

# TEST REPORT

**Product Name** : Projector  
**Model Number** : V03D11, V\*\*D11 ( “ \*\* ” = 01-99 , indicates for different market or business purposes )  
**FCC ID** : 2AQ3A-V03D11

**Prepared for** : Shenzhen VanTop Technology & Innovation Co., Ltd.  
**Address** : 506, BLDG 4, Pingshan minQi Technology Park, No. 65  
Lishan Road, Pingshan Community, Taoyuan Street,  
Nanshan District, Shenzhen, Guangdong, China

**Prepared by** : EMTEK (SHENZHEN) CO., LTD.  
**Address** : Building 69, Majialong Industry Zone, Nanshan District,  
Shenzhen, Guangdong, China

Tel: (0755) 26954280  
Fax: (0755) 26954282

**Report Number** : ENS2605070187W00304R  
**Date(s) of Tests** : May 18, 2026 to May 23, 2026  
**Date of issue** : May 23, 2026

# 1 TEST RESULT CERTIFICATION

Applicant : Shenzhen VanTop Technology & Innovation Co., Ltd.  
Address : 506, BLDG 4, Pingshan minQi Technology Park, No. 65 Lishan Road, Pingshan Community, Taoyuan Street, Nanshan District, Shenzhen, Guangdong, China  
Manufacturer : Shenzhen VanTop Technology & Innovation Co., Ltd.  
Address : 506, BLDG 4, Pingshan minQi Technology Park, No. 65 Lishan Road, Pingshan Community, Taoyuan Street, Nanshan District, Shenzhen, Guangdong, China  
EUT : Projector  
Model Name : V03D11, V\*\*D11 ( “\*\*” = 01-99, indicates for different market or business purposes )  
Trademark : VANKYO

Measurement Procedure Used:

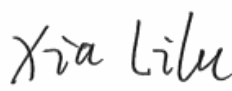
| APPLICABLE STANDARDS                                                                |             |
|-------------------------------------------------------------------------------------|-------------|
| STANDARD                                                                            | TEST RESULT |
| FCC 47 CFR Part 2, Subpart J<br>FCC 47 CFR Part 15, Subpart E                       | PASS        |
| IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)<br>IC RSS-247 Issue 4(07-2025) | PASS        |

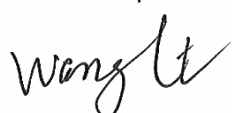
The above equipment was tested by EMTEK (SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 2, Part 15.407, IC RSS-247 Issue 4 and IC RSS-GEN, Issue 5.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : May 18, 2026 to May 23, 2026

Prepared by :   
Yu Xiaolan/Editor

Reviewer :   
Xia lilu /Supervisor

Approve & Authorized Signer :   
Wang li /Manager



## Modified History

| Version | Report No.           | Revision Date | Summary         |
|---------|----------------------|---------------|-----------------|
| Ver.1.0 | ENS2605070187W00304R | /             | Original Report |
|         |                      |               |                 |
|         |                      |               |                 |



## TABLE OF CONTENTS

|                                                      |            |
|------------------------------------------------------|------------|
| <b>1 TEST RESULT CERTIFICATION .....</b>             | <b>2</b>   |
| <b>2 EUT TECHNICAL DESCRIPTION .....</b>             | <b>5</b>   |
| <b>3 SUMMARY OF TEST RESULT .....</b>                | <b>7</b>   |
| <b>4 TEST METHODOLOGY .....</b>                      | <b>8</b>   |
| 4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS .....   | 8          |
| 4.2 MEASUREMENT EQUIPMENT USED .....                 | 8          |
| 4.3 DESCRIPTION OF TEST MODES .....                  | 8          |
| <b>5 FACILITIES AND ACCREDITATIONS .....</b>         | <b>11</b>  |
| 5.1 FACILITIES .....                                 | 11         |
| 5.2 EQUIPMENT .....                                  | 11         |
| 5.3 LABORATORY ACCREDITATIONS AND LISTINGS .....     | 11         |
| <b>6 TEST SYSTEM UNCERTAINTY .....</b>               | <b>12</b>  |
| <b>7 SETUP OF EQUIPMENT UNDER TEST .....</b>         | <b>13</b>  |
| 7.1 RADIO FREQUENCY TEST SETUP .....                 | 13         |
| 7.2 RADIO FREQUENCY TEST SETUP .....                 | 13         |
| 7.3 CONDUCTED EMISSION TEST SETUP .....              | 15         |
| 7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM ..... | 16         |
| 7.5 SUPPORT EQUIPMENT .....                          | 16         |
| <b>8 TEST REQUIREMENTS .....</b>                     | <b>17</b>  |
| 8.1 BANDWIDTH MEASUREMENT .....                      | 17         |
| 8.2 MAXIMUM CONDUCTED OUTPUT POWER .....             | 42         |
| 8.3 MAXIMUM PEAK POWER DENSITY .....                 | 45         |
| 8.4 UNDESIRABLE RADIATED SPURIOUS EMISSION .....     | 64         |
| 8.5 POWER LINE CONDUCTED EMISSIONS .....             | 104        |
| 8.6 ANTENNA APPLICATION .....                        | 108        |
| <b>9 APPENDIX PHOTOGRAPHS OF EUT .....</b>           | <b>109</b> |
| <b>10 APPENDIX PHOTOGRAPHS OF TEST SETUP .....</b>   | <b>110</b> |

## 2 EUT TECHNICAL DESCRIPTION

| Characteristics           | Description                                                                                                                                                                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>           | Projector                                                                                                                                                                                                                                                                 |
| <b>Model Number:</b>      | V03D11, V**D11 (“**”= 01-99, indicates for different market or business purposes)<br>(Note: All models are identical in circuitry and electrical, mechanical and physical construction; It's just that the model names are different. Mode V03D11 was Chosen final test.) |
| <b>Test Sample S/N:</b>   | N/A                                                                                                                                                                                                                                                                       |
| <b>Variant Number:</b>    | N/A                                                                                                                                                                                                                                                                       |
| <b>Wifi Type:</b>         | Wifi 5G with 5150MHz-5250MHz Band<br>Wifi 5G with 5725MHz-5850MHz Band                                                                                                                                                                                                    |
| <b>WLAN Supported:</b>    | 802.11a/n                                                                                                                                                                                                                                                                 |
| <b>Data Rate :</b>        | 802.11a: 54/48/36/24/12/9/6Mbps<br>802.11n: MCS0-MCS7                                                                                                                                                                                                                     |
| <b>Modulation:</b>        | OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n                                                                                                                                                                                                                             |
| <b>Frequency Range:</b>   | UNII-1: 5150MHz-5250MHz Band<br>5180-5240MHz for 802.11a/n(HT20)<br>5190-5230MHz for 802.11n(HT40)                                                                                                                                                                        |
|                           | UNII-3 with 5725MHz-5850MHz Band<br>5745-5825MHz for 802.11a/n(HT20)<br>5755-5795MHz for 802.11n(HT40)                                                                                                                                                                    |
| <b>TPC Function:</b>      | Not Applicable                                                                                                                                                                                                                                                            |
| <b>Antenna Port:</b>      | <input checked="" type="checkbox"/> Antenna port 1 <input type="checkbox"/> Antenna port 2                                                                                                                                                                                |
| <b>Antenna Type:</b>      | PCB Antenna                                                                                                                                                                                                                                                               |
| <b>Antenna Gain:</b>      | UNII-1:3.35dBi<br>UNII-3:3.85dBi<br>(Note: The antenna information is provided by the customers, which will have a certain impact on the test results.)                                                                                                                   |
| <b>Adapter:</b>           | Model:Z48AW350100US00<br>INPUT100-240V~50/60Hz 1.2A MAX 47.0W<br>OUTPUT1:35.0V/1.0A<br>OUTPUT1:12.0V/1.0A                                                                                                                                                                 |
| <b>Test Voltage:</b>      | AC 120V/60Hz                                                                                                                                                                                                                                                              |
| <b>Temperature Range:</b> | 0° C ~ +35° C                                                                                                                                                                                                                                                             |
| <b>Software Version:</b>  | 3W-2605151408                                                                                                                                                                                                                                                             |
| <b>Hardware Version:</b>  | RT-3W-V1.0                                                                                                                                                                                                                                                                |

**Note:** 1.For more details, please refer to the User's manual of the EUT.



### 3 SUMMARY OF TEST RESULT

| FCC Part Clause                                                                                                                                                                                                                                                                                 | IC Part Clause                                                                                                                                      | Test Parameter                 | Verdict | Remark |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------|--------|
| 15.407 (a)<br>15.407 (e)<br>2.1049                                                                                                                                                                                                                                                              | RSS-247 clause 7.3.4.2<br>RSS-Gen 6.7                                                                                                               | 99% , 6dB and 26dB Bandwidth   | PASS    |        |
| 15.407 (a)                                                                                                                                                                                                                                                                                      | RSS-247 clause 7.3.2.2<br>RSS-247 clause 7.3.3.2<br>RSS-247 clause 7.3.4.3                                                                          | Maximum Conducted Output Power | PASS    |        |
| 15.407 (a)                                                                                                                                                                                                                                                                                      | RSS-247 clause 7.3.1.2<br>RSS-247 clause 7.3.2.2<br>RSS-247 clause 7.3.3.2<br>RSS-247 clause 7.3.4.3                                                | PeakPower Spectral Density     | PASS    |        |
| 15.407 (b)<br>15.209<br>15.205                                                                                                                                                                                                                                                                  | RSS-247 clause 7.3.1.3<br>RSS-247 clause 7.3.2.3<br>RSS-247 clause 7.3.3.3<br>RSS-247 clause 7.3.4.4<br>RSS-Gen 8.9<br>RSS-Gen 8.10<br>RSS-Gen 6.13 | RadiatedSpurious Emission      | PASS    |        |
| 15.207                                                                                                                                                                                                                                                                                          | RSS-Gen 8.8                                                                                                                                         | Power Line Conducted Emission  | PASS    |        |
| 15.407(a)<br>15.203                                                                                                                                                                                                                                                                             | RSS-Gen 6.8                                                                                                                                         | Antenna Application            | PASS    |        |
| NOTE1:N/A (Not Applicable)<br>NOTE2:According to FCC OET KDB 789033, the report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits. |                                                                                                                                                     |                                |         |        |

#### RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for **FCC ID:2AQ3A-V03D11** filing to comply with Section 15.407 of the FCC Part 15, Subpart C Rules.

## 4 TEST METHODOLOGY

### 4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:

FCC 47 CFR Part 2, Subpart J

FCC 47 CFR Part 15, Subpart E

IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)

IC RSS-247 Issue 4(07-2025)

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 789033 D2 General UNII Test Procedures New Rules v02r01

### 4.2 MEASUREMENT EQUIPMENT USED

#### Conducted Emission Test Equipment

| Equipment         | Manufacturer    | Model No. | Serial No. | Last Cal. | Cal. Interval |
|-------------------|-----------------|-----------|------------|-----------|---------------|
| EMI Test Receiver | Rohde & Schwarz | ESCI      | 101384     | 2026/5/9  | 1Year         |
| AMN               | Rohde & Schwarz | ENV216    | 101161     | 2026/5/10 | 1Year         |

#### For Spurious Emissions Test

| Equipment         | Manufacturer    | Model No.       | Serial No.         | Last Cal.  | Cal. Interval |
|-------------------|-----------------|-----------------|--------------------|------------|---------------|
| Pre-Amplifier     | Bonn            | BLMA 011001N    | 2213967A           | 2025/10/16 | 1Year         |
| EMI Test Receiver | Rohde & Schwarz | ESR7            | 102551             | 2025/10/16 | 1Year         |
| Bilog Antenna     | Schwarzbeck     | VULB9163        | 9163142            | 2024/7/8   | 2Year         |
| Horn antenna      | Schwarzbeck     | BBHA9120D       | 9120D-1198         | 2025/5/13  | 2Year         |
| Pre-Amplifier     | Bonn            | BLMA 0118-5G    | 2213967B-01        | 2025/10/16 | 1Year         |
| Spectrum Analyzer | Rohde & Schwarz | FSV3044         | 101290             | 2025/10/16 | 1Year         |
| Horn antenna      | Schwarzbeck     | BBHA9170        | 9170-399           | 2025/5/13  | 2Year         |
| Pre-Amplifier     | Lunar EM        | LNA18G26-40     | J101213101000<br>1 | 2026/5/10  | 1Year         |
| Pre-Amplifier     | Lunar EM        | LNA26G40-40     | J101313102800<br>1 | 2026/5/10  | 1Year         |
| Loop Antenna      | Schwarzbeck     | FMZB1519        | 1519-012           | 2025/5/13  | 2Year         |
| Coaxial Cable     | TIMES           | NmNm-7-C15702   | N/A                | 2026/5/10  | 1Year         |
| Coaxial Cable     | TIMES           | HF290-NMSM-6.5M | N/A                | 2026/5/10  | 1Year         |
| Coaxial Cable     | TIMES           | LMR-240 N-N     | N/A                | 2026/5/10  | 1Year         |

#### For other test items

| Equipment                           | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|-------------------------------------|--------------|-----------|------------|------------|---------------|
| Wideband Radio Communication Tester | R&S          | CMW500    | 171168     | 2025/9/9   | 1Year         |
| Frequency Extender                  | R&S          | CMW-Z800A | 100430     | 2025/9/9   | 1Year         |
| Spectrum Analyzer                   | R&S          | FSV3044   | 101289     | 2025/12/16 | 1Year         |
| Analog Signal Generator             | R&S          | SMB100A   | 183237     | 2025/9/9   | 1Year         |
| Vector Signal Generator             | R&S          | SMM100A   | 101808     | 2025/9/9   | 1Year         |
| RF Control Unit(Power Meter)        | Tonscend     | JS0806-2  | 22C8060567 | 2025/9/9   | 1Year         |
| Temperature&Humidity Chamber        | ESPEC        | EL-02KA   | 12107166   | 2026/5/8   | 1 Year        |

### 4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11a: 54 Mbps; 802.11n(HT20): MCS0; 802.11ac(VHT20): MCS0; 802.11n(HT40): MCS0; 802.11ac(VHT40): MCS0; 802.11ac(VHT80): MCS0; )were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

☒ Wifi 5G with U-NII - 1

Frequency and Channel list for 802.11a, 802.11n (HT20):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 36      | 5180            | 44      | 5220            |         |                 |
| 40      | 5200            | 48      | 5240            |         |                 |

Frequency and Channel list for 802.11n (HT40):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 38      | 5190            | 46      | 5230            |         |                 |

Test Frequency and Channel for 802.11a, 802.11n (HT20):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 36               | 5180            | 40               | 5200            | 48                | 5240            |

Test Frequency and channel for 802.11n (HT40):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 38               | 5190            | N/A              | N/A             | 46                | 5230            |

☒ Wifi 5G with U-NII -3

Frequency and Channel list for 802.11a, 802.11n (HT20):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 149     | 5745            | 157     | 5785            | 165     | 5825            |
| 153     | 5765            | 161     | 5805            |         |                 |

Frequency and Channel list for 802.11n (HT40):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 151     | 5755            | 159     | 5795            |         |                 |

Test Frequency and Channel for 802.11a, 802.11n (HT20):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 149              | 5745            | 157              | 5785            | 165               | 5825            |

Test Frequency and channel for 802.11n (HT40):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 151              | 5755            | N/A              | N/A             | 159               | 5795            |

Multi-antenna correlation:

|                          |                                                                                              |
|--------------------------|----------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Transmit Signals are Correlated                                                              |
|                          | Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi |
| <input type="checkbox"/> | All Transmit Signals are Completely Uncorrelated                                             |
|                          | Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi   |

Directional gain =  $10 \log [(10^{1.68/20} + 10^{1.86/20})^2 / 2]$  dBi = / dBi

## 5 FACILITIES AND ACCREDITATIONS

### 5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

EMTEK (Shenzhen) Co., Ltd.

Building 69, Majialong Industry Zone District, Nanshan District, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

### 5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 5.3 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L2291

The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017)

**Accredited by FCC**

Designation Number: CN1204

Test Firm Registration Number: 882943

**Accredited by A2LA**

The Certificate Number is 4321.01

**Accredited by Industry Canada**

The Conformity Assessment Body Identifier is CN0008

Name of Firm : EMTEK (SHENZHEN) CO., LTD.

Site Location : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

## 6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

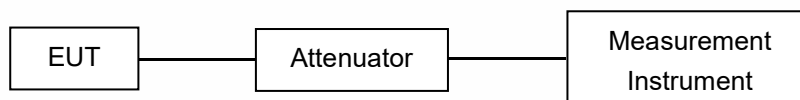
| Test Parameter               | Measurement Uncertainty |
|------------------------------|-------------------------|
| Frequency error              | $\pm 1.9\%$             |
| Occupied Bandwidth           | $\pm 1.9\text{KHz}$     |
| Transmitter output power     | $\pm 1.18\text{dB}$     |
| Conducted spurious emissions | $\pm 3.3\text{dB}$      |
| Radiated spurious emissions  | $\pm 4.5\text{dB}$      |
| Temperature                  | $\pm 1.2^\circ\text{C}$ |
| Humidity                     | $\pm 3\%$               |
| DC voltages                  | $\pm 0.25\text{V}$      |
| Time                         | $\pm 1\%$               |

Measurement Uncertainty for a level of Confidence of 95%

## 7 SETUP OF EQUIPMENT UNDER TEST

### 7.1 RADIO FREQUENCY TEST SETUP

The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



### 7.2 RADIO FREQUENCY TEST SETUP

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 and CAN/CSA-CEI/IEC CISPR 22.

Below 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

Above 30MHz:

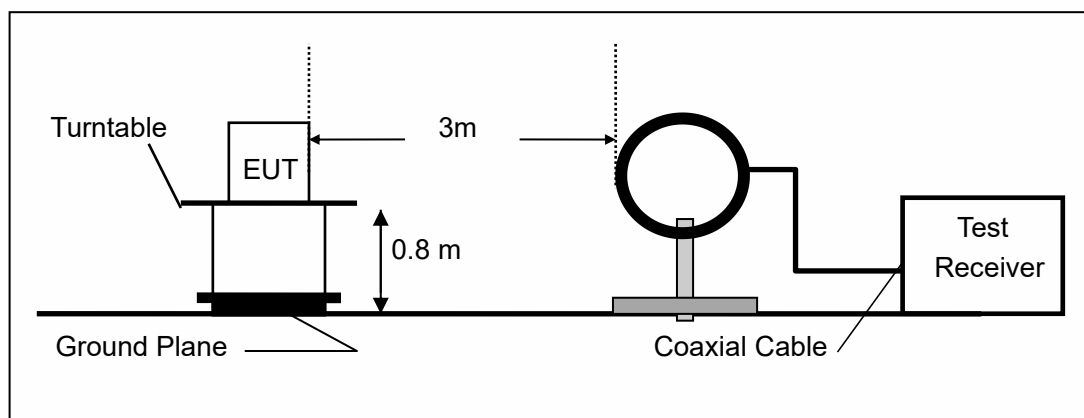
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz:

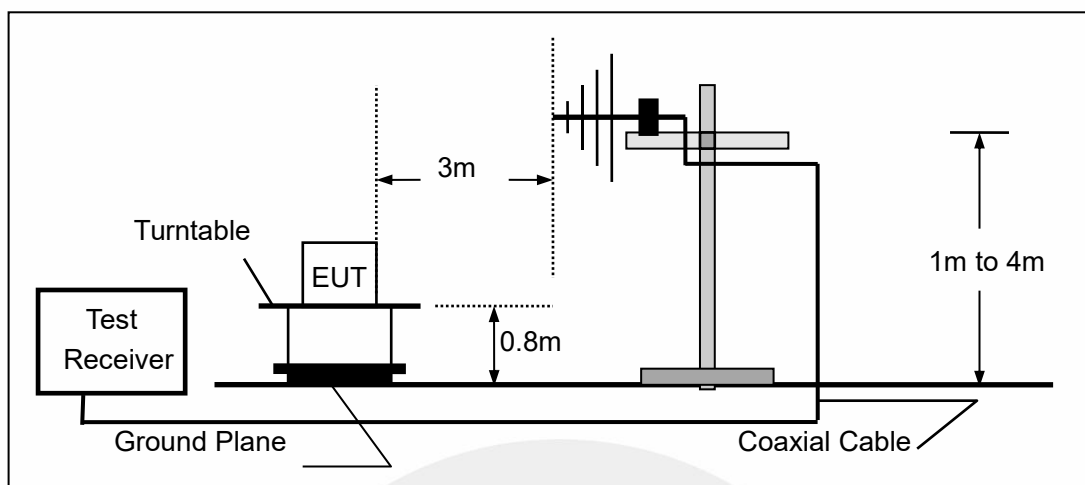
(Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.)

The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

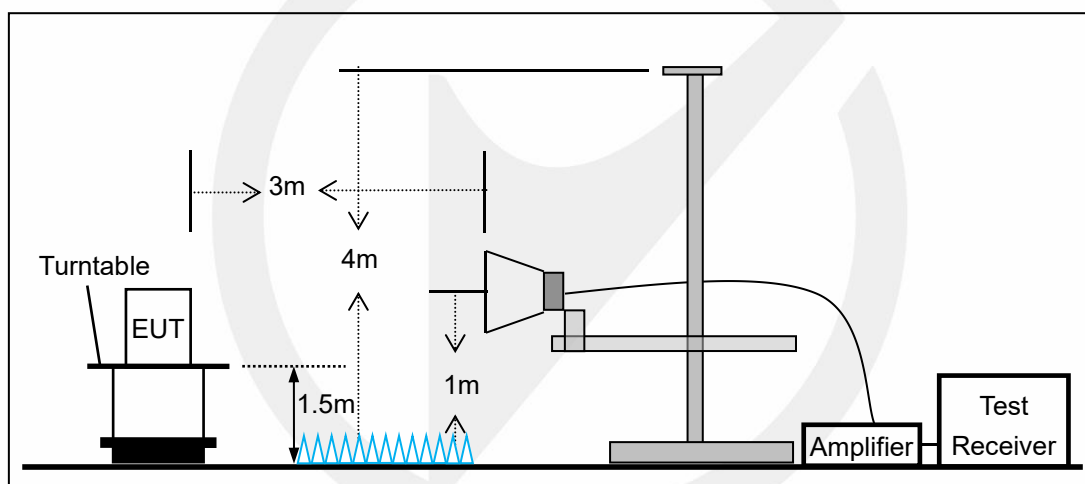
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz

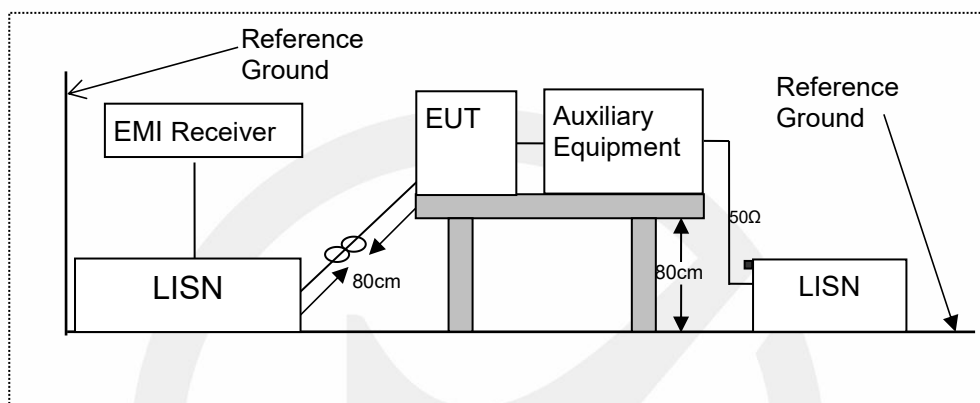


### 7.3 CONDUCTED EMISSION TEST SETUP

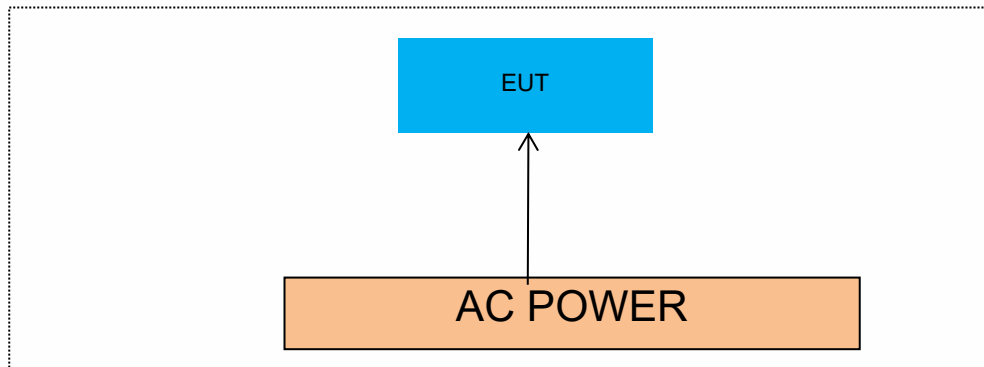
The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



## 7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



## 7.5 SUPPORT EQUIPMENT

| EUT Cable List and Details |            |                     |                        |
|----------------------------|------------|---------------------|------------------------|
| Cable Description          | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| /                          | /          | /                   | /                      |

| Auxiliary Cable List and Details |            |                     |                        |
|----------------------------------|------------|---------------------|------------------------|
| Cable Description                | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| /                                | /          | /                   | /                      |

| Auxiliary Equipment List and Details |              |       |               |
|--------------------------------------|--------------|-------|---------------|
| Description                          | Manufacturer | Model | Serial Number |
| /                                    | /            | /     | /             |

### Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

## 8 TEST REQUIREMENTS

### 8.1 BANDWIDTH MEASUREMENT

#### 8.1.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I  
 According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C  
 According to FCC Part 15.407(a)(3) for UNII Band III  
 According to FCC Part 15.407(e) for UNII Band III  
 According to 789033 D02 Section II(C)  
 According to 789033 D02 Section II(D)  
 According to RSS-Gen, RSS 247

#### 8.1.2 Conformance Limit

The 26dB bandwidth is used to determine the conducted power limits.  
 Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

#### 8.1.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

#### 8.1.4 Test Procedure

According to 789033 D02 v02r01 section C&D, the following is the measurement procedure.

##### 1. Emission Bandwidth (EBW)

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

##### 2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

##### D. 99 Percent Occupied Bandwidth

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v01r02 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted

output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 \cdot$  RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.



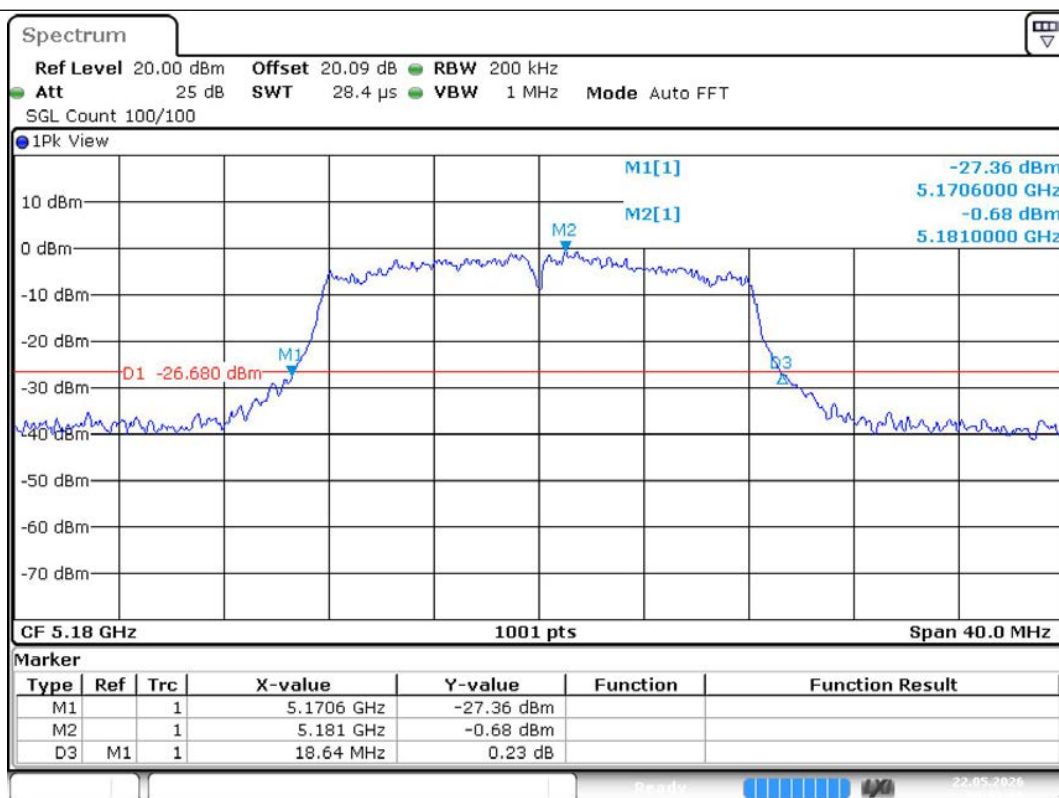
### 8.1.5 Test Results

|                    |           |
|--------------------|-----------|
| Temperature:       | 25°C      |
| Relative Humidity: | 45%       |
| ATM Pressure:      | 1011 mbar |

Note: N/A

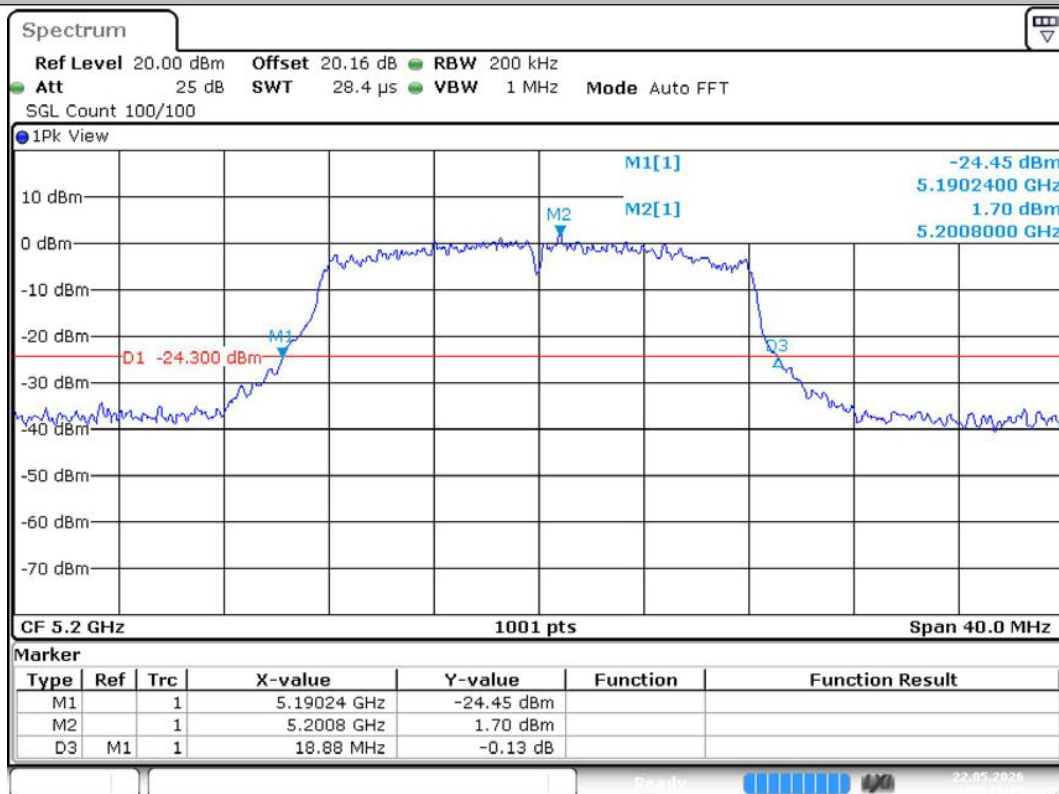
### Emission Bandwidth

| TestMode  | Antenna | Frequency[MHz] | 26db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|----------------|---------|---------|------------|---------|
| 11A       | Ant1    | 5180           | 18.64          | 5170.60 | 5189.24 | ---        | ---     |
| 11A       | Ant1    | 5200           | 18.88          | 5190.24 | 5209.12 | ---        | ---     |
| 11A       | Ant1    | 5240           | 19.00          | 5230.48 | 5249.48 | ---        | ---     |
| 11A       | Ant1    | 5745           | 19.28          | 5735.24 | 5754.52 | ---        | ---     |
| 11A       | Ant1    | 5785           | 18.84          | 5775.44 | 5794.28 | ---        | ---     |
| 11A       | Ant1    | 5825           | 19.32          | 5815.12 | 5834.44 | ---        | ---     |
| 11N20SISO | Ant1    | 5180           | 19.52          | 5170.28 | 5189.80 | ---        | ---     |
| 11N20SISO | Ant1    | 5200           | 19.96          | 5189.88 | 5209.84 | ---        | ---     |
| 11N20SISO | Ant1    | 5240           | 19.92          | 5230.04 | 5249.96 | ---        | ---     |
| 11N20SISO | Ant1    | 5745           | 19.80          | 5735.20 | 5755.00 | ---        | ---     |
| 11N20SISO | Ant1    | 5785           | 19.76          | 5775.16 | 5794.92 | ---        | ---     |
| 11N20SISO | Ant1    | 5825           | 19.72          | 5815.12 | 5834.84 | ---        | ---     |
| 11N40SISO | Ant1    | 5190           | 38.40          | 5170.64 | 5209.04 | ---        | ---     |
| 11N40SISO | Ant1    | 5230           | 38.16          | 5210.88 | 5249.04 | ---        | ---     |
| 11N40SISO | Ant1    | 5755           | 38.32          | 5735.72 | 5774.04 | ---        | ---     |
| 11N40SISO | Ant1    | 5795           | 38.48          | 5775.72 | 5814.20 | ---        | ---     |



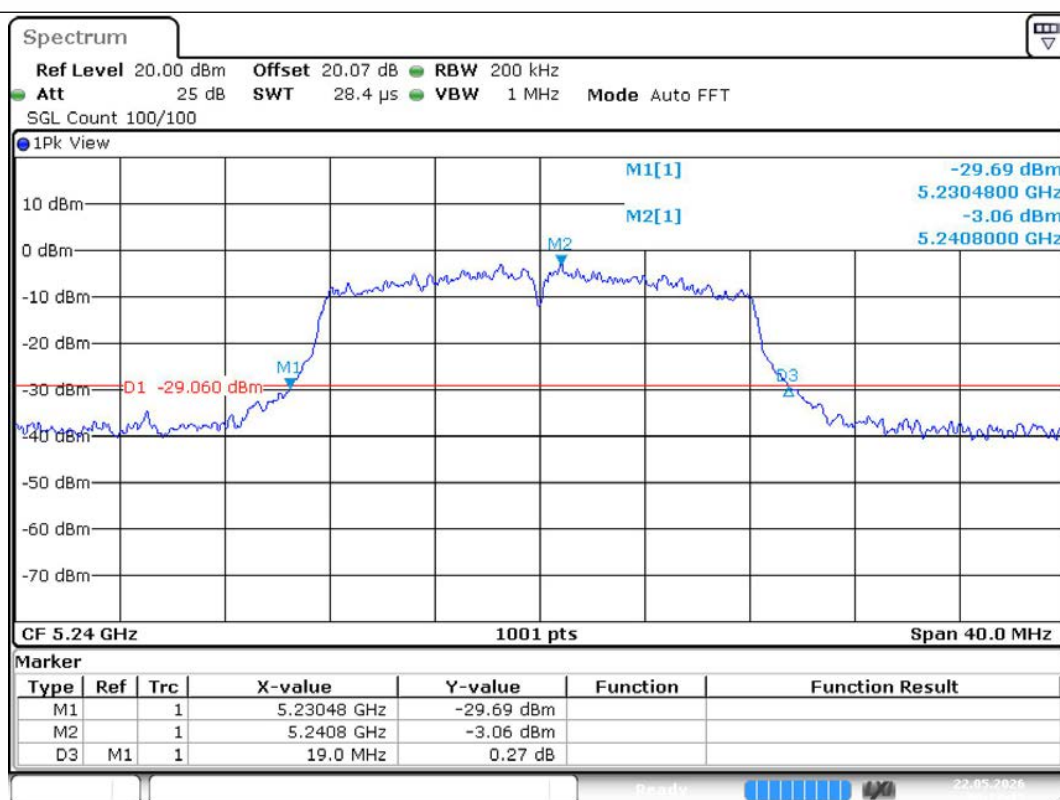
Date: 22.MAY.2026 09:05:00

## 11A-Ant1-5180



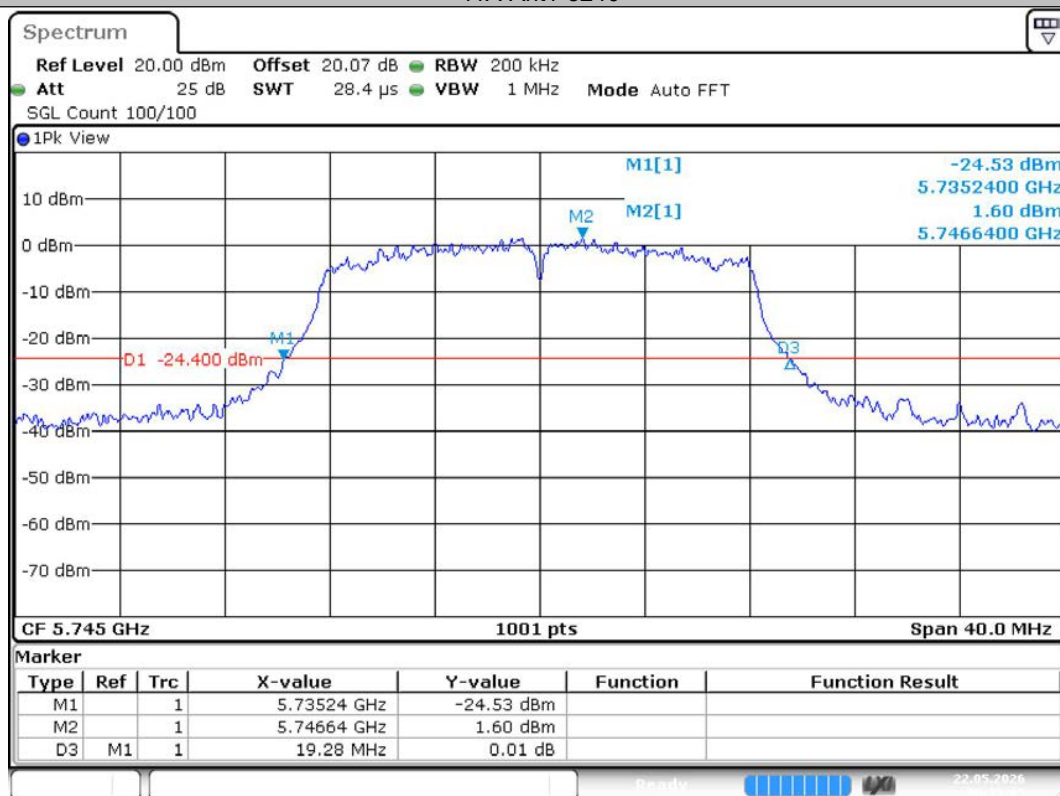
Date: 22.MAY.2026 09:17:12

## 11A-Ant1-5200



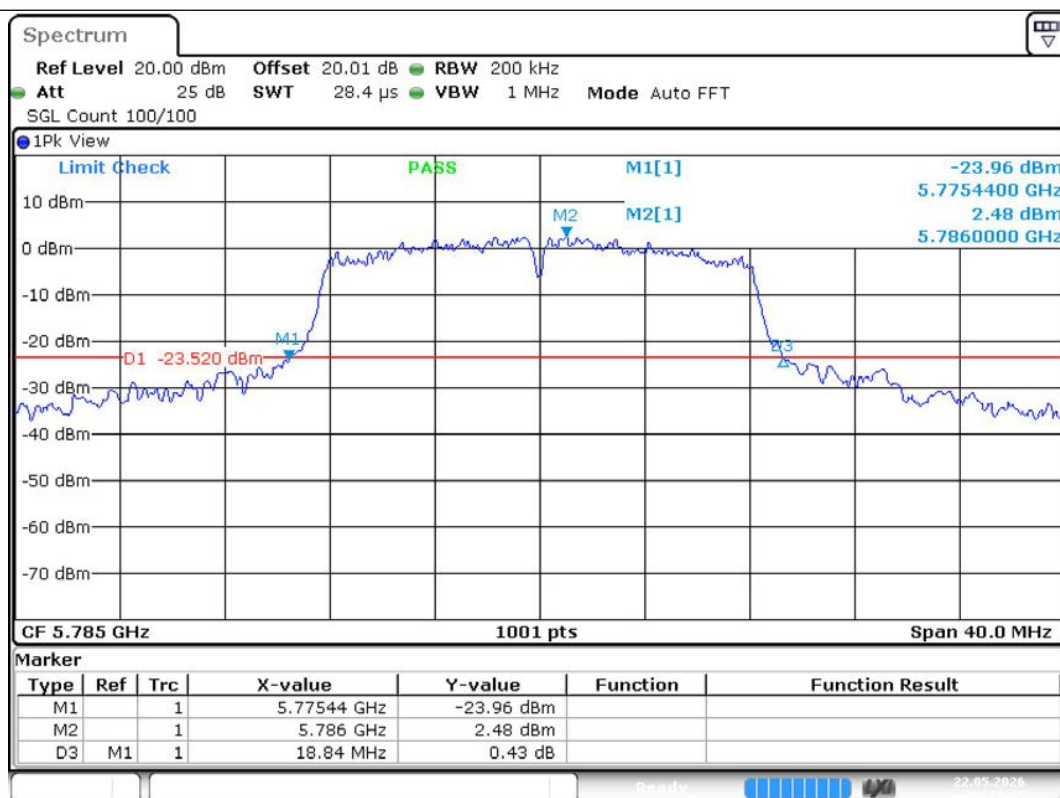
Date: 22.MAY.2026 09:18:33

## 11A-Ant1-5240



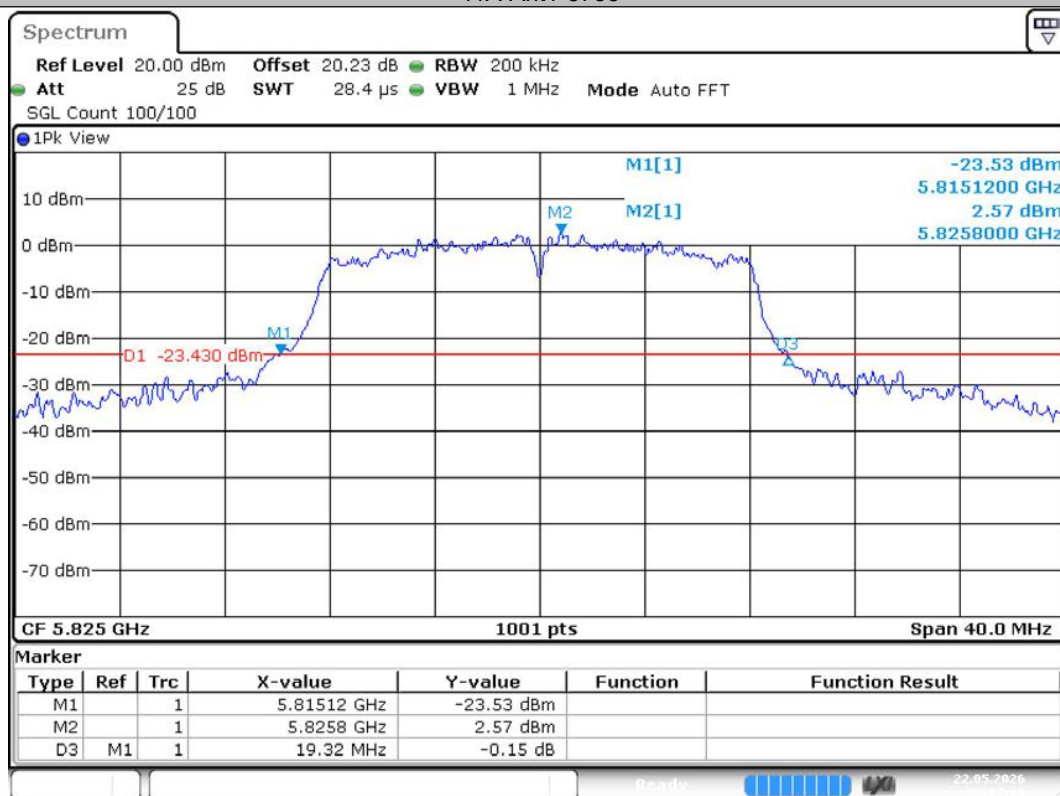
Date: 22.MAY.2026 09:25:05

## 11A-Ant1-5745



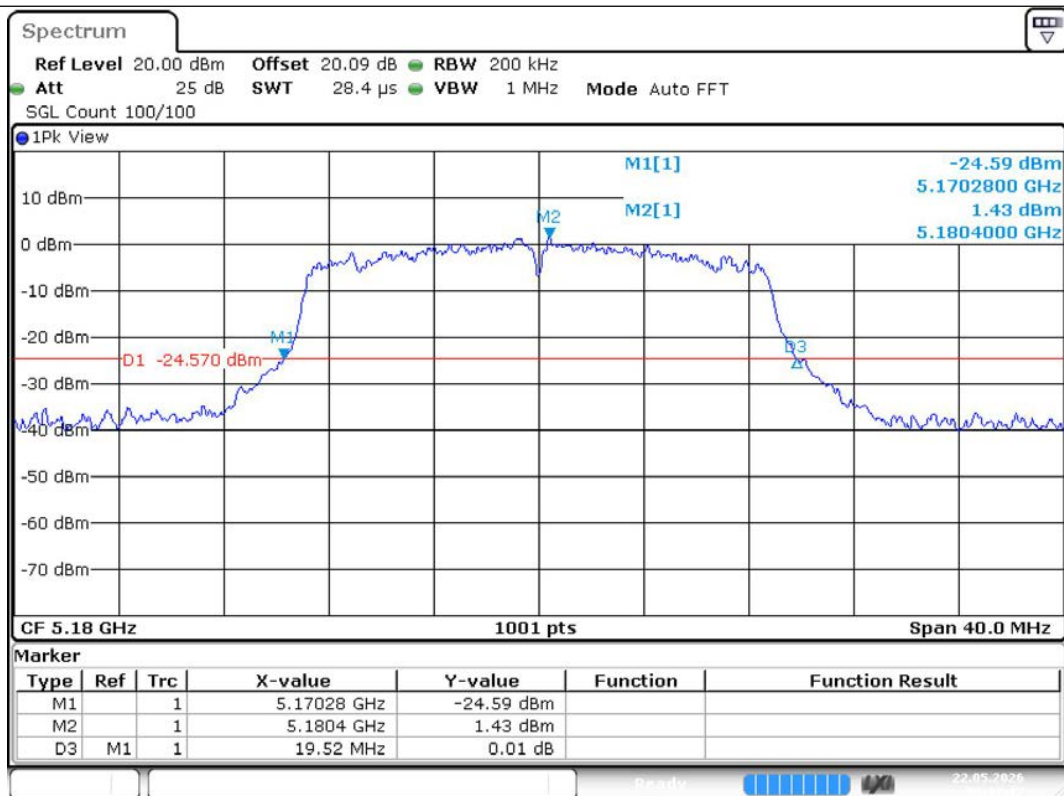
Date: 22.MAY.2026 09:27:25

## 11A-Ant1-5785



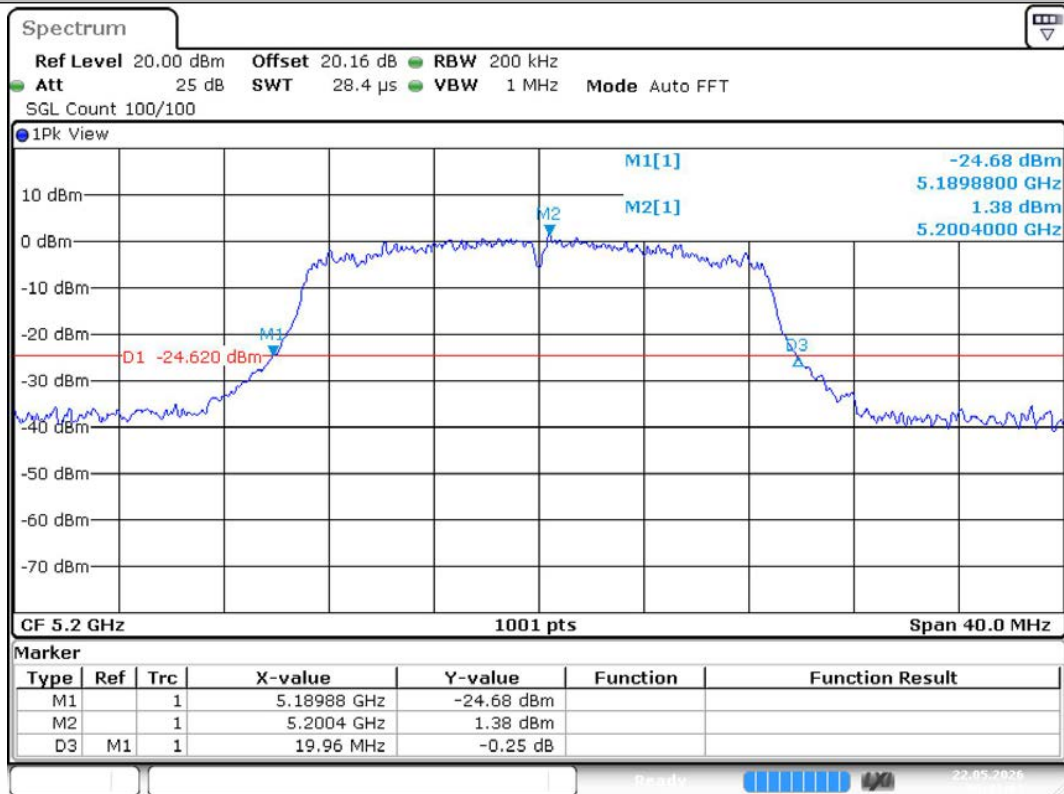
Date: 22.MAY.2026 09:32:00

## 11A-Ant1-5825



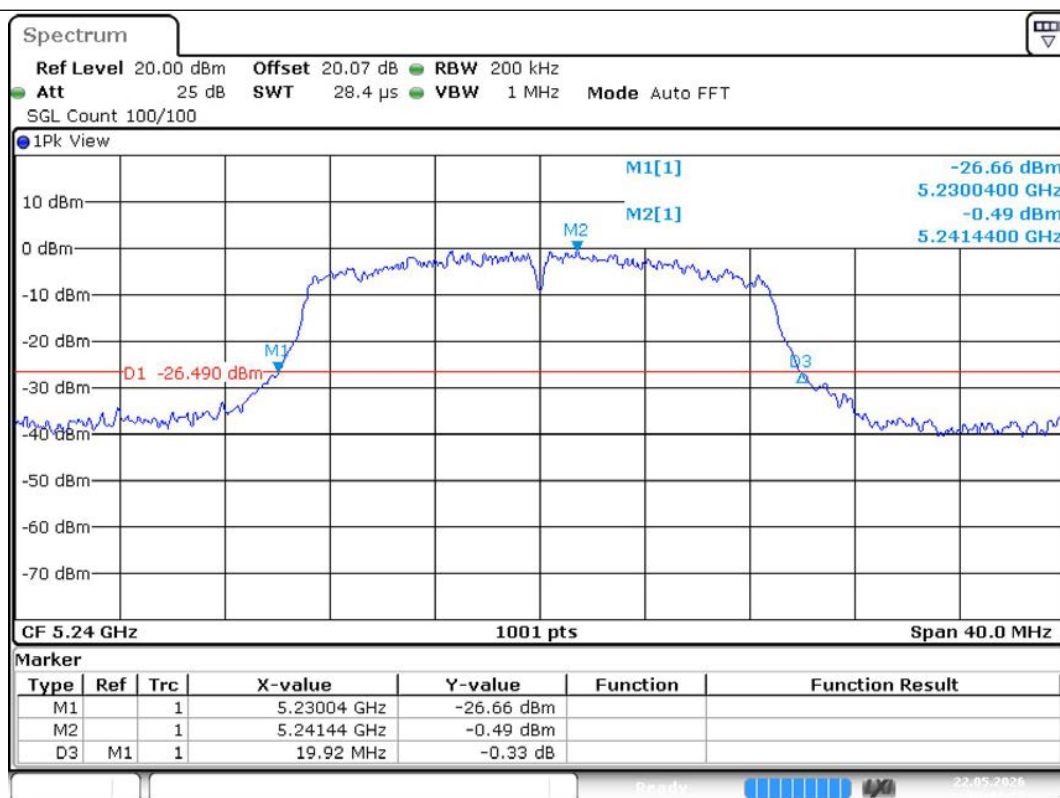
Date: 22.MAY.2026 09:38:37

## 11N20SISO-Ant1-5180



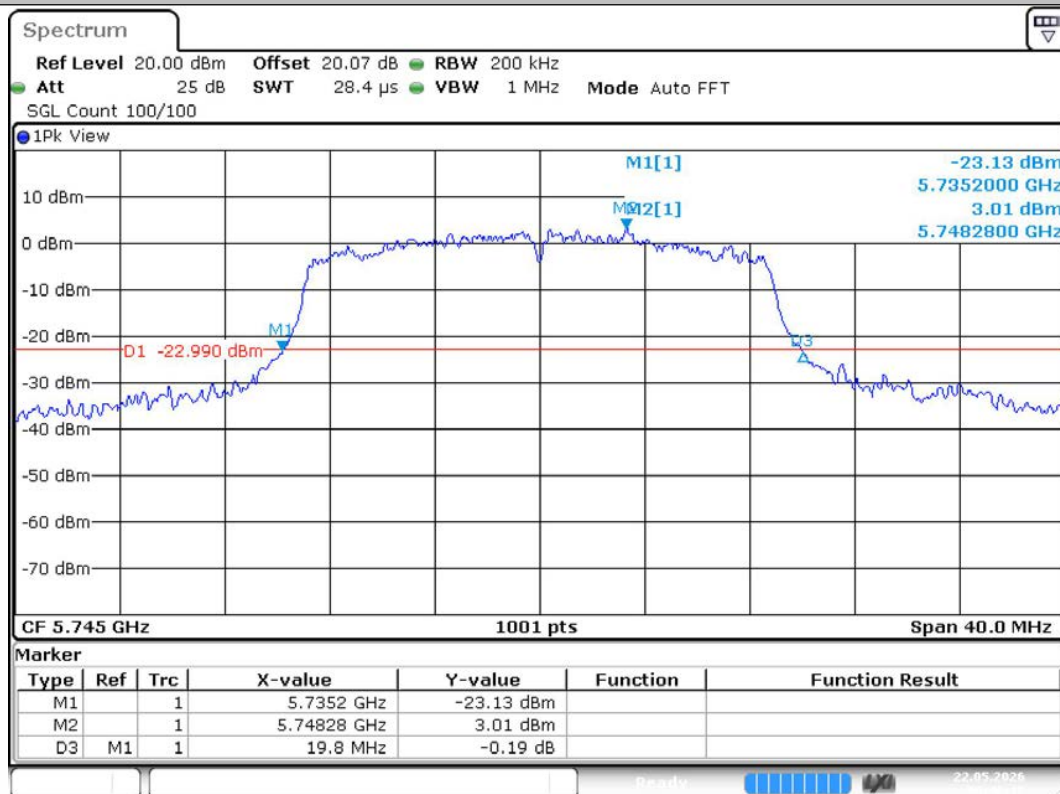
Date: 22.MAY.2026 09:41:02

## 11N20SISO-Ant1-5200



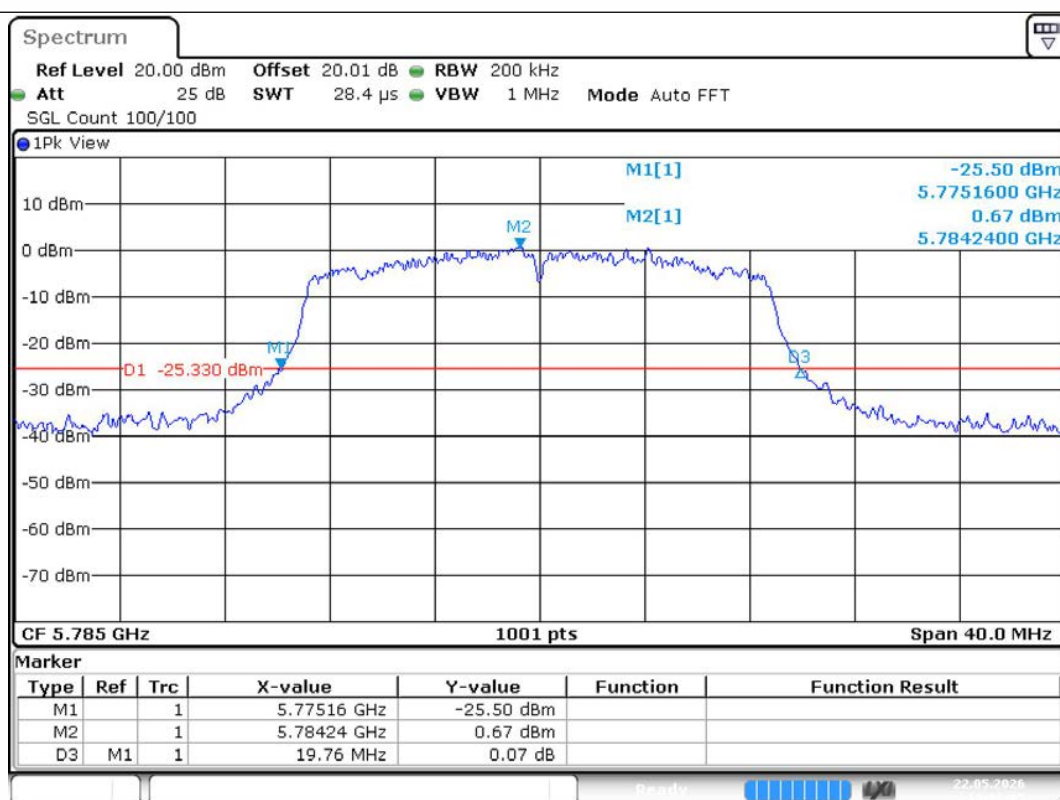
Date: 22.MAY.2026 09:42:22

## 11N20SISO-Ant1-5240



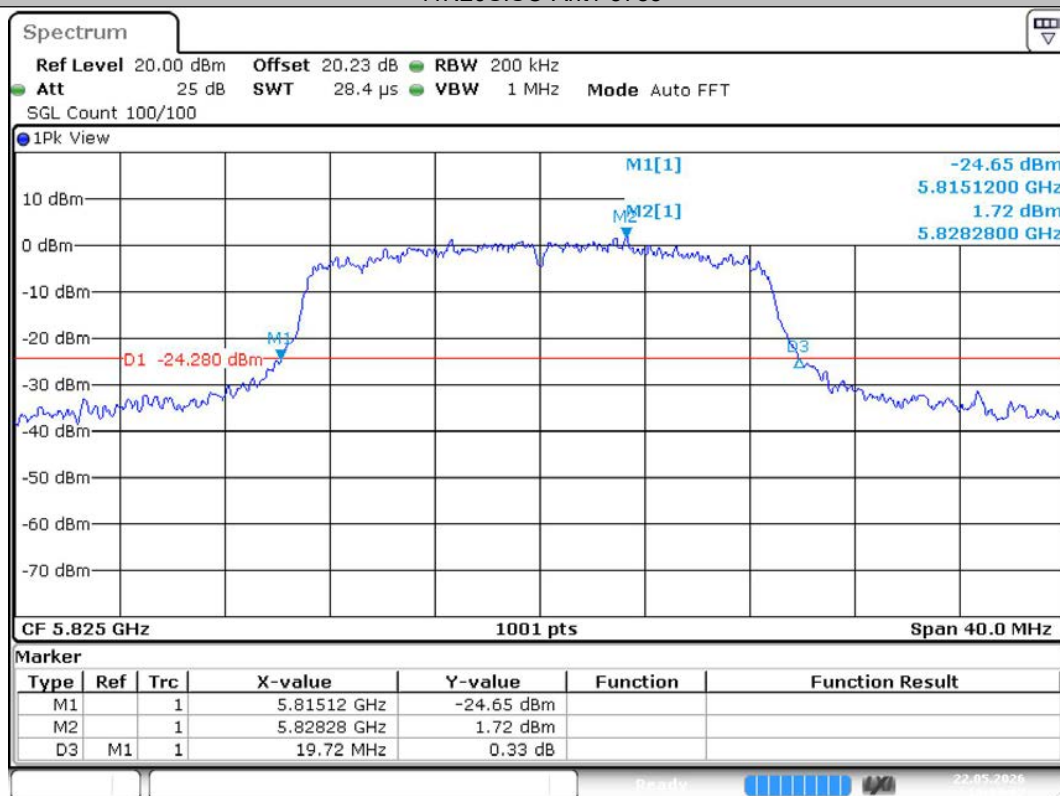
Date: 22.MAY.2026 09:46:12

## 11N20SISO-Ant1-5745



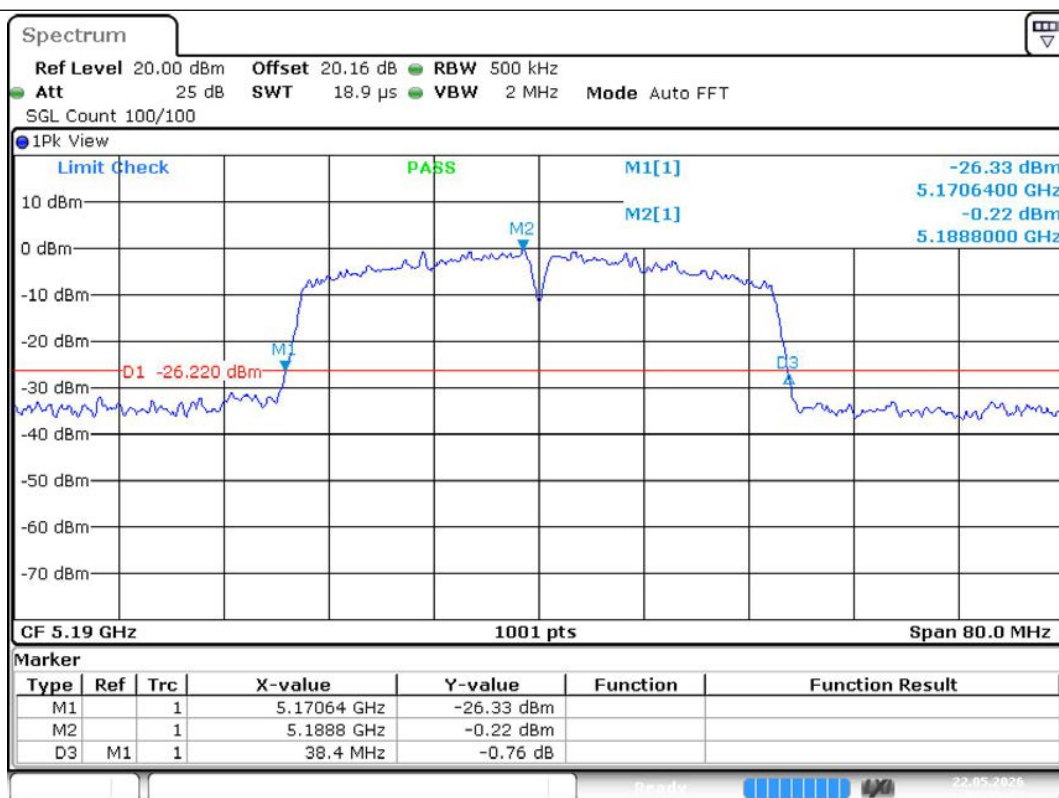
Date: 22.MAY.2026 10:36:05

## 11N20SISO-Ant1-5785



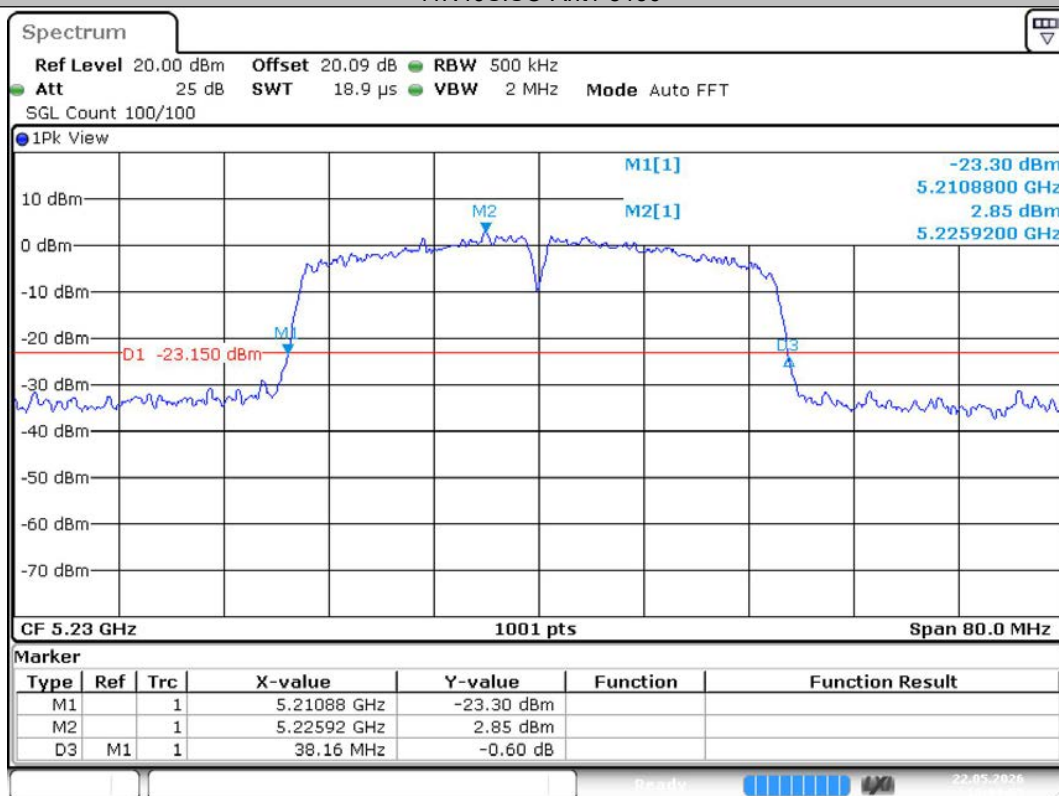
Date: 22.MAY.2026 10:39:07

## 11N20SISO-Ant1-5825



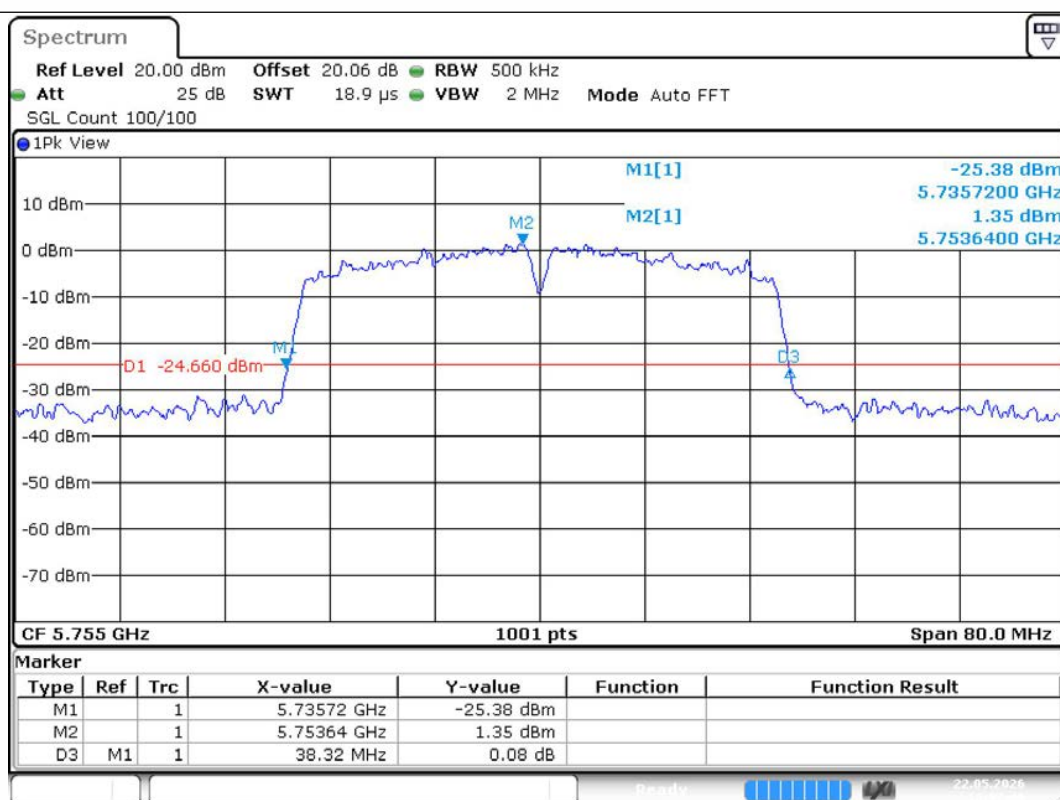
Date: 22.MAY.2026 09:55:28

## 11N40SISO-Ant1-5190



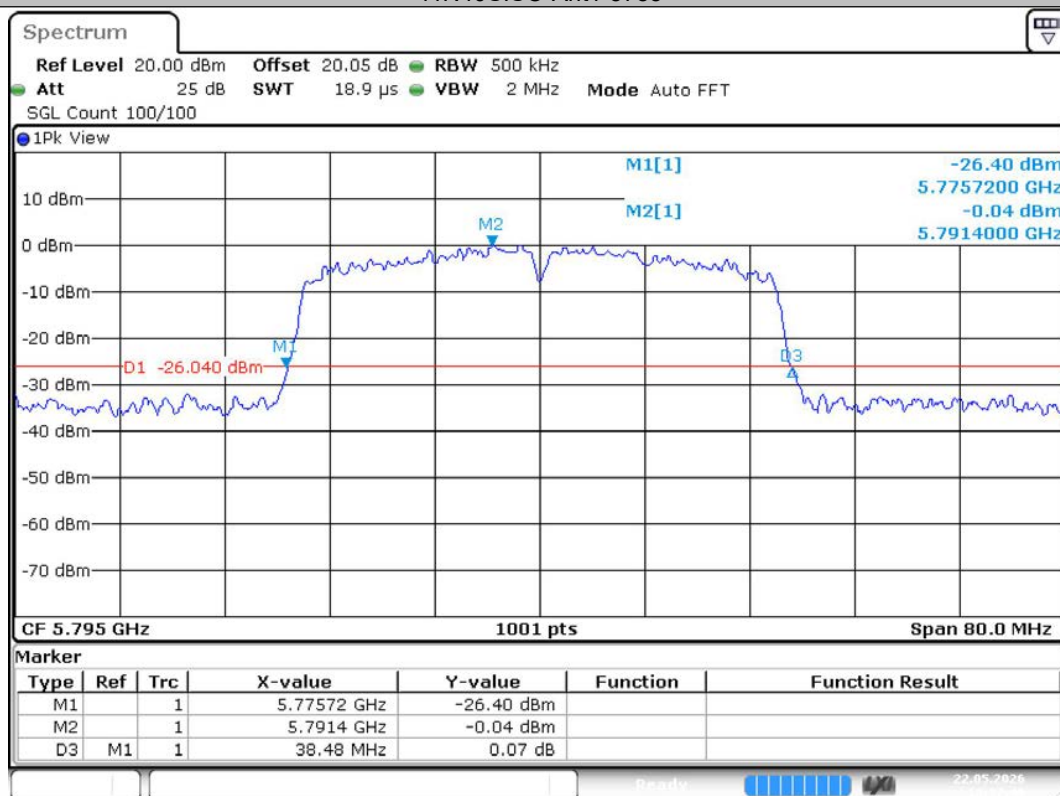
Date: 22.MAY.2026 10:03:53

## 11N40SISO-Ant1-5230



Date: 22.MAY.2026 10:07:48

## 11N40SISO-Ant1-5755

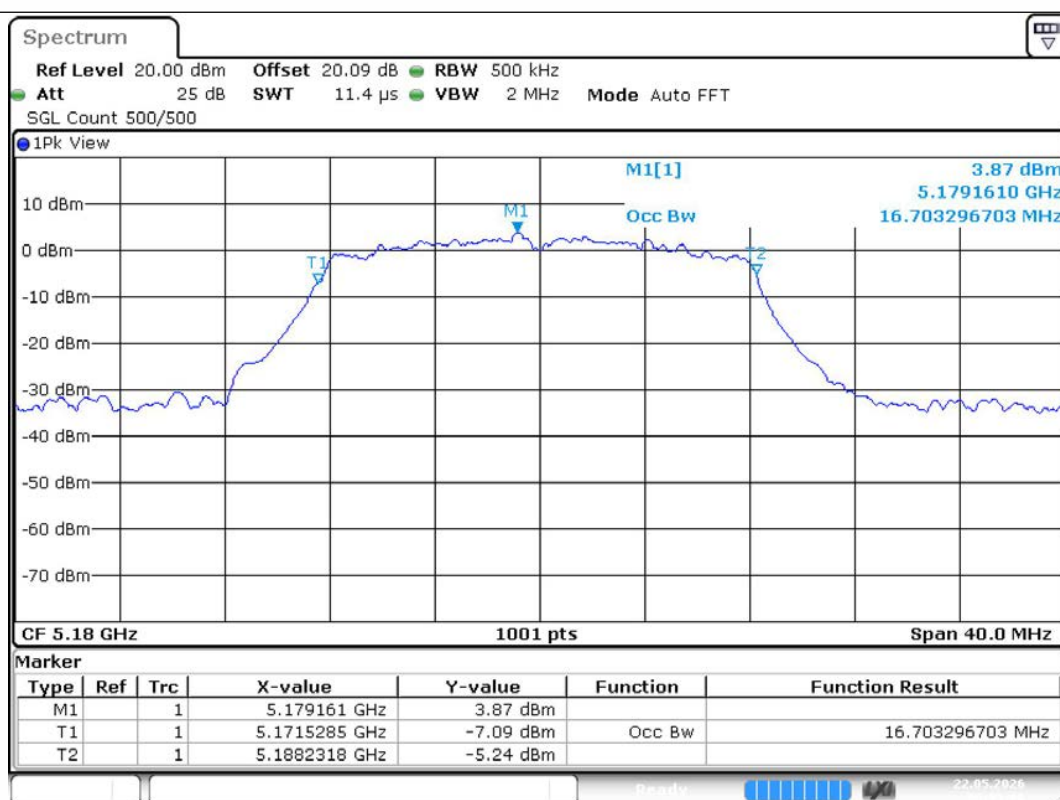


Date: 22.MAY.2026 10:12:45

## 11N40SISO-Ant1-5795

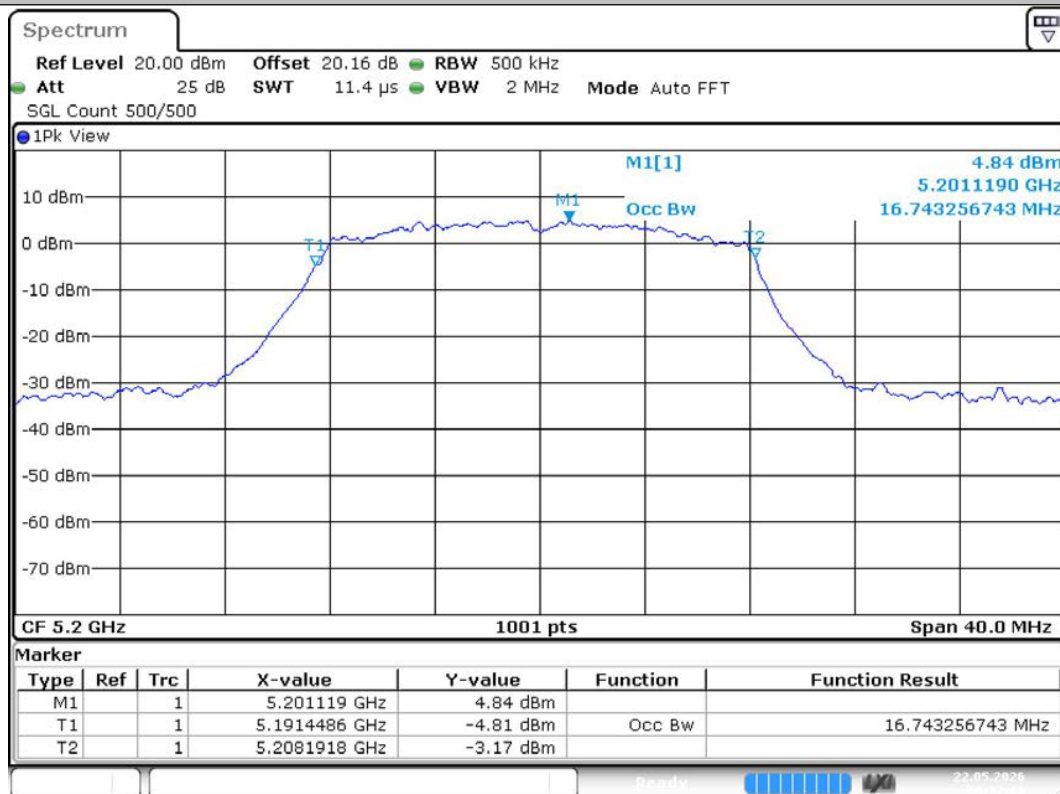
# Occupied channel bandwidth

| TestMode  | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|----------------|-----------|-----------|-----------|------------|---------|
| 11A       | Ant1    | 5180           | 16.703    | 5171.5285 | 5188.2318 | ---        | ---     |
| 11A       | Ant1    | 5200           | 16.743    | 5191.4486 | 5208.1918 | ---        | ---     |
| 11A       | Ant1    | 5240           | 16.623    | 5231.6084 | 5248.2318 | ---        | ---     |
| 11A       | Ant1    | 5745           | 16.583    | 5736.6484 | 5753.2318 | ---        | ---     |
| 11A       | Ant1    | 5785           | 16.623    | 5776.6883 | 5793.3117 | ---        | ---     |
| 11A       | Ant1    | 5825           | 16.823    | 5816.4486 | 5833.2717 | ---        | ---     |
| 11N20SISO | Ant1    | 5180           | 17.702    | 5171.0889 | 5188.7912 | ---        | ---     |
| 11N20SISO | Ant1    | 5200           | 17.542    | 5191.1688 | 5208.7113 | ---        | ---     |
| 11N20SISO | Ant1    | 5240           | 17.542    | 5231.1688 | 5248.7113 | ---        | ---     |
| 11N20SISO | Ant1    | 5745           | 17.702    | 5736.0889 | 5753.7912 | ---        | ---     |
| 11N20SISO | Ant1    | 5785           | 17.742    | 5776.0889 | 5793.8312 | ---        | ---     |
| 11N20SISO | Ant1    | 5825           | 17.742    | 5816.0889 | 5833.8312 | ---        | ---     |
| 11N40SISO | Ant1    | 5190           | 35.325    | 5172.2577 | 5207.5824 | ---        | ---     |
| 11N40SISO | Ant1    | 5230           | 35.325    | 5212.2577 | 5247.5824 | ---        | ---     |
| 11N40SISO | Ant1    | 5755           | 35.405    | 5737.2577 | 5772.6623 | ---        | ---     |
| 11N40SISO | Ant1    | 5795           | 35.405    | 5777.2577 | 5812.6623 | ---        | ---     |



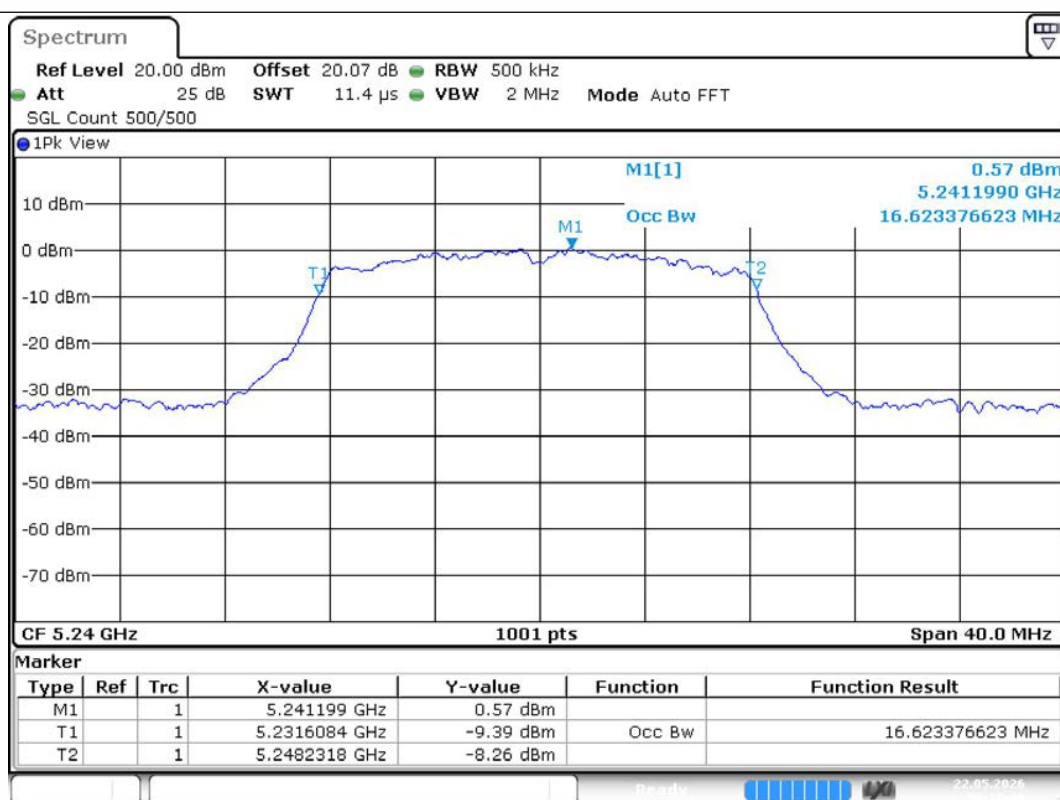
Date: 22.MAY.2026 09:05:08

## 11A-Ant1-5180



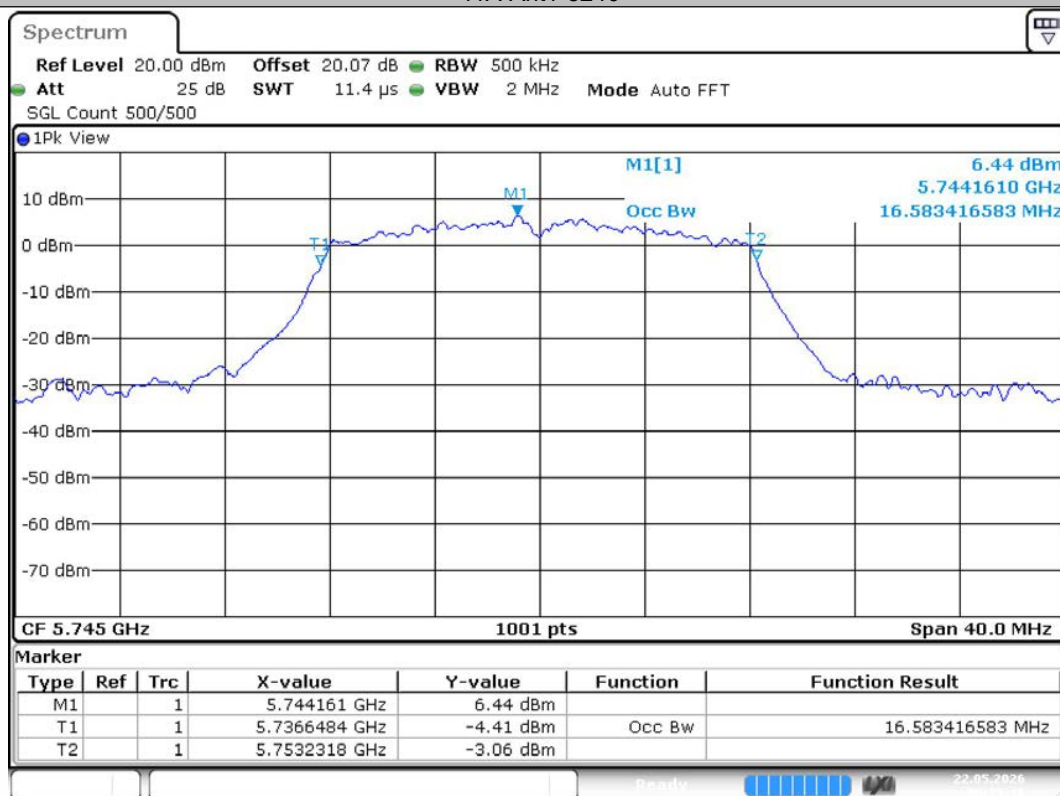
Date: 22.MAY.2026 09:17:19

## 11A-Ant1-5200



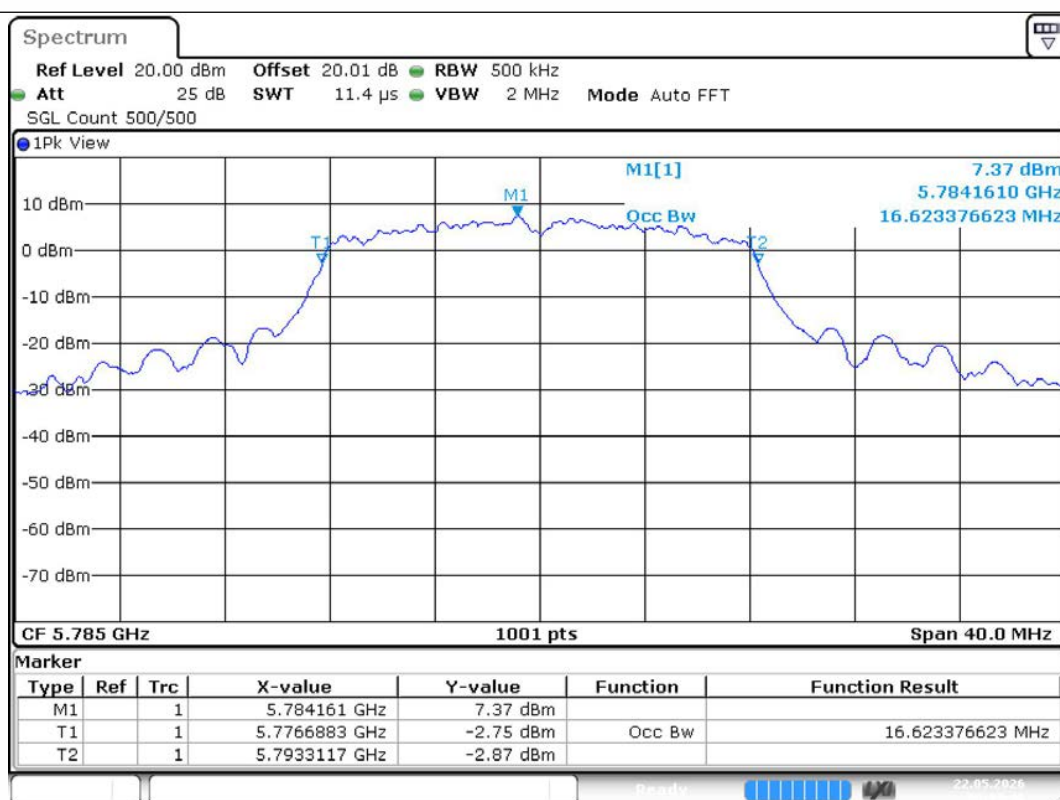
Date: 22.MAY.2026 09:18:40

11A-Ant1-5240



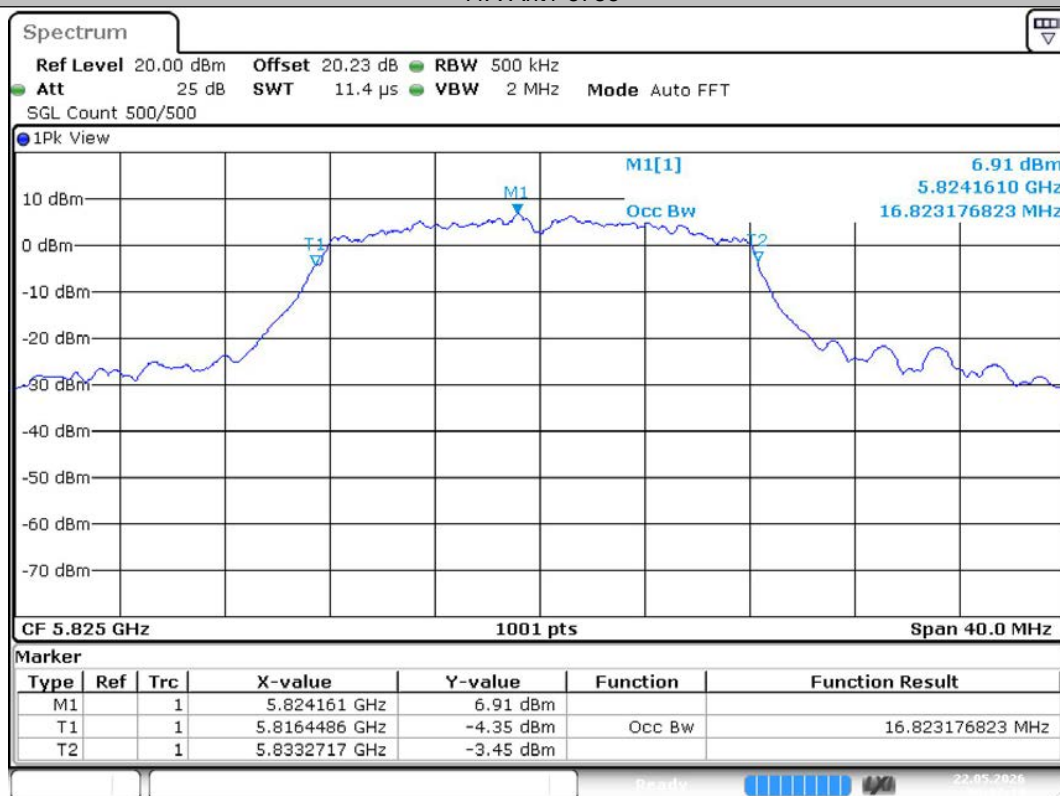
Date: 22.MAY.2026 09:25:18

11A-Ant1-5745



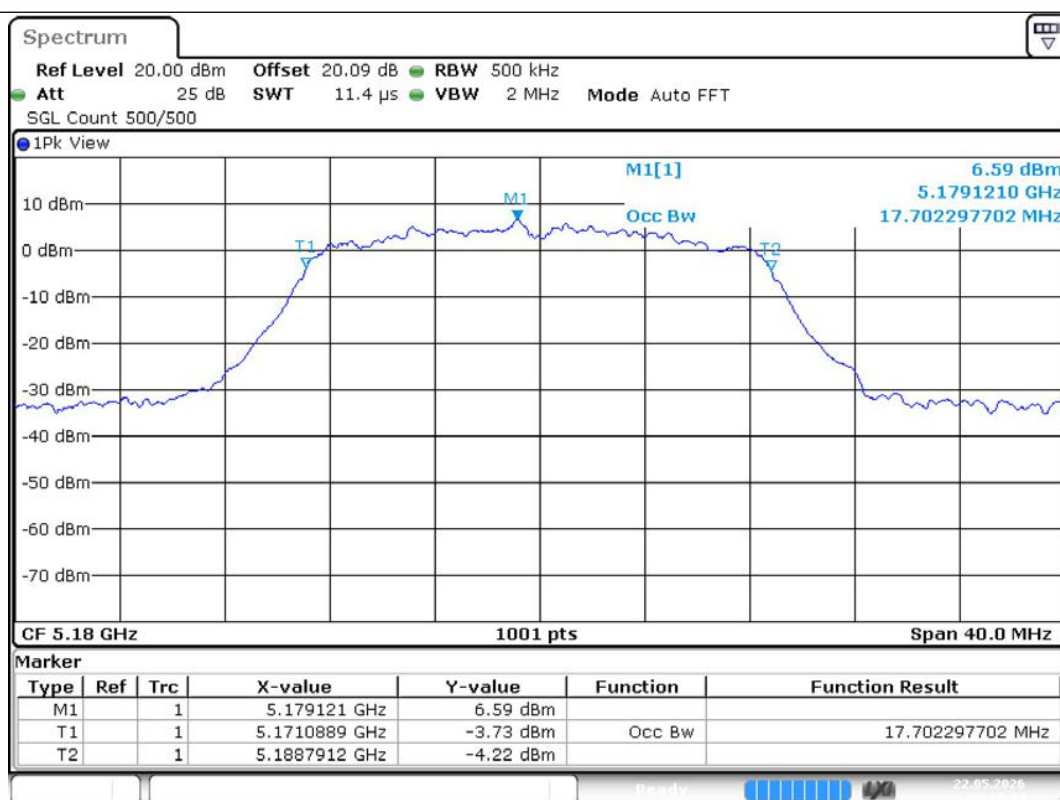
Date: 22.MAY.2026 09:30:48

## 11A-Ant1-5785



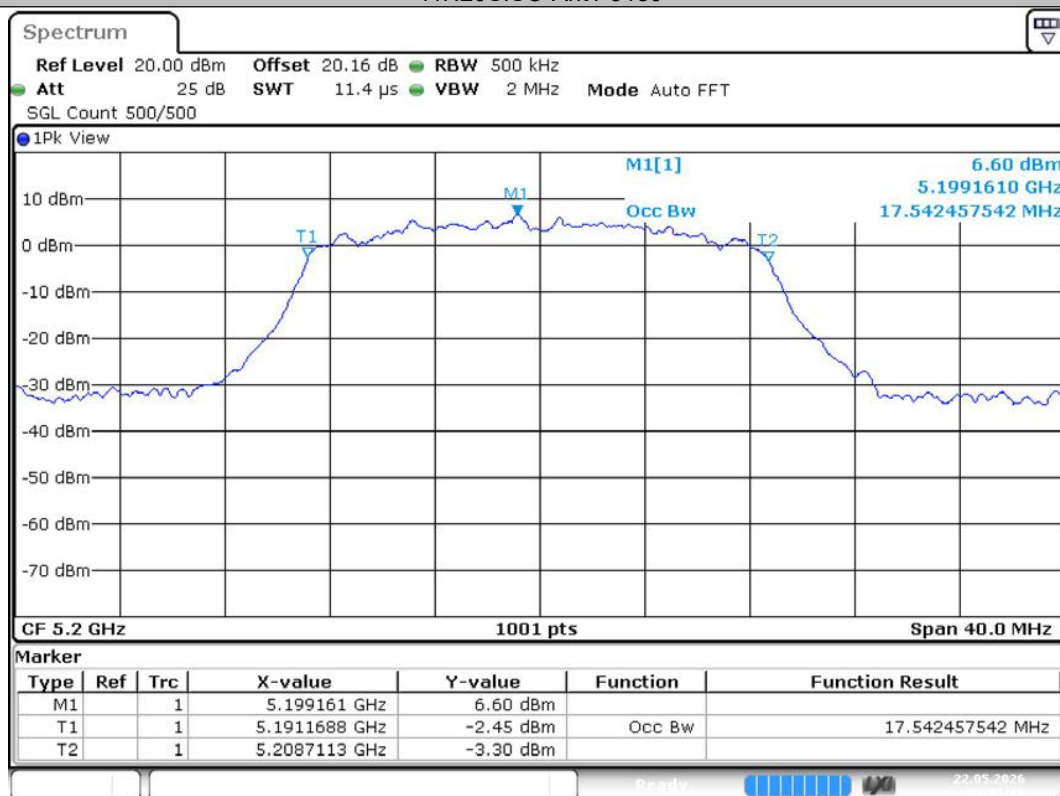
Date: 22.MAY.2026 09:32:14

## 11A-Ant1-5825



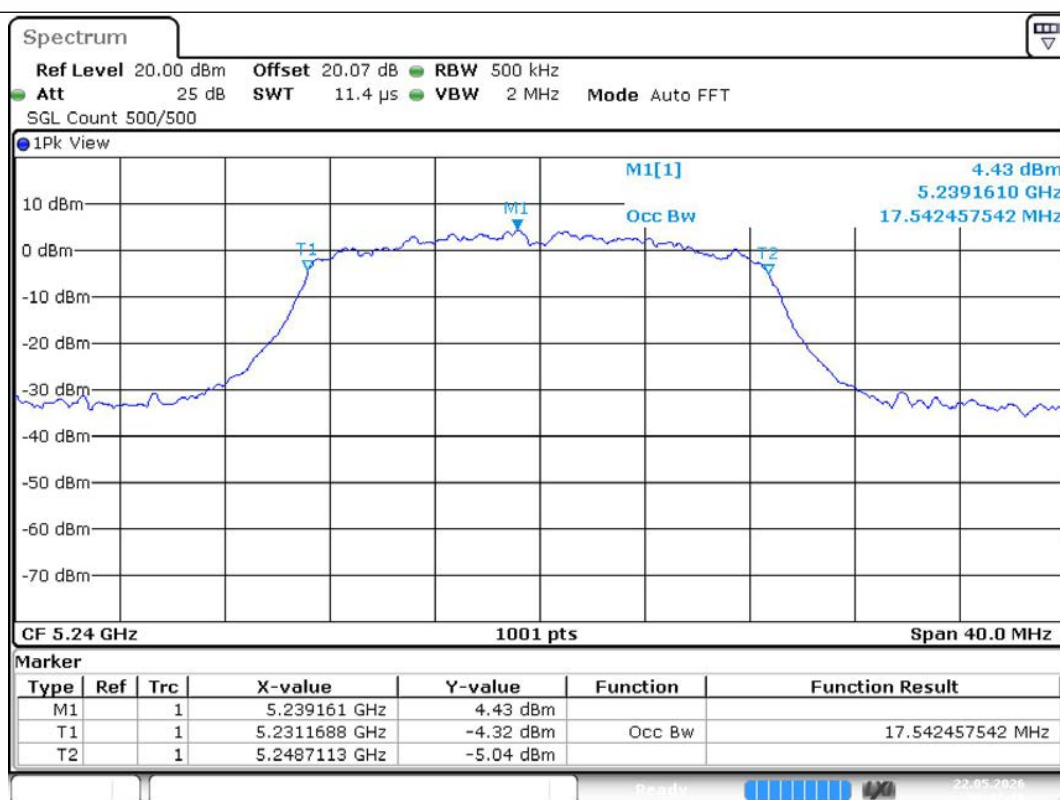
Date: 22.MAY.2026 09:38:44

## 11N20SISO-Ant1-5180



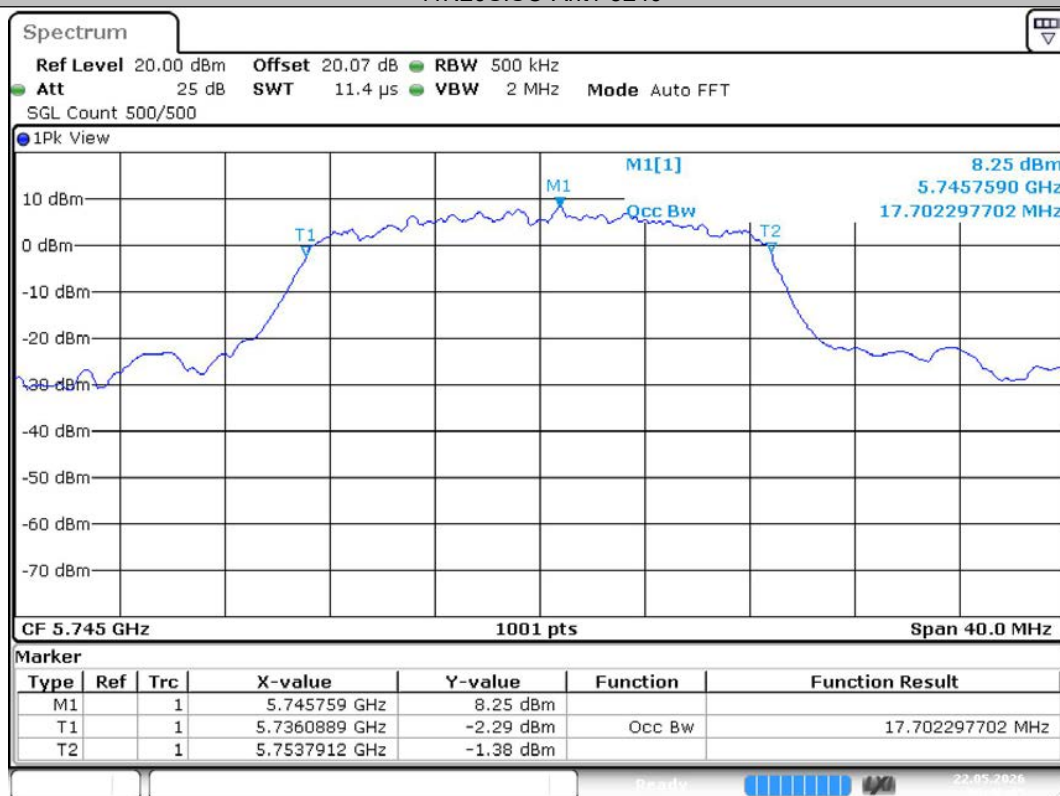
Date: 22.MAY.2026 09:41:09

## 11N20SISO-Ant1-5200



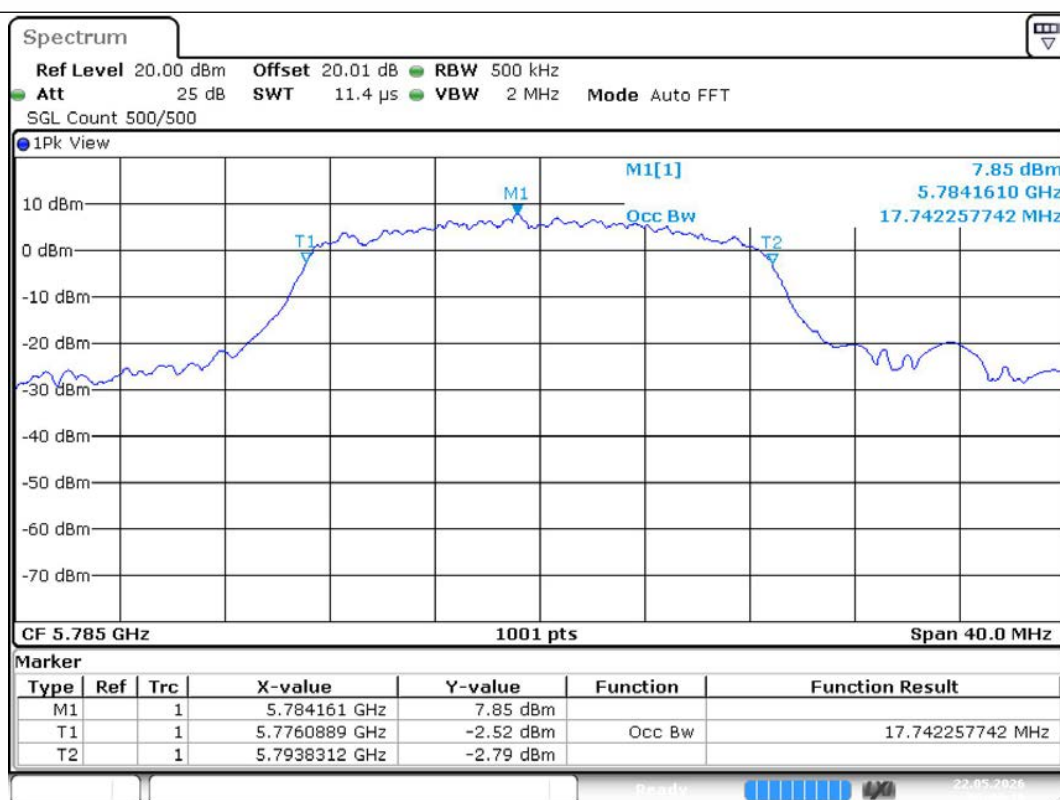
Date: 22.MAY.2026 09:42:29

## 11N20SISO-Ant1-5240



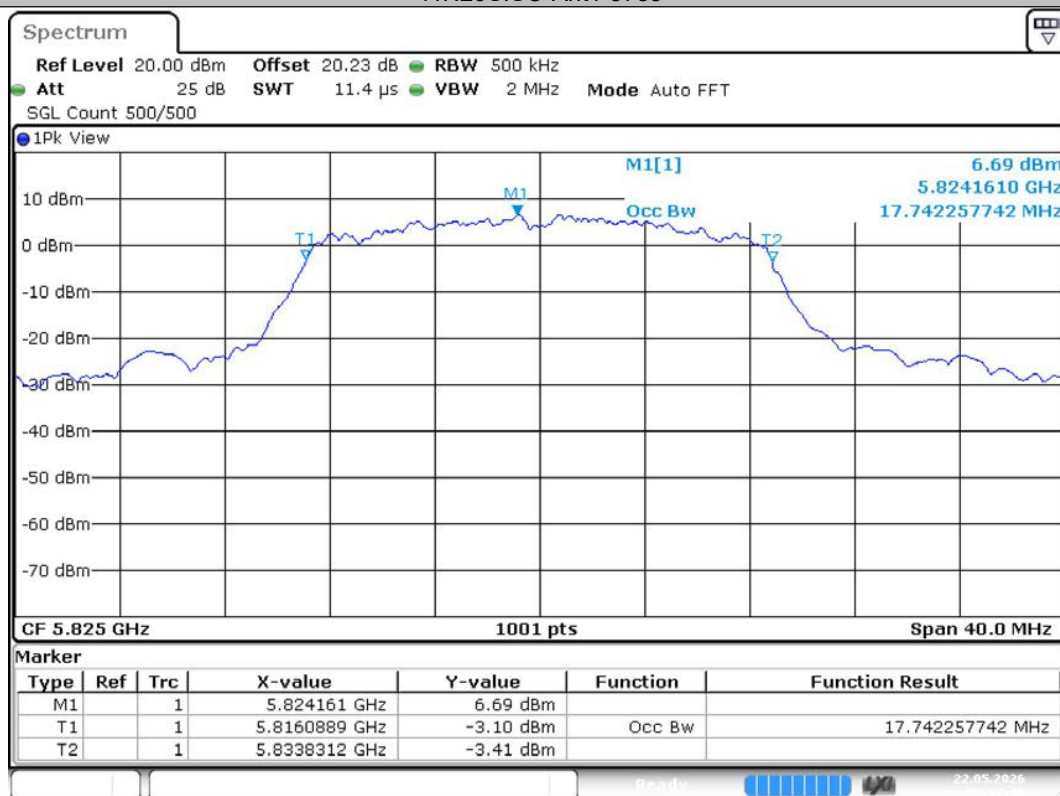
Date: 22.MAY.2026 09:46:25

## 11N20SISO-Ant1-5745



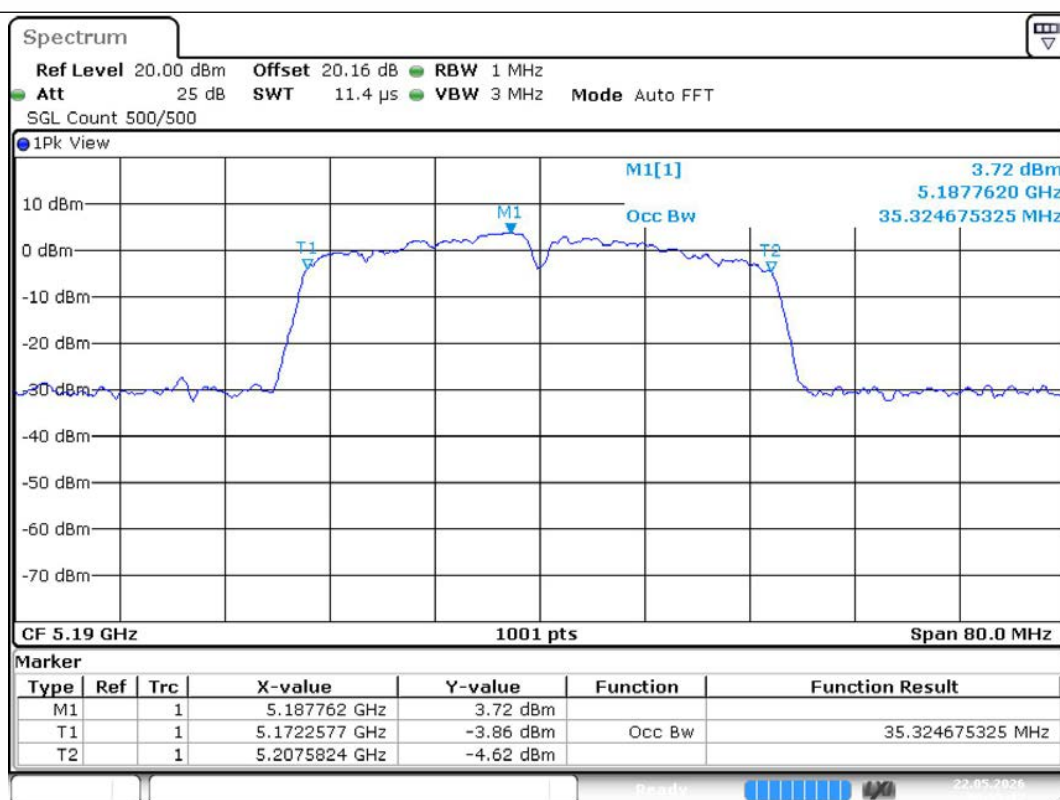
Date: 22.MAY.2026 09:49:19

## 11N20SISO-Ant1-5785



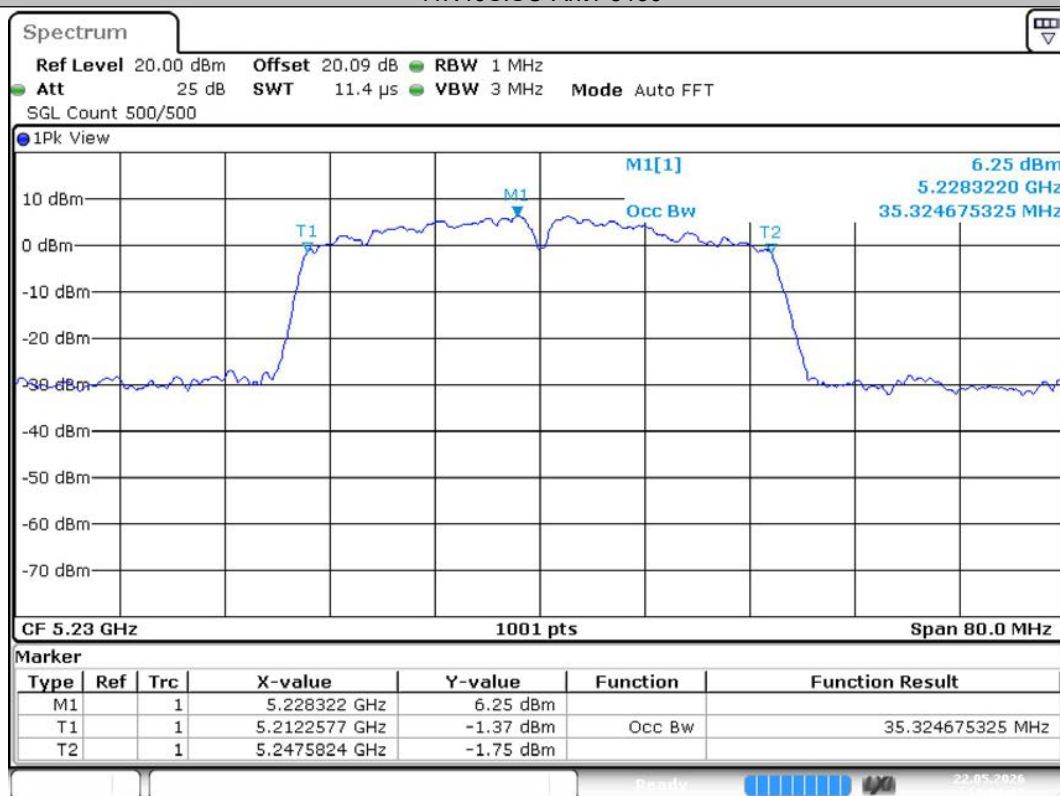
Date: 22.MAY.2026 09:52:49

## 11N20SISO-Ant1-5825



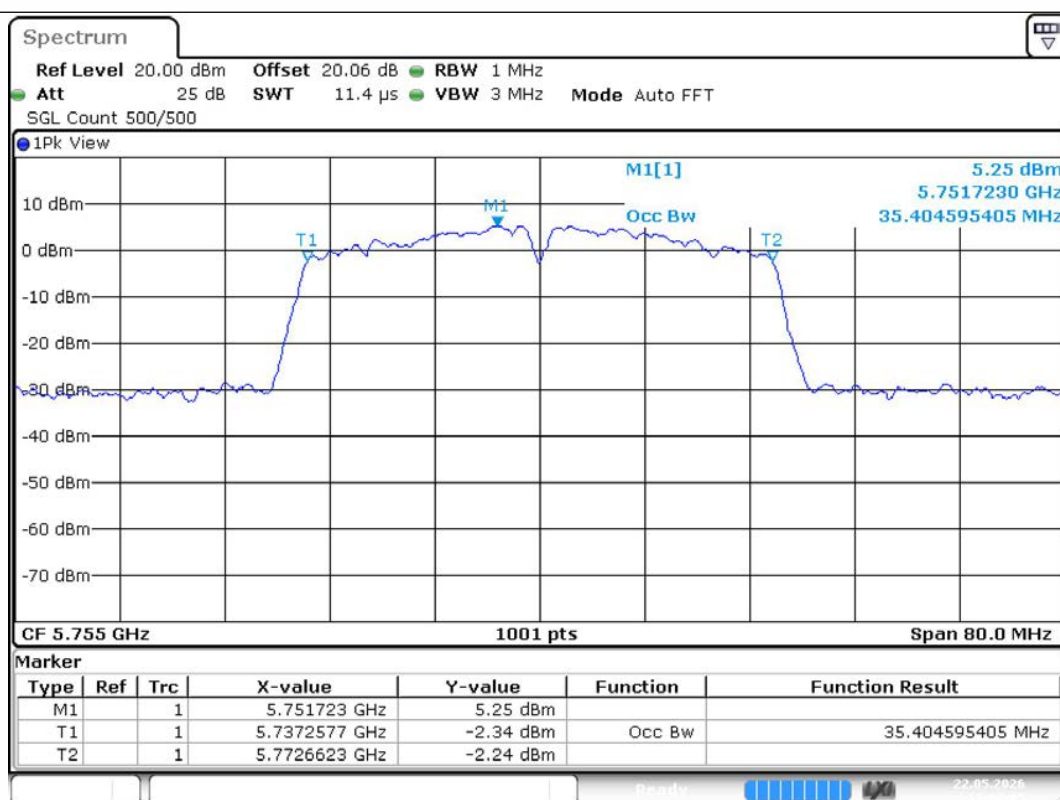
Date: 22.MAY.2026 09:55:38

## 11N40SISO-Ant1-5190



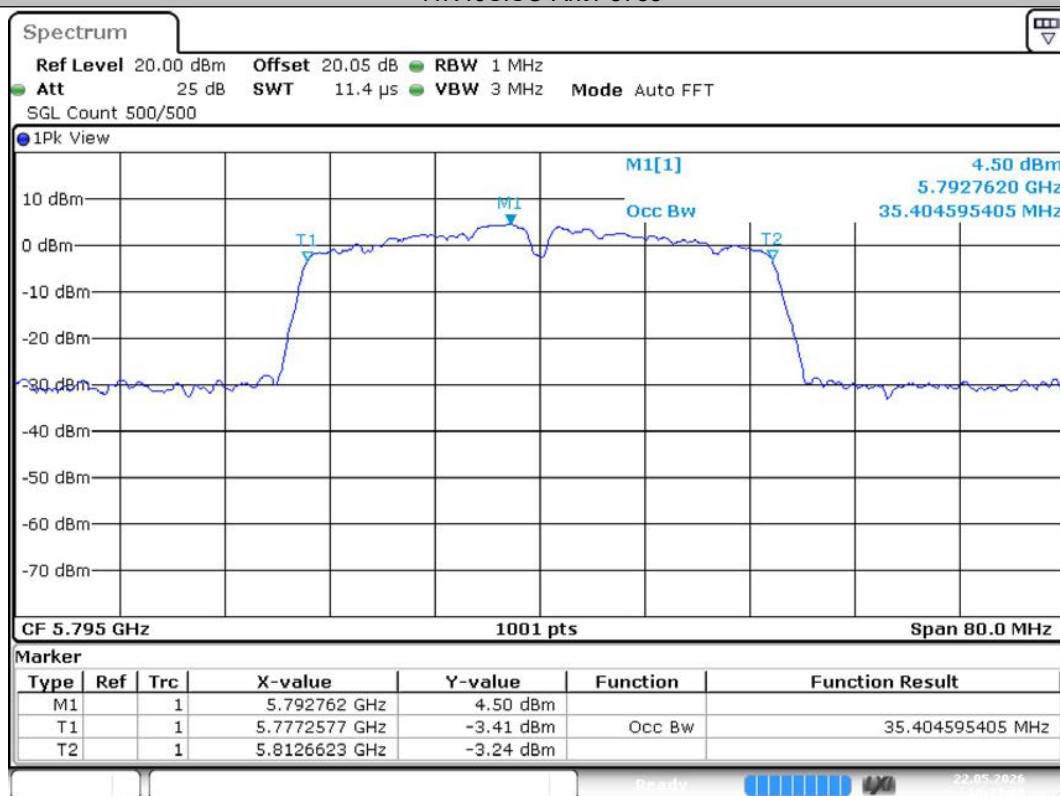
Date: 22.MAY.2026 10:04:04

## 11N40SISO-Ant1-5230



Date: 22.MAY.2026 10:08:05

## 11N40SISO-Ant1-5755



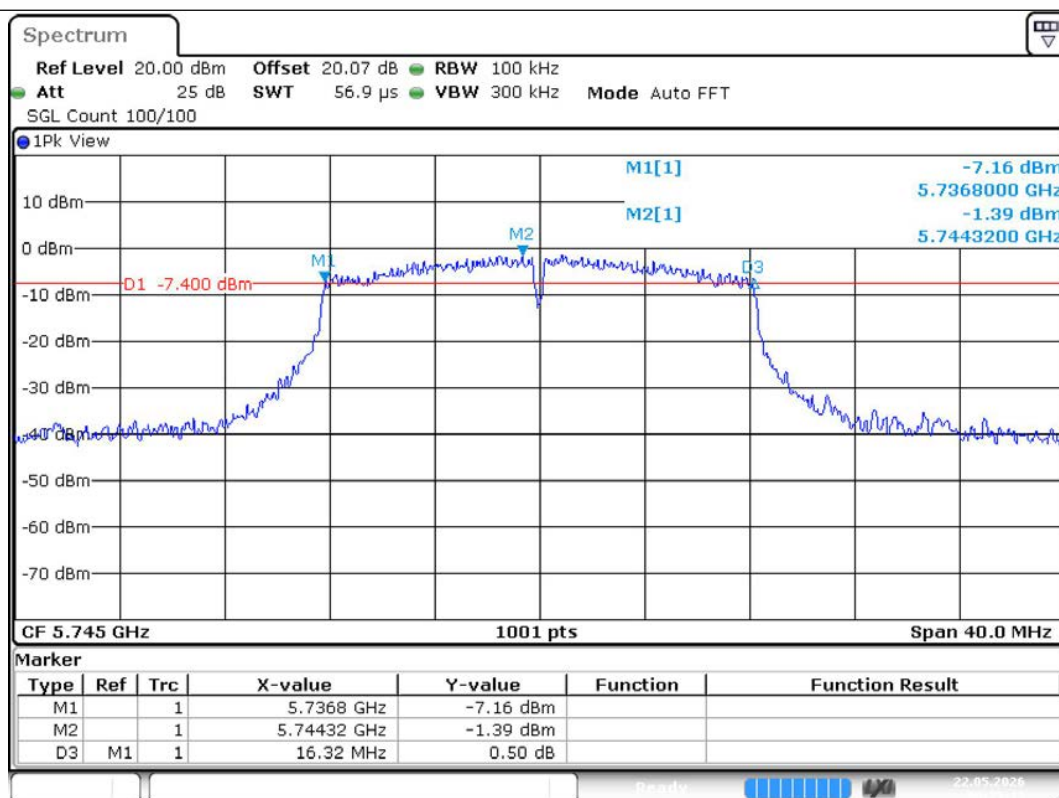
Date: 22.MAY.2026 10:13:02

## 11N40SISO-Ant1-5795

### Min emission bandwidth

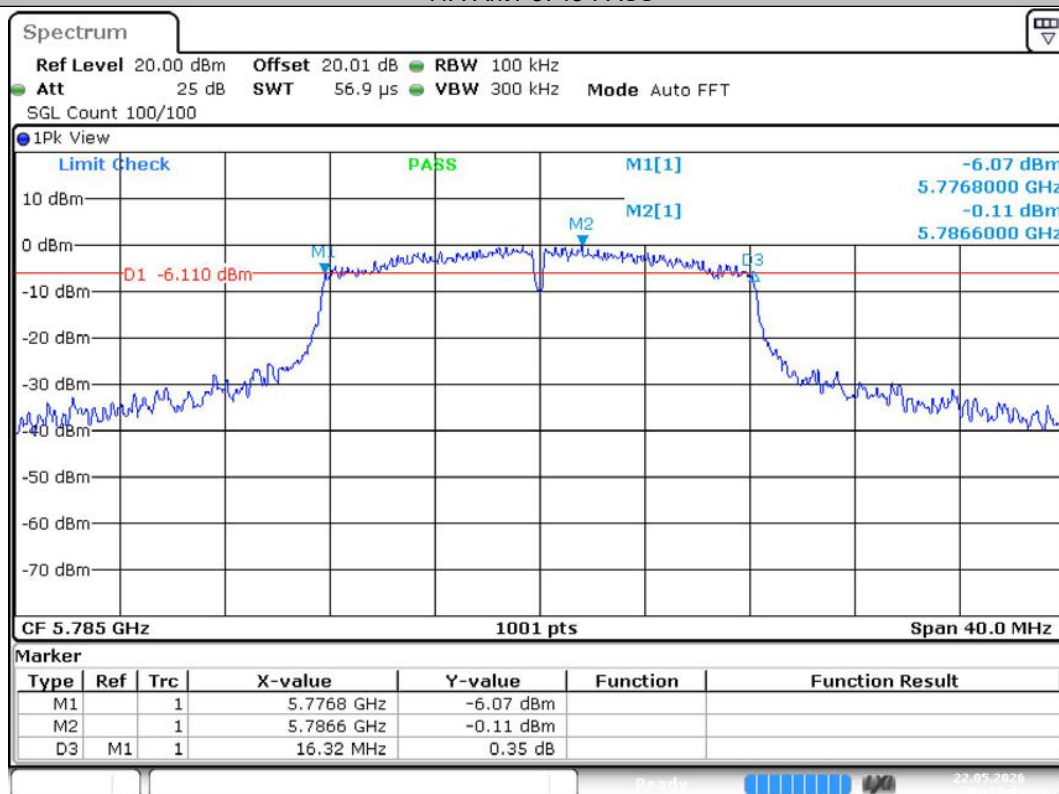
| TestMode  | Antenna | Frequency[MHz] | 6db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|---------------|---------|---------|------------|---------|
| 11A       | Ant1    | 5745           | 16.32         | 5736.80 | 5753.12 | 0.5        | PASS    |
| 11A       | Ant1    | 5785           | 16.32         | 5776.80 | 5793.12 | 0.5        | PASS    |
| 11A       | Ant1    | 5825           | 16.32         | 5816.80 | 5833.12 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 5745           | 16.32         | 5737.04 | 5753.36 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 5785           | 16.80         | 5776.56 | 5793.36 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 5825           | 16.80         | 5816.56 | 5833.36 | 0.5        | PASS    |
| 11N40SISO | Ant1    | 5755           | 32.56         | 5739.08 | 5771.64 | 0.5        | PASS    |
| 11N40SISO | Ant1    | 5795           | 32.56         | 5779.08 | 5811.64 | 0.5        | PASS    |





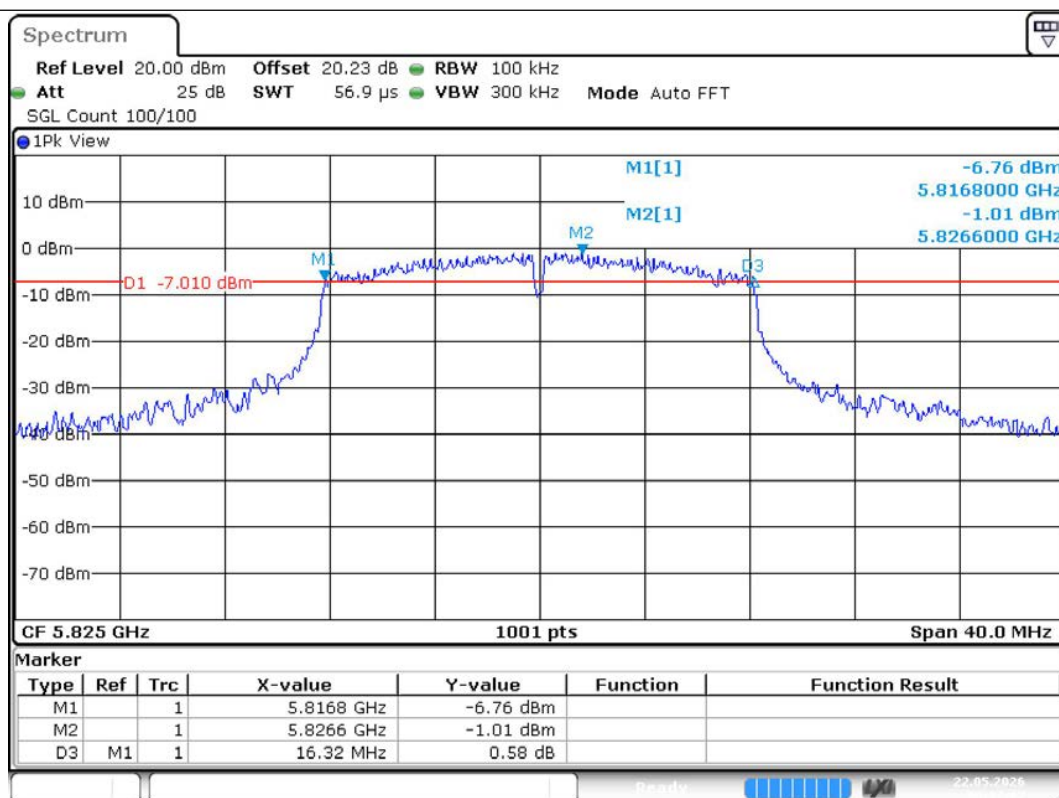
Date: 22.MAY.2026 09:25:12

## 11A-Ant1-5745-PASS



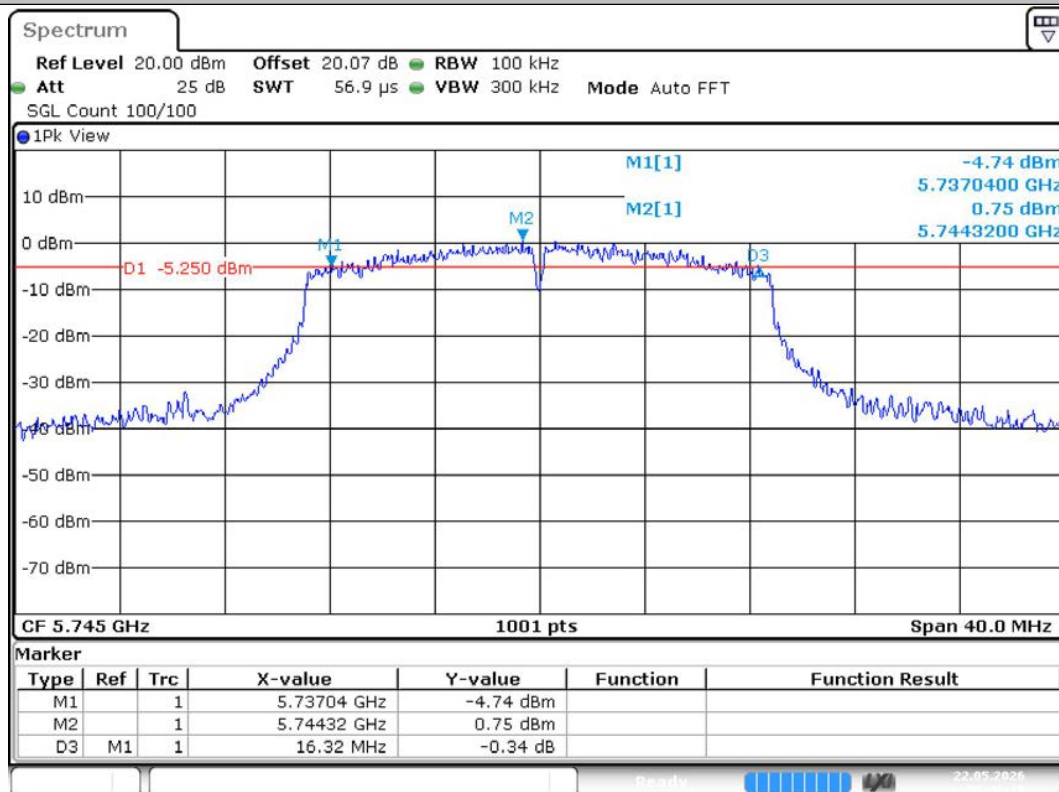
Date: 22.MAY.2026 09:27:32

## 11A-Ant1-5785-PASS



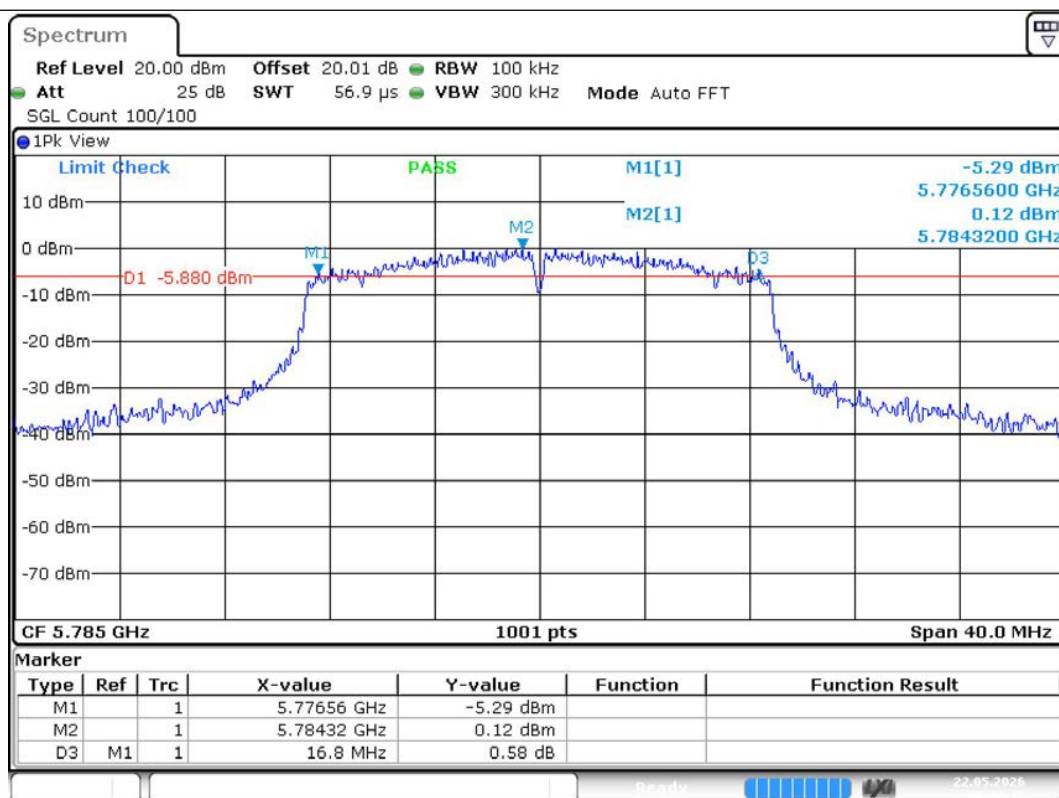
Date: 22.MAY.2026 09:32:07

## 11A-Ant1-5825-PASS



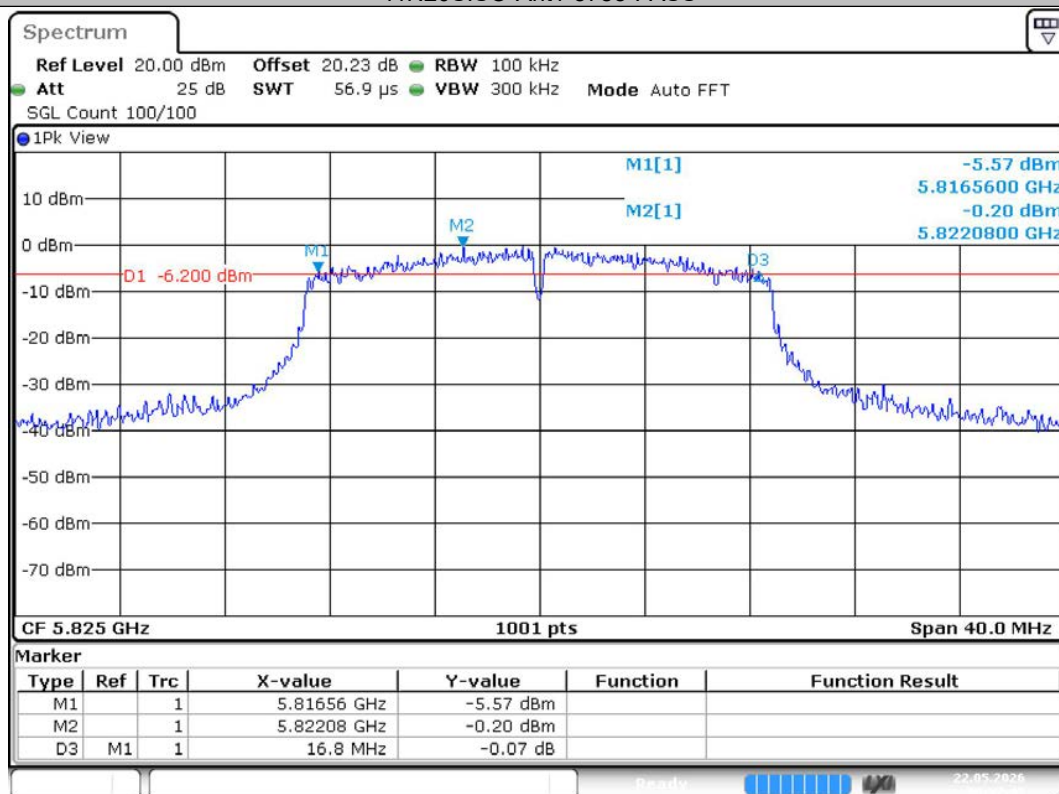
Date: 22.MAY.2026 09:46:19

## 11N20SISO-Ant1-5745-PASS



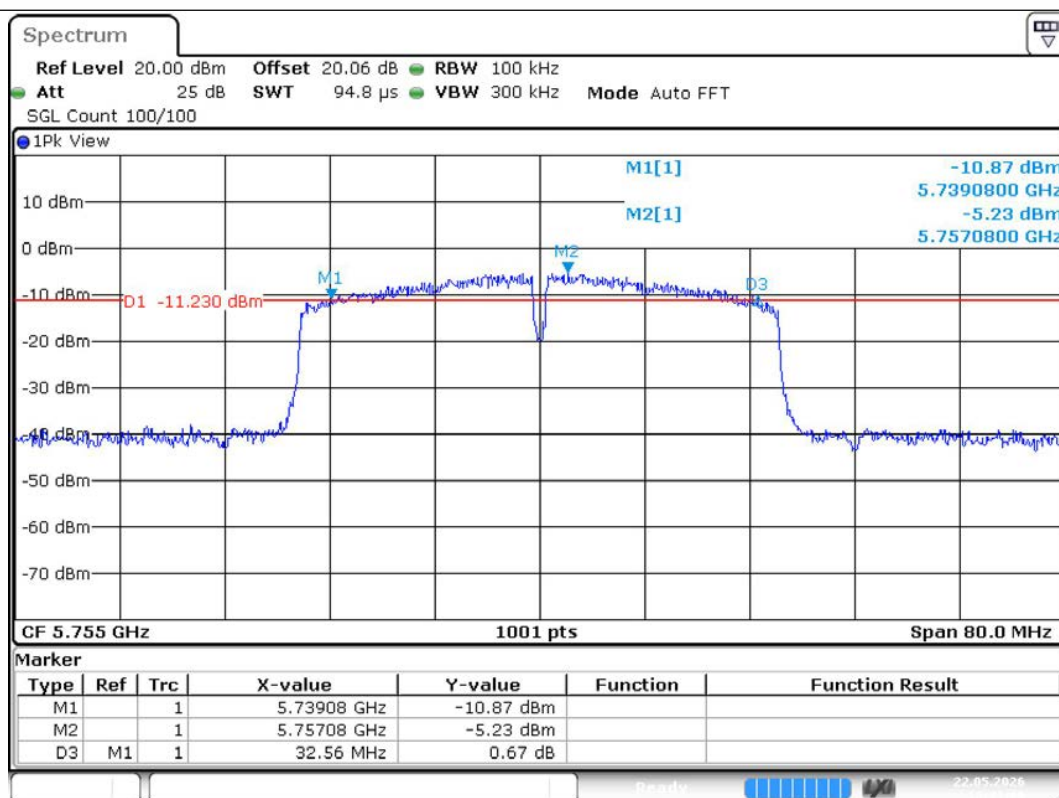
Date: 22.MAY.2026 09:49:12

## 11N20SISO-Ant1-5785-PASS



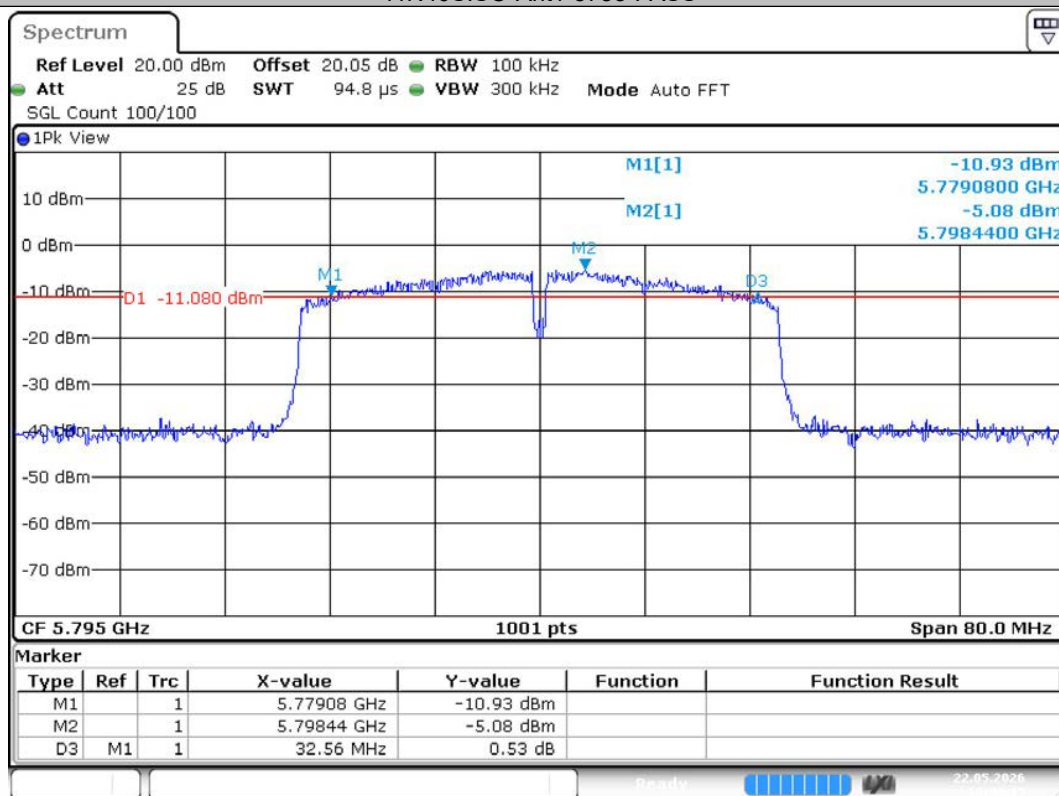
Date: 22.MAY.2026 09:52:42

## 11N20SISO-Ant1-5825-PASS



Date: 22.MAY.2026 10:41:00

## 11N40SISO-Ant1-5755-PASS



Date: 22.MAY.2026 10:40:35

## 11N40SISO-Ant1-5795-PASS

## 8.2 MAXIMUM CONDUCTED OUTPUT POWER

### 8.2.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I  
 According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C  
 According to FCC Part 15.407(a)(3) for UNII Band III  
 According to 789033 D02 Section II(E)  
 According to RSS 247

### 8.2.2 Conformance Limit

#### FCC Limit:

##### ■ For the band 5.15-5.25 GHz

(a)(1) (i) For an outdoor access point, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For client devices, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### ■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(a) (2) The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### ■ For the band 5.725-5.85 GHz

(a) (3) The maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

#### IC Limit:

■ Frequency band 5150-5250 MHz

The maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10}B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz.

■ Frequency band 5250-5350 MHz

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10}B$ , dBm, whichever is less.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10}B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

■ Frequency bands 5470-5600 MHz and 5650-5725 MHz

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10}B$ , dBm, whichever is less.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10}B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

■ Frequency band 5725-5850 MHz

The maximum conducted output power shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

### 8.2.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

### 8.2.4 Test Procedure

The maximum average conducted output power can be measured using Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

- The Transmitter output (antenna port) was connected to the power meter.
- Turn on the EUT and power meter and then record the power value.
- Repeat above procedures on all channels needed to be tested.

### 8.2.5 Test Results

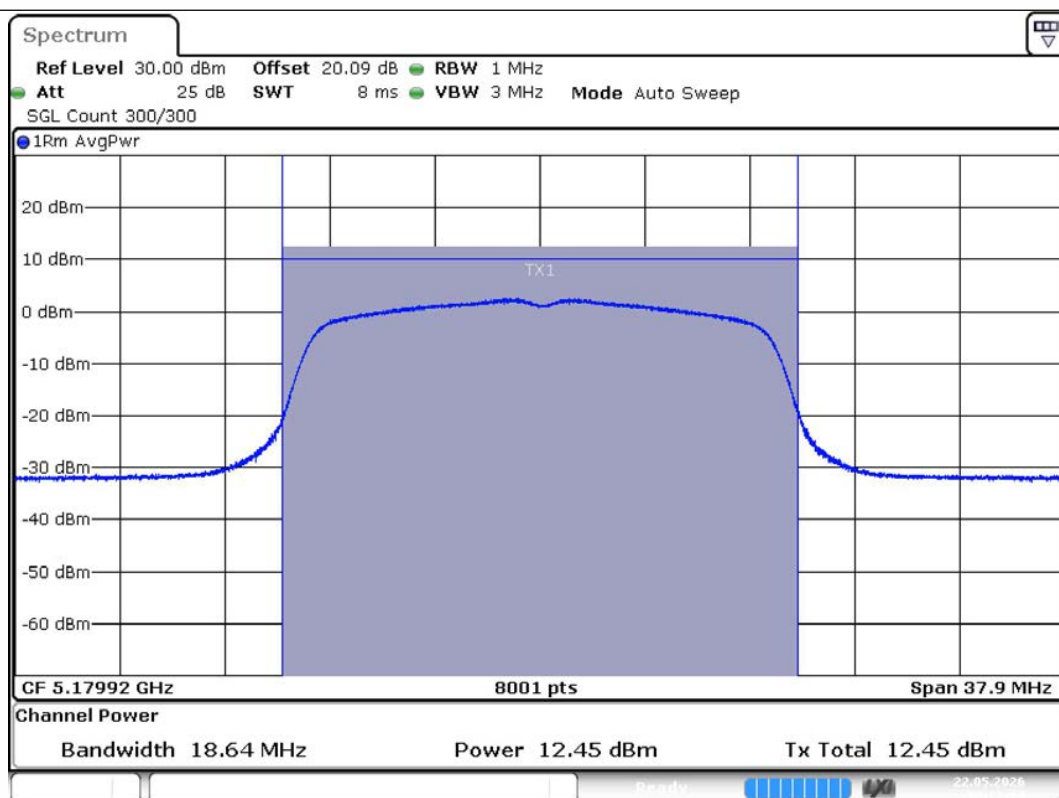
|                    |           |
|--------------------|-----------|
| Temperature:       | 25 °C     |
| Relative Humidity: | 45%       |
| ATM Pressure:      | 1011 mbar |

Note: N/A

| Test Mode | Antenna | Frequency[MHz] | Channel Power [dBm] | Duty Cycle [%] | Result [dBm] | Limit [dBm] | Gain [dBi] | EIRP [dBm] | Verdict |
|-----------|---------|----------------|---------------------|----------------|--------------|-------------|------------|------------|---------|
| 11A       | Ant1    | 5180           | 12.45               | 100.00         | 12.45        | ≤23.98      | 3.35       | 15.80      | PASS    |
| 11A       | Ant1    | 5200           | 11.79               | 100.00         | 11.79        | ≤23.98      | 3.35       | 15.14      | PASS    |
| 11A       | Ant1    | 5240           | 11.01               | 100.00         | 11.01        | ≤23.98      | 3.35       | 14.36      | PASS    |
| 11A       | Ant1    | 5745           | 12.02               | 100.00         | 12.02        | ≤30.00      | 3.85       | 15.87      | PASS    |
| 11A       | Ant1    | 5785           | 13.21               | 100.00         | 13.21        | ≤30.00      | 3.85       | 17.06      | PASS    |
| 11A       | Ant1    | 5825           | 12.65               | 100.00         | 12.65        | ≤30.00      | 3.85       | 16.5       | PASS    |
| 11N20SISO | Ant1    | 5180           | 12.12               | 100.00         | 12.12        | ≤23.98      | 3.35       | 15.47      | PASS    |
| 11N20SISO | Ant1    | 5200           | 12.21               | 100.00         | 12.21        | ≤23.98      | 3.35       | 15.56      | PASS    |
| 11N20SISO | Ant1    | 5240           | 10.51               | 100.00         | 10.51        | ≤23.98      | 3.35       | 13.86      | PASS    |
| 11N20SISO | Ant1    | 5745           | 13.79               | 100.00         | 13.79        | ≤30.00      | 3.85       | 17.64      | PASS    |
| 11N20SISO | Ant1    | 5785           | 13.44               | 100.00         | 13.44        | ≤30.00      | 3.85       | 17.29      | PASS    |
| 11N20SISO | Ant1    | 5825           | 12.92               | 100.00         | 12.92        | ≤30.00      | 3.85       | 16.77      | PASS    |
| 11N40SISO | Ant1    | 5190           | 10.15               | 100.00         | 10.15        | ≤23.98      | 3.35       | 13.50      | PASS    |
| 11N40SISO | Ant1    | 5230           | 11.55               | 100.00         | 11.55        | ≤23.98      | 3.35       | 14.90      | PASS    |
| 11N40SISO | Ant1    | 5755           | 10.73               | 100.00         | 10.73        | ≤30.00      | 3.85       | 14.58      | PASS    |
| 11N40SISO | Ant1    | 5795           | 11.22               | 100.00         | 11.22        | ≤30.00      | 3.85       | 15.07      | PASS    |

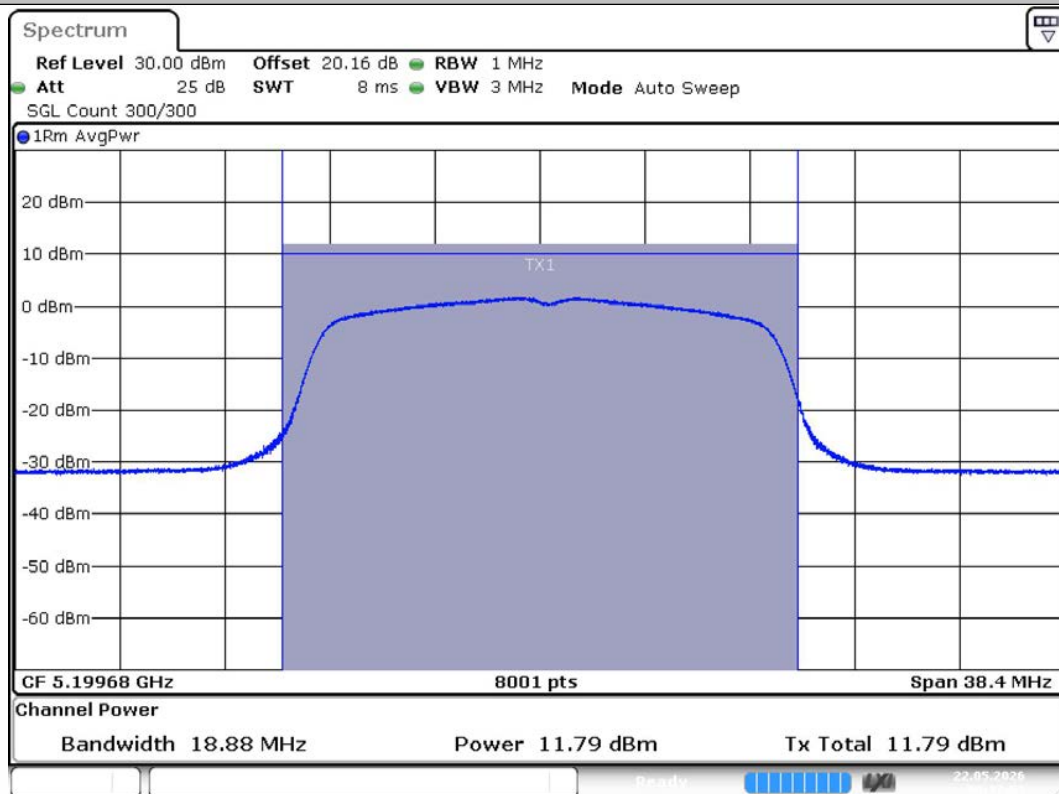
Note: The Duty Cycle Factor is compensated in the graph.

EIRP = conducted power + directional gain



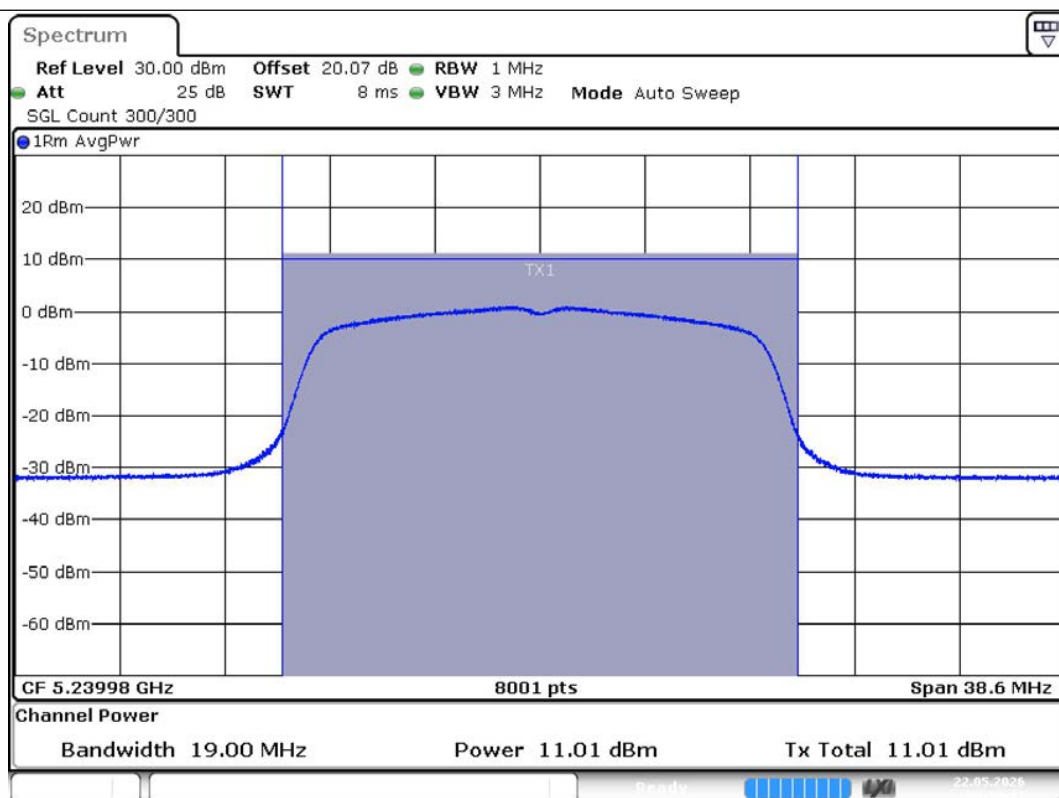
Date: 22.MAY.2026 09:16:04

## 11A-Ant1-5180-PASS



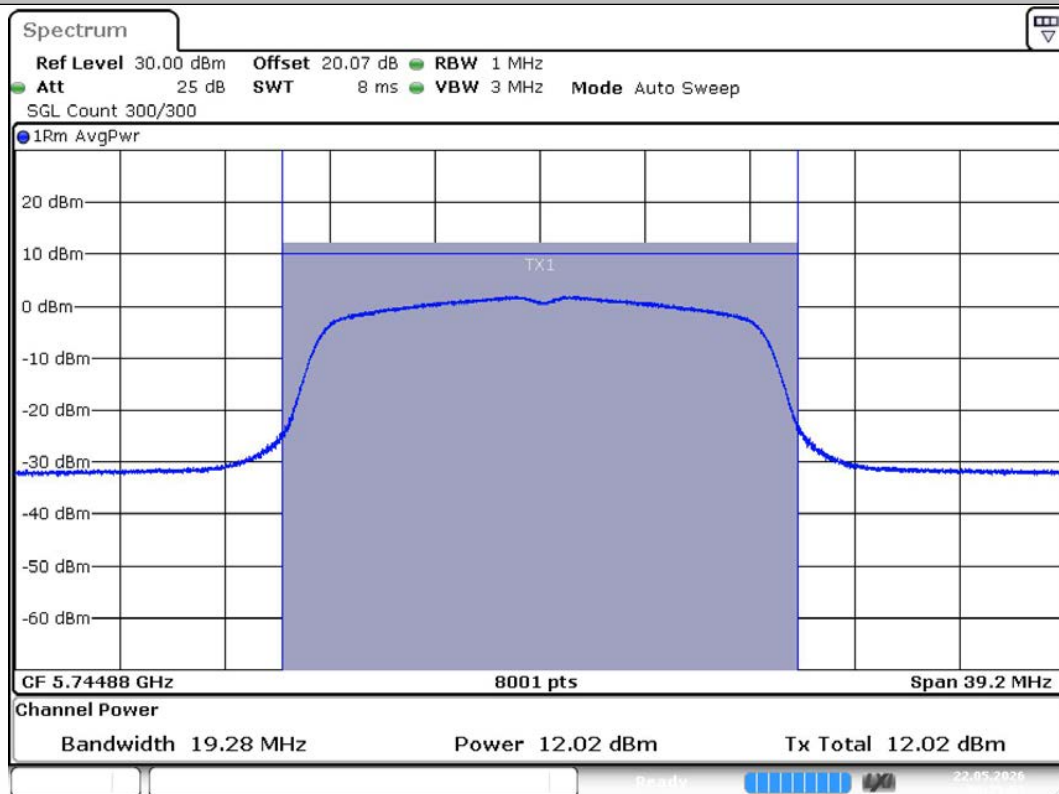
Date: 22.MAY.2026 09:17:51

## 11A-Ant1-5200-PASS



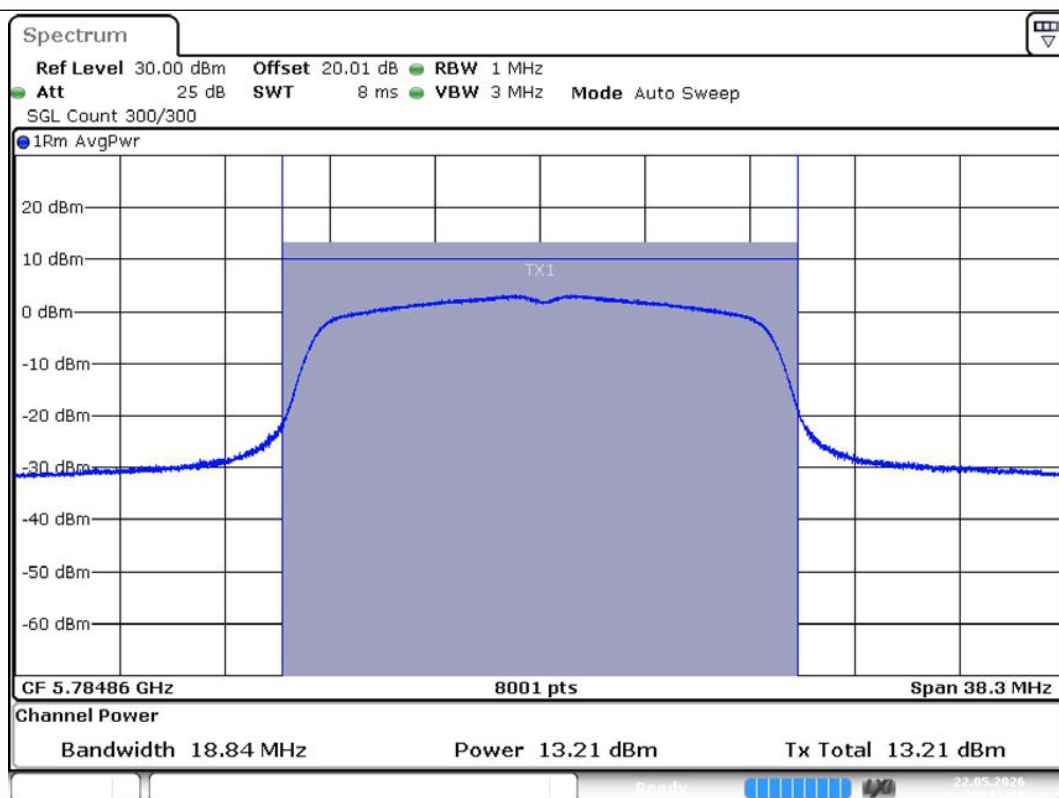
Date: 22.MAY.2026 09:20:31

## 11A-Ant1-5240-PASS



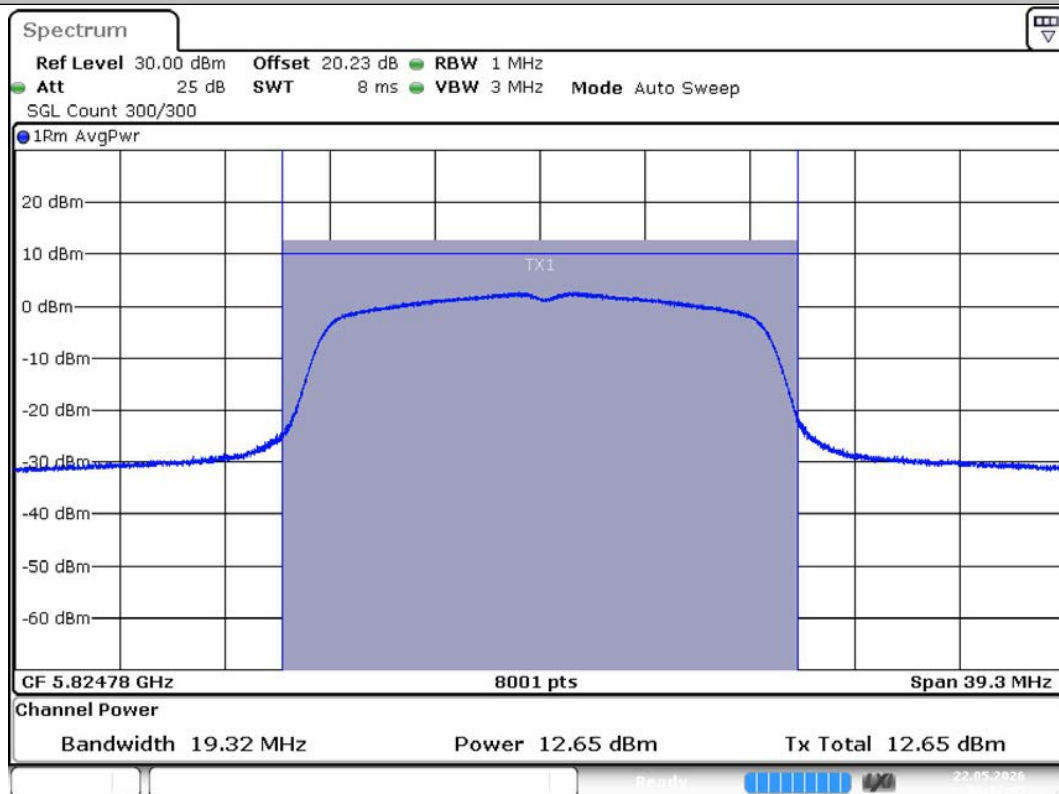
Date: 22.MAY.2026 09:25:51

## 11A-Ant1-5745-PASS



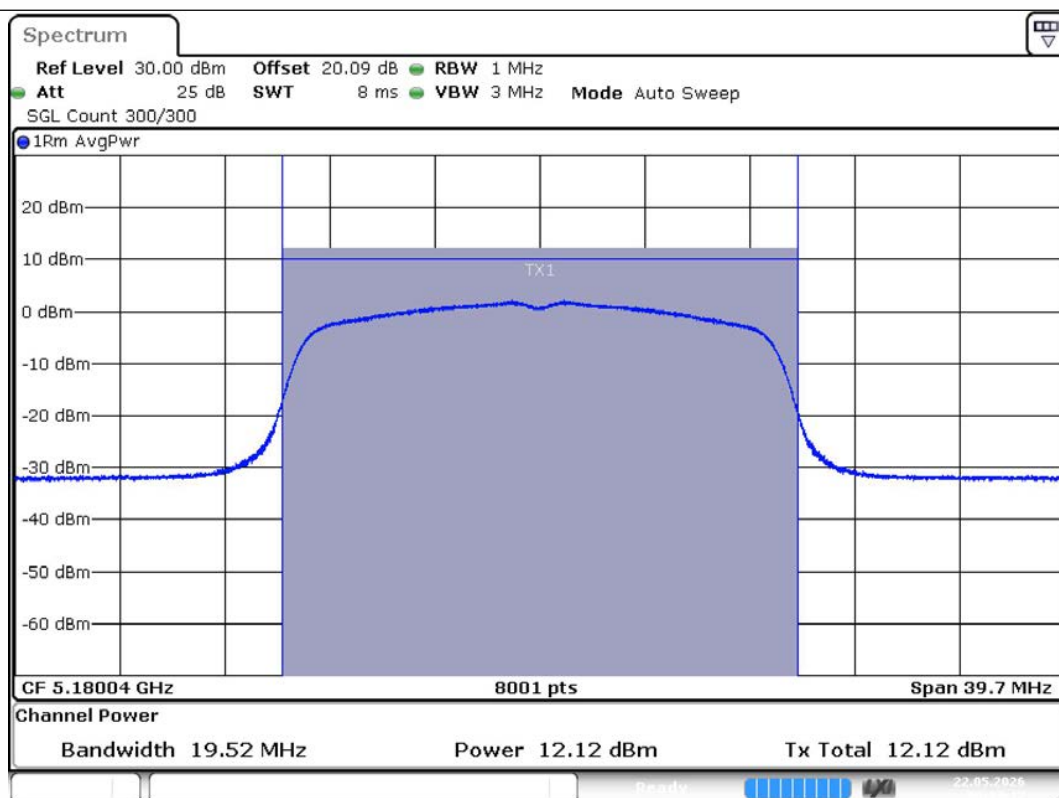
Date: 22.MAY.2026 09:31:20

## 11A-Ant1-5785-PASS



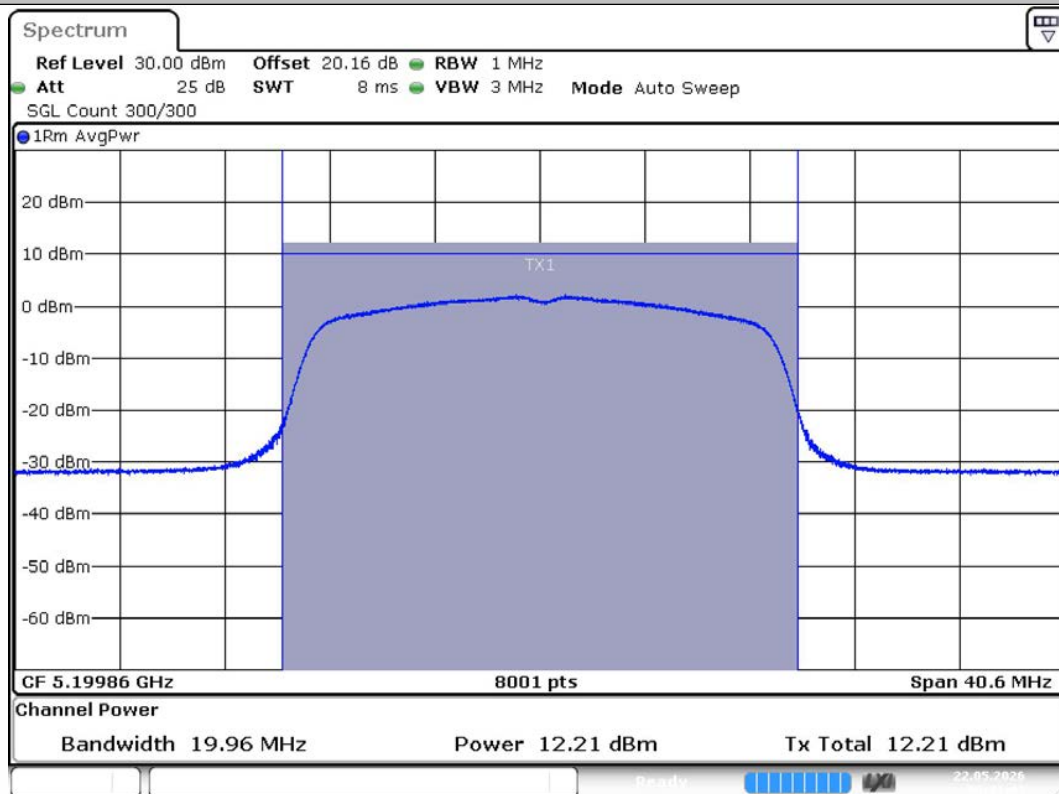
Date: 22.MAY.2026 09:32:46

## 11A-Ant1-5825-PASS



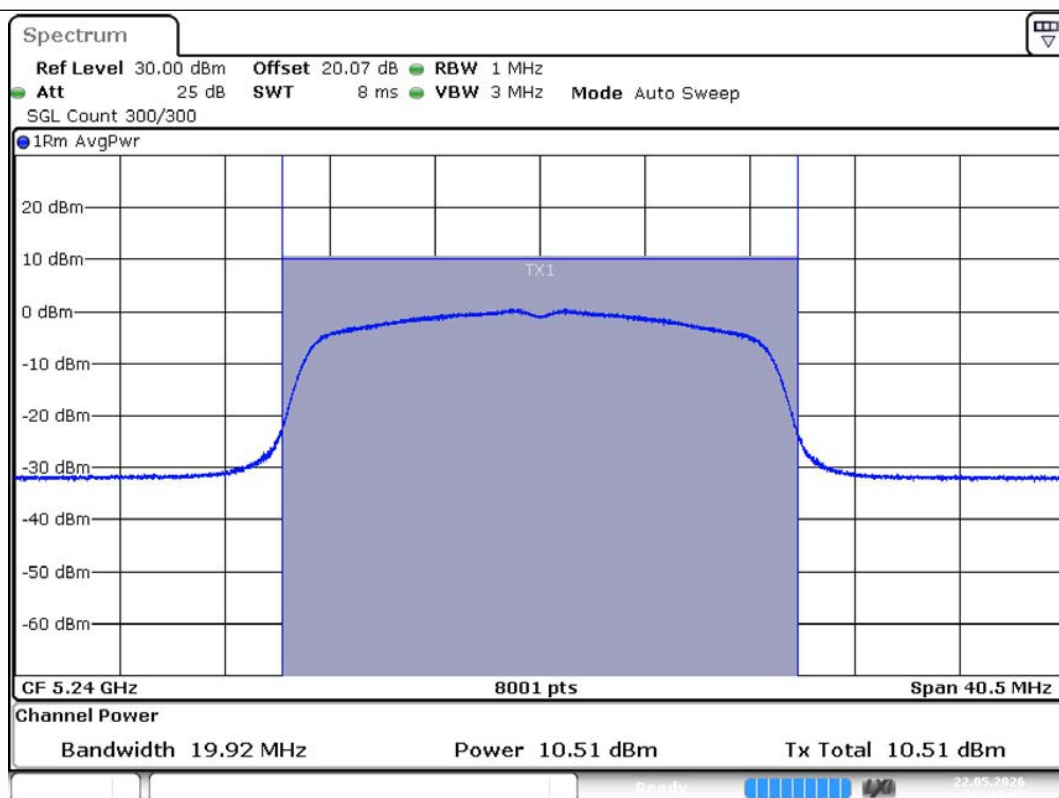
Date: 22.MAY.2026 09:39:17

## 11N20SISO-Ant1-5180-PASS



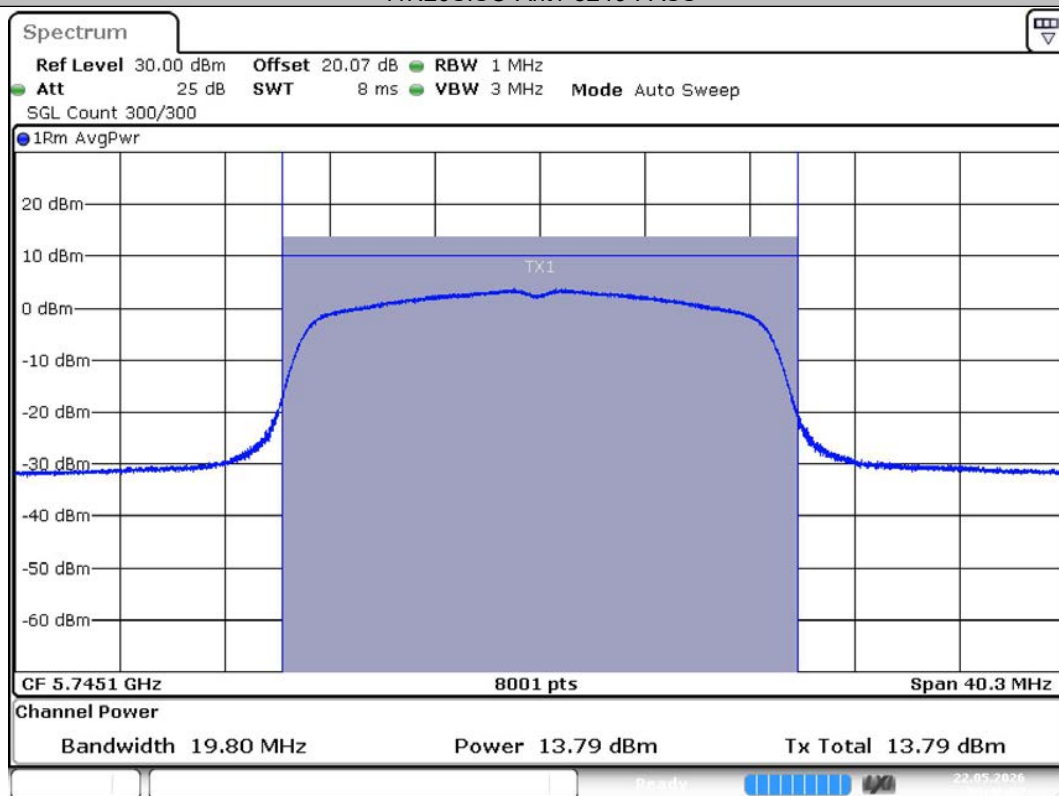
Date: 22.MAY.2026 09:41:41

## 11N20SISO-Ant1-5200-PASS



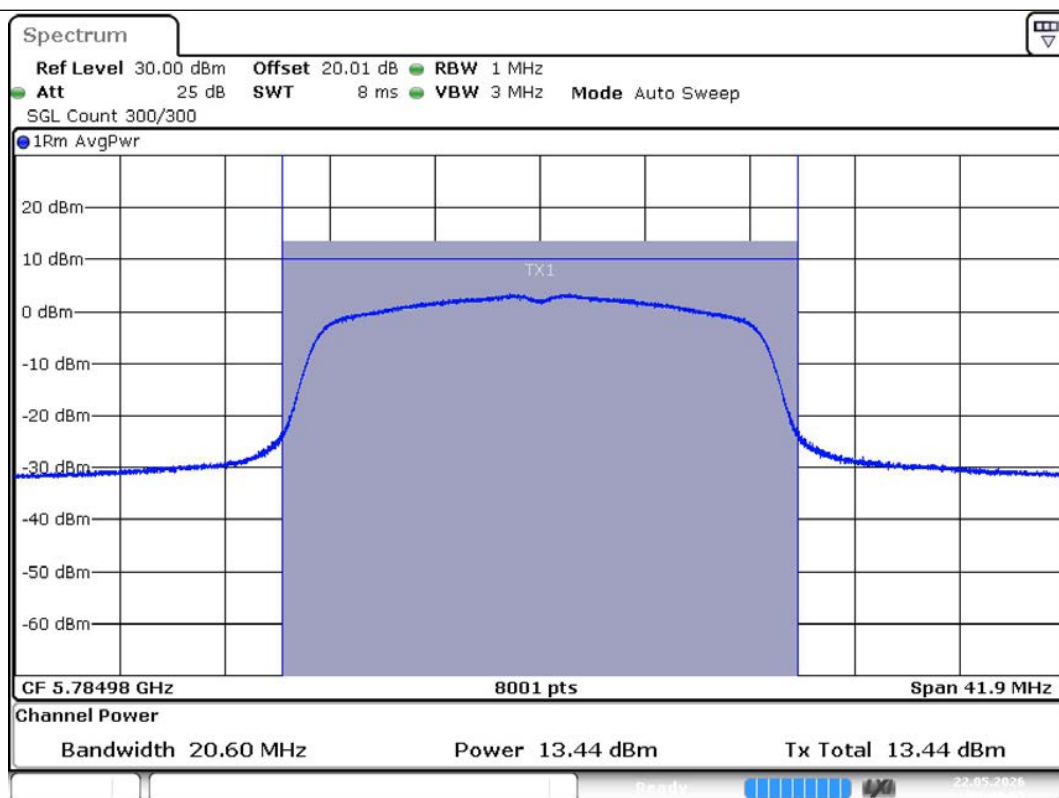
Date: 22.MAY.2026 09:43:01

## 11N20SISO-Ant1-5240-PASS



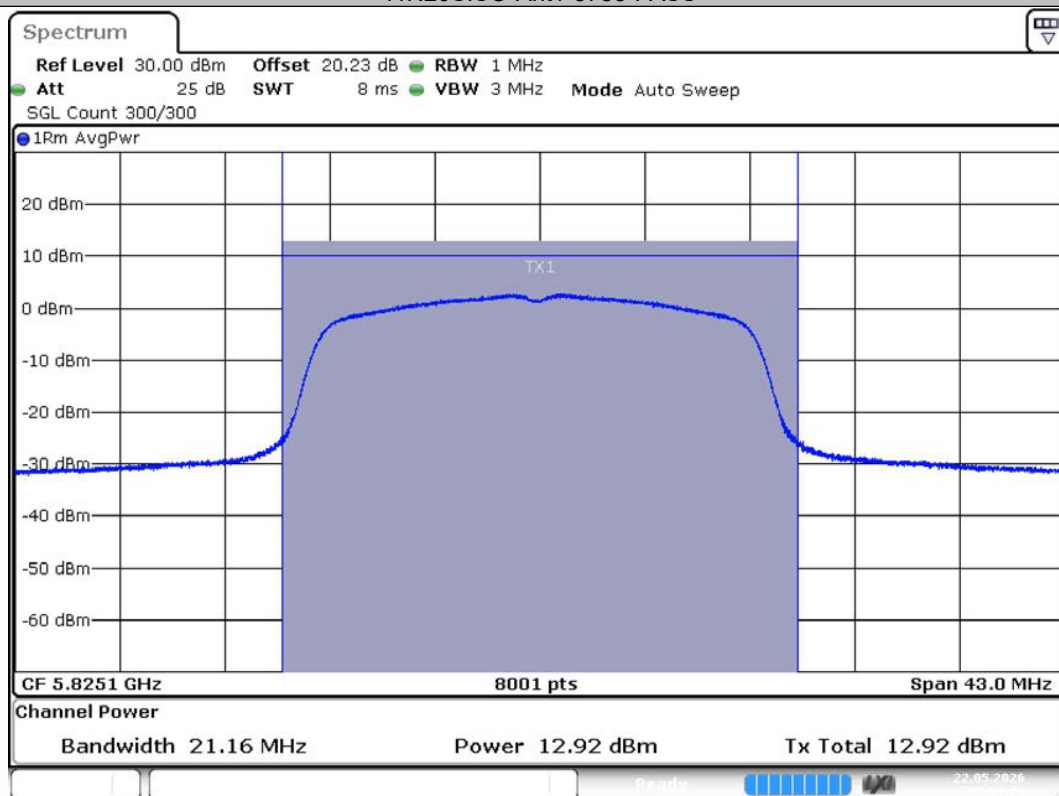
Date: 22.MAY.2026 09:46:58

## 11N20SISO-Ant1-5745-PASS



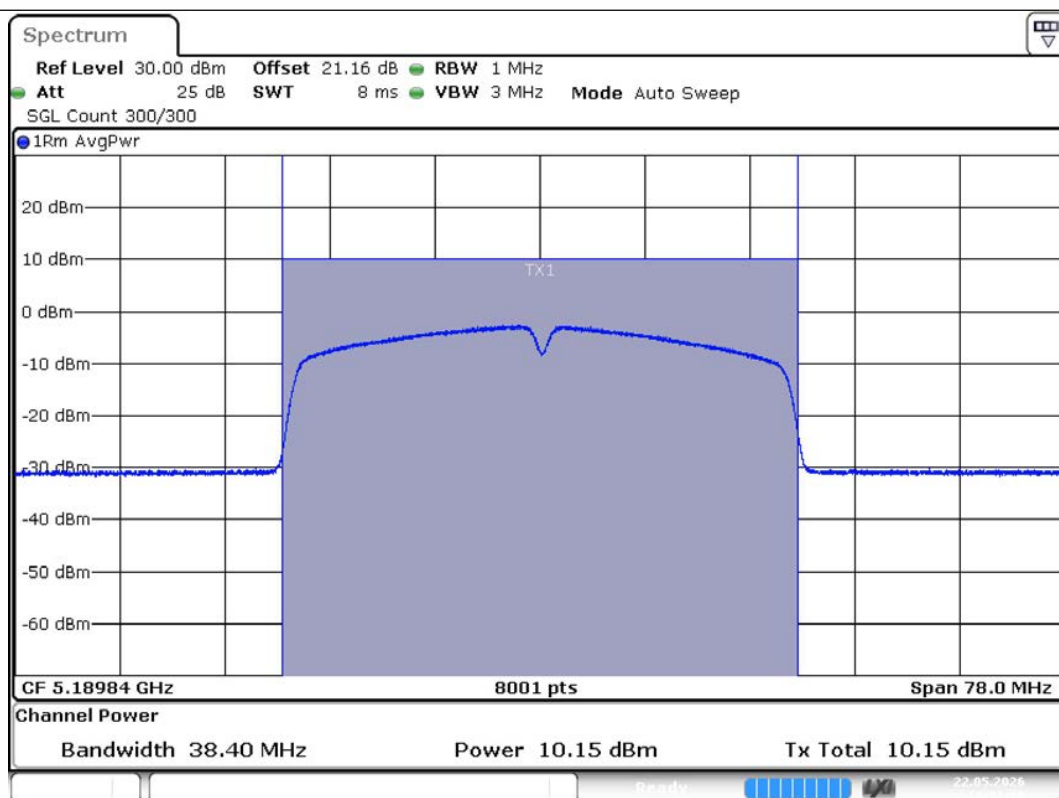
Date: 22.MAY.2026 09:49:51

## 11N20SISO-Ant1-5785-PASS



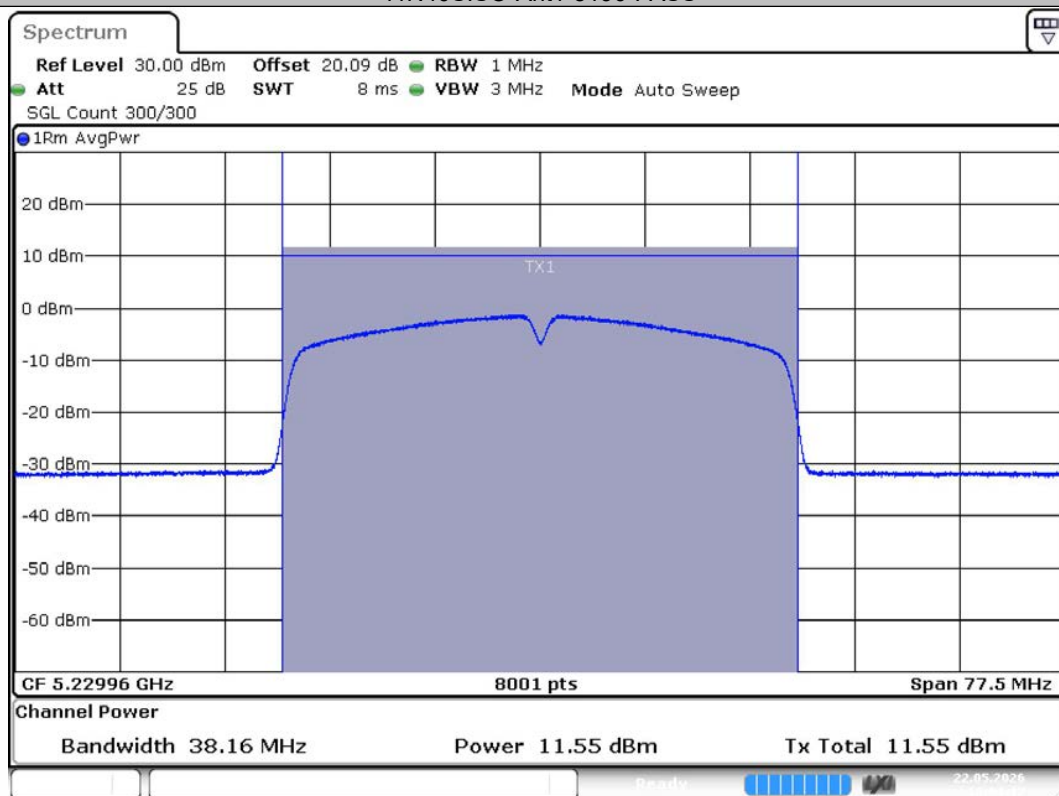
Date: 22.MAY.2026 09:53:21

## 11N20SISO-Ant1-5825-PASS



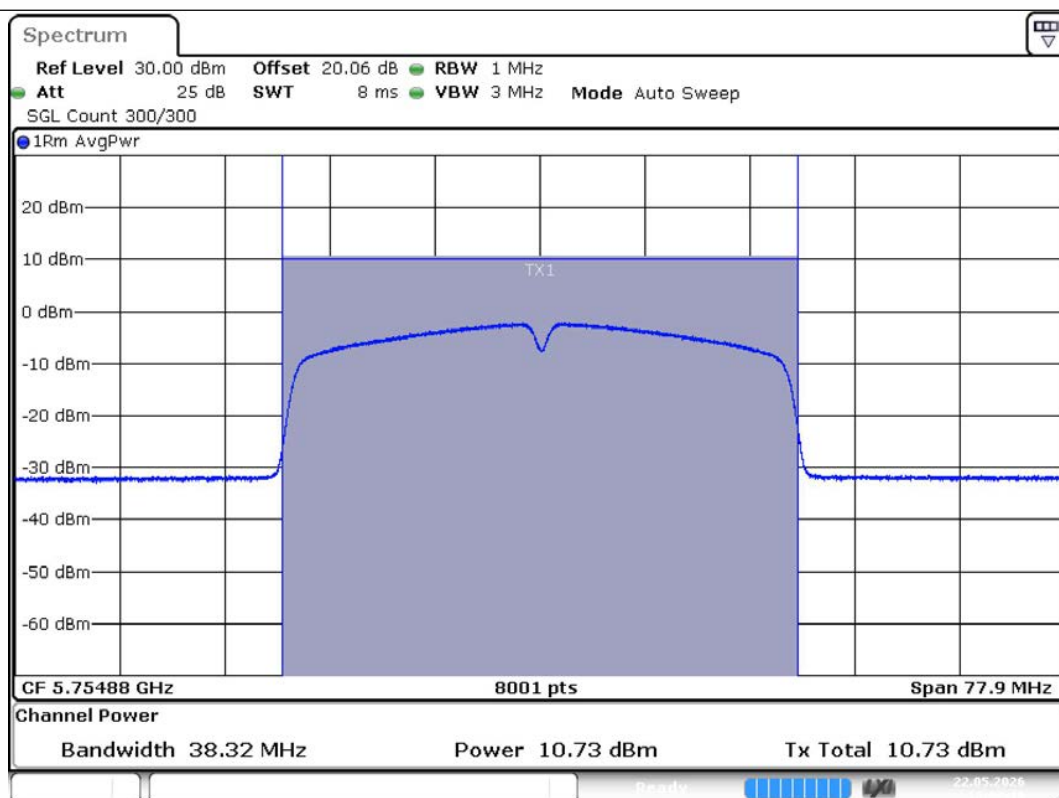
Date: 22.MAY.2026 10:51:07

## 11N40SISO-Ant1-5190-PASS



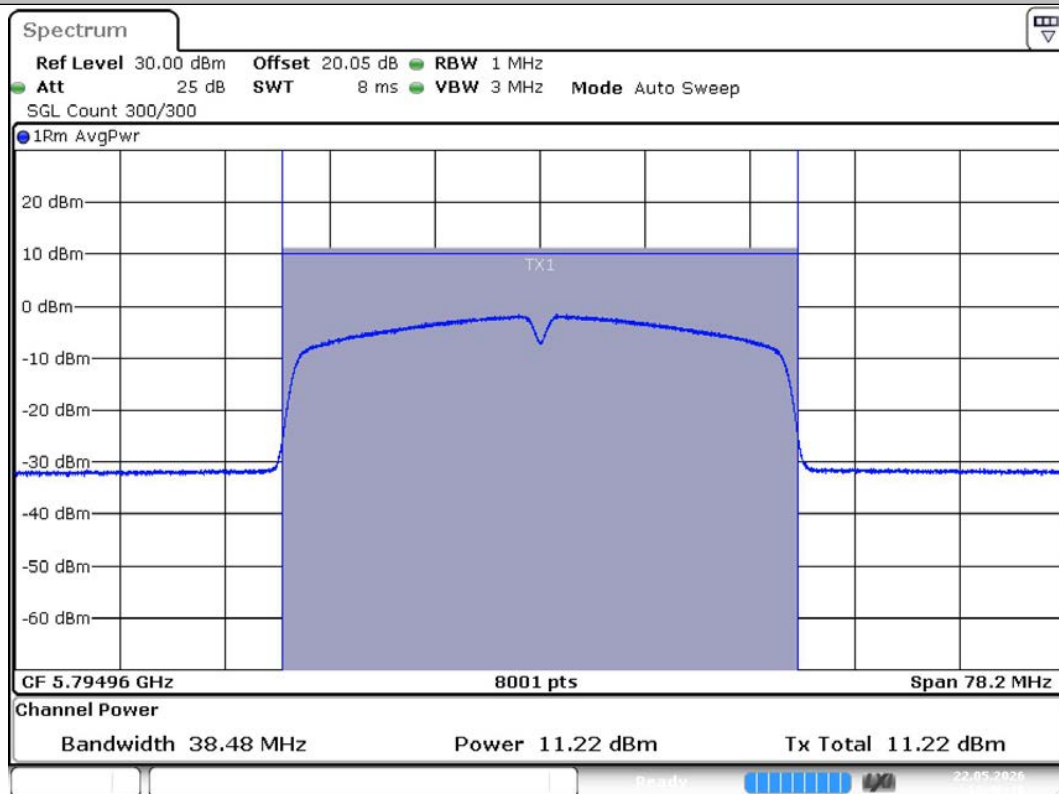
Date: 22.MAY.2026 10:04:37

## 11N40SISO-Ant1-5230-PASS



Date: 22.MAY.2026 10:08:37

## 11N40SISO-Ant1-5755-PASS



Date: 22.MAY.2026 10:46:19

## 11N40SISO-Ant1-5795-PASS

## 8.3 MAXIMUM PEAK POWER DENSITY

### 8.3.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I

According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C

According to FCC Part 15.407(a)(3) for UNII Band III

According to 789033 D02 Section II(F)

According to RSS 247

### 8.3.2 Conformance Limit

#### FCC Limit:

■ For the band 5.15-5.25 GHz,

(a)(1) (i) For an outdoor access point, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (ii) For an indoor access point, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For client devices, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(b) (2) The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (3) The maximum power spectral density shall not exceed 30 dBm in any 500-kHz band provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

#### IC Limit:

- Frequency band 5150-5250 MHz  
The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.
- Frequency band 5250-5350 MHz  
The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
- Frequency bands 5470-5600 MHz and 5650-5725 MHz  
The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
- Frequency band 5725-5850 MHz

The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

### 8.3.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

### 8.3.4 Test Procedure

Methods refer to FCC KDB 789033

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set  $RBW \geq 1/T$ , where T is defined in section II.B.I.a).
- b) Set  $VBW \geq 3 RBW$ .
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10\log(500\text{kHz}/RBW)$  to the measured result, whereas  $RBW (< 500 \text{ KHz})$  is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10\log(1\text{MHz}/RBW)$  to the measured result, whereas  $RBW (< 1 \text{ MHz})$  is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since  $RBW=100 \text{ KHz}$  is available on nearly all spectrum analyzers.

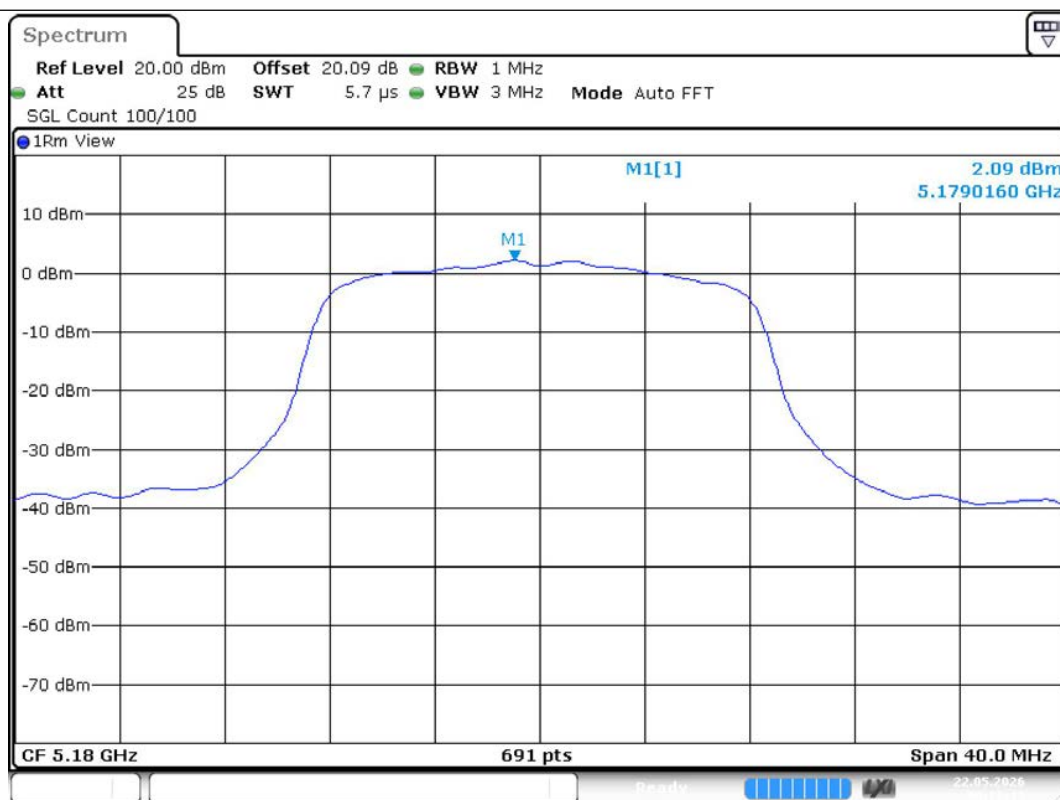
### 8.3.5 Test Results

|                    |           |
|--------------------|-----------|
| Temperature:       | 25 °C     |
| Relative Humidity: | 45%       |
| ATM Pressure:      | 1011 mbar |

Note: N/A

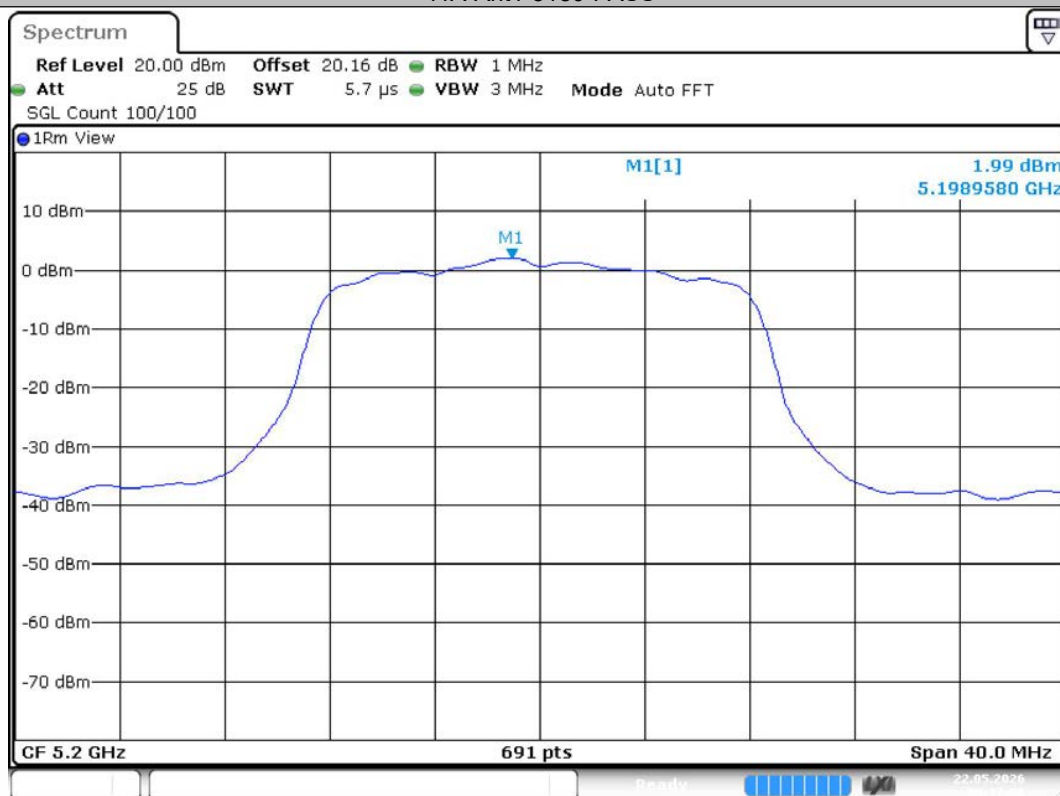
| TestMode  | Antenna | Frequency[MHz] | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|-----------|---------|----------------|------------------|----------------|---------|
| 11A       | Ant1    | 5180           | 2.09             | ≤11.00         | PASS    |
| 11A       | Ant1    | 5200           | 1.99             | ≤11.00         | PASS    |
| 11A       | Ant1    | 5240           | 0.86             | ≤11.00         | PASS    |
| 11A       | Ant1    | 5745           | -1.12            | ≤30.00         | PASS    |
| 11A       | Ant1    | 5785           | 0.15             | ≤30.00         | PASS    |
| 11A       | Ant1    | 5825           | -0.30            | ≤30.00         | PASS    |
| 11N20SISO | Ant1    | 5180           | 2.56             | ≤11.00         | PASS    |
| 11N20SISO | Ant1    | 5200           | 2.37             | ≤11.00         | PASS    |
| 11N20SISO | Ant1    | 5240           | 0.06             | ≤11.00         | PASS    |
| 11N20SISO | Ant1    | 5745           | 0.90             | ≤30.00         | PASS    |
| 11N20SISO | Ant1    | 5785           | 0.13             | ≤30.00         | PASS    |
| 11N20SISO | Ant1    | 5825           | -0.19            | ≤30.00         | PASS    |
| 11N40SISO | Ant1    | 5190           | -2.64            | ≤11.00         | PASS    |
| 11N40SISO | Ant1    | 5230           | -1.28            | ≤11.00         | PASS    |
| 11N40SISO | Ant1    | 5755           | -4.60            | ≤30.00         | PASS    |
| 11N40SISO | Ant1    | 5795           | -4.58            | ≤30.00         | PASS    |

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.  
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.



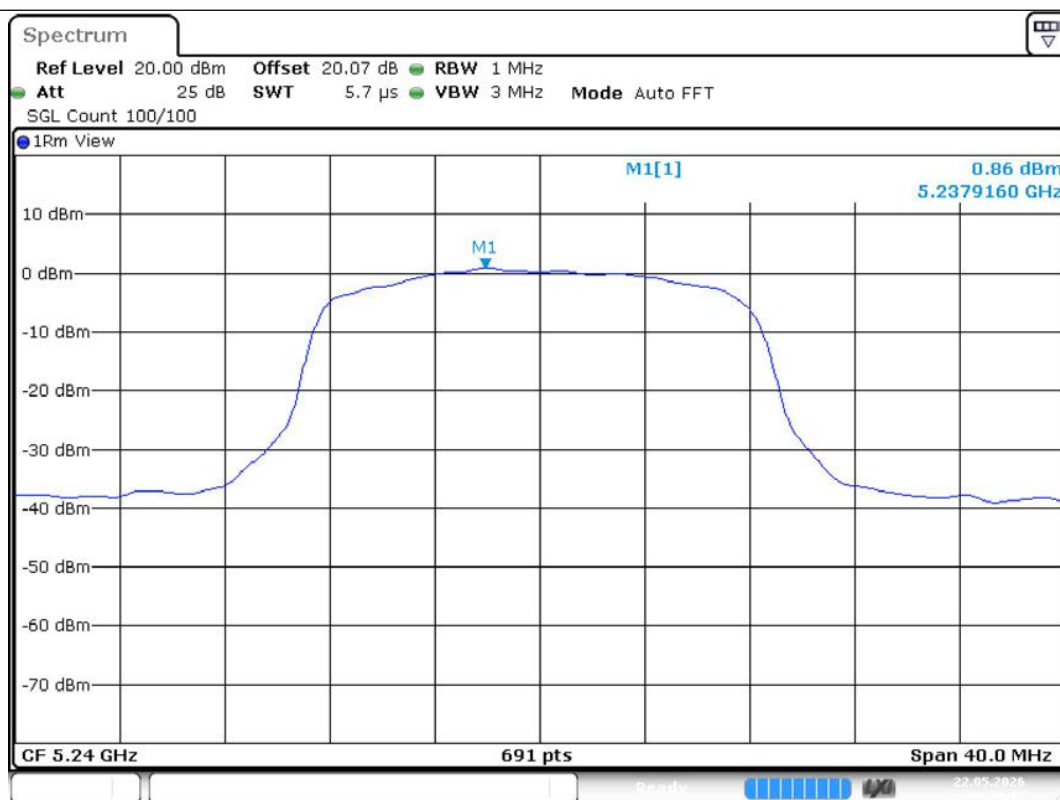
Date: 22.MAY.2026 09:16:11

## 11A-Ant1-5180-PASS



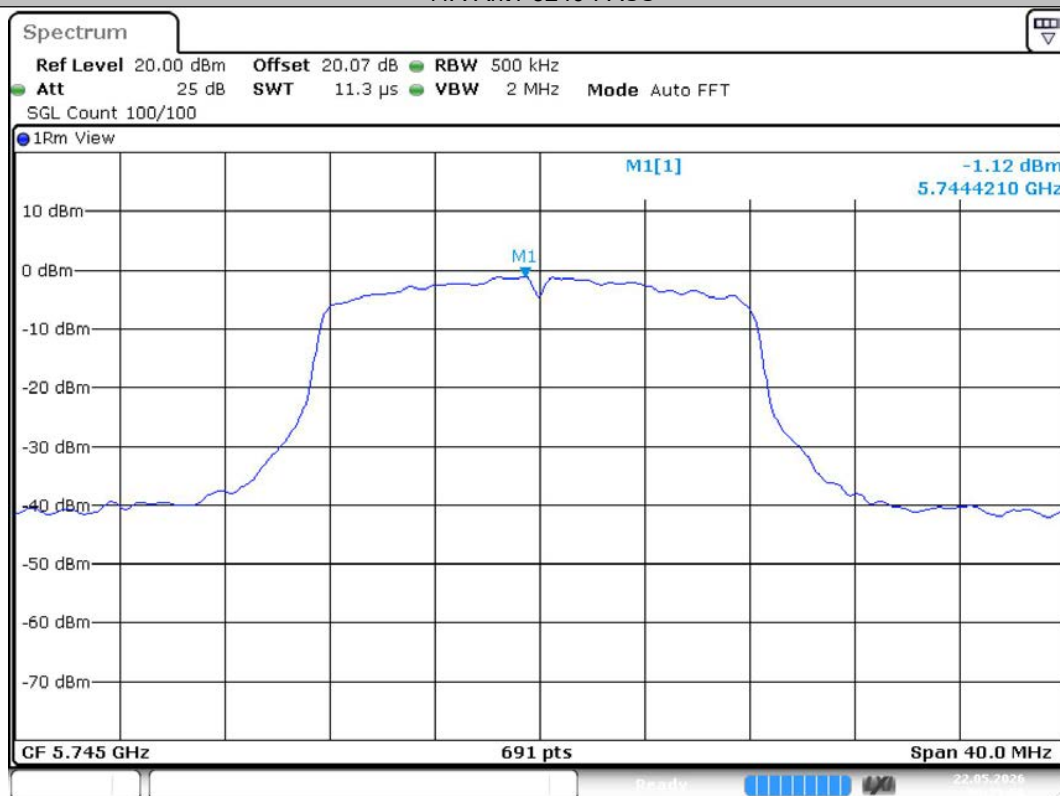
Date: 22.MAY.2026 09:17:58

## 11A-Ant1-5200-PASS



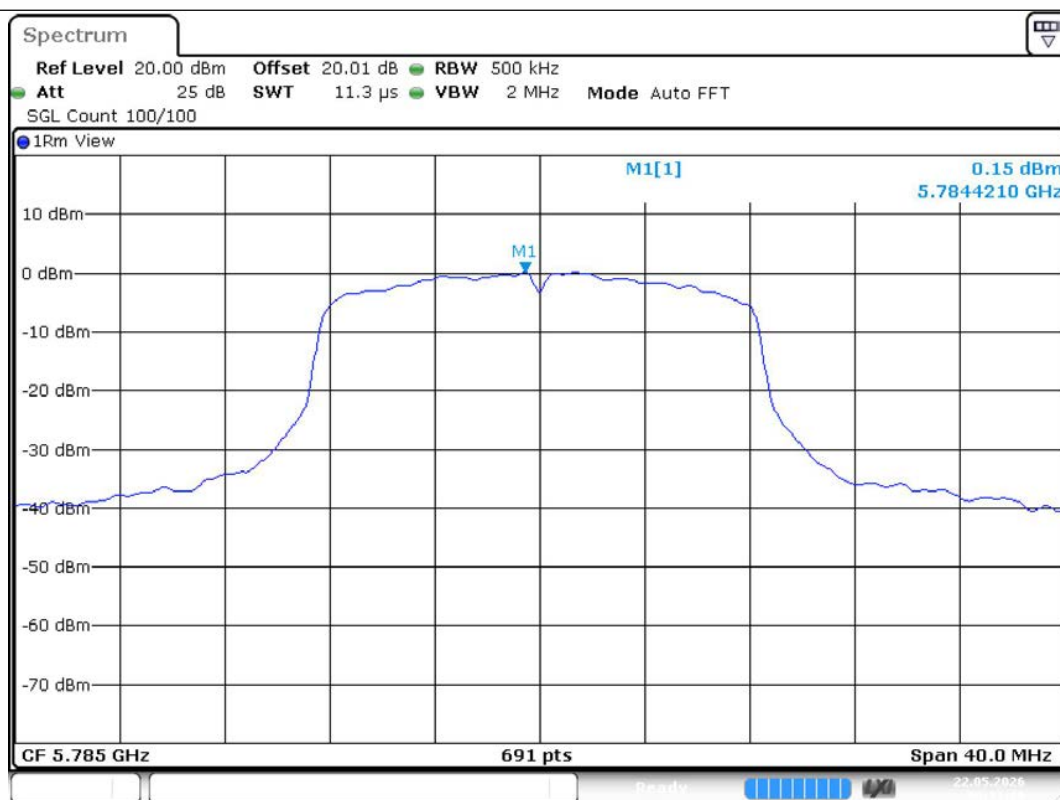
Date: 22.MAY.2026 09:20:38

## 11A-Ant1-5240-PASS



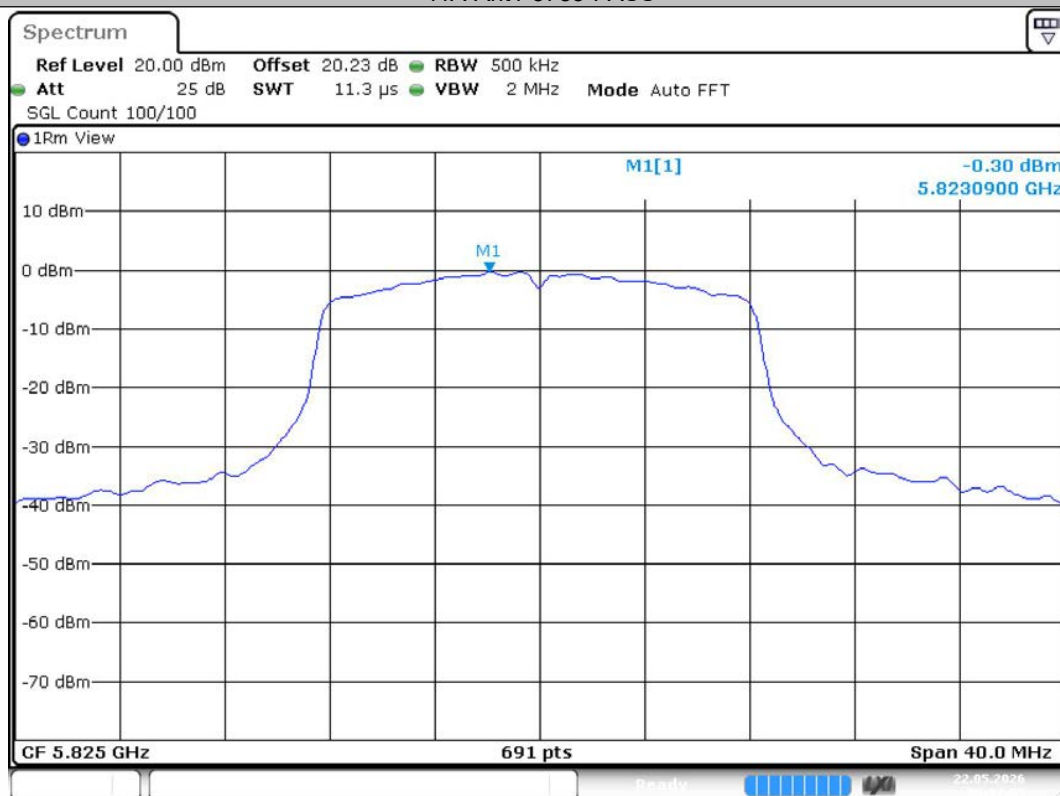
Date: 22.MAY.2026 09:25:58

## 11A-Ant1-5745-PASS



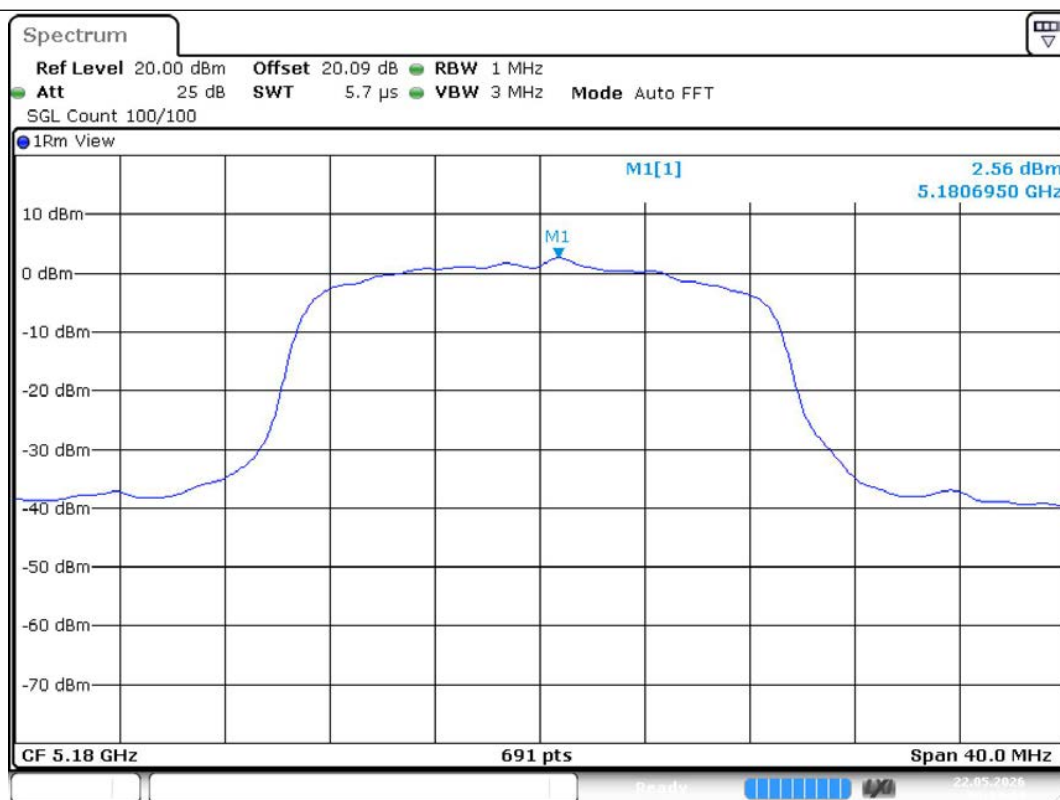
Date: 22.MAY.2026 09:31:27

## 11A-Ant1-5785-PASS



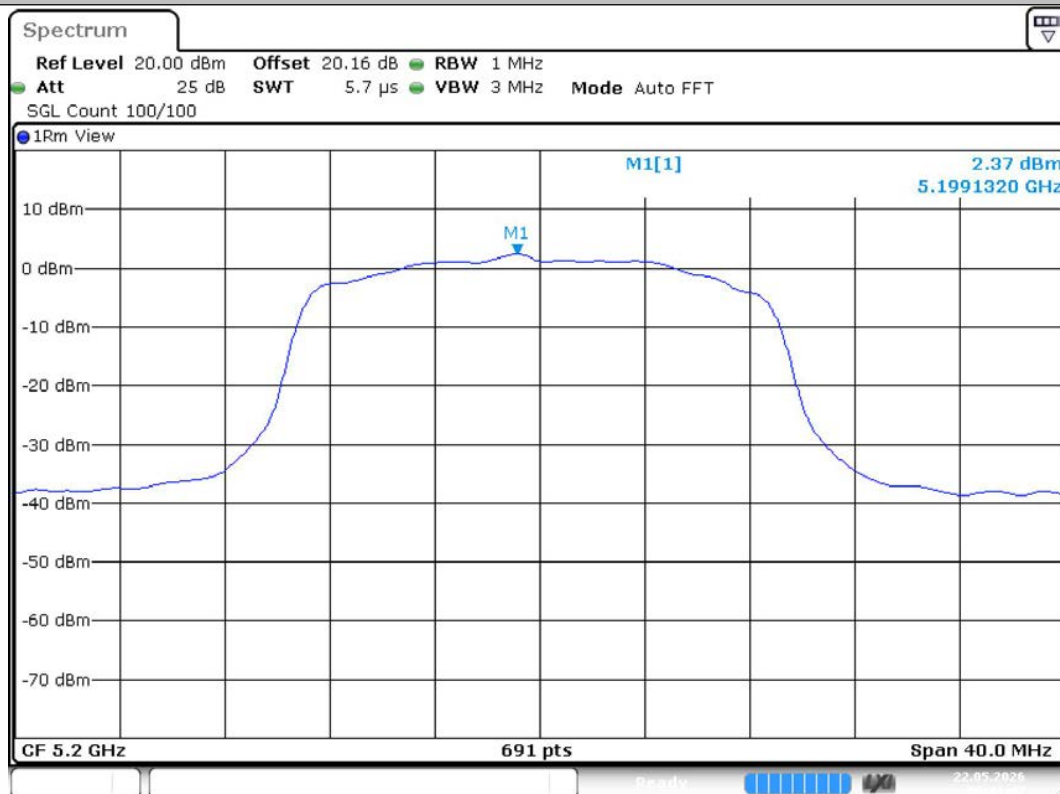
Date: 22.MAY.2026 09:32:53

## 11A-Ant1-5825-PASS



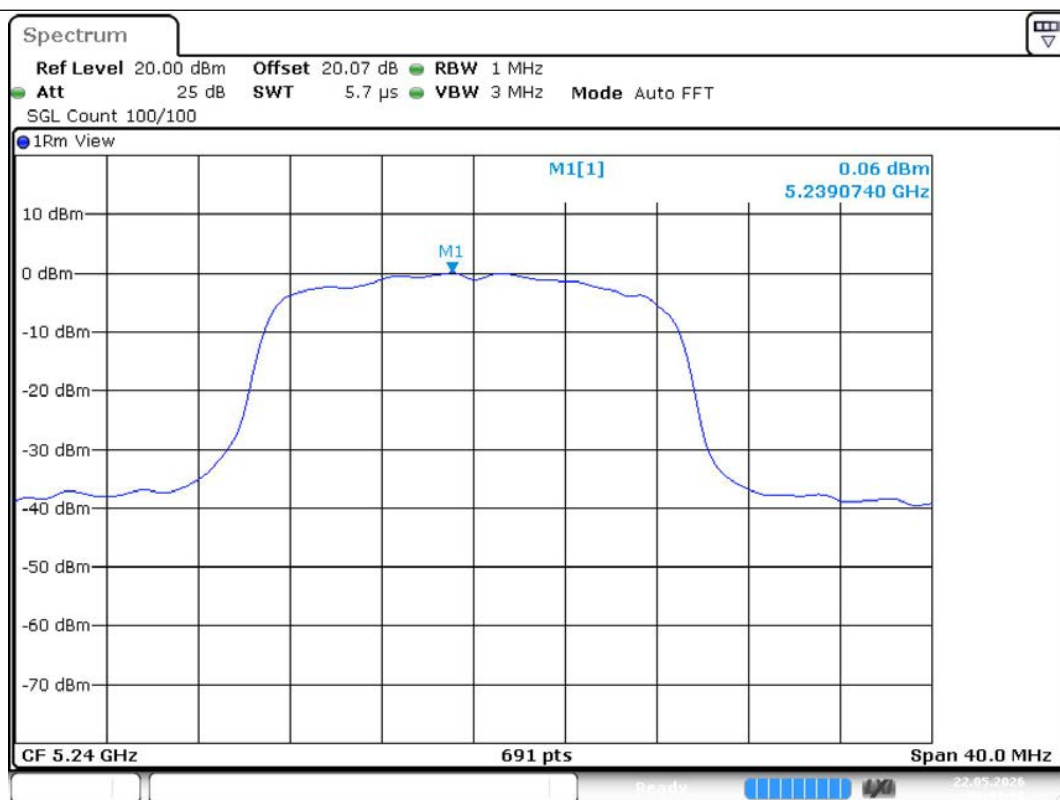
Date: 22.MAY.2026 09:39:24

## 11N20SISO-Ant1-5180-PASS



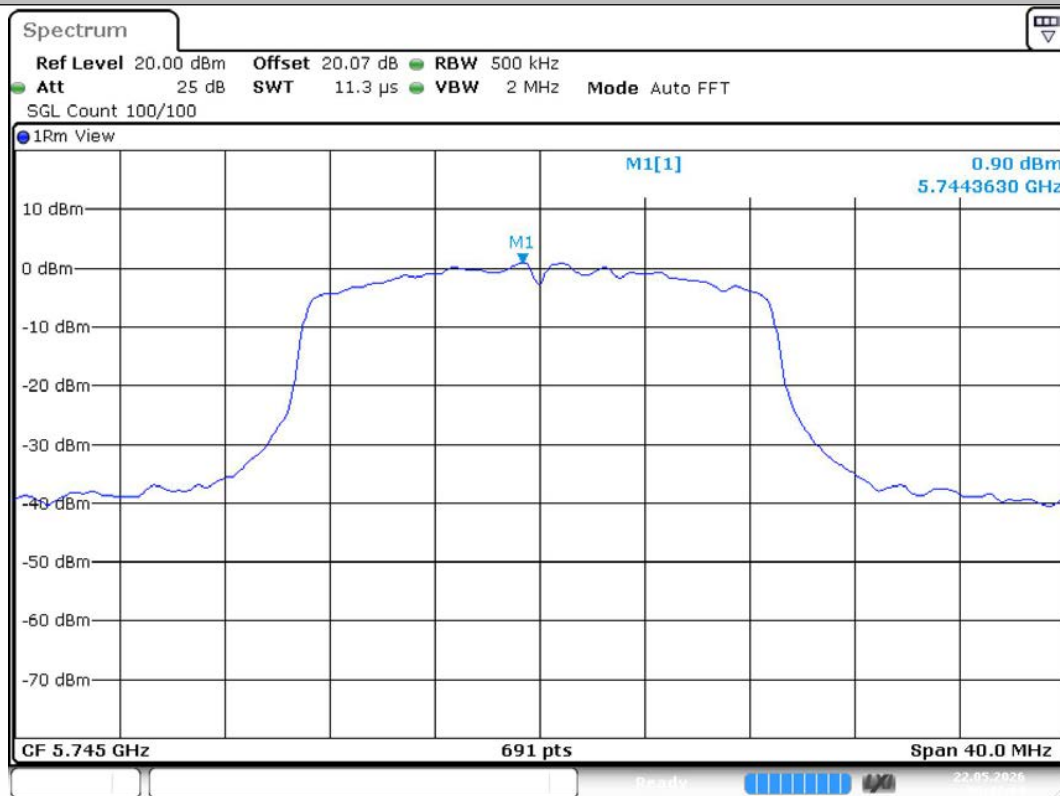
Date: 22.MAY.2026 09:41:47

## 11N20SISO-Ant1-5200-PASS



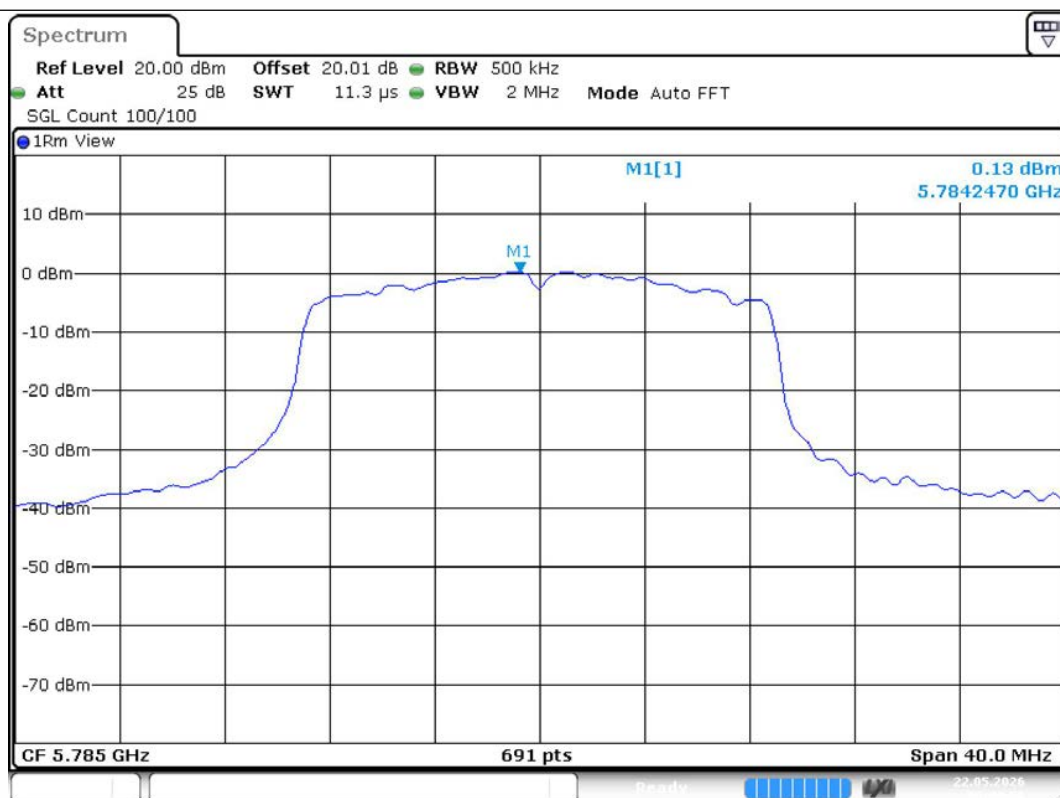
Date: 22.MAY.2026 09:43:08

## 11N20SISO-Ant1-5240-PASS



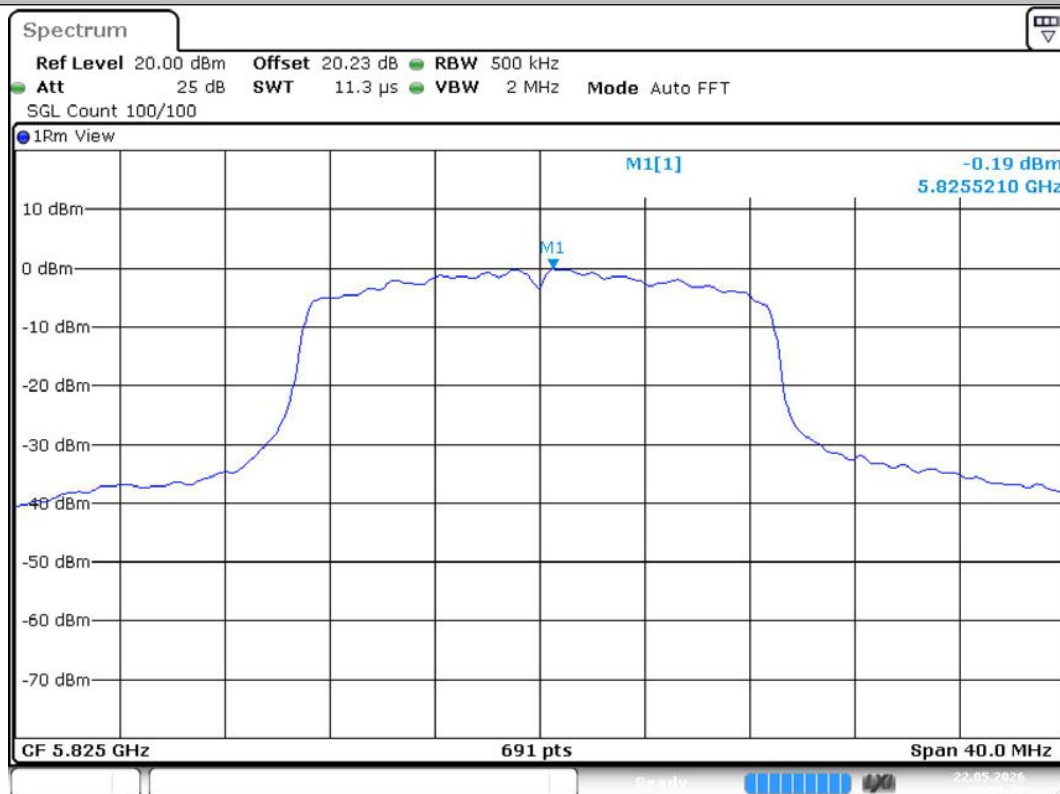
Date: 22.MAY.2026 09:47:04

## 11N20SISO-Ant1-5745-PASS



Date: 22.MAY.2026 09:49:58

## 11N20SISO-Ant1-5785-PASS



Date: 22.MAY.2026 09:53:27

## 11N20SISO-Ant1-5825-PASS