# FCC&IC TEST REPORT

FCC ID: 2A6KK-FW70

IC: 30008-FW70

On Behalf of

SHENZHEN WOPET SMART TECHNOLOGY CO., LTD.

Automatic Pet Feeder

Model No.: FW70PLUS, FW70

| | | |
|---|---|---|
| Prepared for | : | SHENZHEN WOPET SMART TECHNOLOGY CO., LTD. |
| Address | : | ROOM 923, BLOCK A, ECONOMIC BUILDING, HUAFENG, HEADQUARTERS NO. 288, XIXIANG AVENUE, LAODONG COMMUNITY, XIXIANG STREET, BAOAN DISTRICT, SHENZHEN 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 | : | A2304067-C01-R04 |
| Date of Receipt | : | August 1, 2023 |
| Date of Test | : | August 1, 2023-August 10, 2023 |
| Date of Report | : | August 10, 2023 |
| Version Number | : | V0 |

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# TEST REPORT DECLARATION

| | | |
|---|---|---|
| Applicant | : | SHENZHEN WOPET SMART TECHNOLOGY CO., LTD. |
| Address | : | ROOM 923, BLOCK A, ECONOMIC BUILDING, HUAFENG, HEADQUARTERS NO. 288, XIXIANG AVENUE, LAODONG COMMUNITY, XIXIANG STREET, BAOAN DISTRICT, SHENZHEN CHINA |
| Manufacturer | : | SHENZHEN WOPET SMART TECHNOLOGY CO., LTD. |
| Address | : | ROOM 923, BLOCK A, ECONOMIC BUILDING, HUAFENG, HEADQUARTERS NO. 288, XIXIANG AVENUE, LAODONG COMMUNITY, XIXIANG STREET, BAOAN DISTRICT, SHENZHEN CHINA |
| EUT Description | : | Automatic Pet Feeder |
| | | (A) Model No. : FW70PLUS, FW70 |
| | | (B) Trademark : N/A |

Measurement Standard Used:

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

**RSS-247 Issue 2, 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 C 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.....: | August 10, 2023 | |

**Revision History**

| Revision | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V0 | August 10, 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 Issue 5, ANSI C63.10 | PASS |
| Peak Transmit Power | Section 15.407(a), RSS-247 Issue 2 | PASS |
| Power Spectral Density | Section 15.407(a), RSS-247 Issue 2 | PASS |
| Undesirable Emission | Section 15.407(b), RSS-247 Issue 2 | PASS |
| 26dB/6dB&99% Bandwidth | Section 15.407, RSS-Gen Issue 5 | PASS |
| Radiated Emission | Section 15.407(b)&15.209 Section 5.5<br>RSS-Gen Issue 5, RSS-247 Issue 2, 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: Pass: The EUT complies with the essential requirements in the standard.

Frequency Stability: The manufacturer stated in the user's manual.

## 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 Radiation Emission test in 3m chamber (18GHz to 40GHz) | 4.31 dB(Polarize: V) |
| | 4.30 dB(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 | : | Automatic Pet Feeder |
| Model No. | : | FW70PLUS, FW70 |
| DIFF. | : | There is no difference, except for the appearance color and size. The circuit and principle are the same. All tests were conducted using the FW70PLUS model. |
| Power supply | : | DC 5V from USB or DC 4.5V from battery |
| Radio Technology | : | 5G WIFI |
| Operation Frequency | : | 802.11a/n(HT20): 5180~5240MHz; 5260-5320MHz; 5500-5700MHz; 5745~5825MHz<br>802.11n(HT40): 5190~5230MHz; 5260-5320MHz; 5510-5670MHz; 5755~5795MHz |
| Channel separation | : | 20MHz for 802.11a/ 802.11n(HT20)<br>40MHz for 802.11n(HT40) |
| Modulation technology: | : | IEEE 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK)<br>IEEE 802.11a: OFDM (64QAM, 16QAM,QPSK,BPSK) |
| Antenna Type | : | Internal Antenna, max gain 2.64dBi |
| Software Version | : | V1.0 |
| Hardware version/FVIN | : | V1.0 |
| Intend use environment | : | Residential, commercial and light industrial environment |

Note: In this report, the main test model is FW70PLUS, and the main test model serial number is F0000025

## 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: 12135A

## 2.4 Description of Support Units

| | | |
|---|---|---|
| Accessories | : | ADAPTER |
| Manufacturer | : | Shenzhen Tianyin Electronics Co., Ltd. |
| Model | : | TPA-46B050100UU |
| Ratings | : | Input: 100-240V~ 50/60Hz 0.2A<br>Output: 5.0V⎓1.0A |

## 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 | Teelong | TL-HW408S | / | TL-20191205-01 | 2023.07.25 | 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 |

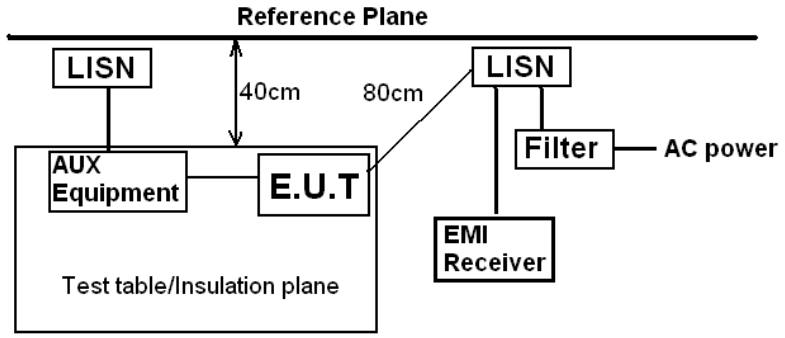
| **Software Information** | | | |
|---|---|---|---|
| Test Item | Software Name | Manufacturer | Version |
| RE | EZ-EMC | Farad | Alpha-3A1 |
| CE | EZ-EMC | Farad | Alpha-3A1 |
| RF-CE | MTS 8310 | MW | V2.0.0.0 |

# 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 internal antenna. The best case gain of the antenna is 2.64dBi for 5.15~5.25GHz,<br>5.25~5.35GHz , 5.47~5.725GHz, 5.725~5.85GHz | |

## 4.2 Conducted Emissions

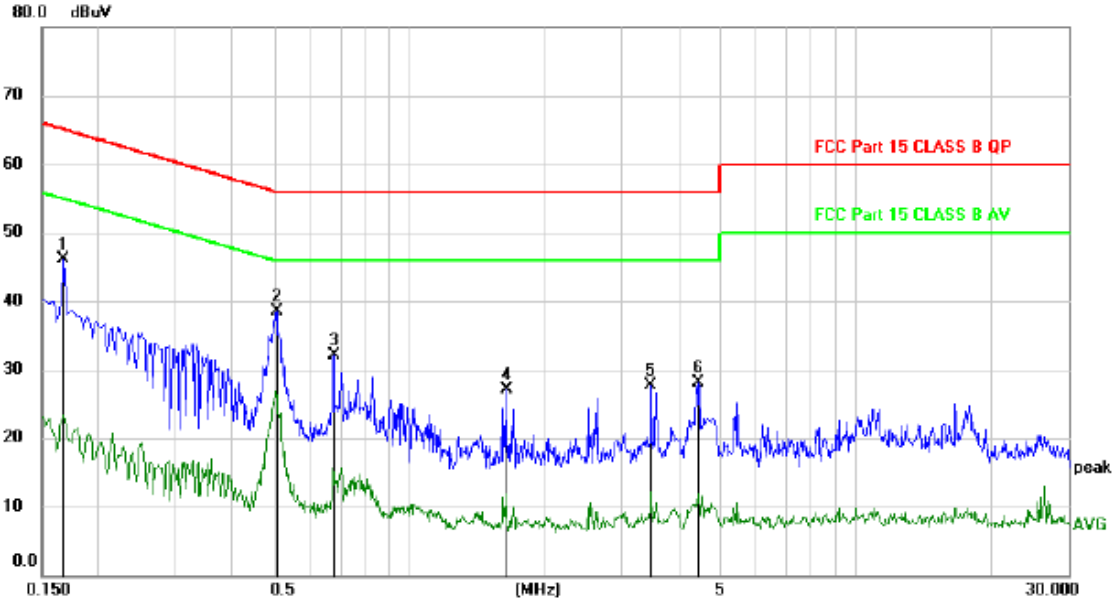
<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.207, RSS-Gen §8.8</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>150KHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td>Class B</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9KHz, VBW=30KHz</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr>
<tr><th>Quasi-peak</th><th>Average</th></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:**

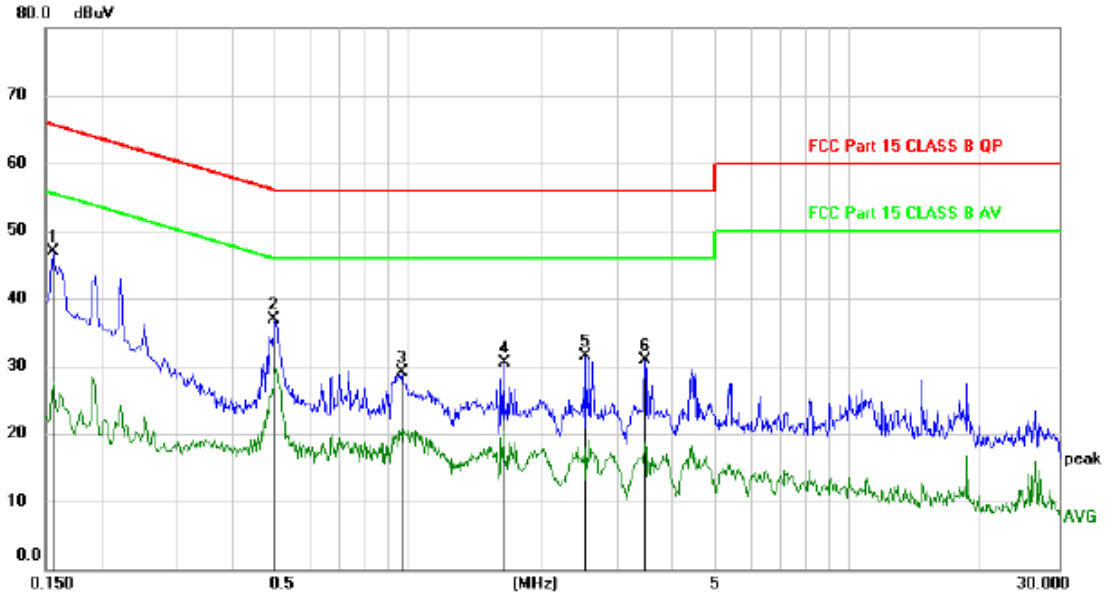



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1680 | 36.06 | 10.05 | 46.11 | 65.06 | -18.95 | peak | |
| 2 | * | 0.5039 | 28.21 | 10.27 | 38.48 | 56.00 | -17.52 | peak | |
| 3 | | 0.6780 | 21.70 | 10.31 | 32.01 | 56.00 | -23.99 | peak | |
| 4 | | 1.6530 | 16.77 | 10.41 | 27.18 | 56.00 | -28.82 | peak | |
| 5 | | 3.4830 | 17.13 | 10.53 | 27.66 | 56.00 | -28.34 | peak | |
| 6 | | 4.4460 | 17.54 | 10.60 | 28.14 | 56.00 | -27.86 | 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:**



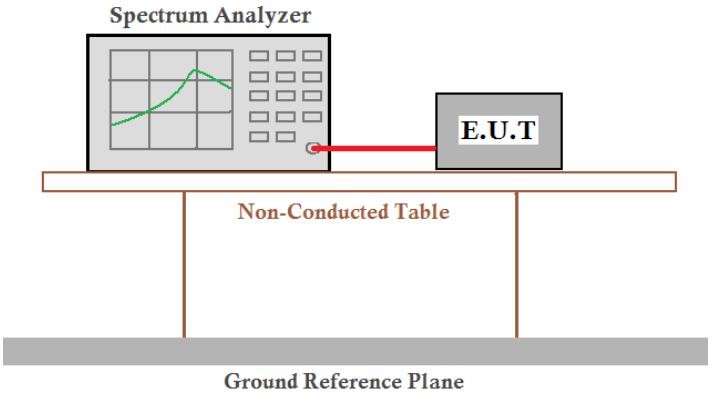

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | * | 0.1560 | 36.88 | 10.06 | 46.94 | 65.67 | -18.73 | peak | |
| 2 | | 0.4950 | 26.68 | 10.26 | 36.94 | 56.08 | -19.14 | peak | |
| 3 | | 0.9660 | 18.80 | 10.40 | 29.20 | 56.00 | -26.80 | peak | |
| 4 | | 1.6500 | 20.19 | 10.41 | 30.60 | 56.00 | -25.40 | peak | |
| 5 | | 2.5230 | 21.13 | 10.46 | 31.59 | 56.00 | -24.41 | peak | |
| 6 | | 3.4530 | 20.34 | 10.53 | 30.87 | 56.00 | -25.13 | 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: Test result for 802.11a (5180MHz), AC 120V/ 60Hz*

## 4.3 Emission Bandwidth and 99% Occupied Bandwidth

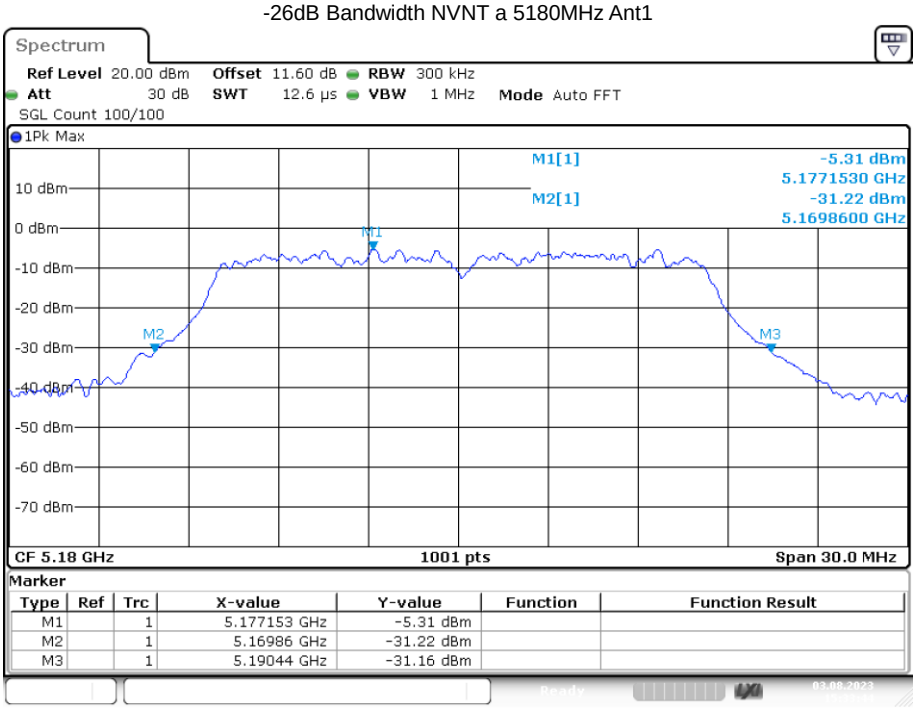
| | |
|---|---|
| Test Requirement: | FCC Part15 E Section 15.407, RSS-Gen §6.7; RSS-247 §6.2 |
| Test Method: | KDB 789033 D02 General UNII Test Procedures New Rules v02r01 |
| Limit: | >500kHz for 6 dB bandwidth |
| Test setup: |  |
| Test procedure: | According to KDB 789033 D02 General UNII Test 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) |
|---|---|---|---|---|
| NVNT | a | 5180 | Ant1 | 20.58 |
| NVNT | a | 5200 | Ant1 | 21.15 |
| NVNT | a | 5240 | Ant1 | 21.03 |
| NVNT | n20 | 5180 | Ant1 | 21.24 |
| NVNT | n20 | 5200 | Ant1 | 20.76 |
| NVNT | n20 | 5240 | Ant1 | 21.66 |
| NVNT | n40 | 5190 | Ant1 | 38.1 |
| NVNT | n40 | 5230 | Ant1 | 37.86 |

-26dB Bandwidth NVNT a 5180MHz Ant1

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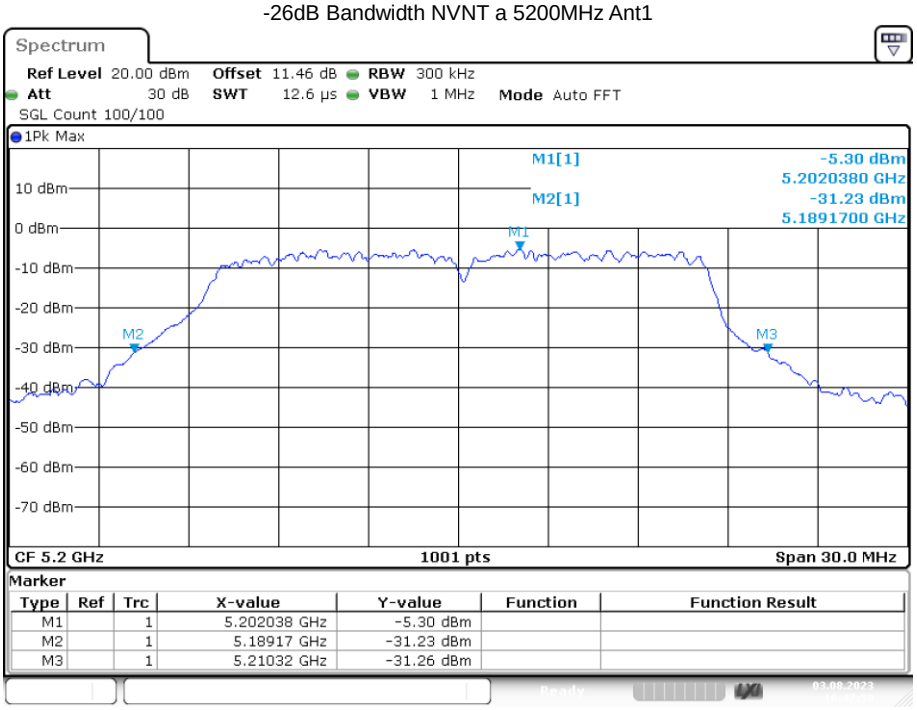
-26dB Bandwidth NVNT a 5200MHz Ant1

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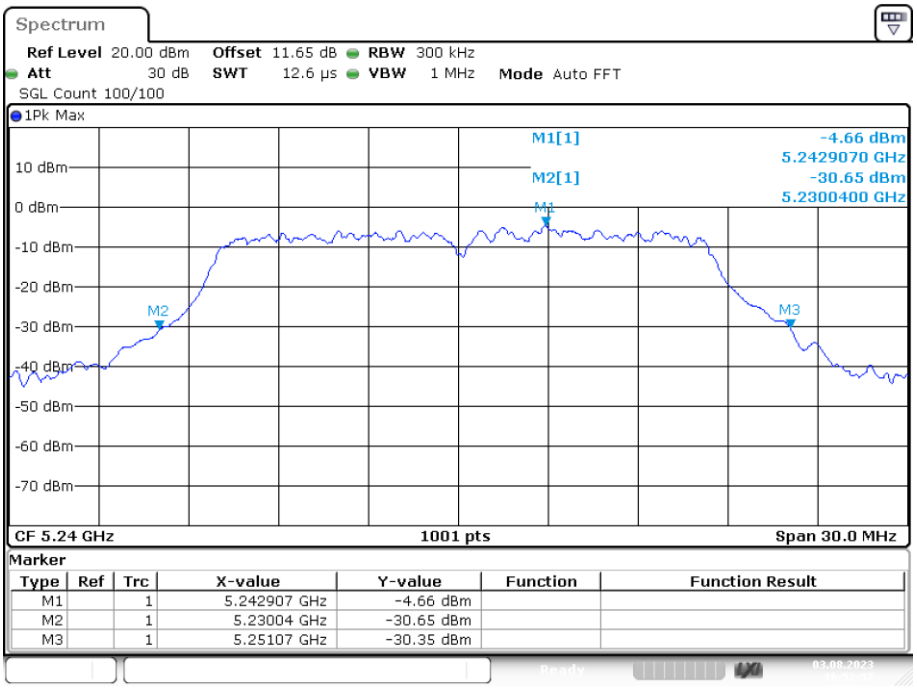
-26dB Bandwidth NVNT a 5240MHz Ant1

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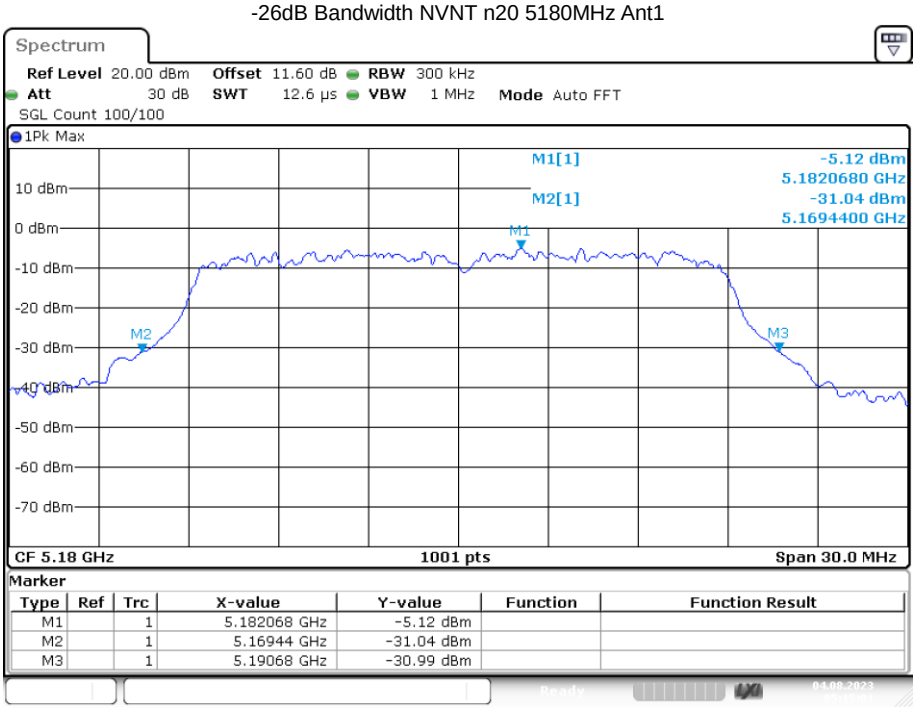
-26dB Bandwidth NVNT n20 5180MHz Ant1

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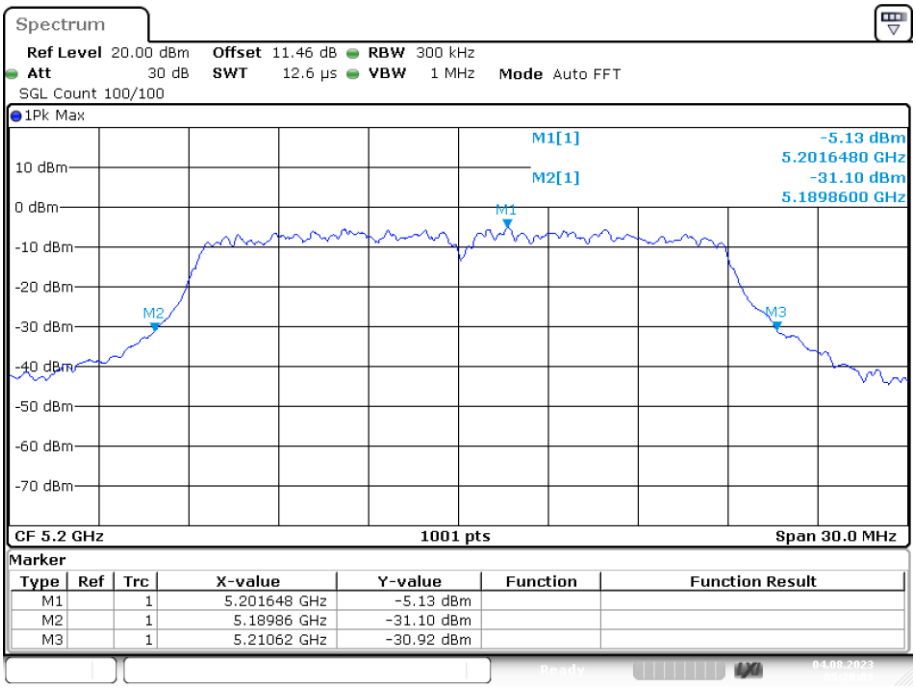
-26dB Bandwidth NVNT n20 5200MHz Ant1

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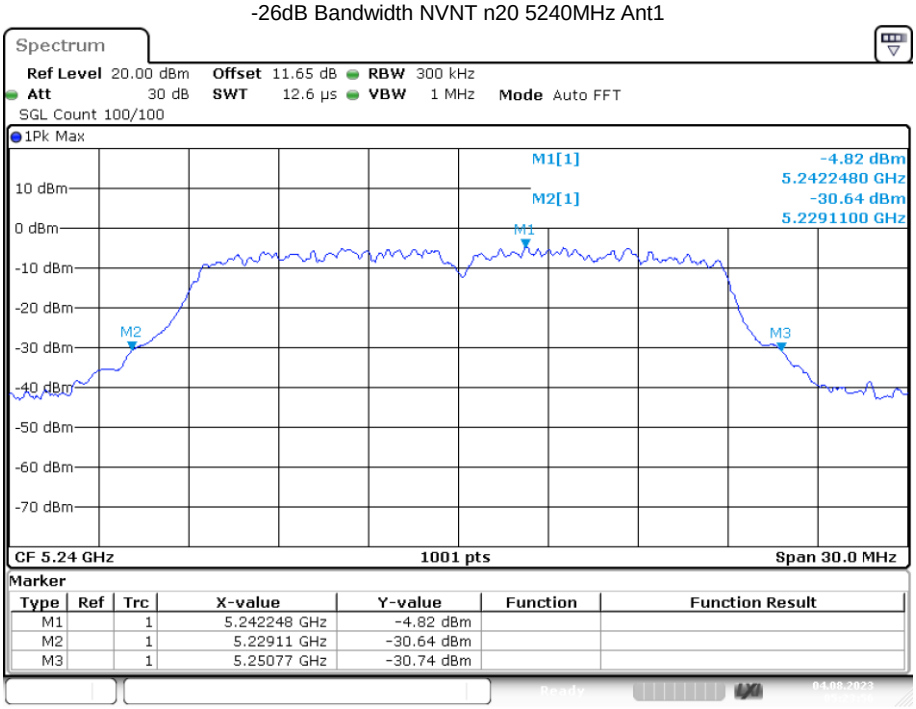
-26dB Bandwidth NVNT n20 5240MHz Ant1

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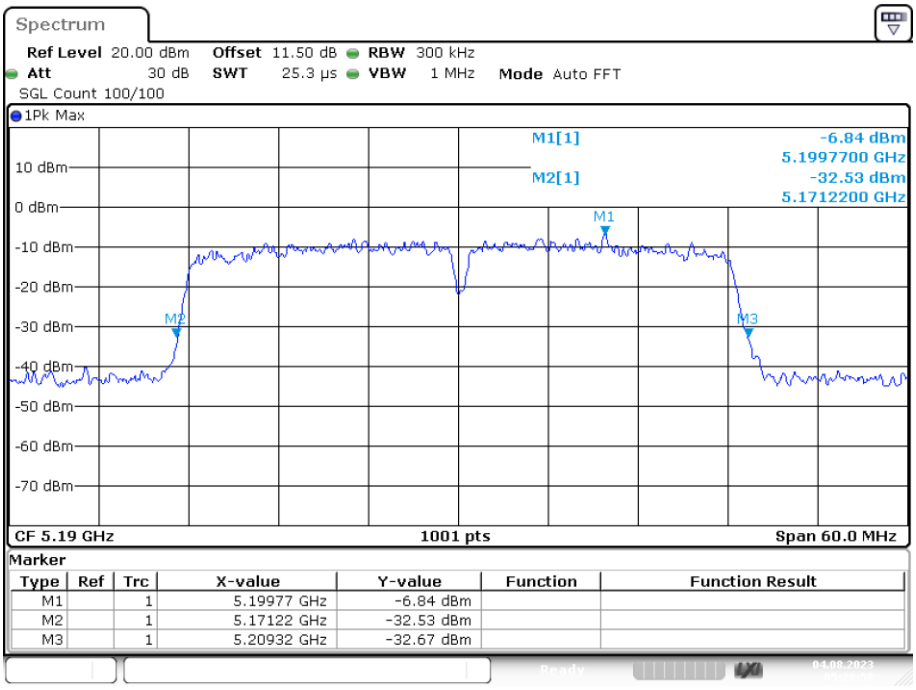
-26dB Bandwidth NVNT n40 5190MHz Ant1

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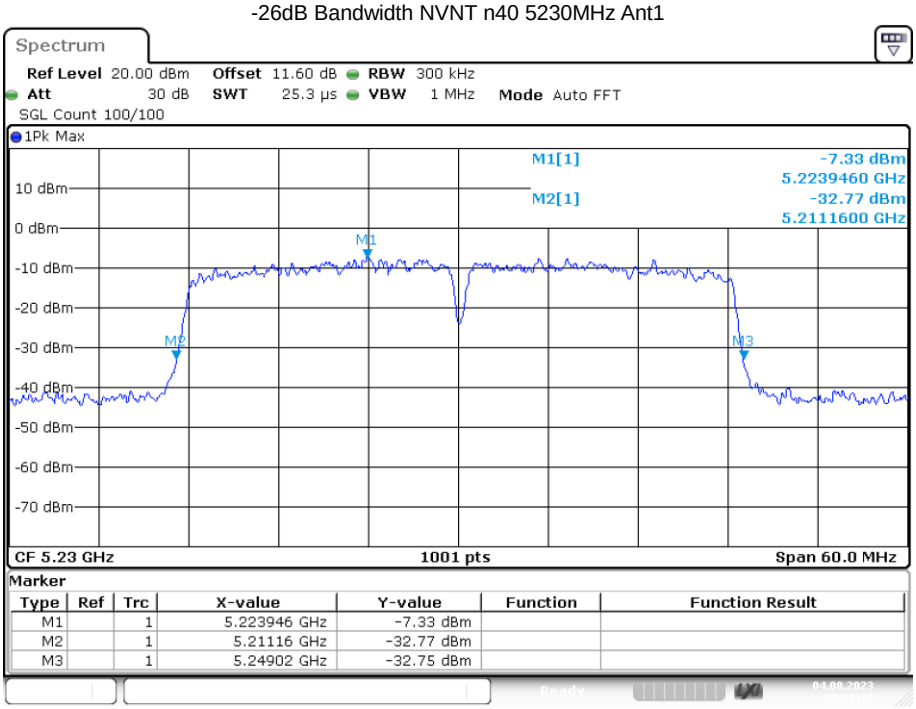
-26dB Bandwidth NVNT n40 5230MHz Ant1

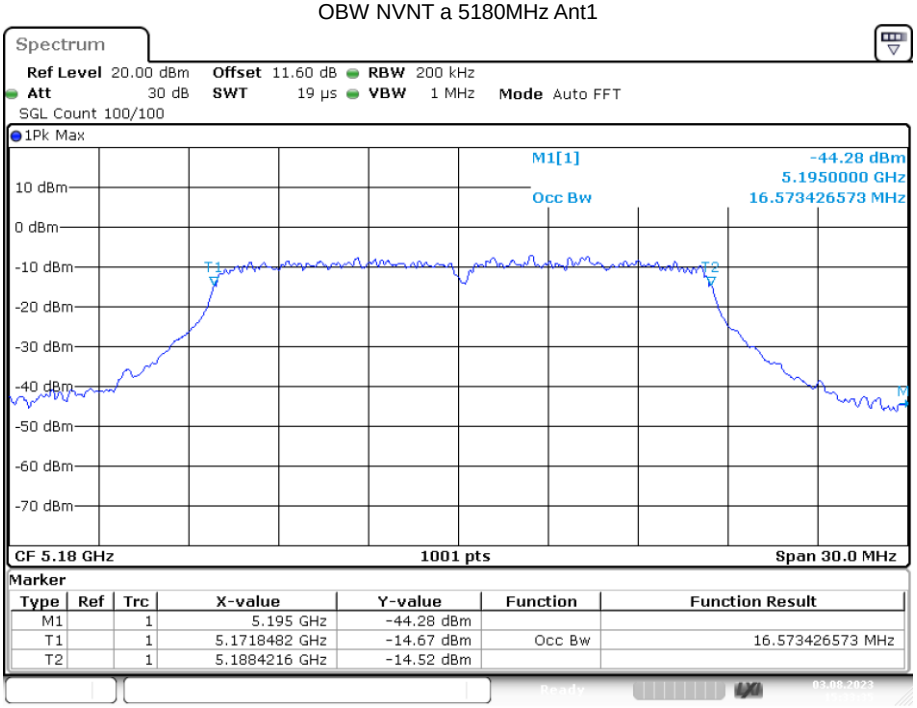



Date: 4.AUG.2023 05:35:10

## Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5180 | Ant1 | 16.573 |
| NVNT | a | 5200 | Ant1 | 16.543 |
| NVNT | a | 5240 | Ant1 | 16.543 |
| NVNT | n20 | 5180 | Ant1 | 17.532 |
| NVNT | n20 | 5200 | Ant1 | 17.622 |
| NVNT | n20 | 5240 | Ant1 | 17.622 |
| NVNT | n40 | 5190 | Ant1 | 35.724 |
| NVNT | n40 | 5230 | Ant1 | 35.784 |

OBW NVNT a 5180MHz Ant1

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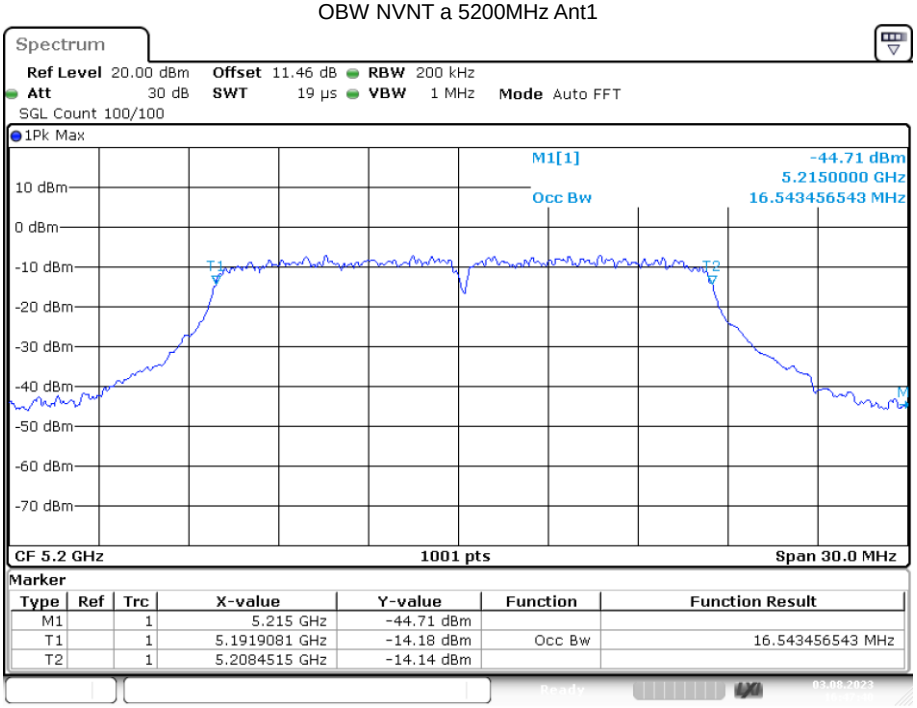
OBW NVNT a 5200MHz Ant1

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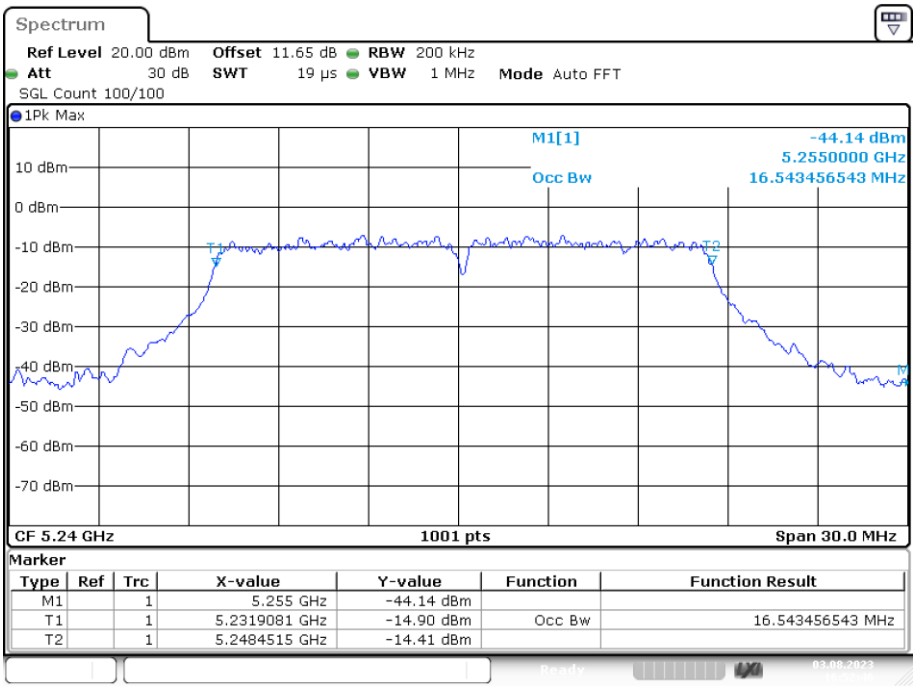
OBW NVNT a 5240MHz Ant1

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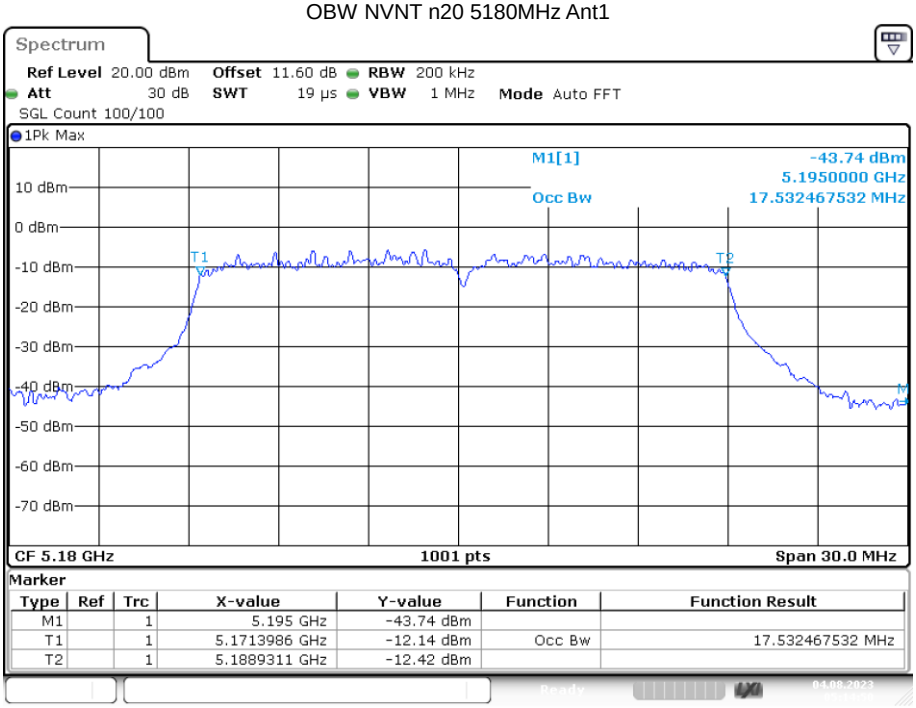
OBW NVNT n20 5180MHz Ant1

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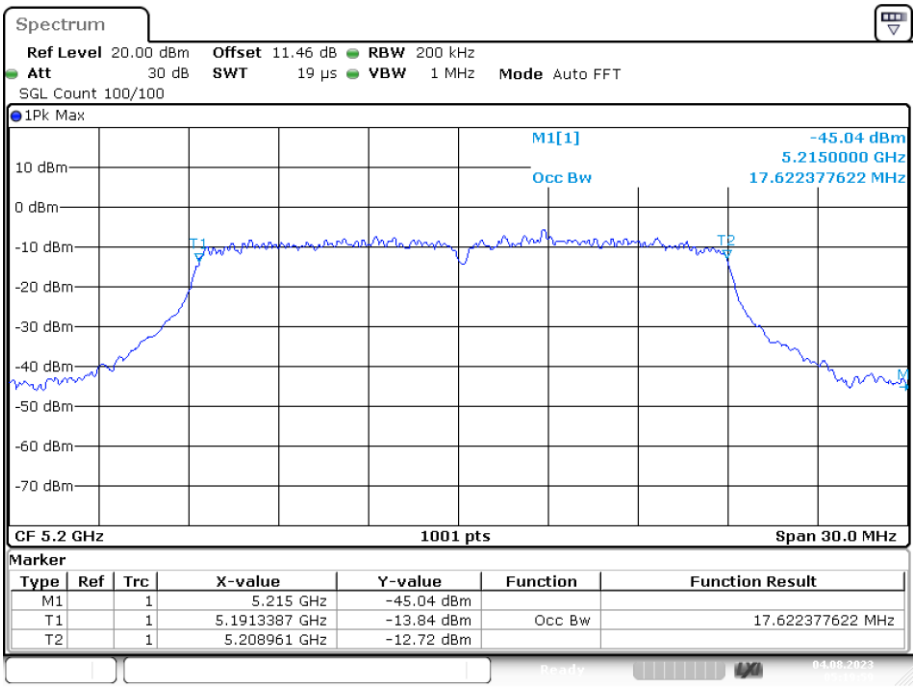
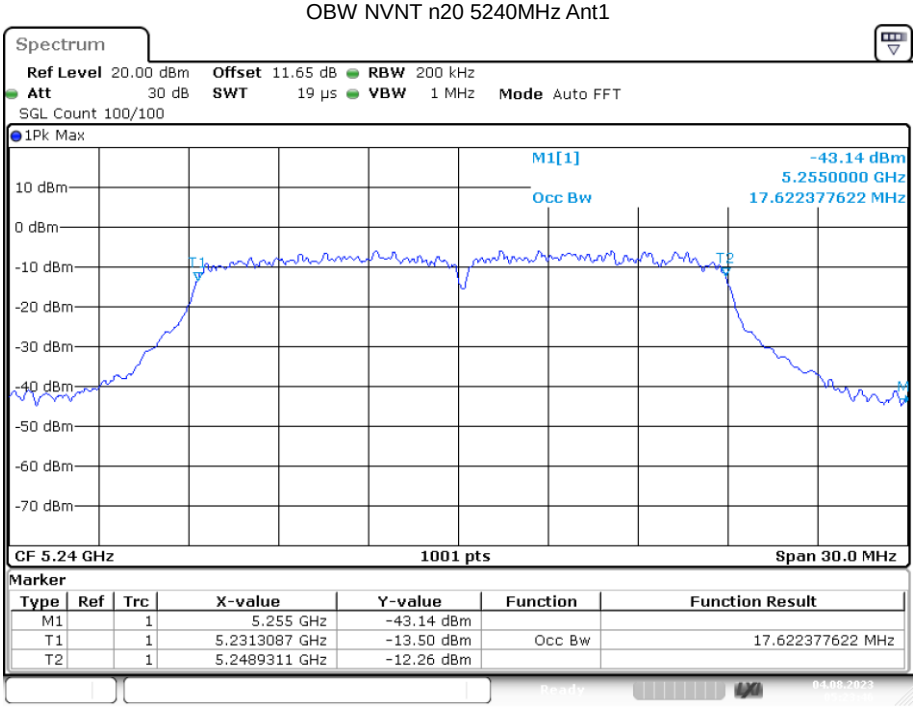
OBW NVNT n20 5200MHz Ant1



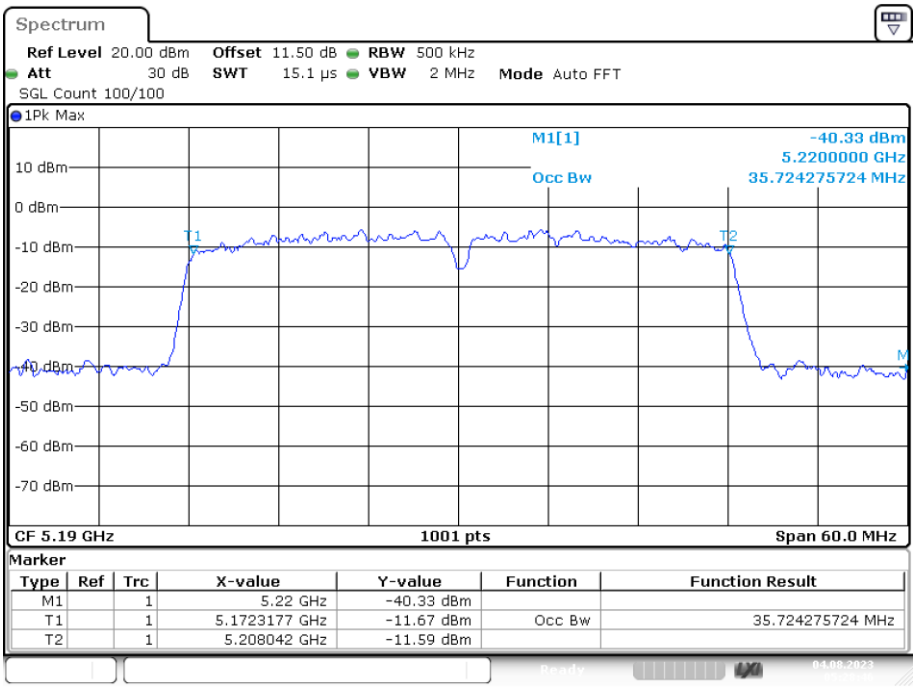

Date: 4.AUG.2023 05:19:59

OBW NVNT n20 5240MHz Ant1



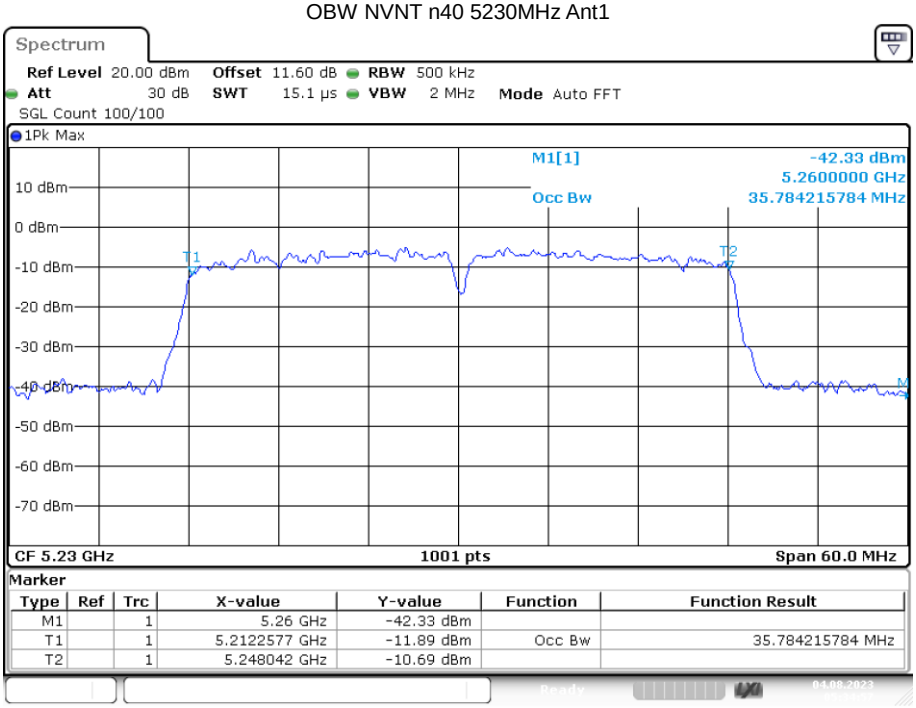

Date: 4.AUG.2023 05:23:46

OBW NVNT n40 5190MHz Ant1




Date: 4.AUG.2023 05:28:46

OBW NVNT n40 5230MHz Ant1

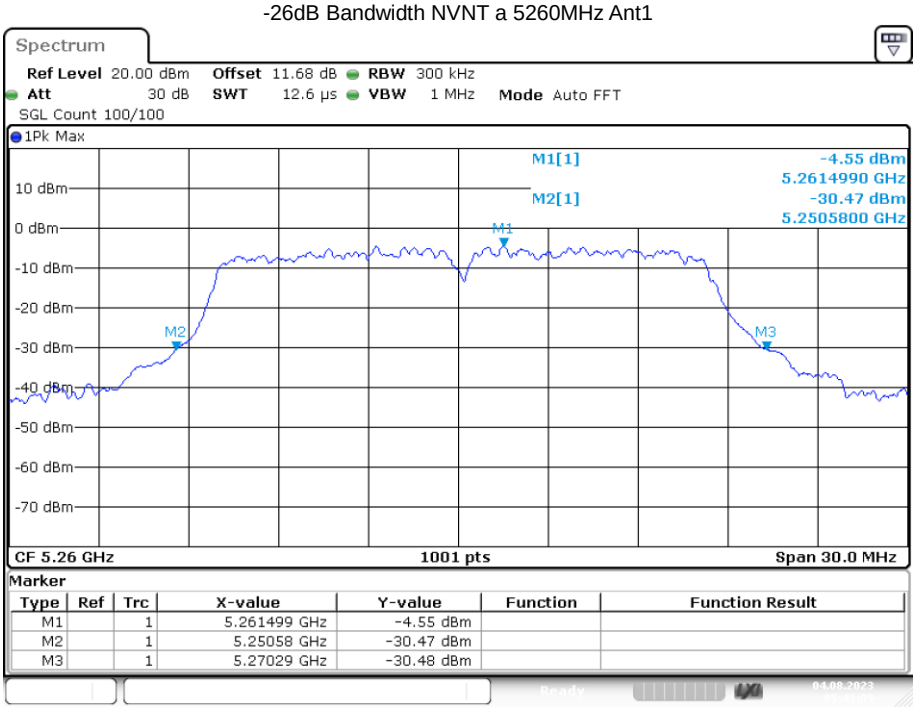



Date: 4.AUG.2023 05:34:57

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

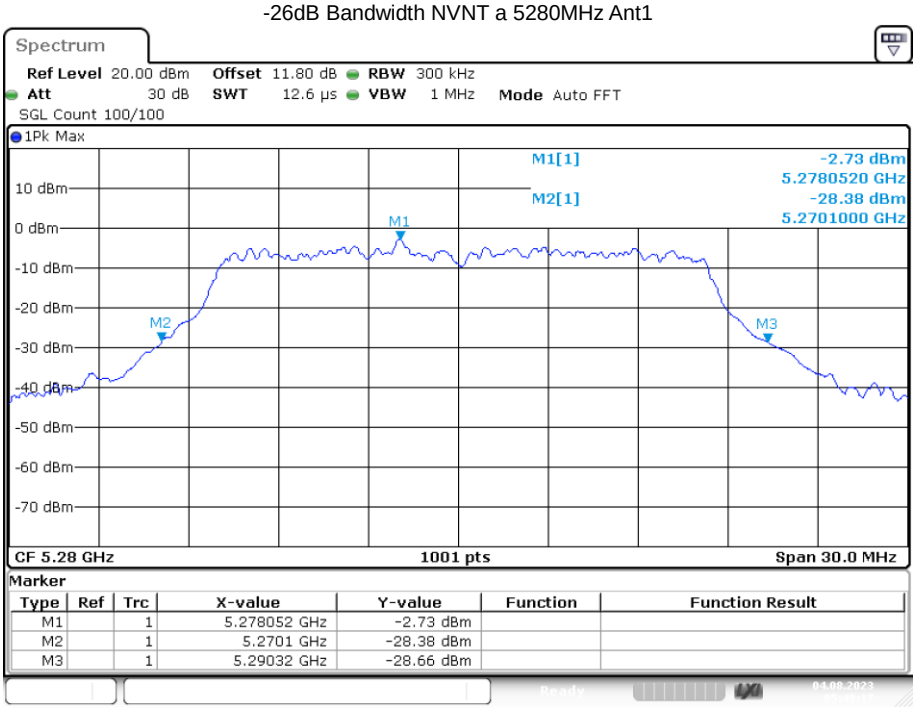
| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) |
|---|---|---|---|---|
| NVNT | a | 5260 | Ant1 | 19.71 |
| NVNT | a | 5280 | Ant1 | 20.22 |
| NVNT | a | 5320 | Ant1 | 20.46 |
| NVNT | n20 | 5260 | Ant1 | 20.61 |
| NVNT | n20 | 5280 | Ant1 | 21.15 |
| NVNT | n20 | 5320 | Ant1 | 21.09 |
| NVNT | n40 | 5270 | Ant1 | 38.22 |
| NVNT | n40 | 5310 | Ant1 | 37.8 |

-26dB Bandwidth NVNT a 5260MHz Ant1



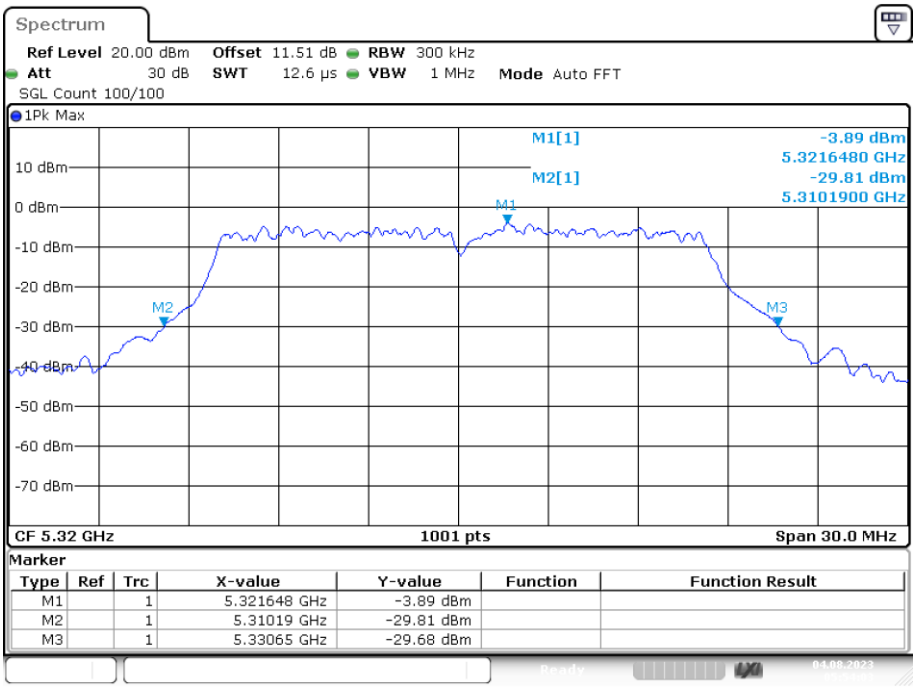

Date: 4.AUG.2023 05:43:05

-26dB Bandwidth NVNT a 5280MHz Ant1



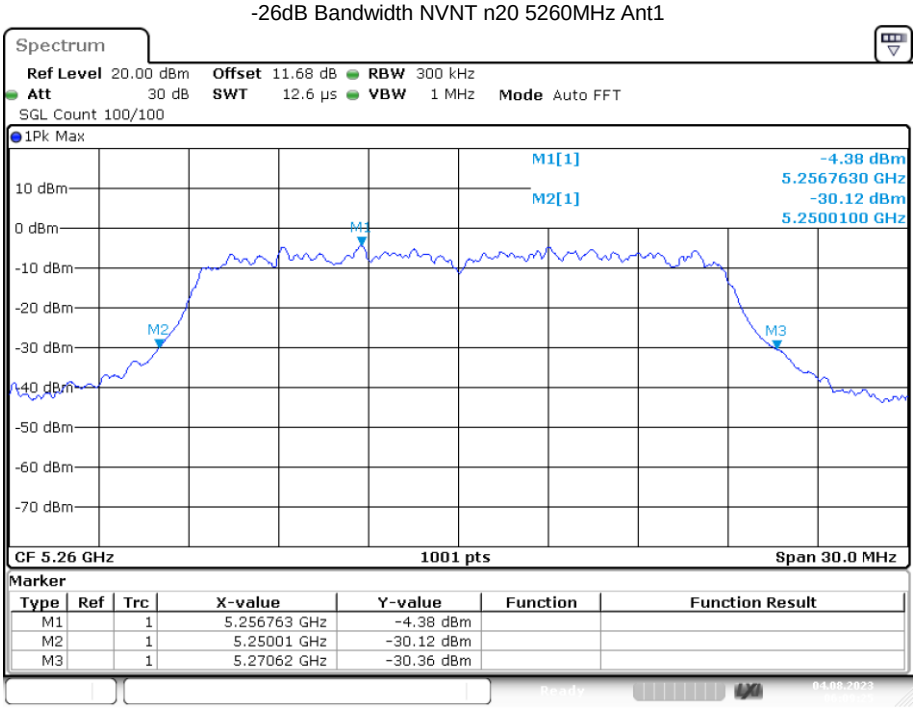

Date: 4.AUG.2023 05:49:16

-26dB Bandwidth NVNT a 5320MHz Ant1



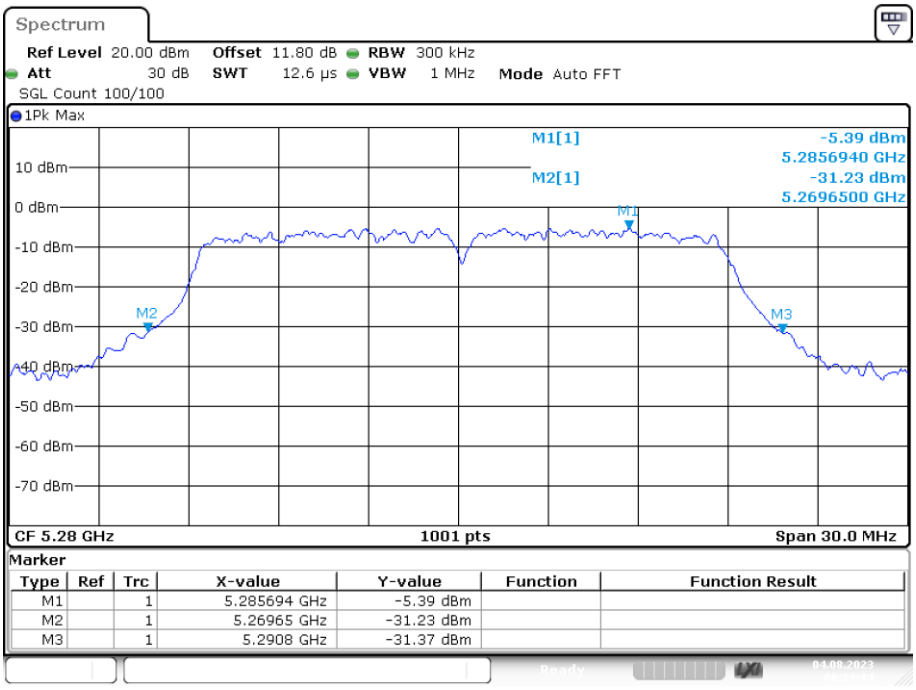

Date: 4.AUG.2023 05:54:03

-26dB Bandwidth NVNT n20 5260MHz Ant1



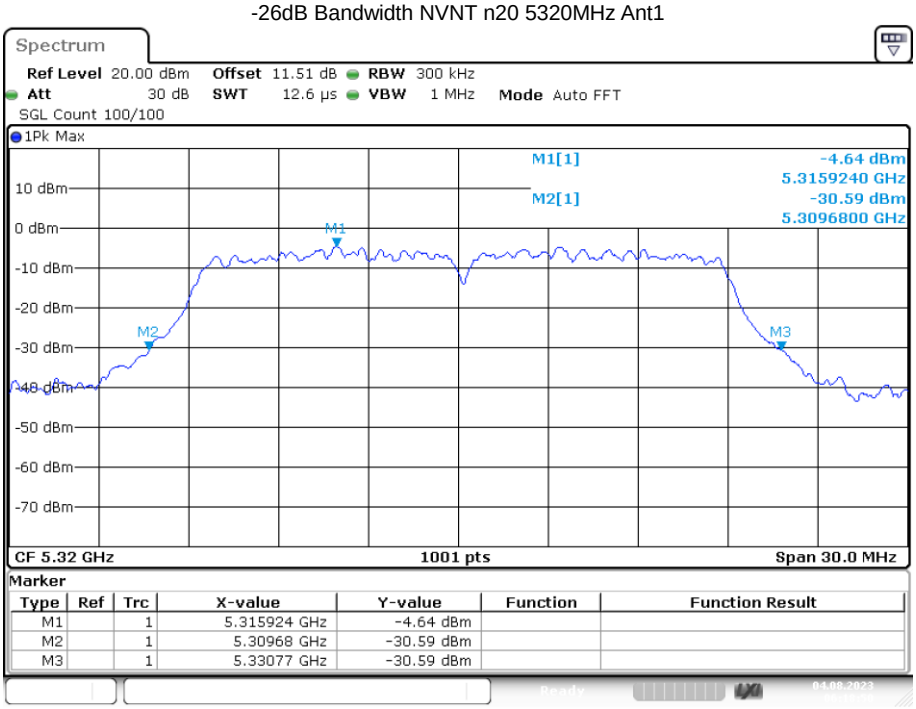

Date: 4.AUG.2023 06:09:25

-26dB Bandwidth NVNT n20 5280MHz Ant1



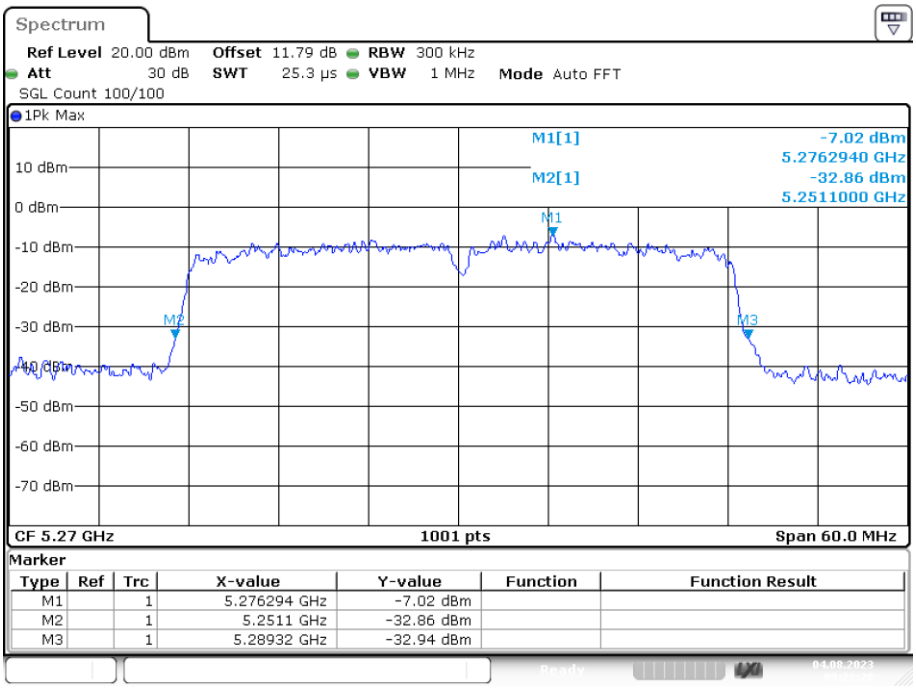

Date: 4.AUG.2023 06:14:13

-26dB Bandwidth NVNT n20 5320MHz Ant1



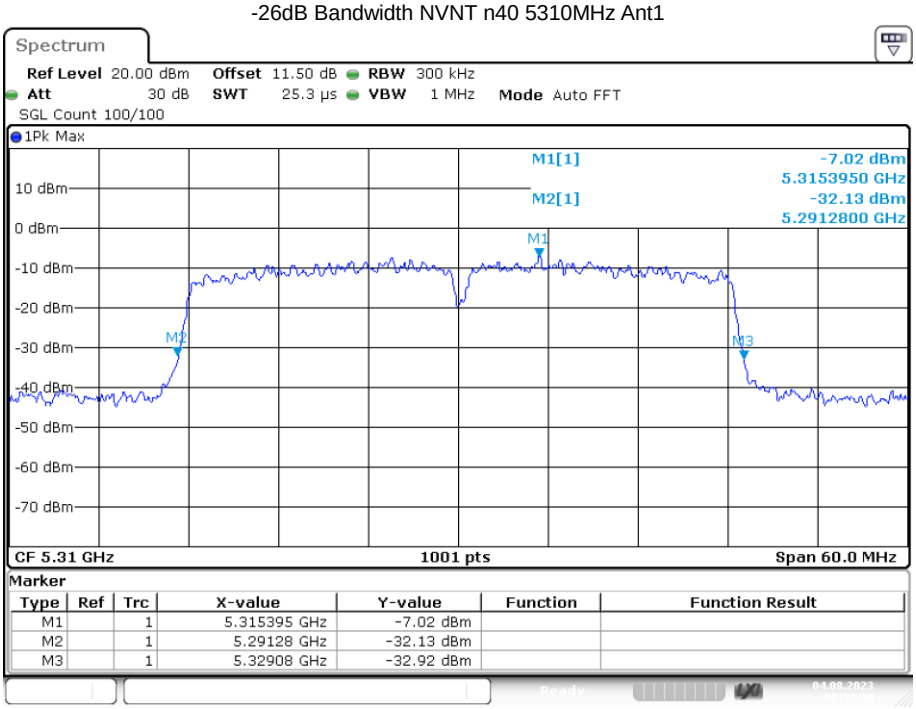

Date: 4.AUG.2023 06:18:50

-26dB Bandwidth NVNT n40 5270MHz Ant1




Date: 4.AUG.2023 09:22:28

-26dB Bandwidth NVNT n40 5310MHz Ant1

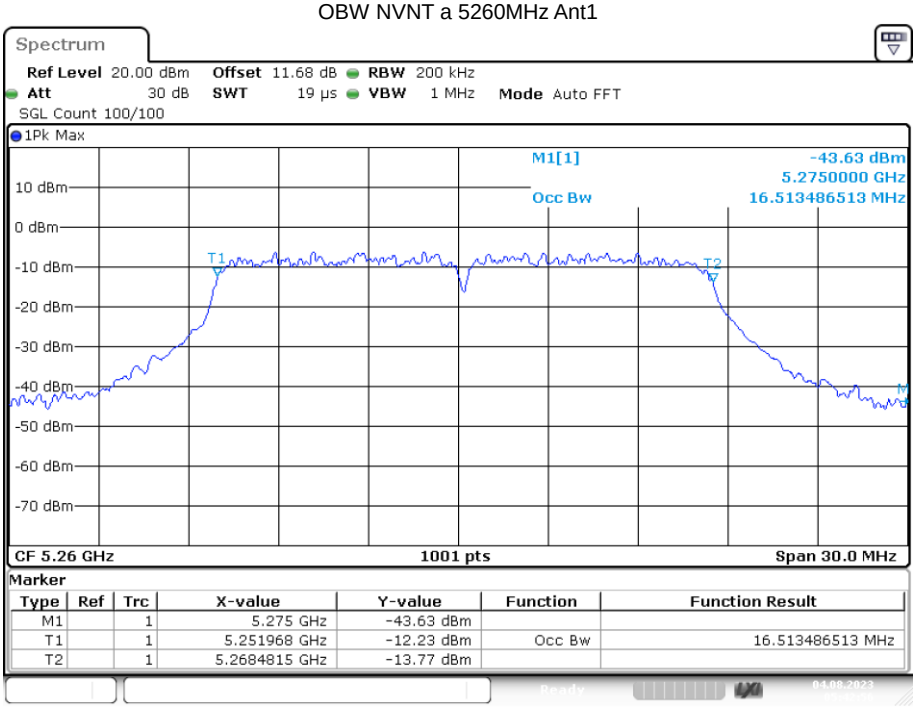



Date: 4.AUG.2023 09:34:30

## Occupied Channel Bandwidth

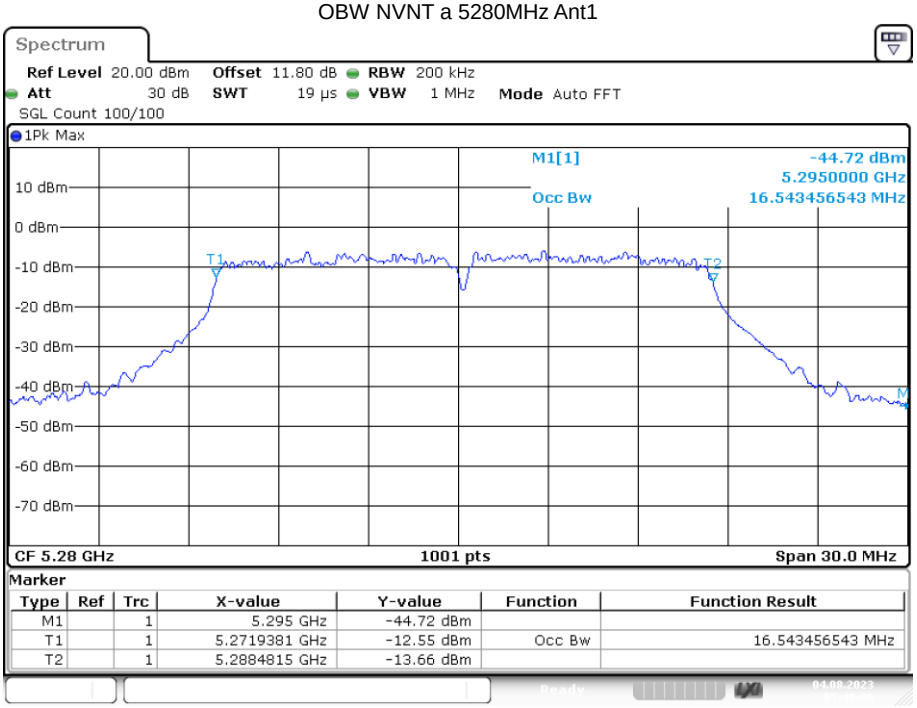
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5260 | Ant1 | 16.513 |
| NVNT | a | 5280 | Ant1 | 16.543 |
| NVNT | a | 5320 | Ant1 | 16.573 |
| NVNT | n20 | 5260 | Ant1 | 17.592 |
| NVNT | n20 | 5280 | Ant1 | 17.712 |
| NVNT | n20 | 5320 | Ant1 | 17.622 |
| NVNT | n40 | 5270 | Ant1 | 35.904 |
| NVNT | n40 | 5310 | Ant1 | 35.724 |

OBW NVNT a 5260MHz Ant1



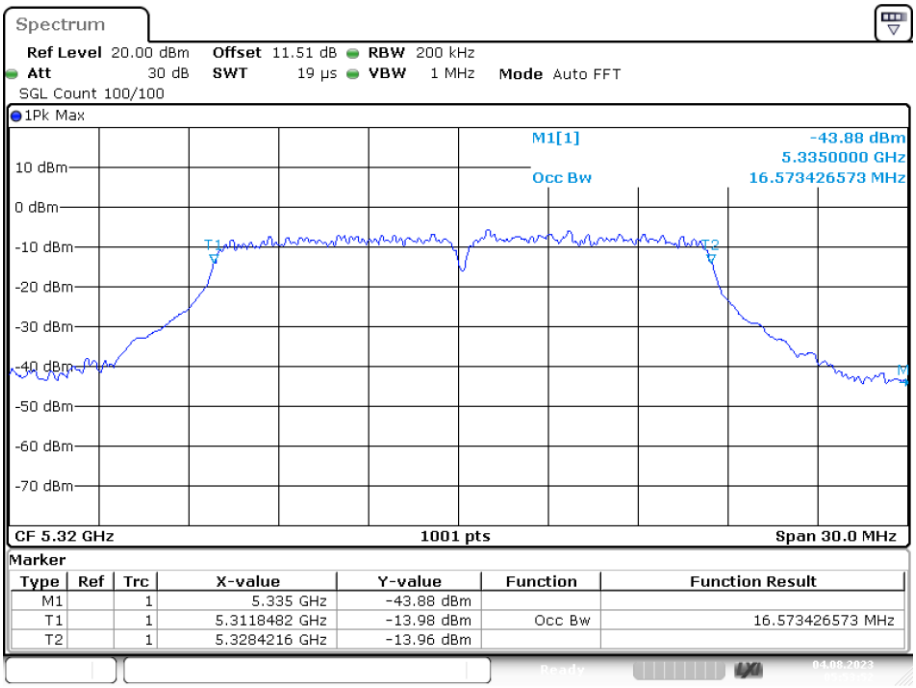

Date: 4.AUG.2023 05:42:56

OBW NVNT a 5280MHz Ant1



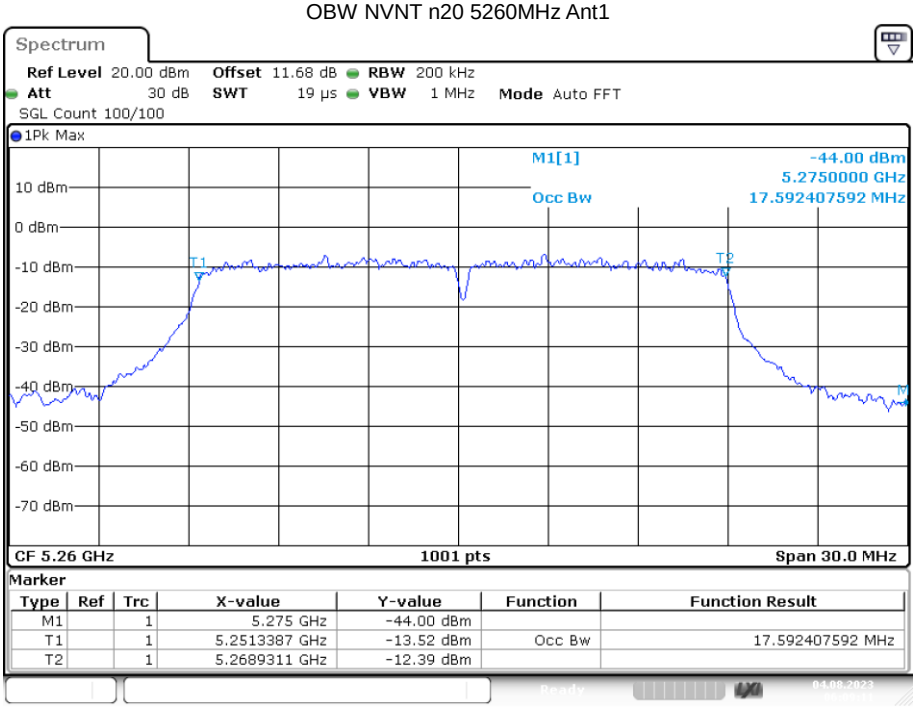

Date: 4.AUG.2023 05:49:07

OBW NVNT a 5320MHz Ant1



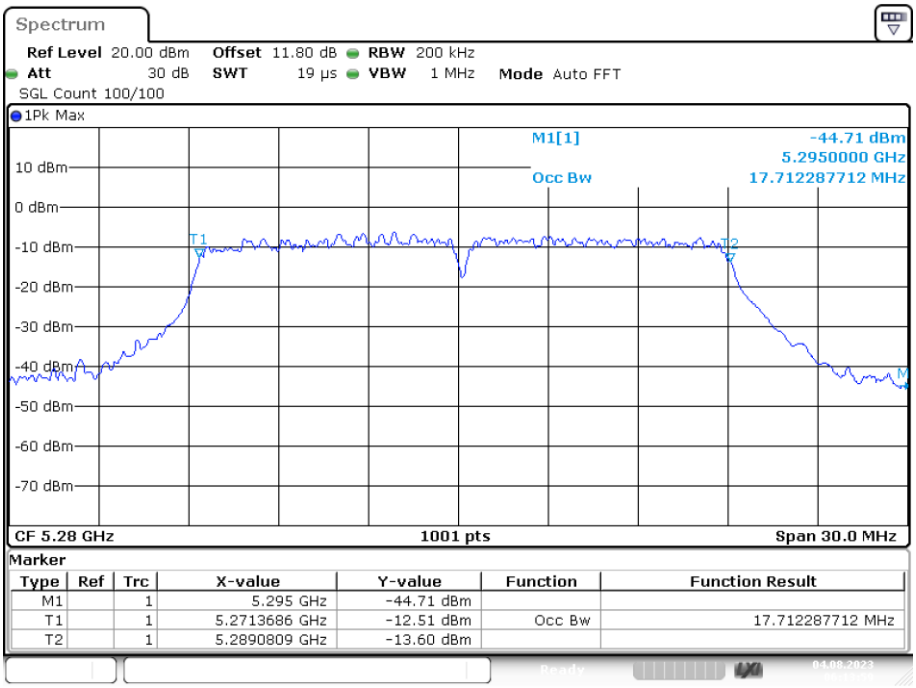

Date: 4.AUG.2023 05:53:52

OBW NVNT n20 5260MHz Ant1



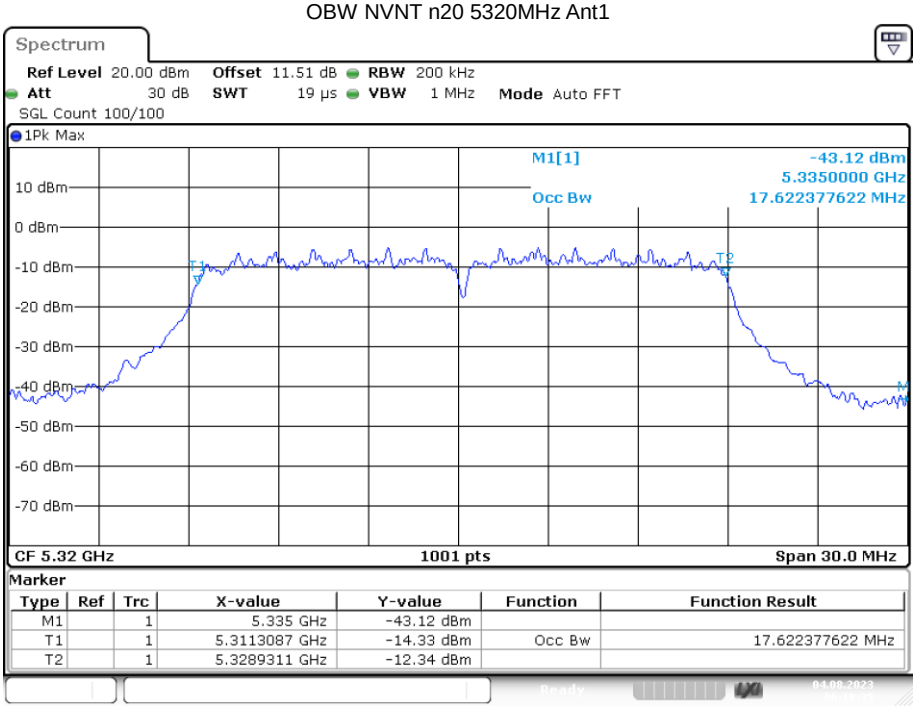

Date: 4.AUG.2023 06:09:12

OBW NVNT n20 5280MHz Ant1



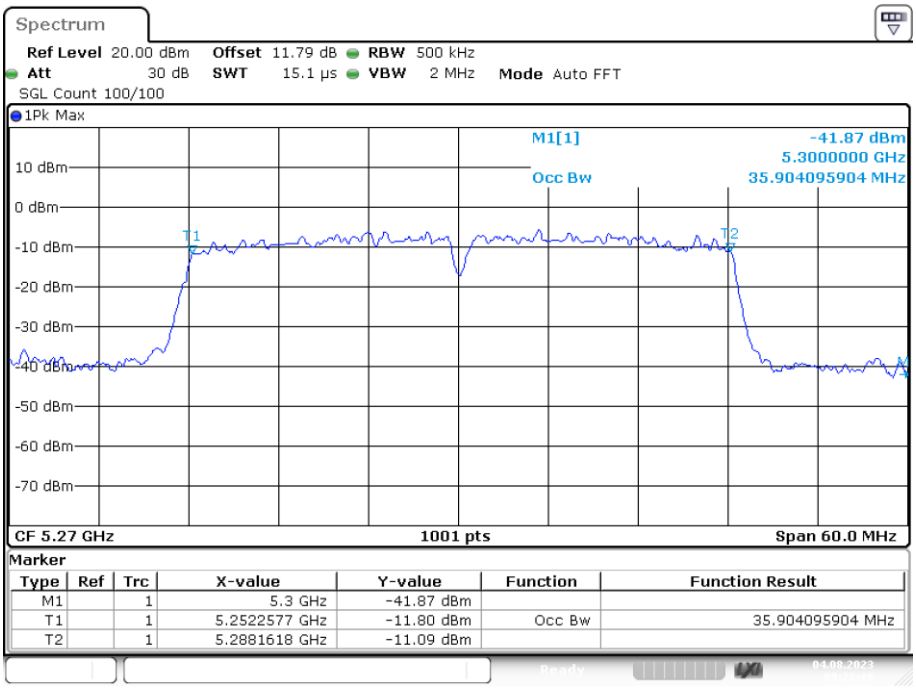

Date: 4.AUG.2023 06:13:59

OBW NVNT n20 5320MHz Ant1



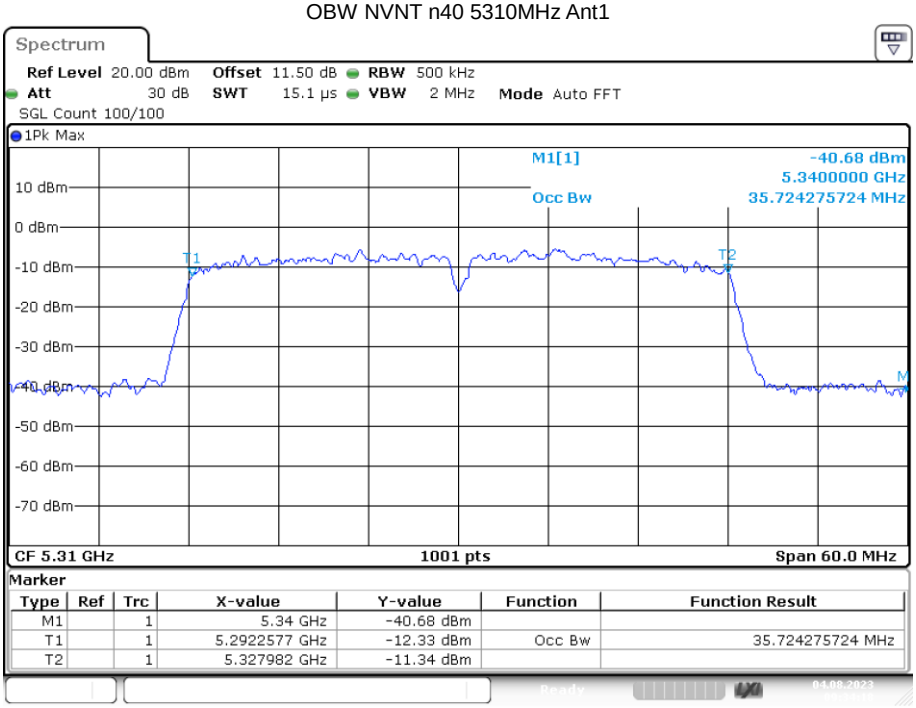

Date: 4.AUG.2023 06:18:35

OBW NVNT n40 5270MHz Ant1




Date: 4.AUG.2023 09:22:18

OBW NVNT n40 5310MHz Ant1

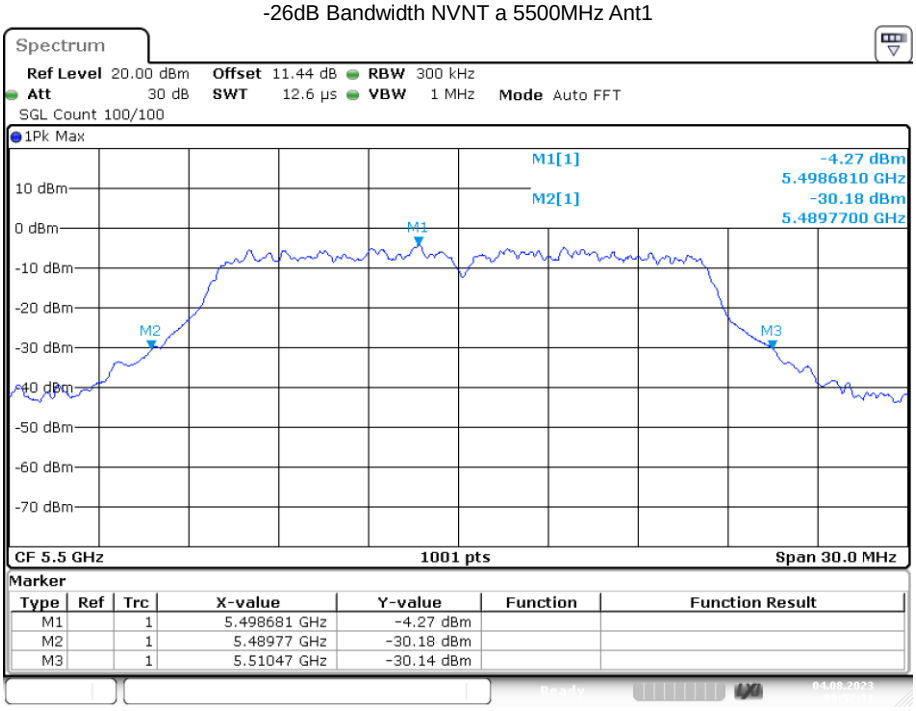



Date: 4.AUG.2023 09:34:18

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

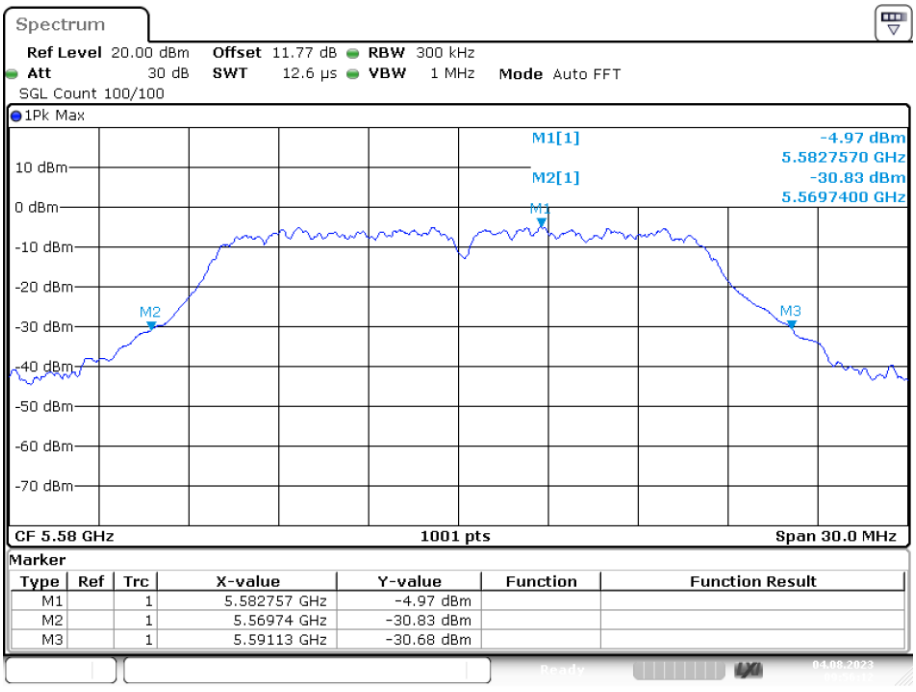
| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) |
|---|---|---|---|---|
| NVNT | a | 5500 | Ant1 | 20.7 |
| NVNT | a | 5580 | Ant1 | 21.39 |
| NVNT | a | 5700 | Ant1 | 20.94 |
| NVNT | n20 | 5500 | Ant1 | 21.6 |
| NVNT | n20 | 5580 | Ant1 | 20.88 |
| NVNT | n20 | 5700 | Ant1 | 21.3 |
| NVNT | n40 | 5510 | Ant1 | 37.74 |
| NVNT | n40 | 5670 | Ant1 | 38.04 |

-26dB Bandwidth NVNT a 5500MHz Ant1



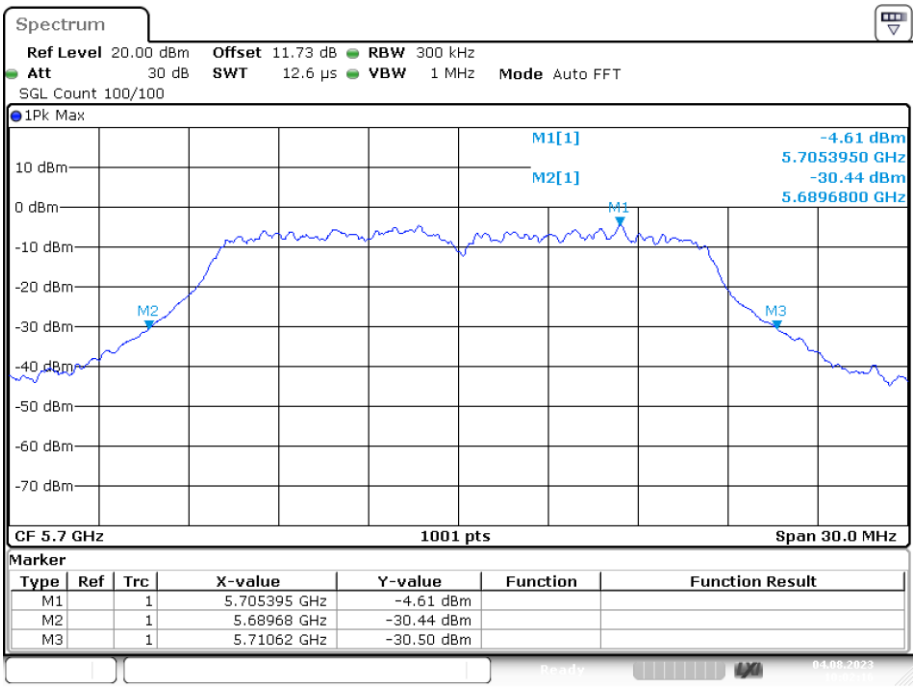

Date: 4.AUG.2023 09:52:11

-26dB Bandwidth NVNT a 5580MHz Ant1



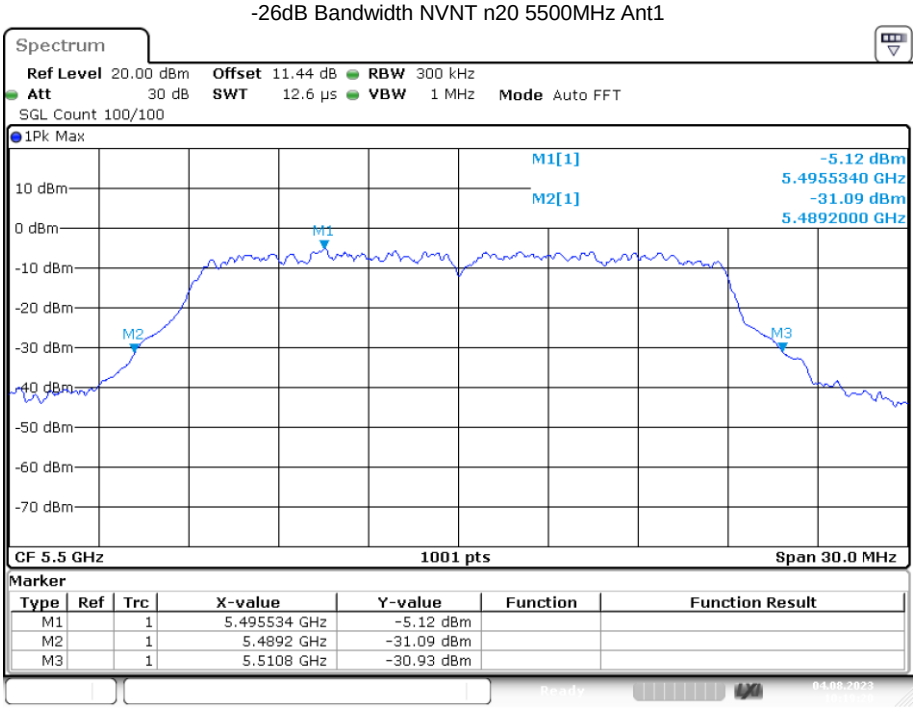

Date: 4.AUG.2023 09:56:12

-26dB Bandwidth NVNT a 5700MHz Ant1



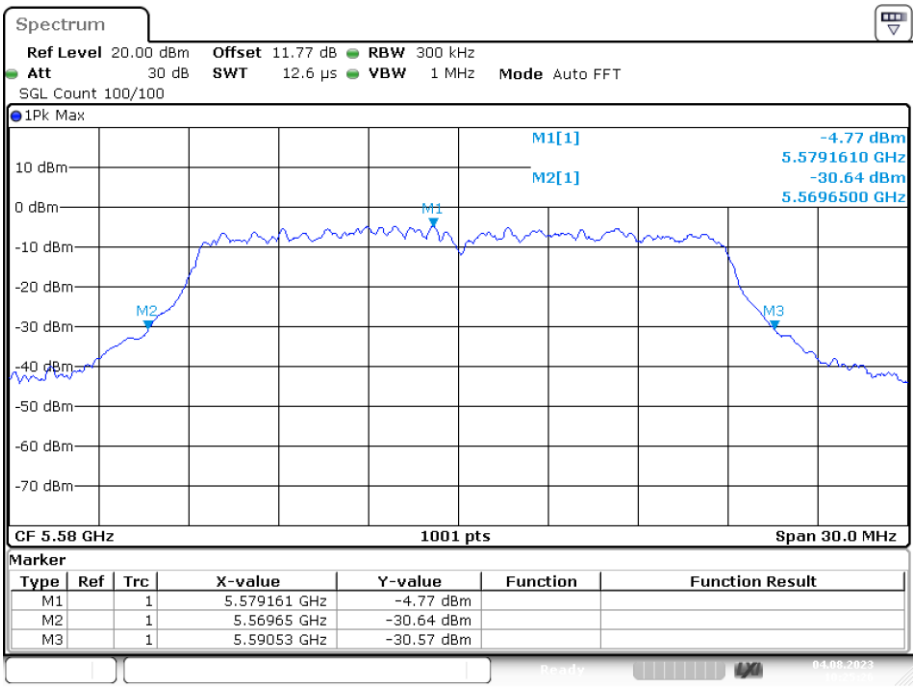

Date: 4.AUG.2023 10:02:17

-26dB Bandwidth NVNT n20 5500MHz Ant1



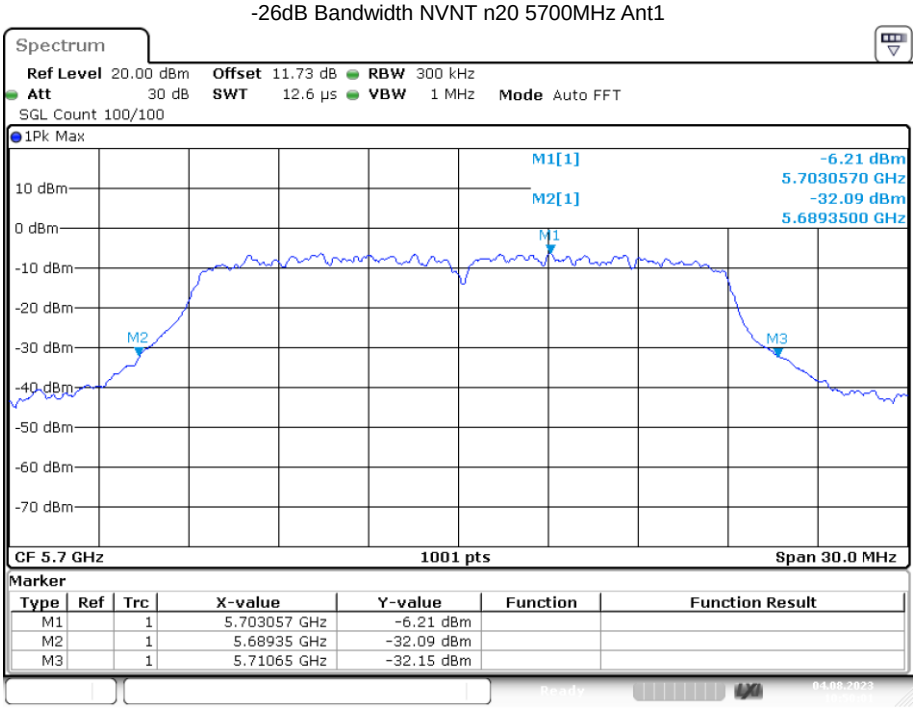

Date: 4.AUG.2023 10:19:20

-26dB Bandwidth NVNT n20 5580MHz Ant1



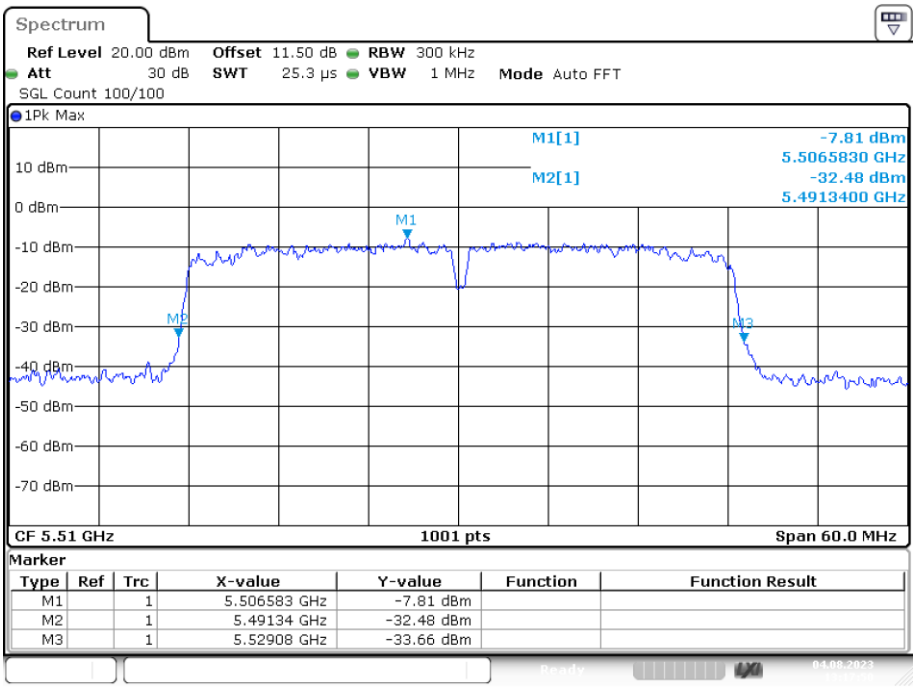

Date: 4.AUG.2023 10:25:25

-26dB Bandwidth NVNT n20 5700MHz Ant1



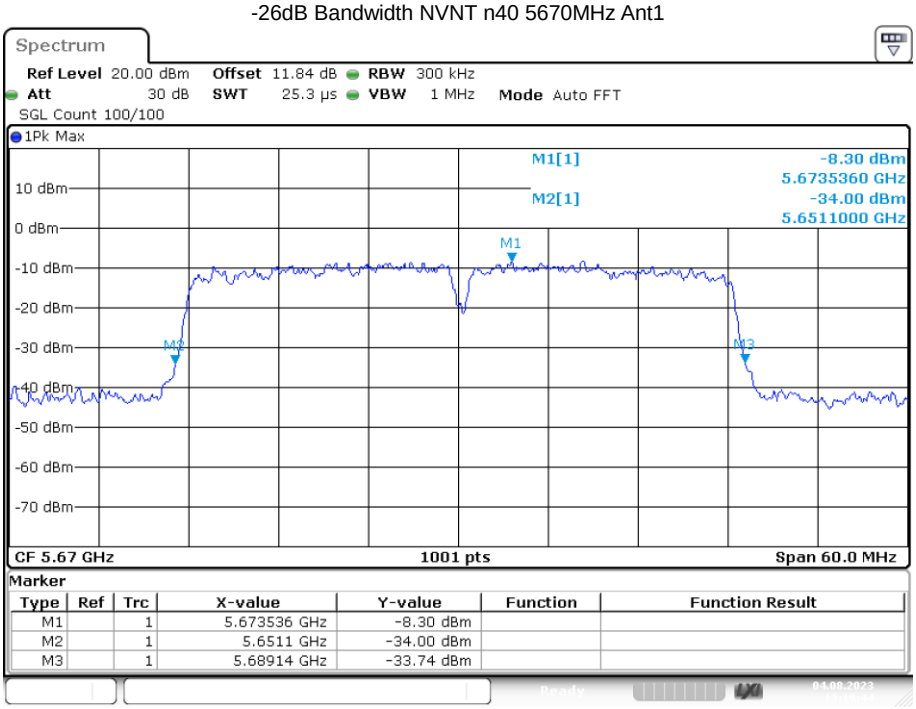

Date: 4.AUG.2023 10:50:01

-26dB Bandwidth NVNT n40 5510MHz Ant1




Date: 4.AUG.2023 13:17:50

-26dB Bandwidth NVNT n40 5670MHz Ant1

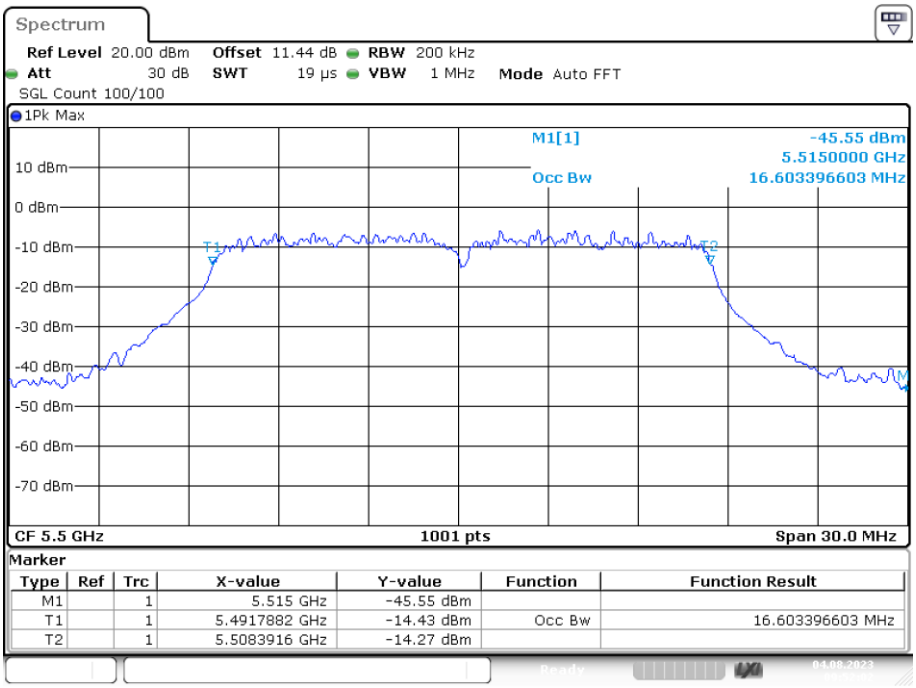



Date: 4.AUG.2023 13:19:44

## Occupied Channel Bandwidth

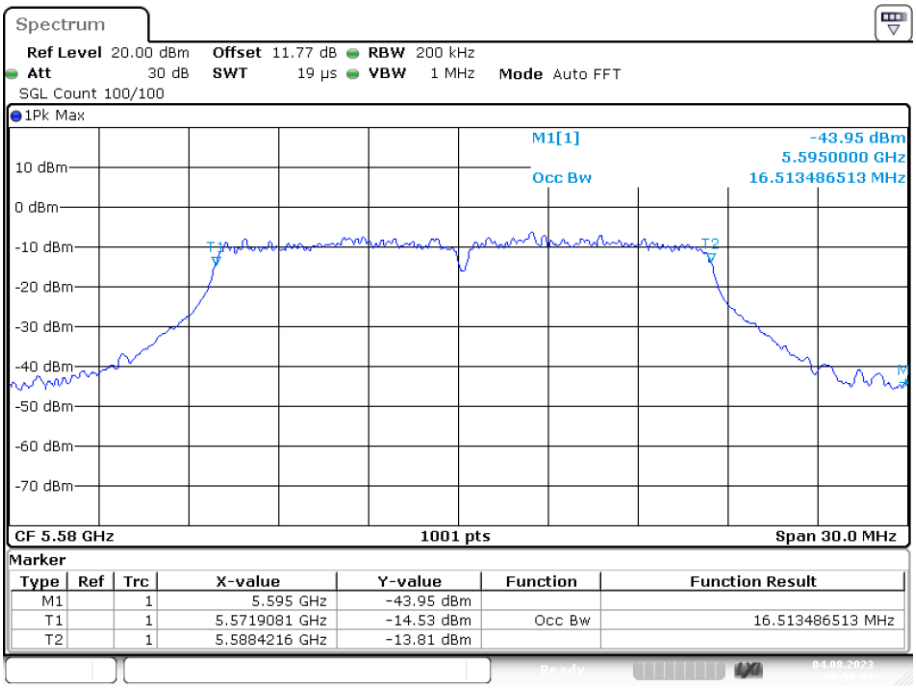
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5500 | Ant1 | 16.603 |
| NVNT | a | 5580 | Ant1 | 16.513 |
| NVNT | a | 5700 | Ant1 | 16.543 |
| NVNT | n20 | 5500 | Ant1 | 17.712 |
| NVNT | n20 | 5580 | Ant1 | 17.802 |
| NVNT | n20 | 5700 | Ant1 | 17.532 |
| NVNT | n40 | 5510 | Ant1 | 35.844 |
| NVNT | n40 | 5670 | Ant1 | 35.784 |

OBW NVNT a 5500MHz Ant1



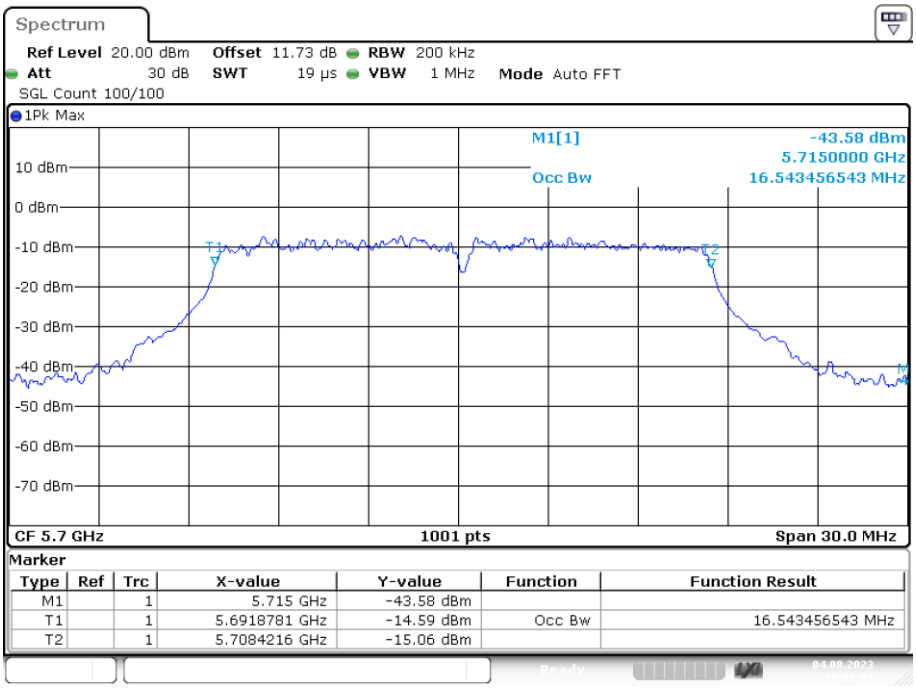

Date: 4.AUG.2023 09:52:02

OBW NVNT a 5580MHz Ant1



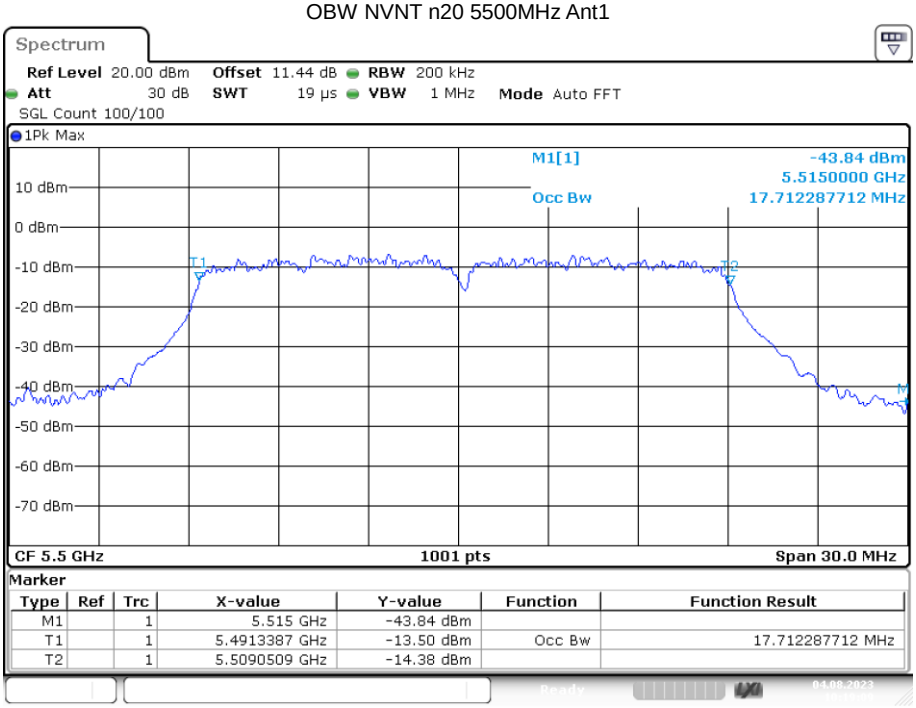

Date: 4.AUG.2023 09:56:02

OBW NVNT a 5700MHz Ant1



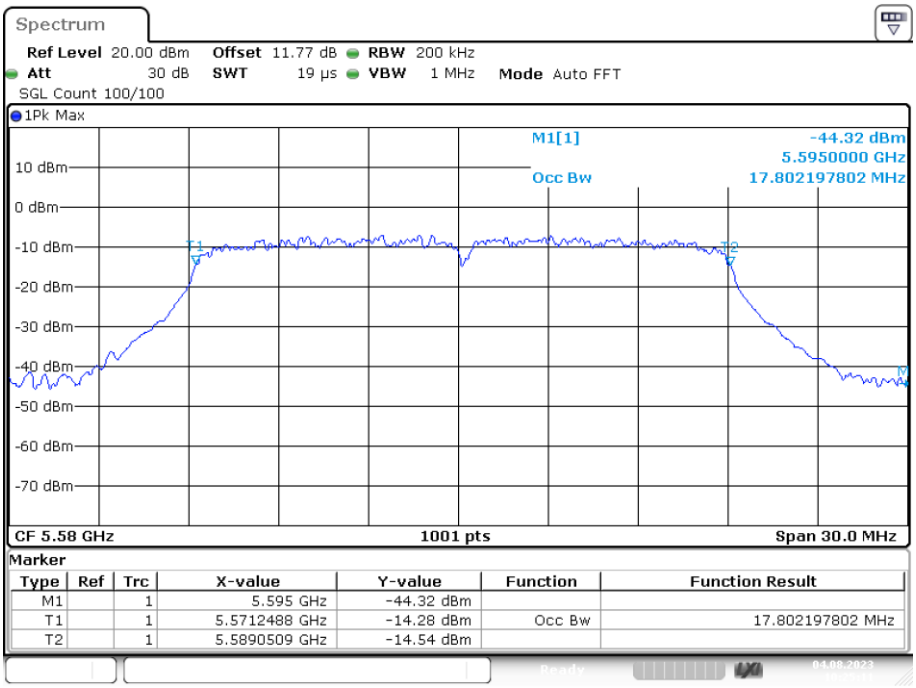

Date: 4.AUG.2023 10:02:05

OBW NVNT n20 5500MHz Ant1



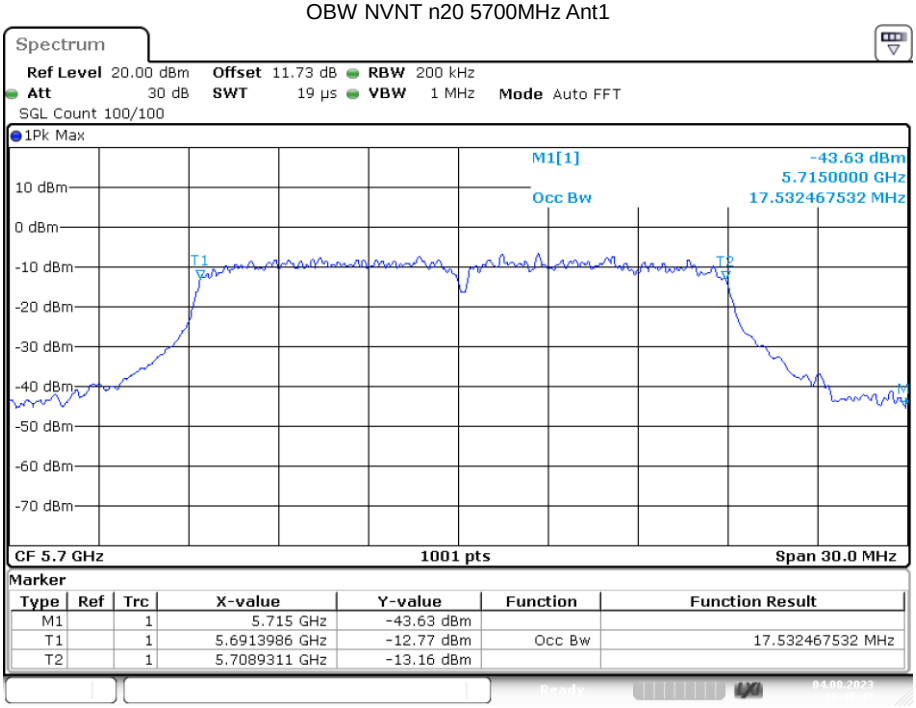

Date: 4.AUG.2023 10:19:08

OBW NVNT n20 5580MHz Ant1



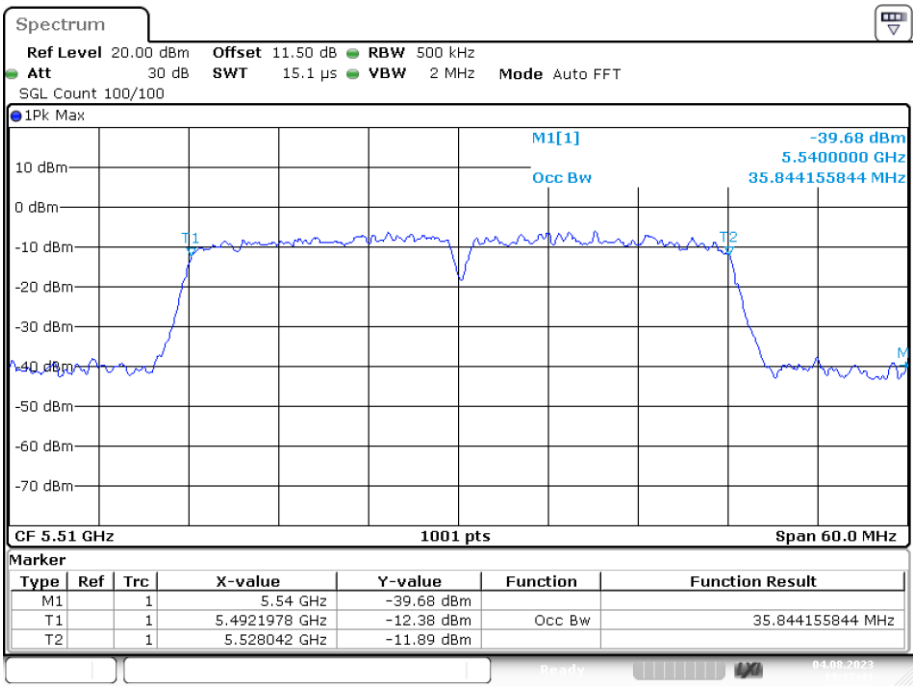

Date: 4.AUG.2023 10:25:11

OBW NVNT n20 5700MHz Ant1



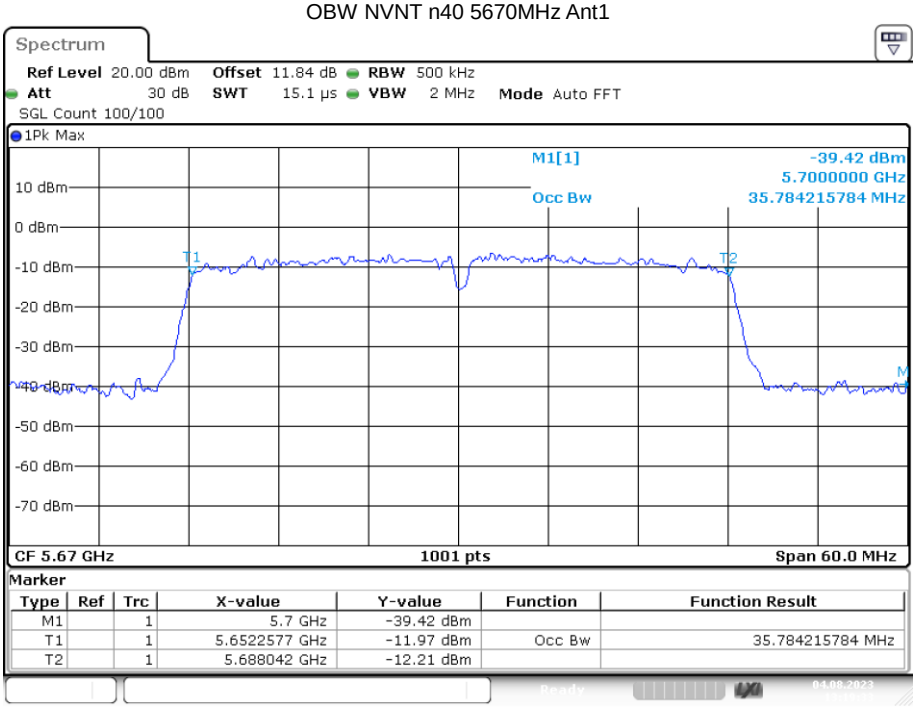

Date: 4.AUG.2023 10:49:47

OBW NVNT n40 5510MHz Ant1




Date: 4.AUG.2023 13:17:41

OBW NVNT n40 5670MHz Ant1

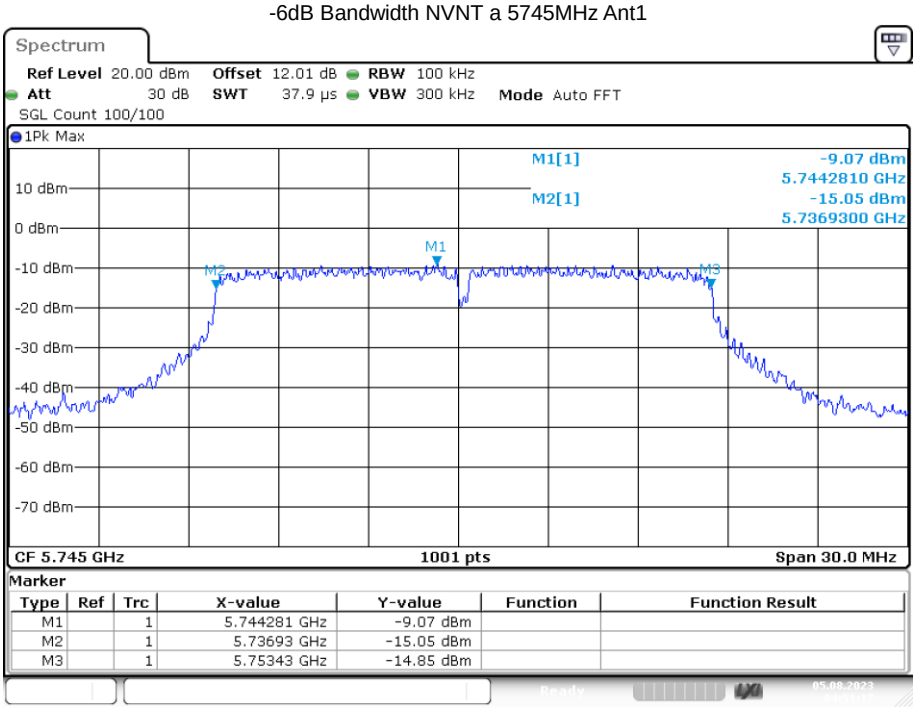



Date: 4.AUG.2023 13:19:33

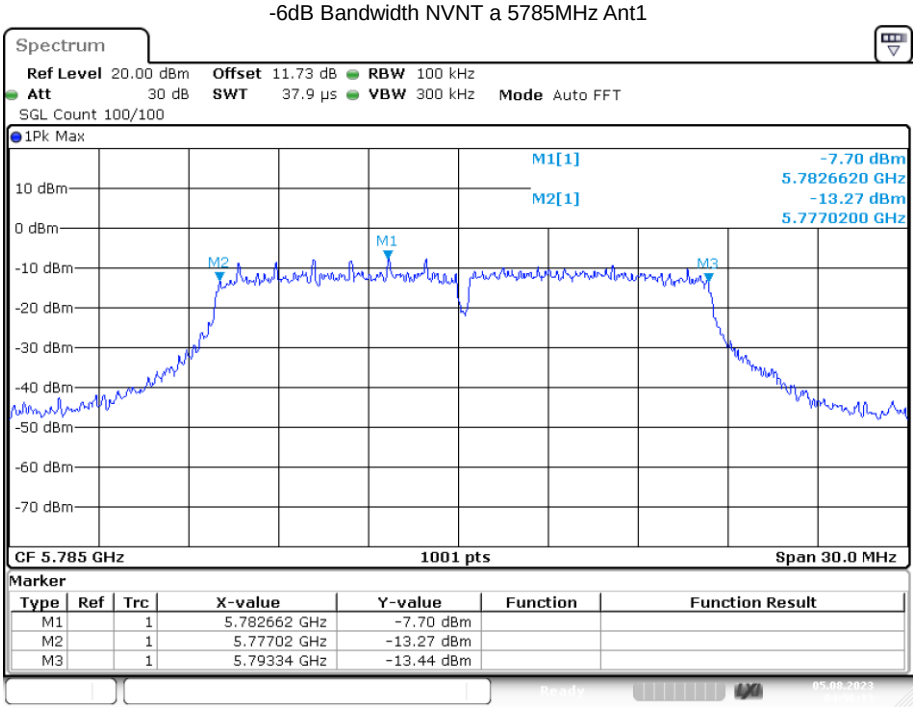
**Band 4 (5725-5850 MHz):**
**-6dB Bandwidth**

| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | 16.5 | 0.5 | Pass |
| NVNT | a | 5785 | Ant1 | 16.32 | 0.5 | Pass |
| NVNT | a | 5825 | Ant1 | 16.53 | 0.5 | Pass |
| NVNT | n20 | 5745 | Ant1 | 17.61 | 0.5 | Pass |
| NVNT | n20 | 5785 | Ant1 | 16.98 | 0.5 | Pass |
| NVNT | n20 | 5825 | Ant1 | 17.55 | 0.5 | Pass |
| NVNT | n40 | 5755 | Ant1 | 33.78 | 0.5 | Pass |
| NVNT | n40 | 5795 | Ant1 | 36.3 | 0.5 | Pass |

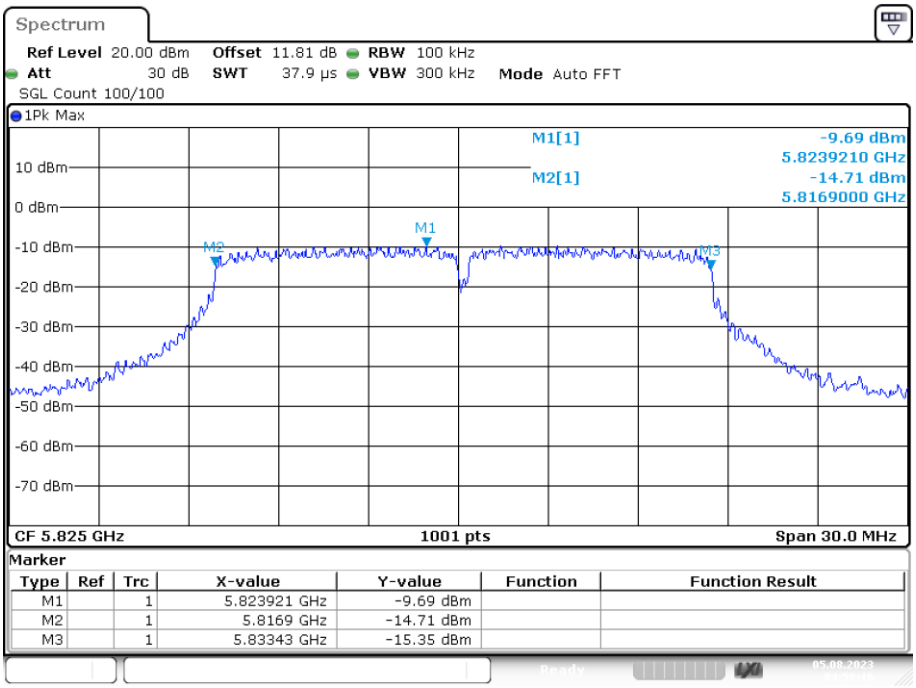
-6dB Bandwidth NVNT a 5745MHz Ant1




-6dB Bandwidth NVNT a 5785MHz Ant1

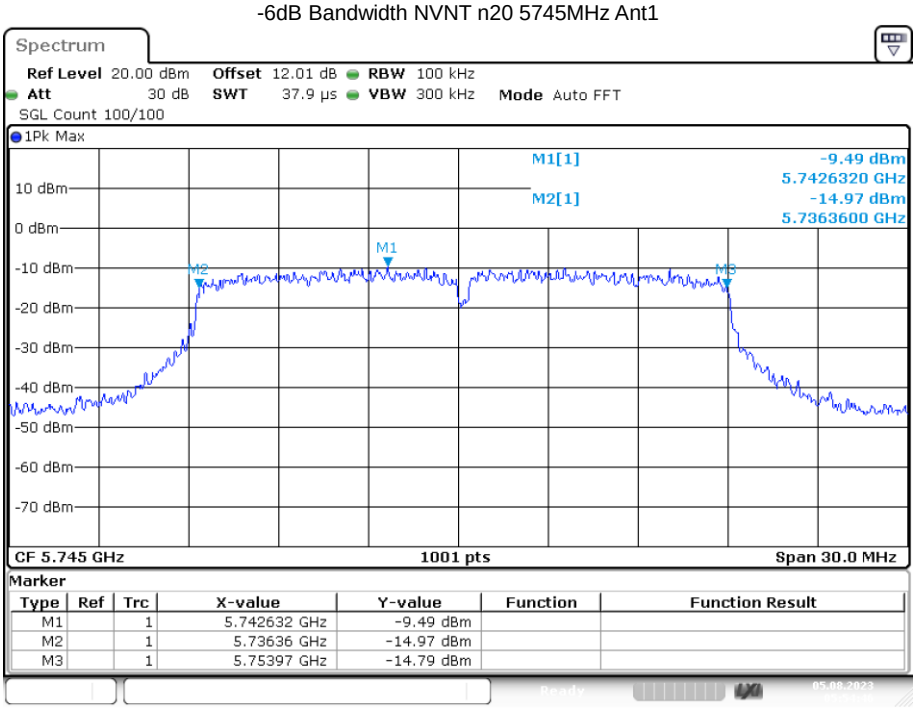


-6dB Bandwidth NVNT a 5825MHz Ant1



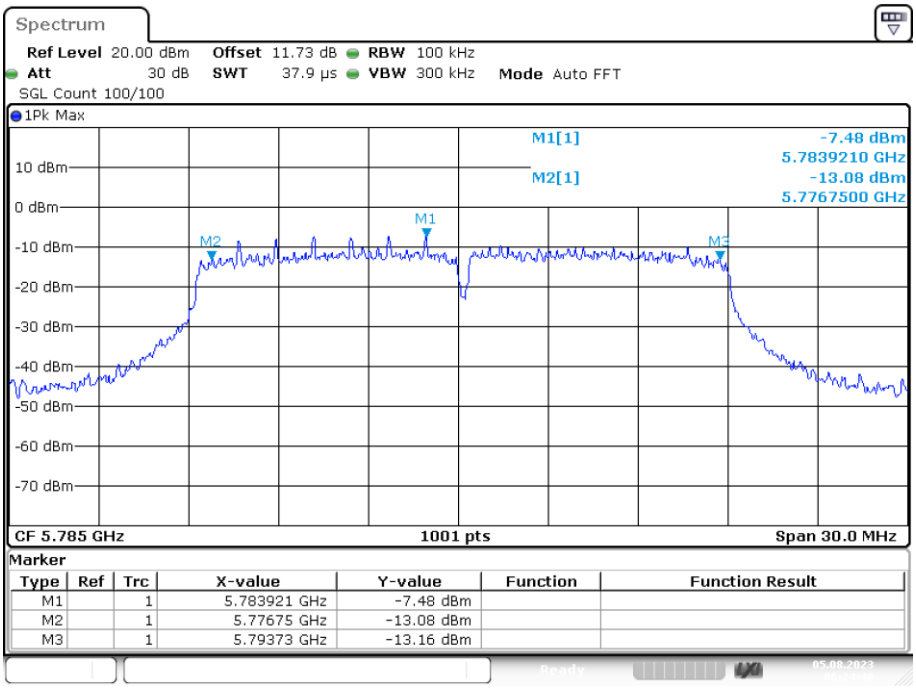

Date: 5.AUG.2023 04:59:16

-6dB Bandwidth NVNT n20 5745MHz Ant1



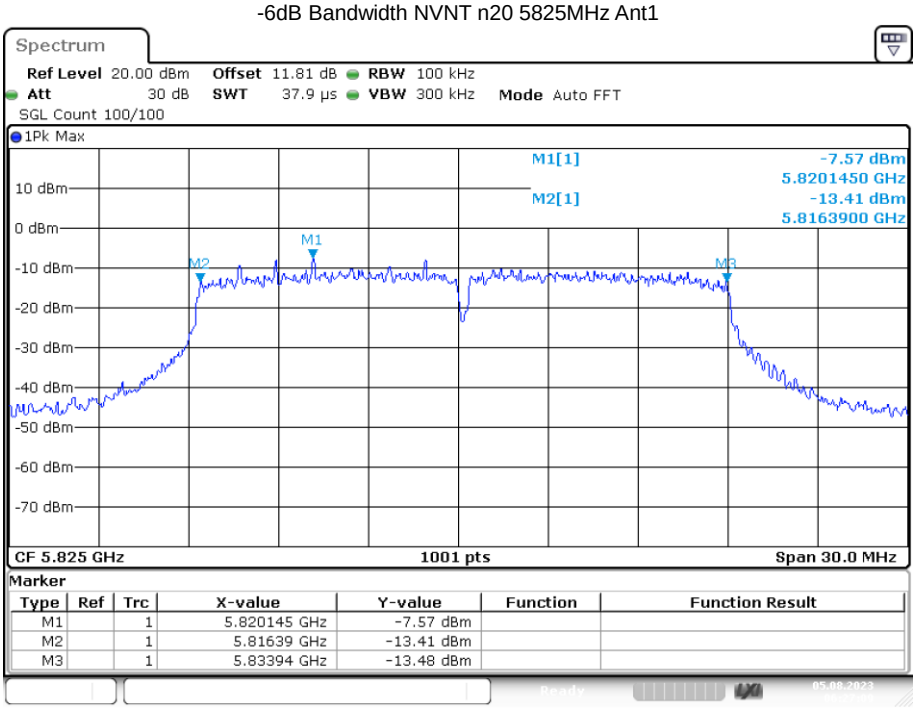

Date: 5.AUG.2023 05:54:46

-6dB Bandwidth NVNT n20 5785MHz Ant1



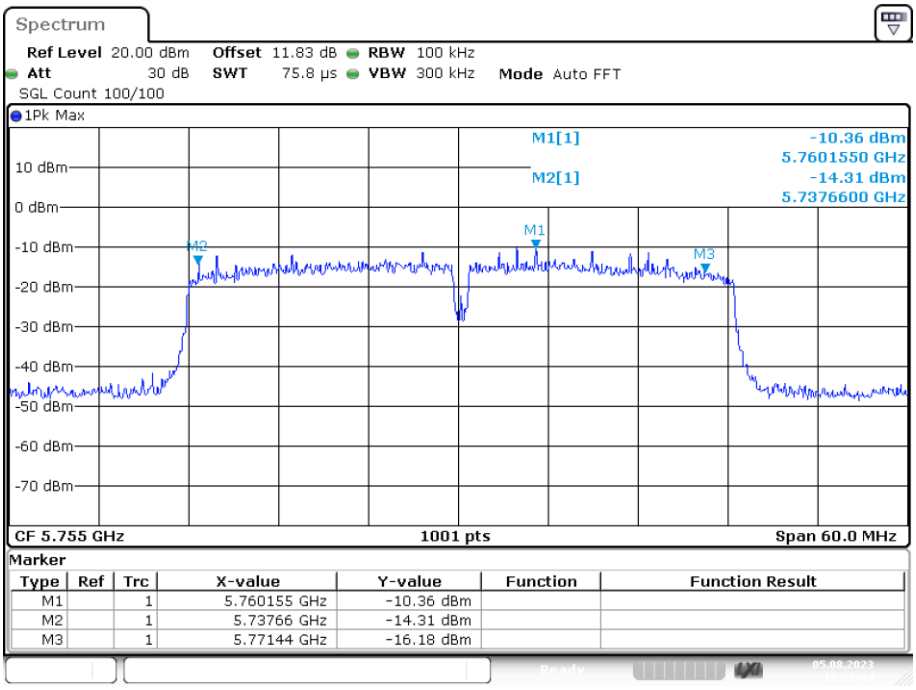

Date: 5.AUG.2023 06:24:41

-6dB Bandwidth NVNT n20 5825MHz Ant1



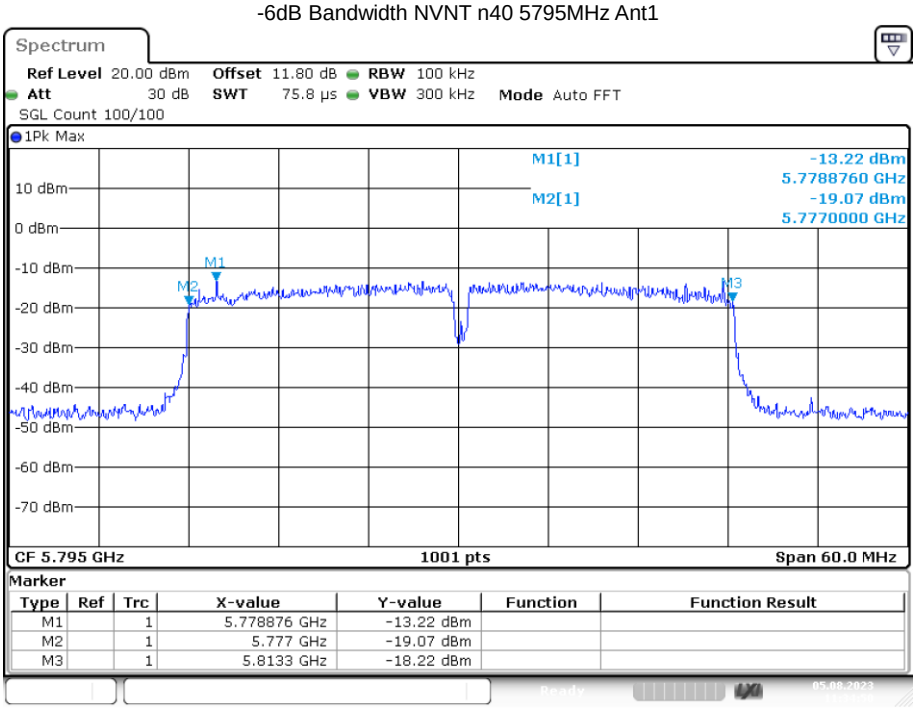

Date: 5.AUG.2023 06:27:09

-6dB Bandwidth NVNT n40 5755MHz Ant1




Date: 5.AUG.2023 10:21:43

-6dB Bandwidth NVNT n40 5795MHz Ant1

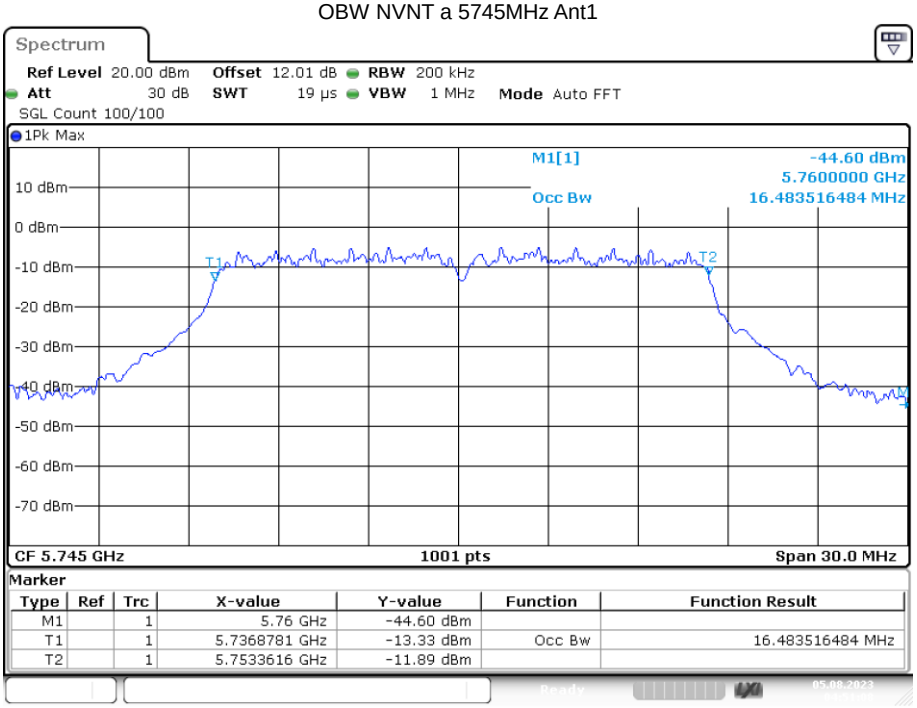



Date: 5.AUG.2023 11:34:49

## Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | 16.484 |
| NVNT | a | 5785 | Ant1 | 16.573 |
| NVNT | a | 5825 | Ant1 | 16.394 |
| NVNT | n20 | 5745 | Ant1 | 17.562 |
| NVNT | n20 | 5785 | Ant1 | 17.592 |
| NVNT | n20 | 5825 | Ant1 | 17.832 |
| NVNT | n40 | 5755 | Ant1 | 35.784 |
| NVNT | n40 | 5795 | Ant1 | 35.784 |

OBW NVNT a 5745MHz Ant1

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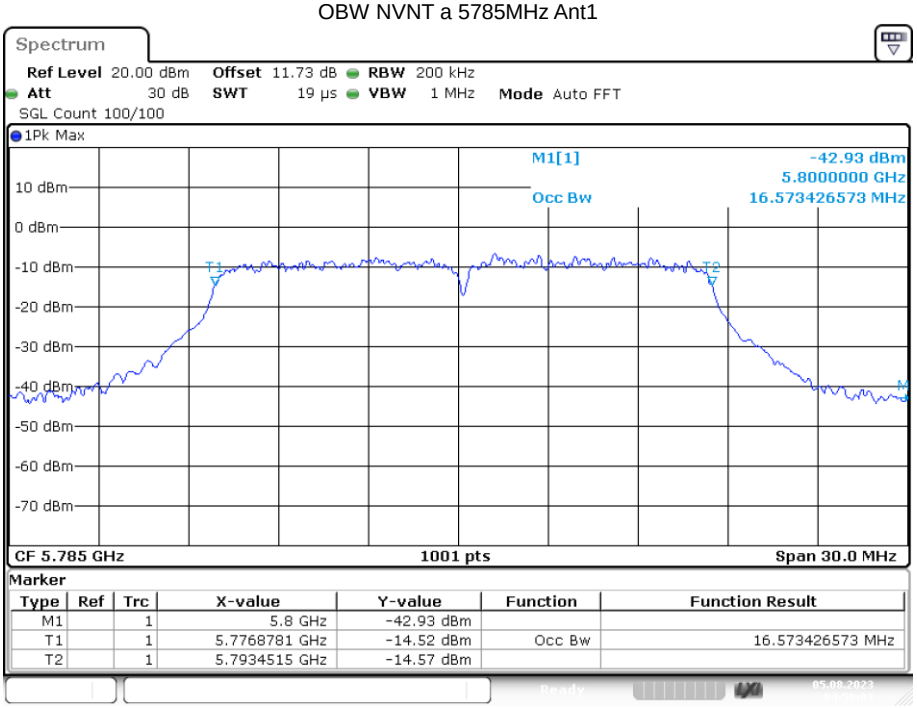
OBW NVNT a 5785MHz Ant1

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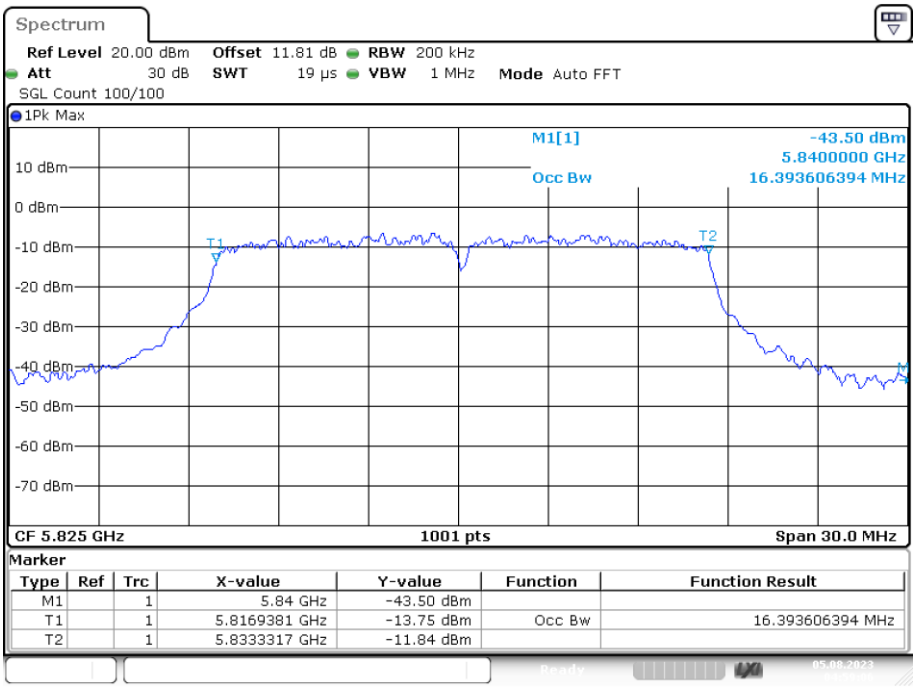
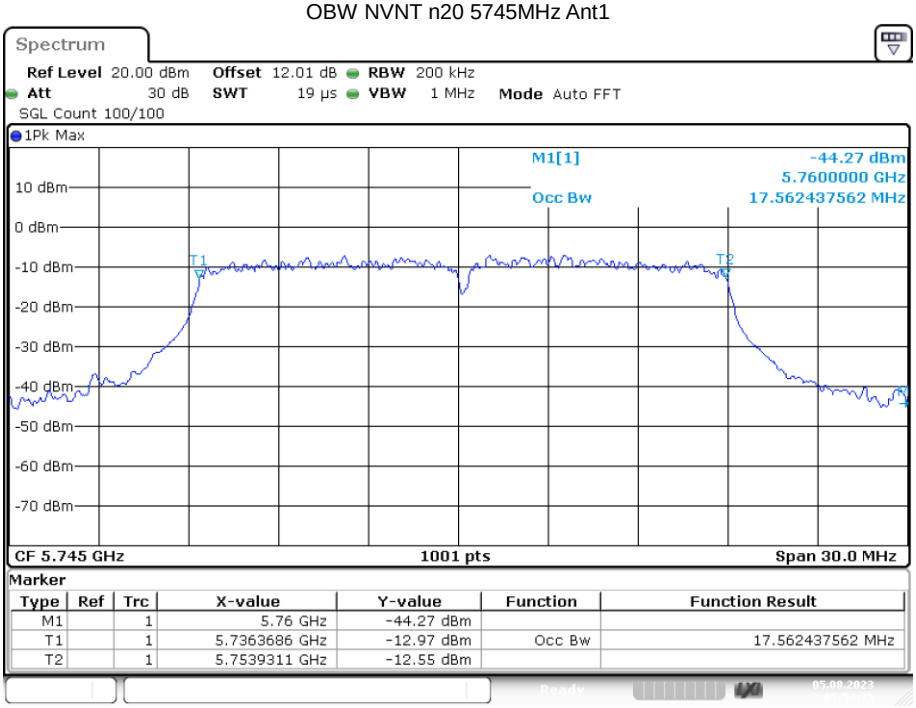
OBW NVNT a 5825MHz Ant1




Date: 5.AUG.2023 04:59:06

OBW NVNT n20 5745MHz Ant1

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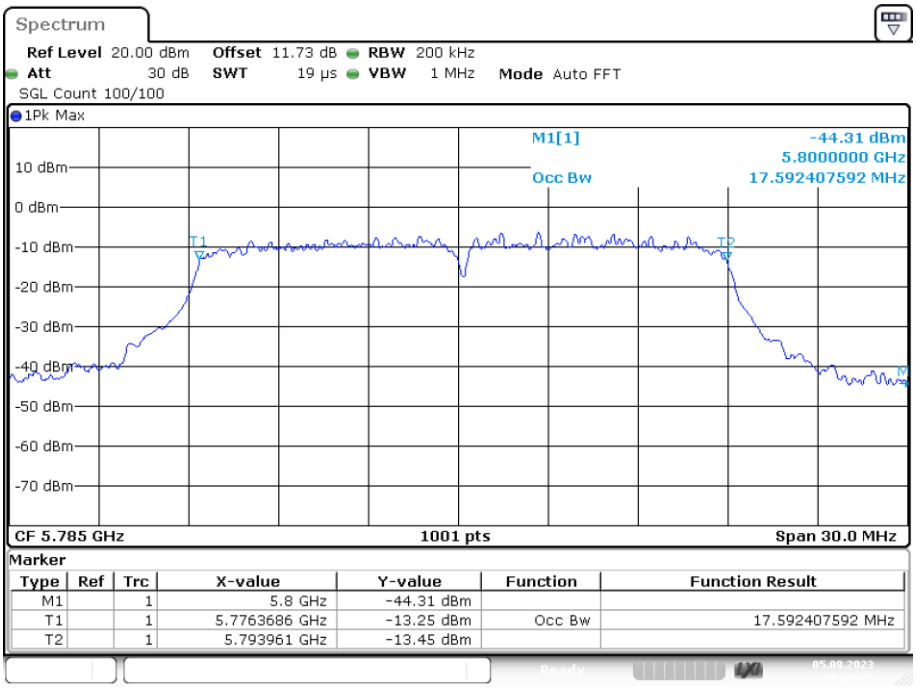
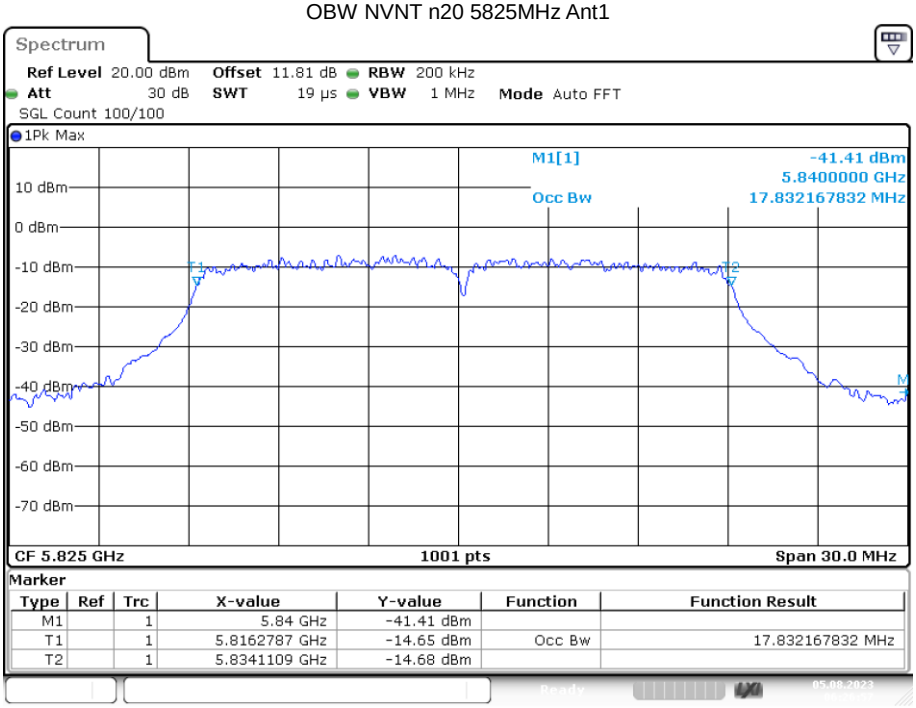
OBW NVNT n20 5785MHz Ant1




Date: 5.AUG.2023 06:24:29

OBW NVNT n20 5825MHz Ant1

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