# FCC Test Report

| | | |
|---|---|---|
| **FCC ID** | : | **2AV5ZGNLR1** |
| **Equipment** | : | **Cellular Tracker** |
| **Model No.** | : | **GNLR1** |
| **Brand Name** | : | **Cox2M** |
| **Applicant** | : | **Cox Communications, Inc.** |
| **Address** | : | **6205 Peachtree Dunwoody Rd Attn Legal Regulatory, Atlanta, Georgia, United States.** |
| **Standard** | : | **47 CFR FCC Part 27** |
| **Received Date** | : | **Dec. 15, 2023** |
| **Tested Date** | : | **Jan. 10 ~ Jan. 18, 2024** |

**We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.**

**Reviewed by:** **Approved by:**

**Along Chen / Assistant Manager** **Gary Chang / Manager**

# Table of Contents

# Release Record

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FG3D1504P27-1 | Rev. 01 | Initial issue | Mar. 22, 2024 |

# Summary of Test Results

| FCC Rules | Test Items | Measured | Result |
|---|---|---|---|
| 2.1046<br>27.50(b)(10)<br>27.50(c)(10)<br>27.50(d)(4) | Effective Radiated Power | Power[dBm]:<br>LTE Band 12: 23.88<br>LTE Band 13: 23.91 | Pass |
| 2.1053<br>27.53(c)<br>27.53(g)<br>27.53(h) | Radiated Emissions | Meet the requirement of limit | Pass |
| 2.1053 / 27.53(f) | Radiated Spurious Emission in the 1559-1610MHz band | Meet the requirement of limit | Pass |
| 2.1051<br>27.53(c)<br>27.53(g)<br>27.53(h) | Conducted Emissions | Meet the requirement of limit | Pass |
| 2.1051<br>27.53(c)<br>27.53(g)<br>27.53(h) | Band Edge | Meet the requirement of limit | Pass |
| 2.1049 / 27.53(h) | Occupied Bandwidth | Meet the requirement of limit | Pass |
| 2.1055 / 27.54 | Frequency Stability | Meet the requirement of limit | Pass |
| 27.50(d)(5) | Peak to Average Ratio | Meet the requirement of limit | Pass |

| **Declaration of Conformity:** |
|---|
| The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. |
| **Comments and Explanations:** |
| The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification. |

# 1 General Description

## 1.1 Information

### 1.1.1 Specification of the Equipment under Test (EUT)

| | |
|---|---|
| **Operating Frequency** | LTE Band 12: 699 MHz – 716 MHz<br>LTE Band 13: 777 MHz – 787 MHz |
| **LTE-M** | |
| **LTE-M Category** | M1 |
| **Modulation Type** | QPSK, 16QAM |
| **NB-IoT** | |
| **NB-IoT Category** | NB1 |
| **Modulation Type** | BPSK, QPSK |
| **Subcarrier Spacing** | 3.75kHz, 15kHz |

### 1.1.2 Antenna Details

| Ant. No. | Type | Connector | Gain (dBi) | Remark |
|---|---|---|---|---|
| 1 | Chip | No | 2.17 | --- |

### 1.1.3 Power Supply Type of Equipment under Test (EUT)

| | | | |
|---|---|---|---|
| **Supply Voltage** | 3.6Vdc from battery | | |
| **Operational Climatic** | ☒ Tnom (20°C) | ☒ Tmax (70°C) | ☒ Tmin (-30°C) |

### 1.1.4 Accessories

| Accessories | | |
|---|---|---|
| **No.** | **Equipment** | **Description** |
| 1 | Lithium battery | Brand: EVE<br>Model: ER14505<br>Rating: 3.6Vdc |

### 1.1.5 Maximum ERP and Emission Designator

| LTE-M1 Band 12 | | | |
|---|---|---|---|
| **Channel Bandwidth** | **Modulation** | **Maximum ERP (W)** | **Emission Designator** |
| 10 MHz | QPSK | 0.243 | 1M10G7D |
| 10 MHz | 16QAM | 0.242 | 1M11W7D |
| 5 MHz | QPSK | 0.244 | 1M10G7D |
| 5 MHz | 16QAM | 0.238 | 1M10W7D |

| NB-IoT Band 12 | | |
|---|---|---|
| **Modulation** | **Maximum ERP (W)** | **Emission Designator** |
| BPSK | 0.211 | 127KG7D |
| QPSK | 0.225 | 198KG7D |

| LTE-M1 Band 13 | | | |
|---|---|---|---|
| **Channel Bandwidth** | **Modulation** | **Maximum ERP (W)** | **Emission Designator** |
| 10 MHz | QPSK | 0.244 | 1M11G7D |
| 10 MHz | 16QAM | 0.244 | 1M12W7D |
| 5 MHz | QPSK | 0.245 | 1M10G7D |
| 5 MHz | 16QAM | 0.244 | 1M11W7D |

| NB-IoT Band 13 | | |
|---|---|---|
| **Modulation** | **Maximum ERP (W)** | **Emission Designator** |
| BPSK | 0.233 | 127KG7D |
| QPSK | 0.246 | 206KG7D |

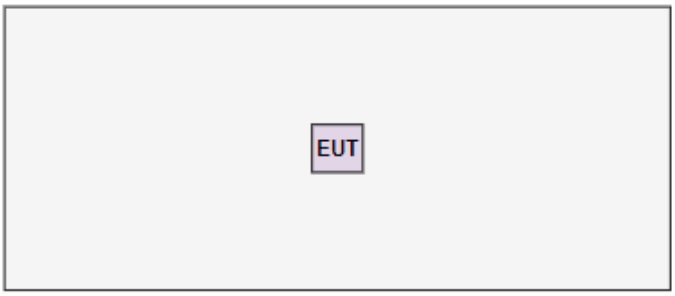
## 1.2 Local Support Equipment List

| Support Equipment List | | | | | |
|---|---|---|---|---|---|
| No. | Equipment | Brand | Model | FCC ID | Remarks |
| 1 | Laptop | DELL | Latitude 5400 | DoC | --- |
| 2 | Fixture | --- | --- | --- | Provided by applicant. |

Note: The above support units, were disconnected from EUT and were removed from testing table after sending command to EUT to transmit continuously.

## 1.3 Test Setup Chart

**Test Setup Diagram**



## 1.4 The Equipment List

| Test Item | Radiated Emission | | | | |
|---|---|---|---|---|---|
| Test Site | 966 chamber1 / (03CH01-WS) | | | | |
| Tested Date | Jan. 10 ~ Jan. 16, 2024 | | | | |
| **Instrument** | **Brand** | **Model No.** | **Serial No.** | **Calibration Date** | **Calibration Until** |
| Wideband Radio Communication Tester | R&S | CMW500 | 106070 | Mar. 24, 2023 | Mar. 23, 2024 |
| Receiver | R&S | ESR3 | 101657 | Mar. 03, 2023 | Mar. 02, 2024 |
| Spectrum Analyzer | R&S | FSV40 | 101498 | Nov. 23, 2023 | Nov. 22, 2024 |
| Loop Antenna | R&S | HFH2-Z2 | 100330 | Oct. 31, 2023 | Oct. 30, 2024 |
| Bilog Antenna | SCHWARZBECK | VULB9168 | VULB9168-522 | Jul. 31, 2023 | Jul. 30, 2024 |
| Horn Antenna 1G-18G | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1096 | Nov. 27, 2023 | Nov. 26, 2024 |
| Horn Antenna 18G-40G | SCHWARZBECK | BBHA 9170 | BBHA 9170517 | Oct. 30, 2023 | Oct. 29, 2024 |
| Preamplifier | EMC | EMC02325 | 980225 | Jun. 28, 2023 | Jun. 27, 2024 |
| Preamplifier | EMC | EMC118A45SE | 980898 | Jul. 14, 2023 | Jul. 13, 2024 |
| Preamplifier | EMC | EMC184045SE | 980903 | Jul. 17, 2023 | Jul. 16, 2024 |
| Loop Antenna Cable | KOAX KABEL | 101354-BW | 101354-BW | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 3M | Woken | CFD400NL-LW | CFD400NL-001 | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 11M | EMC | EMCCFD400-NW-NW-11000 | 200801 | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 1M | EMC | EMCCFD400-NM-NM-1000 | 160502 | Oct. 03, 2023 | Oct. 02, 2024 |
| RF Cable | EMC | EMC104-35M-35M-8000 | 210920 | Oct. 03, 2023 | Oct. 02, 2024 |
| RF Cable | EMC | EMC104-35M-35M-3000 | 210922 | Oct. 03, 2023 | Oct. 02, 2024 |
| HIGHPASS FILTER 1-6G | WHK | WHKS1000-6SS | 12 | Oct. 05, 2023 | Oct. 04, 2024 |
| HIGHPASS FILTER 3.1-18G | WHK | WHK3.1/18G-10SS | 39 | Oct. 05, 2023 | Oct. 04, 2024 |
| Measurement Software | AUDIX | e3 | 6.120210g | NA | NA |
| Note: Calibration Interval of instruments listed above is one year. | | | | | |

| Test Item | RF Conducted | | | | |
|---|---|---|---|---|---|
| Test Site | (TH01-WS) | | | | |
| Tested Date | Jan. 10 ~ Jan. 18, 2024 | | | | |
| **Instrument** | **Brand** | **Model No.** | **Serial No.** | **Calibration Date** | **Calibration Until** |
| Spectrum Analyzer | Agilent | N9010A | MY54200247 | Oct. 24, 2023 | Oct. 23, 2024 |
| Power Meter | Anritsu | ML2495A | 1241002 | Nov. 21, 2023 | Nov. 20, 2024 |
| Power Sensor | Anritsu | MA2411B | 1207366 | Nov. 21, 2023 | Nov. 20, 2024 |
| DC POWER SOURCE | GW INSTEK | GPC-6030D | GES855395 | Nov. 03, 2023 | Nov. 02, 2024 |
| TEMP&HUMIDITY CHAMBER | GIANT FORCE | GCT-225-40-SP-SD | MAF1212-002 | Jun. 21, 2023 | Jun. 20, 2024 |
| Attenuator | woken | PE7013-20 | 20-1 | Oct. 13, 2023 | Oct. 12, 2024 |
| Measurement Software | Sporton | SENSE-FCC_2G-4G | V6.1 | NA | NA |
| Note: Calibration Interval of instruments listed above is one year. | | | | | |

## 1.5 Test Standards

47 CFR FCC Part 27
ANSI C63.26-2015

## 1.6 Reference Guidance

FCC KDB 412172 D01 Determining ERP and EIRP v01r01
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

## 1.7 Deviation from Test Standard and Measurement Procedure

None

## 1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

| Measurement Uncertainty | |
|---|---|
| **Parameters** | **Uncertainty** |
| Bandwidth | ±34.130 Hz |
| Conducted power | ±0.808 dB |
| Frequency error | ±1x10$^{-9}$ |
| Conducted emission | ±2.715 dB |
| Radiated emission ≤ 1GHz | ±3.41 dB |
| Radiated emission > 1GHz | ±4.59 dB |
| Temperature | ±0.4 °C |

# 2 Test Configuration

## 2.1 Testing Facility

| | |
|---|---|
| **Test Laboratory** | International Certification Corp. |
| **Test Site** | 03CH01-WS, TH01-WS |
| **Address of Test Site** | No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 33381, Taiwan, R.O.C. |

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

## 2.2 The Worst Test Modes and Channel Details

| LTE-M1 Band 12 | | | |
|---|---|---|---|
| **Test item** | **Channel Bandwidth** | **Modulation** | **Test Frequency (MHz)** |
| E.R.P. | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 701.5 / 707.5 / 713.5<br>704.0 / 707.5 / 711.0 |
| Radiated Emission ≤ 1GHz | 5 MHz | QPSK | 713.5 |
| Radiated Emission > 1GHz | 5 MHz | QPSK | 701.5 / 707.5 / 713.5 |
| Out of Band Emissions | 5 MHz<br>10 MHz | QPSK<br>QPSK | 701.5 / 707.5 / 713.5<br>704.0 / 707.5 / 711.0 |
| Band Edge | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 701.5 / 713.5<br>704.0 / 711.0 |
| Occupied Bandwidth<br>Peak to Average Ratio | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 707.5<br>707.5 |
| Frequency Stability | 5 MHz<br>10 MHz | QPSK<br>QPSK | 701.5 / 713.5<br>704.0 / 711.0 |
| **NOTE:**<br>1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report. | | | |

| LTE-M1 Band 13 | | | |
|---|---|---|---|
| **Test item** | **Channel Bandwidth** | **Modulation** | **Test Frequency (MHz)** |
| E.R.P. | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 779.5 / 782.0 / 784.5<br>782.0 |
| Radiated Emission ≤ 1GHz | 5 MHz | QPSK | 784.5 |
| Radiated Emission > 1GHz | 5 MHz | QPSK | 779.5 / 782.0 / 784.5 |
| Out of Band Emissions | 5 MHz<br>10 MHz | QPSK<br>QPSK | 779.5 / 782.0 / 784.5<br>782.0 |
| Band Edge | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 779.5 / 784.5<br>782.0 |
| Occupied Bandwidth<br>Peak to Average Ratio | 5 MHz<br>10 MHz | QPSK / 16QAM<br>QPSK / 16QAM | 782.0<br>782.0 |
| Frequency Stability | 5 MHz<br>10 MHz | QPSK<br>QPSK | 779.5 / 784.5<br>782.0 |
| **NOTE:**<br>1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report. | | | |

| NB-IoT Band 12 | | | |
|---|---|---|---|
| **Test item** | **Sub-carrier Spacing(kHz)** | **Modulation** | **Test Frequency (MHz)** |
| E.R.P. | 3.75kHz / 15kHz | BPSK / QPSK | 699.2 / 707.5 / 715.8 |
| Radiated Emission ≤ 1GHz | 15kHz | QPSK | 715.8 |
| Radiated Emission > 1GHz | 15kHz | QPSK | 699.2 / 707.5 / 715.8 |
| Out of Band Emissions | 15kHz | QPSK | 699.2 / 707.5 / 715.8 |
| Occupied Bandwidth<br>Peak to Average Ratio | 3.75kHz / 15kHz | QPSK | 707.5 |
| Band Edge | 3.75kHz / 15kHz | BPSK / QPSK | 699.2 / 715.8 |
| Frequency Stability | 3.75kHz / 15kHz | QPSK | 699.2 / 715.8 |
| **NOTE:**<br>1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report. | | | |

| NB-IoT Band 13 | | | |
|---|---|---|---|
| **Test item** | **Sub-carrier Spacing(kHz)** | **Modulation** | **Test Frequency (MHz)** |
| E.R.P. | 3.75kHz / 15kHz | BPSK / QPSK | 777.2 / 782.0 / 786.8 |
| Radiated Emission ≤ 1GHz | 15kHz | QPSK | 782.0 |
| Radiated Emission > 1GHz | 15kHz | QPSK | 777.2 / 782.0 / 786.8 |
| Out of Band Emissions | 15kHz | QPSK | 777.2 / 782.0 / 786.8 |
| Occupied Bandwidth<br>Peak to Average Ratio | 3.75kHz / 15kHz | QPSK | 782.0 |
| Band Edge | 3.75kHz / 15kHz | BPSK / QPSK | 777.2 / 786.8 |
| Frequency Stability | 3.75kHz / 15kHz | QPSK | 777.2 / 786.8 |
| **NOTE:**<br>1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report. | | | |

# 3 Test Results

## 3.1 Effective Radiated Power

### 3.1.1 Limit of Effective Radiated Power

Portable stations (hand-held devices) are limited to 3 watts ERP.

### 3.1.2 Test Procedures

**For E.R.P measurement**

ERP can be calculated by below formula from KDB 412172 D01.

1. EIRP = $P_T$ + $G_T$ - $L_C$

   $P_T$ = transmitter output power, in dBm.

   $G_T$ = gain of the transmitting antenna, in dBi (EIRP).

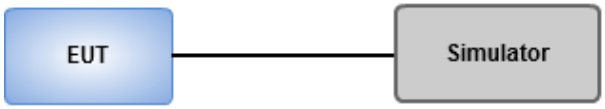
   $L_C$ = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

2. ERP = EIRP – 2.15 dB.

**For Conducted power measurement**

1. The EUT links up with simulator and is set to maximum output power level at low / middel / high channel.
2. Measure the output power of low / middle / high channel of the EUT

### 3.1.3 Test Setup




### 3.1.4 Test Results

| Ambient Condition | 20~24°C / 62~67% | Tested By | Aska Huang |
|---|---|---|---|

Refer to Appendix A.

## 3.2 Radiated Emissions

### 3.2.1 Limit of Radiated Emissions

LTE Band 12 /13
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB equal to -13dBm.

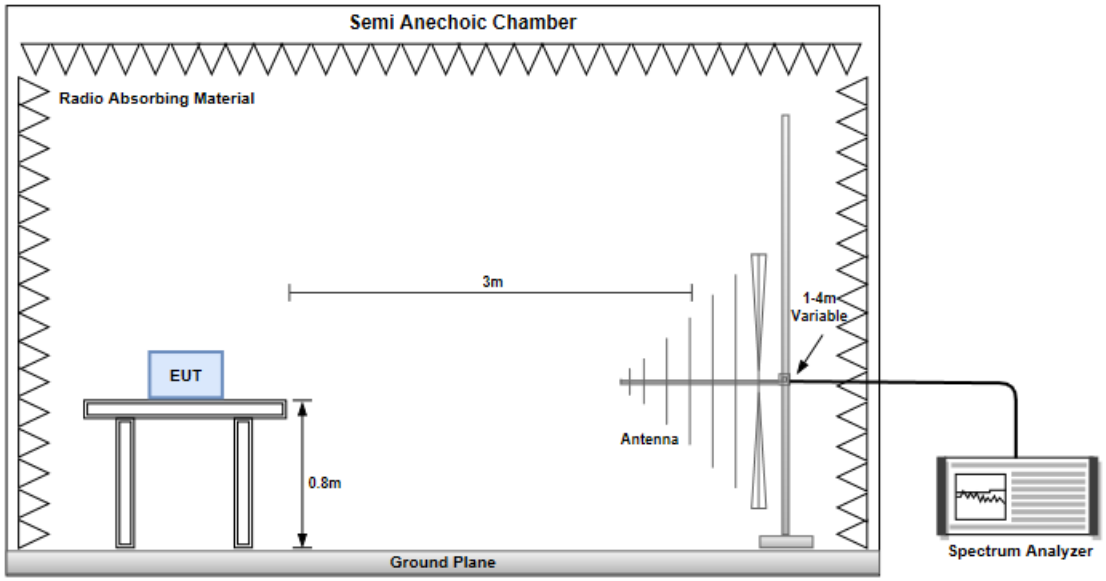
LTE Band 13
For operations in the 775-788 MHz emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

### 3.2.2 Test Procedures

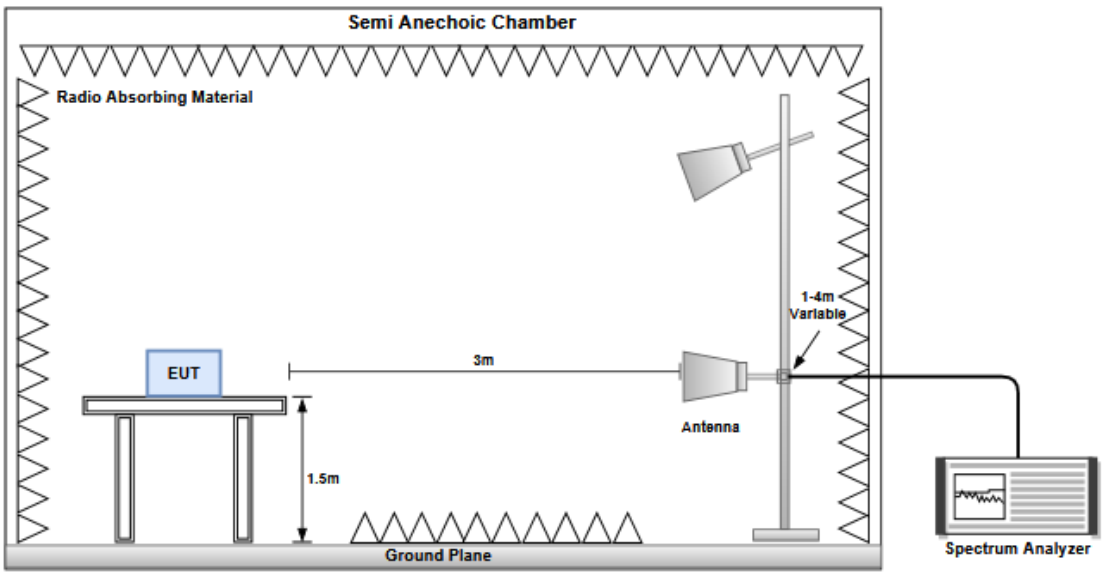
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
   E.R.P = E.I.R.P –2.15dB.

### 3.2.3 Test Setup

**Radiated Emissions below 1 GHz**




**Radiated Emissions above 1 GHz**




### 3.2.4 Test Results

| Ambient Condition | 22~23°C / 63~66% | Tested By | Akun Chung |
|---|---|---|---|

Refer to Appendix B.

## 3.3 Out of Band Emissions& Band Edge

### 3.3.1 Limit of Out of Band Emissions& Band Edge

LTE Band 12 / 13
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB equal to -13dBm.

LTE Band 13
On all frequencies between 763 ~ 775 MHz and 793 ~ 805 MHz, by a factor not less than 65 + 10 log(P) dB in a 6.25 kHz band segment, for mobile and portable stations.

### 3.3.2 Test Procedures

**Out of band emission**

1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30 MHz ~ 10 GHz.
3. Set RBW = 100 kHz, VBW = 300kHz, detector = RMS, sweep time = auto.
4. Record the max trace value and capture the test plot of each sub frequency band.

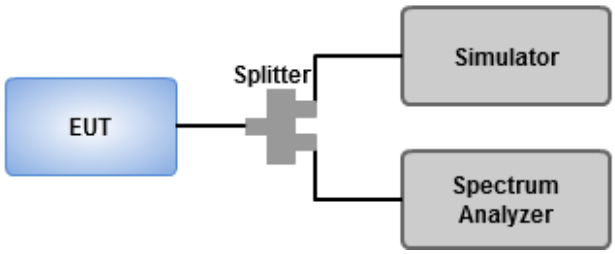
**Band edge**

1. Lowest and highest operating channels are tested for this item.
2. Set RBW = 1% of EBW, VBW = 3 x RBW, detector = RMS, sweep time = auto.
3. Record the max trace value and capture the test plot of each sub frequency band.

**763 ~ 775 MHz / 793 ~ 805 MHz**

1 Lowest, middle and highest operating channels are tested for this item.
2 Scan frequency range is from 763 MHz ~ 806 MHz.
3 Set RBW = 10 kHz, VBW = 30 kHz, detector = rms, sweep time = auto.

### 3.3.3 Test Setup



### 3.3.4 Test Results

| Ambient Condition | 20~24°C / 62~67% | Tested By | Aska Huang |
|---|---|---|---|

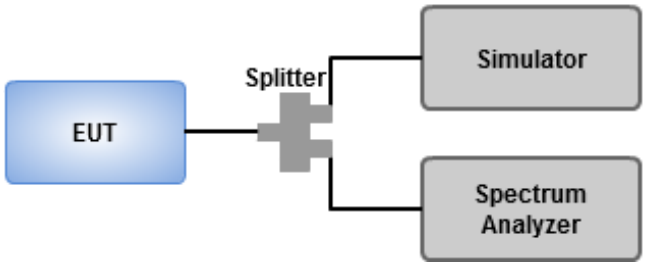
Refer to Appendix C.

## 3.4 Occupied Bandwidth and 26dB Bandwidth

### 3.4.1 Test Procedures

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Using occupied bandwidth measurement function of spectrum analyzer to measure occupied bandwidth
5. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 26dB relative to the maximum level measured in the fundamental emission.

### 3.4.2 Test Setup




### 3.4.3 Test Results

| Ambient Condition | 20~24°C / 62~67% | Tested By | Aska Huang |
|---|---|---|---|

Refer to Appendix D.

## 3.5 Peak to Average Power Ratio

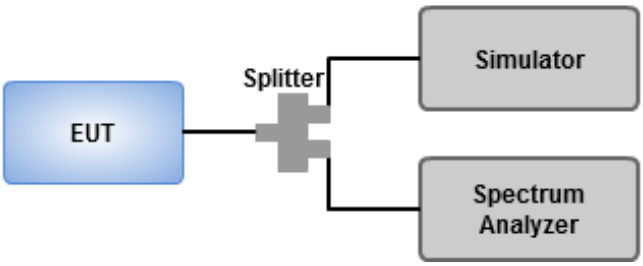
### 3.5.1 Limit of Peak to Average Power Ratio

The Peakto-average power ratio of the transmiss ion may not exceed 13 dB.

### 3.5.2 Test Procedures

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Set the measurement interval to 1 ms.
4. Record the maximum PAPR level associated with a probability of 0.1%.

### 3.5.3 Test Setup




### 3.5.4 Test Results

| Ambient Condition | 20~24°C / 62~67% | Tested By | Aska Huang |
|---|---|---|---|

Refer to Appendix E.

## 3.6 Frequency Stability

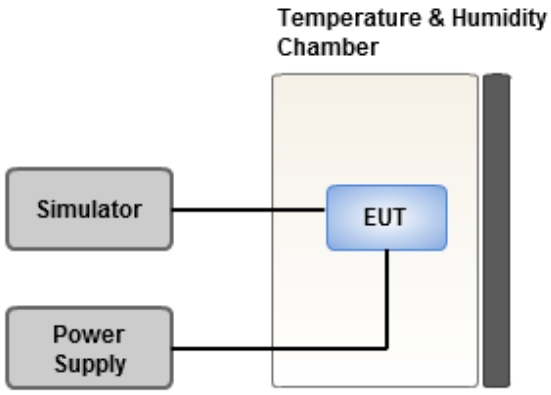
### 3.6.1 Limit of Frequency Stability

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation

### 3.6.2 Test Procedures

1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. The test shall be performed under normal and extreme condition for temperature and voltage.
4. Link up EUT and simulator. Confirm frequency drift value of simulator and record it.

### 3.6.3 Test Setup




### 3.6.4 Test Results

| Ambient Condition | 20~24°C / 62~67% | Tested By | Aska Huang |
|---|---|---|---|

Refer to Appendix F.

# 4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

**Linkou**

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

**Kwei Shan**

Tel: 886-3-271-8666

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**==END==**

| Part 27H M1 Band 12 Maximum Average Power [dBm](GT-LC= 2.17 dB) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW (MHz) | Modulation | RB size# / RB start | RB Index | Lowest | Middle | Highest | - | |
| Channel | | | | 23060 | 23095 | 23130 | ERP (dBm) | ERP (W) |
| Frequency | | | | 704 | 707.5 | 711 | | |
| 10 | QPSK | 1#0 | 0 | 23.71 | 23.69 | 23.66 | 23.85 | 0.243 |
| 10 | QPSK | 1#5 | 7 | 23.83 | 23.79 | 23.82 | | |
| 10 | QPSK | 6#0 | 0 | 22.73 | 22.78 | 22.72 | | |
| 10 | QPSK | 6#0 | 7 | 22.89 | 22.93 | 22.89 | | |
| 10 | 16QAM | 1#0 | 0 | 23.58 | 23.62 | 23.52 | 23.83 | 0.242 |
| 10 | 16QAM | 1#5 | 7 | 23.81 | 23.77 | 23.79 | | |
| 10 | 16QAM | 6#0 | 0 | 21.82 | 21.98 | 21.95 | | |
| 10 | 16QAM | 6#0 | 7 | 21.99 | 22.17 | 22.12 | | |
| Channel | | | | 23035 | 23095 | 23155 | ERP (dBm) | ERP (W) |
| Frequency | | | | 701.5 | 707.5 | 713.5 | | |
| 5 | QPSK | 1#0 | 0 | 23.64 | 23.67 | 23.72 | 23.88 | 0.244 |
| 5 | QPSK | 1#5 | 3 | 23.71 | 23.81 | 23.86 | | |
| 5 | QPSK | 6#0 | 0 | 22.71 | 22.82 | 22.79 | | |
| 5 | QPSK | 6#0 | 3 | 22.81 | 22.89 | 22.87 | | |
| 5 | 16QAM | 1#0 | 0 | 23.59 | 23.64 | 23.65 | 23.76 | 0.238 |
| 5 | 16QAM | 1#5 | 3 | 23.74 | 23.74 | 23.74 | | |
| 5 | 16QAM | 6#0 | 0 | 21.83 | 22.01 | 22.01 | | |
| 5 | 16QAM | 6#0 | 3 | 21.99 | 22.09 | 22.04 | | |
| Limit | ERP < 3 W | | | Result | | | Pass | |

| Part 27F M1 Band 13 Maximum Average Power [dBm](GT-LC= 2.17 dB) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW (MHz) | Modulation | RB size# / RB start | RB Index | Lowest | Middle | Highest | - | |
| Channel | | | | - | 23230 | - | ERP (dBm) | ERP (W) |
| Frequency | | | | - | 782 | - | | |
| 10 | QPSK | 1#0 | 0 | - | 23.78 | - | 23.88 | 0.244 |
| 10 | QPSK | 1#5 | 7 | - | 23.86 | - | | |
| 10 | QPSK | 6#0 | 0 | - | 22.93 | - | | |
| 10 | QPSK | 6#0 | 7 | - | 23.13 | - | | |
| 10 | 16QAM | 1#0 | 0 | - | 23.76 | - | 23.87 | 0.244 |
| 10 | 16QAM | 1#5 | 7 | - | 23.85 | - | | |
| 10 | 16QAM | 6#0 | 0 | - | 22.18 | - | | |
| 10 | 16QAM | 6#0 | 7 | - | 22.34 | - | | |
| Channel | | | | 23205 | 23230 | 23255 | ERP (dBm) | ERP (W) |
| Frequency | | | | 779.5 | 782 | 784.5 | | |
| 5 | QPSK | 1#0 | 0 | 23.71 | 23.74 | 23.78 | 23.9 | 0.245 |
| 5 | QPSK | 1#5 | 3 | 23.88 | 23.81 | 23.88 | | |
| 5 | QPSK | 6#0 | 0 | 22.91 | 22.99 | 23.05 | | |
| 5 | QPSK | 6#0 | 3 | 23.01 | 23.09 | 23.14 | | |
| 5 | 16QAM | 1#0 | 0 | 23.66 | 23.68 | 23.78 | 23.87 | 0.244 |
| 5 | 16QAM | 1#5 | 3 | 23.78 | 23.82 | 23.85 | | |
| 5 | 16QAM | 6#0 | 0 | 22.12 | 22.22 | 22.21 | | |
| 5 | 16QAM | 6#0 | 3 | 22.28 | 22.29 | 22.28 | | |
| Limit | ERP < 3 W | | | Result | | | Pass | |

| Part27H Band 12 Maximum Average Power [dBm](GT-LC= 2.17 dB) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NB-IoT** | **Modulation** | **Sub-carrier Spacing(kHz)** | **Ntones** | **Lowest** | **Middle** | **Highest** | **-** | |
| **Channel** | | | | **23012** | **23095** | **23178** | **ERP** | **ERP** |
| **Frequency** | | | | **699.2** | **707.5** | **715.8** | **(dBm)** | **(W)** |
| Standalone | BPSK | 3.75 | 1@0 | 23.19 | 23.19 | 23.22 | 23.25 | 0.211 |
| | | | 1@47 | 23.2 | 23.21 | 23.23 | | |
| | | 15 | 1@0 | 23.15 | 23.08 | 23.16 | | |
| | | | 1@11 | 23.16 | 23.15 | 23.18 | | |
| | QPSK | 3.75 | 1@0 | 23.18 | 23.21 | 23.23 | 23.53 | 0.225 |
| | | | 1@47 | 23.21 | 23.22 | 23.24 | | |
| | | 15 | 1@0 | 23.18 | 23.15 | 23.18 | | |
| | | | 1@11 | 23.21 | 23.17 | 23.19 | | |
| | | 15 | 12@0 | 23.44 | 23.39 | 23.51 | | |
| **Limit** | **ERP < 3 W** | | | **Result** | | | **Pass** | |

| Part27F Band 13 Maximum Average Power [dBm](GT-LC= 2.17 dB) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NB-IoT** | **Modulation** | **Sub-carrier Spacing(kHz)** | **Ntones** | **Lowest** | **Middle** | **Highest** | **-** | |
| **Channel** | | | | **23182** | **23230** | **23278** | **ERP** | **ERP** |
| **Frequency** | | | | **777.2** | **782** | **786.8** | **(dBm)** | **(W)** |
| Standalone | BPSK | 3.75 | 1@0 | 23.45 | 23.62 | 23.44 | 23.67 | 0.233 |
| | | | 1@47 | 23.47 | 23.65 | 23.45 | | |
| | | 15 | 1@0 | 23.43 | 23.51 | 23.41 | | |
| | | | 1@11 | 23.44 | 23.53 | 23.42 | | |
| | QPSK | 3.75 | 1@0 | 23.51 | 23.64 | 23.5 | 23.91 | 0.246 |
| | | | 1@47 | 23.53 | 23.66 | 23.51 | | |
| | | 15 | 1@0 | 23.45 | 23.53 | 23.43 | | |
| | | | 1@11 | 23.48 | 23.56 | 23.46 | | |
| | | 15 | 12@0 | 23.75 | 23.89 | 23.72 | | |
| **Limit** | **ERP < 3 W** | | | **Result** | | | **Pass** | |

**Below 1GHz**

| Mode | LTE-M1 Band 12, QPSK, CB:5 MHz, Channel: 713.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 112.45 | H | -46.12 | -13.00 | -33.12 | -40.62 | -41.09 | -2.88 |
| 116.33 | H | -45.62 | -13.00 | -32.62 | -40.41 | -40.48 | -2.99 |
| 188.11 | H | -40.64 | -13.00 | -27.64 | -37.59 | -39.38 | 0.89 |
| 195.87 | H | -40.59 | -13.00 | -27.59 | -37.33 | -40.41 | 1.97 |
| 256.01 | H | -38.64 | -13.00 | -25.64 | -37.09 | -39.27 | 2.78 |
| 259.89 | H | -39.18 | -13.00 | -26.18 | -37.63 | -39.83 | 2.80 |
| 112.45 | V | -40.00 | -13.00 | -27.00 | -39.77 | -34.97 | -2.88 |
| 116.33 | V | -39.14 | -13.00 | -26.14 | -39.33 | -34.00 | -2.99 |
| 127.97 | V | -31.24 | -13.00 | -18.24 | -42.62 | -25.87 | -3.22 |
| 188.11 | V | -39.37 | -13.00 | -26.37 | -40.45 | -38.11 | 0.89 |
| 195.87 | V | -41.69 | -13.00 | -28.69 | -41.93 | -41.51 | 1.97 |
| 256.01 | V | -49.09 | -13.00 | -36.09 | -47.02 | -49.72 | 2.78 |

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 784.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 116.33 | H | -45.46 | -13.00 | -32.46 | -40.25 | -40.32 | -2.99 |
| 188.11 | H | -40.25 | -13.00 | -27.25 | -37.20 | -38.99 | 0.89 |
| 195.87 | H | -40.49 | -13.00 | -27.49 | -37.23 | -40.31 | 1.97 |
| 256.01 | H | -39.32 | -13.00 | -26.32 | -37.77 | -39.95 | 2.78 |
| 259.89 | H | -39.64 | -13.00 | -26.64 | -38.09 | -40.29 | 2.80 |
| 267.65 | H | -41.40 | -13.00 | -28.40 | -39.84 | -42.08 | 2.83 |
| 112.45 | V | -40.11 | -13.00 | -27.11 | -39.88 | -35.08 | -2.88 |
| 116.33 | V | -39.09 | -13.00 | -26.09 | -39.28 | -33.95 | -2.99 |
| 188.11 | V | -39.97 | -13.00 | -26.97 | -41.05 | -38.71 | 0.89 |
| 195.87 | V | -41.36 | -13.00 | -28.36 | -41.60 | -41.18 | 1.97 |
| 256.01 | V | -49.06 | -13.00 | -36.06 | -46.99 | -49.69 | 2.78 |
| 259.89 | V | -49.64 | -13.00 | -36.64 | -47.69 | -50.29 | 2.80 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

**Above 1GHz**

| Mode | LTE-M1 Band 12, QPSK, CB:5 MHz, Channel: 701.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1402.86 | H | -50.03 | -13.00 | -37.03 | -52.74 | -58.62 | 10.74 |
| 2104.29 | H | -46.67 | -13.00 | -33.67 | -50.53 | -58.54 | 14.02 |
| 2805.72 | H | -47.92 | -13.00 | -34.92 | 53.73 | -62.00 | 16.23 |
| 1402.86 | V | -51.90 | -13.00 | -38.90 | -54.50 | -60.49 | 10.74 |
| 2104.29 | V | -54.86 | -13.00 | -41.86 | -58.69 | -66.73 | 14.02 |
| 2805.72 | V | -53.81 | -13.00 | -40.81 | -60.02 | -67.89 | 16.23 |

| Mode | LTE-M1 Band 12, QPSK, CB:5 MHz, Channel: 707.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1414.86 | H | -48.94 | -13.00 | -35.94 | -51.60 | -57.67 | 10.88 |
| 2122.29 | H | -45.49 | -13.00 | -32.49 | -49.55 | -57.28 | 13.94 |
| 2829.72 | H | -47.08 | -13.00 | -34.08 | -52.91 | -61.20 | 16.27 |
| 1414.86 | V | -51.07 | -13.00 | -38.07 | -53.63 | -59.80 | 10.88 |
| 2122.29 | V | -54.03 | -13.00 | -41.03 | -58.08 | -65.82 | 13.94 |
| 2829.72 | V | -52.95 | -13.00 | -39.95 | -59.18 | -67.07 | 16.27 |

| Mode | LTE-M1 Band 12, QPSK, CB:5 MHz, Channel: 713.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1426.86 | H | -49.81 | -13.00 | -36.81 | -52.41 | -58.67 | 11.01 |
| 2140.29 | H | -46.40 | -13.00 | -33.40 | -50.66 | -58.11 | 13.86 |
| 2853.72 | H | -47.78 | -13.00 | -34.78 | -53.64 | -61.95 | 16.32 |
| 1426.86 | V | -51.78 | -13.00 | -38.78 | -54.31 | -60.64 | 11.01 |
| 2140.29 | V | -54.90 | -13.00 | -41.90 | -59.18 | -66.61 | 13.86 |
| 2853.72 | V | -53.87 | -13.00 | -40.87 | -60.12 | -68.04 | 16.32 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 779.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1558.86 | H | -56.92 | -13.00 | -43.92 | -58.93 | -67.31 | 12.54 |
| 2338.29 | H | -43.90 | -13.00 | -30.90 | -48.73 | -56.48 | 14.73 |
| 6235.44 | H | -40.07 | -13.00 | -27.07 | -51.72 | -58.77 | 20.85 |
| 1558.86 | V | -63.86 | -13.00 | -50.86 | -66.06 | -74.25 | 12.54 |
| 2338.29 | V | -41.69 | -13.00 | -28.69 | -46.58 | -54.27 | 14.73 |
| 6235.44 | V | -44.48 | -13.00 | -31.48 | -55.92 | -63.18 | 20.85 |

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 782.0MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 2345.79 | H | -43.01 | -13.00 | -30.01 | -47.84 | -55.59 | 14.73 |
| 3127.72 | H | -57.16 | -13.00 | -44.16 | -63.18 | -71.90 | 16.89 |
| 6255.44 | H | -39.23 | -13.00 | -26.23 | -50.89 | -57.92 | 20.84 |
| 2345.79 | V | -40.98 | -13.00 | -27.98 | -45.87 | -53.56 | 14.73 |
| 3127.72 | V | -61.28 | -13.00 | -48.28 | -68.16 | -76.02 | 16.89 |
| 6255.44 | V | -43.64 | -13.00 | -30.64 | -55.10 | -62.33 | 20.84 |

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 784.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 2353.29 | H | -43.87 | -13.00 | -30.87 | -48.70 | -56.51 | 14.79 |
| 3137.72 | H | -58.08 | -13.00 | -45.08 | -64.10 | -72.84 | 16.91 |
| 6275.44 | H | -40.08 | -13.00 | -27.08 | -51.77 | -58.71 | 20.78 |
| 2353.29 | V | -41.87 | -13.00 | -28.87 | -46.76 | -54.51 | 14.79 |
| 3137.72 | V | -62.10 | -13.00 | -49.10 | 69.03 | -76.86 | 16.91 |
| 6275.44 | V | -44.51 | -13.00 | -31.51 | -56.06 | -63.14 | 20.78 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

**Radiated Emissions in the 1559-1610MHz band**

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 782.0MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1563.86 | H | -53.85 | -40.00 | -13.85 | -58.01 | -66.40 | 12.55 |
| 1563.86 | V | -60.90 | -40.00 | -20.90 | -65.25 | -73.45 | 12.55 |

| Mode | LTE-M1 Band 13, QPSK, CB:5 MHz, Channel: 784.5MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1568.86 | H | -54.72 | -40.00 | -14.72 | -58.85 | -67.32 | 12.60 |
| 1568.86 | V | -60.63 | -40.00 | -20.63 | -64.96 | -73.23 | 12.60 |

NOTE: EIRP = S.G power value + correction factor

**Below 1GHz**

| Mode | NB-IoT Band 12, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23178 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 183.55 | H | -35.81 | -13.00 | -22.81 | -32.87 | -33.92 | 0.26 |
| 187.52 | H | -33.67 | -13.00 | -20.67 | -30.63 | -32.33 | 0.81 |
| 195.45 | H | -32.71 | -13.00 | -19.71 | -29.46 | -32.47 | 1.91 |
| 199.25 | H | -32.78 | -13.00 | -19.78 | -29.44 | -33.07 | 2.44 |
| 208.54 | H | -36.73 | -13.00 | -23.73 | -33.68 | -37.16 | 2.58 |
| 211.85 | H | -38.78 | -13.00 | -25.78 | -35.85 | -39.22 | 2.59 |
| 111.55 | V | -42.48 | -13.00 | -29.48 | -42.15 | -37.47 | -2.86 |
| 124.56 | V | -41.66 | -13.00 | -28.66 | -42.71 | -36.34 | -3.17 |
| 127.78 | V | -41.78 | -13.00 | -28.78 | -43.14 | -36.41 | -3.22 |
| 183.55 | V | -38.67 | -13.00 | -25.67 | -40.25 | -36.78 | 0.26 |
| 187.66 | V | -38.03 | -13.00 | -25.03 | -39.16 | -36.71 | 0.83 |
| 195.58 | V | -39.05 | -13.00 | -26.05 | -39.32 | -38.83 | 1.93 |

| Mode | NB-IoT Band 13, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23230 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 184.11 | H | -35.00 | -13.00 | -22.00 | -32.05 | -33.19 | 0.34 |
| 188.55 | H | -32.37 | -13.00 | -19.37 | -29.31 | -31.17 | 0.95 |
| 196.63 | H | -31.85 | -13.00 | -18.85 | -28.57 | -31.77 | 2.07 |
| 198.58 | H | -31.67 | -13.00 | -18.67 | -28.35 | -31.86 | 2.34 |
| 206.11 | H | -35.48 | -13.00 | -22.48 | -32.34 | -35.90 | 2.57 |
| 209.66 | H | -37.63 | -13.00 | -24.63 | -34.62 | -38.06 | 2.58 |
| 110.58 | V | -41.37 | -13.00 | -28.37 | -40.93 | -36.39 | -2.83 |
| 123.32 | V | -40.56 | -13.00 | -27.56 | -41.49 | -35.27 | -3.14 |
| 128.52 | V | -40.69 | -13.00 | -27.69 | -42.13 | -35.31 | -3.23 |
| 182.15 | V | -37.17 | -13.00 | -24.17 | -38.90 | -35.09 | 0.07 |
| 186.36 | V | -37.37 | -13.00 | -24.37 | -38.64 | -35.87 | 0.65 |
| 194.54 | V | -37.90 | -13.00 | -24.90 | -38.28 | -37.53 | 1.78 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

**Above 1GHz**

| Mode | NB-IoT Band 12, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23012 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1398.40 | H | -48.91 | -13.00 | -35.91 | -51.63 | -57.46 | 10.70 |
| 2097.60 | H | -45.74 | -13.00 | -32.74 | -49.53 | -57.64 | 14.05 |
| 2796.80 | H | -46.63 | -13.00 | -33.63 | -52.42 | -60.70 | 16.22 |
| 1398.40 | V | -51.04 | -13.00 | -38.04 | -53.63 | -59.59 | 10.70 |
| 2097.60 | V | -54.43 | -13.00 | -41.43 | -58.18 | -66.33 | 14.05 |
| 2796.80 | V | -53.56 | -13.00 | -40.56 | -59.75 | -67.63 | 16.22 |

| Mode | NB-IoT Band 12, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23095 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1415.00 | H | -48.00 | -13.00 | -35.00 | -50.66 | -56.73 | 10.88 |
| 2122.50 | H | -44.57 | -13.00 | -31.57 | -48.63 | -56.36 | 13.94 |
| 2830.00 | H | -46.05 | -13.00 | -33.05 | -51.88 | -60.17 | 16.27 |
| 1415.00 | V | -50.21 | -13.00 | -37.21 | -52.77 | -58.94 | 10.88 |
| 2122.50 | V | -53.79 | -13.00 | -40.79 | -57.85 | -65.58 | 13.94 |
| 2830.00 | V | -52.55 | -13.00 | -39.55 | -58.78 | -66.67 | 16.27 |

| Mode | NB-IoT Band 12, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23178 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1431.60 | H | -48.66 | -13.00 | -35.66 | -51.25 | -57.57 | 11.06 |
| 2147.40 | H | -45.13 | -13.00 | -32.13 | -49.47 | -56.81 | 13.83 |
| 2863.20 | H | -46.84 | -13.00 | -33.84 | -52.71 | -61.02 | 16.33 |
| 1431.60 | V | -50.95 | -13.00 | -37.95 | -53.48 | -59.86 | 11.06 |
| 2147.40 | V | -54.32 | -13.00 | -41.32 | -58.69 | -66.00 | 13.83 |
| 2863.20 | V | -53.37 | -13.00 | -40.37 | -59.63 | -67.55 | 16.33 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

| Mode | NB-IoT Band 13, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23182 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1554.40 | H | -53.51 | -13.00 | -40.51 | -55.56 | -63.80 | 12.44 |
| 2331.60 | H | -43.74 | -13.00 | -30.74 | -48.58 | -56.21 | 14.62 |
| 6217.60 | H | -39.71 | -13.00 | -26.71 | -51.31 | -58.52 | 20.96 |
| 1554.40 | V | -62.02 | -13.00 | -49.02 | -64.25 | -72.31 | 12.44 |
| 2331.60 | V | -43.74 | -13.00 | -30.74 | -45.53 | -56.21 | 14.62 |
| 6217.60 | V | -44.06 | -13.00 | -31.06 | -55.33 | -62.87 | 20.96 |

| Mode | NB-IoT Band 13, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23230 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 2346.00 | H | -43.02 | -13.00 | -30.02 | -47.85 | -55.60 | 14.73 |
| 3128.00 | H | -57.23 | -13.00 | -44.23 | -63.25 | -71.97 | 16.89 |
| 6256.00 | H | -38.62 | -13.00 | -25.62 | -50.28 | -57.31 | 20.84 |
| 2346.00 | V | -39.87 | -13.00 | -26.87 | -44.76 | -52.45 | 14.73 |
| 3128.00 | V | -60.22 | -13.00 | -47.22 | -67.11 | -74.96 | 16.89 |
| 6256.00 | V | -43.27 | -13.00 | -30.27 | -54.73 | -61.96 | 20.84 |

| Mode | NB-IoT Band 13, QPSK, Sub-Carrier spacing: 15kHz, Ntones: 12@0, Channel: 23278 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 2360.40 | H | -43.65 | -13.00 | -30.65 | -48.47 | -56.35 | 14.85 |
| 3147.20 | H | -58.21 | -13.00 | -45.21 | -64.23 | -72.99 | 16.93 |
| 6294.40 | H | -39.42 | -13.00 | -26.42 | -51.15 | -57.99 | 20.72 |
| 2360.40 | V | -40.57 | -13.00 | -27.57 | -45.45 | -53.27 | 14.85 |
| 3147.20 | V | -60.92 | -13.00 | -47.92 | -67.88 | -75.70 | 16.93 |
| 6294.40 | V | -44.04 | -13.00 | -31.04 | -55.69 | -62.61 | 20.72 |

NOTE: ERP = S.G power value + correction factor – 2.15 dB.

**Radiated Emissions in the 1559-1610MHz band**

| Mode | NB-IoT Band 13, QPSK, CB:5 MHz, Channel: 23230 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1564.00 | H | -50.38 | -40.00 | -10.38 | -54.54 | -62.93 | 12.55 |
| 1564.00 | V | -58.98 | -40.00 | -18.98 | -63.33 | -71.53 | 12.55 |

| Mode | NB-IoT Band 13, QPSK, CB:5 MHz, Channel: 23278 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frequency (MHz)** | **Antenna Polarity** | **E.I.R.P (dBm)** | **Limit (dBm)** | **Margin (dB)** | **S.A Reading (dBm)** | **S.G Power Value (dBm)** | **Correction Factor (dB)** |
| 1573.60 | H | -51.55 | -40.00 | -11.55 | -55.67 | -64.20 | 12.65 |
| 1573.60 | V | -59.93 | -40.00 | -19.93 | -64.25 | -72.58 | 12.65 |

NOTE: EIRP = S.G power value + correction factor

**Summary**

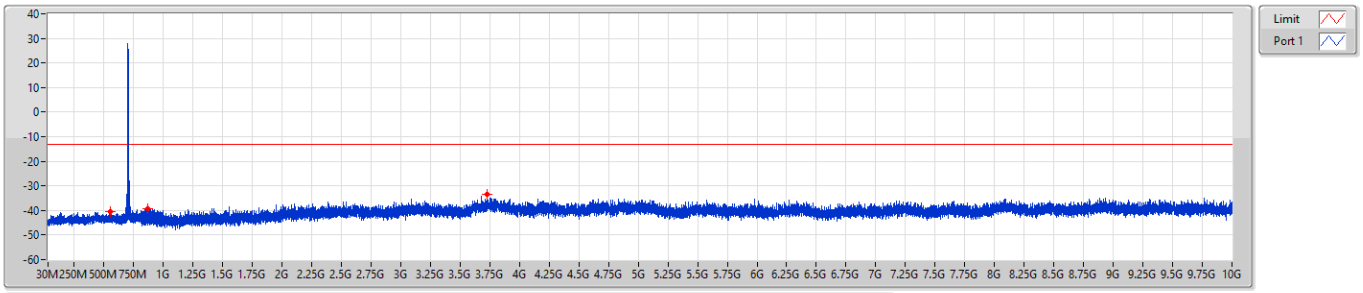
| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 3.73094G | -33.28 | -13.00 | -20.28 | - | - |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 4.72178G | -33.92 | -13.00 | -20.92 | - | - |

**Result**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 12_LTE-M1_10MHz_Nss1_1TX | - | - | - | - | - | - | - | - | - | - | - | - |
| 704MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 551.71M | -40.63 | -13.00 | -27.63 | - | - |
| 704MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 873.13M | -39.13 | -13.00 | -26.13 | - | - |
| 704MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 3.73094G | -33.28 | -13.00 | -20.28 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 544.32M | -40.72 | -13.00 | -27.72 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 927.49M | -39.23 | -13.00 | -26.23 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 3.77594G | -34.71 | -13.00 | -21.71 | - | - |
| 711MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 300.94M | -39.95 | -13.00 | -26.95 | - | - |
| 711MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 860.26M | -39.89 | -13.00 | -26.89 | - | - |
| 711MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 4.96534G | -34.32 | -13.00 | -21.32 | - | - |
| Band 12_LTE-M1_5MHz_Nss1_1TX | - | - | - | - | - | - | - | - | - | - | - | - |
| 701.5MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 596.58M | -40.50 | -13.00 | -27.50 | - | - |
| 701.5MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 817.67M | -39.18 | -13.00 | -26.18 | - | - |
| 701.5MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 4.72178G | -33.92 | -13.00 | -20.92 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 475.6M | -40.34 | -13.00 | -27.34 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 916.39M | -37.18 | -13.00 | -24.18 | - | - |
| 707.5MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 8.1505G | -34.60 | -13.00 | -21.60 | - | - |
| 713.5MHz_QPSK_RB 1 | Pass | 30M | 598M | 1M | 3M | Peak | 470.2M | -40.02 | -13.00 | -27.02 | - | - |
| 713.5MHz_QPSK_RB 1 | Pass | 816M | 1G | 1M | 3M | Peak | 847.68M | -37.85 | -13.00 | -24.85 | - | - |
| 713.5MHz_QPSK_RB 1 | Pass | 1G | 10G | 1M | 3M | Peak | 3.77003G | -34.35 | -13.00 | -21.35 | - | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

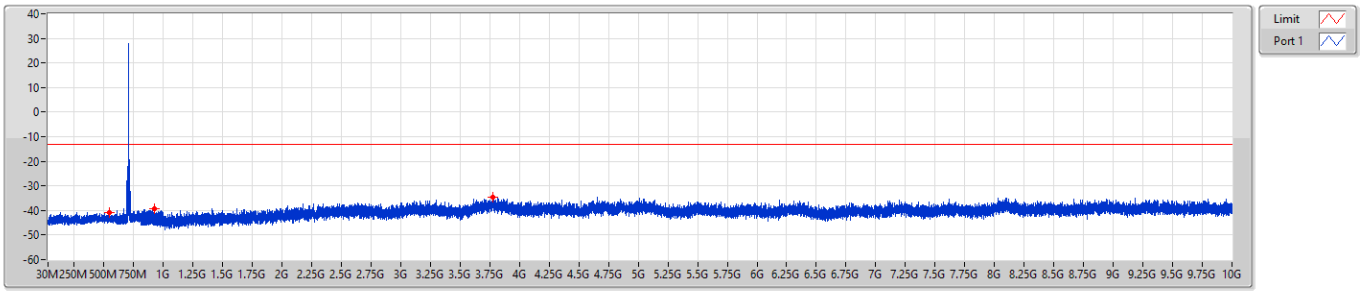
**704MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 551.71M | -40.63 | -13.00 | -27.63 | - | - |
| 816M | 1G | 1M | 3M | Peak | 873.13M | -39.13 | -13.00 | -26.13 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.73094G | -33.28 | -13.00 | -20.28 | - | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

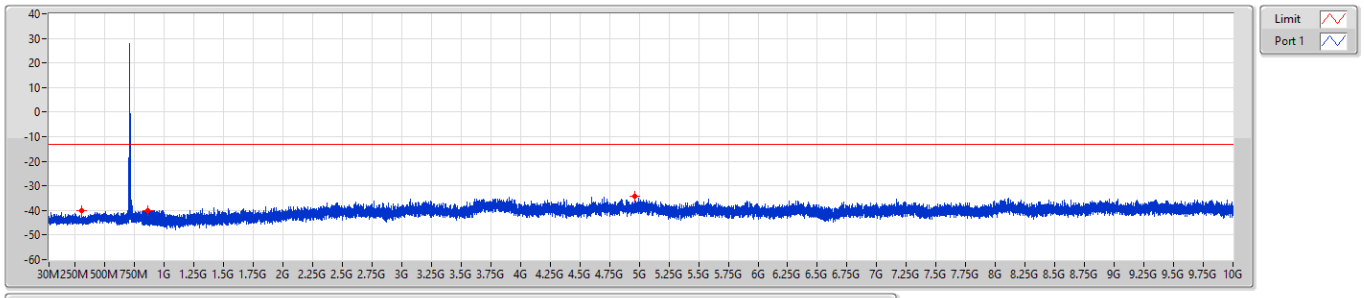
**707.5MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 544.32M | -40.72 | -13.00 | -27.72 | - | - |
| 816M | 1G | 1M | 3M | Peak | 927.49M | -39.23 | -13.00 | -26.23 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.77594G | -34.71 | -13.00 | -21.71 | - | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

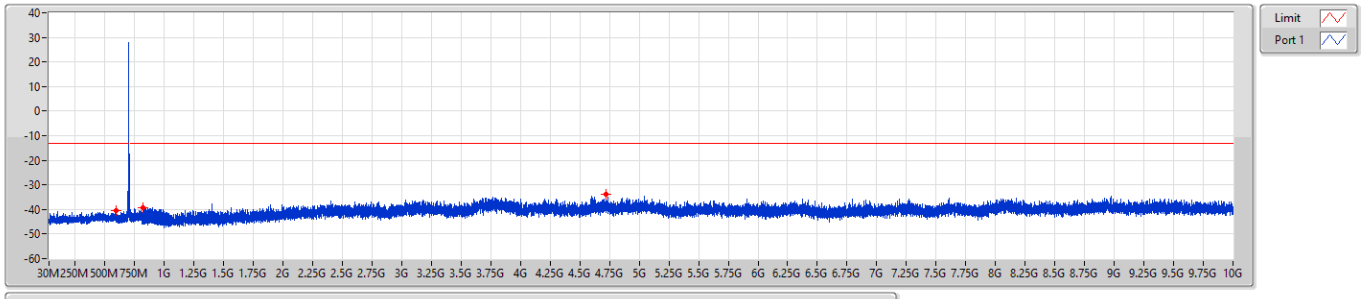
**711MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 300.94M | -39.95 | -13.00 | -26.95 | - | - |
| 816M | 1G | 1M | 3M | Peak | 860.26M | -39.89 | -13.00 | -26.89 | - | - |
| 1G | 10G | 1M | 3M | Peak | 4.96534G | -34.32 | -13.00 | -21.32 | - | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

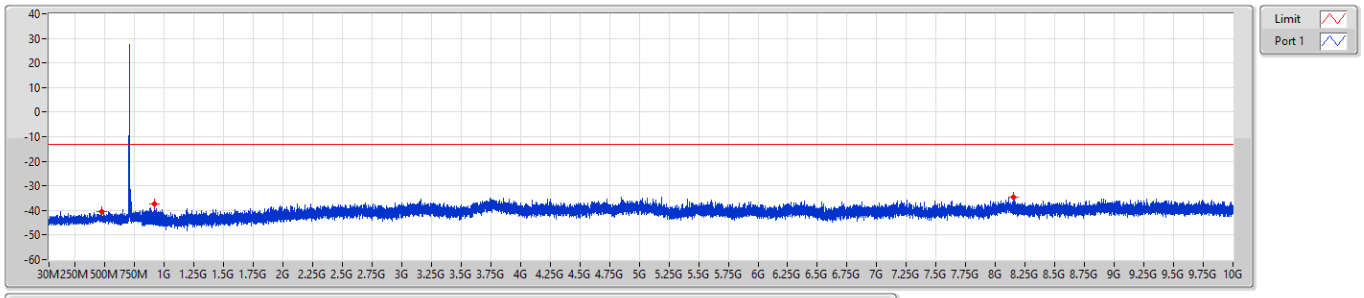
**701.5MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 596.58M | -40.50 | -13.00 | -27.50 | - | - |
| 816M | 1G | 1M | 3M | Peak | 817.67M | -39.18 | -13.00 | -26.18 | - | - |
| 1G | 10G | 1M | 3M | Peak | 4.72178G | -33.92 | -13.00 | -20.92 | - | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

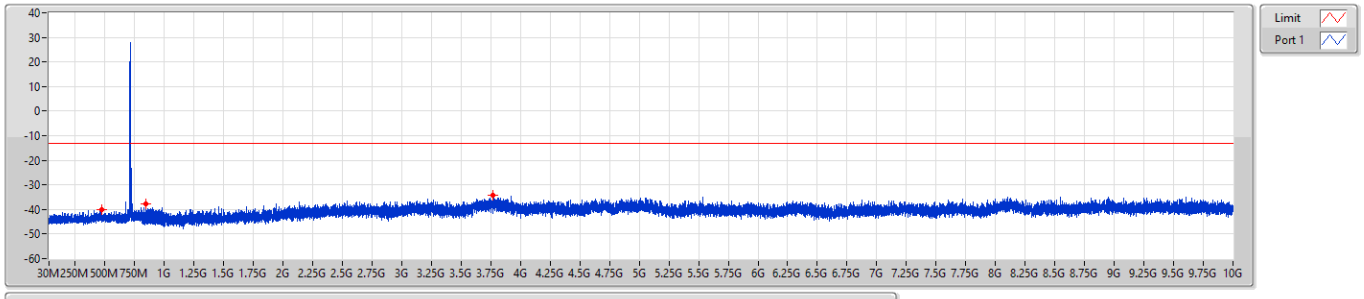
**707.5MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 475.6M | -40.34 | -13.00 | -27.34 | - | - |
| 816M | 1G | 1M | 3M | Peak | 916.39M | -37.18 | -13.00 | -24.18 | - | - |
| 1G | 10G | 1M | 3M | Peak | 8.1505G | -34.60 | -13.00 | -21.60 | - | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**713.5MHz_QPSK_RB 1**



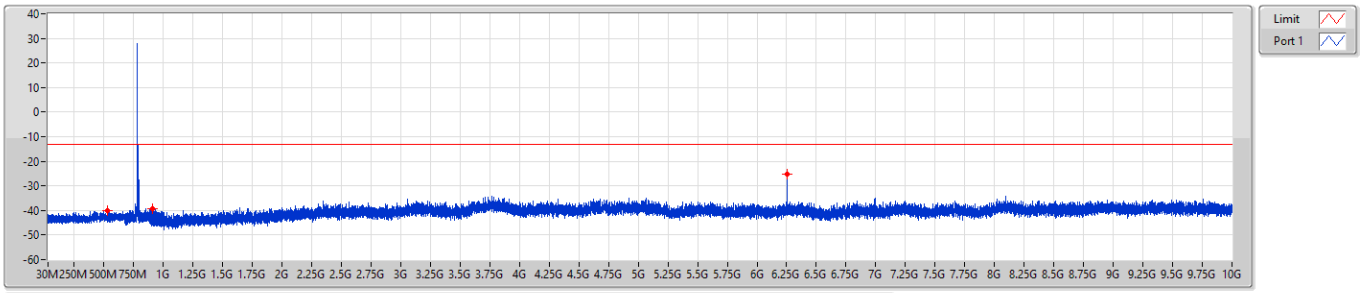

| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 470.2M | -40.02 | -13.00 | -27.02 | - | - |
| 816M | 1G | 1M | 3M | Peak | 847.68M | -37.85 | -13.00 | -24.85 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.77003G | -34.35 | -13.00 | -21.35 | - | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 6.25263G | -25.28 | -13.00 | -12.28 | - | - |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 6.23238G | -24.44 | -13.00 | -11.44 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

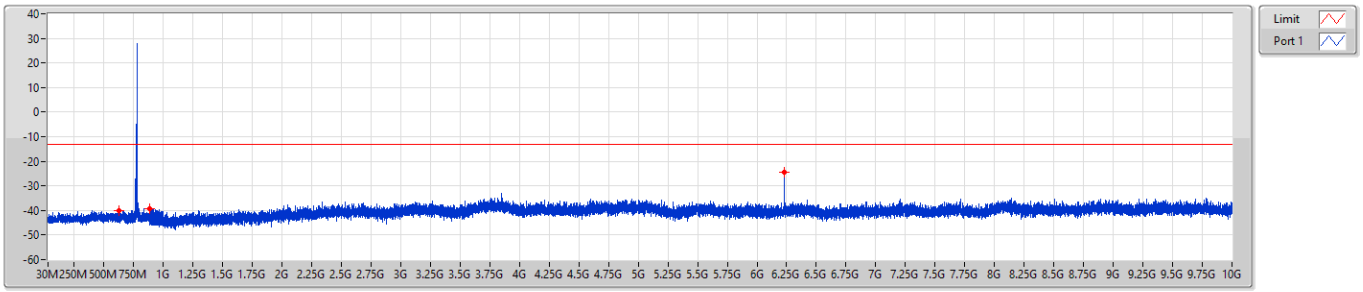
**782MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 532.07M | -39.89 | -13.00 | -26.89 | - | - |
| 887M | 1G | 1M | 3M | Peak | 908.02M | -39.28 | -13.00 | -26.28 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.25263G | -25.28 | -13.00 | -12.28 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

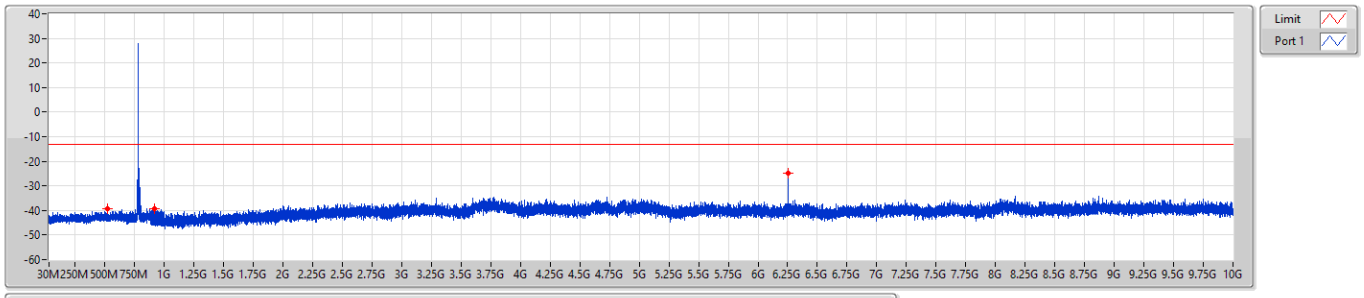
**779.5MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 624.59M | -40.00 | -13.00 | -27.00 | - | - |
| 887M | 1G | 1M | 3M | Peak | 887.42M | -39.24 | -13.00 | -26.24 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.23238G | -24.44 | -13.00 | -11.44 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

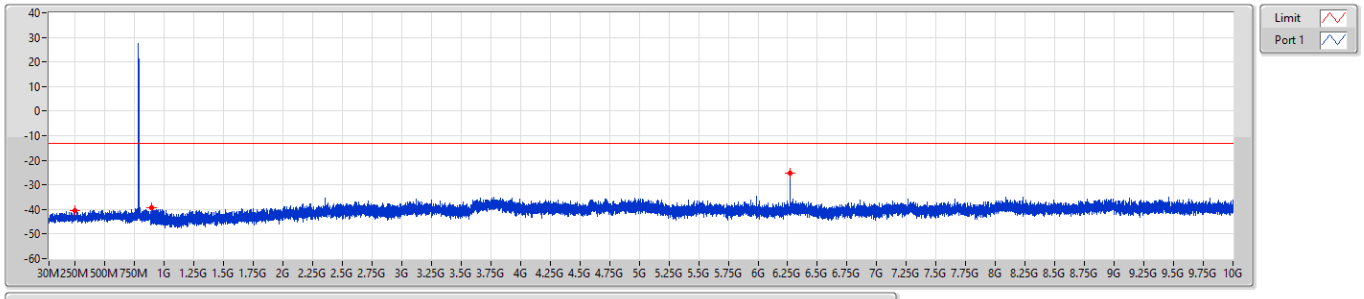
**782MHz_QPSK_RB 1**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 519.13M | -39.20 | -13.00 | -26.20 | - | - |
| 887M | 1G | 1M | 3M | Peak | 915.64M | -39.35 | -13.00 | -26.35 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.25178G | -24.76 | -13.00 | -11.76 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**784.5MHz_QPSK_RB 1**



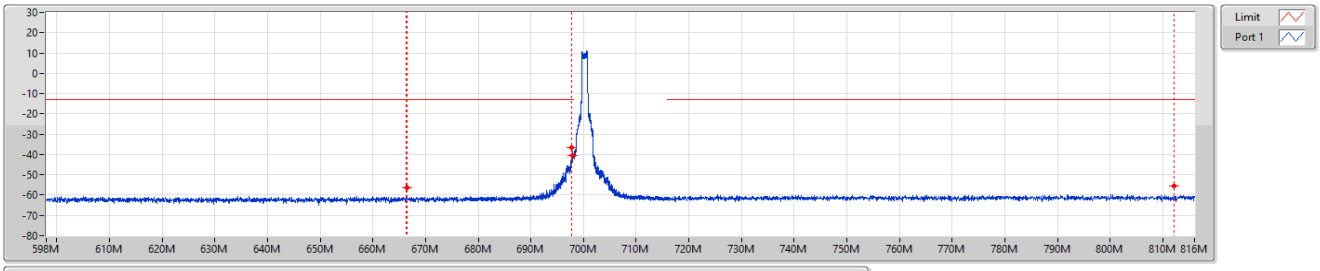

| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 245.13M | -40.44 | -13.00 | -27.44 | - | - |
| 887M | 1G | 1M | 3M | Peak | 895.88M | -39.40 | -13.00 | -26.40 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.27203G | -25.39 | -13.00 | -12.39 | - | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 716.1M | 736M | 30k | 100k | RMS | 716.15M | -22.65 | -13.00 | -9.65 | MBW 100k | - |
| LTE-M1_10MHz_Nss1,16QAM_1TX | Pass | 716.1M | 736M | 30k | 100k | RMS | 716.15M | -23.75 | -13.00 | -10.75 | MBW 100k | - |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 716.1M | 726M | 30k | 100k | RMS | 716.15M | -15.09 | -13.00 | -2.09 | MBW 100k | - |
| LTE-M1_5MHz_Nss1,16QAM_1TX | Pass | 716.1M | 726M | 30k | 100k | RMS | 716.15M | -18.77 | -13.00 | -5.77 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

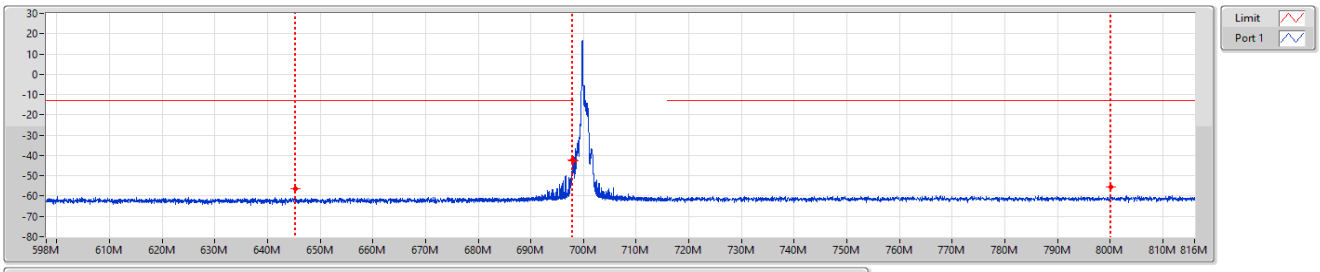
**704MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 678M | 30k | 100k | RMS | 666.45M | -56.42 | -13.00 | -43.42 | MBW 100k | - |
| 678M | 697.9M | 30k | 100k | RMS | 697.75M | -36.48 | -13.00 | -23.48 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.99M | -40.33 | -13.00 | -27.33 | - | - |
| 716M | 816M | 30k | 100k | RMS | 812.15M | -55.41 | -13.00 | -42.41 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

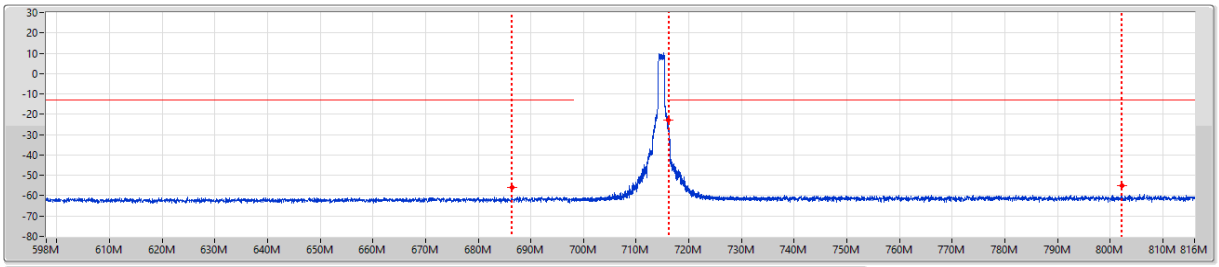
**704MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 678M | 30k | 100k | RMS | 645.25M | -56.22 | -13.00 | -43.22 | MBW 100k | - |
| 678M | 697.9M | 30k | 100k | RMS | 697.85M | -42.12 | -13.00 | -29.12 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 698M | -42.43 | -13.00 | -29.43 | - | - |
| 716M | 816M | 30k | 100k | RMS | 800.05M | -55.43 | -13.00 | -42.43 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

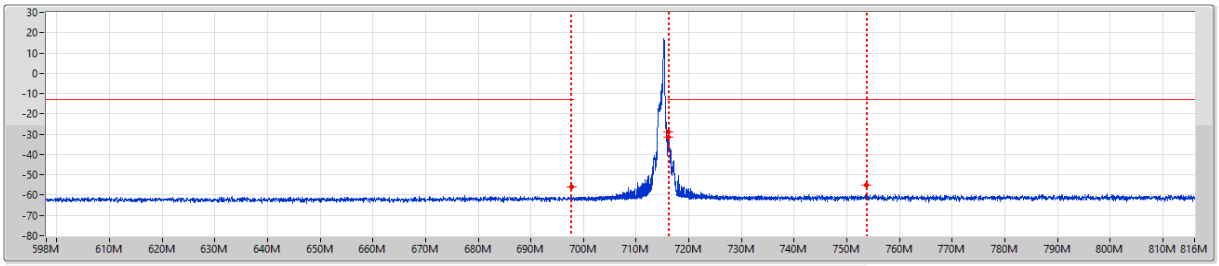
**711MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 686.35M | -56.13 | -13.00 | -43.13 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.01M | -22.93 | -13.00 | -9.93 | - | - |
| 716.1M | 736M | 30k | 100k | RMS | 716.15M | -22.65 | -13.00 | -9.65 | MBW 100k | - |
| 736M | 816M | 30k | 100k | RMS | 802.15M | -55.20 | -13.00 | -42.20 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

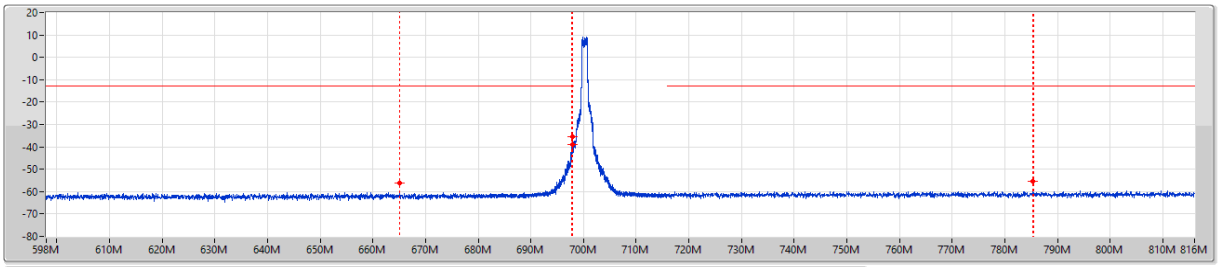
**711MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 697.65M | -55.96 | -13.00 | -42.96 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.07M | -31.36 | -13.00 | -18.36 | - | - |
| 716.1M | 736M | 30k | 100k | RMS | 716.15M | -29.06 | -13.00 | -16.06 | MBW 100k | - |
| 736M | 816M | 30k | 100k | RMS | 753.75M | -55.03 | -13.00 | -42.03 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

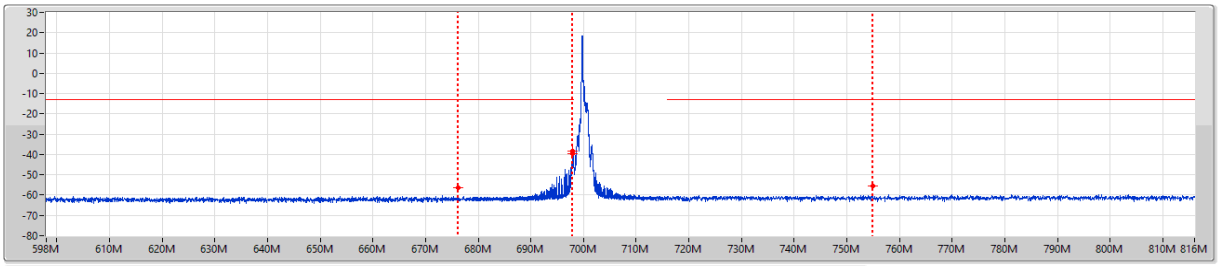
**704MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 678M | 30k | 100k | RMS | 665.05M | -56.17 | -13.00 | -43.17 | MBW 100k | - |
| 678M | 697.9M | 30k | 100k | RMS | 697.85M | -35.64 | -13.00 | -22.64 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.9M | -39.01 | -13.00 | -26.01 | - | - |
| 716M | 816M | 30k | 100k | RMS | 785.35M | -55.20 | -13.00 | -42.20 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

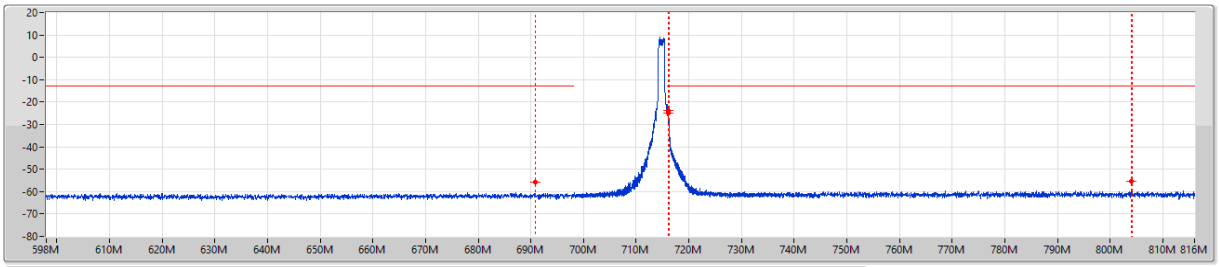
**704MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 678M | 30k | 100k | RMS | 676.15M | -56.32 | -13.00 | -43.32 | MBW 100k | - |
| 678M | 697.9M | 30k | 100k | RMS | 697.85M | -39.44 | -13.00 | -26.44 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.99M | -38.34 | -13.00 | -25.34 | - | - |
| 716M | 816M | 30k | 100k | RMS | 754.85M | -55.51 | -13.00 | -42.51 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

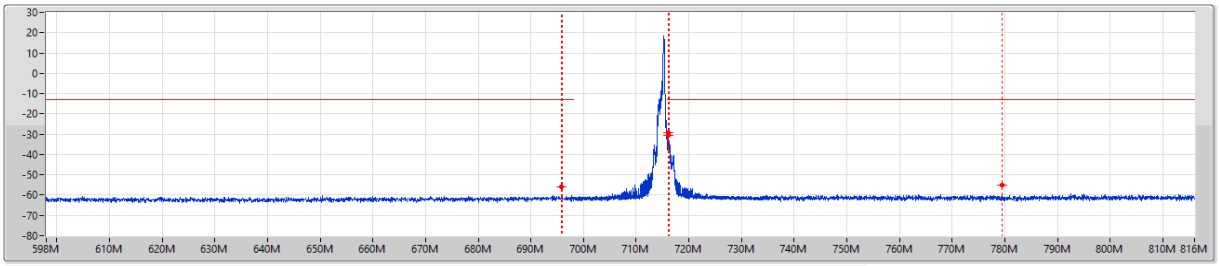
**711MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 690.85M | -55.91 | -13.00 | -42.91 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.06M | -24.78 | -13.00 | -11.78 | - | - |
| 716.1M | 736M | 30k | 100k | RMS | 716.15M | -23.75 | -13.00 | -10.75 | MBW 100k | - |
| 736M | 816M | 30k | 100k | RMS | 804.05M | -55.25 | -13.00 | -42.25 | MBW 100k | - |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

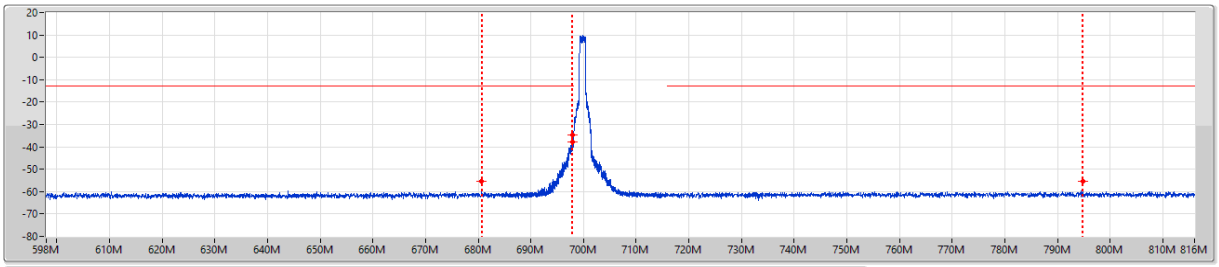
**711MHz_16QAM_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 695.85M | -55.99 | -13.00 | -42.99 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.03M | -30.43 | -13.00 | -17.43 | - | - |
| 716.1M | 736M | 30k | 100k | RMS | 716.15M | -29.25 | -13.00 | -16.25 | MBW 100k | - |
| 736M | 816M | 30k | 100k | RMS | 779.45M | -55.25 | -13.00 | -42.25 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

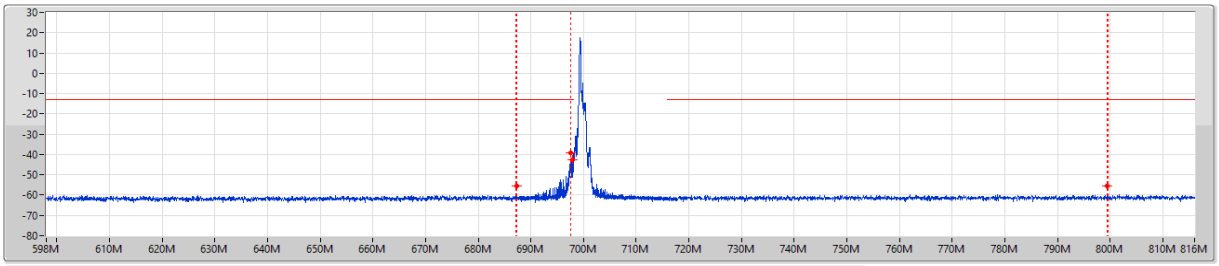
**701.5MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 688M | 30k | 100k | RMS | 680.65M | -55.57 | -13.00 | -42.57 | MBW 100k | - |
| 688M | 697.9M | 30k | 100k | RMS | 697.85M | -34.59 | -13.00 | -21.59 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.99M | -37.92 | -13.00 | -24.92 | - | - |
| 716M | 816M | 30k | 100k | RMS | 794.75M | -55.29 | -13.00 | -42.29 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

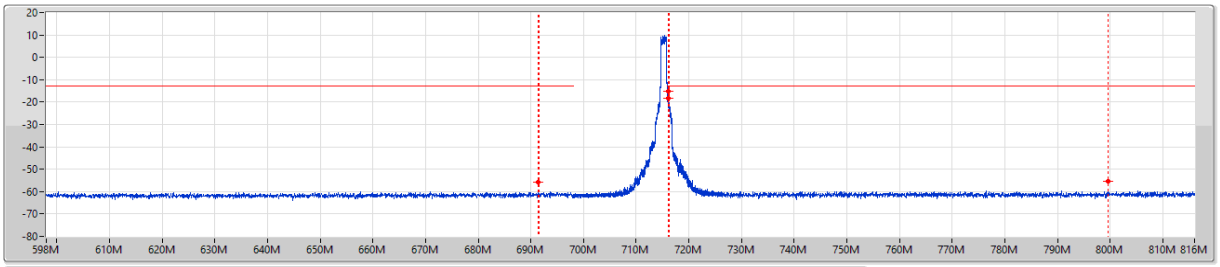
**701.5MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 688M | 30k | 100k | RMS | 687.25M | -55.38 | -13.00 | -42.38 | MBW 100k | - |
| 688M | 697.9M | 30k | 100k | RMS | 697.55M | -39.02 | -13.00 | -26.02 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.91M | -42.69 | -13.00 | -29.69 | - | - |
| 716M | 816M | 30k | 100k | RMS | 799.45M | -55.37 | -13.00 | -42.37 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

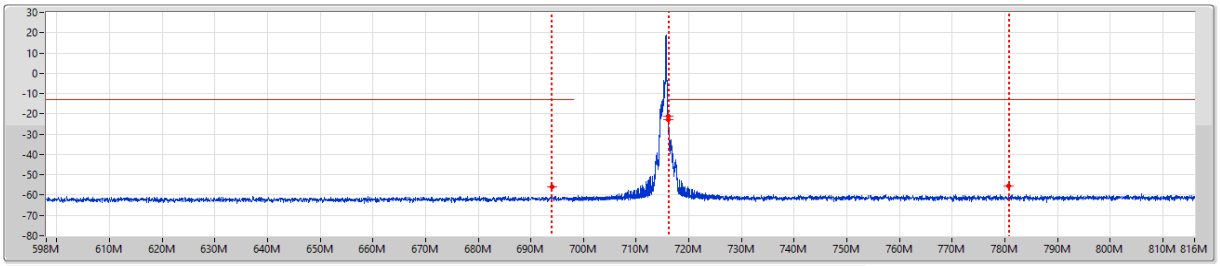
**713.5MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 691.45M | -55.65 | -13.00 | -42.65 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.06M | -18.23 | -13.00 | -5.23 | - | - |
| 716.1M | 726M | 30k | 100k | RMS | 716.15M | -15.09 | -13.00 | -2.09 | MBW 100k | - |
| 726M | 816M | 30k | 100k | RMS | 799.55M | -55.31 | -13.00 | -42.31 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

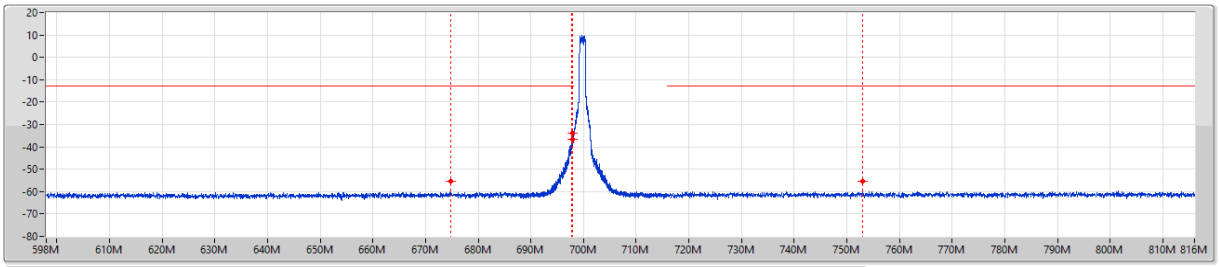
**713.5MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 693.95M | -56.01 | -13.00 | -43.01 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.01M | -21.20 | -13.00 | -8.20 | - | - |
| 716.1M | 726M | 30k | 100k | RMS | 716.15M | -22.83 | -13.00 | -9.83 | MBW 100k | - |
| 726M | 816M | 30k | 100k | RMS | 780.75M | -55.33 | -13.00 | -42.33 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

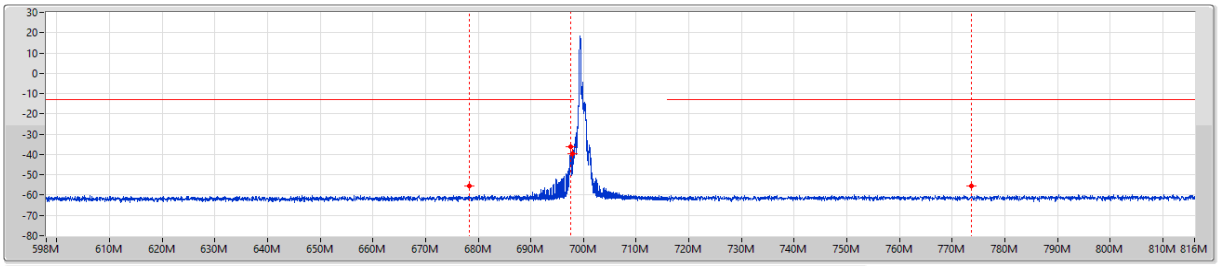
**701.5MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 688M | 30k | 100k | RMS | 674.75M | -55.41 | -13.00 | -42.41 | MBW 100k | - |
| 688M | 697.9M | 30k | 100k | RMS | 697.85M | -33.84 | -13.00 | -20.84 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.93M | -36.50 | -13.00 | -23.50 | - | - |
| 716M | 816M | 30k | 100k | RMS | 752.95M | -55.44 | -13.00 | -42.44 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

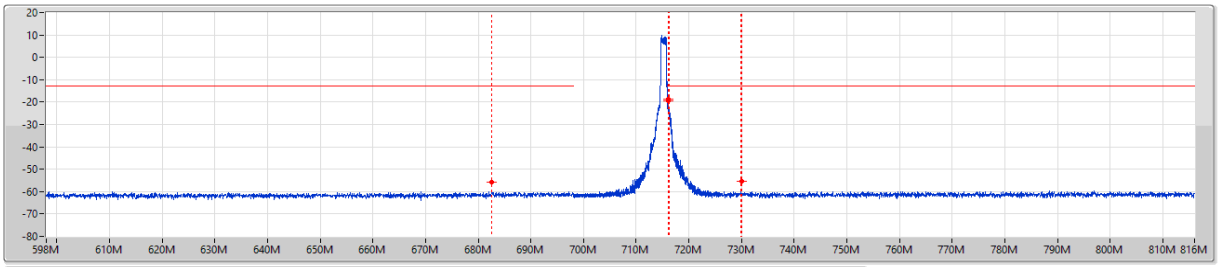
**701.5MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 688M | 30k | 100k | RMS | 678.35M | -55.57 | -13.00 | -42.57 | MBW 100k | - |
| 688M | 697.9M | 30k | 100k | RMS | 697.55M | -36.08 | -13.00 | -23.08 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.98M | -39.73 | -13.00 | -26.73 | - | - |
| 716M | 816M | 30k | 100k | RMS | 773.65M | -55.33 | -13.00 | -42.33 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

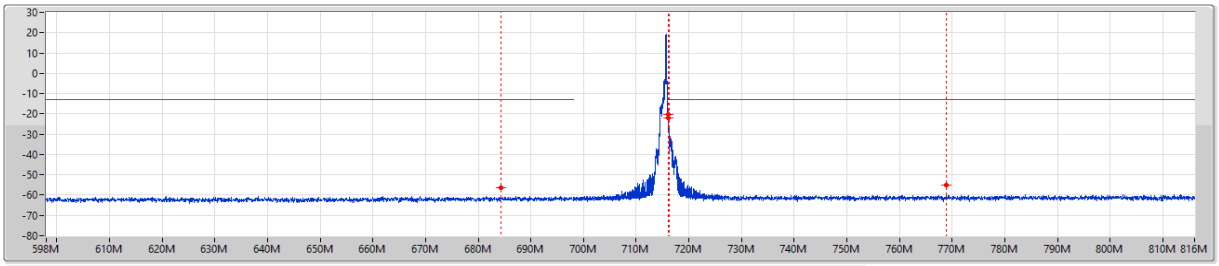
**713.5MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 682.55M | -55.59 | -13.00 | -42.59 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.02M | -19.60 | -13.00 | -6.60 | - | - |
| 716.1M | 726M | 30k | 100k | RMS | 716.15M | -18.77 | -13.00 | -5.77 | MBW 100k | - |
| 726M | 816M | 30k | 100k | RMS | 729.95M | -55.35 | -13.00 | -42.35 | MBW 100k | - |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

**713.5MHz_16QAM_RB 1,#RB H,NB H**



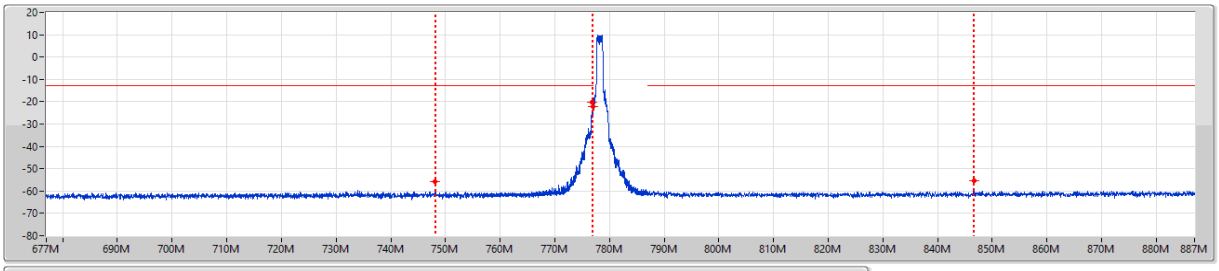

| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 684.35M | -56.17 | -13.00 | -43.17 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.01M | -20.45 | -13.00 | -7.45 | - | - |
| 716.1M | 726M | 30k | 100k | RMS | 716.15M | -22.02 | -13.00 | -9.02 | MBW 100k | - |
| 726M | 816M | 30k | 100k | RMS | 768.85M | -55.10 | -13.00 | -42.10 | MBW 100k | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 787.1M | 807M | 30k | 100k | RMS | 787.15M | -19.29 | -13.00 | -6.29 | MBW 100k | - |
| LTE-M1_10MHz_Nss1,16QAM_1TX | Pass | 787.1M | 807M | 30k | 100k | RMS | 787.15M | -18.99 | -13.00 | -5.99 | MBW 100k | - |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 787.1M | 797M | 30k | 100k | RMS | 787.15M | -13.19 | -13.00 | -0.19 | MBW 100k | - |
| LTE-M1_5MHz_Nss1,16QAM_1TX | Pass | 787.1M | 797M | 30k | 100k | RMS | 787.15M | -14.66 | -13.00 | -1.66 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

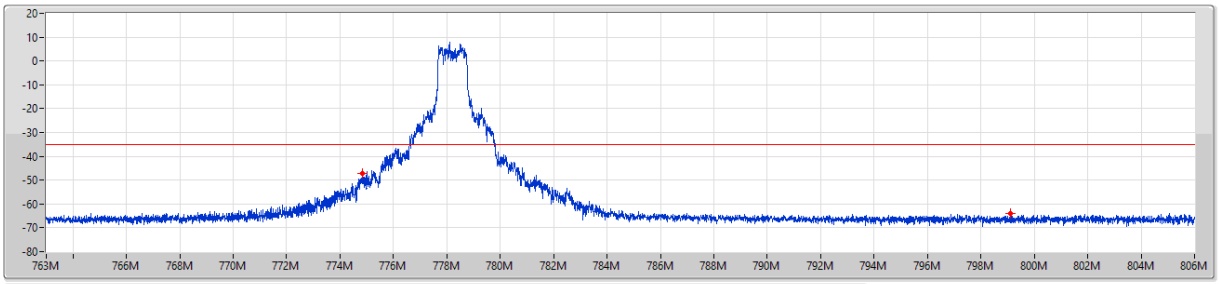
**782MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 757M | 30k | 100k | RMS | 748.15M | -55.88 | -13.00 | -42.88 | MBW 100k | - |
| 757M | 776.9M | 30k | 100k | RMS | 776.85M | -20.37 | -13.00 | -7.37 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.98M | -22.33 | -13.00 | -9.33 | - | - |
| 787M | 887M | 30k | 100k | RMS | 846.65M | -55.25 | -13.00 | -42.25 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

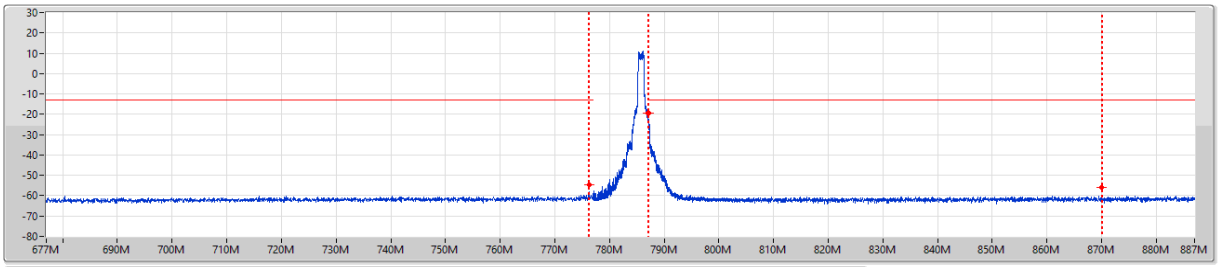
**782MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.85M | -47.05 | -35.00 | -12.05 | - | - |
| 793M | 806M | 10k | 30k | RMS | 799.12M | -64.02 | -35.00 | -29.02 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

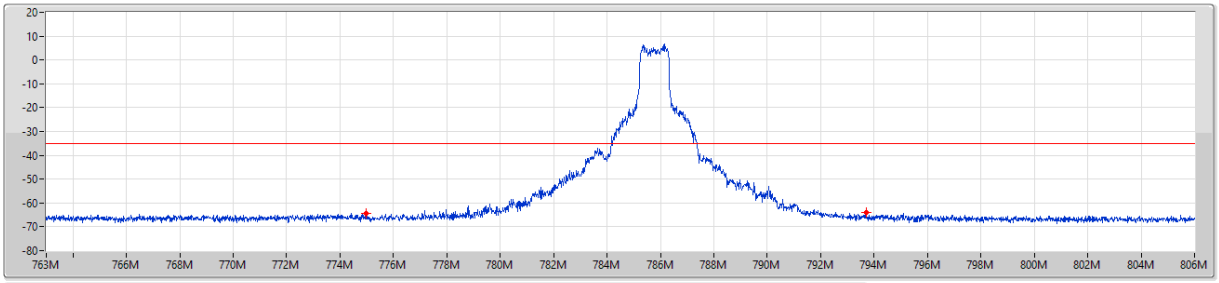
**782MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.25M | -54.68 | -13.00 | -41.68 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.01M | -19.31 | -13.00 | -6.31 | - | - |
| 787.1M | 807M | 30k | 100k | RMS | 787.15M | -19.29 | -13.00 | -6.29 | MBW 100k | - |
| 807M | 887M | 30k | 100k | RMS | 870.05M | -55.83 | -13.00 | -42.83 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

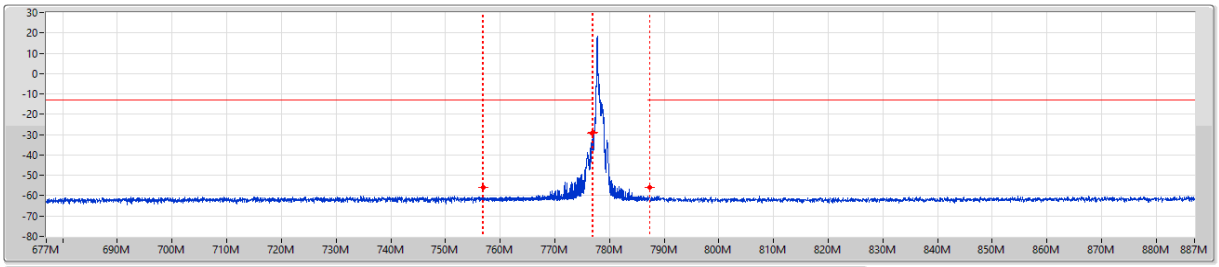
**782MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.99M | -64.40 | -35.00 | -29.40 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.7M | -63.95 | -35.00 | -28.95 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

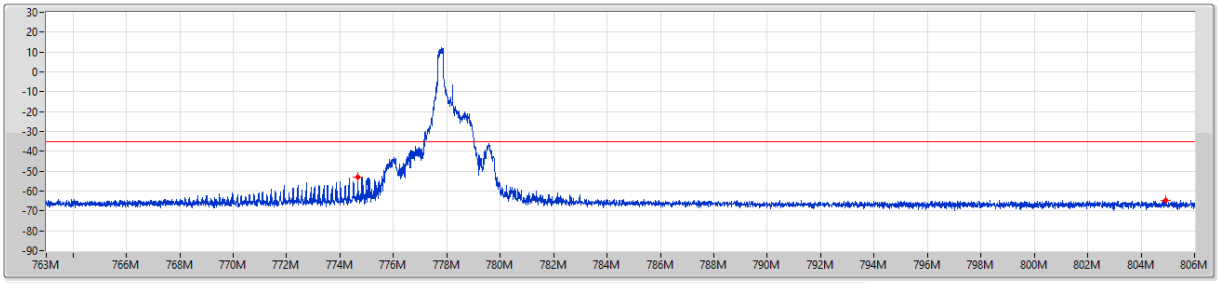
**782MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 757M | 30k | 100k | RMS | 756.85M | -55.95 | -13.00 | -42.95 | MBW 100k | - |
| 757M | 776.9M | 30k | 100k | RMS | 776.85M | -29.19 | -13.00 | -16.19 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -28.99 | -13.00 | -15.99 | - | - |
| 787M | 887M | 30k | 100k | RMS | 787.35M | -55.78 | -13.00 | -42.78 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

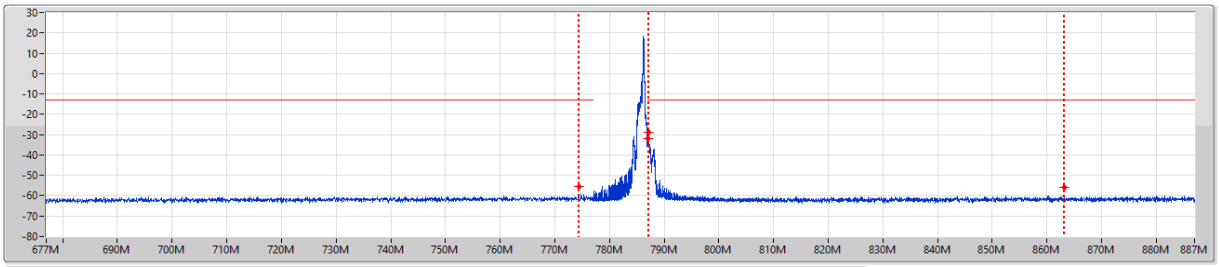
**782MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.66M | -53.05 | -35.00 | -18.05 | - | - |
| 793M | 806M | 10k | 30k | RMS | 804.93M | -64.75 | -35.00 | -29.75 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

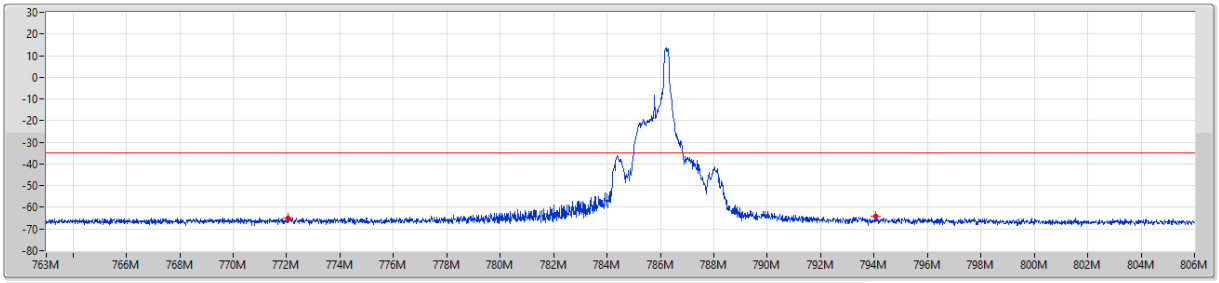
**782MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 774.35M | -55.30 | -13.00 | -42.30 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.08M | -32.08 | -13.00 | -19.08 | - | - |
| 787.1M | 807M | 30k | 100k | RMS | 787.15M | -28.96 | -13.00 | -15.96 | MBW 100k | - |
| 807M | 887M | 30k | 100k | RMS | 863.15M | -55.90 | -13.00 | -42.90 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

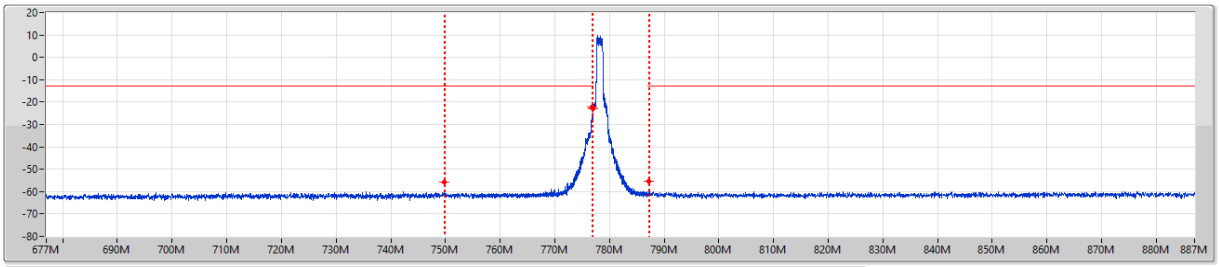
**782MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 772.06M | -64.76 | -35.00 | -29.76 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.05M | -63.93 | -35.00 | -28.93 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

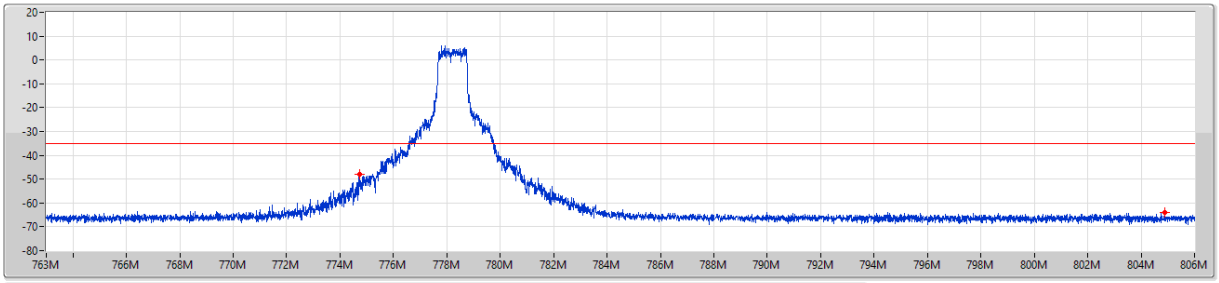
**782MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 757M | 30k | 100k | RMS | 749.85M | -55.79 | -13.00 | -42.79 | MBW 100k | - |
| 757M | 776.9M | 30k | 100k | RMS | 776.85M | -22.18 | -13.00 | -9.18 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.91M | -22.97 | -13.00 | -9.97 | - | - |
| 787M | 887M | 30k | 100k | RMS | 787.25M | -55.38 | -13.00 | -42.38 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

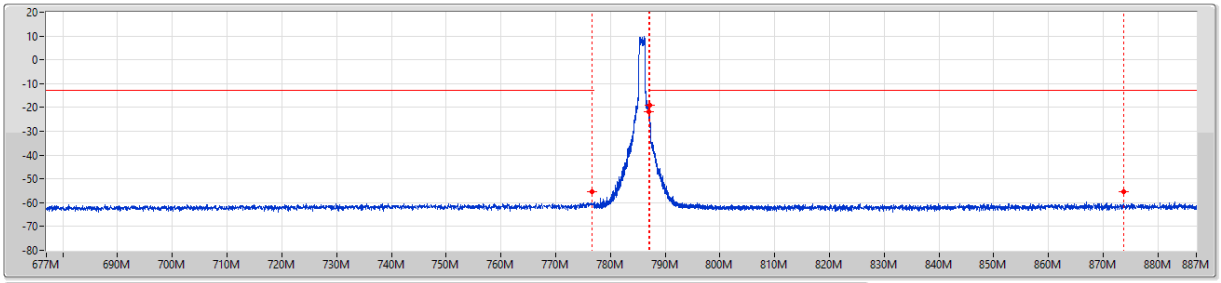
**782MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.72M | -47.82 | -35.00 | -12.82 | - | - |
| 793M | 806M | 10k | 30k | RMS | 804.89M | -64.04 | -35.00 | -29.04 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

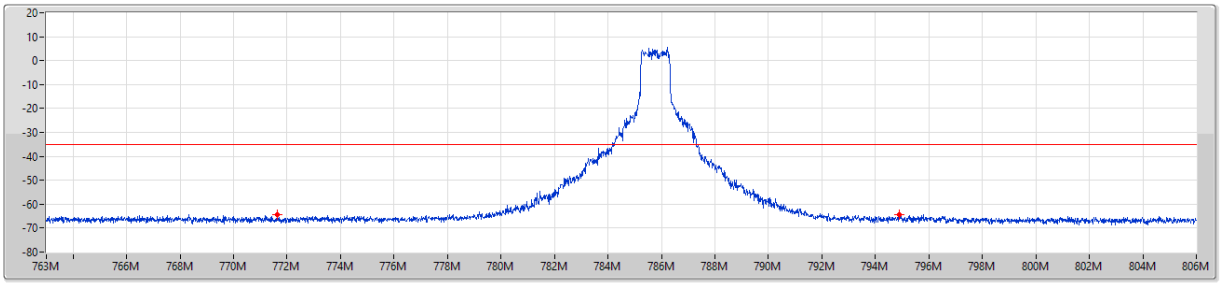
**782MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.65M | -55.54 | -13.00 | -42.54 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.01M | -21.61 | -13.00 | -8.61 | - | - |
| 787.1M | 807M | 30k | 100k | RMS | 787.15M | -18.99 | -13.00 | -5.99 | MBW 100k | - |
| 807M | 887M | 30k | 100k | RMS | 873.75M | -55.57 | -13.00 | -42.57 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

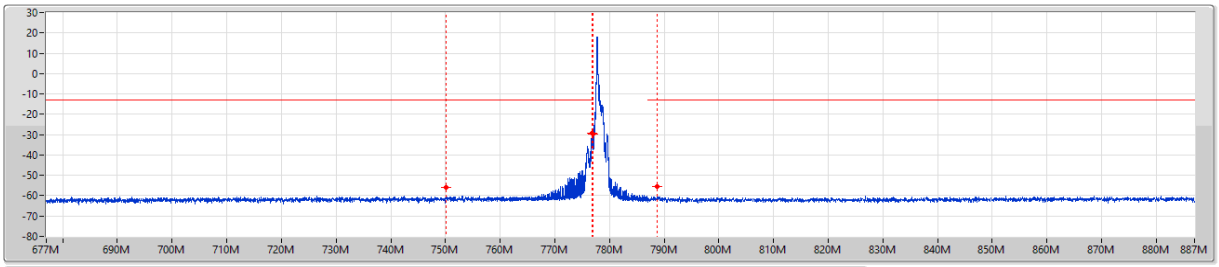
**782MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 771.64M | -64.48 | -35.00 | -29.48 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.89M | -64.38 | -35.00 | -29.38 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

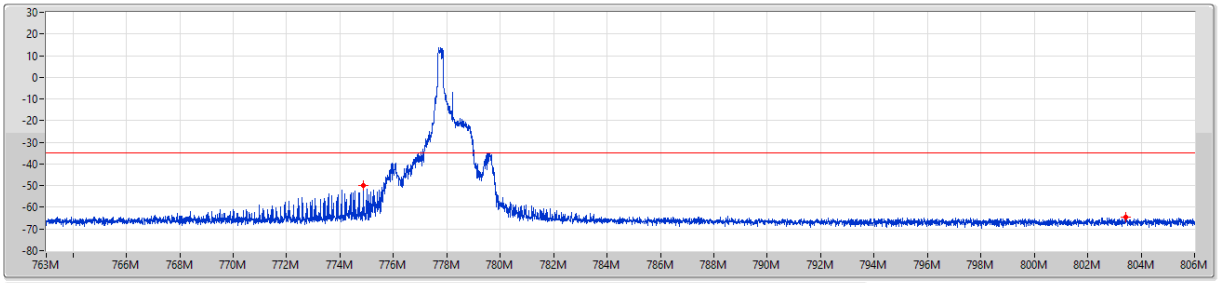
**782MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 757M | 30k | 100k | RMS | 750.15M | -56.00 | -13.00 | -43.00 | MBW 100k | - |
| 757M | 776.9M | 30k | 100k | RMS | 776.85M | -29.14 | -13.00 | -16.14 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.99M | -29.69 | -13.00 | -16.69 | - | - |
| 787M | 887M | 30k | 100k | RMS | 788.75M | -55.58 | -13.00 | -42.58 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

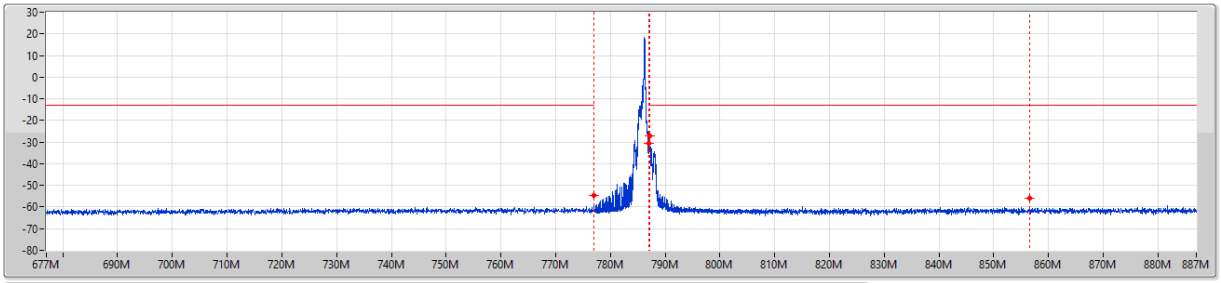
**782MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.88M | -50.05 | -35.00 | -15.05 | - | - |
| 793M | 806M | 10k | 30k | RMS | 803.42M | -64.61 | -35.00 | -29.61 | - | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

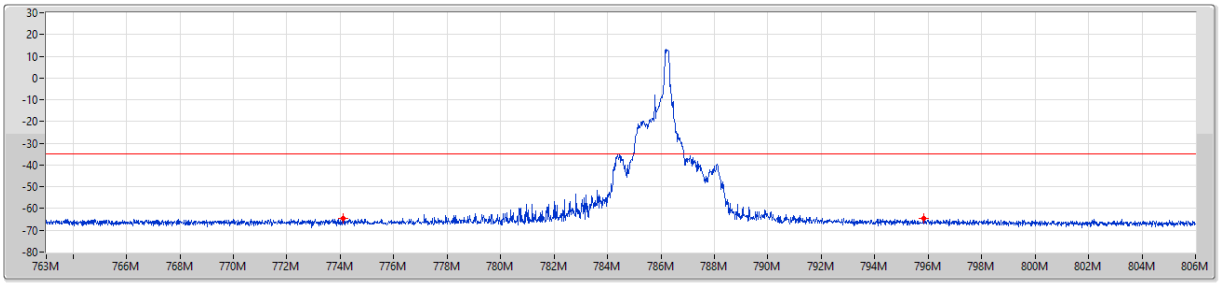
**782MHz_16QAM_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.95M | -54.76 | -13.00 | -41.76 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.09M | -30.72 | -13.00 | -17.72 | - | - |
| 787.1M | 807M | 30k | 100k | RMS | 787.15M | -27.09 | -13.00 | -14.09 | MBW 100k | - |
| 807M | 887M | 30k | 100k | RMS | 856.55M | -55.78 | -13.00 | -42.78 | MBW 100k | - |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

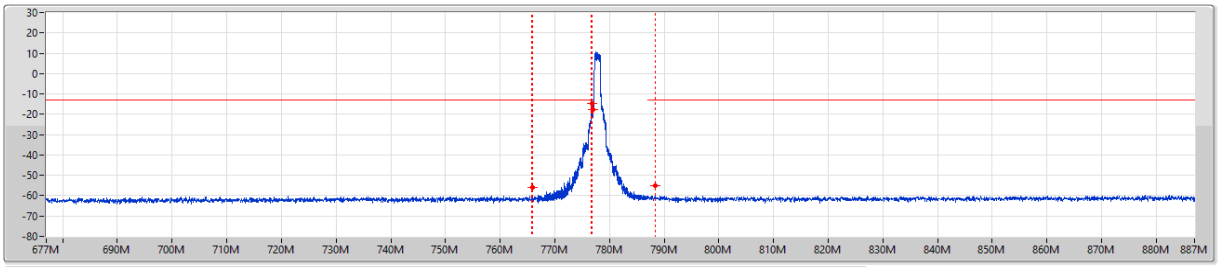
**782MHz_16QAM_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.12M | -64.73 | -35.00 | -29.73 | - | - |
| 793M | 806M | 10k | 30k | RMS | 795.85M | -64.67 | -35.00 | -29.67 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

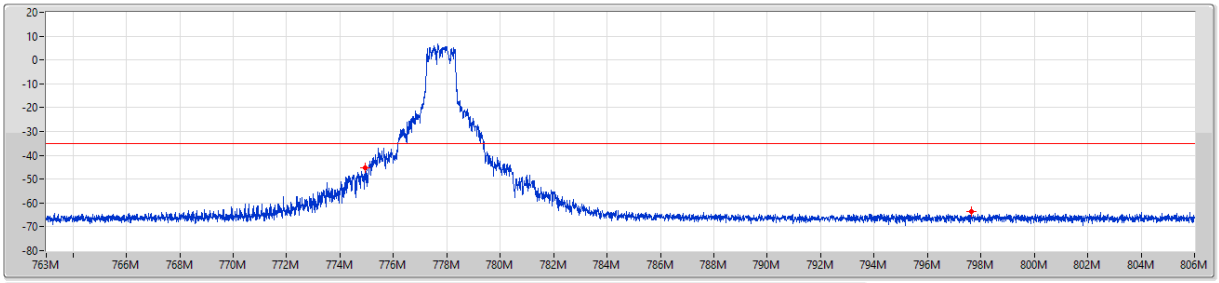
**779.5MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 767M | 30k | 100k | RMS | 765.85M | -55.87 | -13.00 | -42.87 | MBW 100k | - |
| 767M | 776.9M | 30k | 100k | RMS | 776.75M | -14.70 | -13.00 | -1.70 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.99M | -17.55 | -13.00 | -4.55 | - | - |
| 787M | 887M | 30k | 100k | RMS | 788.35M | -55.15 | -13.00 | -42.15 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

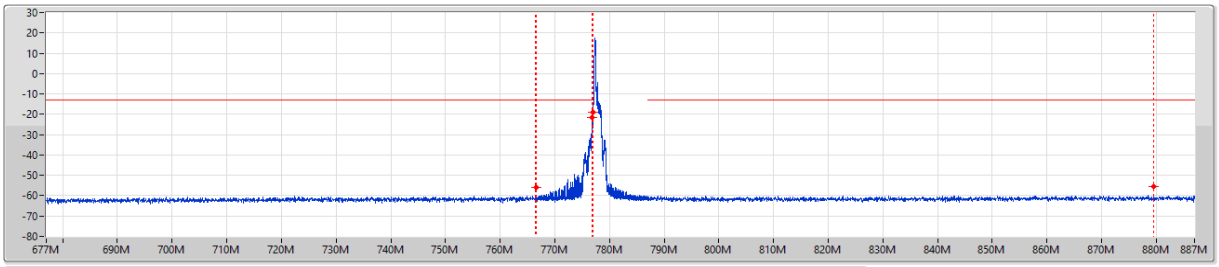
**779.5MHz_QPSK_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.94M | -45.14 | -35.00 | -10.14 | - | - |
| 793M | 806M | 10k | 30k | RMS | 797.63M | -63.74 | -35.00 | -28.74 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

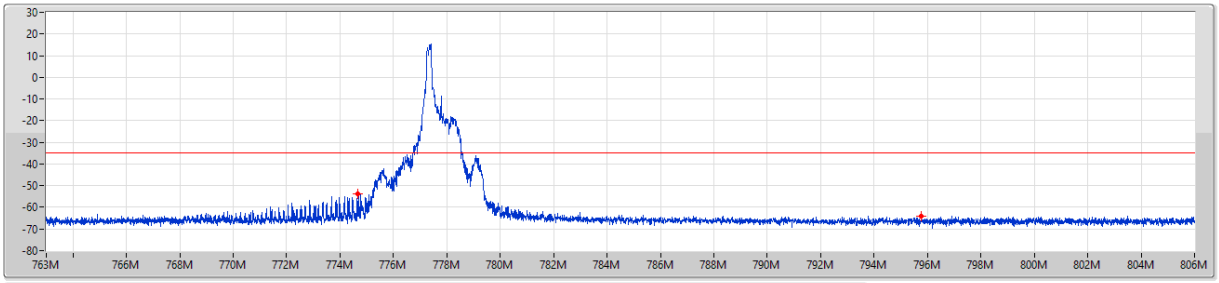
**779.5MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 767M | 30k | 100k | RMS | 766.55M | -55.74 | -13.00 | -42.74 | MBW 100k | - |
| 767M | 776.9M | 30k | 100k | RMS | 776.85M | -21.71 | -13.00 | -8.71 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -18.99 | -13.00 | -5.99 | - | - |
| 787M | 887M | 30k | 100k | RMS | 879.55M | -55.48 | -13.00 | -42.48 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

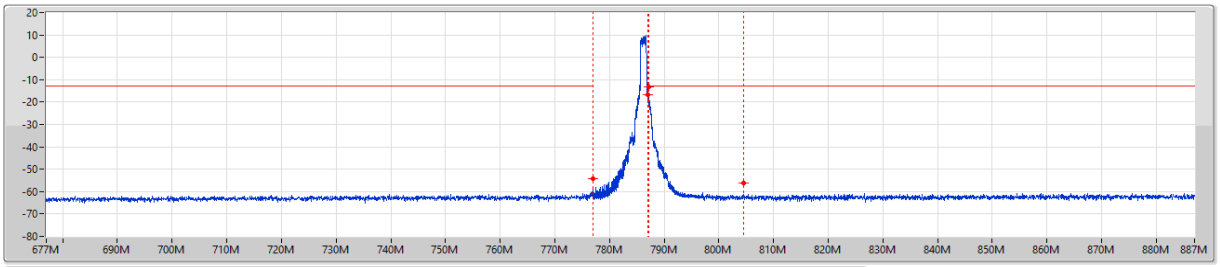
**779.5MHz_QPSK_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.68M | -53.70 | -35.00 | -18.70 | - | - |
| 793M | 806M | 10k | 30k | RMS | 795.76M | -64.24 | -35.00 | -29.24 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

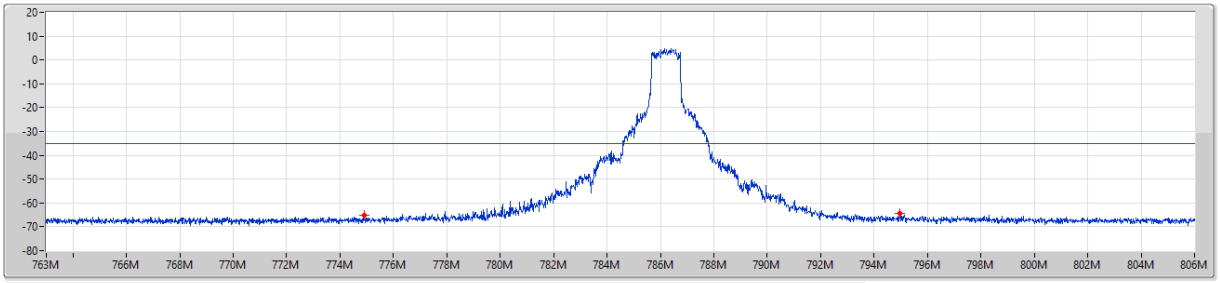
**784.5MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.95M | -54.26 | -13.00 | -41.26 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.02M | -16.62 | -13.00 | -3.62 | - | - |
| 787.1M | 797M | 30k | 100k | RMS | 787.15M | -13.19 | -13.00 | -0.19 | MBW 100k | - |
| 797M | 887M | 30k | 100k | RMS | 804.55M | -56.34 | -13.00 | -43.34 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

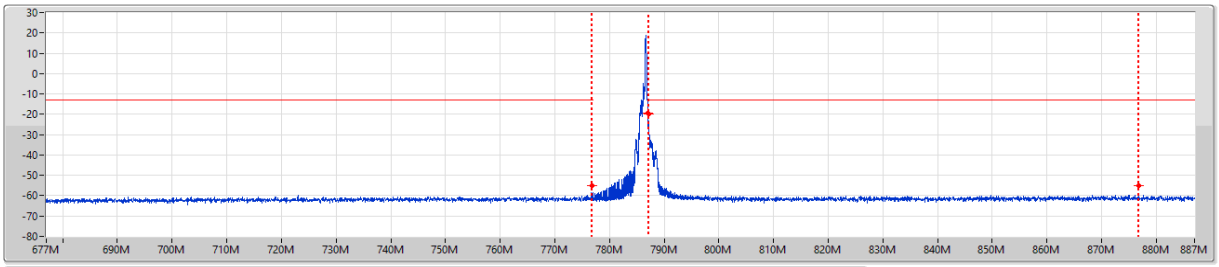
**784.5MHz_QPSK_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.9M | -65.12 | -35.00 | -30.12 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.98M | -64.35 | -35.00 | -29.35 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

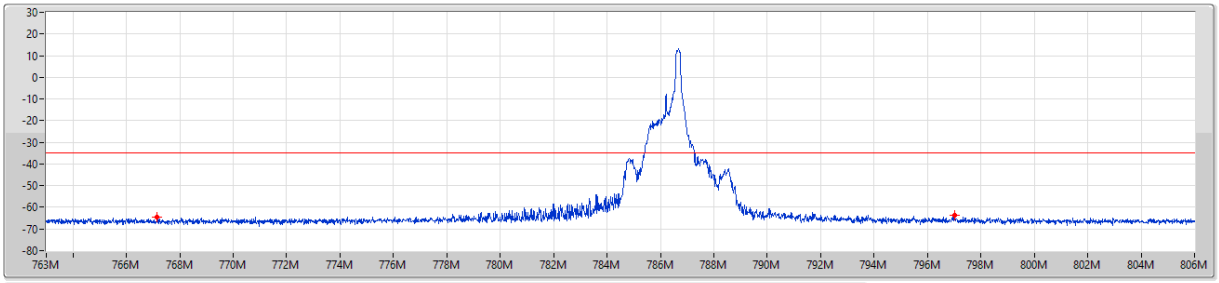
**784.5MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.75M | -54.93 | -13.00 | -41.93 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.03M | -19.22 | -13.00 | -6.22 | - | - |
| 787.1M | 797M | 30k | 100k | RMS | 787.15M | -19.90 | -13.00 | -6.90 | MBW 100k | - |
| 797M | 887M | 30k | 100k | RMS | 876.75M | -55.29 | -13.00 | -42.29 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

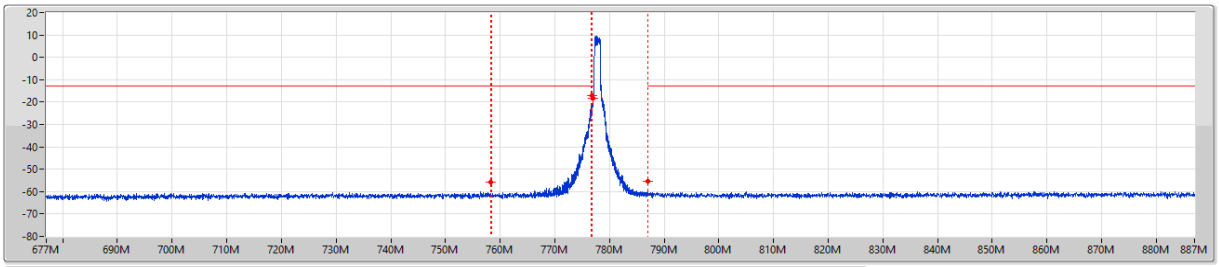
**784.5MHz_QPSK_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 767.14M | -64.54 | -35.00 | -29.54 | - | - |
| 793M | 806M | 10k | 30k | RMS | 797M | -63.67 | -35.00 | -28.67 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

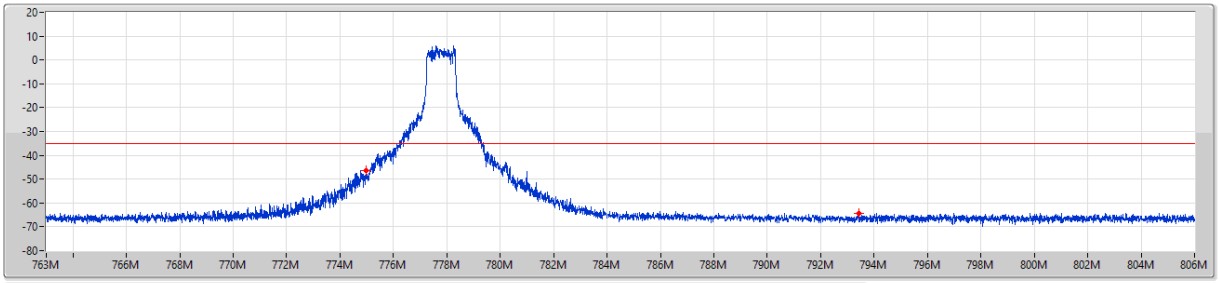
**779.5MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 767M | 30k | 100k | RMS | 758.35M | -55.92 | -13.00 | -42.92 | MBW 100k | - |
| 767M | 776.9M | 30k | 100k | RMS | 776.75M | -17.27 | -13.00 | -4.27 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.93M | -18.35 | -13.00 | -5.35 | - | - |
| 787M | 887M | 30k | 100k | RMS | 787.05M | -55.50 | -13.00 | -42.50 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

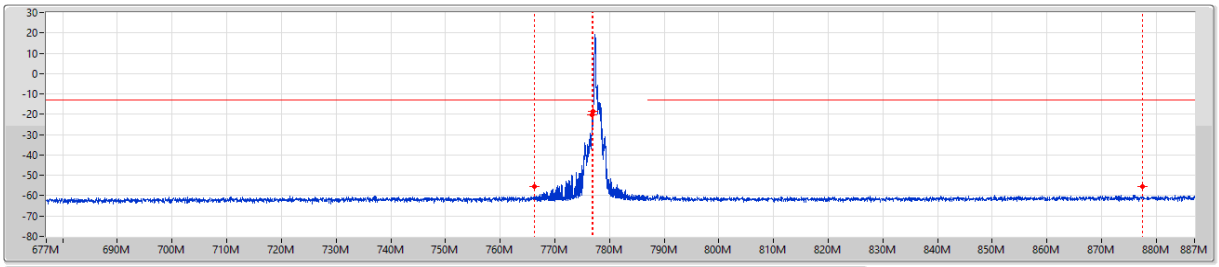
**779.5MHz_16QAM_RB 6,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.99M | -46.29 | -35.00 | -11.29 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.43M | -64.30 | -35.00 | -29.30 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

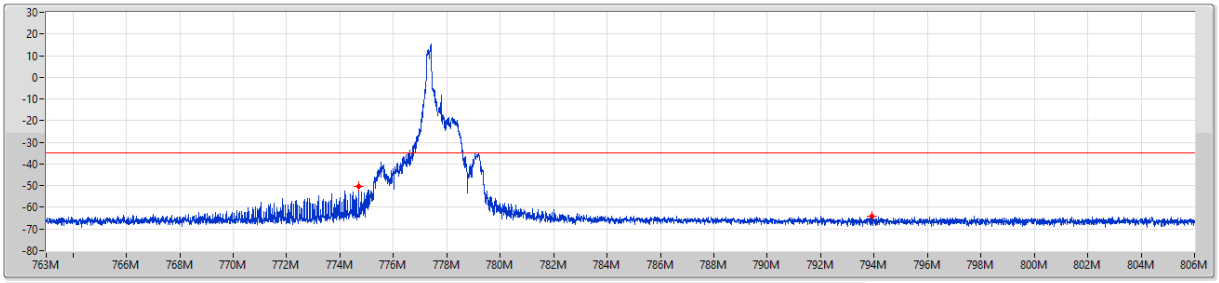
**779.5MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 767M | 30k | 100k | RMS | 766.25M | -55.72 | -13.00 | -42.72 | MBW 100k | - |
| 767M | 776.9M | 30k | 100k | RMS | 776.85M | -20.16 | -13.00 | -7.16 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -18.41 | -13.00 | -5.41 | - | - |
| 787M | 887M | 30k | 100k | RMS | 877.45M | -55.40 | -13.00 | -42.40 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

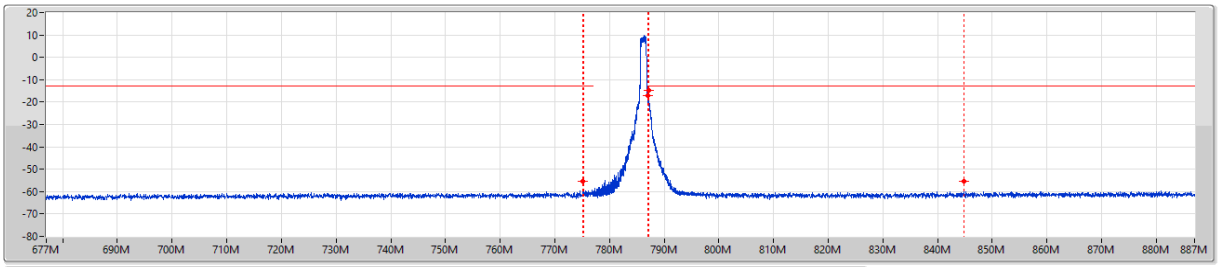
**779.5MHz_16QAM_RB 1,#RB L,NB L**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.69M | -50.52 | -35.00 | -15.52 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.92M | -64.22 | -35.00 | -29.22 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

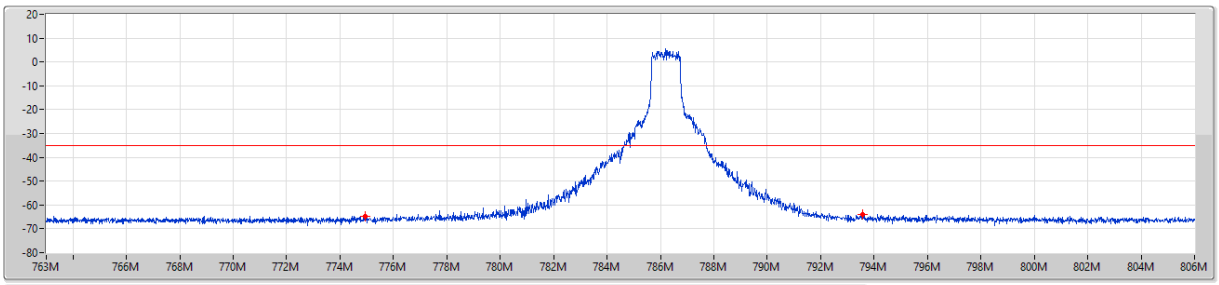
**784.5MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 775.15M | -55.31 | -13.00 | -42.31 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.07M | -17.00 | -13.00 | -4.00 | - | - |
| 787.1M | 797M | 30k | 100k | RMS | 787.15M | -14.66 | -13.00 | -1.66 | MBW 100k | - |
| 797M | 887M | 30k | 100k | RMS | 844.85M | -55.39 | -13.00 | -42.39 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

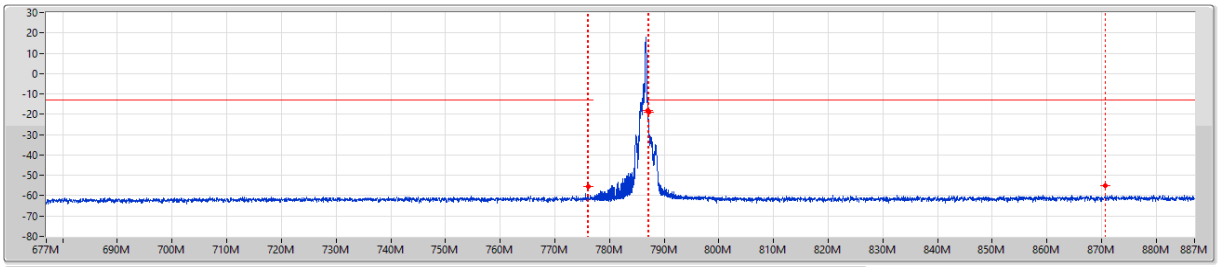
**784.5MHz_16QAM_RB 6,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.93M | -64.63 | -35.00 | -29.63 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.56M | -64.15 | -35.00 | -29.15 | - | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

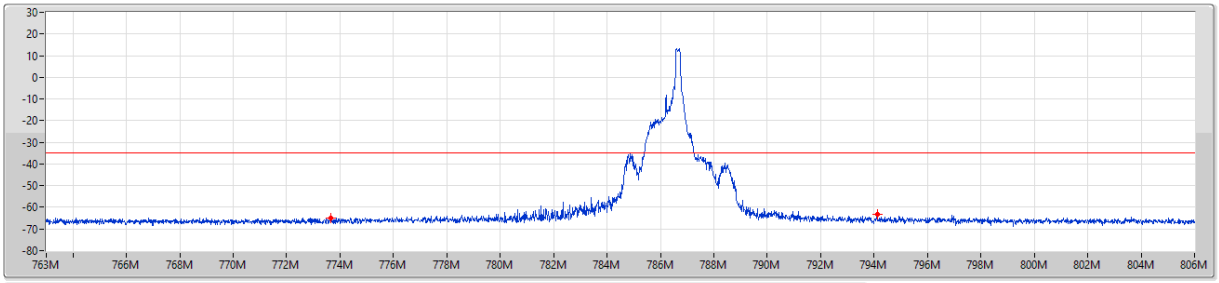
**784.5MHz_16QAM_RB 1,#RB H,NB H**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.05M | -55.70 | -13.00 | -42.70 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787.01M | -18.27 | -13.00 | -5.27 | - | - |
| 787.1M | 797M | 30k | 100k | RMS | 787.15M | -18.97 | -13.00 | -5.97 | MBW 100k | - |
| 797M | 887M | 30k | 100k | RMS | 870.65M | -54.90 | -13.00 | -41.90 | MBW 100k | - |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **CSE-TX-Sum**

**784.5MHz_16QAM_RB 1,#RB H,NB H**



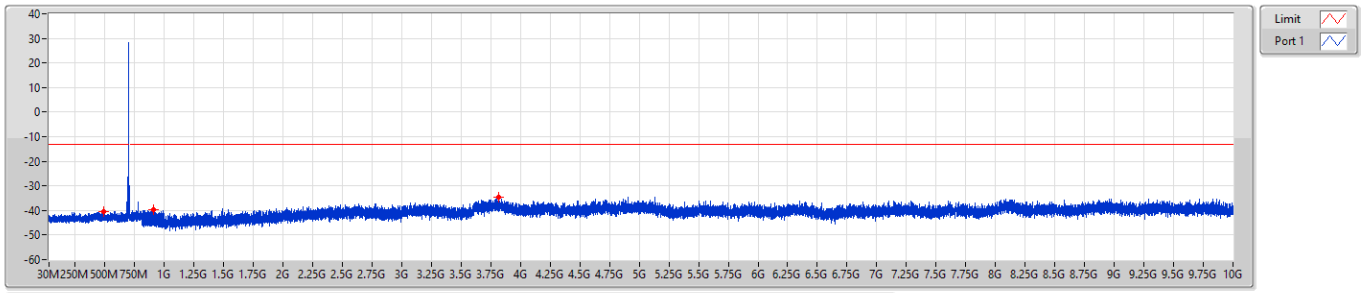

| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 773.67M | -64.76 | -35.00 | -29.76 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.12M | -63.42 | -35.00 | -28.42 | - | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 3.62153G | -34.23 | -13.00 | -21.23 | - | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

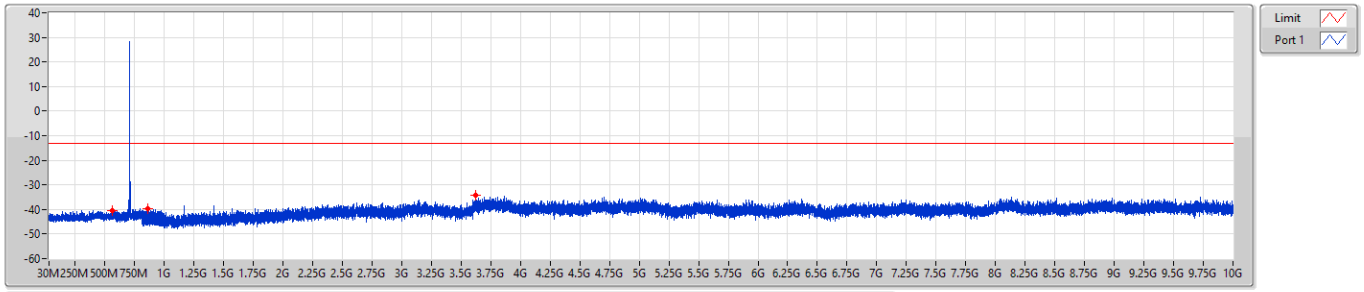
**699.2MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 494.06M | -40.46 | -13.00 | -27.46 | - | - |
| 816M | 1G | 1M | 3M | Peak | 912.71M | -39.75 | -13.00 | -26.75 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.81616G | -34.67 | -13.00 | -21.67 | - | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

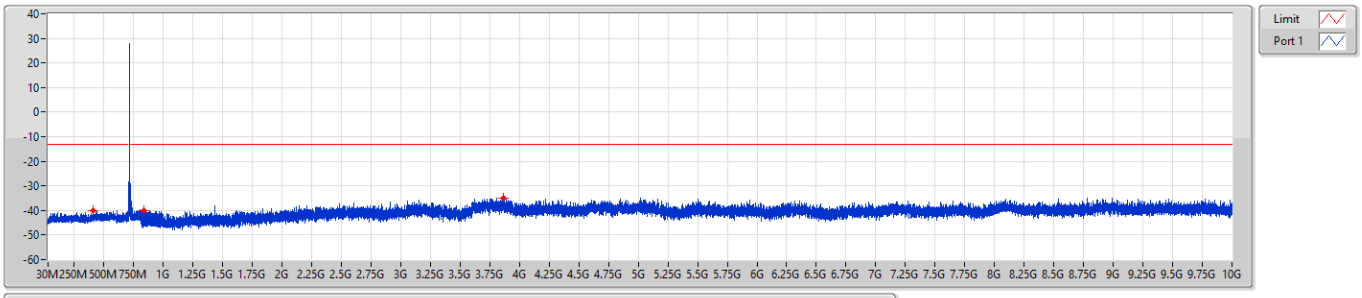
**707.5MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 564.49M | -40.52 | -13.00 | -27.52 | - | - |
| 816M | 1G | 1M | 3M | Peak | 859.65M | -39.82 | -13.00 | -26.82 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.62153G | -34.23 | -13.00 | -21.23 | - | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**715.8MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 598M | 1M | 3M | Peak | 413.12M | -40.17 | -13.00 | -27.17 | - | - |
| 816M | 1G | 1M | 3M | Peak | 839.6M | -39.94 | -13.00 | -26.94 | - | - |
| 1G | 10G | 1M | 3M | Peak | 3.86509G | -34.89 | -13.00 | -21.89 | - | - |

**Summary**

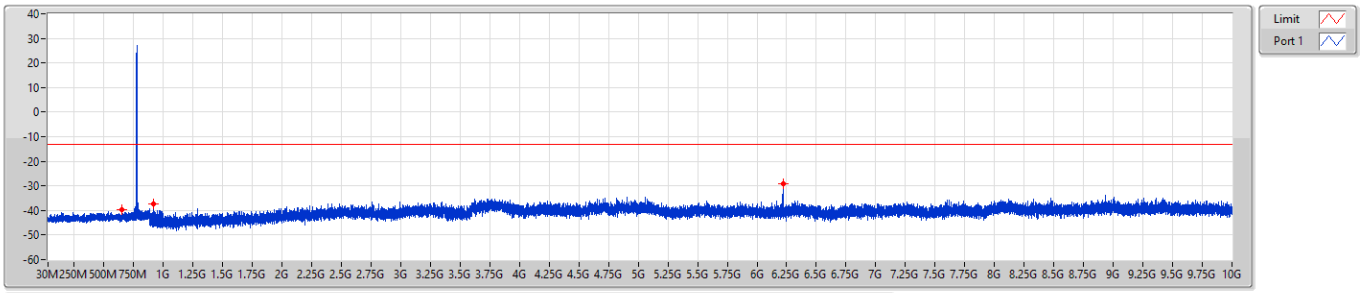
| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 1G | 10G | 1M | 3M | Peak | 6.29453G | -28.37 | -13.00 | -15.37 | - | - |

**Result**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13_NB-IoT_15kHz_Nss1_1TX | - | - | - | - | - | - | - | - | - | - | - | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 30M | 677M | 1M | 3M | Peak | 651.12M | -39.83 | -13.00 | -26.83 | - | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 887M | 1G | 1M | 3M | Peak | 917.46M | -37.19 | -13.00 | -24.19 | - | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 1G | 10G | 1M | 3M | Peak | 6.21859G | -29.01 | -13.00 | -16.01 | - | - |
| 782.0MHz_QPSK_Tone 12@0 | Pass | 30M | 677M | 1M | 3M | Peak | 477.4M | -40.13 | -13.00 | -27.13 | - | - |
| 782.0MHz_QPSK_Tone 12@0 | Pass | 887M | 1G | 1M | 3M | Peak | 937.7M | -40.13 | -13.00 | -27.13 | - | - |
| 782.0MHz_QPSK_Tone 12@0 | Pass | 1G | 10G | 1M | 3M | Peak | 6.25656G | -32.08 | -13.00 | -19.08 | - | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 30M | 677M | 1M | 3M | Peak | 555.69M | -40.04 | -13.00 | -27.04 | - | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 887M | 1G | 1M | 3M | Peak | 925.2M | -39.84 | -13.00 | -26.84 | - | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 1G | 10G | 1M | 3M | Peak | 6.29453G | -28.37 | -13.00 | -15.37 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

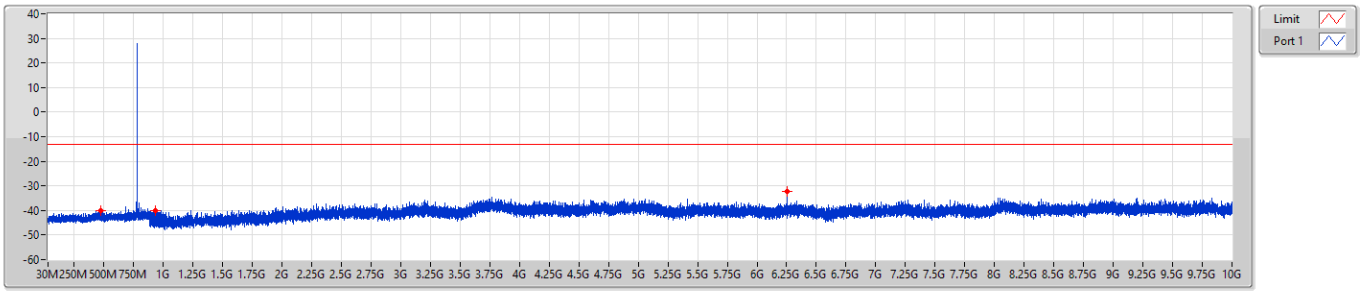
**777.2MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 651.12M | -39.83 | -13.00 | -26.83 | - | - |
| 887M | 1G | 1M | 3M | Peak | 917.46M | -37.19 | -13.00 | -24.19 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.21859G | -29.01 | -13.00 | -16.01 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

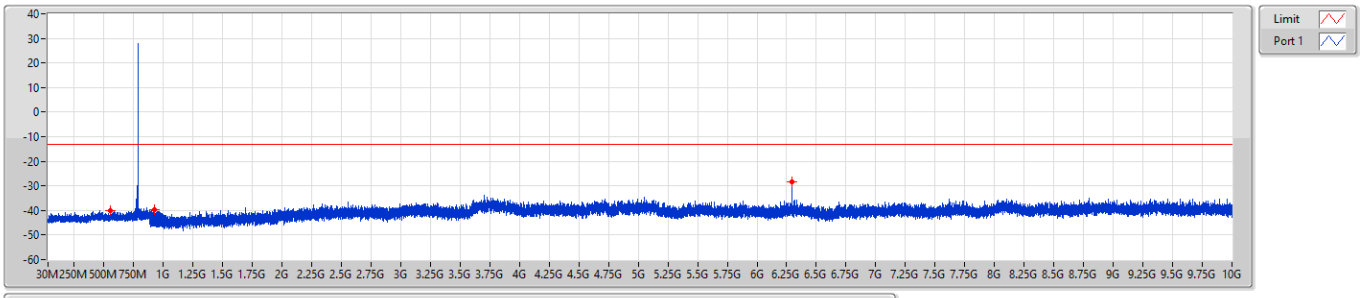
**782.0MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 477.4M | -40.13 | -13.00 | -27.13 | - | - |
| 887M | 1G | 1M | 3M | Peak | 937.7M | -40.13 | -13.00 | -27.13 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.25656G | -32.08 | -13.00 | -19.08 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**786.8MHz_QPSK_Tone 12@0**



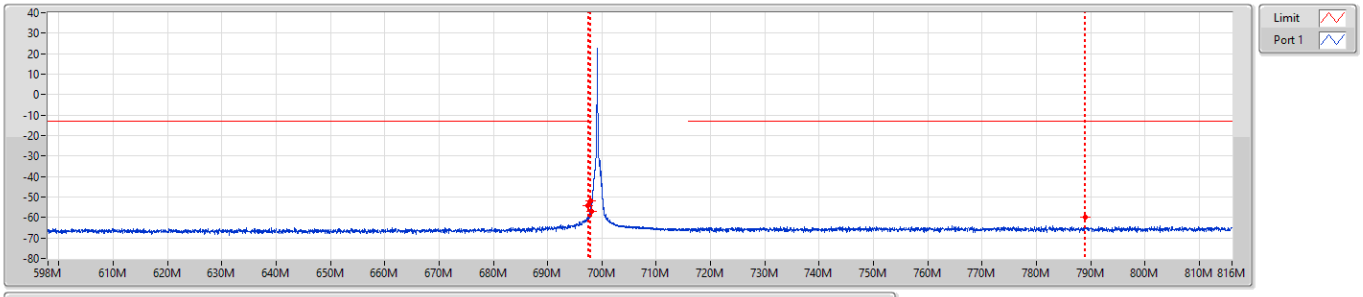

| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30M | 677M | 1M | 3M | Peak | 555.69M | -40.04 | -13.00 | -27.04 | - | - |
| 887M | 1G | 1M | 3M | Peak | 925.2M | -39.84 | -13.00 | -26.84 | - | - |
| 1G | 10G | 1M | 3M | Peak | 6.29453G | -28.37 | -13.00 | -15.37 | - | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | Pass | 716M | 716.1M | 30k | 100k | RMS | 716M | -23.00 | -13.00 | -10.00 | - | - |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | Pass | 716M | 716.1M | 30k | 100k | RMS | 716.01M | -23.52 | -13.00 | -10.52 | - | - |
| NB-IoT_15kHz_Nss1,BPSK_1TX | Pass | 716M | 716.1M | 30k | 100k | RMS | 716M | -18.88 | -13.00 | -5.88 | - | - |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 716M | 716.1M | 5.1k | 16k | RMS | 716.015M | -15.05 | -13.00 | -2.05 | MBW 30k | - |

**Band 12_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

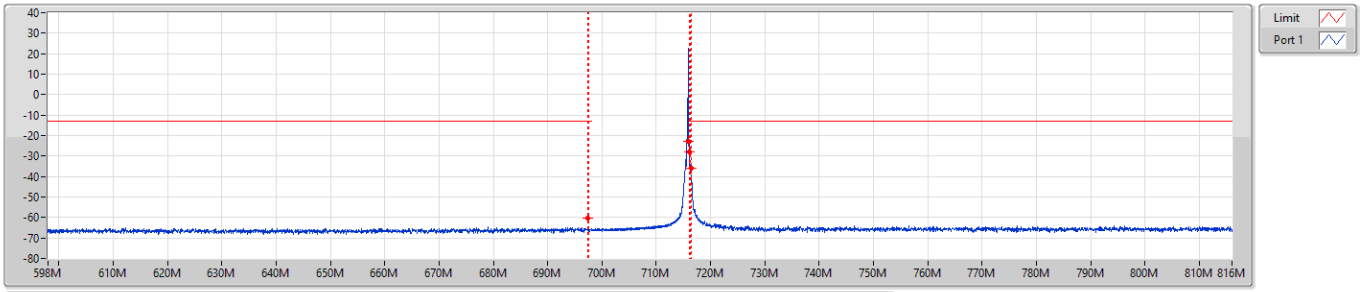
**699.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 697.6M | 30k | 100k | RMS | 697.45M | -54.37 | -13.00 | -41.37 | MBW 100k | - |
| 697.6M | 697.9M | 30k | 100k | RMS | 697.85M | -51.97 | -13.00 | -38.97 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 698M | -56.88 | -13.00 | -43.88 | - | - |
| 716M | 816M | 30k | 100k | RMS | 788.95M | -59.83 | -13.00 | -46.83 | MBW 100k | - |

**Band 12_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

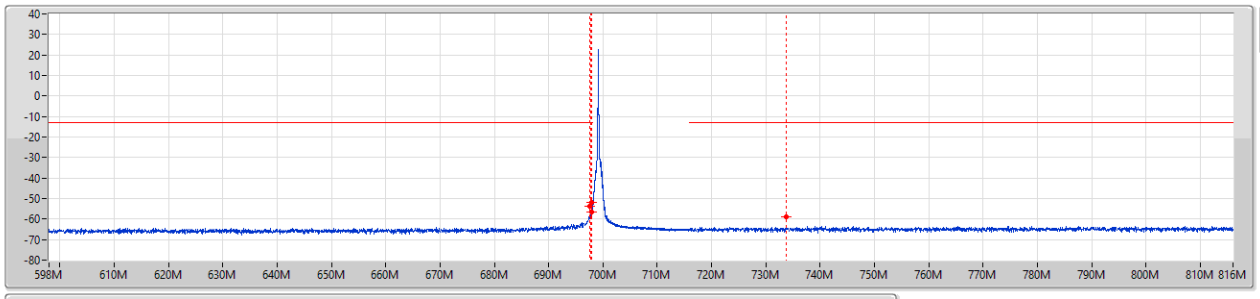
**715.8MHz_BPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 697.45M | -60.26 | -13.00 | -47.26 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716M | -23.00 | -13.00 | -10.00 | - | - |
| 716.1M | 716.4M | 30k | 100k | RMS | 716.15M | -27.86 | -13.00 | -14.86 | MBW 100k | - |
| 716.4M | 816M | 30k | 100k | RMS | 716.45M | -35.73 | -13.00 | -22.73 | MBW 100k | - |

**Band 12_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

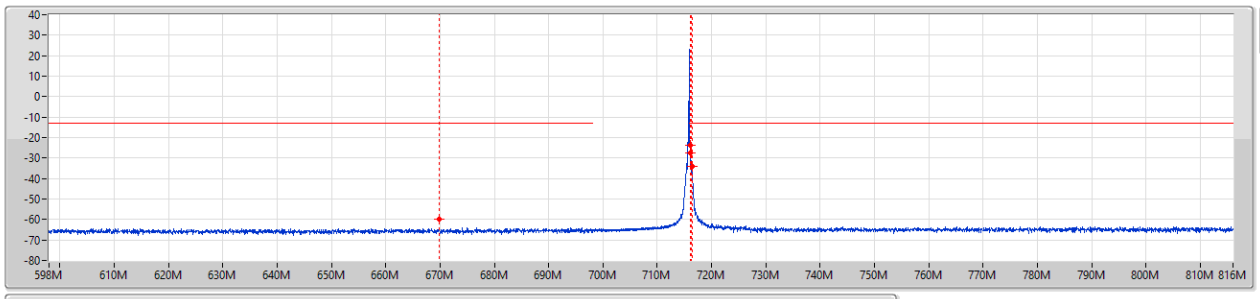
**699.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 697.6M | 30k | 100k | RMS | 697.55M | -53.56 | -13.00 | -40.56 | MBW 100k | - |
| 697.6M | 697.9M | 30k | 100k | RMS | 697.85M | -51.92 | -13.00 | -38.92 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.93M | -56.67 | -13.00 | -43.67 | - | - |
| 716M | 816M | 30k | 100k | RMS | 733.75M | -59.14 | -13.00 | -46.14 | MBW 100k | - |

**Band 12_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

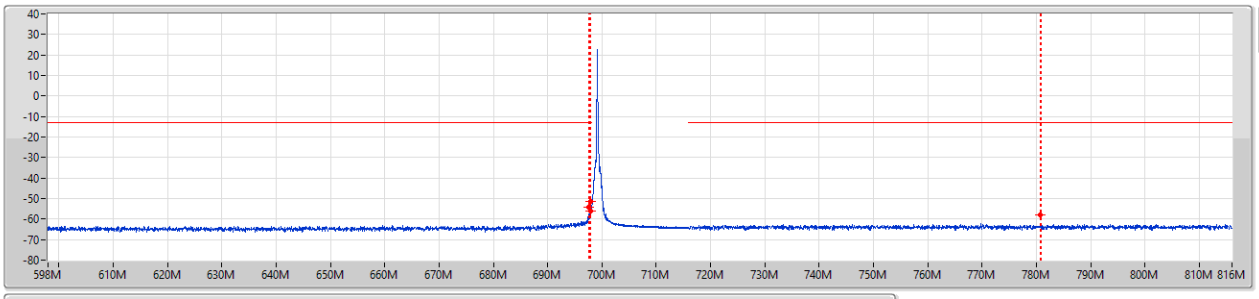
**715.8MHz_QPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 669.85M | -59.70 | -13.00 | -46.70 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.01M | -23.52 | -13.00 | -10.52 | - | - |
| 716.1M | 716.4M | 30k | 100k | RMS | 716.15M | -27.65 | -13.00 | -14.65 | MBW 100k | - |
| 716.4M | 816M | 30k | 100k | RMS | 716.45M | -34.17 | -13.00 | -21.17 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

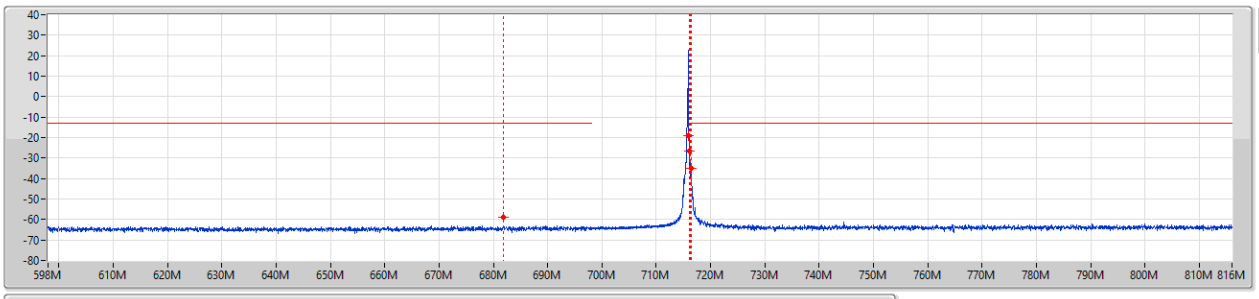
**699.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 697.6M | 30k | 100k | RMS | 697.55M | -54.13 | -13.00 | -41.13 | MBW 100k | - |
| 697.6M | 697.9M | 30k | 100k | RMS | 697.85M | -51.63 | -13.00 | -38.63 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.98M | -56.19 | -13.00 | -43.19 | - | - |
| 716M | 816M | 30k | 100k | RMS | 780.75M | -58.14 | -13.00 | -45.14 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

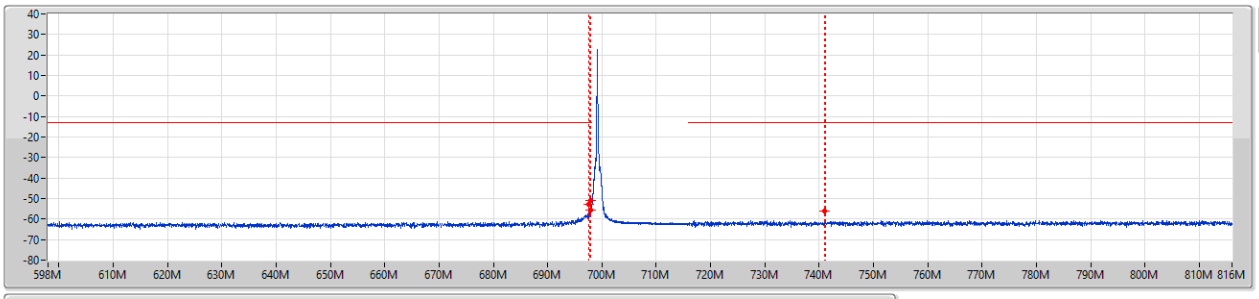
**715.8MHz_BPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 681.85M | -58.71 | -13.00 | -45.71 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716M | -18.88 | -13.00 | -5.88 | - | - |
| 716.1M | 716.4M | 30k | 100k | RMS | 716.15M | -26.53 | -13.00 | -13.53 | MBW 100k | - |
| 716.4M | 816M | 30k | 100k | RMS | 716.45M | -35.02 | -13.00 | -22.02 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

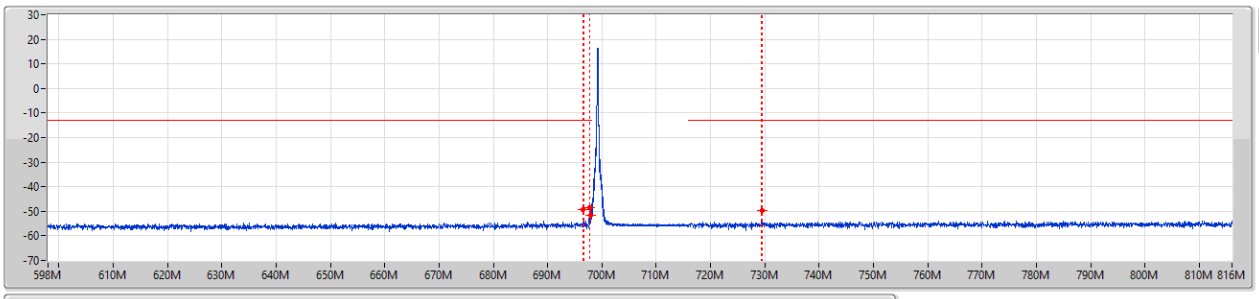
**699.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 697.6M | 30k | 100k | RMS | 697.55M | -52.65 | -13.00 | -39.65 | MBW 100k | - |
| 697.6M | 697.9M | 30k | 100k | RMS | 697.85M | -51.10 | -13.00 | -38.10 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.98M | -55.65 | -13.00 | -42.65 | - | - |
| 716M | 816M | 30k | 100k | RMS | 741.05M | -56.26 | -13.00 | -43.26 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

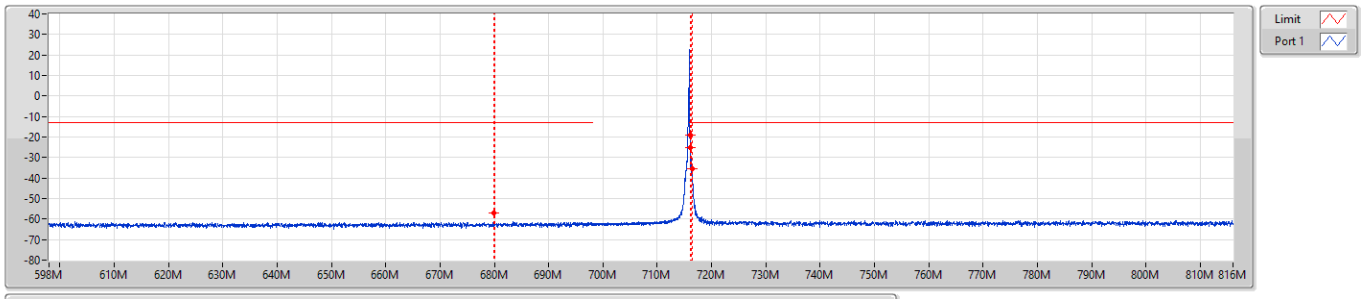
**699.2MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 697.6M | 30k | 100k | RMS | 696.55M | -49.26 | -13.00 | -36.26 | MBW 100k | - |
| 697.6M | 697.9M | 30k | 100k | RMS | 697.75M | -48.40 | -13.00 | -35.40 | MBW 100k | - |
| 697.9M | 698M | 30k | 100k | RMS | 697.97M | -51.47 | -13.00 | -38.47 | - | - |
| 716M | 816M | 30k | 100k | RMS | 729.45M | -49.53 | -13.00 | -36.53 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

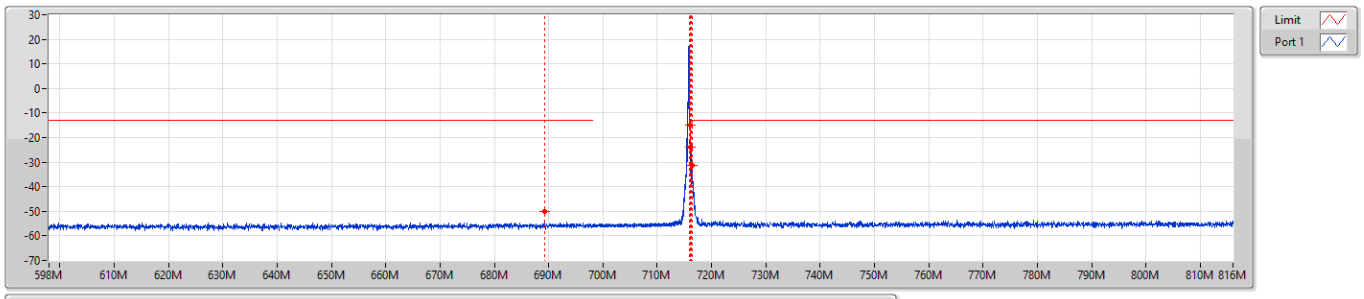
**715.8MHz_QPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 679.95M | -56.98 | -13.00 | -43.98 | MBW 100k | - |
| 716M | 716.1M | 30k | 100k | RMS | 716.01M | -19.03 | -13.00 | -6.03 | - | - |
| 716.1M | 716.4M | 30k | 100k | RMS | 716.15M | -25.17 | -13.00 | -12.17 | MBW 100k | - |
| 716.4M | 816M | 30k | 100k | RMS | 716.45M | -35.48 | -13.00 | -22.48 | MBW 100k | - |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**715.8MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 598M | 698M | 30k | 100k | RMS | 689.25M | -50.04 | -13.00 | -37.04 | MBW 100k | - |
| 716M | 716.1M | 5.1k | 16k | RMS | 716.015M | -15.05 | -13.00 | -2.05 | MBW 30k | - |
| 716.1M | 716.4M | 30k | 100k | RMS | 716.15M | -24.01 | -13.00 | -11.01 | MBW 100k | - |
| 716.4M | 816M | 30k | 100k | RMS | 716.45M | -31.41 | -13.00 | -18.41 | MBW 100k | - |

**Summary**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -22.05 | -13.00 | -9.05 | - | - |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -21.54 | -13.00 | -8.54 | - | - |
| NB-IoT_15kHz_Nss1,BPSK_1TX | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -19.15 | -13.00 | -6.15 | - | - |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 787M | 787.1M | 5.1k | 16k | RMS | 787.015M | -13.21 | -13.00 | -0.21 | MBW 30k | - |

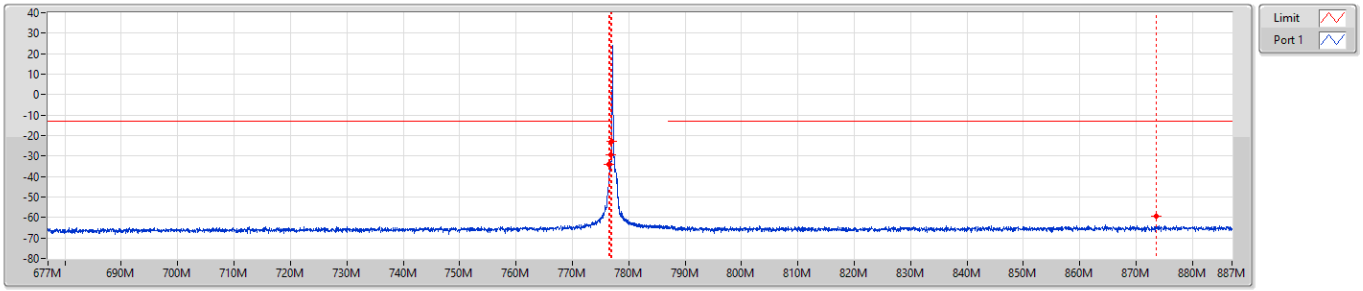
**Result**

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 13_NB-IoT_3.75kHz_Nss1_1TX | - | - | - | - | - | - | - | - | - | - | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.92 | -13.00 | -20.92 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -29.41 | -13.00 | -16.41 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 776.9M | 777M | 30k | 100k | RMS | 776.99M | -22.62 | -13.00 | -9.62 | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 787M | 887M | 30k | 100k | RMS | 873.55M | -59.52 | -13.00 | -46.52 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 763M | 775M | 10k | 30k | RMS | 774.92M | -64.94 | -35.00 | -29.94 | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 793M | 806M | 10k | 30k | RMS | 794.37M | -68.33 | -35.00 | -33.33 | - | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 677M | 777M | 30k | 100k | RMS | 776.65M | -59.60 | -13.00 | -46.60 | MBW 100k | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -22.05 | -13.00 | -9.05 | - | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -27.42 | -13.00 | -14.42 | MBW 100k | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 787.4M | 887M | 30k | 100k | RMS | 787.45M | -35.17 | -13.00 | -22.17 | MBW 100k | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 763M | 775M | 10k | 30k | RMS | 772.49M | -68.58 | -35.00 | -33.58 | - | - |
| 786.8MHz_BPSK_Tone 1@47 | Pass | 793M | 806M | 10k | 30k | RMS | 794.38M | -67.47 | -35.00 | -32.47 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 677M | 776.6M | 30k | 100k | RMS | 776.55M | -34.84 | -13.00 | -21.84 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -26.35 | -13.00 | -13.35 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 776.9M | 777M | 30k | 100k | RMS | 777M | -21.93 | -13.00 | -8.93 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 787M | 887M | 30k | 100k | RMS | 787.35M | -58.34 | -13.00 | -45.34 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 763M | 775M | 10k | 30k | RMS | 774.84M | -63.38 | -35.00 | -28.38 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 793M | 806M | 10k | 30k | RMS | 802.99M | -67.37 | -35.00 | -32.37 | - | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 677M | 777M | 30k | 100k | RMS | 766.55M | -58.89 | -13.00 | -45.89 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -21.54 | -13.00 | -8.54 | - | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -28.01 | -13.00 | -15.01 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 787.4M | 887M | 30k | 100k | RMS | 787.45M | -34.25 | -13.00 | -21.25 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 763M | 775M | 10k | 30k | RMS | 767.57M | -67.96 | -35.00 | -32.96 | - | - |
| 786.8MHz_QPSK_Tone 1@47 | Pass | 793M | 806M | 10k | 30k | RMS | 793.57M | -66.99 | -35.00 | -31.99 | - | - |
| Band 13_NB-IoT_15kHz_Nss1_1TX | - | - | - | - | - | - | - | - | - | - | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.08 | -13.00 | -20.08 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -26.66 | -13.00 | -13.66 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 776.9M | 777M | 30k | 100k | RMS | 777M | -19.26 | -13.00 | -6.26 | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 787M | 887M | 30k | 100k | RMS | 787.05M | -57.66 | -13.00 | -44.66 | MBW 100k | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 763M | 775M | 10k | 30k | RMS | 774.77M | -63.67 | -35.00 | -28.67 | - | - |
| 777.2MHz_BPSK_Tone 1@0 | Pass | 793M | 806M | 10k | 30k | RMS | 799.47M | -66.35 | -35.00 | -31.35 | - | - |
| 786.8MHz_BPSK_Tone 1@11 | Pass | 677M | 777M | 30k | 100k | RMS | 757.25M | -57.98 | -13.00 | -44.98 | MBW 100k | - |

| Mode | Result | F-Start (Hz) | F-Stop (Hz) | RBW (Hz) | VBW (Hz) | Detector | Freq (Hz) | Level (dBm) | Limit (dBm) | Margin (dB) | Remark | Ref.Limit (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 786.8MHz_BPSK_Tone 1@11 | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -19.15 | -13.00 | -6.15 | - | - |
| 786.8MHz_BPSK_Tone 1@11 | Pass | 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -26.97 | -13.00 | -13.97 | MBW 100k | - |
| 786.8MHz_BPSK_Tone 1@11 | Pass | 787.4M | 887M | 30k | 100k | RMS | 787.45M | -35.21 | -13.00 | -22.21 | MBW 100k | - |
| 786.8MHz_BPSK_Tone 1@11 | Pass | 763M | 775M | 10k | 30k | RMS | 772.4M | -66.75 | -35.00 | -31.75 | - | - |
| 786.8MHz_BPSK_Tone 1@11 | Pass | 793M | 806M | 10k | 30k | RMS | 793.86M | -66.46 | -35.00 | -31.46 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.59 | -13.00 | -20.59 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -25.73 | -13.00 | -12.73 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 776.9M | 777M | 30k | 100k | RMS | 777M | -19.29 | -13.00 | -6.29 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 787M | 887M | 30k | 100k | RMS | 865.15M | -55.89 | -13.00 | -42.89 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 763M | 775M | 10k | 30k | RMS | 774.98M | -61.34 | -35.00 | -26.34 | - | - |
| 777.2MHz_QPSK_Tone 1@0 | Pass | 793M | 806M | 10k | 30k | RMS | 805.9M | -64.66 | -35.00 | -29.66 | - | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.56 | -13.00 | -20.56 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -20.09 | -13.00 | -7.09 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 776.9M | 777M | 5.1k | 16k | RMS | 776.985M | -13.29 | -13.00 | -0.29 | MBW 30k | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 787M | 887M | 30k | 100k | RMS | 883.15M | -49.10 | -13.00 | -36.10 | MBW 100k | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 763M | 775M | 10k | 30k | RMS | 774.96M | -56.58 | -35.00 | -21.58 | - | - |
| 777.2MHz_QPSK_Tone 12@0 | Pass | 793M | 806M | 10k | 30k | RMS | 801.19M | -56.89 | -35.00 | -21.89 | - | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 677M | 777M | 30k | 100k | RMS | 772.35M | -56.25 | -13.00 | -43.25 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 787M | 787.1M | 30k | 100k | RMS | 787M | -16.60 | -13.00 | -3.60 | - | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -27.09 | -13.00 | -14.09 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 787.4M | 887M | 30k | 100k | RMS | 787.45M | -33.87 | -13.00 | -20.87 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 763M | 775M | 10k | 30k | RMS | 774.75M | -64.90 | -35.00 | -29.90 | - | - |
| 786.8MHz_QPSK_Tone 1@11 | Pass | 793M | 806M | 10k | 30k | RMS | 795.59M | -64.17 | -35.00 | -29.17 | - | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 677M | 777M | 30k | 100k | RMS | 746.85M | -51.13 | -13.00 | -38.13 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 787M | 787.1M | 5.1k | 16k | RMS | 787.015M | -13.21 | -13.00 | -0.21 | MBW 30k | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -21.87 | -13.00 | -8.87 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 787.4M | 887M | 30k | 100k | RMS | 787.45M | -31.68 | -13.00 | -18.68 | MBW 100k | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 763M | 775M | 10k | 30k | RMS | 769.86M | -59.78 | -35.00 | -24.78 | - | - |
| 786.8MHz_QPSK_Tone 12@0 | Pass | 793M | 806M | 10k | 30k | RMS | 795.16M | -59.39 | -35.00 | -24.39 | - | - |

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

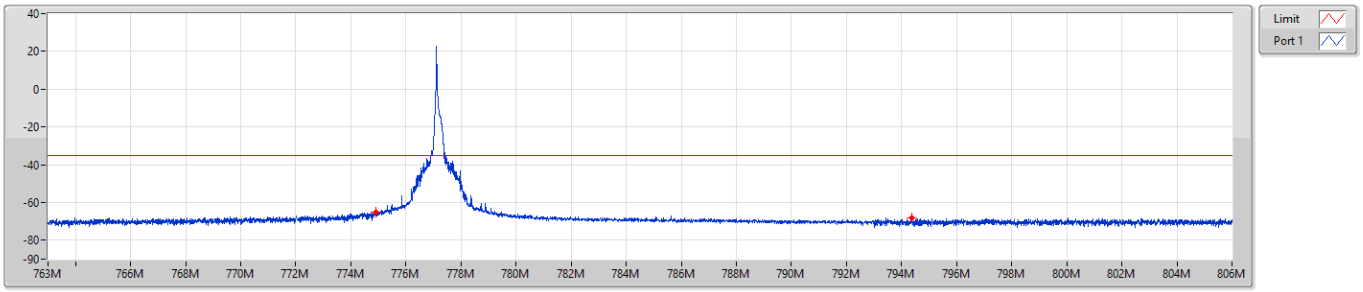
**777.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.92 | -13.00 | -20.92 | MBW 100k | - |
| 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -29.41 | -13.00 | -16.41 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 776.99M | -22.62 | -13.00 | -9.62 | - | - |
| 787M | 887M | 30k | 100k | RMS | 873.55M | -59.52 | -13.00 | -46.52 | MBW 100k | - |

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

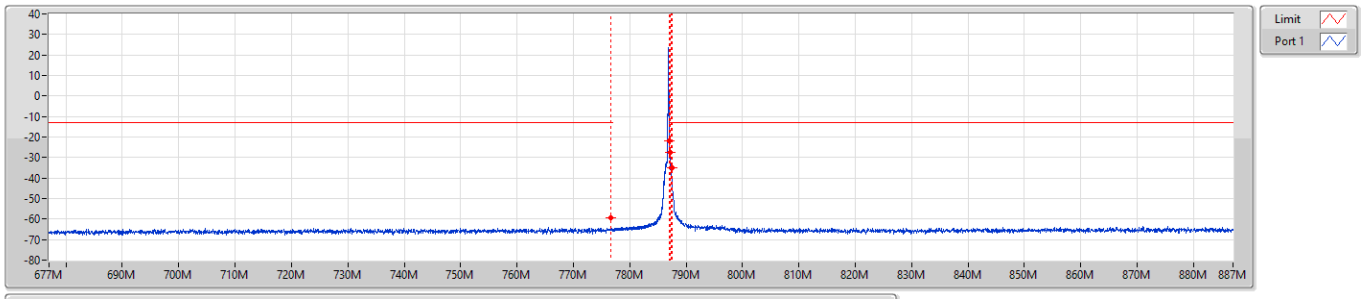
**777.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.92M | -64.94 | -35.00 | -29.94 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.37M | -68.33 | -35.00 | -33.33 | - | - |

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

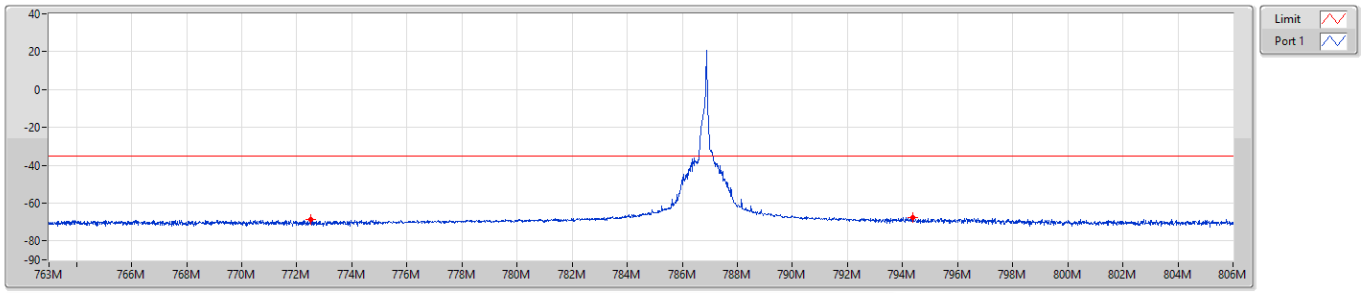
**786.8MHz_BPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 776.65M | -59.60 | -13.00 | -46.60 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787M | -22.05 | -13.00 | -9.05 | - | - |
| 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -27.42 | -13.00 | -14.42 | MBW 100k | - |
| 787.4M | 887M | 30k | 100k | RMS | 787.45M | -35.17 | -13.00 | -22.17 | MBW 100k | - |

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

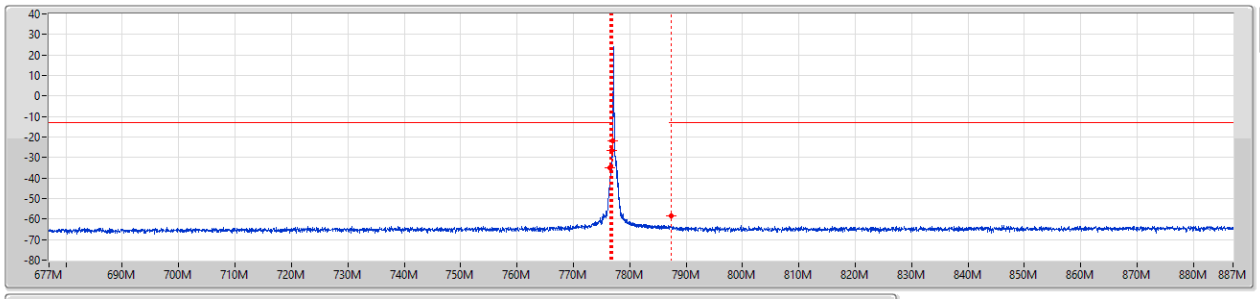
**786.8MHz_BPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 772.49M | -68.58 | -35.00 | -33.58 | - | - |
| 793M | 806M | 10k | 30k | RMS | 794.38M | -67.47 | -35.00 | -32.47 | - | - |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

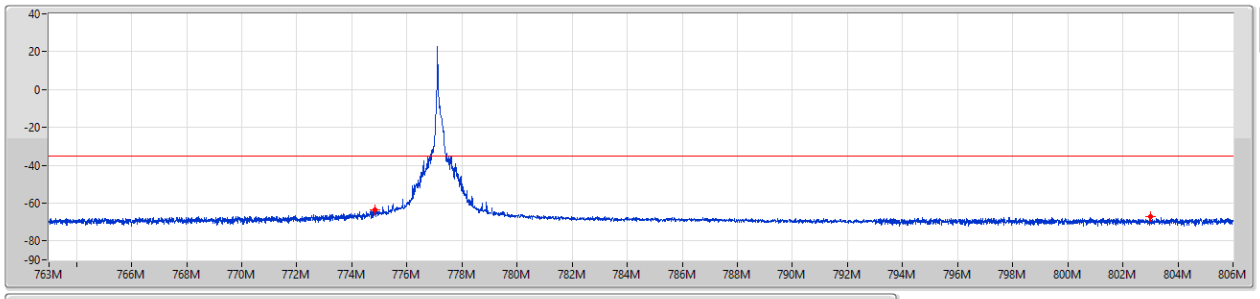
**777.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 776.6M | 30k | 100k | RMS | 776.55M | -34.84 | -13.00 | -21.84 | MBW 100k | - |
| 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -26.35 | -13.00 | -13.35 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -21.93 | -13.00 | -8.93 | - | - |
| 787M | 887M | 30k | 100k | RMS | 787.35M | -58.34 | -13.00 | -45.34 | MBW 100k | - |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

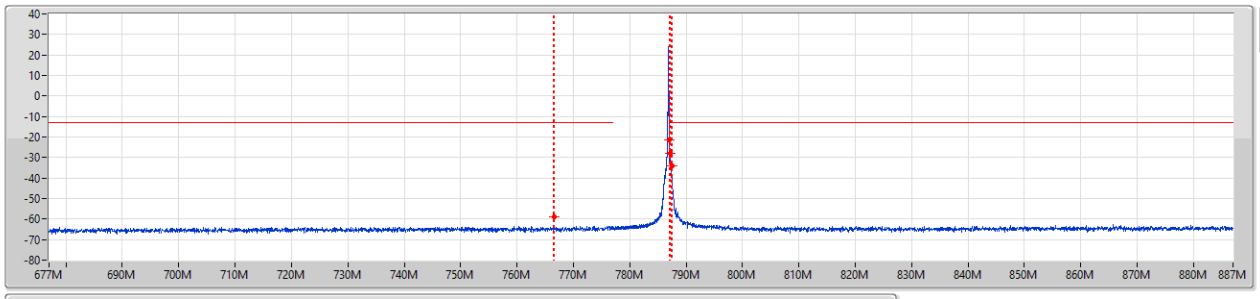
**777.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.84M | -63.38 | -35.00 | -28.38 | - | - |
| 793M | 806M | 10k | 30k | RMS | 802.99M | -67.37 | -35.00 | -32.37 | - | - |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

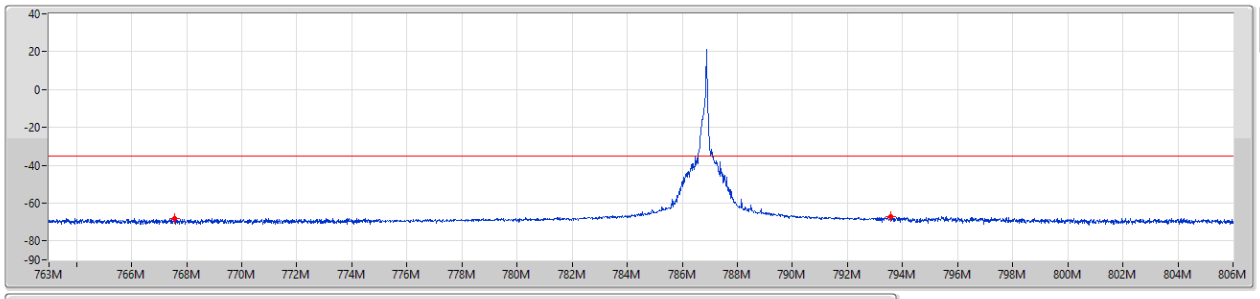
**786.8MHz_QPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 766.55M | -58.89 | -13.00 | -45.89 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787M | -21.54 | -13.00 | -8.54 | - | - |
| 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -28.01 | -13.00 | -15.01 | MBW 100k | - |
| 787.4M | 887M | 30k | 100k | RMS | 787.45M | -34.25 | -13.00 | -21.25 | MBW 100k | - |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

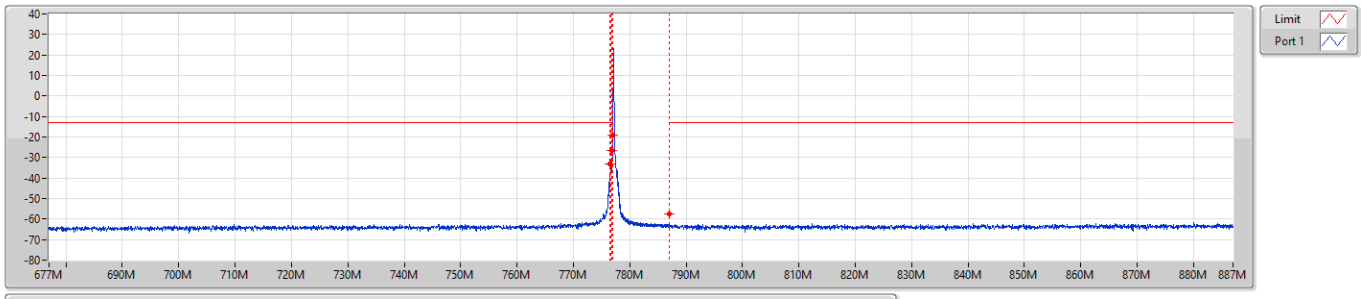
**786.8MHz_QPSK_Tone 1@47**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 767.57M | -67.96 | -35.00 | -32.96 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.57M | -66.99 | -35.00 | -31.99 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

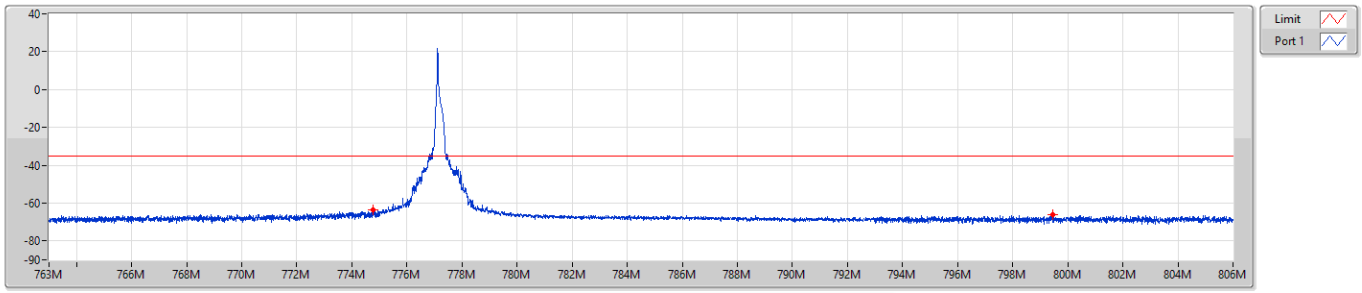
**777.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.08 | -13.00 | -20.08 | MBW 100k | - |
| 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -26.66 | -13.00 | -13.66 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -19.26 | -13.00 | -6.26 | - | - |
| 787M | 887M | 30k | 100k | RMS | 787.05M | -57.66 | -13.00 | -44.66 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

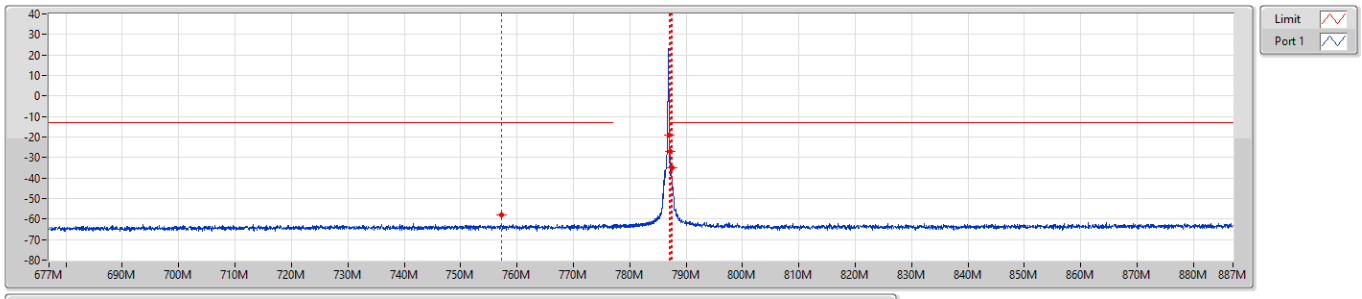
**777.2MHz_BPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.77M | -63.67 | -35.00 | -28.67 | - | - |
| 793M | 806M | 10k | 30k | RMS | 799.47M | -66.35 | -35.00 | -31.35 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

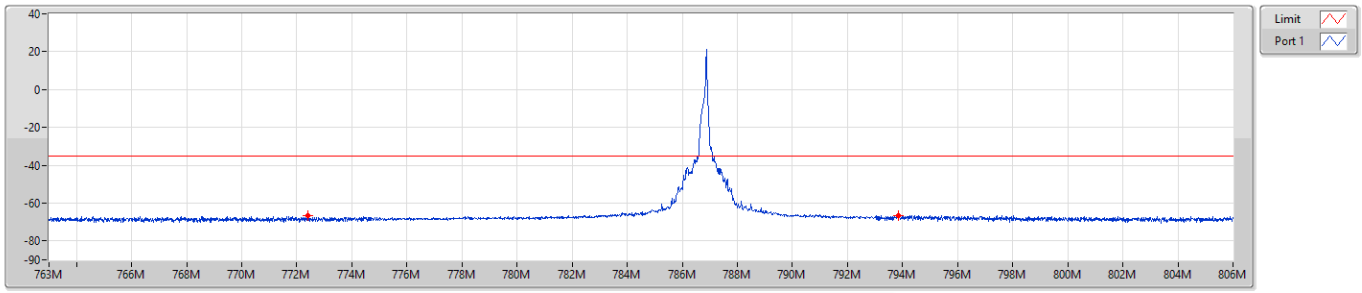
**786.8MHz_BPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 757.25M | -57.98 | -13.00 | -44.98 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787M | -19.15 | -13.00 | -6.15 | - | - |
| 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -26.97 | -13.00 | -13.97 | MBW 100k | - |
| 787.4M | 887M | 30k | 100k | RMS | 787.45M | -35.21 | -13.00 | -22.21 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **CSE-TX-Sum**

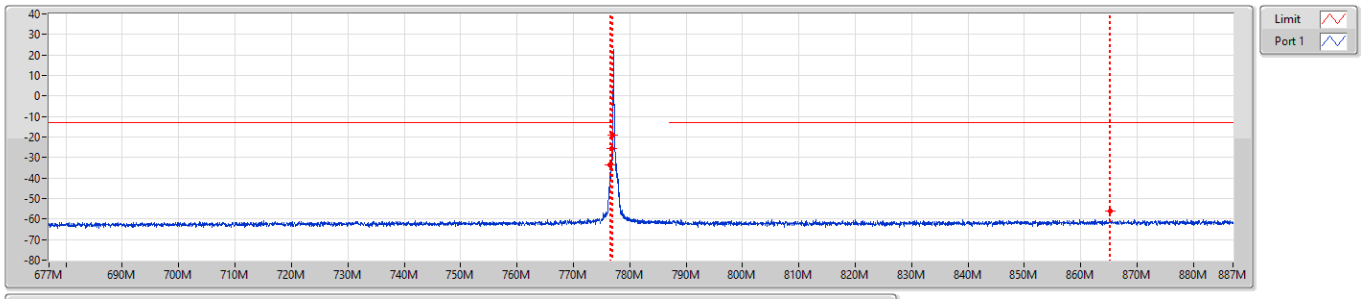
**786.8MHz_BPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 772.4M | -66.75 | -35.00 | -31.75 | - | - |
| 793M | 806M | 10k | 30k | RMS | 793.86M | -66.46 | -35.00 | -31.46 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

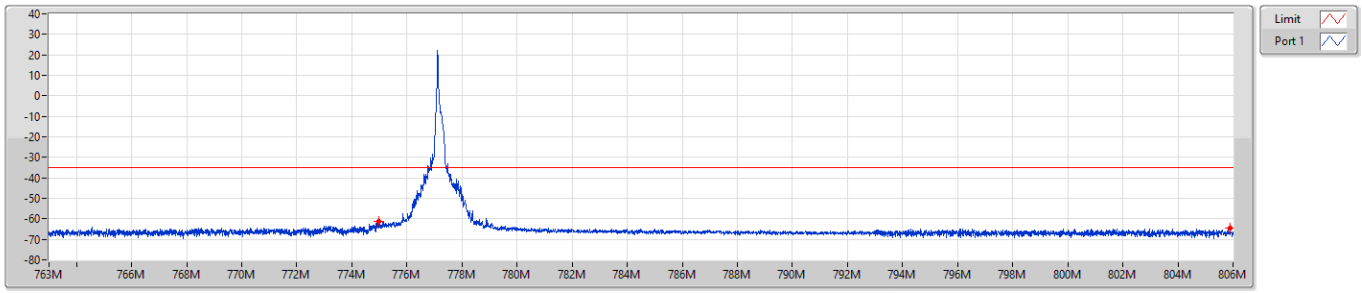
**777.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.59 | -13.00 | -20.59 | MBW 100k | - |
| 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -25.73 | -13.00 | -12.73 | MBW 100k | - |
| 776.9M | 777M | 30k | 100k | RMS | 777M | -19.29 | -13.00 | -6.29 | - | - |
| 787M | 887M | 30k | 100k | RMS | 865.15M | -55.89 | -13.00 | -42.89 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

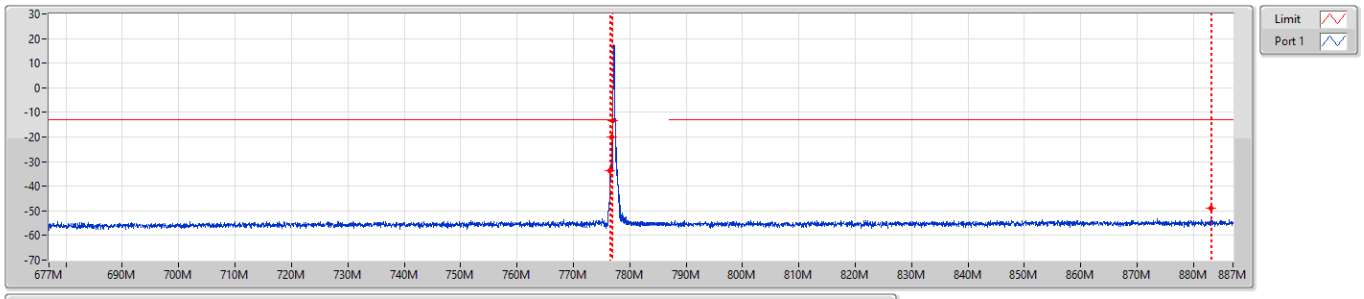
**777.2MHz_QPSK_Tone 1@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.98M | -61.34 | -35.00 | -26.34 | - | - |
| 793M | 806M | 10k | 30k | RMS | 805.9M | -64.66 | -35.00 | -29.66 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

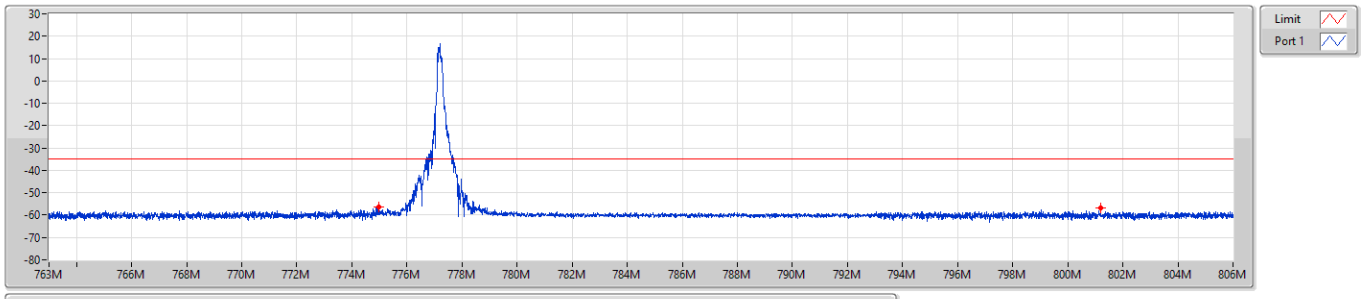
**777.2MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 776.6M | 30k | 100k | RMS | 776.55M | -33.56 | -13.00 | -20.56 | MBW 100k | - |
| 776.6M | 776.9M | 30k | 100k | RMS | 776.85M | -20.09 | -13.00 | -7.09 | MBW 100k | - |
| 776.9M | 777M | 5.1k | 16k | RMS | 776.985M | -13.29 | -13.00 | -0.29 | MBW 30k | - |
| 787M | 887M | 30k | 100k | RMS | 883.15M | -49.10 | -13.00 | -36.10 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

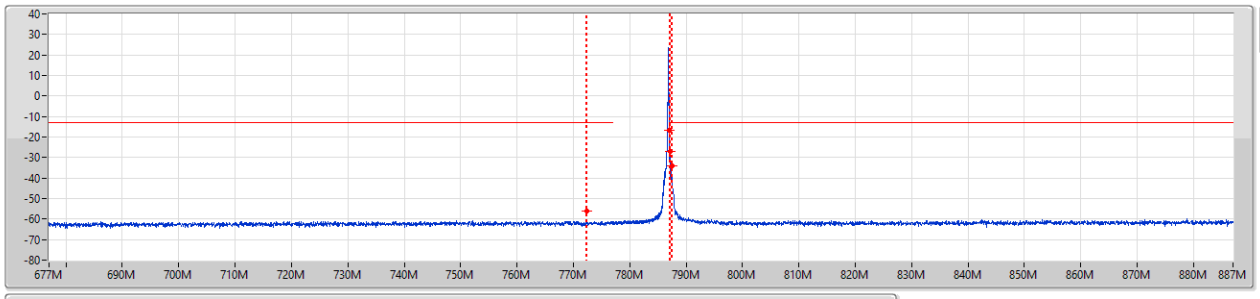
**777.2MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.96M | -56.58 | -35.00 | -21.58 | - | - |
| 793M | 806M | 10k | 30k | RMS | 801.19M | -56.89 | -35.00 | -21.89 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

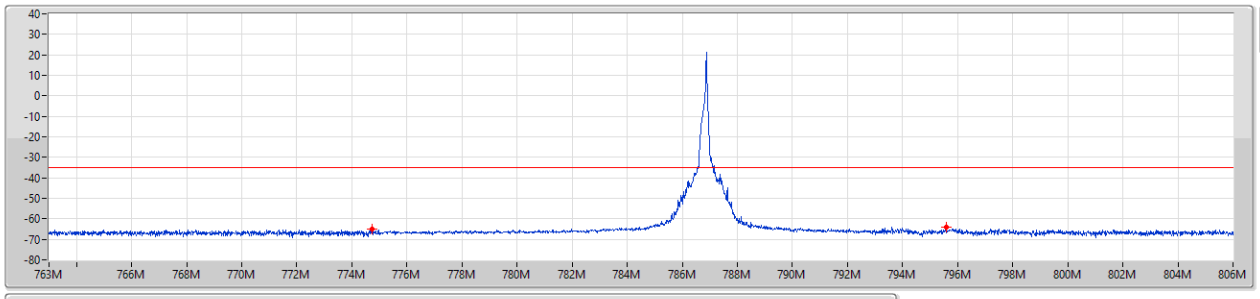
**786.8MHz_QPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 772.35M | -56.25 | -13.00 | -43.25 | MBW 100k | - |
| 787M | 787.1M | 30k | 100k | RMS | 787M | -16.60 | -13.00 | -3.60 | - | - |
| 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -27.09 | -13.00 | -14.09 | MBW 100k | - |
| 787.4M | 887M | 30k | 100k | RMS | 787.45M | -33.87 | -13.00 | -20.87 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

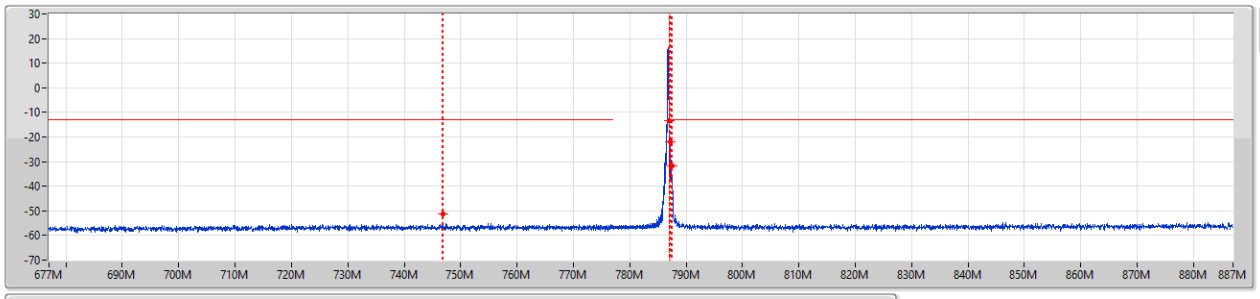
**786.8MHz_QPSK_Tone 1@11**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 774.75M | -64.90 | -35.00 | -29.90 | - | - |
| 793M | 806M | 10k | 30k | RMS | 795.59M | -64.17 | -35.00 | -29.17 | - | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

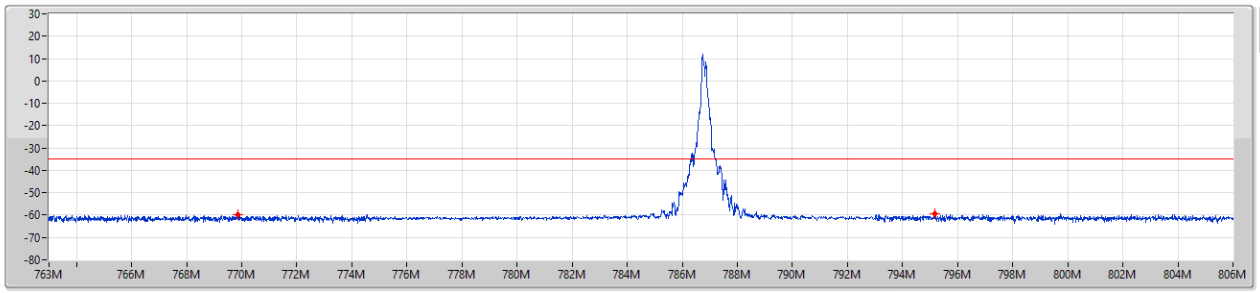
**786.8MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 677M | 777M | 30k | 100k | RMS | 746.85M | -51.13 | -13.00 | -38.13 | MBW 100k | - |
| 787M | 787.1M | 5.1k | 16k | RMS | 787.015M | -13.21 | -13.00 | -0.21 | MBW 30k | - |
| 787.1M | 787.4M | 30k | 100k | RMS | 787.15M | -21.87 | -13.00 | -8.87 | MBW 100k | - |
| 787.4M | 887M | 30k | 100k | RMS | 787.45M | -31.68 | -13.00 | -18.68 | MBW 100k | - |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **CSE-TX-Sum**

**786.8MHz_QPSK_Tone 12@0**




| F-Start(Hz) | F-Stop(Hz) | RBW(Hz) | VBW(Hz) | Detector | Freq(Hz) | Level(dBm) | Limit(dBm) | Margin(dB) | Remark | Ref.Limit(dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 763M | 775M | 10k | 30k | RMS | 769.86M | -59.78 | -35.00 | -24.78 | - | - |
| 793M | 806M | 10k | 30k | RMS | 795.16M | -59.39 | -35.00 | -24.39 | - | - |

**Summary**

| Mode | Max-NdB (Hz) | Max-OBW (Hz) | ITU-Code | Min-NdB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | 1.338M | 1.099M | 1M10G7D | 1.338M | 1.099M |
| LTE-M1_10MHz_Nss1,16QAM_1TX | 1.425M | 1.114M | 1M11W7D | 1.425M | 1.114M |
| LTE-M1_5MHz_Nss1,QPSK_1TX | 1.356M | 1.095M | 1M10G7D | 1.356M | 1.095M |
| LTE-M1_5MHz_Nss1,16QAM_1TX | 1.344M | 1.096M | 1M10W7D | 1.344M | 1.096M |

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

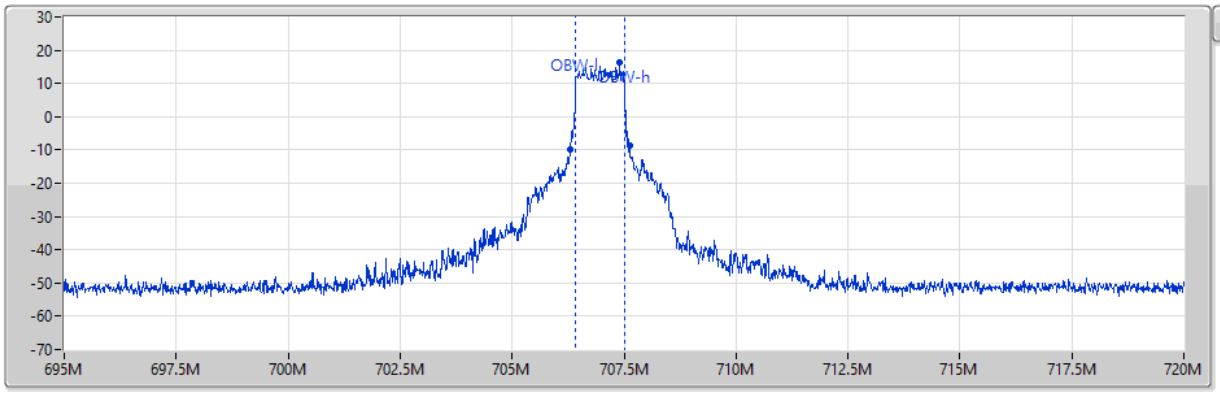
**Result**

| Mode | Result | Port 1-NdB (Hz) | Port 1-OBW (Hz) | Limit (Hz) |
|---|---|---|---|---|
| Band 12_LTE-M1_10MHz_Nss1_1TX | - | - | - | - |
| 707.5MHz_QPSK_RB 6,#RB 0,NB M | Pass | 1.338M | 1.099M | Inf |
| 707.5MHz_16QAM_RB 6,#RB 0,NB M | Pass | 1.425M | 1.114M | Inf |
| Band 12_LTE-M1_5MHz_Nss1_1TX | - | - | - | - |
| 707.5MHz_QPSK_RB 6,#RB 0,NB M | Pass | 1.356M | 1.095M | Inf |
| 707.5MHz_16QAM_RB 6,#RB 0,NB M | Pass | 1.344M | 1.096M | Inf |

Port X-N dB = Port X 26dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **EBW**

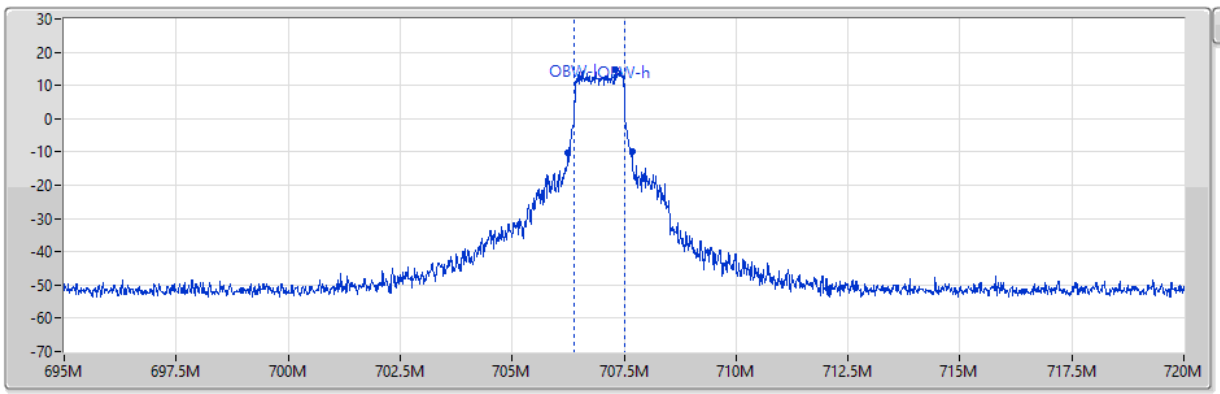
**707.5MHz_QPSK_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.338M | 706.2875M | 707.625M | 1.099M | 706.408684M | 707.507528M | 1 | 707.5M | 25M | 20k | 62k |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **EBW**

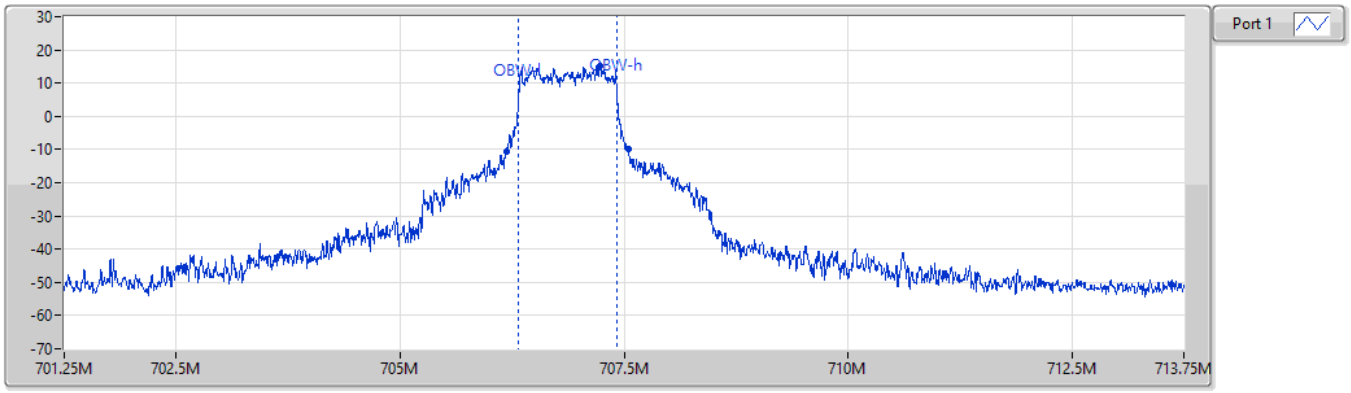
**707.5MHz_16QAM_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.425M | 706.25M | 707.675M | 1.114M | 706.397106M | 707.511016M | 1 | 707.5M | 25M | 20k | 62k |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **EBW**

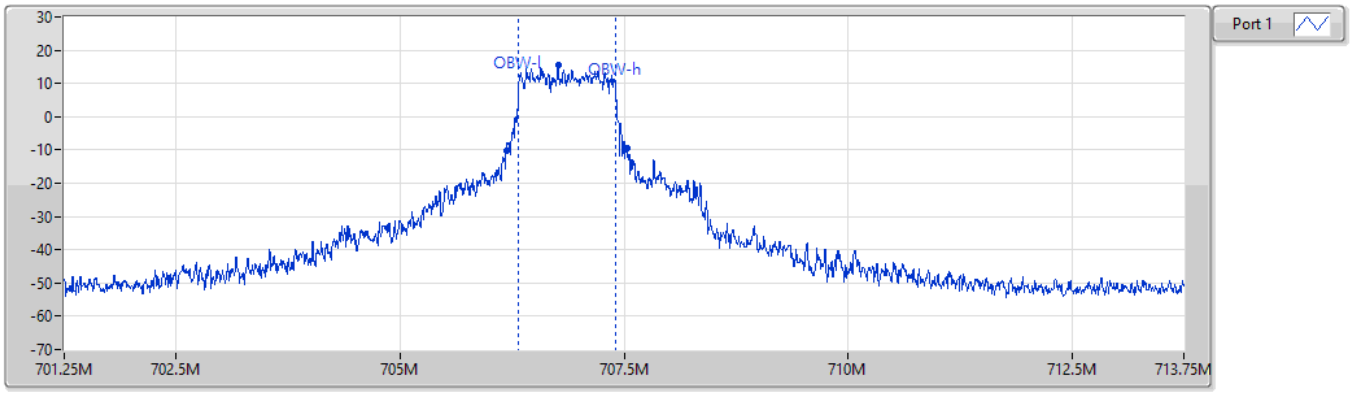
**707.5MHz_QPSK_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.356M | 706.1875M | 707.54375M | 1.095M | 706.325623M | 707.421064M | 1 | 707.5M | 12.5M | 20k | 62k |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **EBW**

**707.5MHz_16QAM_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.344M | 706.1875M | 707.53125M | 1.096M | 706.316034M | 707.412035M | 1 | 707.5M | 12.5M | 20k | 62k |

**Summary**

| Mode | Max-NdB (Hz) | Max-OBW (Hz) | ITU-Code | Min-NdB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | 1.663M | 1.105M | 1M11G7D | 1.663M | 1.105M |
| LTE-M1_10MHz_Nss1,16QAM_1TX | 1.438M | 1.119M | 1M12W7D | 1.438M | 1.119M |
| LTE-M1_5MHz_Nss1,QPSK_1TX | 1.406M | 1.1M | 1M10G7D | 1.406M | 1.1M |
| LTE-M1_5MHz_Nss1,16QAM_1TX | 1.394M | 1.11M | 1M11W7D | 1.394M | 1.11M |

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

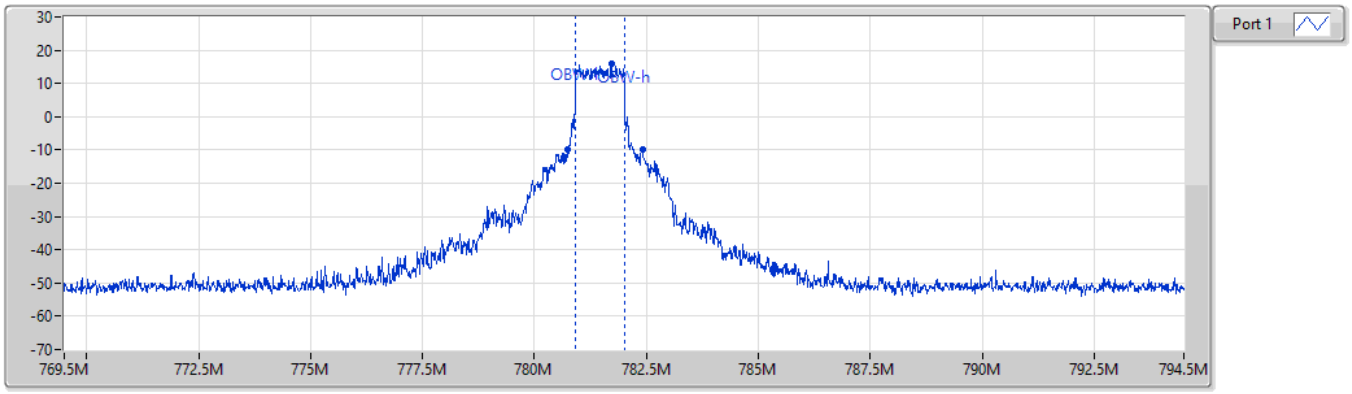
**Result**

| Mode | Result | Port 1-NdB (Hz) | Port 1-OBW (Hz) | Limit (Hz) |
|---|---|---|---|---|
| Band 13_LTE-M1_10MHz_Nss1_1TX | - | - | - | - |
| 782MHz_QPSK_RB 6,#RB 0,NB M | Pass | 1.663M | 1.105M | Inf |
| 782MHz_16QAM_RB 6,#RB 0,NB M | Pass | 1.438M | 1.119M | Inf |
| Band 13_LTE-M1_5MHz_Nss1_1TX | - | - | - | - |
| 782MHz_QPSK_RB 6,#RB 0,NB M | Pass | 1.406M | 1.1M | Inf |
| 782MHz_16QAM_RB 6,#RB 0,NB M | Pass | 1.394M | 1.11M | Inf |

Port X-N dB = Port X 26dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **EBW**

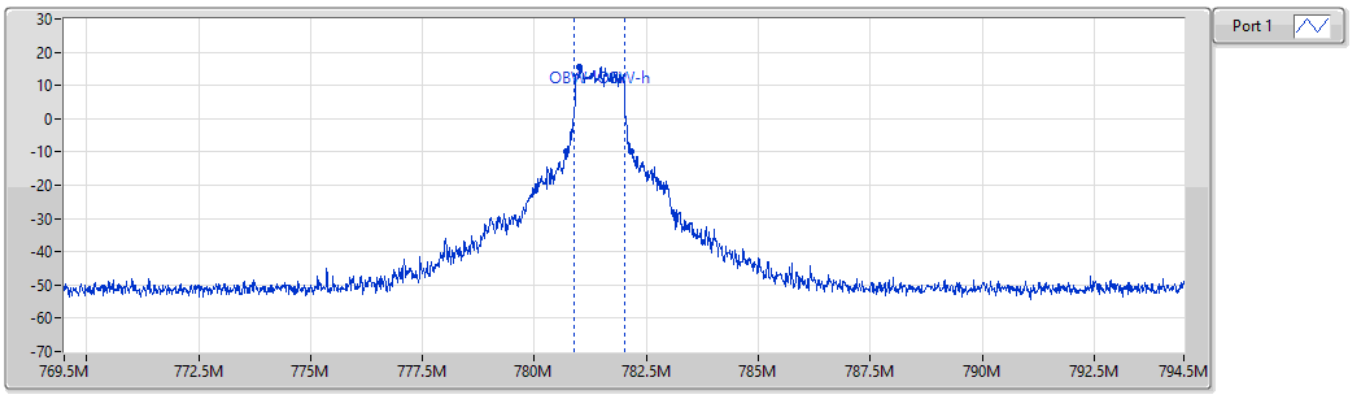
**782MHz_QPSK_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.663M | 780.75M | 782.4125M | 1.105M | 780.905813M | 782.010337M | 1 | 782M | 25M | 20k | 62k |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **EBW**

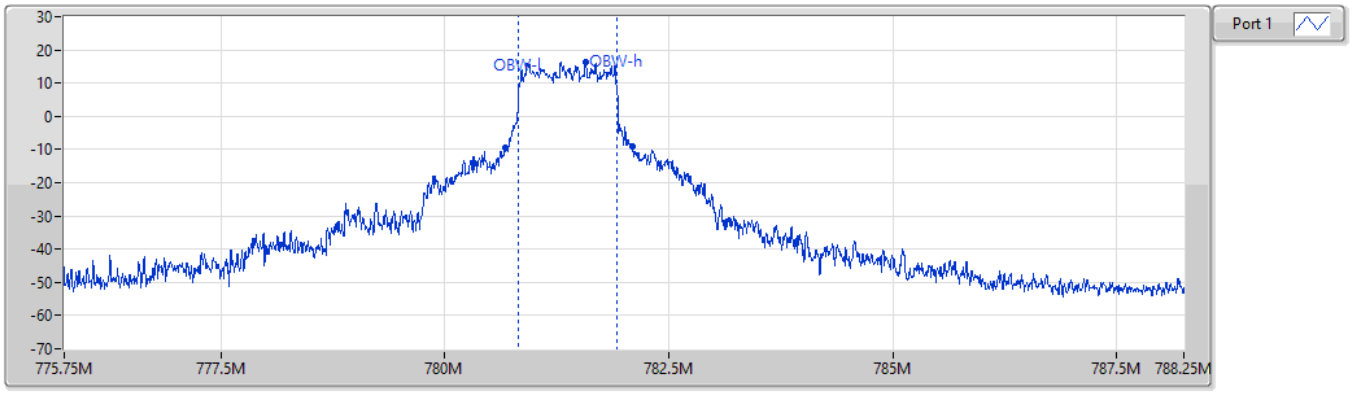
**782MHz_16QAM_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.438M | 780.725M | 782.1625M | 1.119M | 780.894524M | 782.013671M | 1 | 782M | 25M | 20k | 62k |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **EBW**

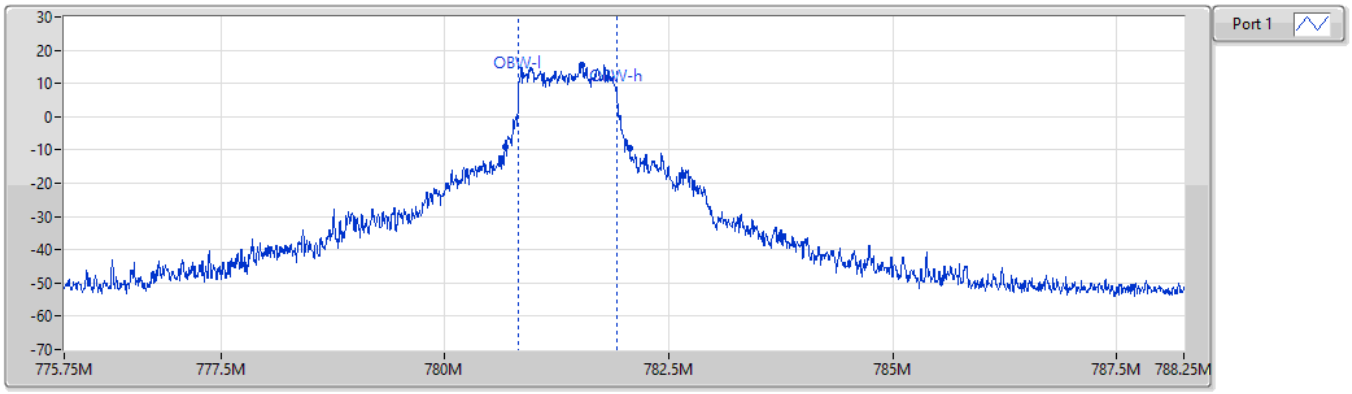
**782MHz_QPSK_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.406M | 780.68125M | 782.0875M | 1.1M | 780.823946M | 781.924312M | 1 | 782M | 12.5M | 20k | 62k |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **EBW**

**782MHz_16QAM_RB 6,#RB 0,NB M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.394M | 780.66875M | 782.0625M | 1.11M | 780.816062M | 781.926054M | 1 | 782M | 12.5M | 20k | 62k |

**Summary**

| Mode | Max-NdB (Hz) | Max-OBW (Hz) | ITU-Code | Min-NdB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | 34.5k | 54.801k | 54K9G7D | 34.5k | 54.801k |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | 40.5k | 60.492k | 60K5G7D | 40.5k | 60.492k |
| NB-IoT_15kHz_Nss1,BPSK_1TX | 134k | 127.04k | 127KG7D | 134k | 127.04k |
| NB-IoT_15kHz_Nss1,QPSK_1TX | 275k | 198.2k | 198KG7D | 141k | 125.321k |

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

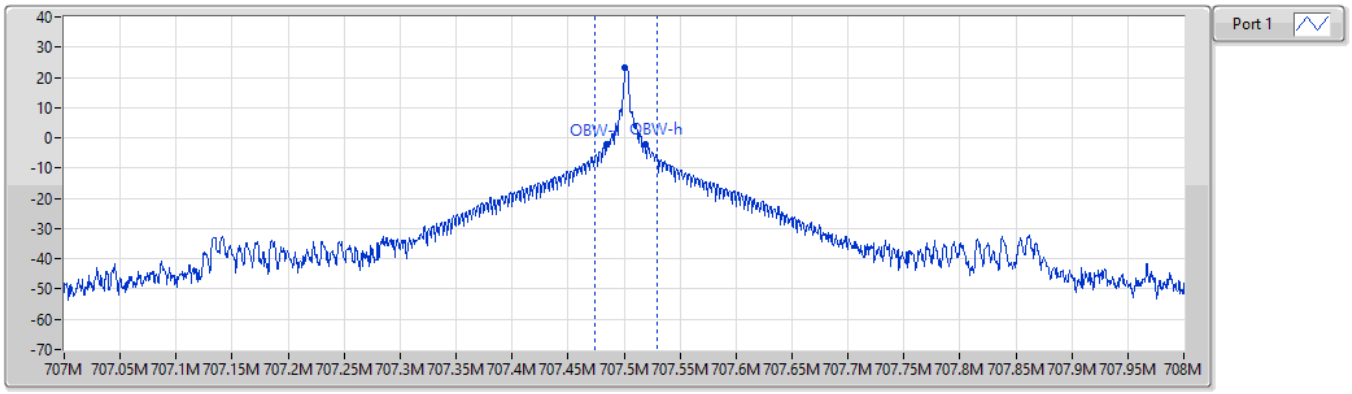
**Result**

| Mode | Result | Port 1-NdB (Hz) | Port 1-OBW (Hz) | Limit (Hz) |
|---|---|---|---|---|
| Band 12_NB-IoT_3.75kHz_Nss1_1TX | - | - | - | - |
| 707.5MHz_BPSK_Tone 1@M | Pass | 34.5k | 54.801k | Inf |
| 707.5MHz_QPSK_Tone 1@M | Pass | 40.5k | 60.492k | Inf |
| Band 12_NB-IoT_15kHz_Nss1_1TX | - | - | - | - |
| 707.5MHz_BPSK_Tone 1@M | Pass | 134k | 127.04k | Inf |
| 707.5MHz_QPSK_Tone 1@M | Pass | 141k | 125.321k | Inf |
| 707.5MHz_QPSK_Tone 12@0 | Pass | 275k | 198.2k | Inf |

Port X-N dB = Port X 26dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

**Band 12_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **EBW**

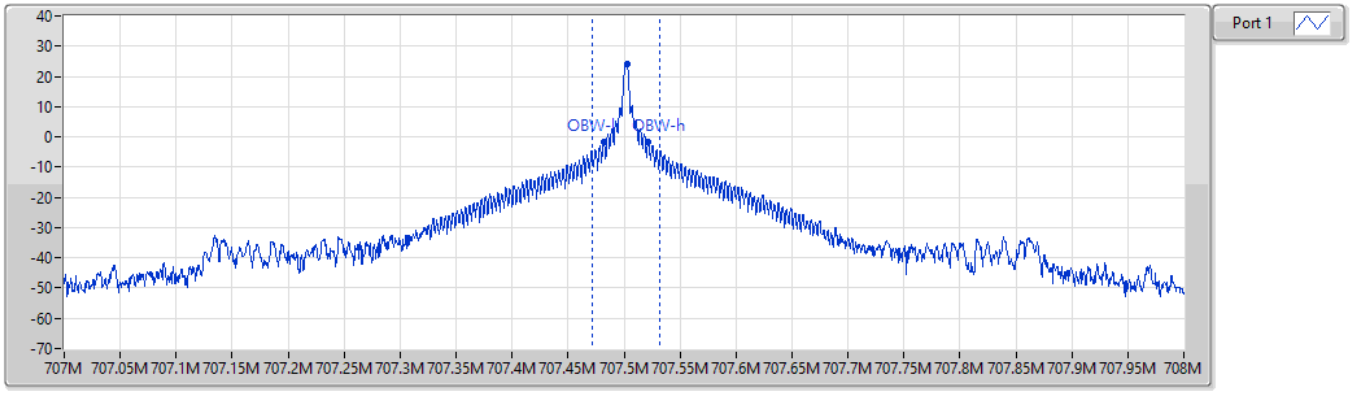
**707.5MHz_BPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5k | 707.4845M | 707.519M | 54.801k | 707.474278M | 707.529079M | 1 | 707.5M | 1M | 1k | 3k |

**Band 12_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **EBW**

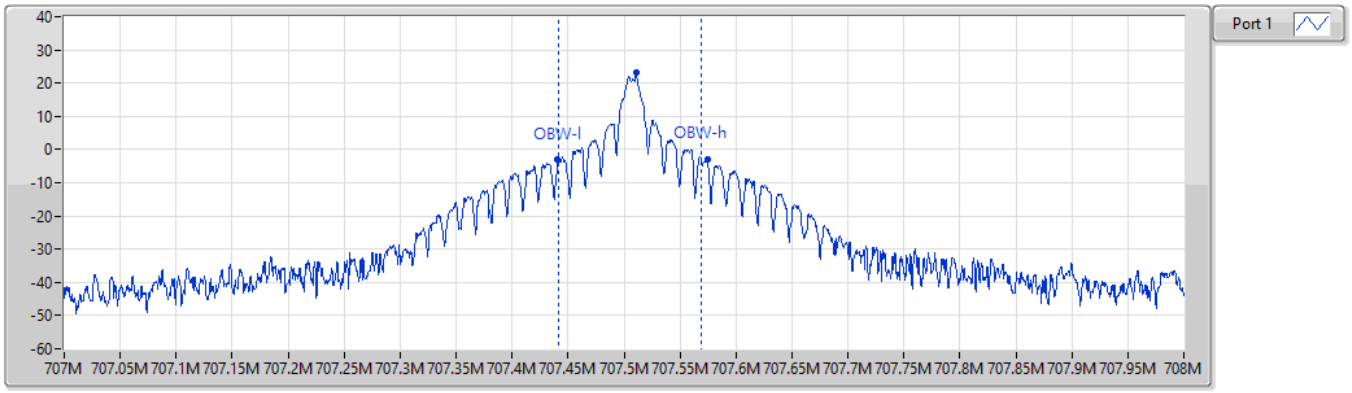
**707.5MHz_QPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 40.5k | 707.4815M | 707.522M | 60.492k | 707.471684M | 707.532176M | 1 | 707.5M | 1M | 1k | 3k |

**Band 12_NB-IoT_15kHz_Nss1,BPSK_1TX** **EBW**

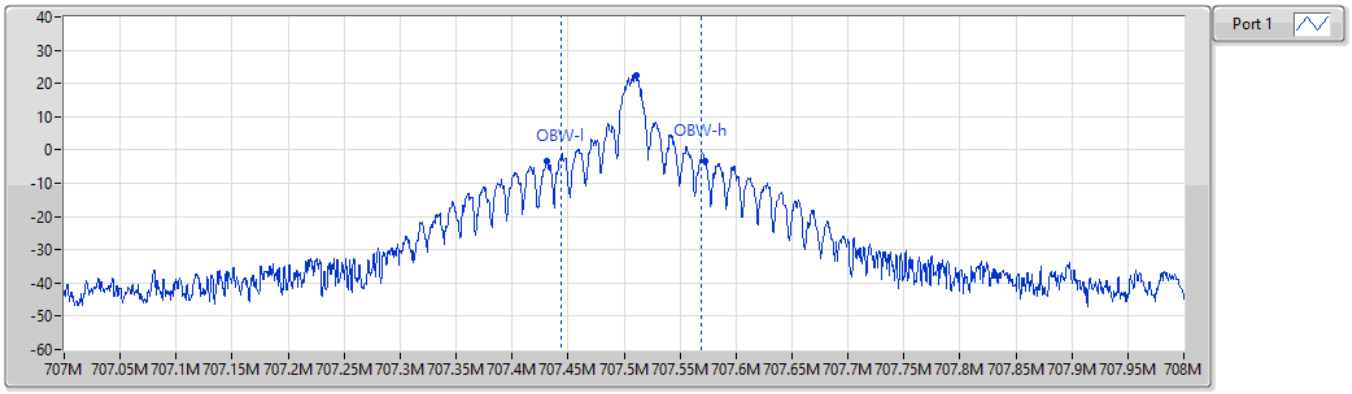
**707.5MHz_BPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 134k | 707.4405M | 707.5745M | 127.04k | 707.441497M | 707.568537M | 1 | 707.5M | 1M | 2k | 6.2k |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **EBW**

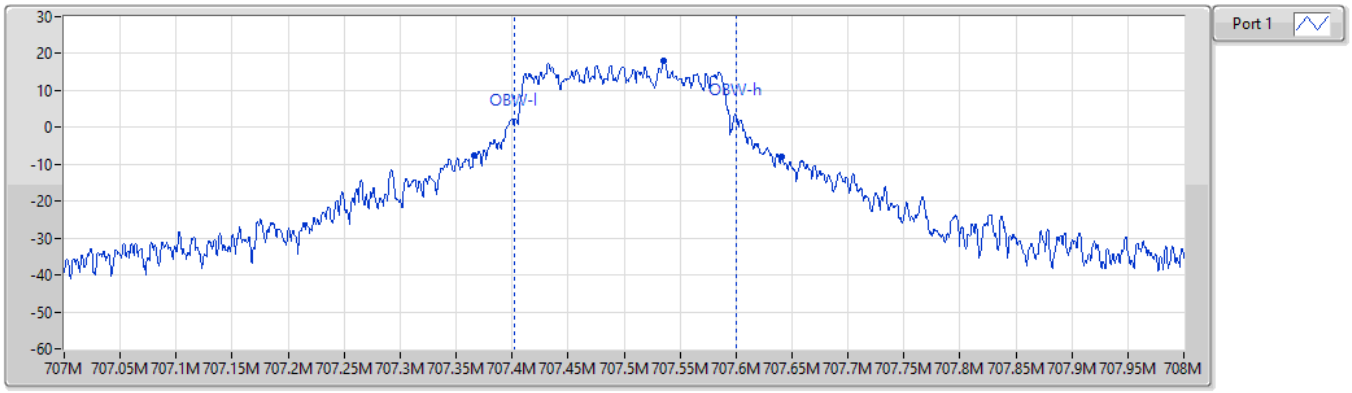
**707.5MHz_QPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 141k | 707.4315M | 707.5725M | 125.321k | 707.44367M | 707.568991M | 1 | 707.5M | 1M | 2k | 6.2k |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **EBW**

**707.5MHz_QPSK_Tone 12@0**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 275k | 707.366M | 707.641M | 198.2k | 707.401878M | 707.600078M | 1 | 707.5M | 1M | 5.1k | 16k |

**Summary**

| Mode | Max-NdB (Hz) | Max-OBW (Hz) | ITU-Code | Min-NdB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | 35k | 56.086k | 56K1G7D | 35k | 56.086k |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | 41.5k | 62.561k | 62K6G7D | 41.5k | 62.561k |
| NB-IoT_15kHz_Nss1,BPSK_1TX | 127.5k | 127.271k | 127KG7D | 127.5k | 127.271k |
| NB-IoT_15kHz_Nss1,QPSK_1TX | 354k | 206.031k | 206KG7D | 156.5k | 126.647k |

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

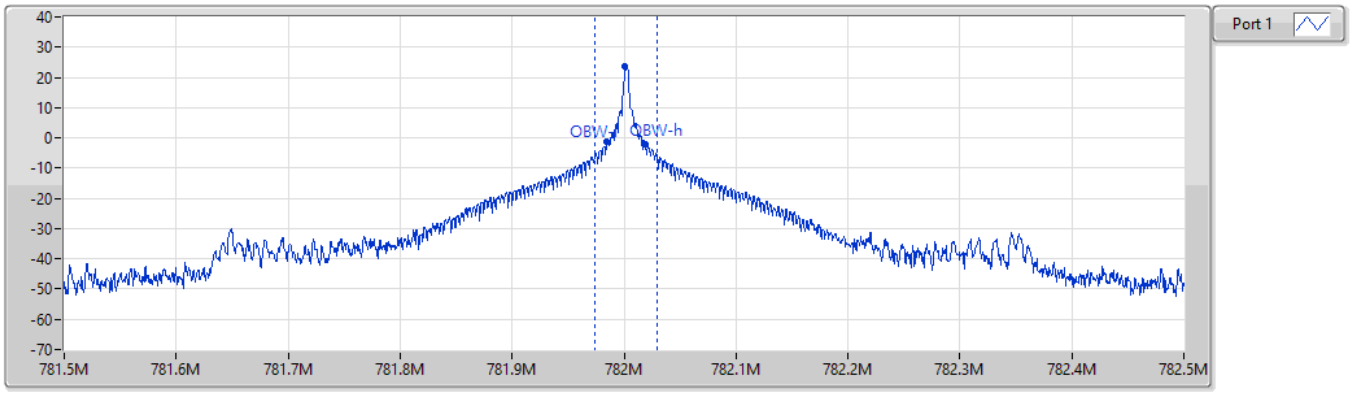
**Result**

| Mode | Result | Port 1-NdB (Hz) | Port 1-OBW (Hz) | Limit (Hz) |
|---|---|---|---|---|
| Band 13_NB-IoT_3.75kHz_Nss1_1TX | - | - | - | - |
| 782.0MHz_BPSK_Tone 1@M | Pass | 35k | 56.086k | Inf |
| 782.0MHz_QPSK_Tone 1@M | Pass | 41.5k | 62.561k | Inf |
| Band 13_NB-IoT_15kHz_Nss1_1TX | - | - | - | - |
| 782.0MHz_BPSK_Tone 1@M | Pass | 127.5k | 127.271k | Inf |
| 782.0MHz_QPSK_Tone 1@M | Pass | 156.5k | 126.647k | Inf |
| 782.0MHz_QPSK_Tone 12@0 | Pass | 354k | 206.031k | Inf |

Port X-N dB = Port X 26dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **EBW**

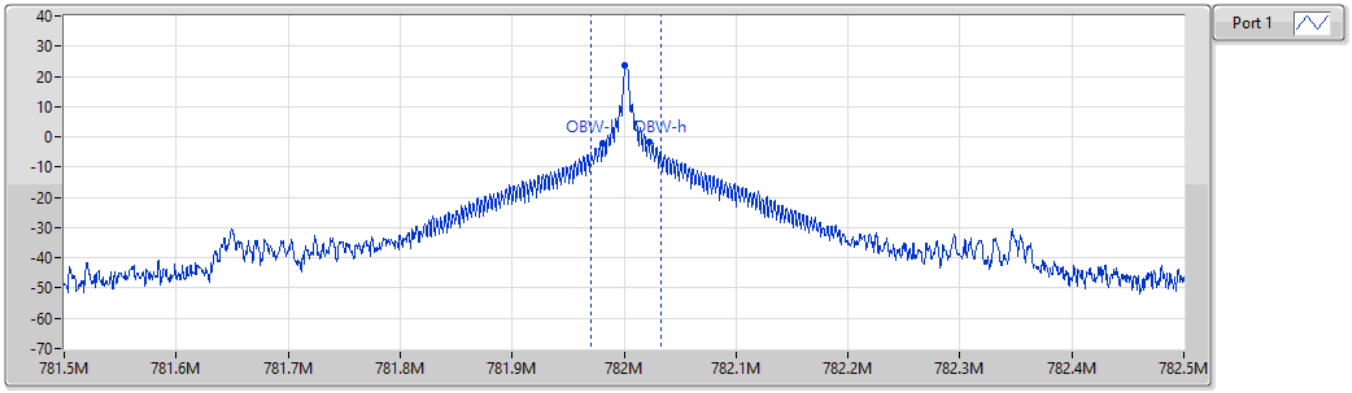
**782.0MHz_BPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 35k | 781.9845M | 782.0195M | 56.086k | 781.97342M | 782.029506M | 1 | 782M | 1M | 1k | 3k |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **EBW**

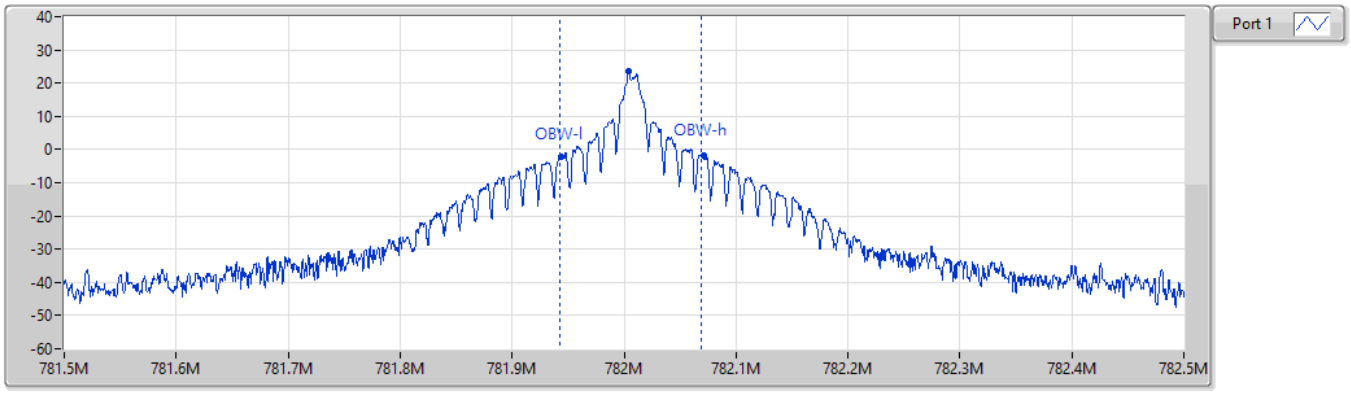
**782.0MHz_QPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 41.5k | 781.981M | 782.0225M | 62.561k | 781.970596M | 782.033158M | 1 | 782M | 1M | 1k | 3k |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **EBW**

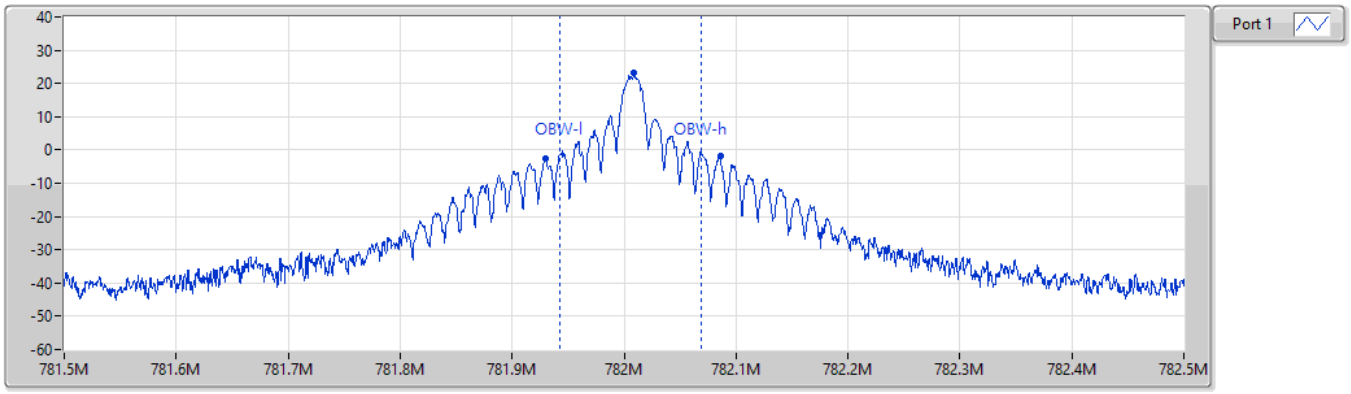
**782.0MHz_BPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 127.5k | 781.9435M | 782.071M | 127.271k | 781.94207M | 782.069341M | 1 | 782M | 1M | 2k | 6.2k |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **EBW**

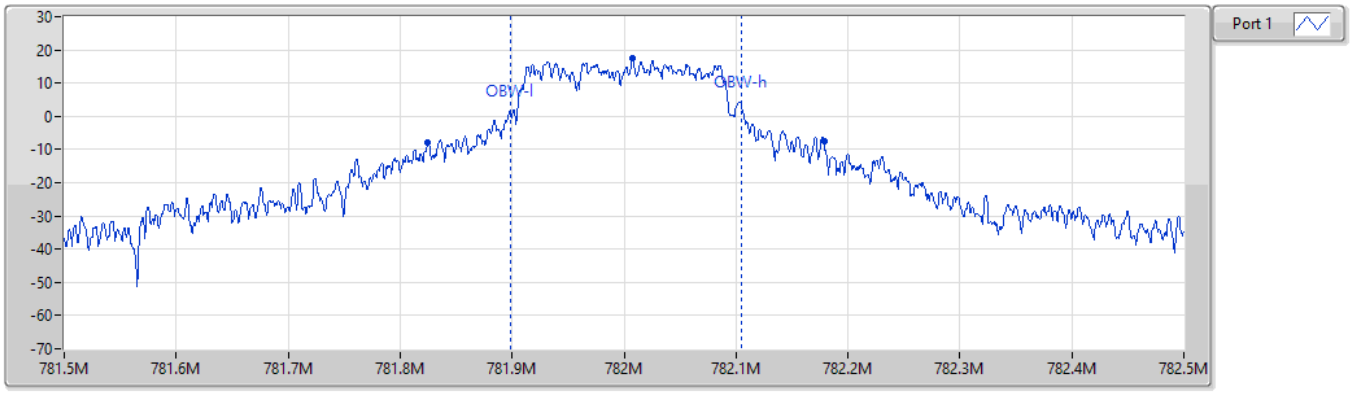
**782.0MHz_QPSK_Tone 1@M**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 156.5k | 781.9295M | 782.086M | 126.647k | 781.942605M | 782.069252M | 1 | 782M | 1M | 2k | 6.2k |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **EBW**

**782.0MHz_QPSK_Tone 12@0**




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Port | CF(Hz) | Span(Hz) | RBW(Hz) | VBW(Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 354k | 781.8245M | 782.1785M | 206.031k | 781.898873M | 782.104904M | 1 | 782M | 1M | 5.1k | 16k |

**Summary**

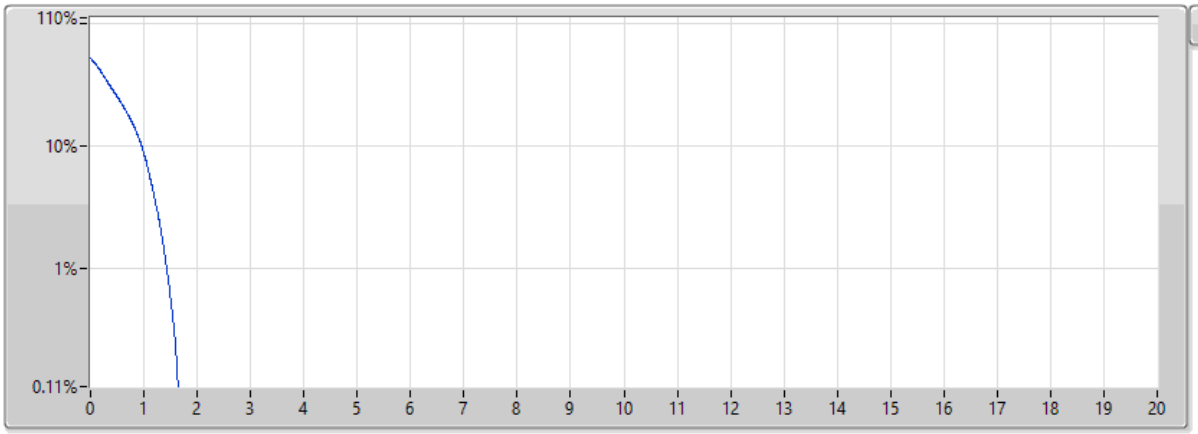
| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 707.5 | 13.00 | 4.11 | 1 |
| LTE-M1_10MHz_Nss1,16QAM_1TX | Pass | 707.5 | 13.00 | 4.87 | 1 |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 707.5 | 13.00 | 4.13 | 1 |
| LTE-M1_5MHz_Nss1,16QAM_1TX | Pass | 707.5 | 13.00 | 4.88 | 1 |

**Result**

| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 12_LTE-M1_10MHz_Nss1_1TX | - | - | - | - | - |
| 707.5MHz_QPSK_RB 6,#RB 0,NB M | Pass | 707.5 | 13.00 | 4.11 | 1 |
| 707.5MHz_16QAM_RB 6,#RB 0,NB M | Pass | 707.5 | 13.00 | 4.87 | 1 |
| Band 12_LTE-M1_5MHz_Nss1_1TX | - | - | - | - | - |
| 707.5MHz_QPSK_RB 6,#RB 0,NB M | Pass | 707.5 | 13.00 | 4.13 | 1 |
| 707.5MHz_16QAM_RB 6,#RB 0,NB M | Pass | 707.5 | 13.00 | 4.88 | 1 |

**Band 12_LTE-M1_10MHz_Nss1,QPSK_1TX** **PAPR**

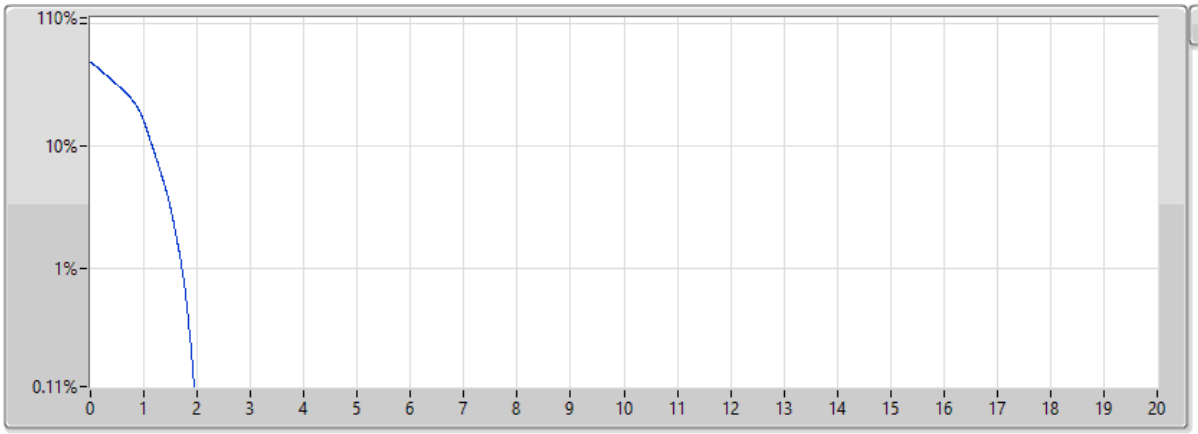
**707.5MHz_QPSK_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 4.11 | -8.89 | 13.00 | 1 |

**Band 12_LTE-M1_10MHz_Nss1,16QAM_1TX** **PAPR**

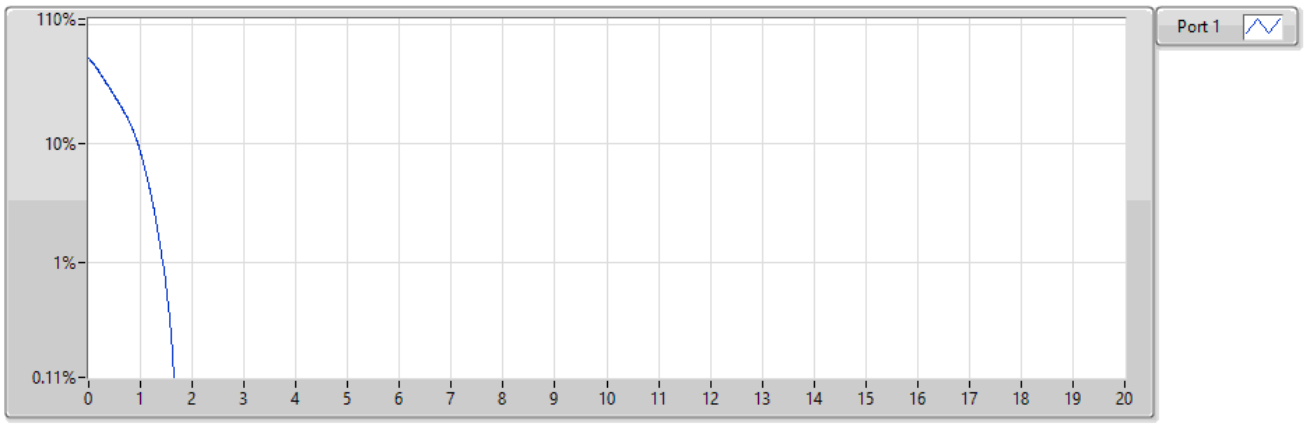
**707.5MHz_16QAM_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 4.87 | -8.13 | 13.00 | 1 |

**Band 12_LTE-M1_5MHz_Nss1,QPSK_1TX** **PAPR**

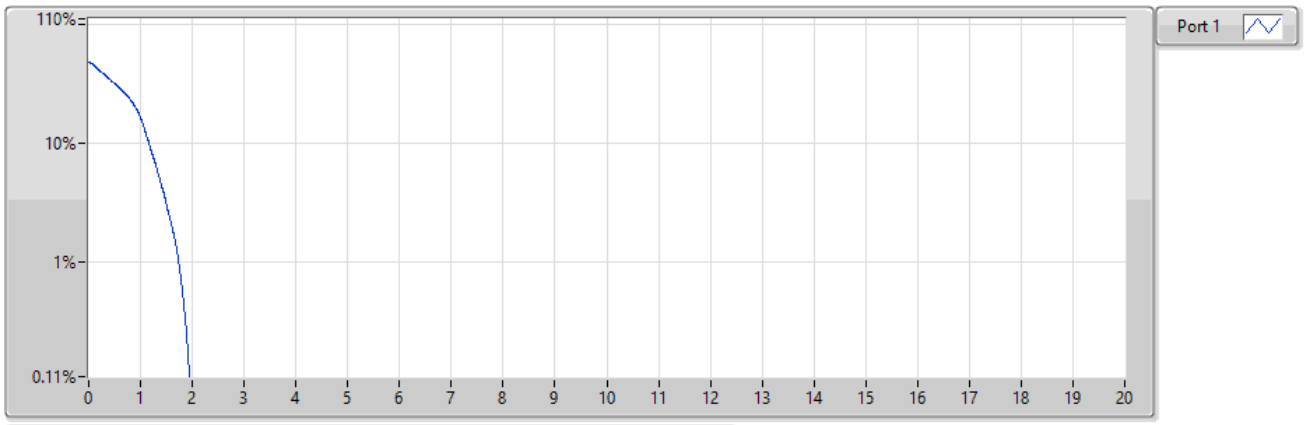
**707.5MHz_QPSK_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 4.13 | -8.87 | 13.00 | 1 |

**Band 12_LTE-M1_5MHz_Nss1,16QAM_1TX** **PAPR**

**707.5MHz_16QAM_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 4.88 | -8.12 | 13.00 | 1 |

**Summary**

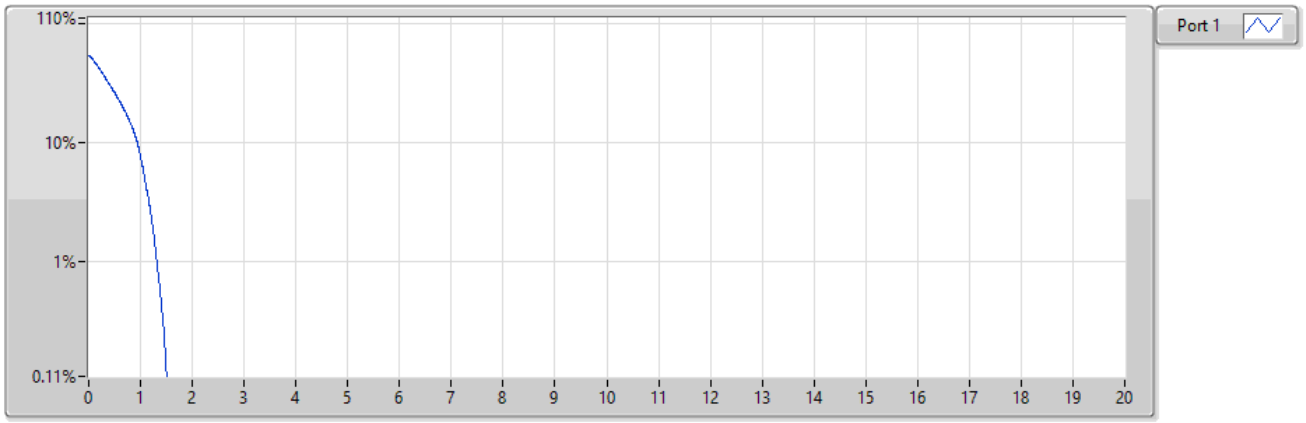
| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - |
| LTE-M1_10MHz_Nss1,QPSK_1TX | Pass | 782 | 13.00 | 3.77 | 1 |
| LTE-M1_10MHz_Nss1,16QAM_1TX | Pass | 782 | 13.00 | 4.51 | 1 |
| LTE-M1_5MHz_Nss1,QPSK_1TX | Pass | 782 | 13.00 | 3.80 | 1 |
| LTE-M1_5MHz_Nss1,16QAM_1TX | Pass | 782 | 13.00 | 4.46 | 1 |

**Result**

| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 13_LTE-M1_10MHz_Nss1_1TX | - | - | - | - | - |
| 782MHz_QPSK_RB 6,#RB 0,NB M | Pass | 782 | 13.00 | 3.77 | 1 |
| 782MHz_16QAM_RB 6,#RB 0,NB M | Pass | 782 | 13.00 | 4.51 | 1 |
| Band 13_LTE-M1_5MHz_Nss1_1TX | - | - | - | - | - |
| 782MHz_QPSK_RB 6,#RB 0,NB M | Pass | 782 | 13.00 | 3.80 | 1 |
| 782MHz_16QAM_RB 6,#RB 0,NB M | Pass | 782 | 13.00 | 4.46 | 1 |

**Band 13_LTE-M1_10MHz_Nss1,QPSK_1TX** **PAPR**

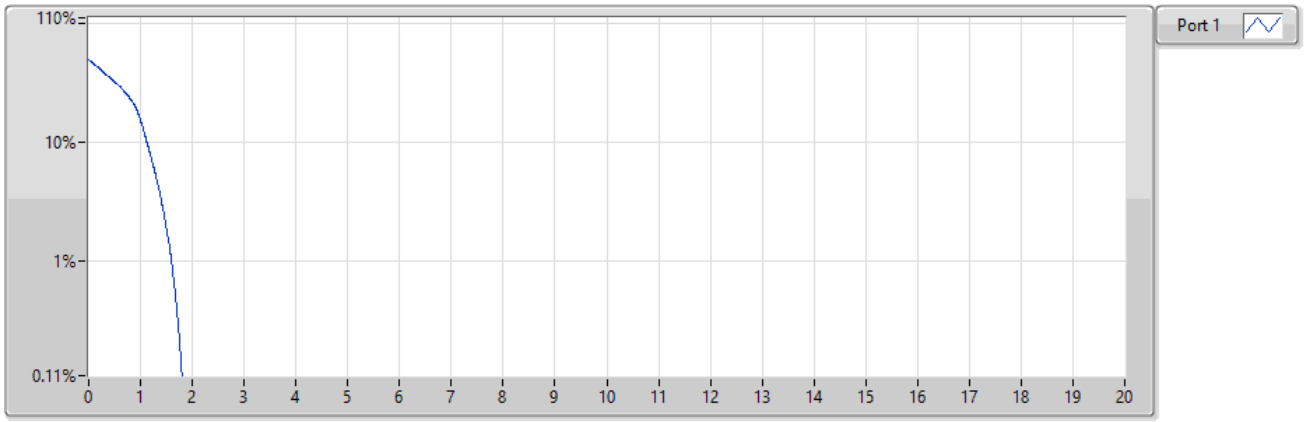
**782MHz_QPSK_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782 | 20M | 3.77 | -9.23 | 13.00 | 1 |

**Band 13_LTE-M1_10MHz_Nss1,16QAM_1TX** **PAPR**

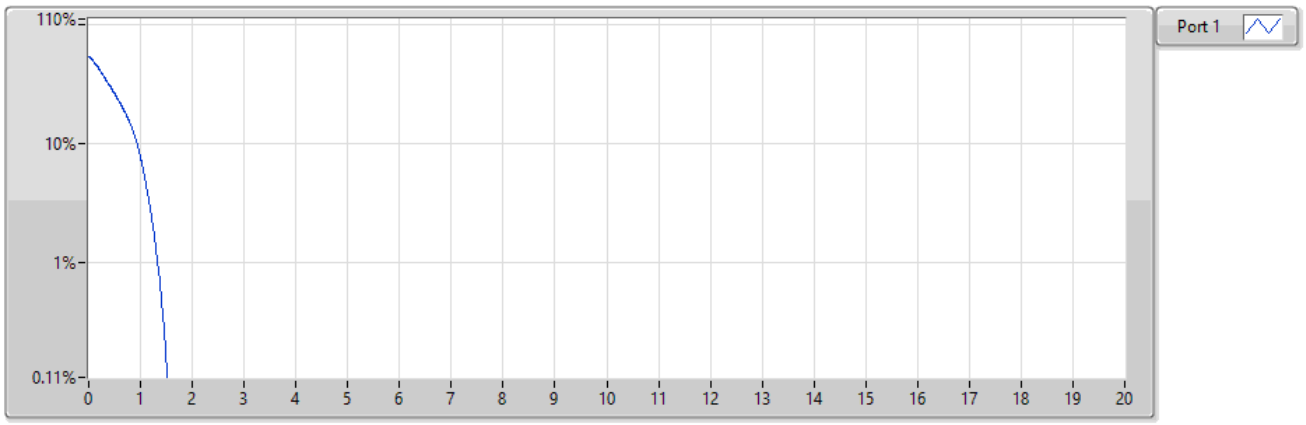
**782MHz_16QAM_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782 | 20M | 4.51 | -8.49 | 13.00 | 1 |

**Band 13_LTE-M1_5MHz_Nss1,QPSK_1TX** **PAPR**

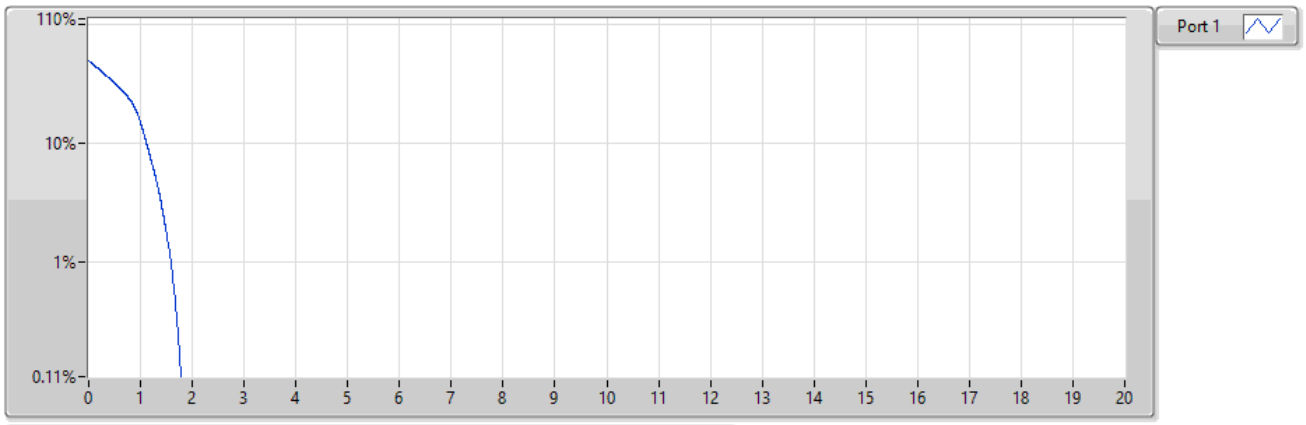
**782MHz_QPSK_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782 | 20M | 3.80 | -9.20 | 13.00 | 1 |

**Band 13_LTE-M1_5MHz_Nss1,16QAM_1TX** **PAPR**

**782MHz_16QAM_RB 6,#RB 0,NB M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782 | 20M | 4.46 | -8.54 | 13.00 | 1 |

**Summary**

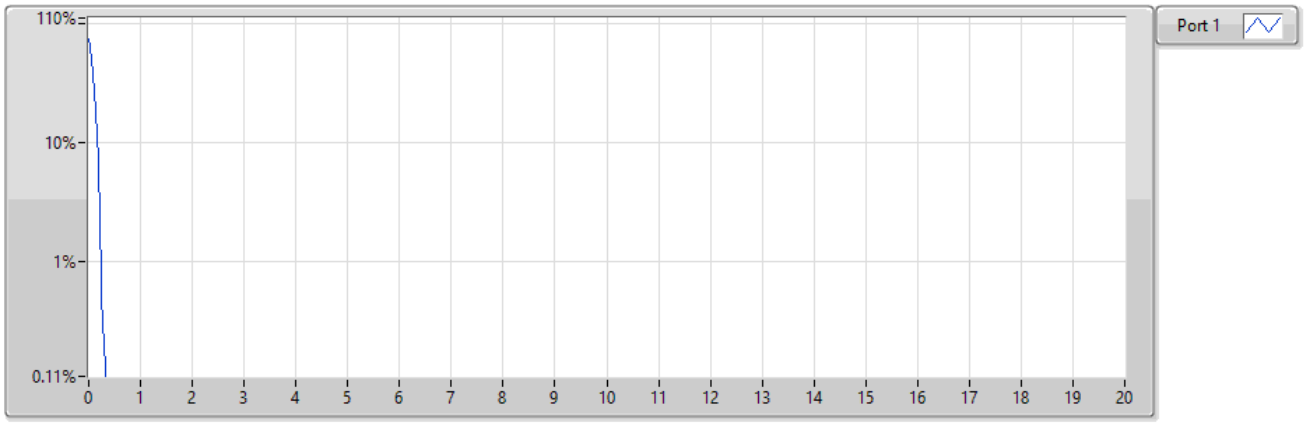
| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 12 | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | Pass | 707.5 | 13.00 | 0.82 | 1 |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | Pass | 707.5 | 13.00 | 1.01 | 1 |
| NB-IoT_15kHz_Nss1,BPSK_1TX | Pass | 707.5 | 13.00 | 0.90 | 1 |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 707.5 | 13.00 | 3.53 | 1 |

**Result**

| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 12_NB-IoT_3.75kHz_Nss1_1TX | - | - | - | - | - |
| 707.5MHz_BPSK_Tone 1@M | Pass | 707.5 | 13.00 | 0.82 | 1 |
| 707.5MHz_QPSK_Tone 1@M | Pass | 707.5 | 13.00 | 1.01 | 1 |
| Band 12_NB-IoT_15kHz_Nss1_1TX | - | - | - | - | - |
| 707.5MHz_BPSK_Tone 1@M | Pass | 707.5 | 13.00 | 0.90 | 1 |
| 707.5MHz_QPSK_Tone 1@M | Pass | 707.5 | 13.00 | 1.08 | 1 |
| 707.5MHz_QPSK_Tone 12@0 | Pass | 707.5 | 13.00 | 3.53 | 1 |

**Band 12_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **PAPR**

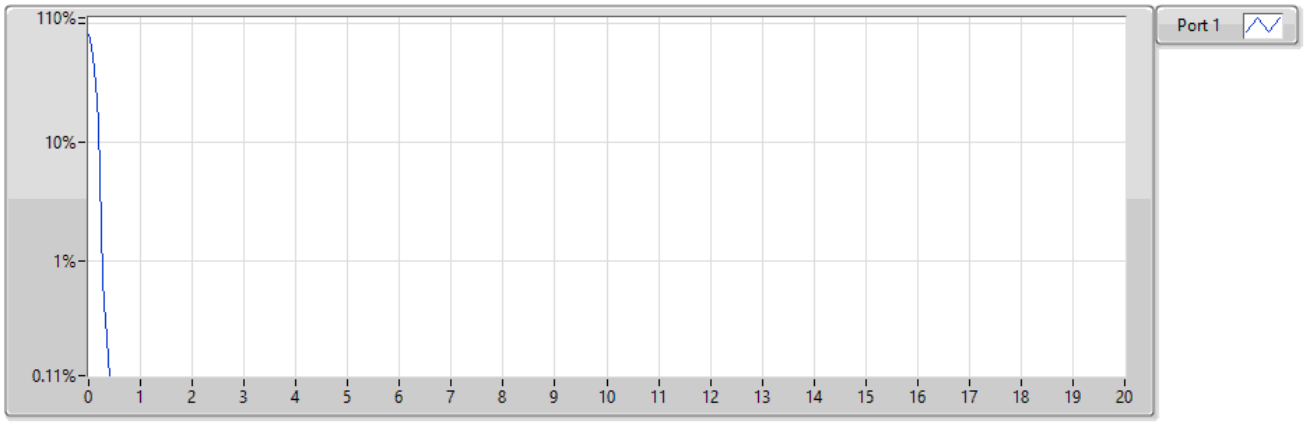
**707.5MHz_BPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 0.82 | -12.18 | 13.00 | 1 |

**Band 12_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **PAPR**

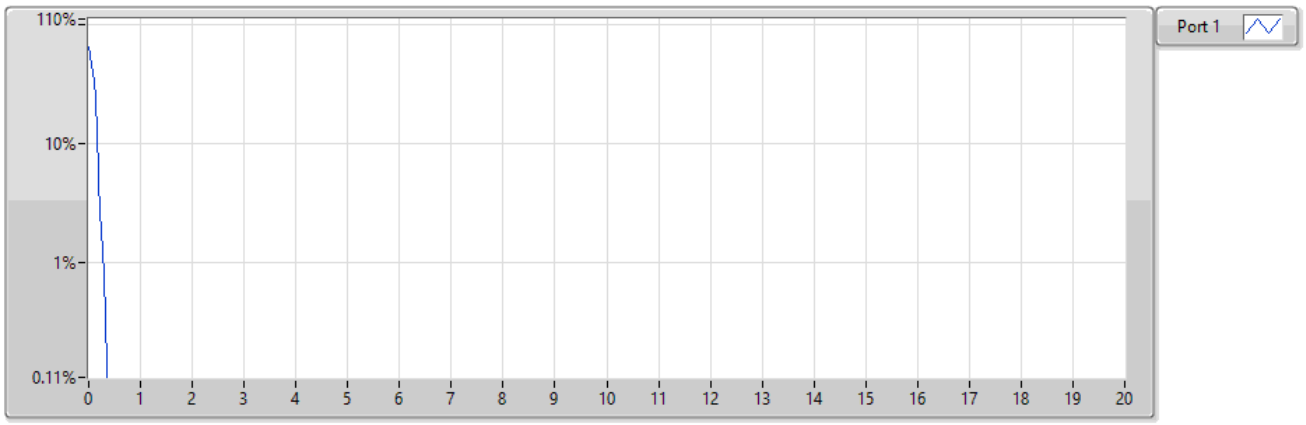
**707.5MHz_QPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 1.01 | -11.99 | 13.00 | 1 |

**Band 12_NB-IoT_15kHz_Nss1,BPSK_1TX** **PAPR**

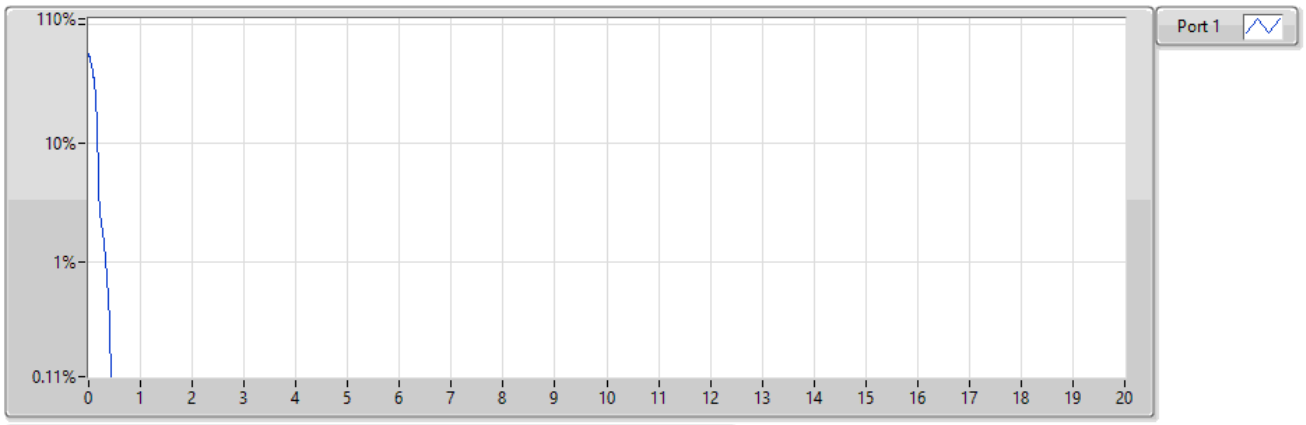
**707.5MHz_BPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 0.90 | -12.10 | 13.00 | 1 |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **PAPR**

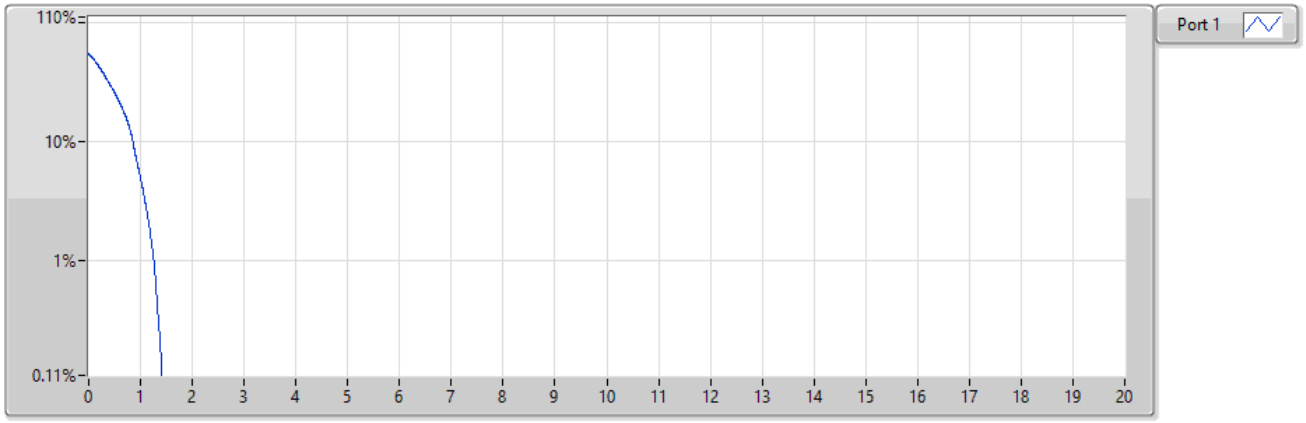
**707.5MHz_QPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 1.08 | -11.92 | 13.00 | 1 |

**Band 12_NB-IoT_15kHz_Nss1,QPSK_1TX** **PAPR**

**707.5MHz_QPSK_Tone 12@0**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 707.5 | 20M | 3.53 | -9.47 | 13.00 | 1 |

**Summary**

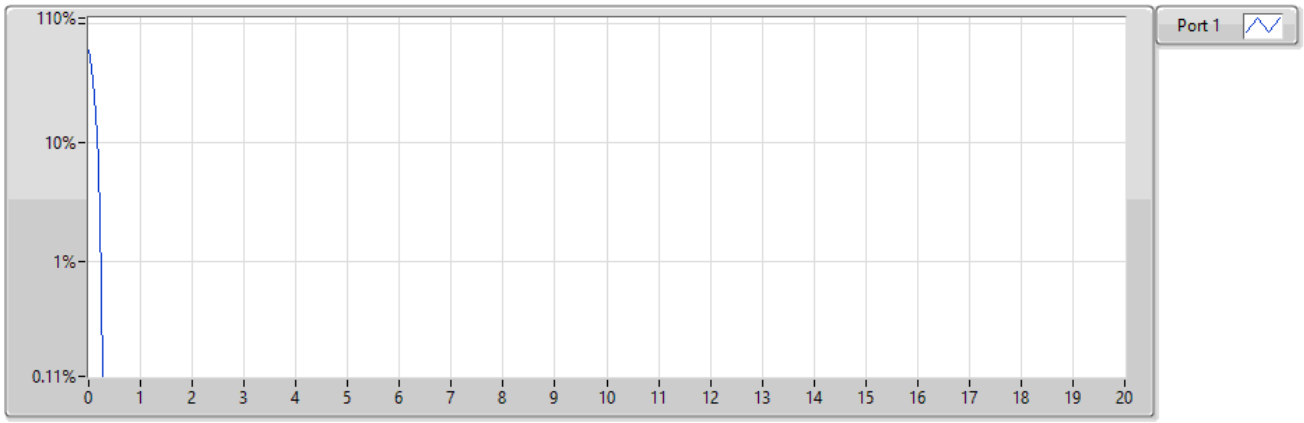
| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 13 | - | - | - | - | - |
| NB-IoT_3.75kHz_Nss1,BPSK_1TX | Pass | 782.0 | 13.00 | 0.71 | 1 |
| NB-IoT_3.75kHz_Nss1,QPSK_1TX | Pass | 782.0 | 13.00 | 1.02 | 1 |
| NB-IoT_15kHz_Nss1,BPSK_1TX | Pass | 782.0 | 13.00 | 0.92 | 1 |
| NB-IoT_15kHz_Nss1,QPSK_1TX | Pass | 782.0 | 13.00 | 3.29 | 1 |

**Result**

| Mode | Result | Freq (MHz) | Limit (dB) | 0.1% | Port |
|---|---|---|---|---|---|
| Band 13_NB-IoT_3.75kHz_Nss1_1TX | - | - | - | - | - |
| 782.0MHz_BPSK_Tone 1@M | Pass | 782.0 | 13.00 | 0.71 | 1 |
| 782.0MHz_QPSK_Tone 1@M | Pass | 782.0 | 13.00 | 1.02 | 1 |
| Band 13_NB-IoT_15kHz_Nss1_1TX | - | - | - | - | - |
| 782.0MHz_BPSK_Tone 1@M | Pass | 782.0 | 13.00 | 0.92 | 1 |
| 782.0MHz_QPSK_Tone 1@M | Pass | 782.0 | 13.00 | 1.03 | 1 |
| 782.0MHz_QPSK_Tone 12@0 | Pass | 782.0 | 13.00 | 3.29 | 1 |

**Band 13_NB-IoT_3.75kHz_Nss1,BPSK_1TX** **PAPR**

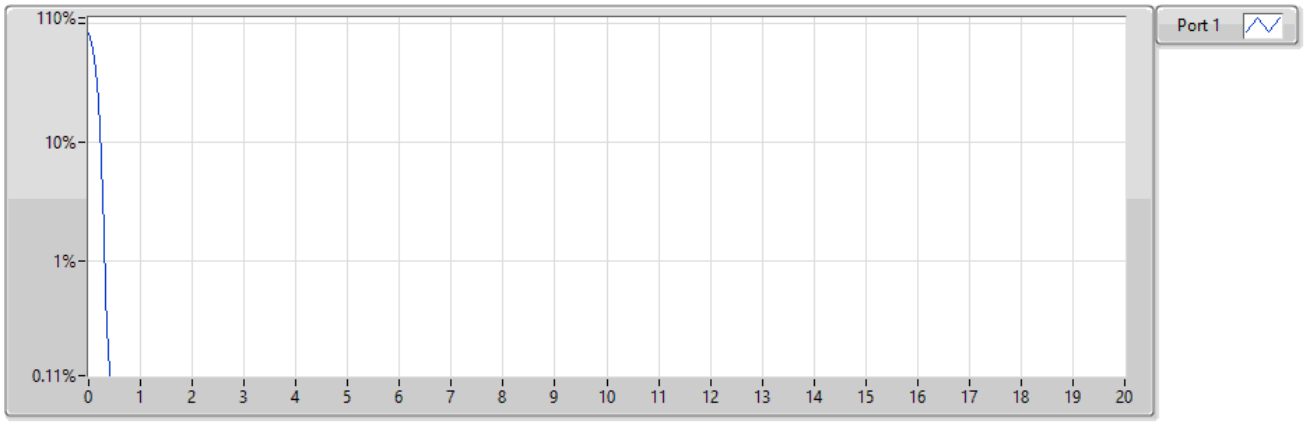
**782.0MHz_BPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782.0 | 20M | 0.71 | -12.29 | 13.00 | 1 |

**Band 13_NB-IoT_3.75kHz_Nss1,QPSK_1TX** **PAPR**

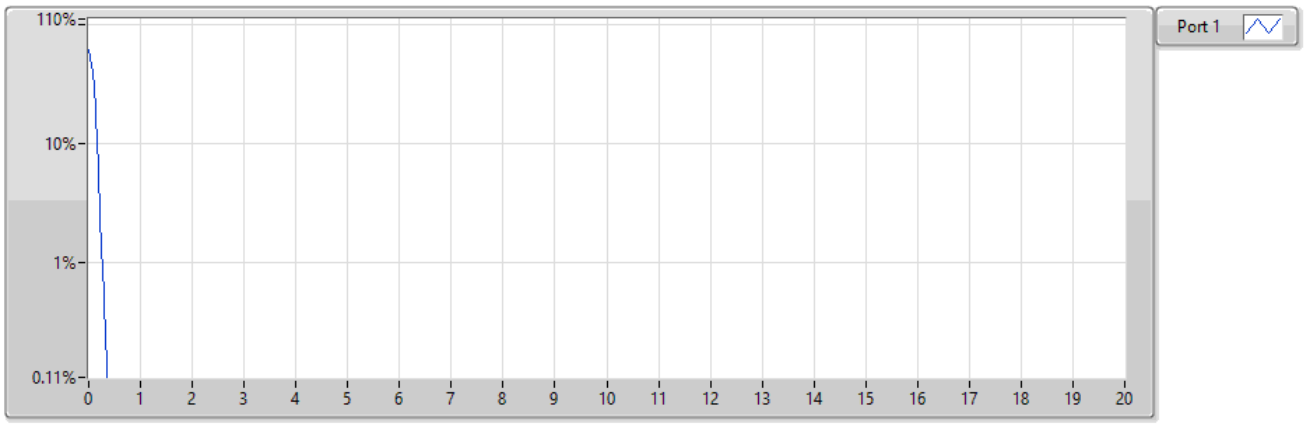
**782.0MHz_QPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782.0 | 20M | 1.02 | -11.98 | 13.00 | 1 |

**Band 13_NB-IoT_15kHz_Nss1,BPSK_1TX** **PAPR**

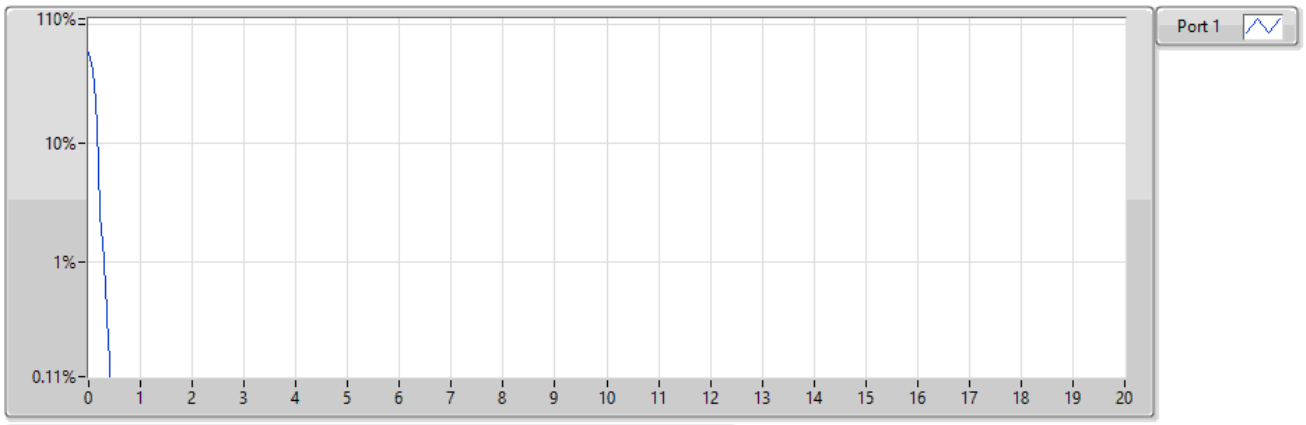
**782.0MHz_BPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782.0 | 20M | 0.92 | -12.08 | 13.00 | 1 |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **PAPR**

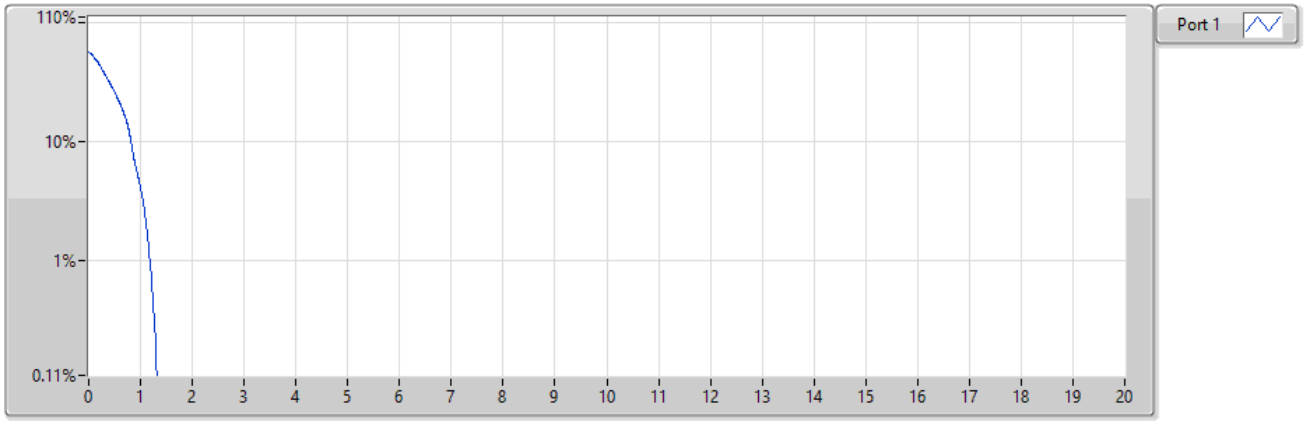
**782.0MHz_QPSK_Tone 1@M**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782.0 | 20M | 1.03 | -11.97 | 13.00 | 1 |

**Band 13_NB-IoT_15kHz_Nss1,QPSK_1TX** **PAPR**

**782.0MHz_QPSK_Tone 12@0**




| Freq (MHz) | MBW(Hz) | 0.1% | Margin(dB) | Limit(dB) | Port |
|---|---|---|---|---|---|
| 782.0 | 20M | 3.29 | -9.71 | 13.00 | 1 |

| LTE Band 12, CB: 10MHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **704MHz** | | **711MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.021 | 699.660843 | 0.023 | 715.334962 |
| T20°CVmin | 0.023 | 699.660844 | 0.024 | 715.334963 |
| T70°CVnom | 0.021 | 699.660843 | 0.025 | 715.334964 |
| T60°CVnom | 0.023 | 699.660844 | 0.023 | 715.334962 |
| T50°CVnom | 0.024 | 699.660845 | 0.024 | 715.334963 |
| T40°CVnom | 0.021 | 699.660843 | 0.021 | 715.334961 |
| T30°CVnom | 0.021 | 699.660843 | 0.023 | 715.334962 |
| T20°CVnom | 0.023 | 699.660844 | 0.024 | 715.334963 |
| T10°CVnom | 0.021 | 699.660843 | 0.021 | 715.334961 |
| T0°CVnom | 0.023 | 699.660844 | 0.023 | 715.334962 |
| T-10°CVnom | 0.021 | 699.660843 | 0.024 | 715.334963 |
| T-20°CVnom | 0.021 | 699.660843 | 0.023 | 715.334962 |
| T-30°CVnom | 0.023 | 699.660844 | 0.023 | 715.334962 |
| **Limit** | | >698MHz | | <716MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [°C]: 20 | Tmax [°C]: 70 | | Tmin [°C]: -30 | |

| LTE Band 12, CB: 5MHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **701.5MHz** | | **713.5MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.023 | 699.237365 | 0.021 | 715.766971 |
| T20°CVmin | 0.021 | 699.237364 | 0.022 | 715.766972 |
| T70°CVnom | 0.023 | 699.237365 | 0.024 | 715.766973 |
| T60°CVnom | 0.024 | 699.237366 | 0.021 | 715.766971 |
| T50°CVnom | 0.023 | 699.237365 | 0.022 | 715.766972 |
| T40°CVnom | 0.023 | 699.237365 | 0.022 | 715.766972 |
| T30°CVnom | 0.023 | 699.237365 | 0.021 | 715.766971 |
| T20°CVnom | 0.024 | 699.237366 | 0.022 | 715.766972 |
| T10°CVnom | 0.023 | 699.237365 | 0.024 | 715.766973 |
| T0°CVnom | 0.021 | 699.237364 | 0.021 | 715.766971 |
| T-10°CVnom | 0.023 | 699.237365 | 0.022 | 715.766972 |
| T-20°CVnom | 0.023 | 699.237365 | 0.024 | 715.766973 |
| T-30°CVnom | 0.024 | 699.237366 | 0.022 | 715.766972 |
| **Limit** | | >698MHz | | <716MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [°C]: 20 | Tmax [°C]: 70 | | Tmin [°C]: -30 | |

| Band 12_NB-IoT_3.75kHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **699.2MHz** | | **715.8MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.023 | 699.171700 | 0.021 | 715.832191 |
| T20°CVmin | 0.021 | 699.171699 | 0.022 | 715.832192 |
| T70°CVnom | 0.021 | 699.171699 | 0.024 | 715.832193 |
| T60°CVnom | 0.023 | 699.171700 | 0.021 | 715.832191 |
| T50°CVnom | 0.021 | 699.171699 | 0.024 | 715.832193 |
| T40°CVnom | 0.020 | 699.171698 | 0.022 | 715.832192 |
| T30°CVnom | 0.023 | 699.171700 | 0.021 | 715.832191 |
| T20°CVnom | 0.021 | 699.171699 | 0.021 | 715.832191 |
| T10°CVnom | 0.020 | 699.171698 | 0.020 | 715.832190 |
| T0°CVnom | 0.021 | 699.171699 | 0.022 | 715.832192 |
| T-10°CVnom | 0.021 | 699.171699 | 0.021 | 715.832191 |
| T-20°CVnom | 0.023 | 699.171700 | 0.021 | 715.832191 |
| T-30°CVnom | 0.021 | 699.171699 | 0.022 | 715.832192 |
| **Limit** | | >698MHz | | <716MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [℃]: 20 | Tmax [℃]: 70 | | Tmin [℃]: -30 | |

| Band 12_NB-IoT_15kHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **699.2MHz** | | **715.8MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.021 | 699.101893 | 0.024 | 715.900095 |
| T20°CVmin | 0.023 | 699.101894 | 0.021 | 715.900093 |
| T70°CVnom | 0.021 | 699.101893 | 0.022 | 715.900094 |
| T60°CVnom | 0.021 | 699.101893 | 0.020 | 715.900092 |
| T50°CVnom | 0.023 | 699.101894 | 0.022 | 715.900094 |
| T40°CVnom | 0.021 | 699.101893 | 0.021 | 715.900093 |
| T30°CVnom | 0.021 | 699.101893 | 0.022 | 715.900094 |
| T20°CVnom | 0.023 | 699.101894 | 0.021 | 715.900093 |
| T10°CVnom | 0.021 | 699.101893 | 0.022 | 715.900094 |
| T0°CVnom | 0.023 | 699.101894 | 0.021 | 715.900093 |
| T-10°CVnom | 0.024 | 699.101895 | 0.021 | 715.900093 |
| T-20°CVnom | 0.021 | 699.101893 | 0.022 | 715.900094 |
| T-30°CVnom | 0.023 | 699.101894 | 0.021 | 715.900093 |
| **Limit** | | >698MHz | | <716MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [°C]: 20 | Tmax [°C]: 70 | | Tmin [°C]: -30 | |

| Band 13_NB-IoT_3.75kHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **777.2MHz** | | **786.8MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.019 | 777.170611 | 0.020 | 786.833174 |
| T20°CVmin | 0.021 | 777.170612 | 0.019 | 786.833173 |
| T70°CVnom | 0.019 | 777.170611 | 0.019 | 786.833173 |
| T60°CVnom | 0.018 | 777.170610 | 0.020 | 786.833174 |
| T50°CVnom | 0.021 | 777.170612 | 0.019 | 786.833173 |
| T40°CVnom | 0.019 | 777.170611 | 0.019 | 786.833173 |
| T30°CVnom | 0.019 | 777.170611 | 0.018 | 786.833172 |
| T20°CVnom | 0.018 | 777.170610 | 0.020 | 786.833174 |
| T10°CVnom | 0.021 | 777.170612 | 0.019 | 786.833173 |
| T0°CVnom | 0.019 | 777.170611 | 0.019 | 786.833173 |
| T-10°CVnom | 0.021 | 777.170612 | 0.020 | 786.833174 |
| T-20°CVnom | 0.019 | 777.170611 | 0.019 | 786.833173 |
| T-30°CVnom | 0.018 | 777.170610 | 0.019 | 786.833173 |
| **Limit** | | >777MHz | | <787MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [°C]: 20 | Tmax [°C]: 70 | | Tmin [°C]: -30 | |

| Band 13_NB-IoT_15kHz | | | | |
|---|---|---|---|---|
| **Temperature (ºC)** | **777.2MHz** | | **786.8MHz** | |
| | **Frequency Drift (ppm)** | **$F_L$ (MHz)** | **Frequency Drift (ppm)** | **$F_H$ (MHz)** |
| T20°CVmax | 0.021 | 777.098889 | 0.019 | 786.904919 |
| T20°CVmin | 0.019 | 777.098888 | 0.020 | 786.904920 |
| T70°CVnom | 0.021 | 777.098889 | 0.022 | 786.904921 |
| T60°CVnom | 0.021 | 777.098889 | 0.019 | 786.904919 |
| T50°CVnom | 0.019 | 777.098888 | 0.019 | 786.904919 |
| T40°CVnom | 0.018 | 777.098887 | 0.020 | 786.904920 |
| T30°CVnom | 0.019 | 777.098888 | 0.022 | 786.904921 |
| T20°CVnom | 0.018 | 777.098887 | 0.020 | 786.904920 |
| T10°CVnom | 0.021 | 777.098889 | 0.019 | 786.904919 |
| T0°CVnom | 0.019 | 777.098888 | 0.022 | 786.904921 |
| T-10°CVnom | 0.019 | 777.098888 | 0.020 | 786.904920 |
| T-20°CVnom | 0.021 | 777.098889 | 0.019 | 786.904919 |
| T-30°CVnom | 0.022 | 777.098890 | 0.020 | 786.904920 |
| **Limit** | | >777MHz | | <787MHz |
| Vnom [V]: 3.6 | Vmax [V]: 4 | | Vmin [V]: 2.8 | |
| Tnom [°C]: 20 | Tmax [°C]: 70 | | Tmin [°C]: -30 | |