

# RADIO TEST REPORT

**REP068632**

Date of issue: December 23, 2024

Applicant:

**Andrew Wireless Systems Industriering 10, Buchdorf 86675  
Germany**

Product:

**RPM-A61L1-7E**

Model:

**7847588-00**

Model variant:

**None**

FCC ID:

**XS5-RPML2-B121314**

IC Registration number:

**NA**

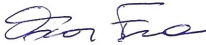
Specifications:

◆ **FCC 47 CFR Part 27**

Miscellaneous Wireless Communications Services

#### Lab and test locations

|              |                      |
|--------------|----------------------|
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|             |                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------|
| Tested by   | O. Frau                                                                                                                       |
| Signature   |  Firmato digitalmente<br>da Frau Oscar       |
| Reviewed by | D. Guarnone                                                                                                                   |
| Review date | December 23, 2024                                                                                                             |
| Signature   |  Firmato digitalmente<br>da Guarnone Daniele |

#### Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report. This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko Spa ISO/IEC 17025 accreditation.

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## Section 1. Report summary

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### 1.1 Applicant and manufacturer

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|                 |                         |
|-----------------|-------------------------|
| Company name    | Andrew Wireless Systems |
| Address         | Industriering 10,       |
| City            | Buchdorf                |
| Province/State  | --                      |
| Postal/Zip code | 86675                   |
| Country         | Germany                 |

### 1.2 Test specifications

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|                    |                                                |
|--------------------|------------------------------------------------|
| FCC 47 CFR Part 27 | Miscellaneous Wireless Communications Services |
|--------------------|------------------------------------------------|

### 1.3 Statement of compliance

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In the configuration tested, the EUT was found compliant.

Testing was performed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See "Summary of test results" for full details.

### 1.4 Exclusions

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None

### 1.5 Test report revision history

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| Revision # | Details of changes made to test report |
|------------|----------------------------------------|
| REP068632  | Original report issued                 |

## Section 2. Summary of test results

### 2.1 FCC Part 27 test results

| Part          | Test description                     | Verdict |
|---------------|--------------------------------------|---------|
| §2.1033(c)(4) | Modulation type                      | Pass    |
| §2.1049(h)    | 99% Occupied bandwidth               | Pass    |
| §27.53(h)(3)  | Frequency ranges                     | Pass    |
| §27.50(c)(3)  | Output power at RF antenna connector | Pass    |
| §27.50(d)(5)  | Peak to average power ratio          | Pass    |
| §27.53(m)     | Conducted spurious emissions         | Pass    |
| §27.53(m)     | Radiated spurious emissions          | Pass    |
| §27.53(h)(3)  | 26 dB Occupied bandwidth             | Pass    |
| §27.54        | Frequency stability                  | Pass    |

Note: None.

## Section 3. Equipment under test (EUT) details

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### 3.1 Sample information

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|                        |                  |
|------------------------|------------------|
| Receipt date           | November 7, 2024 |
| Nemko sample ID number | PRJ00630770006   |

### 3.2 EUT information

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|               |                |
|---------------|----------------|
| Product name  | RPM-A61L1-7E   |
| Model         | 7847588-00     |
| Part Number   | 7847588-00     |
| Serial number | SZRMBG24230045 |

### 3.3 Technical information

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|                             |                                                                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency band              | B12: 729 - 746 MHz                                                                                                                                    |
| RF power Max (W), Conducted | max Port 1 = 23.4 dBm (0.22 W) – max Port 2 = 23.2 dBm (0.21 W);<br>max comb. Port 1 + Port 2 = 26.3 dBm (0.43 W) @ 741.0 MHz (with 10 MHz bandwidth) |
| Supported bandwidths:       | 5, 10 MHz                                                                                                                                             |
| Type of modulation          | TM1.1, TM3p1, TM3p1a, TM3p3 (QPSK, 16QAM, 64QAM, 256QAM)                                                                                              |
| Power requirements          | 48 Vdc                                                                                                                                                |
| Antenna information         | The EUT uses a unique antenna coupling/ non-detachable antenna to the intentional radiator.                                                           |
| Antenna gain                | 3.7 dBi                                                                                                                                               |

### 3.4 Product description and theory of operation

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The radio unit (RU) is one of the components to configure the 4G RAN mobile communication system.

### 3.5 EUT exercise details

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A laptop computer was used to send test commands to EUT to force it to transmit the appropriate signal. Unit transmit the selected signal at full power. The unit was tested using a conducted port. The antenna installation shall be done by professionals, and they are not within the scope of the tests evaluated on this document.

### 3.6 EUT setup diagram

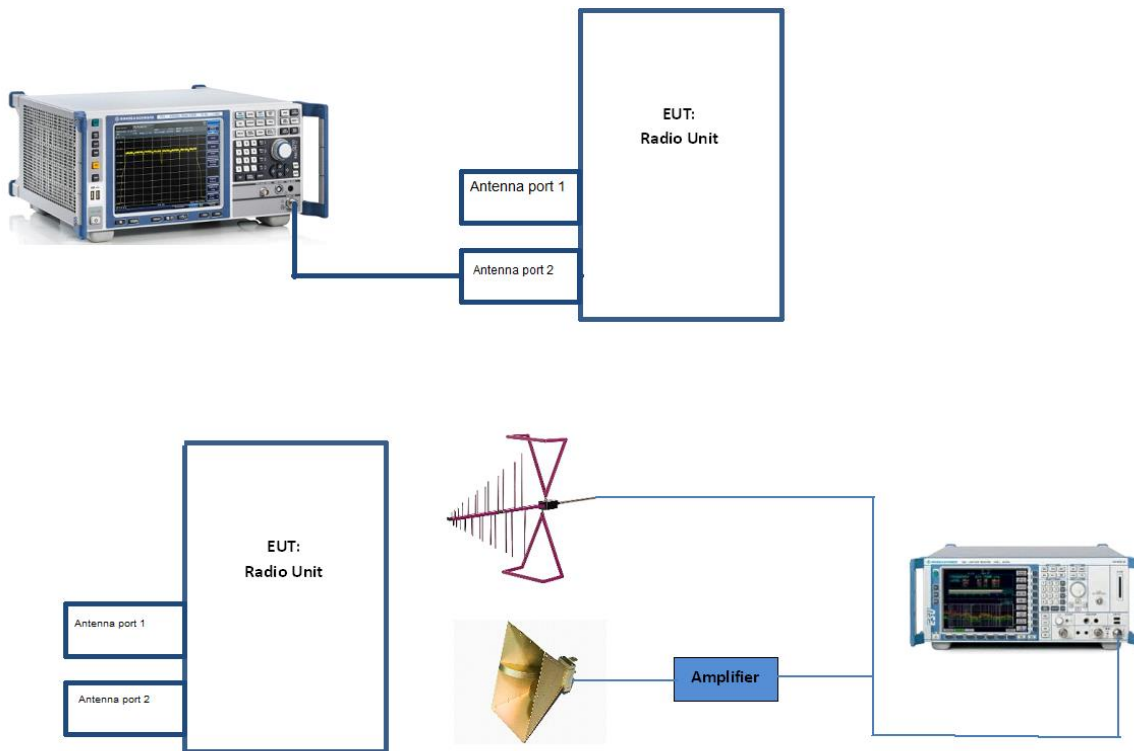


Figure 3.6-1: Setup diagram

## Section 4. Engineering considerations

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### 4.1 Modifications incorporated in the EUT

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There were no modifications performed to the EUT during this assessment.

### 4.2 Technical judgment

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None

### 4.3 Deviations from laboratory tests procedures

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No deviations were made from laboratory procedures.

## Section 5. Test conditions

### 5.1 Atmospheric conditions

|                   |                                         |
|-------------------|-----------------------------------------|
| Temperature       | 15 °C – 35 °C                           |
| Relative humidity | 20 % – 75 %                             |
| Air pressure      | 86 kPa (860 mbar) – 106 kPa (1060 mbar) |

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

The following instruments are used to monitor the environmental conditions:

| Equipment                      | Manufacturer | Model no. | Asset no.    | Cal date | Next cal. |
|--------------------------------|--------------|-----------|--------------|----------|-----------|
| Thermo-hygrometer data loggers | Testo        | 175-H2    | 20012380/305 | 2022-12  | 2024-12   |
| Thermo-hygrometer data loggers | Testo        | 175-H2    | 38203337/703 | 2022-12  | 2024-12   |
| Barometer                      | Castle       | GPB 3300  | 072015       | 2024-04  | 2025-04   |

### 5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages  $\pm 5\%$ , for which the equipment was designed.

## Section 6. Measurement uncertainty

### 6.1 Uncertainty of measurement

The measurement uncertainty was calculated for each test and quantity listed in this test report, according to CISPR 16-4-2, ETSI TR 100 028-1, ETSI TR 100 028-2 and other specific test standards and is documented in Nemko Spa working manuals WML1002 and WML0078.

The assessment of conformity for each test performed on the equipment is performed not taking into account the measurement uncertainty. The two following possible verdicts are stated in the report:

P (Pass) - The measured values of the equipment respect the specification limit at the points tested. The specific risk of false accept is up to 50% when the measured result is close to the limit.

F (Fail) - One or more measured values of the equipment do not respect the specification limit at the points tested. The specific risk of false reject is up to 50% when the measured result is close to the limit.

Hereafter Nemko's measurement uncertainties are reported:

| EUT         | Type      | Test                                                                                    | Range                | Measurement Uncertainty | Notes |
|-------------|-----------|-----------------------------------------------------------------------------------------|----------------------|-------------------------|-------|
| Transmitter | Conducted | Frequency error                                                                         | 0.001 MHz ÷ 40 GHz   | 0.08 ppm                | (1)   |
|             |           | Carrier power<br>RF Output Power                                                        | 0.009 MHz ÷ 30 MHz   | 1.1 dB                  | (1)   |
|             |           |                                                                                         | 30 MHz ÷ 18 GHz      | 1.5 dB                  | (1)   |
|             |           |                                                                                         | 18 MHz ÷ 40 GHz      | 3.0 dB                  | (1)   |
|             |           |                                                                                         | 5 MHz ÷ 140 GHz      | 5.0 dB                  | (1)   |
|             |           | Adjacent channel power                                                                  | 1 MHz ÷ 18 GHz       | 1.4 dB                  | (1)   |
|             |           | Conducted spurious emissions                                                            | 0.009 MHz ÷ 18 GHz   | 3.0 dB                  | (1)   |
|             |           |                                                                                         | 18 GHz ÷ 40 GHz      | 4.2 dB                  | (1)   |
|             |           |                                                                                         | 40 GHz ÷ 220 GHz     | 6.0 dB                  | (1)   |
|             |           | Intermodulation attenuation                                                             | 1 MHz ÷ 18 GHz       | 2.2 dB                  | (1)   |
|             |           | Attack time – frequency behaviour                                                       | 1 MHz ÷ 18 GHz       | 2.0 ms                  | (1)   |
|             |           | Attack time – power behaviour                                                           | 1 MHz ÷ 18 GHz       | 2.5 ms                  | (1)   |
|             |           | Release time – frequency behaviour                                                      | 1 MHz ÷ 18 GHz       | 2.0 ms                  | (1)   |
|             |           | Release time – power behaviour                                                          | 1 MHz ÷ 18 GHz       | 2.5 ms                  | (1)   |
|             |           | Transient behaviour of the transmitter– Transient frequency behaviour                   | 1 MHz ÷ 18 GHz       | 0.2 kHz                 | (1)   |
|             |           | Transient behaviour of the transmitter – Power level slope                              | 1 MHz ÷ 18 GHz       | 9%                      | (1)   |
|             |           | Frequency deviation - Maximum permissible frequency deviation                           | 0.001 MHz ÷ 18 GHz   | 1.3%                    | (1)   |
|             |           | Frequency deviation - Response of the transmitter to modulation frequencies above 3 kHz | 0.001 MHz ÷ 18 GHz   | 0.5 dB                  | (1)   |
|             |           | Dwell time                                                                              | -                    | 3%                      | (1)   |
|             |           | Hopping Frequency Separation                                                            | 0.01 MHz ÷ 18 GHz    | 1%                      | (1)   |
|             |           | Occupied Channel Bandwidth                                                              | 0.01 MHz ÷ 18 GHz    | 2%                      | (1)   |
|             |           | Modulation Bandwidth                                                                    | 0.01 MHz ÷ 18 GHz    | 2%                      | (1)   |
|             | Radiated  | Radiated spurious emissions                                                             | 0.009 MHz ÷ 26.5 GHz | 6.0 dB                  | (1)   |
|             |           |                                                                                         | 26.5 GHz ÷ 66 GHz    | 8.0 dB                  | (1)   |
|             |           |                                                                                         | 66 GHz ÷ 220 GHz     | 10 dB                   | (1)   |
|             |           | Effective radiated power transmitter                                                    | 10 kHz ÷ 26.5 GHz    | 6.0 dB                  | (1)   |
|             |           |                                                                                         | 26.5 GHz ÷ 66 GHz    | 8.0 dB                  | (1)   |
|             |           |                                                                                         | 66 GHz ÷ 220 GHz     | 10 dB                   | (1)   |

#### NOTES:

(1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2$ , which for a normal distribution corresponds to a coverage probability of approximately 95 %

## Section 7. Test equipment

### 7.1 Test equipment list

**Table 7.1-1: Equipment list**

| Equipment                        | Manufacturer                   | Model no.                 | Asset no.     | Cal cycle | Next cal. |
|----------------------------------|--------------------------------|---------------------------|---------------|-----------|-----------|
| Spectrum Analyzer                | Rohde & Schwarz                | FSW43                     | 101767        | 2024-01   | 2025-01   |
| EMI Receiver                     | Rohde & Schwarz                | ESU8                      | 100202        | 2024-09   | 2025-09   |
| EMI Receiver                     | Rohde & Schwarz                | ESW44                     | 101620        | 2024-08   | 2025-08   |
| RF Vector Signal Generator       | Rohde & Schwarz                | SMBV100A                  | 263254        | 2024-05   | 2025-05   |
| RF Vector Signal Generator       | Rohde & Schwarz                | SMBV100A                  | 263397        | 2024-09   | 2025-09   |
| Climatic Chamber                 | MSL                            | EC500DA                   | 15022         | 2024-01   | 2025-01   |
| Antenna Trilog 25MHz - 8GHz      | Schwarzbeck Mess-Elektronik    | VULB9162                  | 9162-025      | 2024-07   | 2027-07   |
| Antenna 1 - 18 GHz               | Schwarzbeck Mess-Elektronik    | STLP9148                  | STLP 9148-152 | 2024-09   | 2027-09   |
| Double Ridge Horn Antenna        | RFSpin                         | DRH40                     | 061106A40     | 2023-04   | 2026-04   |
| Broadband Amplifier              | Schwarzbeck Mess-Elektronik    | BBV9718C                  | 00121         | 2024-01   | 2025-01   |
| Broadband Bench Top Amplifier    | Sage                           | STB-1834034030-KFKF-L1    | 18490-01      | 2024-04   | 2025-04   |
| Semi-anechoic chamber            | Nemko S.p.a.                   | 10m semi-anechoic chamber | 530           | 2023-09   | 2025-09   |
| Controller                       | Maturo                         | FCU3.0                    | 10041         | NCR       | NCR       |
| Tilt antenna mast                | Maturo                         | TAM4.0-E                  | 10042         | NCR       | NCR       |
| Turntable                        | Maturo                         | TT4.0-5T                  | 2.527         | NCR       | NCR       |
| Semi-anechoic chamber            | Comtest                        | 3m SAC                    | 1711-150      | 2024-09   | 2026-09   |
| Controller                       | Maturo                         | FCU3.0                    | 10237         | NCR       | NCR       |
| Tilt antenna mast                | Maturo                         | TAM4.0-E                  | 3466.01       | NCR       | NCR       |
| Turntable                        | Maturo                         | TT4.0                     | -             | NCR       | NCR       |
| Pyramidal Horn Antenna 40-60 GHz | Sage                           | SAR-2507-19VF-R2          | 15715-01      | 2024-06   | 2027-06   |
| Harmonic Mixer                   | Radiometer Physics             | FS-Z60                    | 100988        | 2024-01   | 2027-01   |
| Cable set                        | Rosenberger                    | ST.ALO-02                 | 1.650         | 2024-10   | 2025-10   |
| Cable set                        | Rosenberger and Huber + Suhner | RE01+RE02                 | 1.654+1.655   | 2024-09   | 2025-09   |
| Cable set                        | Rosenberger+Huber-Suhner       | RE03+RE04                 | 1.510+1.511   | 2024-09   | 2025-09   |

## Section 8. Testing data

### 8.1 FCC §2.1033(c)(4) Modulation type

#### 8.1.1 Definitions and limits

(c) Applications for equipment other than that operating under parts 15, 11 and 18 of this chapter shall be accompanied by a technical report containing the following information:

(4) Type or types of emission

#### 8.1.2 Test summary

|               |                   |                   |           |
|---------------|-------------------|-------------------|-----------|
| Test date     | November 20, 2024 | Temperature       | 22 °C     |
| Test engineer | O. Frau           | Air pressure      | 1001 mbar |
| Verdict       | Pass              | Relative humidity | 62 %      |

#### 8.1.3 Observations, settings and special notes

None

#### 8.1.4 Test data

Band B12:

| Bandwidth (MHz) | Emission type |
|-----------------|---------------|
| 5               | TM1.1         |
| 5               | TM3p1         |
| 5               | TM3p1a        |
| 5               | TM3p3         |
| 10              | TM1.1         |
| 10              | TM3p1         |
| 10              | TM3p1a        |
| 10              | TM3p3         |

**Table Error.** Per applicare Heading 2 al testo da visualizzare in questo punto, utilizzare la scheda Home.-1: Types of emission

## 8.2 FCC §2.1049(h) 99% Occupied Bandwidth and frequency ranges

### 8.2.1 Definitions and limits

§2.1049 (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the use.

### 8.2.2 Test summary

|                 |                   |                   |           |
|-----------------|-------------------|-------------------|-----------|
| Test start date | November 22, 2024 | Temperature       | 22 °C     |
| Test end date   | December 13, 2024 | Air pressure      | 1001 mbar |
| Test engineer   | O. Frau           | Relative humidity | 62%       |
| Verdict         | Pass              |                   |           |

### 8.2.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.4.4

Spectrum analyzer settings:

|                      |             |
|----------------------|-------------|
| Resolution bandwidth | 1% - 5% OBW |
| Video bandwidth      | 3*RBW       |
| Frequency span       | 2*OBW       |
| Detector mode        | Peak        |
| Trace mode           | Max Hold    |

### 8.2.4 Test equipment used

| Equipment         | Manufacturer    | Model no. | Asset no. |
|-------------------|-----------------|-----------|-----------|
| Spectrum Analyzer | Rohde & Schwarz | FSW43     | 101767    |

## 8.2.5 Test data

## Band B12: Antenna port 1

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM1.1      | 731.5         | 4.49          |
| B12  | 5 MHz        | TM1.1      | 737.5         | 4.50          |
| B12  | 5 MHz        | TM1.1      | 743.5         | 4.49          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p1      | 731.5         | 4.50          |
| B12  | 5 MHz        | TM3p1      | 737.5         | 4.51          |
| B12  | 5 MHz        | TM3p1      | 743.5         | 4.51          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p1a     | 731.5         | 4.48          |
| B12  | 5 MHz        | TM3p1a     | 737.5         | 4.49          |
| B12  | 5 MHz        | TM3p1a     | 743.5         | 4.48          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p3      | 731.5         | 4.50          |
| B12  | 5 MHz        | TM3p3      | 737.5         | 4.50          |
| B12  | 5 MHz        | TM3p3      | 743.5         | 4.50          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM1.1      | 734.0         | 8.96          |
| B12  | 10 MHz       | TM1.1      | 737.5         | 8.97          |
| B12  | 10 MHz       | TM1.1      | 741.0         | 8.97          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p1      | 734.0         | 8.97          |
| B12  | 10 MHz       | TM3p1      | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p1      | 741.0         | 8.97          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p1a     | 734.0         | 8.97          |
| B12  | 10 MHz       | TM3p1a     | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p1a     | 741.0         | 8.98          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p3      | 734.0         | 8.97          |
| B12  | 10 MHz       | TM3p3      | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p3      | 741.0         | 8.97          |

# Band B12: Antenna port 2

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM1.1      | 731.5         | 4.49          |
| B12  | 5 MHz        | TM1.1      | 737.5         | 4.49          |
| B12  | 5 MHz        | TM1.1      | 743.5         | 4.50          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p1      | 731.5         | 4.52          |
| B12  | 5 MHz        | TM3p1      | 737.5         | 4.50          |
| B12  | 5 MHz        | TM3p1      | 743.5         | 4.51          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p1a     | 731.5         | 4.48          |
| B12  | 5 MHz        | TM3p1a     | 737.5         | 4.49          |
| B12  | 5 MHz        | TM3p1a     | 743.5         | 4.49          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 5 MHz        | TM3p3      | 731.5         | 4.50          |
| B12  | 5 MHz        | TM3p3      | 737.5         | 4.50          |
| B12  | 5 MHz        | TM3p3      | 743.5         | 4.50          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM1.1      | 734.0         | 8.96          |
| B12  | 10 MHz       | TM1.1      | 737.5         | 8.96          |
| B12  | 10 MHz       | TM1.1      | 741.0         | 8.96          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p1      | 734.0         | 8.96          |
| B12  | 10 MHz       | TM3p1      | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p1      | 741.0         | 8.97          |

| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p1a     | 734.0         | 8.97          |
| B12  | 10 MHz       | TM3p1a     | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p1a     | 741.0         | 8.98          |

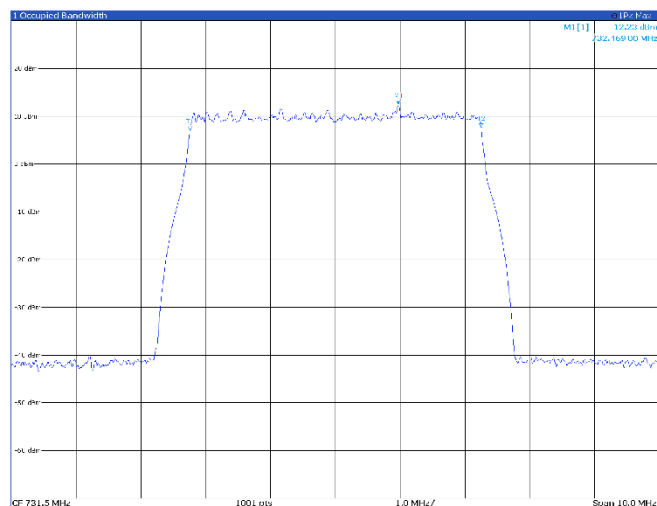
| Band | OBW Declared | Modulation | Channel (MHz) | 99% OBW (MHz) |
|------|--------------|------------|---------------|---------------|
| B12  | 10 MHz       | TM3p3      | 734.0         | 8.97          |
| B12  | 10 MHz       | TM3p3      | 737.5         | 8.97          |
| B12  | 10 MHz       | TM3p3      | 741.0         | 8.97          |

## Antenna port 1

Band B12

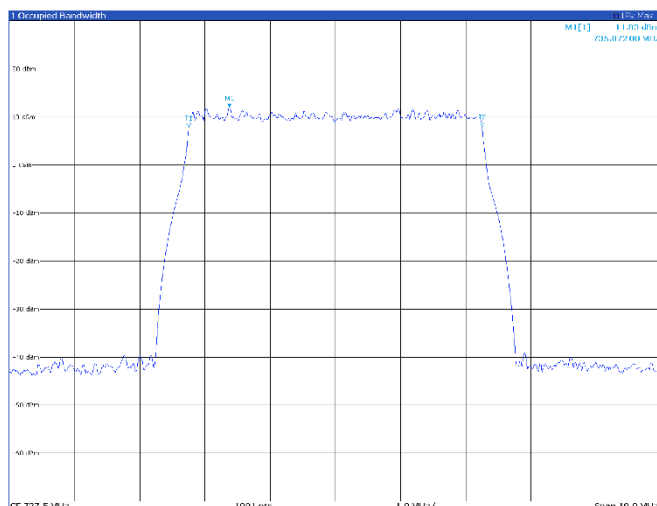
5 MHz

## TM1.1, 5 MHz, low channel



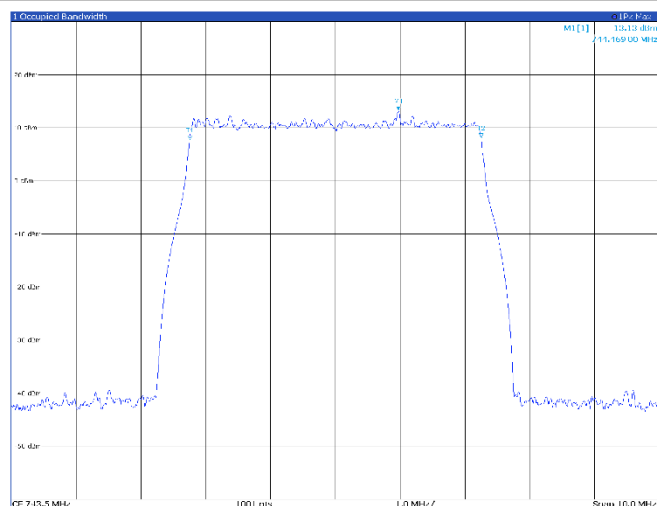
| Type | Ref | Trc | X Value     | Y Value   | Function       | Function Result   |
|------|-----|-----|-------------|-----------|----------------|-------------------|
| M1   | 1   |     | 731.500 MHz | 12.23 dBm | Occ Sw         | 4.491 406 139 MHz |
| M2   | 1   |     | 731.500 MHz | 6.05 dBm  | Occ Sw Channel | 731.500 126 MHz   |
| M3   | 1   |     | 731.500 MHz | 2.00 dBm  | Occ Sw Channel | 731.500 126 MHz   |

## TM1.1, 5 MHz, mid channel



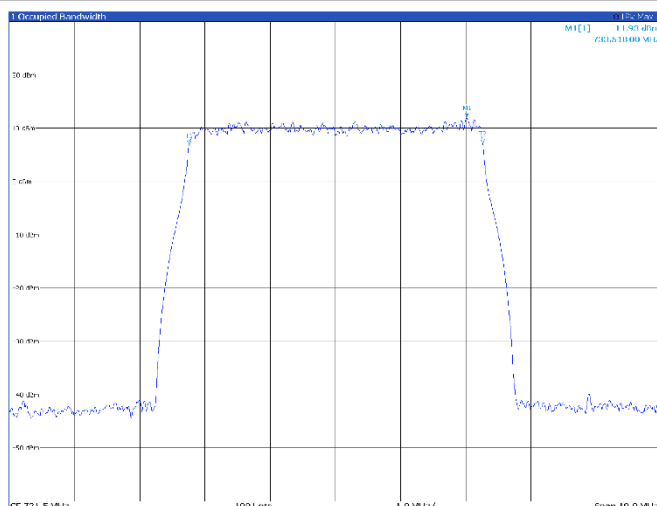
| Type | Ref | Trc | X Value     | Y Value   | Function       | Function Result   |
|------|-----|-----|-------------|-----------|----------------|-------------------|
| M1   | 1   |     | 735.500 MHz | 11.83 dBm | Occ Sw         | 4.496 770 149 MHz |
| M2   | 1   |     | 735.500 MHz | 7.75 dBm  | Occ Sw Channel | 735.500 126 MHz   |
| M3   | 1   |     | 735.500 MHz | 2.00 dBm  | Occ Sw Channel | 735.500 126 MHz   |

## TM1.1, 5 MHz, high channel



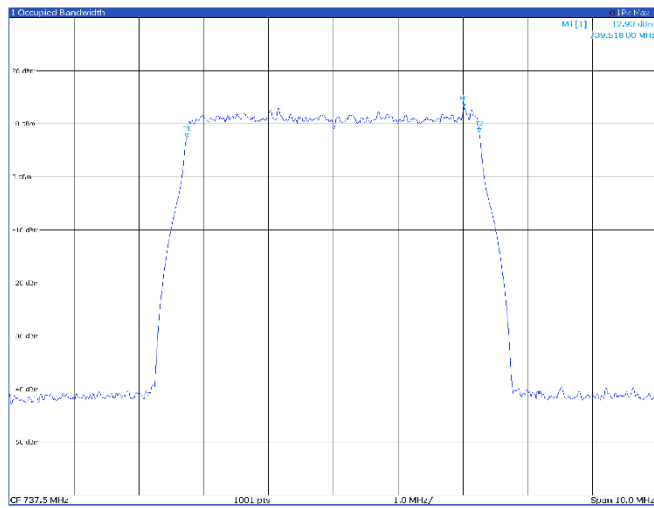
| Type | Ref | Trc | X Value     | Y Value   | Function       | Function Result  |
|------|-----|-----|-------------|-----------|----------------|------------------|
| M1   | 1   |     | 744.500 MHz | 13.13 dBm | Occ Sw         | 4.494 541 55 MHz |
| M2   | 1   |     | 744.500 MHz | 7.75 dBm  | Occ Sw Channel | 744.500 126 MHz  |
| M3   | 1   |     | 744.500 MHz | 2.00 dBm  | Occ Sw Channel | 744.500 126 MHz  |

## TM3p1, 5 MHz, low channel



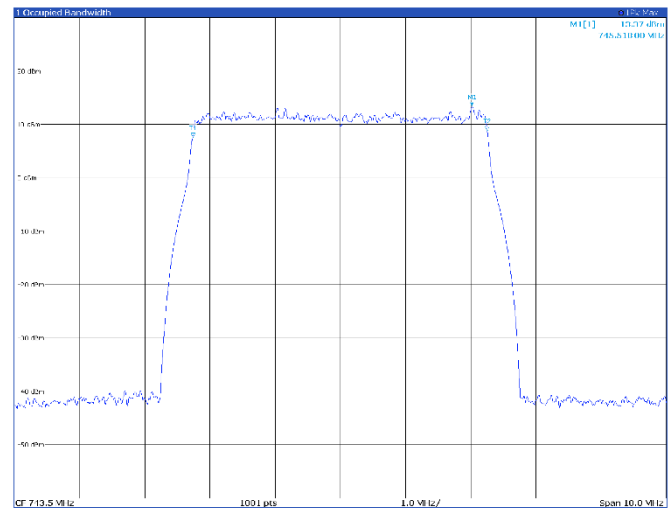
| Type | Ref | Trc | X Value     | Y Value   | Function       | Function Result   |
|------|-----|-----|-------------|-----------|----------------|-------------------|
| M1   | 1   |     | 733.500 MHz | 11.93 dBm | Occ Sw         | 4.501 269 809 MHz |
| M2   | 1   |     | 733.500 MHz | 6.05 dBm  | Occ Sw Channel | 733.500 126 MHz   |
| M3   | 1   |     | 733.500 MHz | 2.00 dBm  | Occ Sw Channel | 733.500 126 MHz   |

### TM3p1, 5 MHz, mid channel



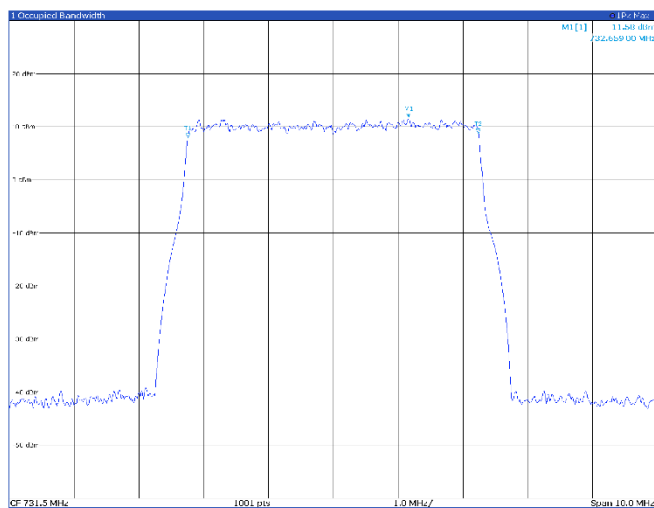
| Type | Ref | Trc | X Value     | Y Value    | Corr. Fnc | Function | Function Result   |
|------|-----|-----|-------------|------------|-----------|----------|-------------------|
| M1   | 1   |     | 739.518 MHz | 12.93 dBm  | Corr. Fnc |          | 4.510403763 MHz   |
| T1   | 1   |     | 739.518 MHz | -47.27 dBm | Corr. Fnc |          | 737.495217451 MHz |
| Z    | 1   |     | 739.518 MHz | 0.00 dBm   | Corr. Fnc |          | -4.866531311 dB   |

### TM3p1, 5 MHz, high channel



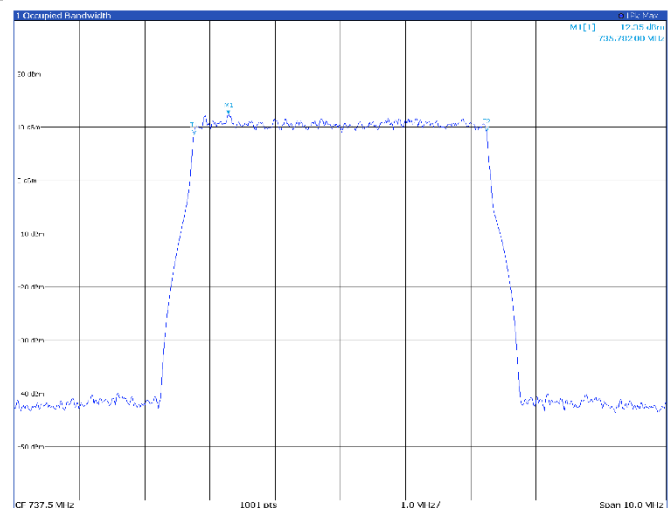
| Type | Ref | Trc | X Value     | Y Value    | Corr. Fnc | Function | Function Result   |
|------|-----|-----|-------------|------------|-----------|----------|-------------------|
| M1   | 1   |     | 745.518 MHz | 13.37 dBm  | Corr. Fnc |          | 4.513173768 MHz   |
| T1   | 1   |     | 745.518 MHz | -47.50 dBm | Corr. Fnc |          | 743.495653044 MHz |
| Z    | 1   |     | 745.518 MHz | 0.00 dBm   | Corr. Fnc |          | -4.866531311 dB   |

### TM3p1a, 5 MHz, low channel



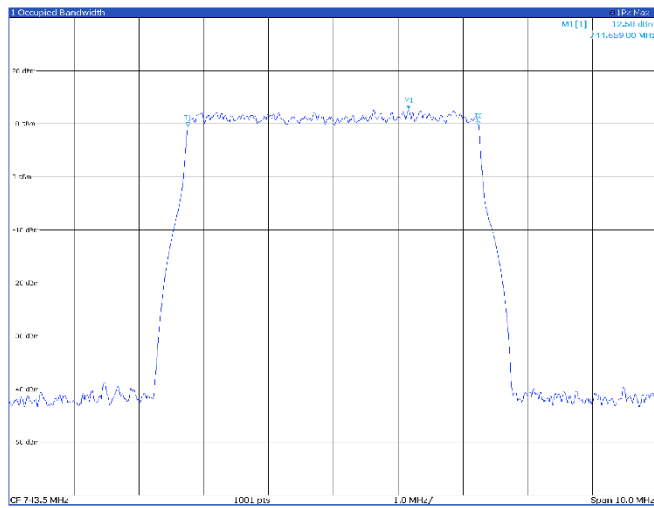
| Type | Ref | Trc | X Value     | Y Value    | Corr. Fnc | Function | Function Result   |
|------|-----|-----|-------------|------------|-----------|----------|-------------------|
| M1   | 1   |     | 732.659 MHz | 11.55 dBm  | Corr. Fnc |          | 4.483732477 MHz   |
| T1   | 1   |     | 732.659 MHz | -47.58 dBm | Corr. Fnc |          | 730.487186576 MHz |
| Z    | 1   |     | 732.659 MHz | 0.00 dBm   | Corr. Fnc |          | -4.866531311 dB   |

### TM3p1a, 5 MHz, mid channel



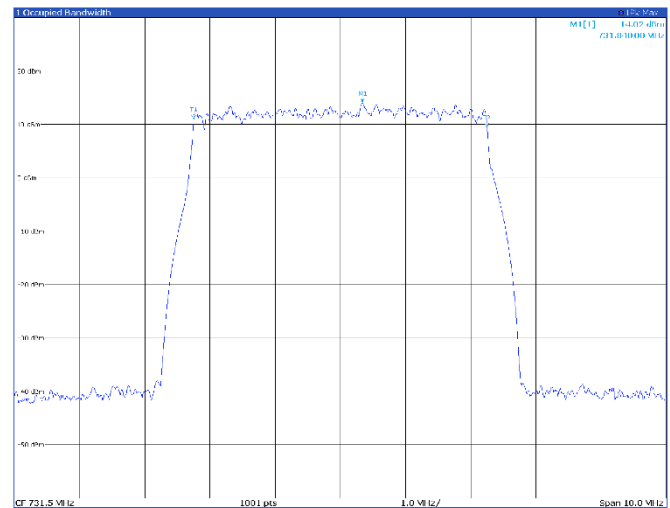
| Type | Ref | Trc | X Value     | Y Value    | Corr. Fnc | Function | Function Result   |
|------|-----|-----|-------------|------------|-----------|----------|-------------------|
| M1   | 1   |     | 735.782 MHz | 12.35 dBm  | Corr. Fnc |          | 4.486953413 MHz   |
| T1   | 1   |     | 735.782 MHz | -47.62 dBm | Corr. Fnc |          | 730.497195777 MHz |
| Z    | 1   |     | 735.782 MHz | 0.00 dBm   | Corr. Fnc |          | -4.866531311 dB   |

### TM3p1a, 5 MHz, high channel



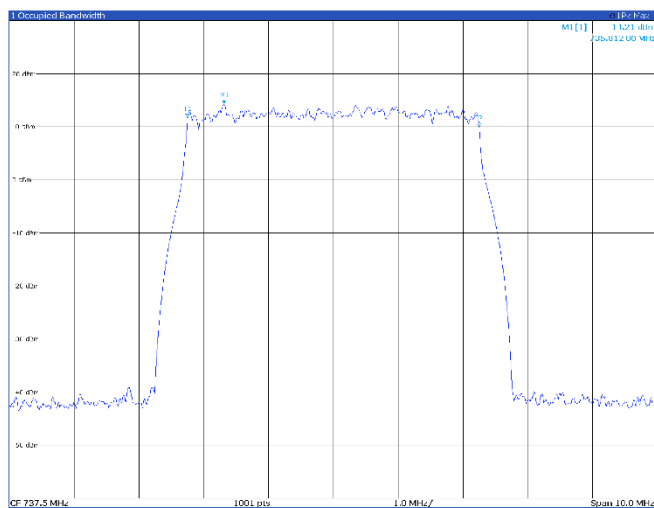
| Type | Ref | Trc | X Value     | Y Value    | Function           | Function Result   |
|------|-----|-----|-------------|------------|--------------------|-------------------|
| M1   | 1   |     | 744.659 MHz | 12.58 dBm  | Occupied Bandwidth | 4.484 678 899 MHz |
| M2   | 1   |     | 744.659 MHz | -44.00 dBm | Occupied Bandwidth | 4.484 678 899 MHz |

### TM3p3, 5 MHz, low channel



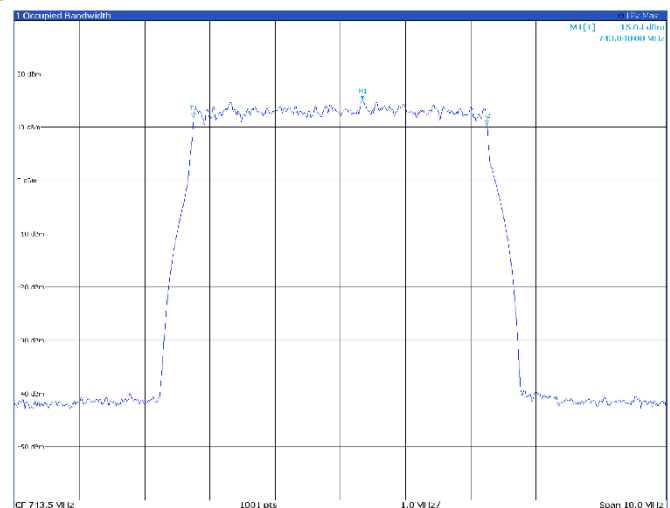
| Type | Ref | Trc | X Value    | Y Value    | Function           | Function Result   |
|------|-----|-----|------------|------------|--------------------|-------------------|
| M1   | 1   |     | 731.84 MHz | 14.02 dBm  | Occupied Bandwidth | 4.495 040 591 MHz |
| M2   | 1   |     | 731.84 MHz | -44.00 dBm | Occupied Bandwidth | 4.495 040 591 MHz |

### TM3p3, 5 MHz, mid channel



| Type | Ref | Trc | X Value     | Y Value    | Function           | Function Result   |
|------|-----|-----|-------------|------------|--------------------|-------------------|
| M1   | 1   |     | 735.812 MHz | 14.21 dBm  | Occupied Bandwidth | 4.495 371 599 MHz |
| M2   | 1   |     | 735.812 MHz | -44.00 dBm | Occupied Bandwidth | 4.495 371 599 MHz |

### TM3p3, 5 MHz, high channel

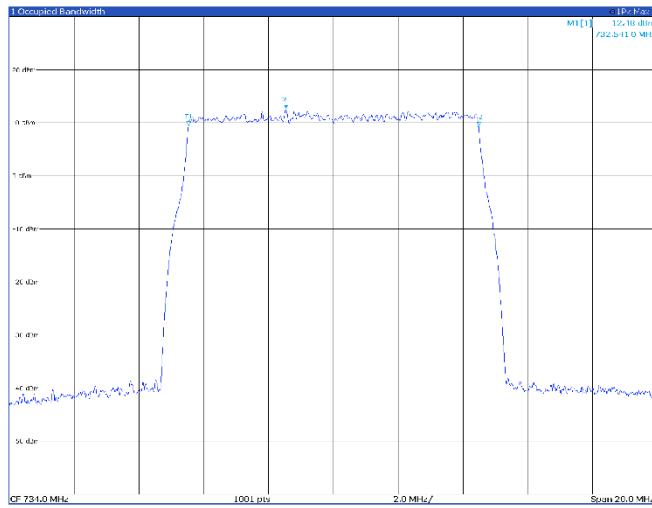


| Type | Ref | Trc | X Value    | Y Value    | Function           | Function Result   |
|------|-----|-----|------------|------------|--------------------|-------------------|
| M1   | 1   |     | 743.84 MHz | 15.04 dBm  | Occupied Bandwidth | 4.496 045 169 MHz |
| M2   | 1   |     | 743.84 MHz | -44.00 dBm | Occupied Bandwidth | 4.496 045 169 MHz |

## Band B12

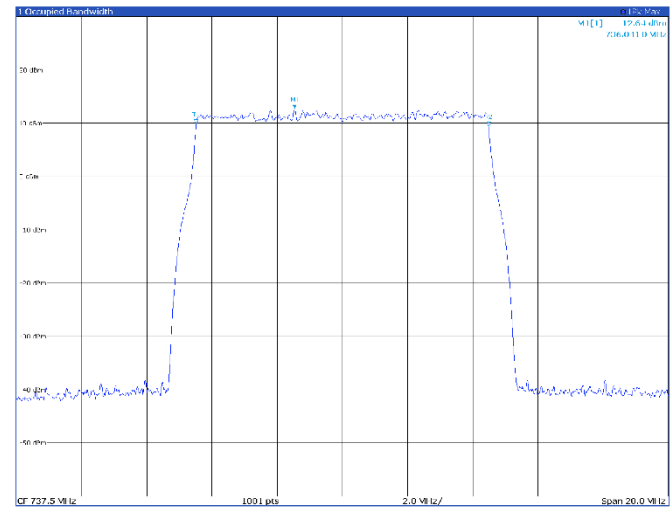
## 10 MHz

## TM1.1, 10 MHz, low channel



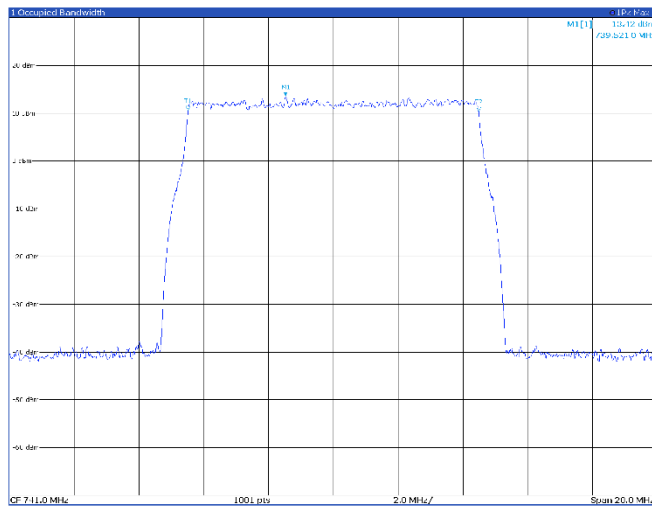
| Type | Ref | Trc | X Value       | Y Value   | Function         | Function Result   |
|------|-----|-----|---------------|-----------|------------------|-------------------|
| M1   | 1   |     | 732.544 MHz   | 12.48 dBm | Occ SW           | 8.962 260 357 MHz |
| T1   | 1   |     | 729.522.0 MHz | 9.25 dBm  | Occ SW Channel 1 | 729.522.0 MHz     |
| T2   | 1   |     | 734.485 MHz   | 9.08 dBm  | Occ SW Channel 2 | 734.485 MHz       |

## TM1.1, 10 MHz, mid channel



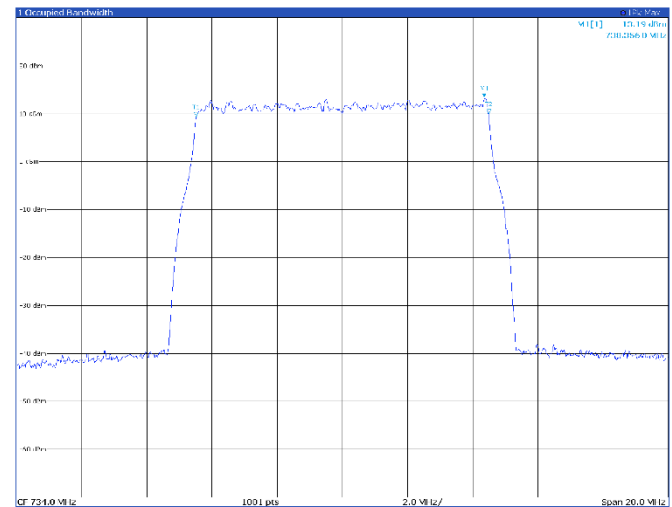
| Type | Ref | Trc | X Value       | Y Value   | Function         | Function Result   |
|------|-----|-----|---------------|-----------|------------------|-------------------|
| M1   | 1   |     | 736.041 MHz   | 12.64 dBm | Occ SW           | 8.966 910 507 MHz |
| T1   | 1   |     | 733.510.0 MHz | 9.63 dBm  | Occ SW Channel 1 | 733.510.0 MHz     |
| T2   | 1   |     | 738.572 MHz   | 9.41 dBm  | Occ SW Channel 2 | 738.572 MHz       |

## TM1.1, 10 MHz, high channel



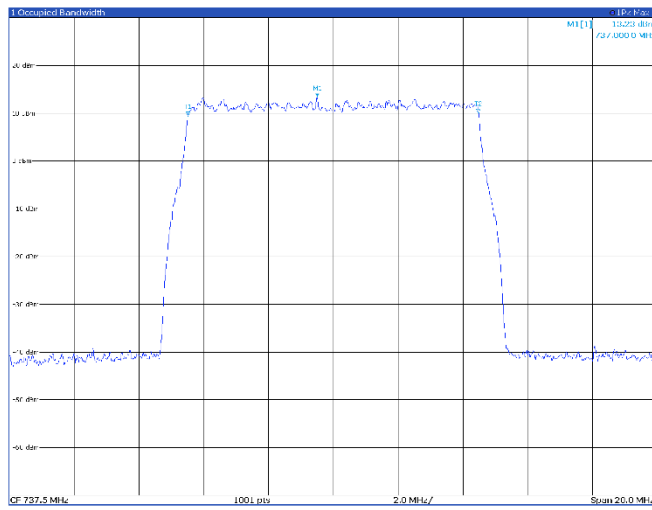
| Type | Ref | Trc | X Value      | Y Value   | Function         | Function Result   |
|------|-----|-----|--------------|-----------|------------------|-------------------|
| M1   | 1   |     | 739.521 MHz  | 13.42 dBm | Occ SW           | 8.968 503 107 MHz |
| T1   | 1   |     | 736.5140 MHz | 10.37 dBm | Occ SW Channel 1 | 736.5140 MHz      |
| T2   | 1   |     | 738.485 MHz  | 10.25 dBm | Occ SW Channel 2 | 738.485 MHz       |

## TM3p1, 10 MHz, low channel



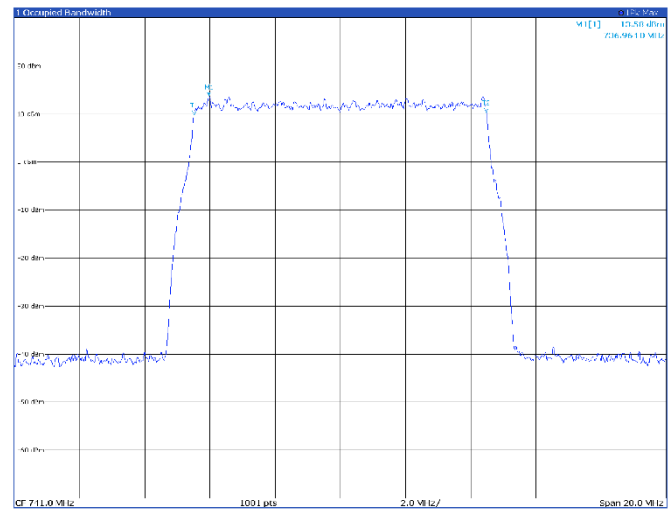
| Type | Ref | Trc | X Value      | Y Value   | Function         | Function Result   |
|------|-----|-----|--------------|-----------|------------------|-------------------|
| M1   | 1   |     | 739.356 MHz  | 13.19 dBm | Occ SW           | 8.965 004 698 MHz |
| T1   | 1   |     | 736.5165 MHz | 9.12 dBm  | Occ SW Channel 1 | 736.5165 MHz      |
| T2   | 1   |     | 738.485 MHz  | 9.08 dBm  | Occ SW Channel 2 | 738.485 MHz       |

TM3p1, 10 MHz, mid channel



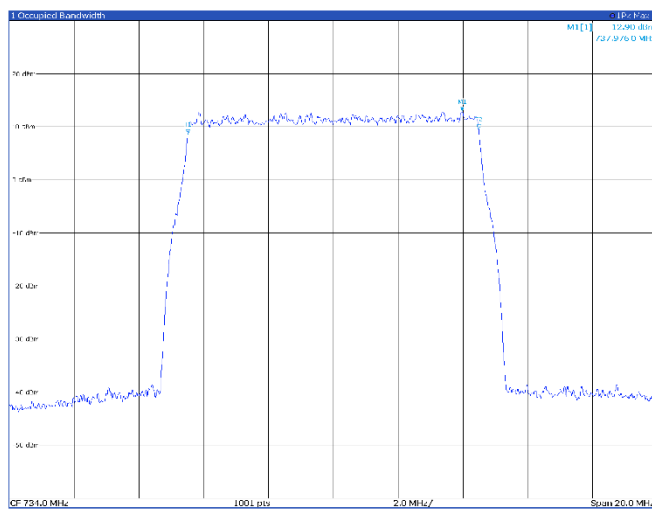
| Type | Ref | Trc | X Value      | Y Value   | Unit | Function       | Function Result   |
|------|-----|-----|--------------|-----------|------|----------------|-------------------|
| M1   | 1   |     | 737.0 MHz    | 13.23 dBm |      | Occ BW         | 8.968600778 MHz   |
| M2   | 1   |     | 737.0000 MHz | 13.23 dBm |      | Occ BW Control | 737.000000000 MHz |
| M3   | 1   |     | 737.0000 MHz | 13.23 dBm |      | Occ BW Control | 737.000000000 MHz |

TM3p1, 10 MHz, high channel



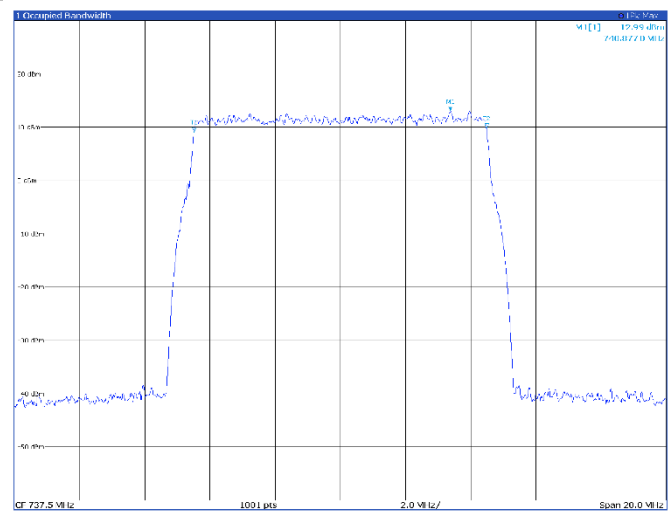
| Type | Ref | Trc | X Value      | Y Value   | Unit | Function       | Function Result   |
|------|-----|-----|--------------|-----------|------|----------------|-------------------|
| M1   | 1   |     | 736.964 MHz  | 13.58 dBm |      | Occ BW         | 8.968456052 MHz   |
| M2   | 1   |     | 736.9640 MHz | 13.58 dBm |      | Occ BW Control | 736.964000000 MHz |
| M3   | 1   |     | 736.9640 MHz | 13.58 dBm |      | Occ BW Control | 736.964000000 MHz |

TM3p1a, 10 MHz, low channel



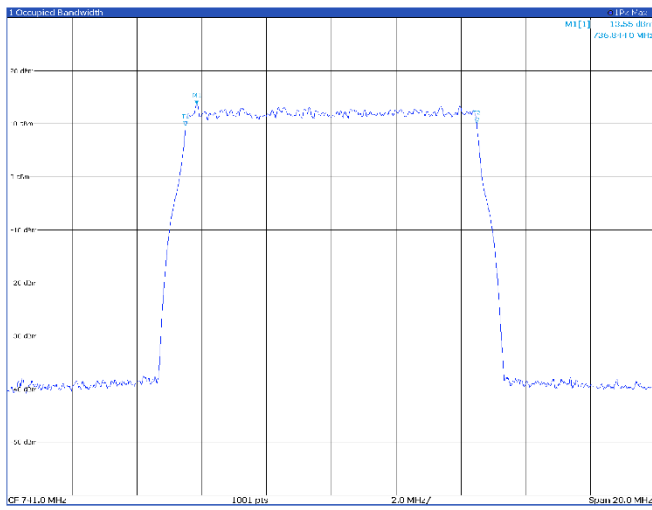
| Type | Ref | Trc | X Value      | Y Value   | Unit | Function       | Function Result   |
|------|-----|-----|--------------|-----------|------|----------------|-------------------|
| M1   | 1   |     | 737.976 MHz  | 12.90 dBm |      | Occ BW         | 8.971385867 MHz   |
| M2   | 1   |     | 737.9760 MHz | 12.90 dBm |      | Occ BW Control | 737.976000000 MHz |
| M3   | 1   |     | 737.9760 MHz | 12.90 dBm |      | Occ BW Control | 737.976000000 MHz |

TM3p1a, 10 MHz, mid channel



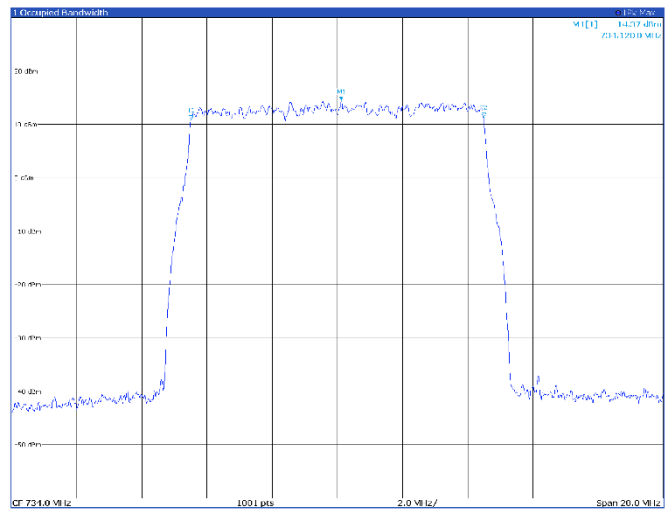
| Type | Ref | Trc | X Value      | Y Value   | Unit | Function       | Function Result   |
|------|-----|-----|--------------|-----------|------|----------------|-------------------|
| M1   | 1   |     | 737.992 MHz  | 12.99 dBm |      | Occ BW         | 8.970413372 MHz   |
| M2   | 1   |     | 737.9920 MHz | 12.99 dBm |      | Occ BW Control | 737.992000000 MHz |
| M3   | 1   |     | 737.9920 MHz | 12.99 dBm |      | Occ BW Control | 737.992000000 MHz |

### TM3p1a, 10 MHz, high channel



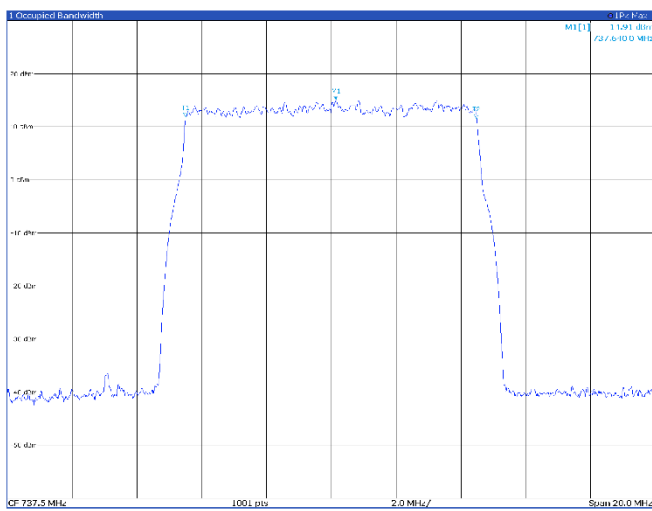
| Type | Ref | Trc | X Value            | Y Value          | Function       | Function Result          |
|------|-----|-----|--------------------|------------------|----------------|--------------------------|
| P1   | 1   |     | <b>736.844 MHz</b> | <b>13.55 dBm</b> | Occ Sw         | <b>8.979 327 995 MHz</b> |
| P1   | 1   |     | 736.500 MHz        | 0.26 dBm         | Occ Sw Control | 740.500 445 524 MHz      |
| P2   | 1   |     | 736.844 MHz        | 10.10 dBm        | Occ Sw Control | 736.500 445 524 MHz      |

### TM3p3, 10 MHz, low channel



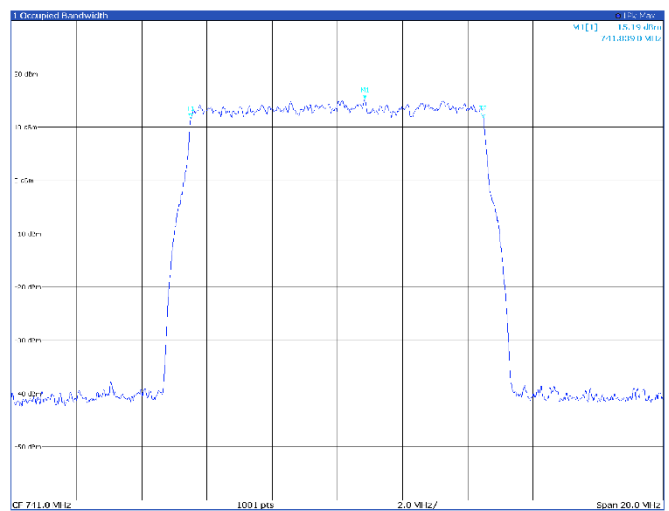
| Type | Ref | Trc | X Value           | Y Value          | Function       | Function Result          |
|------|-----|-----|-------------------|------------------|----------------|--------------------------|
| P1   | 1   |     | <b>734.12 MHz</b> | <b>14.37 dBm</b> | Occ Sw         | <b>8.972 346 739 MHz</b> |
| P1   | 1   |     | 729.500 MHz       | 10.62 dBm        | Occ Sw Control | 733.500 445 524 MHz      |
| P2   | 1   |     | 734.12 MHz        | 11.78 dBm        | Occ Sw Control | 733.500 445 524 MHz      |

### TM3p3, 10 MHz, mid channel



| Type | Ref | Trc | X Value           | Y Value          | Function       | Function Result          |
|------|-----|-----|-------------------|------------------|----------------|--------------------------|
| P1   | 1   |     | <b>737.64 MHz</b> | <b>14.91 dBm</b> | Occ Sw         | <b>8.974 806 767 MHz</b> |
| P1   | 1   |     | 737.000 MHz       | 11.79 dBm        | Occ Sw Control | 737.500 445 524 MHz      |
| P2   | 1   |     | 737.64 MHz        | 11.79 dBm        | Occ Sw Control | 737.500 445 524 MHz      |

### TM3p3, 10 MHz, high channel



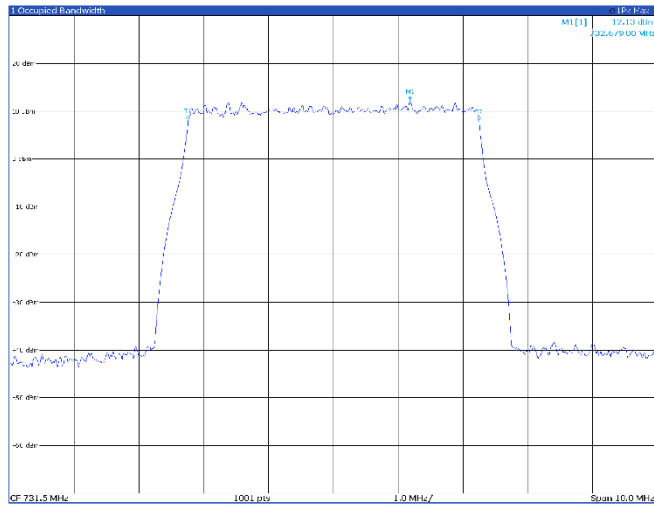
| Type | Ref | Trc | X Value            | Y Value          | Function       | Function Result          |
|------|-----|-----|--------------------|------------------|----------------|--------------------------|
| P1   | 1   |     | <b>741.839 MHz</b> | <b>15.19 dBm</b> | Occ Sw         | <b>8.974 161 405 MHz</b> |
| P1   | 1   |     | 736.500 MHz        | 11.71 dBm        | Occ Sw Control | 740.500 445 524 MHz      |
| P2   | 1   |     | 741.839 MHz        | 11.78 dBm        | Occ Sw Control | 740.500 445 524 MHz      |

## Antenna port 2

Band B12

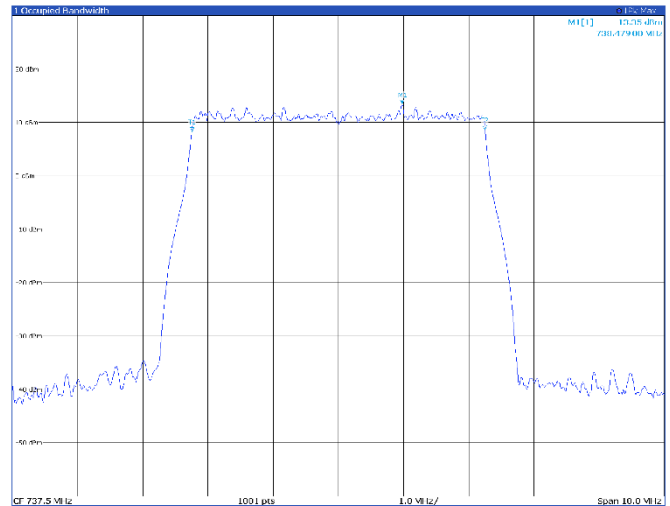
5 MHz

## TM1.1, 5 MHz, low channel



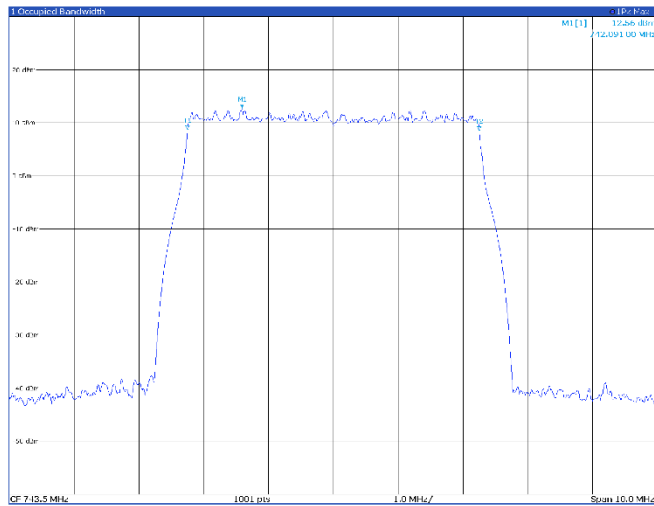
| Type | Ref | Trc | X Value        | Y Value   | Function        | Function Result     |
|------|-----|-----|----------------|-----------|-----------------|---------------------|
| M1   | 1   |     | 732.679 MHz    | 12.13 dBm | Occ. BW         | 4.488 394 409 MHz   |
| M1   | 1   |     | 729.257 33 MHz | 7.06 dBm  | Occ. BW Control | 731.521 527 116 MHz |
| M1   | 1   |     | 735.744 77 MHz | 7.06 dBm  | Occ. BW Control | 733.521 527 116 MHz |

## TM1.1, 5 MHz, mid channel



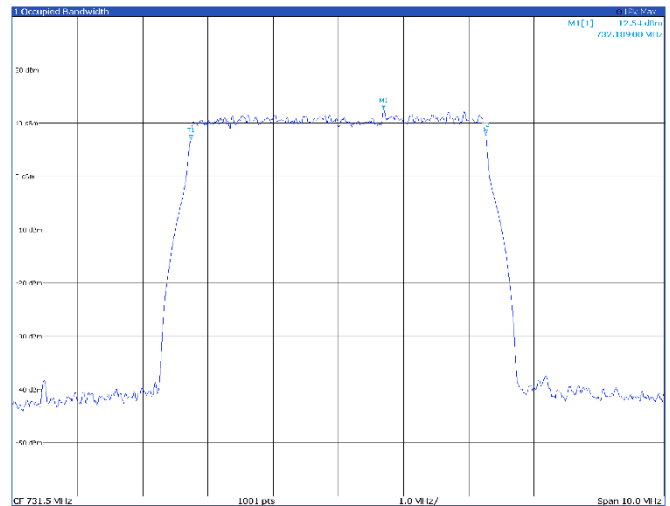
| Type | Ref | Trc | X Value        | Y Value   | Function        | Function Result     |
|------|-----|-----|----------------|-----------|-----------------|---------------------|
| M1   | 1   |     | 738.479 MHz    | 13.35 dBm | Occ. BW         | 4.492 714 203 MHz   |
| M1   | 1   |     | 735.252 02 MHz | 8.27 dBm  | Occ. BW Control | 737.495 787 667 MHz |
| M1   | 1   |     | 741.745 52 MHz | 8.27 dBm  | Occ. BW Control | 739.741 529 116 MHz |

## TM1.1, 5 MHz, high channel



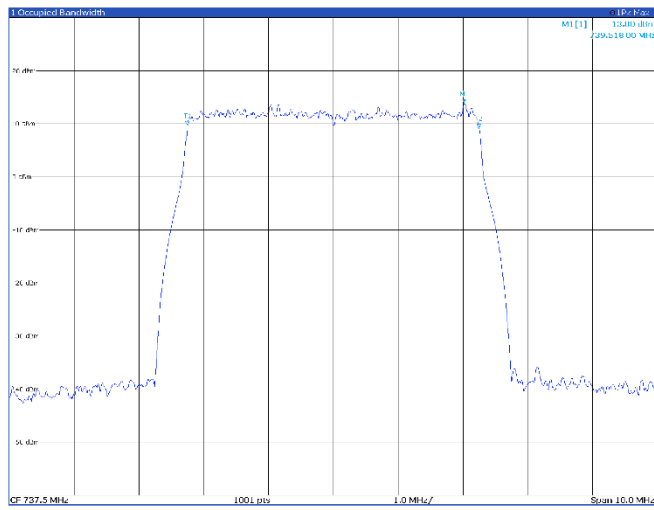
| Type | Ref | Trc | X Value        | Y Value   | Function        | Function Result     |
|------|-----|-----|----------------|-----------|-----------------|---------------------|
| M1   | 1   |     | 742.091 MHz    | 12.56 dBm | Occ. BW         | 4.500 551 779 MHz   |
| M1   | 1   |     | 741.242 97 MHz | 8.62 dBm  | Occ. BW Control | 742.409 295 411 MHz |
| M1   | 1   |     | 743.744 77 MHz | 8.62 dBm  | Occ. BW Control | 743.596 787 667 MHz |

## TM3p1, 5 MHz, low channel



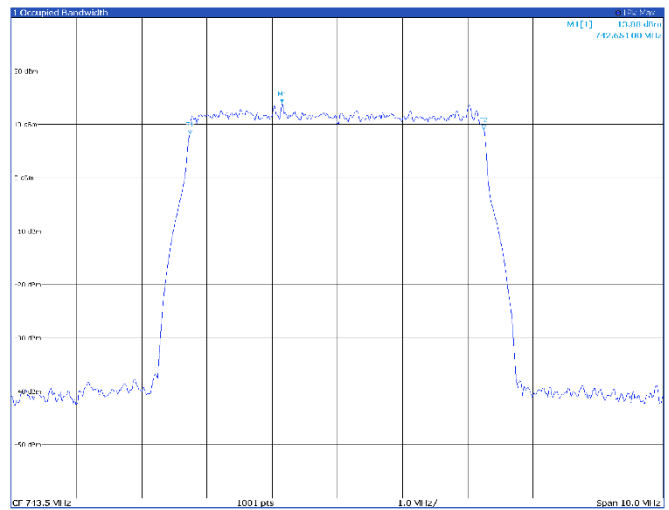
| Type | Ref | Trc | X Value        | Y Value   | Function        | Function Result     |
|------|-----|-----|----------------|-----------|-----------------|---------------------|
| M1   | 1   |     | 732.189 MHz    | 12.54 dBm | Occ. BW         | 4.516 898 377 MHz   |
| M1   | 1   |     | 729.207 11 MHz | 6.68 dBm  | Occ. BW Control | 731.697 075 333 MHz |
| M1   | 1   |     | 735.755 52 MHz | 6.68 dBm  | Occ. BW Control | 737.942 409 116 MHz |

TM3p1, 5 MHz, mid channel



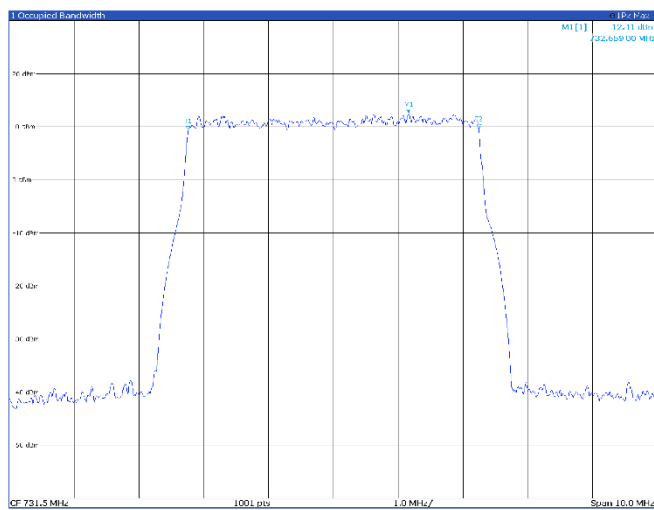
| Type | Ref | Trc | X Value        | Y Value   | Function | Function Result     |
|------|-----|-----|----------------|-----------|----------|---------------------|
| M1   | 1   |     | 739.518 MHz    | 13.80 dBm | Occ Sw   | 4.500 242 827 MHz   |
| F1   | 1   |     | 739.247 47 MHz | 0.64 dBm  | Occ Sw   | 737.407 521 734 MHz |
| F2   | 1   |     | 739.787 7 MHz  | 9.11 dBm  | Occ Sw   | 739.653 031 MHz     |

TM3p1, 5 MHz, high channel



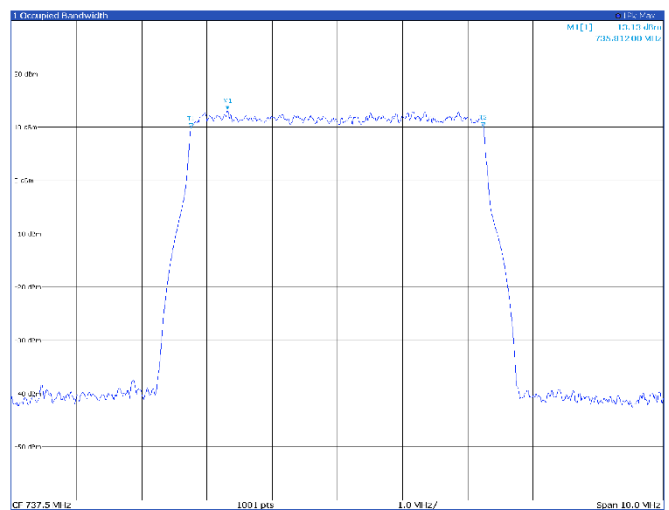
| Type | Ref | Trc | X Value        | Y Value   | Function | Function Result     |
|------|-----|-----|----------------|-----------|----------|---------------------|
| M1   | 1   |     | 742.651 MHz    | 13.88 dBm | Occ Sw   | 4.505 390 546 MHz   |
| F1   | 1   |     | 741.257 02 MHz | 0.22 dBm  | Occ Sw   | 740.197 519 532 MHz |
| F2   | 1   |     | 744.041 11 MHz | 9.11 dBm  | Occ Sw   | 743.804 47 801 MHz  |

TM3p1a, 5 MHz, low channel

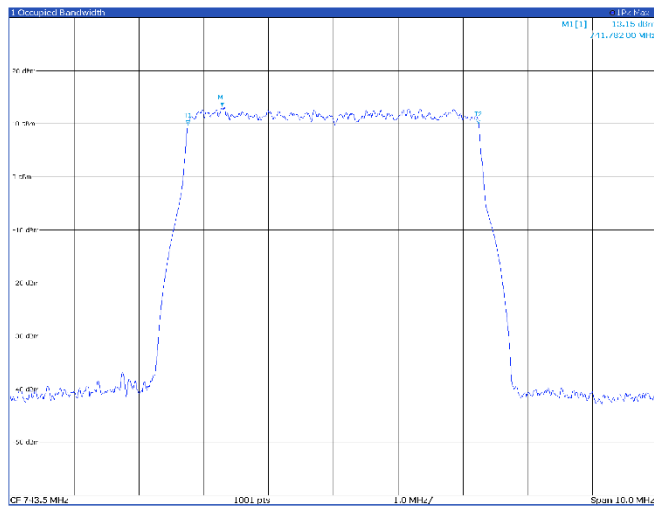


| Type | Ref | Trc | X Value        | Y Value   | Function | Function Result     |
|------|-----|-----|----------------|-----------|----------|---------------------|
| M1   | 1   |     | 732.659 MHz    | 12.41 dBm | Occ Sw   | 4.482 562 294 MHz   |
| F1   | 1   |     | 729.252 11 MHz | 0.14 dBm  | Occ Sw   | 727.459 795 467 MHz |
| F2   | 1   |     | 735.741 28 MHz | 9.14 dBm  | Occ Sw   | 733.131 430 544 MHz |

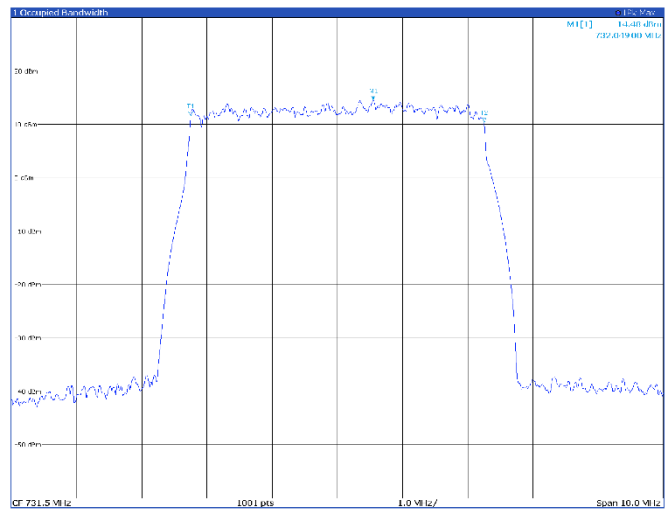
TM3p1a, 5 MHz, mid channel



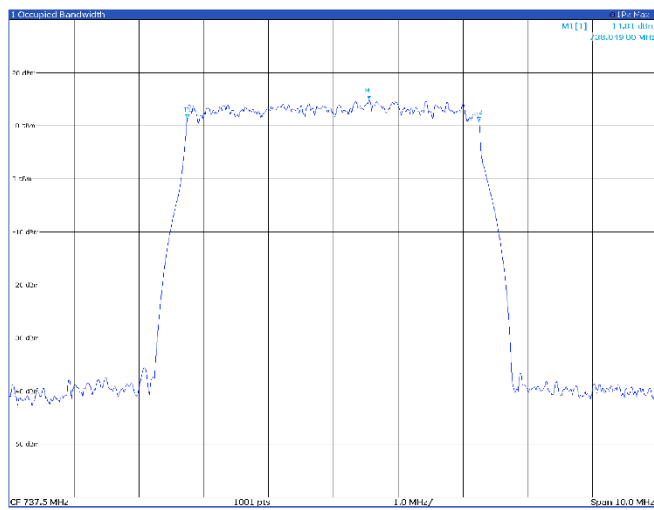
| Type | Ref | Trc | X Value        | Y Value   | Function | Function Result     |
|------|-----|-----|----------------|-----------|----------|---------------------|
| M1   | 1   |     | 735.812 MHz    | 13.13 dBm | Occ Sw   | 4.485 055 346 MHz   |
| F1   | 1   |     | 733.231 14 MHz | 0.62 dBm  | Occ Sw   | 731.567 019 511 MHz |
| F2   | 1   |     | 737.532 19 MHz | 10.01 dBm | Occ Sw   | 735.636 536 814 MHz |

**TM3p1a, 5 MHz, high channel**


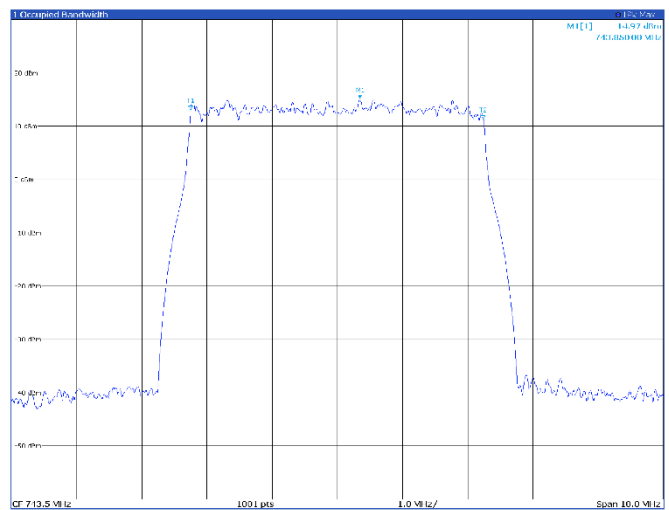
| Type | Ref | Trc | X Value            | Y Value          | Function       | Function Result          |
|------|-----|-----|--------------------|------------------|----------------|--------------------------|
| M1   | 1   |     | <b>741.782 MHz</b> | <b>13.15 dBm</b> | Occ BW         | <b>4.485 430 487 MHz</b> |
| M1   | 1   |     | 741.2525 MHz       | 10.74 dBm        | Occ BW Control | 741.499 401 342 MHz      |
| M2   | 1   |     | 742.7548 MHz       | 10.66 dBm        | Occ BW Control | 742.5052 727 545 MHz     |

**TM3p3, 5 MHz, low channel**


| Type | Ref | Trc | X Value            | Y Value          | Function       | Function Result          |
|------|-----|-----|--------------------|------------------|----------------|--------------------------|
| M1   | 1   |     | <b>732.049 MHz</b> | <b>14.48 dBm</b> | Occ BW         | <b>4.498 480 147 MHz</b> |
| M1   | 1   |     | 732.2505 MHz       | 11.55 dBm        | Occ BW Control | 731.499 401 30 MHz       |
| M2   | 1   |     | 731.74827 MHz      | 10.43 dBm        | Occ BW Control | 731.499 401 30 MHz       |

**TM3p3, 5 MHz, mid channel**


| Type | Ref | Trc | X Value            | Y Value          | Function       | Function Result          |
|------|-----|-----|--------------------|------------------|----------------|--------------------------|
| M1   | 1   |     | <b>738.049 MHz</b> | <b>14.81 dBm</b> | Occ BW         | <b>4.501 920 988 MHz</b> |
| M1   | 1   |     | 737.24456 MHz      | 11.24 dBm        | Occ BW Control | 737.499 472 077 MHz      |
| M2   | 1   |     | 738.24456 MHz      | 10.26 dBm        | Occ BW Control | 737.499 472 077 MHz      |

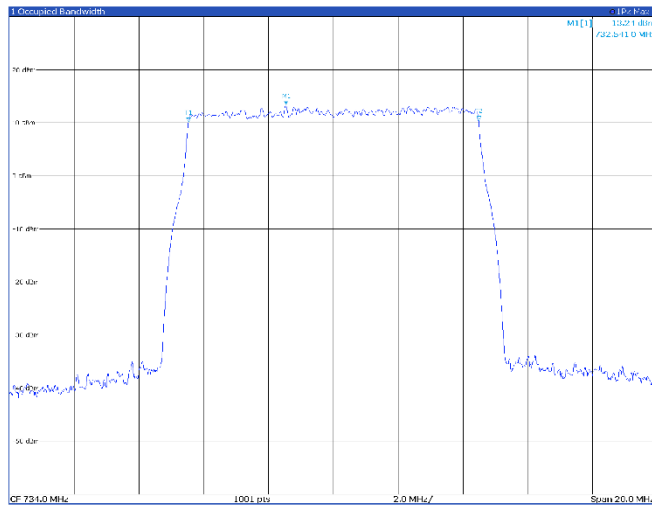
**TM3p3, 5 MHz, high channel**


| Type | Ref | Trc | X Value           | Y Value          | Function       | Function Result         |
|------|-----|-----|-------------------|------------------|----------------|-------------------------|
| M1   | 1   |     | <b>743.05 MHz</b> | <b>14.97 dBm</b> | Occ BW         | <b>4.469 719 51 MHz</b> |
| M1   | 1   |     | 743.12 75 MHz     | 12.51 dBm        | Occ BW Control | 743.499 451 88 MHz      |
| M2   | 1   |     | 743.77772 MHz     | 11.25 dBm        | Occ BW Control | 743.499 451 88 MHz      |

## Band B12

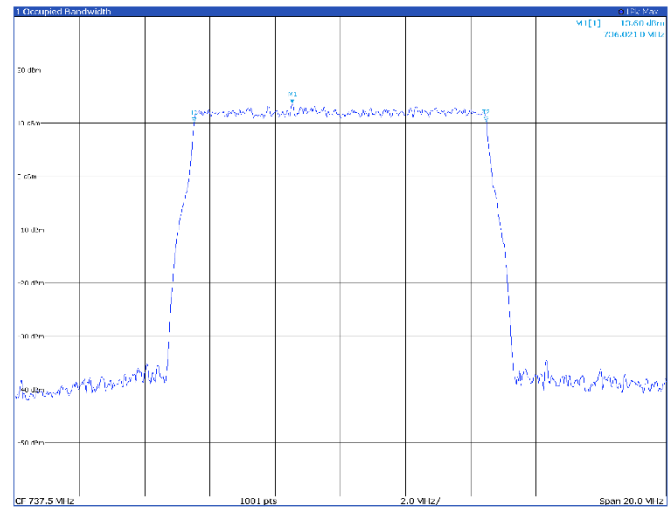
## 10 MHz

## TM1.1, 10 MHz, low channel



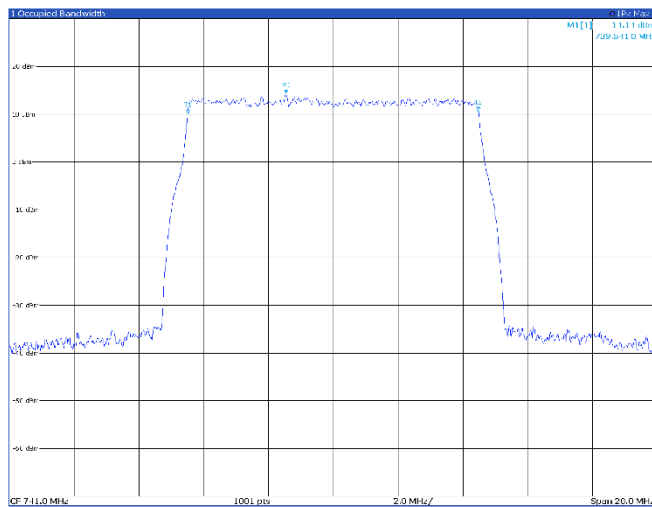
| Type | Ref | Trc | X Value     | Y Value   | Function             | Function Result     |
|------|-----|-----|-------------|-----------|----------------------|---------------------|
| M1   | 1   |     | 732.541 MHz | 13.24 dBm | Occ Sw               | 8.960 853 974 MHz   |
| M1   | 1   |     | 732.544 MHz | 10.00 dBm | Occ Sw Control       | 734.954 954 402 MHz |
| M1   | 1   |     | 732.545 MHz | 10.00 dBm | Occ Sw Energy Offset | 8.960 853 974 MHz   |

## TM1.1, 10 MHz, mid channel



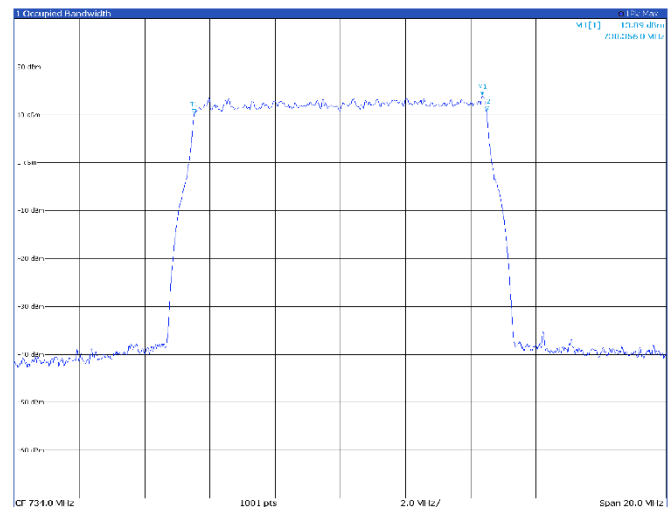
| Type | Ref | Trc | X Value     | Y Value   | Function             | Function Result     |
|------|-----|-----|-------------|-----------|----------------------|---------------------|
| M1   | 1   |     | 737.021 MHz | 13.60 dBm | Occ Sw               | 8.961 559 692 MHz   |
| M1   | 1   |     | 737.017 MHz | 10.00 dBm | Occ Sw Control       | 737.999 417 002 MHz |
| M1   | 1   |     | 737.018 MHz | 10.00 dBm | Occ Sw Energy Offset | 8.961 559 692 MHz   |

## TM1.1, 10 MHz, high channel



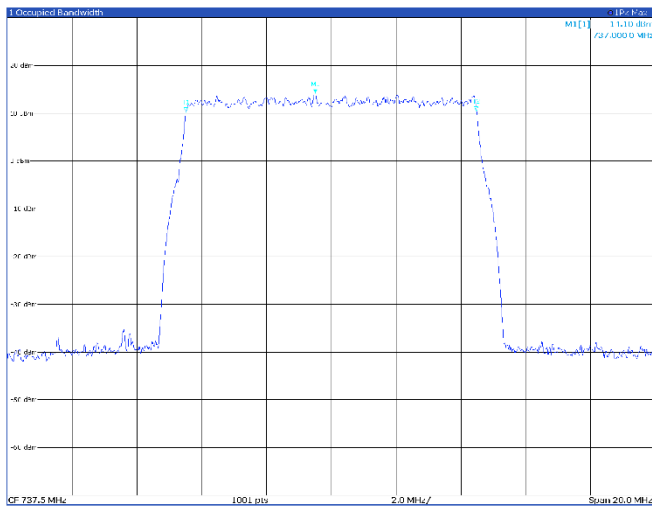
| Type | Ref | Trc | X Value     | Y Value   | Function             | Function Result     |
|------|-----|-----|-------------|-----------|----------------------|---------------------|
| M1   | 1   |     | 739.541 MHz | 14.14 dBm | Occ Sw               | 8.964 962 192 MHz   |
| M1   | 1   |     | 739.542 MHz | 10.00 dBm | Occ Sw Control       | 740.999 417 002 MHz |
| M1   | 1   |     | 739.543 MHz | 10.00 dBm | Occ Sw Energy Offset | 8.964 962 192 MHz   |

## TM3p1, 10 MHz, low channel



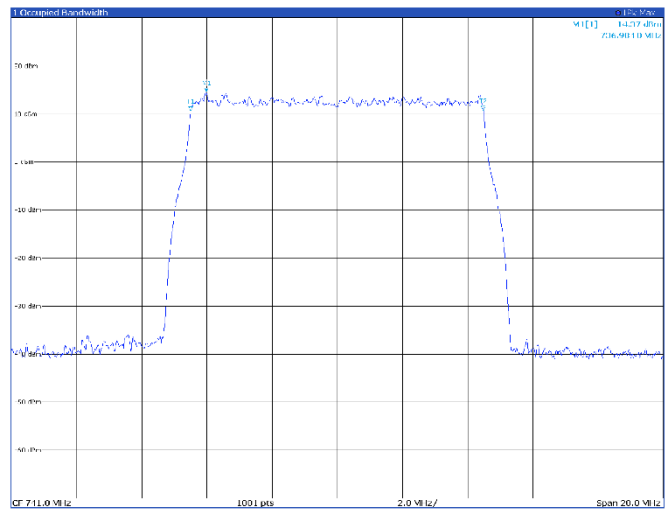
| Type | Ref | Trc | X Value     | Y Value   | Function             | Function Result     |
|------|-----|-----|-------------|-----------|----------------------|---------------------|
| M1   | 1   |     | 739.356 MHz | 13.89 dBm | Occ Sw               | 8.964 217 633 MHz   |
| M1   | 1   |     | 739.317 MHz | 10.00 dBm | Occ Sw Control       | 739.999 417 002 MHz |
| M1   | 1   |     | 739.318 MHz | 10.00 dBm | Occ Sw Energy Offset | 8.964 217 633 MHz   |

### TM3p1, 10 MHz, mid channel



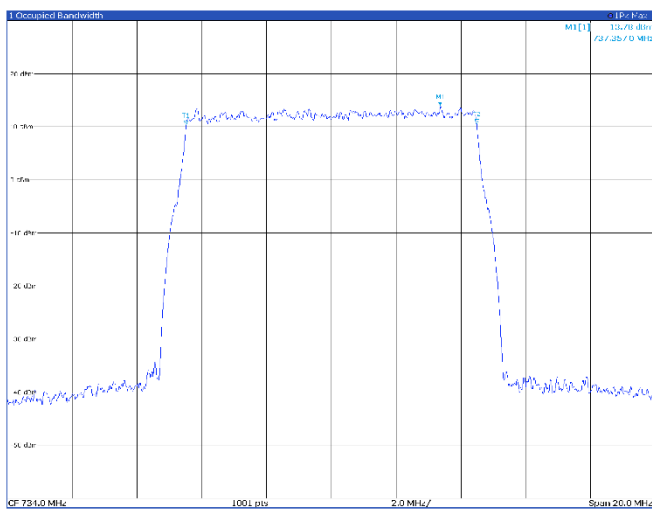
| Type | Ref | Freq | X Value          | Y Value          | Function       | Function Result         |
|------|-----|------|------------------|------------------|----------------|-------------------------|
| M1   | 1   |      | <b>737.0 MHz</b> | <b>14.10 dBm</b> | Occ BW         | <b>8.965640 556 MHz</b> |
| M1   | 1   |      | 737.0120 MHz     | 10.27 dBm        | Occ BW Control | 737.42515; 450 MHz      |
| M2   | 1   |      | 737.0120 MHz     | 10.27 dBm        | Occ BW Control | 737.42515; 450 MHz      |

### TM3p1, 10 MHz, high channel



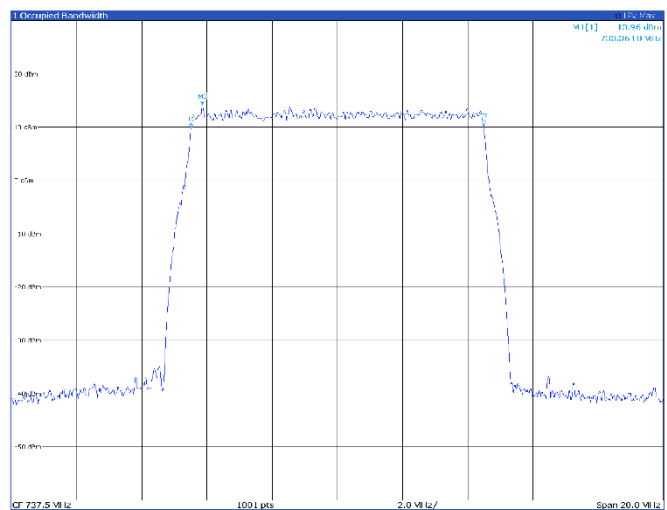
| Type | Ref | Freq | X Value            | Y Value          | Function       | Function Result         |
|------|-----|------|--------------------|------------------|----------------|-------------------------|
| M1   | 1   |      | <b>736.984 MHz</b> | <b>14.37 dBm</b> | Occ BW         | <b>8.971163 908 MHz</b> |
| M1   | 1   |      | 736.9930 MHz       | 10.27 dBm        | Occ BW Control | 737.38902175 MHz        |
| M2   | 1   |      | 736.9930 MHz       | 10.27 dBm        | Occ BW Control | 737.38902175 MHz        |

### TM3p1a, 10 MHz, low channel



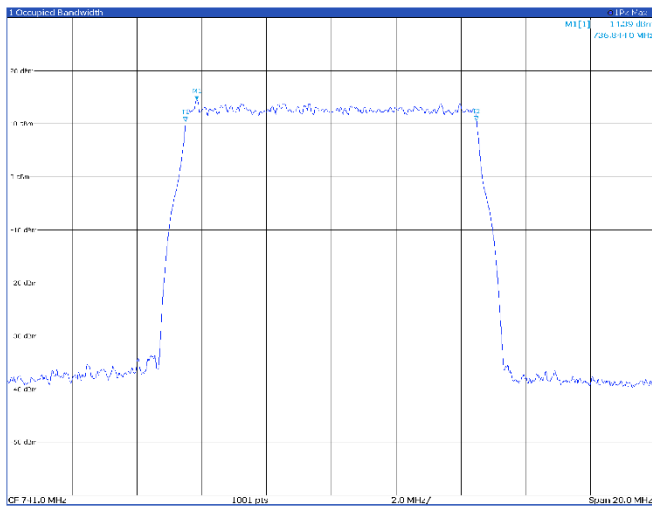
| Type | Ref | Freq | X Value            | Y Value          | Function       | Function Result         |
|------|-----|------|--------------------|------------------|----------------|-------------------------|
| M1   | 1   |      | <b>737.357 MHz</b> | <b>13.78 dBm</b> | Occ BW         | <b>8.969054 359 MHz</b> |
| M1   | 1   |      | 737.3570 MHz       | 10.27 dBm        | Occ BW Control | 737.600401000 MHz       |
| M2   | 1   |      | 737.3570 MHz       | 10.27 dBm        | Occ BW Control | 737.600401000 MHz       |

### TM3p1a, 10 MHz, mid channel



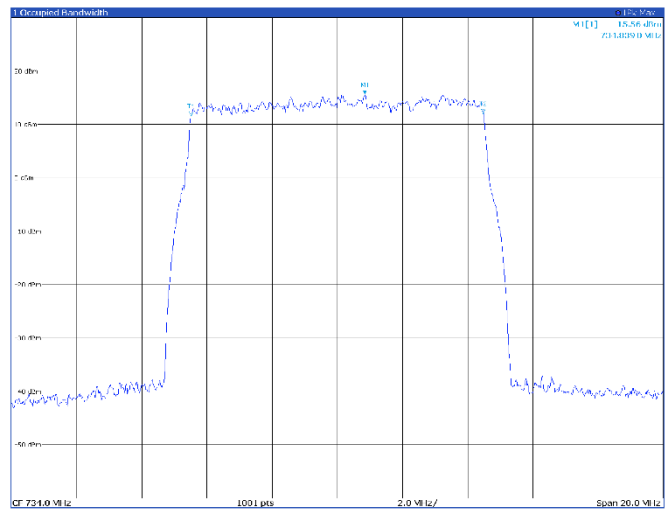
| Type | Ref | Freq | X Value            | Y Value          | Function       | Function Result         |
|------|-----|------|--------------------|------------------|----------------|-------------------------|
| M1   | 1   |      | <b>737.364 MHz</b> | <b>13.96 dBm</b> | Occ BW         | <b>8.969368 521 MHz</b> |
| M1   | 1   |      | 737.3640 MHz       | 9.78 dBm         | Occ BW Control | 737.496927235 MHz       |
| M2   | 1   |      | 737.3640 MHz       | 10.27 dBm        | Occ BW Control | 737.496927235 MHz       |

### TM3p1a, 10 MHz, high channel



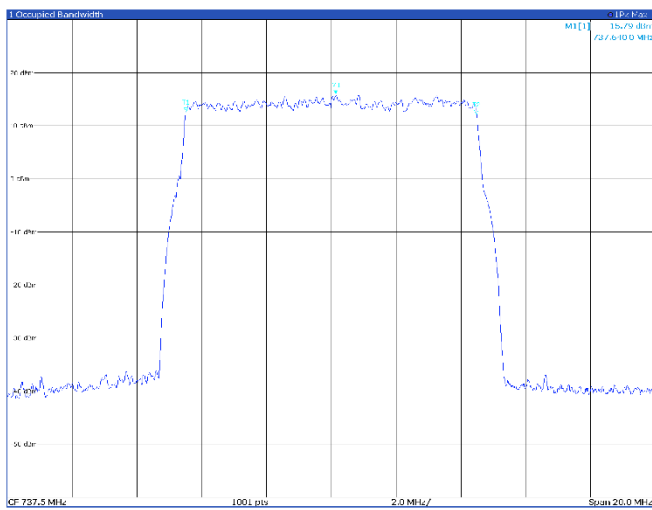
| Type | Ref | Trc | X Value            | Y Value          | Function              | Function Result          |
|------|-----|-----|--------------------|------------------|-----------------------|--------------------------|
| P1   | 1   |     | <b>736.844 MHz</b> | <b>14.39 dBm</b> | Occ Sw                | <b>8.978 838 205 MHz</b> |
| P1   | 1   |     | 736.8 MHz          | 10.42 dBm        | Occ Sw Control        | 740.997 442 170 MHz      |
| P2   | 1   |     | 736.8 MHz          | 10.08 dBm        | Occ Sw Control Offset | 10.522 722 743 Hz        |

### TM3p3, 10 MHz, low channel



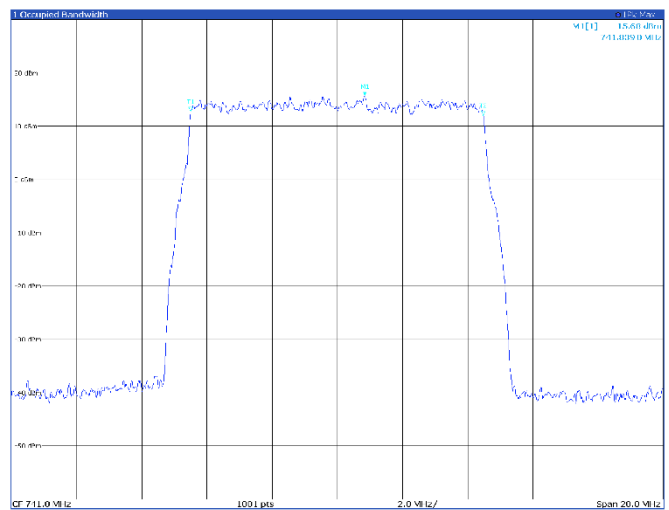
| Type | Ref | Trc | X Value            | Y Value          | Function              | Function Result          |
|------|-----|-----|--------------------|------------------|-----------------------|--------------------------|
| P1   | 1   |     | <b>734.839 MHz</b> | <b>15.56 dBm</b> | Occ Sw                | <b>8.967 944 148 MHz</b> |
| P1   | 1   |     | 734.8 MHz          | 11.67 dBm        | Occ Sw Control        | 733.997 030 912 MHz      |
| P2   | 1   |     | 734.8 MHz          | 11.03 dBm        | Occ Sw Control Offset | -1.136 107 18 319        |

### TM3p3, 10 MHz, mid channel



| Type | Ref | Trc | X Value           | Y Value          | Function              | Function Result          |
|------|-----|-----|-------------------|------------------|-----------------------|--------------------------|
| P1   | 1   |     | <b>737.64 MHz</b> | <b>15.79 dBm</b> | Occ Sw                | <b>8.969 816 112 MHz</b> |
| P1   | 1   |     | 737.6 MHz         | 14.56 dBm        | Occ Sw Control        | 737.400 155 150 MHz      |
| P2   | 1   |     | 737.6 MHz         | 12.18 dBm        | Occ Sw Control Offset | 4.646 549 303 dBm        |

### TM3p3, 10 MHz, high channel



| Type | Ref | Trc | X Value            | Y Value          | Function              | Function Result          |
|------|-----|-----|--------------------|------------------|-----------------------|--------------------------|
| P1   | 1   |     | <b>741.839 MHz</b> | <b>15.68 dBm</b> | Occ Sw                | <b>8.974 402 305 MHz</b> |
| P1   | 1   |     | 741.8 MHz          | 12.01 dBm        | Occ Sw Control        | 740.997 030 912 MHz      |
| P2   | 1   |     | 741.8 MHz          | 11.03 dBm        | Occ Sw Control Offset | -1.136 107 18 319        |

## 8.3 FCC §27.53(h)(3) 26 dB Occupied Bandwidth

### 8.3.1 Definitions and limits

(3) Measurement procedure. (i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

### 8.3.2 Test summary

|                 |                   |                   |           |
|-----------------|-------------------|-------------------|-----------|
| Test start date | November 22, 2024 | Temperature       | 22 °C     |
| Test end date   | December 13, 2024 | Air pressure      | 1001 mbar |
| Test engineer   | O. Frau           | Relative humidity | 62%       |
| Verdict         | Pass              |                   |           |

### 8.3.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.4.4

Spectrum analyzer settings:

|                      |             |
|----------------------|-------------|
| Resolution bandwidth | 1% - 5% OBW |
| Video bandwidth      | 3*RBW       |
| Frequency span       | 2*OBW       |
| Detector mode        | Peak        |
| Trace mode           | Max Hold    |

### 8.3.3 Test equipment used

| Equipment         | Manufacturer    | Model no. | Asset no. |
|-------------------|-----------------|-----------|-----------|
| Spectrum Analyzer | Rohde & Schwarz | FSW43     | 101767    |

## 8.3.4 Test data

## Band B12: Antenna port 1

| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
|------|--------------|------------|---------------|-------------|
| B12  | 5 MHz        | TM1.1      | 731.5         | 5.07        |
| B12  | 5 MHz        | TM1.1      | 737.5         | 5.09        |
| B12  | 5 MHz        | TM1.1      | 743.5         | 5.08        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p1      | 731.5         | 5.09        |
| B12  | 5 MHz        | TM3p1      | 737.5         | 5.09        |
| B12  | 5 MHz        | TM3p1      | 743.5         | 5.11        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p1a     | 731.5         | 5.03        |
| B12  | 5 MHz        | TM3p1a     | 737.5         | 5.03        |
| B12  | 5 MHz        | TM3p1a     | 743.5         | 5.04        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p3      | 731.5         | 5.08        |
| B12  | 5 MHz        | TM3p3      | 737.5         | 5.08        |
| B12  | 5 MHz        | TM3p3      | 743.5         | 5.08        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM1.1      | 734.0         | 10.03       |
| B12  | 10 MHz       | TM1.1      | 737.5         | 10.07       |
| B12  | 10 MHz       | TM1.1      | 741.0         | 10.05       |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p1      | 734.0         | 9.99        |
| B12  | 10 MHz       | TM3p1      | 737.5         | 10.03       |
| B12  | 10 MHz       | TM3p1      | 741.0         | 9.99        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p1a     | 734.0         | 10.03       |
| B12  | 10 MHz       | TM3p1a     | 737.5         | 10.05       |
| B12  | 10 MHz       | TM3p1a     | 741.0         | 10.05       |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p3      | 734.0         | 10.01       |
| B12  | 10 MHz       | TM3p3      | 737.5         | 10.01       |
| B12  | 10 MHz       | TM3p3      | 741.0         | 9.99        |

# Band B12: Antenna port 2

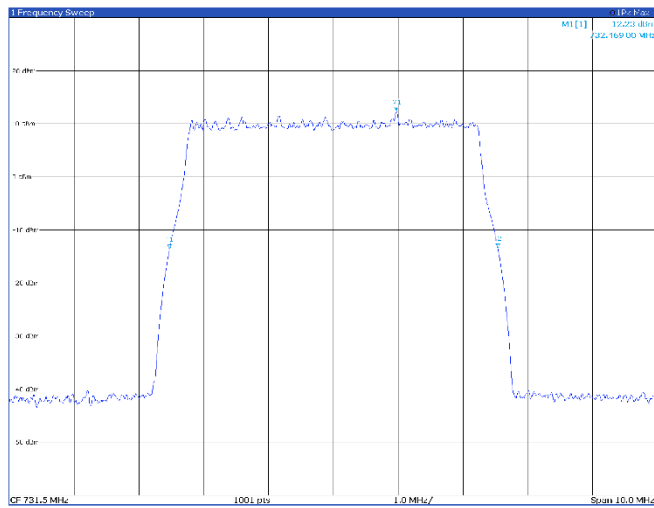
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
|------|--------------|------------|---------------|-------------|
| B12  | 5 MHz        | TM1.1      | 731.5         | 5.08        |
| B12  | 5 MHz        | TM1.1      | 737.5         | 5.07        |
| B12  | 5 MHz        | TM1.1      | 743.5         | 5.12        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p1      | 731.5         | 5.11        |
| B12  | 5 MHz        | TM3p1      | 737.5         | 5.08        |
| B12  | 5 MHz        | TM3p1      | 743.5         | 5.05        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p1a     | 731.5         | 5.04        |
| B12  | 5 MHz        | TM3p1a     | 737.5         | 5.03        |
| B12  | 5 MHz        | TM3p1a     | 743.5         | 5.03        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 5 MHz        | TM3p3      | 731.5         | 5.08        |
| B12  | 5 MHz        | TM3p3      | 737.5         | 5.11        |
| B12  | 5 MHz        | TM3p3      | 743.5         | 5.04        |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM1.1      | 734.0         | 10.05       |
| B12  | 10 MHz       | TM1.1      | 737.5         | 10.03       |
| B12  | 10 MHz       | TM1.1      | 741.0         | 10.03       |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p1      | 734.0         | 10.01       |
| B12  | 10 MHz       | TM3p1      | 737.5         | 9.99        |
| B12  | 10 MHz       | TM3p1      | 741.0         | 10.01       |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p1a     | 734.0         | 10.03       |
| B12  | 10 MHz       | TM3p1a     | 737.5         | 10.01       |
| B12  | 10 MHz       | TM3p1a     | 741.0         | 10.05       |
| Band | OBW Declared | Modulation | Channel (MHz) | 26 dB (MHz) |
| B12  | 10 MHz       | TM3p3      | 734.0         | 9.99        |
| B12  | 10 MHz       | TM3p3      | 737.5         | 10.01       |
| B12  | 10 MHz       | TM3p3      | 741.0         | 9.95        |

## Antenna port 1

Band B12

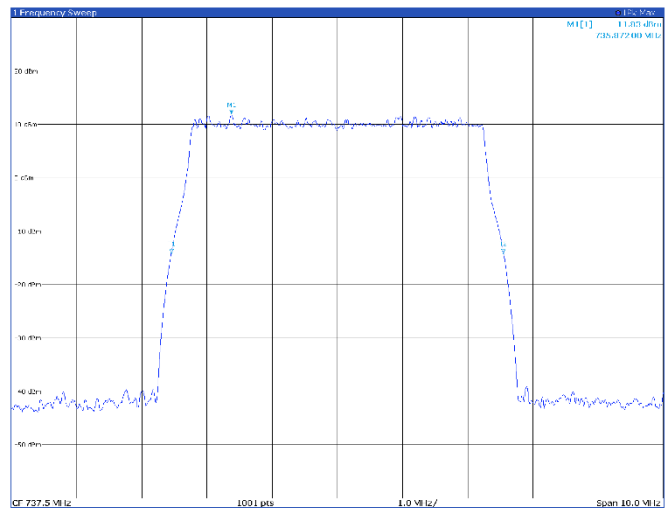
5 MHz

## TM1.1, 5 MHz, low channel



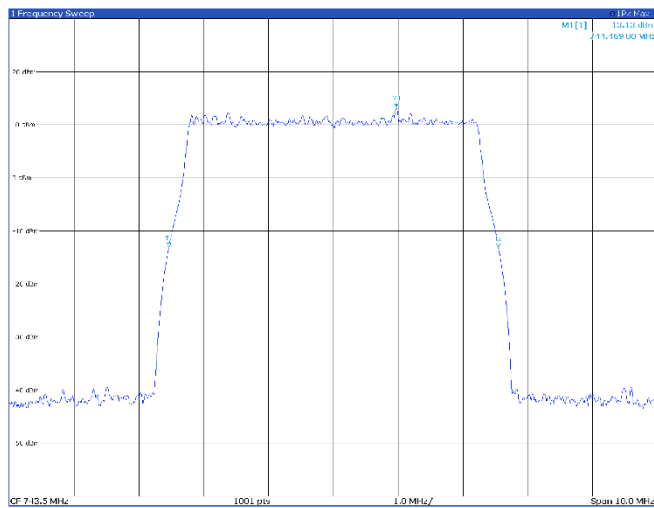
| Type | Ref | Trc | X Value     | Y Value   | n/B | Function | Function Result |
|------|-----|-----|-------------|-----------|-----|----------|-----------------|
| M1   | 1   |     | 732.169 MHz | 12.23 dBm | n/B |          | 5.07 MHz        |
| M1   | 1   |     | 732.169 MHz | 12.23 dBm | n/B | max BW   | 5.07 MHz        |
| M1   | 1   |     | 732.169 MHz | 12.23 dBm | n/B | min BW   | 5.07 MHz        |

## TM1.1, 5 MHz, mid channel



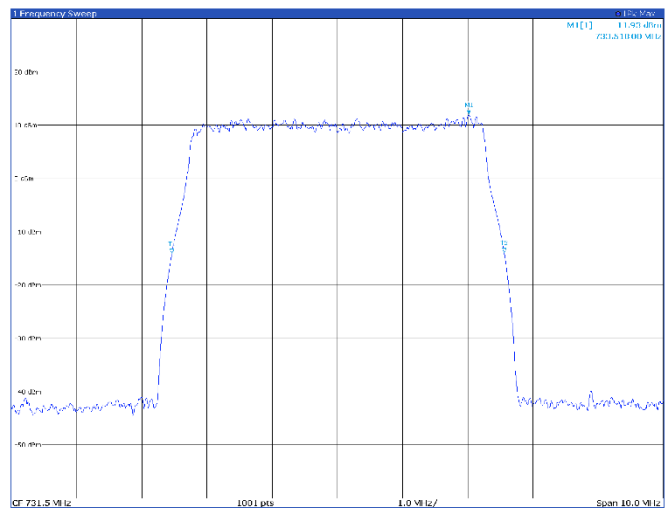
| Type | Ref | Trc | X Value     | Y Value   | n/B | Function | Function Result |
|------|-----|-----|-------------|-----------|-----|----------|-----------------|
| M1   | 1   |     | 735.872 MHz | 11.83 dBm | n/B |          | 5.09 MHz        |
| M1   | 1   |     | 735.872 MHz | 11.83 dBm | n/B | max BW   | 5.09 MHz        |
| M1   | 1   |     | 735.872 MHz | 11.83 dBm | n/B | min BW   | 5.09 MHz        |

## TM1.1, 5 MHz, high channel



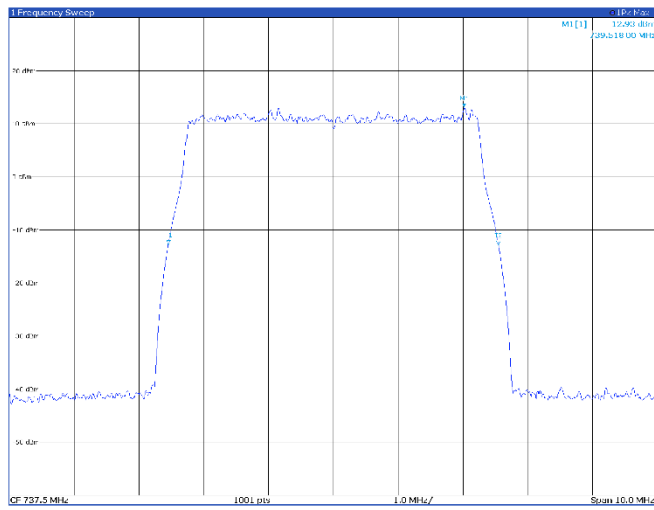
| Type | Ref | Trc | X Value     | Y Value   | n/B | Function | Function Result |
|------|-----|-----|-------------|-----------|-----|----------|-----------------|
| M1   | 1   |     | 744.469 MHz | 13.13 dBm | n/B |          | 5.08 MHz        |
| M1   | 1   |     | 744.469 MHz | 13.13 dBm | n/B | max BW   | 5.08 MHz        |
| M1   | 1   |     | 744.469 MHz | 13.13 dBm | n/B | min BW   | 5.08 MHz        |

## TM3p1, 5 MHz, low channel

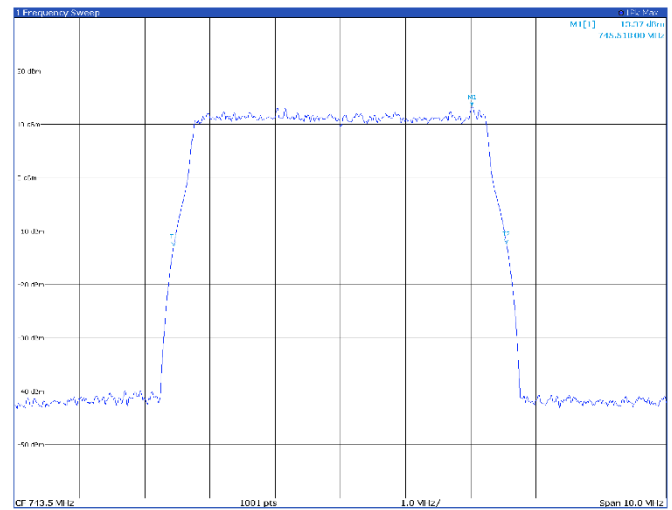


| Type | Ref | Trc | X Value     | Y Value   | n/B | Function | Function Result |
|------|-----|-----|-------------|-----------|-----|----------|-----------------|
| M1   | 1   |     | 735.518 MHz | 11.93 dBm | n/B |          | 5.09 MHz        |
| M1   | 1   |     | 735.518 MHz | 11.93 dBm | n/B | max BW   | 5.09 MHz        |
| M1   | 1   |     | 735.518 MHz | 11.93 dBm | n/B | min BW   | 5.09 MHz        |

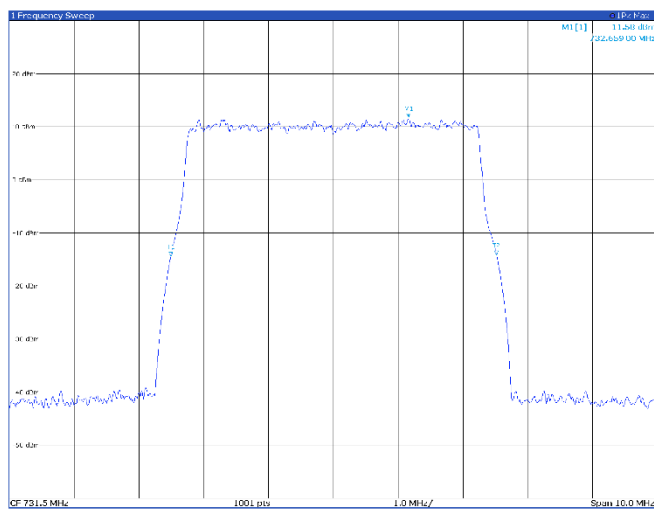
TM3p1, 5 MHz, mid channel



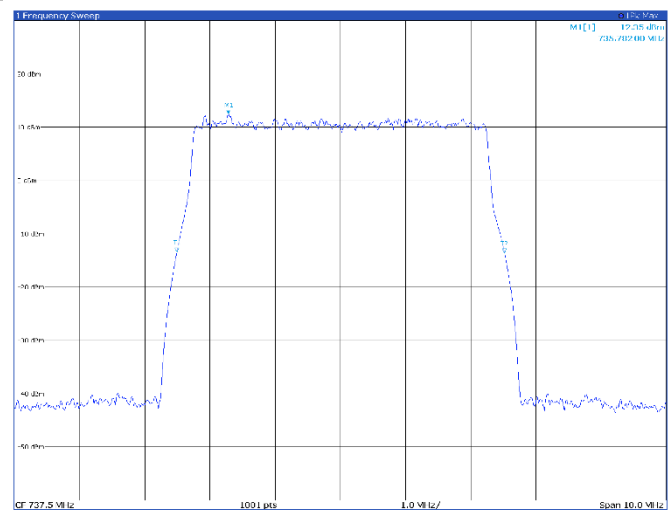
TM3p1, 5 MHz, high channel



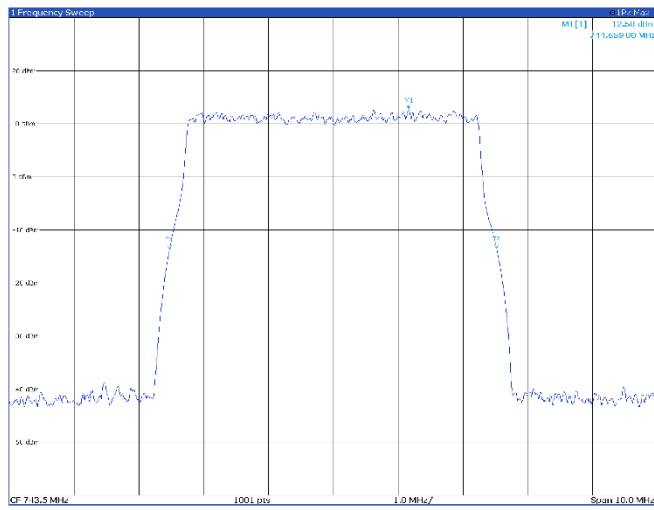
TM3p1a, 5 MHz, low channel



TM3p1a, 5 MHz, mid channel

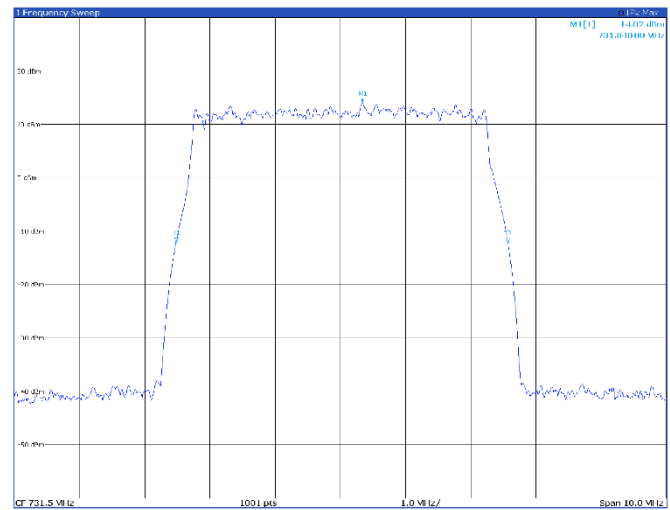


TM3p1a, 5 MHz, high channel



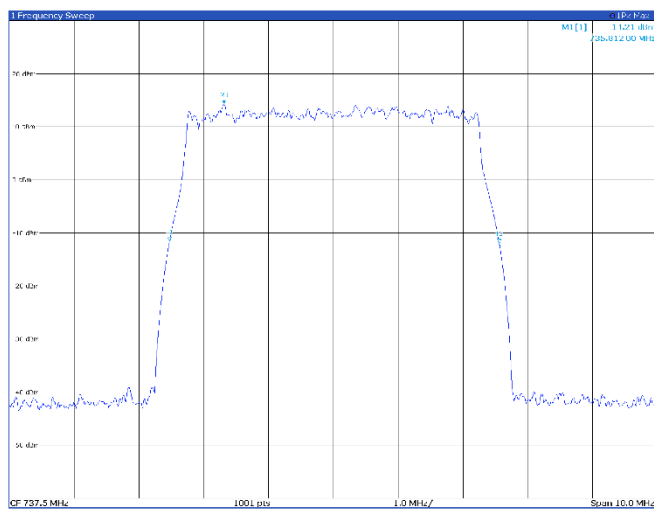
| Type | Ref | Trc | X Value    | Y Value   | Function  | Function Result |
|------|-----|-----|------------|-----------|-----------|-----------------|
| M1   | 1   |     | 714.50 MHz | 12.58 dBm | nB        | 5.04 MHz        |
| M1   | 1   |     | 714.50 MHz | 12.58 dBm | nB cpm BW | 5.04 MHz        |
| M1   | 1   |     | 714.50 MHz | 12.58 dBm | nB cpm BW | 5.04 MHz        |

TM3p3, 5 MHz, low channel



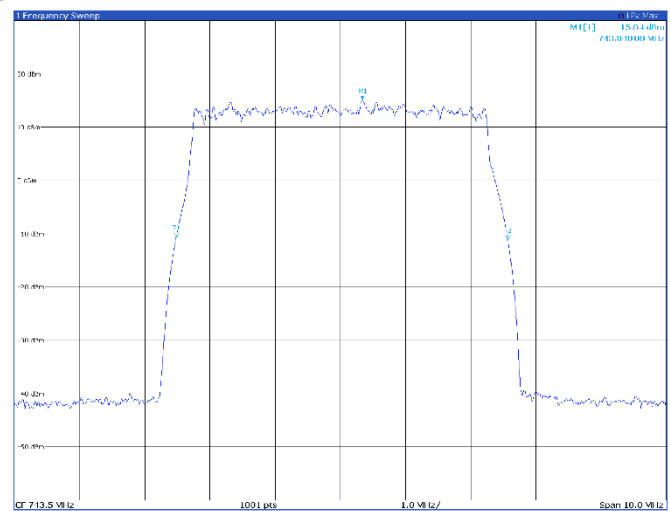
| Type | Ref | Trc | X Value    | Y Value   | Function  | Function Result |
|------|-----|-----|------------|-----------|-----------|-----------------|
| M1   | 1   |     | 732.50 MHz | 14.07 dBm | nB        | 5.08 MHz        |
| M1   | 1   |     | 732.50 MHz | 14.07 dBm | nB cpm BW | 5.08 MHz        |
| M1   | 1   |     | 732.50 MHz | 14.07 dBm | nB cpm BW | 5.08 MHz        |

TM3p3, 5 MHz, mid channel



| Type | Ref | Trc | X Value    | Y Value   | Function  | Function Result |
|------|-----|-----|------------|-----------|-----------|-----------------|
| M1   | 1   |     | 738.50 MHz | 14.21 dBm | nB        | 5.08 MHz        |
| M1   | 1   |     | 738.50 MHz | 14.21 dBm | nB cpm BW | 5.08 MHz        |
| M1   | 1   |     | 738.50 MHz | 14.21 dBm | nB cpm BW | 5.08 MHz        |

TM3p3, 5 MHz, high channel

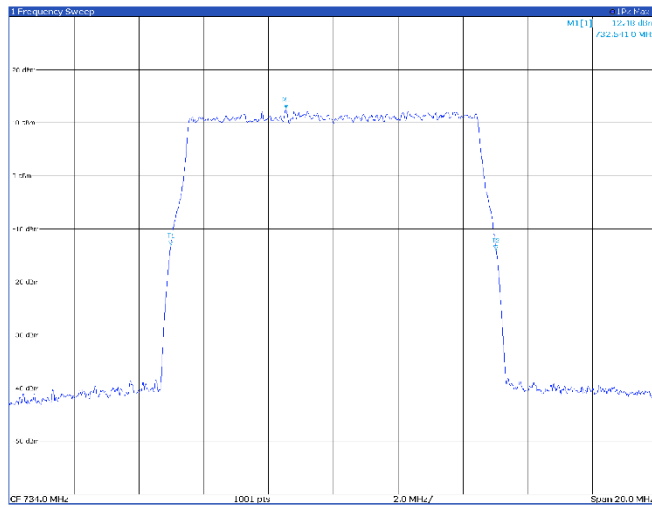


| Type | Ref | Trc | X Value    | Y Value   | Function  | Function Result |
|------|-----|-----|------------|-----------|-----------|-----------------|
| M1   | 1   |     | 744.50 MHz | 15.04 dBm | nB        | 5.08 MHz        |
| M1   | 1   |     | 744.50 MHz | 15.04 dBm | nB cpm BW | 5.08 MHz        |
| M1   | 1   |     | 744.50 MHz | 15.04 dBm | nB cpm BW | 5.08 MHz        |

## Band B12

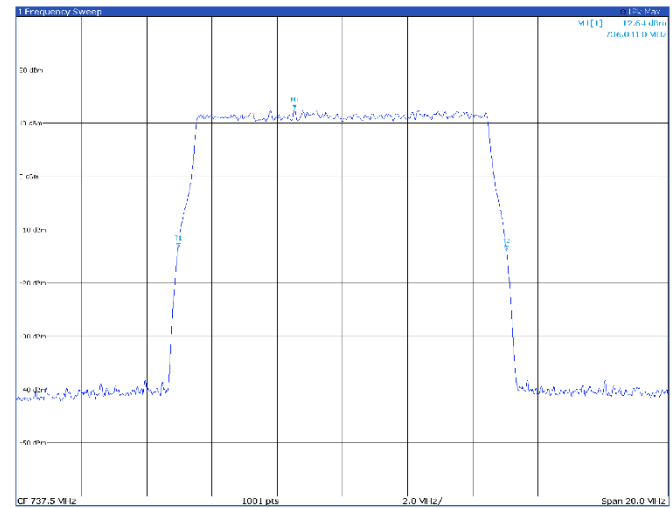
## 10 MHz

## TM1.1, 10 MHz, low channel



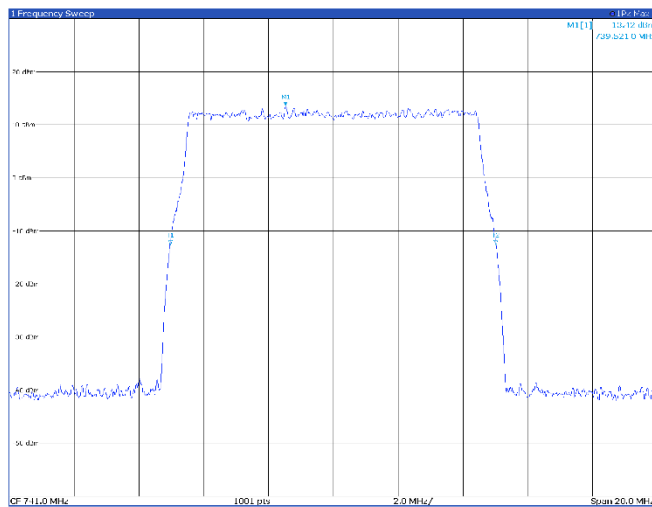
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   |     | 732.541 MHz | 12.48 dBm  | nB         | 20.0 dB         |
| M1   | 1   |     | 732.541 MHz | -12.48 dBm | nB down BW | 10.02 MHz       |
| M1   | 1   |     | 732.541 MHz | -12.48 dBm | Q-factor   | 73.6            |

## TM1.1, 10 MHz, mid channel



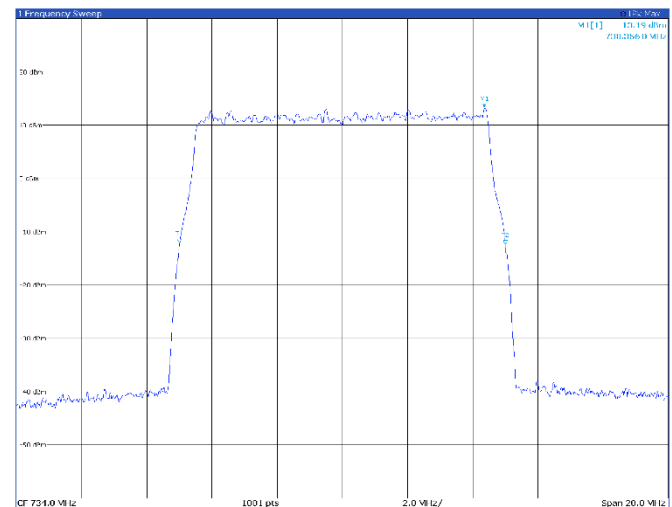
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   |     | 732.041 MHz | 12.64 dBm  | nB         | 20.0 dB         |
| M1   | 1   |     | 732.041 MHz | -12.64 dBm | nB down BW | 10.07 MHz       |
| M1   | 1   |     | 732.041 MHz | -12.64 dBm | Q-factor   | 73.1            |

## TM1.1, 10 MHz, high channel



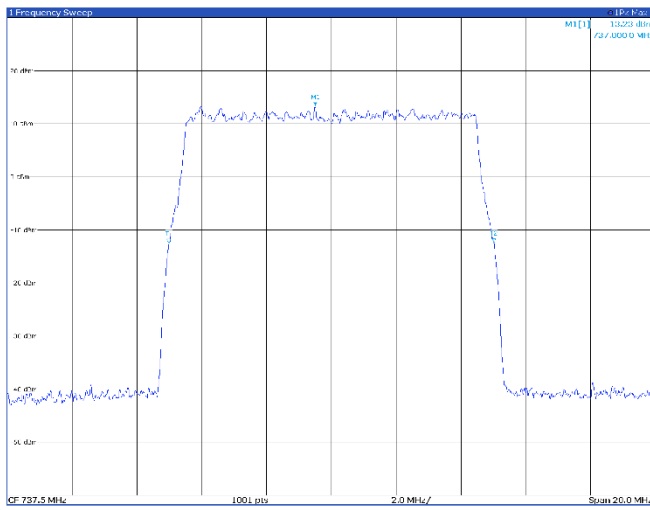
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   |     | 732.521 MHz | 13.42 dBm  | nB         | 20.0 dB         |
| M1   | 1   |     | 732.521 MHz | -13.42 dBm | nB down BW | 10.05 MHz       |
| M1   | 1   |     | 732.521 MHz | -13.42 dBm | Q-factor   | 73.6            |

## TM3p1, 10 MHz, low channel



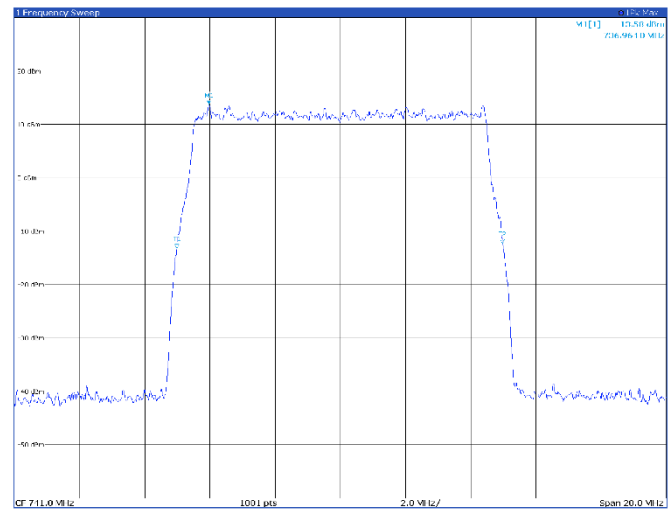
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   |     | 732.356 MHz | 13.19 dBm  | nB         | 20.0 dB         |
| M1   | 1   |     | 732.356 MHz | -13.19 dBm | nB down BW | 9.99 MHz        |
| M1   | 1   |     | 732.356 MHz | -13.19 dBm | Q-factor   | 73.9            |

TM3p1, 10 MHz, mid channel



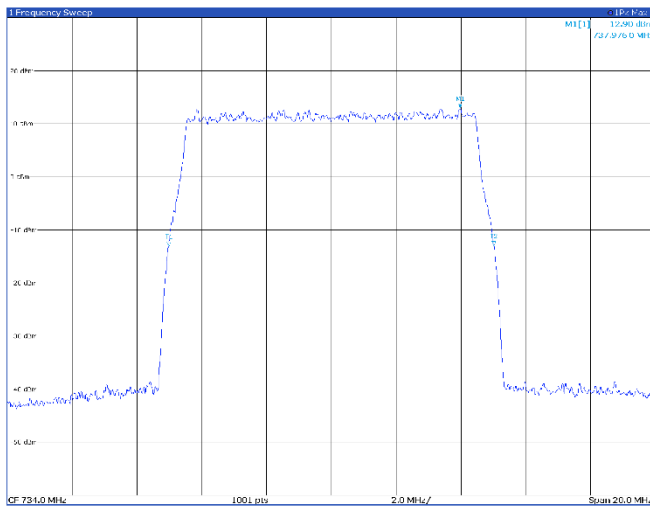
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   | 1   | 737.0 MHz   | 13.23 dBm  | nB         | 20.0 dB         |
| M1   | 1   | 1   | 737.453 MHz | -12.40 dBm | nB down BW | 10.03 MHz       |
| M2   | 1   | 1   | 737.500 MHz | -12.40 dBm | nB         | 20.0 dB         |

TM3p1, 10 MHz, high channel



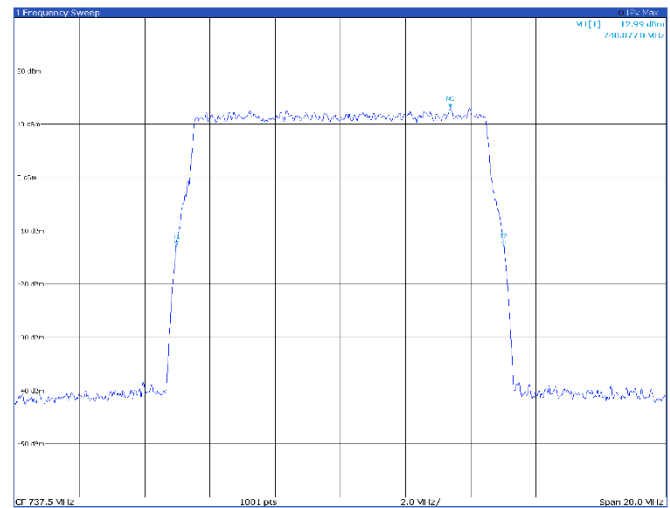
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   | 1   | 736.964 MHz | 13.58 dBm  | nB         | 20.0 dB         |
| M1   | 1   | 1   | 737.953 MHz | -12.21 dBm | nB down BW | 9.99 MHz        |
| M2   | 1   | 1   | 738.000 MHz | -12.21 dBm | nB         | 20.0 dB         |

TM3p1a, 10 MHz, low channel



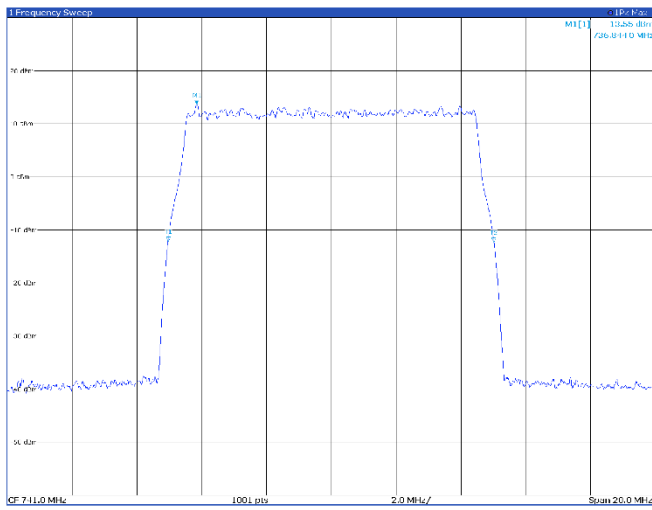
| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   | 1   | 737.976 MHz | 12.90 dBm  | nB         | 20.0 dB         |
| M1   | 1   | 1   | 738.965 MHz | -12.53 dBm | nB down BW | 10.03 MHz       |
| M2   | 1   | 1   | 739.000 MHz | -12.53 dBm | nB         | 20.0 dB         |

TM3p1a, 10 MHz, mid channel

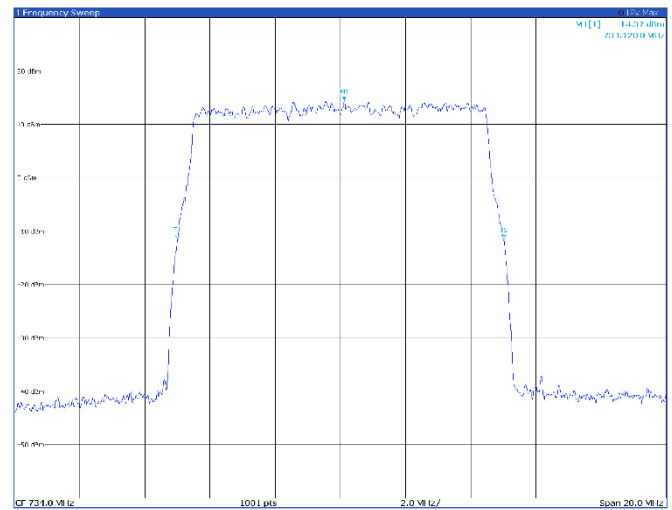


| Type | Ref | Trc | X Value     | Y Value    | Function   | Function Result |
|------|-----|-----|-------------|------------|------------|-----------------|
| M1   | 1   | 1   | 740.877 MHz | 12.99 dBm  | nB         | 20.0 dB         |
| M1   | 1   | 1   | 742.413 MHz | -12.52 dBm | nB down BW | 10.05 MHz       |
| M2   | 1   | 1   | 743.000 MHz | -12.52 dBm | nB         | 20.0 dB         |

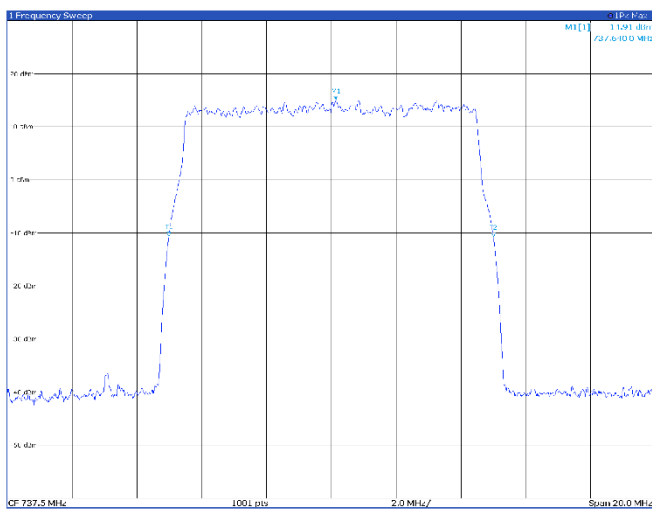
### TM3p1a, 10 MHz, high channel



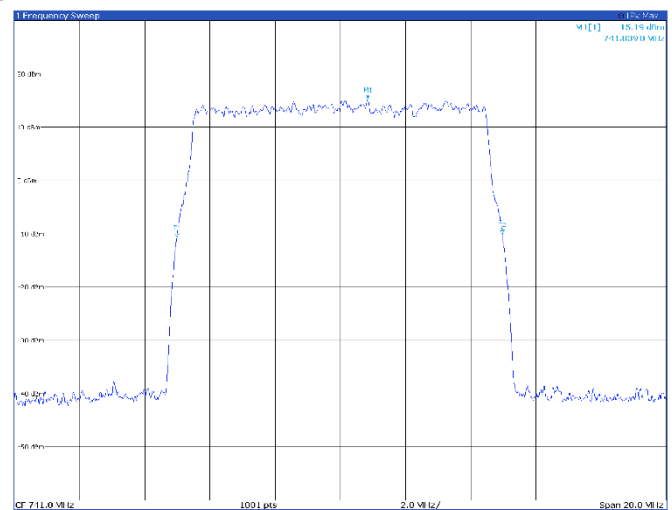
### TM3p3, 10 MHz, low channel



### TM3p3, 10 MHz, mid channel



### TM3p3, 10 MHz, high channel

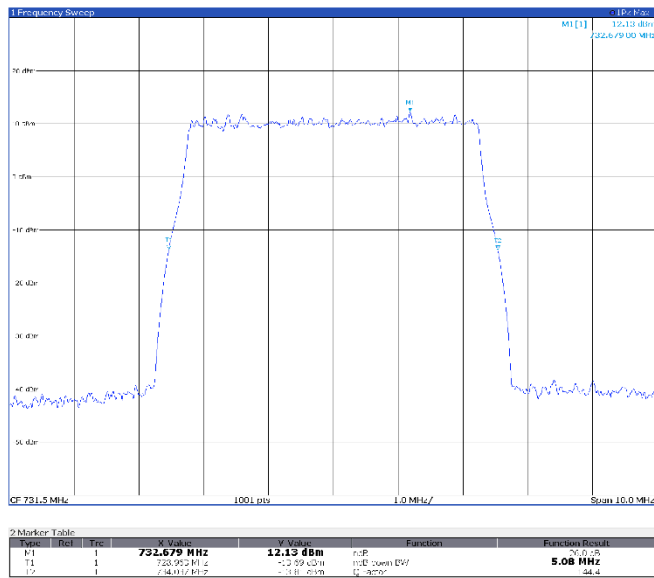


## Antenna port 2

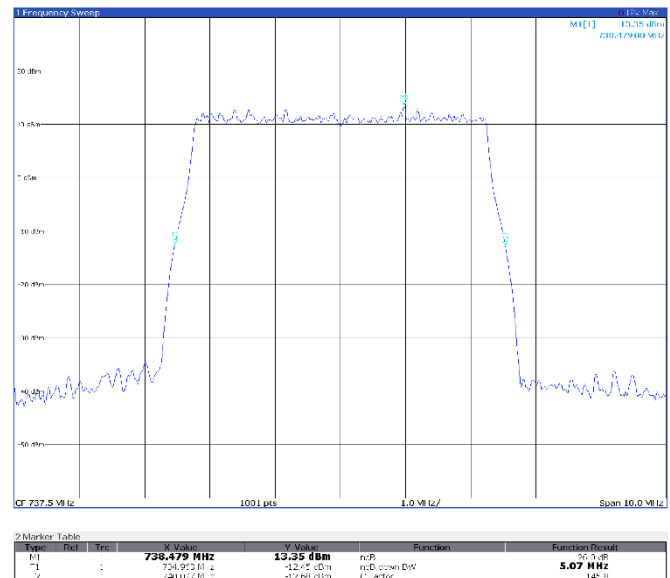
Band B12

5 MHz

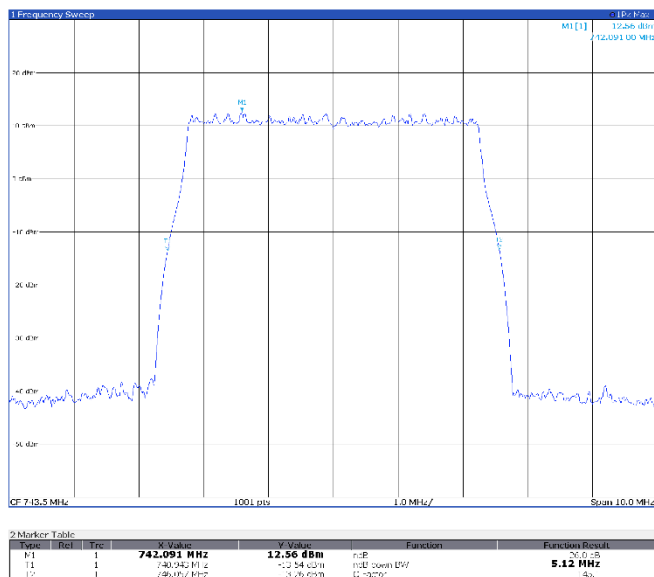
TM1.1, 5 MHz, low channel



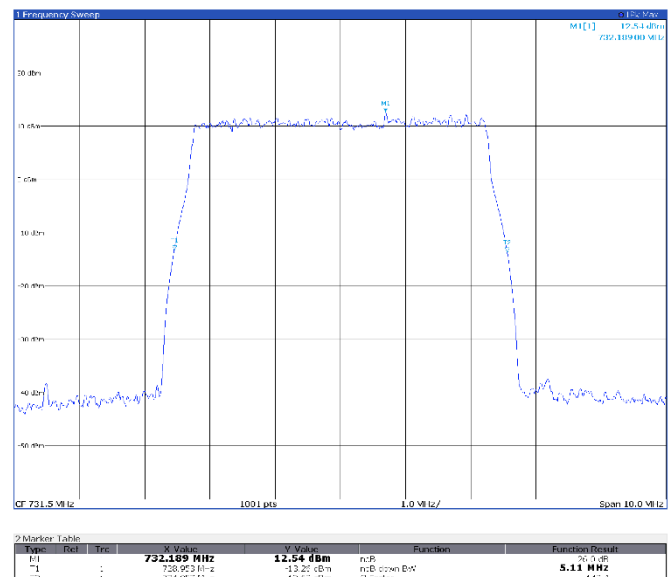
TM1.1, 5 MHz, mid channel



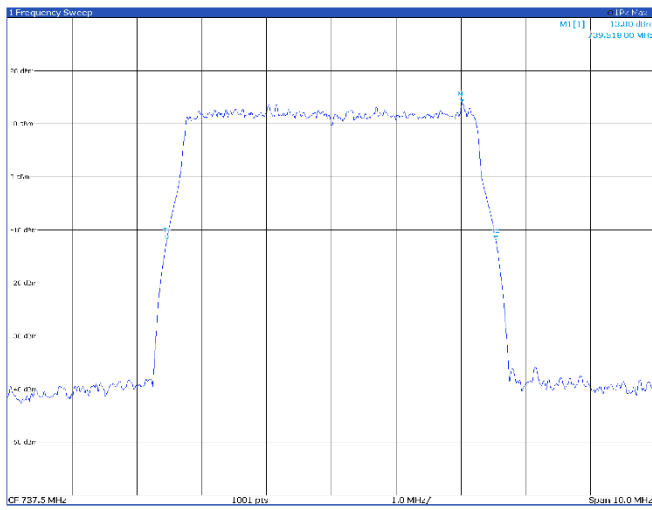
TM1.1, 5 MHz, high channel



TM3p1, 5 MHz, low channel

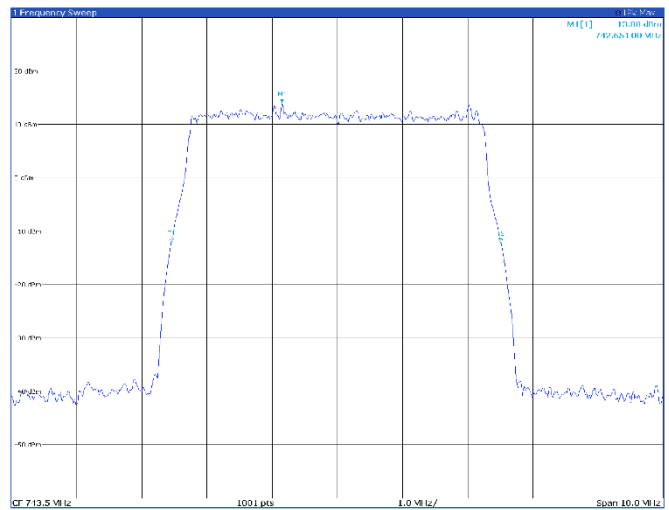


TM3p1, 5 MHz, mid channel



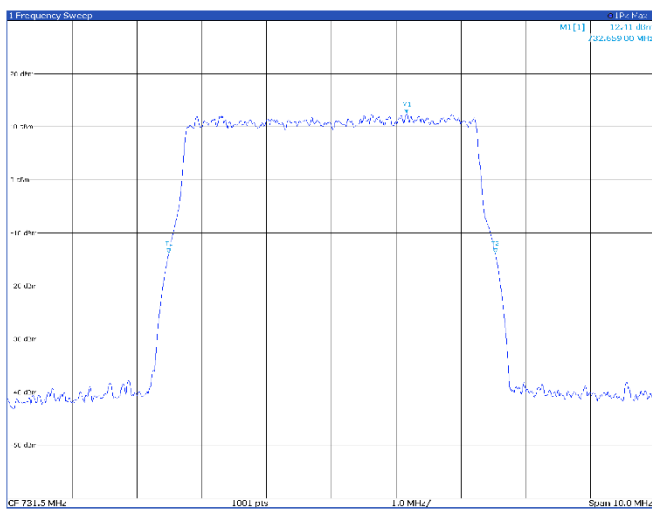
| Type | Ref | Trc | X Value     | Y Value   | Function  | Function Result |
|------|-----|-----|-------------|-----------|-----------|-----------------|
| M1   | 1   | 1   | 739.518 MHz | 13.80 dBm | nB        | 36.0 dB         |
| M1   | 1   | 1   | 739.518 MHz | 13.80 dBm | nB cpm BW | 5.08 MHz        |
| M1   | 1   | 1   | 739.518 MHz | 13.80 dBm | nB cpm    | 5.08 MHz        |

TM3p1, 5 MHz, high channel



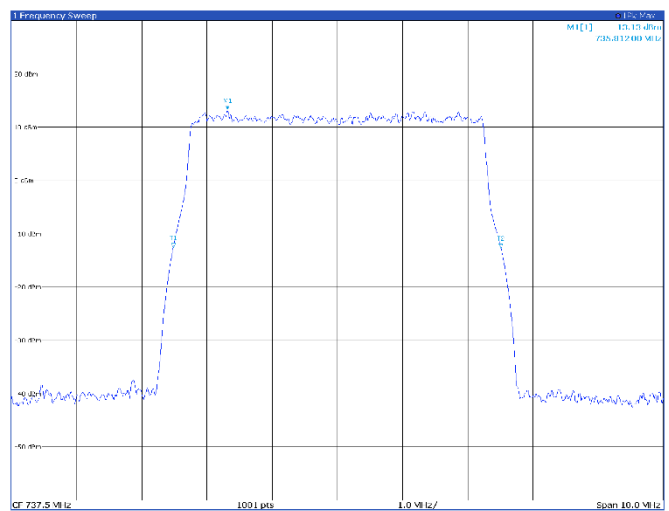
| Type | Ref | Trc | X Value     | Y Value   | Function  | Function Result |
|------|-----|-----|-------------|-----------|-----------|-----------------|
| M1   | 1   | 1   | 742.651 MHz | 13.80 dBm | nB        | 36.0 dB         |
| M1   | 1   | 1   | 742.651 MHz | 13.80 dBm | nB cpm BW | 5.05 MHz        |
| M1   | 1   | 1   | 742.651 MHz | 13.80 dBm | nB cpm    | 5.05 MHz        |

TM3p1a, 5 MHz, low channel

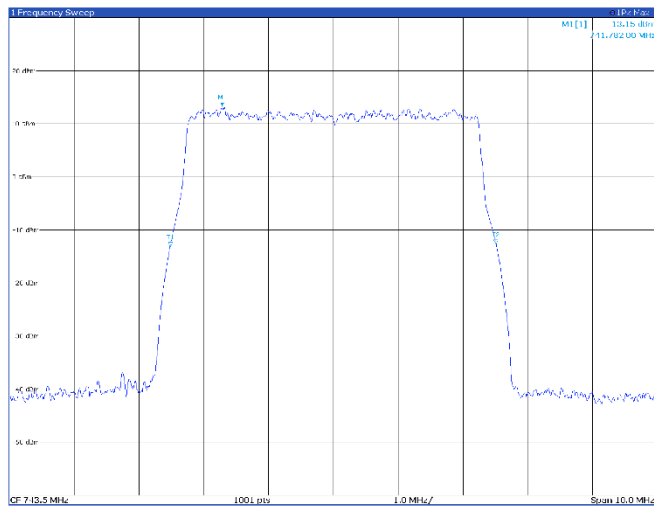


| Type | Ref | Trc | X Value     | Y Value   | Function  | Function Result |
|------|-----|-----|-------------|-----------|-----------|-----------------|
| M1   | 1   | 1   | 732.659 MHz | 12.41 dBm | nB        | 36.0 dB         |
| M1   | 1   | 1   | 732.659 MHz | 12.41 dBm | nB cpm BW | 5.04 MHz        |
| M1   | 1   | 1   | 732.659 MHz | 12.41 dBm | nB cpm    | 5.04 MHz        |

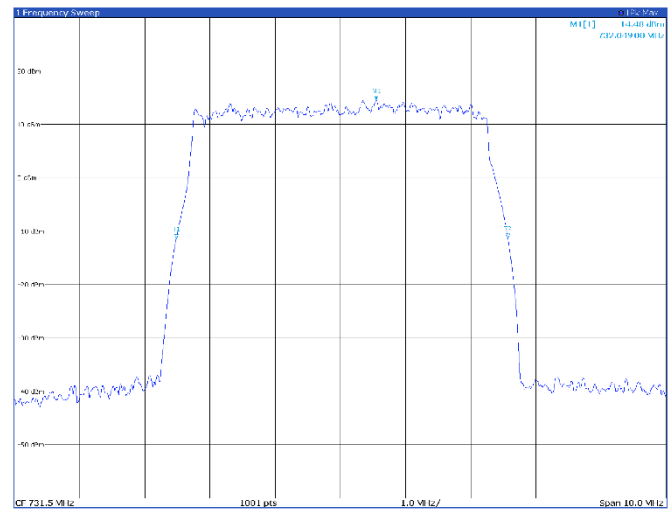
TM3p1a, 5 MHz, mid channel



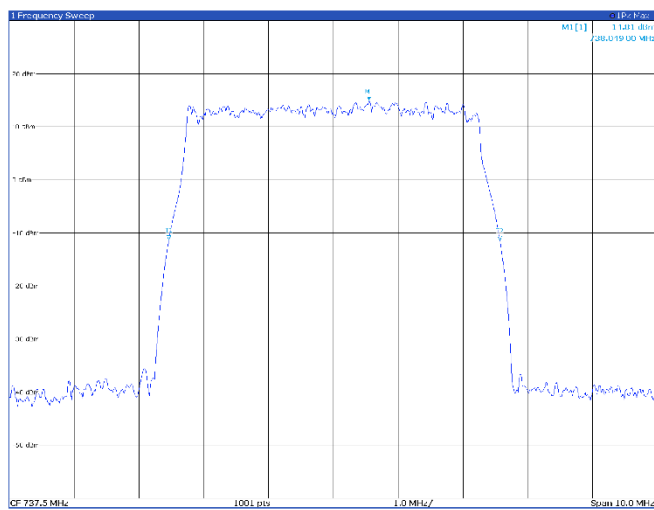
| Type | Ref | Trc | X Value     | Y Value   | Function  | Function Result |
|------|-----|-----|-------------|-----------|-----------|-----------------|
| M1   | 1   | 1   | 735.812 MHz | 13.13 dBm | nB        | 36.0 dB         |
| M1   | 1   | 1   | 735.812 MHz | 13.13 dBm | nB cpm BW | 5.03 MHz        |
| M1   | 1   | 1   | 735.812 MHz | 13.13 dBm | nB cpm    | 5.03 MHz        |

**TM3p1a, 5 MHz, high channel**


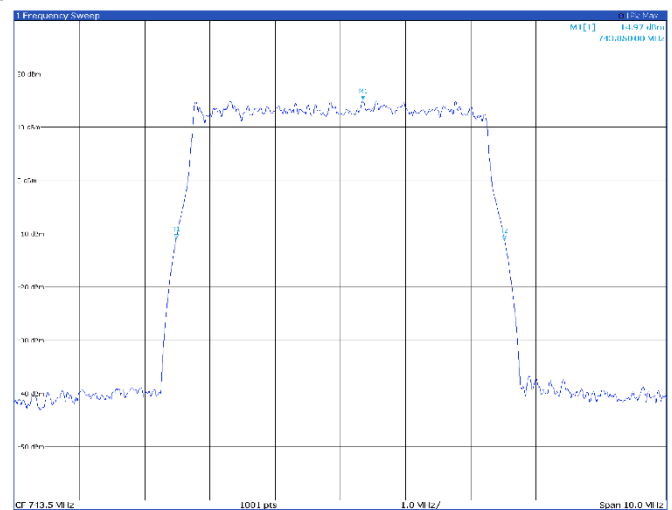
| Type | Ref | Freq | X-Value   | Y-Value    | Function   | Function Result |
|------|-----|------|-----------|------------|------------|-----------------|
| M1   | 1   |      | 714.5 MHz | 0.00 dBm   | nB         | 30.0 dB         |
| M2   | 1   |      | 715.0 MHz | -11.75 dBm | nB down BW | 5.03 MHz        |

**TM3p3, 5 MHz, low channel**


| Type | Ref | Freq | X-Value   | Y-Value    | Function   | Function Result |
|------|-----|------|-----------|------------|------------|-----------------|
| M1   | 1   |      | 732.5 MHz | 0.00 dBm   | nB         | 30.0 dB         |
| M2   | 1   |      | 733.0 MHz | -11.75 dBm | nB down BW | 5.08 MHz        |

**TM3p3, 5 MHz, mid channel**


| Type | Ref | Freq | X-Value   | Y-Value    | Function   | Function Result |
|------|-----|------|-----------|------------|------------|-----------------|
| M1   | 1   |      | 738.5 MHz | 0.00 dBm   | nB         | 30.0 dB         |
| M2   | 1   |      | 739.0 MHz | -11.75 dBm | nB down BW | 5.11 MHz        |

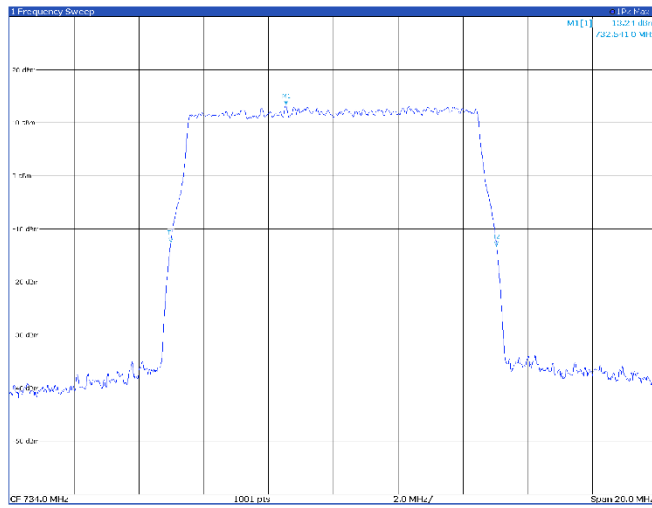
**TM3p3, 5 MHz, high channel**


| Type | Ref | Freq | X-Value   | Y-Value    | Function   | Function Result |
|------|-----|------|-----------|------------|------------|-----------------|
| M1   | 1   |      | 744.5 MHz | 0.00 dBm   | nB         | 30.0 dB         |
| M2   | 1   |      | 745.0 MHz | -11.75 dBm | nB down BW | 5.04 MHz        |

## Band B12

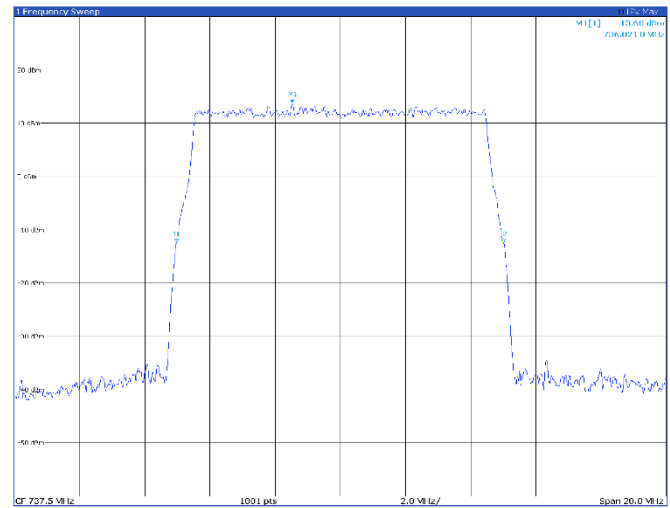
## 10 MHz

## TM1.1, 10 MHz, low channel



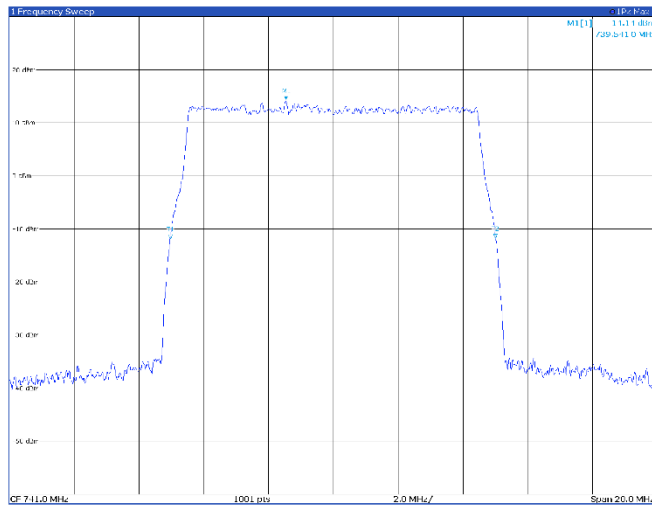
| Type | Ref | Trc | X Value     | Y Value    | nB | Function | Function Result |
|------|-----|-----|-------------|------------|----|----------|-----------------|
| M1   | 1   |     | 732.541 MHz | 13.24 dBm  | nB |          | 20.0 dB         |
| M1   | 1   |     | 732.541 MHz | -12.54 dBm | nB | Down BW  | 10.05 MHz       |
| M1   | 1   |     | 732.541 MHz | -12.54 dBm | nB | Q-factor | 72.8            |

## TM1.1, 10 MHz, mid channel



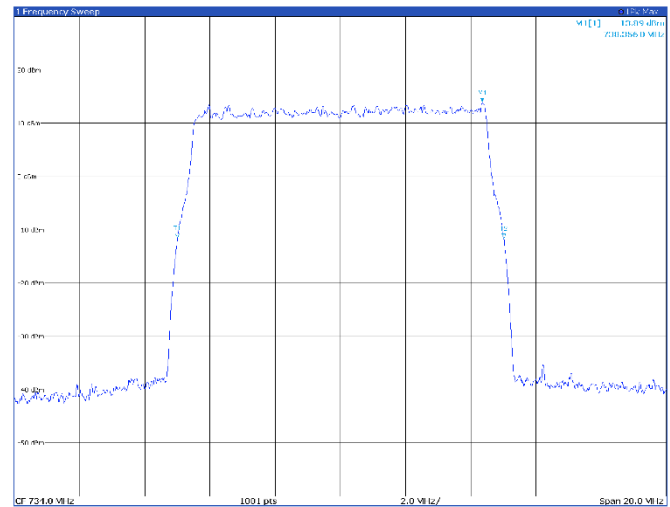
| Type | Ref | Trc | X Value     | Y Value    | nB | Function | Function Result |
|------|-----|-----|-------------|------------|----|----------|-----------------|
| M1   | 1   |     | 738.021 MHz | 13.60 dBm  | nB |          | 20.0 dB         |
| M1   | 1   |     | 738.021 MHz | -12.60 dBm | nB | Down BW  | 10.05 MHz       |
| M1   | 1   |     | 738.021 MHz | -12.60 dBm | nB | Q-factor | 73.4            |

## TM1.1, 10 MHz, high channel



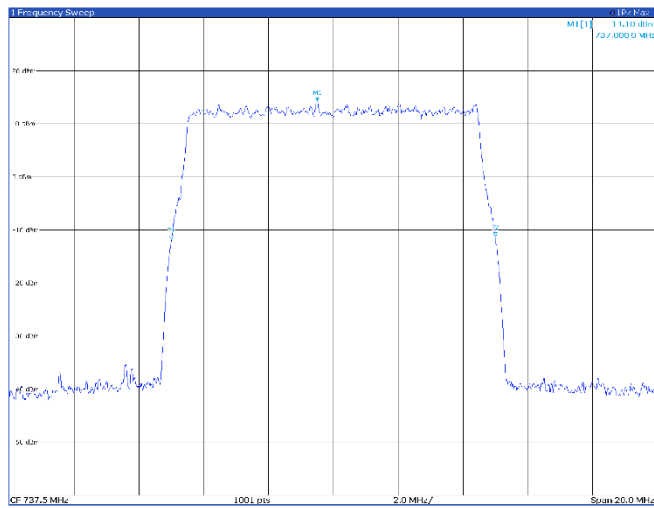
| Type | Ref | Trc | X Value     | Y Value    | nB | Function | Function Result |
|------|-----|-----|-------------|------------|----|----------|-----------------|
| M1   | 1   |     | 739.541 MHz | 14.14 dBm  | nB |          | 20.0 dB         |
| M1   | 1   |     | 739.541 MHz | -11.54 dBm | nB | Down BW  | 10.03 MHz       |
| M1   | 1   |     | 739.541 MHz | -11.54 dBm | nB | Q-factor | 73.7            |

## TM3p1, 10 MHz, low channel



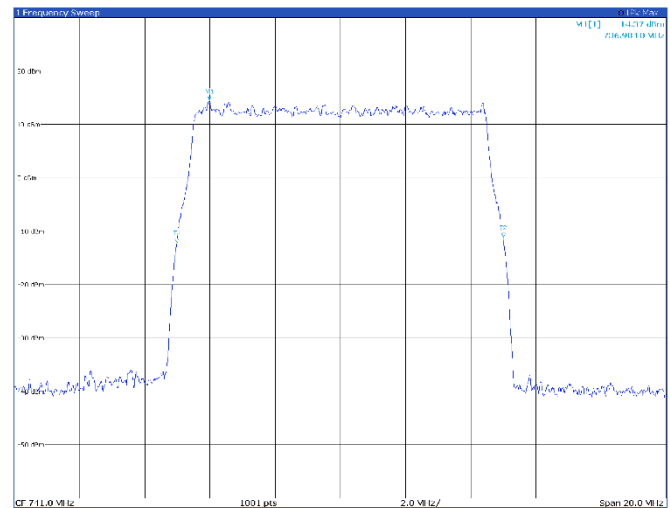
| Type | Ref | Trc | X Value     | Y Value    | nB | Function | Function Result |
|------|-----|-----|-------------|------------|----|----------|-----------------|
| M1   | 1   |     | 739.356 MHz | 13.89 dBm  | nB |          | 20.0 dB         |
| M1   | 1   |     | 739.356 MHz | -11.50 dBm | nB | Down BW  | 10.01 MHz       |
| M1   | 1   |     | 739.356 MHz | -11.50 dBm | nB | Q-factor | 73.1            |

TM3p1, 10 MHz, mid channel



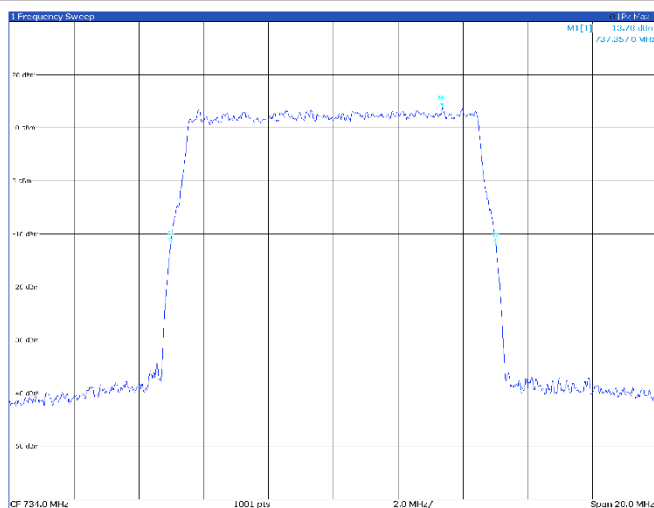
| Type | Ref | Trc | X Value   | Y Value    | nB | Function | Function Result |
|------|-----|-----|-----------|------------|----|----------|-----------------|
| F1   | 1   | 1   | 737.0 MHz | 14.10 dBm  | nB | 20.0 dB  | 9.99 MHz        |
| F1   | 1   | 1   | 742.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |
| F2   | 1   | 1   | 747.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |

TM3p1, 10 MHz, high channel



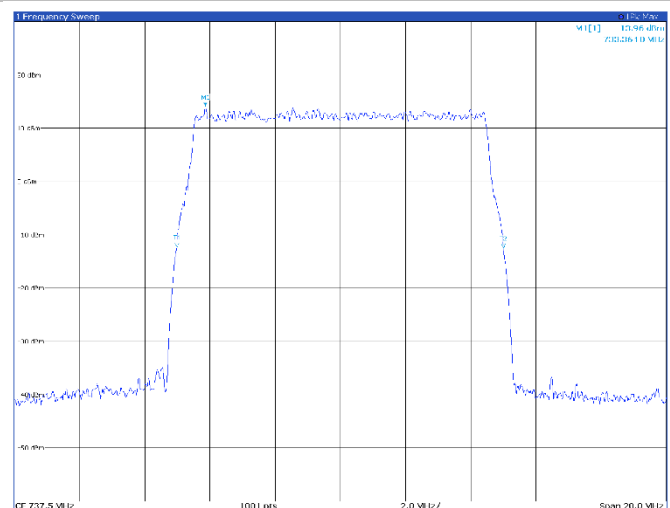
| Type | Ref | Trc | X Value   | Y Value    | nB | Function | Function Result |
|------|-----|-----|-----------|------------|----|----------|-----------------|
| F1   | 1   | 1   | 737.0 MHz | 14.10 dBm  | nB | 20.0 dB  | 9.99 MHz        |
| F1   | 1   | 1   | 742.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |
| F2   | 1   | 1   | 747.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |

TM3p1a, 10 MHz, low channel



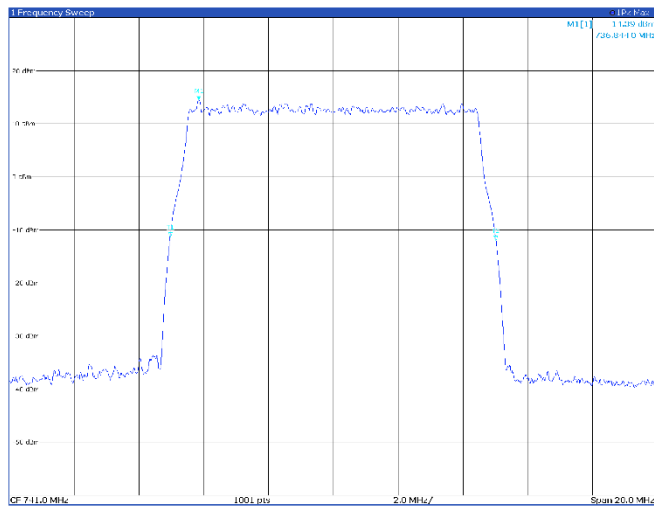
| Type | Ref | Trc | X Value   | Y Value    | nB | Function | Function Result |
|------|-----|-----|-----------|------------|----|----------|-----------------|
| F1   | 1   | 1   | 737.0 MHz | 13.76 dBm  | nB | 20.0 dB  | 10.01 MHz       |
| F1   | 1   | 1   | 742.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |
| F2   | 1   | 1   | 747.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |

TM3p1a, 10 MHz, mid channel

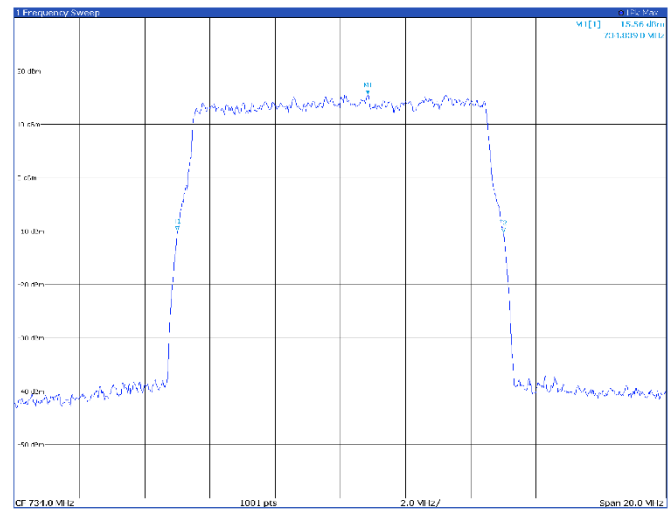


| Type | Ref | Trc | X Value   | Y Value    | nB | Function | Function Result |
|------|-----|-----|-----------|------------|----|----------|-----------------|
| F1   | 1   | 1   | 737.0 MHz | 13.96 dBm  | nB | 20.0 dB  | 10.01 MHz       |
| F1   | 1   | 1   | 742.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |
| F2   | 1   | 1   | 747.5 MHz | -11.60 dBm | nB | 20.0 dB  | 10.01 MHz       |

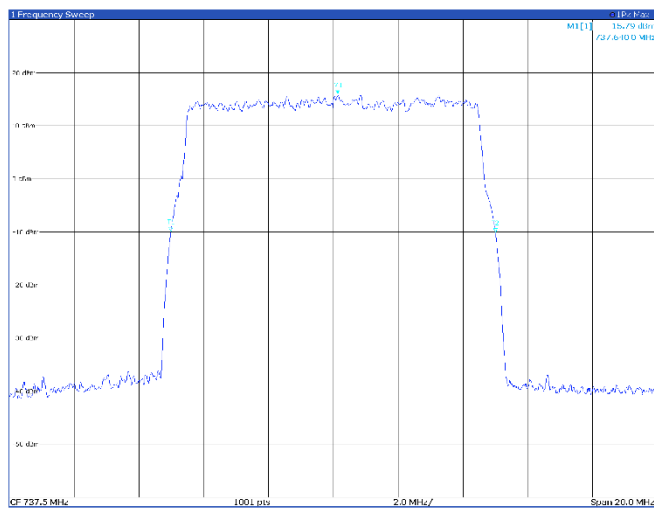
### TM3p1a, 10 MHz, high channel



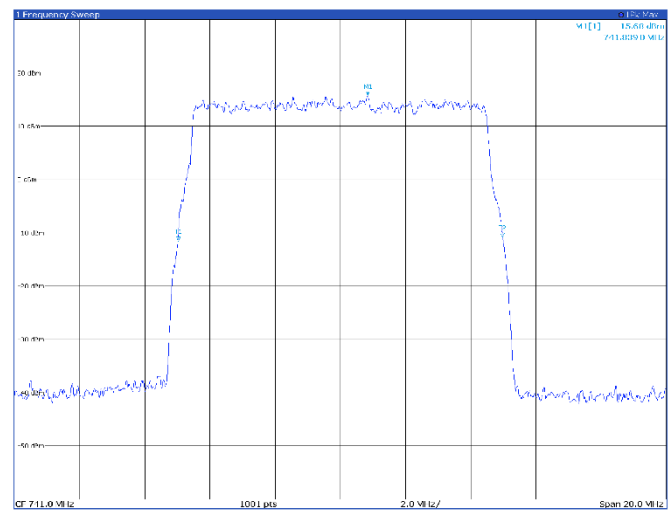
### TM3p3, 10 MHz, low channel



### TM3p3, 10 MHz, mid channel



### TM3p3, 10 MHz, high channel



## 8.4 FCC §27.50(c)(3) Output power

### 8.4.1 Definitions and limits

(c) The following power and antenna height requirements apply to stations transmitting in the 600 MHz band and the 698-746 MHz band:

(3) Fixed and base stations transmitting a signal with an emission bandwidth greater than 1 MHz must not exceed an ERP of **1000 watts/MHz (60 dBm/MHz)** and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP in accordance with Table 3 of this section

(10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts (34.8 dBm) ERP.

### 8.4.2 Test summary

|                 |                   |                   |           |
|-----------------|-------------------|-------------------|-----------|
| Test start date | November 22, 2024 | Temperature       | 22 °C     |
| Test end date   | December 13, 2024 | Air pressure      | 1001 mbar |
| Test engineer   | O. Frau           | Relative humidity | 62%       |
| Verdict         | Pass              |                   |           |

### 8.4.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.2.4.5

Spectrum analyzer settings:

|                      |                              |
|----------------------|------------------------------|
| Resolution bandwidth | 1 MHz                        |
| Video bandwidth      | 3 MHz                        |
| Frequency span       | $\geq 1.5 \times \text{OBW}$ |
| Detector mode        | Peak                         |
| Trace mode           | Max Hold                     |

This test was made across the conducted port and using a sensor power. An offset of 30 dB was added to the measurement to compensate the loss of the external 30 dB attenuator. Interconnecting cable losses were included as a transducer factor in the spectrum analyzer.

### 8.4.4 Test equipment used

| Equipment         | Manufacturer    | Model no. | Asset no. |
|-------------------|-----------------|-----------|-----------|
| Spectrum Analyzer | Rohde & Schwarz | FSW43     | 101767    |

## 8.4.5 Test data

## Band B12:

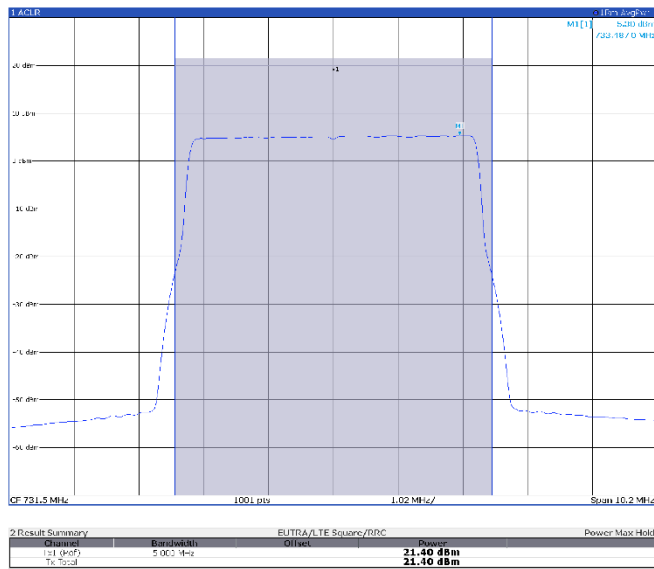
| Modulation | OBW<br>(MHz) | Frequency<br>(MHz) | Measured Power<br>Density<br>(dBm/MHz)<br>port 1 | Measured Power<br>Density<br>(dBm/MHz)<br>port 2 | Antenna<br>Gain<br>Max<br>(dBi) | Total EIRP<br>Power<br>Density<br>(dBm/MHz) | Measured<br>Power<br>(dBm)<br>port 1 | Measured<br>Power<br>(dBm)<br>port 2 | Limits<br>Power<br>(dBm) | Margin<br>(dB) |
|------------|--------------|--------------------|--------------------------------------------------|--------------------------------------------------|---------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------|--------------------------|----------------|
| TM1.1      | 5            | 731.5              | 5.30                                             | 6.10                                             | 3.7                             | 12.43                                       | 21.40                                | 22.09                                | 60.0                     | -47.57         |
| TM3p1      | 5            | 731.5              | 5.23                                             | 6.08                                             | 3.7                             | 12.39                                       | 21.37                                | 22.07                                | 60.0                     | -47.61         |
| TM3p1a     | 5            | 731.5              | 5.28                                             | 6.11                                             | 3.7                             | 12.43                                       | 21.35                                | 22.01                                | 60.0                     | -47.57         |
| TM3p3      | 5            | 731.5              | 6.69                                             | 7.47                                             | 3.7                             | 13.81                                       | 21.22                                | 22.02                                | 60.0                     | -46.19         |
| TM1.1      | 5            | 737.5              | 5.72                                             | 6.60                                             | 3.7                             | 12.89                                       | 21.92                                | 22.74                                | 60.0                     | -47.11         |
| TM3p1      | 5            | 737.5              | 5.73                                             | 6.68                                             | 3.7                             | 12.94                                       | 21.90                                | 22.73                                | 60.0                     | -47.06         |
| TM3p1a     | 5            | 737.5              | 5.77                                             | 6.68                                             | 3.7                             | 12.96                                       | 21.88                                | 22.76                                | 60.0                     | -47.04         |
| TM3p3      | 5            | 737.5              | 7.19                                             | 7.92                                             | 3.7                             | 14.28                                       | 21.84                                | 22.63                                | 60.0                     | -45.72         |
| TM1.1      | 5            | 743.5              | 6.16                                             | 6.58                                             | 3.7                             | 13.09                                       | 22.41                                | 22.68                                | 60.0                     | -46.91         |
| TM3p1      | 5            | 743.5              | 6.23                                             | 6.66                                             | 3.7                             | 13.16                                       | 22.40                                | 22.69                                | 60.0                     | -46.84         |
| TM3p1a     | 5            | 743.5              | 6.28                                             | 6.74                                             | 3.7                             | 13.23                                       | 22.43                                | 22.71                                | 60.0                     | -46.77         |
| TM3p3      | 5            | 743.5              | 7.64                                             | 7.93                                             | 3.7                             | 14.50                                       | 22.33                                | 22.65                                | 60.0                     | -45.50         |
| TM1.1      | 10           | 734.0              | 2.53                                             | 3.42                                             | 3.7                             | 9.71                                        | 21.66                                | 22.45                                | 60.0                     | -50.29         |
| TM3p1      | 10           | 734.0              | 2.87                                             | 3.67                                             | 3.7                             | 10.00                                       | 22.02                                | 22.58                                | 60.0                     | -50.00         |
| TM3p1a     | 10           | 734.0              | 2.80                                             | 3.70                                             | 3.7                             | 9.98                                        | 21.59                                | 22.46                                | 60.0                     | -50.02         |
| TM3p3      | 10           | 734.0              | 4.27                                             | 5.16                                             | 3.7                             | 11.45                                       | 21.62                                | 22.43                                | 60.0                     | -48.55         |
| TM1.1      | 10           | 737.5              | 2.78                                             | 3.40                                             | 3.7                             | 9.81                                        | 21.92                                | 22.53                                | 60.0                     | -50.19         |
| TM3p1      | 10           | 737.5              | 2.95                                             | 3.80                                             | 3.7                             | 10.11                                       | 21.97                                | 22.81                                | 60.0                     | -49.89         |
| TM3p1a     | 10           | 737.5              | 2.92                                             | 3.65                                             | 3.7                             | 10.01                                       | 21.92                                | 22.68                                | 60.0                     | -49.99         |
| TM3p3      | 10           | 737.5              | 4.50                                             | 5.24                                             | 3.7                             | 11.60                                       | 21.91                                | 22.71                                | 60.0                     | -48.40         |
| TM1.1      | 10           | 741.0              | 3.98                                             | 3.93                                             | 3.7                             | 10.67                                       | 23.38                                | 23.23                                | 60.0                     | -49.33         |
| TM3p1      | 10           | 741.0              | 3.25                                             | 3.83                                             | 3.7                             | 10.26                                       | 22.30                                | 22.89                                | 60.0                     | -49.74         |
| TM3p1a     | 10           | 741.0              | 3.17                                             | 3.62                                             | 3.7                             | 10.11                                       | 22.17                                | 22.73                                | 60.0                     | -49.89         |
| TM3p3      | 10           | 741.0              | 4.68                                             | 5.15                                             | 3.7                             | 11.63                                       | 22.14                                | 22.71                                | 60.0                     | -48.37         |

## Antenna port 1

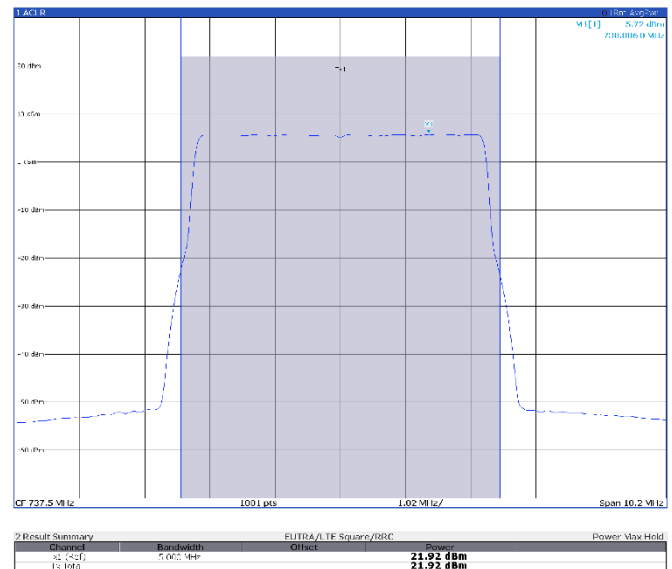
Band B12

5 MHz

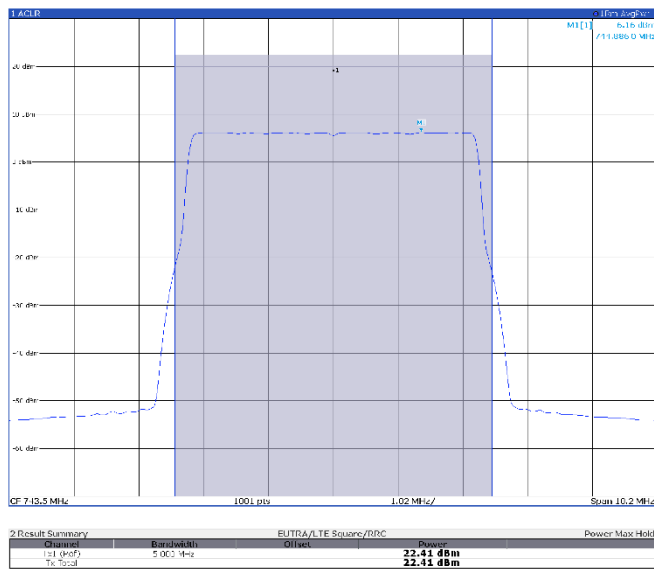
TM1.1, 5 MHz, low channel



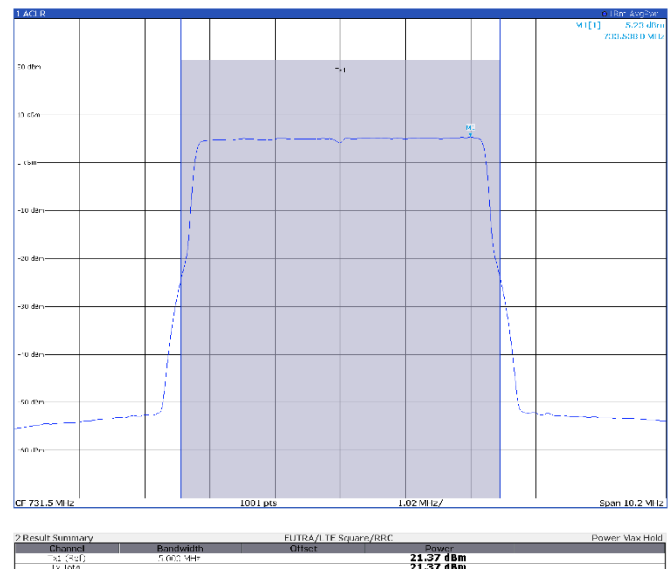
TM1.1, 5 MHz, mid channel



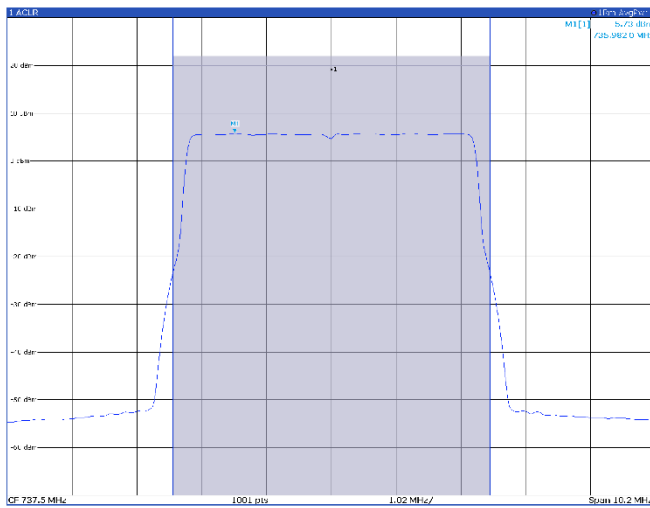
TM1.1, 5 MHz, high channel



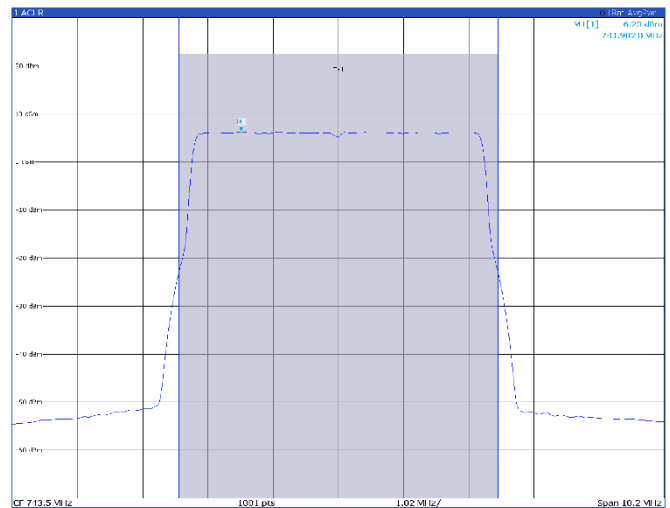
TM3p1, 5 MHz, low channel



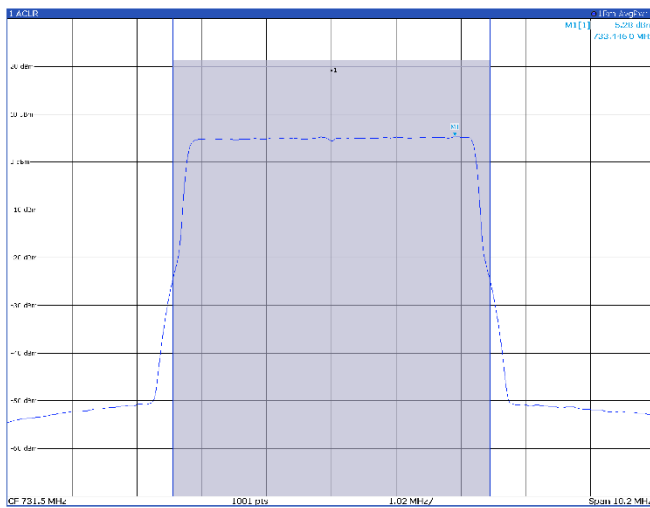
TM3p1, 5 MHz, mid channel



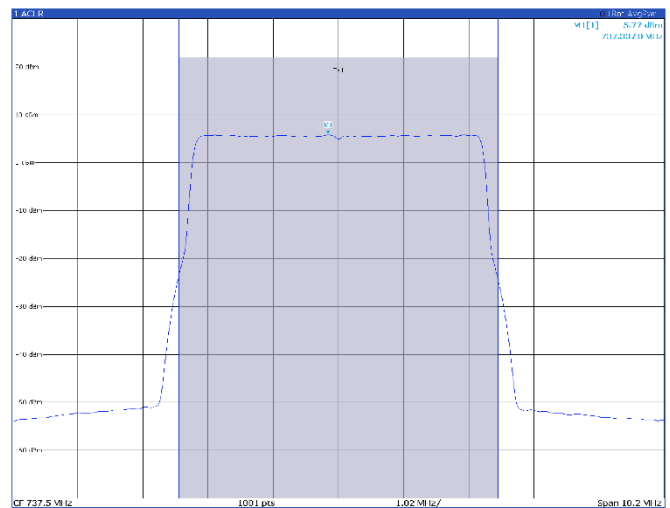
TM3p1, 5 MHz, high channel



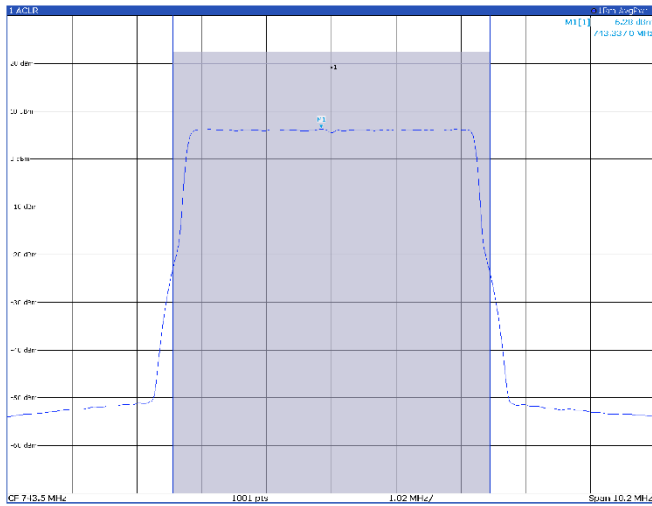
TM3p1a, 5 MHz, low channel



TM3p1a, 5 MHz, mid channel

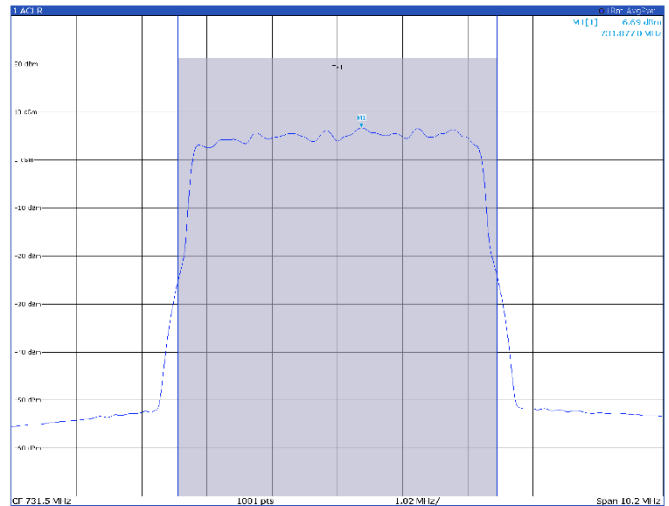


TM3p1a, 5 MHz, high channel



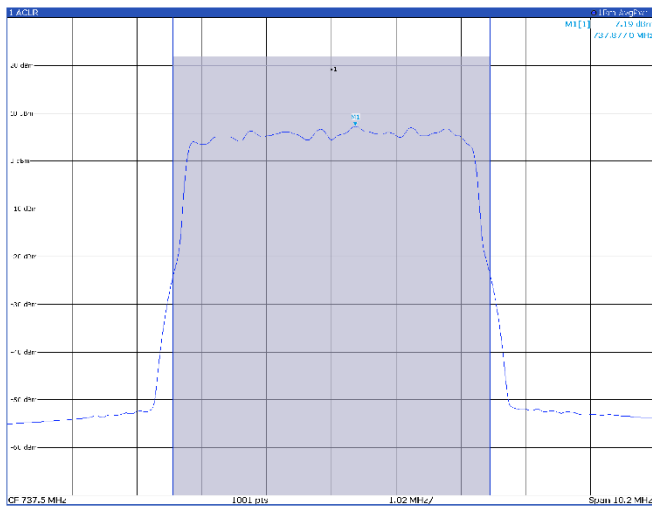
| Result Summary |           |        |           |
|----------------|-----------|--------|-----------|
| Channel        | Bandwidth | Offset | Power     |
| 11 (dof)       | 5.000 MHz |        | 22.43 dBm |
| 12 (dof)       |           |        | 22.43 dBm |

TM3p3, 5 MHz, low channel



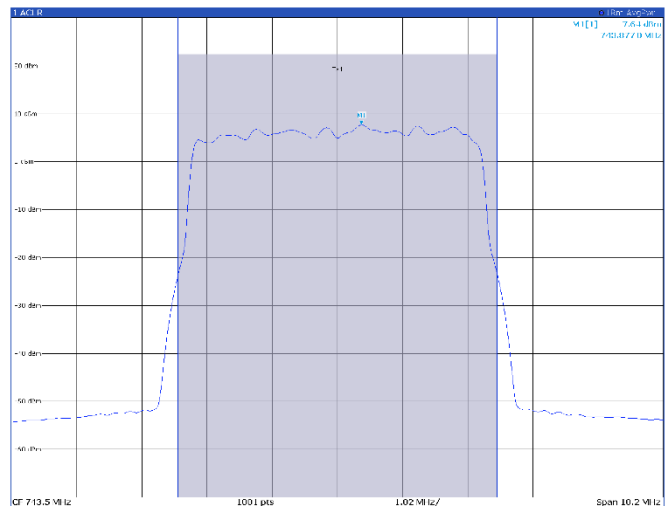
| Result Summary |           |        |           |
|----------------|-----------|--------|-----------|
| Channel        | Bandwidth | Offset | Power     |
| 11 (dof)       | 5.000 MHz |        | 21.22 dBm |
| 12 (dof)       |           |        | 21.22 dBm |

TM3p3, 5 MHz, mid channel



| Result Summary |           |        |           |
|----------------|-----------|--------|-----------|
| Channel        | Bandwidth | Offset | Power     |
| 11 (dof)       | 5.000 MHz |        | 21.84 dBm |
| 12 (dof)       |           |        | 21.84 dBm |

TM3p3, 5 MHz, high channel

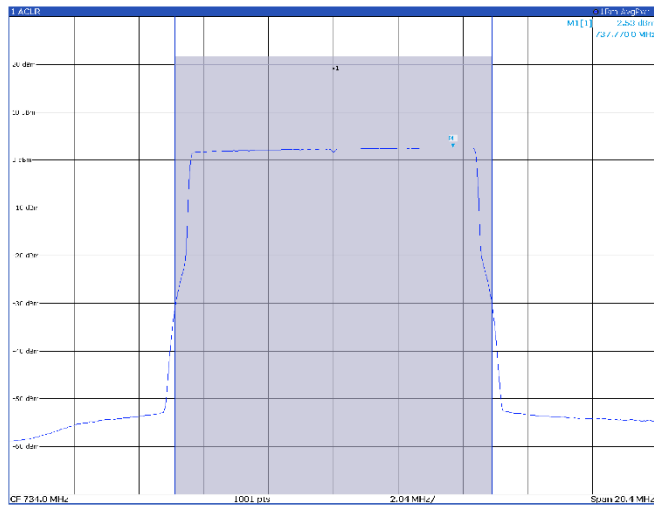


| Result Summary |           |        |           |
|----------------|-----------|--------|-----------|
| Channel        | Bandwidth | Offset | Power     |
| 11 (dof)       | 5.000 MHz |        | 22.33 dBm |
| 12 (dof)       |           |        | 22.33 dBm |

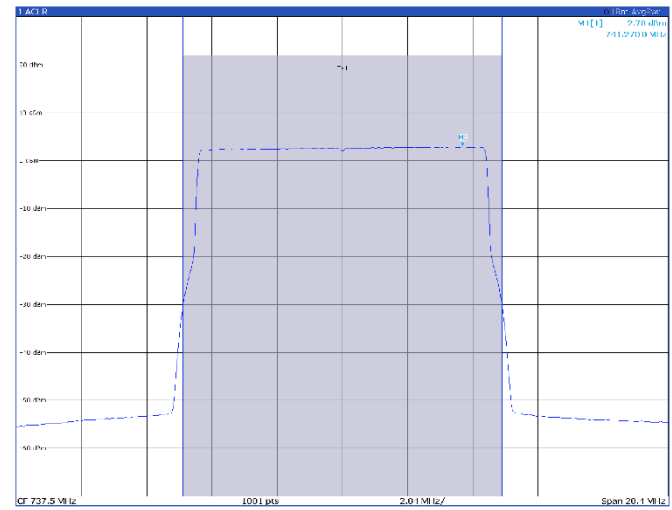
## Band B12

## 10 MHz

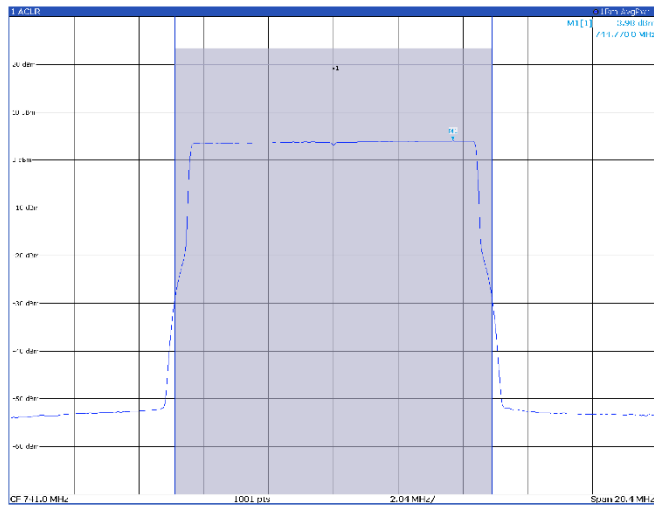
## TM1.1, 10 MHz, low channel



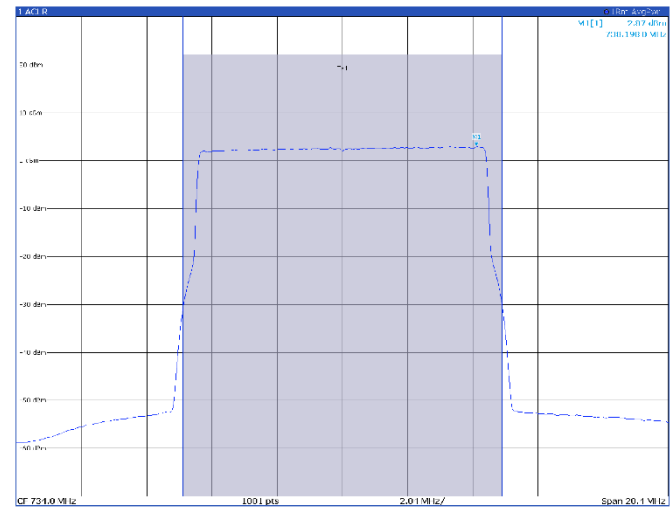
## TM1.1, 10 MHz, mid channel



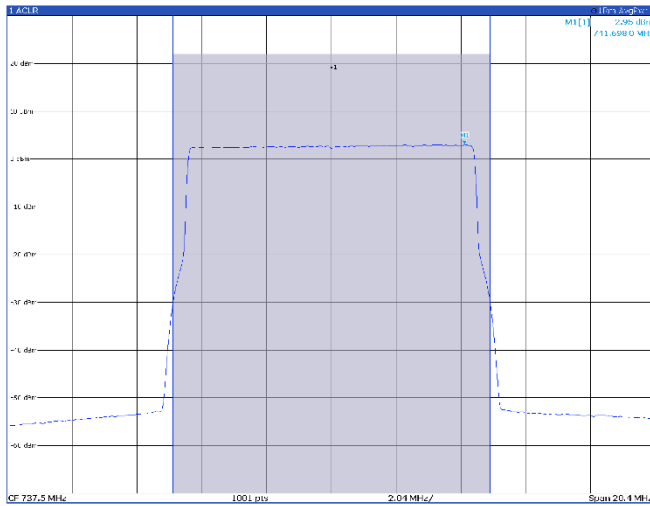
## TM1.1, 10 MHz, high channel



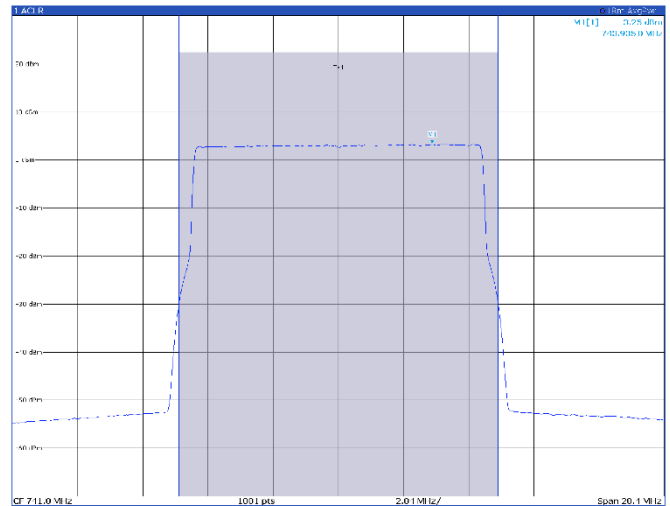
## TM3p1, 10 MHz, low channel



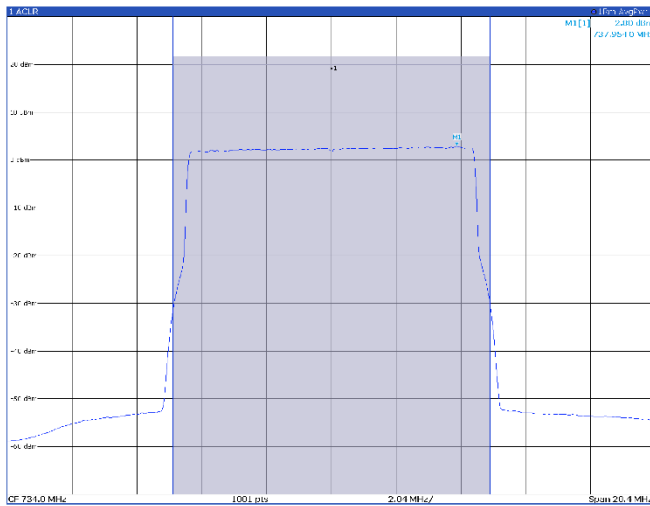
TM3p1, 10 MHz, mid channel



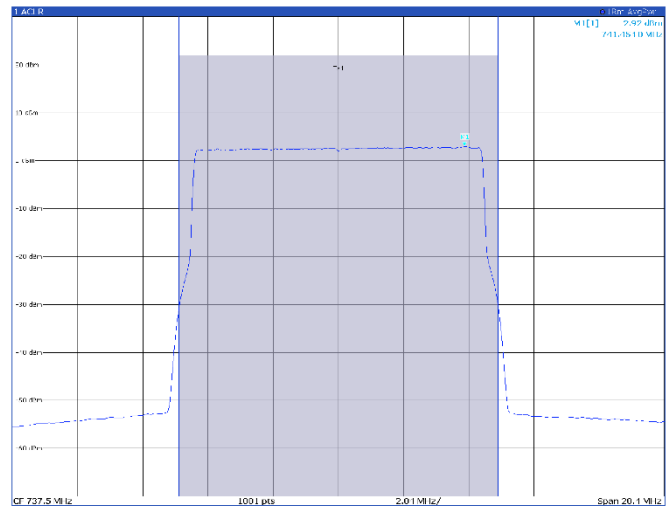
TM3p1, 10 MHz, high channel



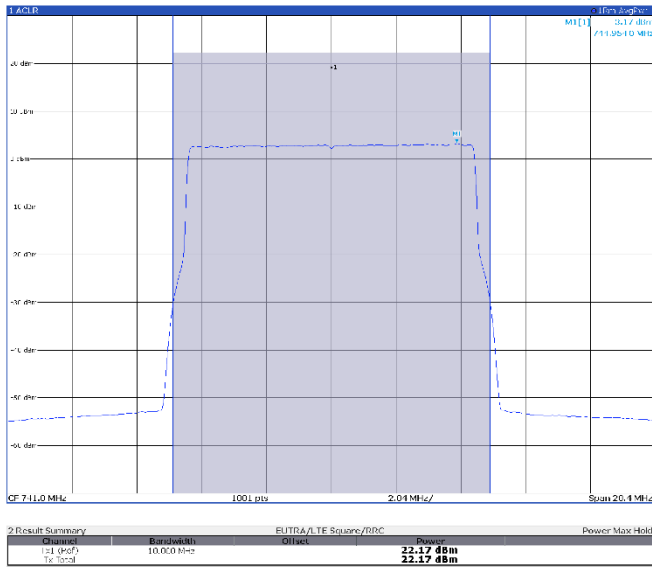
TM3p1a, 10 MHz, low channel



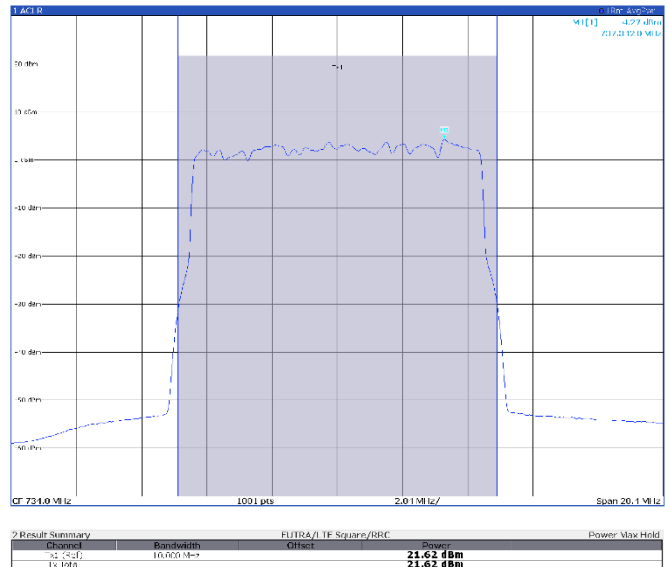
TM3p1a, 10 MHz, mid channel



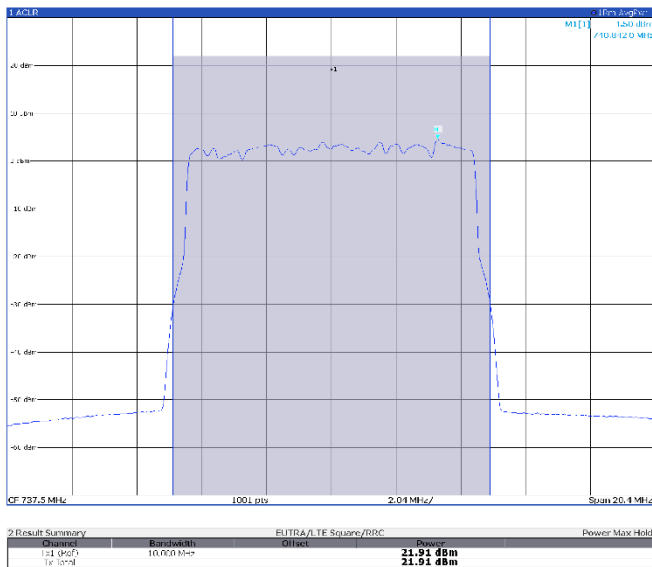
TM3p1a, 10 MHz, high channel



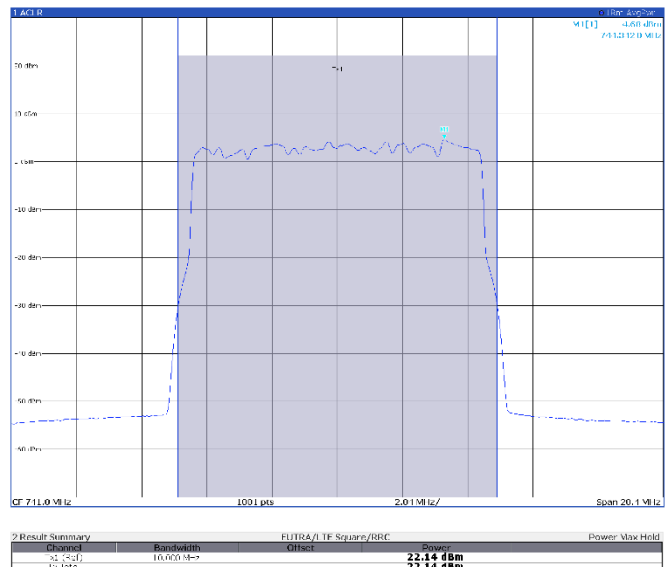
TM3p3, 10 MHz, low channel



TM3p3, 10 MHz, mid channel



TM3p3, 10 MHz, high channel

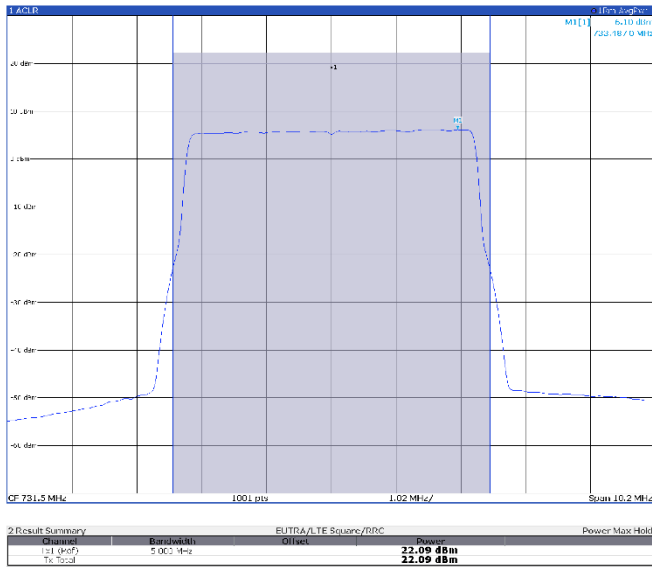


## Antenna port 2

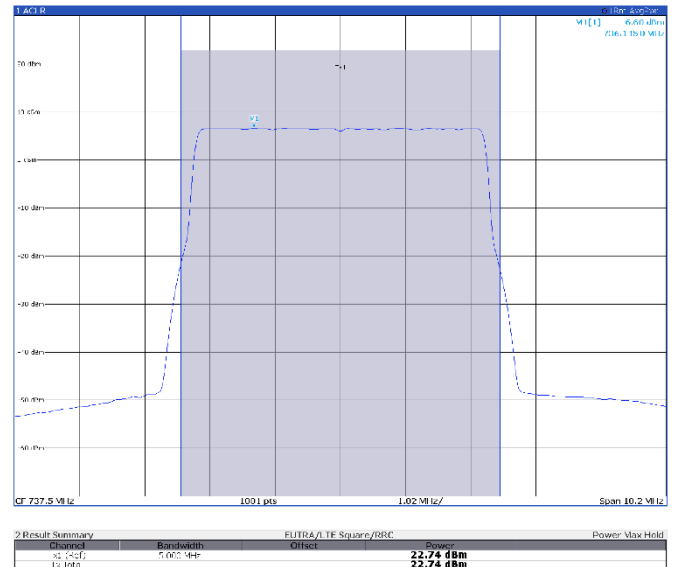
Band B12

5 MHz

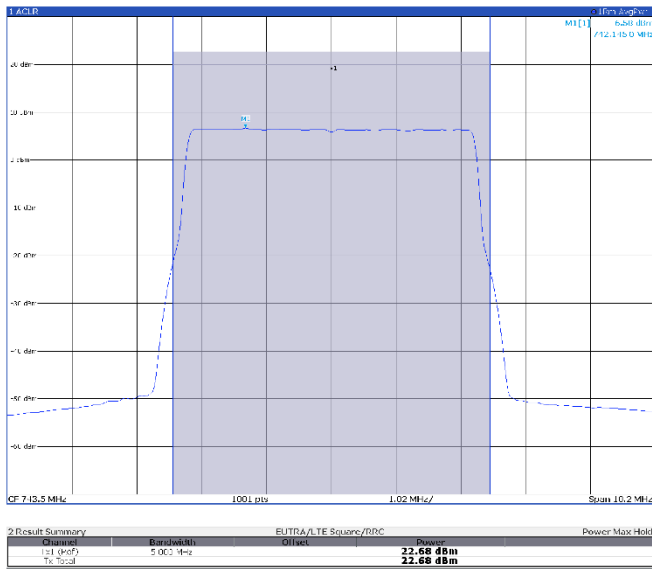
TM1.1, 5 MHz, low channel



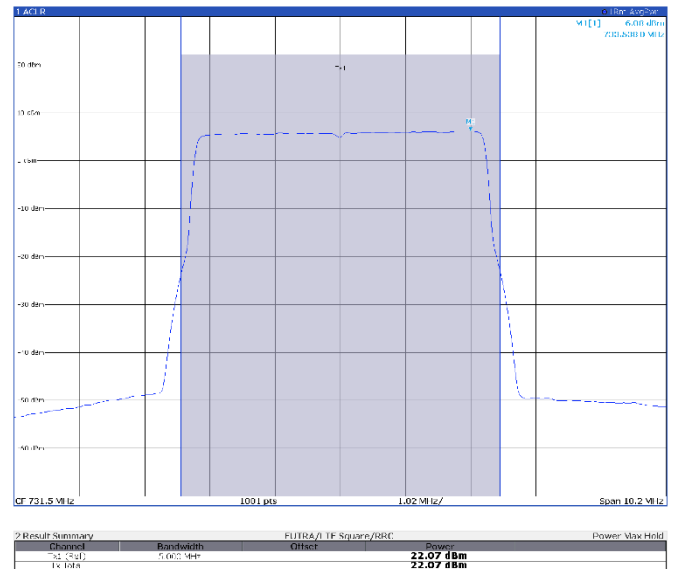
TM1.1, 5 MHz, mid channel



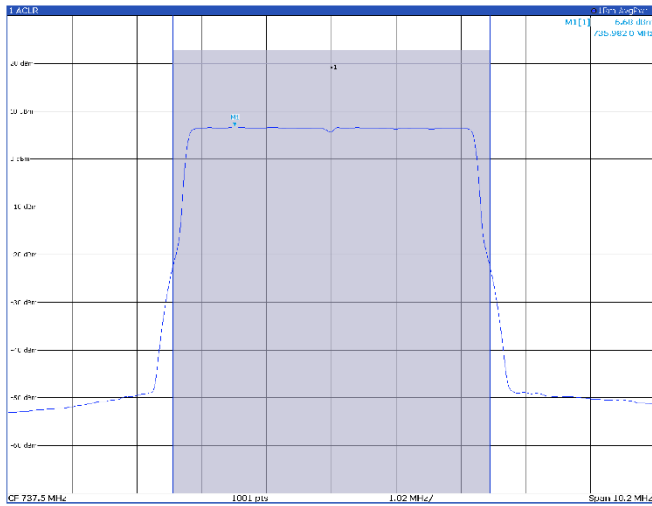
TM1.1, 5 MHz, high channel



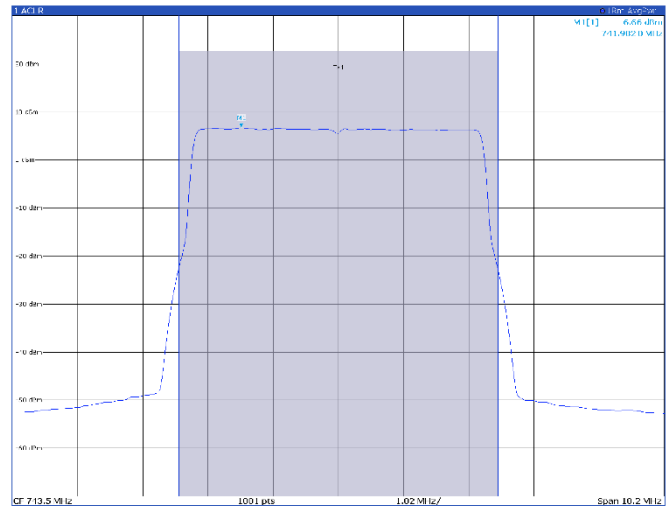
TM3p1, 5 MHz, low channel



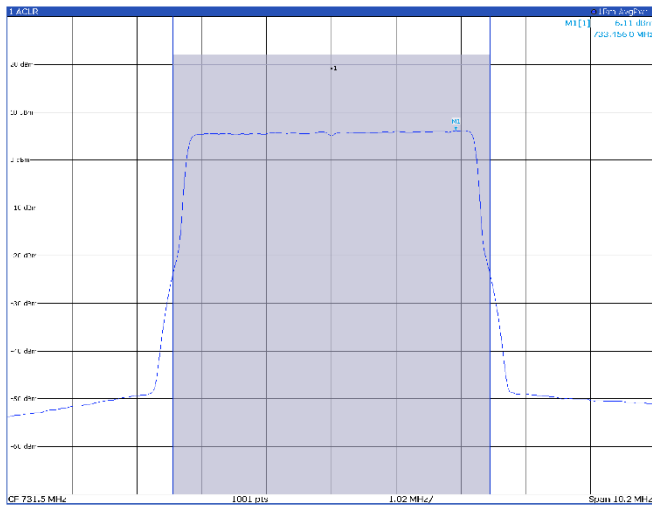
TM3p1, 5 MHz, mid channel



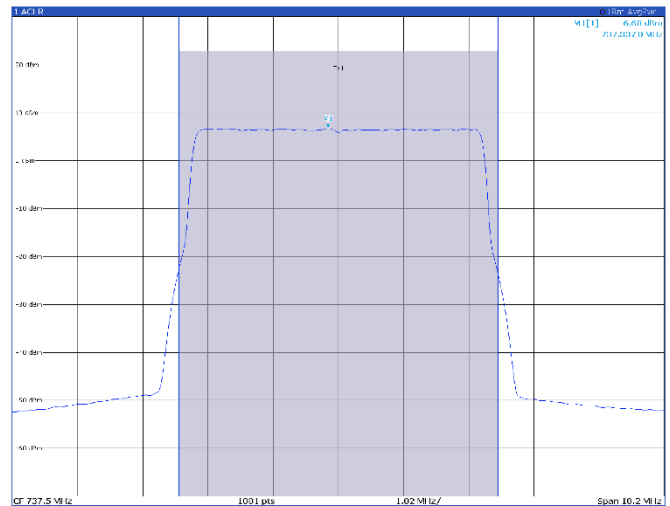
TM3p1, 5 MHz, high channel



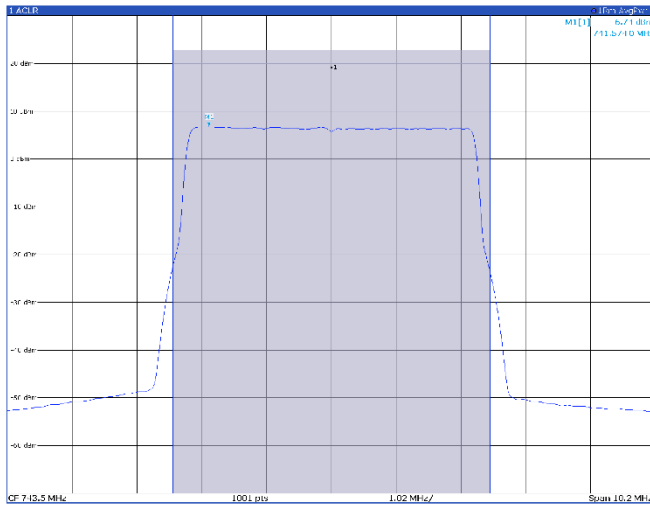
TM3p1a, 5 MHz, low channel



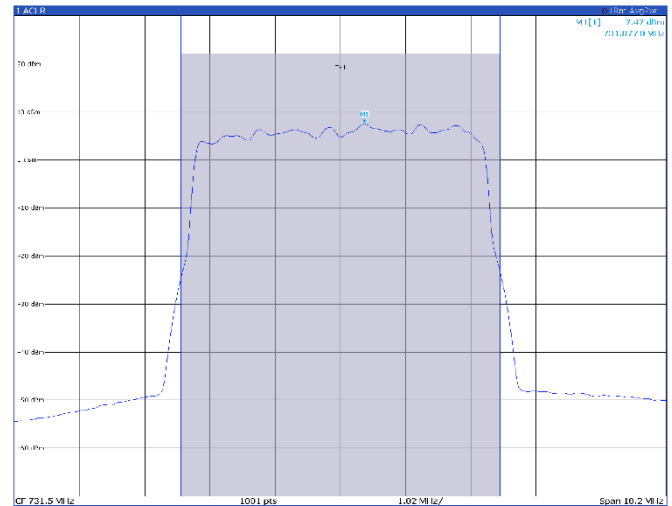
TM3p1a, 5 MHz, mid channel



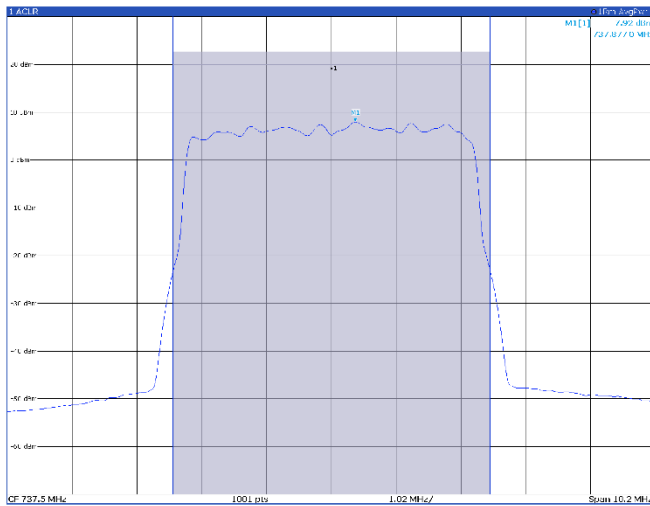
TM3p1a, 5 MHz, high channel



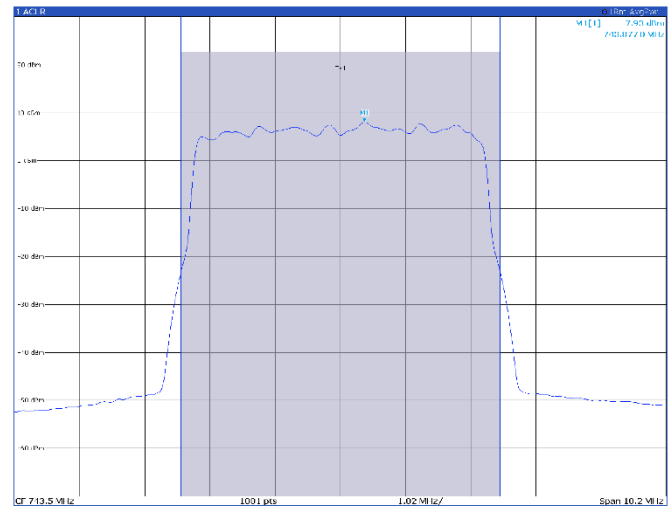
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel



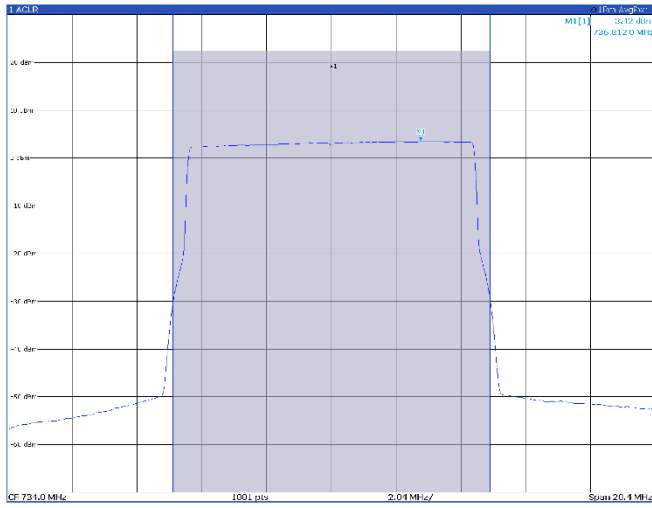
TM3p3, 5 MHz, high channel



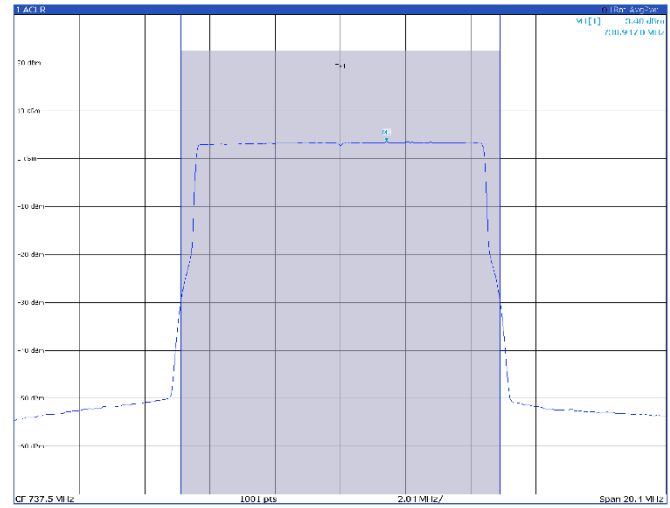
## Band B12

## 10 MHz

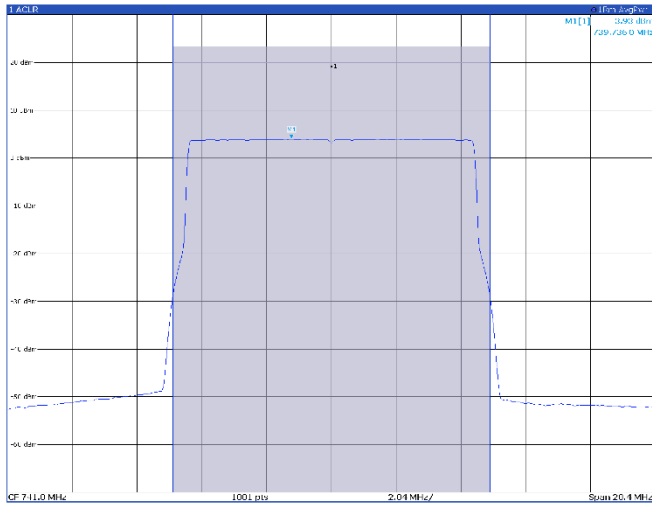
## TM1.1, 10 MHz, low channel



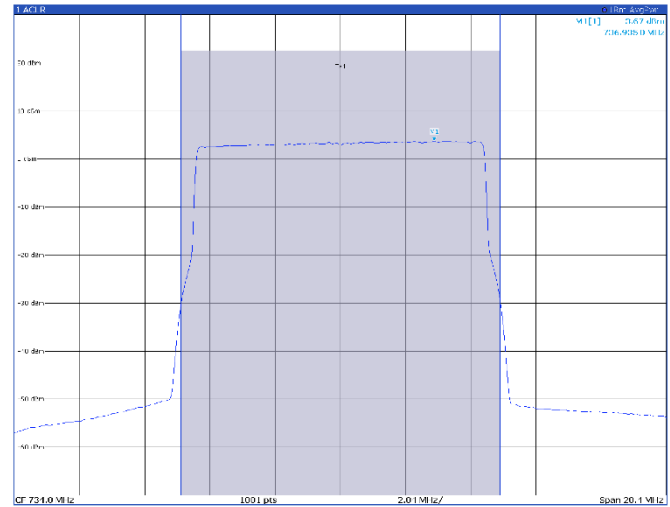
## TM1.1, 10 MHz, mid channel



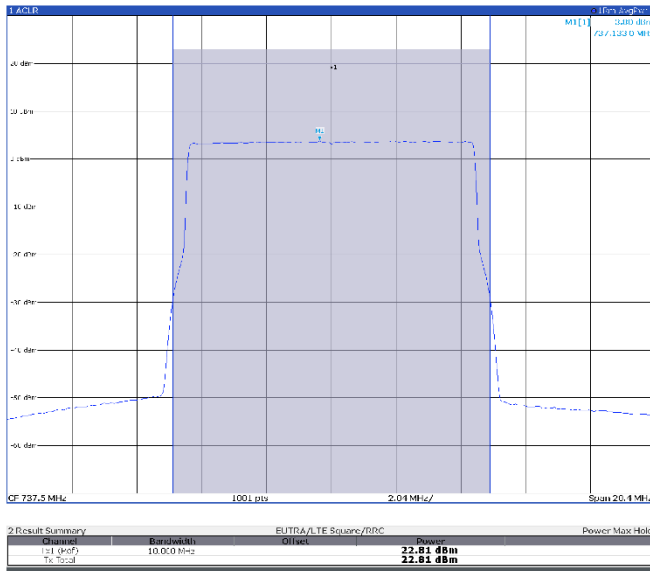
## TM1.1, 10 MHz, high channel



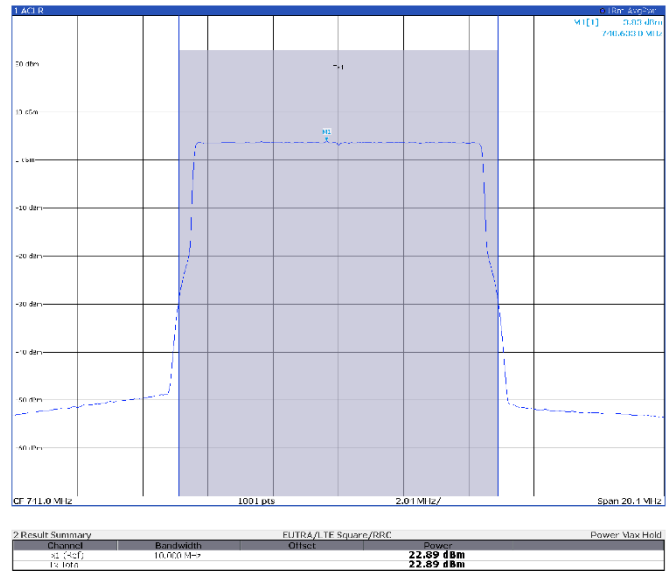
## TM3p1, 10 MHz, low channel



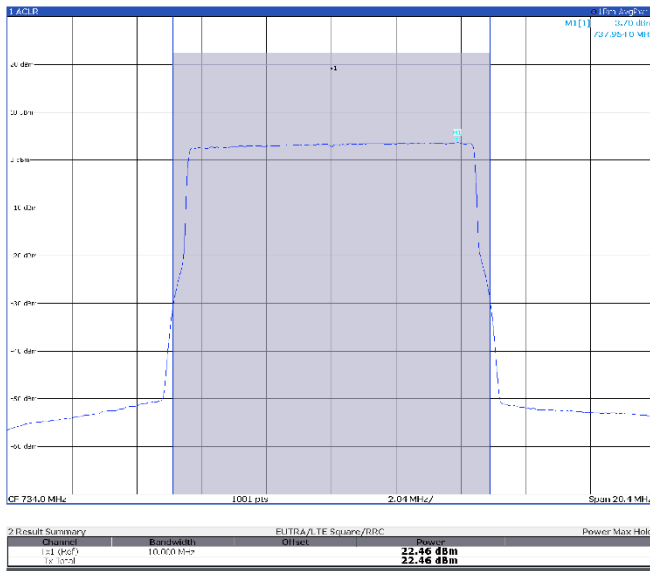
TM3p1, 10 MHz, mid channel



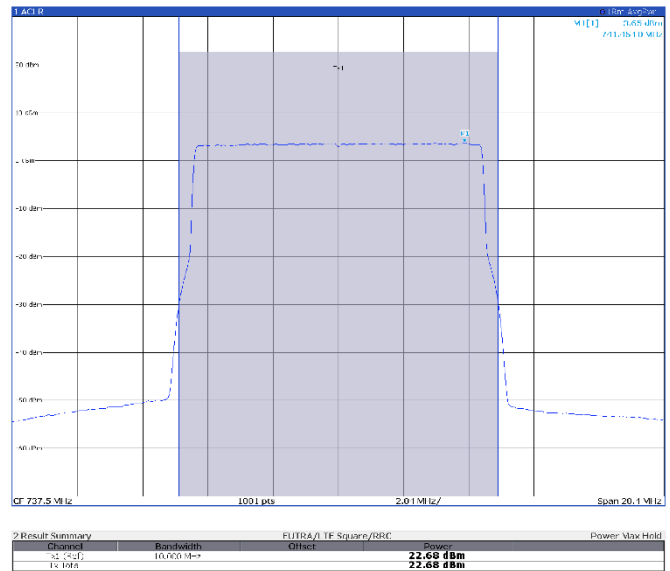
TM3p1, 10 MHz, high channel



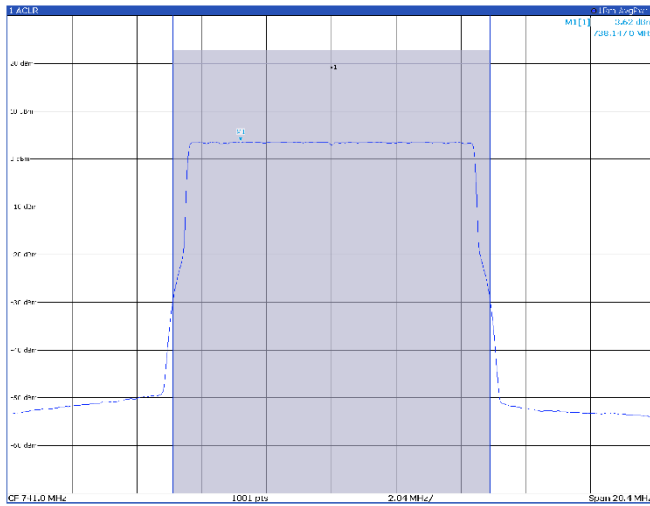
TM3p1a, 10 MHz, low channel



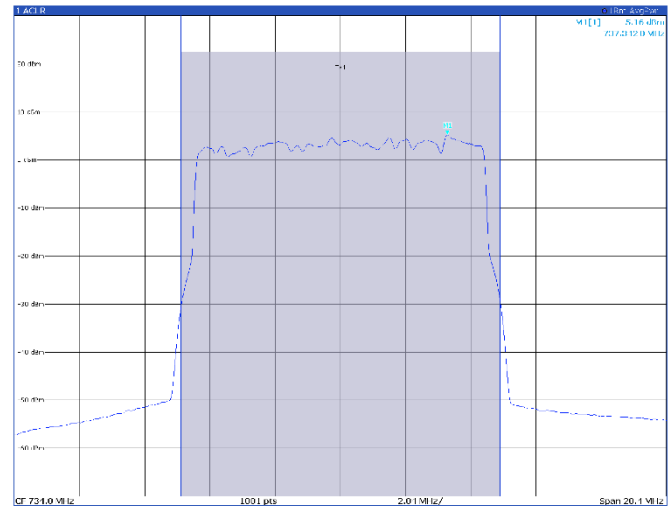
TM3p1a, 10 MHz, mid channel



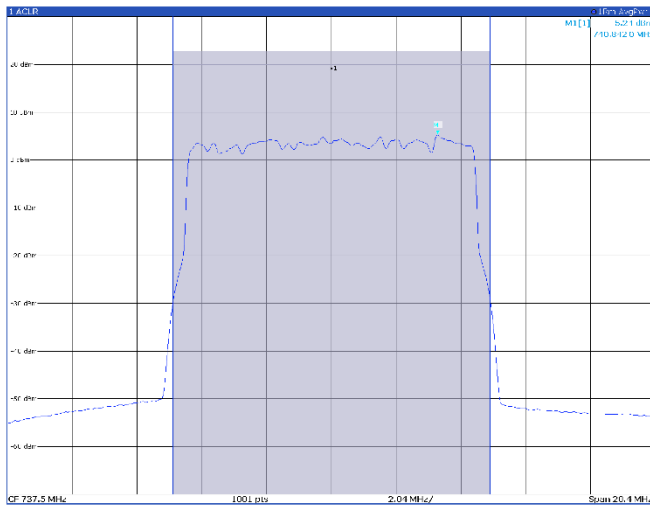
### TM3p1a, 10 MHz, high channel



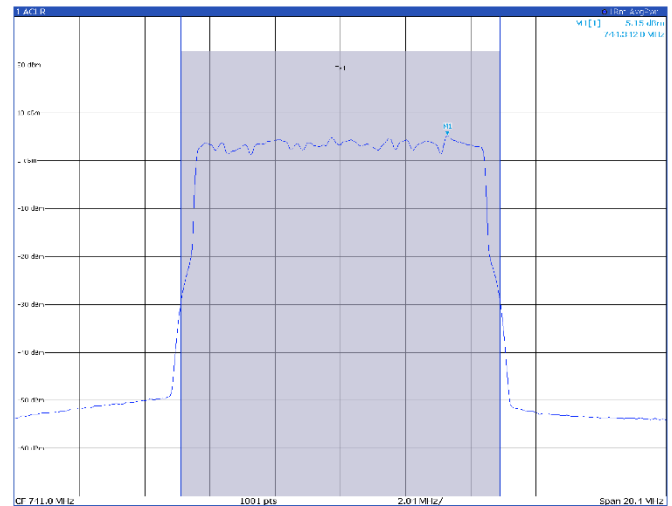
### TM3p3, 10 MHz, low channel



### TM3p3, 10 MHz, mid channel



### TM3p3, 10 MHz, high channel



## 8.5 FCC §27.50(d)(5) Peak to Average Power Ratio

### 8.5.1 Definitions and limits

d) (5) Equipment employed must be authorized in accordance with the provisions of § 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

(6) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, and any other relevant factors, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

### 8.5.2 Test summary

|                 |                   |                   |           |
|-----------------|-------------------|-------------------|-----------|
| Test start date | November 22, 2024 | Temperature       | 22 °C     |
| Test end date   | December 13, 2024 | Air pressure      | 1001 mbar |
| Test engineer   | O. Frau           | Relative humidity | 62%       |
| Verdict         | Pass              |                   |           |

### 8.5.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.2.3.4.

Spectrum analyzer settings:

|                      |                                                    |
|----------------------|----------------------------------------------------|
| Resolution bandwidth | ≥ OBW                                              |
| Number of counts     | The necessary number up to stabilizes the measured |
| Trace mode           | Clear/Write                                        |

### 8.5.4 Test equipment used

| Equipment         | Manufacturer    | Model no. | Asset no. |
|-------------------|-----------------|-----------|-----------|
| Spectrum Analyzer | Rohde & Schwarz | FSW43     | 101767    |

## 8.5.5 Test data

## Antenna 1

## Band B12:

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 1    | 731.5         | 8.36      | 13              | -4.64       |
| B12  | 5 MHz        | 1    | 737.5         | 8.48      | 13              | -4.52       |
| B12  | 5 MHz        | 1    | 743.5         | 8.44      | 13              | -4.56       |

Peak to average power ratio, TM1.1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 1    | 731.5         | 8.40      | 13              | -4.60       |
| B12  | 5 MHz        | 1    | 737.5         | 8.46      | 13              | -4.54       |
| B12  | 5 MHz        | 1    | 743.5         | 8.40      | 13              | -4.60       |

Peak to average power ratio, TM3p1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 1    | 731.5         | 8.24      | 13              | -4.76       |
| B12  | 5 MHz        | 1    | 737.5         | 8.28      | 13              | -4.72       |
| B12  | 5 MHz        | 1    | 743.5         | 8.22      | 13              | -4.78       |

Peak to average power ratio, TM3p1a

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 1    | 731.5         | 8.42      | 13              | -4.58       |
| B12  | 5 MHz        | 1    | 737.5         | 8.44      | 13              | -4.56       |
| B12  | 5 MHz        | 1    | 743.5         | 8.40      | 13              | -4.60       |

Peak to average power ratio, TM3p3

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 1    | 734.0         | 8.62      | 13              | -4.38       |
| B12  | 10 MHz       | 1    | 737.5         | 8.62      | 13              | -4.38       |
| B12  | 10 MHz       | 1    | 741.0         | 8.60      | 13              | -4.40       |

Peak to average power ratio, TM1.1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 1    | 734.0         | 8.32      | 13              | -4.68       |
| B12  | 10 MHz       | 1    | 737.5         | 8.40      | 13              | -4.60       |
| B12  | 10 MHz       | 1    | 741.0         | 8.46      | 13              | -4.54       |

Peak to average power ratio, TM3p1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 1    | 734.0         | 8.38      | 13              | -4.62       |
| B12  | 10 MHz       | 1    | 737.5         | 8.42      | 13              | -4.58       |
| B12  | 10 MHz       | 1    | 741.0         | 8.42      | 13              | -4.58       |

Peak to average power ratio, TM3p1a

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 1    | 734.0         | 8.52      | 13              | -4.48       |
| B12  | 10 MHz       | 1    | 737.5         | 8.50      | 13              | -4.50       |
| B12  | 10 MHz       | 1    | 741.0         | 8.48      | 13              | -4.52       |

Peak to average power ratio, TM3p3

## Antenna 2

## Band B12:

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 2    | 731.5         | 8.46      | 13              | -4.54       |
| B12  | 5 MHz        | 2    | 737.5         | 8.52      | 13              | -4.48       |
| B12  | 5 MHz        | 2    | 743.5         | 8.50      | 13              | -4.50       |

Peak to average power ratio, TM1.1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 2    | 731.5         | 8.32      | 13              | -4.68       |
| B12  | 5 MHz        | 2    | 737.5         | 8.36      | 13              | -4.64       |
| B12  | 5 MHz        | 2    | 743.5         | 8.42      | 13              | -4.58       |

Peak to average power ratio, TM3p1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 2    | 731.5         | 8.30      | 13              | -4.70       |
| B12  | 5 MHz        | 2    | 737.5         | 8.30      | 13              | -4.70       |
| B12  | 5 MHz        | 2    | 743.5         | 8.28      | 13              | -4.72       |

Peak to average power ratio, TM3p1a

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 5 MHz        | 2    | 731.5         | 8.38      | 13              | -4.62       |
| B12  | 5 MHz        | 2    | 737.5         | 8.36      | 13              | -4.64       |
| B12  | 5 MHz        | 2    | 743.5         | 8.38      | 13              | -4.60       |

Peak to average power ratio, TM3p3

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 2    | 734.0         | 8.40      | 13              | -4.60       |
| B12  | 10 MHz       | 2    | 737.5         | 8.36      | 13              | -4.64       |
| B12  | 10 MHz       | 2    | 741.0         | 8.36      | 13              | -4.64       |

Peak to average power ratio, TM1.1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 2    | 734.0         | 8.44      | 13              | -4.56       |
| B12  | 10 MHz       | 2    | 737.5         | 8.34      | 13              | -4.66       |
| B12  | 10 MHz       | 2    | 741.0         | 8.56      | 13              | -4.44       |

Peak to average power ratio, TM3p1

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 2    | 734.0         | 8.38      | 13              | -4.62       |
| B12  | 10 MHz       | 2    | 737.5         | 8.42      | 13              | -4.58       |
| B12  | 10 MHz       | 2    | 741.0         | 8.42      | 13              | -4.58       |

Peak to average power ratio, TM3p1a

| Band | OBW Declared | Port | Channel (MHz) | 0.1% (dB) | 0.1% Limit (dB) | Margin (dB) |
|------|--------------|------|---------------|-----------|-----------------|-------------|
| B12  | 10 MHz       | 2    | 734.0         | 8.48      | 13              | -4.52       |
| B12  | 10 MHz       | 2    | 737.5         | 8.50      | 13              | -4.50       |
| B12  | 10 MHz       | 2    | 741.0         | 8.52      | 13              | -4.68       |

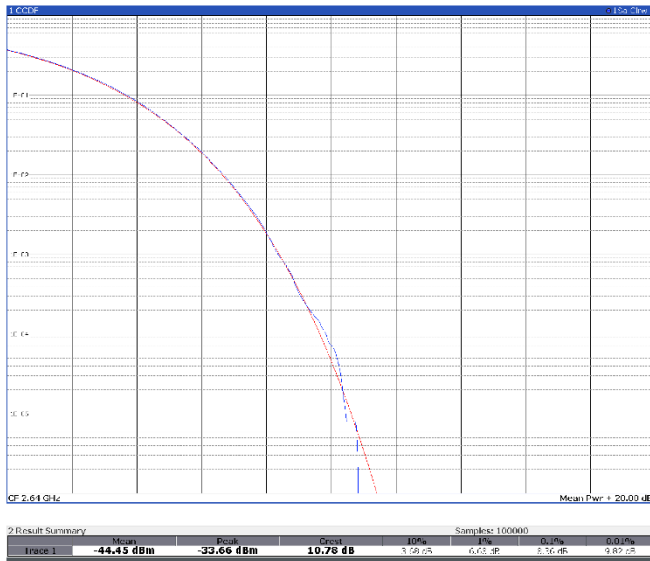
Peak to average power ratio, TM3p3

## Antenna port 1

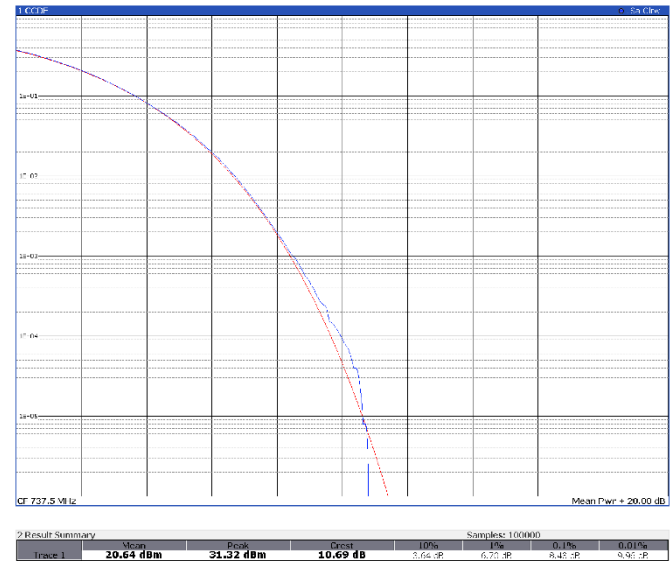
Band B12

5 MHz

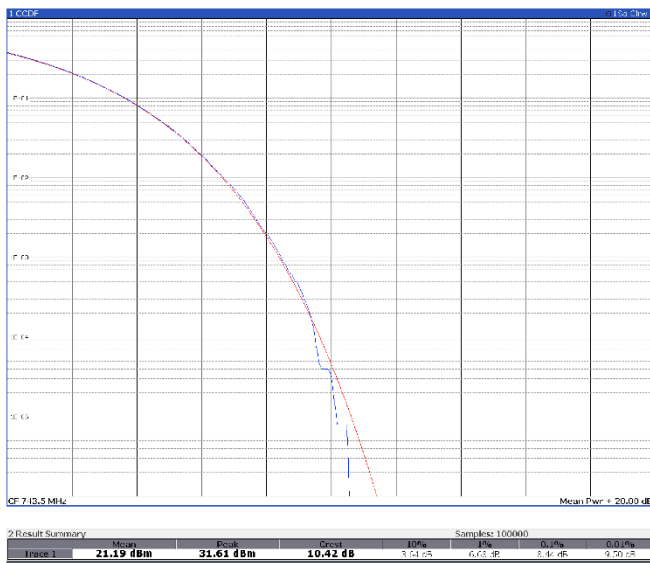
## TM1.1, 5 MHz, low channel



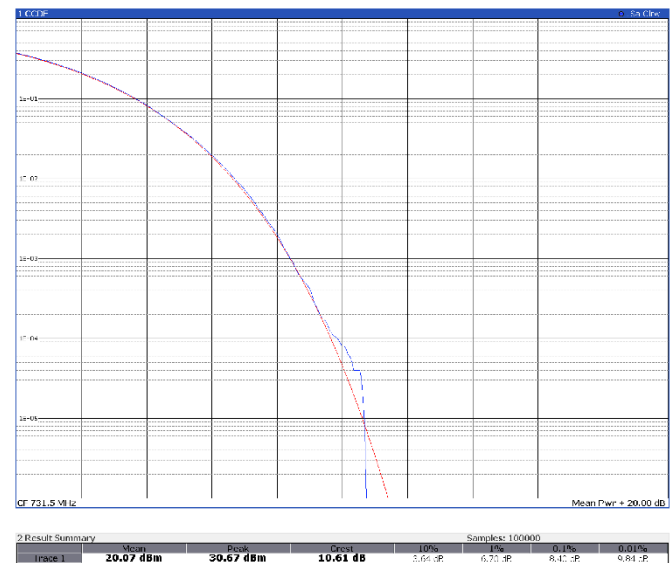
## TM1.1, 5 MHz, mid channel



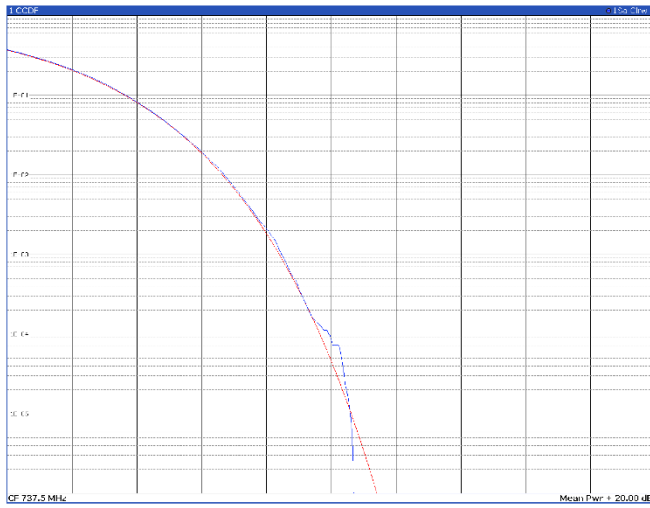
## TM1.1, 5 MHz, high channel



## TM3p1, 5 MHz, low channel

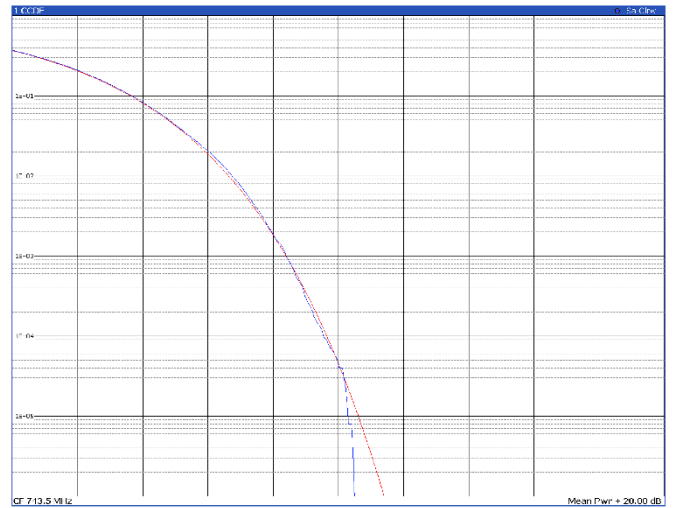


TM3p1, 5 MHz, mid channel



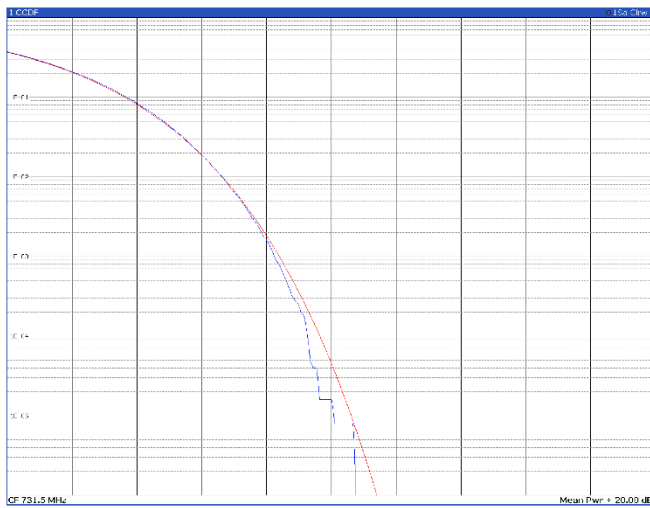
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Dist           | 10%      |
| Trace 1          | 20.66 dBm | 31.26 dBm      | 10.59 dB |
|                  |           |                | 1.0%     |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1, 5 MHz, high channel



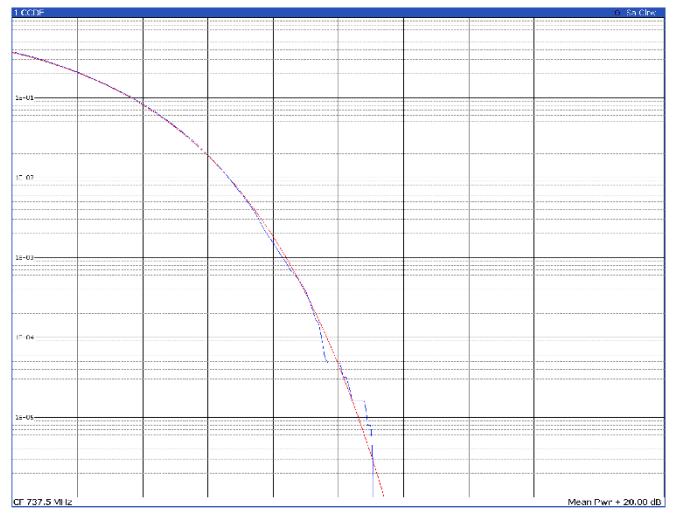
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Dist           | 10%      |
| Trace 1          | 21.16 dBm | 31.55 dBm      | 10.40 dB |
|                  |           |                | 1.0%     |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1a, 5 MHz, low channel



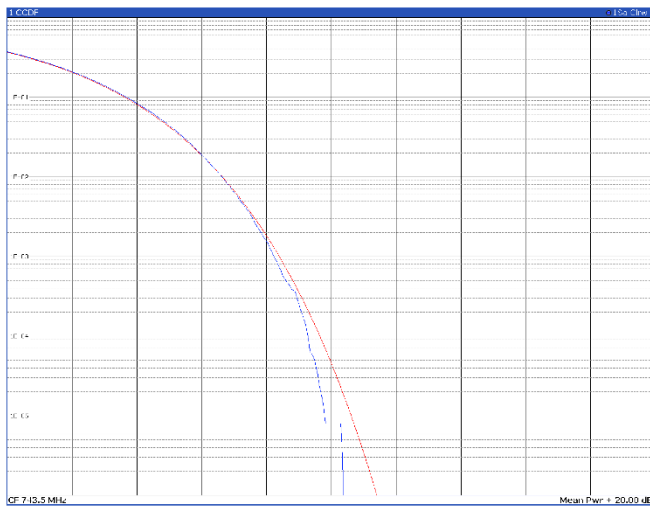
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Dist           | 10%      |
| Trace 1          | 20.13 dBm | 30.76 dBm      | 10.63 dB |
|                  |           |                | 1.0%     |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1a, 5 MHz, mid channel



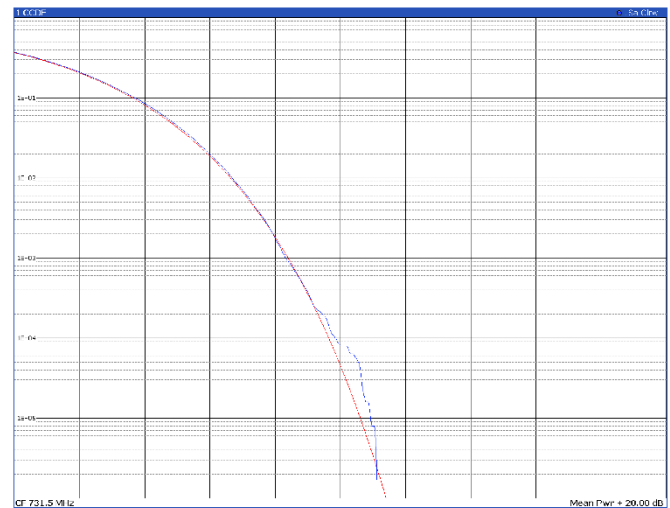
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Dist           | 10%      |
| Trace 1          | 20.66 dBm | 31.65 dBm      | 10.99 dB |
|                  |           |                | 1.0%     |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1a, 5 MHz, high channel



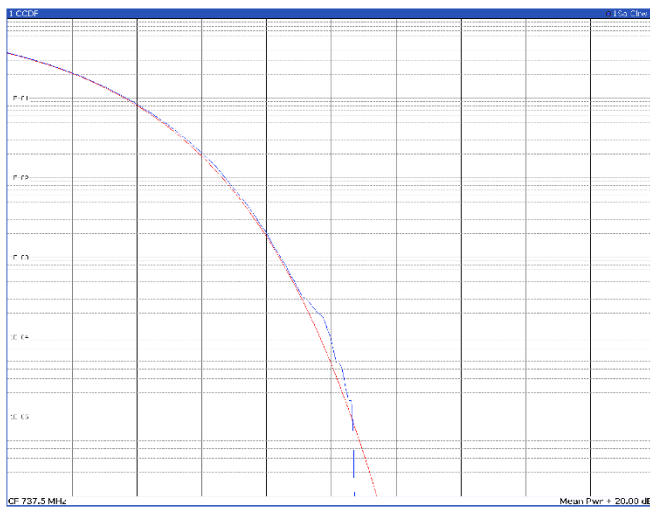
| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
|                  | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
| Trace 1          | 21.18 dBm | 31.43 dBm | 10.26 dB | 5.58 dB | 6.02 dB | 6.78 dB |

TM3p3, 5 MHz, low channel



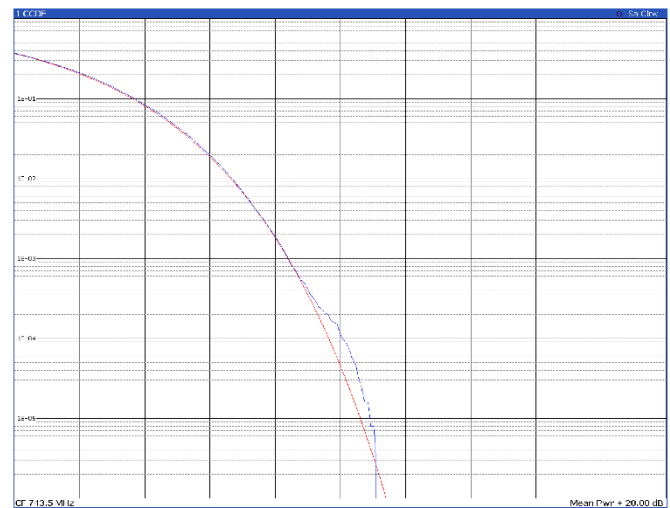
| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
|                  | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
| Trace 1          | 20.31 dBm | 31.33 dBm | 11.02 dB | 5.71 dB | 6.03 dB | 6.81 dB |

TM3p3, 5 MHz, mid channel



| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
|                  | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
| Trace 1          | 20.84 dBm | 31.49 dBm | 10.65 dB | 5.58 dB | 6.22 dB | 6.91 dB |

TM3p3, 5 MHz, high channel



| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
|                  | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
| Trace 1          | 21.38 dBm | 32.36 dBm | 10.98 dB | 5.68 dB | 6.03 dB | 6.40 dB |

## Band B12

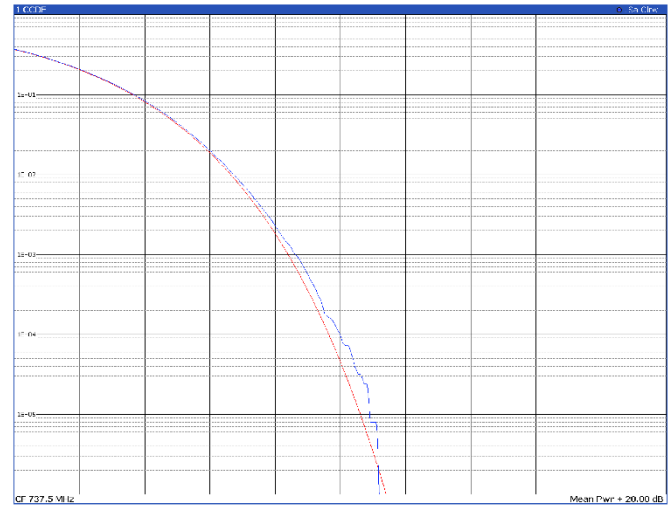
## 10 MHz

## TM1.1, 10 MHz, low channel



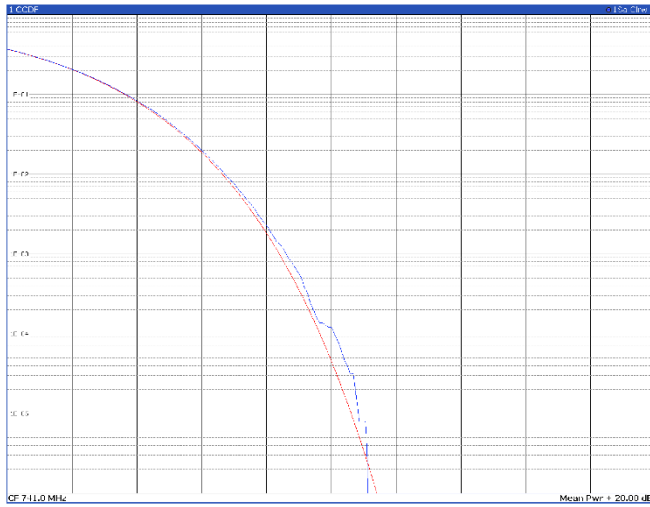
| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
| Samples: 100000  |           |           |          |         |         |         |
| Trace 1          | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
|                  | 17.41 dBm | 28.50 dBm | 11.09 dB | 3.56 dB | 6.72 dB | 9.94 dB |

## TM1.1, 10 MHz, mid channel



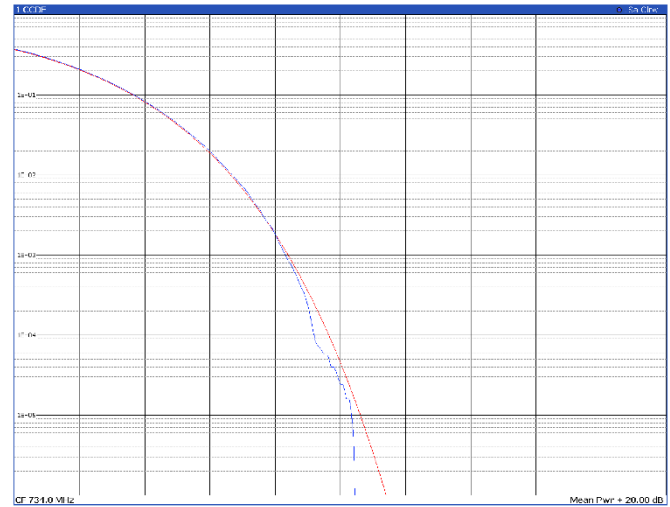
| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
| Samples: 100000  |           |           |          |         |         |         |
| Trace 1          | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
|                  | 17.63 dBm | 28.69 dBm | 11.06 dB | 3.60 dB | 6.72 dB | 9.95 dB |

## TM1.1, 10 MHz, high channel



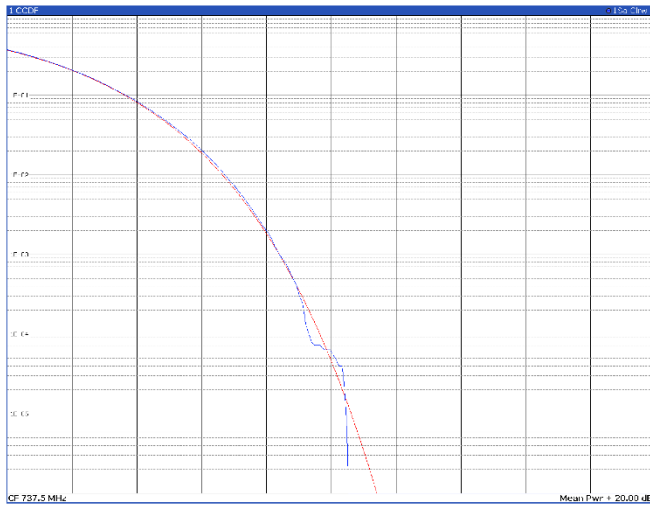
| 2 Result Summary |           |           |          |         |         |          |
|------------------|-----------|-----------|----------|---------|---------|----------|
| Samples: 100000  |           |           |          |         |         |          |
| Trace 1          | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%    |
|                  | 18.35 dBm | 29.36 dBm | 11.01 dB | 3.56 dB | 6.72 dB | 10.12 dB |

## TM3p1, 10 MHz, low channel



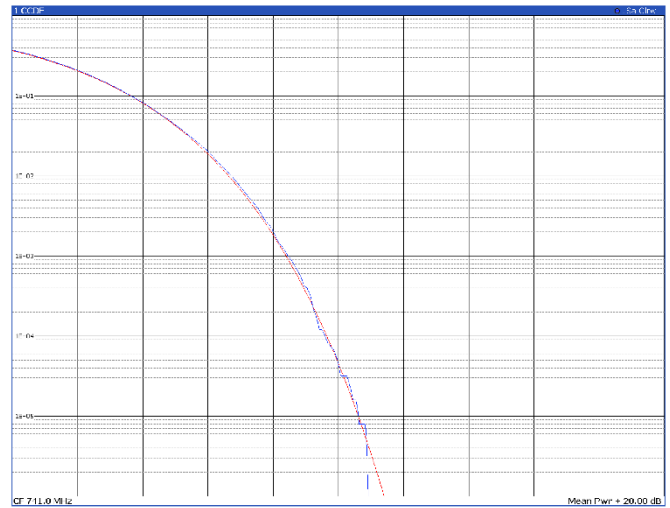
| 2 Result Summary |           |           |          |         |         |         |
|------------------|-----------|-----------|----------|---------|---------|---------|
| Samples: 100000  |           |           |          |         |         |         |
| Trace 1          | Mean      | Peak      | Crest    | 10%     | 1%      | 0.01%   |
|                  | 17.42 dBm | 27.76 dBm | 10.34 dB | 3.65 dB | 6.63 dB | 9.91 dB |

TM3p1, 10 MHz, mid channel



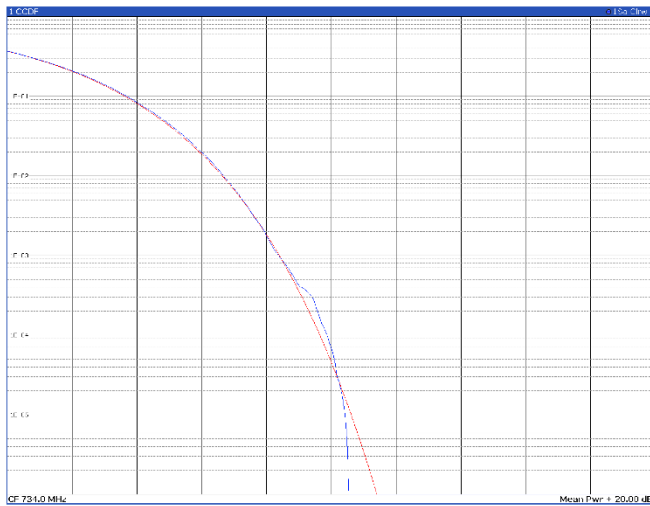
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.65 dBm | 28.06 dBm      | 10.43 dB |
|                  | 10%       | 1%             | 0.1%     |
|                  | 5.56 dB   | 6.72 dB        | 8.40 dB  |
|                  | 0.1%      | 0.01%          | 0.01%    |

TM3p1, 10 MHz, high channel



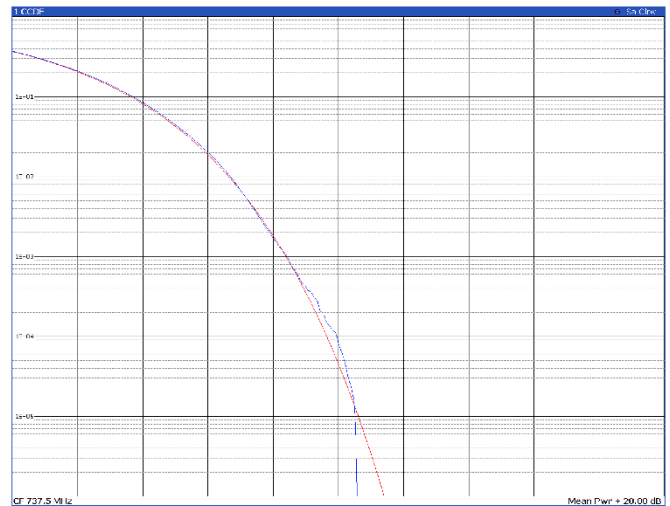
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.91 dBm | 28.72 dBm      | 10.61 dB |
|                  | 10%       | 1%             | 0.1%     |
|                  | 5.64 dB   | 6.72 dB        | 8.41 dB  |
|                  | 0.1%      | 0.01%          | 0.01%    |

TM3p1a, 10 MHz, low channel



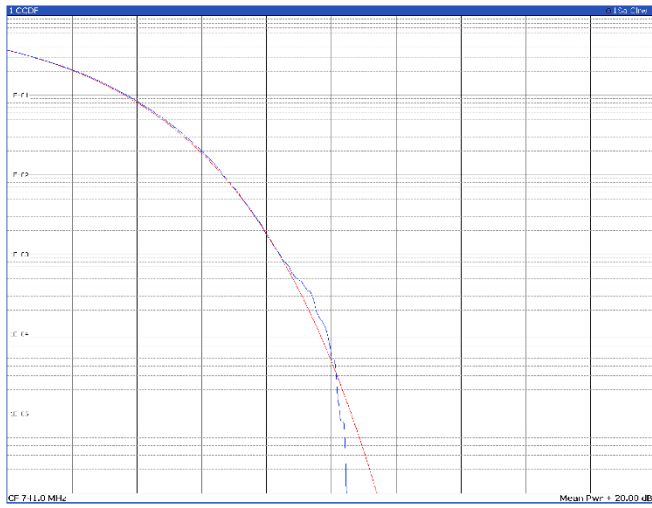
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.35 dBm | 27.74 dBm      | 10.39 dB |
|                  | 10%       | 1%             | 0.1%     |
|                  | 5.56 dB   | 6.62 dB        | 8.38 dB  |
|                  | 0.1%      | 0.01%          | 0.01%    |

TM3p1a, 10 MHz, mid channel



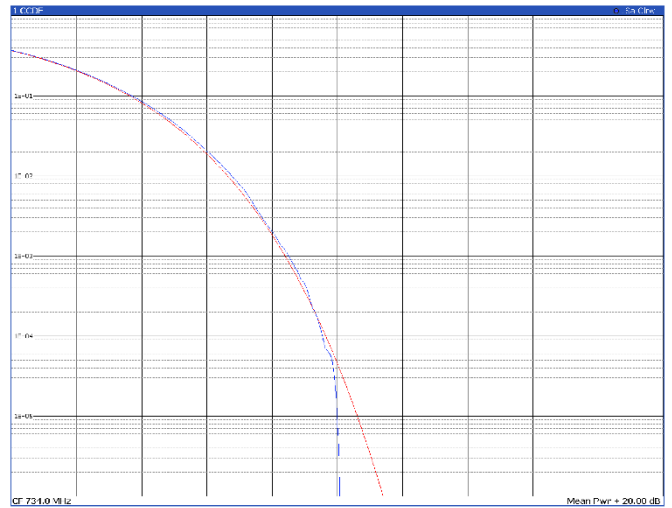
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.60 dBm | 28.10 dBm      | 10.51 dB |
|                  | 10%       | 1%             | 0.1%     |
|                  | 5.63 dB   | 6.63 dB        | 8.42 dB  |
|                  | 0.1%      | 0.01%          | 0.01%    |

TM3p1a, 10 MHz, high channel



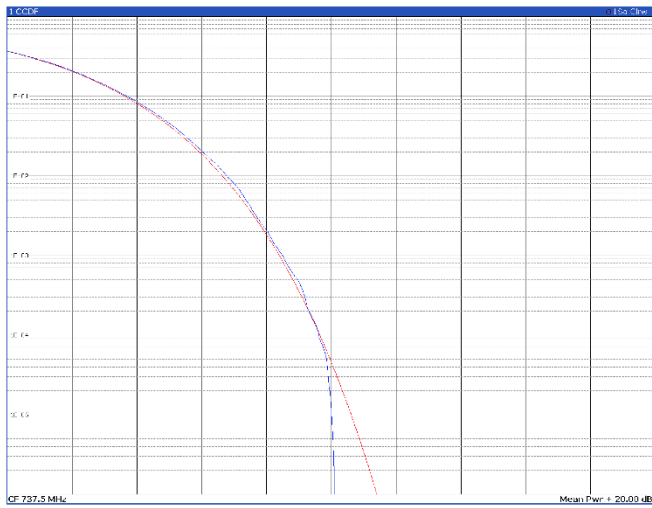
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.88 dBm | 28.28 dBm      | 10.39 dB |
|                  |           |                | 10%      |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p3, 10 MHz, low channel



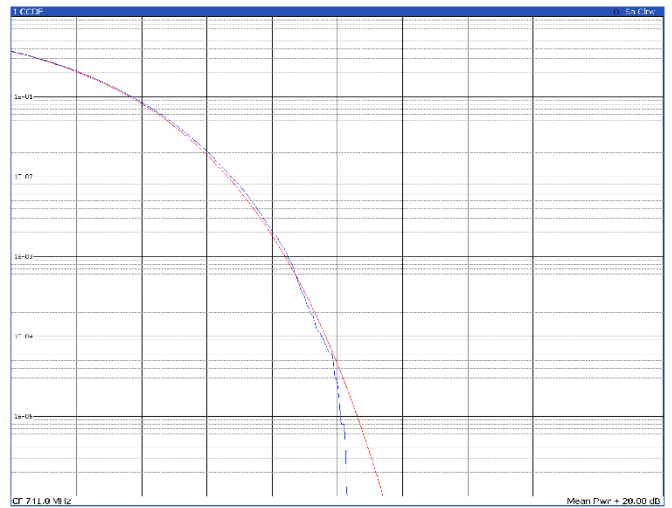
| 2 Result Summary |           | Sample: 100000 |         |
|------------------|-----------|----------------|---------|
| Trace 1          | Mean      | Peak           | Crest   |
|                  | 17.42 dBm | 27.40 dBm      | 9.96 dB |
|                  |           |                | 10%     |
|                  |           |                | 1%      |
|                  |           |                | 0.1%    |
|                  |           |                | 0.01%   |

TM3p3, 10 MHz, mid channel



| 2 Result Summary |           | Sample: 100000 |         |
|------------------|-----------|----------------|---------|
| Trace 1          | Mean      | Peak           | Crest   |
|                  | 17.68 dBm | 27.64 dBm      | 9.96 dB |
|                  |           |                | 10%     |
|                  |           |                | 1%      |
|                  |           |                | 0.1%    |
|                  |           |                | 0.01%   |

TM3p3, 10 MHz, high channel



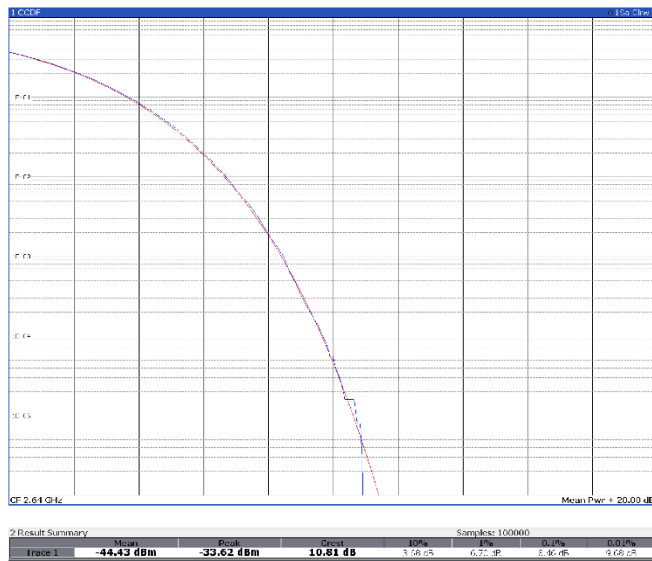
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Trace 1          | Mean      | Peak           | Crest    |
|                  | 17.97 dBm | 28.13 dBm      | 10.16 dB |
|                  |           |                | 10%      |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

## Antenna port 2

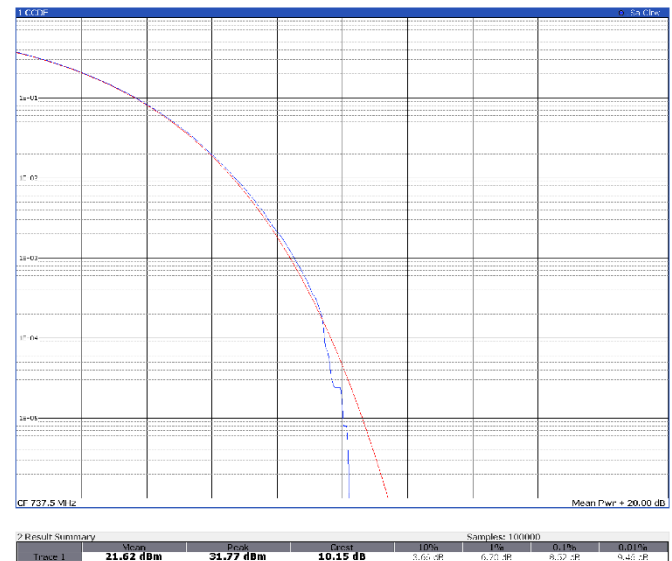
Band B12

5 MHz

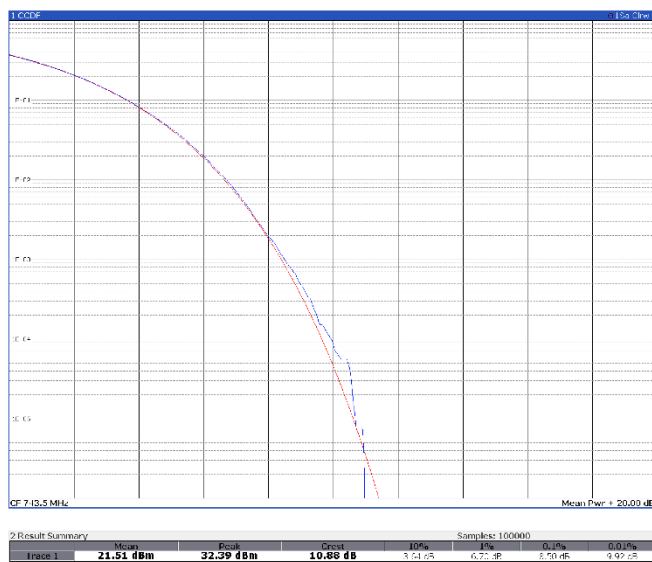
## TM1.1, 5 MHz, low channel



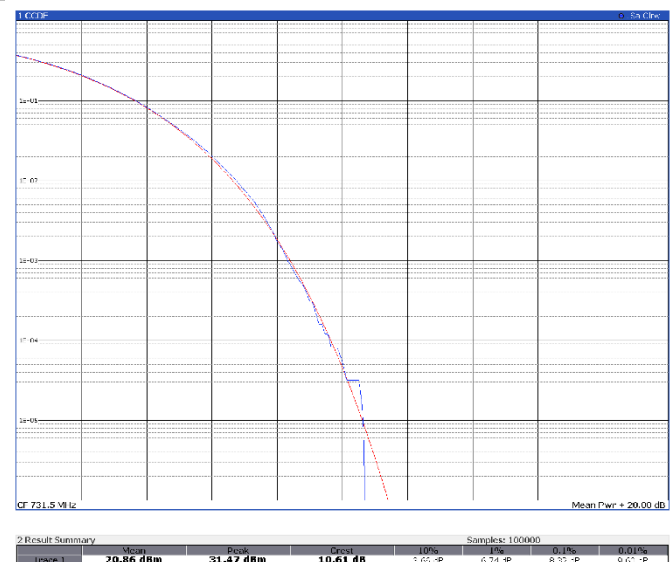
## TM1.1, 5 MHz, mid channel



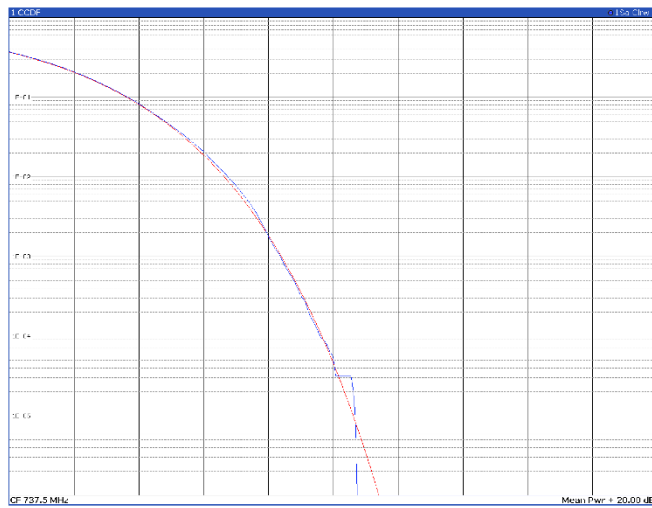
## TM1.1, 5 MHz, high channel



## TM3p1, 5 MHz, low channel

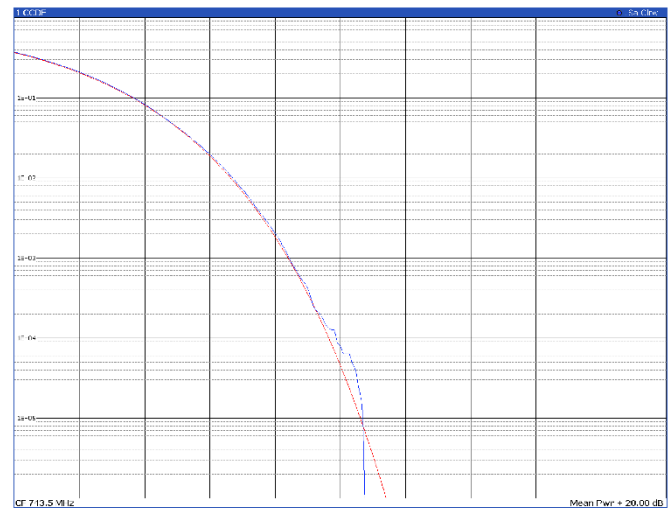


TM3p1, 5 MHz, mid channel



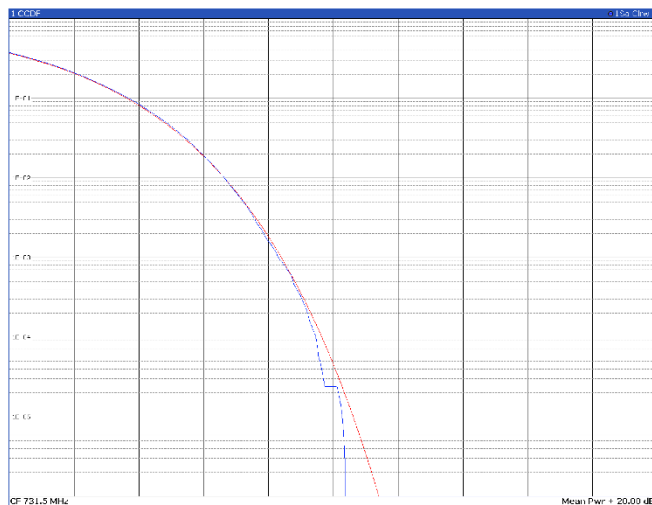
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Crest          | 10%      |
| Trace 1          | 21.48 dBm | 32.15 dBm      | 10.67 dB |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1, 5 MHz, high channel



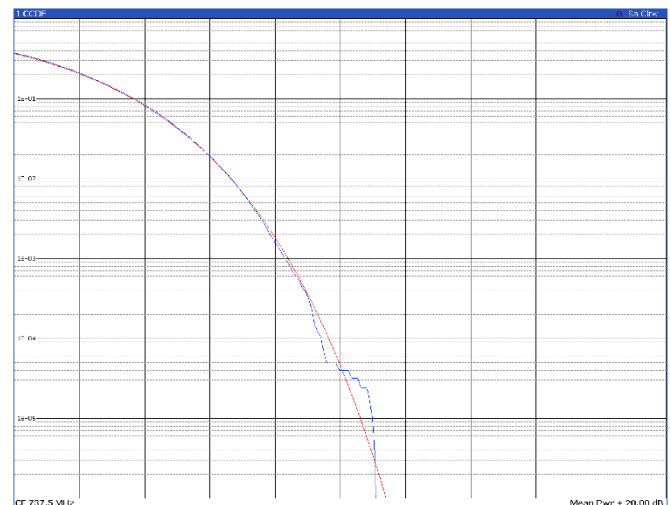
| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Crest          | 10%      |
| Trace 1          | 21.56 dBm | 32.23 dBm      | 10.66 dB |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1a, 5 MHz, low channel



| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Crest          | 10%      |
| Trace 1          | 20.88 dBm | 31.13 dBm      | 10.25 dB |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |

TM3p1a, 5 MHz, mid channel



| 2 Result Summary |           | Sample: 100000 |          |
|------------------|-----------|----------------|----------|
| Mean             | Peak      | Crest          | 10%      |
| Trace 1          | 21.59 dBm | 32.62 dBm      | 11.03 dB |
|                  |           |                | 1%       |
|                  |           |                | 0.1%     |
|                  |           |                | 0.01%    |