

## FCC CERTIFICATION TEST REPORT

Report No.: DDT-B23101115-2E02

|                      |   |                                                                                                               |
|----------------------|---|---------------------------------------------------------------------------------------------------------------|
| Applicant            | : | Ruijie Networks Co., Ltd.                                                                                     |
| Address              | : | Building 19, Juyuanzhou Industrial Park, No. 618<br>Jinshan Road, Cangshan District, Fuzhou, Fujian,<br>China |
| Equipment under Test | : | Wireless Route                                                                                                |
| Model No.            | : | RG-EG105GW-X                                                                                                  |
| Trade Mark           | : | Reyee                                                                                                         |
| FCC ID               | : | 2AX5J-EG105GWX                                                                                                |
| Manufacturer         | : | Ruijie Networks Co., Ltd.                                                                                     |
| Address              | : | Building 19, Juyuanzhou Industrial Park, No. 618<br>Jinshan Road, Cangshan District, Fuzhou, Fujian,<br>China |

**Issued By:** Tianjin Dongdian Testing Service Co., Ltd.

**Address:** Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park  
Development Area, Tianjin, China

Tel: +86-22-58038033, E-mail: [ddt@dgddt.com](mailto:ddt@dgddt.com), <http://www.ddttest.com>



# REPORT

## Table of Contents

|                                                          |     |
|----------------------------------------------------------|-----|
| Test report declares.....                                | 4   |
| 1. Summary of test results .....                         | 6   |
| 2. General Test Information.....                         | 7   |
| 2.1. Description of EUT .....                            | 7   |
| 2.2. Accessories of EUT .....                            | 9   |
| 2.3. Assistant equipment used for test.....              | 9   |
| 2.4. Block diagram of EUT configuration for test.....    | 9   |
| 2.5. Deviations of test standard.....                    | 11  |
| 2.6. Test environment conditions .....                   | 11  |
| 2.7. Test laboratory .....                               | 11  |
| 2.8. Measurement uncertainty.....                        | 12  |
| 3. Equipment Used During Test.....                       | 13  |
| 4. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth ..... | 14  |
| 4.1. Block diagram of test setup.....                    | 14  |
| 4.2. Limits .....                                        | 14  |
| 4.3. Test procedure .....                                | 14  |
| 4.4. Test result .....                                   | 15  |
| 4.5. Original test data.....                             | 26  |
| 5. Duty Cycle.....                                       | 288 |
| 5.1. Block diagram of test setup.....                    | 288 |
| 5.2. Limit .....                                         | 288 |
| 5.3. Test procedure .....                                | 288 |
| 5.4. Test result .....                                   | 289 |
| 5.5. Test graphs.....                                    | 294 |
| 6. Maximum Conducted Output Power.....                   | 425 |
| 6.1. Block diagram of test setup.....                    | 425 |
| 6.2. Limits .....                                        | 425 |
| 6.3. Test procedure .....                                | 425 |
| 6.4. Test result .....                                   | 426 |
| 6.5. Original test data.....                             | 437 |
| 7. Power Spectral Density .....                          | 568 |
| 7.1. Block diagram of test setup.....                    | 568 |
| 7.2. Limits .....                                        | 568 |
| 7.3. Test procedure .....                                | 568 |
| 7.4. Test result .....                                   | 569 |
| 7.5. Original test data.....                             | 580 |
| 8. Frequency Stability Measurement.....                  | 711 |

|       |                                                      |     |
|-------|------------------------------------------------------|-----|
| 8.1.  | Limit of Frequency Stability .....                   | 711 |
| 8.2.  | Measuring Instruments .....                          | 711 |
| 8.3.  | Test procedures .....                                | 711 |
| 8.4.  | Test setup .....                                     | 711 |
| 8.5.  | Test result .....                                    | 712 |
| 9.    | Emissions in restricted frequency bands.....         | 754 |
| 9.1.  | Block diagram of test setup.....                     | 754 |
| 9.2.  | Limit .....                                          | 755 |
| 9.3.  | Test procedure .....                                 | 756 |
| 9.4.  | Test result .....                                    | 758 |
| 10.   | Band Edge Compliance .....                           | 812 |
| 10.1. | Block diagram of test setup.....                     | 812 |
| 10.2. | Limit .....                                          | 812 |
| 10.3. | Test procedure .....                                 | 813 |
| 10.4. | Test result .....                                    | 813 |
| 11.   | Power Line Conducted Emission .....                  | 926 |
| 11.1. | Block diagram of test setup.....                     | 926 |
| 11.2. | Power Line Conducted Emission Limits (Class B) ..... | 926 |
| 11.3. | Test Procedure.....                                  | 926 |
| 11.4. | Test Result.....                                     | 927 |
| 12.   | Antenna Requirements .....                           | 929 |
| 12.1. | Limit .....                                          | 929 |
| 12.2. | Result.....                                          | 929 |
| 13.   | Test setup photograph .....                          | 930 |
| 14.   | Photos of the EUT .....                              | 933 |

## Test Report Declare

|                             |   |                                                                                                         |
|-----------------------------|---|---------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>            | : | Ruijie Networks Co., Ltd.                                                                               |
| <b>Address</b>              | : | Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District, Fuzhou, Fujian, China |
| <b>Equipment under Test</b> | : | Wireless Route                                                                                          |
| <b>Model No</b>             | : | RG-EG105GW-X                                                                                            |
| <b>Trade Mark</b>           | : | Reyee                                                                                                   |
| <b>Manufacturer</b>         | : | Ruijie Networks Co., Ltd.                                                                               |
| <b>Address</b>              | : | Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District, Fuzhou, Fujian, China |

**Test Standard Used:** FCC Rules and Regulations Part 15 Subpart E

**Test procedure used:** ANSI C63.10:2020, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01

**We Declare:**

The equipment described above is tested by Tianjin Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Tianjin Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.**

|                         |                    |                      |                               |
|-------------------------|--------------------|----------------------|-------------------------------|
| <b>Report No:</b>       | DDT-B23101115-2E02 |                      |                               |
| <b>Date of Receipt:</b> | Oct. 18, 2023      | <b>Date of Test:</b> | Oct. 18, 2023 ~ Dec. 06, 2023 |

**Prepared By:**

Sunny Zhang

**Sunny Zhang/Engineer**

**Approved By:**

Aaron Zhang

**Aaron Zhang/Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Tianjin Dongdian Testing Service Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

## Revision History

| Rev. | Revisions     | Issue Date    | Revised By |
|------|---------------|---------------|------------|
| ---  | Initial issue | Dec. 06, 2023 |            |
|      |               |               |            |

## 1. Summary of test results

The EUT have been tested according to the applicable standards as referenced below.

| Description of Test Item                                                                           | Standard                                   | Verdict           |
|----------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------|
| 6/26db Bandwidth and 99% Bandwidth                                                                 | FCC 15.407 (e)                             | Pass              |
| Maximum Conducted Output Power                                                                     | FCC 15.407 (a)                             | Pass              |
| Power Spectral Density                                                                             | FCC 15.407 (a)                             | Pass              |
| Frequency Stability Measurement                                                                    | FCC 15.407 (g)                             | Pass              |
| Emissions in restricted frequency bands                                                            | FCC 15.407 (a)<br>FCC 15.209<br>FCC 15.205 | Pass              |
| Band Edge Compliance                                                                               | FCC 15.407 (a)<br>FCC 15.209<br>FCC 15.205 | Pass              |
| Power Line Conducted Emission                                                                      | FCC 15.207                                 | Pass              |
| Antenna requirement                                                                                | FCC 15.203                                 | Pass              |
| Dynamic Frequency Selection                                                                        | FCC 15.407 (h)                             | Pass <sup>1</sup> |
| <p>"N/A" means Not Applicable.<br/>The part of "PASS<sup>1</sup>" please reference DFS report.</p> |                                            |                   |

## 2. General Test Information

### 2.1. Description of EUT

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EUT* Name                | : Wireless Route                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Model Number             | : RG-EG105GW-X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EUT function description | : Please reference user manual of this device                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Power supply             | : AC 120V/60Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Radio Technology         | : IEEE 802.11a/n/ac/ax                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operation frequency      | : IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz<br>IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz<br>IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5795MHz<br>IEEE 802.11ac VHT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz<br>IEEE 802.11ac VHT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5795MHz<br>IEEE 802.11ac VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5775MHz<br>IEEE 802.11ax HE20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz<br>IEEE 802.11ax HE40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5795MHz<br>IEEE 802.11ax HE80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5775MHz<br>IEEE 802.11ax HE160: 5250MHz, 5570MHz |
| Modulation               | : IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11ax: OFDM, OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Transmitter rate         | : IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br>IEEE 802.11n: MCS0~MCS15<br>IEEE 802.11ac: MCS0~MCS9<br>IEEE 802.11ax: MCS0~MCS11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Antenna Type             | : PCB antenna:<br>U-NII-1: Antenna1:3.41dBi, Antenna2: 5.61dBi, Antenna3: 4.78dBi<br>U-NII-2A: Antenna1:2.91dBi, Antenna2: 5.41dBi, Antenna3: 5.05dBi<br>U-NII-2C: Antenna1:3.31dBi, Antenna2: 5.68dBi, Antenna3: 5.39dBi<br>U-NII-III: Antenna1:3.39dBi, Antenna2: 6.17dBi, Antenna3: 4.32dBi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| TPC Function             | : <input checked="" type="checkbox"/> Support <input type="checkbox"/> Not Support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| SISO Mode                | : <input checked="" type="checkbox"/> 11a <input checked="" type="checkbox"/> 11n <input checked="" type="checkbox"/> 11ac <input checked="" type="checkbox"/> 11ax                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| MIMO Mode                | : <input type="checkbox"/> 11a <input checked="" type="checkbox"/> 11n <input checked="" type="checkbox"/> 11ac <input checked="" type="checkbox"/> 11ax                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Note 1: EUT is the ab. of equipment under test.

Note 2: EUT Supports DFS detection.

Note 3: This EUT supports 2\*2 MIMO in IEEE 802.11n/ac/ax mode, and antenna gains are not equal, Directional gain was calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain.

So Directional gain = GANT+ Array Gain, where Array Gain is as follows:



For power measurements, Array Gain = 0 dB ( $N_{ANT} \leq 4$ ), For power spectral density measurements,  $N_{ANT} = 2$ ,  $NSS = 1$ . So Directional gain =  $G_{ANT} + \text{Array Gain} = 10 \log (N_{ANT}/NSS)$  dB

| Ant1+Ant2                  | Directional gain |          |          |           |
|----------------------------|------------------|----------|----------|-----------|
|                            | U-NII-1          | U-NII-2A | U-NII-2C | U-NII-III |
| For power                  | 5.61             | 5.41     | 5.68     | 6.17      |
| For power spectral density | 8.62             | 8.42     | 8.69     | 9.18      |

| Ant2+Ant3                  | Directional gain |          |          |           |
|----------------------------|------------------|----------|----------|-----------|
|                            | U-NII-1          | U-NII-2A | U-NII-2C | U-NII-III |
| For power                  | 5.61             | 5.41     | 5.68     | 6.17      |
| For power spectral density | 8.62             | 8.42     | 8.69     | 9.18      |

| Ant1+Ant3                  | Directional gain |          |          |           |
|----------------------------|------------------|----------|----------|-----------|
|                            | U-NII-1          | U-NII-2A | U-NII-2C | U-NII-III |
| For power                  | 4.78             | 5.05     | 5.39     | 4.32      |
| For power spectral density | 7.79             | 8.06     | 8.4      | 7.33      |

| Channel information                                                                  |      |                                                                      |      |                                               |      |                       |      |
|--------------------------------------------------------------------------------------|------|----------------------------------------------------------------------|------|-----------------------------------------------|------|-----------------------|------|
| IEEE 802.11a<br>IEEE 802.11n (HT20)<br>IEEE 802.11ac (VHT20)<br>IEEE 802.11ax (HE20) |      | IEEE 802.11n (HT40)<br>IEEE 802.11ac (VHT40)<br>IEEE 802.11ax (HE40) |      | IEEE 802.11ac (VHT80)<br>IEEE 802.11ax (HE80) |      | IEEE 802.11ax (HE160) |      |
| U-NII-1                                                                              |      |                                                                      |      |                                               |      |                       |      |
| 36                                                                                   | 5180 | 38                                                                   | 5190 | 42                                            | 5210 | 50                    | 5250 |
| 40                                                                                   | 5200 | 46                                                                   | 5230 | /                                             | /    | /                     | /    |
| 44                                                                                   | 5220 | /                                                                    | /    | /                                             | /    | /                     | /    |
| 48                                                                                   | 5240 | /                                                                    | /    | /                                             | /    | /                     | /    |
| U-NII-2A                                                                             |      |                                                                      |      |                                               |      |                       |      |
| 52                                                                                   | 5260 | 54                                                                   | 5270 | 58                                            | 5290 | 50                    | 5250 |
| 56                                                                                   | 5280 | 62                                                                   | 5310 |                                               | /    | /                     | /    |
| 60                                                                                   | 5300 | /                                                                    | /    | /                                             | /    | /                     | /    |
| 64                                                                                   | 5320 | /                                                                    | /    | /                                             | /    | /                     | /    |
| U-NII-2C                                                                             |      |                                                                      |      |                                               |      |                       |      |
| 100                                                                                  | 5500 | 102                                                                  | 5510 | 106                                           | 5530 | 114                   | 5570 |
| 104                                                                                  | 5520 | 110                                                                  | 5550 | 122                                           | 5610 | /                     | /    |
| 108                                                                                  | 5540 | 118                                                                  | 5590 | /                                             | /    | /                     | /    |
| 112                                                                                  | 5560 | 126                                                                  | 5630 | /                                             | /    | /                     | /    |
| 116                                                                                  | 5580 | 134                                                                  | 5670 | /                                             | /    | /                     | /    |
| 120                                                                                  | 5600 | /                                                                    | /    |                                               |      |                       |      |
| 124                                                                                  | 5620 | /                                                                    | /    |                                               |      |                       |      |
| 128                                                                                  | 5640 | /                                                                    | /    |                                               |      |                       |      |
| 132                                                                                  | 5660 | /                                                                    | /    | /                                             | /    | /                     | /    |
| 136                                                                                  | 5680 | /                                                                    | /    | /                                             | /    | /                     | /    |
| 140                                                                                  | 5700 | /                                                                    | /    | /                                             | /    | /                     | /    |
| U-NII-3                                                                              |      |                                                                      |      |                                               |      |                       |      |
| 149                                                                                  | 5745 | 151                                                                  | 5755 | 155                                           | 5725 | /                     | /    |



|     |      |     |      |   |   |   |   |
|-----|------|-----|------|---|---|---|---|
| 153 | 5765 | 159 | 5795 | / | / | / | / |
| 157 | 5785 | /   | /    | / | / | / | / |
| 161 | 5805 | /   | /    | / | / | / | / |
| 165 | 5825 | /   | /    | / | / | / | / |

## 2.2. Accessories of EUT

| Description of Accessories | Manufacturer | Model number | Description | Remark |
|----------------------------|--------------|--------------|-------------|--------|
| N/A                        | N/A          | N/A          | N/A         | N/A    |

## 2.3. Assistant equipment used for test

| Assistant equipment | Manufacturer            | Model number | EMC Compliance | SN       |
|---------------------|-------------------------|--------------|----------------|----------|
| Notebook            | Lenovo Beijing Co. Ltd. | ThinkPad     | FCC/CE         | TP00067A |

## 2.4. Block diagram of EUT configuration for test

AC Mains

EUT

Run a special test software “QATool\_Dbg.exe” provided by manufacturer to control EUT work in Continuous Tx mode, and select test channel, wireless mode and data rate.

| Tested mode, channel, and data rate information |                  |      |      |                                |               |                 |
|-------------------------------------------------|------------------|------|------|--------------------------------|---------------|-----------------|
| Mode                                            | Setting Tx Power |      |      | Data Rate (Mbps)<br>(See Note) | Channel       | Frequency (MHz) |
|                                                 | Ant1             | Ant2 | Ant3 |                                |               |                 |
| IEEE 802.11a                                    | 18               | 18   | 18   | 6                              | Low: CH36     | 5180            |
|                                                 | 18               | 18   | 18   | 6                              | Middle: CH40  | 5200            |
|                                                 | 18               | 18   | 18   | 6                              | High: CH48    | 5240            |
|                                                 | 18               | 18   | 18   | 6                              | Low: CH52     | 5260            |
|                                                 | 18               | 18   | 18   | 6                              | Middle: CH56  | 5280            |
|                                                 | 18               | 18   | 18   | 6                              | High: CH64    | 5320            |
|                                                 | 18               | 18   | 18   | 6                              | Low: CH100    | 5500            |
|                                                 | 18               | 18   | 18   | 6                              | Middle: CH116 | 5580            |
|                                                 | 17               | 17   | 17   | 6                              | High: CH140   | 5700            |
|                                                 | 17               | 17   | 17   | 6                              | Low: CH149    | 5745            |
|                                                 | 17               | 17   | 17   | 6                              | Middle: CH157 | 5785            |
|                                                 | 17               | 17   | 17   | 6                              | High: CH165   | 5825            |
| IEEE 802.11n HT20                               | 18               | 18   | 18   | MCS 8                          | Low: CH36     | 5180            |
|                                                 | 18               | 18   | 18   | MCS 8                          | Middle: CH40  | 5200            |

|                    |      |      |      |       |               |      |
|--------------------|------|------|------|-------|---------------|------|
|                    | 18   | 18   | 18   | MCS 8 | High: CH48    | 5240 |
|                    | 14   | 14   | 14   | MCS 8 | Low: CH52     | 5260 |
|                    | 14   | 14   | 14   | MCS 8 | Middle: CH56  | 5280 |
|                    | 14   | 14   | 14   | MCS 8 | High: CH64    | 5320 |
|                    | 14   | 14   | 14   | MCS 8 | Low: CH100    | 5500 |
|                    | 12   | 12   | 12   | MCS 8 | Middle: CH116 | 5580 |
|                    | 14   | 14   | 14   | MCS 8 | High: CH140   | 5700 |
|                    | 17   | 17   | 17   | MCS 8 | Low: CH149    | 5745 |
|                    | 17   | 17   | 17   | MCS 8 | Middle: CH157 | 5785 |
|                    | 17   | 17   | 17   | MCS 8 | High: CH165   | 5825 |
| IEEE 802.11n HT40  | 17   | 17   | 17   | MCS 8 | Low: CH38     | 5190 |
|                    | 17   | 17   | 17   | MCS 8 | High: CH46    | 5230 |
|                    | 15   | 15   | 15   | MCS 8 | Low: CH54     | 5270 |
|                    | 16   | 16   | 16   | MCS 8 | High: CH62    | 5310 |
|                    | 16   | 16   | 16   | MCS 8 | Low: CH102    | 5510 |
|                    | 16   | 16   | 16   | MCS 8 | Middle: CH110 | 5550 |
|                    | 16   | 16   | 16   | MCS 8 | High: CH134   | 5670 |
|                    | 16   | 16   | 16   | MCS 8 | Low: CH151    | 5755 |
|                    | 16   | 16   | 16   | MCS 8 | High: CH159   | 5795 |
| IEEE 802.11ac HT20 | 18   | 18   | 18   | MCS 0 | Low: CH36     | 5180 |
|                    | 18   | 18   | 18   | MCS 0 | Middle: CH40  | 5200 |
|                    | 18   | 18   | 18   | MCS 0 | High: CH48    | 5240 |
|                    | 14   | 14   | 14   | MCS 0 | Low: CH52     | 5260 |
|                    | 14   | 14   | 14   | MCS 0 | Middle: CH56  | 5280 |
|                    | 14   | 14   | 14   | MCS 0 | High: CH64    | 5320 |
|                    | 13.5 | 13.5 | 13.5 | MCS 0 | Low: CH100    | 5500 |
|                    | 12.5 | 12.5 | 12.5 | MCS 0 | Middle: CH116 | 5580 |
|                    | 14   | 14   | 14   | MCS 0 | High: CH140   | 5700 |
|                    | 17   | 17   | 17   | MCS 0 | Low: CH149    | 5745 |
|                    | 17   | 17   | 17   | MCS 0 | Middle: CH157 | 5785 |
|                    | 17   | 17   | 17   | MCS 0 | High: CH165   | 5825 |
| IEEE 802.11ac HT40 | 16   | 16   | 16   | MCS 0 | Low: CH38     | 5190 |
|                    | 16   | 16   | 16   | MCS 0 | High: CH46    | 5230 |
|                    | 11   | 11   | 11   | MCS 0 | Low: CH54     | 5270 |
|                    | 11   | 11   | 11   | MCS 0 | High: CH62    | 5310 |
|                    | 14   | 14   | 14   | MCS 0 | Low: CH102    | 5510 |
|                    | 14   | 14   | 14   | MCS 0 | Middle: CH110 | 5550 |
|                    | 12   | 12   | 12   | MCS 0 | High: CH134   | 5670 |
|                    | 17   | 17   | 17   | MCS 0 | Low: CH151    | 5755 |
|                    | 17   | 17   | 17   | MCS 0 | High: CH159   | 5795 |
| IEEE 802.11ac HT80 | 11   | 11   | 11   | MCS 0 | CH42          | 5210 |
|                    | 11   | 11   | 11   | MCS 0 | CH58          | 5290 |
|                    | 14   | 14   | 14   | MCS 0 | Low: CH106    | 5530 |
|                    | 14   | 14   | 14   | MCS 0 | High: CH122   | 5610 |
|                    | 17   | 17   | 17   | MCS 0 | CH155         | 5775 |
| IEEE 802.11ax HT20 | 18   | 18   | 18   | MCS 0 | Low: CH36     | 5180 |
|                    | 18   | 18   | 18   | MCS 0 | Middle: CH40  | 5200 |
|                    | 18   | 18   | 18   | MCS 0 | High: CH48    | 5240 |
|                    | 14   | 14   | 14   | MCS 0 | Low: CH52     | 5260 |
|                    | 13   | 13   | 13   | MCS 0 | Middle: CH56  | 5280 |
|                    | 13.5 | 13.5 | 13.5 | MCS 0 | High: CH64    | 5320 |

|                     |      |      |      |       |               |      |
|---------------------|------|------|------|-------|---------------|------|
|                     | 13   | 13   | 13   | MCS 0 | Low: CH100    | 5500 |
|                     | 12.5 | 12.5 | 12.5 | MCS 0 | Middle: CH116 | 5580 |
|                     | 13   | 13   | 13   | MCS 0 | High: CH140   | 5700 |
|                     | 17   | 17   | 17   | MCS 0 | Low: CH149    | 5745 |
|                     | 17   | 17   | 17   | MCS 0 | Middle: CH157 | 5785 |
|                     | 17   | 17   | 17   | MCS 0 | High: CH165   | 5825 |
| IEEE 802.11ax HT40  | 16   | 16   | 16   | MCS 0 | Low: CH38     | 5190 |
|                     | 16   | 16   | 16   | MCS 0 | High: CH46    | 5230 |
|                     | 14   | 14   | 14   | MCS 0 | Low: CH54     | 5270 |
|                     | 14   | 14   | 14   | MCS 0 | High: CH62    | 5310 |
|                     | 16   | 16   | 16   | MCS 0 | Low: CH102    | 5510 |
|                     | 16   | 16   | 16   | MCS 0 | Middle: CH110 | 5550 |
|                     | 14   | 14   | 14   | MCS 0 | High: CH134   | 5670 |
|                     | 17   | 17   | 17   | MCS 0 | Low: CH151    | 5755 |
| IEEE 802.11ax HT80  | 17   | 17   | 17   | MCS 0 | High: CH159   | 5795 |
|                     | 14   | 14   | 14   | MCS 0 | CH42          | 5210 |
|                     | 11   | 11   | 11   | MCS 0 | CH58          | 5290 |
|                     | 16   | 16   | 16   | MCS 0 | Low: CH106    | 5530 |
|                     | 16   | 16   | 16   | MCS 0 | High: CH122   | 5610 |
| IEEE 802.11ax HT160 | 16   | 16   | 16   | MCS 0 | CH155         | 5775 |
|                     | 10   | 10   | 10   | MCS 0 | Low: CH50     | 5250 |
|                     | 10   | 10   | 10   | MCS 0 | High: CH114   | 5570 |

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

## 2.5. Deviations of test standard

No Deviation.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

|                    |            |
|--------------------|------------|
| Temperature range: | 21-28℃     |
| Humidity range:    | 20-75%     |
| Pressure range:    | 86-106 kPa |

## 2.7. Test laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com)

**NVLAP** (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

**CNAS** (China National Accreditation Service for Conformity Assessment) CODE: L13402

**FCC** Designation Number: CN5004; FCC Test Firm Registration Number: 368676

ISED (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

VCCI Facility Registration Number: C-20089, T-20093, R-20125, G-20122

**2.8. Measurement uncertainty**

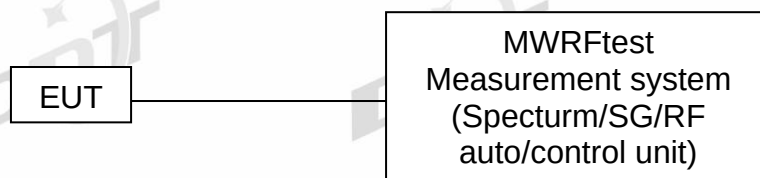
| Test Item                                                                                                                                     | Uncertainty                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth                                                                                                                                     | 0.14%                                                                                                                                                                  |
| Peak Output Power (Conducted) (Spectrum Analyzer)                                                                                             | 0.12 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>0.32 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ )                                                         |
| Peak Output Power (Conducted) (Power Sensor)                                                                                                  | 0.51 dB                                                                                                                                                                |
| Power Spectral Density                                                                                                                        | 0.12 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>0.32 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ )                                                         |
| Frequencies Stability                                                                                                                         | $6.7 \times 10^{-8}$ (Antenna couple method)<br>$3.4 \times 10^{-8}$ (Conducted method)                                                                                |
| Conducted Spurious Emissions                                                                                                                  | 0.12 dB ( $10 \text{ MHz} \leq f < 3.6 \text{ GHz}$ );<br>0.32 dB ( $3.6 \text{ GHz} \leq f < 8 \text{ GHz}$ );<br>0.52 dB ( $8 \text{ GHz} \leq f < 22 \text{ GHz}$ ) |
| Uncertainty for Radio Frequency (RBW < 20 kHz)                                                                                                | $3 \times 10^{-7}$                                                                                                                                                     |
| Temperature                                                                                                                                   | $\pm 2^{\circ}\text{C}$                                                                                                                                                |
| Humidity                                                                                                                                      | $\pm 1\%$                                                                                                                                                              |
| Uncertainty for Radiation Emission Test<br>(30 MHz - 1 GHz)                                                                                   | 2.72 dB (Antenna Polarize: V)<br>2.72 dB (Antenna Polarize: H)                                                                                                         |
| Uncertainty for Radiation Emission Test<br>(1 GHz - 40 GHz)                                                                                   | 2.74 dB (1 - 6 GHz)<br>2.72 dB (6 GHz - 18 GHz)<br>3.54 dB (18 GHz - 26 GHz)<br>4.30 dB (26 GHz - 40 GHz)                                                              |
| Uncertainty for Power Line Conduction Emission Test                                                                                           | 3.40 dB (150 kHz - 30 MHz)                                                                                                                                             |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. |                                                                                                                                                                        |

### 3. Equipment Used During Test

| Equipment                                  | Manufacturer | Model No.  | Serial No. | Last Cal.  | Cal. Interval |
|--------------------------------------------|--------------|------------|------------|------------|---------------|
| <b>RF Connected Test (MWRFTest system)</b> |              |            |            |            |               |
| Microwave Signal Generator                 | R&S          | SMF100A    | 101396     | 2023/05/29 | 1 Year        |
| MXG Vector Signal Generator                | Keysight     | N5182A     | MY50143288 | 2023/03/07 | 1 Year        |
| EMI Test Receiver                          | R&S          | ESU26      | 100243     | 2023/03/03 | 1 Year        |
| Signal Analyzer                            | R&S          | FSV        | 101730     | 2023/04/04 | 1 Year        |
| Wideband Radio Communication Tester        | R&S          | CMW500     | 158800     | 2023/06/10 | 1 Year        |
| Power Sensor                               | KEYSIGHT     | U2021XA    | MY59150007 | 2023/03/22 | 1 Year        |
| DC Power Supply                            | inSTEK       | PSP-2010   | EN122317   | 2023/02/12 | 1 Year        |
| Test Software                              | MWRFTest     | MTS8310    | V03        | N/A        | N/A           |
| <b>Radiated Emission -10m EMI Chamber</b>  |              |            |            |            |               |
| Broadband Horn Antenna                     | TESEQ        | BHA 9118   | 31754      | 2023/10/11 | 1 Year        |
| Broad Band Horn Antenna                    | Schwarzbeck  | BBHA 9170  | 790        | 2023/05/06 | 1 Year        |
| Active Loop Antenna                        | R&S          | HFH2-Z2    | 100269     | 2022/07/11 | 2 Year        |
| Low noise amplifier                        | MITEQ        | TPA0118-36 | 0914       | 2023/02/16 | 1 Year        |
| EMI Test Receiver                          | R&S          | ESCI       | 101024     | 2023/02/15 | 1 Year        |
| EMI Test Receiver                          | R&S          | ESCI       | 101030     | 2023/02/15 | 1 Year        |
| EMI Test Receiver                          | R&S          | ESU26      | 100244     | 2023/03/03 | 1 Year        |
| Bilog Antenna                              | TESEQ        | CBL6112D   | 29068      | 2022/10/10 | 2 Year        |
| Bilog Antenna                              | TESEQ        | CBL6112D   | 29069      | 2022/10/10 | 2 Year        |
| Amplifier                                  | Sonoma       | 310N       | 300913     | 2023/02/15 | 1 Year        |
| Amplifier                                  | Sonoma       | 310N       | 300914     | 2023/02/15 | 1 Year        |
| Ant Mast                                   | Innco        | MA4000     | N/A        | N/A        | N/A           |
| Ant Mast                                   | Innco        | MA4000     | N/A        | N/A        | N/A           |
| Mast Controller                            | Innco        | CO2000     | N/A        | N/A        | N/A           |
| Mast Controller                            | Innco        | CO2000     | N/A        | N/A        | N/A           |
| RF Selector 4CH                            | TOYO         | NS4904N    | Selector1  | N/A        | N/A           |
| RF Selector 4CH                            | TOYO         | NS4904N    | Selector2  | N/A        | N/A           |
| Test software                              | TOYO         | EP5/RSE    | Ver 1.9.1  | N/A        | N/A           |
| Test software                              | Audix        | E3         | V 6.11111b | N/A        | N/A           |
| <b>Power Line Conducted Emissions Test</b> |              |            |            |            |               |
| Test Receiver                              | R&S          | ESCI       | 101397     | 2023/02/15 | 1 Year        |
| LISN                                       | R&S          | ENV216     | 101122     | 2023/02/15 | 1 Year        |
| Test software                              | TOYO         | EP5/CE     | V 5.4.40   | N/A        | N/A           |

## 4. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

### 4.1. Block diagram of test setup



### 4.2. Limits

| FCC Part15, Subpart E |                                |                       |
|-----------------------|--------------------------------|-----------------------|
| Test Item             | Limit                          | Frequency Range (MHz) |
| Bandwidth             | 26 dB Bandwidth                | 5150 - 5250           |
|                       | 26 dB Bandwidth                | 5250 - 5350           |
|                       | 26 dB Bandwidth                | 5470 - 5725           |
|                       | Minimum 500 kHz 6 dB Bandwidth | 5725 - 5850           |

### 4.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

|                  |                                                                                             |
|------------------|---------------------------------------------------------------------------------------------|
| Center Frequency | The center frequency of the channel under test                                              |
| Detector         | Peak                                                                                        |
| RBW              | For 6 dB Bandwidth: RBW=100 kHz<br>For 26 dB Bandwidth: 1% to 5% of the emission bandwidth. |
| VBW              | For 6 dB Bandwidth: VBW=300 kHz<br>For 26 dB Bandwidth: >3 RBW                              |
| Trace            | Max hold                                                                                    |
| Sweep            | Auto couple                                                                                 |

(2) 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 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

#### 4.4. Test result

99% OBW

| Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|------|-----------------|---------|---------------|
| a    | 5180            | Ant1    | 16.561        |
| a    | 5200            | Ant1    | 16.657        |
| a    | 5240            | Ant1    | 16.585        |
| a    | 5260            | Ant1    | 16.357        |
| a    | 5280            | Ant1    | 16.366        |
| a    | 5320            | Ant1    | 16.447        |
| a    | 5500            | Ant1    | 16.447        |
| a    | 5580            | Ant1    | 16.369        |
| a    | 5700            | Ant1    | 16.456        |
| a    | 5745            | Ant1    | 16.441        |
| a    | 5785            | Ant1    | 16.393        |
| a    | 5825            | Ant1    | 18.838        |
| a    | 5180            | Ant2    | 16.543        |
| a    | 5200            | Ant2    | 16.483        |
| a    | 5240            | Ant2    | 16.405        |
| a    | 5260            | Ant2    | 16.372        |
| a    | 5280            | Ant2    | 16.354        |
| a    | 5320            | Ant2    | 16.438        |
| a    | 5500            | Ant2    | 16.456        |
| a    | 5580            | Ant2    | 16.378        |
| a    | 5700            | Ant2    | 16.447        |
| a    | 5745            | Ant2    | 16.435        |
| a    | 5785            | Ant2    | 16.375        |
| a    | 5825            | Ant2    | 16.441        |
| a    | 5180            | Ant3    | 16.483        |
| a    | 5200            | Ant3    | 16.459        |
| a    | 5240            | Ant3    | 16.462        |
| a    | 5260            | Ant3    | 16.471        |
| a    | 5280            | Ant3    | 16.459        |
| a    | 5320            | Ant3    | 16.477        |
| a    | 5500            | Ant3    | 16.480        |
| a    | 5580            | Ant3    | 16.474        |
| a    | 5700            | Ant3    | 16.462        |
| a    | 5745            | Ant3    | 16.477        |
| a    | 5785            | Ant3    | 16.474        |
| a    | 5825            | Ant3    | 16.456        |
| n20  | 5180            | Ant1    | 17.602        |
| n20  | 5200            | Ant1    | 17.632        |
| n20  | 5240            | Ant1    | 17.542        |
| n20  | 5260            | Ant1    | 17.533        |
| n20  | 5280            | Ant1    | 17.536        |
| n20  | 5320            | Ant1    | 17.599        |
| n20  | 5500            | Ant1    | 17.587        |
| n20  | 5580            | Ant1    | 17.536        |
| n20  | 5700            | Ant1    | 17.608        |
| n20  | 5745            | Ant1    | 17.599        |



|     |      |      |        |
|-----|------|------|--------|
| n20 | 5785 | Ant1 | 17.548 |
| n20 | 5825 | Ant1 | 17.584 |
| n20 | 5180 | Ant2 | 17.653 |
| n20 | 5200 | Ant2 | 17.617 |
| n20 | 5240 | Ant2 | 17.542 |
| n20 | 5260 | Ant2 | 17.557 |
| n20 | 5280 | Ant2 | 17.524 |
| n20 | 5320 | Ant2 | 17.602 |
| n20 | 5500 | Ant2 | 17.617 |
| n20 | 5580 | Ant2 | 17.530 |
| n20 | 5700 | Ant2 | 17.596 |
| n20 | 5745 | Ant2 | 17.602 |
| n20 | 5785 | Ant2 | 17.554 |
| n20 | 5825 | Ant2 | 17.617 |
| n20 | 5180 | Ant3 | 17.629 |
| n20 | 5200 | Ant3 | 17.617 |
| n20 | 5240 | Ant3 | 17.533 |
| n20 | 5260 | Ant3 | 17.542 |
| n20 | 5280 | Ant3 | 17.536 |
| n20 | 5320 | Ant3 | 17.602 |
| n20 | 5500 | Ant3 | 17.605 |
| n20 | 5580 | Ant3 | 17.530 |
| n20 | 5700 | Ant3 | 17.599 |
| n20 | 5745 | Ant3 | 17.599 |
| n20 | 5785 | Ant3 | 17.545 |
| n20 | 5825 | Ant3 | 17.620 |
| n40 | 5190 | Ant1 | 35.990 |
| n40 | 5230 | Ant1 | 35.834 |
| n40 | 5270 | Ant1 | 35.828 |
| n40 | 5310 | Ant1 | 35.978 |
| n40 | 5510 | Ant1 | 36.044 |
| n40 | 5550 | Ant1 | 35.828 |
| n40 | 5670 | Ant1 | 36.062 |
| n40 | 5755 | Ant1 | 35.894 |
| n40 | 5795 | Ant1 | 35.846 |
| n40 | 5190 | Ant2 | 36.020 |
| n40 | 5230 | Ant2 | 35.858 |
| n40 | 5270 | Ant2 | 35.810 |
| n40 | 5310 | Ant2 | 35.924 |
| n40 | 5510 | Ant2 | 35.948 |
| n40 | 5550 | Ant2 | 35.798 |
| n40 | 5670 | Ant2 | 35.966 |
| n40 | 5755 | Ant2 | 35.942 |
| n40 | 5795 | Ant2 | 35.792 |
| n40 | 5190 | Ant3 | 35.972 |
| n40 | 5230 | Ant3 | 35.828 |
| n40 | 5270 | Ant3 | 35.870 |
| n40 | 5310 | Ant3 | 35.924 |
| n40 | 5510 | Ant3 | 35.942 |
| n40 | 5550 | Ant3 | 35.792 |
| n40 | 5670 | Ant3 | 35.984 |
| n40 | 5755 | Ant3 | 35.924 |

|      |      |      |        |
|------|------|------|--------|
| n40  | 5795 | Ant3 | 35.804 |
| ac20 | 5180 | Ant1 | 17.596 |
| ac20 | 5200 | Ant1 | 17.644 |
| ac20 | 5240 | Ant1 | 17.554 |
| ac20 | 5260 | Ant1 | 17.527 |
| ac20 | 5280 | Ant1 | 17.548 |
| ac20 | 5320 | Ant1 | 17.599 |
| ac20 | 5500 | Ant1 | 17.584 |
| ac20 | 5580 | Ant1 | 17.545 |
| ac20 | 5700 | Ant1 | 17.602 |
| ac20 | 5745 | Ant1 | 17.590 |
| ac20 | 5785 | Ant1 | 17.536 |
| ac20 | 5825 | Ant1 | 17.569 |
| ac20 | 5180 | Ant2 | 17.665 |
| ac20 | 5200 | Ant2 | 17.626 |
| ac20 | 5240 | Ant2 | 17.560 |
| ac20 | 5260 | Ant2 | 17.569 |
| ac20 | 5280 | Ant2 | 17.548 |
| ac20 | 5320 | Ant2 | 17.608 |
| ac20 | 5500 | Ant2 | 17.617 |
| ac20 | 5580 | Ant2 | 17.554 |
| ac20 | 5700 | Ant2 | 17.605 |
| ac20 | 5745 | Ant2 | 17.602 |
| ac20 | 5785 | Ant2 | 17.557 |
| ac20 | 5825 | Ant2 | 17.611 |
| ac20 | 5180 | Ant3 | 17.608 |
| ac20 | 5200 | Ant3 | 17.587 |
| ac20 | 5240 | Ant3 | 17.521 |
| ac20 | 5260 | Ant3 | 17.542 |
| ac20 | 5280 | Ant3 | 17.527 |
| ac20 | 5320 | Ant3 | 17.575 |
| ac20 | 5500 | Ant3 | 17.593 |
| ac20 | 5580 | Ant3 | 17.533 |
| ac20 | 5700 | Ant3 | 17.575 |
| ac20 | 5745 | Ant3 | 17.584 |
| ac20 | 5785 | Ant3 | 17.536 |
| ac20 | 5825 | Ant3 | 17.581 |
| ac40 | 5190 | Ant1 | 35.972 |
| ac40 | 5230 | Ant1 | 35.822 |
| ac40 | 5270 | Ant1 | 35.810 |
| ac40 | 5310 | Ant1 | 35.966 |
| ac40 | 5510 | Ant1 | 36.020 |
| ac40 | 5550 | Ant1 | 35.840 |
| ac40 | 5670 | Ant1 | 36.020 |
| ac40 | 5755 | Ant1 | 35.912 |
| ac40 | 5795 | Ant1 | 35.900 |
| ac40 | 5190 | Ant2 | 35.996 |
| ac40 | 5230 | Ant2 | 35.876 |
| ac40 | 5270 | Ant2 | 35.864 |
| ac40 | 5310 | Ant2 | 35.948 |
| ac40 | 5510 | Ant2 | 35.918 |
| ac40 | 5550 | Ant2 | 35.720 |

|       |      |      |         |
|-------|------|------|---------|
| ac40  | 5670 | Ant2 | 35.960  |
| ac40  | 5755 | Ant2 | 35.978  |
| ac40  | 5795 | Ant2 | 35.864  |
| ac40  | 5190 | Ant3 | 35.936  |
| ac40  | 5230 | Ant3 | 35.804  |
| ac40  | 5270 | Ant3 | 35.846  |
| ac40  | 5310 | Ant3 | 35.882  |
| ac40  | 5510 | Ant3 | 35.882  |
| ac40  | 5550 | Ant3 | 35.750  |
| ac40  | 5670 | Ant3 | 35.924  |
| ac40  | 5755 | Ant3 | 35.918  |
| ac40  | 5795 | Ant3 | 35.834  |
| ac80  | 5210 | Ant1 | 74.585  |
| ac80  | 5290 | Ant1 | 74.621  |
| ac80  | 5530 | Ant1 | 74.693  |
| ac80  | 5610 | Ant1 | 74.357  |
| ac80  | 5775 | Ant1 | 74.441  |
| ac80  | 5210 | Ant2 | 74.585  |
| ac80  | 5290 | Ant2 | 74.489  |
| ac80  | 5530 | Ant2 | 74.837  |
| ac80  | 5610 | Ant2 | 74.249  |
| ac80  | 5775 | Ant2 | 74.237  |
| ac80  | 5210 | Ant3 | 74.537  |
| ac80  | 5290 | Ant3 | 74.537  |
| ac80  | 5530 | Ant3 | 74.693  |
| ac80  | 5610 | Ant3 | 74.261  |
| ac80  | 5775 | Ant3 | 74.165  |
| ax160 | 5250 | Ant1 | 154.521 |
| ax160 | 5570 | Ant1 | 154.761 |
| ax160 | 5250 | Ant2 | 154.521 |
| ax160 | 5570 | Ant2 | 154.761 |
| ax160 | 5250 | Ant3 | 154.401 |
| ax160 | 5570 | Ant3 | 154.881 |
| ax20  | 5180 | Ant1 | 18.856  |
| ax20  | 5200 | Ant1 | 18.868  |
| ax20  | 5240 | Ant1 | 18.754  |
| ax20  | 5260 | Ant1 | 18.799  |
| ax20  | 5280 | Ant1 | 18.826  |
| ax20  | 5320 | Ant1 | 18.850  |
| ax20  | 5500 | Ant1 | 18.853  |
| ax20  | 5580 | Ant1 | 18.817  |
| ax20  | 5700 | Ant1 | 18.859  |
| ax20  | 5745 | Ant1 | 18.847  |
| ax20  | 5785 | Ant1 | 18.820  |
| ax20  | 5825 | Ant1 | 18.883  |
| ax20  | 5180 | Ant2 | 18.877  |
| ax20  | 5200 | Ant2 | 18.850  |
| ax20  | 5240 | Ant2 | 18.742  |
| ax20  | 5260 | Ant2 | 18.823  |
| ax20  | 5280 | Ant2 | 18.814  |
| ax20  | 5320 | Ant2 | 18.841  |
| ax20  | 5500 | Ant2 | 18.865  |

|      |      |      |        |
|------|------|------|--------|
| ax20 | 5580 | Ant2 | 18.811 |
| ax20 | 5700 | Ant2 | 18.838 |
| ax20 | 5745 | Ant2 | 18.844 |
| ax20 | 5785 | Ant2 | 18.823 |
| ax20 | 5825 | Ant2 | 18.853 |
| ax20 | 5180 | Ant3 | 18.865 |
| ax20 | 5200 | Ant3 | 18.844 |
| ax20 | 5240 | Ant3 | 18.733 |
| ax20 | 5260 | Ant3 | 18.826 |
| ax20 | 5280 | Ant3 | 18.805 |
| ax20 | 5320 | Ant3 | 18.832 |
| ax20 | 5500 | Ant3 | 18.841 |
| ax20 | 5580 | Ant3 | 18.811 |
| ax20 | 5700 | Ant3 | 18.844 |
| ax20 | 5745 | Ant3 | 18.844 |
| ax20 | 5785 | Ant3 | 18.832 |
| ax20 | 5825 | Ant3 | 18.847 |
| ax40 | 5190 | Ant1 | 37.334 |
| ax40 | 5230 | Ant1 | 37.244 |
| ax40 | 5270 | Ant1 | 37.244 |
| ax40 | 5310 | Ant1 | 37.370 |
| ax40 | 5510 | Ant1 | 37.382 |
| ax40 | 5550 | Ant1 | 37.250 |
| ax40 | 5670 | Ant1 | 37.382 |
| ax40 | 5755 | Ant1 | 37.280 |
| ax40 | 5795 | Ant1 | 37.256 |
| ax40 | 5190 | Ant2 | 37.364 |
| ax40 | 5230 | Ant2 | 37.244 |
| ax40 | 5270 | Ant2 | 37.238 |
| ax40 | 5310 | Ant2 | 37.286 |
| ax40 | 5510 | Ant2 | 37.298 |
| ax40 | 5550 | Ant2 | 37.178 |
| ax40 | 5670 | Ant2 | 37.298 |
| ax40 | 5755 | Ant2 | 37.322 |
| ax40 | 5795 | Ant2 | 37.184 |
| ax40 | 5190 | Ant3 | 37.352 |
| ax40 | 5230 | Ant3 | 37.208 |
| ax40 | 5270 | Ant3 | 37.178 |
| ax40 | 5310 | Ant3 | 37.316 |
| ax40 | 5510 | Ant3 | 37.250 |
| ax40 | 5550 | Ant3 | 37.166 |
| ax40 | 5670 | Ant3 | 37.304 |
| ax40 | 5755 | Ant3 | 37.292 |
| ax40 | 5795 | Ant3 | 37.190 |
| ax80 | 5210 | Ant1 | 76.060 |
| ax80 | 5290 | Ant1 | 76.156 |
| ax80 | 5530 | Ant1 | 76.156 |
| ax80 | 5610 | Ant1 | 75.976 |
| ax80 | 5775 | Ant1 | 76.168 |
| ax80 | 5210 | Ant2 | 76.144 |
| ax80 | 5290 | Ant2 | 76.000 |
| ax80 | 5530 | Ant2 | 76.372 |

|      |      |      |        |
|------|------|------|--------|
| ax80 | 5610 | Ant2 | 75.832 |
| ax80 | 5775 | Ant2 | 75.772 |
| ax80 | 5210 | Ant3 | 76.132 |
| ax80 | 5290 | Ant3 | 76.108 |
| ax80 | 5530 | Ant3 | 76.336 |
| ax80 | 5610 | Ant3 | 75.904 |
| ax80 | 5775 | Ant3 | 75.652 |

## 26 dB Bandwidth

| Mode | Frequency (MHz) | Antenna | 26 dB Bandwidth (MHz) |
|------|-----------------|---------|-----------------------|
| a    | 5180            | Ant1    | 27.924                |
| a    | 5200            | Ant1    | 29.124                |
| a    | 5240            | Ant1    | 29.235                |
| a    | 5260            | Ant1    | 20.625                |
| a    | 5280            | Ant1    | 20.559                |
| a    | 5320            | Ant1    | 23.394                |
| a    | 5500            | Ant1    | 24.783                |
| a    | 5580            | Ant1    | 20.688                |
| a    | 5700            | Ant1    | 22.659                |
| a    | 5180            | Ant2    | 26.322                |
| a    | 5200            | Ant2    | 25.671                |
| a    | 5240            | Ant2    | 20.094                |
| a    | 5260            | Ant2    | 20.964                |
| a    | 5280            | Ant2    | 20.535                |
| a    | 5320            | Ant2    | 23.136                |
| a    | 5500            | Ant2    | 24.732                |
| a    | 5580            | Ant2    | 21.111                |
| a    | 5700            | Ant2    | 23.100                |
| a    | 5180            | Ant3    | 20.766                |
| a    | 5200            | Ant3    | 20.511                |
| a    | 5240            | Ant3    | 19.872                |
| a    | 5260            | Ant3    | 20.757                |
| a    | 5280            | Ant3    | 20.736                |
| a    | 5320            | Ant3    | 20.796                |
| a    | 5500            | Ant3    | 20.736                |
| a    | 5580            | Ant3    | 20.634                |
| a    | 5700            | Ant3    | 20.514                |
| n20  | 5180            | Ant1    | 25.431                |
| n20  | 5200            | Ant1    | 27.660                |
| n20  | 5240            | Ant1    | 20.370                |
| n20  | 5260            | Ant1    | 21.387                |
| n20  | 5280            | Ant1    | 21.513                |
| n20  | 5320            | Ant1    | 26.517                |
| n20  | 5500            | Ant1    | 25.119                |
| n20  | 5580            | Ant1    | 21.456                |
| n20  | 5700            | Ant1    | 24.678                |
| n20  | 5180            | Ant2    | 28.335                |
| n20  | 5200            | Ant2    | 27.201                |
| n20  | 5240            | Ant2    | 20.310                |
| n20  | 5260            | Ant2    | 21.654                |

|      |      |      |        |
|------|------|------|--------|
| n20  | 5280 | Ant2 | 21.474 |
| n20  | 5320 | Ant2 | 23.715 |
| n20  | 5500 | Ant2 | 26.319 |
| n20  | 5580 | Ant2 | 21.423 |
| n20  | 5700 | Ant2 | 22.827 |
| n20  | 5180 | Ant3 | 26.895 |
| n20  | 5200 | Ant3 | 24.438 |
| n20  | 5240 | Ant3 | 20.424 |
| n20  | 5260 | Ant3 | 21.570 |
| n20  | 5280 | Ant3 | 21.531 |
| n20  | 5320 | Ant3 | 25.272 |
| n20  | 5500 | Ant3 | 24.519 |
| n20  | 5580 | Ant3 | 21.534 |
| n20  | 5700 | Ant3 | 24.009 |
| n40  | 5190 | Ant1 | 43.092 |
| n40  | 5230 | Ant1 | 39.540 |
| n40  | 5270 | Ant1 | 39.510 |
| n40  | 5310 | Ant1 | 40.752 |
| n40  | 5510 | Ant1 | 42.750 |
| n40  | 5550 | Ant1 | 39.558 |
| n40  | 5670 | Ant1 | 43.860 |
| n40  | 5190 | Ant2 | 44.130 |
| n40  | 5230 | Ant2 | 39.546 |
| n40  | 5270 | Ant2 | 39.480 |
| n40  | 5310 | Ant2 | 41.532 |
| n40  | 5510 | Ant2 | 42.198 |
| n40  | 5550 | Ant2 | 39.420 |
| n40  | 5670 | Ant2 | 41.694 |
| n40  | 5190 | Ant3 | 42.078 |
| n40  | 5230 | Ant3 | 39.648 |
| n40  | 5270 | Ant3 | 39.888 |
| n40  | 5310 | Ant3 | 41.520 |
| n40  | 5510 | Ant3 | 43.008 |
| n40  | 5550 | Ant3 | 39.618 |
| n40  | 5670 | Ant3 | 41.310 |
| ac20 | 5180 | Ant1 | 25.608 |
| ac20 | 5200 | Ant1 | 28.176 |
| ac20 | 5240 | Ant1 | 20.724 |
| ac20 | 5260 | Ant1 | 21.453 |
| ac20 | 5280 | Ant1 | 21.375 |
| ac20 | 5320 | Ant1 | 24.720 |
| ac20 | 5500 | Ant1 | 25.548 |
| ac20 | 5580 | Ant1 | 21.498 |
| ac20 | 5700 | Ant1 | 25.455 |
| ac20 | 5180 | Ant2 | 25.380 |
| ac20 | 5200 | Ant2 | 26.640 |
| ac20 | 5240 | Ant2 | 20.214 |
| ac20 | 5260 | Ant2 | 20.817 |
| ac20 | 5280 | Ant2 | 20.667 |
| ac20 | 5320 | Ant2 | 24.204 |
| ac20 | 5500 | Ant2 | 24.429 |
| ac20 | 5580 | Ant2 | 20.808 |

|       |      |      |         |
|-------|------|------|---------|
| ac20  | 5700 | Ant2 | 24.366  |
| ac20  | 5180 | Ant3 | 25.812  |
| ac20  | 5200 | Ant3 | 24.633  |
| ac20  | 5240 | Ant3 | 20.163  |
| ac20  | 5260 | Ant3 | 20.916  |
| ac20  | 5280 | Ant3 | 20.874  |
| ac20  | 5320 | Ant3 | 24.603  |
| ac20  | 5500 | Ant3 | 25.791  |
| ac20  | 5580 | Ant3 | 20.742  |
| ac20  | 5700 | Ant3 | 24.144  |
| ac40  | 5190 | Ant1 | 42.138  |
| ac40  | 5230 | Ant1 | 39.606  |
| ac40  | 5270 | Ant1 | 39.792  |
| ac40  | 5310 | Ant1 | 41.784  |
| ac40  | 5510 | Ant1 | 43.350  |
| ac40  | 5550 | Ant1 | 39.450  |
| ac40  | 5670 | Ant1 | 44.766  |
| ac40  | 5190 | Ant2 | 41.646  |
| ac40  | 5230 | Ant2 | 39.270  |
| ac40  | 5270 | Ant2 | 39.204  |
| ac40  | 5310 | Ant2 | 40.428  |
| ac40  | 5510 | Ant2 | 39.402  |
| ac40  | 5550 | Ant2 | 39.294  |
| ac40  | 5670 | Ant2 | 41.064  |
| ac40  | 5190 | Ant3 | 41.172  |
| ac40  | 5230 | Ant3 | 39.174  |
| ac40  | 5270 | Ant3 | 39.612  |
| ac40  | 5310 | Ant3 | 40.284  |
| ac40  | 5510 | Ant3 | 39.972  |
| ac40  | 5550 | Ant3 | 39.390  |
| ac40  | 5670 | Ant3 | 40.170  |
| ac80  | 5210 | Ant1 | 81.516  |
| ac80  | 5290 | Ant1 | 80.064  |
| ac80  | 5530 | Ant1 | 84.480  |
| ac80  | 5610 | Ant1 | 78.264  |
| ac80  | 5210 | Ant2 | 79.344  |
| ac80  | 5290 | Ant2 | 79.044  |
| ac80  | 5530 | Ant2 | 85.872  |
| ac80  | 5610 | Ant2 | 77.892  |
| ac80  | 5210 | Ant3 | 78.864  |
| ac80  | 5290 | Ant3 | 80.016  |
| ac80  | 5530 | Ant3 | 87.924  |
| ac80  | 5610 | Ant3 | 78.036  |
| ax160 | 5250 | Ant1 | 159.048 |
| ax160 | 5570 | Ant1 | 159.288 |
| ax160 | 5250 | Ant2 | 159.384 |
| ax160 | 5570 | Ant2 | 159.072 |
| ax160 | 5250 | Ant3 | 159.168 |
| ax160 | 5570 | Ant3 | 159.312 |
| ax20  | 5180 | Ant1 | 24.972  |
| ax20  | 5200 | Ant1 | 25.464  |
| ax20  | 5240 | Ant1 | 19.965  |

|      |      |      |        |
|------|------|------|--------|
| ax20 | 5260 | Ant1 | 21.432 |
| ax20 | 5280 | Ant1 | 21.804 |
| ax20 | 5320 | Ant1 | 22.446 |
| ax20 | 5500 | Ant1 | 23.064 |
| ax20 | 5580 | Ant1 | 21.657 |
| ax20 | 5700 | Ant1 | 23.358 |
| ax20 | 5180 | Ant2 | 26.250 |
| ax20 | 5200 | Ant2 | 24.285 |
| ax20 | 5240 | Ant2 | 19.944 |
| ax20 | 5260 | Ant2 | 21.360 |
| ax20 | 5280 | Ant2 | 21.420 |
| ax20 | 5320 | Ant2 | 22.581 |
| ax20 | 5500 | Ant2 | 21.879 |
| ax20 | 5580 | Ant2 | 21.483 |
| ax20 | 5700 | Ant2 | 24.213 |
| ax20 | 5180 | Ant3 | 25.143 |
| ax20 | 5200 | Ant3 | 23.046 |
| ax20 | 5240 | Ant3 | 19.899 |
| ax20 | 5260 | Ant3 | 21.222 |
| ax20 | 5280 | Ant3 | 21.537 |
| ax20 | 5320 | Ant3 | 23.778 |
| ax20 | 5500 | Ant3 | 23.745 |
| ax20 | 5580 | Ant3 | 21.588 |
| ax20 | 5700 | Ant3 | 23.988 |
| ax40 | 5190 | Ant1 | 39.132 |
| ax40 | 5230 | Ant1 | 39.144 |
| ax40 | 5270 | Ant1 | 39.240 |
| ax40 | 5310 | Ant1 | 41.778 |
| ax40 | 5510 | Ant1 | 41.628 |
| ax40 | 5550 | Ant1 | 39.186 |
| ax40 | 5670 | Ant1 | 39.264 |
| ax40 | 5190 | Ant2 | 44.958 |
| ax40 | 5230 | Ant2 | 39.222 |
| ax40 | 5270 | Ant2 | 39.234 |
| ax40 | 5310 | Ant2 | 39.438 |
| ax40 | 5510 | Ant2 | 39.300 |
| ax40 | 5550 | Ant2 | 39.126 |
| ax40 | 5670 | Ant2 | 39.504 |
| ax40 | 5190 | Ant3 | 39.450 |
| ax40 | 5230 | Ant3 | 39.240 |
| ax40 | 5270 | Ant3 | 39.240 |
| ax40 | 5310 | Ant3 | 39.102 |
| ax40 | 5510 | Ant3 | 40.770 |
| ax40 | 5550 | Ant3 | 39.138 |
| ax40 | 5670 | Ant3 | 39.210 |
| ax80 | 5210 | Ant1 | 79.464 |
| ax80 | 5290 | Ant1 | 79.092 |
| ax80 | 5530 | Ant1 | 79.176 |
| ax80 | 5610 | Ant1 | 79.044 |
| ax80 | 5210 | Ant2 | 79.164 |
| ax80 | 5290 | Ant2 | 79.104 |
| ax80 | 5530 | Ant2 | 79.740 |



|      |      |      |        |
|------|------|------|--------|
| ax80 | 5610 | Ant2 | 79.104 |
| ax80 | 5210 | Ant3 | 79.200 |
| ax80 | 5290 | Ant3 | 79.140 |
| ax80 | 5530 | Ant3 | 79.152 |
| ax80 | 5610 | Ant3 | 79.116 |

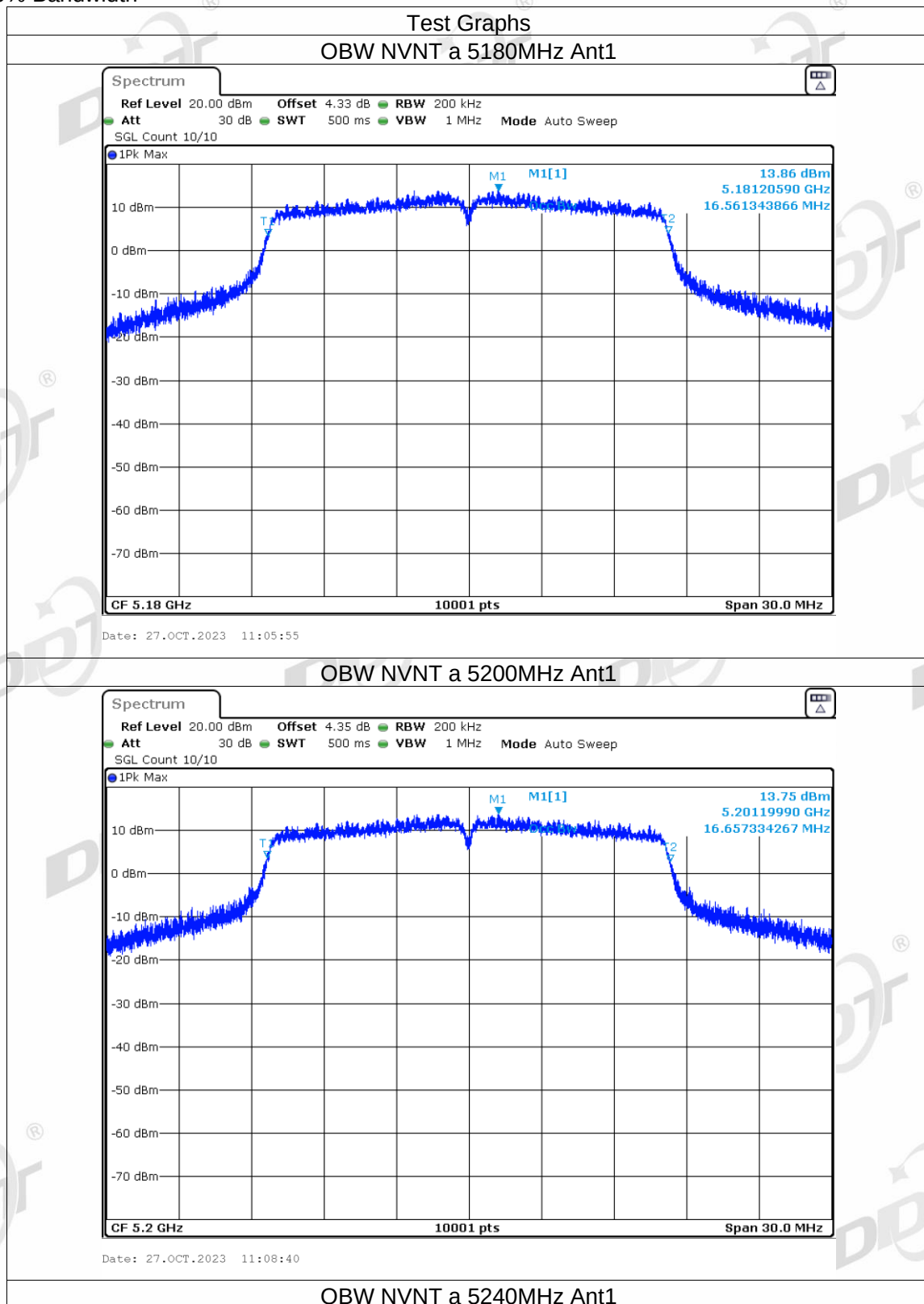
## 6 dB Bandwidth

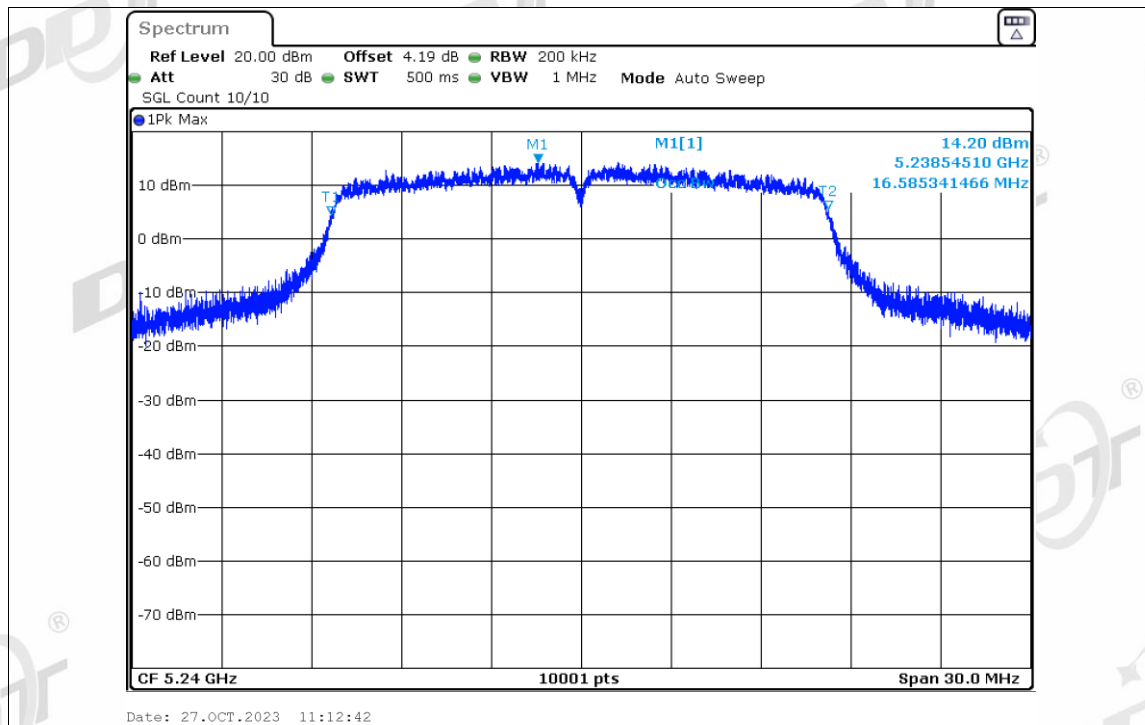
| Mode | Frequency (MHz) | Antenna | 6 dB Bandwidth (MHz) | Limit 6 dB Bandwidth (MHz) | Verdict |
|------|-----------------|---------|----------------------|----------------------------|---------|
| a    | 5745            | Ant1    | 15.411               | $\geq 0.5$                 | Pass    |
| a    | 5785            | Ant1    | 15.120               | $\geq 0.5$                 | Pass    |
| a    | 5825            | Ant1    | 17.019               | $\geq 0.5$                 | Pass    |
| a    | 5745            | Ant2    | 15.666               | $\geq 0.5$                 | Pass    |
| a    | 5785            | Ant2    | 15.651               | $\geq 0.5$                 | Pass    |
| a    | 5825            | Ant2    | 15.420               | $\geq 0.5$                 | Pass    |
| a    | 5745            | Ant3    | 16.434               | $\geq 0.5$                 | Pass    |
| a    | 5785            | Ant3    | 16.425               | $\geq 0.5$                 | Pass    |
| a    | 5825            | Ant3    | 17.070               | $\geq 0.5$                 | Pass    |
| n20  | 5745            | Ant1    | 15.939               | $\geq 0.5$                 | Pass    |
| n20  | 5785            | Ant1    | 15.423               | $\geq 0.5$                 | Pass    |
| n20  | 5825            | Ant1    | 15.114               | $\geq 0.5$                 | Pass    |
| n20  | 5745            | Ant2    | 15.588               | $\geq 0.5$                 | Pass    |
| n20  | 5785            | Ant2    | 15.438               | $\geq 0.5$                 | Pass    |
| n20  | 5825            | Ant2    | 15.885               | $\geq 0.5$                 | Pass    |
| n20  | 5745            | Ant3    | 15.438               | $\geq 0.5$                 | Pass    |
| n20  | 5785            | Ant3    | 15.744               | $\geq 0.5$                 | Pass    |
| n20  | 5825            | Ant3    | 15.432               | $\geq 0.5$                 | Pass    |
| n40  | 5755            | Ant1    | 32.532               | $\geq 0.5$                 | Pass    |
| n40  | 5795            | Ant1    | 35.028               | $\geq 0.5$                 | Pass    |
| n40  | 5755            | Ant2    | 35.022               | $\geq 0.5$                 | Pass    |
| n40  | 5795            | Ant2    | 32.526               | $\geq 0.5$                 | Pass    |
| n40  | 5755            | Ant3    | 32.556               | $\geq 0.5$                 | Pass    |
| n40  | 5795            | Ant3    | 32.538               | $\geq 0.5$                 | Pass    |
| ac20 | 5745            | Ant1    | 15.687               | $\geq 0.5$                 | Pass    |
| ac20 | 5785            | Ant1    | 15.120               | $\geq 0.5$                 | Pass    |
| ac20 | 5825            | Ant1    | 15.933               | $\geq 0.5$                 | Pass    |
| ac20 | 5745            | Ant2    | 16.533               | $\geq 0.5$                 | Pass    |
| ac20 | 5785            | Ant2    | 17.139               | $\geq 0.5$                 | Pass    |
| ac20 | 5825            | Ant2    | 16.269               | $\geq 0.5$                 | Pass    |
| ac20 | 5745            | Ant3    | 16.281               | $\geq 0.5$                 | Pass    |
| ac20 | 5785            | Ant3    | 15.705               | $\geq 0.5$                 | Pass    |
| ac20 | 5825            | Ant3    | 16.278               | $\geq 0.5$                 | Pass    |
| ac40 | 5755            | Ant1    | 32.550               | $\geq 0.5$                 | Pass    |
| ac40 | 5795            | Ant1    | 35.028               | $\geq 0.5$                 | Pass    |
| ac40 | 5755            | Ant2    | 35.034               | $\geq 0.5$                 | Pass    |
| ac40 | 5795            | Ant2    | 32.574               | $\geq 0.5$                 | Pass    |
| ac40 | 5755            | Ant3    | 32.562               | $\geq 0.5$                 | Pass    |
| ac40 | 5795            | Ant3    | 32.556               | $\geq 0.5$                 | Pass    |
| ac80 | 5775            | Ant1    | 68.796               | $\geq 0.5$                 | Pass    |

|      |      |      |        |            |      |
|------|------|------|--------|------------|------|
| ac80 | 5775 | Ant2 | 61.296 | $\geq 0.5$ | Pass |
| ac80 | 5775 | Ant3 | 61.284 | $\geq 0.5$ | Pass |
| ax20 | 5745 | Ant1 | 17.580 | $\geq 0.5$ | Pass |
| ax20 | 5785 | Ant1 | 18.096 | $\geq 0.5$ | Pass |
| ax20 | 5825 | Ant1 | 17.334 | $\geq 0.5$ | Pass |
| ax20 | 5745 | Ant2 | 18.123 | $\geq 0.5$ | Pass |
| ax20 | 5785 | Ant2 | 18.063 | $\geq 0.5$ | Pass |
| ax20 | 5825 | Ant2 | 17.835 | $\geq 0.5$ | Pass |
| ax20 | 5745 | Ant3 | 17.547 | $\geq 0.5$ | Pass |
| ax20 | 5785 | Ant3 | 17.904 | $\geq 0.5$ | Pass |
| ax20 | 5825 | Ant3 | 17.643 | $\geq 0.5$ | Pass |
| ax40 | 5755 | Ant1 | 32.526 | $\geq 0.5$ | Pass |
| ax40 | 5795 | Ant1 | 35.004 | $\geq 0.5$ | Pass |
| ax40 | 5755 | Ant2 | 35.250 | $\geq 0.5$ | Pass |
| ax40 | 5795 | Ant2 | 32.544 | $\geq 0.5$ | Pass |
| ax40 | 5755 | Ant3 | 33.006 | $\geq 0.5$ | Pass |
| ax40 | 5795 | Ant3 | 32.544 | $\geq 0.5$ | Pass |
| ax80 | 5775 | Ant1 | 69.996 | $\geq 0.5$ | Pass |
| ax80 | 5775 | Ant2 | 62.520 | $\geq 0.5$ | Pass |
| ax80 | 5775 | Ant3 | 62.520 | $\geq 0.5$ | Pass |

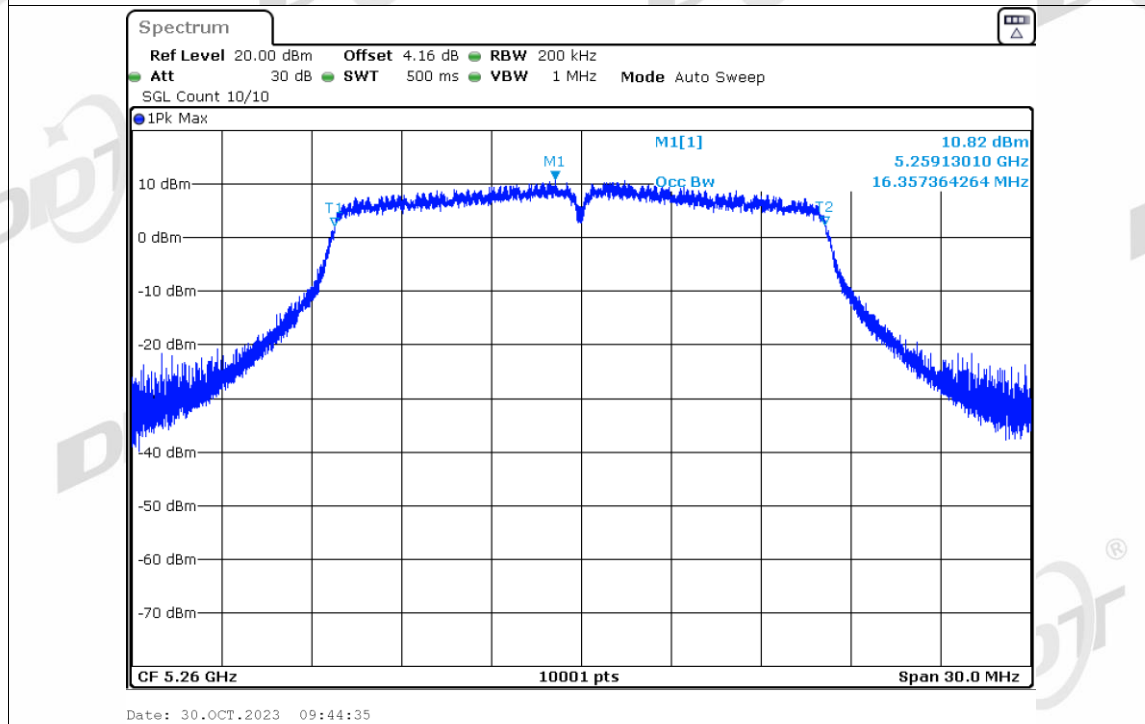
#### 4.5. Original test data

99% Bandwidth

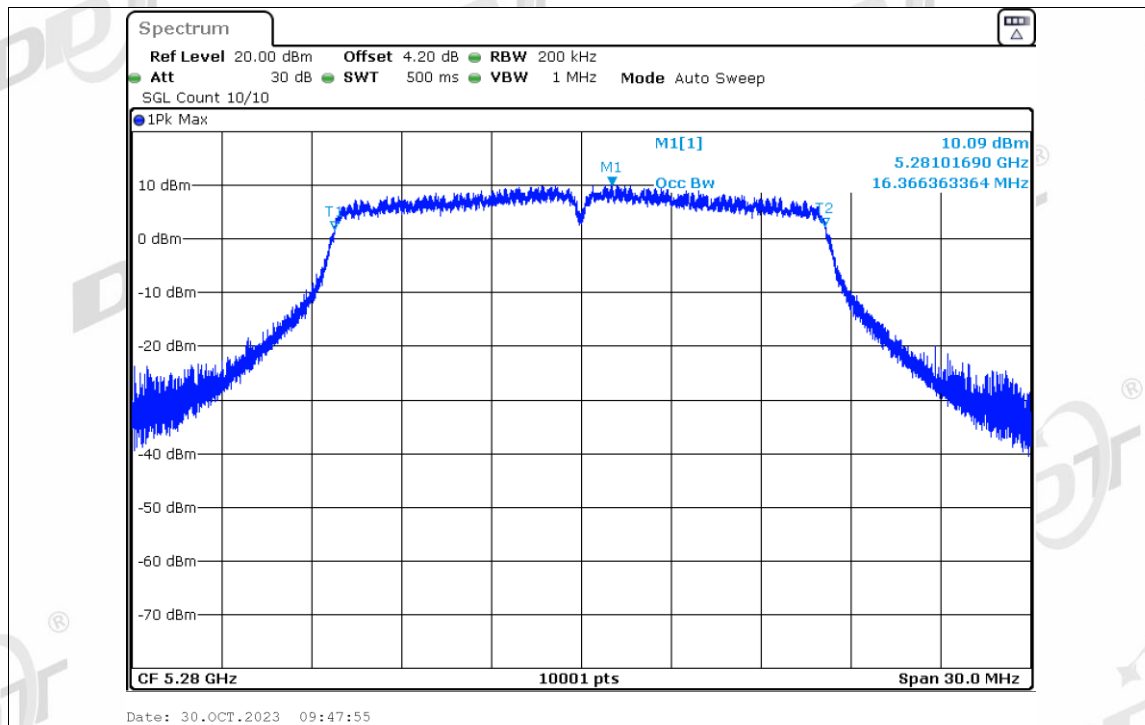




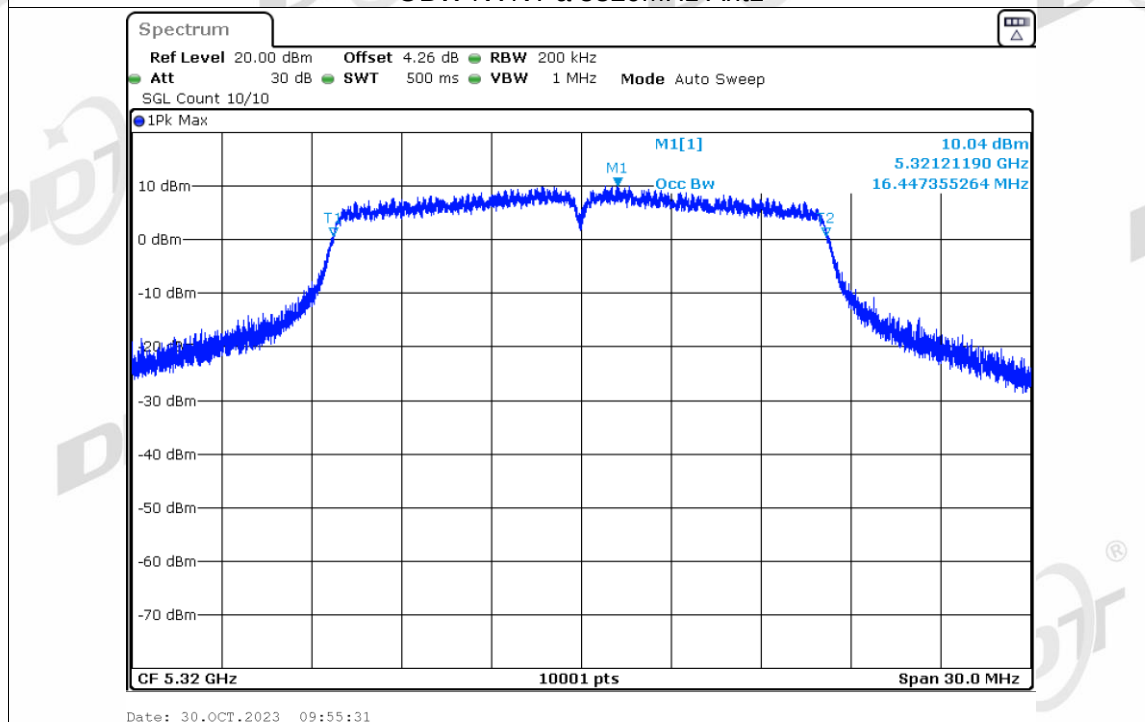
OBW NVNT a 5260MHz Ant1



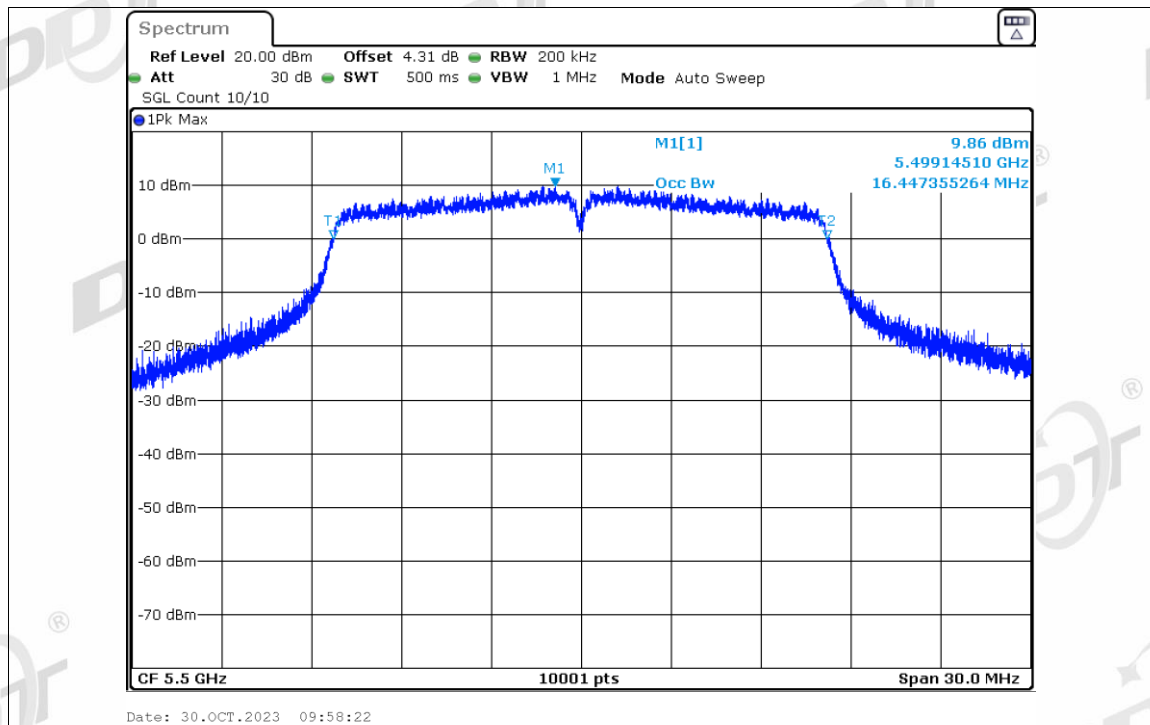
OBW NVNT a 5280MHz Ant1



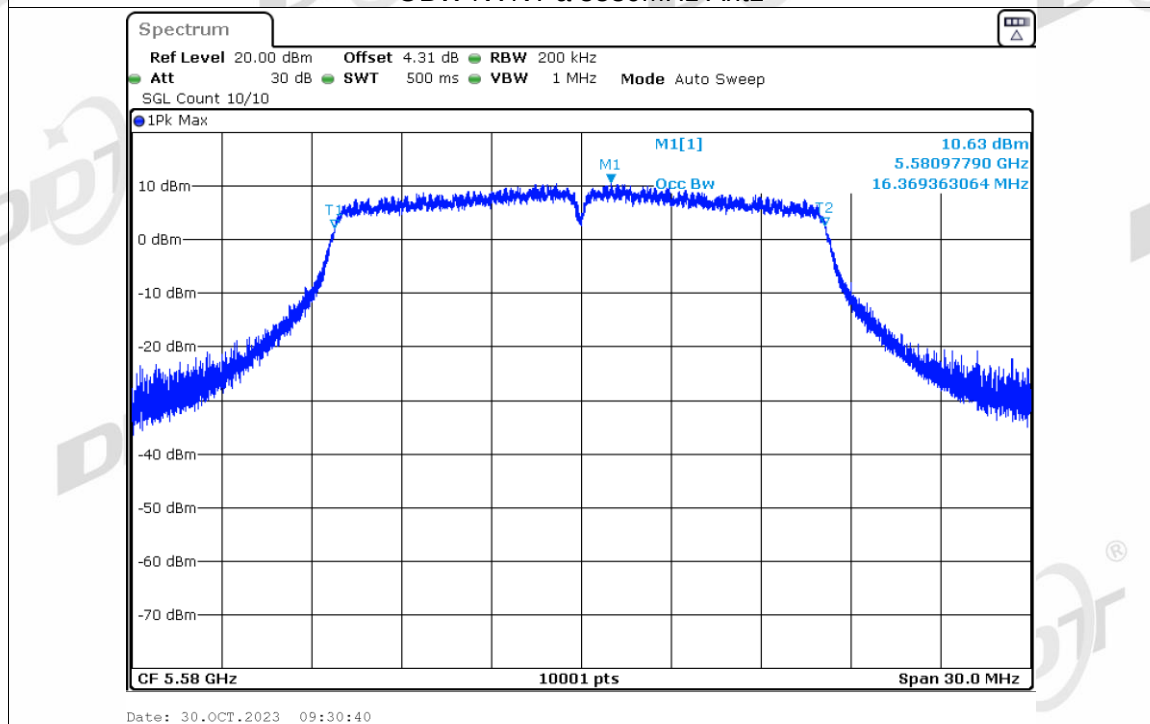
OBW NVNT a 5320MHz Ant1



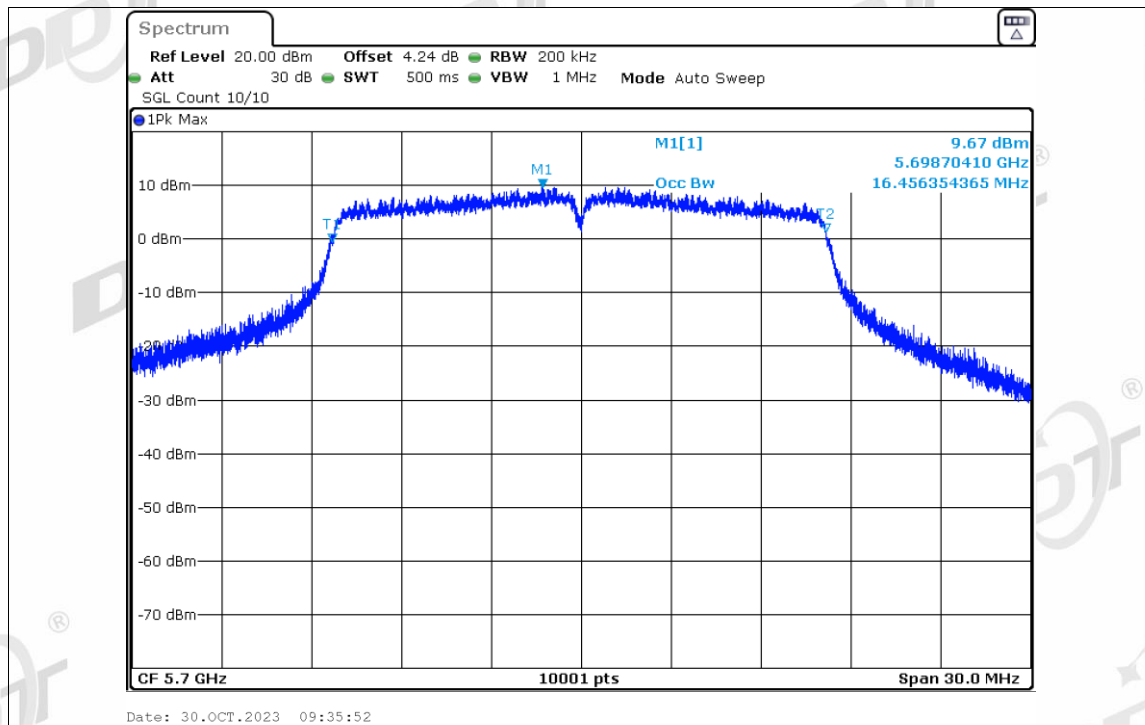
OBW NVNT a 5500MHz Ant1



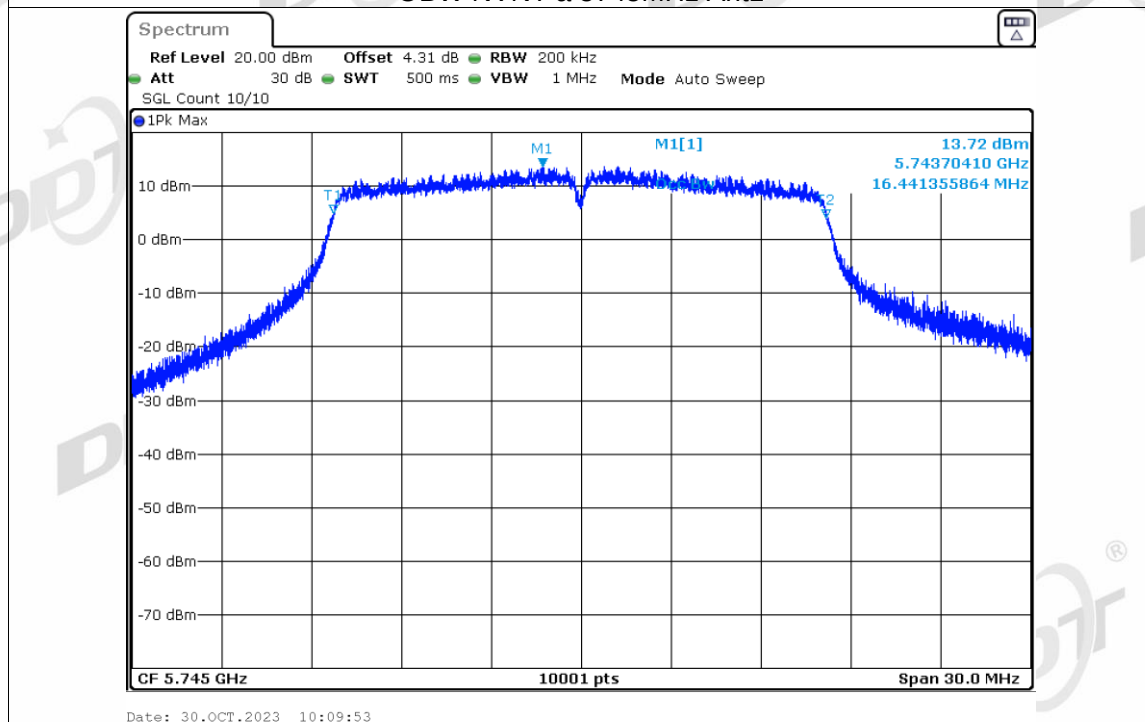
OBW NVNT a 5580MHz Ant1



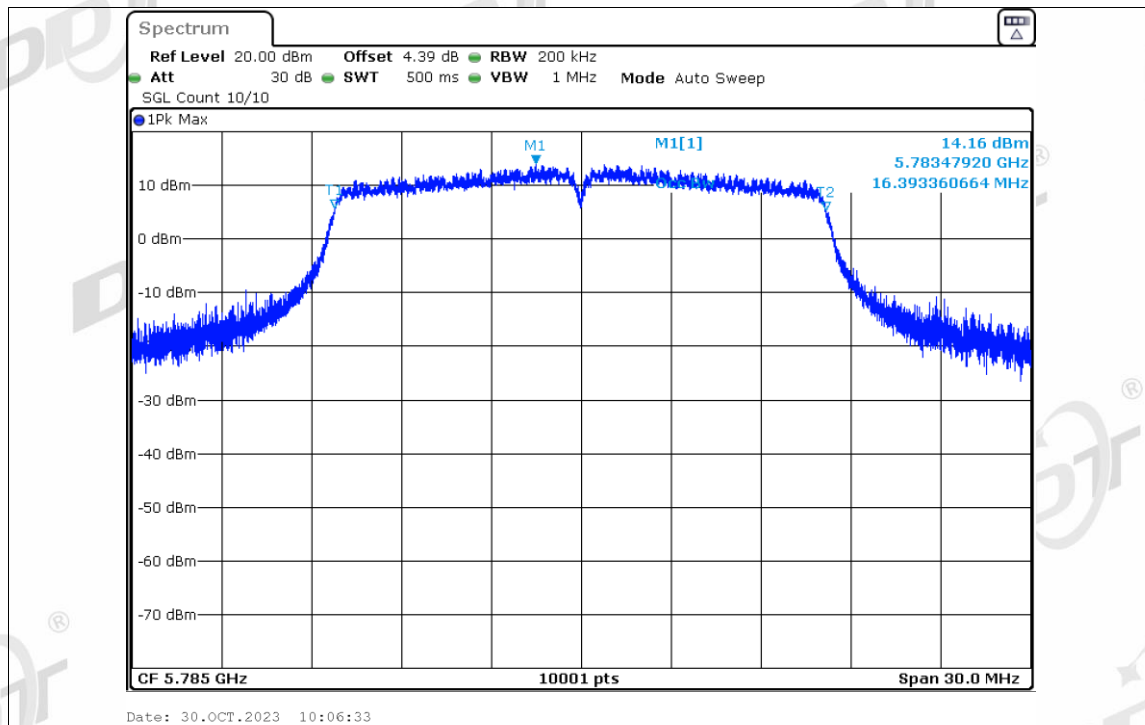
OBW NVNT a 5700MHz Ant1



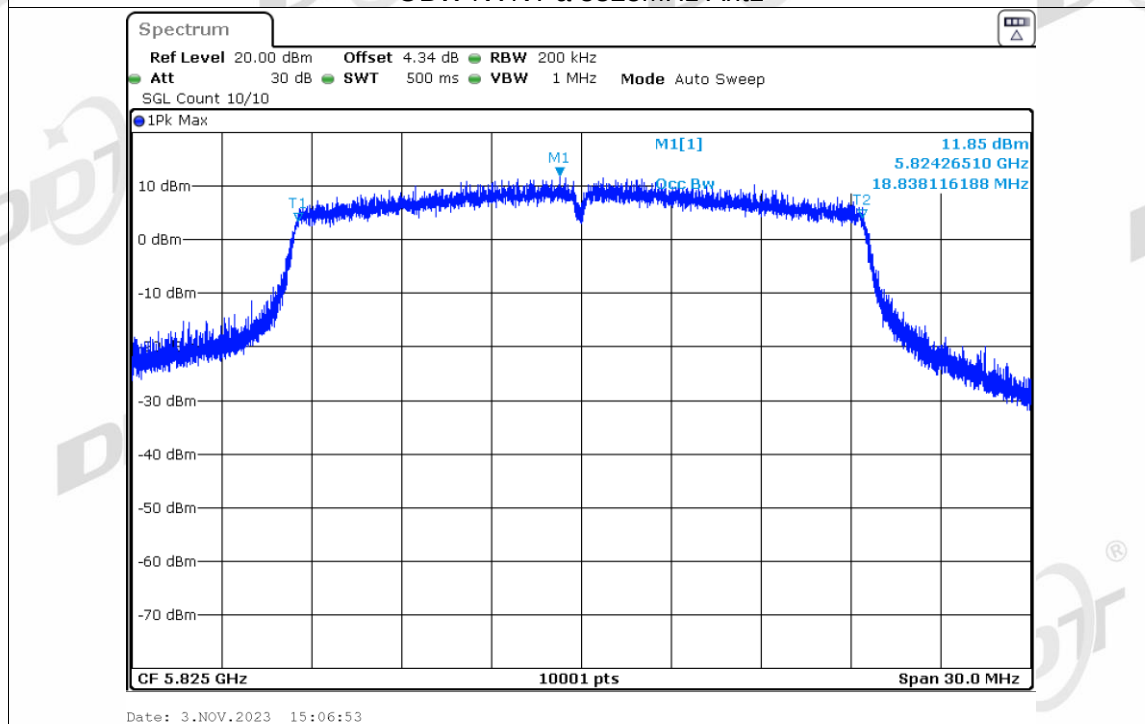
OBW NVNT a 5745MHz Ant1



OBW NVNT a 5785MHz Ant1

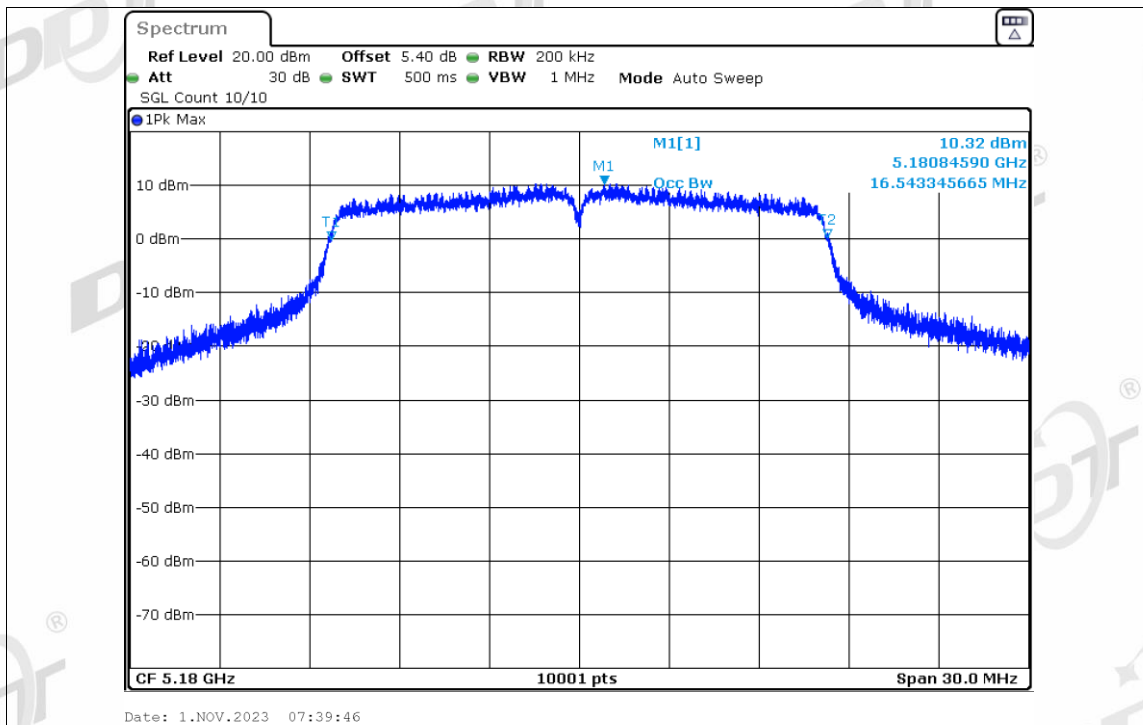


OBW NVNT a 5825MHz Ant1

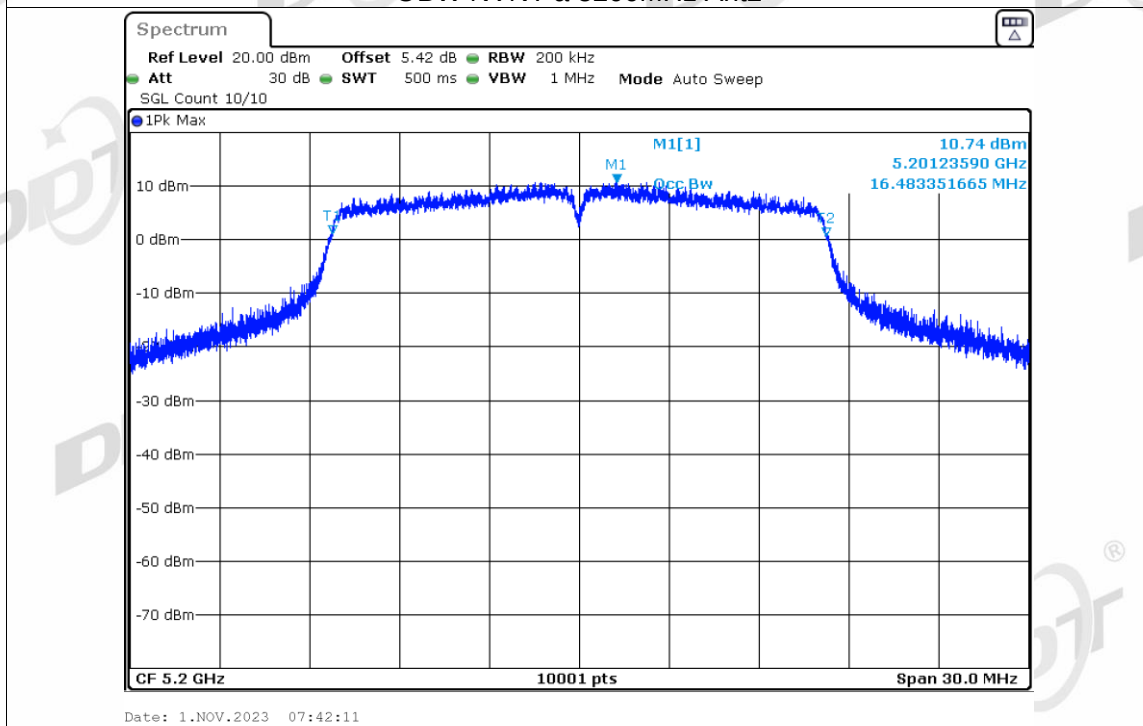


OBW NVNT a 5180MHz Ant2

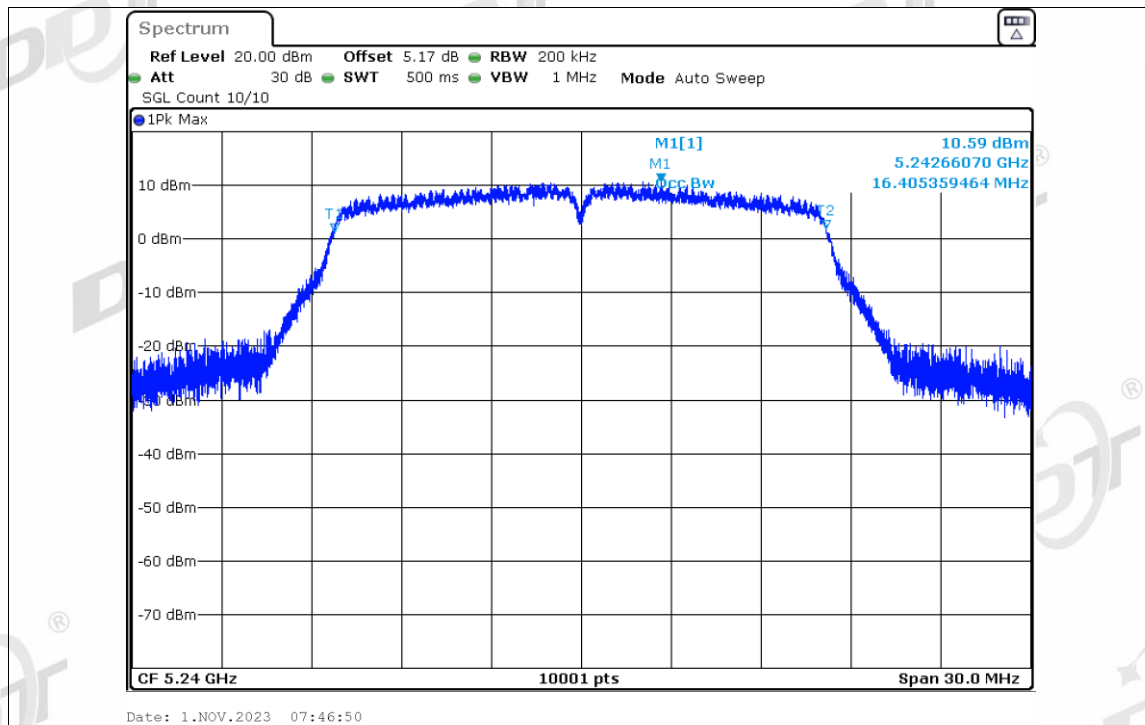




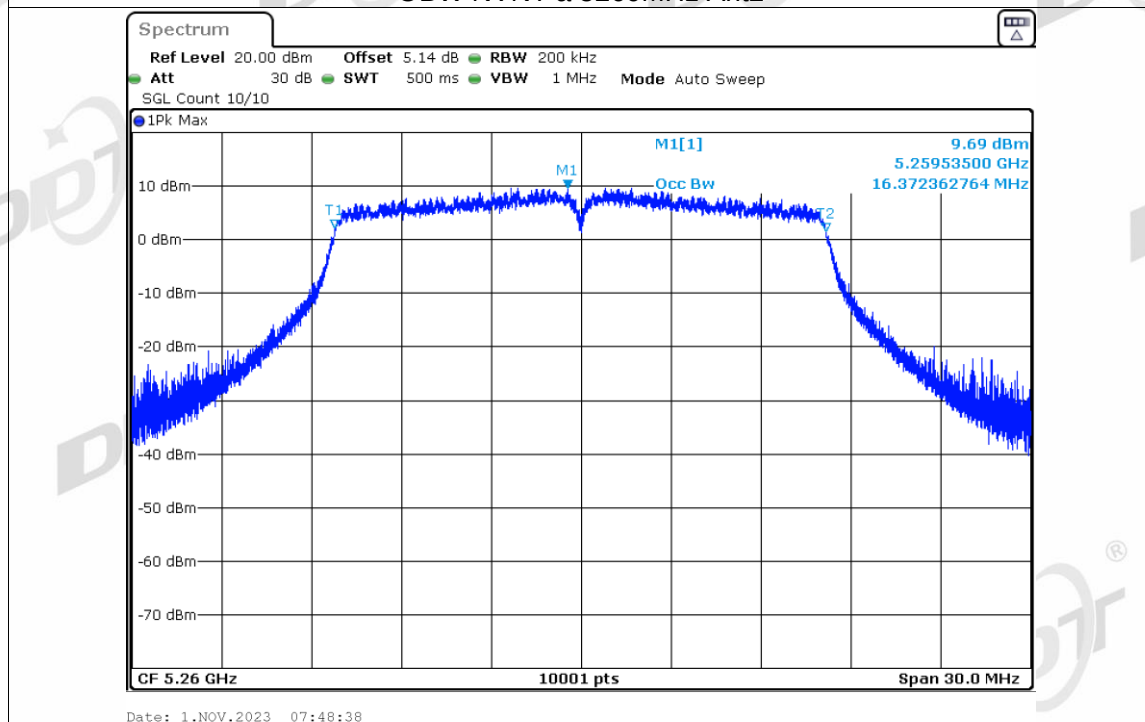
OBW NVNT a 5200MHz Ant2



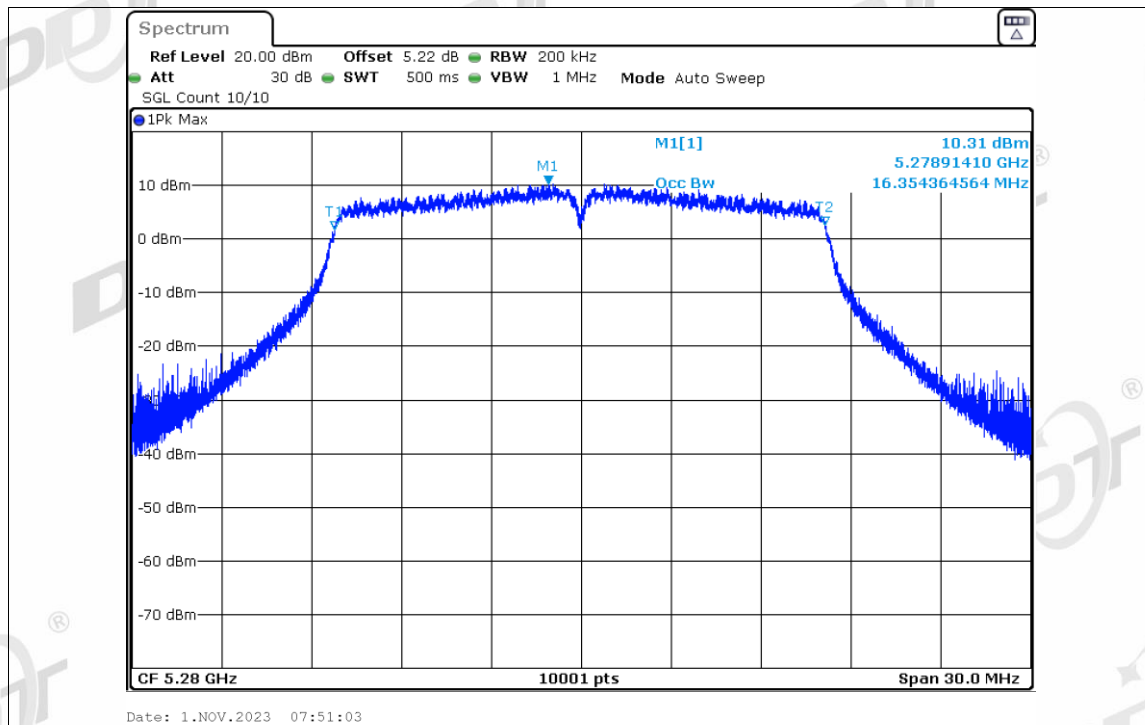
OBW NVNT a 5240MHz Ant2



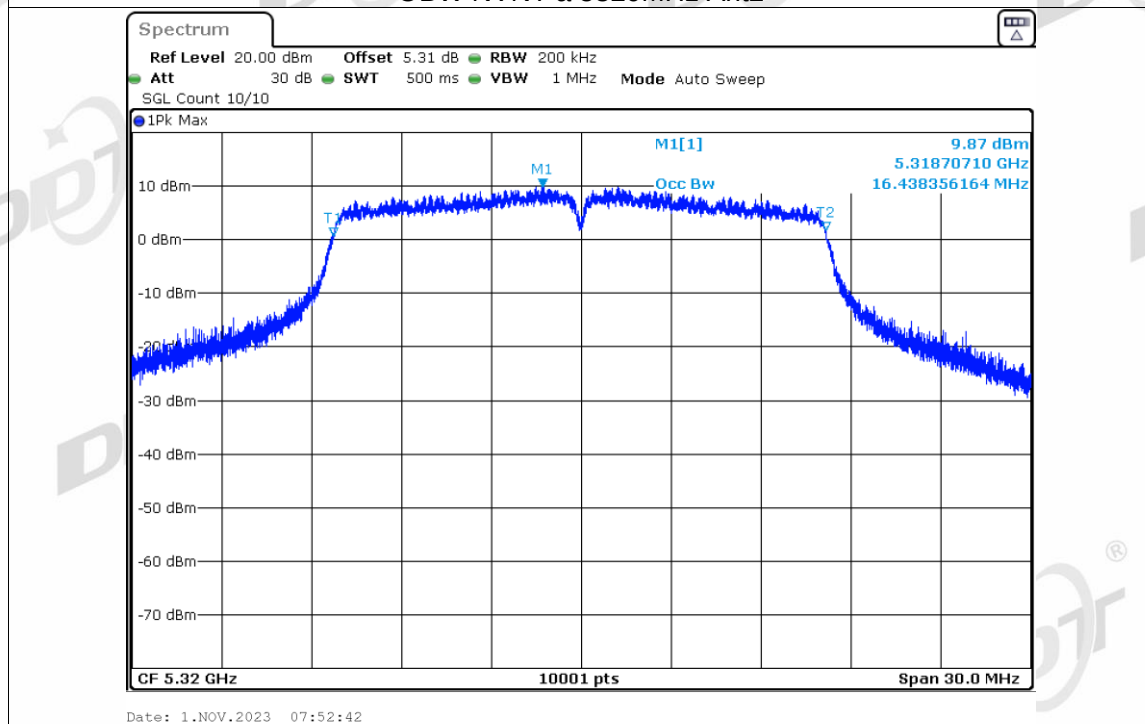
OBW NVNT a 5260MHz Ant2



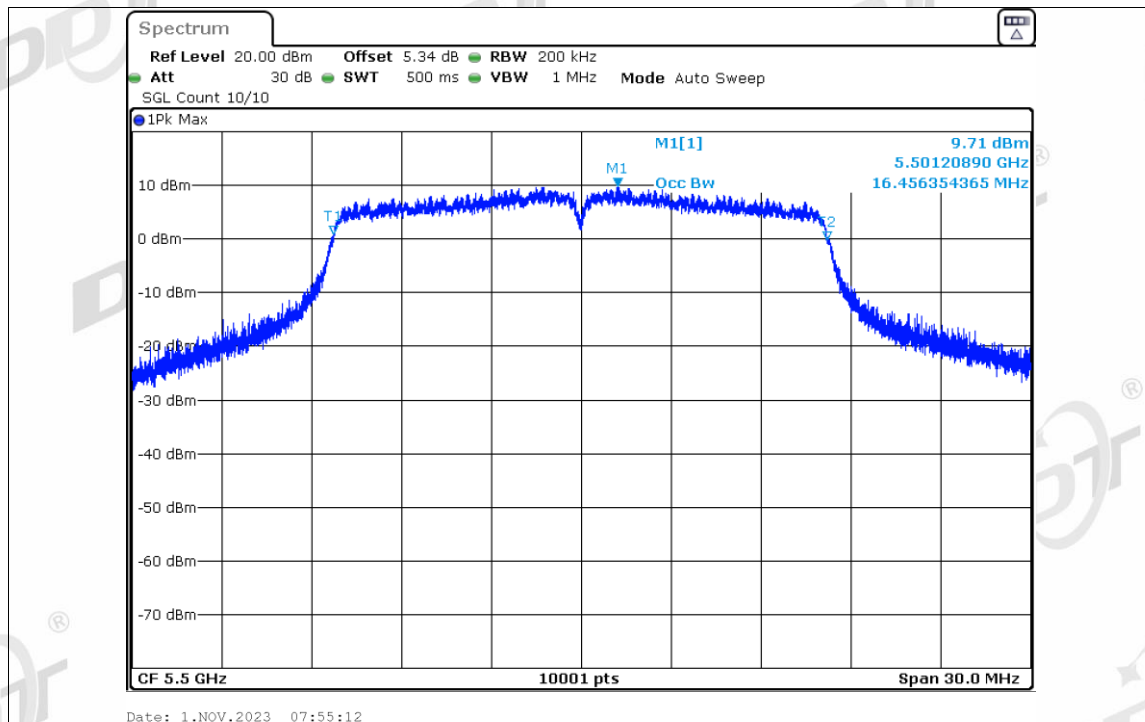
OBW NVNT a 5280MHz Ant2



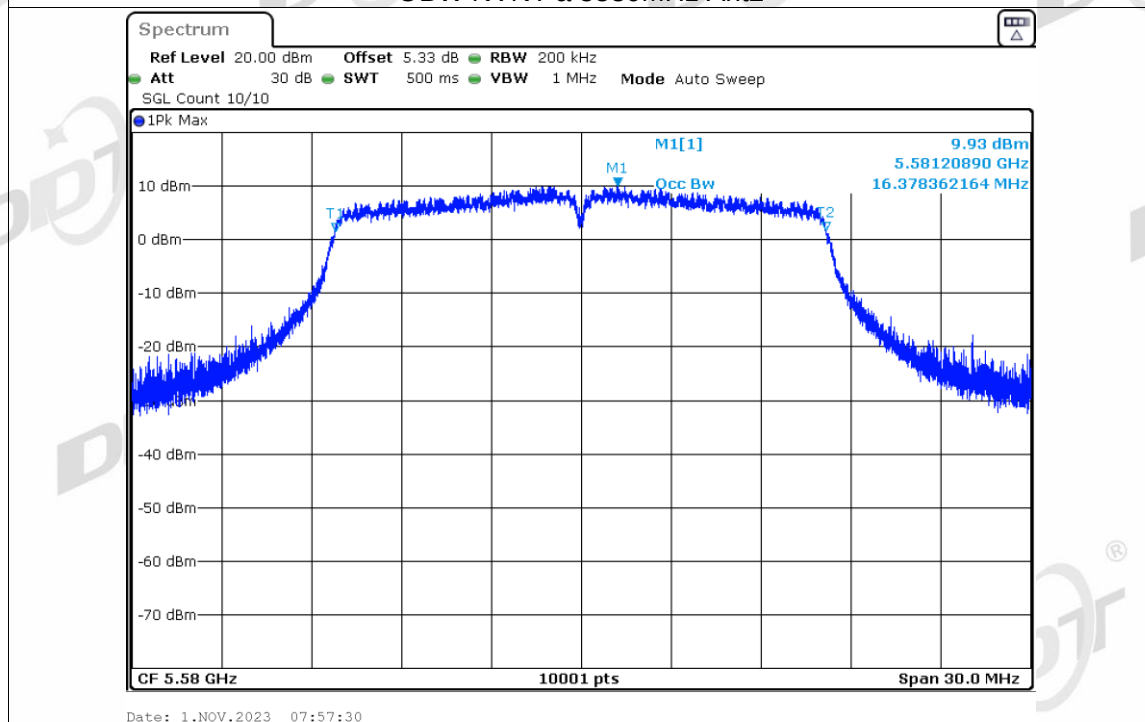
OBW NVNT a 5320MHz Ant2



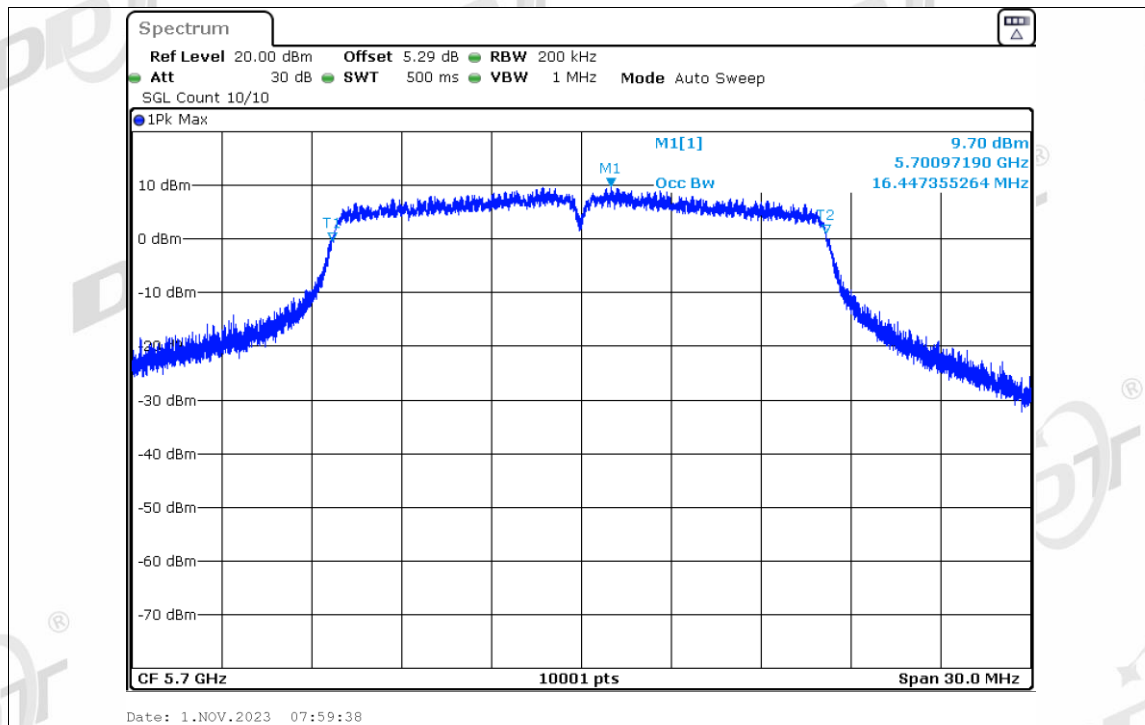
OBW NVNT a 5500MHz Ant2



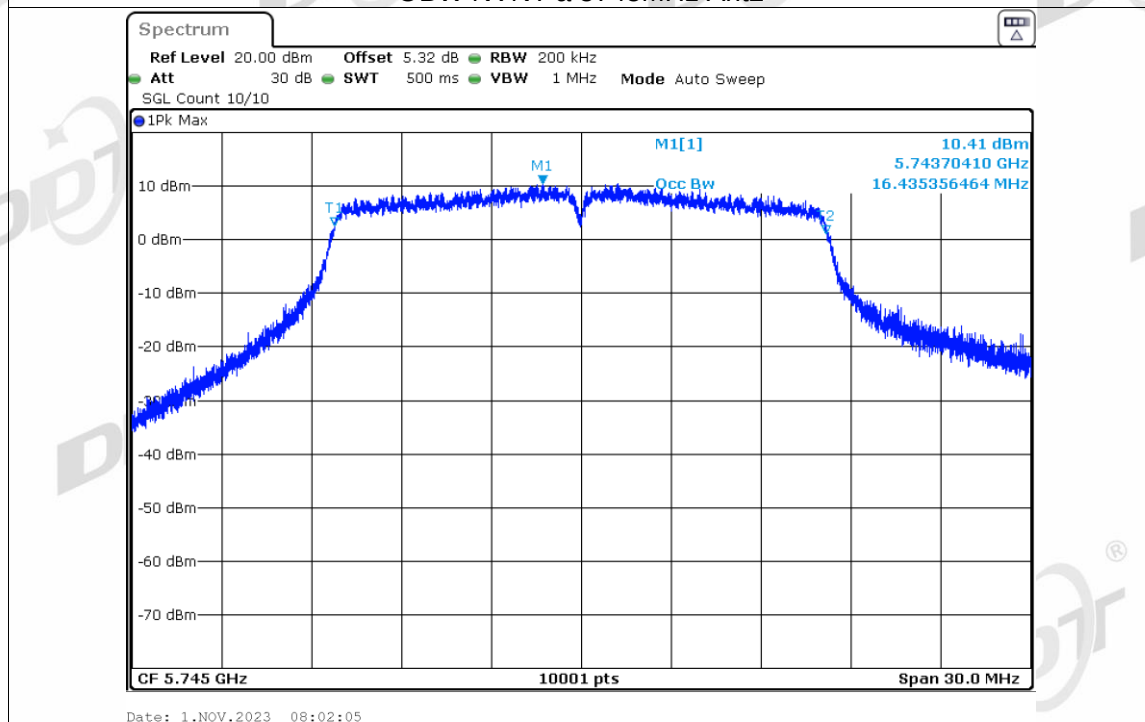
OBW NVNT a 5580MHz Ant2



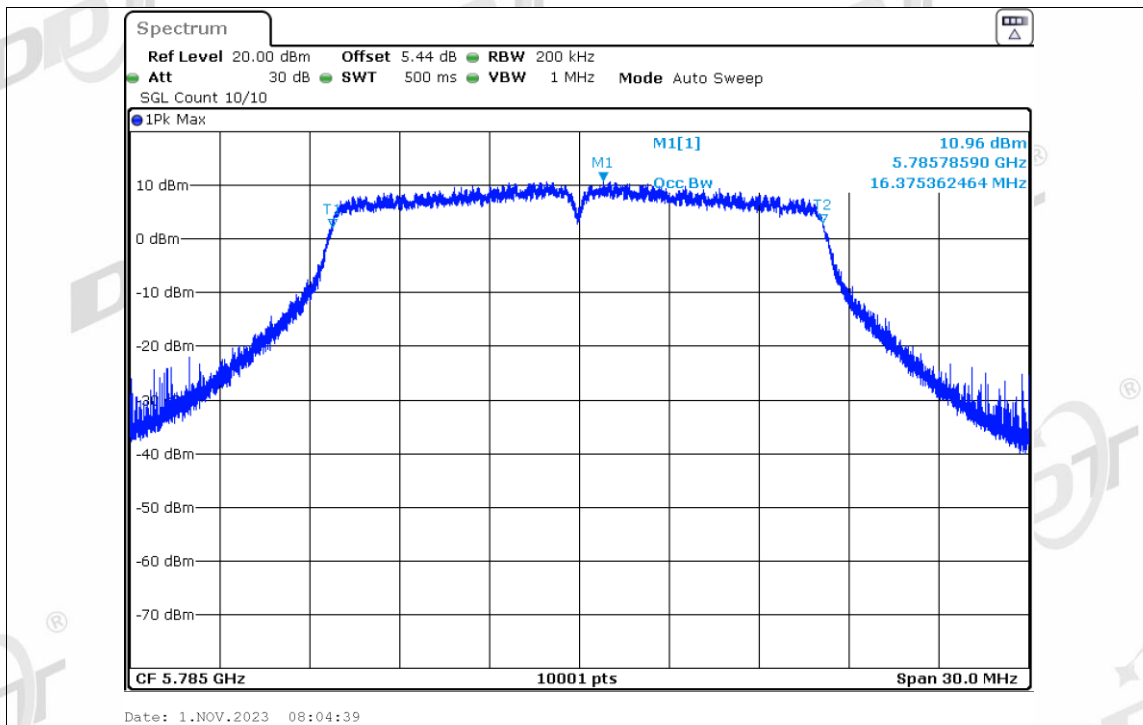
OBW NVNT a 5700MHz Ant2



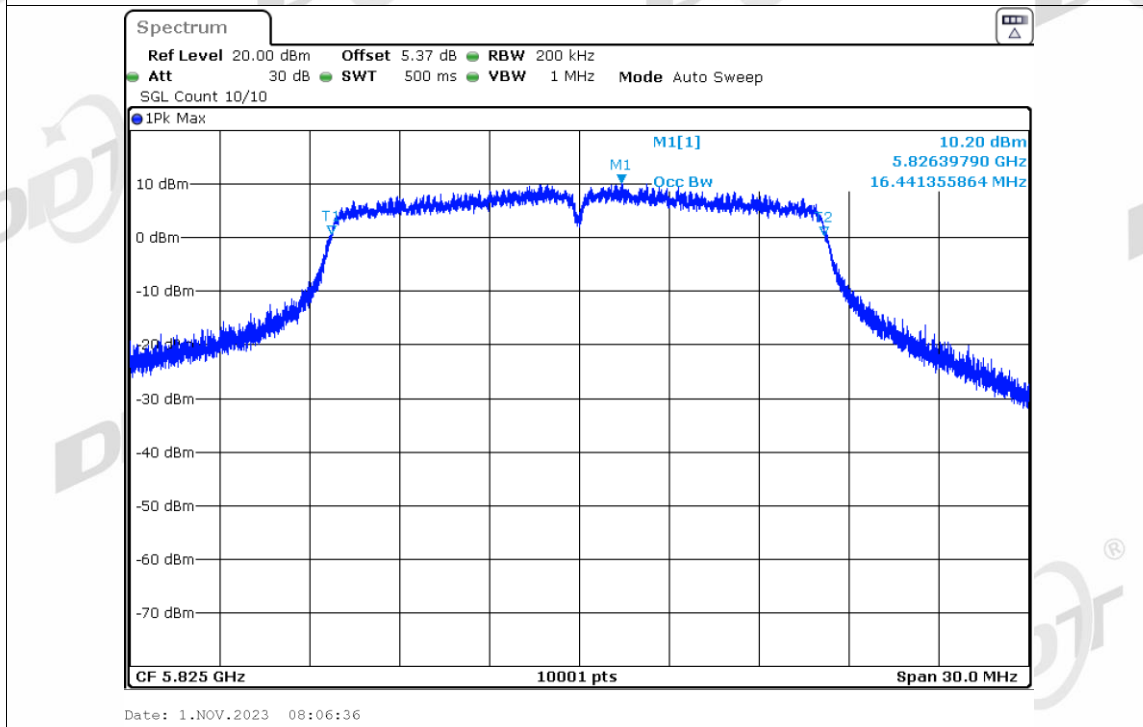
OBW NVNT a 5745MHz Ant2



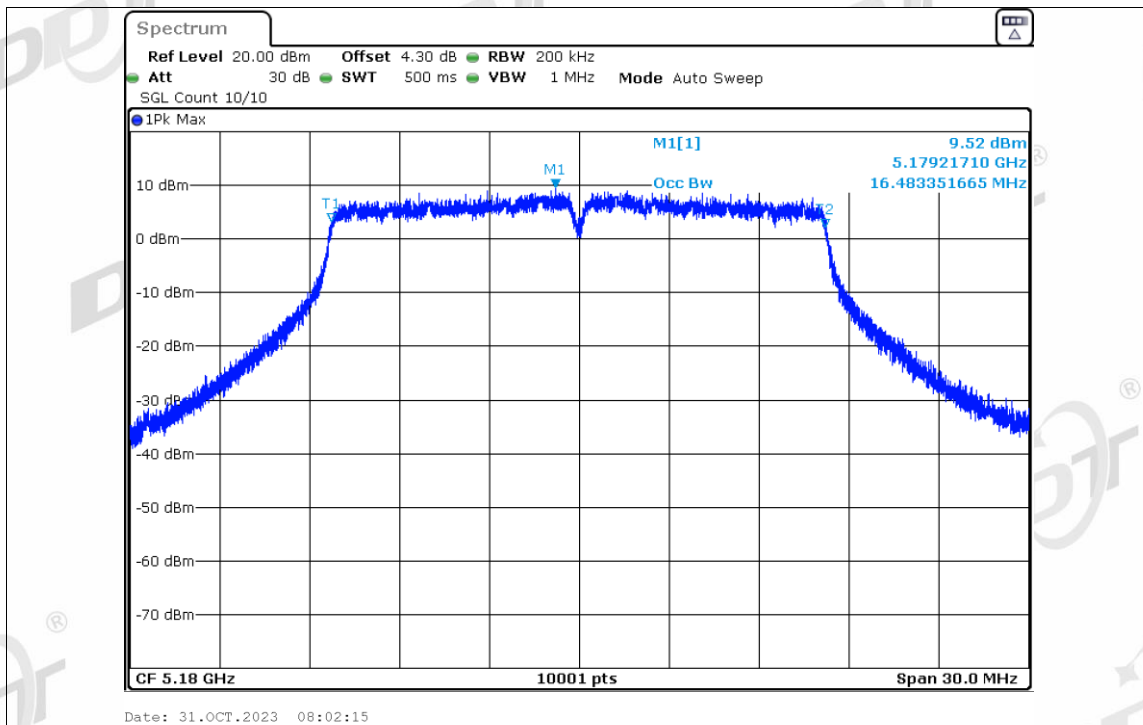
OBW NVNT a 5785MHz Ant2



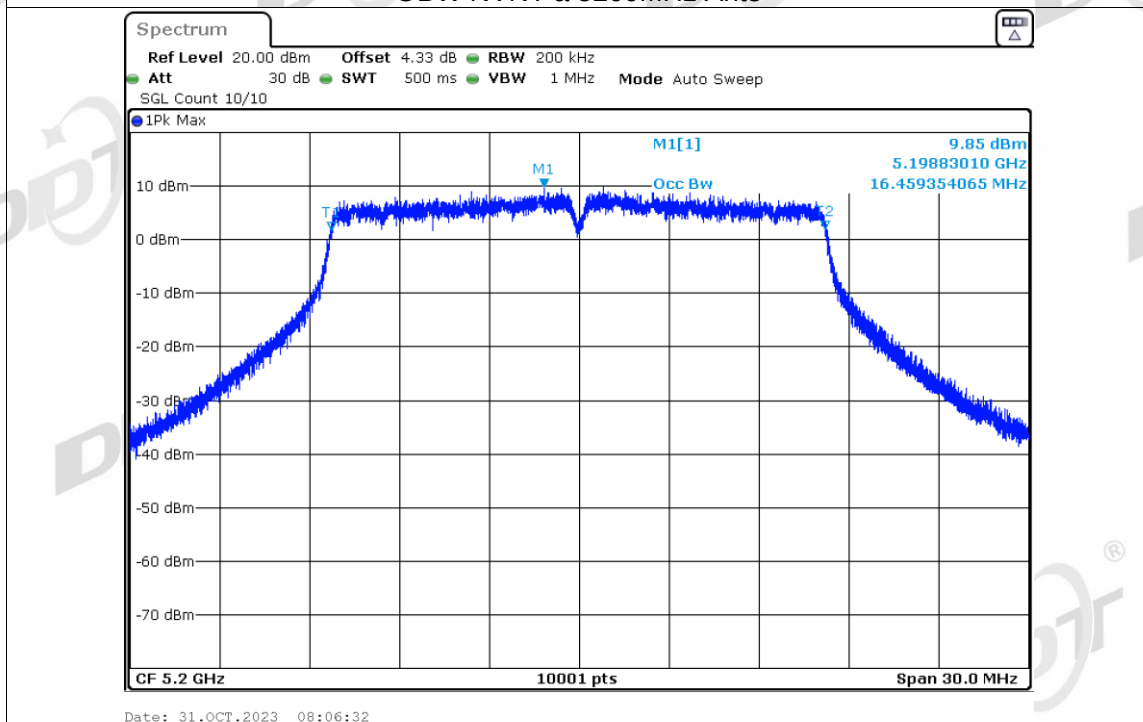
OBW NVNT a 5825MHz Ant2



OBW NVNT a 5180MHz Ant3

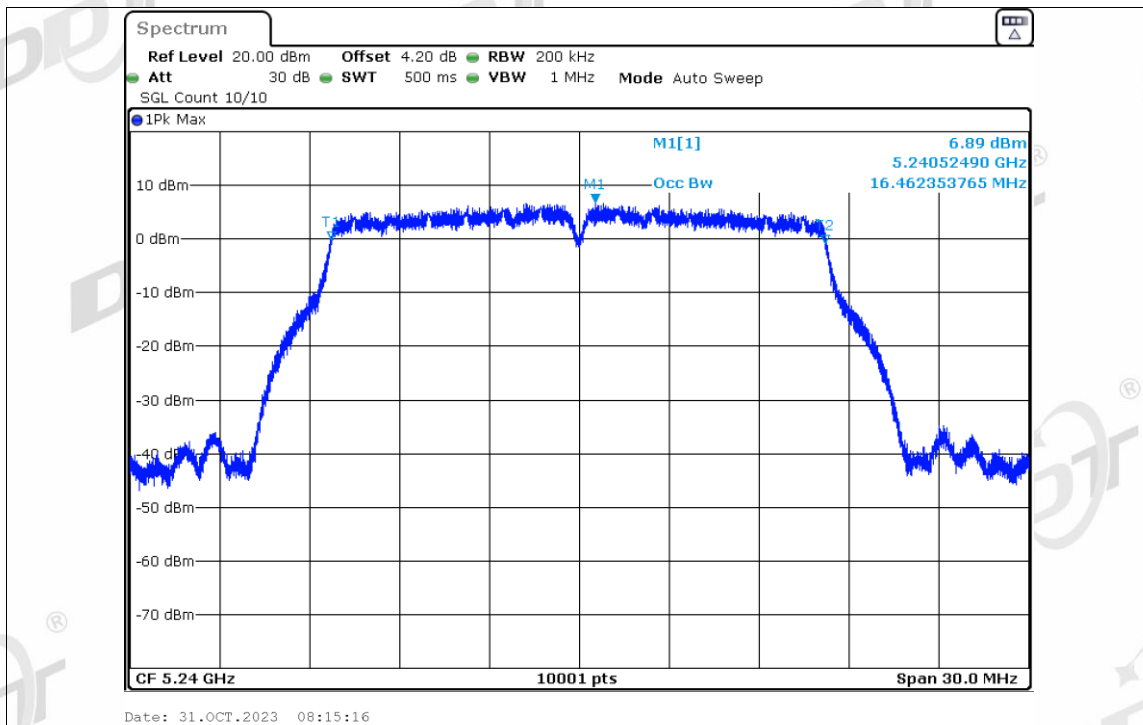


OBW NVNT a 5200MHz Ant3

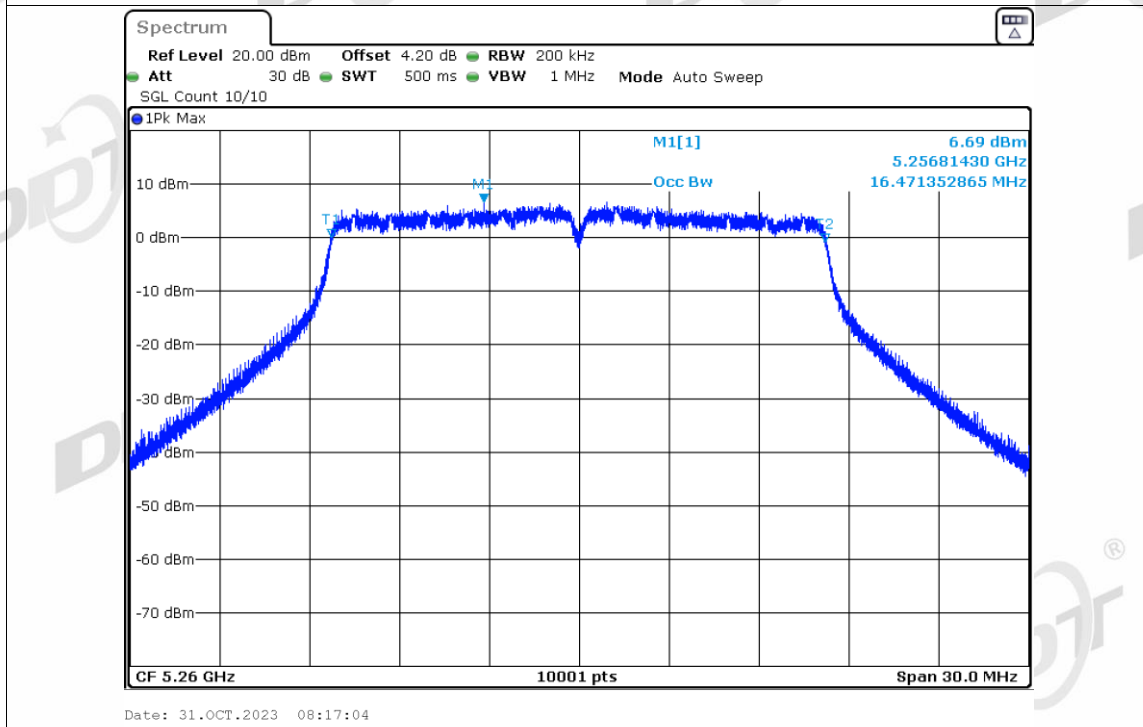


OBW NVNT a 5240MHz Ant3



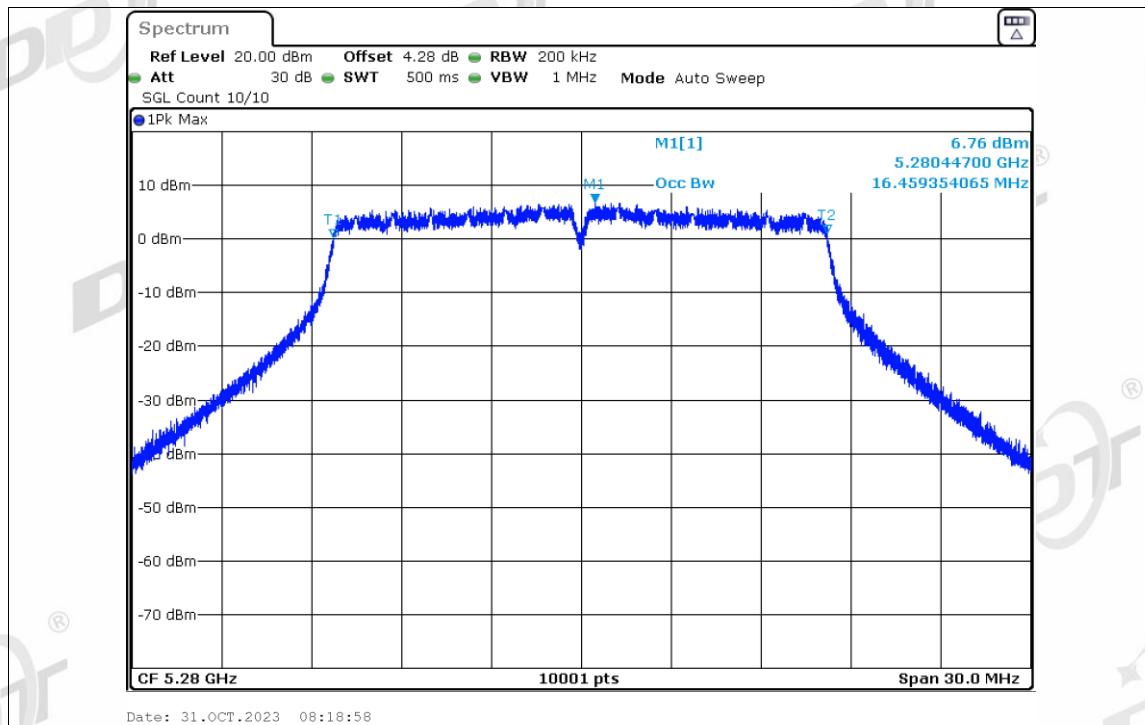


OBW NVNT a 5260MHz Ant3

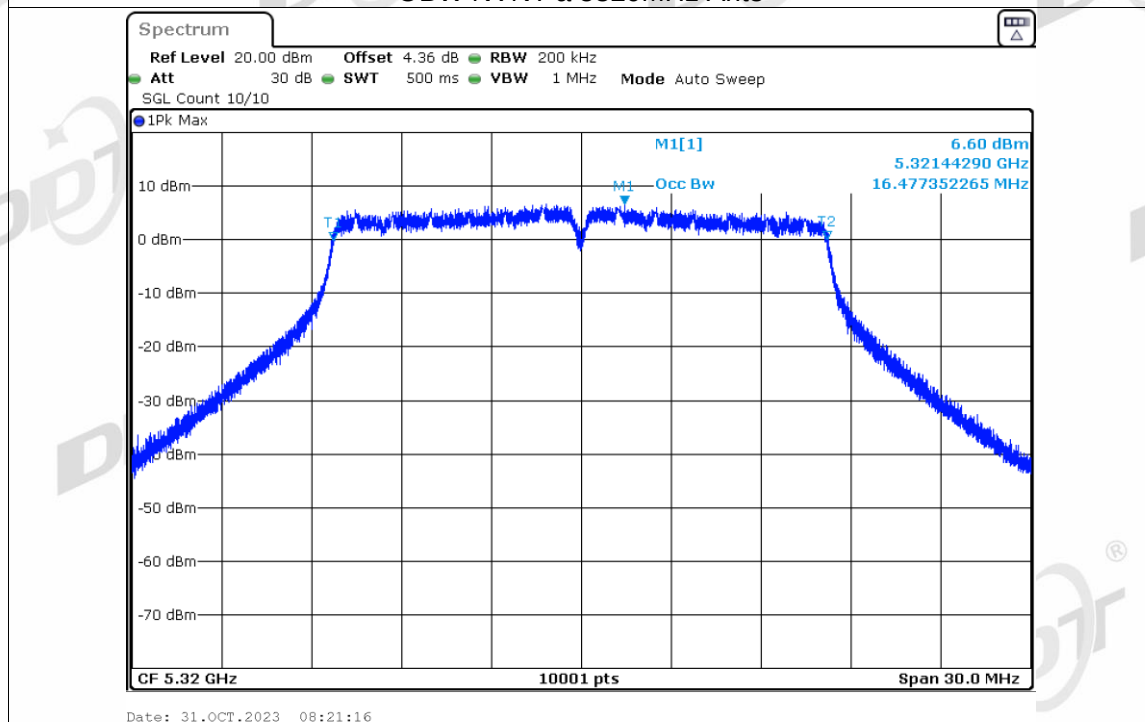


OBW NVNT a 5280MHz Ant3

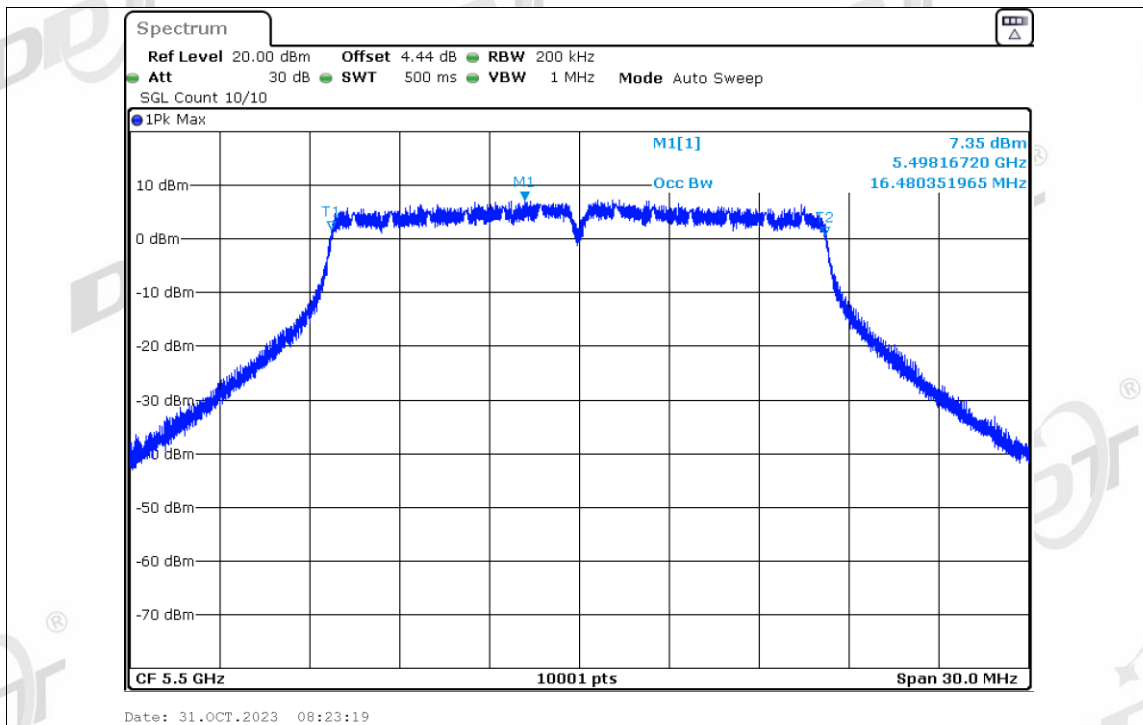




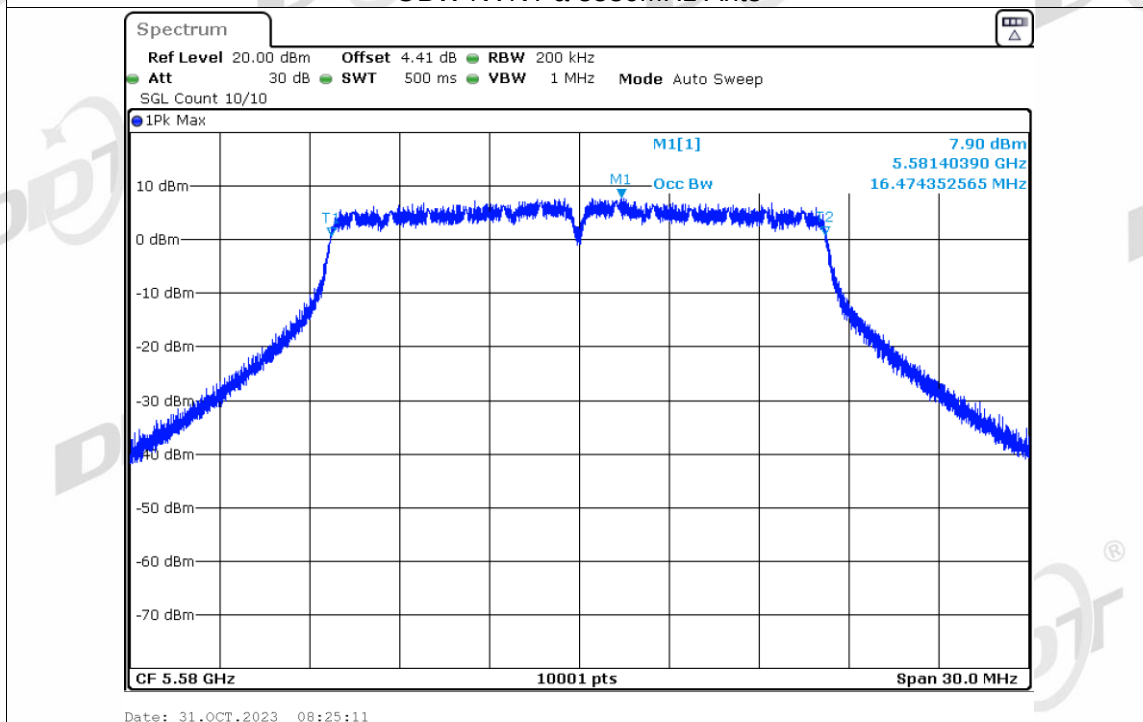
OBW NVNT a 5320MHz Ant3



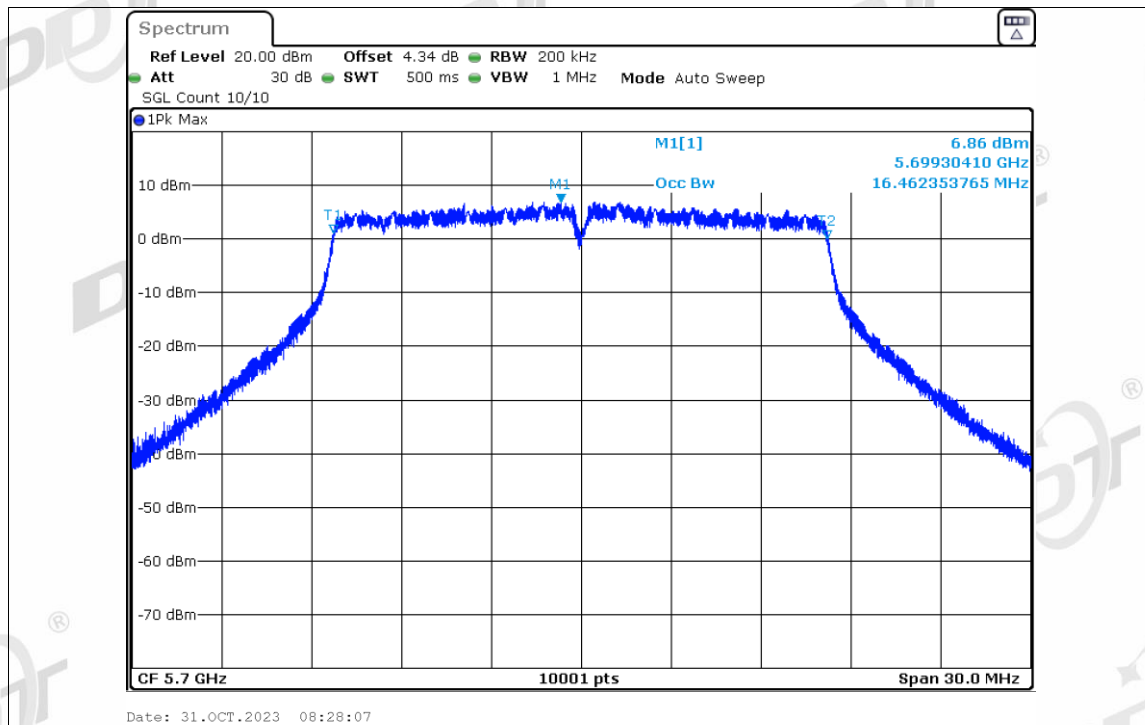
OBW NVNT a 5500MHz Ant3



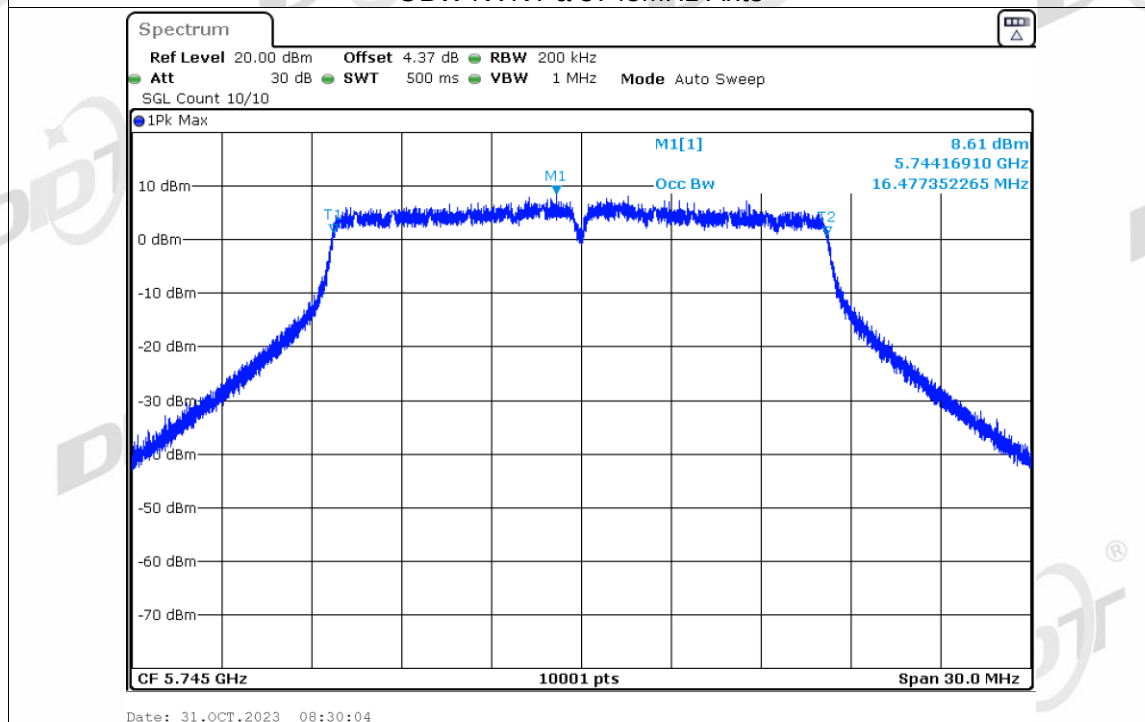
OBW NVNT a 5580MHz Ant3



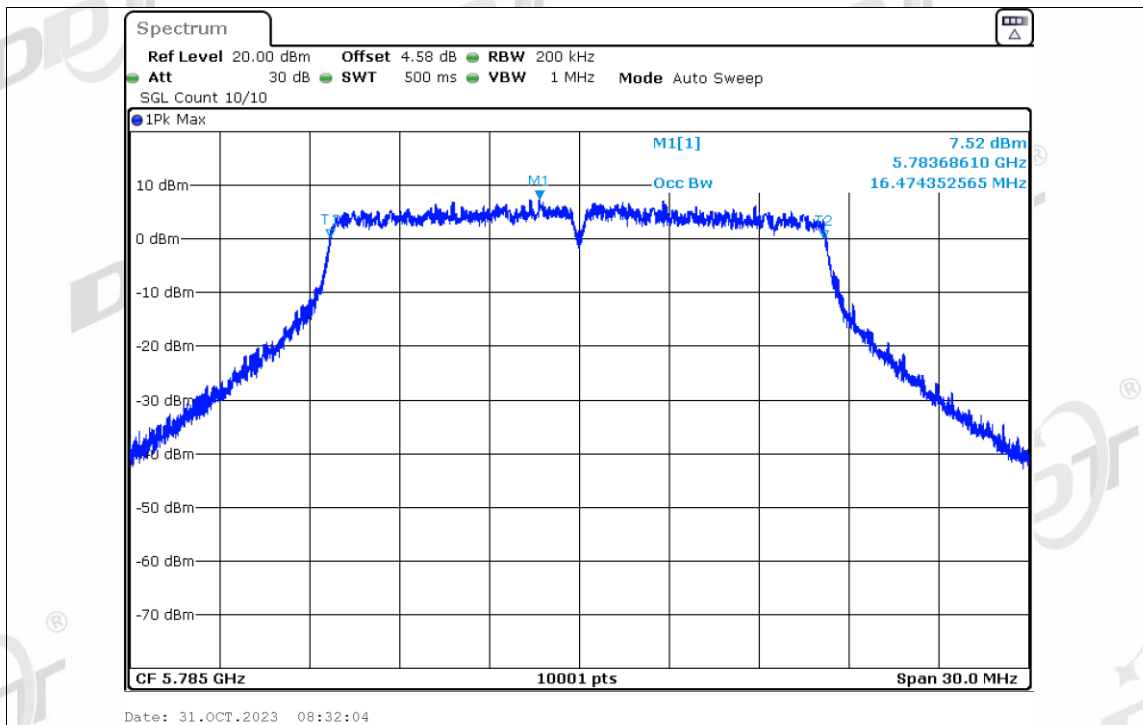
OBW NVNT a 5700MHz Ant3



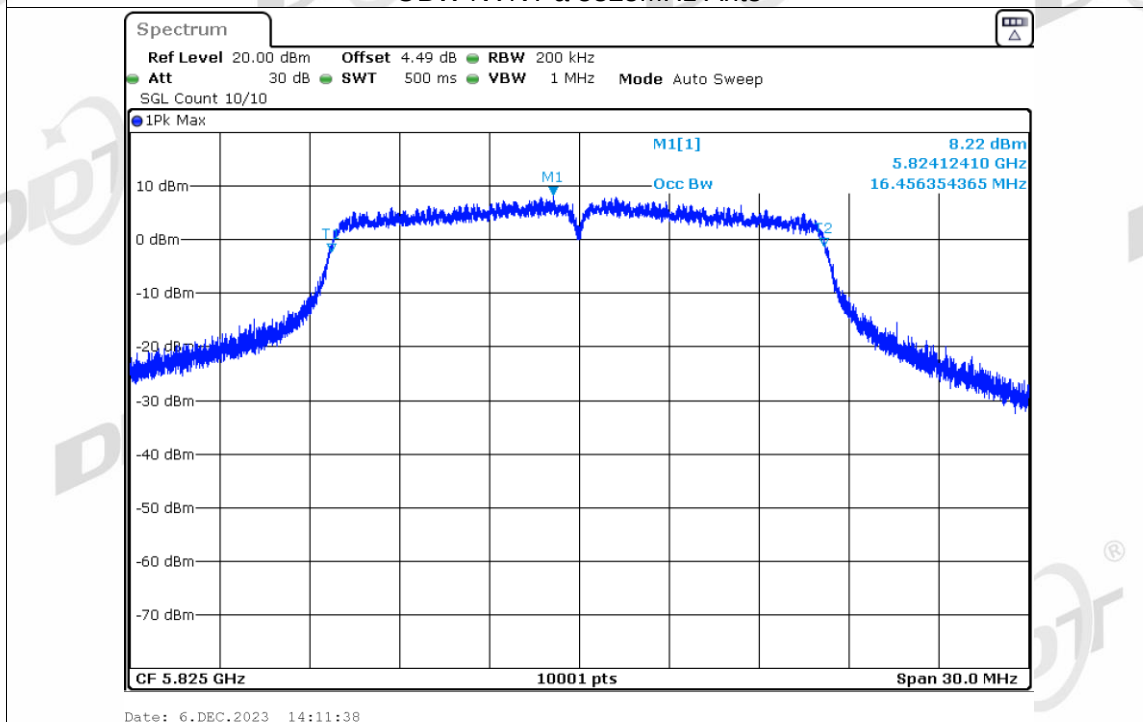
OBW NVNT a 5745MHz Ant3



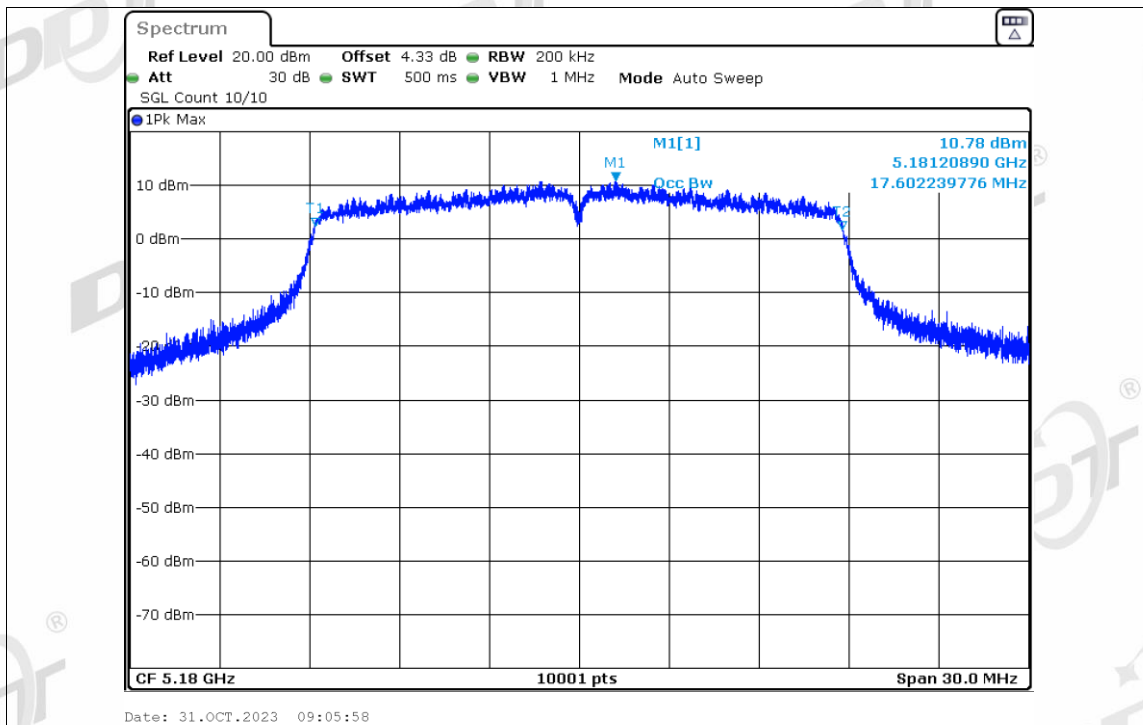
OBW NVNT a 5785MHz Ant3



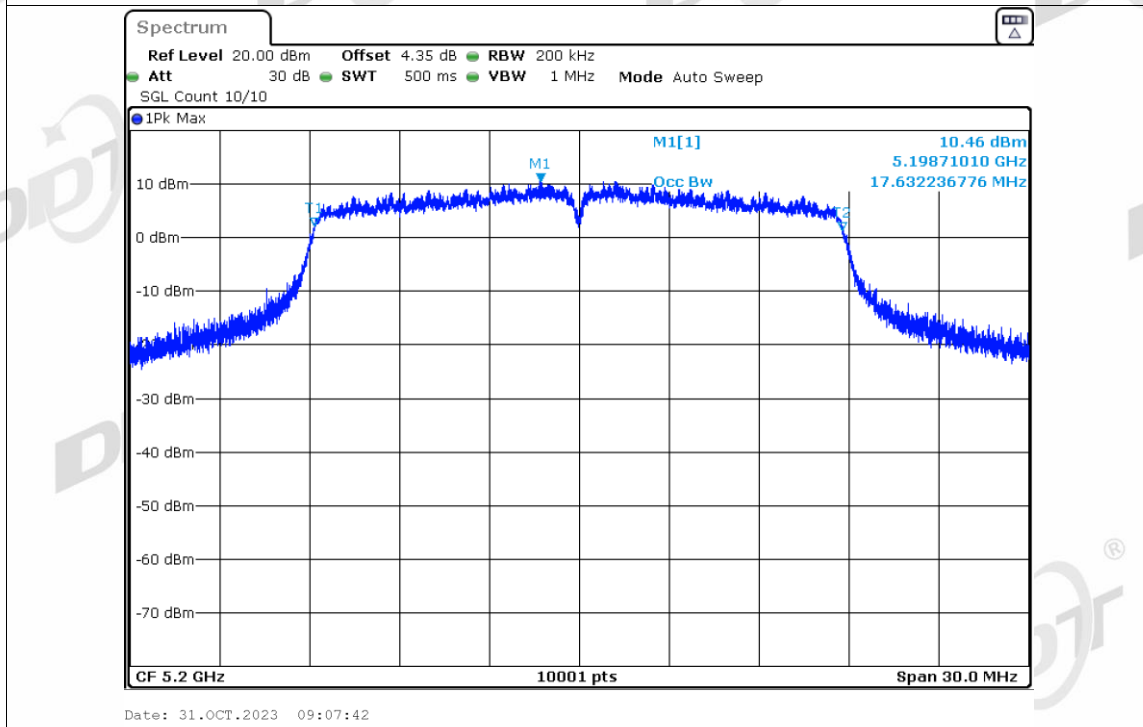
OBW NVNT a 5825MHz Ant3



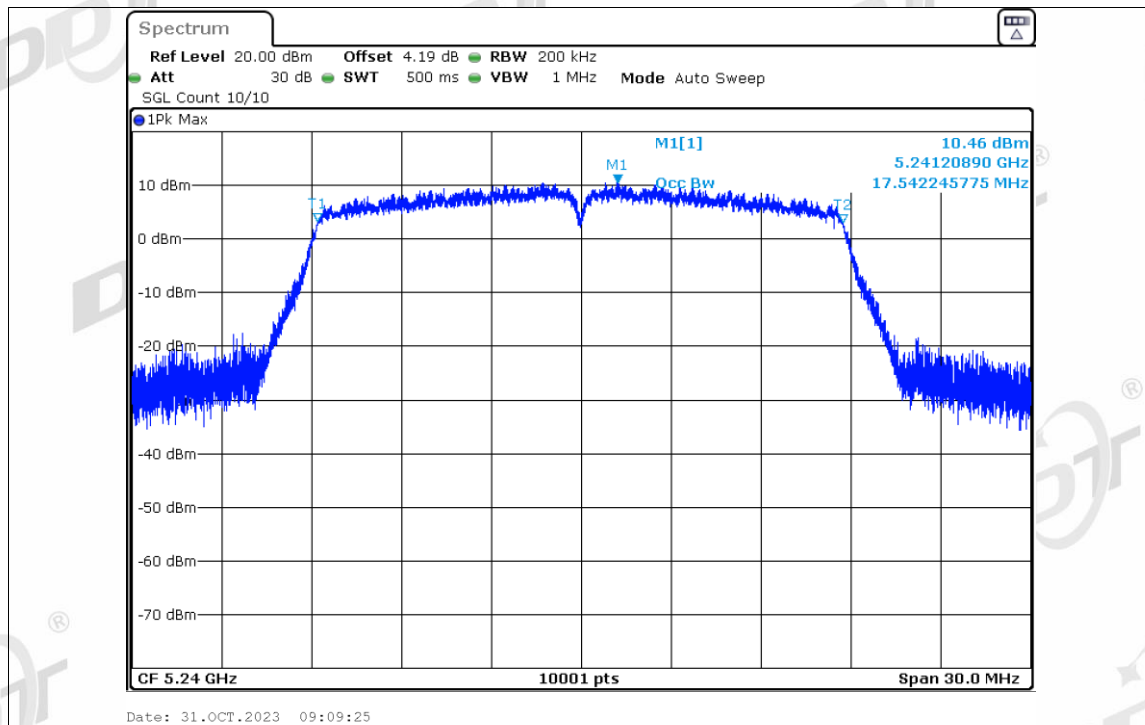
OBW NVNT n20 5180MHz Ant1



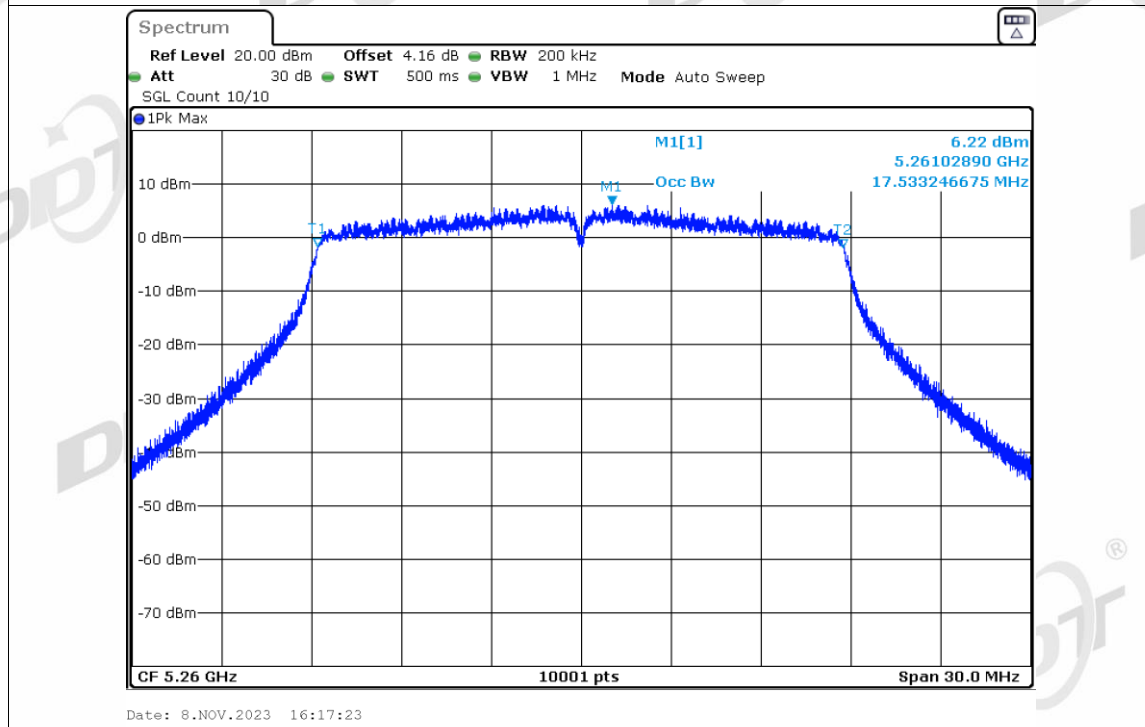
OBW NVNT n20 5200MHz Ant1



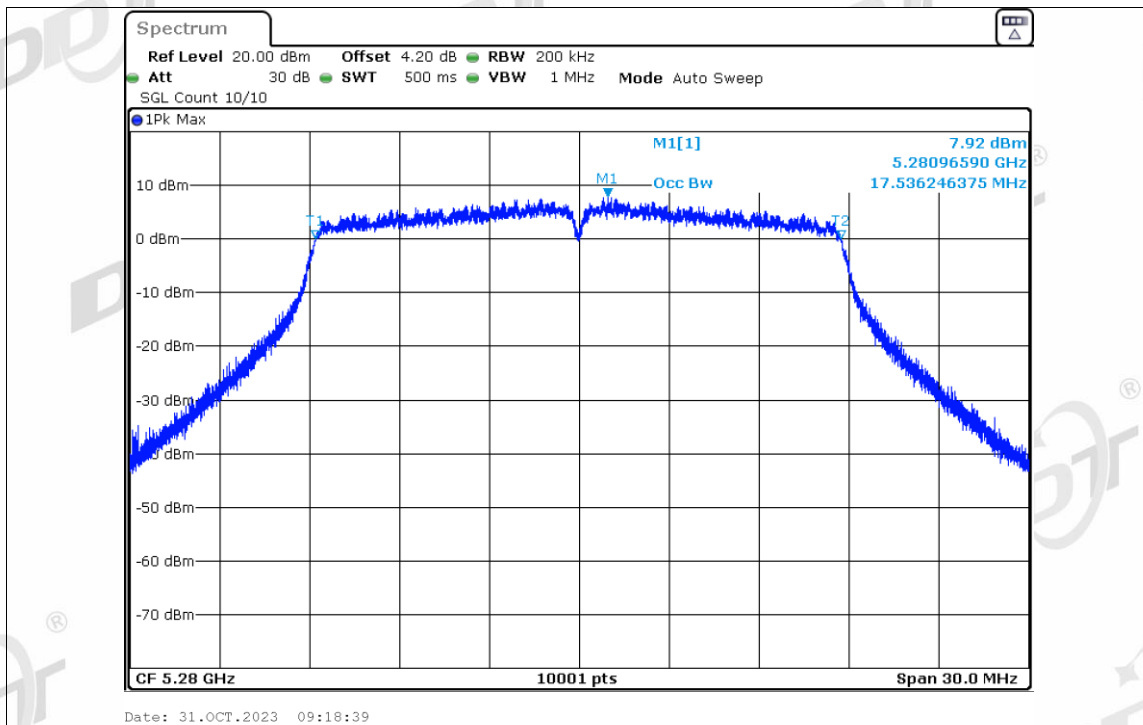
OBW NVNT n20 5240MHz Ant1



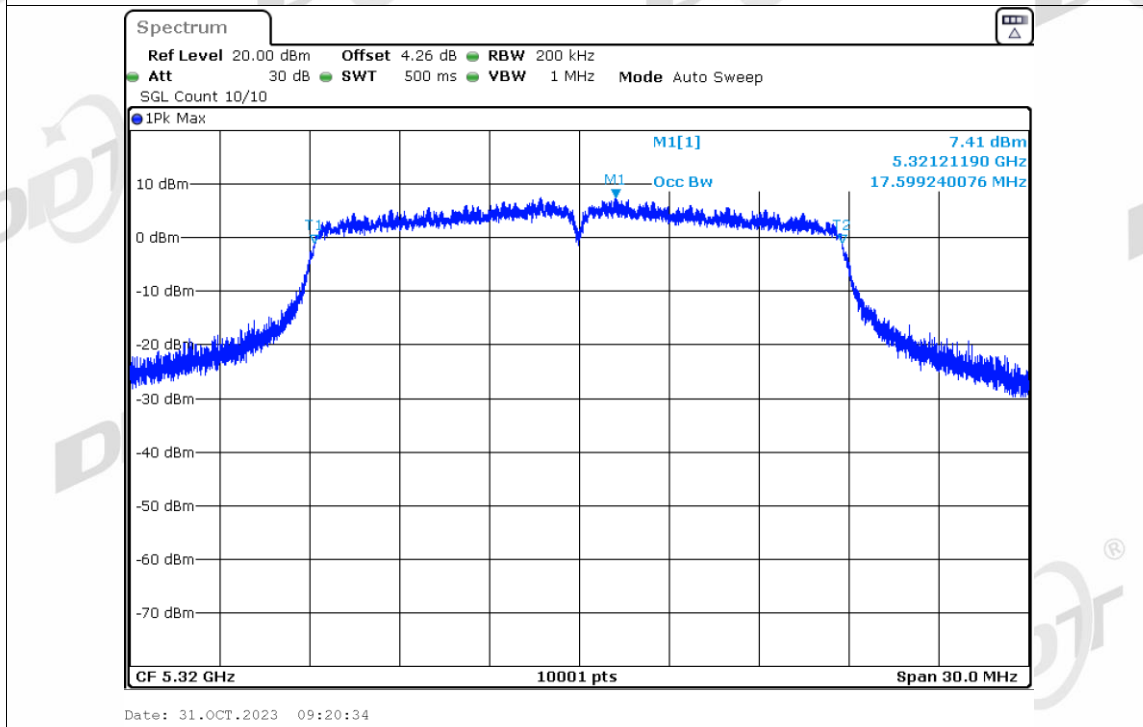
OBW NVNT n20 5260MHz Ant1



OBW NVNT n20 5280MHz Ant1

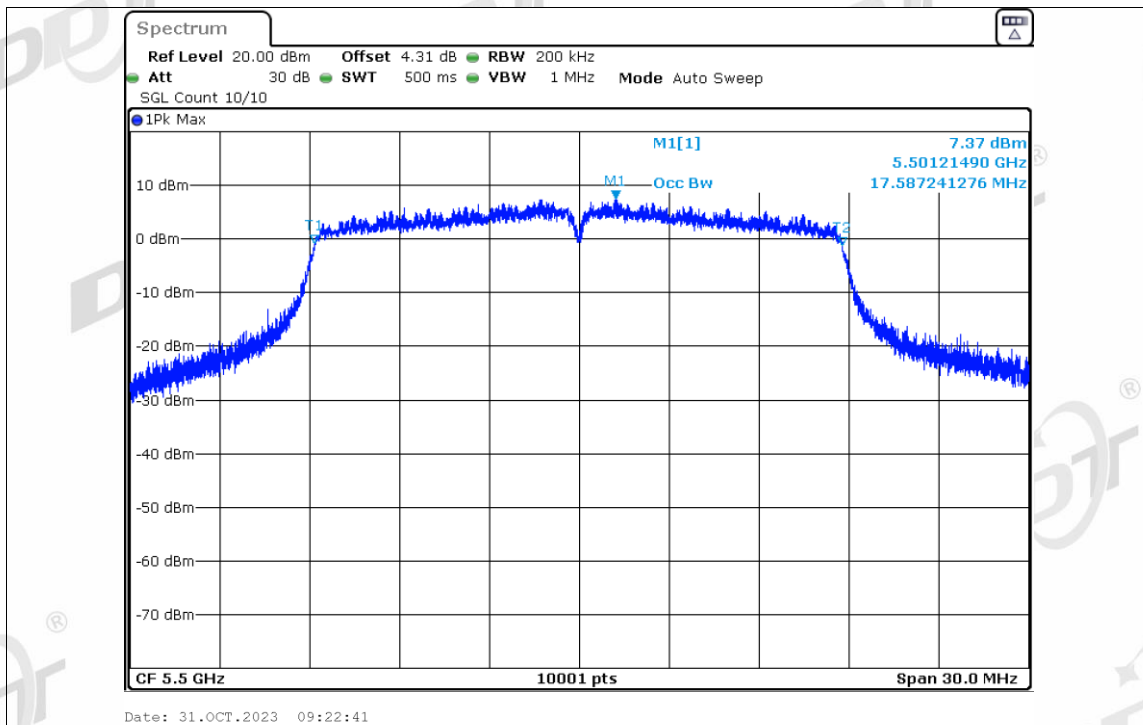


OBW NVNT n20 5320MHz Ant1

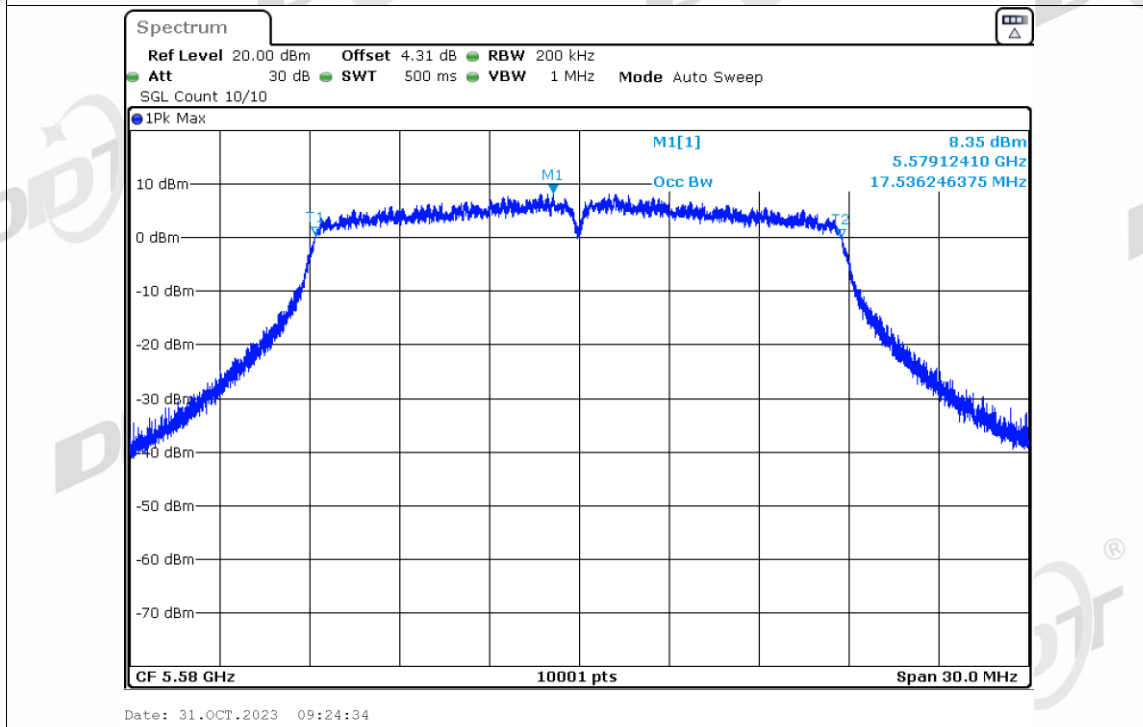


OBW NVNT n20 5500MHz Ant1



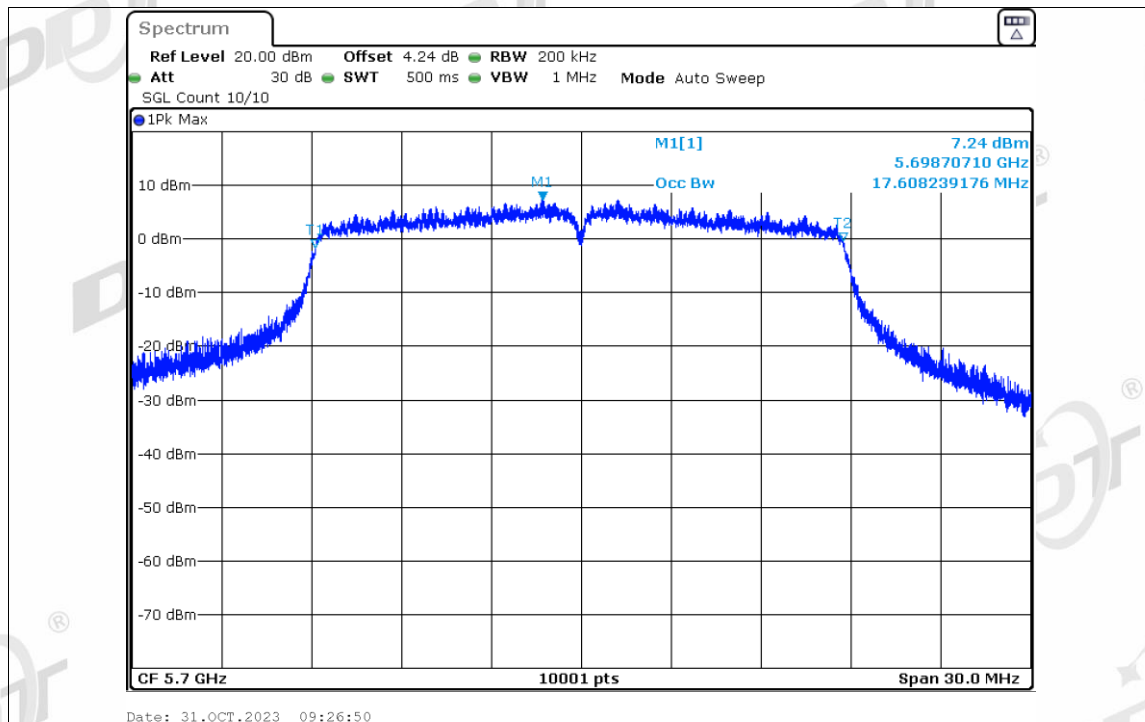


OBW NVNT n20 5580MHz Ant1

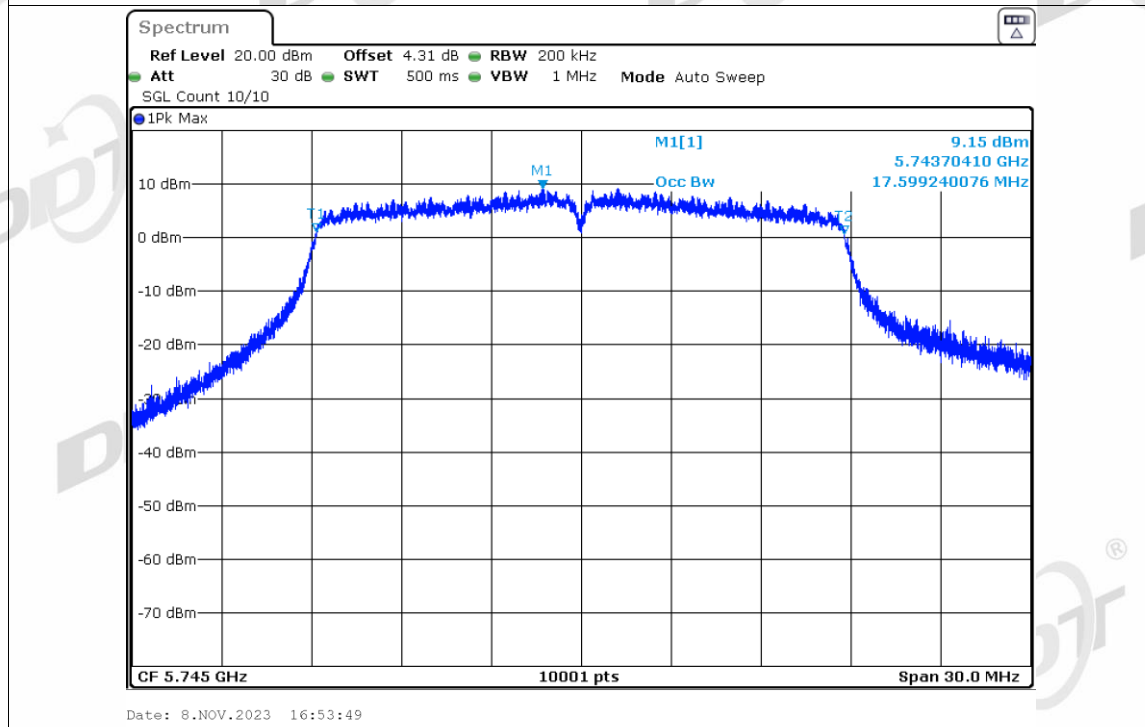


OBW NVNT n20 5700MHz Ant1

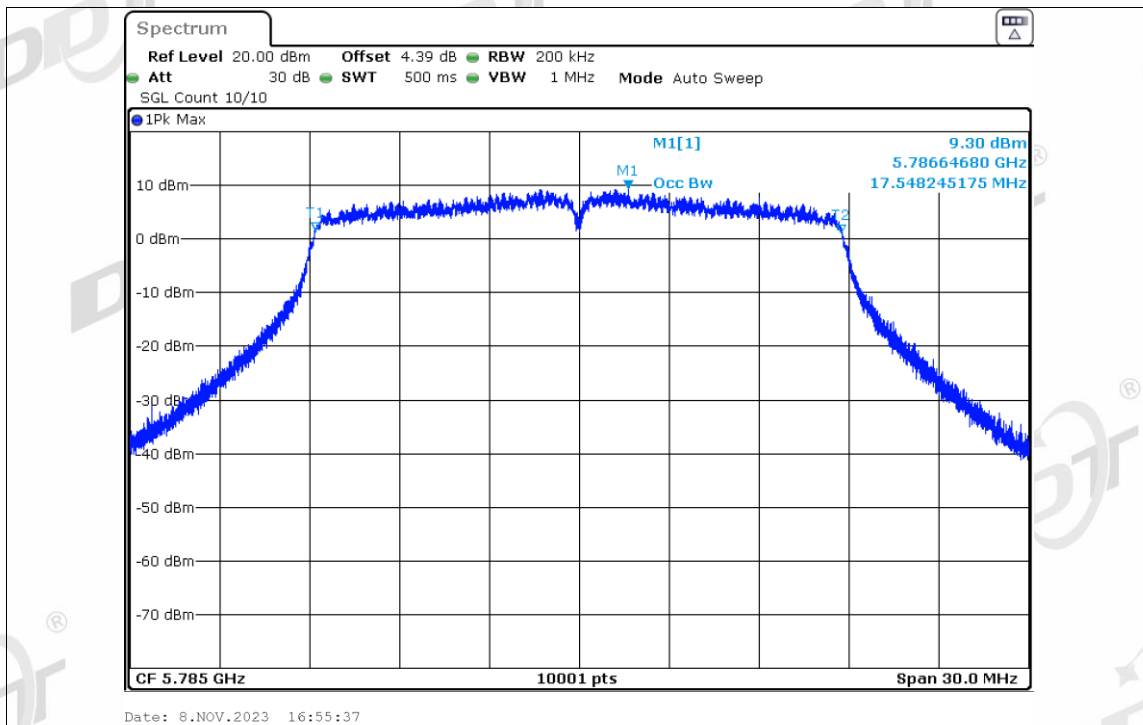




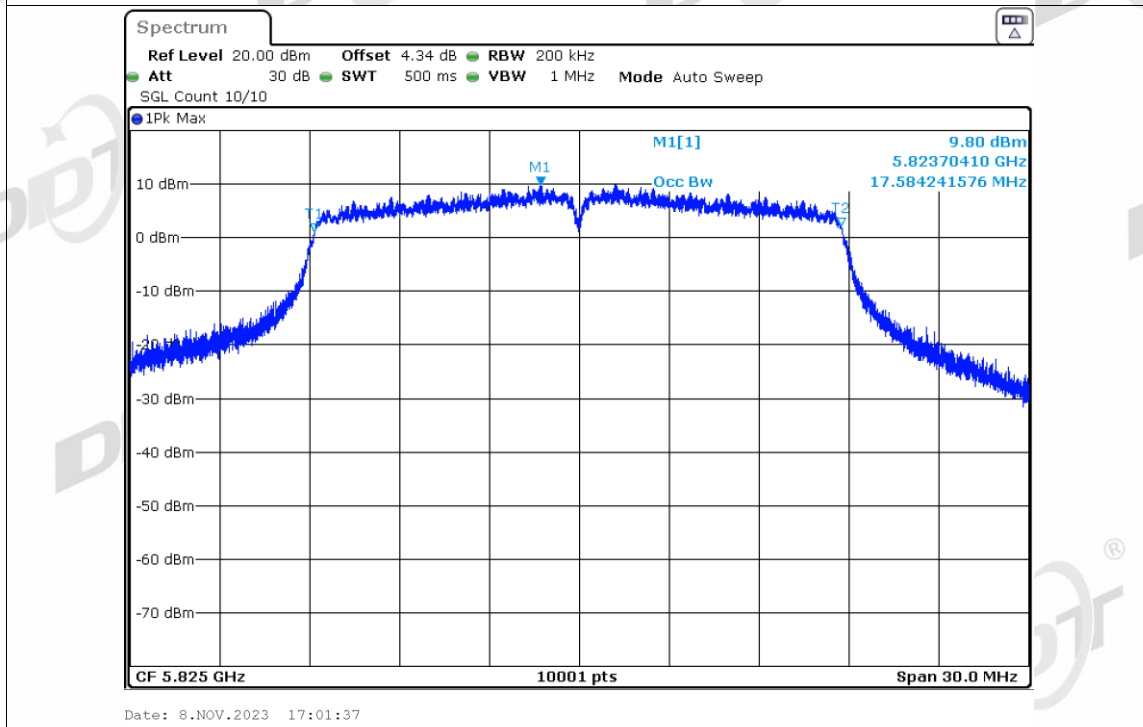
OBW NVNT n20 5745MHz Ant1



OBW NVNT n20 5785MHz Ant1



OBW NVNT n20 5825MHz Ant1



OBW NVNT n20 5180MHz Ant2