	35.844
NVNT	ac80	5290	Ant1	75.285
NVNT	ax20	5260	Ant1	17.712
NVNT	ax20	5280	Ant1	17.772
NVNT	ax20	5320	Ant1	17.832
NVNT	ax40	5270	Ant1	36.444
NVNT	ax40	5310	Ant1	36.264
NVNT	ax80	5290	Ant1	75.764
NVNT	n20	5260	Ant1	17.233
NVNT	n20	5280	Ant1	17.203
NVNT	n20	5320	Ant1	17.233
NVNT	n40	5270	Ant1	35.844
NVNT	n40	5310	Ant1	35.784

OBW NVNT a 5260MHz Ant1

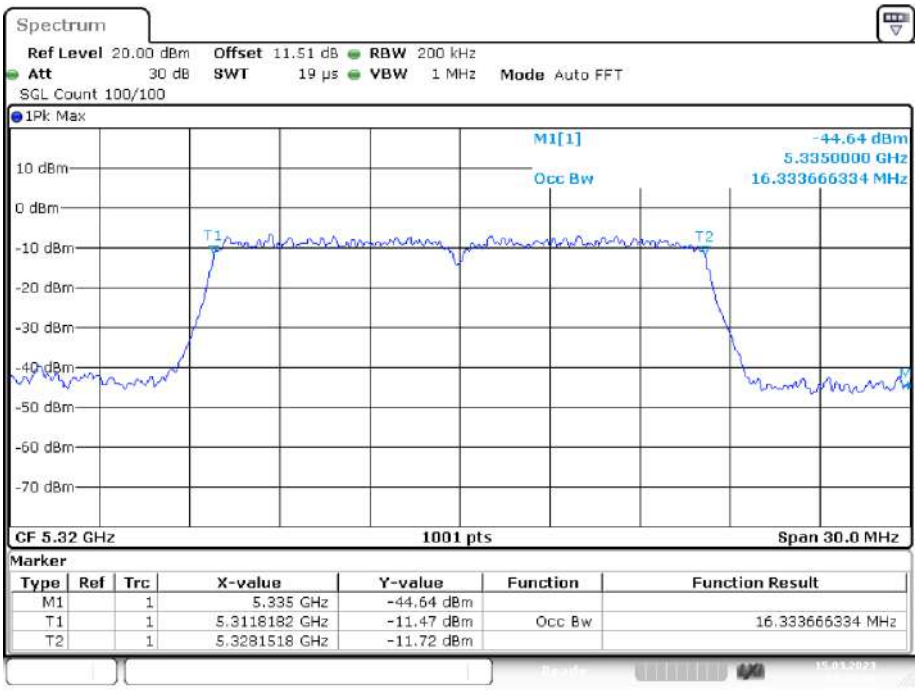


OBW NVNT a 5280MHz Ant1



Date: 15.MAR.2023 12:33:11

OBW NVNT a 5320MHz Ant1



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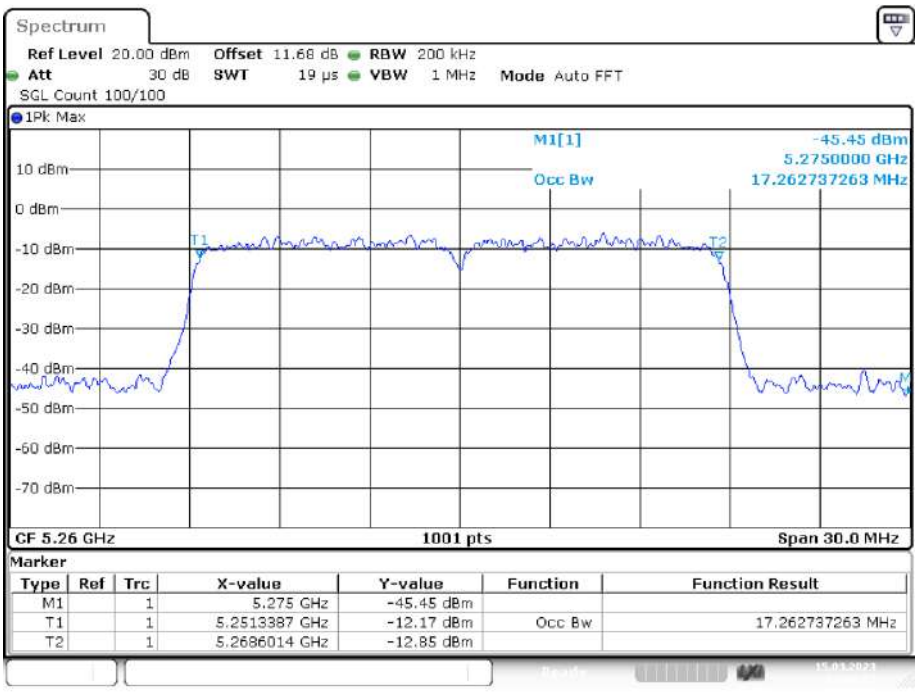
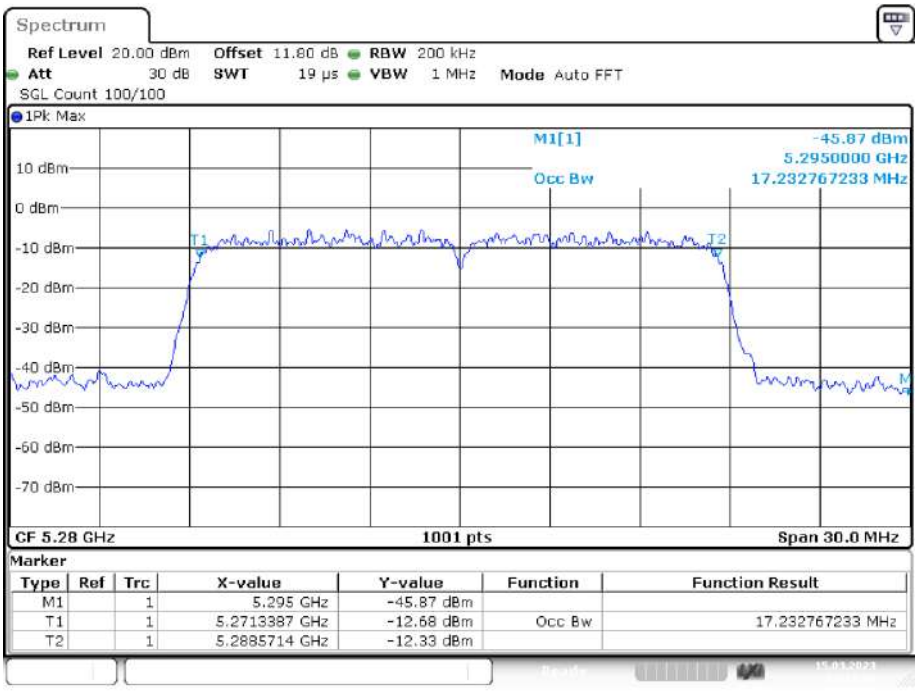
OBW NVNT ac20 5260MHz Ant1



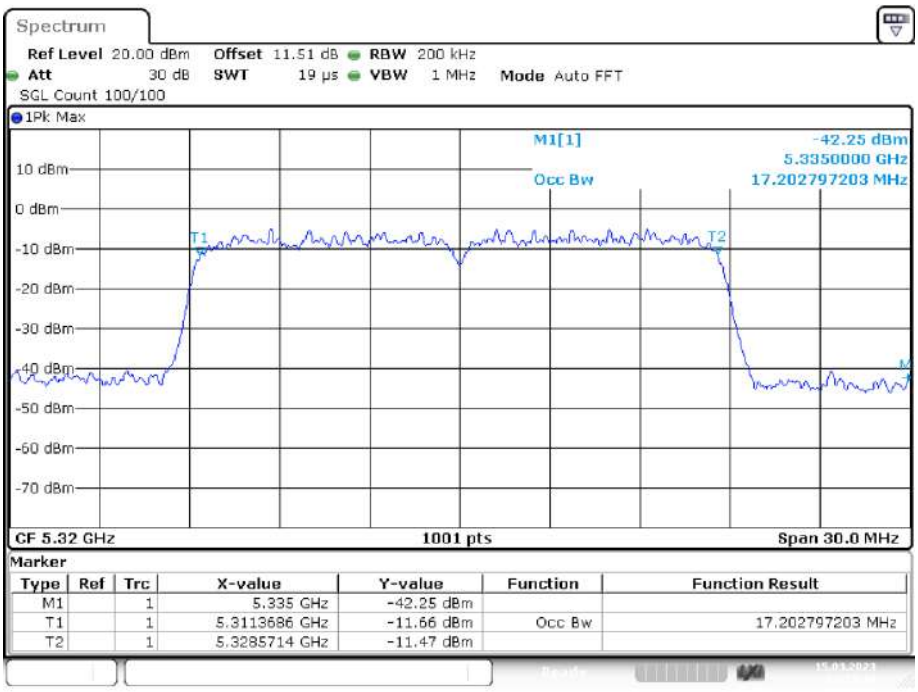
Date: 15.MAR.2023 14:07:27

OBW NVNT ac20 5280MHz Ant1



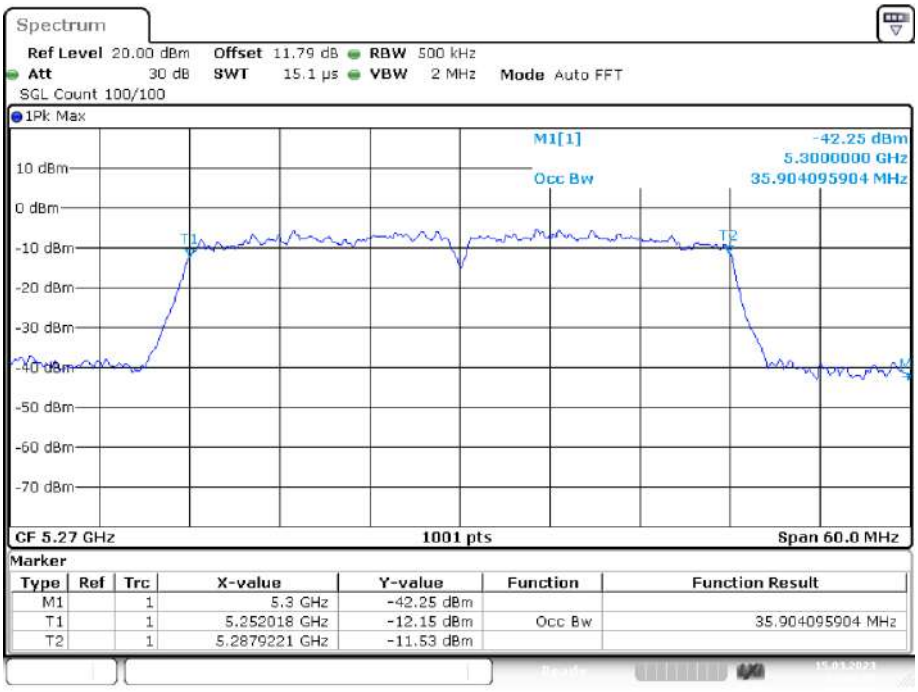
Date: 15.MAR.2023 14:11:26

OBW NVNT ac20 5320MHz Ant1



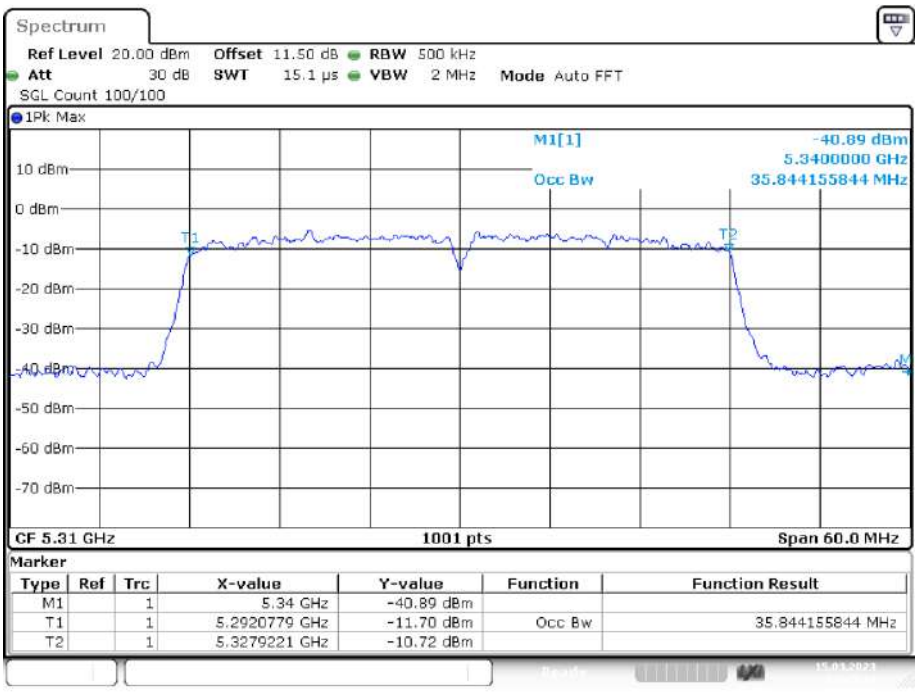
Date: 15.MAR.2023 14:15:19

OBW NVNT ac40 5270MHz Ant1



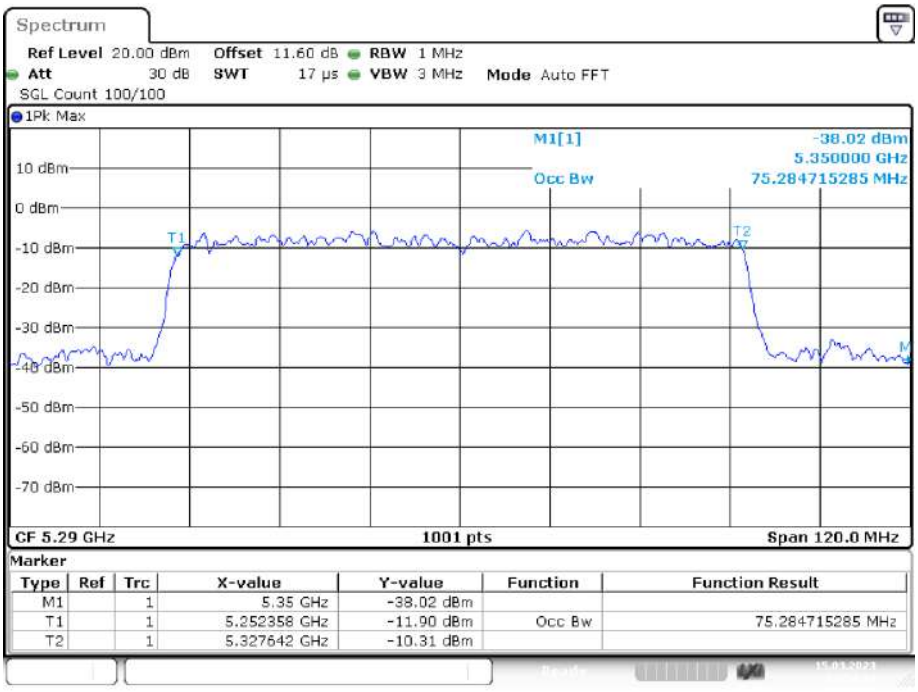
Date: 15.MAR.2023 14:40:35

OBW NVNT ac40 5310MHz Ant1



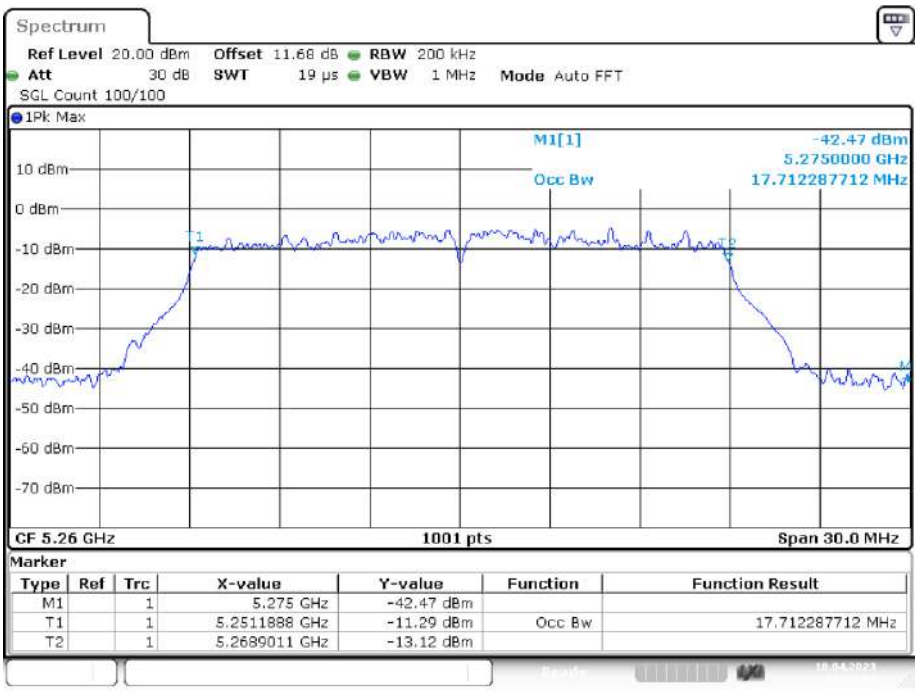
Date: 15.MAR.2023 14:45:17

OBW NVNT ac80 5290MHz Ant1

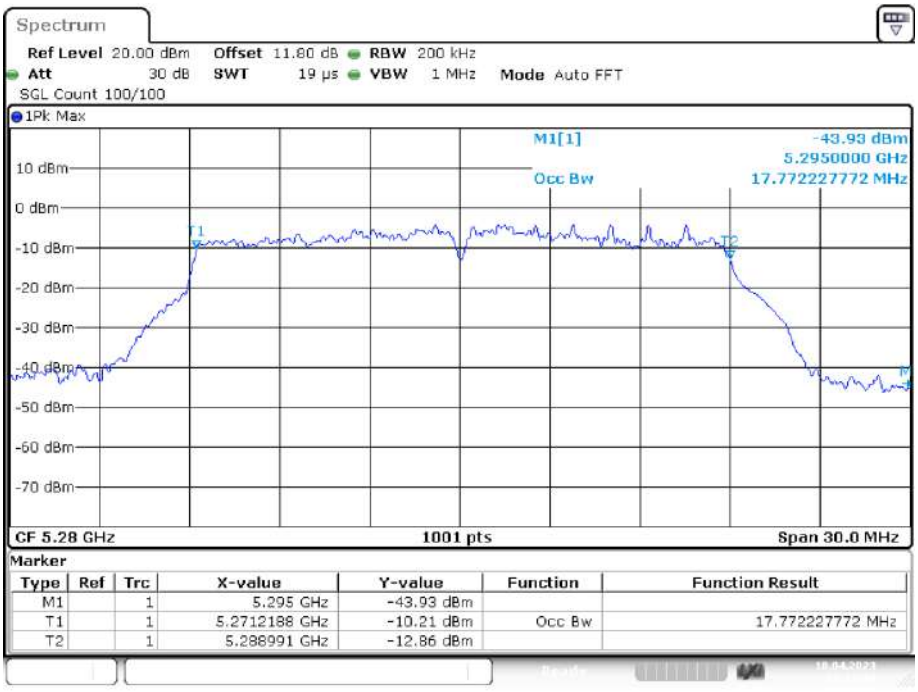


Date: 15.MAR.2023 14:54:35

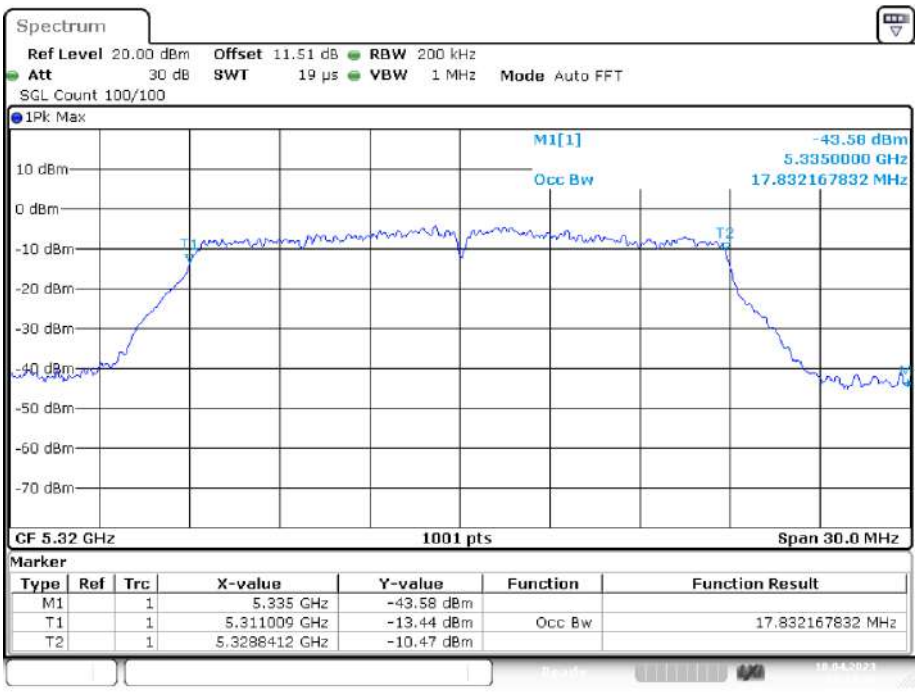
OBW NVNT ax20 5260MHz Ant1



OBW NVNT ax20 5280MHz Ant1

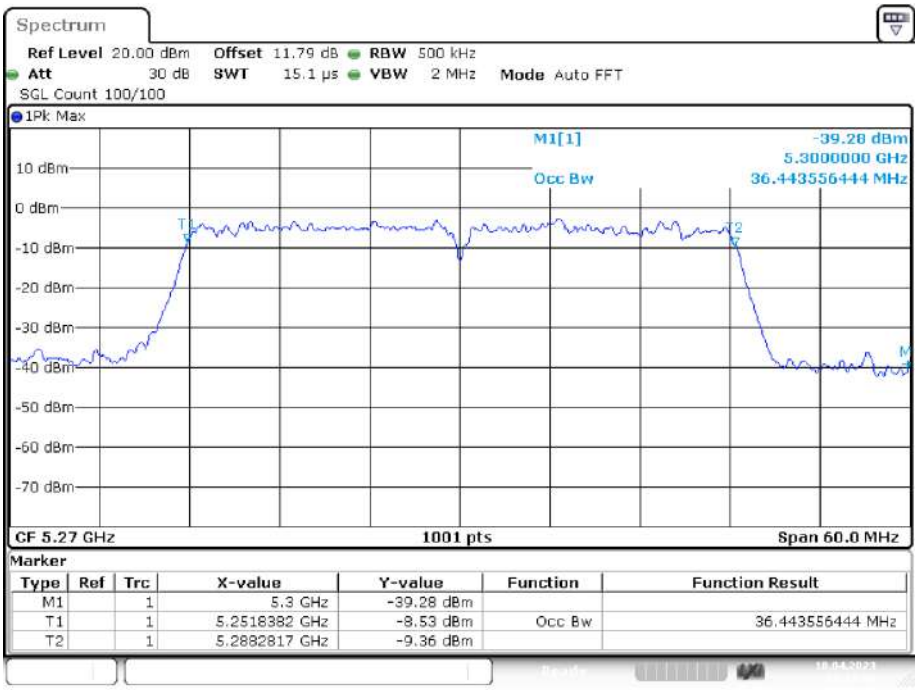


OBW NVNT ax20 5320MHz Ant1



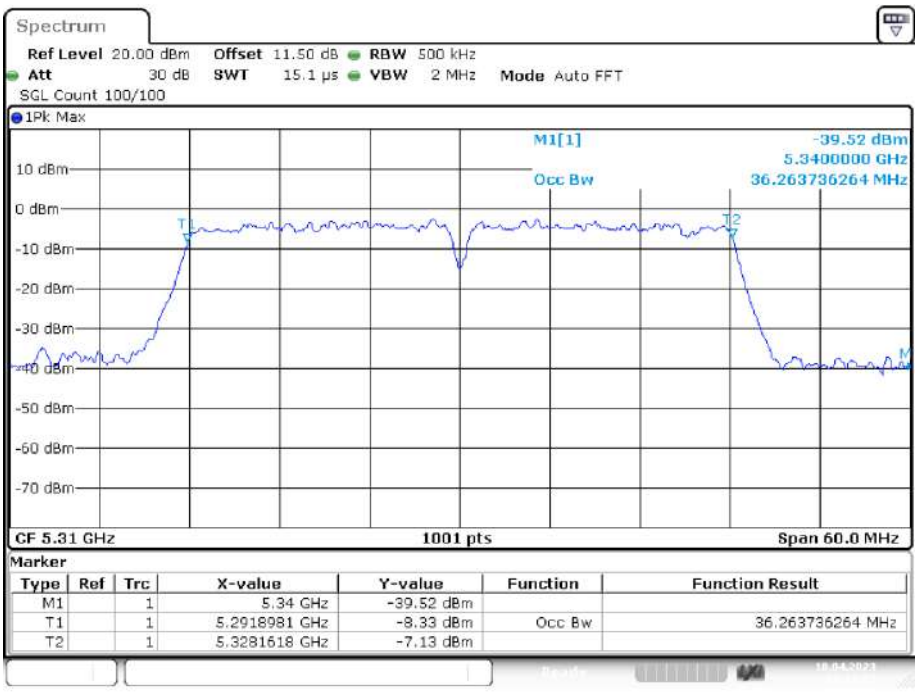
Date: 18.APR.2023 10:14:38

OBW NVNT ax40 5270MHz Ant1



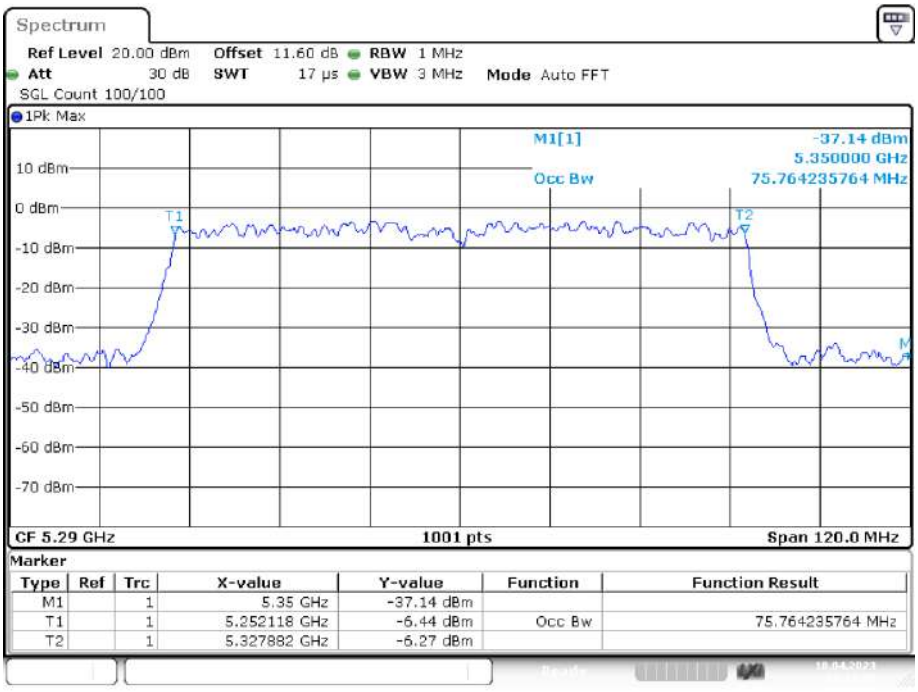
Date: 18.APR.2023 10:17:08

OBW NVNT ax40 5310MHz Ant1



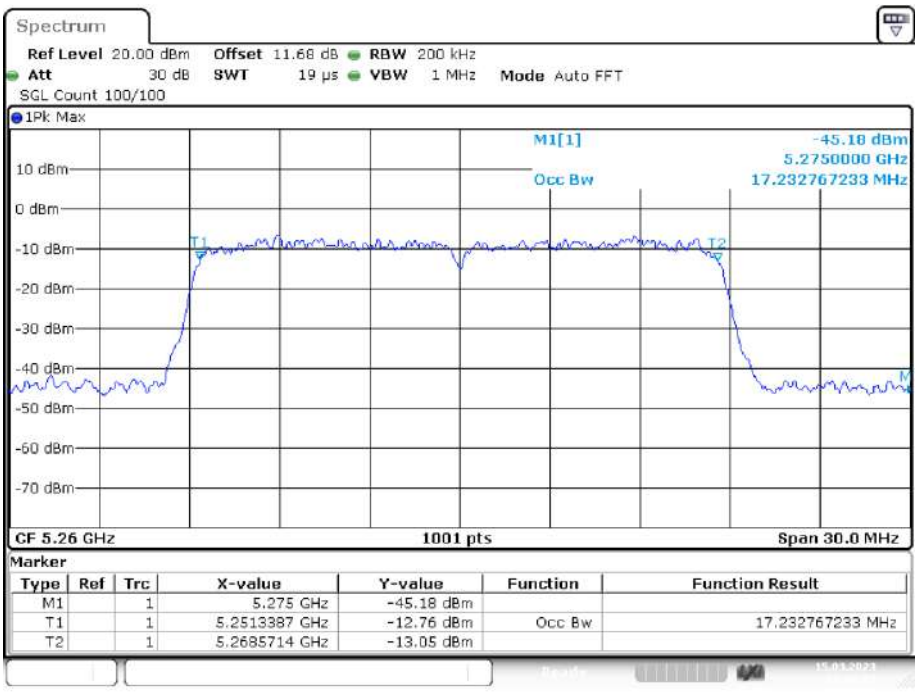
Date: 18.APR.2023 10:19:26

OBW NVNT ax80 5290MHz Ant1



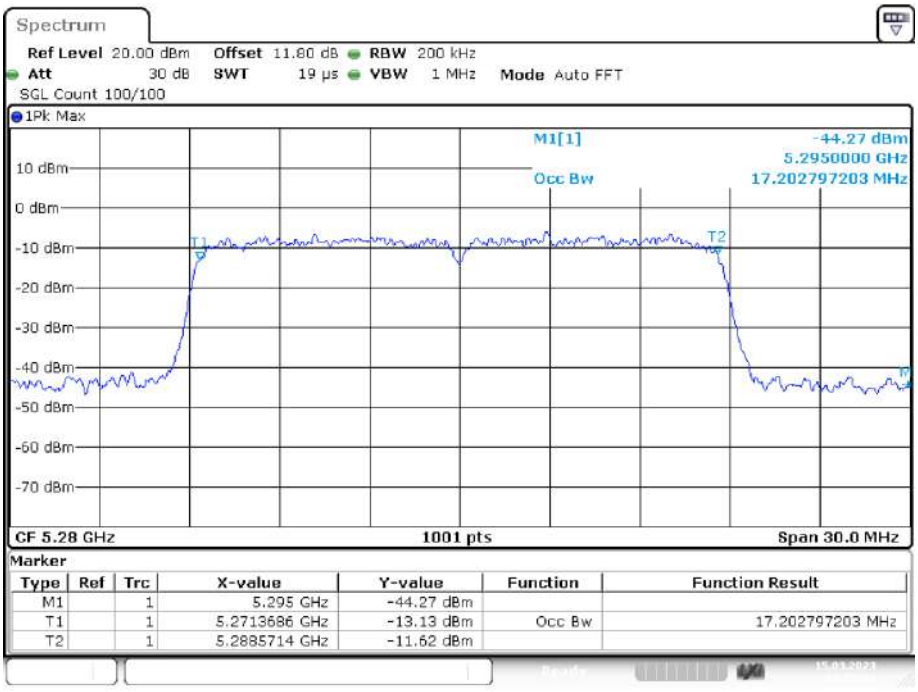
Date: 18.APR.2023 10:22:44

OBW NVNT n20 5260MHz Ant1



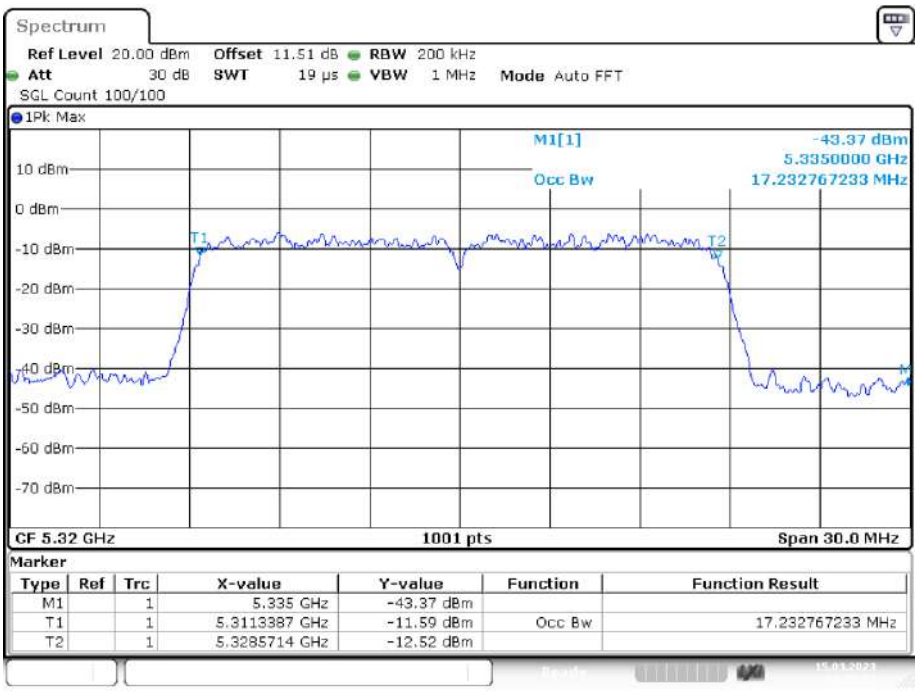
Date: 15.MAR.2023 13:40:23

OBW NVNT n20 5280MHz Ant1



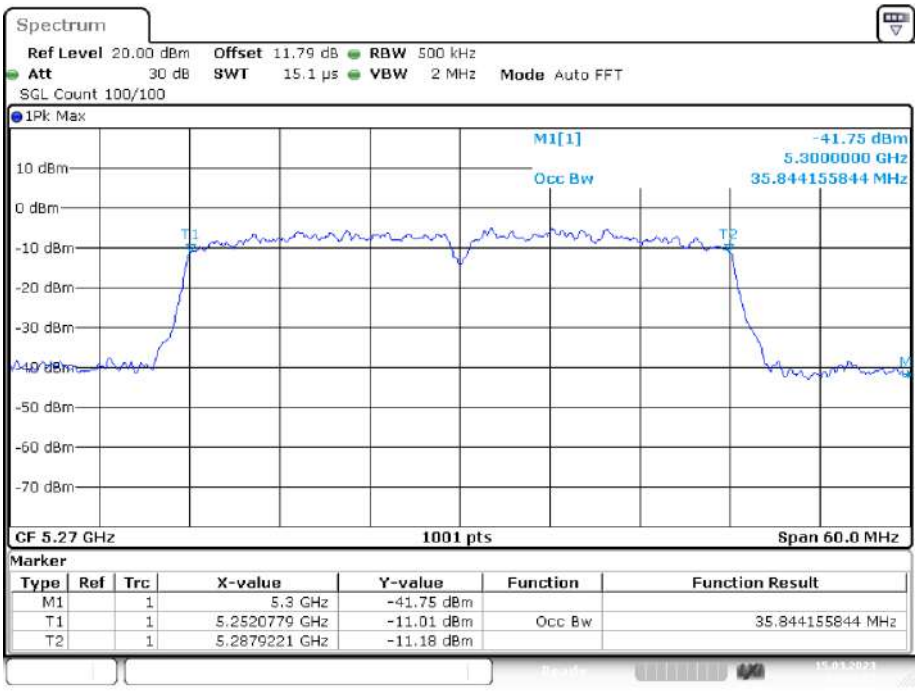
Date: 15.MAR.2023 13:52:15

OBW NVNT n20 5320MHz Ant1



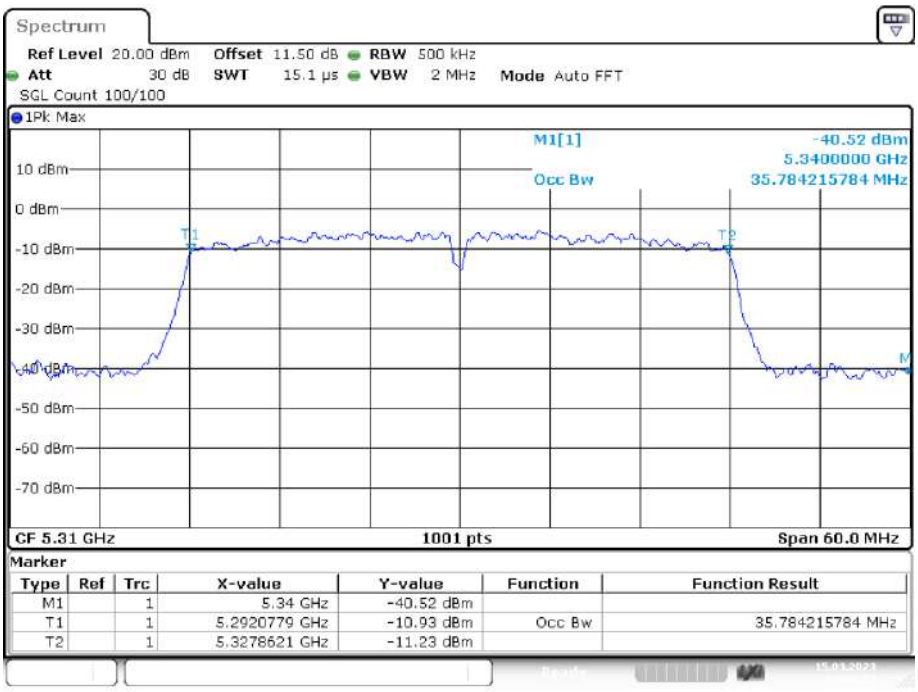
Date: 15.MAR.2023 13:59:52

OBW NVNT n40 5270MHz Ant1



Date: 15.MAR.2023 14:30:33

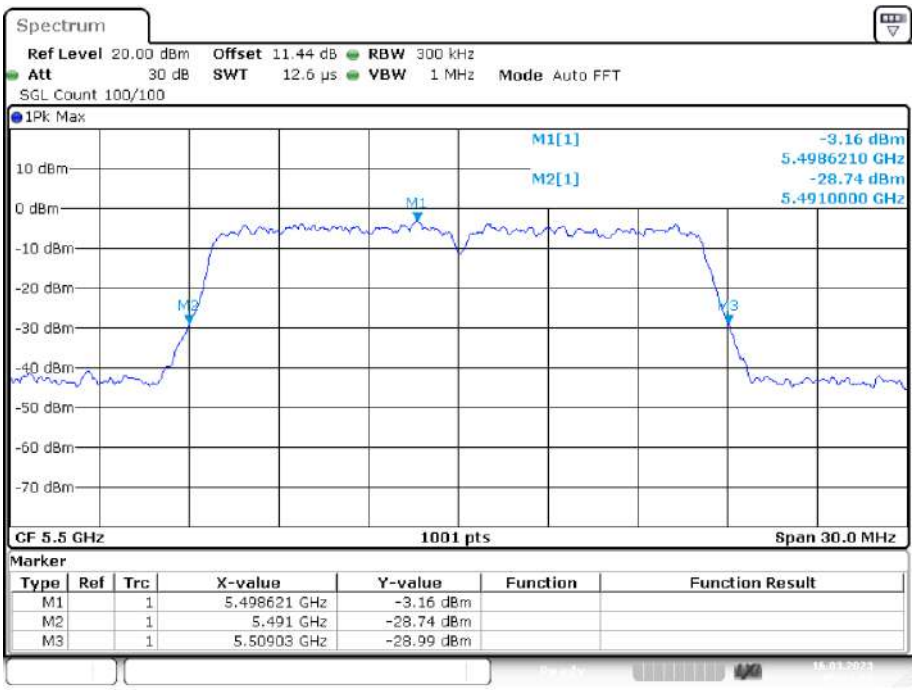
OBW NVNT n40 5310MHz Ant1



Band 3 (5470-5725 MHz):
-26dB Bandwidth

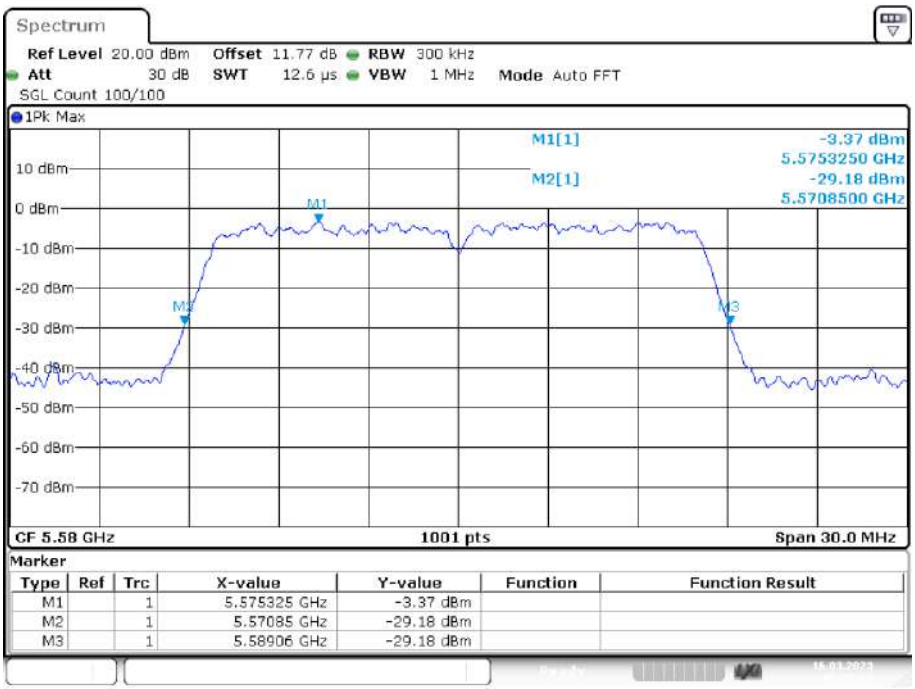
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	18.03	0.5	Pass
NVNT	a	5580	Ant1	18.21	0.5	Pass
NVNT	a	5700	Ant1	18	0.5	Pass
NVNT	ac20	5500	Ant1	18.75	0.5	Pass
NVNT	ac20	5580	Ant1	18.69	0.5	Pass
NVNT	ac20	5700	Ant1	18.66	0.5	Pass
NVNT	ac40	5510	Ant1	39.42	0.5	Pass
NVNT	ac40	5670	Ant1	39.9	0.5	Pass
NVNT	ac80	5530	Ant1	79.56	0.5	Pass
NVNT	ax20	5500	Ant1	21.06	0.5	Pass
NVNT	ax20	5580	Ant1	21.03	0.5	Pass
NVNT	ax20	5700	Ant1	21.42	0.5	Pass
NVNT	ax40	5510	Ant1	39.06	0.5	Pass
NVNT	ax40	5670	Ant1	39.36	0.5	Pass
NVNT	ax80	5530	Ant1	79.92	0.5	Pass
NVNT	n20	5500	Ant1	18.84	0.5	Pass
NVNT	n20	5580	Ant1	18.75	0.5	Pass
NVNT	n20	5700	Ant1	18.81	0.5	Pass
NVNT	n40	5510	Ant1	38.22	0.5	Pass
NVNT	n40	5670	Ant1	38.28	0.5	Pass

-26dB Bandwidth NVNT a 5500MHz Ant1



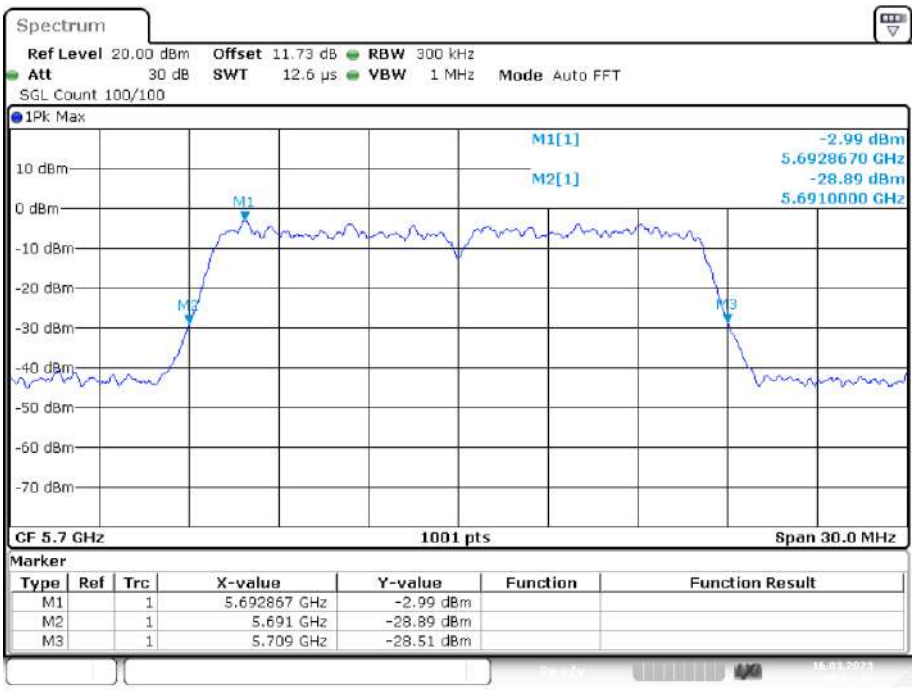
Date: 16.MAR.2023 05:44:08

-26dB Bandwidth NVNT a 5580MHz Ant1

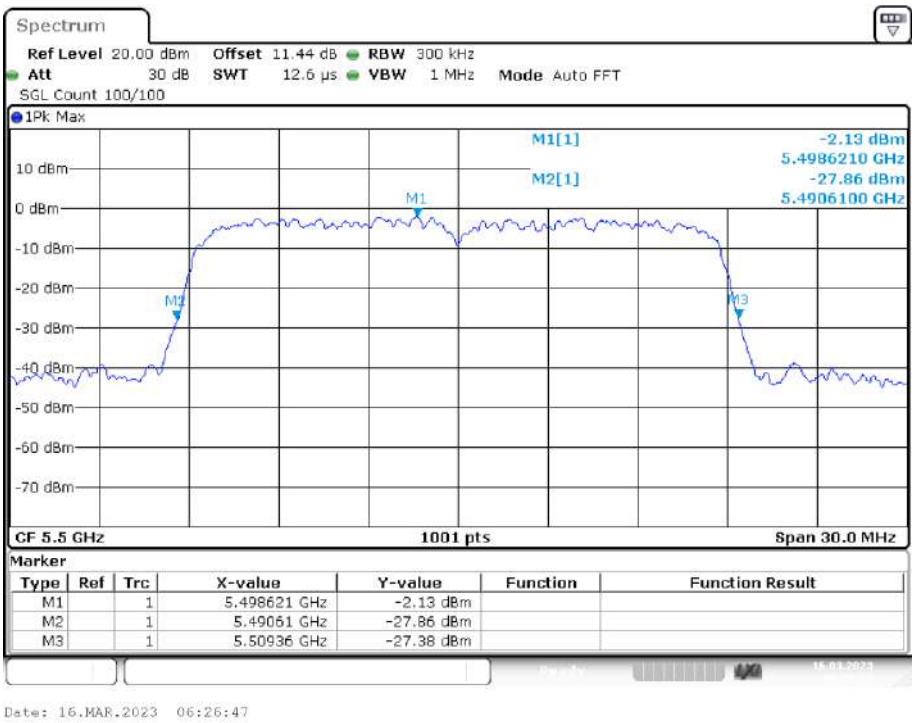


Date: 16.MAR.2023 05:47:23

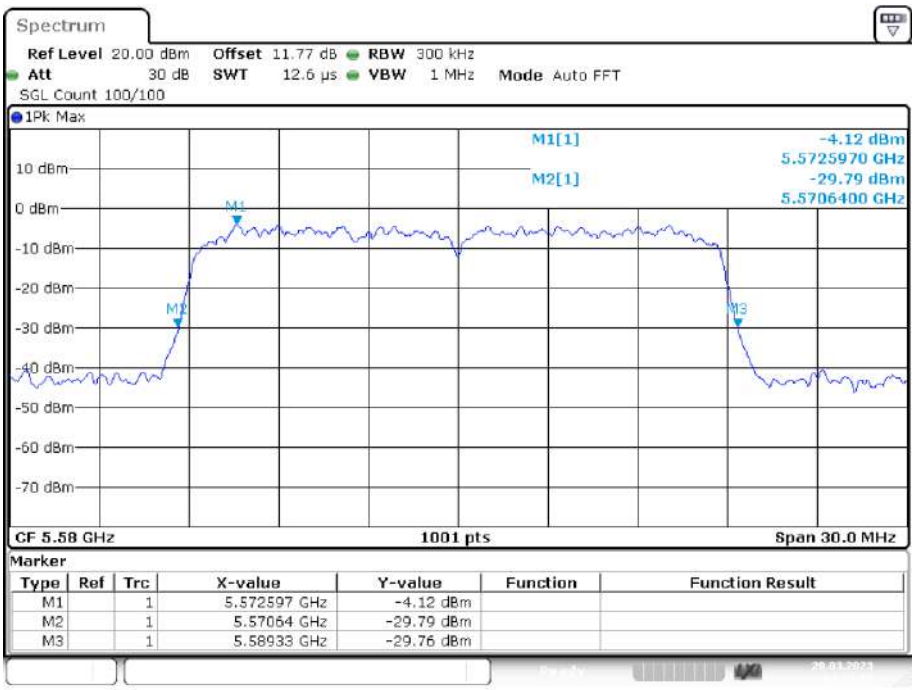
-26dB Bandwidth NVNT a 5700MHz Ant1



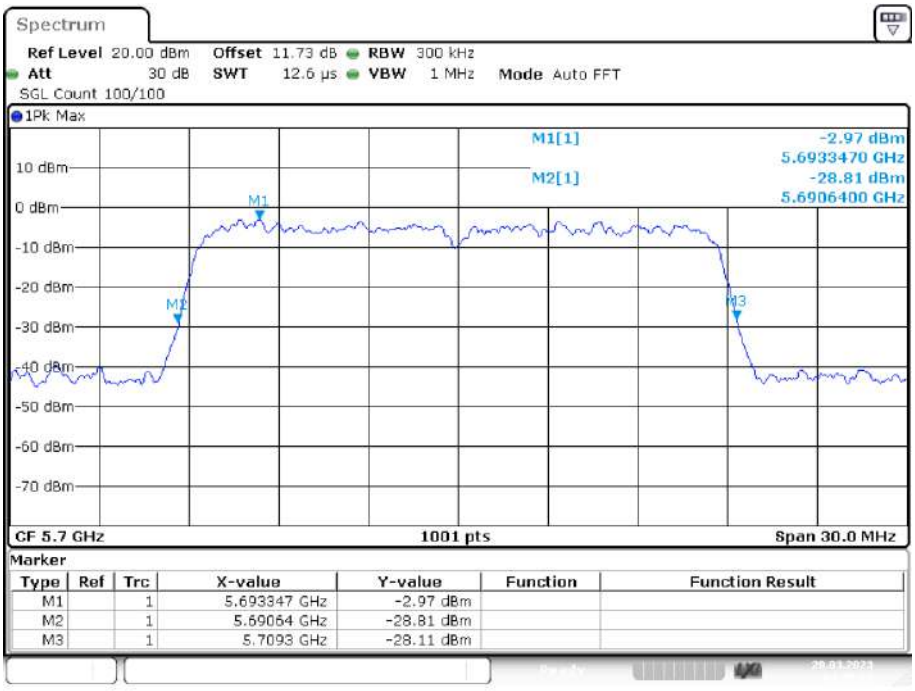
-26dB Bandwidth NVNT ac20 5500MHz Ant1



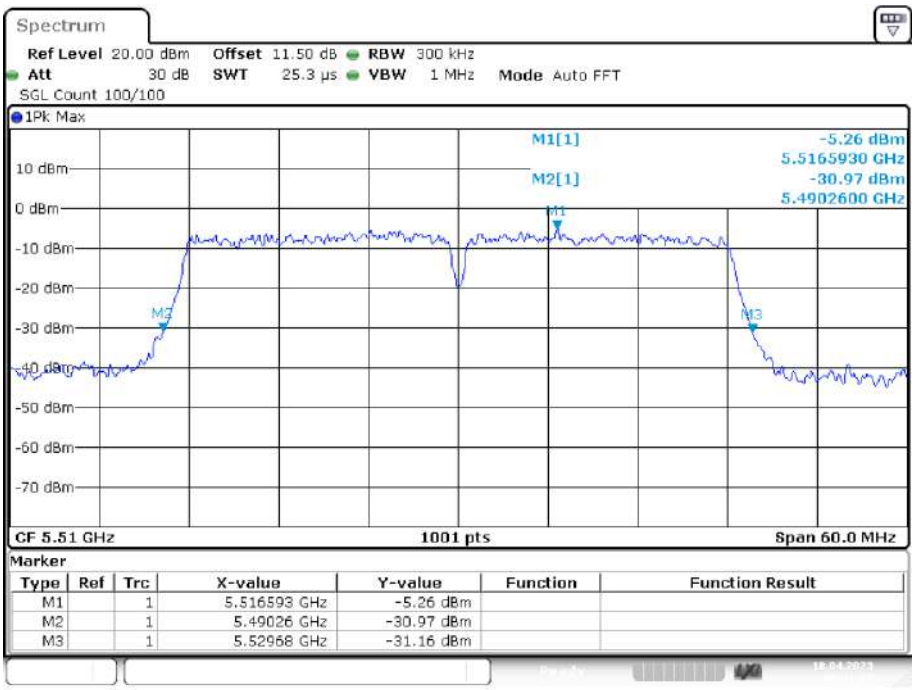
-26dB Bandwidth NVNT ac20 5580MHz Ant1



-26dB Bandwidth NVNT ac20 5700MHz Ant1

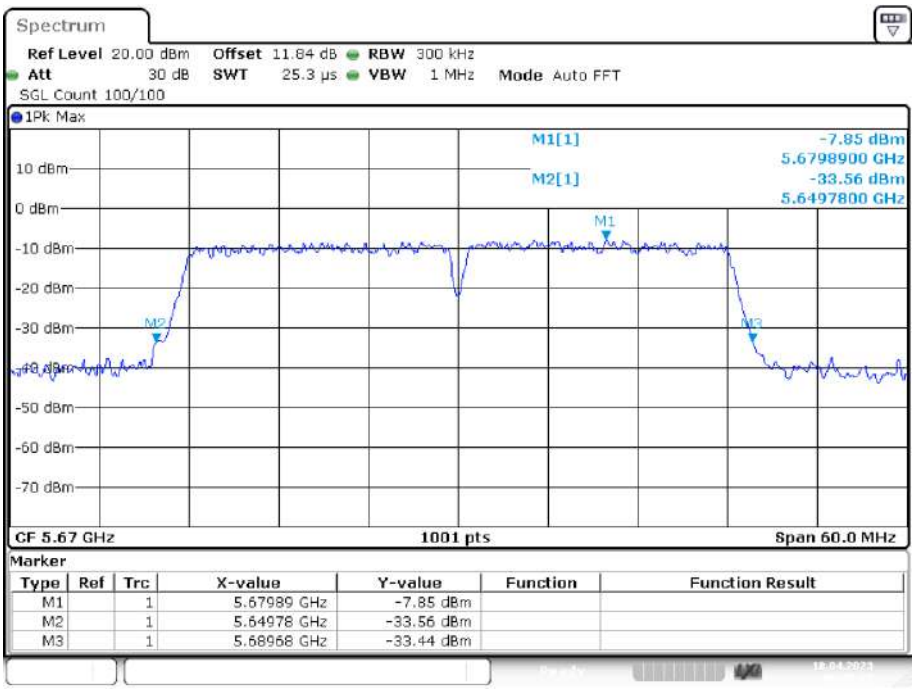


-26dB Bandwidth NVNT ac40 5510MHz Ant1



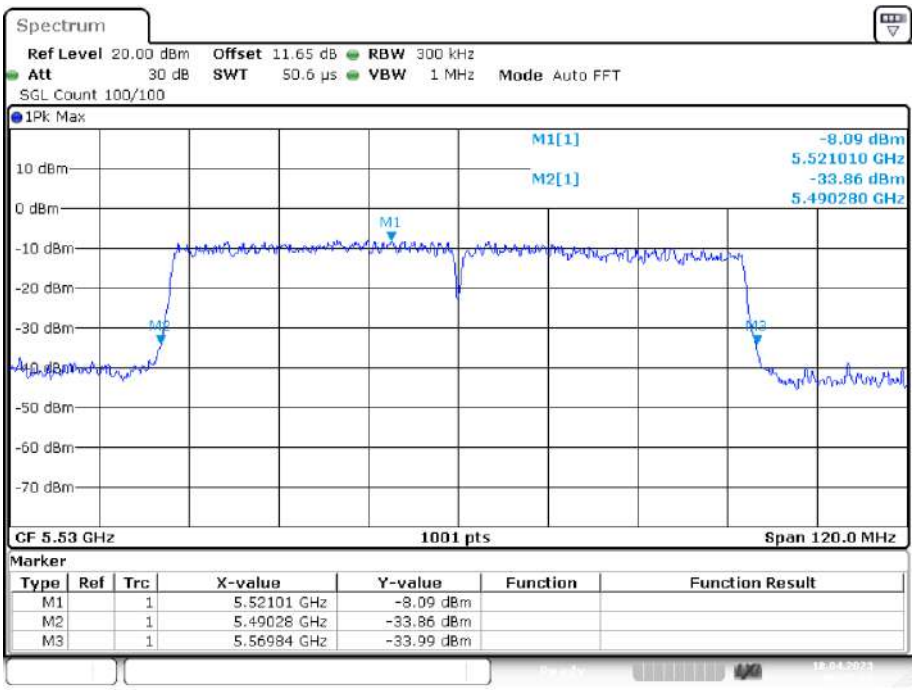
Date: 18.APR.2023 09:41:45

-26dB Bandwidth NVNT ac40 5670MHz Ant1



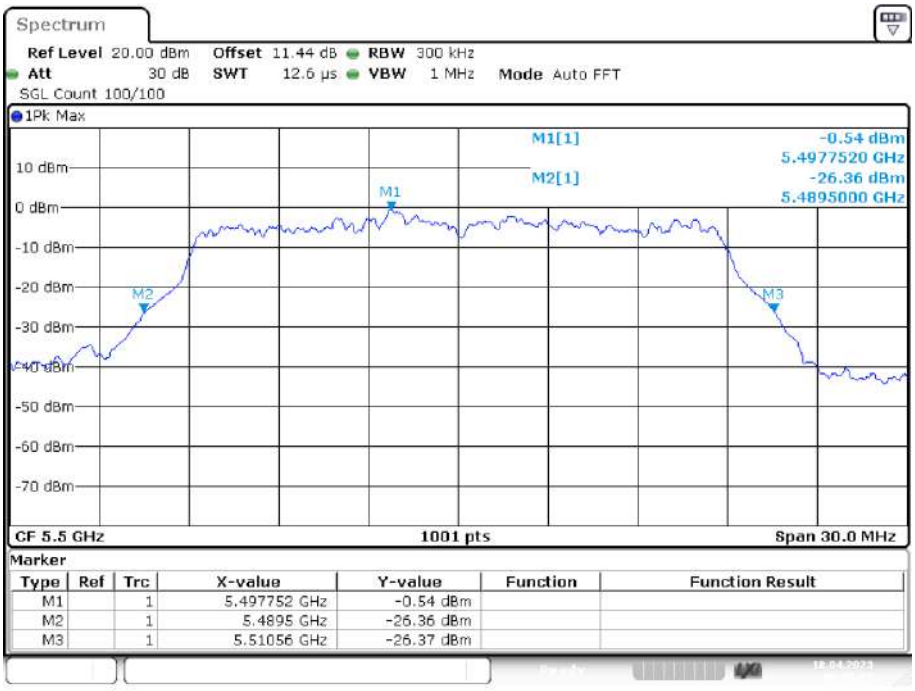
Date: 18.APR.2023 09:45:37

-26dB Bandwidth NVNT ac80 5530MHz Ant1



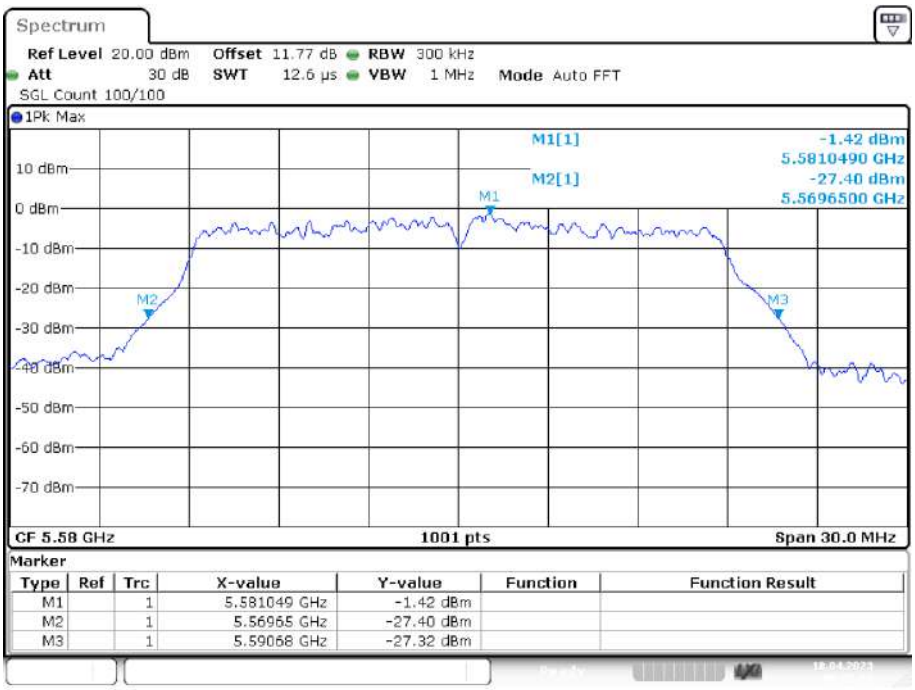
Date: 18.APR.2023 09:47:48

-26dB Bandwidth NVNT ax20 5500MHz Ant1



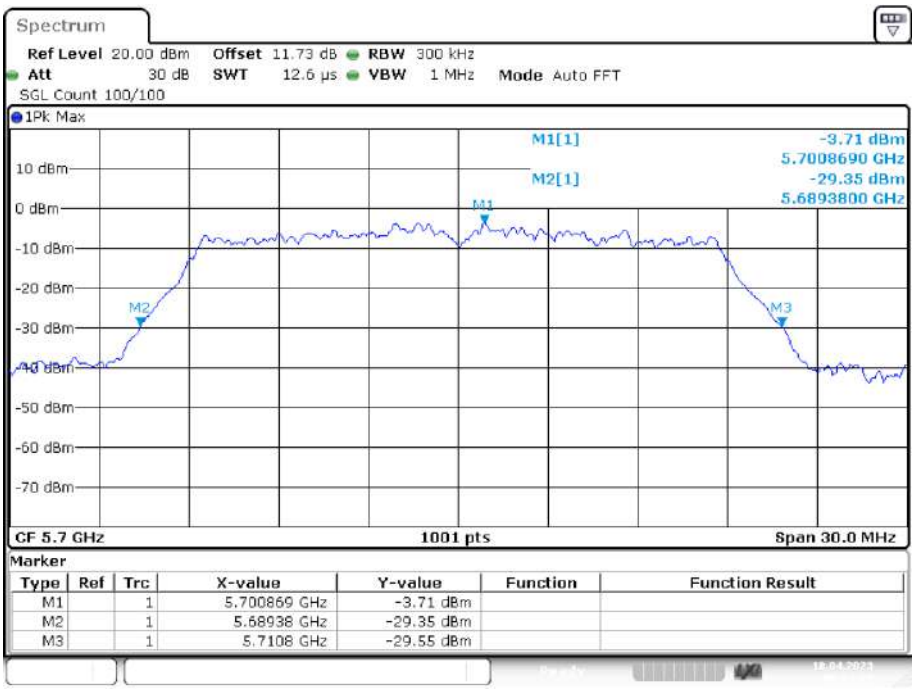
Date: 18.APR.2023 09:50:55

-26dB Bandwidth NVNT ax20 5580MHz Ant1



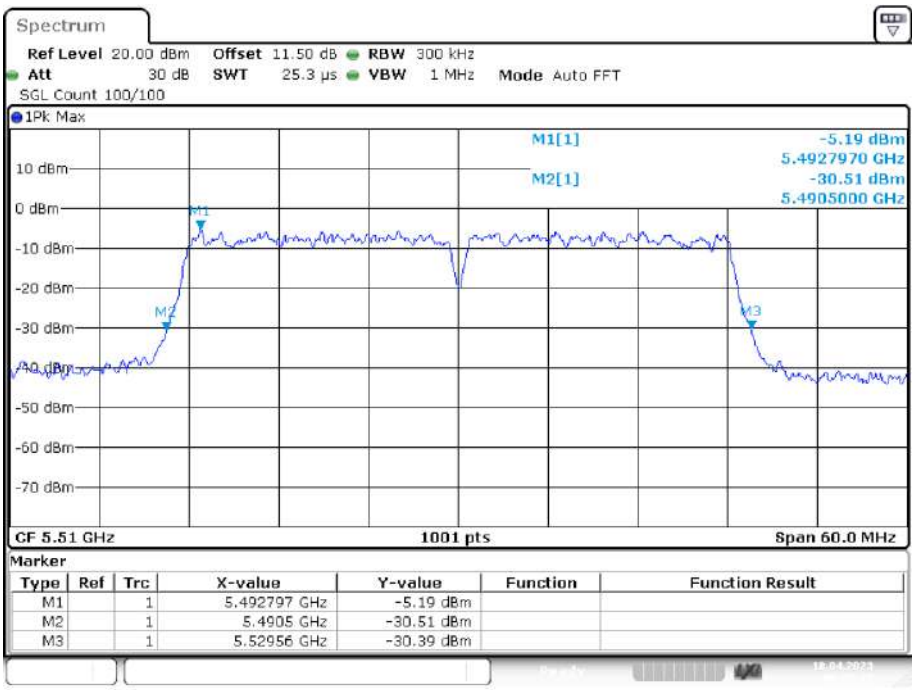
Date: 18.APR.2023 09:52:59

-26dB Bandwidth NVNT ax20 5700MHz Ant1



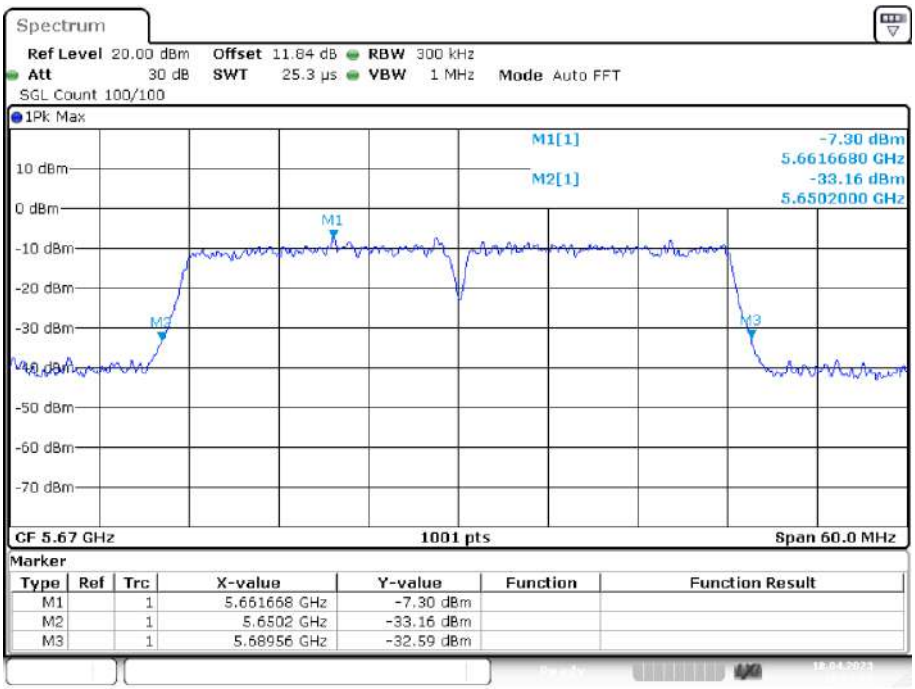
Date: 18.APR.2023 09:54:49

-26dB Bandwidth NVNT ax40 5510MHz Ant1



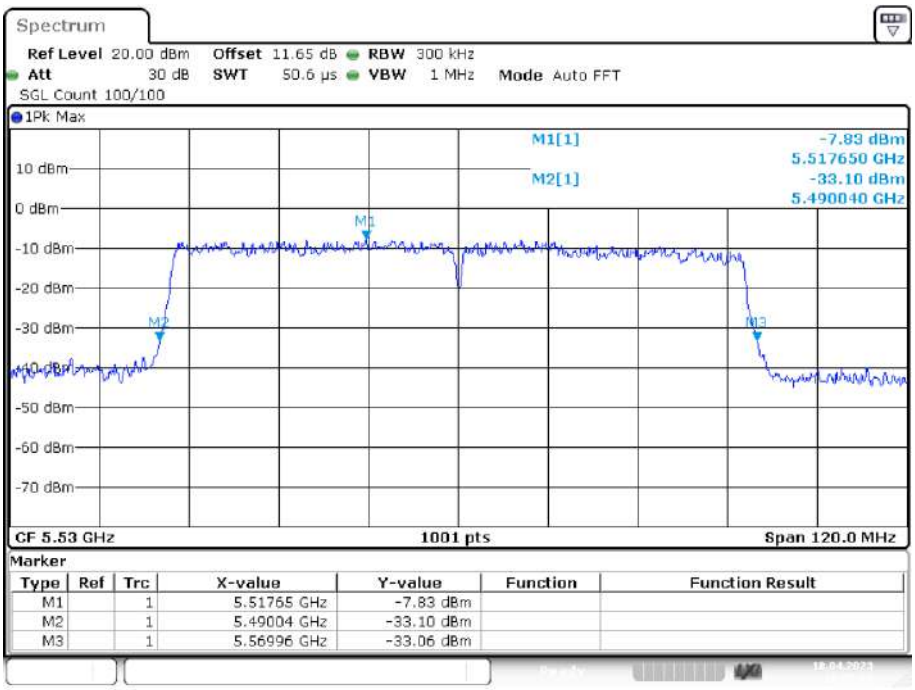
Date: 18.APR.2023 09:57:14

-26dB Bandwidth NVNT ax40 5670MHz Ant1



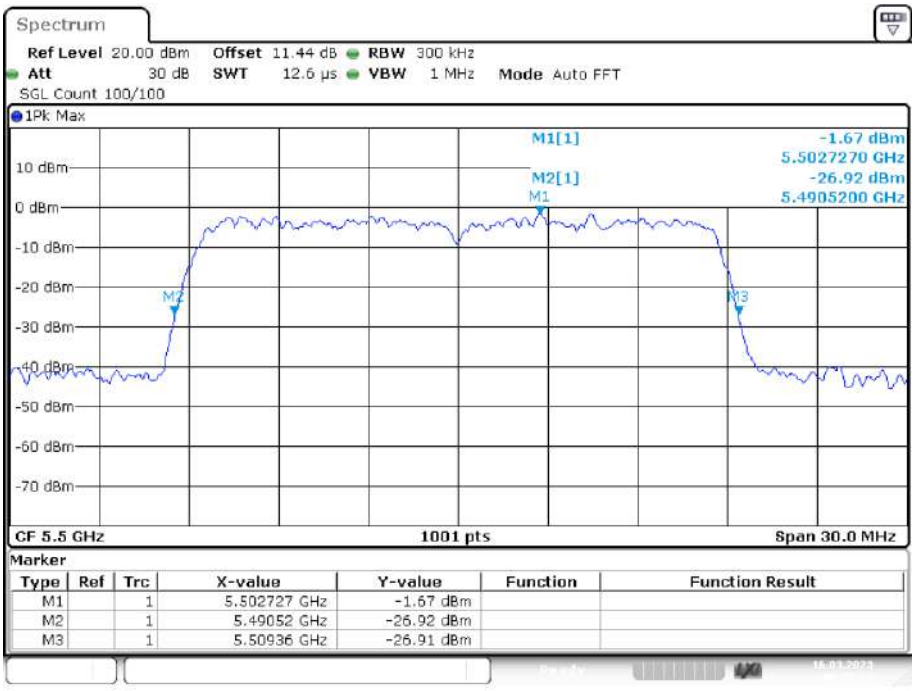
Date: 18.APR.2023 10:01:05

-26dB Bandwidth NVNT ax80 5530MHz Ant1



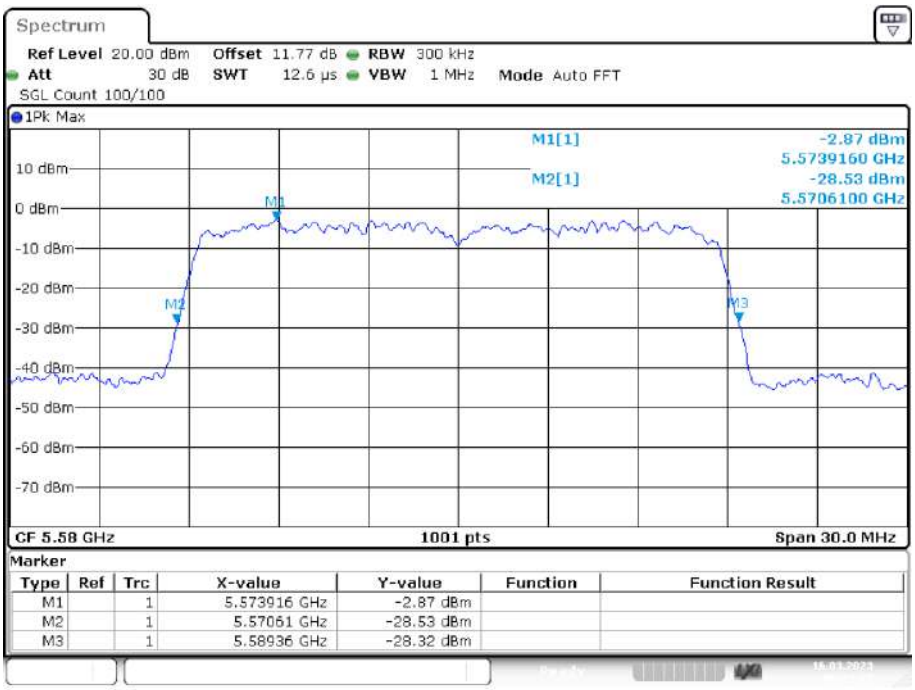
Date: 18.APR.2023 10:05:39

-26dB Bandwidth NVNT n20 5500MHz Ant1



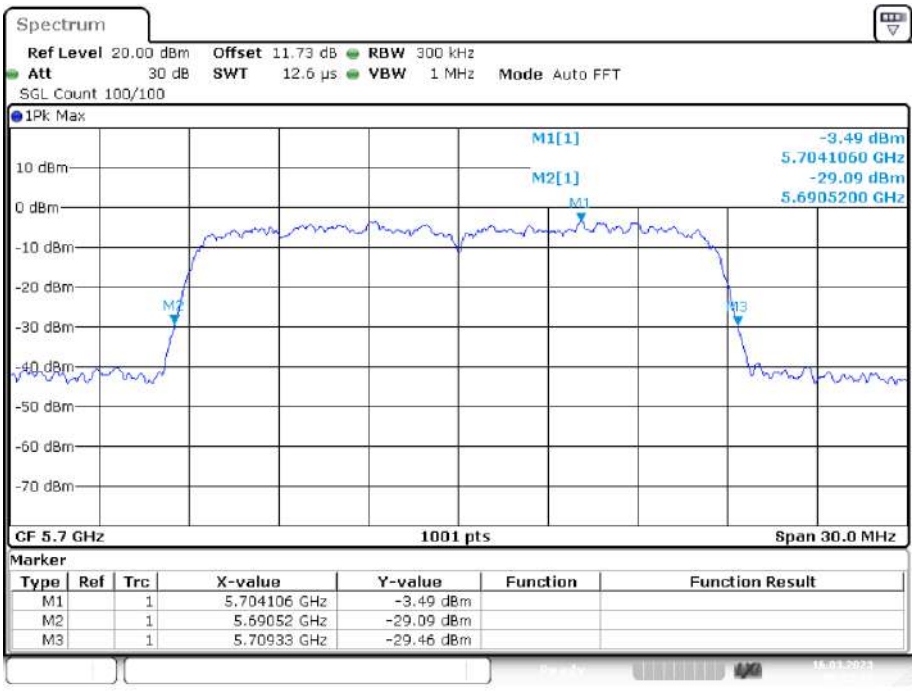
Date: 16.MAR.2023 06:07:19

-26dB Bandwidth NVNT n20 5580MHz Ant1



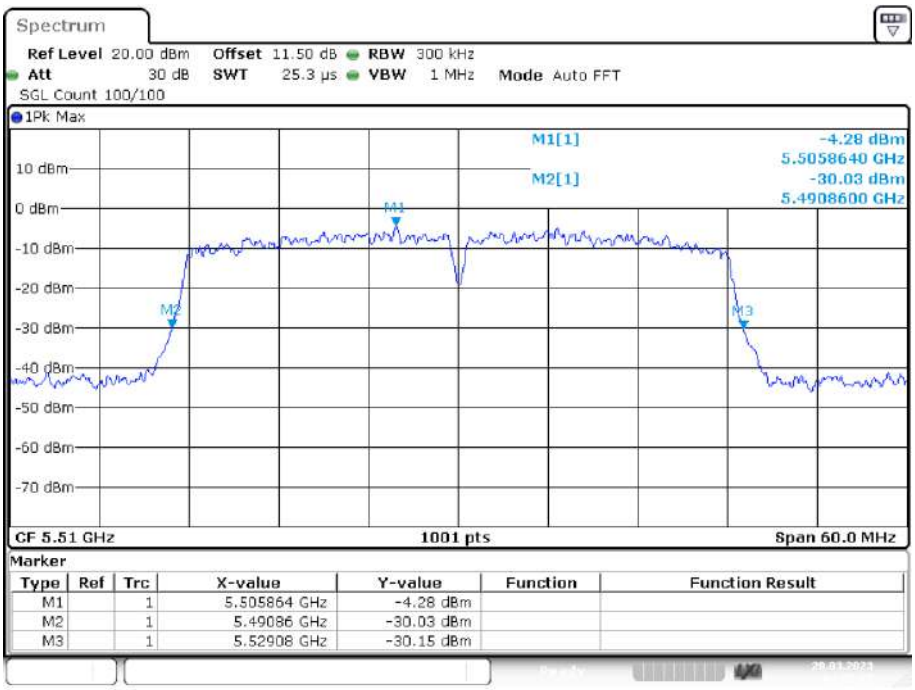
Date: 16.MAR.2023 06:18:47

-26dB Bandwidth NVNT n20 5700MHz Ant1



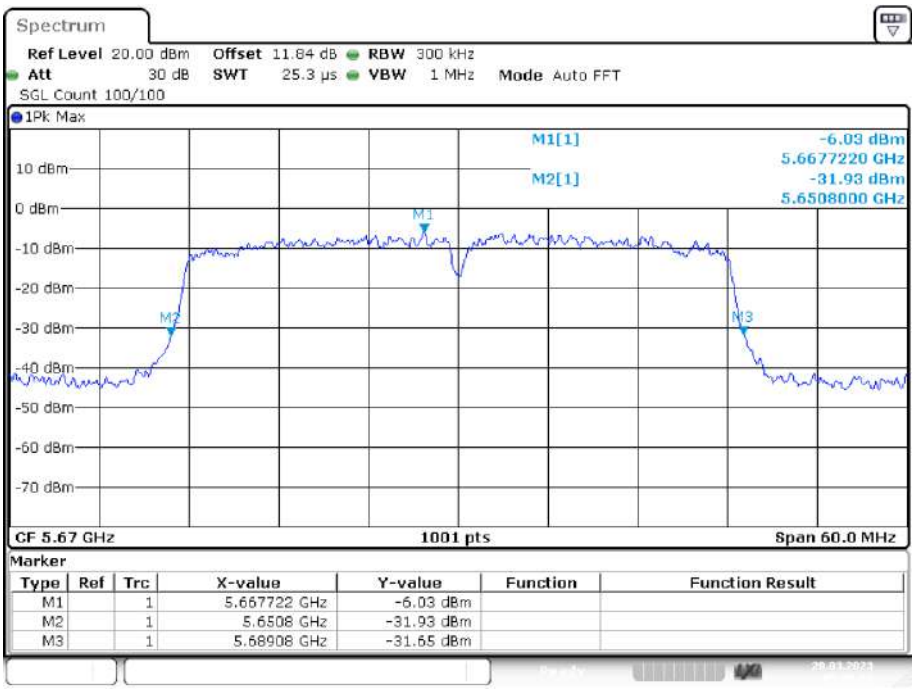
Date: 16.MAR.2023 06:22:10

-26dB Bandwidth NVNT n40 5510MHz Ant1



Date: 20.MAR.2023 04:52:06

-26dB Bandwidth NVNT n40 5670MHz Ant1

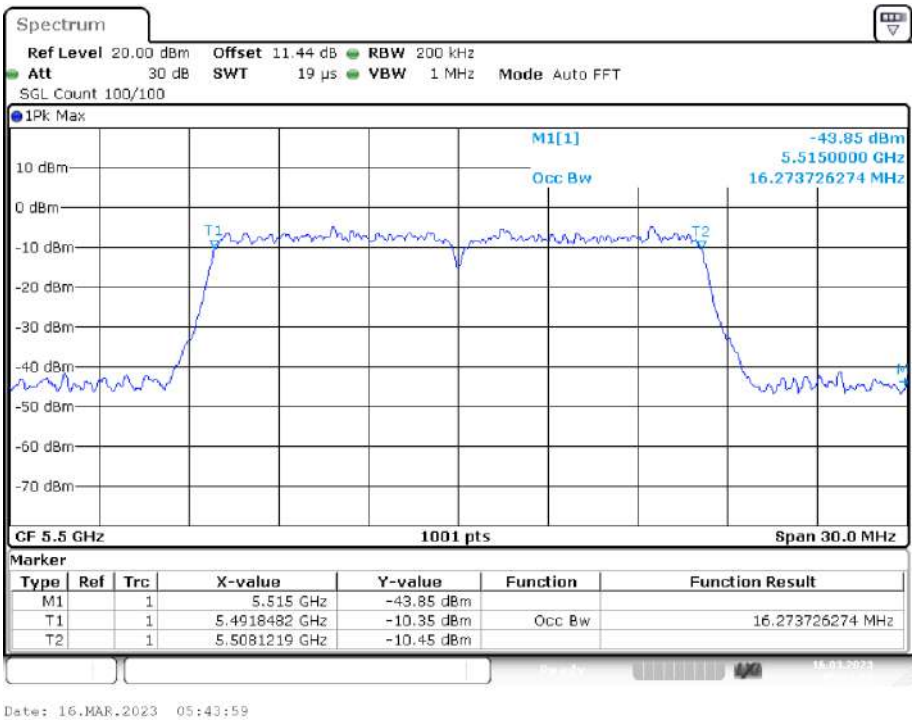


Date: 20.MAR.2023 05:00:55

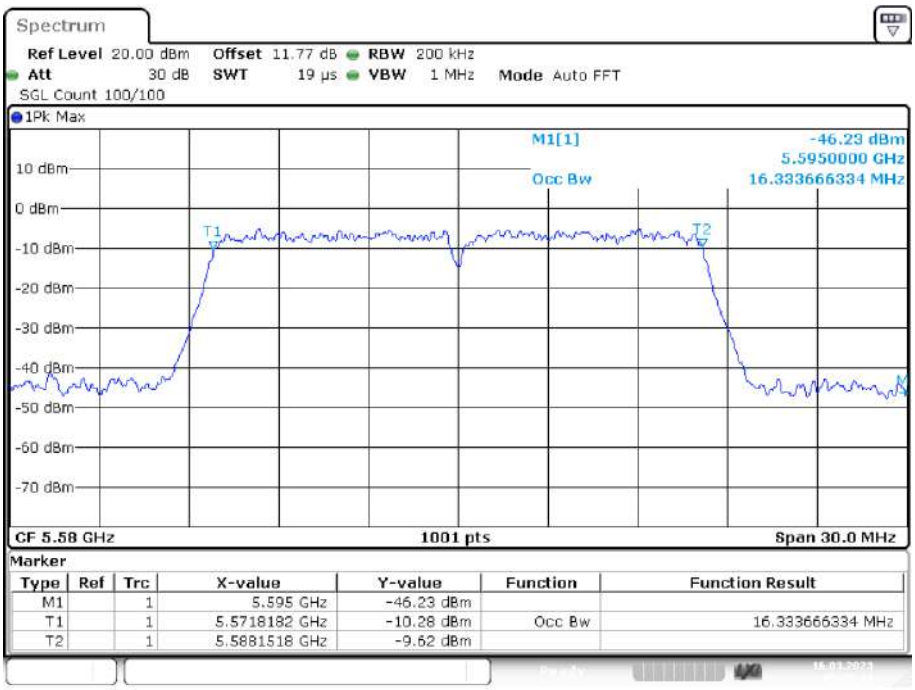
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.274
NVNT	a	5580	Ant1	16.334
NVNT	a	5700	Ant1	16.304
NVNT	ac20	5500	Ant1	17.203
NVNT	ac20	5580	Ant1	17.233
NVNT	ac20	5700	Ant1	17.263
NVNT	ac40	5510	Ant1	36.204
NVNT	ac40	5670	Ant1	36.444
NVNT	ac80	5530	Ant1	75.884
NVNT	ax20	5500	Ant1	17.652
NVNT	ax20	5580	Ant1	17.802
NVNT	ax20	5700	Ant1	17.712
NVNT	ax40	5510	Ant1	36.384
NVNT	ax40	5670	Ant1	36.204
NVNT	ax80	5530	Ant1	75.884
NVNT	n20	5500	Ant1	17.233
NVNT	n20	5580	Ant1	17.203
NVNT	n20	5700	Ant1	17.233
NVNT	n40	5510	Ant1	35.724
NVNT	n40	5670	Ant1	35.664

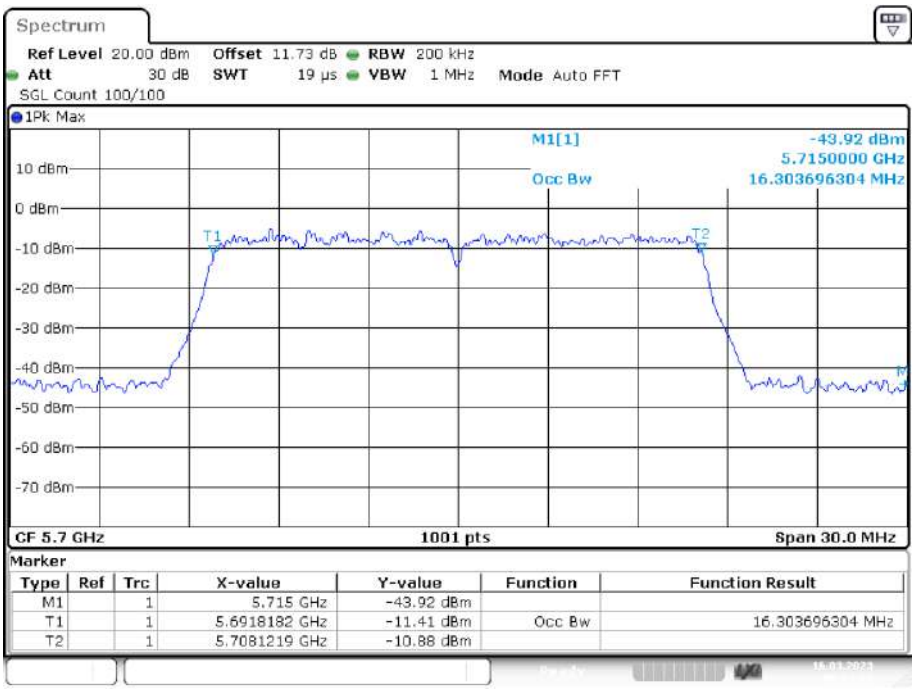
OBW NVNT a 5500MHz Ant1



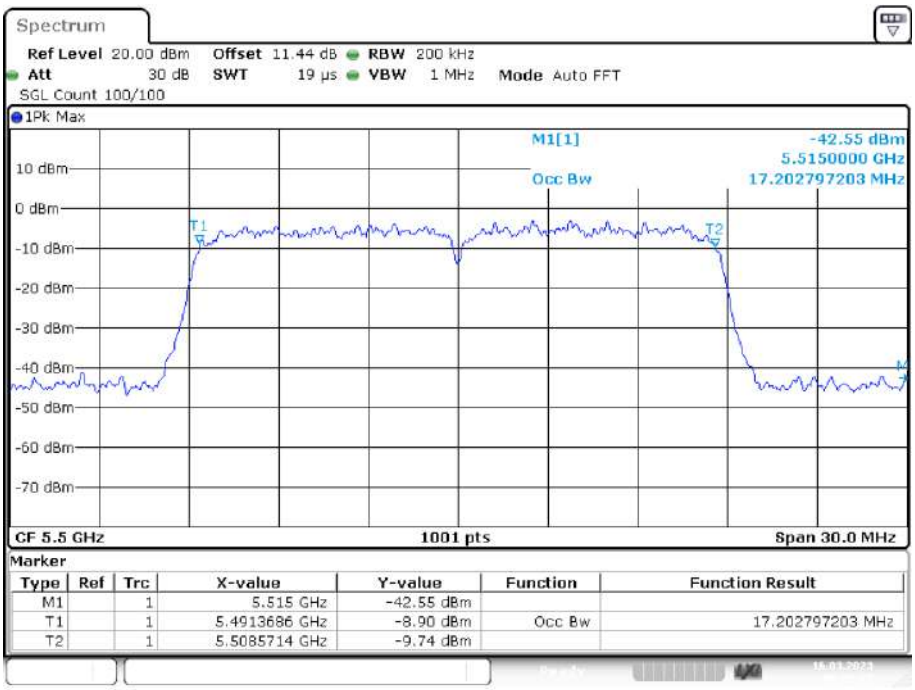
OBW NVNT a 5580MHz Ant1



OBW NVNT a 5700MHz Ant1

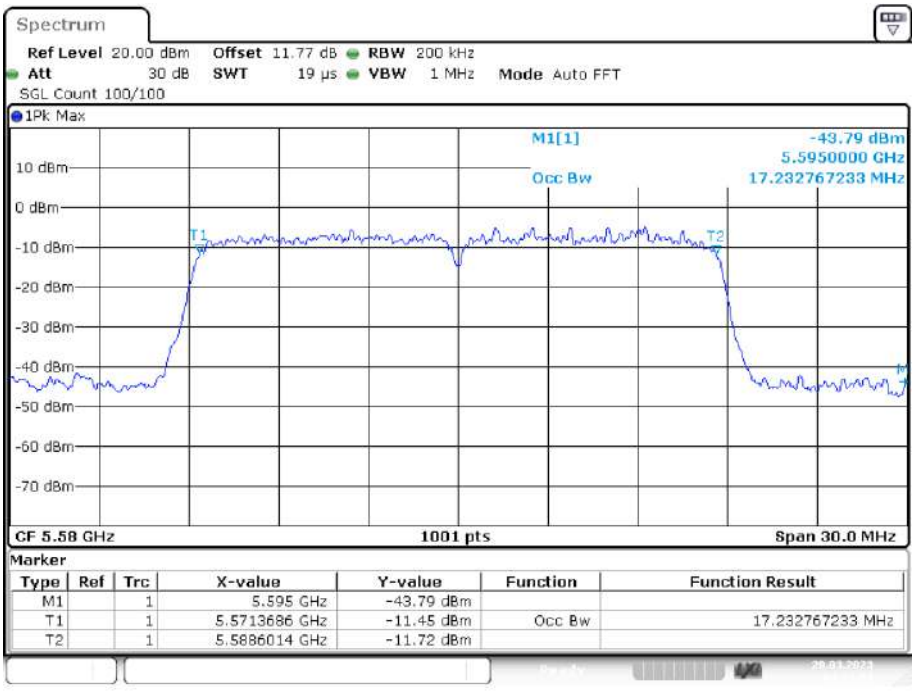


OBW NVNT ac20 5500MHz Ant1



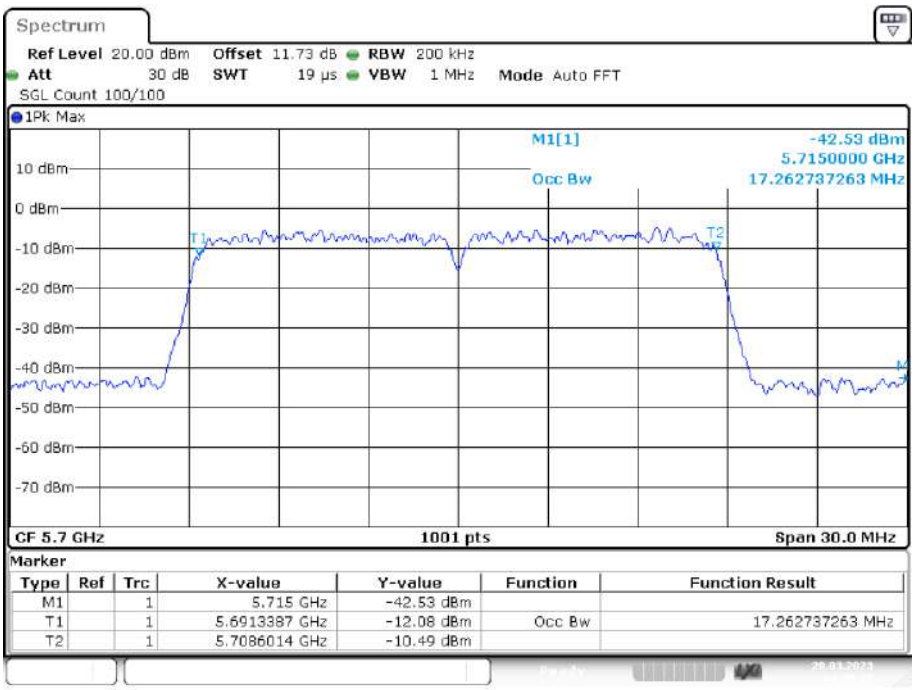
Date: 16.MAR.2023 06:26:34

OBW NVNT ac20 5580MHz Ant1



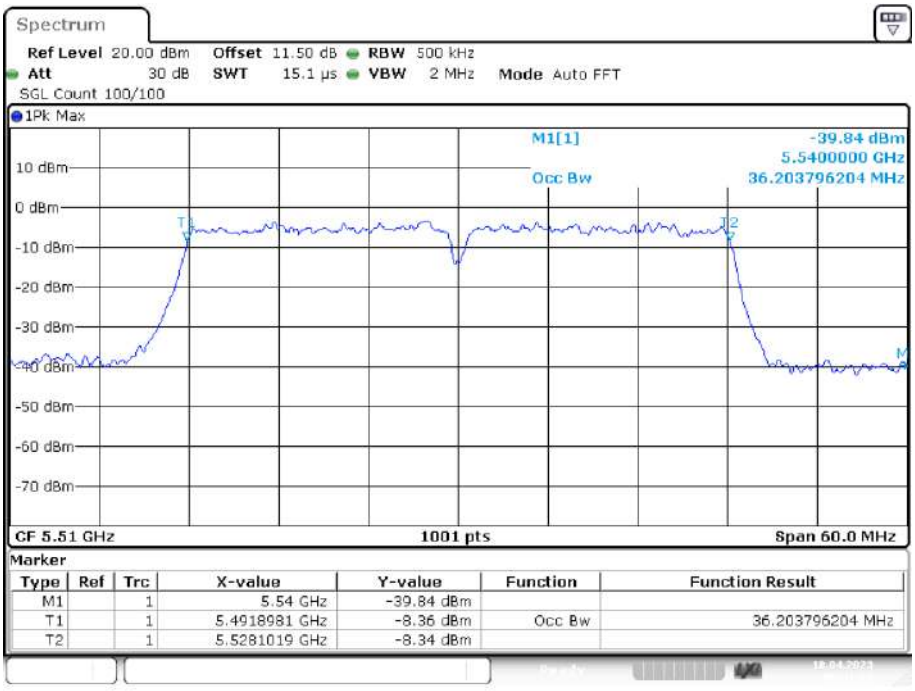
Date: 20.MAR.2023 04:44:04

OBW NVNT ac20 5700MHz Ant1



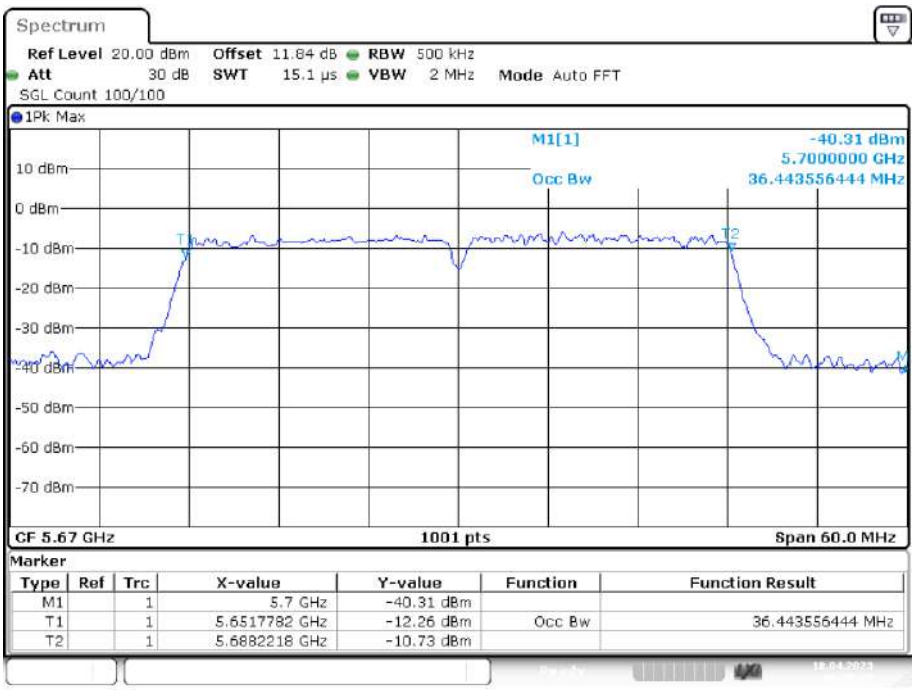
Date: 20.MAR.2023 04:48:18

OBW NVNT ac40 5510MHz Ant1

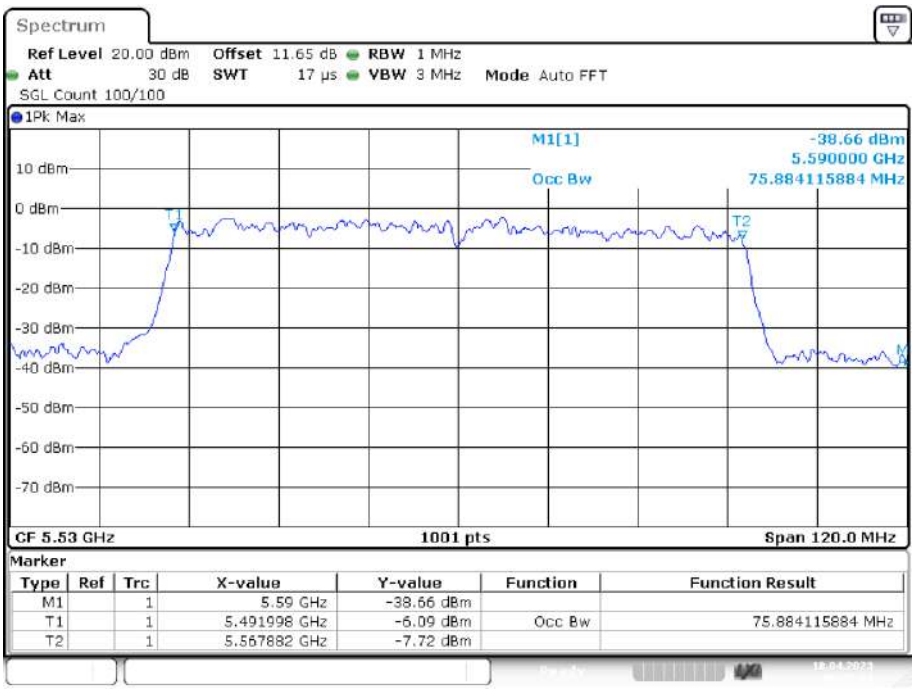


Date: 18.APR.2023 09:41:34

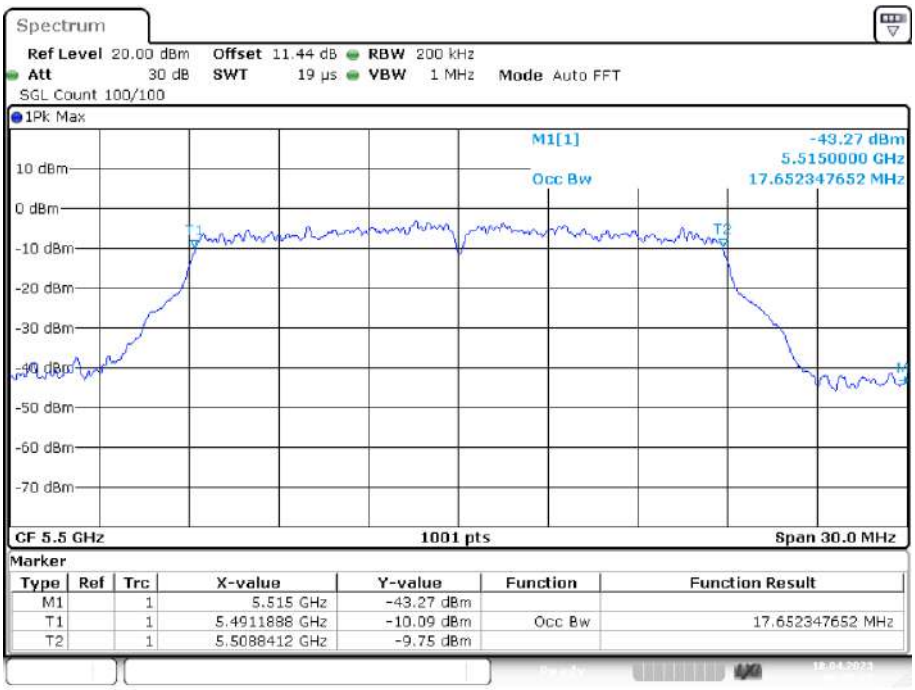
OBW NVNT ac40 5670MHz Ant1



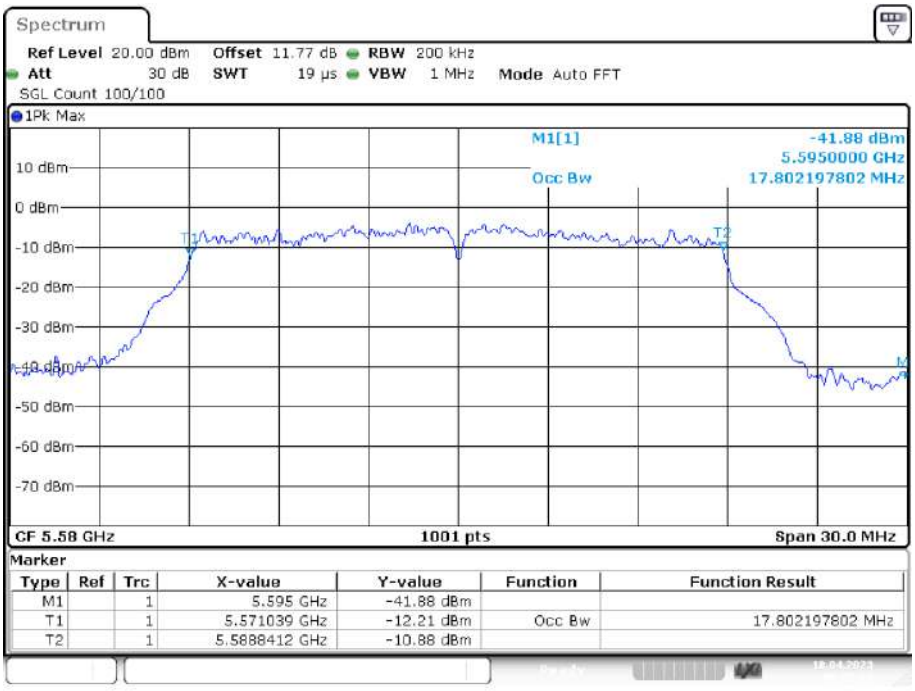
OBW NVNT ac80 5530MHz Ant1



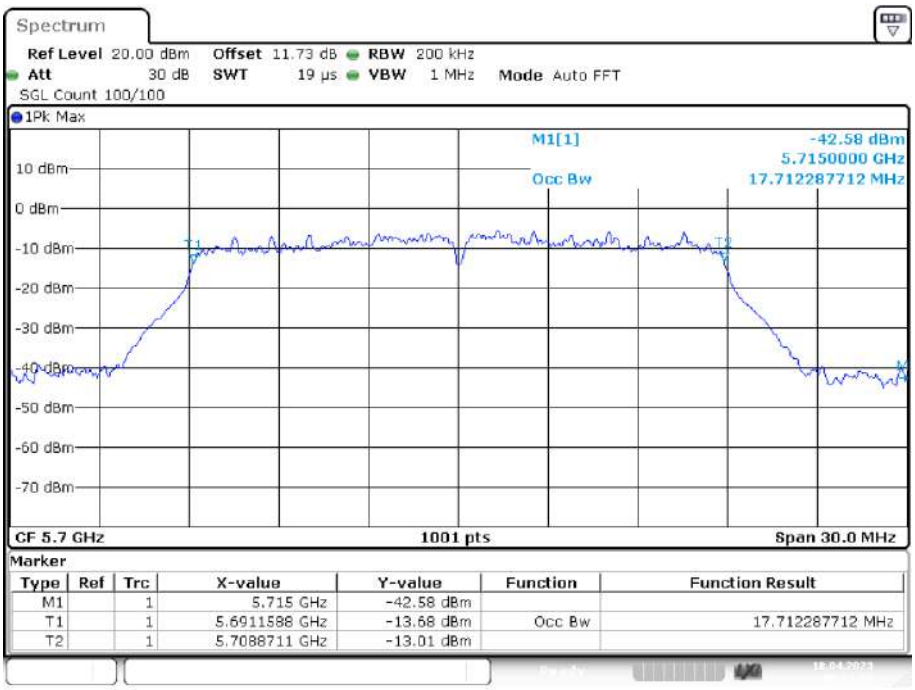
OBW NVNT ax20 5500MHz Ant1



OBW NVNT ax20 5580MHz Ant1

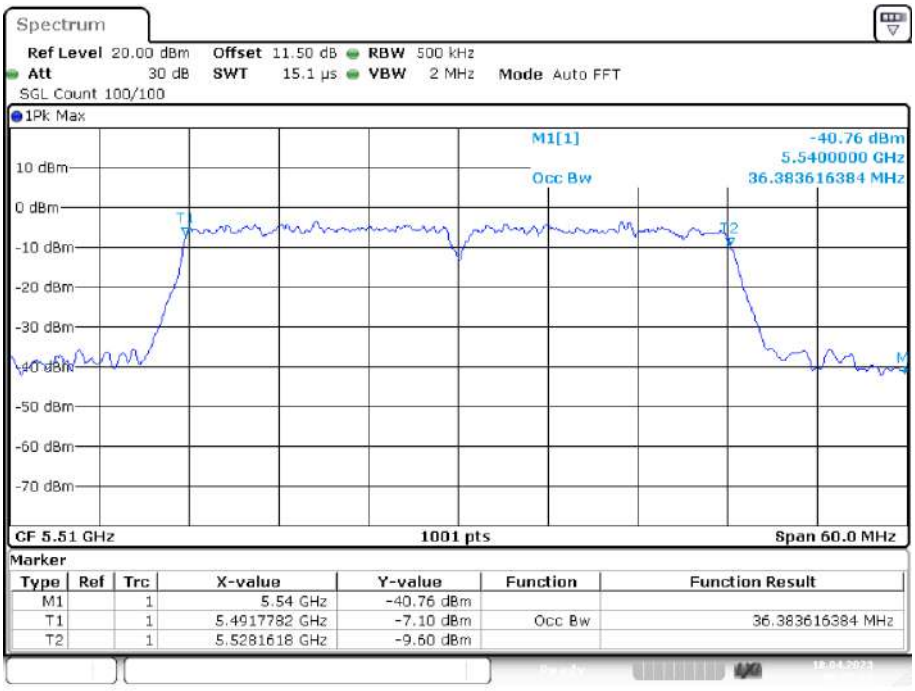


OBW NVNT ax20 5700MHz Ant1



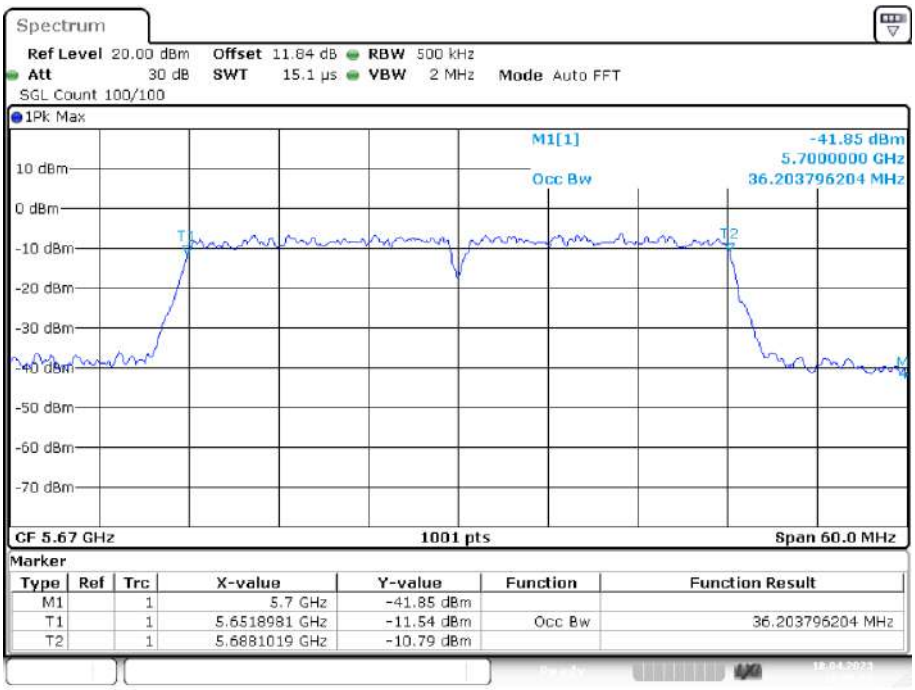
Date: 18.APR.2023 09:54:38

OBW NVNT ax40 5510MHz Ant1

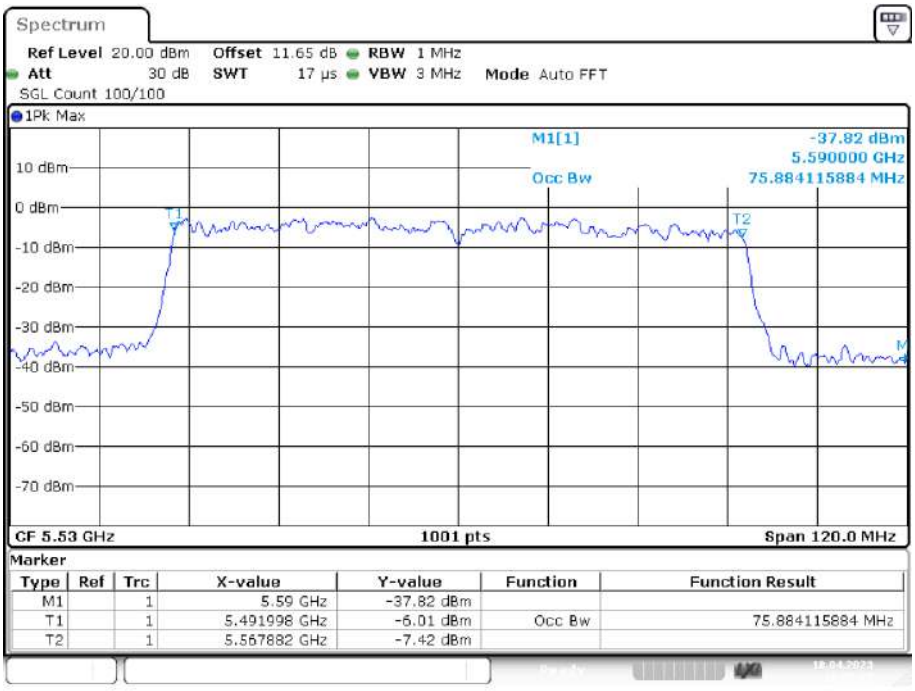


Date: 18.APR.2023 09:57:02

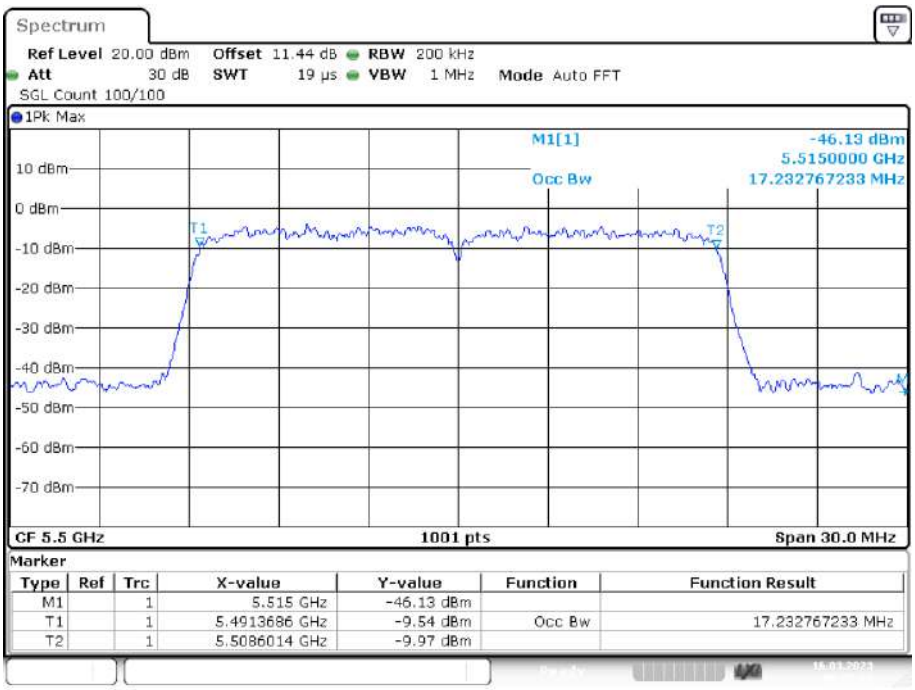
OBW NVNT ax40 5670MHz Ant1



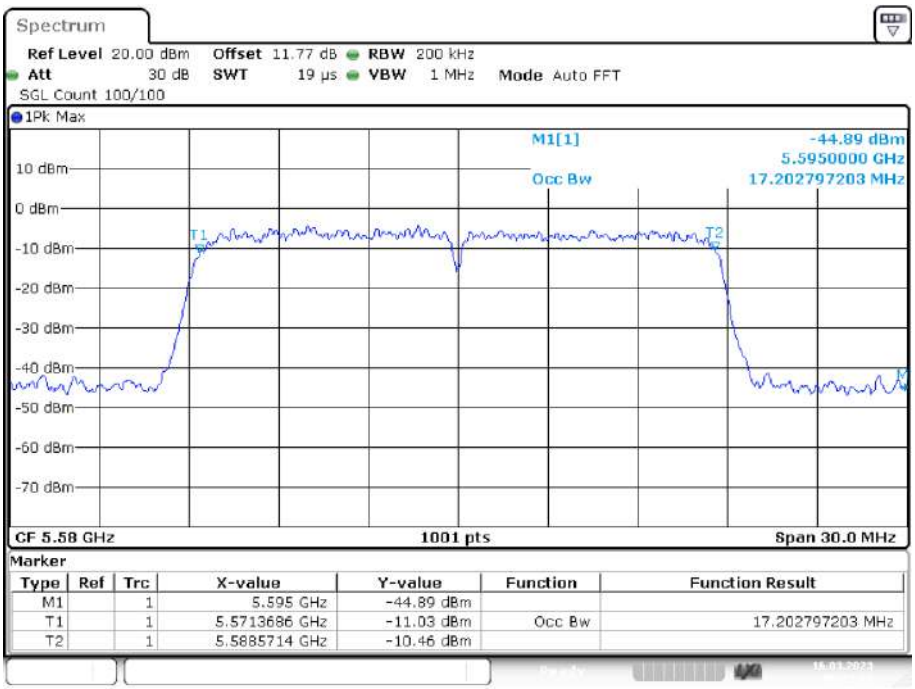
OBW NVNT ax80 5530MHz Ant1



OBW NVNT n20 5500MHz Ant1



OBW NVNT n20 5580MHz Ant1



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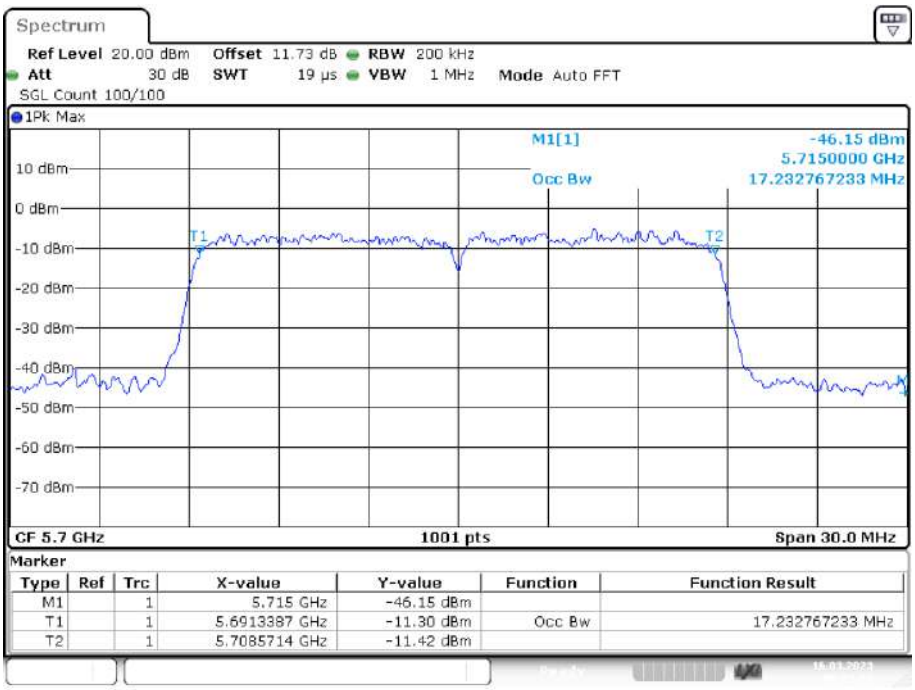
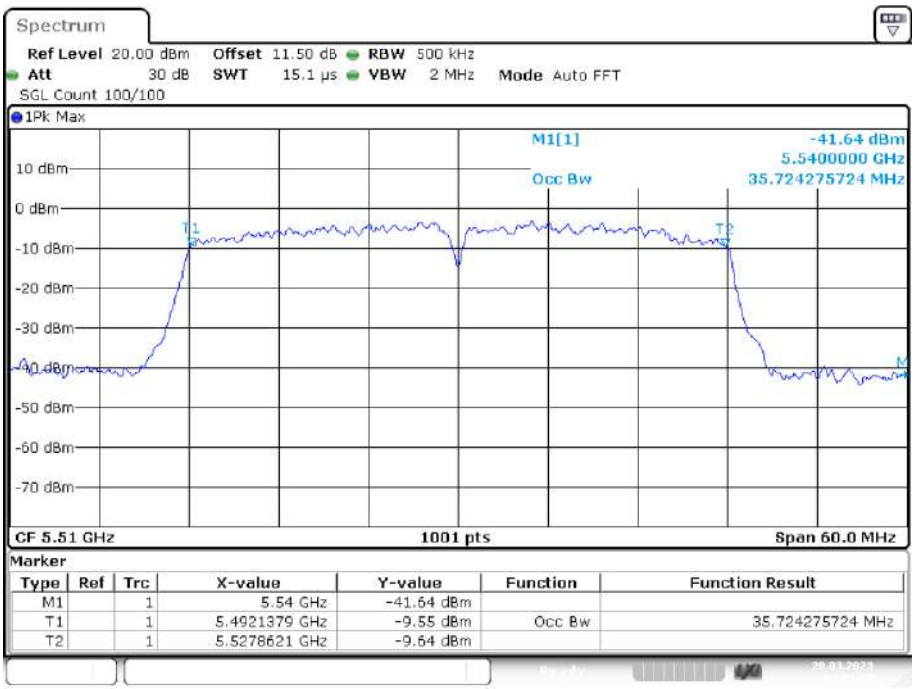
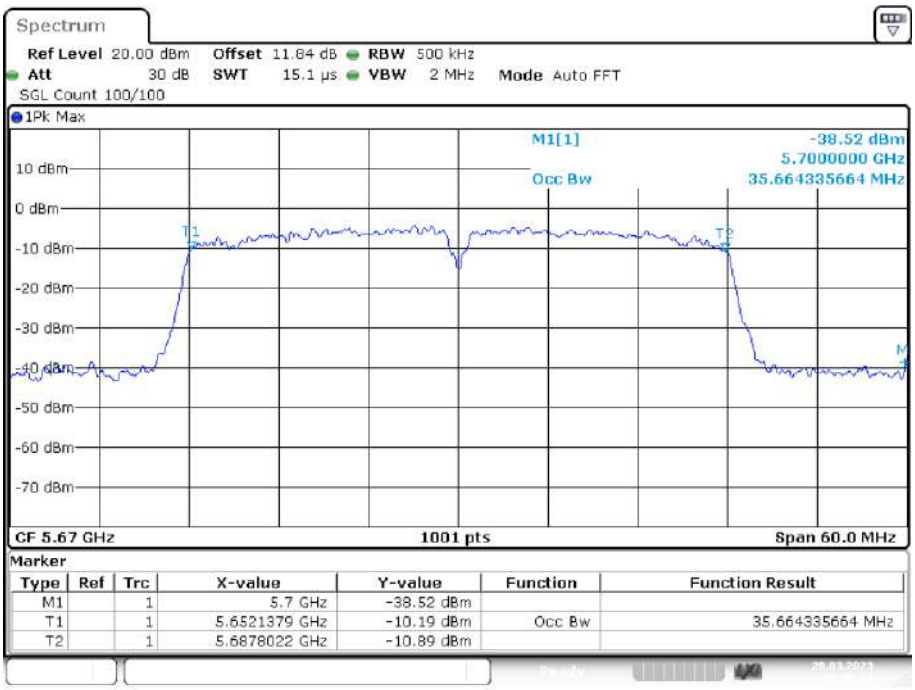


OBW NVNT n40 5510MHz Ant1



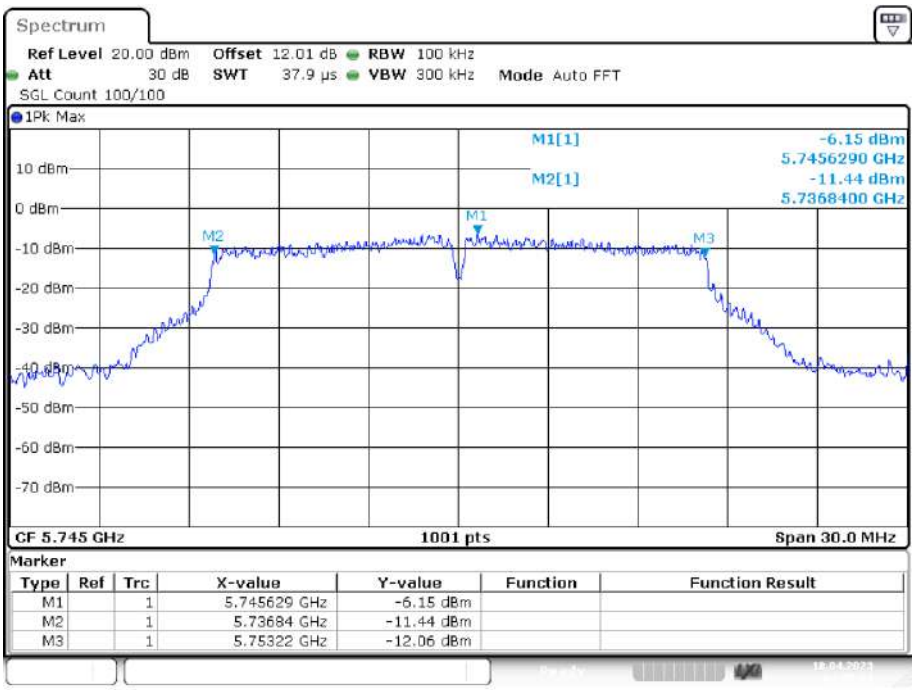
OBW NVNT n40 5670MHz Ant1



Band 4(5725-5850 MHz):
-6dB Bandwidth

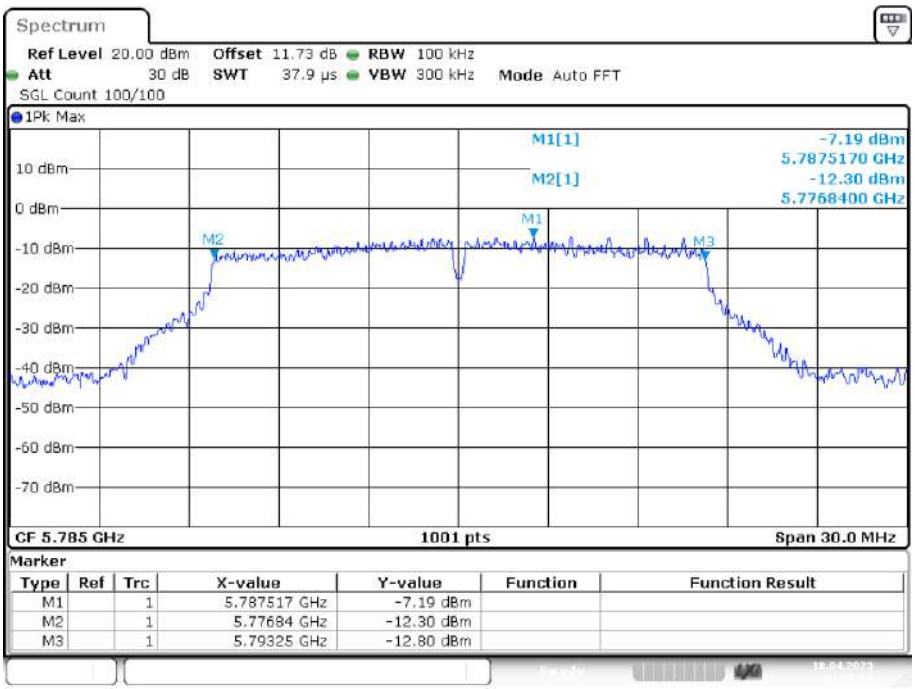
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.38	0.5	Pass
NVNT	a	5785	Ant1	16.41	0.5	Pass
NVNT	a	5825	Ant1	16.35	0.5	Pass
NVNT	ac20	5745	Ant1	17.7	0.5	Pass
NVNT	ac20	5785	Ant1	17.67	0.5	Pass
NVNT	ac20	5825	Ant1	17.28	0.5	Pass
NVNT	ac40	5755	Ant1	36.42	0.5	Pass
NVNT	ac40	5795	Ant1	36.3	0.5	Pass
NVNT	ac80	5775	Ant1	75.72	0.5	Pass
NVNT	ax20	5745	Ant1	17.58	0.5	Pass
NVNT	ax20	5785	Ant1	17.55	0.5	Pass
NVNT	ax20	5825	Ant1	17.61	0.5	Pass
NVNT	ax40	5755	Ant1	36.3	0.5	Pass
NVNT	ax40	5795	Ant1	35.64	0.5	Pass
NVNT	ax80	5775	Ant1	75.72	0.5	Pass
NVNT	n20	5745	Ant1	17.55	0.5	Pass
NVNT	n20	5785	Ant1	17.31	0.5	Pass
NVNT	n20	5825	Ant1	17.19	0.5	Pass
NVNT	n40	5755	Ant1	36.3	0.5	Pass
NVNT	n40	5795	Ant1	35.94	0.5	Pass

-6dB Bandwidth NVNT a 5745MHz Ant1



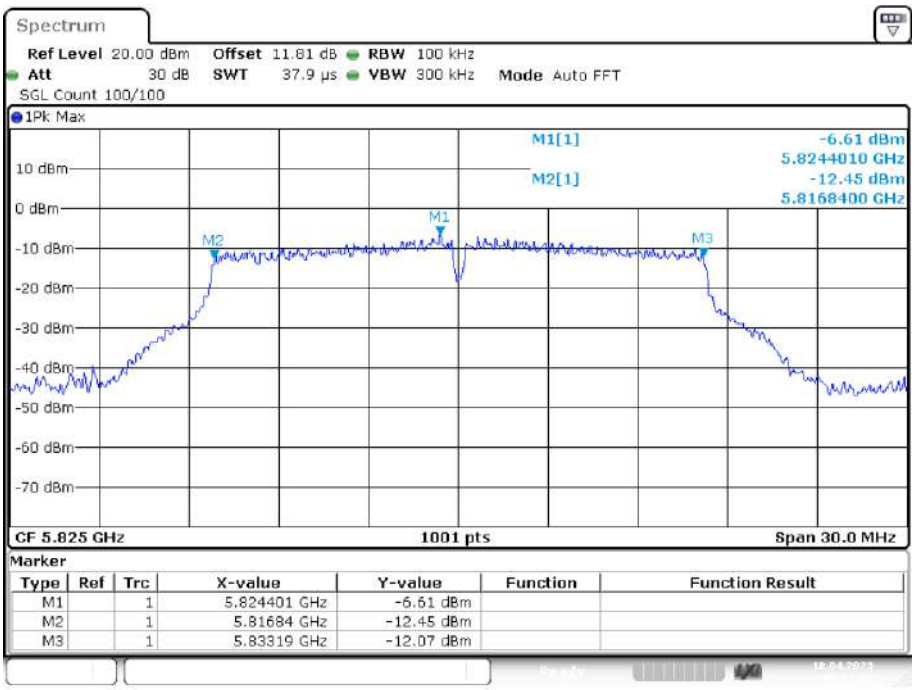
Date: 18.APR.2023 04:50:42

-6dB Bandwidth NVNT a 5785MHz Ant1



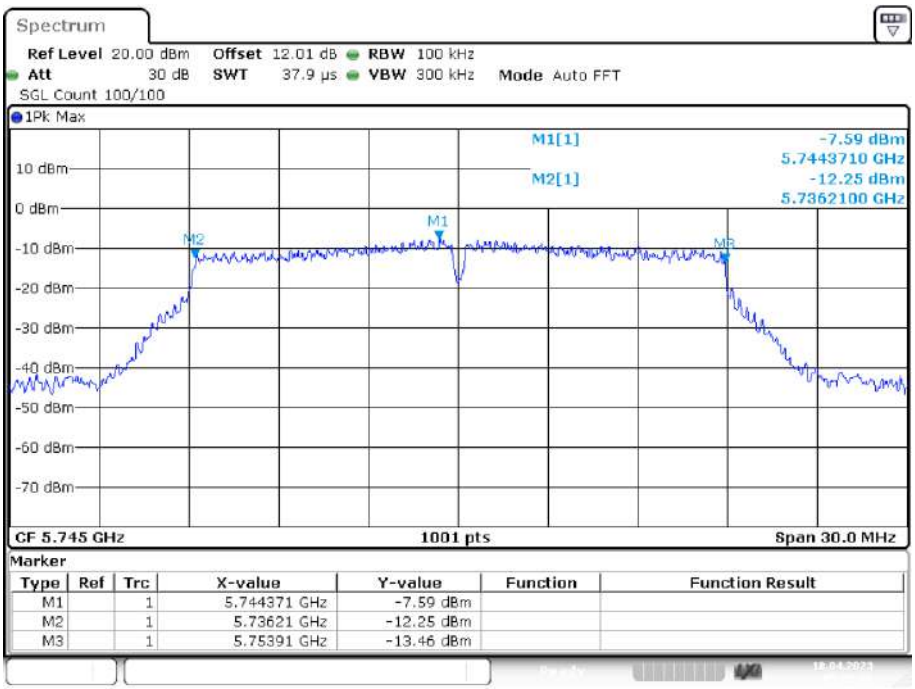
Date: 18.APR.2023 04:55:59

-6dB Bandwidth NVNT a 5825MHz Ant1



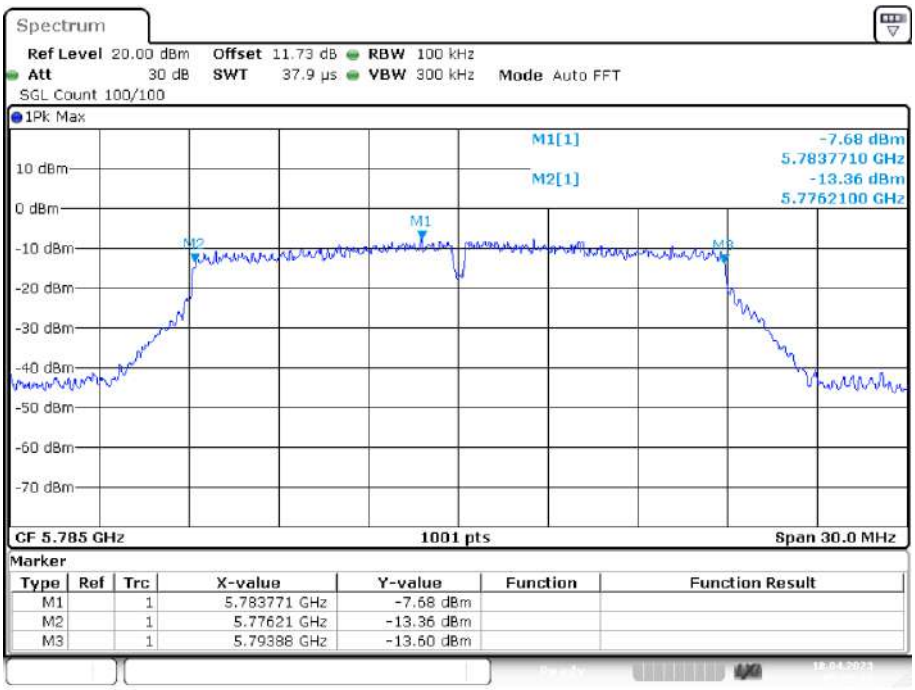
Date: 18.APR.2023 05:01:25

-6dB Bandwidth NVNT ac20 5745MHz Ant1



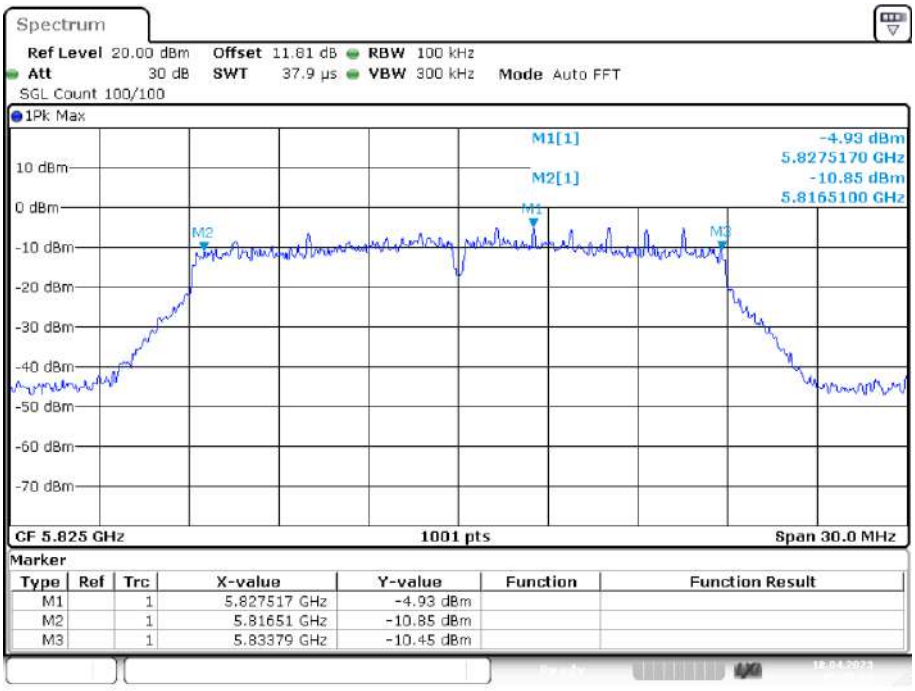
Date: 18.APR.2023 05:26:46

-6dB Bandwidth NVNT ac20 5785MHz Ant1



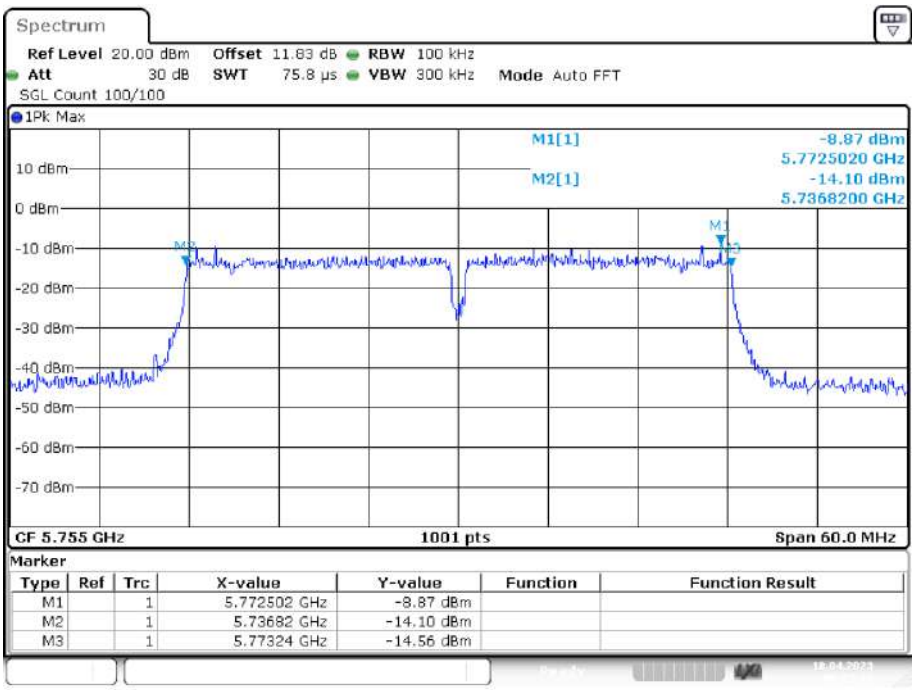
Date: 18.APR.2023 05:32:20

-6dB Bandwidth NVNT ac20 5825MHz Ant1



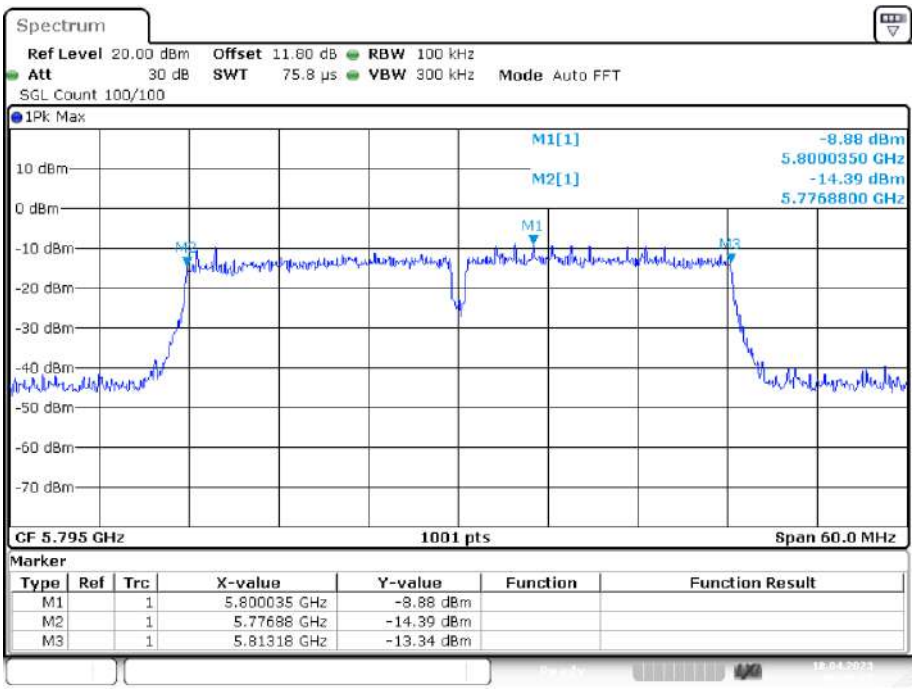
Date: 18.APR.2023 05:45:31

-6dB Bandwidth NVNT ac40 5755MHz Ant1



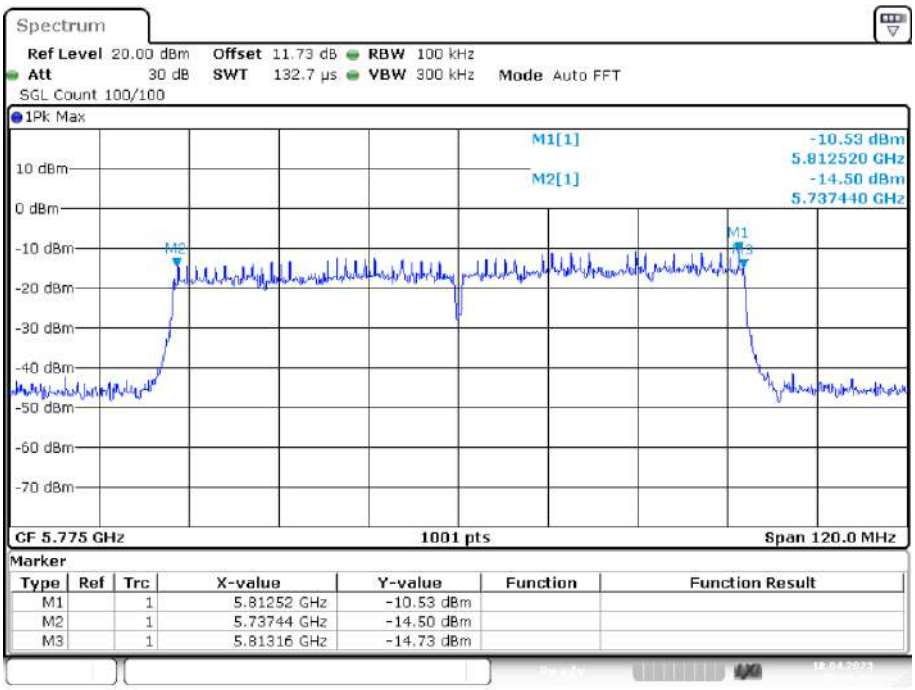
Date: 18.APR.2023 06:25:19

-6dB Bandwidth NVNT ac40 5795MHz Ant1



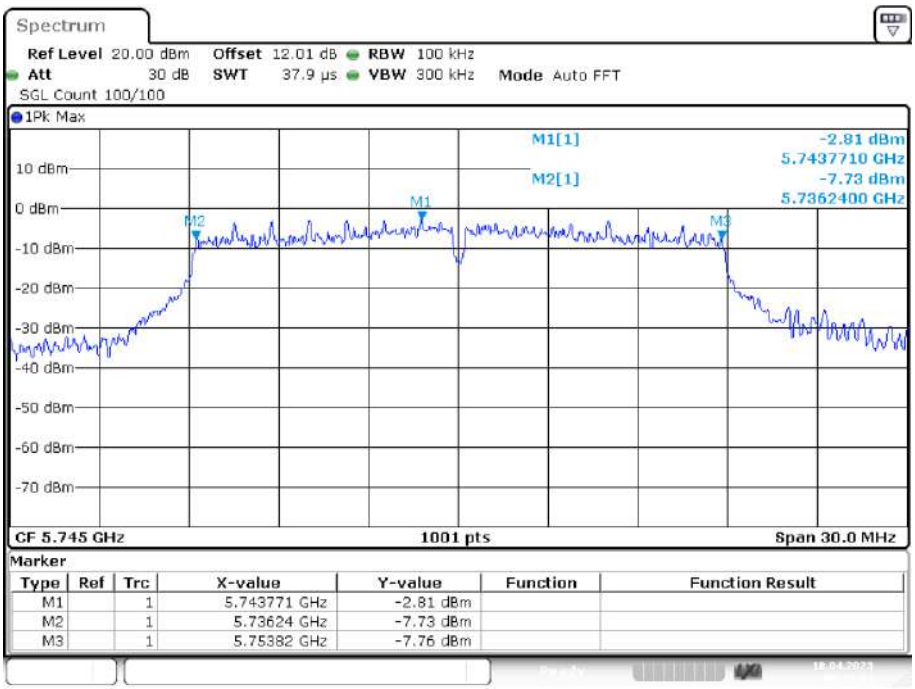
Date: 18.APR.2023 06:49:28

-6dB Bandwidth NVNT ac80 5775MHz Ant1



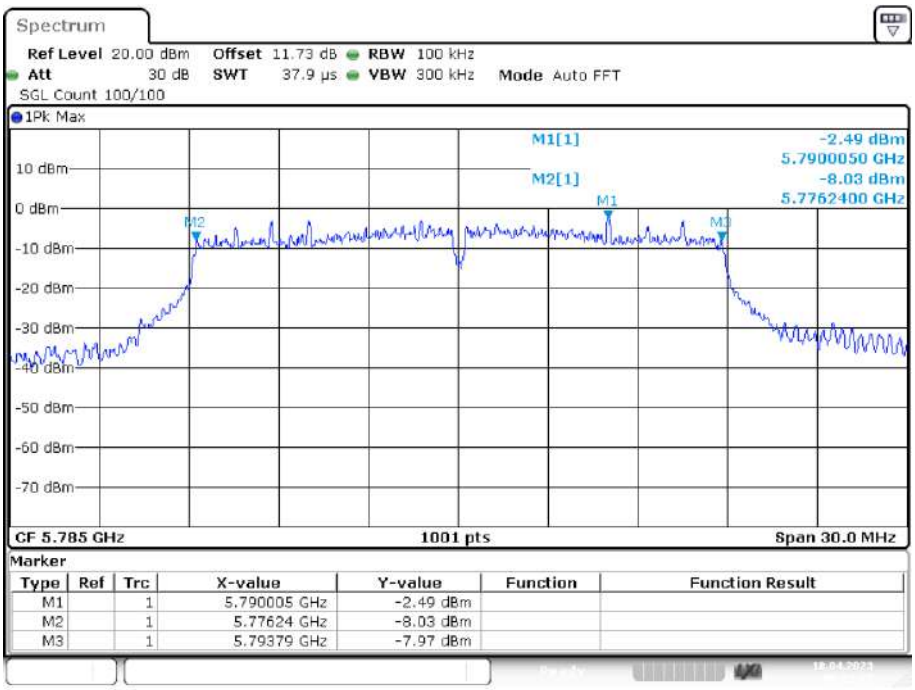
Date: 18.APR.2023 07:02:53

-6dB Bandwidth NVNT ax20 5745MHz Ant1



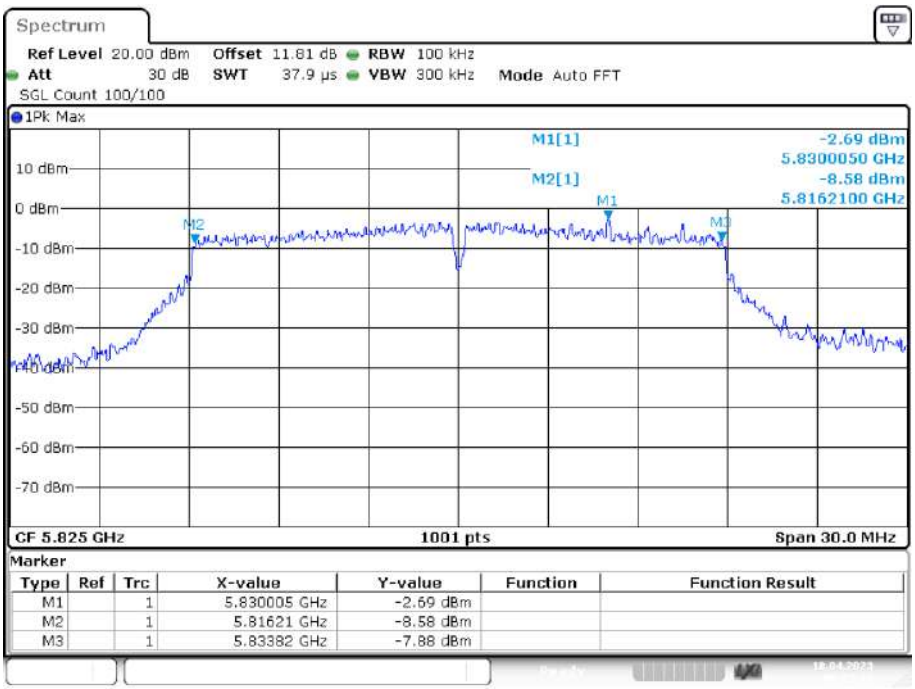
Date: 18.APR.2023 09:19:44

-6dB Bandwidth NVNT ax20 5785MHz Ant1



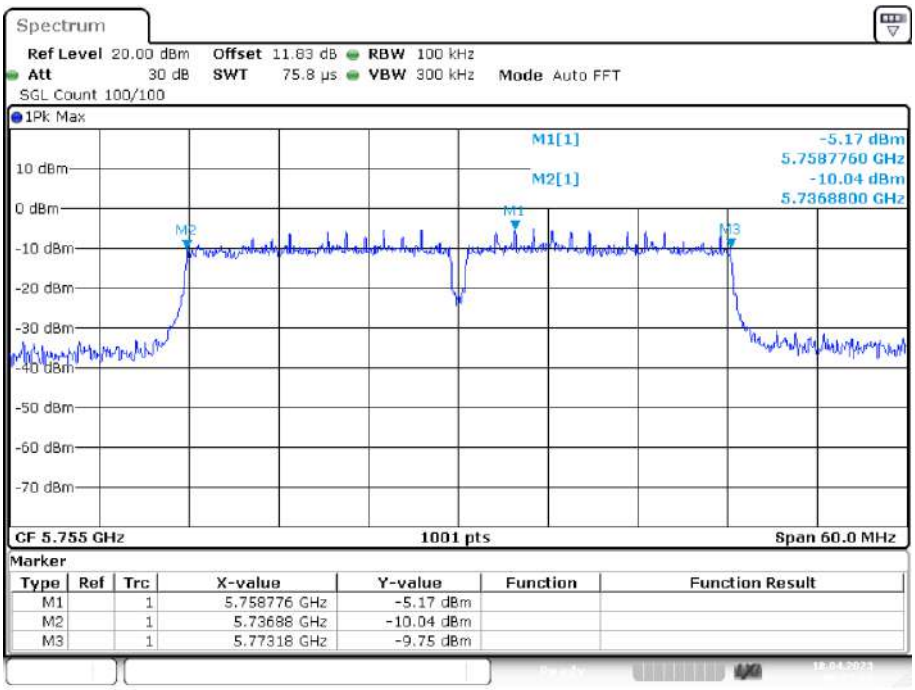
Date: 18.APR.2023 09:22:44

-6dB Bandwidth NVNT ax20 5825MHz Ant1



Date: 18.APR.2023 09:25:13

-6dB Bandwidth NVNT ax40 5755MHz Ant1



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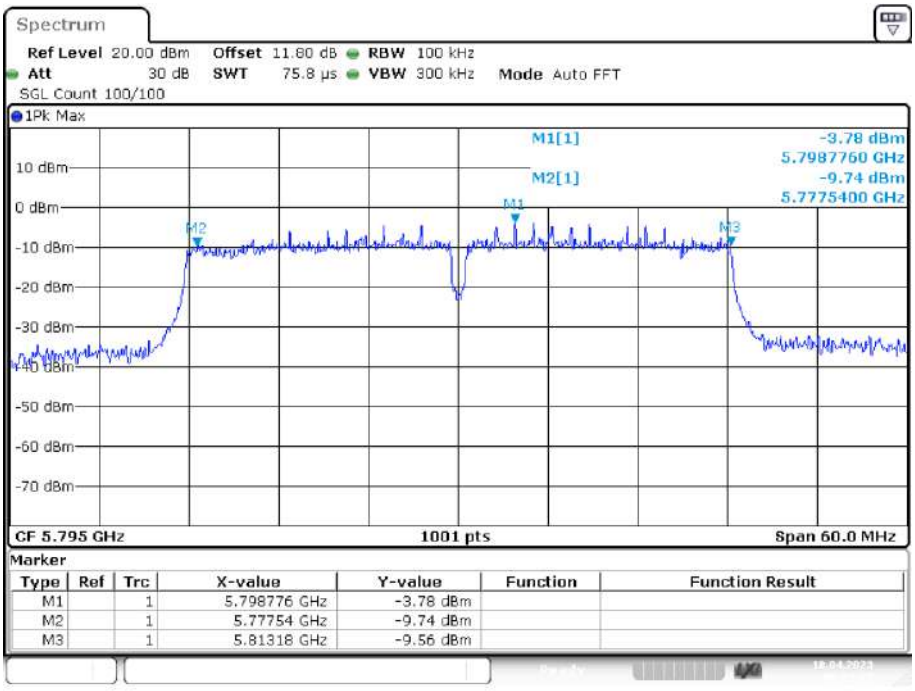
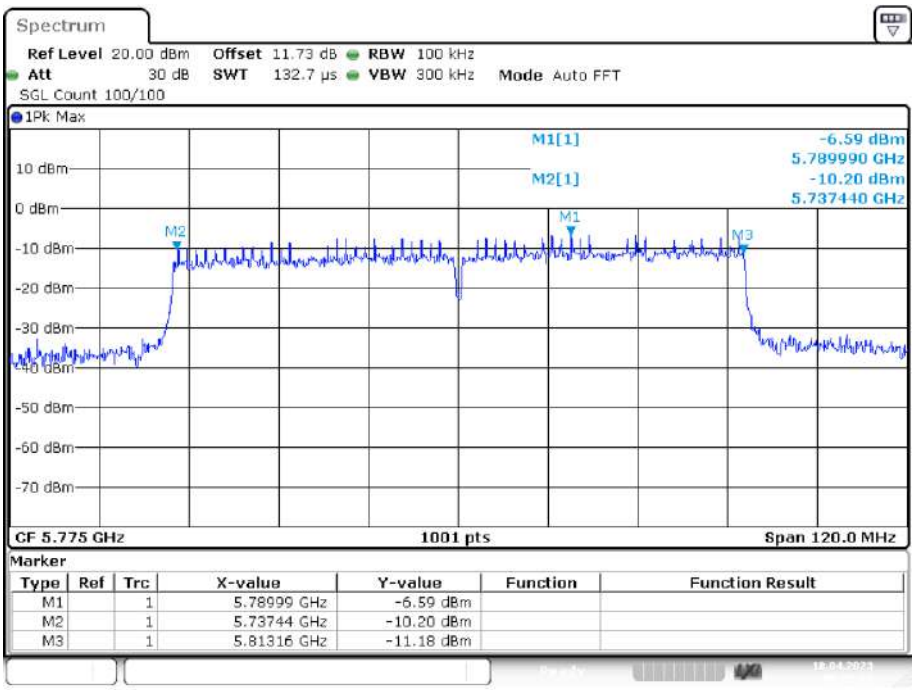
-6dB Bandwidth NVNT ax40 5795MHz Ant1



Date: 18.APR.2023 09:29:45

-6dB Bandwidth NVNT ax80 5775MHz Ant1



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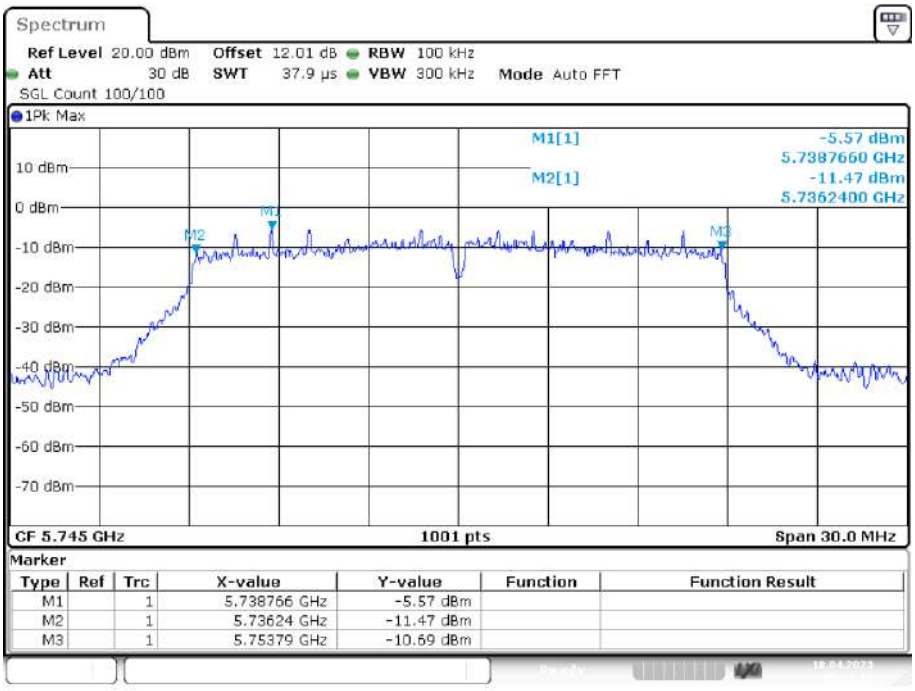
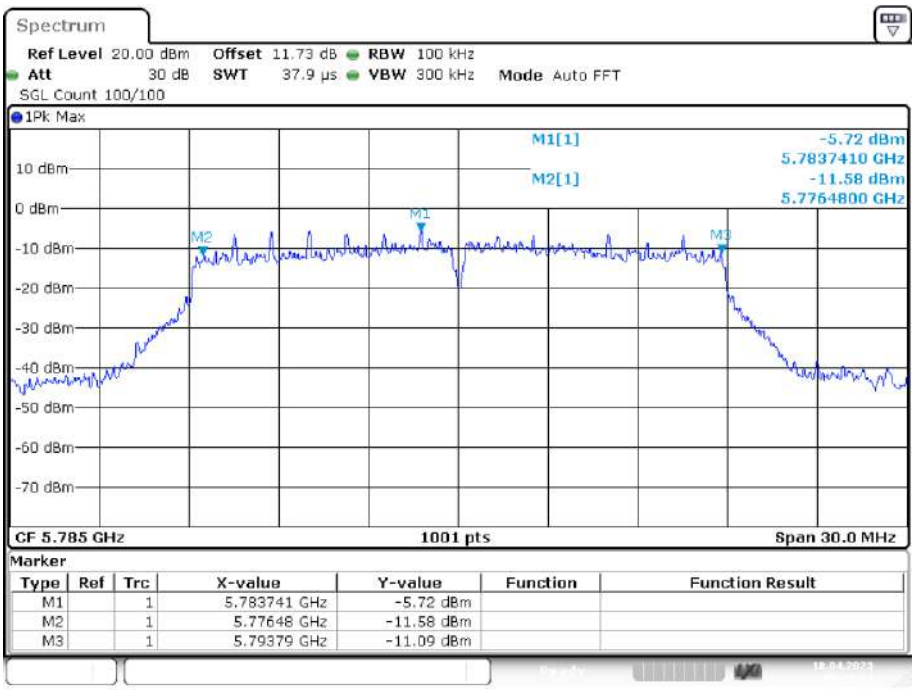
-6dB Bandwidth NVNT n20 5745MHz Ant1



Date: 18.APR.2023 05:14:11

-6dB Bandwidth NVNT n20 5785MHz Ant1



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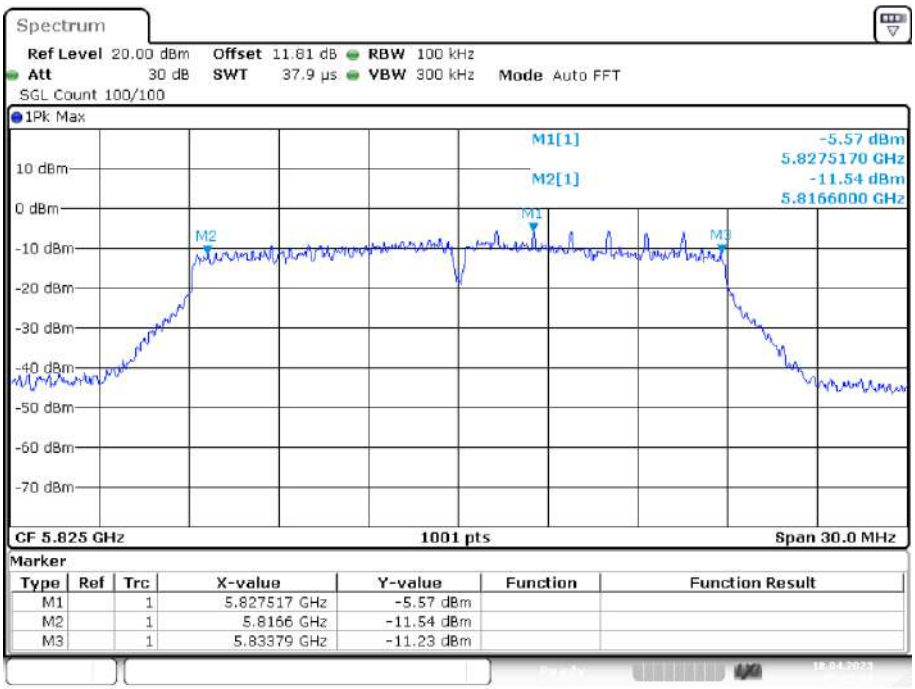
-6dB Bandwidth NVNT n20 5825MHz Ant1



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