# FCC RF Test Report

| | |
|---|---|
| APPLICANT | : Bullitt Group |
| EQUIPMENT | : Rugged Smart Phone |
| BRAND NAME | : CAT |
| MODEL NAME | : S48c |
| FCC ID | : ZL5S48C |
| STANDARD | : FCC 47 CFR Part 2, 90(R) |
| CLASSIFICATION | : PCS Licensed Transmitter Held to Ear (PCE) |

**The product was received on Jun. 06, 2018 and completely tested on Jul. 01, 2018. We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI/TIA-603-E and shown compliance with the applicable technical standards.**

**The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Shenzhen) Inc., the test report shall not be reproduced except in full.**

Eric Shih

**Approved by: Eric Shih / Manager**

NVLAP®
TESTING
NVLAP LAB CODE 600156-0

***Sporton International (Shenzhen) Inc.***
***1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen City***
***Guangdong Province 518055 China***

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# REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION | ISSUED DATE |
|---|---|---|---|
| FG850804-02C | Rev. 01 | Initial issue of report | Jul. 10, 2018 |
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# SUMMARY OF TEST RESULT

| Report Section | FCC Rule | Description | Limit | Result | Remark |
|---|---|---|---|---|---|
| 3.4 | §2.1046 | Conducted Output Power | Reporting only | PASS | - |
| | §90.542 (a)(7) | Effective Radiated Power | ERP < 3Watt | PASS | - |
| 3.5 | §2.1049 | Occupied Bandwidth | Reporting only | PASS | - |
| 3.6 | §2.1053<br>§90.543 (e)(2)(3) | Conducted Band Edge Measurement | Refer standard | PASS | - |
| 3.7 | §2.1051<br>§90.210(n) | Emission Mask | Mask B | PASS | - |
| 3.8 | §2.1053<br>§90.543 (e)(3) | Conducted Spurious Emission | < $43+10\log_{10}$(P[Watts]) | PASS | - |
| 3.9 | §2.1055<br>§90.539 (e) | Frequency Stability Temperature & Voltage | < ±1.25 ppm | PASS | - |
| 4.4 | §2.1053<br>§90.543 (e)(3)<br>§90.543 (f) | Radiated Spurious Emission | < $43+10\log_{10}$(P[Watts]) | PASS | Under limit 19.22 dB at 1577.000 MHz |

# 1 General Description

## 1.1 Applicant

**Bullitt Group**

One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

## 1.2 Feature of Equipment Under Test

| Product Feature | |
|---|---|
| **Equipment** | Rugged Smart Phone |
| **Brand Name** | CAT |
| **Model Name** | S48c |
| **FCC ID** | ZL5S48C |
| **Tx Frequency** | LTE Band 14: 790.5 MHz ~ 795.5 MHz |
| **Rx Frequency** | LTE Band 14: 760.5 MHz ~ 765.5 MHz |
| **Bandwidth** | 5MHz / 10MHz |
| **Maximum Output Power to Antenna** | LTE Band 14: 24.29 dBm |
| **Type of Modulation** | QPSK / 16QAM / 64QAM |
| **IMEI Code** | Conducted: 358016090006507<br>Radiation: 358016090012505 |
| **EUT Stage** | Identical Prototype |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.3 Maximum ERP Power, Frequency Tolerance, and Emission Designator

| LTE Band 14 | | QPSK | | | 16QAM | | |
|---|---|---|---|---|---|---|---|
| BW (MHz) | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 5 | 790.5~795.5 | 4M51G7D | - | 0.1208 | 4M50W7D | - | 0.1084 |
| 10 | 793 | 9M05G7D | 0.0155 | 0.1213 | 9M03W7D | - | 0.1047 |

| LTE Band 14 | | 64QAM | | |
|---|---|---|---|---|
| BW (MHz) | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 5 | 790.5~795.5 | 4M51W7D | - | 0.0743 |
| 10 | 793 | 9M07W7D | - | 0.0752 |

## 1.4 Testing Site

Sporton International (Shenzhen) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0) and the FCC designation No. are CN5018 and CN5019.

| | | |
|---|---|---|
| **Test Site** | Sporton International (Shenzhen) Inc. | |
| **Test Site Location** | 1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen City Guangdong Province 518055 China<br>TEL: +86-755-8637-9589<br>FAX: +86-755-8637-9595 | |
| **Test Site No.** | **Sporton Site No.** | **FCC Test Firm Registration No.** |
| | TH01-SZ | 251365 |

| | | |
|---|---|---|
| **Test Site** | Sporton International (Shenzhen) Inc. | |
| **Test Site Location** | No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District Shenzhen City Guangdong Province 518055 China<br>TEL: +86-755-3320-2398 | |
| **Test Site No.** | **Sporton Site No.** | **FCC Test Firm Registration No.** |
| | 03CH04-SZ | 577730 |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

## 1.5 Applied Standards

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

- 47 CFR Part 2, Part 90(R)
- ANSI/TIA-603-E
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

# 2 Test Configuration of Equipment Under Test

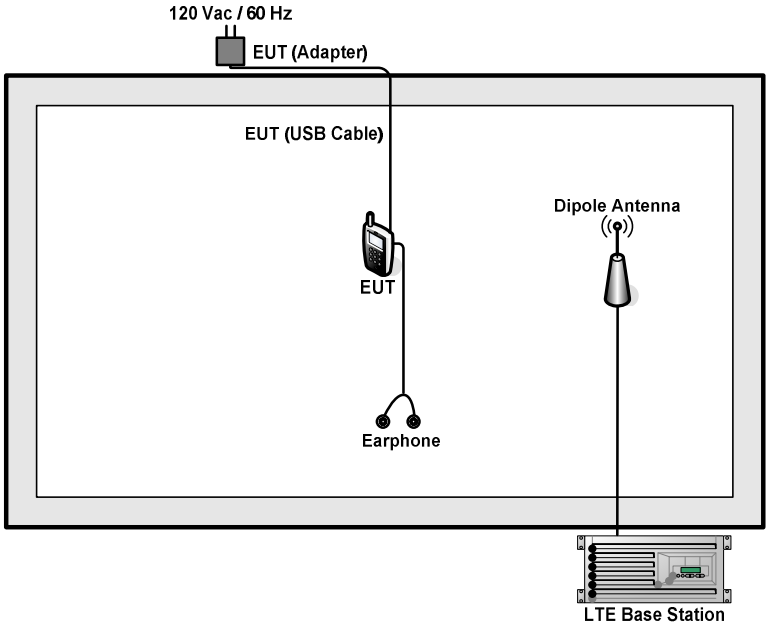
## 2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

| Conducted Test Cases | Band | Bandwidth (MHz) | | | | | | Modulation | | | RB # | | | Test Channel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.4 | 3 | 5 | 10 | 15 | 20 | QPSK | 16QAM | 64QAM | 1 | Half | Full | L | M | H |
| Max. Output Power | 14 | - | - | V | - | - | - | V | V | V | V | V | V | V | V | V |
| | 14 | - | - | | V | - | - | V | V | V | V | V | V | | V | |
| 26dB and 99% Bandwidth | 14 | - | - | V | | - | - | V | V | V | | | V | V | V | V |
| | 14 | - | - | | V | - | - | V | V | V | | | V | | V | |
| Conducted Band Edge | 14 | - | - | V | | - | - | V | V | V | V | | V | V | | V |
| | 14 | - | - | | V | - | - | V | V | V | V | | V | | V | |
| Emission Mask | 14 | - | - | V | | - | - | V | V | V | V | | V | V | V | V |
| | 14 | - | - | | V | - | - | V | V | V | V | | V | | V | |
| Conducted Spurious Emission | 14 | - | - | V | | - | - | V | V | V | V | | | V | V | V |
| | 14 | - | - | | V | - | - | V | V | V | V | | | | V | |
| Frequency Stability | 14 | - | - | | V | - | - | V | | | | | V | | V | |
| E.R.P | 14 | - | - | V | | - | - | V | V | V | V | | | V | V | V |
| | 14 | - | - | | V | - | - | V | V | V | V | | | | V | |
| Radiated Spurious Emission | 14 | - | - | V | V | - | - | V | | | V | | | | V | |
| Note | 1. The mark "V" means that this configuration is chosen for testing<br>2. The mark "-" means that this bandwidth is not supported.<br>3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. | | | | | | | | | | | | | | | |

## 2.2 Connection Diagram of Test System




## 2.3 Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model No. | FCC ID | Data Cable | Power Cord |
|---|---|---|---|---|---|---|
| 1. | LTE Base Station | Anritsu | MT8820C | N/A | N/A | Unshielded, 1.8 m |
| 2. | DC Power Supply | GW INSTEK | GPS-3030D | N/A | N/A | Unshielded, 1.8 m |
| 3. | Earphone | Apple | MC690ZP/A | N/A | Shielded,1.0m | N/A |

## 2.4 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.0 dB and 10dB attenuator.

Example :

*Offset(dB) = RF cable loss(dB) + attenuator factor(dB).*

= 4.0 + 10 = 14.0 (dB)

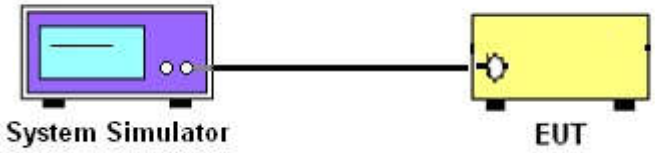
# 3 Conducted Test Items

## 3.1 Measuring Instruments

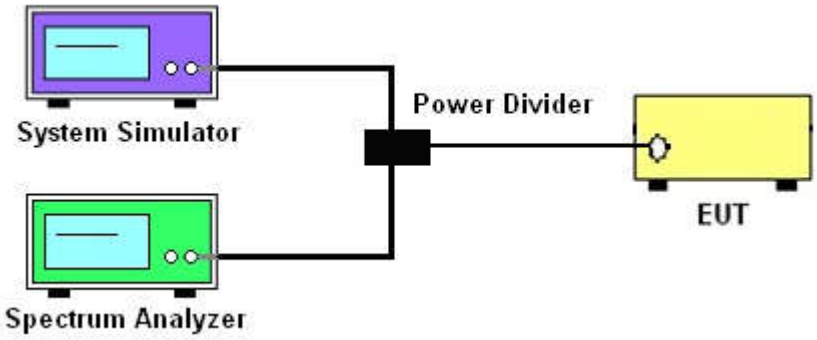
See list of measuring instruments of this test report.

## 3.2 Test Setup

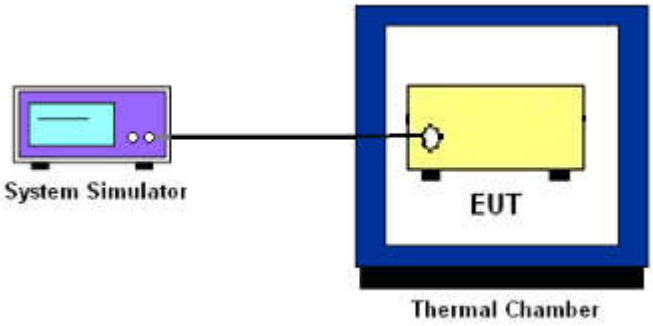
### 3.2.1 Conducted Output Power




### 3.2.2 Occupied / 26dB Bandwidth ,Band-Edge and Conducted Spurious Emission




### 3.2.3 Frequency Stability




## 3.3 Test Result of Conducted Test

Please refer to Appendix A.

## 3.4 Conducted Output Power and ERP

### 3.4.1 Description of the Conducted Output Power Measurement and ERP Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 14.
According to KDB 412172 D01 Power Approach,
EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where
$P_T$ = transmitter output power in dBm
$G_T$ = gain of the transmitting antenna in dBi
$L_C$ = signal attenuation in the connecting cable between the transmitter and antenna in dB

### 3.4.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

## 3.5 Occupied Bandwidth

### 3.5.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

### 3.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.

# 3.6 Conducted Band Edge Measurement

## 3.6.1 Description of Conducted Band Edge Measurement

For operations in the 758-768 MHz and the 788-798 MHz bands

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 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) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

## 3.6.2 Test Procedures

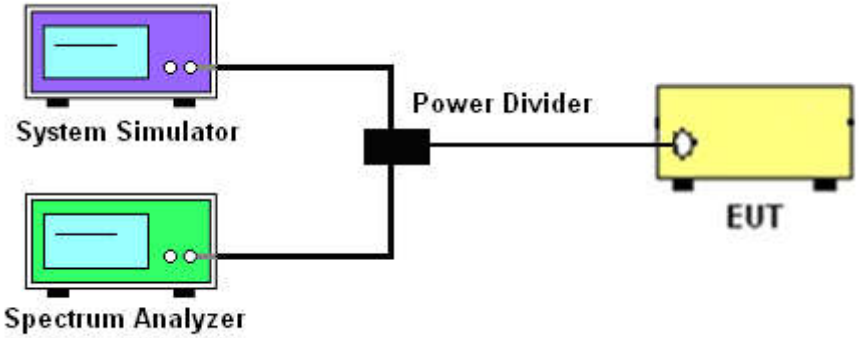
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. Set spectrum analyzer with RMS detector.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
4. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

## 3.7 Emission Mask

### 3.7.1 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The power of the modulated signal was measured on a spectrum analyzer using an RMS and 10 second sweep time in order to maximize the level.
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 3.7.2 Test Setup



# 3.8 Conducted Spurious Emission Measurement

## 3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30MHz up to a frequency including its $10^{th}$ harmonic.

## 3.8.2 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's, for under 1GHz RBW = 100kHz, VBW = 300kHz and for above 1GHz RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

# 3.9 Frequency Stability Measurement

## 3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±1.25 ppm of the center frequency.

## 3.9.2 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

## 3.9.3 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the base station.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

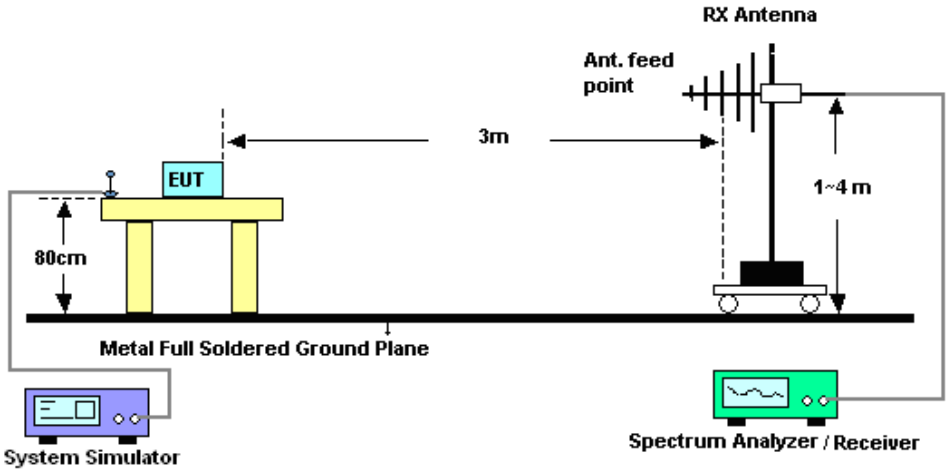
# 4 Radiated Test Items

## 4.1 Measuring Instruments

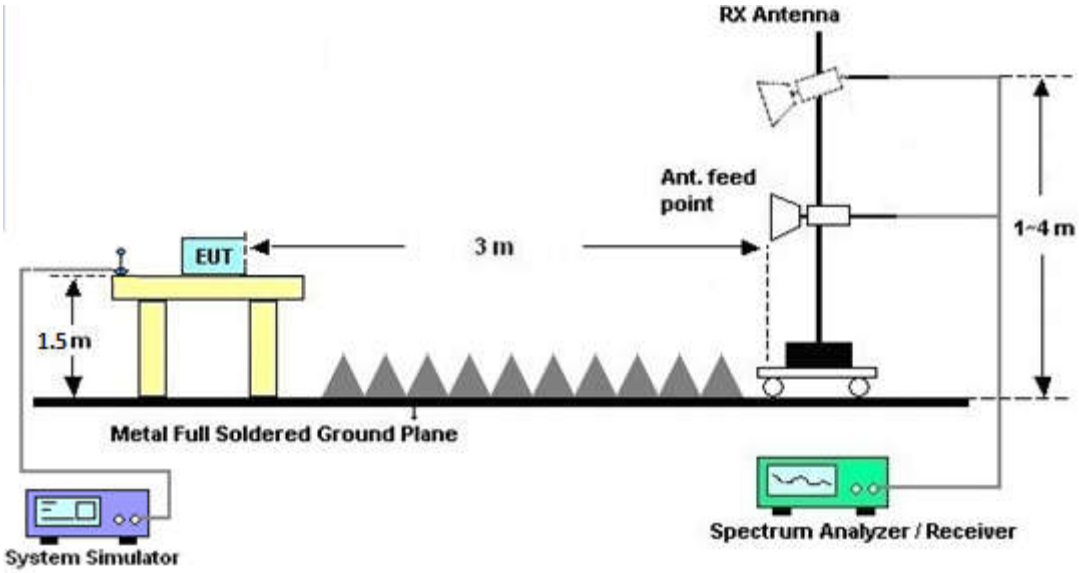
See list of measuring instruments of this test report.

## 4.2 Test Setup

### 4.2.1 For radiated test from 30MHz to 1GHz




### 4.2.2 For radiated test above 1GHz




## 4.3 Test Result of Radiated Test

Please refer to Appendix B.

## 4.4 Radiated Spurious Emission Measurement

### 4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics 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. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

### 4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI/TIA-603-E Section 2.2.12.
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
12. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
    ERP (dBm) = EIRP – 2.15

# 5 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| Spectrum Analyzer | R&S | FSV40 | 101078 | 9kHz~40GHz | Apr. 19, 2018 | Jul. 01, 2018 | Apr. 18, 2019 | Conducted (TH01-SZ) |
| Thermal Chamber | Ten Billion Hongzhangroup | LP-150U | H2014081803 | -40~+150°C | Jul. 20, 2017 | Jul. 01, 2018 | Jul. 19, 2018 | Conducted (TH01-SZ) |
| EXA Spectrum Analyzer | KEYSIGHT | N9010A | MY55150213 | 10Hz~44GHz | Apr. 19, 2018 | Jun. 12, 2018 | Apr. 18, 2019 | Radiation (03CH04-SZ) |
| Bilog Antenna | TeseQ | CBL6111D | 41909 | 30MHz~1GHz | Aug. 29, 2017 | Jun. 12, 2018 | Aug. 28, 2018 | Radiation (03CH04-SZ) |
| Double Ridge Horn Antenna | SCHWARZBECK | BBHA9120D | 9120D-1285 | 1GHz~18GHz | Dec. 13, 2017 | Jun. 12, 2018 | Dec. 12, 2018 | Radiation (03CH04-SZ) |
| Horn Antenna | SCHWARZBECK | BBHA9170 | 9170#679 | 15GHz~40GHz | Apr. 20, 2018 | Jun. 12, 2018 | Apr. 19, 2019 | Radiation (03CH04-SZ) |
| Amplifier | Burgeon | BPA-530 | 102211 | 0.01Hz ~3000MHz | Oct. 19, 2017 | Jun. 12, 2018 | Oct. 18, 2018 | Radiation (03CH04-SZ) |
| HF Amplifier | MITEQ | AMF-7D-00 101800-30-1 | 1989346 | 1GHz~18GHz | Jul. 27, 2017 | Jun. 12, 2018 | Jul. 26, 2018 | Radiation (03CH04-SZ) |
| HF Amplifier | MITEQ | TTA1840-35 -HG | 1988315 | 18GHz~40GHz | Jul. 27, 2017 | Jun. 12, 2018 | Jul. 26, 2018 | Radiation (03CH04-SZ) |
| Amplifier | Agilent Technologies | 83017A | MY53270156 | 500MHz~26.5GHz | Apr. 19, 2018 | Jun. 12, 2018 | Apr. 18, 2019 | Radiation (03CH04-SZ) |
| AC Power Source | Chroma | 61601 | N/A | N/A | NCR | Jun. 12, 2018 | NCR | Radiation (03CH04-SZ) |
| Turn Table | EM | EM1000 | N/A | 0~360 degree | NCR | Jun. 12, 2018 | NCR | Radiation (03CH04-SZ) |
| Antenna Mast | EM | EM1000 | N/A | 1 m~4 m | NCR | Jun. 12, 2018 | NCR | Radiation (03CH04-SZ) |

NCR: No Calibration Required

# 6 Uncertainty of Evaluation

**Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **2.8 dB** |

**Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **3.1 dB** |

**Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **3.9 dB** |

# Appendix A. Test Results of Conducted Test

## Conducted Output Power(Average power)

| LTE Band 14 Maximum Average Power [dBm] | | | | | | |
|---|---|---|---|---|---|---|
| BW [MHz] | RB Size | RB Offset | Mod | Lowest | Middle | Highest |
| 5 | 1 | 0 | QPSK | 24.20 | 24.27 | 24.25 |
| 5 | 1 | 12 | | 24.19 | 24.27 | 24.24 |
| 5 | 1 | 24 | | 24.24 | 24.24 | 24.22 |
| 5 | 12 | 0 | | 23.73 | 23.82 | 23.78 |
| 5 | 12 | 7 | | 23.89 | 23.82 | 23.82 |
| 5 | 12 | 13 | | 23.84 | 23.81 | 23.76 |
| 5 | 25 | 0 | | 23.85 | 23.84 | 23.80 |
| 5 | 1 | 0 | 16-QAM | 23.41 | 23.38 | 23.80 |
| 5 | 1 | 12 | | 23.10 | 23.40 | 23.79 |
| 5 | 1 | 24 | | 23.47 | 23.13 | 23.52 |
| 5 | 12 | 0 | | 22.19 | 22.35 | 22.34 |
| 5 | 12 | 7 | | 22.43 | 22.49 | 22.41 |
| 5 | 12 | 13 | | 22.36 | 22.43 | 22.33 |
| 5 | 25 | 0 | | 22.44 | 22.32 | 22.37 |
| 5 | 1 | 0 | 64QAM | 22.06 | 22.12 | 22.14 |
| 5 | 1 | 12 | | 22.08 | 22.16 | 22.12 |
| 5 | 1 | 24 | | 22.15 | 22.14 | 22.02 |
| 5 | 12 | 0 | | 20.98 | 21.09 | 21.08 |
| 5 | 12 | 7 | | 21.11 | 21.12 | 21.07 |
| 5 | 12 | 13 | | 21.11 | 21.05 | 21.01 |
| 5 | 25 | 0 | | 21.08 | 21.06 | 20.99 |

| LTE Band 14 Maximum Average Power [dBm] | | | | | | |
|---|---|---|---|---|---|---|
| BW [MHz] | RB Size | RB Offset | Mod | Lowest | Middle | Highest |
| 10 | 1 | 0 | QPSK | | 24.17 | |
| 10 | 1 | 25 | | | 24.29 | |
| 10 | 1 | 49 | | | 24.20 | |
| 10 | 25 | 0 | | | 23.83 | |
| 10 | 25 | 12 | | | 23.86 | |
| 10 | 25 | 25 | | | 23.79 | |
| 10 | 50 | 0 | | | 23.84 | |
| 10 | 1 | 0 | 16-QAM | | 23.65 | |
| 10 | 1 | 25 | | | 23.51 | |
| 10 | 1 | 49 | | | 23.37 | |
| 10 | 25 | 0 | | | 22.30 | |
| 10 | 25 | 12 | | | 22.33 | |
| 10 | 25 | 25 | | | 22.36 | |
| 10 | 50 | 0 | | | 22.43 | |
| 10 | 1 | 0 | 64QAM | | 22.07 | |
| 10 | 1 | 25 | | | 22.21 | |
| 10 | 1 | 49 | | | 22.03 | |
| 10 | 25 | 0 | | | 21.09 | |
| 10 | 25 | 12 | | | 21.11 | |
| 10 | 25 | 25 | | | 21.02 | |
| 10 | 50 | 0 | | | 21.07 | |

# ERP

| LTE Band 14 ($G_T$ - $L_C$ = -1.30 dBi) QPSK | | | | | | |
|---|---|---|---|---|---|---|
| Bandwidth | 5M | | | 10M | | |
| Channel | 23305 | 23330 | 23355 | | 23330 | |
| | (Low) | (Mid) | (High) | | (Mid) | |
| Frequency (MHz) | 790.5 | 793 | 795.5 | | 793 | |
| Conducted Power (dBm) | 24.20 | 24.27 | 24.25 | | 24.29 | |
| Conducted Power (Watts) | 0.2630 | 0.2673 | 0.2661 | | 0.2685 | |
| ERP(dBm) | 20.75 | 20.82 | 20.80 | | 20.84 | |
| ERP(Watts) | 0.1189 | 0.1208 | 0.1202 | | 0.1213 | |

| LTE Band 14 ($G_T$ - $L_C$ = -1.30 dBi) 16QAM | | | | | | |
|---|---|---|---|---|---|---|
| Bandwidth | 5M | | | 10M | | |
| Channel | 23305 | 23330 | 23355 | | 23330 | |
| | (Low) | (Mid) | (High) | | (Mid) | |
| Frequency (MHz) | 790.5 | 793 | 795.5 | | 793 | |
| Conducted Power (dBm) | 23.41 | 23.38 | 23.80 | | 23.65 | |
| Conducted Power (Watts) | 0.2193 | 0.2178 | 0.2399 | | 0.2317 | |
| ERP(dBm) | 19.96 | 19.93 | 20.35 | | 20.20 | |
| ERP(Watts) | 0.0991 | 0.0984 | 0.1084 | | 0.1047 | |

| LTE Band 14 ($G_T$ - $L_C$ = -1.30 dBi) 64QAM | | | | | | |
|---|---|---|---|---|---|---|
| Bandwidth | 5M | | | | 10M | |
| Channel | 23305 | 23330 | 23355 | | 23330 | |
| | (Low) | (Mid) | (High) | | (Mid) | |
| Frequency (MHz) | 790.5 | 793 | 795.5 | | 793 | |
| Conducted Power (dBm) | 22.08 | 22.16 | 22.12 | | 22.21 | |
| Conducted Power (Watts) | 0.1614 | 0.1644 | 0.1629 | | 0.1663 | |
| ERP(dBm) | 18.63 | 18.71 | 18.67 | | 18.76 | |
| ERP(Watts) | 0.0729 | 0.0743 | 0.0736 | | 0.0752 | |

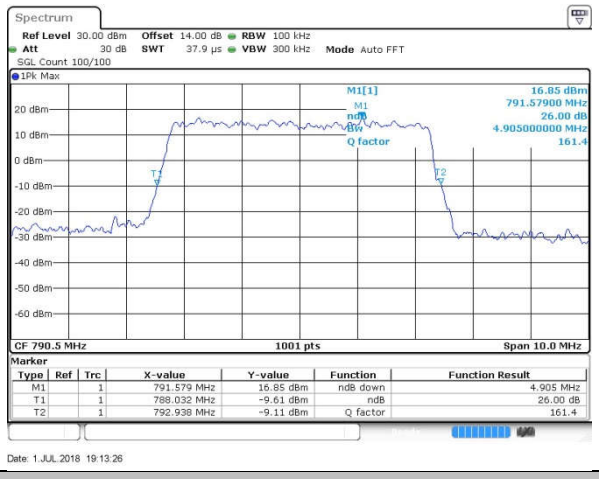
# 26dB Bandwidth

| Mode | LTE Band 14 : 26dB BW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.905 | 4.895 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.865 | 4.915 | 9.79 | 9.73 | - | - | - | - |
| Highest CH | - | - | - | - | 4.925 | 4.915 | - | - | - | - | - | - |

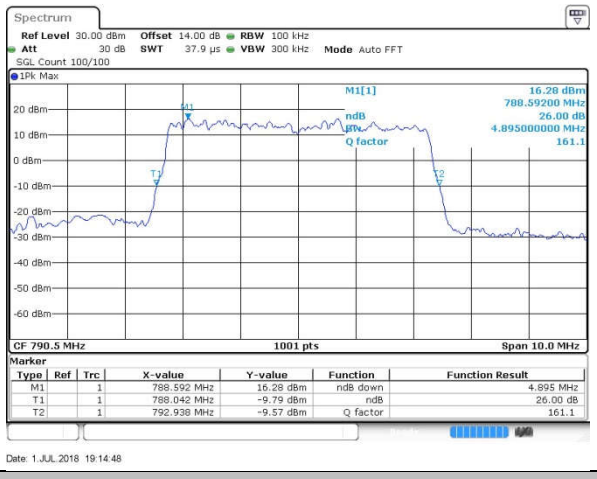
| BW | 5MHz | 10MHz |
|---|---|---|
| Mod. | 64QAM | 64QAM |
| Lowest CH | 4.895 | - |
| Middle CH | 4.905 | 10.05 |
| Highest CH | 4.855 | - |

## LTE Band 14

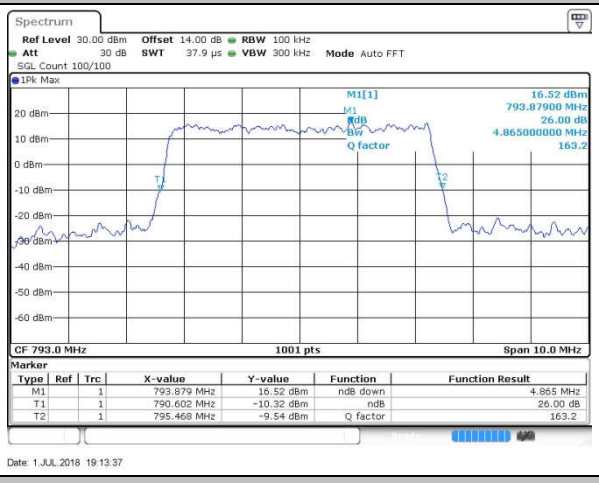
### Lowest Channel / 5MHz / QPSK



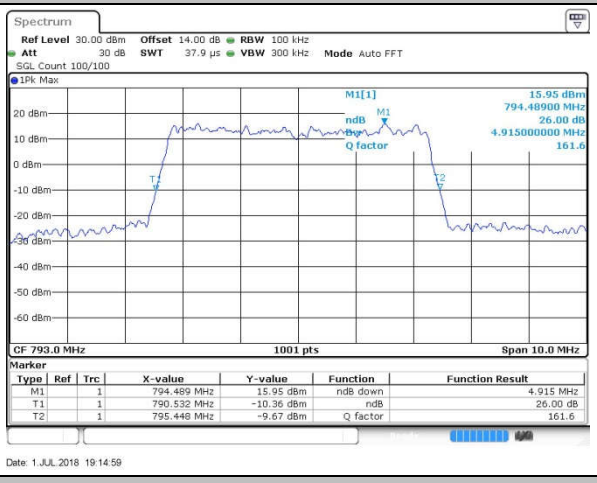

### Lowest Channel / 5MHz / 16QAM



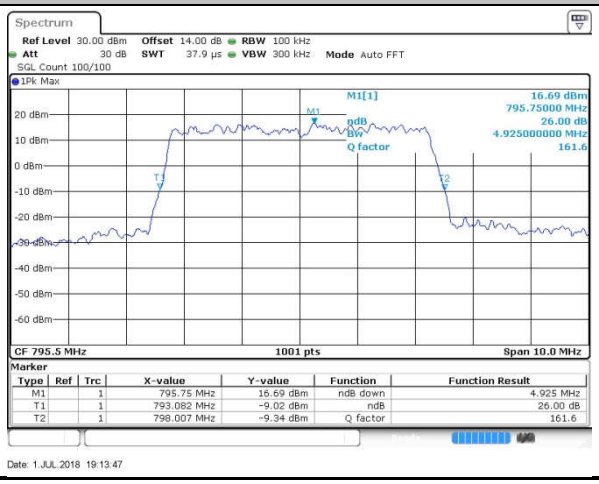

### Middle Channel / 5MHz / QPSK



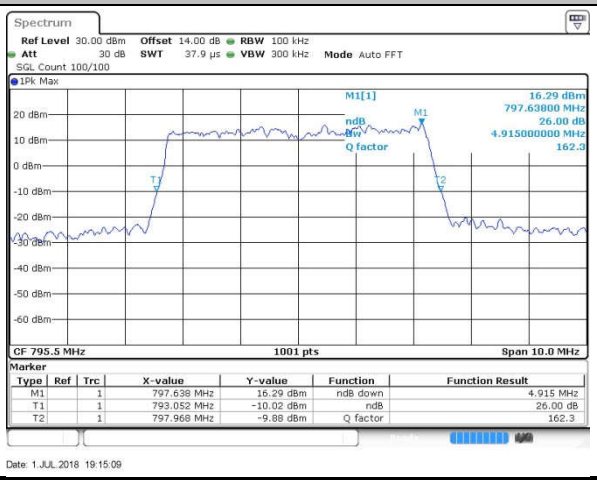

### Middle Channel / 5MHz / 16QAM



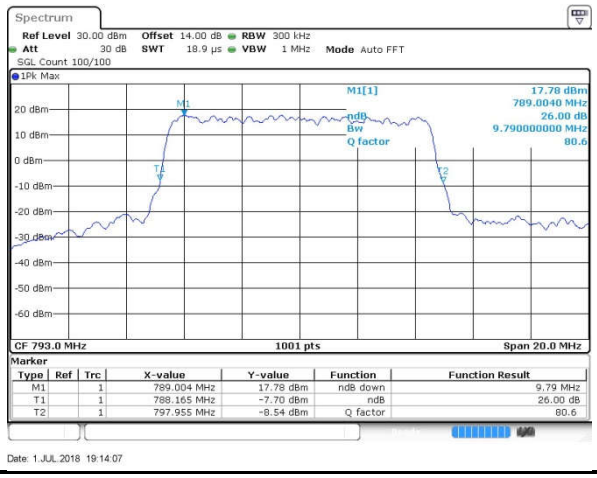

### Highest Channel / 5MHz / QPSK

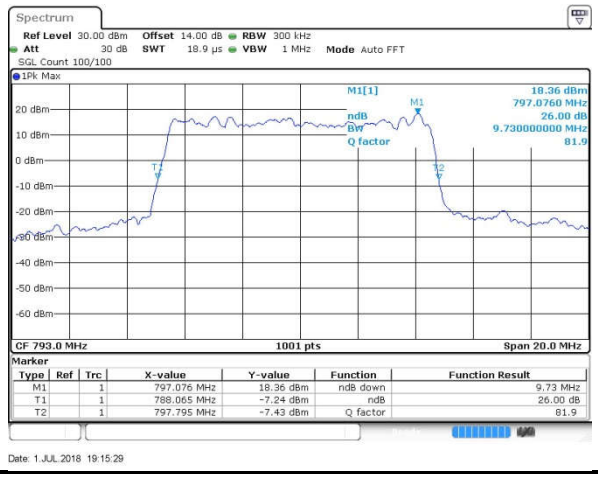



### Highest Channel / 5MHz / 16QAM



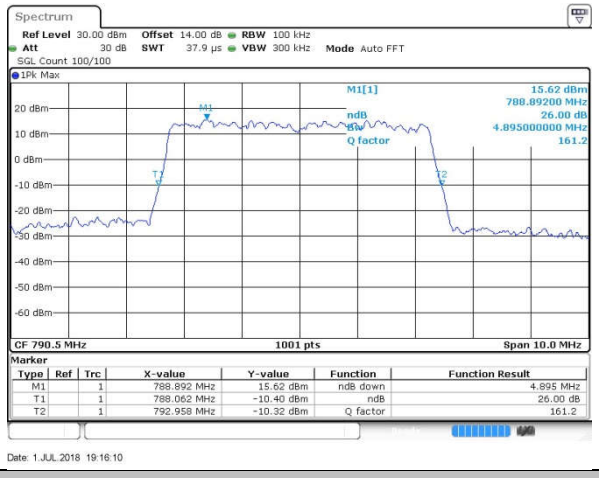
| LTE Band 14 | |
|---|---|
| Middle Channel / 10MHz / QPSK | Middle Channel / 10MHz / 16QAM |



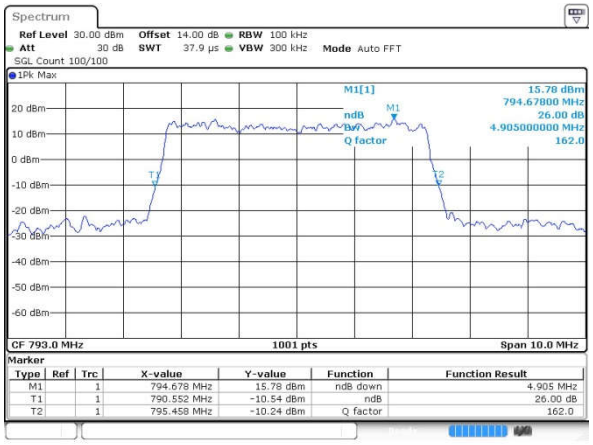



## LTE Band 14

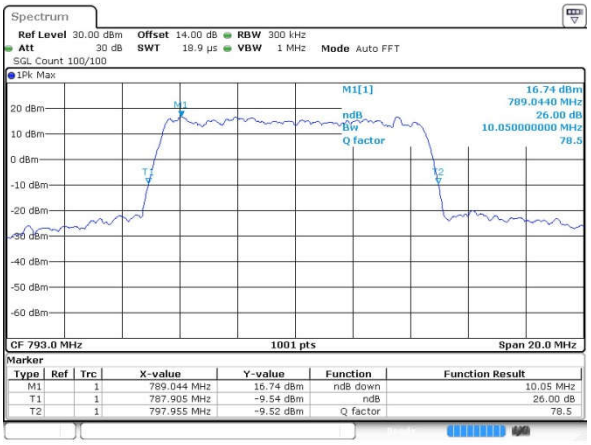
### Lowest Channel / 5MHz / 64QAM



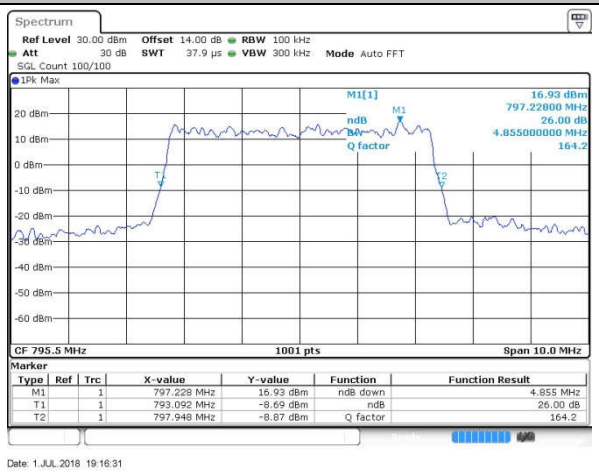

### Middle Channel / 5MHz / 64QAM




### Middle Channel / 10MHz / 64QAM




### Highest Channel / 5MHz / 64QAM



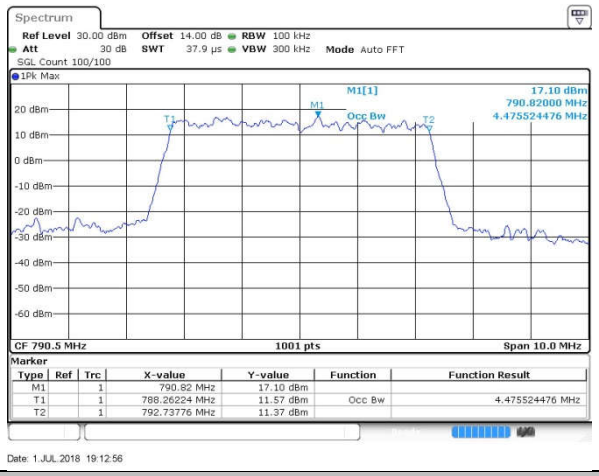
# Occupied Bandwidth

| Mode | LTE Band 14 : 99%OBW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.48 | 4.50 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.51 | 4.49 | 9.05 | 9.03 | - | - | - | - |
| Highest CH | - | - | - | - | 4.50 | 4.49 | - | - | - | - | - | - |

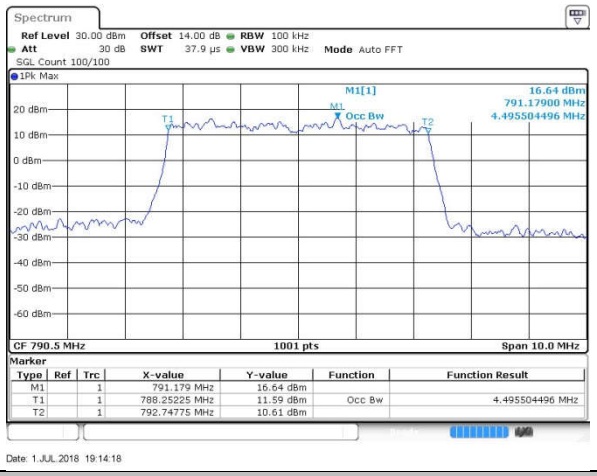
| BW | 5MHz | 10MHz |
|---|---|---|
| Mod. | 64QAM | 64QAM |
| Lowest CH | 4.50 | - |
| Middle CH | 4.53 | 9.07 |
| Highest CH | 4.51 | - |

## LTE Band 14

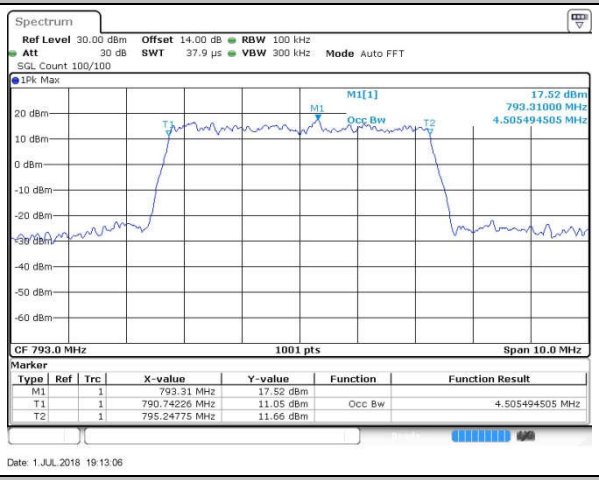
### Lowest Channel / 5MHz / QPSK



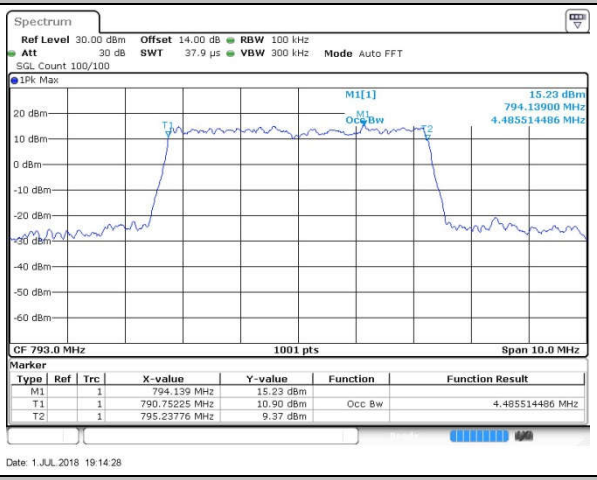

### Lowest Channel / 5MHz / 16QAM



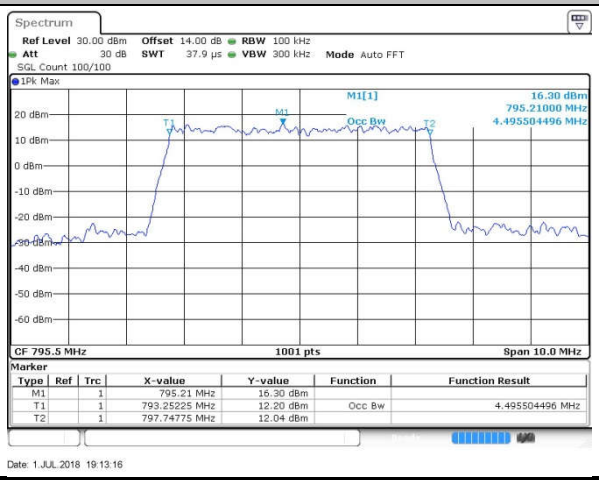

### Middle Channel / 5MHz / QPSK



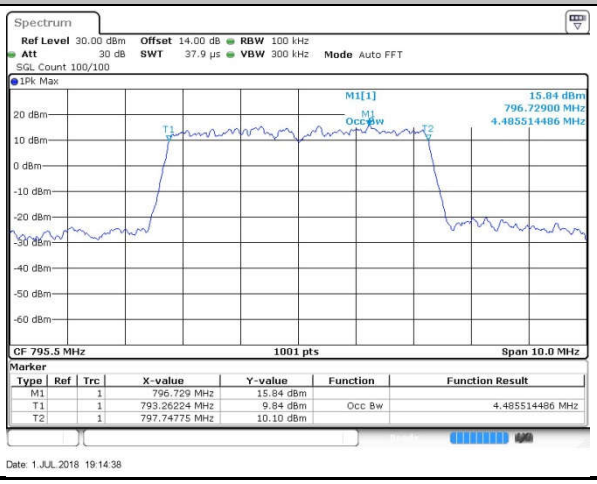

### Middle Channel / 5MHz / 16QAM



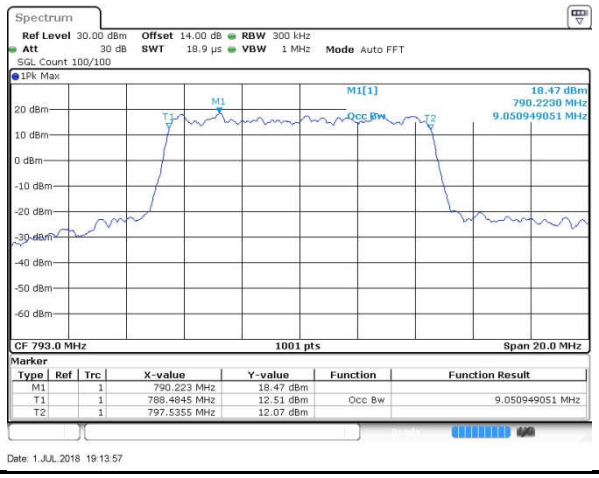

### Highest Channel / 5MHz / QPSK

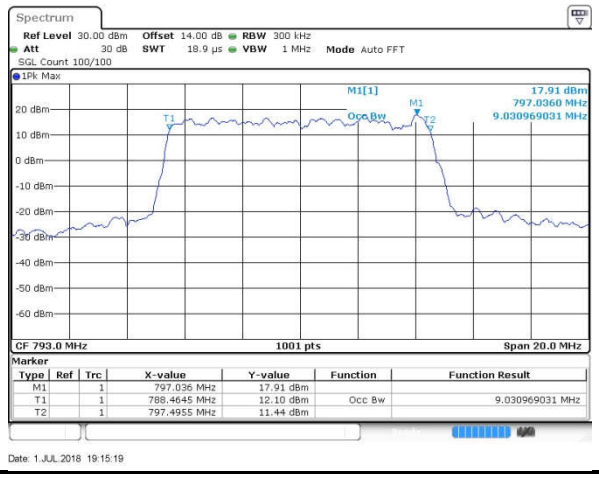


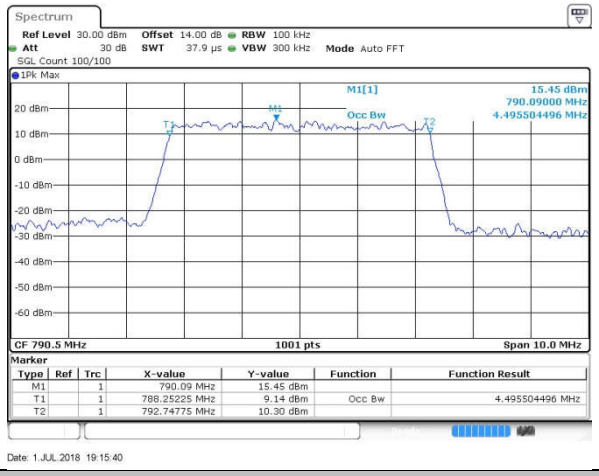
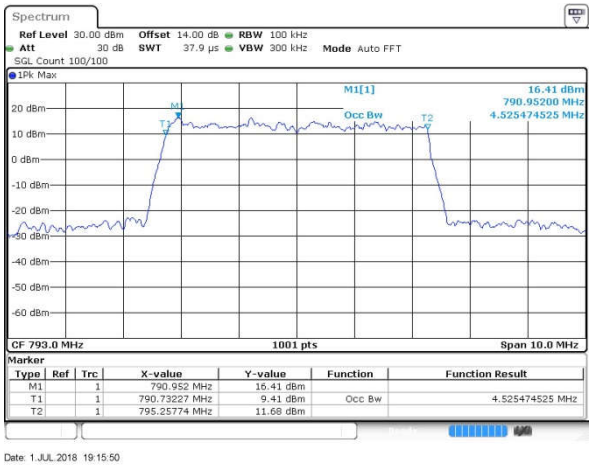
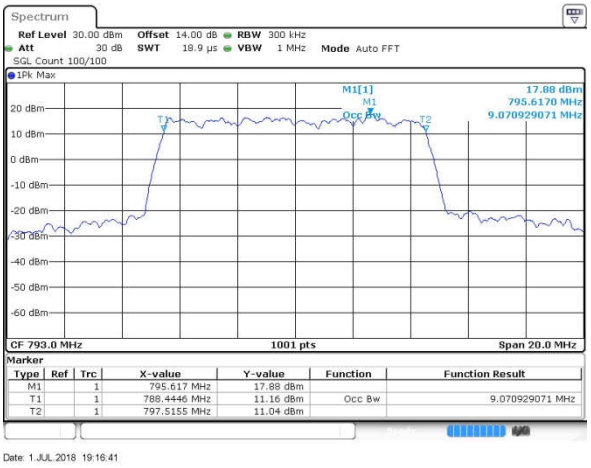
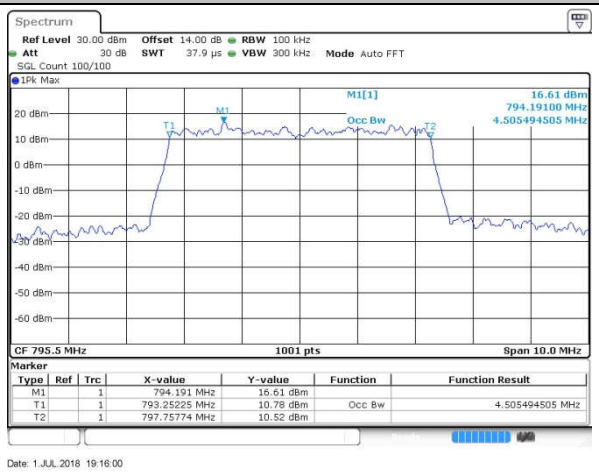

### Highest Channel / 5MHz / 16QAM



| LTE Band 14 | |
|---|---|
| Middle Channel / 10MHz / QPSK | Middle Channel / 10MHz / 16QAM |



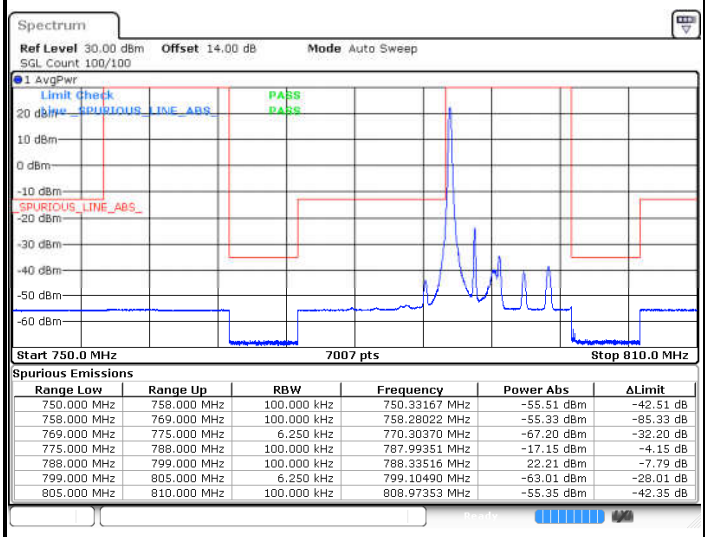



| LTE Band 14 | |
|---|---|
| **Lowest Channel / 5MHz / 64QAM** | |
|  | |
| **Middle Channel / 5MHz / 64QAM** | **Middle Channel / 10MHz / 64QAM** |
|  |  |
| **Highest Channel / 5MHz / 64QAM** | |
|  | |

# Conducted Band Edge

## LTE Band 14 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

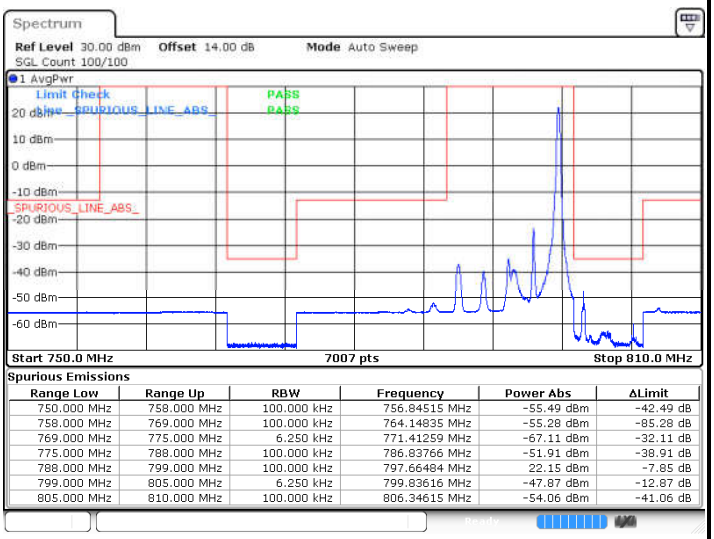



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 750.33167 MHz | -55.51 dBm | -42.51 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 758.28022 MHz | -55.33 dBm | -85.33 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 770.30370 MHz | -67.20 dBm | -32.20 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -17.15 dBm | -4.15 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.33516 MHz | 22.21 dBm | -7.79 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.10490 MHz | -63.01 dBm | -28.01 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 808.97353 MHz | -55.35 dBm | -42.35 dB |

Date: 1.JUL.2018 16:03:12

### Highest Band Edge / 1 RB

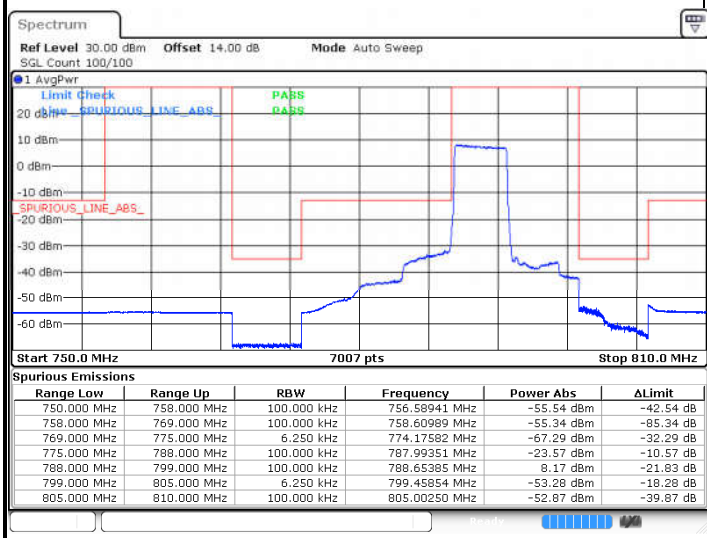



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.84515 MHz | -55.49 dBm | -42.49 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 764.14835 MHz | -55.28 dBm | -85.28 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 771.41259 MHz | -67.11 dBm | -32.11 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 786.83766 MHz | -51.91 dBm | -38.91 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.66484 MHz | 22.15 dBm | -7.85 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.83616 MHz | -47.87 dBm | -12.87 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.34615 MHz | -54.06 dBm | -41.06 dB |

Date: 1.JUL.2018 17:26:19

### Lowest Band Edge / Full RB

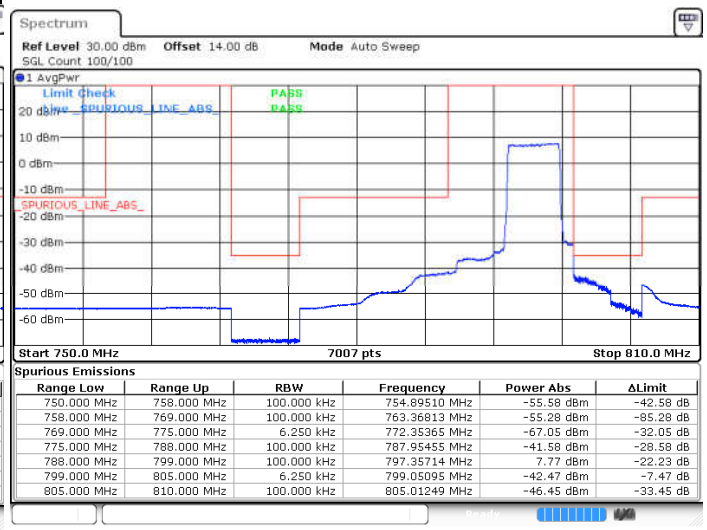



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.58941 MHz | -55.54 dBm | -42.54 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 758.60989 MHz | -55.34 dBm | -85.34 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 774.17582 MHz | -67.29 dBm | -32.29 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -23.57 dBm | -10.57 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.65385 MHz | 8.17 dBm | -21.83 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.45854 MHz | -53.28 dBm | -18.28 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.00250 MHz | -52.87 dBm | -39.87 dB |

Date: 1.JUL.2018 16:05:42

### Highest Band Edge / Full RB



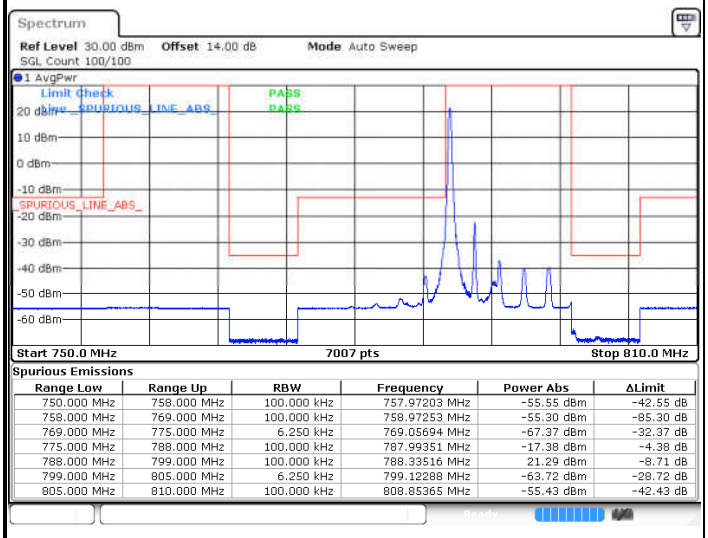

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 754.89510 MHz | -55.58 dBm | -42.58 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 763.36813 MHz | -55.28 dBm | -85.28 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 772.35365 MHz | -67.05 dBm | -32.05 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.95455 MHz | -41.58 dBm | -28.58 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.35714 MHz | 7.77 dBm | -22.23 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.05095 MHz | -42.47 dBm | -7.47 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.01249 MHz | -46.45 dBm | -33.45 dB |

Date: 1.JUL.2018 17:08:27

## LTE Band 14 / 5MHz / 16QAM

### Lowest Band Edge /1 RB

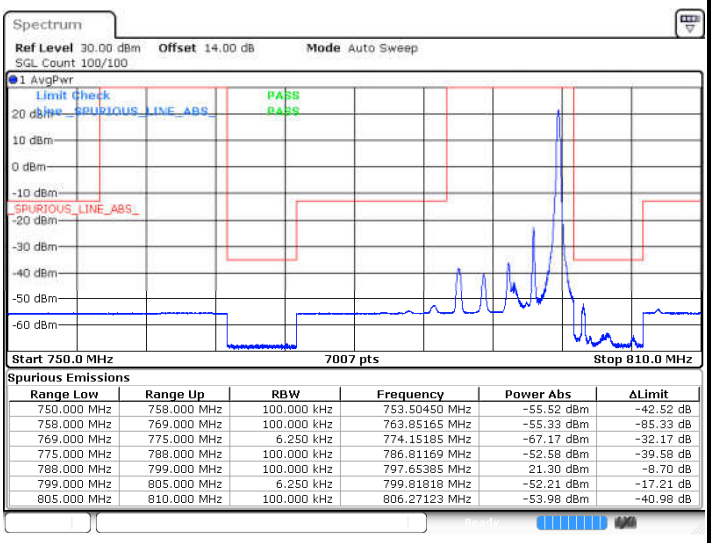



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 757.97203 MHz | -55.55 dBm | -42.55 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 759.97253 MHz | -55.30 dBm | -85.30 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 769.05694 MHz | -67.37 dBm | -32.37 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -17.38 dBm | -4.38 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.33516 MHz | 21.29 dBm | -8.71 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.12288 MHz | -63.72 dBm | -28.72 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 808.85365 MHz | -55.43 dBm | -42.43 dB |

Date: 1.JUL.2018 16:59:26

### Highest Band Edge / 1 RB

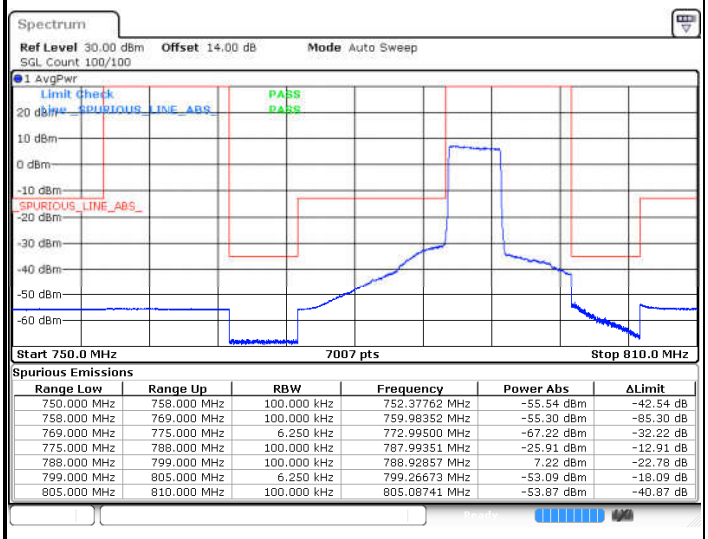



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 753.50450 MHz | -55.52 dBm | -42.52 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 763.85165 MHz | -55.33 dBm | -85.33 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 774.15185 MHz | -67.17 dBm | -32.17 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 786.81169 MHz | -52.58 dBm | -39.58 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.65385 MHz | 21.30 dBm | -8.70 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.81818 MHz | -52.21 dBm | -17.21 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.27123 MHz | -53.98 dBm | -40.98 dB |

Date: 1.JUL.2018 17:24:07

### Lowest Band Edge / Full RB

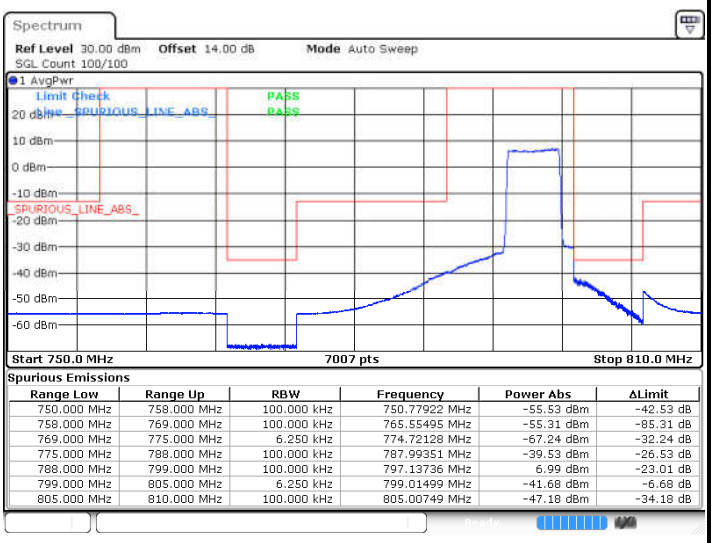



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 752.37762 MHz | -55.54 dBm | -42.54 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 759.98352 MHz | -55.30 dBm | -85.30 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 772.99500 MHz | -67.22 dBm | -32.22 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -25.91 dBm | -12.91 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.92857 MHz | 7.22 dBm | -22.78 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.26673 MHz | -53.09 dBm | -18.09 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.08741 MHz | -53.87 dBm | -40.87 dB |

Date: 1.JUL.2018 16:10:00

### Highest Band Edge / Full RB



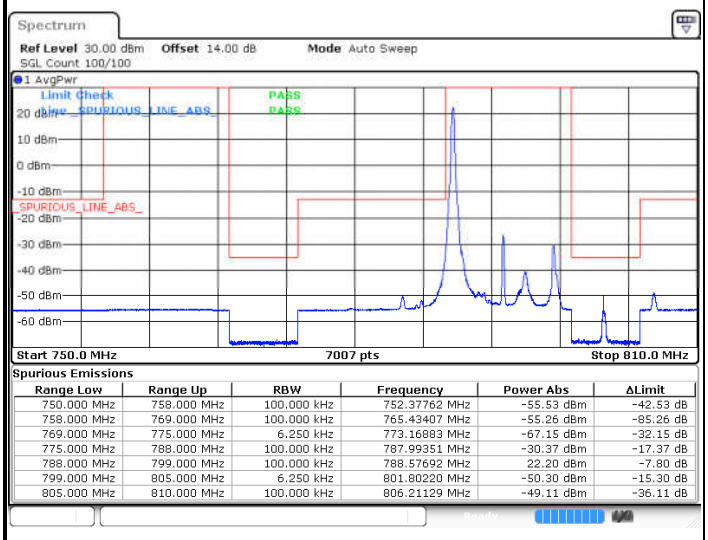

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 750.77922 MHz | -55.53 dBm | -42.53 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.55495 MHz | -55.31 dBm | -85.31 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 774.72128 MHz | -67.24 dBm | -32.24 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -39.53 dBm | -26.53 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.13736 MHz | 6.99 dBm | -23.01 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.01499 MHz | -41.68 dBm | -6.68 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.00749 MHz | -47.18 dBm | -34.18 dB |

Date: 1.JUL.2018 17:06:32

## LTE Band 14 / 10MHz / QPSK

### Lowest Band Edge / 1 RB

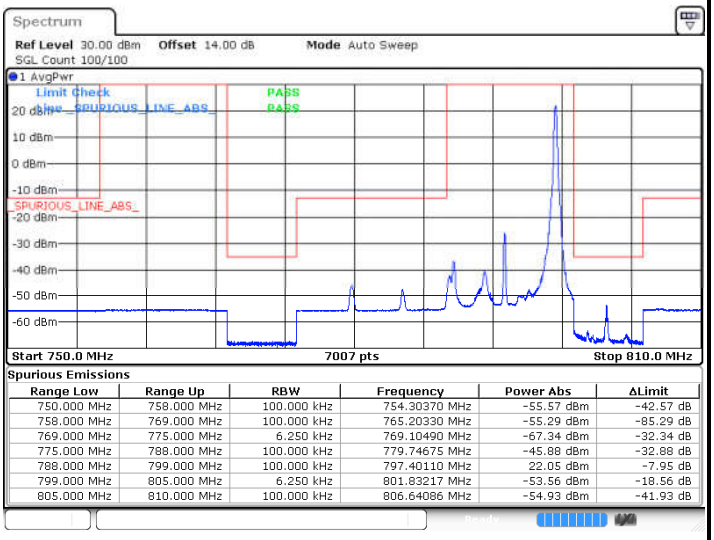



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 752.37762 MHz | -55.53 dBm | -42.53 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.43407 MHz | -55.26 dBm | -85.26 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 773.16883 MHz | -67.15 dBm | -32.15 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -30.37 dBm | -17.37 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.57692 MHz | 22.20 dBm | -7.80 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.80220 MHz | -50.30 dBm | -15.30 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.21129 MHz | -49.11 dBm | -36.11 dB |

Date: 1.JUL.2018 17:41:02

### Highest Band Edge / 1 RB

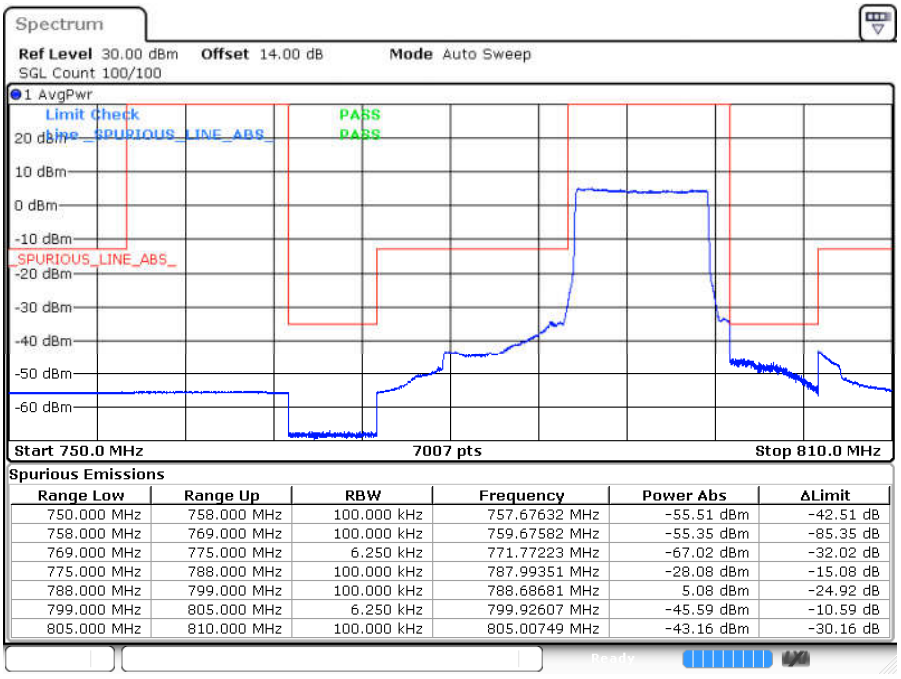



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 754.30370 MHz | -55.57 dBm | -42.57 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.20330 MHz | -55.29 dBm | -85.29 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 769.10490 MHz | -67.34 dBm | -32.34 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 779.74675 MHz | -45.88 dBm | -32.88 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.40110 MHz | 22.05 dBm | -7.95 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.83217 MHz | -53.56 dBm | -18.56 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.64086 MHz | -54.93 dBm | -41.93 dB |

Date: 1.JUL.2018 17:59:36

### Band Edge / Full RB



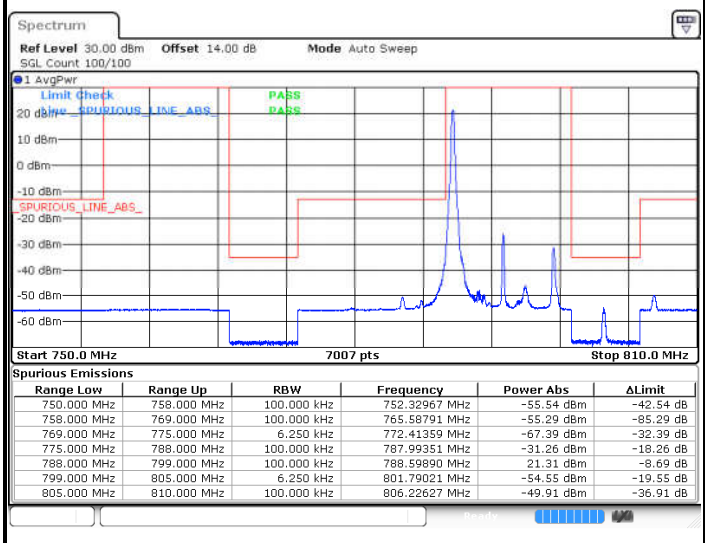

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 757.67632 MHz | -55.51 dBm | -42.51 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 759.67582 MHz | -55.35 dBm | -85.35 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 771.77223 MHz | -67.02 dBm | -32.02 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -28.08 dBm | -15.08 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.68681 MHz | 5.08 dBm | -24.92 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.92607 MHz | -45.59 dBm | -10.59 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.00749 MHz | -43.16 dBm | -30.16 dB |

Date: 1.JUL.2018 17:54:15

## LTE Band 14 / 10MHz / 16QAM

### Lowest Band Edge / 1 RB

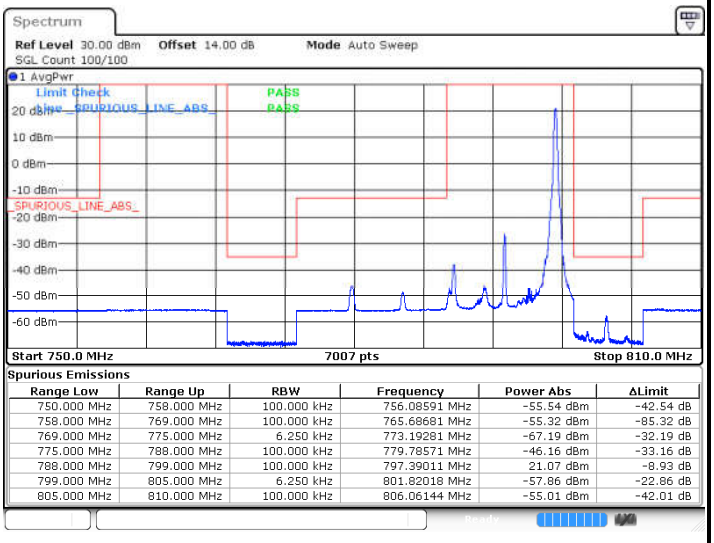



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 752.32967 MHz | -55.54 dBm | -42.54 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.58791 MHz | -55.29 dBm | -85.29 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 772.41359 MHz | -67.39 dBm | -32.39 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -31.26 dBm | -18.26 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.59890 MHz | 21.31 dBm | -8.69 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.79021 MHz | -54.55 dBm | -19.55 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.22627 MHz | -49.91 dBm | -36.91 dB |

Date: 1.JUL.2018 17:44:34

### Highest Band Edge / 1 RB

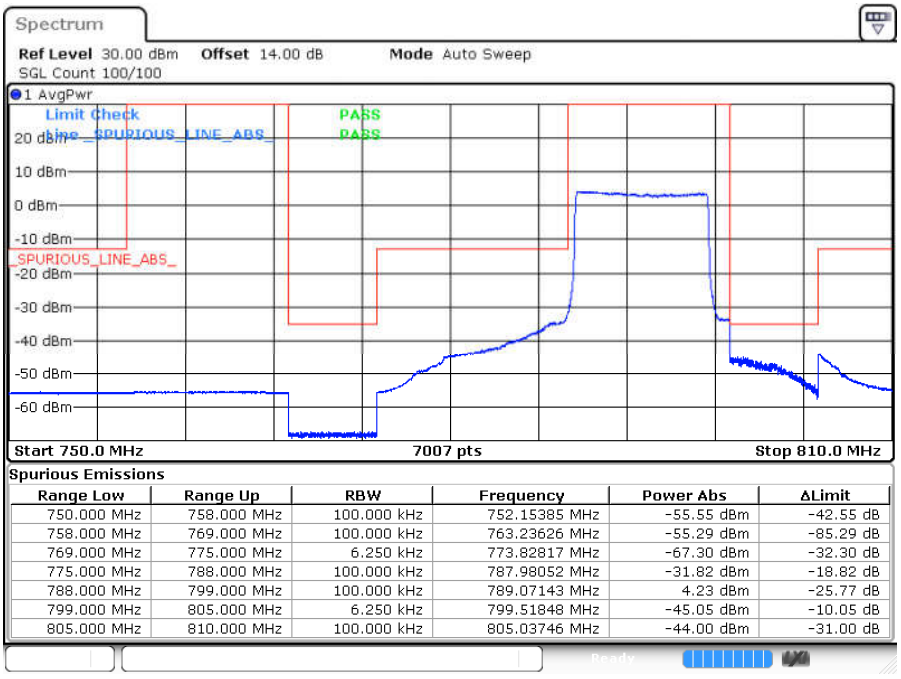



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.08591 MHz | -55.54 dBm | -42.54 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.68681 MHz | -55.32 dBm | -85.32 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 773.19281 MHz | -67.19 dBm | -32.19 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 779.78571 MHz | -46.16 dBm | -33.16 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.39011 MHz | 21.07 dBm | -8.93 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.82018 MHz | -57.86 dBm | -22.86 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.06144 MHz | -55.01 dBm | -42.01 dB |

Date: 1.JUL.2018 18:01:09

### Band Edge / Full RB



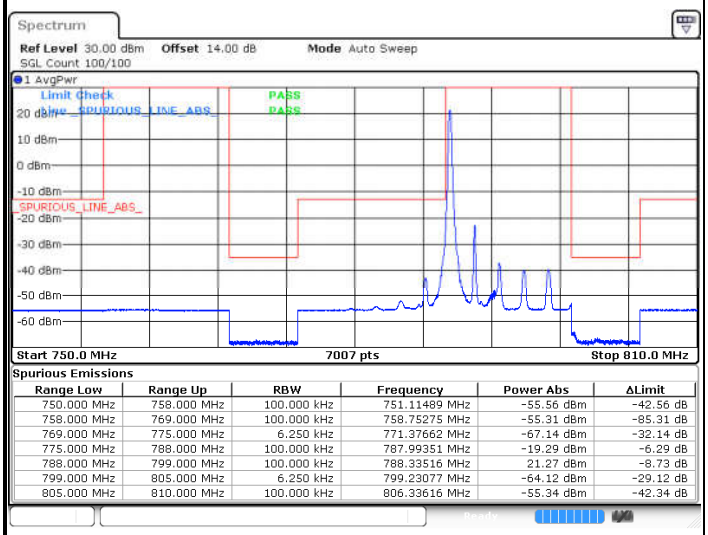

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 752.15385 MHz | -55.55 dBm | -42.55 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 763.23626 MHz | -55.29 dBm | -85.29 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 773.82817 MHz | -67.30 dBm | -32.30 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.98052 MHz | -31.82 dBm | -18.82 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 789.07143 MHz | 4.23 dBm | -25.77 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.51848 MHz | -45.05 dBm | -10.05 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.03746 MHz | -44.00 dBm | -31.00 dB |

Date: 1.JUL.2018 17:52:10

## LTE Band 14 / 5MHz / 64QAM

### Lowest Band Edge /1 RB

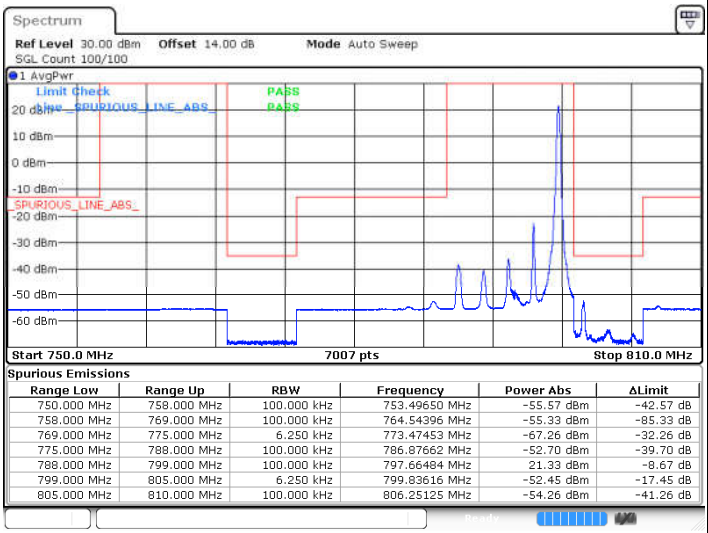



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 751.11489 MHz | -55.56 dBm | -42.56 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 758.75275 MHz | -55.31 dBm | -85.31 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 771.37662 MHz | -67.14 dBm | -32.14 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -19.29 dBm | -6.29 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.33516 MHz | 21.27 dBm | -8.73 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.23077 MHz | -64.12 dBm | -29.12 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.33616 MHz | -55.34 dBm | -42.34 dB |

Date: 1.JUL.2018 17:01:18

### Highest Band Edge / 1 RB

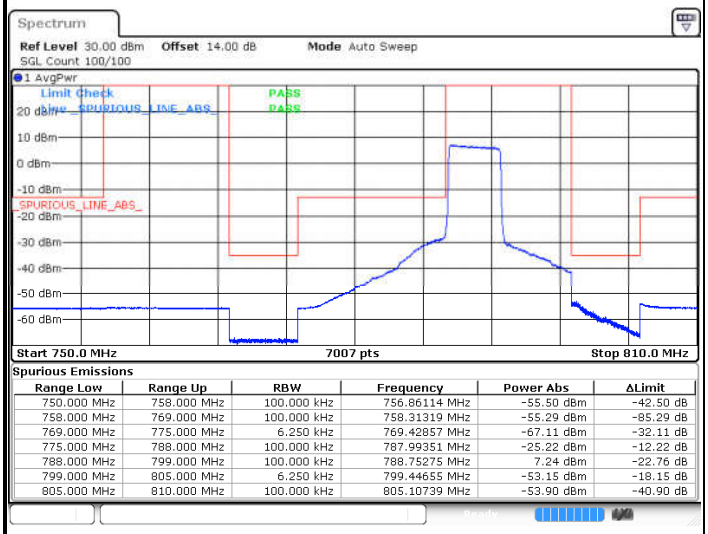



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 753.49650 MHz | -55.57 dBm | -42.57 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 764.54396 MHz | -55.33 dBm | -85.33 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 773.47453 MHz | -67.26 dBm | -32.26 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 786.87662 MHz | -52.70 dBm | -39.70 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.66484 MHz | 21.33 dBm | -8.67 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.83616 MHz | -52.45 dBm | -17.45 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.25125 MHz | -54.26 dBm | -41.26 dB |

Date: 1.JUL.2018 17:21:37

### Lowest Band Edge / Full RB

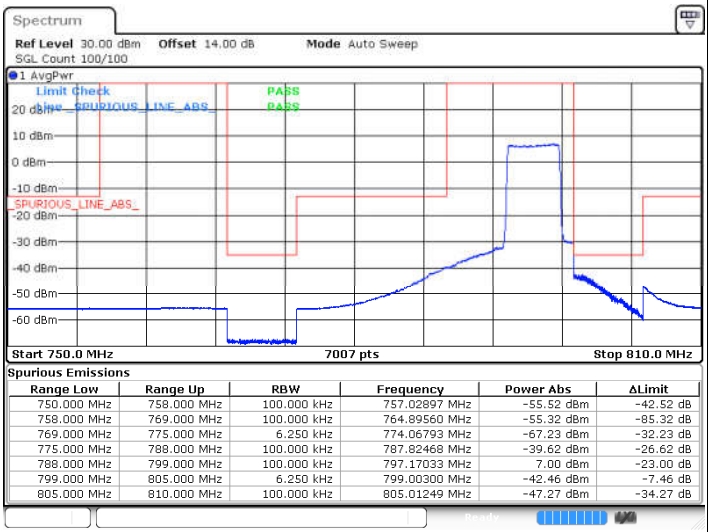



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.86114 MHz | -55.50 dBm | -42.50 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 758.31319 MHz | -55.29 dBm | -85.29 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 769.42857 MHz | -67.11 dBm | -32.11 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -25.22 dBm | -12.22 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.75275 MHz | 7.24 dBm | -22.76 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.44655 MHz | -53.15 dBm | -18.15 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.10739 MHz | -53.90 dBm | -40.90 dB |

Date: 1.JUL.2018 17:02:47

### Highest Band Edge / Full RB



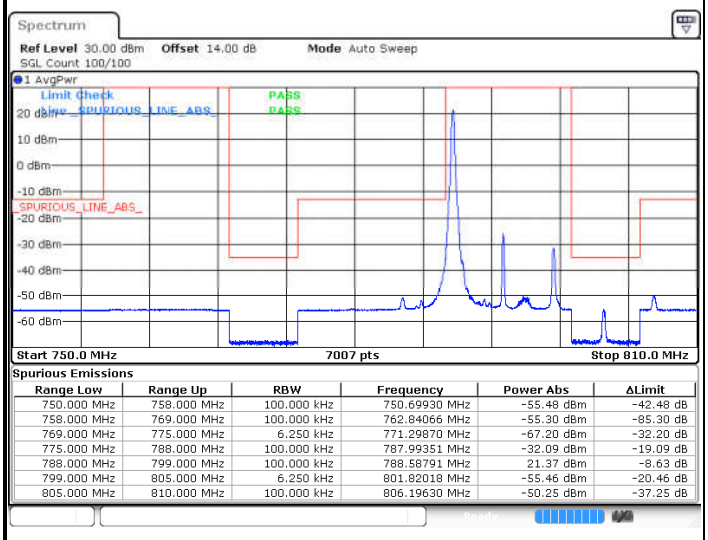

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 757.02897 MHz | -55.52 dBm | -42.52 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 764.89560 MHz | -55.32 dBm | -85.32 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 774.06793 MHz | -67.23 dBm | -32.23 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.82468 MHz | -39.62 dBm | -26.62 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.17033 MHz | 7.00 dBm | -23.00 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 799.00300 MHz | -42.46 dBm | -7.46 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.01249 MHz | -47.27 dBm | -34.27 dB |

Date: 1.JUL.2018 17:04:51

## LTE Band 14 / 10MHz / 64QAM

### Band Edge / 1 RB

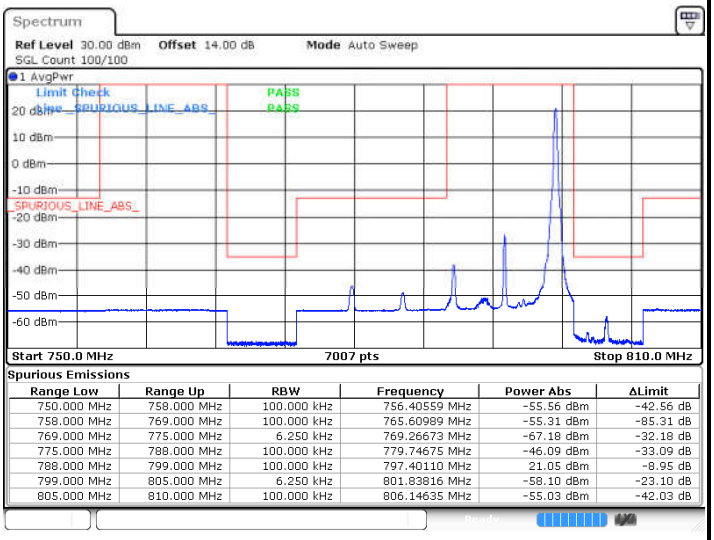



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 750.69930 MHz | -55.48 dBm | -42.48 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 762.84066 MHz | -55.30 dBm | -85.30 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 771.29870 MHz | -67.20 dBm | -32.20 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -32.09 dBm | -19.09 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 788.58791 MHz | 21.37 dBm | -8.63 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.82018 MHz | -55.46 dBm | -20.46 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.19630 MHz | -50.25 dBm | -37.25 dB |

Date: 1.JUL.2018 17:47:46

### Band Edge / 1 RBMax

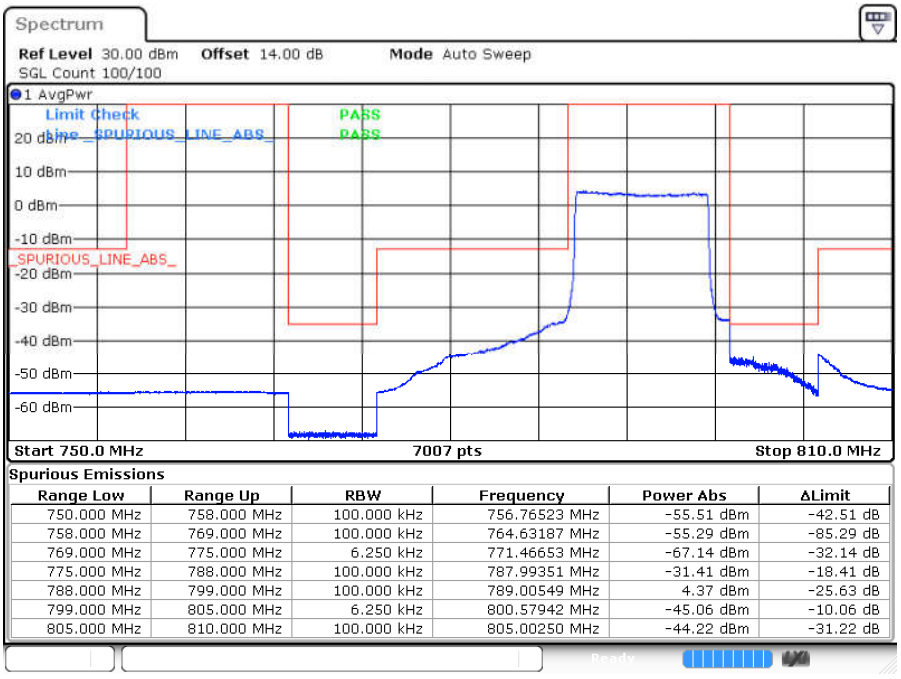



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.40559 MHz | -55.56 dBm | -42.56 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 765.60989 MHz | -55.31 dBm | -85.31 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 769.26673 MHz | -67.18 dBm | -32.18 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 779.74675 MHz | -46.09 dBm | -33.09 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 797.40110 MHz | 21.05 dBm | -8.95 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 801.83816 MHz | -58.10 dBm | -23.10 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 806.14635 MHz | -55.03 dBm | -42.03 dB |

Date: 1.JUL.2018 18:02:51

### Band Edge / Full RB

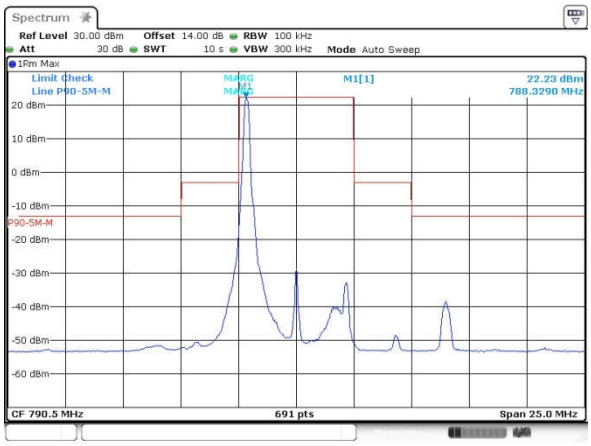
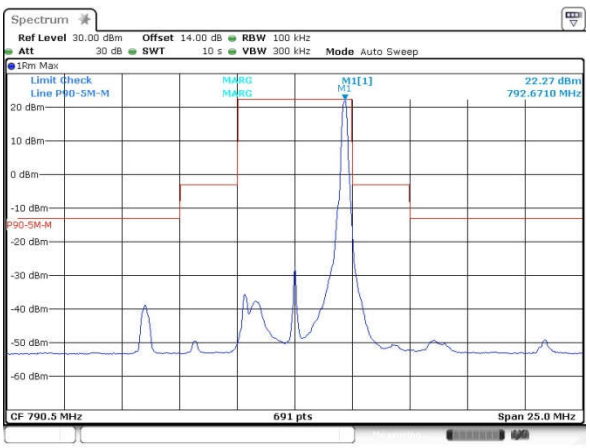
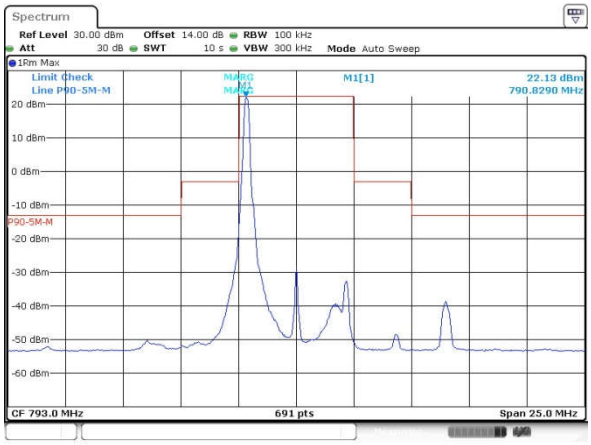
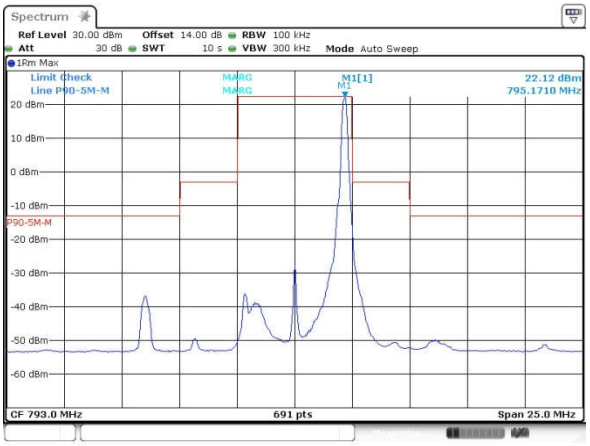
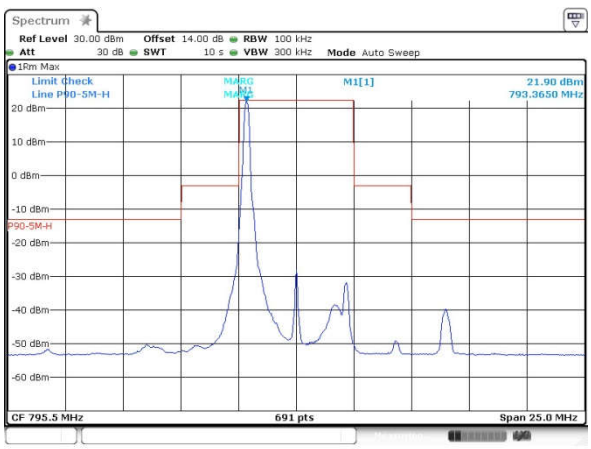
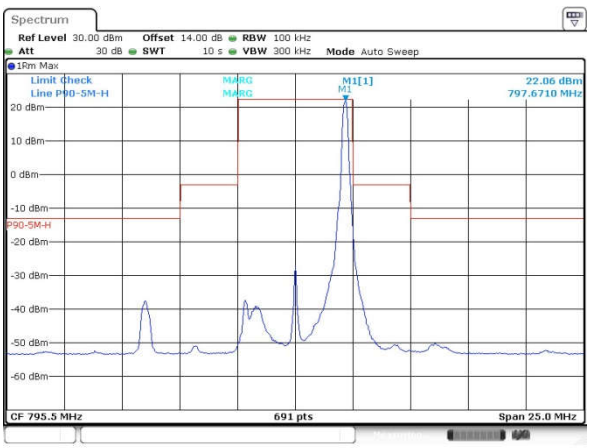


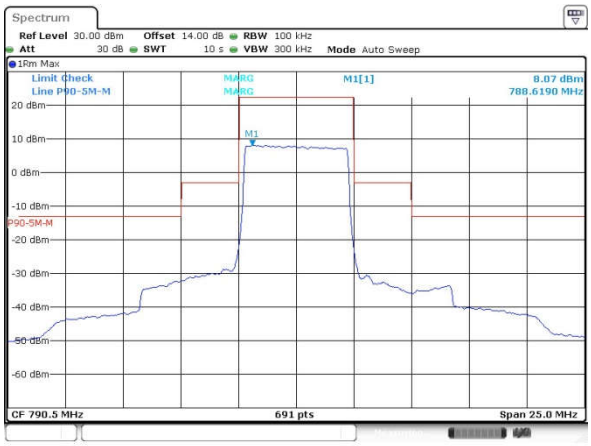
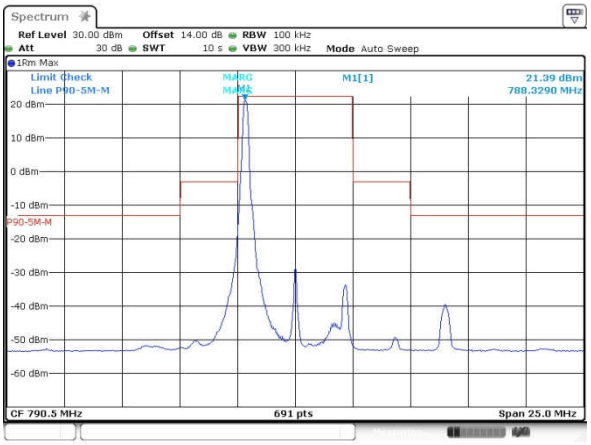
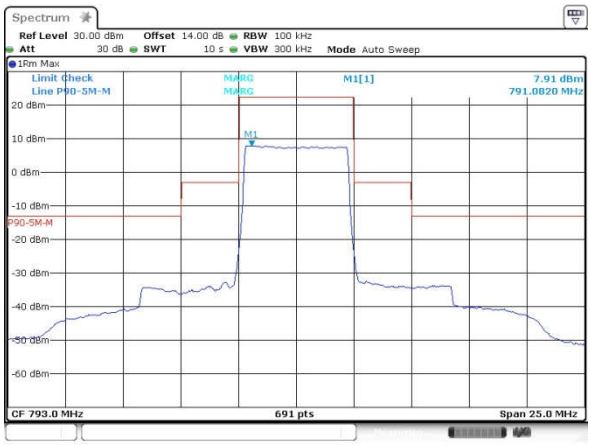
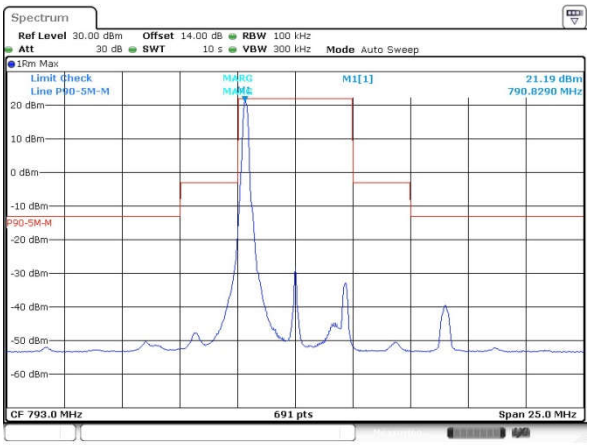
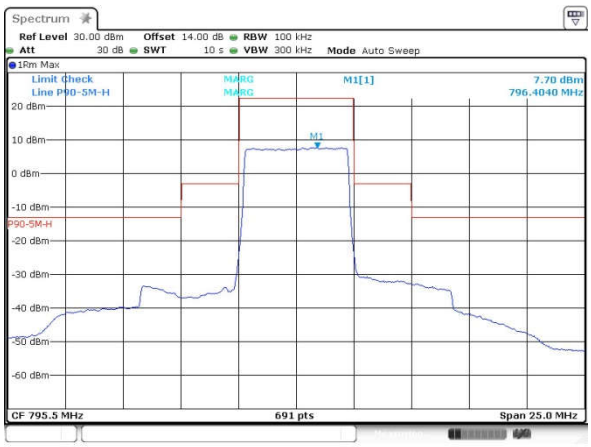
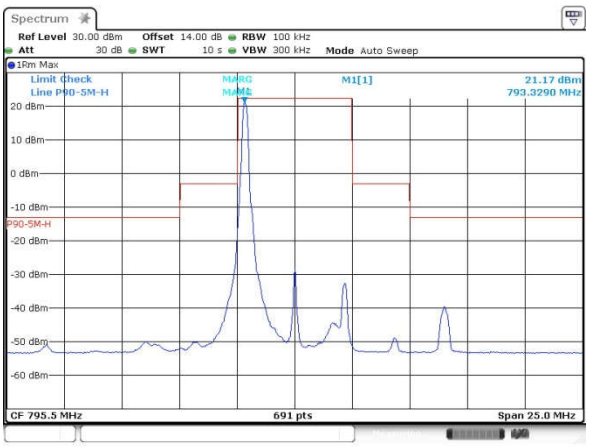

Spurious Emissions

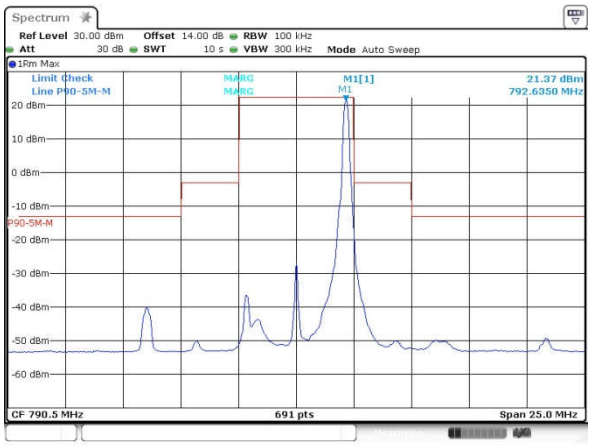
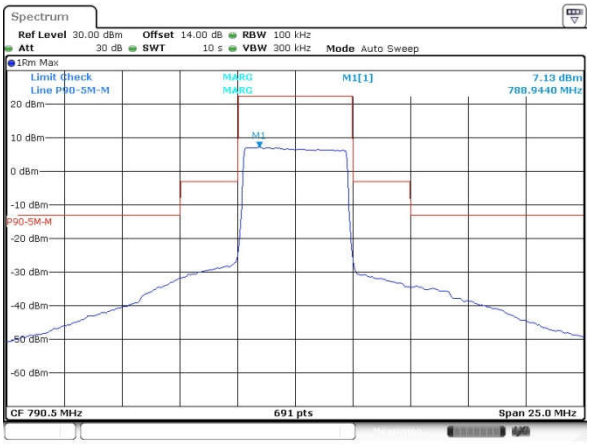
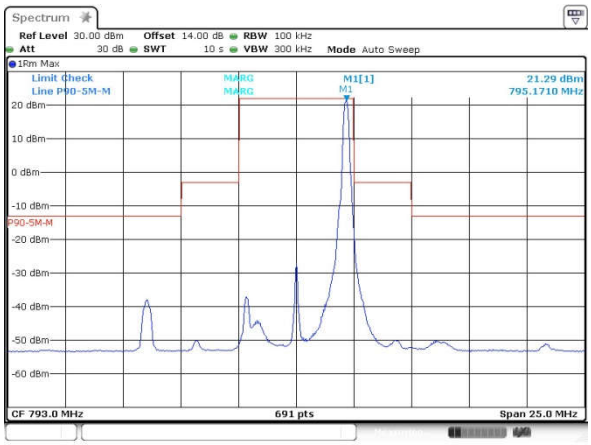
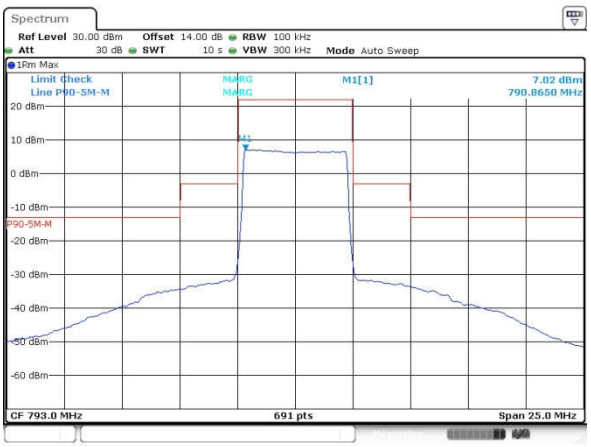
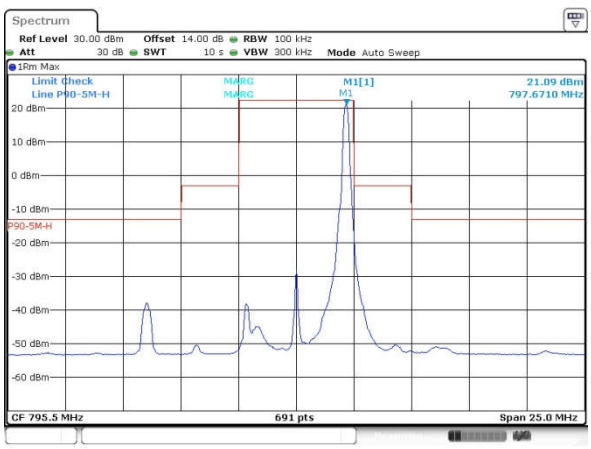
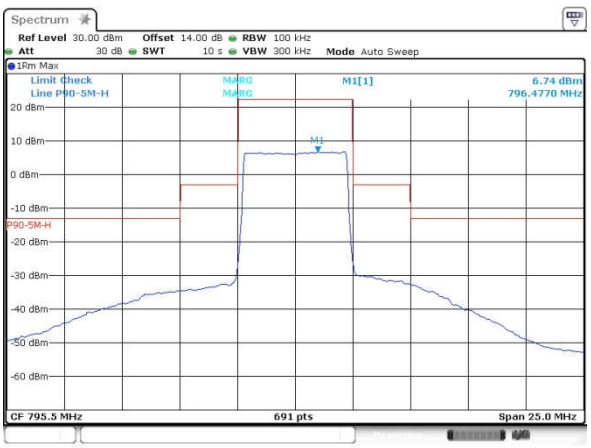
| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 750.000 MHz | 758.000 MHz | 100.000 kHz | 756.76523 MHz | -55.51 dBm | -42.51 dB |
| 758.000 MHz | 769.000 MHz | 100.000 kHz | 764.63187 MHz | -55.29 dBm | -85.29 dB |
| 769.000 MHz | 775.000 MHz | 6.250 kHz | 771.46653 MHz | -67.14 dBm | -32.14 dB |
| 775.000 MHz | 788.000 MHz | 100.000 kHz | 787.99351 MHz | -31.41 dBm | -18.41 dB |
| 788.000 MHz | 799.000 MHz | 100.000 kHz | 789.00549 MHz | 4.37 dBm | -25.63 dB |
| 799.000 MHz | 805.000 MHz | 6.250 kHz | 800.57942 MHz | -45.06 dBm | -10.06 dB |
| 805.000 MHz | 810.000 MHz | 100.000 kHz | 805.00250 MHz | -44.22 dBm | -31.22 dB |

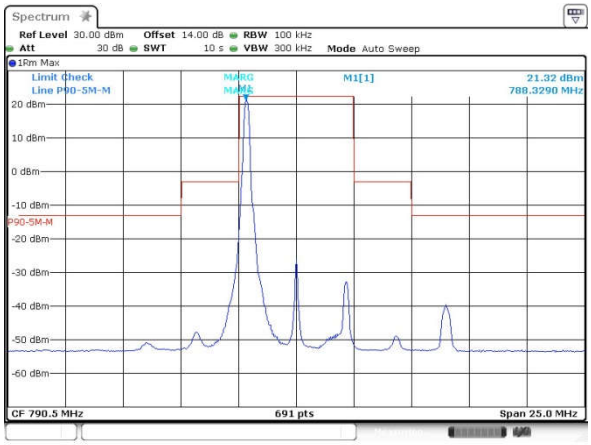
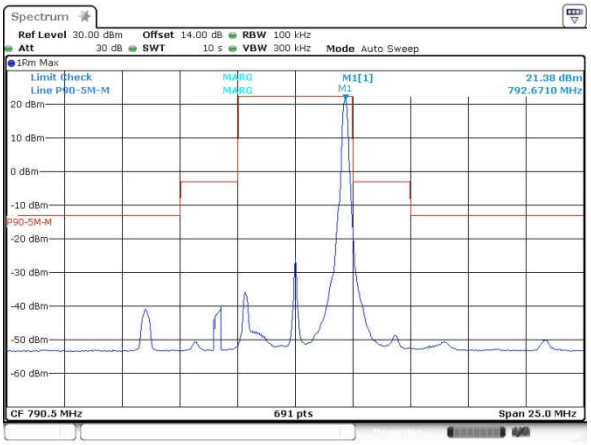
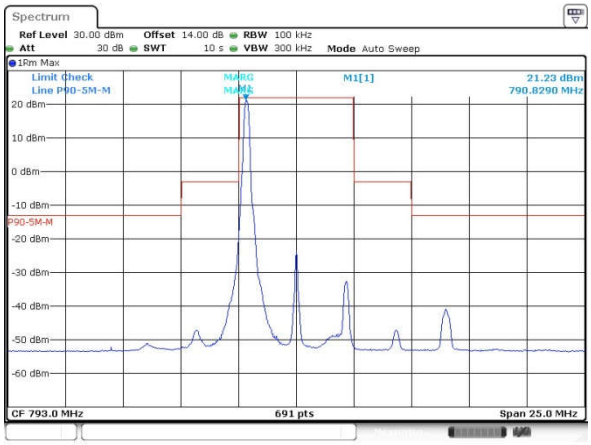
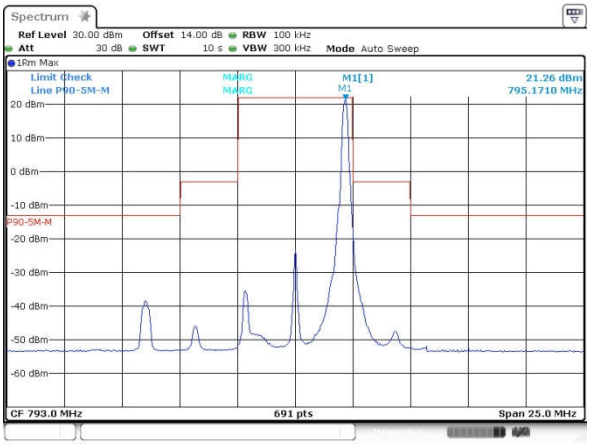
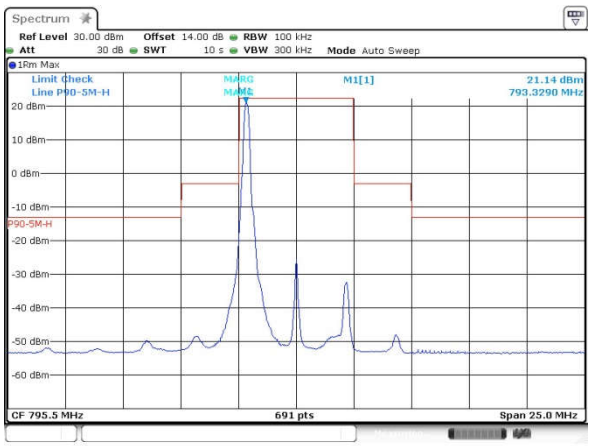
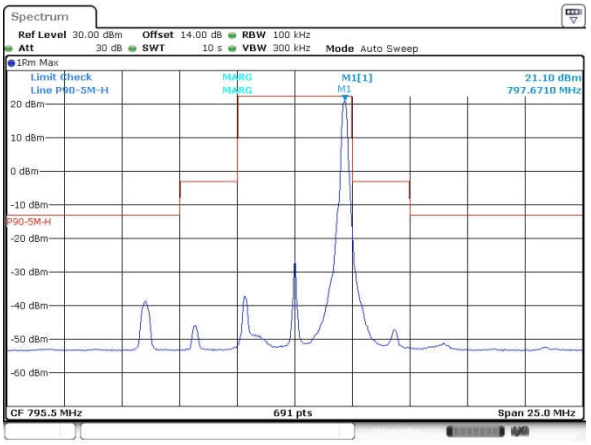
Date: 1.JUL.2018 17:50:01

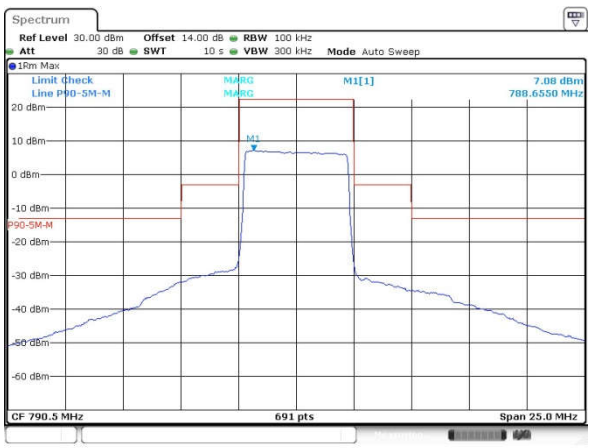
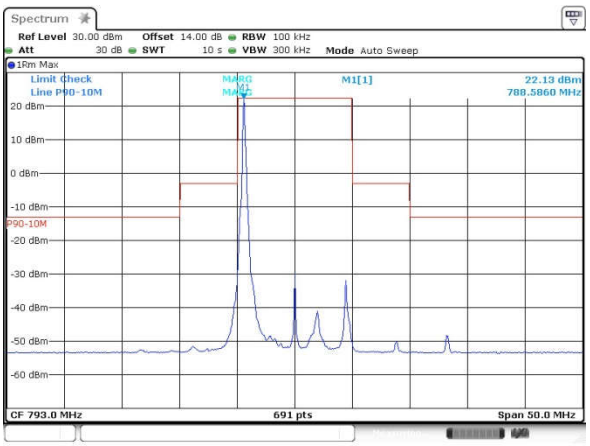
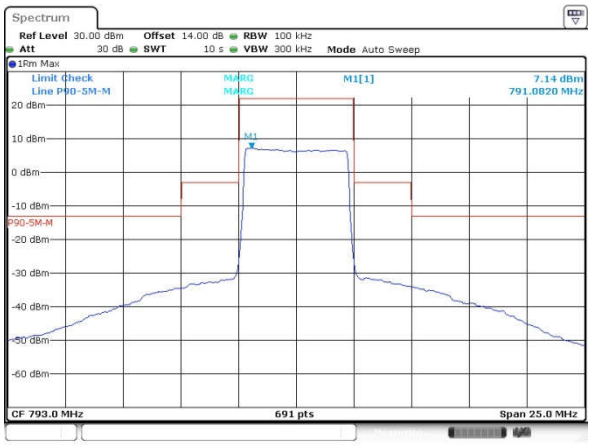
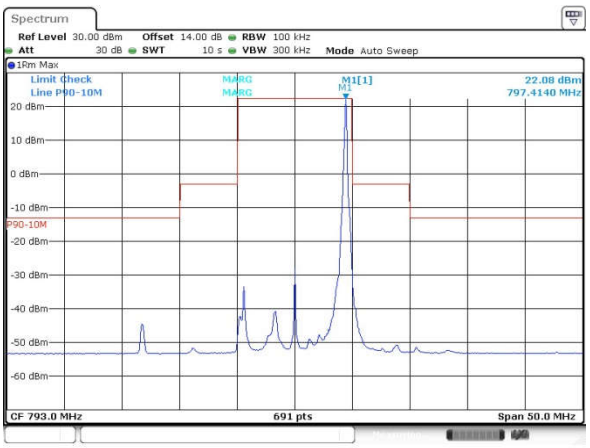
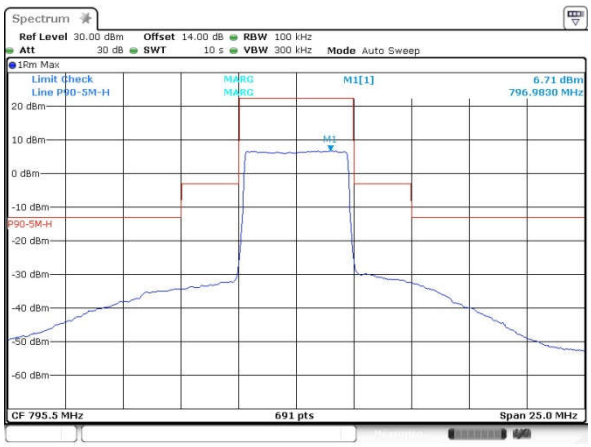
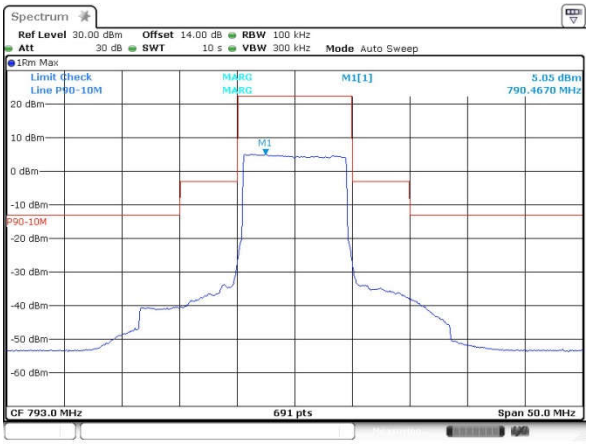
# Emission Mask B

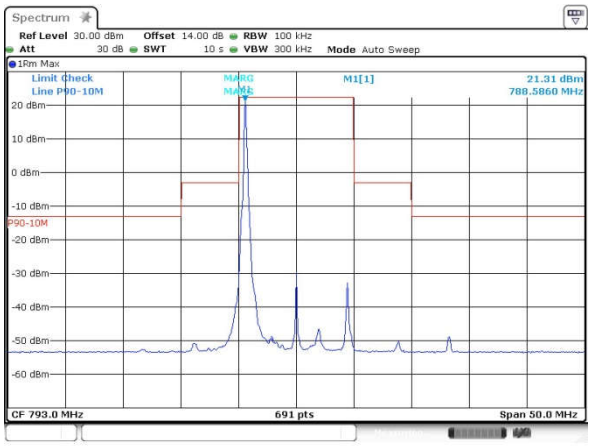
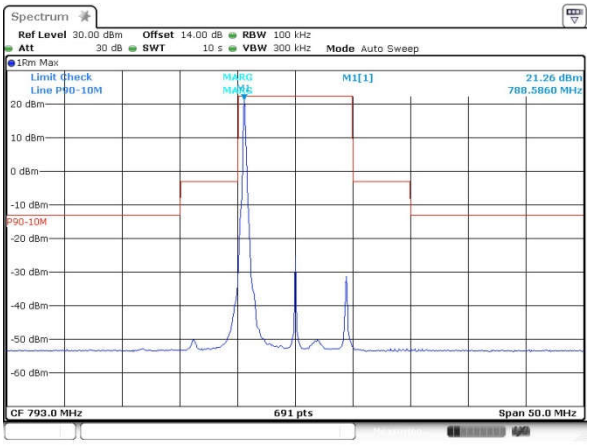
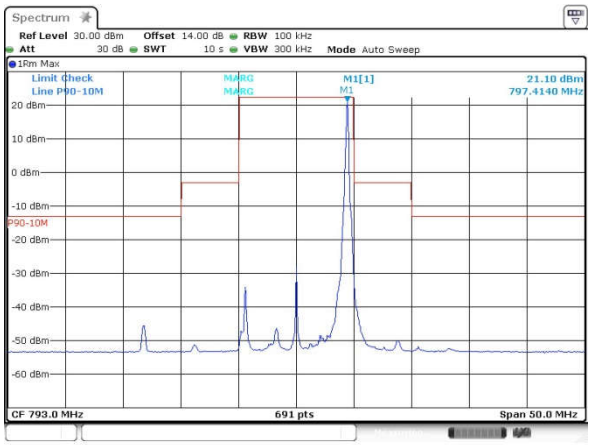
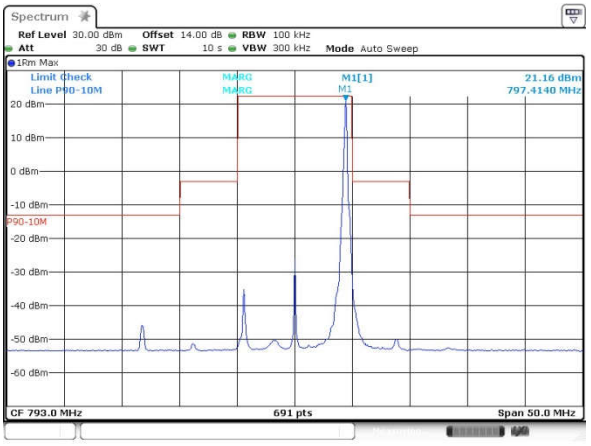
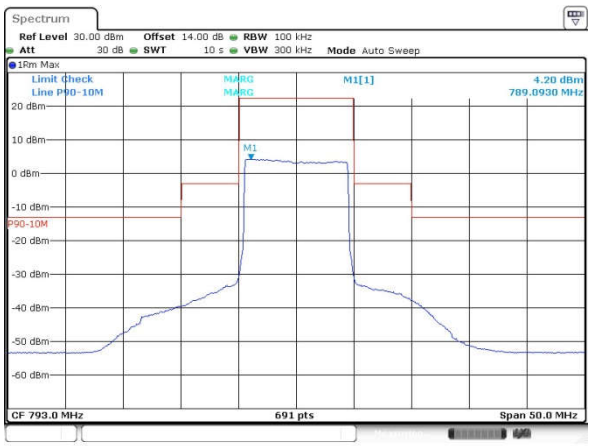
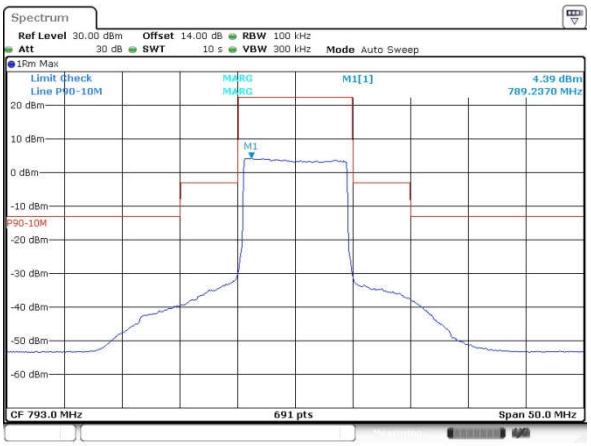
| LTE Band 14 /Emission Mask B | |
|---|---|
| Lowest / 5MHz / 1RB0/ QPSK | Lowest / 5MHz / 1RBmax/ QPSK |
|  |  |
| Middle / 5MHz / 1RB0/ QPSK | Middle / 5MHz / 1RBmax/ QPSK |
|  |  |
| Highest / 5MHz / 1RB0/ QPSK | Highest / 5MHz / 1RBmax/ QPSK |
|  |  |

| LTE Band 14 /Emission Mask B | |
|---|---|
| **Lowest / 5MHz / Full RB/ QPSK** | **Lowest / 5MHz / 1RB0/ 16QAM** |
|  |  |
| **Middle / 5MHz / Full RB / QPSK** | **Middle / 5MHz / 1RB0 / 16QAM** |
|  |  |
| **Highest / 5MHz / Full RB / QPSK** | **Highest /5MHz / 1RB0 / 16QAM** |
|  |  |

| LTE Band 14 /Emission Mask B | |
|---|---|
| **Lowest / 5MHz / 1RBmax/ 16QAM** | **Lowest / 5MHz / Full RB / 16QAM** |
|  |  |
| **Middle / 5MHz / 1RBMax / 16QAM** | **Middle / 5MHz / Full RB / 16QAM** |
|  |  |
| **Highest / 5MHz / 1RBMax / 16QAM** | **Highest / 5MHz / Full RB / 16QAM** |
|  |  |

| LTE Band 14 /Emission Mask B | |
|---|---|
| **Lowest / 5MHz / 1RB0/ 64QAM** | **Lowest / 5MHz /1RBmax/ 64QAM** |
|  |  |
| **Middle / 5MHz / 1RB0/ 64QAM** | **Middle / 5MHz /1RBmax/ 64QAM** |
|  |  |
| **Highest / 5MHz / 1RB0/ 64QAM** | **Highest / 5MHz /1RBmax/ 64QAM** |
|  |  |

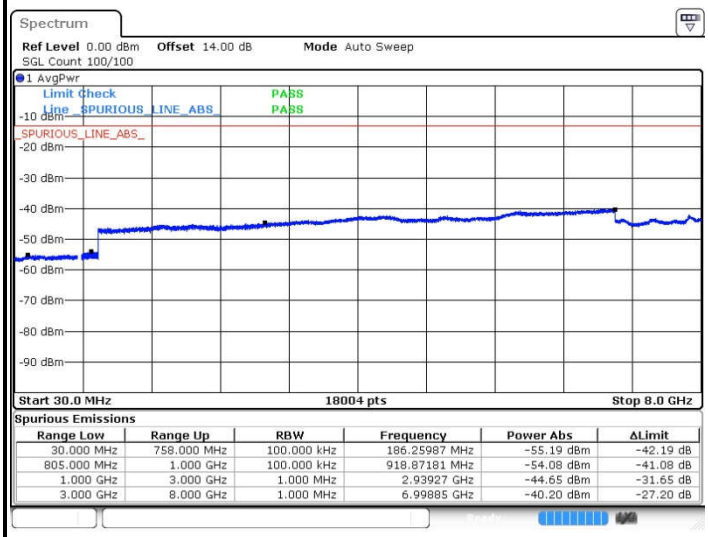
| LTE Band 14 /Emission Mask B | |
|---|---|
| **Lowest / 5MHz / Full RB/ 64QAM** | **Middle / 10MHz / 1RB0/ QPSK** |
|  |  |
| **Middle / 5MHz / Full RB / 64QAM** | **Middle / 10MHz / 1RBmax/ QPSK** |
|  |  |
| **Highest / 5MHz / Full RB / 64QAM** | **Middle /10MHz / Full RB / QPSK** |
|  |  |

| LTE Band 14 /Emission Mask B | |
|---|---|
| **Middle / 10MHz / 1RB0 / 16QAM** | **Middle / 10MHz / 1RB0 / 64QAM** |
|  |  |
| **Middle / 10MHz / 1RBMax / 16QAM** | **Middle / 5MHz / 1RBMax / 64QAM** |
|  |  |
| **Highest / 10MHz / Full RB / 16QAM** | **Middle /5MHz / Full RB / 64QAM** |
|  |  |

# Conducted Spurious Emission

## LTE Band 14 / 5MHz

### Lowest Channel / QPSK

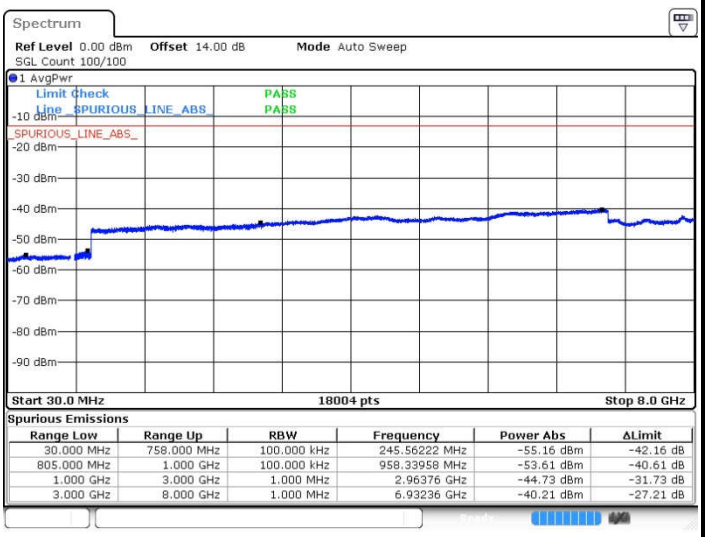



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 186.25987 MHz | -55.19 dBm | -42.19 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 918.87181 MHz | -54.08 dBm | -41.08 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.93927 GHz | -44.65 dBm | -31.65 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.99885 GHz | -40.20 dBm | -27.20 dB |

Date: 1.JUL.2018 19:24:47

### Lowest Channel / 16QAM

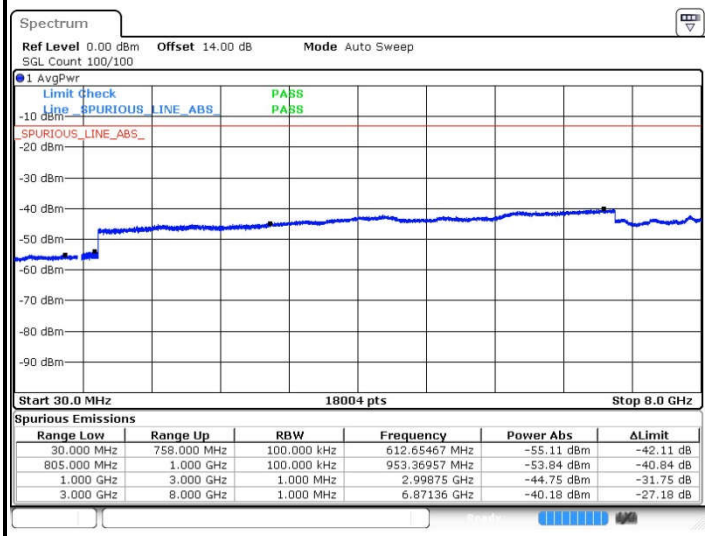



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 245.56222 MHz | -55.16 dBm | -42.16 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 958.33958 MHz | -53.61 dBm | -40.61 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.96376 GHz | -44.73 dBm | -31.73 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.93236 GHz | -40.21 dBm | -27.21 dB |

Date: 1.JUL.2018 19:37:29

### Middle Channel / QPSK

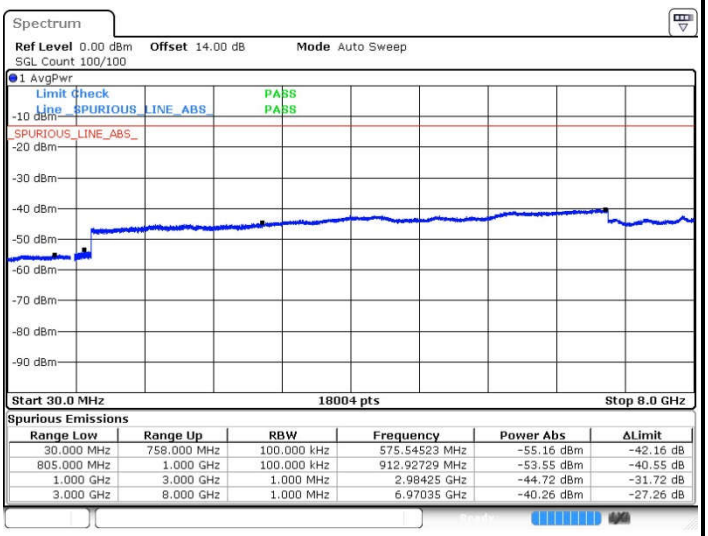



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 612.65467 MHz | -55.11 dBm | -42.11 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 953.36957 MHz | -53.84 dBm | -40.84 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99875 GHz | -44.75 dBm | -31.75 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.87136 GHz | -40.18 dBm | -27.18 dB |

Date: 1.JUL.2018 19:33:41

### Middle Channel / 16QAM



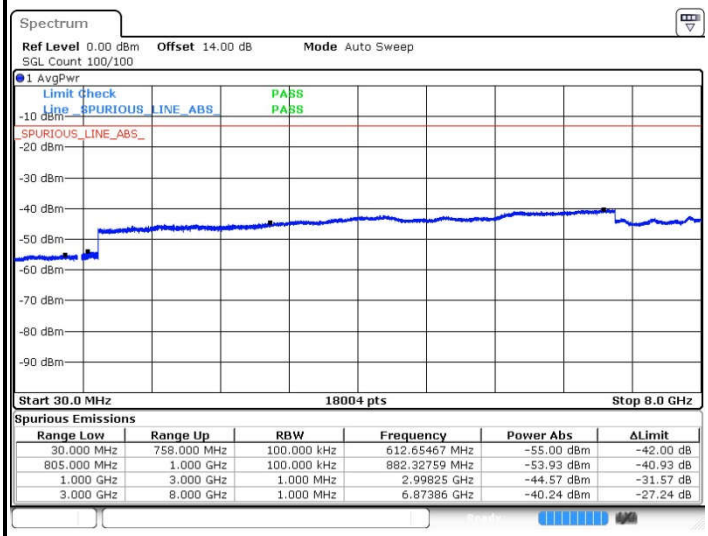

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 575.54523 MHz | -55.16 dBm | -42.16 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 912.92729 MHz | -53.55 dBm | -40.55 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.98425 GHz | -44.72 dBm | -31.72 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.97035 GHz | -40.26 dBm | -27.26 dB |

Date: 1.JUL.2018 19:39:18

## LTE Band 14 / 5MHz

### Highest Channel / QPSK

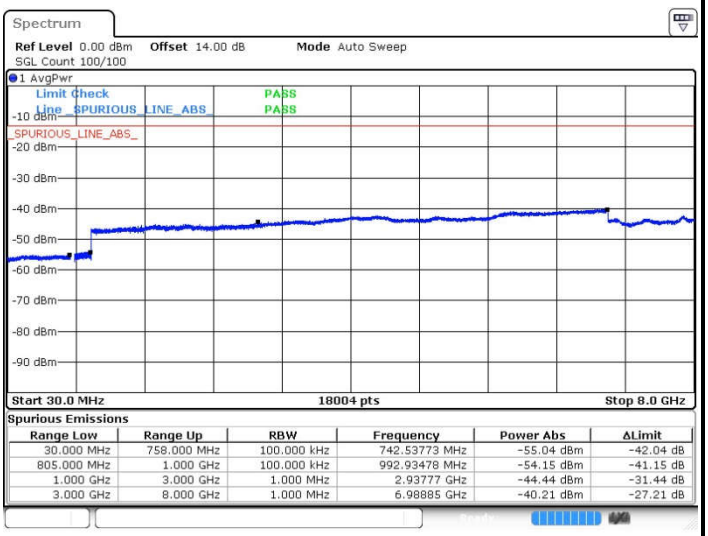



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 612.65467 MHz | -55.00 dBm | -42.00 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 882.32759 MHz | -53.93 dBm | -40.93 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99825 GHz | -44.57 dBm | -31.57 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.87386 GHz | -40.24 dBm | -27.24 dB |

Date: 1.JUL.2018 19:34:24

### Highest Channel / 16QAM



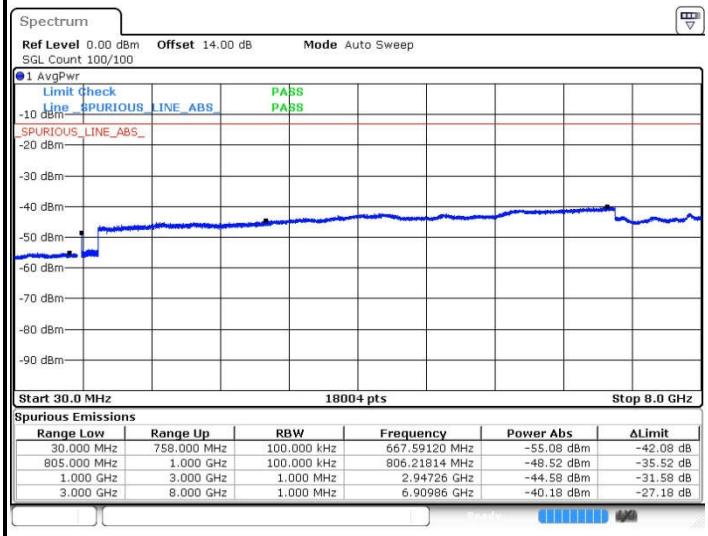

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 742.53773 MHz | -55.04 dBm | -42.04 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 992.93478 MHz | -54.15 dBm | -41.15 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.93777 GHz | -44.44 dBm | -31.44 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.98885 GHz | -40.21 dBm | -27.21 dB |

Date: 1.JUL.2018 19:40:13

## LTE Band 14 / 10MHz

### Middle Channel / QPSK

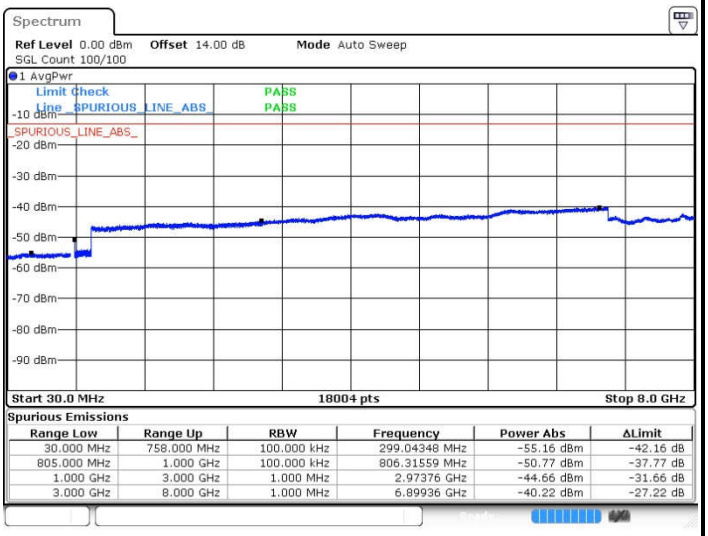



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 667.59120 MHz | -55.08 dBm | -42.08 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 806.21814 MHz | -48.52 dBm | -35.52 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.94726 GHz | -44.58 dBm | -31.58 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.90986 GHz | -40.18 dBm | -27.18 dB |

Date: 1.JUL.2018 19:48:32

### Middle Channel / 16QAM



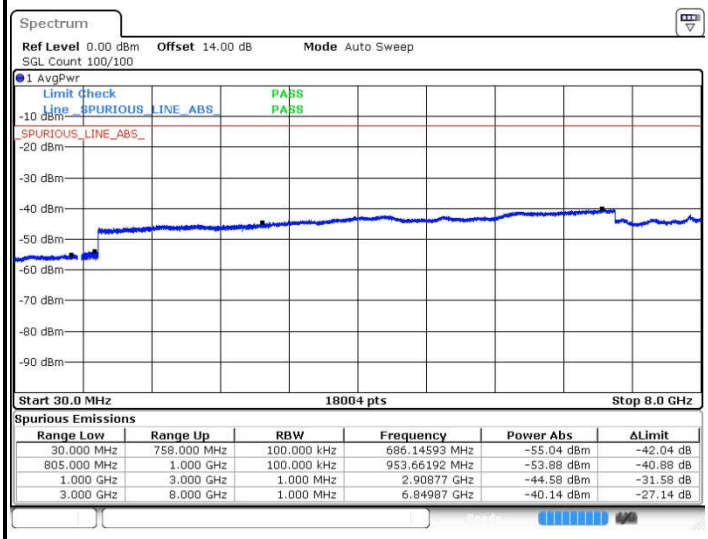

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 299.04348 MHz | -55.16 dBm | -42.16 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 806.31559 MHz | -50.77 dBm | -37.77 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.97376 GHz | -44.66 dBm | -31.66 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.89936 GHz | -40.22 dBm | -27.22 dB |

Date: 1.JUL.2018 19:49:18

## LTE Band 14 / 5MHz

### Lowest Channel / 64QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 686.14593 MHz | -55.04 dBm | -42.04 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 953.66192 MHz | -53.88 dBm | -40.88 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.90877 GHz | -44.58 dBm | -31.58 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.84987 GHz | -40.14 dBm | -27.14 dB |

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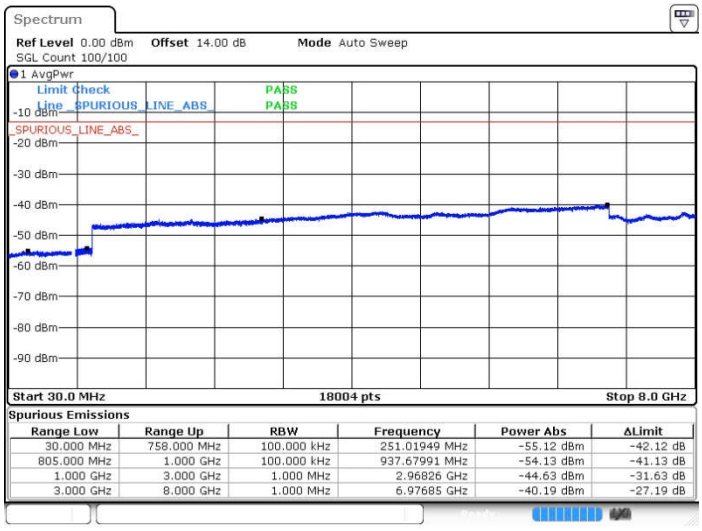
### Middle Channel / 64QAM



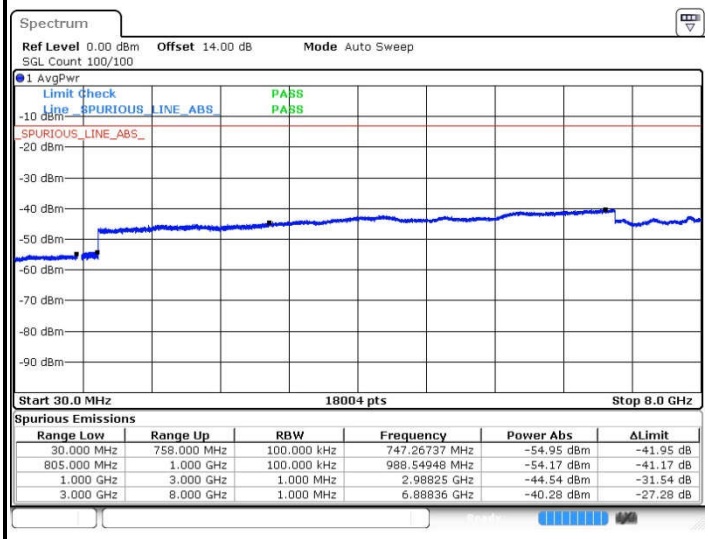

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 251.01949 MHz | -55.12 dBm | -42.12 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 937.67991 MHz | -54.13 dBm | -41.13 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.96826 GHz | -44.63 dBm | -31.63 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.97685 GHz | -40.19 dBm | -27.19 dB |

Date: 1.JUL.2018 19:45:29

## LTE Band 14 / 5MHz

### Highest Channel / 64QAM



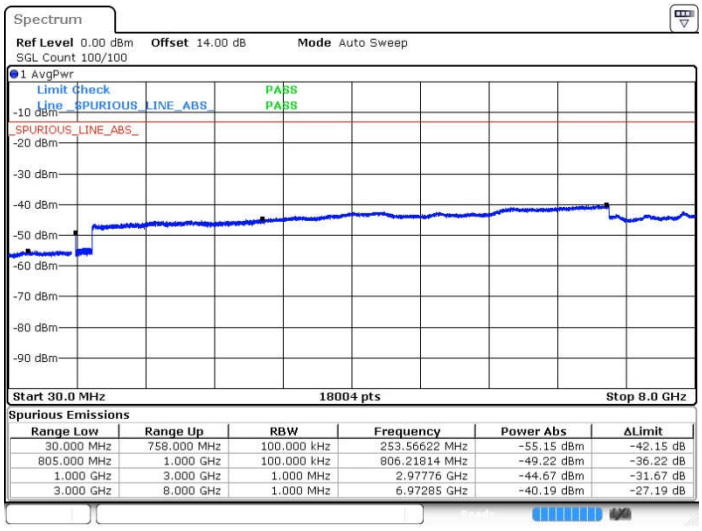

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 747.26737 MHz | -54.95 dBm | -41.95 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 988.54948 MHz | -54.17 dBm | -41.17 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.98825 GHz | -44.54 dBm | -31.54 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.88836 GHz | -40.28 dBm | -27.28 dB |

Date: 1.JUL.2018 19:46:46

## LTE Band 14 / 10MHz

### Middle Channel / 64QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 758.000 MHz | 100.000 kHz | 253.56622 MHz | -55.15 dBm | -42.15 dB |
| 805.000 MHz | 1.000 GHz | 100.000 kHz | 806.21814 MHz | -49.22 dBm | -36.22 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.97776 GHz | -44.67 dBm | -31.67 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.97285 GHz | -40.19 dBm | -27.19 dB |

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# Frequency Stability

| Test Conditions | | LTE Band 14 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | 1.25ppm |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0155 | PASS |
| 40 | Normal Voltage | 0.0137 | |
| 30 | Normal Voltage | 0.0136 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0091 | |
| 0 | Normal Voltage | 0.0095 | |
| -10 | Normal Voltage | 0.0066 | |
| -20 | Normal Voltage | 0.0100 | |
| -30 | Normal Voltage | 0.0082 | |
| 20 | Maximum Voltage | 0.0120 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0101 | |

**Note:** Normal Voltage =3.8 V.；Battery End Point (BEP) =3.6 V.；Maximum Voltage =4.0 V.

# Appendix B. Test Results of Radiated Test

## Field Strength of Spurious Radiated

| LTE Band 14 / QPSK / RB Size 1 Offset 0 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Bandwidth | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| 5MHz | 1581.5 | -59.92 | -40 | -19.92 | -74.93 | -65.32 | 4.00 | 9.40 | H |
| | 2372.25 | -57.56 | -13 | -44.56 | -76.01 | -61.13 | 4.88 | 10.60 | H |
| | 3163 | -55.34 | -13 | -42.34 | -76.67 | -60.27 | 5.52 | 12.60 | H |
| | 1581.5 | -60.36 | -40 | -20.36 | -74.86 | -65.76 | 4.00 | 9.40 | V |
| | 2372.25 | -57.93 | -13 | -44.93 | -76.11 | -61.50 | 4.88 | 10.60 | V |
| | 3163 | -55.63 | -13 | -42.63 | -76.64 | -60.56 | 5.52 | 12.60 | V |
| | Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | | | | | | |
| Test Result | | | | PASS | | | | | |

| LTE Band 14 / QPSK / RB Size 1 Offset 0 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Bandwidth | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| 10MHz | 1577 | -59.22 | -40 | -19.22 | -74.23 | -64.62 | 4.00 | 9.40 | H |
| | 2365.5 | -57.13 | -13 | -44.13 | -75.72 | -60.70 | 4.88 | 10.60 | H |
| | 3154 | -54.89 | -13 | -41.89 | -76.24 | -59.82 | 5.52 | 12.60 | H |
| | 1577 | -60.34 | -40 | -20.34 | -74.23 | -65.74 | 4.00 | 9.40 | V |
| | 2365.5 | -57.77 | -13 | -44.77 | -75.72 | -61.34 | 4.88 | 10.60 | V |
| | 3154 | -55.69 | -13 | -42.69 | -76.24 | -60.62 | 5.52 | 12.60 | V |
| | Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | | | | | | |
| Test Result | | | | PASS | | | | | |