# FCC TEST REPORT

FCC ID: 2BAK5-CEK8902

On Behalf of

SHENZHEN CECPORT TECHNOLOGIES CO., LTD.

CEK8902 SBC

Model No.: CEK8902-S905D3

| | | |
|---|---|---|
| Prepared for | : | SHENZHEN CECPORT TECHNOLOGIES CO., LTD. |
| Address | : | 20th Floor, block A, phase 1, China Merchants Qianhai Economic and Trade Center, No.151, Nanshan street, Nanshan District, Shenzhen City, Guangdong Province, China |

| | | |
|---|---|---|
| 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 | : | A2301110-C01-R12 |
| Date of Receipt | : | February 14, 2023 |
| Date of Test | : | February 14, 2023-March 10, 2023 |
| Date of Report | : | March 15, 2023 |
| Version Number | : | V0 |

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# TEST REPORT DECLARATION

| | | |
|---|---|---|
| Applicant | : | SHENZHEN CECPORT TECHNOLOGIES CO., LTD. |
| Address | : | 20th Floor, block A, phase 1, China Merchants Qianhai Economic and Trade Center, No.151, Nanshan street, Nanshan District, Shenzhen City, Guangdong Province, China |
| Manufacturer | : | Shenzhen Komkia Precision Products Co., Ltd. |
| Address | : | Building D, Area 0A-04, Fenghuang Third Industrial Park Fuyong Subdistrict, Bao'an District, Shenzhen, P.R. China, 518100 |
| EUT Description | : | CEK8902 SBC |
| | (A) Model No. | : CEK8902-S905D3 |
| | (B) Trademark | : |

Measurement Standard Used:

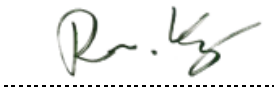
**FCC Rules and Regulations Part 15 Subpart E**

**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).....: | Lucas Pang<br>Project Engineer |  |
| Approved by (name + signature).....: | Reak Yang<br>Project Manager |  |
| Date of issue.....: | March 15, 2023 | |

**Revision History**

| Revision | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V0 | March 15, 2023 | Initial released Issue | Lucas Pang |

# 1 Test Summary

| Test Item | Section in CFR 47 | Result |
|---|---|---|
| Antenna requirement | Section 15.203 Section 7.1.4<br>RSS-Gen Issue 5 | PASS |
| AC Power Line Conducted Emission | Section 15.207 Section 7.2.4<br>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)&15.209 Section 5.5<br>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 | 1.63dB |
| Uncertainty for Radiation Emission test in 3m chamber (below 30MHz) | 3.5dB |
| Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz) | 3.74dB(Polarize: V) |
| | 3.76dB(Polarize: H) |
| Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz) | 3.77dB(Polarize: V) |
| | 3.80dB(Polarize: H) |
| Uncertainty for radio frequency | $5.06\times10^{-8}$GHz |
| Uncertainty for conducted RF Power | 0.40dB |
| 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 | : | CEK8902 SBC |
| Model No. | : | CEK8902-S905D3 |
| DIFF. | : | N/A |
| Power supply | : | DC 5V from adapter |

| | | |
|---|---|---|
| Radio Technology | : | 5G WIFI |
| Operation Frequency | : | 802.11a/n(HT20)/ac(VHT20): 5180~5240MHz; 5260-5320MHz; 5500-5700MHz; 5745~5825MHz<br>802.11n(HT40)/ac(VHT40): 5190~5230MHz; 5260-5320MHz; 5510-5670MHz; 5755~5795MHz<br>802.11ac(VHT80): 5210MHz, 5290MHz, 5530MHz, 5775MHz |
| Channel separation | : | 20MHz for 802.11a/ 802.11ac(VHT20)/ 802.11n(HT20)<br>40MHz for 802.11ac(VHT40)/ 802.11n(HT40)<br>80MHz for 802.11ac(VHT80) |
| Modulation technology | : | IEEE 802.11n/a/ac: OFDM (64QAM, 16QAM, QPSK, BPSK) |
| Antenna Type | : | Ceramic antenna, max gain 5.64dBi<br>(Antenna information is provided by applicant.)<br>Note: The product also has a spare antenna, and their antenna gain is the same. |
| 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 | : | Adapter |
| Manufacturer | : | Shenzhen Keyu Power Supply Co., Ltd. |
| Model | : | KA1801A-0503000US |
| Ratings | : | Input: 100-240V~ 50/60Hz 0.55A<br>Output: 5V⎓3.0A |

## 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 | 2022.08.22 | 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 |

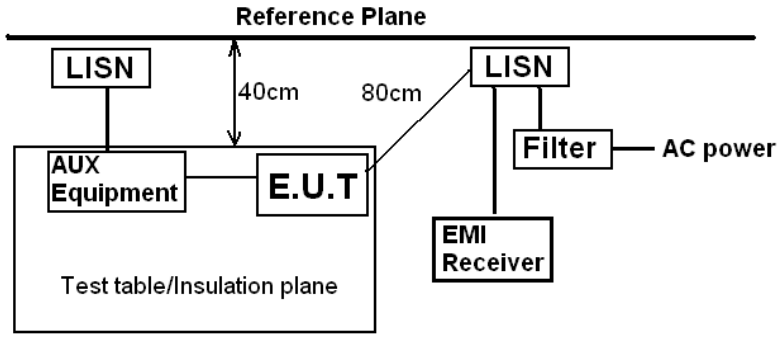
| **Software Information** | | | |
|---|---|---|---|
| Test Item | Software Name | Manufacturer | Version |
| RE | EZ-EMC | EZ | Alpha-3A1 |
| CE | EZ-EMC | EZ | Alpha-3A1 |
| RF-CE | MTS 8310 | MW | V2.0.0.0 |

# 4 Test results and Measurement Data

## 4.1 Antenna requirement:

| | |
|---|---|
| **Standard requirement:** | FCC Part15 C Section 15.203 |
| 15.203 requirement:<br>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 Ceramic antenna. The best case gain of the antenna is 5.64dBi, for 5180~5240MHz; 5260-5320MHz; 5500-5700MHz; 5745~5825MHz | |

## 4.2 Conducted Emissions

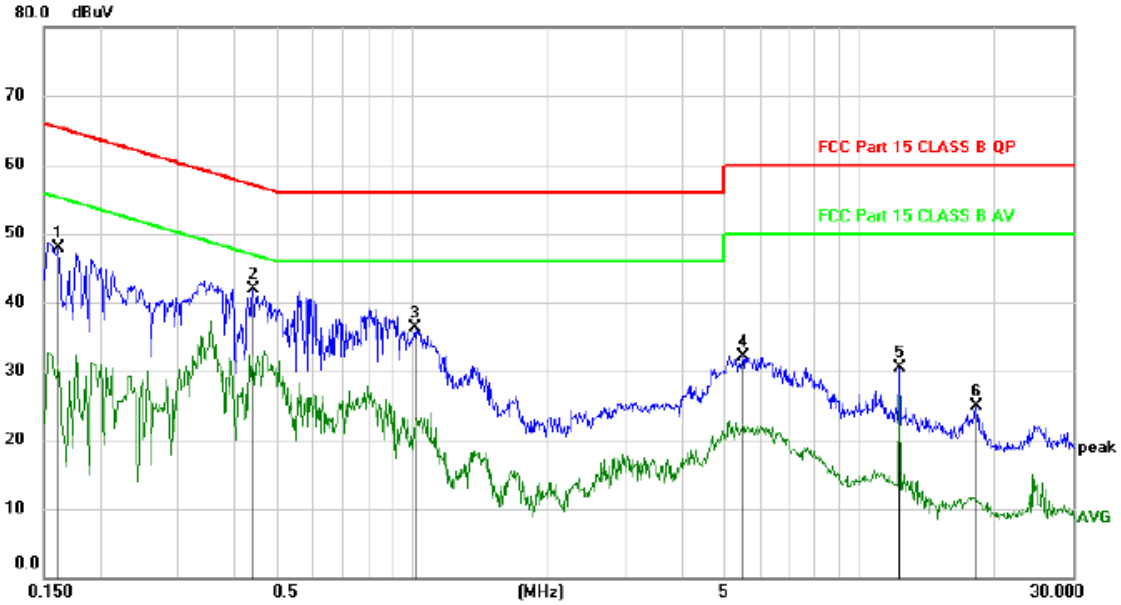
<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>150KHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td>Class B</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9KHz, VBW=30KHz</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:<br>E.U.T: Equipment Under Test<br>LISN: Line Impedence Stabilization Network<br>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>Pass</td></tr>
</table>

**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:

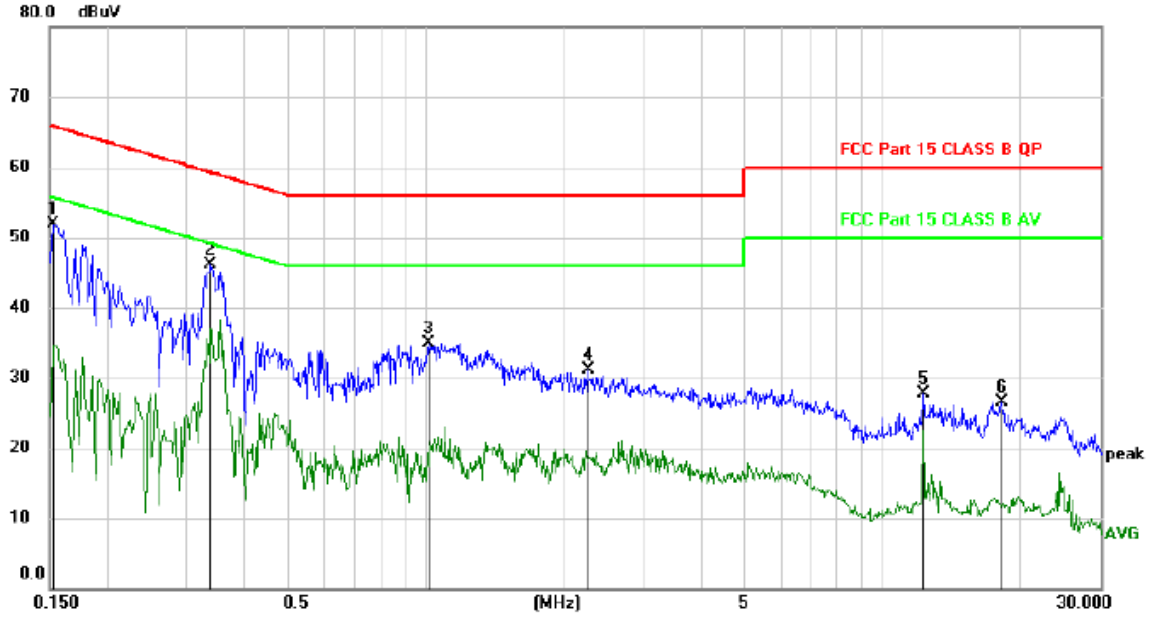



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1620 | 37.88 | 9.93 | 47.81 | 65.36 | -17.55 | peak | |
| 2 | * | 0.4410 | 32.00 | 9.95 | 41.95 | 57.04 | -15.09 | peak | |
| 3 | | 1.0200 | 26.29 | 9.92 | 36.21 | 56.00 | -19.79 | peak | |
| 4 | | 5.5049 | 22.00 | 10.06 | 32.06 | 60.00 | -27.94 | peak | |
| 5 | | 12.2880 | 20.26 | 10.26 | 30.52 | 60.00 | -29.48 | peak | |
| 6 | | 18.2970 | 14.40 | 10.42 | 24.82 | 60.00 | -35.18 | peak | |

*:Maximum data x:Over limit !:over margin 〈Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

## Neutral:



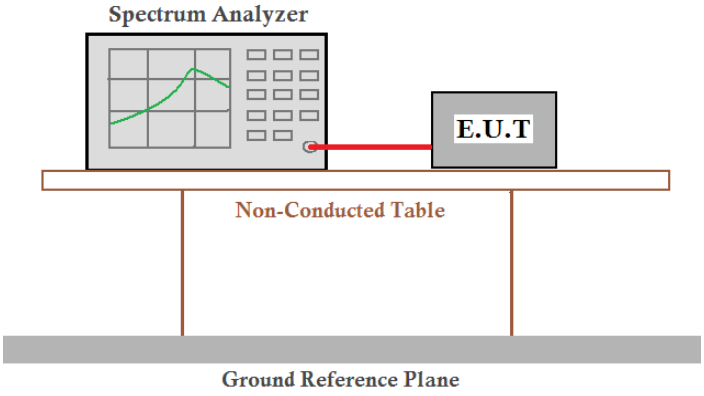

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1529 | 42.02 | 9.94 | 51.96 | 65.84 | -13.88 | peak | |
| 2 | * | 0.3390 | 36.13 | 9.94 | 46.07 | 59.23 | -13.16 | peak | |
| 3 | | 1.0200 | 25.02 | 9.92 | 34.94 | 56.00 | -21.06 | peak | |
| 4 | | 2.2618 | 21.14 | 9.90 | 31.04 | 56.00 | -24.96 | peak | |
| 5 | | 12.2880 | 17.49 | 10.26 | 27.75 | 60.00 | -32.25 | peak | |
| 6 | | 18.2970 | 16.13 | 10.42 | 26.55 | 60.00 | -33.45 | peak | |

*:Maximum data x:Over limit !:over margin (Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Note: All modes and channels have been tested and only the A 5240MHz mode with the worst data is listed.

## 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 |

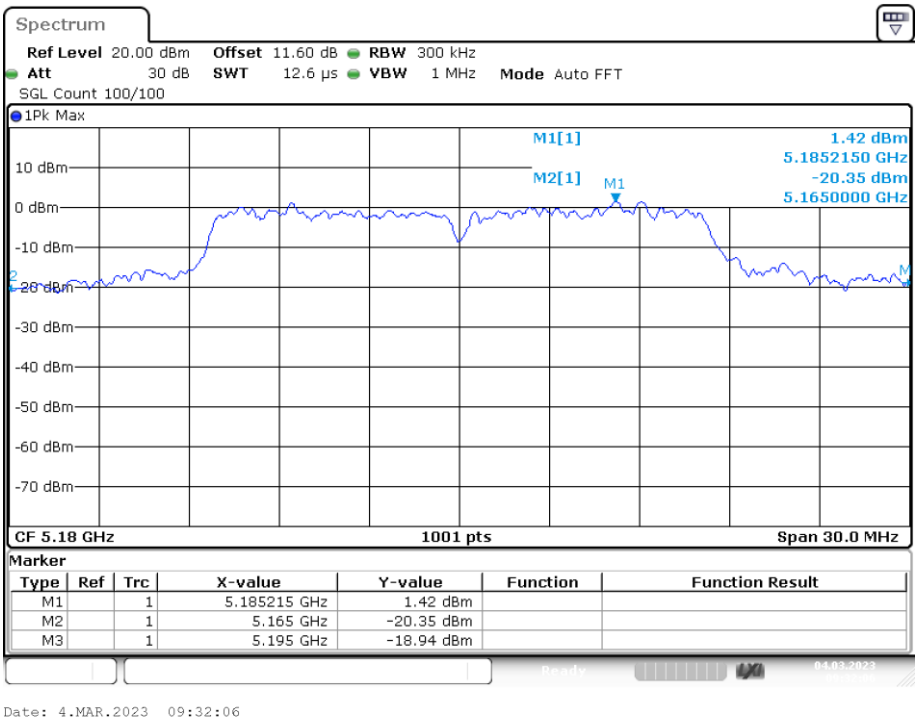
**Measurement Data:**

**Band 1 (5150-5250 MHz):**

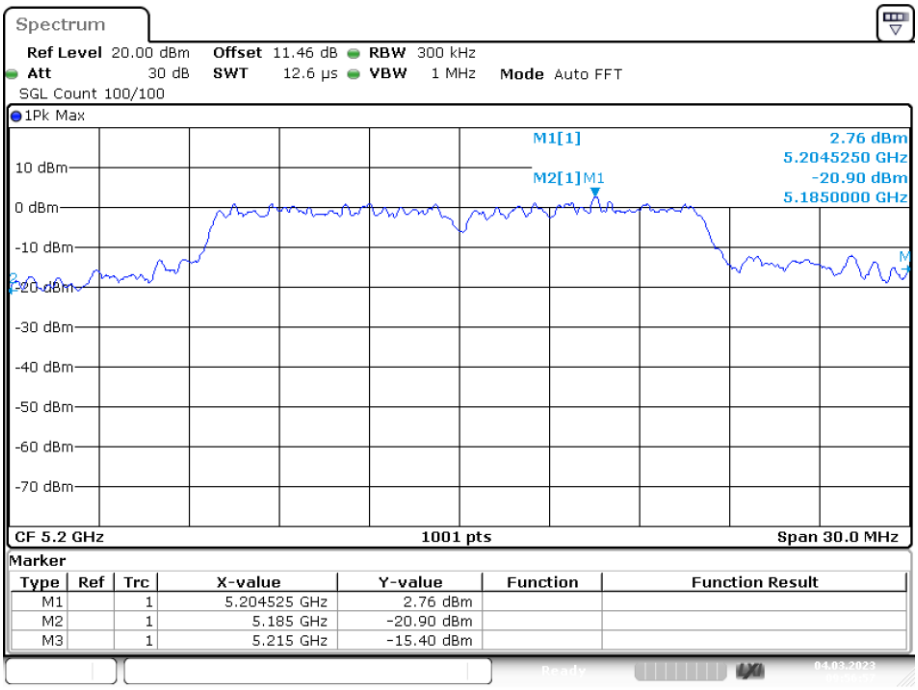
**-26dB Bandwidth**

| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) | Limit -26 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5180 | Ant1 | 30 | 0.5 | Pass |
| NVNT | a | 5200 | Ant1 | 30 | 0.5 | Pass |
| NVNT | a | 5240 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5180 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5200 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5240 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac40 | 5190 | Ant1 | 60 | 0.5 | Pass |
| NVNT | ac40 | 5230 | Ant1 | 60 | 0.5 | Pass |
| NVNT | ac80 | 5210 | Ant1 | 102.72 | 0.5 | Pass |
| NVNT | n20 | 5180 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n20 | 5200 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n20 | 5240 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n40 | 5190 | Ant1 | 59.82 | 0.5 | Pass |
| NVNT | n40 | 5230 | Ant1 | 60 | 0.5 | Pass |

-26dB Bandwidth NVNT a 5180MHz Ant1

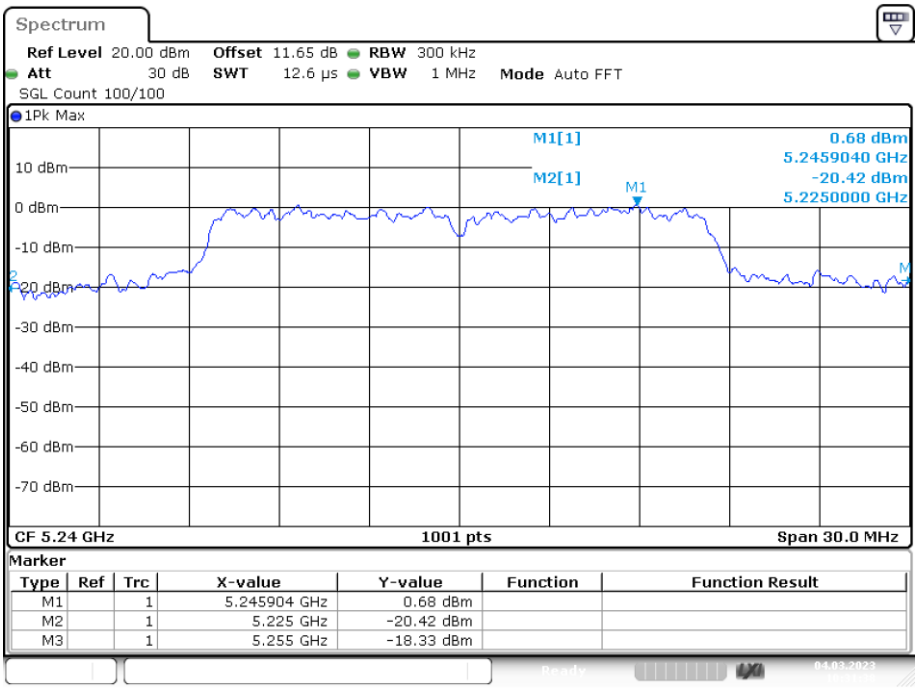


-26dB Bandwidth NVNT a 5200MHz Ant1




Date: 4.MAR.2023 09:56:56

-26dB Bandwidth NVNT a 5240MHz Ant1

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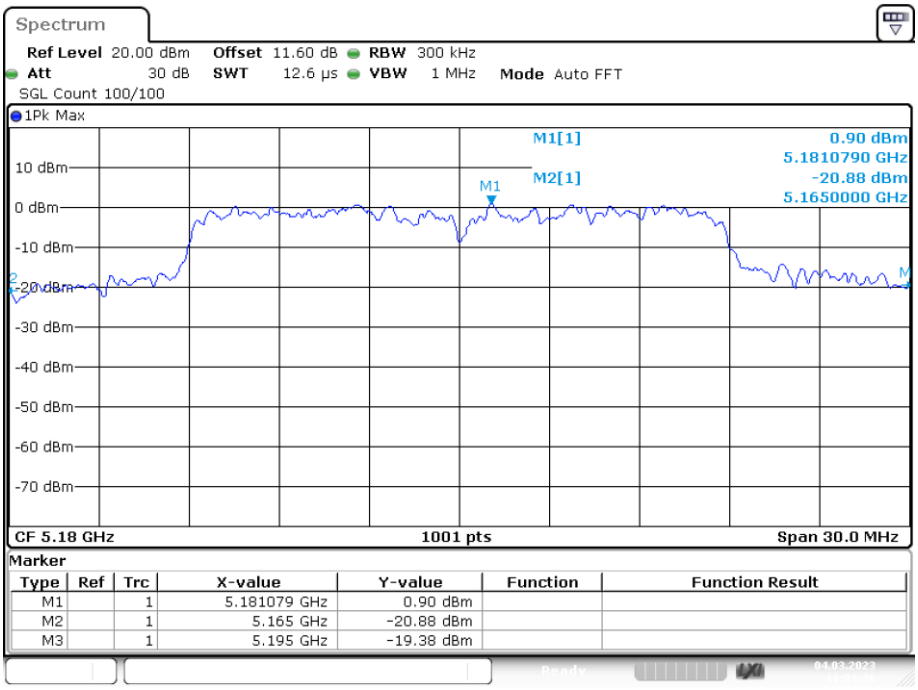
-26dB Bandwidth NVNT ac20 5180MHz Ant1

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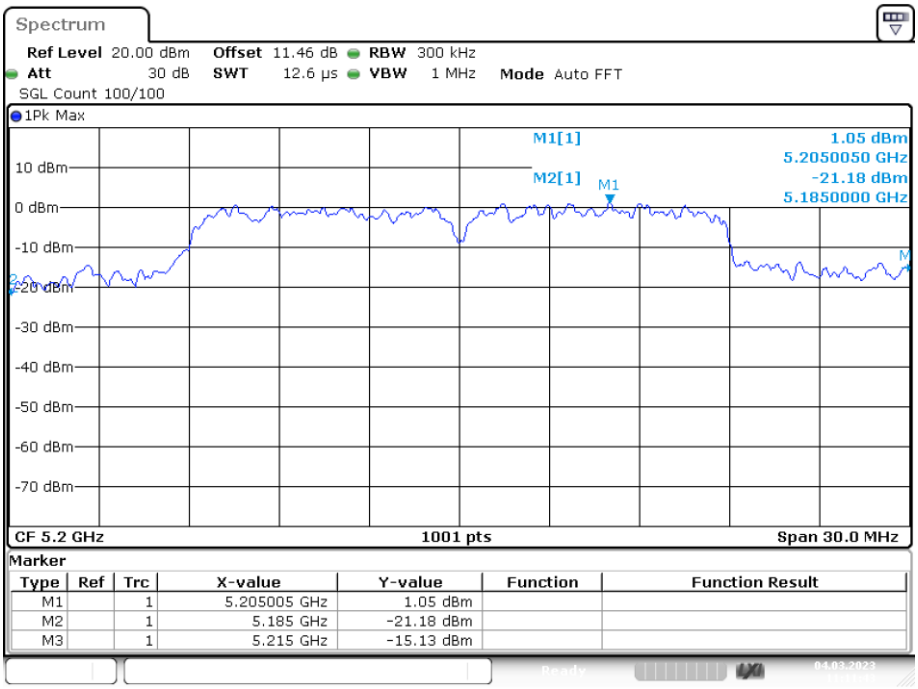
-26dB Bandwidth NVNT ac20 5200MHz Ant1

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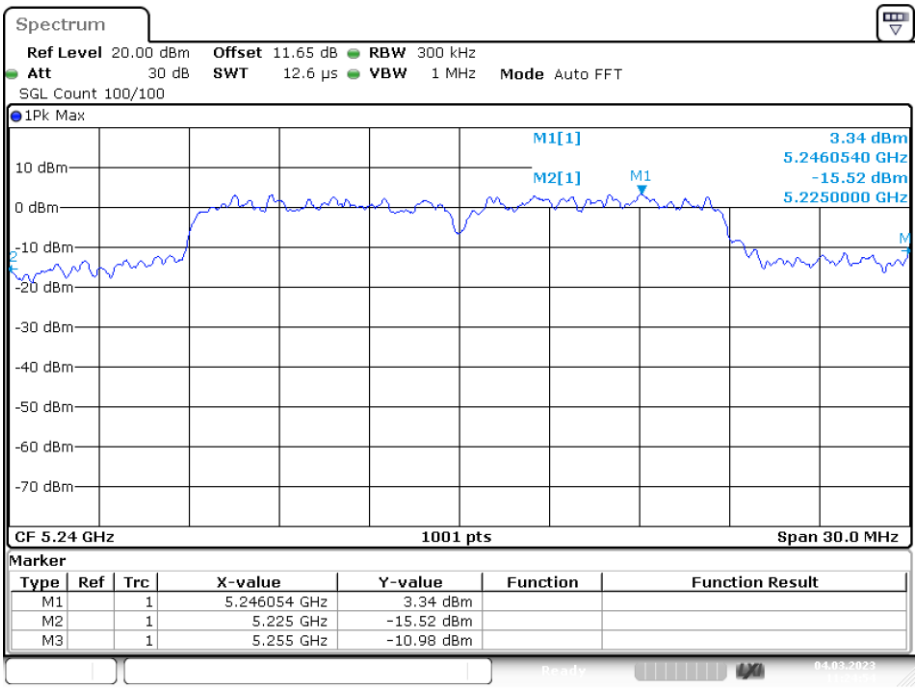
-26dB Bandwidth NVNT ac20 5240MHz Ant1

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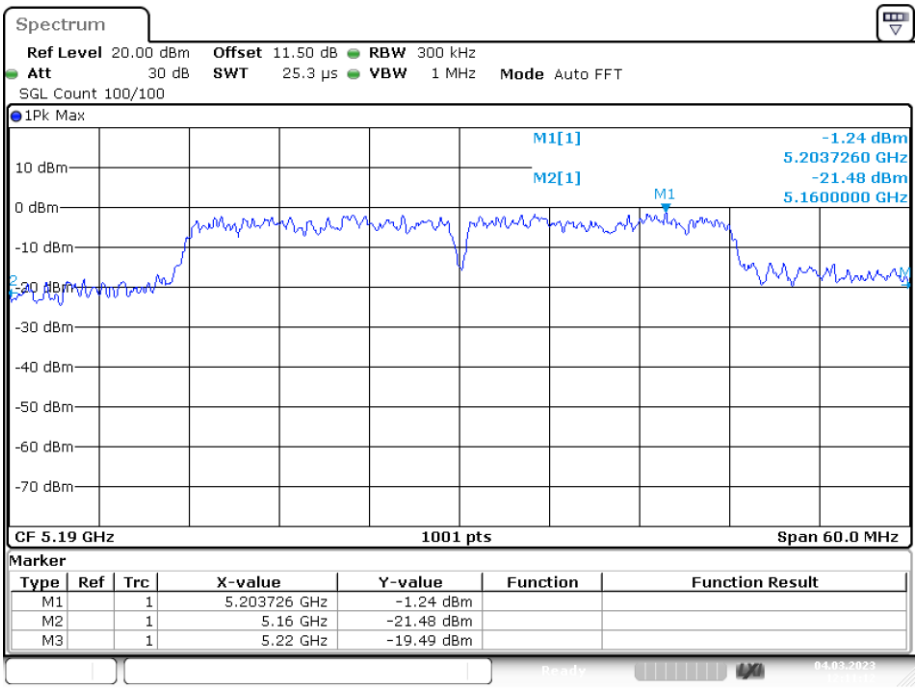
-26dB Bandwidth NVNT ac40 5190MHz Ant1

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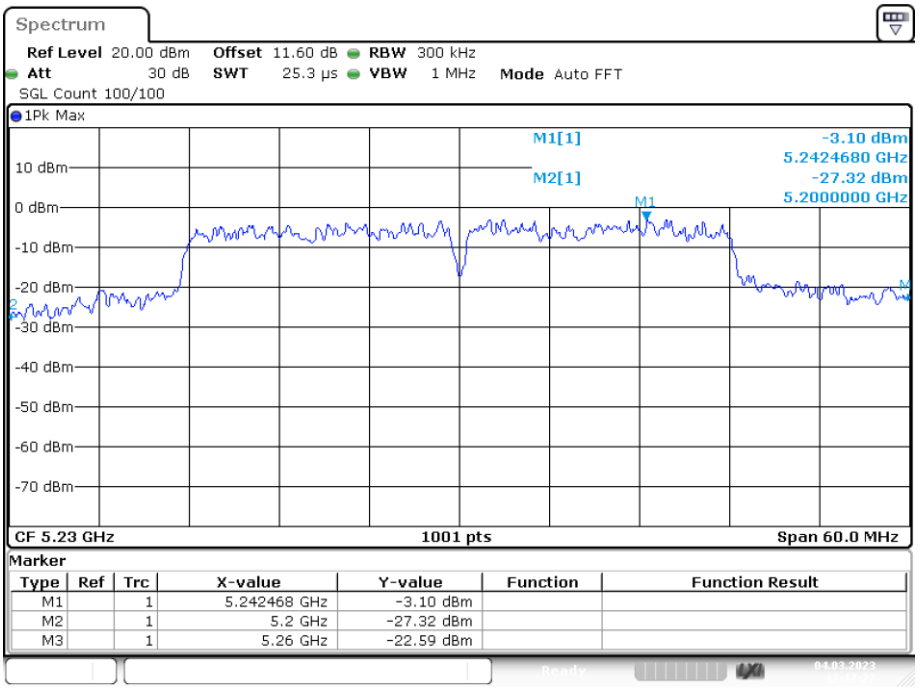
-26dB Bandwidth NVNT ac40 5230MHz Ant1

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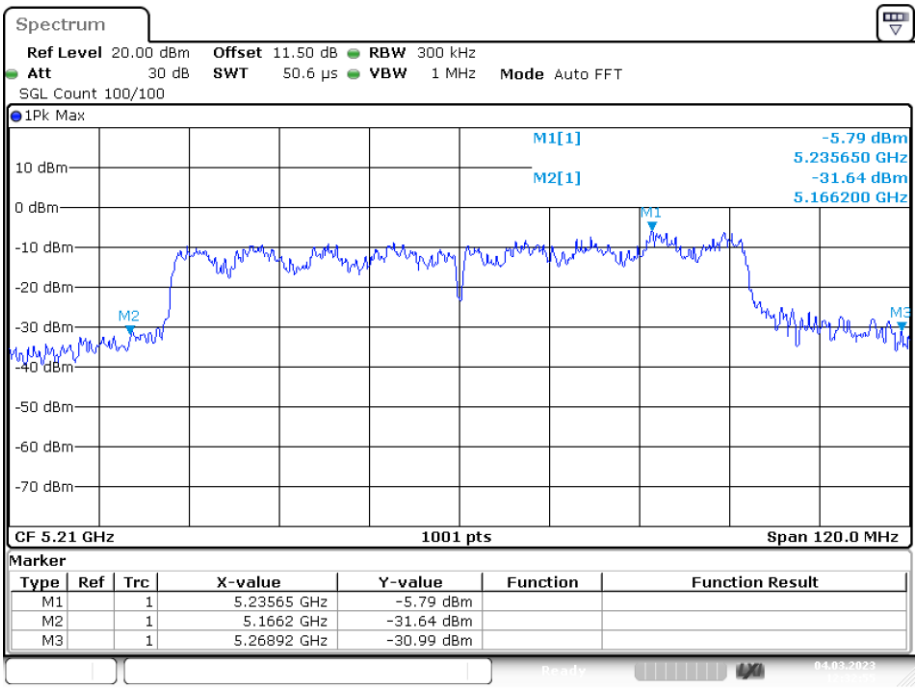
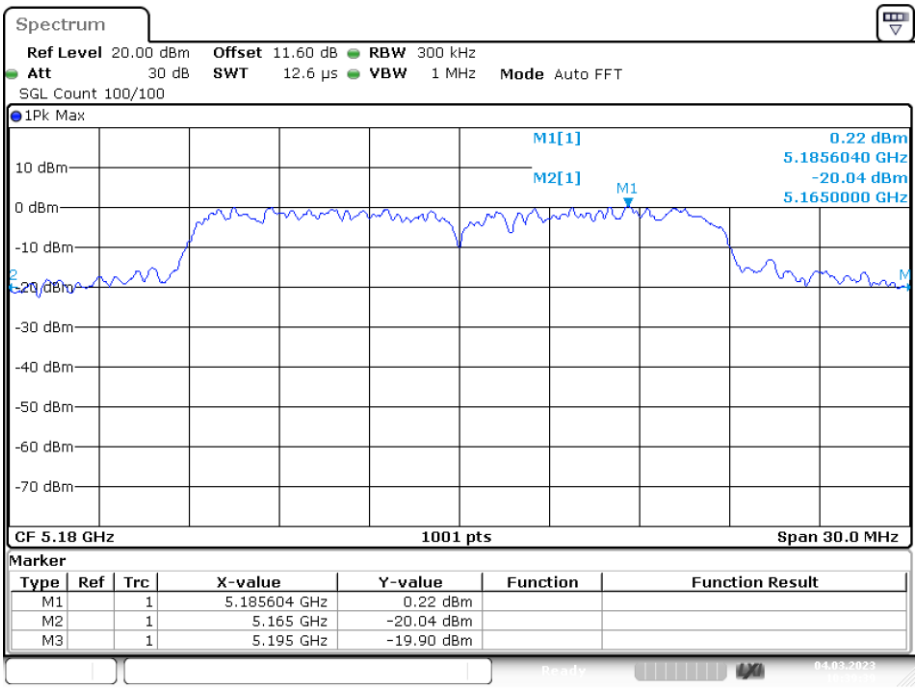
-26dB Bandwidth NVNT ac80 5210MHz Ant1




Date: 4.MAR.2023 12:32:55

-26dB Bandwidth NVNT n20 5180MHz Ant1

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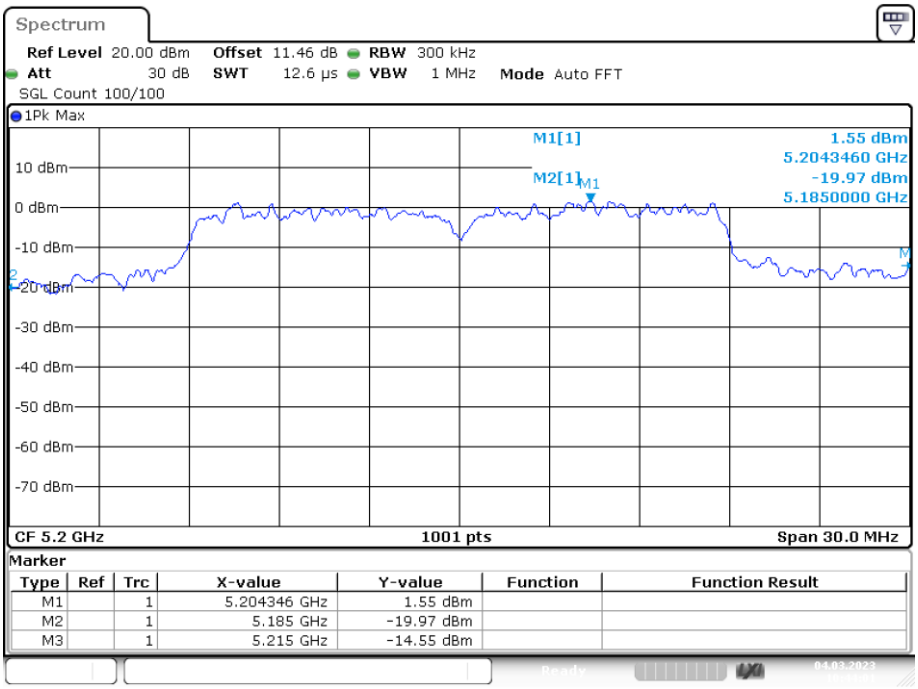
-26dB Bandwidth NVNT n20 5200MHz Ant1

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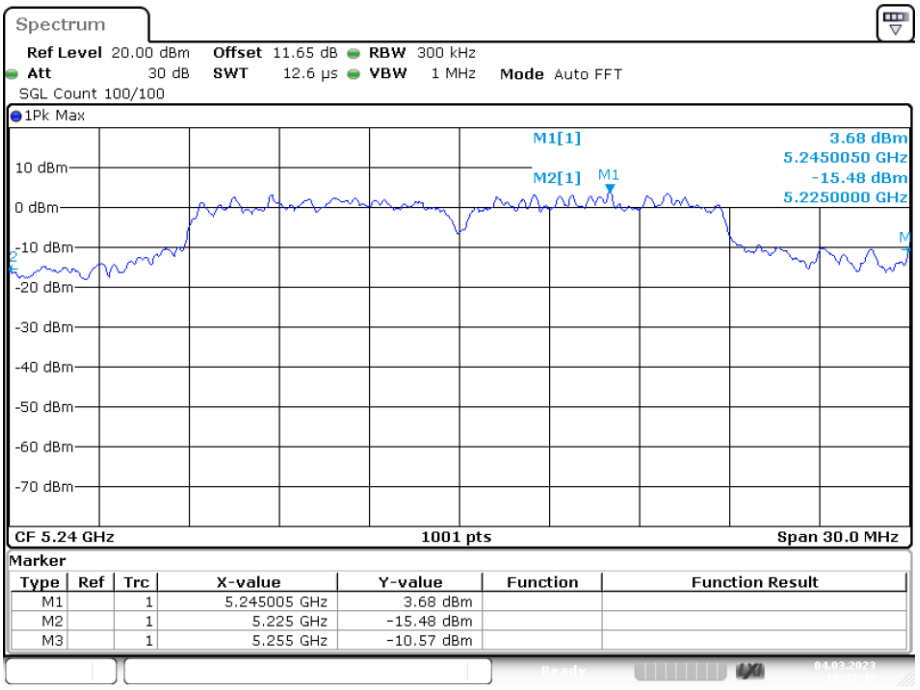
-26dB Bandwidth NVNT n20 5240MHz Ant1

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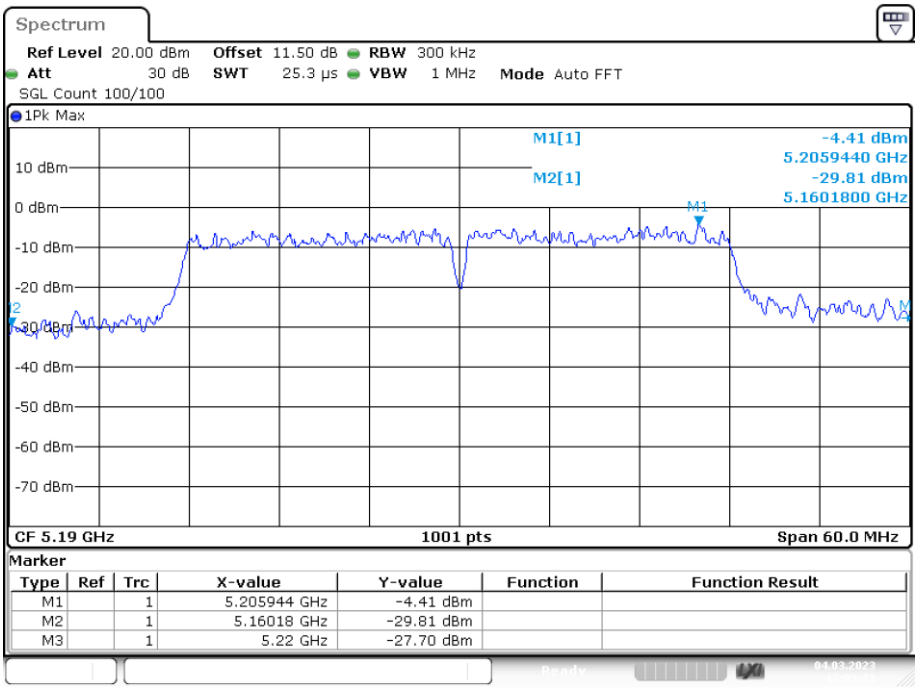
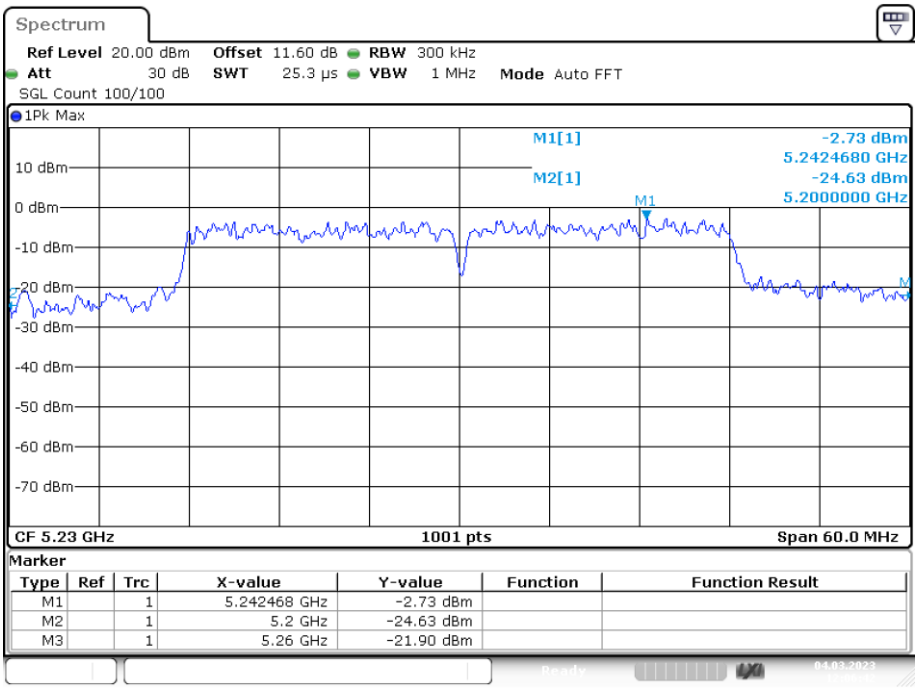
-26dB Bandwidth NVNT n40 5190MHz Ant1




Date: 4.MAR.2023 12:03:23

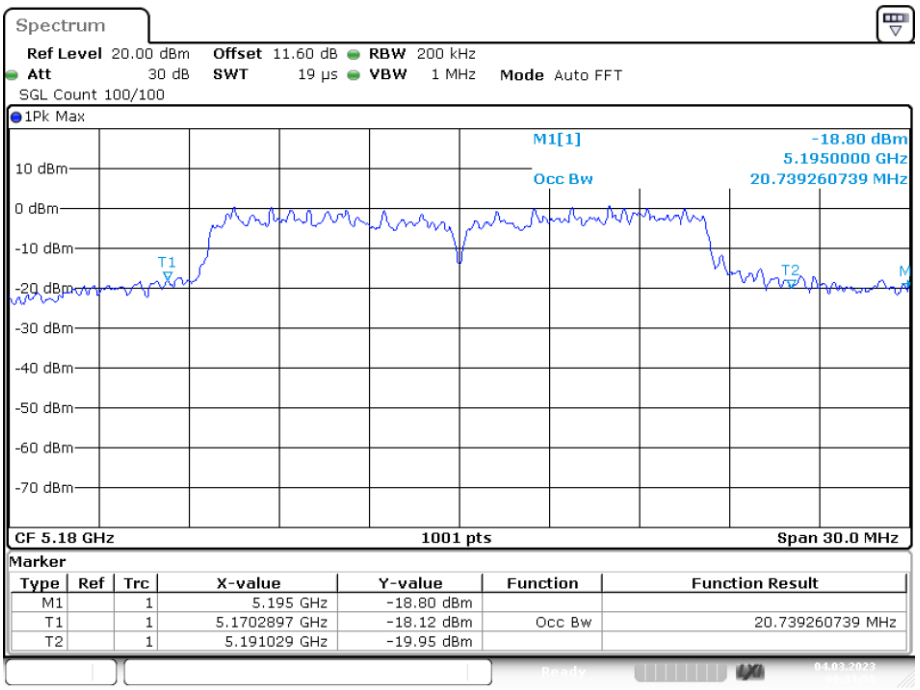
-26dB Bandwidth NVNT n40 5230MHz Ant1



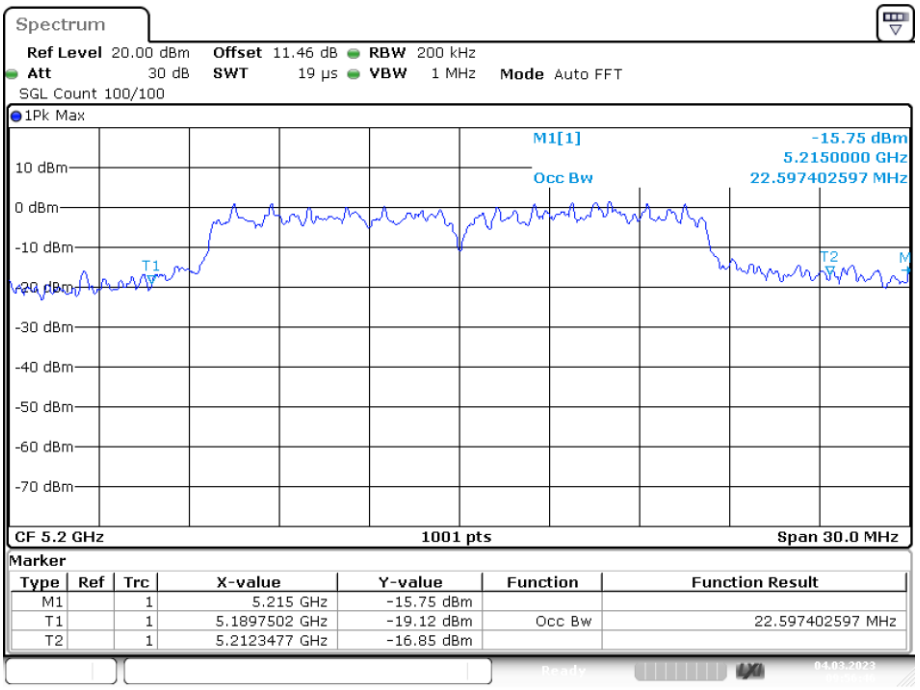
## Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5180 | Ant1 | 20.739 |
| NVNT | a | 5200 | Ant1 | 22.597 |
| NVNT | a | 5240 | Ant1 | 20.799 |
| NVNT | ac20 | 5180 | Ant1 | 21.219 |
| NVNT | ac20 | 5200 | Ant1 | 23.107 |
| NVNT | ac20 | 5240 | Ant1 | 23.497 |
| NVNT | ac40 | 5190 | Ant1 | 46.334 |
| NVNT | ac40 | 5230 | Ant1 | 42.138 |
| NVNT | ac80 | 5210 | Ant1 | 76.484 |
| NVNT | n20 | 5180 | Ant1 | 21.369 |
| NVNT | n20 | 5200 | Ant1 | 21.998 |
| NVNT | n20 | 5240 | Ant1 | 23.526 |
| NVNT | n40 | 5190 | Ant1 | 39.5 |
| NVNT | n40 | 5230 | Ant1 | 42.977 |

OBW NVNT a 5180MHz Ant1

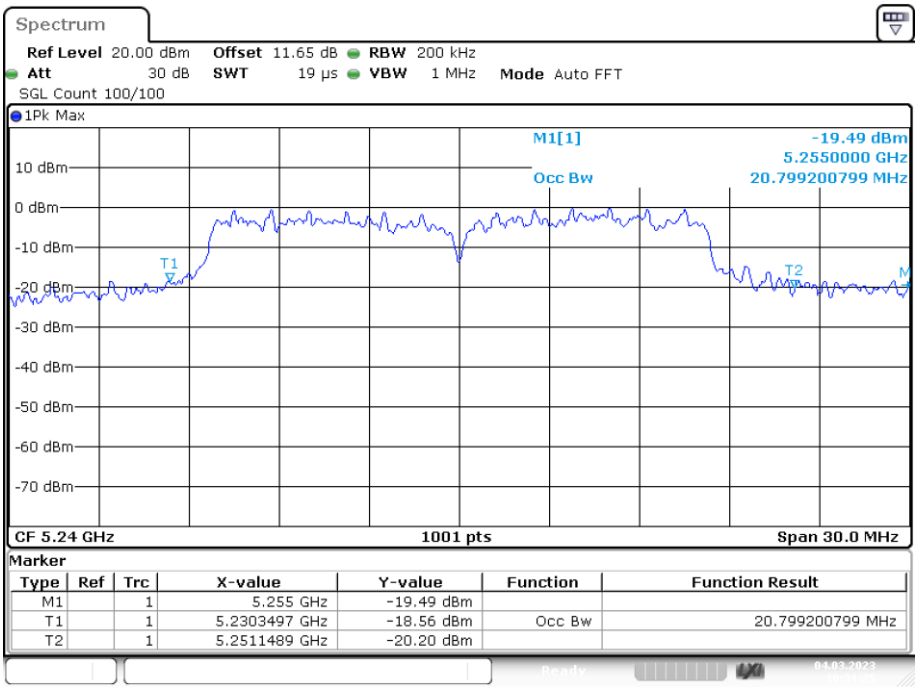


OBW NVNT a 5200MHz Ant1



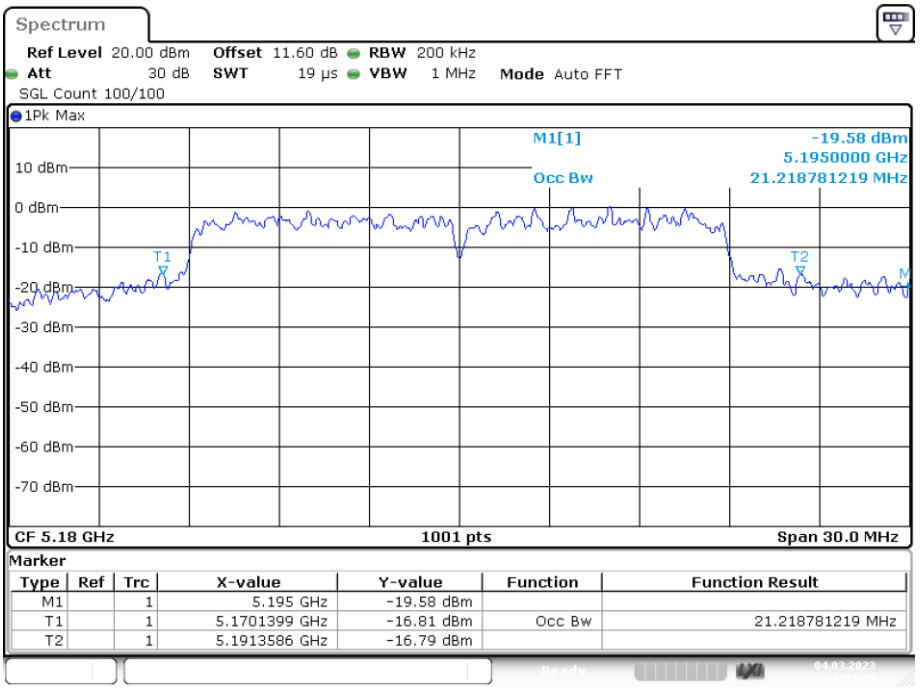

Date: 4.MAR.2023 09:56:47

OBW NVNT a 5240MHz Ant1



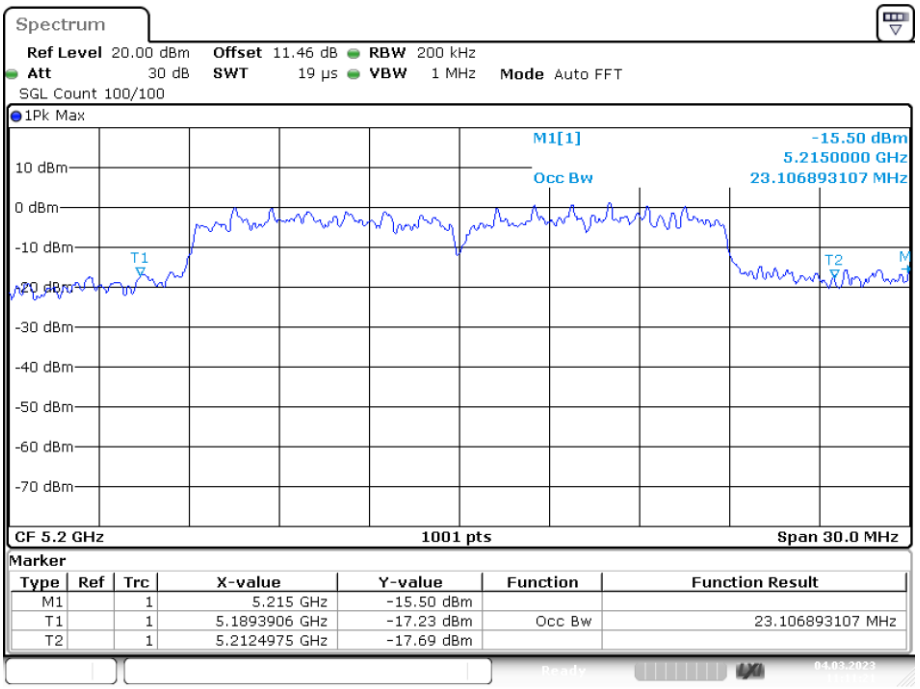

Date: 4.MAR.2023 10:31:26

OBW NVNT ac20 5180MHz Ant1



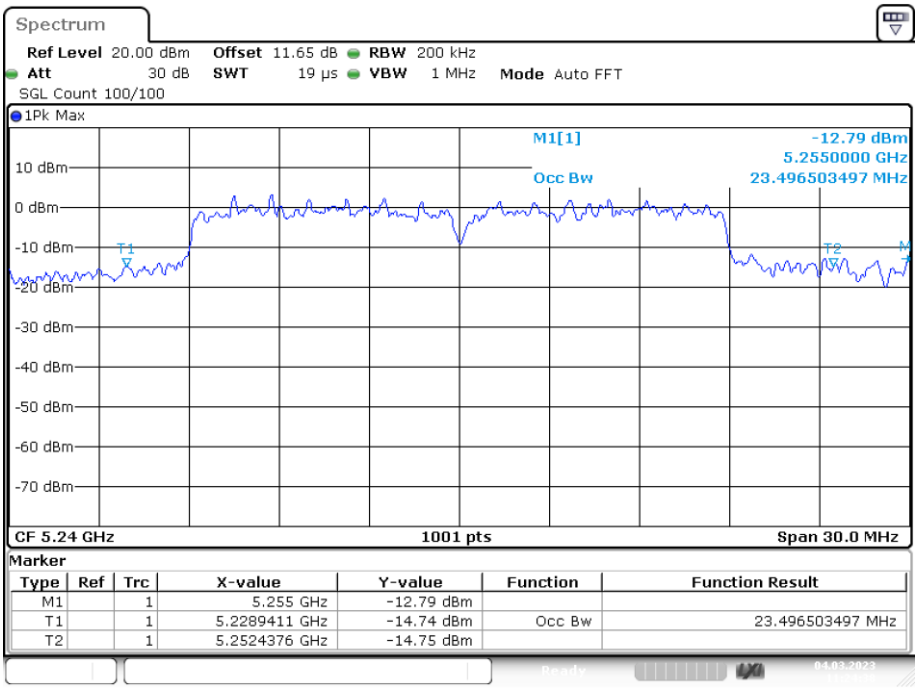

Date: 4.MAR.2023 11:01:20

OBW NVNT ac20 5200MHz Ant1



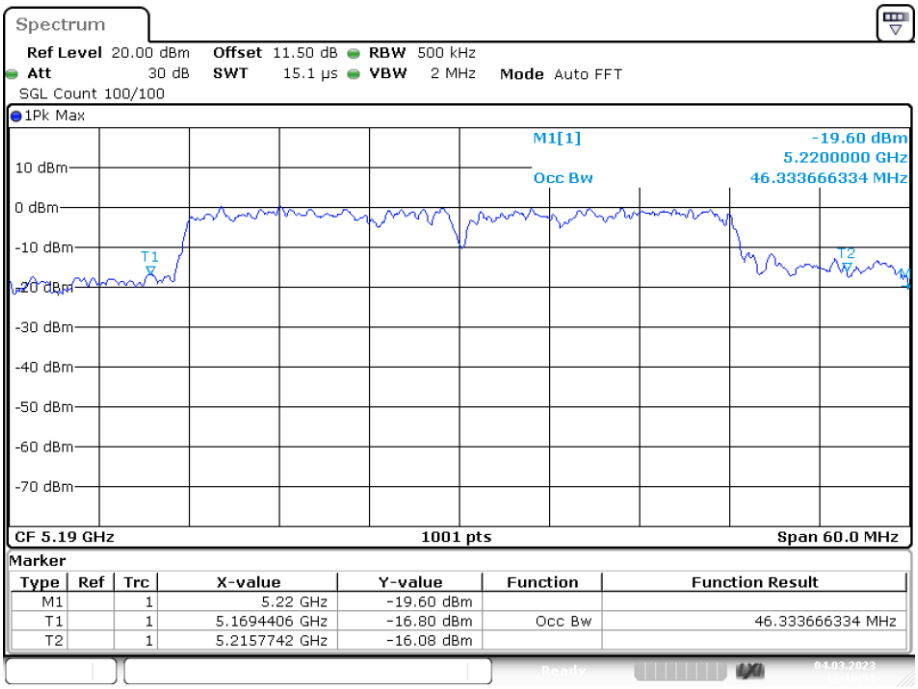

Date: 4.MAR.2023 11:11:21

OBW NVNT ac20 5240MHz Ant1



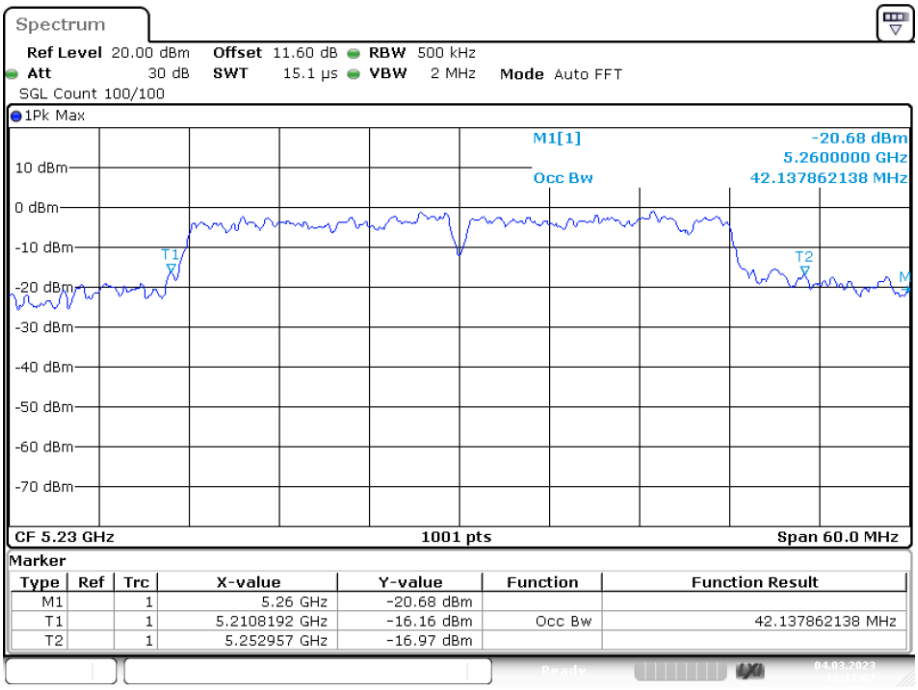

Date: 4.MAR.2023 11:24:38

OBW NVNT ac40 5190MHz Ant1



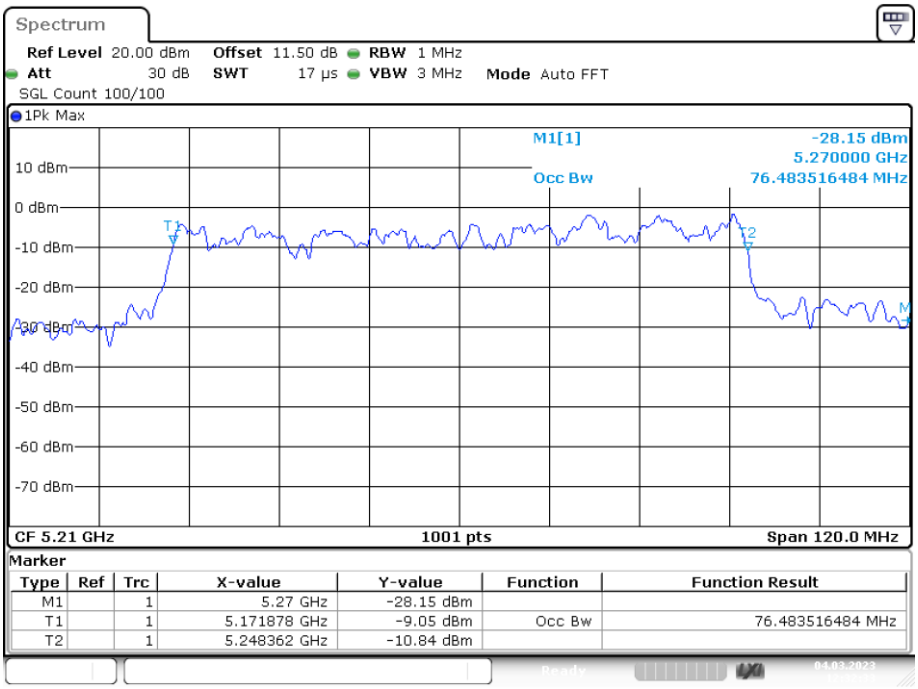

Date: 4.MAR.2023 12:10:52

OBW NVNT ac40 5230MHz Ant1



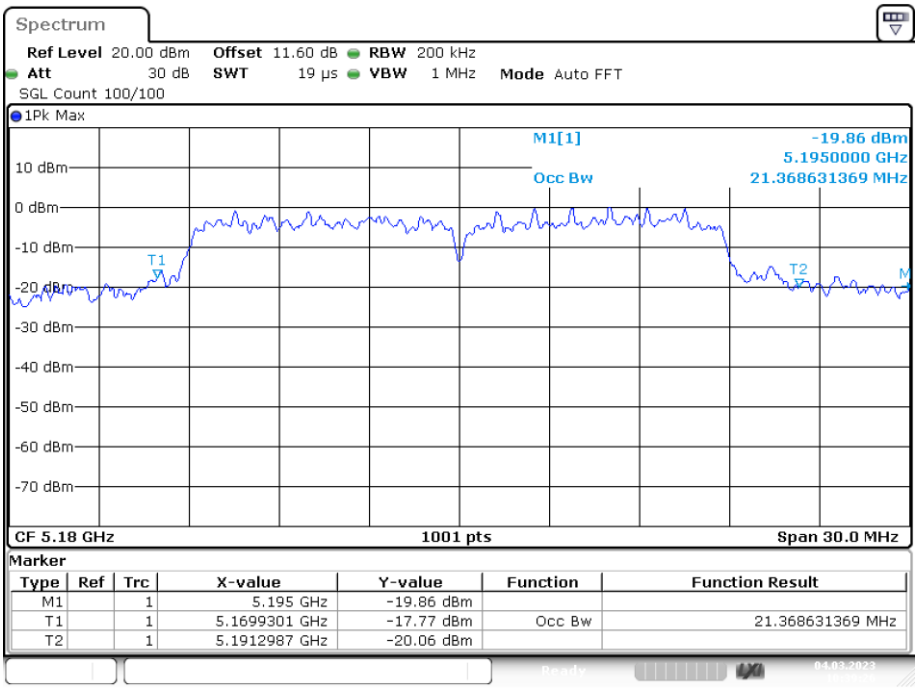

Date: 4.MAR.2023 12:17:07

OBW NVNT ac80 5210MHz Ant1



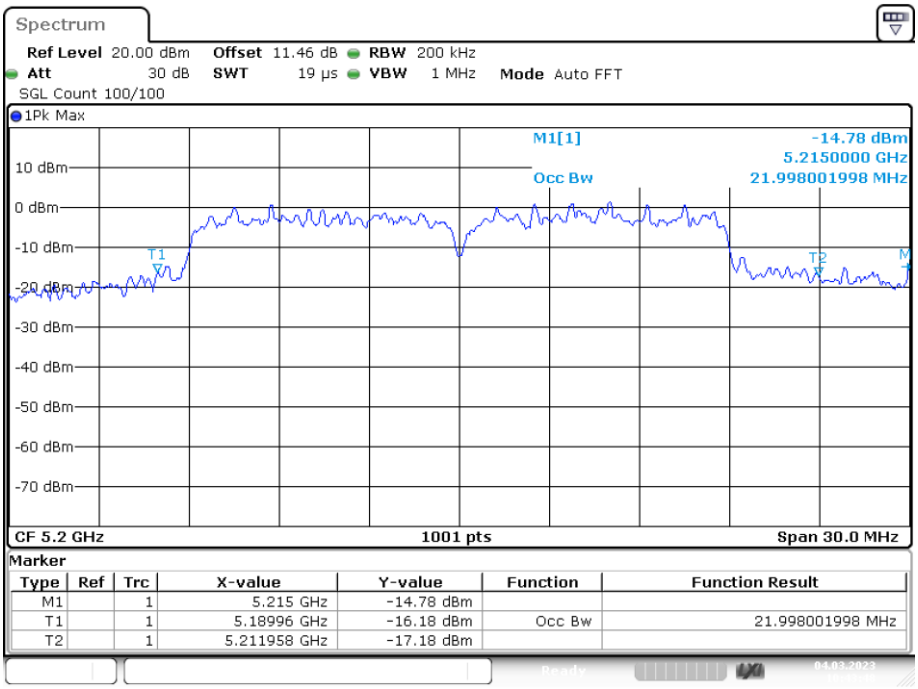

Date: 4.MAR.2023 12:32:33

OBW NVNT n20 5180MHz Ant1



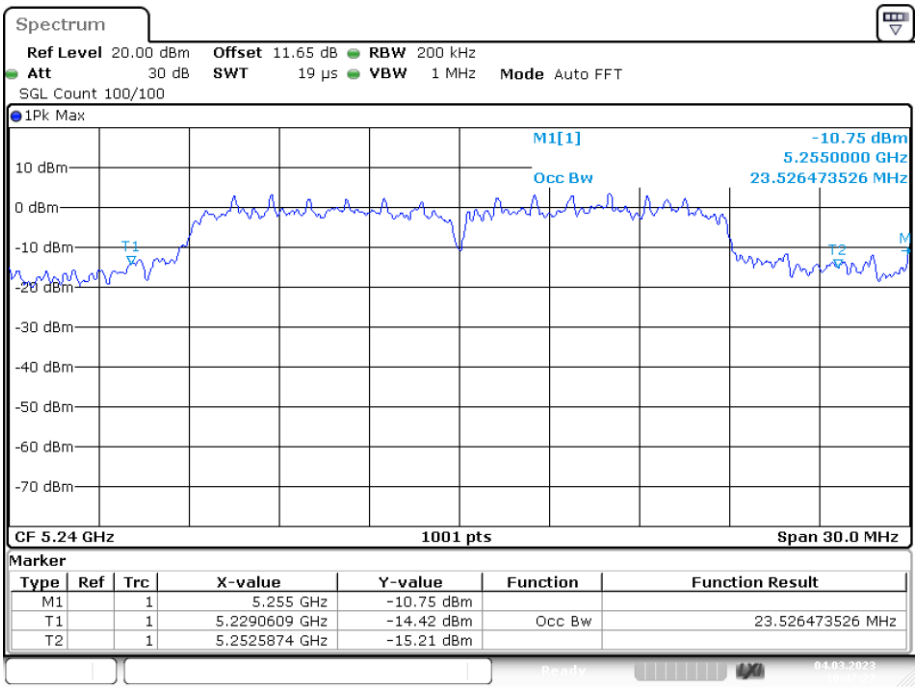

Date: 4.MAR.2023 10:39:26

OBW NVNT n20 5200MHz Ant1



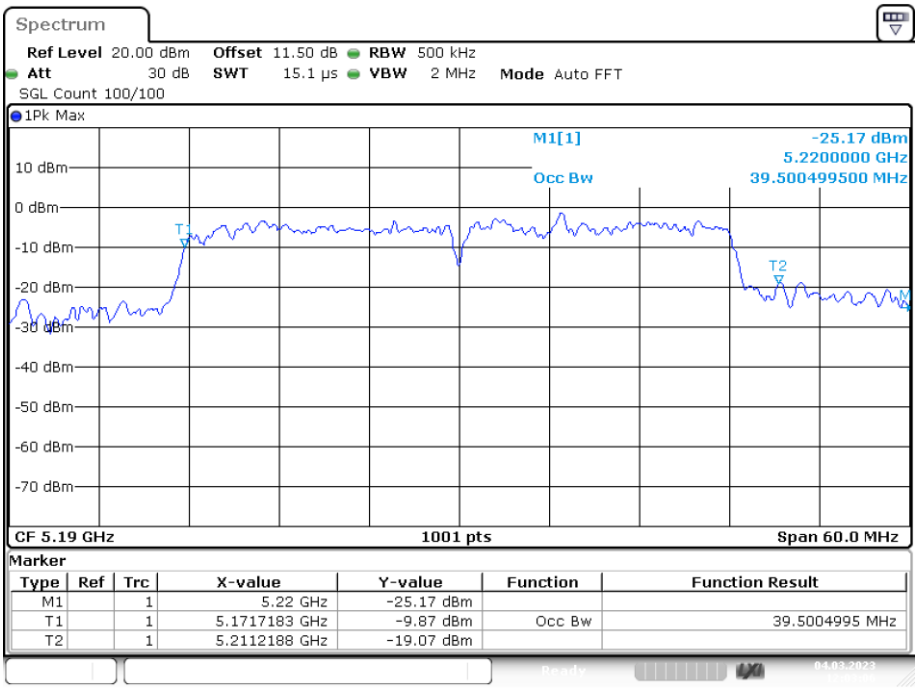

Date: 4.MAR.2023 10:43:47

OBW NVNT n20 5240MHz Ant1



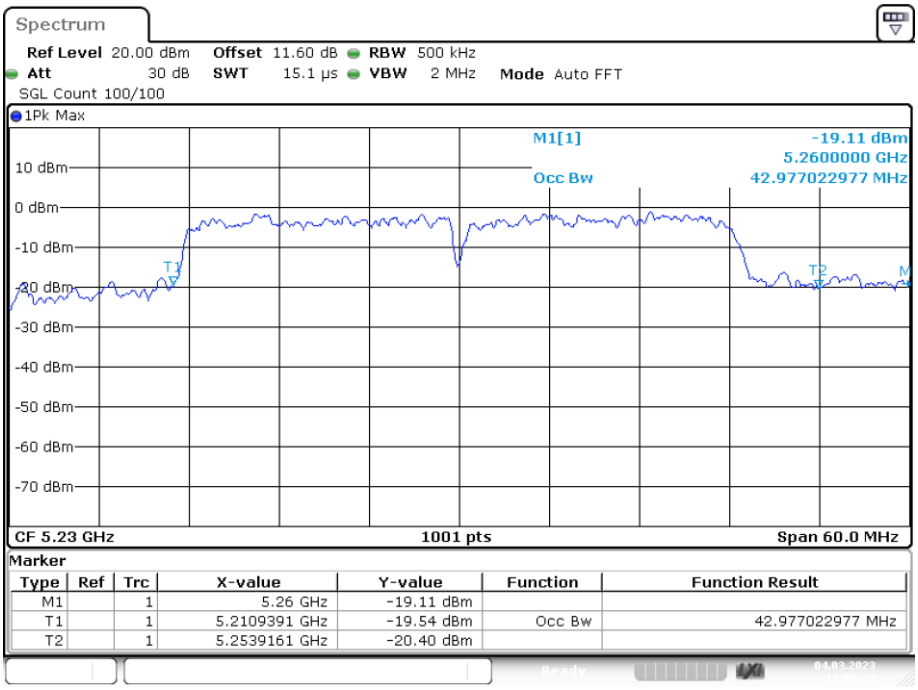

Date: 4.MAR.2023 10:47:26

OBW NVNT n40 5190MHz Ant1




Date: 4.MAR.2023 12:03:05

OBW NVNT n40 5230MHz Ant1



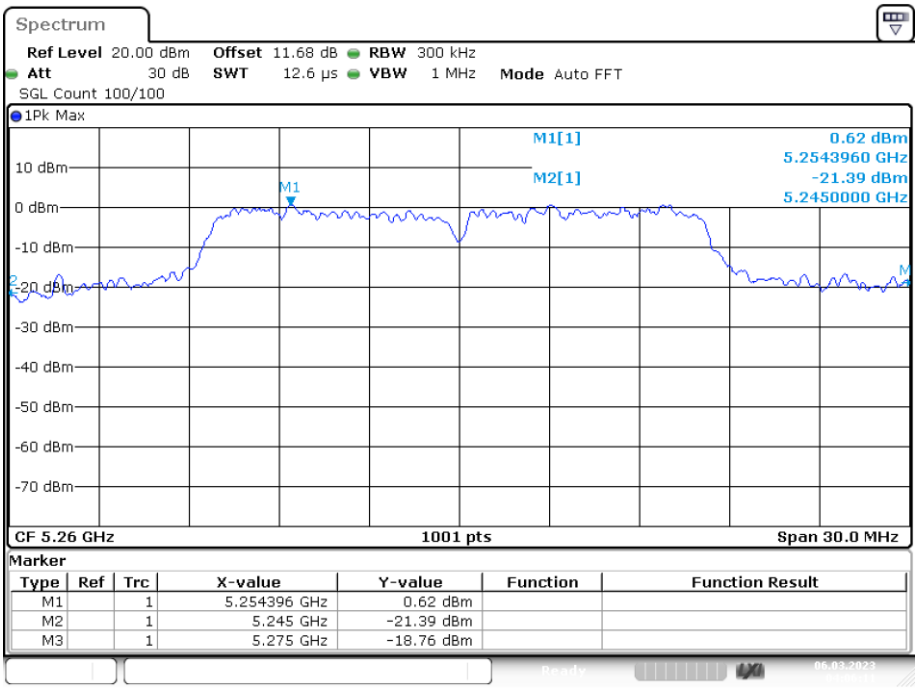

Date: 4.MAR.2023 12:06:25

## Band 2 (5250-5350 MHz):

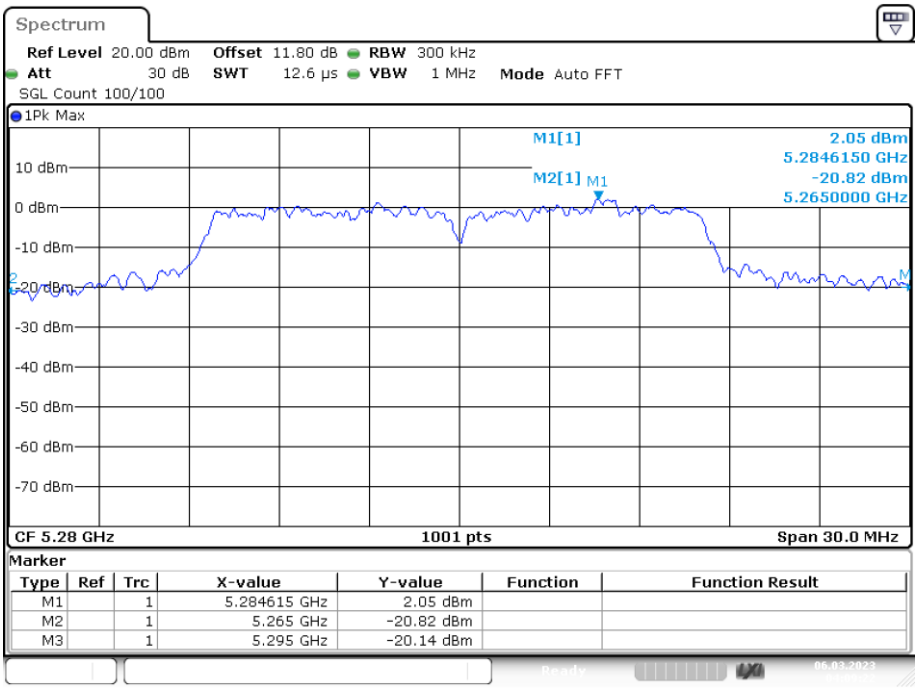
### -26dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) | Limit -26 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5260 | Ant1 | 30 | 0.5 | Pass |
| NVNT | a | 5280 | Ant1 | 30 | 0.5 | Pass |
| NVNT | a | 5320 | Ant1 | 29.52 | 0.5 | Pass |
| NVNT | ac20 | 5260 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5280 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5320 | Ant1 | 29.73 | 0.5 | Pass |
| NVNT | ac40 | 5270 | Ant1 | 60 | 0.5 | Pass |
| NVNT | ac40 | 5310 | Ant1 | 59.04 | 0.5 | Pass |
| NVNT | ac80 | 5290 | Ant1 | 99.6 | 0.5 | Pass |
| NVNT | n20 | 5260 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n20 | 5280 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n20 | 5320 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n40 | 5270 | Ant1 | 60 | 0.5 | Pass |
| NVNT | n40 | 5310 | Ant1 | 58.92 | 0.5 | Pass |

-26dB Bandwidth NVNT a 5260MHz Ant1

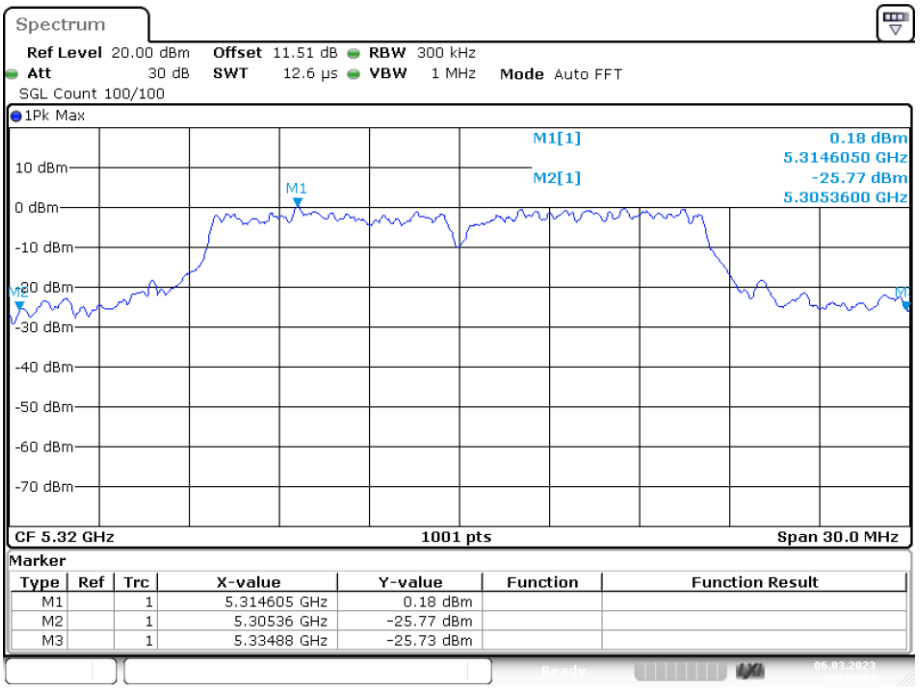


-26dB Bandwidth NVNT a 5280MHz Ant1



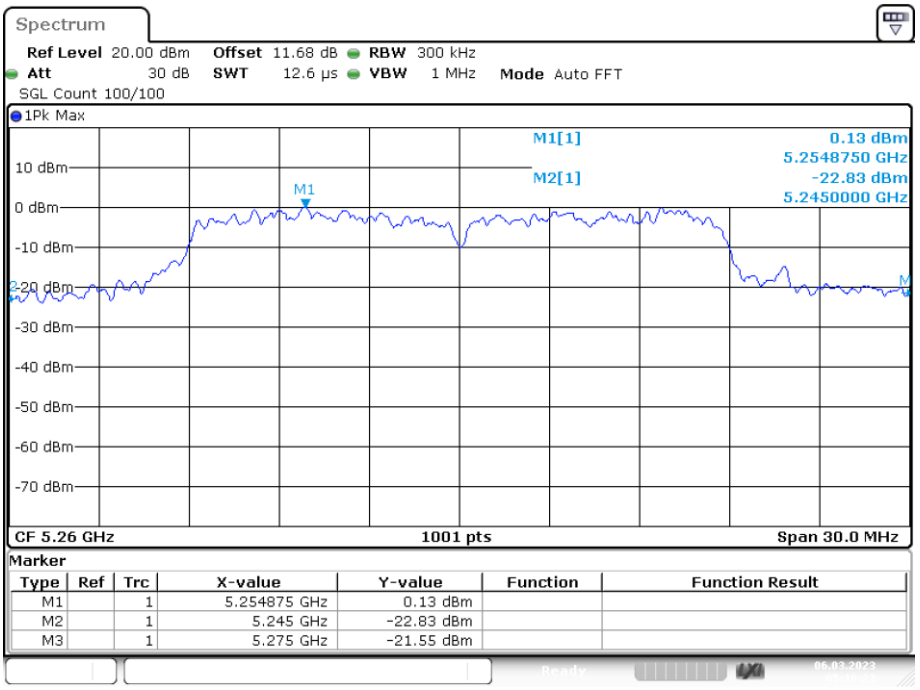

Date: 6.MAR.2023 04:09:21

-26dB Bandwidth NVNT a 5320MHz Ant1



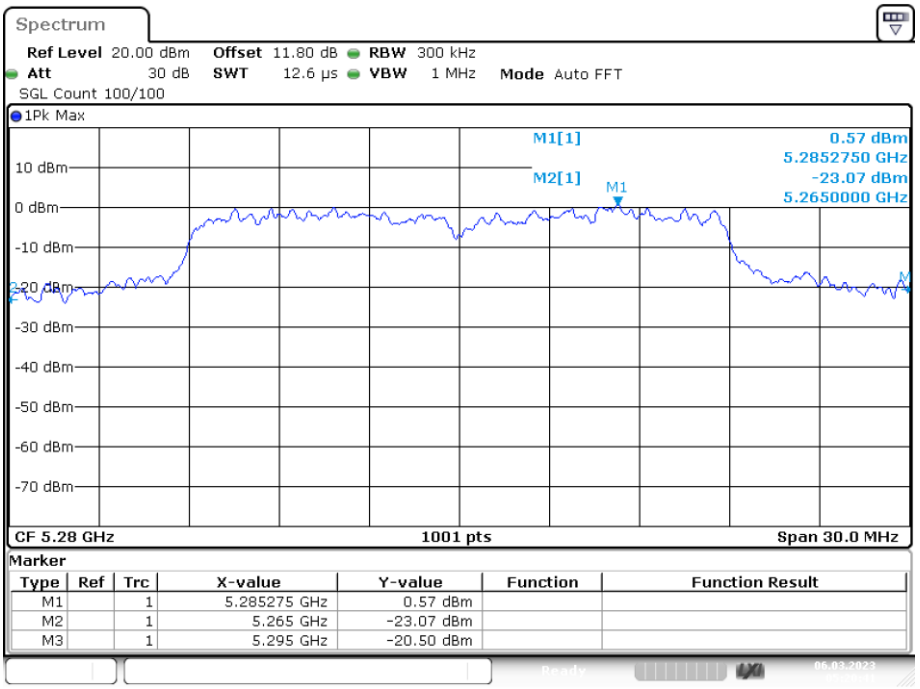

Date: 6.MAR.2023 04:18:14

-26dB Bandwidth NVNT ac20 5260MHz Ant1



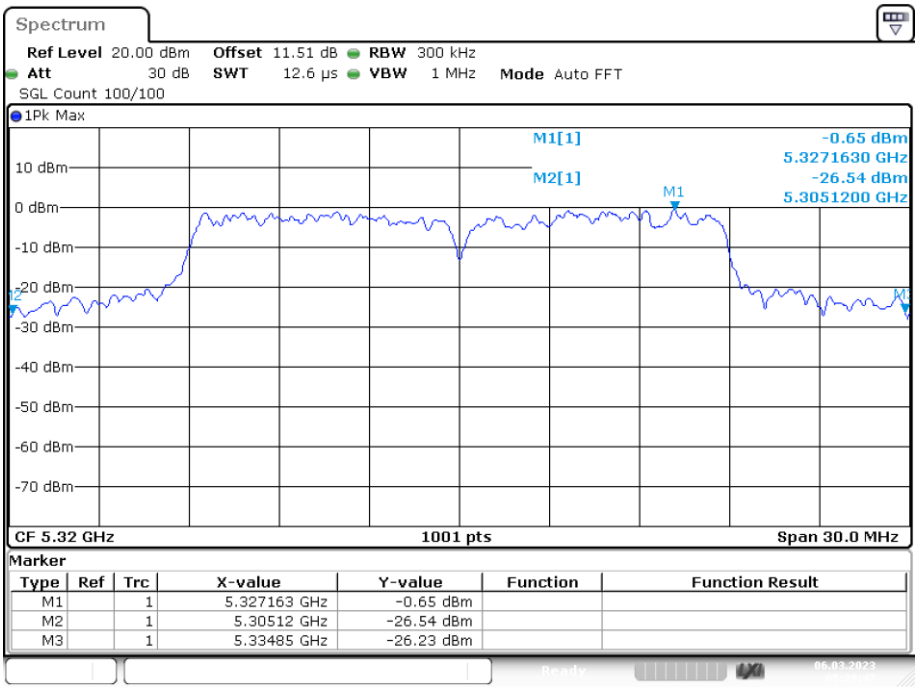

Date: 6.MAR.2023 05:16:22

-26dB Bandwidth NVNT ac20 5280MHz Ant1



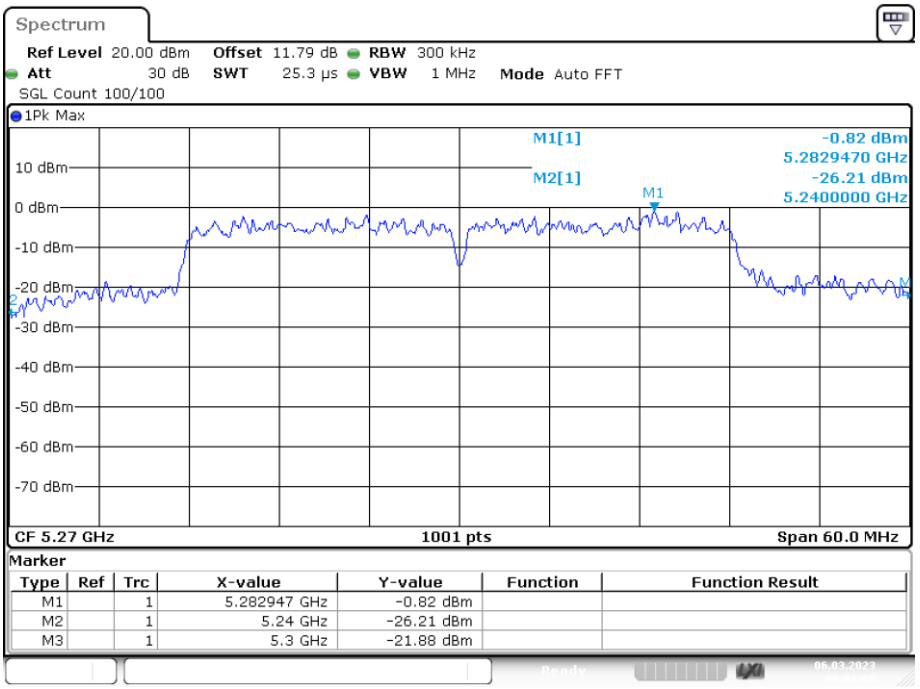

Date: 6.MAR.2023 05:20:41

-26dB Bandwidth NVNT ac20 5320MHz Ant1



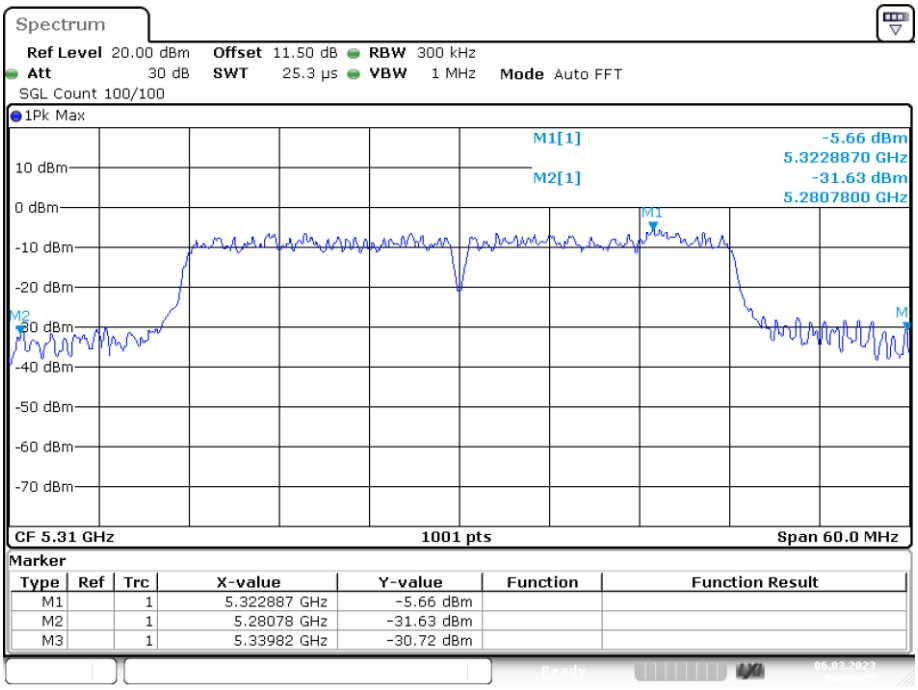

Date: 6.MAR.2023 05:29:47

-26dB Bandwidth NVNT ac40 5270MHz Ant1



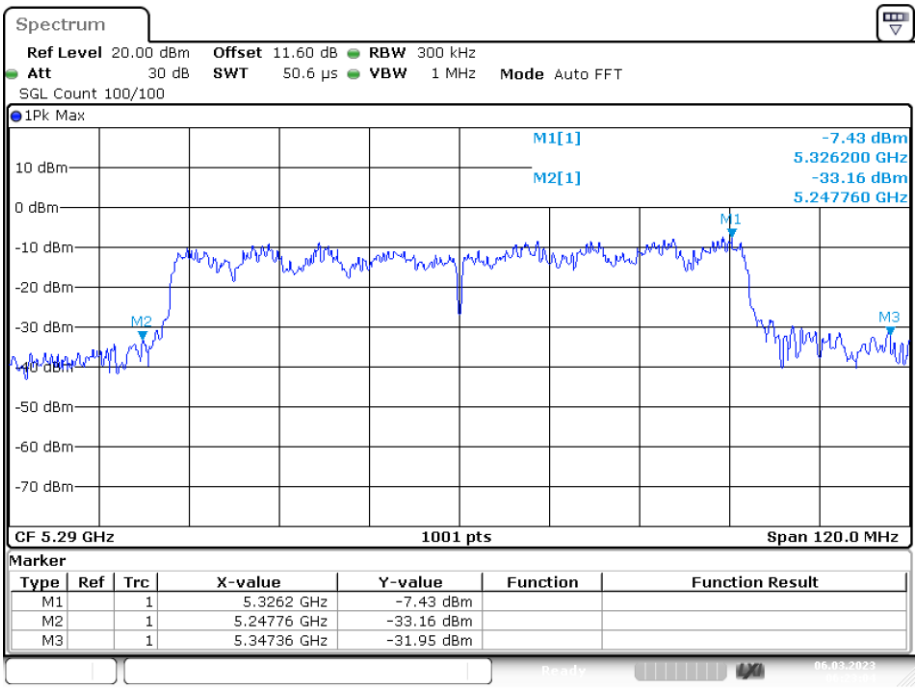

Date: 6.MAR.2023 06:01:00

-26dB Bandwidth NVNT ac40 5310MHz Ant1



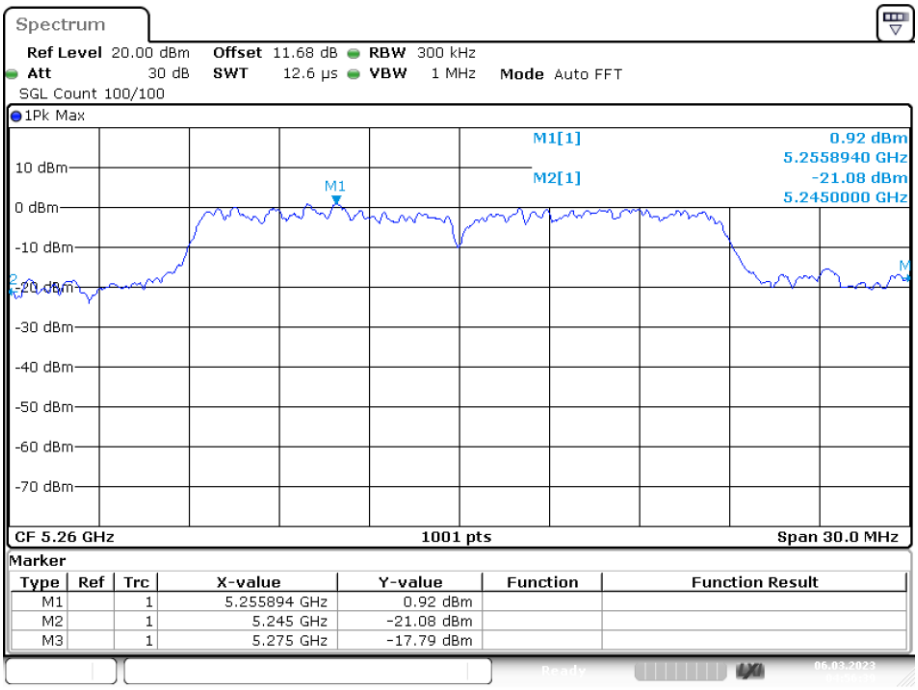

Date: 6.MAR.2023 06:16:56

-26dB Bandwidth NVNT ac80 5290MHz Ant1



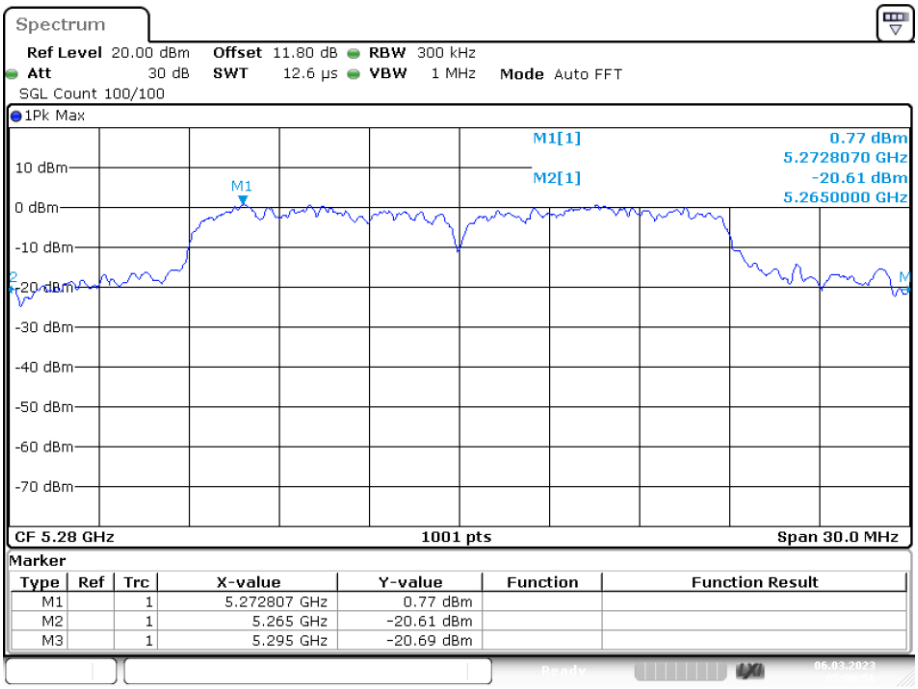

Date: 6.MAR.2023 06:23:03

-26dB Bandwidth NVNT n20 5260MHz Ant1



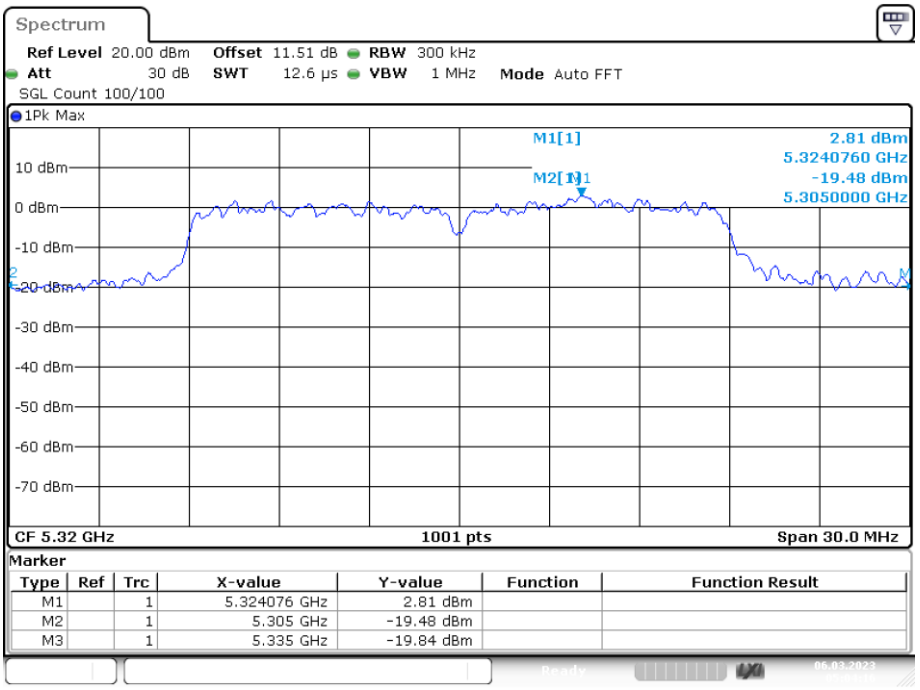

Date: 6.MAR.2023 04:56:39

-26dB Bandwidth NVNT n20 5280MHz Ant1



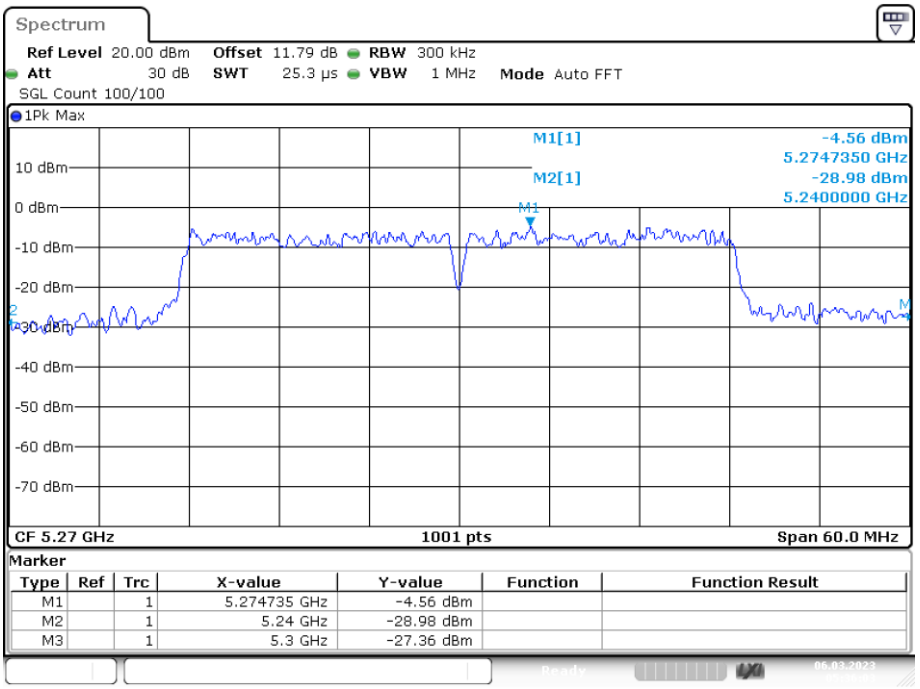

Date: 6.MAR.2023 05:00:55

-26dB Bandwidth NVNT n20 5320MHz Ant1



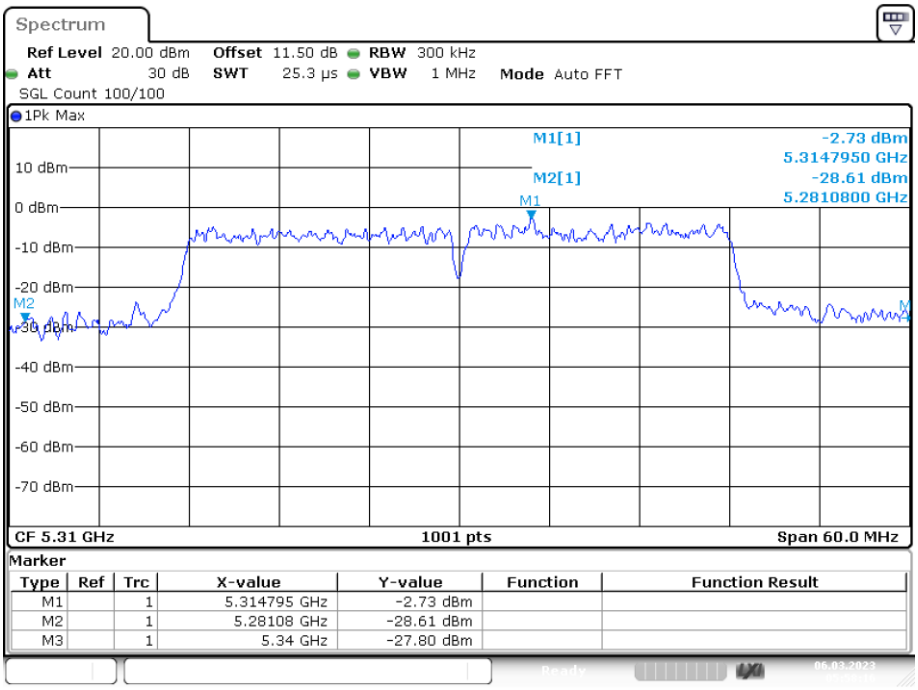

Date: 6.MAR.2023 05:04:16

-26dB Bandwidth NVNT n40 5270MHz Ant1




Date: 6.MAR.2023 05:36:03

-26dB Bandwidth NVNT n40 5310MHz Ant1

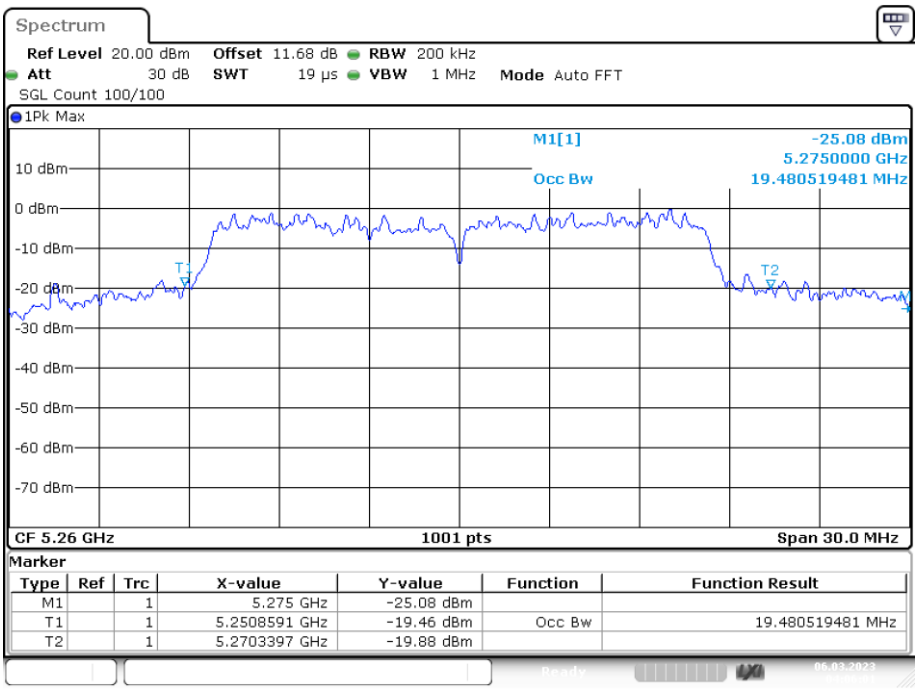



Date: 6.MAR.2023 05:58:17

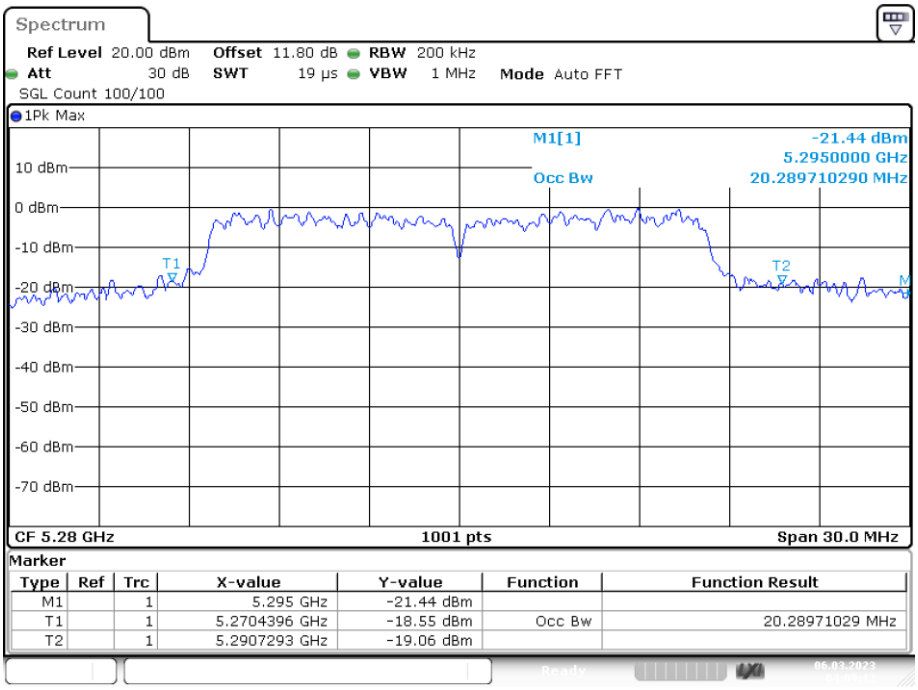
## Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5260 | Ant1 | 19.481 |
| NVNT | a | 5280 | Ant1 | 20.29 |
| NVNT | a | 5320 | Ant1 | 16.693 |
| NVNT | ac20 | 5260 | Ant1 | 20.2 |
| NVNT | ac20 | 5280 | Ant1 | 20.919 |
| NVNT | ac20 | 5320 | Ant1 | 17.802 |
| NVNT | ac40 | 5270 | Ant1 | 42.498 |
| NVNT | ac40 | 5310 | Ant1 | 36.803 |
| NVNT | ac80 | 5290 | Ant1 | 76.124 |
| NVNT | n20 | 5260 | Ant1 | 19.66 |
| NVNT | n20 | 5280 | Ant1 | 20.739 |
| NVNT | n20 | 5320 | Ant1 | 18.731 |
| NVNT | n40 | 5270 | Ant1 | 37.463 |
| NVNT | n40 | 5310 | Ant1 | 36.563 |

OBW NVNT a 5260MHz Ant1

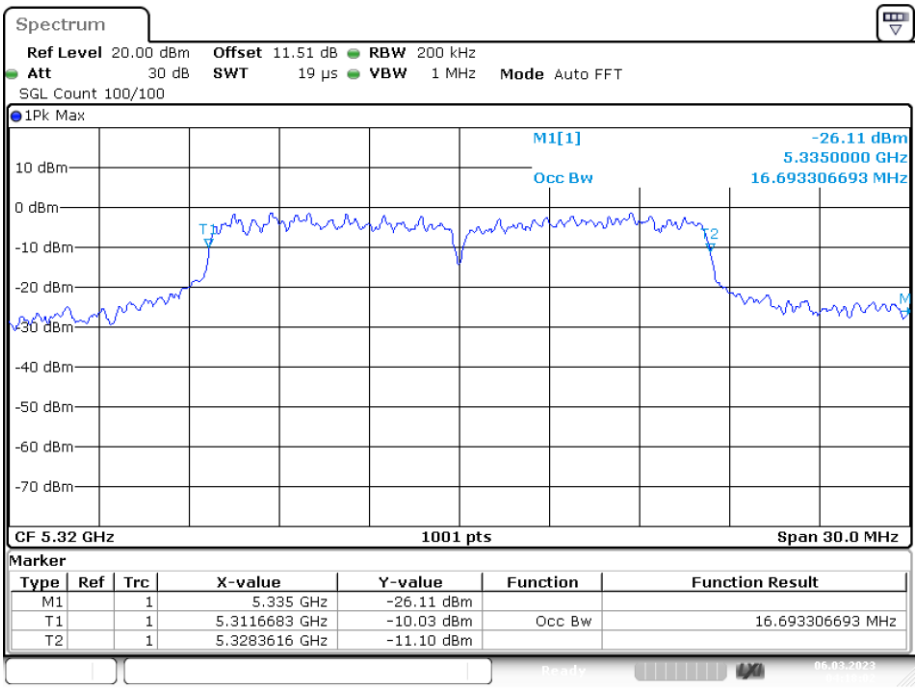


OBW NVNT a 5280MHz Ant1



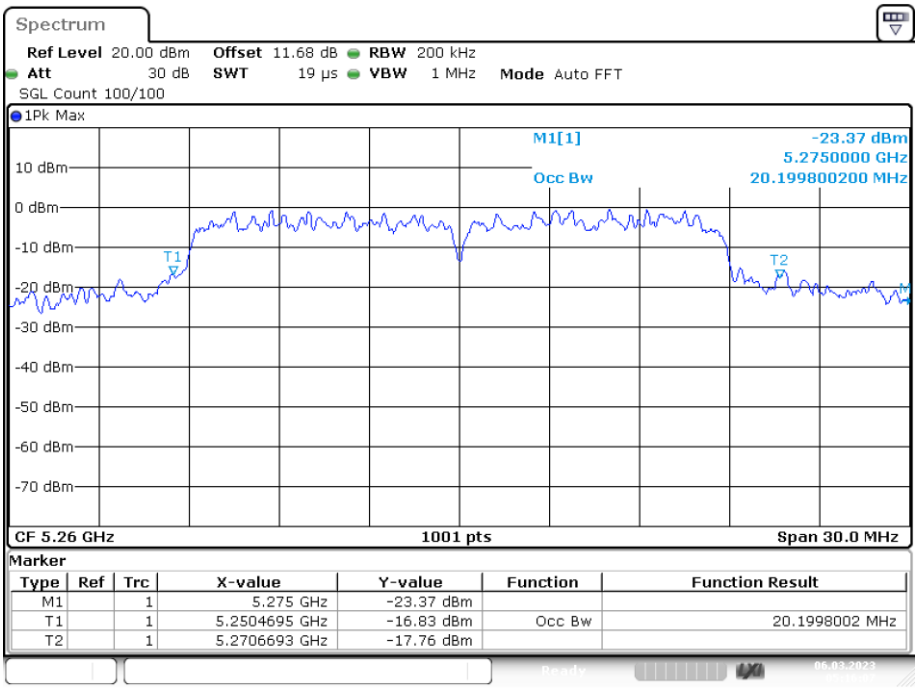

Date: 6.MAR.2023 04:09:12

OBW NVNT a 5320MHz Ant1



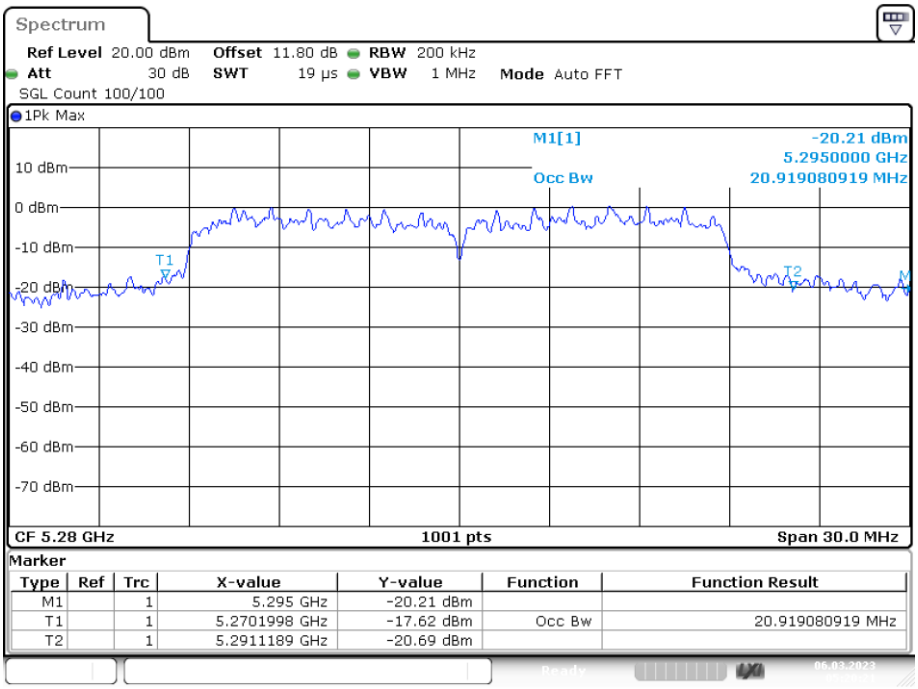

Date: 6.MAR.2023 04:18:02

OBW NVNT ac20 5260MHz Ant1



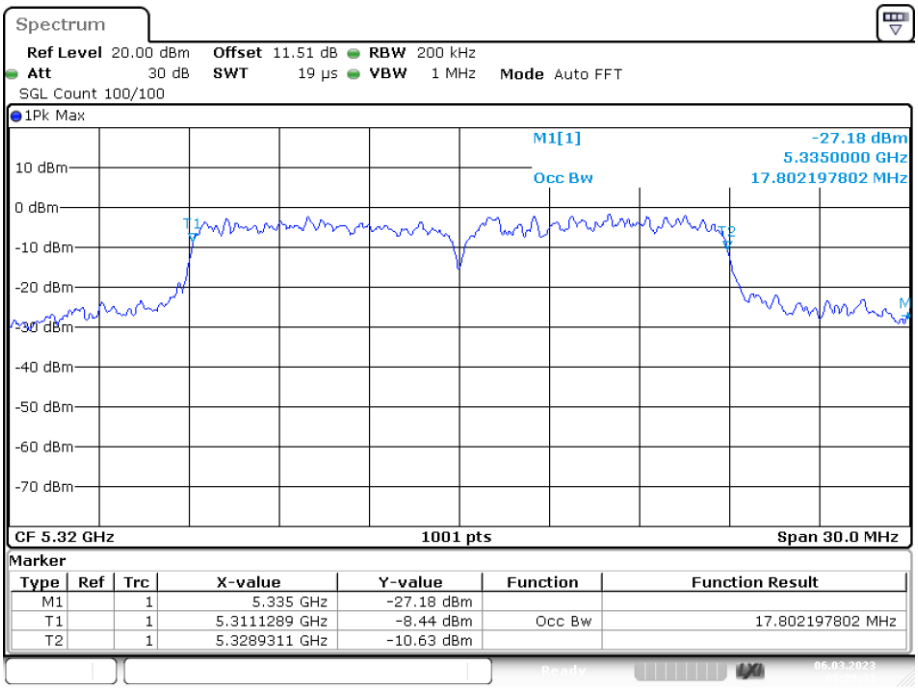

Date: 6.MAR.2023 05:16:07

OBW NVNT ac20 5280MHz Ant1



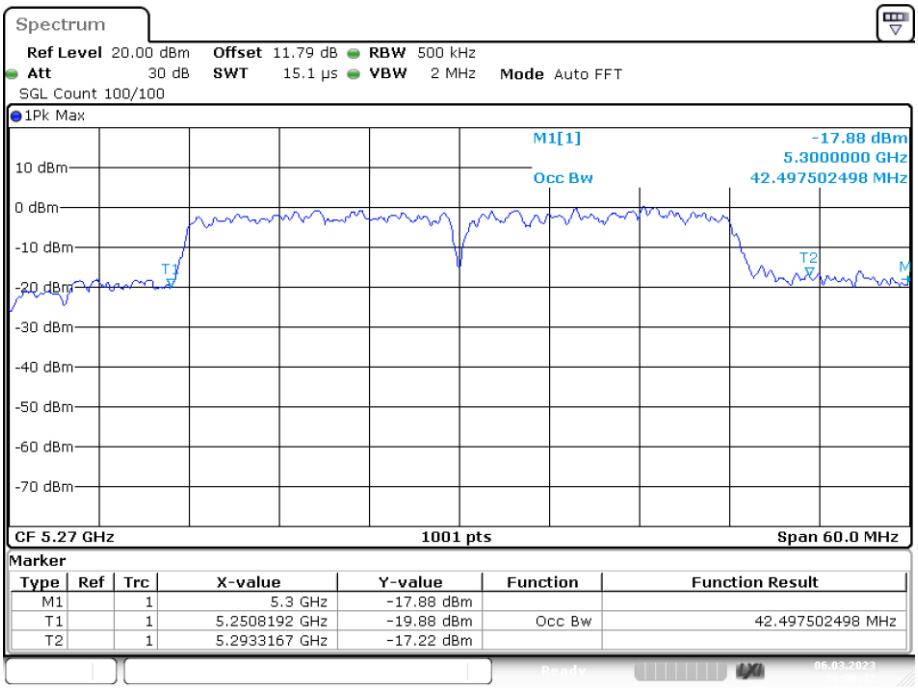

Date: 6.MAR.2023 05:20:21

OBW NVNT ac20 5320MHz Ant1



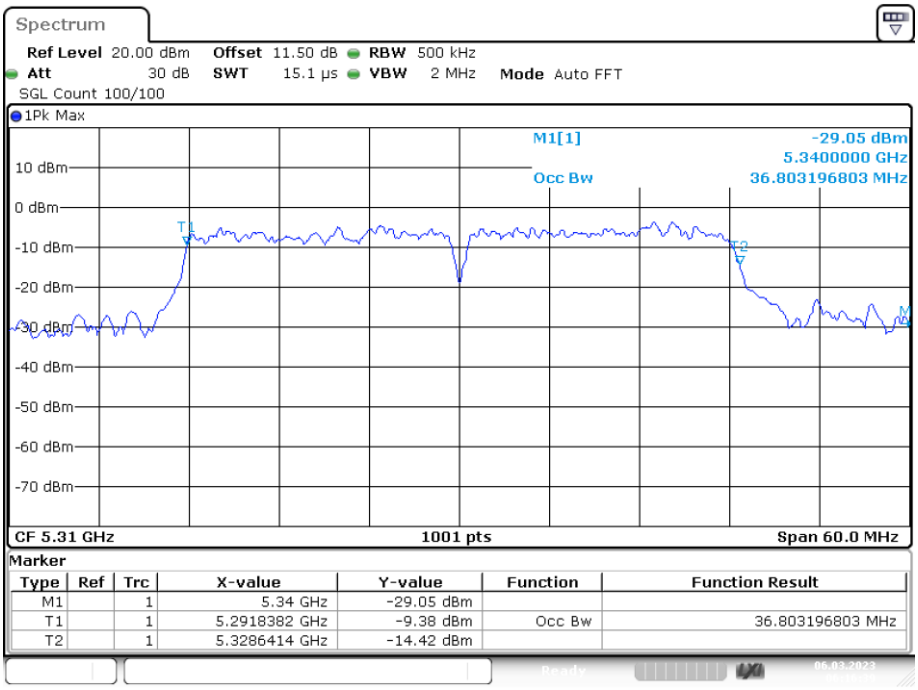

Date: 6.MAR.2023 05:29:32

OBW NVNT ac40 5270MHz Ant1



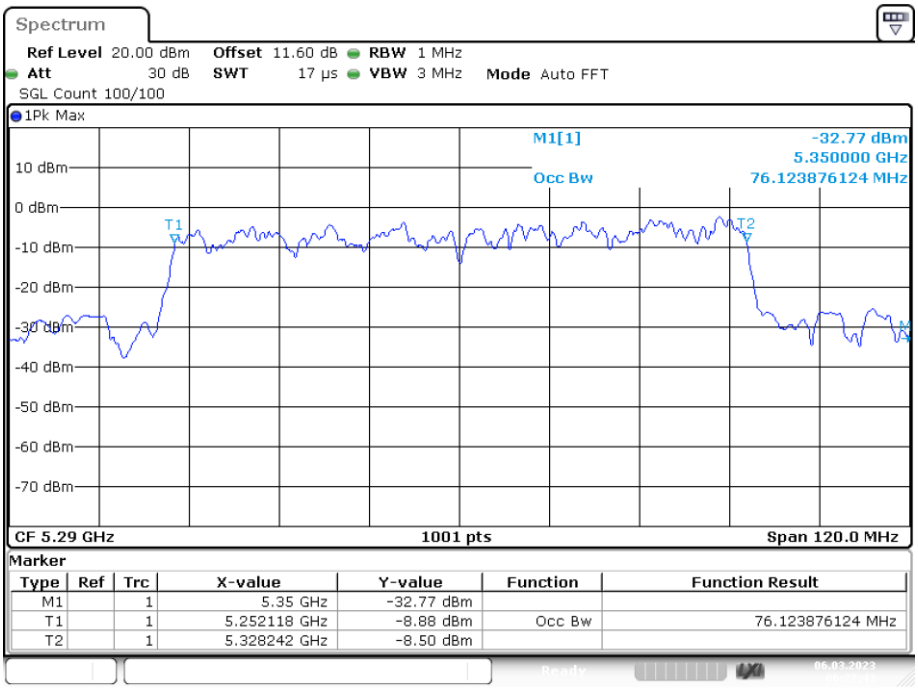

Date: 6.MAR.2023 06:00:42

OBW NVNT ac40 5310MHz Ant1



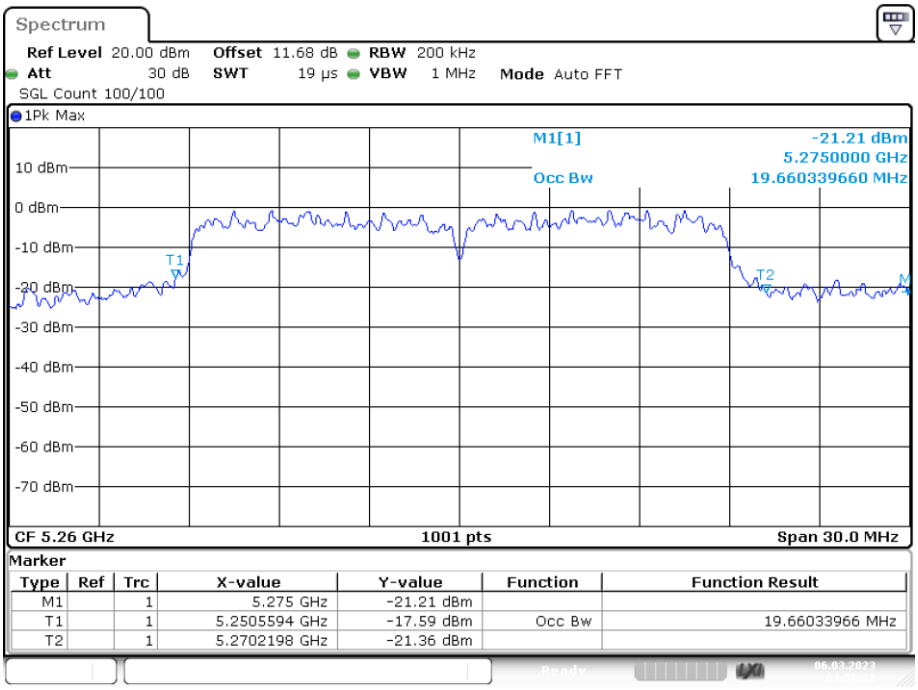

Date: 6.MAR.2023 06:16:38

OBW NVNT ac80 5290MHz Ant1



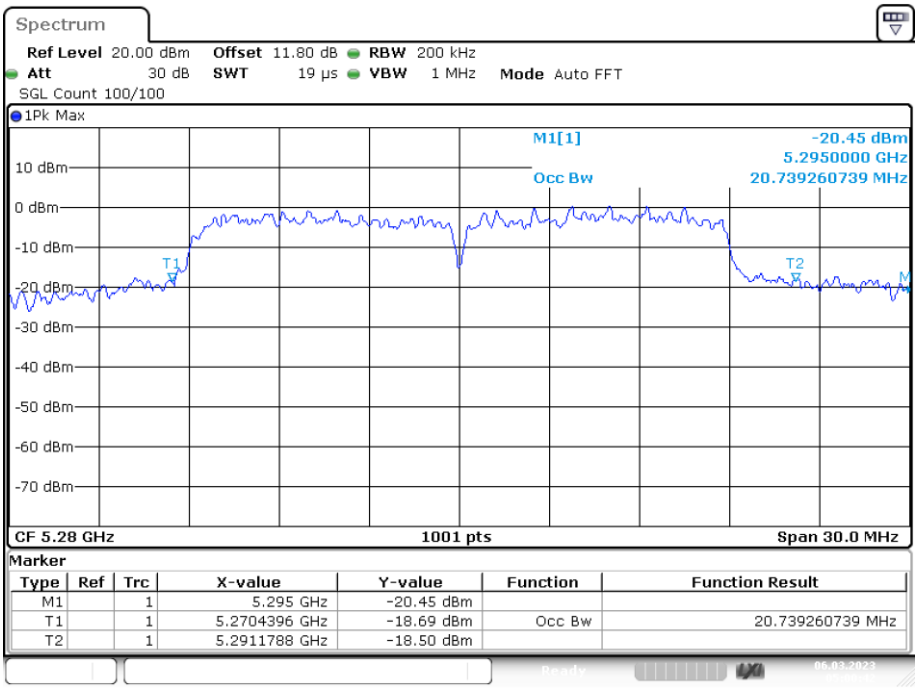

Date: 6.MAR.2023 06:22:42

OBW NVNT n20 5260MHz Ant1



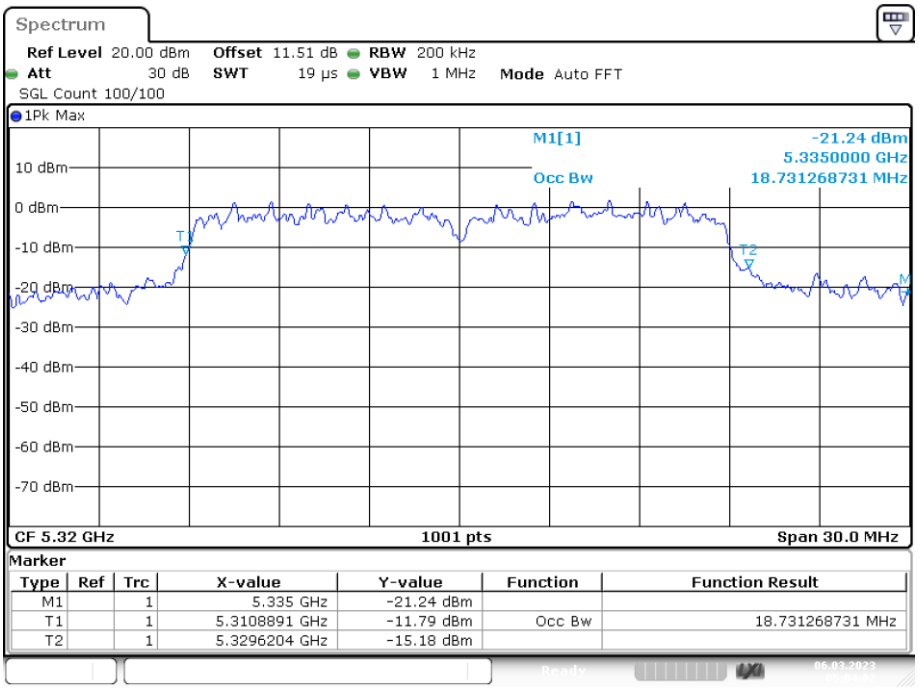

Date: 6.MAR.2023 04:56:27

OBW NVNT n20 5280MHz Ant1



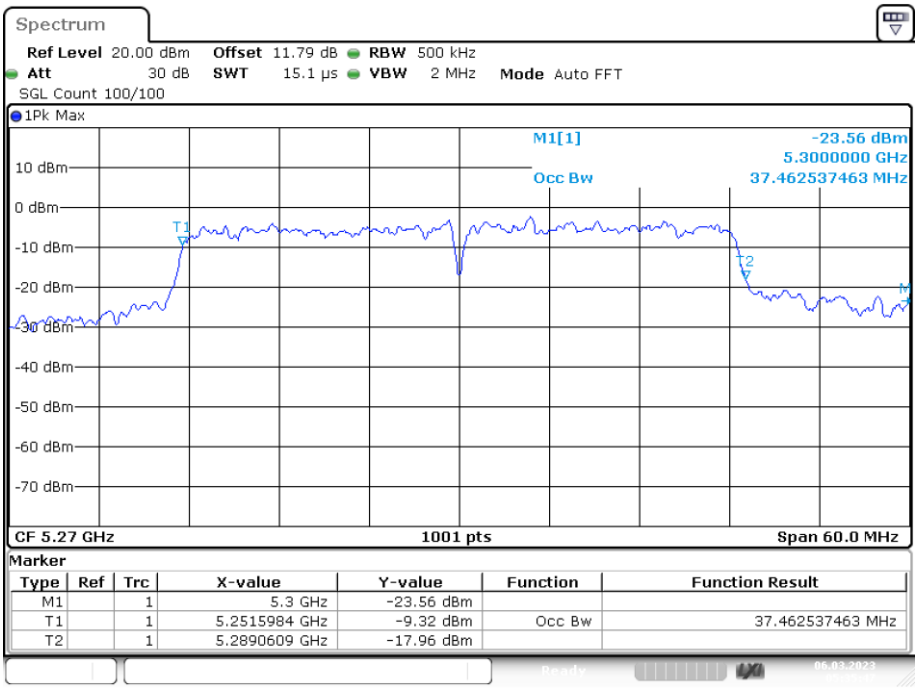

Date: 6.MAR.2023 05:00:42

OBW NVNT n20 5320MHz Ant1



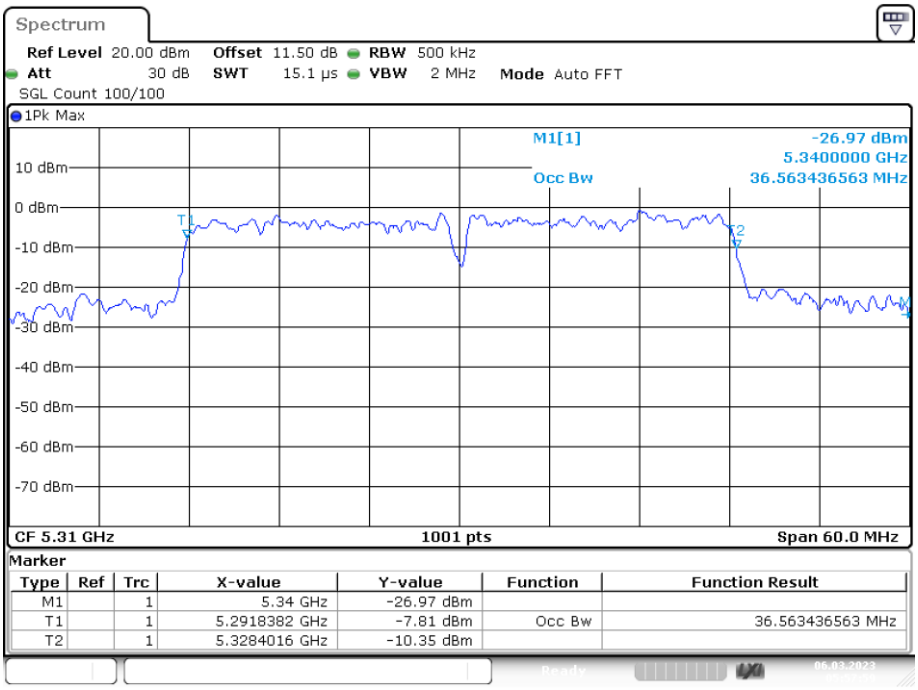

Date: 6.MAR.2023 05:04:02

OBW NVNT n40 5270MHz Ant1




Date: 6.MAR.2023 05:35:47

OBW NVNT n40 5310MHz Ant1



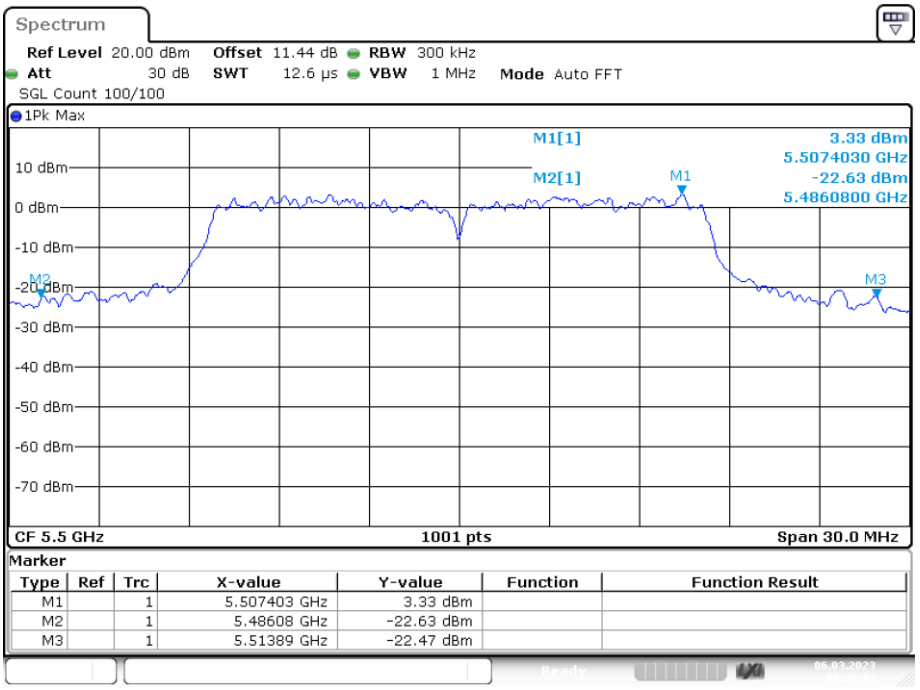

Date: 6.MAR.2023 05:58:00

## Band 3 (5470-5725 MHz):

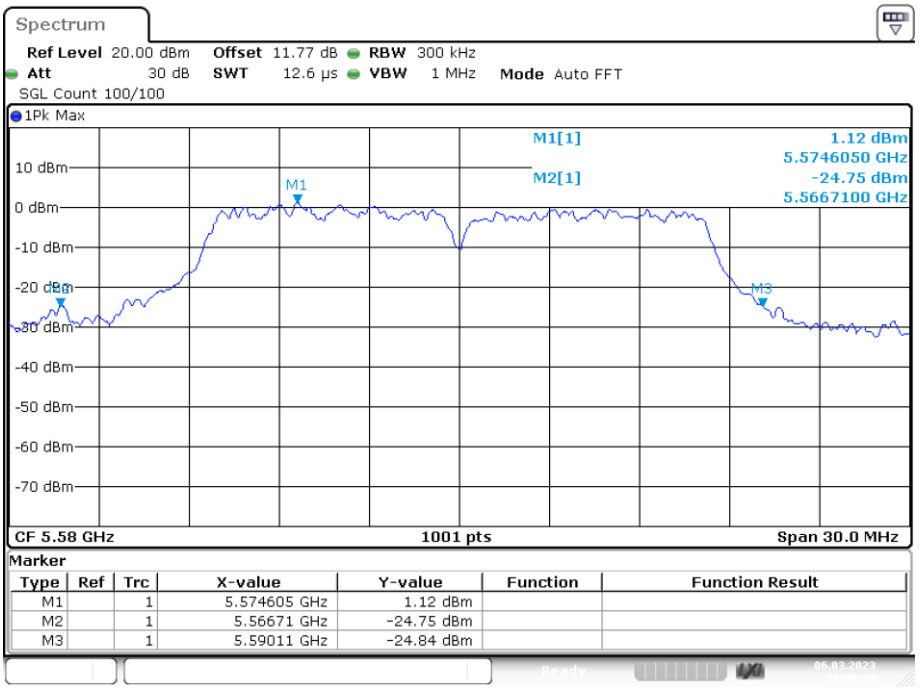
### -26dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) | Limit -26 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5500 | Ant1 | 27.81 | 0.5 | Pass |
| NVNT | a | 5580 | Ant1 | 23.4 | 0.5 | Pass |
| NVNT | a | 5700 | Ant1 | 30 | 0.5 | Pass |
| NVNT | ac20 | 5500 | Ant1 | 25.77 | 0.5 | Pass |
| NVNT | ac20 | 5580 | Ant1 | 22.32 | 0.5 | Pass |
| NVNT | ac20 | 5700 | Ant1 | 29.37 | 0.5 | Pass |
| NVNT | ac40 | 5510 | Ant1 | 44.94 | 0.5 | Pass |
| NVNT | ac40 | 5670 | Ant1 | 59.88 | 0.5 | Pass |
| NVNT | ac80 | 5530 | Ant1 | 80.16 | 0.5 | Pass |
| NVNT | n20 | 5500 | Ant1 | 22.56 | 0.5 | Pass |
| NVNT | n20 | 5580 | Ant1 | 22.05 | 0.5 | Pass |
| NVNT | n20 | 5700 | Ant1 | 30 | 0.5 | Pass |
| NVNT | n40 | 5510 | Ant1 | 40.5 | 0.5 | Pass |
| NVNT | n40 | 5670 | Ant1 | 58.8 | 0.5 | Pass |

-26dB Bandwidth NVNT a 5500MHz Ant1

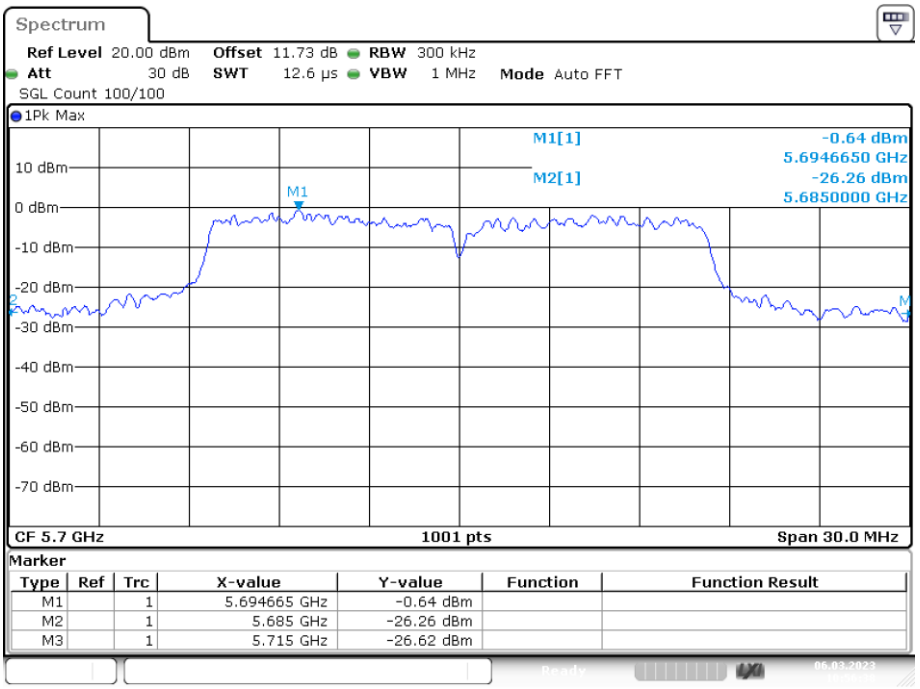


-26dB Bandwidth NVNT a 5580MHz Ant1




Date: 6.MAR.2023 10:46:34

-26dB Bandwidth NVNT a 5700MHz Ant1

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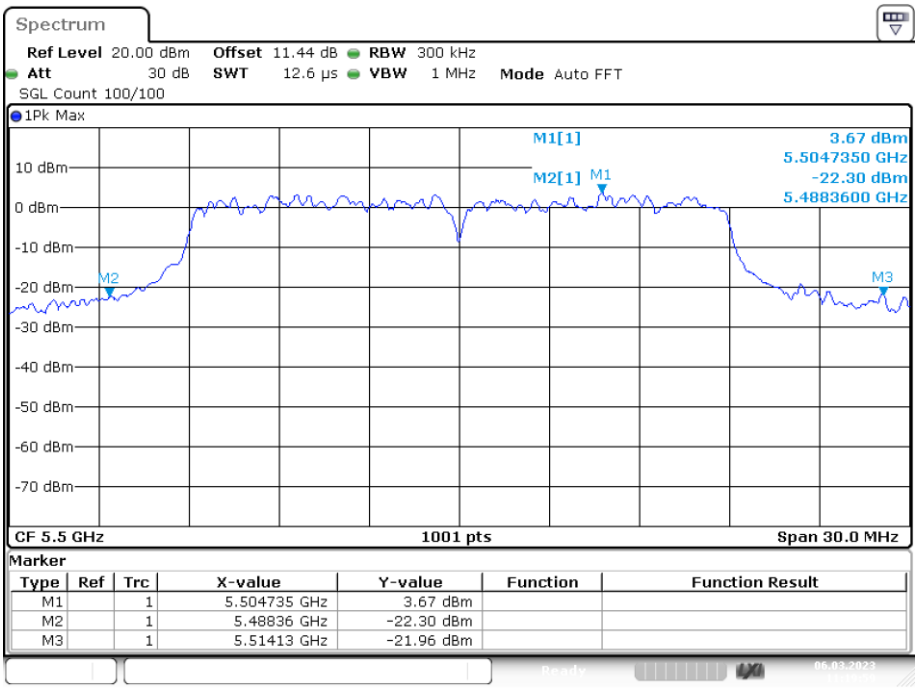
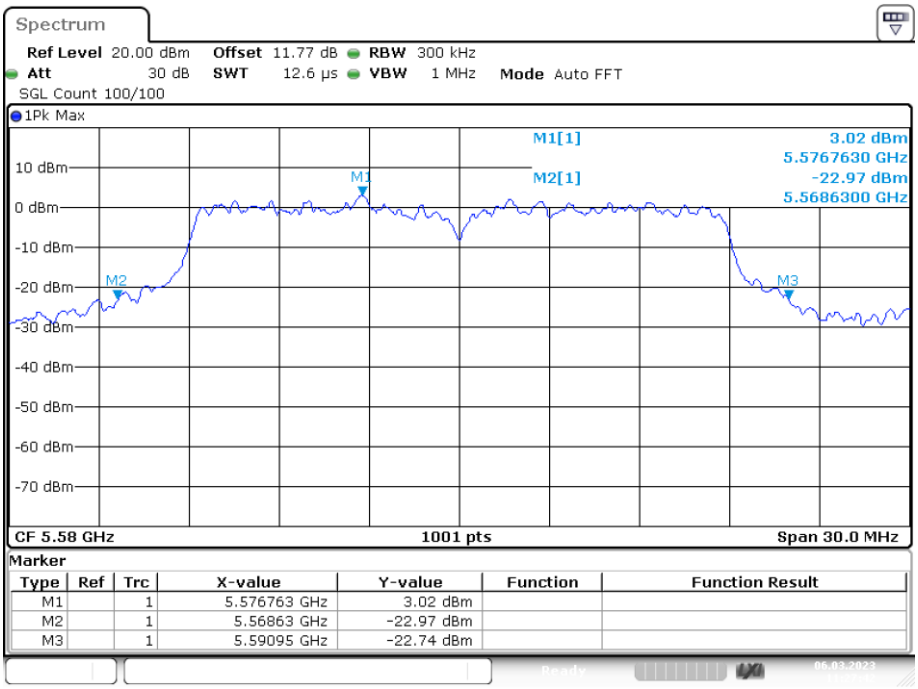
-26dB Bandwidth NVNT ac20 5500MHz Ant1



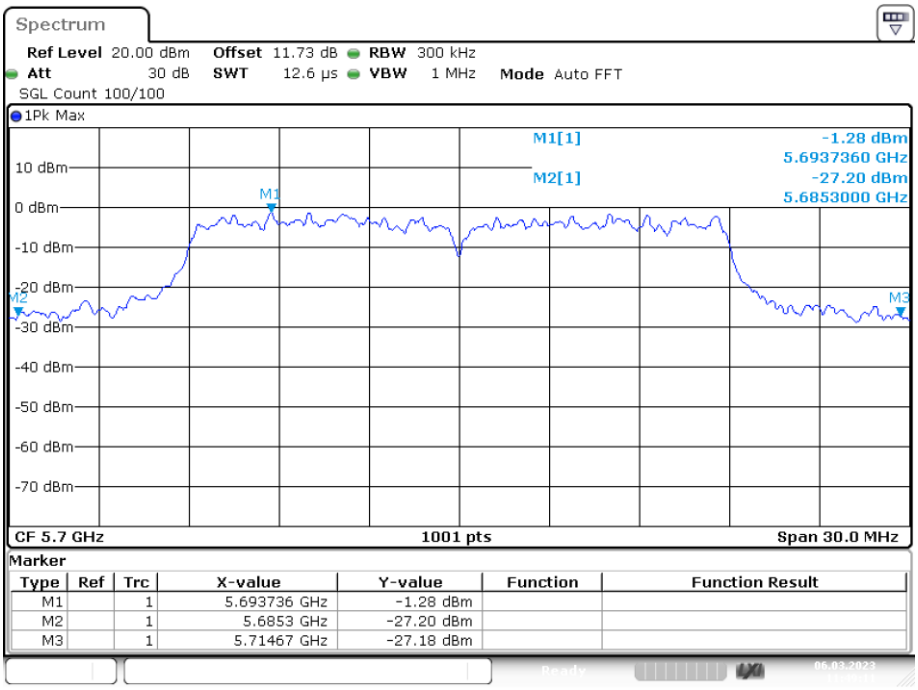

Date: 6.MAR.2023 11:19:58

-26dB Bandwidth NVNT ac20 5580MHz Ant1



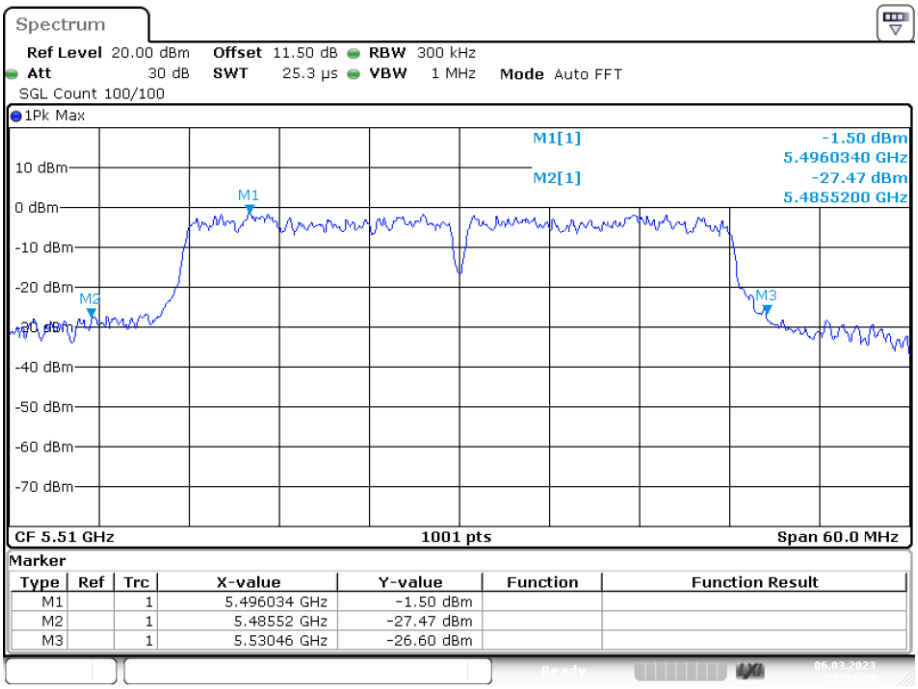

Date: 6.MAR.2023 11:27:42

-26dB Bandwidth NVNT ac20 5700MHz Ant1




Date: 6.MAR.2023 11:49:11

-26dB Bandwidth NVNT ac40 5510MHz Ant1

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